CORRELATIONS AMONG SEASONAL WATER QUALITY, DISCHARGE, WEATHER, AND COVERAGE BY SUBMERSED AQUATIC VEGETATION IN THE TIDAL POTOMAC RIVER AND POTOMAC ESTUARY, 1983-96

By VIRGINIA CARTER, NANCY B. RYBICKI, JURATE M. LANDWEHR, JUSTIN T. REEL, AND HENRY A. RUHL

U.S. GEOLOGICAL SURVEY

Open-File Report 98-657

Reston, Virginia

1998

U. S. DEPARTMENT OF THE INTERIOR
Bruce Babbitt, *Secretary*

U. S. GEOLOGICAL SURVEY
Charles G. Groat, *Director*

For additional information write to:

Chief, Regional Hydrologic
Processes Project
U.S. Geological Survey
MS 431 - National Center
Reston, Virginia 20192

Copies of this report can be purchased from:

U.S. Geological Survey
Branch of Information Services
Box 25286, Federal Center
Denver, Colorado 80225-0286

CONTENTS

ILLUSTRATIONS

TABLES

SUMMARY OF CORRELATIONS AMONG SEASONAL WATER QUALITY, WEATHER, DISCHARGE, AND COVERAGE BY SUBMERSED AQUATIC VEGETATION IN THE TIDAL POTOMAC RIVER AND POTOMAC ESTUARY, 1983-96

Virginia Carter, Nancy Rybicki, Jurate Landwehr, Justin Reel and Henry Ruhl

ABSTRACT

The U.S. Geological Survey has been cooperating with other scientists under the auspices of the Interstate Commission on the Potomac River Basin to utilize existing data from the tidal Potomac River and Estuary for investigating linkages among living resources (primary producers, consumers) and abiotic components of the environment. Because the distribution and abundance of submersed aquatic vegetation in the tidal Potomac River and Estuary are controlled largely by light availability, the first step in investigating linkages with submersed aquatic vegetation is to examine the correlations that exist among vegetative cover, discharge, water quality and weather, all of which can affect light availability directly or indirectly. Growing season (April-October), spring (April-June), and summer (July-August) correlations are presented along with figures demonstrating the significant relationships among variables.

INTRODUCTION

The ecosystem of the Chesapeake Bay, the Nation's largest estuary, has been adversely affected during the past several decades by eutrophication caused by excessive nutrients

entering the bay. Nutrient loading has been identified as the primary cause of periods of hypoxia that kill or stress living resources in parts of the bay. Additionally, high nutrient and sediment loads have decreased water clarity and consequently are largely responsible for the decline in submersed aquatic vegetation (SAV) that form the base of the food chain and provide critical habitat for finfish, shellfish, and waterfowl. The mission of the U.S. Geological Survey's (USGS) Chesapeake Bay Ecosystem Program is to provide information to a broad community of policy makers, resource managers, scientists, and private citizens working on the restoration of the Chesapeake Bay. As part of this mission, USGS scientists collect and analyze data on current and historical nutrient and sediment loads in the drainage basin of the Chesapeake Bay and determine linkages between hydrologic parameters and the distribution and abundance of SAV in the Potomac River drainage basin.

Light is the primary factor controlling the distribution and abundance of SAV in the Chesapeake Bay and its tributaries (Batiuk and others, 1992; Carter and others, 1994; Carter and Rybicki, 1990). Light availability for SAV photosynthesis and growth is affected by water-column components such as total suspended solids (TSS) and chlorophyll-a (Carter and Rybicki, 1990). Additionally, epiphytic growths on the leaves and stems of SAV further reduce light availability for photosynthesis. Eutrophication causes an increase in the abundance of phytoplankton and thus increases chlorophyll-a, TSS, and epiphyte loads. Weather (precipitation, windspeed, available sunshine) also affects the amount of light available for photosynthesis and thus the distribution and abundance of SAV (Carter and others, 1994).

The USGS is cooperating with other scientists under the auspices of the Interstate Commission on the Potomac River Basin (ICPRB) to utilize existing data from the tidal Potomac River and Estuary for investigation of linkages among primary producers, consumers, water-quality and weather parameters, and discharge.

This this report presents statistical correlations among water quality, discharge, weather, and SAV coverage at mainstem stations in the tidal Potomac River and Estuary. The available data for 1983-95 include (1) biweekly water-quality monitoring data from the Maryland Department of Water Resources, the Virginia Water Control Board, and the District of Columbia, (2) daily and(or) monthly values for windspeed, wind direction, available sunshine (actual minutes of sunlight as a percent of possible sunlight), air temperature, and precipitation at National Airport from the National Oceanic and Atmospheric Administration (NOAA), (3) discharge data at Little Falls and sediment and nutrient loads at Chain Bridge from USGS, and (4) annual SAV coverage from the Chesapeake Bay Program.

MATERIALS AND METHODS—DEVELOPMENT OF CORRELATIONS

Figure 1 is a map of the tidal Potomac River and Estuary showing water-quality monitoring stations and salinity related segments. . Before 1997, the Chesapeake Bay Program subdivided the tidal Potomac River and Estuary into 3 segments: tidal fresh (TF2)(fresh water), transition zone (RET2) (oligohaline to mesohaline), and lower estuary (LE2)

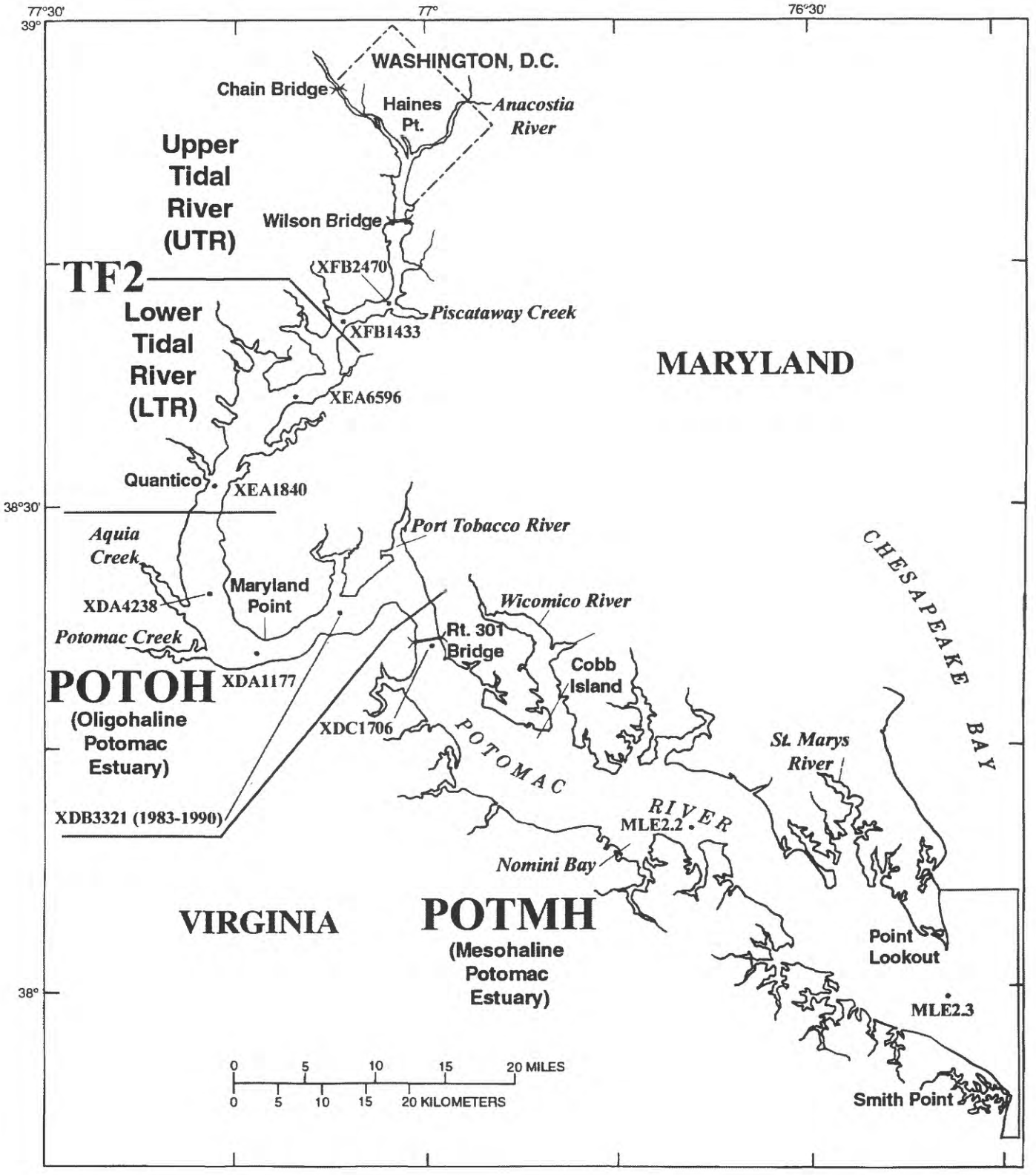


Figure 1. Map of the Tidal Potomac River and Estuary showing Chesapeake Bay Program segments adapted for use after 1997 and Maryland Department of Natural Resources water-quality stations.

(mesohaline) for the purpose of analyzing data and comparing tributaries baywide. Carter and Rybicki (1990) further divide the tidal river (TF2) into two zones, the upper tidal river (UTR) and the lower tidal river (LTR) (table 1; figure 1). In 1997, the Chesapeake Bay Program changed the boundaries of the segments to better reflect salinity, changing segment RET2 to POTOH (oligohaline) and segment LE2 to POTMH (mesohaline)(table 1, figure 1). SAV coverage for stations included all SAV within approximately 3 km upstream and downstream of each station (figure 1). SAV coverage for a segment included all SAV within the segment as depicted on Figure 1. SAV coverage for 1984-87 and 89-95 was provided by the Chesapeake Bay Program. SAV estimates for TF2 and stations therein for 1983 were made by Carter and Rybicki on the basis of extensive field work during the 1983 growing season. SAV estimates for TF2 and POTOH and stations therein for 1988 were made from 1:12,000-scale aerial photographs acquired for the Metropolitan Washington Council of Governments.

Water-quality data were collected biweekly by MD DNR at mainstem stations from Hatton Point to Point Lookout (figure 1). Growing season (April-October) means for each parameter for each year from 1983-95 were used in the correlations. Total nitrogen and total phosphorus were collected from 1986-95. Data collection at station NY (XDB3321) was discontinued in 1990, so this station was not used in the segment correlations. In 1990, analysis of nitrate plus nitrite (NO_{23}), ammonia (NH_4), and phosphate (PO_4) was changed from whole water samples to filtered water samples. Probability analysis showed that there was sufficient difference between filtered and

unfiltered samples in the case of NH_4 and PO_4 to preclude including them in the correlations.

Correlations were done for Chesapeake Bay Program segments and for each mainstem station (figure 1) using SAS (PROC CORR)(SAS Institute 1986); correlations were done for the new segments only. Correlations were considered significant when probability $\geq$ 0.05. Growing season precipitation, mean monthly wind speed, and mean monthly available sunshine for 1983-95 from National Airport and growing season mean monthly discharge from USGS were used in the correlations..

RESULTS OF CORRELATION ANALYSES

Tables 1-16 (Appendix 1) give all the growing season (April-October) Pearson Correlation Coefficients and probabilities for the mainstem stations and the Chespeake Bay Program segments. Tables 17-31 give all the spring (April-June) Pearson Correlation Coefficients and probabilities for the mainstem stations and the Chespeake Bay Program segments. Tables 32-46 give all the summer (July-September) Pearson Correlation Coefficients and probabilities for the mainstem stations and the Chespeake Bay Program Segments. Figures 2-16 (Appendix 2) show the significant growing season correlations for each mainstem station and segment and the relationship among these elements. Figures 17-21 show the significant spring correlations and their relationships for the salinity-related segments and Figures 22-26 show the significant summer correlations and their relationships for the salinity-related segments.

REFERENCES CITED

Carter, Virginia, Rybicki, N.B., Landwehr, J. M., and Michael Turtora, 1994, Role of weather and water quality in population dynamics of submersed macrophytes in the tidal Potomac River: Estuaries v. 17, no. 2, p. 417-426.

Batiuk, Richard, Heasley, Patsy, Orth, Robert, Moore, Kenneth, Stevenson, J.C., Dennison, William, Staver, Lori, Carter, Virginia, Rybicki, N.B., Hickman, R.E., Kollar, Stan, Bieber, Steven, and Peter Bergstrom, 1992, Chesapeake Bay submerged aquatic vegetation requirements and restoration goals: a technical synthesis: USEPA CBP/TRS 83-92, 162 p.

Carter, Virginia and N. B. Rybicki, 1990, Light attenuation and submersed macrophyte distribution in the tidal Potomac River and Estuary: Estuaries, v. 13, no. 4, p. 441-442.

SAS Institute, Inc, 1990, SAS Procedures Guide, Version 6: SAS Circle, Cary, NC, 705p.

Appendix 1. Correlation Tables by Station and Segment for the tidal Potomac River and Estuary, 1983-96

Table 1. Parameters, abbreviations, and units used in the tables and figures.

Parameter	Abbreviation	Units
Secchi depth	SECCHI	meters (m)
Chlorophyll-a	CHLA	micrograms per liter (µg/l)
Total suspended solids	TSS	milligrams per liter (mg/l)
Total nitrogen	TN	milligrams per liter as N (mg/l)
Total phosphorus	TP	milligrams per liter as P (mg/l)
Water temperature	WATEMP	degrees C (°C)
Salinity	SAL	parts per thousand (ppt)
Nitrate plus nitrite	NO23	milligrams per liter (mg/l)
SAV coverage	SAV	hectares
Difference in SAV coverage from previous year	SAV_D	hectares
Discharge	DISCH	cubic meters per second (m^3/s)
Available sunshine	AVSUN	percent of total available (%)
Wind speed	WINDSP	kilometers per hour (km/hr)
Precipitation	PRECIP	millimeters (mm)
Conductivity	COND	microsiemans per cm (µS/cm)
Tidal fresh Potomac River	TF2	
Upper tidal Potomac River	UTR	
Lower tidal Potomac River	LTR	
Oligohaline Potomac Estuary	POTOH	
Mesohaline Potomac Estuary	POTMH	

Table 2. Growing season correlations for Station XFB2470 (HP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.18756 0.5208 14	-0.41721 0.1378 14	0.33717 0.3106 11	-0.38629 0.1725 14	0.61129 0.0202 14	0.32680 0.2541 14	0.00737 0.9801 14	0.38467 0.1744 14	0.69950 0.0054 14	-0.33590 0.2403 14	0.00770 0.9792 14	-0.55369 0.0400 14	-0.19403 0.5063 14
CHLA	-0.18756 0.5208 14	1.00000 0.0 14	-0.10450 0.7222 14	-0.42380 0.1940 11	-0.04866 0.8688 14	0.30019 0.2971 14	-0.16250 0.5789 14	-0.24543 0.3977 14	-0.54167 0.0454 14	-0.07128 0.8087 14	-0.03327 0.9101 14	0.81880 0.0003 14	-0.35442 0.2137 14	0.01935 0.9477 14
TSS	-0.41721 0.1378 14	-0.10450 0.7222 14	1.00000 0.0 14	-0.64659 0.0316 11	0.94168 0.0001 14	-0.58660 0.0275 14	-0.49444 0.0723 14	-0.58974 0.0264 14	-0.21954 0.4508 14	-0.07147 0.8082 14	0.75355 0.0019 14	-0.09899 0.7363 14	0.13450 0.6466 14	0.38347 0.1759 14
TN	0.33717 0.3106 11	-0.42380 0.1940 11	-0.64659 0.0316 11	1.00000 0.0 11	-0.63652 0.0352 11	0.41565 0.2036 11	0.65403 0.0290 11	0.94938 0.0001 11	0.57895 0.0620 11	-0.02706 0.9371 11	-0.61240 0.0452 11	-0.07372 0.8295 11	0.23502 0.4867 11	-0.59548 0.0532 11
TP	-0.38629 0.1725 14	-0.04866 0.8688 14	0.94168 0.0001 14	-0.63652 0.0352 11	1.00000 0.0 14	-0.54689 0.0430 14	-0.56234 0.0363 14	-0.60634 0.0215 14	-0.41778 0.1372 14	-0.15917 0.5868 14	0.80417 0.0005 14	-0.06105 0.8358 14	-0.01935 0.9477 14	0.51079 0.0620 14
WATEMP	0.61129 0.0202 14	0.30019 0.2971 14	-0.58660 0.0275 14	0.41565 0.2036 11	-0.54689 0.0430 14	1.00000 0.0 14	0.60363 0.0223 14	0.35148 0.2178 14	0.22271 0.4441 14	0.60132 0.0229 14	-0.61044 0.0204 14	0.49957 0.0689 14	-0.35315 0.2155 14	-0.60568 0.0217 14
COND	0.32680 0.2541 14	-0.16250 0.5789 14	-0.49444 0.0723 14	0.65403 0.0290 11	-0.56234 0.0363 14	0.60363 0.0223 14	1.00000 0.0 14	0.61619 0.0189 14	0.56876 0.0338 14	0.45995 0.0980 14	-0.66018 0.0102 14	-0.08550 0.7713 14	0.23269 0.4234 14	-0.81246 0.0004 14
NO23	0.00737 0.9801 14	-0.24543 0.3977 14	-0.58974 0.0264 14	0.94938 0.0001 11	-0.60634 0.0215 14	0.35148 0.2178 14	0.61619 0.0189 14	1.00000 0.0 14	0.35409 0.2142 14	-0.01678 0.9546 14	-0.62568 0.0167 14	-0.02476 0.9331 14	0.16666 0.5690 14	-0.64392 0.0129 14
SAV	0.38467 0.1744 14	-0.54167 0.0454 14	-0.21954 0.4508 14	0.57895 0.0620 11	-0.41778 0.1372 14	0.22271 0.4441 14	0.56876 0.0338 14	0.35409 0.2142 14	1.00000 0.0 14	0.34984 0.2201 14	-0.39573 0.1613 14	-0.33272 0.2451 14	0.32585 0.2556 14	-0.54844 0.0423 14
SAV_D	0.69950 0.0054 14	-0.07128 0.8087 14	-0.07147 0.8082 14	-0.02706 0.9371 11	-0.15917 0.5868 14	0.60132 0.0229 14	0.45995 0.0980 14	-0.01678 0.9546 14	0.34984 0.2201 14	1.00000 0.0 14	-0.25719 0.3747 14	0.09317 0.7514 14	-0.38825 0.1701 14	-0.51746 0.0581 14
DISCH	-0.33590 0.2403 14	-0.03327 0.9101 14	0.75355 0.0019 14	-0.61240 0.0452 11	0.80417 0.0005 14	-0.61044 0.0204 14	-0.66018 0.0102 14	-0.62568 0.0167 14	-0.39573 0.1613 14	-0.25719 0.3747 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.00770 0.9792 14	0.81880 0.0003 14	-0.09899 0.7363 14	-0.07372 0.8295 11	-0.06105 0.8358 14	0.49957 0.0689 14	-0.08550 0.7713 14	-0.02476 0.9331 14	-0.33272 0.2451 14	0.09317 0.7514 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.55369 0.0400 14	-0.35442 0.2137 14	0.13450 0.6466 14	0.23502 0.4867 11	-0.01935 0.9477 14	-0.35315 0.2155 14	0.23269 0.4234 14	0.16666 0.5690 14	0.32585 0.2556 14	-0.38825 0.1701 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.19403 0.5063 14	0.01935 0.9477 14	0.38347 0.1759 14	-0.59548 0.0532 11	0.51079 0.0620 14	-0.60568 0.0217 14	-0.81246 0.0004 14	-0.64392 0.0129 14	-0.54844 0.0423 14	-0.51746 0.0581 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 3. Growing season correlations for Station XFB1433 (MH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.34719 0.2239 14	-0.46160 0.0966 14	0.43252 0.1840 11	0.07050 0.8107 14	0.65301 0.0113 14	0.29871 0.2996 14	-0.05338 0.8562 14	-0.14316 0.6254 14	0.37896 0.1815 14	-0.36607 0.1980 14	0.24524 0.3981 14	-0.69516 0.0058 14	-0.19433 0.5056 14
CHLA	0.34719 0.2239 14	1.00000 0.0 14	-0.06918 0.8142 14	-0.49713 0.1198 11	0.22255 0.4444 14	0.49142 0.0743 14	-0.06925 0.8140 14	-0.68825 0.0065 14	-0.54606 0.0434 14	0.09206 0.7543 14	-0.06496 0.8254 14	0.67794 0.0077 14	-0.52334 0.0548 14	0.06991 0.8123 14
TSS	-0.46160 0.0966 14	-0.06918 0.8142 14	1.00000 0.0 14	-0.55185 0.0784 11	0.60282 0.0225 14	-0.47881 0.0832 14	-0.41783 0.1371 14	-0.41854 0.1364 14	-0.29671 0.3029 14	-0.07852 0.7896 14	0.73321 0.0028 14	0.13204 0.6527 14	0.08902 0.7622 14	0.34309 0.2298 14
TN	0.43252 0.1840 11	-0.49713 0.1198 11	-0.55185 0.0784 11	1.00000 0.0 11	-0.45841 0.1562 11	0.27740 0.4089 11	0.24253 0.4724 11	0.92557 0.0001 11	0.62521 0.0397 11	-0.16184 0.6345 11	-0.47374 0.1410 11	-0.07804 0.8196 11	0.23505 0.4866 11	-0.40894 0.2117 11
TP	0.07050 0.8107 14	0.22255 0.4444 14	0.60282 0.0225 14	-0.45841 0.1562 11	1.00000 0.0 14	-0.11477 0.6960 14	-0.09218 0.7540 14	-0.48616 0.0780 14	-0.53715 0.0476 14	0.13520 0.6449 14	0.67062 0.0087 14	0.25481 0.3793 14	-0.37160 0.1908 14	0.35663 0.2107 14
WATEMP	0.65301 0.0113 14	0.49142 0.0743 14	-0.47881 0.0832 14	0.27740 0.4089 11	-0.11477 0.6960 14	1.00000 0.0 14	0.51739 0.0581 14	0.07471 0.7996 14	0.09385 0.7496 14	0.47679 0.0847 14	-0.62906 0.0159 14	0.53122 0.0506 14	-0.27688 0.3379 14	-0.63174 0.0154 14
COND	0.29871 0.2996 14	-0.06925 0.8140 14	-0.41783 0.1371 14	0.24253 0.4724 11	-0.09218 0.7540 14	0.51739 0.0581 14	1.00000 0.0 14	0.27340 0.3443 14	0.46847 0.0911 14	0.52197 0.0556 14	-0.61266 0.0198 14	-0.02189 0.9408 14	0.07418 0.8010 14	-0.62253 0.0174 14
NO23	-0.05338 0.8562 14	-0.68825 0.0065 14	-0.41854 0.1364 14	0.92557 0.0001 11	-0.48616 0.0780 14	0.07471 0.7996 14	0.27340 0.3443 14	1.00000 0.0 14	0.55579 0.0391 14	-0.20843 0.4746 14	-0.41513 0.1399 14	-0.17935 0.5395 14	0.37481 0.1867 14	-0.40678 0.1489 14
SAV	-0.14316 0.6254 14	-0.54606 0.0434 14	-0.29671 0.3029 14	0.62521 0.0397 11	-0.53715 0.0476 14	0.09385 0.7496 14	0.46847 0.0911 14	0.55579 0.0391 14	1.00000 0.0 14	0.34066 0.2333 14	-0.49087 0.0747 14	-0.46032 0.0977 14	0.49942 0.0690 14	-0.41782 0.1371 14
SAV_D	0.37896 0.1815 14	0.09206 0.7543 14	-0.07852 0.7896 14	-0.16184 0.6345 11	0.13520 0.6449 14	0.47679 0.0847 14	0.52197 0.0556 14	-0.20843 0.4746 14	0.34066 0.2333 14	1.00000 0.0 14	-0.21499 0.4604 14	-0.16070 0.5831 14	-0.08647 0.7688 14	-0.23319 0.4224 14
DISCH	-0.36607 0.1980 14	-0.06496 0.8254 14	0.73321 0.0028 14	-0.47374 0.1410 11	0.67062 0.0087 14	-0.62906 0.0159 14	-0.61266 0.0198 14	-0.41513 0.1399 14	-0.49087 0.0747 14	-0.21499 0.4604 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.24524 0.3981 14	0.67794 0.0077 14	0.13204 0.6527 14	-0.07804 0.8196 11	0.25481 0.3793 14	0.53122 0.0506 14	-0.02189 0.9408 14	-0.17935 0.5395 14	-0.46032 0.0977 14	-0.16070 0.5831 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.69516 0.0058 14	-0.52334 0.0548 14	0.08902 0.7622 14	0.23505 0.4866 11	-0.37160 0.1908 14	-0.27688 0.3379 14	0.07418 0.8010 14	0.37481 0.1867 14	0.49942 0.0690 14	-0.08647 0.7688 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.19433 0.5056 14	0.06991 0.8123 14	0.34309 0.2298 14	-0.40894 0.2117 11	0.35663 0.2107 14	-0.63174 0.0154 14	-0.62253 0.0174 14	-0.40678 0.1489 14	-0.41782 0.1371 14	-0.23319 0.4224 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 4. Growing season correlations for Station XEA6596 (IH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.32474 0.2573 14	-0.68899 0.0064 14	0.34919 0.2925 11	-0.66091 0.0101 14	0.49381 0.0727 14	-0.09554 0.7453 14	0.42817 0.1267 14	0.48469 0.0790 14	0.24523 0.3981 14	-0.44946 0.1069 14	-0.04606 0.8758 14	0.01993 0.9461 14	-0.30500 0.2890 14
CHLA	-0.32474 0.2573 14	1.00000 0.0 14	0.16835 0.5651 14	-0.80093 0.0031 11	0.68519 0.0068 14	0.38117 0.1787 14	-0.08314 0.7775 14	-0.76819 0.0013 14	-0.59945 0.0235 14	-0.38732 0.1712 14	0.05076 0.8632 14	0.55087 0.0412 14	-0.68521 0.0068 14	0.22190 0.4458 14
TSS	-0.68899 0.0064 14	0.16835 0.5651 14	1.00000 0.0 14	-0.37879 0.2506 11	0.67454 0.0081 14	-0.48746 0.0771 14	-0.22383 0.4417 14	-0.34558 0.2262 14	-0.09243 0.7533 14	0.09028 0.7589 14	0.77298 0.0012 14	0.09780 0.7394 14	-0.08259 0.7789 14	0.40967 0.1458 14
TN	0.34919 0.2925 11	-0.80093 0.0031 11	-0.37879 0.2506 11	1.00000 0.0 11	-0.57422 0.0647 11	-0.29908 0.3716 11	-0.22897 0.4983 11	0.90661 0.0001 11	0.21476 0.5260 11	0.46370 0.1508 11	-0.01081 0.9748 11	-0.59980 0.0511 11	0.35952 0.2775 11	0.26230 0.4359 11
TP	-0.66091 0.0101 14	0.68519 0.0068 14	0.67454 0.0081 14	-0.57422 0.0647 11	1.00000 0.0 14	-0.05442 0.8534 14	0.08236 0.7796 14	-0.66593 0.0093 14	-0.33569 0.2406 14	0.02265 0.9387 14	0.42379 0.1310 14	0.32210 0.2614 14	-0.54651 0.0432 14	0.37288 0.1892 14
WATEMP	0.49381 0.0727 14	0.38117 0.1787 14	-0.48746 0.0771 14	-0.29908 0.3716 11	-0.05442 0.8534 14	1.00000 0.0 14	0.31573 0.2715 14	-0.38057 0.1795 14	-0.11560 0.6939 14	-0.01274 0.9655 14	-0.60542 0.0218 14	0.42653 0.1283 14	-0.35138 0.2180 14	-0.56712 0.0344 14
COND	-0.09554 0.7453 14	-0.08314 0.7775 14	-0.22383 0.4417 14	-0.22897 0.4983 11	0.08236 0.7796 14	0.31573 0.2715 14	1.00000 0.0 14	-0.22583 0.4376 14	-0.21287 0.4650 14	0.08042 0.7846 14	-0.59197 0.0257 14	-0.23755 0.4135 14	0.15516 0.5964 14	-0.51435 0.0599 14
NO23	0.42817 0.1267 14	-0.76819 0.0013 14	-0.34558 0.2262 14	0.90661 0.0001 11	-0.66593 0.0093 14	-0.38057 0.1795 14	-0.22583 0.4376 14	1.00000 0.0 14	0.46678 0.0924 14	0.36750 0.1961 14	-0.02776 0.9250 14	-0.59906 0.0236 14	0.35353 0.2150 14	0.10936 0.7098 14
SAV	0.48469 0.0790 14	-0.59945 0.0235 14	-0.09243 0.7533 14	0.21476 0.5260 11	-0.33569 0.2406 14	-0.11560 0.6939 14	-0.21287 0.4650 14	0.46678 0.0924 14	1.00000 0.0 14	0.32723 0.2534 14	-0.00123 0.9967 14	0.13626 0.6423 14	0.11295 0.7006 14	-0.09506 0.7465 14
SAV_D	0.24523 0.3981 14	-0.38732 0.1712 14	0.09028 0.7589 14	0.46370 0.1508 11	0.02265 0.9387 14	-0.01274 0.9655 14	0.08042 0.7846 14	0.36750 0.1961 14	0.32723 0.2534 14	1.00000 0.0 14	0.20805 0.4754 14	-0.37390 0.1878 14	0.19703 0.4996 14	0.20457 0.4830 14
DISCH	-0.44946 0.1069 14	0.05076 0.8632 14	0.77298 0.0012 14	-0.01081 0.9748 11	0.42379 0.1310 14	-0.60542 0.0218 14	-0.59197 0.0257 14	-0.02776 0.9250 14	-0.00123 0.9967 14	0.20805 0.4754 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	-0.04606 0.8758 14	0.55087 0.0412 14	0.09780 0.7394 14	-0.59980 0.0511 11	0.32210 0.2614 14	0.42653 0.1283 14	-0.23755 0.4135 14	-0.59906 0.0236 14	0.13626 0.6423 14	-0.37390 0.1878 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	0.01993 0.9461 14	-0.68521 0.0068 14	-0.08259 0.7789 14	0.35952 0.2775 11	-0.54651 0.0432 14	-0.35138 0.2180 14	0.15516 0.5964 14	0.35353 0.2150 14	0.11295 0.7006 14	0.19703 0.4996 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.30500 0.2890 14	0.22190 0.4458 14	0.40967 0.1458 14	0.26230 0.4359 11	0.37288 0.1892 14	-0.56712 0.0344 14	-0.51435 0.0599 14	0.10936 0.7098 14	-0.09506 0.7465 14	0.20457 0.4830 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 5. Growing season correlations for Station XEA1840 (QN) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.47054 0.0895 14	-0.71494 0.0041 14	0.31966 0.3379 11	-0.73567 0.0027 14	0.14434 0.6225 14	-0.04085 0.8897 14	0.34544 0.2264 14	0.24636 0.3959 14	0.24470 0.3991 14	-0.25970 0.3699 14	0.06738 0.8190 14	0.19439 0.5055 14	-0.24269 0.4032 14
CHLA	-0.47054 0.0895 14	1.00000 0.0 14	0.49385 0.0727 14	-0.46465 0.1499 11	0.57549 0.0313 14	0.41063 0.1447 14	0.08934 0.7613 14	-0.64042 0.0136 14	-0.56833 0.0340 14	-0.24200 0.4045 14	0.19882 0.4956 14	-0.26362 0.3625 14	-0.25281 0.3832 14	-0.01444 0.9609 14
TSS	-0.71494 0.0041 14	0.49385 0.0727 14	1.00000 0.0 14	-0.15412 0.6509 11	0.68793 0.0065 14	-0.29951 0.2982 14	-0.17397 0.5520 14	-0.19209 0.5106 14	-0.37144 0.1910 14	-0.17994 0.5382 14	0.68900 0.0064 14	-0.18099 0.5358 14	-0.02614 0.9293 14	0.34359 0.2291 14
TN	0.31966 0.3379 11	-0.46465 0.1499 11	-0.15412 0.6509 11	1.00000 0.0 11	-0.30722 0.3581 11	-0.62356 0.0404 11	-0.52501 0.0973 11	0.92294 0.0001 11	0.14816 0.6638 11	0.71002 0.0144 11	0.27219 0.4181 11	-0.65047 0.0302 11	0.37558 0.2550 11	0.54522 0.0828 11
TP	-0.73567 0.0027 14	0.57549 0.0313 14	0.68793 0.0065 14	-0.30722 0.3581 11	1.00000 0.0 14	0.14138 0.6297 14	0.06426 0.8272 14	-0.50853 0.0633 14	-0.56863 0.0339 14	-0.22288 0.4437 14	0.43236 0.1226 14	0.09035 0.7587 14	-0.56291 0.0361 14	0.36829 0.1951 14
WATEMP	0.14434 0.6225 14	0.41063 0.1447 14	-0.29951 0.2982 14	-0.62356 0.0404 11	0.14138 0.6297 14	1.00000 0.0 14	0.57377 0.0319 14	-0.75064 0.0020 14	-0.34937 0.2208 14	-0.38490 0.1742 14	-0.52233 0.0554 14	0.31071 0.2796 14	-0.42853 0.1263 14	-0.47835 0.0836 14
COND	-0.04085 0.8897 14	0.08934 0.7613 14	-0.17397 0.5520 14	-0.52501 0.0973 11	0.06426 0.8272 14	0.57377 0.0319 14	1.00000 0.0 14	-0.52477 0.0540 14	-0.36414 0.2006 14	-0.16165 0.5809 14	-0.64511 0.0127 14	-0.07479 0.7994 14	-0.01932 0.9477 14	-0.54284 0.0449 14
NO23	0.34544 0.2264 14	-0.64042 0.0136 14	-0.19209 0.5106 14	0.92294 0.0001 11	-0.50853 0.0633 14	-0.75064 0.0020 14	-0.52477 0.0540 14	1.00000 0.0 14	0.60897 0.0208 14	0.57212 0.0325 14	0.17017 0.5608 14	-0.32740 0.2532 14	0.38077 0.1792 14	0.35684 0.2104 14
SAV	0.24636 0.3959 14	-0.56833 0.0340 14	-0.37144 0.1910 14	0.14816 0.6638 11	-0.56863 0.0339 14	-0.34937 0.2208 14	-0.36414 0.2006 14	0.60897 0.0208 14	1.00000 0.0 14	0.21696 0.4562 14	-0.14211 0.6279 14	0.13909 0.6353 14	0.13648 0.6418 14	-0.08694 0.7676 14
SAV_D	0.24470 0.3991 14	-0.24200 0.4045 14	-0.17994 0.5382 14	0.71002 0.0144 11	-0.22288 0.4437 14	-0.38490 0.1742 14	-0.16165 0.5809 14	0.57212 0.0325 14	0.21696 0.4562 14	1.00000 0.0 14	0.23878 0.4110 14	-0.44886 0.1074 14	0.24128 0.4060 14	0.19899 0.4952 14
DISCH	-0.25970 0.3699 14	0.19882 0.4956 14	0.68900 0.0064 14	0.27219 0.4181 11	0.43236 0.1226 14	-0.52233 0.0554 14	-0.64511 0.0127 14	0.17017 0.5608 14	-0.14211 0.6279 14	0.23878 0.4110 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.06738 0.8190 14	-0.26362 0.3625 14	-0.18099 0.5358 14	-0.65047 0.0302 11	0.09035 0.7587 14	0.31071 0.2796 14	-0.07479 0.7994 14	-0.32740 0.2532 14	0.13909 0.6353 14	-0.44886 0.1074 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	0.19439 0.5055 14	-0.25281 0.3832 14	-0.02614 0.9293 14	0.37558 0.2550 11	-0.56291 0.0361 14	-0.42853 0.1263 14	-0.01932 0.9477 14	0.38077 0.1792 14	0.13648 0.6418 14	0.24128 0.4060 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.24269 0.4032 14	-0.01444 0.9609 14	0.34359 0.2291 14	0.54522 0.0828 11	0.36829 0.1951 14	-0.47835 0.0836 14	-0.54284 0.0449 14	0.35684 0.2104 14	-0.08694 0.7676 14	0.19899 0.4952 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 6. Growing season correlations for Station XDA4238 (DP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.19744 0.4987 14	-0.76272 0.0015 14	-0.13164 0.6996 11	-0.22754 0.4340 14	0.49782 0.0701 14	0.45906 0.0987 14	-0.23356 0.4216 14	-0.31822 0.2893 13	-0.24493 0.4429 12	-0.27792 0.3360 14	0.28593 0.3217 14	-0.24316 0.4022 14	-0.22670 0.4358 14
CHLA	-0.19744 0.4987 14	1.00000 0.0 14	0.28604 0.3215 14	-0.08733 0.7985 11	0.77164 0.0012 14	0.36721 0.1965 14	-0.09055 0.7582 14	-0.51524 0.0594 14	-0.42582 0.1468 13	-0.25077 0.4318 12	0.13594 0.6431 14	-0.27618 0.3392 14	-0.33561 0.2408 14	-0.02277 0.9384 14
TSS	-0.76272 0.0015 14	0.28604 0.3215 14	1.00000 0.0 14	-0.11836 0.7289 11	0.17277 0.5548 14	-0.31847 0.2671 14	-0.33687 0.2389 14	-0.06978 0.8126 14	-0.02401 0.9380 13	-0.14459 0.6539 12	0.41486 0.1402 14	-0.10961 0.7091 14	0.08339 0.7769 14	0.06402 0.8279 14
TN	-0.13164 0.6996 11	-0.08733 0.7985 11	-0.11836 0.7289 11	1.00000 0.0 11	0.25594 0.4475 11	-0.70821 0.0147 11	-0.66090 0.0268 11	0.92527 0.0001 11	-0.28556 0.3947 11	0.30735 0.3579 11	0.56190 0.0720 11	-0.68620 0.0197 11	0.33139 0.3195 11	0.77873 0.0047 11
TP	-0.22754 0.4340 14	0.77164 0.0012 14	0.17277 0.5548 14	0.25594 0.4475 11	1.00000 0.0 14	0.09875 0.7370 14	-0.12562 0.6687 14	-0.25232 0.3842 14	-0.36679 0.2177 13	0.00724 0.9822 12	0.20894 0.4735 14	-0.37684 0.1841 14	-0.27999 0.3323 14	0.25246 0.3839 14
WATEMP	0.49782 0.0701 14	0.36721 0.1965 14	-0.31847 0.2671 14	-0.70821 0.0147 11	0.09875 0.7370 14	1.00000 0.0 14	0.54721 0.0428 14	-0.81147 0.0004 14	-0.06153 0.8417 13	-0.36852 0.2385 12	-0.47749 0.0842 14	0.41165 0.1436 14	-0.44083 0.1146 14	-0.46066 0.0974 14
COND	0.45906 0.0987 14	-0.09055 0.7582 14	-0.33687 0.2389 14	-0.66090 0.0268 11	-0.12562 0.6687 14	0.54721 0.0428 14	1.00000 0.0 14	-0.56421 0.0356 14	-0.21970 0.4708 13	-0.19965 0.5339 12	-0.77895 0.0010 14	0.09827 0.7382 14	0.03275 0.9115 14	-0.68529 0.0068 14
NO23	-0.23356 0.4216 14	-0.51524 0.0594 14	-0.06978 0.8126 14	0.92527 0.0001 11	-0.25232 0.3842 14	-0.81147 0.0004 14	-0.56421 0.0356 14	1.00000 0.0 14	0.22624 0.4573 13	0.52968 0.0765 12	0.41593 0.1391 14	-0.37189 0.1904 14	0.34704 0.2241 14	0.62568 0.0167 14
SAV	-0.31822 0.2893 13	-0.42582 0.1468 13	-0.02401 0.9380 13	-0.28556 0.3947 11	-0.36679 0.2177 13	-0.06153 0.8417 13	-0.21970 0.4708 13	0.22624 0.4573 13	1.00000 0.0 13	0.25815 0.4179 12	-0.14085 0.6463 13	0.44511 0.1275 13	-0.22939 0.4509 13	-0.03904 0.8992 13
SAV_D	-0.24493 0.4429 12	-0.25077 0.4318 12	-0.14459 0.6539 12	0.30735 0.3579 11	0.00724 0.9822 12	-0.36852 0.2385 12	-0.19965 0.5339 12	0.52968 0.0765 12	0.25815 0.4179 12	1.00000 0.0 12	0.06081 0.8511 12	-0.47324 0.1202 12	0.22851 0.4750 12	0.23135 0.4694 12
DISCH	-0.27792 0.3360 14	0.13594 0.6431 14	0.41486 0.1402 14	0.56190 0.0720 11	0.20894 0.4735 14	-0.47749 0.0842 14	-0.77895 0.0010 14	0.41593 0.1391 14	-0.14085 0.6463 13	0.06081 0.8511 12	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.28593 0.3217 14	-0.27618 0.3392 14	-0.10961 0.7091 14	-0.68620 0.0197 11	-0.37684 0.1841 14	0.41165 0.1436 14	0.09827 0.7382 14	-0.37189 0.1904 14	0.44511 0.1275 13	-0.47324 0.1202 12	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.24316 0.4022 14	-0.33561 0.2408 14	0.08339 0.7769 14	0.33139 0.3195 11	-0.27999 0.3323 14	-0.44083 0.1146 14	0.03275 0.9115 14	0.34704 0.2241 14	-0.22939 0.4509 13	0.22851 0.4750 12	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.22670 0.4358 14	-0.02277 0.9384 14	0.06402 0.8279 14	0.77873 0.0047 11	0.25246 0.3839 14	-0.46066 0.0974 14	-0.68529 0.0068 14	0.62568 0.0167 14	-0.03904 0.8992 13	0.23135 0.4694 12	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 7. Growing season correlations for Station XDA1177 (MP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.06225 0.8326 14	-0.79718 0.0006 14	-0.71103 0.0142 11	0.10005 0.7336 14	0.67468 0.0081 14	0.61370 0.0196 14	-0.60884 0.0208 14	-0.42391 0.1489 13	-0.03405 0.9163 12	-0.43127 0.1236 14	0.42278 0.1320 14	-0.36205 0.2034 14	-0.49688 0.0707 14
CHLA	0.06225 0.8326 14	1.00000 0.0 14	0.18273 0.5318 14	-0.01123 0.9739 11	0.80016 0.0006 14	0.22781 0.4335 14	-0.16922 0.5630 14	-0.47419 0.0867 14	-0.32082 0.2852 13	-0.49188 0.1043 12	0.20050 0.4919 14	-0.34678 0.2245 14	-0.12144 0.6792 14	-0.15336 0.6007 14
TSS	-0.79718 0.0006 14	0.18273 0.5318 14	1.00000 0.0 14	0.52631 0.0963 11	0.14807 0.6134 14	-0.42621 0.1286 14	-0.55526 0.0393 14	0.33188 0.2464 14	0.33056 0.2700 13	-0.33069 0.2938 12	0.60044 0.0232 14	-0.28917 0.3160 14	0.10298 0.7261 14	0.45239 0.1043 14
TN	-0.71103 0.0142 11	-0.01123 0.9739 11	0.52631 0.0963 11	1.00000 0.0 11	0.08757 0.7979 11	-0.72948 0.0108 11	-0.73917 0.0093 11	0.87890 0.0004 11	-0.04083 0.9051 11	0.23446 0.4877 11	0.76644 0.0059 11	-0.54586 0.0824 11	0.31020 0.3532 11	0.83843 0.0013 11
TP	0.10005 0.7336 14	0.80016 0.0006 14	0.14807 0.6134 14	0.08757 0.7979 11	1.00000 0.0 14	0.17954 0.5391 14	-0.27332 0.3444 14	-0.29601 0.3042 14	-0.06924 0.8222 13	0.10490 0.7456 12	0.26025 0.3689 14	-0.20991 0.4714 14	-0.28999 0.3146 14	0.11815 0.6875 14
WATEMP	0.67468 0.0081 14	0.22781 0.4335 14	-0.42621 0.1286 14	-0.72948 0.0108 11	0.17954 0.5391 14	1.00000 0.0 14	0.43575 0.1194 14	-0.79848 0.0006 14	-0.04464 0.8849 13	-0.05202 0.8725 12	-0.35893 0.2076 14	0.49630 0.0711 14	-0.44508 0.1108 14	-0.39656 0.1604 14
COND	0.61370 0.0196 14	-0.16922 0.5630 14	-0.55526 0.0393 14	-0.73917 0.0093 11	-0.27332 0.3444 14	0.43575 0.1194 14	1.00000 0.0 14	-0.57882 0.0301 14	-0.33812 0.2585 13	0.01241 0.9695 12	-0.84285 0.0002 14	0.06191 0.8335 14	0.14175 0.6288 14	-0.70983 0.0045 14
NO23	-0.60884 0.0208 14	-0.47419 0.0867 14	0.33188 0.2464 14	0.87890 0.0004 11	-0.29601 0.3042 14	-0.79848 0.0006 14	-0.57882 0.0301 14	1.00000 0.0 14	0.19764 0.5175 13	0.22344 0.4851 12	0.49506 0.0719 14	-0.29307 0.3092 14	0.29026 0.3141 14	0.66159 0.0100 14
SAV	-0.42391 0.1489 13	-0.32082 0.2852 13	0.33056 0.2700 13	-0.04083 0.9051 11	-0.06924 0.8222 13	-0.04464 0.8849 13	-0.33812 0.2585 13	0.19764 0.5175 13	1.00000 0.0 13	0.22077 0.4905 12	0.07175 0.8158 13	0.48097 0.0961 13	-0.28133 0.3518 13	0.25766 0.3954 13
SAV_D	-0.03405 0.9163 12	-0.49188 0.1043 12	-0.33069 0.2938 12	0.23446 0.4877 11	0.10490 0.7456 12	-0.05202 0.8725 12	0.01241 0.9695 12	0.22344 0.4851 12	0.22077 0.4905 12	1.00000 0.0 12	-0.24693 0.4391 12	-0.32038 0.3100 12	-0.00956 0.9765 12	0.35443 0.2583 12
DISCH	-0.43127 0.1236 14	0.20050 0.4919 14	0.60044 0.0232 14	0.76644 0.0059 11	0.26025 0.3689 14	-0.35893 0.2076 14	-0.84285 0.0002 14	0.49506 0.0719 14	0.07175 0.8158 13	-0.24693 0.4391 12	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.42278 0.1320 14	-0.34678 0.2245 14	-0.28917 0.3160 14	-0.54586 0.0824 11	-0.20991 0.4714 14	0.49630 0.0711 14	0.06191 0.8335 14	-0.29307 0.3092 14	0.48097 0.0961 13	-0.32038 0.3100 12	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.36205 0.2034 14	-0.12144 0.6792 14	0.10298 0.7261 14	0.31020 0.3532 11	-0.28999 0.3146 14	-0.44508 0.1108 14	0.14175 0.6288 14	0.29026 0.3141 14	-0.28133 0.3518 13	-0.00956 0.9765 12	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.49688 0.0707 14	-0.15336 0.6007 14	0.45239 0.1043 14	0.83843 0.0013 11	0.11815 0.6875 14	-0.39656 0.1604 14	-0.70983 0.0045 14	0.66159 0.0100 14	0.25766 0.3954 13	0.35443 0.2583 12	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 8. Growing season correlations for Station XDB3321 (NY) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 8	0.30404 0.4641 8	-0.25748 0.5381 8	-0.31859 0.6013 5	0.37065 0.3661 8	0.47114 0.2386 8	0.30471 0.4631 8	-0.54384 0.1635 8	-0.76719 0.0441 7	0.13404 0.8001 6	0.02196 0.9588 8	0.60295 0.1136 8	-0.47826 0.2306 8	-0.36215 0.3780 8
CHLA	0.30404 0.4641 8	1.00000 0.0 8	-0.66600 0.0714 8	-0.65042 0.2347 5	0.25106 0.5487 8	0.26569 0.5248 8	0.63130 0.0932 8	-0.81607 0.0135 8	-0.86032 0.0130 7	-0.09537 0.8574 6	-0.50619 0.2006 8	-0.42278 0.2967 8	0.10983 0.7957 8	-0.69659 0.0549 8
TSS	-0.25748 0.5381 8	-0.66600 0.0714 8	1.00000 0.0 8	-0.15492 0.8035 5	-0.42604 0.2926 8	-0.18685 0.6577 8	0.02292 0.9570 8	0.44587 0.2682 8	0.30215 0.5101 7	-0.57744 0.2301 6	-0.17474 0.6790 8	0.39638 0.3310 8	0.32679 0.4295 8	0.05153 0.9036 8
TN	-0.31859 0.6013 5	-0.65042 0.2347 5	-0.15492 0.8035 5	1.00000 0.0 5	0.01702 0.9783 5	-0.41511 0.4871 5	-0.78286 0.1174 5	0.80210 0.1025 5	0.86697 0.0571 5	0.86659 0.0573 5	0.90746 0.0333 5	-0.10071 0.8720 5	0.27070 0.6596 5	0.67851 0.2079 5
TP	0.37065 0.3661 8	0.25106 0.5487 8	-0.42604 0.2926 8	0.01702 0.9783 5	1.00000 0.0 8	0.73849 0.0364 8	-0.29854 0.4726 8	-0.47955 0.2292 8	-0.37648 0.4052 7	-0.02945 0.9558 6	0.34571 0.4016 8	0.05811 0.8913 8	-0.46768 0.2426 8	0.02066 0.9613 8
WATEMP	0.47114 0.2386 8	0.26569 0.5248 8	-0.18685 0.6577 8	-0.41511 0.4871 5	0.73849 0.0364 8	1.00000 0.0 8	0.02689 0.9496 8	-0.71821 0.0448 8	-0.60775 0.1477 7	-0.33978 0.5099 6	0.03546 0.9336 8	0.45137 0.2616 8	-0.47980 0.2289 8	-0.37680 0.3575 8
COND	0.30471 0.4631 8	0.63130 0.0932 8	0.02292 0.9570 8	-0.78286 0.1174 5	-0.29854 0.4726 8	0.02689 0.9496 8	1.00000 0.0 8	-0.60800 0.1098 8	-0.63514 0.1254 7	-0.39973 0.4323 6	-0.92475 0.0010 8	-0.00415 0.9922 8	0.21032 0.6171 8	-0.74313 0.0346 8
NO23	-0.54384 0.1635 8	-0.81607 0.0135 8	0.44587 0.2682 8	0.80210 0.1025 5	-0.47955 0.2292 8	-0.71821 0.0448 8	-0.60800 0.1098 8	1.00000 0.0 8	0.90266 0.0054 7	0.35224 0.4935 6	0.49007 0.2176 8	-0.07232 0.8649 8	0.24631 0.5565 8	0.74369 0.0344 8
SAV	-0.76719 0.0441 7	-0.86032 0.0130 7	0.30215 0.5101 7	0.86697 0.0571 5	-0.37648 0.4052 7	-0.60775 0.1477 7	-0.63514 0.1254 7	0.90266 0.0054 7	1.00000 0.0 13	0.74261 0.0057 12	0.65808 0.0145 13	0.00979 0.9747 13	0.05560 0.8568 13	0.68457 0.0098 13
SAV_D	0.13404 0.8001 6	-0.09537 0.8574 6	-0.57744 0.2301 6	0.86659 0.0573 5	-0.02945 0.9558 6	-0.33978 0.5099 6	-0.39973 0.4323 6	0.35224 0.4935 6	0.74261 0.0057 12	1.00000 0.0 12	0.68409 0.0141 12	-0.15165 0.6380 12	-0.08727 0.7874 12	0.58715 0.0447 12
DISCH	0.02196 0.9588 8	-0.50619 0.2006 8	-0.17474 0.6790 8	0.90746 0.0333 5	0.34571 0.4016 8	0.03546 0.9336 8	-0.92475 0.0010 8	0.49007 0.2176 8	0.65808 0.0145 13	0.68409 0.0141 12	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.60295 0.1136 8	-0.42278 0.2967 8	0.39638 0.3310 8	-0.10071 0.8720 5	0.05811 0.8913 8	0.45137 0.2616 8	-0.00415 0.9922 8	-0.07232 0.8649 8	0.00979 0.9747 13	-0.15165 0.6380 12	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.47826 0.2306 8	0.10983 0.7957 8	0.32679 0.4295 8	0.27070 0.6596 5	-0.46768 0.2426 8	-0.47980 0.2289 8	0.21032 0.6171 8	0.24631 0.5565 8	0.05560 0.8568 13	-0.08727 0.7874 12	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.36215 0.3780 8	-0.69659 0.0549 8	0.05153 0.9036 8	0.67851 0.2079 5	0.02066 0.9613 8	-0.37680 0.3575 8	-0.74313 0.0346 8	0.74369 0.0344 8	0.68457 0.0098 13	0.58715 0.0447 12	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 9. Growing season correlations for Station XDC1706 (301B) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.16183 0.5804 14	-0.66926 0.0089 14	-0.25125 0.4561 11	-0.22578 0.4377 14	-0.07451 0.8001 14	0.61727 0.0187 14	-0.11053 0.7068 14	-0.31578 0.3174 12	-0.09360 0.7970 10	-0.46455 0.0942 14	0.25205 0.3847 14	-0.05147 0.8613 14	-0.19640 0.5010 14
CHLA	-0.16183 0.5804 14	1.00000 0.0 14	-0.14990 0.6090 14	0.12969 0.7039 11	0.60323 0.0224 14	0.45645 0.1009 14	0.05626 0.8485 14	-0.40431 0.1516 14	-0.40857 0.1873 12	0.13656 0.7068 10	-0.03487 0.9058 14	-0.40863 0.1469 14	0.44158 0.1139 14	-0.36086 0.2050 14
TSS	-0.66926 0.0089 14	-0.14990 0.6090 14	1.00000 0.0 14	0.29924 0.3714 11	-0.16949 0.5624 14	-0.09861 0.7373 14	-0.72815 0.0031 14	0.38860 0.1697 14	0.72219 0.0080 12	-0.08493 0.8155 10	0.60665 0.0214 14	0.21570 0.4589 14	0.02205 0.9403 14	0.34186 0.2316 14
TN	-0.25125 0.4561 11	0.12969 0.7039 11	0.29924 0.3714 11	1.00000 0.0 11	-0.00486 0.9887 11	-0.46251 0.1520 11	-0.71723 0.0130 11	0.81411 0.0023 11	0.10730 0.7680 10	0.44470 0.2304 9	0.87784 0.0004 11	-0.38755 0.2389 11	0.42343 0.1944 11	0.62475 0.0399 11
TP	-0.22578 0.4377 14	0.60323 0.0224 14	-0.16949 0.5624 14	-0.00486 0.9887 11	1.00000 0.0 14	0.60569 0.0217 14	-0.01175 0.9682 14	-0.45442 0.1026 14	-0.54096 0.0693 12	-0.06146 0.8661 10	0.11499 0.6955 14	-0.25427 0.3804 14	-0.06925 0.8140 14	-0.11221 0.7025 14
WATEMP	-0.07451 0.8001 14	0.45645 0.1009 14	-0.09861 0.7373 14	-0.46251 0.1520 11	0.60569 0.0217 14	1.00000 0.0 14	0.10398 0.7235 14	-0.62543 0.0168 14	-0.31957 0.3113 12	-0.13005 0.7203 10	-0.09493 0.7468 14	0.23778 0.4130 14	-0.38090 0.1791 14	-0.32527 0.2565 14
SAL	0.61727 0.0187 14	0.05626 0.8485 14	-0.72815 0.0031 14	-0.71723 0.0130 11	-0.01175 0.9682 14	0.10398 0.7235 14	1.00000 0.0 14	-0.67324 0.0083 14	-0.53985 0.0700 12	-0.31482 0.3756 10	-0.89737 0.0001 14	-0.08102 0.7831 14	0.06313 0.8302 14	-0.58360 0.0285 14
NO23	-0.11053 0.7068 14	-0.40431 0.1516 14	0.38860 0.1697 14	0.81411 0.0023 11	-0.45442 0.1026 14	-0.62543 0.0168 14	-0.67324 0.0083 14	1.00000 0.0 14	0.57230 0.0518 12	0.15826 0.6623 10	0.67660 0.0079 14	-0.05082 0.8630 14	0.12967 0.6586 14	0.71116 0.0043 14
SAV	-0.31578 0.3174 12	-0.40857 0.1873 12	0.72219 0.0080 12	0.10730 0.7680 10	-0.54096 0.0693 12	-0.31957 0.3113 12	-0.53985 0.0700 12	0.57230 0.0518 12	1.00000 0.0 12	-0.24282 0.4991 10	0.27180 0.3928 12	0.43630 0.1562 12	0.18170 0.5719 12	0.39314 0.2061 12
SAV_D	-0.09360 0.7970 10	0.13656 0.7068 10	-0.08493 0.8155 10	0.44470 0.2304 9	-0.06146 0.8661 10	-0.13005 0.7203 10	-0.31482 0.3756 10	0.15826 0.6623 10	-0.24282 0.4991 10	1.00000 0.0 10	0.29837 0.4024 10	0.06007 0.8691 10	-0.06076 0.8676 10	-0.03609 0.9212 10
DISCH	-0.46455 0.0942 14	-0.03487 0.9058 14	0.60665 0.0214 14	0.87784 0.0004 11	0.11499 0.6955 14	-0.09493 0.7468 14	-0.89737 0.0001 14	0.67660 0.0079 14	0.27180 0.3928 12	0.29837 0.4024 10	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.25205 0.3847 14	-0.40863 0.1469 14	0.21570 0.4589 14	-0.38755 0.2389 11	-0.25427 0.3804 14	0.23778 0.4130 14	-0.08102 0.7831 14	-0.05082 0.8630 14	0.43630 0.1562 12	0.06007 0.8691 10	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.05147 0.8613 14	0.44158 0.1139 14	0.02205 0.9403 14	0.42343 0.1944 11	-0.06925 0.8140 14	-0.38090 0.1791 14	0.06313 0.8302 14	0.12967 0.6586 14	0.18170 0.5719 12	-0.06076 0.8676 10	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.19640 0.5010 14	-0.36086 0.2050 14	0.34186 0.2316 14	0.62475 0.0399 11	-0.11221 0.7025 14	-0.32527 0.2565 14	-0.58360 0.0285 14	0.71116 0.0043 14	0.39314 0.2061 12	-0.03609 0.9212 10	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 10. Growing season correlations for Station MLE2.2 (RP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 13	-0.28779 0.3403 13	0.41530 0.1582 13	-0.51097 0.0896 12	-0.42687 0.1457 13	0.02149 0.9444 13	0.32142 0.2842 13	-0.14385 0.6392 13	-0.05305 0.8699 12	0.03209 0.9299 10	-0.46356 0.1106 13	0.47022 0.1049 13	-0.03847 0.9007 13	0.00981 0.9746 13
CHLA	-0.28779 0.3403 13	1.00000 0.0 13	0.18030 0.5556 13	0.52681 0.0784 12	0.38342 0.1959 13	-0.43445 0.1380 13	-0.32231 0.2828 13	0.15808 0.6060 13	0.35820 0.2529 12	0.37868 0.2805 10	0.53747 0.0582 13	-0.48901 0.0899 13	0.37201 0.2107 13	0.66328 0.0135 13
TSS	0.41530 0.1582 13	0.18030 0.5556 13	1.00000 0.0 13	-0.00326 0.9920 12	-0.16253 0.5958 13	-0.35826 0.2294 13	-0.06934 0.8219 13	0.15738 0.6076 13	0.26798 0.3997 12	0.24977 0.4865 10	0.07783 0.8005 13	0.05262 0.8644 13	0.08306 0.7873 13	0.40555 0.1692 13
TN	-0.51097 0.0896 12	0.52681 0.0784 12	-0.00326 0.9920 12	1.00000 0.0 12	0.38568 0.2156 12	-0.25303 0.4275 12	-0.74872 0.0051 12	0.80229 0.0017 12	0.69646 0.0173 11	0.56832 0.0865 10	0.90411 0.0001 12	-0.00447 0.9890 12	0.21080 0.5108 12	0.36111 0.2488 12
TP	-0.42687 0.1457 13	0.38342 0.1959 13	-0.16253 0.5958 13	0.38568 0.2156 12	1.00000 0.0 13	0.18136 0.5532 13	-0.15483 0.6135 13	-0.17407 0.5695 13	0.02854 0.9299 12	0.24173 0.5010 10	0.36700 0.2174 13	-0.41358 0.1601 13	-0.14691 0.6320 13	0.33763 0.2592 13
WATEMP	0.02149 0.9444 13	-0.43445 0.1380 13	-0.35826 0.2294 13	-0.25303 0.4275 12	0.18136 0.5532 13	1.00000 0.0 13	0.32868 0.2729 13	-0.39040 0.1872 13	-0.00891 0.9781 12	0.08114 0.8237 10	-0.33166 0.2683 13	0.34518 0.2480 13	-0.49807 0.0832 13	-0.42078 0.1522 13
SAL	0.32142 0.2842 13	-0.32231 0.2828 13	-0.06934 0.8219 13	-0.74872 0.0051 12	-0.15483 0.6135 13	0.32868 0.2729 13	1.00000 0.0 13	-0.79356 0.0012 13	-0.46588 0.1269 12	-0.36864 0.2945 10	-0.82538 0.0005 13	-0.06786 0.8257 13	0.06010 0.8454 13	-0.46262 0.1114 13
NO23	-0.14385 0.6392 13	0.15808 0.6060 13	0.15738 0.6076 13	0.80229 0.0017 12	-0.17407 0.5695 13	-0.39040 0.1872 13	-0.79356 0.0012 13	1.00000 0.0 13	0.41148 0.1839 12	0.22716 0.5279 10	0.62683 0.0219 13	0.26005 0.3909 13	0.14283 0.6416 13	0.15976 0.6021 13
SAV	-0.05305 0.8699 12	0.35820 0.2529 12	0.26798 0.3997 12	0.69646 0.0173 11	0.02854 0.9299 12	-0.00891 0.9781 12	-0.46588 0.1269 12	0.41148 0.1839 12	1.00000 0.0 12	0.96258 0.0001 10	0.66695 0.0178 12	0.05148 0.8738 12	0.12645 0.6954 12	0.44598 0.1462 12
SAV_D	0.03209 0.9299 10	0.37868 0.2805 10	0.24977 0.4865 10	0.56832 0.0865 10	0.24173 0.5010 10	0.08114 0.8237 10	-0.36864 0.2945 10	0.22716 0.5279 10	0.96258 0.0001 10	1.00000 0.0 10	0.63140 0.0502 10	0.00045 0.9990 10	0.21370 0.5533 10	0.70405 0.0231 10
DISCH	-0.46356 0.1106 13	0.53747 0.0582 13	0.07783 0.8005 13	0.90411 0.0001 12	0.36700 0.2174 13	-0.33166 0.2683 13	-0.82538 0.0005 13	0.62683 0.0219 13	0.66695 0.0178 12	0.63140 0.0502 10	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.47022 0.1049 13	-0.48901 0.0899 13	0.05262 0.8644 13	-0.00447 0.9890 12	-0.41358 0.1601 13	0.34518 0.2480 13	-0.06786 0.8257 13	0.26005 0.3909 13	0.05148 0.8738 12	0.00045 0.9990 10	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.03847 0.9007 13	0.37201 0.2107 13	0.08306 0.7873 13	0.21080 0.5108 12	-0.14691 0.6320 13	-0.49807 0.0832 13	0.06010 0.8454 13	0.14283 0.6416 13	0.12645 0.6954 12	0.21370 0.5533 10	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	0.00981 0.9746 13	0.66328 0.0135 13	0.40555 0.1692 13	0.36111 0.2488 12	0.33763 0.2592 13	-0.42078 0.1522 13	-0.46262 0.1114 13	0.15976 0.6021 13	0.44598 0.1462 12	0.70405 0.0231 10	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 11. Growing season correlations for Station MLE2.3 (PL) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.42412	-0.41143	-0.74879	0.18203	0.29599	0.46444	-0.40410	0.11241	-0.38994	-0.50956	-0.46354	-0.05335	-0.42214
	0.0	0.1486	0.1625	0.0032	0.5517	0.3261	0.1098	0.1709	0.7280	0.2653	0.0753	0.1106	0.8626	0.1508
	13	13	13	13	13	13	13	13	12	10	13	13	13	13
CHLA	-0.42412	1.00000	0.32499	0.35601	-0.48835	0.00887	-0.13108	-0.22540	-0.19152	-0.03119	0.24668	-0.30193	0.67213	0.01802
	0.1486	0.0	0.2569	0.2325	0.0764	0.9760	0.6551	0.4385	0.5510	0.9318	0.3952	0.2941	0.0085	0.9513
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
TSS	-0.41143	0.32499	1.00000	0.24575	0.36559	-0.26388	-0.23301	0.08606	0.60260	0.75132	0.17827	0.22991	-0.16744	0.17585
	0.1625	0.2569	0.0	0.4183	0.1986	0.3620	0.4227	0.7699	0.0381	0.0122	0.5420	0.4291	0.5672	0.5476
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
TN	-0.74879	0.35601	0.24575	1.00000	-0.05650	-0.38636	-0.79440	0.82383	-0.29159	0.03736	0.58953	0.35625	-0.03897	0.26042
	0.0032	0.2325	0.4183	0.0	0.8545	0.1922	0.0012	0.0005	0.3578	0.9184	0.0340	0.2322	0.8994	0.3902
	13	13	13	13	13	13	13	13	12	10	13	13	13	13
TP	0.18203	-0.48835	0.36559	-0.05650	1.00000	-0.58259	-0.45338	0.56422	-0.04323	0.57648	0.32505	0.35848	-0.72996	0.37266
	0.5517	0.0764	0.1986	0.8545	0.0	0.0288	0.1035	0.0356	0.8939	0.0811	0.2568	0.2082	0.0030	0.1894
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
WATEMP	0.29599	0.00887	-0.26388	-0.38636	-0.58259	1.00000	0.54035	-0.58063	0.27409	0.22798	-0.62583	-0.12647	0.16326	-0.56866
	0.3261	0.9760	0.3620	0.1922	0.0288	0.0	0.0461	0.0295	0.3886	0.5264	0.0167	0.6666	0.5771	0.0338
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
SAL	0.46444	-0.13108	-0.23301	-0.79440	-0.45338	0.54035	1.00000	-0.88401	0.45280	0.10482	-0.78652	-0.18270	0.25586	-0.41869
	0.1098	0.6551	0.4227	0.0012	0.1035	0.0461	0.0	0.0001	0.1394	0.7732	0.0008	0.5319	0.3773	0.1362
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
NO23	-0.40410	-0.22540	0.08606	0.82383	0.56422	-0.58063	-0.88401	1.00000	-0.46012	-0.26021	0.64686	0.39405	-0.41894	0.35710
	0.1709	0.4385	0.7699	0.0005	0.0356	0.0295	0.0001	0.0	0.1323	0.4678	0.0124	0.1633	0.1360	0.2101
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
SAV	0.11241	-0.19152	0.60260	-0.29159	-0.04323	0.27409	0.45280	-0.46012	1.00000	0.64982	-0.36650	-0.22537	-0.34469	-0.11282
	0.7280	0.5510	0.0381	0.3578	0.8939	0.3886	0.1394	0.1323	0.0	0.0420	0.2413	0.4813	0.2725	0.7270
	12	12	12	12	12	12	12	12	12	10	12	12	12	12
SAV_D	-0.38994	-0.03119	0.75132	0.03736	0.57648	0.22798	0.10482	-0.26021	0.64982	1.00000	-0.02397	0.02796	-0.71364	0.33902
	0.2653	0.9318	0.0122	0.9184	0.0811	0.5264	0.7732	0.4678	0.0420	0.0	0.9476	0.9389	0.0205	0.3379
	10	10	10	10	10	10	10	10	10	10	10	10	10	10
DISCH	-0.50956	0.24668	0.17827	0.58953	0.32505	-0.62583	-0.78652	0.64686	-0.36650	-0.02397	1.00000	-0.06377	-0.03704	0.63309
	0.0753	0.3952	0.5420	0.0340	0.2568	0.0167	0.0008	0.0124	0.2413	0.9476	0.0	0.8285	0.9000	0.0151
	13	14	14	13	14	14	14	14	12	10	17	14	14	14
AVSUN	-0.46354	-0.30193	0.22991	0.35625	0.35848	-0.12647	-0.18270	0.39405	-0.22537	0.02796	-0.06377	1.00000	-0.44999	-0.20376
	0.1106	0.2941	0.4291	0.2322	0.2082	0.6666	0.5319	0.1633	0.4813	0.9389	0.8285	0.0	0.1064	0.4847
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
WINDSP	-0.05335	0.67213	-0.16744	-0.03897	-0.72996	0.16326	0.25586	-0.41894	-0.34469	-0.71364	-0.03704	-0.44999	1.00000	-0.15264
	0.8626	0.0085	0.5672	0.8994	0.0030	0.5771	0.3773	0.1360	0.2725	0.0205	0.9000	0.1064	0.0	0.6024
	13	14	14	13	14	14	14	14	12	10	14	14	14	14
PRECIP	-0.42214	0.01802	0.17585	0.26042	0.37266	-0.56866	-0.41869	0.35710	-0.11282	0.33902	0.63309	-0.20376	-0.15264	1.00000
	0.1508	0.9513	0.5476	0.3902	0.1894	0.0338	0.1362	0.2101	0.7270	0.3379	0.0151	0.4847	0.6024	0.0
	13	14	14	13	14	14	14	14	12	10	14	14	14	14

