

**Revised Procedures  
for Calculating Regional  
Average Water Properties  
for Northeast Fisheries  
Science Center Cruises**

by

**David G. Mountain, Maureen H. Taylor,  
and Cristina Bascuñán**

April 2004

## Recent Issues in This Series

- 03-08 **Northeast Fisheries Science Center Publications, Reports, and Abstracts for Calendar Year 2002.** By L. Garner and J.A. Gibson. July 2003.
- 03-09 **Stock Assessment of Summer Flounder for 2003.** By M. Terceiro. August 2003.
- 03-10 **Comparison of Invertebrate Abundances in Four Bays of the Northeastern United States: Two Bays with Sparse Quahogs and Two Bays with Abundant Quahogs.** By C.L. MacKenzie, Jr. August 2003.
- 03-11 **Accuracy Enhancement of Microscope Enumeration of Picoplankter *Aureococcus anophagefferens*.** By J.B. Mahoney, D. Jeffress, J. Bredemeyer, and K. Wendling. August 2003.
- 03-12 **A Taxonomy of World Whaling: Operations, Eras, and Data Sources.** By R.R. Reeves and T.D. Smith. August 2003.
- 03-13 **Distribution of the Brown Tide Picoplankter *Aureococcus anophagefferens* in Western New York Bight Coastal Waters.** By J.B. Mahoney, D. Jeffress, C. Zetlin, P.S. Olsen, H. Grebe, and J. Brooks. August 2003.
- 03-14 **Assessment of the Gulf of Maine and Georges Bank Witch Flounder Stock for 2003.** By S.E. Wigley, J.K.T. Brodziak, and L. Col. September 2003.
- 03-15 **Estimates of the Number of Vessels and Quantity of Gear Deployed in the Lobster and Gillnet Fisheries in 1999 off the Northeast Coast of the United States.** By K.D. Bisack. September 2003.
- 03-16 **Report of the 37th Northeast Regional Stock Assessment Workshop (37th SAW): Stock Assessment Review Committee (SARC) Consensus Summary of Assessments.** [By Northeast Regional Stock Assessment Workshop No. 37.] September 2003.
- 03-17 **Report of the 37th Northeast Regional Stock Assessment Workshop (37th SAW): Advisory Report.** [By Northeast Regional Stock Assessment Workshop No. 37.] September 2003.
- 03-18 **Estimates of Marine Mammal Bycatch in the Northeast (New England) Multispecies Sink Gillnet Fishery in 1996.** By K.D. Bisack. September 2003.
- 04-01 **Current Fisheries Research and Future Ecosystems Science in the Northeast Center: Collected Abstracts of the Northeast Fisheries Science Center's Eighth Science Symposium, Atlantic City, New Jersey, February 3-5, 2004.** By D.L. Johnson, T.W. Finneran, B.A. Phelan, A.D. Deshpande, C.L. Noonan, S. Fromm, and D.M. Dowds. January 2004.
- 04-02 **Salmon PVA: A Population Viability Analysis Model for Atlantic Salmon in the Maine Distinct Population Segment.** By C.M. Legault. January 2004.
- 04-03 **Report of the 38th Northeast Regional Stock Assessment Workshop (38th SAW): Stock Assessment Review Committee (SARC) Consensus Summary of Assessments.** [By Northeast Regional Stock Assessment Workshop No. 38.] January 2004.
- 04-04 **Report of the 38th Northeast Regional Stock Assessment Workshop (38th SAW): Advisory Report.** [By Northeast Regional Stock Assessment Workshop No. 38.] January 2004.
- 04-05 **Proceedings of the Seventh Meeting of the Transboundary Resources Assessment Committee (TRAC), Woods Hole, Massachusetts, May 27-29, 2003.** By W.J. Overholtz, TRAC chairman. [A report of Transboundary Resources Assessment Committee Meeting No. 7]. February 2004.
- 04-06 **Stock Assessment of the Gulf of Maine - Georges Bank Atlantic Herring Complex, 2003.** By W.J. Overholtz, L.D. Jacobson, G.D. Melvin, M. Cieri, M. Power, D. Libby, and K. Clark. February 2004.
- 04-07 **Identification and Description of the Common Sponges of Jeffreys Ledge as an Aid in Field Operations.** By K. McCarthy. April 2004.

**Revised Procedures  
for Calculating Regional Average Water Properties  
for Northeast Fisheries Science Center Cruises**

by

**David G. Mountain, Maureen H. Taylor, and Cristina Bascuñán**

*Postal Address: National Marine Fisheries Serv., Woods Hole Lab., 166 Water St., Woods Hole, MA 02543  
E-mail Addresses: David.Mountain@noaa.gov; Maureen.Taylor@noaa.gov; Cristina.Bascunan@noaa.gov*

**U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northeast Fisheries Science Center  
Woods Hole, Massachusetts**

**April 2004**

## Northeast Fisheries Science Center Reference Documents

**This series** is a secondary scientific series designed to assure the long-term documentation and to enable the timely transmission of research results by Center and/or non-Center researchers, where such results bear upon the research mission of the Center (see the outside back cover for the mission statement). These documents receive internal scientific review but no technical or copy editing. The National Marine Fisheries Service does not endorse any proprietary material, process, or product mentioned in these documents.

All documents issued in this series since April 2001, and several documents issued prior to that date, have been copublished in both paper and electronic versions. To access the electronic version of a document in this series, go to <http://www.nefsc.noaa.gov/nefsc/publications/series/crdlist.htm>. The electronic version will be available in PDF format to permit printing of a paper copy directly from the Internet. If you do not have Internet access, or if a desired document is one of the pre-April 2001 documents available only in the paper version, you can obtain a paper copy by contacting the senior Center author of the desired document. Refer to the title page of the desired document for the senior Center author's name and mailing address. If there is no Center author, or if there is corporate (*i.e.*, non-individualized) authorship, then contact the Center's Woods Hole Laboratory Library (166 Water St., Woods Hole, MA 02543-1026).

**This document's** publication history is as follows: manuscript submitted for review--March 8, 2004; manuscript accepted through technical review--April 19, 2004; manuscript accepted through policy review--April 29, 2004; and camera-ready copy submitted for publication--April 30, 2004. This document may be cited as:

Mountain, D.G.; Taylor, M.H.; Bascuñán, C. 2004. Revised procedures for calculating regional average water properties for Northeast Fisheries Science Center cruises. *Northeast Fish. Sci. Cent. Ref. Doc.* 04-08; 53 p. Available from: National Marine Fisheries Service, 166 Water St., Woods Hole, MA 02543.

## Table of Contents

Introduction.....	1
Changes in the Reference Annual Cycles .....	1
Changes in the Calculation of Anomalies .....	2
Changes in the Calculation of Regional Average Values .....	2
Data Tables.....	2
References .....	5

## Figures

Figure 1. Regions of the northeast continental shelf.....	6
---	---

## Tables

Table 1. Coefficients for the annual cycle of surface temperature for MARMAP standard station locations .....	7
Table 2. Coefficients for the annual cycle of bottom temperature for MARMAP standard station locations .....	10
Table 3. Coefficients for the annual cycle of surface salinity for MARMAP standard station locations .....	13
Table 4. Coefficients for the annual cycle of bottom salinity for MARMAP standard station locations .....	16
Table 5. Average surface and bottom temperature values for the southern Middle Atlantic Bight region.....	19
Table 6. Average surface and bottom temperature values for the northern Middle Atlantic Bight region.....	21
Table 7. Average surface and bottom temperature values for the Georges Bank region .....	24
Table 8. Average surface and bottom temperature values for the western Gulf of Maine region .....	28
Table 9. Average surface and bottom temperature values for the eastern Gulf of Maine region.....	31
Table 10. Average surface and bottom salinity values for the southern Middle Atlantic Bight region .....	34
Table 11. Average surface and bottom salinity values for the northern Middle Atlantic Bight region .....	36
Table 12. Average surface and bottom salinity values for the Georges Bank region .....	39
Table 13. Average surface and bottom salinity values for the western Gulf of Maine region.....	43
Table 14. Average surface and bottom salinity values for the eastern Gulf of Maine region.....	46
Table 15. Spring Bottom Trawl Survey regional temperature values .....	49
Table 16. Fall Bottom Trawl Survey regional temperature values .....	51



## **Introduction**

Temperature and salinity measurements are made routinely on most Northeast Fisheries Science Center (NEFSC) survey and research cruises. The area of coverage extends from Cape Hatteras northeastward to the Gulf of Maine, and from near the coast to just seaward of the shelf break. Since 1991 a report of the water properties has been issued almost every year (e.g., Taylor and Bascuñán, 2003). This report includes regional average values of surface and bottom water temperature and salinity, and of the anomalies of temperature and salinity for five regions of the shelf (Figure 1). The anomalies are determined relative to reference annual cycles derived from data collected during the NEFSC Marine Resources Monitoring and Assessment Program (MARMAP) program. Holzwarth and Mountain (1992) present similar regional values for surface and bottom temperature as measured on the NEFSC spring and fall bottom trawl survey cruises from 1963 to 1990.

The methods used to determine the MARMAP annual cycles are described by Mountain and Holzwarth (1989). The methods used to calculate the anomalies, the regional average values, and the uncertainty in the regional average values are described by Holzwarth and Mountain (1992). This report documents changes that have been made to the reference annual cycles and to the methods used to calculate the regional average values. The revised cycles and methods will be used in the annual summary of water properties beginning with the report for 2003 (Bascuñán and Taylor, 2004). All previously reported regional average values have been recalculated using the revised annual cycles and methods, and are included in this report. In most cases differences between the original and the revised regional values are small ( $< 0.1$  °C or  $< 0.1$  PSU).

## **Changes in the Reference Annual Cycles**

The NEFSC MARMAP program (1977-1987) made observations of plankton and water properties at approximately 160 standard station locations 4-8 times per year. Temperature and salinity measurements were made using water bottles with reversing thermometers. The water samples collected were analyzed for salinity by a laboratory salinometer. During the last year of the program an electronic conductivity/temperature/depth (CTD) instrument was used.

Because the MARMAP measurements were made at fixed locations over a 10 year period, characteristic annual cycles of the surface and bottom temperature and salinity could be determined for each of the locations. The annual cycles were derived by sequentially fitting up to three harmonic cycles (periods of one, one half, and one third year) to the observations at a location (Mountain and Holzwarth, 1989). For each harmonic a significance test was performed to determine if the fit was statistically significant. In some cases no significant harmonic cycle was found and the annual cycle consisted only of the mean of the observations.

In 2002 an ORACLE database was established for NEFSC's hydrographic data. As part of that effort the historic hydrographic data was reviewed for quality before it was entered into the database. This quality control process resulted in some MARMAP data either being changed or deleted from the data set. Because of these changes the annual cycles based on the MARMAP data were recalculated using the data in the ORACLE database. In determining the bottom annual cycles, observations had to be no more than 10m or 10% of the water depth (which ever was greater) from the bottom to be included in

the calculations as representing a bottom value. Generally, only minor changes resulted in the annual cycles. In a few cases no significant annual cycle could be determined where previously one had been, and in a few other cases a cycle was determined where previously one had not been.

### **Changes in the Calculation of Anomalies**

To calculate the anomaly for an observation, the MARMAP stations closest to the observation location are determined. The expected value of the property (i.e., surface or bottom temperature or salinity) at each of these MARMAP stations is determined from the appropriate annual cycle for the calendar day on which the observation was made. The MARMAP values are averaged by a weighting inversely proportional to the square of the distance each is from the observation location. The anomaly is the difference between the observed value and the resulting averaged MARMAP value.

For calculating bottom anomalies, only MARMAP stations with bottom depths similar to the bottom depth of the observation station are included. The criterion used is that the depth difference has to be smaller than 25m or 25% of the bottom depth of the observation station, whichever is greater.

When calculating salinity anomalies, MARMAP stations that do not have a significant annual cycle are included by using the annual mean value for that station (i.e., the C1 value in Table 1). For calculating temperature anomalies, MARMAP stations without an annual cycle previously had not been included. Under the new procedures MARMAP stations without an annual cycle are included in calculating temperature anomalies by using the mean value for that station. The only MARMAP stations that do not have an annual cycle for bottom temperature are in the deep Gulf of Maine or seaward of the shelf break (>100m depth). Therefore, this change in the procedure for calculating bottom temperature anomalies only affects observations in those areas.

### **Changes in the Calculation of Regional Average Values**

The regional average values are determined by interpolating the observed values to a fine scale grid, with each grid point representing a known area. Previously the separation between grid points was 0.2 degrees latitude and 0.25 degrees longitude. In the revised procedures the separation has been reduced to 0.1 degree in latitude and 0.1 degree in longitude to provide a more accurate representation of an area. In addition the computer code used to determine if a station was within the boundaries of a region has been modified to correct for an error that in a few, specific situations identified stations close to but south of a regional boundary as being within the region.

### **Data Tables**

Annual Cycles:

The MARMAP annual cycles are calculated as the sum of three harmonics. For calendar day 'd', the value of the parameter 'V' is calculated by:

$$V(d) = \sum_{i=1}^3 C_i + A_i * \cos(r_i * d) + B_i * \cos(r_i * d)$$

where  $r_i = 2*\pi (i/365)$  and the C's, A's and B's are the harmonic coefficients.

Tables 1-4 contain the coefficients for surface temperature, bottom temperature, surface salinity and bottom salinity, respectively. The columns in the tables are:

- MARMAP standard station number
- Latitude
- Longitude
- Bottom depth
- The harmonic coefficients C1, A1, B1, C2, A2, B2, C3, A3, B3
- The standard deviation of the original data values from the fitted curve

#### Regional Property Values:

For each cruise in the NEFSC hydrographic data base Tables 5-9 contain the revised area average surface and bottom temperature and temperature anomaly values for the five regions in figure 1. Tables 10-14 contain the same information for salinity. In these tables the columns are:

- Cruise name
- Region Code ()
- Year
- Calendar day
- Decimal-Year (year + calendar day/365)
- For the surface:
  - Number of stations in the region
  - Value
  - Anomaly
  - SDV1
  - SDV2
  - Flagg
- For the bottom:
  - Number of stations in the region
  - Value
  - Anomaly
  - SDV1
  - SDV2
  - Flagg
- Cruise Purpose Code

The Region Codes are:

- 1 MAB South
- 2 MAB North
- 3 Georges Bank
- 4 Gulf of Maine West
- 5 Gulf of Maine East

SDV1 indicates the uncertainty in the regional average anomaly value associated with the uncertainties in the MARMAP annual cycles (See Holzwarth and Mountain, 1990). SDV2 is the standard deviation of the anomaly values for the stations within the region. A Flagg value of 0 indicates that there were enough observations to calculate an area weighted value for the region. A Flagg value of 1 indicates that the spatial distribution of the observations was not sufficient to calculate an area average for the region and instead a simple average of the observations was calculated.

The cruise purpose codes are:

- 01 BLUEFISH SURVEY
- 02 LOBSTER SURVEY
- 03 COD SPAWNING SURVEY
- 10 NMFS NEFSC BOTTOM TRAWL SURVEY
- 16 NMFS ACOUSTICS SURVEY
- 20 GLOBEC BROADSCALE SURVEY
- 21 GLOBEC PROCESS STUDY
- 22 ECOSYSTEM MONITORING
- 23 MARMAP
- 24 LARVAL HERRING SURVEY
- 25 12-MILE DUMPSITE
- 27 WARM CORE RING CRUISE
- 50 NMFS NEFSC CLAM AND QUAHOG SURVEY
- 60 NMFS NEFSC SEA SCALLOP SURVEY
- 70 NMFS NEFSC GEAR COMPARISON
- 80 FOOD CHAIN DYNAMICS FEEDING ECOLOGY SURVEY
- 81 COASTAL OCEAN PROGRAM
- 82 APEX PREDATOR SURVEY
- 91 BENTHIC HABITAT STUDY
- 90 MARINE MAMMAL SURVEY
- 93 MISCELLANEOUS NON-RANDOM RESOURCE INVESTIGATION CRUISE

Regional average surface and bottom temperature for the spring and fall bottom trawl surveys from 1963 to 1990 are listed in Tables 15 and 16. The columns are the same as those for Tables 5-14 except that cruise name column is omitted.

## References

- Bascuñán, C. and M.H. Taylor 2004. Description of the 2003 oceanographic conditions on the northeast continental shelf. Northeast Fisheries Science Center Reference Doc. 04-xx; xx p. Available from: National Marine Fisheries Service, 166 Water St., Woods Hole, MA 02543.
- Holzwarth, T.J. and D.G. Mountain 1990. Surface and bottom temperature distributions from the Northeast Fisheries Center spring and fall bottom trawl survey program, 1963-1987, with addendum for 1988-1990. Northeast Fisheries Science Center Reference Doc. 90-03; 77 p. Available from: National Marine Fisheries Service, 166 Water St., Woods Hole, MA 02543.
- Mountain, D.G. and T.J. Holzwarth. 1989. Surface and bottom temperature distribution for the northeast continental shelf. NOAA Tech. Mem. NMFS-F/NEC-73; 32 p.
- Taylor, M.H. and C. Bascuñán. 2001. Description of the 2000 oceanographic conditions on the northeast continental shelf. Northeast Fisheries Science Center Reference Doc. 01-01; 93 p. Available from: National Marine Fisheries Service, 166 Water St., Woods Hole, MA 02543.

**Figure 1. Regions of the northeast continental shelf**

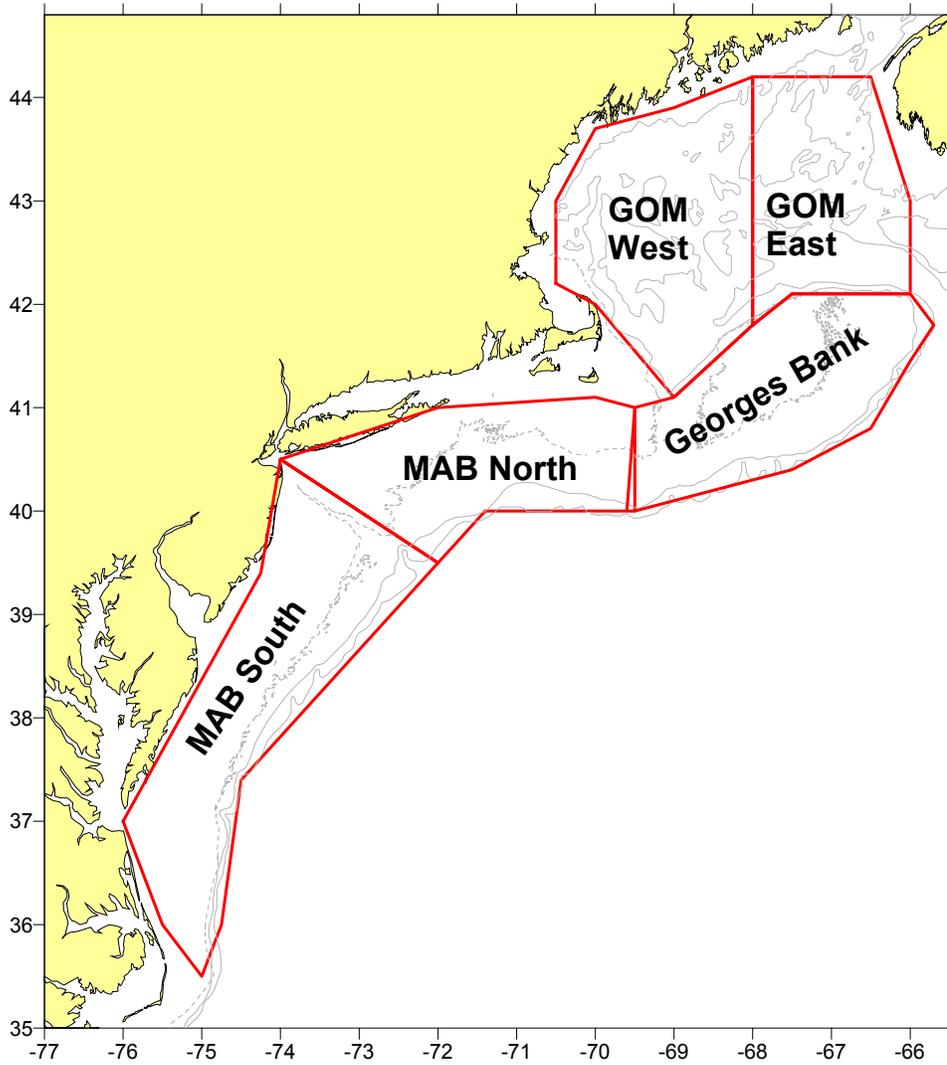


Table 1. Coefficients for the annual cycle of surface temperature for MARMAP standard station locations. See text for explanation.

Sta	Lat	Lon	Depth	C1	A1	B1	C2	A2	B2	C3	A3	B3	Sdv
1	35.27	75.23	26	21.48	-2.99	-3.43	0.00	0.00	0.00	0.00	0.00	0.00	2.49
2	35.47	75.25	29	17.25	-8.15	-6.20	0.00	0.00	0.00	0.00	0.00	0.00	2.11
3	35.68	74.97	54	17.48	-7.98	-6.52	0.00	0.00	0.00	0.00	0.00	0.00	2.33
4	35.85	75.48	19	15.34	-7.75	-6.89	-0.16	-0.07	-1.10	0.00	0.00	0.00	1.56
5	36.25	75.53	26	15.26	-7.52	-7.49	0.00	0.00	0.00	0.00	0.00	0.00	1.43
6	36.38	75.25	35	15.40	-6.94	-7.15	0.00	0.00	0.00	0.00	0.00	0.00	1.36
7	36.15	75.10	36	15.58	-6.68	-7.16	0.00	0.00	0.00	0.00	0.00	0.00	1.68
8	36.27	74.77	413	17.10	-4.63	-5.30	0.00	0.00	0.00	0.00	0.00	0.00	2.98
9	36.65	74.87	47	16.24	-5.40	-6.15	0.28	1.93	1.03	0.00	0.00	0.00	1.96
10	36.72	75.37	20	15.20	-7.09	-7.21	0.00	0.00	0.00	0.00	0.00	0.00	1.41
11	36.55	75.78	18	14.80	-7.85	-7.00	-0.15	0.12	-1.16	0.00	0.00	0.00	1.51
12	36.95	75.80	12	14.65	-8.26	-7.31	0.00	0.00	0.00	0.00	0.00	0.00	1.64
13	36.92	75.55	18	14.96	-7.54	-6.97	0.09	1.21	-0.72	0.00	0.00	0.00	1.33
14	36.88	75.32	24	15.27	-7.25	-7.05	0.00	0.00	0.00	0.00	0.00	0.00	1.40
15	36.85	75.07	35	15.61	-6.58	-6.89	0.14	1.21	0.58	0.00	0.00	0.00	1.42
16	36.82	74.83	49	15.82	-6.10	-6.44	0.27	1.48	1.17	0.00	0.00	0.00	1.55
17	36.77	74.58	1174	18.01	-3.41	-4.82	0.39	1.85	2.71	0.00	0.00	0.00	1.88
19	37.22	74.75	68	15.96	-4.87	-5.68	0.61	2.25	2.06	0.00	0.00	0.00	1.87
20	37.30	75.15	28	14.62	-6.88	-6.64	0.17	1.48	0.00	0.00	0.00	0.00	1.36
21	37.25	75.67	11	14.20	-8.29	-7.30	0.00	0.00	0.00	0.00	0.00	0.00	1.60
22	37.62	75.32	17	13.98	-7.54	-7.25	0.00	0.00	0.00	0.00	0.00	0.00	1.57
23	37.80	75.28	16	13.67	-7.86	-7.14	0.00	0.00	0.00	0.00	0.00	0.00	1.56
24	37.52	74.95	31	14.81	-6.87	-7.36	0.20	1.45	0.56	0.00	0.00	0.00	1.26
25	37.52	74.65	60	15.52	-4.67	-5.48	0.45	2.25	1.63	0.00	0.00	0.00	1.66
26	37.63	74.35	98	16.00	-4.90	-5.54	0.48	1.49	2.05	0.00	0.00	0.00	1.68
27	37.80	74.77	40	14.68	-6.65	-6.93	0.11	1.07	0.58	0.06	0.80	0.42	0.99
28	38.17	74.90	25	13.69	-6.95	-7.37	0.04	0.62	-0.72	0.00	0.00	0.00	1.22
29	38.75	74.95	18	12.62	-7.35	-7.26	0.00	0.00	0.00	0.00	0.00	0.00	1.46
30	38.58	74.80	27	13.12	-7.07	-7.34	0.00	0.00	0.00	0.00	0.00	0.00	1.37
31	38.42	74.65	32	14.00	-6.83	-7.56	0.17	1.06	0.45	0.00	0.00	0.00	1.19
32	38.23	74.52	41	14.22	-6.42	-6.87	0.17	1.36	0.63	0.00	0.00	0.00	1.25
33	38.07	74.37	48	14.59	-6.37	-6.55	0.21	1.13	0.98	0.00	0.00	0.00	1.12
34	37.85	74.18	116	15.49	-4.40	-5.92	0.35	1.63	1.95	0.00	0.00	0.00	1.58
35	37.68	74.05	1280	17.22	-3.93	-5.16	0.00	0.00	0.00	0.00	0.00	0.00	2.76
37	37.98	73.97	163	16.20	-4.15	-4.73	0.10	1.02	1.22	0.00	0.00	0.00	1.90
38	38.35	73.65	125	15.30	-4.59	-5.74	0.22	1.16	1.78	0.00	0.00	0.00	1.93
39	38.42	74.12	57	14.30	-5.80	-6.61	0.41	1.34	1.65	0.00	0.00	0.00	1.26
40	38.67	74.32	42	13.82	-6.49	-7.15	0.23	0.88	0.87	0.00	0.00	0.00	1.20
41	38.92	74.55	22	12.65	-6.37	-6.92	0.00	0.00	0.00	0.00	0.00	0.00	1.39
42	39.23	74.43	17	12.63	-7.00	-7.19	0.00	0.00	0.00	0.00	0.00	0.00	1.05
43	39.35	74.10	24	12.77	-6.84	-7.27	0.00	0.00	0.00	0.00	0.00	0.00	1.15
44	38.95	74.12	40	13.69	-5.62	-6.99	0.12	0.82	0.63	0.00	0.00	0.00	1.12
45	38.75	73.75	49	14.04	-4.55	-6.71	0.20	1.42	0.86	0.00	0.00	0.00	1.39
46	38.65	73.15	177	15.73	-3.66	-5.43	0.20	0.89	1.07	0.00	0.00	0.00	1.32
47	38.98	73.13	78	14.44	-4.51	-6.22	0.11	1.75	1.49	0.00	0.00	0.00	1.75
49	39.28	72.85	81	14.09	-4.51	-6.72	0.19	1.77	1.18	0.00	0.00	0.00	1.32
50	39.20	73.65	42	13.49	-5.70	-6.50	0.22	1.29	0.81	0.00	0.00	0.00	0.99
51	39.65	73.38	33	13.03	-5.83	-6.54	0.23	1.19	0.58	0.00	0.00	0.00	0.97
52	39.57	73.82	22	12.96	-6.41	-7.12	0.00	0.00	0.00	0.00	0.00	0.00	1.22
53	39.72	74.05	15	12.06	-6.76	-7.31	0.00	0.00	0.00	0.00	0.00	0.00	1.43
54	40.12	73.80	28	12.44	-6.48	-6.82	0.04	1.10	-0.54	0.00	0.00	0.00	0.88
55	40.43	73.83	26	12.18	-6.40	-6.87	0.00	0.00	0.00	0.00	0.00	0.00	1.22
56	40.27	73.60	25	12.50	-6.30	-7.12	0.01	0.98	-0.15	0.00	0.00	0.00	1.01
57	40.10	73.38	40	12.62	-5.65	-6.98	0.10	1.25	0.21	0.00	0.00	0.00	0.93
58	39.87	73.08	66	13.05	-4.76	-6.09	0.21	1.65	0.65	0.00	0.00	0.00	1.04
59	39.65	72.77	69	13.05	-4.27	-6.13	0.13	1.45	0.48	0.00	0.00	0.00	1.13
60	39.47	72.55	112	13.78	-3.76	-6.61	0.28	1.86	1.15	0.00	0.00	0.00	1.51
61	39.30	72.32	249	15.73	-3.86	-6.58	0.00	0.00	0.00	0.00	0.00	0.00	1.94
64	39.55	72.12	226	14.83	-3.65	-6.51	0.00	0.00	0.00	0.00	0.00	0.00	2.21
65	39.85	72.45	74	13.17	-4.21	-6.60	0.15	1.39	1.49	0.00	0.00	0.00	1.41
66	40.32	72.72	50	12.48	-4.23	-6.33	0.02	0.92	0.54	0.00	0.00	0.00	1.14
67	40.47	73.22	26	11.95	-5.70	-7.04	0.01	0.90	-0.09	0.00	0.00	0.00	1.14
68	40.73	72.67	26	11.32	-5.38	-6.55	0.00	0.00	0.00	0.00	0.00	0.00	1.05
69	40.57	72.47	41	12.21	-4.60	-6.49	0.00	0.91	0.30	0.00	0.00	0.00	1.10
70	40.23	71.95	65	12.99	-3.97	-6.75	0.04	1.34	1.15	0.00	0.00	0.00	1.46

71	39.87	71.82	169	14.12	-3.79	-6.71	0.24	1.21	1.38	0.00	0.00	0.00	1.96
72	40.07	71.50	92	13.23	-3.71	-6.69	0.22	1.70	1.84	0.00	0.00	0.00	1.42
73	40.52	71.60	76	12.69	-3.99	-6.73	0.17	2.12	0.97	0.00	0.00	0.00	1.22
74	40.82	72.13	40	11.39	-4.69	-6.61	0.00	0.00	0.00	0.00	0.00	0.00	1.10
75	41.07	71.70	45	10.92	-4.27	-6.26	-0.01	0.83	-0.14	0.00	0.00	0.00	0.73
76	41.33	71.35	30	11.25	-5.35	-6.63	0.04	1.19	-0.01	0.00	0.00	0.00	0.86
77	41.15	71.25	40	11.27	-4.47	-6.48	0.10	1.23	0.22	0.00	0.00	0.00	0.77
78	40.97	71.17	50	11.46	-3.94	-6.37	0.14	1.43	0.53	0.00	0.00	0.00	0.93
79	40.68	71.03	62	11.81	-4.08	-6.72	0.08	1.70	0.43	0.00	0.00	0.00	1.18
80	40.35	70.85	99	12.64	-3.95	-6.67	0.10	1.16	1.31	0.00	0.00	0.00	1.34
81	40.17	70.77	132	13.32	-3.59	-6.55	0.08	1.13	1.48	0.00	0.00	0.00	1.66
82	39.98	70.67	406	14.42	-3.36	-6.01	0.21	0.34	1.75	0.00	0.00	0.00	1.70
85	40.22	70.42	114	12.71	-3.62	-6.32	0.06	1.22	1.20	0.00	0.00	0.00	1.69
86	40.70	70.58	57	11.25	-3.61	-6.72	0.00	0.00	0.00	0.00	0.00	0.00	1.33
87	41.17	71.00	34	10.99	-4.31	-6.23	-0.01	0.90	-0.10	0.00	0.00	0.00	0.95
88	41.05	70.55	44	10.59	-3.83	-6.17	0.00	0.00	0.00	0.00	0.00	0.00	1.16
89	40.68	70.18	45	10.37	-3.35	-6.39	0.00	0.00	0.00	0.00	0.00	0.00	1.23
90	40.40	69.70	70	11.42	-2.93	-5.64	0.04	0.80	0.92	0.00	0.00	0.00	1.25
91	40.13	69.57	91	12.28	-3.21	-6.06	0.06	0.58	0.79	0.00	0.00	0.00	1.31
93	40.88	69.57	37	9.00	-2.17	-4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.86
94	41.53	69.43	63	9.95	-3.98	-5.06	0.27	1.08	1.27	0.00	0.00	0.00	0.83
95	41.97	69.83	96	9.83	-4.05	-5.52	0.08	0.95	1.09	0.00	0.00	0.00	1.00
96	42.25	69.72	220	10.71	-4.23	-5.14	0.10	0.91	1.41	0.00	0.00	0.00	0.89
97	42.10	70.33	61	9.98	-5.30	-5.45	-0.06	1.49	0.54	0.00	0.00	0.00	1.19
98	42.43	70.63	75	9.59	-4.53	-4.74	-0.11	1.35	0.18	0.00	0.00	0.00	0.77
99	42.80	70.53	101	10.05	-5.05	-4.90	0.04	1.56	1.15	0.00	0.00	0.00	1.12
100	42.83	70.00	197	9.98	-3.64	-4.98	0.02	0.96	1.53	0.00	0.00	0.00	0.92
101	43.13	69.97	157	9.96	-4.04	-4.94	0.09	1.50	1.43	0.00	0.00	0.00	0.91
102	43.40	70.20	103	9.04	-3.72	-4.99	0.06	0.89	0.62	0.00	0.00	0.00	0.85
103	43.33	69.68	206	9.69	-4.18	-4.85	0.12	1.17	1.04	0.00	0.00	0.00	0.98
104	43.67	69.37	100	8.55	-2.81	-4.56	-0.16	1.53	0.53	0.00	0.00	0.00	0.83
105	42.97	69.28	163	9.74	-3.05	-3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.91
106	42.58	69.23	225	10.21	-3.83	-4.91	0.11	0.94	1.71	0.00	0.00	0.00	0.94
107	42.18	69.20	194	10.71	-4.40	-5.52	0.17	0.91	1.90	0.00	0.00	0.00	0.81
108	41.90	69.17	216	10.67	-4.17	-5.64	0.08	0.93	1.77	0.00	0.00	0.00	0.81
109	41.65	69.15	170	10.47	-3.70	-5.36	0.08	0.61	1.42	0.00	0.00	0.00	0.90
110	41.33	69.12	160	10.03	-3.14	-5.04	0.19	0.72	1.25	0.00	0.00	0.00	0.83
111	41.07	69.10	89	9.05	-1.64	-4.42	0.09	0.29	0.89	0.00	0.00	0.00	0.92
112	40.92	69.10	72	9.67	-1.47	-5.54	0.05	-0.59	0.58	0.00	0.00	0.00	0.88
113	40.65	69.08	75	10.46	-2.80	-6.07	0.09	0.51	0.90	0.03	0.15	-0.82	1.10
114	40.42	69.05	80	11.52	-3.31	-5.67	0.14	1.66	0.98	0.00	0.00	0.00	1.09
115	40.08	69.02	171	13.59	-4.17	-6.64	0.00	0.00	0.00	0.00	0.00	0.00	1.91
117	40.48	68.62	82	11.07	-2.72	-5.41	0.04	0.86	0.84	0.00	0.00	0.00	0.98
118	40.33	68.35	131	12.17	-4.07	-5.23	0.00	0.00	0.00	0.00	0.00	0.00	1.61
119	40.52	67.93	109	11.11	-3.06	-5.71	0.12	0.25	0.82	0.00	0.00	0.00	1.30
120	40.80	68.28	57	9.73	-1.35	-5.03	0.00	0.00	0.00	0.00	0.00	0.00	0.63
121	40.85	68.73	64	9.84	-1.76	-5.44	0.00	0.00	0.00	0.00	0.00	0.00	0.75
122	41.33	68.70	85	9.91	-2.38	-5.12	0.00	0.00	0.00	0.00	0.00	0.00	1.12
123	41.18	68.13	38	10.20	-2.24	-5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.57
124	41.62	68.10	35	10.04	-2.72	-5.62	0.08	-0.56	0.15	0.00	0.00	0.00	0.57
125	41.87	68.18	177	10.31	-3.07	-5.27	0.10	0.61	0.72	0.00	0.00	0.00	0.85
126	41.62	68.88	100	10.64	-3.24	-5.44	0.13	0.43	1.02	0.00	0.00	0.00	0.87
127	41.98	68.65	168	10.57	-4.06	-5.39	0.05	0.87	1.57	0.00	0.00	0.00	0.60
128	42.17	68.80	188	10.67	-4.05	-5.52	0.13	0.66	1.60	0.00	0.00	0.00	0.77
129	42.32	68.45	198	10.44	-4.00	-5.37	0.15	1.00	1.60	0.00	0.00	0.00	0.85
130	42.67	68.32	207	9.68	-3.06	-4.43	0.17	0.93	0.89	0.00	0.00	0.00	0.81
131	42.75	68.77	201	10.06	-3.46	-4.99	-0.01	0.98	1.56	0.00	0.00	0.00	0.78
132	42.92	68.37	152	9.68	-3.46	-4.99	0.19	0.94	1.54	0.10	0.10	-0.62	0.64
133	43.20	67.98	203	9.74	-3.27	-4.72	0.13	0.48	1.16	0.00	0.00	0.00	0.95
134	43.38	68.13	208	9.28	-2.87	-4.52	0.05	0.60	0.79	0.00	0.00	0.00	0.90
135	43.37	68.68	136	9.10	-2.67	-4.32	-0.01	0.75	0.58	0.00	0.00	0.00	0.69
136	43.13	69.02	172	9.71	-3.45	-4.36	-0.07	1.12	0.83	0.00	0.00	0.00	0.85
137	43.62	68.93	135	8.59	-2.15	-4.11	-0.01	0.74	0.54	0.00	0.00	0.00	0.73
138	43.97	68.58	88	7.91	-2.08	-4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.87
140	43.97	68.18	108	8.30	-1.60	-3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.79
141	44.33	67.72	68	7.09	-1.16	-4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.45
142	43.82	67.72	223	9.40	-2.90	-4.77	-0.04	0.97	1.10	0.00	0.00	0.00	0.73
143	42.98	67.70	182	9.36	-2.54	-4.71	0.26	0.24	1.03	0.00	0.00	0.00	0.71
144	42.60	67.70	201	9.68	-3.14	-5.49	0.07	0.73	1.23	0.00	0.00	0.00	1.02
145	42.30	67.70	236	10.20	-3.44	-5.61	0.13	0.36	1.14	0.00	0.00	0.00	0.75
146	41.80	67.70	32	9.82	-2.54	-5.30	0.07	-0.42	0.20	0.00	0.00	0.00	0.64

147	41.50	67.68	24	10.13	-2.54	-5.76	0.00	0.00	0.00	0.00	0.00	0.00	0.64
148	41.27	67.68	40	10.01	-2.05	-5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.62
149	40.93	67.68	67	10.27	-2.40	-5.75	0.12	0.37	0.62	0.00	0.00	0.00	0.84
150	40.62	67.68	81	10.69	-2.60	-5.38	0.12	0.49	0.73	0.00	0.00	0.00	0.97
151	40.37	67.67	780	13.87	-4.28	-5.08	0.00	0.00	0.00	0.00	0.00	0.00	2.29
153	40.77	67.32	97	10.42	-2.79	-5.20	0.07	0.41	0.81	0.00	0.00	0.00	1.07
154	40.67	67.08	190	12.02	-3.43	-5.47	0.00	0.00	0.00	0.00	0.00	0.00	2.53
155	41.22	66.93	68	9.72	-1.70	-5.04	0.00	0.00	0.00	0.00	0.00	0.00	0.71
157	41.55	67.02	63	9.49	-1.57	-5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.78
158	41.60	66.52	83	9.27	-1.52	-5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.64
159	42.03	66.83	75	9.08	-1.56	-4.74	0.15	-0.51	0.28	0.00	0.00	0.00	0.65
160	41.98	67.40	22	9.37	-2.07	-4.99	0.16	-0.45	0.37	0.00	0.00	0.00	0.65
161	42.18	67.25	180	9.75	-2.72	-4.97	0.16	0.04	0.58	0.00	0.00	0.00	0.68
162	42.72	67.47	205	9.30	-2.23	-4.52	0.31	0.02	0.71	0.00	0.00	0.00	0.37
163	42.77	66.97	170	8.92	-2.06	-4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.61
164	43.20	66.80	142	7.92	-1.21	-4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.42
165	43.58	66.73	126	8.63	-1.52	-3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.83
166	43.50	67.00	205	8.20	-1.17	-3.93	0.00	0.00	0.00	0.00	0.00	0.00	0.68
167	43.70	67.43	205	9.03	-2.18	-4.07	0.16	-0.18	0.52	0.00	0.00	0.00	0.50
168	44.03	67.17	140	8.78	-2.15	-3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.70
169	44.27	67.12	139	8.14	-1.45	-3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.27
170	44.27	66.60	201	7.89	-1.11	-3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.37
171	43.53	66.33	74	7.75	-1.71	-4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.87
172	43.02	66.33	128	7.36	-1.36	-4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.86
173	42.65	66.33	110	8.35	-2.17	-5.41	0.00	0.00	0.00	0.00	0.00	0.00	1.30
174	42.47	66.33	250	8.84	-2.49	-5.59	0.00	0.00	0.00	0.00	0.00	0.00	1.18
175	42.28	66.33	245	9.05	-2.49	-5.01	0.00	0.00	0.00	0.00	0.00	0.00	0.79
176	42.15	66.33	182	9.22	-2.34	-4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.67
177	41.87	66.33	85	9.03	-1.72	-4.88	0.12	-0.33	0.39	0.00	0.00	0.00	0.52
178	41.50	66.33	89	9.45	-2.26	-4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.84
179	41.17	66.32	155	10.70	-3.46	-5.81	0.00	0.00	0.00	0.00	0.00	0.00	1.47
181	44.00	66.20	22	7.23	-3.10	-5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
182	43.40	67.72	261	9.57	-3.05	-4.67	0.00	0.70	1.01	0.00	0.00	0.00	0.74
183	43.28	69.33	164	9.80	-3.26	-4.25	0.00	0.00	0.00	0.00	0.00	0.00	1.31
184	38.57	74.88	20	12.99	-7.57	-7.35	0.00	0.00	0.00	0.00	0.00	0.00	1.60
185	39.92	73.93	20	12.40	-6.62	-7.09	0.00	0.00	0.00	0.00	0.00	0.00	1.12
186	39.87	73.55	33	13.05	-5.95	-6.79	0.07	1.12	0.41	0.00	0.00	0.00	1.09
187	40.25	73.90	22	12.24	-6.72	-6.76	0.00	0.00	0.00	0.00	0.00	0.00	1.28
188	42.43	70.15	81	10.22	-4.05	-4.90	-0.09	1.08	1.08	0.00	0.00	0.00	1.04
189	42.82	66.33	62	8.10	-1.44	-3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.78
190	43.28	66.33	81	6.78	-0.89	-4.22	0.00	0.00	0.00	0.00	0.00	0.00	0.77
191	41.65	65.92	125	9.11	-1.96	-5.13	0.00	0.00	0.00	0.00	0.00	0.00	0.68
192	41.90	65.82	148	9.06	-2.57	-5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.87
193	40.87	66.62	245	12.55	-3.04	-5.56	0.00	0.00	0.00	0.00	0.00	0.00	3.22

Table 2. Coefficients for the annual cycle of bottom temperature for MARMAP standard station locations. See text for explanation.

