

# **DOI/GTN-P Climate and Active-Layer Data Acquired in the National Petroleum Reserve–Alaska and the Arctic National Wildlife Refuge, 1998–2015**



Data Series 1021

**Cover.** U.S. Department of the Interior/Global Terrestrial Network for Permafrost (DOI/GTN-P) climate-monitoring station U31 at Marsh Creek, Arctic National Wildlife Refuge.



# **DOI/GTN-P Climate and Active-Layer Data Acquired in the National Petroleum Reserve—Alaska and the Arctic National Wildlife Refuge, 1998–2015**

By Frank E. Urban and Gary D. Clow

Data Series 1021

**U.S. Department of the Interior  
U.S. Geological Survey**

**U.S. Department of the Interior**  
SALLY JEWELL, Secretary

**U.S. Geological Survey**  
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## Conversion Factors

SI to Inch/Pound

<b>Multiply</b>	<b>By</b>	<b>To obtain</b>
<b>Length</b>		
centimeter (cm)	0.3937	inch (in.)
meter (m)	3.281	foot (ft)
kilometer (km)	0.6214	mile (mi)
<b>Area</b>		
square kilometer (km <sup>2</sup> )	247.1	acre
square kilometer (km <sup>2</sup> )	0.3861	square mile (mi <sup>2</sup> )
<b>Speed</b>		
meter per second (m/s)	3.281	foot per second (ft/s)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F}=(1.8\times^{\circ}\text{C})+32$$

Vertical coordinate information is referenced to the World Geodetic System 1984 (WGS 84).

## Abbreviations

CSI	Campbell Scientific
DOI	U.S. Department of the Interior
GTN-P	Global Terrestrial Network for Permafrost
MRC	Measurement Research Corporation
USGS	U.S. Geological Survey





# DOI/GTN-P Climate and Active-Layer Data Acquired in the National Petroleum Reserve—Alaska and the Arctic National Wildlife Refuge, 1998–2015

By Frank E. Urban and Gary D. Clow

## Abstract

This report provides data collected by the climate monitoring array of the U.S. Department of the Interior on Federal lands in Arctic Alaska over the period August 1998 to July 2015; this array is part of the Global Terrestrial Network for Permafrost (DOI/GTN-P). In addition to presenting data, this report also describes monitoring, data collection, and quality-control methods. The array of 16 monitoring stations spans lat 68.5°N. to 70.5°N. and long 142.5°W. to 161°W., an area of approximately 150,000 square kilometers. Climate summaries are presented along with quality-controlled data. Data collection is ongoing and includes the following climate- and permafrost-related variables: air temperature, wind speed and direction, ground temperature, soil moisture, snow depth, rainfall totals, up- and downwelling shortwave radiation, and atmospheric pressure. These data were collected by the U.S. Geological Survey in close collaboration with the Bureau of Land Management and the U.S. Fish and Wildlife Service.

## A. Introduction

### Introduction

#### Background

Atmosphere-ocean general circulation models consistently project that the largest climate changes during this century will occur in the Arctic, especially in Arctic Alaska and the adjacent Bering, Beaufort, and Chukchi Seas—that is, lands and portions of the seas managed by the U.S. Department of the Interior (DOI) (Houghton and others, 2001; Arctic Council, 2005; Chapman and Walsh, 2007; Walsh, 2008). Every aspect of the Alaskan Arctic environment is expected to be significantly affected over the next few decades, posing tremendous land management challenges for DOI (DeGange and others, 2005; Clow and others, 2011). This region is particularly vulnerable to climate change because of the prevalence of ice-rich permafrost, which is projected to degrade significantly

during this century (U.S. Arctic Research Commission, 2003; Lawrence and others, 2008). In Arctic Alaska, permafrost is the foundation upon which terrestrial ecosystems and human infrastructure exist. The indigenous plants and wildlife of this region are highly adapted to extreme conditions, and large projected climate changes are expected to stress these specialized biological systems.

Accurate data detailing current environmental conditions and rates of environmental change on DOI lands in Arctic Alaska<sup>1</sup> are critical to fulfill the DOI mission. This is particularly true given the high rates of change that are now occurring in the region (Jeffries and others, 2012). Because of the remoteness and harsh environmental conditions in the Arctic and northern Alaska, the observational database of climate-change-related variables for the region has been extremely limited. The paucity of baseline environmental data contributes to the uncertainty in future climate projections and climate impact assessments in a number of ways:

- Insufficient knowledge of many of the physical processes active in this region makes correctly representing them in climate models difficult (National Research Council, 2001; Arctic Council, 2005).
- Without adequate information about current conditions, it is difficult to assess whether the models are performing correctly (model validation).
- High-quality data to supply the boundary conditions necessary for climate-model runs are lacking, particularly at the higher spatial resolutions needed for making land-management decisions.

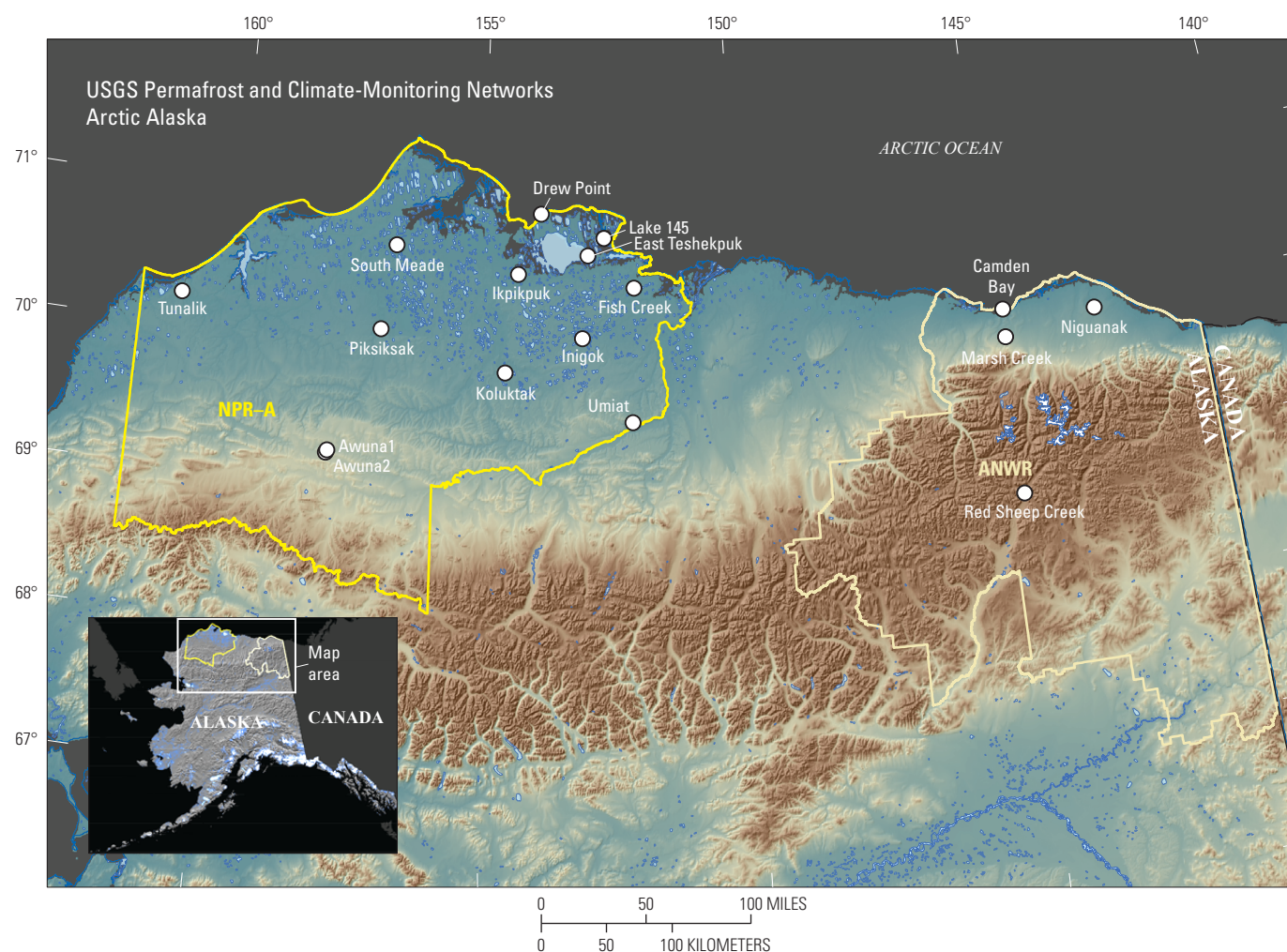
Studies by the National Research Council (2001, 2010) have concluded there is a pressing need for a comprehensive system designed for monitoring climate, particularly in the Arctic, if we are to reduce the uncertainties in future climate projections and the associated climate impacts.

<sup>1</sup>The Bureau of Land Management, the U.S. Fish and Wildlife Service, and the Bureau of Ocean Energy Management all have significant management responsibilities for natural resources, wildlife, and the environment in this region.

## Description of Monitoring Network

To satisfy DOI's need for accurate environmental information and to improve future climate impact assessments, the U.S. Geological Survey (USGS) has established an array of climate-monitoring stations on Federal lands in Arctic Alaska as part of the U.S. Department of the Interior/Global Terrestrial Network for Permafrost (DOI/GTN-P) Observing System. This array currently consists of 16 automated stations (fig. A–1) spanning the National Petroleum Reserve–Alaska and the Arctic National Wildlife Refuge. The first stations were installed during August 1998, allowing for more than fifteen years of high-quality observational data from some locations (table A–1). Additional stations in the array were gradually added with the goals of broader spatial and elevation

coverage across a range of geomorphic substrates and vegetation regimes. Aspects of the physical environment monitored by these stations include shallow permafrost temperature at 10 depths (from 5 to 120 centimeters [cm]), active-layer thaw depth and duration, soil moisture, air temperature and pressure, wind speed and direction, up- and downwelling short-wave radiation, surface albedo, snow depth and duration, and rainfall (fig. A–2). The DOI/GTN-P climate monitoring array is an integral part (through data contribution) of a number of global observing systems, including the Global Terrestrial Network for Permafrost, the Global Terrestrial Observing System (GTOS), and the Global Climate Observing System (GCOS). On a regional scale, the stations also contribute to the Circumpolar Active-Layer Monitoring Network (CALM) and the Arctic Observing Network (AON).



**Figure A–1.** U.S. Department of the Interior/Global Terrestrial Network for Permafrost (DOI/GTN-P) climate monitoring array in Arctic Alaska. There are 12 stations currently operating in the National Petroleum Reserve–Alaska (NPR–A) and 4 stations in the Arctic National Wildlife Refuge (ANWR). Station names can be clicked to access climate summaries, data files, and station-specific information.

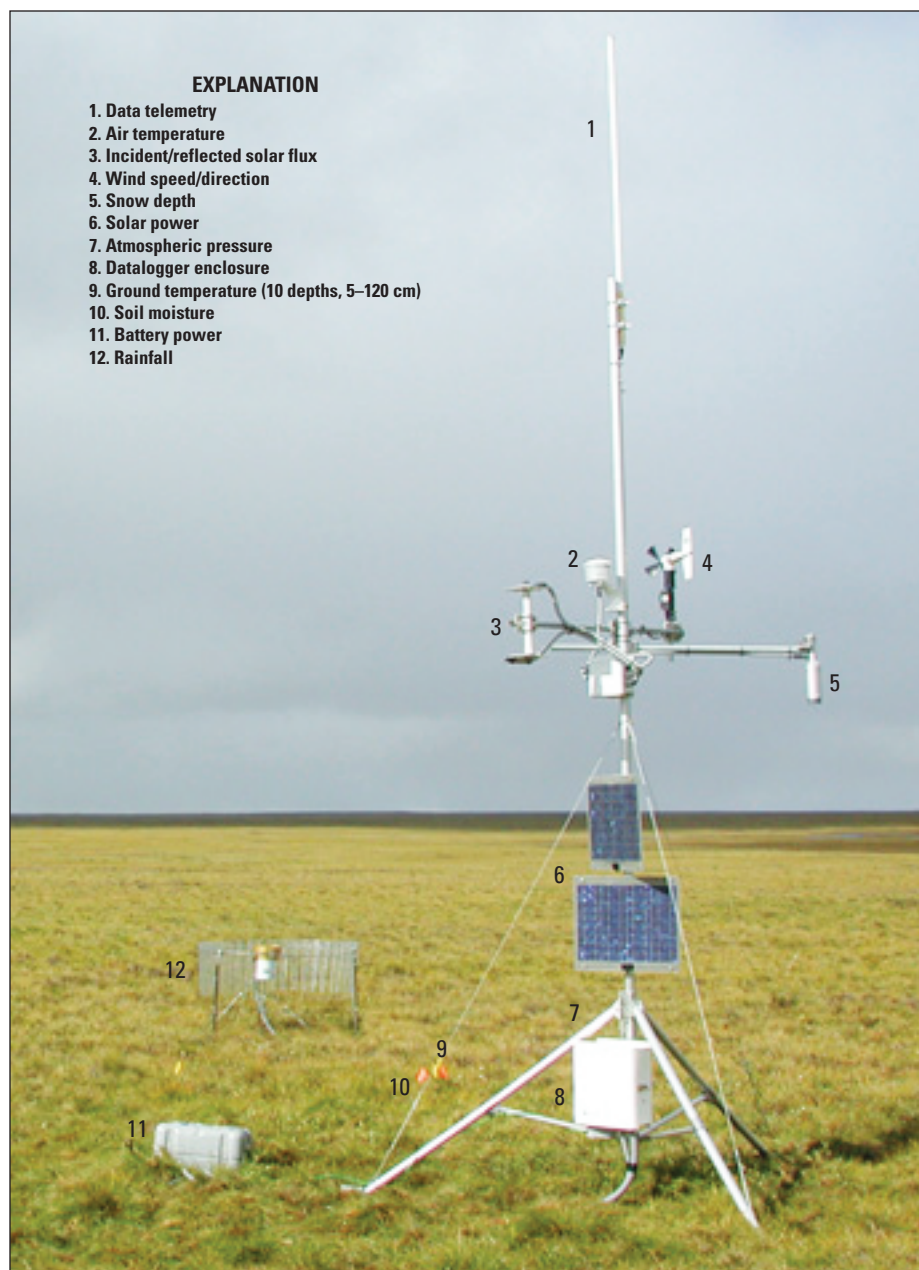
**Table A-1.** Location, elevation, and installation dates for the U.S. Department of the Interior/Global Terrestrial Network for Permafrost (DOI/GTN-P) climate monitoring stations. Thirteen stations in the National Petroleum Reserve–Alaska are listed first, followed by four stations in the Arctic National Wildlife Refuge.

[AUG, August; m, meter]

Station name	GTN-P code	Station installation date	Latitude	Longitude	Elevation (m)
Drew Point	U20	18 AUG 1998	70°51.872'N.	153°54.405'W.	5
Inigok	U21	17 AUG 1998	69°59.377'N.	153°05.630'W.	53
Fish Creek	U22	18 AUG 1998	70°20.114'N.	152°03.120'W.	31
Awuna1 <sup>1</sup>	U23	19 AUG 1998	69°10.226'N.	158°00.402'W.	362
Umiat	U24	20 AUG 1998	69°23.741'N.	152°08.568'W.	201
Tunalik	U25	20 AUG 1998	70°11.756'N.	161°04.687'W.	26
Koluktak	U30	27 AUG 1999	69°45.096'N.	154°37.054'W.	60
South Meade	U33	08 AUG 2003	70°37.708'N.	156°50.119'W.	15
Awuna2	U35	22 AUG 2003	69°09.331'N.	158°01.827'W.	343
Piksiksak	U37	08 AUG 2004	70°02.197'N.	157°04.882'W.	33
East Teshekpuk	U38	10 AUG 2004	70°34.111'N.	152°57.899'W.	7
Ikpikpuk	U39	21 AUG 2005	70°26.499'N.	154°21.938'W.	5
Lake 145 <sup>2</sup>	—	13 AUG 2007	70°41.388'N.	152°37.995'W.	6
Niguanak	U29	18 AUG 2000	69°53.363'N.	142°59.037'W.	84
Marsh Creek	U31	03 AUG 2001	69°46.657'N.	144°47.595'W.	260
Camden Bay	U34	14 AUG 2003	69°58.317'N.	144°46.234'W.	4
Red Sheep Creek	U36	03 AUG 2004	68°40.898'N.	144°50.524'W.	785

<sup>1</sup>Awuna1 was decommissioned on 22 May 2004. It was replaced by Awuna2, located 1.91 kilometers to the southwest. The two stations ran concurrently for several months.

<sup>2</sup>Lake 145 has not yet been assigned a GTN-P code.



**Figure A–2.** Components of a typical U.S. Department of the Interior/Global Terrestrial Network for Permafrost (DOI/GTN-P) climate monitoring station. (cm, centimeter)



## Purpose and Scope

Historically, very little climate information has been collected on Federal lands in Arctic Alaska. The information that has been collected generally resulted from short-term campaigns designed to support oil development and other activities. This report provides data collected by the DOI/GTN-P climate monitoring array over the period August 1998 through July 2015 that greatly augment the existing record for this region. Variables presented in this report include ground temperature at 10 depths (5–120 cm), soil moisture, air temperature and pressure, wind speed and direction, incident and reflected solar

flux, snow depth, and rainfall. Because the network took nearly a decade to develop (table A–1), the records are of varying lengths. For example, the longest air and ground temperature and snow depth records cover nearly 17 years (as of July 2015), whereas the longest wind and soil moisture records cover about 11 years (table A–2). Although short, the records are long enough to establish climate gradients and patterns across the region, quantify the magnitude of variability on daily through annual timescales, and provide the context for future climate change. Data collection is ongoing. Subsequent reports will provide annual updates and information on the full suite of climate variables monitored by the network.

**Table A–2.** Full metadata information for each sensor at each station, including install date and presence or absence of sensor.

[GTN-P, Global Terrestrial Network for Permafrost; AUG, August; m, meter; cm, centimeter; agl, above ground level; yr, year; doy, day of year; hr, hour]

Station name	GTN-P code	Install date	Latitude	Longitude	Elevation (m)	Ground temperature depths (cm)
Drew Point	U20	18 AUG 1998	70°51.872'N.	153°54.405'W.	5	5,10,15,20,25,30,45,70,95,120
Inigok	U21	17 AUG 1998	69°59.377'N.	153°05.630'W.	53	5,10,15,20,25,30,45,70,95,120
Fish Creek	U22	18 AUG 1998	70°20.114'N.	152°03.120'W.	31	5,10,15,20,25,30,45,70,95,120
Awuna1 (inactive)	U23	19 AUG 1998	69°10.226'N.	158°00.402'W.	362	5,10,15,20,25,30,45,70,95,120
Umiat	U24	20 AUG 1998	69°23.741'N.	152°08.568'W.	201	5,10,15,20,25,30,45,70,95,120
Tunalik	U25	20 AUG 1998	70°11.756'N.	161°04.687'W.	26	5,10,15,20,25,30,45,70,95,120
Koluktak	U30	27 AUG 1999	69°45.096'N.	154°37.054'W.	60	5,10,15,20,25,30,45,70,95,120
South Meade	U33	08 AUG 2003	70°37.708'N.	156°50.119'W.	15	5,10,15,20,25,30,45,70,95,120
Awuna2	U35	22 AUG 2003	69°09.331'N.	158°01.827'W.	343	5,10,15,20,25,30,45,70,95,120
Piksiksak	U37	08 AUG 2004	70°02.197'N.	157°04.882'W.	33	5,10,15,20,25,30,45,70,95,120
East Teshekpuk	U38	10 AUG 2004	70°34.111'N.	152°57.899'W.	7	5,10,15,20,25,30,45,70,95,120
Ikpikpuk	U39	21 AUG 2005	70°26.499'N.	154°21.938'W.	5	5,10,15,20,25,30,45,70,95,120
Lake 145	—	13 AUG 2007	70°41.388'N.	152°37.995'W.	6	25
Niguanak	U29	18 AUG 2000	69°53.363'N.	142°59.037'W.	84	5,10,15,20,25,30,45,70,95,120
Marsh Creek	U31	03 AUG 2001	69°46.657'N.	144°47.595'W.	260	5,10,15,20,25,30,45,70,95,120
Camden Bay	U34	14 AUG 2003	69°58.317'N.	144°46.234'W.	4	5,10,15,20,25,30,45,70,95,120
Red Sheep Creek	U36	03 AUG 2004	68°40.898'N.	144°50.524'W.	785	5,10,15,20,25,30,45,70,95,120

Station name	Sensor start date (yr, doy, hr)				
	Ground temperature	Air temperature (3 m agl)	Wind speed (3 m agl)	Wind direction (3 m agl)	Incoming radiation
Drew Point	1998,230,1600	1998,230,1600	2004,220,2000	2004,220,2000	2000,228,1800
Inigok	1998,229,1400	1998,229,1400	2004,230,1800	2004,230,1800	1999,236,1400
Fish Creek	1998,230,1200	1998,230,1200	2003,223,1600	2003,223,1600	1999,236,1800
Awuna1 (inactive)	1998,231,1400	1998,231,1400	—	—	2000,229,1400
Umiat	1998,232,2000	1998,232,2000	2005,109,1800	2005,109,1800	1999,236,1200
Tunalik	1998,232,1600	1998,232,1600	2003,232,1600	2003,232,1600	1999,238,1400
Koluktak	1999,239,1400	1999,239,1400	2004,223,1900	2004,223,1900	2000,230,1800
South Meade	2003,220,1700	2003,220,1700	2003,220,1700	2003,220,1700	2003,220,1700
Awuna2	2003,236,1300	2003,236,1300	2003,236,1300	2003,236,1300	2003,236,1300
Piksiksak	2004,221,1700	2004,221,1700	2005,217,1300	2005,217,1300	2004,221,1700
East Teshekpuk	2004,223,1600	2004,223,1600	2005,218,1200	2005,218,1200	2004,223,1600
Ikpikpuk	2005,233,2100	2005,233,2100	2005,233,2100	2005,233,2100	2005,233,2100
Lake 145	2007,225,1800	2007,225,1800	2007,225,1800	2007,225,1800	2007,225,1800
Niguanak	2000,231,1600	2000,231,1600	2004,218,2200	2004,218,2200	2000,231,1600
Marsh Creek	2001,215,1600	2001,215,1600	2003,225,1800	2003,225,1800	2001,215,1600
Camden Bay	2003,226,1700	2003,226,1700	2007,217,1700	2007,217,1700	2003,226,1700
Red Sheep Creek	2004,216,2200	2004,216,2200	2004,216,2200	2004,216,2200	2004,216,2200

**Table A-2.** Full metadata information for each sensor at each station, including install date and presence or absence of sensor.—Continued

[GTN-P, Global Terrestrial Network for Permafrost; AUG, August; m, meter; cm, centimeter; agl, above ground level; yr, year; doy, day of year; hr, hour]

Station name	Sensor start date (yr, doy, hr)				
	Reflected radiation	Snow depth	Soil moisture 15–20 cm	Precipitation (summer only)	Atmospheric pressure
Drew Point	1998,230,1600	2000,228,1800	2003,219,1600	2009,223,1400	—
Inigok	1998,229,1400	1998,229,1400	2003,222,1600	2005,230,1300	—
Fish Creek	1998,230,1200	1998,230,1200	2003,223,1600	2006,234,1100	2006,234,1100
Awuna1 (inactive)	1998,231,1400	2000,229,1400	—	—	—
Umiat	1998,232,2000	2000,229,1800	2003,220,0700	2013,218,1200	—
Tunalik	1998,232,1600	1999,238,1400	2003,232,1600	2009,218,1800	2007,205,1600
Koluktak	1999,239,1400	1999,239,1400	2003,217,1600	2012,216,1200	—
South Meade	2003,220,1700	2003,220,1700	2003,220,1700	2007,214,1800	—
Awuna2	2003,236,1300	2003,236,1300	2003,236,1300	—	2008,216,1500
Piksiksak	2004,221,1700	2004,221,1700	2004,221,1700	2014,220,1000	—
East Teshekpuk	2004,223,1600	2004,223,1600	2004,223,1600	2013,215,1000	—
Ikpikpuk	2005,233,2100	2005,233,2100	2005,233,2100	2005,233,2100	—
Lake 145	2007,225,1800	2007,225,1800	2007,225,1800	2007,225,1800	2007,225,1800
Niguanak	2000,231,1600	2000,231,1600	2003,225,2000	2013,209,1700	2010,210,0700
Marsh Creek	2001,215,1600	2001,215,1600	2003,225,1800	2010,211,2300	2007,116,0100
Camden Bay	2003,226,1700	2003,226,1700	2003,226,1700	—	—
Red Sheep Creek	2004,216,2200	2004,216,2200	2004,216,2200	—	—

## Data Collection and Analysis

### Data Collection Methods

Each station consists of a solar- and battery-powered datalogger (Campbell Scientific [CSI] model CR10X or CR1000, depending on the station), a sensor mast, and the sensors (fig. A–2). Air temperature, wind, radiation, and rainfall values are sampled every 30 seconds and then averaged once per hour (rainfall is totaled). Ground temperatures, soil moisture, snow depth, and surface pressure values are sampled once per hour. The resultant data stream from this sampling protocol is of hourly resolution. Because of limited power and data storage capacity, measurements taken before August 2003 were stored once every 2 hours rather than hourly. Physical site visits are made 1–2 times per year to collect the stored measurements and to perform station maintenance. For the stations with telemetry (table A–1), data are occasionally downloaded between site visits.

The air temperature measurements are made using a CSI model 107 thermistor probe mounted in a naturally aspirated six-gill radiation shield located 3 meters (m) above the surface as measured during the snow-free period. The CSI model 107 probe is sampled using a half-bridge voltage measurement. To reduce measurement uncertainties, voltages are converted to temperature during the data processing step using a four-term calibration function appropriate for the full temperature range experienced at these sites (–50 °C to +30 °C).

Wind speed and direction are measured using a R.M. Young 05103 wind monitor, located 3 m above the surface. For wind direction, the hourly vector mean is stored, although prior to April 2008, the arithmetic mean was stored rather than the vector mean.

Ground temperature is measured once per hour at ten depths using a Measurement Research Corporation (MRC) TP101 model temperature probe. The probe is 125 cm long and contains 10 thermistors at depths of 5, 10, 15, 20, 25, 30, 45, 70, 95, and 120 cm. The MRC thermistors are read on a single-ended channel through an interface circuit containing a half-bridge network and a means to switch the excitation voltage to each thermistor. A fixed precision resistor within the MRC is sampled at each time-step for comparison and to improve the estimate of the measurement voltages. Resistance is calculated from the voltage measurements and then converted to temperature using a four-term calibration function similar to the Steinhart-Hart equation (Steinhart and Hart, 1968) but with an additional term that improves the calibration fit below 0 °C.

Incident and reflected solar-flux measurements are made with CSI model LI200X silicon pyranometers located 3 m above the surface. The pyranometers are measured using a differential voltage measurement. A factory standard-calibration factor is applied to the resultant voltages to produce energy-flux values.

Rainfall is measured with a Texas Electronics TE525 rain gage mounted approximately 60 cm above the ground in the

middle of an ETI Instrument Systems Lexan altershield. The sensor is sampled every 30 seconds and millimeter totals are stored once per hour.

Snow depth is measured once per hour with a CSI model SR50 ultrasonic distance sensor mounted approximately 2.5 m above the ground surface. The sensor sends out an ultrasonic pulse and measures the time it takes for the signal to bounce off the ground or snow surface and return to the sensor. The travel time of the ultrasonic pulse varies with temperature; this effect is taken into account using data from the CSI model 107 air temperature sensor. The distance to the ground calculated from the ultrasonic travel time is subtracted from the known distance, as measured during physical site visits and distance-data analysis, to calculate snow depth.

Soil moisture is measured once per hour at approximately 15-cm depth using a Stevens Hydra Probe Soil Moisture sensor. Four single-ended voltage measurements are stored by the datalogger and then converted to soil moisture and salinity using algorithms supplied by the manufacturer.

Atmospheric pressure is measured once per hour through a vented port in the datalogger enclosure using a Vaisala PTB101B barometer.

## Data Processing and Quality Control

Because of the harsh operating environment, a variety of problems can affect the sensors and resulting data streams. These include loss of system power, total or partial failure of the sensor-support mast due to bear activity, damage or destruction of sensor cables or the sensors themselves by wildlife, obstruction of air temperature radiation shields by snow or rime ice, complete freeze-up of wind sensors by rime ice, obstruction of incident solar-flux detectors by snow, corrosion of snow depth transducers by high humidity, false snow depth signals caused by blowing snow, intermittent electrical noise associated with electric bear fences, vertical movement (“jacking”) of ground temperature sensors by freeze-thaw forces, and others.

A multi-component data-processing system has been developed to automatically and consistently handle a number of the data processing tasks, including application of sensor calibration factors, masking data during periods that are known to be problematic, masking data that are outside reasonable predefined limits, calculation of derived climate variables (for example, thawing-degree days, maximum active-layer depth, and total precipitation), calculation of climate statistics on a variety of timescales (hourly to decadal), and calculation of climate trends and anomalies. Predefined faulty data limits are unique to each sensor and are based on known environmental extremes and sensor specific performance. For example, hourly average wind speed values are flagged for masking if they are less than zero (physically impossible) or if they exceed 40 meters per second (m/s), a condition that is highly unlikely. The system also includes a number of tools to assist the data technician in identifying spurious data that are missed by the automated routines and

require a higher level of analysis. For example, wind speed values are automatically flagged if they do not change for 6 consecutive hours, likely indicating a condition of sensor freeze-up during icing. The technician is notified of these periods and directed to investigate each freeze-up period individually for any additional masking that may be necessary. First, the processing system is applied on a station- and sensor-specific basis. Second, the system is used in interstation mode, whereby statistics are calculated for data from the one or two most spatially proximate stations, depending on data availability and environmental homogeneity. Time periods that contain data that exceed statistical limits are further scrutinized and masked where appropriate. After the release of U.S. Geological Survey Data Series 812, 892, and 977 (Urban and Clow, 2014a, b, 2016), small improvements were made to the data processing system in order to release a more complete data series. In the previous releases, all calculated averages were based on hourly resolution data. In this data series, averages at resolutions greater than daily are calculated from daily average values. Details of the data processing system are described in “DOI/GTN-P Climate-Station Data, Quality Assurance and Control Procedures” (G.D. Clow and F.E. Urban, unpub. data, 2015).

*Air temperature.*—The resistance  $R_s$  of a CSI model 107 air temperature sensor is determined from the stored half-bridge voltage  $V$  using the equation

$$R_s = R_f \left( \frac{V_x}{V} - 1 \right) - R_b \quad (1)$$

where  $R_f$  and  $R_b$  are the resistances of the field and bridge resistors in the half-bridge, respectively, and  $V_x$  is the excitation voltage. The excitation voltage can vary slightly, so it is collected each time a measurement is made. Temperature is then calculated from the measured resistance using the four-term calibration function

$$T^{-1} = a_0 + a_1 (\ln R_s) + a_2 (\ln R_s)^2 + a_3 (\ln R_s)^3 \quad (2)$$

where  $T$  is temperature expressed in Kelvin.

This is an extension of the often used Steinhart-Hart equation (Steinhart and Hart, 1968), which proved inadequate for our purposes below 0 °C. The four calibration coefficients ( $a_0, a_1, a_2, a_3$ ) are determined for each CSI model 107 probe by monitoring its resistance while the temperature is varied from −50 °C to +30 °C in a Hart Scientific temperature calibration bath at the USGS temperature calibration facility in Lakewood, Colorado. For those rare instances where  $a_0, a_1, a_2$ , and  $a_3$  are unavailable for a particular CSI model 107 sensor, we use values that have been determined for a “factory standard” probe.

Temperature measurements are assigned a bad data code when it is determined they do not represent the air temperature field 3 m above the ground. Data that have been assigned such a code are effectively masked and are not used in any further

calculations (for example, climate statistics, climate trends, or climate anomalies). Beyond the general problems described above (for example, insufficient system power and change in sensor height due to sensor mast damage), specific problems that can lead to air temperature masking include (a) reduction of the necessary ventilation through the radiation shield by snow, rime ice, or low wind speeds ( $<1$  m/s), and (b) the sensor falling out of the radiation shield, exposing it to solar radiational heating. Air temperature climate statistics are calculated when the data are available at least 95 percent of the time.

*Wind speed and direction.*—No calibration factors or corrections are currently applied to the wind speed or wind direction measurements. Specific problems that can lead to masking of either the wind speed or wind direction include significant ice buildup that prevents the wind monitor from functioning properly. In some cases, icing will affect the wind speed measurements but not the wind direction, and vice versa. The threshold for calculating climate statistics for the wind variables is the same as for air temperature, that is, 95 percent data availability.

*Ground temperatures.*—The resistances of the MRC TP101 thermistors are determined from the stored half-bridge voltages using known values for the excitation voltage and the circuit's fixed resistors. The thermistor resistances are then converted to temperature using the same four-term calibration function (eq. 2) as for the air temperature sensor. In this case, the four calibration coefficients ( $a_0, a_1, a_2, a_3$ ) were determined from data for a “factory standard” MRC probe over the temperature range  $-40$  °C to  $+10$  °C. The stated uncertainty of the MRC measurements is  $0.1$  °C. To further reduce the uncertainty of the ground temperature measurements, a special set of orthonormal basis functions were fit to site specific zero-curtain ground temperature profiles in a least-squares sense where the number of basis functions retained was determined by the reduced chi-squared values. The difference between the zero-curtain temperature profiles (based on the factory standard calibration) and the resulting least-squares fit provided an estimate of the unique calibration offset for each thermistor relative to the factory standard. These calibration offsets were then applied as corrections to the data. With these corrections, the standard uncertainty of the ground temperature measurements is believed to be in the range  $0.02$ – $0.05$  °C. Small improvements from previously released U.S. Geological Survey Data Series 812 and 892 (Urban and Clow, 2014a, b) have been made to the data processing system such that the resulting ground temperatures are more complete and more accurate. The improvements are as follows, and details of the refined data processing algorithms are described in “DOI/GTN-P Climate-Station Data, Quality Assurance and Control Procedures” (G.D. Clow and F.E. Urban, unpub. data, 2015). Each data logger has a unique internal voltage offset that affects the half-bridge voltage measurements used to determine the resistance of each thermistor. The resistances are now corrected for this offset, eliminating a small shift that occurred when data loggers were upgraded at each station. The excitation voltage used to drive the MRC probe is on occasion

erroneously recorded even though the actual voltage was valid. Previously, when this occurred, the processing system masked the associated ground temperatures out of the data stream. Improved algorithms now allow recovery of the actual excitation voltages during these times; thus, ground temperatures can be reported when they were previously masked.

Beyond the general system problems (power loss, sensor or sensor cable damage, and so forth) that can lead to masking, the ground temperature instrument is subject to freeze-thaw processes inherent to its placement in permafrost. The MRC is a rigid instrument (the thermistors are encased in a hard epoxy potting in a long cylindrical shape), and permafrost and freeze-thaw processes periodically act to “jack” the instrument vertically out of its original position. The amount of jacking varies widely year to year and among stations. Many sites experienced no jacking, some experienced small ( $1$ – $3$  cm) documented amounts, and several experienced extreme ( $5$ – $10$  cm) amounts. The data processing system is used to mask data from the topmost thermistors at the  $5$ - and sometimes  $10$ -cm depths when their values during unfrozen time periods exceed local air temperatures. These criteria indicate that portions of the instrument are exposed to solar radiation above the tundra and that those thermistors are reporting values that are erroneously warm. Stations with extreme jacking amounts during some portion of their deployment include Marsh Creek, Camden Bay, Ikpiuk, Piksiksak, and Awuna1. The threshold for calculating climate statistics for ground temperatures is 95 percent data availability.

*Incident and reflected solar flux.*—The pyranometers that measure incoming and reflected shortwave radiation have a factory standard calibration factor applied to the raw measurements. Other than that, no corrections or calibrations are applied. Specific problems that can lead to masking of solar-flux values include significant ice or snow buildup, which prevent the sensor from functioning properly. This is generally much more of a problem for the downwelling (incident) radiation sensor than for the reflected flux sensor. Much of the radiation-data masking that is accomplished in the processing system is achieved by calculating ideal clear-sky radiation values at a given station location and then using differences between the calculated and observed values to identify times with potentially faulty data. The threshold for calculating climate statistics for incoming and reflected radiation is 95 percent data availability.

*Rainfall.*—Rainfall data are collected only during the summer months when air temperatures are above  $0$  °C. A conversion factor is applied for each rainfall gage to convert the measured values (tipping bucket counts) into total millimeters per hour. In the late summer and autumn, rain may be mixed with snow; these periods are difficult to identify and mask in the data. The data processing system is employed to mask any rainfall data that occur (a) when there is snow on the ground, (b) in midwinter during isolated events when air temperature is above freezing, causing any snow in the rain gage to melt and provide faulty rain gage readings, and (c) in midspring during snowmelt when snow in the rain gage bucket melts and



creates faulty readings. The threshold for calculating climate statistics for rainfall is 95 percent data availability.

**Snow depth.**—Snow depth data are collected year round, and snow presence is confirmed by high-reflected solar-flux values. The distance to ground provided by the sensor during snow-free periods is included in the complete data files and can be utilized to some degree to investigate plant growth, foliar loss of tundra plants, and so forth. Negative values for snow depth are occasionally reported during snow-free periods and represent a deviation from what is determined as a local zero-depth value. Negative values are typically a result of changes in tundra surface characteristics, such as loss of leaves or grasses being matted down by wind and moisture. The snow depth sensor can return faulty values during periods of high wind and blowing snow. To detect this situation, the data processing system automatically flags snow depth values that are more than 3 standard deviations away from the running mean. The system color-codes the flagged (potentially bad) values according to wind speed to help determine whether masking is warranted. The high-wind flagged values are then masked along with those that occur during general system problems (for example, low power, damaged mast, and cable failure). The threshold for calculating climate statistics for snow depth is 90 percent data availability.

**Soil moisture.**—Factory standard conversion algorithms are applied to the raw data from the soil moisture sensor. Specific problems that can lead to masking of the soil moisture values include ground temperatures below  $-15^{\circ}\text{C}$ , at which point the sensor behaves erratically. Three-sigma statistics are calculated for soil moisture data, and values that exceed these limits are masked. The threshold for calculating climate statistics for soil moisture is 95 percent data availability.

**Atmospheric pressure.**—No calibration factors or corrections are currently applied to the atmospheric pressure measurements. Beyond the general system problems that can lead to masking, there are no specific problems related to this sensor. Three-sigma statistics are calculated for atmospheric pressure data, and values that exceed these limits are masked. The threshold for calculating climate statistics for atmospheric pressure is 95 percent data availability.

## Data Overview

Figures A–3 through A–12 present overviews of each of the data variables at several temporal scales. Figure A–3 shows the air temperature record from the Fish Creek monitoring station (lat  $70^{\circ}20.114'\text{N}$ , long  $152^{\circ}03.120'\text{W}$ .) at hourly resolution. The top panel shows the full record, the middle panel shows a single year of data, and the lower panels show 1 week of winter data and 1 week of summer data. The annual seasonal cycle is clearly evident in the top panel with minimum winter air temperatures dropping to about  $-45^{\circ}\text{C}$  and maximum summer temperatures reaching  $+25^{\circ}\text{C}$ . In addition to the seasonal cycle, temperature excursions due to passing weather systems are discernible in the middle panel. These weather systems are the dominant source of air temperature

variability during the winter (lower left panel). During the summer, air temperature variations are primarily related to changes in the incident solar radiation, which produces a strong diurnal cycle (lower right panel).

Figure A–4 shows the wind speed record from Fish Creek at hourly resolution. The top panel shows the full record, whereas the middle panel shows 1 full year, and the lower panels show 1 week of winter data and 1 week of summer data. Seasonal patterns are evident with the strongest wind events occurring during winter and the most consistent wind speeds occurring during the summer. The strongest winds, which are related to passing weather systems, are about  $20\text{ m/s}$  at this site. Occasional gaps in the sub- $0^{\circ}\text{C}$  portion of the record (upper and middle panels) are due to significant ice buildup on the wind monitor; the data have been masked during these periods. As with air temperature, passing weather systems are the dominant source of wind speed variability during the winter (lower left panel). A diurnal signal is apparent in the summer wind speed variability (lower right panel).

Figure A–5 shows windroses at the Fish Creek station for each of the four seasons: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). Windroses are useful for showing how both wind speeds and directions are distributed at a particular site. For the DOI/GTN-P dataset, windroses are calculated by dividing the wind direction into 16 categories ( $22.5^{\circ}$  each) and the wind speed into three classes: (a) less than  $5\text{ m/s}$ , (b) between  $5\text{ m/s}$  and  $10\text{ m/s}$ , and (c) greater than  $10\text{ m/s}$ . The windroses show that winds at Fish Creek most frequently come out of the east and east-northeast. The strongest winds occur during the winter and tend to come out of the east with a secondary maximum out of the west. Strong winds also occur during the transition seasons, autumn and spring, again primarily coming out of the east with a secondary maximum out of the west.

Figure A–6 shows the ground temperature record from the Fish Creek monitoring station at hourly resolution. The top panel shows the full record, the middle panel shows a single year of data, and the lower panels show 1 week of winter data and 1 week of summer data. The annual seasonal cycle is clearly evident in the top panel with minimum winter ground temperatures near the surface ( $5\text{ cm}$ ) dropping to about  $-20^{\circ}\text{C}$  and  $-15^{\circ}\text{C}$  at depth ( $120\text{ cm}$ ). Maximum summer temperatures near the surface ( $5\text{ cm}$ ) reach  $+10^{\circ}\text{C}$  and  $-2^{\circ}\text{C}$  at depth ( $120\text{ cm}$ ). In the middle panel, seasonal changes are clearly evident with fast warming in the spring when snow melts and the low-albedo tundra surface is able to absorb shortwave radiation. In the autumn, the water-saturated soils take a long time to freeze solid due to the release of latent heat. In addition to the seasonal cycle, temperature excursions due to passing weather systems are discernible in the middle panel. These weather systems, as well as variability in snow cover, are the dominant source of ground temperature variability during the winter (lower left panel). During the summer, ground temperature variations in the active layer ( $0\text{--}25\text{ cm}$  at Fish Creek) are primarily related to changes in the incident solar flux, which

produces a strong diurnal cycle (lower right panel). Ground temperatures below the active layer in summer are reflective of longer term (annual) conditions including air temperature and previous winter snow cover.

Figure A–7 shows the incident solar flux from the Fish Creek monitoring station at hourly resolution. The top panel shows the full record; the bottom panel shows a single year of data. The annual seasonal cycle is clearly evident with maximum flux values in midsummer of about 600 to 700 watts per meter squared and values that drop to zero for about 2 months of winter when there is little or no daylight at this latitude. Cloudy periods are often evident in the peak summer months (June, July, and August) when temperatures are above freezing and sea ice in the adjacent ocean is far offshore, providing a consistent moisture source for cloud formation.

Figure A–8 shows the reflected shortwave radiation flux from the Fish Creek monitoring station at hourly resolution. The top panel shows the full record; the bottom panel shows a single year of data. The annual seasonal cycle is clearly evident with maximum flux values in midspring of about 600 watts per meter squared and values that drop to zero for about 2 months of winter. A distinguishing feature of the reflected solar-flux data is the extremely rapid decrease in values during snowpack disintegration. This transition from snow cover to bare tundra usually occurs in late May or early June, and in the span of 5–7 days reflected solar-flux values drop from 600 to 150 watts per meter squared.

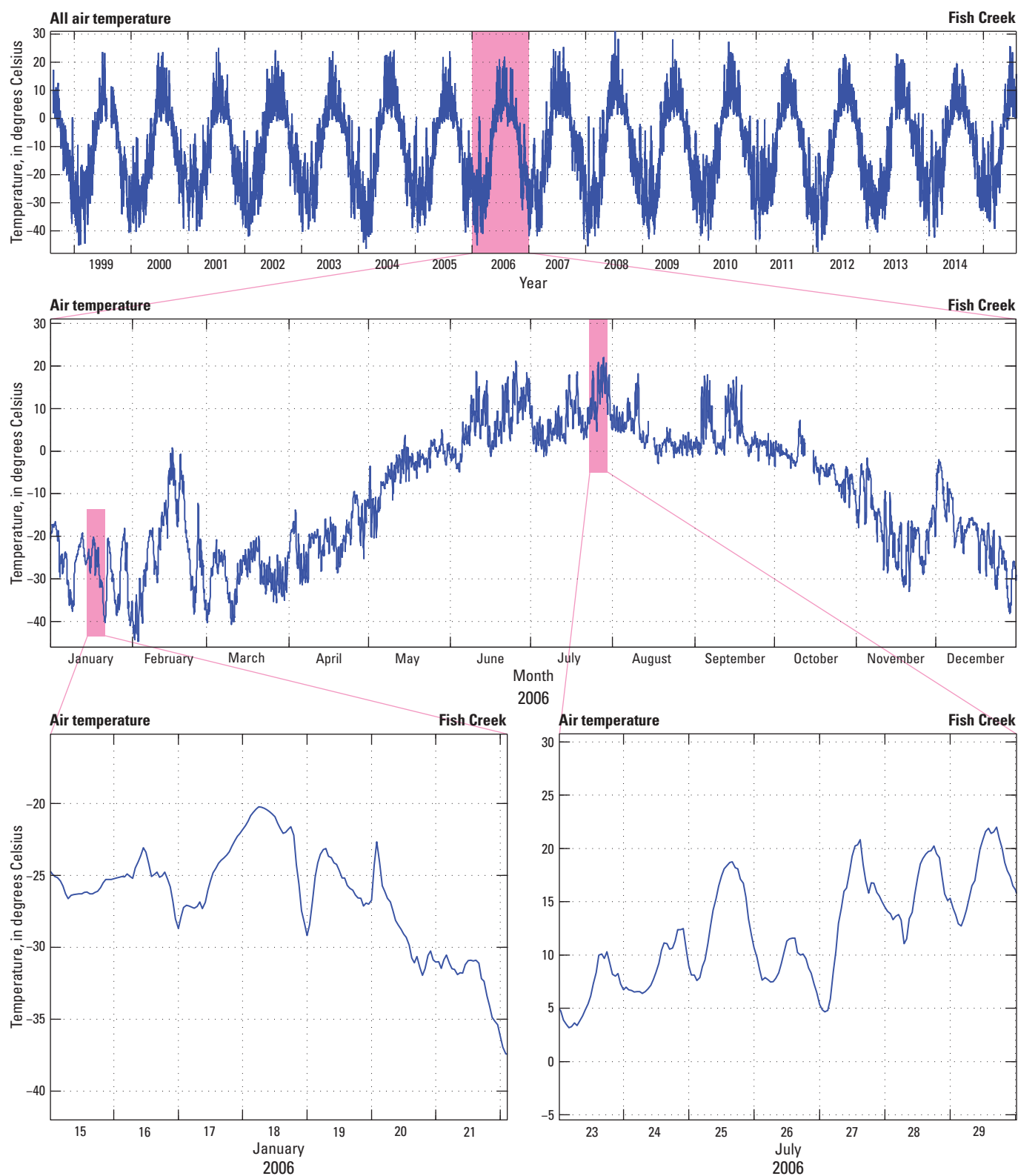
Figure A–9 shows the entire accumulated rainfall record from the Inigok monitoring station (lat 69°59.377'N., long 153°05.630'W.) at four different resolutions: seasonal (top left panel), monthly (top right panel), weekly (bottom left panel), and daily (bottom right panel). The rainfall season typically begins in early June and ends in late September to early October, with the greatest rainfall amounts occurring in August.

Figure A–10 shows the snow depth record from the Inigok monitoring station. The top panel shows the full record at hourly resolution; the bottom panel shows a single year of data at daily resolution. The annual seasonal cycle is evident with snow accumulation typically beginning in late September to early October and snowmelt occurring in late May to early June. The snowpack gradually increases through the autumn (October–November), sometimes plateauing in the winter (January–March). Common snowpack features include midwinter wind scour (evident in the lower panel in late January), and early spring (April–May) snow depth increases immediately prior to snowmelt. A consistent aspect of the snowpack in this region is the extremely rapid disintegration that occurs in late May or early June. Once snowmelt ensues, the entire snowpack is usually gone in 7–10 days. Snow depth varies from station to station with a general trend of increasing depths away from the coast as elevation increases from the coast to the Brooks Range (5–785 m).

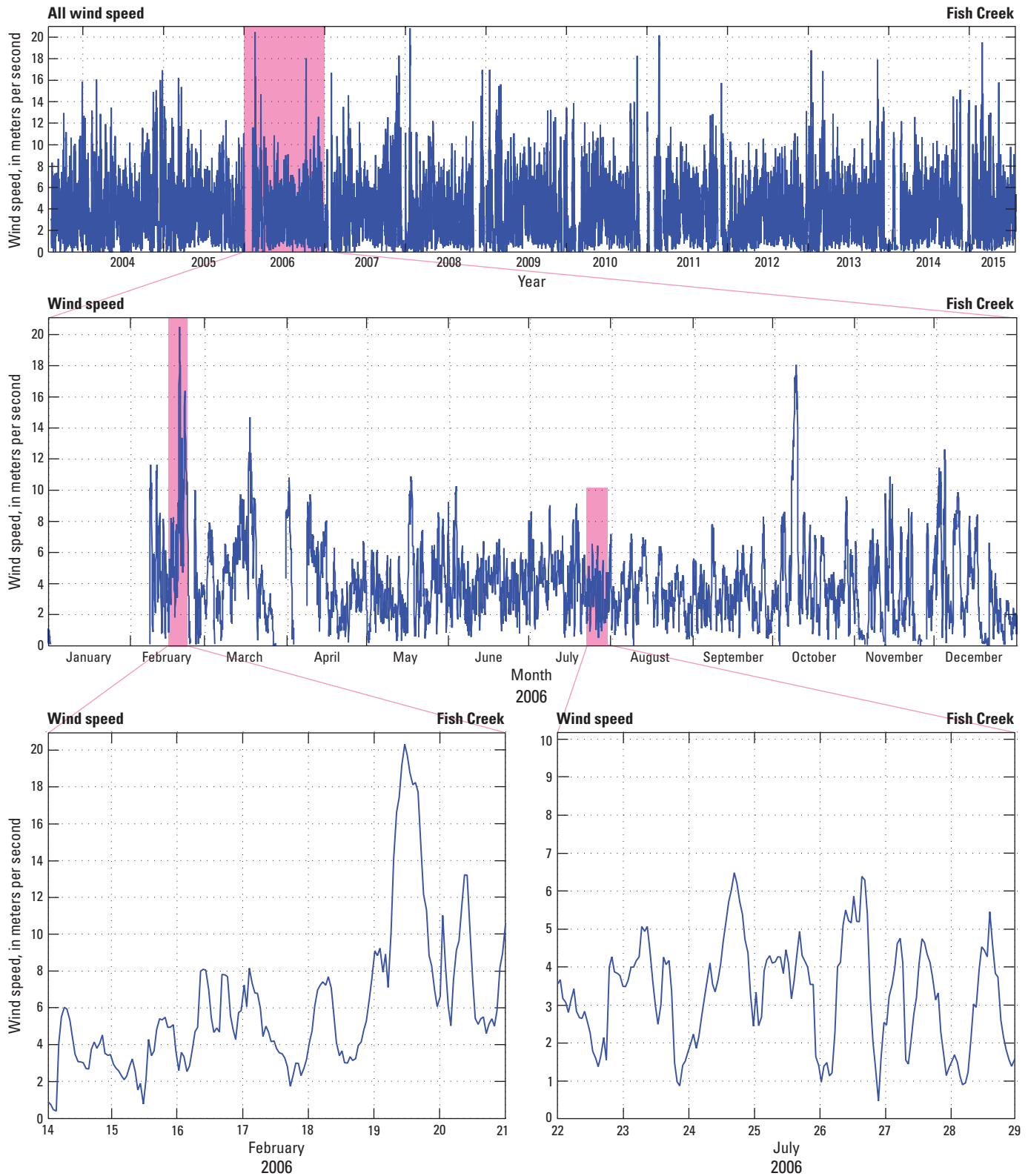
Figure A–11 shows the hourly resolution soil moisture record at 15-cm depth from the South Meade (lat 70°37.708'N., long 156°50.119'W.) monitoring station. Data gaps in winter occur when the ground temperature

falls below about  $-15^{\circ}\text{C}$  and the sensor does not report valid values. The top panel shows the full record, the bottom panel shows a single year of data, and the inset shows soil-moisture-response details during one summer season. Typical water-fraction values are about 0.4 when the active layer is thawed and near zero when the active layer is frozen. The inset displays a common feature, higher initial water fraction in the soils after snowmelt that gradually dissipates, usually by the end of July. Rains in August and September are often reflected in temporary increases in the water fraction.

Figure A–12 shows the surface pressure record from the Fish Creek monitoring station at hourly resolution. The top panel shows the full record; the bottom panel shows a single year of data. A seasonal cycle is evident with fewer high-amplitude pressure changes in spring and summer (late March through mid-October) than in the autumn and winter (November through February).

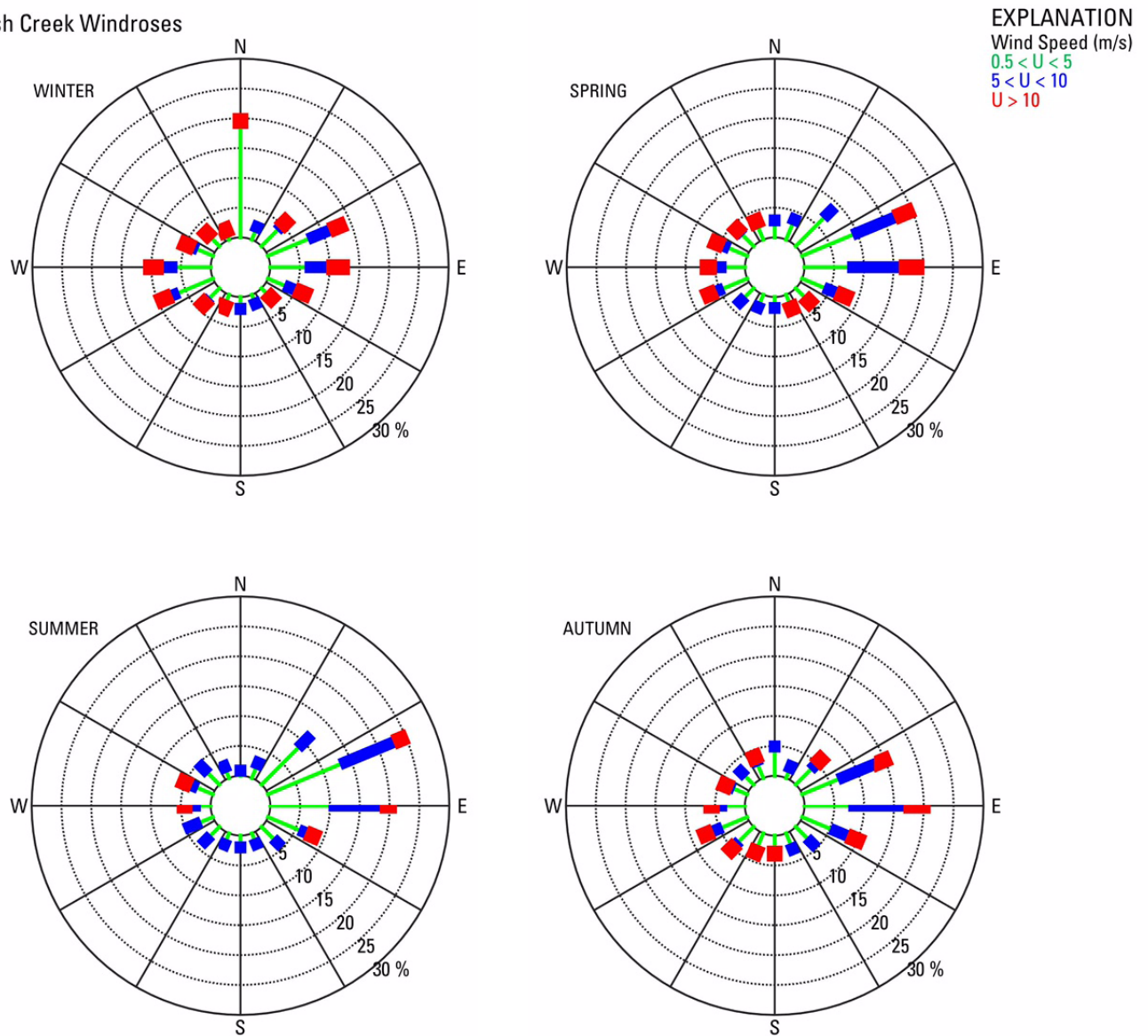


**Figure A-3.** Sample air temperature record from Fish Creek station. Data are presented at several resolutions with each highlighted section expanded. The top panel shows the full record for the station, the middle panel shows 1 full year (2006), the lower left panel shows 1 week during the winter of 2006, and the lower right panel shows 1 week during the summer of 2006.



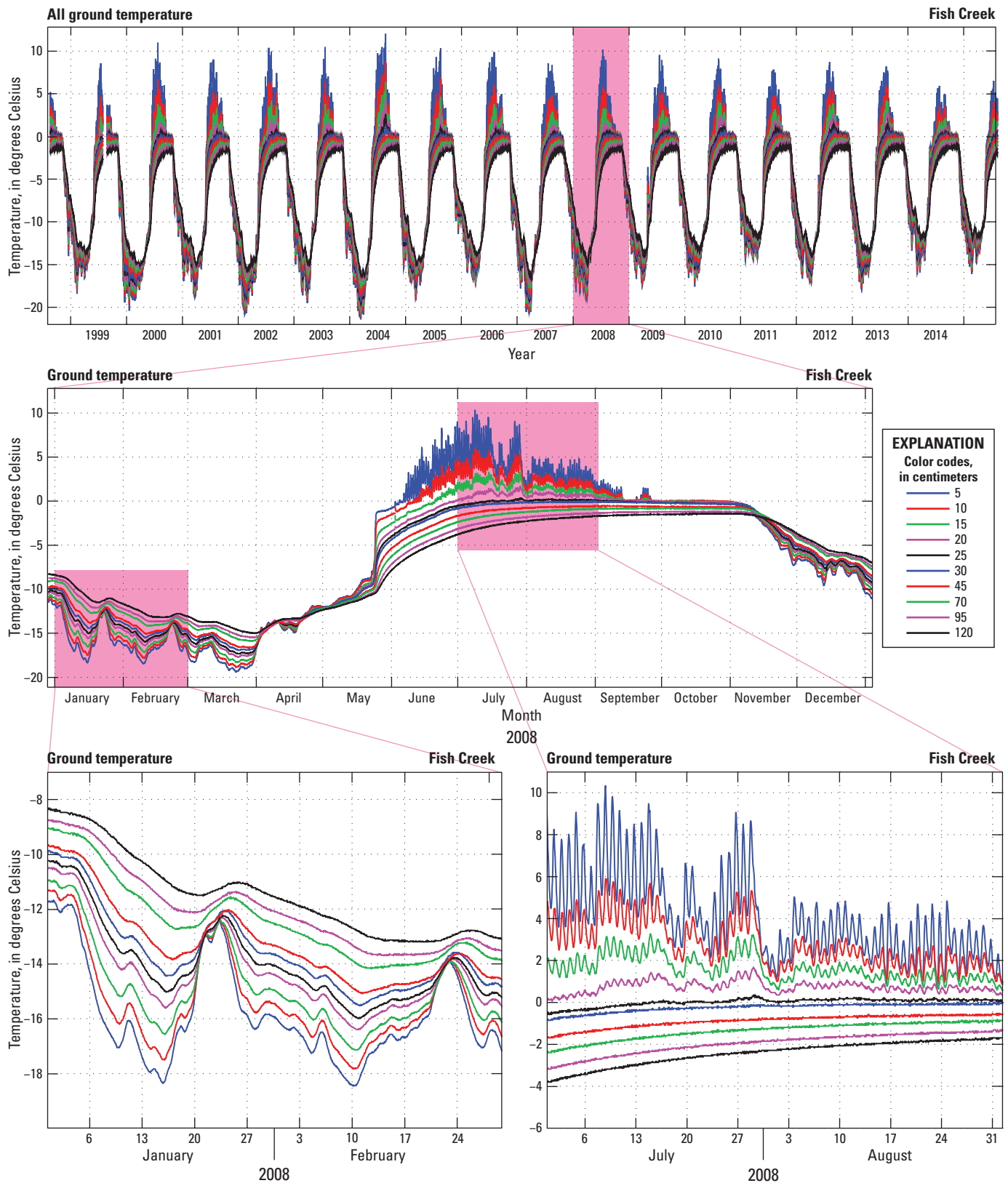
**Figure A-4.** Sample wind speed record from Fish Creek station. Data are presented at several resolutions with each highlighted section expanded. The top panel shows the full record for the station, the middle panel shows 1 full year (2006), the lower left panel shows 1 week during the winter of 2006, and the lower right panel shows 1 week during the summer of 2006.

## Fish Creek Windroses

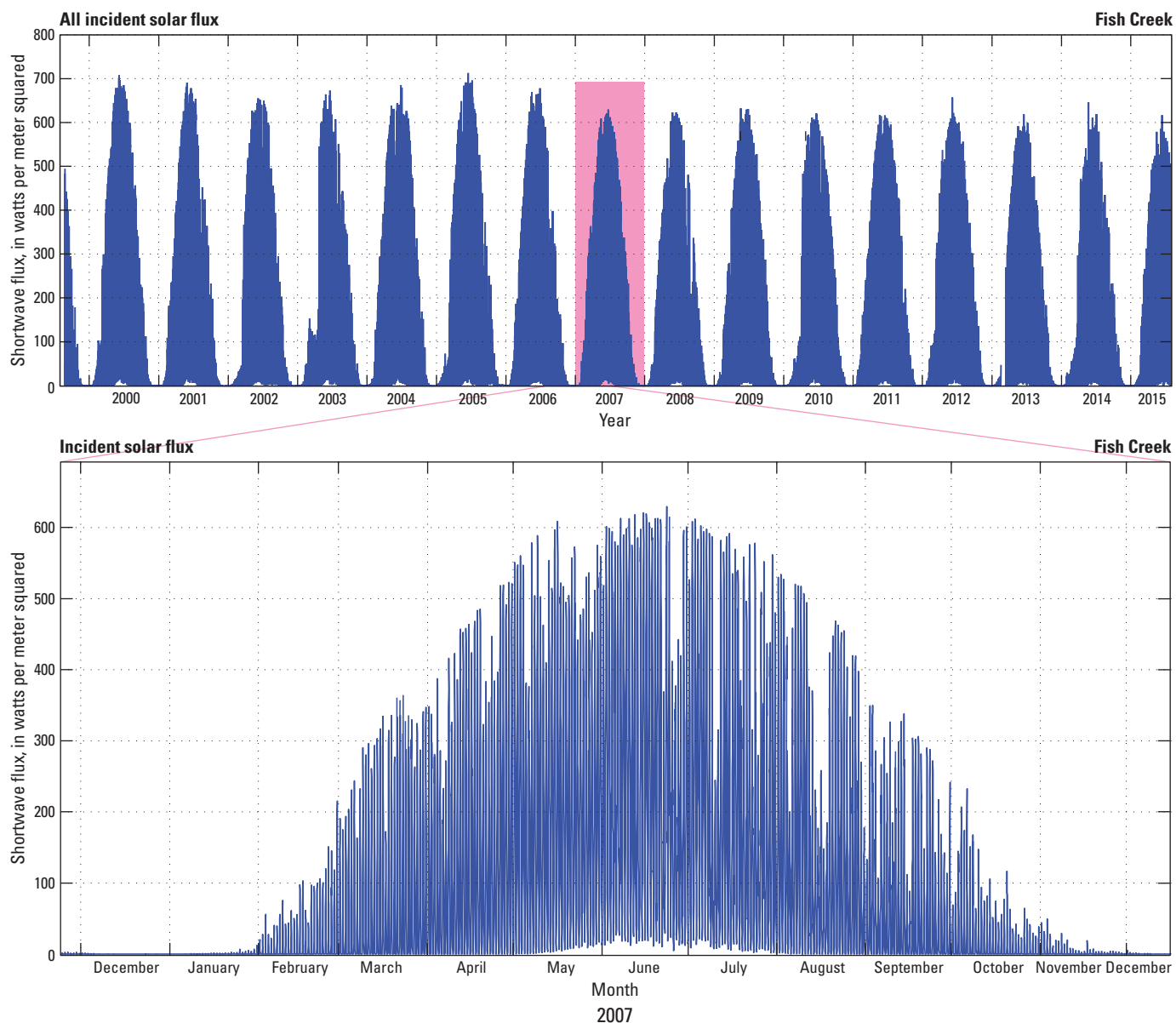


**Figure A-5.** Sample windroses from Fish Creek station. The wind direction and speed data for a site are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: (a) less than 5 meters per second (m/s), (b) between 5 m/s and 10 m/s, and (c) greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (U, wind speed; N, north; E, east; S, south; W, west)

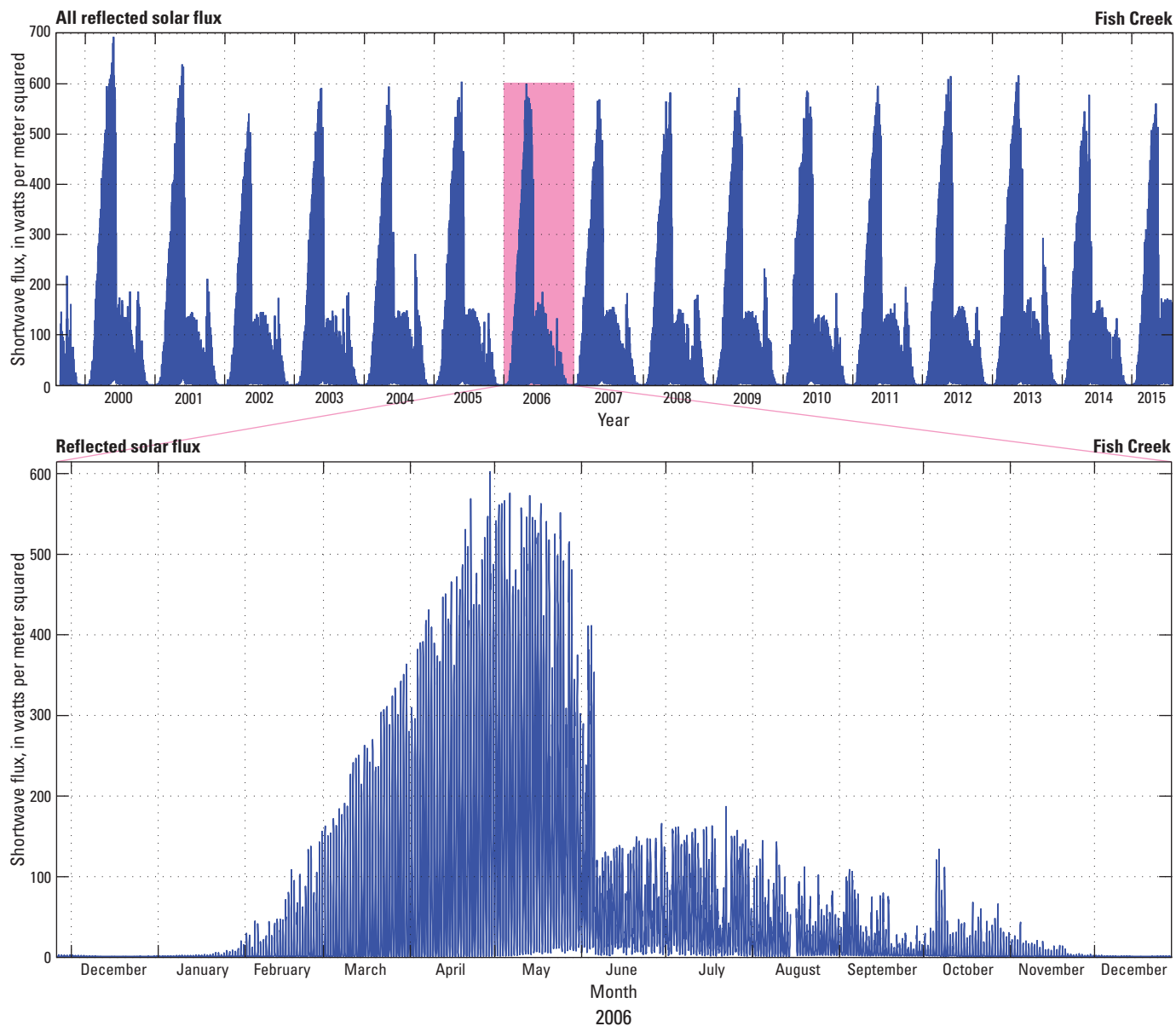




**Figure A-6.** Sample ground temperature record from Fish Creek station. Data are presented at several resolutions with each highlighted section expanded. The top panel shows the full record for the station, the middle panel shows 1 full year (2008), the lower left panel shows 2 months during the winter of 2008, and the lower right panel shows 2 months during the summer of 2008. (cm, centimeter)

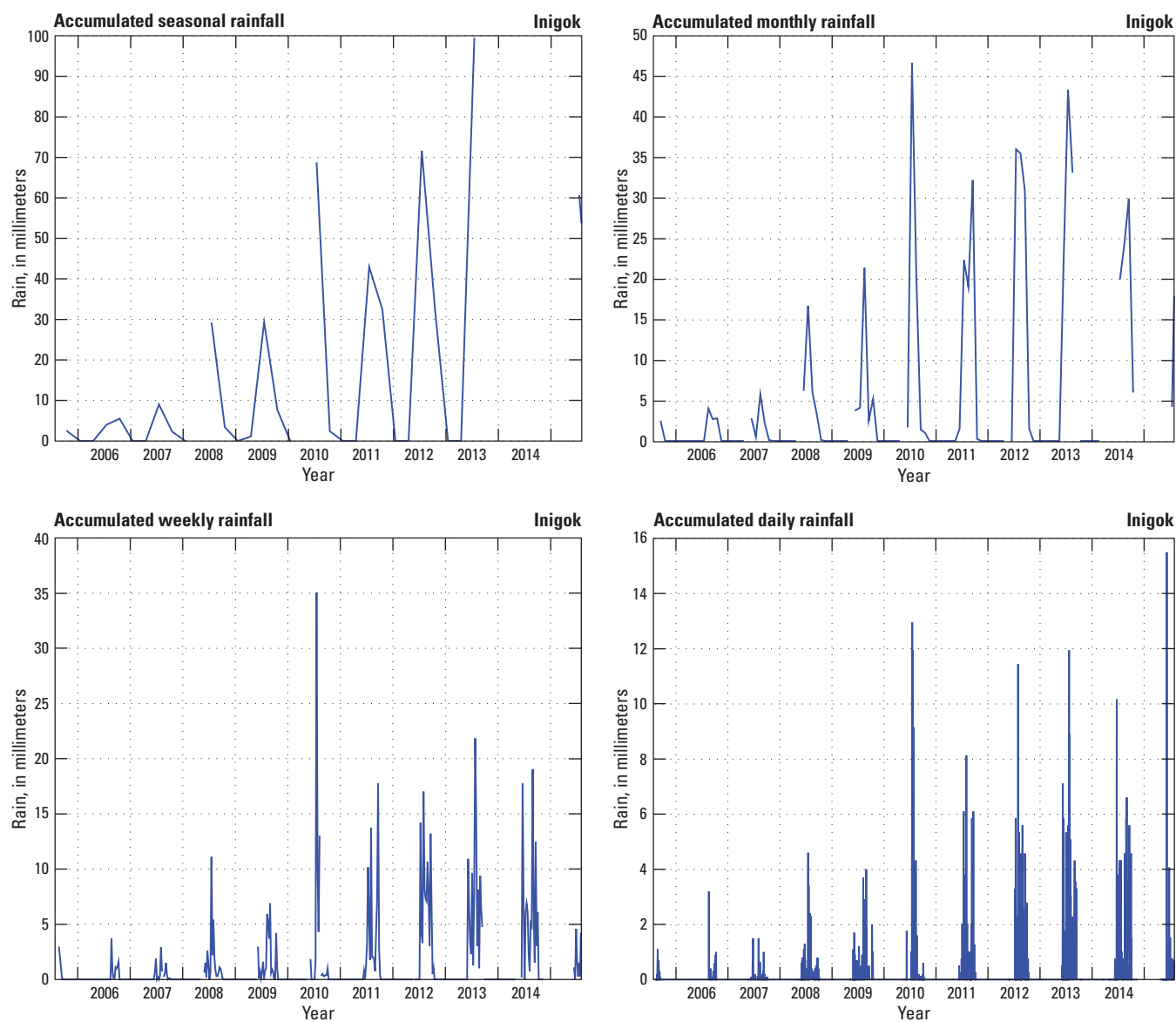


**Figure A-7.** Sample incident solar-flux record from Fish Creek station. Data are presented at two resolutions with one highlighted section expanded. The top panel shows the full record for the station; the bottom panel shows 1 full year (2007).

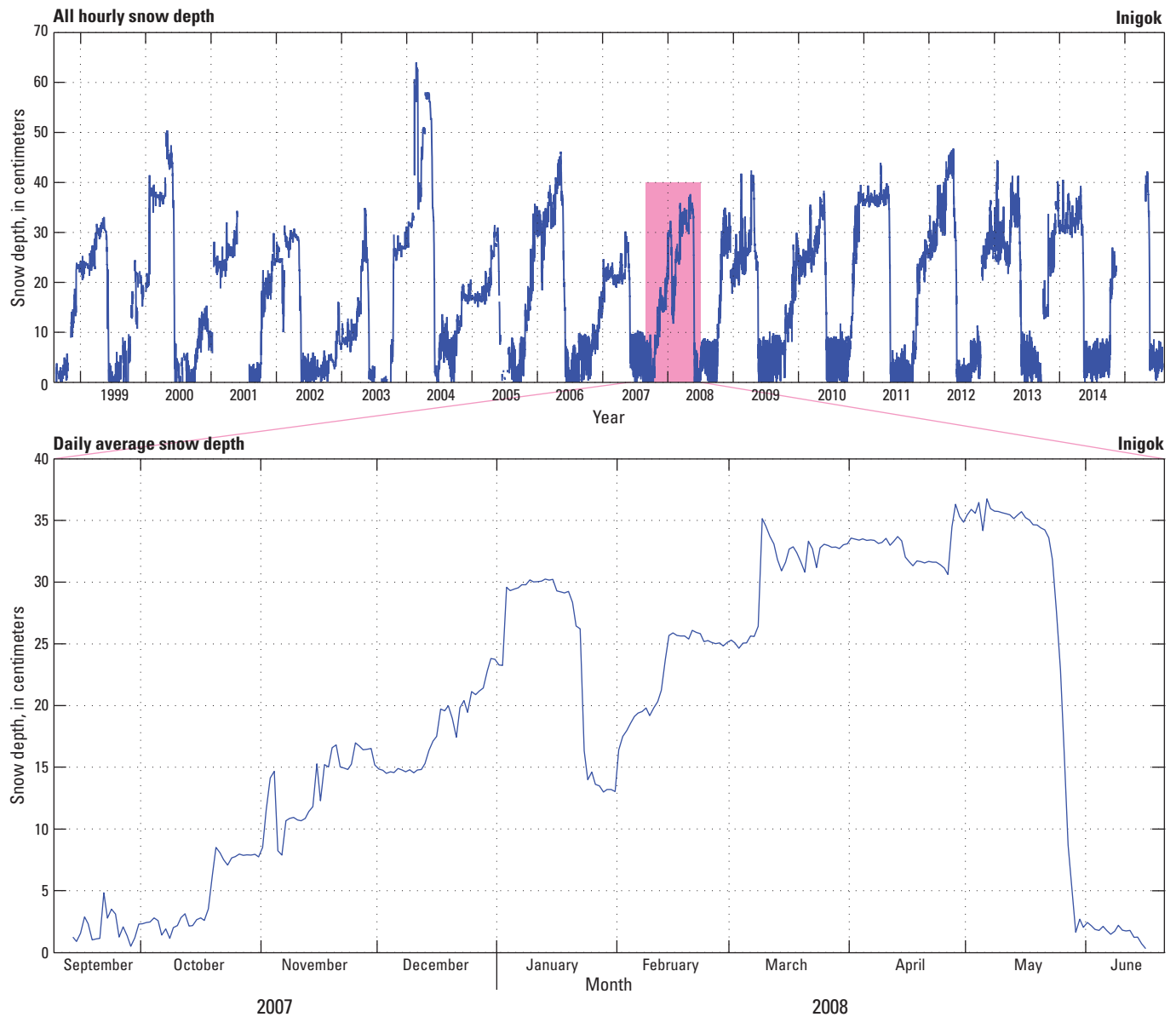


**Figure A-8.** Sample reflected solar-flux record from Fish Creek station. Data are presented at two resolutions with one highlighted section expanded. The top panel shows the full record for the station; the bottom panel shows 1 full year (2006).

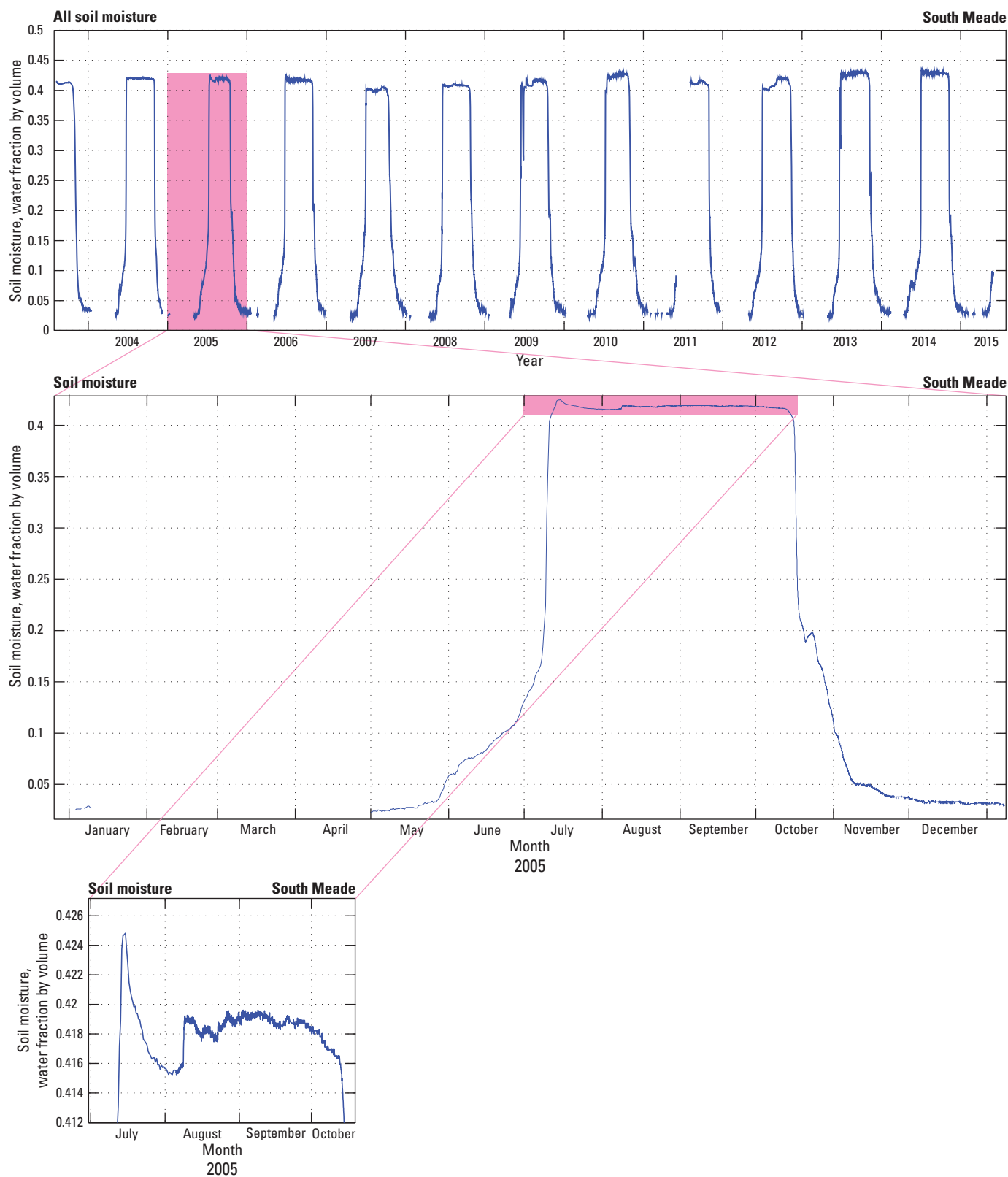




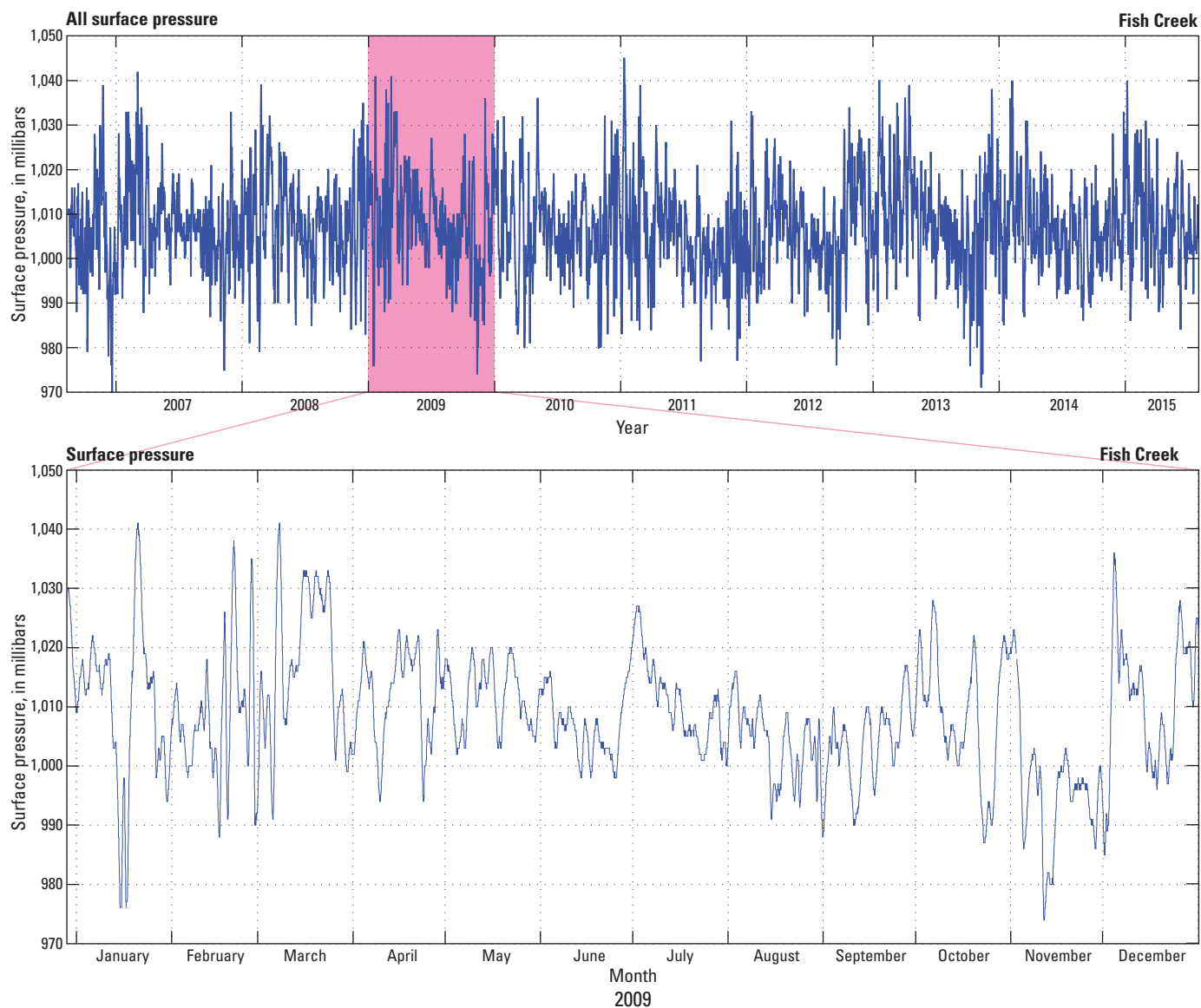
**Figure A–9.** Sample rainfall record from Inigok station. Data are presented at several resolutions. The top left panel shows the accumulated rainfall at seasonal resolution, the top right panel shows the accumulated rainfall at monthly resolution, the bottom left panel shows the accumulated rainfall at weekly resolution, and the bottom right panel shows the accumulated rainfall at daily resolution.



**Figure A-10.** Sample snow depth record from Inigok station. Data are presented at two resolutions with one highlighted section expanded. The top panel shows the full record for the station; the bottom panel shows daily averages for one full snow-cover season, September 2007 through June 2008.



**Figure A-11.** Sample soil moisture record at 15-centimeter depth from South Meade station. Data are presented at several resolutions with each highlighted section expanded. The top panel shows the full record for the station, the bottom panel shows 1 full year (2005), and the inset shows detail during the unfrozen season, July through October, 2005.



**Figure A-12.** Sample surface pressure record from Fish Creek station. Data are presented at two resolutions with one highlighted section expanded. The top panel shows the full record for the station; the bottom panel shows 1 full year (2009).

## B. Drew Point

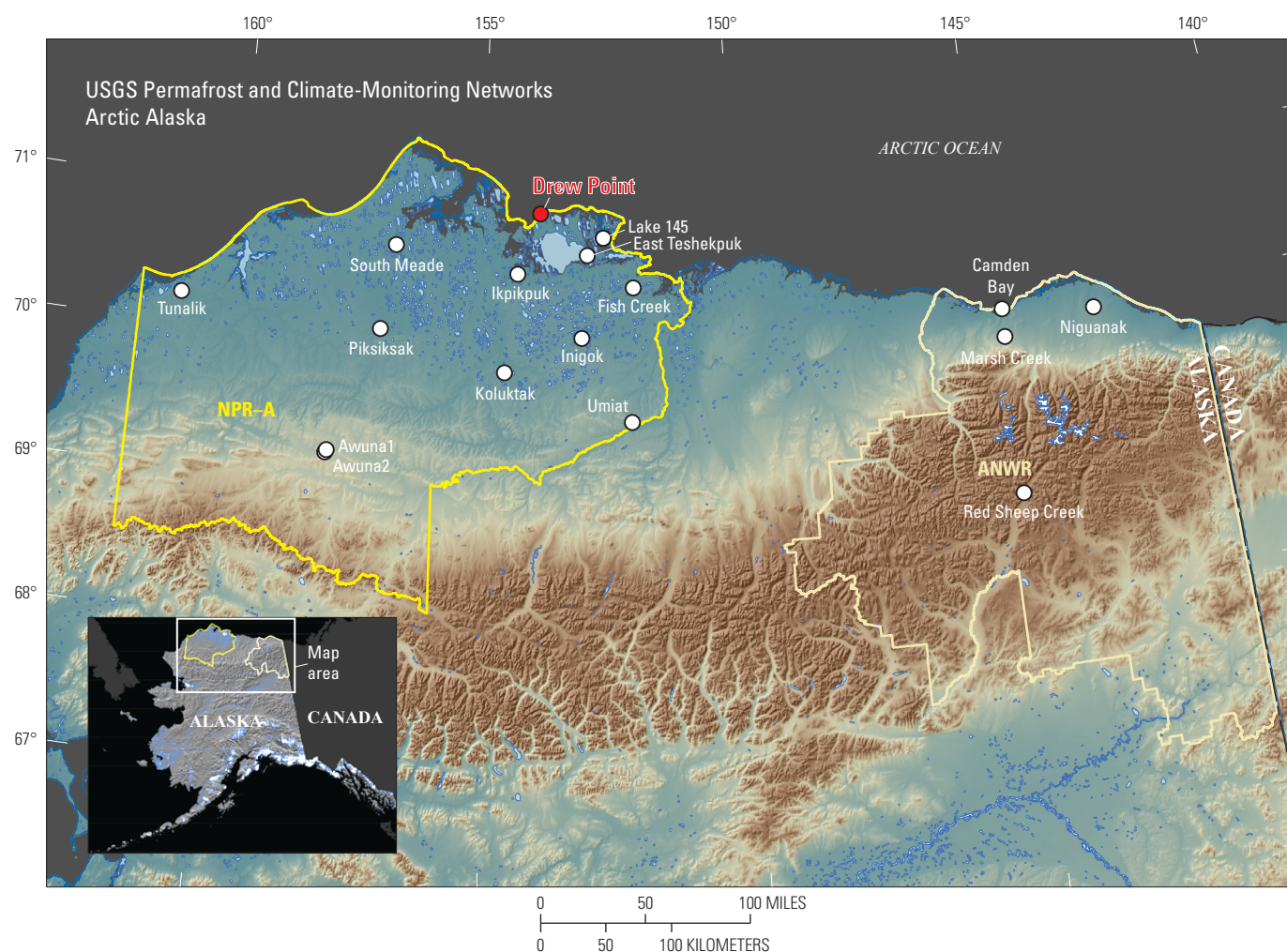
GTN-P code: U20

Latitude: 70°51.872'N

Longitude: 153°54.405'W

Elevation: 5 meters above mean sea level

Installation date: 18 AUG 1998



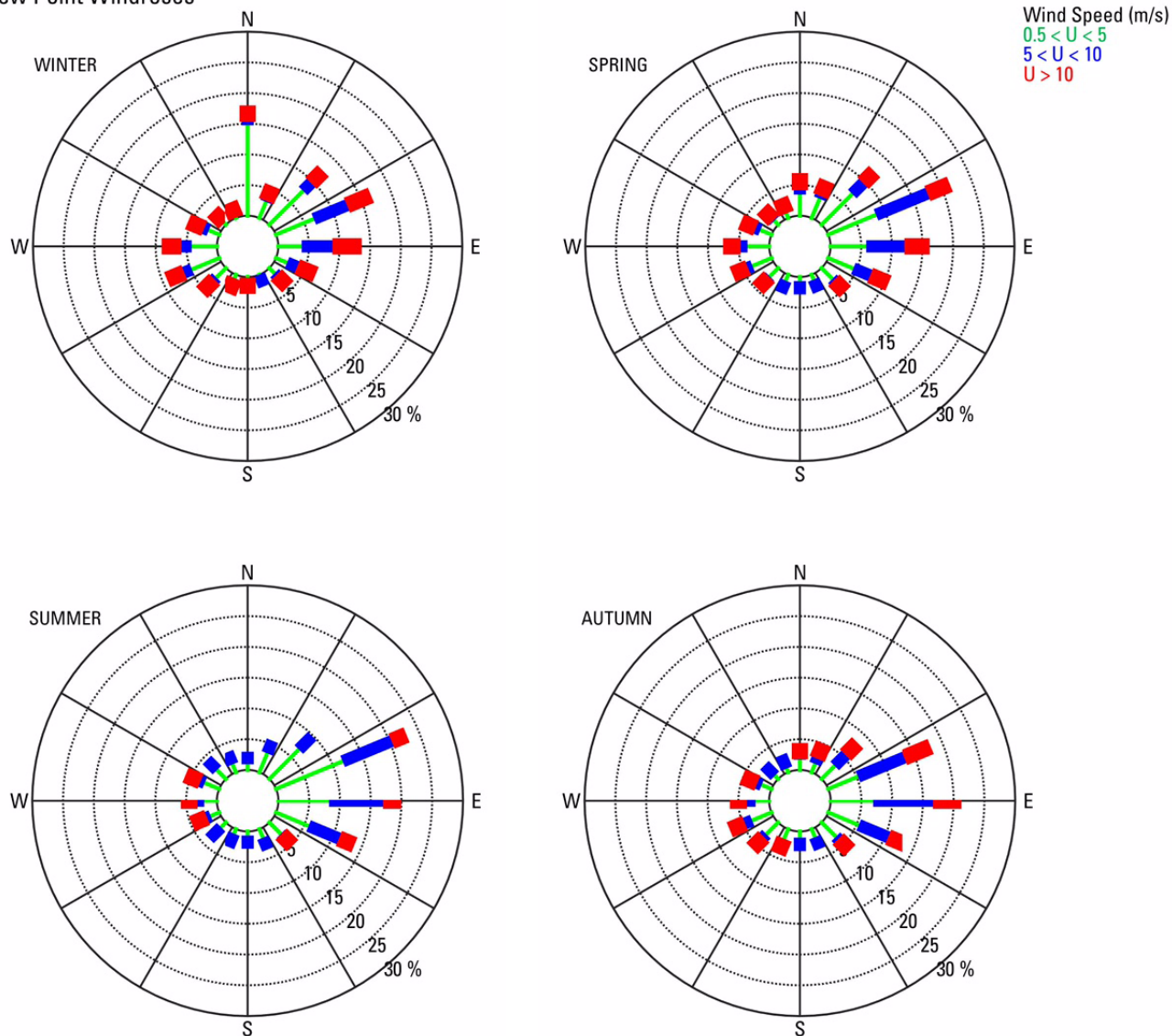
**Figure B-1.** Location map presenting the specific location of the Drew Point site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure B-2.** Drew Point station in summer 2008.

## Drew Point Windroses



**Figure B-3.** Drew Point seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table B–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
 Variable: Air temperature, in degrees Celsius  
 File name: AK100\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.05	-4.52	-11.33	-20.75
1999	-30.40	-27.43	-28.07	-20.03	-5.49	0.87	5.31	5.49	0.37	-8.52	-20.26	-28.97
2000	-25.47	-27.71	-24.99	-18.62	-9.27	3.53	4.68	4.46	0.41	-7.88	-18.50	-21.45
2001	-24.46	-19.75	-28.22	-17.83	-11.16	2.00	5.20	4.73	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.16	-3.37	-18.57	-22.84
2004	-24.47	-33.08	-28.37	-17.60	-4.86	3.84	6.41	7.15	0.90	-6.05	-16.91	-24.44
2005	-23.79	-26.37	-23.39	-17.39	-5.35	0.80	3.25	5.66	0.49	-6.03	-21.21	-20.56
2006	-25.82	-22.80	-28.77	-20.47	-3.45	4.05	5.23	2.35	2.39	-3.39	-16.05	-20.54
2007	-27.50	-25.40	-28.60	-13.50	-8.24	2.00	5.46	6.31	2.53	-5.28	-10.42	NaN
2008	-29.09	-27.63	-28.58	NaN	-4.95	3.49	5.36	3.84	0.96	-6.18	-16.54	-18.55
2009	-27.40	-27.85	-28.04	-15.98	-4.09	1.75	6.80	5.99	0.99	-3.87	-18.69	NaN
2010	NaN	NaN	-24.40	-12.83	-6.74	1.22	6.07	6.05	2.52	-4.60	-11.14	-24.65
2011	-24.50	-22.11	-22.44	-19.41	-5.55	1.58	5.88	5.31	2.48	-4.63	-19.61	-25.32
2012	-31.60	-25.46	-32.32	-15.61	-5.96	3.42	8.55	8.50	2.20	-2.35	-15.39	-25.29
2013	-25.45	-30.55	-23.39	-19.09	-5.77	4.12	7.56	4.36	-0.54	-3.98	-14.48	NaN
2014	-17.02	-17.48	-16.89	-15.92	-2.76	1.47	4.47	3.64	1.09	-5.47	-12.59	-22.61
2015	-24.71	-22.17	-24.57	NaN	-1.22	5.99	4.50					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.63	-22.02	-20.76	-39.14
1999	-47.30	-44.37	-44.71	-31.75	-19.51	-6.74	-2.08	-0.91	-11.46	-21.49	-33.81	-37.44
2000	-38.42	-42.67	-36.26	-32.51	-21.88	-6.24	-2.36	-2.12	-9.08	-16.65	-33.08	-35.15
2001	-35.94	-33.55	-37.24	-31.62	-26.27	-3.26	-1.90	-1.33	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.54	-18.61	-35.40	-36.27
2004	-37.33	-44.28	-42.19	-34.86	-18.16	-3.04	-0.10	-1.49	-4.47	-21.41	-28.48	-36.82
2005	-39.76	-36.38	-34.81	-31.36	-18.30	-6.80	-1.62	-1.50	-4.84	-17.02	-35.37	-30.40
2006	-40.12	-48.27	-42.08	-34.43	-19.86	-7.47	-2.63	-2.34	-3.81	-12.07	-27.13	-40.22
2007	-40.49	-39.22	-41.21	-28.15	-20.07	-4.40	-0.12	-0.28	-2.30	-15.58	-25.90	NaN
2008	-45.22	-40.56	-41.50	NaN	-16.42	-2.94	-1.25	-1.24	-5.15	-22.74	-30.44	-32.84
2009	-37.94	-45.36	-37.56	-32.26	-14.93	-4.00	0.54	0.20	-9.95	-19.07	-35.45	NaN
2010	NaN	NaN	-40.94	-30.59	-23.64	-2.49	-1.79	0.31	-7.92	-11.15	-31.02	-36.93
2011	-42.45	-35.73	-34.43	-32.15	-21.60	-3.87	-0.43	-0.41	-6.77	-22.28	-32.17	-37.88
2012	-42.27	-45.95	-41.11	-34.81	-21.73	-2.69	-0.12	0.21	-2.19	-17.91	-26.36	-37.01
2013	-37.85	-40.25	-35.29	-35.34	-24.14	-6.26	-1.38	-1.81	-11.43	-15.76	-28.65	NaN
2014	-42.57	-41.79	-38.78	-35.63	-14.68	-4.53	-1.42	-1.62	-4.47	-15.55	-26.26	-33.14
2015	-36.76	-37.61	-40.49	NaN	-14.00	-4.40	-0.70					



**Table B-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.08	2.33	-2.32	-0.01
1999	-11.32	-16.93	-14.70	-2.54	2.00	10.56	21.19	25.37	10.84	-0.98	-9.15	-19.73
2000	-11.08	-6.40	-14.82	-5.35	0.46	19.99	22.28	16.97	15.97	-0.67	-2.50	-11.57
2001	-14.15	-5.66	-18.35	-5.39	1.10	12.56	22.36	16.16	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.33	7.84	-0.49	-8.46
2004	-2.50	-23.52	-4.05	0.48	5.88	19.92	22.46	22.84	9.71	0.27	-8.81	-5.89
2005	0.39	-13.37	-4.19	-0.12	0.45	18.25	14.18	21.43	7.45	-0.69	-10.94	-6.13
2006	-16.11	0.84	-20.04	-8.77	11.93	18.20	19.34	14.76	16.93	4.89	-1.58	-2.26
2007	-14.96	-7.03	-7.41	-4.77	1.04	12.54	19.45	19.47	15.05	-0.31	-3.80	NaN
2008	-2.17	-8.26	-10.14	NaN	6.38	15.20	20.48	11.94	4.71	-0.34	-7.01	-2.45
2009	-4.00	-5.12	-14.99	4.22	6.15	11.67	23.23	19.37	12.20	3.65	-5.45	NaN
2010	NaN	NaN	-14.07	-0.78	5.46	9.92	19.83	19.46	15.26	0.90	0.48	-9.90
2011	-1.41	-1.14	-8.91	-5.35	6.59	12.40	19.46	16.12	13.27	0.07	-3.69	-12.68
2012	-15.18	-12.74	-16.03	-2.50	3.49	21.51	21.77	19.39	8.80	5.42	-3.87	-13.22
2013	-14.31	-22.09	-13.55	-2.85	5.39	17.46	19.92	19.51	12.03	0.99	1.86	NaN
2014	-7.67	15.06	11.70	1.03	5.66	10.69	18.14	14.28	10.64	0.72	-0.66	-6.53
2015	-7.54	-1.44	-6.29	NaN	10.16	21.39	18.59					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.85	0.61	4.78	2.41
1999	-5.02	-2.34	-2.17	-3.13	-0.05	-1.80	-0.34	0.31	-0.83	-3.39	-4.15	-5.81
2000	-0.08	-2.62	0.91	-1.71	-3.84	0.85	-0.97	-0.72	-0.79	-2.75	-2.40	1.71
2001	0.93	5.35	-2.32	-0.93	-5.72	-0.68	-0.45	-0.44	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.04	1.76	-2.47	0.32
2004	0.92	-7.99	-2.46	-0.69	0.57	1.17	0.76	1.97	-0.30	-0.92	-0.80	-1.28
2005	1.60	-1.27	2.52	-0.49	0.08	-1.87	-2.40	0.49	-0.71	-0.90	-5.10	2.60
2006	-0.44	2.29	-2.87	-3.57	1.99	1.38	-0.42	-2.82	1.19	1.74	0.06	2.62
2007	-2.12	-0.31	-2.69	3.40	-2.80	-0.68	-0.19	1.13	1.33	-0.15	5.68	NaN
2008	-3.70	-2.54	-2.68	NaN	0.48	0.82	-0.29	-1.34	-0.24	-1.05	-0.43	4.61
2009	-2.01	-2.76	-2.13	0.92	1.34	-0.93	1.15	0.81	-0.21	1.26	-2.59	NaN
2010	NaN	NaN	1.51	4.07	-1.30	-1.46	0.42	0.87	1.31	0.53	4.97	-1.49
2011	0.89	2.98	3.47	-2.50	-0.11	-1.10	0.23	0.14	1.28	0.50	-3.50	-2.16
2012	-6.21	-0.37	-6.42	1.30	-0.52	0.74	2.91	3.32	1.00	2.78	0.72	-2.13
2013	-0.06	-5.46	2.52	-2.19	-0.33	1.45	1.91	-0.81	-1.74	1.15	1.63	NaN
2014	8.37	7.61	9.01	0.99	2.68	-1.21	-1.18	-1.53	-0.11	-0.34	3.52	0.55
2015	0.67	2.92	1.34	NaN	4.21	3.32	-1.15					

**Table B–1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	23.33	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	93.55
2008	100.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	9.68
2010	0.00	17.86	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	96.77	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	53.33	100.00	100.00	100.00					

**Table B–1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Wind speed, in meters per second

File name: AK100\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.76	5.35	6.07	NaN
2005	4.43	5.08	5.51	4.23	4.86	4.85	4.33	3.79	6.34	4.26	3.07	4.03
2006	NaN	NaN	NaN	NaN	4.13	3.62	4.19	3.48	3.65	5.95	4.27	3.86
2007	3.42	4.12	3.63	4.78	3.74	5.31	4.46	NaN	5.23	5.39	6.14	4.28
2008	4.31	2.91	3.66	NaN	4.73	3.69	4.25	3.37	3.53	4.87	5.06	NaN
2009	NaN	4.94	NaN	4.16	3.95	5.44	4.26	4.00	4.04	4.39	3.79	NaN
2010	NaN	NaN	NaN	4.42	5.17	5.56	3.92	4.41	4.04	6.76	NaN	NaN
2011	NaN	NaN	NaN	4.22	3.62	5.68	4.37	4.34	4.59	5.66	NaN	NaN
2012	NaN	NaN	NaN	4.06	4.15	4.61	3.74	4.26	4.22	4.63	3.54	NaN
2013	NaN	NaN	5.77	NaN	4.23	3.67	NaN	3.44	4.46	NaN	5.31	NaN
2014	NaN	NaN	3.15	3.39	4.73	NaN	NaN	4.59	5.22	6.03	4.38	3.79
2015	NaN	5.03	4.56	4.47	4.27	3.78	4.03					

**Table B-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.17	11.41	14.13	NaN
2005	15.13	13.29	14.66	10.50	9.95	11.73	8.43	9.66	13.01	11.58	8.63	12.19
2006	NaN	NaN	NaN	NaN	13.04	9.40	8.56	8.52	9.21	19.09	11.34	12.09
2007	16.15	13.53	12.80	14.18	9.47	12.32	8.89	NaN	10.95	13.17	15.27	18.39
2008	19.43	10.99	9.59	NaN	11.35	10.35	11.24	9.56	11.74	12.53	12.65	NaN
2009	NaN	15.01	NaN	10.23	10.31	10.30	10.84	10.56	9.56	14.82	12.92	NaN
2010	NaN	NaN	NaN	11.47	10.95	12.84	7.91	10.55	10.38	14.44	NaN	NaN
2011	NaN	NaN	NaN	10.01	10.20	10.49	9.83	9.62	10.08	13.56	NaN	NaN
2012	NaN	NaN	NaN	11.81	9.58	11.19	8.58	9.28	10.78	10.90	11.26	NaN
2013	NaN	NaN	16.65	NaN	12.26	9.13	NaN	8.35	10.92	NaN	14.70	NaN
2014	NaN	NaN	8.15	13.69	11.54	NaN	NaN	10.08	10.68	15.56	13.62	14.48
2015	NaN	16.67	13.01	13.35	13.25	8.34	10.01					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.69	0.00	1.44	NaN
2005	NaN	0.66	1.00	-0.36	0.55	0.23	0.16	-0.22	1.89	-1.08	-1.56	0.03
2006	NaN	NaN	NaN	NaN	-0.18	-1.00	0.02	-0.52	-0.80	0.61	-0.35	-0.14
2007	NaN	-0.29	-0.88	0.19	-0.58	0.69	0.29	NaN	0.78	0.04	1.51	0.28
2008	NaN	-1.51	-0.85	NaN	0.41	-0.93	0.08	-0.63	-0.92	-0.47	0.43	NaN
2009	NaN	0.53	NaN	-0.43	-0.37	0.82	0.09	-0.00	-0.41	-0.95	-0.84	NaN
2010	NaN	NaN	NaN	-0.17	0.86	0.94	-0.25	0.41	-0.41	1.41	NaN	NaN
2011	NaN	NaN	NaN	-0.37	-0.69	1.06	0.19	0.34	0.15	0.31	NaN	NaN
2012	NaN	NaN	NaN	-0.53	-0.16	-0.01	-0.43	0.26	-0.22	-0.72	-1.08	NaN
2013	NaN	NaN	1.26	NaN	-0.08	-0.95	NaN	-0.56	0.01	NaN	0.69	NaN
2014	NaN	NaN	-1.36	-1.21	0.42	NaN	NaN	0.59	0.77	0.68	-0.25	-0.21
2015	NaN	0.61	0.05	-0.12	-0.05	-0.84	-0.15					

**Table B-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	70.97
2005	100.00	96.43	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	96.77
2006	22.58	89.29	77.42	83.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	96.77	96.43	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2008	100.00	96.55	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	74.19
2009	54.84	96.43	70.97	96.67	100.00	100.00	100.00	96.77	100.00	96.77	96.67	9.68
2010	0.00	7.14	93.55	100.00	100.00	100.00	100.00	96.77	100.00	100.00	90.00	0.00
2011	3.23	35.71	93.55	96.67	100.00	100.00	100.00	100.00	100.00	100.00	66.67	90.32
2012	64.52	75.86	67.74	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	77.42
2013	87.10	82.14	100.00	90.00	100.00	96.67	87.10	96.77	100.00	87.10	100.00	87.10
2014	93.55	78.57	96.77	96.67	100.00	86.67	77.42	96.77	100.00	100.00	100.00	100.00
2015	90.32	100.00	100.00	100.00	100.00	100.00	100.00					

**Table B-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Ground temperature, in degrees Celsius

File name: AK100\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.39	-0.40	-3.02	-10.78
1999	-17.39	-19.18	-18.27	-16.60	-8.47	-0.49	1.86	2.88	0.68	-1.00	-9.07	-19.27
2000	-19.25	-20.35	-20.80	-17.45	-11.04	-1.32	2.04	2.16	0.67	-0.62	-7.96	-13.63
2001	-17.96	-16.77	-20.89	-16.89	-11.66	-0.66	1.59	1.62	0.68	-1.76	-8.95	-14.42
2002	-18.99	NaN	NaN	NaN	NaN	-0.50	1.55	1.99	1.11	-0.14	-5.22	-11.60
2003	-17.18	-20.74	-20.59	-15.44	-5.67	-0.44	NaN	NaN	0.29	-0.15	-4.16	-12.27
2004	-14.47	-19.07	-20.08	-16.55	-8.04	-0.27	2.81	4.03	0.67	-0.46	-7.54	-16.83
2005	-18.20	-20.51	-19.82	-16.40	-8.42	-0.13	1.55	3.43	0.59	-1.10	-9.30	-13.78
2006	-16.04	-16.91	-19.96	-17.74	-8.81	0.15	3.23	2.27	1.34	-0.53	-7.67	-13.28
2007	-21.34	-21.48	-25.35	-14.35	-8.76	0.09	2.62	3.64	1.42	-0.78	-3.72	NaN
2008	-17.96	-20.10	-21.29	NaN	-7.40	1.30	4.25	2.79	0.73	-0.30	-5.16	-11.17
2009	-17.42	-19.53	-20.57	-16.63	-4.46	0.57	3.64	3.41	1.04	-0.59	-8.62	NaN
2010	NaN	NaN	-18.49	-14.35	-9.35	-0.74	1.95	3.63	1.79	-0.16	-0.73	-9.29
2011	-14.94	-15.82	-16.75	-15.54	-7.64	-0.11	2.75	3.58	1.62	-0.15	-4.67	-13.29
2012	-18.15	-18.01	-19.94	-15.98	-8.81	0.22	4.25	5.18	1.39	-0.11	-1.97	-11.37
2013	-16.04	-20.53	-18.29	-15.85	-8.86	0.80	4.42	3.67	0.69	-0.21	-3.60	-11.45
2014	-16.24	-16.46	-17.44	-14.06	-2.08	-0.13	2.71	2.48	0.61	-0.18	-3.03	-11.38
2015	-15.53	-17.05	-16.03	-12.95	NaN	1.22	3.16					

**Table B-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.09	-0.97	-6.68	-16.20
1999	-22.18	-21.73	-20.29	-19.80	-13.82	-1.13	-0.08	0.45	-0.17	-3.24	-11.92	-23.70
2000	-21.69	-23.94	-23.38	-20.52	-13.39	-7.98	0.11	0.32	-0.18	-2.10	-13.02	-17.32
2001	-21.13	-19.88	-23.12	-21.26	-17.37	-6.41	-0.11	0.25	-0.13	-5.70	-12.50	-17.81
2002	-23.42	NaN	NaN	NaN	NaN	-1.37	-0.20	0.44	-0.16	-0.43	-10.46	-16.57
2003	-20.82	-24.64	-24.06	-21.10	-9.91	-0.83	NaN	NaN	-0.12	-0.39	-9.96	-13.56
2004	-17.41	-21.46	-21.59	-19.30	-13.23	-2.27	0.67	1.41	-0.25	-2.40	-12.61	-19.95
2005	-23.40	-22.57	-24.00	-20.19	-12.02	-1.44	-0.00	0.36	-0.21	-2.92	-13.15	-16.01
2006	-18.96	-20.53	-21.83	-20.85	-14.40	-3.13	0.70	0.43	-0.08	-2.56	-13.53	-19.44
2007	-24.19	-28.52	-29.46	-18.53	-13.32	-2.54	0.20	1.18	-0.14	-1.53	-7.78	NaN
2008	-21.89	-23.30	-22.51	NaN	-12.22	-0.59	1.30	0.81	-0.16	-0.84	-12.55	-14.34
2009	-20.23	-23.01	-23.04	-21.12	-8.35	-0.91	0.68	1.04	-0.23	-1.89	-14.73	NaN
2010	NaN	NaN	-21.02	-17.84	-11.59	-2.85	-0.12	1.27	-0.21	-0.27	-1.89	-15.99
2011	-19.65	-17.67	-18.87	-17.17	-13.53	-0.62	0.23	1.86	-0.15	-0.53	-10.57	-17.36
2012	-21.67	-22.87	-20.44	-20.05	-12.79	-1.31	0.81	2.23	-0.37	-0.34	-5.85	-16.05
2013	-20.05	-22.49	-20.30	-17.43	-13.54	-1.04	0.93	0.78	-0.18	-0.53	-8.74	-17.65
2014	-22.06	-20.02	-22.14	-18.07	-9.09	-2.52	0.68	0.96	-0.11	-0.47	-7.99	-13.99
2015	-19.12	-20.62	-18.18	-15.77	NaN	-0.59	1.62					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.52	-0.04	-0.72	-6.64
1999	-13.73	-16.92	-16.47	-13.66	-0.34	0.45	4.68	5.84	2.39	-0.06	-3.34	-12.03
2000	-17.29	-16.69	-18.72	-13.43	-8.04	2.51	5.91	4.33	3.84	-0.03	-2.12	-11.60
2001	-15.72	-13.95	-17.56	-14.27	-6.70	0.79	4.74	3.80	2.57	-0.08	-5.74	-10.90
2002	-14.91	NaN	NaN	NaN	NaN	0.11	4.49	5.26	4.34	0.30	-0.22	-7.55
2003	-15.22	-16.49	-16.38	-8.00	-0.21	0.43	NaN	NaN	2.06	-0.03	-0.25	-9.98
2004	-10.06	-16.24	-16.80	-13.23	-0.49	2.32	5.84	7.10	3.46	-0.06	-2.44	-11.70
2005	-10.04	-18.07	-16.62	-11.61	-1.24	1.82	3.66	7.99	2.44	-0.15	-2.90	-12.29
2006	-12.33	-13.09	-18.13	-14.41	-1.45	4.24	6.98	6.09	4.28	-0.04	-1.43	-7.89
2007	-17.78	-14.58	-16.84	-9.56	-2.16	2.18	5.18	6.64	4.93	-0.08	-1.10	NaN
2008	-13.79	-15.88	-18.29	NaN	-0.16	6.13	7.97	4.52	2.26	-0.08	-0.70	-8.35
2009	-13.22	-16.24	-16.46	-5.81	-0.16	2.90	8.62	8.13	3.56	-0.15	-1.66	NaN
2010	NaN	NaN	-17.02	-11.46	-2.46	0.21	6.37	6.81	3.89	-0.04	-0.17	-1.91
2011	-10.49	-13.16	-14.99	-13.57	-0.14	1.74	5.85	5.81	4.54	-0.04	-0.36	-9.09
2012	-16.06	-15.75	-18.97	-12.62	-1.33	2.60	8.23	8.47	4.58	0.31	-0.30	-4.42
2013	-13.21	-18.34	-16.69	-12.67	-1.02	4.90	8.46	7.82	4.01	-0.05	-0.51	-4.55
2014	-13.46	-11.38	-14.45	-9.18	-0.12	2.97	6.73	5.36	2.13	-0.00	-0.53	-8.03
2015	-11.81	-12.21	-12.46	-9.89	NaN	5.14	6.26					

**Table B–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.44	0.13	2.57	2.23
1999	-0.27	-0.59	1.16	-1.00	-0.78	-0.47	-0.91	-0.20	-0.27	-0.47	-3.48	-6.26
2000	-2.14	-1.76	-1.38	-1.85	-3.36	-1.29	-0.73	-0.93	-0.28	-0.09	-2.37	-0.61
2001	-0.84	1.82	-1.46	-1.29	-3.97	-0.63	-1.18	-1.46	-0.27	-1.24	-3.36	-1.40
2002	-1.87	NaN	NaN	NaN	NaN	-0.47	-1.22	-1.10	0.16	0.39	0.37	1.41
2003	-0.06	-2.15	-1.16	0.16	2.02	-0.42	NaN	NaN	-0.66	0.38	1.43	0.75
2004	2.65	-0.49	-0.66	-0.95	-0.36	-0.24	0.03	0.95	-0.28	0.07	-1.95	-3.82
2005	-1.08	-1.92	-0.39	-0.80	-0.74	-0.10	-1.22	0.34	-0.36	-0.58	-3.71	-0.77
2006	1.08	1.67	-0.53	-2.14	-1.12	0.18	0.46	-0.82	0.39	0.00	-2.08	-0.27
2007	-4.22	-2.89	-5.93	1.26	-1.08	0.11	-0.15	0.55	0.47	-0.25	1.87	NaN
2008	-0.84	-1.51	-1.86	NaN	0.29	1.33	1.48	-0.30	-0.22	0.23	0.43	1.84
2009	-0.30	-0.94	-1.14	-1.03	3.22	0.60	0.87	0.32	0.09	-0.07	-3.03	NaN
2010	NaN	NaN	0.94	1.25	-1.67	-0.71	-0.83	0.54	0.84	0.37	4.86	3.72
2011	2.18	2.77	2.68	0.06	0.05	-0.09	-0.03	0.50	0.66	0.38	0.92	-0.28
2012	-1.03	0.58	-0.51	-0.37	-1.12	0.25	1.47	2.09	0.44	0.41	3.62	1.64
2013	1.08	-1.94	1.14	-0.25	-1.17	0.82	1.64	0.58	-0.26	0.32	1.99	1.56
2014	0.87	2.13	1.99	1.54	5.61	-0.11	-0.07	-0.60	-0.34	0.35	2.56	1.63
2015	1.59	1.54	3.39	2.65	NaN	1.25	0.39					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	75.00	0.00	0.00	67.74	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	41.94	77.42	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	90.32
2008	100.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	9.68
2010	0.00	17.86	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	93.55	100.00	100.00					

**Table B-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.31	-2.06	-2.09	-5.45
1999	-10.21	-13.97	-14.28	-14.45	-11.45	-6.22	-3.84	-2.73	-2.27	-2.03	-4.09	-10.23
2000	-14.17	-15.16	-16.56	-15.88	-12.79	-7.94	-4.21	-2.91	-2.43	-2.18	-3.77	-8.15
2001	-12.32	-13.18	-15.23	-15.28	-12.92	-7.33	-4.11	-2.96	-2.47	-2.24	-4.69	-9.01
2002	-12.77	NaN	NaN	NaN	NaN	-5.34	-3.65	-2.73	-2.34	-2.11	-2.59	-6.29
2003	-10.99	-14.12	-15.83	-15.48	-10.20	-5.51	NaN	NaN	-2.34	-2.14	-2.48	-6.92
2004	-9.85	-13.28	-15.59	-14.94	-11.53	-5.91	-3.53	-2.63	-2.20	-1.97	-3.00	-9.17
2005	-12.42	-15.07	-16.02	-15.05	-11.58	-6.34	-3.92	-2.85	-2.33	-2.07	-4.00	-8.76
2006	-11.11	-13.15	-14.60	-15.36	-12.27	-6.43	-3.75	-2.72	-2.30	-2.05	-2.90	-7.56
2007	-13.40	-15.08	-18.95	-15.65	-11.81	-6.54	-3.95	-2.84	-2.35	-2.08	-2.46	NaN
2008	-10.72	-14.03	-15.50	NaN	-11.04	-5.82	-3.44	-2.57	-2.20	-2.01	-2.33	-6.12
2009	-10.20	-13.57	-14.81	-15.31	-9.67	-5.07	-3.38	-2.53	-2.15	-1.92	-3.24	NaN
2010	NaN	NaN	-14.76	-13.86	-11.29	-6.65	-3.95	-2.75	-2.23	-1.98	-1.85	-3.64
2011	-8.79	-11.61	-12.80	-13.09	-10.75	-5.40	-3.39	-2.47	-2.06	-1.85	-1.84	-6.14
2012	-11.30	-13.77	-14.87	-14.75	-11.43	-5.92	-3.54	-2.51	-2.11	-1.84	-1.72	-4.25
2013	-9.68	-13.67	-14.69	-14.15	-11.53	-5.78	-3.39	-2.44	-2.04	-1.86	-1.81	-4.72
2014	-9.77	-11.54	-13.43	-12.78	-7.91	-4.44	-3.04	-2.35	-2.04	-1.87	-1.89	-5.41
2015	-9.46	-12.37	-12.66	-12.23	NaN	-4.39	-2.89					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.53	-2.24	-3.01	-7.57
1999	-12.72	-14.47	-14.65	-14.92	-13.71	-8.89	-4.72	-3.10	-2.45	-2.18	-6.09	-13.78
2000	-14.64	-16.21	-16.77	-16.61	-14.71	-11.16	-5.34	-3.34	-2.61	-2.32	-5.98	-10.21
2001	-13.01	-13.59	-16.57	-16.49	-14.41	-11.02	-5.09	-3.36	-2.70	-2.62	-6.85	-11.06
2002	-15.18	NaN	NaN	NaN	NaN	-6.71	-4.33	-3.09	-2.54	-2.25	-4.31	-8.67
2003	-12.45	-16.00	-17.11	-17.05	-12.61	-7.41	NaN	NaN	-2.52	-2.23	-4.11	-8.71
2004	-11.82	-14.87	-15.97	-15.65	-13.88	-8.20	-4.38	-3.00	-2.41	-2.12	-5.45	-11.60
2005	-14.60	-15.77	-16.88	-15.78	-13.72	-9.22	-4.71	-3.29	-2.55	-2.23	-6.75	-10.00
2006	-12.57	-13.69	-15.79	-15.90	-14.58	-9.02	-4.74	-3.13	-2.51	-2.20	-5.75	-10.14
2007	-15.01	-17.56	-19.49	-18.65	-13.17	-9.47	-4.80	-3.29	-2.59	-2.23	-3.43	NaN
2008	-12.69	-14.59	-16.24	NaN	-12.62	-8.03	-4.34	-2.90	-2.36	-2.11	-3.95	-7.49
2009	-12.13	-14.21	-16.04	-16.11	-13.02	-6.63	-4.06	-2.87	-2.32	-2.07	-5.98	NaN
2010	NaN	NaN	-14.99	-14.96	-12.51	-9.61	-4.81	-3.25	-2.47	-2.12	-1.93	-6.84
2011	-11.31	-12.12	-13.51	-13.48	-12.62	-7.54	-4.15	-2.85	-2.30	-2.00	-3.06	-9.44
2012	-13.48	-14.44	-15.61	-15.75	-13.14	-8.57	-4.40	-2.91	-2.44	-2.00	-1.88	-7.76
2013	-11.77	-15.04	-15.05	-14.63	-13.18	-8.33	-4.24	-2.84	-2.24	-1.97	-2.41	-7.85
2014	-11.10	-13.10	-14.02	-13.49	-11.49	-5.44	-3.65	-2.58	-2.21	-1.98	-2.66	-7.48
2015	-11.43	-13.28	-13.25	-13.00	NaN	-5.69	-3.47					



**Table B-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.12	-1.93	-1.86	-3.01
1999	-7.62	-12.72	-13.87	-13.69	-8.93	-4.65	-3.08	-2.39	-2.12	-1.88	-1.95	-6.10
2000	-13.77	-14.56	-16.20	-14.69	-11.17	-5.28	-3.33	-2.56	-2.29	-2.06	-2.05	-6.03
2001	-10.21	-12.78	-13.62	-14.25	-10.99	-5.06	-3.32	-2.66	-2.32	-2.14	-2.64	-6.84
2002	-11.06	NaN	NaN	NaN	NaN	-4.30	-3.02	-2.43	-2.16	-1.97	-1.92	-4.29
2003	-8.71	-12.49	-14.90	-12.65	-7.38	-4.29	NaN	NaN	-2.19	-1.99	-1.95	-4.11
2004	-8.62	-11.81	-14.90	-13.87	-8.19	-4.35	-2.96	-2.33	-2.05	-1.83	-1.77	-5.42
2005	-10.67	-14.52	-15.18	-13.71	-9.21	-4.69	-3.22	-2.47	-2.16	-1.95	-1.95	-6.70
2006	-9.88	-12.57	-13.08	-14.57	-9.01	-4.68	-3.06	-2.41	-2.13	-1.88	-1.86	-5.75
2007	-10.13	-13.69	-17.52	-13.16	-9.47	-4.77	-3.25	-2.50	-2.15	-1.98	-1.98	NaN
2008	-8.04	-12.69	-14.37	NaN	-8.02	-4.29	-2.87	-2.31	-2.06	-1.85	-1.84	-3.93
2009	-7.47	-12.13	-13.69	-13.05	-6.60	-3.97	-2.78	-2.27	-2.00	-1.80	-1.77	NaN
2010	NaN	NaN	-14.25	-12.50	-9.59	-4.77	-3.20	-2.38	-2.05	-1.86	-1.77	-1.77
2011	-6.84	-11.17	-11.89	-12.61	-7.57	-4.08	-2.80	-2.21	-1.92	-1.71	-1.58	-3.04
2012	-9.42	-13.24	-13.57	-13.14	-8.57	-4.32	-2.81	-2.21	-1.90	-1.72	-1.62	-1.61
2013	-7.76	-11.81	-14.35	-13.15	-8.57	-4.21	-2.75	-2.15	-1.88	-1.75	-1.66	-2.37
2014	-7.89	-10.46	-12.76	-11.49	-5.39	-3.55	-2.53	-2.14	-1.89	-1.79	-1.69	-2.66
2015	-7.47	-11.38	-12.01	-10.92	NaN	-3.39	-2.41					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.08	-0.06	0.65	1.38
1999	0.81	-0.54	0.59	-0.05	-0.43	-0.28	-0.21	-0.09	-0.04	-0.03	-1.35	-3.40
2000	-3.15	-1.73	-1.69	-1.48	-1.77	-2.00	-0.59	-0.27	-0.20	-0.18	-1.03	-1.33
2001	-1.30	0.25	-0.36	-0.88	-1.90	-1.38	-0.49	-0.31	-0.24	-0.24	-1.95	-2.18
2002	-1.76	NaN	NaN	NaN	NaN	0.60	-0.02	-0.09	-0.11	-0.11	0.15	0.54
2003	0.03	-0.69	-0.96	-1.08	0.82	0.43	NaN	NaN	-0.11	-0.13	0.26	-0.09
2004	1.17	0.15	-0.72	-0.54	-0.51	0.03	0.10	0.01	0.03	0.04	-0.26	-2.34
2005	-1.40	-1.64	-1.15	-0.65	-0.57	-0.40	-0.30	-0.21	-0.10	-0.07	-1.26	-1.93
2006	-0.10	0.28	0.27	-0.95	-1.25	-0.48	-0.13	-0.08	-0.07	-0.04	-0.16	-0.73
2007	-2.38	-1.65	-4.09	-1.24	-0.79	-0.59	-0.33	-0.20	-0.12	-0.08	0.28	NaN
2008	0.30	-0.60	-0.63	NaN	-0.03	0.12	0.18	0.08	0.03	-0.01	0.41	0.71
2009	0.82	-0.14	0.05	-0.91	1.34	0.88	0.25	0.11	0.08	0.08	-0.50	NaN
2010	NaN	NaN	0.11	0.55	-0.28	-0.70	-0.32	-0.11	0.00	0.02	0.90	3.18
2011	2.23	1.82	2.06	1.31	0.27	0.54	0.24	0.17	0.17	0.16	0.91	0.68
2012	-0.29	-0.34	-0.01	-0.35	-0.42	0.02	0.09	0.14	0.12	0.16	1.02	2.58
2013	1.34	-0.24	0.18	0.25	-0.52	0.16	0.23	0.20	0.19	0.15	0.94	2.10
2014	1.25	1.89	1.44	1.62	3.11	1.50	0.58	0.30	0.19	0.13	0.85	1.41
2015	1.56	1.06	2.21	2.17	NaN	1.56	0.73					

**Table B-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	75.00	0.00	0.00	67.74	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	41.94	77.42	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	90.32
2008	100.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	9.68
2010	0.00	17.86	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	93.55	100.00	100.00					

**Table B-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Incident solar flux, in watts per meter squared

File name: AK100\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	58.5	21.8	1.6	0.0
2001	0.5	11.8	76.0	174.5	258.3	241.5	194.0	85.8	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	48.6	NaN	1.0	0.0
2004	0.2	10.6	NaN	167.9	220.7	253.8	160.8	118.5	51.7	18.3	1.4	-0.0
2005	0.7	11.0	68.0	156.2	219.5	236.8	202.7	116.8	39.5	13.5	1.4	0.2
2006	0.4	11.5	67.3	143.7	215.3	225.4	189.3	101.8	56.0	13.8	1.4	0.0
2007	0.2	NaN	NaN	NaN	223.2	260.8	189.1	131.5	52.8	16.9	1.4	NaN
2008	0.4	10.2	72.8	NaN	212.3	222.6	178.4	92.7	47.7	16.9	1.3	0.1
2009	0.5	9.8	68.5	145.4	214.2	NaN	NaN	NaN	46.4	15.8	1.4	NaN
2010	NaN	NaN	NaN	147.4	207.7	229.9	162.8	105.4	58.6	15.7	1.2	0.0
2011	0.1	8.9	75.4	165.0	221.6	212.9	164.4	105.1	42.7	17.3	1.4	0.1
2012	0.2	NaN	NaN	NaN	216.7	217.4	192.6	99.6	47.0	16.6	1.3	0.0
2013	0.5	8.4	NaN	156.4	203.2	184.8	147.5	78.3	43.9	13.9	1.4	0.0
2014	0.5	7.7	55.2	134.8	152.1	165.1	144.5	86.9	45.5	13.6	1.6	0.0
2015	0.4	9.5	60.5	133.7	171.1	185.6	153.3					

**Table B–1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.8	5.7	0.2	-0.0
2001	0.1	1.8	8.6	23.8	52.3	21.8	20.7	-14.2	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.1	NaN	-0.3	-0.0
2004	-0.2	0.6	NaN	17.2	14.7	34.1	-12.5	18.5	2.9	2.2	0.1	-0.1
2005	0.3	1.0	0.5	5.5	13.6	17.1	29.4	16.8	-9.2	-2.6	0.0	0.1
2006	-0.0	1.6	-0.2	-7.1	9.3	5.7	16.1	1.8	7.2	-2.3	0.1	-0.0
2007	-0.2	NaN	NaN	NaN	17.3	41.1	15.8	31.5	4.1	0.8	0.0	NaN
2008	-0.0	0.2	5.4	NaN	6.4	2.9	5.1	-7.3	-1.1	0.8	-0.0	0.1
2009	0.1	-0.2	1.1	-5.3	8.2	NaN	NaN	NaN	-2.4	-0.3	0.0	NaN
2010	NaN	NaN	NaN	-3.3	1.8	10.1	-10.5	5.4	9.8	-0.4	-0.1	-0.0
2011	-0.2	-1.0	7.9	14.3	15.7	-6.8	-8.9	5.1	-6.0	1.2	0.1	0.1
2012	-0.2	NaN	NaN	NaN	10.8	-2.3	19.3	-0.4	-1.8	0.5	-0.1	-0.0
2013	0.1	-1.6	NaN	5.7	-2.8	-34.9	-25.8	-21.7	-4.9	-2.2	0.1	-0.0
2014	0.1	-2.2	-12.3	-15.9	-53.9	-54.6	-28.7	-13.1	-3.3	-2.5	0.3	-0.0
2015	0.0	-0.5	-6.9	-17.0	-34.9	-34.1	-20.0					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.6	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	23.3	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	33.3	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	100.0	93.5	96.7	100.0
2004	100.0	96.6	93.5	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	92.9	0.0	16.7	100.0	100.0	100.0	96.8	100.0	100.0	100.0	93.5
2008	100.0	100.0	100.0	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	86.7	0.0	64.5	100.0	100.0	100.0	9.7
2010	0.0	10.7	22.6	96.7	96.8	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	89.7	0.0	13.3	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	90.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	96.4	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table B-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Reflected solar flux, in watts per meter squared

File name: AK100\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.7	7.9	1.1	-0.0
1999	0.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.9	10.3	1.6	-0.0
2000	0.3	13.1	69.5	157.3	NaN	107.7	44.6	29.9	22.0	20.7	1.5	-0.0
2001	0.5	13.4	74.1	164.7	243.3	91.0	51.3	21.4	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	21.5	9.9	1.5	-0.0
2004	0.4	16.5	74.7	165.7	198.0	86.1	46.2	33.5	14.9	13.4	1.4	-0.0
2005	0.4	14.7	67.7	158.0	207.6	94.3	58.5	34.5	9.7	7.0	1.5	0.0
2006	0.5	12.1	71.6	151.5	197.9	94.3	55.3	29.3	14.3	8.2	1.3	-0.0
2007	0.3	14.3	68.0	132.3	214.5	85.3	61.2	38.9	13.7	12.0	1.3	NaN
2008	0.3	12.3	71.0	NaN	200.0	64.6	52.9	29.0	13.4	17.2	1.2	-0.1
2009	0.4	11.1	70.6	144.0	175.3	NaN	NaN	NaN	12.6	7.5	1.1	NaN
2010	NaN	NaN	71.3	150.8	204.0	99.4	44.1	29.9	21.0	15.5	1.2	0.0
2011	0.5	12.5	74.8	161.4	201.6	63.8	46.7	30.4	12.9	17.3	1.5	0.0
2012	0.4	11.9	79.4	142.0	204.7	85.0	59.3	31.2	13.2	9.8	1.4	0.1
2013	0.6	13.8	68.3	162.3	201.7	66.3	52.7	28.2	25.5	17.5	1.6	0.0
2014	0.7	16.4	71.1	156.4	119.3	59.1	47.7	29.1	17.4	12.0	1.7	0.0
2015	0.6	11.8	68.4	145.6	130.7	61.0	51.9					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.7	-4.8	-0.3	-0.0
1999	-0.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.5	-2.3	0.2	-0.0
2000	-0.2	-0.3	-1.9	4.9	NaN	26.3	-7.1	-0.2	5.5	8.0	0.1	-0.0
2001	0.0	0.1	2.7	12.3	56.1	9.7	-0.4	-8.6	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.0	-2.8	0.1	-0.0
2004	-0.0	3.1	3.3	13.3	10.8	4.7	-5.5	3.4	-1.5	0.8	0.1	-0.0
2005	-0.0	1.4	-3.6	5.7	20.4	13.0	6.8	4.5	-6.8	-5.6	0.1	0.0
2006	0.0	-1.3	0.2	-0.9	10.7	12.9	3.6	-0.8	-2.2	-4.4	-0.1	-0.0
2007	-0.2	1.0	-3.4	-20.1	27.3	3.9	9.4	8.8	-2.8	-0.6	-0.1	NaN
2008	-0.1	-1.0	-0.3	NaN	12.9	-16.8	1.2	-1.1	-3.1	4.6	-0.2	-0.1
2009	-0.0	-2.2	-0.8	-8.4	-11.9	NaN	NaN	NaN	-3.8	-5.1	-0.3	NaN
2010	NaN	NaN	-0.0	-1.6	16.8	18.0	-7.7	-0.2	4.5	2.9	-0.2	0.0
2011	0.1	-0.8	3.4	9.0	14.4	-17.5	-5.1	0.3	-3.6	4.7	0.1	0.0
2012	-0.1	-1.5	8.1	-10.4	17.5	3.7	7.6	1.2	-3.2	-2.8	-0.0	0.1
2013	0.2	0.4	-3.1	9.9	14.5	-15.1	1.0	-1.8	9.0	4.9	0.2	0.0
2014	0.2	3.1	-0.2	4.0	-67.9	-22.3	-4.0	-0.9	1.0	-0.6	0.3	0.0
2015	0.1	-1.5	-3.0	-6.8	-56.5	-20.4	0.2					

**Table B–1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	96.7	100.0
1999	100.0	92.9	71.0	86.7	90.3	66.7	0.0	16.1	100.0	100.0	100.0	100.0
2000	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	23.3	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	33.3	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	93.5
2008	100.0	100.0	100.0	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	86.7	0.0	64.5	100.0	100.0	100.0	9.7
2010	0.0	17.9	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	96.8	100.0	100.0
2013	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table B–1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Rainfall, in millimeters per hour

File name: AK100\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.0	0.3	0.0	NaN
2010	NaN	NaN	0.0	0.0	NaN	NaN	3.3	1.0	0.5	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.8	2.3	3.0	1.3	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.3	2.8	1.8	3.3	1.3	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	1.8	3.8	2.8	1.3	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	3.8	2.5	1.5	1.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	NaN	1.0					

**Table B-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.8	0.8	0.0	NaN
2010	NaN	NaN	0.0	0.0	NaN	NaN	35.8	7.6	4.3	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	4.1	34.8	19.0	23.4	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.8	25.1	24.9	29.2	3.3	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	18.0	43.2	17.8	12.7	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	21.1	16.8	18.8	2.5	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	NaN	3.8					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.5	100.0	100.0	100.0	9.7
2010	0.0	17.9	100.0	100.0	90.3	83.3	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	96.8	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	74.2	90.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	80.6	90.0	100.0					

**Table B-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Snow depth, in centimeters

File name: AK100\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.9	9.9	20.2	38.1
2001	41.8	41.8	42.0	41.2	41.6	10.7	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.9	4.5	14.9	19.2
2004	23.1	38.2	46.7	45.7	42.3	9.9	3.8	NaN	3.5	3.4	5.5	10.7
2005	20.5	23.3	23.1	24.9	24.4	6.5	1.3	8.3	8.5	5.5	9.3	13.1
2006	14.1	19.5	20.3	26.3	28.4	6.0	5.0	6.3	3.7	2.4	8.0	10.3
2007	10.4	10.0	13.8	16.6	18.9	3.4	3.6	4.6	4.0	4.0	12.5	14.2
2008	12.6	16.5	17.2	19.2	35.1	9.1	7.0	5.9	4.4	13.5	20.0	18.9
2009	18.3	21.8	18.7	24.4	16.0	3.1	2.8	2.8	1.7	2.4	7.9	NaN
2010	NaN	NaN	36.5	45.4	47.3	NaN	NaN	NaN	2.5	14.6	22.1	21.2
2011	34.7	35.3	NaN	NaN	NaN	NaN	NaN	6.0	3.4	15.9	18.9	22.8
2012	25.1	46.8	50.4	54.6	50.2	10.0	0.7	2.4	3.2	5.8	17.2	17.6
2013	19.6	21.8	21.9	28.6	26.2	2.2	2.0	3.7	5.2	14.2	17.4	22.5
2014	32.4	28.6	29.8	32.7	18.1	2.7	2.3	3.3	2.9	9.1	11.9	NaN
2015	NaN	NaN	NaN	NaN	20.5	2.6	5.3					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.6	6.2	11.8	18.4
2001	39.6	40.2	40.8	39.9	39.2	-2.8	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.2	-0.7	11.1	16.3
2004	17.3	23.0	45.2	44.0	36.8	-0.8	0.8	NaN	0.6	0.9	3.1	7.8
2005	17.9	21.5	22.1	21.7	19.3	-0.6	-0.5	1.0	2.3	0.8	3.7	6.0
2006	12.7	14.0	15.6	17.5	18.0	-0.6	1.1	2.0	1.4	-0.6	0.8	7.0
2007	7.2	7.3	8.3	13.2	14.3	-1.1	-0.7	0.5	0.6	-0.4	7.0	10.8
2008	9.4	11.4	14.4	11.8	16.0	-1.1	-1.8	0.9	0.1	-0.0	15.4	16.6
2009	16.4	17.7	16.2	15.4	4.9	-0.1	-0.4	-1.2	-1.6	-1.7	2.3	NaN
2010	NaN	NaN	26.7	41.2	35.9	NaN	NaN	NaN	-1.0	5.3	19.6	18.2
2011	19.4	30.5	NaN	NaN	NaN	NaN	NaN	1.8	-0.3	4.3	14.9	17.5
2012	23.1	25.5	47.2	48.4	37.9	-0.8	-2.0	-1.8	-1.0	-0.9	8.8	14.9
2013	13.5	19.4	20.4	21.5	13.5	-1.4	-1.9	-0.1	-0.1	8.8	13.7	15.4
2014	23.7	25.3	26.2	29.5	6.6	-1.4	-1.6	-0.9	-1.4	-0.8	9.0	NaN
2015	NaN	NaN	NaN	NaN	-0.8	-0.5	2.3					



**Table B-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.4	14.5	27.0	44.8
2001	43.1	42.2	44.1	41.6	45.5	37.9	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.3	14.6	20.0	22.7
2004	25.9	48.3	47.6	46.4	46.0	37.2	8.7	NaN	14.0	5.9	10.2	21.9
2005	22.1	24.6	23.8	30.3	28.8	19.7	4.0	16.4	16.5	10.9	16.2	20.9
2006	17.5	25.5	26.4	33.3	33.2	21.0	9.1	11.6	8.3	5.2	10.8	13.5
2007	17.2	17.5	19.1	21.8	29.5	17.7	7.6	7.7	8.7	9.3	20.2	22.7
2008	21.1	23.0	20.9	28.5	45.8	18.7	12.7	12.6	10.9	20.5	24.5	24.5
2009	21.8	34.6	21.7	32.3	23.8	7.3	8.2	8.9	7.5	8.2	13.2	NaN
2010	NaN	NaN	47.6	56.2	51.4	NaN	NaN	NaN	7.1	23.7	29.9	28.4
2011	37.2	37.4	NaN	NaN	NaN	NaN	NaN	12.4	8.1	26.5	21.2	28.1
2012	28.3	52.5	52.3	61.3	60.5	38.8	3.3	8.1	10.8	11.3	21.0	20.0
2013	23.2	23.2	24.1	32.5	34.1	15.1	10.2	9.5	16.0	18.4	24.4	35.5
2014	37.6	31.9	32.0	37.0	31.2	13.4	5.2	5.7	7.3	16.6	17.2	NaN
2015	NaN	NaN	NaN	NaN	35.5	5.7	9.6					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.1	1.9	6.4	19.7
2001	19.1	14.4	13.1	7.9	9.6	4.7	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.9	-3.5	1.0	0.8
2004	0.4	10.9	17.8	12.5	10.3	3.9	0.4	NaN	-0.4	-4.5	-8.4	-7.7
2005	-2.2	-4.1	-5.8	-8.4	-7.6	0.4	-2.0	3.5	4.6	-2.4	-4.5	-5.3
2006	-8.6	-7.8	-8.7	-6.9	-3.6	0.0	1.6	1.5	-0.2	-5.6	-5.9	-8.0
2007	-12.3	-17.3	-15.1	-16.6	-13.1	-2.7	0.2	-0.3	0.2	-4.0	-1.4	-4.2
2008	-10.1	-10.8	-11.7	-14.0	3.1	3.1	3.6	1.1	0.6	5.6	6.2	0.5
2009	-4.4	-5.5	-10.2	-8.8	-16.1	-2.9	-0.6	-2.0	-2.1	-5.5	-5.9	NaN
2010	NaN	NaN	7.6	12.1	15.3	NaN	NaN	NaN	-1.4	6.7	8.2	2.8
2011	12.0	8.0	NaN	NaN	NaN	NaN	NaN	1.2	-0.4	8.0	5.1	4.5
2012	2.5	19.5	21.5	21.4	18.2	4.0	-2.7	-2.4	-0.7	-2.1	3.3	-0.8
2013	-3.0	-5.6	-7.0	-4.7	-5.8	-3.8	-1.4	-1.1	1.3	6.3	3.5	4.1
2014	9.7	1.3	0.8	-0.5	-13.9	-3.3	-1.1	-1.5	-0.9	1.2	-2.0	NaN
2015	NaN	NaN	NaN	NaN	-11.6	-3.4	1.9					

**Table B–1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.8	100.0	100.0	90.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	74.2	45.2	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	100.0	100.0	100.0	100.0
2004	100.0	96.6	100.0	100.0	100.0	100.0	100.0	77.4	93.3	83.9	100.0	93.5
2005	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2008	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	12.9
2010	0.0	21.4	100.0	100.0	100.0	20.0	0.0	67.7	100.0	100.0	100.0	100.0
2011	100.0	96.4	16.1	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	61.3
2015	0.0	0.0	0.0	10.0	100.0	100.0	100.0					

**Table B–1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Soil moisture, in water fraction by volume

File name: AK100\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.37	0.07	0.02
2004	NaN	NaN	NaN	NaN	0.03	0.19	0.41	0.41	0.41	0.32	0.02	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.07	0.39	0.40	0.41	0.15	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.14	0.40	0.41	0.41	0.31	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.18	0.22	0.31	0.11	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.23	0.36	0.41	0.41	0.35	0.07	0.02
2009	NaN	NaN	NaN	NaN	0.05	0.26	0.36	0.38	0.41	0.24	0.02	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.06	0.35	0.40	0.41	0.38	0.16	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.16	0.40	0.41	0.41	0.40	0.12	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.17	0.39	0.41	0.41	0.40	0.16	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.19	0.40	0.41	0.40	0.37	0.10	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.12	0.40	0.39	0.40	0.36	0.06	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.22	0.38					

**Table B-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.20	0.02	0.01
2004	NaN	NaN	NaN	NaN	0.01	0.06	0.40	0.41	0.41	0.04	0.00	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.02	0.14	0.39	0.40	0.02	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.01	0.39	0.40	0.41	0.02	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.15	0.16	0.25	0.00	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.00	0.33	0.40	0.40	0.20	0.02	0.01
2009	NaN	NaN	NaN	NaN	0.02	0.09	0.34	0.35	0.39	0.05	0.00	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.02	0.08	0.40	0.40	0.32	0.05	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.08	0.40	0.41	0.41	0.36	0.01	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.03	0.38	0.40	0.41	0.37	0.03	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.03	0.39	0.41	0.40	0.31	0.01	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.07	0.39	0.39	0.40	0.24	0.01	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.07	0.38					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.19	0.02
2004	NaN	NaN	NaN	NaN	0.06	0.41	0.41	0.41	0.41	0.41	0.04	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.18	0.41	0.41	0.41	0.40	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.24	0.26	0.34	0.30	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.41	0.41	0.40	0.20	0.02
2009	NaN	NaN	NaN	NaN	0.20	0.39	0.38	0.41	0.41	0.39	0.05	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.08	0.41	0.41	0.41	0.40	0.32	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.40	0.41	0.41	0.41	0.41	0.36	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	0.37	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.40	0.31	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	0.24	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.41	0.40					

**Table B–1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.01	0.06	-0.01	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.02	0.04	0.02	0.01	0.02	-0.06	NaN
2005	NaN	NaN	NaN	NaN	NaN	-0.10	0.02	0.02	0.01	-0.16	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	-0.02	0.03	0.02	0.01	0.01	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	-0.19	-0.17	-0.09	-0.20	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.07	-0.01	0.02	0.01	0.05	-0.01	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.10	-0.01	-0.00	0.01	-0.06	-0.06	NaN
2010	NaN	NaN	NaN	NaN	NaN	-0.11	-0.02	0.02	0.01	0.07	0.08	NaN
2011	NaN	NaN	NaN	NaN	NaN	-0.01	0.04	0.02	0.01	0.09	0.04	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.00	0.03	0.02	0.01	0.09	0.08	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.03	0.03	0.02	0.01	0.06	0.02	NaN
2014	NaN	NaN	NaN	NaN	NaN	-0.04	0.03	0.01	0.01	0.05	-0.02	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.06	0.02					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2004	41.94	0.00	0.00	3.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	12.90
2005	6.45	0.00	0.00	0.00	80.65	100.00	100.00	96.77	100.00	100.00	30.00	0.00
2006	0.00	0.00	0.00	0.00	16.13	100.00	100.00	100.00	100.00	100.00	36.67	0.00
2007	0.00	0.00	0.00	0.00	0.00	93.33	100.00	96.77	100.00	100.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	19.35	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	6.45	0.00	0.00	13.33	100.00	100.00	100.00	96.77	100.00	100.00	100.00	9.68
2010	0.00	0.00	0.00	0.00	80.65	100.00	100.00	96.77	100.00	100.00	100.00	87.10
2011	19.35	0.00	0.00	0.00	58.06	100.00	100.00	100.00	100.00	100.00	100.00	64.52
2012	0.00	0.00	0.00	0.00	61.29	100.00	100.00	96.77	100.00	100.00	100.00	87.10
2013	12.90	0.00	0.00	0.00	70.97	100.00	100.00	100.00	100.00	100.00	100.00	45.16
2014	0.00	0.00	0.00	0.00	93.55	100.00	100.00	100.00	100.00	100.00	100.00	29.03
2015	0.00	0.00	0.00	0.00	64.52	100.00	100.00					

**Table B–1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table B-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
 Variable: Air temperature, in degrees Celsius  
 File name: AK100\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-4.27	NaN
1999	-26.15	-17.84	3.92	-9.46	-13.01
2000	-27.38	-17.62	4.23	-8.65	-11.68
2001	-21.96	-19.09	4.00	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-7.22	NaN
2004	-26.66	-16.93	5.81	-7.34	-11.43
2005	-24.82	-15.36	3.24	-8.88	-11.10
2006	-23.07	-17.53	3.88	-5.66	-10.54
2007	-24.45	-16.81	4.60	-4.40	-10.08
2008	-25.39	-15.73	4.24	-7.24	-10.87
2009	-24.49	-16.04	4.87	-7.15	NaN
2010	NaN	-14.68	4.46	-4.41	NaN
2011	-23.81	-15.76	4.28	-7.23	-10.62
2012	-27.51	-17.83	6.84	-5.15	-10.91
2013	-26.98	-16.05	5.36	-6.31	-10.04
2014	-16.67	-11.81	3.21	-5.65	-8.28
2015	-23.20	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	11.08	NaN
1999	-0.01	2.00	25.37	10.84	25.37
2000	-6.40	0.46	22.28	15.97	22.28
2001	-5.66	1.10	22.36	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	10.33	NaN
2004	-2.50	5.88	22.84	9.71	22.84
2005	0.39	0.45	21.43	7.45	21.43
2006	0.84	11.93	19.34	16.93	19.34
2007	-2.26	1.04	19.47	15.05	19.47
2008	-2.17	6.38	20.48	4.71	20.48
2009	-2.45	6.15	23.23	12.20	NaN
2010	NaN	5.46	19.83	15.26	NaN
2011	-1.14	6.59	19.46	13.27	19.46
2012	-12.68	3.49	21.77	8.80	21.77
2013	-13.22	5.39	19.92	12.03	19.92
2014	15.06	11.70	18.14	10.64	18.14
2015	-1.44	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-22.02	NaN
1999	-47.30	-44.71	-6.74	-33.81	-47.30
2000	-42.67	-36.26	-6.24	-33.08	-42.67
2001	-35.94	-37.24	-3.26	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-35.40	NaN
2004	-44.28	-42.19	-3.04	-28.48	-44.28
2005	-39.76	-34.81	-6.80	-35.37	-39.76
2006	-48.27	-42.08	-7.47	-27.13	-48.27
2007	-40.49	-41.21	-4.40	-25.90	-41.21
2008	-45.22	-41.50	-2.94	-30.44	-45.22
2009	-45.36	-37.56	-4.00	-35.45	NaN
2010	NaN	-40.94	-2.49	-31.02	NaN
2011	-42.45	-34.43	-3.87	-32.17	-42.45
2012	-45.95	-41.11	-2.69	-26.36	-45.95
2013	-40.25	-35.34	-6.26	-28.65	-40.25
2014	-42.57	-38.78	-4.53	-26.26	-42.57
2015	-37.61	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	2.39	NaN
1999	-1.88	-1.73	-0.59	-2.80	-2.32
2000	-3.10	-1.50	-0.28	-1.99	-0.99
2001	2.32	-2.97	-0.52	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-0.56	NaN
2004	-2.38	-0.82	1.29	-0.68	-0.73
2005	-0.54	0.76	-1.27	-2.22	-0.40
2006	1.21	-1.42	-0.64	1.00	0.16
2007	-0.17	-0.70	0.08	2.26	0.62
2008	-1.11	0.39	-0.27	-0.58	-0.17
2009	-0.21	0.08	0.36	-0.49	NaN
2010	NaN	1.44	-0.05	2.25	NaN
2011	0.47	0.36	-0.23	-0.56	0.08
2012	-3.23	-1.71	2.33	1.51	-0.21
2013	-2.70	0.07	0.85	0.35	0.65
2014	7.60	4.30	-1.30	1.01	2.41
2015	1.08	NaN			

**Table B-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	7.69	68.49
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	26.09	100.00	40.00
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	98.91	100.00	99.18
2008	97.80	96.74	100.00	100.00	99.18
2009	100.00	100.00	98.91	100.00	92.05
2010	8.89	100.00	98.91	100.00	84.93
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	98.91	98.91	100.00	99.45
2013	100.00	100.00	100.00	100.00	99.18
2014	96.67	100.00	100.00	100.00	100.00
2015	100.00	84.78			

**Table B-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Wind speed, in meters per second

File name: AK100\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	5.06	NaN	2004	NaN	NaN	NaN	14.13	NaN
2005	NaN	4.87	4.32	4.55	4.56	2005	NaN	14.66	11.73	13.01	15.13
2006	NaN	NaN	3.77	4.64	NaN	2006	NaN	NaN	9.40	19.09	NaN
2007	3.79	4.04	NaN	5.58	4.52	2007	16.15	14.18	NaN	15.27	18.39
2008	3.86	4.24	3.77	4.49	4.09	2008	19.43	11.35	11.24	12.65	19.43
2009	NaN	NaN	4.56	4.07	NaN	2009	NaN	NaN	10.84	14.82	NaN
2010	NaN	4.59	4.62	5.44	NaN	2010	NaN	11.71	12.84	17.39	NaN
2011	NaN	3.68	4.79	NaN	NaN	2011	NaN	10.20	10.49	NaN	NaN
2012	NaN	NaN	4.20	4.14	NaN	2012	NaN	NaN	11.19	11.26	NaN
2013	NaN	4.75	NaN	4.60	NaN	2013	NaN	16.65	NaN	14.70	NaN
2014	NaN	3.77	NaN	5.22	NaN	2014	NaN	13.69	NaN	15.56	NaN
2015	4.35	4.43				2015	16.67	13.35			

**Table B-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.00	0.00	0.00	0.00	0.00
1999	NaN	NaN	NaN	NaN	NaN	1999	0.00	0.00	0.00	0.00	0.00
2000	NaN	NaN	NaN	NaN	NaN	2000	0.00	0.00	0.00	0.00	0.00
2001	NaN	NaN	NaN	NaN	NaN	2001	0.00	0.00	0.00	0.00	0.00
2002	NaN	NaN	NaN	NaN	NaN	2002	0.00	0.00	0.00	0.00	0.00
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	0.00	0.00
2004	NaN	NaN	NaN	0.28	NaN	2004	0.00	0.00	26.09	100.00	37.43
2005	NaN	0.42	0.06	-0.23	NaN	2005	88.89	100.00	98.91	100.00	99.18
2006	NaN	NaN	-0.49	-0.14	NaN	2006	68.89	86.96	100.00	100.00	89.32
2007	NaN	-0.41	NaN	0.80	NaN	2007	97.78	100.00	94.57	100.00	98.08
2008	NaN	-0.21	-0.49	-0.29	NaN	2008	98.90	96.74	100.00	100.00	96.72
2009	NaN	NaN	0.30	-0.70	NaN	2009	74.44	89.13	98.91	97.80	84.66
2010	NaN	0.14	0.36	0.67	NaN	2010	5.56	97.83	98.91	96.70	74.25
2011	NaN	-0.77	0.53	NaN	NaN	2011	12.22	96.74	100.00	89.01	82.47
2012	NaN	NaN	-0.06	-0.64	NaN	2012	76.92	89.13	98.91	100.00	90.16
2013	NaN	0.30	NaN	-0.18	NaN	2013	82.22	96.74	93.48	95.60	92.88
2014	NaN	-0.68	NaN	0.44	NaN	2014	86.67	97.83	86.96	100.00	93.97
2015	NaN	-0.02				2015	96.67	100.00			



**Table B–2C.** Statistical summaries of ground temperature data at 10- and 120- centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Ground temperature, in degrees Celsius

File name: AK100\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-0.67	NaN
1999	-15.67	-14.42	1.44	-3.11	-8.63
2000	-19.61	-16.42	0.97	-2.62	-8.96
2001	-16.10	-16.47	0.87	-3.33	-8.80
2002	NaN	NaN	1.02	-1.40	NaN
2003	-16.37	-13.88	NaN	-1.33	NaN
2004	-15.19	-14.87	2.20	-2.42	-7.98
2005	-18.45	-14.86	1.62	-3.25	-8.47
2006	-15.53	-15.48	1.90	-2.27	-7.77
2007	-18.61	-16.17	2.12	-1.02	-8.14
2008	-16.23	-14.35	2.80	-1.56	-7.29
2009	-15.93	-13.86	2.55	-2.70	NaN
2010	NaN	-14.06	1.62	0.29	NaN
2011	-13.27	-13.29	2.10	-1.06	-6.69
2012	-16.45	-14.90	3.23	-0.23	-6.94
2013	-15.83	-14.38	2.98	-1.03	-7.02
2014	-14.66	-11.16	1.71	-0.86	-6.21
2015	-14.57	-11.35			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	3.52	NaN
1999	-6.64	-0.34	5.84	2.39	5.84
2000	-12.03	-8.04	5.91	3.84	5.91
2001	-11.60	-6.70	4.74	2.57	4.74
2003	-7.55	-0.21	NaN	2.06	NaN
2004	-9.98	-0.49	7.10	3.46	7.10
2005	-10.04	-1.24	7.99	2.44	7.99
2006	-12.29	-1.45	6.98	4.28	6.98
2007	-7.89	-2.16	6.64	4.93	6.64
2008	-6.13	-0.16	7.97	2.26	7.97
2009	-8.35	-0.16	8.62	3.56	NaN
2010	NaN	-2.46	6.81	3.89	NaN
2011	-1.91	-0.14	5.85	4.54	5.85
2012	-9.09	-1.33	8.47	4.58	8.47
2013	-4.42	-1.02	8.46	4.01	8.46
2014	-4.55	-0.12	6.73	2.13	6.73
2015	-8.03	-0.25			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-6.68	NaN
1999	-22.18	-20.29	-1.13	-11.92	-23.70
2000	-23.94	-23.38	-7.98	-13.02	-23.94
2001	-21.13	-23.12	-6.41	-12.50	-23.12
2002	NaN	NaN	-1.37	-10.46	NaN
2003	-24.64	-24.06	NaN	-9.96	NaN
2004	-21.46	-21.59	-2.27	-12.61	-21.59
2005	-23.40	-24.00	-1.44	-13.15	-24.00
2006	-20.53	-21.83	-3.13	-13.53	-21.83
2007	-28.52	-29.46	-2.54	-7.78	-29.46
2008	-23.30	-22.51	-0.59	-12.55	-23.30
2009	-23.01	-23.04	-0.91	-14.73	NaN
2010	NaN	-21.02	-2.85	-1.89	NaN
2011	-19.65	-18.87	-0.62	-10.57	-19.65
2012	-22.87	-20.44	-1.31	-5.85	-22.87
2013	-22.49	-20.30	-1.04	-8.74	-22.49
2014	-22.06	-22.14	-2.52	-7.99	-22.14
2015	-20.62	-18.18			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	1.04	NaN
1999	0.38	-0.27	-0.53	-1.40	-0.97
2000	-3.55	-2.27	-0.99	-0.91	-1.30
2001	-0.04	-2.32	-1.10	-1.62	-1.14
2002	NaN	NaN	-0.95	0.31	NaN
2003	-0.31	0.27	NaN	0.38	NaN
2004	0.87	-0.72	0.23	-0.71	-0.32
2005	-2.39	-0.71	-0.35	-1.54	-0.81
2006	0.52	-1.32	-0.06	-0.56	-0.12
2007	-2.55	-2.02	0.16	0.69	-0.48
2008	-0.17	-0.20	0.83	0.15	0.36
2009	0.13	0.30	0.59	-0.99	NaN
2010	NaN	0.09	-0.35	2.00	NaN
2011	2.78	0.87	0.13	0.65	0.96
2012	-0.40	-0.74	1.26	1.48	0.71
2013	0.22	-0.22	1.02	0.68	0.64
2014	1.39	2.99	-0.26	0.85	1.45
2015	1.48	2.80			

**Table B-2C.** Statistical summaries of ground temperature data at 10- and 120- centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	98.91	100.00	99.73
2001	100.00	100.00	100.00	100.00	100.00
2002	92.22	22.83	98.91	100.00	78.36
2003	100.00	100.00	72.83	100.00	93.15
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	98.91	100.00	98.90
2008	96.70	96.74	100.00	100.00	99.18
2009	100.00	100.00	98.91	100.00	92.05
2010	8.89	100.00	98.91	100.00	84.93
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	98.91	100.00	100.00	99.73
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	97.83			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-3.01	NaN
1999	-14.47	-14.92	-8.89	-6.09	-14.92
2000	-16.21	-16.77	-11.16	-5.98	-16.77
2001	-13.59	-16.57	-11.02	-6.85	-16.57
2002	NaN	NaN	-6.71	-4.31	NaN
2003	-16.00	-17.11	NaN	-4.11	NaN
2004	-14.87	-15.97	-8.20	-5.45	-15.97
2005	-15.77	-16.88	-9.22	-6.75	-16.88
2006	-13.69	-15.90	-9.02	-5.75	-15.90
2007	-17.56	-19.49	-9.47	-3.43	-19.49
2008	-14.59	-16.24	-8.03	-3.95	-16.24
2009	-14.21	-16.11	-6.63	-5.98	NaN
2010	NaN	-14.99	-9.61	-2.47	NaN
2011	-12.12	-13.51	-7.54	-3.06	-13.51
2012	-14.44	-15.75	-8.57	-2.44	-15.75
2013	-15.04	-15.05	-8.33	-2.41	-15.05
2014	-13.10	-14.02	-5.44	-2.66	-14.02
2015	-13.28	-13.25			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-2.15	NaN
1999	-9.74	-13.38	-4.24	-2.79	-7.95
2000	-13.14	-15.07	-5.01	-2.79	-8.84
2001	-11.15	-14.47	-4.77	-3.13	-8.45
2002	NaN	NaN	-3.91	-2.35	NaN
2003	-10.34	-13.82	NaN	-2.32	NaN
2004	-9.95	-14.01	-4.02	-2.38	-7.80
2005	-12.13	-14.21	-4.37	-2.79	-8.34
2006	-10.94	-14.06	-4.28	-2.41	-7.82
2007	-11.91	-15.47	-4.44	-2.29	-8.38
2008	-10.13	-13.62	-3.92	-2.18	-7.44
2009	-9.84	-13.24	-3.66	-2.43	NaN
2010	NaN	-13.30	-4.44	-2.02	NaN
2011	-7.89	-12.20	-3.73	-1.91	-6.65
2012	-10.33	-13.67	-3.98	-1.89	-7.33
2013	-9.05	-13.47	-3.85	-1.90	-7.09
2014	-8.58	-11.36	-3.26	-1.93	-6.34
2015	-8.97	-11.26			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.86	NaN
1999	-3.01	-8.93	-2.39	-1.88	-1.88
2000	-6.10	-11.17	-2.56	-2.05	-2.05
2001	-6.03	-10.99	-2.66	-2.14	-2.14
2002	NaN	NaN	-2.43	-1.92	NaN
2003	-4.29	-7.38	NaN	-1.95	NaN
2004	-4.11	-8.19	-2.33	-1.77	-1.77
2005	-5.42	-9.21	-2.47	-1.95	-1.95
2006	-6.70	-9.01	-2.41	-1.86	-1.86
2007	-5.75	-9.47	-2.50	-1.98	-1.98
2008	-3.43	-8.02	-2.31	-1.84	-1.84
2009	-3.93	-6.60	-2.27	-1.77	NaN
2010	NaN	-9.59	-2.38	-1.77	NaN
2011	-1.77	-7.57	-2.21	-1.58	-1.58
2012	-3.04	-8.57	-2.21	-1.62	-1.61
2013	-1.61	-8.57	-2.15	-1.66	-1.66
2014	-2.37	-5.39	-2.14	-1.69	-1.69
2015	-2.66	-5.68			

**Table B–2C.** Statistical summaries of ground temperature data at 10- and 120- centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	0.17	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	0.49	-0.01	-0.18	-0.47	-0.33	1999	100.00	100.00	100.00	100.00	100.00
2000	-2.91	-1.69	-0.94	-0.46	-1.23	2000	100.00	100.00	98.91	100.00	99.73
2001	-0.92	-1.09	-0.70	-0.81	-0.84	2001	100.00	100.00	100.00	100.00	100.00
2002	NaN	NaN	0.16	-0.02	NaN	2002	92.22	22.83	98.91	100.00	78.36
2003	-0.11	-0.44	NaN	0.00	NaN	2003	100.00	100.00	72.83	100.00	93.15
2004	0.28	-0.63	0.05	-0.06	-0.18	2004	100.00	100.00	98.91	100.00	99.73
2005	-1.90	-0.83	-0.30	-0.47	-0.73	2005	100.00	100.00	98.91	100.00	99.73
2006	-0.71	-0.68	-0.21	-0.09	-0.21	2006	100.00	100.00	100.00	100.00	100.00
2007	-1.68	-2.09	-0.37	0.03	-0.77	2007	100.00	100.00	98.91	100.00	98.90
2008	0.10	-0.25	0.15	0.14	0.17	2008	96.70	96.74	100.00	100.00	99.18
2009	0.39	0.13	0.41	-0.11	NaN	2009	100.00	100.00	98.91	100.00	92.05
2010	NaN	0.08	-0.38	0.30	NaN	2010	8.89	100.00	98.91	100.00	84.93
2011	2.34	1.17	0.33	0.41	0.96	2011	100.00	100.00	100.00	100.00	100.00
2012	-0.10	-0.30	0.08	0.43	0.29	2012	100.00	100.00	98.91	100.00	99.73
2013	1.18	-0.10	0.22	0.42	0.52	2013	100.00	98.91	100.00	100.00	99.73
2014	1.65	2.02	0.80	0.39	1.27	2014	100.00	100.00	100.00	100.00	100.00
2015	1.26	2.12				2015	100.00	97.83			

**Table B-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
Variable: Incident solar flux, in watts per meter squared

File name: AK100\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.0	0.0	0.0	0.0	0.0
1999	NaN	NaN	NaN	NaN	NaN	1999	0.0	0.0	0.0	0.0	0.0
2000	NaN	NaN	NaN	27.2	NaN	2000	0.0	0.0	17.4	100.0	37.7
2001	3.8	169.6	173.0	NaN	NaN	2001	100.0	100.0	100.0	7.7	68.5
2002	NaN	NaN	NaN	NaN	NaN	2002	0.0	0.0	23.9	11.0	8.8
2003	NaN	NaN	NaN	21.0	NaN	2003	0.0	0.0	26.1	96.7	39.2
2004	3.4	155.8	177.5	23.7	90.2	2004	98.9	97.8	98.9	100.0	98.9
2005	3.7	147.8	185.6	18.1	89.2	2005	100.0	100.0	98.9	100.0	99.7
2006	3.8	142.1	171.6	23.6	85.9	2006	100.0	100.0	100.0	100.0	100.0
2007	2.1	NaN	193.7	23.6	NaN	2007	97.8	39.1	98.9	100.0	83.3
2008	3.5	139.3	163.9	21.9	82.0	2008	97.8	96.7	100.0	100.0	99.2
2009	3.3	142.7	NaN	21.1	NaN	2009	100.0	100.0	50.0	100.0	79.7
2010	NaN	NaN	166.0	25.0	NaN	2010	6.7	71.7	98.9	100.0	77.3
2011	2.8	153.9	160.2	20.5	85.0	2011	100.0	100.0	100.0	100.0	100.0
2012	1.9	NaN	170.1	21.6	NaN	2012	96.7	38.0	98.9	100.0	83.3
2013	2.8	144.1	136.4	19.7	75.7	2013	100.0	96.7	100.0	100.0	99.2
2014	2.5	114.4	131.8	20.2	67.8	2014	98.9	98.9	100.0	100.0	99.5
2015	3.1	121.6				2015	100.0	100.0			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	5.3	NaN
2001	0.7	29.1	9.0	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-0.9	NaN
2004	0.3	15.3	13.5	1.8	9.3
2005	0.6	7.3	21.6	-3.9	8.3
2006	0.7	1.6	7.6	1.7	5.0
2007	-1.0	NaN	29.7	1.7	NaN
2008	0.4	-1.2	-0.1	-0.0	1.2
2009	0.2	2.2	NaN	-0.8	NaN
2010	NaN	NaN	1.9	3.1	NaN
2011	-0.2	13.4	-3.8	-1.5	4.1
2012	-1.2	NaN	6.1	-0.4	NaN
2013	-0.3	3.6	-27.7	-2.3	-5.2
2014	-0.5	-26.0	-32.2	-1.8	-13.1
2015	0.0	-18.8			

**Table B–2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Reflected solar flux, in watts per meter squared

File name: AK100\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	7.0	NaN
1999	2.9	NaN	NaN	9.6	NaN
2000	4.3	147.9	60.2	14.8	56.6
2001	4.3	160.6	54.2	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	10.9	NaN
2004	5.4	145.9	55.1	10.0	54.4
2005	4.7	144.3	62.4	6.1	54.8
2006	3.9	140.2	59.3	8.0	53.2
2007	4.5	138.3	61.8	9.0	54.1
2008	4.1	135.7	48.6	10.7	49.3
2009	3.6	129.8	NaN	7.1	NaN
2010	NaN	141.9	57.6	12.6	NaN
2011	4.1	145.8	46.8	10.6	52.2
2012	3.9	142.0	58.5	8.1	53.5
2013	4.5	144.7	48.9	14.9	53.4
2014	5.4	115.2	45.2	10.4	44.3
2015	3.9	114.6			

#### Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	98.9	0.0
1999	97.8	82.6	27.2	100.0	76.7
2000	100.0	97.8	100.0	100.0	99.5
2001	100.0	100.0	100.0	7.7	68.5
2002	0.0	0.0	23.9	11.0	8.8
2003	0.0	0.0	26.1	100.0	40.0
2004	100.0	100.0	98.9	100.0	99.7
2005	100.0	100.0	98.9	100.0	99.7
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	98.9	100.0	99.2
2008	97.8	96.7	100.0	100.0	99.2
2009	100.0	100.0	50.0	100.0	79.7
2010	8.9	100.0	98.9	100.0	84.9
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	98.9	98.9	99.5
2013	100.0	98.9	100.0	100.0	99.7
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

#### Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-3.2	NaN
1999	-1.4	NaN	NaN	-0.6	NaN
2000	0.0	10.7	6.0	4.6	4.7
2001	0.1	23.5	-0.0	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.7	NaN
2004	1.1	8.7	0.9	-0.2	2.5
2005	0.5	7.1	8.2	-4.1	2.9
2006	-0.3	3.0	5.1	-2.2	1.4
2007	0.3	1.1	7.6	-1.2	2.2
2008	-0.1	-1.5	-5.6	0.5	-2.6
2009	-0.7	-7.4	NaN	-3.1	NaN
2010	NaN	4.8	3.4	2.4	NaN
2011	-0.2	8.6	-7.4	0.4	0.3
2012	-0.3	4.8	4.3	-2.0	1.7
2013	0.3	7.5	-5.3	4.7	1.5
2014	1.1	-22.0	-9.0	0.2	-7.5
2015	-0.4	-22.6			

**Table B-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
 Variable: Rainfall, in millimeters per hour  
 File name: AK100\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	1.0	NaN
2010	NaN	0.0	NaN	0.5	NaN
2011	0.0	0.0	3.0	1.3	3.0
2012	0.0	0.0	2.8	3.3	3.3
2013	0.0	0.0	3.8	1.3	3.8
2014	0.0	NaN	3.8	1.5	3.8
2015	0.0	NaN			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	21.7	100.0	31.2
2010	8.9	96.7	93.5	100.0	82.7
2011	100.0	98.9	100.0	100.0	99.7
2012	100.0	98.9	98.9	100.0	99.5
2013	100.0	98.9	100.0	100.0	99.7
2014	100.0	91.3	96.7	100.0	97.0
2015	100.0	93.5			

## Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	5.6	NaN
2010	NaN	0.0	NaN	4.3	NaN
2011	0.0	0.0	57.9	23.4	81.3
2012	0.0	0.0	50.8	32.5	83.3
2013	0.0	0.0	79.0	12.7	91.7
2014	0.0	NaN	76.2	21.3	97.5
2015	0.0	NaN			

**Table B–2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Drew Point

Variable: Snow depth, in centimeters

File name: AK100\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	11.7	NaN
2001	40.5	41.6	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	6.7	NaN
2004	26.5	44.9	6.8	4.2	20.5
2005	18.1	24.1	5.5	7.7	14.1
2006	15.5	25.0	5.8	4.6	12.5
2007	10.2	16.5	3.9	6.8	9.7
2008	14.4	23.9	7.3	12.7	15.0
2009	19.6	19.6	2.9	4.0	10.8
2010	NaN	43.0	NaN	13.1	NaN
2011	30.2	NaN	NaN	12.8	NaN
2012	31.3	51.7	4.4	8.7	23.8
2013	19.6	25.5	2.7	12.3	15.4
2014	27.9	26.8	2.8	7.9	15.9
2015	NaN	NaN			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	27.0	NaN
2001	44.8	45.5	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	20.0	NaN
2004	48.3	47.6	37.2	14.0	48.3
2005	24.6	30.3	19.7	16.5	30.3
2006	25.5	33.3	21.0	10.8	33.3
2007	17.5	29.5	17.7	20.2	29.5
2008	23.0	45.8	18.7	24.5	45.8
2009	34.6	32.3	8.9	13.2	34.6
2010	NaN	56.2	NaN	29.9	NaN
2011	37.4	NaN	NaN	26.5	NaN
2012	52.5	61.3	38.8	21.0	61.3
2013	23.2	34.1	15.1	24.4	35.5
2014	37.6	37.0	13.4	17.2	37.6
2015	NaN	NaN			

#### Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	1.6	NaN
2001	18.4	39.2	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-1.2	NaN
2004	16.3	36.8	-0.8	0.6	-0.8
2005	7.8	19.3	-0.6	0.8	-0.6
2006	6.0	15.6	-0.6	-0.6	-0.6
2007	7.0	8.3	-1.1	-0.4	-1.1
2008	9.4	11.8	-1.8	-0.0	-1.8
2009	16.4	4.9	-1.2	-1.7	-1.7
2010	NaN	26.7	NaN	-1.0	NaN
2011	18.2	NaN	NaN	-0.3	NaN
2012	17.5	37.9	-2.0	-1.0	-2.0
2013	13.5	13.5	-1.9	-0.1	-1.9
2014	15.4	6.6	-1.6	-1.4	-1.6
2015	NaN	NaN			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	3.2	NaN
2001	17.8	9.9	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-1.8	NaN
2004	3.8	13.2	2.1	-4.4	5.2
2005	-4.5	-7.6	0.8	-0.8	-1.2
2006	-7.2	-6.7	1.2	-3.9	-2.8
2007	-12.5	-15.2	-0.8	-1.7	-5.6
2008	-8.3	-7.8	2.7	4.2	-0.3
2009	-3.1	-12.1	-1.7	-4.5	-4.5
2010	NaN	11.3	NaN	4.6	NaN
2011	7.5	NaN	NaN	4.3	NaN
2012	8.6	20.0	-0.2	0.2	8.5
2013	-3.1	-6.2	-2.0	3.7	0.1
2014	5.2	-4.9	-1.8	-0.6	0.6
2015	NaN	NaN			



**Table B-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	18.5	96.7	37.2
2001	100.0	100.0	72.8	0.0	59.7
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	26.1	100.0	40.0
2004	98.9	100.0	92.4	92.3	95.4
2005	97.8	100.0	97.8	100.0	99.5
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	99.7
2008	98.9	98.9	100.0	100.0	99.7
2009	100.0	100.0	100.0	100.0	92.6
2010	11.1	100.0	29.3	100.0	67.7
2011	98.9	5.4	33.7	100.0	59.2
2012	100.0	100.0	95.7	100.0	98.9
2013	100.0	100.0	100.0	100.0	99.7
2014	98.9	100.0	100.0	97.8	96.2
2015	21.1	37.0			

**Table B-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Drew Point  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK100\_Smoist\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.28	NaN	2003	NaN	NaN	NaN	0.02	NaN
2004	NaN	NaN	0.34	0.25	NaN	2004	NaN	NaN	0.06	0.00	NaN
2005	NaN	NaN	0.29	NaN	NaN	2005	NaN	NaN	0.02	NaN	NaN
2006	NaN	NaN	0.32	NaN	NaN	2006	NaN	NaN	0.01	NaN	NaN
2007	NaN	NaN	0.16	NaN	NaN	2007	NaN	NaN	0.02	NaN	NaN
2008	NaN	NaN	0.33	0.28	NaN	2008	NaN	NaN	0.00	0.02	NaN
2009	NaN	NaN	0.33	0.22	NaN	2009	NaN	NaN	0.09	0.00	NaN
2010	NaN	NaN	0.27	0.31	NaN	2010	NaN	NaN	0.02	0.05	NaN
2011	NaN	NaN	0.32	0.31	NaN	2011	NaN	NaN	0.08	0.01	NaN
2012	NaN	NaN	0.32	0.32	NaN	2012	NaN	NaN	0.03	0.03	NaN
2013	NaN	NaN	0.34	0.29	NaN	2013	NaN	NaN	0.03	0.01	NaN
2014	NaN	NaN	0.31	0.28	NaN	2014	NaN	NaN	0.07	0.01	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table B–2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.00	0.00	0.00	0.00	0.00
1999	NaN	NaN	NaN	NaN	NaN	1999	0.00	0.00	0.00	0.00	0.00
2000	NaN	NaN	NaN	NaN	NaN	2000	0.00	0.00	0.00	0.00	0.00
2001	NaN	NaN	NaN	NaN	NaN	2001	0.00	0.00	0.00	0.00	0.00
2002	NaN	NaN	NaN	NaN	NaN	2002	0.00	0.00	0.00	0.00	0.00
2003	NaN	NaN	NaN	0.41	NaN	2003	0.00	0.00	26.09	100.00	40.00
2004	NaN	NaN	0.41	0.41	NaN	2004	48.35	34.78	100.00	100.00	63.39
2005	NaN	NaN	0.41	NaN	NaN	2005	6.67	27.17	98.91	76.92	51.51
2006	NaN	NaN	0.41	NaN	NaN	2006	0.00	5.43	100.00	79.12	46.30
2007	NaN	NaN	0.26	NaN	NaN	2007	0.00	0.00	96.74	67.03	41.10
2008	NaN	NaN	0.41	0.41	NaN	2008	0.00	6.52	100.00	100.00	60.11
2009	NaN	NaN	0.41	0.41	NaN	2009	36.67	38.04	98.91	100.00	60.82
2010	NaN	NaN	0.41	0.41	NaN	2010	3.33	27.17	98.91	100.00	64.11
2011	NaN	NaN	0.41	0.41	NaN	2011	36.67	19.57	100.00	100.00	62.19
2012	NaN	NaN	0.41	0.41	NaN	2012	21.98	20.65	98.91	100.00	62.30
2013	NaN	NaN	0.41	0.41	NaN	2013	34.44	23.91	100.00	100.00	61.10
2014	NaN	NaN	0.41	0.41	NaN	2014	15.56	31.52	100.00	100.00	60.55
2015	NaN	NaN				2015	10.00	21.74			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.01	NaN
2004	NaN	NaN	0.03	-0.03	NaN
2005	NaN	NaN	-0.02	NaN	NaN
2006	NaN	NaN	0.01	NaN	NaN
2007	NaN	NaN	-0.15	NaN	NaN
2008	NaN	NaN	0.03	-0.00	NaN
2009	NaN	NaN	0.03	-0.05	NaN
2010	NaN	NaN	-0.04	0.04	NaN
2011	NaN	NaN	0.02	0.03	NaN
2012	NaN	NaN	0.02	0.05	NaN
2013	NaN	NaN	0.03	0.01	NaN
2014	NaN	NaN	0.00	-0.00	NaN
2015	NaN	NaN			

**Table B–2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## C. Inigok

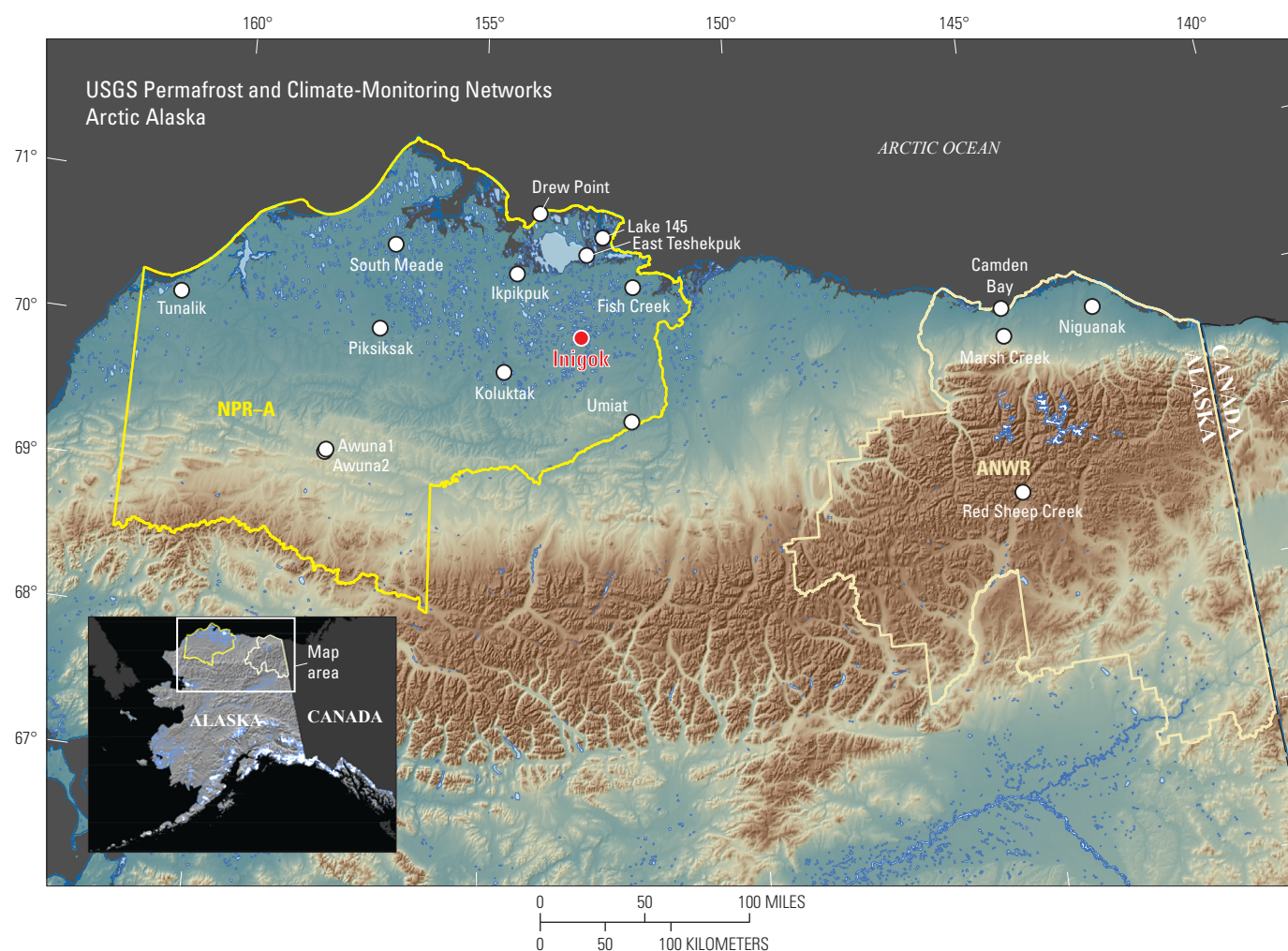
GTN-P code: U21

Latitude: 69°59.377'N

Longitude: 153°05.630'W

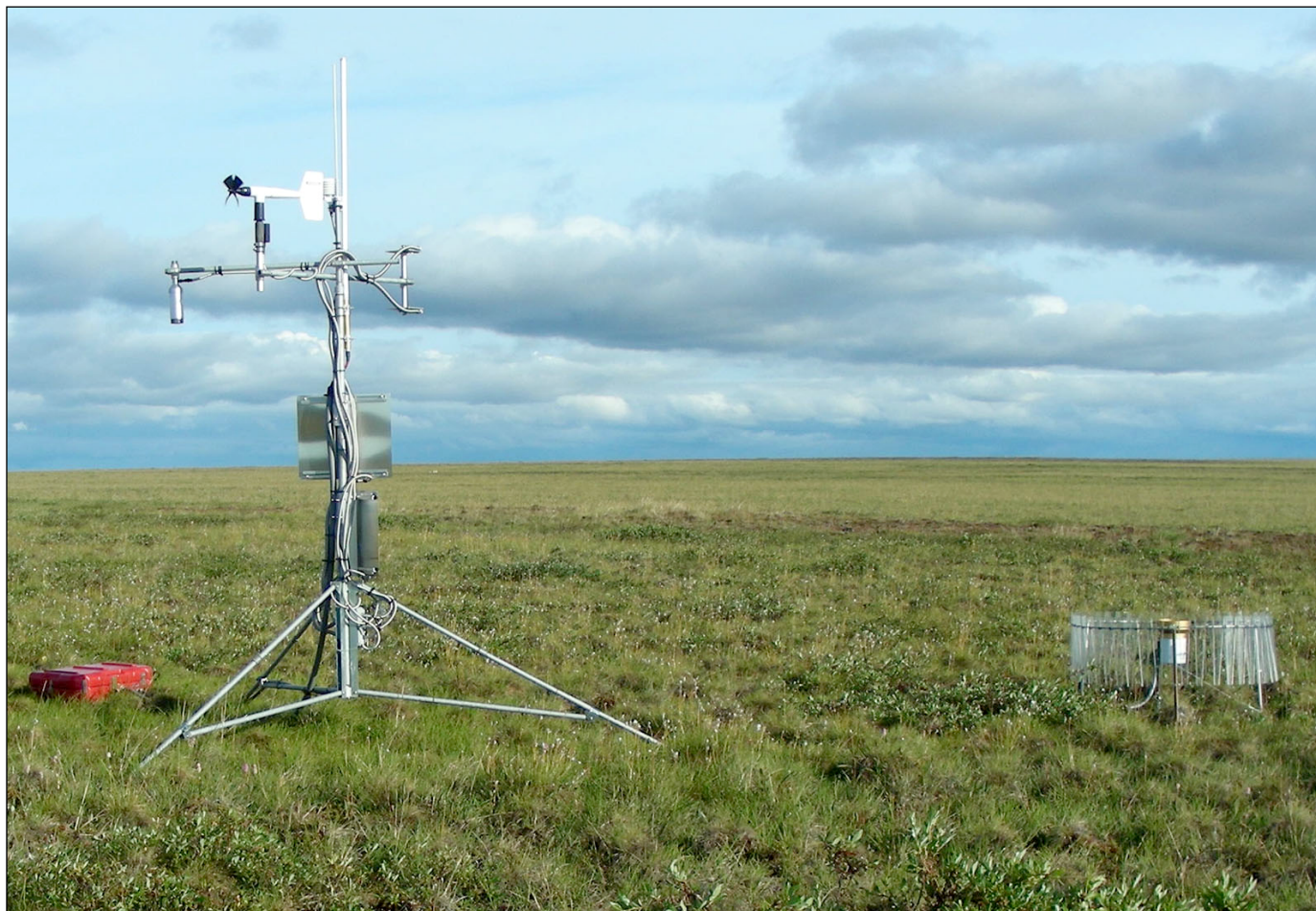
Elevation: 53 meters above mean sea level

Installation date: 17 AUG 1998



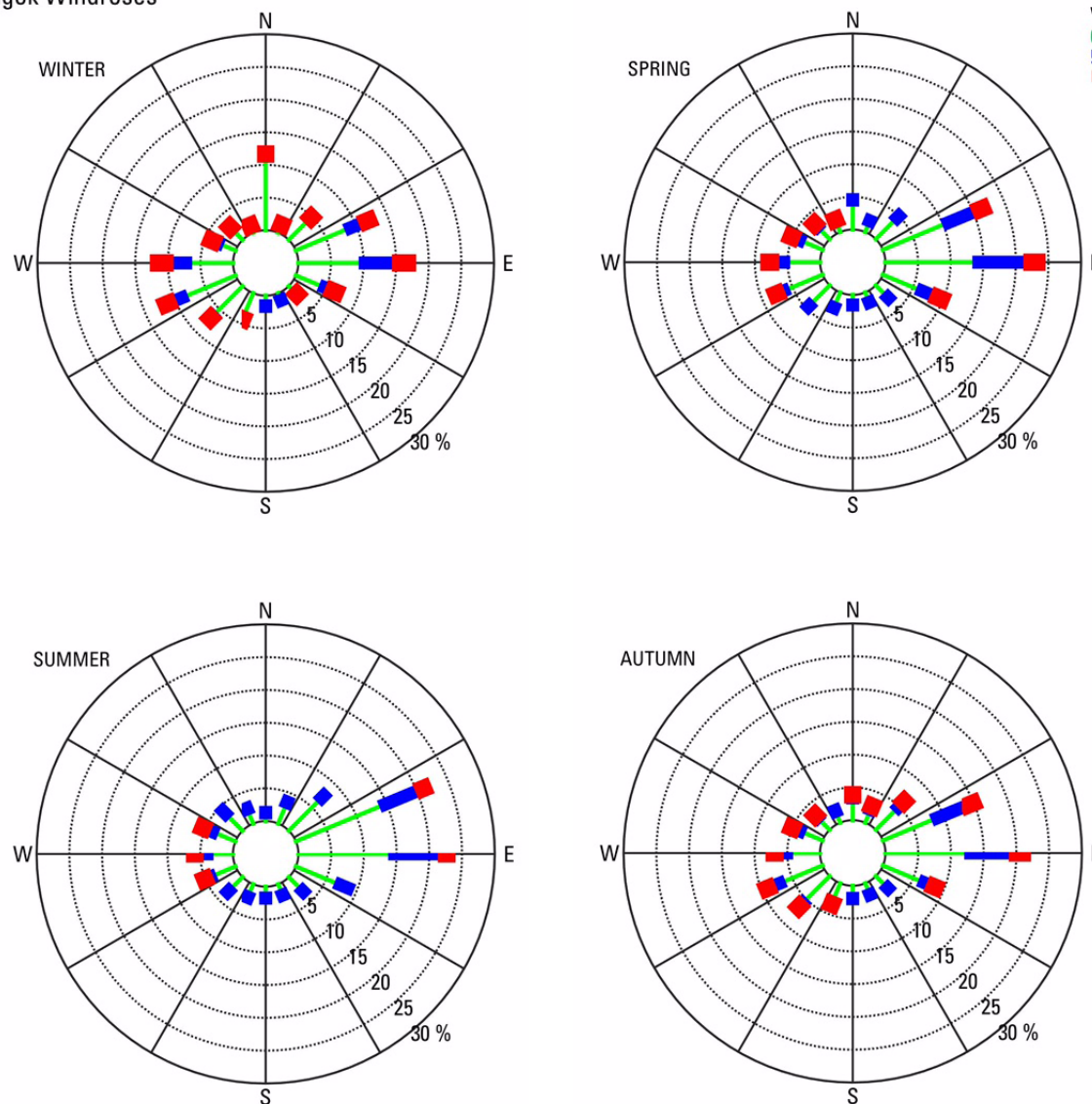
**Figure C-1.** Location map presenting the specific location of the Inigok site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure C–2.** Inigok station in summer 2008.