Table 12. Growing season correlations for segment TF2, the freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.10876 0.7113 14	-0.66363 0.0097 14	0.46271 0.1518 11	-0.39264 0.1649 14	0.71227 0.0043 14	0.27783 0.3362 14	0.11942 0.6843 14	0.18323 0.5307 14	0.27324 0.3445 14	-0.48369 0.0797 14	0.13033 0.6570 14	-0.31899 0.2663 14	-0.35371 0.2147 14
CHLA	0.10876 0.7113 14	1.00000 0.0 14	0.00513 0.9861 14	-0.83605 0.0013 11	0.40377 0.1522 14	0.46036 0.0976 14	0.03788 0.8977 14	-0.85995 0.0001 14	-0.75503 0.0018 14	0.13473 0.6461 14	0.08953 0.7608 14	0.49626 0.0711 14	-0.66223 0.0099 14	0.12646 0.6666 14
TSS	-0.66363 0.0097 14	0.00513 0.9861 14	1.00000 0.0 14	-0.47092 0.1437 11	0.77273 0.0012 14	-0.53285 0.0498 14	-0.30025 0.2969 14	-0.29202 0.3110 14	-0.35000 0.2199 14	-0.02195 0.9406 14	0.76906 0.0013 14	-0.02968 0.9198 14	0.05488 0.8522 14	0.38766 0.1708 14
TN	0.46271 0.1518 11	-0.83605 0.0013 11	-0.47092 0.1437 11	1.00000 0.0 11	-0.56179 0.0721 11	-0.13337 0.6958 11	-0.05785 0.8658 11	0.90242 0.0001 11	0.68849 0.0192 11	0.08268 0.8090 11	-0.22123 0.5133 11	-0.42230 0.1957 11	0.36440 0.2706 11	-0.02612 0.9392 11
TP	-0.39264 0.1649 14	0.40377 0.1522 14	0.77273 0.0012 14	-0.56179 0.0721 11	1.00000 0.0 14	-0.21067 0.4697 14	-0.08806 0.7647 14	-0.56249 0.0363 14	-0.60671 0.0214 14	0.22591 0.4374 14	0.68386 0.0070 14	0.16742 0.5673 14	-0.42625 0.1286 14	0.47907 0.0831 14
WATEMP	0.71227 0.0043 14	0.46036 0.0976 14	-0.53285 0.0498 14	-0.13337 0.6958 11	-0.21067 0.4697 14	1.00000 0.0 14	0.54252 0.0450 14	-0.33353 0.2439 14	0.05182 0.8604 14	0.36421 0.2005 14	-0.60536 0.0218 14	0.45087 0.1057 14	-0.36109 0.2046 14	-0.58281 0.0287 14
COND	0.27783 0.3362 14	0.03788 0.8977 14	-0.30025 0.2969 14	-0.05785 0.8658 11	-0.08806 0.7647 14	0.54252 0.0450 14	1.00000 0.0 14	-0.24456 0.3994 14	0.37829 0.1823 14	0.47435 0.0866 14	-0.64233 0.0132 14	-0.13055 0.6564 14	0.00490 0.9867 14	-0.53488 0.0487 14
NO23	0.11942 0.6843 14	-0.85995 0.0001 14	-0.29202 0.3110 14	0.90242 0.0001 11	-0.56249 0.0363 14	-0.33353 0.2439 14	-0.24456 0.3994 14	1.00000 0.0 14	0.62600 0.0166 14	-0.20225 0.4881 14	-0.18361 0.5298 14	-0.31991 0.2648 14	0.39516 0.1620 14	-0.08180 0.7810 14
SAV	0.18323 0.5307 14	-0.75503 0.0018 14	-0.35000 0.2199 14	0.68849 0.0192 11	-0.60671 0.0214 14	0.05182 0.8604 14	0.37829 0.1823 14	0.62600 0.0166 14	1.00000 0.0 14	0.12635 0.6669 14	-0.53510 0.0486 14	-0.30867 0.2829 14	0.44081 0.1146 14	-0.52514 0.0538 14
SAV_D	0.27324 0.3445 14	0.13473 0.6461 14	-0.02195 0.9406 14	0.08268 0.8090 11	0.22591 0.4374 14	0.36421 0.2005 14	0.47435 0.0866 14	-0.20225 0.4881 14	0.12635 0.6669 14	1.00000 0.0 14	-0.06018 0.8381 14	-0.31422 0.2739 14	-0.29799 0.3008 14	-0.02854 0.9228 14
DISCH	-0.48369 0.0797 14	0.08953 0.7608 14	0.76906 0.0013 14	-0.22123 0.5133 11	0.68386 0.0070 14	-0.60536 0.0218 14	-0.64233 0.0132 14	-0.18361 0.5298 14	-0.53510 0.0486 14	-0.06018 0.8381 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.13033 0.6570 14	0.49626 0.0711 14	-0.02968 0.9198 14	-0.42230 0.1957 11	0.16742 0.5673 14	0.45087 0.1057 14	-0.13055 0.6564 14	-0.31991 0.2648 14	-0.30867 0.2829 14	-0.31422 0.2739 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.31899 0.2663 14	-0.66223 0.0099 14	0.05488 0.8522 14	0.36440 0.2706 11	-0.42625 0.1286 14	-0.36109 0.2046 14	0.00490 0.9867 14	0.39516 0.1620 14	0.44081 0.1146 14	-0.29799 0.3008 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.35371 0.2147 14	0.12646 0.6666 14	0.38766 0.1708 14	-0.02612 0.9392 11	0.47907 0.0831 14	-0.58281 0.0287 14	-0.53488 0.0487 14	-0.08180 0.7810 14	-0.52514 0.0538 14	-0.02854 0.9228 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 13. Growing season correlations for segment UTR, the upper freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.15758 0.5906 14	-0.46660 0.0926 14	0.37953 0.2496 11	-0.22481 0.4397 14	0.64012 0.0137 14	0.34929 0.2209 14	-0.03912 0.8944 14	0.23967 0.4092 14	0.81327 0.0004 14	-0.35518 0.2127 14	0.10779 0.7138 14	-0.62828 0.0161 14	-0.20038 0.4922 14
CHLA	0.15758 0.5906 14	1.00000 0.0 14	-0.13290 0.6506 14	-0.47154 0.1431 11	0.02594 0.9299 14	0.44105 0.1144 14	-0.12428 0.6721 14	-0.49817 0.0698 14	-0.38008 0.1801 14	0.18196 0.5336 14	-0.06346 0.8294 14	0.78880 0.0008 14	-0.48497 0.0788 14	0.04964 0.8662 14
TSS	-0.46660 0.0926 14	-0.13290 0.6506 14	1.00000 0.0 14	-0.62406 0.0402 11	0.85822 0.0001 14	-0.56440 0.0355 14	-0.46139 0.0968 14	-0.51045 0.0622 14	-0.30813 0.2838 14	-0.22893 0.4311 14	0.75365 0.0019 14	-0.02677 0.9276 14	0.12142 0.6792 14	0.37415 0.1875 14
TN	0.37953 0.2496 11	-0.47154 0.1431 11	-0.62406 0.0402 11	1.00000 0.0 11	-0.57381 0.0649 11	0.35803 0.2797 11	0.48120 0.1340 11	0.94720 0.0001 11	0.58264 0.0600 11	-0.03825 0.9111 11	-0.56746 0.0686 11	-0.08185 0.8109 11	0.24474 0.4683 11	-0.52685 0.0959 11
TP	-0.22481 0.4397 14	0.02594 0.9299 14	0.85822 0.0001 14	-0.57381 0.0649 11	1.00000 0.0 14	-0.38932 0.1688 14	-0.39951 0.1570 14	-0.55232 0.0406 14	-0.52034 0.0565 14	-0.09084 0.7574 14	0.80278 0.0005 14	0.07859 0.7894 14	-0.17864 0.5412 14	0.47697 0.0846 14
WATEMP	0.64012 0.0137 14	0.44105 0.1144 14	-0.56440 0.0355 14	0.35803 0.2797 11	-0.38932 0.1688 14	1.00000 0.0 14	0.57597 0.0311 14	0.21819 0.4536 14	0.24959 0.3895 14	0.64184 0.0133 14	-0.62061 0.0179 14	0.51570 0.0591 14	-0.31692 0.2696 14	-0.61989 0.0180 14
COND	0.34929 0.2209 14	-0.12428 0.6721 14	-0.46139 0.0968 14	0.48120 0.1340 11	-0.39951 0.1570 14	0.57597 0.0311 14	1.00000 0.0 14	0.46575 0.0933 14	0.57488 0.0315 14	0.37783 0.1829 14	-0.64777 0.0122 14	-0.04982 0.8657 14	0.14203 0.6281 14	-0.71819 0.0038 14
NO23	-0.03912 0.8944 14	-0.49817 0.0698 14	-0.51045 0.0622 14	0.94720 0.0001 11	-0.55232 0.0406 14	0.21819 0.4536 14	0.46575 0.0933 14	1.00000 0.0 14	0.31451 0.2734 14	-0.18152 0.5346 14	-0.53304 0.0497 14	-0.10865 0.7116 14	0.27644 0.3387 14	-0.54189 0.0453 14
SAV	0.23967 0.4092 14	-0.38008 0.1801 14	-0.30813 0.2838 14	0.58264 0.0600 11	-0.52034 0.0565 14	0.24959 0.3895 14	0.57488 0.0315 14	0.31451 0.2734 14	1.00000 0.0 14	0.29329 0.3088 14	-0.51006 0.0624 14	-0.36299 0.2021 14	0.35832 0.2084 14	-0.55162 0.0409 14
SAV_D	0.81327 0.0004 14	0.18196 0.5336 14	-0.22893 0.4311 14	-0.03825 0.9111 11	-0.09084 0.7574 14	0.64184 0.0133 14	0.37783 0.1829 14	-0.18152 0.5346 14	0.29329 0.3088 14	1.00000 0.0 14	-0.30360 0.2913 14	0.09696 0.7416 14	-0.52071 0.0562 14	-0.34555 0.2262 14
DISCH	-0.35518 0.2127 14	-0.06346 0.8294 14	0.75365 0.0019 14	-0.56746 0.0686 11	0.80278 0.0005 14	-0.62061 0.0179 14	-0.64777 0.0122 14	-0.53304 0.0497 14	-0.51006 0.0624 14	-0.30360 0.2913 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.10779 0.7138 14	0.78880 0.0008 14	-0.02677 0.9276 14	-0.08185 0.8109 11	0.07859 0.7894 14	0.51570 0.0591 14	-0.04982 0.8657 14	-0.10865 0.7116 14	-0.36299 0.2021 14	0.09696 0.7416 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.62828 0.0161 14	-0.48497 0.0788 14	0.12142 0.6792 14	0.24474 0.4683 11	-0.17864 0.5412 14	-0.31692 0.2696 14	0.14203 0.6281 14	0.27644 0.3387 14	0.35832 0.2084 14	-0.52071 0.0562 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.20038 0.4922 14	0.04964 0.8662 14	0.37415 0.1875 14	-0.52685 0.0959 11	0.47697 0.0846 14	-0.61989 0.0180 14	-0.71819 0.0038 14	-0.54189 0.0453 14	-0.55162 0.0409 14	-0.34555 0.2262 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 14. Growing season correlations for segment LTR. the lower freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.43520 0.1199 14	-0.69404 0.0059 14	0.36482 0.2700 11	-0.71246 0.0042 14	0.31114 0.2789 14	-0.07440 0.8004 14	0.36667 0.1972 14	0.35197 0.2172 14	0.15871 0.5879 14	-0.34601 0.2256 14	0.04225 0.8860 14	0.15408 0.5990 14	-0.29142 0.3121 14
CHLA	-0.43520 0.1199 14	1.00000 0.0 14	0.27883 0.3344 14	-0.72142 0.0122 11	0.69650 0.0056 14	0.46198 0.0963 14	0.09488 0.7470 14	-0.76776 0.0013 14	-0.74393 0.0023 14	-0.37155 0.1909 14	0.16779 0.5664 14	0.23081 0.4272 14	-0.62207 0.0175 14	0.16299 0.5777 14
TSS	-0.69404 0.0059 14	0.27883 0.3344 14	1.00000 0.0 14	-0.24775 0.4626 11	0.67866 0.0076 14	-0.42223 0.1326 14	-0.21382 0.4629 14	-0.21103 0.4689 14	-0.23764 0.4133 14	0.04678 0.8738 14	0.75557 0.0018 14	-0.02614 0.9293 14	-0.06301 0.8306 14	0.39133 0.1665 14
TN	0.36482 0.2700 11	-0.72142 0.0122 11	-0.24775 0.4626 11	1.00000 0.0 11	-0.46631 0.1482 11	-0.49656 0.1203 11	-0.40679 0.2144 11	0.91725 0.0001 11	0.27505 0.4130 11	0.65543 0.0286 11	0.14893 0.6621 11	-0.64385 0.0325 11	0.37526 0.2554 11	0.43174 0.1849 11
TP	-0.71246 0.0042 14	0.69650 0.0056 14	0.67866 0.0076 14	-0.46631 0.1482 11	1.00000 0.0 14	0.03710 0.8998 14	0.12372 0.6735 14	-0.57476 0.0316 14	-0.49497 0.0719 14	-0.08400 0.7753 14	0.44730 0.1088 14	0.23006 0.4288 14	-0.57511 0.0314 14	0.38486 0.1742 14
WATEMP	0.31114 0.2789 14	0.46198 0.0963 14	-0.42223 0.1326 14	-0.49656 0.1203 11	0.03710 0.8998 14	1.00000 0.0 14	0.51540 0.0593 14	-0.61243 0.0199 14	-0.29328 0.3088 14	-0.35476 0.2133 14	-0.56958 0.0335 14	0.36735 0.1963 14	-0.39782 0.1589 14	-0.52471 0.0541 14
COND	-0.07440 0.8004 14	0.09488 0.7470 14	-0.21382 0.4629 14	-0.40679 0.2144 11	0.12372 0.6735 14	0.51540 0.0593 14	1.00000 0.0 14	-0.46420 0.0945 14	-0.32378 0.2588 14	-0.06870 0.8155 14	-0.63649 0.0144 14	-0.12675 0.6659 14	0.00737 0.9801 14	-0.52595 0.0534 14
NO23	0.36667 0.1972 14	-0.76776 0.0013 14	-0.21103 0.4689 14	0.91725 0.0001 11	-0.57476 0.0316 14	-0.61243 0.0199 14	-0.46420 0.0945 14	1.00000 0.0 14	0.68755 0.0066 14	0.57946 0.0299 14	0.09638 0.7431 14	-0.44623 0.1097 14	0.39110 0.1667 14	0.25794 0.3733 14
SAV	0.35197 0.2172 14	-0.74393 0.0023 14	-0.23764 0.4133 14	0.27505 0.4130 11	-0.49497 0.0719 14	-0.29328 0.3088 14	-0.32378 0.2588 14	0.68755 0.0066 14	1.00000 0.0 14	0.21745 0.4552 14	-0.07339 0.8031 14	0.03046 0.9177 14	0.12594 0.6679 14	-0.01799 0.9513 14
SAV_D	0.15871 0.5879 14	-0.37155 0.1909 14	0.04678 0.8738 14	0.65543 0.0286 11	-0.08400 0.7753 14	-0.35476 0.2133 14	-0.06870 0.8155 14	0.57946 0.0299 14	0.21745 0.4552 14	1.00000 0.0 14	0.32929 0.2503 14	-0.60432 0.0221 14	0.27320 0.3446 14	0.43460 0.1204 14
DISCH	-0.34601 0.2256 14	0.16779 0.5664 14	0.75557 0.0018 14	0.14893 0.6621 11	0.44730 0.1088 14	-0.56958 0.0335 14	-0.63649 0.0144 14	0.09638 0.7431 14	-0.07339 0.8031 14	0.32929 0.2503 14	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.04225 0.8860 14	0.23081 0.4272 14	-0.02614 0.9293 14	-0.64385 0.0325 11	0.23006 0.4288 14	0.36735 0.1963 14	-0.12675 0.6659 14	-0.44623 0.1097 14	0.03046 0.9177 14	-0.60432 0.0221 14	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	0.15408 0.5990 14	-0.62207 0.0175 14	-0.06301 0.8306 14	0.37526 0.2554 11	-0.57511 0.0314 14	-0.39782 0.1589 14	0.00737 0.9801 14	0.39110 0.1667 14	0.12594 0.6679 14	0.27320 0.3446 14	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.29142 0.3121 14	0.16299 0.5777 14	0.39133 0.1665 14	0.43174 0.1849 11	0.38486 0.1742 14	-0.52471 0.0541 14	-0.52595 0.0534 14	0.25794 0.3733 14	-0.01799 0.9513 14	0.43460 0.1204 14	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 15. Growing season correlations for segment POTOH, the oligohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.08322 0.7773 14	-0.79868 0.0006 14	-0.46047 0.1541 11	-0.08695 0.7676 14	0.60954 0.0207 14	0.56730 0.0344 14	-0.44217 0.1134 14	-0.41604 0.1574 13	-0.12008 0.7101 12	-0.36389 0.2009 14	0.36787 0.1956 14	-0.31107 0.2790 14	-0.37365 0.1882 14
CHLA	-0.08322 0.7773 14	1.00000 0.0 14	0.29106 0.3127 14	-0.06454 0.8505 11	0.78834 0.0008 14	0.30986 0.2810 14	-0.14404 0.6232 14	-0.51198 0.0613 14	-0.55222 0.0504 13	-0.07458 0.8178 12	0.16983 0.5616 14	-0.31962 0.2653 14	-0.23950 0.4096 14	-0.08664 0.7684 14
TSS	-0.79868 0.0006 14	0.29106 0.3127 14	1.00000 0.0 14	0.19888 0.5577 11	0.21203 0.4668 14	-0.39985 0.1566 14	-0.47865 0.0834 14	0.13255 0.6515 14	0.07254 0.8138 13	-0.21788 0.4963 12	0.53105 0.0507 14	-0.20704 0.4776 14	0.09715 0.7411 14	0.26298 0.3637 14
TN	-0.46047 0.1541 11	-0.06454 0.8505 11	0.19888 0.5577 11	1.00000 0.0 11	0.17906 0.5983 11	-0.74203 0.0089 11	-0.70083 0.0163 11	0.91118 0.0001 11	0.07201 0.8334 11	0.77126 0.0054 11	0.67160 0.0236 11	-0.63136 0.0372 11	0.32571 0.3284 11	0.82234 0.0019 11
TP	-0.08695 0.7676 14	0.78834 0.0008 14	0.21203 0.4668 14	0.17906 0.5983 11	1.00000 0.0 14	0.13675 0.6411 14	-0.22446 0.4404 14	-0.28787 0.3183 14	-0.31311 0.2976 13	0.20470 0.5233 12	0.24668 0.3952 14	-0.30073 0.2961 14	-0.29164 0.3117 14	0.19275 0.5091 14
WATEMP	0.60954 0.0207 14	0.30986 0.2810 14	-0.39985 0.1566 14	-0.74203 0.0089 11	0.13675 0.6411 14	1.00000 0.0 14	0.49779 0.0701 14	-0.81515 0.0004 14	-0.26638 0.3790 13	-0.39569 0.2029 12	-0.42156 0.1333 14	0.45468 0.1024 14	-0.44472 0.1111 14	-0.43126 0.1237 14
COND	0.56730 0.0344 14	-0.14404 0.6232 14	-0.47865 0.0834 14	-0.70083 0.0163 11	-0.22446 0.4404 14	0.49779 0.0701 14	1.00000 0.0 14	-0.57085 0.0330 14	-0.35612 0.2324 13	-0.27282 0.3909 12	-0.82163 0.0003 14	0.07784 0.7914 14	0.09631 0.7433 14	-0.70443 0.0049 14
NO23	-0.44217 0.1134 14	-0.51198 0.0613 14	0.13255 0.6515 14	0.91118 0.0001 11	-0.28787 0.3183 14	-0.81515 0.0004 14	-0.57085 0.0330 14	1.00000 0.0 14	0.48530 0.0928 13	0.64021 0.0249 12	0.45786 0.0997 14	-0.33529 0.2412 14	0.31997 0.2647 14	0.64656 0.0125 14
SAV	-0.41604 0.1574 13	-0.55222 0.0504 13	0.07254 0.8138 13	0.07201 0.8334 11	-0.31311 0.2976 13	-0.26638 0.3790 13	-0.35612 0.2324 13	0.48530 0.0928 13	1.00000 0.0 13	0.08823 0.7851 12	0.04035 0.8959 13	0.33474 0.2636 13	-0.12738 0.6784 13	0.26684 0.3782 13
SAV_D	-0.12008 0.7101 12	-0.07458 0.8178 12	-0.21788 0.4963 12	0.77126 0.0054 11	0.20470 0.5233 12	-0.39569 0.2029 12	-0.27282 0.3909 12	0.64021 0.0249 12	0.08823 0.7851 12	1.00000 0.0 12	0.15757 0.6248 12	-0.73820 0.0061 12	0.05017 0.8769 12	0.58793 0.0444 12
DISCH	-0.36389 0.2009 14	0.16983 0.5616 14	0.53105 0.0507 14	0.67160 0.0236 11	0.24668 0.3952 14	-0.42156 0.1333 14	-0.82163 0.0003 14	0.45786 0.0997 14	0.04035 0.8959 13	0.15757 0.6248 12	1.00000 0.0 17	-0.06377 0.8285 14	-0.03704 0.9000 14	0.63309 0.0151 14
AVSUN	0.36787 0.1956 14	-0.31962 0.2653 14	-0.20704 0.4776 14	-0.63136 0.0372 11	-0.30073 0.2961 14	0.45468 0.1024 14	0.07784 0.7914 14	-0.33529 0.2412 14	0.33474 0.2636 13	-0.73820 0.0061 12	-0.06377 0.8285 14	1.00000 0.0 14	-0.44999 0.1064 14	-0.20376 0.4847 14
WINDSP	-0.31107 0.2790 14	-0.23950 0.4096 14	0.09715 0.7411 14	0.32571 0.3284 11	-0.29164 0.3117 14	-0.44472 0.1111 14	0.09631 0.7433 14	0.31997 0.2647 14	-0.12738 0.6784 13	0.05017 0.8769 12	-0.03704 0.9000 14	-0.44999 0.1064 14	1.00000 0.0 14	-0.15264 0.6024 14
PRECIP	-0.37365 0.1882 14	-0.08664 0.7684 14	0.26298 0.3637 14	0.82234 0.0019 11	0.19275 0.5091 14	-0.43126 0.1237 14	-0.70443 0.0049 14	0.64656 0.0125 14	0.26684 0.3782 13	0.58793 0.0444 12	0.63309 0.0151 14	-0.20376 0.4847 14	-0.15264 0.6024 14	1.00000 0.0 14

