## ARCTIC SLOPE ALASKA

## 15875000 COLVILLE RIVER AT UMIAT

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1969, 1975, 1978, 2002 to current year.

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PERIOD OF DAILY RECORD.--
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WATER TEMPERATURE: August 2002 to current year.
INSTRUMENTATION.--Electronic water-temperature recorder set for 1 -hour recording interval.

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REMARKS. --No record from October 1 to May 15, August 14 - 17, 21 - 29, and September 17 - 19, 27 - 30 due to water
    levels dropping below the sensor, the sensor encased in ice, or equipment malfunctions. Records represent water-
    temperature at the sensor within 0.5 C section on July 27. A variation of \(0.1^{\circ} \mathrm{C}\) was found in the cross section. The variation found between mean stream temperature and the recorded sensor temperature was \(1.8^{\circ} \mathrm{C}\). This difference is due to the location of the sensor which is in a backwater area of the stream during moderate to low flows.
EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, \(18.5^{\circ} \mathrm{C}\), July 2 and 26,2004 ; minimum, \(0.0^{\circ} \mathrm{C}\) on many days during winter periods.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, \(15.5^{\circ} \mathrm{C}\), July 26 ; minimum recorded \(0.5^{\circ} \mathrm{C}\), May \(16-22\).
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| Date | Time | $\begin{gathered} \text { Stream } \\ \text { width, } \\ \text { feet } \\ (00004) \end{gathered}$ | Location in X-sect. looking dwnstrm ft from 1 bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Sampling method, code (82398) | $\begin{aligned} & \text { Temper- } \\ & \text { ature, } \\ & \text { water, } \\ & \text { deg C } \\ & (00010) \end{aligned}$ | ```Temper- ature, air, deg C (00020)``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JUL |  |  |  |  |  |  |  |  |
| 27. | 1247 | 384 | 40.0 | 43.91 | 5200 | 10 | 12.7 | 13.5 |
| 27. | 1248 | 384 | 120 | 43.91 | 5200 | 10 | 12.7 | 13.5 |
| 27. | 1249 | 384 | 200 | 43.91 | 5200 | 10 | 12.7 | 13.5 |
| 27. | 1250 | 384 | 280 | 43.91 | 5200 | 10 | 12.7 | 13.5 |
| 27. | 1251 | 384 | 360 | 43.91 | 5200 | 10 | 12.8 | 13.5 |

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FEBRUARY |  |  | MARCH |  |  | APRIL |  |  | MAY |  |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | --- | - | -- | --- | --- | --- | - | --- | --- | - |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| 5 | --- | --- | - | - | --- | --- | - | --- | --- | --- | --- | --- |
|  | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | --- | --- | - | --- | --- | - | --- | --- | --- | -- | --- | - |
| 8 | --- | --- | --- | --- | --- | - | --- | --- | --- | --- | --- | --- |
| 9 | --- | --- | - | --- | --- | --- | --- | --- | --- | --- | --- | -- |
| 10 | --- | --- | -- | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| 11 | --- | --- | - | --- | --- | --- | --- | --- | --- | --- | --- | - |
| 12 | --- | --- | - | --- | - | - | --- | -- | - | -- | --- | --- |
| 13 | --- | --- | -- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | --- | --- | - | --- | --- | --- | - | --- | -- | --- |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0.5 | 0.5 | 0.5 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0.5 | 0.0 | 0.5 |
| 18 | --- | --- | --- | - | --- | - | --- | --- | --- | 0.5 | 0.5 | 0.5 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0.5 | 0.5 | 0.5 |
| 20 | --- | --- | --- | --- | --- | -- | --- | --- | --- | 1.0 | 0.5 | 0.5 |
| 21 | --- | --- | - | --- | --- | - | --- | --- | --- | 0.5 | 0.5 | 0.5 |
| 22 | --- | - | --- | - | --- | - | --- | --- | --- | 0.5 | 0.5 | 0.5 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.0 | 0.5 | 0.5 |
| 24 | --- | --- | - | --- | --- | - | --- | --- | --- | 1.5 | 0.5 | 0.5 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.0 | 0.5 | 0.5 |
|  | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.5 | 0.5 | 0.5 |
| 27 | --- | --- | - | --- | --- | --- | --- | --- | --- | 1.5 | 0.5 | 0.5 |
| 28 | --- | --- | -- | --- | -- | - | --- | --- | --- | 2.0 | 0.5 | 1.0 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2.5 | 1.0 | 2.0 |
| 30 | -- | --- | --- | --- | --- | --- | - | --- | - | 2.5 | 2.0 | 2.0 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.0 | 2.0 | 2.5 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | - |

## ARCTIC SLOPE ALASKA

## 15875000 COLVILLE RIVER AT UMIAT-Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE |  | JULY |  | AUGUST |  |  |  | SEPTEMBER |  |  |
| 1 | 3.0 | 2.0 | 2.5 | 14.5 | 10.5 | 12.5 | 12.0 | 8.0 | 10.0 | 10.0 | 7.5 | 8.5 |
| 2 | 3.0 | 2.0 | 2.5 | 14.0 | 11.5 | 13.0 | 12.5 | 8.0 | 10.0 | 9.0 | 8.5 | 8.5 |
| 3 | 2.0 | 1.5 | 1.5 | 11.5 | 10.0 | 10.5 | 13.0 | 8.5 | 10.5 | 9.0 | 8.0 | 8.5 |
| 4 | 2.0 | 1.5 | 1.5 | 10.5 | 8.5 | 9.5 | 12.5 | --- | 10.5 | 8.5 | 8.0 | 8.0 |
| 5 | 4.0 | 1.5 | 2.0 | 9.5 | 8.5 | 9.0 | 10.5 | 8.5 | 9.5 | 8.5 | 6.0 | 7.5 |
| 6 | 5.0 | 3.0 | 4.5 | 9.0 | 7.0 | 8.0 | 12.0 | 9.0 | 10.0 | 7.0 | 5.0 | 6.0 |
| 7 | 4.5 | 2.0 | 4.0 | 11.5 | 6.0 | 9.0 | 11.0 | 9.0 | 10.0 | 8.0 | 7.0 | 7.5 |
| 8 | 4.5 | 3.5 | 3.5 | 10.0 | 7.0 | 8.0 | 12.0 | 8.5 | 10.0 | 9.0 | 7.0 | 7.5 |
| 9 | 4.0 | 3.0 | 3.5 | 9.5 | 7.5 | 8.5 | 12.0 | 9.5 | 10.5 | 7.0 | 4.5 | 5.5 |
| 10 | 4.0 | 3.5 | 3.5 | 9.0 | 7.5 | 8.0 | 13.0 | 9.0 | 10.5 | 8.5 | 6.0 | 7.0 |
| 11 | 4.5 | 3.5 | 4.0 | 11.0 | 8.5 | 10.0 | 11.0 | 9.5 | 10.0 | 7.0 | 5.5 | 6.5 |
| 12 | 4.5 | 3.5 | 4.0 | 11.0 | 10.0 | 10.5 | 14.0 | 9.5 | 11.0 | 7.5 | 5.0 | 6.0 |
| 13 | 5.5 | 4.0 | 4.5 | 12.0 | 10.0 | 11.0 | 14.0 | 10.5 | 12.5 | 7.5 | 6.0 | 6.5 |
| 14 | 7.5 | 5.0 | 6.0 | 13.0 | 11.5 | 12.0 | --- | --- | --- | 6.5 | 6.0 | 6.5 |
| 15 | 8.5 | 7.0 | 7.5 | 13.5 | 12.0 | 12.5 | --- | --- | --- | 7.5 | 6.0 | 6.5 |
| 16 | 9.5 | 8.0 | 8.5 | 13.5 | 11.5 | 12.5 | --- | --- | --- | 7.5 | 5.0 | 6.0 |
| 17 | 9.5 | 8.5 | 9.0 | 12.5 | 11.0 | 11.5 | --- | --- | --- | --- | --- | --- |
| 18 | 10.0 | 8.5 | 9.0 | 12.0 | 9.5 | 10.5 | 11.5 | 7.0 | 9.0 | --- | --- | --- |
| 19 | 10.5 | 9.5 | 10.0 | 12.5 | 9.0 | 11.0 | 12.5 | 7.5 | 10.0 | --- | --- | --- |
| 20 | 10.0 | 9.0 | 9.5 | 12.0 | 10.0 | 11.0 | 13.0 | 7.5 | 10.5 | 5.5 | 5.0 | 5.5 |
| 21 | 10.0 | 8.5 | 9.5 | 12.0 | 9.0 | 10.5 | --- | --- | --- | 6.0 | 5.0 | 5.5 |
| 22 | 9.5 | 8.0 | 8.5 | 13.0 | 9.5 | 11.0 | --- | --- | --- | 5.0 | 4.0 | 4.5 |
| 23 | 9.5 | 8.0 | 8.5 | 13.5 | 9.5 | 11.5 | --- | --- | --- | 5.5 | 4.0 | 4.5 |
| 24 | 10.5 | 8.5 | 9.5 | 13.5 | 9.0 | 11.0 | --- | --- | --- | 5.5 | 4.5 | 5.0 |
| 25 | 12.0 | 9.0 | 10.5 | 13.5 | 8.5 | 10.5 | --- | --- | --- | 4.5 | 3.0 | 3.5 |
| 26 | 13.0 | 9.5 | 11.0 | 15.5 | 7.5 | 11.5 | --- | --- | --- | 3.0 | 2.5 | 2.5 |
| 27 | 12.5 | 10.5 | 11.5 | 12.0 | 6.5 | 10.0 | --- | --- | --- | 3.5 | --- | --- |
| 28 | 15.0 | 11.5 | 13.0 | 12.0 | 8.5 | 10.0 | --- | --- | --- | --- | --- | --- |
| 29 | 15.0 | 13.0 | 14.0 | 11.5 | 8.0 | 10.0 | --- | --- | --- | --- | --- | --- |
| 30 | 13.5 | 10.5 | 12.0 | 11.0 | 8.5 | 9.5 | 10.0 | 8.5 | 9.0 | --- | --- | --- |
| 31 | --- | --- | --- | 12.0 | 8.0 | 9.5 | 9.5 | 8.5 | 8.5 | - | --- | --- |
| MONTH | 15.0 | 1.5 | 7.0 | 15.5 | 6.0 | 10.4 | --- | - | --- | --- | --- | --- |