Inigok Windroses



**Figure C-3.** Inigok seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories ( $22.5^\circ$  each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table C–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
 Variable: Air temperature, in degrees Celsius  
 File name: AK101\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.28	-6.09	-13.36	-20.64
1999	-29.84	-28.79	-28.37	-19.80	-4.87	5.20	10.52	8.86	1.32	-9.97	-21.05	-30.97
2000	-25.80	-26.82	-27.01	-18.77	-8.38	7.26	8.85	5.81	0.69	-9.66	-19.33	-22.56
2001	-25.35	-19.90	-28.46	-17.87	NaN	NaN	NaN	5.22	1.46	-13.45	-20.33	-25.17
2002	-29.70	-29.40	-19.97	-15.83	-1.79	5.34	9.78	6.26	3.29	-6.04	-14.29	-21.47
2003	-24.86	-28.05	-25.68	-13.16	-4.80	5.29	NaN	NaN	0.09	-4.56	-17.50	-24.55
2004	-27.16	-34.79	-28.45	-18.48	-3.78	8.22	11.58	9.36	0.40	-7.47	-18.58	-24.73
2005	-24.25	-27.15	-23.53	-17.14	-4.70	4.20	7.24	NaN	1.40	-8.08	-24.43	-22.84
2006	-27.75	-22.52	-29.98	-20.72	-4.05	8.13	9.84	5.16	4.16	-4.26	-18.63	-19.89
2007	-27.90	-26.63	-29.34	-14.52	-8.01	6.67	11.00	9.03	3.10	-8.50	-13.97	-22.37
2008	-30.68	-29.13	-30.23	-13.05	-3.10	8.98	10.94	4.89	0.45	-8.31	-17.77	-19.24
2009	-28.20	-27.15	-31.33	-15.45	-1.95	6.34	11.51	7.06	1.28	-5.69	-21.39	-21.35
2010	-28.81	-25.87	-26.12	-12.16	-6.01	5.02	10.67	9.07	4.14	-7.34	-11.27	-27.02
2011	-25.10	-21.15	-21.79	-20.45	-4.90	5.08	10.47	7.84	2.58	-6.18	-22.49	-26.80
2012	-33.15	-25.52	-33.00	-16.25	-5.49	7.18	12.91	10.37	2.46	-3.52	-18.20	-26.93
2013	-27.61	-32.40	-24.42	-19.51	-5.46	8.74	11.93	7.56	NaN	-5.52	-16.29	-21.23
2014	-23.31	-24.53	NaN	-14.32	-1.33	4.93	8.90	6.11	1.22	-5.87	NaN	NaN
2015	NaN	NaN	NaN	NaN	0.29	10.23	9.06					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.19	-21.37	-25.03	-37.23
1999	-44.94	-43.67	-44.85	-34.79	-20.15	-3.03	-0.84	-2.42	-13.60	-27.16	-35.72	-42.07
2000	-38.26	-40.57	-38.32	-34.40	-22.49	-5.66	-0.61	-3.20	-10.64	-22.37	-32.09	-39.44
2001	-40.81	-42.11	-39.90	-30.86	NaN	NaN	NaN	-1.54	-6.17	-25.41	-29.57	-38.63
2002	-44.04	-42.29	-36.37	-30.88	-20.50	-2.85	-1.34	-0.26	-4.56	-21.90	-26.75	-38.60
2003	-39.67	-40.78	-39.74	-32.37	-17.20	-2.69	NaN	NaN	-8.02	-19.17	-35.47	-37.27
2004	-42.50	-46.02	-42.69	-34.04	-18.16	-1.78	2.42	-2.02	-5.79	-24.75	-31.83	-41.51
2005	-39.54	-38.57	-39.31	-33.67	-19.60	-3.15	-0.86	NaN	-4.80	-22.64	-42.85	-39.12
2006	-40.87	-44.43	-41.80	-35.68	-21.93	-5.55	-0.43	-2.39	-2.51	-15.53	-32.43	-39.54
2007	-43.24	-44.05	-42.81	-27.22	-20.90	-3.09	2.08	0.95	-8.68	-21.69	-29.16	-44.13
2008	-46.12	-42.96	-43.36	-30.51	-13.15	-1.42	0.53	-1.39	-8.16	-19.99	-31.91	-35.23
2009	-38.20	-43.60	-42.20	-30.23	-13.37	-1.44	1.09	-0.24	-14.27	-18.22	-34.73	-40.87
2010	-43.80	-44.22	-39.47	-28.72	-20.28	-0.97	0.05	-0.38	-7.79	-20.74	-31.37	-44.51
2011	-45.56	-34.68	-37.07	-33.72	-22.10	-3.81	1.46	-1.68	-8.59	-21.41	-39.16	-40.19
2012	-48.00	-48.15	-43.40	-32.93	-24.27	-1.47	2.76	2.25	-3.21	-18.44	-30.09	-38.08
2013	-39.19	-42.09	-35.52	-39.03	-26.84	-5.12	0.62	-2.14	NaN	-16.33	-34.55	-36.73
2014	-42.96	-43.52	NaN	-33.30	-9.23	-3.11	0.23	-1.30	-7.52	-13.69	NaN	NaN
2015	NaN	NaN	NaN	NaN	-14.48	-4.04	1.08					

**Table C-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.42	3.00	-2.98	0.17
1999	-4.73	-15.88	-16.73	1.26	3.11	22.32	27.06	30.23	16.60	-1.32	-12.06	-17.96
2000	-8.53	-4.43	-16.83	-4.53	3.41	23.99	23.99	22.85	17.44	-1.39	-2.93	-10.96
2001	-7.07	-3.91	-16.59	-4.03	NaN	NaN	NaN	15.82	16.24	-0.01	-11.37	-5.73
2002	-5.24	-8.68	-1.55	2.42	20.62	19.97	25.69	23.30	16.63	4.13	-1.18	-9.03
2003	-10.82	-14.75	-7.26	1.65	3.36	25.35	NaN	NaN	11.51	6.29	1.14	-6.02
2004	-2.45	-24.33	-2.65	1.52	9.00	24.65	27.62	24.54	13.22	1.34	-3.77	-4.31
2005	0.55	-9.88	-2.69	0.44	1.59	23.00	20.09	NaN	14.73	0.99	-10.57	-5.02
2006	-17.13	2.95	-18.05	-9.90	6.20	20.12	23.20	18.31	18.79	6.03	-1.13	-1.47
2007	-15.18	-6.96	-5.56	-4.29	2.14	19.78	25.25	23.89	16.90	-1.33	-5.43	-4.55
2008	0.03	-3.28	-3.72	1.46	9.26	22.20	25.86	16.08	8.00	-0.82	-7.63	-1.54
2009	-4.19	-1.95	-12.99	5.98	14.89	16.77	28.87	20.25	16.16	2.80	-7.61	-2.60
2010	-12.14	-14.83	-12.38	-0.52	3.91	21.93	24.39	24.59	18.79	-0.10	1.43	-8.38
2011	0.91	0.10	-7.26	-5.16	11.02	22.27	22.45	20.65	14.62	-0.33	-2.92	-5.21
2012	-11.88	-10.42	-10.15	-4.98	6.14	24.17	25.47	19.71	13.97	6.99	-5.55	-14.15
2013	-15.43	-21.84	-13.68	-1.91	6.18	29.63	21.18	21.42	NaN	2.07	5.84	13.83
2014	-6.47	-1.39	NaN	15.60	6.74	19.24	20.60	20.65	12.47	3.41	NaN	NaN
2015	NaN	NaN	NaN	NaN	13.35	27.24	27.20					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.50	1.01	4.67	3.16
1999	-2.78	-2.19	-1.43	-3.35	-0.85	-1.48	0.18	1.64	-0.47	-2.86	-3.03	-7.17
2000	1.27	-0.22	-0.07	-2.32	-4.36	0.59	-1.50	-1.41	-1.10	-2.55	-1.31	1.24
2001	1.72	6.70	-1.52	-1.41	NaN	NaN	NaN	-2.01	-0.33	-6.35	-2.31	-1.37
2002	-2.64	-2.80	6.96	0.62	2.23	-1.34	-0.57	-0.97	1.50	1.07	3.74	2.33
2003	2.20	-1.45	1.26	3.29	-0.78	-1.38	NaN	NaN	-1.70	2.54	0.53	-0.75
2004	-0.10	-8.19	-1.51	-2.03	0.24	1.54	1.24	2.13	-1.39	-0.37	-0.56	-0.92
2005	2.81	-0.55	3.41	-0.69	-0.69	-2.48	-3.11	NaN	-0.39	-0.98	-6.41	0.96
2006	-0.69	4.08	-3.04	-4.27	-0.04	1.45	-0.51	-2.06	2.37	2.85	-0.61	3.91
2007	-0.83	-0.02	-2.40	1.93	-3.99	-0.00	0.66	1.80	1.32	-1.40	4.06	1.43
2008	-3.61	-2.52	-3.30	3.40	0.91	2.30	0.59	-2.33	-1.34	-1.20	0.26	4.56
2009	-1.13	-0.55	-4.40	1.00	2.07	-0.33	1.16	-0.16	-0.51	1.41	-3.36	2.45
2010	-1.74	0.73	0.82	4.29	-1.99	-1.66	0.32	1.84	2.36	-0.24	6.76	-3.22
2011	1.97	5.45	5.15	-4.00	-0.88	-1.59	0.13	0.62	0.79	0.92	-4.47	-3.00
2012	-6.08	1.08	-6.06	0.20	-1.47	0.50	2.57	3.14	0.67	3.58	-0.18	-3.13
2013	-0.54	-5.80	2.51	-3.06	-1.45	2.06	1.58	0.33	NaN	1.58	1.74	2.57
2014	3.76	2.07	NaN	2.14	2.69	-1.74	-1.45	-1.11	-0.57	1.23	NaN	NaN
2015	NaN	NaN	NaN	NaN	4.31	3.56	-1.29					



**Table C–1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	90.32	0.00	0.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	16.13	67.74	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	53.33	100.00	100.00	100.00
2014	100.00	100.00	83.87	100.00	100.00	100.00	100.00	100.00	100.00	100.00	43.33	0.00
2015	0.00	0.00	0.00	13.33	100.00	100.00	100.00					

**Table C–1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok

Variable: Wind speed, in meters per second

File name: AK101\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.77	4.36	4.72	NaN
2005	NaN	NaN	4.49	3.48	4.54	4.52	4.17	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.88	3.89	NaN	NaN
2007	3.36	NaN	3.75	3.60	3.79	4.39	3.76	3.13	3.71	NaN	NaN	NaN
2008	NaN	NaN	NaN	3.66	5.13	3.41	3.88	3.16	2.97	3.81	NaN	NaN
2009	3.56	3.88	NaN	3.36	3.86	4.50	4.10	3.47	3.84	NaN	NaN	NaN
2010	NaN	4.79	NaN	3.40	5.16	4.73	3.58	3.73	3.42	NaN	NaN	NaN
2011	NaN	NaN	NaN	3.92	2.95	4.82	3.47	3.50	4.15	NaN	3.25	NaN
2012	NaN	NaN	NaN	3.51	3.86	3.93	3.11	3.75	3.44	3.99	NaN	2.75
2013	4.94	NaN	NaN	3.90	3.81	3.55	4.02	3.04	NaN	NaN	NaN	NaN
2014	5.16	NaN	NaN	3.00	4.16	3.55	3.73	4.25	4.24	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	3.58	3.41	3.69					

**Table C-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.66	10.77	13.31	NaN
2005	NaN	NaN	14.68	10.65	9.88	12.07	9.54	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.22	14.33	NaN	NaN
2007	12.54	NaN	14.14	10.87	10.47	11.00	8.43	9.04	8.56	NaN	NaN	NaN
2008	NaN	NaN	NaN	10.67	12.38	7.51	10.33	8.18	7.37	9.60	NaN	NaN
2009	15.38	16.04	NaN	10.90	10.28	8.42	9.13	9.37	9.66	NaN	NaN	NaN
2010	NaN	14.30	NaN	10.81	12.17	10.22	9.53	11.61	7.54	NaN	NaN	NaN
2011	NaN	NaN	NaN	11.77	8.73	9.75	9.06	6.97	9.05	NaN	10.47	NaN
2012	NaN	NaN	NaN	10.12	10.10	9.84	7.96	10.45	9.41	10.28	NaN	12.78
2013	15.20	NaN	NaN	12.09	11.90	7.54	9.74	8.23	NaN	NaN	NaN	NaN
2014	13.69	NaN	NaN	11.25	10.85	7.84	10.24	8.74	9.84	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	14.33	7.68	9.55					

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.17	NaN	NaN	NaN
2005	NaN	NaN	NaN	-0.28	0.45	0.44	0.42	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.73	NaN	NaN	NaN
2007	NaN	NaN	NaN	-0.16	-0.29	0.31	0.01	-0.41	0.11	NaN	NaN	NaN
2008	NaN	NaN	NaN	-0.10	1.05	-0.67	0.13	-0.37	-0.63	NaN	NaN	NaN
2009	NaN	NaN	NaN	-0.40	-0.22	0.42	0.35	-0.07	0.24	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.36	1.08	0.65	-0.17	0.19	-0.19	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.16	-1.14	0.74	-0.28	-0.04	0.55	NaN	NaN	NaN
2012	NaN	NaN	NaN	-0.25	-0.22	-0.15	-0.64	0.22	-0.16	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.14	-0.27	-0.53	0.27	-0.49	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.76	0.08	-0.53	-0.02	0.71	0.64	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	-0.51	-0.67	-0.06					

**Table C-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.16	100.00	100.00	96.67	48.39
2005	93.55	82.14	96.77	100.00	100.00	100.00	100.00	93.55	40.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.48	100.00	96.77	66.67	90.32
2007	100.00	82.14	96.77	96.67	100.00	100.00	100.00	96.77	100.00	80.65	83.33	80.65
2008	93.55	89.66	19.35	100.00	96.77	100.00	100.00	100.00	100.00	100.00	73.33	90.32
2009	100.00	100.00	58.06	100.00	100.00	100.00	100.00	100.00	100.00	83.87	83.33	58.06
2010	77.42	100.00	93.55	100.00	100.00	100.00	100.00	96.77	100.00	87.10	83.33	61.29
2011	19.35	92.86	58.06	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	77.42
2012	83.87	37.93	35.48	100.00	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00
2013	96.77	85.71	90.32	100.00	100.00	100.00	100.00	100.00	53.33	87.10	80.00	93.55
2014	96.77	78.57	80.65	100.00	100.00	100.00	100.00	100.00	100.00	93.55	43.33	0.00
2015	0.00	0.00	0.00	13.33	100.00	100.00	100.00					

**Table C-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Ground temperature, in degrees Celsius

File name: AK101\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.48	-3.84	-4.64	-9.05
1999	-13.87	-16.53	-16.99	-14.92	-7.52	NaN	NaN	NaN	1.33	-0.88	-5.01	-14.00
2000	-15.14	-14.05	-15.52	-13.58	-10.05	NaN	NaN	NaN	1.13	-0.67	-6.79	-11.56
2001	-15.19	-14.55	-17.51	-14.88	-11.10	NaN	NaN	NaN	1.27	-0.24	-2.59	-8.42
2002	-11.73	-14.84	-13.59	NaN	NaN	1.16	4.91	3.56	1.90	-0.46	-3.61	-7.85
2003	-12.90	-15.94	-16.81	-14.05	-7.43	1.07	5.65	3.57	0.61	-0.08	-0.98	-8.29
2004	-11.21	-13.84	-14.85	-13.56	-7.00	2.56	6.86	NaN	0.87	-0.54	-2.97	-10.33
2005	-12.47	-15.19	-15.51	-13.94	-7.63	2.06	4.88	NaN	1.09	-0.89	-5.32	-9.24
2006	-11.20	-12.44	-14.38	-13.27	-7.37	1.75	5.50	3.63	1.94	-0.62	-5.11	-9.33
2007	-14.97	-16.27	-20.80	-13.77	-9.59	1.10	5.34	5.05	1.71	-1.42	-4.56	-9.26
2008	-13.39	-15.77	-16.45	-12.25	-6.47	2.31	6.18	3.15	0.65	-0.41	-2.27	-7.24
2009	-12.53	-14.59	-15.51	-12.56	-2.28	1.97	5.63	3.93	1.28	-0.43	-3.52	-7.33
2010	-12.28	-13.19	-14.54	-12.02	-7.64	0.56	4.26	NaN	2.29	-0.89	-0.86	-5.15
2011	-10.05	-11.15	-11.70	-11.84	NaN	NaN	NaN	NaN	1.63	-0.42	-2.48	-7.46
2012	-12.03	-12.79	-15.56	-13.14	-6.46	NaN	6.48	NaN	1.43	-0.16	-1.64	-7.21
2013	-12.95	-17.10	-15.91	-13.90	-7.99	NaN	5.98	4.61	NaN	-0.28	-0.86	-2.72
2014	-8.50	-10.28	NaN	-10.51	-2.29	1.01	4.62	3.59	0.63	-0.14	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	2.82	4.90					

**Table C-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.83	-11.31	-8.08	-15.48
1999	-17.74	-19.67	-20.27	-18.94	-12.28	NaN	NaN	NaN	-1.04	-1.35	-8.59	-16.87
2000	-18.09	-15.81	-16.16	-14.62	-12.04	NaN	NaN	NaN	-0.18	-2.11	-10.43	-14.30
2001	-17.54	-18.15	-19.21	-17.85	-15.34	NaN	NaN	NaN	-0.07	-0.70	-7.12	-10.46
2002	-14.59	-15.76	-14.86	NaN	NaN	-0.41	0.46	0.92	-0.07	-1.36	-7.48	-11.85
2003	-15.07	-19.04	-19.55	-17.78	-10.24	-0.94	1.30	1.24	-0.55	-0.21	-3.37	-9.78
2004	-13.40	-14.64	-15.88	-14.92	-11.69	-1.27	3.65	NaN	-0.48	-1.90	-5.41	-13.32
2005	-15.98	-16.46	-18.19	-16.46	-10.58	-0.92	0.70	NaN	-0.12	-2.25	-8.62	-11.17
2006	-13.71	-14.64	-15.55	-15.52	-11.57	-0.89	1.73	0.63	0.05	-2.24	-10.41	-12.94
2007	-17.92	-20.85	-23.70	-16.04	-13.27	-0.86	1.83	1.75	-0.18	-2.66	-7.61	-12.95
2008	-16.15	-18.45	-17.47	-15.12	-10.66	-0.35	2.09	0.90	-0.06	-0.86	-6.14	-10.03
2009	-15.17	-17.21	-17.03	-15.94	-5.78	-0.32	1.89	0.67	-0.24	-1.07	-6.32	-9.58
2010	-14.45	-15.55	-15.70	-14.64	-9.85	-1.00	1.25	NaN	-0.27	-2.36	-1.46	-10.62
2011	-13.46	-12.57	-12.76	-13.06	NaN	NaN	NaN	NaN	-0.08	-1.03	-5.12	-10.59
2012	-14.53	-15.34	-16.33	-16.20	-11.24	NaN	3.09	NaN	-0.07	-0.40	-3.55	-11.74
2013	-16.64	-18.64	-17.61	-15.76	-12.45	NaN	1.84	0.63	NaN	-0.78	-1.59	-7.03
2014	-10.63	-12.82	NaN	-12.19	-8.88	-0.62	1.64	0.56	-0.13	-0.41	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	-0.32	2.44					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.67	0.64	-1.80	-4.88
1999	-11.08	-14.85	-14.29	-12.35	-0.06	NaN	NaN	NaN	5.83	-0.35	-1.35	-8.64
2000	-13.84	-11.98	-14.60	-12.08	-1.75	NaN	NaN	NaN	6.43	-0.04	-2.18	-9.75
2001	-13.65	-11.99	-15.29	-13.20	-0.91	NaN	NaN	NaN	3.88	0.01	-0.60	-6.29
2002	-9.73	-13.57	-11.61	NaN	NaN	4.93	10.48	10.53	6.76	0.04	-0.29	-5.42
2003	-11.33	-12.85	-13.88	-9.89	-0.12	8.12	14.06	9.50	3.58	0.00	-0.04	-3.37
2004	-7.46	-12.82	-13.28	-11.73	-1.13	8.87	11.40	NaN	6.12	-0.09	-1.46	-4.70
2005	-7.32	-13.66	-13.66	-10.58	-0.04	12.45	10.37	NaN	3.81	-0.10	-1.58	-7.83
2006	-8.94	-9.93	-12.98	-11.56	-0.05	7.04	9.93	8.02	5.28	0.05	-0.60	-5.58
2007	-11.96	-11.39	-15.88	-11.30	-0.05	4.92	9.79	9.42	5.35	-0.10	-2.16	-6.56
2008	-10.48	-12.55	-15.05	-10.46	0.17	7.49	10.82	5.17	2.38	0.00	-0.58	-5.46
2009	-9.70	-11.55	-12.08	-0.30	-0.16	6.44	11.61	9.18	5.37	-0.06	-0.77	-5.29
2010	-9.62	-12.08	-13.32	-9.80	-0.26	4.89	8.71	NaN	6.72	-0.10	-0.37	-1.35
2011	-6.85	-9.23	-10.90	-10.75	NaN	NaN	NaN	NaN	5.72	-0.00	-0.71	-4.58
2012	-10.58	-11.41	-14.56	-10.83	-0.18	NaN	10.41	NaN	5.52	0.03	-0.27	-2.17
2013	-10.12	-14.97	-14.34	-11.38	-0.28	NaN	10.09	9.97	NaN	-0.02	-0.29	-0.12
2014	-6.58	-7.77	NaN	-8.92	-0.14	6.25	8.32	7.03	2.52	0.02	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	8.62	9.22					

**Table C–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.21	-3.13	-1.37	-0.59
1999	-1.51	-2.43	-1.50	-1.89	-0.32	NaN	NaN	NaN	0.05	-0.17	-1.74	-5.54
2000	-2.79	0.05	-0.03	-0.55	-2.85	NaN	NaN	NaN	-0.14	0.04	-3.53	-3.11
2001	-2.83	-0.44	-2.02	-1.85	-3.90	NaN	NaN	NaN	-0.00	0.48	0.67	0.04
2002	0.63	-0.74	1.90	NaN	NaN	-0.51	-0.57	-0.26	0.63	0.25	-0.34	0.61
2003	-0.54	-1.83	-1.33	-1.01	-0.23	-0.60	0.17	-0.24	-0.67	0.64	2.29	0.16
2004	1.15	0.26	0.63	-0.52	0.20	0.89	1.38	NaN	-0.40	0.18	0.30	-1.87
2005	-0.11	-1.08	-0.02	-0.90	-0.43	0.39	-0.60	NaN	-0.19	-0.17	-2.05	-0.79
2006	1.16	1.67	1.10	-0.23	-0.17	0.08	0.03	-0.19	0.67	0.09	-1.85	-0.87
2007	-2.61	-2.17	-5.31	-0.73	-2.39	-0.57	-0.13	1.23	0.43	-0.71	-1.29	-0.80
2008	-1.03	-1.66	-0.97	0.79	0.73	0.64	0.71	-0.67	-0.62	0.30	1.00	1.21
2009	-0.17	-0.48	-0.02	0.47	4.92	0.30	0.16	0.12	0.01	0.28	-0.25	1.13
2010	0.08	0.92	0.95	1.02	-0.44	-1.11	-1.22	NaN	1.01	-0.17	2.41	3.31
2011	2.31	2.96	3.79	1.20	NaN	NaN	NaN	NaN	0.35	0.29	0.78	1.00
2012	0.33	1.32	-0.07	-0.10	0.74	NaN	1.01	NaN	0.16	0.55	1.63	1.25
2013	-0.59	-3.00	-0.42	-0.86	-0.79	NaN	0.50	0.79	NaN	0.43	2.40	5.74
2014	3.86	3.83	NaN	2.53	4.91	-0.66	-0.86	-0.23	-0.65	0.57	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	1.15	-0.58					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	20.00	0.00	22.58	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	33.33	0.00	48.39	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	23.33	0.00	93.55	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	93.33	32.26	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	13.33	0.00	0.00	80.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	13.33	0.00	25.81	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	13.33	0.00	25.81	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	83.87	83.33	90.32	93.55	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	80.00	96.77	90.32	96.67	96.77	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	90.00	100.00	96.77	53.33	100.00	100.00	100.00
2014	100.00	100.00	87.10	100.00	100.00	100.00	96.77	96.77	100.00	100.00	43.33	0.00
2015	0.00	0.00	0.00	13.33	90.32	100.00	100.00					

**Table C-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.81	-0.66	-0.73	-3.84
1999	-7.78	-11.17	-12.27	-12.63	-10.28	NaN	NaN	NaN	-0.95	-0.84	-2.00	-7.60
2000	-11.08	-11.43	-12.49	-12.53	-10.97	NaN	NaN	NaN	-1.09	-0.96	-3.17	-7.63
2001	-11.04	-11.84	-13.82	-13.84	-11.98	NaN	NaN	NaN	-1.18	-1.06	-1.56	-5.54
2002	-8.44	-11.33	-11.86	NaN	NaN	-3.44	-1.92	-1.18	-0.88	-0.78	-1.32	-5.01
2003	-8.94	-11.68	-13.38	-13.52	-9.84	-4.51	-2.28	-1.32	-1.00	-0.91	-0.86	-4.63
2004	-8.00	-10.78	-12.33	-12.36	-9.68	-4.04	-1.87	NaN	-0.77	-0.72	-0.77	-5.32
2005	-8.72	-11.52	-12.80	-12.71	-9.96	-4.59	-2.42	NaN	-1.01	-0.88	-2.24	-6.19
2006	-7.94	-9.78	-11.03	-11.77	-9.77	-4.35	-2.13	-1.23	-0.92	-0.79	-1.46	-5.65
2007	-9.95	-11.78	-15.44	-13.60	-11.09	-5.11	-2.57	-1.49	-1.06	-0.93	-2.25	-5.40
2008	-8.74	-11.35	-12.54	-12.01	-9.46	-4.31	-2.10	-1.24	-0.97	-0.87	-1.08	-4.17
2009	-7.58	-10.53	-11.58	-12.24	-6.57	-3.12	-1.77	-1.10	-0.84	-0.75	-1.12	-4.53
2010	-8.18	-10.31	-11.63	-11.47	-9.39	-4.37	-2.32	NaN	-0.89	-0.75	-0.71	-2.08
2011	-6.14	-8.30	-9.24	-9.90	NaN	NaN	NaN	NaN	-0.81	-0.70	-0.73	-3.66
2012	-7.84	-10.00	-11.75	-12.14	-9.32	NaN	-2.09	NaN	-0.83	-0.72	-0.66	-2.73
2013	-7.87	-11.67	-12.86	-12.59	-10.23	NaN	-2.03	-1.12	NaN	-0.74	-0.68	-1.18
2014	-5.36	-7.52	NaN	-9.59	-5.95	-2.75	-1.58	-0.99	-0.75	-0.68	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	-2.86	-1.51					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.95	-0.73	-1.52	-5.64
1999	-9.63	-11.67	-12.86	-13.13	-12.11	NaN	NaN	NaN	-1.14	-0.91	-4.15	-10.21
2000	-11.68	-11.91	-12.93	-12.85	-12.02	NaN	NaN	NaN	-1.22	-1.06	-5.78	-9.25
2001	-11.64	-12.57	-14.85	-14.76	-13.24	NaN	NaN	NaN	-1.35	-1.13	-3.44	-7.20
2002	-10.16	-12.09	-12.14	NaN	NaN	-4.68	-2.54	-1.45	-1.00	-0.84	-3.31	-7.00
2003	-10.38	-13.34	-14.73	-14.74	-11.63	-6.97	-3.15	-1.62	-1.11	-0.94	-1.11	-6.71
2004	-9.88	-11.56	-12.68	-12.70	-11.79	-5.94	-2.70	NaN	-0.89	-0.78	-1.63	-7.85
2005	-10.68	-12.36	-13.36	-13.21	-11.66	-7.27	-3.16	NaN	-1.13	-0.95	-4.63	-6.86
2006	-9.33	-10.05	-11.95	-12.07	-11.39	-6.55	-2.95	-1.56	-1.07	-0.84	-4.17	-7.72
2007	-11.24	-13.78	-16.23	-15.48	-12.17	-8.69	-3.37	-1.95	-1.26	-1.03	-3.70	-7.23
2008	-10.28	-11.78	-13.28	-13.27	-10.89	-6.26	-3.06	-1.52	-1.09	-0.91	-2.26	-5.42
2009	-9.26	-11.06	-12.65	-12.74	-9.80	-4.35	-2.34	-1.36	-0.96	-0.83	-2.90	-6.19
2010	-9.81	-10.75	-12.22	-12.26	-10.45	-6.93	-3.01	NaN	-1.03	-0.83	-0.74	-4.71
2011	-7.92	-8.84	-9.65	-10.21	NaN	NaN	NaN	NaN	-0.96	-0.79	-1.38	-6.19
2012	-9.58	-10.36	-12.73	-12.82	-10.98	NaN	-2.84	NaN	-0.97	-0.79	-0.73	-5.89
2013	-10.08	-12.98	-13.02	-12.93	-11.68	NaN	-2.87	-1.43	NaN	-0.79	-0.75	-3.12
2014	-6.80	-8.97	NaN	-10.02	-8.96	-3.68	-2.10	-1.23	-0.89	-0.75	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	-3.91	-2.05					

**Table C–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.68	-0.60	-0.59	-1.50
1999	-5.64	-9.63	-11.49	-12.06	-7.76	NaN	NaN	NaN	-0.83	-0.77	-0.77	-4.20
2000	-10.25	-11.09	-11.90	-12.02	-9.84	NaN	NaN	NaN	-0.99	-0.86	-0.88	-5.83
2001	-9.28	-11.45	-12.61	-13.07	-10.42	NaN	NaN	NaN	-1.05	-0.98	-0.97	-3.49
2002	-7.20	-10.16	-11.38	NaN	NaN	-2.52	-1.36	-0.96	-0.80	-0.71	-0.67	-3.31
2003	-7.04	-10.37	-12.48	-11.63	-7.00	-3.11	-1.60	-1.05	-0.89	-0.83	-0.76	-1.11
2004	-6.60	-9.87	-11.56	-11.83	-5.94	-2.62	-1.35	NaN	-0.70	-0.64	-0.60	-1.68
2005	-7.27	-10.63	-12.35	-11.65	-7.29	-3.12	-1.85	NaN	-0.88	-0.82	-0.82	-4.61
2006	-6.85	-9.32	-9.99	-11.39	-6.53	-2.90	-1.51	-0.98	-0.80	-0.70	-0.69	-4.17
2007	-7.70	-10.57	-13.78	-12.12	-8.69	-3.36	-1.87	-1.16	-0.93	-0.87	-1.01	-3.75
2008	-7.21	-10.26	-11.72	-10.97	-6.25	-2.98	-1.48	-1.05	-0.87	-0.82	-0.82	-2.26
2009	-5.42	-9.26	-10.49	-9.80	-4.30	-2.26	-1.28	-0.89	-0.72	-0.67	-0.67	-2.90
2010	-6.19	-9.81	-10.78	-10.45	-6.98	-2.96	-1.67	NaN	-0.74	-0.68	-0.64	-0.68
2011	-4.71	-7.85	-8.68	-9.52	NaN	NaN	NaN	NaN	-0.67	-0.63	-0.60	-1.36
2012	-6.18	-9.58	-10.34	-10.99	-5.76	NaN	-1.46	NaN	-0.71	-0.64	-0.61	-0.61
2013	-5.89	-10.08	-12.62	-11.68	-6.59	NaN	-1.42	-0.91	NaN	-0.68	-0.62	-0.63
2014	-3.10	-6.74	NaN	-8.94	-3.66	-2.07	-1.17	-0.81	-0.64	-0.64	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	-1.98	-1.13					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.10	0.14	0.57	0.85
1999	0.49	-0.61	-0.09	-0.59	-0.67	NaN	NaN	NaN	-0.04	-0.04	-0.69	-2.91
2000	-2.81	-0.88	-0.32	-0.48	-1.36	NaN	NaN	NaN	-0.18	-0.16	-1.86	-2.94
2001	-2.77	-1.29	-1.65	-1.79	-2.37	NaN	NaN	NaN	-0.27	-0.26	-0.25	-0.85
2002	-0.16	-0.77	0.31	NaN	NaN	0.51	0.13	0.01	0.03	0.02	-0.01	-0.32
2003	-0.67	-1.12	-1.21	-1.48	-0.23	-0.56	-0.24	-0.14	-0.08	-0.11	0.44	0.06
2004	0.28	-0.22	-0.16	-0.32	-0.07	-0.09	0.17	NaN	0.14	0.09	0.53	-0.63
2005	-0.44	-0.96	-0.63	-0.66	-0.35	-0.64	-0.37	NaN	-0.09	-0.08	-0.94	-1.50
2006	0.34	0.78	1.14	0.27	-0.16	-0.40	-0.09	-0.04	-0.01	0.02	-0.16	-0.96
2007	-1.67	-1.22	-3.27	-1.56	-1.49	-1.16	-0.53	-0.30	-0.14	-0.13	-0.95	-0.71
2008	-0.47	-0.80	-0.36	0.03	0.14	-0.36	-0.06	-0.06	-0.06	-0.07	0.23	0.52
2009	0.70	0.03	0.59	-0.20	3.03	0.83	0.28	0.08	0.07	0.05	0.18	0.16
2010	0.10	0.25	0.54	0.57	0.21	-0.42	-0.27	NaN	0.02	0.05	0.59	2.61
2011	2.13	2.26	2.93	2.15	NaN	NaN	NaN	NaN	0.10	0.10	0.58	1.03
2012	0.43	0.56	0.42	-0.10	0.29	NaN	-0.05	NaN	0.08	0.08	0.64	1.96
2013	0.41	-1.11	-0.69	-0.54	-0.63	NaN	0.01	0.07	NaN	0.06	0.62	3.51
2014	2.92	3.04	NaN	2.45	3.66	1.20	0.47	0.19	0.16	0.12	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	1.09	0.53					



**Table C-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	20.00	0.00	22.58	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	33.33	0.00	48.39	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	23.33	0.00	93.55	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	93.33	32.26	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	13.33	0.00	0.00	80.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	13.33	0.00	25.81	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	13.33	0.00	25.81	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	83.87	83.33	90.32	93.55	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	80.00	96.77	90.32	96.67	96.77	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	90.00	100.00	96.77	53.33	100.00	100.00	100.00
2014	100.00	100.00	87.10	100.00	100.00	100.00	96.77	96.77	100.00	100.00	43.33	0.00
2015	0.00	0.00	0.00	13.33	90.32	100.00	100.00					

**Table C-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Incident solar flux, in watts per meter squared

File name: AK101\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.2	0.0
2000	0.6	NaN	89.6	NaN	NaN	286.5	178.6	123.7	64.8	22.5	1.2	0.0
2001	0.2	NaN	NaN	174.8	NaN	NaN	NaN	106.0	56.3	18.7	0.9	0.0
2002	0.2	NaN	NaN	171.9	240.0	219.9	223.6	109.6	65.2	20.7	1.9	0.0
2003	0.3	6.8	NaN	156.6	220.2	262.9	NaN	NaN	56.7	16.3	2.5	0.1
2004	0.7	16.2	76.4	176.6	215.7	239.9	171.8	130.7	59.2	24.3	1.7	0.0
2005	0.8	9.3	68.0	168.3	215.0	241.3	205.4	NaN	48.5	18.9	1.5	0.0
2006	0.5	12.9	NaN	167.6	228.3	225.7	193.6	108.7	61.4	18.3	1.6	0.1
2007	0.7	14.6	79.8	157.0	238.2	271.2	232.5	NaN	72.3	23.3	2.0	0.1
2008	0.7	15.7	85.5	NaN	216.2	239.3	199.6	106.6	58.3	18.9	1.8	0.0
2009	1.0	14.2	82.2	164.4	213.9	223.6	203.1	112.3	56.9	20.6	1.9	0.0
2010	0.4	7.9	NaN	138.5	221.9	238.3	178.5	122.8	73.6	20.2	1.1	0.1
2011	0.6	15.5	77.8	178.8	250.1	240.6	186.0	129.4	48.8	18.0	2.5	0.0
2012	0.9	NaN	NaN	NaN	244.9	220.0	192.8	108.0	54.8	22.0	2.4	0.1
2013	0.6	6.3	NaN	NaN	234.5	230.2	175.2	104.8	NaN	21.1	2.3	0.1
2014	0.8	NaN	NaN	161.2	172.5	182.3	170.1	104.8	56.4	19.1	NaN	NaN
2015	NaN	NaN	NaN	NaN	205.0	218.6	186.0					

**Table C–1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.3	-0.0
2000	0.0	NaN	NaN	NaN	NaN	50.5	-14.1	11.6	5.1	2.2	-0.7	-0.0
2001	-0.4	NaN	NaN	13.7	NaN	NaN	NaN	-6.2	-3.4	-1.6	-1.0	-0.0
2002	-0.4	NaN	NaN	10.8	18.5	-16.1	31.0	-2.5	5.5	0.4	0.1	-0.0
2003	-0.3	-5.1	NaN	-4.4	-1.3	26.9	NaN	NaN	-3.0	-4.0	0.7	0.0
2004	0.1	4.3	-3.5	15.5	-5.7	3.9	-20.8	18.5	-0.5	4.0	-0.2	-0.0
2005	0.2	-2.7	-11.9	7.2	-6.5	5.3	12.8	NaN	-11.2	-1.4	-0.4	-0.0
2006	-0.1	1.0	NaN	6.5	6.8	-10.3	0.9	-3.4	1.7	-2.0	-0.2	0.0
2007	0.1	2.6	-0.1	-4.1	16.7	35.2	39.9	NaN	12.6	3.0	0.1	0.0
2008	0.1	3.8	5.6	NaN	-5.3	3.3	7.0	-5.6	-1.4	-1.4	-0.1	-0.0
2009	0.4	2.3	2.3	3.3	-7.6	-12.5	10.5	0.1	-2.8	0.3	0.1	-0.0
2010	-0.2	-4.0	NaN	-22.6	0.4	2.3	-14.1	10.7	13.9	-0.1	-0.8	0.0
2011	-0.0	3.6	-2.1	17.7	28.6	4.6	-6.6	17.2	-10.9	-2.3	0.6	0.0
2012	0.3	NaN	NaN	NaN	23.4	-16.0	0.2	-4.2	-4.9	1.7	0.5	0.0
2013	0.0	-5.7	NaN	NaN	13.0	-5.8	-17.4	-7.3	NaN	0.8	0.5	0.0
2014	0.2	NaN	NaN	0.1	-49.0	-53.8	-22.6	-7.4	-3.3	-1.2	NaN	NaN
2015	NaN	NaN	NaN	NaN	-16.5	-17.4	-6.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	83.3	83.9	100.0	100.0
2000	100.0	89.7	100.0	90.0	77.4	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2001	100.0	92.9	87.1	100.0	90.3	0.0	0.0	96.8	100.0	100.0	100.0	100.0
2002	100.0	50.0	45.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2003	100.0	100.0	93.5	100.0	100.0	100.0	16.1	67.7	100.0	100.0	100.0	100.0
2004	100.0	96.6	100.0	100.0	100.0	100.0	100.0	96.8	96.7	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2006	100.0	96.4	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	96.8	96.7	100.0
2008	100.0	100.0	100.0	93.3	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	87.1	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	72.4	0.0	83.3	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	25.8	33.3	100.0	100.0	100.0	100.0	53.3	96.8	100.0	100.0
2014	100.0	89.3	83.9	100.0	100.0	100.0	96.8	100.0	100.0	100.0	43.3	0.0
2015	0.0	0.0	0.0	13.3	100.0	100.0	100.0					

**Table C-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Reflected solar flux, in watts per meter squared

File name: AK101\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.2	9.2	2.1	-0.0
1999	0.6	12.5	68.1	153.1	205.4	71.7	42.5	23.1	19.0	NaN	2.2	-0.1
2000	0.4	13.7	69.8	NaN	NaN	96.4	33.3	29.7	17.1	22.0	2.3	0.0
2001	0.6	15.0	75.1	159.6	NaN	NaN	NaN	20.0	11.9	20.9	NaN	-0.0
2002	0.9	11.1	NaN	153.1	139.4	39.5	44.5	21.0	14.4	12.8	1.5	0.0
2003	0.6	10.1	76.8	143.2	189.7	57.8	NaN	NaN	13.6	16.5	2.2	-0.0
2004	0.9	16.3	72.3	163.5	175.3	57.1	42.5	32.6	21.9	22.5	2.3	0.0
2005	0.8	14.0	69.5	154.5	187.2	63.3	50.7	NaN	10.7	13.4	1.7	-0.1
2006	0.4	13.1	71.3	148.5	189.4	57.9	43.8	24.3	12.6	7.6	1.9	0.0
2007	0.6	17.7	69.3	138.2	202.5	65.8	53.2	31.8	15.7	17.7	2.2	-0.0
2008	0.7	14.9	75.1	135.6	158.0	45.1	42.1	21.0	11.9	18.9	2.1	0.0
2009	0.9	13.4	70.0	141.3	112.6	42.3	43.2	23.0	17.9	17.3	2.1	0.0
2010	0.9	17.3	69.8	142.7	186.2	54.9	36.4	26.1	15.8	17.4	1.9	0.1
2011	0.8	12.8	68.5	150.1	188.2	45.5	39.7	28.5	10.3	18.4	2.4	0.1
2012	1.0	18.1	87.3	141.2	202.6	50.4	44.3	25.7	13.9	13.5	2.3	0.1
2013	0.9	13.6	66.2	157.0	192.1	52.8	42.8	25.9	NaN	21.5	2.3	0.1
2014	0.9	16.0	NaN	146.4	104.6	39.3	41.7	25.1	14.1	14.9	NaN	NaN
2015	NaN	NaN	NaN	NaN	121.1	50.9	47.4					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.1	-7.6	0.0	-0.0
1999	-0.2	-1.8	-1.0	4.6	38.4	16.0	-0.7	-2.1	3.8	NaN	0.0	-0.1
2000	-0.3	-0.7	0.7	NaN	NaN	40.8	-9.9	4.5	1.8	5.3	0.2	0.0
2001	-0.1	0.6	6.0	11.0	NaN	NaN	NaN	-5.3	-3.3	4.1	NaN	-0.1
2002	0.2	-3.2	NaN	4.6	-27.7	-16.2	1.3	-4.3	-0.8	-3.9	-0.6	0.0
2003	-0.1	-4.3	7.7	-5.3	22.7	2.1	NaN	NaN	-1.7	-0.2	0.1	-0.0
2004	0.2	1.9	3.2	15.0	8.2	1.5	-0.7	7.4	6.6	5.7	0.2	-0.0
2005	0.1	-0.3	0.4	6.0	20.1	7.6	7.5	NaN	-4.5	-3.4	-0.4	-0.1
2006	-0.4	-1.2	2.3	-0.0	22.3	2.2	0.6	-1.0	-2.7	-9.1	-0.2	-0.0
2007	-0.1	3.4	0.2	-10.3	35.4	10.1	10.0	6.5	0.4	0.9	0.1	-0.0
2008	-0.1	0.6	6.0	-12.9	-9.0	-10.6	-1.1	-4.2	-3.4	2.2	-0.0	0.0
2009	0.2	-0.9	0.9	-7.3	-54.5	-13.4	-0.0	-2.3	2.7	0.6	-0.0	-0.0
2010	0.2	2.9	0.7	-5.9	19.1	-0.8	-6.8	0.8	0.6	0.7	-0.2	0.1
2011	0.1	-1.5	-0.6	1.5	21.1	-10.2	-3.5	3.3	-5.0	1.7	0.3	0.0
2012	0.2	3.8	18.2	-7.3	35.6	-5.3	1.1	0.5	-1.3	-3.3	0.2	0.1
2013	0.2	-0.8	-2.9	8.5	25.0	-2.8	-0.4	0.7	NaN	4.8	0.2	0.1
2014	0.1	1.6	NaN	-2.1	-62.5	-16.4	-1.6	-0.1	-1.2	-1.8	NaN	NaN
2015	NaN	NaN	NaN	NaN	-45.9	-4.7	4.2					

**Table C-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
1999	100.0	100.0	100.0	100.0	96.8	96.7	100.0	100.0	100.0	93.5	96.7	100.0
2000	100.0	96.6	100.0	90.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	90.3	0.0	0.0	96.8	100.0	100.0	93.3	100.0
2002	100.0	96.4	87.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	16.1	67.7	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	53.3	100.0	100.0	100.0
2014	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	43.3	0.0
2015	0.0	0.0	0.0	13.3	100.0	100.0	100.0					

**Table C-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
 Variable: Rainfall, in millimeters per hour  
 File name: AK101\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.3	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.3	0.5	0.0	0.0
2007	0.0	0.0	0.0	0.0	NaN	0.4	0.1	0.8	0.3	0.1	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	0.6	2.0	0.4	0.2	0.1	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	0.6	0.5	1.0	0.3	0.4	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	1.0	5.8	1.5	0.1	0.4	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.3	2.3	3.3	1.3	0.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	0.0	7.9	2.0	2.5	0.3	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	1.8	2.8	3.3	NaN	0.0	0.0	0.0
2014	0.0	0.0	NaN	0.0	NaN	NaN	1.8	2.5	2.0	0.8	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	1.5					

**Table C-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.4	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.7	2.8	0.0	0.0
2007	0.0	0.0	0.0	0.0	NaN	2.7	0.5	5.8	2.2	0.1	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	6.3	16.7	6.0	3.3	0.1	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	3.8	4.1	21.4	2.5	5.2	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	1.8	46.7	20.0	1.4	1.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	1.5	22.4	19.1	32.3	0.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	0.0	36.1	35.6	31.0	1.5	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	22.6	43.4	33.3	NaN	0.0	0.0	0.0
2014	0.0	0.0	NaN	0.0	NaN	NaN	20.1	24.4	30.0	6.1	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	4.3					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.3	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	93.5	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	77.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	80.6	96.7	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	90.3	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	53.3	96.8	100.0	100.0
2014	100.0	100.0	87.1	100.0	54.8	90.0	100.0	100.0	100.0	100.0	43.3	0.0
2015	0.0	0.0	0.0	13.3	83.9	93.3	100.0					

**Table C-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Inigok

Variable: Snow depth, in centimeters

File name: AK101\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	NaN	NaN	21.5
1999	23.2	23.7	26.0	30.4	30.3	4.1	0.6	NaN	NaN	NaN	NaN	NaN
2000	27.3	37.7	37.2	40.7	44.9	12.1	NaN	2.5	0.4	7.1	11.4	10.8
2001	NaN	23.3	24.6	26.4	29.0	NaN	NaN	1.3	1.2	13.0	19.0	24.2
2002	25.2	23.6	28.3	29.4	14.2	2.5	2.3	2.5	2.5	3.9	4.2	9.4
2003	8.5	9.1	11.2	18.6	26.9	2.9	NaN	NaN	NaN	15.7	26.5	27.4
2004	30.4	50.5	42.4	54.6	47.6	4.0	7.8	7.1	6.6	10.6	17.5	17.7
2005	16.9	16.8	18.2	23.2	27.7	NaN	NaN	3.6	0.9	7.4	17.4	28.8
2006	30.3	31.5	35.2	38.7	36.4	4.1	1.9	4.5	7.2	5.6	8.9	13.8
2007	21.4	22.1	20.7	22.2	25.1	6.9	4.8	4.1	2.0	4.6	13.4	17.8
2008	24.4	22.8	30.8	32.9	28.9	1.2	5.1	4.1	3.2	15.3	28.9	25.4
2009	22.6	26.9	26.0	34.4	16.8	2.2	3.0	6.5	7.6	8.9	13.9	22.9
2010	23.3	25.2	27.6	29.0	33.8	6.7	3.3	5.1	2.6	8.7	27.8	36.1
2011	36.6	36.8	36.6	37.6	32.5	2.1	1.2	1.6	1.1	9.4	22.5	26.2
2012	28.0	32.4	35.6	42.1	38.1	3.4	1.3	2.8	6.2	13.7	26.3	NaN
2013	29.9	28.9	NaN	34.8	29.2	5.3	5.1	4.0	NaN	16.1	24.1	33.0
2014	31.3	33.7	32.3	35.0	15.7	4.1	4.3	4.0	4.5	15.7	NaN	NaN
2015	NaN	NaN	NaN	NaN	24.0	4.6	4.4					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.4	NaN	NaN	13.3
1999	20.5	21.3	22.4	27.8	20.7	-2.7	-2.7	NaN	NaN	NaN	NaN	NaN
2000	18.1	34.0	35.1	35.6	40.1	-2.0	NaN	-2.7	-2.9	-0.5	6.0	6.3
2001	NaN	18.8	21.0	24.4	25.0	NaN	NaN	-2.6	-3.1	0.8	16.7	16.6
2002	22.4	10.0	25.0	28.0	-2.3	-1.6	-2.9	0.5	-0.5	0.2	2.7	4.7
2003	7.5	6.1	8.3	13.2	16.8	-0.1	NaN	NaN	NaN	-1.0	24.3	25.0
2004	27.0	32.4	34.6	49.6	28.4	-1.4	2.8	1.1	0.1	5.3	11.2	15.6
2005	15.8	15.1	15.6	17.2	17.4	NaN	NaN	-1.2	-4.2	-0.0	10.3	18.3
2006	18.4	24.5	30.7	31.3	16.4	-1.7	-1.9	-1.6	-0.1	0.1	5.3	6.6
2007	16.0	20.5	18.9	19.6	19.8	-0.2	-0.6	-1.6	-2.1	-0.3	7.4	14.0
2008	11.7	13.3	23.6	29.6	-0.1	-2.3	1.2	-1.5	-0.9	1.5	24.8	17.8
2009	19.0	19.4	21.5	26.1	0.1	-1.7	-2.0	-1.3	0.3	0.9	8.0	15.8
2010	19.5	21.0	22.0	25.7	21.5	-2.0	-2.0	-1.2	-1.1	1.1	17.2	28.1
2011	35.0	35.4	35.0	35.3	0.6	-0.4	-1.5	-1.6	-1.7	-1.8	17.7	20.0
2012	24.5	26.1	29.3	34.2	22.3	-0.6	-2.3	-2.1	2.0	0.7	22.7	NaN
2013	23.5	24.5	NaN	29.8	3.2	-0.4	-2.4	0.4	NaN	12.7	21.2	23.1
2014	29.6	29.6	28.9	30.6	-0.2	0.0	-0.3	0.8	1.0	0.9	NaN	NaN
2015	NaN	NaN	NaN	NaN	2.3	0.3	0.9					

**Table C-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.5	NaN	NaN	24.1
1999	25.3	25.9	30.0	32.0	33.1	22.6	6.1	NaN	NaN	NaN	NaN	NaN
2000	41.4	39.6	38.1	50.4	49.7	38.2	NaN	6.0	3.1	12.9	14.9	15.4
2001	NaN	25.4	32.0	27.9	34.3	NaN	NaN	3.7	4.1	22.5	22.4	29.8
2002	28.1	31.4	30.5	30.8	29.1	5.8	6.0	5.3	6.4	5.6	8.3	16.2
2003	11.8	12.8	15.2	28.4	34.9	16.4	NaN	NaN	NaN	29.6	29.4	31.2
2004	32.8	64.0	62.3	58.1	58.0	27.8	13.6	13.0	10.4	13.6	19.6	20.6
2005	18.1	19.2	22.3	27.5	31.4	NaN	NaN	8.9	8.9	15.7	26.7	35.8
2006	34.4	34.8	39.5	44.6	46.2	17.4	7.5	9.9	9.7	9.3	11.8	18.3
2007	24.7	23.9	21.6	25.9	30.2	20.1	10.4	10.1	9.6	9.6	19.1	24.4
2008	32.3	27.8	35.9	37.1	37.8	6.7	8.8	8.6	8.7	30.3	35.0	34.0
2009	29.7	41.8	33.2	42.4	27.8	9.2	10.2	9.8	9.4	15.6	21.7	30.0
2010	26.8	28.7	35.5	32.6	38.4	24.1	9.2	11.8	10.2	21.8	35.7	39.5
2011	39.4	37.9	38.5	43.9	39.8	6.5	6.0	7.6	5.9	23.7	26.1	30.3
2012	34.5	39.4	40.1	45.9	46.8	22.5	4.8	8.4	11.4	27.4	30.0	NaN
2013	44.5	35.2	NaN	41.3	41.3	10.1	10.3	7.3	NaN	33.7	30.4	40.2
2014	40.5	37.9	35.4	39.3	35.2	8.2	8.9	8.8	8.8	27.0	NaN	NaN
2015	NaN	NaN	NaN	NaN	42.2	8.6	8.3					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.9	NaN	NaN	-1.8
1999	-2.8	-5.5	-2.8	-3.9	0.6	-0.3	-2.9	NaN	NaN	NaN	NaN	NaN
2000	1.2	8.5	8.4	6.5	15.2	7.7	NaN	-1.3	-3.0	-3.6	-8.0	-12.5
2001	NaN	-5.8	-4.2	-7.8	-0.7	NaN	NaN	-2.5	-2.2	2.4	-0.4	0.9
2002	-0.9	-5.6	-0.6	-4.8	-15.5	-1.9	-1.2	-1.3	-0.9	-6.8	-15.2	-13.9
2003	-17.5	-20.1	-17.7	-15.7	-2.8	-1.5	NaN	NaN	NaN	5.0	7.1	4.1
2004	4.4	21.4	13.5	20.4	17.9	-0.4	4.4	3.3	3.2	-0.0	-1.9	-5.5
2005	-9.1	-12.3	-10.6	-11.1	-2.0	NaN	NaN	-0.2	-2.5	-3.3	-2.0	5.5
2006	4.3	2.3	6.4	4.4	6.7	-0.3	-1.6	0.7	3.8	-5.1	-10.4	-9.4
2007	-4.7	-7.1	-8.2	-12.1	-4.6	2.5	1.4	0.3	-1.3	-6.0	-6.0	-5.4
2008	-1.6	-6.4	1.9	-1.4	-0.8	-3.2	1.7	0.3	-0.2	4.6	9.5	2.1
2009	-3.4	-2.2	-2.9	0.1	-12.9	-2.2	-0.5	2.7	4.3	-1.7	-5.5	-0.4
2010	-2.7	-3.9	-1.2	-5.2	4.1	2.3	-0.2	1.3	-0.8	-2.0	8.5	12.8
2011	10.6	7.6	7.7	3.3	2.9	-2.3	-2.2	-2.2	-2.3	-1.2	3.1	2.9
2012	1.9	3.2	6.8	7.8	8.4	-1.0	-2.1	-1.0	2.8	3.1	6.9	NaN
2013	3.9	-0.3	NaN	0.5	-0.5	0.9	1.6	0.2	NaN	5.4	4.7	9.8
2014	5.2	4.5	3.4	0.8	-13.9	-0.3	0.9	0.2	1.1	5.1	NaN	NaN
2015	NaN	NaN	NaN	NaN	-5.7	0.2	0.9					



**Table C–1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	77.4	73.3	100.0
1999	100.0	100.0	96.8	90.0	100.0	100.0	100.0	51.6	66.7	67.7	76.7	58.1
2000	83.9	96.6	100.0	100.0	100.0	96.7	51.6	83.9	100.0	100.0	100.0	96.8
2001	77.4	100.0	100.0	100.0	93.5	0.0	0.0	96.8	100.0	100.0	100.0	100.0
2002	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2003	100.0	96.4	100.0	100.0	100.0	100.0	19.4	41.9	46.7	96.8	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2005	100.0	100.0	100.0	100.0	100.0	73.3	74.2	90.3	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	100.0	77.4
2013	90.3	100.0	67.7	96.7	100.0	100.0	100.0	100.0	60.0	100.0	100.0	100.0
2014	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0
2015	0.0	0.0	0.0	16.7	100.0	100.0	100.0					

**Table C–1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Soil moisture, in water fraction by volume

File name: AK101\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.42	0.42	0.24	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.16	0.41	0.40	0.40	0.39	0.07	0.01
2005	NaN	NaN	NaN	NaN	NaN	0.06	0.35	NaN	0.38	0.28	0.05	0.01
2006	0.01	0.00	NaN	NaN	0.01	0.10	0.37	0.38	0.37	0.32	0.04	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.05	0.26	0.27	0.27	0.15	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.10	0.28	0.30	0.30	0.27	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.02	0.13	0.26	0.28	0.35	0.31	0.09	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.05	0.24	0.40	0.37	0.32	0.12	0.04
2011	0.01	0.01	0.00	0.00	0.01	0.05	0.28	0.32	0.33	0.32	0.13	0.01
2012	NaN	NaN	NaN	NaN	NaN	0.04	0.25	0.31	0.38	0.38	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.40	NaN	0.38	0.27	0.05
2014	NaN	NaN	NaN	NaN	0.03	NaN	0.38	0.35	0.42	0.41	NaN	NaN
2015	NaN	NaN	NaN	NaN	0.02	0.15	0.33					

**Table C-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.03	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.02	0.40	0.39	0.40	0.32	0.03	0.00
2005	NaN	NaN	NaN	NaN	NaN	0.04	0.09	NaN	0.38	0.11	0.02	0.01
2006	0.00	0.00	NaN	NaN	0.00	0.03	0.34	0.36	0.37	0.07	0.01	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.03	0.07	0.26	0.27	0.04	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.05	0.24	0.30	0.29	0.22	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.01	0.04	0.25	0.25	0.33	0.28	0.00	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.04	0.06	0.39	0.36	0.25	0.08	0.01
2011	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.31	0.30	0.29	0.03	0.00
2012	NaN	NaN	NaN	NaN	NaN	0.03	0.06	0.30	0.34	0.35	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.35	0.39	NaN	0.36	0.07	0.01
2014	NaN	NaN	NaN	NaN	0.00	NaN	0.11	0.34	0.38	0.38	NaN	NaN
2015	NaN	NaN	NaN	NaN	0.00	0.05	0.31					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.42	0.42	0.41	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.41	0.42	0.40	0.41	0.40	0.31	0.03
2005	NaN	NaN	NaN	NaN	NaN	0.09	0.43	NaN	0.38	0.38	0.11	0.02
2006	0.01	0.01	NaN	NaN	0.03	0.38	0.41	0.40	0.39	0.39	0.08	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.07	0.34	0.28	0.28	0.27	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.32	0.36	0.31	0.30	0.30	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.05	0.30	0.30	0.40	0.40	0.33	0.28	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.07	0.42	0.42	0.39	0.36	0.25	0.08
2011	0.02	0.01	0.01	0.01	0.07	0.07	0.41	0.34	0.39	0.37	0.29	0.03
2012	NaN	NaN	NaN	NaN	NaN	0.06	0.37	0.35	0.41	0.41	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.43	0.42	NaN	0.40	0.36	0.08
2014	NaN	NaN	NaN	NaN	0.05	NaN	0.41	0.38	0.43	0.44	NaN	NaN
2015	NaN	NaN	NaN	NaN	0.07	0.41	0.38					

**Table C–1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.05	0.09	0.11	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.07	0.09	0.06	0.04	0.06	-0.06	-0.02
2005	NaN	NaN	NaN	NaN	NaN	-0.03	0.04	NaN	0.02	-0.05	-0.08	-0.01
2006	NaN	NaN	NaN	NaN	-0.01	0.01	0.06	0.04	0.01	-0.01	-0.09	NaN
2007	NaN	NaN	NaN	NaN	NaN	-0.04	-0.06	-0.07	-0.09	-0.18	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.01	-0.04	-0.04	-0.06	-0.05	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.00	0.04	-0.05	-0.06	-0.01	-0.02	-0.04	NaN
2010	NaN	NaN	NaN	NaN	NaN	-0.04	-0.08	0.06	0.01	-0.01	-0.01	0.01
2011	NaN	NaN	NaN	NaN	-0.01	-0.04	-0.04	-0.02	-0.03	-0.00	0.01	-0.01
2012	NaN	NaN	NaN	NaN	NaN	-0.05	-0.06	-0.03	0.01	0.05	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.08	0.06	NaN	0.05	0.15	0.02
2014	NaN	NaN	NaN	NaN	0.01	NaN	0.06	0.01	0.06	0.08	NaN	NaN
2015	NaN	NaN	NaN	NaN	0.00	0.06	0.01					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.74	100.00	100.00	100.00	61.29
2004	0.00	0.00	0.00	0.00	32.26	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	45.16	0.00	0.00	0.00	67.74	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2006	100.00	96.43	12.90	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10
2007	0.00	0.00	0.00	0.00	19.35	100.00	100.00	96.77	100.00	100.00	63.33	0.00
2008	0.00	0.00	0.00	0.00	22.58	100.00	100.00	100.00	100.00	100.00	90.00	0.00
2009	0.00	0.00	0.00	3.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	41.94
2010	0.00	0.00	0.00	0.00	6.45	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	25.81	0.00	0.00	0.00	38.71	100.00	100.00	100.00	100.00	100.00	86.67	35.48
2013	19.35	0.00	0.00	0.00	22.58	93.33	100.00	100.00	53.33	100.00	100.00	96.77
2014	80.65	60.71	6.45	20.00	96.77	93.33	100.00	100.00	100.00	100.00	43.33	0.00
2015	0.00	0.00	0.00	13.33	100.00	100.00	100.00					

**Table C–1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table C-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
 Variable: Air temperature, in degrees Celsius  
 File name: AK101\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-5.40	NaN
1999	-26.34	-17.66	8.23	-9.90	-12.22
2000	-27.89	-18.04	7.31	-9.44	-11.27
2001	-22.69	-19.76	NaN	-10.80	NaN
2002	-28.05	-12.50	7.14	-5.68	-9.37
2003	-24.69	-14.56	NaN	-7.29	NaN
2004	-28.70	-16.89	9.74	-8.54	-11.13
2005	-25.32	-15.10	6.74	-10.35	-10.87
2006	-24.44	-18.22	7.70	-6.22	-9.98
2007	-24.74	-17.32	8.92	-6.48	-10.10
2008	-27.35	-15.62	8.26	-8.54	-10.49
2009	-24.78	-16.25	8.33	-8.57	-10.42
2010	-25.32	-14.79	8.28	-4.85	-9.62
2011	-24.53	-15.66	7.83	-8.67	-10.17
2012	-28.56	-18.27	10.19	-6.39	-10.73
2013	-28.87	-16.43	9.42	NaN	-10.50
2014	-22.97	NaN	6.67	NaN	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	14.42	NaN
1999	0.17	3.11	30.23	16.60	30.23
2000	-4.43	3.41	23.99	17.44	23.99
2001	-3.91	-4.03	NaN	16.24	NaN
2002	-5.24	20.62	25.69	16.63	25.69
2003	-9.03	3.36	NaN	11.51	NaN
2004	-2.45	9.00	27.62	13.22	27.62
2005	0.55	1.59	24.41	14.73	24.41
2006	2.95	6.20	23.20	18.79	23.20
2007	-1.47	2.14	25.25	16.90	25.25
2008	0.03	9.26	25.86	8.00	25.86
2009	-1.54	14.89	28.87	16.16	28.87
2010	-2.60	3.91	24.59	18.79	24.59
2011	0.91	11.02	22.45	14.62	22.45
2012	-5.21	6.14	25.47	13.97	25.47
2013	-14.15	6.18	29.63	NaN	29.63
2014	13.83	NaN	20.65	NaN	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-25.03	NaN
1999	-44.94	-44.85	-3.03	-35.72	-44.94
2000	-42.07	-38.32	-5.66	-32.09	-40.57
2001	-42.11	-39.90	NaN	-29.57	NaN
2002	-44.04	-36.37	-2.85	-26.75	-44.04
2003	-40.78	-39.74	NaN	-35.47	NaN
2004	-46.02	-42.69	-2.02	-31.83	-46.02
2005	-41.51	-39.31	-3.15	-42.85	-42.85
2006	-44.43	-41.80	-5.55	-32.43	-44.43
2007	-44.05	-42.81	-3.09	-29.16	-44.13
2008	-46.12	-43.36	-1.42	-31.91	-46.12
2009	-43.60	-42.20	-1.44	-34.73	-43.60
2010	-44.22	-39.47	-0.97	-31.37	-44.51
2011	-45.56	-37.07	-3.81	-39.16	-45.56
2012	-48.15	-43.40	-1.47	-30.09	-48.15
2013	-42.09	-39.03	-5.12	NaN	-42.09
2014	-43.52	NaN	-3.11	NaN	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	2.46	NaN
1999	-0.55	-1.48	0.02	-2.04	-1.69
2000	-2.09	-1.87	-0.90	-1.58	-0.74
2001	3.11	-3.59	NaN	-2.95	NaN
2002	-2.25	3.68	-1.06	2.17	1.16
2003	1.11	1.61	NaN	0.56	NaN
2004	-2.90	-0.71	1.53	-0.68	-0.60
2005	0.48	1.07	-1.47	-2.49	-0.34
2006	1.36	-2.05	-0.50	1.63	0.55
2007	1.06	-1.15	0.72	1.38	0.43
2008	-1.55	0.55	0.06	-0.68	0.03
2009	1.01	-0.08	0.12	-0.71	0.10
2010	0.48	1.38	0.07	3.01	0.90
2011	1.27	0.51	-0.38	-0.82	0.36
2012	-2.76	-2.10	1.98	1.47	-0.20
2013	-3.07	-0.26	1.21	NaN	0.02
2014	2.83	NaN	-1.54	NaN	NaN
2015	NaN	NaN			

**Table C-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00
2001	100.00	96.74	32.61	100.00	82.19
2002	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	60.87	100.00	90.14
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	97.83	100.00	99.45
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	98.91	100.00	99.73
2008	100.00	98.91	100.00	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	98.91	100.00	99.73
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	84.62	96.16
2014	100.00	94.57	100.00	81.32	85.48
2015	0.00	38.04			

**Table C-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
 Variable: Wind speed, in meters per second  
 File name: AK101\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	4.28	NaN	2004	NaN	NaN	NaN	14.66	NaN
2005	NaN	4.17	3.92	NaN	NaN	2005	NaN	14.68	12.07	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	3.72	3.76	NaN	NaN	2007	NaN	14.14	11.00	NaN	NaN
2008	NaN	NaN	3.48	NaN	NaN	2008	NaN	NaN	10.33	NaN	NaN
2009	3.57	NaN	4.02	NaN	NaN	2009	18.11	NaN	9.37	NaN	NaN
2010	NaN	4.06	4.01	NaN	NaN	2010	NaN	12.17	11.61	NaN	NaN
2011	NaN	NaN	3.92	3.81	NaN	2011	NaN	NaN	9.75	13.43	NaN
2012	NaN	NaN	3.60	NaN	NaN	2012	NaN	NaN	10.45	NaN	NaN
2013	NaN	4.21	3.54	NaN	NaN	2013	NaN	14.44	9.74	NaN	NaN
2014	NaN	NaN	3.85	NaN	NaN	2014	NaN	NaN	10.24	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table C-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.00	0.00	0.00	0.00	0.00
1999	NaN	NaN	NaN	NaN	NaN	1999	0.00	0.00	0.00	0.00	0.00
2000	NaN	NaN	NaN	NaN	NaN	2000	0.00	0.00	0.00	0.00	0.00
2001	NaN	NaN	NaN	NaN	NaN	2001	0.00	0.00	0.00	0.00	0.00
2002	NaN	NaN	NaN	NaN	NaN	2002	0.00	0.00	0.00	0.00	0.00
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	0.00	0.00
2004	NaN	NaN	NaN	NaN	NaN	2004	0.00	0.00	15.22	98.90	32.51
2005	NaN	NaN	0.14	NaN	NaN	2005	74.44	98.91	97.83	13.19	67.12
2006	NaN	NaN	NaN	NaN	NaN	2006	0.00	0.00	11.96	87.91	32.60
2007	NaN	NaN	-0.01	NaN	NaN	2007	91.11	97.83	98.91	87.91	93.15
2008	NaN	NaN	-0.29	NaN	NaN	2008	87.91	71.74	100.00	91.21	88.52
2009	NaN	NaN	0.25	NaN	NaN	2009	96.67	85.87	100.00	89.01	90.14
2010	NaN	NaN	0.23	NaN	NaN	2010	77.78	97.83	98.91	90.11	91.51
2011	NaN	NaN	0.15	NaN	NaN	2011	56.67	85.87	100.00	97.80	86.58
2012	NaN	NaN	-0.18	NaN	NaN	2012	67.03	78.26	100.00	93.41	86.61
2013	NaN	NaN	-0.23	NaN	NaN	2013	94.44	96.74	100.00	73.63	90.68
2014	NaN	NaN	0.07	NaN	NaN	2014	90.00	93.48	100.00	79.12	82.74
2015	NaN	NaN				2015	0.00	38.04			

**Table C-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Ground temperature, in degrees Celsius

File name: AK101\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-2.35	NaN	1998	NaN	NaN	NaN	-11.31	NaN
1999	-13.04	-13.12	NaN	-1.51	NaN	1999	-19.67	-20.27	NaN	-8.59	NaN
2000	-14.41	-13.05	NaN	-2.10	NaN	2000	-18.09	-16.16	NaN	-10.43	NaN
2001	-13.74	-14.49	NaN	-0.52	NaN	2001	-18.15	-19.21	NaN	-7.12	NaN
2002	-11.56	NaN	3.23	-0.72	NaN	2002	-15.76	NaN	-0.41	-7.48	NaN
2003	-12.10	-12.75	3.45	-0.15	-5.43	2003	-19.04	-19.55	-0.94	-3.37	-19.55
2004	-11.06	-11.78	NaN	-0.88	-5.07	2004	-14.64	-15.88	NaN	-5.41	-15.88
2005	-12.58	-12.34	4.16	-1.70	-5.55	2005	-16.46	-18.19	-0.92	-8.62	-18.19
2006	-10.91	-11.65	3.65	-1.26	-5.05	2006	-14.64	-15.55	-0.89	-10.41	-15.55
2007	-13.43	-14.73	3.85	-1.42	-6.43	2007	-20.85	-23.70	-0.86	-7.61	-23.70
2008	-12.74	-11.77	3.90	-0.67	-5.13	2008	-18.45	-17.47	-0.35	-6.14	-18.45
2009	-11.35	-10.09	3.87	-0.88	-4.59	2009	-17.21	-17.03	-0.32	-6.32	-17.21
2010	-10.86	-11.39	3.20	0.17	-4.58	2010	-15.55	-15.70	-1.00	-2.36	-15.70
2011	-8.70	NaN	NaN	-0.43	-4.34	2011	-13.46	NaN	NaN	-5.12	-13.46
2012	-10.72	-11.70	NaN	-0.14	-4.75	2012	-15.34	-16.33	NaN	-3.55	-16.33
2013	-12.26	-12.64	4.24	NaN	NaN	2013	-18.64	-17.61	-1.04	NaN	NaN
2014	-7.06	-7.97	3.07	NaN	NaN	2014	-12.82	-12.87	-0.62	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table C-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	6.67	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	-4.88	-0.06	NaN	5.83	NaN	1999	100.00	100.00	14.13	100.00	78.36
2000	-8.64	-1.75	NaN	6.43	NaN	2000	100.00	100.00	27.17	100.00	81.69
2001	-9.75	-0.91	NaN	3.88	NaN	2001	100.00	100.00	39.13	100.00	84.66
2002	-6.29	NaN	10.53	6.76	NaN	2002	100.00	75.00	98.91	100.00	93.42
2003	-5.42	-0.12	14.06	3.58	14.06	2003	100.00	100.00	4.35	93.41	74.25
2004	-3.37	-1.13	NaN	6.12	12.54	2004	100.00	100.00	13.04	100.00	78.14
2005	-4.70	-0.04	12.60	3.81	12.60	2005	100.00	100.00	13.04	100.00	78.08
2006	-7.83	-0.05	9.93	5.28	9.93	2006	100.00	100.00	98.91	100.00	99.73
2007	-5.58	-0.05	9.79	5.35	9.79	2007	100.00	100.00	98.91	100.00	99.73
2008	-6.56	0.17	10.82	2.38	10.82	2008	100.00	98.91	100.00	100.00	99.73
2009	-5.46	-0.16	11.61	5.37	11.61	2009	100.00	100.00	100.00	100.00	100.00
2010	-5.29	-0.26	9.87	6.72	9.87	2010	100.00	100.00	96.74	100.00	99.18
2011	-1.35	NaN	NaN	5.72	8.61	2011	100.00	94.57	89.13	100.00	95.89
2012	-4.58	-0.18	NaN	5.52	10.41	2012	100.00	100.00	89.13	97.80	96.72
2013	-2.17	-0.28	10.09	NaN	NaN	2013	100.00	98.91	95.65	84.62	94.79
2014	-0.12	-0.14	8.32	NaN	NaN	2014	100.00	95.65	97.83	81.32	85.21
2015	NaN	NaN				2015	0.00	34.78			

Anomaly Relative to the Climatological Mean (10 cm depth):

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.39	NaN	1998	NaN	NaN	NaN	-0.73	NaN
1999	-1.47	-1.26	NaN	-0.56	NaN	1999	-7.48	-11.71	NaN	-1.26	NaN
2000	-2.84	-1.18	NaN	-1.14	NaN	2000	-10.01	-11.99	NaN	-1.73	NaN
2001	-2.18	-2.63	NaN	0.44	NaN	2001	-10.12	-13.20	NaN	-1.26	NaN
2002	0.01	NaN	-0.43	0.24	NaN	2002	-8.34	NaN	-2.17	-0.99	NaN
2003	-0.54	-0.88	-0.21	0.81	-0.33	2003	-8.44	-12.23	-2.70	-0.92	-6.05
2004	0.51	0.08	NaN	0.08	0.02	2004	-7.74	-11.45	NaN	-0.75	-5.73
2005	-1.01	-0.47	0.49	-0.74	-0.46	2005	-8.42	-11.81	-2.83	-1.37	-6.20
2006	0.65	0.21	-0.01	-0.30	0.04	2006	-7.91	-10.85	-2.56	-1.05	-5.56
2007	-1.87	-2.86	0.19	-0.46	-1.34	2007	-9.04	-13.38	-3.05	-1.41	-6.71
2008	-1.18	0.09	0.24	0.29	-0.03	2008	-8.44	-11.35	-2.53	-0.97	-5.71
2009	0.22	1.78	0.20	0.07	0.50	2009	-7.32	-10.11	-1.98	-0.90	-5.11
2010	0.71	0.47	-0.46	1.13	0.51	2010	-7.58	-10.82	-2.69	-0.78	-5.28
2011	2.86	NaN	NaN	0.53	0.75	2011	-5.41	NaN	NaN	-0.75	-4.59
2012	0.85	0.16	NaN	0.82	0.34	2012	-7.11	-11.06	NaN	-0.74	-5.36
2013	-0.70	-0.77	0.58	NaN	NaN	2013	-7.28	-11.91	-2.44	NaN	NaN
2014	4.50	3.90	-0.59	NaN	NaN	2014	-4.59	-8.24	-1.77	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			



**Table C-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.52	NaN
1999	-11.67	-13.13	NaN	-4.15	NaN
2000	-11.91	-12.93	NaN	-5.78	NaN
2001	-12.57	-14.85	NaN	-3.44	NaN
2002	-12.09	NaN	-4.68	-3.31	NaN
2003	-13.34	-14.74	-6.97	-1.11	-14.74
2004	-11.56	-12.70	NaN	-1.63	-12.70
2005	-12.36	-13.36	-7.27	-4.63	-13.36
2006	-10.05	-12.07	-6.55	-4.17	-12.07
2007	-13.78	-16.23	-8.69	-3.70	-16.23
2008	-11.78	-13.28	-6.26	-2.26	-13.28
2009	-11.06	-12.74	-4.35	-2.90	-12.74
2010	-10.75	-12.26	-6.93	-1.03	-12.26
2011	-8.84	NaN	NaN	-1.38	-10.21
2012	-10.36	-12.82	NaN	-0.97	-12.82
2013	-12.98	-13.02	-6.59	NaN	NaN
2014	-8.97	-10.02	-3.68	NaN	NaN
2015	NaN	NaN			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	0.29	NaN
1999	0.28	-0.46	NaN	-0.24	NaN
2000	-2.25	-0.74	NaN	-0.71	NaN
2001	-2.36	-1.95	NaN	-0.24	NaN
2002	-0.58	NaN	0.24	0.03	NaN
2003	-0.68	-0.98	-0.29	0.10	-0.42
2004	0.02	-0.19	NaN	0.27	-0.10
2005	-0.66	-0.56	-0.42	-0.35	-0.57
2006	-0.15	0.40	-0.15	-0.03	0.07
2007	-1.28	-2.12	-0.64	-0.38	-1.08
2008	-0.68	-0.10	-0.12	0.05	-0.08
2009	0.44	1.15	0.43	0.12	0.52
2010	0.17	0.43	-0.28	0.24	0.34
2011	2.34	NaN	NaN	0.28	1.04
2012	0.65	0.19	NaN	0.28	0.27
2013	0.48	-0.65	-0.03	NaN	NaN
2014	3.16	3.01	0.64	NaN	NaN
2015	NaN	NaN			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-0.59	NaN
1999	-1.50	-7.76	NaN	-0.77	NaN
2000	-4.20	-9.84	NaN	-0.86	NaN
2001	-5.83	-10.42	NaN	-0.97	NaN
2002	-3.49	NaN	-0.96	-0.67	NaN
2003	-3.31	-7.00	-1.05	-0.76	-0.76
2004	-1.11	-5.94	NaN	-0.60	-0.60
2005	-1.68	-7.29	-1.11	-0.82	-0.82
2006	-4.61	-6.53	-0.98	-0.69	-0.69
2007	-4.17	-8.69	-1.16	-0.87	-0.87
2008	-3.75	-6.25	-1.05	-0.82	-0.82
2009	-2.26	-4.30	-0.89	-0.67	-0.67
2010	-2.90	-6.98	-0.99	-0.64	-0.64
2011	-0.68	NaN	NaN	-0.60	-0.60
2012	-1.36	-5.76	NaN	-0.61	-0.61
2013	-0.61	-6.59	-0.91	NaN	NaN
2014	-0.63	-3.66	-0.81	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	14.13	100.00	78.36
2000	100.00	100.00	27.17	100.00	81.69
2001	100.00	100.00	39.13	100.00	84.66
2002	100.00	75.00	98.91	100.00	93.42
2003	100.00	100.00	4.35	93.41	74.25
2004	100.00	100.00	13.04	100.00	78.14
2005	100.00	100.00	13.04	100.00	78.08
2006	100.00	100.00	98.91	100.00	99.73
2007	100.00	100.00	98.91	100.00	99.73
2008	100.00	98.91	100.00	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	96.74	100.00	99.18
2011	100.00	94.57	89.13	100.00	95.89
2012	100.00	100.00	89.13	97.80	96.72
2013	100.00	98.91	95.65	84.62	94.79
2014	100.00	95.65	97.83	81.32	85.21
2015	0.00	34.78			

**Table C–2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Incident solar flux, in watts per meter squared

File name: AK101\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	5.2	NaN	196.1	29.4	99.1
2001	3.7	NaN	NaN	25.2	NaN
2002	NaN	NaN	184.0	29.2	NaN
2003	2.2	136.1	NaN	25.1	NaN
2004	5.3	156.0	180.7	28.0	93.1
2005	3.2	150.2	190.6	22.9	91.9
2006	4.1	161.3	175.5	27.0	92.5
2007	4.8	158.3	217.3	32.9	103.5
2008	5.3	151.0	181.2	26.3	90.8
2009	4.8	153.4	179.2	26.4	91.6
2010	2.6	135.9	179.9	31.5	87.3
2011	4.9	168.8	184.7	23.0	96.3
2012	NaN	NaN	173.8	26.3	NaN
2013	2.2	NaN	169.4	NaN	NaN
2014	4.2	NaN	151.8	NaN	NaN
2015	NaN	NaN			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	5.4	89.0	32.1
2000	96.7	89.1	98.9	100.0	96.2
2001	97.8	92.4	32.6	100.0	80.5
2002	84.4	81.5	100.0	100.0	91.5
2003	100.0	97.8	60.9	100.0	89.6
2004	98.9	100.0	98.9	98.9	99.2
2005	100.0	100.0	97.8	100.0	99.5
2006	98.9	97.8	100.0	100.0	99.2
2007	100.0	100.0	96.7	97.8	98.6
2008	100.0	96.7	100.0	100.0	99.2
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	95.7	98.9	100.0	98.6
2011	98.9	100.0	100.0	100.0	99.7
2012	91.2	60.9	98.9	100.0	87.7
2013	100.0	53.3	100.0	83.5	84.1
2014	96.7	94.6	98.9	81.3	84.4
2015	0.0	38.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	1.1	NaN	15.5	2.1	5.1
2001	-0.4	NaN	NaN	-2.0	NaN
2002	NaN	NaN	3.4	1.9	NaN
2003	-1.8	-16.2	NaN	-2.2	NaN
2004	1.3	3.7	0.1	0.7	-0.9
2005	-0.9	-2.1	10.0	-4.3	-2.2
2006	0.1	9.0	-5.2	-0.3	-1.5
2007	0.8	6.0	36.6	5.6	9.5
2008	1.3	-1.4	0.6	-1.0	-3.2
2009	0.7	1.0	-1.4	-0.9	-2.4
2010	-1.4	-16.4	-0.8	4.2	-6.7
2011	0.9	16.5	4.1	-4.2	2.3
2012	NaN	NaN	-6.8	-1.0	NaN
2013	-1.8	NaN	-11.2	NaN	NaN
2014	0.1	NaN	-28.8	NaN	NaN
2015	NaN	NaN			

**Table C-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Reflected solar flux, in watts per meter squared

File name: AK101\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	7.5	NaN
1999	4.1	141.4	45.2	12.5	51.2
2000	4.4	NaN	52.7	13.9	53.9
2001	4.9	152.8	NaN	12.0	NaN
2002	3.7	122.3	34.9	9.6	42.2
2003	3.4	136.5	NaN	10.8	NaN
2004	5.5	136.7	44.1	15.6	50.7
2005	4.6	136.9	48.6	8.7	50.0
2006	4.2	136.3	41.8	7.4	47.8
2007	5.7	136.7	50.3	11.9	51.5
2008	5.0	122.4	36.0	11.0	43.6
2009	4.5	107.6	36.1	12.6	40.5
2010	5.7	132.8	39.1	11.8	47.7
2011	4.3	135.4	37.8	10.4	47.3
2012	6.1	143.7	40.0	9.9	50.2
2013	4.6	138.2	40.4	NaN	50.7
2014	5.3	107.5	35.3	NaN	NaN
2015	NaN	NaN			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	100.0	0.0
1999	100.0	98.9	98.9	96.7	98.6
2000	98.9	94.6	100.0	100.0	98.4
2001	100.0	96.7	32.6	97.8	81.6
2002	98.9	95.7	100.0	100.0	98.6
2003	100.0	100.0	60.9	100.0	90.1
2004	100.0	100.0	98.9	100.0	99.7
2005	100.0	100.0	97.8	100.0	99.5
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	98.9	100.0	99.7
2008	100.0	98.9	100.0	100.0	99.7
2009	100.0	100.0	100.0	98.9	99.7
2010	100.0	100.0	98.9	100.0	99.7
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	84.6	96.2
2014	100.0	95.7	100.0	81.3	85.8
2015	0.0	38.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-3.9	NaN
1999	-0.5	11.5	3.8	1.1	3.0
2000	-0.2	NaN	11.2	2.5	5.6
2001	0.3	22.9	NaN	0.6	NaN
2002	-0.9	-7.6	-6.5	-1.8	-6.1
2003	-1.3	6.6	NaN	-0.6	NaN
2004	0.9	6.8	2.6	4.3	2.5
2005	0.0	7.0	7.1	-2.7	1.8
2006	-0.4	6.4	0.4	-4.0	-0.5
2007	1.1	6.7	8.8	0.5	3.2
2008	0.4	-7.5	-5.5	-0.4	-4.7
2009	-0.1	-22.3	-5.4	1.2	-7.7
2010	1.1	2.9	-2.4	0.4	-0.6
2011	-0.3	5.5	-3.7	-0.9	-0.9
2012	1.5	13.8	-1.4	-1.4	1.9
2013	-0.1	8.3	-1.1	NaN	2.4
2014	0.7	-22.4	-6.1	NaN	NaN
2015	NaN	NaN			

**Table C-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Rainfall, in millimeters per hour

File name: AK101\_rain\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	0.3	NaN
2006	0.0	0.0	1.6	0.5	1.6
2007	0.0	0.0	0.8	0.3	0.8
2008	0.0	NaN	2.0	0.2	2.0
2009	0.0	0.9	1.0	0.4	1.0
2010	0.0	NaN	5.8	0.4	5.8
2011	0.0	0.0	3.3	1.3	3.3
2012	0.0	0.0	7.9	2.5	7.9
2013	0.0	0.0	3.3	NaN	3.3
2014	0.0	NaN	2.5	NaN	NaN
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	20.7	100.0	38.6
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	97.8	98.9	100.0	99.2
2008	100.0	92.4	100.0	100.0	98.1
2009	100.0	97.8	100.0	100.0	99.5
2010	100.0	93.5	97.8	100.0	97.8
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	96.7	98.9	100.0	98.9
2013	100.0	100.0	100.0	83.5	95.9
2014	100.0	80.4	96.7	81.3	81.1
2015	0.0	32.6			

## Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	2.4	NaN
2006	0.0	0.0	4.0	5.5	9.5
2007	0.0	0.0	9.0	2.3	11.3
2008	0.0	NaN	29.0	3.4	32.5
2009	0.0	1.1	29.3	7.7	38.1
2010	0.0	NaN	68.5	2.4	70.9
2011	0.0	0.0	42.9	32.5	75.4
2012	0.0	0.0	71.6	32.5	104.1
2013	0.0	0.0	99.3	NaN	111.0
2014	0.0	NaN	69.6	NaN	NaN
2015	NaN	NaN			

**Table C-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
 Variable: Snow depth, in centimeters  
 File name: AK101\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	5.3	NaN
1999	22.8	28.9	2.3	NaN	17.1
2000	NaN	40.9	NaN	6.3	20.3
2001	17.4	26.6	NaN	11.1	18.0
2002	24.3	23.9	2.4	3.5	12.2
2003	9.0	18.9	NaN	17.1	14.7
2004	35.8	48.1	6.3	11.6	24.7
2005	17.2	23.0	NaN	8.5	14.5
2006	30.1	36.7	3.5	7.2	18.1
2007	19.0	22.7	5.3	6.7	13.7
2008	21.7	30.8	3.5	15.8	18.6
2009	24.9	25.6	3.9	10.1	15.9
2010	23.8	30.2	5.0	13.0	19.3
2011	36.5	35.5	1.6	11.1	20.3
2012	28.8	38.6	2.5	15.5	21.5
2013	29.5	30.5	4.8	16.1	20.2
2014	32.6	27.5	4.1	12.5	18.1
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	18.7	NaN
1999	25.9	33.1	22.6	NaN	33.1
2000	NaN	50.4	NaN	14.9	50.4
2001	28.1	34.3	NaN	22.5	34.3
2002	31.4	30.8	6.0	8.3	31.4
2003	16.2	34.9	NaN	29.6	34.9
2004	64.0	62.3	27.8	19.6	64.0
2005	20.6	31.4	NaN	26.7	35.8
2006	35.8	46.2	17.4	11.8	46.2
2007	24.7	30.2	20.1	19.1	30.2
2008	32.3	37.8	8.8	35.0	37.8
2009	41.8	42.4	10.2	21.7	42.4
2010	30.0	38.4	24.1	35.7	39.5
2011	39.5	43.9	7.6	26.1	43.9
2012	39.4	46.8	22.5	30.0	46.8
2013	44.5	41.3	10.3	33.7	44.5
2014	40.5	39.3	8.9	27.0	40.5
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.4	NaN
1999	13.3	20.7	-2.7	NaN	-2.7
2000	NaN	35.1	NaN	-2.9	-3.5
2001	5.8	21.0	NaN	-3.1	-3.1
2002	10.0	-2.3	-2.9	-0.5	-2.9
2003	4.7	8.3	NaN	-1.9	-1.9
2004	25.0	28.4	-1.4	0.1	-1.4
2005	15.1	15.6	NaN	-4.2	-4.2
2006	18.3	16.4	-1.9	-0.1	-1.9
2007	6.6	18.9	-1.6	-2.1	-2.1
2008	11.7	-0.1	-2.3	-0.9	-2.3
2009	17.8	0.1	-2.0	0.3	-2.0
2010	15.8	21.5	-2.0	-1.1	-2.0
2011	28.1	0.6	-1.6	-1.8	-1.8
2012	20.0	22.3	-2.3	0.7	-2.3
2013	23.5	3.2	-2.4	-0.9	-2.4
2014	23.1	-0.2	-0.3	0.9	-0.3
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-5.7	NaN
1999	-3.1	-1.7	-1.5	NaN	-0.8
2000	NaN	10.4	NaN	-4.7	2.3
2001	-8.4	-3.9	NaN	0.1	0.1
2002	-1.5	-6.6	-1.4	-7.5	-5.8
2003	-16.9	-11.7	NaN	6.1	-3.3
2004	9.9	17.6	2.5	0.6	6.7
2005	-8.7	-7.5	NaN	-2.5	-3.4
2006	4.3	6.2	-0.3	-3.8	0.2
2007	-6.9	-7.9	1.5	-4.3	-4.2
2008	-4.2	0.3	-0.3	4.8	0.6
2009	-1.0	-4.9	0.1	-0.9	-2.0
2010	-2.1	-0.4	1.2	2.0	1.3
2011	10.6	5.0	-2.2	0.1	2.4
2012	2.9	8.0	-1.3	4.5	3.6
2013	3.6	-0.0	1.0	5.1	2.3
2014	6.8	-3.0	0.3	1.5	0.1
2015	NaN	NaN			

**Table C–2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	83.5	0.0
1999	100.0	95.7	83.7	70.3	83.8
2000	79.1	100.0	77.2	100.0	92.3
2001	91.1	97.8	32.6	100.0	80.5
2002	97.8	100.0	100.0	100.0	99.5
2003	98.9	100.0	53.3	81.3	83.3
2004	100.0	100.0	100.0	100.0	99.7
2005	98.9	100.0	79.3	100.0	94.8
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	94.6	100.0	98.6
2011	100.0	100.0	100.0	98.9	99.7
2012	100.0	100.0	100.0	94.5	96.7
2013	88.9	88.0	100.0	86.8	92.9
2014	100.0	97.8	100.0	82.4	86.6
2015	0.0	39.1			

**Table C–2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Inigok  
Variable: Soil moisture, in water fraction by volume

File name: AK101\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.36	NaN	2003	NaN	NaN	NaN	0.03	NaN
2004	NaN	NaN	0.33	0.29	NaN	2004	NaN	NaN	0.02	0.03	NaN
2005	NaN	NaN	0.26	0.24	NaN	2005	NaN	NaN	0.04	0.02	NaN
2006	0.01	NaN	0.28	0.25	NaN	2006	0.00	NaN	0.03	0.01	NaN
2007	NaN	NaN	0.19	NaN	NaN	2007	NaN	NaN	0.03	NaN	NaN
2008	NaN	NaN	0.23	0.23	NaN	2008	NaN	NaN	0.05	0.00	NaN
2009	NaN	NaN	0.23	0.25	NaN	2009	NaN	NaN	0.04	0.00	NaN
2010	NaN	NaN	0.23	0.27	NaN	2010	NaN	NaN	0.04	0.08	NaN
2011	0.02	0.01	0.22	0.26	0.13	2011	0.00	0.00	0.04	0.03	0.00
2012	NaN	NaN	0.21	0.34	NaN	2012	NaN	NaN	0.03	0.04	NaN
2013	NaN	NaN	0.31	NaN	NaN	2013	NaN	NaN	0.03	NaN	NaN
2014	NaN	NaN	0.27	NaN	NaN	2014	NaN	NaN	0.03	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table C-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.42	NaN
2004	NaN	NaN	0.42	0.41	NaN
2005	NaN	NaN	0.43	0.38	NaN
2006	0.02	NaN	0.41	0.39	NaN
2007	NaN	NaN	0.34	NaN	NaN
2008	NaN	NaN	0.36	0.30	NaN
2009	NaN	NaN	0.40	0.40	NaN
2010	NaN	NaN	0.42	0.39	NaN
2011	0.08	0.07	0.41	0.39	0.41
2012	NaN	NaN	0.37	0.41	NaN
2013	NaN	NaN	0.43	NaN	NaN
2014	NaN	NaN	0.41	NaN	NaN
2015	NaN	NaN			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	22.83	100.00	35.89
2004	20.88	10.87	100.00	100.00	61.20
2005	50.00	22.83	97.83	100.00	67.67
2006	98.89	38.04	100.00	100.00	83.01
2007	30.00	6.52	98.91	87.91	48.49
2008	0.00	7.61	100.00	96.70	51.09
2009	0.00	34.78	100.00	100.00	62.47
2010	14.44	2.17	98.91	100.00	58.90
2011	100.00	100.00	100.00	100.00	100.00
2012	42.86	13.04	100.00	95.60	57.38
2013	18.89	7.61	97.83	84.62	57.53
2014	80.00	41.30	97.83	81.32	66.85
2015	0.00	38.04			

Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.08	NaN
2004	NaN	NaN	0.07	0.01	NaN
2005	NaN	NaN	0.01	-0.04	NaN
2006	NaN	NaN	0.03	-0.03	NaN
2007	NaN	NaN	-0.06	NaN	NaN
2008	NaN	NaN	-0.02	-0.04	NaN
2009	NaN	NaN	-0.03	-0.02	NaN
2010	NaN	NaN	-0.02	-0.00	NaN
2011	NaN	NaN	-0.03	-0.01	NaN
2012	NaN	NaN	-0.05	0.07	NaN
2013	NaN	NaN	0.06	NaN	NaN
2014	NaN	NaN	0.02	NaN	NaN
2015	NaN	NaN			

**Table C-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



## D. Fish Creek

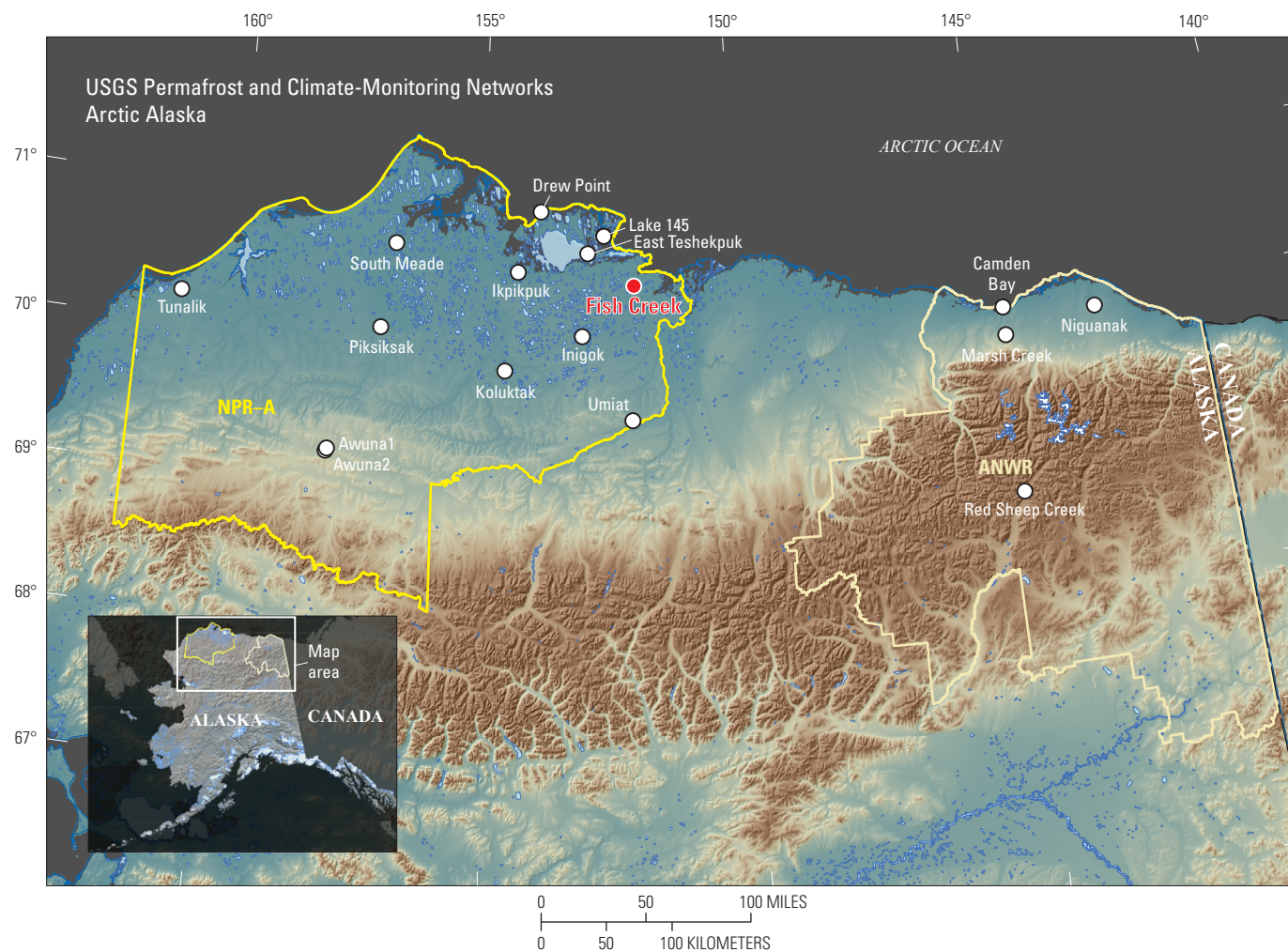
GTN-P code: U22

Latitude: 70° 20.114'N

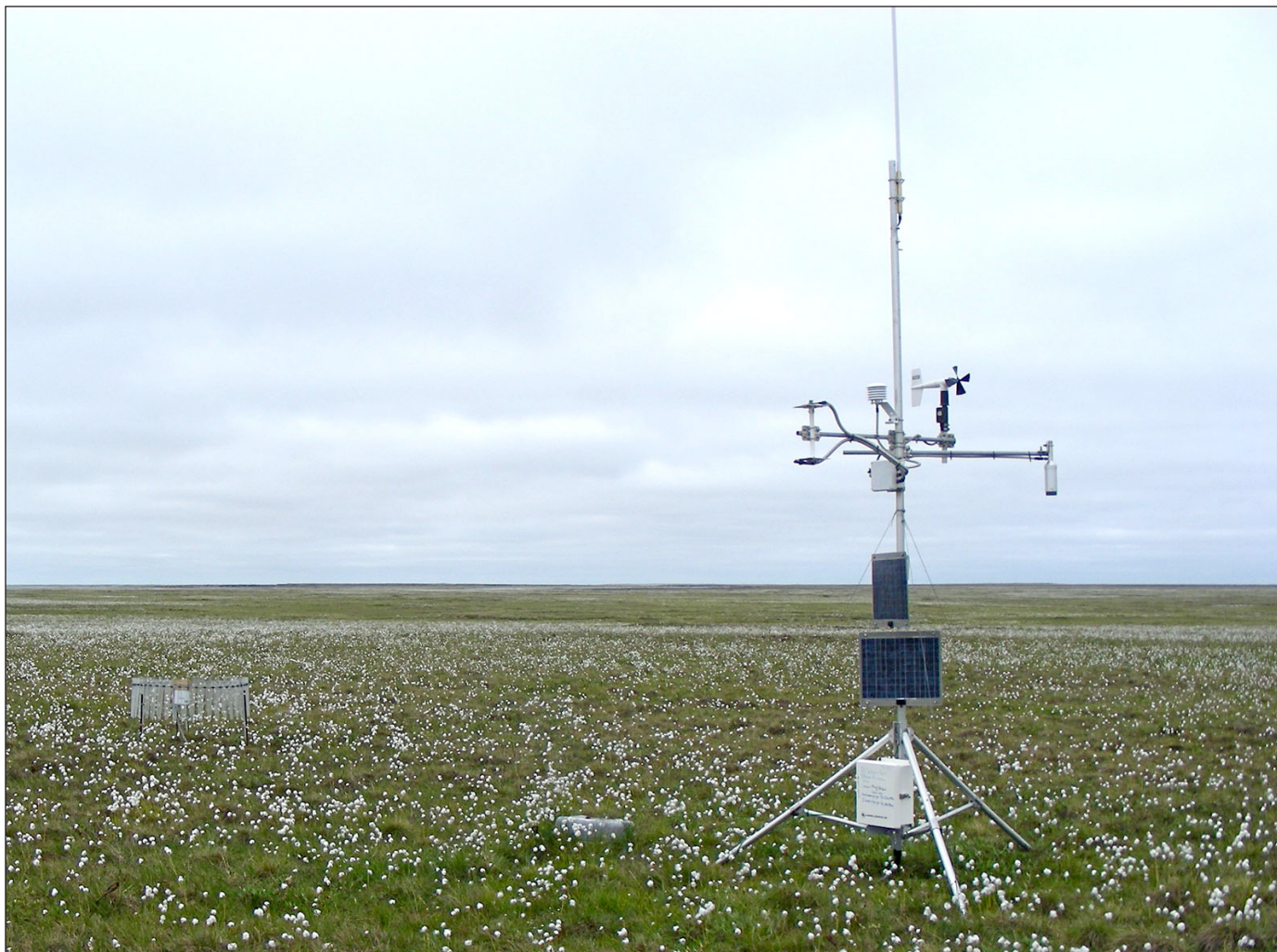
Longitude: 152° 03.120'W

Elevation: 31 meters above mean sea level

Installation date: 18 AUG 1998



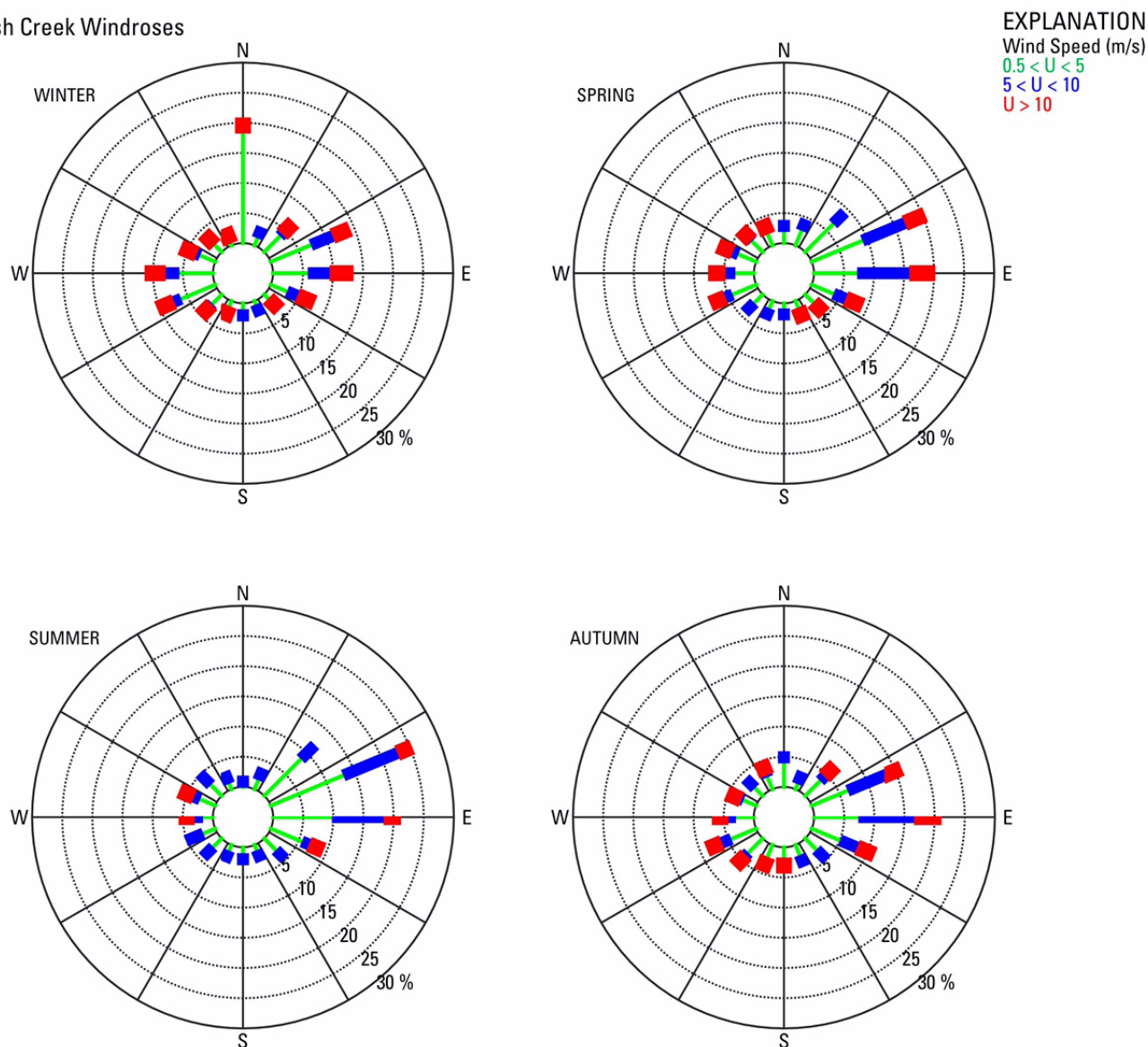
**Figure D–1.** Location map presenting the specific location of the Fish Creek site and its spatial relationship to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure D-2.** Fish Creek station in summer 2008.



Fish Creek Windroses



**Figure D–3.** Fish Creek seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meter per second; U, wind speed; N, north; E, east; S, south; W, west;)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table D-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Air temperature, in degrees Celsius  
 File name: AK102\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.90	-5.65	-12.35	-20.57
1999	-30.29	-28.57	-28.02	-19.54	-5.30	2.63	NaN	NaN	1.29	-9.05	-20.70	-30.02
2000	-25.60	-27.37	-25.89	-18.91	-9.16	5.61	7.13	5.08	0.41	-9.35	-19.02	-21.78
2001	-25.05	-20.51	-28.75	-17.67	NaN	3.86	7.57	4.39	1.09	-12.87	-19.08	-24.41
2002	-29.31	-29.73	-20.77	-16.44	-2.52	3.67	7.71	5.74	3.10	-5.99	-14.22	-19.75
2003	-24.34	-27.52	-25.41	-13.69	-5.26	2.71	8.77	4.31	0.03	-4.27	-18.18	-23.13
2004	-26.03	-34.43	-28.82	-18.09	-4.80	6.09	9.29	8.59	0.44	-7.43	-18.32	-24.42
2005	-24.55	-27.22	-23.59	-17.26	-5.04	2.29	5.32	6.97	0.95	-7.35	-23.71	-21.45
2006	-27.47	-22.79	-29.12	-20.39	-4.08	6.94	8.21	NaN	4.35	NaN	-18.24	-19.95
2007	-27.58	-25.89	-29.33	-13.90	-6.65	7.70	8.73	8.19	3.31	-6.48	-12.08	-21.30
2008	-30.07	-28.54	-29.47	-13.12	-2.85	8.69	11.52	6.41	1.56	-7.84	-17.08	-19.42
2009	-28.12	-27.49	-30.00	-15.61	-2.85	4.62	9.44	6.74	1.25	-4.53	-20.07	-20.90
2010	-28.85	-24.97	-25.14	-12.30	-5.75	4.69	10.86	8.01	3.51	-5.42	-11.13	-26.68
2011	-25.32	-22.28	-23.18	-20.13	-5.76	2.93	8.80	6.84	2.35	-5.44	-21.12	-26.59
2012	-32.71	-25.71	-32.95	-15.70	-5.84	NaN	NaN	NaN	2.62	-3.24	-16.87	-26.89
2013	-26.83	-31.55	-24.07	-19.75	NaN	NaN	10.18	6.69	-0.36	-5.05	-15.90	-21.20
2014	-23.08	-25.06	-21.86	-15.79	-2.14	3.25	7.24	5.08	0.99	-5.43	-13.87	-22.93
2015	-25.07	-21.89	-24.06	-14.09	-0.87	8.70	6.80					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.29	-18.62	-22.40	-37.53
1999	-45.21	-44.94	-44.55	-32.20	-19.66	-3.91	NaN	NaN	-10.93	-25.33	-34.13	-40.71
2000	-37.35	-40.41	-37.10	-34.42	-21.74	-6.09	-1.09	-2.62	-8.70	-21.12	-32.06	-39.19
2001	-39.97	-40.04	-38.51	-31.48	NaN	-3.29	-1.72	-1.79	-6.44	-27.07	-30.70	-37.70
2002	-42.04	-41.60	-34.60	-31.39	-19.72	-3.59	-1.01	-0.54	-3.45	-24.10	-27.12	-37.01
2003	-40.34	-39.45	-36.90	-32.13	-17.70	-3.13	-0.49	-1.32	-5.25	-20.95	-35.36	-35.78
2004	-40.31	-46.38	-42.22	-34.70	-19.02	-2.17	0.96	-0.43	-4.75	-26.80	-31.20	-39.01
2005	-40.58	-38.30	-38.06	-33.05	-14.53	-3.72	-1.23	-2.17	-4.66	-23.40	-40.62	-38.73
2006	-41.35	-45.19	-41.07	-31.57	-20.48	-4.90	-1.23	NaN	-3.02	NaN	-32.66	-39.24
2007	-41.97	-41.86	-40.38	-26.47	-19.54	-3.57	1.25	0.25	-6.73	-18.86	-28.91	-43.00
2008	-45.49	-40.02	-41.97	-30.76	-13.13	-0.29	1.34	1.15	-4.03	-20.76	-28.39	-35.22
2009	-38.25	-43.00	-41.29	-31.99	-13.25	-1.36	0.46	-0.65	-12.16	-17.05	-32.69	-37.28
2010	-41.79	-43.40	-39.66	-28.81	-21.35	0.02	0.67	0.67	-6.61	-17.36	-32.35	-43.08
2011	-42.92	-34.37	-34.10	-31.37	-20.72	-4.00	0.00	-0.37	-6.85	-20.41	-35.93	-37.57
2012	-46.57	-47.46	-41.39	-29.62	-19.77	NaN	NaN	NaN	-1.91	-17.42	-28.99	-39.34
2013	-37.62	-40.53	-35.66	-36.01	NaN	NaN	-0.32	-2.15	-10.79	-16.96	-31.49	-36.36
2014	-41.87	-42.39	-38.69	-34.27	-9.98	-4.15	-0.70	-0.97	-5.62	-13.49	-27.79	-32.95
2015	-35.48	-36.96	-39.31	-26.62	-13.05	-4.02	-0.08					

**Table D-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.66	2.80	-2.56	0.40
1999	-9.43	-16.51	-16.90	-0.66	3.19	14.49	NaN	NaN	11.10	1.05	-9.99	-18.49
2000	-9.75	-6.62	-16.08	-5.23	1.21	23.30	23.55	18.13	17.14	-1.28	-3.86	-11.67
2001	-9.19	-5.43	-17.88	-2.32	NaN	16.24	25.08	15.29	15.61	-0.40	-9.80	-4.27
2002	-7.74	-16.44	-4.15	2.33	17.65	18.66	24.28	20.51	16.42	1.69	-1.98	-9.41
2003	-12.31	-15.63	-8.01	0.18	3.58	21.72	23.96	19.00	10.86	5.01	0.84	-8.04
2004	-2.91	-24.08	-3.61	0.51	6.94	22.58	23.78	24.31	11.41	0.98	-8.70	-5.87
2005	0.58	-13.61	-3.29	0.11	0.47	21.87	18.30	23.95	12.58	-0.09	-12.06	-4.22
2006	-16.61	0.76	-20.03	-9.44	4.90	21.09	21.94	NaN	18.09	NaN	-1.53	-1.95
2007	-15.23	-6.91	-7.59	6.08	17.83	24.65	23.90	25.42	16.81	0.52	-4.93	-6.49
2008	0.72	-3.33	-7.43	3.08	10.21	23.04	30.98	17.63	8.99	0.66	-7.15	-1.92
2009	-4.30	-2.59	-13.48	6.05	12.74	15.94	28.18	20.47	14.22	3.28	-6.65	-4.30
2010	-12.65	-13.12	-13.89	-1.44	4.05	19.09	27.28	23.07	17.18	-0.27	1.00	-9.73
2011	-0.45	-0.36	-9.25	-5.34	5.76	16.34	21.10	17.25	13.78	-0.08	-3.44	-6.72
2012	-13.43	-12.30	-18.97	-3.76	3.17	NaN	NaN	NaN	12.30	6.58	-4.91	-14.46
2013	-15.02	-21.69	-14.09	-2.72	NaN	NaN	21.04	21.02	13.10	1.62	1.96	1.73
2014	-9.67	-4.04	-8.22	1.06	4.39	17.96	19.57	17.44	11.62	3.17	-0.98	-6.73
2015	-8.14	-0.82	-4.65	-2.03	12.38	25.77	23.55					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.30	0.94	4.81	2.61
1999	-3.62	-2.34	-1.77	-3.20	-0.92	-2.32	NaN	NaN	-0.31	-2.45	-3.54	-6.84
2000	1.06	-1.14	0.37	-2.58	-4.78	0.65	-1.37	-1.20	-1.19	-2.76	-1.85	1.40
2001	1.62	5.72	-2.49	-1.33	NaN	-1.10	-0.93	-1.89	-0.51	-6.27	-1.92	-1.22
2002	-2.64	-3.50	5.49	-0.10	1.86	-1.29	-0.79	-0.54	1.50	0.60	2.95	3.44
2003	2.32	-1.28	0.84	2.65	-0.87	-2.25	0.26	-1.97	-1.57	2.32	-1.01	0.05
2004	0.63	-8.19	-2.57	-1.75	-0.42	1.13	0.78	2.31	-1.16	-0.84	-1.15	-1.23
2005	2.12	-0.99	2.67	-0.92	-0.66	-2.67	-3.19	0.69	-0.65	-0.76	-6.54	1.74
2006	-0.80	3.44	-2.86	-4.06	0.30	1.98	-0.29	NaN	2.75	NaN	-1.07	3.23
2007	-0.91	0.35	-3.08	2.44	-2.27	2.74	0.23	1.91	1.71	0.12	5.09	1.89
2008	-3.40	-2.31	-3.21	3.22	1.53	3.73	3.02	0.13	-0.04	-1.25	0.09	3.76
2009	-1.45	-1.25	-3.74	0.73	1.54	-0.34	0.94	0.46	-0.35	2.07	-2.91	2.29
2010	-2.19	1.27	1.12	4.04	-1.37	-0.27	2.36	1.73	1.91	1.17	6.04	-3.49
2011	1.34	3.96	3.07	-3.79	-1.38	-2.03	0.29	0.56	0.75	1.15	-3.96	-3.40
2012	-6.04	0.53	-6.69	0.64	-1.46	NaN	NaN	NaN	1.02	3.36	0.29	-3.71
2013	-0.16	-5.31	2.19	-3.41	NaN	NaN	1.68	0.41	-1.96	1.55	1.27	1.99
2014	3.58	1.17	4.39	0.55	2.24	-1.71	-1.27	-1.20	-0.61	1.16	3.30	0.26
2015	1.59	4.35	2.19	2.24	3.51	3.74	-1.71					

**Table D-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	90.32	22.58	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	64.52	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	87.10	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	83.33	93.55	93.55	100.00	96.77	96.67	100.00
2013	100.00	100.00	100.00	100.00	74.19	33.33	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table D-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Wind speed, in meters per second  
 File name: AK102\_U\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.71	3.92	3.89	4.76
2004	4.47	3.66	NaN	3.53	NaN	NaN	NaN	NaN	3.68	4.87	NaN	NaN
2005	4.55	4.59	5.05	3.83	4.62	4.90	4.47	3.31	5.59	3.91	NaN	NaN
2006	NaN	NaN	NaN	NaN	3.64	3.79	4.08	NaN	3.15	4.69	NaN	3.49
2007	NaN	3.28	3.72	4.31	3.83	4.93	4.09	3.45	4.46	NaN	NaN	NaN
2008	3.69	3.01	NaN	4.18	5.12	3.77	3.92	3.21	3.25	3.99	NaN	NaN
2009	NaN	NaN	NaN	3.80	4.12	5.16	4.55	3.62	4.03	4.15	NaN	NaN
2010	2.44	NaN	3.18	3.88	5.28	5.34	3.95	4.04	3.57	NaN	NaN	NaN
2011	NaN	NaN	NaN	4.07	3.33	5.36	4.01	3.84	4.37	4.52	NaN	NaN
2012	NaN	NaN	2.59	3.79	4.11	4.56	3.51	NaN	3.76	3.99	3.39	NaN
2013	NaN	NaN	NaN	4.02	3.78	3.75	4.38	3.25	3.88	3.23	NaN	NaN
2014	NaN	NaN	3.04	3.24	3.91	3.95	4.01	4.59	4.53	4.90	NaN	NaN
2015	NaN	4.87	NaN	3.99	4.02	3.80	3.87					

**Table D–1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.66	12.93	10.64	15.87
2004	12.66	13.15	NaN	11.90	NaN	NaN	NaN	NaN	11.55	11.07	NaN	NaN
2005	13.56	12.46	16.22	11.44	10.06	11.35	8.00	8.77	10.85	12.28	NaN	NaN
2006	NaN	NaN	NaN	NaN	10.85	10.22	9.09	NaN	8.25	18.03	NaN	12.58
2007	NaN	10.87	13.50	14.58	9.63	12.10	8.45	9.01	9.96	NaN	NaN	NaN
2008	20.84	11.15	NaN	10.81	12.21	8.67	10.11	9.46	8.85	10.78	NaN	NaN
2009	NaN	NaN	NaN	10.69	11.05	9.81	10.65	10.18	9.72	13.22	NaN	NaN
2010	13.43	NaN	12.06	10.96	11.20	11.86	8.51	10.65	7.59	NaN	NaN	NaN
2011	NaN	NaN	NaN	11.66	8.82	10.27	8.32	7.95	9.97	12.84	NaN	NaN
2012	NaN	NaN	8.56	10.20	9.58	10.54	7.93	NaN	9.86	10.33	11.06	NaN
2013	NaN	NaN	NaN	12.86	11.66	8.47	9.63	7.31	10.55	12.18	NaN	NaN
2014	NaN	NaN	8.28	12.57	10.93	8.89	10.13	10.35	9.91	14.47	NaN	NaN
2015	NaN	19.51	NaN	12.97	15.79	8.11	9.78					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.28	-0.29	NaN	NaN
2004	NaN	-0.22	NaN	-0.61	NaN	NaN	NaN	NaN	-0.31	0.65	NaN	NaN
2005	NaN	0.71	1.31	-0.31	0.47	0.42	0.39	-0.40	1.60	-0.31	NaN	NaN
2006	NaN	NaN	NaN	NaN	-0.51	-0.70	0.01	NaN	-0.84	0.47	NaN	NaN
2007	NaN	-0.60	-0.02	0.17	-0.31	0.45	0.01	-0.26	0.46	NaN	NaN	NaN
2008	NaN	-0.87	NaN	0.04	0.97	-0.71	-0.16	-0.50	-0.75	-0.23	NaN	NaN
2009	NaN	NaN	NaN	-0.34	-0.03	0.68	0.47	-0.09	0.04	-0.07	NaN	NaN
2010	NaN	NaN	-0.56	-0.26	1.13	0.85	-0.12	0.34	-0.42	NaN	NaN	NaN
2011	NaN	NaN	NaN	-0.08	-0.82	0.88	-0.07	0.13	0.37	0.30	NaN	NaN
2012	NaN	NaN	-1.16	-0.35	-0.04	0.07	-0.57	NaN	-0.23	-0.23	NaN	NaN
2013	NaN	NaN	NaN	-0.12	-0.37	-0.73	0.31	-0.46	-0.12	-0.99	NaN	NaN
2014	NaN	NaN	-0.71	-0.91	-0.24	-0.53	-0.06	0.88	0.54	0.69	NaN	NaN
2015	NaN	0.98	NaN	-0.16	-0.13	-0.69	-0.20					



**Table D-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.29	100.00	96.77	100.00	100.00
2004	100.00	96.55	90.32	100.00	80.65	86.67	90.32	93.55	100.00	100.00	90.00	67.74
2005	100.00	96.43	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	73.33	80.65
2006	0.00	60.71	77.42	80.00	100.00	100.00	100.00	90.32	100.00	100.00	70.00	100.00
2007	48.39	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	77.42	83.33	80.65
2008	96.77	96.55	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00	13.33	67.74
2009	90.32	92.86	87.10	100.00	100.00	100.00	100.00	100.00	96.67	96.77	93.33	64.52
2010	96.77	46.43	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	63.33	0.00
2011	6.45	75.00	74.19	100.00	100.00	100.00	100.00	100.00	100.00	100.00	60.00	74.19
2012	80.65	82.76	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	90.32
2013	87.10	85.71	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.33	48.39
2014	61.29	21.43	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.33	19.35
2015	67.74	100.00	80.65	96.67	100.00	100.00	100.00					

**Table D-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Ground temperature, in degrees Celsius

File name: AK102\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.08	-0.17	-3.52	-9.06
1999	-12.65	-15.89	-15.06	-14.80	-10.60	-1.21	NaN	NaN	0.85	-0.15	-6.11	-15.71
2000	-17.03	-17.08	-17.16	-15.41	-11.83	-1.65	2.76	2.30	0.73	-0.38	-7.40	-11.11
2001	-14.63	-14.35	-17.01	-15.28	-11.86	-0.63	2.41	2.23	0.97	-0.30	-7.07	-11.36
2002	-15.64	-19.13	-16.87	-15.30	-5.95	0.12	2.85	2.62	1.49	-0.08	-4.31	-8.45
2003	-13.03	-15.90	-16.81	-14.61	-8.49	-0.54	2.94	2.44	0.47	-0.04	-4.10	-12.10
2004	-13.97	-17.90	-19.38	-16.24	-7.90	0.79	4.26	4.47	0.81	-0.07	-4.13	-12.43
2005	-13.63	-16.39	-16.69	-14.92	-9.28	-0.41	2.11	3.10	0.69	-0.20	-6.12	-9.50
2006	-11.82	-13.70	-15.77	-14.94	-9.12	0.24	2.97	NaN	1.27	-0.10	-5.33	-10.10
2007	-15.43	-16.27	-19.30	-14.41	-10.48	-0.86	1.91	2.86	1.00	-0.70	-4.87	-9.72
2008	-14.72	-16.06	-17.58	-13.63	-8.47	0.93	3.47	1.95	0.39	-0.02	-2.68	-7.56
2009	-12.08	-14.55	-15.42	-13.87	-5.28	0.25	2.37	2.37	0.98	-0.03	-3.54	-8.97
2010	-14.08	-14.51	-15.40	-12.90	-9.05	-0.64	1.89	3.42	1.69	-0.07	-0.44	-6.38
2011	-11.10	-12.38	-13.29	-13.12	-8.12	-0.21	2.36	2.84	1.13	-0.03	-2.92	-9.84
2012	-13.74	-13.92	-16.15	-14.08	-8.68	-0.37	2.97	NaN	1.12	-0.02	-0.16	-6.02
2013	-11.85	-16.02	-15.54	-14.43	-9.47	-0.29	2.81	3.17	0.64	-0.02	-0.57	-5.98
2014	-10.78	-12.57	-13.81	-12.23	-4.20	-0.37	1.83	1.76	0.45	-0.03	-1.76	-9.32
2015	-12.51	-13.70	-13.08	-11.79	-4.94	0.44	2.26					

**Table D-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	-0.58	-6.66	-13.31
1999	-16.52	-17.91	-16.22	-16.28	-13.87	-6.91	NaN	NaN	-0.06	-0.49	-9.38	-18.70
2000	-19.67	-18.76	-18.55	-16.46	-13.75	-9.67	0.75	0.13	-0.09	-3.13	-9.85	-13.80
2001	-16.43	-16.57	-18.38	-17.76	-15.37	-6.33	0.20	0.62	-0.08	-2.12	-10.50	-14.17
2002	-19.32	-20.30	-19.11	-18.06	-13.40	-1.16	0.30	0.79	-0.07	-0.22	-8.77	-11.75
2003	-14.94	-18.19	-19.14	-17.78	-10.83	-2.60	0.54	0.91	-0.08	-0.11	-9.92	-13.76
2004	-16.90	-20.47	-20.96	-18.73	-12.93	-1.47	1.75	1.54	-0.04	-0.39	-8.99	-14.85
2005	-16.69	-17.52	-18.72	-17.18	-12.16	-2.18	0.15	0.41	-0.04	-0.72	-9.42	-10.81
2006	-14.24	-15.58	-17.04	-16.80	-13.04	-1.86	0.88	NaN	-0.00	-0.92	-10.52	-13.54
2007	-17.29	-20.05	-20.24	-16.89	-13.48	-6.25	0.05	1.19	-0.08	-2.80	-8.26	-13.38
2008	-17.40	-17.74	-18.78	-16.63	-12.01	-1.55	1.23	0.91	-0.06	-0.12	-6.71	-9.89
2009	-14.20	-16.14	-16.89	-16.22	-8.54	-1.37	0.65	0.42	-0.06	-0.11	-7.68	-11.80
2010	-15.99	-17.03	-17.09	-15.15	-10.83	-2.44	0.06	1.42	-0.08	-0.24	-1.69	-11.09
2011	-14.14	-13.27	-14.09	-14.05	-12.42	-1.33	0.42	1.28	-0.05	-0.17	-8.30	-12.52
2012	-15.69	-16.19	-16.85	-16.86	-11.83	-3.13	0.65	NaN	-0.03	-0.09	-0.70	-10.48
2013	-14.95	-17.48	-16.90	-15.82	-12.76	-2.55	0.77	0.77	-0.06	-0.08	-2.93	-9.88
2014	-12.92	-15.65	-15.56	-14.29	-10.34	-2.17	0.55	0.55	-0.06	-0.12	-6.17	-10.95
2015	-14.86	-15.73	-14.61	-13.32	-10.10	-0.73	1.22					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.89	0.09	-0.54	-6.04
1999	-10.27	-14.29	-14.26	-13.66	-6.94	0.60	NaN	NaN	2.44	0.03	-0.41	-9.46
2000	-15.72	-14.76	-16.43	-13.78	-9.71	2.96	6.71	5.59	3.78	-0.01	-3.18	-9.89
2001	-13.37	-12.76	-14.86	-13.88	-6.52	1.95	5.19	4.87	2.91	0.00	-2.22	-9.23
2002	-12.71	-17.54	-14.05	-11.84	-0.61	2.36	6.30	6.38	5.17	0.02	-0.14	-6.53
2003	-11.42	-13.17	-14.19	-10.56	-2.44	2.36	6.38	4.71	2.68	-0.01	-0.06	-9.96
2004	-9.80	-16.15	-15.72	-12.93	-1.45	5.18	7.16	8.72	3.68	0.04	-0.43	-8.01
2005	-9.43	-15.35	-15.11	-12.20	-2.18	2.48	5.00	6.86	1.98	-0.01	-0.72	-8.01
2006	-9.39	-11.59	-14.54	-13.04	-1.84	4.12	6.07	NaN	3.32	0.08	-0.26	-7.13
2007	-13.17	-12.69	-16.92	-11.67	-6.23	0.40	4.35	4.79	3.13	0.03	-2.80	-6.65
2008	-11.26	-13.76	-16.00	-11.88	-1.51	4.71	5.85	3.10	1.44	0.05	-0.06	-6.16
2009	-9.88	-12.76	-12.91	-5.47	-1.37	1.99	5.15	4.97	3.23	0.12	-0.04	-6.61
2010	-11.76	-13.12	-14.30	-10.83	-2.29	0.70	5.31	6.07	3.91	0.03	-0.14	-1.72
2011	-8.45	-11.21	-12.59	-12.15	-1.22	1.97	4.71	4.75	3.13	0.06	-0.06	-7.29
2012	-12.16	-12.72	-15.21	-11.75	-3.03	1.87	5.61	NaN	3.49	0.07	0.03	-0.49
2013	-9.82	-14.33	-14.47	-12.26	-2.09	2.42	4.76	5.89	2.07	0.05	-0.01	-2.59
2014	-8.98	-9.69	-12.42	-10.38	-1.37	1.39	3.52	3.22	1.29	0.04	-0.01	-6.16
2015	-10.14	-11.29	-11.25	-10.06	-0.61	3.16	4.03					

**Table D-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.18	-0.03	0.41	0.78
1999	0.79	-0.61	1.02	-0.67	-2.41	-0.95	NaN	NaN	-0.04	-0.01	-2.18	-5.87
2000	-3.60	-1.81	-1.08	-1.28	-3.65	-1.39	0.12	-0.38	-0.17	-0.24	-3.47	-1.27
2001	-1.19	0.93	-0.94	-1.16	-3.67	-0.37	-0.22	-0.45	0.07	-0.15	-3.15	-1.52
2002	-2.21	-3.86	-0.79	-1.17	2.23	0.38	0.22	-0.06	0.60	0.07	-0.39	1.39
2003	0.40	-0.62	-0.73	-0.49	-0.30	-0.28	0.30	-0.24	-0.43	0.10	-0.17	-2.26
2004	-0.54	-2.63	-3.30	-2.11	0.29	1.05	1.62	1.79	-0.08	0.08	-0.20	-2.59
2005	-0.19	-1.12	-0.62	-0.80	-1.09	-0.15	-0.53	0.42	-0.21	-0.06	-2.20	0.33
2006	1.62	1.58	0.31	-0.82	-0.93	0.50	0.34	NaN	0.38	0.05	-1.41	-0.26
2007	-1.99	-0.99	-3.22	-0.29	-2.29	-0.60	-0.73	0.17	0.11	-0.55	-0.94	0.12
2008	-1.28	-0.78	-1.50	0.49	-0.29	1.19	0.83	-0.73	-0.50	0.12	1.24	2.28
2009	1.35	0.73	0.66	0.25	2.91	0.51	-0.26	-0.31	0.09	0.12	0.39	0.86
2010	-0.65	0.77	0.67	1.22	-0.86	-0.38	-0.75	0.74	0.79	0.08	3.49	3.45
2011	2.33	2.90	2.78	1.00	0.07	0.05	-0.27	0.16	0.24	0.12	1.01	-0.01
2012	-0.30	1.36	-0.07	0.04	-0.49	-0.11	0.34	NaN	0.23	0.13	3.77	3.82
2013	1.59	-0.75	0.54	-0.31	-1.28	-0.03	0.17	0.49	-0.26	0.12	3.35	3.86
2014	2.66	2.71	2.27	1.89	3.98	-0.11	-0.81	-0.93	-0.45	0.11	2.17	0.52
2015	0.92	1.57	3.00	2.33	3.25	0.70	-0.37					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	90.32	22.58	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	96.67	100.00	100.00	96.67	100.00	96.67	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table D–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.53	-1.38	-2.21	-6.02
1999	-9.05	-12.38	-12.91	-13.36	-11.53	-6.29	NaN	NaN	-1.62	-1.46	-3.52	-9.65
2000	-13.12	-13.98	-14.87	-14.50	-12.60	-7.71	-3.68	-2.35	-1.85	-1.69	-4.62	-8.13
2001	-11.33	-12.15	-13.87	-14.19	-12.55	-6.85	-3.54	-2.32	-1.84	-1.66	-4.36	-8.23
2002	-11.49	-14.97	-15.08	-14.47	-10.36	-4.95	-3.09	-2.12	-1.68	-1.51	-2.76	-6.15
2003	-9.59	-12.15	-13.83	-14.12	-10.65	-5.56	-3.17	-2.08	-1.65	-1.52	-2.59	-8.10
2004	-10.41	-13.70	-15.97	-15.33	-11.40	-5.34	-2.96	-1.92	-1.49	-1.36	-2.41	-7.87
2005	-10.69	-13.32	-14.55	-14.12	-11.28	-5.82	-3.31	-2.18	-1.69	-1.54	-3.78	-7.33
2006	-9.26	-11.44	-12.82	-13.58	-11.22	-5.41	-2.97	NaN	-1.57	-1.40	-2.93	-7.16
2007	-11.21	-12.93	-15.89	-14.44	-11.82	-6.38	-3.45	-2.23	-1.73	-1.65	-3.40	-6.49
2008	-10.29	-12.69	-14.04	-13.42	-10.90	-5.46	-2.87	-1.96	-1.60	-1.47	-2.12	-5.34
2009	-8.57	-11.42	-12.56	-13.33	-9.10	-4.45	-2.71	-1.87	-1.48	-1.35	-2.23	-6.18
2010	-10.08	-11.95	-12.93	-12.52	-10.45	-5.56	-3.14	-1.99	-1.45	-1.28	-1.27	-3.68
2011	-7.81	-10.02	-11.05	-11.57	-10.01	-4.79	-2.79	-1.78	-1.37	-1.22	-1.72	-6.09
2012	-9.95	-11.58	-12.99	-13.26	-10.72	-5.60	-3.02	NaN	NaN	-1.25	-1.20	-3.18
2013	-8.01	-11.72	-13.11	-13.11	-11.01	-5.46	-2.89	-1.80	-1.39	-1.28	-1.26	-3.49
2014	-7.71	-9.58	-11.46	-11.34	-7.67	NaN	-2.40	-1.66	-1.34	-1.22	-1.46	-5.65
2015	-8.93	-11.15	-11.30	-11.23	-8.09	-3.81	-2.26					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.68	-1.47	-4.04	-7.42
1999	-10.93	-12.90	-13.29	-13.61	-13.03	-9.76	NaN	NaN	-1.79	-1.57	-5.79	-12.37
2000	-13.82	-14.66	-15.08	-14.93	-13.86	-11.35	-4.89	-2.82	-2.03	-1.90	-6.56	-9.70
2001	-11.86	-12.67	-14.92	-15.00	-13.73	-11.05	-4.56	-2.80	-2.05	-1.84	-6.54	-9.84
2002	-13.63	-15.81	-15.60	-15.01	-13.54	-6.47	-3.87	-2.53	-1.90	-1.58	-4.91	-7.71
2003	-10.93	-13.67	-15.05	-15.05	-12.26	-8.23	-4.10	-2.47	-1.81	-1.57	-5.31	-9.34
2004	-12.45	-15.31	-16.39	-16.23	-14.00	-7.45	-3.87	-2.33	-1.64	-1.44	-4.85	-10.03
2005	-12.52	-14.15	-15.07	-14.69	-13.03	-8.87	-4.16	-2.64	-1.89	-1.63	-6.09	-8.09
2006	-10.74	-11.84	-13.82	-13.92	-12.96	-7.90	-3.82	NaN	-1.75	-1.48	-6.12	-9.02
2007	-12.60	-14.79	-16.62	-16.14	-12.92	-9.87	-4.39	-2.72	-1.96	-2.16	-4.76	-8.39
2008	-11.64	-13.13	-14.95	-14.90	-12.28	-7.85	-3.77	-2.30	-1.73	-1.57	-3.68	-6.55
2009	-10.16	-11.91	-13.68	-13.81	-11.64	-6.15	-3.35	-2.23	-1.64	-1.44	-4.61	-7.93
2010	-11.70	-12.30	-13.35	-13.33	-11.51	-8.47	-3.93	-2.48	-1.71	-1.39	-1.55	-6.31
2011	-9.77	-10.45	-11.52	-11.88	-11.45	-6.75	-3.54	-2.20	-1.56	-1.32	-3.88	-8.43
2012	-11.43	-11.98	-13.85	-13.95	-12.13	-8.35	-3.95	NaN	NaN	-1.35	-1.27	-6.08
2013	-10.08	-13.11	-13.29	-13.40	-12.38	-8.24	-3.80	-2.23	-1.58	-1.36	-1.71	-6.06
2014	-8.85	-11.11	-11.84	-11.88	-10.54	NaN	-3.03	-1.95	-1.51	-1.30	-2.89	-7.42
2015	-10.54	-11.87	-11.77	-11.72	-10.40	-5.03	-2.88					

**Table D-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.38	-1.32	-1.31	-4.04
1999	-7.42	-10.96	-12.50	-12.99	-9.74	-4.28	NaN	NaN	-1.49	-1.38	-1.41	-5.79
2000	-12.37	-13.58	-14.66	-13.84	-11.35	-4.82	-2.80	-1.95	-1.75	-1.62	-1.90	-6.59
2001	-9.70	-11.82	-12.71	-13.57	-11.05	-4.51	-2.73	-1.95	-1.72	-1.55	-1.84	-6.52
2002	-9.82	-13.63	-14.28	-13.54	-6.45	-3.80	-2.44	-1.81	-1.51	-1.41	-1.43	-4.91
2003	-7.74	-10.93	-13.01	-12.24	-8.26	-4.03	-2.45	-1.79	-1.51	-1.47	-1.41	-5.31
2004	-9.04	-12.43	-15.31	-13.98	-7.45	-3.85	-2.31	-1.58	-1.39	-1.27	-1.24	-4.85
2005	-9.33	-12.48	-14.12	-13.02	-8.91	-4.14	-2.60	-1.82	-1.57	-1.46	-1.53	-6.09
2006	-8.08	-10.74	-11.58	-12.96	-7.90	-3.79	-2.36	NaN	-1.42	-1.30	-1.28	-6.09
2007	-9.01	-11.80	-14.75	-12.86	-9.88	-4.38	-2.66	-1.87	-1.58	-1.49	-2.11	-4.76
2008	-8.32	-11.64	-13.00	-12.27	-7.84	-3.77	-2.26	-1.70	-1.46	-1.38	-1.40	-3.68
2009	-6.54	-10.12	-11.55	-11.67	-6.14	-3.30	-2.15	-1.58	-1.34	-1.24	-1.25	-4.58
2010	-7.95	-11.63	-12.29	-11.50	-8.47	-3.92	-2.43	-1.65	-1.28	-1.21	-1.17	-1.50
2011	-6.34	-9.67	-10.28	-11.28	-6.77	-3.52	-2.13	-1.43	-1.21	-1.15	-1.12	-3.88
2012	-8.42	-11.28	-11.71	-12.10	-8.37	-3.90	-2.29	NaN	NaN	-1.16	-1.11	-1.15
2013	-6.08	-10.08	-12.89	-12.38	-8.22	-3.76	-2.21	-1.49	-1.24	-1.18	-1.16	-1.67
2014	-6.06	-8.64	-10.84	-10.54	-5.01	NaN	-1.88	-1.41	-1.24	-1.14	-1.10	-2.87
2015	-7.41	-10.33	-10.75	-10.39	-5.00	-2.83	-1.80					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.04	0.03	0.39	0.48
1999	0.83	-0.22	0.52	-0.03	-1.02	-0.70	NaN	NaN	-0.06	-0.05	-0.92	-3.15
2000	-3.23	-1.82	-1.44	-1.17	-2.09	-2.12	-0.67	-0.36	-0.29	-0.28	-2.02	-1.63
2001	-1.44	0.01	-0.44	-0.86	-2.04	-1.26	-0.52	-0.33	-0.28	-0.25	-1.77	-1.72
2002	-1.61	-2.82	-1.66	-1.14	0.14	0.64	-0.07	-0.13	-0.12	-0.10	-0.16	0.35
2003	0.30	0.00	-0.40	-0.79	-0.14	0.03	-0.15	-0.09	-0.09	-0.11	0.01	-1.60
2004	-0.52	-1.54	-2.54	-2.00	-0.90	0.25	0.06	0.07	0.08	0.05	0.19	-1.37
2005	-0.81	-1.17	-1.12	-0.79	-0.77	-0.23	-0.29	-0.20	-0.13	-0.13	-1.18	-0.83
2006	0.63	0.72	0.61	-0.25	-0.71	0.18	0.05	NaN	-0.00	0.02	-0.33	-0.66
2007	-1.32	-0.77	-2.46	-1.10	-1.31	-0.79	-0.44	-0.24	-0.17	-0.23	-0.80	0.02
2008	-0.40	-0.53	-0.61	-0.09	-0.39	0.13	0.14	0.03	-0.04	-0.06	0.48	1.16
2009	1.32	0.74	0.87	0.00	1.41	1.14	0.31	0.12	0.08	0.07	0.36	0.33
2010	-0.19	0.21	0.50	0.81	0.06	0.03	-0.13	-0.00	0.11	0.14	1.33	2.82
2011	2.08	2.13	2.38	1.77	0.50	0.80	0.22	0.21	0.20	0.19	0.87	0.42
2012	-0.06	0.57	0.44	0.07	-0.21	-0.01	-0.01	NaN	NaN	0.16	1.40	3.32
2013	1.88	0.44	0.31	0.22	-0.51	0.13	0.13	0.19	0.18	0.13	1.33	3.01
2014	2.18	2.58	1.97	1.99	2.83	NaN	0.62	0.33	0.22	0.19	1.14	0.86
2015	0.96	1.00	2.13	2.10	2.41	1.78	0.76					

**Table D–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	90.32	22.58	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	96.67	100.00	100.00	96.67	100.00	96.67	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table D–1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Incident solar flux, in watts per meter squared

File name: AK102\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	19.7	1.4	0.0
2000	0.3	10.6	NaN	NaN	NaN	NaN	NaN	128.5	62.5	24.8	1.5	0.0
2001	0.3	12.0	71.5	174.3	253.3	241.4	190.3	87.6	53.4	19.8	1.1	0.0
2002	0.2	3.5	NaN	NaN	223.7	213.3	NaN	107.6	64.9	18.8	2.1	0.1
2003	0.2	7.3	26.3	67.6	227.6	246.3	NaN	98.8	54.5	20.3	2.2	0.1
2004	0.5	15.7	75.0	171.2	215.8	235.0	188.8	143.2	58.3	23.8	1.2	0.0
2005	0.7	6.0	62.9	170.4	222.3	244.8	209.4	120.9	45.6	27.1	2.0	0.7
2006	0.7	16.0	80.5	167.5	233.6	233.8	188.8	NaN	53.8	16.8	1.7	0.0
2007	0.2	14.3	NaN	140.6	215.5	250.0	206.8	134.9	64.5	17.6	1.6	0.1
2008	0.5	12.4	76.1	139.0	198.0	223.7	178.7	92.4	50.1	19.8	1.7	0.0
2009	0.7	11.6	54.3	140.5	201.8	199.1	185.7	101.2	50.7	16.7	1.4	0.0
2010	0.2	4.2	19.6	NaN	201.9	215.5	163.9	111.1	63.7	16.7	1.5	0.0
2011	0.6	NaN	68.8	158.9	NaN	210.9	163.2	114.9	39.4	19.0	1.9	0.0
2012	0.4	NaN	61.9	NaN	215.2	202.0	187.5	NaN	50.8	19.1	1.6	0.0
2013	0.4	NaN	NaN	NaN	NaN	NaN	157.8	94.4	50.2	NaN	1.4	0.0
2014	0.5	4.8	24.2	128.7	161.5	170.1	149.7	NaN	NaN	16.8	2.1	0.0
2015	0.2	6.6	61.1	136.9	180.1	190.5	164.3					

**Table D-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	-0.2	-0.1
2000	-0.1	1.4	NaN	NaN	NaN	NaN	NaN	19.6	8.3	5.1	-0.1	-0.0
2001	-0.1	2.7	18.1	32.9	44.3	21.6	10.7	-21.2	-0.7	0.1	-0.5	-0.1
2002	-0.2	-5.7	NaN	NaN	14.8	-6.5	NaN	-1.3	10.7	-0.9	0.5	0.0
2003	-0.2	-2.0	-27.1	-73.9	18.6	26.6	NaN	-10.1	0.3	0.6	0.5	-0.0
2004	0.1	6.5	21.6	29.7	6.8	15.3	9.2	34.3	4.2	4.1	-0.5	-0.0
2005	0.3	-3.2	9.4	29.0	13.4	25.1	29.8	12.0	-8.5	7.4	0.3	0.6
2006	0.3	6.7	27.0	26.1	24.7	14.1	9.2	NaN	-0.3	-2.9	0.1	-0.0
2007	-0.2	5.1	NaN	-0.8	6.6	30.2	27.2	26.0	10.4	-2.1	-0.0	-0.0
2008	0.1	3.2	22.6	-2.4	-11.0	3.9	-0.9	-16.5	-4.0	0.1	0.0	-0.0
2009	0.3	2.3	0.9	-0.9	-7.1	-20.6	6.1	-7.7	-3.5	-3.0	-0.2	-0.1
2010	-0.2	-5.1	-33.9	NaN	-7.0	-4.2	-15.7	2.2	9.5	-3.0	-0.2	-0.0
2011	0.2	NaN	15.4	17.5	NaN	-8.9	-16.4	6.0	-14.7	-0.7	0.2	-0.0
2012	-0.0	NaN	8.4	NaN	6.3	-17.8	7.9	NaN	-3.3	-0.6	-0.0	-0.0
2013	-0.0	NaN	NaN	NaN	NaN	NaN	-21.8	-14.5	-3.9	NaN	-0.2	-0.1
2014	0.1	-4.4	-29.3	-12.8	-47.4	-49.6	-29.8	NaN	NaN	-2.9	0.5	-0.1
2015	-0.2	-2.7	7.6	-4.5	-28.9	-29.2	-15.3					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	93.3	96.8	100.0	100.0
2000	100.0	96.6	80.6	76.7	80.6	86.7	90.3	100.0	100.0	100.0	100.0	100.0
2001	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	77.4	36.7	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	93.5	96.8	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	100.0	100.0
2007	100.0	100.0	83.9	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	96.8	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	89.3	100.0	100.0	93.5	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2012	100.0	86.2	100.0	76.7	96.8	100.0	100.0	93.5	100.0	96.8	100.0	100.0
2013	100.0	57.1	45.2	90.0	93.5	93.3	100.0	100.0	96.7	83.9	96.7	100.0
2014	100.0	100.0	96.8	96.7	100.0	100.0	100.0	90.3	6.7	96.8	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table D–1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Reflected solar flux, in watts per meter squared

File name: AK102\_So\_u\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.8	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	18.5	15.0	1.6	-0.1
2000	0.3	14.1	76.4	164.9	233.4	111.9	36.9	31.9	16.4	21.6	1.7	-0.0
2001	0.5	13.1	71.0	163.4	240.7	72.9	45.2	20.1	13.8	21.1	1.7	-0.0
2002	0.6	15.0	67.6	151.2	141.3	46.4	52.6	24.0	13.8	14.7	1.6	-0.0
2003	0.2	11.6	70.5	148.3	204.8	60.0	36.9	23.3	14.1	15.4	1.6	-0.1
2004	0.5	14.2	65.4	161.6	181.1	58.3	44.1	33.6	21.0	21.7	1.8	0.0
2005	0.6	11.9	68.1	156.8	199.4	74.3	51.4	31.7	9.6	11.1	1.7	0.0
2006	0.4	12.5	70.9	155.7	202.9	68.5	50.9	NaN	13.3	8.5	1.6	0.0
2007	0.4	16.2	67.5	133.1	199.6	73.1	55.1	36.7	15.8	15.9	1.9	0.1
2008	0.6	15.2	77.9	147.2	182.9	50.0	47.7	23.7	13.9	20.8	1.8	0.1
2009	0.8	13.6	75.7	150.4	184.6	47.4	48.5	26.3	19.9	16.6	2.0	0.1
2010	0.7	16.2	73.1	150.1	203.6	69.5	40.8	29.3	16.3	14.7	1.5	0.0
2011	0.7	12.9	72.2	164.2	205.2	51.6	42.4	32.2	11.9	19.3	2.0	0.0
2012	0.7	NaN	79.2	146.4	215.2	68.7	52.5	NaN	14.3	14.0	1.9	0.1
2013	0.9	13.7	73.3	168.2	215.5	80.4	49.6	29.0	29.4	NaN	2.2	0.0
2014	1.0	16.6	73.7	159.2	137.1	48.1	43.6	25.5	13.7	14.1	2.3	0.0
2015	0.9	14.4	68.6	151.3	132.8	56.9	54.1					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.2	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.5	-1.4	-0.2	-0.1
2000	-0.3	0.0	4.5	11.4	45.8	47.0	-10.1	4.0	0.4	5.2	-0.2	-0.1
2001	-0.2	-1.0	-0.9	9.9	53.1	8.1	-1.8	-7.9	-2.2	4.7	-0.1	-0.1
2002	-0.0	0.9	-4.3	-2.3	-46.3	-18.5	5.6	-3.9	-2.2	-1.7	-0.2	-0.1
2003	-0.4	-2.4	-1.5	-5.2	17.1	-4.9	-10.1	-4.7	-1.9	-1.0	-0.2	-0.1
2004	-0.1	0.2	-6.6	8.1	-6.6	-6.6	-2.9	5.7	5.0	5.2	0.0	0.0
2005	-0.0	-2.2	-3.9	3.3	11.8	9.4	4.4	3.7	-6.4	-5.3	-0.1	0.0
2006	-0.2	-1.6	-1.0	2.2	15.3	3.7	3.9	NaN	-2.7	-8.0	-0.2	0.0
2007	-0.2	2.2	-4.4	-20.4	12.0	8.3	8.1	8.8	-0.2	-0.6	0.0	0.0
2008	0.0	1.1	6.0	-6.3	-4.7	-14.9	0.6	-4.3	-2.1	4.4	0.0	0.0
2009	0.2	-0.5	3.8	-3.0	-3.1	-17.5	1.5	-1.6	3.9	0.2	0.2	0.1
2010	0.1	2.1	1.1	-3.4	16.0	4.7	-6.2	1.4	0.3	-1.7	-0.4	0.0
2011	0.1	-1.2	0.3	10.7	17.6	-13.3	-4.6	4.2	-4.1	2.9	0.2	0.0
2012	0.1	NaN	7.2	-7.1	27.6	3.8	5.5	NaN	-1.7	-2.4	0.1	0.0
2013	0.2	-0.4	1.4	14.8	27.9	15.5	2.6	1.1	13.4	NaN	0.3	-0.0
2014	0.4	2.6	1.7	5.7	-50.5	-16.8	-3.4	-2.5	-2.3	-2.3	0.5	0.0
2015	0.3	0.3	-3.4	-2.2	-54.8	-8.0	7.0					



**Table D-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	19.4	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	100.0	96.8	100.0	100.0
2000	100.0	96.6	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	100.0	100.0
2007	100.0	96.4	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	89.7	100.0	96.7	96.8	100.0	100.0	93.5	100.0	96.8	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	90.3	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table D-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Rainfall, in millimeters per hour  
 File name: AK102\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.2	0.6	0.0	0.0
2007	0.0	0.0	0.0	0.0	NaN	0.5	0.1	0.2	0.3	0.2	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	1.0	0.5	0.5	0.3	0.1	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	0.9	0.7	1.1	0.1	0.2	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	NaN	8.9	2.5	1.0	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.3	2.3	1.5	1.0	0.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	0.5	3.3	NaN	1.3	1.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.5	1.8	0.3	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	1.8	1.3	2.0	1.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	13.0	1.0					

**Table D-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.3	1.8	0.0	0.0
2007	0.0	0.0	0.0	0.0	NaN	3.8	0.1	3.0	1.9	0.3	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	5.4	14.2	6.6	4.3	0.1	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	5.2	4.0	24.3	2.4	1.9	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	NaN	45.7	16.8	6.3	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.5	15.7	12.7	35.8	0.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	1.5	14.7	NaN	25.9	3.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.5	0.0	25.1	22.1	1.3	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	17.5	14.5	27.9	4.1	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	24.1	2.5					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	96.7	83.9	96.7	100.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	80.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	90.3	90.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	90.3	96.7	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2014	100.0	100.0	100.0	100.0	67.7	93.3	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	83.9	100.0	100.0					

**Table D-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek

Variable: Snow depth, in centimeters

File name: AK102\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.1	4.6	9.2	11.2
1999	16.3	NaN	NaN	17.4	21.0	4.1	1.6	NaN	3.6	7.3	NaN	NaN
2000	NaN	NaN	15.4	20.9	29.3	7.1	3.6	3.7	3.6	8.9	10.6	14.1
2001	15.4	16.4	NaN	NaN	NaN	NaN	NaN	8.5	6.7	12.5	15.2	16.2
2002	18.8	18.7	25.0	27.1	19.4	4.0	4.3	4.3	5.1	7.9	9.6	15.9
2003	13.6	13.1	13.6	17.9	22.3	NaN	3.8	5.4	5.4	7.5	15.3	17.9
2004	22.5	24.8	22.7	27.4	25.0	4.3	5.1	7.4	6.5	10.8	12.7	11.5
2005	NaN	17.1	17.7	18.9	21.6	4.9	4.5	5.2	4.5	6.4	17.1	18.6
2006	17.6	22.9	24.9	30.0	27.7	5.9	7.4	10.6	8.4	6.1	13.9	17.5
2007	17.2	18.6	23.2	28.4	NaN	NaN	NaN	5.3	4.8	3.3	9.3	13.9
2008	14.3	26.1	28.0	38.8	35.3	5.5	5.0	5.6	5.0	17.4	31.9	28.3
2009	28.3	35.9	39.2	38.8	26.8	4.4	5.6	8.4	8.7	9.2	14.9	22.1
2010	22.4	23.2	24.6	27.2	30.8	8.4	7.2	8.5	9.6	9.7	18.3	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.1	5.7	7.2	15.0	20.3
2012	27.2	35.9	41.4	35.6	34.9	6.3	5.4	8.2	7.2	9.2	27.2	28.1
2013	25.8	25.2	27.4	39.1	NaN	NaN	9.2	8.2	7.3	13.4	20.4	27.3
2014	27.5	31.1	33.6	36.6	17.7	5.6	6.8	6.0	5.4	13.4	23.0	23.9
2015	25.1	28.8	38.4	35.7	21.8	5.8	11.6					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.4	1.1	6.7	7.7
1999	8.8	NaN	NaN	12.3	15.3	0.4	-1.9	NaN	0.9	1.6	NaN	NaN
2000	NaN	NaN	13.0	12.5	23.5	-2.7	-0.1	-0.7	1.0	4.0	7.7	7.8
2001	12.3	15.0	NaN	NaN	NaN	NaN	NaN	1.5	3.1	8.1	12.5	14.4
2002	14.7	17.4	18.2	23.1	3.2	0.5	-0.7	2.0	2.5	3.5	6.9	9.2
2003	11.0	10.4	10.7	11.0	14.3	NaN	-2.7	-1.3	-0.7	1.9	10.0	16.4
2004	18.3	21.0	18.2	24.0	15.2	-1.4	1.8	2.4	3.0	7.1	10.2	10.6
2005	NaN	15.7	15.6	16.3	16.3	-0.8	-1.3	-1.4	-2.2	0.4	8.5	14.5
2006	13.7	16.6	22.3	24.1	10.8	-1.8	4.3	5.3	2.3	-1.0	9.4	14.4
2007	11.9	15.5	19.5	22.4	NaN	NaN	NaN	0.6	0.3	-0.9	2.8	8.4
2008	8.5	20.9	25.3	27.2	5.7	-2.4	-1.6	-0.1	-1.3	2.4	21.0	23.7
2009	23.4	28.4	36.7	30.3	13.2	-1.5	1.0	2.7	1.5	0.8	11.6	12.8
2010	20.2	20.3	22.0	21.3	21.2	-0.6	0.2	3.0	2.9	5.2	11.2	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.9	-0.1	2.9	12.4	12.0
2012	20.7	30.2	37.3	31.4	27.5	-2.0	-0.3	5.2	0.0	0.3	22.6	21.8
2013	22.0	23.0	23.4	30.7	NaN	NaN	3.9	4.7	-0.1	11.1	12.7	23.4
2014	25.7	27.0	29.5	32.5	1.5	-0.7	-0.1	0.7	-0.9	-0.9	16.9	21.4
2015	21.2	19.1	33.3	31.0	0.5	-1.8	2.0					

**Table D-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.8	7.6	13.9	19.3
1999	21.3	NaN	NaN	22.3	22.8	15.4	4.6	NaN	6.0	15.2	NaN	NaN
2000	NaN	NaN	19.2	32.0	33.1	24.2	6.5	6.2	6.4	13.5	14.5	16.6
2001	17.4	16.9	NaN	NaN	NaN	NaN	NaN	21.6	13.8	18.3	20.7	18.8
2002	24.6	21.6	26.8	34.2	33.8	6.9	6.9	6.8	9.4	11.7	19.4	26.0
2003	18.1	15.4	15.5	25.3	26.3	NaN	8.0	9.0	8.1	11.3	19.2	23.1
2004	24.1	30.0	27.4	28.9	28.9	15.4	6.9	9.4	8.6	14.8	15.5	13.2
2005	NaN	18.4	19.2	23.5	25.0	16.6	7.7	8.0	8.9	13.4	23.3	22.8
2006	19.4	26.8	27.3	32.6	33.2	10.8	9.4	16.7	16.2	13.4	16.6	21.3
2007	23.3	24.0	29.6	32.3	NaN	NaN	NaN	7.9	8.0	6.7	17.3	21.1
2008	24.8	32.2	31.0	52.3	49.0	9.5	13.4	9.9	11.3	29.1	39.3	36.8
2009	37.3	45.7	40.5	41.8	35.4	13.3	7.6	10.8	11.3	14.3	19.5	33.3
2010	25.1	26.7	29.2	32.4	33.5	23.1	10.1	10.2	12.4	17.0	29.3	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.2	8.9	13.9	19.3	28.1
2012	34.5	43.3	45.4	44.5	40.6	28.2	8.0	10.4	10.4	26.1	34.1	33.6
2013	34.2	28.0	40.9	43.7	NaN	NaN	16.0	10.8	18.5	19.6	34.9	29.7
2014	29.6	35.7	35.9	39.1	35.4	10.7	9.7	9.5	13.8	21.4	24.9	26.4
2015	28.0	38.0	45.5	41.6	39.1	15.4	18.1					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.9	-4.6	-7.1	-7.6
1999	-4.4	NaN	NaN	-11.9	-4.0	-1.4	-4.2	NaN	-2.5	-1.9	NaN	NaN
2000	NaN	NaN	-10.9	-8.4	4.3	1.5	-2.2	-3.6	-2.5	-0.3	-5.7	-4.6
2001	-5.4	-7.4	NaN	NaN	NaN	NaN	NaN	1.2	0.6	3.3	-1.1	-2.6
2002	-2.0	-5.1	-1.3	-2.2	-5.6	-1.5	-1.5	-3.0	-1.0	-1.3	-6.7	-2.9
2003	-7.1	-10.7	-12.7	-11.4	-2.7	NaN	-2.0	-1.9	-0.7	-1.7	-1.0	-0.9
2004	1.7	1.0	-3.6	-1.8	-0.1	-1.2	-0.7	0.1	0.5	1.6	-3.6	-7.2
2005	NaN	-6.7	-8.7	-10.4	-3.5	-0.6	-1.3	-2.1	-1.6	-2.8	0.9	-0.1
2006	-3.2	-1.0	-1.4	0.8	2.7	0.4	1.7	3.3	2.4	-3.1	-2.4	-1.3
2007	-3.5	-5.2	-3.2	-0.9	NaN	NaN	NaN	-2.0	-1.2	-5.9	-7.0	-4.9
2008	-6.5	2.2	1.7	9.5	10.3	-0.0	-0.8	-1.7	-1.0	8.2	15.6	9.5
2009	7.6	12.1	12.9	9.5	1.8	-1.1	-0.2	1.1	2.7	-0.0	-1.4	3.3
2010	1.6	-0.6	-1.8	-2.1	5.7	2.8	1.4	1.2	3.5	0.5	2.1	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.2	-0.4	-2.0	-1.2	1.5
2012	6.4	12.1	15.0	6.3	9.9	0.8	-0.4	1.0	1.2	-0.0	10.9	9.3
2013	5.1	1.4	1.1	9.8	NaN	NaN	3.5	1.0	1.3	4.2	4.1	8.5
2014	6.8	7.2	7.3	7.3	-7.3	0.0	1.0	-1.3	-0.7	4.2	6.7	5.2
2015	4.4	5.0	12.1	6.4	-3.2	0.3	5.8					

**Table D-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
1999	83.9	39.3	0.0	83.3	100.0	100.0	90.3	25.8	100.0	100.0	56.7	12.9
2000	32.3	75.9	93.5	100.0	100.0	96.7	100.0	100.0	100.0	100.0	93.3	96.8
2001	100.0	100.0	77.4	0.0	0.0	0.0	0.0	96.8	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	96.8
2003	100.0	89.3	100.0	96.7	100.0	66.7	100.0	100.0	100.0	100.0	100.0	96.8
2004	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2005	54.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	77.4	6.7	0.0	90.3	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	80.0	54.8
2011	0.0	0.0	32.3	20.0	29.0	0.0	6.5	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	77.4	53.3	100.0	100.0	100.0	100.0	96.7	90.3
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table D-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Soil moisture, in water fraction by volume

File name: AK102\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.15	NaN
2004	NaN	NaN	NaN	NaN	0.02	0.21	0.40	0.40	0.40	0.39	0.05	NaN
2005	NaN	NaN	NaN	NaN	0.01	0.10	0.40	0.40	0.40	0.28	0.03	0.01
2006	NaN	NaN	NaN	NaN	0.01	0.24	0.40	NaN	0.40	0.37	0.04	0.01
2007	NaN	NaN	NaN	NaN	NaN	0.06	0.38	0.39	0.38	0.22	0.04	0.02
2008	NaN	NaN	NaN	NaN	0.02	0.26	0.38	0.40	0.40	0.37	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.31	0.38	0.40	0.41	0.41	0.15	0.03
2010	NaN	NaN	NaN	NaN	0.02	0.07	0.33	0.41	0.41	0.40	0.20	0.04
2011	NaN	0.02	NaN	NaN	0.02	0.13	0.41	0.40	0.40	0.40	0.18	0.03
2012	NaN	NaN	NaN	NaN	0.02	0.15	0.40	NaN	0.41	0.41	0.35	0.06
2013	NaN	NaN	NaN	NaN	0.02	0.17	0.41	0.41	0.41	0.41	0.29	0.05
2014	0.02	NaN	NaN	NaN	0.04	0.08	0.41	0.41	0.41	0.41	0.19	0.02
2015	NaN	NaN	NaN	0.01	0.04	0.16	0.40					

**Table D-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.40	0.02	NaN
2004	NaN	NaN	NaN	NaN	0.00	0.05	0.40	0.40	0.40	0.21	0.02	NaN
2005	NaN	NaN	NaN	NaN	0.00	0.04	0.40	0.40	0.40	0.11	0.02	0.01
2006	NaN	NaN	NaN	NaN	0.00	0.04	0.40	NaN	0.40	0.11	0.01	0.01
2007	NaN	NaN	NaN	NaN	NaN	0.01	0.15	0.39	0.37	0.05	0.02	0.01
2008	NaN	NaN	NaN	NaN	0.01	0.04	0.37	0.40	0.40	0.29	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.02	0.37	0.37	0.41	0.40	0.03	0.02
2010	NaN	NaN	NaN	NaN	0.01	0.04	0.09	0.41	0.41	0.38	0.09	0.02
2011	NaN	0.01	NaN	NaN	0.01	0.05	0.41	0.40	0.40	0.39	0.03	0.02
2012	NaN	NaN	NaN	NaN	0.01	0.04	0.39	NaN	0.41	0.41	0.12	0.02
2013	NaN	NaN	NaN	NaN	0.01	0.04	0.41	0.41	0.41	0.41	0.08	0.02
2014	0.02	NaN	NaN	NaN	0.02	0.05	0.40	0.40	0.41	0.40	0.04	0.02
2015	NaN	NaN	NaN	0.01	0.01	0.06	0.40					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.40	NaN
2004	NaN	NaN	NaN	NaN	0.04	0.41	0.41	0.40	0.40	0.40	0.15	NaN
2005	NaN	NaN	NaN	NaN	0.03	0.41	0.41	0.40	0.40	0.40	0.11	0.02
2006	NaN	NaN	NaN	NaN	0.04	0.41	0.41	NaN	0.40	0.40	0.10	0.02
2007	NaN	NaN	NaN	NaN	NaN	0.15	0.41	0.39	0.39	0.37	0.05	0.03
2008	NaN	NaN	NaN	NaN	0.05	0.41	0.40	0.41	0.40	0.40	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.41	0.41	0.41	0.40	0.04
2010	NaN	NaN	NaN	NaN	0.04	0.09	0.41	0.41	0.41	0.41	0.38	0.09
2011	NaN	0.02	NaN	NaN	0.05	0.41	0.41	0.41	0.41	0.41	0.39	0.03
2012	NaN	NaN	NaN	NaN	0.04	0.41	0.41	NaN	0.41	0.41	0.41	0.12
2013	NaN	NaN	NaN	NaN	0.05	0.41	0.41	0.41	0.41	0.41	0.41	0.08
2014	0.03	NaN	NaN	NaN	0.05	0.39	0.41	0.41	0.41	0.41	0.40	0.04
2015	NaN	NaN	NaN	0.02	0.06	0.41	0.41					