Table 16. Growing season correlations for segment POTMH, the mesohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	0.01407	-0.39392	-0.60282	-0.53170	0.19554	0.87127	-0.76936	-0.56920	-0.78094	-0.76092	-0.36389	0.41487	-0.54671
	0.0	0.9619	0.1634	0.0292	0.0504	0.5029	0.0001	0.0013	0.0534	0.0077	0.0016	0.2009	0.1402	0.0431
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
CHLA	0.01407	1.00000	0.06446	0.48329	-0.22914	-0.06622	-0.15851	-0.05941	0.19267	0.61779	0.30872	-0.60236	0.68206	0.06252
	0.9619	0.0	0.8267	0.0943	0.4307	0.8221	0.5883	0.8401	0.5486	0.0570	0.2829	0.0226	0.0072	0.8318
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
TSS	-0.39392	0.06446	1.00000	0.51546	-0.22352	-0.24137	-0.52365	0.45903	0.83498	0.64929	0.52292	0.12331	0.06689	0.44115
	0.1634	0.8267	0.0	0.0714	0.4424	0.4058	0.0546	0.0987	0.0007	0.0422	0.0550	0.6745	0.8203	0.1143
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
TN	-0.60282	0.48329	0.51546	1.00000	-0.28840	-0.56453	-0.64495	0.89258	0.66233	0.78369	0.73927	0.06030	0.42410	0.44455
	0.0292	0.0943	0.0714	0.0	0.3393	0.0444	0.0173	0.0001	0.0189	0.0073	0.0039	0.8449	0.1487	0.1280
	13	13	13	13	13	13	13	13	12	10	13	13	13	13
TP	-0.53170	-0.22914	-0.22352	-0.28840	1.00000	0.17222	-0.40287	0.24816	-0.18841	0.31580	0.33740	0.13376	-0.58434	0.27480
	0.0504	0.4307	0.4424	0.3393	0.0	0.5560	0.1532	0.3923	0.5576	0.3740	0.2381	0.6485	0.0282	0.3417
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
WATEMP	0.19554	-0.06622	-0.24137	-0.56453	0.17222	1.00000	0.30000	-0.62409	-0.07247	0.04482	-0.36848	0.14692	-0.22809	-0.48902
	0.5029	0.8221	0.4058	0.0444	0.5560	0.0	0.2974	0.0171	0.8229	0.9022	0.1948	0.6162	0.4329	0.0760
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
SAL	0.87127	-0.15851	-0.52365	-0.64495	-0.40287	0.30000	1.00000	-0.80351	-0.59702	-0.81482	-0.85935	-0.17335	0.21794	-0.51496
	0.0001	0.5883	0.0546	0.0173	0.1532	0.2974	0.0	0.0005	0.0404	0.0041	0.0001	0.5534	0.4542	0.0595
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
NO23	-0.76936	-0.05941	0.45903	0.89258	0.24816	-0.62409	-0.80351	1.00000	0.57664	0.65621	0.76417	0.25222	-0.17226	0.60095
	0.0013	0.8401	0.0987	0.0001	0.3923	0.0171	0.0005	0.0	0.0497	0.0393	0.0015	0.3843	0.5560	0.0230
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
SAV	-0.56920	0.19267	0.83498	0.66233	-0.18841	-0.07247	-0.59702	0.57664	1.00000	0.91673	0.60575	0.30194	0.00590	0.41626
	0.0534	0.5486	0.0007	0.0189	0.5576	0.8229	0.0404	0.0497	0.0	0.0002	0.0368	0.3402	0.9855	0.1783
	12	12	12	12	12	12	12	12	12	10	12	12	12	12
SAV_D	-0.78094	0.61779	0.64929	0.78369	0.31580	0.04482	-0.81482	0.65621	0.91673	1.00000	0.76385	0.20818	-0.09234	0.56090
	0.0077	0.0570	0.0422	0.0073	0.3740	0.9022	0.0041	0.0393	0.0002	0.0	0.0101	0.5638	0.7997	0.0916
	10	10	10	10	10	10	10	10	10	10	10	10	10	10
DISCH	-0.76092	0.30872	0.52292	0.73927	0.33740	-0.36848	-0.85935	0.76417	0.60575	0.76385	1.00000	-0.06377	-0.03704	0.63309
	0.0016	0.2829	0.0550	0.0039	0.2381	0.1948	0.0001	0.0015	0.0368	0.0101	0.0	0.8285	0.9000	0.0151
	14	14	14	13	14	14	14	14	12	10	17	14	14	14
AVSUN	-0.36389	-0.60236	0.12331	0.06030	0.13376	0.14692	-0.17335	0.25222	0.30194	0.20818	-0.06377	1.00000	-0.44999	-0.20376
	0.2009	0.0226	0.6745	0.8449	0.6485	0.6162	0.5534	0.3843	0.3402	0.5638	0.8285	0.0	0.1064	0.4847
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
WINDSP	0.41487	0.68206	0.06689	0.42410	-0.58434	-0.22809	0.21794	-0.17226	0.00590	-0.09234	-0.03704	-0.44999	1.00000	-0.15264
	0.1402	0.0072	0.8203	0.1487	0.0282	0.4329	0.4542	0.5560	0.9855	0.7997	0.9000	0.1064	0.0	0.6024
	14	14	14	13	14	14	14	14	12	10	14	14	14	14
PRECIP	-0.54671	0.06252	0.44115	0.44455	0.27480	-0.48902	-0.51496	0.60095	0.41626	0.56090	0.63309	-0.20376	-0.15264	1.00000
	0.0431	0.8318	0.1143	0.1280	0.3417	0.0760	0.0595	0.0230	0.1783	0.0916	0.0151	0.4847	0.6024	0.0
	14	14	14	13	14	14	14	14	12	10	14	14	14	14

Table 17. Spring correlations for station XFB2470 (HP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.38305 0.1964 13	-0.47498 0.0861 14	0.04396 0.8979 11	-0.22555 0.4381 14	0.15916 0.5868 14	-0.02259 0.9389 14	-0.04349 0.8826 14	0.09268 0.7527 14	0.52168 0.0557 14	-0.02620 0.9292 14	0.11057 0.7067 14	-0.80249 0.0006 14	0.13867 0.6364 14
CHLA	-0.38305 0.1964 13	1.00000 0.0 13	0.04605 0.8812 13	-0.20932 0.5368 11	0.13107 0.6695 13	0.13396 0.6626 13	0.53067 0.0621 13	-0.08593 0.7802 13	-0.37234 0.2103 13	-0.01140 0.9705 13	-0.30153 0.3167 13	-0.26389 0.3836 13	0.34039 0.2551 13	-0.04982 0.8716 13
TSS	-0.47498 0.0861 14	0.04605 0.8812 13	1.00000 0.0 14	-0.19871 0.5581 11	0.27843 0.3351 14	-0.67245 0.0084 14	-0.62696 0.0164 14	-0.27626 0.3390 14	0.24391 0.4007 14	-0.40263 0.1535 14	0.19844 0.4964 14	-0.31963 0.2653 14	0.54905 0.0420 14	0.23944 0.4097 14
TN	0.04396 0.8979 11	-0.20932 0.5368 11	-0.19871 0.5581 11	1.00000 0.0 11	0.23537 0.4860 11	0.08171 0.8112 11	0.03366 0.9217 11	0.81017 0.0025 11	-0.18571 0.5846 11	-0.37515 0.2556 11	-0.20427 0.5469 11	-0.16588 0.6259 11	-0.22087 0.5140 11	0.17395 0.6090 11
TP	-0.22555 0.4381 14	0.13107 0.6695 13	0.27843 0.3351 14	0.23537 0.4860 11	1.00000 0.0 14	-0.15029 0.6081 14	-0.24508 0.3984 14	0.12592 0.6680 14	0.00373 0.9899 14	-0.48602 0.0781 14	-0.23695 0.4147 14	-0.45668 0.1007 14	0.36795 0.1955 14	0.14693 0.6162 14
WATEMP	0.15916 0.5868 14	0.13396 0.6626 13	-0.67245 0.0084 14	0.08171 0.8112 11	-0.15029 0.6081 14	1.00000 0.0 14	0.78032 0.0010 14	0.24951 0.3896 14	0.15400 0.5991 14	0.58707 0.0273 14	-0.42188 0.1330 14	0.34053 0.2335 14	-0.13926 0.6349 14	-0.64972 0.0119 14
COND	-0.02259 0.9389 14	0.53067 0.0621 13	-0.62696 0.0164 14	0.03366 0.9217 11	-0.24508 0.3984 14	0.78032 0.0010 14	1.00000 0.0 14	0.15576 0.5949 14	-0.01480 0.9600 14	0.41379 0.1413 14	-0.44674 0.1093 14	0.00200 0.9946 14	0.08889 0.7625 14	-0.57191 0.0326 14
NO23	-0.04349 0.8826 14	-0.08593 0.7802 13	-0.27626 0.3390 14	0.81017 0.0025 11	0.12592 0.6680 14	0.24951 0.3896 14	0.15576 0.5949 14	1.00000 0.0 14	-0.36353 0.2014 14	-0.12214 0.6774 14	-0.22955 0.4299 14	-0.00393 0.9894 14	-0.18021 0.5376 14	-0.11335 0.6996 14
SAV	0.09268 0.7527 14	-0.37234 0.2103 13	0.24391 0.4007 14	-0.18571 0.5846 11	0.00373 0.9899 14	0.15400 0.5991 14	-0.01480 0.9600 14	-0.36353 0.2014 14	1.00000 0.0 14	0.34984 0.2201 14	-0.27732 0.3371 14	-0.12988 0.6581 14	0.24028 0.4080 14	-0.53148 0.0505 14
SAV_D	0.52168 0.0557 14	-0.01140 0.9705 13	-0.40263 0.1535 14	-0.37515 0.2556 11	-0.48602 0.0781 14	0.58707 0.0273 14	0.41379 0.1413 14	-0.12214 0.6774 14	0.34984 0.2201 14	1.00000 0.0 14	-0.26455 0.3607 14	0.29125 0.3124 14	-0.46683 0.0924 14	-0.51913 0.0571 14
DISCH	-0.02620 0.9292 14	-0.30153 0.3167 13	0.19844 0.4964 14	-0.20427 0.5469 11	-0.23695 0.4147 14	-0.42188 0.1330 14	-0.44674 0.1093 14	-0.22955 0.4299 14	-0.27732 0.3371 14	-0.26455 0.3607 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	0.11057 0.7067 14	-0.26389 0.3836 13	-0.31963 0.2653 14	-0.16588 0.6259 11	-0.45668 0.1007 14	0.34053 0.2335 14	0.00200 0.9946 14	-0.00393 0.9894 14	-0.12988 0.6581 14	0.29125 0.3124 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.80249 0.0006 14	0.34039 0.2551 13	0.54905 0.0420 14	-0.22087 0.5140 11	0.36795 0.1955 14	-0.13926 0.6349 14	0.08889 0.7625 14	-0.18021 0.5376 14	0.24028 0.4080 14	-0.46683 0.0924 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.13867 0.6364 14	-0.04982 0.8716 13	0.23944 0.4097 14	0.17395 0.6090 11	0.14693 0.6162 14	-0.64972 0.0119 14	-0.57191 0.0326 14	-0.11335 0.6996 14	-0.53148 0.0505 14	-0.51913 0.0571 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 18. Spring correlations for station XFB1433 (MH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.15439 0.6145 13	-0.30489 0.2892 14	0.26610 0.4290 11	0.29146 0.3120 14	0.07821 0.7904 14	-0.11963 0.6837 14	0.19933 0.4945 14	-0.33297 0.2447 14	0.30875 0.2828 14	0.06390 0.8282 14	0.31417 0.2740 14	-0.81659 0.0004 14	0.26576 0.3584 14
CHLA	-0.15439 0.6145 13	1.00000 0.0 13	-0.18101 0.5540 13	-0.36295 0.2726 11	-0.35419 0.2351 13	0.33435 0.2642 13	0.60335 0.0290 13	-0.28733 0.3412 13	-0.26850 0.3751 13	0.13003 0.6720 13	-0.41811 0.1551 13	-0.21344 0.4838 13	0.15587 0.6111 13	-0.08908 0.7723 13
TSS	-0.30489 0.2892 14	-0.18101 0.5540 13	1.00000 0.0 14	-0.48889 0.1270 11	-0.08270 0.7786 14	-0.62225 0.0175 14	-0.60395 0.0222 14	-0.32196 0.2616 14	-0.07799 0.7910 14	-0.49018 0.0752 14	0.43344 0.1216 14	-0.02142 0.9420 14	0.32730 0.2533 14	0.26884 0.3527 14
TN	0.26610 0.4290 11	-0.36295 0.2726 11	-0.48889 0.1270 11	1.00000 0.0 11	0.35093 0.2900 11	0.01317 0.9693 11	0.02097 0.9512 11	0.86945 0.0005 11	0.33504 0.3139 11	-0.30088 0.3686 11	-0.15913 0.6403 11	-0.21130 0.5328 11	-0.13549 0.6912 11	0.11876 0.7280 11
TP	0.29146 0.3120 14	-0.35419 0.2351 13	-0.08270 0.7786 14	0.35093 0.2900 11	1.00000 0.0 14	-0.19894 0.4953 14	-0.10550 0.7196 14	0.06381 0.8284 14	-0.23741 0.4138 14	0.03024 0.9183 14	0.35978 0.2064 14	-0.22325 0.4430 14	-0.46046 0.0975 14	0.22504 0.4392 14
WATEMP	0.07821 0.7904 14	0.33435 0.2642 13	-0.62225 0.0175 14	0.01317 0.9693 11	-0.19894 0.4953 14	1.00000 0.0 14	0.74230 0.0024 14	0.12477 0.6708 14	0.08425 0.7746 14	0.48649 0.0777 14	-0.37981 0.1804 14	0.38949 0.1686 14	-0.11885 0.6857 14	-0.66935 0.0088 14
COND	-0.11963 0.6837 14	0.60335 0.0290 13	-0.60395 0.0222 14	0.02097 0.9512 11	-0.10550 0.7196 14	0.74230 0.0024 14	1.00000 0.0 14	0.05331 0.8564 14	-0.03821 0.8968 14	0.26711 0.3559 14	-0.46181 0.0964 14	-0.02397 0.9352 14	0.13199 0.6528 14	-0.55507 0.0394 14
NO23	0.19933 0.4945 14	-0.28733 0.3412 13	-0.32196 0.2616 14	0.86945 0.0005 11	0.06381 0.8284 14	0.12477 0.6708 14	0.05331 0.8564 14	1.00000 0.0 14	0.07592 0.7964 14	-0.34779 0.2230 14	-0.13353 0.6490 14	-0.07076 0.8100 14	-0.20449 0.4831 14	-0.00135 0.9964 14
SAV	-0.33297 0.2447 14	-0.26850 0.3751 13	-0.07799 0.7910 14	0.33504 0.3139 11	-0.23741 0.4138 14	0.08425 0.7746 14	-0.03821 0.8968 14	0.07592 0.7964 14	1.00000 0.0 14	0.34066 0.2333 14	-0.45592 0.1013 14	-0.27884 0.3344 14	0.45954 0.0983 14	-0.42909 0.1258 14
SAV_D	0.30875 0.2828 14	0.13003 0.6720 13	-0.49018 0.0752 14	-0.30088 0.3686 11	0.03024 0.9183 14	0.48649 0.0777 14	0.26711 0.3559 14	-0.34779 0.2230 14	0.34066 0.2333 14	1.00000 0.0 14	-0.26167 0.3662 14	0.16372 0.5760 14	-0.12453 0.6715 14	-0.30469 0.2895 14
DISCH	0.06390 0.8282 14	-0.41811 0.1551 13	0.43344 0.1216 14	-0.15913 0.6403 11	0.35978 0.2064 14	-0.37981 0.1804 14	-0.46181 0.0964 14	-0.13353 0.6490 14	-0.45592 0.1013 14	-0.26167 0.3662 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	0.31417 0.2740 14	-0.21344 0.4838 13	-0.02142 0.9420 14	-0.21130 0.5328 11	-0.22325 0.4430 14	0.38949 0.1686 14	-0.02397 0.9352 14	-0.07076 0.8100 14	-0.27884 0.3344 14	0.16372 0.5760 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.81659 0.0004 14	0.15587 0.6111 13	0.32730 0.2533 14	-0.13549 0.6912 11	-0.46046 0.0975 14	-0.11885 0.6857 14	0.13199 0.6528 14	-0.20449 0.4831 14	0.45954 0.0983 14	-0.12453 0.6715 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.26576 0.3584 14	-0.08908 0.7723 13	0.26884 0.3527 14	0.11876 0.7280 11	0.22504 0.4392 14	-0.66935 0.0088 14	-0.55507 0.0394 14	-0.00135 0.9964 14	-0.42909 0.1258 14	-0.30469 0.2895 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 19. Spring correlations for station XEA6596 (IH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.18811 0.5196 14	-0.77279 0.0012 14	0.45563 0.1590 11	-0.24423 0.4001 14	0.44471 0.1111 14	0.24969 0.3893 14	0.55938 0.0375 14	0.49331 0.0731 14	0.35023 0.2196 14	-0.29260 0.3100 14	-0.00778 0.9789 14	-0.41453 0.1406 14	-0.01183 0.9680 14
CHLA	0.18811 0.5196 14	1.00000 0.0 14	-0.07006 0.8119 14	-0.39021 0.2355 11	0.19731 0.4990 14	0.50295 0.0668 14	0.45661 0.1007 14	-0.30544 0.2883 14	-0.24168 0.4052 14	-0.12009 0.6826 14	-0.58418 0.0283 14	-0.05600 0.8492 14	-0.03807 0.8972 14	-0.24998 0.3887 14
TSS	-0.77279 0.0012 14	-0.07006 0.8119 14	1.00000 0.0 14	-0.41910 0.1995 11	0.21468 0.4611 14	-0.32187 0.2618 14	-0.01737 0.9530 14	-0.51915 0.0571 14	-0.42500 0.1298 14	-0.17758 0.5436 14	0.35028 0.2195 14	-0.25918 0.3709 14	0.37290 0.1891 14	-0.00952 0.9742 14
TN	0.45563 0.1590 11	-0.39021 0.2355 11	-0.41910 0.1995 11	1.00000 0.0 11	-0.13825 0.6852 11	-0.21880 0.5180 11	-0.11870 0.7281 11	0.86991 0.0005 11	0.48828 0.1275 11	0.35127 0.2895 11	-0.07694 0.8221 11	-0.31190 0.3504 11	0.01747 0.9593 11	0.23362 0.4893 11
TP	-0.24423 0.4001 14	0.19731 0.4990 14	0.21468 0.4611 14	-0.13825 0.6852 11	1.00000 0.0 14	-0.04677 0.8739 14	0.25586 0.3773 14	-0.30021 0.2970 14	-0.45634 0.1010 14	0.00073 0.9980 14	-0.21932 0.4512 14	0.10056 0.7323 14	-0.04568 0.8768 14	-0.15382 0.5996 14
WATEMP	0.44471 0.1111 14	0.50295 0.0668 14	-0.32187 0.2618 14	-0.21880 0.5180 11	-0.04677 0.8739 14	1.00000 0.0 14	0.61735 0.0187 14	-0.12175 0.6784 14	0.10816 0.7128 14	-0.00674 0.9817 14	-0.49022 0.0751 14	0.21234 0.4661 14	-0.18513 0.5263 14	-0.67835 0.0077 14
COND	0.24969 0.3893 14	0.45661 0.1007 14	-0.01737 0.9530 14	-0.11870 0.7281 11	0.25586 0.3773 14	0.61735 0.0187 14	1.00000 0.0 14	-0.09594 0.7442 14	0.11286 0.7009 14	-0.00812 0.9780 14	-0.60645 0.0215 14	-0.20451 0.4831 14	0.29901 0.2990 14	-0.57414 0.0318 14
NO23	0.55938 0.0375 14	-0.30544 0.2883 14	-0.51915 0.0571 14	0.86991 0.0005 11	-0.30021 0.2970 14	-0.12175 0.6784 14	-0.09594 0.7442 14	1.00000 0.0 14	0.74999 0.0020 14	0.27356 0.3440 14	-0.13731 0.6397 14	-0.11959 0.6839 14	-0.08878 0.7628 14	0.10733 0.7150 14
SAV	0.49331 0.0731 14	-0.24168 0.4052 14	-0.42500 0.1298 14	0.48828 0.1275 11	-0.45634 0.1010 14	0.10816 0.7128 14	0.11286 0.7009 14	0.74999 0.0020 14	1.00000 0.0 14	0.32723 0.2534 14	-0.09684 0.7419 14	0.11249 0.7018 14	0.17841 0.5417 14	-0.15611 0.5941 14
SAV_D	0.35023 0.2196 14	-0.12009 0.6826 14	-0.17758 0.5436 14	0.35127 0.2895 11	0.00073 0.9980 14	-0.00674 0.9817 14	-0.00812 0.9780 14	0.27356 0.3440 14	0.32723 0.2534 14	1.00000 0.0 14	0.08088 0.7834 14	-0.40541 0.1504 14	0.25238 0.3840 14	0.09228 0.7537 14
DISCH	-0.29260 0.3100 14	-0.58418 0.0283 14	0.35028 0.2195 14	-0.07694 0.8221 11	-0.21932 0.4512 14	-0.49022 0.0751 14	-0.60645 0.0215 14	-0.13731 0.6397 14	-0.09684 0.7419 14	0.08088 0.7834 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.00778 0.9789 14	-0.05600 0.8492 14	-0.25918 0.3709 14	-0.31190 0.3504 11	0.10056 0.7323 14	0.21234 0.4661 14	-0.20451 0.4831 14	-0.11959 0.6839 14	0.11249 0.7018 14	-0.40541 0.1504 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.41453 0.1406 14	-0.03807 0.8972 14	0.37290 0.1891 14	0.01747 0.9593 11	-0.04568 0.8768 14	-0.18513 0.5263 14	0.29901 0.2990 14	-0.08878 0.7628 14	0.17841 0.5417 14	0.25238 0.3840 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.01183 0.9680 14	-0.24998 0.3887 14	-0.00952 0.9742 14	0.23362 0.4893 11	-0.15382 0.5996 14	-0.67835 0.0077 14	-0.57414 0.0318 14	0.10733 0.7150 14	-0.15611 0.5941 14	0.09228 0.7537 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 20. Spring correlations for station XEA1840 (QN) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.35755 0.2304 13	-0.80623 0.0005 14	0.50693 0.1115 11	-0.61204 0.0200 14	0.11444 0.6969 14	-0.01422 0.9615 14	0.59499 0.0248 14	0.48119 0.0815 14	0.16030 0.5841 14	-0.14331 0.6250 14	-0.02198 0.9406 14	0.04472 0.8793 14	-0.08972 0.7603 14
CHLA	-0.35755 0.2304 13	1.00000 0.0 13	0.38763 0.1906 13	-0.74741 0.0082 11	0.22914 0.4514 13	0.58897 0.0342 13	0.20317 0.5056 13	-0.74270 0.0036 13	-0.49302 0.0869 13	-0.50798 0.0763 13	-0.42687 0.1457 13	-0.05233 0.8652 13	-0.18172 0.5524 13	-0.24154 0.4266 13
TSS	-0.80623 0.0005 14	0.38763 0.1906 13	1.00000 0.0 14	-0.49259 0.1237 11	0.71784 0.0038 14	0.05596 0.8493 14	0.12209 0.6776 14	-0.63168 0.0154 14	-0.57925 0.0299 14	-0.10695 0.7159 14	0.22607 0.4371 14	-0.31625 0.2707 14	0.06601 0.8226 14	0.00359 0.9903 14
TN	0.50693 0.1115 11	-0.74741 0.0082 11	-0.49259 0.1237 11	1.00000 0.0 11	-0.30109 0.3683 11	-0.34159 0.3039 11	-0.14973 0.6604 11	0.85526 0.0008 11	0.44750 0.1675 11	0.58524 0.0586 11	-0.11866 0.7282 11	-0.26206 0.4363 11	0.10491 0.7589 11	0.20572 0.5439 11
TP	-0.61204 0.0200 14	0.22914 0.4514 13	0.71784 0.0038 14	-0.30109 0.3683 11	1.00000 0.0 14	-0.13821 0.6375 14	-0.11357 0.6991 14	-0.47740 0.0843 14	-0.59184 0.0258 14	-0.32364 0.2590 14	0.35264 0.2162 14	-0.09551 0.7453 14	-0.35663 0.2107 14	0.25346 0.3819 14
WATEMP	0.11444 0.6969 14	0.58897 0.0342 13	0.05596 0.8493 14	-0.34159 0.3039 11	-0.13821 0.6375 14	1.00000 0.0 14	0.57962 0.0298 14	-0.38135 0.1785 14	-0.03100 0.9162 14	-0.25159 0.3856 14	-0.54672 0.0431 14	0.19203 0.5107 14	-0.16551 0.5717 14	-0.70052 0.0053 14
COND	-0.01422 0.9615 14	0.20317 0.5056 13	0.12209 0.6776 14	-0.14973 0.6604 11	-0.11357 0.6991 14	0.57962 0.0298 14	1.00000 0.0 14	-0.09579 0.7446 14	-0.07311 0.8039 14	-0.21975 0.4503 14	-0.68396 0.0070 14	-0.03741 0.8990 14	0.16962 0.5621 14	-0.69619 0.0057 14
NO23	0.59499 0.0248 14	-0.74270 0.0036 13	-0.63168 0.0154 14	0.85526 0.0008 11	-0.47740 0.0843 14	-0.38135 0.1785 14	-0.09579 0.7446 14	1.00000 0.0 14	0.78002 0.0010 14	0.38017 0.1800 14	-0.09667 0.7423 14	-0.12749 0.6641 14	0.15443 0.5981 14	0.15053 0.6075 14
SAV	0.48119 0.0815 14	-0.49302 0.0869 13	-0.57925 0.0299 14	0.44750 0.1675 11	-0.59184 0.0258 14	-0.03100 0.9162 14	-0.07311 0.8039 14	0.78002 0.0010 14	1.00000 0.0 14	0.21696 0.4562 14	-0.16238 0.5791 14	0.14097 0.6307 14	0.17736 0.5441 14	-0.06350 0.8293 14
SAV_D	0.16030 0.5841 14	-0.50798 0.0763 13	-0.10695 0.7159 14	0.58524 0.0586 11	-0.32364 0.2590 14	-0.25159 0.3856 14	-0.21975 0.4503 14	0.38017 0.1800 14	0.21696 0.4562 14	1.00000 0.0 14	0.30479 0.2893 14	-0.16425 0.5747 14	0.20626 0.4793 14	0.32121 0.2628 14
DISCH	-0.14331 0.6250 14	-0.42687 0.1457 13	0.22607 0.4371 14	-0.11866 0.7282 11	0.35264 0.2162 14	-0.54672 0.0431 14	-0.68396 0.0070 14	-0.09667 0.7423 14	-0.16238 0.5791 14	0.30479 0.2893 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.02198 0.9406 14	-0.05233 0.8652 13	-0.31625 0.2707 14	-0.26206 0.4363 11	-0.09551 0.7453 14	0.19203 0.5107 14	-0.03741 0.8990 14	-0.12749 0.6641 14	0.14097 0.6307 14	-0.16425 0.5747 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	0.04472 0.8793 14	-0.18172 0.5524 13	0.06601 0.8226 14	0.10491 0.7589 11	-0.35663 0.2107 14	-0.16551 0.5717 14	0.16962 0.5621 14	0.15443 0.5981 14	0.17736 0.5441 14	0.20626 0.4793 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.08972 0.7603 14	-0.24154 0.4266 13	0.00359 0.9903 14	0.20572 0.5439 11	0.25346 0.3819 14	-0.70052 0.0053 14	-0.69619 0.0057 14	0.15053 0.6075 14	-0.06350 0.8293 14	0.32121 0.2628 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 21. Spring correlations for station XDA4238 (DP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	0.01385	-0.62769	0.21714	-0.12266	-0.17551	-0.23861	-0.09215	-0.23236	-0.21370	0.30224	-0.08925	-0.49949	0.36437
	0.0	0.9642	0.0162	0.5213	0.6761	0.5484	0.4113	0.7540	0.4449	0.5048	0.2936	0.7616	0.0690	0.2003
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
CHLA	0.01385	1.00000	0.04694	-0.58977	0.06629	0.56013	0.51859	-0.55813	0.05996	-0.36415	-0.62704	-0.21999	-0.09649	-0.34171
	0.9642	0.0	0.8790	0.0562	0.8297	0.0465	0.0694	0.0474	0.8532	0.2445	0.0218	0.4702	0.7538	0.2531
	13	13	13	11	13	13	13	13	12	12	13	13	13	13
TSS	-0.62769	0.04694	1.00000	-0.56332	0.18917	0.06914	0.03960	-0.32344	-0.07038	-0.15070	-0.03346	0.18564	0.22397	-0.25588
	0.0162	0.8790	0.0	0.0711	0.5172	0.8143	0.8931	0.2593	0.8193	0.6401	0.9096	0.5252	0.4414	0.3772
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
TN	0.21714	-0.58977	-0.56332	1.00000	0.00791	-0.60394	-0.13044	0.86929	-0.13336	0.34541	0.15682	-0.42771	0.37886	0.42080
	0.5213	0.0562	0.0711	0.0	0.9816	0.0491	0.7023	0.0005	0.6959	0.2982	0.6452	0.1894	0.2505	0.1975
	11	11	11	11	11	11	11	11	11	11	11	11	11	11
TP	-0.12266	0.06629	0.18917	0.00791	1.00000	-0.35582	0.07553	-0.15447	-0.18961	0.16297	-0.04103	-0.00487	-0.36493	0.38510
	0.6761	0.8297	0.5172	0.9816	0.0	0.2118	0.7975	0.5980	0.5350	0.6128	0.8892	0.9868	0.1995	0.1739
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
WATEMP	-0.17551	0.56013	0.06914	-0.60394	-0.35582	1.00000	0.62423	-0.38321	0.15515	-0.26128	-0.69679	0.22922	0.08121	-0.73692
	0.5484	0.0465	0.8143	0.0491	0.2118	0.0	0.0170	0.1762	0.6128	0.4121	0.0056	0.4305	0.7826	0.0026
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
COND	-0.23861	0.51859	0.03960	-0.13044	0.07553	0.62423	1.00000	-0.32634	-0.14614	-0.21315	-0.86354	-0.15898	0.15638	-0.63129
	0.4113	0.0694	0.8931	0.7023	0.7975	0.0170	0.0	0.2548	0.6338	0.5060	0.0001	0.5872	0.5934	0.0155
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
NO23	-0.09215	-0.55813	-0.32344	0.86929	-0.15447	-0.38321	-0.32634	1.00000	0.35199	0.46102	0.21167	-0.30741	0.26823	0.33984
	0.7540	0.0474	0.2593	0.0005	0.5980	0.1762	0.2548	0.0	0.2382	0.1314	0.4676	0.2850	0.3538	0.2345
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
SAV	-0.23236	0.05996	-0.07038	-0.13336	-0.18961	0.15515	-0.14614	0.35199	1.00000	0.25815	-0.20069	0.24961	-0.13338	0.01992
	0.4449	0.8532	0.8193	0.6959	0.5350	0.6128	0.6338	0.2382	0.0	0.4179	0.5109	0.4108	0.6640	0.9485
	13	12	13	11	13	13	13	13	13	12	13	13	13	13
SAV_D	-0.21370	-0.36415	-0.15070	0.34541	0.16297	-0.26128	-0.21315	0.46102	0.25815	1.00000	0.05715	-0.28220	0.18708	0.42130
	0.5048	0.2445	0.6401	0.2982	0.6128	0.4121	0.5060	0.1314	0.4179	0.0	0.8600	0.3742	0.5604	0.1726
	12	12	12	11	12	12	12	12	12	12	12	12	12	12
DISCH	0.30224	-0.62704	-0.03346	0.15682	-0.04103	-0.69679	-0.86354	0.21167	-0.20069	0.05715	1.00000	0.13060	-0.09456	0.62189
	0.2936	0.0218	0.9096	0.6452	0.8892	0.0056	0.0001	0.4676	0.5109	0.8600	0.0	0.6563	0.7478	0.0176
	14	13	14	11	14	14	14	14	13	12	17	14	14	14
AVSUN	-0.08925	-0.21999	0.18564	-0.42771	-0.00487	0.22922	-0.15898	-0.30741	0.24961	-0.28220	0.13060	1.00000	-0.36251	-0.20509
	0.7616	0.4702	0.5252	0.1894	0.9868	0.4305	0.5872	0.2850	0.4108	0.3742	0.6563	0.0	0.2027	0.4818
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
WINDSP	-0.49949	-0.09649	0.22397	0.37886	-0.36493	0.08121	0.15638	0.26823	-0.13338	0.18708	-0.09456	-0.36251	1.00000	-0.20090
	0.0690	0.7538	0.4414	0.2505	0.1995	0.7826	0.5934	0.3538	0.6640	0.5604	0.7478	0.2027	0.0	0.4910
	14	13	14	11	14	14	14	14	13	12	14	14	14	14
PRECIP	0.36437	-0.34171	-0.25588	0.42080	0.38510	-0.73692	-0.63129	0.33984	0.01992	0.42130	0.62189	-0.20509	-0.20090	1.00000
	0.2003	0.2531	0.3772	0.1975	0.1739	0.0026	0.0155	0.2345	0.9485	0.1726	0.0176	0.4818	0.4910	0.0
	14	13	14	11	14	14	14	14	13	12	14	14	14	14