Sta	Lat	Lon	Depth	C1	A1	B1	C2	A2	B2	C3	A3	B3	Sdv
1	35.27	75.23	26	20.80	-2.58	-3.24	0.00	0.00	0.00	0.00	0.00	0.00	2.42
2	35.47	75.25	29	17.27	-6.17	-5.56	-0.41	-0.31	-2.72	0.00	0.00	0.00	2.70
3	35.68	74.97	54	13.63	0.25	-3.91	-0.39	0.26	-3.38	0.00	0.00	0.00	2.58
4	35.85	75.48	19	13.50	-4.53	-6.76	-0.38	-0.83	-1.75	0.00	0.00	0.00	2.16
5	36.25	75.53	26	12.02	-1.95	-5.94	-0.60	-1.54	-1.88	0.00	0.00	0.00	1.52
6	36.38	75.25	35	11.91	-0.89	-4.74	-0.48	-1.48	-1.38	0.00	0.00	0.00	1.37
7	36.15	75.10	36	12.73	-1.21	-4.51	-0.63	-1.25	-1.61	0.00	0.00	0.00	2.16
9	36.65	74.87	47	11.24	2.16	-2.69	-0.23	-0.06	-1.87	0.00	0.00	0.00	1.83
10	36.72	75.37	20	12.78	-3.31	-6.55	0.00	0.00	0.00	0.00	0.00	0.00	1.44
11	36.55	75.78	18	12.57	-3.91	-7.25	-0.26	-1.64	-1.02	0.09	1.52	0.64	1.27
12	36.95	75.80	12	13.01	-5.17	-8.17	0.00	0.00	0.00	0.00	0.00	0.00	1.76
13	36.92	75.55	18	12.40	-3.23	-7.08	-0.20	-1.34	-0.38	0.00	1.11	0.32	1.22
14	36.88	75.32	24	11.50	-1.50	-5.88	-0.17	-1.11	-1.11	0.00	0.00	0.00	1.43
15	36.85	75.07	35	10.93	0.67	-3.73	-0.10	-0.23	-1.85	0.00	0.00	0.00	1.65
16	36.82	74.83	49	10.80	1.45	-2.06	0.15	1.28	-2.07	0.00	0.00	0.00	2.07
19	37.22	74.75	68	10.46	2.18	-1.76	0.00	0.00	0.00	0.00	0.00	0.00	2.04
20	37.30	75.15	28	10.89	-0.83	-4.82	-0.21	-0.49	-1.65	0.00	0.00	0.00	1.52
21	37.25	75.67	11	13.34	-6.60	-7.70	0.00	0.00	0.00	0.00	0.00	0.00	1.66
22	37.62	75.32	17	12.37	-4.68	-7.52	0.00	0.00	0.00	0.00	0.00	0.00	1.57
23	37.80	75.28	16	12.78	-6.30	-7.67	0.00	0.00	0.00	0.00	0.00	0.00	1.40
24	37.52	74.95	31	10.45	-0.37	-4.37	-0.28	-0.37	-1.97	-0.02	0.02	1.01	1.29
25	37.52	74.65	60	10.22	2.51	-1.43	-0.15	0.48	-1.44	0.00	0.00	0.00	1.89
26	37.63	74.35	98	11.82	1.42	-1.73	0.00	0.00	0.00	0.00	0.00	0.00	1.49
27	37.80	74.77	40	9.65	0.78	-3.80	-0.24	-0.16	-2.06	0.00	0.00	0.00	1.30
28	38.17	74.90	25	11.74	-3.68	-7.04	0.00	0.00	0.00	0.00	0.00	0.00	1.80
29	38.75	74.95	18	11.70	-5.59	-7.36	0.00	0.00	0.00	0.00	0.00	0.00	1.47
30	38.58	74.80	27	10.40	-2.15	-5.88	-0.37	-1.10	-1.61	-0.05	0.43	1.05	1.28
31	38.42	74.65	32	9.77	-0.29	-4.51	-0.32	-0.13	-1.93	0.00	0.00	0.00	1.29
32	38.23	74.52	41	9.20	1.00	-3.22	-0.11	0.15	-2.17	0.00	0.00	0.00	1.00
33	38.07	74.37	48	9.38	1.60	-2.60	-0.08	-0.01	-2.09	0.00	0.00	0.00	1.08
34	37.85	74.18	116	12.01	1.20	-1.27	0.00	0.00	0.00	0.00	0.00	0.00	1.31
37	37.98	73.97	163	12.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
38	38.35	73.65	125	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55
39	38.42	74.12	57	8.99	2.19	-1.65	-0.14	0.33	-1.75	0.00	0.00	0.00	1.54
40	38.67	74.32	42	9.10	0.48	-3.49	-0.32	0.05	-2.04	0.00	0.00	0.00	1.14
41	38.92	74.55	22	10.96	-3.19	-6.46	0.00	0.00	0.00	0.00	0.00	0.00	1.59
42	39.23	74.43	17	11.15	-4.82	-6.90	0.00	0.00	0.00	0.00	0.00	0.00	1.61
43	39.35	74.10	24	10.13	-2.31	-6.49	-0.35	-1.45	-1.03	0.01	0.77	0.47	1.21
44	38.95	74.12	40	9.09	0.47	-3.47	-0.35	-0.28	-1.92	0.00	0.00	0.00	1.22
45	38.75	73.75	49	8.83	2.00	-2.28	0.01	0.42	-2.16	0.00	0.00	0.00	1.38
46	38.65	73.15	177	11.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
47	38.98	73.13	78	10.12	2.10	-1.47	0.00	0.00	0.00	0.00	0.00	0.00	2.02
49	39.28	72.85	81	9.89	2.26	-1.86	0.00	0.00	0.00	0.00	0.00	0.00	2.25
50	39.20	73.65	42	8.83	1.25	-3.12	-0.20	-0.15	-2.21	0.00	0.00	0.00	0.93
51	39.65	73.38	33	8.68	0.76	-3.81	-0.23	-0.62	-1.88	0.00	0.00	0.00	0.92
52	39.57	73.82	22	10.02	-1.93	-5.65	-0.14	-1.19	-0.95	0.00	0.00	0.00	1.33
53	39.72	74.05	15	10.27	-3.79	-6.73	-0.20	-1.64	-1.02	0.00	0.00	0.00	2.09
54	40.12	73.80	28	8.87	-0.64	-5.11	-0.09	-0.69	-1.34	0.00	0.00	0.00	1.41
55	40.43	73.83	26	9.56	-1.11	-5.51	-0.19	-0.49	-1.22	0.00	0.00	0.00	1.40
56	40.27	73.60	25	9.74	-1.75	-6.46	-0.15	-0.98	-0.69	0.00	0.00	0.00	1.13
57	40.10	73.38	40	8.24	1.31	-3.61	-0.20	-0.30	-1.85	0.00	0.00	0.00	1.05
58	39.87	73.08	66	7.86	1.76	-2.24	-0.08	0.44	-1.42	0.00	0.00	0.00	1.26
59	39.65	72.77	69	8.59	2.31	-2.31	-0.13	0.23	-1.20	0.00	0.00	0.00	1.47
60	39.47	72.55	112	11.66	0.79	-1.31	0.00	0.00	0.00	0.00	0.00	0.00	1.24
61	39.30	72.32	249	10.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
64	39.55	72.12	226	10.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44
65	39.85	72.45	74	8.49	2.61	-1.94	-0.05	0.85	-0.91	0.00	0.00	0.00	1.38
66	40.32	72.72	50	7.71	1.41	-2.61	-0.04	0.04	-0.86	0.00	0.00	0.00	0.78
67	40.47	73.22	26	9.29	-1.46	-5.40	-0.28	-0.41	-1.39	0.00	0.00	0.00	1.30
68	40.73	72.67	26	9.91	-2.92	-5.93	0.00	0.00	0.00	0.00	0.00	0.00	1.88
69	40.57	72.47	41	8.43	0.91	-4.04	-0.25	-0.05	-1.31	0.00	0.00	0.00	0.89
70	40.23	71.95	65	8.41	2.59	-2.86	-0.10	1.02	-1.57	0.00	0.00	0.00	1.13
71	39.87	71.82	169	11.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
72	40.07	71.50	92	11.60	0.78	-1.62	0.00	0.00	0.00	0.00	0.00	0.00	1.60
73	40.52	71.60	76	8.41	2.15	-2.72	-0.10	1.20	-0.96	0.00	0.00	0.00	1.18

74	40.82	72.13	40	8.54	0.31	-4.88	-0.13	-0.47	-1.26	0.00	0.00	0.00	1.12
75	41.07	71.70	45	8.97	-0.39	-5.08	0.00	0.00	0.00	0.00	0.00	0.00	1.44
76	41.33	71.35	30	9.29	-1.99	-5.88	-0.14	-0.15	-0.84	0.04	0.35	0.57	0.95
77	41.15	71.25	40	8.60	-0.49	-4.85	-0.04	0.22	-0.87	0.00	0.00	0.00	0.90
78	40.97	71.17	50	8.29	0.93	-4.53	-0.15	0.45	-1.12	0.00	0.00	0.00	0.91
79	40.68	71.03	62	8.31	0.97	-4.32	-0.21	0.78	-1.45	0.00	0.00	0.00	1.16
80	40.35	70.85	99	11.58	1.18	-0.91	-0.06	-0.60	-1.17	0.00	0.00	0.00	1.63
81	40.17	70.77	132	12.42	0.41	-0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.91
82	39.98	70.67	406	8.76	0.79	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.72
85	40.22	70.42	114	12.23	1.01	-1.07	0.00	0.00	0.00	0.00	0.00	0.00	1.40
86	40.70	70.58	57	8.42	0.51	-4.57	-0.20	-0.64	-1.86	0.00	0.00	0.00	1.44
87	41.17	71.00	34	9.21	-1.72	-5.53	-0.14	0.14	-0.89	0.00	0.00	0.00	0.92
88	41.05	70.55	44	8.44	-0.90	-5.19	-0.08	-0.55	-1.28	0.00	0.00	0.00	1.07
89	40.68	70.18	45	8.56	-0.71	-5.07	-0.14	-0.56	-1.64	0.00	0.00	0.00	1.27
90	40.40	69.70	70	8.89	0.81	-3.21	-0.16	0.25	-1.23	0.00	0.00	0.00	1.49
91	40.13	69.57	91	10.96	1.33	-1.77	0.00	0.00	0.00	0.00	0.00	0.00	2.04
93	40.88	69.57	37	8.88	-2.10	-4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.83
94	41.53	69.43	63	6.12	0.86	-2.07	-0.14	0.33	-0.80	0.00	0.00	0.00	0.76
95	41.97	69.83	96	5.80	0.88	-1.76	-0.07	0.22	-0.61	0.00	0.00	0.00	0.52
96	42.25	69.72	220	6.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
97	42.10	70.33	61	5.90	0.35	-3.32	-0.17	0.12	-1.05	0.00	0.00	0.00	0.77
98	42.43	70.63	75	5.91	0.51	-3.18	-0.11	0.54	-0.42	0.00	0.00	0.00	0.68
99	42.80	70.53	101	5.06	1.38	-1.97	0.00	0.00	0.00	0.00	0.00	0.00	1.44
100	42.83	70.00	197	5.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
101	43.13	69.97	157	5.35	0.70	-0.75	-0.14	0.85	-0.04	-0.02	0.50	0.34	0.46
102	43.40	70.20	103	6.28	1.13	-2.31	-0.22	0.32	-0.69	0.00	0.00	0.00	0.94
103	43.33	69.68	206	5.43	0.52	-0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.57
104	43.67	69.37	100	6.45	1.01	-2.72	-0.16	0.30	-0.61	0.00	0.00	0.00	0.49
105	42.97	69.28	163	5.73	0.88	-0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.65
106	42.58	69.23	225	6.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
107	42.18	69.20	194	5.72	0.55	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.48
108	41.90	69.17	216	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
109	41.65	69.15	170	5.35	0.63	-0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.45
110	41.33	69.12	160	5.47	1.06	-0.32	-0.07	0.64	-0.07	-0.06	0.40	0.09	0.37
111	41.07	69.10	89	6.96	0.66	-2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.83
112	40.92	69.10	72	8.39	-0.81	-3.89	0.00	0.00	0.00	0.00	0.00	0.00	0.80
113	40.65	69.08	75	8.40	-0.32	-3.77	-0.08	-0.41	-1.28	-0.05	-0.93	0.58	1.06
114	40.42	69.05	80	9.10	1.18	-3.24	-0.17	0.59	-1.56	0.00	0.00	0.00	1.07
115	40.08	69.02	171	11.36	1.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	1.26
117	40.48	68.62	82	8.79	1.08	-2.79	-0.10	0.89	-0.68	0.00	0.00	0.00	1.22
118	40.33	68.35	131	11.64	0.67	-0.62	0.00	0.00	0.00	0.00	0.00	0.00	1.00
119	40.52	67.93	109	9.97	1.10	-1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.74
120	40.80	68.28	57	9.32	-0.75	-4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.81
121	40.85	68.73	64	9.50	-1.42	-5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.82
122	41.33	68.70	85	6.92	0.57	-1.91	0.00	0.00	0.00	0.00	0.00	0.00	1.18
123	41.18	68.13	38	10.27	-2.12	-5.67	0.00	0.00	0.00	0.00	0.00	0.00	0.54
124	41.62	68.10	35	10.01	-2.70	-5.52	0.10	-0.51	0.13	0.00	0.00	0.00	0.61
125	41.87	68.18	177	6.57	0.65	-0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.74
126	41.62	68.88	100	5.50	0.91	-0.70	-0.13	0.74	0.03	0.00	0.29	0.39	0.40
127	41.98	68.65	168	5.81	0.67	0.16	-0.02	0.21	0.37	0.00	0.00	0.00	0.43
128	42.17	68.80	188	5.59	0.65	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.47
129	42.32	68.45	198	6.78	-0.02	-0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.68
130	42.67	68.32	207	6.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
131	42.75	68.77	201	6.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
132	42.92	68.37	152	6.43	0.44	-0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.47
133	43.20	67.98	203	6.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
134	43.38	68.13	208	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03
135	43.37	68.68	136	6.41	1.19	-1.43	-0.10	0.57	-0.46	0.00	0.00	0.00	0.76
136	43.13	69.02	172	6.02	0.89	-0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.39
137	43.62	68.93	135	6.47	0.96	-2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.59
138	43.97	68.58	88	6.69	0.18	-3.57	-0.19	0.01	-0.58	0.00	0.00	0.00	0.60
140	43.97	68.18	108	6.59	0.47	-2.68	-0.25	0.71	-0.36	0.00	0.00	0.00	0.55
141	44.33	67.72	68	6.70	-0.65	-3.85	0.00	0.00	0.00	0.00	0.00	0.00	0.49
142	43.82	67.72	223	7.59	0.52	-0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.68
143	42.98	67.70	182	7.03	0.62	-0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.49
144	42.60	67.70	201	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
145	42.30	67.70	236	7.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
146	41.80	67.70	32	9.72	-2.38	-5.28	0.08	-0.47	0.20	0.00	0.00	0.00	0.64
147	41.50	67.68	24	10.08	-2.63	-5.71	0.00	0.00	0.00	0.00	0.00	0.00	0.58
148	41.27	67.68	40	10.00	-2.01	-5.79	0.00	0.00	0.00	0.00	0.00	0.00	0.61
149	40.93	67.68	67	8.77	-0.38	-4.23	-0.15	0.09	-0.55	0.00	0.00	0.00	0.51

150	40.62	67.68	81	8.80	1.09	-2.51	-0.15	0.54	-0.74	0.00	0.00	0.00	1.29
153	40.77	67.32	97	9.26	0.67	-1.75	0.00	0.00	0.00	0.00	0.00	0.00	1.77
154	40.67	67.08	190	10.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76
155	41.22	66.93	68	8.55	-0.39	-4.02	-0.10	0.20	-0.44	0.00	0.00	0.00	0.55
157	41.55	67.02	63	9.32	-1.09	-4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.61
158	41.60	66.52	83	8.40	-0.62	-4.18	0.00	0.00	0.00	0.00	0.00	0.00	0.66
159	42.03	66.83	75	8.75	-0.87	-3.86	0.00	0.00	0.00	0.00	0.00	0.00	0.58
160	41.98	67.40	22	9.28	-1.91	-4.67	0.16	-0.28	0.46	0.00	0.00	0.00	0.52
162	42.72	67.47	205	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
163	42.77	66.97	170	8.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
164	43.20	66.80	142	8.06	0.22	-2.16	0.00	0.00	0.00	0.00	0.00	0.00	0.56
165	43.58	66.73	126	7.69	0.85	-1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.89
166	43.50	67.00	205	8.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
167	43.70	67.43	205	7.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
168	44.03	67.17	140	7.10	0.79	-0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.64
171	43.53	66.33	74	7.05	-0.26	-3.61	0.00	0.00	0.00	0.00	0.00	0.00	0.89
172	43.02	66.33	128	7.25	0.65	-2.51	0.00	0.00	0.00	0.00	0.00	0.00	1.07
173	42.65	66.33	110	7.87	-0.19	-1.43	0.00	0.00	0.00	0.00	0.00	0.00	1.04
174	42.47	66.33	250	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
175	42.28	66.33	245	8.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66
176	42.15	66.33	182	7.81	0.09	-0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.57
177	41.87	66.33	85	8.08	-0.51	-3.43	0.00	0.00	0.00	0.00	0.00	0.00	0.71
178	41.50	66.33	89	7.48	0.31	-2.76	-0.14	0.04	-0.76	0.00	0.00	0.00	0.88
179	41.17	66.32	155	9.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94
181	44.00	66.20	22	7.03	-2.79	-5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
182	43.40	67.72	261	7.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72
183	43.28	69.33	164	5.69	1.17	-0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.46
184	38.57	74.88	20	11.84	-5.25	-7.78	0.00	0.00	0.00	0.00	0.00	0.00	1.44
185	39.92	73.93	20	10.13	-2.92	-6.79	-0.18	-1.06	-0.50	0.00	0.00	0.00	1.13
186	39.87	73.55	33	8.90	0.43	-4.25	-0.26	-0.81	-1.55	0.00	0.00	0.00	1.05
187	40.25	73.90	22	10.13	-2.82	-6.67	0.00	0.00	0.00	0.00	0.00	0.00	1.56
188	42.43	70.15	81	5.89	0.99	-2.24	-0.09	0.45	-0.44	0.00	0.00	0.00	0.61
189	42.82	66.33	62	7.18	-0.05	-3.09	0.00	0.00	0.00	0.00	0.00	0.00	1.17
190	43.28	66.33	81	6.80	-0.88	-4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.74
191	41.65	65.92	125	8.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
192	41.90	65.82	148	8.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
193	40.87	66.62	245	10.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90

Table 3. Coefficients for the annual cycle of surface salinity for MARMAP standard station locations. See text for explanation.

Sta	Lat	Lon	Depth	C1	A1	B1	C2	A2	B2	C3	A3	B3	Sdv
1	35.27	75.23	26	34.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63
2	35.47	75.25	29	33.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
3	35.68	74.97	54	33.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55
4	35.85	75.48	19	30.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91
5	36.25	75.53	26	31.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
6	36.38	75.25	35	32.75	0.85	0.25	0.00	0.00	0.00	0.00	0.00	0.00	1.01
7	36.15	75.10	36	33.05	1.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	1.05
8	36.27	74.77	413	34.04	0.80	0.94	0.00	0.00	0.00	0.00	0.00	0.00	1.06
9	36.65	74.87	47	33.30	1.33	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.91
10	36.72	75.37	20	32.49	0.73	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.81
11	36.55	75.78	18	30.03	0.45	-1.26	0.00	0.00	0.00	0.00	0.00	0.00	1.68
12	36.95	75.80	12	29.84	2.27	-0.40	0.00	0.00	0.00	0.00	0.00	0.00	2.02
13	36.92	75.55	18	31.78	1.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	1.09
14	36.88	75.32	24	32.54	0.97	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.96
15	36.85	75.07	35	32.88	1.12	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.86
16	36.82	74.83	49	33.31	1.23	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.90
17	36.77	74.58	1174	34.13	1.39	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.72
19	37.22	74.75	68	33.51	1.14	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.83
20	37.30	75.15	28	32.50	1.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.69
21	37.25	75.67	11	31.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
22	37.62	75.32	17	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
23	37.80	75.28	16	31.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
24	37.52	74.95	31	32.65	0.93	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.74
25	37.52	74.65	60	33.35	1.21	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.62
26	37.63	74.35	98	33.82	1.33	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.72
27	37.80	74.77	40	32.71	1.04	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.74
28	38.17	74.90	25	32.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
29	38.75	74.95	18	30.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
30	38.58	74.80	27	31.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
31	38.42	74.65	32	32.39	0.71	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.66
32	38.23	74.52	41	32.73	0.98	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.67
33	38.07	74.37	48	32.91	0.94	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.65
34	37.85	74.18	116	33.61	1.33	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.69
35	37.68	74.05	1280	34.48	0.66	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.80
37	37.98	73.97	163	33.85	1.07	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.80
38	38.35	73.65	125	33.78	0.77	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.96
39	38.42	74.12	57	33.03	0.84	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.65
40	38.67	74.32	42	32.68	0.84	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.65
41	38.92	74.55	22	31.99	0.54	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.70
42	39.23	74.43	17	31.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
43	39.35	74.10	24	31.95	0.56	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.68
44	38.95	74.12	40	32.63	1.02	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.54
45	38.75	73.75	49	33.13	0.63	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.64
46	38.65	73.15	177	34.06	1.28	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.70
47	38.98	73.13	78	33.21	1.12	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.73
49	39.28	72.85	81	33.29	0.97	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.70
50	39.20	73.65	42	32.68	0.96	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.70
51	39.65	73.38	33	32.41	1.06	0.45	-0.09	-0.65	0.01	0.00	0.00	0.00	0.48
52	39.57	73.82	22	32.17	0.89	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.72
53	39.72	74.05	15	31.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
54	40.12	73.80	28	31.87	0.95	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.70
55	40.43	73.83	26	30.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68
56	40.27	73.60	25	31.95	0.79	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.75
57	40.10	73.38	40	32.41	0.90	0.29	-0.05	-0.38	-0.21	0.00	0.00	0.00	0.51
58	39.87	73.08	66	32.72	1.02	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.57
59	39.65	72.77	69	32.96	0.90	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.67
60	39.47	72.55	112	33.50	0.95	-0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.67
61	39.30	72.32	249	34.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
64	39.55	72.12	226	34.00	0.60	-0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.73
65	39.85	72.45	74	33.19	0.58	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.54
66	40.32	72.72	50	32.48	0.94	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.58
67	40.47	73.22	26	32.00	0.75	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.51
68	40.73	72.67	26	31.85	0.69	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.56
69	40.57	72.47	41	32.22	0.82	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.54
70	40.23	71.95	65	33.15	0.66	-0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.62

71	39.87	71.82	169	33.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
72	40.07	71.50	92	33.52	0.51	-0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.73
73	40.52	71.60	76	33.12	0.62	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.55
74	40.82	72.13	40	31.85	0.98	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.55
75	41.07	71.70	45	31.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
76	41.33	71.35	30	32.16	0.41	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.43
77	41.15	71.25	40	32.38	0.32	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.40
78	40.97	71.17	50	32.49	0.37	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.39
79	40.68	71.03	62	32.79	0.28	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.48
80	40.35	70.85	99	33.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
81	40.17	70.77	132	33.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
82	39.98	70.67	406	34.09	0.39	-0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.65
85	40.22	70.42	114	33.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
86	40.70	70.58	57	32.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
87	41.17	71.00	34	32.33	0.33	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.43
88	41.05	70.55	44	32.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
89	40.68	70.18	45	32.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
90	40.40	69.70	70	32.87	0.23	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.32
91	40.13	69.57	91	33.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
93	40.88	69.57	37	32.52	0.28	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.31
94	41.53	69.43	63	32.41	0.63	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.36
95	41.97	69.83	96	32.25	0.74	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.47
96	42.25	69.72	220	32.52	0.78	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.43
97	42.10	70.33	61	31.77	0.85	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.54
98	42.43	70.63	75	31.58	0.99	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.62
99	42.80	70.53	101	31.65	1.07	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.55
100	42.83	70.00	197	32.43	0.67	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.37
101	43.13	69.97	157	32.33	0.81	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.38
102	43.40	70.20	103	31.80	0.87	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.45
103	43.33	69.68	206	32.50	0.57	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.42
104	43.67	69.37	100	32.35	0.54	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.31
105	42.97	69.28	163	32.65	0.52	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.45
106	42.58	69.23	225	32.67	0.45	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.35
107	42.18	69.20	194	32.64	0.53	0.49	-0.01	-0.18	-0.18	0.00	0.00	0.00	0.30
108	41.90	69.17	216	32.63	0.41	0.57	-0.01	-0.13	-0.25	0.00	0.00	0.00	0.29
109	41.65	69.15	170	32.51	0.52	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.30
110	41.33	69.12	160	32.47	0.52	0.44	-0.01	-0.22	-0.10	0.00	0.00	0.00	0.32
111	41.07	69.10	89	32.63	0.34	0.42	-0.01	-0.18	-0.12	0.00	0.00	0.00	0.27
112	40.92	69.10	72	32.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
113	40.65	69.08	75	32.90	0.18	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.26
114	40.42	69.05	80	32.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
115	40.08	69.02	171	34.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
117	40.48	68.62	82	32.88	0.11	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.31
118	40.33	68.35	131	33.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
119	40.52	67.93	109	32.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
120	40.80	68.28	57	32.77	0.03	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.21
121	40.85	68.73	64	32.80	0.02	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.20
122	41.33	68.70	85	32.68	0.37	0.37	-0.03	-0.24	-0.14	0.00	0.00	0.00	0.28
123	41.18	68.13	38	32.74	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.20
124	41.62	68.10	35	32.77	0.09	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.23
125	41.87	68.18	177	32.68	0.29	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.28
126	41.62	68.88	100	32.64	0.46	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.35
127	41.98	68.65	168	32.67	0.29	0.51	-0.01	-0.09	-0.21	0.00	0.00	0.00	0.29
128	42.17	68.80	188	32.68	0.41	0.46	-0.02	-0.10	-0.28	0.00	0.00	0.00	0.32
129	42.32	68.45	198	32.70	0.36	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.34
130	42.67	68.32	207	32.78	0.37	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.35
131	42.75	68.77	201	32.70	0.51	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.30
132	42.92	68.37	152	32.70	0.44	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.29
133	43.20	67.98	203	32.61	0.65	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.33
134	43.38	68.13	208	32.66	0.48	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.36
135	43.37	68.68	136	32.63	0.49	-0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.36
136	43.13	69.02	172	32.59	0.61	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.46
137	43.62	68.93	135	32.49	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
138	43.97	68.58	88	32.31	0.48	-0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.30
140	43.97	68.18	108	32.65	0.50	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.30
141	44.33	67.72	68	32.43	0.44	-0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.30
142	43.82	67.72	223	32.71	0.47	-0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.27
143	42.98	67.70	182	32.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
144	42.60	67.70	201	32.63	0.41	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.27
145	42.30	67.70	236	32.65	0.34	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.31
146	41.80	67.70	32	32.77	0.13	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.23

147	41.50	67.68	24	32.73	0.06	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.21
148	41.27	67.68	40	32.69	0.02	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.21
149	40.93	67.68	67	32.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
150	40.62	67.68	81	32.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
151	40.37	67.67	780	33.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
153	40.77	67.32	97	32.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
154	40.67	67.08	190	33.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
155	41.22	66.93	68	32.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
157	41.55	67.02	63	32.76	-0.01	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.24
158	41.60	66.52	83	32.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
159	42.03	66.83	75	32.85	0.15	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.21
160	41.98	67.40	22	32.83	0.08	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.23
161	42.18	67.25	180	32.71	0.22	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.31
162	42.72	67.47	205	32.65	0.55	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.21
163	42.77	66.97	170	32.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
164	43.20	66.80	142	32.46	-0.05	-0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.26
165	43.58	66.73	126	32.60	0.28	-0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.26
166	43.50	67.00	205	32.65	0.23	-0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.30
167	43.70	67.43	205	32.66	0.55	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.28
168	44.03	67.17	140	32.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
169	44.27	67.12	139	32.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
170	44.27	66.60	201	32.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
171	43.53	66.33	74	32.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
172	43.02	66.33	128	32.26	-0.10	-0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.51
173	42.65	66.33	110	32.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
174	42.47	66.33	250	32.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
175	42.28	66.33	245	32.46	0.11	-0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.29
176	42.15	66.33	182	32.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
177	41.87	66.33	85	32.76	0.03	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.19
178	41.50	66.33	89	32.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
179	41.17	66.32	155	33.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
181	44.00	66.20	22	31.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
182	43.40	67.72	261	32.62	0.46	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.38
183	43.28	69.33	164	32.65	0.45	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.43
184	38.57	74.88	20	31.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05
185	39.92	73.93	20	31.77	0.61	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.69
186	39.87	73.55	33	32.35	0.83	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.64
187	40.25	73.90	22	31.36	0.79	-0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.89
188	42.43	70.15	81	32.28	0.77	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.40
189	42.82	66.33	62	32.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
190	43.28	66.33	81	32.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
191	41.65	65.92	125	32.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
192	41.90	65.82	148	32.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
193	40.87	66.62	245	33.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65

Table 4. Coefficients for the annual cycle of bottom salinity for MARMAP standard station locations. See text for explanation.

Sta	Lat	Lon	Depth	C1	A1	B1	C2	A2	B2	C3	A3	B3	Sdv
1	35.27	75.23	26	35.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
2	35.47	75.25	29	34.58	-1.58	-0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.96
3	35.68	74.97	54	34.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
4	35.85	75.48	19	32.51	-0.87	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.11
5	36.25	75.53	26	33.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
6	36.38	75.25	35	33.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
7	36.15	75.10	36	33.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
8	36.27	74.77	413	35.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
9	36.65	74.87	47	34.09	0.62	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.64
10	36.72	75.37	20	33.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
11	36.55	75.78	18	31.98	-0.85	-0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.69
12	36.95	75.80	12	31.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
13	36.92	75.55	18	32.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
14	36.88	75.32	24	33.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
15	36.85	75.07	35	33.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
16	36.82	74.83	49	34.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
19	37.22	74.75	68	34.25	0.52	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.52
20	37.30	75.15	28	33.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
21	37.25	75.67	11	31.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
22	37.62	75.32	17	32.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66
23	37.80	75.28	16	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
24	37.52	74.95	31	33.13	0.30	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.54
25	37.52	74.65	60	34.04	0.49	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.48
26	37.63	74.35	98	35.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
27	37.80	74.77	40	33.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
28	38.17	74.90	25	32.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
29	38.75	74.95	18	31.79	-0.55	-0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.61
30	38.58	74.80	27	32.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
31	38.42	74.65	32	32.92	0.13	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.42
32	38.23	74.52	41	33.31	0.12	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.46
33	38.07	74.37	48	33.57	0.41	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.48
34	37.85	74.18	116	35.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
37	37.98	73.97	163	35.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
38	38.35	73.65	125	35.47	-0.12	-0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.27
39	38.42	74.12	57	33.67	0.42	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.51
40	38.67	74.32	42	33.25	0.20	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.48
41	38.92	74.55	22	32.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
42	39.23	74.43	17	32.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
43	39.35	74.10	24	32.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
44	38.95	74.12	40	33.13	0.29	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.43
45	38.75	73.75	49	33.53	0.43	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.46
46	38.65	73.15	177	35.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
47	38.98	73.13	78	34.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
49	39.28	72.85	81	34.37	0.54	-0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.62
50	39.20	73.65	42	33.24	0.42	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.43
51	39.65	73.38	33	33.02	0.22	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.38
52	39.57	73.82	22	32.59	0.37	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.53
53	39.72	74.05	15	31.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
54	40.12	73.80	28	32.78	0.36	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.45
55	40.43	73.83	26	32.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
56	40.27	73.60	25	32.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
57	40.10	73.38	40	33.03	0.34	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.38
58	39.87	73.08	66	33.42	0.42	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.35
59	39.65	72.77	69	33.72	0.63	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.45
60	39.47	72.55	112	35.15	0.21	-0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.37
61	39.30	72.32	249	35.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
64	39.55	72.12	226	35.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
65	39.85	72.45	74	33.89	0.69	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.56
66	40.32	72.72	50	33.17	0.37	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.37
67	40.47	73.22	26	32.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
68	40.73	72.67	26	32.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
69	40.57	72.47	41	32.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
70	40.23	71.95	65	33.66	0.56	-0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.44
71	39.87	71.82	169	35.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
72	40.07	71.50	92	34.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36

73	40.52	71.60	76	33.70	0.49	-0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.45
74	40.82	72.13	40	32.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
75	41.07	71.70	45	32.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
76	41.33	71.35	30	32.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
77	41.15	71.25	40	32.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
78	40.97	71.17	50	33.04	0.33	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.45
79	40.68	71.03	62	33.32	0.22	-0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.54
80	40.35	70.85	99	34.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
81	40.17	70.77	132	35.46	0.04	-0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.21
82	39.98	70.67	406	35.19	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.08
85	40.22	70.42	114	35.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
86	40.70	70.58	57	33.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
87	41.17	71.00	34	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
88	41.05	70.55	44	32.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
89	40.68	70.18	45	32.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
90	40.40	69.70	70	33.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
91	40.13	69.57	91	34.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
93	40.88	69.57	37	32.49	0.27	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.31
94	41.53	69.43	63	32.80	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27
95	41.97	69.83	96	32.98	0.25	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.24
96	42.25	69.72	220	33.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
97	42.10	70.33	61	32.48	0.22	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.33
98	42.43	70.63	75	32.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
99	42.80	70.53	101	32.73	0.29	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.26
100	42.83	70.00	197	33.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
101	43.13	69.97	157	33.35	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
102	43.40	70.20	103	32.80	0.52	-0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.23
103	43.33	69.68	206	33.51	0.10	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.09
104	43.67	69.37	100	32.93	0.38	-0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.18
105	42.97	69.28	163	33.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
106	42.58	69.23	225	34.05	0.15	-0.01	0.01	-0.07	0.09	0.00	0.00	0.00	0.13
107	42.18	69.20	194	33.69	0.15	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.14
108	41.90	69.17	216	33.68	0.12	-0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.17
109	41.65	69.15	170	33.46	0.13	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.11
110	41.33	69.12	160	33.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
111	41.07	69.10	89	32.85	0.18	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.23
112	40.92	69.10	72	32.79	0.11	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.28
113	40.65	69.08	75	33.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
114	40.42	69.05	80	33.58	0.20	-0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.56
115	40.08	69.02	171	35.41	0.16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.18
117	40.48	68.62	82	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
118	40.33	68.35	131	35.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
119	40.52	67.93	109	34.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
120	40.80	68.28	57	32.79	0.04	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.23
121	40.85	68.73	64	32.82	0.02	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.22
122	41.33	68.70	85	32.92	0.14	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.23
123	41.18	68.13	38	32.73	-0.03	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.19
124	41.62	68.10	35	32.76	0.05	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.22
125	41.87	68.18	177	33.98	0.08	-0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.35
126	41.62	68.88	100	33.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
127	41.98	68.65	168	33.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
128	42.17	68.80	188	33.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
129	42.32	68.45	198	34.22	-0.17	-0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.24
130	42.67	68.32	207	34.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
131	42.75	68.77	201	34.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
132	42.92	68.37	152	33.90	0.15	-0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.17
133	43.20	67.98	203	33.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
134	43.38	68.13	208	34.22	0.13	-0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.19
135	43.37	68.68	136	33.39	0.25	-0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.21
136	43.13	69.02	172	33.58	0.23	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.22
137	43.62	68.93	135	33.05	0.27	-0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.23
138	43.97	68.58	88	32.62	0.30	-0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.23
140	43.97	68.18	108	33.19	0.24	-0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.26
141	44.33	67.72	68	32.62	0.37	-0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.25
142	43.82	67.72	223	34.36	0.08	-0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.16
143	42.98	67.70	182	34.13	0.13	-0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.20
144	42.60	67.70	201	34.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
145	42.30	67.70	236	34.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
146	41.80	67.70	32	32.78	0.13	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.22
147	41.50	67.68	24	32.71	0.06	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.19
148	41.27	67.68	40	32.68	0.03	0.33	0.01	-0.16	0.00	0.00	0.00	0.00	0.18

149	40.93	67.68	67	32.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
150	40.62	67.68	81	33.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
153	40.77	67.32	97	33.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
154	40.67	67.08	190	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
155	41.22	66.93	68	32.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
157	41.55	67.02	63	32.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
158	41.60	66.52	83	32.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
159	42.03	66.83	75	32.93	0.09	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.21
160	41.98	67.40	22	32.82	0.08	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.23
162	42.72	67.47	205	34.83	-0.15	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.11
163	42.77	66.97	170	34.77	-0.08	-0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.16
164	43.20	66.80	142	33.84	-0.04	-0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.16
165	43.58	66.73	126	33.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
166	43.50	67.00	205	34.37	0.00	-0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.15
167	43.70	67.43	205	34.29	0.10	-0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.18
168	44.03	67.17	140	33.92	0.08	-0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.21
171	43.53	66.33	74	32.46	-0.08	-0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.42
172	43.02	66.33	128	33.22	0.15	-0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.40
173	42.65	66.33	110	33.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
174	42.47	66.33	250	35.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
175	42.28	66.33	245	34.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
176	42.15	66.33	182	34.39	0.08	-0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.27
177	41.87	66.33	85	32.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
178	41.50	66.33	89	33.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
179	41.17	66.32	155	34.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
181	44.00	66.20	22	31.65	-0.04	-0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.28
182	43.40	67.72	261	34.38	0.14	-0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18
183	43.28	69.33	164	33.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
184	38.57	74.88	20	32.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
185	39.92	73.93	20	32.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
186	39.87	73.55	33	32.89	0.23	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.42
187	40.25	73.90	22	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
188	42.43	70.15	81	32.81	0.31	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.32
189	42.82	66.33	62	32.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
190	43.28	66.33	81	32.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
191	41.65	65.92	125	34.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
192	41.90	65.82	148	34.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
193	40.87	66.62	245	35.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24