**Table D-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.00	0.03	0.00	NaN
2004	NaN	NaN	NaN	NaN	-0.01	0.05	0.01	0.00	-0.00	0.02	-0.09	NaN
2005	NaN	NaN	NaN	NaN	-0.01	-0.07	0.01	0.00	0.00	-0.09	-0.11	-0.02
2006	NaN	NaN	NaN	NaN	-0.01	0.08	0.01	NaN	-0.00	-0.01	-0.10	-0.02
2007	NaN	NaN	NaN	NaN	NaN	-0.10	-0.01	-0.01	-0.02	-0.15	-0.11	-0.01
2008	NaN	NaN	NaN	NaN	-0.01	0.09	-0.01	0.00	-0.00	-0.00	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.14	-0.01	-0.01	0.00	0.04	0.00	-0.00
2010	NaN	NaN	NaN	NaN	-0.00	-0.10	-0.06	0.01	0.00	0.03	0.05	0.01
2011	NaN	NaN	NaN	NaN	0.00	-0.03	0.01	-0.00	0.00	0.03	0.03	-0.00
2012	NaN	NaN	NaN	NaN	-0.00	-0.01	0.01	NaN	0.00	0.04	0.21	0.03
2013	NaN	NaN	NaN	NaN	-0.00	0.01	0.01	0.00	0.00	0.04	0.15	0.02
2014	NaN	NaN	NaN	NaN	0.01	-0.08	0.01	0.00	0.00	0.04	0.05	-0.00
2015	NaN	NaN	NaN	NaN	0.01	-0.00	0.01					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.52	100.00	100.00	100.00	83.87
2004	32.26	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	54.84
2005	35.48	0.00	0.00	13.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	70.97	32.14	0.00	0.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2007	3.23	17.86	0.00	33.33	93.55	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	29.03	0.00	0.00	40.00	100.00	100.00	100.00	100.00	100.00	100.00	93.33	0.00
2009	0.00	0.00	0.00	0.00	38.71	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	35.48	35.71	0.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	93.55	100.00	77.42	80.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	70.97	51.72	0.00	43.33	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	83.87	0.00	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	71.43	58.06	93.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	83.87	60.71	80.65	100.00	100.00	100.00	100.00					

**Table D-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



**Table D-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Air temperature, in degrees Celsius  
 File name: AK102\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-5.04	NaN
1999	-26.41	-17.60	NaN	-9.48	NaN
2000	-27.67	-17.98	5.95	-9.32	-11.52
2001	-22.51	NaN	5.29	-10.32	-11.87
2002	-27.75	-13.21	5.73	-5.71	-9.76
2003	-23.75	-14.80	5.30	-7.44	-10.43
2004	-27.72	-17.23	8.01	-8.43	-11.41
2005	-25.34	-15.28	4.89	-10.01	-11.11
2006	-23.94	-17.84	6.39	-5.93	-10.33
2007	-24.43	-16.66	8.21	-5.10	-9.58
2008	-26.59	-15.17	8.88	-7.79	-9.97
2009	-24.93	-16.16	6.96	-7.75	-10.52
2010	-24.90	-14.42	7.89	-4.36	-9.36
2011	-24.84	-16.31	6.23	-8.04	-10.67
2012	-28.39	-18.19	NaN	-5.71	-11.54
2013	-28.32	NaN	NaN	-7.08	NaN
2014	-23.05	-13.24	5.21	-6.10	-9.37
2015	-23.34	-13.00			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	12.66	NaN
1999	0.40	3.19	NaN	11.10	NaN
2000	-6.62	1.21	23.55	17.14	23.55
2001	-5.43	NaN	25.08	15.61	25.08
2002	-4.27	17.65	24.28	16.42	24.28
2003	-9.41	3.58	23.96	10.86	23.96
2004	-2.91	6.94	24.31	11.41	24.31
2005	0.58	0.47	23.95	12.58	23.95
2006	0.76	4.90	21.94	18.09	21.94
2007	-1.95	17.83	25.42	16.81	25.42
2008	0.72	10.21	30.98	8.99	30.98
2009	-1.92	12.74	28.18	14.22	28.18
2010	-4.30	4.05	27.28	17.18	27.28
2011	-0.36	5.76	21.10	13.78	21.10
2012	-6.72	3.17	NaN	12.30	22.84
2013	-14.46	NaN	NaN	13.10	NaN
2014	1.73	4.39	19.57	11.62	19.57
2015	-0.82	12.38			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-22.40	NaN
1999	-45.21	-44.55	NaN	-34.13	NaN
2000	-40.71	-37.10	-6.09	-32.06	-40.41
2001	-40.04	NaN	-3.29	-30.70	-40.04
2002	-42.04	-34.60	-3.59	-27.12	-42.04
2003	-40.34	-36.90	-3.13	-35.36	-40.34
2004	-46.38	-42.22	-2.17	-31.20	-46.38
2005	-40.58	-38.06	-3.72	-40.62	-40.62
2006	-45.19	-41.07	-4.90	-32.66	-45.19
2007	-41.97	-40.38	-3.57	-28.91	-43.00
2008	-45.49	-41.97	-0.29	-28.39	-45.49
2009	-43.00	-41.29	-1.36	-32.69	-43.00
2010	-43.40	-39.66	0.02	-32.35	-43.40
2011	-43.08	-34.10	-4.00	-35.93	-42.92
2012	-47.46	-41.39	NaN	-28.99	-47.46
2013	-40.53	NaN	NaN	-31.49	NaN
2014	-42.39	-38.69	-4.15	-27.79	-42.39
2015	-36.96	-39.31			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	2.28	NaN
1999	-1.07	-2.05	NaN	-2.16	NaN
2000	-2.34	-2.43	-0.60	-2.00	-1.05
2001	2.82	NaN	-1.26	-2.99	-1.40
2002	-2.42	2.34	-0.82	1.62	0.72
2003	1.59	0.75	-1.25	-0.11	0.04
2004	-2.38	-1.68	1.46	-1.10	-0.94
2005	-0.00	0.27	-1.66	-2.68	-0.63
2006	1.40	-2.29	-0.16	1.39	0.15
2007	0.91	-1.11	1.66	2.23	0.89
2008	-1.26	0.38	2.33	-0.46	0.50
2009	0.41	-0.61	0.41	-0.43	-0.05
2010	0.43	1.13	1.34	2.97	1.11
2011	0.49	-0.77	-0.32	-0.72	-0.19
2012	-3.05	-2.64	NaN	1.62	-1.07
2013	-2.98	NaN	NaN	0.24	NaN
2014	2.29	2.31	-1.34	1.23	1.10
2015	1.99	2.55			

**Table D-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	70.65	100.00	92.60
2000	100.00	100.00	100.00	100.00	100.00
2001	100.00	88.04	100.00	100.00	96.99
2002	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	98.91	100.00	99.73
2004	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	96.74	95.60	98.08
2007	100.00	100.00	98.91	100.00	99.73
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	90.22	97.80	96.99
2013	100.00	91.30	78.26	100.00	92.33
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

**Table D-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek

Variable: Wind speed, in meters per second

File name: AK102\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	3.84	NaN	2003	NaN	NaN	NaN	12.93	NaN
2004	4.32	NaN	NaN	4.88	NaN	2004	15.87	NaN	NaN	15.06	NaN
2005	NaN	4.51	4.22	NaN	4.36	2005	NaN	16.22	11.35	NaN	16.22
2006	NaN	NaN	3.75	NaN	NaN	2006	NaN	NaN	10.22	NaN	NaN
2007	NaN	3.95	4.16	NaN	NaN	2007	NaN	14.58	12.10	NaN	NaN
2008	NaN	4.09	3.63	NaN	NaN	2008	NaN	12.21	10.11	NaN	NaN
2009	NaN	4.06	4.43	3.94	NaN	2009	NaN	15.61	10.65	13.22	NaN
2010	NaN	4.12	4.43	NaN	NaN	2010	NaN	12.06	11.86	NaN	NaN
2011	NaN	NaN	4.39	NaN	NaN	2011	NaN	NaN	10.27	NaN	NaN
2012	NaN	3.49	4.01	3.72	3.50	2012	NaN	10.20	10.54	11.06	13.12
2013	NaN	4.35	3.79	3.88	NaN	2013	NaN	16.85	9.63	17.89	NaN
2014	NaN	3.40	4.19	4.65	NaN	2014	NaN	12.57	10.35	15.10	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table D–2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.00	0.00	0.00	0.00	0.00
1999	NaN	NaN	NaN	NaN	NaN	1999	0.00	0.00	0.00	0.00	0.00
2000	NaN	NaN	NaN	NaN	NaN	2000	0.00	0.00	0.00	0.00	0.00
2001	NaN	NaN	NaN	NaN	NaN	2001	0.00	0.00	0.00	0.00	0.00
2002	NaN	NaN	NaN	NaN	NaN	2002	0.00	0.00	0.00	0.00	0.00
2003	NaN	NaN	NaN	-0.31	NaN	2003	0.00	0.00	20.65	98.90	38.36
2004	NaN	NaN	NaN	0.73	NaN	2004	98.90	90.22	90.22	96.70	91.26
2005	NaN	0.37	0.14	NaN	NaN	2005	87.78	100.00	100.00	90.11	95.62
2006	NaN	NaN	-0.33	NaN	NaN	2006	46.67	85.87	96.74	90.11	81.64
2007	NaN	-0.19	0.07	NaN	NaN	2007	82.22	100.00	98.91	86.81	90.41
2008	NaN	-0.05	-0.45	NaN	NaN	2008	91.21	97.83	100.00	71.43	89.07
2009	NaN	-0.08	0.35	-0.21	NaN	2009	83.33	95.65	100.00	95.60	93.42
2010	NaN	-0.03	0.35	NaN	NaN	2010	70.00	100.00	100.00	84.62	83.29
2011	NaN	NaN	0.31	NaN	NaN	2011	25.56	91.30	100.00	86.81	82.47
2012	NaN	-0.65	-0.08	-0.43	NaN	2012	79.12	100.00	97.83	100.00	95.63
2013	NaN	0.21	-0.29	-0.27	NaN	2013	87.78	97.83	100.00	97.80	92.33
2014	NaN	-0.74	0.10	0.50	NaN	2014	44.44	100.00	100.00	97.80	83.29
2015	NaN	NaN				2015	61.11	92.39			

**Table D-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Ground temperature, in degrees Celsius

File name: AK102\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-0.86	NaN
1999	-12.42	-13.47	NaN	-1.78	NaN
2000	-16.60	-14.79	1.16	-2.33	-7.77
2001	-13.33	-14.71	1.35	-2.11	-7.23
2002	-15.25	-12.68	1.87	-0.96	-6.50
2003	-12.34	-13.29	1.63	-1.21	-6.62
2004	-14.59	-14.48	3.22	-1.11	-6.79
2005	-14.07	-13.62	1.62	-1.86	-6.71
2006	-11.61	-13.26	1.84	-1.37	-6.20
2007	-13.85	-14.73	1.31	-1.51	-7.17
2008	-13.43	-13.22	2.14	-0.76	-6.13
2009	-11.29	-11.50	1.68	-0.85	-5.59
2010	-12.45	-12.45	1.60	0.39	-5.54
2011	-9.87	-11.49	1.69	-0.60	-5.35
2012	-12.47	-12.96	2.09	0.32	-5.51
2013	-11.14	-13.13	1.92	0.01	-5.57
2014	-9.68	-10.03	1.09	-0.44	-5.02
2015	-11.78	-9.97			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-6.66	NaN
1999	-17.91	-16.28	NaN	-9.38	NaN
2000	-19.67	-18.55	-9.67	-9.85	-19.67
2001	-16.57	-18.38	-6.33	-10.50	-18.38
2002	-20.30	-19.11	-1.16	-8.77	-20.30
2003	-18.19	-19.14	-2.60	-9.92	-19.14
2004	-20.47	-20.96	-1.47	-8.99	-20.96
2005	-17.52	-18.72	-2.18	-9.42	-18.72
2006	-15.58	-17.04	-1.86	-10.52	-17.04
2007	-20.05	-20.24	-6.25	-8.26	-20.24
2008	-17.74	-18.78	-1.55	-6.71	-18.78
2009	-16.14	-16.89	-1.37	-7.68	-16.89
2010	-17.03	-17.09	-2.44	-1.69	-17.09
2011	-14.14	-14.09	-1.33	-8.30	-14.14
2012	-16.19	-16.86	-3.13	-0.70	-16.86
2013	-17.48	-16.90	-2.55	-2.93	-17.48
2014	-15.65	-15.56	-2.17	-6.17	-15.65
2015	-15.73	-14.61			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	2.89	NaN
1999	-6.04	-6.94	NaN	2.44	NaN
2000	-9.46	-9.71	6.71	3.78	6.71
2001	-9.89	-6.52	5.19	2.91	5.19
2002	-9.23	-0.61	6.38	5.17	6.38
2003	-6.53	-2.44	6.38	2.68	6.38
2004	-9.80	-1.45	8.72	3.68	8.72
2005	-8.01	-2.18	6.86	1.98	6.86
2006	-8.01	-1.84	6.07	3.32	6.07
2007	-7.13	-6.23	4.79	3.13	4.79
2008	-6.65	-1.51	5.85	1.44	5.85
2009	-6.16	-1.37	5.15	3.23	5.15
2010	-6.61	-2.29	6.07	3.91	6.07
2011	-1.72	-1.22	4.75	3.13	4.75
2012	-7.29	-3.03	5.61	3.49	5.61
2013	-0.49	-2.09	5.89	2.07	5.89
2014	-2.59	-1.37	3.52	1.29	3.52
2015	-6.16	-0.61			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	0.19	NaN
1999	0.35	-0.69	NaN	-0.74	NaN
2000	-3.82	-2.01	-0.58	-1.28	-1.55
2001	-0.55	-1.93	-0.39	-1.06	-1.01
2002	-2.48	0.11	0.14	0.09	-0.28
2003	0.43	-0.51	-0.11	-0.16	-0.40
2004	-1.81	-1.70	1.49	-0.07	-0.57
2005	-1.30	-0.83	-0.11	-0.81	-0.49
2006	1.17	-0.48	0.10	-0.32	0.02
2007	-1.08	-1.95	-0.43	-0.46	-0.95
2008	-0.66	-0.44	0.41	0.29	0.09
2009	1.48	1.29	-0.06	0.20	0.63
2010	0.32	0.34	-0.13	1.43	0.68
2011	2.90	1.29	-0.05	0.45	0.87
2012	0.31	-0.17	0.35	1.37	0.71
2013	1.63	-0.35	0.18	1.06	0.65
2014	3.09	2.75	-0.65	0.61	1.20
2015	0.99	2.81			

**Table D-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	70.65	100.00	92.60
2000	100.00	100.00	98.91	100.00	99.73
2001	100.00	100.00	98.91	100.00	99.73
2002	100.00	100.00	98.91	100.00	99.73
2003	100.00	100.00	98.91	100.00	99.73
2004	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	96.74	100.00	99.18
2007	100.00	100.00	98.91	100.00	99.73
2008	98.90	100.00	100.00	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	98.91	97.80	99.18
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	97.83	100.00	99.45
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	98.91	100.00	100.00	99.73
2015	100.00	100.00			

Minimum Value Each Season/Year (120 cm  
depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-4.04	NaN
1999	-12.90	-13.61	NaN	-5.79	NaN
2000	-14.66	-15.08	-11.35	-6.56	-15.08
2001	-12.67	-15.00	-11.05	-6.54	-15.00
2002	-15.81	-15.60	-6.47	-4.91	-15.81
2003	-13.67	-15.05	-8.23	-5.31	-15.05
2004	-15.31	-16.39	-7.45	-4.85	-16.39
2005	-14.15	-15.07	-8.87	-6.09	-15.07
2006	-11.84	-13.92	-7.90	-6.12	-13.92
2007	-14.79	-16.62	-9.87	-4.76	-16.62
2008	-13.13	-14.95	-7.85	-3.68	-14.95
2009	-11.91	-13.81	-6.15	-4.61	-13.81
2010	-12.30	-13.35	-8.47	-1.71	-13.35
2011	-10.45	-11.88	-6.75	-3.88	-11.88
2012	-11.98	-13.95	-8.35	NaN	-13.95
2013	-13.11	-13.40	-8.24	-1.71	-13.40
2014	-11.11	-11.88	-5.08	-2.89	-11.88
2015	-11.87	-11.77			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.70	NaN
1999	-9.04	-12.59	NaN	-2.19	NaN
2000	-12.21	-13.98	-4.57	-2.71	-8.26
2001	-10.48	-13.53	-4.23	-2.61	-7.73
2002	-11.45	-13.29	-3.38	-1.98	-7.35
2003	-9.20	-12.85	-3.60	-1.92	-7.07
2004	-10.67	-14.22	-3.39	-1.75	-7.49
2005	-10.54	-13.31	-3.75	-2.33	-7.43
2006	-9.27	-12.53	-3.48	-1.96	-6.82
2007	-10.35	-14.04	-4.01	-2.25	-7.62
2008	-9.75	-12.78	-3.41	-1.73	-6.82
2009	-8.34	-11.64	-3.00	-1.68	-6.24
2010	-9.32	-11.96	-3.52	-1.33	-6.36
2011	-7.08	-10.87	-3.10	-1.44	-5.83
2012	-9.16	-12.31	-3.53	NaN	-6.42
2013	-7.50	-12.41	-3.36	-1.31	-6.18
2014	-6.84	-10.13	-2.58	-1.34	-5.42
2015	-8.49	-10.20			

Maximum Value Each Season/Year (120 cm  
depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.31	NaN
1999	-4.04	-9.74	NaN	-1.38	NaN
2000	-5.79	-11.35	-1.95	-1.62	-1.62
2001	-6.59	-11.05	-1.95	-1.55	-1.55
2002	-6.52	-6.45	-1.81	-1.41	-1.41
2003	-4.91	-8.26	-1.79	-1.41	-1.41
2004	-5.31	-7.45	-1.58	-1.24	-1.24
2005	-4.85	-8.91	-1.82	-1.46	-1.46
2006	-6.09	-7.90	-1.70	-1.28	-1.28
2007	-6.09	-9.88	-1.87	-1.49	-1.49
2008	-4.76	-7.84	-1.70	-1.38	-1.38
2009	-3.68	-6.14	-1.58	-1.24	-1.24
2010	-4.58	-8.47	-1.65	-1.17	-1.17
2011	-1.50	-6.77	-1.43	-1.12	-1.12
2012	-3.88	-8.37	-1.51	NaN	-1.11
2013	-1.15	-8.22	-1.49	-1.16	-1.16
2014	-1.67	-5.01	-1.41	-1.10	-1.10
2015	-2.87	-5.00			

**Table D-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean  
(120 cm depth):

Percent of Data Available during Each  
Season/Year (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	0.18	NaN
1999	0.39	-0.18	NaN	-0.31	NaN
2000	-2.78	-1.57	-1.11	-0.83	-1.44
2001	-1.05	-1.12	-0.76	-0.73	-0.92
2002	-2.02	-0.88	0.08	-0.09	-0.54
2003	0.23	-0.44	-0.14	-0.03	-0.26
2004	-1.24	-1.81	0.08	0.14	-0.68
2005	-1.11	-0.89	-0.28	-0.44	-0.62
2006	0.16	-0.12	-0.01	-0.07	-0.01
2007	-0.92	-1.63	-0.55	-0.37	-0.80
2008	-0.32	-0.37	0.06	0.16	-0.00
2009	1.09	0.77	0.47	0.20	0.58
2010	0.12	0.45	-0.06	0.55	0.46
2011	2.36	1.54	0.36	0.45	0.98
2012	0.28	0.10	-0.06	NaN	0.39
2013	1.93	0.01	0.10	0.57	0.64
2014	2.60	2.28	0.88	0.54	1.39
2015	0.94	2.21			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	70.65	100.00	92.60
2000	100.00	100.00	98.91	100.00	99.73
2001	100.00	100.00	98.91	100.00	99.73
2002	100.00	100.00	98.91	100.00	99.73
2003	100.00	100.00	98.91	100.00	99.73
2004	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	96.74	100.00	99.18
2007	100.00	100.00	98.91	100.00	99.73
2008	98.90	100.00	100.00	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	98.91	97.80	99.18
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	97.83	100.00	99.45
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	98.91	100.00	100.00	99.73
2015	100.00	100.00			

**Table D-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Incident solar flux, in watts per meter squared

File name: AK102\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	27.2	NaN
2000	3.4	NaN	NaN	29.5	NaN
2001	3.7	166.3	172.4	24.7	92.7
2002	1.2	NaN	171.7	28.5	NaN
2003	2.4	107.6	167.4	25.6	75.5
2004	5.2	153.8	188.5	27.7	94.2
2005	2.1	150.9	191.1	24.9	92.8
2006	5.5	160.5	174.8	24.0	91.1
2007	4.5	NaN	197.3	27.8	93.8
2008	4.2	137.7	164.3	23.8	82.8
2009	3.9	132.0	161.6	22.9	80.5
2010	1.4	113.7	162.9	27.2	76.5
2011	3.3	147.2	163.0	20.1	84.1
2012	2.2	NaN	163.6	23.8	80.9
2013	NaN	NaN	151.4	NaN	NaN
2014	1.7	105.2	136.3	NaN	NaN
2015	2.1	125.9			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	4.3	96.7	33.7
2000	98.9	79.3	92.4	100.0	92.6
2001	98.9	100.0	100.0	100.0	99.7
2002	100.0	71.7	95.7	100.0	91.8
2003	100.0	100.0	96.7	100.0	99.2
2004	100.0	100.0	100.0	100.0	100.0
2005	100.0	98.9	100.0	100.0	99.7
2006	100.0	100.0	96.7	100.0	99.2
2007	100.0	94.6	98.9	100.0	98.4
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	98.9	100.0	100.0	99.7
2010	100.0	96.7	100.0	100.0	99.2
2011	96.7	97.8	98.9	100.0	98.4
2012	95.6	91.3	97.8	98.9	95.9
2013	86.7	76.1	97.8	92.3	88.2
2014	100.0	97.8	96.7	68.1	90.7
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	1.8	NaN
2000	0.4	NaN	NaN	4.1	NaN
2001	0.7	33.2	5.0	-0.7	7.7
2002	-1.8	NaN	4.3	3.1	NaN
2003	-0.6	-25.5	0.0	0.2	-9.4
2004	2.2	20.7	21.1	2.3	9.3
2005	-0.9	17.8	23.7	-0.5	7.9
2006	2.4	27.4	7.4	-1.4	6.1
2007	1.5	NaN	29.9	2.4	8.9
2008	1.1	4.6	-3.1	-1.6	-2.1
2009	0.8	-1.0	-5.8	-2.5	-4.4
2010	-1.7	-19.3	-4.5	1.8	-8.4
2011	0.2	14.1	-4.4	-5.3	-0.9
2012	-0.8	NaN	-3.8	-1.6	-4.1
2013	NaN	NaN	-15.9	NaN	NaN
2014	-1.3	-27.9	-31.1	NaN	NaN
2015	-0.9	-7.2			



**Table D-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Reflected solar flux, in watts per meter squared

File name: AK102\_So\_u\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	11.7	NaN
2000	4.5	158.2	60.0	13.3	59.4
2001	4.2	158.3	45.8	12.3	55.5
2002	4.8	119.7	40.9	10.1	44.2
2003	3.7	141.1	40.0	10.4	49.2
2004	4.7	135.7	45.2	14.8	50.4
2005	3.9	141.3	52.2	7.5	51.6
2006	4.0	143.1	49.1	7.8	51.4
2007	5.1	133.4	55.0	11.2	51.7
2008	5.1	135.9	40.3	12.3	48.6
2009	4.5	136.8	40.7	12.9	49.0
2010	5.3	142.2	46.3	10.9	51.5
2011	4.3	147.0	41.9	11.2	51.5
2012	4.0	146.2	50.1	10.1	52.8
2013	4.6	151.5	52.7	17.0	56.9
2014	5.5	122.9	39.0	10.1	44.7
2015	4.8	117.2			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	39.6	0.0
1999	0.0	0.0	7.6	98.9	35.1
2000	98.9	100.0	98.9	100.0	99.5
2001	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0
2003	100.0	100.0	98.9	100.0	99.7
2004	100.0	100.0	100.0	98.9	99.7
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	96.7	100.0	99.2
2007	98.9	100.0	98.9	100.0	99.5
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	96.7	97.8	97.8	98.9	97.8
2013	100.0	98.9	100.0	96.7	98.9
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	0.1	NaN
2000	-0.0	18.8	13.5	1.7	8.5
2001	-0.3	18.9	-0.7	0.7	4.7
2002	0.3	-19.7	-5.6	-1.5	-6.7
2003	-0.8	1.7	-6.5	-1.2	-1.7
2004	0.2	-3.7	-1.3	3.2	-0.4
2005	-0.6	1.9	5.7	-4.1	0.7
2006	-0.5	3.7	2.6	-3.8	0.5
2007	0.6	-6.0	8.5	-0.4	0.8
2008	0.6	-3.5	-6.2	0.7	-2.3
2009	-0.0	-2.6	-5.8	1.3	-1.8
2010	0.8	2.8	-0.2	-0.7	0.6
2011	-0.2	7.6	-4.6	-0.4	0.6
2012	-0.5	6.8	3.6	-1.5	2.0
2013	0.1	12.1	6.2	5.4	6.0
2014	1.0	-16.5	-7.5	-1.5	-6.2
2015	0.3	-22.2			

**Table D–2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek

Variable: Rainfall, in millimeters per hour

File name: AK102\_rain\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	0.6	NaN
2007	0.0	NaN	0.5	0.3	0.5
2008	0.0	0.0	1.0	0.3	1.0
2009	0.0	NaN	1.1	0.2	1.1
2010	0.0	0.0	8.9	1.0	8.9
2011	0.0	0.0	2.3	1.0	2.3
2012	0.0	0.0	5.6	1.3	5.6
2013	0.0	0.0	2.5	1.8	2.5
2014	0.0	NaN	2.0	2.0	2.0
2015	0.0	NaN			

Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	16.3	100.0	37.5
2007	100.0	93.5	97.8	100.0	97.8
2008	100.0	95.7	100.0	100.0	98.9
2009	100.0	93.5	100.0	100.0	98.4
2010	100.0	96.7	96.7	100.0	98.4
2011	100.0	100.0	98.9	100.0	99.7
2012	100.0	96.7	96.7	100.0	98.4
2013	100.0	100.0	100.0	98.9	99.7
2014	100.0	89.1	97.8	100.0	96.7
2015	100.0	94.6			

Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	4.1	NaN
2007	0.0	NaN	6.9	2.2	9.1
2008	0.0	0.0	26.2	4.4	30.6
2009	0.0	NaN	33.5	4.3	37.8
2010	0.0	0.0	62.5	6.6	69.1
2011	0.0	0.0	29.0	36.1	65.0
2012	0.0	0.0	57.7	29.0	86.6
2013	0.0	0.0	25.7	23.4	49.0
2014	0.0	NaN	54.4	32.0	86.4
2015	0.0	NaN			

**Table D-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
 Variable: Snow depth, in centimeters  
 File name: AK102\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	5.9	NaN
1999	NaN	NaN	NaN	6.4	NaN
2000	NaN	22.0	4.7	7.6	11.7
2001	15.3	NaN	NaN	11.5	NaN
2002	17.9	23.8	4.2	7.5	13.3
2003	14.2	17.9	4.7	9.3	11.9
2004	21.7	25.0	5.6	10.0	15.0
2005	14.3	19.4	4.9	9.3	12.5
2006	19.6	27.5	8.0	9.4	16.1
2007	17.7	26.9	NaN	5.8	15.1
2008	17.9	34.0	5.3	18.1	20.1
2009	30.7	34.9	6.1	10.9	20.1
2010	22.5	27.5	8.0	12.1	17.5
2011	NaN	NaN	NaN	9.3	NaN
2012	27.6	37.3	6.7	14.5	22.2
2013	26.4	35.0	8.2	13.6	20.9
2014	28.6	29.2	6.1	13.9	19.1
2015	25.9	31.9			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	13.9	NaN
1999	NaN	NaN	NaN	15.8	NaN
2000	NaN	33.1	24.2	14.5	33.1
2001	17.4	NaN	NaN	20.7	NaN
2002	24.6	34.2	6.9	19.4	34.2
2003	26.0	26.3	14.7	19.2	26.3
2004	30.0	28.9	15.4	15.5	30.0
2005	18.4	25.0	16.6	23.3	25.0
2006	26.8	33.2	16.7	16.6	33.2
2007	24.0	35.2	NaN	17.3	35.2
2008	32.2	52.3	13.4	39.3	52.3
2009	45.7	41.8	13.3	19.5	45.7
2010	33.3	33.5	23.1	29.3	33.5
2011	NaN	NaN	NaN	19.3	NaN
2012	43.3	45.4	28.2	34.1	45.4
2013	34.2	49.2	16.0	34.9	49.2
2014	35.7	39.1	10.7	24.9	39.1
2015	38.0	45.5			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	1.1	NaN
1999	NaN	NaN	NaN	0.9	NaN
2000	NaN	12.5	-2.7	1.0	-2.7
2001	7.8	NaN	NaN	3.1	NaN
2002	14.4	3.2	-0.7	2.5	-0.7
2003	9.2	10.7	-2.7	-0.7	-2.7
2004	16.4	15.2	-1.4	3.0	-1.4
2005	10.6	15.6	-1.4	-2.2	-2.2
2006	13.7	10.8	-1.8	-1.0	-1.8
2007	11.9	19.5	NaN	-0.9	-0.9
2008	8.4	5.7	-2.4	-1.3	-2.4
2009	23.4	13.2	-1.5	0.8	-1.5
2010	12.8	21.2	-0.6	2.9	-0.6
2011	NaN	NaN	NaN	-0.1	NaN
2012	12.0	27.5	-2.0	0.0	-2.0
2013	21.8	23.4	-1.4	-0.1	-1.4
2014	23.4	1.5	-0.7	-0.9	-0.9
2015	19.1	0.5			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-4.4	NaN
1999	NaN	NaN	NaN	-3.9	NaN
2000	NaN	-5.6	-1.7	-2.7	-5.0
2001	-5.9	NaN	NaN	1.2	NaN
2002	-3.3	-3.8	-2.2	-2.9	-3.4
2003	-6.9	-9.7	-1.8	-1.0	-4.9
2004	0.5	-2.6	-0.8	-0.3	-1.7
2005	-6.9	-8.2	-1.6	-1.0	-4.3
2006	-1.6	-0.1	1.6	-0.9	-0.7
2007	-3.5	-0.7	NaN	-4.5	-1.6
2008	-3.3	6.4	-1.1	7.8	3.3
2009	9.5	7.3	-0.3	0.6	3.3
2010	1.4	-0.1	1.6	1.8	0.8
2011	NaN	NaN	NaN	-1.0	NaN
2012	6.4	9.7	0.2	4.2	5.4
2013	5.2	7.3	1.8	3.3	4.2
2014	7.4	1.6	-0.3	3.6	2.4
2015	4.7	4.3			

**Table D–2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	100.0	0.0
1999	75.6	60.9	71.7	85.7	66.0
2000	39.6	97.8	98.9	97.8	90.7
2001	98.9	26.1	32.6	100.0	64.4
2002	100.0	100.0	100.0	96.7	98.9
2003	95.6	98.9	89.1	100.0	95.9
2004	97.8	100.0	100.0	100.0	99.7
2005	84.4	100.0	100.0	100.0	96.2
2006	100.0	100.0	98.9	100.0	99.7
2007	100.0	92.4	32.6	100.0	81.1
2008	100.0	100.0	100.0	100.0	100.0
2009	98.9	100.0	100.0	100.0	99.7
2010	100.0	100.0	100.0	93.4	94.5
2011	18.9	27.2	35.9	100.0	49.3
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	92.4	84.8	98.9	93.2
2014	96.7	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table D–2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Fish Creek  
Variable: Soil moisture, in water fraction by volume

File name: AK102\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.32	NaN	2003	NaN	NaN	NaN	0.02	NaN
2004	NaN	NaN	0.34	0.28	NaN	2004	NaN	NaN	0.05	0.02	NaN
2005	NaN	NaN	0.30	0.24	NaN	2005	NaN	NaN	0.04	0.02	NaN
2006	NaN	NaN	0.35	0.27	NaN	2006	NaN	NaN	0.04	0.01	NaN
2007	NaN	NaN	0.28	0.21	NaN	2007	NaN	NaN	0.01	0.02	NaN
2008	NaN	NaN	0.35	0.29	NaN	2008	NaN	NaN	0.04	0.00	NaN
2009	NaN	NaN	0.36	0.32	NaN	2009	NaN	NaN	0.02	0.03	NaN
2010	NaN	NaN	0.27	0.33	NaN	2010	NaN	NaN	0.04	0.09	NaN
2011	0.03	NaN	0.31	0.33	0.18	2011	0.01	NaN	0.05	0.03	0.01
2012	NaN	NaN	0.32	0.39	NaN	2012	NaN	NaN	0.04	0.12	NaN
2013	NaN	NaN	0.33	0.37	NaN	2013	NaN	NaN	0.04	0.08	NaN
2014	NaN	NaN	0.30	0.34	NaN	2014	NaN	NaN	0.05	0.04	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table D-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN	1998	0.00	0.00	0.00	0.00	0.00
1999	NaN	NaN	NaN	NaN	NaN	1999	0.00	0.00	0.00	0.00	0.00
2000	NaN	NaN	NaN	NaN	NaN	2000	0.00	0.00	0.00	0.00	0.00
2001	NaN	NaN	NaN	NaN	NaN	2001	0.00	0.00	0.00	0.00	0.00
2002	NaN	NaN	NaN	NaN	NaN	2002	0.00	0.00	0.00	0.00	0.00
2003	NaN	NaN	NaN	0.41	NaN	2003	0.00	0.00	21.74	100.00	37.53
2004	NaN	NaN	0.41	0.40	NaN	2004	39.56	33.70	100.00	100.00	65.85
2005	NaN	NaN	0.41	0.40	NaN	2005	31.11	38.04	100.00	100.00	71.23
2006	NaN	NaN	0.41	0.40	NaN	2006	68.89	33.70	96.74	100.00	74.79
2007	NaN	NaN	0.41	0.39	NaN	2007	41.11	42.39	98.91	100.00	70.68
2008	NaN	NaN	0.41	0.40	NaN	2008	43.96	46.74	100.00	97.80	63.66
2009	NaN	NaN	0.41	0.41	NaN	2009	0.00	13.04	100.00	100.00	61.92
2010	NaN	NaN	0.41	0.41	NaN	2010	57.78	53.26	100.00	100.00	77.81
2011	0.09	NaN	0.41	0.41	0.41	2011	97.78	85.87	100.00	100.00	95.89
2012	NaN	NaN	0.41	0.41	NaN	2012	74.73	47.83	97.83	100.00	80.05
2013	NaN	NaN	0.41	0.41	NaN	2013	63.33	41.30	100.00	100.00	76.16
2014	NaN	NaN	0.41	0.41	NaN	2014	91.11	83.70	100.00	100.00	93.70
2015	NaN	NaN				2015	82.22	93.48			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.01	NaN
2004	NaN	NaN	0.02	-0.02	NaN
2005	NaN	NaN	-0.02	-0.07	NaN
2006	NaN	NaN	0.03	-0.03	NaN
2007	NaN	NaN	-0.04	-0.09	NaN
2008	NaN	NaN	0.03	-0.01	NaN
2009	NaN	NaN	0.04	0.02	NaN
2010	NaN	NaN	-0.05	0.03	NaN
2011	NaN	NaN	-0.01	0.02	NaN
2012	NaN	NaN	-0.00	0.08	NaN
2013	NaN	NaN	0.01	0.06	NaN
2014	NaN	NaN	-0.02	0.03	NaN
2015	NaN	NaN			

**Table D-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## E. Awuna1

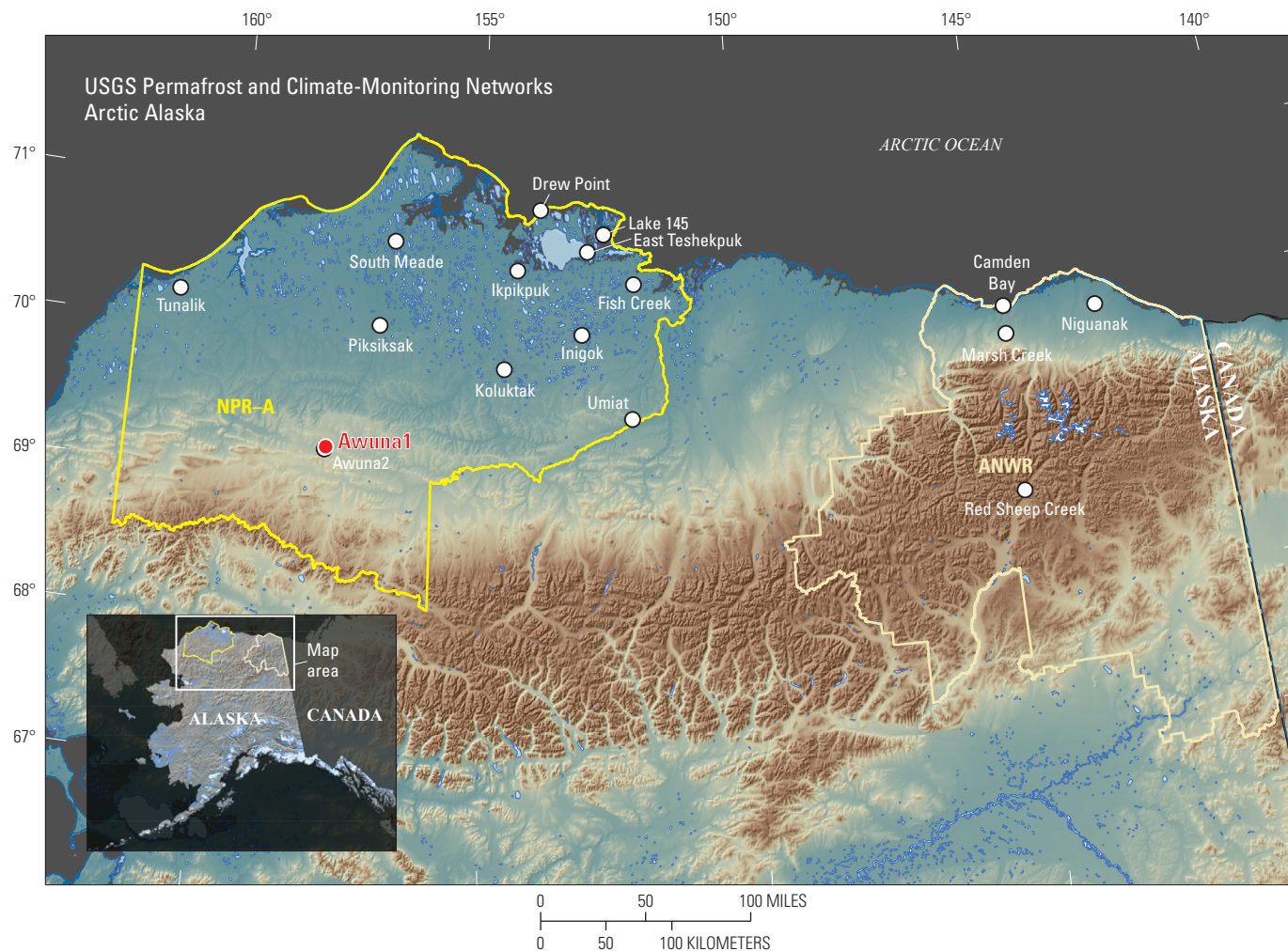
GTN-P code: U23

Latitude: 69°10.226'N

Longitude: 158°00.402'W

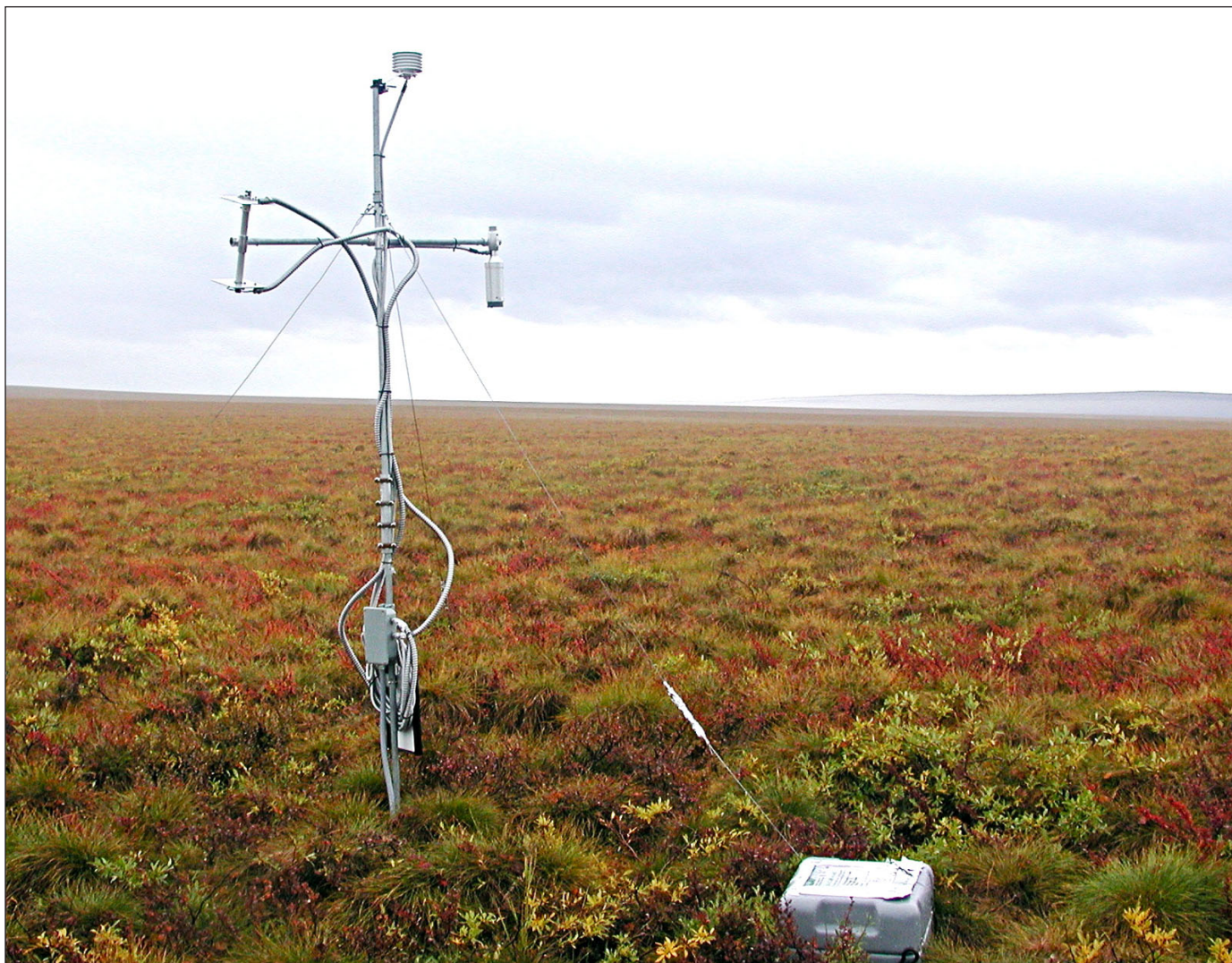
Elevation: 362 meters above mean sea level

Installation date: 19 AUG 1998



**Figure E-1.** Location map presenting the specific location of the Awuna1 site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure E–2.** Awuna1 station in summer 2008.

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table E–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awunal  
 Variable: Air temperature, in degrees Celsius  
 File name: AK103\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.88	-6.26	-16.70	-21.38
1999	-28.64	-26.59	-28.58	-17.86	-3.29	8.67	11.46	8.36	0.94	-13.41	-21.52	-32.26
2000	-25.39	-22.78	-26.74	-17.73	-7.62	8.68	8.56	8.32	-0.75	-10.18	-20.05	-22.09
2001	-23.90	-18.10	-27.74	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.49	-6.71	-14.90	-21.10
2003	-22.89	-26.54	-23.39	-11.01	-4.84	8.59	8.72	5.38	-1.43	-5.11	-15.83	-23.41
2004	-26.42	-33.68	-26.62	-15.48								

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.07	-20.41	-28.32	-39.76
1999	-46.16	-40.53	-39.80	-37.29	-20.91	-3.63	-1.01	-3.18	-18.16	-25.74	-33.65	-46.12
2000	-40.60	-41.65	-36.24	-32.47	-19.78	-5.54	-1.92	-3.20	-13.14	-25.30	-33.56	-40.74
2001	-39.63	-41.19	-38.94	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.51	-24.17	-30.74	-38.87
2003	-40.67	-38.84	-35.39	-27.15	-17.77	-3.42	-1.45	-1.76	-13.61	-21.84	-34.85	-35.68
2004	-43.60	-46.07	-41.40	-33.58								

### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.00	1.90	1.11	-0.57
1999	-3.92	-10.13	-13.59	1.47	15.36	22.07	25.33	25.75	13.78	-3.63	-12.13	-12.94
2000	-8.34	0.48	-6.49	-2.69	6.61	19.94	19.88	26.30	10.61	-2.88	-1.58	-0.52
2001	-3.97	-2.86	-15.40	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.51	3.20	0.21	-1.41
2003	-0.45	-9.37	-2.70	2.75	6.21	20.70	22.20	21.42	10.50	8.35	3.57	-3.15
2004	-3.55	-3.43	-2.47	2.25								



**Table E-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.25	2.08	1.10	2.67
1999	-3.19	-1.05	-1.96	NaN	NaN	NaN	NaN	NaN	0.32	-5.08	-3.72	-8.21
2000	0.06	2.76	-0.12	NaN	NaN	NaN	NaN	NaN	-1.37	-1.85	-2.25	1.96
2001	1.55	7.44	-1.13	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.87	1.62	2.90	2.95
2003	2.55	-1.00	3.22	NaN	NaN	NaN	NaN	NaN	-2.06	3.22	1.96	0.63
2004	-0.97	-8.14	-0.01	NaN								

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.73	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	6.67	0.00	69.72	0.00	88.44	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.73	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00								

**Table E-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
Variable: Ground temperature, in degrees Celsius

File name: AK103\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.06	-0.07	-0.52	-2.40
1999	-7.66	-11.85	-12.95	-12.32	-6.45	NaN	NaN	NaN	1.34	-0.45	-3.41	-9.49
2000	-11.40	-11.16	-12.76	-12.09	-8.94	-0.01	1.98	2.10	0.63	-0.07	-1.30	-5.59
2001	-9.27	-8.75	-11.62	NaN	NaN	-0.64	1.53	NaN	0.83	-0.08	-0.44	-3.14
2002	-7.62	-10.66	-9.97	-9.96	NaN	NaN	NaN	NaN	0.77	-0.06	-0.60	-3.42
2003	-7.26	-9.01	-9.55	-8.98	-6.06	-0.50	1.72	1.89	0.35	-0.07	-0.42	-5.77
2004	-9.21	-12.92	-14.21	-13.18								

**Table E-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	-0.17	-1.18	-4.37
1999	-11.94	-13.87	-14.99	-15.06	-11.07	NaN	NaN	NaN	-0.10	-1.57	-5.04	-11.56
2000	-12.93	-12.35	-13.52	-13.14	-10.69	-3.21	0.23	0.35	-0.10	-0.21	-2.94	-8.24
2001	-10.49	-9.99	-12.75	NaN	NaN	-6.34	0.08	NaN	-0.10	-0.15	-1.14	-5.41
2002	-9.88	-11.58	-11.02	-11.06	NaN	NaN	NaN	NaN	-0.07	-0.11	-1.43	-6.88
2003	-8.44	-9.82	-10.76	-10.31	-7.31	-4.28	0.40	0.71	-0.10	-0.12	-1.66	-8.42
2004	-11.59	-14.43	-15.14	-15.06								

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.26	-0.00	-0.09	-1.10
1999	-4.42	-10.61	-11.25	-11.05	-0.34	NaN	NaN	NaN	3.35	0.01	-1.55	-5.11
2000	-10.84	-9.43	-11.92	-10.73	-3.51	2.15	4.31	4.55	2.83	-0.02	-0.13	-3.00
2001	-8.28	-8.19	-9.99	NaN	NaN	0.81	3.57	NaN	1.97	-0.02	-0.07	-1.16
2002	-5.07	-9.87	-9.19	-8.69	NaN	NaN	NaN	NaN	3.36	0.19	-0.06	-0.91
2003	-6.59	-8.08	-8.42	-6.59	-4.43	1.26	3.37	3.97	2.01	0.00	-0.05	-1.72
2004	-6.47	-11.33	-12.37	-10.90								

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.23	0.06	0.60	2.57
1999	1.08	-1.13	-1.11	-1.01	NaN	NaN	NaN	NaN	0.51	-0.32	-2.29	-4.53
2000	-2.67	-0.44	-0.91	-0.79	NaN	NaN	NaN	NaN	-0.20	0.06	-0.19	-0.62
2001	-0.53	1.98	0.22	NaN	NaN	NaN	NaN	NaN	-0.00	0.06	0.67	1.83
2002	1.11	0.06	1.87	1.34	NaN	NaN	NaN	NaN	-0.06	0.07	0.52	1.55
2003	1.48	1.72	2.30	2.33	NaN	NaN	NaN	NaN	-0.48	0.06	0.69	-0.80
2004	-0.47	-2.20	-2.36	-1.87								

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	31.67	0.00	13.71	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.46	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	6.39	0.00	97.22	100.00	89.25	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	27.69	0.00	0.00	74.46	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.79	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00								

**Table E-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.21	-1.07	-1.00	-0.96
1999	-3.12	-7.11	-8.92	-10.12	-8.65	NaN	NaN	NaN	-1.25	-1.09	-1.01	-3.76
2000	-7.42	-8.55	-9.63	-10.32	-9.31	-5.51	-3.01	-2.00	-1.50	-1.29	-1.18	-2.73
2001	-5.90	-6.91	-8.31	NaN	NaN	-5.42	-2.94	NaN	-1.51	-1.32	-1.19	-1.61
2002	-4.40	-7.08	-8.05	-8.45	NaN	NaN	NaN	NaN	-1.35	-1.19	-1.09	-1.68
2003	-4.50	-6.24	-7.33	-8.01	-6.84	-4.25	-2.43	-1.65	-1.34	-1.18	-1.08	-2.38
2004	-5.62	-8.76	-10.84	-11.37								

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.34	-1.17	-1.04	-1.13
1999	-5.26	-7.88	-9.89	-10.35	-9.82	NaN	NaN	NaN	-1.45	-1.22	-1.30	-6.17
2000	-8.28	-8.92	-10.33	-10.48	-10.05	-8.53	-3.79	-2.44	-1.65	-1.38	-1.24	-4.38
2001	-6.63	-7.18	-9.37	NaN	NaN	-8.32	-3.79	NaN	-1.74	-1.41	-1.30	-2.86
2002	-5.80	-7.96	-8.26	-8.58	NaN	NaN	NaN	NaN	-1.53	-1.27	-1.14	-3.05
2003	-5.39	-7.00	-7.98	-8.17	-7.49	-6.09	-3.09	-2.01	-1.48	-1.28	-1.17	-4.29
2004	-7.46	-10.10	-11.19	-11.71								

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.08	-1.02	-0.93	-0.89
1999	-1.13	-5.26	-7.88	-9.79	-5.91	NaN	NaN	NaN	-1.11	-1.00	-0.89	-1.30
2000	-6.17	-8.28	-8.92	-10.05	-8.53	-3.73	-2.37	-1.63	-1.34	-1.22	-1.11	-1.22
2001	-4.38	-6.62	-7.18	NaN	NaN	-3.77	-2.19	NaN	-1.38	-1.26	-1.14	-1.13
2002	-2.86	-5.79	-7.90	-8.21	NaN	NaN	NaN	NaN	-1.19	-1.09	-1.04	-1.04
2003	-3.10	-5.39	-7.00	-7.48	-6.09	-3.02	-1.94	-1.38	-1.21	-1.11	-1.02	-1.02
2004	-4.29	-7.44	-10.10	-10.88								

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.15	0.12	0.09	1.23
1999	2.04	0.33	-0.07	-0.47	NaN	NaN	NaN	NaN	0.11	0.10	0.09	-1.58
2000	-2.26	-1.11	-0.78	-0.67	NaN	NaN	NaN	NaN	-0.14	-0.10	-0.09	-0.55
2001	-0.74	0.53	0.54	NaN	NaN	NaN	NaN	NaN	-0.15	-0.13	-0.10	0.58
2002	0.76	0.36	0.79	1.20	NaN	NaN	NaN	NaN	0.01	-0.00	-0.00	0.51
2003	0.66	1.20	1.51	1.64	NaN	NaN	NaN	NaN	0.02	0.01	0.01	-0.20
2004	-0.46	-1.32	-1.99	-1.71								

**Table E–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	31.67	0.00	13.71	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.46	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	6.39	0.00	97.22	100.00	89.25	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	27.69	0.00	0.00	74.46	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.79	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00								

**Table E–1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
Variable: Incident solar flux, in watts per meter squared

File name: AK103\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	65.9	23.3	2.5	0.1
2001	1.2	18.4	76.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	66.4	21.3	1.5	0.1
2003	1.3	16.7	82.9	166.4	246.2	292.3	173.4	109.9	66.9	19.8	3.2	0.1
2004	1.2	15.6	83.6	184.4								

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN								

**Table E-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	100.0	100.0	100.0	100.0
2001	100.0	99.7	99.2	6.7	0.0	69.4	0.0	88.4	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.7	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.8	100.0	100.0	100.0	100.0
2004	99.7	100.0	99.9	99.9								

**Table E-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1

Variable: Reflected solar flux, in watts per meter squared

File name: AK103\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	18.0	21.6	2.7	0.0
1999	1.2	14.1	77.5	157.3	205.0	48.8	57.2	28.9	19.3	19.0	3.1	0.1
2000	1.0	17.2	78.2	169.0	234.5	95.0	42.0	27.2	26.9	25.8	2.8	0.1
2001	1.1	18.2	76.6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	19.6	15.1	2.0	0.0
2003	1.1	14.9	73.3	146.8	211.3	102.2	43.9	27.3	30.6	13.3	2.9	-0.0
2004	0.9	14.9	69.8	163.2								

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.8	2.7	0.0	-0.0
1999	0.1	-1.7	2.5	NaN	NaN	NaN	NaN	NaN	-3.6	0.0	0.4	0.0
2000	-0.1	1.3	3.1	NaN	NaN	NaN	NaN	NaN	4.0	6.8	0.1	0.1
2001	0.1	2.3	1.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.3	-3.8	-0.7	-0.0
2003	0.0	-0.9	-1.8	NaN	NaN	NaN	NaN	NaN	7.7	-5.6	0.2	-0.1
2004	-0.1	-1.0	-5.3	NaN								

**Table E-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.2	100.0	100.0
1999	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2000	100.0	100.0	99.7	100.0	100.0	99.4	100.0	99.7	100.0	100.0	100.0	100.0
2001	100.0	99.7	100.0	6.7	0.0	69.4	0.0	88.4	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.7	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0								

**Table E-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Awuna1

Variable: Snow depth, in centimeters

File name: AK103\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	17.1	15.1	12.3	21.7	32.8
2001	39.8	44.0	46.8	NaN	NaN	NaN	NaN	2.6	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	15.5	6.5	6.9	11.2	24.2
2003	33.6	50.8	61.5	59.0	57.7	17.5	12.6	11.6	3.0	11.0	31.5	41.8
2004	40.9	43.1	47.9	50.0								

Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.2	-0.8	4.8	14.2	29.1
2001	32.1	38.4	43.2	NaN	NaN	NaN	NaN	0.2	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.1	-0.0	-0.5	3.6	12.8
2003	27.0	35.8	57.4	55.8	53.6	1.6	9.3	4.8	0.3	0.1	16.7	40.4
2004	39.7	40.4	43.4	46.1								

**Table E-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	24.8	25.4	21.1	33.3	34.0
2001	47.0	48.3	53.9	NaN	NaN	NaN	NaN	5.4	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	19.8	12.4	14.0	20.0	28.8
2003	40.6	60.4	64.3	64.2	63.3	52.5	17.1	19.3	6.1	24.2	42.7	45.0
2004	42.1	48.6	52.7	53.3								

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN								

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	96.7	100.0	100.0	100.0
2001	98.4	100.0	100.0	5.0	0.0	0.0	0.0	85.5	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.2	98.3	98.4	100.0	100.0
2003	100.0	92.9	100.0	100.0	100.0	98.3	95.2	93.5	100.0	100.0	96.7	100.0
2004	100.0	96.6	95.2	98.3								

**Table E-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



**Table E-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
 Variable: Air temperature, in degrees Celsius  
 File name: AK103\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-7.02	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	-25.50	-16.56	9.50	-11.35	-11.82	1999	100.00	100.00	100.00	100.00	100.00
2000	-26.90	-17.36	8.52	-10.32	-10.62	2000	100.00	100.00	99.91	100.00	99.98
2001	-21.47	NaN	NaN	NaN	NaN	2001	100.00	35.87	52.54	0.00	38.45
2002	NaN	NaN	NaN	-6.38	NaN	2002	0.00	0.00	25.18	100.00	39.77
2003	-23.41	-13.10	7.35	-7.43	-9.51	2003	100.00	100.00	100.00	100.00	100.00
2004	-27.71					2004	100.00				
Minimum Value Each Season/Year:											
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL						
1998	NaN	NaN	NaN	-28.32	NaN						
1999	-46.16	-39.80	-3.63	-33.65	-46.16						
2000	-46.12	-36.24	-5.54	-33.56	-41.65						
2001	-41.19	NaN	NaN	NaN	NaN						
2002	NaN	NaN	NaN	-30.74	NaN						
2003	-40.67	-35.39	-3.42	-34.85	-40.67						
2004	-46.07										
Maximum Value Each Season/Year:											
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL						
1998	NaN	NaN	NaN	13.00	NaN						
1999	-0.57	15.36	25.75	13.78	25.75						
2000	0.48	6.61	26.30	10.61	26.30						
2001	-0.52	NaN	NaN	NaN	NaN						
2002	NaN	NaN	NaN	12.51	NaN						
2003	-0.45	6.21	22.20	10.50	22.20						
2004	-3.15										
Anomaly Relative to the Climatological Mean:											
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL						
1998	NaN	NaN	NaN	1.48	NaN						
1999	-0.50	NaN	NaN	-2.85	NaN						
2000	-1.90	NaN	NaN	-1.82	NaN						
2001	3.53	NaN	NaN	NaN	NaN						
2002	NaN	NaN	NaN	2.13	NaN						
2003	1.59	NaN	NaN	1.07	NaN						
2004	-2.71										

**Table E-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
Variable: Ground temperature, in degrees Celsius

File name: AK103\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

#### Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	0.15	NaN
1999	-7.15	-10.55	NaN	-0.83	NaN
2000	-10.68	-11.25	1.37	-0.24	-4.87
2001	-7.84	NaN	0.95	0.10	NaN
2002	-7.03	NaN	NaN	0.04	NaN
2003	-6.48	-8.19	1.13	-0.05	-2.99
2004	-9.22				

#### Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-1.18	NaN
1999	-13.87	-15.06	NaN	-5.04	NaN
2000	-12.93	-13.52	-3.21	-2.94	-13.52
2001	-10.49	NaN	-6.34	-1.14	NaN
2002	-11.58	NaN	NaN	-1.43	NaN
2003	-9.82	-10.76	-4.28	-1.66	-10.76
2004	-14.43				

#### Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	3.26	NaN
1999	-1.10	-0.34	NaN	3.35	NaN
2000	-5.11	-3.51	4.55	2.83	4.55
2001	-3.00	NaN	3.57	1.97	NaN
2002	-1.16	NaN	NaN	3.36	NaN
2003	-0.91	-4.43	3.97	2.01	3.97
2004	-1.72				

#### Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	0.29	NaN
1999	0.91	NaN	NaN	-0.70	NaN
2000	-2.61	NaN	NaN	-0.11	NaN
2001	0.23	NaN	NaN	0.24	NaN
2002	1.04	NaN	NaN	0.18	NaN
2003	1.59	NaN	NaN	0.09	NaN
2004	-1.16				

#### Percent of Data Available during Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	14.95	100.00	78.56
2000	100.00	100.00	99.82	100.00	99.95
2001	100.00	35.78	95.47	100.00	82.67
2002	100.00	75.63	25.09	100.00	74.98
2003	100.00	100.00	99.92	100.00	99.98
2004	100.00				

#### Seasonal/Annual Averages (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-1.09	NaN
1999	-3.62	-9.22	NaN	-1.11	NaN
2000	-6.54	-9.75	-3.49	-1.32	-5.19
2001	-5.13	NaN	-3.44	-1.34	NaN
2002	-4.27	NaN	NaN	-1.21	NaN
2003	-4.07	-7.39	-2.66	-1.20	-3.28
2004	-5.52				

**Table E-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.34	NaN
1999	-7.88	-10.35	NaN	-1.45	NaN
2000	-8.92	-10.48	-8.53	-1.65	-10.48
2001	-7.18	NaN	-8.32	-1.74	NaN
2002	-7.96	NaN	NaN	-1.53	NaN
2003	-7.00	-8.17	-6.09	-1.48	-8.17
2004	-10.10				

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-0.93	NaN
1999	-0.89	-5.91	NaN	-0.89	NaN
2000	-1.30	-8.53	-1.63	-1.11	-1.11
2001	-1.22	NaN	-1.54	-1.14	NaN
2002	-1.13	NaN	NaN	-1.04	NaN
2003	-1.04	-6.09	-1.38	-1.02	-1.02
2004	-1.02				

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	0.12	NaN
1999	1.24	NaN	NaN	0.10	NaN
2000	-1.68	NaN	NaN	-0.11	NaN
2001	-0.27	NaN	NaN	-0.13	NaN
2002	0.58	NaN	NaN	0.00	NaN
2003	0.79	NaN	NaN	0.01	NaN
2004	-0.66				

Percent of Data Available during Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	14.95	100.00	78.56
2000	100.00	100.00	99.82	100.00	99.95
2001	100.00	35.78	95.47	100.00	82.67
2002	100.00	75.63	25.09	100.00	74.98
2003	100.00	100.00	99.92	100.00	99.98
2004	100.00				

**Table E-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
 Variable: Incident solar flux, in watts per meter squared

File name: AK103\_So\_d\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	30.5	NaN
2001	6.1	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	29.6	NaN
2003	5.7	165.1	183.4	29.9	80.0
2004	5.4				

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	16.8	100.0	37.5
2001	99.9	35.6	52.4	0.0	38.3
2002	0.0	0.0	25.2	100.0	39.8
2003	100.0	100.0	99.8	100.0	100.0
2004	99.9				

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN				

**Table E-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna1

Variable: Reflected solar flux, in watts per meter squared

File name: AK103\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	14.2	NaN
1999	4.8	146.5	45.0	13.9	52.9
2000	5.9	160.5	54.2	18.6	60.0
2001	6.1	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	12.3	NaN
2003	5.0	143.8	54.5	15.6	44.4
2004	5.1				

#### Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	99.7	0.0
1999	100.0	99.9	100.0	100.0	100.0
2000	100.0	99.9	99.7	100.0	99.9
2001	99.9	35.9	52.4	0.0	38.4
2002	0.0	0.0	25.2	100.0	39.8
2003	100.0	100.0	100.0	100.0	100.0
2004	100.0				

#### Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-0.7	NaN
1999	-0.5	NaN	NaN	-1.0	NaN
2000	0.5	NaN	NaN	3.7	NaN
2001	0.7	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	-2.6	NaN
2003	-0.3	NaN	NaN	0.7	NaN
2004	-0.3				

**Table E-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Awuna1  
Variable: Snow depth, in centimeters

File name: AK103\_snowD\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	17.1	16.3	20.2
2001	38.7	46.6	2.6	NaN	34.3
2002	NaN	NaN	15.5	8.2	12.7
2003	35.4	59.4	13.9	15.0	32.7
2004	41.9				

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN				

## Minimum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	6.2	-0.8	-0.8
2001	29.1	40.2	0.2	NaN	0.2
2002	NaN	NaN	8.1	-0.5	-0.5
2003	12.8	53.6	1.6	0.1	0.1
2004	39.7				

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	16.3	98.9	37.2
2001	99.4	35.3	28.8	0.0	32.2
2002	0.0	0.0	17.9	98.9	37.7
2003	97.8	100.0	95.7	98.9	98.1
2004	98.9				

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	24.8	33.3	34.0
2001	48.3	53.9	5.4	NaN	53.9
2002	NaN	NaN	19.8	20.0	28.8
2003	60.4	64.3	52.5	42.7	64.3
2004	48.6				

**Table E-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table E-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## F. Umiat

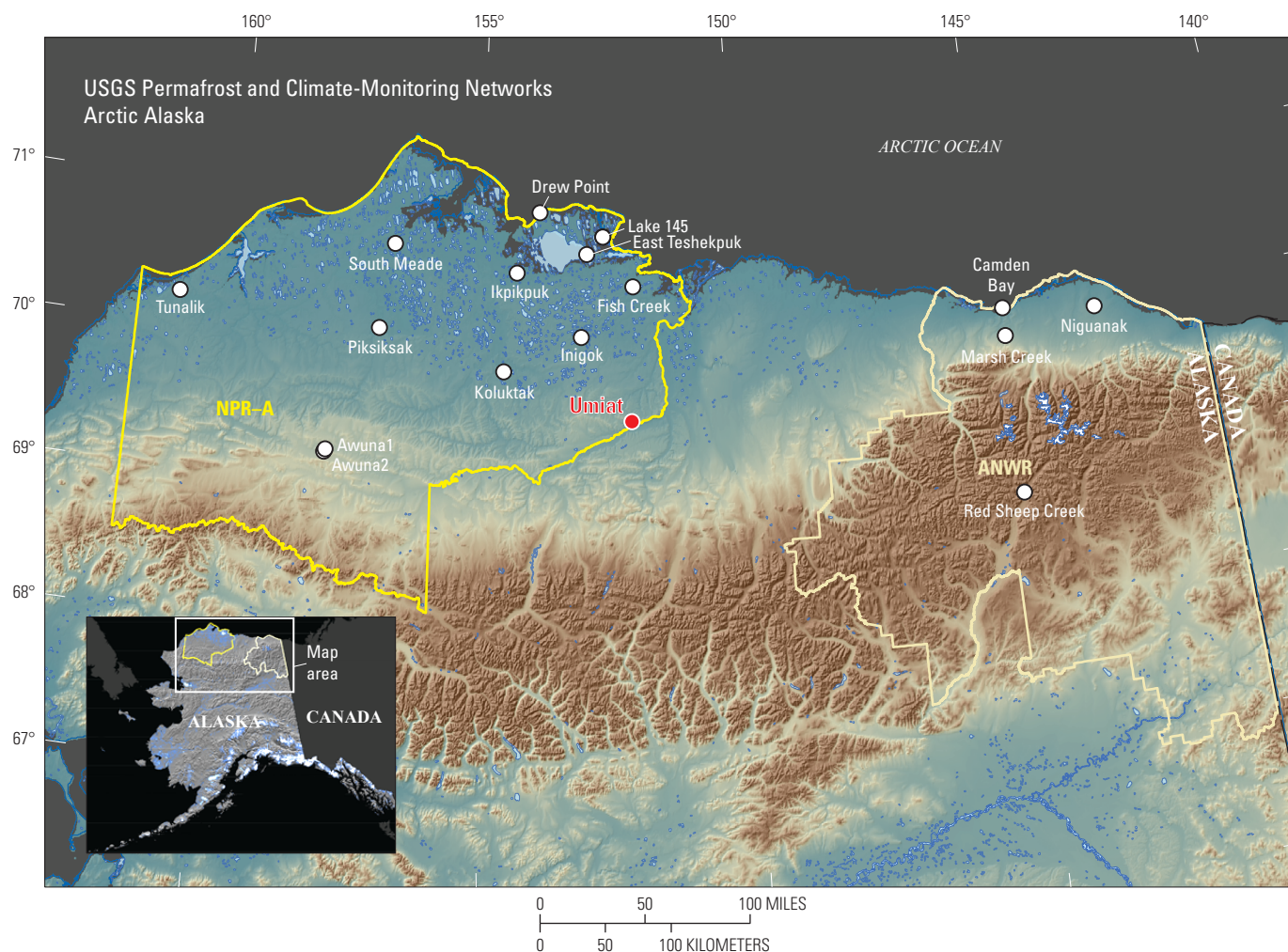
GTN-P code: U24

Latitude: 69°23.741'N

Longitude: 152°08.568'W

Elevation: 201 meters above mean sea level

Installation date: 20 AUG 1998



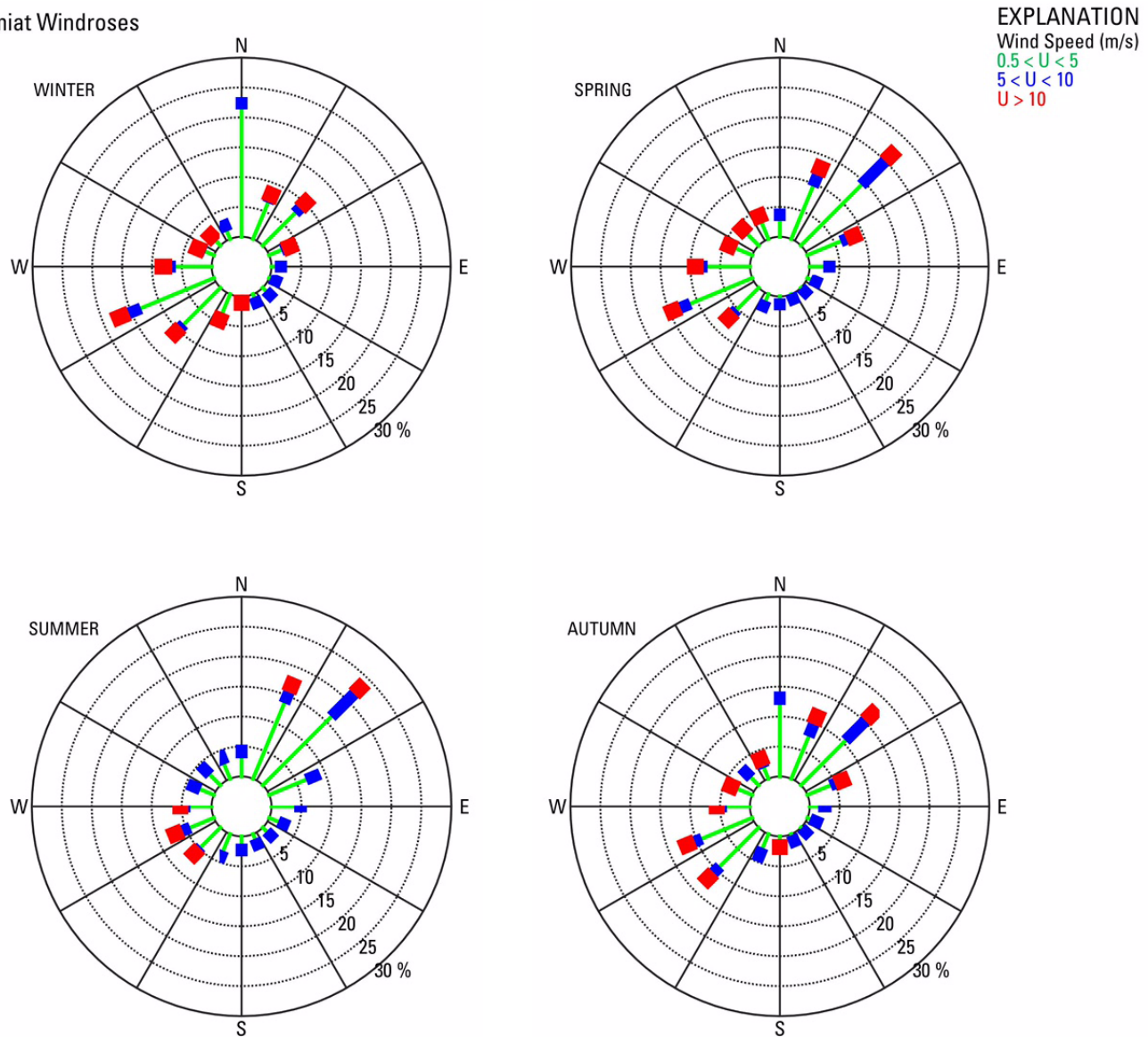
**Figure F–1.** Location map presenting the specific location of the Umiat site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure F-2.** Umiat station in summer 2008.

## Umiat Windroses



**Figure F-3.** Umiat seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table F-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
 Variable: Air temperature, in degrees Celsius  
 File name: AK104\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.91	-6.81	-15.57	-20.44
1999	-28.79	-28.08	-27.14	-17.33	-4.11	7.76	10.99	9.28	1.38	-13.10	-21.57	-31.49
2000	-24.70	-23.57	-27.25	-17.56	-7.99	8.83	9.77	6.17	0.21	-10.35	-19.06	-22.98
2001	-25.20	-18.47	-27.89	-16.24	-10.79	7.52	9.64	5.84	1.58	-14.63	-18.88	-25.19
2002	-27.11	-26.49	-17.33	-14.56	-0.90	6.70	10.54	NaN	3.74	-6.48	-14.48	-21.24
2003	-23.18	-26.49	-23.76	-11.04	-3.97	7.79	10.09	NaN	-0.68	-5.18	-16.62	-23.87
2004	-26.48	-33.88	-27.43	-16.45	-2.35	10.55	13.07	10.39	-0.72	-7.82	-18.69	-25.64
2005	-22.04	-26.41	-22.62	-15.80	-4.31	5.92	7.80	9.38	1.92	-9.40	-24.95	-23.59
2006	-27.82	-18.96	-27.27	-20.40	-2.92	NaN	NaN	NaN	4.81	-4.46	-17.41	-20.64
2007	-27.01	-23.98	-28.77	-13.84	-7.81	9.61	12.65	10.36	3.31	-10.81	-14.16	-20.40
2008	-27.45	-26.31	-28.33	-11.27	-2.89	10.70	11.83	4.63	-0.74	-9.97	-18.91	-17.51
2009	-25.42	-24.39	-29.10	-13.09	-0.60	8.21	12.51	7.02	0.76	-6.99	-22.77	-19.04
2010	NaN	NaN	NaN	NaN	-5.52	7.46	11.40	NaN	4.55	-9.77	-11.70	-25.55
2011	-22.45	-19.00	-17.59	-19.63	-3.16	6.88	11.23	8.12	1.88	-7.01	-22.98	-25.54
2012	-31.56	-23.46	-33.12	-15.80	-4.67	9.07	13.39	10.44	2.22	-4.29	-19.38	-26.57
2013	-28.02	-32.26	-24.14	-18.87	-5.02	11.07	12.20	8.00	-0.19	-4.39	-15.58	-20.38
2014	-21.30	-22.72	-19.67	-12.76	-0.55	6.38	9.63	6.71	1.01	-6.80	-13.63	-23.70
2015	-22.81	-19.83	-22.59	-13.63	2.39	11.31	9.60					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-6.05	-18.45	-24.88	-37.43
1999	-47.40	-42.89	-42.62	-36.28	-18.85	-1.92	-1.11	-3.13	-17.16	-24.78	-31.36	-43.41
2000	-35.34	-39.00	-35.34	-33.91	-17.87	-6.11	-2.18	-5.10	-10.72	-22.75	-31.15	-38.44
2001	-39.41	-43.69	-39.35	-30.69	-26.08	-2.74	-1.44	-2.56	-7.15	-30.09	-26.65	-39.41
2002	-41.10	-39.09	-33.55	-27.55	-18.75	-1.81	-1.30	NaN	-6.37	-17.87	-27.03	-39.87
2003	-39.77	-38.32	-35.24	-29.01	-13.47	-2.56	0.30	NaN	-9.27	-19.73	-34.83	-36.30
2004	-42.05	-43.13	-42.31	-32.28	-18.54	-1.97	1.77	-1.47	-10.06	-24.51	-29.74	-37.66
2005	-38.01	-36.44	-40.90	-32.70	-15.45	-4.03	-1.71	-4.54	-6.68	-21.67	-35.49	-38.26
2006	-42.66	-41.61	-37.05	-30.12	-18.90	NaN	NaN	NaN	-3.82	-17.30	-30.72	-33.71
2007	-41.68	-41.07	-43.18	-22.44	-21.32	-3.19	1.66	-0.76	-11.09	-22.21	-22.77	-40.44
2008	-41.68	-38.56	-43.26	-24.65	-13.15	-1.34	0.16	-1.65	-11.68	-18.54	-28.54	-33.69
2009	-37.14	-40.58	-41.29	-26.28	-13.00	-2.45	0.20	-0.95	-15.68	-19.32	-31.46	-39.51
2010	NaN	NaN	NaN	NaN	-18.26	-1.06	1.21	NaN	-10.83	-21.15	-24.16	-42.82
2011	-44.64	-37.31	-33.38	-31.48	-16.80	-5.08	1.94	-1.62	-5.18	-16.88	-38.01	-37.17
2012	-44.59	-42.98	-42.94	-30.89	-21.97	-1.62	4.53	2.30	-5.75	-18.50	-31.07	-39.15
2013	-37.52	-40.74	-34.52	-35.77	-26.50	-5.46	0.22	-4.10	-9.98	-13.52	-29.24	-38.77
2014	-37.98	-41.27	-36.89	-30.25	-9.06	-2.19	-0.54	-1.65	-6.12	-14.44	-29.39	-37.00
2015	-35.27	-37.06	-37.23	-27.56	-12.29	-4.44	0.32					

**Table F-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.34	2.80	0.11	0.18
1999	-2.63	-5.50	-8.99	3.39	6.51	25.25	26.29	28.79	17.49	-3.95	-10.63	-19.54
2000	-7.50	-2.60	-9.00	-2.10	7.98	24.80	23.60	23.98	17.09	-2.48	-2.74	-5.26
2001	-2.27	-2.63	-12.14	-0.30	4.72	23.80	24.21	17.44	15.24	0.57	-9.34	0.69
2002	-2.02	-5.27	-0.65	2.30	20.05	22.32	26.26	NaN	17.07	4.72	0.46	-2.20
2003	-5.75	-9.20	-1.25	7.60	8.33	23.94	25.36	NaN	12.10	13.05	2.30	-5.06
2004	-2.45	-19.81	-3.32	4.32	11.78	25.91	29.65	25.55	13.08	1.74	-0.81	-1.95
2005	1.47	-5.61	0.22	6.21	3.20	24.03	20.36	23.90	14.99	4.89	-12.29	-0.64
2006	-18.99	5.26	-15.85	-9.58	11.11	NaN	NaN	NaN	18.98	10.16	-2.34	-2.54
2007	-6.14	-0.45	-4.79	1.44	2.23	22.60	25.54	23.88	17.44	-2.80	-1.89	0.24
2008	3.88	-1.63	-1.57	4.14	10.18	24.42	25.66	16.87	9.49	-2.23	-9.92	0.78
2009	3.33	-1.61	-10.73	10.31	20.45	18.83	28.32	20.00	19.19	7.22	-12.17	-1.26
2010	NaN	NaN	NaN	NaN	9.13	22.77	25.68	NaN	18.83	-1.13	3.59	-8.30
2011	-0.36	-0.09	-2.52	-3.93	12.14	27.41	22.21	21.54	15.03	0.08	-3.73	-3.38
2012	-11.31	-1.41	-19.78	-4.27	10.07	23.65	25.18	19.70	15.82	7.93	-7.19	-10.73
2013	-10.32	-18.30	-11.15	-1.94	9.28	30.21	23.41	26.56	17.21	6.16	1.44	3.60
2014	-0.45	-2.07	-1.83	3.90	9.27	20.26	22.56	20.52	12.96	2.34	4.37	-4.13
2015	-7.40	-0.82	-3.75	3.89	20.14	26.69	28.00					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.38	1.33	2.35	2.94
1999	-3.40	-3.56	-2.02	-1.97	-0.59	-0.69	-0.03	1.41	-0.15	-4.96	-3.65	-8.11
2000	0.69	0.95	-2.13	-2.20	-4.47	0.37	-1.25	-1.70	-1.32	-2.21	-1.14	0.40
2001	0.19	6.06	-2.76	-0.88	-7.27	-0.94	-1.38	-2.04	0.05	-6.49	-0.96	-1.81
2002	-1.72	-1.97	7.80	0.79	2.63	-1.76	-0.48	NaN	2.21	1.66	3.44	2.14
2003	2.21	-1.97	1.36	4.32	-0.45	-0.66	-0.93	NaN	-2.21	2.95	1.30	-0.49
2004	-1.09	-9.36	-2.30	-1.09	1.17	2.09	2.05	2.52	-2.25	0.31	-0.77	-2.26
2005	3.35	-1.89	2.51	-0.44	-0.79	-2.54	-3.22	1.51	0.40	-1.26	-7.03	-0.21
2006	-2.43	5.56	-2.15	-5.04	0.61	NaN	NaN	NaN	3.29	3.68	0.52	2.75
2007	-1.62	0.54	-3.65	1.52	-4.28	1.16	1.63	2.49	1.78	-2.67	3.76	2.98
2008	-2.06	-1.78	-3.21	4.09	0.63	2.25	0.81	-3.24	-2.27	-1.83	-0.99	5.87
2009	-0.03	0.13	-3.97	2.27	2.92	-0.25	1.48	-0.85	-0.76	1.15	-4.85	4.34
2010	NaN	NaN	NaN	NaN	-2.00	-1.00	0.38	NaN	3.02	-1.63	6.22	-2.17
2011	2.94	5.52	7.54	-4.27	0.37	-1.58	0.21	0.24	0.36	1.13	-5.06	-2.16
2012	-6.17	1.06	-8.00	-0.44	-1.15	0.61	2.36	2.56	0.69	3.85	-1.46	-3.19
2013	-2.63	-7.74	0.99	-3.51	-1.49	2.62	1.18	0.13	-1.72	3.75	2.35	3.00
2014	4.09	1.80	5.46	2.60	2.98	-2.08	-1.39	-1.17	-0.52	1.34	4.30	-0.32
2015	2.58	4.70	2.54	1.73	5.92	2.85	-1.42					

**Table F-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.67	100.00
2006	100.00	100.00	100.00	100.00	100.00	83.33	16.13	67.74	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	96.67	96.77	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00
2010	22.58	0.00	0.00	43.33	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	96.67	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table F-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Wind speed, in meters per second

File name: AK104\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	3.58	3.93	3.52	2.60	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	1.80	NaN	NaN	NaN	NaN	2.21	NaN	NaN	NaN
2007	NaN	NaN	NaN	3.12	3.42	3.61	3.12	2.64	2.44	NaN	NaN	NaN
2008	3.12	NaN	NaN	3.02	4.02	3.25	3.21	2.82	2.54	NaN	NaN	NaN
2009	3.13	NaN	NaN	2.48	3.59	3.48	3.15	3.01	3.19	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	3.99	3.76	3.14	NaN	2.82	NaN	NaN	NaN
2011	NaN	5.01	NaN	3.45	2.57	4.11	2.86	2.98	3.37	NaN	2.93	2.62
2012	2.64	NaN	2.29	NaN	3.32	3.35	2.73	2.99	2.84	3.49	NaN	NaN
2013	NaN	NaN	2.99	3.81	3.27	3.25	3.24	2.84	2.90	NaN	NaN	2.68
2014	NaN	3.11	2.26	2.40	3.49	3.21	2.99	3.21	3.55	NaN	NaN	NaN
2015	NaN	3.83	NaN	NaN	3.14	3.11	3.44					



**Table F-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	9.40	10.70	9.59	10.21	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	6.22	NaN	NaN	NaN	NaN	5.74	NaN	NaN	NaN
2007	NaN	NaN	NaN	10.87	8.50	7.54	6.78	7.70	7.46	NaN	NaN	NaN
2008	19.60	NaN	NaN	10.55	10.40	8.39	9.40	7.35	7.43	NaN	NaN	NaN
2009	12.35	NaN	NaN	12.55	10.20	7.55	8.09	9.75	10.19	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	10.48	8.56	7.34	NaN	6.16	NaN	NaN	NaN
2011	NaN	23.10	NaN	11.82	8.54	9.26	8.01	6.57	8.75	NaN	9.03	15.18
2012	11.91	NaN	9.26	NaN	8.62	8.30	7.23	9.33	7.59	10.03	NaN	NaN
2013	NaN	NaN	9.18	12.25	14.42	7.76	10.70	9.20	6.94	NaN	NaN	15.09
2014	NaN	15.15	11.04	8.18	12.08	8.12	7.67	8.16	9.54	NaN	NaN	NaN
2015	NaN	19.65	NaN	NaN	11.17	8.20	10.89					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	0.14	0.44	0.38	-0.33	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	-1.16	NaN	NaN	NaN	NaN	-0.66	NaN	NaN	NaN
2007	NaN	NaN	NaN	0.15	-0.02	0.11	-0.01	-0.29	-0.43	NaN	NaN	NaN
2008	NaN	NaN	NaN	0.05	0.58	-0.24	0.07	-0.11	-0.33	NaN	NaN	NaN
2009	NaN	NaN	NaN	-0.49	0.14	-0.01	0.01	0.08	0.32	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	0.54	0.27	-0.00	NaN	-0.05	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.48	-0.87	0.62	-0.28	0.04	0.49	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	-0.12	-0.14	-0.41	0.06	-0.03	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.85	-0.17	-0.24	0.10	-0.10	0.02	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.56	0.05	-0.28	-0.15	0.28	0.68	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	-0.30	-0.38	0.30					

**Table F-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	33.33	100.00	100.00	100.00	96.77	40.00	0.00	0.00	22.58
2006	0.00	67.86	93.55	100.00	87.10	80.00	16.13	67.74	100.00	93.55	63.33	38.71
2007	0.00	67.86	87.10	100.00	100.00	96.67	96.77	100.00	100.00	67.74	3.33	90.32
2008	100.00	75.86	90.32	100.00	96.77	100.00	100.00	100.00	100.00	90.32	36.67	61.29
2009	100.00	50.00	90.32	100.00	100.00	100.00	100.00	100.00	96.67	48.39	0.00	45.16
2010	22.58	0.00	0.00	43.33	100.00	100.00	100.00	83.87	100.00	74.19	73.33	0.00
2011	45.16	100.00	64.52	100.00	100.00	100.00	100.00	100.00	100.00	77.42	100.00	96.77
2012	96.77	62.07	100.00	90.00	100.00	100.00	100.00	100.00	96.67	100.00	73.33	32.26
2013	54.84	78.57	100.00	100.00	96.77	96.67	100.00	100.00	100.00	80.65	80.00	100.00
2014	64.52	96.43	100.00	100.00	100.00	100.00	100.00	96.77	100.00	80.65	56.67	22.58
2015	74.19	96.43	93.55	93.33	100.00	100.00	100.00					

**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
Variable: Ground temperature, in degrees Celsius

File name: AK104\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.32	-0.39	-2.80	-6.65
1999	-11.10	-14.00	-13.54	-12.61	-5.47	1.04	3.25	3.93	1.22	-0.83	-3.84	-11.60
2000	-13.53	-12.64	-14.66	-13.07	-9.21	0.16	2.87	2.12	0.63	-0.78	-5.49	-9.94
2001	-14.04	-12.86	-16.04	-13.37	-10.48	-0.03	2.43	2.23	0.87	-0.09	-1.56	-6.54
2002	-9.38	-12.23	-11.41	-10.82	-3.56	0.34	2.67	NaN	1.08	-0.12	-2.87	-8.22
2003	-11.46	-14.07	-13.90	-11.58	-5.23	0.31	2.07	NaN	0.33	-0.05	-0.95	-6.53
2004	-9.58	-13.38	-14.51	-12.92	-5.70	NaN	NaN	NaN	0.57	-0.19	-1.99	-10.29
2005	-11.46	-14.06	-14.20	-12.89	-6.91	0.04	1.81	2.76	0.88	-0.42	-4.02	-7.10
2006	-9.79	-11.02	-12.98	-12.30	-5.90	NaN	NaN	NaN	1.38	-0.10	-1.49	-5.50
2007	-11.65	-13.16	-16.82	-12.00	-8.94	0.18	2.71	2.97	1.14	-1.07	-3.76	-8.25
2008	-12.38	-13.92	-13.92	-11.11	-6.20	0.56	3.05	1.90	0.37	-0.05	-0.96	-4.24
2009	-9.95	-13.25	-14.66	-12.63	-1.92	0.40	2.60	2.22	0.84	-0.02	-2.47	NaN
2010	NaN	NaN	NaN	NaN	-7.23	-0.22	1.61	NaN	1.44	-0.34	-0.99	-4.78
2011	-8.79	-10.13	-10.44	-11.13	-5.76	0.01	2.20	2.61	1.17	-0.09	-1.63	-6.89
2012	-12.80	-12.79	-14.90	-12.81	-5.86	0.13	2.80	3.04	0.92	0.01	-0.47	-4.70
2013	-9.72	-13.57	-13.54	-12.88	NaN	NaN	2.46	2.74	0.63	-0.00	-0.38	-2.03
2014	-7.68	-9.48	-10.23	-9.76	-2.84	-0.04	2.07	2.25	0.39	-0.03	-1.07	-6.04
2015	-8.32	-10.00	-10.45	-9.77	NaN	0.51	2.18					



**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	-1.32	-4.61	-8.97
1999	-14.61	-15.86	-15.74	-15.74	-10.49	-0.41	1.16	0.53	-0.09	-1.88	-6.35	-14.74
2000	-15.10	-14.46	-15.38	-14.53	-11.18	-5.84	0.71	0.06	-0.07	-2.98	-7.48	-14.83
2001	-16.36	-15.10	-18.10	-15.68	-13.15	-6.17	0.16	0.70	-0.06	-0.43	-3.83	-8.35
2002	-11.56	-12.74	-12.57	-12.54	-9.60	-0.52	0.23	NaN	-0.03	-0.34	-6.30	-11.95
2003	-13.83	-15.31	-15.49	-14.28	-8.16	-0.65	0.78	NaN	-0.10	-0.15	-2.60	-8.19
2004	-12.16	-15.33	-15.83	-14.59	-10.59	NaN	NaN	NaN	-0.05	-0.94	-3.76	-13.61
2005	-14.10	-15.14	-16.88	-14.76	-9.86	-0.51	0.18	0.16	-0.08	-1.69	-6.37	-8.03
2006	-12.13	-12.58	-13.63	-13.42	-10.94	NaN	NaN	NaN	0.00	-0.56	-2.83	-9.73
2007	-12.73	-16.53	-17.81	-14.27	-11.11	-2.84	0.60	1.00	-0.25	-2.21	-6.24	-11.45
2008	-14.28	-15.65	-14.75	-13.55	-9.66	-0.42	1.51	0.93	-0.06	-0.22	-2.05	-6.86
2009	-12.82	-14.95	-16.70	-16.01	-4.54	-0.53	0.92	0.78	-0.04	-0.15	-4.82	NaN
2010	NaN	NaN	NaN	NaN	-9.37	-0.70	0.20	NaN	-0.07	-1.10	-1.50	-8.99
2011	-11.46	-10.95	-11.15	-12.48	-10.59	-0.51	0.31	1.23	-0.03	-0.56	-4.04	-11.26
2012	-15.69	-15.73	-15.55	-15.26	-10.56	-0.90	1.19	1.59	-0.01	-0.06	-1.60	-8.58
2013	-12.49	-14.93	-14.64	-14.24	NaN	NaN	0.78	0.41	-0.03	-0.06	-1.11	-5.74
2014	-9.52	-12.04	-10.68	-11.09	-8.09	-0.61	0.87	0.37	-0.06	-0.15	-2.29	-8.11
2015	-9.74	-11.31	-12.23	-10.82	NaN	-0.39	1.18					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.87	0.08	-1.02	-4.30
1999	-8.97	-12.50	-12.62	-10.58	-0.10	3.72	5.22	7.29	3.89	-0.04	-1.83	-6.44
2000	-12.55	-10.51	-14.13	-11.18	-6.14	4.06	5.04	5.86	3.05	0.00	-2.30	-7.53
2001	-12.75	-11.22	-13.73	-12.25	-5.26	2.16	5.14	4.32	2.53	0.02	-0.41	-3.81
2002	-7.69	-11.56	-10.08	-8.60	-0.28	2.56	5.59	NaN	3.56	0.11	-0.10	-4.70
2003	-10.17	-12.17	-12.20	-7.23	-0.40	3.00	4.04	NaN	1.85	0.06	-0.07	-2.60
2004	-6.68	-11.96	-12.55	-10.58	-0.51	NaN	NaN	NaN	3.24	0.04	-0.92	-3.69
2005	-7.59	-12.86	-12.20	-9.86	-0.03	2.33	3.87	5.49	2.47	0.07	-1.56	-5.77
2006	-8.02	-9.15	-11.98	-10.95	-0.11	NaN	NaN	NaN	3.46	0.09	-0.17	-1.79
2007	-9.34	-9.38	-14.31	-10.39	-2.89	1.67	5.37	5.41	3.26	-0.12	-1.68	-5.50
2008	-9.62	-12.11	-13.06	-9.60	-0.09	2.97	4.74	2.85	1.49	0.05	-0.20	-1.99
2009	-6.86	-10.89	-11.38	-1.47	-0.38	2.22	5.12	4.40	2.94	0.05	-0.07	NaN
2010	NaN	NaN	NaN	NaN	-0.05	0.78	3.55	NaN	3.40	0.08	-0.41	-1.15
2011	-6.50	-9.36	-9.88	-10.21	-0.05	1.68	4.29	4.33	3.83	0.07	-0.19	-3.89
2012	-11.26	-11.44	-13.60	-10.43	-0.53	1.93	4.48	4.51	2.99	0.15	0.01	-1.31
2013	-8.14	-12.10	-12.77	-10.81	NaN	NaN	4.03	4.87	2.23	0.08	0.02	-0.15
2014	-5.74	-7.05	-9.72	-8.10	-0.31	1.92	3.38	3.67	1.45	0.09	-0.13	-2.29
2015	-6.93	-8.49	-8.46	-8.41	NaN	2.80	3.47					

**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.46	-0.12	-0.68	0.29
1999	-0.46	-1.56	-0.13	-0.73	0.61	0.81	0.80	1.36	0.36	-0.56	-1.71	-4.66
2000	-2.90	-0.19	-1.26	-1.18	-3.13	-0.07	0.42	-0.44	-0.23	-0.51	-3.36	-3.00
2001	-3.41	-0.42	-2.63	-1.49	-4.40	-0.26	-0.03	-0.34	0.02	0.18	0.56	0.40
2002	1.26	0.21	1.99	1.06	2.52	0.11	0.22	NaN	0.22	0.15	-0.74	-1.28
2003	-0.82	-1.63	-0.50	0.30	0.85	0.08	-0.38	NaN	-0.53	0.22	1.18	0.40
2004	1.06	-0.94	-1.10	-1.04	0.38	NaN	NaN	NaN	-0.29	0.08	0.14	-3.36
2005	-0.82	-1.62	-0.80	-1.01	-0.83	-0.19	-0.64	0.20	0.03	-0.16	-1.89	-0.16
2006	0.85	1.42	0.42	-0.42	0.18	NaN	NaN	NaN	0.53	0.17	0.64	1.44
2007	-1.01	-0.71	-3.41	-0.12	-2.85	-0.04	0.26	0.41	0.28	-0.81	-1.63	-1.31
2008	-1.74	-1.47	-0.51	0.77	-0.12	0.34	0.60	-0.66	-0.49	0.22	1.17	2.70
2009	0.68	-0.80	-1.26	-0.75	4.16	0.18	0.15	-0.35	-0.02	0.25	-0.34	NaN
2010	NaN	NaN	NaN	NaN	-1.15	-0.45	-0.84	NaN	0.58	-0.08	1.14	2.15
2011	1.85	2.31	2.97	0.75	0.32	-0.21	-0.25	0.05	0.31	0.18	0.49	0.05
2012	-2.16	-0.34	-1.49	-0.92	0.23	-0.10	0.34	0.48	0.06	0.28	1.65	2.23
2013	0.92	-1.13	-0.14	-0.99	NaN	NaN	0.00	0.18	-0.23	0.27	1.75	4.91
2014	2.95	2.96	3.18	2.13	3.24	-0.26	-0.38	-0.32	-0.47	0.24	1.05	0.90
2015	2.31	2.44	2.96	2.12	NaN	0.29	-0.27					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	96.67	100.00	90.32	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	10.00	0.00	74.19	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.67	100.00
2006	100.00	100.00	100.00	100.00	100.00	83.33	16.13	67.74	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	96.67	96.77	100.00	96.67	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	90.32
2010	19.35	0.00	0.00	43.33	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	96.77	100.00	100.00	100.00	90.32	70.00	100.00	100.00	93.33	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	96.67	100.00	100.00	96.67	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	74.19	100.00	100.00					

**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.39	-1.24	-1.14	-2.95
1999	-6.16	-9.27	-10.14	-10.71	-8.55	-4.34	-2.82	-1.99	-1.51	-1.32	-1.50	-5.39
2000	-9.03	-9.80	-10.98	-11.35	-9.94	-6.09	-3.37	-2.33	-1.81	-1.56	-2.56	-5.89
2001	-9.39	-10.10	-11.61	-11.95	-10.73	-6.16	-3.42	-2.37	-1.88	-1.63	-1.53	-3.62
2002	-6.29	-8.61	-9.40	-9.56	-7.35	-3.77	-2.56	NaN	-1.57	-1.38	-1.46	-4.25
2003	-7.58	-9.86	-10.93	-11.08	-8.14	-4.28	-2.81	NaN	-1.65	-1.45	-1.34	-3.19
2004	-6.07	-8.97	-10.93	-11.15	-8.80	NaN	NaN	NaN	-1.49	-1.31	-1.21	-4.16
2005	-7.47	-9.86	-11.08	-11.19	-9.16	-4.91	-3.07	-2.21	-1.71	-1.47	-1.86	-4.47
2006	-6.46	-8.41	-9.54	-10.37	-8.74	NaN	NaN	NaN	-1.50	-1.31	-1.20	-2.39
2007	-6.61	-8.63	-11.65	-11.34	-9.69	-5.50	-3.11	-2.12	-1.64	-1.42	-2.02	-4.49
2008	-7.71	-9.92	-10.71	-10.62	-8.83	-4.64	-2.80	-1.92	-1.55	-1.38	-1.28	-2.22
2009	-5.50	-8.90	-10.28	-11.44	-6.79	-3.65	-2.48	-1.80	-1.46	-1.29	-1.20	NaN
2010	NaN	NaN	NaN	NaN	-8.71	-4.67	-2.86	NaN	-1.56	-1.32	-1.20	-2.02
2011	-4.95	-7.15	-8.11	-8.85	-7.95	-3.93	-2.54	-1.79	-1.40	-1.22	-1.12	-2.71
2012	-7.09	-9.42	-10.68	-11.26	-8.93	-4.44	-2.83	-1.97	-1.52	-1.31	-1.19	-1.62
2013	-5.18	-8.49	-10.30	-10.74	NaN	NaN	-2.85	-1.96	-1.53	-1.34	-1.21	-1.24
2014	-3.99	-6.16	-7.91	-8.44	-6.09	-3.25	-2.23	-1.65	-1.34	-1.20	-1.11	-2.47
2015	-5.22	-7.10	-7.99	-8.52	NaN	-3.22	-2.19					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.51	-1.36	-1.31	-4.36
1999	-7.81	-9.79	-10.60	-11.08	-10.28	-5.91	-3.38	-2.38	-1.72	-1.47	-2.57	-7.87
2000	-9.71	-10.10	-11.56	-11.56	-10.92	-9.02	-4.21	-2.77	-1.99	-1.71	-4.17	-7.63
2001	-9.96	-10.33	-12.59	-12.57	-11.42	-9.61	-4.27	-2.80	-2.09	-1.76	-1.88	-5.29
2002	-7.48	-9.33	-9.58	-9.68	-9.37	-4.79	-3.06	NaN	-1.78	-1.47	-2.46	-6.25
2003	-8.70	-10.87	-11.69	-11.69	-9.62	-5.91	-3.38	NaN	-1.84	-1.55	-1.41	-4.93
2004	-7.78	-10.23	-11.19	-11.44	-10.70	NaN	NaN	NaN	-1.66	-1.38	-1.28	-6.71
2005	-8.95	-10.55	-11.49	-11.45	-10.59	-7.05	-3.75	-2.65	-1.96	-1.61	-3.16	-5.43
2006	-7.83	-8.68	-10.33	-10.42	-10.29	NaN	NaN	NaN	-1.69	-1.44	-1.27	-4.48
2007	-8.07	-10.22	-12.59	-12.47	-10.33	-8.40	-3.90	-2.56	-1.88	-1.56	-3.04	-6.24
2008	-8.95	-10.39	-11.36	-11.36	-9.87	-6.39	-3.60	-2.28	-1.76	-1.51	-1.35	-3.42
2009	-7.31	-9.52	-11.72	-11.84	-10.03	-4.65	-2.98	-2.12	-1.62	-1.42	-1.48	NaN
2010	NaN	NaN	NaN	NaN	-9.65	-6.94	-3.49	NaN	-1.80	-1.45	-1.27	-3.48
2011	-6.54	-7.71	-8.40	-9.18	-9.08	-5.39	-3.14	-2.14	-1.58	-1.36	-1.21	-5.06
2012	-9.00	-9.74	-11.58	-11.72	-10.46	-5.97	-3.47	-2.37	-1.73	-1.44	-1.27	-3.30
2013	-6.92	-9.89	-10.61	-10.91	NaN	NaN	-3.55	-2.37	-1.72	-1.44	-1.30	-1.95
2014	-5.49	-7.52	-8.30	-8.72	-8.07	-4.08	-2.68	-1.93	-1.55	-1.27	-1.20	-4.23
2015	-6.31	-7.68	-8.53	-8.67	NaN	-4.16	-2.70					

**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.25	-1.12	-1.06	-1.29
1999	-4.36	-7.81	-9.69	-10.26	-5.92	-3.30	-2.30	-1.57	-1.36	-1.19	-1.15	-2.57
2000	-7.87	-9.55	-10.10	-10.88	-9.03	-4.07	-2.72	-1.90	-1.63	-1.42	-1.41	-4.17
2001	-7.63	-9.91	-10.33	-11.32	-9.61	-4.20	-2.72	-2.00	-1.68	-1.51	-1.42	-1.86
2002	-5.24	-7.48	-9.26	-9.37	-4.75	-2.99	-2.10	NaN	-1.33	-1.25	-1.23	-2.44
2003	-6.25	-8.70	-10.46	-9.62	-5.90	-3.27	-2.34	NaN	-1.51	-1.35	-1.27	-1.34
2004	-4.95	-7.78	-10.23	-10.69	-5.78	NaN	NaN	NaN	-1.36	-1.24	-1.12	-1.23
2005	-6.62	-8.94	-10.55	-10.63	-7.08	-3.69	-2.54	-1.82	-1.53	-1.36	-1.31	-3.14
2006	-5.41	-7.82	-8.55	-10.28	-5.80	NaN	NaN	NaN	-1.33	-1.23	-1.12	-1.15
2007	-4.48	-7.87	-10.20	-10.30	-8.40	-3.81	-2.49	-1.76	-1.46	-1.33	-1.33	-3.02
2008	-6.23	-8.93	-10.22	-9.86	-6.39	-3.51	-2.16	-1.66	-1.41	-1.29	-1.19	-1.23
2009	-3.35	-7.27	-9.29	-10.05	-4.58	-2.85	-2.01	-1.55	-1.36	-1.22	-1.13	NaN
2010	NaN	NaN	NaN	NaN	-6.98	-3.42	-2.33	NaN	-1.38	-1.18	-1.12	-1.17
2011	-3.48	-6.54	-7.68	-8.34	-5.32	-3.04	-2.04	-1.45	-1.23	-1.12	-1.02	-1.07
2012	-5.11	-8.98	-9.47	-10.46	-5.97	-3.40	-2.30	-1.66	-1.33	-1.20	-1.12	-1.06
2013	-3.30	-6.92	-9.89	-10.43	NaN	NaN	-2.28	-1.62	-1.35	-1.27	-1.12	-1.09
2014	-1.95	-5.43	-7.52	-8.07	-4.06	-2.57	-1.75	-1.39	-1.18	-1.10	-1.00	-1.05
2015	-4.21	-6.31	-7.44	-8.17	NaN	-2.52	-1.77					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.15	0.12	0.26	0.38
1999	0.37	-0.53	-0.07	-0.25	0.01	0.08	-0.03	-0.01	0.04	0.05	-0.10	-2.07
2000	-2.50	-1.06	-0.90	-0.88	-1.38	-1.67	-0.58	-0.35	-0.26	-0.20	-1.15	-2.56
2001	-2.86	-1.36	-1.54	-1.49	-2.16	-1.74	-0.62	-0.39	-0.34	-0.26	-0.12	-0.29
2002	0.24	0.12	0.67	0.90	1.21	0.65	0.24	NaN	-0.02	-0.02	-0.06	-0.92
2003	-1.05	-1.13	-0.86	-0.61	0.42	0.14	-0.02	NaN	-0.10	-0.09	0.06	0.13
2004	0.45	-0.23	-0.86	-0.68	-0.24	NaN	NaN	NaN	0.06	0.05	0.19	-0.83
2005	-0.94	-1.12	-1.01	-0.72	-0.60	-0.49	-0.27	-0.23	-0.16	-0.10	-0.46	-1.14
2006	0.07	0.33	0.54	0.10	-0.18	NaN	NaN	NaN	0.05	0.05	0.20	0.94
2007	-0.08	0.11	-1.58	-0.87	-1.13	-1.08	-0.31	-0.15	-0.10	-0.06	-0.62	-1.16
2008	-1.18	-1.18	-0.64	-0.16	-0.27	-0.22	0.00	0.05	-0.01	-0.02	0.12	1.10
2009	1.03	-0.16	-0.21	-0.97	1.77	0.77	0.32	0.18	0.09	0.07	0.20	NaN
2010	NaN	NaN	NaN	NaN	-0.15	-0.25	-0.06	NaN	-0.01	0.04	0.20	1.30
2011	1.58	1.58	1.97	1.61	0.61	0.49	0.25	0.18	0.15	0.14	0.28	0.62
2012	-0.56	-0.69	-0.60	-0.80	-0.37	-0.02	-0.04	0.01	0.03	0.05	0.21	1.71
2013	1.35	0.25	-0.23	-0.28	NaN	NaN	-0.05	0.02	0.02	0.03	0.19	2.09
2014	2.54	2.58	2.16	2.02	2.47	1.17	0.57	0.33	0.21	0.16	0.29	0.86
2015	1.31	1.63	2.08	1.95	NaN	1.20	0.60					

**Table F-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	96.67	100.00	90.32	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	10.00	0.00	74.19	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.67	100.00
2006	100.00	100.00	100.00	100.00	100.00	83.33	16.13	67.74	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	96.67	96.77	100.00	96.67	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	90.32
2010	19.35	0.00	0.00	43.33	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	96.77	100.00	100.00	100.00	90.32	70.00	100.00	100.00	93.33	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	96.67	100.00	100.00	96.67	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	74.19	100.00	100.00					

**Table F-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Incident solar flux, in watts per meter squared

File name: AK104\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	73.5	23.9	2.2	0.0
2000	0.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	69.8	23.2	0.7	0.0
2001	0.1	16.6	NaN	184.1	273.7	253.6	194.1	121.8	65.5	14.5	0.7	-0.0
2002	0.8	15.8	84.0	174.2	253.3	234.6	218.0	NaN	70.9	23.2	1.4	0.1
2003	1.3	12.3	NaN	149.9	220.5	286.5	165.2	NaN	63.5	17.6	2.7	0.1
2004	1.4	19.4	84.9	188.1	237.3	267.6	180.6	143.5	63.5	22.3	2.7	0.1
2005	1.2	NaN	NaN	NaN	NaN	266.4	218.3	139.7	63.9	17.5	0.5	0.0
2006	0.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	68.6	20.7	0.9	0.1
2007	0.3	NaN	NaN	162.7	247.6	284.7	253.8	156.3	75.5	NaN	0.7	0.1
2008	1.1	NaN	NaN	160.5	231.5	244.0	199.1	111.7	62.2	8.3	0.7	0.1
2009	0.9	14.1	NaN	NaN	213.3	216.6	199.9	121.1	60.9	NaN	0.6	0.0
2010	NaN	NaN	NaN	NaN	232.5	256.3	180.6	NaN	79.6	NaN	0.9	0.1
2011	0.6	16.3	73.4	175.3	245.3	247.6	200.0	143.0	47.7	19.6	2.8	0.1
2012	0.7	NaN	NaN	NaN	240.3	235.2	185.1	115.8	56.0	21.4	2.6	0.1
2013	0.9	3.9	NaN	166.1	240.4	215.3	177.6	124.6	64.7	22.6	2.6	0.1
2014	0.7	16.4	66.5	160.1	185.9	185.0	175.4	115.1	68.1	18.1	2.8	0.0
2015	0.9	14.2	67.6	161.7	210.0	225.9	193.2					

**Table F-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.2	4.2	0.6	-0.0
2000	-0.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.5	3.4	-0.9	-0.1
2001	-0.6	3.3	NaN	23.9	42.1	12.0	-1.7	-4.1	-0.8	-5.2	-0.9	-0.1
2002	0.1	2.5	19.1	14.0	21.7	-7.0	22.2	NaN	4.6	3.5	-0.2	0.0
2003	0.6	-1.1	NaN	-10.3	-11.1	44.8	-30.6	NaN	-2.8	-2.1	1.1	0.0
2004	0.6	6.0	19.9	28.0	5.7	25.9	-15.2	17.6	-2.8	2.6	1.1	0.0
2005	0.5	NaN	NaN	NaN	NaN	24.7	22.5	13.9	-2.4	-2.2	-1.1	-0.0
2006	-0.6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.4	1.0	-0.7	0.0
2007	-0.4	NaN	NaN	2.5	16.0	43.0	58.0	30.4	9.2	NaN	-1.0	0.1
2008	0.3	NaN	NaN	0.3	-0.1	2.4	3.3	-14.2	-4.0	-11.4	-0.9	-0.0
2009	0.2	0.7	NaN	NaN	-18.3	-25.0	4.1	-4.8	-5.4	NaN	-1.0	-0.0
2010	NaN	NaN	NaN	NaN	0.9	14.6	-15.2	NaN	13.3	NaN	-0.8	0.0
2011	-0.1	3.0	8.5	15.2	13.7	6.0	4.2	17.1	-18.6	-0.1	1.2	0.0
2012	-0.1	NaN	NaN	NaN	8.7	-6.4	-10.6	-10.1	-10.2	1.7	1.0	0.0
2013	0.2	-9.5	NaN	6.0	8.8	-26.3	-18.2	-1.3	-1.6	2.9	1.0	0.0
2014	-0.1	3.0	1.6	-0.1	-45.7	-56.6	-20.4	-10.8	1.8	-1.6	1.2	-0.0
2015	0.2	0.8	2.7	1.5	-21.6	-15.8	-2.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	96.7	100.0	100.0	100.0
2000	100.0	75.9	0.0	53.3	93.5	83.3	90.3	93.5	100.0	100.0	100.0	100.0
2001	100.0	96.4	54.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	96.8	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2003	100.0	100.0	90.3	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	96.8	100.0	100.0
2005	100.0	71.4	12.9	63.3	83.9	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2006	100.0	50.0	0.0	0.0	32.3	66.7	16.1	67.7	100.0	100.0	100.0	100.0
2007	100.0	85.7	61.3	96.7	96.8	96.7	96.8	100.0	100.0	74.2	100.0	100.0
2008	100.0	82.8	77.4	100.0	96.8	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	41.9	83.3	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0
2010	22.6	0.0	0.0	43.3	100.0	100.0	100.0	83.9	100.0	93.5	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	34.5	0.0	50.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2013	100.0	100.0	87.1	100.0	96.8	96.7	100.0	96.8	100.0	96.8	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2015	100.0	100.0	100.0	96.7	100.0	100.0	100.0					

**Table F-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Reflected solar flux, in watts per meter squared

File name: AK104\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.6	18.0	2.6	0.0
1999	0.9	15.6	NaN	165.1	196.9	55.5	50.9	29.2	25.5	23.9	NaN	0.1
2000	0.4	NaN	92.0	171.3	NaN	108.3	42.0	40.5	20.0	24.3	2.8	0.1
2001	0.4	16.2	79.8	164.8	238.4	73.2	45.3	27.4	15.9	22.0	NaN	-0.1
2002	1.1	15.9	NaN	153.3	149.6	49.0	50.4	NaN	23.9	15.6	1.7	0.1
2003	1.4	15.5	75.3	141.1	171.5	58.2	37.2	NaN	20.7	17.4	2.7	-0.0
2004	1.5	17.4	76.7	171.5	167.3	55.6	42.0	32.2	23.3	23.0	NaN	-0.0
2005	1.3	16.4	70.7	158.0	186.5	76.9	48.9	33.8	14.6	NaN	NaN	0.0
2006	0.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.5	10.8	2.3	-0.0
2007	0.6	16.7	72.8	145.6	207.5	70.0	61.0	37.3	18.7	17.9	1.3	0.0
2008	1.0	16.5	75.8	140.4	177.7	50.7	47.5	25.4	17.6	21.5	1.8	0.1
2009	1.0	14.5	76.4	148.9	117.5	45.9	47.4	27.9	24.0	21.4	2.4	0.1
2010	NaN	NaN	NaN	NaN	195.8	62.1	42.3	NaN	22.4	NaN	NaN	0.1
2011	1.0	15.2	75.1	159.7	183.3	52.6	48.2	35.3	12.2	18.8	2.6	0.1
2012	1.0	14.2	76.7	148.2	204.0	56.0	45.6	28.6	16.3	18.4	3.0	0.1
2013	0.9	9.2	68.5	162.4	209.9	57.3	44.9	34.8	33.4	23.1	2.6	0.1
2014	1.2	17.9	76.6	148.1	144.7	44.1	42.2	32.7	18.3	13.8	2.6	0.1
2015	1.0	13.5	66.4	147.5	124.2	55.5	50.7					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.2	-1.5	0.2	0.0
1999	-0.0	0.3	NaN	10.9	22.3	-4.4	4.3	-2.0	4.6	4.4	NaN	0.0
2000	-0.5	NaN	16.4	17.1	NaN	48.3	-4.6	9.3	-0.9	4.8	0.4	0.0
2001	-0.5	0.9	4.2	10.6	63.8	13.3	-1.4	-3.9	-5.0	2.5	NaN	-0.1
2002	0.1	0.6	NaN	-0.9	-25.0	-11.0	3.8	NaN	3.0	-3.8	-0.7	0.0
2003	0.5	0.2	-0.4	-13.1	-3.2	-1.8	-9.5	NaN	-0.1	-2.0	0.3	-0.1
2004	0.6	2.0	1.1	17.3	-7.3	-4.4	-4.7	0.9	2.4	3.5	NaN	-0.1
2005	0.3	1.1	-4.9	3.8	11.8	17.0	2.3	2.6	-6.3	NaN	NaN	-0.0
2006	-0.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-6.4	-8.7	-0.1	-0.1
2007	-0.4	1.3	-2.8	-8.6	32.9	10.1	14.4	6.0	-2.2	-1.6	-1.1	-0.0
2008	0.0	1.2	0.2	-13.8	3.1	-9.3	0.8	-5.9	-3.3	2.0	-0.6	0.0
2009	0.0	-0.8	0.8	-5.3	-57.1	-14.1	0.8	-3.3	3.1	1.9	-0.0	0.0
2010	NaN	NaN	NaN	NaN	21.2	2.1	-4.4	NaN	1.5	NaN	NaN	0.1
2011	0.1	-0.1	-0.5	5.5	8.7	-7.3	1.6	4.0	-8.7	-0.7	0.2	0.0
2012	0.1	-1.2	1.1	-6.0	29.3	-3.9	-1.0	-2.7	-4.6	-1.0	0.6	0.1
2013	-0.0	-6.1	-7.2	8.2	35.2	-2.6	-1.8	3.6	12.5	3.6	0.2	0.1
2014	0.3	2.6	1.0	-6.1	-30.0	-15.9	-4.4	1.5	-2.6	-5.7	0.2	0.0
2015	0.1	-1.9	-9.2	-6.7	-50.4	-4.5	4.0					



**Table F-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
1999	100.0	96.4	90.3	100.0	100.0	100.0	100.0	100.0	100.0	96.8	93.3	100.0
2000	100.0	93.1	100.0	96.7	90.3	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	100.0
2002	100.0	100.0	93.5	100.0	100.0	100.0	100.0	93.5	100.0	96.8	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	90.0	100.0
2005	100.0	96.4	100.0	100.0	100.0	100.0	100.0	96.8	100.0	83.9	93.3	100.0
2006	100.0	53.6	0.0	0.0	41.9	83.3	16.1	67.7	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	96.7	96.8	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2010	22.6	0.0	0.0	43.3	100.0	100.0	100.0	83.9	100.0	93.5	90.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	96.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table F-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
 Variable: Rainfall, in millimeters per hour  
 File name: AK104\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.0	NaN	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	6.3	5.3	2.0	1.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	2.0	5.8					

**Table F–1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	23.1	NaN	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	67.3	29.5	27.9	2.8	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	8.6	17.8					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	100.0	87.1	100.0	100.0
2014	100.0	100.0	100.0	96.7	71.0	86.7	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	93.5	100.0	100.0					

**Table F-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Snow depth, in centimeters

File name: AK104\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.4	11.9	19.9	24.9
2001	25.3	26.0	28.3	43.2	41.9	5.4	5.7	6.3	5.0	NaN	NaN	NaN
2002	47.6	46.8	52.0	54.5	30.3	3.7	6.5	4.4	4.2	7.0	13.1	17.2
2003	22.1	34.7	41.1	42.0	35.0	1.9	NaN	NaN	2.2	17.0	34.2	38.5
2004	50.4	53.2	53.7	59.6	43.2	3.5	9.3	3.7	3.7	6.9	20.3	19.3
2005	24.3	33.8	36.7	41.8	NaN	8.4	4.8	3.9	4.8	7.5	19.0	34.9
2006	NaN	39.5	40.7	43.2	35.1	4.6	NaN	NaN	5.8	5.0	14.0	19.9
2007	26.1	24.7	26.4	29.7	30.5	6.7	6.3	5.4	4.6	5.9	18.3	20.2
2008	22.6	26.9	36.3	41.9	41.2	5.2	6.5	6.9	4.8	22.5	34.2	34.4
2009	36.0	38.8	43.5	49.7	21.4	5.6	7.2	7.3	9.5	18.1	32.8	39.1
2010	NaN	NaN	NaN	NaN	52.2	9.6	8.7	7.4	5.3	10.7	NaN	43.1
2011	44.6	48.7	46.7	46.3	39.0	5.7	6.5	6.5	NaN	10.8	25.7	38.5
2012	44.0	NaN	53.1	55.5	48.7	8.9	8.2	4.2	3.4	14.1	31.7	35.5
2013	39.1	38.0	39.6	53.1	55.8	4.3	6.3	5.5	8.8	22.1	30.5	38.3
2014	38.1	43.7	50.7	54.5	39.9	5.7	9.3	5.6	4.9	14.5	21.5	29.3
2015	39.5	44.7	45.8	51.3	31.4	5.1	3.9					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.3	6.7	12.4	23.9
2001	23.8	24.4	24.6	38.5	33.9	-2.3	1.3	2.0	0.4	NaN	NaN	NaN
2002	43.2	40.9	49.1	51.6	-1.4	-1.1	1.2	0.0	-1.6	0.8	9.0	13.8
2003	16.9	22.2	35.9	37.1	16.5	-1.0	NaN	NaN	-0.1	0.3	25.8	36.4
2004	47.1	47.8	49.2	57.2	-0.0	-0.2	3.7	-0.8	-0.1	4.3	11.5	17.3
2005	22.1	23.0	35.1	37.2	NaN	-1.7	1.3	-0.5	-1.7	-0.1	12.4	21.8
2006	NaN	25.5	38.8	39.8	-0.3	-1.4	NaN	NaN	-0.5	-1.1	5.0	14.9
2007	20.6	21.4	22.3	24.4	27.0	-1.2	3.1	-0.3	-1.8	-0.8	10.3	16.8
2008	19.3	19.3	30.0	36.1	-1.7	-1.8	1.2	2.3	-1.5	2.0	27.1	29.3
2009	31.9	36.6	37.9	33.7	-0.3	0.2	2.6	2.7	-1.0	11.4	20.4	31.2
2010	NaN	NaN	NaN	NaN	30.4	0.0	2.2	-1.0	-1.6	4.7	NaN	30.1
2011	42.2	43.3	44.4	43.8	1.4	0.6	-1.0	-1.4	NaN	0.6	14.9	26.0
2012	36.9	NaN	46.6	51.1	25.1	-0.0	-0.3	-0.7	-0.8	0.5	24.5	31.2
2013	32.8	31.1	31.7	43.9	27.3	-0.7	2.0	-0.2	-0.2	17.8	18.3	35.0
2014	34.7	36.3	45.2	47.1	15.8	-0.8	2.5	0.1	0.2	-0.4	16.4	23.9
2015	32.7	42.7	42.2	42.1	0.4	-0.7	-0.3					

**Table F-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.8	16.7	27.3	26.1
2001	27.7	27.5	47.4	47.6	48.0	33.5	9.8	10.0	21.2	NaN	NaN	NaN
2002	51.8	52.5	54.4	60.7	54.8	11.2	11.9	9.7	12.7	13.0	17.0	23.2
2003	24.1	42.7	44.5	46.5	40.4	16.5	NaN	NaN	9.4	31.0	38.1	48.3
2004	55.4	62.5	59.0	61.9	62.0	12.4	16.3	11.2	6.8	12.1	23.0	24.5
2005	28.4	37.7	38.8	46.3	NaN	36.0	7.3	7.6	8.0	16.6	30.1	42.4
2006	NaN	45.4	42.4	48.1	47.2	8.0	NaN	NaN	8.4	8.2	19.5	24.9
2007	29.8	27.5	30.6	33.2	35.4	27.1	9.2	7.7	8.3	13.2	23.7	24.1
2008	26.6	35.0	43.5	50.1	55.7	8.4	8.3	8.6	8.4	32.3	38.8	38.2
2009	39.3	42.6	47.6	56.7	35.7	8.5	9.0	9.7	23.9	22.3	36.5	47.0
2010	NaN	NaN	NaN	NaN	57.0	31.4	18.5	18.4	12.0	25.0	NaN	45.6
2011	47.4	54.7	49.2	49.6	52.5	10.4	10.0	12.4	NaN	23.5	31.4	47.6
2012	51.6	NaN	58.4	58.6	63.2	26.6	11.8	11.7	8.9	27.5	36.5	39.8
2013	51.2	42.7	51.7	59.4	69.8	25.6	9.2	11.5	25.0	27.7	43.1	44.5
2014	43.8	50.4	54.7	59.6	61.1	21.9	29.7	21.3	7.2	23.9	27.5	38.1
2015	47.4	48.7	55.6	54.8	56.4	7.1	7.9					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.7	-0.8	-4.9	-6.3
2001	-10.5	-13.1	-15.0	-5.1	3.2	-0.3	-1.2	0.7	-0.1	NaN	NaN	NaN
2002	11.8	7.7	8.7	6.2	-8.3	-2.0	-0.4	-1.1	-0.9	-5.8	-11.7	-14.0
2003	-13.7	-4.5	-2.2	-6.4	-3.6	-3.8	NaN	NaN	-2.9	4.2	9.4	7.2
2004	14.5	14.0	10.4	11.3	4.6	-2.2	2.4	-1.8	-1.4	-5.8	-4.6	-11.9
2005	-11.5	-5.3	-6.6	-6.6	NaN	2.7	-2.0	-1.7	-0.3	-5.3	-5.8	3.6
2006	NaN	0.4	-2.6	-5.2	-3.5	-1.1	NaN	NaN	0.7	-7.8	-10.8	-11.3
2007	-9.7	-14.4	-16.9	-18.7	-8.1	1.0	-0.6	-0.2	-0.5	-6.9	-6.5	-11.1
2008	-13.2	-12.2	-7.0	-6.5	2.5	-0.5	-0.4	1.3	-0.3	9.7	9.4	3.2
2009	0.1	-0.3	0.2	1.3	-17.3	-0.1	0.3	1.7	4.4	5.3	7.9	7.9
2010	NaN	NaN	NaN	NaN	13.6	4.0	1.8	1.8	0.2	-2.0	NaN	11.9
2011	8.7	9.6	3.4	-2.1	0.3	-0.0	-0.4	1.0	NaN	-2.0	0.9	7.3
2012	8.2	NaN	9.8	7.1	10.0	3.2	1.4	-1.3	-1.8	1.3	6.9	4.3
2013	3.3	-1.1	-3.7	4.7	17.1	-1.4	-0.6	-0.0	3.7	9.3	5.6	7.1
2014	2.3	4.5	7.3	6.2	1.3	-0.0	2.5	0.1	-0.2	1.7	-3.3	-1.9
2015	3.7	5.6	2.5	3.0	-7.3	-0.6	-2.9					

**Table F-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.6	100.0	100.0	100.0	90.3
2001	80.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.4	0.0	16.1
2002	90.3	96.4	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	90.3
2003	80.6	96.4	100.0	96.7	100.0	100.0	77.4	77.4	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	96.8	100.0	100.0
2005	100.0	100.0	100.0	100.0	77.4	100.0	100.0	100.0	100.0	100.0	100.0	90.3
2006	38.7	100.0	100.0	100.0	100.0	86.7	25.8	71.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	96.7	100.0
2010	25.8	0.0	0.0	46.7	100.0	100.0	100.0	90.3	100.0	100.0	43.3	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	66.7	80.6	80.0	80.6
2012	96.8	72.4	100.0	93.3	87.1	93.3	93.5	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table F-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
Variable: Soil moisture, in water fraction by volume

File name: AK104\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.59	0.26	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.28	0.58	0.66	0.59	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.07	0.44	0.22	0.25	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.13	0.06	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.14	0.28	0.36	0.27	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.15	0.32	0.39	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	0.17	NaN	0.37	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	0.31	0.35	0.59	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.21	0.26	0.50	0.32	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.27	0.37	0.51	0.18	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.53	0.49	0.62	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.10					

**Table F-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.34	0.08	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.02	0.40	0.53	0.40	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.01	0.24	0.16	0.15	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.38	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.03	0.05	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.02	0.16	0.28	0.20	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.03	0.15	0.30	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	0.01	NaN	0.22	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	0.16	0.18	0.35	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.07	0.13	0.33	0.13	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.13	0.28	0.31	0.08	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.32	0.35	0.41	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.03					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.80	0.39	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.77	0.81	0.81	0.81	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.81	0.86	0.26	0.29	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.33	0.08	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.72	0.38	0.78	0.31	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.23	0.79	0.80	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	0.78	NaN	0.40	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	0.76	0.81	0.88	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.60	0.87	0.90	0.89	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.82	0.83	0.87	0.31	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.85	0.85	0.87	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.24					

**Table F-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.13	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	0.29	0.32	0.13	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	0.15	-0.12	-0.21	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.07	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	-0.16	-0.29	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	0.01	-0.19	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	-0.13	-0.03	-0.07	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	-0.12	NaN	-0.09	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	0.02	0.00	0.13	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	-0.08	-0.09	0.04	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	-0.02	0.03	0.05	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.24	0.15	0.16	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	-0.19					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.29	100.00	100.00	73.33	0.00
2004	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	87.10	0.00	0.00
2005	0.00	0.00	0.00	0.00	12.90	100.00	100.00	100.00	100.00	38.71	0.00	0.00
2006	0.00	0.00	0.00	0.00	19.35	83.33	16.13	67.74	100.00	83.87	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	80.00	96.77	100.00	93.33	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	22.58	100.00	100.00	100.00	100.00	77.42	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	86.67	100.00	100.00	100.00	93.55	0.00	0.00
2010	0.00	0.00	0.00	0.00	3.23	43.33	100.00	83.87	100.00	48.39	0.00	0.00
2011	0.00	0.00	0.00	0.00	9.68	33.33	100.00	100.00	100.00	74.19	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	40.00	100.00	100.00	100.00	100.00	26.67	0.00
2013	0.00	0.00	0.00	0.00	0.00	40.00	100.00	100.00	100.00	100.00	26.67	0.00
2014	0.00	0.00	0.00	0.00	0.00	23.33	100.00	100.00	100.00	93.55	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	53.33	100.00					



**Table F-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table F-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

site name: Umiat  
 Variable: Air temperature, in degrees Celsius  
 File name: AKl04\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-6.16	NaN
1999	-25.69	-16.18	9.36	-11.12	-11.77
2000	-26.65	-17.60	8.25	-9.74	-10.68
2001	-22.34	-18.33	7.67	-10.69	-11.05
2002	-26.26	-10.89	8.01	-5.75	-8.39
2003	-23.54	-12.95	7.82	-7.47	-9.28
2004	-27.95	-15.40	11.36	-9.07	-10.43
2005	-24.64	-14.23	7.70	-10.64	-10.25
2006	-23.60	-16.83	NaN	-5.67	NaN
2007	-23.87	-16.84	10.88	-7.26	-9.29
2008	-24.68	-14.32	9.04	-9.88	-9.66
2009	-22.38	-14.28	9.26	-9.67	-9.32
2010	NaN	NaN	NaN	-5.68	NaN
2011	-22.45	-13.39	8.76	-9.34	-9.03
2012	-26.93	-17.89	10.98	-7.12	-10.29
2013	-28.84	-16.10	10.41	-6.70	-9.73
2014	-21.43	-10.97	7.59	-6.47	-8.03
2015	-22.19	-11.25			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-24.88	NaN
1999	-47.40	-42.62	-3.13	-31.36	-47.40
2000	-43.41	-35.34	-6.11	-31.15	-39.00
2001	-43.69	-39.35	-2.74	-30.09	-43.69
2002	-41.10	-33.55	-1.81	-27.03	-41.10
2003	-39.87	-35.24	-2.73	-34.83	-39.77
2004	-43.13	-42.31	-1.97	-29.74	-43.13
2005	-38.01	-40.90	-4.54	-35.49	-40.90
2006	-42.66	-37.05	NaN	-30.72	NaN
2007	-41.68	-43.18	-3.19	-22.77	-43.18
2008	-41.68	-43.26	-1.65	-28.54	-43.26
2009	-40.58	-41.29	-2.45	-31.46	-41.29
2010	NaN	NaN	NaN	-24.16	NaN
2011	-44.64	-33.38	-5.08	-38.01	-44.64
2012	-44.59	-42.94	-1.62	-31.07	-44.59
2013	-40.74	-35.77	-5.46	-29.24	-40.74
2014	-41.27	-36.89	-2.19	-29.39	-41.27
2015	-37.06	-37.23			

**Table F-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	16.34	NaN
1999	0.18	6.51	28.79	17.49	28.79
2000	-2.60	7.98	24.80	17.09	24.80
2001	-2.27	4.72	24.21	15.24	24.21
2002	0.69	20.05	26.26	17.07	26.26
2003	-2.20	8.33	25.36	13.05	25.36
2004	-2.45	11.78	29.65	13.08	29.65
2005	1.47	6.21	24.03	14.99	24.03
2006	5.26	11.11	NaN	18.98	NaN
2007	-0.45	2.23	25.54	17.44	25.54
2008	3.88	10.18	25.66	9.49	25.66
2009	3.33	20.45	28.32	19.19	28.32
2010	NaN	NaN	NaN	18.83	NaN
2011	-0.09	12.14	27.41	15.03	27.41
2012	-1.41	10.07	25.18	15.82	25.18
2013	-10.32	9.28	30.21	17.21	30.21
2014	3.60	9.27	22.56	12.96	22.56
2015	-0.82	20.14			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	97.83	100.00	99.45
2003	100.00	100.00	97.83	100.00	99.45
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	98.91	98.90	99.45
2006	100.00	100.00	55.43	100.00	88.77
2007	100.00	100.00	97.83	100.00	99.45
2008	100.00	98.91	100.00	100.00	99.73
2009	100.00	100.00	100.00	98.90	99.73
2010	42.22	47.83	94.57	100.00	71.23
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00
2013	100.00	98.91	98.91	100.00	99.45
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	2.01	NaN
1999	-1.18	-1.55	0.29	-2.95	-2.05
2000	-2.14	-2.96	-0.82	-1.57	-0.97
2001	2.17	-3.69	-1.40	-2.51	-1.34
2002	-1.74	3.75	-1.06	2.42	1.32
2003	0.98	1.69	-1.25	0.70	0.44
2004	-3.43	-0.76	2.29	-0.89	-0.72
2005	-0.12	0.41	-1.37	-2.47	-0.53
2006	0.91	-2.19	NaN	2.50	NaN
2007	0.65	-2.20	1.82	0.91	0.42
2008	-0.17	0.32	-0.03	-1.71	0.05
2009	2.14	0.36	0.19	-1.50	0.39
2010	NaN	NaN	NaN	2.49	NaN
2011	2.07	1.25	-0.31	-1.17	0.68
2012	-2.41	-3.25	1.92	1.05	-0.58
2013	-4.32	-1.46	1.34	1.47	-0.01
2014	3.09	3.66	-1.48	1.70	1.68
2015	2.33	3.39			

**Table F-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Wind speed, in meters per second

File name: AK104\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	3.35	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	3.09	3.11	NaN	NaN
2008	NaN	3.32	3.09	NaN	NaN
2009	NaN	3.18	3.21	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	3.31	NaN	NaN
2012	NaN	2.76	3.02	NaN	NaN
2013	NaN	3.35	3.11	NaN	NaN
2014	NaN	2.72	3.14	NaN	NaN
2015	NaN	2.82			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	0.17	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	0.03	-0.07	NaN	NaN
2008	NaN	0.27	-0.09	NaN	NaN
2009	NaN	0.13	0.03	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	0.13	NaN	NaN
2012	NaN	-0.29	-0.16	NaN	NaN
2013	NaN	0.30	-0.07	NaN	NaN
2014	NaN	-0.33	-0.04	NaN	NaN
2015	NaN	-0.24			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	10.70	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	11.31	7.70	NaN	NaN
2008	NaN	10.55	9.40	NaN	NaN
2009	NaN	15.17	9.75	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	9.26	NaN	NaN
2012	NaN	9.26	9.33	NaN	NaN
2013	NaN	14.42	10.70	NaN	NaN
2014	NaN	12.08	8.16	NaN	NaN
2015	NaN	12.73			

#### Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00
2005	0.00	44.57	98.91	13.19	41.37
2006	28.89	93.48	54.35	85.71	67.12
2007	34.44	95.65	97.83	57.14	75.89
2008	89.01	95.65	100.00	75.82	87.70
2009	71.11	96.74	100.00	48.35	77.81
2010	23.33	47.83	94.57	82.42	58.36
2011	46.67	88.04	100.00	92.31	90.14
2012	85.71	96.74	100.00	90.11	87.70
2013	54.44	98.91	98.91	86.81	90.68
2014	86.67	100.00	98.91	79.12	84.66
2015	63.33	95.65			

**Table F-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
Variable: Ground temperature, in degrees Celsius

File name: AK104\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-0.62	NaN
1999	-10.47	-10.52	2.76	-1.14	-5.24
2000	-12.59	-12.31	1.73	-1.87	-6.11
2001	-12.26	-13.30	1.56	-0.26	-5.76
2002	-9.29	-8.57	NaN	-0.63	-4.40
2003	-11.16	-10.23	1.44	-0.22	-4.95
2004	-9.75	-11.02	NaN	-0.53	NaN
2005	-11.87	-11.32	1.54	-1.15	-5.44
2006	-9.25	-10.37	NaN	-0.07	NaN
2007	-10.00	-12.59	1.99	-1.26	-5.74
2008	-11.46	-10.45	1.85	-0.21	-4.71
2009	-9.01	-9.71	1.76	-0.55	-4.50
2010	NaN	NaN	NaN	0.03	NaN
2011	-7.83	-9.09	1.63	-0.19	-4.04
2012	-10.78	-11.17	2.01	0.15	-4.76
2013	-9.18	-11.48	NaN	0.07	-4.52
2014	-6.29	-7.59	1.46	-0.24	-3.52
2015	-8.06	NaN			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-4.61	NaN
1999	-15.86	-15.74	-0.41	-6.35	-15.86
2000	-15.10	-15.38	-5.84	-7.48	-15.38
2001	-16.36	-18.10	-6.17	-3.83	-18.10
2002	-12.74	-12.57	NaN	-6.30	-12.74
2003	-15.31	-15.49	-0.65	-2.60	-15.49
2004	-15.33	-15.83	NaN	-3.76	NaN
2005	-15.14	-16.88	-0.51	-6.37	-16.88
2006	-12.58	-13.63	NaN	-2.83	NaN
2007	-16.53	-17.81	-2.84	-6.24	-17.81
2008	-15.65	-14.75	-0.42	-2.05	-15.65
2009	-14.95	-16.70	-0.53	-4.82	-16.70
2010	NaN	NaN	NaN	-1.50	NaN
2011	-11.46	-12.48	-0.51	-4.04	-12.48
2012	-15.73	-15.55	-0.90	-1.60	-15.73
2013	-14.93	-14.64	NaN	-1.11	-14.93
2014	-12.04	-11.09	-0.61	-2.29	-12.04
2015	-11.31	NaN			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	3.87	NaN
1999	-4.30	-0.10	7.29	3.89	7.29
2000	-6.44	-6.14	5.86	3.05	5.86
2001	-7.53	-5.26	5.14	2.53	5.14
2002	-3.81	-0.28	NaN	3.56	5.59
2003	-4.70	-0.40	4.04	1.85	4.04
2004	-2.60	-0.51	NaN	3.24	NaN
2005	-3.69	-0.03	5.49	2.47	5.49
2006	-5.77	-0.11	NaN	3.46	NaN
2007	-1.79	-2.89	5.41	3.26	5.41
2008	-5.50	-0.09	4.74	1.49	4.74
2009	-1.99	-0.38	5.12	2.94	5.12
2010	NaN	NaN	NaN	3.40	NaN
2011	-1.15	-0.05	4.33	3.83	4.33
2012	-3.89	-0.53	4.51	2.99	4.51
2013	-1.31	-0.70	NaN	2.23	4.87
2014	-0.15	-0.31	3.67	1.45	3.67
2015	-2.29	NaN			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-0.11	NaN
1999	-0.54	0.13	0.98	-0.64	-0.41
2000	-2.66	-1.66	-0.04	-1.36	-1.28
2001	-2.33	-2.65	-0.22	0.25	-0.93
2002	0.64	2.07	NaN	-0.12	0.43
2003	-1.22	0.42	-0.34	0.29	-0.12
2004	0.18	-0.38	NaN	-0.02	NaN
2005	-1.94	-0.67	-0.23	-0.64	-0.60
2006	0.69	0.27	NaN	0.44	NaN
2007	-0.07	-1.94	0.21	-0.75	-0.91
2008	-1.53	0.20	0.08	0.30	0.12
2009	0.92	0.94	-0.02	-0.04	0.33
2010	NaN	NaN	NaN	0.54	NaN
2011	2.11	1.56	-0.15	0.32	0.80
2012	-0.85	-0.52	0.23	0.66	0.07
2013	0.75	-0.83	NaN	0.58	0.31
2014	3.64	3.06	-0.31	0.27	1.31
2015	1.87	NaN			

**Table F-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	94.57	100.00	98.63
2003	100.00	100.00	95.65	100.00	98.90
2004	100.00	100.00	28.26	100.00	81.97
2005	100.00	100.00	98.91	98.90	99.45
2006	100.00	100.00	55.43	100.00	88.77
2007	100.00	100.00	97.83	98.90	99.18
2008	100.00	98.91	100.00	100.00	99.73
2009	100.00	100.00	100.00	98.90	98.90
2010	37.78	47.83	94.57	100.00	70.96
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00
2013	98.89	96.74	90.22	97.80	95.89
2014	100.00	100.00	98.91	98.90	99.45
2015	100.00	91.30			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.51	NaN
1999	-9.79	-11.08	-5.91	-2.57	-11.08
2000	-10.10	-11.56	-9.02	-4.17	-11.56
2001	-10.33	-12.59	-9.61	-2.09	-12.59
2002	-9.33	-9.68	NaN	-2.46	-9.68
2003	-10.87	-11.69	-5.91	-1.84	-11.69
2004	-10.23	-11.44	NaN	-1.66	NaN
2005	-10.55	-11.49	-7.05	-3.16	-11.49
2006	-8.68	-10.42	NaN	-1.69	NaN
2007	-10.22	-12.59	-8.40	-3.04	-12.59
2008	-10.39	-11.36	-6.39	-1.76	-11.36
2009	-9.52	-11.84	-4.65	-1.62	-11.84
2010	NaN	NaN	NaN	-1.80	NaN
2011	-7.71	-9.18	-5.39	-1.58	-9.18
2012	-9.74	-11.72	-5.97	-1.73	-11.72
2013	-9.89	-10.91	NaN	-1.72	-10.91
2014	-7.52	-8.72	-4.08	-1.55	-8.72
2015	-7.68	NaN			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.26	NaN
1999	-6.02	-9.79	-3.04	-1.44	-5.29
2000	-8.04	-10.75	-3.91	-1.97	-6.21
2001	-8.40	-11.43	-3.96	-1.68	-6.18
2002	-6.09	-8.76	NaN	-1.47	-4.86
2003	-7.14	-10.04	-3.05	-1.48	-5.36
2004	-6.01	-10.29	NaN	-1.34	NaN
2005	-7.07	-10.47	-3.39	-1.67	-5.70
2006	-6.38	-9.54	NaN	-1.34	NaN
2007	-5.78	-10.89	-3.54	-1.69	-5.69
2008	-7.32	-10.06	-3.10	-1.40	-5.27
2009	-5.43	-9.48	-2.63	-1.32	-4.79
2010	NaN	NaN	NaN	-1.36	NaN
2011	-4.63	-8.30	-2.74	-1.25	-4.29
2012	-6.34	-10.28	-3.07	-1.34	-5.17
2013	-4.98	-10.19	NaN	-1.36	-4.86
2014	-3.71	-7.47	-2.36	-1.22	-3.81
2015	-4.86	NaN			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-1.06	NaN
1999	-1.29	-5.92	-1.57	-1.15	-1.15
2000	-2.57	-9.03	-1.90	-1.41	-1.41
2001	-4.17	-9.61	-2.00	-1.42	-1.42
2002	-1.86	-4.75	NaN	-1.23	-1.23
2003	-2.44	-5.90	-1.72	-1.27	-1.27
2004	-1.34	-5.78	NaN	-1.12	NaN
2005	-1.23	-7.08	-1.82	-1.31	-1.31
2006	-3.14	-5.80	NaN	-1.12	NaN
2007	-1.15	-8.40	-1.76	-1.33	-1.33
2008	-3.02	-6.39	-1.66	-1.19	-1.19
2009	-1.23	-4.58	-1.55	-1.13	-1.13
2010	NaN	NaN	NaN	-1.12	NaN
2011	-1.17	-5.32	-1.45	-1.02	-1.02
2012	-1.07	-5.97	-1.66	-1.12	-1.06
2013	-1.06	-6.93	NaN	-1.12	-1.09
2014	-1.09	-4.06	-1.39	-1.00	-1.00
2015	-1.05	NaN			

**Table F-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	0.17	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	0.10	0.06	0.06	-0.01	-0.18	1999	100.00	100.00	100.00	100.00	100.00
2000	-1.92	-0.90	-0.81	-0.54	-1.10	2000	100.00	100.00	100.00	100.00	100.00
2001	-2.28	-1.58	-0.87	-0.25	-1.07	2001	100.00	100.00	100.00	100.00	100.00
2002	0.03	1.09	NaN	-0.04	0.25	2002	100.00	100.00	94.57	100.00	98.63
2003	-1.02	-0.19	0.05	-0.05	-0.25	2003	100.00	100.00	95.65	100.00	98.90
2004	0.11	-0.44	NaN	0.10	NaN	2004	100.00	100.00	28.26	100.00	81.97
2005	-0.95	-0.62	-0.30	-0.24	-0.59	2005	100.00	100.00	98.91	98.90	99.45
2006	-0.26	0.31	NaN	0.09	NaN	2006	100.00	100.00	55.43	100.00	88.77
2007	0.34	-1.04	-0.45	-0.26	-0.58	2007	100.00	100.00	97.83	98.90	99.18
2008	-1.20	-0.21	-0.01	0.03	-0.16	2008	100.00	98.91	100.00	100.00	99.73
2009	0.69	0.37	0.46	0.11	0.32	2009	100.00	100.00	100.00	98.90	98.90
2010	NaN	NaN	NaN	0.07	NaN	2010	37.78	47.83	94.57	100.00	70.96
2011	1.50	1.55	0.35	0.19	0.82	2011	100.00	100.00	100.00	100.00	100.00
2012	-0.22	-0.43	0.03	0.09	-0.06	2012	100.00	100.00	100.00	100.00	100.00
2013	1.14	-0.34	NaN	0.08	0.25	2013	98.89	96.74	90.22	97.80	95.89
2014	2.41	2.38	0.74	0.22	1.30	2014	100.00	100.00	98.91	98.90	99.45
2015	1.26	NaN				2015	100.00	91.30			

**Table F-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Incident solar flux, in watts per meter squared

File name: AK104\_So\_d\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	32.7	NaN
2000	NaN	NaN	NaN	31.1	NaN
2001	5.1	NaN	189.1	26.8	102.9
2002	5.2	171.4	193.2	31.7	100.4
2003	4.3	152.7	189.2	27.8	93.2
2004	6.7	169.9	197.1	29.5	101.2
2005	NaN	NaN	208.2	27.5	NaN
2006	NaN	NaN	NaN	30.0	NaN
2007	4.5	NaN	230.2	NaN	NaN
2008	NaN	NaN	184.1	23.6	92.2
2009	4.7	NaN	178.8	26.8	NaN
2010	NaN	NaN	NaN	31.8	NaN
2011	5.3	164.6	196.3	23.3	98.1
2012	NaN	NaN	178.1	26.7	NaN
2013	1.6	NaN	172.1	30.0	89.8
2014	5.3	137.3	158.2	29.9	83.4
2015	4.7	146.1			

#### Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	6.5	98.9	34.8
2000	92.3	48.9	89.1	100.0	82.5
2001	98.9	84.8	100.0	100.0	95.9
2002	100.0	98.9	97.8	100.0	99.2
2003	100.0	96.7	97.8	100.0	98.6
2004	100.0	100.0	98.9	98.9	99.5
2005	91.1	53.3	98.9	98.9	85.5
2006	84.4	10.9	50.0	100.0	61.1
2007	95.6	84.8	97.8	91.2	92.3
2008	94.5	91.3	98.9	100.0	96.2
2009	100.0	75.0	100.0	97.8	93.2
2010	42.2	47.8	94.6	97.8	70.7
2011	100.0	100.0	100.0	100.0	100.0
2012	79.1	50.0	100.0	98.9	82.0
2013	100.0	94.6	97.8	98.9	97.8
2014	100.0	100.0	100.0	98.9	99.7
2015	100.0	98.9			

#### Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	3.8	NaN
2000	NaN	NaN	NaN	2.3	NaN
2001	0.6	NaN	1.1	-2.1	8.5
2002	0.7	22.4	5.1	2.9	6.0
2003	-0.2	3.6	1.2	-1.0	-1.3
2004	2.2	20.8	9.0	0.6	6.7
2005	NaN	NaN	20.2	-1.3	NaN
2006	NaN	NaN	NaN	1.1	NaN
2007	0.1	NaN	42.2	NaN	NaN
2008	NaN	NaN	-3.9	-5.3	-2.2
2009	0.3	NaN	-9.2	-2.0	NaN
2010	NaN	NaN	NaN	2.9	NaN
2011	0.9	15.5	8.3	-5.5	3.7
2012	NaN	NaN	-9.9	-2.2	NaN
2013	-2.9	NaN	-15.9	1.1	-4.6
2014	0.9	-11.8	-29.8	1.0	-11.0
2015	0.3	-3.0			



**Table F-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
 Variable: Reflected solar flux, in watts per meter squared

File name: AK104\_So\_u\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	11.5	NaN
1999	5.1	147.1	45.1	17.7	53.8
2000	5.2	162.6	63.1	15.9	61.3
2001	5.2	161.0	48.4	13.8	57.8
2002	5.3	126.8	42.7	13.7	47.2
2003	5.3	129.1	40.3	13.7	47.5
2004	6.0	138.2	43.2	17.1	51.7
2005	5.4	138.2	53.2	NaN	53.4
2006	NaN	NaN	NaN	9.2	NaN
2007	5.4	141.9	55.8	12.7	54.3
2008	5.6	130.7	41.1	13.7	47.8
2009	4.9	113.9	40.3	15.9	44.1
2010	NaN	NaN	NaN	NaN	NaN
2011	5.1	139.2	45.3	11.3	50.6
2012	4.8	142.9	43.3	12.6	51.4
2013	3.2	146.1	45.4	19.7	53.7
2014	6.0	122.9	39.6	11.6	45.3
2015	4.6	112.3			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	100.0	0.0
1999	98.9	96.7	100.0	96.7	98.1
2000	97.8	95.7	100.0	98.9	98.1
2001	100.0	100.0	100.0	96.7	99.2
2002	100.0	97.8	97.8	98.9	98.6
2003	100.0	100.0	97.8	100.0	99.5
2004	100.0	100.0	98.9	96.7	98.9
2005	98.9	100.0	98.9	92.3	97.5
2006	85.6	14.1	55.4	100.0	63.6
2007	100.0	100.0	97.8	100.0	99.5
2008	100.0	98.9	100.0	100.0	99.7
2009	100.0	100.0	100.0	98.9	99.7
2010	42.2	47.8	94.6	94.5	69.9
2011	100.0	100.0	100.0	100.0	100.0
2012	98.9	100.0	100.0	98.9	99.5
2013	100.0	98.9	98.9	100.0	99.5
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-3.0	NaN
1999	-0.0	10.3	-0.8	3.2	2.8
2000	0.2	25.7	17.2	1.4	10.3
2001	0.1	24.1	2.4	-0.7	6.8
2002	0.2	-10.1	-3.2	-0.8	-3.9
2003	0.2	-7.7	-5.7	-0.8	-3.6
2004	1.0	1.3	-2.7	2.6	0.6
2005	0.3	1.3	7.2	NaN	2.4
2006	NaN	NaN	NaN	-5.3	NaN
2007	0.3	5.1	9.8	-1.8	3.3
2008	0.5	-6.1	-4.9	-0.8	-3.3
2009	-0.2	-22.9	-5.6	1.4	-6.9
2010	NaN	NaN	NaN	NaN	NaN
2011	0.0	2.3	-0.6	-3.2	-0.5
2012	-0.3	6.0	-2.7	-1.9	0.3
2013	-1.8	9.2	-0.5	5.2	2.7
2014	1.0	-14.0	-6.3	-2.9	-5.7
2015	-0.5	-24.5			

**Table F-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat

Variable: Rainfall, in millimeters per hour

File name: AK104\_rain\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	2.0	NaN
2014	0.0	NaN	6.3	2.0	6.3
2015	0.0	2.3			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	27.2	95.6	39.2
2014	100.0	89.1	95.7	100.0	96.2
2015	100.0	97.8			

Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	24.1	NaN
2014	0.0	NaN	111.5	30.7	142.2
2015	0.0	13.2			

**Table F-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
 Variable: Snow depth, in centimeters  
 File name: AKl04\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	11.4	NaN
2001	25.4	37.7	5.8	NaN	21.6
2002	NaN	45.5	4.9	8.1	23.7
2003	24.6	39.3	4.8	17.8	24.1
2004	47.2	52.1	5.5	10.4	27.3
2005	25.6	42.1	5.7	10.4	21.8
2006	NaN	39.6	NaN	8.2	21.7
2007	23.5	28.8	6.1	9.6	17.0
2008	23.1	39.7	6.2	20.5	23.6
2009	36.3	38.1	6.7	20.0	25.7
2010	NaN	NaN	8.6	11.5	NaN
2011	45.4	43.9	6.2	NaN	27.5
2012	42.8	52.5	7.0	16.4	28.9
2013	37.5	49.5	5.4	20.5	28.4
2014	39.9	48.3	6.9	13.6	26.4
2015	37.6	42.7			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	27.3	NaN
2001	27.7	48.0	33.5	NaN	48.0
2002	NaN	60.7	11.9	17.0	60.7
2003	42.7	46.5	16.5	38.1	48.3
2004	62.5	62.0	16.3	23.0	62.5
2005	37.7	56.4	36.0	30.1	56.4
2006	NaN	48.1	NaN	19.5	48.1
2007	29.8	35.4	27.1	23.7	35.4
2008	35.0	55.7	8.6	38.8	55.7
2009	42.6	56.7	9.7	36.5	56.7
2010	NaN	NaN	31.4	41.3	NaN
2011	54.7	52.5	12.4	NaN	54.7
2012	52.2	63.2	26.6	36.5	63.2
2013	51.2	69.8	25.6	43.1	69.8
2014	50.4	61.1	29.7	27.5	61.1
2015	48.7	56.4			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	-0.3	NaN
2001	23.8	24.6	-2.3	NaN	-2.3
2002	NaN	-1.4	-1.1	-1.6	-1.6
2003	13.8	16.5	-1.0	-0.1	-1.0
2004	36.4	-0.0	-0.8	-0.1	-0.8
2005	17.3	35.1	-1.7	-1.7	-1.7
2006	NaN	-0.3	NaN	-1.1	-1.4
2007	14.9	22.3	-1.2	-1.8	-1.8
2008	16.8	-1.7	-1.8	-1.5	-1.8
2009	29.3	-0.3	0.2	-1.0	-1.0
2010	NaN	NaN	-1.0	-1.6	NaN
2011	30.1	1.4	-1.4	NaN	-1.6
2012	26.0	25.1	-0.7	-0.8	-0.8
2013	31.1	27.3	-0.7	-0.2	-0.7
2014	34.7	15.8	-0.8	-0.4	-0.8
2015	23.9	0.4			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	-2.7	NaN
2001	-9.2	-5.6	-0.3	NaN	-3.0
2002	NaN	2.2	-1.2	-6.0	-0.9
2003	-10.0	-4.0	-1.3	3.7	-0.5
2004	12.5	8.8	-0.5	-3.7	2.7
2005	-9.1	-1.2	-0.3	-3.7	-2.8
2006	NaN	-3.7	NaN	-5.9	-2.9
2007	-11.1	-14.4	0.1	-4.5	-7.6
2008	-11.5	-3.5	0.2	6.4	-1.0
2009	1.7	-5.2	0.7	5.9	1.1
2010	NaN	NaN	2.6	-2.6	NaN
2011	10.7	0.7	0.2	NaN	3.0
2012	8.2	9.2	1.0	2.3	4.3
2013	2.9	6.2	-0.7	6.4	3.8
2014	5.2	5.0	0.9	-0.5	1.8
2015	2.9	-0.6			

**Table F-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	17.4	100.0	36.9
2001	90.0	100.0	100.0	59.3	81.1
2002	66.7	100.0	100.0	98.9	97.8
2003	88.9	98.9	84.8	100.0	94.0
2004	100.0	100.0	100.0	97.8	99.5
2005	100.0	92.4	100.0	100.0	97.3
2006	75.6	100.0	60.9	100.0	84.9
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	96.7	99.2
2010	43.3	48.9	96.7	81.3	67.7
2011	100.0	100.0	100.0	75.8	92.3
2012	83.5	93.5	95.7	100.0	94.8
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table F-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Umiat  
Variable: Soil moisture, in water fraction by volume

File name: AK104\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.51	NaN	NaN
2005	NaN	NaN	0.25	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	0.26	NaN	NaN
2009	NaN	NaN	0.26	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.81	NaN	NaN
2005	NaN	NaN	0.86	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	0.78	NaN	NaN
2009	NaN	NaN	0.79	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.02	NaN	NaN
2005	NaN	NaN	0.01	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	0.02	NaN	NaN
2009	NaN	NaN	0.00	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

**Table F-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	20.65	91.21	27.95
2004	0.00	14.13	100.00	62.64	44.26
2005	0.00	4.35	100.00	46.15	37.81
2006	0.00	6.52	55.43	61.54	30.96
2007	0.00	0.00	92.39	30.77	30.96
2008	0.00	7.61	100.00	59.34	41.80
2009	0.00	0.00	95.65	64.84	40.27
2010	0.00	1.09	76.09	49.45	31.78
2011	0.00	3.26	78.26	58.24	35.07
2012	0.00	0.00	80.43	75.82	39.07
2013	0.00	0.00	80.43	75.82	39.18
2014	0.00	0.00	75.00	64.84	35.07
2015	0.00	0.00			

**Table F-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## G. Tunalik

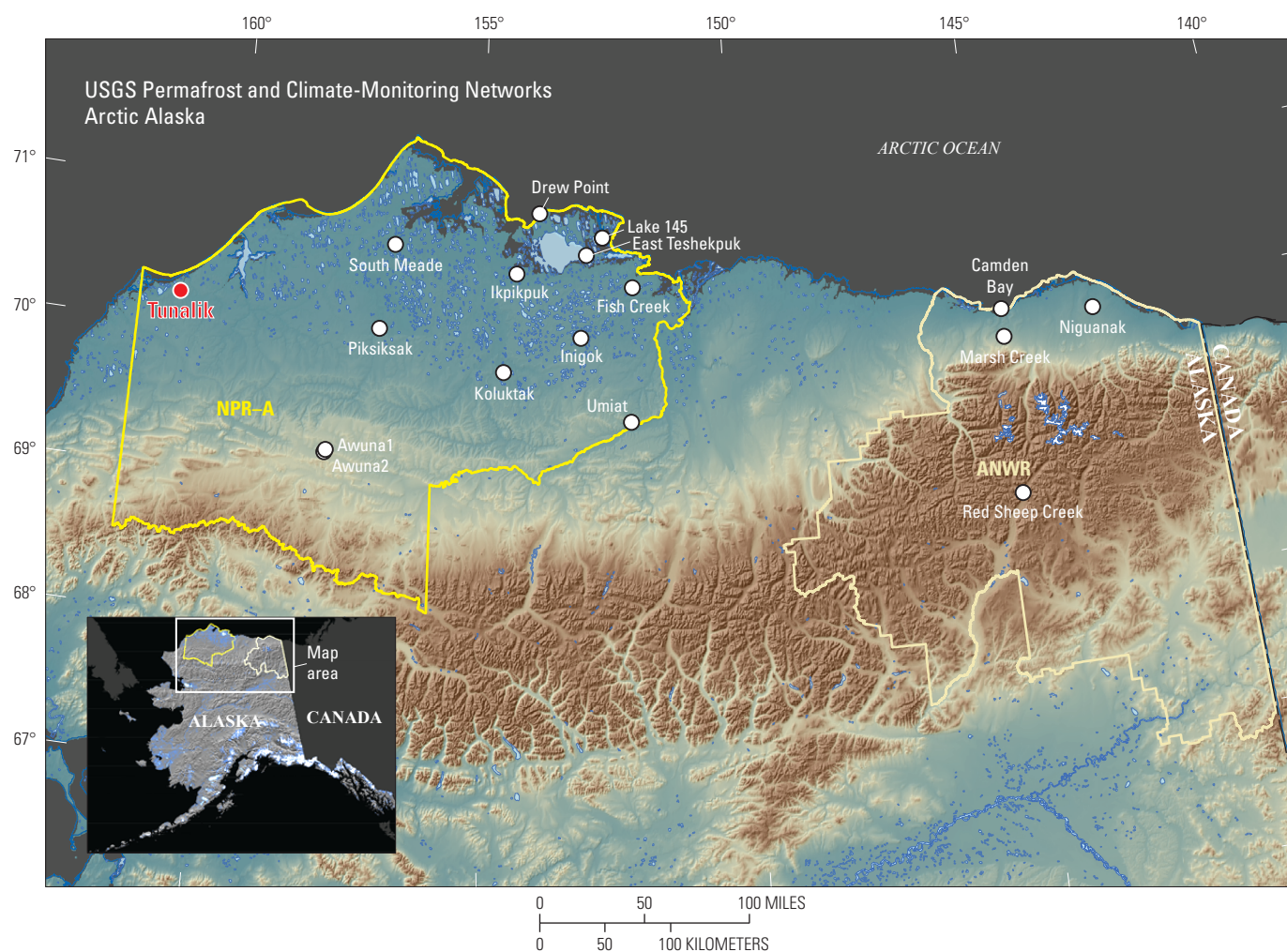
GTN-P code: U25

Latitude: 70°11.756'N

Longitude: 161°04.687'W

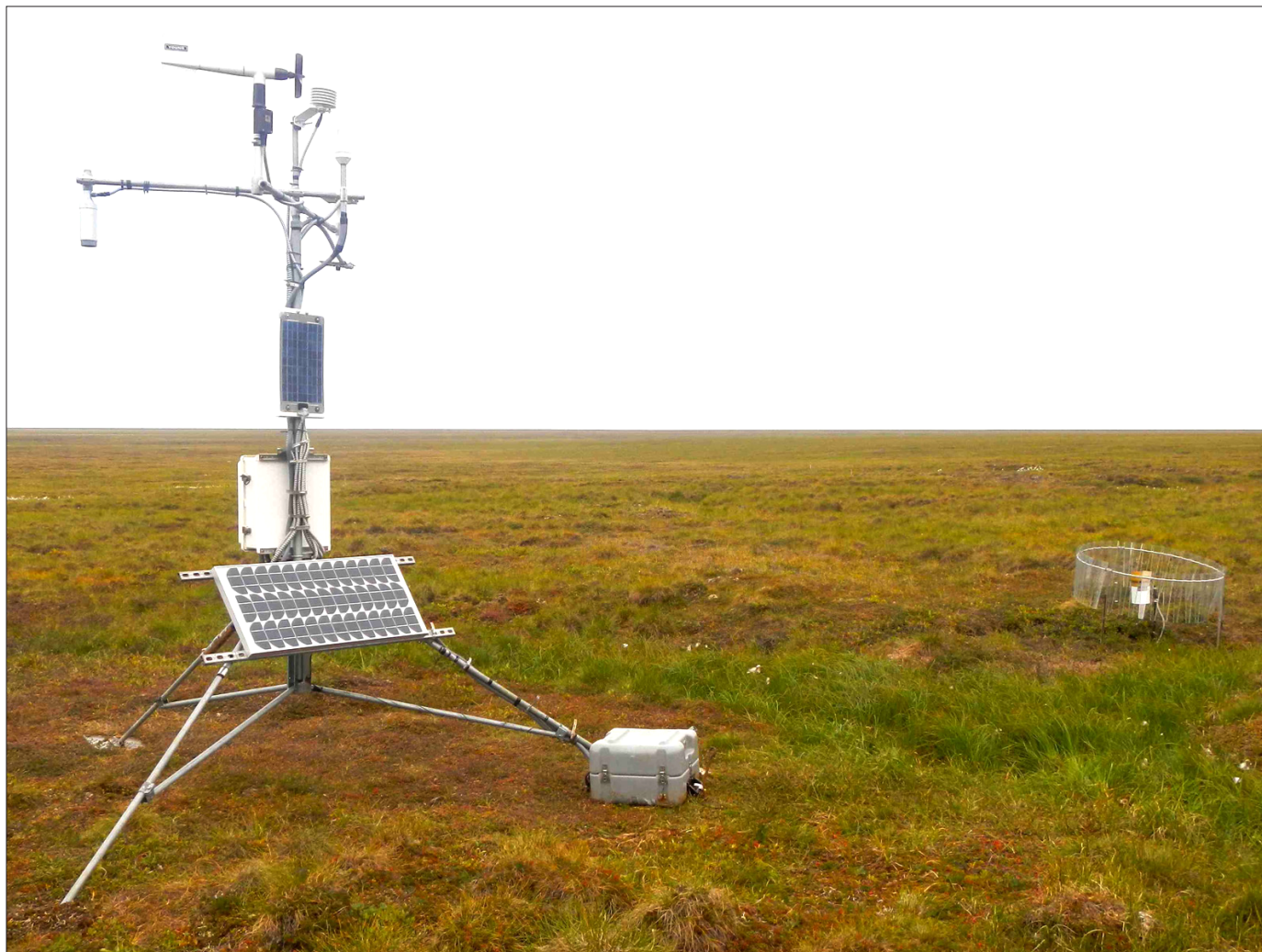
Elevation: 26 meters above mean sea level

Installation date: 20 AUG 1998



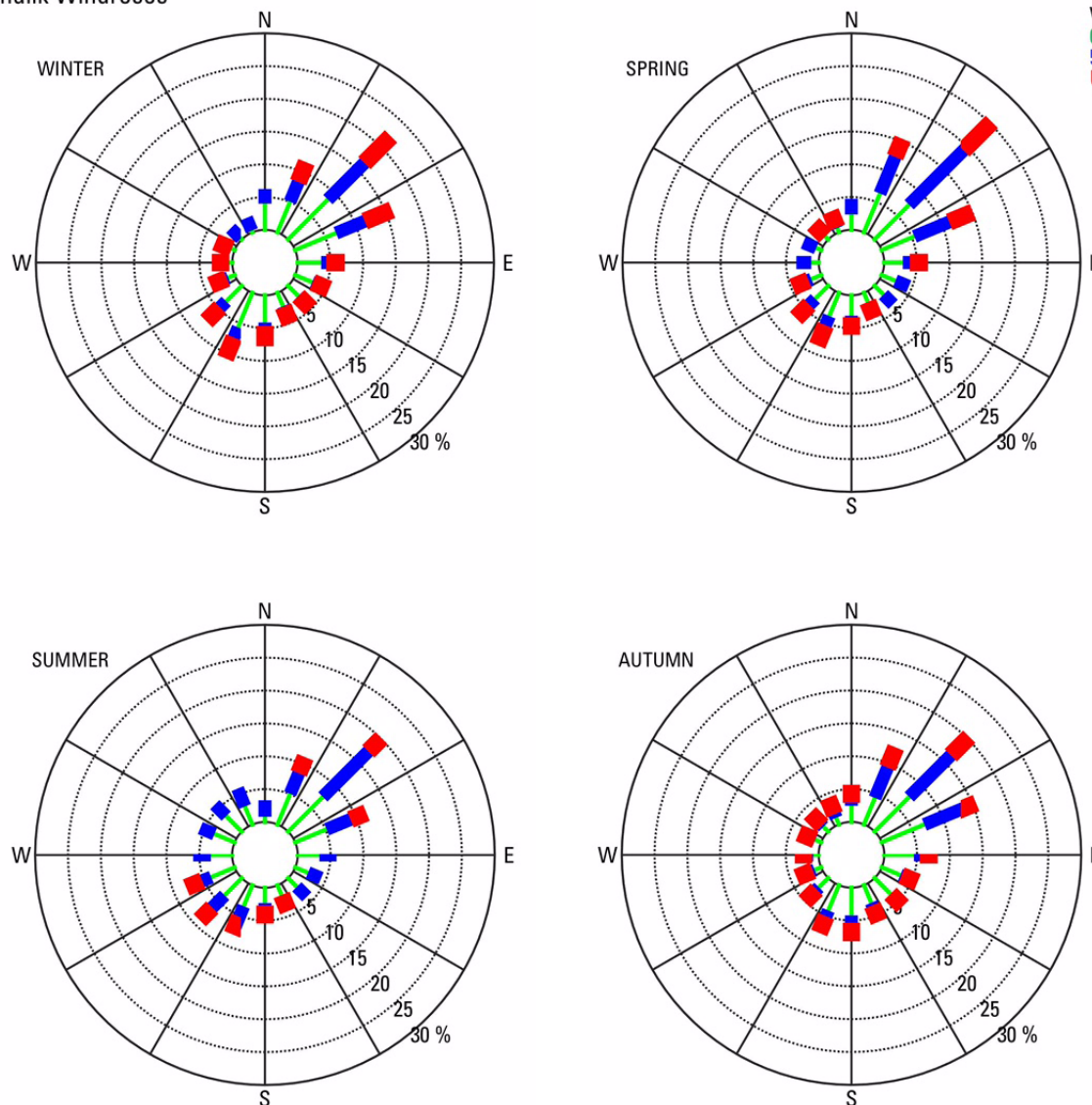
**Figure G-1.** Location map presenting the specific location of the Tunalik site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure G–2.** Tunalik station in summer 2008.