Table 22. Spring correlations for station XDA1177 (MP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.04155 0.8878 14	-0.75155 0.0019 14	0.23586 0.4850 11	0.03070 0.9170 14	0.11873 0.6860 14	0.21892 0.4521 14	-0.17754 0.5437 14	-0.20748 0.4964 13	0.47519 0.1185 12	-0.18020 0.5376 14	-0.00750 0.9797 14	-0.49208 0.0739 14	0.04451 0.8799 14
CHLA	0.04155 0.8878 14	1.00000 0.0 14	0.14500 0.6209 14	-0.40517 0.2164 11	-0.10676 0.7164 14	0.41240 0.1428 14	0.75419 0.0018 14	-0.51928 0.0571 14	-0.17631 0.5645 13	-0.19735 0.5387 12	-0.57430 0.0317 14	0.03286 0.9112 14	0.22937 0.4302 14	-0.52223 0.0554 14
TSS	-0.75155 0.0019 14	0.14500 0.6209 14	1.00000 0.0 14	-0.42397 0.1938 11	0.25900 0.3713 14	-0.16646 0.5695 14	-0.26670 0.3567 14	-0.04003 0.8919 14	0.39091 0.1866 13	-0.26965 0.3967 12	0.33344 0.2440 14	0.13422 0.6473 14	0.23995 0.4087 14	0.20946 0.4723 14
TN	0.23586 0.4850 11	-0.40517 0.2164 11	-0.42397 0.1938 11	1.00000 0.0 11	-0.22177 0.5122 11	-0.53537 0.0897 11	-0.26123 0.4378 11	0.81876 0.0021 11	-0.24797 0.4622 11	0.44558 0.1696 11	0.25818 0.4434 11	-0.26631 0.4286 11	0.22114 0.5135 11	0.37356 0.2578 11
TP	0.03070 0.9170 14	-0.10676 0.7164 14	0.25900 0.3713 14	-0.22177 0.5122 11	1.00000 0.0 14	-0.51014 0.0624 14	-0.39441 0.1629 14	0.05141 0.8614 14	-0.02915 0.9247 13	-0.07186 0.8244 12	0.37188 0.1904 14	0.15006 0.6086 14	-0.52736 0.0526 14	0.39628 0.1607 14
WATEMP	0.11873 0.6860 14	0.41240 0.1428 14	-0.16646 0.5695 14	-0.53537 0.0897 11	-0.51014 0.0624 14	1.00000 0.0 14	0.46815 0.0914 14	-0.53748 0.0475 14	0.22386 0.4622 13	-0.12812 0.6915 12	-0.61957 0.0181 14	0.33617 0.2399 14	0.06202 0.8332 14	-0.69021 0.0063 14
COND	0.21892 0.4521 14	0.75419 0.0018 14	-0.26670 0.3567 14	-0.26123 0.4378 11	-0.39441 0.1629 14	0.46815 0.0914 14	1.00000 0.0 14	-0.44094 0.1145 14	-0.15118 0.6220 13	0.19766 0.5380 12	-0.82796 0.0003 14	-0.24510 0.3983 14	0.27514 0.3411 14	-0.52263 0.0552 14
NO23	-0.17754 0.5437 14	-0.51928 0.0571 14	-0.04003 0.8919 14	0.81876 0.0021 11	0.05141 0.8614 14	-0.53748 0.0475 14	-0.44094 0.1145 14	1.00000 0.0 14	0.16360 0.5933 13	0.33892 0.2812 12	0.29887 0.2993 14	-0.32548 0.2561 14	0.16491 0.5732 14	0.38187 0.1779 14
SAV	-0.20748 0.4964 13	-0.17631 0.5645 13	0.39091 0.1866 13	-0.24797 0.4622 11	-0.02915 0.9247 13	0.22386 0.4622 13	-0.15118 0.6220 13	0.16360 0.5933 13	1.00000 0.0 13	0.22077 0.4905 12	-0.09944 0.7465 13	0.22847 0.4528 13	-0.11707 0.7033 13	0.16027 0.6010 13
SAV_D	0.47519 0.1185 12	-0.19735 0.5387 12	-0.26965 0.3967 12	0.44558 0.1696 11	-0.07186 0.8244 12	-0.12812 0.6915 12	0.19766 0.5380 12	0.33892 0.2812 12	0.22077 0.4905 12	1.00000 0.0 12	-0.07524 0.8162 12	-0.31380 0.3206 12	-0.02529 0.9378 12	0.45852 0.1338 12
DISCH	-0.18020 0.5376 14	-0.57430 0.0317 14	0.33344 0.2440 14	0.25818 0.4434 11	0.37188 0.1904 14	-0.61957 0.0181 14	-0.82796 0.0003 14	0.29887 0.2993 14	-0.09944 0.7465 13	-0.07524 0.8162 12	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.00750 0.9797 14	0.03286 0.9112 14	0.13422 0.6473 14	-0.26631 0.4286 11	0.15006 0.6086 14	0.33617 0.2399 14	-0.24510 0.3983 14	-0.32548 0.2561 14	0.22847 0.4528 13	-0.31380 0.3206 12	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.49208 0.0739 14	0.22937 0.4302 14	0.23995 0.4087 14	0.22114 0.5135 11	-0.52736 0.0526 14	0.06202 0.8332 14	0.27514 0.3411 14	0.16491 0.5732 14	-0.11707 0.7033 13	-0.02529 0.9378 12	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.04451 0.8799 14	-0.52223 0.0554 14	0.20946 0.4723 14	0.37356 0.2578 11	0.39628 0.1607 14	-0.69021 0.0063 14	-0.52263 0.0552 14	0.38187 0.1779 14	0.16027 0.6010 13	0.45852 0.1338 12	-0.20509 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 23. Spring correlations for station XDB3321 (NY) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 8	-0.03261 0.9447 7	-0.73810 0.0366 8	-0.20127 0.7455 5	0.04321 0.9191 8	0.48251 0.2259 8	0.05109 0.9044 8	-0.45026 0.2629 8	-0.20849 0.6537 7	0.48837 0.3257 6	-0.03918 0.9266 8	0.06297 0.8823 8	-0.52120 0.1853 8	-0.12569 0.7668 8
CHLA	-0.03261 0.9447 7	1.00000 0.0 7	0.19600 0.6736 7	-0.69975 0.1883 5	-0.13158 0.7785 7	0.33389 0.4642 7	0.81176 0.0266 7	-0.71024 0.0737 7	-0.70556 0.1173 6	-0.52619 0.2836 6	-0.60281 0.1519 7	0.15502 0.7400 7	0.30295 0.5090 7	-0.63086 0.1287 7
TSS	-0.73810 0.0366 8	0.19600 0.6736 7	1.00000 0.0 8	0.14927 0.8106 5	0.34257 0.4062 8	-0.53679 0.1701 8	-0.11983 0.7775 8	0.03267 0.9388 8	-0.14707 0.7530 7	-0.50580 0.3060 6	0.16801 0.6909 8	0.55966 0.1492 8	0.11328 0.7894 8	0.11587 0.7847 8
TN	-0.20127 0.7455 5	-0.69975 0.1883 5	0.14927 0.8106 5	1.00000 0.0 5	0.51094 0.3790 5	-0.33889 0.5769 5	-0.80892 0.0973 5	0.73866 0.1539 5	0.50313 0.3876 5	0.57488 0.3106 5	0.69794 0.1900 5	0.10786 0.8629 5	0.79943 0.1045 5	0.26598 0.6654 5
TP	0.04321 0.9191 8	-0.13158 0.7785 7	0.34257 0.4062 8	0.51094 0.3790 5	1.00000 0.0 8	-0.46459 0.2461 8	-0.68539 0.0606 8	0.06872 0.8716 8	-0.40841 0.3630 7	-0.17156 0.7452 6	0.56720 0.1426 8	0.50271 0.2042 8	-0.49020 0.2175 8	0.16929 0.6886 8
WATEMP	0.48251 0.2259 8	0.33389 0.4642 7	-0.53679 0.1701 8	-0.33889 0.5769 5	-0.46459 0.2461 8	1.00000 0.0 8	0.72097 0.0436 8	-0.52519 0.1814 8	-0.26658 0.5633 7	-0.09907 0.8519 6	-0.80270 0.0165 8	0.00695 0.9870 8	0.19117 0.6502 8	-0.69047 0.0580 8
COND	0.05109 0.9044 8	0.81176 0.0266 7	-0.11983 0.7775 8	-0.80892 0.0973 5	-0.68539 0.0606 8	0.72097 0.0436 8	1.00000 0.0 8	-0.63880 0.0882 8	-0.18520 0.6910 7	-0.52416 0.2858 6	-0.90058 0.0023 8	-0.04633 0.9133 8	0.43685 0.2791 8	-0.57892 0.1327 8
NO23	-0.45026 0.2629 8	-0.71024 0.0737 7	0.03267 0.9388 8	0.73866 0.1539 5	0.06872 0.8716 8	-0.52519 0.1814 8	-0.63880 0.0882 8	1.00000 0.0 8	0.64950 0.1144 7	0.37238 0.4672 6	0.61142 0.1073 8	-0.51519 0.1913 8	0.31420 0.4485 8	0.50597 0.2008 8
SAV	-0.20849 0.6537 7	-0.70556 0.1173 6	-0.14707 0.7530 7	0.50313 0.3876 5	-0.40841 0.3630 7	-0.26658 0.5633 7	-0.18520 0.6910 7	0.64950 0.1144 7	1.00000 0.0 13	0.74261 0.0057 12	0.24164 0.4264 13	-0.17219 0.5738 13	0.26140 0.3883 13	0.49785 0.0834 13
SAV_D	0.48837 0.3257 6	-0.52619 0.2836 6	-0.50580 0.3060 6	0.57488 0.3106 5	-0.17156 0.7452 6	-0.09907 0.8519 6	-0.52416 0.2858 6	0.37238 0.4672 6	0.74261 0.0057 12	1.00000 0.0 12	0.46974 0.1234 12	-0.28161 0.3752 12	0.11475 0.7225 12	0.42368 0.1699 12
DISCH	-0.03918 0.9266 8	-0.60281 0.1519 7	0.16801 0.6909 8	0.69794 0.1900 5	0.56720 0.1426 8	-0.80270 0.0165 8	-0.90058 0.0023 8	0.61142 0.1073 8	0.24164 0.4264 13	0.46974 0.1234 12	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	0.06297 0.8823 8	0.15502 0.7400 7	0.55966 0.1492 8	0.10786 0.8629 5	0.50271 0.2042 8	0.00695 0.9870 8	-0.04633 0.9133 8	-0.51519 0.1913 8	-0.17219 0.5738 13	-0.28161 0.3752 12	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.52120 0.1853 8	0.30295 0.5090 7	0.11328 0.7894 8	0.79943 0.1045 5	-0.49020 0.2175 8	0.19117 0.6502 8	0.43685 0.2791 8	0.31420 0.4485 8	0.26140 0.3883 13	0.11475 0.7225 12	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.12569 0.7668 8	-0.63086 0.1287 7	0.11587 0.7847 8	0.26598 0.6654 5	0.16929 0.6886 8	-0.69047 0.0580 8	-0.57892 0.1327 8	0.50597 0.2008 8	0.49785 0.0834 13	0.42368 0.1699 12	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 24. Spring correlations for station XDC1706 (301B) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.17918 0.5399 14	-0.84218 0.0002 14	0.13686 0.6882 11	-0.23480 0.4191 14	-0.16018 0.5844 14	0.56325 0.0360 14	-0.09918 0.7359 14	-0.51518 0.0865 12	-0.23269 0.5177 10	-0.21574 0.4588 14	-0.43342 0.1216 14	0.16645 0.5695 14	-0.14607 0.6183 14
CHLA	0.17918 0.5399 14	1.00000 0.0 14	-0.12428 0.6721 14	-0.38930 0.2366 11	-0.01652 0.9553 14	0.07334 0.8032 14	0.56582 0.0349 14	-0.55288 0.0403 14	0.09893 0.7597 12	-0.17648 0.6258 10	-0.55592 0.0390 14	-0.16517 0.5726 14	0.44703 0.1090 14	-0.28980 0.3149 14
TSS	-0.84218 0.0002 14	-0.12428 0.6721 14	1.00000 0.0 14	0.19065 0.5744 11	0.37232 0.1899 14	-0.07819 0.7905 14	-0.65460 0.0111 14	0.28444 0.3243 14	0.53869 0.0708 12	0.28212 0.4297 10	0.46827 0.0913 14	0.30772 0.2845 14	-0.00997 0.9730 14	0.36231 0.2030 14
TN	0.13686 0.6882 11	-0.38930 0.2366 11	0.19065 0.5744 11	1.00000 0.0 11	0.14316 0.6745 11	-0.49361 0.1228 11	-0.55959 0.0735 11	0.69828 0.0169 11	0.12925 0.7219 10	0.56461 0.1132 9	0.83795 0.0013 11	-0.26056 0.4390 11	0.54024 0.0862 11	0.63482 0.0359 11
TP	-0.23480 0.4191 14	-0.01652 0.9553 14	0.37232 0.1899 14	0.14316 0.6745 11	1.00000 0.0 14	0.19407 0.5062 14	-0.41493 0.1401 14	0.11626 0.6923 14	-0.14519 0.6525 12	0.02794 0.9389 10	0.54396 0.0443 14	0.04847 0.8693 14	-0.35439 0.2138 14	0.53825 0.0471 14
WATEMP	-0.16018 0.5844 14	0.07334 0.8032 14	-0.07819 0.7905 14	-0.49361 0.1228 11	0.19407 0.5062 14	1.00000 0.0 14	0.06303 0.8305 14	-0.56868 0.0338 14	-0.43028 0.1626 12	-0.13139 0.7175 10	-0.24048 0.4076 14	0.15587 0.5946 14	-0.09487 0.7470 14	-0.56704 0.0345 14
SAL	0.56325 0.0360 14	0.56582 0.0349 14	-0.65460 0.0111 14	-0.55959 0.0735 11	-0.41493 0.1401 14	0.06303 0.8305 14	1.00000 0.0 14	-0.66162 0.0100 14	-0.29862 0.3458 12	-0.47002 0.1705 10	-0.85280 0.0001 14	-0.41369 0.1414 14	0.21502 0.4604 14	-0.42880 0.1261 14
NO23	-0.09918 0.7359 14	-0.55288 0.0403 14	0.28444 0.3243 14	0.69828 0.0169 11	0.11626 0.6923 14	-0.56868 0.0338 14	-0.66162 0.0100 14	1.00000 0.0 14	0.46770 0.1252 12	0.13743 0.7050 10	0.72689 0.0032 14	-0.06110 0.8356 14	0.02769 0.9251 14	0.63476 0.0147 14
SAV	-0.51518 0.0865 12	0.09893 0.7597 12	0.53869 0.0708 12	0.12925 0.7219 10	-0.14519 0.6525 12	-0.43028 0.1626 12	-0.29862 0.3458 12	0.46770 0.1252 12	1.00000 0.0 12	-0.24282 0.4991 10	0.07417 0.8188 12	0.07087 0.8267 12	0.37979 0.2233 12	0.36497 0.2434 12
SAV_D	-0.23269 0.5177 10	-0.17648 0.6258 10	0.28212 0.4297 10	0.56461 0.1132 9	0.02794 0.9389 10	-0.13139 0.7175 10	-0.47002 0.1705 10	0.13743 0.7050 10	-0.24282 0.4991 10	1.00000 0.0 10	0.50904 0.1329 10	0.01111 0.9757 10	0.22379 0.5342 10	0.14761 0.6840 10
DISCH	-0.21574 0.4588 14	-0.55592 0.0390 14	0.46827 0.0913 14	0.83795 0.0013 11	0.54396 0.0443 14	-0.24048 0.4076 14	-0.85280 0.0001 14	0.72689 0.0032 14	0.07417 0.8188 12	0.50904 0.1329 10	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.43342 0.1216 14	-0.16517 0.5726 14	0.30772 0.2845 14	-0.26056 0.4390 11	0.04847 0.8693 14	0.15587 0.5946 14	-0.41369 0.1414 14	-0.06110 0.8356 14	0.07087 0.8267 12	0.01111 0.9757 10	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	0.16645 0.5695 14	0.44703 0.1090 14	-0.00997 0.9730 14	0.54024 0.0862 11	-0.35439 0.2138 14	-0.09487 0.7470 14	0.21502 0.4604 14	0.02769 0.9251 14	0.37979 0.2233 12	0.22379 0.5342 10	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.14607 0.6183 14	-0.28980 0.3149 14	0.36231 0.2030 14	0.63482 0.0359 11	0.53825 0.0471 14	-0.56704 0.0345 14	-0.42880 0.1261 14	0.63476 0.0147 14	0.36497 0.2434 12	0.14761 0.6840 10	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 25. Spring correlations for station MLE2.2 (RP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.09368	0.35322	-0.57580	0.06271	-0.33494	0.62517	-0.43020	-0.25054	-0.01296	-0.13957	-0.56852	0.14430	0.43032
	0.0	0.7721	0.2601	0.0501	0.8465	0.2872	0.0297	0.1627	0.4574	0.9716	0.6653	0.0538	0.6546	0.1626
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
CHLA	-0.09368	1.00000	-0.13085	-0.08849	0.50410	-0.04339	0.35895	-0.49645	-0.14297	-0.15258	-0.05211	-0.16693	0.08795	0.17337
	0.7721	0.0	0.6852	0.7845	0.0947	0.8935	0.2519	0.1006	0.6749	0.6739	0.8722	0.6041	0.7858	0.5900
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
TSS	0.35322	-0.13085	1.00000	-0.42263	0.08816	-0.28351	0.24829	-0.27025	0.25790	0.33652	-0.28849	-0.28236	-0.13679	0.33990
	0.2601	0.6852	0.0	0.1711	0.7853	0.3719	0.4365	0.3956	0.4439	0.3417	0.3632	0.3739	0.6716	0.2797
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
TN	-0.57580	-0.08849	-0.42263	1.00000	-0.18099	-0.10687	-0.81924	0.80986	0.52784	0.35987	0.77730	0.36013	0.29071	0.14364
	0.0501	0.7845	0.1711	0.0	0.5735	0.7410	0.0011	0.0014	0.0951	0.3071	0.0029	0.2502	0.3593	0.6560
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
TP	0.06271	0.50410	0.08816	-0.18099	1.00000	0.51561	0.35544	-0.52718	-0.04650	0.04612	-0.28411	0.10988	-0.39339	-0.01299
	0.8465	0.0947	0.7853	0.5735	0.0	0.0862	0.2569	0.0782	0.8920	0.8993	0.3708	0.7339	0.2058	0.9681
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
WATEMP	-0.33494	-0.04339	-0.28351	-0.10687	0.51561	1.00000	0.06507	-0.28239	-0.07245	-0.09754	-0.47507	0.38333	-0.62079	-0.55250
	0.2872	0.8935	0.3719	0.7410	0.0862	0.0	0.8408	0.3739	0.8323	0.7886	0.1186	0.2187	0.0312	0.0625
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
SAL	0.62517	0.35895	0.24829	-0.81924	0.35544	0.06507	1.00000	-0.92948	-0.26722	-0.09616	-0.67881	-0.50866	-0.08552	-0.11872
	0.0297	0.2519	0.4365	0.0011	0.2569	0.8408	0.0	0.0001	0.4270	0.7916	0.0152	0.0913	0.7916	0.7133
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
NO23	-0.43020	-0.49645	-0.27025	0.80986	-0.52718	-0.28239	-0.92948	1.00000	0.22902	0.08210	0.76086	0.39649	0.26945	0.12924
	0.1627	0.1006	0.3956	0.0014	0.0782	0.3739	0.0001	0.0	0.4982	0.8216	0.0041	0.2019	0.3970	0.6889
	12	12	12	12	12	12	12	12	11	10	12	12	12	12
SAV	-0.25054	-0.14297	0.25790	0.52784	-0.04650	-0.07245	-0.26722	0.22902	1.00000	0.96258	0.22037	-0.06271	0.27940	0.15555
	0.4574	0.6749	0.4439	0.0951	0.8920	0.8323	0.4270	0.4982	0.0	0.0001	0.4913	0.8465	0.3791	0.6293
	11	11	11	11	11	11	11	11	12	10	12	12	12	12
SAV_D	-0.01296	-0.15258	0.33652	0.35987	0.04612	-0.09754	-0.09616	0.08210	0.96258	1.00000	0.21728	-0.23298	0.37915	0.34874
	0.9716	0.6739	0.3417	0.3071	0.8993	0.7886	0.7916	0.8216	0.0001	0.0	0.5465	0.5171	0.2799	0.3233
	10	10	10	10	10	10	10	10	10	10	10	10	10	10
DISCH	-0.13957	-0.05211	-0.28849	0.77730	-0.28411	-0.47507	-0.67881	0.76086	0.22037	0.21728	1.00000	0.13060	-0.09456	0.62189
	0.6653	0.8722	0.3632	0.0029	0.3708	0.1186	0.0152	0.0041	0.4913	0.5465	0.0	0.6563	0.7478	0.0176
	12	12	12	12	12	12	12	12	12	10	17	14	14	14
AVSUN	-0.56852	-0.16693	-0.28236	0.36013	0.10988	0.38333	-0.50866	0.39649	-0.06271	-0.23298	0.13060	1.00000	-0.36251	-0.20509
	0.0538	0.6041	0.3739	0.2502	0.7339	0.2187	0.0913	0.2019	0.8465	0.5171	0.6563	0.0	0.2027	0.4818
	12	12	12	12	12	12	12	12	12	10	14	14	14	14
WINDSP	0.14430	0.08795	-0.13679	0.29071	-0.39339	-0.62079	-0.08552	0.26945	0.27940	0.37915	-0.09456	-0.36251	1.00000	-0.20090
	0.6546	0.7858	0.6716	0.3593	0.2058	0.0312	0.7916	0.3970	0.3791	0.2799	0.7478	0.2027	0.0	0.4910
	12	12	12	12	12	12	12	12	12	10	14	14	14	14
PRECIP	0.43032	0.17337	0.33990	0.14364	-0.01299	-0.55250	-0.11872	0.12924	0.15555	0.34874	0.62189	-0.20509	-0.20090	1.00000
	0.1626	0.5900	0.2797	0.6560	0.9681	0.0625	0.7133	0.6889	0.6293	0.3233	0.0176	0.4818	0.4910	0.0
	12	12	12	12	12	12	12	12	12	10	14	14	14	14

Table 26. Spring correlations for station MLE2.3 (PL) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 12	-0.32796 0.2980 12	-0.59835 0.0398 12	-0.82623 0.0009 12	-0.31607 0.3169 12	0.35074 0.2637 12	0.76527 0.0037 12	-0.59349 0.0419 12	0.38695 0.2397 11	-0.04964 0.8917 10	-0.79474 0.0020 12	-0.32551 0.3019 12	-0.16668 0.6046 12	-0.24764 0.4377 12
CHLA	-0.32796 0.2980 12	1.00000 0.0 14	0.45056 0.1059 14	0.07847 0.8085 12	-0.21473 0.4610 14	-0.00167 0.9955 14	-0.00980 0.9735 14	-0.29138 0.3121 14	0.05800 0.8579 12	0.09730 0.7892 10	0.12413 0.6725 14	-0.21248 0.4658 14	0.46409 0.0946 14	-0.16016 0.5844 14
TSS	-0.59835 0.0398 12	0.45056 0.1059 14	1.00000 0.0 14	0.48060 0.1137 12	0.44311 0.1125 14	-0.24695 0.3947 14	-0.36910 0.1940 14	0.33457 0.2423 14	-0.14095 0.6622 12	-0.03170 0.9307 10	0.38011 0.1800 14	-0.03359 0.9092 14	0.01733 0.9531 14	-0.13428 0.6472 14
TN	-0.82623 0.0009 12	0.07847 0.8085 12	0.48060 0.1137 12	1.00000 0.0 12	0.21620 0.4997 12	-0.21337 0.5055 12	-0.95341 0.0001 12	0.89084 0.0001 12	-0.38740 0.2391 11	-0.13480 0.7104 10	0.69738 0.0117 12	0.56482 0.0557 12	0.09192 0.7763 12	0.10253 0.7512 12
TP	-0.31607 0.3169 12	-0.21473 0.4610 14	0.44311 0.1125 14	0.21620 0.4997 12	1.00000 0.0 14	-0.63691 0.0143 14	-0.31946 0.2656 14	0.39024 0.1678 14	-0.03367 0.9173 12	0.78655 0.0070 10	0.54390 0.0444 14	0.13133 0.6545 14	-0.70385 0.0050 14	0.47075 0.0893 14
WATEMP	0.35074 0.2637 12	-0.00167 0.9955 14	-0.24695 0.3947 14	-0.21337 0.5055 12	-0.63691 0.0143 14	1.00000 0.0 14	0.24156 0.4054 14	-0.36399 0.2008 14	0.37886 0.2246 12	0.23935 0.5054 10	-0.69357 0.0059 14	0.09864 0.7372 14	0.19972 0.4936 14	-0.70401 0.0049 14
SAL	0.76527 0.0037 12	-0.00980 0.9735 14	-0.36910 0.1940 14	-0.95341 0.0001 12	-0.31946 0.2656 14	0.24156 0.4054 14	1.00000 0.0 14	-0.89882 0.0001 14	0.35002 0.2647 12	0.09212 0.8002 10	-0.63568 0.0146 14	-0.56285 0.0361 14	0.17670 0.5456 14	-0.19447 0.5053 14
NO23	-0.59349 0.0419 12	-0.29138 0.3121 14	0.33457 0.2423 14	0.89084 0.0001 12	0.39024 0.1678 14	-0.36399 0.2008 14	-0.89882 0.0001 14	1.00000 0.0 14	-0.46758 0.1253 12	-0.27728 0.4380 10	0.61918 0.0182 14	0.46341 0.0951 14	-0.18117 0.5354 14	0.23830 0.4120 14
SAV	0.38695 0.2397 11	0.05800 0.8579 12	-0.14095 0.6622 12	-0.38740 0.2391 11	-0.03367 0.9173 12	0.37886 0.2246 12	0.35002 0.2647 12	-0.46758 0.1253 12	1.00000 0.0 12	-0.40443 0.0420 10	0.16288 0.1922 12	-0.46940 0.6130 12	-0.25622 0.1237 12	-0.25622 0.4215 12
SAV_D	-0.04964 0.8917 10	0.09730 0.7892 10	-0.03170 0.9307 10	-0.13480 0.7104 10	0.78655 0.0070 10	0.23935 0.5054 10	0.09212 0.8002 10	-0.27728 0.4380 10	0.64982 0.0420 10	1.00000 0.0 10	-0.08914 0.8065 10	0.10306 0.7769 10	-0.77993 0.0078 10	0.23965 0.5048 10
DISCH	-0.79474 0.0020 12	0.12413 0.6725 14	0.38011 0.1800 14	0.69738 0.0117 12	0.54390 0.0444 14	-0.69357 0.0059 14	-0.63568 0.0146 14	0.61918 0.0182 14	-0.40443 0.1922 12	-0.08914 0.8065 10	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.32551 0.3019 12	-0.21248 0.4658 14	-0.03359 0.9092 14	0.56482 0.0557 12	0.13133 0.6545 14	0.09864 0.7372 14	-0.56285 0.0361 14	0.46341 0.0951 14	0.16288 0.6130 12	0.10306 0.7769 10	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.16668 0.6046 12	0.46409 0.0946 14	0.01733 0.9531 14	0.09192 0.7763 12	-0.70385 0.0050 14	0.19972 0.4936 14	0.17670 0.5456 14	-0.18117 0.5354 14	-0.46940 0.1237 12	-0.77993 0.0078 10	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.24764 0.4377 12	-0.16016 0.5844 14	-0.13428 0.6472 14	0.10253 0.7512 12	0.47075 0.0893 14	-0.70401 0.0049 14	-0.19447 0.5053 14	0.23830 0.4120 14	-0.25622 0.4215 12	0.23965 0.5048 10	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 27. Spring correlations for segment TF2, the freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.00029 0.9992 14	-0.69210 0.0061 14	0.41702 0.2020 11	0.19699 0.4997 14	0.26116 0.3671 14	0.01082 0.9707 14	0.34174 0.2317 14	-0.08277 0.7785 14	0.44075 0.1147 14	-0.10218 0.7282 14	0.14850 0.6124 14	-0.71866 0.0038 14	0.12599 0.6678 14
CHLA	0.00029 0.9992 14	1.00000 0.0 14	-0.09455 0.7478 14	-0.45070 0.1642 11	-0.11119 0.7051 14	0.35229 0.2167 14	0.33755 0.2379 14	-0.28062 0.3312 14	-0.00848 0.9770 14	-0.01701 0.9540 14	-0.56975 0.0334 14	-0.10101 0.7311 14	0.13672 0.6412 14	-0.18279 0.5317 14
TSS	-0.69210 0.0061 14	-0.09455 0.7478 14	1.00000 0.0 14	-0.40873 0.2120 11	0.14063 0.6316 14	-0.56617 0.0348 14	-0.29903 0.2990 14	-0.44689 0.1092 14	-0.12927 0.6596 14	-0.27348 0.3441 14	0.38994 0.1681 14	-0.34317 0.2297 14	0.48090 0.0817 14	0.16781 0.5663 14
TN	0.41702 0.2020 11	-0.45070 0.1642 11	-0.40873 0.2120 11	1.00000 0.0 11	-0.04220 0.9020 11	-0.16235 0.6334 11	-0.12083 0.7234 11	0.86183 0.0006 11	0.61920 0.0422 11	0.03361 0.9218 11	-0.13368 0.6952 11	-0.26684 0.4277 11	-0.05690 0.8680 11	0.21512 0.5253 11
TP	0.19699 0.4997 14	-0.11119 0.7051 14	0.14063 0.6316 14	-0.04220 0.9020 11	1.00000 0.0 14	-0.15065 0.6072 14	0.10039 0.7327 14	-0.35236 0.2166 14	-0.54023 0.0461 14	0.25337 0.3821 14	0.16281 0.5781 14	-0.17166 0.5573 14	-0.33236 0.2456 14	0.19584 0.5022 14
WATEMP	0.26116 0.3671 14	0.35229 0.2167 14	-0.56617 0.0348 14	-0.16235 0.6334 11	-0.15065 0.6072 14	1.00000 0.0 14	0.68589 0.0068 14	-0.05230 0.8591 14	0.33556 0.2408 14	0.41219 0.1430 14	-0.47120 0.0890 14	0.28942 0.3155 14	-0.15591 0.5946 14	-0.68840 0.0065 14
COND	0.01082 0.9707 14	0.33755 0.2379 14	-0.29903 0.2990 14	-0.12083 0.7234 11	0.10039 0.7327 14	0.68589 0.0068 14	1.00000 0.0 14	-0.05711 0.8462 14	0.35671 0.2106 14	0.17218 0.5561 14	-0.65549 0.0109 14	-0.06065 0.8368 14	0.19001 0.5153 14	-0.69564 0.0057 14
NO23	0.34174 0.2317 14	-0.28062 0.3312 14	-0.44689 0.1092 14	0.86183 0.0006 11	-0.35236 0.2166 14	-0.05230 0.8591 14	-0.05711 0.8462 14	1.00000 0.0 14	0.49385 0.0727 14	-0.13063 0.6562 14	-0.14902 0.6111 14	-0.09233 0.7536 14	-0.07211 0.8065 14	0.04706 0.8731 14
SAV	-0.08277 0.7785 14	-0.00848 0.9770 14	-0.12927 0.6596 14	0.61920 0.0422 11	-0.54023 0.0461 14	0.33556 0.2408 14	0.35671 0.2106 14	0.49385 0.0727 14	1.00000 0.0 14	0.12635 0.6669 14	-0.53078 0.0508 14	-0.13166 0.6537 14	0.41886 0.1361 14	-0.56424 0.0356 14
SAV_D	0.44075 0.1147 14	-0.01701 0.9540 14	-0.27348 0.3441 14	0.03361 0.9218 11	0.25337 0.3821 14	0.41219 0.1430 14	0.17218 0.5561 14	-0.13063 0.6562 14	0.12635 0.6669 14	1.00000 0.0 14	-0.08544 0.7715 14	-0.04738 0.8722 14	-0.34370 0.2289 14	-0.04574 0.8766 14
DISCH	-0.10218 0.7282 14	-0.56975 0.0334 14	0.38994 0.1681 14	-0.13368 0.6952 11	0.16281 0.5781 14	-0.47120 0.0890 14	-0.65549 0.0109 14	-0.14902 0.6111 14	-0.53078 0.0508 14	-0.08544 0.7715 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	0.14850 0.6124 14	-0.10101 0.7311 14	-0.34317 0.2297 14	-0.26684 0.4277 11	-0.17166 0.5573 14	0.28942 0.3155 14	-0.06065 0.8368 14	-0.09233 0.7536 14	-0.13166 0.6537 14	-0.04738 0.8722 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.71866 0.0038 14	0.13672 0.6412 14	0.48090 0.0817 14	-0.05690 0.8680 11	-0.33236 0.2456 14	-0.15591 0.5946 14	0.19001 0.5153 14	-0.07211 0.8065 14	0.41886 0.1361 14	-0.34370 0.2289 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.12599 0.6678 14	-0.18279 0.5317 14	0.16781 0.5663 14	0.21512 0.5253 11	0.19584 0.5022 14	-0.68840 0.0065 14	-0.69564 0.0057 14	0.04706 0.8731 14	-0.56424 0.0356 14	-0.04574 0.8766 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 28. Spring correlations for segment UTR, the upper freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.26237 0.3865 13	-0.48933 0.0758 14	0.16464 0.6286 11	0.33434 0.2427 14	0.12121 0.6798 14	-0.07002 0.8120 14	0.07328 0.8034 14	-0.08225 0.7798 14	0.64778 0.0122 14	0.01508 0.9592 14	0.20860 0.4742 14	-0.83146 0.0002 14	0.20180 0.4890 14
CHLA	-0.26237 0.3865 13	1.00000 0.0 13	-0.08886 0.7728 13	-0.28674 0.3926 11	-0.15473 0.6137 13	0.25540 0.3997 13	0.58834 0.0344 13	-0.19288 0.5278 13	-0.24129 0.4271 13	0.02639 0.9318 13	-0.37523 0.2065 13	-0.24171 0.4263 13	0.24862 0.4128 13	-0.07550 0.8064 13
TSS	-0.48933 0.0758 14	-0.08886 0.7728 13	1.00000 0.0 14	-0.32154 0.3349 11	-0.13168 0.6536 14	-0.69850 0.0055 14	-0.65555 0.0109 14	-0.30963 0.2814 14	0.12151 0.6790 14	-0.52755 0.0525 14	0.30561 0.2880 14	-0.22451 0.4403 14	0.50057 0.0683 14	0.26819 0.3539 14
TN	0.16464 0.6286 11	-0.28674 0.3926 11	-0.32154 0.3349 11	1.00000 0.0 11	0.34339 0.3012 11	0.04723 0.8903 11	0.02358 0.9451 11	0.84049 0.0012 11	-0.01714 0.9601 11	-0.24971 0.4590 11	-0.18392 0.5883 11	-0.19042 0.5749 11	-0.18057 0.5952 11	0.14824 0.6636 11
TP	0.33434 0.2427 14	-0.15473 0.6137 13	-0.13168 0.6536 14	0.34339 0.3012 11	1.00000 0.0 14	-0.27360 0.3439 14	-0.21862 0.4527 14	0.09901 0.7363 14	-0.07087 0.8097 14	0.14638 0.6175 14	0.24714 0.3943 14	-0.46495 0.0939 14	-0.33066 0.2482 14	0.34253 0.2306 14
WATEMP	0.12121 0.6798 14	0.25540 0.3997 13	-0.69850 0.0055 14	0.04723 0.8903 11	-0.27360 0.3439 14	1.00000 0.0 14	0.76479 0.0014 14	0.19029 0.5147 14	0.23158 0.4257 14	0.58357 0.0285 14	-0.40200 0.1542 14	0.36531 0.1990 14	-0.12949 0.6591 14	-0.66067 0.0101 14
COND	-0.07002 0.8120 14	0.58834 0.0344 13	-0.65555 0.0109 14	0.02358 0.9451 11	-0.21862 0.4527 14	0.76479 0.0014 14	1.00000 0.0 14	0.10431 0.7227 14	0.03777 0.8980 14	0.28458 0.3241 14	-0.45470 0.1024 14	-0.01046 0.9717 14	0.10972 0.7089 14	-0.56476 0.0354 14
NO23	0.07328 0.8034 14	-0.19288 0.5278 13	-0.30963 0.2814 14	0.84049 0.0012 11	0.09901 0.7363 14	0.19029 0.5147 14	0.10431 0.7227 14	1.00000 0.0 14	-0.24463 0.3993 14	-0.10579 0.7189 14	-0.18444 0.5279 14	-0.03663 0.9011 14	-0.19351 0.5074 14	-0.05950 0.8399 14
SAV	-0.08225 0.7798 14	-0.24129 0.4271 13	0.12151 0.6790 14	-0.01714 0.9601 11	-0.07087 0.8097 14	0.23158 0.4257 14	0.03777 0.8980 14	-0.24463 0.3993 14	1.00000 0.0 14	0.29329 0.3088 14	-0.39584 0.1612 14	-0.15047 0.6076 14	0.27725 0.3372 14	-0.55530 0.0393 14
SAV_D	0.64778 0.0122 14	0.02639 0.9318 13	-0.52755 0.0525 14	-0.24971 0.4590 11	0.14638 0.6175 14	0.58357 0.0285 14	0.28458 0.3241 14	-0.10579 0.7189 14	0.29329 0.3088 14	1.00000 0.0 14	-0.23067 0.4275 14	0.28034 0.3316 14	-0.60701 0.0213 14	-0.32355 0.2591 14
DISCH	0.01508 0.9592 14	-0.37523 0.2065 13	0.30561 0.2880 14	-0.18392 0.5883 11	0.24714 0.3943 14	-0.40200 0.1542 14	-0.45470 0.1024 14	-0.18444 0.5279 14	-0.39584 0.1612 14	-0.23067 0.4275 14	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	0.20860 0.4742 14	-0.24171 0.4263 13	-0.22451 0.4403 14	-0.19042 0.5749 11	-0.46495 0.0939 14	0.36531 0.1990 14	-0.01046 0.9717 14	-0.03663 0.9011 14	-0.15047 0.6076 14	0.28034 0.3316 14	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.83146 0.0002 14	0.24862 0.4128 13	0.50057 0.0683 14	-0.18057 0.5952 11	-0.33066 0.2482 14	-0.12949 0.6591 14	0.10972 0.7089 14	-0.19351 0.5074 14	0.27725 0.3372 14	-0.60701 0.0213 14	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.20180 0.4890 14	-0.07550 0.8064 13	0.26819 0.3539 14	0.14824 0.6636 11	0.34253 0.2306 14	-0.66067 0.0101 14	-0.56476 0.0354 14	-0.05950 0.8399 14	-0.55530 0.0393 14	-0.32355 0.2591 14	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 29. Spring correlations for segment LTR, the lower freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.01790	-0.78147	0.49153	-0.54107	0.28702	0.05899	0.59169	0.53162	0.11551	-0.22892	-0.01935	-0.17533	-0.05797
	0.0	0.9516	0.0010	0.1247	0.0457	0.3198	0.8412	0.0258	0.0504	0.6942	0.4312	0.9476	0.5488	0.8440
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
CHLA	-0.01790	1.00000	0.00543	-0.58011	0.08821	0.49081	0.28235	-0.41802	-0.27777	-0.24293	-0.54734	-0.03196	-0.05316	-0.24168
	0.9516	0.0	0.9853	0.0614	0.7643	0.0747	0.3281	0.1369	0.3363	0.4027	0.0428	0.9136	0.8568	0.4052
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TSS	-0.78147	0.00543	1.00000	-0.47930	0.53443	-0.14137	0.05875	-0.59030	-0.57696	-0.06382	0.31563	-0.32225	0.24257	-0.00847
	0.0010	0.9853	0.0	0.1358	0.0490	0.6298	0.8419	0.0263	0.0308	0.8284	0.2717	0.2612	0.4034	0.9771
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TN	0.49153	-0.58011	-0.47930	1.00000	-0.22200	-0.31549	-0.16280	0.86529	0.50477	0.36596	-0.11213	-0.31649	0.06370	0.23397
	0.1247	0.0614	0.1358	0.0	0.5118	0.3446	0.6325	0.0006	0.1133	0.2684	0.7427	0.3430	0.8524	0.4887
	11	11	11	11	11	11	11	11	11	11	11	11	11	11
TP	-0.54107	0.08821	0.53443	-0.22200	1.00000	-0.07958	0.25089	-0.43511	-0.64975	-0.20589	0.07451	0.00385	-0.25138	0.06759
	0.0457	0.7643	0.0490	0.5118	0.0	0.7868	0.3869	0.1200	0.0119	0.4801	0.8001	0.9896	0.3860	0.8184
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WATEMP	0.28702	0.49081	-0.14137	-0.31549	-0.07958	1.00000	0.59827	-0.27651	0.00555	-0.21464	-0.52081	0.20338	-0.17496	-0.69326
	0.3198	0.0747	0.6298	0.3446	0.7868	0.0	0.0238	0.3386	0.9850	0.4612	0.0562	0.4856	0.5497	0.0060
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
COND	0.05899	0.28235	0.05875	-0.16280	0.25089	0.59827	1.00000	-0.11629	0.04061	-0.04081	-0.70740	-0.08073	0.22066	-0.70726
	0.8412	0.3281	0.8419	0.6325	0.3869	0.0238	0.0	0.6922	0.8904	0.8898	0.0047	0.7838	0.4484	0.0047
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
NO23	0.59169	-0.41802	-0.59030	0.86529	-0.43511	-0.27651	-0.11629	1.00000	0.81877	0.23715	-0.11291	-0.13135	0.04323	0.13768
	0.0258	0.1369	0.0263	0.0006	0.1200	0.3386	0.6922	0.0	0.0003	0.4143	0.7007	0.6544	0.8833	0.6388
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV	0.53162	-0.27777	-0.57696	0.50477	-0.64975	0.00555	0.04061	0.81877	1.00000	0.21745	-0.18934	0.00837	0.18660	-0.05890
	0.0504	0.3363	0.0308	0.1133	0.0119	0.9850	0.8904	0.0003	0.0	0.4552	0.5168	0.9773	0.5230	0.8415
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV_D	0.11551	-0.24293	-0.06382	0.36596	-0.20589	-0.21464	-0.04081	0.23715	0.21745	1.00000	0.19074	-0.45817	0.32398	0.37846
	0.6942	0.4027	0.8284	0.2684	0.4801	0.4612	0.8898	0.4143	0.4552	0.0	0.5136	0.0994	0.2585	0.1821
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
DISCH	-0.22892	-0.54734	0.31563	-0.11213	0.07451	-0.52081	-0.70740	-0.11291	-0.18934	0.19074	1.00000	0.13060	-0.09456	0.62189
	0.4312	0.0428	0.2717	0.7427	0.8001	0.0562	0.0047	0.7007	0.5168	0.5136	0.0	0.6563	0.7478	0.0176
	14	14	14	11	14	14	14	14	14	14	17	14	14	14
AVSUN	-0.01935	-0.03196	-0.32225	-0.31649	0.00385	0.20338	-0.08073	-0.13135	0.00837	-0.45817	0.13060	1.00000	-0.36251	-0.20509
	0.9476	0.9136	0.2612	0.3430	0.9896	0.4856	0.7838	0.6544	0.9773	0.0994	0.6563	0.0	0.2027	0.4818
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WINDSP	-0.17533	-0.05316	0.24257	0.06370	-0.25138	-0.17496	0.22066	0.04323	0.18660	0.32398	-0.09456	-0.36251	1.00000	-0.20090
	0.5488	0.8568	0.4034	0.8524	0.3860	0.5497	0.4484	0.8833	0.5230	0.2585	0.7478	0.2027	0.0	0.4910
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
PRECIP	-0.05797	-0.24168	-0.00847	0.23397	0.06759	-0.69326	-0.70726	0.13768	-0.05890	0.37846	0.62189	-0.20509	-0.20090	1.00000
	0.8440	0.4052	0.9771	0.4887	0.8184	0.0060	0.0047	0.6388	0.8415	0.1821	0.0176	0.4818	0.4910	0.0
	14	14	14	11	14	14	14	14	14	14	14	14	14	14

Table 30. Spring correlations for segment POTOH, the oligohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.16612 0.5703 14	-0.69442 0.0059 14	0.26958 0.4227 11	0.05396 0.8546 14	-0.05629 0.8484 14	-0.07226 0.8061 14	-0.10047 0.7325 14	-0.17493 0.5676 13	0.45867 0.1337 12	0.11606 0.6928 14	-0.05499 0.8519 14	-0.52906 0.0517 14	0.24521 0.3981 14
CHLA	-0.16612 0.5703 14	1.00000 0.0 14	0.22088 0.4479 14	-0.50136 0.1162 11	-0.07422 0.8009 14	0.59317 0.0254 14	0.81390 0.0004 14	-0.55898 0.0377 14	-0.08029 0.7943 13	-0.19690 0.5396 12	-0.70536 0.0048 14	-0.03132 0.9154 14	0.17169 0.5573 14	-0.53584 0.0483 14
TSS	-0.69442 0.0059 14	0.22088 0.4479 14	1.00000 0.0 14	-0.55858 0.0741 11	0.20958 0.4721 14	-0.06036 0.8376 14	-0.10909 0.7105 14	-0.21338 0.4639 14	0.04853 0.8749 13	-0.30921 0.3281 12	0.14533 0.6201 14	0.17256 0.5552 14	0.24668 0.3952 14	-0.04325 0.8833 14
TN	0.26958 0.4227 11	-0.50136 0.1162 11	-0.55858 0.0741 11	1.00000 0.0 11	-0.12612 0.7118 11	-0.60386 0.0491 11	-0.15852 0.6415 11	0.84768 0.0010 11	0.07066 0.8364 11	0.69303 0.0181 11	0.20193 0.5516 11	-0.36457 0.2703 11	0.31377 0.3474 11	0.40583 0.2156 11
TP	0.05396 0.8546 14	-0.07422 0.8009 14	0.20958 0.4721 14	-0.12612 0.7118 11	1.00000 0.0 14	-0.49501 0.0719 14	-0.19662 0.5005 14	-0.07958 0.7868 14	-0.18783 0.5389 13	-0.09898 0.7596 12	0.22122 0.4472 14	0.09307 0.7517 14	-0.49648 0.0709 14	0.42630 0.1285 14
WATEMP	-0.05629 0.8484 14	0.59317 0.0254 14	-0.06036 0.8376 14	-0.60386 0.0491 11	-0.49501 0.0719 14	1.00000 0.0 14	0.54813 0.0424 14	-0.47521 0.0859 14	0.07297 0.8127 13	-0.26700 0.4015 12	-0.66341 0.0097 14	0.28155 0.3295 14	0.07245 0.8056 14	-0.71834 0.0038 14
COND	-0.07226 0.8061 14	0.81390 0.0004 14	-0.10909 0.7105 14	-0.15852 0.6415 11	-0.19662 0.5005 14	0.54813 0.0424 14	1.00000 0.0 14	-0.37622 0.1849 14	-0.17654 0.5640 13	-0.00827 0.9796 12	-0.84521 0.0001 14	-0.21913 0.4516 14	0.23888 0.4108 14	-0.56125 0.0368 14
NO23	-0.10047 0.7325 14	-0.55898 0.0377 14	-0.21338 0.4639 14	0.84768 0.0010 11	-0.07958 0.7868 14	-0.47521 0.0859 14	-0.37622 0.1849 14	1.00000 0.0 14	0.49868 0.0828 13	0.48535 0.1097 12	0.26109 0.3673 14	-0.32290 0.2601 14	0.21704 0.4561 14	0.36728 0.1964 14
SAV	-0.17493 0.5676 13	-0.08029 0.7943 13	0.04853 0.8749 13	0.07066 0.8364 11	-0.18783 0.5389 13	0.07297 0.8127 13	-0.17654 0.5640 13	0.49868 0.0828 13	1.00000 0.0 13	0.08823 0.7851 12	-0.09969 0.7459 13	0.10681 0.7284 13	0.02335 0.9396 13	0.25931 0.3923 13
SAV_D	0.45867 0.1337 12	-0.19690 0.5396 12	-0.30921 0.3281 12	0.69303 0.0181 11	-0.09898 0.7596 12	-0.26700 0.4015 12	-0.00827 0.9796 12	0.48535 0.1097 12	0.08823 0.7851 12	1.00000 0.0 12	0.14219 0.6594 12	-0.50716 0.0924 12	0.07299 0.8216 12	0.64239 0.0243 12
DISCH	0.11606 0.6928 14	-0.70536 0.0048 14	0.14533 0.6201 14	0.20193 0.5516 11	0.22122 0.4472 14	-0.66341 0.0097 14	-0.84521 0.0001 14	0.26109 0.3673 14	-0.09969 0.7459 13	0.14219 0.6594 12	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.05499 0.8519 14	-0.03132 0.9154 14	0.17256 0.5552 14	-0.36457 0.2703 11	0.09307 0.7517 14	0.28155 0.3295 14	-0.21913 0.4516 14	-0.32290 0.2601 14	0.10681 0.7284 13	-0.50716 0.0924 12	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	-0.52906 0.0517 14	0.17169 0.5573 14	0.24668 0.3952 14	0.31377 0.3474 11	-0.49648 0.0709 14	0.07245 0.8056 14	0.23888 0.4108 14	0.21704 0.4561 14	0.02335 0.9396 13	0.07299 0.8216 12	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	0.24521 0.3981 14	-0.53584 0.0483 14	-0.04325 0.8833 14	0.40583 0.2156 11	0.42630 0.1285 14	-0.71834 0.0038 14	-0.56125 0.0368 14	0.36728 0.1964 14	0.25931 0.3923 13	0.64239 0.0243 12	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 31. Spring correlations for segment POTMH, the mesohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.52660 0.0530 14	-0.58596 0.0277 14	-0.70450 0.0105 12	-0.78684 0.0008 14	0.33643 0.2396 14	0.80382 0.0005 14	-0.76245 0.0015 14	-0.23900 0.4544 12	-0.71917 0.0191 10	-0.74721 0.0021 14	-0.37623 0.1849 14	0.50200 0.0674 14	-0.38087 0.1791 14
CHLA	0.52660 0.0530 14	1.00000 0.0 14	-0.53769 0.0474 14	-0.08782 0.7861 12	-0.52252 0.0552 14	0.29543 0.3051 14	0.42058 0.1343 14	-0.53099 0.0507 14	-0.22640 0.4792 12	-0.13614 0.7077 10	-0.34290 0.2301 14	-0.32671 0.2542 14	0.59193 0.0257 14	-0.26692 0.3563 14
TSS	-0.58596 0.0277 14	-0.53769 0.0474 14	1.00000 0.0 14	0.52394 0.0804 12	0.27192 0.3470 14	-0.26254 0.3645 14	-0.67555 0.0080 14	0.64031 0.0136 14	0.72726 0.0074 12	0.77937 0.0079 10	0.45565 0.1016 14	0.21437 0.4618 14	-0.07140 0.8083 14	0.38073 0.1793 14
TN	-0.70450 0.0105 12	-0.08782 0.7861 12	0.52394 0.0804 12	1.00000 0.0 12	-0.01450 0.9643 12	-0.47319 0.1202 12	-0.80542 0.0016 12	0.88055 0.0002 12	0.52579 0.0967 11	0.69394 0.0260 10	0.87210 0.0002 12	0.17840 0.5791 12	0.51153 0.0892 12	0.31511 0.3184 12
TP	-0.78684 0.0008 14	-0.52252 0.0552 14	0.27192 0.3470 14	-0.01450 0.9643 12	1.00000 0.0 14	-0.34883 0.2216 14	-0.36202 0.2034 14	0.45191 0.1048 14	-0.18962 0.5550 12	0.31022 0.3830 10	0.53671 0.0478 14	0.11392 0.6982 14	-0.67478 0.0081 14	0.46404 0.0946 14
WATEMP	0.33643 0.2396 14	0.29543 0.3051 14	-0.26254 0.3645 14	-0.47319 0.1202 12	-0.34883 0.2216 14	1.00000 0.0 14	0.24246 0.4036 14	-0.54803 0.0425 14	-0.17419 0.5882 12	-0.08194 0.8220 10	-0.58235 0.0289 14	0.15284 0.6019 14	0.06869 0.8155 14	-0.75655 0.0017 14
SAL	0.80382 0.0005 14	0.42058 0.1343 14	-0.67555 0.0080 14	-0.80542 0.0016 12	-0.36202 0.2034 14	0.24246 0.4036 14	1.00000 0.0 14	-0.90107 0.0001 14	-0.38314 0.2189 12	-0.63671 0.0478 10	-0.75063 0.0020 14	-0.52773 0.0524 14	0.18211 0.5332 14	-0.30307 0.2922 14
NO23	-0.76245 0.0015 14	-0.53099 0.0507 14	0.64031 0.0136 14	0.88055 0.0002 12	0.45191 0.1048 14	-0.54803 0.0425 14	-0.90107 0.0001 14	1.00000 0.0 14	0.30907 0.3283 12	0.49475 0.1460 10	0.86009 0.0001 14	0.33805 0.2371 14	-0.14635 0.6176 14	0.47574 0.0855 14
SAV	-0.23900 0.4544 12	-0.22640 0.4792 12	0.72726 0.0074 12	0.52579 0.0967 11	-0.18962 0.5550 12	-0.17419 0.5882 12	-0.38314 0.2189 12	0.30907 0.3283 12	1.00000 0.0 12	0.91673 0.0002 10	0.18758 0.5594 12	0.12274 0.7039 12	0.23127 0.4695 12	0.18532 0.5642 12
SAV_D	-0.71917 0.0191 10	-0.13614 0.7077 10	0.77937 0.0079 10	0.69394 0.0260 10	0.31022 0.3830 10	-0.08194 0.8220 10	-0.63671 0.0478 10	0.49475 0.1460 10	0.91673 0.0002 10	1.00000 0.0 10	0.45582 0.1855 10	0.16425 0.6502 10	0.23889 0.5063 10	0.38836 0.2674 10
DISCH	-0.74721 0.0021 14	-0.34290 0.2301 14	0.45565 0.1016 14	0.87210 0.0002 12	0.53671 0.0478 14	-0.58235 0.0289 14	-0.75063 0.0020 14	0.86009 0.0001 14	0.18758 0.5594 12	0.45582 0.1855 10	1.00000 0.0 17	0.13060 0.6563 14	-0.09456 0.7478 14	0.62189 0.0176 14
AVSUN	-0.37623 0.1849 14	-0.32671 0.2542 14	0.21437 0.4618 14	0.17840 0.5791 12	0.11392 0.6982 14	0.15284 0.6019 14	-0.52773 0.0524 14	0.33805 0.2371 14	0.12274 0.7039 12	0.16425 0.6502 10	0.13060 0.6563 14	1.00000 0.0 14	-0.36251 0.2027 14	-0.20509 0.4818 14
WINDSP	0.50200 0.0674 14	0.59193 0.0257 14	-0.07140 0.8083 14	0.51153 0.0892 12	-0.67478 0.0081 14	0.06869 0.8155 14	0.18211 0.5332 14	-0.14635 0.6176 14	0.23127 0.4695 12	0.23889 0.5063 10	-0.09456 0.7478 14	-0.36251 0.2027 14	1.00000 0.0 14	-0.20090 0.4910 14
PRECIP	-0.38087 0.1791 14	-0.26692 0.3563 14	0.38073 0.1793 14	0.31511 0.3184 12	0.46404 0.0946 14	-0.75655 0.0017 14	-0.30307 0.2922 14	0.47574 0.0855 14	0.18532 0.5642 12	0.38836 0.2674 10	0.62189 0.0176 14	-0.20509 0.4818 14	-0.20090 0.4910 14	1.00000 0.0 14