Table 5. Average surface and bottom temperature values for the southern Middle Atlantic Bight region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface					Bottom						Pc
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	
YUB7702	1	1977	237	1977.65	49	23.27	-0.38	0.19	1.68	0	42	11.00	-1.48	0.23	3.67	0	23
ARG7701	1	1977	295	1977.81	43	15.18	-2.37	0.21	1.16	0	36	14.58	-0.86	0.24	1.06	1	23
DEL7802	1	1978	51	1978.14	49	5.03	-0.96	0.20	1.71	0	38	5.05	-0.99	0.26	2.49	0	23
ARG7804	1	1978	114	1978.31	54	8.38	-1.12	0.19	1.33	0	46	6.45	-1.16	0.24	1.10	0	23
ALB7807	1	1978	178	1978.49	51	20.90	0.16	0.20	1.31	0	39	8.68	-1.12	0.26	1.85	0	23
BEL7801	1	1978	229	1978.63	48	25.53	1.54	0.20	2.05	0	43	9.56	-2.76	0.22	2.20	0	23
BEL7803	1	1978	299	1978.82	30	15.83	-0.69	0.25	0.50	1	24	13.97	-0.32	0.28	1.35	1	23
DEL7903	1	1979	59	1979.16	3	3.18	-0.97	0.72	1.85	1	3	2.83	-0.85	0.73	1.78	1	23
EVR8001	1	1980	112	1980.31	53	9.41	0.05	0.19	1.04	0	46	7.33	-0.10	0.23	0.95	0	23
EVR8006	1	1980	202	1980.55	54	22.93	-0.46	0.20	2.15	0	45	9.01	-1.41	0.24	2.83	0	23
ALB8101	1	1981	81	1981.22	37	5.42	-0.07	0.22	0.93	1	30	4.78	0.13	0.25	1.10	1	23
KEL8103	1	1981	83	1981.23	54	6.41	-0.01	0.20	1.05	0	43	5.38	-0.11	0.22	0.80	1	23
DEL8103	1	1981	166	1981.45	40	19.45	1.44	0.22	0.84	1	30	8.86	-0.77	0.25	1.49	1	23
ALB8202	1	1982	79	1982.22	48	5.44	-0.37	0.20	0.77	1	41	4.94	-0.26	0.22	1.03	1	23
DEL8203	1	1982	147	1982.40	5	12.78	-0.33	0.62	0.65	1	3	7.60	0.58	0.78	2.52	1	23
ALB8207	1	1982	178	1982.49	20	18.51	-2.53	0.31	0.94	1	13	7.68	-0.60	0.39	1.50	1	27
DEL8209	1	1982	352	1982.96	39	11.60	1.13	0.22	0.67	1	32	11.26	0.82	0.25	0.92	1	23
ALB8304	1	1983	150	1983.41	52	15.25	-0.74	0.20	0.94	0	47	9.24	-0.14	0.23	1.26	0	23
DEL8309	1	1983	325	1983.89	55	13.35	-0.56	0.20	0.88	0	48	13.45	-0.38	0.24	0.66	0	23
DEL8401	1	1984	35	1984.10	51	6.00	-0.18	0.20	1.13	1	42	5.89	0.39	0.22	0.90	1	23
ALB8403	1	1984	133	1984.37	52	12.85	0.00	0.20	1.43	0	46	8.34	-0.24	0.24	2.22	0	23
DEL8409	1	1984	310	1984.85	55	17.16	1.44	0.20	0.92	0	45	16.14	1.49	0.24	0.90	0	23
DEL8501	1	1985	34	1985.09	50	6.60	0.20	0.20	1.27	1	36	6.17	0.23	0.24	1.05	1	23
DEL8503	1	1985	108	1985.30	56	10.51	1.60	0.20	1.76	0	48	8.99	1.63	0.24	0.93	0	23
ALB8504	1	1985	142	1985.39	57	15.19	0.76	0.19	1.85	0	48	10.86	1.81	0.24	1.39	0	23
DEL8507	1	1985	246	1985.67	56	24.41	1.25	0.20	0.97	0	47	14.20	1.13	0.24	2.06	0	23
DEL8510	1	1985	315	1985.86	55	16.74	1.66	0.20	1.47	0	48	16.21	1.83	0.24	0.99	0	23
DEL8601	1	1986	14	1986.04	56	10.16	1.86	0.20	2.06	0	48	10.00	1.59	0.24	2.14	0	23
DEL8603	1	1986	132	1986.36	54	12.76	0.06	0.20	2.70	0	47	10.66	2.08	0.24	1.39	0	23
DEL8607	1	1986	244	1986.67	55	20.91	-2.35	0.20	1.93	0	47	14.39	1.37	0.24	1.35	0	23
DEL8610	1	1986	312	1986.86	56	16.09	0.69	0.20	0.92	0	47	15.70	1.21	0.24	1.10	0	23
DEL8701	1	1987	12	1987.03	56	9.67	1.18	0.20	1.58	0	47	9.55	0.96	0.24	1.17	0	23
ALB8702	1	1987	131	1987.36	12	10.27	-0.68	0.35	1.27	1	13	7.01	0.34	0.35	0.24	1	25
ALB8703	1	1987	136	1987.37	123	10.36	-1.52	0.11	0.86	1	123	6.92	-0.01	0.12	1.07	1	25
DEL8708	1	1987	235	1987.64	54	24.44	0.70	0.20	0.98	0	43	12.08	-0.32	0.25	2.21	0	23
ALB8706	1	1987	234	1987.64	37	23.49	1.89	0.20	0.87	1	38	11.76	-2.43	0.21	2.58	1	25
DEL8710	1	1987	312	1987.86	48	14.20	-1.20	0.21	1.03	0	36	12.89	-1.58	0.26	1.49	0	23
DEL8801	1	1988	25	1988.07	53	5.93	-1.34	0.21	1.91	0	46	6.73	-0.53	0.25	1.18	0	23
ALB8803	1	1988	127	1988.35	18	9.81	-0.33	0.28	0.45	1	17	6.43	-0.01	0.32	0.38	1	25
ALB8810	1	1988	322	1988.88	17	11.59	-0.81	0.28	0.38	1	16	11.34	-1.62	0.32	0.49	1	25
DEL8904	1	1989	162	1989.44	79	16.78	0.34	0.13	1.36	1	78	9.12	0.50	0.14	2.00	1	25
ORE8905	1	1989	229	1989.63	95	21.63	-0.03	0.12	0.69	1	95	17.60	3.17	0.14	2.92	1	25
DEL9001	1	1990	16	1990.04	9	6.01	-2.02	0.43	1.02	1	7	6.55	-1.10	0.49	0.91	1	24
DEL9105	1	1991	72	1991.20	82	8.97	2.87	0.15	1.93	0	70	8.99	3.32	0.19	2.09	0	10
CHA9103	1	1991	176	1991.48	4	20.86	5.10	0.83	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93
ORE9105	1	1991	215	1991.59	43	24.34	0.70	0.20	1.20	1	6	6.70	-0.43	0.56	1.31	1	60
DEL9110	1	1991	259	1991.71	83	22.81	0.77	0.16	0.98	0	75	14.08	-0.02	0.21	3.04	0	10
ALB9202	1	1992	46	1992.13	47	6.67	0.13	0.20	1.69	0	36	6.95	0.50	0.24	1.67	0	10
ALB9203	1	1992	69	1992.19	72	7.00	1.03	0.16	1.55	0	63	7.19	1.49	0.20	1.20	0	10
DEL9205	1	1992	91	1992.25	6	7.17	-0.11	0.66	0.45	1	0	0.00	-9.99	-9.99	-9.99	1	93
DEL9206	1	1992	168	1992.46	54	17.83	-1.30	0.19	1.31	0	54	9.21	-0.48	0.21	1.94	0	50
ORE9204	1	1992	218	1992.60	50	23.14	-0.62	0.18	0.83	1	47	7.79	-0.03	0.20	1.47	1	60
ALB9211	1	1992	262	1992.72	53	22.27	0.73	0.20	1.27	0	45	13.06	-1.00	0.26	2.63	0	10
DEL9301	1	1993	20	1993.05	10	7.41	-0.55	0.41	1.40	1	7	7.59	0.26	0.49	1.14	1	24
ALB9303	1	1993	40	1993.11	57	6.89	0.32	0.17	1.54	0	50	6.90	0.28	0.20	1.63	0	10
ALB9304	1	1993	78	1993.21	81	5.34	-0.76	0.15	1.42	0	73	5.53	-0.27	0.19	2.15	0	10
ALB9305	1	1993	131	1993.36	10	11.69	1.53	0.60	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	1
ORE9304	1	1993	217	1993.59	49	24.23	0.37	0.19	0.67	1	47	8.21	0.26	0.21	1.81	1	60
DEL9311	1	1993	257	1993.70	80	23.04	0.91	0.15	2.09	0	69	12.10	-2.07	0.19	3.10	0	10
DEL9402	1	1994	35	1994.10	61	6.36	-0.59	0.18	1.62	0	53	7.23	0.43	0.20	1.59	0	10
DEL9403	1	1994	68	1994.19	81	5.71	-0.17	0.15	1.27	0	72	5.59	-0.18	0.18	1.35	0	10
ALB9405	1	1994	178	1994.49	61	22.24	2.04	0.17	1.20	1	55	8.41	0.72	0.19	2.37	1	60
DEL9407	1	1994	213	1994.58	76	23.04	-0.81	0.18	2.89	0	75	9.67	-1.30	0.19	3.54	0	50
ALB9409	1	1994	258	1994.71	83	20.87	-1.28	0.15	1.16	0	75	14.33	0.20	0.18	1.74	0	10
ALB9503	1	1995	44	1995.12	29	8.37	1.96	0.25	1.72	1	25	7.99	2.28	0.27	1.46	1	10
REL9501	1	1995	78	1995.21	36	9.40	2.71	0.34	2.33	1	10	8.53	2.14	0.46	1.88	1	93

ALB9504	1	1995	78	1995.21	28	8.09	1.94	0.23	1.35	0	26	7.34	1.75	0.27	1.17	1	10
ALB9507	1	1995	174	1995.48	41	19.32	0.05	0.21	0.84	1	39	8.01	0.40	0.24	1.34	1	60
PE9501	1	1995	197	1995.54	12	23.53	0.94	0.38	1.59	1	1	6.53	-1.64	-9.99	-9.99	1	93
ALB9512	1	1995	256	1995.70	62	22.87	0.73	0.19	0.73	0	57	20.01	3.46	0.18	2.42	1	10
ALB9603	1	1996	42	1996.12	67	5.45	-1.06	0.17	1.98	0	58	6.68	0.09	0.19	1.96	0	10
ALB9604	1	1996	80	1996.22	99	6.05	-0.43	0.13	1.28	0	90	6.24	0.18	0.16	1.28	0	10
ALB9609	1	1996	216	1996.59	133	21.94	-1.83	0.11	1.16	1	97	6.45	-1.34	0.14	0.94	1	60
ALB9611	1	1996	259	1996.71	84	22.00	0.09	0.15	1.66	0	73	14.09	-0.38	0.19	3.18	0	10
ALB9703	1	1997	39	1997.11	56	7.07	0.23	0.18	1.97	0	42	7.70	1.12	0.23	1.45	0	10
ALB9704	1	1997	69	1997.19	82	7.53	1.76	0.15	1.78	0	73	8.56	2.81	0.18	2.03	0	10
DEL9705	1	1997	72	1997.20	18	7.20	2.63	0.31	0.84	1	17	7.21	3.12	0.34	0.89	1	93
DEL9706	1	1997	146	1997.40	15	12.18	-1.86	0.30	1.52	1	14	9.52	1.53	0.33	1.55	1	70
DEL9707	1	1997	171	1997.47	17	18.73	-0.40	0.30	1.37	1	16	11.68	1.77	0.33	1.23	1	50
ALB9709	1	1997	207	1997.57	161	22.79	-0.56	0.10	1.13	1	158	8.64	1.03	0.11	1.07	1	60
ALB9711	1	1997	257	1997.70	77	22.59	0.36	0.15	1.07	0	70	15.20	0.83	0.19	2.32	0	10
ALB9803	1	1998	43	1998.12	51	7.36	0.79	0.18	2.17	0	43	7.81	1.10	0.22	2.32	0	10
ALB9804	1	1998	67	1998.18	78	6.77	1.10	0.16	2.16	0	70	7.01	2.02	0.17	2.61	1	10
DEL9804	1	1998	77	1998.21	9	6.76	0.72	0.44	1.66	1	6	6.10	1.21	0.51	1.54	1	93
DEL9806	1	1998	145	1998.40	19	15.63	-0.80	0.31	1.18	1	19	11.07	-0.08	0.32	1.32	1	82
ALB9807	1	1998	149	1998.41	40	15.32	-0.37	0.22	1.54	0	36	9.39	0.30	0.24	0.93	0	22
AJ9801	1	1998	196	1998.54	6	22.75	0.16	0.56	0.99	1	1	7.98	0.72	-9.99	-9.99	1	93
ALB9809	1	1998	207	1998.57	42	25.26	1.69	0.21	1.14	1	41	8.60	0.75	0.22	0.99	1	60
ALB9811	1	1998	270	1998.74	77	22.44	1.68	0.15	1.18	0	71	14.44	-0.20	0.18	2.49	0	10
DEL9813	1	1998	309	1998.85	39	15.08	-0.42	0.22	0.89	0	37	12.95	-1.51	0.24	1.66	0	22
ALB9902	1	1999	37	1999.10	60	8.55	1.81	0.18	1.54	0	45	8.92	2.36	0.22	1.41	0	10
ALB9903	1	1999	71	1999.19	80	7.64	1.89	0.15	1.60	0	70	8.66	2.95	0.18	1.92	0	10
DEL9907	1	1999	157	1999.43	6	18.13	2.44	0.50	0.74	1	6	11.24	1.38	0.57	0.90	1	50
ALB9909	1	1999	202	1999.55	57	23.81	0.73	0.17	1.32	1	57	11.37	3.60	0.19	2.15	1	60
ALB9910	1	1999	270	1999.74	81	21.39	0.73	0.15	1.05	0	74	16.79	2.15	0.19	2.05	0	10
NP9901	1	1999	313	1999.86	26	17.06	1.93	0.27	1.72	0	23	16.22	1.83	0.30	0.91	0	22
ALB0001	1	2000	47	2000.13	63	8.38	1.67	0.17	1.71	0	52	8.12	1.55	0.20	1.71	0	10
ALB0002	1	2000	82	2000.22	78	8.25	1.95	0.15	1.43	0	70	7.74	1.80	0.18	1.39	0	10
DEL0006	1	2000	146	2000.40	32	15.07	-0.02	0.23	1.08	0	28	10.07	0.93	0.26	1.76	0	22
ALB0004	1	2000	200	2000.55	43	22.19	-0.57	0.20	1.38	1	43	9.20	1.61	0.21	1.38	1	60
ALB0006	1	2000	256	2000.70	80	22.45	0.22	0.15	1.55	0	73	15.91	1.85	0.17	2.11	0	10
ALB0007	1	2000	307	2000.84	33	15.34	-0.56	0.25	0.57	0	33	15.31	0.35	0.24	1.17	1	22
ALB0102	1	2001	35	2001.10	66	6.87	-0.02	0.16	1.98	0	54	7.06	0.24	0.19	1.52	0	10
DEL0101	1	2001	46	2001.12	18	7.90	-0.30	0.34	1.18	1	7	8.21	0.81	0.52	1.40	1	16
ALB0103	1	2001	70	2001.19	86	6.84	0.65	0.14	1.14	0	78	7.00	1.07	0.18	1.50	0	10
ALB0106	1	2001	141	2001.39	39	13.49	-0.47	0.21	1.00	1	36	8.52	-0.33	0.22	1.73	1	22
DEL0104	1	2001	141	2001.39	17	15.16	-0.68	0.33	1.33	1	17	11.40	0.46	0.34	1.98	1	82
ALB0107	1	2001	188	2001.52	53	23.75	1.90	0.18	1.80	1	51	7.73	0.16	0.20	2.30	1	60
ALB0110	1	2001	255	2001.70	83	23.59	1.30	0.15	1.09	0	75	13.94	-0.33	0.19	3.29	0	10
ALB0111	1	2001	305	2001.83	34	16.86	0.65	0.24	0.72	0	32	15.89	1.10	0.26	1.28	0	22
ALB0203	1	2002	45	2002.12	84	10.96	3.44	0.15	2.39	1	62	10.27	3.45	0.18	2.25	1	10
DEL0201	1	2002	55	2002.15	26	8.99	2.69	0.26	1.61	1	16	8.57	3.75	0.31	2.25	1	16
ALB0204	1	2002	78	2002.21	81	9.35	3.15	0.14	0.93	0	75	9.11	3.08	0.18	1.23	0	10
ALB0206	1	2002	144	2002.40	38	14.65	-0.17	0.21	0.63	0	37	11.77	2.71	0.23	1.43	0	22
ALB0208	1	2002	204	2002.56	47	24.60	1.36	0.19	1.02	1	46	9.63	1.98	0.21	1.27	1	60
NOB0201	1	2002	228	2002.62	33	25.24	1.20	0.23	1.50	0	32	14.01	1.38	0.24	2.88	1	22
ALB0210	1	2002	255	2002.70	77	23.32	1.00	0.15	0.97	0	72	15.59	1.56	0.19	2.72	0	10
DEL0210	1	2002	304	2002.83	34	16.83	0.60	0.23	0.96	0	33	15.91	1.15	0.24	1.08	0	22
OC384	1	2002	302	2002.83	14	17.67	0.77	0.41	1.02	1	1	13.63	0.57	-9.99	-9.99	1	91
DEL0302	1	2003	47	2003.13	57	7.11	0.63	0.17	1.77	0	39	6.92	0.80	0.23	2.02	0	10
DEL0303	1	2003	75	2003.21	69	6.56	0.52	0.16	1.80	0	63	5.89	0.05	0.18	1.95	0	10
ALB0301	1	2003	214	2003.59	55	23.00	-0.34	0.18	2.29	1	55	7.95	-0.03	0.19	1.38	1	60
ALB0306	1	2003	308	2003.84	5	15.90	1.06	0.57	0.81	1	2	13.30	0.32	-9.99	-9.99	1	22

Table 6. Average surface and bottom temperature values for the northern Middle Atlantic Bight region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface					Bottom					Pc	
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2		Flg
YUB7702	2	1977	232	1977.63	45	20.75	0.84	0.19	1.65	0	37	9.92	-0.19	0.21	1.57	0	23
ARG7701	2	1977	300	1977.82	22	14.49	-0.76	0.28	1.50	0	17	13.43	0.17	0.32	1.17	1	23
KEL7711	2	1977	341	1977.93	18	11.32	0.30	0.31	1.07	1	14	12.08	0.29	0.36	1.27	1	23
DEL7802	2	1978	62	1978.17	26	3.05	-1.58	0.27	0.67	0	16	3.43	-1.20	0.34	1.77	1	23
ARG7804	2	1978	131	1978.36	26	7.53	-1.35	0.27	1.14	0	22	4.93	-2.01	0.32	1.62	0	23
ALB7807	2	1978	187	1978.51	25	16.12	-1.58	0.27	2.11	0	21	8.31	-0.30	0.33	2.33	0	23
BEL7801	2	1978	234	1978.64	25	22.44	2.18	0.26	1.59	0	23	9.35	-1.10	0.29	1.29	0	23
BEL7803	2	1978	291	1978.80	27	15.20	-0.84	0.26	0.79	0	21	12.66	-0.71	0.29	1.17	1	23
ALB7913	2	1979	349	1979.96	20	10.77	0.23	0.30	1.00	0	16	11.95	0.74	0.33	1.36	0	23
WIE8002	2	1980	67	1980.18	22	4.00	-0.22	0.28	0.69	1	17	4.40	-0.36	0.33	1.13	1	23
EVR8001	2	1980	117	1980.32	26	7.56	0.52	0.27	0.86	0	21	6.05	-0.25	0.32	0.88	0	23
EVR8006	2	1980	207	1980.57	25	20.58	0.84	0.27	1.90	0	22	8.73	-0.41	0.32	2.16	0	23
ALB8101	2	1981	75	1981.21	23	4.44	-0.04	0.29	0.74	0	18	5.21	-0.24	0.34	1.04	0	23
KEL8103	2	1981	92	1981.25	8	4.86	0.37	0.45	0.63	1	6	3.81	-0.12	0.52	0.69	1	23
DEL8103	2	1981	162	1981.44	26	15.20	1.16	0.27	1.05	0	18	7.99	-0.21	0.36	1.18	0	23
ALB8114	2	1981	354	1981.97	10	7.93	-2.10	0.43	0.91	1	6	8.29	-1.97	0.56	1.09	1	23
ALB8202	2	1982	72	1982.20	25	3.78	-0.73	0.27	0.56	0	21	5.10	-0.06	0.32	0.89	0	23
DEL8203	2	1982	145	1982.40	25	10.31	-0.85	0.27	1.25	0	20	6.98	-0.13	0.30	1.56	1	23
DEL8209	2	1982	346	1982.95	26	11.42	0.63	0.27	0.73	0	19	11.70	0.80	0.31	0.92	1	23
DEL8301	2	1983	40	1983.11	16	6.68	1.17	0.37	0.50	0	14	6.57	1.19	0.36	0.88	1	23
ALB8304	2	1983	158	1983.43	24	13.15	-0.21	0.27	0.92	0	21	8.19	0.30	0.31	1.10	0	23
DEL8309	2	1983	335	1983.92	25	11.56	-0.20	0.27	0.81	0	20	11.82	-0.47	0.34	0.66	0	23
DEL8401	2	1984	28	1984.08	24	5.91	-0.74	0.28	1.09	0	21	7.54	0.30	0.31	0.79	0	23
ALB8403	2	1984	139	1984.38	27	10.14	0.08	0.26	1.14	0	19	6.86	-0.11	0.35	1.09	0	23
DEL8409	2	1984	318	1984.87	25	14.92	1.59	0.27	1.21	0	21	15.33	2.43	0.31	1.36	0	23
DEL8501	2	1985	28	1985.08	32	7.01	0.36	0.25	1.36	0	24	7.59	0.54	0.31	1.34	0	23
DEL8503	2	1985	100	1985.27	26	6.63	1.20	0.27	0.77	0	20	7.10	1.23	0.34	0.60	0	23
ALB8504	2	1985	136	1985.37	26	11.42	1.44	0.27	1.67	0	22	8.33	1.20	0.32	1.16	0	23
DEL8507	2	1985	254	1985.69	26	20.48	1.11	0.27	1.43	0	22	11.93	0.52	0.31	1.08	0	23
DEL8510	2	1985	324	1985.89	24	14.34	1.52	0.27	1.47	0	20	14.48	1.70	0.32	1.12	0	23
DEL8601	2	1986	22	1986.06	26	7.43	0.31	0.27	0.87	0	22	7.77	0.12	0.31	0.84	0	23
DEL8603	2	1986	140	1986.38	25	11.43	1.20	0.27	2.91	0	19	9.85	2.56	0.32	1.97	0	23
DEL8607	2	1986	252	1986.69	26	19.58	0.09	0.27	1.05	0	17	12.78	0.65	0.38	0.89	0	23
DEL8610	2	1986	318	1986.87	26	13.14	-0.27	0.27	0.56	0	21	13.66	0.68	0.32	0.99	0	23
DEL8701	2	1987	25	1987.07	26	6.81	-0.10	0.27	0.85	0	21	6.94	-0.36	0.33	1.30	0	23
ALB8702	2	1987	130	1987.36	13	10.04	-0.76	0.33	1.16	1	12	7.06	0.30	0.37	0.31	1	25
DEL8704	2	1987	136	1987.37	9	9.01	-0.30	0.44	1.10	1	7	8.04	0.88	0.51	1.80	1	23
ALB8703	2	1987	138	1987.38	65	10.50	-1.57	0.15	0.79	1	65	7.90	0.54	0.16	1.55	1	25
ALB8706	2	1987	232	1987.64	50	23.34	1.75	0.17	1.22	1	50	13.02	-0.75	0.19	3.17	1	25
DEL8708	2	1987	241	1987.66	26	19.56	-0.47	0.27	1.26	0	19	9.71	-0.98	0.32	1.46	0	23
DEL8710	2	1987	323	1987.89	26	10.95	-1.95	0.27	0.96	0	21	10.37	-2.47	0.32	1.33	0	23
DEL8801	2	1988	30	1988.08	4	4.44	-0.74	0.69	1.08	1	3	4.79	0.18	0.75	0.98	1	23
ALB8803	2	1988	126	1988.35	15	9.85	-0.23	0.32	0.32	1	14	6.42	-0.18	0.35	0.40	1	25
DEL8812	2	1988	309	1988.85	19	12.09	-0.97	0.28	0.63	1	19	12.54	-0.37	0.28	1.24	1	24
ALB8810	2	1988	321	1988.88	11	11.23	-1.20	0.36	0.47	1	9	11.13	-2.13	0.42	0.55	1	25
ALB8811	2	1988	336	1988.92	20	10.26	-0.20	0.27	0.59	1	20	10.47	-0.50	0.27	0.90	1	24
DEL8901	2	1989	8	1989.02	19	5.14	-1.78	0.28	1.08	1	19	5.13	-1.82	0.28	1.09	1	24
DEL8904	2	1989	162	1989.44	66	16.41	0.30	0.15	1.54	1	64	10.12	1.23	0.16	2.76	1	25
ORE8905	2	1989	228	1989.62	72	21.61	-0.01	0.14	0.71	1	72	17.74	4.18	0.16	3.06	1	25
DEL8907	2	1989	312	1989.85	21	13.18	0.28	0.27	0.73	1	21	12.68	-0.18	0.27	1.55	1	24
DEL8909	2	1989	334	1989.92	23	9.83	-0.89	0.26	0.81	1	23	10.04	-1.24	0.26	0.68	1	24
DEL9001	2	1990	12	1990.03	67	5.57	-2.33	0.17	1.22	0	56	7.07	-1.51	0.20	1.50	0	24
DEL9003	2	1990	52	1990.14	21	4.50	0.26	0.27	0.49	1	21	5.09	0.91	0.27	0.93	1	24
DEL9011	2	1990	272	1990.74	12	17.26	0.70	0.36	1.27	1	10	13.80	0.74	0.39	1.29	1	10
DEL9012	2	1990	278	1990.76	21	13.40	0.58	0.27	2.71	1	19	13.53	1.23	0.29	2.68	1	24
DEL9014	2	1990	334	1990.92	22	10.36	-0.43	0.27	0.84	1	20	10.54	-0.64	0.28	1.09	1	24
DEL9101	2	1991	4	1991.01	24	8.42	0.77	0.26	1.08	1	22	8.36	0.69	0.27	1.19	1	24
DEL9103	2	1991	45	1991.12	47	6.24	1.04	0.19	0.95	1	41	6.50	1.17	0.20	1.48	1	24
DEL9105	2	1991	82	1991.23	51	6.00	1.51	0.19	0.69	0	46	6.61	1.05	0.22	1.41	0	10
ORE9105	2	1991	218	1991.60	22	22.44	2.16	0.27	1.17	1	2	9.41	0.93	-9.99	-9.99	1	60
DEL9110	2	1991	268	1991.73	56	19.45	1.28	0.20	1.34	0	51	12.48	0.56	0.24	2.02	0	10
DEL9111	2	1991	309	1991.85	20	12.01	-1.14	0.28	0.95	1	19	12.03	-0.91	0.29	1.27	1	24
DEL9113	2	1991	341	1991.94	22	9.73	-0.37	0.27	0.91	1	20	10.25	-0.26	0.29	1.70	1	24
DEL9201	2	1992	8	1992.02	25	6.93	-0.39	0.25	0.84	1	23	6.90	-0.37	0.26	1.02	1	24

DEL9202	2	1992	42	1992.11	22	3.65	-0.91	0.26	0.80	1	22	3.66	-0.64	0.26	1.35	1	24
ALB9202	2	1992	49	1992.14	7	5.53	0.11	0.49	1.32	1	8	5.56	-0.27	0.43	1.17	1	10
DEL9203	2	1992	59	1992.16	33	4.79	0.09	0.25	0.78	0	27	4.74	0.13	0.24	1.58	1	10
ALB9203	2	1992	80	1992.22	54	4.51	-0.02	0.20	0.78	0	43	4.81	-0.33	0.24	1.49	0	10
DEL9205	2	1992	81	1992.22	13	5.27	-0.24	0.39	0.52	1	6	5.66	-0.42	0.53	1.03	1	93
DEL9206	2	1992	175	1992.48	22	14.79	-1.09	0.30	1.26	0	21	7.48	-0.34	0.30	1.78	0	50
ORB9204	2	1992	220	1992.60	18	21.16	0.20	0.29	1.22	1	17	7.57	-0.69	0.29	1.11	1	60
ALB9211	2	1992	271	1992.74	57	18.22	0.28	0.20	1.23	0	47	12.47	0.11	0.25	2.15	0	10
DEL9212	2	1992	301	1992.83	20	12.75	-1.08	0.28	0.56	1	19	13.27	0.04	0.29	1.13	1	24
DEL9214	2	1992	338	1992.93	22	9.75	-0.64	0.27	0.59	1	20	10.13	-0.66	0.28	1.03	1	24
DEL9301	2	1993	15	1993.04	70	6.75	-1.03	0.16	1.04	0	62	7.51	-0.90	0.19	1.11	0	24
ALB9303	2	1993	52	1993.14	37	4.23	-1.00	0.22	1.13	0	31	4.87	-0.66	0.24	1.11	0	10
ALB9304	2	1993	89	1993.24	50	4.33	-0.36	0.19	0.64	0	45	4.36	-1.34	0.22	1.43	0	10
ALB9305	2	1993	133	1993.36	3	13.61	4.70	1.00	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	1
ORE9304	2	1993	217	1993.59	23	21.77	1.23	0.26	0.87	1	20	8.87	0.50	0.28	1.86	1	60
DEL9311	2	1993	267	1993.73	57	18.76	0.52	0.20	1.39	0	51	12.39	0.19	0.23	2.48	0	10
DEL9312	2	1993	307	1993.84	20	12.28	-0.98	0.28	0.93	1	19	12.34	-0.67	0.29	1.36	1	24
DEL9314	2	1993	335	1993.92	21	10.40	-0.36	0.27	0.74	1	19	10.59	-0.57	0.29	1.00	1	24
DEL9401	2	1994	7	1994.02	25	6.10	-1.25	0.25	0.98	1	23	6.49	-0.87	0.26	1.22	1	24
DEL9402	2	1994	44	1994.12	48	4.22	-1.22	0.19	0.89	0	39	5.73	-0.11	0.22	1.56	0	10
DEL9403	2	1994	80	1994.22	60	4.39	-0.12	0.19	1.13	0	52	5.56	0.33	0.24	1.34	0	10
ALB9405	2	1994	186	1994.51	30	20.91	3.03	0.23	1.68	1	30	6.90	-0.80	0.23	1.83	1	60
DEL9407	2	1994	215	1994.59	21	21.66	1.62	0.27	1.85	1	19	9.97	0.57	0.29	3.03	1	50
DEL9409	2	1994	267	1994.73	52	18.14	-0.53	0.19	1.01	1	37	13.50	1.60	0.20	1.60	1	70
ALB9409	2	1994	272	1994.74	58	17.67	-0.27	0.20	0.96	0	54	13.88	1.60	0.23	1.48	0	10
ALB9502	2	1995	31	1995.08	28	7.50	0.92	0.24	0.53	1	22	7.24	1.17	0.26	1.36	1	70
ALB9503	2	1995	49	1995.14	20	6.15	0.87	0.30	1.27	0	15	5.87	1.35	0.33	1.03	1	10
ALB9504	2	1995	92	1995.25	23	6.12	1.33	0.29	1.14	0	21	6.80	1.05	0.33	1.19	0	10
ALB9507	2	1995	193	1995.53	23	18.96	1.16	0.27	2.65	0	23	8.46	0.53	0.27	1.63	0	60
PE9501	2	1995	208	1995.57	7	23.43	1.89	0.55	1.56	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9512	2	1995	266	1995.73	41	19.76	1.46	0.23	0.73	0	39	14.81	2.70	0.27	2.49	0	10
ALB9603	2	1996	51	1996.14	26	4.58	-0.60	0.23	0.88	0	23	5.09	-0.75	0.27	1.28	0	10
ALB9604	2	1996	96	1996.26	54	4.71	-0.45	0.19	0.55	0	48	4.51	-0.67	0.24	0.94	0	10
ALB9609	2	1996	221	1996.61	68	20.34	0.07	0.15	1.22	1	53	8.05	-0.56	0.17	1.16	1	60
ALB9611	2	1996	270	1996.74	54	15.83	-2.20	0.19	1.71	0	45	11.86	-0.63	0.24	2.62	0	10
ALB9612	2	1996	318	1996.87	4	12.04	-0.94	0.61	0.50	1	4	12.26	-0.97	0.61	0.82	1	90
ALB9703	2	1997	49	1997.13	39	5.44	0.20	0.20	1.19	0	29	6.80	1.39	0.25	1.06	0	10
ALB9704	2	1997	80	1997.22	58	5.30	0.91	0.19	0.68	0	52	6.55	1.44	0.24	1.38	0	10
DEL9706	2	1997	142	1997.39	3	11.17	0.08	0.72	0.29	1	3	6.41	0.28	0.63	0.06	1	70
DEL9707	2	1997	179	1997.49	3	16.92	1.21	0.70	0.47	1	3	10.18	0.78	0.71	1.46	1	50
ALB9709	2	1997	210	1997.57	80	20.50	0.38	0.14	0.83	1	80	8.32	0.26	0.14	1.88	1	60
ALB9711	2	1997	274	1997.75	54	18.23	0.54	0.20	1.31	0	48	13.32	1.00	0.23	2.22	0	10
ALB9803	2	1998	51	1998.14	35	5.59	0.14	0.22	1.47	1	28	5.63	0.04	0.24	3.15	1	10
ALB9804	2	1998	77	1998.21	59	5.11	0.63	0.18	0.95	0	50	5.17	-0.25	0.21	1.89	0	10
DEL9804	2	1998	80	1998.22	7	5.03	0.93	0.46	0.86	1	5	5.09	1.05	0.56	0.73	1	93
ALB9807	2	1998	152	1998.42	41	13.49	1.05	0.27	1.05	1	22	7.89	0.38	0.28	1.08	1	22
AJ9801	2	1998	198	1998.54	7	19.88	-0.57	0.55	0.14	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9809	2	1998	209	1998.57	18	22.44	2.88	0.30	1.48	1	18	7.88	-0.20	0.29	1.04	1	60
ALB9811	2	1998	280	1998.77	57	17.34	0.30	0.18	1.47	0	53	11.16	-1.66	0.20	1.91	0	10
DEL9813	2	1998	312	1998.86	19	12.49	-1.40	0.29	0.46	0	18	11.07	-2.15	0.30	1.13	0	22
ALB9902	2	1999	43	1999.12	34	6.77	1.04	0.21	1.14	0	25	8.10	2.11	0.25	1.43	0	10
ALB9903	2	1999	86	1999.23	51	5.54	1.06	0.19	0.84	0	46	6.58	1.20	0.23	1.23	0	10
DEL9905	2	1999	89	1999.24	9	5.37	0.77	0.44	0.45	1	7	5.69	-0.16	0.49	2.12	1	70
DEL9906	2	1999	118	1999.32	4	7.70	0.88	0.58	0.33	1	4	5.78	0.71	0.64	0.22	1	93
ALB9909	2	1999	208	1999.57	23	23.58	3.86	0.25	1.37	1	23	8.76	0.64	0.25	1.88	1	60
IS9901	2	1999	235	1999.64	20	22.17	2.08	0.28	1.52	0	17	11.35	1.57	0.32	2.69	0	22
ALB9910	2	1999	282	1999.77	55	18.06	1.16	0.19	1.19	0	50	14.26	1.50	0.22	1.78	0	10
NP9901	2	1999	313	1999.86	8	14.58	0.66	0.43	0.73	1	8	14.56	1.56	0.43	1.48	1	22
ALB9911	2	1999	318	1999.87	12	14.51	1.42	0.37	0.96	1	11	15.30	2.25	0.39	1.29	1	22
ALB0001	2	2000	57	2000.16	40	6.65	1.46	0.21	1.35	1	31	6.53	0.80	0.24	1.48	1	10
ALB0002	2	2000	93	2000.25	60	6.82	2.02	0.18	0.80	0	53	7.38	1.85	0.21	1.12	0	10
DEL0006	2	2000	149	2000.41	22	12.50	0.59	0.27	0.81	0	20	8.83	1.25	0.32	1.54	0	22
ALB0004	2	2000	210	2000.58	16	20.05	0.29	0.31	1.32	1	16	10.40	1.79	0.31	1.30	1	60
ALB0006	2	2000	265	2000.73	59	19.53	0.95	0.19	1.21	0	52	13.40	1.04	0.21	1.69	0	10
ALB0007	2	2000	310	2000.85	21	13.20	-0.89	0.28	0.71	0	19	12.52	-0.58	0.32	0.89	0	22
ALB0102	2	2001	44	2001.12	52	5.47	-0.16	0.18	0.85	0	36	6.60	0.59	0.22	1.22	0	10
DEL0101	2	2001	47	2001.13	37	5.62	0.01	0.27	0.74	1	22	6.05	0.34	0.26	1.34	1	16
ALB0103	2	2001	86	2001.23	49	5.19	0.58	0.19	0.63	0	45	6.03	0.37	0.24	1.10	0	10
ALB0106	2	2001	144	2001.39	23	10.71	-0.11	0.26	1.46	1	20	7.01	0.13	0.28	1.89	1	22
ALB0107	2	2001	188	2001.52	17	19.50	2.19	0.31	2.16	1	17	9.23	1.60	0.30	1.88	1	60
ALB0110	2	2001	265	2001.73	52	20.86	2.50	0.20	1.27	0	49	12.14	0.19	0.24	2.83	0	10

ALB0111	2	2001	307	2001.84	23	15.47	1.21	0.28	0.69	0	22	13.81	0.63	0.29	1.42	0	22
ALB0203	2	2002	55	2002.15	49	7.01	1.96	0.19	1.05	1	36	7.10	2.28	0.21	1.41	1	10
DEL0201	2	2002	62	2002.17	13	8.01	2.13	0.41	0.79	1	6	7.54	2.89	0.52	1.41	1	16
ALB0204	2	2002	77	2002.21	49	7.33	2.86	0.19	0.93	0	44	7.94	2.83	0.24	1.27	0	10
ALB0206	2	2002	147	2002.40	21	12.52	1.01	0.27	1.20	0	18	8.52	0.88	0.31	1.46	0	22
ALB0208	2	2002	211	2002.58	18	21.99	2.17	0.29	1.33	1	18	9.07	0.98	0.29	0.70	1	60
NOB0201	2	2002	231	2002.63	21	23.66	3.55	0.28	1.31	0	19	11.24	1.03	0.32	1.88	0	22
ALB0210	2	2002	267	2002.73	55	19.74	1.42	0.19	1.39	0	50	13.12	0.96	0.24	2.76	0	10
OC384	2	2002	305	2002.83	4	19.22	2.49	0.80	1.00	1	0	0.00	-9.99	-9.99	-9.99	1	91
DEL0210	2	2002	307	2002.84	19	15.66	1.23	0.28	1.32	0	17	14.63	1.41	0.32	1.14	0	22
DEL0302	2	2003	57	2003.16	27	4.67	-0.48	0.26	1.04	1	17	3.78	-0.95	0.31	2.06	1	10
DEL0303	2	2003	86	2003.24	53	5.21	0.60	0.20	0.84	0	49	4.30	-1.64	0.23	2.13	0	10
ALB0301	2	2003	224	2003.61	19	22.56	2.45	0.29	2.02	1	19	9.45	0.94	0.28	1.46	1	60
ALB0306	2	2003	309	2003.85	26	14.98	0.77	0.26	0.53	0	21	12.96	-0.12	0.31	0.98	0	22