## Tunalik Windroses



**Figure G–3.** Tunalik seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table G–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Air temperature, in degrees Celsius  
 File name: AK105\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.93	-4.63	-12.52	-21.21
1999	-30.29	-27.89	-28.33	-19.44	-4.49	5.11	9.41	8.14	1.27	-9.19	-20.77	-31.19
2000	-26.86	-26.08	-26.33	-17.81	-8.28	5.48	6.54	5.69	0.47	-8.98	-19.32	-22.14
2001	-24.50	-17.78	-27.19	-17.27	-10.40	4.97	7.41	4.54	1.57	-13.15	-18.14	-24.91
2002	-29.35	-28.41	-17.63	-15.31	-1.96	4.24	7.59	5.09	3.07	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-23.72
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.60	-5.79	-16.06	-24.01
2005	-23.78	-26.60	-23.10	-16.74	-4.64	4.42	8.51	8.52	2.00	-7.21	-20.66	-22.09
2006	-26.02	-22.88	-28.77	-20.74	-3.96	5.07	7.01	4.91	3.47	-3.75	-14.59	-20.27
2007	-27.72	-24.74	-27.11	-14.04	-7.48	7.22	12.53	10.43	3.72	-7.50	-12.78	-19.89
2008	-28.91	-28.40	-29.12	-13.07	-3.90	5.06	8.45	4.33	0.04	-7.44	-16.23	-17.84
2009	-26.82	-27.19	-29.56	-14.78	-1.01	6.58	11.74	6.61	1.19	-4.93	-20.34	-19.85
2010	-28.15	-25.26	-25.58	-13.28	-5.70	6.33	8.54	8.96	4.07	-7.39	-10.35	-22.89
2011	-22.00	-19.75	-19.23	-19.57	-3.97	5.44	9.90	7.86	2.60	-5.96	-20.91	-25.36
2012	-31.87	-24.77	-32.43	-16.52	-4.92	6.93	10.08	8.41	1.27	-2.81	-16.26	-25.18
2013	-25.83	-31.06	-22.85	-18.14	-4.72	8.22	11.33	5.40	-0.27	-4.30	-13.51	-20.16
2014	-21.03	-22.88	-21.10	-14.75	-2.17	3.39	7.07	6.15	1.54	-5.76	-13.22	-23.35
2015	-24.33	-21.87	-25.44	-14.00	0.62	7.45	9.42					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.45	-17.27	-27.84	-38.08
1999	-48.80	-45.66	-44.55	-33.30	-18.20	-3.59	-1.30	-2.16	-12.18	-23.36	-33.44	-39.47
2000	-40.63	-43.80	-37.24	-31.39	-24.08	-4.11	-2.62	-1.28	-9.06	-21.49	-36.10	-37.90
2001	-38.57	-36.87	-38.32	-31.96	-27.73	-2.78	-1.21	-2.11	-7.78	-27.31	-28.53	-39.41
2002	-44.09	-41.33	-36.21	-32.38	-18.31	-7.01	-2.78	-2.53	-5.50	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-40.03
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-10.50	-20.27	-31.42	-37.80
2005	-39.37	-38.01	-36.44	-32.08	-12.05	-4.44	-0.89	-1.77	-4.91	-24.47	-39.02	-36.08
2006	-40.09	-48.17	-42.25	-34.38	-22.40	-6.45	-0.74	-1.87	-3.34	-14.69	-30.17	-38.25
2007	-42.18	-40.39	-39.83	-26.52	-21.27	-1.16	2.94	0.15	-6.33	-22.21	-25.36	-42.71
2008	-42.29	-40.26	-41.30	-34.45	-16.34	-3.58	-0.56	-4.75	-12.10	-19.75	-29.67	-33.86
2009	-40.63	-45.07	-39.31	-31.82	-13.70	-0.13	1.98	-2.32	-10.36	-18.87	-39.12	-37.68
2010	-40.91	-45.07	-45.07	-35.71	-15.36	-1.63	-0.33	0.42	-14.25	-16.24	-23.32	-41.05
2011	-42.48	-32.99	-32.48	-32.04	-21.90	-2.96	0.68	-0.10	-7.68	-15.52	-37.22	-35.97
2012	-45.74	-48.17	-39.73	-36.80	-24.84	-1.36	1.25	0.26	-6.61	-17.64	-27.40	-37.66
2013	-36.19	-41.48	-32.99	-31.88	-23.43	-4.77	1.42	-3.96	-10.42	-18.29	-31.73	-37.83
2014	-42.56	-42.79	-39.53	-35.24	-14.22	-3.52	0.37	0.33	-6.34	-18.15	-27.18	-35.16
2015	-35.47	-36.24	-38.77	-27.20	-16.03	-3.32	-0.48					

**Table G-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.31	3.51	1.52	0.19
1999	-7.42	-17.05	-15.27	1.87	4.44	23.47	21.22	25.91	13.25	-1.65	-9.40	-20.06
2000	-9.26	-0.62	-14.62	-0.13	4.60	17.04	19.58	20.88	11.66	0.25	-0.77	-4.11
2001	-14.66	-1.86	-14.49	-3.14	7.72	22.74	21.61	13.54	12.05	-0.73	-5.63	-6.73
2002	-3.23	-4.37	-0.66	1.47	19.61	15.02	26.29	20.37	14.85	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.07
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.67	1.60	-1.86	-2.49
2005	-0.15	-7.50	-1.79	4.72	3.69	20.59	22.99	21.31	12.24	4.80	-6.85	-12.46
2006	-12.12	2.40	-15.88	-10.42	10.30	19.87	21.54	15.14	16.84	4.04	0.29	-0.87
2007	-7.09	0.45	-3.24	-1.83	1.81	20.28	25.45	21.29	16.36	-0.19	-2.48	1.45
2008	-0.72	-9.02	-6.87	2.80	8.28	21.83	24.31	17.36	9.59	-0.14	-6.19	-0.45
2009	-8.39	-2.31	-14.20	4.00	12.04	17.20	28.84	18.23	16.25	6.11	-9.70	-0.49
2010	-6.93	-14.74	-11.94	-0.35	4.89	18.13	21.64	25.82	17.02	-0.58	1.49	-5.99
2011	0.95	-0.51	-2.07	-4.88	8.65	20.41	23.26	20.36	13.77	1.28	-1.97	-8.18
2012	-13.23	-1.83	-13.44	-5.36	7.31	21.58	21.82	17.84	12.85	6.19	-3.04	-7.05
2013	-15.65	-21.58	-5.51	-2.89	8.70	24.81	26.03	18.22	11.85	2.21	1.70	1.09
2014	-2.21	-3.05	-4.21	2.23	5.62	18.17	19.46	15.97	12.29	4.17	3.75	-2.83
2015	-7.11	-0.42	-5.27	1.68	15.39	24.81	26.61					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.19	1.96	3.94	1.70
1999	-4.20	-3.09	-2.91	-3.32	-0.39	-0.63	0.38	1.42	-0.47	-2.60	-4.30	-8.29
2000	-0.77	-1.28	-0.91	-1.69	-4.19	-0.25	-2.50	-1.03	-1.27	-2.39	-2.86	0.77
2001	1.59	7.02	-1.77	-1.16	-6.31	-0.77	-1.63	-2.18	-0.17	-6.56	-1.68	-2.00
2002	-3.25	-3.62	7.79	0.81	2.14	-1.49	-1.44	-1.62	1.33	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.81
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.13	0.80	0.40	-1.11
2005	2.32	-1.80	2.32	-0.62	-0.54	-1.32	-0.53	1.81	0.27	-0.62	-4.20	0.82
2006	0.08	1.92	-3.35	-4.62	0.14	-0.67	-2.03	-1.81	1.73	2.84	1.88	2.63
2007	-1.63	0.06	-1.69	2.08	-3.39	1.49	3.49	3.71	1.98	-0.91	3.68	3.02
2008	-2.82	-3.61	-3.70	3.04	0.20	-0.68	-0.58	-2.39	-1.70	-0.85	0.23	5.07
2009	-0.73	-2.39	-4.13	1.34	3.08	0.84	2.70	-0.10	-0.55	1.66	-3.87	3.05
2010	-2.06	-0.47	-0.16	2.83	-1.60	0.59	-0.50	2.24	2.33	-0.80	6.11	0.01
2011	4.10	5.05	6.19	-3.45	0.13	-0.29	0.87	1.14	0.86	0.63	-4.45	-2.46
2012	-5.78	0.03	-7.01	-0.40	-0.82	1.19	1.05	1.69	-0.47	3.78	0.20	-2.27
2013	0.26	-6.26	2.57	-2.02	-0.62	2.48	2.30	-1.32	-2.01	2.29	2.96	2.74
2014	5.06	1.92	4.32	1.36	1.93	-2.34	-1.96	-0.57	-0.20	0.84	3.24	-0.44
2015	1.77	2.93	-0.02	2.12	4.71	1.71	0.38					

**Table G-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	25.81	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.33	100.00
2004	93.55	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table G-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik

Variable: Wind speed, in meters per second

File name: AK105\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.84	4.02	4.32	5.59
2004	3.92	NaN	5.65	5.34	5.96	4.70	3.64	3.37	3.98	6.15	6.38	NaN
2005	NaN	NaN	5.62	4.39	6.23	5.12	4.77	3.49	5.09	4.05	NaN	NaN
2006	NaN	NaN	NaN	NaN	4.72	4.04	3.96	3.44	3.29	4.50	4.63	NaN
2007	NaN	NaN	NaN	5.10	4.37	4.55	3.88	3.33	3.92	4.84	NaN	4.20
2008	NaN	3.29	4.07	3.88	5.97	2.99	3.03	3.71	3.39	3.55	NaN	NaN
2009	NaN	5.59	NaN	4.46	4.00	4.82	4.25	3.62	3.79	4.17	NaN	NaN
2010	NaN	6.45	NaN	4.55	5.90	5.20	4.19	4.38	3.21	6.33	NaN	3.93
2011	2.90	6.09	3.53	4.61	3.88	5.39	3.92	3.59	4.38	4.26	NaN	NaN
2012	3.81	NaN	3.40	4.71	4.14	4.88	3.35	4.01	3.47	4.08	3.94	NaN
2013	NaN	NaN	4.82	4.41	4.81	4.34	4.12	3.56	3.66	NaN	5.17	NaN
2014	NaN	3.73	3.28	3.84	5.66	3.90	3.99	4.76	4.23	5.31	4.01	4.04
2015	NaN	5.25	NaN	4.84	NaN	3.92	3.96					



**Table G-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.71	12.91	13.26	16.26
2004	15.14	NaN	16.86	13.17	15.79	11.57	11.16	11.22	12.23	12.20	14.93	NaN
2005	NaN	NaN	16.55	13.22	11.82	11.97	9.83	11.12	9.87	10.63	NaN	NaN
2006	NaN	NaN	NaN	NaN	9.98	10.20	10.39	8.17	9.44	14.53	12.48	NaN
2007	NaN	NaN	NaN	13.60	11.69	9.87	8.78	10.27	8.59	11.15	NaN	15.77
2008	NaN	9.51	11.37	14.20	12.72	8.91	11.41	8.86	8.55	12.07	NaN	NaN
2009	NaN	17.45	NaN	12.21	12.01	9.35	9.68	9.17	11.39	12.67	NaN	NaN
2010	NaN	16.78	NaN	11.48	12.58	11.50	9.94	15.41	8.03	12.45	NaN	13.50
2011	15.72	19.40	11.89	11.48	9.54	11.31	8.73	8.01	8.76	12.80	NaN	NaN
2012	13.40	NaN	9.58	12.45	10.07	12.52	8.50	10.27	11.39	12.24	9.98	NaN
2013	NaN	NaN	13.99	14.29	13.18	10.07	12.21	8.56	9.26	NaN	14.98	NaN
2014	NaN	11.88	9.19	12.75	14.67	9.78	13.70	9.61	8.31	16.93	10.63	14.38
2015	NaN	14.52	NaN	13.25	NaN	10.31	9.39					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.01	-0.68	-0.42	1.23
2004	NaN	NaN	1.32	0.58	0.91	0.24	-0.28	-0.38	0.15	1.45	1.64	NaN
2005	NaN	NaN	1.28	-0.37	1.18	0.65	0.85	-0.26	1.26	-0.65	NaN	NaN
2006	NaN	NaN	NaN	NaN	-0.33	-0.43	0.04	-0.31	-0.54	-0.20	-0.11	NaN
2007	NaN	NaN	NaN	0.34	-0.68	0.08	-0.04	-0.42	0.09	0.14	NaN	-0.15
2008	NaN	-1.78	-0.27	-0.88	0.91	-1.48	-0.89	-0.04	-0.44	-1.15	NaN	NaN
2009	NaN	0.53	NaN	-0.30	-1.05	0.35	0.33	-0.13	-0.04	-0.53	NaN	NaN
2010	NaN	1.38	NaN	-0.21	0.85	0.73	0.27	0.62	-0.62	1.63	NaN	-0.43
2011	NaN	1.03	-0.81	-0.16	-1.17	0.93	-0.00	-0.16	0.55	-0.44	NaN	NaN
2012	NaN	NaN	-0.94	-0.06	-0.91	0.41	-0.57	0.26	-0.36	-0.62	-0.80	NaN
2013	NaN	NaN	0.48	-0.35	-0.24	-0.13	0.19	-0.19	-0.17	NaN	0.43	NaN
2014	NaN	-1.33	-1.06	-0.93	0.61	-0.57	0.07	1.00	0.40	0.61	-0.73	-0.31
2015	NaN	0.18	NaN	0.07	NaN	-0.54	0.04					

**Table G-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.48	100.00	100.00	100.00	100.00
2004	100.00	58.62	100.00	96.67	100.00	100.00	100.00	100.00	100.00	96.77	100.00	45.16
2005	87.10	78.57	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	90.00	93.55
2006	83.87	67.86	70.97	83.33	100.00	100.00	100.00	100.00	100.00	96.77	96.67	87.10
2007	61.29	89.29	93.55	100.00	100.00	100.00	100.00	100.00	100.00	96.77	80.00	100.00
2008	77.42	100.00	100.00	96.67	100.00	100.00	96.77	100.00	100.00	100.00	76.67	90.32
2009	51.61	100.00	48.39	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.33	77.42
2010	90.32	96.43	87.10	100.00	100.00	100.00	100.00	100.00	100.00	96.77	93.33	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	63.33	83.87
2012	100.00	82.76	100.00	100.00	100.00	100.00	100.00	96.77	100.00	96.77	96.67	90.32
2013	87.10	89.29	100.00	100.00	100.00	100.00	100.00	96.77	100.00	80.65	100.00	70.97
2014	74.19	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	90.32	96.43	90.32	100.00	93.55	100.00	96.77					

**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
Variable: Ground temperature, in degrees Celsius

File name: AK105\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.40	-0.44	-3.98	-12.47
1999	-16.84	-19.40	-19.72	-16.76	-6.45	0.76	3.88	4.33	1.35	-1.41	-9.54	-21.65
2000	-21.42	-20.26	-21.69	-17.47	-10.96	0.88	4.54	2.96	0.80	-0.71	-8.88	-16.25
2001	-20.17	-16.57	-22.83	-16.98	-10.83	0.35	3.34	2.43	1.11	-1.74	-9.43	-17.01
2002	-22.49	-24.90	-17.52	-15.67	-5.24	0.36	2.71	2.62	1.28	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.48	-0.25	-6.91	-16.65
2004	-20.61	-26.62	-24.85	-18.44	-5.45	1.58	5.48	6.08	1.05	-0.62	-6.33	-18.71
2005	-19.01	-21.42	-20.58	-16.70	-4.85	1.92	4.76	5.66	1.70	-1.13	-7.30	-13.54
2006	-16.46	-17.23	-19.48	-17.29	-5.97	1.20	4.15	4.55	2.41	-0.41	-4.87	-11.25
2007	-19.95	-20.56	-23.35	-13.61	-7.80	3.47	9.28	7.56	3.14	-2.08	-4.42	-12.60
2008	-21.39	-21.01	-22.45	-13.80	-5.52	2.36	7.15	3.37	0.96	-0.86	-6.29	-12.48
2009	-17.25	-18.85	-18.61	-15.44	NaN	3.14	8.30	5.16	1.72	-1.25	-8.67	-13.65
2010	-20.31	-19.57	-21.03	-14.29	-7.74	1.57	4.72	5.69	3.13	-0.76	-1.31	-8.20
2011	-14.36	-14.37	-13.41	-13.85	-6.73	0.24	4.87	5.33	2.11	-1.07	-5.63	-13.78
2012	-20.64	-19.67	-24.58	-18.05	-7.53	0.67	5.55	5.69	1.25	-0.10	-2.30	-12.00
2013	-17.33	-22.29	-18.90	-16.66	-7.71	0.84	5.83	4.02	0.90	-0.24	-1.81	-5.28
2014	-11.10	-12.96	-14.41	-12.05	-3.01	-0.19	2.49	3.64	0.89	-0.08	-3.15	-14.23
2015	-17.42	NaN	-16.66	-13.12	-3.67	0.97	4.40					



**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.02	-1.95	-8.58	-20.77
1999	-22.45	-22.89	-22.92	-21.26	-13.53	-0.59	1.89	0.78	-0.16	-3.58	-13.11	-26.19
2000	-26.17	-24.75	-24.16	-21.08	-13.78	-3.36	0.26	0.59	-0.11	-3.35	-15.90	-20.94
2001	-26.15	-24.38	-26.64	-24.26	-18.87	-1.61	0.48	1.08	-0.12	-6.17	-17.77	-22.89
2002	-29.18	-29.63	-22.87	-20.16	-13.52	-0.64	-0.06	0.90	-0.12	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.12	-3.45	-13.72	-18.81
2004	-26.31	-29.99	-29.65	-23.59	-12.66	-0.64	2.62	1.52	-0.26	-3.39	-14.15	-24.53
2005	-25.74	-24.42	-26.16	-22.52	-8.61	-0.41	1.21	1.74	-0.29	-3.47	-13.92	-16.53
2006	-21.42	-23.07	-21.38	-20.14	-14.50	-0.56	0.44	1.21	0.11	-2.05	-12.34	-20.31
2007	-23.30	-28.77	-27.89	-17.97	-13.57	-0.58	3.44	3.31	-2.03	-5.00	-10.44	-20.16
2008	-25.53	-26.13	-25.86	-17.34	-12.04	-0.31	0.96	0.42	-1.87	-3.54	-12.41	-17.60
2009	-20.10	-22.84	-20.56	-19.32	NaN	-0.22	3.65	2.22	-0.69	-6.94	-12.68	-17.98
2010	-25.06	-26.41	-27.21	-18.49	-11.53	-0.33	1.09	3.02	-0.41	-1.95	-2.37	-16.10
2011	-20.67	-17.40	-15.50	-15.54	-12.68	-0.38	0.58	2.41	-0.79	-2.96	-12.52	-18.35
2012	-25.67	-27.17	-25.86	-25.35	-14.09	-0.77	1.73	1.73	-0.05	-0.30	-6.16	-17.14
2013	-22.16	-24.72	-21.77	-20.56	-13.97	-0.78	2.07	0.84	-0.12	-0.64	-4.92	-10.58
2014	-14.81	-16.56	-17.29	-14.85	-8.82	-1.51	0.87	0.95	-0.13	-0.63	-7.75	-19.60
2015	-21.57	NaN	-18.12	-17.08	-10.52	-0.29	2.15					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.75	0.54	-0.53	-7.84
1999	-14.47	-17.33	-17.48	-13.30	-0.40	3.85	6.70	7.85	4.09	-0.08	-3.68	-13.11
2000	-16.65	-14.82	-19.40	-13.84	-3.49	6.26	12.86	8.25	3.48	-0.02	-1.83	-11.74
2001	-16.43	-11.29	-18.95	-13.20	-1.66	5.69	7.50	4.10	3.38	-0.06	-4.18	-13.37
2002	-14.10	-18.29	-11.25	-11.40	-0.00	1.88	7.16	6.71	4.51	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.47	-0.03	-0.23	-12.84
2004	-9.35	-22.28	-15.40	-11.46	-0.40	6.41	8.95	10.67	6.34	-0.06	-2.05	-11.86
2005	-8.96	-18.69	-13.48	-3.87	-0.10	7.79	10.30	9.91	4.39	-0.07	-3.25	-11.37
2006	-11.90	-11.21	-17.19	-13.50	-0.14	6.07	10.32	9.28	6.36	0.88	-0.33	-4.51
2007	-15.81	-8.91	-13.36	-10.60	-0.16	14.55	16.81	11.97	11.05	0.46	-1.77	-6.90
2008	-14.48	-16.19	-17.08	-8.85	0.02	11.69	18.24	9.28	7.49	0.14	-2.13	-7.95
2009	-13.79	-15.24	-15.07	-6.07	NaN	9.33	16.28	13.54	7.68	-0.04	-3.96	-8.58
2010	-15.68	-15.55	-18.08	-11.48	-0.13	8.59	10.95	10.35	6.91	-0.11	-0.24	-1.35
2011	-8.26	-12.24	-11.99	-12.07	-0.19	2.49	8.75	8.24	6.52	-0.09	-1.00	-8.86
2012	-16.96	-16.07	-20.95	-13.74	-0.08	4.83	9.90	8.80	5.57	0.51	-0.24	-3.73
2013	-13.68	-19.08	-15.87	-11.30	-0.34	5.10	9.97	8.85	3.29	-0.04	-0.42	-1.01
2014	-9.03	-8.80	-11.64	-8.86	-0.25	1.35	5.86	6.14	2.18	1.07	-0.31	-7.72
2015	-12.97	NaN	-12.98	-9.33	0.09	4.57	7.97					

**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	0.36	1.64	1.34
1999	1.53	0.10	0.11	-1.31	-0.10	-0.47	-1.21	-0.21	-0.11	-0.61	-3.92	-7.84
2000	-3.05	-0.75	-1.86	-2.02	-4.61	-0.36	-0.55	-1.58	-0.66	0.10	-3.26	-2.44
2001	-1.80	2.93	-3.01	-1.53	-4.48	-0.88	-1.75	-2.11	-0.35	-0.94	-3.81	-3.20
2002	-4.12	-5.39	2.30	-0.22	1.11	-0.88	-2.38	-1.92	-0.18	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.98	0.55	-1.29	-2.84
2004	-2.24	-7.11	-5.03	-2.99	0.91	0.34	0.39	1.54	-0.41	0.18	-0.71	-4.90
2005	-0.64	-1.91	-0.76	-1.26	1.50	0.69	-0.33	1.12	0.24	-0.33	-1.68	0.27
2006	1.91	2.28	0.34	-1.84	0.39	-0.03	-0.94	0.01	0.95	0.39	0.75	2.56
2007	-1.58	-1.05	-3.52	1.84	-1.45	2.24	4.19	3.02	1.68	-1.27	1.20	1.21
2008	-3.02	-1.50	-2.63	1.65	0.83	1.13	2.06	-1.16	-0.51	-0.06	-0.67	1.33
2009	1.12	0.65	1.21	0.01	NaN	1.90	3.21	0.62	0.26	-0.44	-3.05	0.17
2010	-1.94	-0.07	-1.21	1.16	-1.38	0.33	-0.37	1.15	1.67	0.05	4.31	5.61
2011	4.01	5.14	6.42	1.60	-0.38	-1.00	-0.22	0.79	0.65	-0.27	-0.01	0.03
2012	-2.27	-0.16	-4.76	-2.61	-1.18	-0.56	0.46	1.15	-0.22	0.71	3.32	1.81
2013	1.05	-2.78	0.92	-1.21	-1.36	-0.39	0.74	-0.52	-0.56	0.57	3.81	8.54
2014	7.27	6.55	5.41	3.40	3.34	-1.42	-2.60	-0.90	-0.57	0.72	2.47	-0.42
2015	0.95	NaN	3.17	2.33	2.68	-0.27	-0.69					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	19.35	51.61	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	25.81	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	83.87	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	32.26	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	80.65	0.00	22.58	64.52	23.33	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	73.33	16.13	90.32	16.67	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	83.87	46.67	0.00	80.65	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	92.86	100.00	100.00	100.00	100.00	100.00					

**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.66	-1.44	-1.44	-6.07
1999	-10.43	-14.09	-15.03	-15.11	-11.17	-5.30	-3.20	-2.05	-1.58	-1.33	-3.25	-10.83
2000	-15.36	-15.78	-17.10	-16.31	-13.10	-7.36	-3.95	-2.55	-1.90	-1.61	-3.59	-9.33
2001	-13.95	-13.68	-16.41	-16.06	-13.25	-6.91	-3.71	-2.41	-1.91	-1.63	-4.28	-10.08
2002	-14.42	-18.25	-16.26	-14.94	-10.64	-5.16	-3.32	-2.25	-1.82	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.72	-1.50	-2.51	-9.76
2004	-13.68	-18.77	-20.68	-18.42	-11.73	-5.38	-3.08	-2.05	-1.56	-1.37	-1.62	-9.22
2005	-12.79	-15.58	-16.67	-16.03	-10.59	-5.52	-3.41	-2.11	-1.56	-1.32	-2.22	-7.87
2006	-10.71	-13.21	-14.10	-14.95	-11.37	-5.35	-3.18	-1.91	-1.47	-1.29	-1.22	-5.09
2007	-11.94	-13.85	-17.68	-14.57	-11.30	-5.50	-2.99	-1.84	-1.38	-1.21	-1.52	-5.96
2008	-12.11	-14.68	-16.02	-14.72	-10.76	-5.41	-2.99	-1.76	-1.41	-1.25	-1.85	-7.21
2009	-10.86	-13.55	-14.10	-14.58	NaN	-4.38	-2.50	-1.60	-1.26	-1.10	-2.16	-7.81
2010	-12.31	-14.53	-16.03	-14.52	-11.33	-5.46	-3.11	-1.90	-1.36	-1.16	-1.10	-2.54
2011	-8.00	-10.62	-10.98	-11.54	-9.79	-4.48	-2.58	-1.54	-1.16	-1.02	-1.05	-6.35
2012	-12.00	-14.59	-16.89	-16.79	-12.15	-5.50	-3.16	-1.87	-1.35	-1.18	-1.09	-4.13
2013	-10.23	-14.43	-15.42	-15.09	-11.53	-5.32	-2.80	-1.69	-1.31	-1.18	-1.09	-1.83
2014	-6.39	-8.52	-10.75	-10.78	-6.99	-3.53	-2.21	-1.50	-1.19	-1.04	-0.97	-5.29
2015	-10.15	NaN	-12.90	-12.66	-8.56	-3.79	-2.31					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.84	-1.55	-2.79	-8.20
1999	-12.66	-14.65	-15.64	-15.87	-14.16	-7.20	-4.07	-2.47	-1.75	-1.50	-6.17	-14.70
2000	-15.99	-16.57	-17.50	-17.37	-14.95	-11.32	-5.04	-3.18	-2.13	-1.74	-6.51	-11.85
2001	-14.68	-14.66	-17.84	-17.88	-15.07	-10.67	-4.74	-2.84	-2.11	-1.78	-7.41	-12.30
2002	-17.06	-18.88	-17.97	-15.66	-13.95	-6.72	-4.05	-2.66	-2.01	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.92	-1.61	-5.75	-11.79
2004	-16.85	-20.81	-21.43	-20.06	-15.91	-7.25	-4.04	-2.50	-1.77	-1.48	-4.09	-12.34
2005	-15.00	-16.48	-17.81	-16.83	-13.96	-7.52	-4.27	-2.67	-1.75	-1.46	-5.17	-9.40
2006	-12.57	-14.04	-15.28	-15.32	-14.30	-7.27	-4.04	-2.37	-1.66	-1.37	-2.32	-8.62
2007	-13.61	-16.57	-18.21	-17.06	-12.83	-8.23	-3.93	-2.25	-1.59	-1.29	-3.25	-8.92
2008	-13.81	-15.34	-17.30	-17.16	-12.91	-7.40	-4.02	-2.10	-1.54	-1.35	-4.64	-8.37
2009	-12.22	-14.22	-15.20	-15.25	NaN	-6.03	-3.28	-1.93	-1.41	-1.22	-5.55	-9.81
2010	-14.41	-15.02	-16.40	-16.17	-13.06	-8.28	-3.87	-2.49	-1.59	-1.25	-1.16	-6.04
2011	-10.62	-11.14	-11.46	-12.02	-11.48	-6.55	-3.35	-1.95	-1.31	-1.10	-2.56	-9.57
2012	-14.56	-15.72	-18.16	-18.28	-14.74	-7.82	-4.05	-2.43	-1.57	-1.29	-1.18	-8.24
2013	-12.42	-16.07	-16.07	-15.53	-13.66	-7.80	-3.76	-2.11	-1.46	-1.29	-1.18	-4.19
2014	-7.82	-10.15	-11.20	-11.32	-10.01	-4.65	-2.77	-1.78	-1.37	-1.27	-1.04	-8.45
2015	-12.24	NaN	-13.47	-13.40	-11.21	-5.10	-2.90					

**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.51	-1.28	-1.21	-2.79
1999	-8.21	-12.69	-14.15	-14.14	-7.23	-4.02	-2.40	-1.70	-1.42	-1.18	-1.18	-6.17
2000	-14.73	-14.82	-16.61	-14.93	-11.35	-4.97	-3.16	-2.05	-1.72	-1.47	-1.43	-6.58
2001	-11.89	-12.65	-14.41	-14.79	-10.71	-4.72	-2.87	-2.07	-1.76	-1.53	-1.64	-7.43
2002	-12.31	-17.08	-14.55	-13.97	-6.72	-4.03	-2.59	-1.95	-1.66	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.57	-1.35	-1.34	-5.80
2004	-10.99	-16.75	-19.31	-15.93	-7.22	-4.01	-2.46	-1.70	-1.43	-1.25	-1.15	-4.14
2005	-10.70	-14.99	-15.76	-14.00	-7.50	-4.20	-2.59	-1.67	-1.40	-1.18	-1.17	-5.17
2006	-9.33	-12.30	-12.70	-14.30	-7.27	-4.02	-2.35	-1.57	-1.30	-1.19	-1.07	-2.32
2007	-8.65	-11.79	-16.56	-12.74	-8.22	-3.87	-2.20	-1.52	-1.24	-1.15	-1.13	-3.23
2008	-8.92	-13.72	-14.71	-12.91	-7.38	-3.98	-2.08	-1.46	-1.27	-1.17	-1.13	-4.67
2009	-8.40	-12.21	-13.43	-12.88	NaN	-3.24	-1.87	-1.32	-1.09	-1.02	-0.95	-5.55
2010	-9.81	-13.96	-14.97	-13.06	-8.28	-3.82	-2.40	-1.51	-1.19	-1.08	-1.01	-1.05
2011	-6.04	-10.02	-10.59	-11.01	-6.54	-3.28	-1.92	-1.21	-0.99	-0.93	-0.86	-2.56
2012	-9.60	-13.86	-14.81	-14.73	-7.82	-3.98	-2.38	-1.52	-1.17	-1.06	-1.01	-1.00
2013	-8.24	-12.42	-14.98	-13.65	-7.79	-3.74	-2.05	-1.38	-1.16	-1.08	-0.97	-0.97
2014	-4.19	-7.46	-9.86	-9.99	-4.61	-2.71	-1.72	-1.27	-1.05	-0.96	-0.89	-0.89
2015	-8.30	NaN	-12.22	-11.19	-5.08	-2.88	-1.77					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.17	-0.16	0.45	0.78
1999	1.11	0.06	0.25	-0.42	-0.43	-0.13	-0.17	-0.14	-0.09	-0.05	-1.35	-3.98
2000	-3.81	-1.63	-1.82	-1.62	-2.36	-2.18	-0.92	-0.64	-0.41	-0.33	-1.69	-2.48
2001	-2.41	0.47	-1.13	-1.37	-2.51	-1.73	-0.68	-0.50	-0.42	-0.35	-2.38	-3.22
2002	-2.88	-4.10	-0.98	-0.25	0.09	0.01	-0.29	-0.34	-0.32	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.23	-0.22	-0.61	-2.90
2004	-2.14	-4.62	-5.40	-3.73	-1.00	-0.21	-0.05	-0.14	-0.07	-0.09	0.27	-2.37
2005	-1.25	-1.43	-1.39	-1.34	0.15	-0.34	-0.38	-0.19	-0.07	-0.04	-0.32	-1.02
2006	0.83	0.94	1.18	-0.26	-0.64	-0.17	-0.15	-0.00	0.02	-0.01	0.68	1.76
2007	-0.40	0.30	-2.40	0.12	-0.56	-0.32	0.04	0.07	0.11	0.07	0.38	0.89
2008	-0.57	-0.53	-0.74	-0.03	-0.02	-0.24	0.04	0.16	0.09	0.03	0.04	-0.36
2009	0.68	0.60	1.18	0.11	NaN	0.79	0.53	0.31	0.23	0.18	-0.26	-0.96
2010	-0.77	-0.38	-0.75	0.17	-0.59	-0.29	-0.08	0.01	0.13	0.12	0.80	4.31
2011	3.55	3.53	4.30	3.15	0.95	0.69	0.45	0.37	0.33	0.26	0.85	0.50
2012	-0.45	-0.44	-1.61	-2.10	-1.41	-0.32	-0.13	0.04	0.14	0.10	0.81	2.72
2013	1.31	-0.28	-0.14	-0.40	-0.79	-0.15	0.23	0.22	0.18	0.10	0.81	5.02
2014	5.15	5.63	4.53	3.91	3.75	1.64	0.82	0.42	0.30	0.24	0.93	1.56
2015	1.39	NaN	2.38	2.03	2.18	1.38	0.72					

**Table G-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
1999	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	19.35	51.61	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	25.81	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	83.87	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	32.26	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	80.65	0.00	22.58	64.52	23.33	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	73.33	16.13	90.32	16.67	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	83.87	46.67	0.00	80.65	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	92.86	100.00	100.00	100.00	100.00	100.00					

**Table G-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
Variable: Incident solar flux, in watts per meter squared

File name: AK105\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	20.7	2.1	0.0
2000	0.7	NaN	NaN	174.6	248.6	240.6	NaN	NaN	63.2	25.5	2.4	0.0
2001	0.7	16.1	79.9	174.7	251.2	224.9	185.6	108.9	49.9	20.6	2.4	0.1
2002	0.7	18.7	80.7	165.2	234.3	230.3	216.4	105.2	69.9	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	58.1	18.9	2.1	0.1
2004	1.1	16.4	78.0	175.8	207.2	264.4	164.0	123.7	66.5	23.2	2.3	0.0
2005	0.5	11.9	67.1	171.5	236.1	261.0	228.8	120.5	57.2	23.2	1.9	0.1
2006	0.7	14.4	76.7	170.3	222.8	213.5	170.3	116.0	55.2	19.8	2.0	0.0
2007	0.6	10.5	NaN	161.9	256.1	258.3	264.6	154.8	70.8	24.6	2.3	0.1
2008	0.7	14.2	79.8	155.3	221.1	213.0	183.3	130.6	67.9	19.0	2.2	0.1
2009	0.8	14.4	NaN	165.2	220.8	208.9	192.4	108.0	57.0	19.9	2.4	0.1
2010	0.6	14.7	71.6	156.5	NaN	NaN	NaN	NaN	71.4	23.2	1.5	0.1
2011	0.4	13.0	NaN	174.6	249.0	244.4	200.3	126.8	58.8	21.7	2.4	0.0
2012	0.7	14.7	72.0	158.7	219.7	242.6	206.4	89.3	56.3	21.1	2.2	0.1
2013	0.5	9.8	72.4	174.7	219.5	228.4	168.5	95.2	56.6	22.3	2.3	0.1
2014	0.8	14.8	NaN	NaN	NaN	NaN	NaN	NaN	62.7	21.7	NaN	0.0
2015	0.8	12.7	75.9	163.8	220.3	221.2	202.7					

**Table G-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.9	-0.1	-0.0
2000	0.1	NaN	NaN	8.5	19.4	7.8	NaN	NaN	1.5	3.8	0.2	-0.0
2001	0.0	2.1	4.5	8.6	22.0	-7.8	-13.0	-6.6	-11.8	-1.0	0.2	0.0
2002	0.0	4.7	5.3	-0.8	5.1	-2.4	17.8	-10.3	8.3	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.5	-2.7	-0.0	0.0
2004	0.4	2.4	2.6	9.7	-22.1	31.7	-34.6	8.2	4.9	1.5	0.1	-0.0
2005	-0.2	-2.1	-8.3	5.5	6.8	28.3	30.2	5.0	-4.5	1.6	-0.3	0.0
2006	-0.0	0.5	1.3	4.2	-6.4	-19.2	-28.3	0.4	-6.5	-1.9	-0.1	-0.0
2007	-0.1	-3.5	NaN	-4.1	26.9	25.6	66.0	39.3	9.2	2.9	0.1	0.0
2008	-0.0	0.2	4.4	-10.7	-8.2	-19.8	-15.3	15.1	6.3	-2.7	0.0	0.0
2009	0.1	0.4	NaN	-0.8	-8.4	-23.9	-6.2	-7.5	-4.7	-1.7	0.2	0.0
2010	-0.1	0.7	-3.8	-9.5	NaN	NaN	NaN	NaN	9.8	1.5	-0.7	0.0
2011	-0.3	-1.0	NaN	8.6	19.8	11.6	1.7	11.2	-2.8	0.1	0.2	-0.0
2012	-0.0	0.7	-3.4	-7.3	-9.5	9.9	7.8	-26.3	-5.3	-0.5	0.1	-0.0
2013	-0.2	-4.2	-3.0	8.7	-9.7	-4.3	-30.2	-20.4	-5.0	0.7	0.2	0.0
2014	0.1	0.8	NaN	NaN	NaN	NaN	NaN	NaN	1.1	0.1	NaN	-0.0
2015	0.1	-1.3	0.5	-2.3	-8.9	-11.5	4.1					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	73.3	100.0	100.0	100.0
2000	100.0	79.3	16.1	96.7	100.0	96.7	93.5	87.1	100.0	96.8	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	25.8	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	67.7	0.0	0.0	83.9	100.0	100.0	100.0	100.0
2011	100.0	100.0	83.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	96.7	96.8	100.0	100.0
2014	100.0	100.0	77.4	30.0	29.0	66.7	0.0	77.4	100.0	96.8	90.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table G-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Reflected solar flux, in watts per meter squared

File name: AK105\_So\_u\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.0	8.5	1.4	-0.1
1999	0.3	9.1	NaN	142.7	157.6	47.0	48.8	25.3	17.3	13.7	1.9	-0.0
2000	0.5	11.8	NaN	148.8	214.9	72.2	35.5	21.3	24.0	22.0	1.5	-0.1
2001	0.5	12.0	63.7	146.8	223.3	45.7	41.1	23.1	10.4	16.8	1.8	-0.1
2002	0.6	12.9	62.4	142.1	139.8	46.5	48.3	22.6	11.9	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	17.6	9.8	1.4	0.0
2004	0.7	14.3	64.4	146.2	116.0	58.0	39.7	28.0	20.9	17.4	1.9	-0.0
2005	0.6	12.5	65.2	141.9	174.7	56.4	54.8	29.4	12.5	9.5	2.1	-0.0
2006	0.5	13.7	70.0	149.2	155.3	53.0	40.3	27.8	12.1	12.2	1.6	-0.0
2007	0.5	12.7	64.9	141.3	195.2	56.3	68.2	39.5	16.1	11.0	1.8	-0.0
2008	0.6	14.8	71.0	135.8	147.1	48.8	47.2	34.7	17.1	20.5	1.8	0.1
2009	0.7	12.9	69.1	140.6	134.2	46.3	48.0	25.5	14.1	10.2	2.0	0.1
2010	0.8	15.5	70.8	141.6	188.2	60.2	43.6	30.4	23.3	21.0	1.6	0.1
2011	0.5	11.2	65.4	150.1	176.5	51.6	52.3	33.9	14.1	15.7	2.4	0.0
2012	0.7	14.7	79.4	141.8	161.0	59.7	57.2	23.2	15.8	NaN	2.1	0.1
2013	0.6	10.1	59.9	148.8	164.2	55.0	45.6	31.3	24.0	17.7	1.8	0.1
2014	0.7	13.5	63.6	144.1	142.1	55.1	47.3	33.0	20.5	16.6	2.0	0.1
2015	0.7	11.4	61.2	133.7	117.3	55.9	55.6					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.8	-6.6	-0.4	-0.1
1999	-0.3	-3.6	NaN	0.3	-0.7	-7.2	0.4	-3.3	0.5	-1.3	0.1	-0.0
2000	-0.1	-0.9	NaN	6.5	56.6	18.0	-12.9	-7.3	7.2	7.0	-0.3	-0.1
2001	-0.1	-0.7	-2.6	4.4	65.0	-8.5	-7.2	-5.5	-6.4	1.8	-0.0	-0.1
2002	0.0	0.3	-3.9	-0.2	-18.4	-7.7	-0.1	-6.0	-4.9	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.8	-5.2	-0.4	0.0
2004	0.1	1.6	-1.9	3.8	-42.3	3.8	-8.6	-0.6	4.1	2.3	0.1	-0.0
2005	0.0	-0.2	-1.1	-0.5	16.4	2.2	6.4	0.8	-4.3	-5.5	0.3	-0.0
2006	-0.1	1.0	3.7	6.8	-3.0	-1.2	-8.1	-0.8	-4.7	-2.8	-0.2	-0.0
2007	-0.1	0.0	-1.3	-1.0	36.9	2.1	19.8	10.9	-0.6	-4.0	-0.0	-0.0
2008	0.0	2.2	4.7	-6.5	-11.2	-5.4	-1.1	6.1	0.3	5.5	0.0	0.1
2009	0.1	0.2	2.8	-1.7	-24.0	-7.9	-0.3	-3.1	-2.7	-4.8	0.2	0.1
2010	0.2	2.8	4.6	-0.8	29.9	6.0	-4.7	1.8	6.5	6.0	-0.2	0.0
2011	-0.1	-1.4	-0.9	7.7	18.2	-2.6	3.9	5.3	-2.7	0.7	0.6	0.0
2012	0.1	2.0	13.2	-0.5	2.7	5.5	8.9	-5.4	-1.0	NaN	0.2	0.1
2013	0.0	-2.6	-6.4	6.5	5.9	0.8	-2.7	2.7	7.3	2.7	0.0	0.0
2014	0.1	0.8	-2.7	1.8	-16.2	0.9	-1.0	4.4	3.7	1.6	0.2	0.1
2015	0.1	-1.3	-5.0	-8.6	-41.0	1.7	7.3					



**Table G-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
1999	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2000	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	25.8	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	93.5	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table G-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik

Variable: Rainfall, in millimeters per hour

File name: AK105\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.8	0.8	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.3	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	NaN	2.0	1.5	3.0	1.0	0.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	0.3	2.8	2.0	2.5	0.8	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	1.3	4.6	4.1	1.3	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	2.8	3.0	2.5	0.5	NaN	0.0
2015	0.0	0.0	0.0	0.0	0.5	2.0	0.8					

**Table G-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	23.6	4.1	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	NaN	14.7	35.3	31.2	17.0	0.5	0.0	0.0
2012	0.0	0.0	0.0	0.0	NaN	1.5	29.0	54.6	29.5	2.8	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	27.4	56.1	41.7	14.2	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	36.8	29.2	39.4	3.3	NaN	0.0
2015	0.0	0.0	0.0	0.0	2.0	16.0	5.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	100.0	100.0	46.7	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.9	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	83.9	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	96.7	0.0	73.3	100.0	100.0	100.0	100.0	93.3	100.0
2015	100.0	100.0	100.0	100.0	96.8	100.0	100.0					

**Table G-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Snow depth, in centimeters

File name: AK105\_snowD\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	4.6	6.4	3.8
2000	15.5	43.3	35.6	43.8	44.9	7.2	1.2	2.6	2.4	11.0	17.7	17.9
2001	17.6	17.8	17.8	17.8	21.5	1.9	2.5	2.0	2.4	8.1	16.0	17.0
2002	NaN	20.6	18.1	18.4	14.8	5.2	5.3	1.2	2.3	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.4	9.9	11.1
2004	7.7	6.8	7.0	14.9	5.8	0.4	2.2	1.4	2.7	9.7	12.6	11.0
2005	17.6	18.8	19.6	21.9	21.5	1.1	-0.1	NaN	1.4	NaN	8.5	12.8
2006	17.3	24.1	28.2	29.8	22.5	0.5	-0.1	NaN	NaN	3.2	7.9	20.1
2007	13.4	6.4	7.8	12.0	14.8	NaN	NaN	2.3	1.9	3.7	8.7	11.2
2008	13.5	20.0	17.9	24.2	17.9	2.6	1.8	5.7	2.8	16.0	18.6	20.6
2009	25.4	43.2	47.0	46.6	26.3	5.2	5.9	5.3	4.2	7.9	11.2	20.5
2010	22.0	27.9	30.5	33.8	32.8	4.5	2.7	7.1	7.5	13.9	23.2	30.3
2011	30.0	38.0	55.6	57.7	46.2	4.6	10.4	NaN	5.4	1.5	7.8	27.2
2012	31.6	31.6	31.3	42.5	37.6	1.7	8.3	6.4	2.2	3.6	4.9	4.7
2013	5.1	5.3	5.2	5.6	7.7	3.3	3.1	3.6	4.1	6.5	8.6	17.7
2014	22.2	24.0	25.3	30.1	13.2	3.8	2.8	3.2	3.3	6.0	6.8	5.9
2015	6.3	5.6	17.5	10.9	10.7	4.6	4.8					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.9	0.4	3.7	0.2
2000	-0.5	30.0	29.6	32.3	36.9	-1.3	-2.2	-0.2	-1.1	6.0	11.5	16.7
2001	16.3	17.1	16.5	17.0	14.1	-0.2	-0.3	0.5	-0.1	3.1	9.5	8.3
2002	NaN	14.7	12.4	9.4	0.2	0.1	0.0	-1.7	0.1	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.2	6.7	6.2
2004	5.5	4.8	4.5	13.0	0.3	-1.4	0.1	-1.0	0.2	7.0	10.3	8.1
2005	15.6	17.6	18.6	18.0	8.8	-0.5	-1.5	NaN	-0.5	NaN	4.6	6.6
2006	15.0	15.5	21.4	25.9	0.9	-2.5	-2.7	NaN	NaN	0.3	4.4	6.2
2007	3.1	3.4	5.1	6.4	3.8	NaN	NaN	0.9	0.2	0.4	3.1	7.5
2008	10.3	15.3	12.3	15.3	2.7	-0.8	-2.8	-2.9	-1.6	0.8	13.3	17.9
2009	18.0	27.8	44.4	36.8	6.7	-0.7	0.3	2.5	-1.7	4.5	8.3	13.0
2010	18.7	20.3	27.8	28.6	9.8	-0.3	-2.0	2.6	1.9	10.5	17.2	25.4
2011	26.3	31.0	50.8	52.8	3.8	-1.2	0.8	NaN	0.3	-2.0	1.9	6.8
2012	27.6	26.2	24.6	28.0	6.4	-1.5	2.1	-1.8	-1.7	0.5	1.8	1.7
2013	1.8	1.3	2.6	3.5	1.2	-1.1	-0.3	-0.9	0.9	3.9	6.4	7.2
2014	20.1	22.4	20.6	24.4	7.1	-0.2	-0.6	0.6	0.4	0.4	2.8	-0.5
2015	3.6	3.0	5.5	8.6	0.1	1.4	1.7					

**Table G-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.5	14.0	13.7	5.8
2000	52.8	50.9	43.6	56.5	53.7	36.6	5.3	6.7	11.6	15.6	23.7	20.9
2001	18.4	18.3	18.6	19.6	25.7	12.2	3.5	3.4	5.0	14.4	24.3	23.0
2002	NaN	22.2	20.6	23.3	23.2	13.3	10.5	10.3	4.4	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	17.3	14.9	15.4
2004	14.1	12.1	17.1	16.8	14.2	1.6	4.3	5.5	11.8	13.7	17.0	16.6
2005	19.4	21.0	23.1	26.6	24.2	8.2	2.3	NaN	3.2	NaN	12.4	18.8
2006	21.6	30.4	32.7	34.1	32.6	5.4	2.5	NaN	NaN	9.8	14.9	26.5
2007	25.5	8.6	11.5	18.1	18.9	NaN	NaN	3.4	3.6	6.5	17.5	17.5
2008	18.2	27.4	25.5	30.6	33.5	6.6	4.3	11.2	9.1	22.9	23.7	24.9
2009	42.7	53.2	49.6	51.4	38.0	8.3	7.9	7.9	7.6	13.2	15.8	24.6
2010	23.7	32.6	33.3	47.8	39.7	11.9	8.3	9.4	14.7	17.6	34.6	35.8
2011	33.9	52.4	61.3	62.6	59.0	10.0	16.2	NaN	10.3	4.7	13.2	33.2
2012	34.1	34.8	35.6	51.9	51.6	9.1	14.5	16.0	5.0	8.5	7.1	6.5
2013	6.5	6.9	6.5	9.3	14.9	7.4	5.9	6.4	8.3	8.6	11.3	22.5
2014	24.8	25.7	33.8	37.1	26.1	8.1	5.9	5.9	7.3	11.8	10.1	9.3
2015	7.7	11.1	25.8	23.2	22.9	7.1	6.9					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.6	-2.8	-4.9	-11.6
2000	-2.0	21.0	11.3	16.5	22.4	3.8	-2.5	-1.1	-0.6	3.6	6.4	2.5
2001	0.1	-4.4	-6.5	-9.5	-1.0	-1.5	-1.2	-1.6	-0.6	0.8	4.7	1.5
2002	NaN	-1.6	-6.2	-9.0	-7.8	1.9	1.7	-2.4	-0.8	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.1	-1.3	-4.4
2004	-9.8	-15.4	-17.3	-12.5	-16.8	-2.9	-1.4	-2.3	-0.3	2.3	1.3	-4.5
2005	0.1	-3.4	-4.7	-5.4	-1.0	-2.3	-3.7	NaN	-1.6	NaN	-2.8	-2.7
2006	-0.2	1.9	3.9	2.4	-0.0	-2.8	-3.8	NaN	NaN	-4.1	-3.4	4.7
2007	-4.1	-15.8	-16.5	-15.3	-7.8	NaN	NaN	-1.4	-1.1	-3.7	-2.6	-4.2
2008	-4.1	-2.2	-6.4	-3.1	-4.6	-0.8	-1.8	2.0	-0.2	8.6	7.4	5.2
2009	7.8	20.9	22.7	19.3	3.7	1.9	2.3	1.6	1.2	0.5	-0.0	5.0
2010	4.5	5.7	6.2	6.5	10.2	1.2	-0.9	3.4	4.5	6.6	11.9	14.9
2011	12.4	15.7	31.3	30.4	23.7	1.3	6.8	NaN	2.4	-5.8	-3.4	11.7
2012	14.1	9.4	7.0	15.2	15.0	-1.6	4.6	2.7	-0.8	-3.8	-6.3	-10.7
2013	-12.4	-16.9	-19.1	-21.7	-14.9	0.0	-0.5	-0.1	1.1	-0.9	-2.7	2.2
2014	4.7	1.7	1.0	2.8	-9.3	0.5	-0.8	-0.5	0.3	-1.3	-4.4	-9.6
2015	-11.3	-16.7	-6.8	-16.4	-11.8	1.2	1.2					

**Table G-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	100.0	100.0	100.0	100.0
2000	90.3	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2002	74.2	100.0	100.0	100.0	100.0	100.0	96.8	96.8	100.0	25.8	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	63.3	93.5	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	80.0	100.0	96.7	100.0
2005	100.0	96.4	100.0	93.3	100.0	100.0	100.0	71.0	96.7	77.4	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7	46.7	93.5	100.0	100.0
2007	100.0	100.0	100.0	100.0	90.3	53.3	71.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	90.0	90.3	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.4	80.0	83.9	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	90.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table G-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
Variable: Soil moisture, in water fraction by volume

File name: AK105\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.28	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.19	0.40	0.41	0.41	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.39	0.41	0.13	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.13	0.40	0.41	0.41	0.39	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.28	0.27	0.26	0.05	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.36	0.33	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.23	0.34	0.40	0.16	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.14	0.31	0.38	0.37	0.25	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.14	0.36	0.39	0.38	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.16	0.30	0.33	0.29	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.25	0.29	0.27	0.23	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.24	0.24	0.27	0.24	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.16					

**Table G-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.02	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.01	0.38	0.41	0.41	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	0.29	0.32	0.41	0.01	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.00	0.39	0.41	0.41	0.11	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.23	0.23	0.24	0.00	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	0.33	0.34	0.27	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.19	0.22	0.36	0.00	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.01	0.21	0.35	0.36	0.02	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.02	0.31	0.36	0.35	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.12	0.22	0.30	0.26	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.20	0.26	0.25	0.19	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.07	0.22	0.25	0.21	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.10					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.40	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	0.34	0.31	0.27	0.24	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.38	0.34	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	0.29	0.42	0.41	0.36	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.30	0.42	0.41	0.39	0.36	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.42	0.41	0.42	0.42	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	0.30	0.43	0.43	0.41	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.43	0.43	0.41	0.25	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	0.45	0.41	0.43	0.33	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	0.22					

**Table G-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.06	0.05	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	0.11	0.08	0.07	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	0.07	0.06	0.07	-0.09	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	0.11	0.08	0.07	0.17	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	-0.02	-0.06	-0.08	-0.17	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	0.06	0.03	-0.01	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	0.02	0.06	-0.06	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	0.02	0.05	0.03	0.03	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	0.06	0.06	0.04	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	-0.13	-0.03	-0.01	0.06	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	-0.04	-0.04	-0.07	0.00	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	-0.08	-0.07	0.02	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	-0.13					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.65	100.00	100.00	30.00	0.00
2004	0.00	0.00	0.00	0.00	45.16	100.00	100.00	100.00	100.00	90.32	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	46.67	100.00	100.00	100.00	100.00	16.67	0.00
2006	0.00	0.00	0.00	0.00	12.90	100.00	100.00	100.00	100.00	100.00	33.33	0.00
2007	0.00	0.00	0.00	0.00	0.00	80.00	100.00	100.00	100.00	100.00	10.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	86.67	96.77	100.00	100.00	80.65	0.00	0.00
2009	0.00	0.00	0.00	0.00	19.35	93.33	100.00	100.00	100.00	96.77	0.00	0.00
2010	0.00	0.00	0.00	0.00	3.23	100.00	100.00	100.00	100.00	100.00	93.33	12.90
2011	0.00	0.00	0.00	0.00	12.90	100.00	100.00	100.00	100.00	80.65	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	76.67	100.00	96.77	100.00	100.00	53.33	0.00
2013	0.00	0.00	0.00	0.00	0.00	43.33	100.00	100.00	100.00	100.00	20.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	23.33	100.00	100.00	100.00	100.00	16.67	0.00
2015	0.00	0.00	0.00	0.00	0.00	46.67	100.00					



**Table G-11.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Surface pressure, in millibars  
 File name: AK105\_P\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1009.5	1010.6	1005.1	1007.6	1013.6
2009	NaN	1008.7	1018.0	1012.6	1013.4	1007.8	1011.3	1005.0	1006.2	1010.4	997.9	1013.0
2010	1013.6	1011.0	1003.9	1003.3	1015.8	1007.1	1004.9	1006.5	1008.3	1003.5	1007.5	1017.1
2011	1012.2	1009.0	1008.1	1012.4	1010.9	1007.9	1003.1	1003.0	1001.4	1001.2	1007.8	1003.2
2012	1011.3	1006.2	1013.9	1012.9	1008.4	1006.5	1004.5	1000.2	1000.9	1015.2	1019.6	1010.4
2013	1016.5	1011.2	1015.6	1022.5	1010.0	1009.4	1009.1	1005.6	1002.7	1000.8	1006.7	1015.6
2014	1005.6	1019.0	1012.5	1007.1	1011.8	1006.7	1006.5	1005.3	1004.3	1008.1	1007.8	1009.0
2015	1014.1	1014.3	1010.5	1005.2	1012.2	1007.4	1007.2					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	993.0	996.0	996.0	986.0	981.0
2009	NaN	983.0	989.0	995.0	1000.0	996.0	1000.0	982.0	983.0	991.0	977.0	988.0
2010	992.0	997.0	983.0	982.0	1006.0	998.0	991.0	995.0	995.0	981.0	988.0	990.0
2011	985.0	981.0	986.0	992.0	1000.0	994.0	990.0	984.0	989.0	993.0	977.0	976.0
2012	987.0	994.0	997.0	1001.0	991.0	993.0	994.0	985.0	979.0	991.0	1009.0	985.0
2013	990.0	995.0	990.0	1001.0	985.0	994.0	991.0	994.0	989.0	981.0	967.0	998.0
2014	987.0	1002.0	988.0	994.0	1000.0	996.0	990.0	990.0	990.0	994.0	992.0	997.0
2015	989.0	994.0	994.0	989.0	996.0	991.0	996.0					

**Table G-11.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1018.0	1020.0	1019.0	1032.0	1035.0
2009	NaN	1039.0	1039.0	1024.0	1022.0	1023.0	1028.0	1017.0	1020.0	1029.0	1021.0	1034.0
2010	1036.0	1030.0	1032.0	1025.0	1038.0	1020.0	1013.0	1018.0	1019.0	1014.0	1032.0	1031.0
2011	1044.0	1041.0	1024.0	1032.0	1026.0	1020.0	1014.0	1020.0	1011.0	1010.0	1032.0	1024.0
2012	1051.0	1032.0	1029.0	1024.0	1024.0	1019.0	1012.0	1017.0	1016.0	1035.0	1028.0	1029.0
2013	1042.0	1031.0	1036.0	1040.0	1026.0	1025.0	1019.0	1015.0	1021.0	1018.0	1026.0	1041.0
2014	1021.0	1045.0	1032.0	1022.0	1025.0	1020.0	1023.0	1015.0	1018.0	1023.0	1026.0	1028.0
2015	1041.0	1028.0	1032.0	1030.0	1027.0	1026.0	1018.0					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.4	5.6	-1.3	0.9	2.9
2009	NaN	-1.8	6.0	1.8	1.5	0.4	4.6	-0.1	1.3	3.9	-8.8	2.4
2010	2.4	0.5	-8.1	-7.5	3.9	-0.3	-1.7	1.5	3.4	-2.9	0.8	6.5
2011	1.0	-1.5	-4.0	1.6	-1.0	0.5	-3.5	-2.0	-3.6	-5.2	1.1	-7.4
2012	0.2	-4.2	1.9	2.0	-3.5	-0.9	-2.2	-4.8	-4.0	8.8	12.9	-0.2
2013	5.4	0.8	3.5	11.6	-1.9	2.0	2.4	0.6	-2.2	-5.6	-0.0	5.0
2014	-5.6	8.6	0.5	-3.7	-0.1	-0.7	-0.1	0.2	-0.7	1.7	1.1	-1.6
2015	2.9	3.8	-1.5	-5.6	0.3	-0.1	0.5					

**Table G-1I.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	16.1	100.0	100.0	100.0	100.0	100.0
2009	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table G-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Air temperature, in degrees Celsius  
 File name: AK105\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	-4.74	NaN	1998	NaN	NaN	NaN	-27.84	NaN
1999	-26.41	-17.40	7.58	-9.56	-12.22	1999	-48.80	-44.55	-3.59	-33.44	-48.80
2000	-28.09	-17.47	5.91	-9.27	-11.43	2000	-43.80	-37.24	-4.11	-36.10	-43.80
2001	-21.60	-18.30	5.65	-9.94	-11.23	2001	-38.57	-38.32	-2.78	-28.53	-39.41
2002	-27.53	-11.60	5.66	NaN	NaN	2002	-44.09	-36.21	-7.01	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-7.07	NaN	2004	NaN	NaN	NaN	-31.42	NaN
2005	-24.73	-14.80	7.18	-8.61	-10.00	2005	-39.37	-36.44	-4.44	-39.02	-39.37
2006	-23.69	-17.79	5.67	-4.94	-9.97	2006	-48.17	-42.25	-6.45	-30.17	-48.17
2007	-24.23	-16.23	10.09	-5.54	-8.87	2007	-42.18	-39.83	-1.16	-25.36	-42.71
2008	-25.68	-15.39	5.93	-7.87	-10.59	2008	-42.71	-41.30	-4.75	-29.67	-42.29
2009	-23.84	-15.12	8.33	-7.99	-9.75	2009	-45.07	-39.31	-2.32	-39.12	-45.07
2010	-24.40	-14.87	7.96	-4.59	-9.16	2010	-45.07	-45.07	-1.63	-23.32	-45.07
2011	-21.61	-14.20	7.76	-8.07	-9.17	2011	-42.48	-32.48	-2.96	-37.22	-42.48
2012	-27.39	-17.97	8.49	-5.90	-10.70	2012	-48.17	-39.73	-1.36	-27.40	-48.17
2013	-27.23	-15.21	8.32	-6.01	-9.52	2013	-41.48	-32.99	-4.77	-31.73	-41.48
2014	-21.31	-12.65	5.56	-5.81	-8.76	2014	-42.79	-39.53	-3.52	-27.18	-42.79
2015	-23.22	-12.93				2015	-36.24	-38.77			

**Table G-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	13.31	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	0.19	4.44	25.91	13.25	25.91	1999	100.00	100.00	100.00	100.00	100.00
2000	-0.62	4.60	20.88	11.66	20.88	2000	100.00	100.00	100.00	100.00	100.00
2001	-1.86	7.72	22.74	12.05	22.74	2001	100.00	100.00	100.00	100.00	100.00
2002	-3.23	19.61	26.29	NaN	NaN	2002	100.00	100.00	100.00	41.76	76.99
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	24.18	14.52
2004	NaN	NaN	NaN	11.67	NaN	2004	65.93	0.00	26.09	100.00	47.81
2005	-0.15	4.72	22.99	12.24	22.99	2005	100.00	100.00	100.00	100.00	100.00
2006	2.40	10.30	21.54	16.84	21.54	2006	100.00	100.00	100.00	100.00	100.00
2007	0.45	1.81	25.45	16.36	25.45	2007	100.00	100.00	100.00	100.00	100.00
2008	1.45	8.28	24.31	9.59	24.31	2008	100.00	100.00	98.91	100.00	99.73
2009	-0.45	12.04	28.84	16.25	28.84	2009	100.00	100.00	100.00	100.00	100.00
2010	-0.49	4.89	25.82	17.02	25.82	2010	100.00	100.00	100.00	100.00	100.00
2011	0.95	8.65	23.26	13.77	23.26	2011	100.00	100.00	100.00	100.00	100.00
2012	-1.83	7.31	21.82	12.85	21.82	2012	100.00	100.00	98.91	100.00	99.73
2013	-7.05	8.70	26.03	11.85	26.03	2013	100.00	100.00	100.00	100.00	100.00
2014	1.09	5.62	19.46	12.29	19.46	2014	100.00	100.00	100.00	100.00	100.00
2015	-0.42	15.39				2015	100.00	100.00			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	2.39	NaN
1999	-1.84	-2.20	0.41	-2.43	-2.17
2000	-3.52	-2.27	-1.27	-2.15	-1.38
2001	2.98	-3.10	-1.53	-2.81	-1.18
2002	-2.95	3.61	-1.52	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.06	NaN
2005	-0.16	0.40	0.01	-1.48	0.04
2006	0.88	-2.59	-1.51	2.19	0.07
2007	0.34	-1.03	2.92	1.59	1.18
2008	-1.10	-0.19	-1.25	-0.74	-0.54
2009	0.73	0.08	1.15	-0.86	0.29
2010	0.18	0.33	0.79	2.54	0.89
2011	2.97	1.00	0.59	-0.94	0.88
2012	-2.82	-2.77	1.32	1.23	-0.65
2013	-2.66	-0.00	1.14	1.12	0.52
2014	3.27	2.55	-1.61	1.31	1.29
2015	1.35	2.27			

**Table G-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Wind speed, in meters per second  
 File name: AK105\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	4.06	NaN
2004	NaN	5.66	3.90	5.50	NaN
2005	NaN	5.44	4.45	4.09	4.66
2006	NaN	NaN	3.81	4.13	NaN
2007	NaN	4.60	3.91	NaN	NaN
2008	NaN	4.65	3.25	NaN	NaN
2009	NaN	NaN	4.22	3.84	NaN
2010	NaN	5.09	4.58	4.86	4.64
2011	4.25	4.00	4.29	NaN	4.25
2012	NaN	4.07	4.07	3.83	4.03
2013	NaN	4.68	4.01	NaN	NaN
2014	NaN	4.26	4.22	4.52	4.34
2015	4.58	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-0.30	NaN
2004	NaN	0.94	-0.15	1.15	NaN
2005	NaN	0.72	0.40	-0.27	0.27
2006	NaN	NaN	-0.24	-0.22	NaN
2007	NaN	-0.11	-0.14	NaN	NaN
2008	NaN	-0.06	-0.80	NaN	NaN
2009	NaN	NaN	0.17	-0.51	NaN
2010	NaN	0.37	0.53	0.50	0.26
2011	NaN	-0.72	0.24	NaN	-0.13
2012	NaN	-0.64	0.02	-0.52	-0.36
2013	NaN	-0.04	-0.04	NaN	NaN
2014	NaN	-0.45	0.17	0.17	-0.04
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	13.26	NaN
2004	NaN	16.86	11.57	14.93	NaN
2005	NaN	16.55	11.97	10.90	16.55
2006	NaN	NaN	10.39	14.53	NaN
2007	NaN	16.25	10.27	NaN	NaN
2008	NaN	14.20	11.41	NaN	NaN
2009	NaN	NaN	9.68	12.67	NaN
2010	NaN	13.31	15.41	17.90	17.90
2011	19.40	11.89	11.31	NaN	19.40
2012	NaN	12.45	12.52	12.24	13.40
2013	NaN	14.29	12.21	NaN	NaN
2014	NaN	14.67	13.70	16.93	16.93
2015	14.52	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	11.96	100.00	36.44
2004	86.81	98.91	100.00	98.90	91.53
2005	70.00	98.91	100.00	96.70	95.62
2006	82.22	84.78	100.00	97.80	90.68
2007	78.89	97.83	100.00	92.31	93.42
2008	92.31	98.91	98.91	92.31	94.81
2009	80.00	82.61	100.00	97.80	89.04
2010	87.78	95.65	100.00	96.70	96.99
2011	100.00	100.00	100.00	86.81	95.34
2012	89.01	100.00	98.91	97.80	96.99
2013	88.89	100.00	98.91	93.41	93.70
2014	81.11	100.00	100.00	100.00	97.81
2015	95.56	94.57			

**Table G-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
Variable: Ground temperature, in degrees Celsius

File name: AK105\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-1.00	NaN
1999	-16.13	-14.28	3.01	-3.18	-8.39
2000	-21.13	-16.70	2.81	-2.90	-9.04
2001	-17.70	-16.88	2.05	-3.34	-9.03
2002	-21.35	-12.78	1.90	NaN	NaN
2003	NaN	NaN	NaN	-2.21	NaN
2004	-21.18	-16.20	4.41	-1.95	-8.87
2005	-19.65	-14.02	4.14	-2.23	-7.45
2006	-15.69	-14.21	3.32	-0.95	-6.66
2007	-17.14	-14.93	6.80	-1.13	-6.67
2008	-18.28	-13.93	4.29	-2.05	-7.50
2009	-16.10	NaN	5.58	-2.72	-6.59
2010	-17.78	-14.35	4.02	0.34	-6.44
2011	-12.22	-11.30	3.51	-1.52	-5.81
2012	-17.99	-16.71	3.99	-0.38	-7.65
2013	-17.03	-14.40	3.59	-0.38	-6.45
2014	-9.67	-9.80	2.00	-0.77	-5.30
2015	-16.49	-11.13			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	3.75	NaN
1999	-7.84	-0.40	7.85	4.09	7.85
2000	-13.11	-3.49	12.86	3.48	12.86
2001	-11.29	-1.66	7.50	3.38	7.50
2002	-13.37	-0.00	7.16	NaN	NaN
2003	NaN	NaN	NaN	2.47	NaN
2004	-9.35	-0.40	10.67	6.34	10.67
2005	-8.96	-0.10	10.30	4.39	10.30
2006	-11.21	-0.14	10.32	6.36	10.32
2007	-4.51	-0.16	16.81	11.05	16.81
2008	-6.90	0.02	18.24	7.49	18.24
2009	-7.95	NaN	16.28	7.68	16.28
2010	-8.58	-0.13	10.95	6.91	10.95
2011	-1.35	-0.19	8.75	6.52	8.75
2012	-8.86	-0.08	9.90	5.57	9.90
2013	-3.73	-0.34	9.97	3.29	9.97
2014	-1.01	-0.25	6.14	2.18	6.14
2015	-7.72	0.09			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-8.58	NaN
1999	-22.89	-22.92	-0.59	-13.11	-26.19
2000	-26.19	-24.16	-3.36	-15.90	-26.17
2001	-26.15	-26.64	-1.61	-17.77	-26.64
2002	-29.63	-22.87	-0.64	NaN	NaN
2003	NaN	NaN	NaN	-13.72	NaN
2004	-29.99	-29.65	-0.64	-14.15	-29.99
2005	-25.74	-26.16	-0.41	-13.92	-26.16
2006	-23.07	-21.38	-0.56	-12.34	-23.07
2007	-28.77	-27.89	-0.58	-10.44	-28.77
2008	-26.13	-25.86	-0.31	-12.41	-26.13
2009	-22.84	NaN	-0.22	-12.68	-22.84
2010	-26.41	-27.21	-0.33	-2.37	-27.21
2011	-20.67	-15.54	-0.38	-12.52	-20.67
2012	-27.17	-25.86	-0.77	-6.16	-27.17
2013	-24.72	-21.77	-0.78	-4.92	-24.72
2014	-16.56	-17.29	-1.51	-7.75	-19.60
2015	-23.85	-18.12			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	0.64	NaN
1999	1.00	-0.40	-0.64	-1.54	-1.17
2000	-4.00	-2.82	-0.84	-1.26	-1.82
2001	-0.57	-3.00	-1.60	-1.70	-1.80
2002	-4.22	1.10	-1.75	NaN	NaN
2003	NaN	NaN	NaN	-0.56	NaN
2004	-4.05	-2.31	0.76	-0.31	-1.64
2005	-2.53	-0.14	0.49	-0.59	-0.23
2006	1.44	-0.33	-0.33	0.69	0.57
2007	-0.01	-1.05	3.15	0.51	0.55
2008	-1.15	-0.04	0.63	-0.41	-0.28
2009	1.03	NaN	1.93	-1.07	0.64
2010	-0.65	-0.47	0.36	1.98	0.78
2011	4.91	2.58	-0.14	0.12	1.41
2012	-0.87	-2.83	0.34	1.26	-0.42
2013	0.10	-0.52	-0.06	1.26	0.78
2014	7.46	4.08	-1.65	0.87	1.92
2015	0.64	2.75			

**Table G-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.00	0.00	0.00	100.00	0.00
1999	100.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	56.52	100.00	89.07
2001	100.00	100.00	98.91	100.00	99.73
2002	100.00	100.00	98.91	41.76	76.71
2003	0.00	0.00	26.09	100.00	40.00
2004	100.00	98.91	100.00	100.00	99.73
2005	100.00	94.57	25.00	100.00	79.73
2006	100.00	100.00	77.17	100.00	94.25
2007	100.00	93.48	29.35	74.73	74.25
2008	100.00	100.00	59.78	72.53	83.06
2009	100.00	94.57	42.39	100.00	84.11
2010	100.00	100.00	100.00	100.00	100.00
2011	98.89	100.00	100.00	100.00	99.73
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	97.78	100.00			

Minimum Value Each Season/Year (120 cm  
depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-2.79	NaN
1999	-14.65	-15.87	-7.20	-6.17	-15.87
2000	-16.57	-17.50	-11.32	-6.51	-17.50
2001	-14.68	-17.88	-10.67	-7.41	-17.88
2002	-18.88	-17.97	-6.72	NaN	NaN
2003	NaN	NaN	NaN	-5.75	NaN
2004	-20.81	-21.43	-7.25	-4.09	-21.43
2005	-16.48	-17.81	-7.52	-5.17	-17.81
2006	-14.04	-15.32	-7.27	-2.32	-15.32
2007	-16.57	-18.21	-8.23	-3.25	-18.21
2008	-15.34	-17.30	-7.40	-4.64	-17.30
2009	-14.22	NaN	-6.03	-5.55	-15.25
2010	-15.02	-16.40	-8.28	-1.59	-16.40
2011	-11.14	-12.02	-6.55	-2.56	-12.02
2012	-15.72	-18.28	-7.82	-1.57	-18.28
2013	-16.07	-16.07	-7.80	-1.46	-16.07
2014	-10.15	-11.32	-4.65	-1.37	-11.32
2015	-14.21	-13.47			

Seasonal/Annual Averages (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-1.51	NaN
1999	-10.07	-13.75	-3.50	-2.05	-7.75
2000	-13.95	-15.50	-4.61	-2.36	-8.99
2001	-12.28	-15.23	-4.34	-2.60	-8.68
2002	-14.12	-13.94	-3.58	NaN	NaN
2003	NaN	NaN	NaN	-1.91	NaN
2004	-13.96	-16.91	-3.48	-1.52	-8.91
2005	-12.43	-14.41	-3.66	-1.69	-7.93
2006	-10.51	-13.46	-3.46	-1.33	-6.95
2007	-10.17	-14.52	-3.42	-1.37	-7.44
2008	-10.83	-13.82	-3.37	-1.50	-7.51
2009	-10.44	NaN	-2.79	-1.50	-6.89
2010	-11.45	-13.95	-3.47	-1.21	-7.07
2011	-6.92	-10.76	-2.85	-1.08	-5.73
2012	-10.90	-15.26	-3.51	-1.21	-7.55
2013	-9.44	-14.00	-3.25	-1.19	-6.78
2014	-5.48	-9.49	-2.40	-1.07	-4.91
2015	-9.25	-11.36			

Maximum Value Each Season/Year (120 cm  
depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	-1.21	NaN
1999	-2.79	-7.23	-1.70	-1.18	-1.18
2000	-6.17	-11.35	-2.05	-1.43	-1.43
2001	-6.58	-10.71	-2.07	-1.53	-1.53
2002	-7.43	-6.72	-1.95	NaN	NaN
2003	NaN	NaN	NaN	-1.34	NaN
2004	-5.80	-7.22	-1.70	-1.15	-1.15
2005	-4.14	-7.50	-1.67	-1.17	-1.17
2006	-5.17	-7.27	-1.57	-1.07	-1.07
2007	-2.32	-8.22	-1.52	-1.13	-1.13
2008	-3.23	-7.38	-1.46	-1.13	-1.13
2009	-4.67	NaN	-1.32	-0.95	-0.95
2010	-5.55	-8.28	-1.51	-1.01	-1.01
2011	-1.05	-6.54	-1.21	-0.86	-0.86
2012	-2.56	-7.82	-1.52	-1.01	-1.00
2013	-1.00	-7.79	-1.38	-0.97	-0.97
2014	-0.97	-4.61	-1.27	-0.89	-0.89
2015	-0.89	-5.08			

**Table G–2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean  
(120 cm depth):

Percent of Data Available during Each  
Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	0.03	NaN	1998	0.00	0.00	0.00	100.00	0.00
1999	0.65	-0.17	-0.11	-0.50	-0.46	1999	100.00	100.00	100.00	100.00	100.00
2000	-3.23	-1.91	-1.22	-0.81	-1.71	2000	100.00	100.00	56.52	100.00	89.07
2001	-1.56	-1.65	-0.95	-1.05	-1.40	2001	100.00	100.00	98.91	100.00	99.73
2002	-3.40	-0.35	-0.19	NaN	NaN	2002	100.00	100.00	98.91	41.76	76.71
2003	NaN	NaN	NaN	-0.36	NaN	2003	0.00	0.00	26.09	100.00	40.00
2004	-3.24	-3.33	-0.10	0.03	-1.62	2004	100.00	98.91	100.00	100.00	99.73
2005	-1.71	-0.83	-0.27	-0.15	-0.64	2005	100.00	94.57	25.00	100.00	79.73
2006	0.21	0.12	-0.07	0.22	0.34	2006	100.00	100.00	77.17	100.00	94.25
2007	0.55	-0.93	-0.03	0.18	-0.16	2007	100.00	93.48	29.35	74.73	74.25
2008	-0.11	-0.24	0.02	0.05	-0.22	2008	100.00	100.00	59.78	72.53	83.06
2009	0.28	NaN	0.60	0.05	0.40	2009	100.00	94.57	42.39	100.00	84.11
2010	-0.73	-0.37	-0.08	0.34	0.22	2010	100.00	100.00	100.00	100.00	100.00
2011	3.80	2.82	0.54	0.47	1.56	2011	98.89	100.00	100.00	100.00	99.73
2012	-0.18	-1.67	-0.12	0.34	-0.26	2012	100.00	100.00	98.91	100.00	99.73
2013	1.28	-0.42	0.14	0.35	0.51	2013	100.00	100.00	100.00	100.00	100.00
2014	5.24	4.09	0.99	0.48	2.38	2014	100.00	100.00	100.00	100.00	100.00
2015	1.47	2.23				2015	97.78	100.00			



**Table G-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Incident solar flux, in watts per meter squared

File name: AK105\_So\_d\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	30.3	NaN
2001	5.3	168.6	172.6	24.2	93.3
2002	6.1	160.0	183.5	NaN	NaN
2003	NaN	NaN	NaN	26.3	NaN
2004	5.6	153.2	183.2	30.6	93.6
2005	3.9	158.1	202.8	27.4	98.8
2006	4.7	156.5	166.1	25.6	88.8
2007	3.5	164.2	225.6	32.5	106.9
2008	4.8	152.0	175.1	29.6	90.6
2009	4.8	155.1	169.3	26.4	89.2
2010	4.8	NaN	NaN	31.9	NaN
2011	4.2	NaN	189.9	27.6	97.0
2012	4.9	150.1	179.7	26.5	90.5
2013	3.2	155.3	164.1	26.8	88.1
2014	4.9	NaN	NaN	29.8	NaN
2015	4.2	153.2			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	5.4	91.2	32.6
2000	93.4	70.7	92.4	98.9	88.8
2001	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	41.8	77.0
2003	0.0	0.0	27.2	100.0	40.3
2004	100.0	98.9	100.0	98.9	99.5
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	97.8	100.0	100.0	99.5
2008	100.0	100.0	98.9	100.0	99.7
2009	100.0	97.8	100.0	100.0	99.5
2010	100.0	89.1	28.3	100.0	79.2
2011	100.0	94.6	100.0	100.0	98.6
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	100.0	98.9	97.8	99.2
2014	100.0	45.7	47.8	95.6	72.1
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	2.0	NaN
2001	0.6	11.6	-9.8	-4.0	-0.2
2002	1.4	3.1	1.1	NaN	NaN
2003	NaN	NaN	NaN	-2.0	NaN
2004	1.0	-3.8	0.8	2.4	0.1
2005	-0.8	1.2	20.4	-0.9	5.3
2006	0.1	-0.5	-16.3	-2.7	-4.7
2007	-1.1	7.3	43.2	4.2	13.4
2008	0.1	-4.9	-7.2	1.3	-2.9
2009	0.1	-1.8	-13.0	-1.9	-4.3
2010	0.2	NaN	NaN	3.6	NaN
2011	-0.4	NaN	7.5	-0.7	3.5
2012	0.3	-6.9	-2.6	-1.8	-3.0
2013	-1.4	-1.6	-18.3	-1.5	-5.4
2014	0.3	NaN	NaN	1.6	NaN
2015	-0.4	-3.7			

**Table G-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
Variable: Reflected solar flux, in watts per meter squared

File name: AK105\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1998	NaN	NaN	NaN	7.0	NaN
1999	2.9	122.7	40.3	10.9	44.2
2000	3.9	144.3	42.7	15.9	51.4
2001	3.9	144.6	36.5	9.7	49.0
2002	4.2	114.5	39.0	NaN	NaN
2003	NaN	NaN	NaN	9.6	NaN
2004	4.8	108.0	41.7	13.4	42.0
2005	4.1	127.1	46.8	8.1	46.8
2006	4.4	124.6	40.2	8.6	44.8
2007	4.1	133.7	54.6	9.7	50.9
2008	4.9	117.8	43.5	13.2	45.1
2009	4.3	114.4	39.9	8.8	42.1
2010	5.1	133.4	44.6	15.4	50.0
2011	3.7	130.5	45.9	10.8	48.0
2012	4.9	127.3	46.8	10.0	47.7
2013	3.4	124.0	43.9	14.5	46.8
2014	4.5	116.3	45.0	13.0	45.1
2015	3.8	103.8			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1998	0.0	0.0	0.0	100.0	0.0
1999	100.0	97.8	100.0	98.9	99.2
2000	100.0	97.8	100.0	100.0	99.5
2001	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	41.8	77.0
2003	0.0	0.0	27.2	100.0	40.3
2004	100.0	98.9	100.0	100.0	99.7
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	98.9	100.0	99.7
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	98.9	97.8	99.2
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	98.9	99.7
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1998	NaN	NaN	NaN	-4.3	NaN
1999	-1.3	0.5	-3.3	-0.3	-2.2
2000	-0.3	22.2	-0.9	4.6	5.0
2001	-0.3	22.4	-7.1	-1.5	2.6
2002	0.0	-7.7	-4.6	NaN	NaN
2003	NaN	NaN	NaN	-1.7	NaN
2004	0.6	-14.1	-1.9	2.1	-4.4
2005	-0.1	4.9	3.1	-3.2	0.4
2006	0.2	2.4	-3.4	-2.6	-1.6
2007	-0.1	11.6	11.0	-1.6	4.5
2008	0.8	-4.4	-0.2	2.0	-1.3
2009	0.1	-7.8	-3.7	-2.5	-4.3
2010	0.9	11.3	1.0	4.1	3.6
2011	-0.5	8.3	2.3	-0.5	1.6
2012	0.7	5.1	3.2	-1.3	1.3
2013	-0.8	1.9	0.2	3.3	0.4
2014	0.3	-5.9	1.4	1.7	-1.3
2015	-0.4	-18.4			

**Table G-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Rainfall, in millimeters per hour  
 File name: AK105\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	0.3	NaN
2011	0.0	0.0	3.0	1.0	3.0
2012	0.0	NaN	2.8	2.5	2.8
2013	0.0	0.0	4.6	1.3	4.6
2014	0.0	NaN	NaN	2.5	NaN
2015	0.0	0.5			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	27.2	82.4	27.4
2010	0.0	0.0	28.3	100.0	40.5
2011	100.0	97.8	100.0	100.0	99.5
2012	100.0	94.6	98.9	100.0	98.4
2013	100.0	98.9	98.9	100.0	99.5
2014	100.0	65.2	91.3	97.8	88.5
2015	100.0	98.9			

## Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	1.5	NaN
2011	0.0	0.0	81.3	17.5	98.8
2012	0.0	NaN	85.1	32.3	117.3
2013	0.0	0.0	125.2	14.2	139.4
2014	0.0	NaN	NaN	42.7	NaN
2015	0.0	2.0			

**Table G-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Snow depth, in centimeters  
 File name: AK105\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	4.1	NaN
2000	20.5	41.4	3.6	10.3	20.2
2001	17.8	19.1	2.1	8.8	11.8
2002	19.2	17.1	3.9	NaN	NaN
2003	NaN	NaN	NaN	6.9	NaN
2004	8.6	9.2	1.3	8.7	6.9
2005	15.7	21.0	0.6	4.5	10.9
2006	17.9	26.8	0.7	4.9	14.0
2007	13.6	11.4	NaN	4.8	7.4
2008	14.8	19.9	3.3	12.7	13.5
2009	29.3	39.9	5.5	7.7	20.6
2010	23.3	32.3	4.8	14.9	19.7
2011	32.6	53.1	7.9	5.1	25.4
2012	30.1	37.1	5.6	3.6	17.3
2013	5.0	6.2	3.4	6.4	6.3
2014	21.2	22.8	3.2	5.4	12.1
2015	5.9	13.1			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	14.0	NaN
2000	52.8	56.5	36.6	23.7	56.5
2001	20.9	25.7	12.2	24.3	25.7
2002	26.5	23.3	13.3	NaN	NaN
2003	NaN	NaN	NaN	17.3	NaN
2004	15.4	17.1	5.5	17.0	17.1
2005	21.0	26.6	8.2	12.4	26.6
2006	30.4	34.1	5.4	14.9	34.1
2007	26.5	18.9	NaN	17.5	25.5
2008	27.4	33.5	11.2	23.7	33.5
2009	53.2	51.4	8.3	15.8	53.2
2010	32.6	47.8	11.9	34.6	47.8
2011	52.4	62.6	16.2	13.2	62.6
2012	34.8	51.9	16.0	8.5	51.9
2013	6.9	14.9	7.4	11.3	22.5
2014	25.7	37.1	8.1	11.8	37.1
2015	11.1	25.8			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	-0.9	NaN
2000	-0.5	29.6	-2.2	-1.1	-2.2
2001	16.3	14.1	-0.3	-0.1	-0.3
2002	8.3	0.2	-1.7	NaN	NaN
2003	NaN	NaN	NaN	0.2	NaN
2004	4.8	0.3	-1.4	0.2	-1.4
2005	8.1	8.8	-2.0	-0.6	-2.0
2006	6.6	0.9	-2.7	0.3	-2.7
2007	3.1	3.8	NaN	0.2	-2.4
2008	7.5	2.7	-2.9	-1.6	-2.9
2009	17.9	6.7	-0.7	-1.7	-1.7
2010	13.0	9.8	-2.0	1.9	-2.0
2011	25.4	3.8	-1.2	-2.0	-2.0
2012	6.8	6.4	-1.8	-1.7	-1.8
2013	1.3	1.2	-1.1	0.9	-1.1
2014	7.2	7.1	-0.6	0.4	-0.6
2015	-0.5	0.1			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	-3.1	NaN
2000	2.2	16.7	0.0	3.1	5.9
2001	-0.6	-5.6	-1.5	1.6	-2.5
2002	0.9	-7.6	0.3	NaN	NaN
2003	NaN	NaN	NaN	-0.3	NaN
2004	-9.8	-15.5	-2.2	1.4	-7.4
2005	-2.7	-3.7	-3.0	-2.8	-3.4
2006	-0.5	2.1	-2.9	-2.3	-0.3
2007	-4.8	-13.3	NaN	-2.5	-6.9
2008	-3.6	-4.7	-0.3	5.5	-0.8
2009	10.9	15.2	1.9	0.5	6.3
2010	5.0	7.7	1.2	7.6	5.3
2011	14.2	28.4	4.3	-2.2	11.0
2012	11.7	12.4	2.0	-3.7	3.0
2013	-13.3	-18.5	-0.2	-0.9	-8.0
2014	2.8	-1.9	-0.3	-1.9	-2.2
2015	-12.5	-11.6			

**Table G-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	6.5	100.0	35.1
2000	96.7	100.0	98.9	100.0	98.9
2001	100.0	98.9	100.0	100.0	99.5
2002	90.0	100.0	97.8	41.8	74.2
2003	0.0	0.0	4.3	85.7	31.0
2004	100.0	100.0	96.7	92.3	97.3
2005	98.9	97.8	90.2	91.2	94.5
2006	100.0	100.0	89.1	80.2	92.3
2007	100.0	96.7	75.0	100.0	92.9
2008	100.0	100.0	98.9	93.4	98.1
2009	100.0	100.0	100.0	97.8	99.5
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	92.4	87.9	95.1
2012	100.0	100.0	96.7	100.0	99.2
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table G-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK105\_Smoist\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.34	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	0.32	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	0.27	NaN	NaN
2010	NaN	NaN	0.28	0.22	NaN
2011	NaN	NaN	0.30	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.41	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	0.41	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	0.42	NaN	NaN
2010	NaN	NaN	0.42	0.39	NaN
2011	NaN	NaN	0.42	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.01	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	0.00	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	0.00	NaN	NaN
2010	NaN	NaN	0.01	0.00	NaN
2011	NaN	NaN	0.02	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.04	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	0.02	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	-0.03	NaN	NaN
2010	NaN	NaN	-0.02	NaN	NaN
2011	NaN	NaN	-0.00	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN

**Table G-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	27.17	76.92	26.03
2004	0.00	15.22	100.00	63.74	44.81
2005	0.00	0.00	82.61	72.53	38.90
2006	0.00	4.35	100.00	78.02	45.75
2007	0.00	0.00	93.48	70.33	41.10
2008	0.00	0.00	94.57	60.44	38.80
2009	0.00	6.52	97.83	65.93	42.74
2010	0.00	1.09	100.00	97.80	50.96
2011	4.44	4.35	100.00	60.44	41.37
2012	0.00	0.00	91.30	84.62	43.99
2013	0.00	0.00	81.52	73.63	38.90
2014	0.00	0.00	75.00	72.53	36.99
2015	0.00	0.00			

**Table G-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Tunalik  
 Variable: Surface pressure, in millibars  
 File name: AK105\_P\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	1007.7	NaN
2009	1012.1	1014.7	1008.0	1004.9	1009.9
2010	1012.6	1007.7	1006.2	1006.4	1008.6
2011	1012.9	1010.5	1004.6	1003.4	1006.7
2012	1006.9	1011.7	1003.7	1011.9	1009.2
2013	1012.8	1015.9	1008.0	1003.4	1010.5
2014	1013.2	1010.5	1006.2	1006.7	1008.6
2015	1012.4	1009.4			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	1032.0	NaN
2009	1039.0	1039.0	1028.0	1029.0	1039.0
2010	1036.0	1038.0	1020.0	1032.0	1038.0
2011	1044.0	1032.0	1020.0	1032.0	1044.0
2012	1051.0	1029.0	1019.0	1035.0	1051.0
2013	1042.0	1040.0	1025.0	1026.0	1042.0
2014	1045.0	1032.0	1023.0	1026.0	1045.0
2015	1041.0	1032.0			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	986.0	NaN
2009	981.0	989.0	982.0	977.0	977.0
2010	988.0	982.0	991.0	981.0	981.0
2011	981.0	986.0	984.0	977.0	976.0
2012	976.0	991.0	985.0	979.0	979.0
2013	985.0	985.0	991.0	967.0	967.0
2014	987.0	988.0	990.0	990.0	987.0
2015	989.0	989.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	NaN	NaN	NaN	NaN	NaN
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	1.7	NaN
2009	1.3	3.1	1.8	-1.1	1.2
2010	1.7	-3.9	-0.0	0.4	-0.1
2011	2.0	-1.1	-1.6	-2.6	-2.0
2012	-3.9	0.1	-2.5	5.9	0.5
2013	1.9	4.3	1.8	-2.6	1.8
2014	2.4	-1.1	-0.0	0.7	-0.1
2015	1.5	-2.2			



**Table G-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1998	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	39.1	100.0	43.2
2009	97.8	100.0	100.0	100.0	99.5
2010	100.0	100.0	98.9	100.0	99.7
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

## H. Koluktak

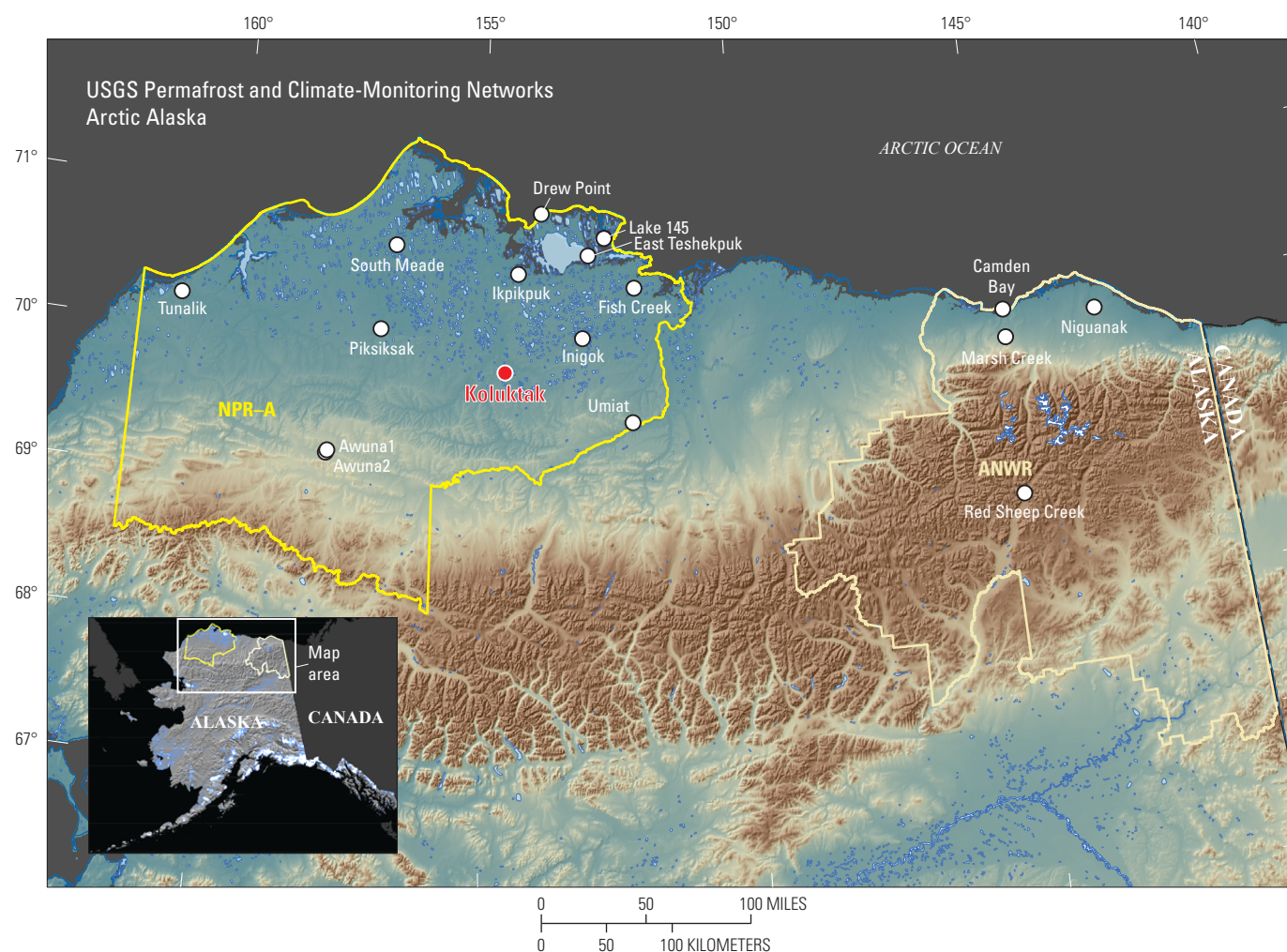
GTN-P code: U30

Latitude: 69°45.096'N

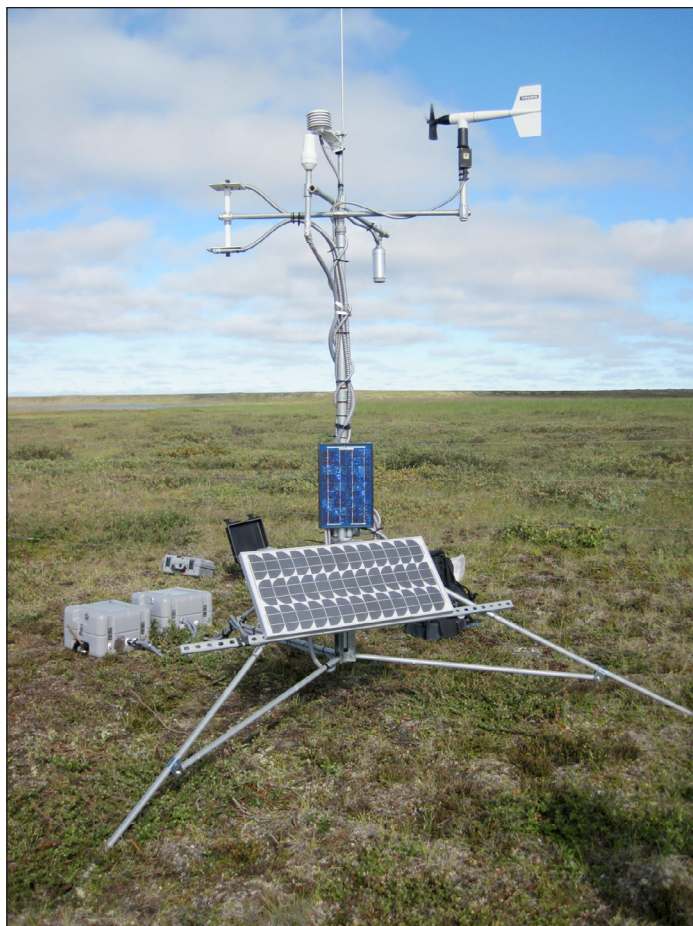
Longitude: 154°37.054'W

Elevation: 60 meters above mean sea level

Installation date: 27 AUG 1999

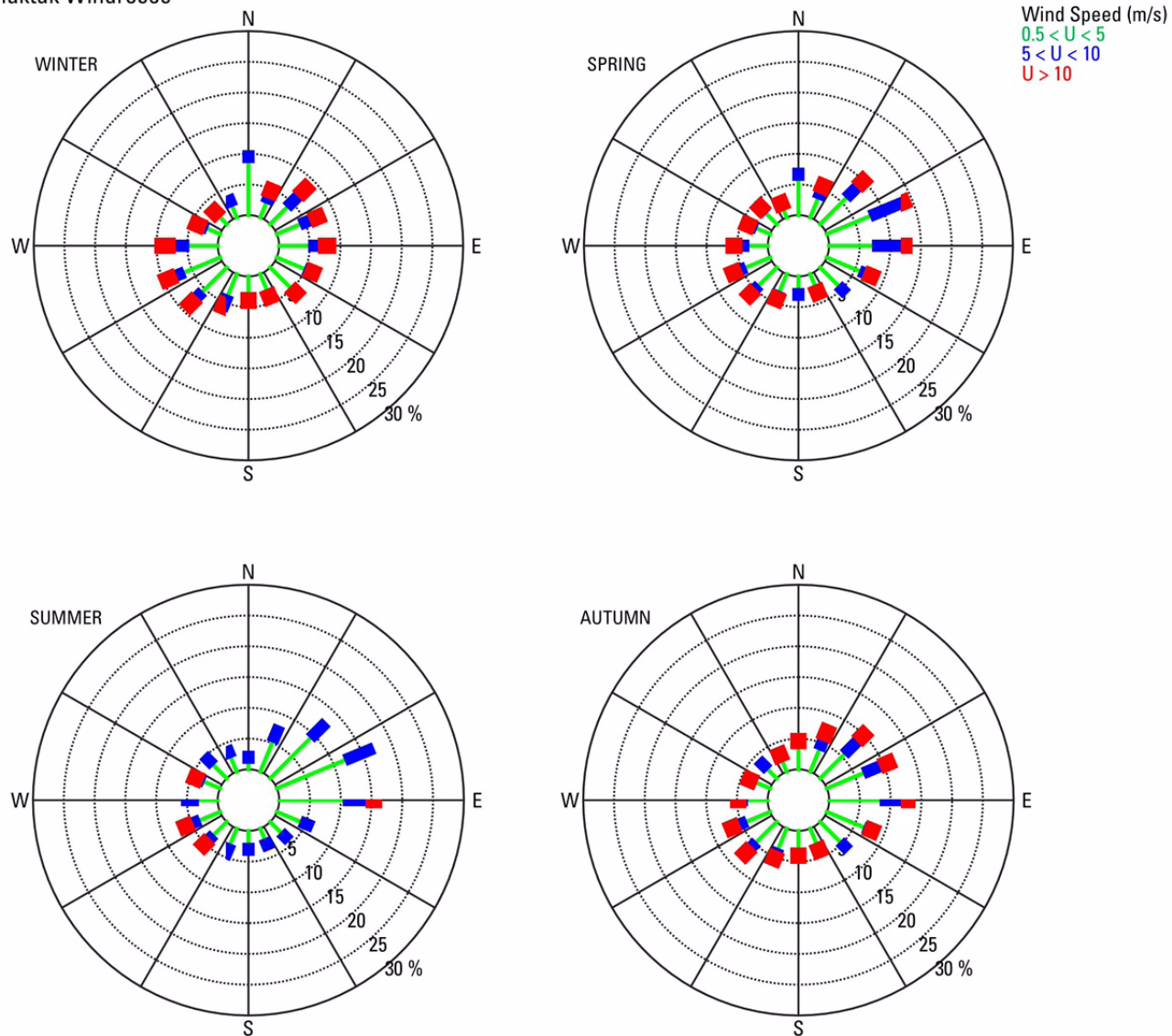


**Figure H-1.** Location map presenting the specific location of the Koluktak site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure H-2.** Koluktak station in summer 2008.

## Koluktak Windroses



**Figure H–3.** Koluktak seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.



## Tables

**Table H-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
 Variable: Air temperature, in degrees Celsius  
 File name: AK106\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.45	-10.35	-21.48	-31.86
2000	-25.81	-26.14	-28.48	-18.97	-8.06	NaN	NaN	NaN	0.83	-9.83	-20.10	-22.54
2001	-25.56	-19.32	-28.44	-17.90	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.34	-6.24	-13.92	-22.60
2003	-25.41	-28.75	-26.28	-12.60	-4.41	6.96	10.15	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-2.55	9.90	12.79	NaN	0.23	-7.74	-19.15	-26.14
2005	-24.28	-27.72	-24.18	-17.07	-4.42	5.52	8.48	9.44	1.88	-8.08	-24.57	-23.84
2006	-28.06	-22.33	-30.13	-20.82	-3.45	8.60	10.60	5.80	4.29	-3.99	-18.44	-20.37
2007	-28.51	-26.83	-29.90	-14.31	-7.63	8.74	12.76	10.28	3.39	-9.63	-14.96	-23.27
2008	-30.68	-29.78	-31.14	-12.95	-2.67	9.96	11.73	5.04	0.14	-8.52	-18.54	-19.22
2009	-28.22	-27.15	-31.68	-15.18	-0.92	7.86	12.82	7.28	1.23	-6.11	-22.60	-22.11
2010	-29.58	-26.96	-27.56	-12.53	NaN	NaN	NaN	NaN	4.52	-8.36	-11.35	-26.35
2011	-24.48	-20.23	-21.38	-20.52	-4.04	6.57	11.23	8.26	2.74	-6.39	-23.52	-26.47
2012	-33.36	-25.51	-35.22	-17.13	-5.13	8.46	13.46	10.19	2.24	-3.52	-18.87	-27.52
2013	-28.16	-33.31	-24.78	-19.96	NaN	10.46	12.80	7.80	-0.06	-5.77	-16.22	-21.26
2014	-23.48	-24.59	-23.03	-14.55	-0.85	6.08	9.96	6.68	1.49	-6.09	-15.58	-23.53
2015	-25.18	-21.49	-24.53	-15.12	2.52	11.17	10.14					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-15.10	-28.27	-35.67	-45.28
2000	-40.13	-43.99	-38.87	-36.64	-22.73	NaN	NaN	NaN	-11.16	-22.61	-34.25	-42.67
2001	-41.12	-41.92	-40.09	-30.27	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.93	-23.15	-26.75	-41.34
2003	-40.50	-42.52	-41.77	-33.13	-16.24	-2.14	0.03	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-17.67	-1.68	2.28	NaN	-11.13	-26.11	-32.04	-45.24
2005	-41.84	-39.20	-41.59	-35.75	-18.99	-2.81	-0.85	-2.37	-6.37	-21.85	-44.50	-42.28
2006	-41.69	-46.61	-41.91	-37.83	-25.37	-5.34	-0.05	-3.02	-3.60	-15.49	-33.67	-41.41
2007	-45.24	-47.35	-45.50	-27.07	-23.24	-3.15	3.05	0.48	-8.66	-24.09	-29.11	-47.75
2008	-47.50	-45.02	-45.87	-34.62	-13.76	-3.45	0.22	-1.85	-9.30	-20.19	-34.92	-36.66
2009	-39.84	-44.00	-44.04	-31.54	-13.59	-1.06	1.56	0.22	-12.88	-18.37	-38.73	-41.69
2010	-48.11	-47.20	-42.85	-30.65	NaN	NaN	NaN	NaN	-9.48	-21.60	-31.73	-46.14
2011	-48.16	-35.02	-37.37	-34.32	-22.65	-3.70	2.89	-0.91	-8.86	-20.36	-40.74	-42.85
2012	-51.27	-49.47	-45.24	-38.16	-29.40	-1.13	3.41	1.33	-3.72	-18.23	-32.22	-40.78
2013	-40.88	-46.47	-37.34	-40.37	NaN	-4.93	1.79	-1.95	-13.04	-16.88	-35.35	-41.59
2014	-44.33	-45.24	-41.16	-35.17	-9.39	-2.21	1.39	-1.58	-7.04	-16.98	-32.10	-36.77
2015	-36.72	-42.21	-42.93	-28.31	-14.95	-3.69	1.87					

**Table H-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.24	-0.68	-12.81	-17.48
2000	-8.99	-1.51	-15.81	-5.28	7.13	NaN	NaN	NaN	15.35	-0.86	-0.88	-10.15
2001	-7.11	-3.68	-15.97	-3.04	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.47	4.86	-0.65	-8.65
2003	-8.79	-12.80	-6.44	2.84	3.54	24.59	24.89	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	8.53	25.13	29.68	NaN	13.74	1.20	-2.30	-2.39
2005	0.86	-6.26	-1.46	4.10	1.73	23.53	21.37	24.76	14.57	2.13	-8.94	-4.09
2006	-17.56	0.89	-19.81	-9.94	10.72	20.49	25.07	18.81	19.17	6.81	-0.72	-0.97
2007	-13.58	-1.72	-5.13	-2.49	2.11	20.59	27.75	24.01	18.09	-0.75	-4.01	-4.51
2008	1.42	-4.35	-6.31	1.77	10.90	23.53	27.40	15.96	7.46	-1.47	-8.08	-0.40
2009	-1.94	-0.43	-13.25	6.17	13.27	18.18	29.77	20.27	20.85	2.81	-9.25	-1.88
2010	-9.15	-15.14	-10.81	-0.15	NaN	NaN	NaN	NaN	19.38	0.17	2.32	-7.42
2011	2.08	0.60	-6.43	-4.56	10.51	24.77	23.15	21.32	14.67	0.35	-2.72	-4.73
2012	-10.35	-7.91	-21.02	-4.76	5.37	24.76	24.96	21.13	12.25	6.61	-5.54	-12.94
2013	-14.54	-21.95	-13.67	-1.46	NaN	30.38	25.70	22.09	15.75	2.49	2.48	3.01
2014	-6.47	-2.07	-5.70	2.58	7.02	19.69	22.23	22.31	13.60	4.25	0.44	-4.33
2015	-7.72	-0.38	-3.67	0.06	17.09	27.37	27.64					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.35	-3.13	-3.02	-7.53
2000	1.00	-0.51	-1.05	-2.81	-4.94	NaN	NaN	NaN	-0.97	-2.62	-1.64	1.80
2001	1.25	6.31	-1.01	-1.74	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.54	0.98	4.53	1.74
2003	1.40	-3.12	1.15	3.55	-1.29	-1.39	-1.26	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	0.57	1.55	1.38	NaN	-1.57	-0.53	-0.69	-1.80
2005	2.53	-2.09	3.25	-0.91	-1.30	-2.84	-2.93	1.74	0.08	-0.87	-6.11	0.50
2006	-1.25	3.30	-2.70	-4.66	-0.33	0.25	-0.81	-1.90	2.49	3.23	0.01	3.97
2007	-1.70	-1.20	-2.46	1.85	-4.51	0.38	1.36	2.58	1.59	-2.42	3.50	1.07
2008	-3.87	-4.15	-3.71	3.21	0.46	1.61	0.32	-2.66	-1.66	-1.31	-0.09	5.12
2009	-1.41	-1.52	-4.25	0.98	2.20	-0.50	1.41	-0.42	-0.57	1.11	-4.14	2.22
2010	-2.77	-1.33	-0.13	3.62	NaN	NaN	NaN	NaN	2.72	-1.15	7.10	-2.01
2011	2.33	5.40	6.05	-4.36	-0.92	-1.78	-0.18	0.56	0.94	0.82	-5.06	-2.13
2012	-6.55	0.12	-7.79	-0.97	-2.00	0.11	2.05	2.49	0.44	3.69	-0.41	-3.18
2013	-1.35	-7.68	2.65	-3.81	NaN	2.11	1.39	0.10	-1.86	1.45	2.23	3.07
2014	3.33	1.04	4.40	1.60	2.28	-2.28	-1.45	-1.02	-0.31	1.13	2.88	0.81
2015	1.63	4.14	2.90	1.03	5.64	2.82	-1.27					

**Table H-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	3.33	0.00	45.16	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	38.71	0.00	0.00	93.55	60.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	12.90	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	56.67	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	90.32	6.67	0.00	77.42	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table H-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Wind speed, in meters per second

File name: AK106\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.49	4.19	NaN	NaN
2005	4.01	NaN	3.24	2.95	4.34	4.09	3.88	2.94	4.06	3.02	NaN	NaN
2006	NaN	NaN	NaN	3.24	3.11	3.71	3.45	2.93	2.45	3.16	NaN	NaN
2007	NaN	NaN	2.98	3.25	3.60	3.66	3.31	2.81	2.91	NaN	NaN	NaN
2008	3.33	NaN	NaN	3.32	4.94	3.07	3.50	2.97	2.51	3.41	NaN	NaN
2009	NaN	3.62	NaN	2.93	3.53	3.82	3.43	3.20	3.31	NaN	NaN	NaN
2010	3.16	NaN	NaN	2.79	NaN	NaN	NaN	NaN	2.87	NaN	NaN	NaN
2011	NaN	NaN	NaN	3.34	2.58	4.28	3.03	3.05	3.69	NaN	3.02	3.55
2012	3.50	NaN	2.26	3.00	3.41	3.48	2.71	3.36	3.09	3.63	2.72	2.40
2013	4.41	NaN	NaN	3.47	NaN	3.41	3.60	2.86	3.21	NaN	NaN	2.93
2014	3.56	NaN	2.20	2.93	3.94	3.15	3.43	3.71	3.81	4.02	NaN	NaN
2015	3.54	4.49	NaN	3.11	3.17	3.29	3.47					

**Table H-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.43	11.40	NaN	NaN
2005	16.71	NaN	13.86	11.34	9.73	11.99	10.15	8.20	8.69	11.74	NaN	NaN
2006	NaN	NaN	NaN	8.69	8.96	9.32	7.98	7.05	7.69	12.59	NaN	NaN
2007	NaN	NaN	12.59	9.84	9.88	8.57	7.44	8.98	8.11	NaN	NaN	NaN
2008	18.67	NaN	NaN	11.37	11.79	7.36	9.99	7.33	7.59	9.87	NaN	NaN
2009	NaN	14.00	NaN	10.39	9.58	7.58	7.87	9.66	8.66	NaN	NaN	NaN
2010	10.05	NaN	NaN	9.84	NaN	NaN	NaN	NaN	7.28	NaN	NaN	NaN
2011	NaN	NaN	NaN	12.56	7.56	9.34	8.37	6.89	7.93	NaN	9.80	14.60
2012	11.36	NaN	7.76	7.66	7.39	8.50	7.41	9.92	8.55	9.47	9.38	11.09
2013	16.99	NaN	NaN	10.94	NaN	7.30	9.64	7.99	8.57	NaN	NaN	11.95
2014	12.07	NaN	8.92	9.46	11.29	6.58	11.04	9.02	10.12	14.27	NaN	NaN
2015	13.41	20.58	NaN	11.29	11.96	7.19	8.40					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.25	0.61	NaN	NaN
2005	0.36	NaN	0.45	-0.28	0.72	0.49	0.50	-0.18	0.81	-0.55	NaN	NaN
2006	NaN	NaN	NaN	0.01	-0.51	0.11	0.07	-0.19	-0.80	-0.41	NaN	NaN
2007	NaN	NaN	0.19	0.03	-0.02	0.06	-0.07	-0.31	-0.34	NaN	NaN	NaN
2008	-0.31	NaN	NaN	0.09	1.32	-0.54	0.12	-0.16	-0.74	-0.16	NaN	NaN
2009	NaN	NaN	NaN	-0.30	-0.09	0.22	0.05	0.08	0.06	NaN	NaN	NaN
2010	-0.48	NaN	NaN	-0.44	NaN	NaN	NaN	NaN	-0.38	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.12	-1.04	0.68	-0.35	-0.08	0.45	NaN	NaN	NaN
2012	-0.15	NaN	-0.53	-0.22	-0.21	-0.12	-0.67	0.24	-0.16	0.06	NaN	NaN
2013	0.77	NaN	NaN	0.24	NaN	-0.20	0.21	-0.26	-0.04	NaN	NaN	NaN
2014	-0.08	NaN	-0.59	-0.30	0.32	-0.45	0.05	0.59	0.57	0.45	NaN	NaN
2015	-0.10	NaN	NaN	-0.12	-0.45	-0.31	0.09					



**Table H-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.29	100.00	100.00	93.33	51.61
2005	100.00	92.86	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	26.67	83.87
2006	25.81	82.14	70.97	100.00	96.77	100.00	100.00	100.00	100.00	100.00	56.67	54.84
2007	67.74	82.14	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87	83.33	77.42
2008	96.77	79.31	80.65	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.00	67.74
2009	74.19	100.00	48.39	96.67	100.00	100.00	100.00	100.00	100.00	77.42	80.00	58.06
2010	100.00	92.86	58.06	100.00	90.32	6.67	0.00	77.42	100.00	74.19	90.00	77.42
2011	35.48	89.29	38.71	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00
2012	100.00	86.21	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.67	96.77
2013	100.00	85.71	87.10	100.00	93.55	100.00	100.00	100.00	100.00	80.65	90.00	100.00
2014	100.00	64.29	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	80.00	90.32
2015	100.00	100.00	74.19	96.67	100.00	100.00	100.00					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
Variable: Ground temperature, in degrees Celsius

File name: AK106\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.35	-0.77	-2.90	-10.16
2000	-14.76	-14.43	-16.71	-14.31	-9.82	3.99	7.89	NaN	1.80	-0.50	-2.83	-7.32
2001	-14.34	-13.48	-17.67	-14.69	-10.45	3.97	7.53	5.48	2.31	-0.38	-1.99	-4.95
2002	-11.48	-15.80	-14.22	-12.51	NaN	NaN	NaN	NaN	2.84	-0.66	-3.41	-5.96
2003	-11.05	-14.98	-15.82	-12.86	-6.29	4.80	8.32	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	10.72	NaN	1.51	-0.24	-1.82	-4.71
2005	-8.24	-13.58	-14.51	-13.29	-7.65	3.22	7.51	7.77	2.14	-1.13	-3.13	-5.89
2006	-11.61	-14.07	-17.33	-15.29	-6.39	5.70	9.14	6.32	3.47	-0.92	-4.73	-8.13
2007	-15.56	-17.33	-21.78	-13.93	-8.27	6.61	11.44	8.62	3.32	-2.10	-3.90	-8.64
2008	-16.50	-18.16	-18.69	-12.91	-5.71	6.55	10.24	5.16	1.23	-0.37	-1.49	-2.82
2009	-9.36	-14.45	-17.01	-13.69	-0.96	6.13	10.74	6.64	2.42	-0.92	-5.71	-3.65
2010	-9.26	-11.71	-13.51	-10.82	NaN	NaN	NaN	NaN	3.70	-0.25	-0.63	-3.40
2011	-7.57	-10.94	-11.21	-11.36	-5.29	3.68	7.81	6.52	2.76	-0.07	-1.70	-3.88
2012	-8.40	-11.62	-14.68	-12.85	NaN	NaN	8.79	7.30	2.18	NaN	-2.18	-5.03
2013	-10.70	-15.95	-15.32	-13.93	NaN	5.20	8.92	6.96	NaN	-0.10	-0.79	-2.81
2014	-7.20	-11.51	-13.83	-11.52	NaN	3.41	7.64	5.69	1.36	-0.22	-1.88	-3.72
2015	-8.34	-11.79	-11.73	-10.42	-3.00	6.16	8.08					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.08	-1.66	-4.71	-14.58
2000	-16.80	-16.37	-17.56	-15.99	-11.87	-3.38	3.65	NaN	-0.15	-1.41	-4.18	-12.60
2001	-15.86	-15.92	-19.95	-17.91	-14.67	-2.32	3.04	2.23	-0.06	-1.28	-4.42	-8.66
2002	-15.33	-16.80	-15.68	-14.79	NaN	NaN	NaN	NaN	-0.07	-2.64	-7.35	-10.51
2003	-13.94	-17.32	-18.30	-16.78	-9.50	-0.74	3.24	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	6.30	NaN	-0.08	-1.18	-3.32	-6.59
2005	-13.61	-14.55	-16.39	-15.24	-10.61	-1.15	2.94	1.28	-0.16	-3.22	-4.47	-8.55
2006	-18.03	-16.89	-19.48	-18.15	-12.57	-0.09	4.21	1.32	0.19	-2.89	-8.68	-13.48
2007	-18.77	-22.24	-24.16	-17.17	-13.88	-1.19	6.49	4.82	-0.31	-3.78	-6.75	-13.15
2008	-20.46	-21.07	-20.02	-16.28	-10.76	-0.04	4.21	2.66	-0.46	-1.12	-3.41	-5.22
2009	-14.30	-16.45	-19.64	-17.99	-6.37	1.93	4.72	2.58	-0.88	-3.04	-8.78	-5.74
2010	-11.60	-14.86	-14.82	-13.66	NaN	NaN	NaN	NaN	-0.07	-1.09	-1.04	-7.59
2011	-12.66	-12.28	-12.30	-12.88	-10.42	-0.10	3.63	3.30	-0.07	-0.33	-3.18	-5.97
2012	-13.41	-14.25	-15.50	-15.49	NaN	NaN	5.87	3.69	-0.01	NaN	-4.80	-6.90
2013	-14.93	-17.19	-16.41	-15.68	NaN	-0.54	4.16	1.59	NaN	-0.34	-1.87	-6.51
2014	-9.42	-15.94	-15.73	-14.24	NaN	-0.30	3.83	1.69	-0.03	-0.73	-3.31	-4.69
2015	-11.65	-14.80	-13.59	-12.32	-8.93	-0.24	5.50					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.26	-0.01	-1.33	-4.34
2000	-13.39	-11.83	-15.93	-11.91	-3.27	11.55	13.59	NaN	7.39	-0.02	-1.37	-3.61
2001	-12.71	-11.39	-14.89	-12.94	-2.43	10.95	13.48	10.71	6.30	-0.03	-0.88	-2.59
2002	-8.66	-14.60	-11.82	-9.56	NaN	NaN	NaN	NaN	9.63	1.57	-0.15	-2.91
2003	-9.87	-12.12	-12.98	-9.37	-0.74	13.20	15.54	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	17.75	NaN	6.61	0.01	-0.68	-2.39
2005	-1.99	-12.17	-12.89	-10.61	-1.01	12.20	13.68	15.47	6.02	-0.08	-1.92	-3.17
2006	-7.91	-10.42	-15.25	-12.56	2.96	12.40	16.88	13.33	8.91	0.19	-0.56	-3.00
2007	-12.94	-11.53	-15.96	-10.23	-0.18	13.89	19.46	13.32	8.44	-0.25	-1.72	-4.94
2008	-11.11	-14.67	-16.31	-10.04	2.06	13.65	16.84	7.79	3.87	-0.07	-0.68	-1.44
2009	-4.58	-11.50	-12.03	-2.49	5.25	10.76	18.92	13.61	9.49	-0.05	-2.31	-1.81
2010	-5.53	-10.23	-12.05	-8.38	NaN	NaN	NaN	NaN	7.31	0.04	-0.25	-0.98
2011	-2.86	-9.36	-10.39	-9.90	2.07	9.66	11.15	10.34	7.33	0.02	-0.17	-1.58
2012	-5.24	-10.29	-13.33	-10.46	NaN	NaN	11.89	10.27	5.98	NaN	-0.36	-2.39
2013	-6.53	-13.98	-13.94	-11.61	NaN	11.17	12.65	12.15	NaN	-0.02	-0.16	-0.13
2014	-5.12	-7.02	-11.67	-8.05	NaN	9.49	11.72	9.57	3.41	0.40	-0.65	-2.97
2015	-4.48	-8.99	-9.88	-8.93	4.41	12.38	13.07					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.06	-0.16	-0.31	-4.71
2000	-4.02	-0.69	-1.40	-1.55	-3.82	-0.97	-1.02	NaN	-0.49	0.12	-0.24	-1.87
2001	-3.60	0.26	-2.36	-1.93	-4.44	-0.99	-1.38	-1.07	0.02	0.24	0.59	0.49
2002	-0.74	-2.06	1.10	0.25	NaN	NaN	NaN	NaN	0.54	-0.04	-0.82	-0.51
2003	-0.31	-1.24	-0.51	-0.09	-0.28	-0.16	-0.60	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	1.81	NaN	-0.78	0.38	0.76	0.74
2005	2.50	0.16	0.80	-0.52	-1.64	-1.73	-1.41	1.22	-0.15	-0.51	-0.55	-0.45
2006	-0.87	-0.33	-2.02	-2.53	-0.38	0.74	0.23	-0.22	1.18	-0.30	-2.14	-2.69
2007	-4.82	-3.59	-6.46	-1.17	-2.27	1.66	2.53	2.07	1.03	-1.49	-1.32	-3.19
2008	-5.76	-4.42	-3.38	-0.15	0.29	1.60	1.33	-1.39	-1.06	0.25	1.10	2.62
2009	1.38	-0.71	-1.70	-0.93	5.05	1.18	1.83	0.10	0.13	-0.31	-3.12	1.80
2010	1.48	2.03	1.80	1.94	NaN	NaN	NaN	NaN	1.41	0.37	1.96	2.04
2011	3.17	2.80	4.10	1.41	0.71	-1.28	-1.10	-0.02	0.47	0.55	0.89	1.57
2012	2.34	2.12	0.63	-0.09	NaN	NaN	-0.12	0.75	-0.11	NaN	0.41	0.42
2013	0.04	-2.21	-0.00	-1.17	NaN	0.24	0.01	0.42	NaN	0.52	1.80	2.63
2014	3.53	2.23	1.48	1.24	NaN	-1.54	-1.27	-0.85	-0.93	0.40	0.70	1.72
2015	2.40	1.95	3.58	2.34	3.01	1.21	-0.84					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	61.29	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	56.67	87.10	93.33	100.00	77.42	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	90.32	0.00	0.00	70.97	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	0.00	29.03	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	80.00	25.81	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	64.52	0.00	0.00	61.29	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	87.10	6.67	0.00	77.42	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	41.94	93.33	100.00	96.77	100.00	96.77	96.67	100.00
2013	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	93.33	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.21	-0.05	-0.06	-3.90
2000	-11.19	-12.06	-13.98	-13.42	-10.60	-4.24	-1.02	NaN	-0.11	-0.17	-0.20	-3.38
2001	-10.52	-11.46	-14.28	-13.92	-11.37	-4.03	-1.09	-0.32	-0.13	-0.17	-0.22	-1.64
2002	-7.80	-12.32	-12.54	-11.86	-6.81	-1.94	-0.68	-0.06	0.16	-0.05	-0.08	-1.78
2003	-7.94	-11.42	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	-0.45	NaN	0.42	-0.03	-0.03	-0.06
2005	-4.05	-10.35	-12.30	-12.26	-9.08	-3.09	-0.90	-0.12	0.07	-0.06	-0.11	-2.24
2006	-7.70	-11.38	-13.63	-14.01	-9.54	-2.70	-0.68	0.22	0.36	-0.03	-0.06	-2.68
2007	-10.74	-13.17	-17.90	-14.34	-10.46	-2.97	-0.62	0.51	0.55	-0.05	-0.05	-3.01
2008	-10.23	-13.41	-14.40	-12.92	-8.99	-2.71	0.14	0.68	0.25	-0.06	-0.07	-0.08
2009	-4.03	-10.38	-12.65	-13.24	-5.37	-1.71	NaN	1.07	0.67	-0.04	-0.05	-0.27
2010	-5.42	-8.82	-10.81	-10.44	NaN	NaN	NaN	NaN	0.25	-0.04	-0.05	-0.08
2011	-2.90	-8.00	-9.16	-9.76	-7.34	NaN	-0.62	0.17	0.39	-0.03	-0.04	-0.05
2012	-3.66	-8.95	-11.41	-11.82	NaN	NaN	-0.69	0.16	0.28	-0.03	-0.06	-0.14
2013	-6.37	-11.76	-12.99	-12.78	NaN	NaN	NaN	0.35	NaN	-0.05	-0.07	-0.09
2014	-2.46	-7.95	-11.21	-10.85	-4.94	NaN	-0.55	-0.09	0.03	-0.07	-0.11	-0.15
2015	-4.95	-9.07	-9.80	-9.66	-6.03	-1.50	-0.37					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	-0.11	-0.13	-9.32
2000	-12.16	-12.98	-14.58	-14.24	-12.19	-8.89	-1.84	NaN	-0.20	-0.23	-0.26	-7.50
2001	-11.47	-12.12	-15.62	-15.39	-13.10	-8.88	-1.90	-0.61	-0.24	-0.25	-0.30	-5.02
2002	-10.75	-13.14	-13.03	-12.58	-10.55	-3.06	-1.19	-0.34	-0.08	-0.14	-0.13	-5.99
2003	-9.81	-13.15	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	-1.11	NaN	-0.06	-0.11	-0.10	-0.10
2005	-8.67	-11.62	-12.92	-12.93	-11.02	-5.76	-1.63	-0.52	-0.09	-0.15	-0.20	-5.14
2006	-10.81	-12.08	-15.15	-15.16	-12.76	-4.75	-1.39	-0.28	0.06	-0.10	-0.14	-7.50
2007	-12.47	-16.11	-18.84	-17.22	-12.47	-6.18	-1.39	-0.17	-0.06	-0.15	-0.13	-7.01
2008	-12.37	-14.08	-15.21	-15.06	-11.25	-4.63	-1.30	0.50	-0.05	-0.11	-0.15	-0.16
2009	-8.32	-11.07	-14.53	-14.52	-9.16	-2.86	NaN	0.78	-0.09	-0.13	-0.12	-1.65
2010	-7.86	-9.94	-11.64	-11.65	NaN	NaN	NaN	NaN	-0.06	-0.13	-0.09	-0.16
2011	-7.17	-8.84	-9.61	-10.33	-9.60	NaN	-1.31	-0.23	-0.05	-0.11	-0.11	-0.14
2012	-8.15	-9.65	-12.52	-12.67	NaN	NaN	-1.42	-0.30	-0.02	-0.09	-0.12	-1.98
2013	-9.79	-13.19	-13.27	-13.27	NaN	NaN	NaN	-0.21	NaN	-0.13	-0.14	-0.15
2014	-5.90	-10.63	-11.73	-11.83	-9.31	NaN	-1.06	-0.31	-0.10	-0.15	-0.20	-1.11
2015	-7.64	-10.11	-10.55	-10.26	-8.84	-2.47	-0.77					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.37	0.02	0.02	-0.04
2000	-9.36	-11.29	-13.00	-12.19	-8.92	-1.78	-0.41	NaN	-0.04	-0.10	-0.14	-0.17
2001	-7.55	-10.88	-12.00	-12.90	-8.92	-1.84	-0.50	-0.12	-0.01	-0.08	-0.18	-0.18
2002	-5.02	-10.78	-11.74	-10.58	-3.06	-1.13	-0.21	0.15	0.42	0.03	0.00	-0.04
2003	-5.97	-9.86	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	0.22	NaN	1.14	0.01	0.03	0.03
2005	-0.04	-8.67	-11.58	-11.02	1.59	-1.55	-0.38	0.17	0.19	0.04	-0.02	-0.08
2006	-5.13	-10.35	-11.83	-12.76	-4.78	-1.27	-0.19	0.45	0.67	0.12	0.02	0.00
2007	-7.50	-10.94	-15.93	-12.22	-6.21	1.67	-0.05	0.90	0.96	0.02	0.00	-0.00
2008	-6.99	-12.33	-13.55	-11.24	-4.60	-1.22	0.87	0.83	0.76	0.02	-0.03	-0.01
2009	-0.09	-8.32	-10.54	-9.17	-2.77	-0.88	NaN	1.40	1.29	0.02	0.01	0.01
2010	-1.65	-7.82	-9.94	-9.20	NaN	NaN	NaN	NaN	0.52	0.06	0.01	0.02
2011	-0.02	-7.10	-8.70	-9.30	-3.61	NaN	-0.13	0.61	0.71	0.05	0.05	0.04
2012	-0.03	-8.15	-9.65	-10.47	NaN	NaN	-0.20	0.59	0.56	0.16	0.03	0.01
2013	-1.98	-9.83	-12.57	-11.57	NaN	NaN	NaN	0.72	NaN	0.01	0.00	-0.03
2014	-0.02	-5.88	-10.04	-9.31	-2.55	NaN	-0.21	0.19	0.14	0.01	-0.03	-0.05
2015	-1.11	-7.60	-8.74	-8.84	-2.51	-0.71	-0.05					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.02	0.01	0.02	-2.61
2000	-4.60	-1.54	-1.57	-1.39	-2.62	-1.48	-0.39	NaN	-0.34	-0.11	-0.12	-2.09
2001	-3.93	-0.94	-1.87	-1.88	-3.39	-1.27	-0.47	-0.55	-0.36	-0.11	-0.13	-0.35
2002	-1.21	-1.80	-0.13	0.17	1.17	0.83	-0.05	-0.28	-0.08	0.01	0.00	-0.49
2003	-1.35	-0.90	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	0.18	NaN	0.19	0.03	0.05	1.23
2005	2.54	0.17	0.12	-0.23	-1.10	-0.32	-0.27	-0.34	-0.16	0.00	-0.03	-0.95
2006	-1.11	-0.86	-1.22	-1.98	-1.56	0.07	-0.05	-0.01	0.13	0.03	0.03	-1.39
2007	-4.15	-2.66	-5.49	-2.31	-2.48	-0.20	0.00	0.28	0.32	0.01	0.03	-1.72
2008	-3.64	-2.89	-1.99	-0.89	-1.01	0.05	0.77	0.45	0.02	0.01	0.01	1.21
2009	2.56	0.14	-0.24	-1.20	2.61	1.06	NaN	0.84	0.43	0.02	0.03	1.01
2010	1.17	1.70	1.60	1.59	NaN	NaN	NaN	NaN	0.02	0.02	0.03	1.21
2011	3.69	2.52	3.25	2.27	0.65	NaN	0.01	-0.06	0.16	0.03	0.05	1.24
2012	2.93	1.57	1.00	0.21	NaN	NaN	-0.06	-0.07	0.05	0.03	0.03	1.14
2013	0.22	-1.24	-0.58	-0.75	NaN	NaN	NaN	0.12	NaN	0.01	0.01	1.20
2014	4.13	2.57	1.20	1.18	3.04	NaN	0.08	-0.32	-0.20	-0.00	-0.02	1.14
2015	1.64	1.45	2.62	2.37	1.95	1.27	0.26					

**Table H-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2000	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	61.29	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	56.67	87.10	93.33	100.00	77.42	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	90.32	0.00	0.00	70.97	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	0.00	29.03	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	80.00	25.81	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	64.52	0.00	0.00	61.29	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	87.10	6.67	0.00	77.42	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	41.94	93.33	100.00	96.77	100.00	96.77	96.67	100.00
2013	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	93.33	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table H-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Incident solar flux, in watts per meter squared

File name: AK106\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	60.4	NaN	2.0	0.1
2003	0.8	17.5	88.2	151.1	202.6	254.1	152.4	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	198.1	231.1	163.7	NaN	56.4	23.7	2.0	0.1
2005	1.0	16.7	75.8	NaN	NaN	226.0	201.1	123.9	54.7	20.8	1.2	0.1
2006	0.8	14.6	NaN	165.1	212.4	194.6	172.7	109.2	60.5	17.8	2.0	0.1
2007	0.7	14.2	NaN	150.8	217.7	243.5	220.4	140.0	69.5	23.1	2.2	0.1
2008	0.9	19.2	NaN	NaN	202.2	210.0	185.5	100.8	54.9	NaN	2.2	0.1
2009	1.1	15.3	83.7	158.2	192.4	206.8	191.8	106.1	57.3	21.5	1.6	0.1
2010	0.3	12.6	72.5	NaN	NaN	NaN	NaN	NaN	72.5	22.8	2.1	0.1
2011	0.6	15.8	NaN	188.4	246.6	234.7	183.7	119.9	43.1	15.7	2.3	0.1
2012	1.0	8.5	36.8	NaN	226.6	197.9	178.0	98.1	54.5	21.0	2.2	0.0
2013	0.8	14.8	69.9	167.9	NaN	223.5	165.1	104.2	58.9	22.0	2.3	0.1
2014	1.0	16.7	77.2	153.8	168.8	174.2	187.2	104.2	58.1	19.4	3.0	0.1
2015	1.1	14.8	71.1	159.4	201.9	223.6	172.7					

**Table H-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.6	NaN	-0.2	-0.0
2003	-0.0	2.5	16.6	-9.2	-4.6	37.2	-28.8	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-9.1	14.1	-17.5	NaN	-2.3	2.8	-0.1	-0.0
2005	0.2	1.7	4.2	NaN	NaN	9.1	19.9	15.2	-4.1	-0.2	-0.9	0.0
2006	-0.0	-0.3	NaN	4.9	5.2	-22.3	-8.5	0.5	1.7	-3.1	-0.1	-0.0
2007	-0.1	-0.7	NaN	-9.5	10.5	26.6	39.2	31.3	10.8	2.1	0.1	0.0
2008	0.1	4.2	NaN	NaN	-4.9	-6.9	4.3	-7.8	-3.8	NaN	0.1	0.0
2009	0.3	0.4	12.1	-2.1	-14.8	-10.1	10.6	-2.6	-1.4	0.5	-0.5	-0.0
2010	-0.5	-2.3	0.9	NaN	NaN	NaN	NaN	NaN	13.7	1.9	-0.1	0.0
2011	-0.2	0.8	NaN	28.1	39.4	17.7	2.5	11.3	-15.7	-5.3	0.2	0.0
2012	0.2	-6.5	-34.8	NaN	19.4	-19.0	-3.2	-10.5	-4.3	0.0	0.1	-0.0
2013	-0.0	-0.2	-1.7	7.6	NaN	6.6	-16.1	-4.4	0.1	1.0	0.2	0.0
2014	0.2	1.7	5.6	-6.5	-38.3	-42.7	6.0	-4.5	-0.7	-1.5	0.9	-0.0
2015	0.2	-0.1	-0.5	-0.9	-5.3	6.7	-8.5					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	30.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.5	53.3	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	100.0	87.1	100.0	100.0
2003	100.0	96.4	100.0	96.7	96.8	100.0	100.0	12.9	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	56.7	100.0	100.0	100.0	93.5	96.7	100.0	100.0	100.0
2005	100.0	100.0	100.0	93.3	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	93.5	96.7	96.8	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2007	100.0	100.0	90.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	77.4	90.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	86.7	90.3	6.7	0.0	77.4	100.0	100.0	100.0	100.0
2011	100.0	100.0	58.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	96.8	76.7	96.8	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2013	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table H-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Reflected solar flux, in watts per meter squared

File name: AK106\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.3	-0.0
2000	0.7	14.9	78.5	NaN	NaN	NaN	NaN	NaN	18.9	23.4	2.4	0.0
2001	0.7	15.4	74.2	162.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.7	11.0	1.4	-0.0
2003	0.8	12.6	65.8	132.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	128.9	49.5	38.9	NaN	22.1	22.1	2.5	-0.0
2005	1.0	16.0	71.0	156.2	189.5	64.6	49.6	30.4	12.2	11.8	2.0	0.0
2006	0.7	14.7	74.2	154.4	165.9	42.5	41.7	25.6	13.8	7.3	1.9	-0.0
2007	0.7	16.4	70.5	143.7	190.7	53.2	54.8	33.7	16.0	17.6	2.2	0.0
2008	0.8	16.7	78.0	138.2	145.3	45.8	45.9	24.2	14.6	21.2	2.4	0.1
2009	1.0	14.2	74.1	141.5	95.4	46.3	47.4	24.8	19.8	17.3	2.4	0.0
2010	0.9	16.4	72.7	144.4	NaN	NaN	NaN	NaN	19.5	19.0	2.3	0.1
2011	0.9	12.8	74.3	159.7	161.3	49.7	NaN	NaN	NaN	18.4	2.5	0.1
2012	1.0	15.4	77.6	143.1	183.5	42.2	43.9	23.8	14.4	14.3	2.5	0.1
2013	1.0	15.9	68.6	154.6	NaN	50.2	NaN	25.5	28.8	21.0	2.6	0.1
2014	1.0	15.4	66.6	139.5	89.4	36.3	45.7	NaN	NaN	14.6	2.8	0.1
2015	1.0	13.5	64.1	146.9	112.3	51.7	44.8					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	-0.1
2000	-0.2	-0.2	6.5	NaN	NaN	NaN	NaN	NaN	0.6	6.3	0.1	-0.0
2001	-0.1	0.3	2.2	15.6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.5	-6.1	-0.9	-0.1
2003	-0.1	-2.6	-6.3	-14.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-14.0	1.5	-7.0	NaN	3.9	5.0	0.2	-0.1
2005	0.1	0.8	-1.0	9.6	46.6	16.5	3.7	4.4	-6.0	-5.3	-0.3	-0.0
2006	-0.2	-0.4	2.1	7.8	23.1	-5.6	-4.1	-0.3	-4.4	-9.8	-0.5	-0.1
2007	-0.2	1.3	-1.5	-2.9	47.8	5.1	8.9	7.7	-2.2	0.5	-0.1	-0.0
2008	-0.1	1.6	6.0	-8.4	2.4	-2.3	0.1	-1.8	-3.6	4.1	0.0	0.0
2009	0.1	-0.9	2.1	-5.1	-47.4	-1.7	1.6	-1.1	1.6	0.2	0.1	-0.0
2010	0.0	1.3	0.7	-2.2	NaN	NaN	NaN	NaN	1.3	1.9	-0.1	0.1
2011	0.1	-2.3	2.3	13.1	18.5	1.6	NaN	NaN	NaN	1.3	0.2	0.0
2012	0.2	0.2	5.5	-3.5	40.7	-5.9	-2.0	-2.1	-3.8	-2.8	0.1	0.1
2013	0.2	0.8	-3.4	8.0	NaN	2.2	NaN	-0.4	10.6	3.9	0.3	0.1
2014	0.1	0.3	-5.4	-7.1	-53.5	-11.8	-0.2	NaN	NaN	-2.5	0.4	0.1
2015	0.1	-1.7	-7.9	0.3	-30.6	3.6	-1.1					



**Table H-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	74.2	100.0	100.0
2000	100.0	96.6	100.0	93.3	0.0	0.0	0.0	45.2	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	38.7	0.0	0.0	93.5	60.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	56.7	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	96.8	100.0	90.3	6.7	0.0	77.4	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	87.1	51.6	90.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	93.5	100.0	93.5	96.8	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	48.4	66.7	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table H-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Rainfall, in millimeters per hour

File name: AK106\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.3	0.3	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	NaN	2.5	5.6	2.3	NaN	NaN	NaN
2014	0.0	0.0	0.0	NaN	NaN	1.8	4.3	2.8	2.5	1.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	2.5	0.8					

**Table H-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	39.9	1.3	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	NaN	53.1	35.6	22.1	NaN	NaN	NaN
2014	0.0	0.0	0.0	NaN	NaN	31.8	23.9	24.1	32.3	6.9	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	11.2	6.9					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	87.1	90.0	100.0	100.0	100.0	90.3	93.3	93.5
2014	100.0	100.0	100.0	93.3	80.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	83.9	100.0	100.0					

**Table H-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Snow depth, in centimeters

File name: AK106\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.9	10.8	9.5
2000	11.1	17.1	17.8	24.9	NaN	NaN	NaN	NaN	1.0	7.7	9.1	8.1
2001	7.6	9.8	10.0	18.0	NaN	NaN	NaN	1.5	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.9	3.9	6.0	11.6
2003	20.3	20.5	20.3	27.2	27.2	2.1	2.6	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	17.0	1.1	0.7	1.4	5.4	18.3	26.3	25.4
2005	24.7	32.1	34.8	36.4	35.8	3.6	2.8	3.1	2.6	3.5	11.2	17.9
2006	19.0	20.9	23.4	23.9	18.7	1.4	1.6	2.1	1.5	1.9	4.6	6.6
2007	8.3	8.5	4.4	13.4	14.7	1.3	1.8	1.3	1.4	4.3	8.3	10.8
2008	14.8	19.6	26.9	29.8	20.8	1.8	3.0	2.8	2.0	15.9	32.7	33.8
2009	30.9	32.7	30.8	34.5	13.3	3.6	3.8	4.4	NaN	NaN	NaN	NaN
2010	NaN	29.1	33.2	NaN	NaN	NaN	NaN	5.3	3.1	9.3	19.4	27.6
2011	27.6	27.6	29.6	28.3	21.3	2.6	5.8	5.6	2.9	10.3	22.2	34.1
2012	40.4	40.7	48.2	49.8	40.1	4.7	7.1	4.4	2.5	5.7	11.9	20.0
2013	25.6	27.9	29.2	38.5	37.9	3.6	7.5	7.5	6.5	16.7	25.9	25.3
2014	26.0	30.4	30.2	32.8	14.5	3.8	8.6	5.4	2.3	6.3	11.2	19.5
2015	28.4	36.4	37.6	42.7	26.7	2.8	3.9					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.5	7.3	6.0
2000	5.7	15.4	15.6	21.6	NaN	NaN	NaN	NaN	-1.4	4.8	6.9	5.1
2001	5.2	7.8	7.1	14.6	NaN	NaN	NaN	-0.3	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.3	-0.3	4.5	5.2
2003	18.5	19.4	18.8	21.0	10.5	0.3	-0.9	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-1.3	-0.5	-1.0	-0.8	-0.8	16.6	21.1	24.4
2005	23.9	24.0	33.6	34.3	21.6	-0.7	0.1	-0.0	0.1	-0.1	4.9	10.4
2006	9.1	9.1	20.5	18.8	-0.5	-0.5	-1.0	-0.2	-0.4	-0.1	1.9	3.1
2007	4.7	1.6	1.4	3.5	4.2	-0.6	0.2	-0.4	0.1	0.1	5.3	6.6
2008	9.3	13.4	23.9	26.1	0.5	-0.4	0.5	0.1	-0.5	1.9	28.1	28.2
2009	29.0	29.0	28.8	23.0	0.7	0.8	0.1	0.1	NaN	NaN	NaN	NaN
2010	NaN	23.4	28.5	NaN	NaN	NaN	NaN	1.1	0.4	2.9	10.2	23.0
2011	26.1	26.3	26.6	25.6	0.1	0.2	0.8	0.0	0.2	1.1	18.4	20.7
2012	32.8	36.8	38.4	46.4	10.9	0.8	2.5	0.7	-0.7	0.2	8.3	8.8
2013	21.1	24.3	24.3	32.6	1.4	-0.0	2.0	1.6	0.3	11.8	21.4	21.8
2014	24.1	25.2	25.3	28.5	0.6	0.1	2.5	0.5	-0.3	0.1	8.5	11.9
2015	25.8	32.6	31.0	36.3	-1.2	-0.0	0.9					

**Table H-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.6	15.3	15.4
2000	15.9	19.4	24.4	26.5	NaN	NaN	NaN	NaN	5.5	10.7	12.9	13.2
2001	9.0	11.7	19.4	22.9	NaN	NaN	NaN	3.4	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.8	8.0	10.0	20.5
2003	21.6	22.1	22.4	36.6	34.6	9.3	4.9	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	30.7	3.2	2.6	4.0	19.9	21.4	29.8	26.6
2005	25.4	38.7	36.3	39.6	42.7	21.3	4.2	6.2	6.2	7.8	20.3	29.1
2006	27.1	28.4	26.7	29.2	28.8	4.6	3.8	4.1	3.6	3.6	7.8	9.7
2007	12.5	11.7	8.9	17.3	17.0	5.1	3.6	3.2	3.3	8.1	11.2	14.1
2008	18.6	30.2	29.1	33.7	33.6	3.4	5.4	4.5	4.1	34.0	38.7	43.5
2009	35.6	42.2	32.4	43.1	24.0	5.7	5.7	7.7	NaN	NaN	NaN	NaN
2010	NaN	31.8	36.4	NaN	NaN	NaN	NaN	7.8	7.3	15.7	32.7	33.7
2011	30.0	30.3	31.9	32.1	29.3	7.1	10.4	8.5	6.6	22.2	28.5	46.2
2012	51.5	47.9	53.0	52.0	51.5	12.3	9.9	9.0	8.3	10.4	14.7	25.6
2013	31.3	31.5	40.9	46.8	51.2	8.6	11.6	11.8	16.2	27.6	33.9	33.7
2014	30.3	41.5	36.1	37.7	35.5	9.5	16.2	16.4	4.1	12.6	20.8	30.4
2015	36.8	42.0	47.5	51.9	51.9	7.0	6.4					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.6	-4.7	-10.4
2000	-12.2	-9.1	-10.0	-6.6	NaN	NaN	NaN	NaN	-1.7	-0.9	-6.4	-11.8
2001	-15.6	-16.4	-17.8	-13.4	NaN	NaN	NaN	-2.3	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.9	-4.6	-9.5	-8.4
2003	-3.0	-5.7	-7.5	-4.3	3.5	-0.7	-1.5	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-6.7	-1.7	-3.4	-2.4	2.6	9.8	10.8	5.4
2005	1.5	6.0	7.0	5.0	12.1	0.8	-1.3	-0.7	-0.2	-5.0	-4.3	-2.0
2006	-4.3	-5.3	-4.4	-7.6	-5.0	-1.4	-2.5	-1.7	-1.2	-6.6	-10.9	-13.3
2007	-15.0	-17.6	-23.4	-18.0	-9.0	-1.5	-2.3	-2.5	-1.4	-4.2	-7.2	-9.1
2008	-8.5	-6.6	-0.9	-1.6	-2.9	-1.0	-1.1	-1.0	-0.7	7.4	17.1	13.9
2009	7.6	6.6	3.0	3.1	-10.4	0.8	-0.3	0.6	NaN	NaN	NaN	NaN
2010	NaN	2.9	5.4	NaN	NaN	NaN	NaN	1.5	0.3	0.8	3.9	7.7
2011	4.3	1.4	1.8	-3.1	-2.4	-0.2	1.7	1.8	0.1	1.8	6.6	14.2
2012	17.2	14.5	20.4	18.4	16.4	1.9	3.0	0.7	-0.3	-2.8	-3.7	0.0
2013	2.3	1.7	1.4	7.0	14.2	0.8	3.4	3.8	3.7	8.2	10.4	5.4
2014	2.7	4.2	2.4	1.4	-9.2	1.0	4.5	1.7	-0.5	-2.3	-4.3	-0.4
2015	5.1	10.3	9.8	11.3	3.0	0.0	-0.2					

**Table H-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	87.1	100.0	90.3
2000	100.0	100.0	100.0	90.0	41.9	6.7	0.0	48.4	100.0	96.8	100.0	96.8
2001	100.0	100.0	100.0	100.0	38.7	0.0	0.0	96.8	53.3	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	100.0	100.0	100.0	100.0
2003	100.0	96.4	100.0	100.0	100.0	100.0	100.0	12.9	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	60.0	100.0	100.0	100.0	80.6	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	70.0	25.8	36.7	22.6
2010	74.2	85.7	100.0	76.7	58.1	0.0	0.0	80.6	100.0	100.0	100.0	100.0
2011	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5
2012	87.1	96.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table H-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
Variable: Soil moisture, in water fraction by volume

File name: AK106\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	0.02	0.34	0.28	NaN	0.33	0.24	0.03	0.02
2005	0.02	NaN	NaN	NaN	0.01	0.21	0.28	0.18	0.19	0.04	0.01	0.01
2006	NaN	NaN	NaN	NaN	NaN	0.30	0.27	0.28	0.28	0.14	0.02	0.01
2007	NaN	NaN	NaN	NaN	NaN	0.28	0.18	0.12	0.11	0.02	0.01	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.30	0.17	0.17	0.16	0.11	0.03	0.02
2009	0.01	NaN	NaN	NaN	0.10	0.36	0.18	0.17	0.23	0.13	0.02	0.02
2010	0.01	0.01	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.34	0.36	0.36	0.31	0.05	0.04
2014	0.03	NaN	NaN	0.02	0.03	0.36	0.32	0.24	0.29	0.23	0.03	0.03
2015	0.02	0.02	0.01	0.01	0.09	0.35	0.17					

**Table H-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	0.00	0.20	0.17	NaN	0.32	0.04	0.03	0.02
2005	0.01	NaN	NaN	NaN	0.01	0.03	0.19	0.16	0.18	0.02	0.01	0.01
2006	NaN	NaN	NaN	NaN	NaN	0.03	0.21	0.23	0.27	0.03	0.01	0.01
2007	NaN	NaN	NaN	NaN	NaN	0.03	0.13	0.11	0.08	0.01	0.00	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.25	0.14	0.15	0.16	0.04	0.02	0.02
2009	0.01	NaN	NaN	NaN	0.01	0.27	0.14	0.14	0.21	0.03	0.02	0.02
2010	0.01	0.01	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.26	0.34	0.35	0.09	0.04	0.03
2014	0.02	NaN	NaN	0.01	0.02	0.04	0.26	0.21	0.26	0.05	0.03	0.02
2015	0.01	0.01	0.01	0.01	0.02	0.25	0.14					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	0.21	0.43	0.34	NaN	0.38	0.32	0.04	0.03
2005	0.02	NaN	NaN	NaN	0.03	0.39	0.41	0.20	0.20	0.18	0.02	0.01
2006	NaN	NaN	NaN	NaN	NaN	0.42	0.41	0.39	0.31	0.28	0.03	0.02
2007	NaN	NaN	NaN	NaN	NaN	0.38	0.26	0.14	0.12	0.08	0.01	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.37	0.27	0.18	0.16	0.16	0.04	0.03
2009	0.02	NaN	NaN	NaN	0.43	0.43	0.29	0.27	0.27	0.21	0.03	0.03
2010	0.02	0.01	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.43	0.41	0.38	0.36	0.09	0.06
2014	0.03	NaN	NaN	0.02	0.05	0.46	0.41	0.26	0.32	0.38	0.05	0.03
2015	0.03	0.02	0.02	0.02	0.42	0.43	0.25					

**Table H-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	-0.03	0.02	0.04	NaN	0.09	0.09	0.01	0.00
2005	-0.00	NaN	NaN	NaN	-0.04	-0.10	0.03	-0.03	-0.05	-0.10	-0.01	-0.01
2006	NaN	NaN	NaN	NaN	NaN	-0.02	0.03	0.07	0.04	-0.00	-0.01	-0.01
2007	NaN	NaN	NaN	NaN	NaN	-0.03	-0.06	-0.09	-0.13	-0.13	-0.02	NaN
2008	NaN	NaN	NaN	NaN	NaN	-0.02	-0.08	-0.04	-0.08	-0.04	0.00	0.00
2009	-0.00	NaN	NaN	NaN	0.05	0.05	-0.06	-0.03	-0.01	-0.01	-0.01	0.00
2010	-0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	0.10	0.15	0.12	0.16	0.02	0.01
2014	0.01	NaN	NaN	NaN	-0.02	0.04	0.08	0.03	0.05	0.08	0.01	0.01
2015	0.00	NaN	NaN	NaN	0.04	0.03	-0.07					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	13.33	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2005	100.00	39.29	9.68	33.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	77.42	28.57	0.00	3.33	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	6.45	17.86	0.00	30.00	87.10	100.00	100.00	100.00	100.00	100.00	100.00	58.06
2008	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	14.29	3.23	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	96.43	41.94	93.33	90.32	6.67	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	56.67	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	89.29	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table H-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table H-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Air temperature, in degrees Celsius

File name: AK106\_Tair\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	-10.13	NaN
2000	-27.98	-18.50	NaN	-9.70	NaN
2001	-22.57	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	-5.61	NaN
2003	-25.48	-14.45	NaN	NaN	NaN
2004	NaN	NaN	10.98	-8.88	NaN
2005	-25.99	-15.20	7.84	-10.23	-10.62
2006	-24.82	-18.11	8.33	-6.02	-9.79
2007	-25.18	-17.31	10.61	-7.09	-9.91
2008	-27.87	-15.61	8.90	-8.97	-10.50
2009	-24.78	-15.93	9.33	-9.13	-10.30
2010	-26.19	-15.75	NaN	-5.10	NaN
2011	-23.80	-15.25	8.71	-9.03	-9.78
2012	-28.51	-19.18	10.73	-6.68	-11.02
2013	-29.54	-16.86	10.35	-7.33	-10.18
2014	-23.06	-12.79	7.59	-6.72	-8.87
2015	-23.46	-12.34			

#### Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	-35.67	NaN
2000	-45.28	-38.87	NaN	-34.25	NaN
2001	-42.67	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	-26.75	NaN
2003	-42.52	-41.77	NaN	NaN	NaN
2004	NaN	NaN	-2.46	-32.04	NaN
2005	-45.24	-41.59	-2.81	-44.50	-44.50
2006	-46.61	-41.91	-5.34	-33.67	-46.61
2007	-47.35	-45.50	-3.15	-29.11	-47.75
2008	-47.75	-45.87	-3.45	-34.92	-47.50
2009	-44.00	-44.04	-1.06	-38.73	-44.04
2010	-48.11	-42.85	NaN	-31.73	NaN
2011	-48.16	-37.37	-3.70	-40.74	-48.16
2012	-51.27	-45.24	-1.13	-32.22	-51.27
2013	-46.47	-40.37	-4.93	-35.35	-46.47
2014	-45.24	-41.16	-2.21	-32.10	-45.24
2015	-42.21	-42.93			



**Table H-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	16.24	NaN
2000	-1.51	7.13	NaN	15.35	NaN
2001	-3.68	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	16.47	NaN
2003	-8.65	3.54	NaN	NaN	NaN
2004	NaN	NaN	29.68	13.74	NaN
2005	0.86	4.10	24.76	14.57	24.76
2006	0.89	10.72	25.07	19.17	25.07
2007	-0.97	2.11	27.75	18.09	27.75
2008	1.42	10.90	27.40	7.46	27.40
2009	-0.40	13.27	29.77	20.85	29.77
2010	-1.88	4.72	NaN	19.38	NaN
2011	2.08	10.51	24.77	14.67	24.77
2012	-4.73	5.37	24.96	12.25	24.96
2013	-12.94	6.44	30.38	15.75	30.38
2014	3.01	7.02	22.31	13.60	22.31
2015	-0.38	17.09			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	0.00	0.00	0.00	100.00	0.00
2000	100.00	100.00	16.30	100.00	78.96
2001	100.00	79.35	31.52	19.78	49.04
2002	0.00	0.00	25.00	100.00	39.73
2003	100.00	100.00	70.65	0.00	59.18
2004	0.00	52.17	97.83	100.00	71.04
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	96.74	28.26	100.00	81.10
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	97.83	100.00	100.00	99.45
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	-2.18	NaN
2000	-2.39	-2.82	NaN	-1.75	NaN
2001	3.01	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	2.33	NaN
2003	0.11	1.22	NaN	NaN	NaN
2004	NaN	NaN	1.66	-0.93	NaN
2005	-0.40	0.47	-1.48	-2.28	-0.61
2006	0.77	-2.43	-0.99	1.93	0.22
2007	0.41	-1.64	1.29	0.86	0.10
2008	-2.28	0.06	-0.42	-1.02	-0.49
2009	0.80	-0.26	0.01	-1.18	-0.29
2010	-0.60	-0.08	NaN	2.85	NaN
2011	1.79	0.42	-0.61	-1.08	0.23
2012	-2.92	-3.50	1.41	1.27	-1.01
2013	-3.95	-1.19	1.03	0.62	-0.18
2014	2.53	2.88	-1.73	1.23	1.14
2015	2.13	3.33			

**Table H-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Wind speed, in meters per second

File name: AK106\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	3.90	NaN
2005	NaN	3.52	3.63	NaN	NaN
2006	NaN	NaN	3.36	NaN	NaN
2007	NaN	3.28	3.26	NaN	NaN
2008	NaN	NaN	3.18	3.00	NaN
2009	NaN	NaN	3.48	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	3.44	NaN	NaN
2012	3.21	2.89	3.18	3.16	3.01
2013	NaN	NaN	3.29	NaN	NaN
2014	NaN	3.02	3.43	NaN	NaN
2015	3.85	NaN			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	0.23	0.27	NaN	NaN
2006	NaN	NaN	-0.00	NaN	NaN
2007	NaN	-0.01	-0.11	NaN	NaN
2008	NaN	NaN	-0.18	NaN	NaN
2009	NaN	NaN	0.12	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	0.08	NaN	NaN
2012	NaN	-0.40	-0.18	NaN	NaN
2013	NaN	NaN	-0.08	NaN	NaN
2014	NaN	-0.27	0.07	NaN	NaN
2015	NaN	NaN			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	16.43	NaN
2005	NaN	13.86	11.99	NaN	NaN
2006	NaN	NaN	9.32	NaN	NaN
2007	NaN	12.59	8.98	NaN	NaN
2008	NaN	NaN	9.99	9.87	NaN
2009	NaN	NaN	9.66	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	9.34	NaN	NaN
2012	14.60	7.76	9.92	9.47	11.36
2013	NaN	NaN	9.64	NaN	NaN
2014	NaN	11.29	11.04	NaN	NaN
2015	20.58	NaN			

#### Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	20.65	97.80	33.88
2005	81.11	100.00	100.00	75.82	92.05
2006	63.33	89.13	100.00	85.71	82.19
2007	67.78	100.00	100.00	89.01	91.23
2008	84.62	93.48	100.00	96.70	92.90
2009	80.00	81.52	100.00	85.71	86.03
2010	83.33	82.61	28.26	87.91	72.05
2011	66.67	79.35	100.00	94.51	87.12
2012	95.60	100.00	98.91	98.90	98.09
2013	94.44	93.48	100.00	90.11	94.79
2014	88.89	98.91	100.00	93.41	94.52
2015	96.67	90.22			

**Table H-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
Variable: Ground temperature, in degrees Celsius

File name: AK106\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	-0.45	NaN
2000	-13.09	-13.61	NaN	-0.51	-5.27
2001	-11.65	-14.27	5.68	-0.02	-4.87
2002	-10.58	NaN	NaN	-0.41	NaN
2003	-10.52	-11.64	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.19	NaN
2005	-8.68	-11.84	6.20	-0.71	-3.82
2006	-10.41	-12.98	7.07	-0.73	-4.43
2007	-13.55	-14.67	8.91	-0.91	-5.06
2008	-14.35	-12.43	7.33	-0.21	-4.41
2009	-8.69	-10.52	7.86	-1.40	-3.23
2010	-8.09	-10.57	NaN	0.93	NaN
2011	-7.18	-9.26	6.03	0.33	-2.55
2012	-7.88	NaN	6.63	-0.00	NaN
2013	-10.38	-12.54	7.07	0.11	-3.73
2014	-7.03	-9.12	5.61	-0.25	-2.72
2015	-7.82	-8.36			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	6.26	NaN
2000	-4.34	-3.27	NaN	7.39	13.59
2001	-3.61	-2.43	13.48	6.30	13.48
2002	-2.59	NaN	NaN	9.63	NaN
2003	-2.91	-0.74	NaN	NaN	NaN
2004	NaN	NaN	NaN	6.61	NaN
2005	-1.99	-1.01	15.47	6.02	15.47
2006	-3.17	2.96	16.88	8.91	16.88
2007	-3.00	-0.18	19.46	8.44	19.46
2008	-4.94	2.06	16.84	3.87	16.84
2009	-1.44	5.25	18.92	9.49	18.92
2010	-1.81	-0.00	NaN	7.31	NaN
2011	-0.98	2.07	11.15	7.33	11.15
2012	-1.58	NaN	11.89	5.98	NaN
2013	-2.39	-0.47	12.65	4.92	12.65
2014	-0.13	-0.09	11.72	3.41	11.72
2015	-2.97	4.41			

## Minimum Value Each Season/Year (10 cm depth): Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	-4.71	NaN
2000	-16.80	-17.56	NaN	-4.18	-17.56
2001	-15.92	-19.95	-2.32	-4.42	-19.95
2002	-16.80	NaN	NaN	-7.35	NaN
2003	-17.32	-18.30	NaN	NaN	NaN
2004	NaN	NaN	NaN	-3.32	NaN
2005	-14.55	-16.39	-1.15	-4.47	-16.39
2006	-18.03	-19.48	-0.09	-8.68	-19.48
2007	-22.24	-24.16	-1.19	-6.75	-24.16
2008	-21.07	-20.02	-0.04	-3.41	-21.07
2009	-16.45	-19.64	1.93	-8.78	-19.64
2010	-14.86	-14.82	NaN	-1.09	NaN
2011	-12.66	-12.88	-0.10	-3.18	-12.88
2012	-14.25	NaN	-0.87	-4.80	NaN
2013	-17.19	-16.41	-0.54	-1.87	-17.19
2014	-15.94	-15.73	-0.30	-3.31	-15.94
2015	-14.80	-13.59			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

1999	NaN	NaN	NaN	-0.13	NaN
2000	-3.23	-2.22	NaN	-0.19	-1.37
2001	-1.79	-2.88	-1.14	0.29	-0.98
2002	-0.72	NaN	NaN	-0.09	NaN
2003	-0.66	-0.25	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.13	NaN
2005	1.17	-0.45	-0.62	-0.39	0.07
2006	-0.55	-1.59	0.26	-0.41	-0.53
2007	-3.69	-3.28	2.10	-0.59	-1.17
2008	-4.49	-1.04	0.51	0.11	-0.52
2009	1.17	0.87	1.04	-1.08	0.66
2010	1.77	0.82	NaN	1.24	NaN
2011	2.67	2.13	-0.79	0.64	1.35
2012	1.97	NaN	-0.19	0.32	NaN
2013	-0.52	-1.15	0.25	0.42	0.17
2014	2.83	2.27	-1.21	0.07	1.17
2015	2.03	3.03			

**Table H-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.00	0.00	0.00	100.00	0.00
2000	100.00	100.00	94.57	100.00	98.63
2001	100.00	100.00	98.91	100.00	99.73
2002	100.00	86.96	25.00	100.00	77.81
2003	100.00	100.00	6.52	0.00	43.01
2004	0.00	47.83	90.22	100.00	68.03
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	96.74	23.91	100.00	80.00
2007	100.00	100.00	43.48	100.00	85.75
2008	100.00	100.00	68.48	100.00	92.08
2009	100.00	88.04	20.65	100.00	76.99
2010	100.00	95.65	28.26	100.00	80.82
2011	100.00	98.91	100.00	100.00	99.73
2012	100.00	80.43	96.74	97.80	93.72
2013	100.00	97.83	100.00	97.80	98.90
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	-0.13	NaN
2000	-12.98	-14.58	NaN	-0.26	-14.58
2001	-12.12	-15.62	-8.88	-0.30	-15.62
2002	-13.14	-13.03	-3.06	-0.14	-13.14
2003	-13.15	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.11	NaN
2005	-11.62	-12.93	-5.76	-0.20	-12.93
2006	-12.08	-15.16	-4.75	-0.14	-15.16
2007	-16.11	-18.84	-6.18	-0.15	-18.84
2008	-14.08	-15.21	-4.63	-0.15	-15.21
2009	-11.07	-14.53	-2.86	-0.13	-14.53
2010	-9.94	-11.65	NaN	-0.13	NaN
2011	-8.84	-10.33	-3.67	-0.11	-10.33
2012	-9.65	NaN	-4.50	-0.12	NaN
2013	-13.19	-13.27	NaN	-0.14	-13.27
2014	-10.63	-11.83	-2.57	-0.20	-11.83
2015	-10.11	-10.55			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	0.03	NaN
2000	-8.98	-12.66	NaN	-0.16	-5.95
2001	-8.35	-13.18	-1.81	-0.17	-5.74
2002	-7.08	-10.39	-0.89	0.01	-4.62
2003	-6.90	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.12	NaN
2005	-4.64	-11.20	-1.35	-0.04	-4.50
2006	-6.96	-12.38	-1.03	0.09	-5.11
2007	-8.72	-14.27	-1.01	0.15	-5.97
2008	-8.78	-12.13	-0.62	0.04	-5.12
2009	-4.65	-10.39	-0.18	0.19	-3.80
2010	-4.71	-9.84	NaN	0.05	NaN
2011	-3.51	-8.74	-0.84	0.11	-3.26
2012	-4.12	NaN	-0.98	0.07	NaN
2013	-5.90	-11.83	NaN	0.02	-4.70
2014	-3.35	-9.02	-0.75	-0.05	-3.31
2015	-4.58	-8.51			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	0.37	NaN
2000	-0.04	-8.92	NaN	-0.04	-0.04
2001	-0.17	-8.92	-0.12	-0.01	-0.01
2002	-0.18	-3.06	0.15	0.42	0.42
2003	-0.04	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	1.14	NaN
2005	0.03	1.59	0.17	0.19	1.59
2006	-0.08	-4.78	0.45	0.67	0.67
2007	0.00	-6.21	1.67	0.96	1.67
2008	-0.00	-4.60	0.87	0.76	0.87
2009	-0.01	-2.77	1.40	1.29	1.40
2010	0.01	-4.90	NaN	0.52	NaN
2011	0.02	-3.61	0.61	0.71	0.71
2012	0.04	NaN	0.59	0.56	NaN
2013	0.01	-5.08	NaN	0.51	0.72
2014	-0.02	-2.55	0.19	0.14	0.19
2015	-0.05	-2.51			

**Table H-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	0.00	NaN	1999	0.00	0.00	0.00	100.00	0.00
2000	-2.98	-1.78	NaN	-0.19	-1.31	2000	100.00	100.00	94.57	100.00	98.63
2001	-2.35	-2.30	-0.90	-0.20	-1.11	2001	100.00	100.00	98.91	100.00	99.73
2002	-1.09	0.50	0.02	-0.02	0.01	2002	100.00	86.96	25.00	100.00	77.81
2003	-0.90	NaN	NaN	NaN	NaN	2003	100.00	100.00	6.52	0.00	43.01
2004	NaN	NaN	NaN	0.09	NaN	2004	0.00	47.83	90.22	100.00	68.03
2005	1.36	-0.32	-0.44	-0.06	0.13	2005	100.00	100.00	100.00	100.00	100.00
2006	-0.97	-1.49	-0.13	0.06	-0.48	2006	100.00	96.74	23.91	100.00	80.00
2007	-2.72	-3.39	-0.10	0.12	-1.34	2007	100.00	100.00	43.48	100.00	85.75
2008	-2.79	-1.24	0.29	0.01	-0.49	2008	100.00	100.00	68.48	100.00	92.08
2009	1.35	0.50	0.72	0.16	0.83	2009	100.00	88.04	20.65	100.00	76.99
2010	1.29	1.05	NaN	0.02	NaN	2010	100.00	95.65	28.26	100.00	80.82
2011	2.48	2.14	0.07	0.08	1.37	2011	100.00	98.91	100.00	100.00	99.73
2012	1.88	NaN	-0.08	0.04	NaN	2012	100.00	80.43	96.74	97.80	93.72
2013	0.10	-0.94	NaN	-0.01	-0.07	2013	100.00	97.83	100.00	97.80	98.90
2014	2.65	1.86	0.16	-0.07	1.32	2014	100.00	100.00	100.00	100.00	100.00
2015	1.42	2.38				2015	100.00	100.00			

**Table H-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
Variable: Incident solar flux, in watts per meter squared

File name: AK106\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	27.4	NaN	2002	NaN	NaN	NaN	0.2	NaN
2003	5.6	146.6	NaN	NaN	NaN	2003	0.6	0.0	NaN	NaN	NaN
2004	NaN	NaN	172.9	27.0	NaN	2004	NaN	NaN	3.6	-0.1	NaN
2005	5.6	148.2	183.2	25.5	90.6	2005	0.6	1.6	13.9	-1.6	3.2
2006	4.8	155.4	158.4	26.8	86.4	2006	-0.1	8.8	-10.8	-0.4	-1.0
2007	4.7	151.4	200.9	31.5	97.3	2007	-0.3	4.8	31.6	4.4	9.9
2008	6.4	NaN	165.0	24.9	85.0	2008	1.5	NaN	-4.3	-2.3	-2.5
2009	5.2	144.6	167.8	26.7	86.7	2009	0.2	-2.0	-1.4	-0.4	-0.7
2010	4.0	NaN	NaN	32.4	NaN	2010	-0.9	NaN	NaN	5.2	NaN
2011	5.1	NaN	178.8	20.3	95.1	2011	0.2	NaN	9.6	-6.8	7.7
2012	3.1	NaN	158.2	26.1	79.7	2012	-1.9	NaN	-11.0	-1.0	-7.7
2013	4.9	154.0	163.6	27.9	88.0	2013	-0.1	7.4	-5.6	0.8	0.6
2014	5.6	133.0	155.0	26.7	80.6	2014	0.6	-13.6	-14.3	-0.4	-6.8
2015	5.0	144.0				2015	0.0	-2.6			

**Table H-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	15.2	9.9	6.3
2001	0.0	0.0	31.5	17.6	12.3
2002	0.0	0.0	25.0	95.6	38.6
2003	98.9	97.8	70.7	0.0	58.4
2004	0.0	52.2	97.8	98.9	70.8
2005	100.0	95.7	100.0	100.0	98.9
2006	100.0	95.7	100.0	98.9	98.6
2007	100.0	96.7	100.0	100.0	99.2
2008	100.0	89.1	100.0	97.8	96.7
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	92.4	28.3	100.0	80.0
2011	100.0	85.9	100.0	100.0	96.4
2012	100.0	90.2	98.9	98.9	97.0
2013	100.0	97.8	100.0	98.9	99.2
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table H-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Reflected solar flux, in watts per meter squared

File name: AK106\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	4.9	NaN	NaN	15.0	NaN	2000	-0.2	NaN	NaN	2.5	NaN
2001	5.1	NaN	NaN	NaN	NaN	2001	0.0	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	8.4	NaN	2002	NaN	NaN	NaN	-4.1	NaN
2003	4.2	NaN	NaN	NaN	NaN	2003	-0.9	NaN	NaN	NaN	NaN
2004	NaN	NaN	39.3	15.7	NaN	2004	NaN	NaN	-1.1	3.2	NaN
2005	5.3	138.7	48.0	8.7	50.5	2005	0.2	16.2	7.6	-3.8	4.5
2006	4.8	131.2	36.5	7.7	45.4	2006	-0.2	8.8	-3.9	-4.8	-0.7
2007	5.4	134.9	47.1	12.0	50.2	2007	0.3	12.4	6.7	-0.4	4.1
2008	5.6	120.3	38.5	12.8	44.5	2008	0.6	-2.2	-1.8	0.4	-1.5
2009	4.8	103.3	39.5	13.2	40.4	2009	-0.3	-19.2	-0.9	0.8	-5.6
2010	5.4	133.4	NaN	13.7	NaN	2010	0.4	10.9	NaN	1.2	NaN
2011	4.3	131.5	NaN	10.5	NaN	2011	-0.7	9.0	NaN	-1.9	NaN
2012	5.3	134.6	36.7	10.5	47.0	2012	0.2	12.2	-3.7	-2.0	0.9
2013	5.4	131.8	39.4	17.5	48.4	2013	0.3	9.3	-1.0	5.1	2.4
2014	5.2	98.0	NaN	NaN	NaN	2014	0.1	-24.5	NaN	NaN	NaN
2015	4.6	107.3				2015	-0.5	-15.2			

**Table H-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.0	0.0	0.0	84.6	0.0
2000	98.9	64.1	15.2	100.0	69.4
2001	100.0	79.3	31.5	19.8	49.0
2002	0.0	0.0	25.0	100.0	39.7
2003	100.0	81.5	0.0	0.0	36.7
2004	0.0	52.2	97.8	100.0	71.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	95.7	28.3	100.0	80.8
2011	100.0	100.0	79.3	96.7	94.0
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	97.8	96.7	100.0	98.6
2014	100.0	100.0	82.6	89.0	92.9
2015	100.0	100.0			

**Table H-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
 Variable: Rainfall, in millimeters per hour  
 File name: AK106\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each  
Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	NaN	NaN	1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	2.3	NaN	2012	NaN	NaN	NaN	41.1	NaN
2013	0.0	0.0	13.2	NaN	13.2	2013	0.0	0.0	124.0	NaN	146.0
2014	0.0	NaN	4.3	2.5	4.3	2014	0.0	NaN	79.8	39.1	126.2
2015	0.0	NaN				2015	0.0	NaN			

**Table H-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	30.4	100.0	41.0
2013	100.0	95.7	96.7	94.5	96.2
2014	97.8	91.3	100.0	100.0	97.8
2015	100.0	93.5			

**Table H-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Koluktak

Variable: Snow depth, in centimeters

File name: AK106\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	9.9	NaN	1999	NaN	NaN	NaN	-0.8	NaN
2000	12.6	NaN	NaN	5.9	NaN	2000	5.7	NaN	NaN	-1.4	NaN
2001	8.5	NaN	NaN	NaN	NaN	2001	5.1	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	4.0	NaN	2002	NaN	NaN	NaN	-0.3	NaN
2003	17.3	24.9	NaN	NaN	NaN	2003	5.2	10.5	NaN	NaN	NaN
2004	NaN	NaN	1.0	16.7	NaN	2004	NaN	NaN	-1.0	-0.8	NaN
2005	27.3	35.7	3.2	5.8	17.4	2005	23.9	21.6	-0.7	-0.1	-0.7
2006	19.2	22.0	1.7	2.7	10.4	2006	9.1	-0.5	-1.0	-0.4	-1.0
2007	7.8	10.8	1.5	4.7	6.5	2007	1.6	1.4	-0.6	0.1	-0.6
2008	14.9	25.8	2.5	16.9	17.0	2008	6.6	0.5	-0.4	-0.5	-0.5
2009	32.5	26.1	3.9	NaN	NaN	2009	28.2	0.7	0.1	NaN	NaN
2010	NaN	NaN	NaN	10.6	NaN	2010	NaN	NaN	NaN	0.4	NaN
2011	27.6	26.4	4.7	11.8	18.0	2011	23.0	0.1	0.0	0.2	0.0
2012	38.3	46.0	5.4	6.7	22.7	2012	20.7	10.9	0.7	-0.7	-0.7
2013	24.4	35.1	6.2	16.4	21.0	2013	8.8	1.4	-0.0	0.3	-0.0
2014	27.1	25.8	6.0	6.6	15.8	2014	21.8	0.6	0.1	-0.3	-0.3
2015	27.8	35.6				2015	11.9	-1.2			



**Table H-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	17.6	NaN
2000	19.4	NaN	NaN	12.9	NaN
2001	13.2	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	10.0	NaN
2003	22.1	36.6	NaN	NaN	NaN
2004	NaN	NaN	4.0	29.8	NaN
2005	38.7	42.7	21.3	20.3	42.7
2006	29.1	29.2	4.6	7.8	29.2
2007	12.5	17.3	5.1	11.2	17.3
2008	30.2	33.7	5.4	38.7	43.5
2009	43.5	43.1	7.7	NaN	NaN
2010	NaN	NaN	NaN	32.7	NaN
2011	33.7	32.1	10.4	28.5	46.2
2012	51.5	53.0	12.3	14.7	53.0
2013	31.5	51.2	11.8	33.9	51.2
2014	41.5	37.7	16.4	20.8	41.5
2015	42.0	51.9			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.0	0.0	0.0	86.8	0.0
2000	96.7	77.2	18.5	98.9	73.2
2001	98.9	79.3	32.6	17.6	48.8
2002	0.0	0.0	26.1	100.0	40.0
2003	98.9	100.0	70.7	0.0	58.9
2004	0.0	53.3	93.5	100.0	70.2
2005	100.0	100.0	100.0	96.7	99.2
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	98.9	100.0	44.0	79.2
2010	60.0	78.3	27.2	100.0	72.9
2011	98.9	100.0	100.0	100.0	99.2
2012	92.3	100.0	100.0	100.0	98.6
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	NaN	NaN	NaN	0.7	NaN
2000	-10.4	NaN	NaN	-3.2	NaN
2001	-14.5	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	-5.2	NaN
2003	-5.7	-4.1	NaN	NaN	NaN
2004	NaN	NaN	-2.6	7.5	NaN
2005	4.3	6.7	-0.4	-3.3	0.9
2006	-3.8	-7.0	-1.9	-6.5	-6.1
2007	-15.2	-18.2	-2.2	-4.5	-10.0
2008	-8.0	-3.2	-1.1	7.7	0.4
2009	9.5	-2.9	0.3	NaN	NaN
2010	NaN	NaN	NaN	1.4	NaN
2011	4.6	-2.6	1.1	2.6	1.5
2012	15.4	17.1	1.8	-2.5	6.1
2013	1.4	6.2	2.6	7.2	4.4
2014	4.2	-3.2	2.4	-2.6	-0.7
2015	4.9	6.6			

**Table H-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Koluktak  
Variable: Soil moisture, in water fraction by volume

File name: AK106\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.30	0.20	NaN
2005	NaN	NaN	0.22	0.08	NaN
2006	NaN	NaN	0.28	0.15	NaN
2007	NaN	NaN	0.19	0.05	NaN
2008	NaN	NaN	0.21	0.10	NaN
2009	NaN	NaN	0.24	0.13	NaN
2010	0.02	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.24	NaN
2014	0.03	0.02	0.31	0.19	0.14
2015	0.02	0.04			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.43	0.38	NaN
2005	NaN	NaN	0.41	0.20	NaN
2006	NaN	NaN	0.42	0.31	NaN
2007	NaN	NaN	0.38	0.12	NaN
2008	NaN	NaN	0.37	0.16	NaN
2009	NaN	NaN	0.43	0.27	NaN
2010	0.03	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.38	NaN
2014	0.06	0.05	0.46	0.38	0.46
2015	0.03	0.42			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.17	0.03	NaN
2005	NaN	NaN	0.03	0.01	NaN
2006	NaN	NaN	0.03	0.01	NaN
2007	NaN	NaN	0.03	0.00	NaN
2008	NaN	NaN	0.14	0.02	NaN
2009	NaN	NaN	0.14	0.02	NaN
2010	0.01	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.04	NaN
2014	0.01	0.01	0.04	0.03	0.01
2015	0.01	0.01			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

1999	NaN	NaN	NaN	NaN	NaN
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	0.05	0.06	NaN
2005	NaN	NaN	-0.02	-0.06	NaN
2006	NaN	NaN	0.04	0.01	NaN
2007	NaN	NaN	-0.05	-0.09	NaN
2008	NaN	NaN	-0.04	-0.04	NaN
2009	NaN	NaN	-0.01	-0.01	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	0.10	NaN
2014	NaN	NaN	0.06	0.05	NaN
2015	NaN	NaN			

**Table H-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	38.04	97.83	100.00	67.49
2005	81.11	47.83	100.00	100.00	82.19
2006	70.00	32.61	100.00	100.00	75.62
2007	42.22	39.13	100.00	100.00	66.85
2008	19.78	14.13	100.00	100.00	62.02
2009	73.33	42.39	100.00	100.00	78.90
2010	98.89	75.00	2.17	0.00	35.34
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	85.87	100.00	55.07
2014	96.67	97.83	100.00	100.00	98.63
2015	100.00	100.00			

**Table H-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## I. South Meade

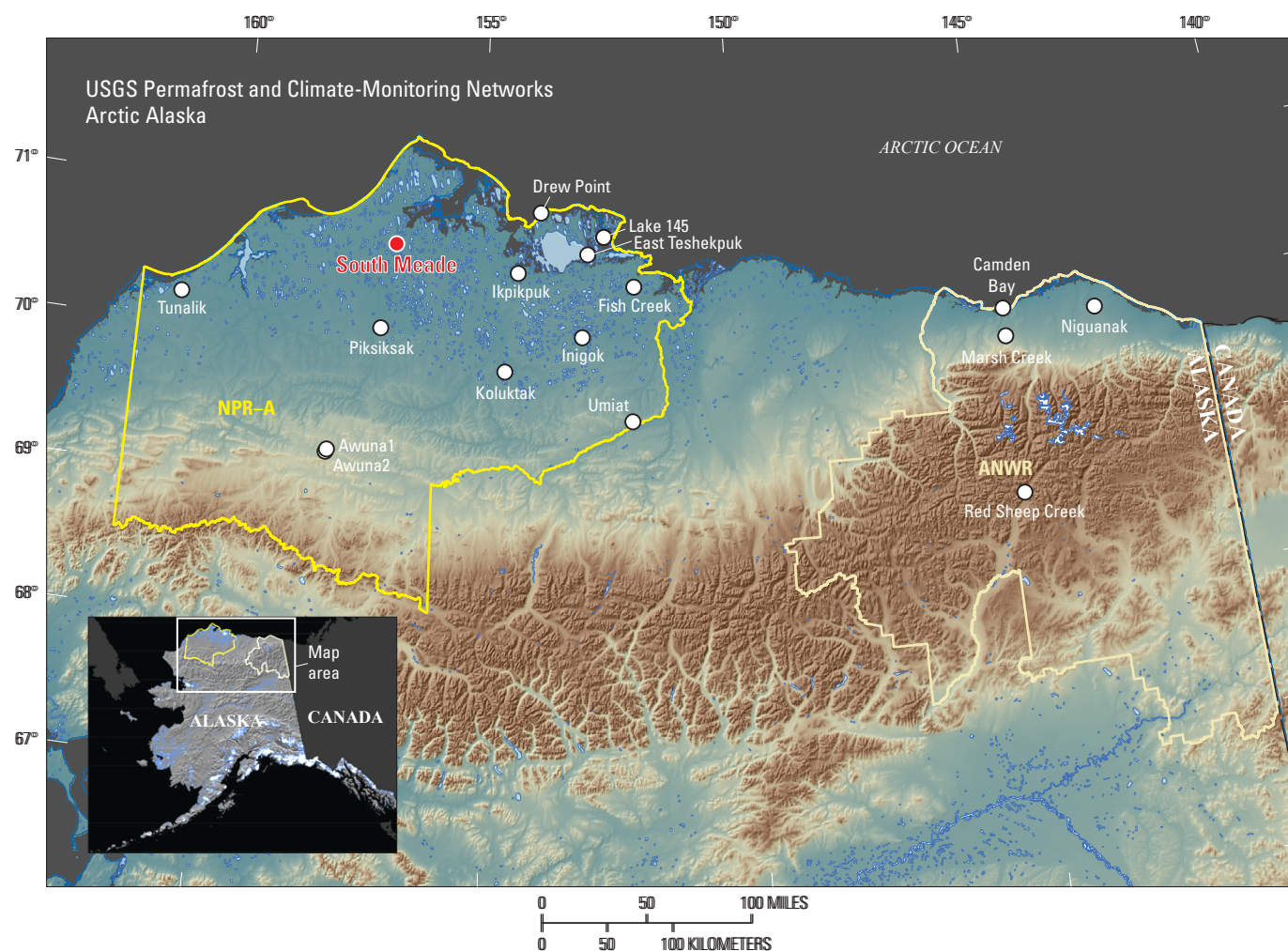
GTN-P code: U33

Latitude: 70°37.708'N

Longitude: 156°50.119'W

Elevation: 15 meters above mean sea level

Installation date: 08 AUG 2003

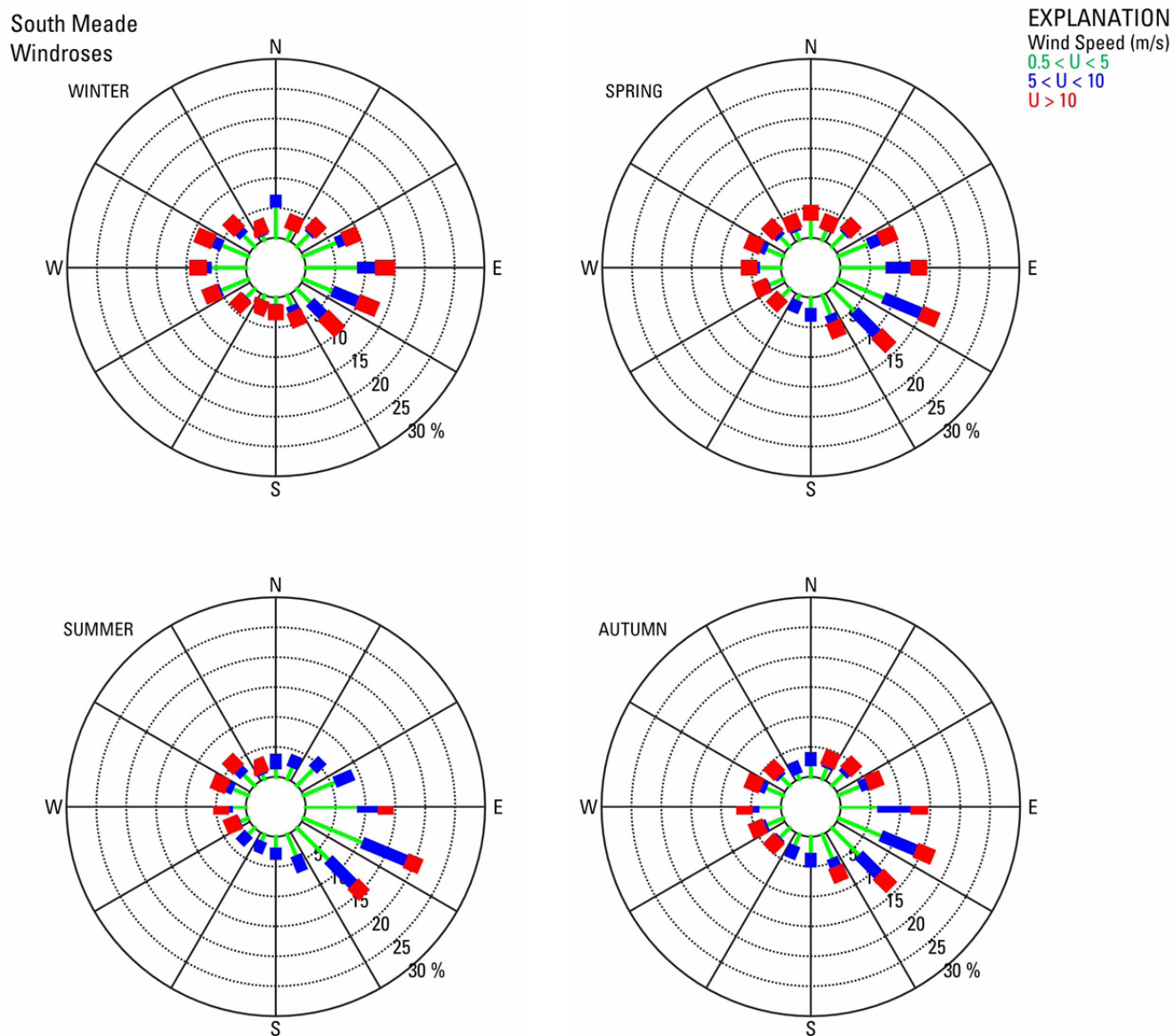


**Figure I–1.** Location map presenting the specific location of the South Meade site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure I-2.** South Meade station in summer 2008.