Table 32. Summer correlations for station XFB2470 (HP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.19940 0.4943 14	-0.48453 0.0791 14	0.47744 0.1375 11	-0.53697 0.0477 14	0.43349 0.1215 14	0.42620 0.1286 14	0.16644 0.5696 14	0.52003 0.0566 14	0.70148 0.0052 14	-0.49988 0.0687 14	-0.08991 0.7599 14	-0.11951 0.6841 14	-0.31691 0.2696 14
CHLA	-0.19940 0.4943 14	1.00000 0.0 14	-0.11711 0.6901 14	-0.17775 0.6011 11	-0.00388 0.9895 14	0.46141 0.0968 14	-0.11264 0.7014 14	-0.11716 0.6900 14	-0.46549 0.0935 14	-0.07394 0.8016 14	-0.20486 0.4823 14	0.81126 0.0004 14	-0.55493 0.0394 14	-0.26544 0.3590 14
TSS	-0.48453 0.0791 14	-0.11711 0.6901 14	1.00000 0.0 14	-0.53684 0.0886 11	0.96488 0.0001 14	-0.56389 0.0357 14	-0.51974 0.0568 14	-0.60076 0.0231 14	-0.25457 0.3798 14	-0.01937 0.9476 14	0.92769 0.0001 14	-0.10965 0.7090 14	-0.05037 0.8642 14	0.59114 0.0260 14
TN	0.47744 0.1375 11	-0.17775 0.6011 11	-0.53684 0.0886 11	1.00000 0.0 11	-0.55734 0.0749 11	0.54083 0.0858 11	0.81535 0.0022 11	0.95677 0.0001 11	0.73066 0.0106 11	0.06744 0.8438 11	-0.69941 0.0166 11	-0.03860 0.9103 11	0.34045 0.3056 11	-0.74795 0.0081 11
TP	-0.53697 0.0477 14	-0.00388 0.9895 14	0.96488 0.0001 14	-0.55734 0.0749 11	1.00000 0.0 14	-0.57351 0.0320 14	-0.58291 0.0287 14	-0.64062 0.0136 14	-0.40913 0.1463 14	-0.10672 0.7165 14	0.91820 0.0001 14	-0.07555 0.7974 14	-0.18518 0.5262 14	0.60872 0.0209 14
WATEMP	0.43349 0.1215 14	0.46141 0.0968 14	-0.56389 0.0357 14	0.54083 0.0858 11	-0.57351 0.0320 14	1.00000 0.0 14	0.39839 0.1583 14	0.45443 0.1026 14	0.14997 0.6089 14	0.27945 0.3332 14	-0.70484 0.0049 14	0.70000 0.0053 14	-0.33535 0.2411 14	-0.58031 0.0296 14
COND	0.42620 0.1286 14	-0.11264 0.7014 14	-0.51974 0.0568 14	0.81535 0.0022 11	-0.58291 0.0287 14	0.39839 0.1583 14	1.00000 0.0 14	0.82801 0.0003 14	0.69179 0.0061 14	0.37021 0.1926 14	-0.69929 0.0054 14	-0.15533 0.5959 14	0.31385 0.2745 14	-0.71113 0.0044 14
NO23	0.16644 0.5696 14	-0.11716 0.6900 14	-0.60076 0.0231 14	0.95677 0.0001 11	-0.64062 0.0136 14	0.45443 0.1026 14	0.82801 0.0003 14	1.00000 0.0 14	0.57382 0.0319 14	-0.00668 0.9819 14	-0.71337 0.0042 14	-0.03418 0.9077 14	0.33388 0.2434 14	-0.73738 0.0026 14
SAV	0.52003 0.0566 14	-0.46549 0.0935 14	-0.25457 0.3798 14	0.73066 0.0106 11	-0.40913 0.1463 14	0.14997 0.6089 14	0.69179 0.0061 14	0.57382 0.0319 14	1.00000 0.0 14	0.34984 0.2201 14	-0.36359 0.2013 14	-0.36365 0.2012 14	0.38214 0.1775 14	-0.38260 0.1770 14
SAV_D	0.70148 0.0052 14	-0.07394 0.8016 14	-0.01937 0.9476 14	0.06744 0.8438 11	-0.10672 0.7165 14	0.27945 0.3332 14	0.37021 0.1926 14	-0.00668 0.9819 14	0.34984 0.2201 14	1.00000 0.0 14	-0.15606 0.5942 14	-0.02295 0.9379 14	-0.26393 0.3619 14	-0.33737 0.2382 14
DISCH	-0.49988 0.0687 14	-0.20486 0.4823 14	0.92769 0.0001 14	-0.69941 0.0166 11	0.91820 0.0001 14	-0.70484 0.0049 14	-0.69929 0.0054 14	-0.71337 0.0042 14	-0.36359 0.2013 14	-0.15606 0.5942 14	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	-0.08991 0.7599 14	0.81126 0.0004 14	-0.10965 0.7090 14	-0.03860 0.9103 11	-0.07555 0.7974 14	0.70000 0.0053 14	-0.15533 0.5959 14	-0.03418 0.9077 14	-0.36365 0.2012 14	-0.02295 0.9379 14	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.11951 0.6841 14	-0.55493 0.0394 14	-0.05037 0.8642 14	0.34045 0.3056 11	-0.18518 0.5262 14	-0.33535 0.2411 14	0.31385 0.2745 14	0.33388 0.2434 14	0.38214 0.1775 14	-0.26393 0.3619 14	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.31691 0.2696 14	-0.26544 0.3590 14	0.59114 0.0260 14	-0.74795 0.0081 11	0.60872 0.0209 14	-0.58031 0.0296 14	-0.71113 0.0044 14	-0.73738 0.0026 14	-0.38260 0.1770 14	-0.33737 0.2382 14	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 33. Summer correlations for station XFB1433 (MH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.12465 0.6712 14	-0.61924 0.0182 14	0.60958 0.0465 11	-0.47322 0.0874 14	0.50562 0.0651 14	0.30182 0.2943 14	0.14662 0.6170 14	0.04777 0.8712 14	0.29398 0.3076 14	-0.62418 0.0170 14	0.05044 0.8640 14	-0.18103 0.5357 14	-0.47872 0.0833 14
CHLA	0.12465 0.6712 14	1.00000 0.0 14	-0.05509 0.8516 14	-0.22968 0.4969 11	0.30486 0.2892 14	0.46839 0.0912 14	-0.01303 0.9647 14	-0.60041 0.0232 14	-0.49894 0.0693 14	-0.01276 0.9655 14	-0.27307 0.3449 14	0.67052 0.0087 14	-0.60046 0.0232 14	-0.22298 0.4435 14
TSS	-0.61924 0.0182 14	-0.05509 0.8516 14	1.00000 0.0 14	-0.46428 0.1503 11	0.72230 0.0035 14	-0.45698 0.1004 14	-0.36414 0.2006 14	-0.39858 0.1581 14	-0.30082 0.2960 14	0.00738 0.9800 14	0.86882 0.0001 14	0.02870 0.9224 14	-0.06475 0.8259 14	0.52532 0.0537 14
TN	0.60958 0.0465 11	-0.22968 0.4969 11	-0.46428 0.1503 11	1.00000 0.0 11	-0.55108 0.0789 11	0.51904 0.1018 11	0.33320 0.3167 11	0.85656 0.0008 11	0.65813 0.0277 11	-0.09091 0.7904 11	-0.63241 0.0368 11	0.08851 0.7958 11	0.37106 0.2612 11	-0.65296 0.0294 11
TP	-0.47322 0.0874 14	0.30486 0.2892 14	0.72230 0.0035 14	-0.55108 0.0789 11	1.00000 0.0 14	-0.29070 0.3133 14	-0.14693 0.6162 14	-0.61241 0.0199 14	-0.48636 0.0778 14	0.09765 0.7398 14	0.59492 0.0248 14	0.15699 0.5920 14	-0.40572 0.1501 14	0.39152 0.1662 14
WATEMP	0.50562 0.0651 14	0.46839 0.0912 14	-0.45698 0.1004 14	0.51904 0.1018 11	-0.29070 0.3133 14	1.00000 0.0 14	0.38130 0.1786 14	0.21814 0.4537 14	0.08369 0.7761 14	0.18307 0.5310 14	-0.72302 0.0035 14	0.70388 0.0050 14	-0.27071 0.3492 14	-0.56498 0.0353 14
COND	0.30182 0.2943 14	-0.01303 0.9647 14	-0.36414 0.2006 14	0.33320 0.3167 11	-0.14693 0.6162 14	0.38130 0.1786 14	1.00000 0.0 14	0.38605 0.1728 14	0.53269 0.0499 14	0.49688 0.0707 14	-0.57065 0.0331 14	-0.12567 0.6686 14	0.11237 0.7021 14	-0.53431 0.0490 14
NO23	0.14662 0.6170 14	-0.60041 0.0232 14	-0.39858 0.1581 14	0.85656 0.0008 11	-0.61241 0.0199 14	0.21814 0.4537 14	0.38605 0.1728 14	1.00000 0.0 14	0.62601 0.0166 14	-0.11069 0.7064 14	-0.41454 0.1406 14	-0.14107 0.6305 14	0.56873 0.0338 14	-0.51634 0.0587 14
SAV	0.04777 0.8712 14	-0.49894 0.0693 14	-0.30082 0.2960 14	0.65813 0.0277 11	-0.48636 0.0778 14	0.08369 0.7761 14	0.53269 0.0499 14	0.62601 0.0166 14	1.00000 0.0 14	0.34066 0.2333 14	-0.34427 0.2281 14	-0.45458 0.1025 14	0.48893 0.0760 14	-0.25914 0.3710 14
SAV_D	0.29398 0.3076 14	-0.01276 0.9655 14	0.00738 0.9800 14	-0.09091 0.7904 11	0.09765 0.7398 14	0.18307 0.5310 14	0.49688 0.0707 14	-0.11069 0.7064 14	0.34066 0.2333 14	1.00000 0.0 14	-0.09179 0.7550 14	-0.28650 0.3207 14	-0.03698 0.9001 14	-0.05752 0.8451 14
DISCH	-0.62418 0.0170 14	-0.27307 0.3449 14	0.86882 0.0001 14	-0.63241 0.0368 11	0.59492 0.0248 14	-0.72302 0.0035 14	-0.57065 0.0331 14	-0.41454 0.1406 14	-0.34427 0.2281 14	-0.09179 0.7550 14	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.05044 0.8640 14	0.67052 0.0087 14	0.02870 0.9224 14	0.08851 0.7958 11	0.15699 0.5920 14	0.70388 0.0050 14	-0.12567 0.6686 14	-0.14107 0.6305 14	-0.45458 0.1025 14	-0.28650 0.3207 14	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.18103 0.5357 14	-0.60046 0.0232 14	-0.06475 0.8259 14	0.37106 0.2612 11	-0.40572 0.1501 14	-0.27071 0.3492 14	0.11237 0.7021 14	0.56873 0.0338 14	0.48893 0.0760 14	-0.03698 0.9001 14	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.47872 0.0833 14	-0.22298 0.4435 14	0.52532 0.0537 14	-0.65296 0.0294 11	0.39152 0.1662 14	-0.56498 0.0353 14	-0.53431 0.0490 14	-0.51634 0.0587 14	-0.25914 0.3710 14	-0.05752 0.8451 14	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 34. Summer correlations for station XEA6596 (IH) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.44147	-0.71870	0.27739	-0.79442	0.24754	-0.12759	0.39208	0.28992	0.06605	-0.49494	-0.02680	0.34997	-0.41026
	0.0	0.1140	0.0038	0.4089	0.0007	0.3935	0.6638	0.1656	0.3147	0.8225	0.0720	0.9275	0.2200	0.1451
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
CHLA	-0.44147	1.00000	0.21269	-0.66080	0.67725	0.49058	-0.15630	-0.78894	-0.52066	-0.38467	-0.16001	0.62275	-0.65248	-0.12324
	0.1140	0.0	0.4654	0.0269	0.0078	0.0749	0.5936	0.0008	0.0563	0.1744	0.5848	0.0174	0.0114	0.6747
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TSS	-0.71870	0.21269	1.00000	-0.14627	0.77048	-0.36507	-0.21876	-0.22291	-0.00720	0.13518	0.85206	0.09257	-0.25688	0.52661
	0.0038	0.4654	0.0	0.6678	0.0013	0.1993	0.4524	0.4437	0.9805	0.6450	0.0001	0.7530	0.3753	0.0530
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TN	0.27739	-0.66080	-0.14627	1.00000	-0.30575	-0.20825	-0.25644	0.90427	0.02535	0.46784	0.11936	-0.52006	0.34089	0.15324
	0.4089	0.0269	0.6678	0.0	0.3605	0.5389	0.4466	0.0001	0.9410	0.1467	0.7267	0.1010	0.3049	0.6528
	11	11	11	11	11	11	11	11	11	11	11	11	11	11
TP	-0.79442	0.67725	0.77048	-0.30575	1.00000	-0.05531	-0.09606	-0.58860	-0.22523	0.02446	0.45822	0.27449	-0.62511	0.33729
	0.0007	0.0078	0.0013	0.3605	0.0	0.8510	0.7439	0.0268	0.4388	0.9338	0.0994	0.3423	0.0168	0.2383
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WATEMP	0.24754	0.49058	-0.36507	-0.20825	-0.05531	1.00000	0.05149	-0.47010	-0.09236	0.01356	-0.65796	0.71206	-0.29885	-0.53505
	0.3935	0.0749	0.1993	0.5389	0.8510	0.0	0.8612	0.0898	0.7535	0.9633	0.0105	0.0043	0.2993	0.0487
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
COND	-0.12759	-0.15630	-0.21876	-0.25644	-0.09606	0.05149	1.00000	-0.18835	-0.20924	0.09216	-0.37753	-0.36784	0.19694	-0.23965
	0.6638	0.5936	0.4524	0.4466	0.7439	0.8612	0.0	0.5190	0.4728	0.7540	0.1833	0.1957	0.4998	0.4092
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
NO23	0.39208	-0.78894	-0.22291	0.90427	-0.58860	-0.47010	-0.18835	1.00000	0.29010	0.35050	0.22256	-0.64141	0.48907	0.19539
	0.1656	0.0008	0.4437	0.0001	0.0268	0.0898	0.5190	0.0	0.3144	0.2192	0.4444	0.0134	0.0759	0.5032
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV	0.28992	-0.52066	-0.00720	0.02535	-0.22523	-0.09236	-0.20924	0.29010	1.00000	0.32723	0.09028	0.11990	0.03162	0.01916
	0.3147	0.0563	0.9805	0.9410	0.4388	0.7535	0.4728	0.3144	0.0	0.2534	0.7589	0.6831	0.9145	0.9482
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV_D	0.06605	-0.38467	0.13518	0.46784	0.02446	0.01356	0.09216	0.35050	0.32723	1.00000	0.25292	-0.28165	0.11753	0.28426
	0.8225	0.1744	0.6450	0.1467	0.9338	0.9633	0.7540	0.2192	0.2534	0.0	0.3830	0.3293	0.6890	0.3246
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
DISCH	-0.49494	-0.16001	0.85206	0.11936	0.45822	-0.65796	-0.37753	0.22256	0.09028	0.25292	1.00000	-0.24763	-0.03698	0.75606
	0.0720	0.5848	0.0001	0.7267	0.0994	0.0105	0.1833	0.4444	0.7589	0.3830	0.0	0.3933	0.9001	0.0018
	14	14	14	11	14	14	14	14	14	14	17	14	14	14
AVSUN	-0.02680	0.62275	0.09257	-0.52006	0.27449	0.71206	-0.36784	-0.64141	0.11990	-0.28165	-0.24763	1.00000	-0.47639	-0.31278
	0.9275	0.0174	0.7530	0.1010	0.3423	0.0043	0.1957	0.0134	0.6831	0.3293	0.3933	0.0	0.0850	0.2762
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WINDSP	0.34997	-0.65248	-0.25688	0.34089	-0.62511	-0.29885	0.19694	0.48907	0.03162	0.11753	-0.03698	-0.47639	1.00000	-0.05149
	0.2200	0.0114	0.3753	0.3049	0.0168	0.2993	0.4998	0.0759	0.9145	0.6890	0.9001	0.0850	0.0	0.8612
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
PRECIP	-0.41026	-0.12324	0.52661	0.15324	0.33729	-0.53505	-0.23965	0.19539	0.01916	0.28426	0.75606	-0.31278	-0.05149	1.00000
	0.1451	0.6747	0.0530	0.6528	0.2383	0.0487	0.4092	0.5032	0.9482	0.3246	0.0018	0.2762	0.8612	0.0
	14	14	14	11	14	14	14	14	14	14	14	14	14	14

Table 35. Summer correlations for station XEA1840 (QN) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.49031	-0.64098	0.24032	-0.69236	0.29150	0.00401	0.23846	0.10958	0.26227	-0.41590	0.13203	0.14989	-0.36740
	0.0	0.0751	0.0135	0.4766	0.0061	0.3119	0.9891	0.4117	0.7092	0.3650	0.1391	0.6528	0.6090	0.1963
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
CHLA	-0.49031	1.00000	0.47856	-0.12711	0.54223	-0.04701	0.02642	-0.44106	-0.58152	-0.21712	0.29267	-0.29020	-0.17954	0.14065
	0.0751	0.0	0.0834	0.7096	0.0452	0.8732	0.9286	0.1144	0.0292	0.4559	0.3099	0.3142	0.5391	0.6315
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TSS	-0.64098	0.47856	1.00000	0.07964	0.72082	-0.37369	-0.24294	0.02249	-0.24627	-0.17856	0.87951	-0.08287	-0.12673	0.58193
	0.0135	0.0834	0.0	0.8160	0.0036	0.1881	0.4027	0.9392	0.3960	0.5414	0.0001	0.7782	0.6659	0.0290
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
TN	0.24032	-0.12711	0.07964	1.00000	-0.07021	-0.52381	-0.60972	0.93704	-0.02109	0.63235	0.44614	-0.49165	0.21843	0.50592
	0.4766	0.7096	0.8160	0.0	0.8375	0.0982	0.0464	0.0001	0.9509	0.0368	0.1690	0.1245	0.5188	0.1123
	11	11	11	11	11	11	11	11	11	11	11	11	11	11
TP	-0.69236	0.54223	0.72082	-0.07021	1.00000	0.01139	0.02220	-0.29517	-0.41470	-0.13596	0.50051	0.04300	-0.54725	0.36014
	0.0061	0.0452	0.0036	0.8375	0.0	0.9692	0.9400	0.3056	0.1404	0.6430	0.0683	0.8840	0.0428	0.2059
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WATEMP	0.29150	-0.04701	-0.37369	-0.52381	0.01139	1.00000	0.31184	-0.62651	-0.31272	-0.38660	-0.60133	0.66620	-0.40663	-0.46806
	0.3119	0.8732	0.1881	0.0982	0.9692	0.0	0.2778	0.0165	0.2763	0.1721	0.0229	0.0093	0.1491	0.0914
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
COND	0.00401	0.02642	-0.24294	-0.60972	0.02220	0.31184	1.00000	-0.54701	-0.34774	-0.16669	-0.49109	-0.18584	0.06376	-0.30804
	0.9891	0.9286	0.4027	0.0464	0.9400	0.2778	0.0	0.0429	0.2231	0.5690	0.0746	0.5247	0.8286	0.2840
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
NO23	0.23846	-0.44106	0.02249	0.93704	-0.29517	-0.62651	-0.54701	1.00000	0.45196	0.59819	0.43613	-0.34616	0.31796	0.41786
	0.4117	0.1144	0.9392	0.0001	0.3056	0.0165	0.0429	0.0	0.1047	0.0238	0.1190	0.2254	0.2679	0.1371
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV	0.10958	-0.58152	-0.24627	-0.02109	-0.41470	-0.31272	-0.34774	0.45196	1.00000	0.21696	-0.07070	0.10959	0.07872	-0.08837
	0.7092	0.0292	0.3960	0.9509	0.1404	0.2763	0.2231	0.1047	0.0	0.4562	0.8102	0.7092	0.7891	0.7639
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
SAV_D	0.26227	-0.21712	-0.17856	0.63235	-0.13596	-0.38660	-0.16669	0.59819	0.21696	1.00000	0.08834	-0.49595	0.25291	-0.03268
	0.3650	0.4559	0.5414	0.0368	0.6430	0.1721	0.5690	0.0238	0.4562	0.0	0.7639	0.0713	0.3830	0.9117
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
DISCH	-0.41590	0.29267	0.87951	0.44614	0.50051	-0.60133	-0.49109	0.43613	-0.07070	0.08834	1.00000	-0.24763	-0.03698	0.75606
	0.1391	0.3099	0.0001	0.1690	0.0683	0.0229	0.0746	0.1190	0.8102	0.7639	0.0	0.3933	0.9001	0.0018
	14	14	14	11	14	14	14	14	14	14	17	14	14	14
AVSUN	0.13203	-0.29020	-0.08287	-0.49165	0.04300	0.66620	-0.18584	-0.34616	0.10959	-0.49595	-0.24763	1.00000	-0.47639	-0.31278
	0.6528	0.3142	0.7782	0.1245	0.8840	0.0093	0.5247	0.2254	0.7092	0.0713	0.3933	0.0	0.0850	0.2762
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
WINDSP	0.14989	-0.17954	-0.12673	0.21843	-0.54725	-0.40663	0.06376	0.31796	0.07872	0.25291	-0.03698	-0.47639	1.00000	-0.05149
	0.6090	0.5391	0.6659	0.5188	0.0428	0.1491	0.8286	0.2679	0.7891	0.3830	0.9001	0.0850	0.0	0.8612
	14	14	14	11	14	14	14	14	14	14	14	14	14	14
PRECIP	-0.36740	0.14065	0.58193	0.50592	0.36014	-0.46806	-0.30804	0.41786	-0.08837	-0.03268	0.75606	-0.31278	-0.05149	1.00000
	0.1963	0.6315	0.0290	0.1123	0.2059	0.0914	0.2840	0.1371	0.7639	0.9117	0.0018	0.2762	0.8612	0.0
	14	14	14	11	14	14	14	14	14	14	14	14	14	14

Table 36. Summer correlations for station XDA4238 (DP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.42313 0.1317 14	-0.79861 0.0006 14	-0.42783 0.1893 11	-0.43754 0.1177 14	0.65800 0.0105 14	0.56825 0.0340 14	-0.28059 0.3312 14	-0.26159 0.3880 13	-0.20401 0.5248 12	-0.61746 0.0186 14	0.35116 0.2183 14	-0.12108 0.6801 14	-0.56011 0.0372 14
CHLA	-0.42313 0.1317 14	1.00000 0.0 14	0.53744 0.0475 14	0.25383 0.4514 11	0.76337 0.0015 14	-0.07562 0.7972 14	-0.10829 0.7125 14	-0.36258 0.2026 14	-0.42228 0.1506 13	-0.25287 0.4278 12	0.20641 0.4790 14	-0.30674 0.2861 14	-0.23756 0.4135 14	0.16382 0.5757 14
TSS	-0.79861 0.0006 14	0.53744 0.0475 14	1.00000 0.0 14	0.31357 0.3477 11	0.34249 0.2307 14	-0.44086 0.1146 14	-0.43624 0.1189 14	0.12814 0.6624 14	-0.00170 0.9956 13	-0.08835 0.7848 12	0.80004 0.0006 14	-0.19713 0.4994 14	-0.07577 0.7968 14	0.53703 0.0477 14
TN	-0.42783 0.1893 11	0.25383 0.4514 11	0.31357 0.3477 11	1.00000 0.0 11	0.37788 0.2519 11	-0.62185 0.0411 11	-0.81713 0.0021 11	0.92845 0.0001 11	-0.30158 0.3674 11	0.25278 0.4533 11	0.71027 0.0143 11	-0.48335 0.1320 11	0.03652 0.9151 11	0.76120 0.0065 11
TP	-0.43754 0.1177 14	0.76337 0.0015 14	0.34249 0.2307 14	0.37788 0.2519 11	1.00000 0.0 14	-0.25500 0.3790 14	-0.15820 0.5891 14	-0.11600 0.6929 14	-0.33147 0.2686 13	-0.03779 0.9072 12	0.20424 0.4837 14	-0.54746 0.0427 14	-0.07044 0.8109 14	0.28086 0.3307 14
WATEMP	0.65800 0.0105 14	-0.07562 0.7972 14	-0.44086 0.1146 14	-0.62185 0.0411 11	-0.25500 0.3790 14	1.00000 0.0 14	0.38846 0.1699 14	-0.53655 0.0479 14	0.00882 0.9772 13	-0.36936 0.2373 12	-0.53047 0.0510 14	0.70672 0.0047 14	-0.45660 0.1008 14	-0.41811 0.1368 14
COND	0.56825 0.0340 14	-0.10829 0.7125 14	-0.43624 0.1189 14	-0.81713 0.0021 11	-0.15820 0.5891 14	0.38846 0.1699 14	1.00000 0.0 14	-0.67145 0.0086 14	-0.19808 0.5165 13	-0.18828 0.5579 12	-0.70326 0.0050 14	0.04060 0.8904 14	0.11647 0.6917 14	-0.54888 0.0421 14
NO23	-0.28059 0.3312 14	-0.36258 0.2026 14	0.12814 0.6624 14	0.92845 0.0001 11	-0.11600 0.6929 14	-0.53655 0.0479 14	-0.67145 0.0086 14	1.00000 0.0 14	0.10584 0.7307 13	0.48585 0.1093 12	0.62120 0.0177 14	-0.31546 0.2719 14	0.18705 0.5220 14	0.60660 0.0214 14
SAV	-0.26159 0.3880 13	-0.42228 0.1506 13	-0.00170 0.9956 13	-0.30158 0.3674 11	-0.33147 0.2686 13	0.00882 0.9772 13	-0.19808 0.5165 13	0.10584 0.7307 13	1.00000 0.0 13	0.25815 0.4179 12	-0.04742 0.8777 13	0.43566 0.1367 13	-0.29128 0.3343 13	-0.09404 0.7599 13
SAV_D	-0.20401 0.5248 12	-0.25287 0.4278 12	-0.08835 0.7848 12	0.25278 0.4533 11	-0.03779 0.9072 12	-0.36936 0.2373 12	-0.18828 0.5579 12	0.48585 0.1093 12	0.25815 0.4179 12	1.00000 0.0 12	0.04709 0.8845 12	-0.44936 0.1428 12	0.23526 0.4617 12	-0.01359 0.9666 12
DISCH	-0.61746 0.0186 14	0.20641 0.4790 14	0.80004 0.0006 14	0.71027 0.0143 11	0.20424 0.4837 14	-0.53047 0.0510 14	-0.70326 0.0050 14	0.62120 0.0177 14	-0.04742 0.8777 13	0.04709 0.8845 12	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.35116 0.2183 14	-0.30674 0.2861 14	-0.19713 0.4994 14	-0.48335 0.1320 11	-0.54746 0.0427 14	0.70672 0.0047 14	0.04060 0.8904 14	-0.31546 0.2719 14	0.43566 0.1367 13	-0.44936 0.1428 12	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.12108 0.6801 14	-0.23756 0.4135 14	-0.07577 0.7968 14	0.03652 0.9151 11	-0.07044 0.8109 14	-0.45660 0.1008 14	0.11647 0.6917 14	0.18705 0.5220 14	-0.29128 0.3343 13	0.23526 0.4617 12	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.56011 0.0372 14	0.16382 0.5757 14	0.53703 0.0477 14	0.76120 0.0065 11	0.28086 0.3307 14	-0.41811 0.1368 14	-0.54888 0.0421 14	0.60660 0.0214 14	-0.09404 0.7599 13	-0.01359 0.9666 12	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 37. Summer correlations for station XDA1177 (MP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.14011 0.6328 14	-0.74458 0.0023 14	-0.81544 0.0022 11	-0.13498 0.6455 14	0.72135 0.0036 14	0.70031 0.0053 14	-0.63552 0.0146 14	-0.36982 0.2136 13	-0.14244 0.6588 12	-0.71682 0.0039 14	0.47332 0.0874 14	-0.21403 0.4625 14	-0.75943 0.0016 14
CHLA	-0.14011 0.6328 14	1.00000 0.0 14	0.33426 0.2428 14	0.35495 0.2841 11	0.83158 0.0002 14	-0.19337 0.5077 14	-0.32395 0.2585 14	-0.31355 0.2750 14	-0.21832 0.4736 13	-0.46211 0.1304 12	0.25689 0.3753 14	-0.32578 0.2557 14	-0.02840 0.9232 14	0.00736 0.9801 14
TSS	-0.74458 0.0023 14	0.33426 0.2428 14	1.00000 0.0 14	0.69616 0.0173 11	0.26821 0.3539 14	-0.49451 0.0722 14	-0.45654 0.1008 14	0.33216 0.2459 14	0.14619 0.6337 13	-0.26013 0.4142 12	0.75959 0.0016 14	-0.39941 0.1571 14	0.01091 0.9705 14	0.74474 0.0022 14
TN	-0.81544 0.0022 11	0.35495 0.2841 11	0.69616 0.0173 11	1.00000 0.0 11	0.24798 0.4622 11	-0.60714 0.0476 11	-0.85617 0.0008 11	0.90422 0.0001 11	0.04739 0.8900 11	0.13697 0.6880 11	0.82212 0.0019 11	-0.46163 0.1529 11	0.03273 0.9239 11	0.84165 0.0012 11
TP	-0.13498 0.6455 14	0.83158 0.0002 14	0.26821 0.3539 14	0.24798 0.4622 11	1.00000 0.0 14	-0.18743 0.5211 14	-0.26622 0.3576 14	-0.23622 0.4162 14	-0.05739 0.8523 13	0.21778 0.4965 12	0.15204 0.6038 14	-0.45355 0.1033 14	-0.01954 0.9471 14	0.08534 0.7718 14
WATEMP	0.72135 0.0036 14	-0.19337 0.5077 14	-0.49451 0.0722 14	-0.60714 0.0476 11	-0.18743 0.5211 14	1.00000 0.0 14	0.40193 0.1543 14	-0.48229 0.0807 14	0.00692 0.9821 13	0.05484 0.8656 12	-0.48344 0.0799 14	0.72562 0.0033 14	-0.43859 0.1167 14	-0.38430 0.1749 14
COND	0.70031 0.0053 14	-0.32395 0.2585 14	-0.45654 0.1008 14	-0.85617 0.0008 11	-0.26622 0.3576 14	0.40193 0.1543 14	1.00000 0.0 14	-0.67425 0.0082 14	-0.32351 0.2809 13	-0.04748 0.8835 12	-0.80150 0.0006 14	0.12503 0.6702 14	0.17146 0.5578 14	-0.64626 0.0125 14
NO23	-0.63552 0.0146 14	-0.31355 0.2750 14	0.33216 0.2459 14	0.90422 0.0001 11	-0.23622 0.4162 14	-0.48229 0.0807 14	-0.67425 0.0082 14	1.00000 0.0 14	0.13283 0.6653 13	0.14860 0.6449 12	0.69251 0.0061 14	-0.27525 0.3409 14	0.15134 0.6055 14	0.67226 0.0084 14
SAV	-0.36982 0.2136 13	-0.21832 0.4736 13	0.14619 0.6337 13	0.04739 0.8900 11	-0.05739 0.8523 13	0.00692 0.9821 13	-0.32351 0.2809 13	0.13283 0.6653 13	1.00000 0.0 13	0.22077 0.4905 12	0.19930 0.5139 13	0.49369 0.0864 13	-0.40684 0.1677 13	0.31227 0.2989 13
SAV_D	-0.14244 0.6588 12	-0.46211 0.1304 12	-0.26013 0.4142 12	0.13697 0.6880 11	0.21778 0.4965 12	0.05484 0.8656 12	-0.04748 0.8835 12	0.14860 0.6449 12	0.22077 0.4905 12	1.00000 0.0 12	-0.31852 0.3130 12	-0.23290 0.4663 12	0.00717 0.9824 12	0.17953 0.5766 12
DISCH	-0.71682 0.0039 14	0.25689 0.3753 14	0.75959 0.0016 14	0.82212 0.0019 11	0.15204 0.6038 14	-0.48344 0.0799 14	-0.80150 0.0006 14	0.69251 0.0061 14	0.19930 0.5139 13	-0.31852 0.3130 12	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.47332 0.0874 14	-0.32578 0.2557 14	-0.39941 0.1571 14	-0.46163 0.1529 11	-0.45355 0.1033 14	0.72562 0.0033 14	0.12503 0.6702 14	-0.27525 0.3409 14	0.49369 0.0864 13	-0.23290 0.4663 12	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.21403 0.4625 14	-0.02840 0.9232 14	0.01091 0.9705 14	0.03273 0.9239 11	-0.01954 0.9471 14	-0.43859 0.1167 14	0.17146 0.5578 14	0.15134 0.6055 14	-0.40684 0.1677 13	0.00717 0.9824 12	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.75943 0.0016 14	0.00736 0.9801 14	0.74474 0.0022 14	0.84165 0.0012 11	0.08534 0.7718 14	-0.38430 0.1749 14	-0.64626 0.0125 14	0.67226 0.0084 14	0.31227 0.2989 13	0.17953 0.5766 12	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 38. Summer correlations for station XDB3321 (NY) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 8	-0.17723 0.6746 8	-0.78408 0.0213 8	-0.67429 0.2119 5	-0.39956 0.3267 8	0.47499 0.2343 8	0.47012 0.2398 8	-0.22920 0.5851 8	-0.62859 0.1305 7	-0.28079 0.5899 6	-0.70688 0.0499 8	0.64001 0.0874 8	-0.18670 0.6580 8	-0.76445 0.0272 8
CHLA	-0.17723 0.6746 8	1.00000 0.0 8	-0.02255 0.9577 8	-0.24489 0.6913 5	0.27450 0.5106 8	-0.57818 0.1333 8	0.44853 0.2650 8	-0.71213 0.0475 8	-0.54840 0.2024 7	0.33814 0.5121 6	-0.28528 0.4934 8	-0.30035 0.4698 8	0.10816 0.7988 8	-0.19768 0.6389 8
TSS	-0.78408 0.0213 8	-0.02255 0.9577 8	1.00000 0.0 8	0.28947 0.6366 5	-0.17020 0.6870 8	-0.14081 0.7395 8	-0.25183 0.5474 8	0.25014 0.5502 8	0.72065 0.0677 7	-0.01701 0.9745 6	0.53055 0.1761 8	-0.33569 0.4163 8	0.39970 0.3266 8	0.49981 0.2072 8
TN	-0.67429 0.2119 5	-0.24489 0.6913 5	0.28947 0.6366 5	1.00000 0.0 5	0.39006 0.5163 5	-0.45627 0.4399 5	-0.81705 0.0913 5	0.89441 0.0405 5	0.86096 0.0609 5	0.84683 0.0703 5	0.68026 0.2063 5	-0.21713 0.7257 5	-0.24849 0.6869 5	0.79382 0.1088 5
TP	-0.39956 0.3267 8	0.27450 0.5106 8	-0.17020 0.6870 8	0.39006 0.5163 5	1.00000 0.0 8	-0.27996 0.5019 8	-0.33196 0.4218 8	-0.27429 0.5109 8	-0.23919 0.6055 7	0.12149 0.8187 6	0.27822 0.5046 8	-0.41856 0.3020 8	-0.27690 0.5067 8	0.23466 0.5759 8
WATEMP	0.47499 0.2343 8	-0.57818 0.1333 8	-0.14081 0.7395 8	-0.45627 0.4399 5	-0.27996 0.5019 8	1.00000 0.0 8	-0.20490 0.6264 8	0.04785 0.9104 8	0.01840 0.9688 7	-0.49733 0.3155 6	0.00455 0.9915 8	0.79279 0.0189 8	-0.38460 0.3468 8	-0.40748 0.3163 8
COND	0.47012 0.2398 8	0.44853 0.2650 8	-0.25183 0.5474 8	-0.81705 0.0913 5	-0.33196 0.4218 8	-0.20490 0.6264 8	1.00000 0.0 8	-0.63634 0.0898 8	-0.65348 0.1114 7	-0.33098 0.5217 6	-0.90574 0.0019 8	0.08077 0.8492 8	0.15762 0.7093 8	-0.54378 0.1636 8
NO23	-0.22920 0.5851 8	-0.71213 0.0475 8	0.25014 0.5502 8	0.89441 0.0405 5	-0.27429 0.5109 8	0.04785 0.9104 8	-0.63634 0.0898 8	1.00000 0.0 8	0.84008 0.0180 7	0.35063 0.4956 6	0.58199 0.1301 8	-0.03152 0.9409 8	0.01317 0.9753 8	0.66008 0.0749 8
SAV	-0.62859 0.1305 7	-0.54840 0.2024 7	0.72065 0.0677 7	0.86096 0.0609 5	-0.23919 0.6055 7	0.01840 0.9688 7	-0.65348 0.1114 7	0.84008 0.0180 7	1.00000 0.0 13	0.74261 0.0057 12	0.82577 0.0005 13	0.10837 0.7245 13	-0.17371 0.5703 13	0.75352 0.0029 13
SAV_D	-0.28079 0.5899 6	0.33814 0.5121 6	-0.01701 0.9745 6	0.84683 0.0703 5	0.12149 0.8187 6	-0.49733 0.3155 6	-0.33098 0.5217 6	0.35063 0.4956 6	0.74261 0.0057 12	1.00000 0.0 12	-0.03292 0.9191 12	-0.27124 0.3938 12	0.65748 0.0202 12
DISCH	-0.70688 0.0499 8	-0.28528 0.4934 8	0.53055 0.1761 8	0.68026 0.2063 5	0.27822 0.5046 8	0.00455 0.9915 8	-0.90574 0.0019 8	0.58199 0.1301 8	0.82577 0.0005 13	0.67095 0.0169 12	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.64001 0.0874 8	-0.30035 0.4698 8	-0.33569 0.4163 8	-0.21713 0.7257 5	-0.41856 0.3020 8	0.79279 0.0189 8	0.08077 0.8492 8	-0.03152 0.9409 8	0.10837 0.7245 13	-0.03292 0.9191 12	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.18670 0.6580 8	0.10816 0.7988 8	0.39970 0.3266 8	-0.24849 0.6869 5	-0.27690 0.5067 8	-0.38460 0.3468 8	0.15762 0.7093 8	0.01317 0.9753 8	-0.17371 0.5703 13	-0.27124 0.3938 12	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.76445 0.0272 8	-0.19768 0.6389 8	0.49981 0.2072 8	0.79382 0.1088 5	0.23466 0.5759 8	-0.40748 0.3163 8	-0.54378 0.1636 8	0.66008 0.0749 8	0.75352 0.0029 13	0.65748 0.0202 12	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 39. Summer correlations for station XDC1706 (301B) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000	-0.24698	-0.46838	-0.45666	-0.27623	0.55910	0.64367	-0.30324	-0.12583	-0.00789	-0.62380	0.60473	-0.12977	-0.35189
	0.0	0.3946	0.0912	0.1580	0.3391	0.0377	0.0130	0.2919	0.6968	0.9828	0.0171	0.0220	0.6584	0.2173
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
CHLA	-0.24698	1.00000	0.15231	0.40939	0.55360	-0.00168	-0.16085	-0.18244	-0.43655	0.72363	0.08156	-0.14428	0.37569	-0.31909
	0.3946	0.0	0.6032	0.2112	0.0400	0.9955	0.5828	0.5325	0.1559	0.0180	0.7817	0.6226	0.1856	0.2661
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
TSS	-0.46838	0.15231	1.00000	0.29442	-0.16006	-0.21661	-0.48026	0.22445	0.60795	-0.52514	0.65315	-0.02626	0.18586	0.45417
	0.0912	0.6032	0.0	0.3795	0.5847	0.4570	0.0822	0.4404	0.0360	0.1191	0.0113	0.9290	0.5247	0.1028
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
TN	-0.45666	0.40939	0.29442	1.00000	-0.15293	-0.44490	-0.76790	0.84551	0.13836	0.31870	0.79844	-0.41040	0.20666	0.63848
	0.1580	0.2112	0.3795	0.0	0.6535	0.1703	0.0058	0.0010	0.7031	0.4032	0.0032	0.2099	0.5421	0.0345
	11	11	11	11	11	11	11	11	10	9	11	11	11	11
TP	-0.27623	0.55360	-0.16006	-0.15293	1.00000	-0.06757	0.12899	-0.43952	-0.60424	-0.07148	-0.24613	-0.41326	0.26763	-0.36001
	0.3391	0.0400	0.5847	0.6535	0.0	0.8185	0.6603	0.1158	0.0374	0.8444	0.3963	0.1419	0.3549	0.2061
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
WATEMP	0.55910	-0.00168	-0.21661	-0.44490	-0.06757	1.00000	0.25548	-0.26076	0.13912	-0.03188	-0.36792	0.75438	-0.43650	-0.41079
	0.0377	0.9955	0.4570	0.1703	0.8185	0.0	0.3780	0.3679	0.6663	0.9303	0.1956	0.0018	0.1187	0.1445
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
SAL	0.64367	-0.16085	-0.48026	-0.76790	0.12899	0.25548	1.00000	-0.73502	-0.48242	-0.17976	-0.85395	0.13636	0.08530	-0.60488
	0.0130	0.5828	0.0822	0.0058	0.6603	0.3780	0.0	0.0027	0.1122	0.6192	0.0001	0.6421	0.7719	0.0219
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
NO23	-0.30324	-0.18244	0.22445	0.84551	-0.43952	-0.26076	-0.73502	1.00000	0.35868	0.12336	0.77234	-0.23663	0.01821	0.71220
	0.2919	0.5325	0.4404	0.0010	0.1158	0.3679	0.0027	0.0	0.2522	0.7342	0.0012	0.4154	0.9507	0.0043
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
SAV	-0.12583	-0.43655	0.60795	0.13836	-0.60424	0.13912	-0.48242	0.35868	1.00000	-0.24282	0.37024	0.51995	-0.12054	0.34961
	0.6968	0.1559	0.0360	0.7031	0.0374	0.6663	0.1122	0.2522	0.0	0.4991	0.2362	0.0831	0.7090	0.2653
	12	12	12	10	12	12	12	12	12	10	12	12	12	12
SAV_D	-0.00789	0.72363	-0.52514	0.31870	-0.07148	-0.03188	-0.17976	0.12336	-0.24282	1.00000	0.05911	0.06575	-0.35842	-0.19257
	0.9828	0.0180	0.1191	0.4032	0.8444	0.9303	0.6192	0.7342	0.4991	0.0	0.8712	0.8568	0.3091	0.5940
	10	10	10	9	10	10	10	10	10	10	10	10	10	10
DISCH	-0.62380	0.08156	0.65315	0.79844	-0.24613	-0.36792	-0.85395	0.77234	0.37024	0.05911	1.00000	-0.24763	-0.03698	0.75606
	0.0171	0.7817	0.0113	0.0032	0.3963	0.1956	0.0001	0.0012	0.2362	0.8712	0.0	0.3933	0.9001	0.0018
	14	14	14	11	14	14	14	14	12	10	17	14	14	14
AVSUN	0.60473	-0.14428	-0.02626	-0.41040	-0.41326	0.75438	0.13636	-0.23663	0.51995	0.06575	-0.24763	1.00000	-0.47639	-0.31278
	0.0220	0.6226	0.9290	0.2099	0.1419	0.0018	0.6421	0.4154	0.0831	0.8568	0.3933	0.0	0.0850	0.2762
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
WINDSP	-0.12977	0.37569	0.18586	0.20666	0.26763	-0.43650	0.08530	0.01821	-0.12054	-0.35842	-0.03698	-0.47639	1.00000	-0.05149
	0.6584	0.1856	0.5247	0.5421	0.3549	0.1187	0.7719	0.9507	0.7090	0.3091	0.9001	0.0850	0.0	0.8612
	14	14	14	11	14	14	14	14	12	10	14	14	14	14
PRECIP	-0.35189	-0.31909	0.45417	0.63848	-0.36001	-0.41079	-0.60488	0.71220	0.34961	-0.19257	0.75606	-0.31278	-0.05149	1.00000
	0.2173	0.2661	0.1028	0.0345	0.2061	0.1445	0.0219	0.0043	0.2653	0.5940	0.0018	0.2762	0.8612	0.0
	14	14	14	11	14	14	14	14	12	10	14	14	14	14