Table 7. Average surface and bottom temperature values for the Georges Bank region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface				Bottom							
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Pc
YUB7702	3	1977	221	1977.60	40	16.92	0.30	0.18	1.88	1	25	11.19	-0.36	0.22	1.29	1	23
ARG7701	3	1977	308	1977.84	23	14.53	1.15	0.25	2.32	1	18	13.00	0.49	0.25	1.70	1	23
KEL7711	3	1977	334	1977.92	21	11.03	0.24	0.25	0.88	1	16	11.11	0.32	0.28	1.01	1	23
DEL7802	3	1978	73	1978.20	8	3.62	-0.98	0.42	0.46	1	7	3.42	-1.32	0.45	0.42	1	23
ARG7804	3	1978	139	1978.38	24	7.04	-1.15	0.25	1.06	1	18	5.98	-0.98	0.26	1.06	1	23
ALB7807	3	1978	193	1978.53	18	14.55	0.18	0.27	1.60	1	14	10.15	-0.75	0.29	0.92	1	23
BEL7801	3	1978	243	1978.67	21	16.82	0.48	0.23	1.25	0	17	11.00	-0.84	0.27	1.34	0	23
BEL7803	3	1978	285	1978.78	24	14.57	-0.85	0.24	1.17	1	17	12.52	-0.21	0.28	1.26	1	23
DEL7905	3	1979	142	1979.39	27	9.76	1.36	0.21	1.68	0	21	6.83	-0.28	0.27	0.76	0	23
ALB7906	3	1979	192	1979.53	20	15.43	0.81	0.26	1.00	1	14	10.68	0.10	0.30	0.77	1	23
BEL7901	3	1979	238	1979.65	15	17.66	0.77	0.31	1.22	1	11	12.79	0.10	0.35	0.75	1	23
ALB7911	3	1979	296	1979.81	25	14.39	0.38	0.22	0.61	0	21	13.10	0.85	0.26	1.11	0	23
ALB7913	3	1979	350	1979.96	16	10.21	1.09	0.27	1.67	1	13	10.16	0.87	0.29	1.82	1	23
WIE8002	3	1980	63	1980.17	22	4.53	-0.28	0.26	0.48	1	13	4.28	-0.48	0.31	0.71	1	23
ALB8002	3	1980	88	1980.24	26	4.75	-0.09	0.20	0.58	0	19	4.69	-0.30	0.24	0.42	0	23
EVR8001	3	1980	125	1980.34	21	7.10	-0.03	0.26	1.33	1	16	6.30	0.14	0.28	0.83	1	23
DEL8003	3	1980	163	1980.45	15	9.83	-0.97	0.30	1.29	1	11	8.16	0.03	0.33	0.81	1	23
EVR8004	3	1980	177	1980.49	7	12.53	-0.03	0.42	0.70	1	6	9.86	-0.20	0.46	1.43	1	23
EVR8006	3	1980	214	1980.59	25	16.96	0.47	0.24	1.47	1	18	11.38	0.20	0.27	0.94	1	23
ALB8010	3	1980	293	1980.80	26	15.17	0.73	0.22	0.86	0	6	13.46	0.91	0.45	0.42	1	23
ALB8012	3	1980	352	1980.96	25	8.17	-1.00	0.23	0.94	0	12	7.64	-1.50	0.31	1.26	1	23
ALB8101	3	1981	63	1981.17	28	5.10	0.32	0.20	0.67	0	21	4.89	0.02	0.24	0.90	1	23
KEL8103	3	1981	96	1981.26	22	5.11	-0.01	0.25	0.96	0	11	4.93	0.21	0.31	1.46	1	23
DEL8103	3	1981	157	1981.43	29	11.56	1.61	0.20	2.81	0	19	8.42	0.42	0.25	1.01	0	23
ALB8114	3	1981	335	1981.92	25	9.71	-0.94	0.21	0.69	0	16	9.65	-0.92	0.29	0.85	0	23
ALB8202	3	1982	65	1982.18	24	3.51	-1.04	0.21	0.59	0	20	3.95	-1.07	0.25	0.89	0	23
ALB8204	3	1982	116	1982.32	9	7.50	0.36	0.29	1.03	1	2	4.40	-2.08	-9.99	-9.99	1	27
DEL8203	3	1982	141	1982.39	29	8.18	-0.13	0.21	2.24	0	21	7.16	0.16	0.24	1.56	0	23
ALB8209	3	1982	228	1982.62	20	19.61	1.72	0.39	2.52	1	3	10.70	-1.15	0.51	6.04	1	27
DEL8206	3	1982	269	1982.74	18	17.67	0.51	0.29	1.37	1	6	10.13	-1.34	0.49	1.55	1	27
DEL8209	3	1982	326	1982.89	28	11.89	0.43	0.20	1.26	0	17	11.16	0.00	0.26	0.58	0	23
DEL8301	3	1983	22	1983.06	25	7.44	1.14	0.21	0.56	0	22	7.89	1.03	0.23	0.80	0	23
ALB8304	3	1983	163	1983.45	28	10.27	-0.30	0.20	0.92	0	25	8.18	-0.21	0.23	0.72	0	23
DEL8309	3	1983	342	1983.94	28	9.45	-0.58	0.20	0.66	0	19	9.84	-0.18	0.25	0.93	1	23
DEL8401	3	1984	21	1984.06	28	5.91	-0.47	0.21	0.54	0	22	6.39	-0.55	0.24	0.57	0	23
ALB8403	3	1984	145	1984.40	28	9.06	0.44	0.19	0.72	0	21	7.44	0.13	0.25	0.49	0	23
DEL8409	3	1984	332	1984.91	28	11.31	0.36	0.21	1.05	0	22	11.40	0.56	0.24	1.22	0	23
DEL8501	3	1985	17	1985.05	29	7.12	0.41	0.20	0.79	0	23	8.38	1.16	0.23	1.68	0	23
DEL8503	3	1985	95	1985.26	29	6.09	1.00	0.21	1.26	0	22	5.74	0.66	0.24	0.56	0	23
ALB8504	3	1985	132	1985.36	31	7.89	0.28	0.21	1.08	0	23	7.41	0.96	0.24	0.52	0	23
DEL8507	3	1985	258	1985.71	32	17.08	0.85	0.20	1.63	0	25	12.50	0.01	0.23	0.94	0	23
DEL8510	3	1985	328	1985.90	28	11.75	0.48	0.21	0.90	0	23	11.93	0.93	0.24	1.07	0	23
DEL8601	3	1986	32	1986.09	27	6.18	0.28	0.21	0.60	0	23	6.74	0.44	0.24	0.55	0	23
DEL8603	3	1986	150	1986.41	33	9.82	0.49	0.20	2.18	0	25	8.07	0.55	0.23	0.72	0	23
DEL8607	3	1986	260	1986.71	30	15.56	-0.70	0.21	0.95	0	19	12.29	-0.11	0.27	0.84	0	23
ALB8606	3	1986	321	1986.88	31	12.43	0.20	0.20	0.66	1	27	13.01	0.98	0.22	0.71	1	90
DEL8610	3	1986	329	1986.90	30	11.08	-0.28	0.21	0.63	0	22	11.20	0.22	0.24	0.78	0	23
DEL8701	3	1987	36	1987.10	30	5.65	0.11	0.21	0.56	0	23	5.95	-0.13	0.24	0.85	0	23
DEL8704	3	1987	139	1987.38	28	8.22	-0.02	0.20	1.14	0	16	7.10	0.13	0.26	1.01	0	23
DEL8708	3	1987	248	1987.68	30	16.04	-0.44	0.21	0.94	0	22	10.75	-1.56	0.24	1.16	0	23
DEL8710	3	1987	337	1987.92	28	8.81	-1.72	0.20	0.97	0	21	8.84	-1.62	0.24	0.86	0	23
DEL8812	3	1988	313	1988.86	28	11.82	-0.79	0.20	0.70	1	28	11.62	-0.09	0.20	1.28	1	24
ALB8811	3	1988	341	1988.94	59	9.37	-0.68	0.17	0.56	0	57	9.32	-0.70	0.17	0.50	0	24
DEL8901	3	1989	17	1989.05	56	5.64	-0.97	0.18	0.58	0	53	5.66	-1.16	0.18	0.67	0	24
DEL8907	3	1989	317	1989.87	55	12.54	0.44	0.13	0.63	1	53	12.41	0.71	0.13	1.09	1	24
DEL8909	3	1989	346	1989.95	58	7.83	-1.77	0.17	0.73	0	51	7.91	-1.88	0.19	0.92	0	24
DEL9001	3	1990	11	1990.03	65	5.26	-1.86	0.16	0.89	0	60	5.50	-2.02	0.19	1.06	0	24
DEL9003	3	1990	58	1990.16	47	4.77	0.22	0.15	0.34	1	46	4.82	-0.01	0.15	0.71	1	24
DEL9005	3	1990	119	1990.33	92	6.84	0.63	0.14	0.87	1	70	6.28	0.53	0.15	0.71	0	80
DEL9006	3	1990	133	1990.36	97	8.04	0.68	0.13	1.04	0	81	7.04	0.53	0.14	0.77	0	80
DEL9011	3	1990	281	1990.77	31	16.39	1.36	0.18	1.05	0	27	13.99	1.27	0.21	1.59	0	10
DEL9012	3	1990	309	1990.85	61	13.17	0.30	0.17	0.83	0	58	12.78	0.59	0.17	0.99	0	24
DEL9014	3	1990	342	1990.94	70	9.43	-0.56	0.14	0.56	0	64	9.48	-0.68	0.16	0.85	0	24

DEL9101	3	1991	11	1991.03	72	7.25	0.15	0.14	0.89	0	57	7.65	0.10	0.16	0.88	0	24
DEL9103	3	1991	46	1991.13	68	5.70	0.69	0.14	0.73	0	58	5.85	0.38	0.16	0.93	0	24
DEL9105	3	1991	90	1991.25	39	5.39	0.66	0.18	0.76	0	36	5.53	0.51	0.19	0.74	0	10
CHA9103	3	1991	188	1991.51	4	20.22	5.56	0.73	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93
ORE9105	3	1991	228	1991.62	30	17.14	1.07	0.20	2.61	0	2	13.56	0.48	-9.99	-9.99	1	60
AM9103	3	1991	279	1991.76	25	15.35	0.48	0.20	0.37	1	10	13.33	-0.10	0.31	1.13	1	90
DEL9110	3	1991	279	1991.76	47	15.76	0.48	0.16	1.16	0	38	12.63	0.14	0.20	1.75	0	10
DEL9111	3	1991	317	1991.87	59	11.46	-0.80	0.18	0.67	0	57	11.31	-0.53	0.17	0.95	0	24
DEL9113	3	1991	345	1991.94	70	9.33	-0.38	0.14	0.47	0	50	9.37	-0.56	0.19	1.06	0	24
DEL9201	3	1992	12	1992.03	30	6.92	0.03	0.19	0.71	1	28	7.08	0.09	0.20	0.94	1	24
DEL9202	3	1992	32	1992.09	69	5.26	-0.43	0.14	0.63	0	56	5.30	-0.74	0.16	0.84	0	24
DEL9203	3	1992	64	1992.18	26	4.34	-0.13	0.22	0.51	0	23	4.51	-0.28	0.23	0.96	0	10
ALB9203	3	1992	93	1992.25	41	3.92	-0.87	0.16	1.00	0	29	4.31	-0.70	0.23	0.86	0	10
ALB9204	3	1992	125	1992.34	45	3.97	-2.97	0.18	1.89	1	27	4.33	-1.51	0.20	1.40	1	93
ALB9205	3	1992	145	1992.40	190	6.57	-2.37	0.08	0.93	1	128	4.84	-2.35	0.10	0.85	1	93
DEL9206	3	1992	181	1992.49	19	11.99	0.06	0.23	1.64	1	19	9.17	-0.92	0.23	1.96	1	50
ORE9204	3	1992	231	1992.63	22	16.58	0.58	0.23	2.20	1	20	11.13	-0.33	0.24	1.40	1	60
ALB9211	3	1992	284	1992.78	54	14.63	-0.26	0.15	1.03	0	47	12.67	-0.12	0.15	1.78	1	10
DEL9212	3	1992	306	1992.84	63	12.01	-1.10	0.16	0.77	0	62	11.92	-0.38	0.16	1.22	0	24
DEL9214	3	1992	348	1992.95	61	8.03	-1.16	0.13	0.55	1	59	8.18	-1.02	0.13	0.82	1	24
DEL9301	3	1993	13	1993.04	72	6.01	-0.97	0.13	0.66	0	63	6.37	-1.11	0.15	0.81	0	24
ALB9303	3	1993	56	1993.15	15	4.40	-0.98	0.30	0.65	1	10	5.65	-0.67	0.39	1.43	1	10
ALB9304	3	1993	100	1993.28	52	5.02	-0.11	0.15	1.59	0	46	4.83	-0.56	0.18	0.86	0	10
ALB9306	3	1993	144	1993.39	207	7.65	-0.51	0.07	0.50	1	146	6.87	-0.24	0.09	1.14	1	21
DEL9306	3	1993	169	1993.46	49	12.64	-0.72	0.20	2.17	1	5	9.55	1.22	0.63	3.09	1	93
ORE9304	3	1993	227	1993.62	52	16.67	0.89	0.15	2.59	0	48	10.51	-0.83	0.17	2.08	0	60
DEL9311	3	1993	278	1993.76	54	15.93	0.54	0.16	1.29	0	46	13.46	-0.64	0.18	1.79	0	10
DEL9312	3	1993	312	1993.85	64	12.34	-0.32	0.16	0.87	0	64	12.03	-0.04	0.15	1.08	0	24
DEL9314	3	1993	341	1993.93	71	10.17	0.12	0.14	1.02	0	65	10.25	0.03	0.16	0.88	0	24
DEL9401	3	1994	13	1994.04	40	6.07	-0.65	0.16	0.64	1	39	6.26	-0.60	0.16	0.94	1	24
DEL9402	3	1994	51	1994.14	41	5.11	-0.02	0.18	1.89	1	31	5.42	-0.08	0.20	2.98	1	10
DEL9403	3	1994	99	1994.27	51	5.59	0.51	0.15	1.21	0	42	5.87	0.56	0.18	0.98	0	10
ALB9403	3	1994	133	1994.36	186	8.21	1.12	0.07	0.78	1	172	7.25	0.77	0.07	1.02	1	21
DEL9404	3	1994	135	1994.37	194	8.32	0.88	0.08	0.96	1	169	7.80	1.09	0.08	1.47	1	81
ALB9404	3	1994	156	1994.43	38	9.95	0.82	0.16	0.87	1	34	8.77	0.78	0.17	1.17	1	20
DEL9406	3	1994	176	1994.48	94	12.18	0.70	0.10	0.95	1	92	11.27	1.46	0.10	1.84	1	80
ALB9405	3	1994	192	1994.53	48	16.86	3.38	0.16	2.66	0	45	10.35	0.72	0.17	1.92	0	60
DEL9407	3	1994	230	1994.63	23	16.99	1.26	0.21	1.41	1	22	14.24	0.92	0.21	1.67	1	50
ALB9407	3	1994	240	1994.66	84	16.75	1.92	0.10	1.32	1	81	11.37	-0.51	0.11	2.39	1	80
ALB9409	3	1994	281	1994.77	52	14.65	-0.48	0.15	0.97	0	45	13.14	0.33	0.18	1.42	0	10
ALB9410	3	1994	318	1994.87	37	12.09	-0.26	0.25	0.66	0	27	12.07	0.54	0.20	1.32	1	20
ALB9501	3	1995	11	1995.03	13	7.84	0.65	0.30	0.88	0	11	8.22	0.92	0.32	1.07	1	22
ALB9502	3	1995	27	1995.07	3	7.74	1.95	0.68	0.41	1	3	7.75	1.31	0.68	0.23	1	70
EN261	3	1995	45	1995.12	50	5.69	0.62	0.18	0.66	0	46	6.05	0.45	0.19	0.82	0	20
ALB9503	3	1995	59	1995.16	18	5.21	0.54	0.24	0.50	0	15	5.24	0.57	0.25	1.09	1	10
SJ9503	3	1995	76	1995.21	18	4.81	0.40	0.23	0.29	1	18	4.83	0.15	0.23	0.58	1	21
EN263	3	1995	76	1995.21	75	5.36	0.66	0.16	0.71	0	72	5.48	0.72	0.18	0.86	0	20
SJ9505	3	1995	100	1995.27	71	4.92	0.07	0.12	0.65	1	71	5.16	-0.13	0.13	0.95	1	21
ALB9504	3	1995	100	1995.27	23	5.41	0.29	0.20	1.24	0	19	6.34	1.08	0.25	1.57	0	10
EN265	3	1995	105	1995.29	87	5.32	0.17	0.15	0.63	0	83	5.58	0.38	0.16	0.76	0	20
SJ9507	3	1995	132	1995.36	95	7.18	0.00	0.11	1.47	1	96	9.20	2.57	0.12	2.55	1	21
KAT9502	3	1995	132	1995.36	118	8.44	0.62	0.11	2.46	1	73	8.27	1.63	0.13	3.03	1	81
ALB9505	3	1995	134	1995.37	87	7.40	-0.16	0.11	0.87	1	81	7.73	1.19	0.11	2.55	1	20
ALB9506	3	1995	161	1995.44	56	9.29	-0.31	0.13	0.93	1	48	7.82	-0.22	0.14	1.17	1	20
KAT9504	3	1995	174	1995.48	49	10.57	-0.32	0.14	1.06	1	49	9.23	-0.32	0.14	0.95	1	81
ALB9508	3	1995	195	1995.53	55	14.21	0.34	0.17	1.47	0	43	9.98	0.01	0.20	1.60	0	20
KAT9505	3	1995	203	1995.56	80	14.30	0.93	0.11	1.38	1	80	10.43	-0.61	0.11	1.15	1	81
ALB9507	3	1995	213	1995.58	34	16.15	0.93	0.18	2.35	0	33	10.98	0.28	0.19	1.79	0	60
PE9502	3	1995	235	1995.64	19	18.66	2.00	0.25	2.67	0	5	12.23	2.32	0.55	1.41	1	93
ALB9512	3	1995	278	1995.76	28	17.33	2.05	0.20	1.67	0	26	15.02	2.27	0.22	2.67	0	10
EN276	3	1996	15	1996.04	83	6.17	-0.72	0.14	1.24	0	71	6.22	-1.03	0.15	0.84	0	20
EN278	3	1996	49	1996.13	82	4.65	-0.31	0.13	0.84	0	63	5.01	-0.47	0.18	1.09	0	20
ALB9603	3	1996	57	1996.16	24	5.16	-0.06	0.25	0.41	1	12	5.09	-0.92	0.36	1.71	1	10
OC275	3	1996	77	1996.21	61	4.44	-0.07	0.16	0.40	0	52	4.66	-0.26	0.17	1.14	0	20
EN282	3	1996	104	1996.29	101	4.88	-0.26	0.11	0.51	0	90	5.14	0.04	0.13	0.58	0	20
ALB9604	3	1996	111	1996.30	44	5.18	-0.38	0.15	0.55	0	38	5.37	-0.26	0.17	0.89	0	10
ALB9605	3	1996	132	1996.36	139	6.82	-0.24	0.10	0.73	0	109	6.38	-0.06	0.12	0.76	0	20
ALB9606	3	1996	146	1996.40	74	8.24	-0.17	0.14	0.67	0	69	7.01	-0.31	0.15	0.73	0	81
ALB9607	3	1996	159	1996.44	61	9.33	-0.39	0.17	1.46	0	54	7.71	-0.39	0.20	1.05	0	20
ALB9608	3	1996	173	1996.48	57	11.42	0.07	0.16	1.14	0	48	8.26	-0.80	0.19	1.13	0	81
AJ9601	3	1996	179	1996.49	4	11.75	-1.06	0.47	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93

AJ9603	3	1996	209	1996.57	7	15.63	-1.53	0.61	0.59	1	1	6.59	-9.99	-9.99	-9.99	1	93
ALB9609	3	1996	235	1996.64	151	15.83	-0.23	0.10	1.43	0	146	9.81	-1.39	0.10	2.29	0	60
ALB9610	3	1996	245	1996.67	43	14.93	-1.14	0.15	0.90	1	42	12.43	-1.18	0.15	1.56	1	81
ALB9611	3	1996	284	1996.78	69	12.96	-1.95	0.14	1.08	0	63	10.49	-1.99	0.16	1.95	0	10
ALB9612	3	1996	314	1996.86	8	10.55	-1.69	0.38	0.51	1	7	10.07	-0.60	0.44	1.50	1	90
ALB9701	3	1997	16	1997.04	27	6.29	-0.29	0.19	0.41	1	24	6.66	-0.40	0.20	0.89	1	20
OC298	3	1997	46	1997.13	102	4.83	-0.18	0.13	0.73	0	92	5.06	-0.44	0.14	1.00	0	20
ALB9703	3	1997	56	1997.15	23	5.00	-0.04	0.25	0.48	1	15	5.40	0.09	0.29	1.59	1	10
OC300	3	1997	79	1997.22	91	4.51	0.02	0.14	0.70	0	86	4.71	-0.11	0.15	0.92	0	20
ALB9704	3	1997	94	1997.26	46	4.79	-0.09	0.15	0.82	0	38	5.03	-0.16	0.19	1.27	0	10
OC301	3	1997	99	1997.27	124	4.59	-0.32	0.10	0.52	1	113	4.78	-0.71	0.11	1.33	1	21
OC302	3	1997	115	1997.32	75	5.49	-0.25	0.14	0.79	0	67	5.50	-0.04	0.15	0.78	0	20
OC303	3	1997	133	1997.37	128	6.95	-0.31	0.09	0.65	1	122	6.24	-0.38	0.10	0.63	1	21
ALB9705	3	1997	143	1997.39	92	7.82	-0.19	0.14	0.87	0	87	6.86	-0.25	0.15	1.14	0	20
ALB9707	3	1997	173	1997.47	62	11.92	0.60	0.17	1.42	0	59	9.41	0.41	0.17	1.55	0	20
ALB9708	3	1997	190	1997.52	7	19.93	3.34	0.47	2.14	1	3	11.62	3.13	0.69	1.46	1	93
DEL9707	3	1997	193	1997.53	8	14.42	1.76	0.33	1.77	1	8	11.55	-0.35	0.33	2.30	1	50
ALB9709	3	1997	225	1997.62	168	17.29	1.59	0.09	2.23	0	161	12.23	1.23	0.10	3.00	0	60
ALB9711	3	1997	285	1997.78	71	15.02	0.24	0.14	1.04	0	64	12.92	0.27	0.17	1.49	0	10
ALB9801	3	1998	11	1998.03	89	6.99	-0.22	0.13	0.90	0	78	7.47	-0.25	0.14	0.95	0	20
ALB9802	3	1998	27	1998.07	3	6.67	1.07	0.71	0.26	1	2	6.70	0.12	-9.99	-9.99	1	22
OC317	3	1998	42	1998.11	93	4.76	-0.55	0.12	0.98	0	86	4.94	-0.85	0.13	1.30	0	20
ALB9803	3	1998	54	1998.15	34	4.27	-0.81	0.21	1.08	1	19	4.83	-0.79	0.26	3.93	1	10
OC319	3	1998	78	1998.21	90	4.72	0.26	0.12	0.75	0	81	4.94	0.19	0.14	1.08	0	20
DEL9804	3	1998	85	1998.23	4	4.86	-0.34	0.65	1.17	1	1	5.36	1.16	-9.99	-9.99	1	93
ALB9804	3	1998	90	1998.25	53	5.24	0.58	0.15	0.95	0	44	5.30	0.42	0.18	1.34	0	10
OC322	3	1998	109	1998.30	92	5.77	0.40	0.12	0.74	0	86	5.61	0.25	0.13	0.95	0	20
ALB9806	3	1998	136	1998.37	96	7.38	-0.11	0.12	0.91	0	88	6.71	0.00	0.15	1.04	0	20
ALB9807	3	1998	155	1998.43	28	10.02	0.29	0.19	1.20	0	25	7.93	-0.01	0.22	1.36	0	22
ALB9808	3	1998	171	1998.47	60	12.16	0.90	0.16	1.16	0	49	8.49	-0.26	0.18	1.52	0	20
ALB9809	3	1998	222	1998.61	55	17.93	2.35	0.16	2.20	0	54	10.39	-0.86	0.16	2.17	0	60
AJ9801	3	1998	225	1998.62	7	20.69	2.86	0.47	1.14	1	0	0.00	-9.99	-9.99	-9.99	1	93
IS9801	3	1998	237	1998.65	34	18.14	1.71	0.20	1.53	0	25	12.34	-0.56	0.20	2.31	1	22
ALB9811	3	1998	292	1998.80	66	13.69	-0.68	0.14	1.08	0	62	11.55	-0.86	0.15	1.58	0	10
DEL9813	3	1998	317	1998.87	29	11.01	-1.19	0.19	0.82	0	25	10.80	-1.00	0.23	0.96	0	22
ALB9901	3	1999	17	1999.05	79	6.74	-0.12	0.14	0.67	0	73	7.81	0.50	0.15	1.16	0	20
OC336	3	1999	46	1999.13	92	5.84	0.65	0.12	0.93	0	86	6.83	1.23	0.14	1.22	0	20
ALB9902	3	1999	51	1999.14	35	5.84	0.88	0.19	1.15	1	22	6.30	0.83	0.23	1.69	1	10
EN320	3	1999	75	1999.20	91	5.05	0.49	0.12	0.89	0	81	5.50	0.67	0.14	0.98	0	20
DEL9905	3	1999	94	1999.26	25	5.59	0.83	0.23	0.62	0	24	5.70	0.76	0.26	0.61	0	70
ALB9903	3	1999	99	1999.27	48	5.81	0.84	0.15	0.69	0	42	5.72	0.71	0.17	0.91	0	10
EDL9904	3	1999	108	1999.30	46	5.90	0.67	0.15	0.25	1	46	5.85	0.51	0.15	0.98	1	21
OC341	3	1999	110	1999.30	92	6.00	0.56	0.12	0.63	0	84	6.17	0.73	0.14	0.60	0	20
EDL9905	3	1999	133	1999.37	70	8.89	1.68	0.13	0.96	1	64	7.81	1.08	0.14	1.71	1	21
ALB9904	3	1999	142	1999.39	95	10.15	2.00	0.12	2.47	0	87	8.43	1.35	0.13	1.52	0	20
AJ9901	3	1999	156	1999.43	31	12.10	2.35	0.20	1.37	0	28	9.61	1.78	0.22	1.56	0	22
ALB9905	3	1999	157	1999.43	46	10.88	1.67	0.14	1.12	1	46	8.38	0.63	0.14	1.01	1	91
ALB9906	3	1999	169	1999.46	63	13.46	2.46	0.15	2.35	0	61	9.73	1.08	0.16	1.58	0	20
ALB9908	3	1999	189	1999.52	19	14.20	2.05	0.24	0.97	1	19	11.48	2.32	0.23	1.60	1	91
ALB9909	3	1999	214	1999.59	31	19.86	4.59	0.22	1.91	0	30	12.47	2.09	0.22	1.92	0	60
IS9901	3	1999	237	1999.65	35	19.49	3.05	0.18	1.64	0	30	13.37	1.39	0.22	2.36	0	22
ALB9910	3	1999	291	1999.80	41	16.27	1.87	0.16	1.60	0	37	14.73	2.18	0.18	1.53	0	10
ALB9911	3	1999	321	1999.88	29	13.24	1.39	0.19	1.36	0	26	13.63	2.06	0.23	1.83	0	22
ALB0001	3	2000	60	2000.16	9	6.49	1.02	0.43	0.69	1	5	7.91	1.56	0.58	4.29	1	10
ALB0002	3	2000	104	2000.28	51	7.00	1.79	0.15	0.71	0	44	7.18	1.73	0.17	0.83	0	10
DEL0006	3	2000	153	2000.42	29	10.45	0.92	0.21	0.90	0	24	9.29	1.30	0.26	1.00	0	22
ALB0003	3	2000	176	2000.48	36	12.53	1.41	0.18	0.94	1	36	9.14	0.96	0.17	1.11	1	91
ALB0004	3	2000	223	2000.61	34	16.51	0.80	0.19	2.42	0	33	11.47	0.54	0.20	1.85	0	60
ALB0005	3	2000	237	2000.65	30	17.81	1.64	0.21	1.60	0	25	12.33	0.21	0.23	1.85	0	22
DEL0008	3	2000	273	2000.75	27	15.87	0.64	0.18	0.80	1	27	13.64	-0.18	0.18	1.73	1	16
ALB0006	3	2000	274	2000.75	45	15.95	0.41	0.16	0.92	0	40	12.49	0.06	0.19	1.73	0	10
DEL0010	3	2000	311	2000.85	5	12.10	-0.29	0.45	0.72	1	5	11.20	-0.68	0.43	0.60	1	91
ALB0007	3	2000	314	2000.86	29	12.73	0.09	0.20	1.68	0	22	11.16	-0.68	0.23	1.01	0	22
ALB0102	3	2001	50	2001.14	30	5.62	0.33	0.23	0.54	1	20	5.91	0.32	0.25	1.84	1	10
ALB0103	3	2001	97	2001.27	47	5.27	0.28	0.15	0.67	0	39	5.55	0.30	0.18	0.78	0	10
DEL0105	3	2001	151	2001.41	33	9.81	0.56	0.19	1.82	0	29	8.10	0.45	0.22	0.93	0	22
DEL0106	3	2001	167	2001.46	20	13.63	2.98	0.25	2.28	1	19	8.14	0.20	0.26	1.44	1	91
ALB0107	3	2001	219	2001.60	64	17.23	1.84	0.14	1.90	0	63	9.86	-1.14	0.15	2.15	0	60
ALB0109	3	2001	234	2001.64	34	18.20	2.18	0.20	1.84	0	29	12.28	0.13	0.23	1.64	0	22
DEL0109	3	2001	268	2001.74	36	16.25	1.10	0.16	0.89	1	35	13.79	0.66	0.16	2.33	1	16
ALB0110	3	2001	275	2001.75	50	17.05	1.63	0.15	1.41	0	42	13.10	0.42	0.18	1.85	0	10

ALB0111	3	2001	313	2001.86	30	13.27	0.65	0.21	0.92	0	27	12.52	0.55	0.22	1.09	0	22
ALB0202	3	2002	28	2002.08	15	6.60	1.35	0.24	0.37	1	14	6.67	1.17	0.24	0.76	1	22
ALB0203	3	2002	60	2002.16	17	5.92	0.69	0.30	0.75	1	10	7.72	2.04	0.38	2.80	1	10
ALB0204	3	2002	98	2002.27	48	6.24	1.29	0.15	0.63	0	42	6.78	1.57	0.19	0.83	0	10
ALB0206	3	2002	151	2002.41	32	11.13	1.89	0.19	1.28	0	26	8.80	1.12	0.23	0.94	0	22
ALB0208	3	2002	219	2002.60	60	18.32	2.90	0.15	2.26	0	59	11.12	0.37	0.16	2.22	0	60
NOB0201	3	2002	235	2002.64	28	20.03	3.57	0.20	1.78	0	24	12.98	0.98	0.24	1.81	0	22
ALB0209	3	2002	236	2002.65	21	18.93	3.90	0.22	1.04	1	19	12.11	0.56	0.22	1.59	1	91
DEL0208	3	2002	268	2002.73	19	17.23	1.75	0.22	0.97	1	19	15.34	1.80	0.22	1.98	1	16
ALB0210	3	2002	280	2002.77	46	17.63	2.39	0.16	1.56	0	37	14.29	1.62	0.18	1.97	0	10
DEL0210	3	2002	313	2002.86	30	12.75	0.16	0.19	0.63	0	27	12.73	0.82	0.22	0.98	0	22
DEL0301	3	2003	29	2003.08	22	5.07	-0.60	0.21	0.58	1	19	5.14	-0.82	0.23	1.03	1	22
DEL0303	3	2003	96	2003.26	50	4.40	-0.52	0.15	0.91	0	44	4.66	-0.38	0.17	0.93	0	10
DEL0305	3	2003	146	2003.40	29	8.49	-0.02	0.23	2.03	0	27	7.99	0.52	0.25	1.71	0	22
ARM0301	3	2003	234	2003.64	37	17.77	1.97	0.18	1.83	1	26	11.83	-0.96	0.19	1.70	1	22
ALB0301	3	2003	236	2003.65	58	17.56	1.69	0.15	2.09	0	57	10.50	-1.10	0.16	2.04	0	60
DEL0308	3	2003	264	2003.72	46	15.90	0.77	0.15	1.14	1	46	13.26	0.44	0.15	2.84	1	16
DEL0310	3	2003	307	2003.84	15	13.39	0.40	0.27	0.43	1	15	12.52	0.16	0.25	1.00	1	91
ALB0306	3	2003	312	2003.86	33	13.38	0.59	0.18	0.72	0	24	12.35	0.37	0.21	1.02	0	22

Table 8. Average surface and bottom temperature values for the western Gulf of Maine region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface				Bottom							
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Pc
YUB7702	4	1977	220	1977.60	34	17.19	0.42	0.19	1.69	0	33	5.85	-0.38	0.16	0.98	0	23
ARG7701	4	1977	306	1977.84	25	11.03	0.16	0.21	0.63	0	23	7.24	-0.06	0.19	0.78	0	23
MTM7711	4	1977	318	1977.87	16	10.39	0.68	0.28	0.24	1	14	7.11	-0.13	0.26	0.55	1	23
KEL7711	4	1977	334	1977.91	6	9.45	-0.22	0.45	0.53	1	6	7.19	0.41	0.37	0.78	1	23
DEL7802	4	1978	73	1978.20	26	2.87	-1.32	0.22	0.45	1	25	5.46	0.01	0.19	0.70	1	23
ARG7804	4	1978	137	1978.38	27	7.12	-0.77	0.21	0.77	0	27	5.29	-0.13	0.18	0.57	0	23
ALB7807	4	1978	193	1978.53	31	15.41	0.07	0.20	1.29	0	30	5.82	-0.13	0.18	0.57	0	23
BEL7801	4	1978	244	1978.67	18	17.09	0.51	0.25	1.24	1	15	6.21	-0.13	0.24	0.52	1	23
BEL7803	4	1978	287	1978.79	29	11.93	-0.72	0.19	0.76	0	43	6.78	-0.21	0.17	0.90	1	23
DEL7903	4	1979	70	1979.19	4	4.08	-0.54	0.52	0.45	1	0	0.00	-9.99	-9.99	-9.99	1	23
DEL7905	4	1979	146	1979.40	25	9.53	0.44	0.21	0.97	0	19	5.14	-0.36	0.21	0.70	0	23
ALB7906	4	1979	192	1979.52	11	16.96	0.85	0.33	1.08	1	6	5.63	0.09	0.38	0.49	1	23
BEL7901	4	1979	242	1979.66	28	16.78	0.46	0.20	1.03	0	28	6.57	-0.25	0.18	0.80	0	23
ALB7911	4	1979	297	1979.81	21	11.84	0.02	0.24	0.55	1	16	7.31	0.43	0.23	1.42	1	23
ALB7913	4	1979	327	1979.89	18	9.56	0.34	0.27	0.38	1	8	8.81	0.68	0.35	0.40	1	23
WIE8002	4	1980	57	1980.16	31	4.78	0.18	0.19	0.52	0	30	5.42	-0.11	0.17	0.67	0	23
ALB8002	4	1980	84	1980.23	15	4.43	0.26	0.29	0.35	1	7	4.06	-0.17	0.36	0.64	1	23
EVR8001	4	1980	128	1980.35	30	6.67	-0.15	0.20	0.74	0	30	4.83	-0.41	0.17	0.66	0	23
DEL8003	4	1980	161	1980.44	7	11.53	-0.21	0.41	0.99	1	4	5.17	-0.26	0.50	0.55	1	23
EVR8004	4	1980	180	1980.49	14	13.35	0.65	0.30	0.84	1	12	5.26	-0.47	0.26	0.84	1	23
EVR8006	4	1980	218	1980.60	33	18.47	1.75	0.19	1.71	0	33	6.05	-0.21	0.16	0.66	0	23
ALB8010	4	1980	297	1980.82	23	10.94	-0.32	0.23	0.82	1	14	7.15	-0.35	0.25	0.37	1	23
ALB8012	4	1980	346	1980.95	7	7.39	-1.11	0.42	0.47	1	5	6.41	-0.62	0.45	0.52	1	23
ALB8101	4	1981	57	1981.16	32	4.11	-0.44	0.19	0.51	0	29	4.69	-0.76	0.17	0.78	0	23
KEL8103	4	1981	95	1981.26	4	4.71	0.00	0.57	0.27	1	1	4.00	-0.31	-9.99	-9.99	1	23
DEL8103	4	1981	147	1981.40	33	9.40	0.12	0.20	0.85	0	27	5.19	-0.21	0.19	0.79	0	23
ALB8114	4	1981	345	1981.94	25	7.82	-0.48	0.22	0.33	0	14	6.59	-0.49	0.26	0.75	1	23
ALB8202	4	1982	52	1982.14	21	3.78	-1.00	0.25	0.42	1	17	5.90	0.56	0.22	0.67	1	23
DEL8203	4	1982	155	1982.43	21	8.43	-1.84	0.24	1.28	1	15	5.63	0.10	0.26	0.42	1	23
DEL8209	4	1982	337	1982.92	31	9.43	0.68	0.19	0.49	0	29	7.32	0.09	0.17	0.49	0	23
DEL8301	4	1983	29	1983.08	31	6.13	0.38	0.20	0.63	0	30	6.57	0.43	0.17	0.68	0	23
ALB8304	4	1983	169	1983.46	31	13.30	0.96	0.19	1.07	0	20	5.62	0.11	0.22	0.57	0	23
DEL8309	4	1983	349	1983.96	17	7.81	-0.37	0.26	0.45	1	12	7.78	0.48	0.28	0.44	1	23
DEL8401	4	1984	13	1984.04	29	5.89	-0.67	0.20	0.45	0	26	6.91	0.29	0.19	0.65	0	23
ALB8403	4	1984	152	1984.42	32	9.28	-0.65	0.19	1.25	0	21	5.92	0.37	0.21	0.44	0	23
DEL8409	4	1984	336	1984.92	16	9.55	0.79	0.28	0.60	1	9	8.77	0.76	0.32	0.43	1	23
DEL8501	4	1985	18	1985.05	9	6.88	0.35	0.38	0.54	1	8	6.99	0.51	0.33	0.70	1	23
DEL8503	4	1985	97	1985.26	7	5.82	1.26	0.43	0.35	1	6	5.83	1.21	0.39	0.96	1	23
ALB8504	4	1985	131	1985.36	8	7.50	0.40	0.39	0.34	1	6	5.87	0.91	0.40	0.62	1	23
DEL8507	4	1985	262	1985.72	26	15.60	0.68	0.21	0.99	0	26	7.48	0.47	0.18	0.76	0	23
DEL8510	4	1985	342	1985.94	31	8.74	0.30	0.19	0.74	0	29	7.75	0.51	0.17	0.83	0	23
DEL8601	4	1986	40	1986.11	31	5.27	0.00	0.19	0.57	0	20	6.48	0.62	0.21	0.87	1	23
DEL8603	4	1986	153	1986.42	33	9.60	-0.66	0.19	1.03	1	29	5.71	0.51	0.17	0.36	1	23
DEL8607	4	1986	264	1986.72	24	14.24	-0.72	0.23	0.71	1	20	6.94	0.30	0.21	0.51	1	23
DEL8610	4	1986	341	1986.93	23	8.42	-0.13	0.23	0.31	1	19	7.48	0.19	0.21	0.42	1	23
DEL8701	4	1987	35	1987.10	4	5.75	0.06	0.57	0.89	1	4	5.98	-0.11	0.52	0.25	1	23
DEL8704	4	1987	153	1987.42	28	10.83	0.83	0.22	1.26	0	17	4.89	-0.35	0.23	0.68	1	23
DEL8708	4	1987	259	1987.71	30	16.10	0.94	0.19	1.28	0	18	6.48	-0.47	0.23	1.43	0	23
DEL8710	4	1987	331	1987.91	4	8.42	-1.51	0.57	0.77	1	3	5.79	-1.65	0.60	1.07	1	23
DEL8812	4	1988	312	1988.85	21	10.05	-0.61	0.25	0.43	1	18	7.34	-0.32	0.24	0.95	1	24
ALB8811	4	1988	339	1988.93	23	8.11	-0.62	0.24	0.43	1	21	7.28	-0.13	0.21	0.68	1	24
DEL8901	4	1989	13	1989.04	24	5.56	-0.90	0.23	0.54	1	21	6.06	-0.02	0.21	0.83	1	24
DEL8907	4	1989	315	1989.86	22	11.02	0.49	0.24	0.53	1	20	8.02	-0.03	0.22	0.76	1	24
DEL8909	4	1989	341	1989.93	24	7.17	-1.40	0.23	0.43	1	22	6.87	-0.51	0.21	0.79	1	24
DEL9001	4	1990	8	1990.02	18	4.76	-1.93	0.26	0.59	1	19	5.19	-1.19	0.22	0.94	1	24
DEL9003	4	1990	58	1990.16	9	4.17	0.13	0.39	0.52	1	9	4.48	0.34	0.31	0.57	1	24
DEL9011	4	1990	285	1990.78	16	14.51	1.30	0.30	0.75	1	16	8.86	0.27	0.25	0.84	1	10
DEL9012	4	1990	307	1990.84	21	11.79	0.45	0.25	0.46	1	21	8.45	0.52	0.21	0.79	1	24
DEL9014	4	1990	338	1990.93	18	8.77	-0.11	0.27	0.39	1	18	7.71	0.23	0.22	0.66	1	24
DEL9101	4	1991	7	1991.02	17	6.96	0.35	0.28	0.68	1	15	6.94	0.62	0.25	0.70	1	24
DEL9103	4	1991	41	1991.11	17	5.49	0.68	0.28	0.61	1	16	5.73	1.01	0.25	0.75	1	24
DEL9105	4	1991	100	1991.27	30	5.07	0.60	0.18	0.72	0	30	5.49	0.54	0.15	0.63	0	10
DEL9108	4	1991	208	1991.57	48	15.71	0.79	0.16	1.62	1	47	6.36	0.03	0.14	0.57	1	10