**Figure I-3.** South Meade seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table I-14.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
 Variable: Air temperature, in degrees Celsius  
 File name: AK109\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.17	-4.65	-17.86	-24.86
2004	-26.35	-34.93	-28.58	-18.18	-4.01	7.10	9.81	8.89	0.71	-6.21	-17.26	-24.88
2005	-24.15	-26.71	-23.60	-17.13	-5.12	2.83	6.68	8.11	1.05	-6.75	-22.03	-22.02
2006	-26.26	-23.59	-29.97	-20.99	-4.01	5.81	7.94	4.42	3.44	-3.99	-16.35	-21.41
2007	-28.79	-26.42	-28.33	-14.08	-7.72	5.39	10.72	9.14	3.46	-6.10	-12.53	-21.34
2008	-30.50	-28.98	-29.61	-13.64	-4.33	6.54	8.69	4.23	0.75	-7.65	-17.41	-18.64
2009	-28.08	-28.11	-30.00	-15.87	-2.29	4.84	10.55	6.38	1.10	-4.59	-19.76	-21.30
2010	-29.23	-25.23	-25.51	-12.95	-6.36	3.50	8.74	8.20	3.51	-5.93	-12.08	-25.87
2011	-24.91	-21.50	-22.01	-20.28	-5.17	NaN	NaN	NaN	2.45	-5.70	-21.45	-26.13
2012	-33.06	-26.14	-33.49	-16.04	-5.44	6.09	10.82	NaN	1.51	-3.60	-16.74	-26.18
2013	-26.53	-31.41	-23.70	-19.13	-4.98	7.41	10.91	5.51	-0.25	-4.47	-15.01	-21.04
2014	-23.12	-23.93	-22.22	-15.66	-2.07	3.45	7.18	5.10	1.05	-6.32	-13.37	-23.42
2015	-25.42	-22.76	-25.25	-14.60	NaN	NaN	NaN					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.05	-22.25	-37.79	-41.23
2004	-40.71	-46.66	-46.32	-34.83	-20.85	-2.56	0.49	-1.13	-4.60	-21.15	-32.43	-37.50
2005	-39.90	-37.91	-36.76	-30.99	-13.88	-6.29	-1.45	-0.62	-4.59	-24.67	-39.16	-36.43
2006	-44.53	-48.94	-44.27	-35.19	-19.79	-5.61	-0.24	-2.92	-4.29	-16.94	-29.02	-40.81
2007	-42.86	-43.98	-41.81	-28.23	-21.09	-4.08	1.59	-0.42	-3.03	-15.91	-28.26	-43.94
2008	-45.45	-41.48	-42.03	-35.44	-17.07	-5.34	-0.38	-2.39	-5.70	-22.24	-32.65	-34.70
2009	-39.61	-46.47	-40.78	-34.06	-15.03	-1.35	1.40	0.38	-6.27	-18.71	-36.68	-40.20
2010	-43.61	-44.78	-44.31	-32.49	-23.36	-1.67	0.29	0.96	-11.33	-15.12	-29.04	-42.82
2011	-43.82	-34.35	-36.79	-33.18	-22.02	NaN	NaN	NaN	-4.27	-18.57	-38.33	-37.07
2012	-46.28	-48.07	-41.06	-38.06	-23.21	-1.74	1.01	NaN	-5.82	-20.16	-31.27	-37.38
2013	-38.12	-41.84	-37.53	-36.35	-23.06	-5.44	0.84	-3.13	-12.19	-24.06	-31.78	-36.62
2014	-43.65	-41.73	-40.71	-35.24	-12.27	-3.90	-0.48	-0.69	-5.18	-18.54	-27.12	-34.78
2015	-36.93	-40.92	-41.20	-30.33	NaN	NaN	NaN					

**Table I–14.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.64	5.25	1.01	-9.24
2004	-1.67	-23.49	-3.72	-0.08	7.96	20.44	25.17	21.56	11.11	1.06	-2.16	-4.55
2005	0.94	-10.77	-5.98	2.01	1.37	17.37	17.27	24.62	10.27	1.21	-8.43	-12.89
2006	-14.90	2.47	-20.20	-9.67	5.28	19.60	22.71	17.10	18.13	4.75	-0.35	-1.74
2007	-14.34	-5.86	-4.53	-3.58	2.44	17.81	25.68	21.96	16.98	-0.28	-4.14	-4.61
2008	1.76	-9.24	-8.90	1.44	7.45	19.47	25.61	14.29	5.46	-0.72	-7.82	-1.90
2009	-1.93	-2.77	-15.45	4.28	9.81	14.74	27.09	19.15	15.18	5.66	-6.50	-1.32
2010	-13.46	-13.74	-14.72	2.03	6.94	18.15	21.84	21.37	16.75	-0.26	1.08	-7.93
2011	0.03	-1.47	-5.95	-5.15	6.66	NaN	NaN	NaN	13.07	1.35	-2.94	-12.40
2012	-13.93	-9.04	-17.78	-4.42	4.98	22.38	22.91	NaN	8.60	6.50	-3.84	-12.39
2013	-14.70	-21.81	-11.70	-2.66	4.88	24.03	22.17	19.01	12.61	1.64	1.96	0.72
2014	-11.26	-4.86	-5.77	1.78	5.70	17.06	19.31	16.84	11.79	1.48	1.07	-4.54
2015	-6.69	-0.62	-6.03	-1.47	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.40	0.84	-1.04	-1.77
2004	0.85	-8.29	-1.73	-1.64	0.67	1.80	0.61	2.22	-0.87	-0.71	-0.44	-1.79
2005	3.05	-0.06	3.26	-0.58	-0.44	-2.47	-2.52	1.45	-0.53	-1.25	-5.21	1.08
2006	0.94	3.06	-3.12	-4.44	0.67	0.52	-1.27	-2.24	1.86	1.51	0.47	1.68
2007	-1.59	0.23	-1.48	2.47	-3.04	0.10	1.51	2.48	1.88	-0.61	4.29	1.75
2008	-3.30	-2.34	-2.75	2.90	0.35	1.24	-0.51	-2.44	-0.82	-2.15	-0.59	4.45
2009	-0.88	-1.47	-3.14	0.68	2.39	-0.45	1.34	-0.28	-0.48	0.90	-2.94	1.79
2010	-2.03	1.41	1.35	3.60	-1.68	-1.80	-0.46	1.54	1.93	-0.43	4.74	-2.78
2011	2.29	5.14	4.85	-3.74	-0.49	NaN	NaN	NaN	0.87	-0.20	-4.63	-3.04
2012	-5.86	0.50	-6.63	0.51	-0.76	0.79	1.62	NaN	-0.07	1.90	0.08	-3.09
2013	0.67	-4.77	3.16	-2.58	-0.30	2.12	1.71	-1.16	-1.83	1.03	1.81	2.05
2014	4.08	2.71	4.64	0.89	2.61	-1.85	-2.03	-1.57	-0.53	-0.82	3.45	-0.33
2015	1.78	3.88	1.61	1.95	NaN	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	96.77	0.00	0.00	87.10	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	90.32	0.00	0.00					



**Table I-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade

Variable: Wind speed, in meters per second

File name: AK109\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.94	4.30	NaN	NaN
2004	NaN	NaN	4.51	4.13	5.63	4.53	4.08	3.52	3.65	5.35	5.68	NaN
2005	4.30	NaN	5.16	4.18	5.19	5.02	4.56	3.54	5.43	3.72	2.66	2.83
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.11	4.94	NaN	NaN
2007	NaN	NaN	3.52	4.33	3.78	4.79	4.05	3.35	4.42	4.68	NaN	3.64
2008	NaN	3.30	NaN	4.14	5.03	3.59	4.04	3.21	3.23	NaN	4.45	3.59
2009	3.34	4.72	NaN	NaN	3.82	4.93	4.28	3.91	3.51	3.66	NaN	NaN
2010	2.52	5.52	3.65	4.13	5.31	5.27	3.95	4.07	3.43	5.76	NaN	NaN
2011	NaN	NaN	NaN	3.93	3.54	NaN	NaN	NaN	3.93	4.60	2.95	3.83
2012	3.65	NaN	NaN	4.05	3.92	4.58	3.43	NaN	3.40	3.61	NaN	NaN
2013	NaN	NaN	5.10	3.91	4.47	3.93	4.07	3.06	3.77	NaN	4.58	NaN
2014	NaN	NaN	NaN	3.37	5.05	3.72	3.93	4.53	4.41	5.17	4.37	3.99
2015	3.91	4.59	NaN	4.08	4.25	NaN	NaN					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.20	11.06	NaN	NaN
2004	NaN	NaN	15.53	10.02	12.51	12.04	9.08	7.68	12.87	13.40	14.74	NaN
2005	14.20	NaN	16.25	10.76	10.08	12.62	8.92	10.20	10.36	10.39	8.58	10.29
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.17	16.08	NaN	NaN
2007	NaN	NaN	14.72	11.71	9.88	10.18	9.18	9.49	9.28	12.20	NaN	16.36
2008	NaN	11.05	NaN	10.42	11.01	8.07	10.86	8.53	7.30	NaN	12.24	15.79
2009	13.27	14.89	NaN	NaN	11.43	8.73	9.56	10.05	10.15	12.36	NaN	NaN
2010	10.86	15.27	10.90	9.82	10.12	11.76	9.36	12.78	7.02	12.14	NaN	NaN
2011	NaN	NaN	NaN	10.36	9.57	NaN	NaN	NaN	8.55	11.22	12.31	14.70
2012	11.14	NaN	NaN	11.72	9.13	9.78	7.60	NaN	9.70	10.86	NaN	NaN
2013	NaN	NaN	15.14	11.79	14.08	8.55	10.37	7.01	8.94	NaN	14.05	NaN
2014	NaN	NaN	NaN	13.07	12.37	9.78	11.91	9.95	8.90	15.38	13.28	14.43
2015	13.25	15.49	NaN	12.50	11.99	NaN	NaN					

**Table I–1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.09	-0.28	NaN	NaN
2004	NaN	NaN	0.12	0.11	1.09	0.05	0.03	-0.13	-0.20	0.77	1.56	NaN
2005	0.76	NaN	0.77	0.16	0.64	0.54	0.52	-0.11	1.57	-0.86	-1.45	-0.75
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.74	0.36	NaN	NaN
2007	NaN	NaN	-0.87	0.30	-0.76	0.30	0.01	-0.30	0.56	0.10	NaN	0.06
2008	NaN	NaN	NaN	0.12	0.49	-0.89	-0.00	-0.44	-0.62	NaN	0.33	0.01
2009	-0.20	NaN	NaN	NaN	-0.73	0.45	0.24	0.26	-0.34	-0.92	NaN	NaN
2010	-1.02	NaN	-0.74	0.10	0.76	0.78	-0.09	0.42	-0.42	1.18	NaN	NaN
2011	NaN	NaN	NaN	-0.10	-1.00	NaN	NaN	NaN	0.08	0.02	-1.17	0.25
2012	0.10	NaN	NaN	0.02	-0.62	0.10	-0.62	NaN	-0.46	-0.97	NaN	NaN
2013	NaN	NaN	0.71	-0.12	-0.08	-0.56	0.03	-0.59	-0.08	NaN	0.47	NaN
2014	NaN	NaN	NaN	-0.66	0.51	-0.77	-0.11	0.88	0.56	0.59	0.26	0.41
2015	0.37	NaN	NaN	0.06	-0.29	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	93.33	67.74
2004	80.65	55.17	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	35.48
2005	96.77	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	0.00	42.86	67.74	0.00	0.00	0.00	0.00	41.94	100.00	100.00	93.33	93.55
2007	87.10	82.14	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	50.00	100.00
2008	80.65	100.00	67.74	100.00	100.00	100.00	100.00	100.00	100.00	90.32	96.67	100.00
2009	100.00	100.00	32.26	93.33	100.00	100.00	100.00	100.00	100.00	100.00	93.33	61.29
2010	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	80.00	41.94
2011	41.94	92.86	74.19	100.00	96.77	0.00	0.00	87.10	100.00	100.00	96.67	100.00
2012	100.00	93.10	77.42	100.00	100.00	100.00	100.00	87.10	100.00	100.00	93.33	90.32
2013	93.55	82.14	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10	96.67	51.61
2014	87.10	67.86	90.32	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	80.65	100.00	96.77	0.00	0.00					

**Table I-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Ground temperature, in degrees Celsius

File name: AK109\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.16	-0.14	-3.90	-11.98
2004	-14.10	-17.88	-18.41	-16.12	-8.58	0.15	3.87	5.05	0.82	-0.43	-5.33	-16.60
2005	-17.89	-19.42	-18.87	-16.53	-9.54	0.51	3.72	4.34	0.83	-0.71	-7.84	-12.13
2006	-13.88	-15.57	-18.01	-16.82	-7.94	0.46	3.47	2.93	1.74	-0.31	-4.32	-11.53
2007	-18.61	-18.94	-22.63	-14.74	-9.50	0.36	4.21	4.35	1.75	-0.62	-2.83	-9.51
2008	-15.91	-16.81	-18.08	-13.78	-7.64	1.28	4.54	2.47	0.65	-0.41	-3.45	-9.50
2009	-14.86	-17.64	-19.44	-15.98	-2.77	0.73	4.29	3.22	1.19	-0.53	-5.64	-10.07
2010	-15.70	-16.31	-18.05	-14.12	-8.97	-0.07	2.62	3.91	2.19	-0.32	-1.36	-8.40
2011	-13.20	-14.27	-14.18	-14.52	NaN	NaN	NaN	NaN	1.40	-0.31	-4.99	-13.59
2012	-19.19	-18.66	-21.56	-16.97	-7.65	0.64	4.19	NaN	1.04	-0.16	-2.09	-12.56
2013	-16.69	-20.47	-17.90	-16.45	-8.85	0.66	4.54	3.58	0.79	-0.18	-1.72	-7.03
2014	-14.14	-15.75	-16.55	-13.46	-2.16	-0.01	2.95	2.85	0.60	-0.14	-1.59	-10.46
2015	-14.32	-16.14	-15.64	-13.39	NaN	NaN	NaN					

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.11	-0.33	-9.03	-13.58
2004	-16.65	-19.50	-19.57	-17.73	-13.92	-2.35	1.62	0.80	-0.20	-2.14	-11.52	-20.16
2005	-22.82	-21.02	-21.57	-18.94	-12.69	-2.19	0.10	0.78	-0.19	-2.19	-11.61	-13.59
2006	-16.86	-18.45	-19.77	-19.09	-14.13	-1.34	0.56	0.67	-0.08	-1.31	-10.25	-18.82
2007	-21.30	-23.98	-25.54	-17.10	-13.65	-1.28	1.20	1.68	-0.15	-1.20	-6.85	-14.00
2008	-19.13	-18.80	-19.14	-16.69	-12.07	-0.56	0.94	0.59	-0.13	-1.03	-8.59	-11.59
2009	-16.76	-20.16	-21.38	-19.90	-7.07	-0.43	1.76	1.21	-0.33	-1.66	-10.37	-12.54
2010	-18.26	-19.87	-20.37	-17.66	-11.41	-1.38	0.41	1.39	-0.16	-0.87	-2.90	-13.65
2011	-17.11	-15.39	-15.42	-15.79	NaN	NaN	NaN	NaN	-0.16	-1.44	-11.54	-16.98
2012	-23.29	-24.25	-22.62	-22.33	-13.60	-0.80	1.36	NaN	-0.12	-0.49	-6.24	-17.20
2013	-20.22	-22.29	-19.94	-17.74	-14.19	-1.39	1.62	0.91	-0.15	-0.41	-4.27	-11.95
2014	-17.94	-19.15	-19.78	-16.69	-9.56	-2.37	0.93	0.89	-0.13	-0.49	-5.00	-13.22
2015	-16.63	-19.72	-17.75	-15.90	NaN	NaN	NaN					

**Table I–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.75	-0.05	-0.19	-9.03
2004	-10.29	-15.58	-16.25	-13.92	-2.42	3.96	7.65	9.92	5.60	-0.03	-1.87	-10.54
2005	-9.93	-17.66	-16.80	-12.73	-1.76	8.05	8.33	9.26	3.00	-0.17	-2.17	-11.10
2006	-11.30	-11.90	-16.62	-14.13	-0.80	3.43	7.56	5.84	4.44	-0.00	-0.41	-6.75
2007	-15.86	-13.31	-16.15	-11.95	-0.68	3.04	7.03	7.78	4.90	-0.11	-0.75	-6.04
2008	-12.50	-14.52	-16.72	-11.71	-0.40	6.28	8.21	4.44	2.07	-0.05	-0.75	-7.67
2009	-11.36	-14.66	-14.96	-2.40	-0.35	3.97	8.17	6.89	4.13	-0.15	-1.08	-7.94
2010	-12.23	-14.33	-16.54	-11.12	-0.90	3.69	6.61	7.03	5.05	0.01	-0.68	-2.86
2011	-9.74	-12.41	-13.22	-13.11	NaN	NaN	NaN	NaN	4.57	-0.04	-0.58	-10.00
2012	-16.39	-16.23	-19.78	-12.90	-0.49	3.64	7.41	NaN	3.89	0.01	-0.42	-5.48
2013	-14.18	-18.33	-16.34	-13.70	-0.92	3.96	6.95	7.30	3.29	-0.01	-0.34	-2.90
2014	-11.33	-11.00	-13.76	-9.64	-0.63	3.69	5.55	5.48	1.76	-0.02	-0.43	-5.03
2015	-11.16	-12.37	-12.42	-10.54	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.93	0.21	-0.15	-0.87
2004	1.60	-0.56	-0.13	-0.88	-1.22	-0.32	0.03	1.41	-0.28	-0.07	-1.57	-5.49
2005	-2.18	-2.10	-0.59	-1.29	-2.18	0.04	-0.12	0.70	-0.27	-0.35	-4.08	-1.01
2006	1.82	1.75	0.27	-1.58	-0.58	-0.01	-0.37	-0.70	0.64	0.04	-0.57	-0.42
2007	-2.90	-1.62	-4.36	0.50	-2.14	-0.11	0.37	0.72	0.65	-0.26	0.93	1.61
2008	-0.20	0.51	0.20	1.46	-0.28	0.81	0.70	-1.17	-0.45	-0.06	0.30	1.61
2009	0.85	-0.32	-1.16	-0.74	4.59	0.26	0.45	-0.41	0.10	-0.17	-1.88	1.04
2010	0.00	1.01	0.22	1.12	-1.61	-0.54	-1.22	0.28	1.09	0.03	2.39	2.71
2011	2.51	3.05	4.10	0.72	NaN	NaN	NaN	NaN	0.30	0.04	-1.24	-2.48
2012	-3.48	-1.34	-3.28	-1.73	-0.29	0.17	0.35	NaN	-0.06	0.20	1.66	-1.44
2013	-0.98	-3.15	0.37	-1.21	-1.49	0.19	0.70	-0.05	-0.31	0.17	2.04	4.09
2014	1.57	1.58	1.73	1.78	5.20	-0.48	-0.89	-0.78	-0.49	0.22	2.16	0.65
2015	1.39	1.18	2.64	1.85	NaN	NaN	NaN					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	67.74	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	22.58	0.00	0.00	64.52	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	25.81	0.00	0.00					

**Table I-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.12	-1.92	-2.65	-7.63
2004	-10.38	-13.43	-15.17	-14.76	-11.71	-5.71	-3.33	-2.29	-1.80	-1.62	-2.58	-9.70
2005	-13.02	-15.52	-16.13	-15.43	-12.13	-6.33	-3.69	-2.56	-1.99	-1.76	-4.08	-8.71
2006	-10.60	-12.66	-14.15	-15.05	-11.59	-5.36	-3.27	-2.29	-1.84	-1.63	-2.15	-6.94
2007	-12.67	-13.98	-17.63	-15.18	-11.89	-5.95	-3.48	-2.42	-1.90	-1.67	-2.09	-5.61
2008	-10.39	-12.99	-14.43	-13.63	-10.71	-5.24	-3.04	-2.14	-1.78	-1.61	-2.13	-6.24
2009	-9.91	-13.16	-14.77	-15.38	-8.44	-4.28	-2.82	-2.01	-1.63	-1.47	-2.75	-6.92
2010	-10.83	-13.04	-14.48	-13.74	-11.06	-5.75	-3.36	-2.33	-1.76	-1.54	-1.51	-4.43
2011	-8.99	-11.35	-11.83	-12.44	NaN	NaN	NaN	NaN	-1.61	-1.43	-2.08	-7.88
2012	-12.81	-15.08	-16.74	-16.39	-11.75	-5.41	-3.29	NaN	-1.76	-1.57	-1.55	-6.45
2013	-11.48	-14.83	-15.31	-14.91	-11.89	-5.49	-3.12	-2.10	-1.68	-1.52	-1.45	-3.77
2014	-9.12	-11.30	-13.23	-12.69	-7.33	-3.93	-2.55	-1.86	-1.52	-1.40	-1.34	-5.20
2015	-9.53	-12.19	-12.61	-12.58	NaN	NaN	NaN					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.33	-2.04	-4.82	-9.38
2004	-12.17	-14.65	-15.52	-15.21	-14.01	-7.96	-4.19	-2.70	-2.01	-1.70	-5.41	-12.41
2005	-15.35	-15.89	-16.82	-16.00	-14.23	-9.44	-4.54	-3.03	-2.19	-1.87	-7.00	-9.67
2006	-12.02	-13.21	-15.34	-15.46	-14.37	-7.41	-4.03	-2.71	-2.03	-1.74	-4.89	-9.84
2007	-13.72	-16.13	-18.24	-17.47	-13.33	-8.97	-4.27	-2.86	-2.14	-1.80	-3.47	-7.87
2008	-12.01	-13.46	-15.28	-15.23	-12.31	-7.40	-3.90	-2.44	-1.97	-1.69	-4.05	-7.49
2009	-11.66	-13.86	-16.21	-16.22	-12.89	-5.54	-3.41	-2.36	-1.78	-1.57	-5.49	-8.51
2010	-12.76	-13.45	-14.92	-14.87	-12.44	-8.74	-4.14	-2.80	-2.00	-1.66	-1.81	-7.40
2011	-11.21	-11.77	-12.23	-12.83	NaN	NaN	NaN	NaN	-1.81	-1.58	-4.90	-10.68
2012	-15.17	-16.05	-17.83	-17.93	-14.20	-7.50	-4.08	NaN	-1.97	-1.68	-2.56	-10.10
2013	-13.31	-15.93	-15.91	-15.15	-14.01	-7.88	-3.98	-2.53	-1.86	-1.62	-1.83	-6.65
2014	-10.59	-12.87	-13.71	-13.33	-11.43	-4.95	-3.13	-2.17	-1.69	-1.51	-1.76	-7.65
2015	-11.14	-13.19	-13.24	-13.16	NaN	NaN	NaN					

## Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.98	-1.84	-1.79	-4.77
2004	-9.16	-12.16	-14.65	-14.00	-7.94	-4.17	-2.61	-1.92	-1.64	-1.51	-1.50	-5.42
2005	-10.97	-15.23	-15.51	-14.22	-9.47	-4.54	-2.98	-2.13	-1.82	-1.66	-1.66	-6.93
2006	-9.57	-11.99	-12.71	-14.36	-7.41	-3.96	-2.67	-1.98	-1.67	-1.56	-1.49	-4.89
2007	-9.88	-12.70	-16.12	-13.31	-8.98	-4.25	-2.81	-2.04	-1.71	-1.59	-1.59	-3.47
2008	-7.85	-12.01	-13.33	-12.31	-7.39	-3.88	-2.40	-1.84	-1.65	-1.51	-1.49	-4.03
2009	-7.49	-11.64	-13.40	-12.92	-5.51	-3.38	-2.29	-1.76	-1.48	-1.39	-1.36	-5.49
2010	-8.51	-12.74	-13.45	-12.44	-8.74	-4.07	-2.78	-1.93	-1.57	-1.44	-1.40	-1.81
2011	-7.40	-10.95	-11.54	-11.99	NaN	NaN	NaN	NaN	-1.47	-1.34	-1.33	-4.88
2012	-10.67	-14.31	-15.04	-14.20	-7.46	-4.03	-2.63	NaN	-1.54	-1.43	-1.37	-2.56
2013	-10.13	-13.31	-14.88	-14.01	-7.89	-3.95	-2.47	-1.76	-1.53	-1.38	-1.32	-1.81
2014	-6.64	-10.07	-12.40	-11.44	-4.89	-3.04	-2.11	-1.58	-1.37	-1.30	-1.21	-1.74
2015	-7.61	-10.98	-11.85	-11.36	NaN	NaN	NaN					

**Table I–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.34	-0.33	-0.46	-1.01
2004	0.43	-0.14	-0.46	-0.41	-0.86	-0.37	-0.14	-0.07	-0.02	-0.02	-0.38	-3.08
2005	-2.21	-2.22	-1.42	-1.08	-1.28	-0.99	-0.50	-0.34	-0.20	-0.16	-1.88	-2.08
2006	0.21	0.63	0.55	-0.70	-0.74	-0.01	-0.07	-0.06	-0.06	-0.04	0.05	-0.32
2007	-1.86	-0.68	-2.93	-0.84	-1.04	-0.60	-0.29	-0.20	-0.12	-0.07	0.11	1.01
2008	0.42	0.30	0.27	0.71	0.14	0.10	0.15	0.08	0.01	-0.01	0.07	0.38
2009	0.90	0.13	-0.06	-1.03	2.41	1.07	0.38	0.21	0.15	0.12	-0.55	-0.30
2010	-0.02	0.25	0.22	0.61	-0.21	-0.41	-0.17	-0.10	0.03	0.05	0.68	2.19
2011	1.82	1.95	2.88	1.91	NaN	NaN	NaN	NaN	0.17	0.17	0.11	-1.26
2012	-2.00	-1.79	-2.03	-2.04	-0.90	-0.06	-0.09	NaN	0.03	0.03	0.65	0.17
2013	-0.67	-1.54	-0.60	-0.56	-1.04	-0.15	0.07	0.12	0.10	0.07	0.75	2.85
2014	1.69	2.00	1.48	1.66	3.52	1.41	0.64	0.36	0.26	0.19	0.85	1.43
2015	1.28	1.10	2.10	1.77	NaN	NaN	NaN					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	67.74	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	22.58	0.00	0.00	64.52	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	25.81	0.00	0.00					

**Table I-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Incident solar flux, in watts per meter squared

File name: AK109\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	54.2	19.1	NaN	NaN
2004	NaN	NaN	NaN	176.3	218.8	254.7	175.3	118.3	56.3	20.6	1.5	0.0
2005	0.5	13.9	NaN	NaN	222.0	NaN	209.8	122.0	NaN	16.3	1.2	0.0
2006	NaN	NaN	73.6	159.4	209.2	204.1	183.3	114.8	59.7	17.8	NaN	0.2
2007	0.5	NaN	NaN	150.7	NaN	260.0	243.7	140.0	64.6	18.9	1.5	NaN
2008	0.5	13.2	NaN	NaN	216.7	220.6	188.1	115.1	52.6	19.7	1.5	0.0
2009	0.6	12.2	NaN	154.7	217.1	201.3	201.4	105.6	49.8	19.1	1.5	0.1
2010	0.1	6.4	NaN	NaN	224.3	245.2	170.8	115.0	NaN	NaN	NaN	0.0
2011	0.4	11.2	NaN	174.9	NaN	NaN	NaN	NaN	52.8	21.8	1.8	0.0
2012	0.4	NaN	NaN	154.6	222.1	222.7	210.1	NaN	49.7	18.7	1.6	0.0
2013	0.5	7.3	63.7	162.3	221.4	224.1	170.3	95.2	52.9	17.5	1.6	0.0
2014	0.4	NaN	57.4	135.9	157.9	177.5	167.1	110.7	53.3	17.8	1.9	0.0
2015	0.4	9.9	56.0	137.7	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.4	0.2	NaN	NaN
2004	NaN	NaN	NaN	20.0	6.6	31.3	-16.7	3.1	1.7	1.8	-0.0	-0.0
2005	0.1	3.3	NaN	NaN	9.8	NaN	17.8	6.8	NaN	-2.5	-0.4	-0.0
2006	NaN	NaN	NaN	3.1	-3.0	-19.3	-8.7	-0.4	5.2	-1.0	NaN	0.1
2007	0.0	NaN	NaN	-5.6	NaN	36.7	51.7	24.8	10.1	0.0	-0.1	NaN
2008	0.1	2.6	NaN	NaN	4.6	-2.8	-3.9	-0.1	-2.0	0.8	-0.1	-0.0
2009	0.2	1.6	NaN	-1.5	4.9	-22.0	9.4	-9.6	-4.8	0.2	-0.1	0.0
2010	-0.3	-4.2	NaN	NaN	12.1	21.9	-21.2	-0.2	NaN	NaN	NaN	-0.0
2011	-0.0	0.6	NaN	18.6	NaN	NaN	NaN	NaN	-1.8	3.0	0.2	-0.0
2012	-0.0	NaN	NaN	-1.7	9.9	-0.6	18.1	NaN	-4.9	-0.1	0.0	-0.0
2013	0.1	-3.3	NaN	6.0	9.2	0.7	-21.7	-20.0	-1.7	-1.4	0.0	-0.0
2014	-0.0	NaN	NaN	-20.4	-54.3	-45.9	-24.9	-4.5	-1.3	-1.1	0.4	-0.0
2015	-0.1	-0.7	NaN	-18.6	NaN	NaN	NaN					

**Table I–1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	93.3	80.6
2004	90.3	72.4	83.9	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	83.9	93.3	100.0	93.3	100.0	100.0	90.0	96.8	100.0	96.8
2006	90.3	92.9	96.8	96.7	96.8	100.0	100.0	100.0	100.0	100.0	93.3	100.0
2007	96.8	89.3	16.1	96.7	93.5	100.0	100.0	100.0	96.7	96.8	100.0	80.6
2008	100.0	100.0	80.6	86.7	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	96.4	87.1	100.0	96.8	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2010	100.0	100.0	93.5	90.0	96.8	100.0	100.0	100.0	93.3	77.4	70.0	100.0
2011	100.0	100.0	54.8	100.0	93.5	0.0	0.0	80.6	96.7	100.0	100.0	100.0
2012	100.0	79.3	71.0	96.7	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0	96.8	100.0	100.0
2014	100.0	92.9	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	90.3	0.0	0.0					

**Table I–1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Reflected solar flux, in watts per meter squared

File name: AK109\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.6	NaN
2004	NaN	NaN	NaN	NaN	181.9	70.3	40.4	27.2	18.2	17.5	NaN	NaN
2005	NaN	NaN	NaN	NaN	200.7	98.6	49.1	29.4	14.2	9.6	NaN	NaN
2006	NaN	NaN	NaN	NaN	161.7	54.9	44.8	28.2	14.6	13.1	2.2	NaN
2007	NaN	NaN	NaN	142.1	203.9	65.8	65.5	44.0	25.8	16.2	1.5	NaN
2008	NaN	13.0	71.1	NaN	179.7	52.9	59.4	37.3	17.9	21.1	NaN	NaN
2009	NaN	NaN	NaN	143.7	109.2	53.8	59.2	29.0	13.1	8.4	NaN	NaN
2010	NaN	12.9	NaN	NaN	204.0	83.0	39.8	27.9	23.5	19.2	2.1	-0.0
2011	0.5	11.2	73.6	162.8	186.2	NaN	NaN	NaN	11.5	17.3	1.6	-0.0
2012	0.5	12.5	75.5	144.7	188.1	49.1	52.0	NaN	10.5	11.7	1.5	0.0
2013	0.5	8.5	64.9	156.9	180.9	50.5	41.9	23.7	23.7	17.1	1.7	0.0
2014	0.5	NaN	62.9	142.6	80.3	45.7	41.7	29.8	22.6	16.8	1.7	0.0
2015	0.5	10.8	61.6	136.4	NaN	NaN	NaN					



**Table I-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.1	NaN
2004	NaN	NaN	NaN	NaN	11.3	7.8	-9.0	-3.5	0.4	2.2	NaN	NaN
2005	NaN	NaN	NaN	NaN	30.1	36.1	-0.3	-1.3	-3.6	-5.7	NaN	NaN
2006	NaN	NaN	NaN	NaN	-8.9	-7.6	-4.6	-2.5	-3.2	-2.2	0.5	NaN
2007	NaN	NaN	NaN	-4.9	33.3	3.3	16.1	13.2	8.0	0.9	-0.3	NaN
2008	NaN	1.5	2.8	NaN	9.1	-9.5	10.0	6.5	0.1	5.8	NaN	NaN
2009	NaN	NaN	NaN	-3.4	-61.4	-8.6	9.8	-1.7	-4.7	-6.8	NaN	NaN
2010	NaN	1.4	NaN	NaN	33.4	20.5	-9.6	-2.8	5.7	3.9	0.4	-0.0
2011	-0.0	-0.3	5.3	15.8	15.6	NaN	NaN	NaN	-6.3	2.0	-0.1	-0.0
2012	-0.0	1.0	7.3	-2.3	17.5	-13.3	2.7	NaN	-7.3	-3.5	-0.3	0.0
2013	0.0	-3.0	-3.4	9.9	10.3	-12.0	-7.5	-7.0	5.9	1.9	-0.0	0.0
2014	-0.0	NaN	-5.4	-4.4	-90.3	-16.8	-7.7	-0.9	4.9	1.5	-0.0	0.0
2015	0.0	-0.7	-6.6	-10.6	NaN	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.3	90.3	100.0	16.1
2004	3.2	10.3	16.1	73.3	100.0	100.0	100.0	100.0	100.0	100.0	53.3	51.6
2005	54.8	75.0	48.4	73.3	100.0	100.0	100.0	100.0	100.0	100.0	56.7	35.5
2006	25.8	46.4	0.0	43.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7
2007	16.1	28.6	25.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7
2008	67.7	100.0	96.8	93.3	100.0	100.0	100.0	100.0	100.0	100.0	90.0	41.9
2009	19.4	57.1	83.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	53.3	90.3
2010	64.5	100.0	93.5	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	96.8	100.0	96.8	0.0	0.0	87.1	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	92.9	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	90.3	0.0	0.0					

**Table I–1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade

Variable: Rainfall, in millimeters per hour

File name: AK109\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	0.3	0.0	0.0
2008	0.0	0.0	0.0	NaN	NaN	NaN	1.5	1.0	0.8	0.5	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	0.0	0.0	3.3	0.8	0.3	0.0	0.0
2010	0.0	0.0	0.0	NaN	NaN	NaN	NaN	NaN	1.3	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	NaN	NaN	NaN	1.0	0.8	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.3	0.3	NaN	2.8	0.5	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	2.3	4.1	2.8	2.5	NaN	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	2.8	1.3	1.3	1.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	NaN	NaN					

Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	15.2	0.3	0.0	0.0
2008	0.0	0.0	0.0	NaN	NaN	NaN	38.1	11.9	7.1	1.5	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	0.0	0.0	68.1	6.9	0.8	0.0	0.0
2010	0.0	0.0	0.0	NaN	NaN	NaN	NaN	NaN	6.6	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	NaN	NaN	NaN	20.8	3.8	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.5	1.3	NaN	38.6	2.8	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	29.5	48.3	41.7	18.8	NaN	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	33.0	12.4	23.1	5.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	NaN	NaN					

**Table I-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.5	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	90.0	93.5	86.7	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	96.7	90.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	90.0	87.1	86.7	0.0	80.6	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	96.8	0.0	0.0	87.1	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	96.7	96.8	100.0	100.0	87.1	100.0	96.8	100.0	100.0
2013	100.0	100.0	100.0	100.0	90.3	96.7	100.0	100.0	100.0	93.5	100.0	100.0
2014	100.0	100.0	100.0	100.0	77.4	93.3	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	87.1	0.0	0.0					

**Table I-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: South Meade

Variable: Snow depth, in centimeters

File name: AK109\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.7	14.8	24.1
2004	29.2	29.9	38.6	40.8	33.2	4.8	NaN	2.0	3.2	9.8	11.1	9.6
2005	NaN	15.0	16.4	21.1	24.0	6.9	1.2	9.6	10.1	10.6	14.4	17.7
2006	25.0	25.3	26.3	33.1	24.8	NaN	NaN	4.0	5.7	4.1	4.2	6.6
2007	15.9	19.9	19.9	21.8	25.1	NaN	NaN	2.8	2.9	3.2	10.6	19.9
2008	19.8	23.0	22.6	26.5	27.4	NaN	NaN	NaN	NaN	6.5	16.9	13.8
2009	18.8	24.3	20.7	20.5	8.2	0.5	4.0	5.2	5.9	6.1	6.4	22.2
2010	22.0	22.2	32.3	43.9	43.3	13.7	7.0	5.5	5.3	6.6	13.3	21.9
2011	27.3	27.4	27.1	31.8	25.1	NaN	NaN	5.4	6.0	13.3	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	4.3	4.5	NaN	6.3	7.8	10.0	13.6
2013	23.7	23.6	32.7	34.1	31.1	0.7	6.2	11.2	11.0	13.5	20.2	23.8
2014	25.2	32.1	28.3	30.2	12.4	7.5	9.5	9.6	8.7	15.0	24.7	29.7
2015	34.0	34.6	35.9	36.1	26.2	NaN	NaN					

**Table I–1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.2	13.3	14.5
2004	27.4	25.6	30.4	38.6	23.9	-0.6	NaN	-0.1	0.1	9.0	9.6	8.9
2005	NaN	13.0	14.7	15.4	14.6	-0.2	-1.0	-0.1	7.2	7.9	10.1	12.9
2006	23.4	23.0	21.5	23.5	-1.2	NaN	NaN	-1.6	2.7	0.7	-0.9	1.4
2007	1.5	16.4	18.3	18.8	17.6	NaN	NaN	-0.3	-0.2	-0.5	6.9	13.0
2008	18.0	19.9	20.3	22.3	10.0	NaN	NaN	NaN	NaN	-0.2	8.8	8.7
2009	8.9	19.7	17.4	14.3	-1.2	-1.9	-1.0	-0.0	0.1	1.9	2.0	14.1
2010	20.7	18.3	19.1	38.9	34.9	0.6	-0.6	0.0	0.8	3.4	7.3	12.3
2011	24.6	24.6	21.6	26.8	-2.3	NaN	NaN	-1.8	-2.1	-0.3	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	-1.4	-1.1	NaN	-0.8	0.9	7.7	7.8
2013	14.2	19.3	24.2	30.2	-3.3	-11.5	-1.5	-1.5	7.2	10.4	15.4	18.0
2014	19.2	21.6	19.5	23.2	-1.2	-1.2	-0.9	1.9	-0.7	3.5	18.0	26.2
2015	27.3	30.1	32.2	32.0	-3.5	NaN	NaN					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	15.5	17.9	36.3
2004	31.0	31.9	44.4	44.5	40.7	23.9	NaN	5.8	11.6	11.6	15.0	10.1
2005	NaN	18.8	19.8	29.1	35.0	19.6	3.3	12.6	12.1	12.8	17.8	26.0
2006	28.0	29.3	32.6	38.1	37.3	NaN	NaN	8.3	9.1	8.0	9.8	12.9
2007	34.7	24.2	22.3	26.7	28.3	NaN	NaN	6.5	6.3	8.7	17.1	24.1
2008	21.3	27.3	23.2	31.6	36.8	NaN	NaN	NaN	NaN	11.1	23.6	21.9
2009	26.2	30.5	23.8	26.2	15.2	3.3	11.0	10.5	9.1	9.2	20.9	30.7
2010	23.7	25.3	46.4	46.6	47.2	35.8	9.6	8.8	9.1	8.0	22.1	29.6
2011	28.7	29.7	32.0	34.4	33.9	NaN	NaN	13.5	12.0	21.2	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	24.0	9.5	NaN	12.5	16.1	12.5	24.0
2013	31.2	29.2	39.3	40.9	41.0	12.4	11.6	13.2	14.6	18.1	31.5	31.8
2014	31.0	38.6	34.1	39.3	31.2	13.0	13.1	13.7	15.1	25.8	31.9	32.8
2015	47.4	39.6	45.7	42.5	43.9	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.9	1.5	5.6
2004	5.1	4.7	11.2	9.9	7.6	-0.7	NaN	-4.1	-3.3	1.2	-2.2	-8.9
2005	NaN	-10.2	-10.9	-9.8	-1.5	1.4	-4.2	3.4	3.6	2.0	1.1	-0.7
2006	0.9	0.1	-1.1	2.2	-0.7	NaN	NaN	-2.1	-0.8	-4.6	-9.1	-11.9
2007	-8.2	-5.3	-7.4	-9.1	-0.4	NaN	NaN	-3.3	-3.6	-5.4	-2.8	1.5
2008	-4.3	-2.2	-4.8	-4.4	1.9	NaN	NaN	NaN	NaN	-2.1	3.5	-4.6
2009	-5.3	-0.9	-6.6	-10.4	-17.3	-5.0	-1.4	-0.9	-0.7	-2.5	-6.9	3.8
2010	-2.1	-3.0	5.0	13.0	17.8	8.2	1.6	-0.7	-1.2	-2.0	-0.0	3.4
2011	3.2	2.2	-0.2	0.9	-0.4	NaN	NaN	-0.8	-0.5	4.7	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	-1.2	-0.9	NaN	-0.2	-0.8	-3.3	-4.8
2013	-0.4	-1.6	5.3	3.2	5.6	-4.8	0.8	5.0	4.5	4.9	6.8	5.4
2014	1.1	6.9	1.0	-0.7	-13.1	2.0	4.1	3.4	2.2	6.4	11.4	11.2
2015	9.9	9.4	8.5	5.2	0.6	NaN	NaN					

**Table I-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	100.0	100.0	93.5
2004	100.0	96.6	96.8	100.0	100.0	100.0	71.0	100.0	96.7	100.0	100.0	100.0
2005	64.5	96.4	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	53.3	71.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	33.3	0.0	96.8	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	23.3	9.7	22.6	60.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	0.0	0.0	90.3	100.0	100.0	50.0	29.0
2012	9.7	41.4	3.2	50.0	58.1	83.3	96.8	71.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	87.1	0.0	0.0					

**Table I-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK109\_Smoist\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.11	0.04
2004	NaN	NaN	NaN	NaN	NaN	0.19	0.42	0.42	0.42	0.42	0.10	NaN
2005	NaN	NaN	NaN	NaN	0.03	0.09	0.34	0.42	0.42	0.30	0.05	0.03
2006	NaN	NaN	NaN	NaN	NaN	0.17	0.42	0.42	0.42	0.41	0.11	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.11	0.39	0.40	0.40	0.31	0.08	0.04
2008	NaN	NaN	NaN	NaN	0.04	0.22	0.41	0.41	0.41	0.37	0.09	0.04
2009	NaN	NaN	NaN	NaN	0.06	0.26	0.41	0.41	0.42	0.32	0.07	0.04
2010	NaN	NaN	NaN	NaN	0.03	0.09	0.34	0.42	0.43	0.41	0.14	0.05
2011	NaN	NaN	NaN	NaN	0.04	NaN	NaN	NaN	0.41	0.40	0.09	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.10	0.40	NaN	0.42	0.42	0.22	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.19	0.43	0.43	0.43	0.43	0.22	0.05
2014	NaN	NaN	NaN	NaN	0.07	0.11	0.42	0.43	0.43	0.43	0.21	0.04
2015	NaN	NaN	NaN	NaN	0.06	NaN	NaN					

**Table I–1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.31	0.05	0.03
2004	NaN	NaN	NaN	NaN	NaN	0.07	0.42	0.42	0.42	0.41	0.04	NaN
2005	NaN	NaN	NaN	NaN	0.02	0.06	0.13	0.42	0.42	0.11	0.04	0.03
2006	NaN	NaN	NaN	NaN	NaN	0.08	0.42	0.42	0.42	0.30	0.04	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.06	0.21	0.40	0.40	0.14	0.05	0.03
2008	NaN	NaN	NaN	NaN	0.02	0.07	0.41	0.41	0.41	0.20	0.04	0.03
2009	NaN	NaN	NaN	NaN	0.04	0.08	0.40	0.41	0.41	0.12	0.04	0.03
2010	NaN	NaN	NaN	NaN	0.03	0.06	0.12	0.42	0.42	0.28	0.08	0.03
2011	NaN	NaN	NaN	NaN	0.03	NaN	NaN	NaN	0.41	0.20	0.04	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.07	0.30	NaN	0.41	0.41	0.05	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.07	0.42	0.43	0.43	0.42	0.07	0.04
2014	NaN	NaN	NaN	NaN	0.03	0.07	0.17	0.43	0.43	0.43	0.07	0.03
2015	NaN	NaN	NaN	NaN	0.03	NaN	NaN					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.30	0.05
2004	NaN	NaN	NaN	NaN	NaN	0.42	0.42	0.42	0.42	0.42	0.40	NaN
2005	NaN	NaN	NaN	NaN	0.06	0.13	0.42	0.42	0.42	0.42	0.11	0.04
2006	NaN	NaN	NaN	NaN	NaN	0.42	0.42	0.42	0.42	0.42	0.29	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.21	0.40	0.40	0.40	0.40	0.14	0.05
2008	NaN	NaN	NaN	NaN	0.07	0.41	0.41	0.41	0.41	0.41	0.20	0.04
2009	NaN	NaN	NaN	NaN	0.09	0.41	0.42	0.42	0.42	0.42	0.12	0.04
2010	NaN	NaN	NaN	NaN	0.06	0.12	0.43	0.43	0.43	0.43	0.28	0.08
2011	NaN	NaN	NaN	NaN	0.09	NaN	NaN	NaN	0.42	0.42	0.20	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.28	0.40	NaN	0.42	0.42	0.41	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.43	0.43	0.43	0.43	0.43	0.42	0.07
2014	NaN	NaN	NaN	NaN	0.08	0.17	0.43	0.43	0.43	0.43	0.43	0.07
2015	NaN	NaN	NaN	NaN	0.10	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	0.01	-0.02	-0.00
2004	NaN	NaN	NaN	NaN	NaN	0.03	0.02	0.00	0.00	0.03	-0.03	NaN
2005	NaN	NaN	NaN	NaN	-0.02	-0.06	-0.05	0.00	0.00	-0.08	-0.07	-0.01
2006	NaN	NaN	NaN	NaN	NaN	0.02	0.02	0.00	-0.00	0.03	-0.02	NaN
2007	NaN	NaN	NaN	NaN	NaN	-0.04	-0.01	-0.02	-0.01	-0.08	-0.04	-0.00
2008	NaN	NaN	NaN	NaN	-0.01	0.07	0.01	-0.01	-0.01	-0.01	-0.04	-0.00
2009	NaN	NaN	NaN	NaN	0.01	0.11	0.01	-0.00	-0.00	-0.06	-0.06	-0.00
2010	NaN	NaN	NaN	NaN	-0.01	-0.06	-0.06	0.01	0.01	0.03	0.01	0.01
2011	NaN	NaN	NaN	NaN	-0.00	NaN	NaN	NaN	-0.00	0.02	-0.04	NaN
2012	NaN	NaN	NaN	NaN	NaN	-0.05	0.00	NaN	0.00	0.03	0.10	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.03	0.03	0.01	0.01	0.04	0.09	0.01
2014	NaN	NaN	NaN	NaN	0.02	-0.05	0.03	0.01	0.01	0.04	0.09	0.00
2015	NaN	NaN	NaN	NaN	0.01	NaN	NaN					

**Table I-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	45.16	0.00	0.00	0.00	90.32	100.00	100.00	100.00	100.00	100.00	100.00	19.35
2005	19.35	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	48.39	17.86	0.00	0.00	80.65	100.00	100.00	100.00	100.00	100.00	100.00	80.65
2007	0.00	0.00	0.00	30.00	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	19.35	0.00	0.00	36.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	16.13	0.00	0.00	13.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	22.58	0.00	0.00	36.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	61.29	3.57	9.68	13.33	96.77	0.00	0.00	87.10	100.00	100.00	100.00	58.06
2012	0.00	0.00	0.00	3.33	77.42	100.00	100.00	87.10	100.00	100.00	100.00	70.97
2013	3.23	0.00	0.00	3.33	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	74.19	39.29	0.00	53.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	58.06	17.86	16.13	63.33	96.77	0.00	0.00					

**Table I-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table I-24.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
 Variable: Air temperature, in degrees Celsius  
 File name: AK109\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-7.42	NaN	2003	NaN	NaN	NaN	-37.79	NaN
2004	-28.58	-16.91	8.62	-7.57	-11.07	2004	-46.66	-46.32	-2.56	-32.43	-46.66
2005	-25.20	-15.26	5.91	-9.22	-10.63	2005	-39.90	-36.76	-6.29	-39.16	-39.90
2006	-23.97	-18.29	6.06	-5.61	-10.34	2006	-48.94	-44.27	-5.61	-29.02	-48.94
2007	-25.51	-16.74	8.45	-5.07	-9.64	2007	-43.98	-41.81	-4.08	-28.26	-43.98
2008	-26.90	-15.88	6.49	-8.10	-10.83	2008	-45.45	-42.03	-5.34	-32.65	-45.45
2009	-24.84	-16.05	7.28	-7.72	-10.48	2009	-46.47	-40.78	-1.35	-36.68	-46.47
2010	-25.25	-14.96	6.85	-4.84	-9.87	2010	-44.78	-44.31	-1.67	-29.04	-44.78
2011	-24.18	-15.89	NaN	-8.20	NaN	2011	-43.82	-36.79	NaN	-38.33	NaN
2012	-28.49	-18.35	8.64	-6.25	-11.30	2012	-48.07	-41.06	-1.74	-31.27	-48.07
2013	-27.93	-15.90	7.95	-6.55	-10.09	2013	-41.84	-37.53	-5.44	-31.78	-41.84
2014	-22.66	-13.29	5.26	-6.21	-9.36	2014	-43.65	-40.71	-3.90	-27.12	-43.65
2015	-23.90	-13.79				2015	-40.92	-41.20			

**Table I–2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	9.64	NaN
2004	-1.67	7.96	25.17	11.11	25.17
2005	0.94	2.01	24.62	10.27	24.62
2006	2.47	5.28	22.71	18.13	22.71
2007	-1.74	2.44	25.68	16.98	25.68
2008	1.76	7.45	25.61	5.46	25.61
2009	-1.90	9.81	27.09	15.18	27.09
2010	-1.32	6.94	21.84	16.75	21.84
2011	0.03	6.66	NaN	13.07	NaN
2012	-9.04	4.98	22.91	8.60	22.91
2013	-12.39	4.88	24.03	12.61	24.03
2014	0.72	5.70	19.31	11.79	19.31
2015	-0.62	14.37			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	98.91	29.35	100.00	81.92
2012	100.00	100.00	95.65	100.00	98.91
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	96.74			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-0.52	NaN
2004	-2.96	-0.97	1.47	-0.67	-0.71
2005	0.42	0.68	-1.24	-2.32	-0.26
2006	1.65	-2.35	-1.09	1.28	0.02
2007	0.11	-0.79	1.30	1.83	0.72
2008	-1.28	0.06	-0.66	-1.20	-0.47
2009	0.78	-0.11	0.13	-0.82	-0.12
2010	0.36	0.98	-0.30	2.05	0.49
2011	1.44	0.05	NaN	-1.31	NaN
2012	-2.88	-2.40	1.49	0.65	-0.94
2013	-2.31	0.04	0.80	0.34	0.27
2014	2.96	2.65	-1.89	0.68	1.00
2015	1.71	2.16			



**Table I-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
 Variable: Wind speed, in meters per second  
 File name: AK109\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	3.99	NaN
2004	NaN	4.77	4.04	4.90	NaN
2005	NaN	4.85	4.37	3.93	4.28
2006	NaN	NaN	NaN	3.89	NaN
2007	NaN	3.87	4.05	NaN	NaN
2008	NaN	NaN	3.62	3.79	NaN
2009	3.86	NaN	4.37	3.51	NaN
2010	NaN	4.36	4.42	NaN	NaN
2011	NaN	NaN	NaN	3.84	NaN
2012	3.66	NaN	4.05	3.35	3.59
2013	NaN	4.50	3.68	NaN	NaN
2014	NaN	3.82	4.07	4.66	4.28
2015	4.15	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.00	NaN
2004	NaN	0.41	-0.04	0.91	NaN
2005	NaN	0.49	0.29	-0.05	NaN
2006	NaN	NaN	NaN	-0.10	NaN
2007	NaN	-0.49	-0.02	NaN	NaN
2008	NaN	NaN	-0.46	-0.20	NaN
2009	NaN	NaN	0.29	-0.47	NaN
2010	NaN	0.00	0.35	NaN	NaN
2011	NaN	NaN	NaN	-0.14	NaN
2012	NaN	NaN	-0.02	-0.64	NaN
2013	NaN	0.14	-0.39	NaN	NaN
2014	NaN	-0.55	-0.01	0.67	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	11.06	NaN
2004	NaN	15.53	12.04	14.74	NaN
2005	NaN	16.25	12.62	10.39	16.25
2006	NaN	NaN	NaN	16.08	NaN
2007	NaN	14.72	10.18	NaN	NaN
2008	NaN	NaN	10.86	12.24	NaN
2009	15.79	NaN	10.05	12.36	NaN
2010	NaN	10.90	12.78	NaN	NaN
2011	NaN	NaN	NaN	12.31	NaN
2012	14.70	NaN	9.78	10.86	12.01
2013	NaN	15.14	10.37	NaN	NaN
2014	NaN	13.07	11.91	15.38	15.38
2015	15.49	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	97.80	0.00
2004	68.13	98.91	100.00	100.00	89.07
2005	68.89	100.00	100.00	100.00	97.81
2006	47.78	22.83	14.13	97.80	44.93
2007	87.78	100.00	100.00	83.52	93.42
2008	93.41	89.13	100.00	95.60	94.54
2009	100.00	75.00	100.00	97.80	89.86
2010	85.56	100.00	100.00	93.41	93.15
2011	57.78	90.22	29.35	98.90	73.97
2012	97.80	92.39	95.65	97.80	95.08
2013	88.89	100.00	100.00	94.51	92.60
2014	68.89	96.74	100.00	100.00	95.62
2015	100.00	92.39			

**Table I–2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Ground temperature, in degrees Celsius

File name: AK109\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-1.28	NaN
2004	-14.58	-14.35	3.06	-1.63	-7.26
2005	-17.92	-14.96	2.88	-2.55	-7.72
2006	-13.80	-14.23	2.31	-0.96	-6.60
2007	-16.27	-15.63	3.00	-0.57	-7.17
2008	-14.01	-13.16	2.78	-1.06	-6.36
2009	-13.88	-12.70	2.77	-1.64	-6.38
2010	-13.95	-13.71	2.18	0.16	-6.16
2011	-11.88	NaN	NaN	-1.29	NaN
2012	-17.12	-15.38	2.96	-0.40	-7.50
2013	-16.44	-14.38	2.95	-0.37	-6.56
2014	-12.19	-10.69	1.95	-0.37	-5.59
2015	-13.56	NaN			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-9.03	NaN
2004	-19.50	-19.57	-2.35	-11.52	-20.16
2005	-22.82	-21.57	-2.19	-11.61	-22.82
2006	-18.45	-19.77	-1.34	-10.25	-19.77
2007	-23.98	-25.54	-1.28	-6.85	-25.54
2008	-19.13	-19.14	-0.56	-8.59	-19.14
2009	-20.16	-21.38	-0.43	-10.37	-21.38
2010	-19.87	-20.37	-1.38	-2.90	-20.37
2011	-17.11	NaN	NaN	-11.54	NaN
2012	-24.25	-22.62	-0.80	-6.24	-24.25
2013	-22.29	-19.94	-1.39	-4.27	-22.29
2014	-19.15	-19.78	-2.37	-5.00	-19.78
2015	-19.72	NaN			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	1.75	NaN
2004	-9.03	-2.42	9.92	5.60	9.92
2005	-9.93	-1.76	9.26	3.00	9.26
2006	-11.10	-0.80	7.56	4.44	7.56
2007	-6.75	-0.68	7.78	4.90	7.78
2008	-6.04	-0.40	8.21	2.07	8.21
2009	-7.67	-0.35	8.17	4.13	8.17
2010	-7.94	-0.90	7.03	5.05	7.03
2011	-2.86	NaN	NaN	4.57	NaN
2012	-10.00	-0.49	7.41	3.89	7.41
2013	-5.48	-0.92	7.30	3.29	7.30
2014	-2.90	-0.63	5.55	1.76	5.55
2015	-5.03	NaN			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-0.28	NaN
2004	0.05	-0.43	0.37	-0.63	-0.53
2005	-3.29	-1.04	0.20	-1.55	-0.99
2006	0.83	-0.31	-0.38	0.04	0.13
2007	-1.64	-1.71	0.32	0.43	-0.44
2008	0.62	0.76	0.09	-0.07	0.37
2009	0.76	1.22	0.08	-0.65	0.35
2010	0.68	0.21	-0.51	1.16	0.57
2011	2.76	NaN	NaN	-0.29	NaN
2012	-2.48	-1.46	0.28	0.60	-0.77
2013	-1.81	-0.46	0.27	0.63	0.17
2014	2.44	3.23	-0.73	0.62	1.14
2015	1.08	NaN			

**Table I-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	89.13	0.00	63.93
2005	0.00	0.00	28.26	100.00	40.55
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	73.91	21.74	100.00	73.70
2012	100.00	100.00	95.65	100.00	98.91
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	75.00			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-1.79	NaN
2004	-4.77	-7.94	-1.92	-1.50	-1.50
2005	-5.42	-9.47	-2.13	-1.66	-1.66
2006	-6.93	-7.41	-1.98	-1.49	-1.49
2007	-4.89	-8.98	-2.04	-1.59	-1.59
2008	-3.47	-7.39	-1.84	-1.49	-1.49
2009	-4.03	-5.51	-1.76	-1.36	-1.36
2010	-5.49	-8.74	-1.93	-1.40	-1.40
2011	-1.81	NaN	NaN	-1.33	NaN
2012	-4.88	-7.46	-1.89	-1.37	-1.37
2013	-2.56	-7.89	-1.76	-1.32	-1.32
2014	-1.81	-4.89	-1.58	-1.21	-1.21
2015	-1.74	NaN			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-2.23	NaN
2004	-10.42	-13.87	-3.76	-1.99	-7.69
2005	-12.65	-14.55	-4.17	-2.60	-8.40
2006	-10.59	-13.58	-3.62	-1.87	-7.26
2007	-11.10	-14.90	-3.93	-1.88	-7.84
2008	-9.59	-12.92	-3.45	-1.83	-7.01
2009	-9.66	-12.83	-3.02	-1.95	-6.92
2010	-10.17	-13.09	-3.79	-1.60	-6.95
2011	-8.15	NaN	NaN	-1.71	NaN
2012	-11.85	-14.94	-3.70	-1.62	-7.96
2013	-10.79	-14.03	-3.55	-1.55	-7.25
2014	-7.95	-11.07	-2.77	-1.42	-5.92
2015	-8.87	NaN			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.37	NaN
2004	-0.27	-0.29	-0.18	-0.14	-0.37
2005	-2.50	-0.98	-0.60	-0.74	-1.08
2006	-0.44	-0.00	-0.04	-0.02	0.06
2007	-0.95	-1.32	-0.35	-0.03	-0.52
2008	0.56	0.66	0.12	0.02	0.31
2009	0.49	0.75	0.56	-0.09	0.40
2010	-0.02	0.49	-0.22	0.25	0.37
2011	2.00	NaN	NaN	0.15	NaN
2012	-1.70	-1.37	-0.13	0.23	-0.64
2013	-0.64	-0.45	0.03	0.30	0.07
2014	2.20	2.51	0.81	0.43	1.40
2015	1.28	NaN			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-4.82	NaN
2004	-14.65	-15.52	-7.96	-5.41	-15.52
2005	-15.89	-16.82	-9.44	-7.00	-16.82
2006	-13.21	-15.46	-7.41	-4.89	-15.46
2007	-16.13	-18.24	-8.97	-3.47	-18.24
2008	-13.46	-15.28	-7.40	-4.05	-15.28
2009	-13.86	-16.22	-5.54	-5.49	-16.22
2010	-13.45	-14.92	-8.74	-2.00	-14.92
2011	-11.77	NaN	NaN	-4.90	NaN
2012	-16.05	-17.93	-7.50	-2.56	-17.93
2013	-15.93	-15.91	-7.88	-1.86	-15.93
2014	-12.87	-13.71	-4.95	-1.76	-13.71
2015	-13.19	NaN			

**Table I-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	89.13	0.00	63.93
2005	0.00	0.00	28.26	100.00	40.55
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	73.91	21.74	100.00	73.70
2012	100.00	100.00	95.65	100.00	98.91
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	75.00			

**Table I-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Incident solar flux, in watts per meter squared

File name: AK109\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	25.4	NaN
2004	NaN	NaN	182.0	26.1	95.2
2005	4.5	NaN	191.0	20.4	92.9
2006	NaN	147.3	167.0	26.8	87.9
2007	1.9	NaN	214.1	27.9	NaN
2008	NaN	NaN	174.1	24.5	87.2
2009	3.9	NaN	169.1	23.5	87.0
2010	2.1	NaN	176.3	NaN	NaN
2011	3.6	NaN	NaN	25.1	NaN
2012	NaN	NaN	177.8	23.3	NaN
2013	2.4	149.0	161.9	24.0	84.9
2014	3.3	116.8	151.5	23.9	74.9
2015	3.2	127.4			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.7	NaN
2004	NaN	NaN	5.5	1.5	8.1
2005	1.4	NaN	14.5	-4.2	5.8
2006	NaN	NaN	-9.5	2.2	0.8
2007	-1.2	NaN	37.6	3.3	NaN
2008	NaN	NaN	-2.3	-0.1	0.1
2009	0.8	NaN	-7.4	-1.2	-0.2
2010	-1.1	NaN	-0.2	NaN	NaN
2011	0.5	NaN	NaN	0.5	NaN
2012	NaN	NaN	1.4	-1.4	NaN
2013	-0.7	NaN	-14.6	-0.6	-2.3
2014	0.1	NaN	-25.0	-0.7	-12.2
2015	0.1	NaN			

**Table I-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	97.8	0.0
2004	81.3	93.5	100.0	100.0	95.4
2005	100.0	92.4	97.8	95.6	96.2
2006	93.3	96.7	100.0	97.8	97.3
2007	95.6	68.5	100.0	97.8	88.8
2008	93.4	88.0	100.0	100.0	97.0
2009	98.9	94.6	100.0	98.9	98.1
2010	100.0	93.5	100.0	80.2	93.4
2011	100.0	82.6	27.2	98.9	77.0
2012	93.4	89.1	95.7	100.0	94.5
2013	100.0	100.0	98.9	98.9	99.5
2014	97.8	100.0	100.0	98.9	99.2
2015	100.0	96.7			

**Table I-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Reflected solar flux, in watts per meter squared

File name: AK109\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	45.7	NaN	NaN	2004	NaN	NaN	-1.4	NaN	NaN
2005	NaN	NaN	58.6	NaN	NaN	2005	NaN	NaN	11.5	NaN	NaN
2006	NaN	NaN	42.5	10.0	NaN	2006	NaN	NaN	-4.6	-2.4	NaN
2007	NaN	NaN	58.3	14.5	NaN	2007	NaN	NaN	11.2	2.1	NaN
2008	NaN	130.0	49.8	14.1	NaN	2008	NaN	3.8	2.7	1.7	NaN
2009	NaN	NaN	47.3	NaN	NaN	2009	NaN	NaN	0.1	NaN	NaN
2010	NaN	141.8	49.9	15.0	53.7	2010	NaN	15.5	2.7	2.5	NaN
2011	3.6	140.8	NaN	10.2	NaN	2011	0.0	14.6	NaN	-2.2	NaN
2012	4.1	136.0	41.7	7.9	47.7	2012	0.5	9.8	-5.5	-4.5	NaN
2013	2.8	134.0	38.6	14.2	47.7	2013	-0.8	7.7	-8.6	1.8	NaN
2014	4.0	94.7	39.0	13.7	38.4	2014	0.3	-31.5	-8.2	1.2	NaN
2015	3.5	106.4				2015	-0.1	-19.9			

**Table I–2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	94.5	0.0
2004	9.9	63.0	100.0	84.6	67.5
2005	60.0	73.9	100.0	85.7	78.6
2006	35.6	47.8	100.0	100.0	73.7
2007	37.8	75.0	100.0	100.0	78.4
2008	78.0	96.7	100.0	96.7	90.7
2009	38.9	94.6	100.0	84.6	83.8
2010	84.4	95.7	100.0	100.0	95.9
2011	100.0	97.8	29.3	100.0	81.6
2012	100.0	100.0	95.7	100.0	98.9
2013	100.0	100.0	100.0	100.0	100.0
2014	97.8	100.0	100.0	98.9	99.2
2015	100.0	96.7			

**Table I–2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade

Variable: Rainfall, in millimeters per hour

File name: AK109\_rain\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	1.5	NaN	2007	NaN	NaN	NaN	15.5	NaN
2008	0.0	NaN	1.5	0.8	1.5	2008	0.0	NaN	56.4	8.6	65.0
2009	0.0	0.0	3.3	0.8	3.3	2009	0.0	0.0	68.1	7.6	75.7
2010	0.0	NaN	NaN	1.3	NaN	2010	0.0	NaN	NaN	6.9	NaN
2011	0.0	0.0	NaN	1.0	NaN	2011	0.0	0.0	NaN	24.6	NaN
2012	0.0	0.0	1.0	2.8	2.8	2012	0.0	0.0	6.6	41.4	48.0
2013	0.0	0.0	4.1	2.5	4.1	2013	0.0	0.0	119.4	18.8	138.2
2014	0.0	NaN	2.8	1.3	2.8	2014	0.0	NaN	76.7	28.4	105.2
2015	0.0	0.0				2015	0.0	0.0			

**Table I-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	31.5	100.0	41.4
2008	100.0	94.6	95.7	100.0	97.5
2009	100.0	95.7	100.0	100.0	98.9
2010	100.0	92.4	55.4	100.0	86.8
2011	100.0	98.9	29.3	100.0	81.9
2012	100.0	97.8	95.7	98.9	98.1
2013	100.0	96.7	98.9	97.8	98.4
2014	100.0	92.4	97.8	100.0	97.5
2015	100.0	95.7			

**Table I-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: South Meade

Variable: Snow depth, in centimeters

File name: AK109\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	8.7	NaN	2003	NaN	NaN	NaN	-1.7	NaN
2004	27.7	37.5	3.3	8.1	18.2	2004	14.5	23.9	-0.6	0.1	-0.6
2005	11.9	20.5	5.9	11.7	13.2	2005	8.9	14.6	-1.0	7.2	-1.0
2006	22.6	28.0	NaN	4.6	14.2	2006	12.9	-1.2	NaN	-0.9	-1.8
2007	13.9	22.3	NaN	5.5	13.9	2007	1.4	17.6	NaN	-0.5	-0.5
2008	20.8	25.5	NaN	9.5	NaN	2008	13.0	10.0	NaN	-0.6	NaN
2009	18.8	16.4	3.3	6.1	11.8	2009	8.7	-1.2	-1.9	0.1	-1.9
2010	22.2	39.8	8.7	8.4	19.7	2010	14.1	19.1	-0.6	0.8	-0.6
2011	25.5	28.0	NaN	10.4	NaN	2011	12.3	-2.3	NaN	-2.1	NaN
2012	NaN	NaN	5.3	8.0	NaN	2012	NaN	NaN	-1.4	-0.8	NaN
2013	20.2	32.6	6.1	14.9	19.3	2013	7.8	-3.3	-11.5	7.2	-11.5
2014	26.9	23.6	8.8	16.2	19.3	2014	18.0	-1.2	-1.2	-0.7	-1.2
2015	32.7	33.0				2015	26.2	-3.5			

**Table I–2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	17.9	NaN
2004	36.3	44.5	23.9	15.0	44.5
2005	18.8	35.0	19.6	17.8	35.0
2006	29.3	38.1	NaN	9.8	38.1
2007	34.7	28.3	NaN	17.1	34.7
2008	27.3	36.8	NaN	23.6	NaN
2009	30.5	26.2	11.0	20.9	30.7
2010	30.7	47.2	35.8	22.1	47.2
2011	29.7	34.4	NaN	21.2	NaN
2012	NaN	NaN	24.0	16.1	NaN
2013	31.2	41.0	13.2	31.5	41.0
2014	38.6	39.3	13.7	31.9	39.3
2015	47.4	45.7			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	0.0	0.0	0.0	84.6	0.0
2004	96.7	98.9	90.2	98.9	96.7
2005	86.7	98.9	100.0	100.0	96.4
2006	100.0	100.0	75.0	100.0	93.7
2007	100.0	100.0	43.5	100.0	85.8
2008	100.0	100.0	18.5	86.8	76.2
2009	100.0	98.9	100.0	100.0	99.7
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	30.4	83.5	72.3
2012	26.4	37.0	83.7	100.0	67.8
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	95.7			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-0.6	NaN
2004	5.6	9.6	-2.6	-1.2	2.0
2005	-10.2	-7.5	-0.1	2.3	-3.0
2006	0.5	0.1	NaN	-4.7	-2.0
2007	-8.2	-5.6	NaN	-3.8	-2.3
2008	-1.3	-2.4	NaN	0.2	NaN
2009	-3.3	-11.5	-2.6	-3.2	-4.4
2010	0.0	11.9	2.7	-1.0	3.5
2011	3.3	0.1	NaN	1.1	NaN
2012	NaN	NaN	-0.6	-1.3	NaN
2013	-1.9	4.7	0.2	5.5	3.1
2014	4.8	-4.3	2.9	6.8	3.1
2015	10.6	5.1			



**Table I-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: South Meade  
Variable: Soil moisture, in water fraction by volume

File name: AK109\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2003	NaN	NaN	NaN	0.31	NaN
2004	NaN	NaN	0.34	0.31	NaN
2005	NaN	NaN	0.29	0.26	NaN
2006	NaN	NaN	0.34	0.31	NaN
2007	NaN	NaN	0.30	0.27	NaN
2008	NaN	NaN	0.35	0.29	NaN
2009	NaN	NaN	0.36	0.27	NaN
2010	NaN	NaN	0.29	0.33	NaN
2011	NaN	NaN	NaN	0.30	NaN
2012	NaN	NaN	0.30	0.35	NaN
2013	NaN	NaN	0.35	0.36	NaN
2014	NaN	NaN	0.32	0.36	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2003	NaN	NaN	NaN	0.41	NaN
2004	NaN	NaN	0.42	0.42	NaN
2005	NaN	NaN	0.42	0.42	NaN
2006	NaN	NaN	0.42	0.42	NaN
2007	NaN	NaN	0.40	0.40	NaN
2008	NaN	NaN	0.41	0.41	NaN
2009	NaN	NaN	0.42	0.42	NaN
2010	NaN	NaN	0.43	0.43	NaN
2011	NaN	NaN	NaN	0.42	NaN
2012	NaN	NaN	0.41	0.42	NaN
2013	NaN	NaN	0.43	0.43	NaN
2014	NaN	NaN	0.43	0.43	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2003	NaN	NaN	NaN	0.05	NaN
2004	NaN	NaN	0.07	0.04	NaN
2005	NaN	NaN	0.06	0.04	NaN
2006	NaN	NaN	0.08	0.04	NaN
2007	NaN	NaN	0.06	0.05	NaN
2008	NaN	NaN	0.07	0.04	NaN
2009	NaN	NaN	0.08	0.04	NaN
2010	NaN	NaN	0.06	0.08	NaN
2011	NaN	NaN	NaN	0.04	NaN
2012	NaN	NaN	0.07	0.05	NaN
2013	NaN	NaN	0.07	0.07	NaN
2014	NaN	NaN	0.07	0.07	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2003	NaN	NaN	NaN	-0.00	NaN
2004	NaN	NaN	0.02	0.00	NaN
2005	NaN	NaN	-0.04	-0.05	NaN
2006	NaN	NaN	0.01	0.00	NaN
2007	NaN	NaN	-0.02	-0.04	NaN
2008	NaN	NaN	0.02	-0.02	NaN
2009	NaN	NaN	0.04	-0.04	NaN
2010	NaN	NaN	-0.04	0.02	NaN
2011	NaN	NaN	NaN	-0.01	NaN
2012	NaN	NaN	-0.02	0.04	NaN
2013	NaN	NaN	0.02	0.05	NaN
2014	NaN	NaN	-0.00	0.05	NaN
2015	NaN	NaN			

**Table I–2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	49.45	30.43	100.00	100.00	63.11
2005	13.33	33.70	100.00	100.00	68.77
2006	56.67	27.17	100.00	100.00	69.32
2007	27.78	41.30	100.00	100.00	69.04
2008	40.66	45.65	100.00	100.00	71.58
2009	40.00	38.04	100.00	100.00	69.59
2010	42.22	45.65	100.00	100.00	72.05
2011	56.67	40.22	29.35	100.00	52.88
2012	19.78	27.17	95.65	100.00	61.75
2013	25.56	32.61	100.00	100.00	67.12
2014	72.22	51.09	100.00	100.00	80.82
2015	60.00	58.70			

**Table I–2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## J. Awuna2

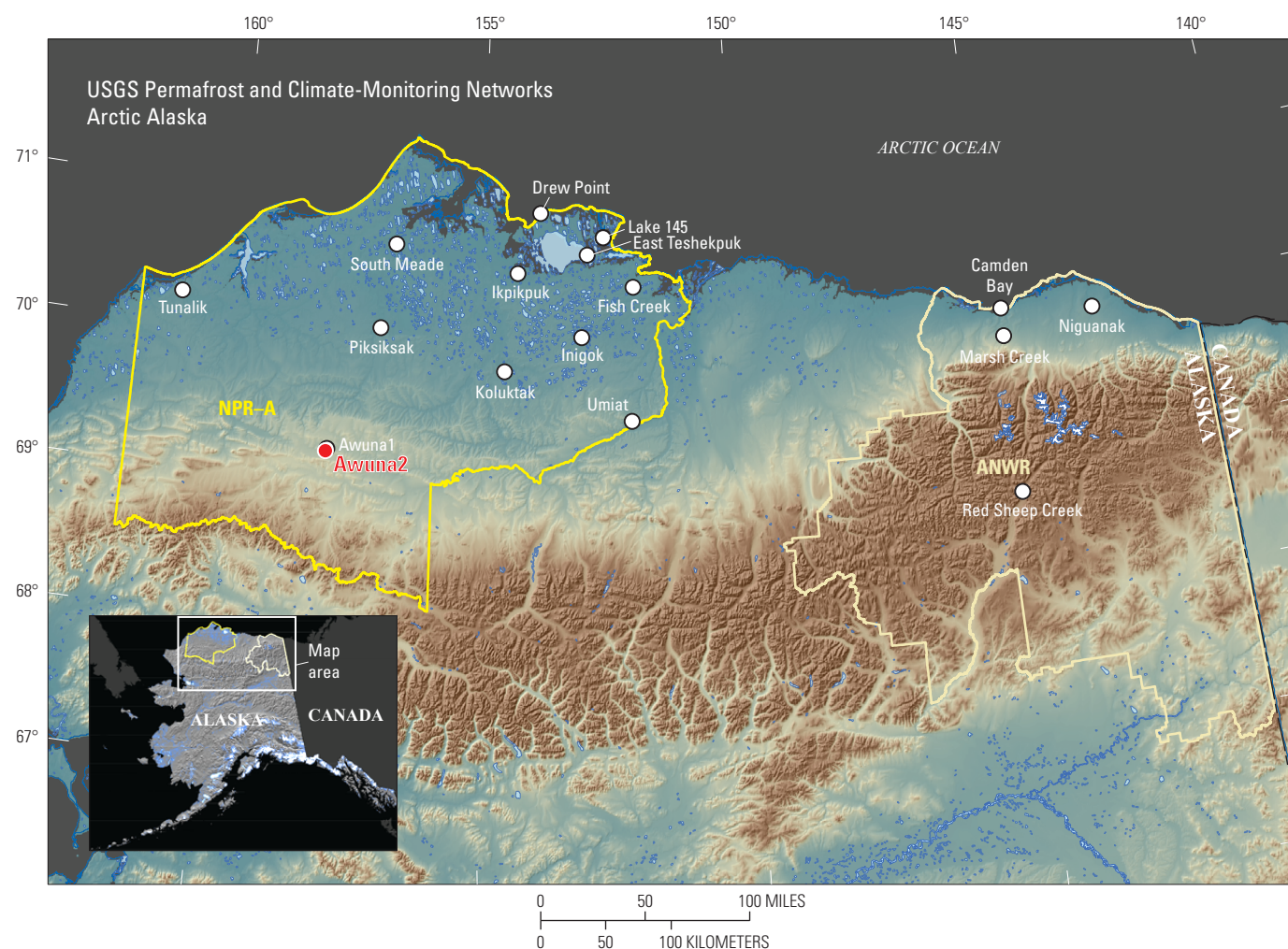
GTN-P code: U35

Latitude: 69°09.331'N

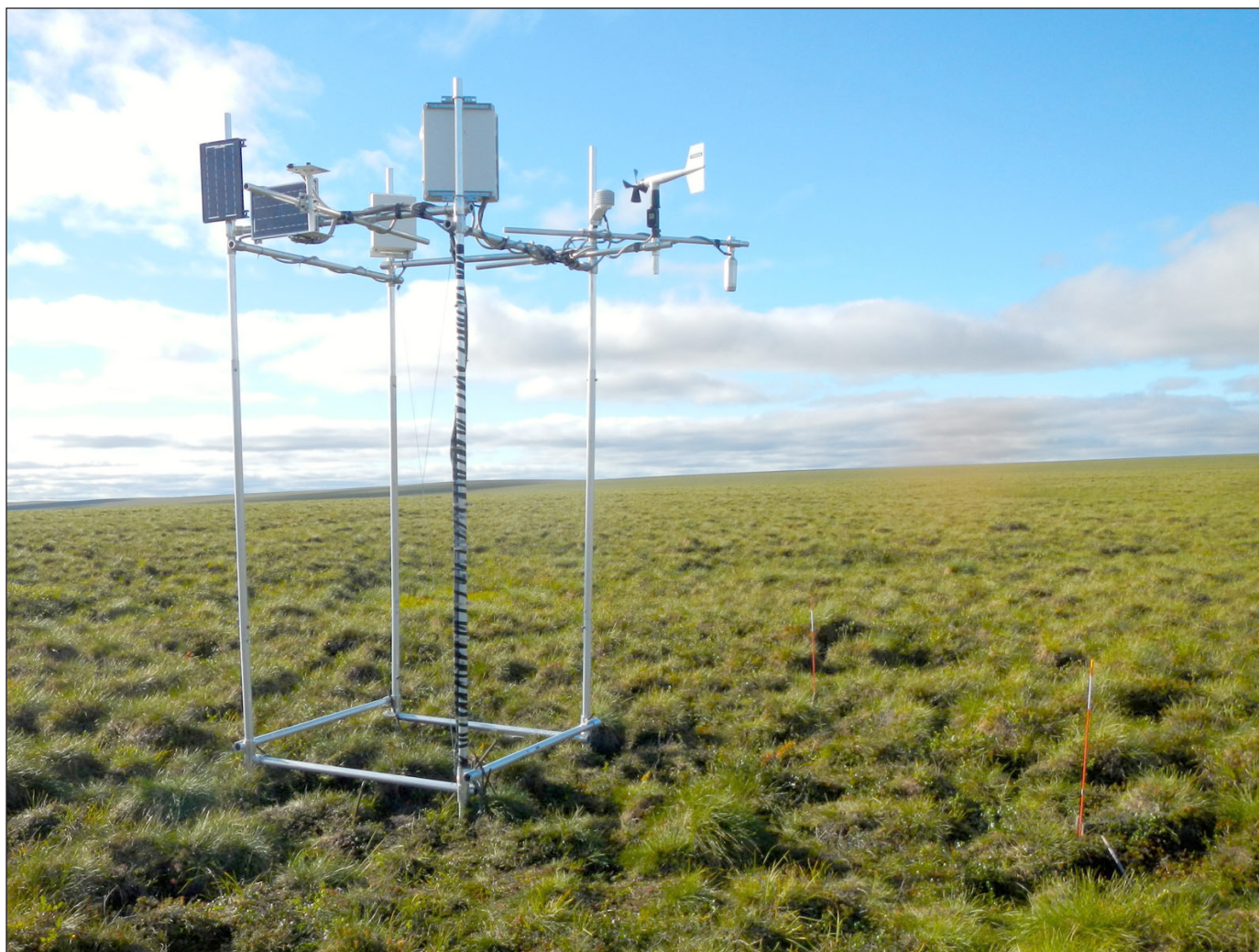
Longitude: 158°01.827'W

Elevation: 343 meters above mean sea level

Installation date: 22 AUG 2003



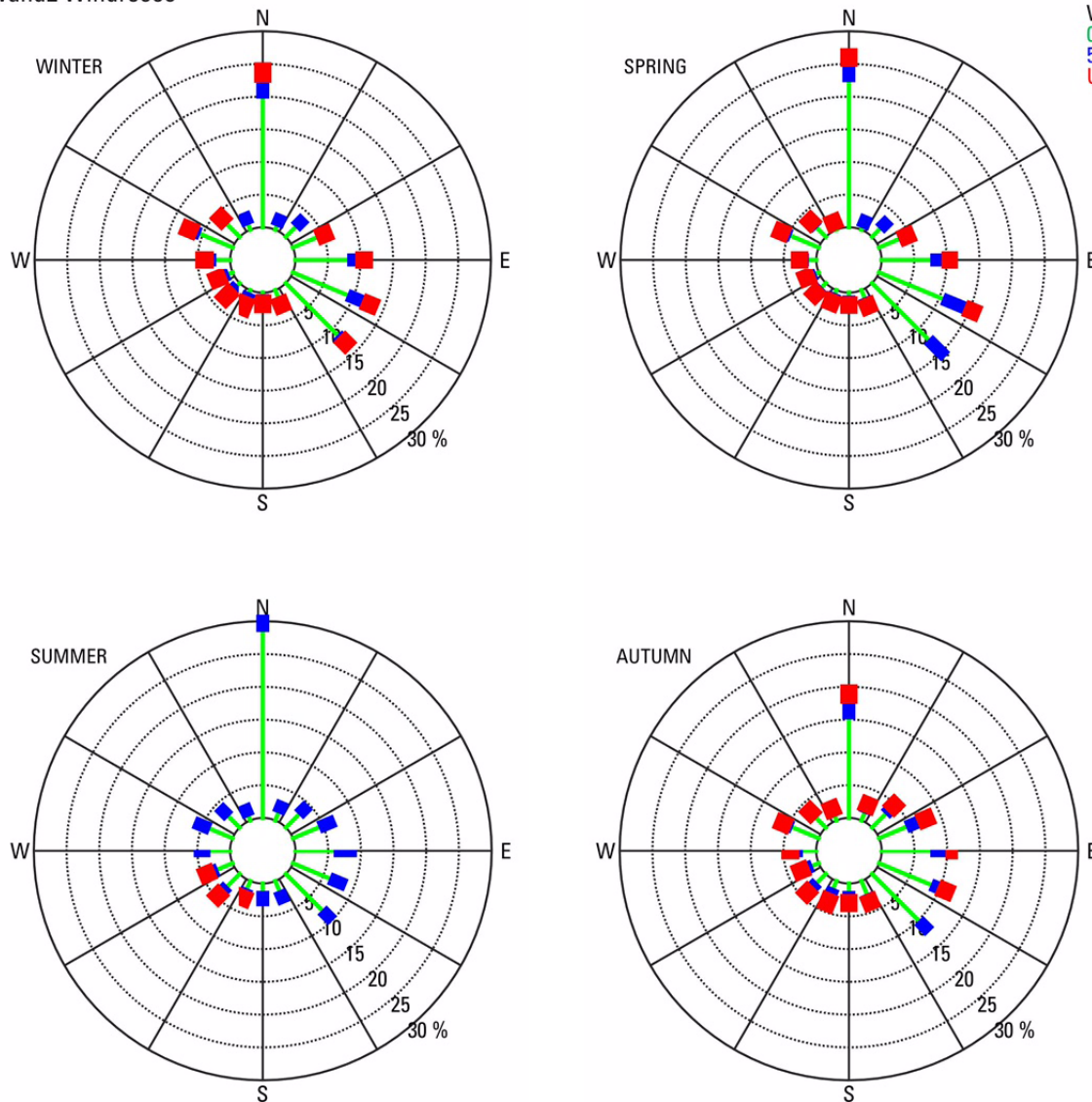
**Figure J-1.** Location map presenting the specific location of the Awuna2 site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure J–2.** Awuna2 station in summer 2008.



Awuna2 Windroses



**Figure J-3.** Awuna2 seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories ( $22.5^\circ$  each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table J–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Air temperature, in degrees Celsius

File name: AK111\_Tair\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.39	-5.27	-16.27	-24.02
2004	-27.89	-34.57	-27.17	-15.53	-0.83	11.70	13.15	10.58	-1.65	-8.32	-17.70	-26.44
2005	-22.49	-27.09	-22.83	-16.90	-3.94	NaN	NaN	NaN	1.78	-9.75	-25.25	-24.17
2006	-28.86	-19.84	-27.34	-21.47	-3.50	7.15	9.83	5.06	4.19	-5.57	-16.53	-22.44
2007	-27.85	-27.14	-30.59	-13.09	-6.06	NaN	14.13	10.73	3.25	-11.32	NaN	NaN
2008	-29.31	-27.61	-29.52	-12.02	-3.39	8.81	NaN	NaN	-1.13	-9.78	-19.52	-18.10
2009	-27.10	-25.96	-28.78	-14.79	-0.46	8.20	12.42	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.87	-9.70	-12.84	-24.73
2011	-21.76	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.01	-8.21	-22.92	-25.78
2012	-31.69	-23.03	-32.70	-14.98	-5.11	9.81	12.07	8.79	0.32	-4.72	-20.17	-26.86
2013	-27.07	-33.11	-22.11	-18.91	-5.25	10.98	11.88	6.31	-1.32	-5.33	-15.79	-19.56
2014	-19.31	-22.21	-20.47	-12.27	-1.23	6.45	8.92	6.65	1.03	-7.72	-14.00	-23.91
2015	-23.09	-18.92	-23.30	-14.85	2.20	9.36	10.25					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-13.98	-23.31	-37.15	-37.24
2004	-45.54	-46.56	-43.79	-35.16	-18.47	-1.94	1.68	-2.65	-14.38	-26.28	-32.62	-42.05
2005	-39.57	-38.29	-42.05	-35.97	-12.71	NaN	NaN	NaN	-8.28	-28.77	-39.88	-42.29
2006	-43.28	-47.37	-39.88	-35.49	-24.71	-7.53	-0.88	-4.41	-5.48	-21.95	-35.05	-43.76
2007	-47.47	-47.47	-48.82	-27.57	-17.83	NaN	1.39	-2.01	-11.78	-27.30	NaN	NaN
2008	-47.62	-39.95	-47.12	-30.39	-15.34	-4.44	NaN	NaN	-16.60	-20.50	-32.80	-37.16
2009	-41.19	-43.58	-43.79	-30.19	-17.98	-1.72	-0.55	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-11.39	-21.81	-28.03	-47.46
2011	-45.17	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-8.96	-16.81	-40.22	-40.97
2012	-46.84	-46.16	-44.07	-34.13	-26.52	-0.80	2.09	-0.14	-7.61	-18.23	-33.13	-41.47
2013	-40.52	-42.82	-37.39	-37.27	-28.64	-6.20	1.28	-4.89	-13.61	-21.14	-32.85	-39.92
2014	-41.29	-43.25	-39.02	-32.20	-15.99	-2.19	-1.37	-2.01	-7.34	-21.11	-31.72	-36.85
2015	-37.59	-37.71	-40.28	-30.33	-16.51	-5.05	-0.70					

**Table J-14.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.30	8.76	3.53	-3.30
2004	-3.57	-3.48	-2.48	2.82	17.19	23.88	28.28	24.13	12.15	1.06	0.75	-3.92
2005	-0.76	-3.72	-0.70	11.02	6.55	NaN	NaN	NaN	13.27	2.17	-9.86	-2.41
2006	-12.59	2.01	-13.67	-2.42	10.38	18.21	24.59	18.05	16.09	4.57	-1.62	-3.72
2007	-1.68	-0.05	-2.20	1.14	8.58	NaN	26.36	21.67	16.29	-2.42	NaN	NaN
2008	1.92	-0.65	-2.50	5.37	9.24	19.74	NaN	NaN	15.01	-3.40	-8.78	-1.62
2009	-2.14	-3.06	-5.50	6.38	17.44	17.12	27.74	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	18.18	-1.63	2.19	-7.66
2011	0.75	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.61	0.81	-4.35	-3.54
2012	-8.09	0.44	-13.61	-2.39	7.26	22.14	21.91	19.99	11.75	4.18	-7.24	-7.00
2013	-1.41	-18.56	-2.64	-2.84	6.93	26.89	25.60	21.93	12.06	4.00	1.01	4.00
2014	5.81	0.88	-2.10	3.23	5.84	21.52	21.24	17.84	13.57	1.95	3.88	-4.44
2015	-6.19	1.79	-2.41	2.20	18.55	25.40	26.44					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.03	2.56	1.65	-0.12
2004	-2.34	-9.00	-0.89	-0.20	1.58	2.78	1.57	2.90	-2.29	-0.49	0.22	-2.54
2005	3.06	-1.51	3.45	-1.57	-1.53	NaN	NaN	NaN	1.13	-1.92	-7.32	-0.27
2006	-3.32	5.73	-1.06	-6.14	-1.08	-1.78	-1.76	-2.61	3.55	2.26	1.40	1.46
2007	-2.30	-1.57	-4.31	2.23	-3.64	NaN	2.55	3.06	2.61	-3.50	NaN	NaN
2008	-3.76	-2.04	-3.24	3.30	-0.98	-0.11	NaN	NaN	-1.78	-1.95	-1.60	5.80
2009	-1.55	-0.39	-2.50	0.54	1.96	-0.73	0.84	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.23	-1.88	5.09	-0.83
2011	3.79	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	-0.38	-4.99	-1.88
2012	-6.14	2.55	-6.42	0.34	-2.69	0.88	0.49	1.12	-0.32	3.11	-2.24	-2.96
2013	-1.52	-7.54	4.17	-3.58	-2.83	2.05	0.30	-1.37	-1.96	2.49	2.14	4.34
2014	6.24	3.36	5.81	3.06	1.19	-2.47	-2.66	-1.03	0.39	0.11	3.92	-0.00
2015	2.46	6.65	2.99	0.48	4.61	0.44	-1.33					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	36.67	0.00	64.52	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	83.33	93.55
2008	100.00	100.00	100.00	100.00	100.00	96.67	74.19	90.32	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	96.67	100.00	100.00	100.00	87.10	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.19	100.00	100.00	100.00	100.00
2011	100.00	78.57	0.00	0.00	0.00	0.00	0.00	61.29	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table J-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Wind speed, in meters per second

File name: AK111\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.47	NaN	4.21	NaN
2004	NaN	NaN	3.63	2.95	3.88	3.34	2.83	2.70	4.12	5.12	3.54	NaN
2005	NaN	3.14	3.28	3.51	4.12	NaN	NaN	NaN	3.59	3.17	NaN	NaN
2006	NaN	NaN	2.94	2.93	3.14	3.85	3.42	2.82	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.57	2.74	NaN	NaN	NaN
2008	NaN	2.37	2.81	NaN	4.15	2.62	NaN	NaN	2.38	3.97	NaN	4.10
2009	2.75	4.38	NaN	3.45	3.73	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.63	NaN	NaN	3.56
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.66	3.45	2.58	3.12
2012	NaN	NaN	1.74	2.64	3.20	3.15	2.73	3.49	2.82	3.77	2.36	NaN
2013	NaN	3.13	2.99	3.35	4.07	3.14	3.12	2.67	3.36	NaN	4.32	NaN
2014	NaN	NaN	2.21	3.00	3.59	2.90	2.90	3.32	3.44	4.01	NaN	2.56
2015	2.78	4.19	2.63	3.00	3.16	3.12	3.20					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.69	NaN	18.90	NaN
2004	NaN	NaN	16.75	9.56	9.82	9.43	9.16	8.45	14.65	17.02	10.82	NaN
2005	NaN	11.92	11.42	11.36	9.20	NaN	NaN	NaN	10.91	10.22	NaN	NaN
2006	NaN	NaN	9.82	7.94	10.37	10.49	11.50	7.19	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.51	9.25	NaN	NaN	NaN
2008	NaN	7.60	9.74	NaN	8.54	7.02	NaN	NaN	7.65	12.60	NaN	17.12
2009	19.56	19.10	NaN	21.47	14.05	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.15	NaN	NaN	13.63
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.42	13.32	11.94	10.39
2012	NaN	NaN	6.26	6.77	8.08	8.12	8.18	9.38	7.79	13.43	9.83	NaN
2013	NaN	7.67	9.33	9.82	14.69	8.15	9.21	6.25	10.39	NaN	17.89	NaN
2014	NaN	NaN	8.54	10.10	11.08	6.29	8.24	7.28	10.00	12.27	NaN	14.04
2015	8.76	14.76	8.38	8.43	8.58	7.31	6.97					



**Table J-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.20	NaN	0.81	NaN
2004	NaN	NaN	0.93	-0.20	0.18	0.17	-0.21	-0.27	0.85	1.21	0.14	NaN
2005	NaN	-0.30	0.57	0.37	0.42	NaN	NaN	NaN	0.32	-0.75	NaN	NaN
2006	NaN	NaN	0.23	-0.22	-0.56	0.68	0.39	-0.14	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.39	-0.53	NaN	NaN	NaN
2008	NaN	-1.07	0.11	NaN	0.45	-0.55	NaN	NaN	-0.89	0.06	NaN	NaN
2009	NaN	0.94	NaN	0.31	0.03	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.64	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	-0.47	-0.82	NaN
2012	NaN	NaN	-0.97	-0.51	-0.50	-0.02	-0.31	0.53	-0.45	-0.14	-1.04	NaN
2013	NaN	-0.31	0.29	0.20	0.37	-0.03	0.09	-0.29	0.09	NaN	0.92	NaN
2014	NaN	NaN	-0.49	-0.15	-0.12	-0.27	-0.13	0.36	0.17	0.09	NaN	NaN
2015	NaN	0.75	-0.08	-0.15	-0.54	-0.05	0.17					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	90.32	100.00	87.10
2004	90.32	72.41	100.00	100.00	100.00	100.00	100.00	96.77	100.00	96.77	100.00	38.71
2005	87.10	100.00	100.00	100.00	100.00	36.67	0.00	64.52	100.00	100.00	13.33	74.19
2006	0.00	64.29	100.00	100.00	100.00	100.00	100.00	100.00	90.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	16.13	100.00	100.00	67.74	20.00	77.42
2008	77.42	100.00	100.00	93.33	100.00	100.00	74.19	90.32	96.67	96.77	86.67	100.00
2009	100.00	100.00	93.55	100.00	100.00	13.33	0.00	41.94	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.19	100.00	93.55	86.67	100.00
2011	80.65	78.57	0.00	0.00	0.00	0.00	0.00	61.29	100.00	100.00	96.67	96.77
2012	90.32	51.72	96.77	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.67	90.32
2013	90.32	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	83.87	96.67	90.32
2014	67.74	92.86	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	80.00	100.00
2015	96.77	100.00	100.00	100.00	100.00	100.00	100.00					



**Table J-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.31	0.05	-0.04	-1.20
2004	-6.76	-13.55	-14.30	-12.03	NaN	NaN	NaN	NaN	5.51	0.03	-0.28	-0.90
2005	-3.31	-11.06	-10.72	-9.68	-0.75	10.32	11.21	11.65	5.53	0.02	-1.10	-2.20
2006	-6.94	-9.04	-12.20	-11.73	-0.46	8.99	13.93	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.90	0.18	0.67	-1.46
2004	-1.77	-2.12	-1.81	-0.95	NaN	NaN	NaN	NaN	-0.02	0.20	0.35	1.69
2005	1.82	0.72	1.32	0.69	-0.23	-0.46	-0.86	NaN	0.92	-0.39	-1.02	-0.22
2006	-0.05	1.39	0.49	0.26	0.23	0.46	0.86	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	74.19	0.00	0.00	41.94	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	96.67	93.55	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	93.55	100.00	100.00	22.58	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

**Table J-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.21	-1.06	-0.95	-2.68
2004	-6.79	-10.71	-12.80	-12.84	NaN	NaN	NaN	NaN	-1.13	-1.01	-0.95	-0.97
2005	-3.67	-7.85	-9.76	-10.50	-8.63	-4.40	-2.31	-1.40	-1.05	-0.92	-0.85	-2.30
2006	-5.70	-8.42	-9.85	-11.00	-9.18	-4.20	-2.21	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.36	-1.14	-1.07	-4.84
2004	-9.33	-12.13	-13.11	-13.35	NaN	NaN	NaN	NaN	-1.40	-1.05	-0.99	-1.58
2005	-6.25	-8.91	-10.20	-10.74	-10.20	-6.53	-3.14	-1.82	-1.25	-1.02	-0.92	-4.18
2006	-7.50	-8.79	-10.90	-11.10	-10.93	-5.89	-3.07	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.05	-0.96	-0.85	-0.91
2004	-4.82	-9.33	-12.13	-12.04	NaN	NaN	NaN	NaN	-1.01	-0.95	-0.89	-0.85
2005	-1.56	-6.23	-8.89	-9.89	-6.53	-3.05	-1.67	-1.15	-0.91	-0.83	-0.77	-0.83
2006	-4.18	-7.50	-8.66	-10.88	-5.89	-3.00	-1.56	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table J-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.08	-0.06	-0.04	-0.70
2004	-1.41	-1.72	-2.00	-1.40	NaN	NaN	NaN	NaN	0.00	-0.01	-0.03	1.01
2005	1.72	1.15	1.05	0.95	0.27	-0.10	-0.05	NaN	0.08	0.07	0.07	-0.32
2006	-0.31	0.58	0.95	0.45	-0.27	0.10	0.05	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	74.19	0.00	0.00	41.94	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	96.67	93.55	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	93.55	100.00	100.00	22.58	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

**Table J-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
Variable: Incident solar flux, in watts per meter squared

File name: AK111\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	68.1	20.7	NaN	0.2
2004	1.2	16.0	77.6	173.8	217.2	NaN	NaN	NaN	62.2	24.4	2.4	0.1
2005	1.2	11.4	58.6	NaN	235.9	NaN	NaN	NaN	61.3	26.1	1.7	0.1
2006	0.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.4	0.2
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.2	0.2
2011	1.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	60.0	27.7	3.4	0.1
2012	0.9	NaN	NaN	NaN	248.1	253.0	178.7	NaN	NaN	NaN	3.2	0.1
2013	0.9	NaN	NaN	NaN	NaN	229.9	175.8	NaN	NaN	NaN	2.6	0.2
2014	1.3	NaN	NaN	NaN	186.4	175.7	193.0	117.2	74.4	20.2	NaN	0.1
2015	0.9	NaN	NaN	157.7	222.6	228.8	193.3					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.9	-3.1	NaN	0.0
2004	0.3	NaN	NaN	NaN	-5.0	NaN	NaN	NaN	-3.0	0.6	-0.2	-0.0
2005	0.2	NaN	NaN	NaN	13.6	NaN	NaN	NaN	-3.9	2.3	-1.0	-0.1
2006	-0.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.3	0.0
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.4	0.0
2011	0.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.2	3.9	0.8	0.0
2012	-0.0	NaN	NaN	NaN	25.9	32.5	NaN	NaN	NaN	NaN	0.6	-0.0
2013	-0.1	NaN	NaN	NaN	NaN	9.4	NaN	NaN	NaN	NaN	0.0	0.0
2014	0.4	NaN	NaN	NaN	-35.8	-44.9	NaN	NaN	9.2	-3.6	NaN	-0.0
2015	-0.1	NaN	NaN	NaN	0.4	8.3	NaN					

**Table J-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	96.8	93.3	100.0
2004	100.0	100.0	96.8	100.0	100.0	56.7	67.7	77.4	100.0	100.0	100.0	100.0
2005	100.0	100.0	96.8	93.3	100.0	30.0	0.0	64.5	100.0	100.0	100.0	100.0
2006	100.0	25.0	0.0	0.0	0.0	0.0	0.0	67.7	86.7	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.1	63.3	77.4	100.0	100.0
2009	74.2	78.6	29.0	33.3	29.0	13.3	19.4	16.1	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.3	66.7	45.2	100.0	100.0
2011	100.0	71.4	0.0	0.0	0.0	0.0	0.0	61.3	100.0	96.8	96.7	100.0
2012	100.0	89.7	0.0	76.7	100.0	100.0	100.0	93.5	83.3	90.3	100.0	100.0
2013	100.0	92.9	71.0	63.3	74.2	100.0	96.8	93.5	93.3	90.3	100.0	100.0
2014	96.8	89.3	93.5	93.3	96.8	100.0	100.0	96.8	100.0	100.0	90.0	100.0
2015	100.0	89.3	93.5	100.0	100.0	100.0	100.0					

**Table J-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Reflected solar flux, in watts per meter squared

File name: AK111\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	35.1	15.0	2.8	0.1
2004	1.2	16.9	73.7	164.9	146.9	65.1	43.6	33.0	31.9	25.6	NaN	0.1
2005	1.2	NaN	73.1	163.4	206.7	NaN	NaN	NaN	14.5	19.0	1.9	0.1
2006	0.8	NaN	82.2	163.2	183.1	41.2	33.7	23.2	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	32.7	15.9	NaN	2.6	0.1
2008	1.1	18.3	76.8	149.8	197.6	40.2	NaN	NaN	24.4	NaN	2.6	0.2
2009	1.5	NaN	80.1	149.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	24.1	20.8	2.6	0.2
2011	1.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.2	11.2	1.5	0.1
2012	0.6	8.2	38.6	64.3	84.0	26.7	21.7	12.6	8.3	6.4	1.0	0.1
2013	0.4	5.7	23.5	52.9	NaN	NaN	45.2	34.2	41.5	32.2	3.9	0.2
2014	1.6	NaN	101.0	NaN	184.4	42.8	51.3	33.2	25.4	29.6	NaN	0.2
2015	1.7	18.2	94.5	197.4	165.9	63.0	58.9					

**Table J-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.2	-6.3	0.2	-0.0
2004	0.1	2.1	-0.5	18.4	-20.1	16.3	1.2	4.8	4.0	4.3	NaN	-0.1
2005	0.1	NaN	-1.1	16.9	39.7	NaN	NaN	NaN	-13.3	-2.3	-0.6	-0.1
2006	-0.3	NaN	7.9	16.7	16.1	-7.5	-8.7	-5.0	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.5	-12.0	NaN	0.0	-0.0
2008	-0.0	3.4	2.6	3.3	30.7	-8.6	NaN	NaN	-3.5	NaN	0.1	0.0
2009	0.4	NaN	5.8	3.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.8	-0.5	0.1	0.0
2011	-0.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-14.7	-10.0	-1.0	-0.1
2012	-0.5	-6.6	-35.7	-82.2	-82.9	-22.0	-20.7	-15.6	-19.6	-14.9	-1.5	-0.1
2013	-0.7	-9.1	-50.8	-93.6	NaN	NaN	2.8	6.0	13.6	10.9	1.4	0.1
2014	0.4	NaN	26.8	NaN	17.4	-5.9	8.9	5.0	-2.5	8.3	NaN	0.1
2015	0.6	3.3	20.3	50.9	-1.0	14.2	16.5					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	96.7	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	93.3	100.0
2005	96.8	89.3	96.8	100.0	100.0	36.7	0.0	64.5	100.0	100.0	96.7	100.0
2006	100.0	89.3	100.0	100.0	100.0	100.0	100.0	100.0	90.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	16.1	100.0	100.0	90.3	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	74.2	90.3	100.0	90.3	100.0	100.0
2009	100.0	92.9	96.8	100.0	67.7	16.7	19.4	58.1	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	100.0	96.8	100.0	100.0
2011	100.0	78.6	0.0	0.0	0.0	0.0	0.0	61.3	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	61.3	93.3	100.0	96.8	96.7	96.8	100.0	100.0
2014	100.0	35.7	100.0	76.7	96.8	100.0	100.0	96.8	100.0	100.0	93.3	100.0
2015	100.0	100.0	100.0	96.7	100.0	100.0	100.0					

**Table J-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



**Table J-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Snow depth, in centimeters

File name: AK111\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.0	13.0	23.5	25.0
2004	27.6	30.0	36.3	46.2	32.3	NaN	NaN	NaN	10.7	44.3	56.6	57.8
2005	58.7	63.2	66.5	72.5	76.2	NaN	NaN	NaN	1.9	10.0	32.6	53.5
2006	53.8	44.3	53.6	60.1	53.4	2.8	4.6	5.2	4.3	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.1	2.5	16.9	53.5	61.6
2008	69.6	71.3	75.8	82.5	82.9	15.7	NaN	4.6	2.8	12.9	18.9	25.2
2009	31.7	44.5	44.2	51.2	32.9	9.0	9.7	7.5	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.7	11.3	27.8	34.3
2011	37.4	45.1	NaN	NaN	NaN	NaN	NaN	NaN	14.6	13.2	10.3	16.9
2012	24.6	40.9	39.8	39.8	28.6	4.1	7.0	20.6	22.5	16.6	14.8	14.4
2013	21.1	24.3	26.8	35.9	35.5	9.8	16.0	14.8	19.4	23.1	NaN	25.3
2014	NaN	32.2	NaN	35.6	21.1	NaN	NaN	NaN	5.6	13.1	12.1	15.5
2015	27.2	33.9	37.8	40.9	18.5	-1.0	1.1					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.2	-0.3	17.2	19.4
2004	24.0	25.0	26.6	44.5	0.0	NaN	NaN	NaN	-0.6	39.8	54.8	53.9
2005	57.0	59.5	63.0	68.2	63.1	NaN	NaN	NaN	-1.0	0.3	19.4	34.8
2006	39.2	39.7	43.3	51.9	5.5	-0.1	0.2	2.1	1.0	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.2	-1.6	-0.6	31.3	59.7
2008	57.3	69.3	70.6	74.6	49.3	7.1	NaN	1.3	-0.4	0.3	12.9	19.0
2009	24.7	38.5	39.7	33.9	8.2	4.3	5.7	1.4	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.9	0.4	18.1	27.1
2011	32.5	37.1	NaN	NaN	NaN	NaN	NaN	NaN	8.0	8.0	5.8	7.4
2012	18.4	36.3	33.6	35.6	0.4	-0.8	1.2	5.0	11.4	7.8	12.2	9.7
2013	14.2	18.3	21.5	28.2	7.8	1.7	2.0	-0.4	8.8	16.3	NaN	21.3
2014	NaN	21.1	NaN	33.2	9.8	NaN	NaN	NaN	-0.1	0.1	8.4	11.6
2015	18.2	30.4	31.7	36.5	-6.9	-6.9	-5.7					

**Table J-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.8	28.8	32.1	32.1
2004	32.0	36.0	46.0	48.8	57.7	NaN	NaN	NaN	49.5	56.9	61.0	64.0
2005	61.9	65.6	69.6	76.0	84.9	NaN	NaN	NaN	4.8	37.4	47.3	64.1
2006	63.8	52.4	58.3	72.8	71.6	5.9	9.7	9.9	9.1	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.1	11.0	38.4	72.5	63.8
2008	74.3	75.7	81.4	93.6	99.2	50.8	NaN	9.3	8.8	18.0	30.9	31.0
2009	42.0	59.2	51.8	62.3	51.1	12.5	12.8	12.1	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.1	24.7	37.6	39.5
2011	43.1	54.5	NaN	NaN	NaN	NaN	NaN	NaN	18.0	20.4	15.8	26.3
2012	43.0	43.9	43.3	42.5	43.0	9.5	12.8	29.4	30.6	23.0	20.1	18.4
2013	26.5	30.3	36.4	43.9	55.3	24.3	33.5	33.2	30.9	30.4	NaN	32.0
2014	NaN	38.6	NaN	38.9	33.9	NaN	NaN	NaN	13.8	25.8	18.3	21.9
2015	37.0	37.3	45.7	45.7	44.2	3.4	8.5					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.3	-3.4	-2.8	-6.1
2004	-9.1	-10.6	-8.4	-3.1	-6.8	NaN	NaN	NaN	2.3	27.9	30.4	26.7
2005	22.0	22.6	21.8	23.2	37.2	NaN	NaN	NaN	-6.5	-6.4	6.3	22.3
2006	17.1	3.7	8.9	10.8	14.4	-2.5	-3.1	-3.3	-4.0	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.3	-5.9	0.5	27.2	30.4
2008	32.9	30.7	31.1	33.2	43.9	10.4	NaN	-3.8	-5.6	-3.5	-7.3	-5.9
2009	-5.0	3.9	-0.5	1.9	-6.2	3.6	2.0	-1.0	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-5.7	-5.1	1.6	3.2
2011	0.6	4.5	NaN	NaN	NaN	NaN	NaN	NaN	6.2	-3.2	-15.9	-14.2
2012	-12.1	0.3	-4.9	-9.6	-10.4	-1.2	-0.7	12.2	14.2	0.2	-11.5	-16.7
2013	-15.6	-16.3	-17.9	-13.4	-3.6	4.4	8.3	6.4	11.1	6.7	NaN	-5.8
2014	NaN	-8.4	NaN	-13.7	-18.0	NaN	NaN	NaN	-2.8	-3.3	-14.2	-15.6
2015	-9.5	-6.7	-6.9	-8.4	-20.6	-6.3	-6.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	96.8	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	23.3	0.0	41.9	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	40.0	0.0	67.7	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	19.4	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	77.4	93.5	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	100.0	100.0	100.0	100.0
2011	100.0	82.1	0.0	0.0	0.0	0.0	0.0	64.5	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	76.7	93.5
2014	41.9	85.7	67.7	80.0	87.1	30.0	58.1	58.1	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table J-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

```
Site name:  Awuna2
Variable:   Soil moisture, in water fraction by volume
```

File name: AK111\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.28	0.04
2004	NaN	NaN	NaN	NaN	0.04	0.34	0.42	0.41	0.42	0.41	0.38	0.10
2005	0.05	0.03	NaN	NaN	0.04	0.19	0.42	0.42	0.43	0.35	0.11	0.06
2006	0.04	0.03	NaN	NaN	0.04	0.27	0.42	0.43	0.44	0.43	0.42	0.17
2007	0.06	0.04	0.02	0.02	0.03	0.22	0.43	0.42	NaN	0.41	0.40	0.15
2008	0.03	0.01	0.00	0.00	0.02	NaN	NaN	NaN	0.35	0.26	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.02	0.27	0.35	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.18	0.02	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.19	0.38	0.43	0.52	0.30	0.02	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.33	0.37	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.07	0.03
2004	NaN	NaN	NaN	NaN	0.02	0.07	0.41	0.41	0.41	0.41	0.20	0.07
2005	0.03	0.03	NaN	NaN	0.03	0.07	0.42	0.42	0.43	0.21	0.09	0.05
2006	0.03	0.03	NaN	NaN	0.02	0.07	0.42	0.42	0.43	0.43	0.38	0.08
2007	0.04	0.03	0.02	0.02	0.03	0.05	0.41	0.41	NaN	0.41	0.36	0.05
2008	0.02	0.00	0.00	0.00	0.00	NaN	NaN	NaN	0.34	0.11	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.01	0.03	0.32	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.03	0.01	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.04	0.32	0.34	0.42	0.07	0.00	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.02	0.33	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table J-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.07
2004	NaN	NaN	NaN	NaN	0.07	0.42	0.42	0.42	0.42	0.41	0.41	0.20
2005	0.07	0.03	NaN	NaN	0.07	0.42	0.42	0.43	0.43	0.43	0.21	0.09
2006	0.05	0.03	NaN	NaN	0.07	0.44	0.43	0.44	0.44	0.44	0.43	0.38
2007	0.08	0.04	0.03	0.03	0.05	0.45	0.44	0.43	NaN	0.42	0.41	0.36
2008	0.06	0.02	0.01	0.01	0.08	NaN	NaN	NaN	0.36	0.34	NaN	NaN
2009	NaN	NaN	NaN	NaN	0.04	0.42	0.50	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.36	0.03	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.54	0.41	0.54	0.55	0.42	0.07	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.45	0.51	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	0.07	0.07	-0.07
2004	NaN	NaN	NaN	NaN	0.01	0.08	0.02	0.00	-0.01	0.07	0.17	-0.00
2005	NaN	NaN	NaN	NaN	0.01	-0.07	0.02	0.01	0.00	0.01	-0.10	-0.04
2006	NaN	NaN	NaN	NaN	0.01	0.01	0.02	0.02	0.01	0.09	0.21	0.06
2007	NaN	NaN	NaN	NaN	-0.00	-0.04	0.03	0.01	NaN	0.07	0.19	0.05
2008	NaN	NaN	NaN	NaN	-0.01	NaN	NaN	NaN	-0.07	-0.08	NaN	NaN
2009	NaN	NaN	NaN	NaN	-0.01	0.01	-0.05	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.03	-0.16	-0.19	NaN
2011	NaN	NaN	NaN	NaN	NaN	-0.07	-0.02	0.01	0.09	-0.05	-0.19	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.07	-0.03	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	58.06	0.00	0.00	16.67	100.00	100.00	100.00	100.00	96.67	96.77	100.00	100.00
2005	100.00	100.00	70.97	76.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	70.97	80.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	93.33	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	93.33	74.19	90.32	100.00	100.00	73.33	0.00
2009	0.00	0.00	0.00	3.33	100.00	100.00	100.00	87.10	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.19	100.00	100.00	100.00	67.74
2011	0.00	0.00	0.00	0.00	35.48	100.00	100.00	96.77	100.00	100.00	100.00	74.19
2012	0.00	0.00	0.00	0.00	45.16	100.00	100.00	19.35	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	41.94					

**Table J-11.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
 Variable: Surface pressure, in millibars  
 File name: AK111\_P\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	963.0	958.7	959.3	965.1
2009	962.8	960.3	966.3	964.2	965.6	961.7	965.0	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	963.0	956.9	960.6	966.7
2011	963.9	962.5	961.7	963.4	NaN	NaN	NaN	NaN	955.9	955.4	959.9	NaN
2012	961.9	NaN	NaN	963.4	NaN	960.8	959.9	957.7	956.5	967.5	969.6	961.3
2013	965.5	961.1	965.8	971.0	963.4	963.6	964.0	960.3	957.6	956.4	NaN	NaN
2014	958.5	968.7	963.7	960.0	965.1	960.7	961.5	960.6	959.5	960.6	961.2	960.0
2015	965.1	965.4	NaN	958.1	965.1	962.0	961.5					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	953.0	950.0	943.0	941.0
2009	936.0	944.0	945.0	951.0	957.0	954.0	957.0	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	953.0	942.0	942.0	950.0
2011	944.0	944.0	945.0	946.0	NaN	NaN	NaN	NaN	945.0	947.0	941.0	NaN
2012	945.0	NaN	NaN	956.0	NaN	950.0	953.0	947.0	941.0	949.0	962.0	944.0
2013	945.0	948.0	949.0	954.0	946.0	954.0	951.0	953.0	945.0	940.0	NaN	NaN
2014	945.0	954.0	945.0	951.0	955.0	952.0	952.0	949.0	949.0	952.0	949.0	951.0
2015	944.0	951.0	NaN	945.0	955.0	947.0	953.0					

**Table J-11.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	970.0	969.0	978.0	982.0
2009	982.0	982.0	983.0	973.0	971.0	973.0	978.0	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	971.0	965.0	981.0	978.0
2011	989.0	986.0	974.0	977.0	NaN	NaN	NaN	NaN	964.0	962.0	979.0	NaN
2012	992.0	NaN	NaN	972.0	NaN	969.0	965.0	970.0	967.0	983.0	975.0	974.0
2013	984.0	977.0	981.0	985.0	972.0	975.0	970.0	967.0	971.0	970.0	NaN	NaN
2014	971.0	987.0	980.0	971.0	977.0	972.0	974.0	969.0	970.0	974.0	974.0	976.0
2015	985.0	975.0	NaN	976.0	974.0	975.0	970.0					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.7	-0.7	-1.5	3.3
2009	0.5	-2.2	2.1	1.1	0.7	-0.0	2.6	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.7	-2.5	-0.2	4.8
2011	1.6	-0.0	-2.5	0.2	NaN	NaN	NaN	NaN	-3.4	-4.0	-0.9	NaN
2012	-0.4	NaN	NaN	0.2	NaN	-0.9	-2.4	NaN	-2.8	8.1	8.7	-0.5
2013	3.2	-1.4	1.5	7.8	-1.6	1.9	1.6	NaN	-1.7	-3.0	NaN	NaN
2014	-3.8	6.2	-0.5	-3.1	0.2	-1.0	-0.9	NaN	0.3	1.2	0.4	-1.8
2015	2.8	3.0	NaN	-5.1	0.2	0.3	-0.9					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	41.9	0.0	0.0	61.3	100.0	100.0	100.0	93.5
2012	100.0	82.8	80.6	100.0	93.5	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2013	96.8	100.0	100.0	100.0	96.8	100.0	100.0	96.8	100.0	100.0	86.7	93.5
2014	100.0	100.0	96.8	96.7	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2015	100.0	100.0	93.5	100.0	100.0	100.0	100.0					

**Table J-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
 Variable: Air temperature, in degrees Celsius  
 File name: AK111\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-7.62	NaN
2004	-28.70	-14.50	11.82	-9.21	-10.36
2005	-25.28	-14.53	NaN	-11.06	NaN
2006	-24.44	-17.39	7.35	-5.96	-9.90
2007	-25.76	-16.62	11.91	NaN	-9.48
2008	-26.59	-15.01	NaN	-10.14	-11.12
2009	-23.65	-14.67	9.12	NaN	NaN
2010	NaN	NaN	NaN	-6.26	NaN
2011	NaN	NaN	NaN	-10.02	NaN
2012	-26.92	-17.63	10.24	-8.15	-10.72
2013	-28.88	-15.38	9.74	-7.46	-9.83
2014	-20.30	-11.31	7.36	-6.90	-8.13
2015	-22.07	-11.95			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	10.30	NaN
2004	-3.30	17.19	28.28	12.15	28.28
2005	-0.76	11.02	NaN	13.27	NaN
2006	2.01	10.38	24.59	16.09	24.59
2007	-0.05	8.58	26.36	NaN	26.36
2008	1.92	9.24	NaN	15.01	25.56
2009	-1.62	17.44	27.74	NaN	NaN
2010	NaN	NaN	NaN	18.18	NaN
2011	NaN	NaN	NaN	12.61	NaN
2012	0.44	7.26	22.14	11.75	22.14
2013	-1.41	6.93	26.89	12.06	26.89
2014	5.81	5.84	21.52	13.57	21.52
2015	1.79	18.55			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-37.15	NaN
2004	-46.56	-43.79	-2.65	-32.62	-46.56
2005	-42.05	-42.05	NaN	-39.88	NaN
2006	-47.37	-39.88	-7.53	-35.05	-47.37
2007	-47.47	-48.82	-2.01	NaN	-48.82
2008	-47.62	-47.12	NaN	-32.80	-47.62
2009	-43.58	-43.79	-2.65	NaN	NaN
2010	NaN	NaN	NaN	-28.03	NaN
2011	NaN	NaN	NaN	-40.22	NaN
2012	-46.84	-44.07	-0.80	-33.13	-46.84
2013	-42.82	-37.39	-6.20	-32.85	-42.82
2014	-43.25	-39.02	-2.19	-31.72	-43.25
2015	-37.71	-40.28			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.72	NaN
2004	-3.65	0.17	2.33	-0.88	-0.57
2005	-0.23	0.14	NaN	-2.72	NaN
2006	0.61	-2.73	-2.15	2.37	-0.10
2007	-0.71	-1.95	2.42	NaN	0.32
2008	-1.53	-0.34	NaN	-1.81	-1.33
2009	1.41	-0.01	-0.37	NaN	NaN
2010	NaN	NaN	NaN	2.07	NaN
2011	NaN	NaN	NaN	-1.69	NaN
2012	-1.86	-2.96	0.75	0.18	-0.93
2013	-3.83	-0.72	0.25	0.88	-0.04
2014	4.75	3.36	-2.13	1.43	1.66
2015	2.98	2.72			

**Table J-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	33.70	100.00	83.29
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	96.74	94.51	97.26
2008	97.80	100.00	86.96	100.00	96.72
2009	100.00	98.91	95.65	0.00	65.21
2010	0.00	0.00	25.00	100.00	39.73
2011	93.33	0.00	20.65	100.00	53.15
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	98.91	100.00	99.73
2014	100.00	100.00	98.91	100.00	99.73
2015	100.00	100.00			

**Table J-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Wind speed, in meters per second

File name: AK111\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	3.69	NaN
2004	NaN	3.49	2.95	4.26	NaN
2005	NaN	3.64	NaN	NaN	NaN
2006	NaN	3.00	3.36	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	3.56	NaN	NaN	NaN
2009	3.72	3.41	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	3.24	NaN
2012	NaN	2.53	3.12	3.00	NaN
2013	NaN	3.47	2.98	NaN	3.31
2014	NaN	2.93	3.04	NaN	NaN
2015	3.15	2.93			

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	18.90	NaN
2004	NaN	16.75	9.43	17.02	NaN
2005	NaN	11.42	NaN	NaN	NaN
2006	NaN	10.37	11.50	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	14.13	NaN	NaN	NaN
2009	19.56	21.47	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	13.32	NaN
2012	NaN	8.08	9.38	13.43	NaN
2013	NaN	14.69	9.21	NaN	17.89
2014	NaN	11.08	8.24	NaN	NaN
2015	14.76	8.58			



**Table J-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	96.70	0.00
2004	NaN	0.28	-0.15	NaN	NaN	2004	83.52	100.00	98.91	98.90	91.26
2005	NaN	0.42	NaN	NaN	NaN	2005	74.44	100.00	33.70	71.43	72.88
2006	NaN	-0.21	0.26	NaN	NaN	2006	45.56	100.00	100.00	29.67	62.74
2007	NaN	NaN	NaN	NaN	NaN	2007	0.00	0.00	39.13	62.64	32.05
2008	NaN	0.34	NaN	NaN	NaN	2008	84.62	97.83	88.04	93.41	92.90
2009	NaN	0.20	NaN	NaN	NaN	2009	100.00	97.83	18.48	0.00	45.48
2010	NaN	NaN	NaN	NaN	NaN	2010	0.00	0.00	25.00	93.41	38.08
2011	NaN	NaN	NaN	NaN	NaN	2011	86.67	0.00	20.65	98.90	50.96
2012	NaN	-0.68	0.02	NaN	NaN	2012	80.22	98.91	98.91	98.90	93.72
2013	NaN	0.26	-0.12	NaN	NaN	2013	93.33	100.00	98.91	93.41	96.44
2014	NaN	-0.28	-0.06	NaN	NaN	2014	83.33	100.00	98.91	93.41	94.79
2015	NaN	-0.29				2015	98.89	100.00			

**Table J-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
 Variable: Ground temperature, in degrees Celsius  
 File name: AK111\_Tg\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.03	NaN	2003	NaN	NaN	NaN	-1.20	NaN
2004	-10.57	NaN	NaN	0.16	NaN	2004	-16.52	NaN	NaN	-1.04	NaN
2005	-7.32	-10.73	4.91	-0.18	-3.44	2005	-13.28	-15.20	-0.76	-2.48	-15.20
2006	-8.41	-11.06	NaN	NaN	NaN	2006	-13.83	-14.79	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table J-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	1.31	NaN
2004	-1.20	NaN	NaN	5.51	NaN
2005	-0.90	-0.75	11.65	5.53	11.65
2006	-2.20	-0.46	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	91.30	14.13	100.00	76.23
2005	100.00	96.74	98.91	100.00	98.90
2006	100.00	97.83	73.91	0.00	59.45
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.01	NaN
2004	-1.80	NaN	NaN	0.18	NaN
2005	1.45	0.16	NaN	-0.17	NaN
2006	0.35	-0.16	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-1.07	NaN
2004	-6.64	NaN	NaN	-1.03	NaN
2005	-4.04	-9.62	-2.70	-0.94	-4.42
2006	-5.37	-10.00	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-1.36	NaN
2004	-12.13	NaN	NaN	-1.40	NaN
2005	-8.91	-10.74	-6.53	-1.25	-10.74
2006	-8.79	-11.10	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

**Table J-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—  
Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (120 cm depth):

Percent of Data Available during Each Season/Year (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-0.85	NaN
2004	-0.91	NaN	NaN	-0.89	NaN
2005	-0.85	-6.53	-1.15	-0.77	-0.77
2006	-0.83	-5.89	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	91.30	14.13	100.00	76.23
2005	100.00	96.74	98.91	100.00	98.90
2006	100.00	97.83	73.91	0.00	59.45
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	-0.06	NaN
2004	-1.29	NaN	NaN	-0.01	NaN
2005	1.31	0.19	NaN	0.07	NaN
2006	-0.02	-0.19	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

**Table J-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
Variable: Incident solar flux, in watts per meter squared

File name: AK111\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	31.1	NaN
2004	5.6	156.8	NaN	29.6	NaN
2005	4.0	154.6	NaN	29.6	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	30.7	NaN
2012	4.0	NaN	177.2	NaN	NaN
2013	6.0	NaN	174.0	NaN	NaN
2014	4.6	NaN	162.3	33.4	89.3
2015	5.7	147.0			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	96.7	0.0
2004	100.0	98.9	67.4	100.0	91.5
2005	100.0	96.7	31.5	100.0	81.9
2006	76.7	0.0	22.8	28.6	23.3
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	19.6	80.2	33.3
2009	84.4	30.4	16.3	0.0	24.1
2010	0.0	0.0	20.7	70.3	31.2
2011	91.1	0.0	20.7	97.8	52.1
2012	96.7	58.7	97.8	91.2	86.1
2013	97.8	69.6	96.7	94.5	89.6
2014	95.6	94.6	98.9	96.7	96.4
2015	96.7	97.8			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.2	NaN
2004	0.9	NaN	NaN	-1.3	NaN
2005	-0.8	NaN	NaN	-1.2	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	-0.2	NaN
2012	-0.8	NaN	NaN	NaN	NaN
2013	1.2	NaN	NaN	NaN	NaN
2014	-0.2	NaN	NaN	2.5	NaN
2015	1.0	NaN			

**Table J-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
Variable: Reflected solar flux, in watts per meter squared

File name: AK111\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	17.8	NaN
2004	5.8	128.1	47.2	20.5	50.8
2005	5.4	148.4	NaN	12.0	NaN
2006	5.2	142.6	32.6	NaN	NaN
2007	NaN	NaN	NaN	12.9	NaN
2008	6.2	141.3	NaN	16.2	51.4
2009	5.3	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	15.8	NaN
2011	NaN	NaN	NaN	8.7	NaN
2012	2.8	62.3	20.3	5.3	22.8
2013	1.9	NaN	43.9	25.7	30.0
2014	NaN	NaN	42.5	20.2	NaN
2015	6.3	151.6			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	0.0	0.0	0.0	98.9	0.0
2004	100.0	100.0	98.9	97.8	99.2
2005	95.6	98.9	33.7	98.9	81.6
2006	96.7	100.0	100.0	29.7	73.2
2007	0.0	0.0	39.1	96.7	42.5
2008	100.0	100.0	88.0	96.7	96.2
2009	97.8	88.0	31.5	0.0	45.8
2010	0.0	0.0	25.0	98.9	39.5
2011	93.3	0.0	20.7	100.0	53.2
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	87.0	96.7	97.8	95.3
2014	80.0	91.3	98.9	97.8	92.1
2015	100.0	98.9			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2003	NaN	NaN	NaN	0.4	NaN
2004	0.7	-5.5	7.8	3.1	7.6
2005	0.2	14.8	NaN	-5.3	NaN
2006	0.1	9.0	-6.8	NaN	NaN
2007	NaN	NaN	NaN	-4.4	NaN
2008	1.1	7.7	NaN	-1.1	8.2
2009	0.1	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-1.5	NaN
2011	NaN	NaN	NaN	-8.7	NaN
2012	-2.3	-71.3	-19.1	-12.1	-20.4
2013	-3.2	NaN	4.5	8.4	-13.2
2014	NaN	NaN	3.1	2.9	NaN
2015	1.2	18.0			

**Table J-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table J-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Awuna2

Variable: Snow depth, in centimeters

File name: AK111\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	13.8	NaN
2004	27.5	38.2	NaN	37.3	35.6
2005	59.8	71.7	NaN	14.8	45.1
2006	50.7	55.7	4.2	NaN	NaN
2007	NaN	NaN	NaN	24.2	NaN
2008	67.4	80.4	8.5	11.5	39.7
2009	33.5	42.7	8.7	NaN	NaN
2010	NaN	NaN	NaN	13.9	NaN
2011	38.3	NaN	NaN	12.7	NaN
2012	27.2	36.0	10.6	17.9	22.7
2013	19.8	32.7	13.5	21.9	23.0
2014	NaN	NaN	NaN	10.3	NaN
2015	25.3	32.3			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	32.1	NaN
2004	36.0	57.7	NaN	61.0	64.0
2005	65.6	84.9	NaN	47.3	84.9
2006	64.1	72.8	9.9	NaN	NaN
2007	NaN	NaN	NaN	72.5	NaN
2008	75.7	99.2	50.8	30.9	99.2
2009	59.2	62.3	12.8	NaN	NaN
2010	NaN	NaN	NaN	37.6	NaN
2011	54.5	NaN	NaN	20.4	NaN
2012	43.9	43.3	29.4	30.6	43.9
2013	30.3	55.3	33.5	30.9	55.3
2014	NaN	NaN	NaN	25.8	NaN
2015	37.3	45.7			

#### Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.3	NaN
2004	19.4	0.0	NaN	-0.6	-0.6
2005	53.9	63.0	NaN	-1.0	-1.3
2006	34.8	5.5	-0.1	NaN	NaN
2007	NaN	NaN	NaN	-1.6	NaN
2008	57.3	49.3	-0.6	-0.4	-0.6
2009	19.0	8.2	1.4	NaN	NaN
2010	NaN	NaN	NaN	-0.9	NaN
2011	27.1	NaN	NaN	5.8	NaN
2012	7.4	0.4	-0.8	7.8	-0.8
2013	9.7	7.8	-0.4	8.8	-0.4
2014	NaN	NaN	NaN	-0.1	NaN
2015	11.6	-6.9			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-3.2	NaN
2004	-8.9	-7.3	NaN	20.3	5.1
2005	23.3	26.3	NaN	-2.2	14.6
2006	14.3	10.2	-3.7	NaN	NaN
2007	NaN	NaN	NaN	7.2	NaN
2008	31.0	34.9	0.6	-5.5	9.2
2009	-3.0	-2.8	0.8	NaN	NaN
2010	NaN	NaN	NaN	-3.1	NaN
2011	1.9	NaN	NaN	-4.3	NaN
2012	-9.3	-9.5	2.7	0.9	-7.7
2013	-16.6	-12.8	5.6	4.9	-7.5
2014	NaN	NaN	NaN	-6.7	NaN
2015	-11.2	-13.2			

**Table J-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	98.9	0.0
2004	100.0	100.0	21.7	100.0	80.3
2005	100.0	100.0	35.9	100.0	83.8
2006	100.0	100.0	100.0	29.7	74.0
2007	0.0	0.0	40.2	100.0	43.6
2008	100.0	100.0	90.2	100.0	97.5
2009	100.0	100.0	96.7	0.0	65.8
2010	0.0	0.0	26.1	100.0	40.0
2011	94.4	0.0	21.7	100.0	53.7
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	96.7	92.3	96.7
2014	73.3	78.3	48.9	100.0	75.6
2015	100.0	100.0			

**Table J-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK111\_Smoist\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.37	NaN	2003	NaN	NaN	NaN	0.07	NaN
2004	NaN	NaN	0.39	0.40	NaN	2004	NaN	NaN	0.07	0.20	NaN
2005	0.06	NaN	0.35	0.30	0.19	2005	0.03	NaN	0.07	0.09	0.02
2006	0.04	NaN	0.37	0.43	0.24	2006	0.03	NaN	0.07	0.38	0.02
2007	0.09	0.03	0.36	0.41	0.22	2007	0.03	0.02	0.05	0.36	0.02
2008	0.07	0.01	NaN	NaN	NaN	2008	0.00	0.00	NaN	NaN	NaN
2009	NaN	NaN	0.35	NaN	NaN	2009	NaN	NaN	0.03	NaN	NaN
2010	NaN	NaN	NaN	0.20	NaN	2010	NaN	NaN	NaN	0.01	NaN
2011	NaN	NaN	0.33	0.28	NaN	2011	NaN	NaN	0.04	0.00	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table J-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.41	NaN
2004	NaN	NaN	0.42	0.42	NaN
2005	0.20	NaN	0.43	0.43	0.43
2006	0.09	NaN	0.44	0.44	0.44
2007	0.38	0.05	0.45	0.43	0.45
2008	0.36	0.08	NaN	NaN	NaN
2009	NaN	NaN	0.54	NaN	NaN
2010	NaN	NaN	NaN	0.41	NaN
2011	NaN	NaN	0.54	0.55	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	53.85	39.13	100.00	97.80	72.68
2005	100.00	82.61	100.00	100.00	95.62
2006	100.00	83.70	100.00	100.00	95.89
2007	100.00	100.00	98.91	97.80	99.18
2008	100.00	100.00	85.87	91.21	85.79
2009	0.00	34.78	95.65	0.00	32.88
2010	0.00	0.00	25.00	100.00	36.99
2011	23.33	11.96	98.91	100.00	59.18
2012	25.27	15.22	72.83	0.00	22.13
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.03	NaN
2004	NaN	NaN	0.03	0.07	NaN
2005	NaN	NaN	-0.01	-0.04	NaN
2006	NaN	NaN	0.02	0.10	NaN
2007	NaN	NaN	-0.00	0.08	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	-0.01	NaN	NaN
2010	NaN	NaN	NaN	-0.13	NaN
2011	NaN	NaN	-0.02	-0.05	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			



**Table J-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Awuna2  
 Variable: Surface pressure, in millibars  
 File name: AK111\_P\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	960.3	NaN
2009	962.8	965.4	NaN	NaN	NaN
2010	NaN	NaN	NaN	960.1	NaN
2011	964.4	NaN	NaN	957.1	NaN
2012	NaN	NaN	959.5	964.5	961.6
2013	962.7	966.7	962.7	958.6	963.2
2014	964.5	963.0	960.9	960.5	961.6
2015	963.5	961.7			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	978.0	NaN
2009	982.0	983.0	NaN	NaN	NaN
2010	NaN	NaN	NaN	981.0	NaN
2011	989.0	NaN	NaN	979.0	NaN
2012	NaN	NaN	970.0	983.0	992.0
2013	984.0	985.0	975.0	974.0	985.0
2014	987.0	980.0	974.0	974.0	987.0
2015	985.0	979.0			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	943.0	NaN
2009	936.0	945.0	NaN	NaN	NaN
2010	NaN	NaN	NaN	942.0	NaN
2011	944.0	NaN	NaN	941.0	NaN
2012	NaN	NaN	947.0	941.0	941.0
2013	944.0	946.0	951.0	940.0	940.0
2014	945.0	945.0	949.0	949.0	945.0
2015	944.0	945.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	0.4	NaN
2009	0.4	1.3	NaN	NaN	NaN
2010	NaN	NaN	NaN	0.2	NaN
2011	1.9	NaN	NaN	-2.8	NaN
2012	NaN	NaN	NaN	4.6	NaN
2013	0.2	2.6	NaN	-1.3	NaN
2014	2.0	-1.1	NaN	0.6	NaN
2015	1.0	-2.4			

**Table J-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	30.4	100.0	41.0
2009	100.0	100.0	94.6	0.0	65.2
2010	0.0	0.0	25.0	100.0	39.7
2011	100.0	80.4	20.7	100.0	74.5
2012	92.3	91.3	98.9	98.9	95.9
2013	98.9	98.9	98.9	95.6	97.5
2014	97.8	97.8	98.9	100.0	99.2
2015	100.0	97.8			

## K. Piksiksak

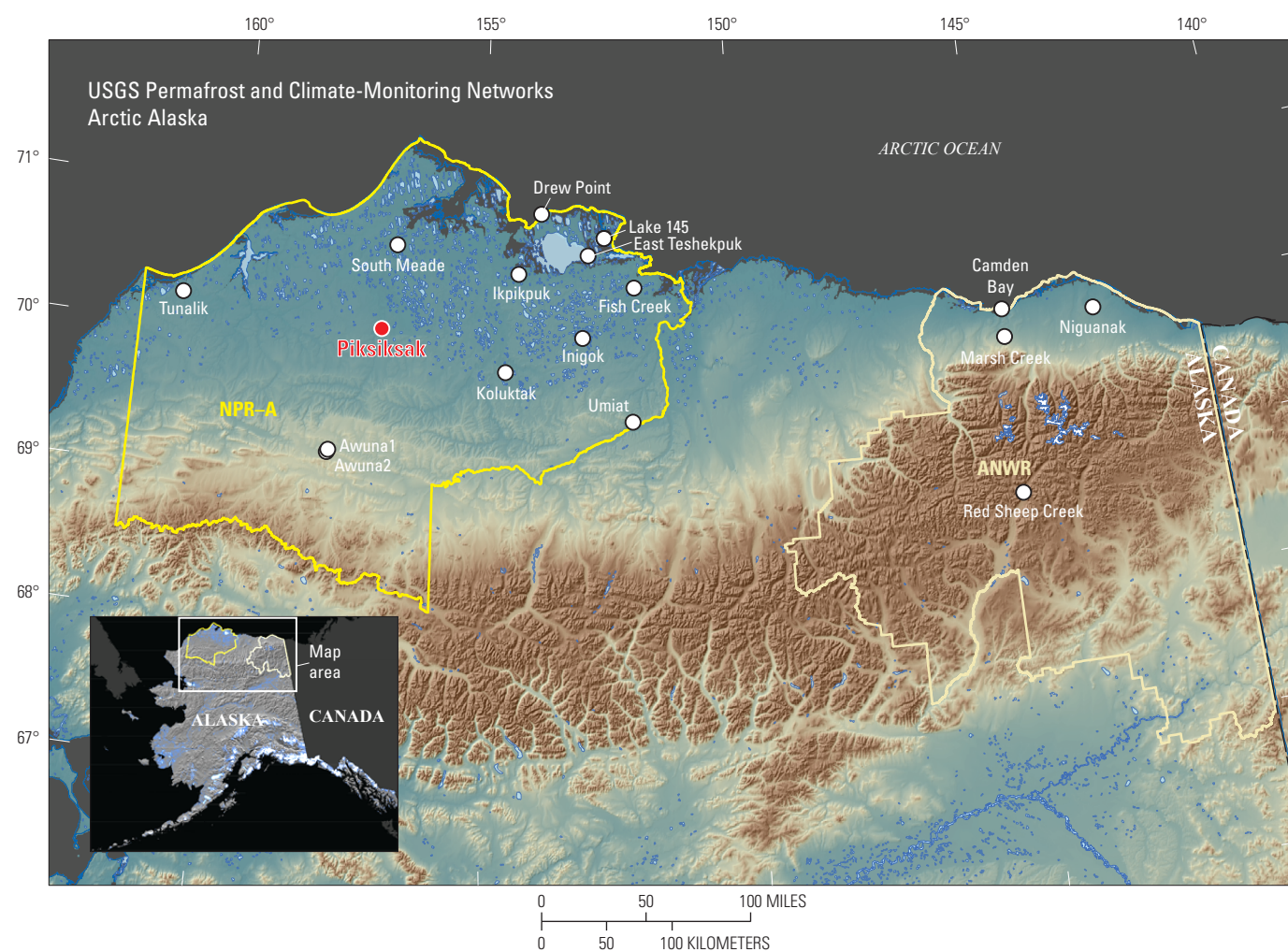
GTN-P code: U37

Latitude: 70°02.197'N

Longitude: 157°04.882'W

Elevation: 33 meters above mean sea level

Installation date: 08 AUG 2004



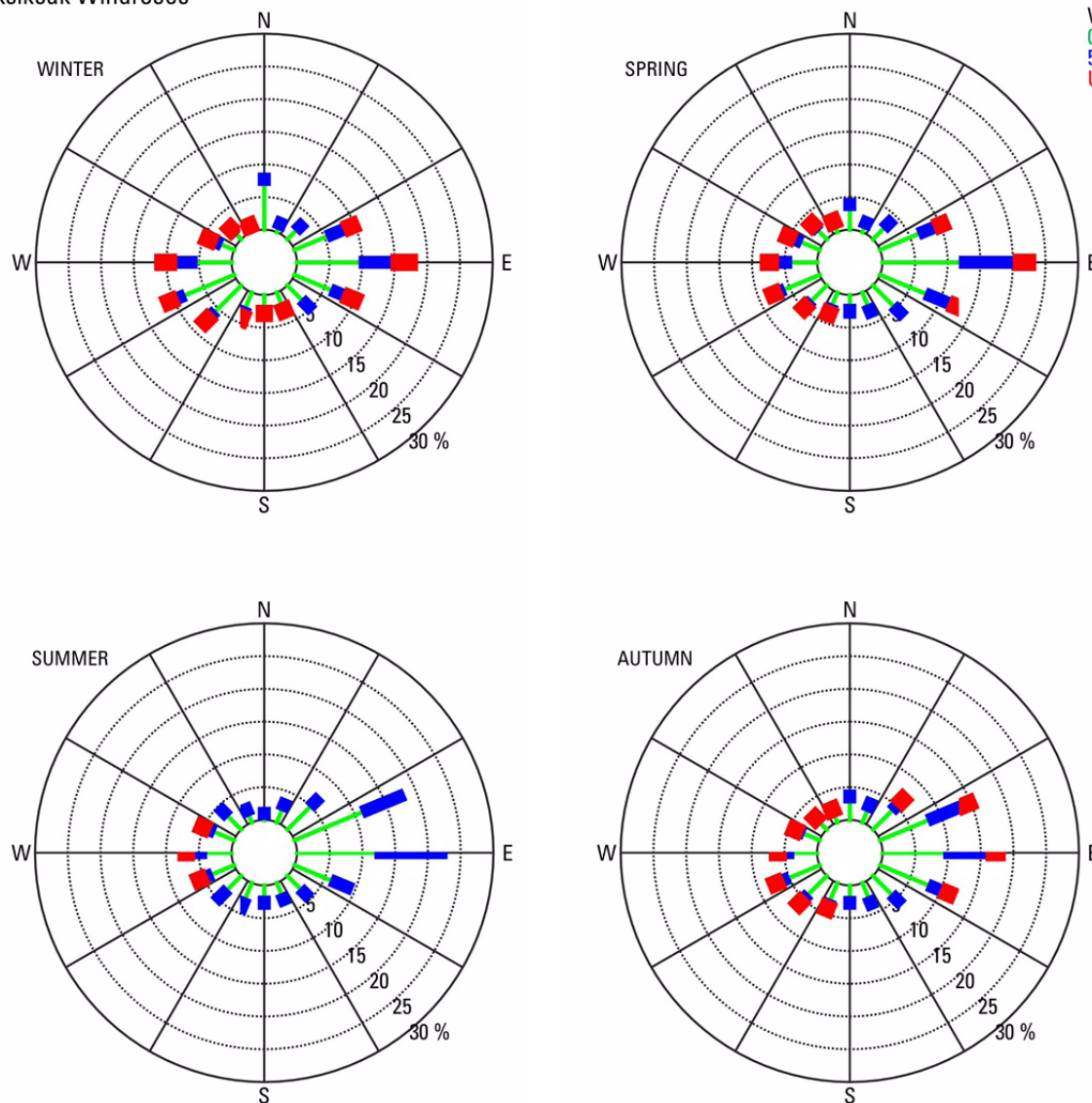
**Figure K-1.** Location map presenting the specific location of the Piksiksak site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure K–2.** Piksiksak station in summer 2008.



Piksiksak Windroses



**Figure K-3.** Piksiksak seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table K–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Air temperature, in degrees Celsius  
 File name: AK113\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	-6.69	-17.65	-25.04
2005	-24.04	-27.52	-23.74	-16.83	-4.60	5.07	8.16	9.07	1.46	-7.68	-22.59	-23.13
2006	-27.05	-22.33	-29.94	-20.81	-3.65	7.23	9.18	5.25	4.11	-4.30	-16.76	-20.63
2007	-28.28	-25.75	-28.39	-14.19	-7.58	7.88	12.43	10.05	3.51	-8.23	-14.04	-21.54
2008	-30.40	-29.03	-29.91	-12.77	-3.61	8.71	10.48	4.37	0.05	-7.84	-17.47	-18.02
2009	-27.60	-26.89	-31.24	-14.82	-1.28	6.96	12.36	6.79	0.86	-5.30	-21.40	-21.60
2010	-28.76	-26.04	-26.37	-12.26	-5.93	6.00	10.18	8.99	4.09	-7.04	-11.59	-25.02
2011	-23.40	-19.65	-20.00	-20.49	-4.26	5.62	10.21	7.60	2.44	-6.12	-22.83	-26.32
2012	-32.72	-25.38	-33.39	-16.93	-5.05	8.04	12.32	9.38	1.65	-2.81	-17.76	-26.41
2013	-27.34	-32.43	-24.13	-19.38	-2.84	10.30	12.11	6.57	-0.31	-4.92	-14.94	-20.72
2014	-22.23	-23.17	-21.95	-14.34	-1.06	5.23	8.77	6.13	1.24	-6.10	-13.91	-23.73
2015	-24.55	-21.53	-24.51	-14.78	0.61	9.90	9.41					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-8.87	-22.97	-33.38	-39.38
2005	-40.30	-39.29	-38.60	-32.96	-12.71	-3.81	-0.69	-2.86	-5.37	-25.27	-39.10	-39.58
2006	-40.92	-45.73	-40.95	-34.34	-25.12	-5.93	-0.41	-3.66	-3.87	-14.75	-32.32	-40.64
2007	-42.75	-44.20	-41.99	-25.53	-22.75	-2.58	2.81	-0.90	-6.66	-21.62	-28.41	-43.14
2008	-45.37	-42.03	-43.42	-31.56	-16.10	-4.84	-0.30	-5.37	-9.65	-19.16	-30.45	-32.24
2009	-39.48	-43.42	-41.59	-30.78	-13.92	-1.00	1.80	-2.31	-10.77	-21.63	-37.24	-41.45
2010	-45.15	-43.86	-44.20	-29.08	-21.86	-1.08	-0.43	-0.78	-8.93	-18.60	-27.05	-45.01
2011	-44.62	-33.52	-36.99	-34.61	-21.57	-3.49	2.26	-1.09	-5.40	-23.35	-41.27	-38.27
2012	-47.33	-48.00	-42.79	-36.79	-25.20	-1.39	1.41	0.10	-4.40	-18.67	-31.19	-39.42
2013	-39.32	-42.38	-36.60	-34.96	-26.45	-4.67	2.48	-4.31	-12.17	-19.15	-31.81	-35.81
2014	-43.08	-41.46	-38.82	-32.39	-11.56	-2.95	-1.20	-1.90	-8.14	-15.63	-30.02	-35.84
2015	-36.54	-38.33	-39.16	-29.60	-14.49	-4.03	-1.12					

**Table K-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.71	1.94	-1.06	-3.59
2005	1.51	-5.12	-1.12	5.28	1.36	21.37	20.92	24.84	12.93	3.37	-7.99	-7.34
2006	-16.11	3.53	-21.42	-10.02	8.83	19.14	25.27	17.56	18.70	5.06	-0.22	-1.88
2007	-3.98	1.59	-5.07	-2.89	2.90	19.29	25.81	23.10	18.79	-0.47	-5.39	-1.75
2008	2.05	-3.10	-5.03	3.39	9.22	20.87	28.53	14.80	7.89	-0.78	-7.83	-1.08
2009	-1.52	-2.32	-15.92	5.45	14.19	16.34	29.48	19.26	19.52	7.08	-8.40	-0.89
2010	-9.64	-15.01	-11.18	0.71	4.33	23.26	23.86	24.72	18.90	-0.14	2.07	-6.78
2011	0.90	-0.83	-3.86	-5.40	10.14	23.73	22.52	18.20	15.11	2.50	-2.60	-5.88
2012	-13.02	-2.36	-16.75	-7.64	7.28	24.51	24.28	19.03	11.98	9.60	-5.03	-10.07
2013	-15.14	-21.61	-11.66	-0.76	11.62	28.09	25.86	19.58	15.55	2.71	2.47	1.71
2014	-3.11	-2.12	-1.39	4.22	7.52	17.34	21.12	18.79	13.72	4.42	3.40	-4.97
2015	-7.06	-0.81	-4.02	0.67	13.62	25.74	27.19					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.22	-0.51	-0.29	-2.12
2005	2.90	-2.09	2.95	-0.68	-1.03	-2.29	-2.35	1.80	-0.12	-1.50	-5.23	-0.21
2006	-0.11	3.10	-3.25	-4.67	-0.08	-0.13	-1.33	-2.02	2.53	1.88	0.60	2.30
2007	-1.33	-0.32	-1.70	1.95	-4.01	0.52	1.92	2.78	1.92	-2.05	3.31	1.38
2008	-3.46	-3.60	-3.22	3.38	-0.04	1.35	-0.03	-2.90	-1.53	-1.66	-0.12	4.91
2009	-0.66	-1.46	-4.55	1.32	2.29	-0.40	1.85	-0.48	-0.72	0.88	-4.04	1.33
2010	-1.82	-0.61	0.32	3.89	-2.36	-1.36	-0.33	1.72	2.51	-0.86	5.77	-2.09
2011	3.54	5.78	6.69	-4.34	-0.69	-1.74	-0.30	0.33	0.86	0.06	-5.47	-3.40
2012	-5.78	0.05	-6.70	-0.78	-1.48	0.68	1.81	2.11	0.07	3.38	-0.40	-3.49
2013	-0.40	-7.00	2.56	-3.23	0.73	2.94	1.60	-0.70	-1.89	1.26	2.42	2.20
2014	4.71	2.26	4.74	1.80	2.50	-2.13	-1.74	-1.14	-0.35	0.08	3.45	-0.81
2015	2.40	3.90	2.17	1.37	4.18	2.54	-1.10					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table K-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak

Variable: Wind speed, in meters per second

File name: AK113\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.65	3.70	NaN	NaN
2006	NaN	NaN	NaN	3.67	4.05	3.79	3.75	3.08	2.81	4.11	NaN	NaN
2007	NaN	NaN	NaN	4.07	4.14	4.33	3.61	3.06	3.48	NaN	NaN	NaN
2008	NaN	NaN	NaN	3.61	5.15	3.17	3.47	3.21	2.91	NaN	NaN	3.90
2009	3.97	4.89	NaN	3.85	3.85	4.55	3.88	3.65	3.44	NaN	NaN	NaN
2010	3.09	5.28	NaN	3.67	5.17	4.92	3.51	3.74	3.22	NaN	NaN	3.36
2011	NaN	NaN	2.94	4.12	3.41	4.90	3.49	3.35	3.95	4.11	NaN	NaN
2012	NaN	NaN	NaN	4.02	3.81	4.15	3.19	3.98	3.11	3.57	NaN	NaN
2013	NaN	NaN	NaN	4.15	4.34	3.67	3.89	3.02	3.83	NaN	NaN	NaN
2014	NaN	3.73	3.19	3.47	4.28	3.37	3.64	4.21	4.17	4.74	NaN	NaN
2015	3.94	5.32	NaN	3.95	4.01	3.42	3.72					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.84	10.54	NaN	NaN
2006	NaN	NaN	NaN	10.94	9.91	8.25	9.48	7.99	8.07	14.68	NaN	NaN
2007	NaN	NaN	NaN	10.77	10.70	9.48	7.69	8.69	7.63	NaN	NaN	NaN
2008	NaN	NaN	NaN	10.41	11.26	7.51	10.54	7.78	7.73	NaN	NaN	18.02
2009	12.86	15.78	NaN	10.38	10.62	8.58	8.73	8.67	9.72	NaN	NaN	NaN
2010	9.79	14.73	NaN	10.69	12.00	9.58	8.53	11.03	6.83	NaN	NaN	10.44
2011	NaN	NaN	10.12	11.08	8.29	9.96	7.66	6.67	8.46	12.81	NaN	NaN
2012	NaN	NaN	NaN	10.24	8.77	9.95	7.99	9.43	9.26	10.35	NaN	NaN
2013	NaN	NaN	NaN	11.46	13.30	7.63	9.51	6.43	9.09	NaN	NaN	NaN
2014	NaN	12.84	8.76	12.09	13.37	7.32	10.17	9.03	9.56	14.39	NaN	NaN
2015	11.34	18.32	NaN	12.48	13.08	8.25	8.79					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.07	-0.35	NaN	NaN
2006	NaN	NaN	NaN	-0.19	-0.17	-0.23	0.13	-0.41	-0.77	0.06	NaN	NaN
2007	NaN	NaN	NaN	0.21	-0.08	0.30	-0.00	-0.43	-0.10	NaN	NaN	NaN
2008	NaN	NaN	NaN	-0.25	0.93	-0.86	-0.14	-0.28	-0.67	NaN	NaN	NaN
2009	NaN	NaN	NaN	-0.01	-0.37	0.53	0.27	0.16	-0.14	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.18	0.95	0.89	-0.10	0.24	-0.36	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.26	-0.81	0.87	-0.13	-0.14	0.37	0.07	NaN	NaN
2012	NaN	NaN	NaN	0.16	-0.41	0.12	-0.42	0.48	-0.47	-0.48	NaN	NaN
2013	NaN	NaN	NaN	0.29	0.12	-0.36	0.28	-0.48	0.25	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.39	0.05	-0.65	0.02	0.72	0.59	0.70	NaN	NaN
2015	NaN	NaN	NaN	0.10	-0.21	-0.61	0.10					



**Table K-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	60.00	70.97
2006	3.23	71.43	54.84	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.33	67.74
2007	80.65	57.14	41.94	100.00	100.00	100.00	100.00	100.00	100.00	83.87	56.67	64.52
2008	93.55	93.10	32.26	100.00	100.00	100.00	100.00	100.00	100.00	90.32	76.67	100.00
2009	96.77	100.00	38.71	100.00	100.00	100.00	100.00	100.00	100.00	90.32	70.00	54.84
2010	96.77	100.00	80.65	100.00	100.00	100.00	100.00	100.00	100.00	77.42	30.00	100.00
2011	77.42	92.86	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.00	93.55
2012	58.06	13.79	93.55	100.00	100.00	100.00	100.00	96.77	100.00	100.00	93.33	61.29
2013	87.10	82.14	93.55	100.00	100.00	100.00	100.00	96.77	100.00	87.10	90.00	90.32
2014	87.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.33	6.45
2015	100.00	100.00	80.65	100.00	100.00	100.00	100.00					

**Table K-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Ground temperature, in degrees Celsius

File name: AK113\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.42	-0.20	-2.23	-11.03
2005	-13.68	-16.56	-16.98	-14.94	-8.42	0.04	2.44	3.40	0.89	-1.00	-4.84	-10.35
2006	-12.77	-14.28	-15.97	-15.00	-7.18	0.72	4.02	3.51	2.24	-0.65	-2.66	-8.13
2007	-14.54	-15.24	-19.21	-13.20	-8.44	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.41	-0.90	-5.57	-10.54
2010	-16.68	-16.07	-17.82	-12.99	-7.78	0.87	3.96	4.49	2.43	-0.83	-1.60	-8.18
2011	-12.88	-13.19	-12.99	-13.65	-6.28	0.94	4.31	4.06	1.64	-0.52	-4.57	-11.81
2012	-16.61	-16.21	-19.93	-15.32	-6.57	1.09	4.95	4.77	1.21	-0.25	-3.36	-10.51
2013	-14.87	-18.99	-17.15	-15.79	-7.61	1.64	5.19	4.08	0.84	-0.25	-2.67	-7.89
2014	-13.99	-14.91	-16.16	-12.49	-1.83	0.44	3.84	3.25	0.65	-0.33	-2.37	-9.34
2015	-13.13	-14.49	-13.86	-11.66	-3.93	2.01	3.99					

**Table K-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.30	-0.68	-5.66	-13.82
2005	-17.09	-17.86	-19.82	-17.47	-11.37	-1.31	0.25	0.34	-0.85	-2.34	-9.09	-11.84
2006	-16.58	-17.45	-17.52	-17.09	-12.86	-1.55	0.45	0.41	-0.14	-1.70	-6.00	-13.38
2007	-17.61	-18.88	-21.76	-15.41	-12.89	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.37	-2.55	-10.32	-14.93
2010	-20.19	-20.39	-20.78	-16.72	-10.43	-0.67	0.94	2.00	-0.17	-2.09	-2.69	-15.59
2011	-17.45	-14.86	-14.90	-15.83	-12.50	-0.29	1.12	1.73	-0.15	-2.23	-9.36	-15.93
2012	-20.30	-21.32	-21.15	-20.66	-13.08	-0.60	1.89	1.65	-0.11	-1.43	-6.93	-15.36
2013	-18.63	-21.23	-19.55	-19.08	-14.00	-0.64	1.92	0.33	-0.15	-1.11	-5.74	-14.94
2014	-18.98	-18.90	-20.27	-17.06	-8.83	-0.70	2.02	0.76	-0.13	-1.05	-5.08	-12.10
2015	-16.32	-18.65	-16.62	-13.50	-9.67	-0.32	2.31					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.51	-0.08	-0.60	-5.45
2005	-8.15	-15.21	-14.14	-11.41	-0.74	4.37	5.37	8.02	4.60	-0.29	-1.45	-8.06
2006	-10.11	-11.01	-14.12	-12.88	-0.75	5.03	9.29	8.04	7.83	-0.06	-0.26	-3.92
2007	-12.87	-10.63	-14.31	-10.27	-0.21	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.45	-0.15	-1.69	-6.29
2010	-12.76	-13.74	-15.89	-9.93	-0.51	5.52	7.97	7.85	5.47	-0.10	-0.63	-2.57
2011	-8.37	-10.55	-11.28	-11.38	0.09	5.14	7.43	6.75	5.20	-0.05	-0.92	-6.97
2012	-13.60	-13.85	-17.63	-11.71	-0.54	5.43	8.09	7.58	4.90	0.17	-1.16	-4.14
2013	-11.93	-16.33	-14.57	-11.98	-0.59	6.16	7.87	8.24	4.31	-0.03	-0.70	-0.94
2014	-10.81	-9.48	-11.60	-8.92	-0.48	4.95	6.34	6.26	2.38	0.33	-0.52	-5.12
2015	-9.98	-10.12	-10.96	-9.66	-0.05	5.81	7.29					

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.80	0.40	1.08	-1.28
2005	0.67	-1.01	-0.30	-1.05	-1.97	-0.93	-1.65	-0.42	-0.33	-0.40	-1.52	-0.60
2006	1.58	1.27	0.70	-1.11	-0.73	-0.25	-0.07	-0.31	1.02	-0.05	0.66	1.63
2007	-0.19	0.31	-2.53	0.70	-1.99	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.19	-0.29	-2.25	-0.78
2010	-2.33	-0.52	-1.15	0.90	-1.33	-0.10	-0.12	0.67	1.21	-0.23	1.72	1.57
2011	1.47	2.36	3.68	0.25	0.17	-0.03	0.22	0.23	0.42	0.08	-1.25	-2.06
2012	-2.27	-0.66	-3.25	-1.42	-0.12	0.12	0.86	0.94	-0.01	0.35	-0.05	-0.76
2013	-0.52	-3.44	-0.47	-1.90	-1.16	0.67	1.10	0.25	-0.38	0.35	0.65	1.86
2014	0.36	0.64	0.52	1.40	4.61	-0.53	-0.25	-0.57	-0.57	0.27	0.95	0.42
2015	1.22	1.05	2.81	2.23	2.52	1.04	-0.10					

**Table K-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	96.43	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	96.77					

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.63	-1.43	-1.49	-5.88
2005	-9.40	-12.34	-13.75	-13.47	-10.53	-5.21	-2.94	-2.02	-1.58	-1.39	-2.20	-6.56
2006	-8.96	-11.26	-12.22	-13.15	-10.44	-4.71	-2.70	-1.83	-1.45	-1.27	-1.27	-4.26
2007	-9.18	-10.92	-14.18	-12.96	-10.53	-5.00	-2.73	-1.81	-1.41	-1.26	-1.31	-3.93
2008	-8.21	-10.76	-12.23	-11.76	-9.28	-4.38	-2.33	-1.58	-1.30	-1.18	-1.17	-4.30
2009	-8.51	-11.91	-13.12	-13.75	-7.87	-3.69	-2.25	-1.55	-1.25	-1.12	-1.64	-5.73
2010	-9.89	-11.89	-13.30	-12.63	-10.09	-4.86	-2.73	-1.80	-1.36	-1.18	-1.12	-3.15
2011	-7.83	-9.88	-10.40	-11.06	-9.28	-4.08	-2.43	-1.58	-1.24	-1.11	-1.06	-4.85
2012	-9.63	-11.92	-13.68	-14.04	-10.40	-4.48	-2.64	-1.75	-1.35	-1.19	-1.09	-3.89
2013	-8.79	-12.15	-13.35	-13.47	-10.69	-4.69	-2.56	-1.66	-1.31	-1.17	-1.09	-2.57
2014	-8.15	-9.86	-12.02	-11.59	-6.69	-3.29	-2.08	-1.46	-1.19	-1.08	-1.00	-3.45
2015	-7.61	-10.42	-10.80	-10.61	-7.50	-3.28	-1.99					

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.84	-1.54	-2.44	-8.42
2005	-11.49	-13.19	-14.46	-14.01	-12.42	-7.96	-3.71	-2.44	-1.77	-1.52	-4.46	-7.77
2006	-10.69	-11.77	-13.31	-13.41	-12.73	-6.71	-3.46	-2.18	-1.62	-1.34	-2.15	-6.65
2007	-10.54	-12.55	-14.94	-14.51	-11.65	-7.83	-3.55	-2.16	-1.62	-1.37	-1.92	-6.10
2008	-9.69	-11.26	-13.19	-13.15	-10.66	-6.27	-3.14	-1.84	-1.42	-1.26	-1.93	-5.90
2009	-10.38	-12.59	-14.35	-14.39	-11.52	-5.03	-2.82	-1.82	-1.40	-1.22	-3.83	-7.77
2010	-11.59	-12.29	-13.78	-13.79	-11.35	-7.71	-3.42	-2.26	-1.57	-1.27	-1.23	-6.25
2011	-9.70	-10.25	-10.83	-11.56	-11.04	-5.81	-3.07	-1.92	-1.40	-1.21	-1.74	-7.74
2012	-11.58	-12.47	-14.78	-14.95	-12.56	-6.38	-3.33	-2.13	-1.54	-1.30	-1.19	-7.15
2013	-10.57	-13.52	-13.55	-13.75	-12.56	-6.92	-3.31	-2.01	-1.52	-1.29	-1.23	-5.87
2014	-9.44	-11.60	-12.50	-12.28	-10.28	-4.30	-2.58	-1.70	-1.35	-1.19	-1.12	-5.89
2015	-9.57	-11.32	-11.40	-10.95	-9.86	-4.43	-2.53					

**Table K-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.46	-1.33	-1.28	-2.47
2005	-7.81	-11.49	-13.17	-12.42	-8.00	-3.71	-2.33	-1.72	-1.46	-1.27	-1.24	-4.46
2006	-7.77	-10.65	-11.09	-12.74	-6.71	-3.42	-2.13	-1.56	-1.29	-1.19	-1.11	-2.13
2007	-6.65	-9.95	-12.55	-11.59	-7.83	-3.46	-2.09	-1.54	-1.29	-1.18	-1.18	-1.90
2008	-6.10	-9.69	-11.22	-10.66	-6.30	-3.08	-1.79	-1.38	-1.20	-1.07	-1.06	-1.96
2009	-5.90	-10.34	-12.00	-11.52	-5.01	-2.76	-1.80	-1.32	-1.14	-1.02	-1.03	-3.88
2010	-7.75	-11.59	-12.29	-11.35	-7.69	-3.33	-2.17	-1.49	-1.20	-1.09	-1.06	-1.15
2011	-6.29	-9.52	-10.07	-10.45	-5.79	-3.04	-1.88	-1.32	-1.11	-1.05	-0.98	-1.72
2012	-7.77	-11.58	-12.09	-12.54	-6.35	-3.24	-2.09	-1.44	-1.22	-1.08	-1.02	-1.04
2013	-7.15	-10.57	-13.02	-12.54	-6.91	-3.29	-1.99	-1.39	-1.18	-1.06	-0.97	-0.96
2014	-5.87	-8.72	-11.16	-10.22	-4.28	-2.52	-1.60	-1.24	-1.05	-0.96	-0.86	-0.93
2015	-5.91	-9.42	-10.15	-9.84	-4.38	-2.48	-1.59					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.28	-0.23	-0.18	-1.46
2005	-0.66	-1.13	-1.11	-0.88	-1.14	-0.88	-0.45	-0.35	-0.23	-0.19	-0.89	-2.15
2006	-0.22	-0.05	0.42	-0.56	-1.05	-0.38	-0.21	-0.15	-0.10	-0.07	0.04	0.16
2007	-0.44	0.29	-1.53	-0.37	-1.14	-0.67	-0.24	-0.13	-0.06	-0.06	0.00	0.49
2008	0.53	0.45	0.41	0.83	0.11	-0.05	0.16	0.10	0.05	0.02	0.14	0.11
2009	0.23	-0.70	-0.48	-1.16	1.52	0.64	0.24	0.13	0.10	0.08	-0.33	-1.32
2010	-1.15	-0.68	-0.66	-0.04	-0.70	-0.53	-0.24	-0.13	-0.01	0.02	0.19	1.27
2011	0.92	1.33	2.24	1.53	0.11	0.25	0.06	0.10	0.11	0.09	0.25	-0.43
2012	-0.89	-0.71	-1.04	-1.45	-1.01	-0.15	-0.15	-0.07	0.00	0.01	0.22	0.52
2013	-0.05	-0.94	-0.71	-0.88	-1.30	-0.36	-0.07	0.02	0.04	0.03	0.23	1.84
2014	0.59	1.35	0.62	1.00	2.71	1.05	0.41	0.21	0.17	0.12	0.32	0.96
2015	1.14	0.79	1.84	1.98	1.89	1.06	0.50					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.42	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	96.43	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	96.77					

**Table K-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Incident solar flux, in watts per meter squared

File name: AK113\_So\_d\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	66.1	25.9	1.9	0.0
2005	0.6	13.2	75.9	181.6	235.1	259.3	231.1	129.2	56.1	21.3	1.1	0.1
2006	0.8	18.2	91.9	180.7	227.5	202.5	173.9	117.6	67.4	21.0	2.0	0.0
2007	0.6	14.2	67.1	167.0	238.7	262.5	244.1	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	115.3	57.6	20.6	1.9	0.1
2009	1.0	15.8	89.5	160.2	211.8	202.9	189.3	108.7	54.8	18.4	1.7	0.1
2010	0.8	14.5	69.4	137.8	221.6	251.9	171.3	121.8	79.1	19.5	1.3	0.1
2011	0.7	14.1	78.2	181.2	243.5	219.7	183.8	126.6	52.0	22.1	2.3	0.1
2012	0.8	NaN	NaN	163.6	219.9	228.7	209.5	104.8	53.4	22.1	2.3	0.0
2013	0.6	7.6	NaN	NaN	230.3	223.8	173.1	112.4	61.6	23.5	2.8	0.1
2014	1.0	17.8	78.5	NaN	163.4	180.8	183.7	116.8	63.7	19.9	NaN	0.0
2015	1.0	14.3	76.8	163.2	212.2	224.4	185.2					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.2	4.7	-0.1	-0.0
2005	-0.1	-1.2	-2.5	14.7	14.7	33.6	36.6	14.5	-5.8	0.1	-0.8	0.0
2006	0.0	3.8	13.5	13.8	7.1	-23.1	-20.6	2.8	5.5	-0.3	0.1	-0.0
2007	-0.2	-0.2	-11.3	0.1	18.4	36.8	49.6	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.6	-4.3	-0.7	-0.0	0.0
2009	0.2	1.4	11.1	-6.7	-8.6	-22.8	-5.2	-6.0	-7.1	-2.8	-0.2	-0.0
2010	0.0	0.1	-9.0	-29.1	1.2	26.3	-23.2	7.1	17.2	-1.7	-0.6	0.0
2011	-0.1	-0.3	-0.2	14.3	23.1	-6.0	-10.7	11.8	-9.9	0.8	0.4	-0.0
2012	0.0	NaN	NaN	-3.3	-0.5	3.0	15.0	-9.9	-8.5	0.9	0.4	-0.0
2013	-0.2	-6.8	NaN	NaN	9.9	-1.8	-21.4	-2.3	-0.3	2.2	0.8	0.0
2014	0.2	3.4	0.1	NaN	-57.0	-44.8	-10.8	2.1	1.7	-1.4	NaN	-0.0
2015	0.2	-0.1	-1.6	-3.7	-8.2	-1.3	-9.3					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	16.1	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	65.5	61.3	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	93.5	80.0	100.0	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2014	100.0	100.0	96.8	56.7	100.0	96.7	100.0	100.0	100.0	100.0	93.3	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table K-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Reflected solar flux, in watts per meter squared

File name: AK113\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	20.0	20.8	2.0	-0.0
2005	0.6	12.7	64.1	147.5	186.9	67.9	52.6	30.0	11.1	10.3	1.5	-0.0
2006	0.6	14.9	72.0	151.1	160.6	42.6	39.3	26.6	12.9	10.9	1.6	-0.0
2007	0.5	13.8	68.2	140.5	193.3	51.0	56.5	35.0	15.1	15.3	2.0	0.0
2008	1.2	NaN	75.2	137.0	151.1	43.5	47.6	26.4	11.4	18.6	1.8	0.0
2009	0.8	13.0	73.6	137.5	121.2	39.3	43.2	23.5	12.4	8.6	1.9	0.0
2010	0.7	14.0	68.9	137.7	192.0	50.9	39.3	27.4	15.2	10.2	1.8	-0.0
2011	0.6	11.7	70.1	155.3	169.2	40.3	43.5	29.7	9.6	14.4	2.3	-0.0
2012	0.7	NaN	78.7	144.4	146.0	42.8	50.0	23.6	9.3	10.2	2.0	-0.0
2013	0.7	12.9	66.9	156.1	163.2	45.0	42.0	26.0	25.2	19.4	2.4	0.1
2014	0.8	15.9	66.4	138.1	73.6	33.7	42.3	25.9	15.1	11.5	2.3	0.1
2015	1.0	12.6	64.3	136.2	111.4	47.5	45.7					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.3	7.5	0.0	-0.0
2005	-0.1	-0.8	-5.8	3.7	35.2	22.0	7.0	3.2	-3.6	-3.0	-0.4	-0.0
2006	-0.1	1.4	2.2	7.3	8.9	-3.3	-6.4	-0.2	-1.8	-2.4	-0.4	-0.0
2007	-0.2	0.3	-1.6	-3.2	41.6	5.1	10.9	8.2	0.3	2.0	-0.0	0.0
2008	0.4	NaN	5.4	-6.8	-0.6	-2.3	2.0	-0.4	-3.3	5.3	-0.2	0.0
2009	0.1	-0.5	3.7	-6.2	-30.4	-6.6	-2.4	-3.3	-2.3	-4.7	-0.1	0.0
2010	-0.1	0.5	-1.0	-6.0	40.3	5.0	-6.3	0.6	0.5	-3.1	-0.2	-0.0
2011	-0.2	-1.8	0.3	11.5	17.5	-5.6	-2.1	2.8	-5.1	1.1	0.3	-0.0
2012	-0.1	NaN	8.8	0.6	-5.7	-3.1	4.4	-3.2	-5.4	-3.0	0.1	-0.0
2013	-0.0	-0.6	-2.9	12.3	11.6	-0.9	-3.7	-0.8	10.5	6.1	0.4	0.1
2014	0.1	2.4	-3.4	-5.7	-78.1	-12.1	-3.3	-0.9	0.4	-1.8	0.4	0.1
2015	0.2	-0.9	-5.6	-7.6	-40.3	1.7	0.0					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	89.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	93.1	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table K-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Rainfall, in millimeters per hour  
 File name: AK113\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.2	0.8	NaN	0.0
2015	0.0	0.0	0.0	NaN	NaN	2.9	1.5					

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	27.2	5.1	NaN	0.0
2015	0.0	0.0	0.0	NaN	NaN	28.2	9.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	100.0	100.0	93.3	100.0
2015	100.0	100.0	100.0	93.3	77.4	100.0	100.0					

**Table K-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Snow depth, in centimeters

File name: AK113\_snowD\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.3	7.6	8.9	7.0
2005	6.9	6.6	6.9	11.3	14.7	2.0	3.8	4.5	5.2	3.9	5.0	3.1
2006	3.5	11.1	11.8	15.4	14.7	4.0	4.5	5.0	5.8	4.3	3.9	5.3
2007	6.7	5.5	5.2	6.9	7.7	2.9	4.0	5.8	8.4	3.3	3.6	7.6
2008	9.0	10.3	12.7	17.2	11.0	3.6	6.1	10.7	11.2	4.5	8.4	7.7
2009	7.6	7.9	13.3	22.4	10.0	10.0	10.9	15.6	15.5	11.2	4.4	9.2
2010	11.1	16.7	19.4	20.8	20.8	13.1	10.4	11.6	14.1	8.6	14.5	14.0
2011	24.4	24.3	25.2	23.8	18.9	12.3	7.5	13.5	10.7	9.3	13.9	18.3
2012	19.1	24.0	27.5	28.7	22.2	NaN	15.8	20.4	NaN	NaN	NaN	NaN
2013	NaN	25.6	NaN	NaN	NaN	NaN	19.7	8.5	6.1	3.4	5.5	6.7
2014	7.3	7.3	7.5	11.2	9.4	5.5	6.5	2.9	2.7	16.2	24.9	28.4
2015	27.7	28.6	38.2	42.8	24.9	6.0	13.7					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.5	6.0	5.1	5.5
2005	6.0	5.7	4.8	6.8	4.7	-0.7	1.3	2.1	2.3	-0.4	-2.0	0.4
2006	0.9	4.0	9.1	10.7	-0.8	-0.5	1.1	1.8	2.6	1.1	0.4	0.7
2007	0.2	2.7	3.1	3.4	0.6	-0.2	1.2	1.8	1.9	-1.8	-2.1	-1.7
2008	2.7	5.9	5.7	12.9	-1.8	-1.9	0.1	5.1	5.4	0.3	3.7	4.0
2009	3.4	4.1	4.6	12.8	-0.7	0.2	4.3	7.8	10.3	1.2	-1.2	1.5
2010	9.2	9.9	16.9	15.6	-0.4	-1.5	5.5	5.0	7.2	0.6	1.8	8.8
2011	13.5	21.4	20.4	20.2	-0.5	3.8	0.4	-0.7	-1.4	-1.9	9.6	11.4
2012	15.4	17.1	20.0	24.2	-1.2	NaN	-0.1	0.1	NaN	NaN	NaN	NaN
2013	NaN	22.3	NaN	NaN	NaN	NaN	-0.5	-0.7	-1.0	-0.4	2.8	4.9
2014	4.7	5.1	5.0	7.4	-3.9	-4.0	0.7	-0.2	-0.1	-0.2	22.1	24.3
2015	25.1	25.3	25.9	38.0	1.0	-0.9	4.7					