Table 40. Summer correlations for station MLE2.2 (RP) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 13	-0.40922 0.1650 13	0.18116 0.5536 13	-0.42121 0.1727 12	-0.60008 0.0301 13	0.66036 0.0140 13	0.36915 0.2145 13	-0.59001 0.0338 13	0.04561 0.8881 12	0.04820 0.8948 10	-0.28151 0.3515 13	0.66306 0.0135 13	-0.28386 0.3473 13	-0.05255 0.8646 13
CHLA	-0.40922 0.1650 13	1.00000 0.0 13	0.24303 0.4237 13	0.84330 0.0006 12	0.71264 0.0063 13	-0.35079 0.2399 13	-0.80160 0.0010 13	0.80823 0.0008 13	0.55165 0.0630 12	0.62245 0.0546 10	0.80915 0.0008 13	-0.34467 0.2488 13	0.04016 0.8964 13	0.67651 0.0111 13
TSS	0.18116 0.5536 13	0.24303 0.4237 13	1.00000 0.0 13	0.22998 0.4721 12	0.07915 0.7972 13	0.15423 0.6149 13	-0.13231 0.6666 13	0.20631 0.4989 13	0.24648 0.4400 12	0.19059 0.5979 10	0.31357 0.2968 13	0.07326 0.8120 13	0.02819 0.9272 13	0.41327 0.1604 13
TN	-0.42121 0.1727 12	0.84330 0.0006 12	0.22998 0.4721 12	1.00000 0.0 12	0.66277 0.0188 12	-0.23712 0.4581 12	-0.70117 0.0111 12	0.83688 0.0007 12	0.76749 0.0058 11	0.69043 0.0271 10	0.82189 0.0010 12	-0.12673 0.6947 12	0.07214 0.8237 12	0.50676 0.0927 12
TP	-0.60008 0.0301 13	0.71264 0.0063 13	0.07915 0.7972 13	0.66277 0.0188 12	1.00000 0.0 13	-0.33730 0.2597 13	-0.50688 0.0771 13	0.51661 0.0707 13	0.13606 0.6733 12	0.24154 0.5014 10	0.38618 0.1925 13	-0.36601 0.2187 13	-0.00490 0.9873 13	0.30511 0.3107 13
WATEMP	0.66036 0.0140 13	-0.35079 0.2399 13	0.15423 0.6149 13	-0.23712 0.4581 12	-0.33730 0.2597 13	1.00000 0.0 13	0.46694 0.1077 13	-0.45763 0.1159 13	0.15638 0.6274 12	0.22411 0.5337 10	-0.21149 0.4879 13	0.68792 0.0093 13	-0.24296 0.4238 13	-0.05063 0.8695 13
SAL	0.36915 0.2145 13	-0.80160 0.0010 13	-0.13231 0.6666 13	-0.70117 0.0111 12	-0.50688 0.0771 13	0.46694 0.1077 13	1.00000 0.0 13	-0.77261 0.0020 13	-0.49480 0.1020 12	-0.54381 0.1042 10	-0.78811 0.0014 13	0.18196 0.5519 13	0.14465 0.6373 13	-0.51791 0.0698 13
NO23	-0.59001 0.0338 13	0.80823 0.0008 13	0.20631 0.4989 13	0.83688 0.0007 12	0.51661 0.0707 13	-0.45763 0.1159 13	-0.77261 0.0020 13	1.00000 0.0 13	0.67989 0.0150 12	0.61385 0.0591 10	0.91103 0.0001 13	-0.48669 0.0917 13	0.04238 0.8907 13	0.57705 0.0389 13
SAV	0.04561 0.8881 12	0.55165 0.0630 12	0.24648 0.4400 12	0.76749 0.0058 11	0.13606 0.6733 12	0.15638 0.6274 12	-0.49480 0.1020 12	0.67989 0.0150 12	1.00000 0.0 12	0.96258 0.0001 10	0.87468 0.0002 12	0.10116 0.7544 12	-0.10327 0.7494 12	0.69059 0.0129 12
SAV_D	0.04820 0.8948 10	0.62245 0.0546 10	0.19059 0.5979 10	0.69043 0.0271 10	0.24154 0.5014 10	0.22411 0.5337 10	-0.54381 0.1042 10	0.61385 0.0591 10	0.96258 0.0001 10	1.00000 0.0 10	0.79846 0.0056 10	0.14221 0.6951 10	-0.02288 0.9500 10	0.86460 0.0012 10
DISCH	-0.28151 0.3515 13	0.80915 0.0008 13	0.31357 0.2968 13	0.82189 0.0010 12	0.38618 0.1925 13	-0.21149 0.4879 13	-0.78811 0.0014 13	0.91103 0.0001 13	0.87468 0.0002 12	0.79846 0.0056 10	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.66306 0.0135 13	-0.34467 0.2488 13	0.07326 0.8120 13	-0.12673 0.6947 12	-0.36601 0.2187 13	0.68792 0.0093 13	0.18196 0.5519 13	-0.48669 0.0917 13	0.10116 0.7544 12	0.14221 0.6951 10	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.28386 0.3473 13	0.04016 0.8964 13	0.02819 0.9272 13	0.07214 0.8237 12	-0.00490 0.9873 13	-0.24296 0.4238 13	0.14465 0.6373 13	0.04238 0.8907 13	-0.10327 0.7494 12	-0.02288 0.9500 10	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.05255 0.8646 13	0.67651 0.0111 13	0.41327 0.1604 13	0.50676 0.0927 12	0.30511 0.3107 13	-0.05063 0.8695 13	-0.51791 0.0698 13	0.57705 0.0389 13	0.69059 0.0129 12	0.86460 0.0012 10	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 41. Summer correlations for station MLE2.3 (PL) [See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 13	-0.52003 0.0685 13	-0.68499 0.0098 13	-0.61872 0.0242 13	-0.64266 0.0178 13	-0.06795 0.8254 13	0.25045 0.4092 13	-0.16918 0.5806 13	-0.15496 0.6306 12	-0.69414 0.0259 10	-0.31898 0.2881 13	-0.20307 0.5058 13	0.05394 0.8611 13	-0.54117 0.0561 13
CHLA	-0.52003 0.0685 13	1.00000 0.0 14	0.03576 0.9034 14	0.72310 0.0052 13	0.07392 0.8017 14	-0.10733 0.7150 14	-0.45745 0.1000 14	-0.25644 0.3762 14	-0.38776 0.2130 12	-0.22654 0.5291 10	0.41660 0.1384 14	-0.30472 0.2895 14	0.34677 0.2245 14	0.36817 0.1952 14
TSS	-0.68499 0.0098 13	0.03576 0.9034 14	1.00000 0.0 14	0.36132 0.2251 13	0.46919 0.0905 14	-0.03690 0.9003 14	-0.07143 0.8083 14	0.45699 0.1004 14	0.68839 0.0133 12	0.83486 0.0027 10	-0.11865 0.6862 14	0.22267 0.4442 14	-0.22221 0.4451 14	0.08008 0.7855 14
TN	-0.61872 0.0242 13	0.72310 0.0052 13	0.36132 0.2251 13	1.00000 0.0 13	0.63926 0.0187 13	-0.25715 0.3964 13	-0.76674 0.0022 13	0.60161 0.0296 13	-0.13140 0.6840 12	0.36167 0.3045 10	0.55428 0.0493 13	-0.19423 0.5249 13	-0.12394 0.6867 13	0.44410 0.1284 13
TP	-0.64266 0.0178 13	0.07392 0.8017 14	0.46919 0.0905 14	0.63926 0.0187 13	1.00000 0.0 14	-0.22965 0.4296 14	-0.58588 0.0277 14	0.85479 0.0001 14	-0.27927 0.3794 12	0.07951 0.8272 10	0.21921 0.4515 14	0.45340 0.1035 14	-0.69422 0.0059 14	0.28876 0.3167 14
WATEMP	-0.06795 0.8254 13	-0.10733 0.7150 14	-0.03690 0.9003 14	-0.25715 0.3964 13	-0.22965 0.4296 14	1.00000 0.0 14	0.36455 0.2000 14	-0.32759 0.2529 14	0.06604 0.8384 12	0.10822 0.7660 10	0.16302 0.5776 14	0.15543 0.5957 14	0.01620 0.9562 14	0.22398 0.4414 14
SAL	0.25045 0.4092 13	-0.45745 0.1000 14	-0.07143 0.8083 14	-0.76674 0.0022 13	-0.58588 0.0277 14	0.36455 0.2000 14	1.00000 0.0 14	-0.50171 0.0676 14	0.45963 0.1328 12	0.10224 0.7787 10	-0.66528 0.0094 14	0.03034 0.9180 14	0.27586 0.3398 14	-0.34777 0.2231 14
NO23	-0.16918 0.5806 13	-0.25644 0.3762 14	0.45699 0.1004 14	0.60161 0.0296 13	0.85479 0.0001 14	-0.32759 0.2529 14	-0.50171 0.0676 14	1.00000 0.0 14	-0.17348 0.5898 12	0.02173 0.9525 10	0.04959 0.8663 14	0.38770 0.1708 14	-0.59005 0.0263 14	0.05594 0.8494 14
SAV	-0.15496 0.6306 12	-0.38776 0.2130 12	0.68839 0.0133 12	-0.13140 0.6840 12	-0.27927 0.3794 12	0.06604 0.8384 12	0.45963 0.1328 12	-0.17348 0.5898 12	1.00000 0.0 12	0.64982 0.0420 10	-0.23193 0.4682 12	-0.38032 0.2226 12	-0.09369 0.7721 12	0.07197 0.8241 12
SAV_D	-0.69414 0.0259 10	-0.22654 0.5291 10	0.83486 0.0027 10	0.36167 0.3045 10	0.07951 0.8272 10	0.10822 0.7660 10	0.10224 0.7787 10	0.02173 0.9525 10	0.64982 0.0420 10	1.00000 0.0 10	0.03294 0.9280 10	-0.02892 0.9368 10	-0.45867 0.1824 10	0.35207 0.3184 10
DISCH	-0.31898 0.2881 13	0.41660 0.1384 14	-0.11865 0.6862 14	0.55428 0.0493 13	0.21921 0.4515 14	0.16302 0.5776 14	-0.66528 0.0094 14	0.04959 0.8663 14	-0.23193 0.4682 12	0.03294 0.9280 10	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	-0.20307 0.5058 13	-0.30472 0.2895 14	0.22267 0.4442 14	-0.19423 0.5249 13	0.45340 0.1035 14	0.15543 0.5957 14	0.03034 0.9180 14	0.38770 0.1708 14	-0.38032 0.2226 12	-0.02892 0.9368 10	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	0.05394 0.8611 13	0.34677 0.2245 14	-0.22221 0.4451 14	-0.12394 0.6867 13	-0.69422 0.0059 14	0.01620 0.9562 14	0.27586 0.3398 14	-0.59005 0.0263 14	-0.09369 0.7721 12	-0.45867 0.1824 10	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.54117 0.0561 13	0.36817 0.1952 14	0.08008 0.7855 14	0.44410 0.1284 13	0.28876 0.3167 14	0.22398 0.4414 14	-0.34777 0.2231 14	0.05594 0.8494 14	0.07197 0.8241 12	0.35207 0.3184 10	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 42. Summer correlations for segment TF2, the freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.07491 0.7991 14	-0.69370 0.0059 14	0.53354 0.0910 11	-0.67721 0.0078 14	0.55055 0.0413 14	0.21118 0.4686 14	0.22135 0.4470 14	0.28540 0.3226 14	0.07492 0.7991 14	-0.67371 0.0083 14	0.09393 0.7494 14	0.07861 0.7894 14	-0.56528 0.0352 14
CHLA	-0.07491 0.7991 14	1.00000 0.0 14	0.04917 0.8674 14	-0.60304 0.0495 11	0.40211 0.1541 14	0.44893 0.1073 14	-0.01613 0.9564 14	-0.79349 0.0007 14	-0.72975 0.0031 14	0.01913 0.9482 14	-0.11368 0.6988 14	0.57202 0.0326 14	-0.68069 0.0074 14	-0.14184 0.6286 14
TSS	-0.69370 0.0059 14	0.04917 0.8674 14	1.00000 0.0 14	-0.33542 0.3133 11	0.85342 0.0001 14	-0.48912 0.0759 14	-0.27989 0.3325 14	-0.23386 0.4210 14	-0.34821 0.2224 14	0.01585 0.9571 14	0.90976 0.0001 14	-0.04018 0.8915 14	-0.10936 0.7098 14	0.57458 0.0316 14
TN	0.53354 0.0910 11	-0.60304 0.0495 11	-0.33542 0.3133 11	1.00000 0.0 11	-0.44974 0.1652 11	0.05945 0.8622 11	-0.02769 0.9356 11	0.86707 0.0005 11	0.60270 0.0497 11	0.09186 0.7882 11	-0.25765 0.4443 11	-0.33055 0.3208 11	0.42628 0.1911 11	-0.24258 0.4723 11
TP	-0.67721 0.0078 14	0.40211 0.1541 14	0.85342 0.0001 14	-0.44974 0.1652 11	1.00000 0.0 14	-0.28894 0.3164 14	-0.14876 0.6118 14	-0.52093 0.0561 14	-0.52579 0.0535 14	0.16941 0.5626 14	0.71540 0.0040 14	0.09499 0.7467 14	-0.46635 0.0928 14	0.49327 0.0731 14
WATEMP	0.55055 0.0413 14	0.44893 0.1073 14	-0.48912 0.0759 14	0.05945 0.8622 11	-0.28894 0.3164 14	1.00000 0.0 14	0.26447 0.3609 14	-0.21392 0.4627 14	-0.09769 0.7397 14	0.08039 0.7847 14	-0.68346 0.0070 14	0.70105 0.0052 14	-0.33012 0.2490 14	-0.54571 0.0435 14
COND	0.21118 0.4686 14	-0.01613 0.9564 14	-0.27989 0.3325 14	-0.02769 0.9356 11	-0.14876 0.6118 14	0.26447 0.3609 14	1.00000 0.0 14	-0.21083 0.4694 14	0.38626 0.1725 14	0.47550 0.0857 14	-0.47609 0.0853 14	-0.25402 0.3809 14	0.07498 0.7989 14	-0.27555 0.3403 14
NO23	0.22135 0.4470 14	-0.79349 0.0007 14	-0.23386 0.4210 14	0.86707 0.0005 11	-0.52093 0.0561 14	-0.21392 0.4627 14	-0.21083 0.4694 14	1.00000 0.0 14	0.59086 0.0261 14	-0.20839 0.4747 14	-0.05547 0.8506 14	-0.33555 0.2409 14	0.52345 0.0547 14	-0.12417 0.6724 14
SAV	0.28540 0.3226 14	-0.72975 0.0031 14	-0.34821 0.2224 14	0.60270 0.0497 11	-0.52579 0.0535 14	-0.09769 0.7397 14	0.38626 0.1725 14	0.59086 0.0261 14	1.00000 0.0 14	0.12635 0.6669 14	-0.34314 0.2297 14	-0.33189 0.2463 14	0.41752 0.1374 14	-0.29242 0.3103 14
SAV_D	0.07492 0.7991 14	0.01913 0.9482 14	0.01585 0.9571 14	0.09186 0.7882 11	0.16941 0.5626 14	0.08039 0.7847 14	0.47550 0.0857 14	-0.20839 0.4747 14	0.12635 0.6669 14	1.00000 0.0 14	-0.01414 0.9617 14	-0.38028 0.1798 14	-0.21804 0.4539 14	0.00424 0.9885 14
DISCH	-0.67371 0.0083 14	-0.11368 0.6988 14	0.90976 0.0001 14	-0.25765 0.4443 11	0.71540 0.0040 14	-0.68346 0.0070 14	-0.47609 0.0853 14	-0.05547 0.8506 14	-0.34314 0.2297 14	-0.01414 0.9617 14	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.09393 0.7494 14	0.57202 0.0326 14	-0.04018 0.8915 14	-0.33055 0.3208 11	0.09499 0.7467 14	0.70105 0.0052 14	-0.25402 0.3809 14	-0.33555 0.2409 14	-0.33189 0.2463 14	-0.38028 0.1798 14	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	0.07861 0.7894 14	-0.68069 0.0074 14	-0.10936 0.7098 14	0.42628 0.1911 11	-0.46635 0.0928 14	-0.33012 0.2490 14	0.07498 0.7989 14	0.52345 0.0547 14	0.41752 0.1374 14	-0.21804 0.4539 14	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.56528 0.0352 14	-0.14184 0.6286 14	0.57458 0.0316 14	-0.24258 0.4723 11	0.49327 0.0731 14	-0.54571 0.0435 14	-0.27555 0.3403 14	-0.12417 0.6724 14	-0.29242 0.3103 14	0.00424 0.9885 14	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 43. Summer correlations for segment UTR, the upper freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	0.03930 0.8939 14	-0.56287 0.0361 14	0.55357 0.0773 11	-0.54041 0.0460 14	0.47877 0.0833 14	0.39561 0.1615 14	0.15013 0.6085 14	0.42278 0.1320 14	0.74335 0.0023 14	-0.57033 0.0332 14	-0.02990 0.9192 14	-0.14841 0.6126 14	-0.40358 0.1524 14
CHLA	0.03930 0.8939 14	1.00000 0.0 14	-0.12228 0.6771 14	-0.20453 0.5463 11	0.09384 0.7497 14	0.49047 0.0750 14	-0.06435 0.8270 14	-0.36745 0.1962 14	-0.32326 0.2596 14	0.13689 0.6408 14	-0.25716 0.3748 14	0.76379 0.0015 14	-0.61313 0.0197 14	-0.24722 0.3941 14
TSS	-0.56287 0.0361 14	-0.12228 0.6771 14	1.00000 0.0 14	-0.52821 0.0949 11	0.90533 0.0001 14	-0.53970 0.0464 14	-0.44138 0.1141 14	-0.51713 0.0583 14	-0.33251 0.2454 14	-0.16196 0.5802 14	0.91367 0.0001 14	-0.06750 0.8187 14	-0.05503 0.8518 14	0.57349 0.0320 14
TN	0.55357 0.0773 11	-0.20453 0.5463 11	-0.52821 0.0949 11	1.00000 0.0 11	-0.56776 0.0685 11	0.53954 0.0867 11	0.62049 0.0417 11	0.92781 0.0001 11	0.71442 0.0135 11	0.02407 0.9440 11	-0.69143 0.0184 11	0.00779 0.9819 11	0.36905 0.2640 11	-0.72807 0.0111 11
TP	-0.54041 0.0460 14	0.09384 0.7497 14	0.90533 0.0001 14	-0.56776 0.0685 11	1.00000 0.0 14	-0.48695 0.0774 14	-0.41133 0.1440 14	-0.62524 0.0168 14	-0.50001 0.0687 14	-0.11266 0.7014 14	0.82292 0.0003 14	0.01533 0.9585 14	-0.28054 0.3313 14	0.54321 0.0447 14
WATEMP	0.47877 0.0833 14	0.49047 0.0750 14	-0.53970 0.0464 14	0.53954 0.0867 11	-0.48695 0.0774 14	1.00000 0.0 14	0.40576 0.1500 14	0.34702 0.2241 14	0.14747 0.6149 14	0.33395 0.2432 14	-0.71523 0.0040 14	0.70287 0.0051 14	-0.30433 0.2901 14	-0.57433 0.0317 14
COND	0.39561 0.1615 14	-0.06435 0.8270 14	-0.44138 0.1141 14	0.62049 0.0417 11	-0.41133 0.1440 14	0.40576 0.1500 14	1.00000 0.0 14	0.63739 0.0142 14	0.64705 0.0124 14	0.33512 0.2415 14	-0.63519 0.0147 14	-0.14125 0.6300 14	0.19418 0.5059 14	-0.61737 0.0187 14
NO23	0.15013 0.6085 14	-0.36745 0.1962 14	-0.51713 0.0583 14	0.92781 0.0001 11	-0.62524 0.0168 14	0.34702 0.2241 14	0.63739 0.0142 14	1.00000 0.0 14	0.48576 0.0782 14	-0.19203 0.5107 14	-0.58879 0.0267 14	-0.09470 0.7474 14	0.46738 0.0920 14	-0.65647 0.0108 14
SAV	0.42278 0.1320 14	-0.32326 0.2596 14	-0.33251 0.2454 14	0.71442 0.0135 11	-0.50001 0.0687 14	0.14747 0.6149 14	0.64705 0.0124 14	0.48576 0.0782 14	1.00000 0.0 14	0.29329 0.3088 14	-0.43202 0.1229 14	-0.39244 0.1652 14	0.40642 0.1493 14	-0.35711 0.2101 14
SAV_D	0.74335 0.0023 14	0.13689 0.6408 14	-0.16196 0.5802 14	0.02407 0.9440 11	-0.11266 0.7014 14	0.33395 0.2432 14	0.33512 0.2415 14	-0.19203 0.5107 14	0.29329 0.3088 14	1.00000 0.0 14	-0.26196 0.3656 14	-0.01273 0.9655 14	-0.37420 0.1875 14	-0.25618 0.3767 14
DISCH	-0.57033 0.0332 14	-0.25716 0.3748 14	0.91367 0.0001 14	-0.69143 0.0184 11	0.82292 0.0003 14	-0.71523 0.0040 14	-0.63519 0.0147 14	-0.58879 0.0267 14	-0.43202 0.1229 14	-0.26196 0.3656 14	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	-0.02990 0.9192 14	0.76379 0.0015 14	-0.06750 0.8187 14	0.00779 0.9819 11	0.01533 0.9585 14	0.70287 0.0051 14	-0.14125 0.6300 14	-0.09470 0.7474 14	-0.39244 0.1652 14	-0.01273 0.9655 14	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.14841 0.6126 14	-0.61313 0.0197 14	-0.05503 0.8518 14	0.36905 0.2640 11	-0.28054 0.3313 14	-0.30433 0.2901 14	0.19418 0.5059 14	0.46738 0.0920 14	0.40642 0.1493 14	-0.37420 0.1875 14	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.40358 0.1524 14	-0.24722 0.3941 14	0.57349 0.0320 14	-0.72807 0.0111 11	0.54321 0.0447 14	-0.57433 0.0317 14	-0.61737 0.0187 14	-0.65647 0.0108 14	-0.35711 0.2101 14	-0.25618 0.3767 14	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 44. Summer correlations for segment LTR, the lower freshwater tidal Potomac River
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.41679 0.1382 14	-0.65021 0.0118 14	0.29569 0.3773 11	-0.69943 0.0054 14	0.34405 0.2284 14	-0.05882 0.8417 14	0.27662 0.3384 14	0.18500 0.5266 14	0.15476 0.5973 14	-0.46894 0.0907 14	0.10402 0.7234 14	0.22144 0.4468 14	-0.41850 0.1364 14
CHLA	-0.41679 0.1382 14	1.00000 0.0 14	0.29476 0.3063 14	-0.45186 0.1629 11	0.71568 0.0040 14	0.38662 0.1721 14	-0.01241 0.9664 14	-0.68342 0.0070 14	-0.69670 0.0056 14	-0.35758 0.2094 14	0.00732 0.9802 14	0.35993 0.2062 14	-0.61145 0.0202 14	-0.03842 0.8962 14
TSS	-0.65021 0.0118 14	0.29476 0.3063 14	1.00000 0.0 14	-0.00701 0.9837 11	0.76296 0.0015 14	-0.38146 0.1784 14	-0.24267 0.4032 14	-0.05604 0.8491 14	-0.12331 0.6745 14	0.06705 0.8198 14	0.87503 0.0001 14	0.01873 0.9493 14	-0.20901 0.4733 14	0.55839 0.0380 14
TN	0.29569 0.3773 11	-0.45186 0.1629 11	-0.00701 0.9837 11	1.00000 0.0 11	-0.16477 0.6283 11	-0.40916 0.2115 11	-0.48488 0.1306 11	0.92419 0.0001 11	0.10881 0.7501 11	0.70536 0.0153 11	0.31982 0.3377 11	-0.51828 0.1024 11	0.27715 0.4093 11	0.37031 0.2623 11
TP	-0.69943 0.0054 14	0.71568 0.0040 14	0.76296 0.0015 14	-0.16477 0.6283 11	1.00000 0.0 14	-0.01121 0.9696 14	-0.00436 0.9882 14	-0.43364 0.1214 14	-0.34565 0.2261 14	-0.02287 0.9381 14	0.48821 0.0765 14	0.18825 0.5193 14	-0.60742 0.0212 14	0.35207 0.2170 14
WATEMP	0.34405 0.2284 14	0.38662 0.1721 14	-0.38146 0.1784 14	-0.40916 0.2115 11	-0.01121 0.9696 14	1.00000 0.0 14	0.23123 0.4264 14	-0.55933 0.0376 14	-0.24299 0.4026 14	-0.30371 0.2911 14	-0.64189 0.0133 14	0.69331 0.0060 14	-0.35839 0.2083 14	-0.50620 0.0648 14
COND	-0.05882 0.8417 14	-0.01241 0.9664 14	-0.24267 0.4032 14	-0.48488 0.1306 11	-0.00436 0.9882 14	0.23123 0.4264 14	1.00000 0.0 14	-0.46246 0.0959 14	-0.31310 0.2757 14	-0.06966 0.8129 14	-0.46373 0.0949 14	-0.24467 0.3992 14	0.08161 0.7815 14	-0.27163 0.3475 14
NO23	0.27662 0.3384 14	-0.68342 0.0070 14	-0.05604 0.8491 14	0.92419 0.0001 11	-0.43364 0.1214 14	-0.55933 0.0376 14	-0.46246 0.0959 14	1.00000 0.0 14	0.53320 0.0496 14	0.64424 0.0129 14	0.35569 0.2120 14	-0.47185 0.0885 14	0.41503 0.1400 14	0.31843 0.2672 14
SAV	0.18500 0.5266 14	-0.69670 0.0056 14	-0.12331 0.6745 14	0.10881 0.7501 11	-0.34565 0.2261 14	-0.24299 0.4026 14	-0.31310 0.2757 14	0.53320 0.0496 14	1.00000 0.0 14	0.21745 0.4552 14	0.06401 0.8279 14	0.03501 0.9054 14	0.04833 0.8697 14	0.04285 0.8844 14
SAV_D	0.15476 0.5973 14	-0.35758 0.2094 14	0.06705 0.8198 14	0.70536 0.0153 11	-0.02287 0.9381 14	-0.30371 0.2911 14	-0.06966 0.8129 14	0.64424 0.0129 14	0.21745 0.4552 14	1.00000 0.0 14	0.34068 0.2333 14	-0.55168 0.0408 14	0.19050 0.5142 14	0.36022 0.2058 14
DISCH	-0.46894 0.0907 14	0.00732 0.9802 14	0.87503 0.0001 14	0.31982 0.3377 11	0.48821 0.0765 14	-0.64189 0.0133 14	-0.46373 0.0949 14	0.35569 0.2120 14	0.06401 0.8279 14	0.34068 0.2333 14	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.10402 0.7234 14	0.35993 0.2062 14	0.01873 0.9493 14	-0.51828 0.1024 11	0.18825 0.5193 14	0.69331 0.0060 14	-0.24467 0.3992 14	-0.47185 0.0885 14	0.03501 0.9054 14	-0.55168 0.0408 14	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	0.22144 0.4468 14	-0.61145 0.0202 14	-0.20901 0.4733 14	0.27715 0.4093 11	-0.60742 0.0212 14	-0.35839 0.2083 14	0.08161 0.7815 14	0.41503 0.1400 14	0.04833 0.8697 14	0.19050 0.5142 14	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.41850 0.1364 14	-0.03842 0.8962 14	0.55839 0.0380 14	0.37031 0.2623 11	0.35207 0.2170 14	-0.50620 0.0648 14	-0.27163 0.3475 14	0.31843 0.2672 14	0.04285 0.8844 14	0.36022 0.2058 14	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 45. Summer correlations for segment POTOH, the oligohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	COND	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.32179 0.2619 14	-0.79107 0.0008 14	-0.65870 0.0275 11	-0.33763 0.2378 14	0.71697 0.0039 14	0.66834 0.0090 14	-0.47478 0.0863 14	-0.37033 0.2129 13	-0.23596 0.4603 12	-0.68686 0.0067 14	0.42353 0.1313 14	-0.17149 0.5577 14	-0.67777 0.0077 14
CHLA	-0.32179 0.2619 14	1.00000 0.0 14	0.52230 0.0554 14	0.29911 0.3716 11	0.79499 0.0007 14	-0.14735 0.6152 14	-0.24132 0.4059 14	-0.34449 0.2278 14	-0.49655 0.0843 13	-0.06478 0.8415 12	0.23940 0.4098 14	-0.33078 0.2480 14	-0.13854 0.6367 14	0.09499 0.7467 14
TSS	-0.79107 0.0008 14	0.52230 0.0554 14	1.00000 0.0 14	0.51292 0.1066 11	0.38068 0.1793 14	-0.48895 0.0760 14	-0.47976 0.0826 14	0.23835 0.4119 14	0.02689 0.9305 13	-0.07941 0.8062 12	0.81294 0.0004 14	-0.31124 0.2787 14	-0.03423 0.9075 14	0.66592 0.0093 14
TN	-0.65870 0.0275 11	0.29911 0.3716 11	0.51292 0.1066 11	1.00000 0.0 11	0.33863 0.3084 11	-0.62480 0.0399 11	-0.84489 0.0011 11	0.91954 0.0001 11	0.06662 0.8457 11	0.65256 0.0295 11	0.77146 0.0054 11	-0.47799 0.1370 11	0.03679 0.9145 11	0.80785 0.0026 11
TP	-0.33763 0.2378 14	0.79499 0.0007 14	0.38068 0.1793 14	0.33863 0.3084 11	1.00000 0.0 14	-0.23364 0.4215 14	-0.24238 0.4038 14	-0.16638 0.5697 14	-0.27727 0.3591 13	0.32569 0.3016 12	0.18893 0.5177 14	-0.51795 0.0578 14	-0.04758 0.8717 14	0.19748 0.4986 14
WATEMP	0.71697 0.0039 14	-0.14735 0.6152 14	-0.48895 0.0760 14	-0.62480 0.0399 11	-0.23364 0.4215 14	1.00000 0.0 14	0.40033 0.1561 14	-0.51373 0.0602 14	-0.13148 0.6685 13	-0.37782 0.2259 12	-0.50790 0.0637 14	0.71712 0.0039 14	-0.44832 0.1079 14	-0.40194 0.1543 14
COND	0.66834 0.0090 14	-0.24132 0.4059 14	-0.47976 0.0826 14	-0.84489 0.0011 11	-0.24238 0.4038 14	0.40033 0.1561 14	1.00000 0.0 14	-0.67729 0.0078 14	-0.33317 0.2660 13	-0.32668 0.3000 12	-0.76458 0.0014 14	0.08846 0.7636 14	0.14842 0.6126 14	-0.60839 0.0210 14
NO23	-0.47478 0.0863 14	-0.34449 0.2278 14	0.23835 0.4119 14	0.91954 0.0001 11	-0.16638 0.5697 14	-0.51373 0.0602 14	-0.67729 0.0078 14	1.00000 0.0 14	0.36174 0.2246 13	0.61278 0.0341 12	0.65983 0.0102 14	-0.29867 0.2996 14	0.17056 0.5599 14	0.64160 0.0134 14
SAV	-0.37033 0.2129 13	-0.49655 0.0843 13	0.02689 0.9305 13	0.06662 0.8457 11	-0.27727 0.3591 13	-0.13148 0.6685 13	-0.33317 0.2660 13	0.36174 0.2246 13	1.00000 0.0 13	0.08823 0.7851 12	0.15011 0.6245 13	0.37262 0.2099 13	-0.26566 0.3803 13	0.22474 0.4604 13
SAV_D	-0.23596 0.4603 12	-0.06478 0.8415 12	-0.07941 0.8062 12	0.65256 0.0295 11	0.32569 0.3016 12	-0.37782 0.2259 12	-0.32668 0.3000 12	0.61278 0.0341 12	0.08823 0.7851 12	1.00000 0.0 12	0.12714 0.6938 12	-0.66206 0.0190 12	0.02057 0.9494 12	0.42451 0.1690 12
DISCH	-0.68686 0.0067 14	0.23940 0.4098 14	0.81294 0.0004 14	0.77146 0.0054 11	0.18893 0.5177 14	-0.50790 0.0637 14	-0.76458 0.0014 14	0.65983 0.0102 14	0.15011 0.6245 13	0.12714 0.6938 12	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.42353 0.1313 14	-0.33078 0.2480 14	-0.31124 0.2787 14	-0.47799 0.1370 11	-0.51795 0.0578 14	0.71712 0.0039 14	0.08846 0.7636 14	-0.29867 0.2996 14	0.37262 0.2099 13	-0.66206 0.0190 12	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	-0.17149 0.5577 14	-0.13854 0.6367 14	-0.03423 0.9075 14	0.03679 0.9145 11	-0.04758 0.8717 14	-0.44832 0.1079 14	0.14842 0.6126 14	0.17056 0.5599 14	-0.26566 0.3803 13	0.02057 0.9494 12	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.67777 0.0077 14	0.09499 0.7467 14	0.66592 0.0093 14	0.80785 0.0026 11	0.19748 0.4986 14	-0.40194 0.1543 14	-0.60839 0.0210 14	0.64160 0.0134 14	0.22474 0.4604 13	0.42451 0.1690 12	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Table 46. Summer correlations for segment POTMH, the mesohaline Potomac Estuary
[See Table 1. for explanation of abbreviations]

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	SECCHI	CHLA	TSS	TN	TP	WATEMP	SAL	NO23	SAV	SAV_D	DISCH	AVSUN	WINDSP	PRECIP
SECCHI	1.00000 0.0 14	-0.48761 0.0769 14	-0.33367 0.2437 14	-0.66994 0.0122 13	-0.34364 0.2290 14	0.25691 0.3753 14	0.82861 0.0003 14	-0.74402 0.0023 14	-0.42564 0.1677 12	-0.66514 0.0358 10	-0.64158 0.0134 14	0.18505 0.5265 14	0.16149 0.5812 14	-0.53140 0.0505 14
CHLA	-0.48761 0.0769 14	1.00000 0.0 14	0.23606 0.4165 14	0.76819 0.0022 13	0.36128 0.2044 14	-0.50557 0.0651 14	-0.62319 0.0173 14	0.31161 0.2781 14	0.42626 0.1670 12	0.83676 0.0025 10	0.62032 0.0179 14	-0.44349 0.1122 14	0.40227 0.1539 14	0.33134 0.2472 14
TSS	-0.33367 0.2437 14	0.23606 0.4165 14	1.00000 0.0 14	0.45693 0.1165 13	-0.26155 0.3664 14	-0.05134 0.8616 14	-0.28688 0.3200 14	0.23695 0.4147 14	0.64264 0.0242 12	0.38308 0.2745 10	0.58657 0.0275 14	-0.05443 0.8534 14	0.17050 0.5601 14	0.52682 0.0529 14
TN	-0.66994 0.0122 13	0.76819 0.0022 13	0.45693 0.1165 13	1.00000 0.0 13	0.02075 0.9464 13	-0.20565 0.5003 13	-0.68746 0.0094 13	0.84860 0.0002 13	0.69747 0.0117 12	0.80258 0.0052 10	0.81393 0.0007 13	-0.12602 0.6816 13	0.16853 0.5820 13	0.57676 0.0391 13
TP	-0.34364 0.2290 14	0.36128 0.2044 14	-0.26155 0.3664 14	0.02075 0.9464 13	1.00000 0.0 14	-0.33293 0.2448 14	-0.40675 0.1489 14	0.09786 0.7393 14	-0.20367 0.5255 12	0.23441 0.5145 10	0.06877 0.8153 14	-0.32719 0.2535 14	-0.07580 0.7968 14	-0.08455 0.7738 14
WATEMP	0.25691 0.3753 14	-0.50557 0.0651 14	-0.05134 0.8616 14	-0.20565 0.5003 13	-0.33293 0.2448 14	1.00000 0.0 14	0.27796 0.3359 14	-0.06946 0.8135 14	0.21982 0.4924 12	0.13035 0.7197 10	-0.23832 0.4119 14	0.70076 0.0052 14	-0.38183 0.1779 14	-0.18083 0.5361 14
SAL	0.82861 0.0003 14	-0.62319 0.0173 14	-0.28688 0.3200 14	-0.68746 0.0094 13	-0.40675 0.1489 14	0.27796 0.3359 14	1.00000 0.0 14	-0.73761 0.0026 14	-0.60203 0.0383 12	-0.83057 0.0029 10	-0.76023 0.0016 14	0.05360 0.8556 14	0.22947 0.4300 14	-0.47335 0.0873 14
NO23	-0.74402 0.0023 14	0.31161 0.2781 14	0.23695 0.4147 14	0.84860 0.0002 13	0.09786 0.7393 14	-0.06946 0.8135 14	-0.73761 0.0026 14	1.00000 0.0 14	0.53280 0.0745 12	0.61024 0.0610 10	0.69449 0.0058 14	-0.04926 0.8672 14	-0.21328 0.4641 14	0.58485 0.0280 14
SAV	-0.42564 0.1677 12	0.42626 0.1670 12	0.64264 0.0242 12	0.69747 0.0117 12	-0.20367 0.5255 12	0.21982 0.4924 12	-0.60203 0.0383 12	0.53280 0.0745 12	1.00000 0.0 12	0.91673 0.0002 10	0.80548 0.0016 12	0.31855 0.3129 12	-0.28502 0.3692 12	0.59892 0.0396 12
SAV_D	-0.66514 0.0358 10	0.83676 0.0025 10	0.38308 0.2745 10	0.80258 0.0052 10	0.23441 0.5145 10	0.13035 0.7197 10	-0.83057 0.0029 10	0.61024 0.0610 10	0.91673 0.0002 10	1.00000 0.0 10	0.81486 0.0041 10	0.15139 0.6763 10	-0.43330 0.2110 10	0.58979 0.0727 10
DISCH	-0.64158 0.0134 14	0.62032 0.0179 14	0.58657 0.0275 14	0.81393 0.0007 13	0.06877 0.8153 14	-0.23832 0.4119 14	-0.76023 0.0016 14	0.69449 0.0058 14	0.80548 0.0016 12	0.81486 0.0041 10	1.00000 0.0 17	-0.24763 0.3933 14	-0.03698 0.9001 14	0.75606 0.0018 14
AVSUN	0.18505 0.5265 14	-0.44349 0.1122 14	-0.05443 0.8534 14	-0.12602 0.6816 13	-0.32719 0.2535 14	0.70076 0.0052 14	0.05360 0.8556 14	-0.04926 0.8672 14	0.31855 0.3129 12	0.15139 0.6763 10	-0.24763 0.3933 14	1.00000 0.0 14	-0.47639 0.0850 14	-0.31278 0.2762 14
WINDSP	0.16149 0.5812 14	0.40227 0.1539 14	0.17050 0.5601 14	0.16853 0.5820 13	-0.07580 0.7968 14	-0.38183 0.1779 14	0.22947 0.4300 14	-0.21328 0.4641 14	-0.28502 0.3692 12	-0.43330 0.2110 10	-0.03698 0.9001 14	-0.47639 0.0850 14	1.00000 0.0 14	-0.05149 0.8612 14
PRECIP	-0.53140 0.0505 14	0.33134 0.2472 14	0.52682 0.0529 14	0.57676 0.0391 13	-0.08455 0.7738 14	-0.18083 0.5361 14	-0.47335 0.0873 14	0.58485 0.0280 14	0.59892 0.0396 12	0.58979 0.0727 10	0.75606 0.0018 14	-0.31278 0.2762 14	-0.05149 0.8612 14	1.00000 0.0 14

Appendix 2. Figures illustrating significant relationships among SAV, water quality parameters, weather parameters, and discharge in the tidal Potomac and Estuary, 1983-96

Table 1. Parameters, abbreviations, and units used in the tables and figures.

Parameter	Abbreviation	Units
Secchi depth	SECCHI	meters (m)
Chlorophyll-a	CHLA	micrograms per liter (µg/l)
Total suspended solids	TSS	milligrams per liter (mg/l)
Total nitrogen	TN	milligrams per liter as N (mg/l)
Total phosphorus	TP	milligrams per liter as P (mg/l)
Water temperature	WATEMP	degrees C (°C)
Salinity	SAL	parts per thousand (ppt)
Nitrate plus nitrite	NO23	milligrams per liter (mg/l)
SAV coverage	SAV	hectares
Difference in SAV coverage from previous year	SAV_D	hectares
Discharge	DISCH	cubic meters per second (m^3/s)
Available sunshine	AVSUN	percent of total available (%)
Wind speed	WINDSP	kilometers per hour (km/hr)
Precipitation	PRECIP	millimeters (mm)
Conductivity	COND	microsiemans per cm (µS/cm)
Tidal fresh Potomac River	TF2	
Upper tidal Potomac River	UTR	
Lower tidal Potomac River	LTR	
Oligohaline Potomac Estuary	POTOH	
Mesohaline Potomac Estuary	POTMH	

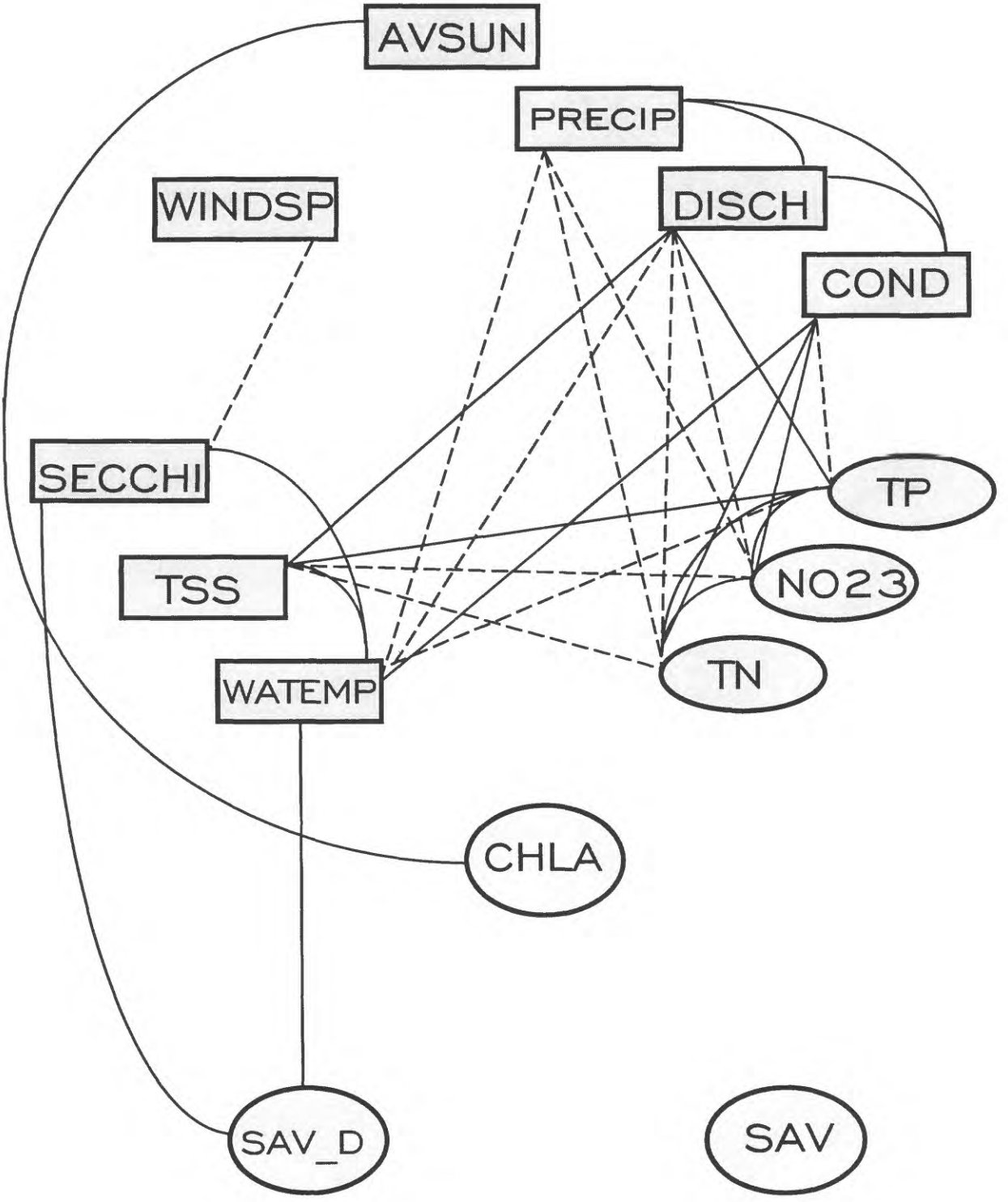
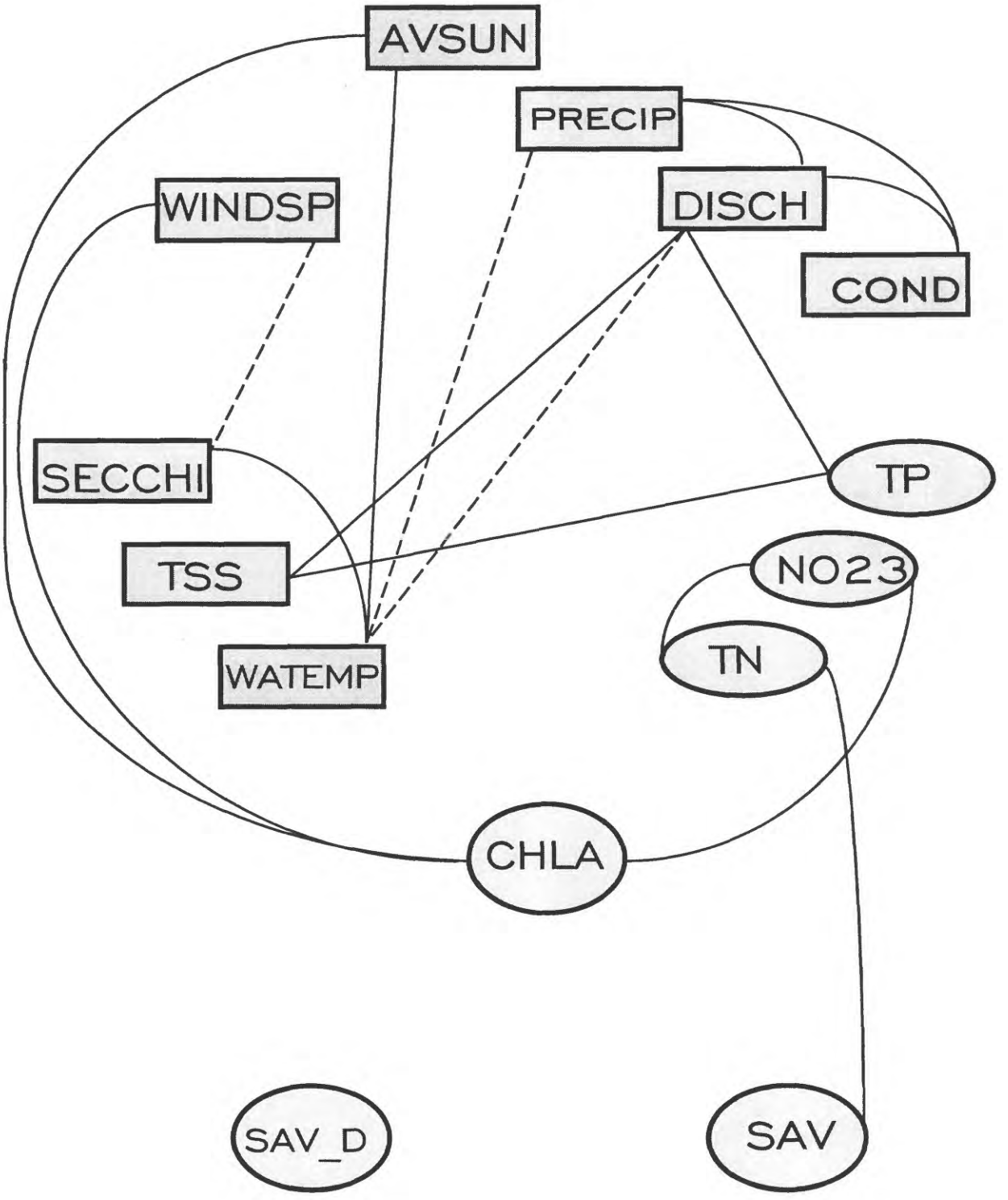


Figure 2. Significant growing season correlations for station XFB2470 (HP) in the freshwater tidal Potomac River, 1983-96.