ORE9105	4	1991	228	1991.62	10	16.15	-1.25	0.35	1.81	1	3	8.36	3.10	0.43	2.99	1	60
AM9103	4	1991	278	1991.76	22	15.39	0.31	0.23	0.46	1	10	8.07	0.51	0.30	1.17	1	90
DEL9110	4	1991	289	1991.79	54	12.44	0.04	0.15	0.73	0	52	7.53	0.03	0.13	1.26	0	10
DEL9111	4	1991	312	1991.85	24	10.70	-0.18	0.23	0.68	1	23	8.32	0.52	0.21	0.97	1	24
DEL9113	4	1991	341	1991.93	18	8.66	-0.01	0.26	0.29	1	18	8.29	0.74	0.22	0.71	1	24
DEL9201	4	1992	12	1992.03	15	6.52	0.13	0.29	0.38	1	15	6.76	0.75	0.24	0.45	1	24
DEL9202	4	1992	37	1992.10	15	5.07	0.01	0.29	0.60	1	12	5.27	0.45	0.27	0.65	1	24
ALB9203	4	1992	101	1992.28	43	3.79	-0.83	0.15	0.76	0	41	5.55	0.55	0.13	0.84	0	10
EGG9201	4	1992	104	1992.29	7	2.98	-9.99	0.00	-9.99	1	6	2.70	-9.99	0.00	-9.99	1	93
DEL9206	4	1992	190	1992.52	11	13.14	-0.75	0.33	1.18	1	9	6.69	-0.83	0.32	0.79	1	50
DEL9207	4	1992	215	1992.59	65	13.99	-0.87	0.14	1.27	1	48	5.58	-1.03	0.15	0.53	1	10
ORE9204	4	1992	229	1992.63	5	15.95	-2.03	0.53	1.16	1	5	5.30	-0.70	0.42	0.89	1	60
AJ9201	4	1992	230	1992.63	6	13.94	0.67	0.43	2.36	1	1	8.41	-9.99	-9.99	-9.99	1	93
ALB9211	4	1992	295	1992.81	43	11.47	-0.47	0.15	0.78	0	41	7.12	-0.28	0.14	1.41	0	10
DEL9212	4	1992	304	1992.83	23	11.49	-0.17	0.24	0.37	1	23	7.35	-0.49	0.20	0.87	1	24
DEL9214	4	1992	344	1992.94	16	7.22	-1.08	0.28	0.42	1	16	6.76	-0.66	0.23	0.79	1	24
DEL9301	4	1993	10	1993.03	15	5.79	-0.71	0.29	0.48	1	14	6.22	0.07	0.24	0.58	1	24
ALB9304	4	1993	111	1993.30	39	4.72	-0.50	0.16	1.00	0	35	4.60	-0.55	0.15	0.66	0	10
DEL9308	4	1993	208	1993.57	55	16.15	-0.29	0.16	1.76	0	54	5.70	-0.28	0.13	1.05	0	10
AJ9301	4	1993	221	1993.61	5	12.01	-1.85	0.36	0.74	1	3	8.48	0.25	0.28	-9.99	1	93
ORE9304	4	1993	235	1993.64	10	14.93	-1.83	0.36	1.33	1	10	5.52	-1.13	0.32	1.18	1	60
EGG9301	4	1993	260	1993.71	3	12.20	-9.99	0.52	-9.99	1	3	10.79	-9.99	0.43	-9.99	1	93
DEL9311	4	1993	286	1993.78	50	12.13	-0.65	0.15	0.84	0	51	7.18	-0.22	0.13	1.30	0	10
DEL9312	4	1993	310	1993.85	22	10.86	-0.18	0.24	0.66	1	22	7.15	-0.46	0.20	0.84	1	24
DEL9314	4	1993	338	1993.93	18	9.51	0.54	0.26	0.53	1	18	7.30	-0.45	0.22	1.05	1	24
DEL9401	4	1994	13	1994.03	15	5.08	-1.25	0.29	0.57	1	14	5.52	-0.42	0.24	0.89	1	24
DEL9403	4	1994	110	1994.30	39	5.55	0.42	0.19	0.64	0	35	5.67	0.74	0.19	0.85	0	10
ALB9404	4	1994	158	1994.43	7	10.84	-0.22	0.41	1.64	1	6	5.53	0.60	0.34	0.94	1	20
DEL9406	4	1994	177	1994.49	19	13.00	0.99	0.25	1.53	1	19	10.05	1.88	0.25	2.56	1	80
ALB9405	4	1994	197	1994.54	11	16.59	1.82	0.35	2.51	1	11	6.10	-0.02	0.33	1.52	1	60
ALB9406	4	1994	211	1994.58	34	16.55	1.82	0.19	1.81	1	34	8.07	1.37	0.16	0.92	1	10
ALB9409	4	1994	293	1994.80	47	12.54	0.38	0.16	0.83	0	42	8.60	1.34	0.14	1.15	0	10
ALB9410	4	1994	315	1994.86	13	11.15	0.65	0.31	0.47	1	11	8.69	1.43	0.28	0.46	1	20
ALB9501	4	1995	14	1995.04	8	7.25	0.63	0.40	0.51	1	7	7.60	1.17	0.32	0.83	1	22
ALB9502	4	1995	26	1995.07	10	7.44	0.95	0.33	0.34	1	10	7.71	1.41	0.25	0.55	1	70
EN261	4	1995	50	1995.14	4	6.14	1.10	0.55	0.31	1	4	7.28	1.11	0.51	0.72	1	20
EN263	4	1995	80	1995.22	7	5.17	0.78	0.42	0.56	1	6	6.28	0.74	0.39	0.82	1	20
EN265	4	1995	110	1995.30	8	5.85	0.21	0.39	0.28	1	8	5.85	0.59	0.37	0.91	1	20
ALB9504	4	1995	111	1995.31	21	5.51	0.35	0.21	0.72	0	17	5.93	0.84	0.23	0.64	1	10
ALB9505	4	1995	136	1995.37	6	7.20	-0.66	0.45	0.17	1	6	6.75	1.61	0.38	0.99	1	20
ALB9506	4	1995	166	1995.45	14	11.78	-0.47	0.29	0.64	1	8	7.10	1.64	0.36	0.76	1	20
KAT9504	4	1995	172	1995.47	5	11.77	0.17	0.46	0.72	1	5	8.62	0.85	0.44	2.11	1	81
KAT9505	4	1995	199	1995.55	4	12.89	-1.05	0.57	0.90	1	4	9.40	0.93	0.58	2.67	1	81
ALB9508	4	1995	200	1995.55	8	16.75	2.16	0.38	0.60	1	8	8.57	2.27	0.35	0.99	1	20
ALB9507	4	1995	210	1995.58	4	17.42	2.38	0.49	2.53	1	4	9.69	-2.18	0.50	2.55	1	60
ALB9510	4	1995	231	1995.63	37	17.45	1.91	0.19	1.58	1	35	7.75	0.47	0.16	0.79	1	10
AJ9502	4	1995	236	1995.65	14	14.41	0.13	0.29	1.11	1	1	10.66	-9.99	-9.99	-9.99	1	93
ALB9512	4	1995	288	1995.79	47	13.32	0.55	0.16	0.69	0	46	8.30	0.69	0.15	1.13	0	10
EN276	4	1996	21	1996.06	6	6.11	-0.11	0.40	0.68	1	6	6.59	0.32	0.36	0.46	1	20
EN278	4	1996	55	1996.15	7	4.87	-0.03	0.39	0.57	1	6	6.40	0.61	0.37	1.06	1	20
OC275	4	1996	81	1996.22	6	4.64	0.12	0.44	0.21	1	6	5.40	0.30	0.42	1.13	1	20
EN282	4	1996	109	1996.30	16	4.79	-0.63	0.27	0.16	1	12	5.38	0.35	0.29	0.76	1	20
ALB9604	4	1996	114	1996.31	47	5.07	-0.29	0.16	0.73	0	45	5.92	0.99	0.14	0.83	0	10
ALB9605	4	1996	137	1996.37	13	7.66	-0.23	0.31	0.63	1	11	6.22	1.12	0.31	0.85	1	20
ALB9606	4	1996	143	1996.39	4	8.86	0.36	0.55	0.69	1	4	5.70	-0.21	0.51	0.52	1	81
ALB9607	4	1996	164	1996.45	10	13.66	2.03	0.34	1.33	1	8	6.27	1.11	0.31	0.97	1	20
ALB9608	4	1996	171	1996.47	4	14.95	2.52	0.55	0.93	1	3	5.18	0.44	0.42	0.45	1	81
ALB9609	4	1996	231	1996.63	32	16.37	-0.79	0.20	1.81	1	32	6.13	-0.67	0.17	1.79	1	60
AJ9604	4	1996	229	1996.63	7	13.02	0.31	0.37	1.26	1	1	9.08	-0.63	-9.99	-9.99	1	93
IS9601	4	1996	237	1996.65	22	14.58	0.69	0.23	1.40	1	6	8.39	0.44	0.40	0.68	1	93
ALB9610	4	1996	243	1996.66	6	16.64	0.03	0.43	2.29	1	6	8.71	-1.10	0.39	1.75	1	81
ALB9611	4	1996	295	1996.81	57	11.48	-0.54	0.15	1.07	0	56	8.13	0.69	0.13	1.51	0	10
ALB9612	4	1996	315	1996.86	31	10.27	0.07	0.20	0.94	1	30	8.05	0.79	0.19	0.88	1	90
ALB9701	4	1997	20	1997.05	4	6.09	-0.66	0.52	0.34	1	4	7.88	1.14	0.43	0.06	1	20
ALB9702	4	1997	29	1997.08	13	5.22	-0.59	0.30	0.52	0	9	7.18	1.06	0.29	0.53	1	22
OC298	4	1997	52	1997.14	14	5.28	0.36	0.29	0.46	1	13	6.39	0.83	0.27	0.82	1	20
OC300	4	1997	87	1997.24	12	4.93	0.27	0.32	0.27	1	12	5.66	0.87	0.28	0.88	1	20
ALB9704	4	1997	103	1997.28	53	4.85	-0.02	0.16	0.66	0	52	6.07	1.23	0.14	0.83	0	10
OC302	4	1997	121	1997.33	8	6.10	-0.33	0.41	0.25	1	8	6.33	1.21	0.38	0.46	1	20
ALB9705	4	1997	147	1997.40	14	8.68	-0.53	0.28	0.26	1	15	6.75	0.56	0.23	1.59	1	20
ALB9707	4	1997	178	1997.49	9	14.13	1.49	0.38	1.80	1	9	7.66	1.34	0.36	2.36	1	20

ALB9708	4	1997	195	1997.53	6	18.24	2.53	0.46	3.51	1	4	5.96	0.68	0.43	0.34	1	93
ALB9709	4	1997	221	1997.60	41	18.12	1.44	0.17	1.98	1	41	8.35	0.74	0.16	2.71	1	60
DEL9708	4	1997	218	1997.60	12	19.38	4.58	0.33	1.22	1	12	6.19	1.30	0.28	0.49	1	81
ALB9711	4	1997	295	1997.81	57	12.09	0.14	0.15	0.84	0	55	7.84	0.51	0.13	1.20	0	10
ALB9801	4	1998	17	1998.05	10	6.80	0.08	0.34	0.40	1	9	7.22	0.44	0.30	0.43	1	20
ALB9802	4	1998	27	1998.07	15	5.76	-0.45	0.28	0.82	1	12	6.99	0.70	0.26	0.72	1	22
OC317	4	1998	48	1998.13	11	5.37	0.26	0.33	0.60	1	10	5.96	0.38	0.32	0.59	1	20
DEL9803	4	1998	63	1998.17	6	4.38	-0.34	0.44	0.85	1	6	6.81	0.93	0.36	0.56	1	93
OC319	4	1998	85	1998.23	9	4.80	0.30	0.39	0.14	1	9	5.84	0.93	0.37	0.59	1	20
ALB9804	4	1998	103	1998.28	71	5.23	0.37	0.13	0.92	0	68	6.01	1.10	0.11	0.77	0	10
OC322	4	1998	115	1998.32	12	6.04	0.24	0.32	0.17	1	11	6.20	1.23	0.29	0.60	1	20
ALB9806	4	1998	141	1998.39	11	9.09	0.70	0.33	0.84	1	10	6.39	0.98	0.30	1.07	1	20
ALB9807	4	1998	160	1998.44	20	11.03	-0.23	0.25	0.93	0	15	6.36	0.87	0.23	1.22	0	22
ALB9808	4	1998	176	1998.48	6	13.61	0.70	0.46	0.95	1	6	6.28	0.75	0.42	0.66	1	20
ALB9809	4	1998	223	1998.61	11	18.27	1.14	0.32	1.56	1	11	8.15	-1.14	0.30	1.80	1	60
IS9801	4	1998	241	1998.66	22	17.67	1.11	0.24	1.63	1	16	6.01	-0.30	0.24	0.78	1	22
DEL9810	4	1998	254	1998.70	3	15.41	-0.65	0.63	0.26	1	3	6.74	0.14	0.52	0.61	1	16
ALB9811	4	1998	303	1998.83	71	10.99	-0.23	0.14	0.96	0	70	7.12	-0.36	0.12	1.43	0	10
DEL9813	4	1998	320	1998.88	16	9.07	-0.68	0.24	0.62	0	15	7.18	-0.26	0.23	0.86	0	22
DEL9901	4	1999	23	1999.06	16	5.46	-0.38	0.27	0.59	1	15	6.12	0.25	0.24	0.58	1	22
ALB9901	4	1999	23	1999.06	8	6.44	0.12	0.38	0.84	1	7	6.69	-0.10	0.34	0.34	1	20
OC336	4	1999	52	1999.14	10	5.74	0.74	0.36	0.62	1	10	6.33	0.64	0.31	0.41	1	20
DEL9903	4	1999	62	1999.17	24	4.14	-0.10	0.23	0.47	1	15	5.07	0.33	0.26	0.80	1	93
EN320	4	1999	80	1999.22	11	5.11	0.60	0.33	0.16	1	11	5.48	0.48	0.31	0.34	1	20
ALB9903	4	1999	106	1999.29	46	5.86	1.02	0.16	0.78	0	43	5.40	0.31	0.14	0.66	0	10
OC341	4	1999	116	1999.32	10	6.55	0.62	0.35	0.37	1	10	5.85	0.84	0.30	0.69	1	20
ALB9904	4	1999	147	1999.40	10	10.21	0.90	0.34	1.02	1	10	6.61	1.18	0.26	1.10	1	20
AJ9901	4	1999	160	1999.44	17	13.28	2.28	0.25	1.14	0	11	6.12	0.40	0.28	1.30	0	22
ALB9906	4	1999	174	1999.48	6	14.07	1.11	0.45	2.41	1	6	7.34	2.02	0.38	1.59	1	20
ALB9907	4	1999	181	1999.50	14	18.01	2.83	0.30	0.75	1	14	5.45	-0.06	0.25	0.49	1	91
ALB9908	4	1999	189	1999.52	7	15.22	2.67	0.43	0.96	1	6	8.03	1.77	0.45	2.75	1	91
AJ9902	4	1999	216	1999.59	8	15.19	1.93	0.39	1.86	1	4	8.89	2.54	0.43	-9.99	1	93
ALB9909	4	1999	217	1999.59	3	19.34	4.61	0.68	0.77	1	3	7.32	-0.06	0.69	2.30	1	60
IS9901	4	1999	241	1999.66	19	18.50	2.13	0.26	1.28	1	14	7.19	0.31	0.26	2.46	1	22
ALB9910	4	1999	307	1999.84	60	11.64	0.65	0.14	0.71	0	58	8.16	0.75	0.12	1.46	0	10
ALB9911	4	1999	323	1999.89	16	10.26	0.44	0.26	0.45	1	13	7.66	0.45	0.24	0.99	1	22
ALB0002	4	2000	115	2000.32	43	6.49	0.92	0.16	0.66	0	43	6.20	1.00	0.14	0.79	0	10
DEL0006	4	2000	157	2000.43	11	10.56	0.22	0.28	1.04	0	24	6.54	0.93	0.25	0.24	1	22
ALB0003	4	2000	178	2000.49	5	14.49	3.03	0.53	1.48	1	5	7.16	0.89	0.52	0.74	1	91
ALB0004	4	2000	219	2000.60	9	15.40	-1.35	0.37	2.18	1	9	7.52	0.71	0.34	1.02	1	60
ALB0005	4	2000	240	2000.66	24	18.53	2.20	0.28	0.92	1	22	7.46	0.87	0.24	0.84	1	22
DEL0008	4	2000	274	2000.75	34	16.30	1.21	0.18	1.10	1	34	9.08	1.04	0.16	0.77	1	16
ALB0006	4	2000	287	2000.79	45	13.19	0.59	0.16	0.79	0	45	8.21	0.68	0.14	1.19	0	10
ALB0007	4	2000	319	2000.87	31	10.69	0.51	0.25	0.72	1	30	8.91	1.19	0.23	1.44	1	22
ALB0103	4	2001	113	2001.31	54	5.77	0.34	0.16	0.95	0	51	5.86	0.75	0.13	0.55	0	10
DEL0105	4	2001	155	2001.42	14	10.04	-0.21	0.28	0.83	1	12	6.54	0.89	0.27	0.45	1	22
DEL0107	4	2001	205	2001.56	15	13.16	1.61	0.27	1.94	1	13	8.30	0.55	0.25	0.97	1	93
ALB0108	4	2001	210	2001.58	10	19.46	2.32	0.33	1.51	1	9	7.05	1.27	0.31	0.36	1	93
ALB0107	4	2001	215	2001.59	14	17.98	1.82	0.30	1.09	1	14	5.89	-1.44	0.28	1.93	1	60
DEL0108	4	2001	220	2001.60	6	20.68	2.97	0.42	0.45	1	6	7.05	0.94	0.37	0.41	1	93
ALB0109	4	2001	238	2001.65	18	17.04	0.60	0.26	1.56	1	14	7.18	0.37	0.26	0.63	1	22
DEL0109	4	2001	259	2001.71	84	17.14	1.39	0.12	1.14	1	83	6.90	0.27	0.11	1.22	1	16
ALB0110	4	2001	288	2001.79	46	12.81	0.34	0.14	0.97	0	43	7.62	0.07	0.13	1.56	0	10
ALB0111	4	2001	318	2001.87	24	9.95	-0.12	0.23	0.84	0	20	7.68	0.14	0.21	1.01	0	22
ALB0202	4	2002	27	2002.07	15	6.48	0.72	0.25	0.64	0	14	7.13	1.02	0.23	0.46	0	22
ALB0204	4	2002	108	2002.29	42	6.36	1.40	0.17	0.75	0	40	6.37	1.33	0.15	0.74	0	10
ALB0206	4	2002	155	2002.42	33	10.80	0.53	0.18	0.66	0	19	6.79	1.27	0.20	0.81	0	22
ALB0208	4	2002	224	2002.61	12	16.98	1.13	0.32	2.11	1	12	7.76	-0.77	0.31	2.69	1	60
NOB0201	4	2002	239	2002.65	21	18.30	1.63	0.23	1.58	0	19	8.01	1.06	0.21	0.97	0	22
DEL0208	4	2002	264	2002.72	64	17.55	1.81	0.13	0.70	1	52	7.93	1.28	0.13	0.62	1	16
ALB0210	4	2002	292	2002.80	45	13.34	1.10	0.16	1.01	0	43	8.55	1.25	0.14	1.39	0	10
DEL0210	4	2002	317	2002.87	10	10.61	0.59	0.34	0.40	1	8	8.65	0.87	0.31	0.87	1	22
DEL0301	4	2003	25	2003.07	21	5.02	-1.00	0.24	1.22	0	19	6.96	0.63	0.21	1.10	0	22
DEL0303	4	2003	111	2003.30	50	4.84	-0.60	0.16	0.77	0	49	5.03	0.01	0.14	0.74	0	10
DEL0305	4	2003	148	2003.41	11	8.92	-0.83	0.34	0.80	1	10	5.95	-0.09	0.30	0.48	1	22
ALB0301	4	2003	221	2003.61	17	17.42	1.35	0.28	1.88	1	17	6.61	-1.12	0.25	1.63	1	60
ARM0301	4	2003	238	2003.65	43	17.47	1.48	0.22	0.99	1	14	7.30	-0.23	0.26	1.26	1	22
DEL0308	4	2003	266	2003.73	47	16.58	1.25	0.15	1.30	1	47	6.32	-0.03	0.13	0.69	1	16
ALB0306	4	2003	316	2003.87	7	9.88	-0.04	0.42	0.58	1	5	7.84	0.38	0.42	0.19	1	22

Table 9. Average surface and bottom temperature values for the eastern Gulf of Maine region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface				Bottom				Pc			
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp		SDV1	SDV2	Flg
YUB7702	5	1977	222	1977.61	5	17.61	1.58	0.44	0.84	1	5	6.97	-0.38	0.41	0.49	1	23
ARG7701	5	1977	310	1977.85	9	11.41	0.56	0.33	0.74	1	7	8.51	0.36	0.40	1.27	1	23
MTM7711	5	1977	320	1977.88	14	10.09	-0.09	0.27	0.67	1	13	8.33	-0.18	0.30	0.92	1	23
ARG7804	5	1978	141	1978.39	4	7.34	-0.26	0.53	0.41	1	4	6.51	-0.76	0.48	0.85	1	23
ALB7807	5	1978	196	1978.54	6	13.84	-0.34	0.44	1.12	1	5	6.79	-0.68	0.42	0.30	1	23
BEL7801	5	1978	240	1978.66	16	13.71	-0.37	0.22	1.30	0	16	7.99	-0.53	0.24	1.22	0	23
BEL7803	5	1978	288	1978.79	5	12.33	-0.68	0.48	0.35	1	4	7.14	-0.34	0.50	0.16	1	23
DEL7905	5	1979	145	1979.40	19	8.29	0.73	0.23	0.66	0	15	7.68	0.48	0.28	0.60	0	23
BEL7901	5	1979	240	1979.66	7	16.60	0.34	0.40	0.98	1	6	7.61	0.25	0.41	0.48	1	23
ALB7911	5	1979	299	1979.82	13	12.24	0.04	0.29	0.42	1	7	8.43	0.34	0.38	0.47	1	23
ALB7913	5	1979	340	1979.93	18	9.47	0.89	0.21	0.61	0	14	9.16	0.95	0.24	0.79	0	23
WIE8002	5	1980	52	1980.14	4	4.85	-0.11	0.55	0.27	1	4	7.39	0.06	0.50	0.31	1	23
ALB8002	5	1980	94	1980.26	14	4.28	0.03	0.29	0.54	0	10	6.40	-0.21	0.36	0.91	0	23
EVR8001	5	1980	127	1980.35	7	6.99	0.67	0.40	0.79	1	7	6.51	-0.69	0.37	0.42	1	23
EVR8004	5	1980	178	1980.49	7	13.14	0.48	0.39	0.93	1	7	7.16	-0.65	0.37	0.38	1	23
EVR8006	5	1980	218	1980.60	8	17.43	1.39	0.36	1.28	1	8	7.98	-0.35	0.35	0.58	1	23
ALB8010	5	1980	297	1980.81	20	12.15	0.16	0.21	0.88	0	5	7.77	-0.23	0.44	0.41	1	23
ALB8012	5	1980	355	1980.97	7	5.70	-1.72	0.42	0.46	1	2	16.20	0.14	-9.99	-9.99	1	23
ALB8101	5	1981	55	1981.15	20	4.16	-0.03	0.21	0.48	0	13	6.63	-0.14	0.26	0.68	0	23
KEL8103	5	1981	96	1981.26	3	3.98	-0.49	0.59	0.77	1	1	6.74	-0.36	-9.99	-9.99	1	23
DEL8103	5	1981	147	1981.40	13	7.41	-0.26	0.25	0.74	0	8	6.42	-0.89	0.36	0.63	1	23
ALB8114	5	1981	339	1981.93	14	8.16	-0.47	0.27	0.36	0	9	7.77	-0.27	0.32	0.59	0	23
ALB8202	5	1982	56	1982.15	12	2.66	-1.21	0.32	0.68	0	4	6.29	-0.59	0.50	0.94	1	23
DEL8203	5	1982	154	1982.42	26	8.17	-0.20	0.19	1.02	0	19	6.58	-0.49	0.23	0.88	0	23
ALB8209	5	1982	231	1982.63	6	13.85	0.97	0.47	1.11	1	6	8.68	-0.30	0.46	0.75	1	27
DEL8209	5	1982	332	1982.91	26	9.20	-0.07	0.19	0.46	0	21	7.90	-0.36	0.21	0.50	0	23
DEL8301	5	1983	24	1983.07	23	6.03	0.63	0.20	0.59	0	19	7.16	-0.27	0.22	0.86	0	23
ALB8304	5	1983	166	1983.46	22	9.81	0.21	0.20	0.73	0	14	7.44	-0.09	0.26	0.58	0	23
DEL8309	5	1983	350	1983.96	18	7.93	0.09	0.24	0.63	0	14	8.27	0.27	0.28	0.66	0	23
DEL8401	5	1984	16	1984.04	19	5.31	-0.49	0.22	0.60	0	18	7.39	-0.01	0.23	0.69	0	23
ALB8403	5	1984	149	1984.41	21	7.65	-0.23	0.20	0.84	0	11	6.65	-0.44	0.27	1.16	0	23
DEL8409	5	1984	337	1984.92	6	9.36	0.73	0.43	0.33	1	5	9.21	0.89	0.50	0.58	1	23
DEL8501	5	1985	12	1985.03	4	6.59	0.42	0.51	0.30	1	2	9.54	1.06	-9.99	-9.99	1	23
DEL8503	5	1985	94	1985.26	3	4.50	-0.02	0.58	1.03	1	4	8.16	0.38	0.47	0.59	1	23
ALB8504	5	1985	130	1985.35	4	5.51	-1.07	0.55	1.71	1	0	0.00	-9.99	-9.99	-9.99	1	23
DEL8507	5	1985	261	1985.71	19	14.64	0.67	0.23	0.94	0	18	9.84	0.81	0.25	0.71	0	23
DEL8510	5	1985	340	1985.93	21	8.16	-0.53	0.21	0.82	0	21	8.81	0.65	0.21	0.63	0	23
DEL8601	5	1986	39	1986.11	17	5.06	0.35	0.24	0.60	0	12	7.08	0.54	0.28	0.77	0	23
DEL8603	5	1986	148	1986.41	12	8.39	0.08	0.31	1.77	1	8	7.66	0.46	0.39	0.88	1	23
DEL8607	5	1986	263	1986.72	10	13.69	-0.13	0.33	0.58	1	9	9.60	0.64	0.36	0.49	1	23
DEL8610	5	1986	340	1986.93	16	8.30	-0.35	0.26	0.26	1	11	8.67	0.62	0.31	0.35	1	23
DEL8701	5	1987	39	1987.11	9	3.42	-0.53	0.37	0.64	1	6	5.31	-0.70	0.44	1.26	1	23
DEL8704	5	1987	154	1987.42	17	8.38	-0.04	0.22	0.87	0	6	6.31	-0.01	0.46	0.69	1	23
DEL8708	5	1987	253	1987.69	22	13.61	-0.39	0.20	0.93	0	18	8.52	-0.30	0.24	1.06	0	23
ALB8811	5	1988	343	1988.94	8	7.97	-0.87	0.35	0.13	1	5	8.06	-0.64	0.42	0.94	1	24
DEL8901	5	1989	17	1989.05	8	5.11	-0.96	0.35	0.48	1	6	6.58	-0.49	0.39	0.80	1	24
DEL8907	5	1989	318	1989.87	5	11.48	0.14	0.42	0.23	1	4	9.45	-1.37	0.45	1.32	1	24
DEL8909	5	1989	347	1989.95	3	6.92	-1.62	0.58	-9.99	1	3	6.98	-2.08	0.55	-9.99	1	24
DEL9001	5	1990	11	1990.03	5	5.43	-0.89	0.42	0.24	1	5	6.37	-0.43	0.41	0.38	1	24
DEL9011	5	1990	284	1990.78	3	15.79	2.92	0.55	-9.99	1	2	8.47	-1.96	-9.99	-9.99	1	10
DEL9012	5	1990	309	1990.85	6	12.82	0.52	0.39	0.32	1	6	10.43	-0.10	0.37	1.17	1	24
DEL9014	5	1990	342	1990.94	4	8.65	-0.97	0.45	-9.99	1	3	8.01	-3.00	0.55	-9.99	1	24
DEL9105	5	1991	100	1991.27	16	4.17	-0.44	0.23	0.95	0	16	6.20	-0.16	0.24	1.00	0	10
DEL9108	5	1991	208	1991.57	4	14.28	2.21	0.50	2.99	1	4	7.27	0.04	0.46	0.44	1	10
ORE9105	5	1991	230	1991.63	4	17.91	2.48	0.47	1.53	1	0	0.00	-9.99	-9.99	-9.99	1	60
AM9103	5	1991	279	1991.76	17	15.26	0.57	0.24	0.41	1	4	11.35	-0.21	0.50	-9.99	1	90
DEL9110	5	1991	288	1991.79	29	12.45	-0.05	0.18	0.53	0	25	9.36	0.41	0.19	1.43	0	10
DEL9111	5	1991	317	1991.87	7	10.52	-0.85	0.37	0.40	1	7	8.35	-1.28	0.36	0.36	1	24
DEL9113	5	1991	345	1991.95	7	8.48	-0.37	0.38	0.27	1	6	8.19	0.10	0.40	0.97	1	24
ALB9203	5	1992	101	1992.28	30	3.20	-1.71	0.18	0.63	1	26	6.85	0.02	0.19	0.66	1	10
AJ9201	5	1992	235	1992.64	15	12.15	-0.27	0.25	2.22	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9211	5	1992	293	1992.80	33	11.23	-1.01	0.17	0.77	0	26	8.58	-0.09	0.19	1.13	0	10
DEL9212	5	1992	306	1992.84	9	11.37	-1.21	0.32	0.45	1	9	8.94	-0.89	0.31	1.60	1	24

DEL9214	5	1992	351	1992.96	4	7.13	-2.75	0.45	-9.99	1	4	6.78	-3.65	0.45	-9.99	1	24
ALB9304	5	1993	109	1993.30	30	3.91	-1.11	0.17	1.07	0	24	6.18	-0.48	0.19	0.78	0	10
DEL9308	5	1993	205	1993.56	13	14.63	0.00	0.28	1.25	1	12	8.18	0.36	0.29	0.75	1	10
AJ9301	5	1993	230	1993.63	6	12.36	-1.34	0.41	1.79	1	2	8.34	-0.62	-9.99	-9.99	1	93
ORB9304	5	1993	229	1993.63	8	16.29	1.81	0.33	2.12	1	7	8.46	-4.86	0.34	1.27	1	60
DEL9311	5	1993	290	1993.80	34	11.56	-1.17	0.17	0.71	1	33	9.05	0.31	0.17	1.70	1	10
DEL9312	5	1993	312	1993.85	9	10.99	-1.11	0.33	0.28	1	9	9.37	-0.82	0.31	1.55	1	24
DEL9314	5	1993	342	1993.94	5	10.00	0.69	0.41	0.60	1	5	8.59	-0.02	0.42	1.14	1	24
DEL9403	5	1994	109	1994.30	23	4.75	-0.11	0.20	0.86	0	22	7.91	1.36	0.21	1.00	0	10
ALB9404	5	1994	158	1994.43	3	10.28	0.80	0.57	0.23	1	3	8.37	-0.08	0.55	0.74	1	20
DEL9406	5	1994	176	1994.48	5	12.90	1.78	0.40	1.16	1	5	9.45	-0.61	0.41	0.32	1	80
ALB9405	5	1994	195	1994.53	5	16.60	5.65	0.42	0.94	1	4	8.61	-2.76	0.46	1.12	1	60
ALB9406	5	1994	214	1994.59	7	17.76	2.21	0.37	1.52	1	7	8.96	1.59	0.36	0.42	1	10
ALB9407	5	1994	239	1994.65	8	17.16	2.61	0.32	0.53	1	8	8.04	-3.26	0.34	1.78	1	80
ALB9409	5	1994	290	1994.79	28	12.47	0.02	0.18	0.75	0	27	9.29	0.29	0.19	1.43	0	10
ALB9410	5	1994	318	1994.87	4	11.32	-0.42	0.45	0.49	1	3	10.58	-0.50	0.54	0.40	1	20
ALB9501	5	1995	10	1995.03	12	4.80	-1.12	0.32	0.71	1	7	6.97	-0.07	0.40	1.11	1	22
EN261	5	1995	49	1995.13	8	4.73	0.07	0.35	0.82	1	7	6.22	0.15	0.35	0.97	1	20
EN263	5	1995	79	1995.22	15	5.13	0.83	0.26	0.69	1	12	6.07	0.51	0.28	0.49	1	20
EN265	5	1995	108	1995.30	4	4.06	-2.25	0.55	-9.99	1	2	5.46	-9.99	-9.99	-9.99	1	20
ALB9504	5	1995	108	1995.30	15	4.42	-0.29	0.25	1.24	0	11	6.49	0.66	0.28	0.77	0	10
ALB9505	5	1995	135	1995.37	7	6.19	-0.95	0.38	0.68	1	6	6.89	-0.05	0.39	0.51	1	20
ALB9506	5	1995	164	1995.45	10	9.84	-0.61	0.32	0.85	1	5	7.55	-1.23	0.42	1.76	1	20
ALB9508	5	1995	199	1995.54	4	14.58	4.04	0.51	-9.99	1	1	5.99	-9.99	-9.99	-9.99	1	20
KAT9505	5	1995	205	1995.56	3	15.84	2.54	0.59	0.92	1	3	8.97	-0.77	0.57	0.81	1	81
ALB9507	5	1995	212	1995.58	3	18.41	9.01	0.50	-9.99	1	3	7.28	-5.27	0.55	-9.99	1	60
ALB9510	5	1995	234	1995.64	5	15.76	1.69	0.41	1.33	1	3	9.23	1.01	0.55	0.82	1	10
AJ9502	5	1995	234	1995.64	12	11.53	-0.96	0.30	1.92	1	1	8.33	-2.53	-9.99	-9.99	1	93
ALB9512	5	1995	285	1995.78	16	13.57	0.91	0.24	0.91	0	12	8.60	-0.39	0.28	2.44	1	10
EN278	5	1996	54	1996.15	10	4.68	-0.04	0.31	0.59	1	6	6.14	0.19	0.39	0.55	1	20
OC275	5	1996	79	1996.22	8	4.03	-0.48	0.35	0.38	1	7	5.83	0.58	0.35	1.07	1	20
EN282	5	1996	108	1996.30	7	4.27	-0.65	0.38	0.66	1	1	8.37	0.33	-9.99	-9.99	1	20
ALB9604	5	1996	115	1996.31	22	4.49	-0.76	0.18	0.79	0	18	7.22	0.47	0.20	1.15	0	10
ALB9605	5	1996	135	1996.37	12	6.61	-0.81	0.29	1.07	1	8	6.79	0.19	0.36	1.46	1	20
ALB9606	5	1996	146	1996.40	3	8.37	0.90	0.55	0.74	1	3	6.27	-0.11	0.51	0.88	1	81
ALB9607	5	1996	163	1996.45	6	12.76	2.73	0.41	0.15	1	5	7.05	-1.54	0.40	1.86	1	20
ALB9608	5	1996	176	1996.48	3	10.90	1.14	0.53	0.75	1	3	5.75	-3.11	0.54	0.67	1	81
ALB9609	5	1996	234	1996.64	21	16.19	0.93	0.21	1.21	1	21	8.72	-4.56	0.20	2.26	1	60
IS9601	5	1996	237	1996.65	13	13.78	0.01	0.29	1.96	1	2	7.72	-2.44	-9.99	-9.99	1	93
ALB9610	5	1996	248	1996.68	3	13.39	-1.59	0.55	0.92	1	2	8.36	-5.45	-9.99	-9.99	1	81
ALB9611	5	1996	289	1996.79	26	11.47	-1.00	0.18	0.59	0	26	8.17	-0.50	0.18	1.79	0	10
ALB9612	5	1996	314	1996.86	8	10.32	-1.09	0.37	0.53	1	8	8.59	0.08	0.35	1.03	1	90
ALB9701	5	1997	19	1997.05	4	5.42	-0.13	0.52	0.59	1	3	7.83	0.45	0.58	0.74	1	20
ALB9702	5	1997	29	1997.08	7	4.99	0.13	0.37	0.71	1	2	14.06	0.78	-9.99	-9.99	1	22
OC298	5	1997	51	1997.14	20	4.74	0.29	0.22	0.53	1	19	6.31	0.30	0.22	0.63	1	20
OC300	5	1997	84	1997.23	12	3.62	-0.68	0.28	0.55	1	9	6.63	0.12	0.31	0.51	1	20
ALB9704	5	1997	105	1997.29	29	4.12	-0.49	0.18	0.79	0	24	6.77	0.22	0.19	0.83	0	10
OC302	5	1997	120	1997.33	6	5.23	-0.72	0.41	1.00	1	5	8.04	0.81	0.43	1.17	1	20
ALB9705	5	1997	146	1997.40	12	7.93	-0.14	0.32	0.31	1	11	7.32	0.00	0.31	1.46	1	20
ALB9707	5	1997	176	1997.48	8	12.75	1.37	0.34	1.55	1	7	7.94	-0.77	0.36	1.78	1	20
ALB9709	5	1997	223	1997.61	26	17.60	3.45	0.19	1.22	1	26	8.73	-3.51	0.18	2.41	1	60
ALB9711	5	1997	290	1997.79	33	11.47	-1.03	0.18	1.06	0	27	8.57	-0.23	0.19	1.37	0	10
ALB9801	5	1998	14	1998.04	11	6.71	0.90	0.30	0.36	1	9	6.85	0.17	0.31	1.27	1	20
ALB9802	5	1998	26	1998.07	18	3.44	-2.31	0.34	0.91	1	6	5.95	-1.12	0.44	1.04	1	22
OC317	5	1998	46	1998.13	12	4.56	0.00	0.28	0.89	1	11	6.37	-0.09	0.28	0.96	1	20
OC319	5	1998	83	1998.23	12	4.76	0.38	0.28	0.53	1	11	5.38	-0.57	0.28	1.38	1	20
ALB9804	5	1998	100	1998.27	40	4.21	-0.26	0.16	0.81	0	32	5.58	-0.88	0.18	1.59	0	10
OC322	5	1998	113	1998.31	12	6.18	0.59	0.28	0.65	1	10	5.82	-0.81	0.30	1.34	1	20
ALB9806	5	1998	139	1998.38	14	7.97	0.25	0.26	0.45	1	13	6.36	-1.09	0.26	0.83	1	20
ALB9807	5	1998	159	1998.44	33	8.74	0.18	0.23	1.39	1	22	5.94	-1.23	0.33	1.16	1	22
ALB9808	5	1998	175	1998.48	9	13.02	1.70	0.33	1.33	1	7	7.27	-1.25	0.36	0.71	1	20
ALB9809	5	1998	225	1998.62	8	17.50	3.37	0.34	1.67	1	8	8.92	-3.41	0.32	2.78	1	60
IS9801	5	1998	239	1998.65	18	15.15	1.22	0.21	1.46	0	13	7.31	-1.55	0.27	1.90	0	22
ALB9811	5	1998	298	1998.82	30	10.47	-1.23	0.17	1.19	0	28	7.37	-1.52	0.17	1.43	0	10
DEL9813	5	1998	321	1998.88	12	8.30	-1.83	0.28	0.76	0	8	7.10	-1.57	0.30	1.13	0	22
DEL9901	5	1999	22	1999.06	17	4.94	-0.69	0.30	0.65	1	6	6.50	-0.60	0.40	0.86	1	22
ALB9901	5	1999	21	1999.06	12	5.75	0.15	0.28	0.68	1	11	6.67	0.11	0.28	0.67	1	20
OC336	5	1999	50	1999.14	15	5.13	0.53	0.25	0.80	1	15	6.83	0.91	0.24	1.11	1	20
EN320	5	1999	79	1999.22	14	4.59	0.34	0.26	0.54	1	12	5.97	-0.56	0.27	0.85	1	20
ALB9903	5	1999	106	1999.29	32	4.95	0.18	0.21	0.71	0	30	7.31	0.44	0.22	1.08	0	10
OC341	5	1999	114	1999.31	12	6.19	0.48	0.29	0.57	1	11	7.07	0.48	0.29	0.69	1	20