**Table K-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.9	11.4	16.4	11.1
2005	8.7	7.7	9.4	14.9	19.8	4.7	5.7	6.5	7.7	6.7	10.6	9.0
2006	9.5	19.1	19.7	23.4	25.5	8.7	7.4	7.1	8.6	6.5	7.7	10.5
2007	15.2	8.3	7.0	9.5	11.0	5.7	5.8	8.6	12.0	11.1	15.1	14.1
2008	12.7	20.9	22.2	24.1	20.5	7.0	18.8	18.1	16.9	12.9	16.5	15.1
2009	15.1	15.3	20.5	30.3	16.4	14.6	14.9	19.2	21.0	19.7	16.0	21.1
2010	14.1	22.2	23.6	28.8	25.4	18.2	14.6	15.5	18.6	16.1	22.3	20.5
2011	27.0	26.5	27.0	26.2	25.3	18.3	11.6	21.5	21.4	19.7	18.4	25.3
2012	26.3	34.1	33.5	32.9	32.8	NaN	25.6	35.3	NaN	NaN	NaN	NaN
2013	NaN	29.4	NaN	NaN	NaN	NaN	38.6	13.7	12.4	9.7	9.4	11.4
2014	14.8	10.5	12.6	22.2	21.2	10.1	12.2	8.7	8.6	27.7	27.5	35.2
2015	35.4	34.5	54.7	46.3	44.8	14.3	18.6					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.5	-0.3	-0.4	-3.8
2005	-5.4	-8.7	-9.9	-8.8	-0.7	-4.6	-5.6	-5.7	-3.6	-4.0	-4.3	-7.7
2006	-8.8	-4.2	-5.0	-4.6	-0.7	-2.6	-4.9	-5.2	-3.0	-3.6	-5.4	-5.4
2007	-5.6	-9.8	-11.6	-13.1	-7.7	-3.7	-5.3	-4.4	-0.4	-4.6	-5.7	-3.1
2008	-3.3	-4.9	-4.1	-2.8	-4.4	-3.0	-3.2	0.4	2.4	-3.4	-0.9	-3.0
2009	-4.8	-7.4	-3.5	2.4	-5.5	3.4	1.5	5.4	6.7	3.3	-4.9	-1.5
2010	-1.3	1.4	2.6	0.7	5.3	6.5	1.0	1.4	5.3	0.7	5.2	3.2
2011	12.1	9.0	8.4	3.8	3.5	5.7	-1.9	3.3	1.9	1.4	4.6	7.6
2012	6.8	8.7	10.7	8.6	6.7	NaN	6.5	10.2	NaN	NaN	NaN	NaN
2013	NaN	10.3	NaN	NaN	NaN	NaN	10.3	-1.7	-2.7	-4.5	-3.8	-4.0
2014	-5.0	-8.0	-9.3	-8.9	-6.0	-1.1	-2.9	-7.3	-6.1	8.3	15.7	17.7
2015	15.3	13.4	21.5	22.7	9.5	-0.6	4.4					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	87.1	92.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	92.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	93.3	87.1	86.7	96.8
2012	100.0	89.7	100.0	100.0	90.3	60.0	100.0	100.0	76.7	19.4	0.0	0.0
2013	22.6	85.7	38.7	20.0	35.5	46.7	83.9	96.8	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table K-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Soil moisture, in water fraction by volume

File name: AK113\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.37	0.36	0.12	NaN
2005	NaN	NaN	NaN	NaN	0.04	0.08	0.32	NaN	0.38	0.25	0.03	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.09	0.36	0.38	0.38	0.37	0.10	0.02
2007	NaN	NaN	NaN	NaN	0.02	0.10	0.24	0.23	0.25	0.14	0.04	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.09	0.24	0.32	0.29	0.23	0.06	0.01
2009	NaN	NaN	NaN	NaN	0.02	0.08	0.16	0.21	0.34	0.22	0.03	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.04	0.16	0.21	0.24	0.14	0.05	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.05	0.20	0.22	0.28	0.26	0.06	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.03	0.13	0.14	0.28	0.26	0.10	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.04	0.18	0.34	0.34	0.29	0.14	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.02	0.22	0.28	0.34	0.32	0.11	0.01
2015	NaN	NaN	NaN	NaN	NaN	0.09	0.21					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.35	0.05	NaN
2005	NaN	NaN	NaN	NaN	0.03	0.06	0.18	NaN	0.37	0.09	0.01	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.02	0.29	0.37	0.37	0.24	0.03	0.01
2007	NaN	NaN	NaN	NaN	0.01	0.04	0.23	0.22	0.24	0.08	0.01	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.02	0.18	0.30	0.28	0.14	0.02	0.00
2009	NaN	NaN	NaN	NaN	0.01	0.03	0.11	0.14	0.28	0.10	0.01	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.02	0.08	0.19	0.22	0.07	0.03	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.04	0.09	0.22	0.22	0.20	0.01	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.02	0.07	0.12	0.16	0.22	0.02	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.02	0.13	0.24	0.31	0.27	0.02	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.02	0.04	0.22	0.31	0.29	0.02	0.00
2015	NaN	NaN	NaN	NaN	NaN	0.03	0.19					

**Table K-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.37	0.36	0.35	NaN
2005	NaN	NaN	NaN	NaN	0.06	0.18	0.38	NaN	0.38	0.38	0.09	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.37	0.40	0.39	0.39	0.39	0.24	0.04
2007	NaN	NaN	NaN	NaN	0.04	0.26	0.26	0.24	0.25	0.24	0.08	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.22	0.36	0.36	0.30	0.28	0.14	0.02
2009	NaN	NaN	NaN	NaN	0.04	0.13	0.18	0.40	0.40	0.28	0.10	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.08	0.22	0.24	0.27	0.23	0.09	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.09	0.32	0.23	0.40	0.30	0.20	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.08	0.14	0.16	0.40	0.29	0.22	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.13	0.26	0.40	0.39	0.31	0.27	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.04	0.28	0.40	0.38	0.38	0.29	0.03
2015	NaN	NaN	NaN	NaN	NaN	0.30	0.24					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.05	0.11	0.05	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.02	0.11	NaN	0.06	-0.00	-0.05	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.02	0.14	0.12	0.07	0.12	0.02	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.03	0.02	-0.03	-0.07	-0.11	-0.03	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.02	0.02	0.06	-0.03	-0.02	-0.02	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.01	-0.05	-0.05	0.03	-0.03	-0.04	NaN
2010	NaN	NaN	NaN	NaN	NaN	-0.03	-0.06	-0.04	-0.07	-0.11	-0.03	NaN
2011	NaN	NaN	NaN	NaN	NaN	-0.02	-0.02	-0.04	-0.03	0.01	-0.01	NaN
2012	NaN	NaN	NaN	NaN	NaN	-0.03	-0.09	-0.12	-0.04	0.01	0.02	NaN
2013	NaN	NaN	NaN	NaN	NaN	-0.02	-0.04	0.08	0.03	0.04	0.06	NaN
2014	NaN	NaN	NaN	NaN	NaN	-0.04	-0.00	0.03	0.02	0.07	0.03	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.02	-0.01					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	90.32
2005	38.71	0.00	0.00	10.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	54.84
2006	3.23	0.00	0.00	0.00	51.61	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	12.90	28.57	0.00	36.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	74.19
2008	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	9.68	0.00	0.00	10.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	48.39
2010	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	100.00	100.00	70.97
2011	0.00	0.00	0.00	0.00	32.26	100.00	100.00	100.00	100.00	100.00	100.00	41.94
2012	0.00	0.00	0.00	0.00	41.94	100.00	100.00	96.77	100.00	100.00	100.00	45.16
2013	0.00	0.00	0.00	0.00	29.03	100.00	100.00	96.77	100.00	100.00	100.00	54.84
2014	0.00	0.00	0.00	0.00	90.32	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	12.90	0.00	0.00	0.00	77.42	100.00	100.00					

**Table K-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table K-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Air temperature, in degrees Celsius  
 File name: AK113\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-7.98	NaN
2005	-25.47	-15.04	7.46	-9.58	-10.42
2006	-24.23	-18.11	7.22	-5.64	-9.91
2007	-24.85	-16.75	10.15	-6.28	-9.44
2008	-26.94	-15.46	7.84	-8.41	-10.41
2009	-24.08	-15.79	8.72	-8.58	-10.16
2010	-25.45	-14.88	8.42	-4.87	-9.41
2011	-22.79	-14.86	7.84	-8.81	-9.69
2012	-28.20	-18.47	9.94	-6.27	-10.78
2013	-28.61	-15.41	9.69	-6.70	-9.74
2014	-22.00	-12.43	6.72	-6.25	-8.68
2015	-23.33	-12.87			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	12.71	NaN
2005	1.51	5.28	24.84	12.93	24.84
2006	3.53	8.83	25.27	18.70	25.27
2007	1.59	2.90	25.81	18.79	25.81
2008	2.05	9.22	28.53	7.89	28.53
2009	-1.08	14.19	29.48	19.52	29.48
2010	-0.89	4.33	24.72	18.90	24.72
2011	0.90	10.14	23.73	15.11	23.73
2012	-2.36	7.28	24.51	11.98	24.51
2013	-10.07	11.62	28.09	15.55	28.09
2014	1.71	7.52	21.12	13.72	21.12
2015	-0.81	13.62			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-33.38	NaN
2005	-40.30	-38.60	-3.81	-39.10	-40.30
2006	-45.73	-40.95	-5.93	-32.32	-45.73
2007	-44.20	-41.99	-2.58	-28.41	-44.20
2008	-45.37	-43.42	-5.37	-30.45	-45.37
2009	-43.42	-41.59	-2.31	-37.24	-43.42
2010	-45.15	-44.20	-1.08	-27.05	-45.15
2011	-45.01	-36.99	-3.49	-41.27	-44.62
2012	-48.00	-42.79	-1.39	-31.19	-48.00
2013	-42.38	-36.60	-4.67	-31.81	-42.38
2014	-43.08	-38.82	-2.95	-30.02	-43.08
2015	-38.33	-39.16			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.77	NaN
2005	-0.38	0.42	-0.94	-2.37	-0.55
2006	0.86	-2.65	-1.18	1.58	-0.05
2007	0.23	-1.29	1.75	0.94	0.43
2008	-1.86	0.00	-0.55	-1.20	-0.54
2009	1.01	-0.33	0.33	-1.36	-0.30
2010	-0.36	0.58	0.02	2.34	0.45
2011	2.30	0.60	-0.56	-1.59	0.17
2012	-3.11	-3.01	1.54	0.95	-0.92
2013	-3.52	0.05	1.30	0.51	0.13
2014	3.08	3.03	-1.67	0.96	1.18
2015	1.76	2.59			

**Table K-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	98.91	100.00	99.73
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

**Table K-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Wind speed, in meters per second  
 File name: AK113\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	3.54	NaN	NaN	2006	NaN	NaN	9.48	NaN	NaN
2007	NaN	NaN	3.66	NaN	NaN	2007	NaN	NaN	9.48	NaN	NaN
2008	NaN	NaN	3.29	NaN	NaN	2008	NaN	NaN	10.54	NaN	NaN
2009	4.23	NaN	4.02	NaN	NaN	2009	18.02	NaN	8.73	NaN	NaN
2010	NaN	NaN	4.05	NaN	NaN	2010	NaN	NaN	11.03	NaN	NaN
2011	NaN	3.48	3.90	3.74	3.86	2011	NaN	11.08	9.96	12.81	21.25
2012	NaN	3.55	3.77	3.25	NaN	2012	NaN	10.24	9.95	10.35	NaN
2013	NaN	4.47	3.53	NaN	NaN	2013	NaN	14.83	9.51	NaN	NaN
2014	NaN	3.65	3.74	NaN	NaN	2014	NaN	13.37	10.17	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table K-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	0.00	0.00	0.00	0.00	0.00
2005	NaN	NaN	NaN	NaN	NaN	2005	0.00	0.00	28.26	86.81	34.79
2006	NaN	NaN	-0.17	NaN	NaN	2006	47.78	84.78	100.00	94.51	81.64
2007	NaN	NaN	-0.05	NaN	NaN	2007	68.89	80.43	100.00	80.22	82.19
2008	NaN	NaN	-0.42	NaN	NaN	2008	83.52	77.17	100.00	89.01	90.44
2009	NaN	NaN	0.31	NaN	NaN	2009	98.89	79.35	100.00	86.81	87.40
2010	NaN	NaN	0.34	NaN	NaN	2010	83.33	93.48	100.00	69.23	90.41
2011	NaN	NaN	0.19	NaN	NaN	2011	90.00	100.00	100.00	96.70	96.16
2012	NaN	NaN	0.06	NaN	NaN	2012	56.04	97.83	98.91	97.80	84.97
2013	NaN	NaN	-0.18	NaN	NaN	2013	76.67	97.83	98.91	92.31	93.97
2014	NaN	NaN	0.03	NaN	NaN	2014	92.22	100.00	100.00	94.51	89.59
2015	NaN	NaN				2015	67.78	93.48			

**Table K-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Ground temperature, in degrees Celsius

File name: AK113\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.67	NaN	2004	NaN	NaN	NaN	-5.66	NaN
2005	-13.66	-13.43	1.98	-1.64	-6.61	2005	-17.86	-19.82	-1.31	-9.09	-19.82
2006	-12.40	-12.69	2.77	-0.36	-5.46	2006	-17.45	-17.52	-1.55	-6.00	-17.52
2007	-12.55	-13.62	NaN	NaN	NaN	2007	-18.88	-21.76	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	-1.68	NaN	2009	NaN	NaN	NaN	-10.32	NaN
2010	-14.37	-12.86	3.13	-0.01	-5.80	2010	-20.39	-20.78	-0.67	-2.69	-20.78
2011	-11.36	-10.94	3.13	-1.14	-5.36	2011	-17.45	-15.83	-0.29	-9.36	-17.45
2012	-14.85	-13.92	3.62	-0.80	-6.40	2012	-21.32	-21.15	-0.60	-6.93	-21.32
2013	-14.65	-13.49	3.65	-0.69	-6.07	2013	-21.23	-19.55	-0.64	-5.74	-21.23
2014	-12.15	-10.07	2.53	-0.68	-5.15	2014	-18.98	-20.27	-0.70	-5.08	-20.27
2015	-12.25	-9.80				2015	-18.65	-16.62			

**Table K-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	3.51	NaN
2005	-5.45	-0.74	8.02	4.60	8.02
2006	-8.06	-0.75	9.29	7.83	9.29
2007	-3.92	-0.21	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	5.45	NaN
2010	-6.29	-0.51	7.97	5.47	7.97
2011	-2.57	0.09	7.43	5.20	7.43
2012	-6.97	-0.54	8.09	4.90	8.09
2013	-4.14	-0.59	8.24	4.31	8.24
2014	-0.94	-0.48	6.34	2.38	6.34
2015	-5.12	-0.05			

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.19	NaN
2005	-0.52	-1.12	-1.00	-0.79	-0.77
2006	0.73	-0.38	-0.21	0.49	0.38
2007	0.59	-1.30	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	-0.82	NaN
2010	-1.24	-0.55	0.16	0.84	0.04
2011	1.78	1.37	0.15	-0.29	0.47
2012	-1.71	-1.61	0.64	0.06	-0.56
2013	-1.51	-1.18	0.67	0.16	-0.23
2014	0.99	2.24	-0.45	0.17	0.68
2015	0.89	2.52			

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	0.00	0.00	41.37
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	26.09	100.00	40.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	98.91	100.00	99.73
2014	98.89	98.91	100.00	100.00	99.45
2015	100.00	100.00			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-1.52	NaN
2005	-9.10	-12.58	-3.37	-1.72	-6.75
2006	-8.85	-11.92	-3.06	-1.33	-6.09
2007	-8.03	-12.55	-3.16	-1.33	-6.24
2008	-7.56	-11.08	-2.74	-1.22	-5.69
2009	-8.12	-11.55	-2.48	-1.34	-5.99
2010	-9.08	-12.00	-3.11	-1.22	-6.13
2011	-6.85	-10.24	-2.68	-1.14	-5.37
2012	-8.73	-12.69	-2.95	-1.21	-6.33
2013	-8.15	-12.49	-2.97	-1.19	-6.10
2014	-6.72	-10.06	-2.26	-1.09	-5.09
2015	-7.05	-9.63			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-2.44	NaN
2005	-13.19	-14.46	-7.96	-4.46	-14.46
2006	-11.77	-13.41	-6.71	-2.15	-13.41
2007	-12.55	-14.94	-7.83	-1.92	-14.94
2008	-11.26	-13.19	-6.27	-1.93	-13.19
2009	-12.59	-14.39	-5.03	-3.83	-14.39
2010	-12.29	-13.79	-7.71	-1.57	-13.79
2011	-10.25	-11.56	-5.81	-1.74	-11.56
2012	-12.47	-14.95	-6.38	-1.54	-14.95
2013	-13.52	-13.75	-6.92	-1.52	-13.75
2014	-11.60	-12.50	-4.30	-1.35	-12.50
2015	-11.32	-11.40			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-1.28	NaN
2005	-2.47	-8.00	-1.72	-1.24	-1.24
2006	-4.46	-6.71	-1.56	-1.11	-1.11
2007	-2.13	-7.83	-1.54	-1.18	-1.18
2008	-1.90	-6.30	-1.38	-1.06	-1.06
2009	-1.96	-5.01	-1.32	-1.02	-1.02
2010	-3.88	-7.69	-1.49	-1.06	-1.06
2011	-1.15	-5.79	-1.32	-0.98	-0.98
2012	-1.72	-6.35	-1.44	-1.02	-1.02
2013	-1.04	-6.91	-1.39	-0.97	-0.96
2014	-0.96	-4.28	-1.24	-0.86	-0.86
2015	-0.93	-4.38			

**Table K-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.22	NaN	2004	0.00	0.00	0.00	100.00	0.00
2005	-1.08	-1.05	-0.55	-0.42	-0.77	2005	100.00	100.00	100.00	100.00	100.00
2006	-0.83	-0.40	-0.24	-0.03	-0.11	2006	100.00	100.00	100.00	100.00	100.00
2007	-0.01	-1.02	-0.34	-0.03	-0.26	2007	100.00	100.00	0.00	0.00	41.37
2008	0.46	0.45	0.07	0.08	0.29	2008	0.00	0.00	0.00	0.00	0.00
2009	-0.10	-0.03	0.34	-0.04	-0.01	2009	0.00	0.00	26.09	100.00	40.00
2010	-1.06	-0.47	-0.29	0.08	-0.15	2010	100.00	100.00	100.00	100.00	100.00
2011	1.17	1.29	0.14	0.16	0.61	2011	100.00	100.00	100.00	100.00	100.00
2012	-0.71	-1.17	-0.13	0.09	-0.35	2012	100.00	100.00	98.91	100.00	99.73
2013	-0.13	-0.97	-0.15	0.11	-0.12	2013	100.00	100.00	98.91	100.00	99.73
2014	1.30	1.46	0.56	0.21	0.89	2014	98.89	98.91	100.00	100.00	99.45
2015	0.97	1.90				2015	100.00	100.00			

**Table K-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Incident solar flux, in watts per meter squared  
 File name: AK113\_So\_d\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	31.2	NaN	2004	NaN	NaN	NaN	3.0	NaN
2005	4.3	164.0	206.0	26.1	100.8	2005	-0.4	6.4	31.3	-2.1	10.4
2006	5.9	166.5	164.2	30.0	92.3	2006	1.2	9.0	-10.5	1.8	1.9
2007	4.6	157.5	NaN	NaN	NaN	2007	-0.1	-0.0	NaN	NaN	NaN
2008	NaN	NaN	NaN	26.6	NaN	2008	NaN	NaN	NaN	-1.6	NaN
2009	5.3	153.8	166.6	24.9	88.3	2009	0.5	-3.8	-8.1	-3.3	-2.2
2010	4.8	143.0	180.9	33.1	91.1	2010	0.0	-14.6	6.2	4.9	0.7
2011	4.6	167.5	176.2	25.4	94.1	2011	-0.1	9.9	1.5	-2.8	3.7
2012	NaN	NaN	181.3	25.9	NaN	2012	NaN	NaN	6.6	-2.3	NaN
2013	2.6	NaN	169.8	29.5	85.4	2013	-2.2	NaN	-4.9	1.3	-5.0
2014	5.9	NaN	160.0	29.1	80.8	2014	1.1	NaN	-14.7	0.9	-9.6
2015	4.8	150.6				2015	0.1	-7.0			



**Table K-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	89.1	0.0	63.8
2008	0.0	0.0	39.1	100.0	43.2
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	89.0	87.0	98.9	100.0	93.7
2013	100.0	91.3	98.9	98.9	97.3
2014	100.0	84.8	98.9	97.8	95.3
2015	100.0	100.0			

**Table K-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Reflected solar flux, in watts per meter squared

File name: AK113\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	14.3	NaN
2005	4.2	132.6	50.0	7.7	49.0
2006	4.9	127.6	36.1	8.5	44.6
2007	4.5	134.0	47.5	10.8	49.5
2008	6.2	120.9	39.1	10.7	44.8
2009	4.3	110.5	35.3	7.6	39.7
2010	4.6	132.8	39.1	9.1	46.7
2011	3.8	131.3	37.8	8.8	45.8
2012	3.6	122.8	38.9	7.2	43.6
2013	4.3	128.4	37.7	15.7	46.9
2014	5.3	92.2	34.0	9.7	35.5
2015	4.3	103.6			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	4.3	NaN
2005	-0.4	11.1	10.6	-2.3	4.4
2006	0.3	6.1	-3.3	-1.5	-0.0
2007	-0.1	12.4	8.1	0.8	4.9
2008	1.7	-0.6	-0.3	0.6	0.2
2009	-0.2	-11.0	-4.1	-2.4	-4.9
2010	0.1	11.3	-0.3	-0.9	2.1
2011	-0.7	9.7	-1.6	-1.2	1.2
2012	-0.9	1.2	-0.5	-2.8	-1.0
2013	-0.3	6.9	-1.7	5.7	2.3
2014	0.7	-29.3	-5.4	-0.3	-9.1
2015	-0.3	-17.9			

**Table K-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	96.7	100.0	100.0	100.0	99.2
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	97.8	100.0	98.9	100.0	99.2
2013	100.0	100.0	98.9	100.0	99.7
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table K-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
 Variable: Rainfall, in millimeters per hour  
 File name: AK113\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	1.2	NaN	2014	NaN	NaN	NaN	32.3	NaN
2015	0.0	NaN				2015	0.0	NaN			

**Table K-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	25.0	97.8	39.2
2015	100.0	90.2			

**Table K-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak

Variable: Snow depth, in centimeters

File name: AK113\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	7.6	NaN
2005	6.8	10.9	3.4	4.7	6.1
2006	5.6	14.0	4.5	4.7	7.4
2007	5.9	6.6	4.3	5.1	5.6
2008	9.0	13.6	6.8	8.0	9.4
2009	7.7	15.1	12.2	10.4	11.5
2010	12.2	20.3	11.7	12.3	14.5
2011	20.8	22.6	11.0	11.3	17.0
2012	20.3	26.2	16.8	NaN	NaN
2013	NaN	NaN	NaN	5.0	NaN
2014	7.1	9.3	5.0	14.6	10.8
2015	28.2	35.2			

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	3.5	NaN
2005	5.5	4.7	-0.7	-2.0	-2.0
2006	0.4	-0.8	-0.5	0.4	-0.8
2007	0.2	0.6	-0.2	-2.1	-2.1
2008	-1.7	-1.8	-1.9	0.3	-1.9
2009	3.4	-0.7	0.2	-1.2	-1.2
2010	1.5	-0.4	-1.5	0.6	-1.5
2011	8.8	-0.5	-0.7	-1.9	-1.9
2012	11.4	-1.2	-1.5	NaN	NaN
2013	NaN	NaN	NaN	-1.0	NaN
2014	4.7	-3.9	-4.0	-0.2	-4.0
2015	24.3	1.0			

**Table K-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	16.4	NaN	2004	0.0	0.0	0.0	100.0	0.0
2005	11.1	19.8	6.5	10.6	19.8	2005	93.3	100.0	100.0	100.0	98.4
2006	19.1	25.5	8.7	8.6	25.5	2006	97.8	100.0	100.0	100.0	99.5
2007	15.2	11.0	8.6	15.1	15.2	2007	100.0	100.0	100.0	100.0	100.0
2008	20.9	24.1	18.8	16.9	24.1	2008	100.0	100.0	100.0	100.0	100.0
2009	15.3	30.3	19.2	21.0	30.3	2009	100.0	100.0	100.0	100.0	99.7
2010	22.2	28.8	18.2	22.3	28.8	2010	98.9	100.0	100.0	100.0	100.0
2011	27.0	27.0	21.5	21.4	27.0	2011	100.0	100.0	97.8	89.0	96.4
2012	34.1	33.5	35.3	NaN	NaN	2012	95.6	96.7	87.0	31.9	69.7
2013	NaN	NaN	NaN	12.4	NaN	2013	34.4	31.5	76.1	100.0	69.0
2014	14.8	22.2	12.2	27.7	35.2	2014	100.0	100.0	100.0	100.0	100.0
2015	35.4	54.7				2015	100.0	100.0			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.8	NaN
2005	-5.5	-6.5	-5.2	-3.7	-4.2
2006	-6.8	-3.4	-4.2	-3.7	-2.9
2007	-6.5	-10.8	-4.4	-3.3	-4.7
2008	-3.4	-3.8	-1.9	-0.4	-0.9
2009	-4.6	-2.2	3.5	2.0	1.2
2010	-0.1	2.9	3.0	4.0	4.2
2011	8.4	5.2	2.3	2.9	6.7
2012	7.9	8.8	8.1	NaN	NaN
2013	NaN	NaN	NaN	-3.4	NaN
2014	-5.3	-8.1	-3.7	6.3	0.5
2015	15.9	17.8			

**Table K-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Piksiksak  
Variable: Soil moisture, in water fraction by volume

File name: AK113\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.28	NaN
2005	NaN	NaN	0.26	0.22	NaN
2006	NaN	NaN	0.28	0.28	NaN
2007	NaN	NaN	0.19	0.14	NaN
2008	NaN	NaN	0.22	0.19	NaN
2009	NaN	NaN	0.15	0.20	NaN
2010	NaN	NaN	0.14	0.15	NaN
2011	NaN	NaN	0.16	0.20	NaN
2012	NaN	NaN	0.10	0.21	NaN
2013	NaN	NaN	0.19	0.26	NaN
2014	NaN	NaN	0.18	0.25	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.37	NaN
2005	NaN	NaN	0.38	0.38	NaN
2006	NaN	NaN	0.40	0.39	NaN
2007	NaN	NaN	0.26	0.25	NaN
2008	NaN	NaN	0.36	0.30	NaN
2009	NaN	NaN	0.40	0.40	NaN
2010	NaN	NaN	0.24	0.27	NaN
2011	NaN	NaN	0.32	0.40	NaN
2012	NaN	NaN	0.16	0.40	NaN
2013	NaN	NaN	0.40	0.39	NaN
2014	NaN	NaN	0.40	0.38	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.05	NaN
2005	NaN	NaN	0.06	0.01	NaN
2006	NaN	NaN	0.02	0.03	NaN
2007	NaN	NaN	0.04	0.01	NaN
2008	NaN	NaN	0.02	0.02	NaN
2009	NaN	NaN	0.03	0.01	NaN
2010	NaN	NaN	0.02	0.03	NaN
2011	NaN	NaN	0.04	0.01	NaN
2012	NaN	NaN	0.02	0.02	NaN
2013	NaN	NaN	0.02	0.02	NaN
2014	NaN	NaN	0.02	0.02	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.07	NaN
2005	NaN	NaN	0.07	0.00	NaN
2006	NaN	NaN	0.09	0.07	NaN
2007	NaN	NaN	0.01	-0.07	NaN
2008	NaN	NaN	0.03	-0.02	NaN
2009	NaN	NaN	-0.03	-0.02	NaN
2010	NaN	NaN	-0.05	-0.07	NaN
2011	NaN	NaN	-0.03	-0.01	NaN
2012	NaN	NaN	-0.09	-0.01	NaN
2013	NaN	NaN	0.00	0.04	NaN
2014	NaN	NaN	-0.01	0.04	NaN
2015	NaN	NaN			

**Table K-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	44.44	36.96	97.83	100.00	66.85
2006	20.00	17.39	100.00	100.00	63.29
2007	47.78	45.65	100.00	100.00	71.23
2008	25.27	14.13	100.00	100.00	62.02
2009	37.78	36.96	100.00	100.00	64.38
2010	16.67	14.13	100.00	100.00	59.73
2011	24.44	10.87	100.00	100.00	56.44
2012	14.29	14.13	98.91	100.00	57.10
2013	15.56	9.78	98.91	100.00	56.99
2014	18.89	30.43	100.00	100.00	66.30
2015	38.89	26.09			

**Table K-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## L. East Teshekpuk

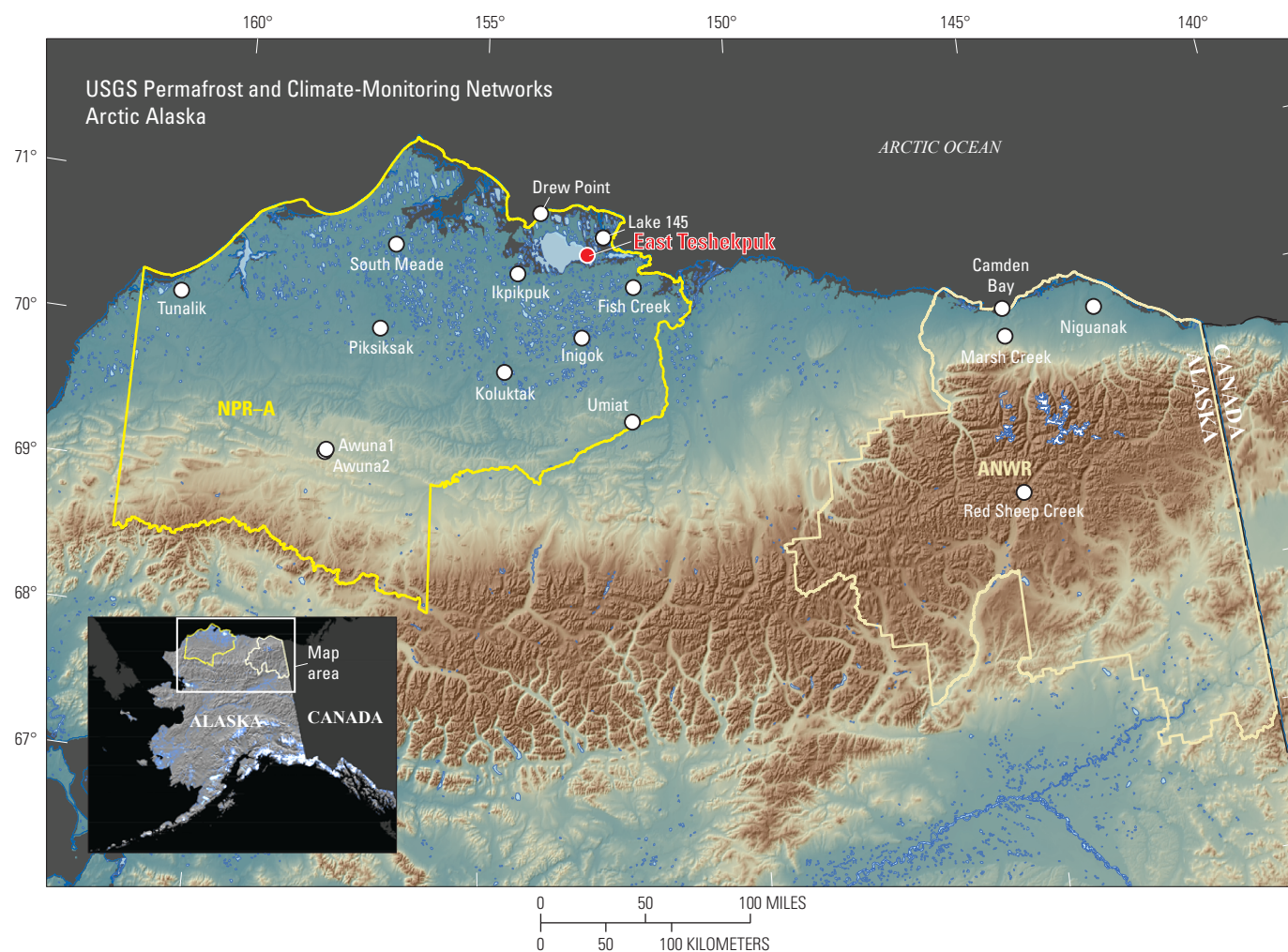
GTN-P code: U38

Latitude: 70°34.111'N

Longitude: 152°57.899'W

Elevation: 7 meters above mean sea level

Installation date: 10 AUG 2004



**Figure L-1.** Location map presenting the specific location of the East Teshekpuk site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)

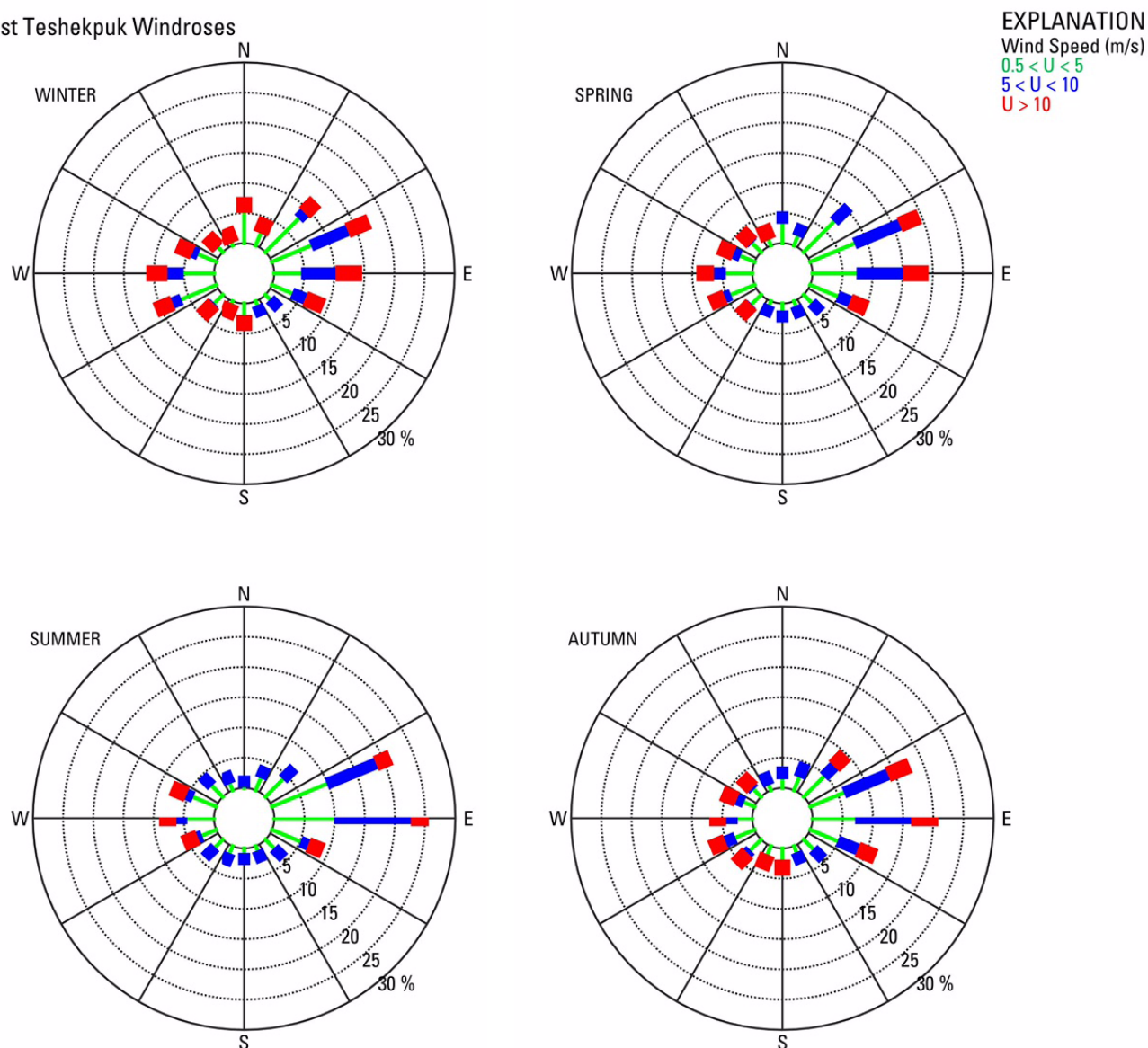




**Figure L-2.** East Teshekpuk station in summer 2008.



East Teshekpuk Windroses



**Figure L-3.** East Teshekpuk seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories ( $22.5^\circ$  each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table L-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
 Variable: Air temperature, in degrees Celsius  
 File name: AK114\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.17	-5.25	-17.01	-23.61
2005	-23.24	-26.27	-23.23	-17.09	-4.99	1.41	4.51	7.70	2.45	-6.28	-22.16	-20.77
2006	-26.20	-22.56	-28.50	-20.07	-4.15	4.76	7.11	3.68	3.31	-3.11	-16.96	-19.65
2007	-26.95	-25.40	-28.32	-13.61	-7.82	2.63	7.24	7.09	2.72	-6.05	-10.77	-20.00
2008	-28.62	-27.51	-28.85	-13.06	-4.28	4.68	NaN	4.61	1.15	-7.03	-16.22	-18.54
2009	-27.40	-27.40	-29.02	-15.72	-3.55	2.51	7.55	6.57	1.34	-4.06	-18.68	-20.17
2010	-27.98	-24.22	-24.33	-12.57	-6.33	2.06	7.12	7.38	3.35	-4.68	-10.96	-25.27
2011	-24.45	-21.97	-22.69	-19.58	-5.54	1.82	7.50	6.28	2.74	-5.21	-20.02	-25.35
2012	-31.77	-25.20	-32.80	-15.74	-5.85	4.01	10.53	NaN	2.64	-2.71	-16.00	-25.61
2013	-25.67	-30.53	-23.47	-19.48	-5.81	4.18	8.97	6.21	-0.27	-4.19	-14.64	-20.01
2014	-22.33	-24.24	-21.62	-15.74	-2.38	2.22	6.10	4.65	1.33	-5.22	-12.77	-22.32
2015	-24.28	-21.55	-23.87	-13.88	-1.29	6.57	6.39					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.17	-25.45	-28.05	-36.35
2005	-38.33	-34.47	-35.65	-31.62	-15.86	-5.31	-1.17	-0.57	-4.57	-21.03	-36.32	-35.39
2006	-39.30	-45.25	-40.49	-35.36	-23.50	-7.10	-1.64	-1.40	-2.45	-12.95	-29.22	-37.74
2007	-38.89	-39.52	-40.42	-26.32	-21.00	-4.52	0.89	0.84	-2.75	-20.72	-25.80	-40.87
2008	-44.16	-38.76	-40.97	-31.34	-14.10	-2.37	NaN	-0.28	-4.16	-20.29	-28.69	-33.81
2009	-36.85	-43.74	-38.21	-32.24	-13.36	-1.86	0.69	0.09	-9.01	-19.01	-32.62	-35.41
2010	-40.32	-41.54	-39.75	-30.22	-22.46	-2.12	-1.56	0.81	-4.90	-12.59	-32.57	-39.30
2011	-41.26	-34.80	-34.30	-31.99	-22.44	-3.97	0.31	0.22	-4.66	-23.31	-33.88	-36.93
2012	-45.16	-45.84	-40.02	-34.70	-20.30	-2.85	1.08	NaN	-1.15	-16.98	-26.87	-36.98
2013	-36.34	-39.51	-34.98	-35.26	-25.45	-6.13	-0.42	-1.29	-9.94	-16.53	-28.52	-35.03
2014	-40.54	-40.71	-37.46	-33.92	-11.11	-4.14	-0.72	-0.57	-3.54	-15.75	-26.22	-31.73
2015	-33.80	-36.45	-37.93	-28.69	-13.53	-4.11	0.56					

**Table L-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.67	5.97	-7.53	-5.43
2005	3.31	-12.78	-2.19	0.68	0.76	19.47	16.35	24.15	11.53	0.09	-11.27	-4.47
2006	-15.88	1.79	-20.18	-8.93	3.72	17.91	19.71	15.85	15.87	4.88	-1.32	-1.82
2007	-15.14	-6.56	-7.76	-4.39	1.34	11.55	20.37	20.69	14.69	-0.28	-3.96	-5.91
2008	-0.36	-7.32	-9.64	0.97	7.21	15.14	NaN	13.86	4.61	-0.33	-6.48	-1.42
2009	-3.13	-4.75	-14.19	4.56	5.49	11.86	24.85	18.56	12.44	2.31	-5.76	-3.58
2010	-12.25	-12.83	-14.20	-1.19	3.28	10.40	19.56	20.64	16.45	-0.07	1.84	-9.18
2011	-0.84	-0.52	-8.82	-5.37	6.47	12.59	19.29	15.74	13.53	0.65	-3.40	-6.20
2012	-14.09	-12.15	-17.06	-6.48	2.86	18.93	23.70	NaN	9.40	4.98	-4.24	-13.38
2013	-14.32	-20.96	-13.92	-2.59	4.30	19.00	20.19	19.89	11.74	1.59	2.05	0.68
2014	-12.34	-4.53	-5.71	1.52	4.93	14.34	19.07	14.26	10.65	1.85	-1.92	-6.17
2015	-7.11	-1.21	-4.80	-1.54	10.21	20.29	18.35					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.22	-0.28	-1.04	-1.47
2005	2.42	-1.51	2.54	-1.40	-0.51	-1.94	-2.79	1.83	0.50	-1.30	-6.19	1.38
2006	-0.54	2.20	-2.74	-4.39	0.33	1.41	-0.19	-2.20	1.36	1.87	-0.99	2.50
2007	-1.29	-0.64	-2.55	2.08	-3.34	-0.72	-0.07	1.22	0.77	-1.08	5.21	2.15
2008	-2.96	-2.75	-3.08	2.63	0.20	1.32	NaN	-1.26	-0.80	-2.05	-0.25	3.61
2009	-1.73	-2.65	-3.25	-0.03	0.92	-0.84	0.24	0.69	-0.61	0.91	-2.71	1.98
2010	-2.32	0.54	1.44	3.12	-1.85	-1.29	-0.18	1.50	1.40	0.30	5.01	-3.12
2011	1.21	2.79	3.08	-3.89	-1.06	-1.53	0.20	0.41	0.79	-0.23	-4.05	-3.20
2012	-6.11	-0.45	-7.03	-0.05	-1.37	0.66	3.23	NaN	0.70	2.26	-0.03	-3.46
2013	-0.01	-5.78	2.30	-3.79	-1.34	0.83	1.66	0.34	-2.22	0.78	1.34	2.14
2014	3.33	0.52	4.14	-0.05	2.10	-1.13	-1.20	-1.22	-0.62	-0.24	3.20	-0.17
2015	1.38	3.21	1.89	1.81	3.19	3.22	-0.92					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table L-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Wind speed, in meters per second

File name: AK114\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.33	4.16	2.94	NaN
2006	NaN	NaN	NaN	NaN	3.74	3.28	4.33	3.66	3.61	5.52	NaN	NaN
2007	3.93	NaN	3.83	4.56	3.89	5.20	4.49	3.83	4.99	NaN	NaN	4.16
2008	NaN	3.21	NaN	4.34	4.95	3.70	NaN	NaN	NaN	4.30	4.49	NaN
2009	NaN	4.27	NaN	NaN	4.02	5.47	4.75	4.10	4.14	NaN	3.89	NaN
2010	3.71	5.47	3.77	4.17	5.07	5.35	3.52	4.33	4.03	5.83	NaN	NaN
2011	NaN	5.07	NaN	4.10	3.39	5.49	4.25	4.21	4.60	4.92	NaN	4.00
2012	4.13	NaN	NaN	3.94	4.04	4.30	3.80	NaN	4.27	4.24	3.48	3.41
2013	5.27	4.83	5.36	3.96	3.80	3.53	4.52	3.51	4.34	3.55	5.03	NaN
2014	NaN	NaN	3.11	3.15	4.28	3.27	3.77	4.84	5.22	5.29	4.42	3.72
2015	NaN	5.12	NaN	4.11	4.05	3.29	4.01					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.48	12.21	8.74	NaN
2006	NaN	NaN	NaN	NaN	10.89	9.03	9.48	9.60	9.46	17.90	NaN	NaN
2007	15.36	NaN	14.06	14.18	9.51	13.30	9.24	9.17	10.96	NaN	NaN	18.26
2008	NaN	10.64	NaN	10.85	11.47	8.98	NaN	NaN	NaN	11.59	11.53	NaN
2009	NaN	14.11	NaN	NaN	11.30	11.35	10.07	12.08	9.83	NaN	12.39	NaN
2010	12.54	13.60	10.21	10.88	11.09	11.50	8.16	9.48	8.75	13.39	NaN	NaN
2011	NaN	19.91	NaN	10.67	8.87	10.45	9.27	8.97	9.94	12.78	NaN	15.41
2012	11.20	NaN	NaN	10.93	9.24	10.63	8.85	NaN	10.05	9.63	11.35	12.22
2013	18.88	11.76	16.73	12.29	10.78	9.01	11.00	8.58	10.70	12.39	16.45	NaN
2014	NaN	NaN	8.23	13.39	10.92	8.41	11.71	10.27	11.00	13.19	14.96	13.97
2015	NaN	19.27	NaN	13.47	14.14	8.02	10.12					

**Table L-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.75	-0.60	-1.11	NaN
2006	NaN	NaN	NaN	NaN	-0.39	-1.00	0.17	-0.45	-0.96	0.75	NaN	NaN
2007	NaN	NaN	-0.46	0.17	-0.24	0.91	0.33	-0.28	0.42	NaN	NaN	0.28
2008	NaN	-1.80	NaN	-0.06	0.81	-0.59	NaN	NaN	NaN	-0.46	0.45	NaN
2009	NaN	-0.75	NaN	NaN	-0.11	1.18	0.59	-0.02	-0.43	NaN	-0.15	NaN
2010	NaN	0.45	-0.52	-0.22	0.94	1.06	-0.64	0.22	-0.55	1.07	NaN	NaN
2011	NaN	0.05	NaN	-0.30	-0.74	1.21	0.09	0.10	0.03	0.15	NaN	0.12
2012	NaN	NaN	NaN	-0.46	-0.09	0.02	-0.36	NaN	-0.31	-0.53	-0.56	-0.46
2013	NaN	-0.19	1.07	-0.44	-0.33	-0.76	0.36	-0.61	-0.23	-1.21	0.99	NaN
2014	NaN	NaN	-1.19	-1.24	0.15	-1.02	-0.39	0.73	0.64	0.53	0.38	-0.16
2015	NaN	0.10	NaN	-0.28	-0.09	-1.00	-0.15					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.65	100.00	100.00	100.00	83.87
2006	0.00	64.29	70.97	80.00	100.00	100.00	100.00	100.00	100.00	100.00	80.00	93.55
2007	100.00	92.86	96.77	100.00	100.00	100.00	100.00	100.00	100.00	87.10	93.33	100.00
2008	64.52	100.00	77.42	100.00	100.00	100.00	87.10	90.32	73.33	96.77	100.00	64.52
2009	77.42	96.43	54.84	76.67	100.00	100.00	100.00	100.00	100.00	93.55	96.67	61.29
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	73.33	90.32
2011	64.52	100.00	64.52	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.33	96.77
2012	100.00	75.86	64.52	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	61.29
2014	90.32	82.14	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	77.42	100.00	80.65	100.00	100.00	100.00	100.00					

**Table L-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Ground temperature, in degrees Celsius

File name: AK114\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.43	-0.25	-7.88	-15.09
2005	-16.47	-19.00	-18.59	-15.71	-9.20	-1.00	0.78	2.61	0.53	-0.66	-8.69	-12.27
2006	-15.40	-16.14	-18.16	-16.43	-8.63	0.29	3.23	2.58	1.49	-0.18	-4.92	-10.58
2007	-17.22	-17.87	-21.01	-14.04	-9.68	-0.52	2.94	3.57	1.25	-0.22	-3.77	-9.69
2008	-16.06	-17.92	-19.56	-13.33	-6.76	1.51	NaN	2.65	0.67	-0.07	-2.42	-8.04
2009	-12.41	-14.85	-16.43	-14.19	-4.25	0.10	2.66	2.85	1.04	-0.08	-5.69	-11.33
2010	-17.01	-16.91	-18.05	-13.87	-9.00	NaN	1.92	3.52	1.64	-0.12	-0.88	-7.90
2011	-11.83	-13.13	-14.21	-13.72	-8.31	-0.58	1.87	2.79	1.22	-0.07	-1.59	-9.42
2012	-14.74	-14.91	-17.95	-14.71	-8.04	-0.57	2.41	NaN	1.03	-0.06	-0.59	-8.16
2013	-13.69	-18.00	-16.60	-14.72	-9.06	-0.66	1.97	2.77	0.50	-0.06	-0.70	-7.04
2014	-12.17	-13.98	-14.95	-12.71	-4.43	-0.86	0.79	1.35	0.33	-0.08	-1.70	-9.02
2015	-12.79	-14.66	-14.08	-11.87	-4.77	-0.13	1.82					

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.09	-1.99	-11.87	-17.66
2005	-20.85	-20.62	-22.17	-19.32	-12.41	-2.67	-0.30	0.24	-0.12	-3.37	-12.28	-14.15
2006	-18.83	-20.24	-20.04	-19.14	-13.46	-2.71	1.19	0.71	-0.05	-0.65	-9.97	-15.16
2007	-19.25	-22.93	-22.70	-16.82	-12.62	-5.66	0.31	1.81	-0.10	-0.76	-7.09	-13.98
2008	-19.30	-20.61	-21.00	-17.19	-11.48	-0.62	NaN	1.41	-0.11	-0.18	-7.36	-10.54
2009	-13.89	-16.22	-18.07	-17.24	-7.17	-1.43	0.83	1.03	-0.11	-0.22	-11.88	-14.81
2010	-19.73	-20.63	-20.70	-17.38	-11.09	NaN	0.07	1.50	-0.09	-0.26	-3.01	-13.09
2011	-14.41	-14.02	-15.34	-14.59	-12.83	-2.58	0.07	1.57	-0.11	-0.16	-6.07	-13.48
2012	-16.85	-17.64	-18.72	-18.54	-11.76	-1.93	0.14	NaN	-0.08	-0.14	-2.47	-12.61
2013	-17.19	-19.29	-18.17	-16.56	-12.74	-2.80	0.10	0.69	-0.12	-0.13	-3.71	-11.57
2014	-14.73	-17.42	-17.66	-14.88	-10.79	-2.69	-0.25	0.53	-0.13	-0.17	-5.50	-10.68
2015	-15.38	-16.98	-15.87	-14.21	-9.83	-1.20	1.06					

**Table L-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.45	-0.02	-2.08	-10.40
2005	-9.39	-16.84	-15.84	-12.44	-2.71	-0.01	2.41	6.54	2.00	-0.04	-3.42	-10.26
2006	-11.42	-12.38	-16.49	-13.46	-1.56	4.21	6.67	5.51	3.73	-0.04	-0.40	-6.41
2007	-15.23	-13.07	-16.86	-10.59	-5.59	1.53	5.45	5.94	3.75	0.01	-0.76	-6.09
2008	-12.20	-14.37	-17.22	-10.77	-0.50	5.20	NaN	3.89	1.80	0.08	-0.12	-6.43
2009	-10.47	-13.41	-13.46	-4.99	-0.96	2.03	5.77	5.45	3.20	-0.01	-0.10	-7.93
2010	-14.46	-14.60	-16.22	-11.07	-1.86	NaN	5.80	6.24	3.55	0.08	-0.18	-3.05
2011	-9.33	-11.95	-13.31	-12.76	-1.21	0.64	4.30	4.71	2.97	0.04	-0.05	-5.96
2012	-13.48	-13.33	-16.65	-11.63	-1.93	0.75	5.17	NaN	2.57	0.04	-0.00	-2.12
2013	-11.13	-16.20	-15.25	-12.11	-1.51	0.63	4.35	5.34	1.65	0.10	-0.01	-2.79
2014	-10.11	-10.34	-13.38	-10.62	-1.49	-0.10	1.99	2.87	1.01	-0.03	-0.07	-5.54
2015	-10.16	-11.32	-11.48	-9.82	-0.73	2.13	3.08					

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.43	-0.06	-4.16	-4.97
2005	-2.05	-3.02	-1.59	-1.78	-2.09	-0.76	-1.26	-0.03	-0.33	-0.47	-4.97	-2.16
2006	-0.99	-0.17	-1.16	-2.51	-1.51	0.53	1.19	-0.06	0.62	0.01	-1.20	-0.47
2007	-2.80	-1.90	-4.01	-0.11	-2.57	-0.28	0.90	0.93	0.39	-0.03	-0.05	0.43
2008	-1.65	-1.94	-2.56	0.60	0.35	1.76	NaN	0.01	-0.20	0.12	1.30	2.08
2009	2.00	1.13	0.57	-0.26	2.86	0.34	0.62	0.21	0.18	0.11	-1.97	-1.22
2010	-2.60	-0.93	-1.04	0.06	-1.89	NaN	-0.12	0.87	0.78	0.07	2.84	2.21
2011	2.59	2.84	2.80	0.21	-1.20	-0.34	-0.17	0.15	0.35	0.12	2.13	0.70
2012	-0.32	1.07	-0.95	-0.79	-0.93	-0.33	0.37	NaN	0.16	0.13	3.12	1.96
2013	0.73	-2.03	0.41	-0.80	-1.95	-0.42	-0.06	0.13	-0.37	0.13	3.01	3.08
2014	2.24	1.99	2.05	1.22	2.68	-0.62	-1.25	-1.29	-0.53	0.12	2.01	1.09
2015	1.62	1.31	2.92	2.06	2.34	0.11	-0.22					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	96.67	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	96.77	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	96.67	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	96.43	100.00	96.67	96.77	96.67	100.00					

**Table L-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.98	-2.67	-3.48	-8.60
2005	-11.46	-14.06	-15.06	-14.27	-11.28	-6.50	-4.35	-3.46	-2.96	-2.66	-3.97	-8.11
2006	-10.44	-12.57	-13.70	-14.40	-11.46	-6.24	-4.11	-3.28	-2.84	-2.58	-2.55	-5.88
2007	-10.88	-12.75	-15.89	-14.08	-11.24	-6.90	-4.38	-3.43	-2.94	-2.63	-2.75	-5.27
2008	-9.66	-12.62	-14.22	-13.28	-10.29	-5.71	NaN	-3.13	-2.73	-2.51	-2.37	-4.39
2009	-7.88	-10.75	-12.18	-12.96	-8.59	-5.06	-3.73	-3.06	-2.67	-2.43	-2.59	-6.49
2010	-10.95	-13.01	-14.21	-13.31	NaN	-6.27	-4.19	-3.30	-2.80	-2.50	-2.29	-3.44
2011	-7.65	-10.13	-11.33	-11.78	-10.25	-5.65	-3.94	-3.12	-2.68	-2.41	-2.21	-4.08
2012	-9.29	-11.57	-13.39	-13.59	-10.52	-5.90	-3.99	NaN	-2.68	-2.42	-2.23	NaN
2013	-8.13	-12.19	-13.41	-13.11	-10.82	-5.98	-3.98	-3.11	-2.65	NaN	-2.23	-3.04
2014	-7.52	-9.79	-11.77	-11.44	-8.16	-4.89	-3.61	-2.94	-2.58	-2.36	-2.21	-4.20
2015	-8.12	-10.85	-11.33	-11.12	-8.14	-4.53	-3.39					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.24	-2.81	-5.52	-10.80
2005	-13.46	-14.80	-15.84	-14.97	-13.13	-9.18	-5.04	-3.83	-3.18	-2.84	-6.35	-9.15
2006	-12.04	-13.12	-14.80	-14.91	-13.56	-8.48	-4.83	-3.63	-3.01	-2.74	-3.77	-8.23
2007	-12.37	-14.78	-16.53	-16.02	-12.29	-9.63	-5.16	-3.79	-3.17	-2.79	-3.53	-7.38
2008	-11.42	-13.09	-15.11	-15.10	-11.83	-7.61	NaN	-3.45	-2.92	-2.64	-2.56	-5.92
2009	-9.39	-11.49	-13.31	-13.45	-11.32	-6.24	-4.23	-3.36	-2.86	-2.59	-4.35	-8.59
2010	-12.75	-13.51	-14.62	-14.53	NaN	-8.91	-4.86	-3.70	-3.03	-2.66	-2.41	-5.89
2011	-9.57	-10.72	-11.88	-12.07	-11.62	-7.52	-4.54	-3.48	-2.90	-2.56	-2.36	-7.12
2012	-11.08	-11.95	-14.42	-14.56	-12.09	-7.96	-4.61	NaN	-2.91	-2.58	-2.36	NaN
2013	-10.39	-13.59	-13.67	-13.49	-12.22	-8.27	-4.64	-3.48	-2.87	NaN	-2.33	-5.36
2014	-9.00	-11.41	-12.21	-11.96	-10.59	-5.87	-4.10	-3.23	-2.79	-2.45	-2.29	-6.30
2015	-9.91	-11.70	-11.92	-11.76	-10.12	-5.54	-3.86					

## Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.77	-2.49	-2.49	-5.52
2005	-9.83	-13.41	-14.34	-13.11	-9.21	-5.01	-3.78	-3.13	-2.79	-2.52	-2.52	-6.35
2006	-9.10	-11.92	-12.47	-13.56	-8.51	-4.79	-3.59	-2.98	-2.68	-2.41	-2.32	-3.80
2007	-8.23	-11.63	-14.78	-12.27	-9.62	-5.12	-3.76	-3.09	-2.75	-2.47	-2.44	-3.47
2008	-7.37	-11.45	-13.07	-11.81	-7.59	-4.46	NaN	-2.87	-2.57	-2.37	-2.27	-2.53
2009	-5.88	-9.37	-11.20	-11.36	-6.23	-4.20	-3.29	-2.74	-2.50	-2.28	-2.21	-4.40
2010	-8.59	-12.60	-13.34	-11.98	NaN	-4.81	-3.59	-2.96	-2.61	-2.33	-2.13	-2.19
2011	-5.93	-9.55	-10.53	-11.56	-7.55	-4.49	-3.43	-2.81	-2.47	-2.25	-2.10	-2.12
2012	-7.10	-11.07	-11.77	-12.05	-7.96	-4.60	-3.45	NaN	-2.49	-2.29	-2.09	NaN
2013	-5.88	-10.39	-13.13	-12.21	-8.28	-4.59	-3.41	-2.80	-2.47	NaN	-2.10	-2.13
2014	-5.34	-8.83	-11.12	-10.57	-5.82	-4.05	-3.16	-2.70	-2.43	-2.24	-2.11	-2.20
2015	-6.29	-9.88	-10.64	-10.10	-5.52	-3.81	-3.02					



**Table L-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.23	-0.18	-0.86	-3.09
2005	-2.15	-2.29	-1.88	-1.37	-1.43	-0.72	-0.38	-0.30	-0.21	-0.16	-1.34	-2.61
2006	-1.13	-0.80	-0.53	-1.50	-1.61	-0.45	-0.15	-0.12	-0.09	-0.09	0.07	-0.38
2007	-1.57	-0.98	-2.72	-1.18	-1.39	-1.12	-0.42	-0.27	-0.19	-0.14	-0.13	0.24
2008	-0.35	-0.85	-1.05	-0.38	-0.45	0.07	NaN	0.04	0.02	-0.02	0.26	1.11
2009	1.42	1.02	0.99	-0.07	1.26	0.73	0.24	0.10	0.08	0.06	0.04	-0.99
2010	-1.64	-1.24	-1.04	-0.42	NaN	-0.49	-0.22	-0.13	-0.05	-0.01	0.34	2.06
2011	1.65	1.64	1.84	1.11	-0.41	0.13	0.03	0.05	0.07	0.08	0.41	1.42
2012	0.02	0.20	-0.21	-0.69	-0.67	-0.11	-0.02	NaN	0.07	0.08	0.40	NaN
2013	1.17	-0.42	-0.23	-0.21	-0.97	-0.19	-0.02	0.05	0.10	NaN	0.40	2.47
2014	1.79	1.98	1.40	1.45	1.68	0.90	0.35	0.22	0.17	0.13	0.42	1.30
2015	1.18	0.92	1.84	1.77	1.71	1.26	0.58					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	87.10	100.00	96.67	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	96.77	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	96.67	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	96.43	100.00	96.67	96.77	96.67	100.00					

**Table L-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Incident solar flux, in watts per meter squared

File name: AK114\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	56.3	20.3	1.9	0.0
2005	0.6	16.7	75.3	169.0	232.1	257.1	217.2	117.7	42.3	15.3	1.2	0.0
2006	0.5	14.8	81.0	168.2	234.0	243.8	203.8	102.5	60.6	15.4	1.8	0.0
2007	0.4	13.2	80.6	152.4	241.8	284.0	226.8	143.6	61.4	17.3	1.4	0.0
2008	0.5	12.9	80.8	152.3	224.4	243.8	NaN	103.9	53.0	19.7	1.6	0.0
2009	0.7	12.3	77.9	161.0	237.4	223.0	204.3	103.6	54.2	17.4	1.5	0.0
2010	0.1	3.9	NaN	NaN	228.2	257.3	176.1	115.3	64.9	18.0	1.4	0.0
2011	0.4	12.8	82.8	185.1	244.8	239.5	NaN	119.7	48.3	20.9	1.8	0.0
2012	0.4	8.1	NaN	NaN	242.9	237.9	207.7	NaN	52.7	20.4	1.7	0.0
2013	0.5	7.4	NaN	180.3	243.5	242.8	184.1	100.1	56.0	21.9	2.1	0.0
2014	0.8	NaN	70.6	170.7	196.4	202.7	173.4	92.1	53.8	18.3	2.4	0.0
2015	0.6	13.0	69.4	158.2	209.9	231.1	184.4					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.7	1.7	0.2	-0.0
2005	0.1	5.1	-2.0	4.5	3.7	15.0	19.7	8.6	-12.4	-3.3	-0.5	0.0
2006	0.0	3.2	3.7	3.7	5.5	1.7	6.3	-6.5	5.9	-3.2	0.1	-0.0
2007	-0.1	1.6	3.3	-12.2	13.3	41.9	29.3	34.6	6.7	-1.4	-0.3	0.0
2008	-0.0	1.3	3.5	-12.2	-4.1	1.7	NaN	-5.1	-1.7	1.1	-0.0	0.0
2009	0.2	0.7	0.6	-3.5	8.9	-19.1	6.8	-5.5	-0.4	-1.2	-0.2	-0.0
2010	-0.4	-7.7	NaN	NaN	-0.3	15.2	-21.5	6.2	10.3	-0.6	-0.3	-0.0
2011	-0.1	1.2	5.5	20.6	16.3	-2.6	NaN	10.6	-6.4	2.2	0.1	-0.0
2012	-0.1	-3.5	NaN	NaN	14.4	-4.1	10.2	NaN	-2.0	1.8	-0.0	0.0
2013	-0.0	-4.2	NaN	15.7	15.1	0.7	-13.5	-8.9	1.4	3.3	0.4	-0.0
2014	0.3	NaN	-6.7	6.2	-32.1	-39.4	-24.2	-16.9	-0.9	-0.3	0.7	-0.0
2015	0.1	1.4	-7.9	-6.4	-18.6	-11.0	-13.1					

#### Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	0.0	66.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	93.5	76.7	100.0	100.0	100.0	93.5	96.7	100.0	100.0	100.0
2013	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	92.9	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	100.0	100.0	100.0					

**Table L-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Reflected solar flux, in watts per meter squared

File name: AK114\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.9	15.8	1.8	-0.1
2005	0.5	13.7	61.9	144.3	186.7	78.0	52.6	29.2	9.0	8.0	1.6	0.0
2006	0.4	12.5	69.1	145.7	187.0	77.5	50.4	24.6	12.7	6.2	1.5	-0.0
2007	0.3	14.8	66.6	129.9	203.0	77.4	55.1	35.8	13.4	12.4	1.4	0.0
2008	0.4	12.9	70.1	127.9	148.9	48.9	NaN	23.6	12.5	17.6	1.5	0.0
2009	0.7	11.6	67.2	133.3	176.4	49.8	47.0	24.2	18.1	11.6	1.5	0.0
2010	0.6	14.5	66.4	136.7	180.6	67.0	38.9	27.4	14.4	12.3	1.2	0.0
2011	0.6	12.2	68.8	153.5	188.4	62.4	44.0	29.9	12.8	18.8	1.7	0.0
2012	0.6	10.1	NaN	133.8	189.7	68.1	53.1	NaN	12.6	11.5	1.7	0.0
2013	0.8	15.2	64.8	149.9	190.4	74.2	47.9	26.2	25.2	19.4	1.9	0.0
2014	0.8	14.8	63.4	141.9	143.6	63.4	43.2	26.1	14.3	13.4	2.0	0.0
2015	0.7	12.2	62.2	134.4	115.1	58.4	51.3					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.2	2.8	0.2	-0.1
2005	-0.1	0.6	-4.2	7.0	20.4	12.1	4.3	2.2	-5.7	-5.0	0.0	0.0
2006	-0.1	-0.6	3.1	8.3	20.7	11.6	2.0	-2.4	-2.0	-6.7	-0.1	-0.0
2007	-0.3	1.8	0.5	-7.5	36.7	11.5	6.7	8.8	-1.3	-0.6	-0.2	-0.0
2008	-0.2	-0.2	4.1	-9.4	-17.4	-17.0	NaN	-3.4	-2.2	4.7	-0.1	0.0
2009	0.1	-1.5	1.1	-4.1	10.0	-16.1	-1.4	-2.8	3.4	-1.4	-0.0	0.0
2010	0.1	1.4	0.4	-0.7	14.3	1.1	-9.5	0.4	-0.3	-0.7	-0.4	0.0
2011	0.0	-0.9	2.7	16.1	22.1	-3.5	-4.3	2.9	-1.9	5.8	0.1	0.0
2012	0.0	-2.9	NaN	-3.5	23.4	2.2	4.8	NaN	-2.1	-1.5	0.1	0.0
2013	0.2	2.2	-1.2	12.5	24.1	8.2	-0.5	-0.8	10.5	6.5	0.3	0.0
2014	0.2	1.8	-2.6	4.5	-22.7	-2.5	-5.1	-1.0	-0.4	0.4	0.4	0.0
2015	0.1	-0.8	-3.8	-3.0	-51.2	-7.5	3.0					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	87.1	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	83.9	96.7	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table L-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Rainfall, in millimeters per hour

File name: AK114\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	2.8	0.8	2.0	0.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	6.3	0.5					

Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	17.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	15.5	6.3	25.1	1.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	28.2	1.5					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	74.2	86.7	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	80.6	100.0	100.0					

**Table L-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Snow depth, in centimeters

File name: AK114\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.7	7.7	10.8	9.5
2005	9.8	12.4	13.1	23.4	28.7	6.2	3.4	7.0	6.6	10.3	15.0	19.9
2006	24.7	28.4	29.2	33.3	33.9	6.2	3.2	8.9	9.0	8.9	14.1	17.1
2007	15.6	18.0	18.3	25.3	29.9	10.1	6.8	3.2	2.2	3.7	11.4	16.0
2008	14.8	18.5	20.1	21.9	19.9	14.7	11.4	8.6	8.4	23.1	37.9	37.5
2009	40.8	48.6	47.0	51.7	40.7	5.3	NaN	3.4	4.6	6.8	8.8	17.3
2010	20.2	19.5	25.3	34.4	35.9	8.9	4.3	11.2	11.4	14.2	25.9	29.5
2011	31.6	34.2	37.1	45.0	46.4	NaN	NaN	9.3	8.4	20.8	30.0	31.1
2012	39.1	NaN	46.2	44.9	46.3	12.7	10.1	8.6	7.3	13.4	30.1	30.2
2013	29.9	30.2	30.6	36.9	37.4	7.0	4.0	12.6	14.5	23.1	20.4	24.0
2014	25.3	25.4	26.8	31.6	38.7	9.7	4.7	5.9	2.7	10.6	17.2	19.0
2015	18.0	20.0	NaN	NaN	18.1	3.2	6.0					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.4	2.9	7.8	8.0
2005	5.9	10.7	10.3	13.5	20.3	-0.6	0.2	-0.1	2.5	4.3	11.2	14.6
2006	22.2	22.9	27.6	28.4	14.7	-2.2	-1.9	-1.2	5.9	4.7	9.8	13.3
2007	10.2	15.8	13.9	18.9	20.5	-1.1	-1.2	-1.3	-1.8	-0.7	3.9	13.9
2008	12.7	14.2	18.9	18.9	-1.0	-2.0	-1.3	4.5	4.5	5.2	30.0	33.4
2009	33.9	42.6	41.5	45.0	30.6	-1.0	NaN	-0.9	0.3	-1.3	4.1	8.8
2010	14.6	15.6	18.9	30.6	26.3	0.4	-0.3	2.6	5.9	9.1	16.8	21.2
2011	24.5	30.7	32.9	34.3	22.8	NaN	NaN	5.5	3.9	9.0	27.2	27.0
2012	34.7	NaN	42.6	41.3	36.1	0.2	0.3	4.2	1.4	3.0	21.9	28.7
2013	28.5	28.6	28.5	31.6	17.9	-0.3	-0.6	-1.0	9.2	16.1	16.7	17.3
2014	23.8	23.2	23.9	24.2	31.3	-1.5	-1.0	-0.5	-1.3	-1.3	13.8	15.9
2015	15.5	14.4	NaN	NaN	-0.3	-1.9	0.1					

**Table L-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.2	11.2	14.3	12.9
2005	11.7	17.9	17.8	29.3	33.1	20.2	5.4	11.1	11.2	16.8	25.4	30.1
2006	27.5	32.1	32.6	39.5	39.6	24.9	7.6	15.5	14.2	13.5	19.5	20.6
2007	20.7	20.0	27.0	32.7	43.2	27.9	11.4	12.8	5.4	8.9	21.1	19.7
2008	19.8	24.0	21.8	26.7	26.4	18.6	18.0	11.9	15.0	34.4	44.2	39.5
2009	48.6	56.0	54.3	58.5	47.8	39.6	NaN	7.6	8.2	12.6	12.7	21.0
2010	26.1	21.9	33.1	40.8	39.8	28.0	7.7	14.7	16.2	19.5	35.4	34.7
2011	35.4	40.5	41.7	52.4	52.7	NaN	NaN	12.2	12.3	30.3	32.8	38.2
2012	42.3	NaN	49.1	47.9	52.3	38.7	15.5	14.0	9.3	23.8	32.2	31.7
2013	31.9	32.3	40.1	43.0	49.0	20.3	8.8	15.6	29.9	30.7	31.5	27.3
2014	26.1	27.7	29.0	51.2	51.1	33.9	8.7	12.6	9.1	17.9	21.8	24.0
2015	22.3	28.3	NaN	NaN	33.0	8.8	13.1					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.1	-4.5	-8.3	-12.2
2005	-13.8	-12.3	-15.5	-10.1	-3.5	-2.3	-2.6	-0.7	-0.2	-1.9	-4.1	-1.8
2006	1.1	3.7	0.6	-0.2	1.6	-2.2	-2.7	1.3	2.2	-3.3	-5.0	-4.6
2007	-8.0	-6.7	-10.3	-8.3	-2.3	1.7	0.8	-4.5	-4.5	-8.5	-7.7	-5.7
2008	-8.8	-6.1	-8.5	-11.7	-12.3	6.3	5.4	1.0	1.6	10.8	18.8	15.8
2009	17.2	24.0	18.4	18.1	8.5	-3.1	NaN	-4.2	-2.2	-5.4	-10.3	-4.4
2010	-3.4	-5.2	-3.4	0.8	3.6	0.5	-1.7	3.5	4.6	2.0	6.8	7.8
2011	8.0	9.6	8.5	11.4	14.2	NaN	NaN	1.6	1.7	8.6	10.9	9.4
2012	15.5	NaN	17.6	11.3	14.1	4.3	4.1	0.9	0.5	1.2	11.0	8.5
2013	6.3	5.5	2.0	3.3	5.2	-1.4	-2.0	5.0	7.7	10.9	1.3	2.3
2014	1.7	0.7	-1.9	-1.9	6.5	1.3	-1.3	-1.8	-4.1	-1.6	-1.8	-2.7
2015	-5.6	-4.6	NaN	NaN	-14.1	-5.2	0.1					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	90.3	100.0	74.2	90.3	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	76.7	3.2	100.0	100.0	100.0	100.0	100.0
2012	100.0	79.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	61.3	10.0	100.0	100.0	100.0					

**Table L-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK114\_Smoist\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.31	0.02	NaN
2005	NaN	NaN	NaN	NaN	0.01	0.06	0.40	0.41	0.41	0.19	0.02	NaN
2006	NaN	NaN	NaN	NaN	0.02	0.26	0.41	0.41	0.41	0.34	0.04	NaN
2007	NaN	NaN	NaN	NaN	0.01	0.20	0.41	0.39	0.39	0.23	0.03	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.33	NaN	0.41	0.41	0.39	0.09	0.03
2009	0.02	NaN	NaN	NaN	0.04	0.29	0.41	0.41	0.41	0.40	0.07	0.02
2010	NaN	NaN	NaN	NaN	0.02	0.17	0.41	0.41	0.41	0.38	0.10	0.03
2011	0.02	0.01	NaN	NaN	0.02	0.17	0.42	0.42	0.42	0.42	0.19	0.03
2012	NaN	NaN	NaN	NaN	0.03	0.18	0.41	NaN	0.41	0.41	0.24	0.03
2013	NaN	NaN	NaN	NaN	0.02	0.18	0.41	0.41	0.41	0.41	0.19	0.03
2014	NaN	NaN	NaN	NaN	0.04	0.07	0.40	0.41	0.41	0.41	0.13	0.02
2015	NaN	NaN	NaN	NaN	0.04	0.21	0.41					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.04	0.01	NaN
2005	NaN	NaN	NaN	NaN	0.00	0.03	0.21	0.41	0.41	0.04	0.01	NaN
2006	NaN	NaN	NaN	NaN	0.00	0.04	0.41	0.41	0.41	0.08	0.01	NaN
2007	NaN	NaN	NaN	NaN	0.00	0.02	0.40	0.39	0.38	0.05	0.01	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.05	NaN	0.41	0.41	0.31	0.03	0.02
2009	0.01	NaN	NaN	NaN	0.02	0.05	0.40	0.41	0.41	0.34	0.02	0.01
2010	NaN	NaN	NaN	NaN	0.01	0.05	0.41	0.41	0.41	0.23	0.05	0.02
2011	0.01	0.01	NaN	NaN	0.01	0.05	0.41	0.42	0.42	0.42	0.04	0.02
2012	NaN	NaN	NaN	NaN	0.02	0.05	0.41	NaN	0.41	0.41	0.05	0.02
2013	NaN	NaN	NaN	NaN	0.01	0.05	0.41	0.41	0.41	0.41	0.04	0.02
2014	NaN	NaN	NaN	NaN	0.01	0.05	0.14	0.41	0.41	0.40	0.03	0.01
2015	NaN	NaN	NaN	NaN	0.01	0.06	0.41					

**Table L-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.04	NaN
2005	NaN	NaN	NaN	NaN	0.03	0.24	0.41	0.41	0.41	0.41	0.04	NaN
2006	NaN	NaN	NaN	NaN	0.04	0.41	0.41	0.41	0.41	0.41	0.08	NaN
2007	NaN	NaN	NaN	NaN	0.02	0.41	0.41	0.40	0.39	0.38	0.05	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.42	NaN	0.41	0.41	0.41	0.30	0.03
2009	0.02	NaN	NaN	NaN	0.06	0.41	0.41	0.41	0.41	0.41	0.34	0.03
2010	NaN	NaN	NaN	NaN	0.05	0.41	0.41	0.41	0.41	0.41	0.23	0.05
2011	0.02	0.02	NaN	NaN	0.06	0.42	0.42	0.42	0.42	0.42	0.42	0.04
2012	NaN	NaN	NaN	NaN	0.05	0.41	0.41	NaN	0.41	0.41	0.41	0.06
2013	NaN	NaN	NaN	NaN	0.06	0.42	0.42	0.41	0.41	0.41	0.41	0.05
2014	NaN	NaN	NaN	NaN	0.05	0.14	0.41	0.41	0.41	0.41	0.40	0.03
2015	NaN	NaN	NaN	NaN	0.07	0.41	0.41					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.00	-0.03	-0.08	NaN
2005	NaN	NaN	NaN	NaN	-0.02	-0.13	-0.00	-0.00	-0.00	-0.16	-0.08	NaN
2006	NaN	NaN	NaN	NaN	-0.01	0.07	0.00	-0.00	-0.00	-0.00	-0.06	NaN
2007	NaN	NaN	NaN	NaN	-0.02	0.01	-0.00	-0.02	-0.02	-0.12	-0.07	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.14	NaN	0.00	0.00	0.04	-0.00	-0.00
2009	NaN	NaN	NaN	NaN	0.01	0.10	-0.00	-0.00	0.00	0.06	-0.03	-0.01
2010	NaN	NaN	NaN	NaN	-0.01	-0.02	-0.00	0.00	0.00	0.03	0.00	0.00
2011	NaN	NaN	NaN	NaN	-0.00	-0.02	0.01	0.01	0.01	0.08	0.10	0.00
2012	NaN	NaN	NaN	NaN	0.00	-0.01	0.00	NaN	0.00	0.06	0.14	0.00
2013	NaN	NaN	NaN	NaN	-0.00	-0.01	0.01	0.00	0.00	0.06	0.10	0.01
2014	NaN	NaN	NaN	NaN	0.01	-0.12	-0.01	0.00	0.00	0.06	0.03	-0.01
2015	NaN	NaN	NaN	NaN	0.01	0.01	0.00					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	12.90
2005	29.03	0.00	0.00	10.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	83.87
2006	12.90	3.57	0.00	0.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	87.10
2007	0.00	3.57	0.00	36.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32
2008	6.45	0.00	0.00	3.33	87.10	100.00	87.10	100.00	100.00	100.00	100.00	100.00
2009	100.00	14.29	3.23	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77
2010	0.00	0.00	0.00	53.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	96.77	100.00	51.61	53.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	35.48	37.93	0.00	43.33	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	54.84	0.00	0.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	93.55	42.86	22.58	73.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	80.65	39.29	54.84	90.00	100.00	100.00	100.00					



**Table L-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table L-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
 Variable: Air temperature, in degrees Celsius  
 File name: AK114\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-6.35	NaN
2005	-24.31	-15.08	4.54	-8.64	-10.60
2006	-23.20	-17.55	5.19	-5.56	-10.13
2007	-23.95	-16.62	5.68	-4.71	-9.87
2008	-25.33	-15.42	5.62	-7.36	-10.65
2009	-24.35	-16.10	5.57	-7.10	-10.57
2010	-24.12	-14.43	5.56	-4.10	-9.64
2011	-23.96	-15.90	5.24	-7.47	-10.46
2012	-27.49	-18.16	8.08	-5.33	-10.82
2013	-27.16	-16.22	6.48	-6.34	-10.26
2014	-22.12	-13.22	4.35	-5.55	-9.27
2015	-22.76	-13.00			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	9.67	NaN
2005	3.31	0.76	24.15	11.53	24.15
2006	1.79	3.72	19.71	15.87	19.71
2007	-1.82	1.34	20.69	14.69	20.69
2008	-0.36	7.21	22.83	4.61	22.83
2009	-1.42	5.49	24.85	12.44	24.85
2010	-3.58	3.28	20.64	16.45	20.64
2011	-0.52	6.47	19.29	13.53	19.29
2012	-6.20	2.86	23.70	9.40	23.70
2013	-13.38	4.30	20.19	11.74	20.19
2014	0.68	4.93	19.07	10.65	19.07
2015	-1.21	10.21			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-28.05	NaN
2005	-38.33	-35.65	-5.31	-36.32	-38.33
2006	-45.25	-40.49	-7.10	-29.22	-45.25
2007	-39.52	-40.42	-4.52	-25.80	-40.87
2008	-44.16	-40.97	-2.37	-28.69	-44.16
2009	-43.74	-38.21	-1.86	-32.62	-43.74
2010	-41.54	-39.75	-2.12	-32.57	-41.54
2011	-41.26	-34.30	-3.97	-33.88	-41.26
2012	-45.84	-40.02	-2.85	-26.87	-45.84
2013	-39.51	-35.26	-6.13	-28.52	-39.51
2014	-40.71	-37.46	-4.14	-26.22	-40.71
2015	-36.45	-37.93			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.04	NaN
2005	-0.14	0.23	-1.11	-2.32	-0.45
2006	0.97	-2.24	-0.46	0.76	0.03
2007	0.22	-1.31	0.04	1.60	0.29
2008	-1.16	-0.11	-0.03	-1.04	-0.49
2009	-0.18	-0.79	-0.07	-0.78	-0.41
2010	0.05	0.88	-0.09	2.22	0.51
2011	0.21	-0.59	-0.41	-1.15	-0.31
2012	-3.32	-2.85	2.43	0.99	-0.66
2013	-2.99	-0.91	0.83	-0.02	-0.11
2014	2.05	2.09	-1.30	0.77	0.88
2015	1.41	2.30			

**Table L-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	95.65	100.00	98.91
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	97.83	100.00	99.45
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

**Table L-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Wind speed, in meters per second

File name: AK114\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	4.47	NaN	2005	NaN	NaN	NaN	12.48	NaN
2006	NaN	NaN	3.76	NaN	NaN	2006	NaN	NaN	9.60	NaN	NaN
2007	3.99	4.09	4.50	NaN	4.55	2007	15.36	14.18	13.30	NaN	18.26
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	4.76	4.15	NaN	2009	NaN	NaN	12.08	13.10	NaN
2010	NaN	4.34	4.39	NaN	4.48	2010	NaN	11.09	11.50	NaN	17.42
2011	NaN	NaN	4.64	NaN	NaN	2011	NaN	NaN	10.45	NaN	NaN
2012	NaN	NaN	4.21	4.00	NaN	2012	NaN	NaN	10.63	11.35	NaN
2013	4.49	4.38	3.85	4.31	4.31	2013	18.88	16.73	11.00	16.45	18.88
2014	NaN	3.52	3.97	4.98	4.28	2014	NaN	13.39	11.71	14.96	14.96
2015	NaN	NaN				2015	NaN	NaN			

**Table L-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	0.00	0.00	0.00	0.00	0.00
2005	NaN	NaN	NaN	0.04	NaN	2005	0.00	0.00	27.17	100.00	38.90
2006	NaN	NaN	-0.46	NaN	NaN	2006	48.89	83.70	100.00	93.41	82.47
2007	NaN	-0.29	0.28	NaN	0.15	2007	95.56	98.91	100.00	93.41	97.53
2008	NaN	NaN	NaN	NaN	NaN	2008	87.91	92.39	92.39	90.11	87.70
2009	NaN	NaN	0.54	-0.27	NaN	2009	78.89	77.17	100.00	96.70	87.95
2010	NaN	-0.05	0.17	NaN	0.07	2010	86.67	100.00	100.00	91.21	96.99
2011	NaN	NaN	0.42	NaN	NaN	2011	84.44	88.04	100.00	94.51	92.33
2012	NaN	NaN	-0.01	-0.43	NaN	2012	91.21	88.04	97.83	100.00	94.54
2013	NaN	-0.01	-0.37	-0.12	-0.09	2013	100.00	100.00	100.00	98.90	96.44
2014	NaN	-0.87	-0.25	0.55	-0.12	2014	77.78	98.91	100.00	100.00	97.53
2015	NaN	NaN				2015	92.22	93.48			

**Table L-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Ground temperature, in degrees Celsius

File name: AK114\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-2.54	NaN	2004	NaN	NaN	NaN	-11.87	NaN
2005	-16.78	-14.49	0.80	-2.91	-8.10	2005	-20.85	-22.17	-2.67	-12.28	-22.17
2006	-14.55	-14.39	2.05	-1.19	-6.85	2006	-20.24	-20.04	-2.71	-9.97	-20.24
2007	-15.14	-14.92	2.02	-0.91	-7.13	2007	-22.93	-22.70	-5.66	-7.09	-22.93
2008	-14.48	-13.21	2.71	-0.60	-6.35	2008	-20.61	-21.00	-0.62	-7.36	-21.00
2009	-11.66	-11.60	1.89	-1.56	-5.99	2009	-16.22	-18.07	-1.43	-11.88	-18.07
2010	-15.02	-13.64	1.73	0.21	-6.43	2010	-20.63	-20.70	-1.99	-3.01	-20.70
2011	-10.88	-12.06	1.38	-0.15	-5.54	2011	-14.41	-15.34	-2.58	-6.07	-15.34
2012	-12.98	-13.56	1.79	0.12	-6.09	2012	-17.64	-18.72	-1.93	-2.47	-18.72
2013	-13.13	-13.45	1.41	-0.08	-6.25	2013	-19.29	-18.17	-2.80	-3.71	-19.29
2014	-10.97	-10.68	0.44	-0.48	-5.57	2014	-17.42	-17.66	-2.69	-5.50	-17.66
2015	-12.05	-10.26				2015	-16.98	-15.87			

**Table L-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	2.45	NaN
2005	-9.39	-2.71	6.54	2.00	6.54
2006	-10.26	-1.56	6.67	3.73	6.67
2007	-6.41	-5.59	5.94	3.75	5.94
2008	-6.09	-0.50	6.28	1.80	6.28
2009	-6.43	-0.96	5.77	3.20	5.77
2010	-7.93	-1.86	6.24	3.55	6.24
2011	-3.05	-1.21	4.71	2.97	4.71
2012	-5.96	-1.93	5.24	2.57	5.24
2013	-2.12	-1.51	5.34	1.65	5.34
2014	-2.79	-1.49	2.87	1.01	2.87
2015	-5.54	-0.73			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-3.04	NaN
2005	-11.28	-13.53	-4.76	-3.19	-8.16
2006	-10.30	-13.17	-4.53	-2.66	-7.47
2007	-9.74	-13.73	-4.88	-2.77	-7.73
2008	-9.11	-12.59	-4.25	-2.53	-7.10
2009	-7.57	-11.23	-3.94	-2.56	-6.51
2010	-10.05	-12.80	-4.55	-2.53	-7.17
2011	-6.97	-11.12	-4.22	-2.43	-6.22
2012	-8.24	-12.49	-4.35	-2.44	-6.88
2013	-7.95	-12.44	-4.35	-2.43	-6.77
2014	-6.68	-10.42	-3.80	-2.38	-5.90
2015	-7.58	-10.20			

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-1.53	NaN
2005	-3.36	-1.82	-0.78	-1.91	-1.70
2006	-1.13	-1.71	0.48	-0.19	-0.45
2007	-1.71	-2.25	0.45	0.10	-0.74
2008	-1.06	-0.54	1.13	0.41	0.05
2009	1.76	1.08	0.31	-0.55	0.40
2010	-1.60	-0.97	0.15	1.22	-0.03
2011	2.54	0.61	-0.20	0.86	0.86
2012	0.44	-0.88	0.21	1.13	0.30
2013	0.30	-0.78	-0.17	0.92	0.14
2014	2.45	1.99	-1.14	0.53	0.82
2015	1.38	2.41			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-5.52	NaN
2005	-14.80	-15.84	-9.18	-6.35	-15.84
2006	-13.12	-14.91	-8.48	-3.77	-14.91
2007	-14.78	-16.53	-9.63	-3.53	-16.53
2008	-13.09	-15.11	-7.61	-2.92	-15.11
2009	-11.49	-13.45	-6.24	-4.35	-13.45
2010	-13.51	-14.62	-8.91	-3.03	-14.62
2011	-10.72	-12.07	-7.52	-2.90	-12.07
2012	-11.95	-14.56	-7.96	-2.91	-14.56
2013	-13.59	-13.67	-8.27	-2.87	-13.67
2014	-11.41	-12.21	-5.87	-2.79	-12.21
2015	-11.70	-11.92			

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	95.65	98.90	98.63
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	98.91	100.00	100.00	99.73
2012	100.00	100.00	97.83	98.90	99.18
2013	100.00	100.00	100.00	96.70	99.18
2014	100.00	100.00	100.00	100.00	100.00
2015	98.89	97.83			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-2.49	NaN
2005	-5.52	-9.21	-3.13	-2.52	-2.52
2006	-6.35	-8.51	-2.98	-2.32	-2.32
2007	-3.80	-9.62	-3.09	-2.44	-2.44
2008	-3.47	-7.59	-2.87	-2.27	-2.27
2009	-2.53	-6.23	-2.74	-2.21	-2.21
2010	-4.40	-8.91	-2.96	-2.13	-2.13
2011	-2.19	-7.55	-2.81	-2.10	-2.10
2012	-2.12	-7.96	-2.82	-2.09	-2.09
2013	-2.09	-8.28	-2.80	-2.10	-2.10
2014	-2.13	-5.82	-2.70	-2.11	-2.11
2015	-2.20	-5.52			

**Table L-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.42	NaN	2004	0.00	0.00	0.00	100.00	0.00
2005	-2.56	-1.54	-0.47	-0.57	-1.24	2005	100.00	100.00	98.91	100.00	99.73
2006	-1.57	-1.18	-0.24	-0.04	-0.56	2006	100.00	100.00	100.00	100.00	100.00
2007	-1.01	-1.74	-0.59	-0.16	-0.82	2007	100.00	100.00	100.00	100.00	100.00
2008	-0.38	-0.60	0.04	0.08	-0.18	2008	100.00	100.00	95.65	98.90	98.63
2009	1.15	0.76	0.35	0.06	0.41	2009	100.00	100.00	100.00	100.00	100.00
2010	-1.33	-0.81	-0.26	0.09	-0.25	2010	100.00	100.00	100.00	100.00	100.00
2011	1.75	0.87	0.07	0.19	0.70	2011	100.00	98.91	100.00	100.00	99.73
2012	0.48	-0.50	-0.06	0.18	0.04	2012	100.00	100.00	97.83	98.90	99.18
2013	0.77	-0.45	-0.06	0.19	0.14	2013	100.00	100.00	100.00	96.70	99.18
2014	2.04	1.57	0.49	0.24	1.01	2014	100.00	100.00	100.00	100.00	100.00
2015	1.14	1.79				2015	98.89	97.83			

**Table L-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Incident solar flux, in watts per meter squared

File name: AK114\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	26.1	NaN	2004	NaN	NaN	NaN	1.2	NaN
2005	5.4	158.7	197.5	19.5	95.7	2005	1.5	2.5	15.8	-5.3	3.8
2006	4.8	160.9	182.7	25.8	94.0	2006	0.9	4.7	1.0	0.9	2.1
2007	4.2	158.3	217.4	26.6	102.6	2007	0.3	2.1	35.7	1.7	10.7
2008	4.3	152.5	182.8	24.7	90.5	2008	0.4	-3.7	1.1	-0.2	-1.5
2009	4.1	158.8	176.5	24.3	91.6	2009	0.2	2.6	-5.2	-0.6	-0.4
2010	1.3	NaN	182.1	28.0	NaN	2010	-2.6	NaN	0.3	3.1	NaN
2011	4.1	170.8	174.6	23.6	93.1	2011	0.2	14.6	-7.1	-1.3	1.1
2012	2.7	NaN	186.3	24.6	89.4	2012	-1.2	NaN	4.6	-0.3	-2.5
2013	2.5	167.4	174.9	26.6	93.1	2013	-1.4	11.2	-6.8	1.7	1.2
2014	4.9	145.1	155.6	24.7	83.4	2014	1.0	-11.1	-26.1	-0.2	-8.5
2015	4.3	145.5				2015	0.4	-10.7			

**Table L-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	98.9	100.0	99.7
2006	100.0	98.9	100.0	100.0	99.7
2007	98.9	100.0	100.0	100.0	99.7
2008	100.0	100.0	95.7	100.0	98.9
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	55.4	100.0	100.0	88.8
2011	100.0	100.0	95.7	100.0	98.9
2012	100.0	90.2	97.8	98.9	96.7
2013	100.0	97.8	100.0	100.0	99.5
2014	97.8	98.9	100.0	100.0	99.2
2015	100.0	98.9			

**Table L-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Reflected solar flux, in watts per meter squared

File name: AK114\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	11.5	NaN	2004	NaN	NaN	NaN	1.7	NaN
2005	4.4	130.8	53.3	6.2	49.0	2005	0.1	8.4	6.3	-3.6	1.9
2006	4.0	133.8	50.6	6.8	49.2	2006	-0.2	11.5	3.6	-3.0	2.1
2007	4.7	133.2	55.9	9.1	51.1	2007	0.4	10.8	8.9	-0.7	4.0
2008	4.2	115.5	40.0	10.6	42.8	2008	-0.0	-6.9	-7.0	0.8	-4.3
2009	3.8	125.5	40.2	10.4	45.3	2009	-0.4	3.2	-6.8	0.7	-1.8
2010	4.7	127.8	44.2	9.3	46.8	2010	0.4	5.4	-2.8	-0.5	-0.2
2011	4.0	136.7	45.2	11.2	49.6	2011	-0.3	14.3	-1.7	1.4	2.5
2012	3.4	NaN	50.2	8.6	48.3	2012	-0.8	NaN	3.2	-1.2	1.2
2013	5.0	134.9	49.2	15.5	51.5	2013	0.7	12.5	2.2	5.8	4.4
2014	4.9	116.0	44.0	9.9	44.0	2014	0.6	-6.3	-3.0	0.1	-3.1
2015	4.0	103.6				2015	-0.3	-18.8			

**Table L-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	98.9	100.0	99.7
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	95.7	100.0	98.9
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	93.5	97.8	100.0	97.8
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

**Table L-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
 Variable: Rainfall, in millimeters per hour  
 File name: AK114\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	1.5	NaN	2013	NaN	NaN	NaN	17.0	NaN
2014	0.0	NaN	2.8	2.0	2.8	2014	0.0	NaN	51.8	26.4	78.2
2015	0.0	NaN				2015	0.0	NaN			

**Table L-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	30.4	100.0	41.1
2014	100.0	91.3	95.7	100.0	96.7
2015	100.0	92.4			

**Table L-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk

Variable: Snow depth, in centimeters

File name: AK114\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	7.1	NaN	2004	NaN	NaN	NaN	-0.4	NaN
2005	10.5	21.8	5.5	10.6	13.0	2005	5.9	10.3	-0.6	2.5	-0.6
2006	24.2	32.1	6.0	10.7	18.2	2006	14.6	14.7	-2.2	4.7	-2.2
2007	16.9	24.5	6.7	5.8	13.4	2007	10.2	13.9	-1.3	-1.8	-1.8
2008	16.4	20.6	11.5	23.1	19.8	2008	12.7	-1.0	-2.0	4.5	-2.0
2009	42.1	46.6	4.1	6.7	23.5	2009	33.4	30.6	-1.0	-1.3	-1.3
2010	19.0	31.8	8.1	17.1	20.1	2010	8.8	18.9	-0.3	5.9	-0.3
2011	31.7	42.8	NaN	19.8	28.1	2011	21.2	22.8	NaN	3.9	-1.6
2012	36.8	45.8	10.4	16.7	27.3	2012	27.0	36.1	0.2	1.4	0.2
2013	30.1	35.0	7.9	19.4	22.5	2013	28.5	17.9	-1.0	9.2	-1.0
2014	24.9	32.4	6.7	10.2	18.1	2014	17.3	23.9	-1.5	-1.3	-1.5
2015	19.0	NaN				2015	14.4	NaN			



**Table L-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	14.3	NaN
2005	17.9	33.1	20.2	25.4	33.1
2006	32.1	39.6	24.9	19.5	39.6
2007	20.7	43.2	27.9	21.1	43.2
2008	24.0	26.7	18.6	44.2	44.2
2009	56.0	58.5	39.6	12.7	58.5
2010	26.1	40.8	28.0	35.4	40.8
2011	40.5	52.7	NaN	32.8	52.7
2012	46.4	52.3	38.7	32.2	52.3
2013	32.3	49.0	20.3	31.5	49.0
2014	27.7	51.2	33.9	21.8	51.2
2015	28.3	NaN			

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	94.6	100.0	98.6
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	97.8	100.0	99.5
2009	100.0	96.7	88.0	100.0	96.2
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	59.8	100.0	89.9
2012	93.4	100.0	100.0	98.9	98.1
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	57.6			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-5.6	NaN
2005	-13.2	-10.2	-1.7	-2.1	-6.5
2006	0.5	0.2	-1.2	-2.0	-1.3
2007	-6.8	-7.4	-0.5	-6.9	-6.1
2008	-7.3	-11.3	4.4	10.4	0.3
2009	18.4	14.7	-3.1	-6.0	4.0
2010	-4.7	-0.1	0.9	4.5	0.6
2011	8.0	10.9	NaN	7.1	8.6
2012	13.1	13.9	3.2	4.0	7.8
2013	6.4	3.1	0.7	6.7	3.0
2014	1.2	0.5	-0.5	-2.5	-1.4
2015	-4.7	NaN			

**Table L-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: East Teshekpuk  
Variable: Soil moisture, in water fraction by volume

File name: AK114\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2004	NaN	NaN	NaN	0.25	NaN
2005	NaN	NaN	0.29	0.20	NaN
2006	NaN	NaN	0.36	0.26	NaN
2007	NaN	NaN	0.33	0.21	NaN
2008	NaN	NaN	0.38	0.30	NaN
2009	NaN	NaN	0.37	0.29	NaN
2010	NaN	NaN	0.33	0.29	NaN
2011	0.02	NaN	0.34	0.35	NaN
2012	NaN	NaN	0.33	0.35	NaN
2013	NaN	NaN	0.34	0.34	NaN
2014	NaN	NaN	0.30	0.32	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2004	NaN	NaN	NaN	0.41	NaN
2005	NaN	NaN	0.41	0.41	NaN
2006	NaN	NaN	0.41	0.41	NaN
2007	NaN	NaN	0.41	0.39	NaN
2008	NaN	NaN	0.42	0.41	NaN
2009	NaN	NaN	0.41	0.41	NaN
2010	NaN	NaN	0.41	0.41	NaN
2011	0.05	NaN	0.42	0.42	NaN
2012	NaN	NaN	0.41	0.41	NaN
2013	NaN	NaN	0.42	0.41	NaN
2014	NaN	NaN	0.41	0.41	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2004	NaN	NaN	NaN	0.01	NaN
2005	NaN	NaN	0.03	0.01	NaN
2006	NaN	NaN	0.04	0.01	NaN
2007	NaN	NaN	0.02	0.01	NaN
2008	NaN	NaN	0.05	0.03	NaN
2009	NaN	NaN	0.05	0.02	NaN
2010	NaN	NaN	0.05	0.05	NaN
2011	0.01	NaN	0.05	0.04	NaN
2012	NaN	NaN	0.05	0.05	NaN
2013	NaN	NaN	0.05	0.04	NaN
2014	NaN	NaN	0.05	0.03	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2004	NaN	NaN	NaN	-0.04	NaN
2005	NaN	NaN	-0.05	-0.08	NaN
2006	NaN	NaN	0.02	-0.02	NaN
2007	NaN	NaN	-0.00	-0.07	NaN
2008	NaN	NaN	0.04	0.01	NaN
2009	NaN	NaN	0.03	0.01	NaN
2010	NaN	NaN	-0.01	0.01	NaN
2011	NaN	NaN	-0.00	0.06	NaN
2012	NaN	NaN	-0.00	0.07	NaN
2013	NaN	NaN	0.00	0.05	NaN
2014	NaN	NaN	-0.04	0.03	NaN
2015	NaN	NaN			

**Table L-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	14.44	36.96	98.91	100.00	68.77
2006	34.44	32.61	100.00	100.00	67.12
2007	31.11	45.65	100.00	100.00	69.59
2008	32.97	30.43	95.65	100.00	65.57
2009	73.33	44.57	100.00	100.00	79.18
2010	33.33	51.09	100.00	100.00	71.51
2011	98.89	68.48	100.00	100.00	91.78
2012	58.24	47.83	97.83	100.00	75.96
2013	53.33	43.48	100.00	100.00	74.25
2014	80.00	65.22	100.00	100.00	86.30
2015	74.44	81.52			

**Table L-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available

## M. Ikpikpuk

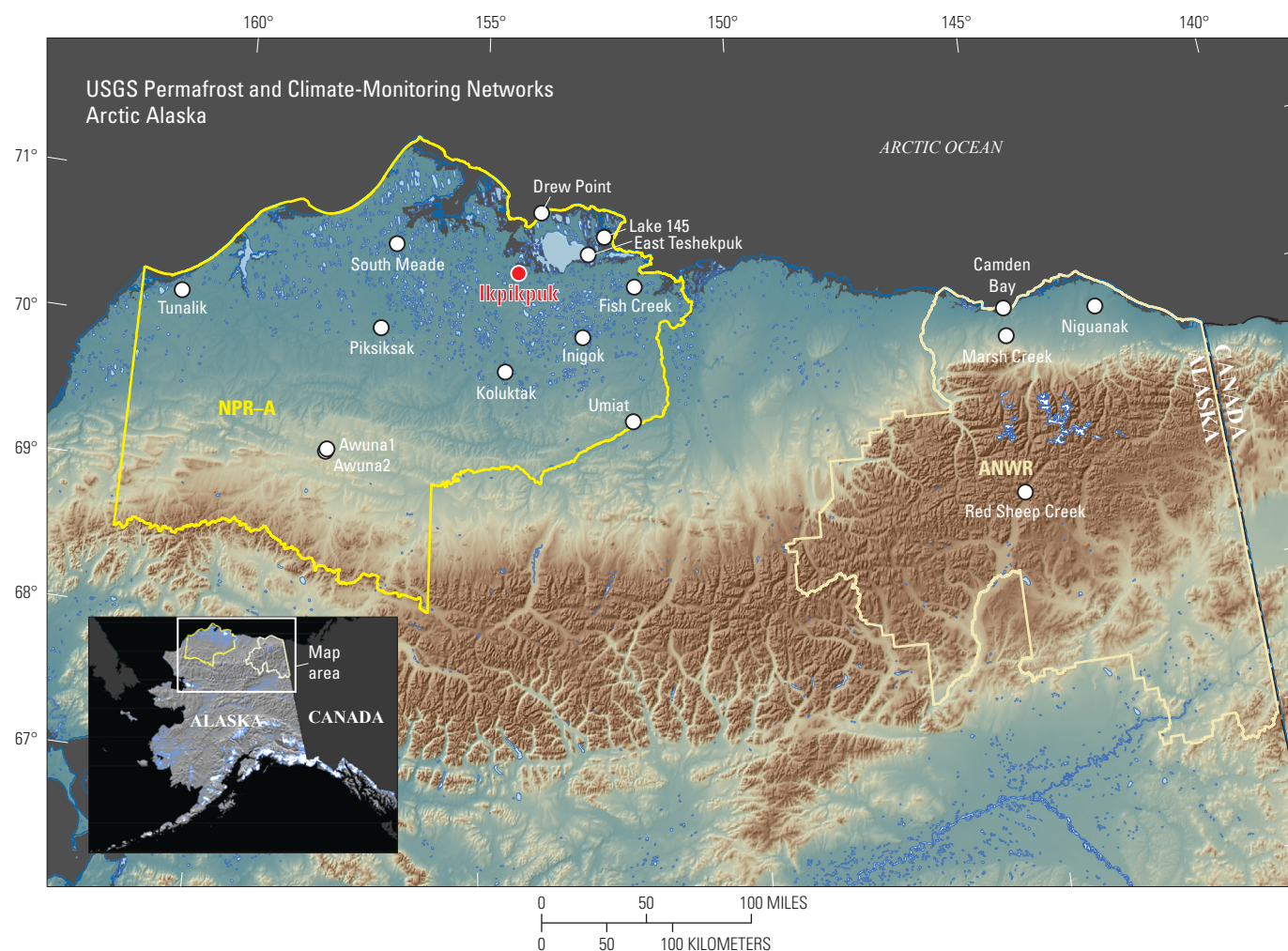
GTN-P code: U39

Latitude: 70°26.499'N

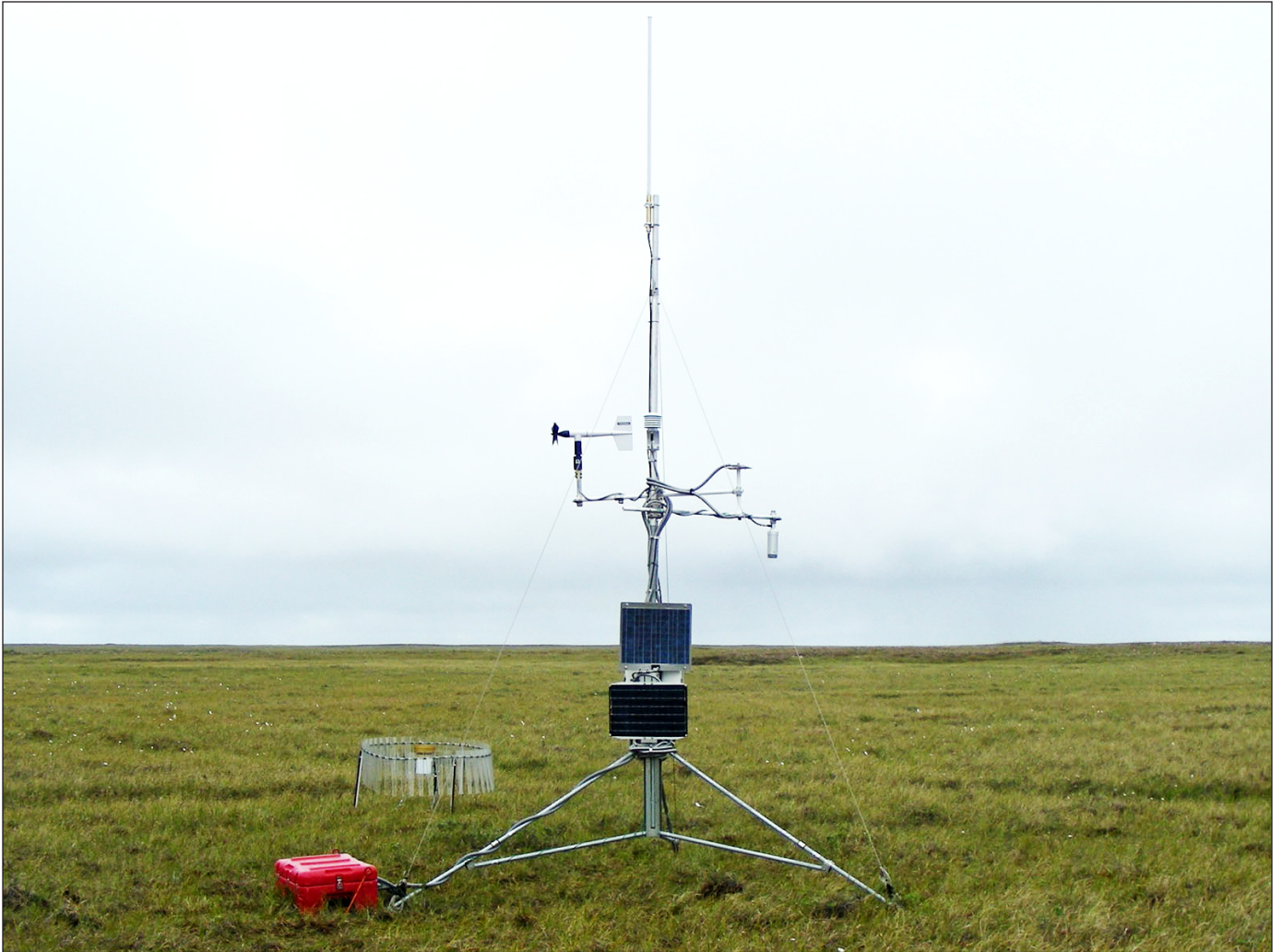
Longitude: 154°21.938'W

Elevation: 5 meters above mean sea level

Installation date: 21 AUG 2005



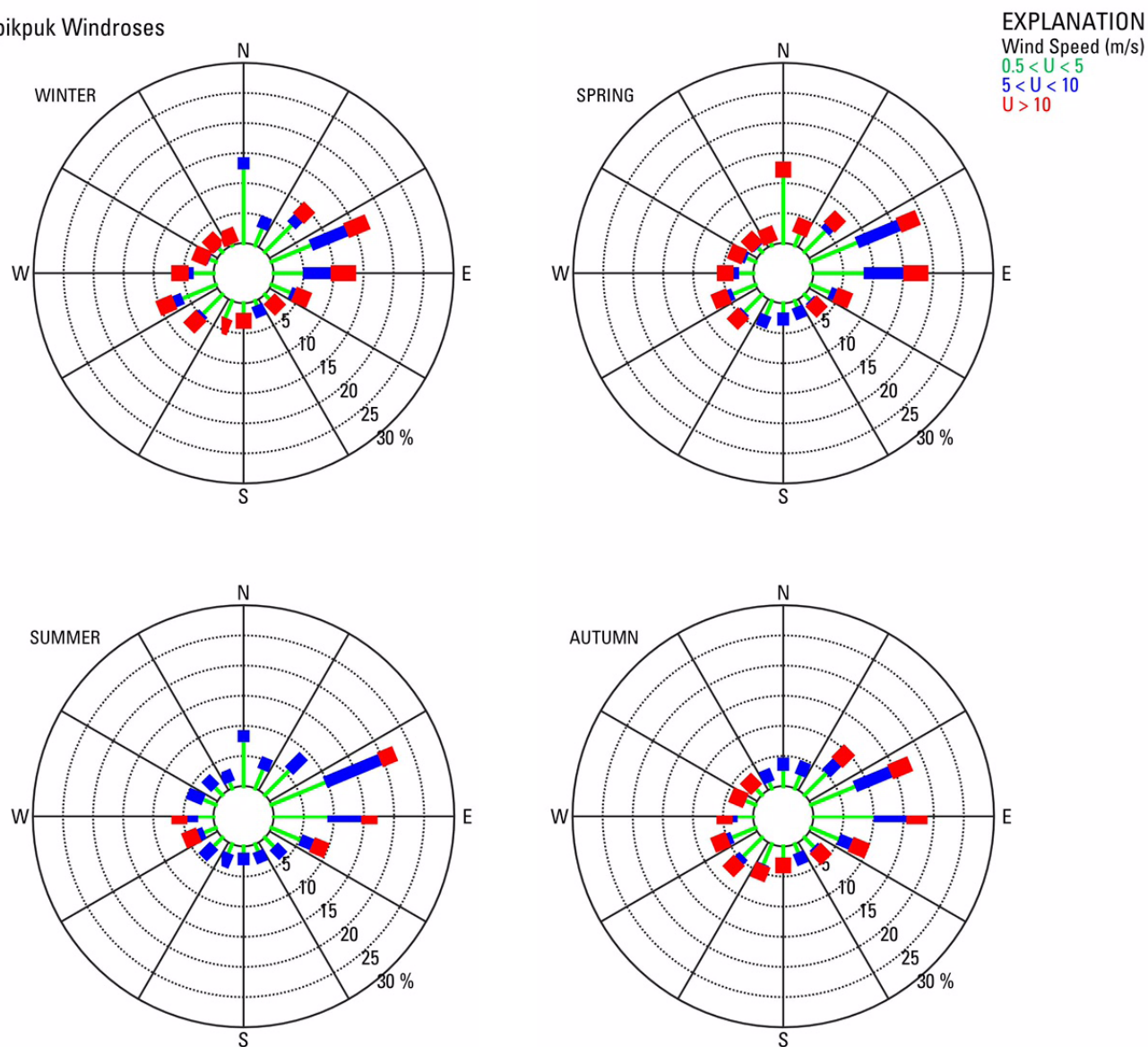
**Figure M–1.** Location map presenting the specific location of the Ikpikpuk site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure M-2.** Ikpikpak station in summer 2008.



## Ikpikpuk Windroses



**Figure M-3.** Ikpiukpuk seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table M-14.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
 Variable: Air temperature, in degrees Celsius  
 File name: AK115\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.09	-6.85	-23.15	-21.77
2006	-26.87	-22.97	-29.44	-20.77	-4.09	6.34	8.18	4.43	3.64	-3.54	-17.48	-20.02
2007	-27.83	-26.69	-28.99	-13.85	-7.86	4.12	9.01	8.39	3.10	-6.80	-12.14	-21.38
2008	-30.13	-28.83	-29.92	-13.19	-3.82	6.80	NaN	4.59	0.88	-7.57	-16.91	-18.60
2009	-28.35	-27.57	-30.54	-15.72	-2.76	4.19	9.59	6.72	1.38	-4.58	-20.14	-20.87
2010	-28.50	-24.88	-25.36	-12.85	-6.29	2.91	8.97	8.37	3.70	-5.26	-11.27	-26.10
2011	-24.86	-21.40	-22.26	-20.17	-5.11	2.95	8.51	7.05	2.71	-5.62	-21.28	-25.93
2012	-33.03	-25.69	-32.81	-16.06	-5.66	5.70	11.67	9.75	2.22	-3.10	-17.00	-26.38
2013	-26.55	-31.35	-24.13	-20.07	-5.36	7.07	10.47	NaN	-0.23	-4.62	-14.84	-20.93
2014	-22.84	-24.40	-22.40	-15.94	-1.97	3.31	7.28	5.25	1.21	-5.94	-13.61	-22.96
2015	-25.10	-22.12	-24.83	-14.34	-0.55	9.00	7.78					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.86	-27.16	-40.41	-37.64
2006	-44.00	-46.46	-41.42	-36.65	-25.71	-5.70	-1.13	-1.49	-4.14	-13.50	-30.61	-40.41
2007	-41.74	-44.51	-42.07	-26.73	-21.27	-4.07	1.64	-0.31	-4.49	-21.51	-28.43	-43.15
2008	-44.59	-41.49	-41.96	-32.97	-14.12	-2.50	NaN	-1.45	-4.98	-19.90	-32.62	-33.10
2009	-37.67	-44.12	-41.38	-31.71	-14.18	-1.75	1.79	0.09	-11.00	-19.63	-34.32	-39.06
2010	-41.02	-44.12	-39.67	-29.37	-21.70	-1.77	-1.21	0.32	-8.35	-15.71	-27.80	-42.91
2011	-42.33	-32.62	-36.78	-32.24	-21.21	-3.73	0.74	-0.77	-6.88	-20.61	-36.98	-38.41
2012	-47.35	-48.35	-43.10	-36.59	-21.96	-1.70	1.26	1.63	-3.77	-18.24	-30.07	-36.51
2013	-38.51	-40.77	-37.93	-37.51	-26.82	-5.87	0.03	NaN	-10.55	-18.37	-29.54	-34.76
2014	-42.97	-41.24	-38.54	-34.69	-14.17	-3.90	0.59	-1.19	-5.61	-16.71	-28.81	-34.56
2015	-36.51	-39.23	-40.46	-29.80	-13.45	-4.17	1.66					

**Table M–14.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.35	0.25	-9.59	-4.32
2006	-16.02	1.19	-19.84	-9.52	7.74	18.62	20.07	17.74	17.90	5.96	-0.87	-2.06
2007	-15.23	-6.05	-5.47	-2.49	1.80	17.52	25.68	23.06	16.70	-0.31	-4.53	-5.09
2008	1.64	-5.30	-7.26	1.20	9.36	19.10	NaN	14.01	6.53	-0.28	-6.65	-1.66
2009	-2.58	-2.01	-14.79	4.44	7.96	14.47	27.15	18.76	14.19	4.09	-6.03	-2.77
2010	-12.19	-13.15	-14.95	-1.41	1.44	18.65	22.40	22.50	18.38	-0.07	1.99	-8.37
2011	-0.38	-0.25	-5.61	-5.36	9.10	16.93	21.29	16.57	15.14	1.45	-3.02	-5.97
2012	-13.84	-11.15	-9.78	-6.02	3.84	23.39	23.49	18.98	10.94	6.54	-4.35	-13.22
2013	-14.45	-21.08	-14.22	-2.44	5.75	23.60	20.29	NaN	13.08	1.99	2.26	0.64
2014	-10.43	-4.36	-5.17	1.80	6.23	18.28	20.01	20.05	13.21	2.88	0.15	-5.65
2015	-6.89	-1.16	-4.16	-1.49	11.75	25.24	23.24					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.65	-1.36	-6.36	0.99
2006	-0.20	2.17	-2.71	-4.89	-0.06	1.10	-0.87	-2.21	1.90	1.96	-0.69	2.74
2007	-1.15	-1.54	-2.25	2.03	-3.83	-1.12	-0.04	1.75	1.36	-1.30	4.65	1.38
2008	-3.45	-3.68	-3.18	2.69	0.21	1.56	NaN	-2.05	-0.87	-2.08	-0.12	4.16
2009	-1.68	-2.42	-3.81	0.16	1.26	-1.05	0.54	0.08	-0.37	0.92	-3.35	1.89
2010	-1.82	0.27	1.37	3.03	-2.26	-2.33	-0.08	1.73	1.96	0.24	5.52	-3.34
2011	1.82	3.75	4.48	-4.29	-1.08	-2.29	-0.55	0.41	0.97	-0.13	-4.49	-3.17
2012	-6.35	-0.54	-6.07	-0.18	-1.63	0.46	2.62	3.11	0.48	2.39	-0.21	-3.62
2013	0.13	-6.21	2.61	-4.19	-1.34	1.84	1.42	NaN	-1.97	0.88	1.95	1.83
2014	3.84	0.75	4.34	-0.06	2.05	-1.92	-1.77	-1.39	-0.53	-0.44	3.17	-0.20
2015	1.58	3.03	1.90	1.54	3.48	3.76	-1.27					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					



**Table M-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpihpuk  
 Variable: Wind speed, in meters per second  
 File name: AK115\_U\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	3.85	3.90	4.17	3.20	3.17	4.77	NaN	3.58
2007	3.56	NaN	NaN	4.18	3.80	5.09	4.27	3.33	4.46	NaN	NaN	3.44
2008	4.09	2.96	NaN	3.87	5.12	3.81	NaN	3.11	3.09	3.75	4.40	NaN
2009	NaN	4.31	NaN	NaN	3.89	5.15	4.45	3.61	3.63	NaN	NaN	NaN
2010	NaN	NaN	3.49	3.83	5.03	5.37	3.94	3.89	3.28	4.96	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.68	4.13	4.53	NaN	NaN
2012	NaN	NaN	NaN	3.66	3.94	4.61	3.43	3.97	3.56	3.79	3.11	NaN
2013	NaN	NaN	5.17	3.57	4.02	3.82	4.18	NaN	3.97	NaN	4.68	NaN
2014	NaN	NaN	2.64	3.22	4.82	4.00	3.97	4.73	4.39	4.94	3.78	NaN
2015	3.90	4.71	NaN	3.89	4.02	3.62	3.88					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	11.02	8.46	10.31	7.33	9.05	17.63	NaN	11.56
2007	14.20	NaN	NaN	12.50	9.72	11.16	8.68	9.48	10.11	NaN	NaN	17.67
2008	19.53	9.73	NaN	11.21	11.62	8.74	NaN	8.93	7.58	10.64	11.86	NaN
2009	NaN	14.67	NaN	NaN	11.29	9.43	9.43	9.39	9.09	NaN	NaN	NaN
2010	NaN	NaN	10.47	10.22	10.45	11.02	8.64	11.33	7.02	12.69	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.04	10.34	12.33	NaN	NaN
2012	NaN	NaN	NaN	11.82	9.68	11.20	8.27	9.08	10.16	9.26	10.19	NaN
2013	NaN	NaN	16.71	11.82	12.76	7.77	10.43	NaN	10.49	NaN	16.13	NaN
2014	NaN	NaN	7.96	13.18	11.65	8.55	11.31	11.06	9.61	14.32	13.55	NaN
2015	12.37	17.54	NaN	13.55	13.77	7.65	10.11					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	-0.41	-0.48	0.14	-0.52	-0.58	0.22	NaN	NaN
2007	NaN	NaN	NaN	0.04	-0.46	0.72	0.23	-0.38	0.71	NaN	NaN	NaN
2008	NaN	NaN	NaN	-0.26	0.86	-0.57	NaN	-0.61	-0.67	-0.80	NaN	NaN
2009	NaN	NaN	NaN	NaN	-0.37	0.78	0.41	-0.11	-0.12	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.31	0.77	0.99	-0.10	0.17	-0.47	0.41	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.04	0.38	-0.02	NaN	NaN
2012	NaN	NaN	NaN	-0.48	-0.32	0.24	-0.60	0.25	-0.19	-0.75	NaN	NaN
2013	NaN	NaN	NaN	-0.56	-0.25	-0.55	0.14	NaN	0.21	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.92	0.56	-0.38	-0.07	1.01	0.64	0.39	NaN	NaN
2015	NaN	NaN	NaN	-0.25	-0.24	-0.76	-0.15					

**Table M–1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	90.00	96.77	100.00	100.00	100.00	100.00	100.00	86.67	100.00
2007	100.00	92.86	93.55	100.00	100.00	100.00	100.00	100.00	100.00	90.32	76.67	96.77
2008	96.77	100.00	48.39	100.00	100.00	100.00	83.87	100.00	100.00	100.00	100.00	74.19
2009	61.29	100.00	32.26	93.33	100.00	100.00	100.00	100.00	100.00	90.32	93.33	64.52
2010	80.65	92.86	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	26.67	0.00
2011	6.45	3.57	0.00	0.00	0.00	0.00	0.00	96.77	100.00	96.77	83.33	93.55
2012	87.10	89.66	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55
2013	90.32	82.14	100.00	100.00	100.00	100.00	100.00	90.32	100.00	83.87	100.00	87.10
2014	90.32	92.86	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	58.06
2015	96.77	100.00	83.87	100.00	100.00	100.00	100.00					

**Table M–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
Variable: Ground temperature, in degrees Celsius

File name: AK115\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.46	0.01	-4.52	-9.09
2006	-11.81	-13.71	-15.72	-14.83	-8.16	1.66	4.06	3.55	2.66	-0.15	-2.88	-8.54
2007	-15.35	-15.47	-19.07	NaN	NaN	1.18	3.95	4.22	1.99	0.40	-0.81	-7.57
2008	-13.61	-15.66	-17.47	-13.04	-7.22	4.07	NaN	4.69	1.50	0.24	-0.76	-6.10
2009	-12.56	-15.29	-15.91	-14.24	-4.24	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.73	0.66	-2.04	-10.92
2012	-18.12	-16.88	-19.39	-15.97	-8.62	-0.53	3.83	5.00	2.35	-0.16	-1.19	-6.98
2013	-14.86	-20.07	-18.28	-15.95	-9.27	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	-11.50	-13.78	-15.64	-13.36	-3.46	NaN	NaN	NaN	NaN	-0.10	-1.43	-6.20
2015	-13.62	-14.83	-14.72	-12.80	NaN	NaN	NaN					

**Table M-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.46	-0.79	-7.84	-10.32
2006	-14.89	-16.21	-17.18	-16.99	-12.77	-1.08	1.93	1.29	0.38	-1.88	-7.43	-12.43
2007	-17.90	-18.68	-20.09	NaN	NaN	-6.02	1.48	1.94	0.58	0.19	-4.21	-12.29
2008	-16.10	-17.41	-18.75	-16.38	-11.29	0.29	NaN	2.02	0.34	-0.11	-2.52	-10.19
2009	-14.21	-17.24	-17.46	-16.84	-7.96	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.79	0.50	-5.43	-17.45
2012	-20.93	-20.45	-20.07	-20.01	-12.77	-3.08	1.05	2.78	0.24	-0.42	-3.11	-13.28
2013	-19.44	-21.80	-20.07	-17.41	-13.75	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	-14.46	-17.04	-17.79	-15.90	-10.53	NaN	NaN	NaN	NaN	-0.32	-3.07	-9.66
2015	-15.99	-17.46	-16.97	-14.97	NaN	NaN	NaN					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.42	0.48	-0.62	-6.91
2006	-8.79	-11.09	-13.95	-12.81	-0.92	5.39	7.97	6.87	6.16	0.42	-0.13	-5.33
2007	-12.47	-12.56	-16.33	NaN	NaN	5.67	6.59	7.15	4.77	0.60	0.28	-3.57
2008	-10.51	-13.45	-16.00	-11.08	0.45	7.78	NaN	8.07	3.64	0.43	0.09	-1.90
2009	-9.96	-13.43	-13.42	-6.43	1.77	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.42	0.83	0.77	-4.65
2012	-15.92	-14.97	-18.40	-12.65	-3.01	3.51	7.05	7.78	5.15	0.57	-0.30	-1.97
2013	-11.47	-17.84	-16.52	-13.34	-1.70	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	-9.00	-10.17	-13.35	-10.57	-0.69	NaN	NaN	NaN	NaN	1.12	-0.26	-3.10
2015	-9.70	-11.59	-11.69	-10.41	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.65	-0.12	-2.57	-1.18
2006	2.12	2.00	1.31	-0.52	-1.33	0.06	0.11	-0.81	0.55	-0.28	-0.93	-0.62
2007	-1.42	0.24	-2.05	NaN	NaN	-0.42	0.01	-0.15	-0.12	0.27	1.14	0.34
2008	0.32	0.05	-0.44	1.28	-0.40	2.48	NaN	0.33	-0.62	0.11	1.19	1.82
2009	1.37	0.42	1.11	0.07	2.59	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.61	0.53	-0.09	-3.01
2012	-4.20	-1.17	-2.37	-1.66	-1.79	-2.12	-0.12	0.64	0.23	-0.29	0.76	0.94
2013	-0.93	-4.36	-1.25	-1.64	-2.44	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	2.43	1.93	1.39	0.95	3.37	NaN	NaN	NaN	NaN	-0.23	0.52	1.71
2015	0.30	0.88	2.30	1.51	NaN	NaN	NaN					

**Table M–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	80.00	77.42	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	96.77	100.00	100.00
2009	100.00	96.43	100.00	100.00	100.00	63.33	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.32	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	30.00	0.00	0.00	0.00	0.00	0.00	12.90
2014	100.00	100.00	100.00	100.00	100.00	20.00	0.00	0.00	66.67	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	80.65	0.00	0.00					

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.92	-1.41	-2.32	-6.38
2006	-8.74	-11.19	-12.48	-13.29	-10.72	-4.90	-2.71	-1.83	-1.43	-1.28	-1.53	-5.61
2007	-10.71	-12.36	-15.42	NaN	NaN	-5.88	-2.96	-1.85	-1.45	-1.24	-1.30	-4.27
2008	-8.98	-11.88	-13.64	-13.08	-10.21	-4.40	NaN	-1.83	-1.40	-1.15	-1.05	-3.14
2009	-8.09	-11.48	-12.64	-13.34	-8.52	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.15	-0.50	NaN	-4.42
2012	-11.84	-13.67	-15.11	-14.99	-11.39	-6.57	-3.45	-2.04	-1.64	-1.17	-1.17	-1.96
2013	-8.65	-13.83	-15.08	-14.59	-11.69	-5.52	-2.12	NaN	-1.15	-1.11	NaN	NaN
2014	-7.04	-9.86	-12.39	-12.26	-7.63	-3.67	-1.93	-1.24	-1.03	-1.01	-1.04	-1.77
2015	-8.01	-11.44	-12.10	-11.99	-8.45	-3.62	-1.77					

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.13	-1.81	-4.68	-7.47
2006	-10.50	-11.65	-13.58	-13.68	-12.70	-7.30	-3.42	-2.25	-1.61	-1.39	-3.65	-7.88
2007	-12.15	-14.03	-16.21	NaN	NaN	-9.48	-3.77	-2.26	-1.66	-1.38	-1.88	-6.73
2008	-10.62	-12.45	-14.70	-14.65	-11.71	-6.91	NaN	-2.05	-1.64	-1.26	-1.22	-5.39
2009	-9.87	-12.13	-13.79	-13.85	-11.48	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.73	-0.68	NaN	-9.43
2012	-14.03	-14.43	-16.05	-16.17	-13.26	-8.51	-4.77	-2.46	-1.84	-1.47	-1.27	-5.84
2013	-11.71	-15.46	-15.42	-15.15	-13.54	-8.27	-3.34	NaN	-1.25	-1.23	NaN	NaN
2014	-8.89	-11.62	-12.91	-12.92	-11.12	-4.76	-2.86	-1.44	-1.21	-1.18	-1.28	-4.36
2015	-10.40	-12.39	-12.87	-12.56	-10.96	-5.16	-2.40					

**Table M-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.71	-1.06	-1.10	-4.64
2006	-7.41	-10.50	-11.27	-12.70	-7.26	-3.36	-2.19	-1.55	-1.23	-1.10	-1.10	-3.65
2007	-7.88	-11.45	-14.02	NaN	NaN	-3.70	-2.17	-1.54	-1.24	-1.13	-1.13	-1.88
2008	-6.71	-10.62	-12.41	-11.70	-6.90	-2.91	NaN	-1.62	-1.17	-1.03	-0.84	-0.95
2009	-5.41	-9.87	-11.68	-11.46	-5.38	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.50	-0.38	NaN	-1.37
2012	-9.43	-13.01	-13.60	-13.28	-8.48	-4.69	-2.43	-1.71	-1.37	-0.99	-1.10	-0.23
2013	-5.84	-11.75	-14.68	-13.52	-8.28	-3.32	-1.29	NaN	-1.00	-0.98	NaN	NaN
2014	-4.11	-8.71	-11.34	-11.11	-4.71	-2.79	-1.30	-1.02	-0.90	-0.83	-0.88	-0.90
2015	-4.36	-10.32	-11.19	-10.94	-5.16	-2.38	-1.34					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.57	-0.32	-0.95	-2.38
2006	0.29	0.70	1.00	-0.10	-1.28	0.04	-0.22	-0.16	-0.07	-0.18	-0.15	-1.61
2007	-1.68	-0.47	-1.93	NaN	NaN	-0.94	-0.47	-0.18	-0.10	-0.15	0.07	-0.27
2008	0.05	0.01	-0.16	0.12	-0.78	0.53	NaN	-0.16	-0.04	-0.06	0.32	0.86
2009	0.94	0.41	0.85	-0.15	0.91	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.20	0.59	NaN	-0.42
2012	-2.81	-1.78	-1.63	-1.80	-1.95	-1.64	-0.96	-0.36	-0.29	-0.08	0.20	2.04
2013	0.38	-1.94	-1.59	-1.39	-2.25	-0.58	0.37	NaN	0.20	-0.01	NaN	NaN
2014	1.99	2.03	1.09	0.93	1.81	1.27	0.56	0.43	0.32	0.09	0.34	2.24
2015	1.02	0.45	1.38	1.20	0.99	1.31	0.72					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	80.00	77.42	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	83.87	100.00	100.00	96.77	100.00	100.00
2009	100.00	96.43	100.00	100.00	100.00	63.33	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.32	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	30.00	0.00	0.00	0.00	0.00	0.00	12.90
2014	100.00	100.00	100.00	100.00	100.00	20.00	0.00	0.00	66.67	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	80.65	0.00	0.00					

**Table M–1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
Variable: Incident solar flux, in watts per meter squared

File name: AK115\_So\_d\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	42.1	16.2	1.3	-0.0
2006	0.5	15.2	79.4	163.5	218.6	217.4	185.8	102.8	58.2	16.1	1.5	0.0
2007	0.4	10.1	67.7	146.6	230.7	268.5	224.8	142.0	64.4	19.0	1.4	0.0
2008	0.5	14.4	81.1	149.2	207.4	229.3	NaN	98.7	49.4	17.9	1.6	0.0
2009	0.6	11.3	78.6	153.2	205.5	200.0	189.3	100.7	51.7	17.4	1.6	0.0
2010	0.1	6.2	NaN	155.9	215.6	225.4	163.6	112.6	72.0	17.1	1.4	0.0
2011	0.3	13.6	72.7	175.7	234.0	206.0	170.0	112.5	46.3	20.5	1.5	0.0
2012	0.5	8.4	NaN	NaN	223.5	212.7	191.3	107.1	52.7	19.9	1.7	0.0
2013	0.4	7.3	69.5	169.2	222.4	216.3	168.8	NaN	NaN	NaN	2.4	0.0
2014	0.8	14.8	73.6	162.5	167.3	176.4	166.3	100.5	NaN	17.8	NaN	0.0
2015	0.7	14.7	NaN	161.7	197.2	209.0	167.2					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-12.3	-2.0	-0.3	-0.0
2006	-0.0	3.5	8.2	6.1	8.4	1.3	5.0	-4.3	3.8	-2.1	-0.1	0.0
2007	-0.1	-1.6	-3.5	-10.8	20.4	52.4	44.0	34.9	10.1	0.9	-0.2	0.0
2008	0.0	2.7	10.0	-8.2	-2.9	13.2	NaN	-8.4	-5.0	-0.3	-0.0	0.0
2009	0.1	-0.4	7.5	-4.2	-4.8	-16.1	8.5	-6.4	-2.7	-0.8	-0.0	-0.0
2010	-0.3	-5.4	NaN	-1.6	5.3	9.3	-17.2	5.5	17.7	-1.1	-0.2	-0.0
2011	-0.1	1.9	1.6	18.3	23.7	-10.1	-10.8	5.3	-8.1	2.3	-0.1	0.0
2012	0.0	-3.3	NaN	NaN	13.3	-3.4	10.5	-0.1	-1.6	1.7	0.1	0.0
2013	-0.1	-4.4	-1.6	11.8	12.2	0.2	-12.0	NaN	NaN	NaN	0.8	0.0
2014	0.3	3.1	2.4	5.1	-43.0	-39.7	-14.5	-6.6	NaN	-0.3	NaN	-0.0
2015	0.2	3.0	NaN	4.3	-13.1	-7.1	-13.6					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	83.9	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	90.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	25.8	43.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	96.7	100.0	100.0	100.0	80.6	66.7	87.1	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.3	100.0	93.3	100.0
2015	100.0	100.0	93.5	96.7	100.0	100.0	100.0					

**Table M-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
Variable: Reflected solar flux, in watts per meter squared

File name: AK115\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.5	10.3	1.8	-0.1
2006	0.4	13.7	72.1	148.4	184.0	61.4	39.4	21.4	10.6	7.1	1.5	-0.0
2007	0.4	13.5	64.5	128.3	194.9	64.7	47.7	30.6	13.0	15.6	1.5	-0.0
2008	0.6	15.2	73.5	131.4	153.5	38.5	NaN	18.6	9.6	18.4	1.7	0.0
2009	0.7	12.1	73.5	138.9	138.7	34.7	44.4	20.4	13.3	11.9	1.8	0.0
2010	0.7	13.6	66.2	140.9	189.6	61.9	32.6	22.6	14.5	12.0	1.4	0.0
2011	0.6	12.3	69.0	158.7	194.3	31.4	40.6	27.6	11.5	19.5	1.8	0.0
2012	0.6	8.1	69.9	139.1	193.8	53.9	48.5	26.5	9.1	10.9	1.8	0.1
2013	0.7	13.7	67.2	156.5	183.5	38.0	41.1	NaN	25.8	19.7	2.0	0.0
2014	0.8	14.7	68.2	145.1	113.5	35.8	39.0	25.9	12.7	14.5	2.1	0.0
2015	0.7	12.4	65.1	137.5	112.2	50.3	46.7					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-6.0	-4.0	0.0	-0.1
2006	-0.2	0.8	3.7	8.1	26.2	14.3	-2.9	-2.4	-2.9	-7.1	-0.3	-0.0
2007	-0.2	0.6	-4.0	-12.1	37.1	17.7	5.5	6.8	-0.5	1.3	-0.2	-0.0
2008	-0.0	2.3	5.1	-9.0	-4.3	-8.6	NaN	-5.2	-3.8	4.1	-0.1	0.0
2009	0.1	-0.8	5.0	-1.5	-19.1	-12.3	2.2	-3.5	-0.2	-2.4	0.1	0.0
2010	0.0	0.7	-2.2	0.6	31.8	14.9	-9.6	-1.3	1.1	-2.2	-0.3	0.0
2011	-0.1	-0.7	0.6	18.3	36.5	-15.6	-1.6	3.8	-2.0	5.2	0.1	0.0
2012	0.0	-4.9	1.5	-1.2	36.0	6.8	6.3	2.7	-4.4	-3.4	0.1	0.0
2013	0.1	0.8	-1.3	16.1	25.7	-9.1	-1.1	NaN	12.4	5.4	0.3	0.0
2014	0.2	1.8	-0.3	4.7	-44.4	-11.2	-3.2	2.1	-0.7	0.2	0.4	0.0
2015	0.1	-0.5	-3.4	-2.9	-45.6	3.2	4.5					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	83.9	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table M–1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk

Variable: Rainfall, in millimeters per hour

File name: AK115\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	NaN	NaN	1.3	4.6	0.5	2.0	0.0	0.0
2007	0.0	0.0	0.0	NaN	NaN	0.3	0.8	1.3	2.0	0.8	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	1.3	NaN	1.0	0.5	0.3	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	2.0	3.0	2.8	1.0	0.5	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	NaN	6.9	1.0	0.3	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	NaN	0.3	3.0	1.8	1.0	1.3	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.3	1.5	1.3	1.3	0.8	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	NaN	3.3	NaN	1.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	2.5	0.5	1.5	0.5	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	3.0	1.0					

Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	NaN	NaN	25.4	26.9	4.8	8.1	0.0	0.0
2007	0.0	0.0	0.0	NaN	NaN	1.0	1.8	10.4	14.5	0.8	0.0	0.0
2008	0.0	0.0	0.0	0.0	NaN	9.4	NaN	18.8	6.9	0.3	0.0	0.0
2009	0.0	0.0	0.0	0.0	NaN	9.4	12.4	65.8	8.4	1.5	0.0	0.0
2010	0.0	0.0	0.0	0.0	NaN	NaN	46.5	11.2	3.6	0.3	0.0	0.0
2011	0.0	0.0	0.0	0.0	NaN	1.5	18.3	16.8	32.5	6.9	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.5	13.5	28.4	23.9	2.5	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	NaN	49.0	NaN	15.7	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	NaN	NaN	13.7	7.9	32.5	3.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	23.1	7.6					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	74.2	86.7	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	93.3	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	87.1	100.0	83.9	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	83.9	93.3	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	90.0	100.0	90.3	96.7	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	74.2	90.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	83.9	100.0	100.0					



**Table M-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk

Variable: Snow depth, in centimeters

File name: AK115\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.6	5.2	9.4	18.8
2006	21.4	25.3	39.0	42.8	39.3	9.2	NaN	NaN	6.1	4.9	6.7	12.9
2007	11.6	15.7	16.5	22.5	31.7	NaN	NaN	NaN	NaN	NaN	22.7	23.2
2008	26.0	NaN	NaN	29.8	23.3	3.5	NaN	9.0	8.5	19.6	34.5	29.9
2009	28.4	41.6	56.1	57.1	NaN	5.7	7.3	8.2	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.2	2.5	6.8	18.0	23.2
2011	23.8	26.9	NaN	NaN	45.0	5.2	3.5	4.6	5.8	13.9	16.8	18.0
2012	27.2	40.6	40.0	40.7	43.4	8.1	4.6	5.2	5.2	10.1	18.7	21.8
2013	19.9	20.8	23.1	35.8	30.5	6.4	3.7	2.3	4.4	12.9	20.9	34.1
2014	38.3	39.3	46.5	50.4	23.1	0.8	-2.2	2.4	8.4	13.4	16.6	20.0
2015	20.0	28.8	38.4	47.9	NaN	NaN	NaN					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.9	-0.4	4.7	9.1
2006	18.7	19.6	29.5	39.2	19.3	0.5	NaN	NaN	0.3	1.5	0.4	5.9
2007	5.2	12.8	14.0	14.8	28.3	NaN	NaN	NaN	NaN	NaN	9.3	15.1
2008	20.8	NaN	NaN	26.4	0.7	0.0	NaN	5.2	3.4	6.0	27.9	21.2
2009	21.4	28.0	54.1	47.9	NaN	-1.4	-0.7	-0.5	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.8	-0.1	2.0	9.4	17.3
2011	22.2	22.6	NaN	NaN	19.1	-1.1	-1.0	-1.0	0.1	5.7	15.0	15.9
2012	18.5	30.7	35.7	36.7	29.4	0.0	-0.3	-0.2	-0.1	3.3	14.0	17.8
2013	17.6	18.6	17.8	28.5	9.1	-1.2	-0.8	0.5	-0.2	10.0	13.3	21.6
2014	35.6	36.0	38.4	45.1	4.4	-4.0	-4.3	-3.6	-0.9	3.7	13.5	11.8
2015	15.4	20.8	29.6	32.4	NaN	NaN	NaN					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.4	8.6	17.6	29.8
2006	26.5	35.0	52.3	47.1	48.0	24.5	NaN	NaN	10.8	10.1	8.5	15.3
2007	18.5	18.8	19.2	29.3	38.2	NaN	NaN	NaN	NaN	NaN	26.4	28.2
2008	30.2	NaN	NaN	38.6	40.7	8.6	NaN	12.7	12.1	30.4	44.7	47.0
2009	34.8	61.5	59.3	62.1	NaN	11.6	12.3	14.4	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.6	6.7	18.5	30.6	29.9
2011	28.6	37.8	NaN	NaN	51.8	37.4	8.1	11.2	10.2	20.0	21.2	22.5
2012	34.2	46.5	44.4	47.8	56.1	29.9	12.2	8.3	10.6	20.7	22.3	26.4
2013	24.5	23.8	33.5	43.7	39.7	42.0	6.9	6.7	16.9	20.3	34.2	38.9
2014	43.2	43.3	50.6	55.0	45.8	7.1	2.0	14.2	20.3	26.2	24.5	29.8
2015	28.1	42.8	47.1	56.7	NaN	NaN	NaN					

**Table M–1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.8	-5.7	-8.8	-3.7
2006	-2.7	-4.6	2.0	1.9	8.2	3.7	NaN	NaN	0.7	-6.0	-11.6	-9.5
2007	-12.4	-14.2	-20.6	-18.3	0.6	NaN	NaN	NaN	NaN	NaN	4.5	0.8
2008	1.9	NaN	NaN	-11.1	-7.8	-2.0	NaN	4.0	3.0	8.8	16.3	7.5
2009	4.3	11.7	19.0	16.2	NaN	0.1	3.9	3.2	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.8	-2.9	-4.0	-0.3	0.8
2011	-0.3	-3.0	NaN	NaN	13.9	-0.4	0.1	-0.4	0.4	3.1	-1.5	-4.5
2012	3.1	10.7	2.9	-0.2	12.3	2.6	1.2	0.3	-0.2	-0.8	0.5	-0.6
2013	-4.1	-9.1	-14.0	-5.1	-0.6	0.8	0.3	-2.6	-1.1	2.0	2.6	11.6
2014	14.3	9.5	9.5	9.6	-8.0	-4.8	-5.5	-2.6	3.0	2.6	-1.7	-2.4
2015	-4.1	-1.0	1.3	7.0	NaN	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	64.5	74.2	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	40.0	19.4	64.5	20.0	77.4	100.0	100.0
2008	80.6	44.8	19.4	100.0	100.0	100.0	77.4	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	71.0	90.0	93.5	90.3	56.7	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.9	100.0	100.0	100.0	100.0
2011	100.0	100.0	6.5	60.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	61.3	0.0	0.0					

**Table M-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpiuk  
Variable: Soil moisture, in water fraction by volume

File name: AK115\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.12	0.03	0.01
2006	NaN	NaN	NaN	NaN	0.01	0.26	0.39	0.39	0.39	0.23	0.03	0.01
2007	NaN	NaN	NaN	NaN	0.01	0.27	0.39	0.38	0.39	0.21	0.05	0.02
2008	NaN	NaN	NaN	NaN	0.02	0.36	NaN	0.39	0.39	0.35	0.06	0.02
2009	NaN	NaN	NaN	NaN	0.02	0.38	0.39	0.39	0.39	0.34	0.03	0.01
2010	NaN	NaN	NaN	NaN	0.01	0.24	0.39	0.39	0.39	0.28	0.05	0.03
2011	NaN	NaN	NaN	NaN	0.01	0.24	0.39	0.37	0.37	0.37	0.12	NaN
2012	NaN	NaN	NaN	NaN	0.01	0.21	0.37	0.38	0.38	0.38	0.19	0.02
2013	NaN	NaN	NaN	NaN	0.01	0.26	0.38	NaN	0.37	0.37	0.16	0.02
2014	0.01	NaN	NaN	NaN	0.02	0.24	0.38	0.38	0.38	0.38	0.20	0.02
2015	NaN	NaN	NaN	NaN	0.02	0.30	0.38					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.05	0.01	0.01
2006	NaN	NaN	NaN	NaN	0.00	0.03	0.39	0.39	0.39	0.04	0.01	0.00
2007	NaN	NaN	NaN	NaN	0.00	0.01	0.38	0.38	0.38	0.07	0.02	0.01
2008	NaN	NaN	NaN	NaN	0.01	0.04	NaN	0.39	0.39	0.15	0.03	0.01
2009	NaN	NaN	NaN	NaN	0.01	0.05	0.39	0.39	0.39	0.07	0.01	0.01
2010	NaN	NaN	NaN	NaN	0.00	0.02	0.39	0.39	0.39	0.06	0.04	0.01
2011	NaN	NaN	NaN	NaN	0.00	0.03	0.39	0.37	0.37	0.37	0.02	NaN
2012	NaN	NaN	NaN	NaN	0.00	0.02	0.37	0.38	0.38	0.38	0.03	0.01
2013	NaN	NaN	NaN	NaN	0.00	0.03	0.37	NaN	0.37	0.37	0.03	0.01
2014	0.00	NaN	NaN	NaN	0.00	0.03	0.38	0.38	0.38	0.37	0.03	0.01
2015	NaN	NaN	NaN	NaN	0.01	0.05	0.38					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.39	0.05	0.02
2006	NaN	NaN	NaN	NaN	0.04	0.40	0.39	0.39	0.39	0.39	0.05	0.02
2007	NaN	NaN	NaN	NaN	0.01	0.40	0.39	0.39	0.39	0.39	0.07	0.03
2008	NaN	NaN	NaN	NaN	0.05	0.39	NaN	0.39	0.39	0.39	0.15	0.04
2009	NaN	NaN	NaN	NaN	0.05	0.40	0.40	0.39	0.39	0.39	0.07	0.02
2010	NaN	NaN	NaN	NaN	0.03	0.40	0.40	0.39	0.39	0.39	0.06	0.05
2011	NaN	NaN	NaN	NaN	0.03	0.40	0.39	0.39	0.37	0.37	0.37	NaN
2012	NaN	NaN	NaN	NaN	0.03	0.39	0.38	0.39	0.38	0.38	0.38	0.04
2013	NaN	NaN	NaN	NaN	0.03	0.39	0.38	NaN	0.38	0.37	0.37	0.04
2014	0.01	NaN	NaN	NaN	0.04	0.39	0.39	0.38	0.38	0.38	0.38	0.04
2015	NaN	NaN	NaN	NaN	0.05	0.39	0.38					

**Table M–1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.01	-0.19	-0.07	-0.01
2006	NaN	NaN	NaN	NaN	-0.01	-0.02	0.01	0.01	0.01	-0.08	-0.06	-0.01
2007	NaN	NaN	NaN	NaN	-0.01	-0.00	0.00	-0.00	0.00	-0.10	-0.04	-0.00
2008	NaN	NaN	NaN	NaN	-0.00	0.08	NaN	0.01	0.01	0.04	-0.03	0.00
2009	NaN	NaN	NaN	NaN	0.01	0.10	0.01	0.01	0.01	0.03	-0.06	-0.01
2010	NaN	NaN	NaN	NaN	-0.01	-0.03	0.01	0.00	0.01	-0.03	-0.04	0.01
2011	NaN	NaN	NaN	NaN	-0.00	-0.04	0.01	-0.01	-0.02	0.06	0.03	NaN
2012	NaN	NaN	NaN	NaN	-0.01	-0.07	-0.01	-0.00	-0.00	0.07	0.10	0.00
2013	NaN	NaN	NaN	NaN	-0.01	-0.02	-0.01	NaN	-0.01	0.06	0.07	0.00
2014	NaN	NaN	NaN	NaN	0.01	-0.04	-0.00	-0.01	-0.01	0.07	0.11	0.00
2015	NaN	NaN	NaN	NaN	0.00	0.02	-0.00					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2006	67.74	28.57	0.00	6.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	0.00	10.71	0.00	36.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	35.48	0.00	0.00	43.33	100.00	100.00	83.87	100.00	100.00	100.00	100.00	100.00
2009	83.87	7.14	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	22.58	0.00	0.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	77.42	82.14	67.74	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	64.52
2012	0.00	0.00	0.00	16.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	38.71	0.00	0.00	6.67	100.00	100.00	100.00	90.32	100.00	100.00	100.00	100.00
2014	100.00	46.43	6.45	50.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	64.52	35.71	25.81	70.00	100.00	100.00	100.00					

**Table M–1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table M-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
 Variable: Air temperature, in degrees Celsius  
 File name: AK115\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-9.61	NaN
2006	-23.90	-18.07	6.32	-5.77	-10.15
2007	-24.78	-16.93	7.21	-5.29	-10.00
2008	-26.73	-15.67	NaN	-7.87	-10.83
2009	-24.75	-16.35	6.86	-7.75	-10.62
2010	-24.74	-14.85	6.79	-4.29	-9.65
2011	-24.21	-15.80	6.20	-8.04	-10.38
2012	-28.27	-18.20	9.07	-5.93	-10.89
2013	-27.99	-16.48	7.88	-6.54	-10.39
2014	-22.67	-13.41	5.30	-6.11	-9.33
2015	-23.43	-13.23			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-2.77	NaN
2006	0.95	-2.53	-0.68	1.07	0.02
2007	0.07	-1.39	0.21	1.54	0.17
2008	-1.88	-0.13	NaN	-1.03	-0.66
2009	0.10	-0.81	-0.13	-0.91	-0.45
2010	0.11	0.69	-0.20	2.55	0.52
2011	0.64	-0.25	-0.79	-1.21	-0.21
2012	-3.42	-2.65	2.08	0.90	-0.72
2013	-3.13	-0.94	0.89	0.29	-0.22
2014	2.18	2.13	-1.69	0.72	0.84
2015	1.42	2.31			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-40.41	NaN
2006	-46.46	-41.42	-5.70	-30.61	-46.46
2007	-44.51	-42.07	-4.07	-28.43	-44.51
2008	-44.59	-41.96	NaN	-32.62	-44.59
2009	-44.12	-41.38	-1.75	-34.32	-44.12
2010	-44.12	-39.67	-1.77	-27.80	-44.12
2011	-42.91	-36.78	-3.73	-36.98	-42.33
2012	-48.35	-43.10	-1.70	-30.07	-48.35
2013	-40.77	-37.93	-5.87	-29.54	-40.77
2014	-42.97	-38.54	-3.90	-28.81	-42.97
2015	-39.23	-40.46			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	0.00	0.00	0.00	100.00	0.00
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	94.57	100.00	98.63
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	96.74	100.00	99.18
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	10.35	NaN
2006	1.19	7.74	20.07	17.90	20.07
2007	-2.06	1.80	25.68	16.70	25.68
2008	1.64	9.36	NaN	6.53	25.31
2009	-1.66	7.96	27.15	14.19	27.15
2010	-2.77	1.44	22.50	18.38	22.50
2011	-0.25	9.10	21.29	15.14	21.29
2012	-5.97	3.84	23.49	10.94	23.49
2013	-13.22	5.75	23.60	13.08	23.60
2014	0.64	6.23	20.05	13.21	20.05
2015	-1.16	11.75			

**Table M–2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
 Variable: Wind speed, in meters per second  
 File name: AK115\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	3.75	3.76	NaN
2007	3.48	3.85	4.22	NaN	4.09
2008	3.50	NaN	NaN	3.75	NaN
2009	NaN	NaN	4.39	NaN	NaN
2010	NaN	4.12	4.39	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	3.43	4.00	3.49	3.60
2013	NaN	4.26	3.72	NaN	NaN
2014	NaN	3.57	4.23	4.38	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	10.31	17.63	NaN
2007	14.20	13.75	11.16	NaN	17.67
2008	19.53	NaN	NaN	11.86	NaN
2009	NaN	NaN	9.43	NaN	NaN
2010	NaN	10.47	11.33	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	11.82	11.20	10.19	13.48
2013	NaN	16.71	10.43	NaN	NaN
2014	NaN	13.18	11.31	14.32	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	-0.31	-0.20	NaN
2007	NaN	-0.24	0.16	NaN	NaN
2008	NaN	NaN	NaN	-0.21	NaN
2009	NaN	NaN	0.33	NaN	NaN
2010	NaN	0.03	0.32	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	-0.66	-0.07	-0.46	NaN
2013	NaN	0.18	-0.34	NaN	NaN
2014	NaN	-0.52	0.17	0.42	NaN
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	0.00	0.00	0.00	13.19	0.00
2006	0.00	61.96	100.00	95.60	73.15
2007	97.78	97.83	100.00	89.01	95.89
2008	97.80	82.61	94.57	100.00	91.80
2009	77.78	75.00	100.00	94.51	86.03
2010	78.89	100.00	100.00	75.82	83.29
2011	3.33	0.00	32.61	93.41	40.27
2012	90.11	97.83	100.00	100.00	96.99
2013	88.89	100.00	96.74	94.51	94.52
2014	90.00	98.91	100.00	100.00	94.79
2015	84.44	94.57			

**Table M-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
Variable: Ground temperature, in degrees Celsius

File name: AK115\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-1.00	NaN
2006	-11.46	-12.85	3.11	-0.12	-5.25
2007	-13.04	NaN	3.12	0.53	-5.70
2008	-12.21	-12.57	NaN	0.33	-4.96
2009	-11.14	-11.43	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.45	NaN
2012	-15.27	-14.65	2.80	0.33	-6.36
2013	-13.77	-14.48	NaN	NaN	NaN
2014	NaN	-10.79	NaN	NaN	NaN
2015	-11.44	NaN			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-7.84	NaN
2006	-16.21	-17.18	-1.08	-7.43	-17.18
2007	-18.68	NaN	-6.02	-4.21	-20.09
2008	-17.41	-18.75	NaN	-2.52	-18.75
2009	-17.24	-17.46	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	-5.43	NaN
2012	-20.93	-20.07	-3.08	-3.11	-20.93
2013	-21.80	-20.07	NaN	NaN	NaN
2014	NaN	-17.79	NaN	NaN	NaN
2015	-17.46	NaN			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	3.42	NaN
2006	-6.91	-0.92	7.97	6.16	7.97
2007	-5.33	NaN	7.15	4.77	7.15
2008	-3.57	0.45	NaN	3.64	8.43
2009	-1.90	1.77	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	5.42	NaN
2012	-4.65	-3.01	7.78	5.15	7.78
2013	-1.97	-1.70	NaN	NaN	NaN
2014	NaN	-0.69	NaN	NaN	NaN
2015	-3.10	NaN			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-1.09	NaN
2006	1.16	-0.05	0.10	-0.21	0.32
2007	-0.42	NaN	0.11	0.44	-0.14
2008	0.41	0.22	NaN	0.24	0.61
2009	1.48	1.36	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.37	NaN
2012	-2.65	-1.85	-0.21	0.24	-0.79
2013	-1.15	-1.69	NaN	NaN	NaN
2014	NaN	2.00	NaN	NaN	NaN
2015	1.18	NaN			

## Percent of Data Available during Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	0.00	0.00	0.00	100.00	0.00
2006	100.00	98.91	100.00	100.00	99.73
2007	100.00	85.87	98.91	100.00	96.16
2008	100.00	100.00	94.57	98.90	98.36
2009	98.89	100.00	20.65	0.00	46.30
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	30.43	100.00	41.10
2012	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	9.78	0.00	44.93
2014	70.00	100.00	6.52	89.01	73.70
2015	100.00	93.48			

## Seasonal/Annual Averages (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-1.88	NaN
2006	-8.69	-12.15	-3.13	-1.41	-6.26
2007	-9.47	NaN	-3.56	-1.33	-6.70
2008	-8.30	-12.30	NaN	-1.20	-6.15
2009	-7.39	-11.48	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	-1.11	NaN
2012	-9.89	-13.82	-3.99	-1.33	-7.06
2013	-7.96	-13.78	-2.99	NaN	NaN
2014	NaN	-10.74	-2.26	-1.02	-5.04
2015	-6.92	-10.83			

**Table M–2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-4.68	NaN
2006	-11.65	-13.68	-7.30	-3.65	-13.68
2007	-14.03	NaN	-9.48	-1.88	-16.21
2008	-12.45	-14.70	NaN	-1.64	-14.70
2009	-12.13	-13.85	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	-2.38	NaN
2012	-14.43	-16.17	-8.51	-1.84	-16.17
2013	-15.46	-15.42	-8.27	NaN	NaN
2014	NaN	-12.92	-4.76	-1.28	-12.92
2015	-12.39	-12.87			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-0.59	NaN
2006	-0.33	-0.20	-0.11	-0.12	-0.15
2007	-1.10	NaN	-0.54	-0.04	-0.59
2008	0.06	-0.36	NaN	0.09	-0.03
2009	0.97	0.46	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.18	NaN
2012	-1.53	-1.87	-0.97	-0.03	-0.94
2013	0.40	-1.83	0.03	NaN	NaN
2014	NaN	1.20	0.76	0.27	1.08
2015	1.44	1.11			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-1.06	NaN
2006	-4.64	-7.26	-1.55	-1.10	-1.10
2007	-3.65	NaN	-1.54	-1.13	-1.13
2008	-1.88	-6.90	NaN	-0.84	-0.84
2009	-0.95	-5.38	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	-0.38	NaN
2012	-1.37	-8.48	-1.71	-0.99	-0.23
2013	-0.23	-8.28	-1.06	NaN	NaN
2014	NaN	-4.71	-1.02	-0.83	-0.83
2015	-0.90	-5.16			

Percent of Data Available during Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	0.00	0.00	0.00	100.00	0.00
2006	100.00	98.91	100.00	100.00	99.73
2007	100.00	85.87	98.91	100.00	96.16
2008	100.00	100.00	94.57	98.90	98.36
2009	98.89	100.00	20.65	0.00	46.30
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	30.43	100.00	41.10
2012	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	9.78	0.00	44.93
2014	70.00	100.00	6.52	89.01	73.70
2015	100.00	93.48			



**Table M-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikuk  
Variable: Incident solar flux, in watts per meter squared

File name: AK115\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	19.8	NaN
2006	4.9	153.0	168.2	25.1	88.3
2007	3.3	148.3	211.2	28.2	98.5
2008	4.8	145.9	NaN	22.9	86.9
2009	3.7	145.7	163.0	23.5	84.6
2010	2.0	145.0	166.6	30.0	86.0
2011	4.4	160.6	162.4	22.8	88.2
2012	2.9	NaN	169.9	24.7	NaN
2013	2.4	153.4	NaN	NaN	NaN
2014	4.9	134.2	147.5	NaN	78.2
2015	4.8	145.1			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	0.0	0.0	0.0	100.0	0.0
2006	100.0	98.9	100.0	100.0	99.7
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	94.6	100.0	98.6
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	96.7	100.0	100.0	99.2
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	56.5	100.0	100.0	89.1
2013	100.0	98.9	93.5	84.6	94.2
2014	100.0	100.0	100.0	92.3	98.1
2015	100.0	96.7			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-4.8	NaN
2006	1.0	7.4	0.4	0.5	1.7
2007	-0.5	2.8	43.4	3.6	11.9
2008	0.9	0.3	NaN	-1.7	0.3
2009	-0.1	0.1	-4.9	-1.1	-2.0
2010	-1.8	-0.6	-1.2	5.4	-0.6
2011	0.5	15.1	-5.4	-1.9	1.6
2012	-1.0	NaN	2.1	0.1	NaN
2013	-1.4	7.8	NaN	NaN	NaN
2014	1.1	-11.4	-20.4	NaN	-8.4
2015	1.0	-0.4			

**Table M–2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk

Variable: Reflected solar flux, in watts per meter squared

File name: AK115\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	6.6	NaN	2005	0.0	0.0	0.0	100.0	0.0
2006	4.4	134.7	40.5	6.4	46.8	2006	100.0	100.0	100.0	100.0	100.0
2007	4.4	129.2	47.5	10.1	48.1	2007	100.0	100.0	100.0	100.0	100.0
2008	5.0	119.3	NaN	10.0	42.1	2008	100.0	100.0	94.6	100.0	98.6
2009	4.0	116.8	33.1	9.0	41.0	2009	100.0	100.0	100.0	100.0	100.0
2010	4.5	132.2	38.8	9.3	46.5	2010	100.0	100.0	100.0	100.0	100.0
2011	4.0	140.5	33.2	11.0	47.5	2011	100.0	100.0	100.0	100.0	100.0
2012	2.8	134.2	42.8	7.3	47.0	2012	100.0	100.0	100.0	100.0	100.0
2013	4.6	135.5	32.4	15.9	47.5	2013	100.0	100.0	96.7	100.0	99.2
2014	4.9	108.5	33.6	9.8	39.4	2014	100.0	100.0	100.0	100.0	100.0
2015	4.1	104.6				2015	100.0	100.0			
Anomaly Relative to the Climatological Mean:						2015	100.0	100.0			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-3.3	NaN
2006	0.1	12.7	2.6	-3.5	2.2
2007	0.1	7.2	9.6	0.2	3.5
2008	0.8	-2.7	NaN	0.1	-2.6
2009	-0.2	-5.2	-4.8	-0.9	-3.6
2010	0.2	10.1	0.9	-0.5	1.9
2011	-0.2	18.5	-4.7	1.2	2.9
2012	-1.5	12.2	4.9	-2.6	2.4
2013	0.3	13.5	-5.5	6.0	2.8
2014	0.6	-13.5	-4.3	-0.1	-5.2
2015	-0.1	-17.5			

**Table M-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpihpuk  
 Variable: Rainfall, in millimeters per hour  
 File name: AK115\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	0.0	NaN
2006	0.0	NaN	4.6	2.0	4.6
2007	0.0	0.0	1.3	2.0	2.0
2008	0.0	0.0	NaN	0.5	1.5
2009	0.0	0.0	3.0	1.0	3.0
2010	0.0	NaN	6.9	0.3	6.9
2011	0.0	0.0	3.0	1.3	3.0
2012	0.0	0.0	1.5	1.3	1.5
2013	0.0	0.0	NaN	1.0	3.3
2014	0.0	NaN	2.5	1.5	2.5
2015	0.0	NaN			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	0.0	0.0	0.0	100.0	0.0
2006	100.0	91.3	95.7	100.0	96.7
2007	100.0	95.7	100.0	100.0	98.9
2008	100.0	95.7	94.6	100.0	97.5
2009	100.0	97.8	100.0	100.0	99.5
2010	100.0	94.6	97.8	100.0	98.1
2011	100.0	97.8	100.0	100.0	99.5
2012	100.0	98.9	100.0	100.0	99.7
2013	100.0	98.9	93.5	98.9	97.8
2014	100.0	91.3	96.7	100.0	97.0
2015	100.0	94.6			

## Accumulated Total for Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	0.0	NaN
2006	0.0	NaN	58.9	13.0	71.9
2007	0.0	0.0	13.2	15.2	28.4
2008	0.0	0.0	NaN	7.1	69.1
2009	0.0	0.0	87.6	9.9	97.5
2010	0.0	NaN	58.2	3.8	62.0
2011	0.0	0.0	36.6	39.4	75.9
2012	0.0	0.0	42.4	26.4	68.8
2013	0.0	0.0	NaN	15.7	94.0
2014	0.0	NaN	54.6	35.8	90.4
2015	0.0	NaN			

**Table M–2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
 Variable: Snow depth, in centimeters  
 File name: AK115\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	5.7	NaN
2006	21.7	40.4	NaN	5.9	19.0
2007	13.3	23.6	NaN	NaN	NaN
2008	NaN	NaN	6.2	20.9	19.7
2009	33.0	52.1	7.0	NaN	NaN
2010	NaN	NaN	NaN	9.1	NaN
2011	24.6	NaN	4.4	12.2	18.3
2012	28.3	41.4	6.0	11.3	22.1
2013	20.8	29.7	4.1	12.7	17.9
2014	37.2	39.9	0.3	12.8	21.3
2015	22.7	39.5			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-5.6	NaN
2006	-3.5	2.3	NaN	-5.4	-0.7
2007	-11.9	-14.5	NaN	NaN	NaN
2008	NaN	NaN	1.5	9.5	-0.1
2009	7.8	14.0	2.4	NaN	NaN
2010	NaN	NaN	NaN	-2.2	NaN
2011	-0.7	NaN	-0.3	0.9	-1.4
2012	3.1	3.3	1.3	0.0	2.4
2013	-4.4	-8.4	-0.6	1.4	-1.8
2014	12.0	1.8	-4.3	1.5	1.6
2015	-2.5	1.5			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	-1.9	NaN
2006	9.1	19.3	NaN	0.3	0.3
2007	5.2	14.0	NaN	NaN	NaN
2008	NaN	NaN	-1.0	3.4	-1.0
2009	21.2	6.4	-1.4	NaN	NaN
2010	NaN	NaN	NaN	-0.1	NaN
2011	17.3	NaN	-1.1	0.1	-1.1
2012	15.9	29.4	-0.3	-0.1	-0.3
2013	17.6	9.1	-1.2	-0.2	-1.2
2014	21.6	4.4	-4.3	-0.9	-4.3
2015	11.8	0.6			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	0.0	0.0	0.0	100.0	0.0
2006	100.0	100.0	79.3	100.0	94.8
2007	100.0	100.0	41.3	65.9	76.7
2008	75.8	72.8	92.4	100.0	85.2
2009	100.0	90.2	91.3	18.7	66.6
2010	0.0	0.0	28.3	100.0	40.5
2011	100.0	55.4	100.0	100.0	88.8
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	85.9			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2005	NaN	NaN	NaN	17.6	NaN
2006	35.0	52.3	NaN	10.8	52.3
2007	18.8	38.2	NaN	NaN	NaN
2008	NaN	NaN	12.7	44.7	47.0
2009	61.5	62.1	14.4	NaN	NaN
2010	NaN	NaN	NaN	30.6	NaN
2011	37.8	NaN	37.4	21.2	51.8
2012	46.5	56.1	29.9	22.3	56.1
2013	26.4	43.7	42.0	34.2	43.7
2014	43.3	55.0	14.2	26.2	55.0
2015	42.8	56.7			

**Table M-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Ikpikpuk  
Variable: Soil moisture, in water fraction by volume

File name: AK115\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	0.18	NaN
2006	NaN	NaN	0.35	0.22	NaN
2007	NaN	NaN	0.35	0.21	NaN
2008	NaN	NaN	NaN	0.27	NaN
2009	NaN	NaN	0.39	0.25	NaN
2010	NaN	NaN	0.34	0.24	NaN
2011	NaN	NaN	0.34	0.29	NaN
2012	NaN	NaN	0.32	0.32	NaN
2013	NaN	NaN	0.34	0.30	NaN
2014	NaN	NaN	0.33	0.32	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	-0.09	NaN
2006	NaN	NaN	0.00	-0.04	NaN
2007	NaN	NaN	0.00	-0.05	NaN
2008	NaN	NaN	NaN	0.01	NaN
2009	NaN	NaN	0.04	-0.01	NaN
2010	NaN	NaN	-0.00	-0.02	NaN
2011	NaN	NaN	-0.01	0.03	NaN
2012	NaN	NaN	-0.02	0.06	NaN
2013	NaN	NaN	-0.01	0.04	NaN
2014	NaN	NaN	-0.01	0.05	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	0.01	NaN
2006	NaN	NaN	0.03	0.01	NaN
2007	NaN	NaN	0.01	0.02	NaN
2008	NaN	NaN	NaN	0.03	NaN
2009	NaN	NaN	0.05	0.01	NaN
2010	NaN	NaN	0.02	0.04	NaN
2011	NaN	NaN	0.03	0.02	NaN
2012	NaN	NaN	0.02	0.03	NaN
2013	NaN	NaN	0.03	0.03	NaN
2014	NaN	NaN	0.03	0.03	NaN
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	0.00	0.00	0.00	100.00	0.00
2006	66.67	35.87	100.00	100.00	75.62
2007	37.78	45.65	100.00	100.00	70.96
2008	46.15	47.83	94.57	100.00	72.13
2009	65.56	41.30	100.00	100.00	76.71
2010	42.22	53.26	100.00	100.00	73.97
2011	86.67	76.09	100.00	100.00	87.67
2012	21.98	39.13	100.00	100.00	68.31
2013	47.78	35.87	96.74	100.00	70.14
2014	83.33	52.17	100.00	100.00	83.84
2015	67.78	65.22			

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2005	NaN	NaN	NaN	0.39	NaN
2006	NaN	NaN	0.40	0.39	NaN
2007	NaN	NaN	0.40	0.39	NaN
2008	NaN	NaN	NaN	0.39	NaN
2009	NaN	NaN	0.40	0.39	NaN
2010	NaN	NaN	0.40	0.39	NaN
2011	NaN	NaN	0.40	0.37	NaN
2012	NaN	NaN	0.39	0.38	NaN
2013	NaN	NaN	0.39	0.38	NaN
2014	NaN	NaN	0.39	0.38	NaN
2015	NaN	NaN			

**Table M–2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

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## N. Lake 145

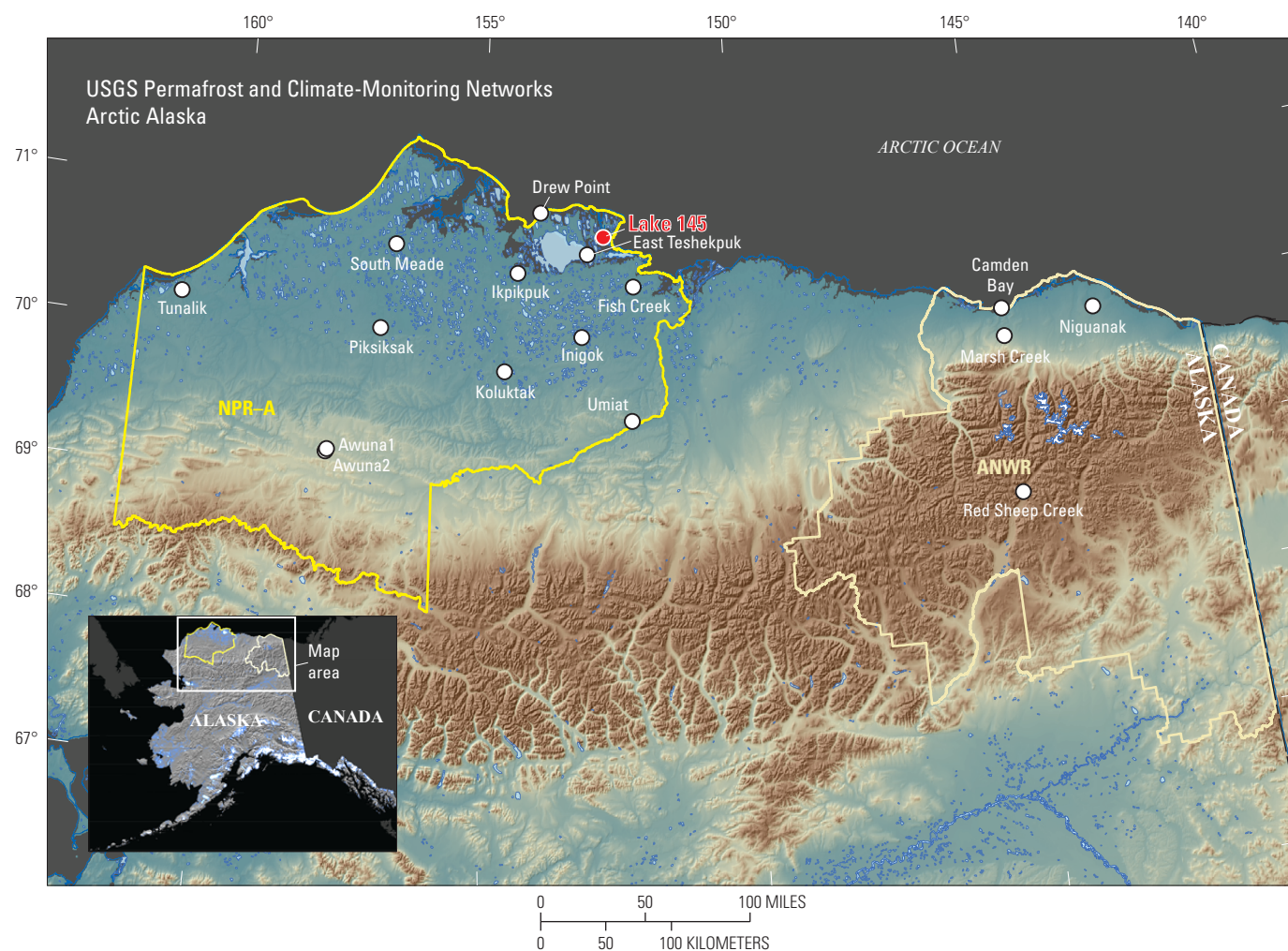
GTN-P code: —

Latitude: 70°41.388'N

Longitude: 152°37.995'W

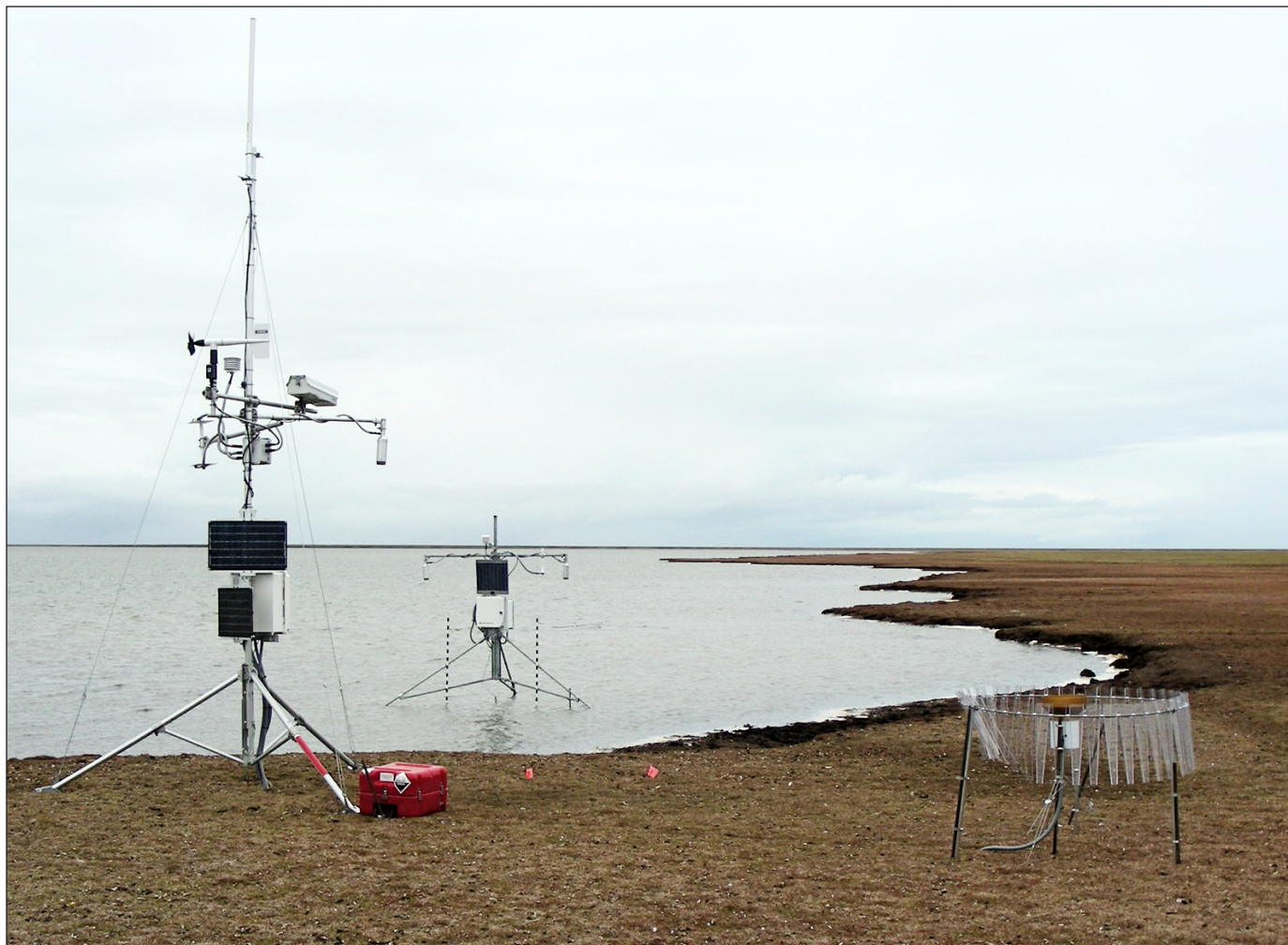
Elevation: 6 meters above mean sea level

Installation date: 13 AUG 2007



**Figure N-1.** Location map presenting the specific location of the Lake 145 site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)