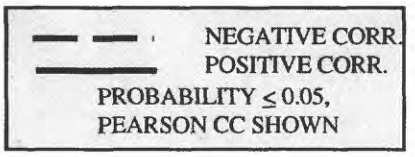


Figure 3. Significant growing season correlations for station XFB1433 (MH) in the freshwater tidal Potomac River, 1983-96.

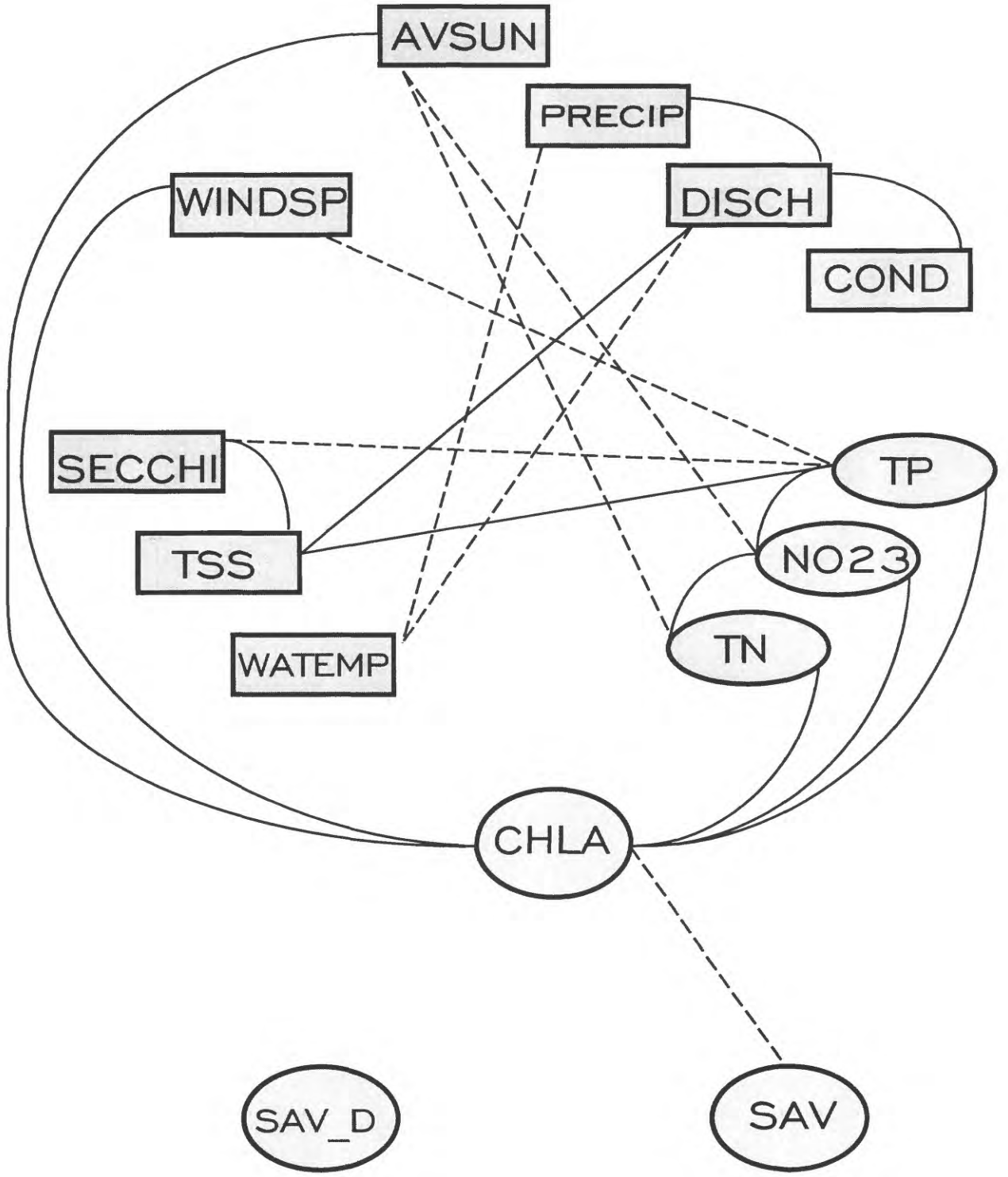


Figure 4. Significant growing season correlations for station XEA6596 (IH) in the freshwater tidal Potomac River, 1983-96.

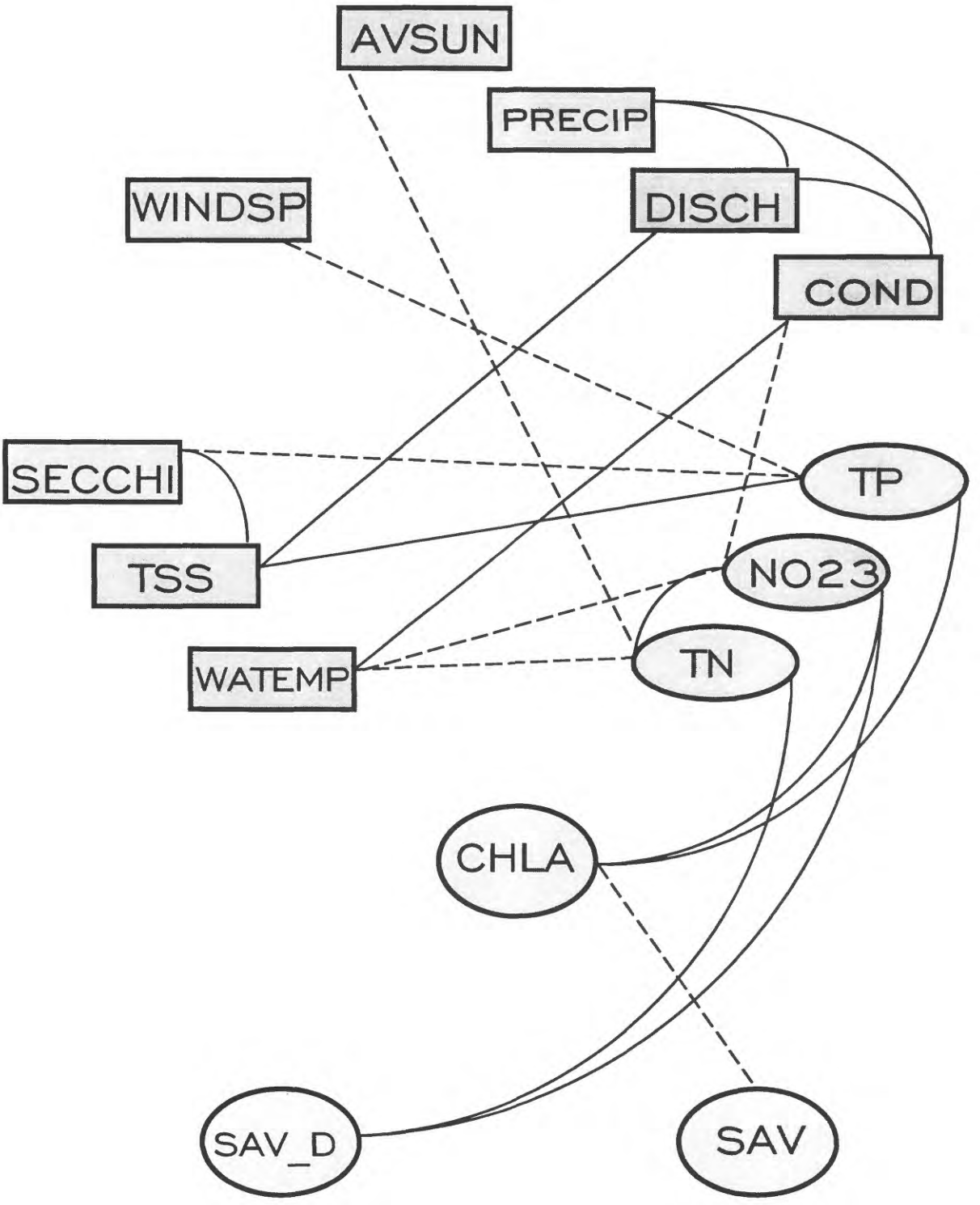


Figure 5. Significant growing season correlations for station XEA1840 (QN) in the freshwater tidal Potomac River, 1983-96.

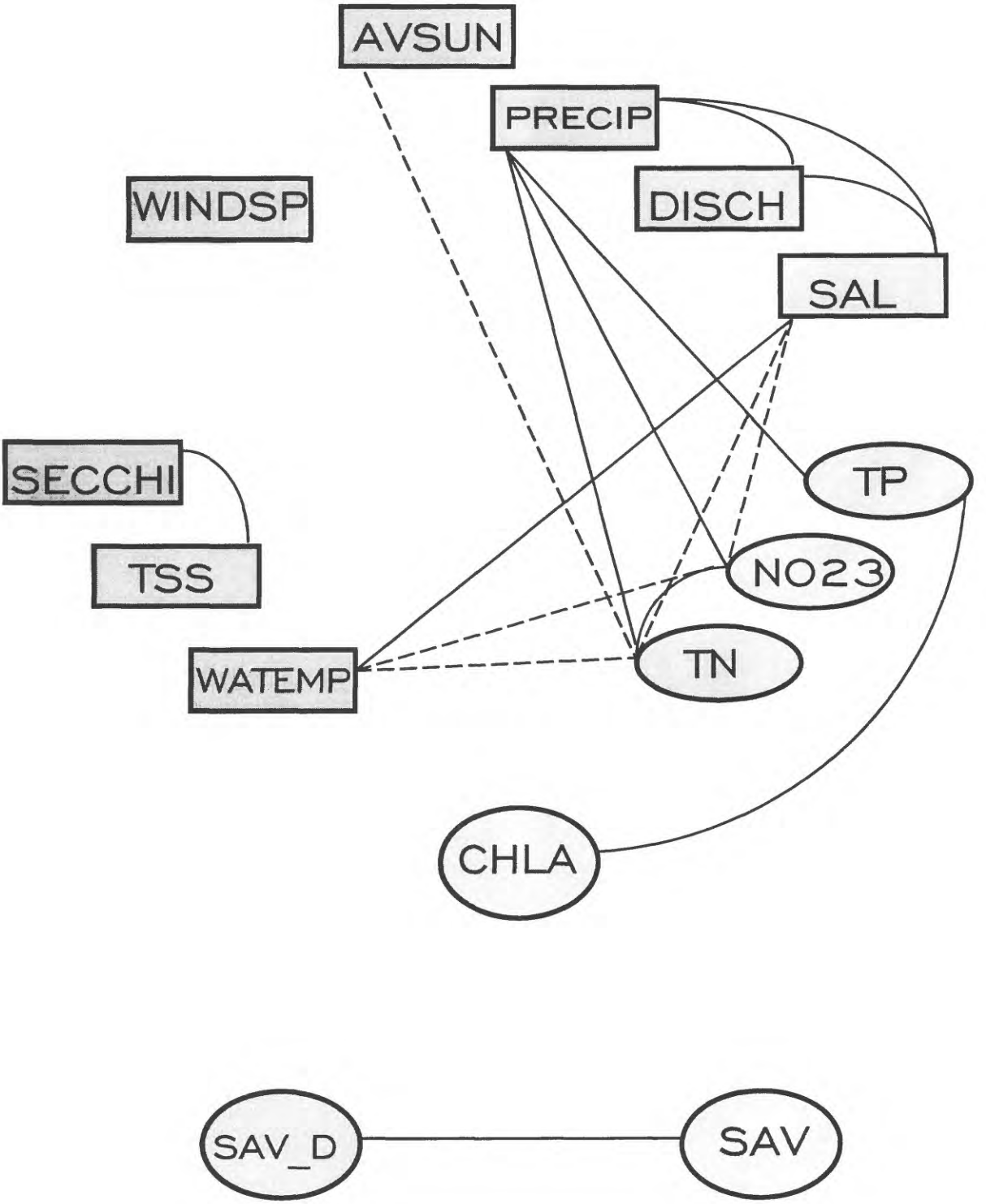


Figure 6. Significant growing season correlations for station XDA4238 (DP) in the oligohaline Potomac Estuary, 1983-96.

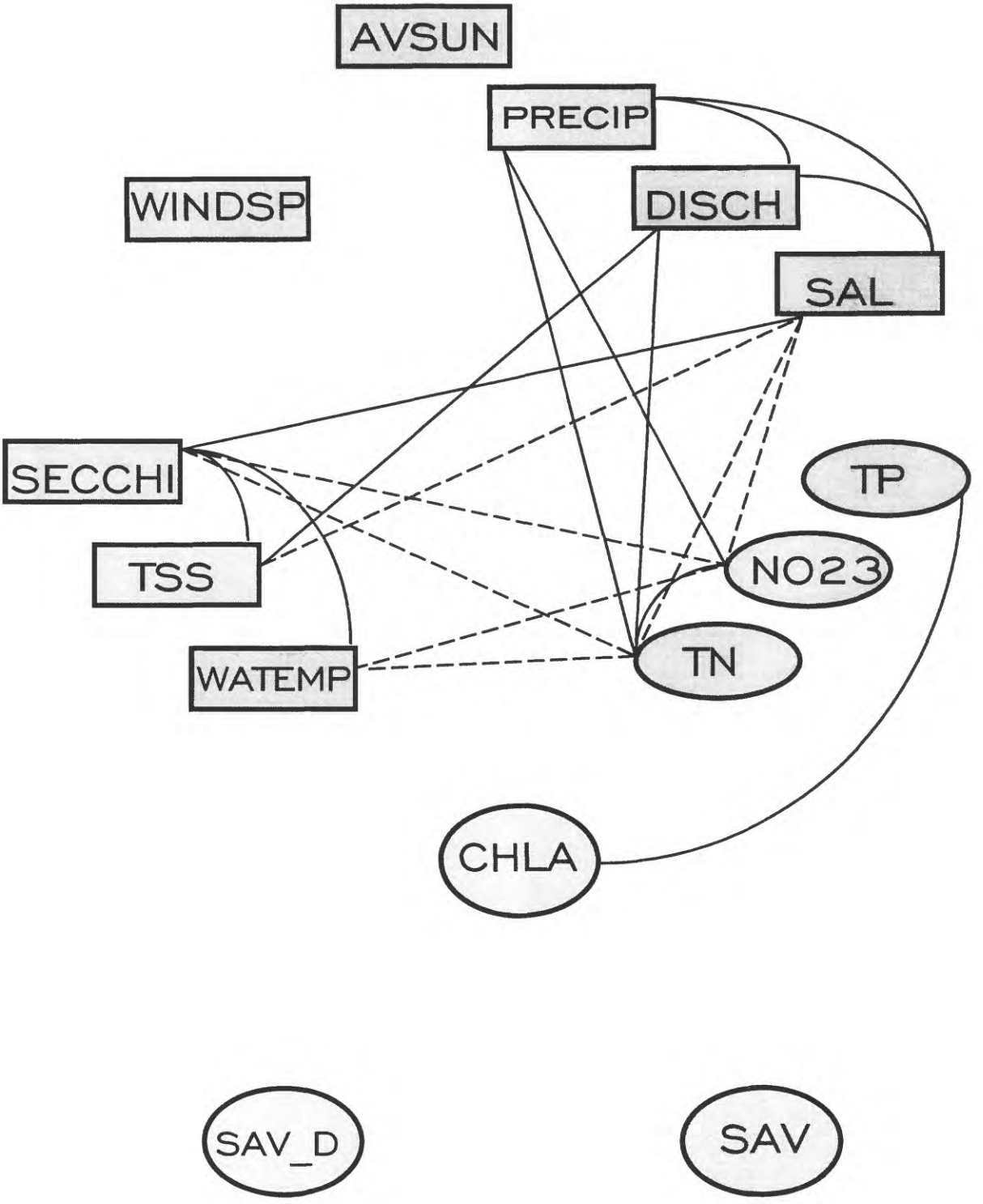


Figure 7. Significant growing season correlations for station XDA1177 (MP) in the oligohaline Potomac Estuary, 1983-96.

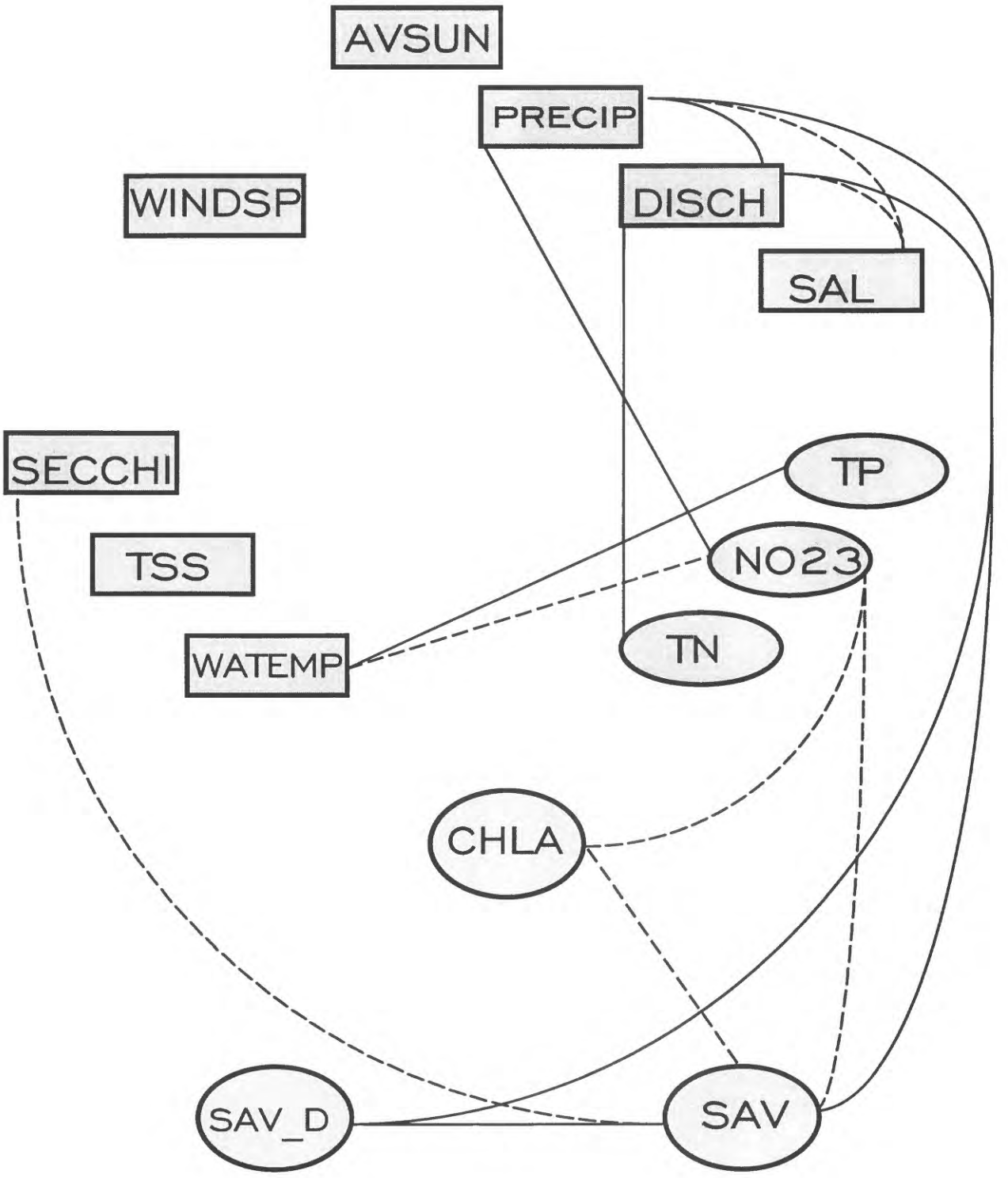


Figure 8. Significant growing season correlations for station XDB3321 (NY) in the oligohaline Potomac Estuary, 1983-90.

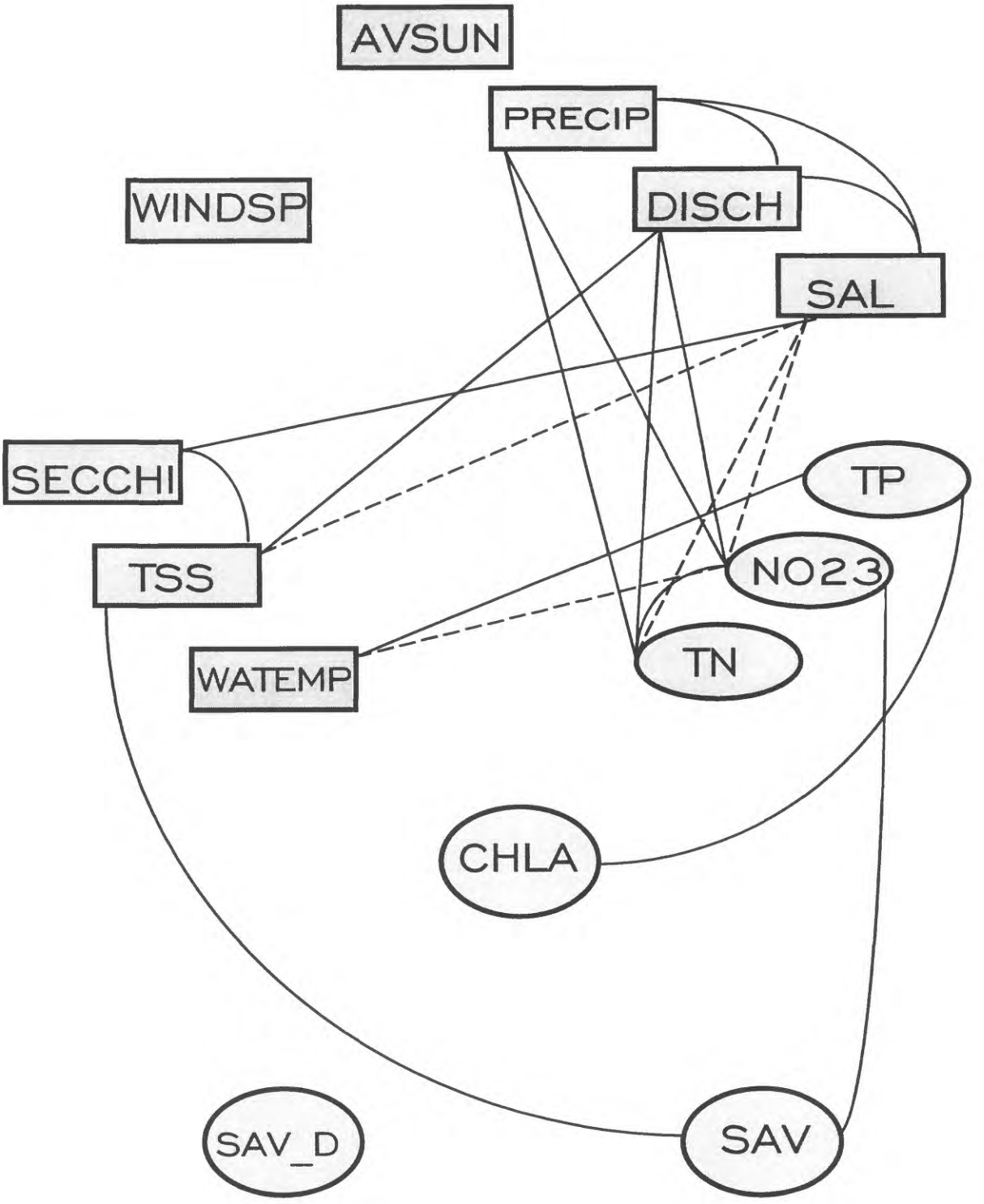
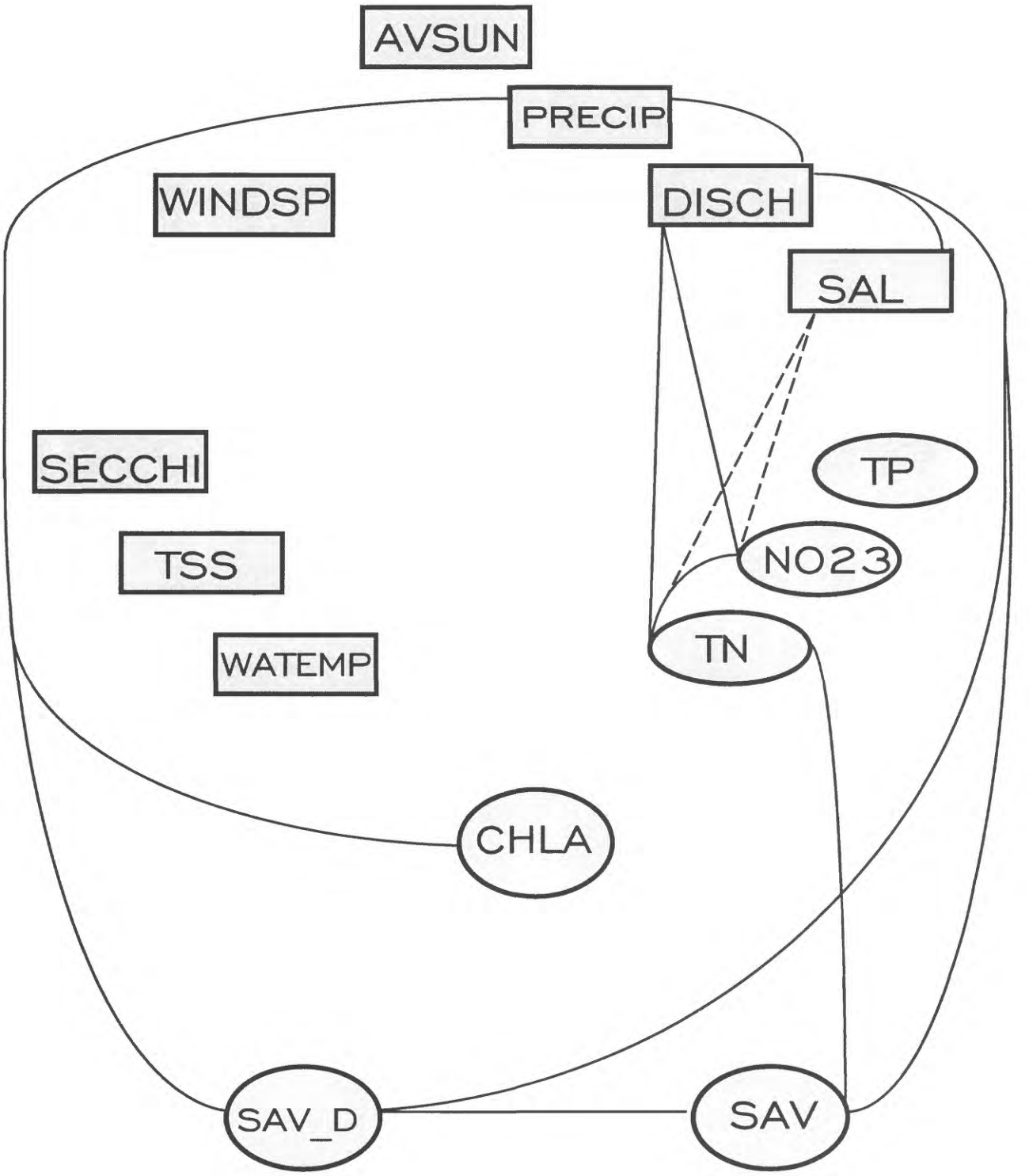


Figure 9. Significant growing season correlations for station XDC1706 (301B) in the mesohaline Potomac Estuary, 1983-96.



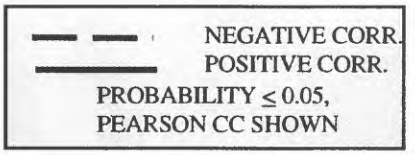


Figure 10. Significant growing season correlations for station MLE2.2 (RP) in the mesohaline Potomac Estuary, 1983-96.

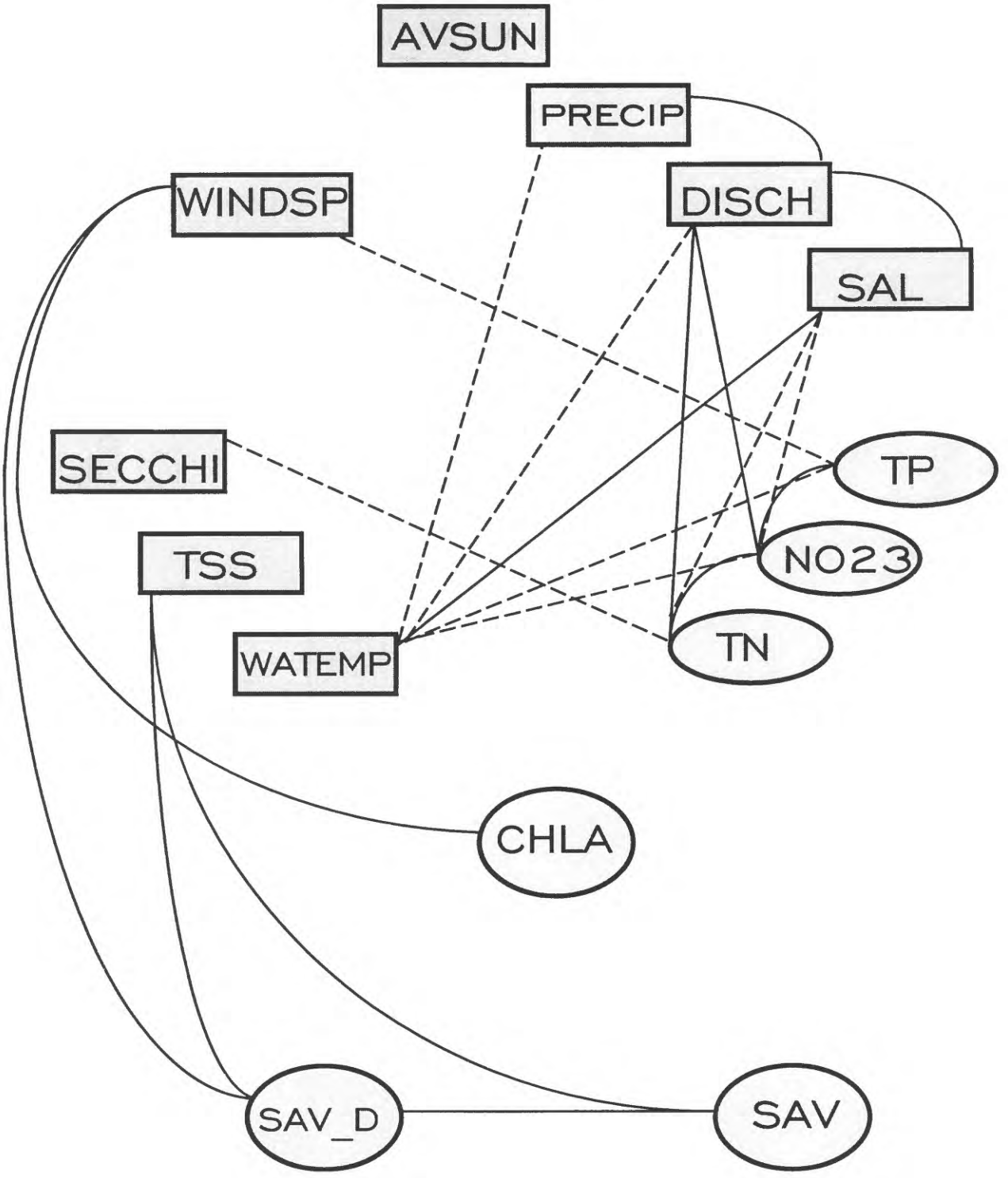
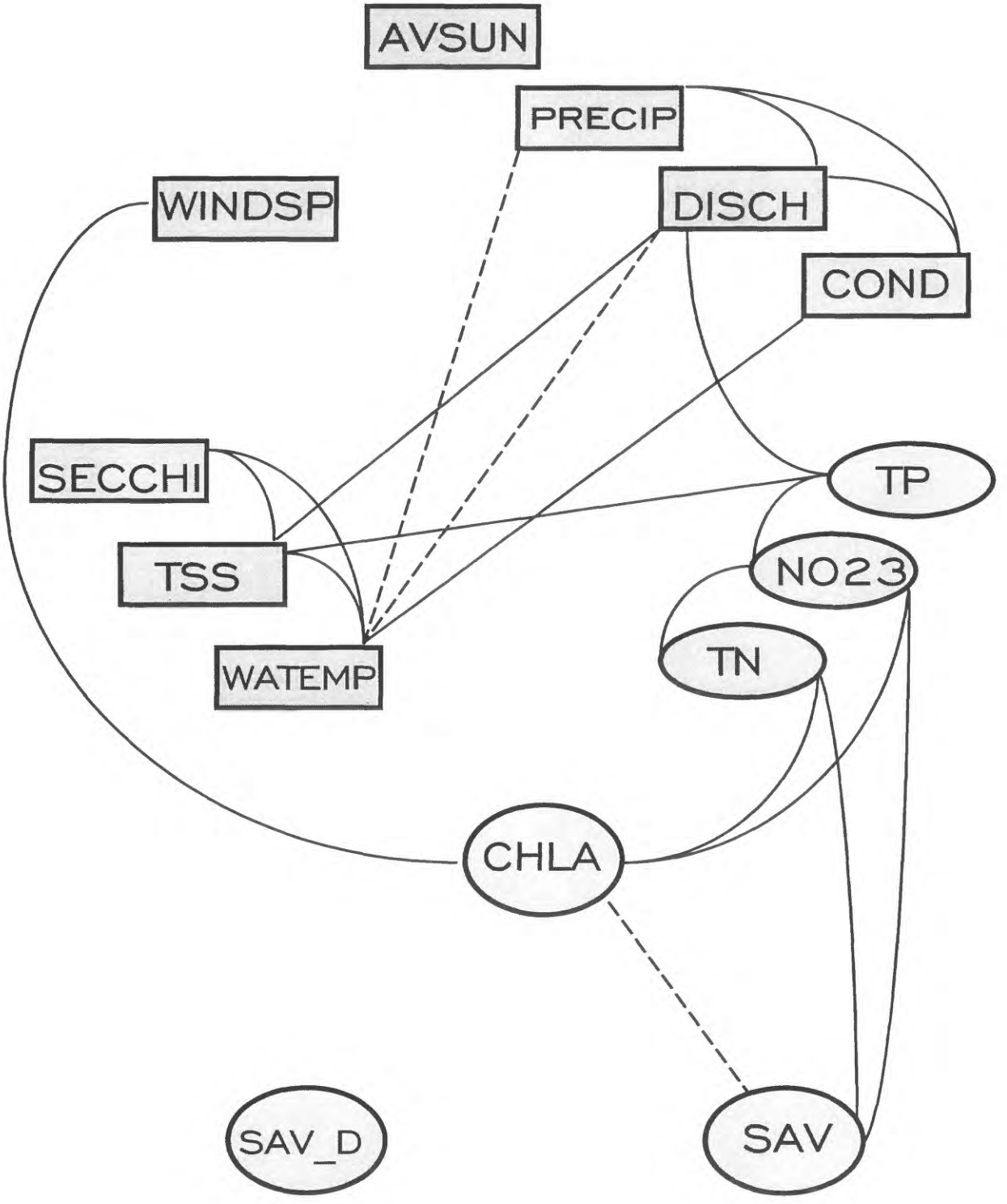


Figure 11. Significant growing season correlations for station MLE2.3 (PL) in the mesohaline Potomac Estuary, 1983-96.



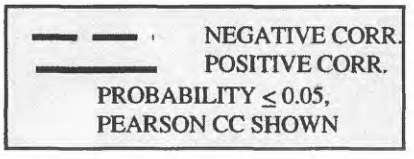


Figure 12. Significant growing season correlations for segment TF2, the freshwater tidal Potomac River, 1983-96.

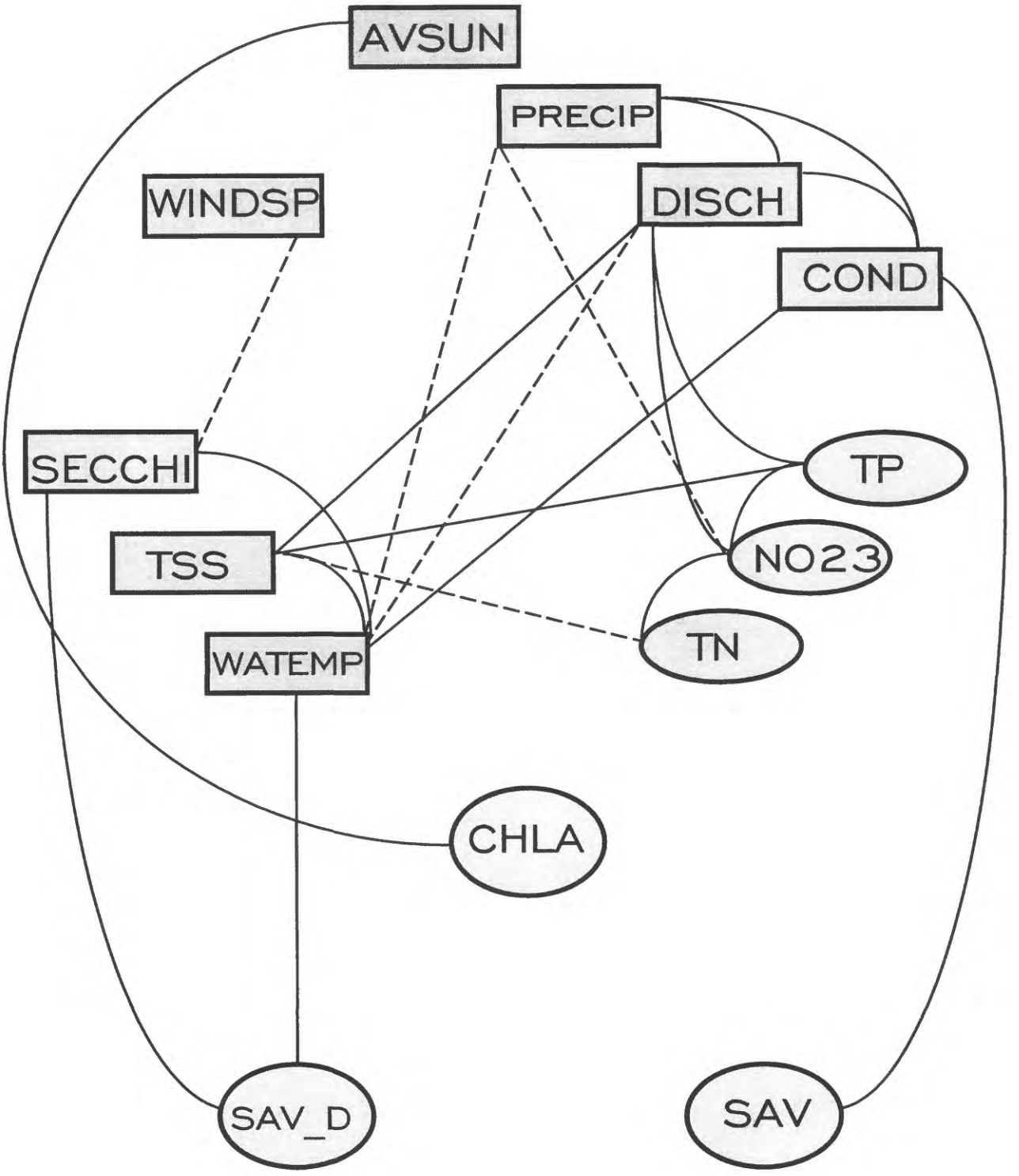


Figure 13. Significant growing season correlations for segment UTR in the freshwater tidal Potomac River, 1983-96.

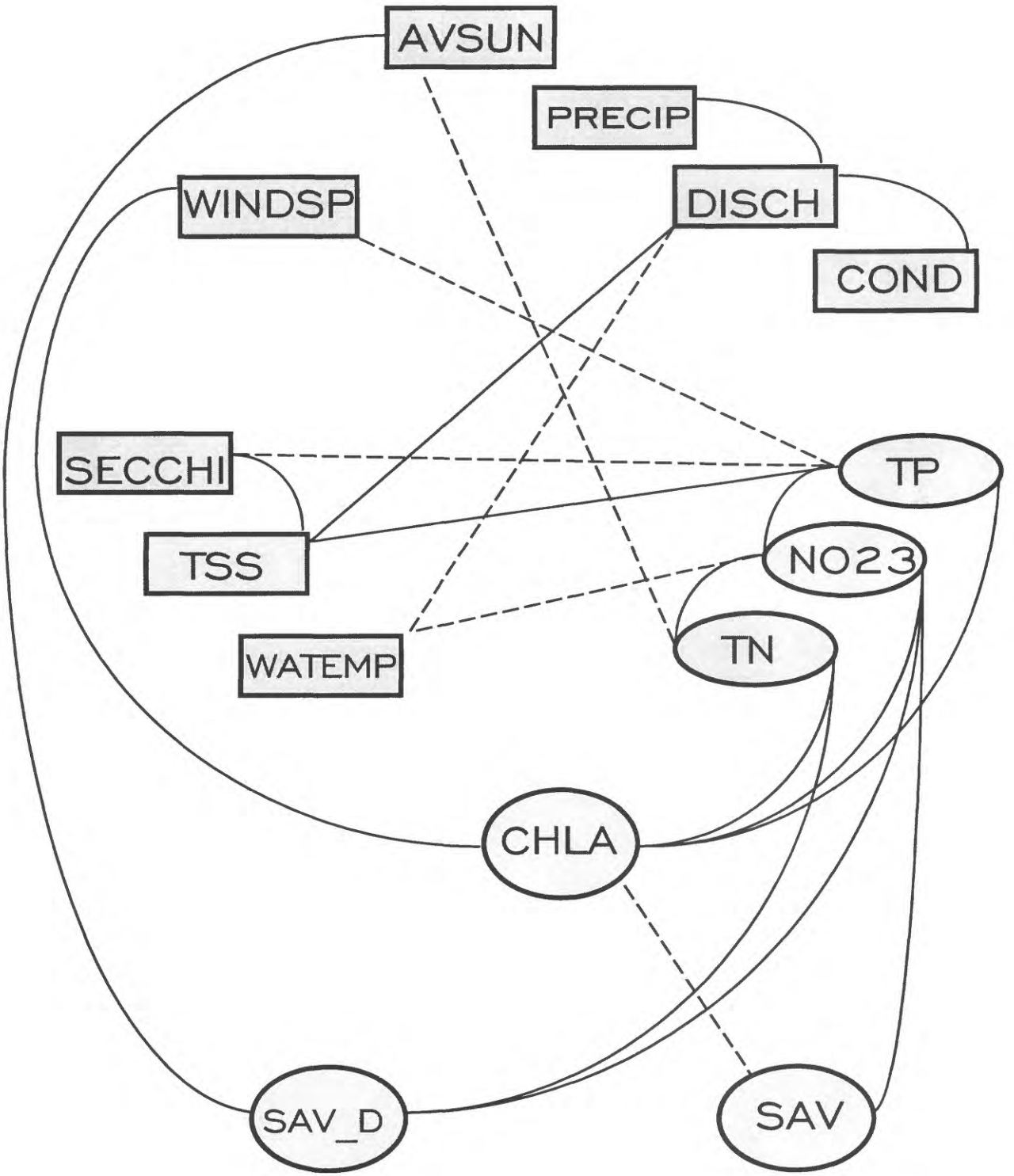
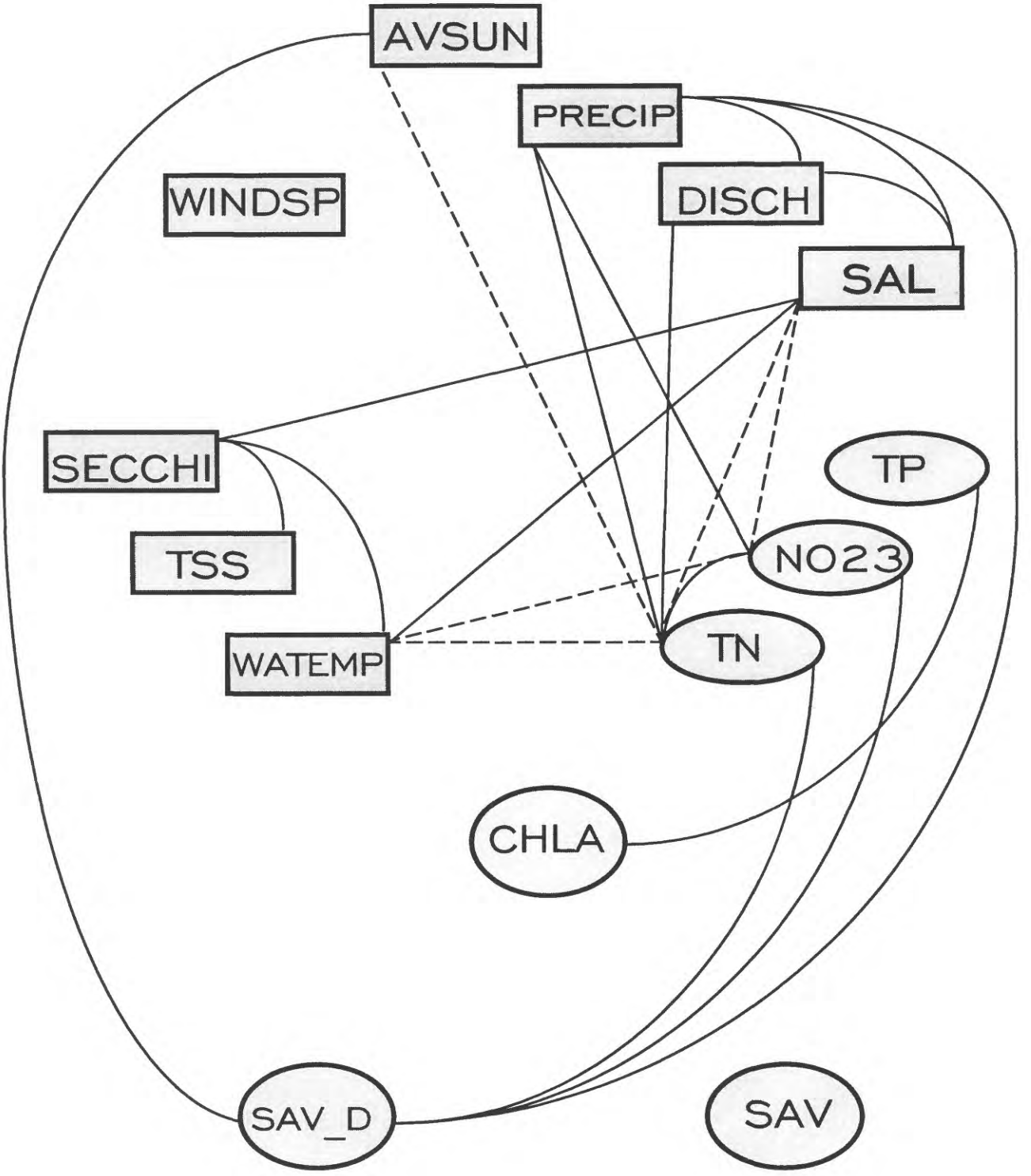


Figure 14. Significant growing season correlations for segment LTR the freshwater tidal Potomac River, 1983-96.