ALB9904	5	1999	145	1999.40	14	9.08	1.01	0.26	0.92	1	13	7.87	0.61	0.26	0.79	1	20
AJ9901	5	1999	159	1999.44	18	10.75	2.13	0.22	1.35	0	11	7.50	0.35	0.29	0.82	0	22
ALB9906	5	1999	173	1999.47	7	13.52	2.31	0.37	1.43	1	7	8.80	0.23	0.37	1.57	1	20
AJ9902	5	1999	226	1999.62	13	13.26	0.37	0.29	1.44	1	6	10.31	0.65	0.42	0.53	1	93
IS9901	5	1999	240	1999.66	19	16.98	2.78	0.24	1.69	0	15	10.00	1.34	0.27	1.45	0	22
ALB9910	5	1999	299	1999.82	35	12.15	0.40	0.17	0.81	0	31	10.12	1.51	0.18	0.99	0	10
ALB9911	5	1999	323	1999.89	10	10.22	0.28	0.27	0.68	0	8	10.16	1.32	0.30	0.79	0	22
ALB0002	5	2000	115	2000.32	32	5.98	0.83	0.17	0.76	0	27	7.52	0.93	0.19	0.89	0	10
DEL0006	5	2000	156	2000.43	9	9.70	1.35	0.27	0.80	0	8	7.93	0.75	0.30	0.61	0	22
ALB0005	5	2000	240	2000.66	12	16.96	2.79	0.28	1.51	0	9	9.19	0.29	0.31	1.66	0	22
DEL0008	5	2000	273	2000.75	34	16.00	1.10	0.18	0.72	1	33	9.49	0.34	0.16	1.04	1	16
ALB0006	5	2000	283	2000.77	28	13.14	0.19	0.18	0.77	0	23	9.05	0.50	0.22	1.41	0	10
ALB0007	5	2000	318	2000.87	15	10.81	0.38	0.22	0.55	0	12	8.96	0.44	0.26	1.02	0	22
ALB0103	5	2001	108	2001.29	33	3.92	-0.81	0.17	0.98	0	30	6.62	0.06	0.18	0.74	0	10
DEL0105	5	2001	154	2001.42	19	8.01	-0.44	0.22	0.84	0	11	7.06	0.07	0.26	0.75	0	22
ALB0108	5	2001	212	2001.58	5	15.74	0.62	0.42	0.75	1	5	7.64	0.29	0.44	0.14	1	93
DEL0108	5	2001	220	2001.60	4	16.13	0.83	0.47	1.66	1	4	7.70	0.34	0.50	0.31	1	93
ALB0107	5	2001	226	2001.62	8	19.59	5.66	0.33	0.33	1	8	7.08	-5.43	0.32	1.13	1	60
ALB0109	5	2001	237	2001.65	21	14.48	-0.14	0.20	1.66	0	17	7.98	-0.57	0.23	1.85	0	22
DEL0109	5	2001	269	2001.74	34	16.28	1.43	0.18	1.03	1	34	8.75	0.19	0.17	0.88	1	16
ALB0110	5	2001	284	2001.78	33	13.00	0.20	0.18	1.13	0	31	8.60	-0.21	0.19	1.23	0	10
ALB0111	5	2001	316	2001.87	12	10.02	-0.53	0.26	0.75	0	10	8.68	0.32	0.29	0.70	0	22
ALB0202	5	2002	27	2002.07	15	5.79	0.44	0.23	0.76	0	11	7.45	0.34	0.28	1.11	0	22
ALB0204	5	2002	108	2002.30	36	5.45	0.70	0.17	0.79	0	33	7.28	0.56	0.19	0.79	0	10
ALB0206	5	2002	154	2002.42	19	9.13	0.71	0.18	0.48	0	10	7.97	0.99	0.28	0.64	0	22
ALB0208	5	2002	222	2002.61	7	16.73	2.32	0.36	1.37	1	7	9.00	-2.35	0.36	2.77	1	60
ALB0209	5	2002	234	2002.64	5	18.35	4.08	0.43	1.88	1	2	7.06	-5.24	-9.99	-9.99	1	91
NOB0201	5	2002	237	2002.65	15	16.53	2.40	0.25	1.71	0	13	9.31	0.86	0.27	1.84	0	22
DEL0208	5	2002	267	2002.73	22	16.64	1.41	0.21	0.70	1	22	9.43	0.47	0.21	0.84	1	16
ALB0210	5	2002	292	2002.80	30	13.46	1.18	0.17	0.94	0	28	9.90	1.10	0.17	1.54	0	10
DEL0210	5	2002	316	2002.87	6	11.12	0.46	0.38	0.33	1	3	9.69	0.49	0.53	0.01	1	22
DEL0301	5	2003	26	2003.07	13	3.33	-2.08	0.23	1.13	0	9	7.22	0.29	0.29	1.27	0	22
DEL0303	5	2003	105	2003.29	31	3.61	-1.00	0.17	0.70	0	29	6.44	-0.18	0.18	0.88	0	10
DEL0305	5	2003	148	2003.41	13	6.60	-1.30	0.27	0.86	1	12	7.32	0.41	0.31	0.93	1	22
ALB0301	5	2003	237	2003.65	7	16.66	1.92	0.36	1.36	1	7	9.24	-3.13	0.34	2.77	1	60
ARM0301	5	2003	237	2003.65	16	15.22	0.41	0.20	2.23	0	9	8.64	0.23	0.27	1.75	0	22
DEL0308	5	2003	262	2003.72	39	16.05	1.13	0.16	1.17	1	38	8.24	0.34	0.15	1.46	1	16
ALB0306	5	2003	315	2003.86	8	11.27	0.02	0.35	0.56	1	6	8.82	0.38	0.40	1.51	1	22

Table 10. Average surface and bottom salinity values for the southern Middle Atlantic Bight region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Temp	Surface				Npts	Temp	Bottom				Pc
							Dtemp	SDV1	SDV2	Flg			Dtemp	SDV1	SDV2	Flg	
YUB7702	1	1977	237	1977.65	49	32.67	0.64	0.14	0.79	0	42	33.52	0.41	0.14	0.58	0	23
ARG7701	1	1977	295	1977.81	41	32.90	0.14	0.17	0.74	0	34	33.40	0.22	0.15	0.63	1	23
DEL7802	1	1978	51	1978.14	47	33.00	-0.47	0.16	0.70	0	41	33.23	-0.38	0.15	0.73	0	23
ARG7804	1	1978	115	1978.31	51	33.83	1.18	0.15	8.96	0	44	32.99	-0.40	0.14	0.45	0	23
ALB7807	1	1978	178	1978.49	51	30.83	-1.09	0.15	0.96	0	42	32.76	-0.40	0.16	0.41	0	23
BEL7801	1	1978	229	1978.63	49	31.09	-0.79	0.15	1.21	0	44	32.93	-0.33	0.14	0.59	0	23
BEL7803	1	1978	299	1978.82	13	32.44	-0.18	0.27	0.26	1	14	32.74	-0.24	0.22	0.41	1	23
DEL7903	1	1979	59	1979.16	3	32.16	-0.45	0.58	1.14	1	3	32.89	0.05	0.48	1.11	1	23
EVR8001	1	1980	112	1980.31	53	32.99	0.27	0.15	0.80	0	46	33.71	0.38	0.14	0.53	0	23
EVR8006	1	1980	202	1980.55	53	31.96	0.11	0.15	0.91	0	44	33.56	0.42	0.15	0.37	0	23
ALB8101	1	1981	81	1981.22	36	33.71	0.84	0.17	0.41	1	30	33.67	0.57	0.16	0.36	1	23
KEL8103	1	1981	83	1981.23	54	33.90	0.81	0.15	0.74	0	46	33.86	0.42	0.15	0.45	0	23
DEL8103	1	1981	166	1981.45	40	32.35	0.37	0.16	0.51	1	32	33.25	0.36	0.15	0.75	1	23
ALB8202	1	1982	79	1982.22	47	32.46	-0.53	0.16	0.73	1	41	32.67	-0.55	0.14	0.40	1	23
DEL8203	1	1982	147	1982.40	5	32.18	-0.09	0.50	0.52	1	3	32.39	-0.48	0.49	0.77	1	23
ALB8207	1	1982	178	1982.49	20	31.75	-0.81	0.21	0.39	1	13	33.41	-0.21	0.23	0.62	1	27
DEL8209	1	1982	352	1982.96	38	33.45	0.17	0.17	0.49	1	33	33.38	0.08	0.15	0.32	1	23
ALB8304	1	1983	150	1983.41	50	31.14	-0.99	0.16	1.66	0	48	32.76	-0.50	0.14	0.50	0	23
DEL8309	1	1983	324	1983.89	55	32.65	-0.48	0.15	0.65	0	47	33.14	-0.28	0.14	0.41	0	23
DEL8401	1	1984	35	1984.10	51	32.50	-0.76	0.15	0.53	1	44	32.74	-0.48	0.13	0.38	1	23
ALB8403	1	1984	133	1984.37	52	30.73	-1.63	0.15	1.45	0	46	32.81	-0.44	0.14	0.60	0	23
DEL8409	1	1984	310	1984.85	54	32.89	-0.06	0.15	0.81	0	48	33.16	-0.19	0.14	0.36	0	23
DEL8501	1	1985	34	1985.09	49	33.81	0.42	0.15	0.57	1	43	33.86	0.56	0.14	0.52	1	23
DEL8503	1	1985	108	1985.30	56	33.57	0.84	0.15	0.56	0	48	34.08	0.70	0.14	0.28	0	23
ALB8504	1	1985	142	1985.39	55	33.23	0.97	0.15	0.71	0	48	33.82	0.57	0.14	0.47	0	23
DEL8507	1	1985	246	1985.67	55	32.84	0.74	0.15	0.74	0	48	33.46	0.31	0.14	0.52	0	23
DEL8510	1	1985	315	1985.86	53	33.44	0.44	0.15	0.69	0	48	33.81	0.44	0.14	0.50	0	23
DEL8601	1	1986	14	1986.04	53	34.30	0.72	0.15	0.72	0	45	34.46	0.88	0.15	0.65	0	23
DEL8603	1	1986	132	1986.36	54	33.44	1.07	0.15	1.15	0	47	33.63	0.34	0.14	0.51	0	23
DEL8607	1	1986	244	1986.67	55	32.82	0.75	0.15	0.87	0	47	33.28	0.16	0.14	0.59	0	23
DEL8610	1	1986	312	1986.86	56	33.29	0.30	0.15	0.64	0	48	33.54	0.18	0.14	0.49	0	23
DEL8701	1	1987	11	1987.03	55	33.42	-0.08	0.15	0.89	0	48	33.67	0.14	0.14	0.46	0	23
ALB8702	1	1987	131	1987.36	12	28.66	-2.46	0.34	1.52	1	13	31.61	-1.05	0.23	0.28	1	25
ALB8703	1	1987	136	1987.37	123	30.80	-0.63	0.10	1.05	1	123	32.12	-0.68	0.07	0.51	1	25
DEL8708	1	1987	235	1987.64	54	31.71	-0.27	0.15	0.65	0	43	32.58	-0.56	0.15	0.51	0	23
ALB8706	1	1987	234	1987.64	37	30.80	-0.25	0.19	0.23	1	38	32.05	-0.50	0.14	0.37	1	25
DEL8710	1	1987	312	1987.86	48	32.43	-0.56	0.16	0.50	0	36	32.91	-0.47	0.16	0.58	0	23
DEL8801	1	1988	25	1988.07	53	32.41	-1.09	0.15	0.54	0	46	32.79	-0.75	0.15	0.49	0	23
ALB8803	1	1988	127	1988.35	18	30.43	-0.89	0.27	0.67	1	17	32.28	-0.39	0.21	0.22	1	25
ALB8810	1	1988	322	1988.88	17	31.84	-0.21	0.26	0.55	1	16	32.47	-0.15	0.21	0.44	1	25
DEL8904	1	1989	162	1989.44	79	29.55	-1.51	0.12	1.04	1	78	31.99	-0.63	0.09	0.80	1	25
ORE8905	1	1989	229	1989.63	95	29.18	-1.81	0.12	1.43	1	95	30.93	-1.60	0.09	1.30	1	25
DEL9001	1	1990	16	1990.04	9	33.21	-0.07	0.34	0.43	1	7	33.70	0.18	0.30	0.47	1	24
DEL9105	1	1991	72	1991.20	82	33.04	-0.05	0.11	1.27	0	70	33.48	0.11	0.11	1.02	0	10
CHA9103	1	1991	176	1991.48	4	34.07	1.77	0.53	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93
ORE9105	1	1991	215	1991.59	43	31.58	-0.35	0.14	0.64	1	5	33.15	-0.16	0.35	0.51	1	60
DEL9110	1	1991	259	1991.71	83	31.92	-0.33	0.12	0.71	0	75	32.71	-0.46	0.12	0.68	0	10
ALB9202	1	1992	46	1992.13	47	33.10	-0.47	0.16	0.66	0	36	33.47	-0.23	0.15	0.74	0	10
ALB9203	1	1992	69	1992.19	72	32.74	-0.34	0.12	0.89	0	63	33.11	-0.31	0.12	0.83	0	10
DEL9205	1	1992	91	1992.25	6	33.31	-0.23	0.41	0.39	1	0	0.00	-9.99	-9.99	-9.99	1	93
DEL9206	1	1992	168	1992.46	54	31.50	-0.33	0.15	1.07	0	54	32.41	-0.67	0.13	0.59	0	50
ORE9204	1	1992	218	1992.60	48	31.08	-0.82	0.13	0.50	1	45	33.04	-0.21	0.12	0.48	1	60
ALB9211	1	1992	262	1992.72	53	31.68	-0.60	0.15	0.76	0	45	32.43	-0.79	0.15	0.57	0	10
DEL9301	1	1993	20	1993.05	10	32.78	-0.60	0.32	0.53	1	7	32.79	-0.73	0.30	0.47	1	24
ALB9303	1	1993	40	1993.11	57	32.99	-0.53	0.13	0.62	0	50	33.06	-0.60	0.12	0.41	0	10
ALB9304	1	1993	78	1993.21	81	31.82	-1.08	0.12	1.36	0	73	32.64	-0.75	0.11	0.93	0	10
ALB9305	1	1993	131	1993.36	10	33.21	0.83	0.36	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	1
ORE9304	1	1993	217	1993.59	49	31.05	-0.93	0.13	0.41	1	47	33.22	-0.18	0.12	0.58	1	60
DEL9311	1	1993	257	1993.70	80	31.70	-0.43	0.11	0.85	0	69	32.70	-0.42	0.11	0.69	0	10
DEL9402	1	1994	35	1994.10	61	33.13	-0.45	0.13	0.57	0	53	33.59	-0.05	0.12	0.51	0	10
DEL9403	1	1994	68	1994.19	81	32.36	-0.79	0.11	1.50	0	72	32.73	-0.71	0.11	0.96	0	10
ALB9405	1	1994	178	1994.49	60	30.82	-1.18	0.12	0.50	1	55	33.80	0.40	0.11	0.74	1	60
DEL9407	1	1994	213	1994.58	76	32.30	0.60	0.14	1.34	0	75	33.45	0.43	0.12	0.86	0	50
ALB9409	1	1994	258	1994.71	83	32.63	0.39	0.11	1.34	0	75	33.10	-0.09	0.11	0.87	0	10
ALB9503	1	1995	44	1995.12	29	33.98	0.38	0.19	0.70	1	25	34.04	0.45	0.16	0.50	1	10

REL9501	1	1995	78	1995.21	36	33.45	0.55	0.25	0.99	1	10	33.90	0.42	0.28	0.59	1	93
ALB9504	1	1995	78	1995.21	28	33.62	0.51	0.18	0.69	0	26	33.50	0.20	0.17	0.59	1	10
ALB9507	1	1995	174	1995.48	41	32.35	0.28	0.15	0.37	1	39	33.40	-0.11	0.14	0.48	1	60
PE9501	1	1995	197	1995.54	12	33.21	0.89	0.26	1.20	1	1	32.92	-1.11	-9.99	-9.99	1	93
ALB9512	1	1995	256	1995.70	61	32.66	0.52	0.14	0.63	0	56	32.53	-0.18	0.12	0.56	1	10
ALB9603	1	1996	42	1996.12	67	32.83	-0.82	0.13	0.95	0	58	33.60	-0.12	0.12	0.71	0	10
ALB9604	1	1996	80	1996.22	98	32.85	-0.20	0.10	0.89	0	90	33.13	-0.31	0.10	0.72	0	10
ALB9609	1	1996	216	1996.59	130	30.62	-1.28	0.08	0.42	1	97	32.51	-0.84	0.08	0.43	1	60
ALB9611	1	1996	259	1996.71	84	30.65	-1.53	0.11	1.30	0	73	31.77	-1.40	0.11	0.73	0	10
ALB9703	1	1997	39	1997.11	56	32.40	-1.30	0.14	0.54	0	42	32.71	-0.99	0.14	0.48	0	10
ALB9704	1	1997	69	1997.19	82	31.75	-1.31	0.11	1.13	0	73	32.59	-0.83	0.11	1.33	0	10
DEL9705	1	1997	72	1997.20	18	30.27	-2.01	0.26	2.22	1	17	30.60	-2.11	0.22	2.52	1	93
DEL9706	1	1997	146	1997.40	14	31.20	-0.22	0.25	0.30	1	14	31.92	-0.59	0.21	0.60	1	70
DEL9707	1	1997	171	1997.47	16	30.65	-0.95	0.24	1.00	1	16	31.91	-0.91	0.20	0.18	1	50
ALB9711	1	1997	257	1997.70	77	31.79	-0.45	0.12	1.04	0	70	32.58	-0.62	0.11	0.71	0	10
ALB9803	1	1998	43	1998.12	51	32.78	-0.89	0.14	0.78	0	43	33.11	-0.69	0.13	0.78	0	10
ALB9804	1	1998	67	1998.18	77	32.01	-1.00	0.12	1.28	0	70	32.26	-0.83	0.11	0.79	1	10
DEL9804	1	1998	77	1998.21	9	32.56	-0.85	0.32	0.34	1	6	32.47	-0.88	0.30	0.32	1	93
DEL9806	1	1998	145	1998.40	19	29.62	-2.19	0.26	2.03	1	19	31.29	-1.87	0.21	0.56	1	82
ALB9807	1	1998	149	1998.41	40	31.08	-1.06	0.17	1.03	0	36	31.99	-1.28	0.15	0.57	0	22
AJ9801	1	1998	196	1998.54	6	31.48	-1.07	0.39	0.27	1	1	32.53	-0.58	-9.99	-9.99	1	93
ALB9809	1	1998	207	1998.57	42	30.08	-1.81	0.15	0.56	1	41	32.58	-0.85	0.13	0.48	1	60
ALB9811	1	1998	270	1998.74	77	31.24	-1.07	0.11	0.76	0	71	32.09	-1.21	0.11	0.80	0	10
DEL9813	1	1998	309	1998.85	39	31.82	-1.05	0.17	0.34	0	37	32.01	-1.36	0.15	0.49	0	22
ALB9902	1	1999	37	1999.10	60	32.62	-0.95	0.14	0.51	0	45	32.80	-0.84	0.14	0.39	0	10
ALB9903	1	1999	71	1999.19	80	32.37	-0.67	0.11	0.96	0	70	33.03	-0.37	0.11	1.24	0	10
DEL9907	1	1999	157	1999.43	5	31.16	-0.40	0.43	0.11	1	5	31.92	-0.38	0.37	0.39	1	50
ALB9909	1	1999	202	1999.55	57	32.27	0.35	0.12	0.81	1	57	34.13	0.75	0.11	0.78	1	60
ALB9910	1	1999	270	1999.74	81	32.75	0.39	0.11	1.42	0	74	33.46	0.28	0.11	1.26	0	10
NP9901	1	1999	313	1999.86	26	33.62	0.53	0.21	0.81	0	23	34.23	0.75	0.18	0.62	0	22
ALB0001	1	2000	47	2000.13	63	34.50	0.81	0.13	0.48	0	52	34.53	0.77	0.12	0.42	0	10
ALB0002	1	2000	82	2000.22	78	33.51	0.59	0.12	0.98	0	70	33.68	0.31	0.11	0.90	0	10
DEL0006	1	2000	146	2000.40	31	32.45	0.27	0.18	0.75	0	28	33.39	0.16	0.16	0.55	0	22
ALB0004	1	2000	200	2000.55	43	32.21	0.27	0.14	0.83	1	43	33.35	0.05	0.12	0.55	1	60
ALB0006	1	2000	256	2000.70	79	32.53	0.33	0.11	1.54	0	73	32.69	-0.53	0.11	1.00	0	10
ALB0007	1	2000	307	2000.84	33	33.10	0.20	0.19	0.47	0	33	33.10	-0.26	0.14	0.53	1	22
ALB0102	1	2001	35	2001.10	66	33.39	-0.27	0.12	0.61	0	54	33.53	-0.13	0.12	0.48	0	10
DEL0101	1	2001	46	2001.12	18	33.64	-0.51	0.23	0.34	1	7	33.87	-0.12	0.31	0.52	1	16
ALB0103	1	2001	70	2001.19	86	32.74	-0.41	0.11	1.12	0	78	33.21	-0.26	0.11	0.70	0	10
ALB0106	1	2001	141	2001.39	39	32.15	-0.12	0.16	0.48	1	36	32.67	-0.57	0.14	0.29	1	22
DEL0104	1	2001	141	2001.39	17	31.55	-0.31	0.28	1.18	1	17	32.30	-0.85	0.22	0.56	1	82
ALB0107	1	2001	188	2001.52	52	31.41	-0.58	0.13	0.54	1	51	33.28	-0.09	0.12	0.56	1	60
ALB0110	1	2001	255	2001.70	82	32.52	0.32	0.11	1.11	0	75	32.83	-0.28	0.12	0.59	0	10
ALB0111	1	2001	305	2001.83	32	33.49	0.64	0.19	0.52	0	32	33.69	0.37	0.16	0.52	0	22
ALB0203	1	2002	45	2002.12	84	34.46	0.50	0.11	0.72	1	62	34.43	0.59	0.11	0.65	1	10
DEL0201	1	2002	55	2002.15	24	33.88	0.19	0.20	0.58	1	16	33.94	0.43	0.19	0.42	1	16
ALB0204	1	2002	78	2002.21	80	33.78	0.80	0.11	0.83	0	75	33.90	0.45	0.11	0.62	0	10
ALB0206	1	2002	144	2002.40	38	33.21	1.02	0.16	0.61	0	37	33.78	0.43	0.14	0.37	0	22
ALB0208	1	2002	204	2002.56	46	32.07	0.18	0.14	0.56	1	46	33.42	0.09	0.12	0.51	1	60
NOB0201	1	2002	228	2002.62	33	32.41	0.59	0.18	0.70	0	32	33.29	0.30	0.15	0.49	1	22
ALB0210	1	2002	255	2002.70	77	32.41	0.30	0.11	0.60	0	72	32.80	-0.28	0.11	0.54	0	10
DEL0210	1	2002	304	2002.83	34	33.22	0.46	0.17	0.56	0	33	33.28	0.00	0.15	0.60	0	22
OC384	1	2002	302	2002.83	14	34.69	0.44	0.26	0.43	1	1	35.11	-0.26	-9.99	-9.99	1	91
DEL0302	1	2003	47	2003.13	52	34.10	0.47	0.14	0.52	0	38	34.28	0.56	0.14	0.40	0	10
DEL0303	1	2003	75	2003.21	64	33.03	0.04	0.13	1.99	0	62	33.55	0.14	0.11	1.52	0	10
ALB0301	1	2003	214	2003.59	52	31.34	-0.66	0.13	0.57	1	55	33.51	0.10	0.11	0.48	1	60
ALB0306	1	2003	308	2003.84	5	33.34	0.01	0.40	0.56	1	2	33.74	0.49	-9.99	-9.99	1	22

Table 11. Average surface and bottom salinity values for the northern Middle Atlantic Bight region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Temp	Surface			Npts	Temp	Bottom			Pc		
							Dtemp	SDV1	SDV2 Flg			Dtemp	SDV1	SDV2 Flg			
YUB7702	2	1977	231	1977.63	47	32.62	0.16	0.13	0.52	0	40	33.49	0.15	0.12	0.49	0	23
ARG7701	2	1977	300	1977.82	18	32.87	0.01	0.21	0.36	1	15	33.59	0.38	0.20	0.54	1	23
KEL7711	2	1977	341	1977.93	18	33.35	0.38	0.20	0.58	1	13	33.76	0.36	0.22	0.44	1	23
DEL7802	2	1978	62	1978.17	23	32.61	-0.48	0.19	0.51	0	18	33.15	-0.36	0.20	0.56	0	23
ARG7804	2	1978	131	1978.36	26	32.06	-0.52	0.18	0.35	0	22	32.45	-0.86	0.19	0.48	0	23
ALB7807	2	1978	187	1978.51	24	34.98	2.97	0.18	10.78	0	20	36.62	3.33	0.19	12.03	0	23
BEL7801	2	1978	234	1978.64	24	32.20	-0.28	0.18	0.71	0	23	32.94	-0.45	0.17	0.59	0	23
BEL7803	2	1978	291	1978.80	33	32.73	-0.18	0.22	0.35	1	16	32.80	-0.37	0.20	0.36	1	23
ALB7913	2	1979	349	1979.96	20	33.31	0.11	0.20	0.51	0	15	34.15	0.53	0.21	0.50	0	23
WIB8002	2	1980	67	1980.18	22	33.23	0.38	0.18	0.26	1	17	33.53	0.27	0.19	0.45	1	23
EVR8001	2	1980	117	1980.32	26	32.96	0.29	0.17	0.49	0	21	33.42	0.13	0.19	0.42	0	23
EVR8006	2	1980	207	1980.57	24	32.30	-0.08	0.18	0.68	0	22	33.62	0.27	0.19	0.27	0	23
ALB8101	2	1981	75	1981.21	23	33.27	0.32	0.20	0.47	0	19	33.68	0.21	0.20	0.35	0	23
KEL8103	2	1981	92	1981.25	8	33.04	0.47	0.34	0.67	1	8	33.57	0.38	0.30	0.40	1	23
DEL8103	2	1981	162	1981.44	26	32.52	0.10	0.18	0.50	0	21	33.28	-0.02	0.19	0.21	0	23
ALB8114	2	1981	354	1981.97	10	32.45	-0.58	0.26	0.25	1	6	32.69	-0.73	0.33	0.70	1	23
ALB8202	2	1982	72	1982.20	25	32.32	-0.65	0.18	0.62	0	21	33.18	-0.27	0.19	0.35	0	23
DEL8203	2	1982	145	1982.40	25	32.18	-0.32	0.18	0.42	0	21	32.94	-0.34	0.19	0.40	0	23
DEL8209	2	1982	346	1982.95	26	33.05	-0.09	0.18	0.45	0	22	33.65	0.03	0.18	0.34	0	23
DEL8301	2	1983	40	1983.11	16	33.10	0.01	0.24	0.21	0	15	33.15	-0.09	0.21	0.22	1	23
ALB8304	2	1983	158	1983.43	24	31.65	-0.80	0.18	1.94	0	21	32.98	-0.30	0.18	0.43	0	23
DEL8309	2	1983	335	1983.92	23	32.57	-0.48	0.19	0.45	0	20	33.30	-0.29	0.19	0.37	0	23
DEL8401	2	1984	28	1984.08	25	32.56	-0.61	0.18	0.47	0	21	33.24	-0.36	0.18	0.26	0	23
ALB8403	2	1984	139	1984.38	27	31.52	-1.00	0.17	0.63	0	22	32.94	-0.31	0.18	0.32	0	23
DEL8409	2	1984	318	1984.87	25	33.36	0.36	0.18	0.62	0	21	33.91	0.32	0.18	0.66	0	23
DEL8501	2	1985	28	1985.08	32	33.74	0.60	0.16	0.53	0	26	34.11	0.54	0.17	0.41	0	23
DEL8503	2	1985	100	1985.27	26	33.22	0.41	0.18	0.48	0	21	33.72	0.33	0.19	0.30	0	23
ALB8504	2	1985	136	1985.37	26	33.12	0.54	0.18	0.59	0	22	33.63	0.37	0.19	0.34	0	23
DEL8507	2	1985	254	1985.69	26	32.95	0.37	0.17	0.41	0	22	33.35	-0.06	0.18	0.26	0	23
DEL8510	2	1985	323	1985.89	21	33.43	0.42	0.20	0.48	0	18	33.53	0.35	0.19	0.53	1	23
DEL8601	2	1986	22	1986.06	25	33.63	0.47	0.18	0.45	0	22	33.83	0.23	0.18	0.36	0	23
DEL8603	2	1986	140	1986.38	25	33.36	0.80	0.18	0.93	0	21	33.79	0.50	0.18	0.57	0	23
DEL8607	2	1986	252	1986.69	26	33.07	0.52	0.18	0.73	0	22	33.63	0.23	0.18	0.37	0	23
DEL8610	2	1986	318	1986.87	26	33.06	0.04	0.18	0.39	0	22	33.65	0.06	0.18	0.37	0	23
DEL8701	2	1987	25	1987.07	26	32.91	-0.26	0.18	0.63	0	22	33.13	-0.47	0.18	0.50	0	23
ALB8702	2	1987	130	1987.36	13	29.18	-1.96	0.35	1.68	1	12	31.58	-1.04	0.25	0.32	1	25
DEL8704	2	1987	136	1987.37	9	32.37	-0.40	0.26	0.68	1	7	32.72	-0.41	0.30	0.93	1	23
ALB8703	2	1987	138	1987.38	65	30.74	-0.31	0.16	1.04	1	65	31.65	-0.96	0.11	0.46	1	25
ALB8706	2	1987	232	1987.64	50	30.56	-0.34	0.19	0.31	1	50	31.88	-0.70	0.13	0.39	1	25
DEL8708	2	1987	241	1987.66	26	32.05	-0.46	0.18	0.37	0	19	32.96	-0.43	0.19	0.34	0	23
DEL8710	2	1987	323	1987.89	26	32.27	-0.77	0.18	0.41	0	21	32.60	-1.01	0.19	0.54	0	23
DEL8801	2	1988	30	1988.08	4	31.95	-0.71	0.57	0.47	1	3	32.21	-0.65	0.52	0.70	1	23
ALB8803	2	1988	126	1988.35	15	30.37	-0.72	0.34	0.60	1	14	32.24	-0.39	0.24	0.25	1	25
DEL8812	2	1988	309	1988.85	19	32.49	-0.08	0.16	0.18	1	19	32.95	0.13	0.17	0.71	1	24
ALB8810	2	1988	321	1988.88	11	31.37	-0.15	0.38	0.85	1	9	32.41	-0.17	0.29	0.55	1	25
ALB8811	2	1988	336	1988.92	20	32.69	0.01	0.16	0.16	1	20	32.82	-0.09	0.16	0.33	1	24
DEL8901	2	1989	8	1989.02	19	32.68	-0.14	0.16	0.19	1	19	32.79	-0.19	0.17	0.27	1	24
DEL8904	2	1989	162	1989.44	66	30.17	-0.83	0.15	0.71	1	64	31.82	-0.75	0.11	0.65	1	25
ORE8905	2	1989	228	1989.62	72	29.56	-1.33	0.16	1.32	1	72	31.11	-1.47	0.11	1.22	1	25
DEL8907	2	1989	312	1989.85	21	32.50	-0.12	0.16	0.25	1	21	32.76	-0.22	0.16	0.35	1	24
DEL8909	2	1989	334	1989.92	23	32.43	-0.28	0.15	0.28	1	23	32.75	-0.29	0.15	0.38	1	24
DEL9001	2	1990	12	1990.03	67	33.14	-0.02	0.11	0.29	0	56	33.67	0.05	0.11	0.38	0	24
DEL9003	2	1990	52	1990.14	21	32.96	0.05	0.16	0.16	1	21	33.15	0.02	0.16	0.23	1	24
DEL9011	2	1990	272	1990.74	12	33.12	0.48	0.22	0.73	1	10	33.17	0.33	0.23	0.34	1	10
DEL9012	2	1990	278	1990.76	21	32.75	0.05	0.16	0.34	1	19	32.99	0.04	0.17	0.54	1	24
DEL9014	2	1990	334	1990.92	22	32.86	0.08	0.16	0.25	1	20	33.07	0.06	0.16	0.28	1	24
DEL9101	2	1991	4	1991.01	24	33.02	0.14	0.15	0.21	1	22	33.01	-0.11	0.16	0.42	1	24
DEL9103	2	1991	45	1991.12	47	32.98	-0.04	0.12	0.28	1	41	33.17	-0.18	0.12	0.42	1	24
DEL9105	2	1991	82	1991.23	51	32.80	-0.10	0.12	0.48	0	46	33.15	-0.34	0.13	0.47	0	10
ORE9105	2	1991	218	1991.60	22	31.16	-0.73	0.18	1.58	1	2	32.70	-0.26	-9.99	-9.99	1	60
DEL9110	2	1991	268	1991.73	56	32.84	0.24	0.13	0.70	0	51	33.00	-0.25	0.15	0.51	0	10
DEL9111	2	1991	309	1991.85	20	32.28	-0.39	0.16	0.20	1	19	32.47	-0.50	0.17	0.37	1	24
DEL9113	2	1991	341	1991.94	22	32.45	-0.36	0.16	0.43	1	20	32.68	-0.36	0.17	0.64	1	24