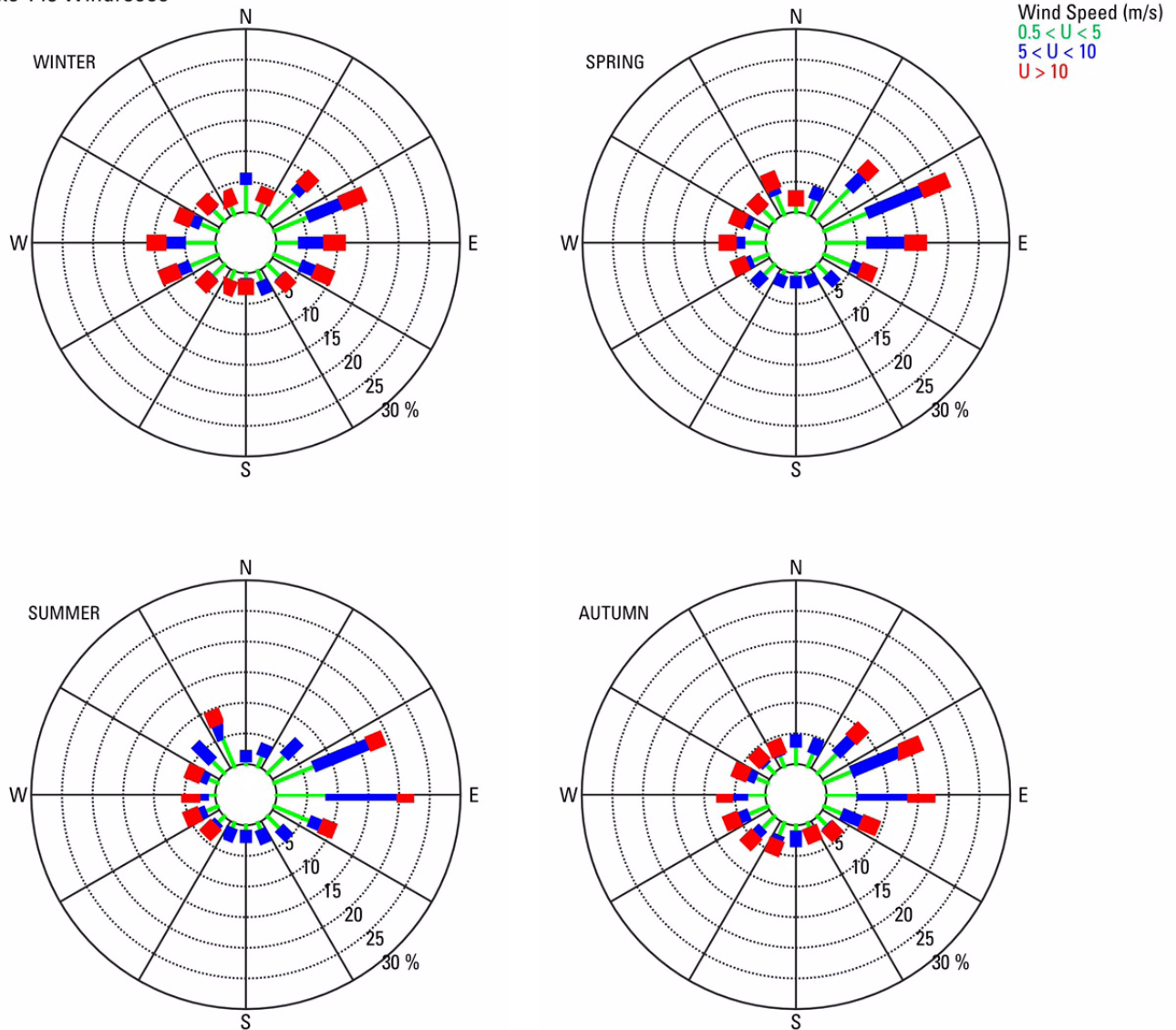




**Figure N–2.** Lake 145 station in summer 2008.



Lake 145 Windroses



**Figure N-3.** Lake 145 seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table N-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Air temperature, in degrees Celsius

File name: AK116\_Tair\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.39	-5.57	-10.32	-19.70
2008	-29.07	-28.02	-29.29	-13.24	-4.77	3.60	6.42	4.11	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.93	-3.87	NaN	NaN
2010	NaN	NaN	NaN	NaN	-6.47	1.58	6.67	6.50	2.62	-4.47	-10.64	-25.21
2011	-24.51	-21.96	-22.68	-19.61	-5.53	1.52	6.85	5.58	2.56	-4.80	-19.60	-25.67
2012	-31.90	-25.28	-33.64	-15.74	-5.81	3.39	9.37	NaN	2.52	-2.84	-15.75	-25.78
2013	-26.40	-30.91	-23.66	-19.67	-5.79	3.17	7.82	5.62	-0.28	-3.79	-14.60	-20.22
2014	-22.73	-24.65	-21.90	-15.85	-2.48	1.81	5.16	4.36	1.35	-5.18	-12.21	-22.64
2015	-24.72	-22.07	-24.01	-13.88	-1.40	5.94	5.44					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.53	-16.22	-24.65	-39.96
2008	-44.43	-38.97	-39.86	-30.89	-15.59	-3.00	-0.81	-0.84	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-7.65	-18.68	NaN	NaN
2010	NaN	NaN	NaN	NaN	-22.95	-1.99	-1.06	0.62	-6.24	-11.35	-30.99	-37.96
2011	-40.04	-34.81	-33.32	-32.02	-21.62	-3.84	0.18	-0.15	-7.28	-22.27	-33.28	-36.42
2012	-44.36	-47.80	-41.17	-35.37	-20.79	-2.92	1.53	NaN	-1.23	-16.64	-26.97	-36.20
2013	-38.63	-39.64	-37.12	-36.17	-25.70	-6.45	-0.91	-1.41	-9.97	-15.95	-28.43	-35.30
2014	-42.65	-40.96	-38.38	-34.31	-10.88	-4.21	-0.83	-1.09	-3.82	-15.87	-24.76	-32.58
2015	-33.87	-36.72	-37.93	-28.33	-13.75	-4.13	-0.23					

### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	13.94	-0.20	-3.82	-5.36
2008	-1.08	-8.50	-9.97	0.01	5.16	15.44	18.00	10.17	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.91	2.62	NaN	NaN
2010	NaN	NaN	NaN	NaN	2.59	9.73	19.74	19.35	12.09	-0.06	0.97	-9.83
2011	-1.25	-0.47	-8.97	-5.30	7.52	12.57	18.91	15.05	11.73	0.20	-3.69	-6.88
2012	-14.74	-12.14	-17.53	-7.58	2.53	16.36	20.68	NaN	8.84	4.24	-4.21	-13.75
2013	-14.08	-21.10	-13.56	-2.51	4.41	15.84	18.80	19.17	9.73	1.37	1.86	0.62
2014	-13.85	-4.57	-7.26	1.38	6.73	14.31	16.49	14.83	8.89	1.80	-1.99	-5.97
2015	-7.37	-1.21	-4.69	-1.75	8.23	21.07	15.72					

**Table N-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.95	-1.04	3.76	3.76
2008	-3.55	-3.27	-3.42	2.37	-0.48	0.59	-0.40	-0.95	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.50	0.66	NaN	NaN
2010	NaN	NaN	NaN	NaN	-2.19	-1.43	-0.15	1.45	1.18	0.06	3.44	-1.75
2011	1.01	2.79	3.18	-4.00	-1.24	-1.49	0.04	0.52	1.13	-0.27	-5.52	-2.21
2012	-6.39	-0.54	-7.78	-0.14	-1.52	0.38	2.55	NaN	1.08	1.69	-1.67	-2.32
2013	-0.88	-6.16	2.20	-4.07	-1.51	0.16	1.00	0.56	-1.72	0.74	-0.52	3.24
2014	2.79	0.09	3.96	-0.24	1.81	-1.20	-1.66	-0.70	-0.08	-0.66	1.87	0.82
2015	0.79	2.67	1.85	1.73	2.88	2.93	-1.38					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	93.33	70.97	43.33	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.74	96.67	96.77	16.67	0.00
2010	0.00	0.00	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table N-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Wind speed, in meters per second

File name: AK116\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.43	NaN	NaN	4.21
2008	NaN	3.06	3.43	4.34	4.92	4.04	4.71	3.61	3.83	4.43	4.73	NaN
2009	3.81	NaN	NaN	3.89	4.03	5.72	5.10	4.48	4.36	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	5.09	5.67	4.29	4.69	4.29	6.40	NaN	3.34
2011	NaN	4.98	NaN	4.13	3.49	5.87	4.70	4.47	4.70	5.49	NaN	NaN
2012	4.24	NaN	NaN	3.91	4.07	4.75	4.24	NaN	4.51	4.45	3.53	3.50
2013	5.61	NaN	5.67	3.87	3.89	3.94	4.92	3.59	4.55	NaN	5.15	NaN
2014	NaN	NaN	3.00	3.15	4.67	4.33	4.81	5.35	5.57	5.54	3.85	4.07
2015	NaN	4.95	4.49	4.34	4.19	3.87	4.05					

**Table N-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.03	NaN	NaN	18.87
2008	NaN	11.30	9.87	10.90	11.23	9.50	13.34	10.42	10.94	12.09	12.35	NaN
2009	18.92	NaN	NaN	10.14	11.12	10.40	11.14	12.55	10.69	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	10.63	11.86	8.98	11.89	9.66	15.00	NaN	11.68
2011	NaN	20.78	NaN	10.74	9.32	10.87	10.85	9.47	10.24	14.02	NaN	NaN
2012	11.42	NaN	NaN	10.56	8.82	11.68	9.46	NaN	10.39	10.55	11.54	15.34
2013	19.29	NaN	18.64	12.04	11.45	9.05	11.68	9.43	10.69	NaN	15.70	NaN
2014	NaN	NaN	8.63	12.24	11.51	9.75	13.90	11.13	11.11	13.41	13.27	14.07
2015	NaN	19.06	14.08	13.22	13.72	8.88	9.79					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.81	NaN	NaN	0.40
2008	NaN	NaN	-0.94	-0.05	0.62	-0.70	0.11	-0.82	-0.79	-0.86	NaN	NaN
2009	NaN	NaN	NaN	-0.50	-0.28	0.98	0.50	0.05	-0.26	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	0.79	0.93	-0.32	0.27	-0.33	1.12	NaN	-0.48
2011	NaN	NaN	NaN	-0.26	-0.81	1.13	0.10	0.05	0.08	0.20	NaN	NaN
2012	NaN	NaN	NaN	-0.48	-0.23	0.01	-0.36	NaN	-0.11	-0.84	NaN	-0.31
2013	NaN	NaN	1.29	-0.52	-0.41	-0.80	0.32	-0.84	-0.07	NaN	NaN	NaN
2014	NaN	NaN	-1.37	-1.24	0.37	-0.40	0.21	0.92	0.95	0.26	NaN	0.26
2015	NaN	NaN	0.12	-0.05	-0.11	-0.87	-0.55					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	90.32	93.33	100.00
2008	93.55	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	87.10
2009	100.00	92.86	93.55	100.00	100.00	100.00	100.00	96.77	96.67	90.32	13.33	0.00
2010	0.00	0.00	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	93.33	96.77
2011	77.42	100.00	90.32	100.00	100.00	100.00	100.00	100.00	100.00	100.00	63.33	83.87
2012	96.77	79.31	93.55	100.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	100.00	85.71	96.77	100.00	100.00	100.00	100.00	100.00	100.00	74.19	100.00	77.42
2014	93.55	89.29	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	90.32	100.00	96.77	100.00	100.00	100.00	100.00					

**Table N-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
Variable: Ground temperature, in degrees Celsius

File name: AK116\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table N-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table N-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

**Table N-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Incident solar flux, in watts per meter squared

File name: AK116\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	59.9	17.9	1.6	0.1
2008	0.5	13.5	83.1	155.2	238.7	251.3	200.1	102.4	NaN	20.3	1.6	0.0
2009	0.6	10.8	73.3	154.7	237.1	233.1	204.4	107.3	52.3	16.2	NaN	NaN
2010	NaN	NaN	NaN	NaN	228.6	263.4	180.3	119.5	63.8	19.5	NaN	0.0
2011	0.3	NaN	73.2	165.0	243.1	247.2	184.4	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	238.8	243.9	211.9	NaN	55.6	22.0	1.7	0.0
2013	0.4	5.7	60.4	155.5	227.1	241.2	185.2	96.4	54.9	20.0	1.9	0.1
2014	0.7	16.0	64.4	145.7	190.7	195.6	169.1	104.8	54.3	18.6	2.1	0.0
2015	0.3	10.9	66.0	150.1	194.3	225.6	192.2					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.0	-1.0	-0.2	0.0
2008	0.1	3.5	13.0	0.8	18.0	15.4	9.2	-0.8	NaN	1.4	-0.1	-0.0
2009	0.2	0.7	3.3	0.4	16.4	-2.8	13.5	4.1	-3.5	-2.6	NaN	NaN
2010	NaN	NaN	NaN	NaN	7.9	27.5	-10.7	16.2	7.9	0.7	NaN	-0.0
2011	-0.2	NaN	3.2	10.6	22.5	11.3	-6.6	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	18.1	8.0	21.0	NaN	-0.3	3.2	-0.0	-0.0
2013	-0.0	-4.4	-9.7	1.2	6.5	5.3	-5.7	-6.8	-0.9	1.1	0.2	0.0
2014	0.2	6.0	-5.7	-8.6	-29.9	-40.3	-21.9	1.5	-1.6	-0.2	0.3	-0.0
2015	-0.1	0.9	-4.1	-4.3	-26.3	-10.3	1.2					

#### Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	96.7	96.8	16.7	0.0
2010	0.0	0.0	0.0	23.3	100.0	100.0	100.0	100.0	100.0	100.0	86.7	100.0
2011	96.8	92.9	100.0	96.7	100.0	100.0	100.0	93.5	90.0	29.0	40.0	32.3
2012	54.8	10.3	0.0	13.3	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					



**Table N-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Reflected solar flux, in watts per meter squared

File name: AK116\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.6	1.4	0.0
2008	0.5	13.5	72.8	137.4	191.9	75.8	61.8	30.0	19.8	18.9	1.6	0.1
2009	0.7	11.9	76.4	145.5	198.2	83.3	59.9	32.3	24.2	13.3	NaN	NaN
2010	NaN	NaN	NaN	NaN	189.3	111.7	52.6	33.7	25.4	17.6	2.4	0.2
2011	0.8	11.6	64.5	140.6	190.1	82.8	40.3	26.2	15.3	13.8	1.1	0.0
2012	0.4	7.9	47.7	81.6	111.7	48.3	27.6	NaN	15.2	8.1	0.5	0.0
2013	0.2	3.6	17.2	40.9	66.4	39.2	26.0	14.4	12.9	6.0	0.8	0.1
2014	0.2	3.2	13.3	31.7	45.5	21.8	14.8	11.5	9.1	2.9	0.3	0.0
2015	0.1	1.7	8.1	17.8	26.4	25.6	24.5					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.0	0.3	-0.0
2008	0.2	6.6	34.2	60.8	76.3	19.7	23.4	6.1	3.0	8.3	0.5	0.0
2009	0.3	5.1	37.8	69.0	82.7	27.3	21.4	8.4	7.4	2.7	NaN	NaN
2010	NaN	NaN	NaN	NaN	73.8	55.7	14.1	9.8	8.6	7.0	1.4	0.1
2011	0.4	4.8	25.9	64.1	74.6	26.7	1.8	2.3	-1.5	3.2	0.0	-0.0
2012	-0.0	1.0	9.1	5.0	-3.9	-7.8	-10.8	NaN	-1.7	-2.6	-0.5	-0.0
2013	-0.2	-3.3	-21.4	-35.7	-49.1	-16.9	-12.4	-9.5	-4.0	-4.6	-0.3	0.1
2014	-0.2	-3.7	-25.3	-44.9	-70.1	-34.3	-23.6	-12.4	-7.7	-7.8	-0.7	-0.1
2015	-0.3	-5.2	-30.5	-58.7	-89.1	-30.5	-13.9					

#### Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	96.7	96.8	16.7	0.0
2010	0.0	0.0	0.0	23.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table N-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Rainfall, in millimeters per hour

File name: AK116\_rain\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.4	0.2	0.0	0.0
2008	0.0	0.0	0.0	NaN	NaN	NaN	1.3	1.0	1.2	0.3	0.0	0.0
2009	0.0	0.0	0.0	NaN	NaN	NaN	2.1	2.2	0.5	0.9	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.2	8.1	0.6	1.3	0.1	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.4	2.1	3.7	1.0	0.8	0.0	0.0
2012	NaN	NaN	NaN	NaN	NaN	NaN	1.0	NaN	1.2	0.7	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	NaN	5.5	1.8	2.4	NaN	0.0	0.0
2014	0.0	0.0	0.0	NaN	NaN	NaN	1.8	0.8	1.9	0.3	0.0	0.0
2015	0.0	0.0	0.0	NaN	NaN	4.0	0.4					

Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.7	0.5	0.0	0.0
2008	0.0	0.0	0.0	NaN	NaN	NaN	34.8	11.7	9.7	1.2	0.0	0.0
2009	0.0	0.0	0.0	NaN	NaN	NaN	7.2	52.8	3.9	3.8	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.3	46.0	3.0	6.3	0.1	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	1.6	24.1	12.8	24.3	5.0	0.0	0.0
2012	NaN	NaN	NaN	NaN	NaN	NaN	10.3	NaN	26.3	3.5	0.0	0.0
2013	0.0	0.0	0.0	0.0	NaN	NaN	38.2	23.4	22.3	NaN	0.0	0.0
2014	0.0	0.0	0.0	NaN	NaN	NaN	15.3	7.7	20.5	0.9	0.0	0.0
2015	0.0	0.0	0.0	NaN	NaN	32.7	1.5					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	96.8	80.0	90.3	93.3	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	83.3	83.9	90.0	100.0	96.8	96.7	96.8	16.7	0.0
2010	0.0	0.0	0.0	20.0	77.4	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	96.8	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	96.8
2012	0.0	0.0	0.0	0.0	0.0	16.7	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	96.7	83.9	90.0	100.0	100.0	100.0	83.9	100.0	100.0
2014	100.0	100.0	100.0	90.0	54.8	83.3	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	86.7	80.6	100.0	100.0					

**Table N-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Snow depth, in centimeters

File name: AK116\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.9	5.4	8.7	7.8
2008	9.7	12.7	14.5	15.5	16.4	1.3	2.6	4.7	3.4	9.4	26.0	27.2
2009	29.7	37.2	NaN	NaN	NaN	NaN	NaN	NaN	2.2	4.9	NaN	NaN
2010	NaN	NaN	NaN	NaN	46.7	14.5	5.1	3.5	1.2	10.6	23.1	28.9
2011	29.1	29.6	35.2	36.3	37.1	NaN	NaN	2.2	2.7	22.2	22.8	43.2
2012	46.4	52.8	56.0	59.4	61.8	NaN	NaN	NaN	2.7	10.9	18.2	23.1
2013	31.7	34.3	34.2	38.0	37.4	8.8	4.2	7.2	10.5	19.4	21.5	38.1
2014	42.1	43.8	45.2	51.8	45.5	15.4	5.0	3.4	2.7	11.8	21.6	21.8
2015	23.2	NaN	NaN	NaN	28.9	3.6	12.3					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.5	3.6	5.2	5.9
2008	6.7	8.6	12.4	9.9	0.9	-1.4	-2.0	3.3	0.2	2.0	17.1	24.9
2009	25.7	31.4	NaN	NaN	NaN	NaN	NaN	NaN	0.5	1.5	NaN	NaN
2010	NaN	NaN	NaN	NaN	40.8	0.3	1.5	-0.3	-0.7	4.3	16.6	25.9
2011	24.3	27.7	28.7	34.6	17.4	NaN	NaN	0.1	0.6	5.9	15.4	23.2
2012	43.9	45.0	52.0	55.9	49.4	NaN	NaN	NaN	-1.9	-1.1	13.4	12.8
2013	28.3	29.8	30.5	30.5	21.2	0.1	0.8	1.1	1.2	17.0	16.6	18.6
2014	41.0	41.3	40.5	46.4	38.0	-0.4	-0.4	-0.7	0.2	1.2	14.6	15.1
2015	21.4	NaN	NaN	NaN	1.8	0.3	2.4					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.9	8.0	19.5	13.1
2008	12.7	17.0	16.9	20.9	23.7	4.1	6.4	8.1	7.6	23.0	29.1	31.4
2009	33.3	47.1	NaN	NaN	NaN	NaN	NaN	NaN	5.6	9.8	NaN	NaN
2010	NaN	NaN	NaN	NaN	48.8	43.0	8.2	8.0	6.3	19.6	34.3	34.6
2011	31.4	32.4	36.9	38.1	70.0	NaN	NaN	4.0	7.1	36.5	29.0	50.2
2012	48.0	58.9	58.6	69.3	68.5	NaN	NaN	NaN	9.1	18.8	22.9	28.6
2013	34.5	37.2	43.1	45.1	49.8	24.2	8.2	15.2	23.1	22.6	29.8	43.5
2014	42.8	47.9	48.3	58.1	58.0	39.4	10.0	9.2	9.1	20.8	24.7	24.9
2015	26.1	NaN	NaN	NaN	42.6	8.8	20.1					

**Table N-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.7	-7.2	-11.5	-19.0
2008	-20.2	-21.4	-21.1	-22.8	-20.4	-7.1	-3.3	-0.9	-1.2	-3.2	5.8	0.5
2009	-0.2	3.2	NaN	NaN	NaN	NaN	NaN	NaN	-2.4	-7.7	NaN	NaN
2010	NaN	NaN	NaN	NaN	9.9	6.1	-0.7	-2.1	-3.4	-2.0	2.9	2.1
2011	-0.8	-4.4	-0.4	-2.0	0.3	NaN	NaN	-3.4	-1.9	9.6	2.6	16.5
2012	16.5	18.7	20.5	21.1	25.0	NaN	NaN	NaN	-1.9	-1.7	-2.0	-3.7
2013	1.8	0.3	-1.4	-0.3	0.6	0.4	-1.6	1.7	5.9	6.8	1.3	11.3
2014	12.2	9.8	9.6	13.4	8.6	7.0	-0.8	-2.2	-1.9	-0.8	1.4	-5.0
2015	-6.7	NaN	NaN	NaN	-8.0	-4.8	6.5					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	96.8	100.0	0.0	0.0	0.0	0.0	0.0	71.0	100.0	100.0	20.0	0.0
2010	0.0	0.0	0.0	26.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	43.3	0.0	90.3	100.0	100.0	100.0	100.0
2012	100.0	100.0	87.1	100.0	93.5	50.0	0.0	71.0	93.3	100.0	93.3	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	71.4	0.0	10.0	100.0	100.0	100.0					

**Table N-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
Variable: Soil moisture, in water fraction by volume

File name: AK116\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.28	0.10	NaN
2008	NaN	NaN	NaN	NaN	0.08	0.24	0.40	0.41	0.41	0.40	0.20	0.07
2009	NaN	NaN	NaN	NaN	0.07	0.16	0.40	0.41	0.41	0.36	NaN	NaN
2010	NaN	NaN	NaN	NaN	0.02	0.09	0.40	0.41	0.41	0.40	0.19	0.08
2011	NaN	NaN	NaN	NaN	0.06	0.20	0.41	0.41	0.41	0.41	0.23	0.08
2012	NaN	NaN	NaN	NaN	0.05	0.20	0.41	NaN	0.41	0.41	0.32	0.11
2013	NaN	NaN	NaN	NaN	0.07	0.22	0.41	0.41	0.41	0.41	0.34	0.17
2014	0.10	0.08	0.06	0.07	0.10	0.15	0.41	0.41	0.41	0.40	0.25	0.10
2015	NaN	NaN	NaN	NaN	0.10	0.27	0.41					

**Table N-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.13	0.07	NaN
2008	NaN	NaN	NaN	NaN	0.06	0.12	0.40	0.41	0.41	0.37	0.09	0.05
2009	NaN	NaN	NaN	NaN	0.05	0.09	0.40	0.40	0.41	0.13	NaN	NaN
2010	NaN	NaN	NaN	NaN	0.02	0.04	0.38	0.40	0.41	0.38	0.13	0.05
2011	NaN	NaN	NaN	NaN	0.04	0.10	0.41	0.41	0.41	0.41	0.10	0.05
2012	NaN	NaN	NaN	NaN	0.04	0.06	0.41	NaN	0.41	0.41	0.15	0.08
2013	NaN	NaN	NaN	NaN	0.06	0.11	0.41	0.41	0.41	0.41	0.21	0.12
2014	0.08	0.06	0.06	0.06	0.07	0.11	0.41	0.41	0.41	0.37	0.14	0.08
2015	NaN	NaN	NaN	NaN	0.07	0.14	0.41					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.14	NaN
2008	NaN	NaN	NaN	NaN	0.12	0.40	0.41	0.41	0.41	0.41	0.37	0.09
2009	NaN	NaN	NaN	NaN	0.10	0.41	0.41	0.41	0.41	0.41	NaN	NaN
2010	NaN	NaN	NaN	NaN	0.04	0.40	0.41	0.41	0.41	0.41	0.38	0.13
2011	NaN	NaN	NaN	NaN	0.10	0.41	0.41	0.41	0.41	0.41	0.41	0.10
2012	NaN	NaN	NaN	NaN	0.07	0.41	0.41	NaN	0.41	0.41	0.41	0.16
2013	NaN	NaN	NaN	NaN	0.12	0.41	0.41	0.41	0.41	0.41	0.41	0.21
2014	0.13	0.09	0.07	0.07	0.12	0.41	0.41	0.41	0.41	0.41	0.37	0.14
2015	NaN	NaN	NaN	NaN	0.14	0.41	0.41					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.00	-0.10	-0.13	NaN
2008	NaN	NaN	NaN	NaN	0.00	0.03	-0.00	-0.00	-0.00	0.02	-0.03	-0.03
2009	NaN	NaN	NaN	NaN	-0.00	-0.04	-0.00	-0.00	0.00	-0.03	NaN	NaN
2010	NaN	NaN	NaN	NaN	-0.05	-0.11	-0.01	0.00	0.00	0.02	-0.04	-0.02
2011	NaN	NaN	NaN	NaN	-0.01	-0.01	0.00	0.00	0.00	0.03	-0.01	-0.02
2012	NaN	NaN	NaN	NaN	-0.02	-0.01	0.00	NaN	0.00	0.03	0.09	0.01
2013	NaN	NaN	NaN	NaN	0.00	0.02	0.00	0.00	0.00	0.02	0.11	0.07
2014	NaN	NaN	NaN	NaN	0.03	-0.05	0.00	0.00	0.00	0.02	0.01	-0.00
2015	NaN	NaN	NaN	NaN	0.02	0.07	0.00					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	48.39
2008	0.00	0.00	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	87.10	0.00	0.00	13.33	100.00	100.00	100.00	96.77	96.67	96.77	16.67	0.00
2010	0.00	0.00	0.00	23.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	64.52	3.57	0.00	20.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	74.19	41.38	0.00	40.00	100.00	100.00	100.00	93.55	100.00	100.00	100.00	100.00
2013	90.32	0.00	0.00	26.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	58.06	35.71	29.03	73.33	100.00	100.00	100.00					

**Table N-1.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Surface pressure, in millibars

File name: AK116\_P\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1009.9	1009.3	1010.0	1013.3
2008	1014.9	1016.9	1023.7	NaN	NaN	1011.7	1007.9	1014.4	1015.6	1009.0	1012.7	1020.9
2009	1017.6	1015.9	1025.4	1019.6	1018.8	1014.3	1017.8	1010.1	1010.7	1016.1	NaN	NaN
2010	NaN	NaN	NaN	NaN	1021.7	1013.2	NaN	1012.3	1013.9	NaN	1012.2	1022.7
2011	1019.3	1015.0	1015.1	1018.1	1016.8	1013.9	1008.7	1009.0	1006.4	1006.8	1013.1	1009.2
2012	1015.9	1012.3	1018.9	1019.4	1013.9	1012.0	1009.5	NaN	1005.3	1019.2	1024.6	1016.4
2013	1022.9	1017.6	1022.9	1027.1	1015.9	1015.3	1014.7	1010.5	1007.7	1006.4	1012.7	1021.9
2014	1012.1	1025.1	1018.5	1013.5	1017.6	1011.8	1011.6	1011.2	1009.3	1012.4	1015.3	1015.3
2015	1020.1	1020.7	1016.5	1011.2	1018.6	1011.8	1012.7					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	994.0	993.0	980.0	999.0
2008	988.0	987.0	1007.0	NaN	NaN	992.0	991.0	997.0	1001.0	996.0	992.0	990.0
2009	980.0	996.0	999.0	1001.0	1009.0	1005.0	1007.0	994.0	994.0	994.0	NaN	NaN
2010	NaN	NaN	NaN	NaN	1007.0	1003.0	NaN	996.0	997.0	NaN	989.0	995.0
2011	991.0	990.0	991.0	997.0	1007.0	996.0	995.0	984.0	991.0	997.0	992.0	984.0
2012	991.0	1000.0	1000.0	1008.0	998.0	995.0	998.0	NaN	982.0	995.0	1010.0	993.0
2013	998.0	1001.0	1002.0	1004.0	994.0	1002.0	998.0	999.0	991.0	984.0	977.0	1004.0
2014	992.0	1008.0	994.0	1002.0	1004.0	998.0	998.0	995.0	993.0	1002.0	1003.0	1001.0
2015	994.0	1000.0	999.0	997.0	1006.0	991.0	999.0					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1020.0	1028.0	1040.0	1033.0
2008	1033.0	1047.0	1040.0	NaN	NaN	1027.0	1021.0	1023.0	1027.0	1024.0	1036.0	1041.0
2009	1049.0	1045.0	1049.0	1031.0	1028.0	1029.0	1035.0	1022.0	1024.0	1035.0	NaN	NaN
2010	NaN	NaN	NaN	NaN	1044.0	1027.0	NaN	1026.0	1026.0	NaN	1038.0	1039.0
2011	1054.0	1046.0	1031.0	1039.0	1034.0	1028.0	1021.0	1028.0	1016.0	1017.0	1039.0	1031.0
2012	1051.0	1035.0	1036.0	1031.0	1031.0	1024.0	1018.0	NaN	1021.0	1041.0	1037.0	1035.0
2013	1048.0	1039.0	1043.0	1047.0	1029.0	1031.0	1027.0	1020.0	1027.0	1027.0	1031.0	1046.0
2014	1029.0	1048.0	1039.0	1028.0	1032.0	1027.0	1028.0	1021.0	1025.0	1028.0	1036.0	1041.0
2015	1048.0	1037.0	1039.0	1036.0	1032.0	1031.0	1024.0					

**Table N-1I.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	-2.2	-3.3	-2.7
2008	-1.8	0.0	3.7	NaN	NaN	-1.1	-4.0	3.3	5.7	-2.5	-0.6	4.9
2009	0.9	-1.0	5.4	1.5	1.0	1.6	5.9	-1.1	0.8	4.6	NaN	NaN
2010	NaN	NaN	NaN	NaN	3.9	0.4	NaN	1.1	4.0	NaN	-1.1	6.6
2011	2.5	-1.9	-4.9	0.1	-1.0	1.1	-3.2	-2.2	-3.5	-4.8	-0.2	-6.9
2012	-0.9	-4.7	-1.1	1.4	-4.0	-0.8	-2.3	NaN	-4.6	7.7	11.4	0.4
2013	6.2	0.7	2.9	9.0	-2.0	2.5	2.9	-0.6	-2.2	-5.1	-0.6	5.9
2014	-4.6	8.2	-1.5	-4.6	-0.2	-1.0	-0.2	0.1	-0.6	0.9	2.0	-0.7
2015	3.3	3.8	-3.5	-6.9	0.7	-1.0	0.8					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	13.3	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	96.7	96.8	16.7	0.0
2010	0.0	0.0	0.0	23.3	100.0	100.0	93.5	100.0	100.0	90.3	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2013	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	96.8	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	100.0	100.0	100.0					

**Table N-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Air temperature, in degrees Celsius

File name: AK116\_Tair\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	-4.51	NaN	2007	NaN	NaN	NaN	-24.65	NaN
2008	-25.54	-15.79	4.73	NaN	NaN	2008	-44.43	-39.86	-3.00	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	4.95	-4.17	NaN	2010	NaN	NaN	-1.99	-30.99	NaN
2011	-23.96	-15.90	4.68	-7.25	-10.58	2011	-40.04	-33.32	-3.84	-33.28	-40.04
2012	-27.67	-18.43	7.27	-5.33	-11.12	2012	-47.80	-41.17	-2.92	-26.97	-47.80
2013	-27.59	-16.34	5.56	-6.20	-10.59	2013	-39.64	-37.12	-6.45	-28.43	-39.64
2014	-22.46	-13.38	3.80	-5.34	-9.49	2014	-42.65	-38.38	-4.21	-24.76	-42.65
2015	-23.18	-13.09				2015	-36.72	-37.93			

**Table N-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	13.94	NaN	2007	0.00	0.00	0.00	100.00	0.00
2008	-1.08	5.16	18.00	NaN	NaN	2008	100.00	100.00	98.91	69.23	83.61
2009	NaN	NaN	NaN	NaN	NaN	2009	0.00	0.00	22.83	70.33	23.29
2010	NaN	NaN	19.74	12.09	NaN	2010	0.00	41.30	100.00	100.00	69.04
2011	-0.47	7.52	18.91	11.73	18.91	2011	100.00	100.00	100.00	100.00	100.00
2012	-6.88	2.53	20.68	8.84	20.68	2012	100.00	100.00	97.83	100.00	99.45
2013	-13.75	4.41	19.17	9.73	19.17	2013	100.00	100.00	100.00	100.00	100.00
2014	0.62	6.73	16.49	8.89	16.49	2014	100.00	100.00	100.00	100.00	100.00
2015	-1.21	8.23				2015	100.00	100.00			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	1.21	NaN
2008	-0.97	-0.30	-0.44	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	-0.21	1.55	NaN
2011	0.61	-0.41	-0.48	-1.53	-0.28
2012	-3.10	-2.94	2.10	0.39	-0.82
2013	-3.02	-0.85	0.39	-0.48	-0.29
2014	2.10	2.10	-1.37	0.38	0.81
2015	1.39	2.40			

**Table N-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Wind speed, in meters per second

File name: AK116\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	3.88	4.23	4.12	4.33	4.13	2008	19.68	11.23	13.34	12.35	19.68
2009	NaN	4.05	5.10	NaN	NaN	2009	NaN	15.35	12.55	NaN	NaN
2010	NaN	NaN	4.88	5.26	NaN	2010	NaN	NaN	11.89	18.42	NaN
2011	NaN	3.57	5.01	NaN	NaN	2011	NaN	10.74	10.87	NaN	NaN
2012	NaN	3.66	4.64	4.17	4.08	2012	NaN	10.56	11.68	11.54	15.34
2013	4.84	4.47	4.15	NaN	NaN	2013	19.29	18.64	11.68	NaN	NaN
2014	NaN	3.61	4.84	4.99	4.55	2014	NaN	12.24	13.90	13.41	14.07
2015	4.47	4.34				2015	19.06	14.08			



**Table N-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN	2007	0.00	0.00	0.00	94.51	0.00
2008	NaN	0.03	-0.50	-0.39	NaN	2008	97.80	100.00	100.00	100.00	98.36
2009	NaN	-0.15	0.48	NaN	NaN	2009	93.33	97.83	98.91	67.03	81.92
2010	NaN	NaN	0.25	0.54	NaN	2010	0.00	41.30	100.00	97.80	68.22
2011	NaN	-0.63	0.38	NaN	NaN	2011	91.11	96.74	100.00	87.91	92.88
2012	NaN	-0.54	0.02	-0.56	NaN	2012	86.81	97.83	97.83	100.00	96.99
2013	NaN	0.27	-0.47	NaN	NaN	2013	95.56	98.91	100.00	91.21	94.52
2014	NaN	-0.59	0.21	0.27	NaN	2014	86.67	100.00	100.00	100.00	98.63
2015	NaN	0.14				2015	96.67	98.91			

**Table N-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
 Variable: Ground temperature, in degrees Celsius  
 File name: AK116\_Tg\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Maximum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

Minimum Value Each Season/Year (10 cm depth):						Anomaly Relative to the Climatological Mean (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table N-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

**Table N-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
Variable: Incident solar flux, in watts per meter squared

File name: AK116\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	NaN	NaN	NaN	26.4	NaN
2008	4.5	159.0	183.9	23.7	93.6
2009	3.6	155.0	181.9	NaN	NaN
2010	NaN	NaN	186.9	29.5	NaN
2011	3.2	160.3	181.7	NaN	NaN
2012	NaN	NaN	189.4	26.4	NaN
2013	1.9	147.5	173.5	25.6	87.6
2014	5.2	133.5	156.1	24.9	80.5
2015	3.5	136.7			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	0.0	0.0	0.0	100.0	0.0
2008	100.0	100.0	100.0	97.8	99.5
2009	100.0	100.0	98.9	70.3	83.8
2010	0.0	41.3	100.0	95.6	67.9
2011	96.7	98.9	97.8	52.7	80.8
2012	33.0	38.0	97.8	100.0	73.0
2013	100.0	98.9	100.0	100.0	99.7
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	NaN	NaN	NaN	0.8	NaN
2008	1.2	10.4	6.2	-1.9	NaN
2009	0.3	6.4	4.2	NaN	NaN
2010	NaN	NaN	9.2	3.9	NaN
2011	-0.1	11.7	4.0	NaN	NaN
2012	NaN	NaN	11.7	0.8	NaN
2013	-1.4	-1.2	-4.2	-0.0	NaN
2014	1.9	-15.2	-21.6	-0.7	NaN
2015	0.2	-12.0			

**Table N-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Reflected solar flux, in watts per meter squared

File name: AK116\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	NaN	NaN	NaN	NaN	NaN
2008	4.5	134.0	55.4	13.5	52.1
2009	4.0	140.0	58.5	NaN	NaN
2010	NaN	NaN	65.5	15.2	NaN
2011	4.0	131.6	49.4	10.1	49.1
2012	2.6	80.3	30.7	7.9	30.5
2013	1.2	41.5	26.4	6.6	19.1
2014	1.1	30.1	16.0	4.1	12.9
2015	0.6	17.4			

#### Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	0.0	0.0	0.0	90.1	0.0
2008	100.0	100.0	98.9	100.0	99.7
2009	100.0	100.0	98.9	70.3	83.8
2010	0.0	41.3	100.0	100.0	69.0
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	97.8	100.0	99.5
2013	100.0	100.0	100.0	100.0	99.7
2014	98.9	100.0	100.0	100.0	100.0
2015	100.0	100.0			

#### Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2007	NaN	NaN	NaN	NaN	NaN
2008	2.2	60.2	14.8	4.6	22.9
2009	1.7	66.2	17.9	NaN	NaN
2010	NaN	NaN	24.9	6.3	NaN
2011	1.6	57.8	8.8	1.2	19.9
2012	0.3	6.5	-10.0	-1.0	1.3
2013	-1.1	-32.3	-14.2	-2.4	-10.1
2014	-1.2	-43.7	-24.6	-4.9	-16.3
2015	-1.8	-56.4			

**Table N-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
 Variable: Rainfall, in millimeters per hour  
 File name: AK116\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	0.4	NaN
2008	0.0	NaN	1.3	1.2	1.3
2009	0.0	NaN	2.2	NaN	NaN
2010	NaN	NaN	8.1	1.3	NaN
2011	0.0	0.0	3.7	1.0	3.7
2012	NaN	NaN	NaN	1.2	NaN
2013	0.0	NaN	5.5	NaN	5.5
2014	0.0	NaN	NaN	1.9	NaN
2015	0.0	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	0.0	0.0	0.0	100.0	0.0
2008	100.0	89.1	97.8	100.0	96.7
2009	100.0	89.1	95.7	70.3	80.3
2010	0.0	32.6	98.9	100.0	66.6
2011	100.0	98.9	98.9	100.0	99.2
2012	33.0	0.0	70.7	100.0	51.1
2013	100.0	93.5	96.7	94.5	96.2
2014	100.0	81.5	94.6	100.0	94.0
2015	100.0	89.1			

## Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	5.2	NaN
2008	0.0	NaN	49.0	10.9	59.9
2009	0.0	NaN	60.1	NaN	NaN
2010	NaN	NaN	49.3	6.4	NaN
2011	0.0	0.0	38.5	29.3	67.8
2012	NaN	NaN	NaN	29.8	NaN
2013	0.0	NaN	63.8	NaN	86.1
2014	0.0	NaN	NaN	21.4	NaN
2015	0.0	NaN			

**Table N-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: L145Shore

Variable: Snow depth, in centimeters

File name: AK116\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	6.0	NaN
2008	10.0	15.5	2.9	12.9	11.9
2009	31.2	NaN	NaN	NaN	NaN
2010	NaN	NaN	7.6	11.6	NaN
2011	29.2	36.2	NaN	16.0	25.8
2012	47.3	59.2	NaN	10.6	33.9
2013	29.5	36.5	6.7	17.2	23.7
2014	41.2	47.4	7.9	12.0	25.7
2015	23.1	NaN			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	-6.9	NaN
2008	-19.7	-21.3	-4.1	-0.0	-11.2
2009	1.5	NaN	NaN	NaN	NaN
2010	NaN	NaN	0.7	-1.3	NaN
2011	-0.6	-0.6	NaN	3.1	2.6
2012	17.6	22.4	NaN	-2.3	10.7
2013	-0.2	-0.3	-0.2	4.3	0.6
2014	11.5	10.6	0.9	-0.9	2.5
2015	-6.6	NaN			

#### Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	2.5	NaN
2008	5.9	0.9	-2.0	0.2	-2.0
2009	24.9	NaN	NaN	NaN	NaN
2010	NaN	NaN	-0.3	-0.7	NaN
2011	24.3	17.4	NaN	0.6	-0.9
2012	23.2	49.4	NaN	-1.9	-1.9
2013	12.8	21.2	0.1	1.2	0.1
2014	18.6	38.0	-0.7	0.2	-0.7
2015	15.1	NaN			

#### Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	0.0	0.0	0.0	100.0	0.0
2008	100.0	100.0	100.0	100.0	100.0
2009	98.9	0.0	23.9	73.6	40.3
2010	0.0	42.4	100.0	100.0	69.3
2011	100.0	100.0	44.6	100.0	86.0
2012	100.0	93.5	40.2	95.6	82.2
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	91.1	37.0			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	19.5	NaN
2008	17.0	23.7	8.1	29.1	31.4
2009	47.1	NaN	NaN	NaN	NaN
2010	NaN	NaN	43.0	34.3	NaN
2011	34.6	70.0	NaN	36.5	70.0
2012	58.9	69.3	NaN	22.9	69.3
2013	37.2	49.8	24.2	29.8	49.8
2014	47.9	58.1	39.4	24.7	58.1
2015	27.8	NaN			

**Table N-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
Variable: Soil moisture, in water fraction by volume

File name: AK116\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	0.26	NaN
2008	NaN	NaN	0.35	0.34	NaN
2009	NaN	NaN	0.32	NaN	NaN
2010	NaN	NaN	0.30	0.33	NaN
2011	NaN	NaN	0.34	0.35	NaN
2012	NaN	NaN	0.34	0.38	NaN
2013	NaN	NaN	0.35	0.38	NaN
2014	0.12	0.08	0.32	0.35	0.21
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	-0.08	NaN
2008	NaN	NaN	0.01	-0.01	NaN
2009	NaN	NaN	-0.01	NaN	NaN
2010	NaN	NaN	-0.03	-0.01	NaN
2011	NaN	NaN	0.00	0.01	NaN
2012	NaN	NaN	0.00	0.04	NaN
2013	NaN	NaN	0.01	0.04	NaN
2014	NaN	NaN	-0.01	0.01	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	0.07	NaN
2008	NaN	NaN	0.12	0.09	NaN
2009	NaN	NaN	0.09	NaN	NaN
2010	NaN	NaN	0.04	0.13	NaN
2011	NaN	NaN	0.10	0.10	NaN
2012	NaN	NaN	0.06	0.15	NaN
2013	NaN	NaN	0.11	0.21	NaN
2014	0.06	0.06	0.11	0.14	0.06
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	0.00	0.00	0.00	100.00	0.00
2008	16.48	41.30	100.00	100.00	68.85
2009	64.44	38.04	98.91	70.33	59.45
2010	0.00	41.30	100.00	100.00	69.04
2011	57.78	40.22	100.00	100.00	74.52
2012	72.53	46.74	97.83	100.00	79.23
2013	65.56	42.39	100.00	100.00	76.99
2014	100.00	100.00	100.00	100.00	100.00
2015	65.56	67.39			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
------	--------	--------	--------	--------	--------

2007	NaN	NaN	NaN	0.41	NaN
2008	NaN	NaN	0.41	0.41	NaN
2009	NaN	NaN	0.41	NaN	NaN
2010	NaN	NaN	0.41	0.41	NaN
2011	NaN	NaN	0.41	0.41	NaN
2012	NaN	NaN	0.41	0.41	NaN
2013	NaN	NaN	0.41	0.41	NaN
2014	0.21	0.12	0.41	0.41	0.41
2015	NaN	NaN			

**Table N-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: L145Shore  
 Variable: Surface pressure, in millibars  
 File name: AK116\_P\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	1009.7	NaN
2008	1015.0	NaN	1011.3	1012.4	NaN
2009	1018.2	1021.3	1014.1	NaN	NaN
2010	NaN	NaN	1011.7	1011.6	NaN
2011	1019.1	1016.7	1010.5	1008.7	1012.6
2012	1012.5	1017.4	1009.3	1016.4	1014.5
2013	1019.0	1021.9	1013.5	1008.9	1016.3
2014	1019.6	1016.6	1011.5	1012.3	1014.4
2015	1018.6	1015.5			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	-1.5	NaN
2008	-1.6	NaN	-0.4	1.2	NaN
2009	1.6	3.0	2.4	NaN	NaN
2010	NaN	NaN	-0.0	0.4	NaN
2011	2.5	-1.6	-1.2	-2.5	-1.6
2012	-4.1	-0.9	-2.4	5.2	0.3
2013	2.5	3.6	1.8	-2.3	2.1
2014	3.0	-1.7	-0.2	1.1	0.2
2015	2.1	-2.8			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	980.0	NaN
2008	987.0	NaN	991.0	992.0	NaN
2009	980.0	999.0	994.0	NaN	NaN
2010	NaN	NaN	996.0	987.0	NaN
2011	990.0	991.0	984.0	991.0	984.0
2012	984.0	998.0	994.0	982.0	982.0
2013	993.0	994.0	998.0	977.0	977.0
2014	992.0	994.0	995.0	993.0	992.0
2015	994.0	997.0			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	0.0	0.0	0.0	100.0	0.0
2008	100.0	69.6	100.0	100.0	92.3
2009	100.0	100.0	98.9	70.3	83.8
2010	0.0	41.3	97.8	96.7	67.7
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	97.8	100.0	99.5
2013	98.9	100.0	100.0	100.0	99.7
2014	97.8	100.0	100.0	100.0	99.5
2015	100.0	98.9			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2007	NaN	NaN	NaN	1040.0	NaN
2008	1047.0	NaN	1027.0	1036.0	NaN
2009	1049.0	1049.0	1035.0	NaN	NaN
2010	NaN	NaN	1027.0	1038.0	NaN
2011	1054.0	1039.0	1028.0	1039.0	1054.0
2012	1051.0	1036.0	1024.0	1041.0	1051.0
2013	1048.0	1047.0	1031.0	1031.0	1048.0
2014	1048.0	1039.0	1028.0	1036.0	1048.0
2015	1048.0	1039.0			



## O. Niguanak

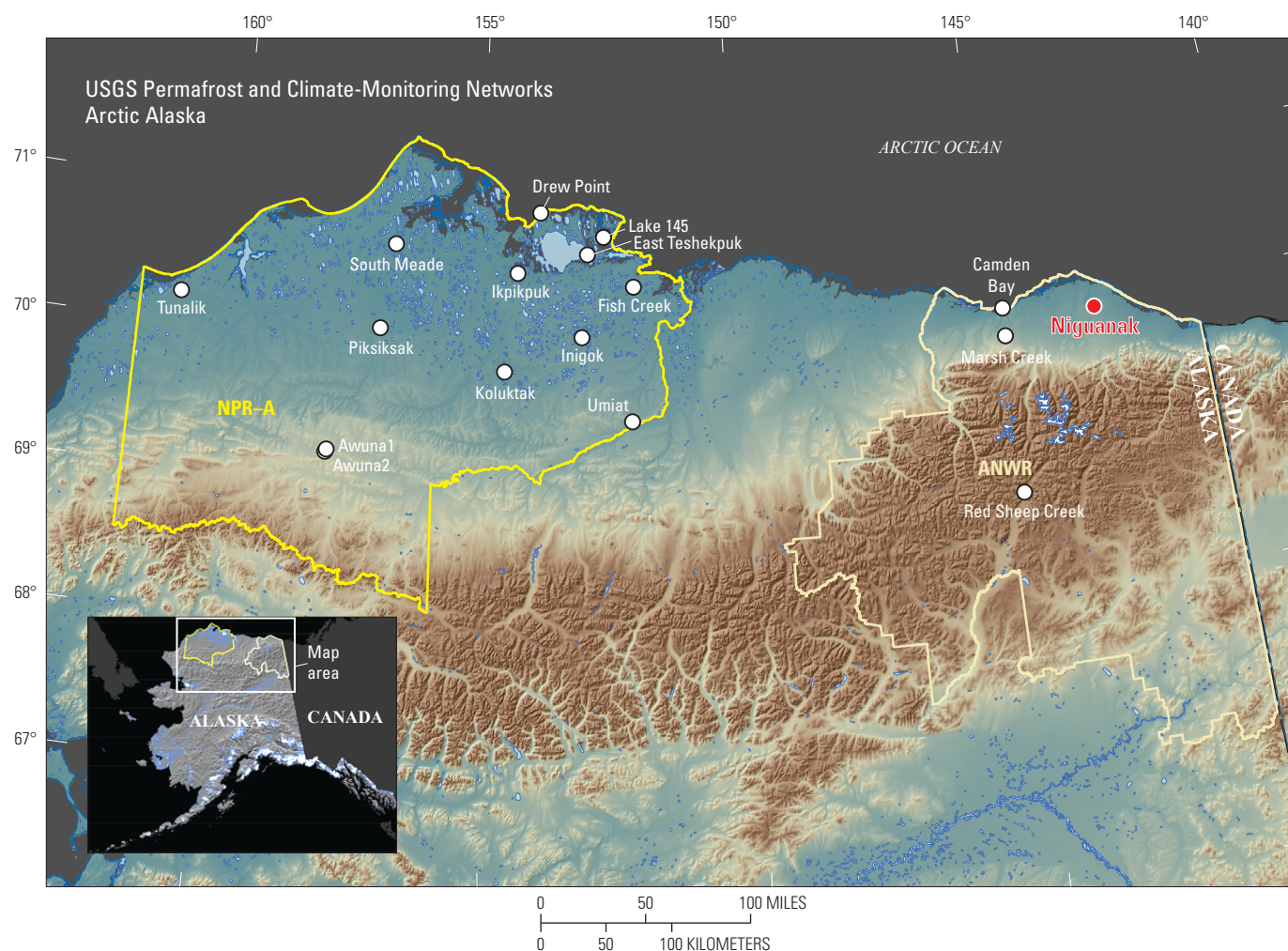
GTN-P code: U29

Latitude: 69°53.363'N

Longitude: 142°59.037'W

Elevation: 84 meters above mean sea level

Installation date: 18 AUG 2000



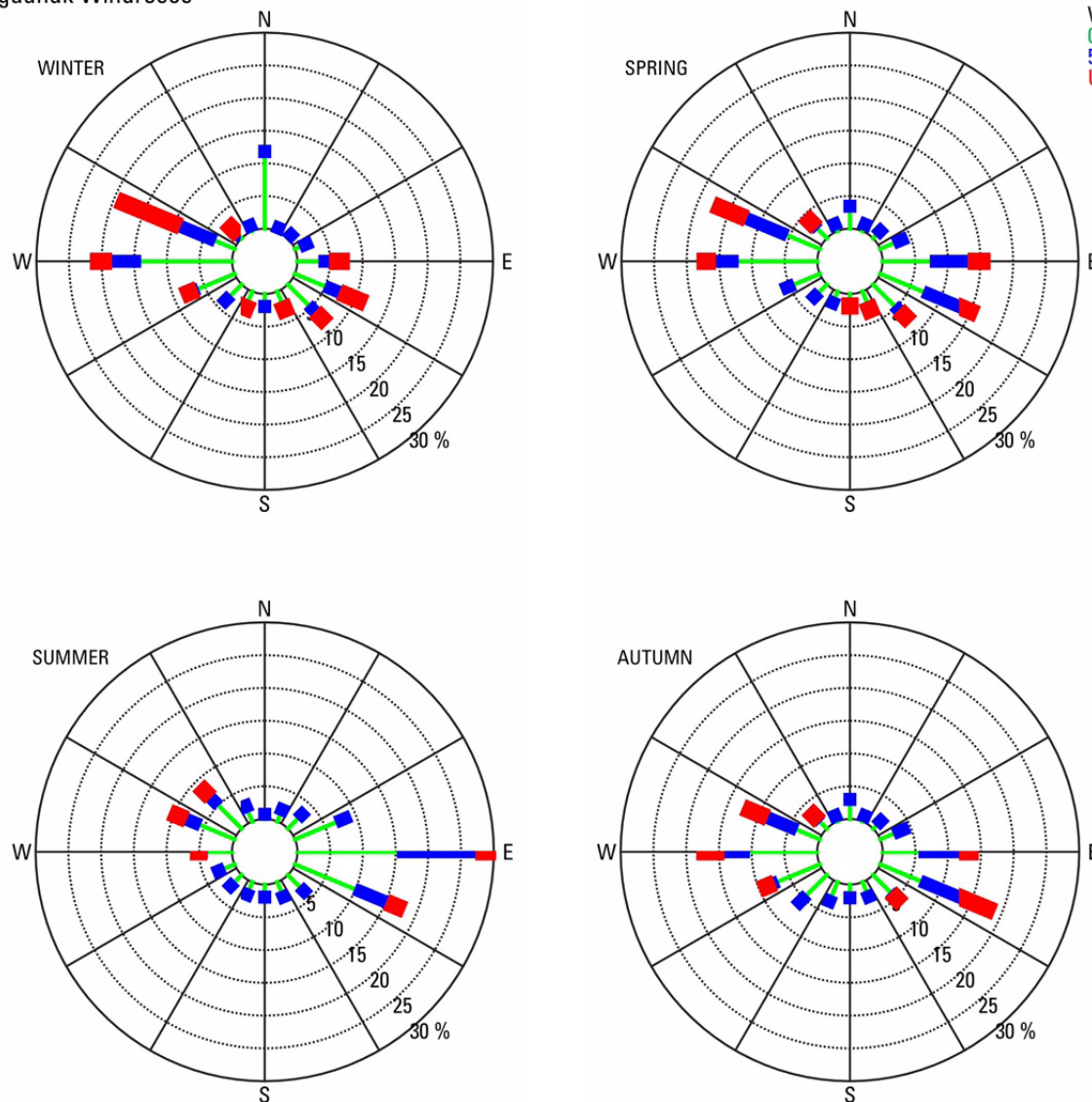
**Figure O-1.** Location map presenting the specific location of the Niguanak site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)



**Figure 0–2.** Niguanak station in summer 2008.



Niguanak Windroses



**Figure 0–3.** Niguanak seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table 0–1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Air temperature, in degrees Celsius  
 File name: AK107\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.28	-9.63	-16.58	-21.22
2001	-22.47	-20.17	-27.73	-15.99	-9.43	3.39	7.52	5.20	1.50	-11.73	-17.29	-22.74
2002	-25.98	-27.35	-19.17	-14.67	-3.26	3.29	6.15	4.76	3.35	-6.69	-11.97	-18.88
2003	-22.41	-25.59	-23.73	-13.05	-4.78	3.13	8.59	3.28	-0.49	-4.02	-17.50	-21.09
2004	-24.34	-32.38	-28.80	-18.50	-5.62	6.04	9.51	8.21	0.06	-8.71	-17.14	-23.69
2005	-21.89	-25.61	-22.83	-16.22	-4.39	2.24	4.92	7.37	1.48	-8.27	-24.04	-20.77
2006	-26.05	-19.48	-27.25	-19.55	-2.79	6.39	8.20	5.39	4.02	-4.75	-18.55	-18.24
2007	-26.40	-24.67	-27.76	-13.06	-7.41	4.17	8.92	7.18	2.26	-8.48	-11.79	-19.19
2008	-27.12	-25.53	-28.44	-12.57	-2.58	6.88	9.70	4.48	0.36	-9.72	-15.78	-18.52
2009	-24.31	-25.92	-29.27	-14.96	-4.08	2.35	7.01	5.73	1.08	-5.10	-19.98	-18.61
2010	-25.30	-23.87	-24.69	-10.87	-5.58	3.72	9.57	8.32	2.20	-6.96	-10.87	-25.64
2011	-24.23	-20.91	-20.95	-18.72	-3.70	2.88	8.60	6.81	1.77	-5.92	-21.39	-25.37
2012	-29.31	-23.27	-32.52	-15.20	-5.01	6.16	11.49	9.23	3.41	-4.41	-16.87	-25.93
2013	-26.38	-30.42	-23.94	-18.17	-6.29	6.63	8.34	7.90	-0.29	-4.65	-14.21	-21.36
2014	-22.27	-23.82	-20.58	-13.91	-1.31	3.80	7.30	5.57	0.86	-5.91	-12.60	-21.79
2015	-22.43	-20.17	-22.27	-11.73	0.09	8.03	NaN					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-13.21	-20.57	-28.45	-36.04
2001	-39.25	-38.05	-38.54	-28.62	-22.69	-2.75	-1.57	-3.47	-7.27	-27.71	-24.75	-32.67
2002	-38.78	-35.38	-34.72	-27.33	-21.27	-1.77	-5.14	-2.80	-3.52	-18.95	-24.54	-31.76
2003	-36.45	-37.09	-34.77	-28.52	-13.79	-2.97	-1.08	-2.25	-8.23	-16.78	-31.89	-33.64
2004	-38.32	-43.51	-41.17	-32.55	-19.08	-2.14	0.91	-1.77	-8.58	-23.87	-31.78	-37.73
2005	-37.88	-33.71	-38.24	-29.69	-14.47	-3.91	-2.98	-4.35	-6.13	-19.54	-37.15	-37.70
2006	-39.69	-39.27	-35.55	-28.89	-18.58	-4.36	-3.88	-1.68	-2.12	-18.11	-28.06	-32.11
2007	-38.30	-40.78	-41.27	-24.28	-18.62	-2.04	1.61	-3.43	-9.68	-18.51	-21.90	-37.15
2008	-39.20	-37.20	-42.31	-28.19	-9.19	-5.41	-0.36	-0.82	-8.40	-21.73	-23.78	-32.02
2009	-37.85	-39.92	-39.72	-28.91	-16.81	-1.75	-0.50	-2.75	-9.52	-18.11	-29.16	-33.69
2010	-38.64	-38.89	-34.08	-25.88	-20.84	-2.20	0.64	-1.71	-10.80	-19.21	-24.08	-38.54
2011	-41.60	-36.47	-33.49	-28.17	-20.15	-5.53	0.56	-2.78	-8.61	-18.62	-35.66	-37.55
2012	-41.31	-40.95	-41.56	-33.02	-20.73	-2.21	3.08	0.52	-7.04	-17.37	-27.61	-37.79
2013	-36.80	-39.59	-33.95	-35.21	-26.42	-5.38	0.85	-1.22	-8.35	-14.26	-26.76	-36.95
2014	-37.41	-41.16	-37.32	-29.20	-11.20	-3.78	-1.33	-1.00	-7.35	-13.77	-24.47	-33.23
2015	-32.18	-37.41	-37.35	-23.90	-11.05	-4.55	NaN					

**Table 0-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	16.61	-1.54	-3.72	-9.17
2001	-0.99	-1.22	-17.14	-4.01	3.52	16.50	27.55	18.12	13.20	0.33	-10.53	1.41
2002	-6.17	-6.26	-4.70	1.94	8.54	16.52	19.96	24.83	19.26	1.24	2.01	-4.87
2003	-10.69	-14.02	-7.64	-0.11	6.59	19.40	22.11	17.78	12.82	15.49	2.05	-7.87
2004	-1.73	-22.93	-2.86	0.35	3.24	24.20	25.44	22.45	12.96	1.68	-9.14	-3.73
2005	1.54	-13.65	-1.05	5.27	2.27	16.86	14.35	20.68	11.71	4.14	-14.79	-3.99
2006	-15.04	2.98	-19.55	-10.29	10.08	22.23	22.91	19.90	17.81	10.39	-3.09	-1.08
2007	-8.94	-7.24	-6.54	-2.98	1.45	17.75	20.90	22.88	16.72	-1.93	-6.23	-5.75
2008	3.60	-3.55	-6.12	0.80	8.35	22.45	20.08	11.63	11.29	-1.76	-8.65	-1.02
2009	5.56	-4.40	-12.50	7.15	7.86	10.02	21.02	20.38	19.03	2.65	-9.57	0.06
2010	3.01	-13.56	-10.81	1.87	6.33	16.91	22.95	24.39	16.77	0.02	-0.51	-10.36
2011	1.12	-0.31	-5.90	-1.35	20.43	15.93	20.39	23.00	13.02	-0.53	-4.26	-6.76
2012	-8.80	-3.12	-21.89	-4.93	5.25	21.08	23.10	19.29	15.74	10.43	-6.80	-15.38
2013	-15.71	-20.99	-13.84	-1.82	6.39	26.18	21.09	24.43	11.11	4.85	2.64	2.58
2014	-4.77	-3.58	-6.75	3.89	4.82	21.33	20.03	20.23	12.13	1.75	2.74	-5.95
2015	-6.19	-0.86	-4.74	1.89	14.83	26.04	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.70	-2.64	-0.14	0.31
2001	2.25	4.44	-2.40	-0.84	-5.02	-1.21	-0.75	-1.19	0.08	-4.74	-0.85	-1.20
2002	-1.26	-2.74	6.16	0.47	1.15	-1.32	-2.12	-1.62	1.93	0.31	4.47	2.66
2003	2.31	-0.97	1.60	2.09	-0.37	-1.48	0.31	-3.11	-1.91	2.98	-1.07	0.45
2004	0.39	-7.77	-3.47	-3.36	-1.21	1.44	1.23	1.82	-1.36	-1.71	-0.70	-2.15
2005	2.83	-1.00	2.50	-1.08	0.02	-2.37	-3.35	0.98	0.06	-1.27	-7.60	0.76
2006	-1.32	5.13	-1.92	-4.40	1.62	1.79	-0.08	-1.00	2.60	2.25	-2.11	3.30
2007	-1.68	-0.06	-2.43	2.08	-3.00	-0.44	0.65	0.79	0.84	-1.48	4.65	2.35
2008	-2.39	-0.92	-3.12	2.58	1.83	2.28	1.43	-1.90	-1.06	-2.72	0.66	3.02
2009	0.42	-1.31	-3.94	0.19	0.33	-2.26	-1.26	-0.66	-0.34	1.90	-3.54	2.92
2010	-0.57	0.74	0.64	4.28	-1.17	-0.89	1.30	1.93	0.78	0.03	5.56	-4.10
2011	0.50	3.70	4.38	-3.58	0.71	-1.72	0.33	0.42	0.35	1.07	-4.95	-3.84
2012	-4.59	1.34	-7.19	-0.05	-0.60	1.55	3.21	2.84	1.99	2.58	-0.44	-4.40
2013	-1.65	-5.81	1.39	-3.03	-1.88	2.03	0.07	1.51	-1.71	2.35	2.22	0.18
2014	2.45	0.79	4.75	1.24	3.10	-0.81	-0.97	-0.81	-0.56	1.08	3.84	-0.26
2015	2.30	4.45	3.06	3.42	4.50	3.42	NaN					

**Table 0–1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	96.77	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	96.67	0.00					

**Table 0–1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak

Variable: Wind speed, in meters per second

File name: AK107\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.23	NaN	NaN	NaN
2005	NaN	NaN	NaN	3.82	4.08	4.49	3.96	3.27	5.31	NaN	4.44	NaN
2006	NaN	NaN	NaN	5.03	NaN	NaN	NaN	NaN	3.34	4.85	3.96	NaN
2007	3.22	NaN	NaN	4.11	4.41	5.04	3.69	3.40	4.35	4.63	NaN	NaN
2008	NaN	NaN	NaN	4.86	4.92	3.69	4.60	3.42	4.21	5.21	NaN	NaN
2009	NaN	NaN	NaN	3.71	4.26	5.02	3.98	3.65	3.80	4.45	NaN	NaN
2010	NaN	NaN	NaN	3.52	5.45	5.03	3.57	3.36	3.57	NaN	NaN	NaN
2011	NaN	6.65	4.01	4.90	3.68	5.08	3.50	3.82	3.29	NaN	4.39	NaN
2012	7.20	NaN	NaN	3.71	3.99	4.41	3.41	2.96	3.77	5.10	6.70	NaN
2013	NaN	NaN	NaN	6.49	3.73	3.53	3.75	3.43	4.04	NaN	NaN	NaN
2014	NaN	NaN	4.29	3.68	4.40	3.47	4.05	4.37	4.75	NaN	NaN	NaN
2015	NaN	NaN	NaN	3.70	4.02	3.74	NaN					

**Table 0-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.52	NaN	NaN	NaN
2005	NaN	NaN	NaN	11.59	11.34	11.06	9.62	10.07	12.69	NaN	13.26	NaN
2006	NaN	NaN	NaN	15.66	NaN	NaN	NaN	NaN	10.61	18.62	13.53	NaN
2007	13.10	NaN	NaN	11.82	14.13	14.18	12.39	11.60	11.97	14.68	NaN	NaN
2008	NaN	NaN	NaN	18.52	15.36	8.68	12.87	10.17	13.49	13.61	NaN	NaN
2009	NaN	NaN	NaN	14.95	13.69	12.31	9.16	10.81	13.32	18.38	NaN	NaN
2010	NaN	NaN	NaN	12.31	15.48	13.11	10.69	11.24	10.65	NaN	NaN	NaN
2011	NaN	29.37	13.62	20.08	11.35	13.28	9.96	10.57	10.22	NaN	14.14	NaN
2012	20.19	NaN	NaN	13.73	9.97	12.47	8.70	9.99	14.32	16.22	20.20	NaN
2013	NaN	NaN	NaN	22.58	12.85	11.94	11.42	13.41	10.42	NaN	NaN	NaN
2014	NaN	NaN	12.02	10.39	16.65	8.52	11.38	11.39	13.63	NaN	NaN	NaN
2015	NaN	NaN	NaN	12.19	15.56	10.83	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.74	NaN	NaN	NaN
2005	NaN	NaN	NaN	-0.50	-0.22	0.14	0.13	-0.25	1.34	NaN	NaN	NaN
2006	NaN	NaN	NaN	0.71	NaN	NaN	NaN	NaN	-0.63	-0.00	NaN	NaN
2007	NaN	NaN	NaN	-0.21	0.12	0.69	-0.15	-0.12	0.38	-0.22	NaN	NaN
2008	NaN	NaN	NaN	0.54	0.63	-0.66	0.77	-0.10	0.24	0.36	NaN	NaN
2009	NaN	NaN	NaN	-0.61	-0.04	0.67	0.15	0.13	-0.17	-0.40	NaN	NaN
2010	NaN	NaN	NaN	-0.80	1.15	0.68	-0.26	-0.16	-0.40	NaN	NaN	NaN
2011	NaN	NaN	NaN	0.58	-0.61	0.73	-0.33	0.30	-0.68	NaN	NaN	NaN
2012	NaN	NaN	NaN	-0.61	-0.31	0.06	-0.43	-0.56	-0.20	0.25	NaN	NaN
2013	NaN	NaN	NaN	2.17	-0.56	-0.82	-0.08	-0.09	0.07	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.65	0.10	-0.88	0.21	0.85	0.78	NaN	NaN	NaN
2015	NaN	NaN	NaN	-0.62	-0.27	-0.61	NaN					

**Table 0-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	90.32	76.67	58.06
2005	83.87	89.29	83.87	100.00	100.00	100.00	100.00	96.77	100.00	87.10	100.00	54.84
2006	29.03	92.86	87.10	96.67	29.03	20.00	3.23	80.65	100.00	100.00	96.67	61.29
2007	100.00	89.29	87.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.33	74.19
2008	80.65	93.10	80.65	100.00	100.00	100.00	100.00	100.00	100.00	100.00	90.00	87.10
2009	93.55	89.29	83.87	100.00	96.77	100.00	96.77	100.00	100.00	96.77	70.00	90.32
2010	90.32	85.71	93.55	100.00	100.00	100.00	100.00	100.00	100.00	93.55	63.33	38.71
2011	74.19	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	77.42	100.00	83.87
2012	96.77	62.07	67.74	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	77.42
2013	51.61	0.00	61.29	100.00	100.00	100.00	96.77	100.00	100.00	87.10	90.00	87.10
2014	74.19	78.57	96.77	100.00	96.77	100.00	100.00	96.77	100.00	90.32	93.33	38.71
2015	83.87	89.29	67.74	100.00	100.00	96.67	0.00					

**Table 0-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Ground temperature, in degrees Celsius

File name: AK107\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.06	-0.67	-5.27	-10.35
2001	-13.26	-13.43	-16.29	-13.99	-10.62	-1.18	0.91	1.38	0.57	-0.05	-3.27	-10.38
2002	-14.00	-17.10	-15.01	-13.10	-4.50	-0.53	1.05	1.30	0.90	-0.09	-2.70	-7.55
2003	-12.69	-14.66	-14.85	-13.38	-7.19	-0.65	1.51	1.53	0.30	-0.14	-6.25	-13.60
2004	-16.17	-21.29	-21.94	-17.60	-9.75	-0.50	2.46	3.49	0.48	-0.09	-3.08	-11.38
2005	-14.80	-17.52	-17.04	-15.02	-7.76	-0.46	1.45	2.82	0.77	-0.18	-6.15	-11.64
2006	-13.90	-16.01	-19.08	-16.34	-5.10	0.61	3.68	3.30	1.65	-0.11	-5.13	-11.15
2007	-17.38	-17.44	-22.09	-13.47	-8.62	0.18	3.27	3.61	1.18	-0.61	-3.75	-9.70
2008	-15.52	-18.24	-19.19	-13.53	-7.00	0.90	4.09	2.56	0.51	-0.04	-0.34	-5.82
2009	-13.48	-17.15	-18.34	-15.13	NaN	-0.06	1.73	2.32	0.91	-0.06	-5.07	-12.04
2010	-18.68	-17.59	-18.68	-13.63	-7.78	-0.41	1.93	3.55	1.49	-0.08	-0.29	-5.51
2011	-11.68	-13.33	-13.96	-13.03	-6.86	-0.22	2.43	3.25	1.23	-0.06	-3.37	-12.29
2012	-17.26	-17.17	-20.17	-14.97	-8.85	-0.26	3.15	3.91	1.47	-0.04	-0.72	-8.00
2013	-12.99	-15.97	-16.01	-14.01	-8.05	0.06	2.61	3.53	0.68	-0.04	-0.47	-5.31
2014	-11.51	-12.79	-13.83	-12.30	-3.27	-0.17	1.83	2.10	0.45	-0.06	-1.10	-8.33
2015	-12.04	-14.13	-14.31	-11.48	NaN	0.05	NaN					



**Table 0-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.14	-2.20	-8.33	-12.25
2001	-15.61	-15.49	-17.89	-17.03	-13.52	-6.37	-0.12	0.32	-0.12	-0.11	-7.23	-13.12
2002	-17.16	-18.38	-16.75	-15.90	-11.42	-1.39	-0.06	0.19	-0.10	-0.22	-4.96	-11.15
2003	-14.36	-15.78	-16.51	-15.69	-9.90	-1.93	0.14	0.40	-0.12	-0.74	-12.91	-15.85
2004	-20.22	-23.94	-24.95	-19.62	-14.51	-2.27	0.50	0.74	-0.12	-0.22	-6.52	-13.99
2005	-18.34	-18.81	-19.41	-17.25	-11.34	-1.71	-0.02	0.73	-0.09	-0.48	-10.04	-14.46
2006	-18.03	-19.12	-20.91	-19.22	-13.85	-0.86	1.11	1.15	0.35	-0.68	-12.23	-15.82
2007	-19.75	-22.09	-24.99	-16.78	-12.10	-1.43	0.41	1.75	-0.12	-1.53	-7.56	-12.22
2008	-19.19	-21.44	-20.90	-17.75	-10.86	-0.75	2.26	1.19	-0.07	-0.09	-1.52	-11.25
2009	-17.38	-19.26	-20.01	-18.63	NaN	-0.81	0.30	0.61	-0.09	-0.14	-11.29	-15.21
2010	-22.91	-20.79	-19.67	-18.16	-10.68	-1.34	0.15	2.03	-0.14	-0.20	-0.67	-11.79
2011	-14.91	-14.74	-15.01	-14.27	-11.97	-0.79	0.35	1.60	-0.06	-0.27	-10.83	-15.89
2012	-22.44	-23.05	-21.87	-18.80	-12.56	-1.58	0.55	2.01	-0.05	-0.14	-1.64	-11.55
2013	-16.34	-17.08	-17.29	-16.74	-12.71	-0.98	0.61	1.20	-0.07	-0.11	-1.47	-10.63
2014	-14.09	-16.17	-15.75	-14.24	-10.01	-0.90	0.66	1.13	-0.10	-0.13	-4.15	-10.40
2015	-14.36	-16.73	-16.40	-14.23	NaN	-0.66	NaN					

## Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.74	-0.03	-2.20	-8.33
2001	-12.16	-11.80	-14.17	-12.26	-6.43	0.44	3.27	3.27	2.15	-0.01	-0.03	-6.59
2002	-11.70	-16.32	-12.43	-9.37	-1.20	0.32	3.04	3.65	3.25	-0.01	-0.14	-4.70
2003	-11.11	-12.87	-13.17	-9.93	-1.91	0.50	4.05	3.45	2.19	0.05	-0.24	-12.10
2004	-10.21	-18.62	-18.02	-14.51	-2.27	1.76	5.28	6.44	2.83	-0.00	-0.18	-6.32
2005	-9.39	-16.20	-15.10	-11.33	-1.64	1.65	2.91	5.86	2.72	-0.01	-0.46	-9.99
2006	-11.02	-12.26	-17.75	-12.93	-0.64	3.86	7.69	5.81	4.15	0.71	-0.47	-7.31
2007	-15.12	-12.81	-15.88	-10.66	-1.21	2.12	5.95	5.60	4.05	-0.00	-0.94	-6.93
2008	-10.96	-14.23	-16.77	-9.87	-0.59	3.97	6.53	4.29	1.89	-0.02	-0.02	-1.48
2009	-10.13	-14.50	-14.68	-1.32	NaN	1.22	4.29	4.35	3.24	0.04	-0.06	-7.61
2010	-13.75	-15.52	-17.39	-9.79	-0.64	0.62	4.58	5.48	3.87	0.02	-0.10	-0.61
2011	-8.50	-11.70	-12.89	-11.50	-0.25	0.90	4.89	5.42	2.72	0.02	-0.19	-8.31
2012	-14.25	-14.76	-18.81	-12.01	-0.16	1.58	5.53	5.52	3.87	0.04	-0.02	-1.62
2013	-10.40	-15.06	-14.99	-10.62	-0.90	1.91	5.13	6.27	2.17	0.03	0.01	-0.75
2014	-10.17	-9.47	-12.61	-10.01	-0.09	1.54	3.27	3.35	1.62	0.04	-0.06	-4.20
2015	-9.61	-10.96	-11.13	-8.94	NaN	1.88	NaN					

**Table 0–1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.79	-0.51	-2.14	-0.81
2001	1.09	2.82	1.10	0.08	-3.28	-1.00	-1.39	-1.38	-0.27	0.11	-0.14	-0.84
2002	0.36	-0.85	2.38	0.97	2.83	-0.35	-1.24	-1.46	0.06	0.06	0.43	1.98
2003	1.67	1.60	2.54	0.69	0.15	-0.47	-0.78	-1.23	-0.54	0.02	-3.12	-4.07
2004	-1.81	-5.04	-4.55	-3.54	-2.42	-0.32	0.17	0.73	-0.37	0.06	0.05	-1.84
2005	-0.44	-1.26	0.35	-0.95	-0.42	-0.29	-0.84	0.06	-0.07	-0.02	-3.02	-2.10
2006	0.45	0.25	-1.69	-2.27	2.23	0.78	1.39	0.54	0.80	0.04	-2.00	-1.61
2007	-3.02	-1.19	-4.71	0.60	-1.29	0.35	0.98	0.85	0.33	-0.46	-0.62	-0.17
2008	-1.17	-1.99	-1.81	0.53	0.33	1.08	1.80	-0.20	-0.33	0.11	2.79	3.72
2009	0.88	-0.89	-0.95	-1.07	NaN	0.11	-0.56	-0.44	0.07	0.10	-1.94	-2.50
2010	-4.33	-1.34	-1.29	0.44	-0.45	-0.24	-0.36	0.79	0.65	0.07	2.84	4.03
2011	2.67	2.92	3.43	1.03	0.48	-0.04	0.14	0.49	0.39	0.10	-0.24	-2.75
2012	-2.90	-0.91	-2.78	-0.90	-1.52	-0.08	0.86	1.15	0.63	0.11	2.41	1.53
2013	1.37	0.28	1.37	0.05	-0.71	0.24	0.31	0.77	-0.16	0.12	2.66	4.22
2014	2.84	3.47	3.55	1.77	4.07	0.00	-0.47	-0.66	-0.40	0.09	2.03	1.21
2015	2.32	2.13	3.08	2.59	NaN	0.23	NaN					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	96.67	100.00	96.67	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	90.32	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	96.77	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	90.32	96.67	0.00					

**Table 0-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.08	-1.94	-3.77	-7.44
2001	-10.54	-11.30	-13.23	-13.35	-11.28	-6.20	-3.41	-2.36	-1.90	-1.73	-2.47	-6.93
2002	-10.24	-13.44	-13.36	-12.56	-8.32	-4.19	-2.78	-2.05	-1.71	-1.57	-2.19	-5.29
2003	-9.18	-11.43	-12.48	-12.68	-9.42	-4.65	-2.84	-2.01	-1.66	-1.55	-3.44	-9.75
2004	-11.95	-16.31	-18.52	-16.69	-12.71	-5.81	-3.30	-2.22	-1.74	-1.63	-2.33	-7.29
2005	-10.84	-13.86	-14.58	-14.13	-10.50	-5.09	-3.08	-2.11	-1.69	-1.55	-3.40	-8.43
2006	-10.39	-13.05	-15.06	-15.16	-9.94	-4.55	-2.69	-1.80	-1.43	-1.31	-2.21	-7.25
2007	-12.25	-13.37	-17.15	-14.28	-10.86	-5.31	-3.04	-1.88	-1.45	-1.31	-2.15	-6.15
2008	-10.36	-13.80	-15.04	-13.97	-10.20	-4.84	-2.61	-1.70	-1.41	-1.33	-1.30	-3.48
2009	-8.97	-12.90	-14.41	-14.67	NaN	-4.23	-2.69	-1.79	-1.42	-1.31	-2.36	-8.01
2010	-13.13	-14.52	-15.51	-14.13	-10.21	-5.10	-2.96	-1.87	-1.39	-1.28	-1.24	-2.83
2011	-7.92	-10.59	-11.59	-11.65	-9.52	-4.31	-2.53	-1.57	-1.21	-1.11	-1.35	-6.88
2012	-11.60	-14.03	-15.60	-14.77	-11.08	-5.32	-2.85	-1.67	-1.25	-1.14	-1.10	-3.62
2013	-8.66	-11.87	-13.18	-12.98	-10.25	-4.74	-2.61	-1.55	-1.20	-1.12	-1.10	-2.42
2014	-7.62	-9.49	-11.42	-11.25	-6.99	-3.52	-2.19	-1.49	-1.21	-1.12	-1.10	-4.47
2015	-8.41	-11.15	-11.77	-11.34	NaN	-3.46	NaN					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.25	-2.17	-5.37	-8.98
2001	-11.01	-12.06	-14.41	-14.44	-12.49	-9.88	-4.23	-2.84	-2.12	-1.84	-4.38	-8.92
2002	-12.30	-13.89	-13.88	-13.19	-11.42	-5.42	-3.33	-2.36	-1.92	-1.68	-3.65	-7.10
2003	-10.33	-12.46	-13.33	-13.34	-11.18	-6.78	-3.54	-2.37	-1.85	-1.60	-7.09	-10.58
2004	-14.79	-17.86	-19.35	-17.69	-15.47	-8.35	-4.23	-2.70	-1.94	-1.70	-4.16	-9.58
2005	-12.90	-14.41	-15.11	-14.75	-12.81	-7.14	-3.85	-2.54	-1.87	-1.64	-6.43	-9.17
2006	-12.48	-13.75	-15.86	-15.97	-14.08	-5.99	-3.41	-2.15	-1.60	-1.37	-5.61	-9.76
2007	-13.10	-15.35	-18.14	-17.06	-12.24	-7.90	-3.93	-2.29	-1.62	-1.39	-3.98	-8.14
2008	-12.41	-14.47	-16.08	-16.00	-12.00	-6.82	-3.58	-2.00	-1.52	-1.40	-1.38	-5.94
2009	-10.94	-13.53	-15.58	-15.58	NaN	-5.73	-3.32	-2.15	-1.60	-1.41	-5.95	-10.31
2010	-15.41	-15.14	-16.06	-16.01	-11.81	-7.50	-3.77	-2.30	-1.59	-1.34	-1.32	-6.07
2011	-10.15	-11.20	-11.99	-12.00	-11.41	-5.93	-3.29	-1.93	-1.37	-1.19	-3.58	-9.67
2012	-14.22	-15.12	-16.55	-16.50	-12.76	-7.82	-3.85	-2.09	-1.41	-1.22	-1.20	-6.94
2013	-10.76	-12.92	-13.40	-13.53	-11.68	-6.82	-3.42	-1.92	-1.34	-1.19	-1.18	-5.36
2014	-8.82	-11.27	-11.88	-11.80	-10.28	-4.59	-2.80	-1.75	-1.33	-1.22	-1.38	-6.74
2015	-10.15	-12.16	-12.46	-12.26	NaN	-4.32	NaN					

**Table 0-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.94	-1.85	-2.17	-5.37
2001	-9.02	-10.82	-12.06	-12.38	-9.88	-4.20	-2.73	-2.01	-1.75	-1.63	-1.62	-4.36
2002	-8.72	-12.30	-12.58	-11.41	-5.39	-3.28	-2.27	-1.73	-1.58	-1.46	-1.46	-3.61
2003	-7.10	-10.33	-11.98	-11.17	-6.83	-3.49	-2.30	-1.74	-1.53	-1.45	-1.44	-7.11
2004	-10.03	-14.75	-17.66	-15.50	-8.36	-4.21	-2.60	-1.86	-1.63	-1.56	-1.56	-4.16
2005	-8.98	-12.81	-14.14	-12.80	-7.18	-3.80	-2.45	-1.78	-1.60	-1.46	-1.48	-6.43
2006	-9.15	-12.23	-13.25	-14.07	-5.99	-3.39	-2.11	-1.51	-1.33	-1.22	-1.19	-5.58
2007	-9.77	-12.15	-15.35	-12.23	-7.90	-3.89	-2.24	-1.56	-1.33	-1.22	-1.24	-3.98
2008	-8.12	-12.44	-13.99	-11.99	-6.84	-3.54	-1.98	-1.48	-1.34	-1.26	-1.25	-1.34
2009	-5.94	-10.97	-13.07	-12.10	NaN	-3.28	-2.14	-1.50	-1.29	-1.25	-1.22	-5.95
2010	-10.30	-14.06	-14.63	-11.81	-7.49	-3.75	-2.26	-1.52	-1.24	-1.20	-1.15	-1.19
2011	-6.10	-10.06	-10.85	-11.37	-5.93	-3.22	-1.87	-1.30	-1.10	-1.03	-1.00	-3.58
2012	-9.65	-13.25	-13.85	-12.75	-7.85	-3.80	-2.07	-1.34	-1.11	-1.07	-1.01	-1.06
2013	-6.94	-10.76	-12.89	-11.67	-6.84	-3.41	-1.88	-1.25	-1.09	-1.06	-1.00	-1.05
2014	-5.36	-8.47	-10.91	-10.24	-4.58	-2.78	-1.69	-1.26	-1.08	-1.07	-1.02	-1.36
2015	-6.70	-10.07	-10.84	-9.86	NaN	-2.76	NaN					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.57	-0.54	-1.67	-1.42
2001	-0.40	1.44	0.96	0.22	-1.18	-1.45	-0.58	-0.50	-0.39	-0.33	-0.37	-0.91
2002	-0.10	-0.70	0.84	1.02	1.77	0.56	0.05	-0.19	-0.19	-0.17	-0.09	0.73
2003	0.95	1.31	1.72	0.89	0.68	0.10	-0.02	-0.15	-0.15	-0.14	-1.34	-3.74
2004	-1.81	-3.57	-4.33	-3.11	-2.61	-1.06	-0.47	-0.35	-0.22	-0.23	-0.23	-1.28
2005	-0.71	-1.12	-0.39	-0.55	-0.40	-0.33	-0.25	-0.25	-0.17	-0.15	-1.30	-2.42
2006	-0.25	-0.31	-0.87	-1.59	0.16	0.21	0.14	0.06	0.08	0.09	-0.11	-1.23
2007	-2.12	-0.63	-2.96	-0.71	-0.76	-0.55	-0.21	-0.02	0.07	0.09	-0.05	-0.14
2008	-0.22	-1.06	-0.85	-0.40	-0.10	-0.09	0.22	0.16	0.11	0.07	0.80	2.53
2009	1.17	-0.16	-0.22	-1.09	NaN	0.52	0.14	0.07	0.10	0.09	-0.26	-1.99
2010	-2.99	-1.78	-1.31	-0.56	-0.11	-0.34	-0.14	-0.01	0.12	0.12	0.87	3.19
2011	2.22	2.15	2.60	1.92	0.58	0.45	0.30	0.29	0.31	0.29	0.75	-0.86
2012	-1.46	-1.29	-1.41	-1.20	-0.98	-0.57	-0.03	0.19	0.27	0.26	1.00	2.39
2013	1.47	0.87	1.01	0.60	-0.15	0.02	0.22	0.31	0.32	0.28	1.01	3.60
2014	2.52	3.25	2.78	2.32	3.11	1.24	0.64	0.37	0.31	0.28	1.00	1.55
2015	1.73	1.59	2.43	2.23	NaN	1.30	NaN					

**Table 0-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	96.67	100.00	96.67	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	90.32	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	96.77	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	90.32	96.67	0.00					

**Table 0-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak

Variable: Incident solar flux, in watts per meter squared

File name: AK107\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	60.1	23.9	0.6	-0.0
2001	0.5	NaN	NaN	171.3	256.9	244.6	200.7	110.3	60.1	21.8	1.9	-0.1
2002	0.7	15.6	67.0	159.0	235.3	NaN	213.6	108.1	67.5	21.0	2.3	-0.0
2003	0.7	13.0	67.3	154.5	217.7	251.2	164.8	114.8	74.6	14.1	2.2	0.0
2004	0.7	16.2	61.3	171.8	229.1	245.4	170.2	139.7	58.3	24.0	1.7	0.0
2005	0.8	11.9	NaN	150.0	183.0	220.8	170.5	103.0	50.7	20.9	2.1	0.2
2006	0.8	13.8	64.8	145.6	177.8	189.3	179.3	94.9	64.0	22.6	3.1	1.0
2007	0.8	10.7	74.6	130.4	217.8	238.4	197.2	135.2	73.6	24.9	3.4	1.4
2008	1.4	13.6	74.5	130.0	190.2	259.8	200.2	92.9	54.5	24.4	3.0	0.6
2009	1.1	12.5	70.0	159.2	211.1	188.3	183.5	113.4	63.0	24.3	2.8	0.8
2010	1.2	11.6	70.2	139.1	202.1	221.5	176.8	104.3	65.9	23.1	5.9	0.6
2011	1.5	16.1	70.2	153.7	226.8	222.2	177.0	124.7	57.2	11.8	2.3	0.3
2012	1.0	6.7	NaN	NaN	223.7	NaN	178.1	110.4	55.5	24.5	2.7	0.1
2013	0.8	8.7	55.4	139.7	226.6	206.1	NaN	NaN	56.6	NaN	2.5	0.3
2014	0.8	13.5	71.0	145.1	186.5	192.7	153.7	NaN	57.2	17.7	3.5	0.3
2015	1.1	14.6	67.7	116.2	189.1	204.5	NaN					

**Table 0–1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.2	2.6	-2.1	-0.4
2001	-0.4	NaN	NaN	23.7	45.3	22.7	18.7	-2.4	-1.2	0.5	-0.7	-0.4
2002	-0.2	2.9	-0.8	11.4	23.8	NaN	31.6	-4.5	6.3	-0.4	-0.4	-0.4
2003	-0.2	0.2	-0.5	6.9	6.1	29.3	-17.2	2.2	13.3	-7.3	-0.4	-0.3
2004	-0.2	3.5	-6.5	24.3	17.6	23.5	-11.8	27.1	-3.0	2.6	-1.0	-0.3
2005	-0.1	-0.8	NaN	2.5	-28.6	-1.1	-11.5	-9.6	-10.5	-0.4	-0.5	-0.1
2006	-0.2	1.0	-3.1	-1.9	-33.8	-32.6	-2.7	-17.7	2.7	1.2	0.5	0.7
2007	-0.2	-2.1	6.8	-17.1	6.2	16.5	15.3	22.5	12.3	3.6	0.7	1.0
2008	0.5	0.8	6.7	-17.5	-21.4	37.9	18.3	-19.7	-6.8	3.0	0.3	0.2
2009	0.2	-0.2	2.1	11.6	-0.5	-33.6	1.5	0.8	1.8	3.0	0.1	0.4
2010	0.2	-1.1	2.3	-8.5	-9.5	-0.4	-5.2	-8.4	4.7	1.8	3.2	0.2
2011	0.6	3.3	2.4	6.1	15.2	0.3	-5.0	12.0	-4.0	-9.5	-0.3	-0.1
2012	0.1	-6.0	NaN	NaN	12.1	NaN	-3.8	-2.2	-5.8	3.1	0.0	-0.3
2013	-0.1	-4.0	-12.4	-7.8	15.0	-15.8	NaN	NaN	-4.6	NaN	-0.2	-0.1
2014	-0.1	0.7	3.2	-2.4	-25.1	-29.2	-28.3	NaN	-4.1	-3.6	0.9	-0.0
2015	0.1	1.9	-0.1	-31.3	-22.5	-17.4	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2001	100.0	92.9	83.9	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	96.8	100.0	100.0	93.3	100.0	96.8	96.7	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2004	100.0	100.0	96.8	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2005	100.0	100.0	87.1	100.0	96.8	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	96.8	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	96.7	96.8	96.7	100.0	100.0	100.0	100.0	96.7	100.0
2012	100.0	96.6	80.6	86.7	100.0	93.3	96.8	96.8	100.0	96.8	100.0	100.0
2013	100.0	100.0	96.8	96.7	100.0	100.0	93.5	83.9	100.0	93.5	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	100.0	100.0	100.0	100.0
2015	100.0	96.4	100.0	100.0	100.0	96.7	0.0					

**Table O-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Reflected solar flux, in watts per meter squared

File name: AK107\_So\_u\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	30.1	24.1	1.2	-0.0
2001	0.3	13.7	73.7	154.4	224.4	73.6	55.2	27.8	16.1	21.1	2.4	-0.0
2002	0.7	16.5	64.7	138.9	125.4	49.5	55.9	28.1	17.0	19.4	1.7	-0.0
2003	0.3	5.2	58.9	146.5	178.0	56.7	40.7	27.7	42.1	11.9	1.9	0.0
2004	0.6	15.5	69.2	166.0	173.6	61.1	47.7	39.1	18.7	24.3	2.2	0.0
2005	0.8	13.8	66.3	153.0	188.5	75.3	52.2	31.9	14.1	22.1	2.3	0.0
2006	0.7	12.8	65.3	145.6	109.1	61.7	58.6	28.8	16.3	8.4	2.4	0.4
2007	0.7	14.2	62.8	123.7	184.6	62.2	58.5	40.2	20.4	17.7	2.5	0.0
2008	0.8	13.8	75.9	132.7	149.1	74.5	64.5	27.7	18.2	24.6	2.2	0.0
2009	0.8	13.2	73.7	152.0	131.0	50.3	55.4	33.6	29.3	20.5	2.4	0.1
2010	0.9	12.6	68.5	140.7	172.9	55.9	51.4	28.8	17.2	20.6	2.2	0.1
2011	1.1	15.1	70.0	153.5	167.6	69.4	52.5	37.0	15.9	18.9	2.7	0.2
2012	0.9	14.4	78.7	141.8	199.2	64.4	56.7	34.5	15.1	15.0	2.5	0.1
2013	0.9	15.3	63.7	145.2	181.2	66.1	54.5	33.5	34.3	24.2	2.6	0.1
2014	0.9	17.9	67.7	147.7	138.5	53.8	47.7	30.2	15.0	19.0	2.7	0.1
2015	0.9	13.5	62.8	134.1	108.2	61.6	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.8	4.6	-1.0	-0.1
2001	-0.4	-0.1	5.6	9.4	62.3	11.2	1.6	-4.3	-5.2	1.6	0.1	-0.1
2002	-0.0	2.7	-3.5	-6.2	-36.7	-12.9	2.3	-4.0	-4.3	-0.1	-0.5	-0.1
2003	-0.5	-8.6	-9.2	1.5	15.9	-5.7	-13.0	-4.4	20.8	-7.5	-0.4	-0.0
2004	-0.1	1.6	1.1	20.9	11.5	-1.3	-6.0	7.0	-2.6	4.9	-0.1	-0.0
2005	0.0	-0.0	-1.8	7.9	26.4	12.9	-1.4	-0.2	-7.3	2.6	0.1	-0.0
2006	-0.1	-1.1	-2.8	0.5	-52.9	-0.7	4.9	-3.3	-5.0	-11.1	0.2	0.3
2007	-0.1	0.3	-5.3	-21.4	22.6	-0.2	4.8	8.2	-0.9	-1.8	0.2	-0.1
2008	0.0	-0.0	7.8	-12.4	-13.0	12.1	10.8	-4.4	-3.1	5.2	-0.0	-0.0
2009	0.0	-0.6	5.6	6.9	-31.1	-12.1	1.7	1.5	8.0	1.0	0.1	0.0
2010	0.1	-1.2	0.4	-4.3	10.8	-6.5	-2.3	-3.2	-4.2	1.1	-0.1	0.0
2011	0.3	1.3	1.9	8.5	5.5	7.0	-1.2	5.0	-5.4	-0.5	0.4	0.1
2012	0.2	0.6	10.6	-3.2	37.1	2.0	3.0	2.4	-6.2	-4.4	0.2	0.0
2013	0.2	1.5	-4.5	0.2	19.1	3.7	0.8	1.5	12.9	4.7	0.3	0.0
2014	0.1	4.1	-0.5	2.6	-23.6	-8.6	-6.0	-1.9	-6.4	-0.4	0.5	0.0
2015	0.1	-0.4	-5.4	-10.9	-53.9	-0.8	NaN					

**Table 0–1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	96.8	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0
2014	100.0	96.4	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2015	100.0	96.4	100.0	100.0	100.0	96.7	0.0					

**Table 0–1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Rainfall, in millimeters per hour  
 File name: AK107\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.3	1.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.5	2.0	3.0	27.4	1.3	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	3.3	NaN					



**Table 0-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	41.1	4.8	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	2.8	21.8	21.3	355.1	2.5	0.0	0.0
2015	0.0	0.0	0.0	0.0	NaN	12.7	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	9.7	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	77.4	96.7	0.0					

**Table O-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Niguanak

Variable: Snow depth, in centimeters

File name: AK107\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.4	8.0	13.0	10.8
2001	11.7	12.8	12.2	12.0	12.9	1.3	2.1	3.1	2.8	19.6	21.4	17.3
2002	17.6	19.8	18.0	17.4	10.0	NaN	1.9	3.5	3.7	8.3	11.1	12.2
2003	10.7	13.3	12.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	16.4	12.4	2.9	NaN	3.4	2.1	16.3	20.6	18.0
2005	16.8	17.1	20.0	21.2	24.6	4.4	NaN	2.8	2.4	5.9	14.0	15.3
2006	16.4	9.6	8.4	11.7	4.5	2.0	4.2	6.4	4.5	4.6	7.9	8.8
2007	11.6	16.3	3.9	7.8	13.2	3.3	6.3	6.3	5.4	4.0	9.1	9.8
2008	8.4	7.9	11.6	10.8	NaN	5.0	8.6	8.6	7.2	24.9	26.7	19.7
2009	13.8	12.8	23.9	19.0	6.8	2.9	4.6	8.3	9.2	14.5	14.0	13.1
2010	12.2	14.0	16.7	18.9	17.5	NaN	NaN	8.1	7.3	17.0	23.1	22.7
2011	26.2	26.9	26.4	26.5	20.8	1.3	5.8	10.3	10.7	8.8	9.7	10.8
2012	8.7	12.7	19.7	23.3	25.6	5.6	6.9	7.4	3.7	8.0	15.2	14.8
2013	14.2	15.1	14.6	14.4	13.6	1.6	1.6	8.9	7.2	15.2	19.9	17.9
2014	NaN	NaN	NaN	21.9	11.9	1.2	9.7	16.3	10.4	15.0	19.8	24.0
2015	22.6	20.7	21.0	24.2	10.7	5.0	NaN					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.3	3.3	10.0	8.4
2001	9.0	11.7	10.0	10.5	9.6	-0.5	0.1	-0.0	0.5	6.4	14.9	14.6
2002	16.6	16.5	16.2	14.7	0.8	NaN	-0.2	0.3	1.1	3.8	9.7	9.9
2003	7.7	10.3	9.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	10.2	1.3	-1.6	NaN	1.3	-0.9	0.6	15.1	16.2
2005	15.5	16.1	16.3	19.4	18.4	-1.1	NaN	-1.0	-0.6	-0.6	11.6	11.1
2006	4.6	7.2	6.2	6.3	-1.1	-0.7	-0.3	1.2	1.7	0.0	2.5	5.9
2007	6.7	2.2	-1.4	1.4	0.8	-0.5	-0.7	1.7	0.5	0.2	5.4	4.4
2008	5.6	4.5	6.0	5.3	NaN	-0.3	0.2	-0.5	0.6	9.1	24.6	11.4
2009	10.2	9.6	11.2	6.0	-0.2	-0.5	0.4	3.2	4.5	11.8	11.0	11.0
2010	9.9	11.4	14.5	16.2	-1.2	NaN	NaN	2.9	3.3	4.3	17.6	18.9
2011	20.7	24.7	24.7	24.5	0.3	-2.0	0.9	-1.0	5.3	4.7	7.3	6.1
2012	4.2	3.3	14.6	17.4	15.7	0.0	-1.0	-1.2	-1.3	-0.7	12.7	12.5
2013	11.4	11.3	9.0	9.5	0.2	-2.1	-2.1	4.2	-0.5	10.9	17.5	12.9
2014	NaN	NaN	NaN	18.4	-1.7	-2.2	2.4	9.7	-1.6	-0.4	14.8	19.0
2015	18.8	16.8	17.5	17.8	-0.6	-0.7	NaN					

**Table 0-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.0	13.2	17.8	14.0
2001	14.4	14.2	14.5	13.9	15.9	9.6	4.7	4.8	10.0	31.5	30.8	19.9
2002	18.9	23.9	21.0	19.1	17.4	NaN	4.6	5.9	5.0	11.7	12.5	14.7
2003	13.5	15.3	15.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	20.3	19.0	5.7	NaN	5.7	4.9	30.4	29.7	21.8
2005	17.6	20.3	23.4	24.8	29.8	20.2	NaN	5.6	5.1	17.6	17.4	21.0
2006	22.3	10.6	9.2	16.6	9.8	5.5	9.0	11.5	8.1	11.7	12.1	12.0
2007	23.4	20.5	8.8	15.2	20.3	10.9	12.9	12.2	9.7	9.5	17.6	16.4
2008	16.4	13.4	14.0	17.0	NaN	10.5	15.1	14.3	13.3	35.2	29.4	26.9
2009	16.3	17.2	31.1	27.3	17.0	6.4	8.8	10.6	17.0	21.5	20.7	16.4
2010	14.5	19.3	18.0	22.5	21.7	NaN	NaN	10.5	12.6	34.5	35.3	27.4
2011	28.1	28.7	28.4	29.1	31.2	5.5	11.9	15.3	14.4	11.8	12.8	14.1
2012	13.8	22.9	25.6	30.0	32.9	16.3	13.0	13.2	10.6	22.7	23.5	17.8
2013	20.8	20.4	18.0	20.8	20.8	6.0	11.6	13.1	11.8	20.6	22.8	21.1
2014	NaN	NaN	NaN	24.1	30.2	6.0	15.5	22.4	21.9	21.2	22.0	39.5
2015	32.8	22.6	23.4	34.7	25.7	13.4	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.3	-4.2	-3.1	-4.6
2001	-3.0	-2.5	-3.8	-5.5	-1.3	-1.7	-3.0	-4.0	-2.8	7.4	5.3	2.0
2002	2.9	4.5	2.0	-0.1	-4.2	NaN	-3.2	-3.7	-1.9	-3.8	-5.0	-3.2
2003	-4.0	-2.0	-4.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-1.1	-1.8	-0.1	NaN	-3.8	-3.5	4.2	4.5	2.6
2005	2.1	1.8	4.0	3.6	10.4	1.3	NaN	-4.4	-3.2	-6.2	-2.1	-0.1
2006	1.7	-5.7	-7.7	-5.9	-9.7	-1.0	-1.0	-0.7	-1.1	-7.5	-8.2	-6.5
2007	-3.1	1.0	-12.1	-9.7	-1.0	0.3	1.1	-0.9	-0.3	-8.1	-7.0	-5.6
2008	-6.3	-7.4	-4.4	-6.7	NaN	1.9	3.4	1.4	1.6	12.7	10.6	4.3
2009	-0.9	-2.5	7.8	1.5	-7.4	-0.1	-0.6	1.1	3.5	2.3	-2.1	-2.3
2010	-2.5	-1.3	0.7	1.3	3.3	NaN	NaN	0.9	1.6	4.8	7.0	7.3
2011	11.5	11.6	10.4	9.0	6.6	-1.8	0.7	3.1	5.0	-3.4	-6.4	-4.6
2012	-6.0	-2.6	3.7	5.8	11.4	2.6	1.8	0.2	-2.0	-4.1	-0.9	-0.5
2013	-0.5	-0.2	-1.5	-3.1	-0.6	-1.4	-3.6	1.7	1.5	3.1	3.8	2.6
2014	NaN	NaN	NaN	4.4	-2.2	-1.8	4.5	9.2	4.8	2.9	3.7	8.6
2015	7.9	5.4	4.9	6.7	-3.5	2.0	NaN					

**Table O-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	96.7	100.0
2001	96.8	100.0	100.0	93.3	96.8	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2002	100.0	100.0	100.0	96.7	90.3	50.0	80.6	100.0	96.7	100.0	100.0	100.0
2003	100.0	100.0	100.0	76.7	58.1	0.0	0.0	38.7	13.3	67.7	23.3	0.0
2004	29.0	13.8	32.3	90.0	100.0	93.3	0.0	87.1	100.0	93.5	100.0	100.0
2005	87.1	100.0	100.0	100.0	90.3	100.0	54.8	96.8	96.7	100.0	100.0	100.0
2006	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	51.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	96.7	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	96.7	83.9	6.7	6.5	100.0	100.0	100.0	100.0	100.0
2011	100.0	96.4	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	80.6
2014	38.7	75.0	19.4	83.3	100.0	100.0	100.0	100.0	96.7	90.3	93.3	100.0
2015	100.0	100.0	100.0	100.0	100.0	96.7	0.0					

**Table O-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Soil moisture, in water fraction by volume

File name: AK107\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.30	0.04	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.04	0.28	0.37	0.38	0.22	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.12	0.37	0.38	0.39	0.32	0.05	NaN
2007	NaN	NaN	NaN	NaN	0.01	0.05	0.31	0.38	0.40	0.15	0.02	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.14	0.35	0.38	0.38	0.33	0.19	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.06	0.31	0.40	0.40	0.36	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.02	0.35	0.37	0.38	0.33	0.17	0.03
2011	NaN	NaN	NaN	NaN	NaN	0.05	0.38	0.39	0.40	0.39	0.08	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.07	0.34	0.35	0.35	0.35	0.17	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.07	0.39	0.40	0.40	0.39	0.21	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.03	0.37	0.39	0.39	0.39	0.14	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table 0-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.36	0.14	0.01	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.02	0.06	0.34	0.38	0.04	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.00	0.36	0.36	0.36	0.14	0.01	NaN
2007	NaN	NaN	NaN	NaN	0.00	0.03	0.11	0.33	0.33	0.05	0.01	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.02	0.28	0.37	0.35	0.30	0.04	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.02	0.11	0.31	0.40	0.30	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.00	0.04	0.35	0.38	0.25	0.08	0.00
2011	NaN	NaN	NaN	NaN	NaN	0.03	0.12	0.39	0.39	0.30	0.00	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.02	0.32	0.34	0.35	0.35	0.02	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.01	0.39	0.39	0.40	0.39	0.04	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.02	0.07	0.39	0.39	0.37	0.02	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.37	0.36	0.13	NaN
2005	NaN	NaN	NaN	NaN	NaN	0.05	0.39	0.38	0.38	0.38	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.39	0.37	0.40	0.40	0.40	0.15	NaN
2007	NaN	NaN	NaN	NaN	0.03	0.11	0.41	0.40	0.40	0.33	0.05	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.35	0.40	0.38	0.39	0.39	0.30	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.12	0.36	0.40	0.40	0.40	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.04	0.40	0.38	0.38	0.38	0.26	0.09
2011	NaN	NaN	NaN	NaN	NaN	0.12	0.40	0.39	0.40	0.40	0.30	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.38	0.37	0.35	0.36	0.36	0.35	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.40	0.40	0.40	0.40	0.40	0.39	NaN
2014	NaN	NaN	NaN	NaN	NaN	0.06	0.40	0.39	0.39	0.39	0.37	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table O-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.02	-0.03	-0.08	NaN
2005	NaN	NaN	NaN	NaN	NaN	-0.03	-0.07	-0.01	-0.01	-0.10	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.05	0.02	0.00	0.01	-0.00	-0.07	NaN
2007	NaN	NaN	NaN	NaN	NaN	-0.01	-0.03	-0.00	0.01	-0.17	-0.10	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.07	0.00	-0.00	-0.01	0.01	0.07	NaN
2009	NaN	NaN	NaN	NaN	NaN	-0.00	-0.03	0.02	0.02	0.04	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	-0.05	0.01	-0.01	-0.00	0.01	0.05	NaN
2011	NaN	NaN	NaN	NaN	NaN	-0.01	0.03	0.01	0.01	0.07	-0.04	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.01	-0.01	-0.03	-0.03	0.03	0.05	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.01	0.05	0.02	0.01	0.07	0.09	NaN
2014	NaN	NaN	NaN	NaN	NaN	-0.03	0.02	0.01	0.01	0.07	0.02	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	32.26
2005	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	100.00	20.00	0.00
2006	0.00	0.00	0.00	0.00	16.13	100.00	100.00	100.00	100.00	100.00	100.00	90.32
2007	0.00	7.14	0.00	33.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	54.84
2008	0.00	0.00	0.00	0.00	41.94	100.00	100.00	100.00	100.00	100.00	100.00	51.61
2009	0.00	0.00	0.00	0.00	38.71	100.00	96.77	100.00	100.00	100.00	53.33	0.00
2010	0.00	0.00	0.00	0.00	9.68	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	67.74	3.57	0.00	0.00	77.42	100.00	100.00	100.00	100.00	100.00	96.67	9.68
2012	0.00	0.00	0.00	0.00	32.26	100.00	100.00	96.77	100.00	100.00	100.00	32.26
2013	0.00	0.00	0.00	0.00	19.35	100.00	96.77	100.00	100.00	100.00	100.00	77.42
2014	0.00	0.00	0.00	0.00	67.74	100.00	100.00	96.77	100.00	100.00	100.00	32.26
2015	0.00	0.00	0.00	0.00	58.06	83.33	0.00					

**Table O-11.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak

Variable: Surface pressure, in millibars

File name: AK107\_P\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	984.9	986.7	981.0	984.1	991.6
2011	989.7	987.3	987.1	987.5	987.8	985.8	982.4	982.4	979.5	980.2	984.6	981.5
2012	986.0	984.1	988.3	989.5	985.6	984.4	983.4	982.0	979.4	990.1	992.9	987.4
2013	991.3	987.4	992.5	994.6	988.4	987.5	987.1	983.5	980.9	980.7	985.3	992.3
2014	984.6	993.8	989.5	986.1	989.3	984.5	984.9	984.3	983.0	983.8	987.4	985.9
2015	990.2	991.0	987.3	983.6	989.7	985.1	NaN					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	972.0	975.0	964.0	962.0	970.0
2011	967.0	970.0	966.0	970.0	980.0	973.0	973.0	961.0	967.0	971.0	970.0	963.0
2012	971.0	972.0	973.0	981.0	974.0	970.0	976.0	973.0	963.0	972.0	981.0	972.0
2013	972.0	971.0	977.0	976.0	972.0	979.0	972.0	976.0	965.0	961.0	962.0	977.0
2014	968.0	979.0	970.0	977.0	978.0	974.0	974.0	972.0	971.0	977.0	977.0	974.0
2015	969.0	976.0	974.0	972.0	980.0	971.0	NaN					

**Table O–11.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	995.0	997.0	989.0	1005.0	1004.0
2011	1017.0	1008.0	1002.0	1004.0	1003.0	997.0	992.0	996.0	990.0	988.0	1004.0	1000.0
2012	1011.0	1001.0	1001.0	999.0	998.0	993.0	989.0	993.0	991.0	1008.0	1003.0	1003.0
2013	1012.0	1004.0	1007.0	1011.0	1000.0	1000.0	996.0	991.0	995.0	999.0	1000.0	1008.0
2014	999.0	1010.0	1006.0	999.0	1001.0	997.0	997.0	992.0	995.0	994.0	1003.0	1008.0
2015	1012.0	1003.0	1005.0	1003.0	997.0	1000.0	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.5	4.8	-2.2	-2.8	3.9
2011	1.3	-1.4	-1.8	-0.8	-0.3	0.3	NaN	-1.0	-2.4	-3.0	-2.2	-6.2
2012	-2.4	-4.6	-0.6	1.3	-2.6	-1.0	NaN	-1.4	-2.5	6.9	6.1	-0.4
2013	3.0	-1.3	3.5	6.3	0.2	2.0	NaN	0.0	-1.0	-2.5	-1.6	4.5
2014	-3.7	5.1	0.5	-2.2	1.2	-1.0	NaN	0.9	1.1	0.7	0.5	-1.8
2015	1.8	2.3	-1.6	-4.6	1.5	-0.3	NaN					



**Table 0-1I.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	3.2	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	96.7	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	100.0	96.7	0.0					

**Table 0-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Air temperature, in degrees Celsius  
 File name: AK107\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-8.84	NaN	2000	NaN	NaN	NaN	-28.45	NaN
2001	-21.33	-17.74	5.39	-9.20	-10.79	2001	-39.25	-38.54	-3.47	-27.71	-39.25
2002	-25.29	-12.34	4.75	-5.12	-9.14	2002	-38.78	-34.72	-5.14	-24.54	-38.78
2003	-22.18	-13.86	5.02	-7.30	-9.71	2003	-37.09	-34.77	-2.97	-31.89	-37.09
2004	-25.79	-17.63	7.94	-8.60	-11.26	2004	-43.51	-41.17	-2.14	-31.78	-43.51
2005	-23.67	-14.46	4.84	-10.25	-10.61	2005	-37.88	-38.24	-4.35	-37.15	-38.24
2006	-22.19	-16.49	6.66	-6.41	-9.33	2006	-39.69	-35.55	-4.36	-28.06	-39.69
2007	-23.05	-16.11	6.78	-6.03	-9.62	2007	-40.78	-41.27	-3.43	-21.90	-41.27
2008	-23.91	-14.55	7.02	-8.39	-9.87	2008	-39.20	-42.31	-5.41	-23.78	-42.31
2009	-22.82	-16.25	5.04	-7.97	-10.47	2009	-39.92	-39.72	-2.75	-29.16	-39.92
2010	-22.55	-13.74	7.24	-5.23	-9.10	2010	-38.89	-34.08	-2.20	-24.08	-38.89
2011	-23.68	-14.41	6.13	-8.48	-10.02	2011	-41.60	-33.49	-5.53	-35.66	-41.60
2012	-26.04	-17.60	8.99	-5.94	-10.22	2012	-41.31	-41.56	-2.21	-27.61	-41.56
2013	-27.48	-16.11	7.63	-6.36	-10.16	2013	-39.59	-35.21	-5.38	-26.76	-39.59
2014	-22.44	-11.91	5.58	-5.88	-8.67	2014	-41.16	-37.32	-3.78	-24.47	-41.16
2015	-21.50	-11.30				2015	-37.41	-37.35			

**Table 0-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	16.61	NaN
2001	-0.99	3.52	27.55	13.20	27.55
2002	1.41	8.54	24.83	19.26	24.83
2003	-4.87	6.59	22.11	15.49	22.11
2004	-1.73	3.24	25.44	12.96	25.44
2005	1.54	5.27	20.68	11.71	20.68
2006	2.98	10.08	22.91	17.81	22.91
2007	-1.08	1.45	22.88	16.72	22.88
2008	3.60	8.35	22.45	11.29	22.45
2009	5.56	7.86	21.02	19.03	21.02
2010	3.01	6.33	24.39	16.77	24.39
2011	1.12	20.43	23.00	13.02	23.00
2012	-3.12	5.25	23.10	15.74	23.10
2013	-15.38	6.39	26.18	11.11	26.18
2014	2.58	4.82	21.33	12.13	21.33
2015	-0.86	14.83			

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.00	0.00	0.00	100.00	0.00
2001	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	98.91	100.00	99.73
2003	100.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	98.91	98.91	100.00	99.45
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	98.91	100.00	99.73
2014	100.00	100.00	98.91	100.00	99.73
2015	100.00	100.00			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-1.50	NaN
2001	2.27	-2.77	-0.96	-1.87	-0.87
2002	-1.70	2.63	-1.61	2.22	0.79
2003	1.41	1.10	-1.34	0.03	0.22
2004	-2.20	-2.66	1.58	-1.26	-1.33
2005	-0.07	0.51	-1.52	-2.92	-0.69
2006	1.41	-1.53	0.30	0.93	0.60
2007	0.54	-1.14	0.43	1.31	0.31
2008	-0.32	0.42	0.67	-1.06	0.06
2009	0.78	-1.28	-1.32	-0.63	-0.55
2010	1.04	1.22	0.88	2.10	0.82
2011	-0.09	0.56	-0.23	-1.15	-0.09
2012	-2.45	-2.63	2.63	1.39	-0.29
2013	-3.88	-1.14	1.27	0.97	-0.24
2014	1.15	3.06	-0.78	1.45	1.25
2015	2.09	3.67			

**Table 0-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Wind speed, in meters per second  
 File name: AK107\_U\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	3.91	4.64	NaN
2006	NaN	NaN	NaN	4.06	NaN
2007	NaN	4.30	4.03	NaN	NaN
2008	NaN	NaN	3.90	4.96	NaN
2009	NaN	NaN	4.21	NaN	NaN
2010	NaN	4.39	3.98	NaN	NaN
2011	NaN	4.19	4.13	NaN	NaN
2012	NaN	NaN	3.59	5.19	NaN
2013	NaN	NaN	3.57	NaN	NaN
2014	NaN	4.12	3.96	NaN	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	-0.01	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	0.11	NaN	NaN
2008	NaN	NaN	-0.02	NaN	NaN
2009	NaN	NaN	0.29	NaN	NaN
2010	NaN	NaN	0.06	NaN	NaN
2011	NaN	NaN	0.21	NaN	NaN
2012	NaN	NaN	-0.33	NaN	NaN
2013	NaN	NaN	-0.35	NaN	NaN
2014	NaN	NaN	0.04	NaN	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	11.06	15.10	NaN
2006	NaN	NaN	NaN	18.62	NaN
2007	NaN	18.44	14.18	NaN	NaN
2008	NaN	NaN	12.87	17.34	NaN
2009	NaN	NaN	12.31	NaN	NaN
2010	NaN	15.48	13.11	NaN	NaN
2011	NaN	20.08	13.28	NaN	NaN
2012	NaN	NaN	12.47	20.20	NaN
2013	NaN	NaN	13.41	NaN	NaN
2014	NaN	16.65	11.39	NaN	NaN
2015	NaN	NaN			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	28.26	89.01	34.15
2005	76.67	94.57	98.91	95.60	91.23
2006	57.78	70.65	34.78	98.90	66.03
2007	83.33	95.65	100.00	94.51	94.52
2008	82.42	93.48	100.00	96.70	94.26
2009	90.00	93.48	98.91	89.01	93.15
2010	88.89	97.83	100.00	85.71	88.77
2011	70.00	100.00	100.00	92.31	94.52
2012	81.32	89.13	98.91	100.00	91.80
2013	44.44	86.96	98.91	92.31	81.64
2014	80.00	97.83	98.91	94.51	88.77
2015	70.00	89.13			

**Table 0–2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Ground temperature, in degrees Celsius

File name: AK107\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2000	NaN	NaN	NaN	-1.94	NaN
2001	-12.31	-13.63	0.39	-0.90	-6.60
2002	-13.72	-10.85	0.61	-0.62	-5.90
2003	-11.53	-11.77	0.82	-2.01	-6.64
2004	-16.93	-16.42	1.82	-0.89	-7.94
2005	-14.47	-13.25	1.27	-1.83	-7.09
2006	-13.78	-13.57	2.55	-1.19	-6.41
2007	-15.25	-14.74	2.38	-1.06	-7.02
2008	-14.41	-13.24	2.53	0.04	-5.93
2009	-11.98	-12.83	1.34	-1.39	-6.70
2010	-16.06	-13.36	1.71	0.37	-6.25
2011	-10.05	-11.27	1.84	-0.72	-5.60
2012	-15.54	-14.66	2.28	0.23	-6.58
2013	-12.20	-12.68	2.08	0.06	-5.46
2014	-9.77	-9.77	1.25	-0.24	-4.91
2015	-11.41	-9.99			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2000	NaN	NaN	NaN	-8.33	NaN
2001	-15.61	-17.89	-6.37	-7.23	-17.89
2002	-18.38	-16.75	-1.39	-4.96	-18.38
2003	-15.78	-16.51	-1.93	-12.91	-16.51
2004	-23.94	-24.95	-2.27	-6.52	-24.95
2005	-18.81	-19.41	-1.71	-10.04	-19.41
2006	-19.12	-20.91	-0.86	-12.23	-20.91
2007	-22.09	-24.99	-1.43	-7.56	-24.99
2008	-21.44	-20.90	-0.75	-1.52	-21.44
2009	-19.26	-20.01	-0.81	-11.29	-20.01
2010	-22.91	-19.67	-1.34	-0.67	-22.91
2011	-14.91	-15.01	-0.79	-10.83	-15.89
2012	-23.05	-21.87	-1.58	-1.64	-23.05
2013	-17.08	-17.29	-0.98	-1.47	-17.29
2014	-16.17	-15.75	-0.90	-4.15	-16.17
2015	-16.73	-16.40			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2000	NaN	NaN	NaN	0.74	NaN
2001	-8.33	-6.43	3.27	2.15	3.27
2002	-6.59	-1.20	3.65	3.25	3.65
2003	-4.70	-1.91	4.05	2.19	4.05
2004	-10.21	-2.27	6.44	2.83	6.44
2005	-6.32	-1.64	5.86	2.72	5.86
2006	-9.99	-0.64	7.69	4.15	7.69
2007	-7.31	-1.21	5.95	4.05	5.95
2008	-6.93	-0.59	6.53	1.89	6.53
2009	-1.48	-0.71	4.35	3.24	4.35
2010	-7.61	-0.64	5.48	3.87	5.48
2011	-0.61	-0.25	5.42	2.72	5.42
2012	-8.31	-0.16	5.53	3.87	5.53
2013	-1.62	-0.90	6.27	2.17	6.27
2014	-0.75	-0.09	3.35	1.62	3.35
2015	-4.20	-0.51			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2000	NaN	NaN	NaN	-1.14	NaN
2001	0.98	-0.83	-1.25	-0.10	-0.24
2002	-0.42	1.96	-1.02	0.18	0.46
2003	1.76	1.03	-0.81	-1.20	-0.29
2004	-3.63	-3.62	0.19	-0.09	-1.58
2005	-1.17	-0.45	-0.36	-1.03	-0.73
2006	-0.48	-0.77	0.92	-0.38	-0.05
2007	-1.96	-1.94	0.74	-0.25	-0.66
2008	-1.11	-0.44	0.90	0.85	0.42
2009	1.31	-0.03	-0.30	-0.58	-0.34
2010	-2.76	-0.56	0.08	1.18	0.11
2011	3.24	1.54	0.21	0.08	0.76
2012	-2.24	-1.86	0.64	1.04	-0.22
2013	1.09	0.12	0.45	0.86	0.90
2014	3.52	3.03	-0.38	0.57	1.45
2015	1.88	2.81			

**Table 0-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.00	0.00	0.00	100.00	0.00
2001	100.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	98.91	100.00	99.73
2003	100.00	98.91	97.83	100.00	99.18
2004	100.00	100.00	98.91	100.00	99.73
2005	100.00	100.00	98.91	100.00	99.73
2006	100.00	98.91	100.00	100.00	99.73
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	96.74	98.91	100.00	98.90
2010	100.00	100.00	100.00	100.00	100.00
2011	98.89	100.00	100.00	100.00	99.73
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	100.00	98.91	100.00	99.73
2014	100.00	100.00	97.83	100.00	99.45
2015	100.00	96.74			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-5.37	NaN
2001	-12.06	-14.44	-9.88	-4.38	-14.44
2002	-13.89	-13.88	-5.42	-3.65	-13.89
2003	-12.46	-13.34	-6.78	-7.09	-13.34
2004	-17.86	-19.35	-8.35	-4.16	-19.35
2005	-14.41	-15.11	-7.14	-6.43	-15.11
2006	-13.75	-15.97	-5.99	-5.61	-15.97
2007	-15.35	-18.14	-7.90	-3.98	-18.14
2008	-14.47	-16.08	-6.82	-1.52	-16.08
2009	-13.53	-15.58	-5.73	-5.95	-15.58
2010	-15.41	-16.06	-7.50	-1.59	-16.06
2011	-11.20	-12.00	-5.93	-3.58	-12.00
2012	-15.12	-16.55	-7.82	-1.41	-16.55
2013	-12.92	-13.53	-6.82	-1.34	-13.53
2014	-11.27	-11.88	-4.59	-1.38	-11.88
2015	-12.16	-12.46			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-2.59	NaN
2001	-9.71	-12.61	-3.97	-2.03	-7.04
2002	-10.09	-11.40	-3.00	-1.82	-6.44
2003	-8.54	-11.50	-3.15	-2.21	-6.73
2004	-12.59	-15.97	-3.77	-1.90	-8.37
2005	-10.56	-13.06	-3.42	-2.20	-7.42
2006	-10.54	-13.41	-2.99	-1.65	-7.03
2007	-10.88	-14.09	-3.39	-1.63	-7.40
2008	-10.02	-13.06	-3.03	-1.34	-6.65
2009	-8.30	-12.67	-2.89	-1.69	-6.74
2010	-11.80	-13.27	-3.29	-1.30	-6.97
2011	-6.99	-10.91	-2.78	-1.22	-5.82
2012	-10.76	-13.81	-3.28	-1.16	-7.00
2013	-7.93	-12.13	-2.95	-1.14	-5.94
2014	-6.41	-9.87	-2.40	-1.14	-5.15
2015	-7.91	-10.19			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-1.85	NaN
2001	-5.37	-9.88	-2.01	-1.62	-1.62
2002	-4.36	-5.39	-1.73	-1.46	-1.46
2003	-3.61	-6.83	-1.74	-1.44	-1.44
2004	-7.11	-8.36	-1.86	-1.56	-1.56
2005	-4.16	-7.18	-1.78	-1.46	-1.46
2006	-6.43	-5.99	-1.51	-1.19	-1.19
2007	-5.58	-7.90	-1.56	-1.22	-1.22
2008	-3.98	-6.84	-1.48	-1.25	-1.25
2009	-1.34	-5.71	-1.50	-1.22	-1.22
2010	-5.95	-7.49	-1.52	-1.15	-1.15
2011	-1.19	-5.93	-1.30	-1.00	-1.00
2012	-3.58	-7.85	-1.34	-1.01	-1.01
2013	-1.06	-6.84	-1.25	-1.00	-1.00
2014	-1.05	-4.58	-1.26	-1.02	-1.02
2015	-1.36	-4.33			

**Table 0–2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Sea- son/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-0.92	NaN	2000	0.00	0.00	0.00	100.00	0.00
2001	-0.17	-0.08	-0.80	-0.36	-0.27	2001	100.00	100.00	100.00	100.00	100.00
2002	-0.56	1.13	0.16	-0.15	0.32	2002	100.00	100.00	98.91	100.00	99.73
2003	0.99	1.03	0.02	-0.54	0.03	2003	100.00	98.91	97.83	100.00	99.18
2004	-3.06	-3.44	-0.60	-0.23	-1.60	2004	100.00	100.00	98.91	100.00	99.73
2005	-1.03	-0.53	-0.26	-0.53	-0.65	2005	100.00	100.00	98.91	100.00	99.73
2006	-1.01	-0.88	0.17	0.02	-0.26	2006	100.00	98.91	100.00	100.00	99.73
2007	-1.34	-1.56	-0.22	0.04	-0.64	2007	100.00	100.00	100.00	100.00	100.00
2008	-0.49	-0.53	0.13	0.33	0.12	2008	100.00	100.00	100.00	100.00	100.00
2009	1.23	-0.14	0.27	-0.02	0.03	2009	100.00	96.74	98.91	100.00	98.90
2010	-2.26	-0.74	-0.13	0.37	-0.21	2010	100.00	100.00	100.00	100.00	100.00
2011	2.55	1.62	0.38	0.45	0.94	2011	98.89	100.00	100.00	100.00	99.73
2012	-1.23	-1.28	-0.11	0.51	-0.23	2012	100.00	100.00	98.91	100.00	99.73
2013	1.61	0.40	0.22	0.53	0.82	2013	100.00	100.00	98.91	100.00	99.73
2014	3.13	2.66	0.77	0.52	1.62	2014	100.00	100.00	97.83	100.00	99.45
2015	1.63	2.34				2015	100.00	96.74			

**Table 0–2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Incident solar flux, in watts per meter squared

File name: AK107\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	28.2	NaN	2000	NaN	NaN	NaN	-0.2	NaN
2001	3.8	NaN	183.9	27.9	96.2	2001	-0.6	NaN	12.0	-0.5	9.4
2002	5.1	154.7	175.9	29.7	91.3	2002	0.7	13.8	4.1	1.4	4.5
2003	4.3	146.4	176.1	29.6	89.9	2003	-0.1	5.5	4.3	1.2	3.1
2004	5.4	154.9	185.0	27.9	93.3	2004	1.0	14.1	13.1	-0.5	6.5
2005	4.0	NaN	164.8	24.8	81.6	2005	-0.4	NaN	-7.0	-3.6	-5.2
2006	4.6	129.2	154.1	29.8	80.1	2006	0.2	-11.6	-17.7	1.4	-6.8
2007	4.0	141.1	189.7	33.9	92.8	2007	-0.4	0.2	17.9	5.5	6.0
2008	5.3	131.6	183.5	27.2	87.2	2008	0.9	-9.3	11.6	-1.1	0.4
2009	4.5	145.9	161.2	30.0	85.6	2009	0.1	5.1	-10.6	1.6	-1.2
2010	4.3	137.1	166.9	31.6	85.5	2010	-0.1	-3.8	-4.9	3.2	-1.3
2011	5.7	149.3	173.6	23.9	88.3	2011	1.3	8.5	1.8	-4.5	1.5
2012	2.5	NaN	169.6	27.5	83.0	2012	-1.9	NaN	-2.3	-0.8	-3.8
2013	3.0	141.6	NaN	27.5	81.8	2013	-1.4	0.7	NaN	-0.8	-5.0
2014	4.6	134.1	149.6	26.1	78.7	2014	0.2	-6.7	-22.3	-2.3	-8.1
2015	4.9	124.4				2015	0.5	-16.4			

**Table 0-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.0	0.0	0.0	100.0	0.0
2001	97.8	94.6	98.9	100.0	97.8
2002	100.0	98.9	96.7	98.9	98.6
2003	100.0	100.0	100.0	98.9	99.7
2004	100.0	98.9	98.9	100.0	99.5
2005	100.0	94.6	98.9	98.9	98.1
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	98.9	98.9	100.0	99.5
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	97.8	98.9	98.9	98.9
2012	98.9	89.1	95.7	98.9	95.6
2013	100.0	97.8	92.4	97.8	97.0
2014	100.0	100.0	97.8	100.0	99.5
2015	98.9	100.0			

**Table 0-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Reflected solar flux, in watts per meter squared

File name: AK107\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	18.5	NaN
2001	4.4	150.8	52.0	13.3	55.5
2002	5.4	109.3	44.6	12.8	43.3
2003	1.7	127.6	41.5	18.6	47.7
2004	5.2	136.0	49.3	15.2	51.6
2005	4.6	135.7	53.1	12.9	51.9
2006	4.2	106.2	49.5	9.0	42.6
2007	4.8	123.7	53.5	13.6	49.2
2008	4.7	119.1	55.4	15.1	48.8
2009	4.4	118.4	46.3	17.4	46.8
2010	4.3	127.2	45.3	13.5	48.0
2011	5.1	130.1	52.8	12.6	50.5
2012	5.0	139.9	51.9	10.9	52.2
2013	5.1	129.9	51.2	20.4	52.0
2014	5.8	117.6	43.9	12.3	45.3
2015	4.4	101.3			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	4.1	NaN
2001	-0.2	26.0	2.7	-1.1	6.5
2002	0.8	-15.6	-4.7	-1.6	-5.6
2003	-2.9	2.8	-7.8	4.2	-1.3
2004	0.6	11.1	-0.0	0.7	2.7
2005	-0.0	10.9	3.8	-1.5	3.0
2006	-0.4	-18.6	0.2	-5.4	-6.4
2007	0.2	-1.2	4.2	-0.9	0.2
2008	0.1	-5.8	6.1	0.7	-0.2
2009	-0.2	-6.4	-3.0	3.0	-2.2
2010	-0.3	2.4	-4.0	-0.9	-1.0
2011	0.5	5.3	3.5	-1.8	1.6
2012	0.4	15.0	2.6	-3.5	3.2
2013	0.5	5.0	1.9	6.0	3.0
2014	1.2	-7.2	-5.4	-2.1	-3.6
2015	-0.2	-23.5			

**Table O-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.0	0.0	0.0	100.0	0.0
2001	100.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	98.9	100.0	99.7
2003	100.0	100.0	100.0	100.0	100.0
2004	100.0	100.0	98.9	100.0	99.7
2005	100.0	100.0	98.9	100.0	99.7
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	98.9	98.9	100.0	99.5
2010	100.0	100.0	100.0	98.9	99.7
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	100.0	98.9	100.0	99.7
2014	98.9	100.0	98.9	100.0	99.5
2015	98.9	100.0			

**Table O-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak

Variable: Rainfall, in millimeters per hour

File name: AK107\_rain\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	1.0	NaN	2013	NaN	NaN	NaN	4.8	NaN
2014	0.0	0.0	3.0	27.4	27.4	2014	0.0	0.0	46.0	357.6	403.6
2015	0.0	NaN				2015	0.0	NaN			



**Table 0-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	37.0	100.0	42.7
2014	100.0	100.0	98.9	100.0	99.7
2015	100.0	91.3			

**Table 0-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Snow depth, in centimeters  
 File name: AK107\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	7.7	NaN
2001	11.7	12.4	2.2	14.6	10.7
2002	18.2	15.3	NaN	7.8	10.9
2003	12.0	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	13.0	NaN
2005	17.3	21.9	3.2	7.5	12.5
2006	13.9	8.1	4.2	5.7	7.4
2007	12.1	8.4	5.3	6.1	8.0
2008	8.7	11.4	7.4	19.7	12.7
2009	15.5	16.6	5.3	12.6	11.9
2010	13.1	17.7	NaN	15.8	15.6
2011	25.2	24.6	5.7	9.7	15.3
2012	10.7	22.9	6.6	8.9	12.7
2013	14.7	14.2	4.1	14.1	11.9
2014	NaN	NaN	9.2	15.0	15.0
2015	22.5	18.6			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	0.3	NaN
2001	8.4	9.6	-0.5	0.5	-0.5
2002	14.6	0.8	NaN	1.1	-0.2
2003	7.7	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.9	NaN
2005	15.5	16.3	-1.1	-0.6	-1.1
2006	4.6	-1.1	-0.7	0.0	-1.1
2007	2.2	-1.4	-0.7	0.2	-1.4
2008	4.4	0.9	-0.5	0.6	-0.5
2009	9.6	-0.2	-0.5	4.5	-0.5
2010	9.9	-1.2	NaN	3.3	-1.2
2011	18.9	0.3	-2.0	4.7	-2.0
2012	3.3	14.6	-1.2	-1.3	-1.3
2013	11.3	0.2	-2.1	-0.5	-2.1
2014	NaN	NaN	-2.2	-1.6	-2.2
2015	16.8	-0.6			

**Table 0-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	17.8	NaN
2001	14.4	15.9	9.6	31.5	31.5
2002	23.9	21.0	NaN	12.5	23.9
2003	15.3	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	30.4	NaN
2005	21.8	29.8	20.2	17.6	29.8
2006	22.3	16.6	11.5	12.1	22.3
2007	23.4	20.3	12.9	17.6	23.4
2008	16.4	19.0	15.1	35.2	35.2
2009	26.9	31.1	10.6	21.5	31.1
2010	19.3	22.5	NaN	35.3	35.3
2011	28.7	31.2	15.3	14.4	31.2
2012	22.9	32.9	16.3	23.5	32.9
2013	20.8	20.8	13.1	22.8	22.8
2014	NaN	NaN	22.4	22.0	39.5
2015	39.5	34.7			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.0	0.0	0.0	98.9	0.0
2001	98.9	96.7	100.0	98.9	98.6
2002	100.0	95.7	77.2	98.9	92.9
2003	100.0	78.3	13.0	35.2	47.9
2004	14.3	73.9	59.8	97.8	69.9
2005	95.6	96.7	83.7	98.9	93.7
2006	98.9	100.0	100.0	100.0	99.7
2007	100.0	98.9	100.0	100.0	99.7
2008	100.0	83.7	100.0	100.0	95.9
2009	100.0	97.8	100.0	100.0	99.5
2010	100.0	93.5	38.0	100.0	82.7
2011	98.9	100.0	96.7	100.0	98.9
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	100.0	98.9	100.0	98.1
2014	64.4	67.4	100.0	93.4	83.0
2015	100.0	100.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	-3.6	NaN
2001	-3.3	-3.6	-3.1	3.3	-1.3
2002	3.1	-0.7	NaN	-3.5	-1.1
2003	-3.0	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	1.7	NaN
2005	2.3	5.9	-2.1	-3.8	0.4
2006	-1.2	-7.8	-1.1	-5.6	-4.7
2007	-2.9	-7.6	-0.0	-5.2	-4.0
2008	-6.3	-4.6	2.1	8.4	0.6
2009	0.5	0.6	-0.0	1.3	-0.2
2010	-2.0	1.7	NaN	4.5	3.5
2011	10.1	8.6	0.4	-1.6	3.2
2012	-4.4	6.9	1.3	-2.4	0.6
2013	-0.3	-1.8	-1.3	2.8	-0.1
2014	NaN	NaN	3.8	3.7	3.0
2015	7.4	2.6			

**Table O-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
Variable: Soil moisture, in water fraction by volume

File name: AK107\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.23	NaN
2005	NaN	NaN	0.23	NaN	NaN
2006	NaN	NaN	0.29	0.26	NaN
2007	NaN	NaN	0.25	0.19	NaN
2008	NaN	NaN	0.29	0.30	NaN
2009	NaN	NaN	0.26	NaN	NaN
2010	NaN	NaN	0.25	0.29	NaN
2011	NaN	NaN	0.28	0.29	NaN
2012	NaN	NaN	0.25	0.29	NaN
2013	NaN	NaN	0.29	0.34	NaN
2014	NaN	NaN	0.27	0.31	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.37	NaN
2005	NaN	NaN	0.39	NaN	NaN
2006	NaN	NaN	0.40	0.40	NaN
2007	NaN	NaN	0.41	0.40	NaN
2008	NaN	NaN	0.40	0.39	NaN
2009	NaN	NaN	0.40	NaN	NaN
2010	NaN	NaN	0.40	0.38	NaN
2011	NaN	NaN	0.40	0.40	NaN
2012	NaN	NaN	0.38	0.36	NaN
2013	NaN	NaN	0.40	0.40	NaN
2014	NaN	NaN	0.40	0.39	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.01	NaN
2005	NaN	NaN	0.02	NaN	NaN
2006	NaN	NaN	0.00	0.01	NaN
2007	NaN	NaN	0.03	0.01	NaN
2008	NaN	NaN	0.02	0.04	NaN
2009	NaN	NaN	0.02	NaN	NaN
2010	NaN	NaN	0.00	0.08	NaN
2011	NaN	NaN	0.03	0.00	NaN
2012	NaN	NaN	0.02	0.02	NaN
2013	NaN	NaN	0.01	0.04	NaN
2014	NaN	NaN	0.02	0.02	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.04	NaN
2005	NaN	NaN	-0.04	NaN	NaN
2006	NaN	NaN	0.03	-0.02	NaN
2007	NaN	NaN	-0.01	-0.09	NaN
2008	NaN	NaN	0.02	0.02	NaN
2009	NaN	NaN	-0.01	NaN	NaN
2010	NaN	NaN	-0.02	0.02	NaN
2011	NaN	NaN	0.01	0.01	NaN
2012	NaN	NaN	-0.01	0.02	NaN
2013	NaN	NaN	0.02	0.06	NaN
2014	NaN	NaN	0.00	0.03	NaN
2015	NaN	NaN			

**Table O-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	28.26	100.00	34.70
2005	11.11	14.13	100.00	73.63	47.12
2006	0.00	5.43	100.00	100.00	59.18
2007	33.33	44.57	100.00	100.00	66.58
2008	18.68	14.13	100.00	100.00	57.92
2009	17.78	13.04	98.91	84.62	49.32
2010	0.00	3.26	100.00	100.00	59.45
2011	58.89	26.09	100.00	98.90	63.29
2012	3.30	10.87	98.91	100.00	55.19
2013	11.11	6.52	98.91	100.00	58.08
2014	26.67	22.83	98.91	100.00	58.36
2015	11.11	19.57			

**Table O-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Niguanak  
 Variable: Surface pressure, in millibars  
 File name: AK107\_P\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN	2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	983.9	NaN	2010	NaN	NaN	NaN	962.0	NaN
2011	989.6	987.5	983.5	981.4	984.6	2011	967.0	966.0	961.0	967.0	961.0
2012	983.9	987.8	983.3	987.5	986.1	2012	963.0	973.0	970.0	963.0	963.0
2013	988.7	991.8	986.0	982.2	987.6	2013	971.0	972.0	972.0	961.0	961.0
2014	990.1	988.3	984.6	984.7	986.4	2014	968.0	970.0	972.0	971.0	968.0
2015	989.0	986.9				2015	969.0	972.0			

**Table 0-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	1005.0	NaN
2011	1017.0	1004.0	997.0	1004.0	1017.0
2012	1011.0	1001.0	993.0	1008.0	1011.0
2013	1012.0	1011.0	1000.0	1000.0	1012.0
2014	1010.0	1006.0	997.0	1003.0	1010.0
2015	1012.0	1005.0			

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	34.8	100.0	42.2
2011	100.0	98.9	100.0	100.0	99.5
2012	98.9	100.0	98.9	100.0	99.7
2013	100.0	100.0	98.9	98.9	99.5
2014	100.0	100.0	98.9	100.0	99.7
2015	100.0	100.0			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2000	NaN	NaN	NaN	NaN	NaN
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.1	NaN
2011	1.3	-1.0	NaN	-2.5	NaN
2012	-4.4	-0.7	NaN	3.5	NaN
2013	0.5	3.3	NaN	-1.7	NaN
2014	1.9	-0.1	NaN	0.8	NaN
2015	0.7	-1.5			

## P. Marsh Creek

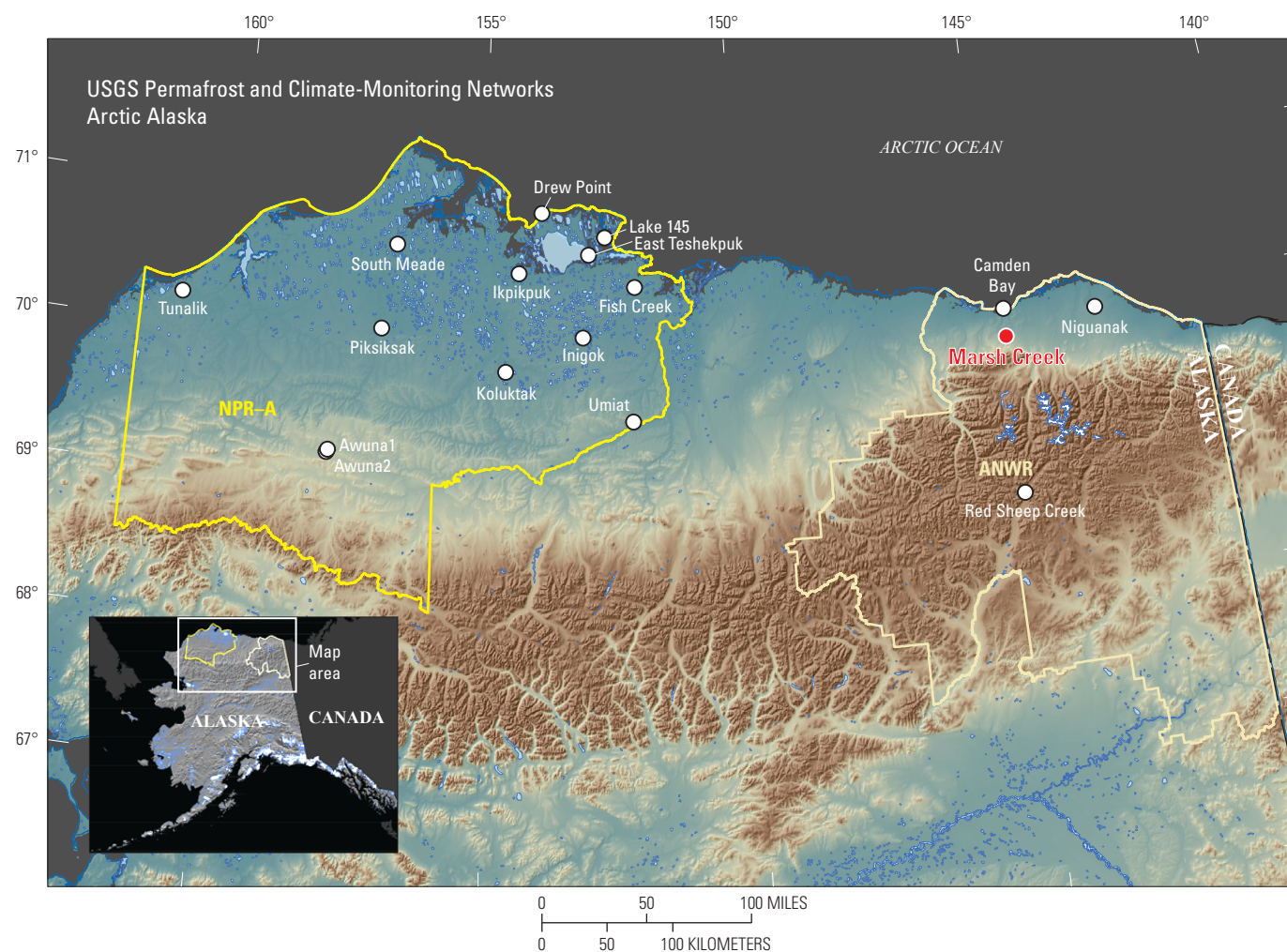
GTN-P code: U31

Latitude: 69°46.657'N

Longitude: 144°47.595'W

Elevation: 260 meters above mean sea level

Installation date: 03 AUG 2001



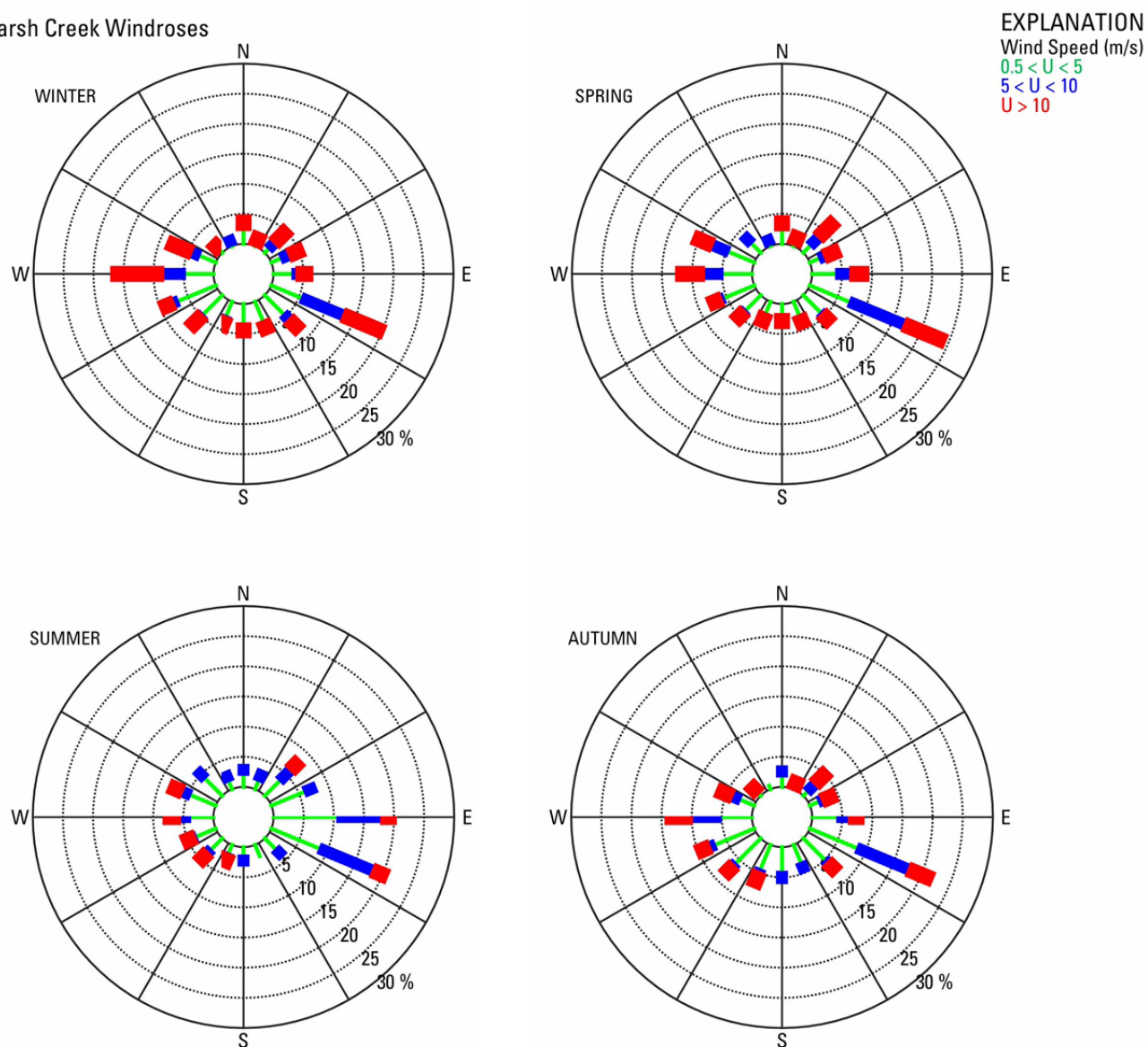
**Figure P-1.** Location map presenting the specific location of the Marsh Creek site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve–Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure P-2.** Marsh Creek station in summer 2008.

## Marsh Creek Windroses



**Figure P-3.** Marsh Creek seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.



## Tables

**Table P-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Air temperature, in degrees Celsius  
 File name: AK108\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.49	-12.23	-15.71	-21.29
2002	-23.51	-24.37	-14.60	-13.27	-1.01	4.70	8.28	5.82	4.59	-5.44	-12.53	-17.75
2003	-19.27	-23.50	-22.27	-10.95	-4.22	5.73	9.77	4.82	-0.99	-3.87	-14.69	-21.85
2004	-22.75	-31.96	-25.34	-15.99	-3.03	9.05	11.49	10.08	-0.76	-7.45	-17.73	-23.16
2005	-19.13	-23.74	-21.69	-14.04	-4.53	4.00	6.13	7.96	0.94	-8.83	-23.61	-21.24
2006	-25.81	-15.52	-24.71	-19.32	NaN	NaN	NaN	NaN	5.10	-4.22	-16.56	-18.85
2007	-24.83	-21.75	-26.15	NaN	-7.82	7.06	10.64	9.13	3.20	-10.13	-12.41	-18.65
2008	-23.93	-23.09	-25.74	-9.85	-2.47	9.82	11.19	3.96	-0.61	-9.23	-16.85	-16.05
2009	-20.55	-22.19	-28.14	-12.05	-2.27	5.08	10.37	6.43	1.08	-5.69	-21.09	-15.97
2010	-23.70	-24.82	-23.49	-8.84	-5.45	5.33	10.83	9.52	3.06	-9.12	-10.75	-23.86
2011	-20.77	-16.75	-15.11	-17.79	-2.98	4.81	10.15	NaN	1.37	-7.28	-21.46	-24.44
2012	NaN	NaN	-31.59	-15.43	-3.02	8.05	12.90	10.27	3.15	-3.84	-16.69	-24.43
2013	-25.83	-30.84	-23.72	-17.26	-3.27	9.52	10.72	8.32	-0.34	-2.18	-13.68	-18.23
2014	-19.28	-20.91	-16.64	-11.54	-0.26	5.87	8.11	6.36	0.72	-6.69	-11.15	-22.78
2015	-19.09	-17.31	-20.44	-11.58	2.89	9.71	8.31					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-11.53	-26.19	-26.10	-33.14
2002	-36.53	-33.77	-33.21	-24.15	-20.47	-2.45	-3.10	-1.11	-4.78	-16.08	-25.56	-30.88
2003	-32.61	-35.04	-33.77	-25.15	-14.56	-4.06	-1.35	-3.09	-12.51	-15.14	-28.61	-31.06
2004	-37.15	-42.98	-37.82	-30.11	-19.45	-2.32	1.20	-2.82	-9.85	-23.07	-27.86	-36.87
2005	-34.98	-32.68	-38.08	-32.05	-14.42	-4.03	-2.35	-5.14	-7.34	-21.85	-36.05	-35.55
2006	-36.96	-39.63	-34.31	-27.72	NaN	NaN	NaN	NaN	-5.37	-16.37	-29.61	-34.21
2007	-38.72	-37.67	-40.76	NaN	-20.89	-3.58	1.34	-1.08	-9.49	-19.09	-21.29	-34.76
2008	-40.93	-34.26	-40.09	-25.13	-11.50	-5.20	0.68	-5.05	-13.82	-18.15	-25.72	-32.43
2009	-34.29	-37.13	-38.29	-25.42	-15.04	-1.45	-0.37	-4.55	-9.91	-14.57	-30.15	-33.52
2010	-37.30	-38.81	-35.92	-24.78	-16.21	-2.40	1.12	-0.23	-8.96	-18.44	-21.71	-40.09
2011	-39.57	-32.21	-28.03	-31.53	-18.68	-5.55	0.45	NaN	-7.24	-17.49	-35.37	-36.46
2012	NaN	NaN	-40.79	-31.06	-17.35	-2.53	0.61	1.71	-3.90	-10.85	-26.61	-35.11
2013	-34.38	-37.91	-33.61	-33.05	-25.00	-6.21	0.53	-3.23	-7.54	-15.03	-26.61	-32.32
2014	-36.40	-40.97	-36.62	-27.25	-9.77	-2.32	-2.14	-1.38	-6.83	-15.29	-27.70	-34.66
2015	-30.26	-35.09	-35.97	-24.03	-12.81	-4.31	-1.91					

**Table P-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.26	4.83	-2.69	6.79
2002	-0.04	-3.14	3.26	2.21	17.63	17.97	23.41	23.47	18.51	8.08	4.65	0.47
2003	-1.17	-9.34	-0.88	10.15	9.45	23.88	25.61	16.60	12.64	20.65	4.55	-5.72
2004	-1.84	-12.34	-1.66	5.09	9.26	24.04	26.21	24.01	12.31	3.01	-2.82	-2.19
2005	4.22	-3.11	-0.07	14.26	8.23	21.97	17.87	22.76	12.62	6.34	-13.61	4.06
2006	-17.91	8.01	-13.20	-8.47	NaN	NaN	NaN	NaN	19.12	13.77	-2.72	-0.81
2007	-4.09	1.68	-4.41	NaN	3.94	21.09	22.38	22.76	16.70	-0.51	-0.65	-1.19
2008	9.07	1.49	-1.01	6.74	15.31	24.06	23.47	12.98	13.14	-2.88	-8.57	4.03
2009	6.54	-0.64	-12.53	13.66	12.59	15.62	24.72	21.24	19.27	8.61	-8.51	2.67
2010	-0.50	-15.46	-2.63	5.28	15.60	20.13	22.54	24.88	19.19	-0.84	1.98	-6.08
2011	2.01	0.63	-0.36	0.44	13.42	22.82	20.45	NaN	14.03	0.37	-5.27	-1.50
2012	NaN	NaN	-21.44	3.39	12.82	21.32	23.37	22.41	15.29	8.75	-6.18	-12.38
2013	-14.43	-22.92	-11.96	-0.48	17.31	29.57	24.01	25.53	14.76	9.40	5.14	2.68
2014	0.97	2.51	0.00	4.03	12.30	21.78	22.57	19.06	13.42	1.76	7.92	-0.91
2015	-0.75	2.56	-1.67	8.17	21.35	24.31	22.75					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.12	-5.29	0.27	-0.39
2002	-1.56	-1.69	8.19	0.38	1.64	-2.11	-1.63	-1.51	3.22	1.49	3.45	3.15
2003	2.68	-0.82	0.52	2.70	-1.57	-1.08	-0.14	-2.51	-2.36	3.07	1.29	-0.95
2004	-0.80	-9.28	-2.55	-2.34	-0.37	2.24	1.57	2.75	-2.13	-0.52	-1.75	-2.26
2005	2.83	-1.06	1.10	-0.38	-1.87	-2.81	-3.79	0.63	-0.43	-1.89	-7.64	-0.34
2006	-3.85	7.17	-1.92	-5.67	NaN	NaN	NaN	NaN	3.73	2.72	-0.58	2.05
2007	-2.88	0.93	-3.36	NaN	-5.16	0.26	0.72	1.80	1.83	-3.19	3.56	2.25
2008	-1.98	-0.40	-2.95	3.81	0.19	3.02	1.28	-3.37	-1.98	-2.29	-0.87	4.85
2009	1.40	0.49	-5.35	1.60	0.39	-1.73	0.46	-0.90	-0.29	1.24	-5.12	4.93
2010	-1.75	-2.14	-0.70	4.82	-2.79	-1.48	0.91	2.19	1.69	-2.19	5.23	-2.96
2011	1.18	5.94	7.68	-4.14	-0.32	-2.00	0.24	NaN	-0.00	-0.34	-5.49	-3.54
2012	NaN	NaN	-8.80	-1.78	-0.36	1.25	2.99	2.94	1.78	3.10	-0.71	-3.53
2013	-3.88	-8.16	-0.93	-3.61	-0.61	2.71	0.81	0.99	-1.71	4.76	2.29	2.67
2014	2.68	1.77	6.15	2.11	2.40	-0.93	-1.81	-0.97	-0.65	0.25	4.83	-1.88
2015	2.86	5.37	2.35	2.07	5.55	2.91	-1.61					

**Table P-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	32.26	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	70.97	100.00	100.00	100.00	100.00
2012	74.19	65.52	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	96.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table P-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Wind speed, in meters per second

File name: AK108\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.06	NaN	NaN	6.68
2004	6.81	NaN	NaN	3.37	5.22	4.31	3.66	3.88	NaN	4.04	4.96	5.52
2005	NaN	6.90	6.15	4.63	NaN	5.33	4.13	2.92	NaN	NaN	NaN	NaN
2006	NaN	NaN	4.74	6.01	3.93	3.79	3.68	3.56	3.27	4.32	NaN	NaN
2007	3.23	NaN	NaN	NaN	5.37	5.17	4.19	3.39	3.68	NaN	NaN	3.89
2008	4.84	4.66	NaN	4.60	5.93	3.48	4.03	3.62	3.98	4.58	5.12	4.83
2009	5.09	4.53	NaN	3.95	4.44	5.13	NaN	4.08	4.72	NaN	NaN	5.20
2010	6.50	NaN	NaN	4.42	7.01	5.31	3.85	3.55	3.43	NaN	4.89	5.10
2011	4.88	NaN	3.45	6.46	3.24	5.32	3.68	NaN	3.37	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.93	4.86	NaN	NaN
2013	NaN	NaN	NaN	6.72	3.81	3.71	4.26	3.38	3.87	NaN	NaN	6.26
2014	6.59	NaN	3.80	3.97	4.55	3.47	3.98	4.27	5.03	NaN	4.78	NaN
2015	6.71	NaN	NaN	4.45	3.79	3.81	3.69					

**Table P-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.78	NaN	NaN	15.37
2004	25.58	NaN	NaN	12.01	13.89	10.84	12.07	14.23	NaN	12.68	13.69	23.95
2005	NaN	18.08	18.29	12.83	NaN	11.13	9.97	11.96	NaN	NaN	NaN	NaN
2006	NaN	NaN	17.70	17.24	12.15	13.49	13.13	11.67	12.20	14.16	NaN	NaN
2007	16.68	NaN	NaN	NaN	16.57	13.63	9.61	9.97	9.69	NaN	NaN	15.48
2008	25.20	19.34	NaN	19.02	16.42	8.58	12.43	11.11	10.21	13.48	13.33	22.53
2009	16.82	21.45	NaN	16.67	13.65	10.32	NaN	11.33	13.64	NaN	NaN	17.87
2010	25.59	NaN	NaN	17.26	16.21	14.04	12.74	10.44	9.05	NaN	20.07	21.39
2011	25.10	NaN	14.25	21.09	12.11	11.19	8.93	NaN	9.38	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.17	17.19	NaN	NaN
2013	NaN	NaN	NaN	19.66	13.06	10.38	13.39	11.08	9.99	NaN	NaN	20.08
2014	18.54	NaN	13.35	15.10	14.51	8.90	12.68	9.96	15.55	NaN	15.79	NaN
2015	19.81	NaN	NaN	15.96	12.96	9.22	10.17					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.05	NaN	NaN	1.32
2004	1.23	NaN	NaN	-1.73	0.57	-0.07	-0.25	0.21	NaN	-0.57	NaN	0.17
2005	NaN	NaN	1.34	-0.47	NaN	0.94	0.21	-0.76	NaN	NaN	NaN	NaN
2006	NaN	NaN	-0.07	0.91	-0.73	-0.59	-0.23	-0.11	-0.74	-0.30	NaN	NaN
2007	-2.35	NaN	NaN	NaN	0.72	0.79	0.27	-0.28	-0.32	NaN	NaN	-1.46
2008	-0.74	NaN	NaN	-0.50	1.28	-0.90	0.12	-0.05	-0.02	-0.04	NaN	-0.52
2009	-0.49	NaN	NaN	-1.15	-0.21	0.75	NaN	0.41	0.72	NaN	NaN	-0.16
2010	0.92	NaN	NaN	-0.69	2.36	0.93	-0.06	-0.12	-0.57	NaN	NaN	-0.25
2011	-0.70	NaN	-1.36	1.35	-1.41	0.94	-0.24	NaN	-0.64	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.07	0.24	NaN	NaN
2013	NaN	NaN	NaN	1.61	-0.84	-0.67	0.34	-0.29	-0.13	NaN	NaN	0.91
2014	1.00	NaN	-1.00	-1.13	-0.11	-0.91	0.07	0.60	1.03	NaN	NaN	NaN
2015	1.13	NaN	NaN	-0.65	-0.86	-0.58	-0.22					

**Table P-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.06	100.00	77.42	56.67	96.77
2004	96.77	89.66	87.10	100.00	100.00	100.00	100.00	100.00	93.33	100.00	100.00	100.00
2005	87.10	100.00	100.00	100.00	93.55	100.00	100.00	100.00	93.33	87.10	90.00	41.94
2006	9.68	89.29	96.77	100.00	100.00	100.00	100.00	100.00	100.00	96.77	93.33	58.06
2007	100.00	92.86	58.06	86.67	100.00	100.00	100.00	100.00	100.00	80.65	83.33	96.77
2008	100.00	100.00	80.65	100.00	100.00	100.00	100.00	96.77	100.00	96.77	100.00	100.00
2009	100.00	100.00	93.55	100.00	100.00	100.00	38.71	100.00	96.67	90.32	86.67	96.77
2010	100.00	82.14	64.52	100.00	100.00	100.00	100.00	100.00	100.00	67.74	100.00	100.00
2011	100.00	92.86	96.77	100.00	100.00	100.00	100.00	70.97	100.00	87.10	86.67	93.55
2012	74.19	24.14	35.48	46.67	38.71	50.00	29.03	58.06	100.00	100.00	86.67	87.10
2013	93.55	92.86	93.55	100.00	100.00	100.00	100.00	100.00	100.00	87.10	83.33	100.00
2014	100.00	85.71	100.00	100.00	100.00	96.67	100.00	100.00	100.00	90.32	100.00	74.19
2015	100.00	92.86	83.87	100.00	100.00	100.00	100.00					

**Table P-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Ground temperature, in degrees Celsius  
 File name: AK108\_Tg\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.06	-0.10	-1.90	-8.92
2002	-12.74	-16.56	-13.97	-12.89	-4.22	0.45	3.34	2.53	1.49	-0.48	-3.72	-9.46
2003	-13.52	-16.63	-16.12	-12.99	-5.03	1.43	3.36	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.45	-0.62	-4.15	-14.83
2005	-13.74	-16.42	-16.49	-14.71	-6.73	1.59	3.29	4.10	0.95	-0.81	-3.07	-9.50
2006	-14.08	-14.48	-17.75	-15.92	-4.58	2.69	6.35	5.28	3.16	-2.17	-5.98	-10.90
2007	-16.24	-17.32	-21.60	NaN	-8.04	NaN	NaN	NaN	2.13	-5.54	-6.94	-13.29
2008	NaN	-18.48	-20.19	-11.84	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.14	2.11	-0.10	-0.31	-2.20
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.17	0.23	-0.06	-1.10	-9.25
2015	-12.25	-14.57	-14.80	-11.80	-2.71	0.36	2.17					

**Table P-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.06	-0.27	-5.10	-11.85
2002	-16.31	-17.36	-15.62	-15.18	-11.46	-0.80	0.00	0.54	-0.06	-1.54	-7.78	-13.16
2003	-16.42	-18.34	-18.10	-16.84	-8.57	-0.47	0.56	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.88	-1.29	-10.14	-18.60
2005	-16.50	-17.55	-19.11	-17.23	-9.37	-0.44	-0.15	0.53	-0.50	-2.16	-6.55	-12.28
2006	-17.69	-18.79	-19.11	-17.85	-13.36	-0.42	1.52	0.55	-1.08	-6.17	-9.44	-15.57
2007	-18.84	-23.78	-25.08	NaN	-14.45	NaN	NaN	NaN	-7.09	-10.73	-14.08	-22.41
2008	NaN	-22.29	-23.98	-17.34	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.86	-0.04	-0.32	-0.56
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.78	-0.12	-0.12	-4.37	-11.29
2015	-15.15	-18.11	-17.82	-15.39	-8.49	-0.49	1.11					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.62	0.01	-0.26	-5.10
2002	-9.76	-15.47	-11.91	-10.41	-0.07	3.43	8.37	8.98	5.17	0.02	-0.25	-5.06
2003	-11.84	-13.63	-12.86	-6.34	-0.02	12.57	11.05	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.85	-0.16	-0.90	-8.45
2005	-8.51	-14.81	-14.45	-8.89	-0.09	11.99	8.76	8.83	3.78	-0.25	-0.56	-6.54
2006	-10.75	-9.97	-16.28	-12.81	-0.11	7.62	12.12	11.30	10.37	3.29	-1.45	-5.17
2007	-13.67	-10.29	-13.89	NaN	0.04	NaN	NaN	NaN	12.74	-1.78	-3.31	-8.41
2008	NaN	-12.75	-15.22	-6.69	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6.27	4.54	0.05	-0.53
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.90	1.38	-0.00	-0.05	-4.22
2015	-10.30	-10.66	-10.66	-8.28	-0.32	2.63	3.95					

**Table P-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.24	1.01	1.18	0.47
2002	0.38	-0.76	2.74	0.19	0.74	-0.63	-0.36	-0.84	0.19	0.62	-0.64	-0.07
2003	-0.40	-0.83	0.59	0.10	-0.07	0.35	-0.34	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.86	0.49	-1.07	-5.44
2005	-0.63	-0.62	0.23	-1.63	-1.77	0.50	-0.42	0.73	-0.36	0.30	0.01	-0.11
2006	-0.97	1.32	-1.04	-2.83	0.38	1.60	2.65	1.92	1.86	-1.06	-2.90	-1.51
2007	-3.13	-1.52	-4.89	NaN	-3.08	NaN	NaN	NaN	0.83	-4.43	-3.86	-3.90
2008	NaN	-2.68	-3.48	1.24	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.77	0.81	1.01	2.76	7.19
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.20	-1.07	1.04	1.98	0.14
2015	0.86	1.23	1.91	1.28	2.25	-0.72	-1.53					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	38.71	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.10	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	36.67	0.00	93.55	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2008	83.87	100.00	100.00	100.00	96.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
2011	90.32	85.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	90.32	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	96.77	100.00	100.00					

**Table P-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.92	-1.60	-1.63	-5.13
2002	-8.70	-12.23	-12.48	-12.07	-8.55	-4.13	-2.73	-1.98	-1.61	-1.37	-1.67	-5.11
2003	-8.91	-11.59	-12.85	-12.84	-8.88	-4.41	-2.82	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.56	-1.35	-1.55	-7.78
2005	-10.43	-12.57	-13.65	-13.63	-10.08	-5.11	-3.19	-2.16	-1.62	-1.38	-1.67	-5.71
2006	-9.23	-11.71	-13.32	-13.97	-9.76	-4.44	-2.54	-1.69	-1.30	-1.12	-1.21	-5.16
2007	-10.17	-11.93	-15.64	NaN	-11.16	-5.53	-3.14	-1.88	-1.35	-1.16	-2.07	-6.92
2008	NaN	-13.39	-14.81	-13.61	-9.50	-4.44	-2.48	-1.50	-1.23	-1.13	-1.08	-2.10
2009	-7.09	-11.08	-12.75	-13.90	-7.96	-3.95	-2.32	-1.50	NaN	-1.07	-0.99	-2.26
2010	-8.30	-11.56	-13.55	-12.69	-9.28	-4.52	NaN	-1.95	-1.44	-1.25	-1.19	-1.20
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.99	-1.57	-1.38	-1.26	-4.06
2015	-7.91	-10.74	-11.56	-11.66	-7.32	-3.81	-2.52					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.17	-1.78	-2.56	-7.27
2002	-10.72	-13.10	-13.05	-12.40	-11.50	-5.29	-3.31	-2.27	-1.79	-1.51	-3.09	-7.13
2003	-10.15	-12.92	-13.67	-13.67	-10.87	-6.18	-3.40	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.75	-1.48	-3.47	-10.31
2005	-11.69	-13.17	-14.14	-14.02	-12.47	-7.45	-3.89	-2.62	-1.81	-1.50	-3.15	-7.29
2006	-11.54	-12.42	-14.13	-14.22	-13.39	-5.84	-3.30	-2.03	-1.44	-1.21	-2.73	-8.09
2007	-11.58	-14.03	-16.65	NaN	-12.36	-8.58	-3.91	-2.43	-1.55	-1.28	-4.42	-9.02
2008	NaN	-14.04	-16.17	-16.05	-11.60	-5.98	-3.36	-1.84	-1.36	-1.19	-1.14	-4.00
2009	-8.97	-11.79	-14.39	-14.47	-11.97	-5.46	-2.98	-1.81	NaN	-1.18	-1.08	-4.97
2010	-10.78	-12.44	-14.08	-14.05	-10.65	-6.63	NaN	-2.42	-1.64	-1.37	-1.30	-1.78
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.33	-1.78	-1.50	-1.38	-6.52
2015	-9.55	-11.74	-12.29	-12.38	-10.04	-4.80	-3.07					



**Table P-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.70	-1.49	-1.42	-2.56
2002	-7.16	-10.75	-11.80	-11.53	-5.27	-3.25	-2.19	-1.73	-1.44	-1.26	-1.21	-3.12
2003	-7.13	-10.15	-12.07	-10.91	-6.17	-3.31	-2.28	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.41	-1.26	-1.17	-3.43
2005	-9.27	-11.67	-13.16	-12.46	-7.48	-3.82	-2.57	-1.77	-1.46	-1.29	-1.26	-3.12
2006	-7.28	-10.79	-11.64	-13.39	-5.82	-3.27	-2.00	-1.42	-1.14	-1.03	-0.95	-2.69
2007	-8.08	-10.66	-14.03	NaN	-8.62	-3.90	-2.41	-1.48	-1.19	-1.04	-1.02	-4.40
2008	NaN	-12.04	-13.57	-11.60	-5.95	-3.32	-1.76	-1.28	-1.06	-1.03	-0.99	-0.97
2009	-4.02	-8.97	-11.33	-12.00	-5.44	-2.94	-1.79	-1.23	NaN	-0.97	-0.88	-1.01
2010	-4.97	-10.71	-12.40	-10.65	-6.63	-3.27	NaN	-1.57	-1.24	-1.16	-1.09	-1.04
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.72	-1.40	-1.29	-1.18	-1.21
2015	-6.50	-9.51	-10.63	-10.03	-4.77	-3.05	-2.03					

## Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.41	-0.32	-0.22	-0.75
2002	-0.16	-0.70	0.58	0.69	0.43	0.27	-0.02	-0.15	-0.11	-0.08	-0.26	-0.74
2003	-0.38	-0.05	0.21	-0.08	0.09	-0.01	-0.10	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.05	-0.07	-0.13	-3.41
2005	-1.90	-1.04	-0.59	-0.87	-1.10	-0.70	-0.47	-0.33	-0.12	-0.10	-0.26	-1.33
2006	-0.69	-0.17	-0.26	-1.21	-0.78	-0.04	0.18	0.14	0.20	0.16	0.20	-0.79
2007	-1.63	-0.39	-2.58	NaN	-2.18	-1.12	-0.42	-0.05	0.16	0.13	-0.66	-2.55
2008	NaN	-1.85	-1.75	-0.85	-0.52	-0.03	0.24	0.33	0.28	0.15	0.34	2.27
2009	1.45	0.46	0.31	-1.14	1.02	0.46	0.40	0.33	NaN	0.21	0.42	2.11
2010	0.24	-0.03	-0.49	0.07	-0.30	-0.11	NaN	-0.12	0.07	0.04	0.22	3.18
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.16	-0.06	-0.10	0.15	0.32
2015	0.63	0.79	1.50	1.11	1.65	0.60	0.20					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2002	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2003	100.00	100.00	100.00	100.00	100.00	100.00	100.00	38.71	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.10	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	36.67	0.00	93.55	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2008	83.87	100.00	100.00	100.00	96.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
2011	90.32	85.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	90.32	96.77	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	96.77	100.00	100.00					

**Table P-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Incident solar flux, in watts per meter squared

File name: AK108\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	68.4	NaN	2.9	0.1
2002	0.8	22.4	94.8	173.9	NaN	NaN	NaN	NaN	NaN	NaN	1.6	0.0
2003	0.8	18.8	79.0	171.0	226.0	272.3	159.5	118.4	75.0	20.5	2.2	0.1
2004	0.8	18.1	78.7	174.5	227.9	272.3	177.2	149.1	NaN	27.9	2.0	0.1
2005	0.9	17.2	76.5	171.9	NaN	268.2	198.3	121.9	63.0	26.5	2.2	0.1
2006	0.7	14.7	76.1	167.1	207.7	203.4	187.6	105.7	75.1	21.4	2.3	0.1
2007	0.7	12.7	76.8	NaN	NaN	NaN	226.5	150.6	81.2	22.7	1.6	0.1
2008	0.8	14.8	79.5	149.6	NaN	254.5	202.1	110.9	66.6	23.5	NaN	0.1
2009	1.0	13.3	NaN	167.3	212.9	219.9	204.8	128.3	71.0	25.9	2.4	0.1
2010	1.0	11.0	NaN	159.1	228.9	241.7	185.2	122.4	73.9	24.8	2.0	0.1
2011	0.9	14.0	NaN	165.6	249.1	240.1	186.0	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	242.1	242.8	192.9	117.0	61.1	22.5	2.3	0.1
2013	0.9	NaN	NaN	156.1	229.1	231.1	183.5	116.4	70.2	26.3	2.2	0.1
2014	0.8	15.7	77.2	167.2	191.8	201.7	169.8	112.6	70.1	18.2	2.3	0.1
2015	0.8	13.6	72.7	161.0	NaN	222.1	192.9					

**Table P-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.4	NaN	0.7	0.0
2002	0.0	6.7	16.1	8.4	NaN	NaN	NaN	NaN	NaN	NaN	-0.6	-0.0
2003	-0.0	3.1	0.3	5.5	3.3	35.7	-30.2	-3.0	4.2	-3.5	0.0	0.0
2004	-0.1	2.5	-0.0	9.0	5.2	35.7	-12.5	27.7	NaN	4.0	-0.2	-0.0
2005	0.1	1.5	-2.3	6.3	NaN	31.6	8.6	0.5	-7.8	2.6	0.0	0.0
2006	-0.1	-0.9	-2.7	1.6	-14.9	-33.2	-2.1	-15.6	4.4	-2.5	0.1	-0.0
2007	-0.1	-2.9	-1.9	NaN	NaN	NaN	36.8	29.3	10.4	-1.2	-0.6	-0.0
2008	-0.0	-0.8	0.8	-15.9	NaN	17.9	12.4	-10.5	-4.2	-0.5	NaN	-0.0
2009	0.2	-2.3	NaN	1.8	-9.7	-16.7	15.1	7.0	0.2	2.0	0.2	-0.0
2010	0.2	-4.6	NaN	-6.5	6.2	5.2	-4.5	1.0	3.1	0.9	-0.2	0.0
2011	0.1	-1.6	NaN	0.1	26.4	3.5	-3.7	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	19.4	6.2	3.2	-4.3	-9.6	-1.4	0.0	0.0
2013	0.1	NaN	NaN	-9.4	6.5	-5.4	-6.3	-4.9	-0.6	2.4	0.0	0.0
2014	-0.0	0.1	-1.5	1.7	-30.8	-34.9	-19.9	-8.8	-0.7	-5.7	0.0	-0.0
2015	0.0	-2.0	-6.0	-4.5	NaN	-14.4	3.1					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	93.5	100.0	100.0
2002	100.0	100.0	96.8	96.7	58.1	53.3	48.4	93.5	93.3	90.3	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	96.8	96.8	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	96.7	96.8	100.0	100.0	100.0	90.0	100.0	100.0	100.0
2005	100.0	100.0	96.8	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	96.7	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	66.7	0.0	46.7	100.0	100.0	100.0	100.0	96.7	100.0
2008	100.0	100.0	100.0	100.0	93.5	100.0	100.0	96.8	96.7	96.8	43.3	100.0
2009	100.0	100.0	0.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	93.5	96.7	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2011	100.0	100.0	93.5	100.0	96.8	100.0	100.0	19.4	0.0	0.0	0.0	0.0
2012	0.0	0.0	93.5	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	42.9	58.1	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	93.5	100.0	100.0					