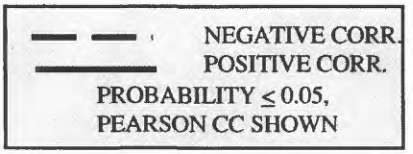


Figure 15. Significant growing season correlations for segment POTOH, the oligohaline Potomac Estuary, 1983-96.

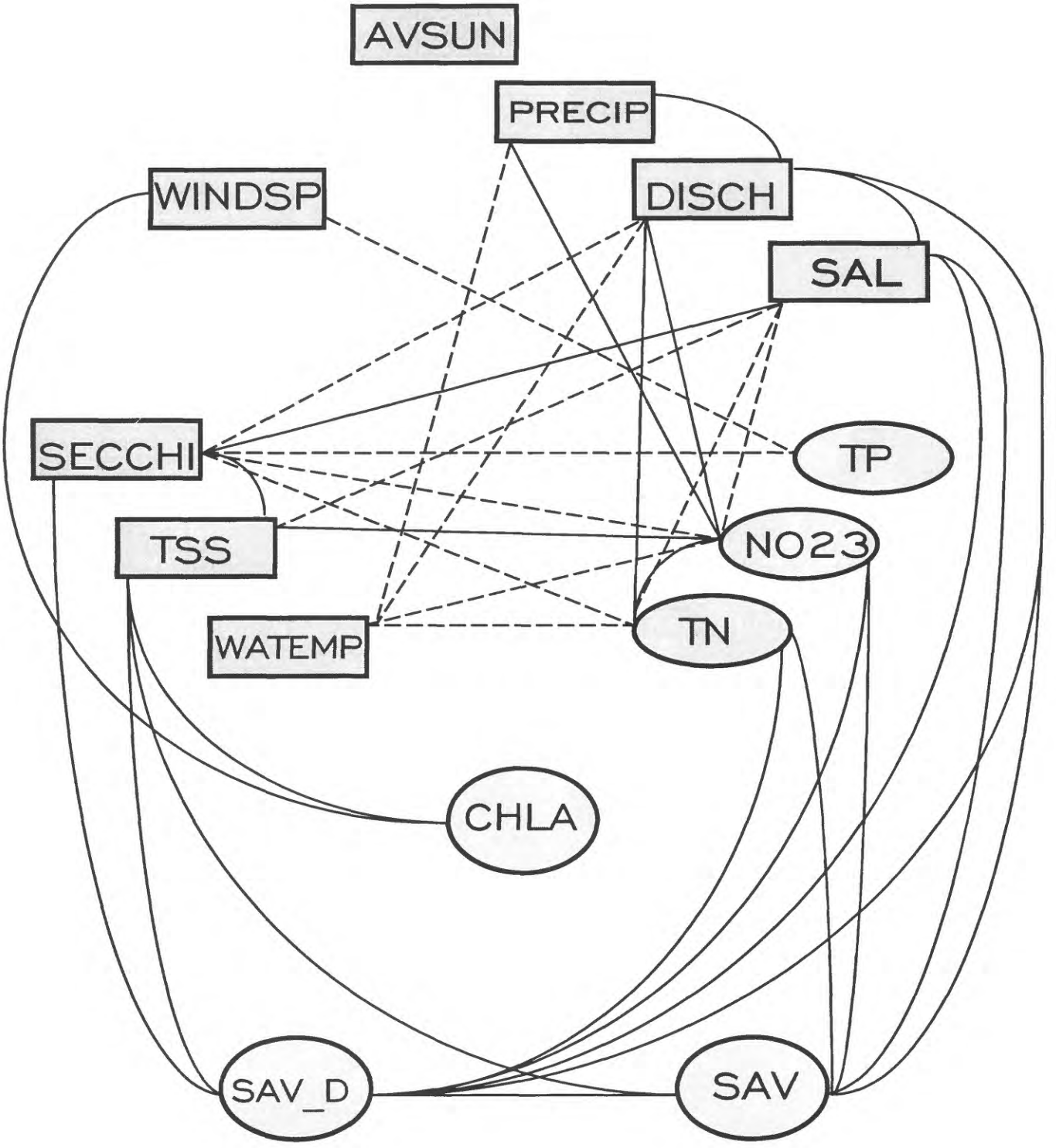


Figure 16. Significant growing season correlations for segment POTMH, the mesohaline Potomac Estuary, 1983-96.

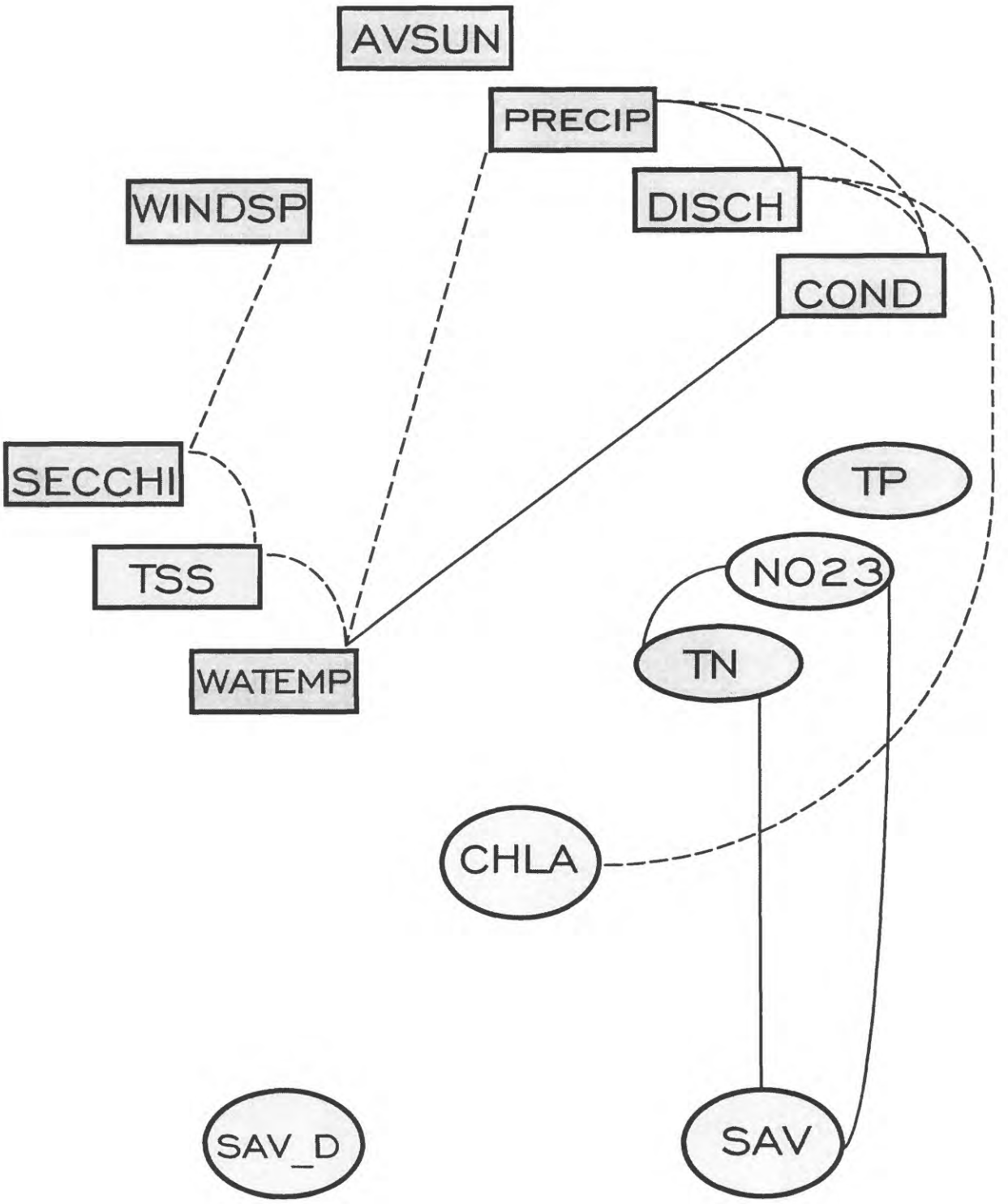


Figure 17. Significant spring correlations for segment TF2 in the freshwater Potomac River, 1983-96.

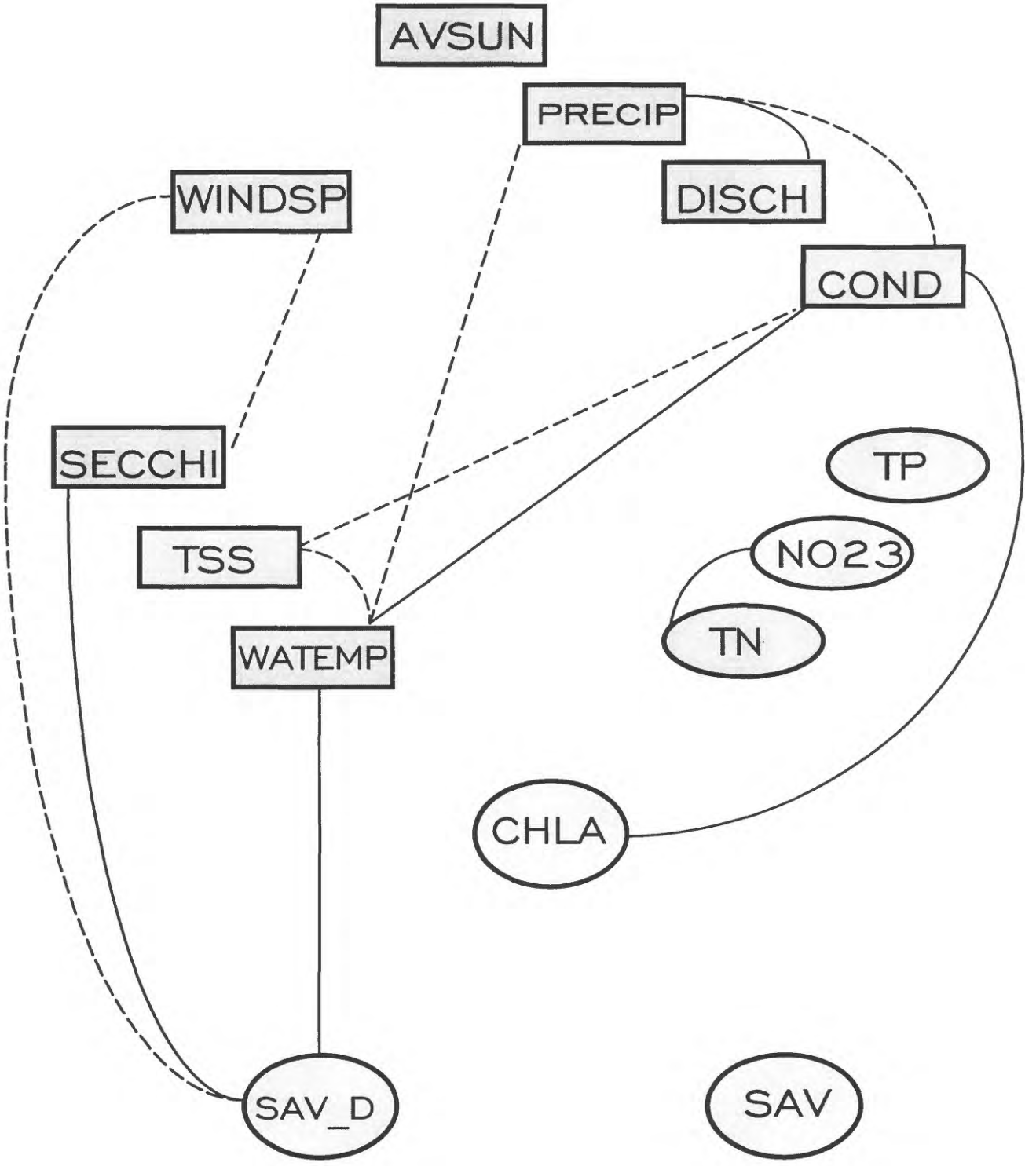


Figure 18. Significant spring correlations for segment UTR in the freshwater Potomac River, 1983-96.

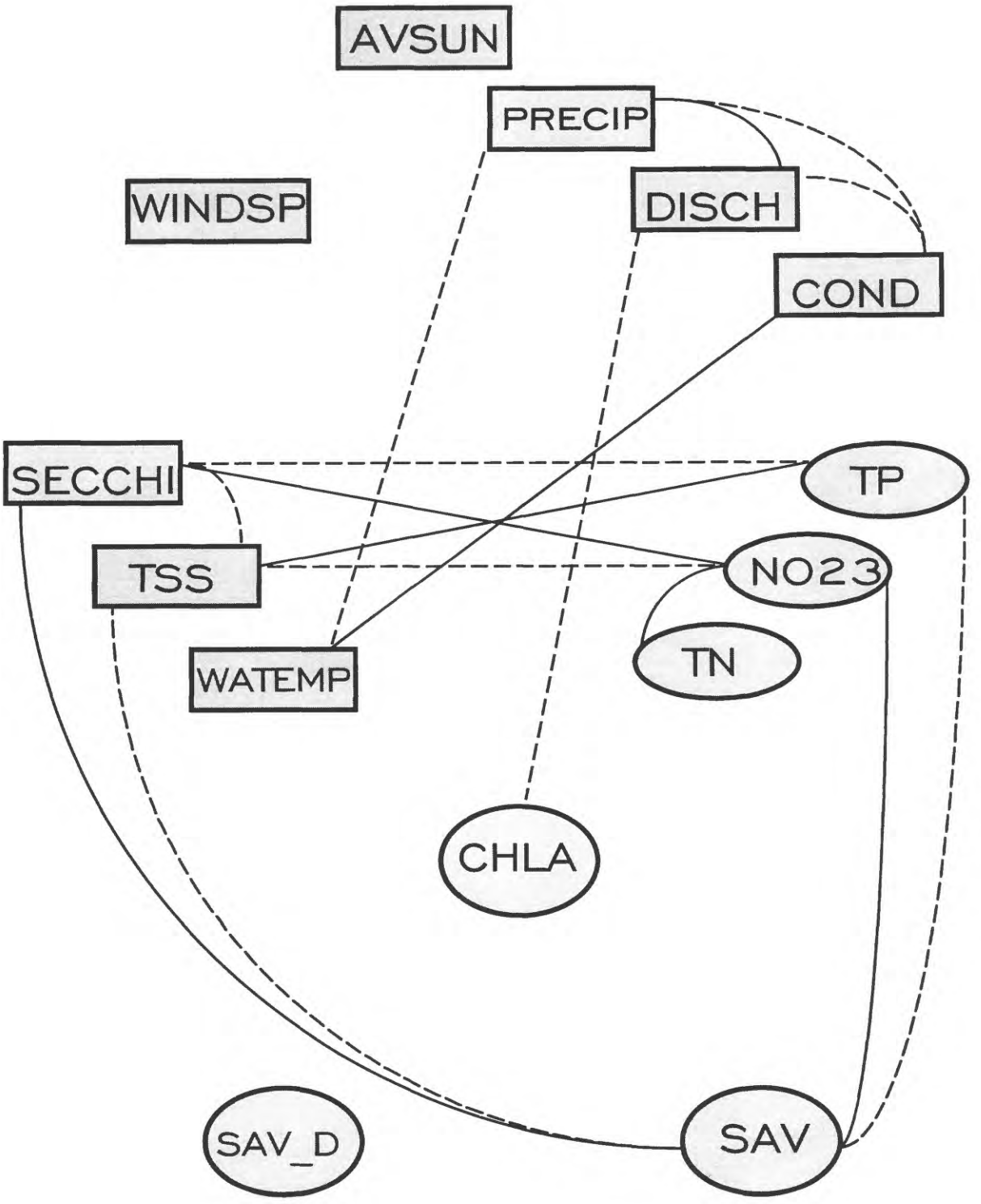


Figure 19. Significant spring correlations for segment LTR in the freshwater Potomac River, 1983-96.

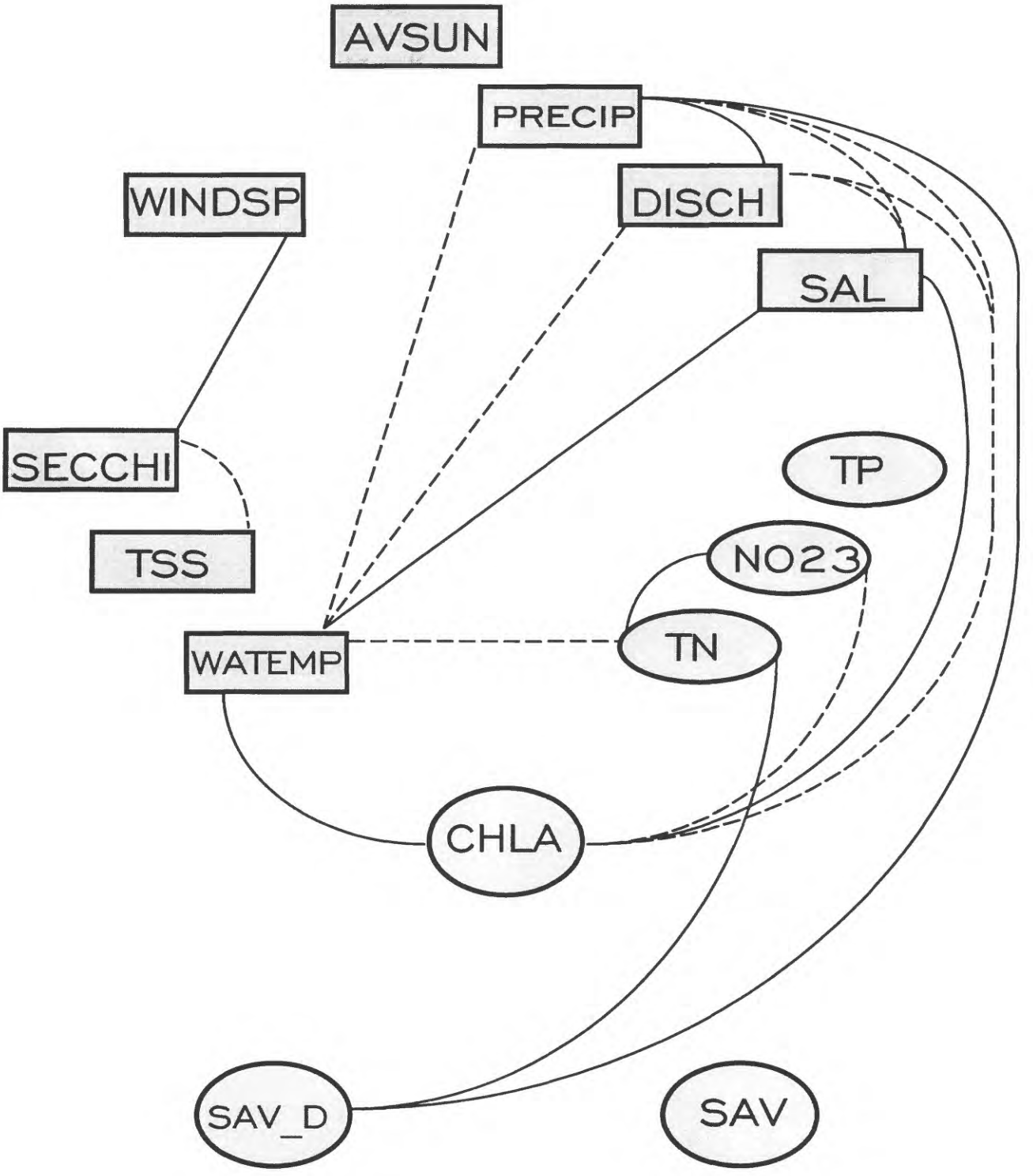
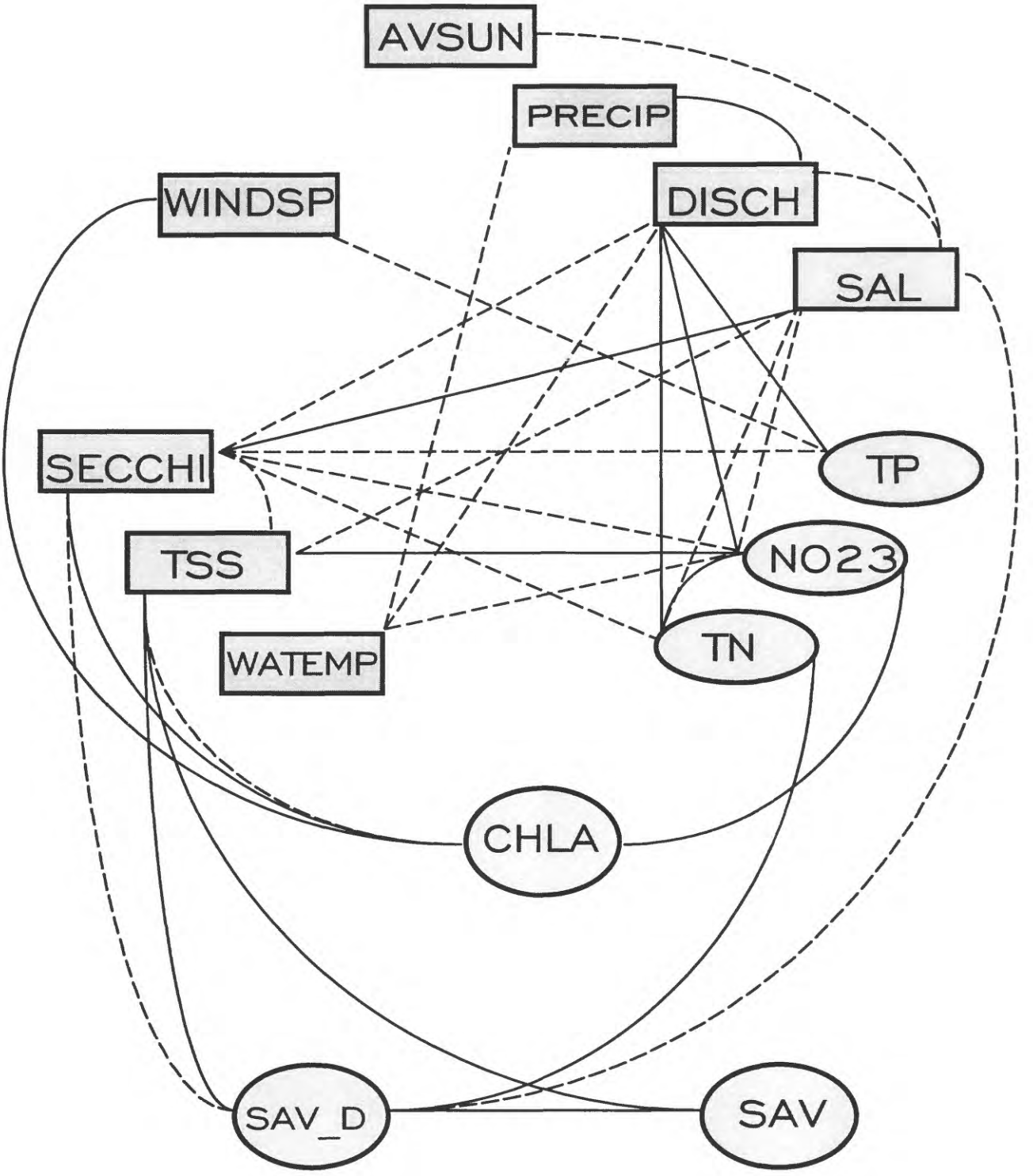


Figure 20. Significant spring correlations for segment POTOH in the oligohaline Potomac Estuary, 1983-96.



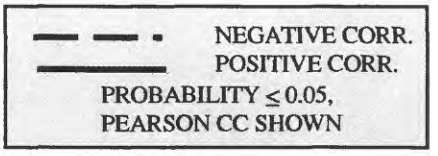


Figure 21. Significant spring correlations for segment POTMH in the mesohaline Potomac Estuary, 1983-96.

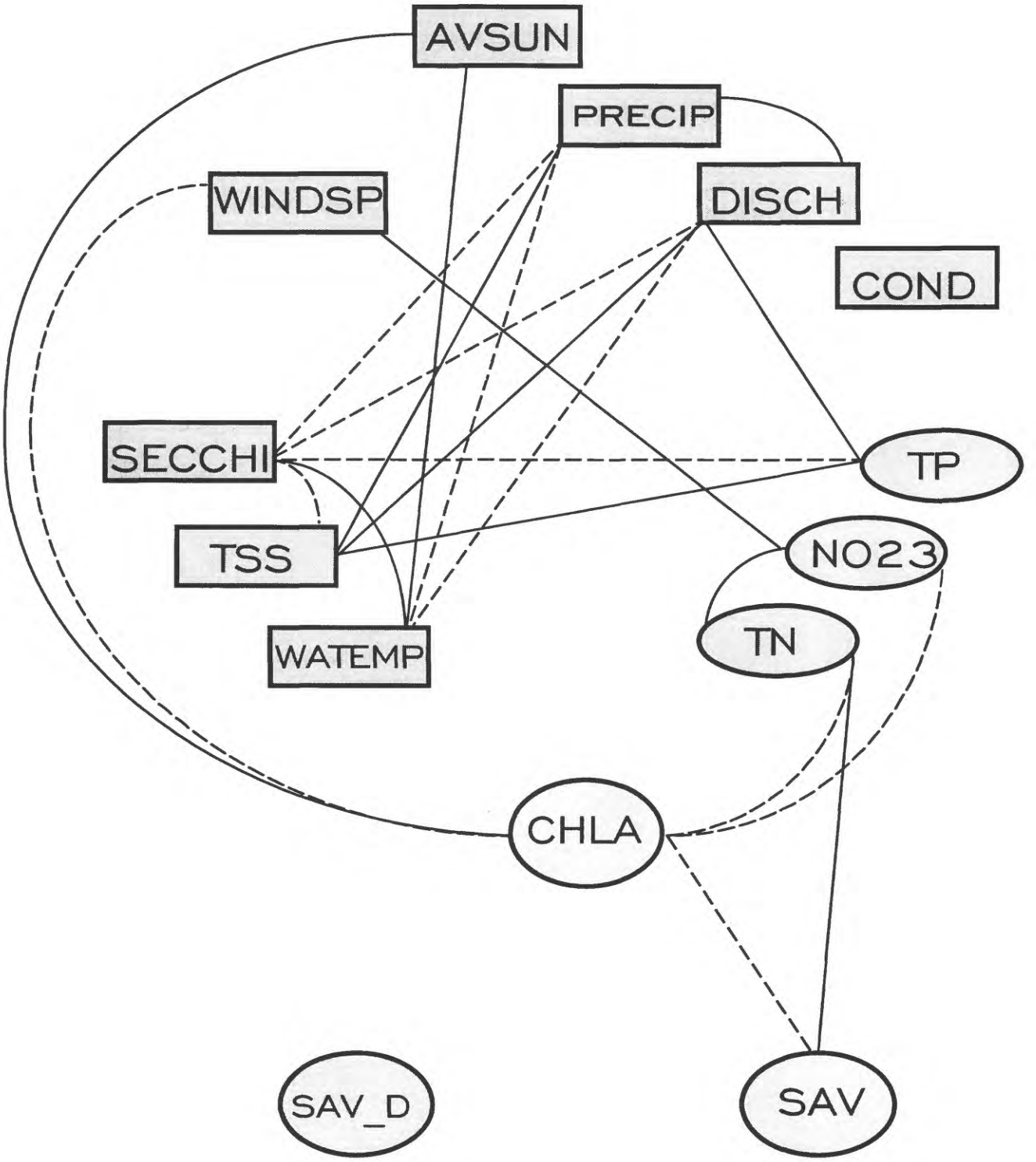


Figure 22. Significant summer correlations for segment TF2 in the freshwater Potomac River, 1983-96.

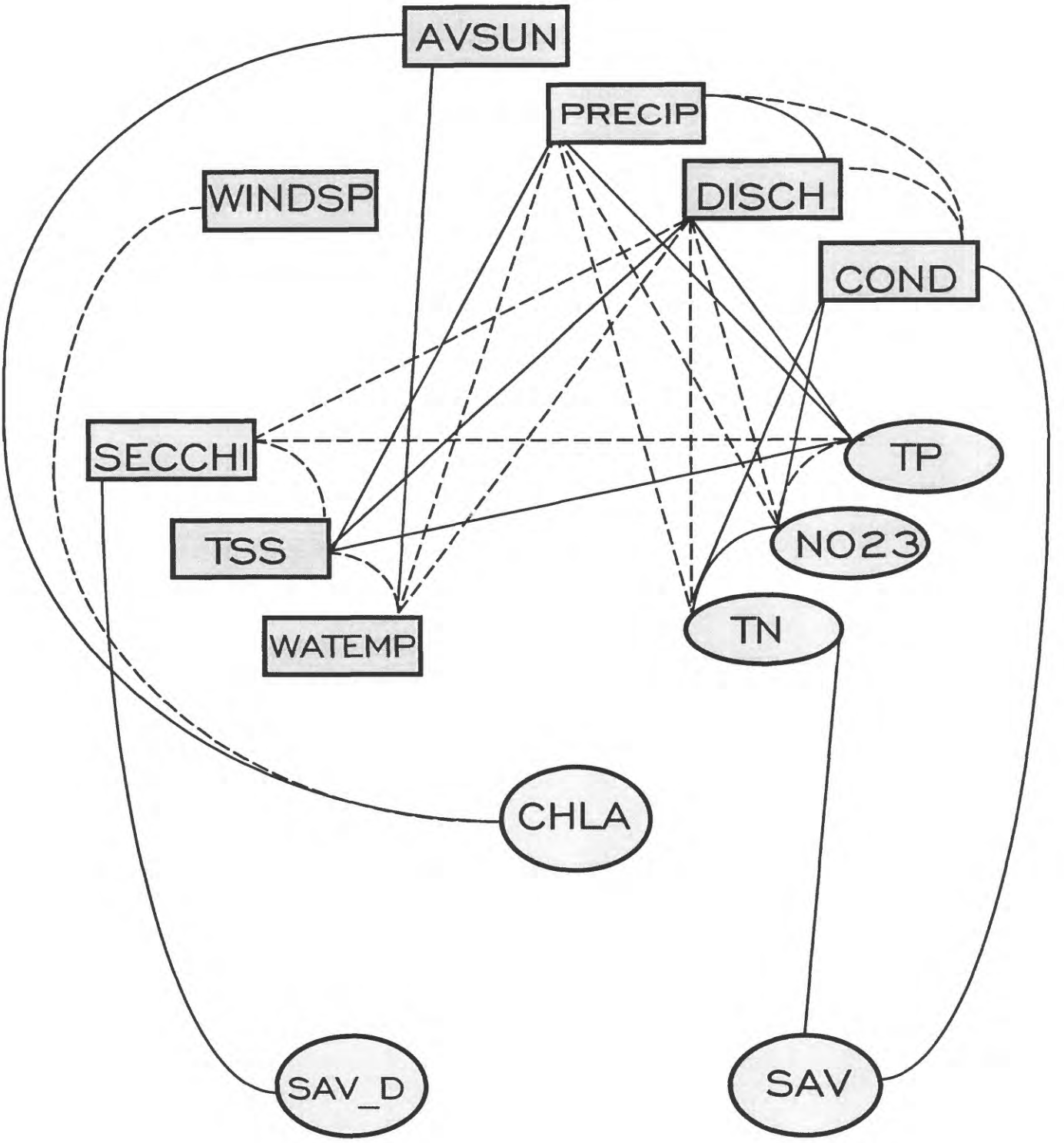
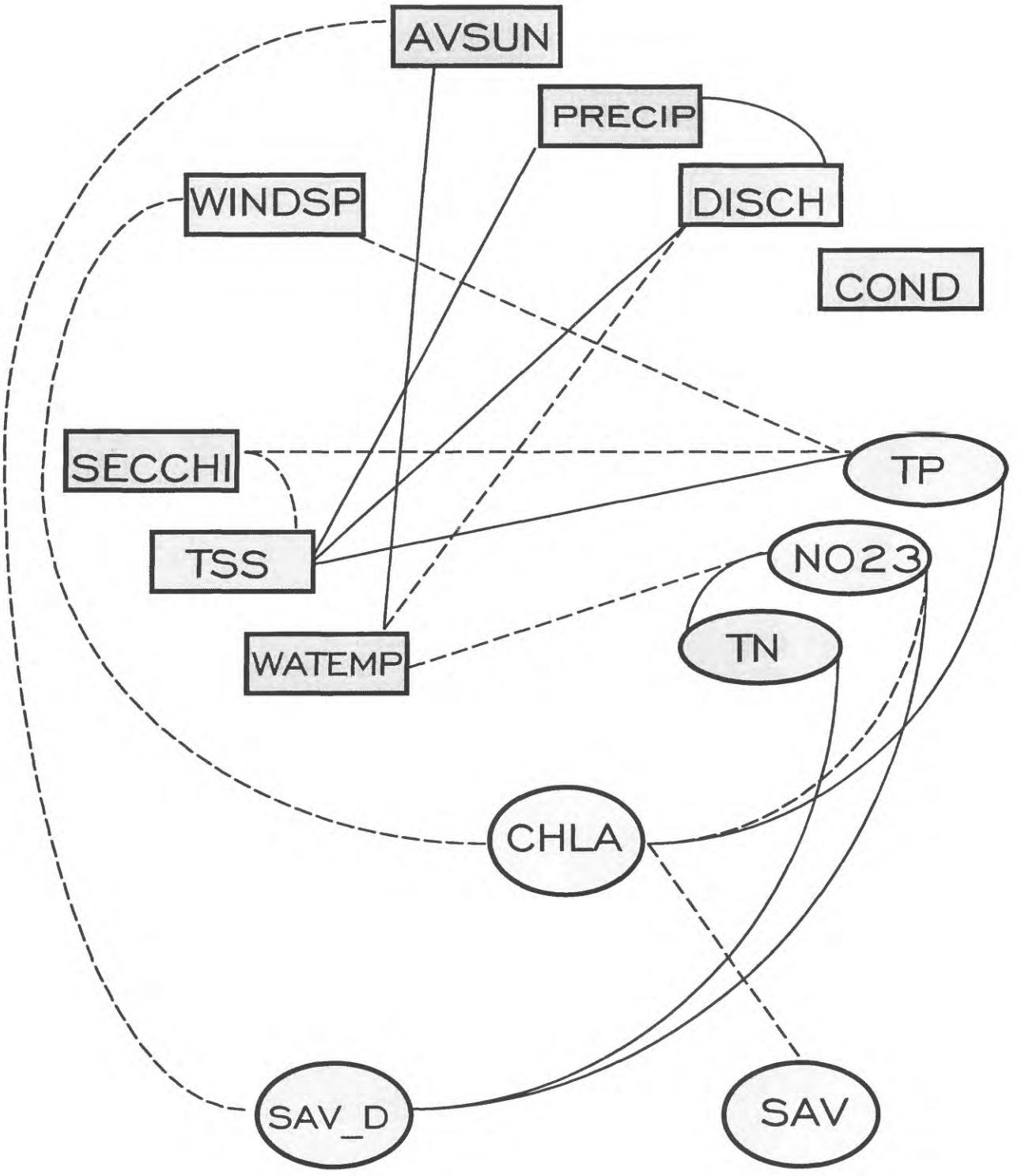


Figure 23. Significant summer correlations for segment UTR in the freshwater Potomac River, 1983-96.



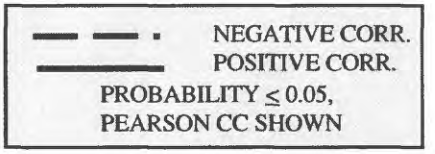


Figure 24. Significant summer correlations for segment LTR in the freshwater Potomac River, 1983-96.

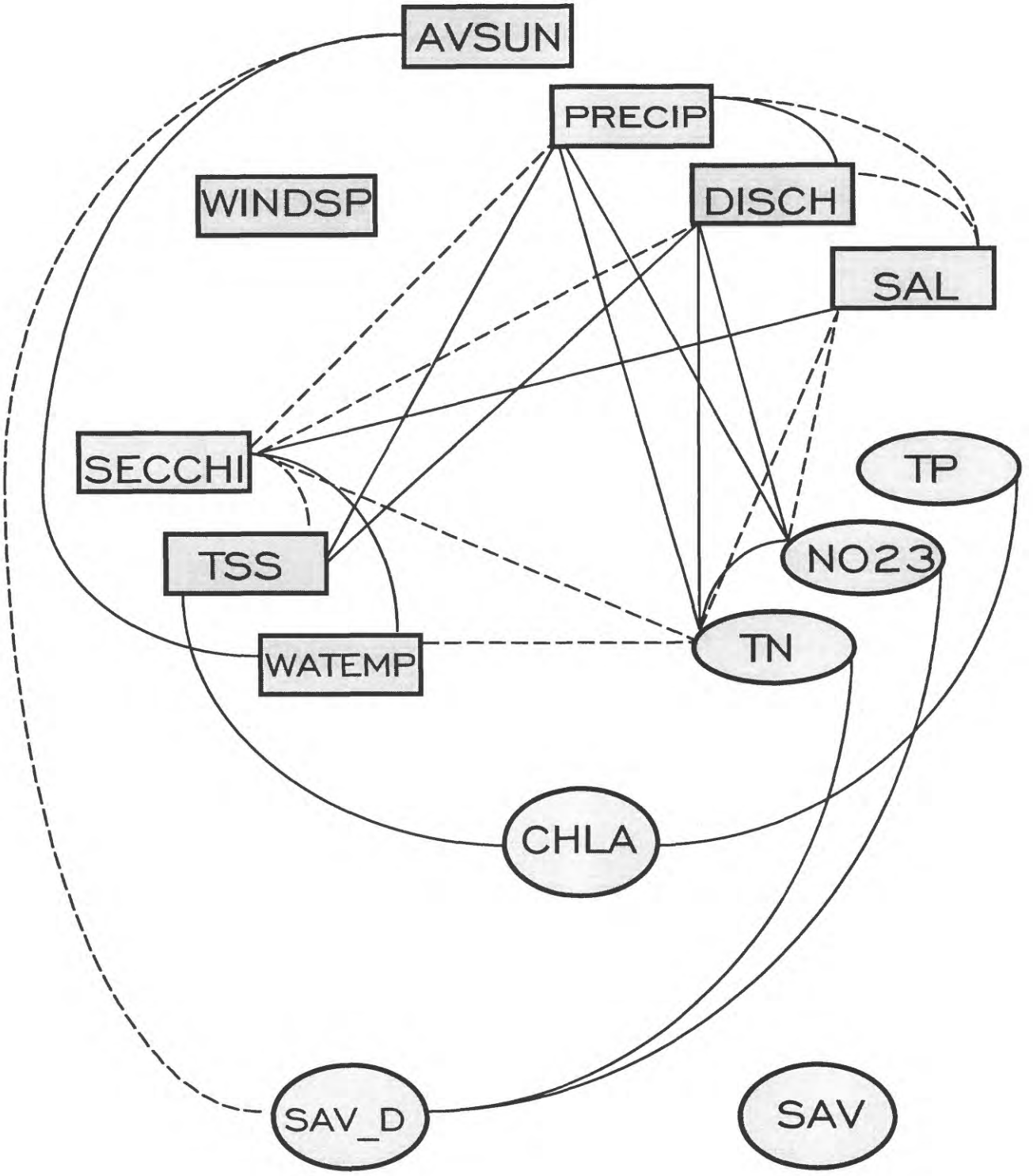


Figure 25. Significant summer correlations for segment POTOH in the oligohaline Potomac Estuary, 1983-96.

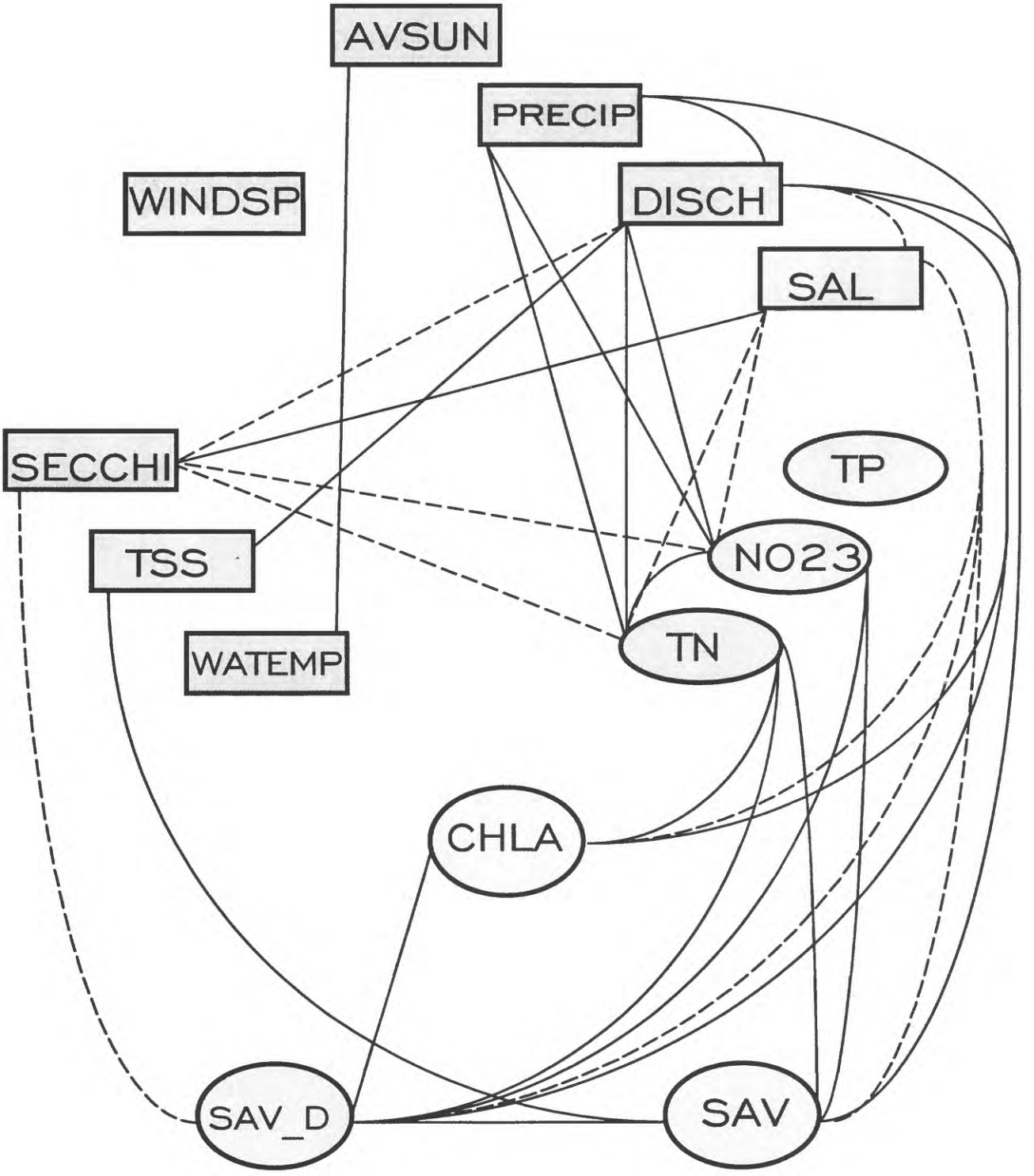


Figure 26. Significant summer correlations for segment POTMH in the mesohaline Potomac Estuary, 1983-96.