DEL9201	2	1992	8	1992.02	25	32.45	-0.44	0.15	0.18	1	23	32.47	-0.63	0.16	0.45	1	24
DEL9202	2	1992	42	1992.11	22	32.55	-0.33	0.15	0.20	1	22	32.56	-0.52	0.16	0.40	1	24
ALB9202	2	1992	49	1992.14	7	32.80	-0.49	0.33	0.41	1	8	32.89	-0.77	0.27	0.50	1	10
DEL9203	2	1992	59	1992.16	33	32.59	-0.44	0.16	0.37	0	27	32.53	-0.63	0.15	0.60	1	10
ALB9203	2	1992	80	1992.22	53	32.56	-0.36	0.13	0.57	0	43	32.70	-0.68	0.14	0.59	0	10
DEL9205	2	1992	81	1992.22	13	32.86	-0.52	0.25	0.21	1	6	32.99	-0.88	0.32	0.74	1	93
DEL9206	2	1992	175	1992.48	22	31.64	-0.51	0.19	0.71	0	21	32.34	-0.58	0.19	0.34	0	50
ORE9204	2	1992	220	1992.60	12	31.23	-0.45	0.24	0.39	1	12	32.49	-0.41	0.21	0.18	1	60
ALB9211	2	1992	271	1992.74	57	32.55	-0.04	0.13	0.61	0	47	32.76	-0.50	0.15	0.56	0	10
DEL9212	2	1992	301	1992.83	20	32.26	-0.39	0.16	0.39	1	19	32.94	-0.02	0.17	0.70	1	24
DEL9214	2	1992	338	1992.93	22	32.39	-0.40	0.16	0.28	1	20	32.60	-0.41	0.16	0.47	1	24
DEL9301	2	1993	15	1993.04	70	32.52	-0.66	0.11	0.35	0	62	32.78	-0.83	0.11	0.38	0	24
ALB9303	2	1993	52	1993.14	31	32.51	-0.67	0.16	0.28	0	25	32.72	-0.85	0.16	0.31	0	10
ALB9304	2	1993	89	1993.24	50	32.25	-0.58	0.13	0.76	0	45	32.59	-0.89	0.13	0.61	0	10
ALB9305	2	1993	133	1993.36	3	34.17	1.15	0.61	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	1
ORE9304	2	1993	217	1993.59	23	31.50	-0.44	0.18	0.67	1	20	32.81	-0.22	0.17	0.43	1	60
DEL9311	2	1993	267	1993.73	57	32.58	-0.03	0.13	0.54	0	51	33.05	-0.38	0.14	0.70	0	10
DEL9312	2	1993	307	1993.84	20	32.54	-0.12	0.16	0.44	1	19	32.71	-0.23	0.17	0.49	1	24
DEL9314	2	1993	335	1993.92	21	32.55	-0.24	0.16	0.44	1	19	32.66	-0.36	0.17	0.43	1	24
DEL9401	2	1994	7	1994.02	25	32.42	-0.47	0.15	0.27	1	22	32.58	-0.53	0.16	0.36	1	24
DEL9402	2	1994	44	1994.12	48	32.62	-0.47	0.12	0.41	0	39	33.10	-0.36	0.13	0.46	0	10
DEL9403	2	1994	80	1994.22	60	32.42	-0.50	0.12	0.88	0	52	33.11	-0.28	0.14	0.53	0	10
ALB9405	2	1994	186	1994.51	30	31.05	-0.82	0.15	0.77	1	30	32.92	-0.01	0.14	0.49	1	60
DEL9407	2	1994	215	1994.59	21	31.79	-0.16	0.18	0.65	1	19	32.88	-0.02	0.17	0.61	1	50
DEL9409	2	1994	267	1994.73	52	32.79	-0.14	0.12	0.46	1	37	33.42	-0.04	0.12	0.38	1	70
ALB9409	2	1994	272	1994.74	58	32.64	-0.05	0.13	0.47	0	54	33.56	0.03	0.14	0.63	0	10
ALB9502	2	1995	31	1995.08	28	33.25	0.13	0.15	0.16	1	22	33.17	-0.16	0.16	0.52	1	70
ALB9503	2	1995	49	1995.14	20	33.31	0.19	0.19	0.56	0	15	33.32	0.18	0.20	0.29	1	10
ALB9504	2	1995	92	1995.25	23	33.02	0.15	0.20	0.40	0	21	33.48	0.00	0.19	0.41	0	10
ALB9507	2	1995	193	1995.53	23	32.16	-0.04	0.17	0.43	0	23	32.75	-0.27	0.17	0.40	0	60
PE9501	2	1995	208	1995.57	7	32.92	-0.40	0.36	1.22	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9512	2	1995	266	1995.73	41	33.44	0.84	0.15	0.82	0	39	33.43	0.14	0.16	0.86	0	10
ALB9603	2	1996	51	1996.14	25	32.76	-0.35	0.16	0.42	0	23	33.00	-0.57	0.15	0.42	0	10
ALB9604	2	1996	96	1996.26	54	32.29	-0.55	0.13	0.55	0	48	32.45	-0.82	0.14	0.55	0	10
ALB9609	2	1996	221	1996.61	68	30.97	-0.88	0.10	0.59	1	53	32.31	-0.69	0.10	0.22	1	60
ALB9611	2	1996	270	1996.74	53	31.74	-0.94	0.13	0.50	0	45	32.38	-1.07	0.14	0.55	0	10
ALB9612	2	1996	318	1996.87	4	31.40	-1.20	0.36	0.11	1	4	31.95	-0.94	0.38	0.14	1	90
ALB9703	2	1997	49	1997.13	39	32.01	-1.12	0.13	0.41	0	29	32.57	-0.84	0.15	0.40	0	10
ALB9704	2	1997	80	1997.22	58	31.88	-1.03	0.13	0.50	0	52	32.46	-0.91	0.14	0.59	0	10
DEL9706	2	1997	142	1997.39	3	31.11	-1.03	0.48	0.14	1	3	32.53	-0.50	0.40	0.03	1	70
DEL9707	2	1997	179	1997.49	3	30.12	-1.70	0.60	0.93	1	3	31.82	-0.84	0.46	0.45	1	50
ALB9711	2	1997	274	1997.75	54	32.87	0.17	0.13	0.74	0	48	33.06	-0.28	0.14	0.68	0	10
ALB9803	2	1998	51	1998.14	35	32.38	-0.83	0.15	0.41	1	28	32.49	-1.00	0.14	0.69	1	10
ALB9804	2	1998	77	1998.21	59	32.02	-0.88	0.12	0.52	0	50	32.13	-1.33	0.12	0.61	0	10
DEL9804	2	1998	80	1998.22	7	31.92	-0.75	0.35	0.66	1	5	31.81	-1.28	0.35	0.80	1	93
ALB9807	2	1998	152	1998.42	41	31.16	-1.35	0.18	0.57	1	22	32.07	-1.09	0.16	0.38	1	22
AJ9801	2	1998	198	1998.54	7	31.96	-1.21	0.35	0.18	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9809	2	1998	209	1998.57	18	30.44	-1.49	0.20	0.85	1	18	32.15	-0.84	0.17	0.22	1	60
ALB9811	2	1998	280	1998.77	57	31.55	-1.16	0.12	0.59	0	53	32.40	-1.08	0.12	0.51	0	10
DEL9813	2	1998	312	1998.86	19	31.91	-1.07	0.19	0.34	0	18	32.33	-1.29	0.18	0.45	0	22
ALB9902	2	1999	43	1999.12	34	32.39	-0.80	0.14	0.41	0	25	32.84	-0.64	0.15	0.46	0	10
ALB9903	2	1999	86	1999.23	51	32.11	-0.78	0.13	0.39	0	46	32.80	-0.61	0.13	0.49	0	10
DEL9905	2	1999	89	1999.24	9	32.36	-0.61	0.26	0.25	1	7	32.72	-0.76	0.29	0.61	1	70
DEL9906	2	1999	118	1999.32	4	31.32	-0.75	0.43	0.63	1	4	32.27	-0.49	0.36	0.13	1	93
ALB9909	2	1999	208	1999.57	23	31.23	-0.50	0.17	0.56	1	23	32.86	-0.07	0.15	0.53	1	60
IS9901	2	1999	235	1999.64	19	32.49	0.11	0.19	0.68	0	16	33.41	-0.23	0.20	0.49	0	22
ALB9910	2	1999	282	1999.77	55	32.95	0.31	0.12	0.56	0	50	33.76	0.39	0.13	0.85	0	10
NP9901	2	1999	313	1999.86	8	32.52	-0.27	0.31	0.37	1	8	33.92	0.59	0.27	0.18	1	22
ALB9911	2	1999	318	1999.87	12	33.63	0.70	0.23	0.48	1	11	34.42	0.88	0.24	0.58	1	22
ALB0001	2	2000	57	2000.16	40	33.49	0.33	0.14	0.43	1	31	33.76	0.18	0.14	0.48	1	10
ALB0002	2	2000	93	2000.25	60	32.94	0.11	0.12	0.43	0	53	33.57	0.17	0.13	0.33	0	10
DEL0006	2	2000	149	2000.41	22	32.55	0.05	0.19	0.52	0	20	33.26	0.01	0.19	0.61	0	22
ALB0004	2	2000	210	2000.58	16	32.05	0.16	0.21	0.53	1	16	32.89	-0.06	0.18	0.28	1	60
ALB0006	2	2000	265	2000.73	59	32.71	0.05	0.12	0.82	0	52	33.56	-0.03	0.12	0.38	0	10
ALB0007	2	2000	310	2000.85	21	32.63	-0.34	0.19	0.48	0	19	32.77	-0.85	0.19	0.70	0	22
ALB0102	2	2001	44	2001.12	52	32.86	-0.30	0.12	0.31	0	36	33.27	-0.26	0.13	0.39	0	10
DEL0101	2	2001	47	2001.13	37	32.95	-0.28	0.17	0.26	1	22	33.13	-0.34	0.16	0.42	1	16
ALB0103	2	2001	86	2001.23	49	32.62	-0.25	0.13	0.86	0	45	33.04	-0.43	0.13	0.34	0	10
ALB0106	2	2001	144	2001.39	23	32.29	-0.11	0.17	0.63	1	20	32.78	-0.30	0.17	0.23	1	22
ALB0107	2	2001	188	2001.52	17	31.72	-0.11	0.20	0.56	1	17	33.02	0.06	0.18	0.56	1	60
ALB0110	2	2001	265	2001.73	51	32.87	0.25	0.13	0.58	0	49	32.67	-0.50	0.14	0.48	0	10

ALB0111	2	2001	307	2001.84	24	32.99	0.00	0.18	0.48	1	22	33.61	-0.12	0.17	0.54	0	22
ALB0203	2	2002	55	2002.15	49	33.09	-0.02	0.12	0.42	1	36	33.25	-0.08	0.13	0.44	1	10
DEL0201	2	2002	62	2002.17	12	33.45	0.12	0.28	0.40	1	6	33.36	0.03	0.31	0.46	1	16
ALB0204	2	2002	77	2002.21	49	33.10	0.17	0.13	0.46	0	44	33.47	0.09	0.14	0.40	0	10
ALB0206	2	2002	147	2002.40	20	32.52	0.11	0.18	0.39	0	17	33.09	-0.24	0.18	0.43	0	22
ALB0208	2	2002	211	2002.58	18	32.07	0.23	0.20	0.60	1	18	32.83	-0.16	0.17	0.20	1	60
NOB0201	2	2002	231	2002.63	21	32.30	-0.09	0.19	0.51	0	19	33.20	-0.13	0.19	0.37	0	22
ALB0210	2	2002	267	2002.73	55	32.99	0.37	0.12	0.59	0	50	33.53	0.14	0.14	0.64	0	10
OC384	2	2002	305	2002.83	4	35.48	1.31	0.51	0.37	1	0	0.00	-9.99	-9.99	-9.99	1	91
DEL0210	2	2002	307	2002.84	19	33.96	0.99	0.19	0.68	0	17	34.12	0.50	0.19	0.45	0	22
DEL0302	2	2003	57	2003.16	22	33.48	0.40	0.19	0.42	1	17	33.39	0.07	0.18	0.69	1	10
DEL0303	2	2003	86	2003.24	52	32.83	-0.02	0.13	1.03	0	48	33.17	-0.31	0.14	0.62	0	10
ALB0301	2	2003	224	2003.61	15	31.46	-0.46	0.21	0.69	1	19	33.31	0.26	0.17	0.40	1	60
ALB0306	2	2003	309	2003.85	26	33.06	0.03	0.17	0.52	0	21	33.75	0.25	0.19	0.41	0	22

Table 12. Average surface and bottom salinity values for the Georges Bank region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface					Bottom					Pc	
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2		Flg
YUB7702	3	1977	221	1977.60	40	32.73	-0.01	0.11	0.34	1	25	33.15	0.07	0.13	0.44	1	23
ARG7701	3	1977	308	1977.84	21	33.27	0.39	0.15	0.65	1	18	33.37	0.28	0.15	0.48	1	23
MTM7711	3	1977	321	1977.88	3	32.73	-0.20	0.44	0.80	1	2	32.94	-0.06	-9.99	-9.99	1	23
KEL7711	3	1977	334	1977.92	23	33.04	0.19	0.14	0.32	1	15	33.11	0.08	0.17	0.40	1	23
DEL7802	3	1978	73	1978.20	8	32.80	-0.25	0.23	0.24	1	6	32.92	-0.25	0.28	0.16	1	23
ARG7804	3	1978	139	1978.38	24	32.43	-0.45	0.15	0.35	1	18	32.70	-0.31	0.15	0.30	1	23
ALB7807	3	1978	193	1978.53	18	32.70	-0.04	0.16	0.39	1	14	32.56	-0.22	0.16	0.22	1	23
BEL7801	3	1978	243	1978.67	20	32.41	-0.25	0.14	0.44	0	17	32.79	-0.23	0.16	0.34	0	23
BEL7803	3	1978	285	1978.78	15	33.11	0.02	0.18	0.61	1	9	33.05	-0.04	0.23	0.32	1	23
DEL7905	3	1979	142	1979.39	27	32.92	0.01	0.13	0.36	0	21	33.05	-0.07	0.16	0.23	0	23
ALB7906	3	1979	192	1979.53	20	32.59	-0.13	0.15	0.16	1	13	32.84	-0.13	0.18	0.16	1	23
BEL7901	3	1979	238	1979.65	15	32.68	-0.08	0.18	0.24	1	11	32.92	0.02	0.19	0.40	1	23
ALB7911	3	1979	296	1979.81	28	33.05	0.27	0.13	0.64	0	24	33.49	0.43	0.15	0.50	0	23
ALB7913	3	1979	350	1979.96	16	33.23	0.39	0.16	0.58	1	13	33.26	0.31	0.17	0.52	1	23
WIB8002	3	1980	63	1980.17	22	33.32	0.25	0.15	0.22	1	13	33.27	0.15	0.18	0.30	1	23
ALB8002	3	1980	88	1980.24	26	33.23	0.23	0.12	0.22	0	22	33.38	0.20	0.14	0.38	0	23
EVR8001	3	1980	125	1980.34	21	33.34	0.30	0.16	0.44	1	16	33.25	0.16	0.16	0.36	1	23
DEL8003	3	1980	163	1980.45	15	33.06	0.18	0.18	0.16	1	11	33.18	0.24	0.19	0.23	1	23
EVR8004	3	1980	177	1980.49	7	33.23	0.45	0.24	0.41	1	6	33.38	0.37	0.27	0.38	1	23
EVR8006	3	1980	214	1980.59	24	32.91	0.17	0.14	0.48	1	18	33.31	0.32	0.16	0.44	1	23
ALB8010	3	1980	293	1980.80	26	33.22	0.41	0.13	0.29	0	21	33.39	0.35	0.16	0.20	0	23
ALB8012	3	1980	352	1980.96	25	33.20	0.36	0.14	0.31	0	17	33.20	0.26	0.15	0.26	1	23
ALB8101	3	1981	63	1981.17	27	33.22	0.12	0.13	0.19	0	21	33.22	0.09	0.14	0.25	1	23
KEL8103	3	1981	96	1981.26	22	33.01	-0.01	0.15	0.31	0	16	33.11	0.07	0.15	0.32	1	23
DEL8103	3	1981	157	1981.43	29	33.37	0.52	0.13	0.81	0	23	33.26	0.20	0.14	0.38	0	23
ALB8114	3	1981	336	1981.92	25	32.49	-0.32	0.14	0.37	0	18	32.96	-0.04	0.15	0.45	1	23
ALB8202	3	1982	65	1982.18	25	32.56	-0.40	0.12	0.26	0	22	32.75	-0.43	0.15	0.34	0	23
ALB8204	3	1982	116	1982.32	9	33.14	-0.10	0.17	0.27	1	2	32.75	-0.66	-9.99	-9.99	1	27
DEL8203	3	1982	141	1982.39	29	33.02	0.11	0.12	0.67	0	25	33.15	0.02	0.14	0.35	0	23
ALB8209	3	1982	228	1982.62	20	33.61	0.44	0.21	0.63	1	3	32.76	0.01	0.32	1.29	1	27
DEL8206	3	1982	269	1982.74	18	33.14	0.02	0.17	0.57	1	6	33.11	-0.32	0.31	0.89	1	27
DEL8209	3	1982	326	1982.89	28	32.92	0.11	0.12	0.45	0	24	33.02	-0.04	0.14	0.22	0	23
DEL8301	3	1983	22	1983.06	25	32.99	0.09	0.13	0.17	0	22	33.16	0.03	0.14	0.19	0	23
ALB8304	3	1983	163	1983.45	28	32.40	-0.42	0.12	0.39	0	25	32.71	-0.39	0.14	0.36	0	23
DEL8309	3	1983	342	1983.94	24	32.50	-0.37	0.13	0.29	0	20	32.96	-0.09	0.15	0.29	0	23
DEL8401	3	1984	21	1984.06	28	32.49	-0.44	0.13	0.32	0	23	32.68	-0.45	0.14	0.28	0	23
ALB8403	3	1984	145	1984.40	28	32.71	-0.17	0.12	0.38	0	23	32.96	-0.12	0.14	0.32	0	23
DEL8409	3	1984	332	1984.91	28	32.61	-0.22	0.13	0.43	0	23	32.94	-0.14	0.14	0.39	0	23
DEL8501	3	1985	17	1985.05	29	32.95	0.00	0.12	0.26	0	23	33.44	0.30	0.14	0.56	0	23
DEL8503	3	1985	95	1985.26	29	33.22	0.19	0.12	0.42	0	23	33.22	0.06	0.14	0.19	0	23
ALB8504	3	1985	132	1985.36	30	33.15	0.18	0.12	0.27	0	25	33.27	0.25	0.15	0.22	0	23
DEL8507	3	1985	258	1985.71	32	33.20	0.48	0.11	0.67	0	27	33.20	0.23	0.14	0.39	0	23
DEL8510	3	1985	328	1985.90	24	32.97	0.14	0.14	0.32	0	18	33.20	0.11	0.16	0.45	0	23
DEL8601	3	1986	32	1986.09	27	33.13	0.15	0.12	0.17	0	23	33.31	0.18	0.14	0.20	0	23
DEL8603	3	1986	150	1986.41	33	33.33	0.44	0.12	0.60	0	26	33.35	0.29	0.14	0.23	0	23
DEL8607	3	1986	260	1986.71	30	32.81	0.07	0.12	0.22	0	23	33.06	0.07	0.14	0.36	0	23
ALB8606	3	1986	321	1986.88	31	33.12	0.26	0.11	0.33	1	27	33.48	0.34	0.13	0.35	1	90
DEL8610	3	1986	329	1986.90	29	32.89	0.04	0.12	0.25	0	23	33.08	0.02	0.14	0.27	0	23
DEL8701	3	1987	36	1987.10	29	33.04	0.05	0.12	0.41	0	22	33.15	0.01	0.15	0.37	0	23
DEL8704	3	1987	139	1987.38	28	32.86	-0.08	0.12	0.57	0	16	32.88	-0.21	0.16	0.46	0	23
DEL8708	3	1987	248	1987.68	30	32.33	-0.40	0.12	0.26	0	22	32.63	-0.37	0.15	0.29	0	23
DEL8710	3	1987	337	1987.92	28	32.64	-0.21	0.12	0.33	0	21	32.79	-0.28	0.15	0.27	0	23
DEL8812	3	1988	313	1988.86	28	32.50	-0.17	0.11	0.14	1	28	32.59	-0.17	0.11	0.14	1	24
ALB8811	3	1988	341	1988.94	59	32.56	-0.19	0.10	0.28	0	57	32.66	-0.20	0.10	0.25	0	24
DEL8901	3	1989	17	1989.05	56	32.82	-0.05	0.10	0.19	0	53	32.86	-0.09	0.11	0.21	0	24
DEL8907	3	1989	317	1989.87	55	32.50	-0.13	0.08	0.15	1	53	32.56	-0.18	0.08	0.17	1	24
DEL8909	3	1989	346	1989.95	58	32.65	-0.12	0.10	0.25	0	51	32.86	-0.12	0.11	0.32	0	24
DEL9001	3	1990	11	1990.03	65	33.06	0.20	0.10	0.22	0	60	33.17	0.09	0.11	0.33	0	24
DEL9003	3	1990	58	1990.16	47	33.11	0.14	0.09	0.15	1	46	33.14	0.05	0.09	0.21	1	24
DEL9005	3	1990	119	1990.33	92	33.09	0.19	0.09	0.22	0	70	33.18	0.09	0.09	0.28	0	80
DEL9006	3	1990	133	1990.36	97	33.06	0.18	0.08	0.28	0	81	33.23	0.13	0.08	0.30	0	80
DEL9011	3	1990	281	1990.77	31	33.15	0.49	0.11	0.56	0	27	33.33	0.38	0.12	0.40	0	10
DEL9012	3	1990	309	1990.85	61	32.84	0.17	0.10	0.21	0	58	32.99	0.11	0.10	0.32	0	24

DEL9014	3	1990	342	1990.94	70	32.91	0.11	0.09	0.24	0	64	33.03	0.01	0.10	0.31	0	24
DEL9101	3	1991	11	1991.03	72	32.83	-0.04	0.08	0.39	0	57	33.04	-0.02	0.10	0.33	0	24
DEL9103	3	1991	46	1991.13	68	32.96	0.03	0.09	0.21	0	58	33.05	-0.06	0.10	0.28	0	24
DEL9105	3	1991	90	1991.25	39	32.90	-0.05	0.11	0.25	0	36	33.04	-0.12	0.11	0.24	0	10
CHA9103	3	1991	188	1991.51	4	34.27	0.95	0.45	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93
ORE9105	3	1991	228	1991.62	30	31.76	-0.18	0.12	0.37	0	2	32.40	-0.25	-9.99	-9.99	1	60
AM9103	3	1991	279	1991.76	25	32.32	-0.19	0.11	0.14	1	10	32.49	-0.11	0.18	0.07	1	90
DEL9110	3	1991	279	1991.76	47	32.58	-0.15	0.10	0.39	0	38	32.88	-0.15	0.12	0.30	0	10
DEL9111	3	1991	317	1991.87	59	32.47	-0.21	0.10	0.26	0	57	32.59	-0.27	0.11	0.29	0	24
DEL9113	3	1991	345	1991.94	70	32.52	-0.26	0.09	0.17	0	50	32.65	-0.39	0.11	0.34	0	24
DEL9201	3	1992	12	1992.03	30	32.66	-0.25	0.11	0.22	1	28	32.71	-0.30	0.11	0.31	1	24
DEL9202	3	1992	32	1992.09	69	32.66	-0.25	0.08	0.18	0	56	32.73	-0.35	0.10	0.26	0	24
DEL9203	3	1992	64	1992.18	26	32.64	-0.30	0.14	0.20	0	23	32.71	-0.37	0.14	0.27	0	10
ALB9203	3	1992	93	1992.25	41	32.50	-0.46	0.10	0.37	0	29	32.71	-0.43	0.14	0.28	0	10
ALB9204	3	1992	125	1992.34	45	32.20	-0.78	0.11	0.27	1	27	32.53	-0.53	0.12	0.40	1	93
ALB9205	3	1992	145	1992.40	190	32.06	-0.78	0.04	0.16	1	128	32.33	-0.82	0.06	0.30	1	93
DEL9206	3	1992	181	1992.49	19	32.37	-0.31	0.13	0.25	1	19	32.49	-0.35	0.13	0.19	1	50
ORE9204	3	1992	231	1992.63	22	32.52	-0.05	0.13	0.64	1	20	32.51	-0.38	0.14	0.58	1	60
ALB9211	3	1992	284	1992.78	54	32.65	-0.06	0.09	0.55	0	47	32.55	-0.30	0.09	0.51	1	10
DEL9212	3	1992	306	1992.84	63	32.45	-0.22	0.09	0.19	0	62	32.67	-0.20	0.10	0.32	0	24
DEL9214	3	1992	348	1992.95	61	32.44	-0.35	0.07	0.15	1	59	32.59	-0.28	0.07	0.35	1	24
DEL9301	3	1993	13	1993.04	72	32.46	-0.44	0.08	0.22	0	63	32.60	-0.49	0.09	0.22	0	24
ALB9303	3	1993	56	1993.15	11	32.65	-0.34	0.22	0.22	1	7	33.23	-0.37	0.30	0.79	1	10
ALB9304	3	1993	100	1993.28	52	32.72	-0.24	0.09	0.54	0	46	32.70	-0.50	0.11	0.37	0	10
ALB9306	3	1993	144	1993.39	207	32.35	-0.48	0.04	0.08	1	146	32.75	-0.32	0.05	0.36	1	21
DEL9306	3	1993	169	1993.46	49	32.66	-0.48	0.13	0.77	1	5	34.18	0.46	0.35	1.14	1	93
ORE9304	3	1993	227	1993.62	52	32.62	-0.03	0.09	0.78	0	48	32.61	-0.37	0.10	0.35	0	60
DEL9311	3	1993	278	1993.76	54	32.66	-0.06	0.10	0.56	0	46	33.10	0.10	0.11	0.52	0	10
DEL9312	3	1993	312	1993.85	64	32.38	-0.30	0.09	0.28	0	64	32.66	-0.22	0.10	0.32	0	24
DEL9314	3	1993	341	1993.93	71	32.66	-0.13	0.08	0.41	0	65	32.86	-0.22	0.10	0.34	0	24
DEL9401	3	1994	13	1994.04	40	32.63	-0.28	0.09	0.22	1	39	32.74	-0.23	0.09	0.34	1	24
DEL9402	3	1994	51	1994.14	41	32.94	-0.01	0.11	0.55	1	31	33.14	-0.04	0.12	0.90	1	10
DEL9403	3	1994	99	1994.27	50	32.85	-0.14	0.09	0.45	0	42	33.16	-0.01	0.11	0.39	0	10
ALB9403	3	1994	133	1994.36	185	32.79	-0.02	0.04	0.22	1	171	32.98	-0.04	0.05	0.29	1	21
DEL9404	3	1994	135	1994.37	194	32.91	0.09	0.04	0.31	1	169	33.15	0.07	0.05	0.48	1	81
ALB9404	3	1994	156	1994.43	38	32.71	-0.09	0.10	0.25	1	34	32.96	0.02	0.10	0.36	1	20
DEL9406	3	1994	176	1994.48	94	32.65	0.05	0.06	0.38	1	92	32.81	0.03	0.06	0.28	1	80
ALB9405	3	1994	192	1994.53	48	32.77	0.09	0.09	0.47	0	45	33.20	0.16	0.10	0.58	0	60
DEL9407	3	1994	230	1994.63	23	32.56	-0.02	0.12	0.25	1	22	32.95	0.27	0.12	0.64	1	50
ALB9407	3	1994	240	1994.66	84	32.53	-0.05	0.06	0.47	1	81	33.18	0.35	0.06	0.56	1	80
ALB9409	3	1994	281	1994.77	52	32.89	0.16	0.09	0.41	0	45	33.35	0.41	0.11	0.51	0	10
ALB9410	3	1994	318	1994.87	37	32.93	0.11	0.16	0.22	0	27	32.92	0.06	0.11	0.51	1	20
ALB9501	3	1995	11	1995.03	13	33.00	0.10	0.18	0.39	0	11	33.23	0.18	0.20	0.26	1	22
ALB9502	3	1995	27	1995.07	3	33.12	0.24	0.35	0.07	1	3	33.13	0.05	0.32	0.04	1	70
EN261	3	1995	45	1995.12	50	33.09	0.14	0.10	0.34	0	46	33.23	0.11	0.11	0.36	0	20
ALB9503	3	1995	59	1995.16	18	33.06	0.14	0.15	0.30	0	15	33.08	0.07	0.15	0.40	1	10
SJ9503	3	1995	76	1995.21	18	32.69	-0.28	0.13	0.17	1	18	32.75	-0.26	0.13	0.20	1	21
EN263	3	1995	76	1995.21	75	32.99	-0.05	0.09	0.30	0	72	33.09	-0.02	0.10	0.30	0	20
SJ9505	3	1995	100	1995.27	71	32.72	-0.15	0.07	0.25	1	71	32.94	-0.20	0.08	0.36	1	21
ALB9504	3	1995	100	1995.27	23	32.90	-0.07	0.13	0.47	0	19	33.30	0.12	0.15	0.48	0	10
EN265	3	1995	105	1995.29	87	32.69	-0.22	0.08	0.26	0	83	32.99	-0.12	0.09	0.28	0	20
SJ9507	3	1995	132	1995.36	95	32.93	0.08	0.06	0.52	1	96	33.81	0.58	0.07	0.77	1	21
KAT9502	3	1995	132	1995.36	118	33.03	0.09	0.06	1.02	1	73	33.28	0.16	0.07	1.00	1	81
ALB9505	3	1995	134	1995.37	87	32.95	-0.05	0.06	0.31	1	81	33.18	0.20	0.06	0.76	1	20
ALB9506	3	1995	161	1995.44	56	32.48	-0.28	0.08	0.22	1	48	32.77	-0.21	0.08	0.33	1	20
KAT9504	3	1995	174	1995.48	41	32.50	-0.24	0.09	0.20	1	49	32.67	-0.19	0.08	0.27	1	81
ALB9508	3	1995	195	1995.53	55	32.50	-0.24	0.09	0.28	0	43	32.79	-0.17	0.12	0.41	0	20
KAT9505	3	1995	203	1995.56	80	32.39	-0.30	0.06	0.20	1	80	32.64	-0.19	0.06	0.19	1	81
ALB9507	3	1995	213	1995.58	34	32.36	-0.30	0.11	0.23	0	33	32.90	-0.08	0.12	0.54	0	60
PE9502	3	1995	235	1995.64	19	33.37	0.50	0.16	1.03	0	5	33.60	0.36	0.33	1.03	1	93
ALB9512	3	1995	278	1995.76	28	33.41	0.71	0.12	0.76	0	26	33.47	0.52	0.13	0.56	0	10
EN276	3	1996	15	1996.04	79	32.88	-0.01	0.08	0.37	0	71	32.90	-0.14	0.09	0.22	0	20
EN278	3	1996	49	1996.13	82	32.75	-0.21	0.07	0.38	0	63	32.90	-0.22	0.11	0.39	0	20
ALB9603	3	1996	57	1996.16	24	32.82	-0.15	0.15	0.16	1	12	32.90	-0.52	0.22	0.55	1	10
OC275	3	1996	77	1996.21	59	32.65	-0.34	0.09	0.26	0	51	32.76	-0.40	0.10	0.40	0	20
EN282	3	1996	104	1996.29	101	32.53	-0.43	0.06	0.18	0	90	32.70	-0.40	0.08	0.31	0	20
ALB9604	3	1996	111	1996.30	44	32.50	-0.42	0.09	0.23	0	38	32.72	-0.44	0.10	0.39	0	10
ALB9605	3	1996	132	1996.36	138	32.45	-0.45	0.06	0.19	0	108	32.59	-0.51	0.07	0.37	0	20
ALB9606	3	1996	146	1996.40	74	32.35	-0.47	0.08	0.15	0	69	32.49	-0.53	0.09	0.21	0	81
ALB9607	3	1996	159	1996.44	60	32.28	-0.51	0.09	0.32	0	54	32.55	-0.50	0.12	0.38	0	20
ALB9608	3	1996	173	1996.48	56	32.07	-0.70	0.09	0.33	0	48	32.49	-0.50	0.11	0.25	0	81

AJ9601	3	1996	179	1996.49	4	31.63	-0.89	0.26	-9.99	1	0	0.00	-9.99	-9.99	-9.99	1	93
AJ9603	3	1996	209	1996.57	7	31.74	-1.35	0.34	0.21	1	1	33.47	-9.99	-9.99	-9.99	1	93
ALB9609	3	1996	235	1996.64	151	31.80	-0.84	0.06	0.33	0	146	32.45	-0.57	0.06	0.32	0	60
ALB9610	3	1996	245	1996.67	43	31.96	-0.63	0.09	0.23	1	42	32.22	-0.55	0.09	0.29	1	81
ALB9611	3	1996	284	1996.78	69	31.97	-0.74	0.08	0.34	0	63	32.47	-0.52	0.10	0.37	0	10
ALB9612	3	1996	314	1996.86	8	31.93	-0.83	0.22	0.25	1	7	32.29	-0.73	0.23	0.17	1	90
ALB9701	3	1997	16	1997.04	27	32.25	-0.63	0.11	0.14	1	23	32.42	-0.56	0.12	0.45	1	20
OC298	3	1997	46	1997.13	101	32.17	-0.77	0.07	0.21	0	91	32.27	-0.84	0.08	0.52	0	20
ALB9703	3	1997	56	1997.15	23	32.16	-0.82	0.15	0.23	1	15	32.36	-0.84	0.17	0.61	1	10
OC300	3	1997	79	1997.22	91	32.27	-0.70	0.08	0.19	0	86	32.37	-0.77	0.09	0.43	0	20
ALB9704	3	1997	94	1997.26	46	32.40	-0.55	0.09	0.33	0	38	32.54	-0.67	0.11	0.50	0	10
OC301	3	1997	99	1997.27	124	32.25	-0.58	0.06	0.22	1	113	32.41	-0.87	0.06	0.55	1	21
OC302	3	1997	115	1997.32	75	32.35	-0.57	0.08	0.24	0	67	32.54	-0.57	0.09	0.38	0	20
OC303	3	1997	133	1997.37	128	32.23	-0.62	0.05	0.09	1	122	32.56	-0.56	0.06	0.29	1	21
ALB9705	3	1997	143	1997.39	91	32.24	-0.62	0.08	0.25	0	86	32.53	-0.53	0.08	0.46	0	20
ALB9707	3	1997	173	1997.47	62	32.44	-0.33	0.09	0.45	0	59	32.68	-0.31	0.10	0.46	0	20
ALB9708	3	1997	190	1997.52	7	32.98	-0.01	0.28	0.64	1	3	34.44	1.03	0.45	0.71	1	93
DEL9707	3	1997	193	1997.53	8	32.05	-0.62	0.20	0.36	1	8	32.25	-0.43	0.19	0.16	1	50
ALB9709	3	1997	224	1997.61	79	32.41	-0.04	0.06	0.73	1	78	32.68	0.00	0.06	0.52	1	60
ALB9711	3	1997	285	1997.78	71	32.53	-0.17	0.08	0.39	0	64	32.79	-0.21	0.10	0.23	0	10
ALB9801	3	1998	11	1998.03	66	32.42	-0.45	0.08	0.37	0	56	32.75	-0.39	0.10	0.27	0	20
ALB9802	3	1998	27	1998.07	3	32.71	-0.22	0.36	0.06	1	2	65.41	-0.81	-9.99	-9.99	1	22
OC317	3	1998	42	1998.11	91	32.32	-0.61	0.07	0.21	0	85	32.41	-0.73	0.08	0.32	0	20
ALB9803	3	1998	54	1998.15	34	32.22	-0.81	0.13	0.40	1	19	32.48	-0.72	0.15	0.79	1	10
OC319	3	1998	78	1998.21	81	32.21	-0.73	0.08	0.27	0	72	32.36	-0.76	0.09	0.44	0	20
DEL9804	3	1998	85	1998.23	4	32.28	-0.96	0.42	0.28	1	1	32.44	-0.63	-9.99	-9.99	1	93
ALB9804	3	1998	90	1998.25	53	32.11	-0.84	0.09	0.29	0	44	32.34	-0.80	0.11	0.39	0	10
OC322	3	1998	109	1998.30	92	32.12	-0.80	0.07	0.19	0	86	32.30	-0.82	0.08	0.35	0	20
ALB9806	3	1998	136	1998.37	96	32.08	-0.78	0.07	0.19	0	88	32.17	-0.90	0.09	0.39	0	20
ALB9807	3	1998	155	1998.43	28	31.95	-0.88	0.11	0.24	0	25	32.21	-0.81	0.14	0.27	0	22
ALB9808	3	1998	171	1998.47	60	31.94	-0.83	0.09	0.20	0	49	32.24	-0.79	0.11	0.43	0	20
ALB9809	3	1998	222	1998.61	55	31.71	-0.96	0.09	0.45	0	54	32.17	-0.80	0.10	0.43	0	60
AJ9801	3	1998	225	1998.62	7	32.20	-0.87	0.30	0.98	1	0	0.00	-9.99	-9.99	-9.99	1	93
IS9801	3	1998	237	1998.65	34	32.00	-0.79	0.12	0.63	0	25	32.19	-0.60	0.11	0.47	1	22
ALB9811	3	1998	292	1998.80	62	32.04	-0.68	0.10	0.28	0	61	32.33	-0.66	0.09	0.39	0	10
DEL9813	3	1998	317	1998.87	29	32.00	-0.74	0.11	0.22	0	25	32.30	-0.70	0.14	0.50	0	22
ALB9901	3	1999	17	1999.05	78	32.27	-0.62	0.08	0.19	0	72	32.72	-0.38	0.10	0.53	0	20
OC336	3	1999	46	1999.13	92	32.42	-0.53	0.07	0.37	0	86	32.87	-0.26	0.08	0.51	0	20
ALB9902	3	1999	51	1999.14	35	32.54	-0.39	0.11	0.39	1	22	32.73	-0.43	0.14	0.74	1	10
EN320	3	1999	75	1999.20	91	32.59	-0.38	0.07	0.32	0	81	32.80	-0.34	0.08	0.38	0	20
DEL9905	3	1999	94	1999.26	25	32.53	-0.44	0.14	0.21	0	24	32.72	-0.39	0.16	0.26	0	70
ALB9903	3	1999	99	1999.27	48	32.60	-0.34	0.09	0.24	0	42	32.72	-0.40	0.11	0.40	0	10
EDL9904	3	1999	108	1999.30	45	32.57	-0.27	0.09	0.12	1	45	32.64	-0.46	0.09	0.28	1	21
OC341	3	1999	110	1999.30	92	32.49	-0.43	0.07	0.31	0	84	32.74	-0.38	0.08	0.38	0	20
EDL9905	3	1999	133	1999.37	70	32.28	-0.54	0.07	0.36	1	64	33.04	-0.10	0.08	0.59	1	21
ALB9904	3	1999	142	1999.39	95	32.85	-0.02	0.07	0.82	0	87	33.00	-0.08	0.08	0.59	0	20
AJ9901	3	1999	156	1999.43	31	32.62	-0.23	0.12	0.39	0	28	33.13	0.08	0.14	0.43	0	22
ALB9905	3	1999	157	1999.43	46	32.45	-0.33	0.09	0.24	1	46	32.93	0.01	0.09	0.32	1	91
ALB9906	3	1999	169	1999.46	63	32.82	0.05	0.09	0.59	0	61	32.97	-0.07	0.10	0.36	0	20
ALB9908	3	1999	189	1999.52	19	32.67	0.22	0.14	0.37	1	19	32.91	0.21	0.13	0.29	1	91
ALB9909	3	1999	214	1999.59	31	32.81	0.15	0.13	0.73	0	30	33.20	0.18	0.14	0.65	0	60
IS9901	3	1999	237	1999.65	35	32.68	0.00	0.11	0.48	0	30	33.02	-0.09	0.12	0.41	0	22
ALB9910	3	1999	291	1999.80	41	33.24	0.51	0.09	0.52	0	37	33.48	0.51	0.11	0.51	0	10
ALB9911	3	1999	321	1999.88	29	33.24	0.50	0.12	0.49	0	26	33.60	0.60	0.14	0.60	0	22
ALB0001	3	2000	60	2000.16	9	33.12	-0.04	0.26	0.42	1	5	33.91	0.32	0.34	1.21	1	10
ALB0002	3	2000	104	2000.28	50	33.09	0.16	0.09	0.18	0	44	33.35	0.17	0.10	0.28	0	10
DEL0006	3	2000	153	2000.42	26	32.96	0.09	0.14	0.47	0	24	33.25	0.12	0.15	0.34	0	22
ALB0003	3	2000	176	2000.48	35	32.62	0.00	0.10	0.21	1	36	32.88	0.00	0.10	0.31	1	91
ALB0004	3	2000	223	2000.61	33	32.67	0.02	0.12	0.48	0	33	33.04	0.05	0.12	0.38	0	60
ALB0005	3	2000	237	2000.65	30	32.77	0.10	0.13	0.58	0	25	33.08	0.15	0.14	0.41	0	22
DEL0008	3	2000	273	2000.75	26	32.44	-0.10	0.11	0.09	1	27	32.63	0.03	0.10	0.21	1	16
ALB0006	3	2000	274	2000.75	45	32.38	-0.33	0.10	0.39	0	40	32.90	-0.16	0.11	0.34	0	10
DEL0010	3	2000	311	2000.85	5	32.64	-0.09	0.26	0.09	1	5	32.77	0.03	0.26	0.15	1	91
ALB0007	3	2000	314	2000.86	29	32.85	0.05	0.12	0.67	0	22	32.98	-0.06	0.13	0.50	0	22
ALB0102	3	2001	50	2001.14	30	32.84	-0.18	0.14	0.30	1	20	33.01	-0.17	0.15	0.64	1	10
ALB0103	3	2001	97	2001.27	46	32.76	-0.19	0.09	0.24	0	39	32.97	-0.21	0.11	0.30	0	10
DEL0105	3	2001	151	2001.41	33	32.61	-0.21	0.11	0.65	0	29	32.85	-0.19	0.13	0.26	0	22
DEL0106	3	2001	167	2001.46	20	32.39	-0.25	0.14	0.39	1	19	32.75	-0.24	0.14	0.32	1	91
ALB0107	3	2001	219	2001.60	64	32.18	-0.46	0.09	0.35	0	63	32.66	-0.33	0.09	0.34	0	60
ALB0109	3	2001	234	2001.64	34	32.14	-0.52	0.12	0.35	0	29	32.55	-0.38	0.13	0.24	0	22
DEL0109	3	2001	268	2001.74	36	32.37	-0.17	0.09	0.14	1	35	32.55	-0.13	0.09	0.19	1	16