**Table P-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Reflected solar flux, in watts per meter squared

File name: AK108\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	19.1	21.6	2.3	0.0
2002	0.7	15.2	69.2	141.3	110.5	48.7	49.2	23.2	13.5	NaN	1.7	0.0
2003	0.6	13.3	62.1	144.5	175.3	55.0	35.6	25.4	41.0	10.1	1.8	0.0
2004	0.6	14.0	64.7	147.8	110.8	53.3	37.3	31.4	29.9	22.8	2.1	0.0
2005	0.7	14.0	65.6	143.9	170.7	78.9	43.1	28.8	15.9	22.8	2.3	-0.0
2006	0.6	12.1	64.6	145.0	117.3	47.6	43.3	22.5	15.1	8.7	2.1	0.1
2007	0.7	12.1	65.4	NaN	NaN	NaN	54.6	36.0	21.2	18.4	1.9	0.1
2008	0.7	13.9	69.4	125.5	129.6	55.6	52.3	27.0	21.4	22.6	NaN	0.0
2009	0.7	9.0	NaN	133.9	148.8	44.8	51.4	33.5	32.7	21.9	2.2	0.1
2010	0.8	12.7	65.6	137.7	179.1	50.0	46.0	28.1	18.6	22.2	1.9	0.1
2011	0.8	11.5	66.1	143.9	166.7	51.8	45.4	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	90.3	144.5	52.8	38.8	29.3	13.6	16.7	2.2	0.1
2013	0.8	14.0	65.2	141.7	127.8	61.7	45.1	29.4	38.7	23.5	2.0	0.1
2014	0.7	14.5	69.5	109.2	95.4	NaN	NaN	9.3	25.4	20.1	2.2	0.1
2015	0.7	11.9	60.4	136.5	91.3	52.0	48.0					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.5	3.2	0.3	-0.0
2002	0.0	2.2	3.4	7.8	-22.8	-4.1	3.9	-2.7	-9.1	NaN	-0.2	-0.0
2003	-0.0	0.3	-3.7	11.1	42.0	2.1	-9.8	-0.5	18.4	-8.3	-0.2	-0.0
2004	-0.1	1.0	-1.1	14.4	-22.5	0.4	-8.1	5.5	7.2	4.4	0.1	-0.0
2005	0.0	0.9	-0.2	10.4	37.4	26.0	-2.3	2.9	-6.8	4.4	0.3	-0.1
2006	-0.1	-1.0	-1.2	11.5	-16.0	-5.2	-2.1	-3.4	-7.6	-9.7	0.1	0.0
2007	0.0	-1.0	-0.4	NaN	NaN	NaN	9.2	10.0	-1.4	0.0	-0.1	0.0
2008	0.1	0.9	3.6	-7.9	-3.6	2.7	6.9	1.1	-1.3	4.1	NaN	-0.0
2009	0.1	-4.0	NaN	0.5	15.5	-8.1	6.0	7.6	10.0	3.5	0.2	0.0
2010	0.1	-0.3	-0.2	4.2	45.8	-2.9	0.7	2.2	-4.0	3.8	-0.1	0.0
2011	0.1	-1.6	0.3	10.5	33.5	-1.1	-0.0	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	-43.1	11.2	-0.0	-6.6	3.3	-9.0	-1.8	0.2	0.0
2013	0.2	0.9	-0.6	8.2	-5.5	8.9	-0.3	3.4	16.0	5.0	0.0	0.0
2014	0.0	1.4	3.7	-24.2	-37.9	NaN	NaN	-16.7	2.8	1.6	0.2	0.0
2015	0.0	-1.1	-5.4	3.0	-42.0	-0.8	2.7					

**Table P-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2002	100.0	100.0	100.0	100.0	100.0	96.7	100.0	100.0	96.7	93.5	100.0	100.0
2003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	73.3	0.0	56.7	100.0	100.0	100.0	100.0	96.7	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	96.8	43.3	100.0
2009	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2011	100.0	100.0	100.0	100.0	96.8	100.0	100.0	19.4	0.0	0.0	0.0	0.0
2012	0.0	0.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	76.7	90.3	100.0	100.0	100.0	96.7	100.0
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

**Table P-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Rainfall, in millimeters per hour  
 File name: AK108\_rain\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.8	0.8	0.4	NaN	0.0
2011	0.0	0.0	0.0	0.0	NaN	2.1	4.9	NaN	0.1	0.1	0.0	0.0
2012	NaN	NaN	0.0	0.0	0.0	0.1	0.3	1.8	4.4	0.9	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	NaN	4.4	2.2	1.3	NaN	0.0	0.0
2014	0.0	0.0	0.0	NaN	NaN	1.4	5.8	3.6	1.3	1.1	0.0	0.0
2015	0.0	0.0	0.0	NaN	NaN	NaN	0.0					

**Table P-1F.** Statistical summaries of rainfall data at monthly resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Accumulated Total for Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	56.2	8.9	0.9	NaN	0.0
2011	0.0	0.0	0.0	0.0	NaN	6.2	47.6	NaN	0.3	0.1	0.0	0.0
2012	NaN	NaN	0.0	0.0	0.0	0.1	1.1	22.6	54.1	3.6	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	NaN	90.5	42.1	15.1	NaN	0.0	0.0
2014	0.0	0.0	0.0	NaN	NaN	20.7	85.2	44.3	27.5	7.8	0.0	0.0
2015	0.0	0.0	0.0	NaN	NaN	NaN	0.0					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	3.2	100.0	100.0	100.0	93.3	100.0
2011	100.0	100.0	100.0	100.0	93.5	100.0	100.0	71.0	100.0	100.0	100.0	100.0
2012	74.2	65.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	93.3	100.0	100.0	100.0	87.1	96.7	96.8
2014	100.0	100.0	100.0	93.3	80.6	100.0	100.0	100.0	100.0	100.0	96.7	100.0
2015	100.0	100.0	100.0	86.7	83.9	93.3	100.0					

**Table P-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Snow depth, in centimeters

File name: AK108\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	5.8	14.1	15.7	15.8
2002	18.4	15.9	15.6	15.7	NaN	NaN	NaN	10.7	14.7	7.7	4.6	8.9
2003	10.3	7.7	12.7	18.0	14.9	7.2	15.1	12.2	11.6	20.0	27.9	25.2
2004	15.6	15.5	15.3	15.0	12.0	8.6	16.5	17.8	16.9	15.1	16.3	12.4
2005	33.2	37.5	37.4	36.1	34.7	11.4	16.1	15.6	14.0	18.3	33.0	33.1
2006	27.1	25.7	24.4	24.3	14.5	10.8	15.9	9.4	7.7	6.0	4.5	7.3
2007	8.4	6.6	7.6	7.9	17.6	11.7	13.4	11.7	11.8	8.5	6.3	7.9
2008	16.1	13.6	12.4	11.2	11.2	9.8	16.1	13.8	12.6	28.1	33.7	37.1
2009	41.5	41.8	41.3	40.4	24.0	12.0	15.1	10.4	13.9	20.5	20.5	20.6
2010	21.2	21.5	21.3	21.5	19.6	7.0	10.1	2.7	4.3	9.8	28.3	34.8
2011	35.9	35.8	NaN	NaN	NaN	NaN	NaN	NaN	6.0	6.3	10.8	11.9
2012	NaN	7.9	8.8	15.4	12.8	4.6	7.2	10.2	9.9	13.3	17.2	12.8
2013	14.6	17.5	15.3	14.5	10.6	8.3	14.7	11.1	12.7	13.4	15.8	16.1
2014	17.5	17.0	20.9	22.0	7.4	4.7	9.8	11.1	7.1	19.9	22.3	20.9
2015	21.9	20.1	NaN	NaN	NaN	NaN	NaN					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.1	1.0	14.0	13.8
2002	15.1	14.4	13.8	9.5	NaN	NaN	NaN	-1.5	8.1	3.2	2.8	4.1
2003	6.7	5.9	6.2	16.5	-0.3	1.0	7.8	7.0	7.5	12.3	13.0	15.9
2004	13.7	14.0	13.1	12.6	2.2	0.2	11.6	13.6	11.7	11.5	7.9	7.9
2005	12.3	36.3	35.3	32.6	30.3	-1.3	13.1	9.8	6.6	-0.3	28.2	25.7
2006	23.7	22.4	21.9	21.1	-0.3	-1.0	11.5	2.7	3.4	-0.3	-0.3	5.6
2007	4.9	4.9	4.6	4.7	11.8	1.9	8.5	8.5	8.6	0.5	2.5	2.6
2008	8.3	9.6	9.1	5.9	-0.2	3.2	11.5	10.5	5.7	3.6	29.7	28.9
2009	39.1	39.4	38.9	29.8	0.1	4.1	5.7	6.8	5.9	10.5	17.3	17.0
2010	17.1	20.1	18.3	18.3	-1.2	1.1	-1.3	-1.8	-0.1	1.3	11.8	28.1
2011	32.2	32.4	NaN	NaN	NaN	NaN	NaN	NaN	-1.0	-0.7	2.9	8.8
2012	NaN	2.0	6.1	7.8	-0.8	-0.6	3.1	5.6	3.3	3.5	6.8	7.5
2013	10.7	13.2	12.7	11.0	5.1	-0.1	7.6	6.4	2.9	5.6	11.5	12.6
2014	13.0	13.6	14.4	17.0	-2.0	-1.6	5.2	6.0	-1.1	4.1	18.1	15.9
2015	16.9	18.3	NaN	NaN	NaN	NaN	NaN					

**Table P-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.1	23.7	18.7	20.1
2002	24.0	18.0	17.6	19.7	NaN	NaN	NaN	17.4	17.1	15.8	8.4	15.9
2003	17.2	10.6	21.3	20.2	17.8	14.2	18.0	18.3	15.9	33.5	34.6	29.8
2004	20.3	16.1	18.0	15.9	15.7	15.8	18.5	19.8	19.2	25.3	25.5	21.7
2005	39.1	39.9	41.0	37.1	39.2	32.4	18.0	17.7	17.1	45.4	40.4	41.5
2006	30.0	27.9	26.0	31.0	24.6	16.7	19.0	19.8	10.6	10.2	8.5	10.1
2007	13.8	7.5	17.5	13.5	23.7	14.8	16.8	15.4	14.0	14.0	13.4	15.1
2008	22.3	16.4	15.5	18.2	18.4	16.8	22.5	18.7	15.4	44.5	40.5	44.6
2009	42.4	45.5	44.7	42.3	40.6	15.8	19.5	12.1	27.0	31.9	31.7	24.0
2010	25.3	22.9	24.6	25.9	24.6	11.0	13.0	5.2	6.7	17.9	44.0	39.3
2011	37.5	38.5	NaN	NaN	NaN	NaN	NaN	NaN	9.5	12.0	16.2	16.2
2012	NaN	13.6	14.1	24.6	29.8	9.4	10.2	14.7	16.2	29.4	29.6	22.7
2013	22.5	23.8	16.4	16.5	14.4	14.6	19.9	14.1	20.3	21.0	21.2	21.6
2014	35.5	22.8	26.1	27.4	26.9	10.7	13.1	15.0	13.0	28.8	29.0	30.4
2015	34.2	22.7	NaN	NaN	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.8	-0.8	-3.5	-3.9
2002	-3.9	-5.0	-5.0	-5.2	NaN	NaN	NaN	-0.7	4.2	-7.2	-14.6	-10.7
2003	-12.0	-13.3	-7.9	-2.9	-1.3	-1.0	1.5	0.8	1.1	5.1	8.7	5.5
2004	-6.7	-5.4	-5.3	-5.9	-4.3	0.3	2.8	6.4	6.3	0.2	-2.8	-7.2
2005	10.8	16.5	16.8	15.2	18.4	3.2	2.5	4.2	3.5	3.5	13.8	13.5
2006	4.7	4.8	3.8	3.3	-1.7	2.5	2.3	-2.0	-2.9	-8.8	-14.6	-12.3
2007	-13.9	-14.3	-13.0	-13.0	1.4	3.5	-0.3	0.4	1.2	-6.4	-12.8	-11.8
2008	-6.3	-7.3	-8.1	-9.7	-5.1	1.6	2.5	2.4	2.0	13.2	14.6	17.4
2009	19.1	20.9	20.8	19.4	7.7	3.7	1.4	-1.0	3.4	5.7	1.4	0.9
2010	-1.1	0.5	0.7	0.5	3.3	-1.2	-3.5	-8.7	-6.2	-5.1	9.1	15.1
2011	13.5	14.9	NaN	NaN	NaN	NaN	NaN	NaN	-4.6	-8.5	-8.4	-7.8
2012	NaN	-13.1	-11.7	-5.6	-3.5	-3.6	-6.4	-1.2	-0.7	-1.6	-1.9	-6.9
2013	-7.8	-3.5	-5.3	-6.4	-5.7	0.1	1.1	-0.3	2.1	-1.5	-3.4	-3.6
2014	-4.8	-3.9	0.3	1.0	-8.8	-3.5	-3.8	-0.3	-3.4	5.1	3.1	1.2
2015	-0.4	-0.9	NaN	NaN	NaN	NaN	NaN					



**Table P-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2002	96.8	100.0	100.0	100.0	48.4	0.0	29.0	93.5	100.0	100.0	100.0	100.0
2003	100.0	100.0	100.0	100.0	96.8	100.0	100.0	96.8	83.3	100.0	83.3	100.0
2004	100.0	100.0	93.5	100.0	100.0	100.0	100.0	96.8	100.0	96.8	100.0	100.0
2005	96.8	100.0	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	96.8	89.3	0.0	0.0	0.0	0.0	0.0	51.6	100.0	100.0	100.0	100.0
2012	74.2	86.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	0.0	0.0	0.0	0.0	0.0					

**Table P-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK108\_Smoist\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.31	0.07	NaN
2004	NaN	NaN	NaN	NaN	0.05	0.17	0.41	0.41	0.41	0.28	0.06	NaN
2005	NaN	NaN	NaN	NaN	0.03	0.08	0.38	0.41	0.41	0.22	0.09	0.04
2006	NaN	NaN	NaN	NaN	NaN	0.29	0.41	0.41	0.41	0.32	0.06	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.19	0.38	0.41	0.41	0.17	0.06	NaN
2008	NaN	NaN	NaN	NaN	0.05	0.30	0.41	0.41	0.41	0.41	0.20	0.08
2009	0.05	NaN	NaN	NaN	0.07	0.30	0.41	0.41	0.41	0.41	0.24	0.07
2010	NaN	NaN	NaN	NaN	0.05	0.21	0.39	0.41	0.41	0.39	0.20	0.08
2011	0.04	0.03	0.03	0.03	0.04	0.10	0.40	NaN	0.41	0.36	0.08	0.03
2012	NaN	NaN	NaN	NaN	0.04	0.16	0.40	0.41	0.41	0.41	0.27	0.06
2013	NaN	NaN	NaN	NaN	NaN	0.23	0.41	0.41	0.41	0.41	0.31	0.08
2014	NaN	NaN	NaN	NaN	0.07	0.18	0.41	0.41	0.41	0.41	0.30	0.06
2015	0.03	NaN	NaN	NaN	0.06	0.21	0.40					

**Table P-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.08	0.03	NaN
2004	NaN	NaN	NaN	NaN	0.02	0.08	0.41	0.41	0.41	0.09	0.03	NaN
2005	NaN	NaN	NaN	NaN	0.02	0.07	0.13	0.41	0.41	0.12	0.06	0.04
2006	NaN	NaN	NaN	NaN	NaN	0.10	0.41	0.41	0.41	0.07	0.04	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.05	0.34	0.41	0.41	0.07	0.04	NaN
2008	NaN	NaN	NaN	NaN	0.03	0.09	0.40	0.41	0.41	0.40	0.11	0.06
2009	0.04	NaN	NaN	NaN	0.06	0.10	0.41	0.41	0.41	0.41	0.08	0.05
2010	NaN	NaN	NaN	NaN	0.04	0.09	0.27	0.41	0.41	0.29	0.14	0.05
2011	0.03	0.02	0.02	0.02	0.02	0.08	0.25	NaN	0.41	0.13	0.04	0.02
2012	NaN	NaN	NaN	NaN	0.01	0.08	0.40	0.41	0.41	0.41	0.08	0.03
2013	NaN	NaN	NaN	NaN	NaN	0.09	0.41	0.41	0.41	0.41	0.10	0.04
2014	NaN	NaN	NaN	NaN	0.04	0.10	0.41	0.41	0.41	0.41	0.09	0.04
2015	0.02	NaN	NaN	NaN	0.02	0.09	0.38					

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.12	NaN
2004	NaN	NaN	NaN	NaN	0.08	0.42	0.41	0.41	0.41	0.41	0.09	NaN
2005	NaN	NaN	NaN	NaN	0.08	0.13	0.43	0.41	0.41	0.41	0.12	0.06
2006	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	0.08	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.40	0.41	0.41	0.41	0.41	0.08	NaN
2008	NaN	NaN	NaN	NaN	0.10	0.41	0.41	0.41	0.41	0.41	0.40	0.11
2009	0.06	NaN	NaN	NaN	0.10	0.41	0.41	0.41	0.41	0.41	0.41	0.09
2010	NaN	NaN	NaN	NaN	0.10	0.38	0.41	0.41	0.41	0.41	0.29	0.14
2011	0.05	0.03	0.03	0.03	0.08	0.25	0.42	NaN	0.41	0.41	0.13	0.04
2012	NaN	NaN	NaN	NaN	0.09	0.41	0.42	0.42	0.41	0.41	0.41	0.09
2013	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.41	0.41	0.41	0.13
2014	NaN	NaN	NaN	NaN	0.11	0.41	0.41	0.41	0.41	0.41	0.41	0.09
2015	0.04	NaN	NaN	NaN	0.09	0.41	0.41					

**Table P-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.00	-0.04	-0.10	NaN
2004	NaN	NaN	NaN	NaN	-0.00	-0.02	0.01	-0.00	0.00	-0.07	-0.11	NaN
2005	NaN	NaN	NaN	NaN	-0.02	-0.12	-0.02	0.00	0.00	-0.12	-0.09	-0.02
2006	NaN	NaN	NaN	NaN	NaN	0.10	0.01	0.00	0.00	-0.03	-0.11	NaN
2007	NaN	NaN	NaN	NaN	NaN	-0.01	-0.02	-0.00	-0.00	-0.18	-0.11	NaN
2008	NaN	NaN	NaN	NaN	0.00	0.10	0.01	-0.00	-0.00	0.06	0.03	0.02
2009	NaN	NaN	NaN	NaN	0.02	0.11	0.01	-0.00	-0.00	0.06	0.06	0.01
2010	NaN	NaN	NaN	NaN	-0.00	0.01	-0.01	0.00	0.00	0.04	0.03	0.02
2011	NaN	NaN	NaN	NaN	-0.01	-0.10	0.00	NaN	-0.00	0.01	-0.09	-0.03
2012	NaN	NaN	NaN	NaN	-0.02	-0.04	0.00	0.01	0.00	0.07	0.10	-0.01
2013	NaN	NaN	NaN	NaN	NaN	0.03	0.01	-0.00	0.00	0.06	0.14	0.02
2014	NaN	NaN	NaN	NaN	0.02	-0.02	0.01	0.00	0.00	0.06	0.13	-0.01
2015	NaN	NaN	NaN	NaN	0.01	0.01	-0.00					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.06	100.00	100.00	100.00	6.45
2004	12.90	0.00	0.00	10.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	16.13
2005	38.71	0.00	0.00	20.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	35.48	28.57	0.00	0.00	90.32	100.00	100.00	100.00	100.00	100.00	100.00	80.65
2007	0.00	17.86	0.00	26.67	87.10	100.00	100.00	100.00	100.00	100.00	100.00	93.55
2008	22.58	0.00	0.00	56.67	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2009	96.77	10.71	6.45	20.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	38.71	3.57	0.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	70.97	100.00	100.00	100.00	100.00
2012	9.68	0.00	0.00	6.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	29.03	0.00	0.00	26.67	80.65	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	54.84	39.29	3.23	46.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	96.77	50.00	32.26	66.67	100.00	100.00	100.00					



**Table P-11.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	997.0	993.0	992.0	992.0	989.0	993.0	NaN	1000.0
2008	996.0	NaN	1002.0	999.0	995.0	993.0	988.0	989.0	993.0	990.0	1001.0	1005.0
2009	1012.0	1009.0	1011.0	999.0	994.0	995.0	1000.0	992.0	990.0	1001.0	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	993.0	995.0	NaN	NaN	NaN
2011	NaN	NaN	NaN	1001.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table P-1I.** Statistical summaries of surface pressure data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	16.7	100.0	100.0	100.0	100.0	100.0	100.0	93.3	100.0
2008	100.0	93.1	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2009	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	70.0	0.0
2010	0.0	7.1	3.2	0.0	0.0	0.0	0.0	100.0	100.0	51.6	0.0	3.2
2011	25.8	25.0	90.3	100.0	54.8	0.0	35.5	22.6	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0					

**Table P-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Air temperature, in degrees Celsius

File name: AK108\_Tair\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	-8.85	NaN	2001	NaN	NaN	NaN	-26.19	NaN
2002	-23.01	-9.59	6.28	-4.47	-7.32	2002	-36.53	-33.21	-3.10	-25.56	-36.53
2003	-20.06	-12.50	6.81	-6.49	-8.39	2003	-35.04	-33.77	-4.06	-28.61	-35.04
2004	-25.38	-14.78	10.22	-8.63	-9.71	2004	-42.98	-37.82	-2.82	-27.86	-42.98
2005	-21.95	-13.41	6.05	-10.48	-9.72	2005	-36.87	-38.08	-5.14	-36.05	-38.08
2006	-21.03	NaN	NaN	-5.21	NaN	2006	-39.63	NaN	NaN	-29.61	NaN
2007	-21.82	-15.94	8.96	-6.49	-8.68	2007	-38.72	-40.76	-3.58	-21.29	-40.76
2008	-21.86	-12.72	8.36	-8.90	-8.57	2008	-40.93	-40.09	-5.20	-25.72	-40.93
2009	-19.51	-14.18	7.32	-8.54	-8.66	2009	-37.13	-38.29	-4.55	-30.15	-38.29
2010	-21.39	-12.63	8.60	-5.64	-8.37	2010	-38.81	-35.92	-2.40	-21.71	-40.09
2011	-20.59	-11.90	NaN	-9.10	-8.89	2011	-40.09	-31.53	NaN	-35.37	-39.57
2012	NaN	-16.69	10.43	-5.77	-8.16	2012	NaN	-40.79	-2.53	-26.61	-40.79
2013	-26.92	-14.72	9.52	-5.37	-8.71	2013	-37.91	-33.61	-6.21	-26.61	-37.91
2014	-19.42	-9.46	6.79	-5.72	-7.27	2014	-40.97	-36.62	-2.32	-27.70	-40.97
2015	-19.80	-9.69				2015	-35.09	-35.97			

**Table P-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	14.26	NaN
2002	6.79	17.63	23.47	18.51	23.47
2003	0.47	10.15	25.61	20.65	25.61
2004	-1.84	9.26	26.21	12.31	26.21
2005	4.22	14.26	22.76	12.62	22.76
2006	8.01	NaN	NaN	19.12	NaN
2007	1.68	3.94	22.76	16.70	22.76
2008	9.07	15.31	24.06	13.14	24.06
2009	6.54	13.66	24.72	19.27	24.72
2010	2.67	15.60	24.88	19.19	24.88
2011	2.01	13.42	NaN	14.03	22.82
2012	NaN	12.82	23.37	15.29	23.37
2013	-12.38	17.31	29.57	14.76	29.57
2014	2.68	12.30	22.57	13.42	22.57
2015	2.56	21.35			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	0.00	0.00	0.00	100.00	0.00
2002	100.00	100.00	100.00	100.00	100.00
2003	100.00	100.00	98.91	100.00	99.73
2004	100.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	77.17	28.26	100.00	76.16
2007	100.00	96.74	100.00	100.00	99.18
2008	100.00	100.00	98.91	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	90.22	100.00	97.53
2012	80.22	100.00	100.00	100.00	95.08
2013	98.89	100.00	100.00	100.00	99.73
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-1.68	NaN
2002	-1.28	3.26	-1.81	2.71	1.14
2003	1.68	0.35	-1.28	0.69	0.07
2004	-3.65	-1.92	2.13	-1.46	-1.25
2005	-0.22	-0.56	-2.04	-3.30	-1.26
2006	0.70	NaN	NaN	1.96	NaN
2007	-0.08	-3.09	0.87	0.69	-0.22
2008	-0.13	0.14	0.27	-1.72	-0.11
2009	2.23	-1.32	-0.77	-1.36	-0.20
2010	0.35	0.22	0.51	1.54	0.09
2011	1.15	0.96	NaN	-1.93	-0.43
2012	NaN	-3.84	2.34	1.40	0.30
2013	-5.18	-1.87	1.43	1.81	-0.25
2014	2.31	3.40	-1.30	1.46	1.19
2015	1.93	3.16			

**Table P-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Wind speed, in meters per second

File name: AK108\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	4.80	3.95	4.31	4.85
2005	6.92	5.39	4.11	NaN	NaN
2006	NaN	4.88	3.68	3.63	NaN
2007	NaN	NaN	4.24	NaN	NaN
2008	4.47	4.58	3.71	4.56	4.56
2009	4.83	4.58	NaN	NaN	NaN
2010	NaN	NaN	4.23	NaN	NaN
2011	5.78	4.37	NaN	NaN	NaN
2012	NaN	NaN	NaN	4.95	NaN
2013	NaN	5.58	3.79	NaN	5.13
2014	6.37	4.11	3.92	5.17	4.68
2015	NaN	NaN			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	-0.13	0.01	-0.27	0.03
2005	1.25	0.46	0.17	NaN	NaN
2006	NaN	-0.05	-0.27	-0.94	NaN
2007	NaN	NaN	0.30	NaN	NaN
2008	-1.21	NaN	-0.23	-0.02	-0.26
2009	-0.85	-0.35	NaN	NaN	NaN
2010	NaN	NaN	0.29	NaN	NaN
2011	0.11	-0.56	NaN	NaN	NaN
2012	NaN	NaN	NaN	0.38	NaN
2013	NaN	0.65	-0.16	NaN	0.31
2014	0.69	-0.82	-0.02	0.59	-0.14
2015	NaN	NaN			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	21.28	14.23	13.69	25.58
2005	26.47	18.29	11.96	NaN	NaN
2006	NaN	17.70	13.49	14.16	NaN
2007	NaN	NaN	13.63	NaN	NaN
2008	25.20	NaN	12.43	13.48	25.20
2009	22.53	18.78	NaN	NaN	NaN
2010	NaN	NaN	14.04	NaN	NaN
2011	28.47	21.09	NaN	NaN	NaN
2012	NaN	NaN	NaN	18.96	NaN
2013	NaN	19.66	13.39	NaN	20.08
2014	20.08	15.10	12.68	15.93	20.06
2015	NaN	NaN			

#### Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	19.57	78.02	32.60
2004	94.51	95.65	100.00	97.80	97.27
2005	95.56	97.83	100.00	90.11	90.96
2006	45.56	98.91	100.00	96.70	86.85
2007	83.33	81.52	100.00	87.91	91.51
2008	98.90	93.48	98.91	98.90	97.81
2009	100.00	97.83	79.35	91.21	91.78
2010	93.33	88.04	100.00	89.01	92.88
2011	97.78	98.91	90.22	91.21	93.97
2012	64.84	40.22	45.65	95.60	60.93
2013	91.11	97.83	100.00	90.11	95.89
2014	95.56	100.00	98.91	96.70	95.62
2015	88.89	94.57			



**Table P-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
Variable: Ground temperature, in degrees Celsius

File name: AK108\_Tg\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-0.31	NaN
2002	-12.61	-10.33	2.12	-0.90	-5.47
2003	-13.09	-11.36	NaN	NaN	NaN
2004	NaN	NaN	NaN	-1.43	NaN
2005	-14.95	-12.62	3.01	-0.97	-5.90
2006	-12.63	-12.71	4.80	-1.67	-5.64
2007	-14.74	-14.31	NaN	-3.47	NaN
2008	NaN	-12.57	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	0.56	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-0.31	NaN
2015	-11.94	-9.83			

## Minimum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-5.10	NaN
2002	-17.36	-15.62	-0.80	-7.78	-17.36
2003	-18.34	-18.10	NaN	NaN	NaN
2004	NaN	NaN	NaN	-10.14	NaN
2005	-18.60	-19.11	-0.44	-6.55	-19.11
2006	-18.79	-19.11	-0.42	-9.44	-19.11
2007	-23.78	-25.08	NaN	-14.08	NaN
2008	NaN	-23.98	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.56	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-4.37	NaN
2015	-18.11	-17.82			

## Maximum Value Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	3.62	NaN
2002	-5.10	-0.07	8.98	5.17	8.98
2003	-5.06	-0.02	NaN	NaN	NaN
2004	NaN	NaN	NaN	4.85	NaN
2005	-8.45	-0.09	11.99	3.78	11.99
2006	-6.54	-0.11	12.12	10.37	12.12
2007	-5.17	0.04	NaN	12.74	NaN
2008	NaN	5.60	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	4.54	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	1.38	NaN
2015	-4.22	-0.32			

## Anomaly Relative to the Climatological Mean (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	0.65	NaN
2002	0.10	1.28	-0.74	0.06	-0.02
2003	-0.37	0.25	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.47	NaN
2005	-2.24	-1.01	0.15	-0.01	-0.45
2006	0.08	-1.10	1.93	-0.70	-0.19
2007	-2.02	-2.70	NaN	-2.51	NaN
2008	NaN	-0.96	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	1.52	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	0.65	NaN
2015	0.78	1.79			

**Table P-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year (10 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	0.00	0.00	0.00	100.00	0.00
2002	100.00	100.00	98.91	100.00	99.73
2003	100.00	100.00	79.35	0.00	61.37
2004	0.00	0.00	29.35	100.00	40.71
2005	100.00	100.00	43.48	100.00	85.75
2006	100.00	100.00	3.26	0.00	42.19
2007	0.00	0.00	28.26	100.00	40.55
2008	94.51	98.91	0.00	0.00	39.89
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	33.70	100.00	41.92
2011	92.22	0.00	0.00	0.00	14.25
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	63.04	100.00	49.32
2015	100.00	98.91			

Seasonal/Annual Averages (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-1.72	NaN
2002	-8.57	-11.02	-2.95	-1.55	-6.03
2003	-8.44	-11.51	NaN	NaN	NaN
2004	NaN	NaN	NaN	-1.48	NaN
2005	-10.18	-12.44	-3.47	-1.56	-6.73
2006	-8.79	-12.33	-2.87	-1.21	-6.26
2007	-8.99	-13.54	-3.49	-1.52	-6.98
2008	NaN	-12.63	-2.80	-1.15	-6.25
2009	-6.61	-11.51	-2.57	NaN	NaN
2010	-7.23	-11.83	-3.07	-1.29	-5.80
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-1.40	NaN
2015	-7.46	-10.19			

Minimum Value Each Season/Year (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-2.56	NaN
2002	-13.10	-13.05	-5.29	-3.09	-13.10
2003	-12.92	-13.67	NaN	NaN	NaN
2004	NaN	NaN	NaN	-3.47	NaN
2005	-13.17	-14.14	-7.45	-3.15	-14.14
2006	-12.42	-14.22	-5.84	-2.73	-14.22
2007	-14.03	-16.65	-8.58	-4.42	-16.65
2008	NaN	-16.17	-5.98	-1.36	-16.17
2009	-11.79	-14.47	-5.46	NaN	NaN
2010	-12.44	-14.08	-6.63	-1.64	-14.08
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-1.78	NaN
2015	-11.74	-12.38			

Maximum Value Each Season/Year (120 cm depth):

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-1.42	NaN
2002	-2.56	-5.27	-1.73	-1.21	-1.21
2003	-3.12	-6.17	NaN	NaN	NaN
2004	NaN	NaN	NaN	-1.17	NaN
2005	-3.43	-7.48	-1.77	-1.26	-1.26
2006	-3.12	-5.82	-1.42	-0.95	-0.95
2007	-2.69	-8.62	-1.48	-1.02	-1.02
2008	NaN	-5.95	-1.28	-0.99	-0.97
2009	-0.97	-5.44	-1.23	NaN	NaN
2010	-1.01	-6.63	-1.57	-1.09	-1.04
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	-1.18	NaN
2015	-1.21	-4.77			

**Table P-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	-0.29	NaN	2001	0.00	0.00	0.00	100.00	0.00
2002	-0.57	0.60	0.05	-0.13	0.17	2002	100.00	100.00	98.91	100.00	99.73
2003	-0.44	0.12	NaN	NaN	NaN	2003	100.00	100.00	79.35	0.00	61.37
2004	NaN	NaN	NaN	-0.06	NaN	2004	0.00	0.00	29.35	100.00	40.71
2005	-2.19	-0.82	-0.48	-0.14	-0.54	2005	100.00	100.00	43.48	100.00	85.75
2006	-0.79	-0.71	0.12	0.21	-0.06	2006	100.00	100.00	3.26	0.00	42.19
2007	-0.99	-1.91	-0.50	-0.10	-0.79	2007	0.00	0.00	28.26	100.00	40.55
2008	NaN	-1.00	0.19	0.28	-0.06	2008	94.51	98.91	0.00	0.00	39.89
2009	1.39	0.11	0.42	NaN	NaN	2009	0.00	0.00	0.00	0.00	0.00
2010	0.76	-0.21	-0.08	0.13	0.39	2010	0.00	0.00	33.70	100.00	41.92
2011	NaN	NaN	NaN	NaN	NaN	2011	92.22	0.00	0.00	0.00	14.25
2012	NaN	NaN	NaN	NaN	NaN	2012	0.00	0.00	0.00	0.00	0.00
2013	NaN	NaN	NaN	NaN	NaN	2013	0.00	0.00	0.00	0.00	0.00
2014	NaN	NaN	NaN	0.02	NaN	2014	0.00	0.00	63.04	100.00	49.32
2015	0.53	1.43				2015	100.00	98.91			

**Table P-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Incident solar flux, in watts per meter squared  
 File name: AK108\_So\_d\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	31.1	NaN	2001	NaN	NaN	NaN	-1.1	NaN
2002	7.3	NaN	NaN	NaN	NaN	2002	2.1	NaN	NaN	NaN	NaN
2003	6.1	158.5	183.4	32.4	95.3	2003	0.9	4.7	2.2	0.3	2.4
2004	6.1	159.3	198.7	31.4	99.5	2004	0.9	5.5	17.6	-0.7	6.7
2005	5.7	153.3	195.3	30.5	96.4	2005	0.5	-0.5	14.2	-1.6	3.6
2006	4.8	149.9	165.8	32.8	88.6	2006	-0.3	-3.9	-15.4	0.7	-4.3
2007	4.2	NaN	NaN	35.4	NaN	2007	-1.0	NaN	NaN	3.2	NaN
2008	5.0	143.2	189.3	NaN	NaN	2008	-0.2	-10.6	8.1	NaN	NaN
2009	4.5	NaN	184.0	33.0	NaN	2009	-0.7	NaN	2.8	0.9	NaN
2010	3.8	155.7	182.5	33.8	94.3	2010	-1.4	1.9	1.3	1.6	1.4
2011	4.7	165.2	NaN	NaN	NaN	2011	-0.5	11.4	NaN	NaN	NaN
2012	NaN	163.5	183.6	28.6	NaN	2012	NaN	9.7	2.4	-3.6	NaN
2013	NaN	NaN	176.4	32.4	NaN	2013	NaN	NaN	-4.8	0.3	NaN
2014	5.2	145.2	160.9	30.1	85.9	2014	0.0	-8.6	-20.2	-2.1	-6.9
2015	4.5	147.5				2015	-0.7	-6.3			

**Table P-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.0	0.0	0.0	97.8	0.0
2002	100.0	83.7	65.2	94.5	85.8
2003	100.0	100.0	97.8	100.0	99.5
2004	100.0	97.8	100.0	96.7	98.6
2005	100.0	96.7	100.0	100.0	99.2
2006	100.0	98.9	98.9	100.0	99.5
2007	100.0	55.4	82.6	98.9	84.1
2008	100.0	97.8	98.9	79.1	94.0
2009	100.0	65.2	100.0	100.0	91.2
2010	100.0	96.7	100.0	98.9	98.9
2011	100.0	96.7	72.8	0.0	58.9
2012	0.0	95.7	100.0	100.0	82.5
2013	82.2	85.9	100.0	98.9	91.8
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	96.7			

**Table P-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Reflected solar flux, in watts per meter squared

File name: AK108\_So\_u\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	14.4	NaN
2002	5.0	106.6	40.2	12.0	41.5
2003	4.4	127.1	38.6	17.5	47.2
2004	4.7	107.3	40.5	18.3	42.9
2005	4.6	126.5	50.0	13.8	49.0
2006	4.0	108.6	37.9	8.6	40.0
2007	4.0	NaN	NaN	14.0	NaN
2008	4.7	108.0	45.0	NaN	NaN
2009	3.0	NaN	43.2	19.0	NaN
2010	4.2	127.4	41.3	14.5	47.2
2011	3.9	124.9	NaN	NaN	NaN
2012	NaN	101.0	40.2	10.9	NaN
2013	4.7	111.2	45.2	21.4	45.9
2014	4.8	91.2	NaN	16.1	32.1
2015	4.0	95.6			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	0.0	NaN
2002	0.7	-3.6	-1.6	-2.4	-1.0
2003	0.0	16.9	-3.2	3.1	4.8
2004	0.4	-2.9	-1.3	3.9	0.4
2005	0.3	16.3	8.2	-0.6	6.6
2006	-0.4	-1.7	-3.9	-5.8	-2.4
2007	-0.3	NaN	NaN	-0.4	NaN
2008	0.4	-2.2	3.2	NaN	NaN
2009	-1.3	NaN	1.4	4.6	NaN
2010	-0.1	17.1	-0.5	0.1	4.8
2011	-0.5	14.7	NaN	NaN	NaN
2012	NaN	-9.2	-1.6	-3.5	NaN
2013	0.3	1.0	3.4	7.0	3.4
2014	0.4	-19.0	NaN	1.7	-10.4
2015	-0.3	-14.6			

**Table P-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.0	0.0	0.0	100.0	0.0
2002	100.0	100.0	98.9	96.7	98.9
2003	100.0	100.0	98.9	100.0	99.7
2004	100.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	98.9	100.0	99.7
2007	100.0	57.6	85.9	98.9	85.5
2008	100.0	100.0	98.9	80.2	94.8
2009	100.0	66.3	100.0	100.0	91.5
2010	100.0	100.0	100.0	98.9	99.7
2011	100.0	98.9	72.8	0.0	59.5
2012	0.0	97.8	100.0	100.0	83.1
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	89.1	98.9	97.0
2015	100.0	100.0			

**Table P-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Rainfall, in millimeters per hour  
 File name: AK108\_rain\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Maximum Value Each Season/Year:

Accumulated Total for Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	0.8	NaN	2010	NaN	NaN	NaN	9.8	NaN
2011	0.0	2.7	NaN	0.1	4.9	2011	0.0	5.7	NaN	0.4	66.8
2012	NaN	0.0	1.8	4.4	4.4	2012	NaN	0.0	23.8	57.7	81.5
2013	0.0	0.0	4.4	NaN	4.4	2013	0.0	0.0	158.4	NaN	173.5
2014	0.0	NaN	5.8	1.3	5.8	2014	0.0	NaN	150.2	35.3	202.9
2015	0.0	NaN				2015	0.0	NaN			

**Table P-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.—Continued

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	34.8	97.8	41.6
2011	100.0	97.8	90.2	100.0	97.0
2012	80.2	100.0	100.0	100.0	95.1
2013	100.0	100.0	97.8	94.5	97.8
2014	98.9	91.3	100.0	98.9	97.5
2015	100.0	90.2			

**Table P-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek

Variable: Snow depth, in centimeters

File name: AK108\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	11.9	NaN
2002	16.7	14.8	NaN	9.0	12.0
2003	9.0	15.2	11.5	19.8	15.2
2004	18.9	14.1	14.3	16.1	14.7
2005	27.3	36.0	14.4	21.7	26.6
2006	28.7	21.0	12.0	6.1	14.7
2007	7.5	11.2	12.3	8.9	10.0
2008	12.5	11.6	13.3	24.8	18.0
2009	40.1	35.2	12.5	18.3	25.1
2010	21.1	20.8	6.6	14.1	16.8
2011	35.5	NaN	NaN	7.7	NaN
2012	11.0	12.3	7.4	13.5	11.1
2013	14.9	13.5	11.4	13.9	13.7
2014	16.9	16.7	8.6	16.5	15.1
2015	21.0	NaN			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	-0.1	NaN
2002	13.8	-2.1	NaN	2.8	-2.1
2003	4.1	-0.3	1.0	7.5	-0.3
2004	13.7	2.2	0.2	7.9	0.2
2005	7.9	30.3	-1.3	-0.3	-1.3
2006	22.4	-0.3	-1.0	-0.3	-1.0
2007	4.9	4.6	1.9	0.5	0.5
2008	2.6	-0.2	3.2	3.6	-0.2
2009	28.9	0.1	4.1	5.9	0.1
2010	17.0	-1.2	-1.8	-0.1	-1.8
2011	28.1	NaN	NaN	-1.0	NaN
2012	2.0	-0.8	-0.6	3.3	-0.8
2013	7.5	5.1	-0.1	2.9	-0.1
2014	12.6	-2.0	-1.6	-1.1	-2.0
2015	15.9	NaN			

**Table P-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	23.7	NaN
2002	24.0	19.7	NaN	17.1	24.0
2003	17.2	21.3	18.3	34.6	34.6
2004	29.8	18.0	19.8	25.5	25.5
2005	39.9	41.0	32.4	45.4	45.4
2006	41.5	31.0	19.8	10.6	31.0
2007	13.8	23.7	16.8	14.0	23.7
2008	22.3	18.4	22.5	44.5	44.6
2009	45.5	44.7	19.5	31.9	45.5
2010	25.3	25.9	13.0	44.0	44.0
2011	39.3	NaN	NaN	16.2	NaN
2012	24.9	29.8	14.7	29.6	29.8
2013	23.8	16.5	19.9	21.2	23.8
2014	35.5	27.4	15.0	29.0	35.5
2015	34.2	NaN			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	0.0	0.0	0.0	100.0	0.0
2002	98.9	82.6	41.3	100.0	80.5
2003	100.0	98.9	98.9	89.0	96.7
2004	100.0	97.8	98.9	98.9	98.9
2005	98.9	97.8	100.0	100.0	99.2
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	97.8	100.0	100.0	99.5
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0
2010	100.0	98.9	100.0	100.0	99.7
2011	95.6	0.0	17.4	100.0	52.9
2012	86.8	100.0	100.0	100.0	96.7
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	0.0			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2001	NaN	NaN	NaN	-3.0	NaN
2002	-4.1	-4.4	NaN	-5.9	-4.1
2003	-11.8	-4.0	0.2	5.0	-0.9
2004	-1.9	-5.1	3.0	1.2	-1.3
2005	6.5	16.9	3.1	6.9	10.5
2006	8.0	1.9	0.7	-8.8	-1.3
2007	-13.3	-8.0	1.0	-6.0	-6.1
2008	-8.3	-7.5	2.0	10.0	1.9
2009	19.3	16.0	1.2	3.5	9.0
2010	0.3	1.6	-4.7	-0.8	0.7
2011	14.7	NaN	NaN	-7.2	NaN
2012	-9.7	-6.9	-3.9	-1.4	-5.0
2013	-5.9	-5.7	0.1	-0.9	-2.4
2014	-3.9	-2.4	-2.7	1.6	-1.0
2015	0.2	NaN			

**Table P-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
Variable: Soil moisture, in water fraction by volume

File name: AK108\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.26	NaN
2004	NaN	NaN	0.33	0.25	NaN
2005	NaN	NaN	0.29	0.24	NaN
2006	NaN	NaN	0.37	0.26	NaN
2007	NaN	NaN	0.33	0.21	NaN
2008	NaN	NaN	0.37	0.34	NaN
2009	NaN	NaN	0.37	0.35	NaN
2010	NaN	NaN	0.34	0.33	NaN
2011	0.05	0.03	NaN	0.28	0.16
2012	NaN	NaN	0.33	0.37	NaN
2013	NaN	NaN	0.35	0.38	NaN
2014	NaN	NaN	0.34	0.37	NaN
2015	NaN	NaN			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.41	NaN
2004	NaN	NaN	0.42	0.41	NaN
2005	NaN	NaN	0.43	0.41	NaN
2006	NaN	NaN	0.41	0.41	NaN
2007	NaN	NaN	0.41	0.41	NaN
2008	NaN	NaN	0.41	0.41	NaN
2009	NaN	NaN	0.41	0.41	NaN
2010	NaN	NaN	0.41	0.41	NaN
2011	0.14	0.08	NaN	0.41	0.42
2012	NaN	NaN	0.42	0.41	NaN
2013	NaN	NaN	0.41	0.41	NaN
2014	NaN	NaN	0.41	0.41	NaN
2015	NaN	NaN			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	0.03	NaN
2004	NaN	NaN	0.08	0.03	NaN
2005	NaN	NaN	0.07	0.06	NaN
2006	NaN	NaN	0.10	0.04	NaN
2007	NaN	NaN	0.05	0.04	NaN
2008	NaN	NaN	0.09	0.11	NaN
2009	NaN	NaN	0.10	0.08	NaN
2010	NaN	NaN	0.09	0.14	NaN
2011	0.02	0.02	NaN	0.04	0.02
2012	NaN	NaN	0.08	0.08	NaN
2013	NaN	NaN	0.09	0.10	NaN
2014	NaN	NaN	0.10	0.09	NaN
2015	NaN	NaN			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	-0.05	NaN
2004	NaN	NaN	-0.01	-0.06	NaN
2005	NaN	NaN	-0.05	-0.07	NaN
2006	NaN	NaN	0.03	-0.05	NaN
2007	NaN	NaN	-0.02	-0.10	NaN
2008	NaN	NaN	0.03	0.03	NaN
2009	NaN	NaN	0.03	0.04	NaN
2010	NaN	NaN	-0.01	0.02	NaN
2011	NaN	NaN	NaN	-0.03	NaN
2012	NaN	NaN	-0.01	0.06	NaN
2013	NaN	NaN	0.01	0.07	NaN
2014	NaN	NaN	-0.01	0.07	NaN
2015	NaN	NaN			



**Table P-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	19.57	100.00	30.41
2004	6.59	36.96	100.00	100.00	61.75
2005	18.89	40.22	100.00	100.00	72.05
2006	55.56	30.43	100.00	100.00	69.86
2007	33.33	38.04	100.00	100.00	69.04
2008	39.56	52.17	98.91	100.00	73.22
2009	71.11	42.39	100.00	100.00	78.36
2010	48.89	53.26	100.00	100.00	75.62
2011	100.00	100.00	90.22	100.00	97.53
2012	37.36	35.87	100.00	100.00	68.31
2013	44.44	35.87	100.00	100.00	70.14
2014	65.56	50.00	100.00	100.00	78.90
2015	83.33	66.30			

**Table P-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Marsh Creek  
 Variable: Surface pressure, in millibars  
 File name: AK108\_P\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN	2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN	2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	981.5	976.2	NaN	2007	NaN	NaN	970.0	954.0	NaN
2008	978.4	983.6	978.4	978.0	980.3	2008	954.0	961.0	961.0	956.0	954.0
2009	983.3	985.7	981.4	NaN	NaN	2009	952.0	963.0	966.0	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table P-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	993.0	1007.0	NaN
2008	1000.0	1002.0	993.0	1001.0	1005.0
2009	1012.0	1011.0	1000.0	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0
2007	0.0	39.1	100.0	97.8	67.9
2008	97.8	100.0	98.9	100.0	99.2
2009	98.9	100.0	100.0	90.1	88.8
2010	2.2	1.1	33.7	50.5	22.2
2011	17.8	81.5	19.6	0.0	29.6
2012	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2001	NaN	NaN	NaN	NaN	NaN
2002	NaN	NaN	NaN	NaN	NaN
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

## Q. Camden Bay

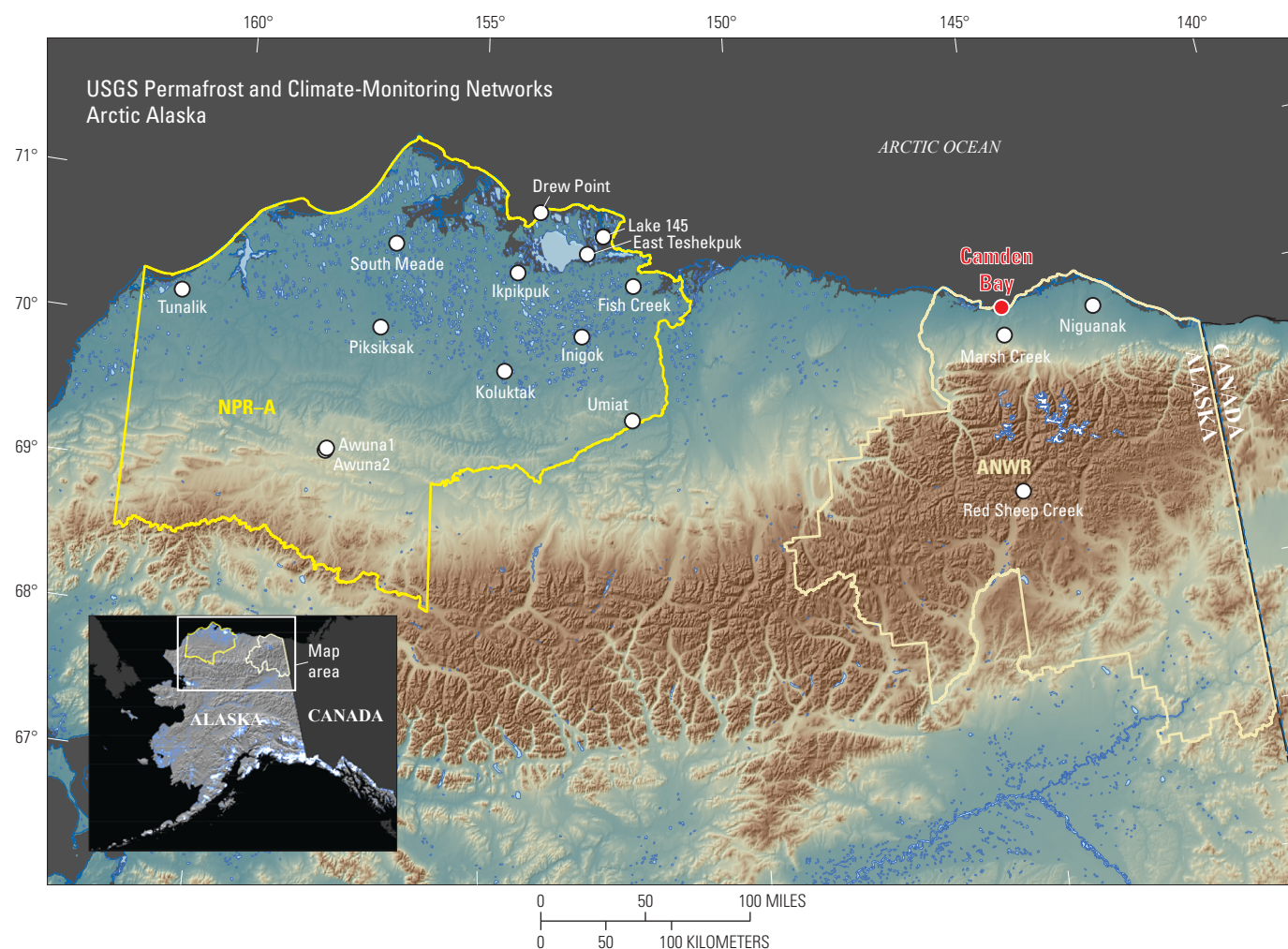
GTN-P code: U34

Latitude: 69°58.317'N

Longitude: 144°46.234'W

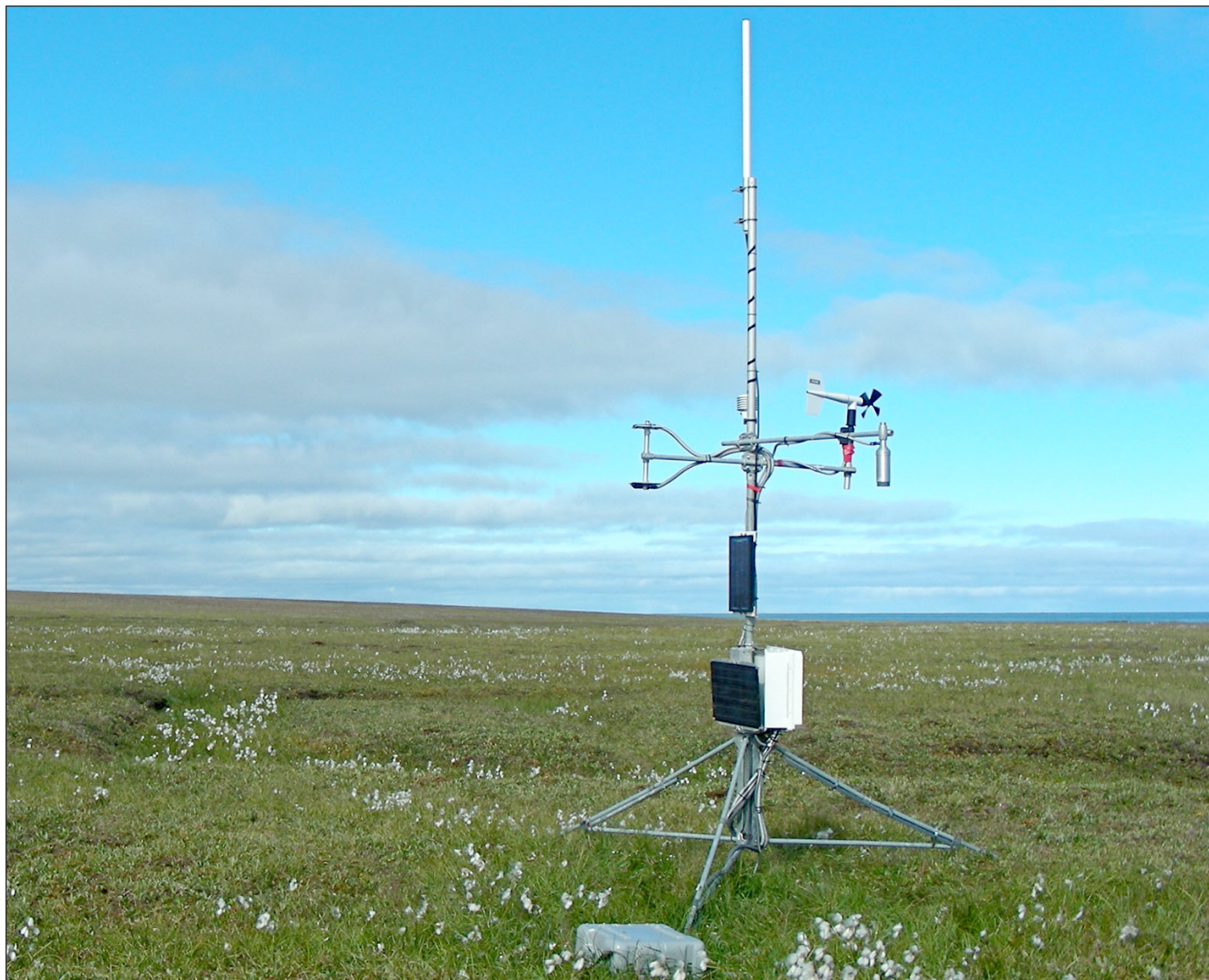
Elevation: 4 meters above mean sea level

Installation date: 14 AUG 2003



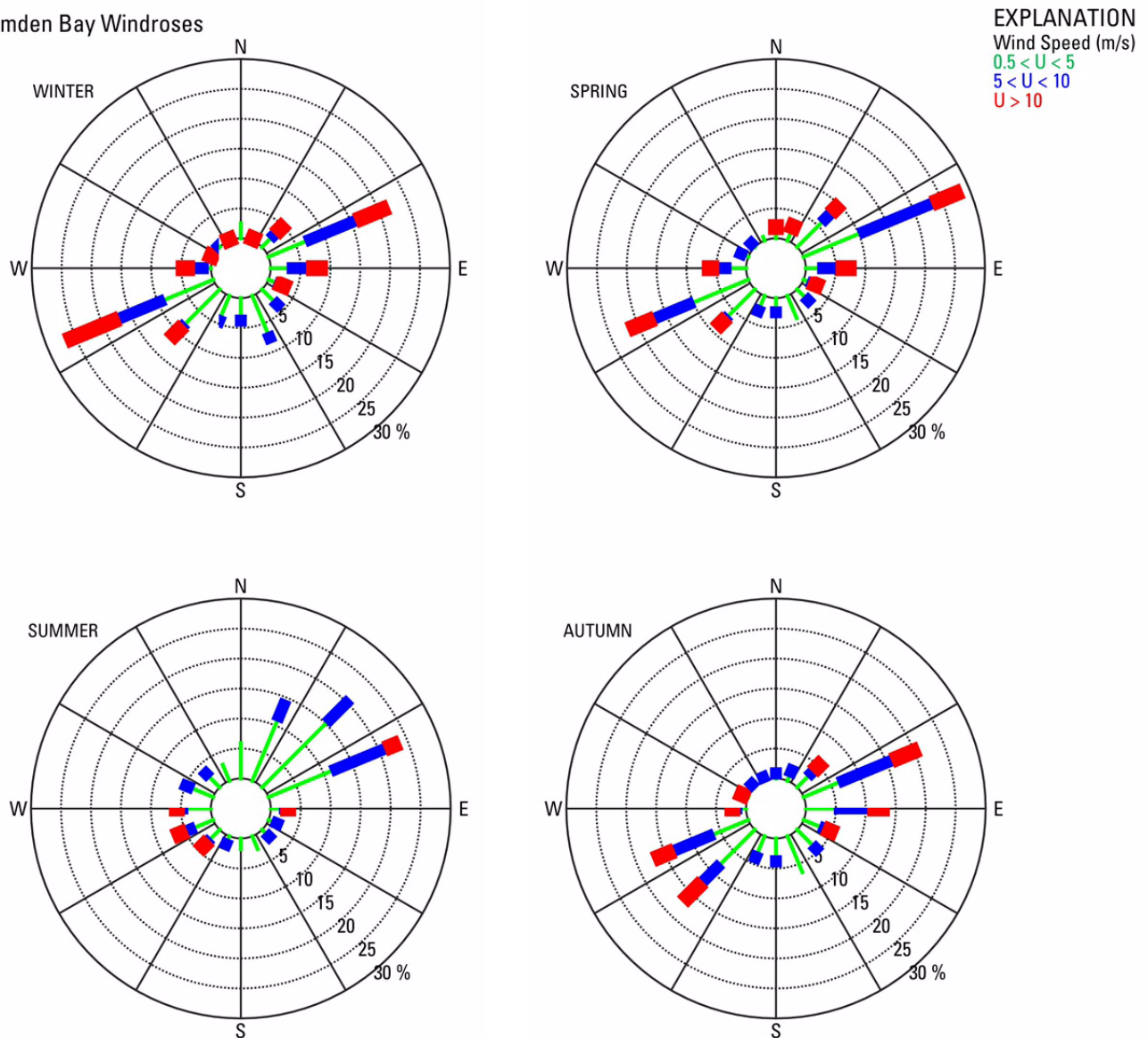
**Figure Q-1.** Location map presenting the specific location of the Camden Bay site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)





**Figure Q–2.** Camden Bay station in summer 2008.

Camden Bay Windroses



**Figure Q-3.** Camden Bay seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table Q-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
 Variable: Air temperature, in degrees Celsius  
 File name: AK110\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.04	-3.79	-17.70	-21.96
2004	-25.36	-33.03	-29.41	-18.65	-5.01	NaN	NaN	NaN	0.59	-8.19	-17.73	-24.03
2005	-22.68	-26.29	-23.26	-16.18	-2.84	1.58	5.46	NaN	NaN	NaN	-23.97	-20.97
2006	-25.44	-19.89	-27.77	-19.32	-1.62	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	-5.87	4.72	7.01	6.78	2.90	-8.29	-11.82	-19.45
2008	-27.62	-26.95	-29.73	-12.40	-1.96	4.09	7.95	4.74	0.54	-8.60	-15.40	-18.90
2009	-25.98	-26.16	-29.89	-14.95	-3.40	2.45	5.71	5.53	1.55	-4.88	-20.29	-19.08
2010	-26.77	-24.22	-25.50	-11.13	-5.24	2.27	7.05	6.94	2.37	-6.69	-10.24	-26.16
2011	-25.26	-21.23	-22.12	-18.94	-5.12	2.15	6.09	5.34	1.94	-5.19	-21.12	-26.31
2012	-29.59	-24.41	-33.10	-15.38	-4.75	3.93	8.69	8.65	3.28	-4.05	-16.62	-26.73
2013	-26.98	-31.61	-24.07	-18.43	-5.26	4.27	6.92	6.90	-0.19	-4.45	-14.31	-20.83
2014	-22.24	-24.85	-21.30	-14.32	-0.84	2.44	6.02	4.71	1.20	-5.45	-13.95	-22.27
2015	-23.01	-20.43	-22.54	-12.08	-0.29	5.71	4.77					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-10.29	-16.21	-33.80	-35.23
2004	-39.84	-46.14	-44.23	-34.09	-18.03	NaN	NaN	NaN	-10.20	-24.95	-31.77	-42.62
2005	-39.45	-35.60	-39.88	-35.60	-16.05	-3.04	-1.49	NaN	NaN	NaN	-38.38	-40.97
2006	-37.63	-41.50	-39.94	-31.27	-20.52	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	-18.61	0.32	1.91	-5.19	-13.07	-19.52	-21.67	-39.10
2008	-44.78	-42.31	-44.31	-30.05	-9.95	-3.12	1.34	-1.59	-11.00	-22.00	-28.20	-37.34
2009	-39.84	-42.54	-40.62	-33.51	-15.76	-1.04	-0.07	-1.83	-8.24	-17.17	-32.01	-32.81
2010	-41.54	-42.01	-37.11	-27.81	-19.82	-2.14	-1.70	-0.14	-9.05	-14.53	-29.63	-43.01
2011	-45.27	-38.94	-35.47	-31.66	-23.49	-4.07	1.14	-3.38	-5.35	-21.07	-37.54	-40.31
2012	-44.10	-46.81	-43.81	-33.46	-19.47	-1.83	1.88	-1.56	-6.40	-18.92	-30.40	-41.36
2013	-40.11	-43.49	-34.89	-35.97	-25.07	-6.70	1.14	-3.45	-7.51	-17.59	-29.15	-38.35
2014	-41.07	-43.77	-39.52	-30.99	-10.21	-2.41	-0.60	-1.87	-7.72	-17.04	-27.28	-36.05
2015	-35.92	-38.85	-39.48	-25.40	-9.44	-3.18	-0.81					

**Table Q-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	12.28	12.58	1.85	-9.44
2004	-1.03	-22.47	-1.48	3.58	5.60	NaN	NaN	NaN	12.35	1.91	-8.17	-3.14
2005	2.30	-15.49	1.09	5.53	3.33	15.47	16.82	NaN	NaN	NaN	-12.25	-2.31
2006	-17.11	10.83	-19.92	-9.39	9.79	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	13.62	18.84	16.97	19.97	18.57	-0.45	-5.79	-4.54
2008	2.54	-3.42	-7.99	4.16	11.54	14.41	22.42	11.03	6.53	-1.09	-6.95	-0.45
2009	4.55	-4.08	-11.04	11.63	8.33	9.36	18.20	17.17	18.40	4.13	-9.34	0.95
2010	-11.00	-14.69	-12.40	2.11	3.14	9.64	21.94	24.15	15.71	0.05	1.19	-8.21
2011	1.91	-0.06	-6.39	-0.15	8.43	15.91	16.79	15.07	13.08	0.75	-3.77	-5.21
2012	-8.76	-1.20	-21.17	0.36	5.88	18.82	20.33	17.63	14.37	10.75	-5.30	-15.04
2013	-15.93	-22.65	-13.67	-1.03	6.05	25.28	19.99	20.82	8.01	5.01	5.54	3.10
2014	-5.15	-2.76	-4.05	3.91	6.04	18.19	16.06	14.39	8.01	3.14	1.71	-4.31
2015	-5.81	0.03	-4.21	5.26	14.17	24.46	16.62					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.27	2.25	-1.06	0.77
2004	-0.29	-8.08	-3.53	-3.40	-1.69	NaN	NaN	NaN	-0.65	-2.14	-1.09	-1.30
2005	2.38	-1.34	2.63	-0.93	0.48	-1.78	-1.10	NaN	NaN	NaN	-7.33	1.76
2006	-0.38	5.06	-1.88	-4.07	1.70	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	-2.55	1.36	0.45	0.77	1.67	-2.25	4.82	3.28
2008	-2.56	-2.00	-3.84	2.85	1.36	0.73	1.38	-1.26	-0.69	-2.55	1.24	3.83
2009	-0.92	-1.21	-4.00	0.30	-0.08	-0.91	-0.86	-0.47	0.32	1.16	-3.65	3.65
2010	-1.71	0.73	0.39	4.12	-1.93	-1.09	0.48	0.94	1.14	-0.65	6.40	-3.43
2011	-0.20	3.72	3.76	-3.69	-1.80	-1.21	-0.48	-0.66	0.71	0.85	-4.48	-3.58
2012	-4.53	0.54	-7.21	-0.13	-1.43	0.56	2.12	2.65	2.05	2.00	0.02	-4.00
2013	-1.92	-6.66	1.81	-3.18	-1.94	0.91	0.36	0.90	-1.42	1.59	2.33	1.90
2014	2.82	0.10	4.58	0.93	2.48	-0.93	-0.55	-1.29	-0.03	0.59	2.69	0.46
2015	2.05	4.52	3.35	3.17	3.03	2.35	-1.80					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	73.33	0.00	87.10	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	45.16	0.00	87.10	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	100.00	96.67	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					



**Table Q-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay

Variable: Wind speed, in meters per second

File name: AK110\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.08	4.63	6.39	4.57
2008	5.51	NaN	NaN	4.86	NaN	NaN	NaN	NaN	4.02	5.31	5.49	NaN
2009	5.15	4.99	NaN	3.90	4.08	5.01	3.85	3.61	4.20	NaN	NaN	4.75
2010	6.34	6.16	NaN	4.01	6.04	4.82	3.08	2.83	3.47	5.76	5.89	5.06
2011	NaN	6.52	NaN	5.22	3.57	4.82	3.13	3.57	3.45	4.05	5.30	4.27
2012	6.53	NaN	NaN	3.89	4.61	3.86	2.83	2.68	3.56	4.98	6.31	NaN
2013	6.99	4.23	NaN	6.25	3.93	3.26	3.52	3.13	4.02	3.51	6.64	6.45
2014	6.78	NaN	3.66	3.71	4.25	NaN	3.40	3.70	4.77	5.45	5.26	NaN
2015	5.98	NaN	5.39	3.69	3.90	3.04	3.14					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.28	13.11	18.56	20.73
2008	24.98	NaN	NaN	19.23	NaN	NaN	NaN	NaN	11.50	12.76	14.54	NaN
2009	15.71	22.25	NaN	14.20	12.50	10.11	8.93	11.98	11.10	NaN	NaN	18.68
2010	22.83	22.22	NaN	13.24	14.86	13.45	10.54	9.10	10.11	18.38	20.39	20.01
2011	NaN	26.63	NaN	17.53	11.74	10.76	7.02	9.79	9.80	13.12	13.57	19.78
2012	17.66	NaN	NaN	13.58	10.58	9.93	7.30	9.43	12.39	13.79	19.97	NaN
2013	19.63	12.60	NaN	18.23	18.86	9.32	10.72	12.62	9.43	9.74	17.17	16.52
2014	17.00	NaN	11.29	11.67	13.69	NaN	11.06	9.26	12.18	15.38	18.35	NaN
2015	17.35	NaN	20.06	12.98	14.62	8.95	8.34					



**Table Q-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.09	-0.23	0.67	-0.39
2008	-0.67	NaN	NaN	0.12	NaN	NaN	NaN	NaN	0.03	0.45	-0.23	NaN
2009	-1.03	-0.84	NaN	-0.84	-0.19	0.87	0.57	0.30	0.21	NaN	NaN	-0.21
2010	0.16	0.33	NaN	-0.73	1.77	0.69	-0.20	-0.48	-0.52	0.90	0.17	0.10
2011	NaN	0.69	NaN	0.49	-0.69	0.68	-0.15	0.25	-0.54	-0.81	-0.42	-0.69
2012	0.35	NaN	NaN	-0.85	0.34	-0.27	-0.45	-0.63	-0.44	0.12	0.59	NaN
2013	0.81	-1.60	NaN	1.52	-0.34	-0.87	0.24	-0.18	0.03	-1.35	0.93	1.49
2014	0.60	NaN	NaN	-1.03	-0.01	NaN	0.12	0.38	0.77	0.59	-0.45	NaN
2015	-0.21	NaN	NaN	-1.04	-0.37	-1.09	-0.14					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.87	100.00	100.00	100.00	100.00
2008	100.00	93.10	54.84	100.00	67.74	0.00	0.00	83.87	100.00	100.00	100.00	90.32
2009	100.00	100.00	93.55	100.00	100.00	100.00	100.00	100.00	100.00	93.55	90.00	96.77
2010	100.00	100.00	87.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	90.32	96.43	90.32	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2012	100.00	82.76	87.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	83.87
2013	100.00	100.00	87.10	96.67	100.00	100.00	100.00	100.00	100.00	96.77	96.67	100.00
2014	100.00	92.86	100.00	100.00	96.77	23.33	100.00	100.00	100.00	100.00	100.00	67.74
2015	100.00	92.86	96.77	100.00	100.00	100.00	100.00					



**Table Q-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.87	-0.00	-0.91	-14.66
2004	-10.73	-22.64	-18.01	-15.34	-1.80	NaN	NaN	NaN	6.17	-0.03	-1.92	-9.05
2005	-9.08	-15.48	-14.94	-11.21	-0.21	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.41	0.09	-1.92	-1.77
2004	-3.17	-4.42	-4.51	-2.52	-1.14	NaN	NaN	NaN	0.41	-0.09	1.92	1.77
2005	3.17	4.42	4.51	2.52	1.14	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	56.67	0.00	87.10	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	6.67	0.00	93.55	36.67	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

**Table Q-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.06	-1.89	-5.25	-11.95
2004	-14.09	-18.59	-20.98	-18.91	-14.03	NaN	NaN	NaN	-2.18	-1.89	-3.92	-8.94
2005	-10.99	-13.12	-14.12	-13.89	-10.98	-5.51	-3.34	-2.40	-1.87	-1.56	-3.75	-9.28
2006	-11.58	-14.20	-15.55	-15.99	-11.79	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.28	-2.46	-9.08	-12.81
2004	-17.45	-20.15	-22.03	-20.17	-17.41	NaN	NaN	NaN	-2.66	-2.19	-6.32	-10.86
2005	-12.35	-13.73	-14.58	-14.28	-13.05	-7.89	-4.40	-3.09	-2.21	-1.86	-7.17	-10.28
2006	-13.60	-15.06	-16.44	-16.69	-15.06	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

## Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.86	-1.76	-2.41	-9.08
2004	-11.92	-17.37	-19.90	-17.40	-9.48	NaN	NaN	NaN	-1.87	-1.58	-1.63	-6.27
2005	-9.91	-12.29	-13.72	-12.88	-7.85	-3.96	-2.48	-1.86	-1.45	-1.30	-1.38	-7.09
2006	-10.20	-13.21	-13.84	-15.02	-7.06	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table Q-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.03	-0.11	-0.95	-1.89
2004	-1.87	-3.28	-4.10	-2.65	-1.76	NaN	NaN	NaN	-0.14	-0.11	0.39	1.12
2005	1.23	2.18	2.77	2.37	1.28	0.00	0.00	0.00	0.17	0.22	0.56	0.78
2006	0.64	1.10	1.34	0.27	0.48	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2004	100.00	100.00	100.00	100.00	100.00	56.67	0.00	87.10	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	6.67	0.00	93.55	36.67	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

**Table Q-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay

Variable: Incident solar flux, in watts per meter squared

File name: AK110\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	66.8	20.0	2.3	0.1
2004	0.8	18.5	76.0	177.7	225.9	NaN	NaN	NaN	58.2	25.5	2.1	0.1
2005	0.9	15.9	73.6	169.9	210.8	254.7	203.8	115.6	52.5	22.3	2.4	0.1
2006	0.9	13.9	72.7	162.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	218.8	157.8	89.0	30.0	2.6	0.3
2008	1.4	18.6	86.4	149.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	125.3	73.9	20.8	2.1	0.1
2011	0.9	15.3	78.1	175.5	234.1	255.4	195.5	138.9	52.9	20.8	2.7	0.3
2012	0.9	15.5	77.6	153.2	234.0	236.4	195.2	120.7	58.1	19.8	2.3	0.1
2013	0.9	14.2	68.8	166.1	245.9	233.5	188.5	113.2	65.1	23.0	2.4	0.2
2014	0.9	17.9	73.2	164.3	202.3	225.7	177.3	110.4	62.6	18.4	6.1	1.0
2015	1.3	14.5	67.5	145.0	201.7	218.4	NaN					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.8	-2.1	-0.5	-0.1
2004	-0.1	3.0	2.0	16.3	5.3	NaN	NaN	NaN	-5.7	3.4	-0.6	-0.2
2005	-0.1	0.5	-0.4	8.6	-9.8	17.4	7.3	-6.9	-11.4	0.1	-0.3	-0.1
2006	-0.0	-1.6	-1.4	0.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	NaN	22.3	35.3	25.0	7.9	-0.2	0.0
2008	0.4	3.1	12.4	-12.1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.8	9.9	-1.3	-0.7	-0.1
2011	-0.1	-0.1	4.1	14.1	13.5	18.1	-1.0	16.4	-11.1	-1.3	-0.1	0.0
2012	-0.0	-0.0	3.6	-8.2	13.5	-1.0	-1.4	-1.7	-5.8	-2.3	-0.5	-0.1
2013	-0.0	-1.2	-5.2	4.7	25.3	-3.9	-8.0	-9.3	1.2	0.9	-0.3	-0.0
2014	-0.1	2.4	-0.9	2.9	-18.3	-11.7	-19.2	-12.1	-1.4	-3.8	3.3	0.8
2015	0.3	-0.9	-6.5	-16.4	-18.9	-19.0	NaN					

**Table Q-1D.** Statistical summaries of incident solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	73.3	0.0	87.1	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	96.8	100.0	61.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	80.6	56.7	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	3.2	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	96.8	100.0	100.0
2013	100.0	100.0	96.8	100.0	96.8	100.0	96.8	96.8	100.0	96.8	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	96.4	100.0	100.0	100.0	100.0	93.5					

**Table Q-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay

Variable: Reflected solar flux, in watts per meter squared

File name: AK110\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	33.7	8.3	1.5	0.0
2004	0.7	15.2	64.5	159.1	174.6	NaN	NaN	NaN	20.7	21.2	2.1	-0.0
2005	0.7	14.1	65.5	147.2	173.3	67.7	58.3	39.0	17.7	17.3	2.1	0.1
2006	0.8	13.5	66.6	139.5	124.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	199.2	79.0	73.2	63.4	35.3	23.7	5.4	1.8
2008	1.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	36.6	24.6	16.7	2.1	0.1
2010	0.8	12.6	64.8	136.7	165.2	62.1	52.9	36.3	19.6	21.4	7.7	0.4
2011	0.9	12.2	63.8	142.5	155.2	68.1	58.5	43.0	16.2	12.4	2.2	0.1
2012	0.7	13.0	64.9	126.2	167.6	56.9	57.8	34.7	16.0	13.7	2.1	0.1
2013	0.8	14.3	59.1	134.1	138.2	64.8	53.3	32.3	30.7	19.8	2.0	0.1
2014	0.8	13.9	59.4	135.9	130.6	51.1	47.3	31.0	15.3	13.6	2.8	0.1
2015	0.7	11.6	55.9	119.3	84.9	62.0	51.3					

**Table Q-1E.** Statistical summaries of reflected solar flux data at monthly resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.4	-8.5	-1.4	-0.2
2004	-0.1	1.8	2.3	22.9	27.4	NaN	NaN	NaN	-2.6	4.4	-0.8	-0.3
2005	-0.1	0.7	3.3	11.0	26.1	3.7	1.8	0.9	-5.6	0.5	-0.8	-0.2
2006	-0.0	0.2	4.4	3.3	-22.7	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	52.0	15.1	16.6	25.3	11.9	6.9	2.5	1.6
2008	0.9	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.5	1.3	-0.2	-0.8	-0.2
2010	-0.0	-0.8	2.6	0.5	18.0	-1.9	-3.7	-1.8	-3.8	4.6	4.8	0.2
2011	0.0	-1.2	1.6	6.3	8.0	4.1	1.9	4.9	-7.1	-4.4	-0.7	-0.1
2012	-0.1	-0.3	2.7	-10.0	20.4	-7.1	1.3	-3.4	-7.3	-3.1	-0.8	-0.2
2013	-0.0	0.9	-3.1	-2.1	-9.0	0.8	-3.3	-5.8	7.3	3.0	-0.9	-0.2
2014	-0.1	0.6	-2.8	-0.3	-16.6	-12.9	-9.3	-7.0	-8.1	-3.2	-0.1	-0.2
2015	-0.1	-1.8	-6.3	-16.9	-62.3	-1.9	-5.3					

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2004	100.0	100.0	100.0	100.0	100.0	73.3	0.0	87.1	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	48.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	6.5	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	96.4	100.0	100.0	100.0	100.0	100.0					

**Table Q-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



**Table Q-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
Variable: Snow depth, in centimeters

File name: AK110\_snowD\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.6	2.5	4.1	4.7
2004	4.6	6.2	7.4	26.5	19.5	NaN	NaN	4.8	5.1	8.1	14.6	15.9
2005	28.8	32.6	34.6	34.8	33.0	4.1	3.0	4.5	5.9	10.3	24.1	20.5
2006	18.6	19.3	24.5	28.1	20.0	NaN	NaN	7.7	NaN	7.1	12.6	16.7
2007	22.4	19.3	22.9	26.8	29.5	NaN	NaN	6.4	6.9	4.8	8.2	10.0
2008	9.8	9.4	10.0	10.4	11.4	4.2	17.1	9.2	4.0	13.5	19.8	21.5
2009	27.4	27.6	27.7	30.0	11.5	7.5	NaN	NaN	NaN	19.1	22.2	23.3
2010	27.6	27.6	27.5	27.0	23.0	8.1	10.4	7.9	7.1	9.0	14.5	18.4
2011	19.5	20.2	19.3	20.3	15.0	3.9	8.1	12.9	16.4	16.2	20.7	19.5
2012	NaN	23.6	25.2	28.0	28.3	7.0	5.5	14.5	21.0	24.8	31.9	31.3
2013	31.9	31.7	31.0	30.9	21.4	10.3	16.5	20.8	18.5	19.3	21.9	27.3
2014	28.6	29.3	29.1	35.3	22.3	10.2	18.6	22.8	19.1	23.0	23.4	23.9
2015	22.8	22.5	22.6	NaN	NaN	6.4	12.6					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.9	1.1	0.6	3.0
2004	3.1	4.5	3.9	22.3	4.2	NaN	NaN	3.1	1.4	3.3	9.3	13.9
2005	15.1	31.2	31.2	31.9	19.2	0.0	-1.0	0.0	0.1	5.5	17.3	17.4
2006	8.6	11.1	22.5	21.2	2.8	NaN	NaN	2.1	NaN	-0.3	7.8	10.5
2007	15.9	13.4	16.2	17.3	21.9	NaN	NaN	1.7	2.0	-0.0	3.5	6.5
2008	7.0	7.4	7.4	6.4	2.2	-0.5	5.4	2.0	-0.3	4.1	14.6	11.2
2009	25.3	25.4	24.5	14.9	-1.0	0.0	NaN	NaN	NaN	11.4	14.2	19.2
2010	25.4	26.2	25.2	24.4	2.4	-0.3	-0.0	2.3	0.5	1.1	9.5	11.7
2011	13.3	16.3	15.4	17.7	0.0	0.1	0.7	0.8	10.7	10.2	12.1	13.1
2012	NaN	13.0	17.5	22.8	14.5	-0.9	-1.7	-1.9	13.7	15.1	30.5	26.6
2013	28.6	27.5	27.4	28.4	0.5	-0.4	2.3	13.7	12.8	16.7	18.2	19.4
2014	26.7	27.0	26.0	26.3	6.2	4.8	8.5	16.3	14.7	15.4	22.1	20.6
2015	19.9	19.6	19.7	NaN	NaN	0.7	0.6					

**Table Q-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.9	5.3	6.8	9.1
2004	6.5	11.2	23.1	29.6	25.4	NaN	NaN	6.2	9.2	16.0	18.4	17.8
2005	33.5	35.2	39.2	36.2	38.0	19.0	6.4	9.1	10.2	20.0	31.7	24.1
2006	25.5	26.4	26.7	34.8	29.4	NaN	NaN	15.8	NaN	12.1	16.4	20.8
2007	30.9	25.5	26.1	32.5	33.9	NaN	NaN	11.0	13.5	12.0	10.9	13.6
2008	14.7	11.5	11.7	15.7	15.5	8.3	26.1	26.6	9.7	19.9	25.3	28.4
2009	28.1	30.1	29.9	35.2	25.1	10.8	NaN	NaN	NaN	35.5	25.8	28.4
2010	29.6	30.5	30.6	30.2	26.8	17.1	20.4	13.1	12.8	17.2	21.8	24.0
2011	22.2	22.4	21.4	22.0	21.9	9.5	13.9	20.5	19.7	22.4	27.3	26.5
2012	NaN	30.3	29.1	34.8	33.3	14.8	15.0	29.7	29.7	35.3	34.5	33.6
2013	45.9	35.9	31.7	32.6	30.5	21.3	24.4	27.1	24.2	24.1	27.4	30.5
2014	39.7	31.4	31.0	40.8	37.9	18.8	26.8	27.3	23.3	32.7	27.0	28.0
2015	24.2	25.6	24.0	NaN	NaN	13.3	21.3					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-6.7	-11.3	-14.6	-15.3
2004	-17.9	-16.2	-16.1	-0.6	-1.8	NaN	NaN	-6.9	-6.1	-5.7	-4.1	-4.2
2005	6.3	10.2	11.1	7.7	11.7	-2.8	-8.5	-7.2	-5.3	-3.5	5.5	0.5
2006	-3.9	-3.1	1.0	1.0	-1.4	NaN	NaN	-4.1	NaN	-6.7	-6.1	-3.4
2007	-0.1	-3.1	-0.6	-0.3	8.2	NaN	NaN	-5.4	-4.4	-9.0	-10.5	-10.1
2008	-12.8	-13.0	-13.5	-16.7	-10.0	-2.7	5.6	-2.6	-7.2	-0.3	1.1	1.5
2009	4.9	5.2	4.2	2.9	-9.9	0.7	NaN	NaN	NaN	5.3	3.5	3.2
2010	5.1	5.1	4.1	-0.1	1.7	1.3	-1.1	-3.8	-4.2	-4.8	-4.1	-1.6
2011	-3.0	-2.2	-4.1	-6.8	-6.3	-3.0	-3.4	1.1	5.1	2.4	2.1	-0.6
2012	NaN	1.2	1.7	0.9	7.0	0.1	-5.9	2.8	9.7	10.9	13.2	11.2
2013	9.4	9.3	7.5	3.8	0.1	3.5	5.0	9.1	7.2	5.5	3.2	7.3
2014	6.1	6.9	5.6	8.2	0.9	3.3	7.2	11.1	7.8	9.2	4.7	3.9
2015	0.3	0.0	-0.8	NaN	NaN	-0.5	1.1					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2004	100.0	93.1	100.0	100.0	100.0	76.7	0.0	90.3	100.0	100.0	96.7	100.0
2005	93.5	100.0	100.0	100.0	100.0	100.0	100.0	90.3	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	30.0	0.0	83.9	63.3	100.0	100.0	90.3
2007	100.0	96.4	100.0	96.7	100.0	36.7	0.0	87.1	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	90.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	38.7	0.0	16.7	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	90.3
2012	45.2	86.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	92.9	87.1	30.0	61.3	86.7	100.0					

**Table Q-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
Variable: Soil moisture, in water fraction by volume

File name: AK110\_Smoist\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.39	0.20	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.30	0.04	NaN
2005	NaN	NaN	NaN	NaN	0.02	0.09	0.38	0.40	0.40	0.26	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.15	0.40	0.40	0.40	0.31	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.14	0.38	0.37	0.36	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.22	0.34	0.41	0.40	0.36	0.05	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.08	0.35	0.39	0.40	0.33	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.03	0.31	0.41	0.40	0.34	0.10	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.01	0.22	0.36	0.39	0.31	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.03	0.20	0.28	0.35	0.31	0.11	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.04	0.34	0.40	0.40	0.39	0.14	NaN
2014	NaN	NaN	NaN	NaN	0.03	0.07	0.33	0.39	0.40	0.40	0.13	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.16	0.33					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.33	0.06	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.40	0.09	0.02	NaN
2005	NaN	NaN	NaN	NaN	0.01	0.04	0.24	0.39	0.40	0.05	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.04	0.39	0.39	0.40	0.05	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.01	0.36	0.34	0.34	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.00	0.28	0.41	0.39	0.27	0.00	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.01	0.28	0.28	0.38	0.17	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.02	0.04	0.37	0.38	0.23	0.03	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.00	0.02	0.33	0.34	0.22	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.03	0.04	0.21	0.32	0.29	0.01	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.02	0.09	0.40	0.39	0.38	0.02	NaN
2014	NaN	NaN	NaN	NaN	0.00	0.06	0.10	0.39	0.40	0.38	0.02	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.04	0.31					

**Table Q-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.33	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.40	0.09	NaN
2005	NaN	NaN	NaN	NaN	0.05	0.24	0.41	0.41	0.40	0.40	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.42	0.41	0.41	0.41	0.41	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.41	0.41	0.41	0.38	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.42	0.41	0.41	0.41	0.39	0.27	NaN
2009	NaN	NaN	NaN	NaN	NaN	0.32	0.42	0.41	0.41	0.39	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	0.05	0.41	0.41	0.41	0.38	0.23	NaN
2011	NaN	NaN	NaN	NaN	NaN	0.02	0.42	0.41	0.42	0.34	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	0.05	0.41	0.42	0.42	0.35	0.29	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.09	0.42	0.41	0.40	0.39	0.38	NaN
2014	NaN	NaN	NaN	NaN	0.10	0.10	0.41	0.40	0.41	0.41	0.38	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.40	0.38					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.01	-0.12	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.01	-0.02	-0.05	NaN
2005	NaN	NaN	NaN	NaN	NaN	-0.00	0.06	0.02	0.01	-0.06	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	0.05	0.07	0.02	0.01	-0.02	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	0.04	0.06	-0.01	-0.03	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	0.13	0.01	0.03	0.00	0.04	-0.04	NaN
2009	NaN	NaN	NaN	NaN	NaN	-0.02	0.03	0.00	0.01	0.00	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	-0.06	-0.02	0.02	0.01	0.02	0.01	NaN
2011	NaN	NaN	NaN	NaN	NaN	-0.08	-0.11	-0.03	-0.00	-0.02	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	-0.06	-0.13	-0.10	-0.04	-0.01	0.02	NaN
2013	NaN	NaN	NaN	NaN	NaN	-0.05	0.01	0.02	0.00	0.07	0.05	NaN
2014	NaN	NaN	NaN	NaN	NaN	-0.02	0.00	0.01	0.01	0.08	0.04	NaN
2015	NaN	NaN	NaN	NaN	NaN	0.06	0.01					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	50.00	0.00
2004	6.45	0.00	0.00	0.00	61.29	73.33	0.00	87.10	100.00	100.00	100.00	35.48
2005	41.94	0.00	0.00	13.33	100.00	100.00	100.00	100.00	100.00	100.00	53.33	0.00
2006	0.00	0.00	0.00	0.00	35.48	100.00	100.00	100.00	100.00	100.00	90.00	41.94
2007	0.00	0.00	0.00	0.00	22.58	96.67	100.00	100.00	100.00	80.65	0.00	0.00
2008	0.00	0.00	0.00	0.00	9.68	100.00	100.00	96.77	100.00	100.00	96.67	0.00
2009	0.00	0.00	0.00	0.00	32.26	100.00	100.00	100.00	100.00	100.00	73.33	0.00
2010	0.00	0.00	0.00	0.00	19.35	100.00	100.00	100.00	100.00	100.00	100.00	32.26
2011	0.00	0.00	0.00	0.00	19.35	100.00	100.00	100.00	100.00	100.00	60.00	0.00
2012	0.00	0.00	0.00	0.00	3.23	100.00	100.00	100.00	100.00	100.00	100.00	25.81
2013	0.00	0.00	0.00	0.00	32.26	100.00	100.00	100.00	100.00	100.00	100.00	83.87
2014	0.00	0.00	0.00	0.00	96.77	100.00	100.00	100.00	100.00	100.00	100.00	41.94
2015	0.00	0.00	0.00	0.00	93.55	100.00	100.00					

**Table Q-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table Q-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
 Variable: Air temperature, in degrees Celsius  
 File name: AK110\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-7.14	NaN
2004	-26.65	-17.68	NaN	-8.44	NaN
2005	-24.27	-14.07	NaN	NaN	NaN
2006	-22.18	-16.20	NaN	NaN	NaN
2007	NaN	NaN	6.20	-5.77	NaN
2008	-24.63	-14.72	5.62	-7.83	-10.35
2009	-23.60	-16.09	4.59	-7.84	-10.69
2010	-23.33	-13.99	5.46	-4.87	-9.72
2011	-24.31	-15.36	4.55	-8.09	-10.75
2012	-26.82	-17.77	7.12	-5.78	-10.82
2013	-28.34	-15.90	6.05	-6.30	-10.54
2014	-22.56	-12.13	4.41	-6.06	-9.14
2015	-21.95	-11.63			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	12.58	NaN
2004	-1.03	5.60	NaN	12.35	NaN
2005	2.30	5.53	NaN	NaN	NaN
2006	10.83	9.79	NaN	NaN	NaN
2007	NaN	NaN	19.97	18.57	NaN
2008	2.54	11.54	22.42	6.53	22.42
2009	4.55	11.63	18.20	18.40	18.40
2010	0.95	3.14	24.15	15.71	24.15
2011	1.91	8.43	16.79	13.08	16.79
2012	-1.20	5.88	20.33	14.37	20.33
2013	-15.04	6.05	25.28	8.01	25.28
2014	3.10	6.04	18.19	8.01	18.19
2015	0.03	14.17			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-33.80	NaN
2004	-46.14	-44.23	NaN	-31.77	NaN
2005	-42.62	-39.88	NaN	NaN	NaN
2006	-41.50	-39.94	NaN	NaN	NaN
2007	NaN	NaN	-5.19	-21.67	NaN
2008	-44.78	-44.31	-3.12	-28.20	-44.78
2009	-42.54	-40.62	-1.83	-32.01	-42.54
2010	-42.01	-37.11	-2.14	-29.63	-43.01
2011	-45.27	-35.47	-4.07	-37.54	-45.27
2012	-46.81	-43.81	-1.83	-30.40	-46.81
2013	-43.49	-35.97	-6.70	-29.15	-43.49
2014	-43.77	-39.52	-2.41	-27.28	-43.77
2015	-38.85	-39.48			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.22	NaN
2004	-2.42	-2.94	NaN	-1.52	NaN
2005	-0.04	0.67	NaN	NaN	NaN
2006	2.05	-1.46	NaN	NaN	NaN
2007	NaN	NaN	0.76	1.15	NaN
2008	-0.40	0.02	0.18	-0.91	-0.18
2009	0.63	-1.35	-0.85	-0.92	-0.51
2010	0.90	0.75	0.02	2.04	0.46
2011	-0.09	-0.61	-0.89	-1.17	-0.57
2012	-2.60	-3.02	1.68	1.14	-0.64
2013	-4.11	-1.15	0.61	0.62	-0.36
2014	1.66	2.61	-1.03	0.86	1.03
2015	2.28	3.11			

**Table Q-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	53.26	100.00	88.25
2005	100.00	100.00	81.52	62.64	86.03
2006	100.00	100.00	9.78	0.00	43.84
2007	0.00	33.70	98.91	100.00	66.85
2008	100.00	100.00	98.91	100.00	99.73
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

**Table Q-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay

Variable: Wind speed, in meters per second

File name: AK110\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	NaN	NaN	2004	NaN	NaN	NaN	NaN	NaN
2005	NaN	NaN	NaN	NaN	NaN	2005	NaN	NaN	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	5.03	NaN	2007	NaN	NaN	NaN	18.56	NaN
2008	4.95	NaN	NaN	4.94	NaN	2008	24.98	NaN	NaN	14.54	NaN
2009	5.08	4.27	4.15	NaN	4.39	2009	23.07	17.30	11.98	NaN	22.25
2010	5.75	4.81	3.56	5.05	4.81	2010	22.83	14.86	13.45	20.39	22.83
2011	5.33	4.17	3.83	4.26	4.31	2011	26.63	17.53	10.76	13.57	26.63
2012	NaN	4.13	3.12	4.95	4.26	2012	NaN	13.58	9.93	19.97	19.97
2013	NaN	NaN	3.31	4.70	4.85	2013	NaN	NaN	12.62	17.17	19.63
2014	6.07	3.87	NaN	5.16	NaN	2014	18.56	13.69	NaN	18.35	NaN
2015	NaN	4.32				2015	NaN	20.06			

**Table Q-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	0.00	0.00
2004	NaN	NaN	NaN	NaN	NaN	2004	0.00	0.00	0.00	0.00	0.00
2005	NaN	NaN	NaN	NaN	NaN	2005	0.00	0.00	0.00	0.00	0.00
2006	NaN	NaN	NaN	NaN	NaN	2006	0.00	0.00	0.00	0.00	0.00
2007	NaN	NaN	NaN	0.18	NaN	2007	0.00	0.00	28.26	100.00	40.55
2008	-0.49	NaN	NaN	0.10	NaN	2008	97.80	73.91	28.26	100.00	74.04
2009	-0.36	-0.17	0.60	NaN	-0.12	2009	96.67	97.83	100.00	94.51	97.81
2010	0.31	0.37	0.02	0.20	0.29	2010	98.89	95.65	100.00	100.00	98.90
2011	-0.11	-0.28	0.28	-0.58	-0.20	2011	95.56	96.74	100.00	100.00	98.08
2012	NaN	-0.31	-0.42	0.10	-0.25	2012	94.51	95.65	100.00	100.00	96.17
2013	NaN	NaN	-0.24	-0.14	0.33	2013	94.44	94.57	100.00	97.80	98.08
2014	0.64	-0.57	NaN	0.32	NaN	2014	97.78	98.91	75.00	100.00	90.14
2015	NaN	-0.12				2015	86.67	98.91			

**Table Q-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
 Variable: Ground temperature, in degrees Celsius  
 File name: AK110\_Tg\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-4.07	NaN	2003	NaN	NaN	NaN	-18.45	NaN
2004	-21.27	-18.44	NaN	-2.60	NaN	2004	-29.79	-31.02	NaN	-9.94	NaN
2005	-15.07	-12.99	NaN	NaN	NaN	2005	-18.38	-19.14	NaN	NaN	NaN
2006	NaN	NaN	NaN	NaN	NaN	2006	NaN	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table Q-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.87	NaN	2003	0.00	0.00	0.00	100.00	0.00
2004	-10.73	-1.80	NaN	6.17	NaN	2004	100.00	100.00	47.83	100.00	86.89
2005	-9.05	-0.21	NaN	NaN	NaN	2005	100.00	100.00	33.70	12.09	52.88
2006	NaN	NaN	NaN	NaN	NaN	2006	0.00	0.00	0.00	0.00	0.00
2007	NaN	NaN	NaN	NaN	NaN	2007	0.00	0.00	0.00	0.00	0.00
2008	NaN	NaN	NaN	NaN	NaN	2008	0.00	0.00	0.00	0.00	0.00
2009	NaN	NaN	NaN	NaN	NaN	2009	0.00	0.00	0.00	0.00	0.00
2010	NaN	NaN	NaN	NaN	NaN	2010	0.00	0.00	0.00	0.00	0.00
2011	NaN	NaN	NaN	NaN	NaN	2011	0.00	0.00	0.00	0.00	0.00
2012	NaN	NaN	NaN	NaN	NaN	2012	0.00	0.00	0.00	0.00	0.00
2013	NaN	NaN	NaN	NaN	NaN	2013	0.00	0.00	0.00	0.00	0.00
2014	NaN	NaN	NaN	NaN	NaN	2014	0.00	0.00	0.00	0.00	0.00
2015	NaN	NaN				2015	0.00	0.00			

Anomaly Relative to the Climatological Mean (10 cm depth):

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.74	NaN	2003	NaN	NaN	NaN	-3.06	NaN
2004	-3.10	-2.72	NaN	0.74	NaN	2004	-14.80	-17.96	NaN	-2.66	NaN
2005	3.10	2.72	NaN	NaN	NaN	2005	-10.95	-12.99	-3.73	-2.38	-7.53
2006	NaN	NaN	NaN	NaN	NaN	2006	-11.60	-14.42	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN	2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN	2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			



**Table Q-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-9.08	NaN
2004	-20.15	-22.03	NaN	-6.32	NaN
2005	-13.73	-14.58	-7.89	-7.17	-14.58
2006	-15.06	-16.69	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-1.76	NaN
2004	-9.08	-9.48	NaN	-1.58	NaN
2005	-6.27	-7.85	-1.86	-1.30	-1.30
2006	-7.09	-7.06	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-0.36	NaN
2004	-2.35	-2.84	NaN	0.04	NaN
2005	1.50	2.14	0.00	0.32	0.00
2006	0.85	0.70	NaN	NaN	NaN
2007	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN
2011	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.00	0.00	0.00	100.00	0.00
2004	100.00	100.00	47.83	100.00	86.89
2005	100.00	100.00	33.70	12.09	52.88
2006	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

**Table Q-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
Variable: Incident solar flux, in watts per meter squared

File name: AK110\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	29.6	NaN	2003	0.0	0.0	0.0	100.0	0.0
2004	6.2	159.6	NaN	28.6	NaN	2004	100.0	100.0	53.3	100.0	88.3
2005	5.3	151.3	190.7	25.7	93.9	2005	100.0	100.0	100.0	100.0	100.0
2006	4.7	NaN	NaN	NaN	NaN	2006	100.0	85.9	0.0	0.0	37.8
2007	NaN	NaN	NaN	40.4	NaN	2007	0.0	27.2	85.9	100.0	61.9
2008	6.5	NaN	NaN	NaN	NaN	2008	100.0	93.5	0.0	0.0	39.9
2009	NaN	NaN	NaN	NaN	NaN	2009	0.0	0.0	0.0	0.0	0.0
2010	NaN	NaN	NaN	32.1	NaN	2010	0.0	0.0	34.8	100.0	42.2
2011	5.1	162.4	196.0	25.4	97.9	2011	100.0	100.0	100.0	100.0	100.0
2012	5.3	155.0	183.4	26.7	92.9	2012	100.0	100.0	98.9	98.9	99.5
2013	4.8	160.3	178.4	30.2	93.4	2013	100.0	97.8	97.8	98.9	98.6
2014	5.9	146.4	170.5	28.9	88.6	2014	100.0	100.0	100.0	100.0	100.0
2015	5.2	138.0				2015	98.9	100.0			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.0	NaN
2004	1.0	7.8	NaN	-0.9	NaN
2005	0.0	-0.6	10.2	-3.8	2.1
2006	-0.6	NaN	NaN	NaN	NaN
2007	NaN	NaN	NaN	10.9	NaN
2008	1.2	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	2.6	NaN
2011	-0.1	10.6	15.5	-4.2	6.1
2012	0.1	3.1	2.9	-2.8	1.1
2013	-0.5	8.4	-2.1	0.6	1.6
2014	0.7	-5.5	-10.0	-0.7	-3.2
2015	-0.1	-13.9			

**Table Q-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
Variable: Reflected solar flux, in watts per meter squared

File name: AK110\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	14.4	NaN
2004	5.1	132.4	NaN	14.7	NaN
2005	4.6	128.5	54.9	12.4	50.5
2006	4.5	109.9	NaN	NaN	NaN
2007	NaN	NaN	71.7	21.5	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	14.5	NaN
2010	4.2	122.1	50.3	16.3	48.6
2011	4.2	120.2	56.4	10.3	48.1
2012	4.4	119.5	49.7	10.6	46.3
2013	4.7	109.9	50.0	17.5	45.7
2014	4.6	108.3	43.0	10.6	41.9
2015	3.8	86.3			

## Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	100.0	0.0
2004	100.0	100.0	53.3	100.0	88.3
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	9.8	0.0	43.8
2007	0.0	33.7	98.9	100.0	66.8
2008	83.5	0.0	0.0	0.0	12.3
2009	0.0	0.0	35.9	100.0	42.5
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	98.9	100.0	100.0	99.7
2014	100.0	100.0	100.0	100.0	100.0
2015	98.9	100.0			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.0	NaN
2004	0.6	19.3	NaN	0.3	NaN
2005	0.2	15.3	2.1	-1.9	4.8
2006	0.0	-3.3	NaN	NaN	NaN
2007	NaN	NaN	18.9	7.1	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	0.1	NaN
2010	-0.2	8.9	-2.5	1.9	3.0
2011	-0.2	7.1	3.6	-4.1	2.5
2012	-0.0	6.4	-3.1	-3.7	0.7
2013	0.3	-3.2	-2.8	3.1	0.0
2014	0.2	-4.8	-9.8	-3.8	-3.7
2015	-0.7	-26.8			

**Table Q-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table Q-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay

Variable: Snow depth, in centimeters

File name: AK110\_snowD\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	3.7	NaN
2004	5.1	17.7	NaN	9.2	10.6
2005	25.5	34.1	3.8	13.4	19.7
2006	19.5	24.1	NaN	8.6	16.1
2007	19.6	26.4	NaN	6.6	15.7
2008	9.7	10.6	10.2	12.2	11.6
2009	25.4	23.0	NaN	NaN	NaN
2010	26.1	25.8	8.8	10.2	17.3
2011	19.4	18.2	8.3	17.7	15.9
2012	NaN	27.2	9.0	25.9	21.9
2013	31.7	27.7	15.9	19.9	23.4
2014	28.4	28.8	17.3	21.8	23.8
2015	23.1	NaN			

#### Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	10.9	NaN
2004	11.2	29.6	NaN	18.4	29.6
2005	35.2	39.2	19.0	31.7	39.2
2006	26.4	34.8	NaN	16.4	34.8
2007	30.9	33.9	NaN	13.5	33.9
2008	14.7	15.7	26.6	25.3	28.4
2009	30.1	35.2	NaN	NaN	NaN
2010	30.5	30.6	20.4	21.8	30.6
2011	24.0	22.0	20.5	27.3	27.3
2012	NaN	34.8	29.7	35.3	35.3
2013	45.9	32.6	27.1	27.4	45.9
2014	39.7	40.8	27.3	32.7	40.8
2015	28.0	NaN			

#### Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	0.6	NaN
2004	3.0	3.9	NaN	1.4	-0.2
2005	13.9	19.2	-1.0	0.1	-1.0
2006	8.6	2.8	NaN	-0.9	-0.9
2007	10.5	16.2	NaN	-0.0	-0.0
2008	6.5	2.2	-0.5	-0.3	-0.5
2009	11.2	-1.0	NaN	NaN	NaN
2010	19.2	2.4	-0.3	0.5	-0.3
2011	11.7	0.0	0.1	10.2	0.0
2012	NaN	14.5	-1.9	13.7	-1.9
2013	26.6	0.5	-0.4	12.8	-0.4
2014	19.4	6.2	4.8	14.7	4.8
2015	19.6	NaN			

#### Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	-10.4	NaN
2004	-16.1	-6.3	NaN	-4.9	-7.1
2005	4.2	10.1	-6.9	-0.8	2.0
2006	-1.7	0.2	NaN	-5.5	-1.6
2007	-1.7	2.4	NaN	-7.6	-2.1
2008	-11.5	-13.4	-0.5	-2.0	-6.1
2009	4.2	-1.0	NaN	NaN	NaN
2010	4.9	1.9	-1.9	-4.0	-0.4
2011	-1.9	-5.8	-2.4	3.6	-1.8
2012	NaN	3.2	-1.7	11.7	4.2
2013	10.4	3.8	5.2	5.7	5.7
2014	7.2	4.8	6.5	7.7	6.0
2015	1.9	NaN			

**Table Q-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	0.0	0.0	0.0	100.0	0.0
2004	97.8	100.0	55.4	98.9	88.0
2005	97.8	100.0	96.7	100.0	98.6
2006	100.0	100.0	38.0	87.9	80.5
2007	95.6	98.9	41.3	100.0	84.7
2008	100.0	100.0	100.0	94.5	98.6
2009	100.0	100.0	45.7	72.5	79.5
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	98.9	98.9
2012	73.6	100.0	100.0	100.0	94.3
2013	100.0	100.0	100.0	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0
2015	97.8	59.8			

**Table Q-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Camden Bay  
 Variable: Soil moisture, in water fraction by volume  
 File name: AK110\_Smoist\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	0.25	NaN	2004	NaN	NaN	NaN	0.02	NaN
2005	NaN	NaN	0.29	NaN	NaN	2005	NaN	NaN	0.04	NaN	NaN
2006	NaN	NaN	0.32	0.25	NaN	2006	NaN	NaN	0.04	0.00	NaN
2007	NaN	NaN	0.30	NaN	NaN	2007	NaN	NaN	0.01	NaN	NaN
2008	NaN	NaN	0.32	0.27	NaN	2008	NaN	NaN	0.00	0.00	NaN
2009	NaN	NaN	0.27	NaN	NaN	2009	NaN	NaN	0.01	NaN	NaN
2010	NaN	NaN	0.25	0.28	NaN	2010	NaN	NaN	0.02	0.03	NaN
2011	NaN	NaN	0.20	NaN	NaN	2011	NaN	NaN	0.00	NaN	NaN
2012	NaN	NaN	0.17	0.26	NaN	2012	NaN	NaN	0.03	0.01	NaN
2013	NaN	NaN	0.26	0.31	NaN	2013	NaN	NaN	0.02	0.02	NaN
2014	NaN	NaN	0.27	0.31	NaN	2014	NaN	NaN	0.06	0.02	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table Q-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year:

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN	2003	0.00	0.00	0.00	83.52	0.00
2004	NaN	NaN	NaN	0.41	NaN	2004	2.20	20.65	53.26	100.00	46.99
2005	NaN	NaN	0.41	NaN	NaN	2005	26.67	38.04	100.00	84.62	59.45
2006	NaN	NaN	0.42	0.41	NaN	2006	0.00	11.96	100.00	96.70	55.89
2007	NaN	NaN	0.41	NaN	NaN	2007	14.44	7.61	98.91	60.44	41.92
2008	NaN	NaN	0.42	0.41	NaN	2008	0.00	3.26	98.91	98.90	50.27
2009	NaN	NaN	0.42	NaN	NaN	2009	0.00	10.87	100.00	91.21	50.68
2010	NaN	NaN	0.41	0.41	NaN	2010	0.00	6.52	100.00	100.00	54.52
2011	NaN	NaN	0.42	NaN	NaN	2011	11.11	6.52	100.00	86.81	48.49
2012	NaN	NaN	0.42	0.42	NaN	2012	0.00	1.09	100.00	100.00	52.46
2013	NaN	NaN	0.42	0.40	NaN	2013	8.89	10.87	100.00	100.00	60.00
2014	NaN	NaN	0.41	0.41	NaN	2014	28.89	32.61	100.00	100.00	61.92
2015	NaN	NaN				2015	14.44	31.52			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2003	NaN	NaN	NaN	NaN	NaN
2004	NaN	NaN	NaN	-0.03	NaN
2005	NaN	NaN	0.02	NaN	NaN
2006	NaN	NaN	0.05	-0.02	NaN
2007	NaN	NaN	0.03	NaN	NaN
2008	NaN	NaN	0.05	-0.00	NaN
2009	NaN	NaN	0.01	NaN	NaN
2010	NaN	NaN	-0.02	0.00	NaN
2011	NaN	NaN	-0.07	NaN	NaN
2012	NaN	NaN	-0.10	-0.02	NaN
2013	NaN	NaN	-0.01	0.03	NaN
2014	NaN	NaN	-0.00	0.04	NaN
2015	NaN	NaN			

**Table Q-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

## R. Red Sheep Creek

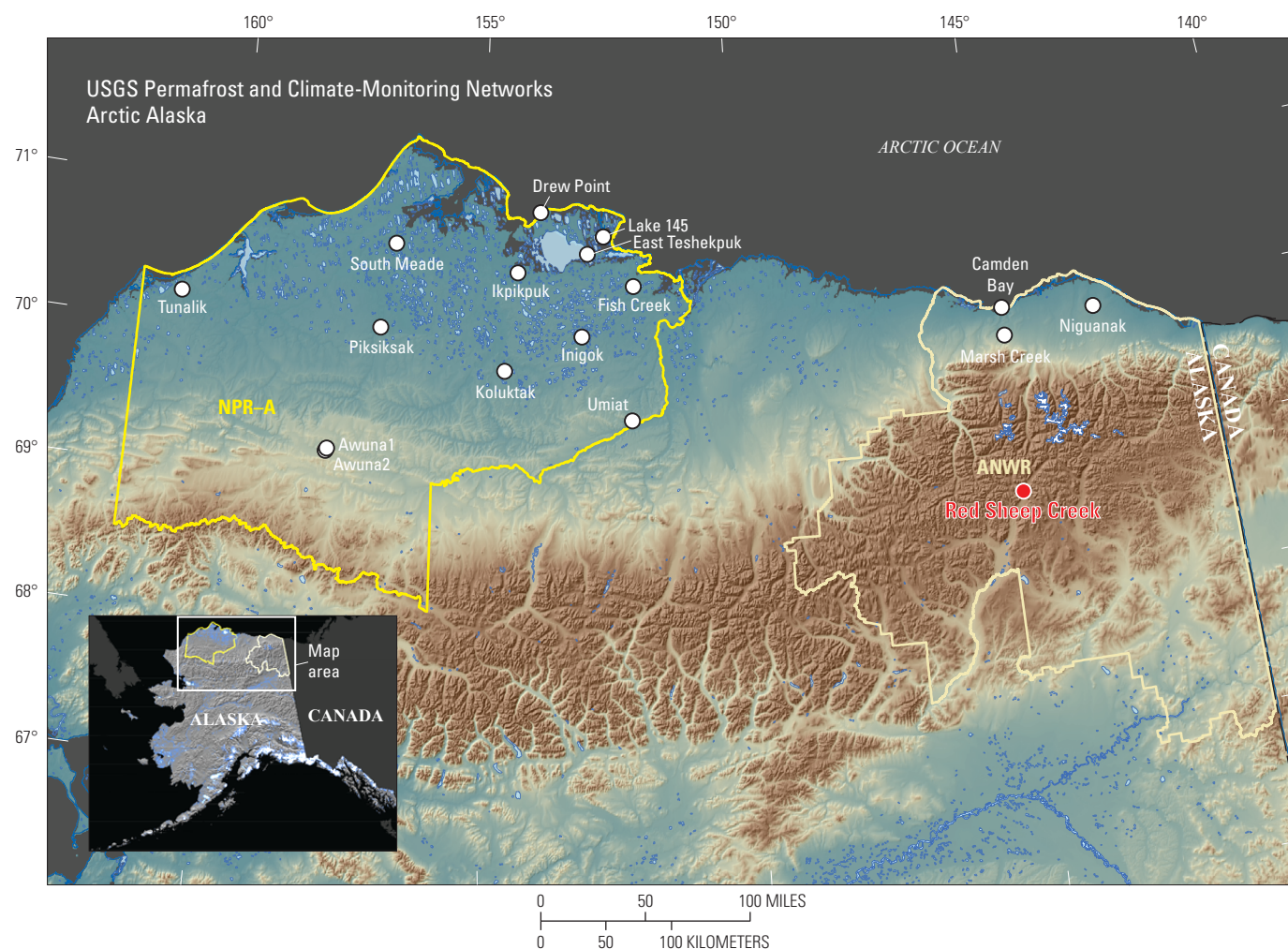
GTN-P code: U36

Latitude: 68°40.898'N

Longitude: 144°50.524'W

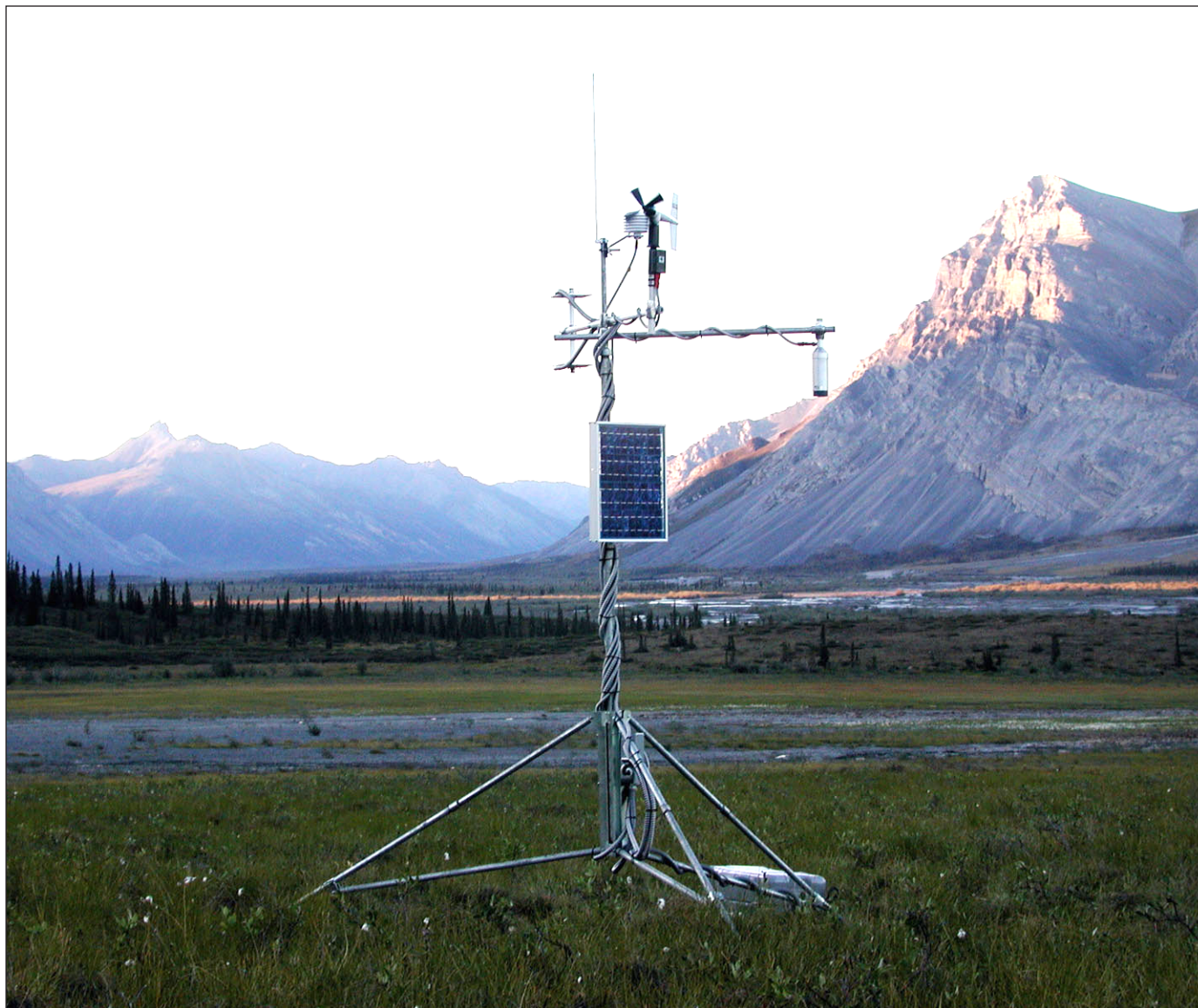
Elevation: 785 meters above mean sea level

Installation date: 03 AUG 2004



**Figure R-1.** Location map presenting the specific location of the Red Sheep Creek site and its spatial relation to other sites in the monitoring network. (NPR-A, National Petroleum Reserve-Alaska; ANWR, Arctic National Wildlife Refuge)

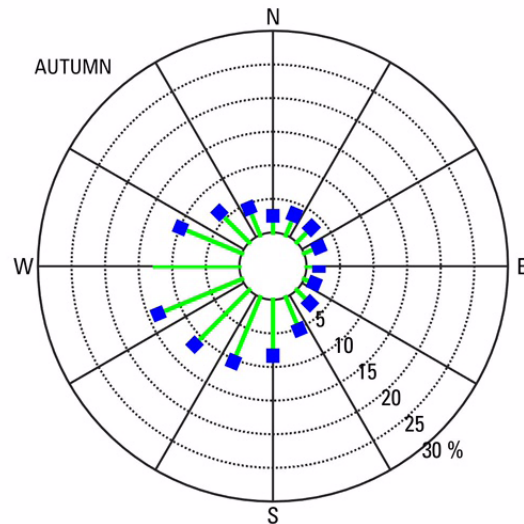
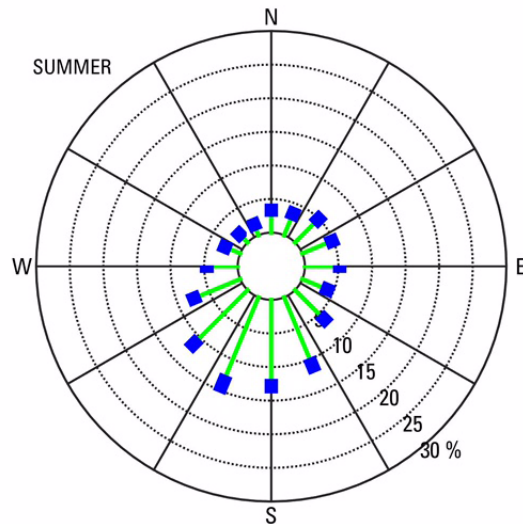
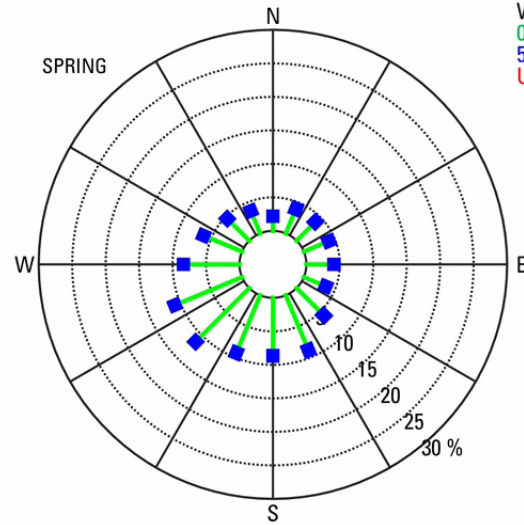
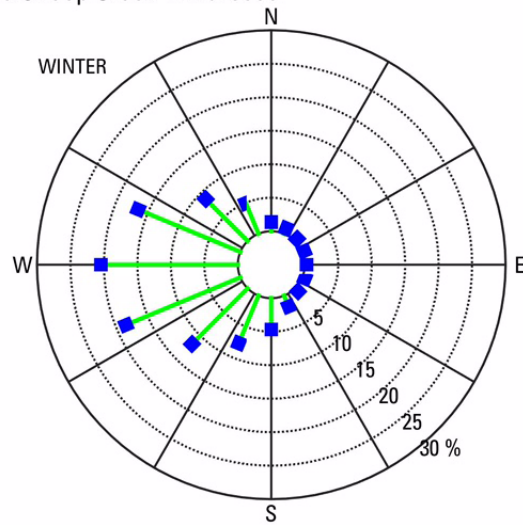




**Figure R–2.** Red Sheep Creek station in summer 2008.



## Red Sheep Creek Windroses



## EXPLANATION

Wind Speed (m/s)

0.5 &lt; U &lt; 5

5 &lt; U &lt; 10

U &gt; 10

**Figure R-3.** Red Sheep Creek seasonal windroses. The wind direction and speed data are divided into 16 wind direction categories (22.5° each) and 3 wind speed classes: less than 5 m/s, between 5 m/s and 10 m/s, and greater than 10 m/s. The percentage of time that wind speeds occupy each class and directional category (concentric rings) is presented for each season: winter (December, January, February), spring (March, April, May), summer (June, July, August), and autumn (September, October, November). (m/s, meters per second; U, wind speed; N, north; E, east; S, south; W, west)

## Data Access

List of station data files can be found at <https://doi.org/10.3133/ds1021>.

## Tables

**Table R-1A.** Statistical summaries of air temperature data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
 Variable: Air temperature, in degrees Celsius  
 File name: AK112\_Tair\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.33	-11.58	-20.69	-22.02
2005	-21.27	-21.54	-14.65	-7.94	6.81	12.71	11.15	10.30	1.63	-9.15	-21.63	-16.66
2006	-26.27	-18.25	-21.19	-11.07	3.25	10.46	11.65	8.23	5.39	-7.21	-21.88	-16.76
2007	-20.46	-23.72	-24.40	-6.56	2.23	13.33	15.13	10.74	1.78	-11.16	-13.91	-19.88
2008	-25.16	-21.69	-18.37	-8.05	2.94	12.23	11.54	7.07	0.49	-15.11	-16.91	-22.60
2009	-24.18	-22.74	-23.72	-9.85	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.50	-8.47	-14.06	-26.01
2011	-19.83	-23.33	-18.18	-11.88	NaN	NaN	NaN	NaN	2.94	-8.32	-24.01	-19.88
2012	-26.98	-17.67	-22.84	-6.46	2.34	13.49	13.21	8.56	2.05	-9.95	-21.44	-25.28
2013	-21.45	-20.93	-18.06	-12.84	-1.23	12.68	13.66	8.97	1.11	-6.25	-19.38	-22.28
2014	-17.54	-20.86	-14.64	-9.61	2.21	10.32	11.27	9.32	0.99	-8.80	-16.36	-17.37
2015	-20.55	-18.29	-16.29	-6.73	7.68	11.10	12.80					

### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-15.75	-24.71	-34.74	-36.33
2005	-35.56	-34.89	-26.03	-25.28	-6.26	0.82	0.57	-2.05	-11.45	-22.95	-33.72	-34.64
2006	-39.26	-39.17	-36.66	-26.37	-14.23	-9.23	4.17	-1.12	-2.31	-21.09	-29.58	-33.18
2007	-36.77	-40.41	-38.79	-19.80	-16.58	3.11	6.43	0.40	-11.68	-23.18	-23.10	-35.82
2008	-39.42	-36.80	-33.88	-23.42	-6.26	0.52	2.01	-2.37	-12.90	-30.03	-31.68	-34.74
2009	-38.04	-37.39	-34.69	-28.48	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-14.87	-20.31	-34.00	-35.82
2011	-37.39	-37.86	-30.89	-27.10	NaN	NaN	NaN	NaN	-9.29	-22.97	-32.67	-32.90
2012	-44.40	-40.89	-33.15	-24.97	-18.01	1.68	4.85	-1.83	-7.02	-21.31	-27.15	-34.04
2013	-34.79	-31.57	-32.62	-26.07	-22.66	-0.22	3.30	-4.39	-11.14	-18.75	-31.51	-35.78
2014	-34.36	-32.62	-32.97	-29.06	-9.36	2.01	1.19	-1.07	-10.41	-24.10	-29.06	-28.63
2015	-36.40	-33.80	-35.56	-22.54	-8.95	-2.86	3.89					

**Table R-1A.** Statistical summaries of air temperature data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	10.15	2.42	-7.93	-7.19
2005	-1.27	-9.42	-5.91	14.13	16.72	24.49	21.59	24.96	9.35	3.19	-2.80	-3.14
2006	-12.70	0.88	-3.84	0.39	13.66	21.01	20.38	18.83	16.10	2.68	-11.87	-4.75
2007	-7.00	-3.43	-4.68	6.06	15.53	23.91	23.52	19.23	14.77	0.99	-1.22	-7.98
2008	-7.11	-0.53	-2.81	3.70	15.42	23.82	21.36	16.41	14.69	0.55	-6.51	-4.03
2009	1.02	-8.22	-6.29	12.19	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	14.56	6.31	-1.51	-9.53
2011	1.06	-5.57	0.88	2.55	NaN	NaN	NaN	NaN	14.78	2.70	-9.88	-7.14
2012	-10.77	-3.53	-0.20	12.65	15.27	21.77	21.60	17.86	10.71	1.85	-8.18	-6.72
2013	-7.56	-7.96	-3.39	0.44	17.85	25.68	25.75	22.76	13.81	6.56	-5.59	-0.82
2014	-3.06	-6.31	1.06	8.07	15.47	20.98	22.08	17.46	14.35	0.22	-0.72	-7.85
2015	-4.97	-4.46	0.32	6.98	23.36	24.01	25.79					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-3.73	-2.03	-1.78	-0.90
2005	0.53	-1.13	4.06	1.00	3.30	1.03	-1.40	1.45	0.23	0.41	-2.73	4.46
2006	-4.47	2.15	-2.48	-2.14	-0.26	-1.23	-0.90	-0.62	3.99	2.35	-2.98	4.36
2007	1.34	-3.31	-5.68	2.38	-1.28	1.65	2.57	1.90	0.37	-1.60	4.99	1.24
2008	-3.37	-1.28	0.34	0.88	-0.57	0.55	-1.01	-1.77	-0.91	-5.56	1.99	-1.47
2009	-2.38	-2.34	-5.01	-0.92	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.09	1.09	4.84	-4.89
2011	1.96	-2.92	0.53	-2.94	NaN	NaN	NaN	NaN	1.54	1.23	-5.11	1.25
2012	-5.18	2.74	-4.13	2.47	-1.17	1.80	0.66	-0.29	0.65	-0.39	-2.54	-4.16
2013	0.35	-0.52	0.65	-3.90	-4.74	0.99	1.11	0.12	-0.30	3.30	-0.47	-1.16
2014	4.26	-0.45	4.07	-0.68	-1.30	-1.37	-1.28	0.47	-0.41	0.75	2.55	3.75
2015	1.25	2.12	2.42	2.20	4.17	-0.58	0.24					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	83.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.71	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	61.29	0.00	0.00	19.35	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	96.77	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

**Table R-1B.** Statistical summaries of wind speed data at monthly resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek

Variable: Wind speed, in meters per second

File name: AK112\_U\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.70	NaN	0.98
2005	1.00	NaN	1.42	1.05	1.95	2.44	2.57	1.98	1.74	1.13	1.39	NaN
2006	0.51	1.14	0.79	1.33	1.92	2.70	2.40	1.84	1.26	1.12	0.98	0.93
2007	0.79	0.75	0.91	1.19	1.63	2.27	2.01	1.73	1.60	1.11	0.94	0.84
2008	1.10	1.07	1.19	1.31	2.25	2.19	1.96	1.82	1.41	1.11	1.09	0.81
2009	0.91	NaN	0.90	0.85	2.09	2.16	1.94	1.91	1.40	1.13	0.71	1.06
2010	NaN	1.10	1.28	1.40	2.30	2.26	2.17	1.62	1.32	1.19	NaN	NaN
2011	0.90	1.03	0.60	1.29	NaN	NaN	NaN	NaN	1.59	0.87	0.93	1.13
2012	1.50	0.97	0.81	0.99	1.83	2.20	2.00	2.03	1.87	0.90	0.85	0.58
2013	1.01	0.92	1.10	1.66	1.67	2.15	2.09	1.92	1.52	0.88	1.00	1.01
2014	0.92	1.01	0.77	1.10	1.76	2.18	2.56	1.75	1.44	1.54	NaN	NaN
2015	0.69	0.78	0.84	1.32	NaN	NaN	NaN					

#### Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.39	NaN	6.37
2005	6.72	NaN	8.77	5.60	5.25	6.06	6.79	6.19	5.88	5.36	7.16	NaN
2006	6.40	6.80	5.51	6.50	5.85	7.99	7.21	7.03	4.95	6.04	8.45	5.95
2007	5.69	5.13	5.11	6.48	7.28	6.08	7.94	5.57	5.52	4.55	6.37	6.85
2008	8.95	6.47	7.16	6.65	6.54	6.11	5.85	4.80	4.56	6.71	5.78	5.27
2009	8.41	NaN	5.41	5.02	5.32	5.71	6.64	5.53	4.59	5.98	5.06	6.13
2010	NaN	6.24	7.21	5.57	6.10	6.39	6.14	5.21	5.93	5.47	NaN	NaN
2011	7.85	9.68	3.93	8.17	NaN	NaN	NaN	NaN	5.25	4.49	7.11	7.73
2012	7.54	7.84	5.34	6.43	5.06	6.48	5.71	5.96	6.98	4.59	6.14	5.21
2013	5.71	5.39	6.64	7.01	7.83	6.54	5.82	6.33	5.63	5.94	6.37	5.09
2014	5.88	7.16	4.53	5.19	5.23	6.24	7.27	5.48	6.58	5.89	NaN	NaN
2015	4.08	6.15	5.76	6.65	NaN	NaN	NaN					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.36	NaN	0.10
2005	0.05	NaN	0.41	-0.17	0.02	0.14	0.38	0.13	0.22	0.08	0.43	NaN
2006	-0.43	0.16	-0.21	0.11	-0.02	0.40	0.21	-0.00	-0.26	0.07	0.03	0.05
2007	-0.15	-0.23	-0.10	-0.03	-0.31	-0.03	-0.18	-0.11	0.08	0.06	-0.01	-0.04
2008	0.15	0.10	0.18	0.08	0.31	-0.11	-0.23	-0.03	-0.11	0.05	0.14	-0.07
2009	-0.03	NaN	-0.10	-0.38	0.15	-0.14	-0.25	0.07	-0.12	0.07	-0.24	0.18
2010	NaN	0.13	0.28	0.17	0.36	-0.04	-0.02	-0.23	-0.20	0.14	NaN	NaN
2011	-0.04	0.05	-0.41	0.07	NaN	NaN	NaN	NaN	0.07	-0.18	-0.02	0.25
2012	0.56	-0.01	-0.20	-0.24	-0.10	-0.10	-0.19	0.19	0.35	-0.16	-0.10	-0.30
2013	0.07	-0.06	0.09	0.43	-0.27	-0.15	-0.10	0.08	0.00	-0.18	0.05	0.14
2014	-0.03	0.03	-0.24	-0.12	-0.18	-0.12	0.37	-0.09	-0.08	0.49	NaN	NaN
2015	-0.25	-0.20	-0.17	0.09	NaN	NaN	NaN					

**Table R-1B.** Statistical summaries of wind speed data at monthly resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.33	96.77	93.33	100.00
2005	100.00	92.86	100.00	100.00	100.00	100.00	100.00	100.00	96.67	100.00	100.00	74.19
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	96.77	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	82.14	100.00	100.00	100.00	100.00	100.00	96.77	96.67	100.00	100.00	100.00
2010	90.32	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	73.33	87.10
2011	100.00	100.00	100.00	100.00	61.29	0.00	0.00	19.35	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2013	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	93.33	93.55
2015	100.00	100.00	100.00	100.00	90.32	60.00	87.10					

**Table R-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
Variable: Ground temperature, in degrees Celsius

File name: AK112\_Tg\_mon\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Monthly Averages (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.21	-0.23	-1.01	-2.64
2005	-5.25	-7.43	-7.39	-6.81	0.10	5.60	6.14	4.73	1.60	-1.02	-3.67	-4.06
2006	-8.05	-9.45	-9.66	-8.07	-2.36	3.33	6.06	4.36	1.85	-0.37	-5.57	-8.68
2007	-10.38	-10.65	-12.99	-9.45	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.98	-2.62	-3.19	-6.32
2011	-10.34	-12.12	-14.07	-10.27	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table R-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Minimum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.04	-0.50	-1.80	-3.67
2005	-7.01	-7.96	-7.80	-7.90	-4.35	0.11	2.40	1.64	-0.07	-2.92	-5.75	-5.14
2006	-11.46	-11.71	-10.57	-9.55	-6.73	-0.03	2.40	1.52	0.04	-1.49	-10.30	-10.53
2007	-12.27	-12.77	-13.42	-12.44	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-4.10	-5.92	-5.51	-10.41
2011	-14.69	-13.14	-15.55	-11.65	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Maximum Value Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2.87	0.04	-0.42	-1.49
2005	-3.40	-6.99	-6.92	-4.40	4.20	12.09	9.96	8.56	3.71	0.04	-1.37	-3.07
2006	-5.03	-8.18	-8.70	-6.59	0.97	8.63	11.20	10.29	4.40	0.16	-1.21	-6.56
2007	-8.89	-8.32	-12.39	-7.35	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8.82	0.02	-1.71	-2.99
2011	-6.47	-10.82	-10.81	-7.66	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-1.45	0.83	2.35	2.79
2005	3.26	2.48	3.64	1.84	1.23	1.14	0.04	0.18	-0.06	0.04	-0.31	1.36
2006	0.46	0.46	1.37	0.58	-1.23	-1.14	-0.04	-0.18	0.19	0.69	-2.21	-3.25
2007	-1.88	-0.73	-1.97	-0.80	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1.32	-1.56	0.17	-0.90
2011	-1.84	-2.21	-3.04	-1.62	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table R-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Month (10 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	0.00	0.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	93.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.71	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	61.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Monthly Averages (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.84	-0.72	-0.65	-0.76
2005	-2.67	-4.85	-5.67	-5.95	-3.55	-1.68	-1.06	-0.77	-0.61	-0.50	-0.43	-1.25
2006	-3.96	-6.69	-7.29	-7.22	-4.97	-2.16	-1.34	-0.91	-0.68	-0.56	-0.48	-3.70
2007	-6.60	-7.50	-9.47	-9.01	-6.20	-2.72	-1.54	-0.94	-0.69	-0.57	-0.56	-5.16
2008	-8.43	-11.79	-11.60	-10.36	-6.34	-2.82	-1.68	-1.05	-0.80	-0.69	-0.62	-1.15
2009	-4.84	-6.82	-7.43	-7.76	-4.38	-2.01	-1.22	-0.82	-0.65	-0.56	-0.48	-1.60
2010	-5.85	-8.08	-8.39	-7.67	-3.49	-1.81	-1.12	-0.75	-0.59	-0.50	-0.44	-1.83
2011	-5.54	-8.34	-10.08	-9.39	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Minimum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.97	-0.80	-0.72	-1.44
2005	-3.99	-5.39	-5.90	-6.07	-5.61	-2.18	-1.35	-0.92	-0.69	-0.58	-0.51	-2.33
2006	-6.11	-6.99	-7.68	-7.51	-6.64	-2.93	-1.63	-1.14	-0.81	-0.63	-0.56	-5.36
2007	-7.22	-8.66	-9.99	-9.99	-7.90	-3.88	-1.99	-1.19	-0.81	-0.66	-1.24	-7.27
2008	-10.18	-12.74	-12.11	-11.48	-9.05	-3.79	-2.12	-1.32	-0.91	-0.78	-0.67	-2.75
2009	-5.95	-7.10	-7.93	-8.07	-6.75	-2.77	-1.56	-0.99	-0.76	-0.65	-0.56	-3.62
2010	-7.45	-8.33	-8.71	-8.58	-5.70	-2.36	-1.44	-0.92	-0.74	-0.57	-0.51	-4.13
2011	-7.87	-8.81	-10.77	-10.37	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

**Table R-1C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.72	-0.64	-0.55	-0.53
2005	-1.42	-3.94	-5.35	-5.61	-2.14	-1.27	-0.83	-0.65	-0.52	-0.41	-0.38	-0.40
2006	-2.30	-6.14	-6.70	-6.64	-2.89	-1.61	-1.06	-0.73	-0.59	-0.47	-0.40	-0.45
2007	-5.29	-6.98	-8.63	-7.86	-3.87	-1.91	-1.15	-0.75	-0.58	-0.47	-0.44	-1.24
2008	-7.24	-10.21	-11.31	-9.05	-3.77	-2.08	-1.26	-0.83	-0.68	-0.59	-0.51	-0.53
2009	-2.75	-5.91	-6.95	-6.75	-2.74	-1.48	-0.93	-0.66	-0.54	-0.48	-0.42	-0.42
2010	-3.62	-7.39	-8.13	-5.70	-2.31	-1.37	-0.82	-0.57	-0.48	-0.42	-0.36	-0.42
2011	-4.10	-7.83	-8.81	-8.54	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Anomaly Relative to the Climatological Mean (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.15	-0.14	-0.13	1.44
2005	2.74	2.88	2.89	2.24	1.27	0.52	0.26	0.10	0.08	0.09	0.09	0.96
2006	1.45	1.04	1.27	0.98	-0.14	0.04	-0.01	-0.04	0.02	0.03	0.04	-1.50
2007	-1.19	0.22	-0.91	-0.81	-1.38	-0.52	-0.21	-0.07	0.01	0.02	-0.04	-2.95
2008	-3.01	-4.07	-3.04	-2.17	-1.52	-0.62	-0.35	-0.17	-0.10	-0.11	-0.09	1.06
2009	0.57	0.90	1.13	0.44	0.44	0.19	0.10	0.05	0.05	0.02	0.04	0.61
2010	-0.44	-0.36	0.17	0.53	1.33	0.39	0.21	0.12	0.10	0.09	0.08	0.38
2011	-0.12	-0.62	-1.52	-1.19	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN	NaN	NaN	NaN	NaN	NaN					

Percent of Data Available during Each Month (120 cm depth):

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	0.00	0.00	96.77	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	93.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.71	100.00	100.00	100.00	100.00
2011	100.00	100.00	100.00	100.00	61.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00					



**Table R-1D.** Statistical summaries of incident solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek

Variable: Incident solar flux, in watts per meter squared

File name: AK112\_So\_d\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	86.1	25.9	1.0	0.1
2005	1.0	5.8	74.2	188.7	216.6	272.1	211.4	144.2	59.7	25.4	2.3	0.1
2006	0.6	10.4	NaN	182.2	245.1	210.9	207.5	130.3	77.9	21.6	2.1	0.1
2007	0.2	11.8	70.5	178.8	230.0	269.1	219.8	161.7	83.2	24.6	1.6	0.1
2008	0.6	9.5	76.2	155.5	220.2	241.3	185.3	147.2	83.1	20.2	1.2	0.1
2009	1.0	3.9	33.6	168.4	239.8	214.2	198.5	137.8	62.1	22.6	3.0	0.1
2010	0.9	16.4	72.9	164.6	223.7	246.8	187.9	134.0	83.3	26.8	1.7	0.0
2011	1.2	10.9	76.4	153.8	NaN	NaN	NaN	NaN	67.7	21.4	1.3	0.1
2012	1.2	15.5	NaN	179.2	236.5	229.1	196.0	122.5	61.7	21.3	3.6	0.1
2013	1.3	11.2	77.1	174.6	261.4	243.7	194.3	140.5	69.4	24.5	2.0	0.2
2014	1.3	18.9	79.2	170.2	229.4	202.8	181.2	139.8	84.7	24.4	3.3	0.1
2015	0.5	11.7	60.6	174.7	NaN	NaN	NaN					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	11.8	2.0	-1.2	-0.0
2005	0.1	-6.2	5.2	16.1	-15.9	37.7	13.5	4.4	-14.7	1.6	0.2	-0.0
2006	-0.3	-1.6	NaN	9.7	12.6	-23.5	9.5	-9.5	3.6	-2.2	-0.0	-0.0
2007	-0.7	-0.2	1.5	6.3	-2.5	34.7	21.8	21.9	8.9	0.8	-0.5	0.0
2008	-0.3	-2.5	7.2	-17.1	-12.3	6.9	-12.7	7.5	8.7	-3.6	-1.0	0.0
2009	0.0	-8.1	-35.4	-4.2	7.3	-20.2	0.5	-2.0	-12.3	-1.3	0.8	0.0
2010	-0.0	4.4	3.9	-8.0	-8.8	12.4	-10.1	-5.7	9.0	3.0	-0.4	-0.1
2011	0.3	-1.1	7.4	-18.7	NaN	NaN	NaN	NaN	-6.6	-2.5	-0.9	0.0
2012	0.3	3.5	NaN	6.7	4.0	-5.3	-1.9	-17.3	-12.7	-2.5	1.5	0.0
2013	0.4	-0.7	8.1	2.0	28.9	9.2	-3.6	0.7	-4.9	0.7	-0.2	0.1
2014	0.4	6.9	10.2	-2.3	-3.1	-31.6	-16.8	-0.0	10.4	0.6	1.1	-0.0
2015	-0.4	-0.3	-8.4	2.2	NaN	NaN	NaN					

#### Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	96.4	77.4	96.7	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	96.7	61.3	0.0	0.0	19.4	100.0	100.0	100.0	100.0
2012	100.0	100.0	90.3	100.0	100.0	100.0	100.0	96.8	96.7	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	96.8	100.0	100.0	96.8	100.0	96.8	100.0	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	96.7	41.9	0.0	0.0					

**Table R-1E.** Statistical summaries of reflected solar flux data at monthly resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek

Variable: Reflected solar flux, in watts per meter squared

File name: AK112\_So\_u\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	27.2	25.6	3.1	0.1
2005	1.4	17.3	68.3	147.2	64.1	53.7	44.2	29.2	13.8	13.2	3.1	0.1
2006	1.1	16.3	70.4	148.4	118.6	40.4	43.5	26.4	14.7	15.4	2.8	0.1
2007	1.0	17.4	69.5	144.9	139.5	55.7	52.2	36.6	18.3	10.1	2.6	0.0
2008	1.0	16.7	70.0	132.7	92.1	51.0	41.8	31.9	21.7	24.2	2.7	0.2
2009	1.1	16.0	72.8	146.1	119.1	44.2	46.9	32.4	27.3	20.2	2.7	0.1
2010	1.1	15.7	66.7	131.7	43.3	52.6	40.3	26.1	15.4	14.5	2.5	0.1
2011	1.2	15.0	65.9	148.4	NaN	NaN	NaN	NaN	13.5	13.4	3.1	0.1
2012	1.2	17.6	71.2	145.8	113.0	47.3	44.9	27.6	14.7	18.4	2.6	0.2
2013	1.4	15.8	69.6	142.0	165.0	51.4	45.8	33.2	27.2	20.2	2.9	0.2
2014	1.2	18.3	69.9	136.8	137.4	40.6	41.9	32.5	20.9	8.7	2.2	0.2
2015	1.3	14.9	68.1	137.9	NaN	NaN	NaN					

#### Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7.2	8.4	0.3	-0.0
2005	0.2	0.9	-0.3	5.3	-40.5	5.3	-0.4	-1.4	-6.2	-4.1	0.4	-0.0
2006	-0.1	-0.1	1.7	6.5	14.0	-7.9	-1.1	-4.3	-5.3	-1.8	0.0	-0.1
2007	-0.2	1.0	0.8	3.0	34.9	7.4	7.6	5.9	-1.7	-7.1	-0.2	-0.1
2008	-0.2	0.3	1.3	-9.2	-12.4	2.7	-2.8	1.3	1.7	6.9	-0.1	0.0
2009	-0.1	-0.3	4.2	4.2	14.5	-4.1	2.3	1.7	7.3	2.9	-0.0	0.0
2010	-0.1	-0.7	-2.0	-10.3	-61.3	4.2	-4.3	-4.5	-4.6	-2.7	-0.3	-0.0
2011	0.1	-1.4	-2.8	6.5	NaN	NaN	NaN	NaN	-6.6	-3.9	0.3	-0.1
2012	0.1	1.2	2.5	3.9	8.5	-1.0	0.3	-3.1	-5.4	1.1	-0.1	0.0
2013	0.2	-0.6	1.0	0.1	60.4	3.1	1.2	2.6	7.2	3.0	0.2	0.1
2014	0.0	1.9	1.3	-5.1	32.8	-7.7	-2.7	1.9	0.9	-8.5	-0.6	0.1
2015	0.2	-1.5	-0.6	-4.0	NaN	NaN	NaN					

#### Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	58.1	0.0	0.0	19.4	100.0	100.0	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8	100.0	100.0	96.7	100.0
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015	100.0	100.0	100.0	100.0	41.9	0.0	0.0					

**Table R-1F.** Statistical summaries of rainfall data at monthly resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table R-1G.** Statistical summaries of snow depth data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek

Variable: Snow depth, in centimeters

File name: AK112\_snowD\_mon\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

#### Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	4.2	15.7	25.3	33.2
2005	39.8	43.9	41.3	39.7	8.3	2.3	3.6	5.2	3.9	10.9	20.4	32.1
2006	34.6	40.3	45.9	47.3	21.6	1.5	4.9	5.4	4.8	6.6	11.3	14.9
2007	23.8	32.9	34.0	36.4	25.2	4.6	10.7	9.4	5.6	4.6	8.8	9.1
2008	15.1	19.3	23.4	27.8	12.6	2.9	7.3	8.3	3.0	17.7	26.4	31.1
2009	33.9	44.4	48.8	49.3	26.4	NaN	NaN	NaN	8.8	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	9.2	12.7	22.5	33.3
2011	30.7	34.4	29.2	36.2	NaN	NaN	NaN	NaN	NaN	NaN	23.5	30.3
2012	35.5	42.1	37.6	39.9	21.1	4.6	7.1	11.1	4.3	4.9	8.4	9.2
2013	15.9	19.5	23.2	26.0	15.8	7.1	10.1	7.1	7.1	7.3	20.0	28.6
2014	36.8	34.3	40.1	44.6	26.5	5.9	10.6	10.0	7.5	6.8	8.7	17.7
2015	31.2	31.8	35.2	37.9	NaN	NaN	NaN					

#### Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.5	11.1	22.7	28.2
2005	37.6	38.5	34.9	34.6	1.1	-1.0	0.1	0.7	1.6	3.7	16.4	25.9
2006	32.3	32.9	42.9	43.3	-0.6	-0.5	1.0	0.3	1.3	1.4	9.1	7.9
2007	17.9	30.4	31.3	33.0	1.5	0.3	0.4	-0.6	-0.2	-0.6	3.3	3.9
2008	8.8	14.7	15.0	23.4	-0.8	-0.6	-0.6	0.7	-0.8	1.4	21.6	27.9
2009	27.3	37.3	46.1	40.7	-0.7	NaN	NaN	NaN	0.1	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	5.2	12.8	30.6
2011	25.5	27.5	26.3	32.4	NaN	NaN	NaN	NaN	NaN	NaN	17.0	21.4
2012	31.8	32.9	34.4	36.8	-0.1	-0.8	0.1	-0.9	-1.6	-1.7	3.3	5.1
2013	5.7	15.1	18.7	18.4	-0.1	1.3	0.4	-1.1	-0.8	-0.1	12.7	20.5
2014	29.2	28.0	33.1	37.9	0.6	-0.5	3.7	-1.4	-1.3	-0.6	-1.9	6.1
2015	24.9	27.9	31.8	33.6	NaN	NaN	NaN					

**Table R-1G.** Statistical summaries of snow depth data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	15.6	23.3	29.6	44.9
2005	42.5	46.7	45.7	43.8	33.7	4.9	6.4	8.8	9.5	21.8	29.5	35.8
2006	36.2	45.3	48.4	49.8	46.6	6.4	11.3	10.4	9.9	11.1	13.1	21.8
2007	33.1	36.3	37.2	40.4	42.6	14.1	19.6	18.9	14.8	11.3	13.3	14.6
2008	18.9	25.3	27.2	33.2	30.3	13.5	14.3	13.7	9.4	28.3	30.6	33.6
2009	40.7	53.7	52.5	54.7	42.0	NaN	NaN	NaN	21.8	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	18.1	18.4	36.2	35.4
2011	36.5	39.9	39.5	39.3	NaN	NaN	NaN	NaN	NaN	NaN	25.8	36.5
2012	45.1	48.0	41.0	45.4	46.7	17.2	16.4	23.1	14.0	13.6	13.0	14.2
2013	26.0	23.1	31.3	32.7	26.9	14.2	17.1	13.3	13.6	16.7	30.3	32.4
2014	49.3	42.7	43.1	48.7	47.4	12.9	13.9	13.8	14.1	16.4	17.7	34.4
2015	35.3	40.6	38.4	46.8	NaN	NaN	NaN					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-2.1	6.0	8.7	10.6
2005	11.0	11.0	6.7	2.4	-10.1	-2.7	-4.1	-3.6	-2.3	1.3	3.8	9.5
2006	5.8	7.3	11.3	9.9	3.2	-3.6	-2.8	-3.4	-1.5	-3.0	-5.3	-7.7
2007	-5.1	-0.0	-0.6	-0.9	6.8	-0.4	2.9	0.6	-0.6	-5.0	-7.8	-13.5
2008	-13.7	-13.7	-11.2	-9.6	-5.8	-2.1	-0.5	-0.4	-3.2	8.0	9.8	8.5
2009	5.0	11.4	14.3	12.0	8.0	NaN	NaN	NaN	2.6	NaN	NaN	NaN
2010	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3.0	3.1	5.9	10.7
2011	1.9	1.4	-5.4	-1.2	NaN	NaN	NaN	NaN	NaN	NaN	6.9	7.7
2012	6.7	9.1	3.0	2.5	2.7	-0.4	-0.6	2.3	-1.9	-4.7	-8.2	-13.4
2013	-13.0	-13.4	-11.4	-11.4	-2.5	2.0	2.3	-1.7	0.9	-2.4	3.3	6.0
2014	8.0	1.3	5.5	7.3	8.1	0.8	2.9	1.3	1.3	-2.9	-7.9	-4.9
2015	2.3	-1.2	0.6	0.5	NaN	NaN	NaN					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
2005	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	100.0	83.9	0.0	0.0	0.0	100.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.9	100.0	100.0	100.0	100.0
2011	100.0	100.0	100.0	100.0	64.5	0.0	0.0	0.0	0.0	22.6	100.0	100.0
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	96.8
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	100.0
2015	100.0	100.0	100.0	100.0	45.2	0.0	12.9					

**Table R-1H.** Statistical summaries of soil moisture data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
 Variable: Soil moisture, in water fraction by volume

File name: AK112\_Smoist\_mon\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Monthly Averages:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.59	0.25	0.10	0.07
2005	0.05	0.04	0.03	0.03	0.09	0.53	0.52	0.64	0.67	0.16	0.06	0.05
2006	0.03	0.02	0.02	0.02	0.05	0.37	0.69	0.68	0.69	0.55	0.04	0.02
2007	0.02	0.02	0.01	0.02	0.03	0.26	0.43	0.61	0.70	0.08	0.04	0.02
2008	NaN	NaN	NaN	0.01	0.04	0.22	0.59	0.71	0.70	0.27	0.06	0.04
2009	0.02	0.01	0.01	0.01	0.04	0.42	0.70	0.70	0.70	0.40	0.05	0.04
2010	0.02	0.02	0.02	0.02	0.06	0.32	0.51	0.71	0.73	0.19	0.04	0.03
2011	0.01	0.01	NaN	0.01	NaN	NaN	NaN	NaN	0.74	0.40	0.04	0.03
2012	0.01	0.01	0.00	0.01	0.03	0.25	0.55	0.72	0.70	0.46	0.02	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.15	0.54	0.60	0.67	0.41	0.07	0.04
2014	0.02	0.02	0.01	0.01	0.03	0.39	0.88	0.94	0.88	0.34	0.18	0.18
2015	0.18	0.18	0.18	0.18	0.17	0.39	0.46					

## Minimum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.41	0.13	0.08	0.06
2005	0.04	0.03	0.03	0.03	0.04	0.35	0.43	0.59	0.67	0.06	0.05	0.04
2006	0.02	0.02	0.02	0.02	0.02	0.08	0.68	0.68	0.68	0.08	0.02	0.02
2007	0.02	0.01	0.01	0.01	0.02	0.06	0.41	0.51	0.50	0.04	0.03	0.01
2008	NaN	NaN	NaN	0.00	0.01	0.06	0.42	0.70	0.57	0.09	0.05	0.02
2009	0.01	0.01	0.01	0.01	0.02	0.06	0.69	0.69	0.69	0.06	0.04	0.03
2010	0.02	0.01	0.01	0.02	0.04	0.08	0.41	0.69	0.71	0.04	0.03	0.02
2011	0.01	0.01	NaN	0.00	NaN	NaN	NaN	NaN	0.73	0.07	0.03	0.02
2012	0.00	0.00	0.00	0.00	0.01	0.05	0.41	0.50	0.69	0.04	0.00	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.03	0.41	0.48	0.58	0.10	0.05	0.03
2014	0.02	0.01	0.01	0.01	0.01	0.06	0.65	0.86	0.85	0.00	0.18	0.18
2015	0.18	0.17	0.17	0.17	0.15	0.07	0.41					

**Table R-1H.** Statistical summaries of soil moisture data at monthly resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.67	0.41	0.13	0.09
2005	0.06	0.04	0.04	0.04	0.38	0.67	0.59	0.68	0.68	0.69	0.08	0.06
2006	0.04	0.03	0.03	0.03	0.08	0.70	0.69	0.69	0.70	0.72	0.08	0.03
2007	0.02	0.02	0.01	0.02	0.06	0.59	0.51	0.71	0.72	0.49	0.05	0.03
2008	NaN	NaN	NaN	0.01	0.06	0.51	0.71	0.71	0.71	0.57	0.09	0.05
2009	0.03	0.02	0.02	0.02	0.06	0.71	0.71	0.71	0.71	0.71	0.06	0.05
2010	0.03	0.02	0.02	0.05	0.08	0.41	0.69	0.73	0.76	0.71	0.05	0.04
2011	0.02	0.01	NaN	0.01	NaN	NaN	NaN	NaN	0.75	0.78	0.07	0.03
2012	0.02	0.01	0.01	0.01	0.05	0.49	0.75	0.75	0.71	0.73	0.04	NaN
2013	NaN	NaN	NaN	NaN	NaN	0.42	0.70	0.68	0.68	0.68	0.10	0.06
2014	0.03	0.02	0.02	0.02	0.06	0.68	0.97	0.97	0.89	0.89	0.20	0.18
2015	0.18	0.18	0.18	0.18	0.18	0.88	0.63					

## Anomaly Relative to the Climatological Mean:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	-0.13	-0.07	0.03	0.01
2005	-0.01	-0.01	-0.02	-0.01	0.03	0.20	-0.07	-0.08	-0.05	-0.16	-0.02	-0.01
2006	-0.02	-0.02	-0.03	-0.02	-0.01	0.04	0.10	-0.03	-0.03	0.23	-0.03	-0.04
2007	-0.04	-0.03	-0.04	-0.03	-0.03	-0.07	-0.16	-0.10	-0.02	-0.24	-0.03	-0.05
2008	NaN	NaN	NaN	-0.04	-0.02	-0.11	0.00	-0.01	-0.02	-0.04	-0.01	-0.02
2009	-0.04	-0.03	-0.04	-0.03	-0.02	0.09	0.11	-0.02	-0.02	0.08	-0.03	-0.02
2010	-0.03	-0.03	-0.04	-0.02	-0.00	-0.01	-0.08	-0.00	0.01	-0.13	-0.03	-0.03
2011	-0.04	-0.04	NaN	-0.04	NaN	NaN	NaN	NaN	0.02	0.08	-0.03	-0.04
2012	-0.04	-0.04	-0.05	-0.04	-0.03	-0.08	-0.04	0.00	-0.02	0.14	-0.06	NaN
2013	NaN	NaN	NaN	NaN	NaN	-0.18	-0.05	-0.11	-0.05	0.09	-0.00	-0.02
2014	-0.03	-0.03	-0.04	-0.03	-0.03	0.06	0.29	0.22	0.16	0.02	0.11	0.12
2015	0.12	0.13	0.12	0.13	0.11	0.06	-0.12					

## Percent of Data Available during Each Month:

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00
2005	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	100.00
2007	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2008	83.87	17.24	38.71	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2009	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2011	100.00	100.00	61.29	100.00	61.29	0.00	0.00	19.35	100.00	100.00	100.00	100.00
2012	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00	100.00	6.45
2013	0.00	0.00	0.00	0.00	45.16	100.00	100.00	96.77	100.00	96.77	100.00	100.00
2014	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.77	100.00	100.00
2015	100.00	100.00	100.00	100.00	100.00	96.67	100.00					

**Table R-1I.** Statistical summaries of surface pressure data at monthly resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table R-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
 Variable: Air temperature, in degrees Celsius  
 File name: AK112\_Tair\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-11.53	NaN
2005	-21.61	-5.23	11.37	-9.71	-5.75
2006	-20.46	-9.66	10.13	-7.89	-6.95
2007	-20.20	-9.61	13.06	-7.80	-6.32
2008	-22.26	-7.83	10.26	-10.56	-7.78
2009	-23.19	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-6.70	NaN
2011	-23.05	NaN	NaN	-9.78	NaN
2012	-21.59	-9.02	11.77	-9.78	-7.62
2013	-22.61	-10.79	11.79	-8.15	-7.14
2014	-20.21	-7.32	10.30	-8.06	-5.83
2015	-18.75	-5.10			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	10.15	NaN
2005	-1.27	16.72	24.96	9.35	24.96
2006	0.88	13.66	21.01	16.10	21.01
2007	-3.43	15.53	23.91	14.77	23.91
2008	-0.53	15.42	23.82	14.69	23.82
2009	1.02	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	14.56	NaN
2011	1.06	NaN	NaN	14.78	NaN
2012	-3.53	15.27	21.77	10.71	21.77
2013	-6.72	17.85	25.75	13.81	25.75
2014	-0.82	15.47	22.08	14.35	22.08
2015	-4.46	23.36			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-34.74	NaN
2005	-36.33	-26.03	-2.05	-33.72	-35.56
2006	-39.26	-36.66	-9.23	-29.58	-39.26
2007	-40.41	-38.79	0.40	-23.18	-40.41
2008	-39.42	-33.88	-2.37	-31.68	-39.42
2009	-38.04	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-34.00	NaN
2011	-37.86	NaN	NaN	-32.67	NaN
2012	-44.40	-33.15	-1.83	-27.15	-44.40
2013	-34.79	-32.62	-4.39	-31.51	-35.78
2014	-35.78	-32.97	-1.07	-29.06	-34.36
2015	-36.40	-35.56			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-2.51	NaN
2005	-0.49	2.51	0.23	-0.69	0.94
2006	0.66	-1.92	-1.02	1.13	-0.26
2007	0.93	-1.87	1.92	1.22	0.37
2008	-1.13	-0.09	-0.89	-1.54	-1.09
2009	-2.06	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	2.33	NaN
2011	-1.92	NaN	NaN	-0.76	NaN
2012	-0.47	-1.28	0.62	-0.76	-0.93
2013	-1.48	-3.05	0.64	0.87	-0.46
2014	0.92	0.42	-0.85	0.96	0.86
2015	2.37	2.64			

**Table R-2A.** Statistical summaries of air temperature data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	98.91	100.00	99.73
2007	100.00	100.00	100.00	100.00	100.00
2008	100.00	100.00	100.00	100.00	100.00
2009	100.00	94.57	0.00	0.00	40.00
2010	0.00	0.00	13.04	100.00	36.71
2011	100.00	86.96	6.52	100.00	73.15
2012	100.00	100.00	98.91	100.00	99.73
2013	100.00	98.91	98.91	100.00	99.45
2014	100.00	100.00	100.00	100.00	100.00
2015	100.00	100.00			

**Table R-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek

Variable: Wind speed, in meters per second

File name: AK112\_U\_sea\_stats.txt

Date of file preparation: 20 Jul 2016

Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN
2005	0.86	1.48	2.33	1.41	1.52
2006	NaN	1.35	2.32	1.12	1.41
2007	0.82	1.24	2.00	1.21	1.32
2008	1.00	1.58	1.99	1.20	1.44
2009	NaN	1.28	2.00	1.07	1.32
2010	1.11	1.66	2.01	NaN	1.49
2011	0.91	NaN	NaN	1.13	NaN
2012	1.20	1.21	2.08	1.20	1.38
2013	0.83	1.47	2.05	1.13	1.41
2014	0.98	1.21	2.16	1.21	1.39
2015	0.80	1.00			

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN
2005	6.72	8.77	6.79	7.16	8.77
2006	NaN	6.50	7.99	8.45	8.45
2007	5.95	7.28	7.94	6.37	7.94
2008	8.95	7.16	6.11	6.71	8.95
2009	NaN	5.41	6.64	5.98	8.41
2010	6.71	7.21	6.39	NaN	7.21
2011	9.68	NaN	NaN	7.11	NaN
2012	7.84	6.43	6.48	6.98	7.84
2013	5.71	7.83	6.54	6.37	7.83
2014	7.16	5.23	7.27	6.58	7.27
2015	6.74	6.65			



**Table R-2B.** Statistical summaries of wind speed data at seasonal and annual resolution.—Continued

[Average, maximum, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean:						Percent of Data Available during Each Season/Year:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	NaN	NaN	2004	0.00	0.00	0.00	94.51	0.00
2005	-0.08	0.11	0.22	0.24	0.11	2005	97.78	100.00	100.00	98.90	96.99
2006	NaN	-0.02	0.21	-0.05	0.00	2006	91.11	100.00	98.91	98.90	99.45
2007	-0.12	-0.12	-0.10	0.04	-0.09	2007	100.00	100.00	100.00	100.00	100.00
2008	0.06	0.22	-0.12	0.03	0.03	2008	100.00	100.00	100.00	100.00	100.00
2009	NaN	-0.08	-0.10	-0.10	-0.09	2009	94.44	100.00	98.91	98.90	98.08
2010	0.17	0.29	-0.09	NaN	0.08	2010	96.67	100.00	100.00	91.21	95.89
2011	-0.03	NaN	NaN	-0.05	NaN	2011	95.56	86.96	6.52	100.00	73.15
2012	0.26	-0.16	-0.03	0.03	-0.03	2012	100.00	100.00	98.91	100.00	99.73
2013	-0.11	0.10	-0.05	-0.05	0.00	2013	100.00	100.00	98.91	100.00	99.73
2014	0.04	-0.16	0.06	0.03	-0.02	2014	100.00	100.00	100.00	97.80	98.90
2015	-0.14	-0.36				2015	97.78	96.74			

**Table R-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
 Variable: Ground temperature, in degrees Celsius  
 File name: AK112\_Tg\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages (10 cm depth):						Minimum Value Each Season/Year (10 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.34	NaN	2004	NaN	NaN	NaN	-1.80	NaN
2005	-5.03	-4.68	5.49	-1.03	-1.41	2005	-7.96	-7.90	0.11	-5.75	-7.96
2006	-7.11	-6.68	4.60	-1.35	-3.03	2006	-11.71	-10.57	-0.03	-10.30	-11.71
2007	-9.88	-8.80	NaN	NaN	NaN	2007	-12.77	-13.42	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN	2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN	2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.96	NaN	2010	NaN	NaN	NaN	-5.92	NaN
2011	-9.51	NaN	NaN	NaN	NaN	2011	-14.69	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN	2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN	2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN	2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN				2015	NaN	NaN			

**Table R-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Maximum Value Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	2.87	NaN
2005	-1.49	4.20	12.09	3.71	12.09
2006	-3.07	0.97	11.20	4.40	11.20
2007	-6.56	1.56	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	8.82	NaN
2011	-2.99	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Seasonal/Annual Averages (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.74	NaN
2005	-2.69	-5.05	-1.17	-0.51	-2.40
2006	-3.87	-6.48	-1.47	-0.57	-3.32
2007	-5.88	-8.22	-1.72	-0.60	-4.23
2008	-8.38	-9.42	-1.84	-0.70	-4.75
2009	-4.18	-6.51	-1.35	-0.56	-3.19
2010	-5.08	-6.50	-1.22	-0.51	-3.35
2011	-5.13	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Anomaly Relative to the Climatological Mean (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.58	NaN
2005	2.86	2.04	0.44	-0.11	0.81
2006	0.77	0.04	-0.44	-0.43	-0.81
2007	-1.99	-2.08	NaN	NaN	NaN
2008	NaN	NaN	NaN	NaN	NaN
2009	NaN	NaN	NaN	NaN	NaN
2010	NaN	NaN	NaN	-0.04	NaN
2011	-1.63	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Minimum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.97	NaN
2005	-5.39	-6.07	-2.18	-0.69	-6.07
2006	-6.99	-7.68	-2.93	-0.81	-7.68
2007	-8.66	-9.99	-3.88	-1.24	-9.99
2008	-12.74	-12.11	-3.79	-0.91	-12.74
2009	-7.10	-8.07	-2.77	-0.76	-8.07
2010	-8.33	-8.71	-2.36	-0.74	-8.71
2011	-8.81	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

Percent of Data Available during Each Season/Year (10 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	32.61	100.00	83.01
2006	100.00	100.00	98.91	100.00	99.73
2007	100.00	97.83	0.00	0.00	40.82
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	13.04	100.00	36.71
2011	100.00	86.96	0.00	0.00	38.08
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00			

Maximum Value Each Season/Year (120 cm depth):

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.55	NaN
2005	-0.53	-2.14	-0.65	-0.38	-0.38
2006	-0.40	-2.89	-0.73	-0.40	-0.40
2007	-0.45	-3.87	-0.75	-0.44	-0.44
2008	-1.24	-3.77	-0.83	-0.51	-0.51
2009	-0.53	-2.74	-0.66	-0.42	-0.42
2010	-0.42	-2.31	-0.57	-0.36	-0.36
2011	-0.42	NaN	NaN	NaN	NaN
2012	NaN	NaN	NaN	NaN	NaN
2013	NaN	NaN	NaN	NaN	NaN
2014	NaN	NaN	NaN	NaN	NaN
2015	NaN	NaN			

**Table R-2C.** Statistical summaries of ground temperature data at 10- and 120-centimeter depth at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Anomaly Relative to the Climatological Mean (120 cm depth):						Percent of Data Available during Each Season/Year (120 cm depth):					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.14	NaN	2004	0.00	0.00	0.00	100.00	0.00
2005	2.34	1.98	0.29	0.09	1.14	2005	100.00	100.00	32.61	100.00	83.01
2006	1.16	0.55	-0.01	0.03	0.22	2006	100.00	100.00	98.91	100.00	99.73
2007	-0.85	-1.19	-0.26	-0.00	-0.69	2007	100.00	97.83	0.00	0.00	40.82
2008	-3.35	-2.39	-0.38	-0.10	-1.21	2008	0.00	0.00	0.00	0.00	0.00
2009	0.85	0.52	0.11	0.04	0.35	2009	0.00	0.00	0.00	0.00	0.00
2010	-0.05	0.53	0.24	0.09	0.19	2010	0.00	0.00	13.04	100.00	36.71
2011	-0.10	NaN	NaN	NaN	NaN	2011	100.00	86.96	0.00	0.00	38.08
2012	NaN	NaN	NaN	NaN	NaN	2012	0.00	0.00	0.00	0.00	0.00
2013	NaN	NaN	NaN	NaN	NaN	2013	0.00	0.00	0.00	0.00	0.00
2014	NaN	NaN	NaN	NaN	NaN	2014	0.00	0.00	0.00	0.00	0.00
2015	NaN	NaN				2015	0.00	0.00			

**Table R-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
Variable: Incident solar flux, in watts per meter squared

File name: AK112\_So\_d\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:						Anomaly Relative to the Climatological Mean:					
Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	37.5	NaN	2004	NaN	NaN	NaN	4.2	NaN
2005	2.2	159.5	208.6	29.1	100.6	2005	-1.9	1.6	17.4	-4.2	3.5
2006	3.4	NaN	183.2	33.8	95.0	2006	-0.7	NaN	-8.0	0.4	-2.1
2007	3.8	159.6	216.3	36.4	104.7	2007	-0.3	1.7	25.1	3.0	7.7
2008	3.3	150.6	190.7	34.6	95.2	2008	-0.8	-7.4	-0.5	1.3	-1.9
2009	1.6	147.0	183.2	29.2	91.1	2009	-2.5	-10.9	-8.0	-4.1	-6.0
2010	5.5	153.6	189.0	37.2	96.9	2010	1.4	-4.3	-2.2	3.8	-0.1
2011	3.8	NaN	NaN	30.0	NaN	2011	-0.3	NaN	NaN	-3.3	NaN
2012	5.4	164.7	182.7	28.4	95.1	2012	1.3	6.7	-8.5	-4.9	-2.0
2013	4.0	170.0	192.8	32.0	100.2	2013	-0.1	12.1	1.6	-1.4	3.1
2014	6.4	159.5	174.3	37.3	95.0	2014	2.3	1.6	-16.9	4.0	-2.1
2015	3.8	NaN				2015	-0.3	NaN			

**Table R-2D.** Statistical summaries of incident solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	98.9	91.3	98.9	100.0	97.3
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	100.0	100.0	98.9	99.7
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	85.9	6.5	100.0	72.9
2012	100.0	96.7	98.9	98.9	98.6
2013	100.0	98.9	98.9	98.9	99.2
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	79.3			

**Table R-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
Variable: Reflected solar flux, in watts per meter squared

File name: AK112\_So\_u\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	18.7	NaN
2005	5.9	92.6	42.2	10.1	38.0
2006	5.5	112.1	36.8	11.0	41.6
2007	5.8	117.7	48.1	10.3	45.8
2008	5.7	97.9	41.5	16.3	40.5
2009	5.4	112.7	41.1	16.8	44.1
2010	5.3	80.0	39.5	10.8	34.1
2011	5.1	NaN	NaN	10.0	NaN
2012	6.0	109.6	40.0	12.0	42.1
2013	5.4	125.4	43.5	17.0	48.2
2014	6.2	114.5	38.3	10.6	42.7
2015	5.2	NaN			

Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	5.3	NaN
2005	0.3	-12.1	1.0	-3.3	-4.0
2006	-0.1	7.4	-4.4	-2.4	-0.3
2007	0.2	13.0	6.8	-3.0	3.9
2008	0.1	-6.8	0.2	2.9	-1.4
2009	-0.2	8.0	-0.1	3.4	2.2
2010	-0.3	-24.7	-1.7	-2.5	-7.8
2011	-0.5	NaN	NaN	-3.4	NaN
2012	0.5	4.9	-1.2	-1.4	0.2
2013	-0.1	20.7	2.3	3.6	6.3
2014	0.6	9.8	-2.9	-2.8	0.8
2015	-0.4	NaN			

**Table R-2E.** Statistical summaries of reflected solar-flux data at seasonal and annual resolution.—Continued

[Average, anomaly, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	98.9	100.0	99.7
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	98.9	100.0	100.0	99.7
2010	100.0	100.0	100.0	100.0	100.0
2011	100.0	85.9	6.5	100.0	72.9
2012	100.0	100.0	98.9	100.0	99.7
2013	100.0	100.0	98.9	98.9	99.5
2014	100.0	100.0	100.0	100.0	100.0
2015	100.0	80.4			

**Table R-2F.** Statistical summaries of rainfall data at seasonal and annual resolution.

[Maximum, accumulated total, and percentage of data available. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.

**Table R-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
 Variable: Snow depth, in centimeters  
 File name: AK112\_snowD\_sea\_stats.txt  
 Date of file preparation: 20 Jul 2016  
 Name of file preparer: Frank Urban

Seasonal/Annual Averages:

Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL	Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	15.1	NaN	2004	NaN	NaN	NaN	-0.5	NaN
2005	38.8	29.7	3.7	11.7	20.8	2005	28.2	1.1	-1.0	1.6	-1.0
2006	35.5	38.2	3.9	7.5	19.8	2006	25.9	-0.6	-0.5	1.3	-0.6
2007	23.6	31.8	8.3	6.3	17.0	2007	7.9	1.5	-0.6	-0.6	-0.6
2008	14.4	21.2	6.2	15.7	16.2	2008	3.9	-0.8	-0.6	-0.8	-0.8
2009	36.2	42.3	NaN	NaN	NaN	2009	27.3	-0.7	NaN	NaN	NaN
2010	NaN	NaN	NaN	14.8	NaN	2010	NaN	NaN	NaN	0.0	NaN
2011	32.8	32.4	NaN	NaN	NaN	2011	25.5	13.5	NaN	NaN	NaN
2012	35.8	32.8	7.6	5.9	18.8	2012	21.4	-0.1	-0.9	-1.7	-1.7
2013	14.7	21.6	8.1	11.3	15.6	2013	5.1	-0.1	-1.1	-0.8	-1.1
2014	33.2	37.0	8.9	7.6	20.8	2014	20.5	0.6	-1.4	-1.9	-1.9
2015	26.7	32.7				2015	6.1	1.7			

**Table R-2G.** Statistical summaries of snow depth data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 90 percent of the data must be available in order to calculate statistics. Periods with less than the 90 percent requirement are represented by NaN (not a number)]

## Maximum Value Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2004	NaN	NaN	NaN	29.6	NaN
2005	46.7	45.7	8.8	29.5	46.7
2006	45.3	49.8	11.3	13.1	49.8
2007	36.3	42.6	19.6	14.8	42.6
2008	25.3	33.2	14.3	30.6	33.6
2009	53.7	54.7	NaN	NaN	NaN
2010	NaN	NaN	NaN	36.2	NaN
2011	39.9	39.5	NaN	NaN	NaN
2012	48.0	46.7	23.1	14.0	48.0
2013	26.0	32.7	17.1	30.3	32.7
2014	49.3	48.7	13.9	17.7	49.3
2015	40.6	46.8			

## Percent of Data Available during Each Season/Year:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2004	0.0	0.0	0.0	100.0	0.0
2005	100.0	100.0	100.0	100.0	100.0
2006	100.0	100.0	100.0	100.0	100.0
2007	100.0	100.0	100.0	100.0	100.0
2008	100.0	100.0	100.0	100.0	100.0
2009	100.0	94.6	0.0	33.0	48.2
2010	0.0	0.0	14.1	100.0	37.0
2011	100.0	88.0	0.0	40.7	57.0
2012	100.0	100.0	100.0	100.0	100.0
2013	100.0	100.0	100.0	98.9	99.5
2014	98.9	100.0	100.0	96.7	99.2
2015	100.0	81.5			

## Anomaly Relative to the Climatological Mean:

Year WINTER SPRING SUMMER AUTUMN ANNUAL

2004	NaN	NaN	NaN	4.6	NaN
2005	10.8	-1.1	-3.0	1.2	2.4
2006	7.5	7.4	-2.7	-2.9	1.4
2007	-4.4	1.1	1.6	-4.2	-1.4
2008	-13.6	-9.6	-0.5	5.2	-2.2
2009	8.2	11.6	NaN	NaN	NaN
2010	NaN	NaN	NaN	4.3	NaN
2011	4.8	1.6	NaN	NaN	NaN
2012	7.8	2.1	1.0	-4.6	0.3
2013	-13.3	-9.1	1.4	0.8	-2.9
2014	5.2	6.2	2.2	-2.9	2.4
2015	-1.3	2.0			

**Table R-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Site name: Red Sheep Creek  
Variable: Soil moisture, in water fraction by volume

File name: AK112\_Smoist\_sea\_stats.txt  
Date of file preparation: 20 Jul 2016  
Name of file preparer: Frank Urban

## Seasonal/Annual Averages:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.31	NaN
2005	0.05	0.05	0.56	0.30	0.24
2006	0.04	0.03	0.58	0.43	0.27
2007	0.02	0.02	0.44	0.27	0.19
2008	NaN	NaN	0.51	0.35	NaN
2009	0.02	0.02	0.61	0.38	0.26
2010	0.03	0.03	0.51	0.32	0.22
2011	0.02	NaN	NaN	0.39	NaN
2012	0.02	0.01	0.51	0.39	NaN
2013	NaN	NaN	0.43	0.38	NaN
2014	0.03	0.02	0.74	0.46	0.32
2015	0.18	0.18			

## Maximum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.67	NaN
2005	0.09	0.38	0.68	0.69	0.69
2006	0.06	0.08	0.70	0.72	0.72
2007	0.03	0.06	0.71	0.72	0.72
2008	NaN	NaN	0.71	0.71	NaN
2009	0.05	0.06	0.71	0.71	0.71
2010	0.05	0.08	0.73	0.76	0.76
2011	0.04	NaN	NaN	0.78	NaN
2012	0.03	0.05	0.75	0.73	NaN
2013	NaN	NaN	0.70	0.68	NaN
2014	0.06	0.06	0.97	0.89	0.97
2015	0.18	0.18			

## Minimum Value Each Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	0.08	NaN
2005	0.03	0.03	0.35	0.05	0.03
2006	0.02	0.02	0.08	0.02	0.02
2007	0.01	0.01	0.06	0.03	0.01
2008	NaN	NaN	0.06	0.05	NaN
2009	0.01	0.01	0.06	0.04	0.01
2010	0.01	0.01	0.08	0.03	0.01
2011	0.01	NaN	NaN	0.03	NaN
2012	0.00	0.00	0.05	0.00	NaN
2013	NaN	NaN	0.03	0.05	NaN
2014	0.01	0.01	0.06	0.00	0.00
2015	0.17	0.15			

## Anomaly Relative to the Climatological Mean:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	NaN	NaN	NaN	-0.06	NaN
2005	-0.01	0.01	0.02	-0.08	-0.02
2006	-0.02	-0.01	0.04	0.06	0.00
2007	-0.04	-0.03	-0.11	-0.10	-0.08
2008	NaN	NaN	-0.04	-0.03	NaN
2009	-0.03	-0.02	0.06	0.01	-0.00
2010	-0.03	-0.01	-0.03	-0.06	-0.04
2011	-0.04	NaN	NaN	0.02	NaN
2012	-0.04	-0.03	-0.04	0.02	NaN
2013	NaN	NaN	-0.11	0.01	NaN
2014	-0.03	-0.03	0.19	0.09	0.06
2015	0.12	0.13			

**Table R-2H.** Statistical summaries of soil moisture data at seasonal and annual resolution.—Continued

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Percent of Data Available during Each  
Season/Year:

Year	WINTER	SPRING	SUMMER	AUTUMN	ANNUAL
2004	0.00	0.00	0.00	100.00	0.00
2005	100.00	100.00	100.00	100.00	100.00
2006	100.00	100.00	98.91	100.00	99.73
2007	100.00	100.00	100.00	100.00	100.00
2008	68.13	79.35	100.00	100.00	86.89
2009	100.00	100.00	100.00	100.00	100.00
2010	100.00	100.00	100.00	100.00	100.00
2011	100.00	73.91	6.52	100.00	69.86
2012	100.00	100.00	98.91	100.00	91.80
2013	2.22	15.22	98.91	98.90	61.92
2014	100.00	100.00	100.00	98.90	99.73
2015	100.00	100.00			

**Table R-2I.** Statistical summaries of surface pressure data at seasonal and annual resolution.

[Average, minimum, maximum, anomaly, and percentage of data available. Anomalies are calculated relative to the entire available period of record for the given site. 95 percent of the data must be available in order to calculate statistics. Periods with less than the 95 percent requirement are represented by NaN (not a number)]

Data for this station are not available.



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