ALB0110	3	2001	275	2001.75	50	32.76	0.03	0.09	0.46	0	42	32.85	-0.13	0.11	0.40	0	10
ALB0111	3	2001	313	2001.86	30	32.61	-0.15	0.12	0.21	0	27	32.70	-0.29	0.14	0.33	0	22
ALB0202	3	2002	28	2002.08	15	32.86	-0.07	0.15	0.07	1	14	32.95	0.01	0.14	0.28	1	22
ALB0203	3	2002	60	2002.16	17	32.69	-0.39	0.18	0.31	1	10	33.43	0.06	0.23	0.99	1	10
ALB0204	3	2002	98	2002.27	47	32.68	-0.28	0.09	0.34	0	41	33.11	-0.06	0.11	0.27	0	10
ALB0206	3	2002	151	2002.41	32	32.78	-0.10	0.11	0.24	0	26	32.85	-0.18	0.13	0.28	0	22
ALB0208	3	2002	219	2002.60	59	32.77	0.14	0.09	0.46	0	59	33.04	0.04	0.10	0.33	0	60
NOB0201	3	2002	235	2002.64	28	33.21	0.44	0.12	0.74	0	24	33.09	0.06	0.14	0.34	0	22
ALB0209	3	2002	236	2002.65	21	32.69	0.08	0.13	0.58	1	19	32.90	0.08	0.13	0.24	1	91
DEL0208	3	2002	268	2002.73	18	32.62	0.10	0.14	0.14	1	19	32.91	0.24	0.13	0.43	1	16
ALB0210	3	2002	280	2002.77	46	33.09	0.36	0.10	0.68	0	37	33.41	0.38	0.11	0.52	0	10
DEL0210	3	2002	313	2002.86	30	32.97	0.24	0.11	0.20	0	27	33.23	0.24	0.13	0.34	0	22
DEL0301	3	2003	29	2003.08	11	33.21	0.31	0.18	0.16	1	10	33.24	0.22	0.18	0.35	1	22
DEL0303	3	2003	96	2003.26	44	32.45	-0.51	0.09	0.49	0	44	32.71	-0.43	0.10	0.41	0	10
DEL0305	3	2003	146	2003.40	29	32.92	0.06	0.13	0.66	0	27	33.13	0.00	0.15	0.46	0	22
ARM0301	3	2003	234	2003.64	36	32.36	-0.29	0.11	0.23	1	25	32.71	-0.05	0.11	0.32	1	22
ALB0301	3	2003	236	2003.65	55	32.34	-0.31	0.09	0.33	0	57	32.90	-0.01	0.09	0.27	0	60
DEL0308	3	2003	264	2003.72	45	32.49	0.00	0.08	0.18	1	46	32.70	0.06	0.08	0.20	1	16
DEL0310	3	2003	307	2003.84	14	32.70	-0.06	0.16	0.10	1	15	32.91	0.05	0.15	0.25	1	91
ALB0306	3	2003	312	2003.86	33	32.75	0.00	0.11	0.22	0	24	32.99	-0.01	0.13	0.48	0	22

Table 13. Average surface and bottom salinity values for the western Gulf of Maine region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface				Bottom							
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Pc
YUB7702	4	1977	220	1977.60	34	31.95	0.02	0.13	0.27	0	33	33.75	0.27	0.10	0.34	0	23
ARG7701	4	1977	306	1977.84	21	32.51	-0.13	0.15	0.27	0	15	33.66	0.08	0.13	0.25	0	23
MTM7711	4	1977	318	1977.87	16	32.66	-0.12	0.18	0.23	1	15	33.65	-0.01	0.14	0.27	1	23
KEL7711	4	1977	334	1977.91	6	32.76	-0.01	0.27	0.11	1	6	33.57	0.10	0.21	0.24	1	23
DEL7802	4	1978	73	1978.20	25	32.48	-0.47	0.14	0.22	1	25	33.67	0.09	0.11	0.27	1	23
ARG7804	4	1978	137	1978.38	27	31.93	-0.37	0.14	0.30	0	27	33.30	-0.09	0.11	0.20	0	23
ALB7807	4	1978	193	1978.53	31	31.69	-0.19	0.13	0.37	0	29	33.48	0.09	0.11	0.27	0	23
BEL7801	4	1978	244	1978.67	18	32.04	-0.14	0.16	0.26	1	14	33.76	-0.01	0.14	0.19	1	23
BEL7803	4	1978	288	1978.79	19	32.55	0.11	0.15	0.35	0	26	33.62	0.06	0.13	0.25	1	23
DEL7903	4	1979	70	1979.19	4	32.96	-0.19	0.33	0.31	1	0	0.00	-9.99	-9.99	-9.99	1	23
DEL7905	4	1979	146	1979.40	25	31.95	-0.24	0.14	0.37	0	19	33.34	-0.02	0.12	0.19	0	23
ALB7906	4	1979	192	1979.52	11	31.80	-0.24	0.20	0.15	1	7	33.45	-0.02	0.20	0.13	1	23
BEL7901	4	1979	242	1979.66	26	32.04	-0.05	0.14	0.23	0	25	33.53	0.08	0.11	0.18	0	23
ALB7911	4	1979	297	1979.81	21	32.55	0.00	0.15	0.20	1	16	33.70	0.25	0.14	0.18	1	23
ALB7913	4	1979	327	1979.89	18	33.00	0.14	0.17	0.27	1	10	33.77	0.14	0.18	0.28	1	23
WIE8002	4	1980	57	1980.16	31	33.49	0.47	0.13	0.26	0	28	33.67	0.12	0.11	0.27	0	23
ALB8002	4	1980	84	1980.23	15	33.46	0.45	0.18	0.34	1	10	33.51	0.24	0.18	0.27	1	23
EVR8001	4	1980	128	1980.35	30	32.97	0.57	0.13	0.34	0	29	33.40	0.04	0.10	0.25	0	23
DEL8003	4	1980	161	1980.44	7	32.82	0.42	0.25	0.26	1	5	33.53	-0.11	0.27	0.22	1	23
EVR8004	4	1980	180	1980.49	14	32.43	0.35	0.19	0.23	1	11	33.28	-0.03	0.16	0.27	1	23
EVR8006	4	1980	218	1980.60	33	32.19	0.28	0.12	0.30	0	32	33.44	0.01	0.10	0.24	0	23
ALB8010	4	1980	297	1980.82	21	32.99	0.37	0.16	0.13	1	14	33.51	0.04	0.15	0.15	1	23
ALB8012	4	1980	346	1980.95	7	33.12	0.27	0.26	0.06	1	5	33.51	0.08	0.27	0.11	1	23
ALB8101	4	1981	57	1981.16	32	33.07	0.07	0.13	0.25	0	30	33.44	-0.07	0.10	0.23	0	23
KEL8103	4	1981	95	1981.26	4	33.19	0.07	0.32	0.14	1	2	33.22	0.10	-9.99	-9.99	1	23
DEL8103	4	1981	147	1981.40	33	32.47	0.25	0.13	0.26	0	27	33.26	-0.10	0.12	0.20	0	23
ALB8114	4	1981	345	1981.94	25	32.45	-0.49	0.15	0.36	0	17	33.05	-0.42	0.14	0.37	1	23
ALB8202	4	1982	52	1982.14	23	32.62	-0.41	0.15	0.18	1	18	33.50	0.09	0.13	0.34	1	23
DEL8203	4	1982	155	1982.43	21	32.48	0.21	0.15	0.16	1	17	33.41	0.09	0.13	0.20	1	23
DEL8209	4	1982	337	1982.92	31	32.93	0.02	0.13	0.16	0	29	33.77	0.15	0.10	0.19	0	23
DEL8301	4	1983	29	1983.08	30	33.17	0.11	0.13	0.16	0	30	33.61	0.04	0.10	0.16	0	23
ALB8304	4	1983	169	1983.46	31	31.37	-0.65	0.13	0.43	0	20	32.97	-0.21	0.13	0.22	0	23
DEL8309	4	1983	349	1983.96	17	32.63	-0.33	0.16	0.17	1	13	33.60	-0.05	0.15	0.27	1	23
DEL8401	4	1984	13	1984.04	29	32.69	-0.37	0.13	0.22	0	27	33.49	-0.14	0.11	0.25	0	23
ALB8403	4	1984	152	1984.42	32	31.66	-0.51	0.13	0.37	0	23	33.09	-0.19	0.12	0.25	0	23
DEL8409	4	1984	336	1984.92	16	32.87	0.04	0.18	0.24	1	10	33.21	-0.03	0.19	0.14	1	23
DEL8501	4	1985	18	1985.05	9	33.10	0.01	0.24	0.14	1	8	33.33	0.02	0.20	0.14	1	23
DEL8503	4	1985	97	1985.26	6	33.25	0.34	0.29	0.25	1	7	33.37	0.15	0.21	0.16	1	23
ALB8504	4	1985	131	1985.36	8	33.13	0.45	0.24	0.22	1	6	33.29	0.10	0.24	0.24	1	23
DEL8507	4	1985	263	1985.72	27	32.35	0.13	0.14	0.20	0	25	33.61	0.09	0.11	0.15	0	23
DEL8510	4	1985	342	1985.94	26	33.05	0.09	0.14	0.16	1	22	33.60	-0.05	0.11	0.16	1	23
DEL8601	4	1986	40	1986.11	31	33.23	0.19	0.13	0.23	0	21	33.63	0.11	0.12	0.24	1	23
DEL8603	4	1986	153	1986.42	33	32.54	0.34	0.12	0.34	1	29	33.33	0.06	0.10	0.15	1	23
DEL8607	4	1986	264	1986.72	24	32.40	0.24	0.15	0.13	1	21	33.39	0.00	0.12	0.12	1	23
DEL8610	4	1986	341	1986.93	23	32.90	0.04	0.15	0.12	1	20	33.39	0.00	0.12	0.17	1	23
DEL8701	4	1987	35	1987.10	4	33.04	-0.01	0.33	0.23	1	4	33.23	-0.09	0.30	0.12	1	23
DEL8704	4	1987	153	1987.42	28	31.87	-0.33	0.14	0.40	0	23	33.13	-0.28	0.13	0.30	0	23
DEL8708	4	1987	259	1987.71	30	31.78	-0.42	0.13	0.31	0	18	33.46	-0.06	0.13	0.22	0	23
DEL8710	4	1987	331	1987.91	4	32.34	-0.39	0.33	0.05	1	3	33.23	-0.21	0.34	0.15	1	23
DEL8812	4	1988	312	1988.85	21	32.53	0.04	0.16	0.18	1	18	33.17	0.03	0.13	0.20	1	24
ALB8811	4	1988	339	1988.93	23	32.54	-0.22	0.15	0.09	1	21	33.29	0.08	0.12	0.19	1	24
DEL8901	4	1989	13	1989.04	24	32.95	-0.02	0.15	0.19	1	21	33.31	0.08	0.12	0.18	1	24
DEL8907	4	1989	315	1989.86	22	32.34	-0.16	0.16	0.19	1	20	33.00	-0.04	0.13	0.22	1	24
DEL8909	4	1989	341	1989.93	24	32.68	-0.08	0.15	0.22	1	22	33.26	0.09	0.12	0.33	1	24
DEL9001	4	1990	8	1990.02	18	33.08	0.16	0.17	0.20	1	19	33.31	0.17	0.13	0.22	1	24
DEL9003	4	1990	58	1990.16	9	33.06	0.21	0.24	0.22	1	9	33.22	0.14	0.18	0.14	1	24
DEL9011	4	1990	285	1990.78	16	32.27	0.16	0.19	0.26	1	16	32.88	0.17	0.15	0.16	1	10
DEL9012	4	1990	307	1990.84	21	32.73	0.29	0.16	0.26	1	21	33.20	0.13	0.12	0.23	1	24
DEL9014	4	1990	338	1990.93	18	32.90	0.17	0.17	0.15	1	18	33.24	0.09	0.13	0.21	1	24
DEL9101	4	1991	7	1991.02	17	33.00	0.10	0.18	0.18	1	15	33.25	0.09	0.15	0.18	1	24
DEL9103	4	1991	41	1991.11	17	33.07	0.18	0.18	0.37	1	16	33.16	0.02	0.15	0.16	1	24
DEL9105	4	1991	100	1991.27	30	32.40	-0.25	0.12	0.35	0	30	33.24	-0.13	0.10	0.24	0	10
DEL9108	4	1991	208	1991.57	48	31.38	-0.24	0.10	0.31	1	47	32.69	-0.15	0.08	0.31	1	10

ORE9105	4	1991	228	1991.62	10	31.62	-0.23	0.22	0.43	1	3	32.66	-0.55	0.30	0.07	1	60
AM9103	4	1991	278	1991.76	22	32.22	-0.11	0.14	0.27	1	10	33.24	-0.18	0.18	0.26	1	90
DEL9110	4	1991	289	1991.79	54	32.11	-0.35	0.10	0.40	0	52	33.44	-0.10	0.08	0.23	0	10
DEL9111	4	1991	312	1991.85	24	32.07	-0.43	0.15	0.49	1	23	32.83	-0.37	0.12	0.28	1	24
DEL9113	4	1991	341	1991.93	18	32.51	-0.24	0.17	0.20	1	18	32.94	-0.24	0.13	0.21	1	24
DEL9201	4	1992	12	1992.03	15	32.50	-0.46	0.19	0.20	1	15	32.81	-0.39	0.15	0.25	1	24
DEL9202	4	1992	37	1992.10	14	32.69	-0.26	0.20	0.18	1	12	32.84	-0.35	0.16	0.24	1	24
ALB9203	4	1992	101	1992.28	43	32.24	-0.31	0.10	0.40	0	41	33.21	-0.17	0.08	0.27	0	10
EGG9201	4	1992	104	1992.29	7	30.82	-9.99	0.00	-9.99	1	6	31.76	-9.99	0.00	-9.99	1	93
DEL9206	4	1992	190	1992.52	11	31.54	-0.03	0.22	0.50	1	9	32.09	-0.38	0.21	0.24	1	50
DEL9207	4	1992	215	1992.59	65	30.81	-0.59	0.09	0.36	1	48	32.16	-0.34	0.08	0.21	1	10
ORE9204	4	1992	229	1992.63	5	31.60	-0.03	0.35	0.16	1	5	32.26	-0.42	0.27	0.25	1	60
AJ9201	4	1992	230	1992.63	6	31.60	-0.51	0.28	0.24	1	1	31.77	-9.99	-9.99	-9.99	1	93
ALB9211	4	1992	295	1992.81	43	32.08	-0.45	0.10	0.21	0	41	33.28	-0.22	0.08	0.24	0	10
DEL9212	4	1992	304	1992.83	23	31.97	-0.44	0.15	0.37	1	23	32.88	-0.30	0.12	0.18	1	24
DEL9214	4	1992	344	1992.94	16	32.30	-0.47	0.18	0.23	1	16	32.78	-0.34	0.14	0.21	1	24
DEL9301	4	1993	10	1993.03	15	32.51	-0.42	0.19	0.16	1	14	32.84	-0.31	0.15	0.19	1	24
ALB9304	4	1993	111	1993.30	39	32.05	-0.49	0.10	0.40	0	35	32.83	-0.54	0.08	0.24	0	10
DEL9308	4	1993	208	1993.57	55	31.45	-0.42	0.10	0.34	0	54	33.08	-0.35	0.08	0.33	0	10
AJ9301	4	1993	221	1993.61	5	31.89	-0.05	0.22	0.05	1	3	32.60	-0.38	0.17	-9.99	1	93
ORE9304	4	1993	235	1993.64	10	31.33	-0.56	0.22	1.54	1	10	32.22	-0.56	0.18	0.19	1	60
EGG9301	4	1993	260	1993.71	3	31.77	-9.99	0.31	-9.99	1	3	32.15	-9.99	0.27	-9.99	1	93
DEL9311	4	1993	286	1993.78	50	32.08	-0.37	0.10	0.23	0	51	33.33	-0.23	0.08	0.26	0	10
DEL9312	4	1993	310	1993.85	22	32.19	-0.29	0.15	0.18	1	22	32.98	-0.26	0.12	0.19	1	24
DEL9314	4	1993	338	1993.93	18	32.30	-0.45	0.17	0.17	1	18	32.89	-0.26	0.13	0.16	1	24
DEL9401	4	1994	13	1994.03	15	32.45	-0.50	0.19	0.17	1	14	32.78	-0.37	0.15	0.27	1	24
DEL9403	4	1994	110	1994.30	38	32.35	-0.09	0.13	0.44	0	35	33.44	0.14	0.11	0.35	0	10
ALB9404	4	1994	158	1994.43	7	31.85	-0.40	0.25	0.38	1	6	33.14	-0.08	0.21	0.40	1	20
DEL9406	4	1994	177	1994.49	19	32.58	0.23	0.14	0.47	1	19	33.00	0.21	0.13	0.23	1	80
ALB9405	4	1994	197	1994.54	11	31.95	0.05	0.20	0.35	1	11	32.73	-0.03	0.17	0.15	1	60
ALB9406	4	1994	211	1994.58	34	31.29	-0.26	0.12	1.77	1	34	32.94	0.26	0.09	0.31	1	10
ALB9409	4	1994	293	1994.80	47	32.77	0.27	0.10	0.20	0	42	33.69	0.12	0.09	0.28	0	10
ALB9410	4	1994	315	1994.86	13	32.94	0.37	0.19	0.20	1	11	33.55	0.20	0.17	0.22	1	20
ALB9501	4	1995	14	1995.04	8	33.17	0.14	0.25	0.26	1	7	33.59	0.08	0.18	0.16	1	22
ALB9502	4	1995	26	1995.07	10	33.24	0.19	0.21	0.18	1	10	33.49	0.00	0.15	0.12	1	70
EN261	4	1995	50	1995.14	4	33.28	0.13	0.31	0.11	1	4	34.16	0.65	0.30	0.63	1	20
EN263	4	1995	80	1995.22	7	32.96	-0.22	0.24	0.27	1	6	33.59	0.11	0.23	0.44	1	20
EN265	4	1995	110	1995.30	8	32.83	-0.21	0.22	0.11	1	8	33.15	-0.01	0.19	0.31	1	20
ALB9504	4	1995	111	1995.31	21	32.20	-0.34	0.15	0.39	0	17	33.17	-0.13	0.13	0.26	1	10
ALB9505	4	1995	136	1995.37	6	32.76	0.07	0.26	0.18	1	6	33.33	-0.02	0.23	0.32	1	20
ALB9506	4	1995	166	1995.45	14	32.09	-0.28	0.17	0.29	1	8	33.50	0.14	0.19	0.49	1	20
KAT9504	4	1995	172	1995.47	5	32.26	-0.13	0.27	0.09	1	5	32.68	-0.21	0.24	0.12	1	81
KAT9505	4	1995	199	1995.55	4	32.32	0.22	0.31	0.40	1	4	32.63	-0.13	0.28	0.21	1	81
ALB9508	4	1995	200	1995.55	8	32.12	0.07	0.21	0.26	1	8	33.25	0.18	0.20	0.57	1	20
ALB9507	4	1995	210	1995.58	4	32.00	-0.32	0.29	0.56	1	4	32.53	-0.12	0.27	0.11	1	60
ALB9510	4	1995	231	1995.63	36	31.55	-0.26	0.12	0.40	1	34	32.53	-0.46	0.10	0.38	1	10
AJ9502	4	1995	236	1995.65	14	31.99	0.05	0.19	0.31	1	1	31.95	-9.99	-9.99	-9.99	1	93
ALB9512	4	1995	288	1995.79	47	32.42	-0.04	0.11	0.29	0	46	33.46	-0.11	0.08	0.36	0	10
EN276	4	1996	21	1996.06	5	32.89	-0.12	0.26	0.04	1	6	33.19	-0.21	0.23	0.22	1	20
EN278	4	1996	55	1996.15	7	32.69	-0.47	0.23	0.21	1	6	33.56	0.11	0.22	0.67	1	20
OC275	4	1996	81	1996.22	6	32.63	-0.53	0.24	0.22	1	6	33.13	-0.09	0.23	0.56	1	20
EN282	4	1996	109	1996.30	16	32.46	-0.58	0.15	0.08	1	12	32.93	-0.29	0.16	0.40	1	20
ALB9604	4	1996	114	1996.31	47	31.86	-0.61	0.11	0.52	0	45	33.11	-0.20	0.08	0.37	0	10
ALB9605	4	1996	137	1996.37	13	32.16	-0.55	0.18	0.11	1	11	32.88	-0.30	0.17	0.64	1	20
ALB9606	4	1996	143	1996.39	4	31.91	-0.74	0.31	0.12	1	4	32.54	-0.46	0.26	0.20	1	81
ALB9607	4	1996	164	1996.45	10	31.46	-0.79	0.20	0.30	1	8	33.02	-0.30	0.19	0.55	1	20
ALB9608	4	1996	171	1996.47	4	31.23	-0.87	0.33	0.46	1	3	32.75	-0.48	0.27	0.11	1	81
ALB9609	4	1996	231	1996.63	32	31.36	-0.47	0.13	0.30	1	32	32.33	-0.33	0.10	0.19	1	60
AJ9604	4	1996	229	1996.63	7	31.76	-0.40	0.25	0.23	1	1	32.31	-0.28	-9.99	-9.99	1	93
IS9601	4	1996	237	1996.65	22	31.37	-0.57	0.15	0.39	1	6	32.45	-0.46	0.24	0.26	1	93
ALB9610	4	1996	243	1996.66	6	31.58	-0.56	0.25	0.16	1	6	32.60	-0.26	0.21	0.35	1	81
ALB9611	4	1996	295	1996.81	57	31.86	-0.70	0.10	0.24	0	56	33.37	-0.18	0.08	0.38	0	10
ALB9612	4	1996	315	1996.86	31	31.77	-0.86	0.13	0.24	1	30	33.36	-0.09	0.10	0.31	1	90
ALB9701	4	1997	20	1997.05	4	32.26	-0.78	0.31	0.14	1	4	33.87	0.22	0.28	0.62	1	20
ALB9702	4	1997	29	1997.08	13	32.23	-0.89	0.20	0.18	0	9	33.39	-0.08	0.17	0.34	1	22
OC298	4	1997	52	1997.14	14	32.32	-0.83	0.17	0.05	1	13	33.02	-0.30	0.15	0.65	1	20
OC300	4	1997	87	1997.24	12	32.44	-0.70	0.18	0.10	1	12	32.91	-0.34	0.16	0.67	1	20
ALB9704	4	1997	103	1997.28	53	32.24	-0.37	0.11	0.36	0	52	33.16	-0.16	0.08	0.38	0	10
OC302	4	1997	121	1997.33	8	32.43	-0.51	0.22	0.09	1	8	33.01	-0.22	0.20	0.54	1	20
ALB9705	4	1997	147	1997.40	14	32.15	-0.46	0.17	0.12	1	15	33.04	-0.13	0.14	0.60	1	20
ALB9707	4	1997	178	1997.49	9	31.83	-0.35	0.21	0.35	1	9	32.94	-0.18	0.19	0.48	1	20

ALB9708	4	1997	195	1997.53	6	31.59	-0.37	0.31	0.33	1	4	32.98	-0.52	0.25	0.14	1	93
ALB9709	4	1997	221	1997.60	41	32.06	0.25	0.11	0.73	1	41	32.45	-0.18	0.09	0.48	1	60
DEL9708	4	1997	218	1997.60	11	31.61	-0.46	0.23	0.07	1	12	33.17	-0.04	0.12	0.30	1	81
ALB9711	4	1997	295	1997.81	57	32.40	-0.14	0.10	0.50	0	55	33.46	-0.09	0.08	0.23	0	10
ALB9801	4	1998	17	1998.05	7	32.75	-0.31	0.25	0.14	1	6	33.05	-0.25	0.22	0.16	1	20
ALB9802	4	1998	27	1998.07	15	32.45	-0.59	0.17	0.33	1	12	33.38	-0.23	0.15	0.43	1	22
OC317	4	1998	48	1998.13	11	32.48	-0.63	0.20	0.25	1	10	32.74	-0.50	0.18	0.14	1	20
DEL9803	4	1998	63	1998.17	6	31.87	-1.25	0.28	0.24	1	6	33.32	-0.47	0.20	0.54	1	93
OC319	4	1998	85	1998.23	8	32.03	-1.13	0.23	0.15	1	8	32.89	-0.35	0.22	0.73	1	20
ALB9804	4	1998	103	1998.28	71	31.35	-1.27	0.09	0.49	0	68	32.92	-0.43	0.07	0.53	0	10
OC322	4	1998	115	1998.32	12	31.80	-1.17	0.19	0.20	1	11	32.85	-0.40	0.17	0.53	1	20
ALB9806	4	1998	141	1998.39	11	31.82	-0.82	0.19	0.23	1	10	32.72	-0.50	0.17	0.51	1	20
ALB9807	4	1998	160	1998.44	20	31.16	-0.87	0.17	0.22	0	15	32.98	-0.17	0.14	0.57	0	22
ALB9808	4	1998	176	1998.48	6	31.66	-0.50	0.25	0.30	1	6	33.11	-0.19	0.23	0.46	1	20
ALB9809	4	1998	223	1998.61	11	31.20	-0.70	0.21	0.41	1	11	32.02	-0.53	0.18	0.18	1	60
IS9801	4	1998	241	1998.66	22	31.05	-0.80	0.16	0.43	1	16	32.97	-0.24	0.15	0.32	1	22
DEL9810	4	1998	254	1998.70	3	31.50	-0.46	0.43	0.27	1	3	32.71	-0.46	0.32	0.45	1	16
ALB9811	4	1998	303	1998.83	71	31.98	-0.62	0.09	0.24	0	70	33.35	-0.21	0.07	0.33	0	10
DEL9813	4	1998	320	1998.88	16	32.17	-0.58	0.16	0.22	0	15	33.46	-0.15	0.13	0.39	0	22
DEL9901	4	1999	23	1999.06	16	32.59	-0.40	0.18	0.26	1	15	33.35	-0.08	0.14	0.29	1	22
ALB9901	4	1999	23	1999.06	8	32.39	-0.67	0.23	0.10	1	7	33.37	-0.06	0.21	0.51	1	20
OC336	4	1999	52	1999.14	10	32.48	-0.68	0.20	0.12	1	10	33.10	-0.22	0.17	0.31	1	20
DEL9903	4	1999	62	1999.17	23	32.54	-0.24	0.16	0.24	1	15	33.02	-0.24	0.14	0.25	1	93
EN320	4	1999	80	1999.22	11	32.68	-0.48	0.19	0.07	1	11	33.00	-0.20	0.17	0.48	1	20
ALB9903	4	1999	106	1999.29	46	32.20	-0.36	0.10	0.44	0	43	33.17	-0.25	0.08	0.27	0	10
OC341	4	1999	116	1999.32	10	32.60	-0.33	0.20	0.17	1	10	33.14	-0.10	0.17	0.55	1	20
ALB9904	4	1999	147	1999.40	10	32.26	-0.29	0.21	0.22	1	10	33.02	-0.27	0.17	0.43	1	20
AJ9901	4	1999	160	1999.44	17	31.91	-0.23	0.17	0.25	0	11	33.31	-0.18	0.17	0.29	0	22
ALB9906	4	1999	174	1999.48	6	32.21	0.01	0.26	0.26	1	6	33.29	-0.07	0.23	0.59	1	20
ALB9907	4	1999	181	1999.50	14	31.64	0.14	0.19	0.22	1	14	32.88	-0.15	0.16	0.21	1	91
ALB9908	4	1999	189	1999.52	6	32.48	0.44	0.25	0.37	1	6	32.70	-0.08	0.22	0.21	1	91
AJ9902	4	1999	216	1999.59	8	32.13	0.01	0.24	0.17	1	4	32.52	-0.51	0.28	-9.99	1	93
ALB9909	4	1999	217	1999.59	3	32.76	0.83	0.35	0.42	1	3	32.71	0.00	0.32	0.15	1	60
IS9901	4	1999	241	1999.66	19	32.12	0.10	0.16	0.31	1	14	33.23	0.03	0.15	0.37	1	22
ALB9910	4	1999	307	1999.84	60	32.68	0.03	0.09	0.31	0	58	33.75	0.16	0.07	0.29	0	10
ALB9911	4	1999	323	1999.89	16	32.87	0.11	0.17	0.25	1	13	33.56	0.10	0.15	0.22	1	22
ALB0002	4	2000	115	2000.32	43	32.42	-0.01	0.11	0.67	0	43	33.33	-0.03	0.08	0.26	0	10
DEL0006	4	2000	157	2000.43	11	32.13	0.07	0.18	0.45	0	24	33.05	-0.16	0.14	0.18	1	22
ALB0003	4	2000	178	2000.49	5	31.87	-0.29	0.28	0.32	1	5	32.60	-0.17	0.25	0.15	1	91
ALB0004	4	2000	219	2000.60	9	31.91	-0.05	0.22	0.37	1	9	32.66	-0.11	0.19	0.28	1	60
ALB0005	4	2000	240	2000.66	24	32.19	0.10	0.18	0.28	1	22	33.45	0.01	0.15	0.38	1	22
DEL0008	4	2000	274	2000.75	30	32.38	0.02	0.11	0.15	1	32	33.73	0.04	0.10	0.24	1	16
ALB0006	4	2000	287	2000.79	44	32.58	0.16	0.11	0.24	0	45	33.56	0.01	0.08	0.21	0	10
ALB0007	4	2000	319	2000.87	30	32.50	-0.25	0.17	0.61	1	30	33.50	0.01	0.13	0.20	1	22
ALB0103	4	2001	113	2001.31	54	31.88	-0.63	0.10	0.69	0	51	33.20	-0.16	0.08	0.31	0	10
DEL0105	4	2001	155	2001.42	14	31.89	-0.42	0.18	0.28	1	12	33.17	-0.12	0.15	0.24	1	22
ALB0108	4	2001	210	2001.58	10	31.40	-0.51	0.21	0.22	1	9	33.93	0.25	0.15	0.11	1	93
ALB0107	4	2001	215	2001.59	14	31.53	-0.31	0.18	0.46	1	14	32.49	-0.24	0.15	0.14	1	60
DEL0108	4	2001	220	2001.60	6	31.40	-0.56	0.26	0.25	1	6	33.95	0.14	0.17	0.20	1	93
ALB0109	4	2001	238	2001.65	18	31.86	-0.17	0.17	0.28	1	14	33.53	-0.05	0.15	0.26	1	22
DEL0109	4	2001	259	2001.71	80	31.89	-0.12	0.08	0.25	1	83	33.32	-0.05	0.06	0.27	1	16
ALB0110	4	2001	288	2001.79	46	32.34	-0.13	0.10	0.16	0	43	33.43	-0.10	0.08	0.33	0	10
ALB0111	4	2001	318	2001.87	24	32.67	-0.08	0.15	0.19	0	20	33.63	0.02	0.11	0.23	0	22
ALB0202	4	2002	27	2002.07	15	33.02	-0.05	0.17	0.24	0	14	33.61	0.12	0.13	0.24	0	22
ALB0204	4	2002	108	2002.29	42	32.50	-0.03	0.11	0.48	0	40	33.37	0.06	0.08	0.26	0	10
ALB0206	4	2002	155	2002.42	33	32.09	-0.04	0.12	0.23	0	19	33.48	0.21	0.12	0.28	0	22
ALB0208	4	2002	224	2002.61	11	32.41	0.35	0.19	0.32	1	12	32.79	0.03	0.16	0.18	1	60
NOB0201	4	2002	239	2002.65	21	32.23	0.20	0.16	0.39	0	19	33.61	0.14	0.12	0.17	0	22
DEL0208	4	2002	264	2002.72	46	32.39	0.34	0.10	0.34	1	52	33.83	0.23	0.07	0.33	1	16
ALB0210	4	2002	292	2002.80	44	32.88	0.33	0.10	0.32	0	43	33.75	0.16	0.08	0.29	0	10
DEL0210	4	2002	317	2002.87	10	33.13	0.32	0.22	0.13	1	8	33.70	-0.04	0.20	0.40	1	22
DEL0301	4	2003	26	2003.07	4	33.43	0.43	0.30	0.10	1	4	33.47	0.23	0.25	0.17	1	22
DEL0303	4	2003	111	2003.30	37	32.67	0.19	0.12	0.52	0	49	33.30	-0.04	0.08	0.28	0	10
DEL0305	4	2003	148	2003.41	11	32.70	0.24	0.21	0.30	1	10	33.71	-0.07	0.17	0.14	1	22
ALB0301	4	2003	221	2003.61	8	31.88	-0.20	0.22	0.15	1	12	32.73	-0.03	0.16	0.20	1	60
ARM0301	4	2003	238	2003.65	42	32.06	-0.06	0.14	0.20	1	14	33.56	0.07	0.14	0.18	1	22
DEL0308	4	2003	266	2003.73	46	32.19	-0.03	0.10	0.22	1	47	33.72	-0.07	0.08	0.26	1	16
ALB0306	4	2003	316	2003.87	7	32.56	-0.05	0.28	0.10	1	5	33.45	0.09	0.22	0.06	1	22

Table 14. Average surface and bottom salinity values for the eastern Gulf of Maine region. See text for explanation.

Cruise	Reg	Year	Day	Yrday	Npts	Surface				Bottom						Pc	
						Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2		Flg
YUB7702	5	1977	222	1977.61	5	32.21	-0.18	0.31	0.12	1	5	34.64	0.20	0.21	0.38	1	23
ARG7701	5	1977	310	1977.85	8	32.69	-0.11	0.24	0.38	1	6	34.49	0.05	0.22	0.16	1	23
MTM7711	5	1977	320	1977.88	14	32.53	-0.14	0.19	0.45	1	14	34.28	-0.05	0.15	0.39	1	23
ARG7804	5	1978	141	1978.39	4	32.33	-0.14	0.34	0.17	1	4	34.28	-0.13	0.25	0.28	1	23
ALB7807	5	1978	196	1978.54	6	32.11	-0.10	0.28	0.25	1	5	34.00	-0.09	0.23	0.10	1	23
BEL7801	5	1978	241	1978.66	17	32.41	-0.08	0.16	0.40	0	17	34.15	-0.06	0.13	0.26	0	23
BEL7803	5	1978	288	1978.79	4	32.71	0.04	0.36	0.14	1	3	34.24	-0.07	0.32	0.11	1	23
DEL7905	5	1979	145	1979.40	18	32.26	-0.06	0.16	0.25	0	14	34.34	0.24	0.15	0.22	1	23
BEL7901	5	1979	240	1979.66	7	32.37	-0.03	0.26	0.25	1	5	34.40	0.06	0.24	0.11	1	23
ALB7911	5	1979	299	1979.82	13	33.03	0.42	0.20	0.54	1	10	34.75	0.20	0.16	0.18	1	23
ALB7913	5	1979	340	1979.93	17	33.14	0.36	0.15	0.31	0	14	34.34	0.35	0.14	0.32	0	23
WIE8002	5	1980	52	1980.14	4	33.25	0.36	0.35	0.18	1	4	34.06	-0.17	0.27	0.22	1	23
ALB8002	5	1980	94	1980.26	14	32.73	0.29	0.22	0.23	0	10	33.90	0.15	0.18	0.47	0	23
EVR8001	5	1980	127	1980.35	7	33.05	0.52	0.26	0.17	1	6	33.88	-0.21	0.22	0.27	1	23
EVR8004	5	1980	178	1980.49	7	32.79	0.48	0.25	0.32	1	6	33.97	-0.14	0.20	0.18	1	23
EVR8006	5	1980	218	1980.60	8	32.60	0.30	0.23	0.19	1	8	34.24	0.02	0.18	0.28	1	23
ALB8010	5	1980	297	1980.81	20	33.19	0.56	0.15	0.29	0	5	34.25	0.13	0.19	0.34	0	23
ALB8012	5	1980	355	1980.97	7	31.95	-0.55	0.29	0.31	1	2	34.90	0.02	-9.99	-9.99	1	23
ALB8101	5	1981	55	1981.15	19	32.65	0.06	0.16	0.20	0	13	33.86	0.00	0.15	0.26	0	23
KEL8103	5	1981	96	1981.26	3	32.41	-0.20	0.38	0.09	1	1	34.11	0.10	-9.99	-9.99	1	23
DEL8103	5	1981	147	1981.40	14	32.34	-0.01	0.19	0.24	0	8	33.73	-0.04	0.17	0.20	0	23
ALB8114	5	1981	339	1981.93	13	31.93	-0.71	0.20	0.51	0	9	33.88	-0.13	0.19	0.41	0	23
ALB8202	5	1982	56	1982.15	12	32.11	-0.41	0.22	0.28	0	5	33.55	-0.02	0.28	0.43	1	23
DEL8203	5	1982	154	1982.42	26	32.41	0.08	0.14	0.23	0	20	33.91	-0.01	0.12	0.17	0	23
ALB8209	5	1982	231	1982.63	6	32.43	0.16	0.34	0.48	1	6	34.13	0.38	0.29	0.46	1	27
DEL8209	5	1982	332	1982.91	26	32.92	0.21	0.14	0.33	0	22	34.15	0.00	0.11	0.19	0	23
DEL8301	5	1983	24	1983.07	23	32.82	0.16	0.14	0.23	0	21	33.82	-0.12	0.11	0.22	0	23
ALB8304	5	1983	166	1983.46	22	31.94	-0.37	0.14	0.22	0	15	33.70	-0.20	0.14	0.27	0	23
DEL8309	5	1983	350	1983.96	17	32.49	-0.13	0.18	0.27	0	14	33.98	0.04	0.14	0.45	0	23
DEL8401	5	1984	16	1984.04	19	32.49	-0.16	0.17	0.30	0	18	33.79	-0.16	0.13	0.34	0	23
ALB8403	5	1984	149	1984.41	20	32.06	-0.27	0.15	0.30	0	10	33.64	-0.03	0.16	0.24	0	23
DEL8409	5	1984	337	1984.92	6	32.42	0.04	0.33	0.25	1	5	33.36	0.24	0.34	0.24	1	23
DEL8501	5	1985	12	1985.03	4	32.59	-0.20	0.33	0.28	1	2	34.88	0.27	-9.99	-9.99	1	23
DEL8503	5	1985	94	1985.26	4	32.76	0.06	0.33	0.52	1	4	34.50	-0.09	0.26	0.11	1	23
ALB8504	5	1985	130	1985.35	4	32.37	-0.12	0.36	0.58	1	0	0.00	-9.99	-9.99	-9.99	1	23
DEL8507	5	1985	261	1985.71	19	32.50	-0.02	0.16	0.25	0	18	34.33	0.20	0.14	0.22	0	23
DEL8510	5	1985	340	1985.93	22	32.56	-0.13	0.15	0.38	0	21	34.03	-0.06	0.12	0.26	0	23
DEL8601	5	1986	39	1986.11	16	33.02	0.39	0.17	0.31	0	12	33.87	0.18	0.16	0.31	0	23
DEL8603	5	1986	148	1986.41	11	32.70	0.31	0.22	0.32	1	8	34.07	-0.09	0.22	0.25	1	23
DEL8607	5	1986	263	1986.72	10	32.86	0.40	0.23	0.31	1	9	34.50	0.22	0.20	0.27	1	23
DEL8610	5	1986	340	1986.93	16	32.61	0.01	0.18	0.21	1	14	34.21	0.03	0.15	0.33	1	23
DEL8701	5	1987	39	1987.11	9	31.88	-0.41	0.27	0.30	1	9	33.18	-0.46	0.23	0.49	1	23
DEL8704	5	1987	154	1987.42	17	32.08	-0.24	0.16	0.29	0	17	33.61	-0.22	0.13	0.45	0	23
DEL8708	5	1987	253	1987.69	22	32.38	-0.10	0.15	0.41	0	18	34.12	-0.03	0.12	0.27	0	23
ALB8811	5	1988	343	1988.94	8	32.98	0.30	0.22	0.22	1	5	33.76	0.16	0.26	0.12	1	24
DEL8901	5	1989	17	1989.05	8	32.67	-0.27	0.22	0.24	1	6	33.72	0.10	0.23	0.28	1	24
DEL8907	5	1989	318	1989.87	5	32.42	0.01	0.26	0.06	1	4	33.18	-0.06	0.28	0.53	1	24
DEL8909	5	1989	347	1989.95	3	32.73	0.23	0.34	-9.99	1	3	33.16	0.34	0.35	-9.99	1	24
DEL9001	5	1990	11	1990.03	5	33.27	0.33	0.26	0.05	1	5	33.73	0.47	0.25	0.58	1	24
DEL9011	5	1990	284	1990.78	3	32.67	0.43	0.33	-9.99	1	2	34.30	0.57	-9.99	-9.99	1	10
DEL9012	5	1990	309	1990.85	6	33.02	0.42	0.25	0.08	1	6	33.48	-0.08	0.23	0.88	1	24
DEL9014	5	1990	342	1990.94	4	33.06	0.57	0.27	-9.99	1	3	33.40	1.36	0.31	-9.99	1	24
DEL9105	5	1991	100	1991.27	16	32.28	-0.26	0.18	0.32	0	16	33.58	-0.12	0.14	0.44	0	10
DEL9108	5	1991	208	1991.57	4	32.23	-0.03	0.32	0.08	1	4	33.51	-0.11	0.29	0.23	1	10
ORE9105	5	1991	230	1991.63	4	31.96	-0.48	0.28	0.20	1	0	0.00	-9.99	-9.99	-9.99	1	60
AM9103	5	1991	279	1991.76	17	32.29	-0.14	0.15	0.09	1	4	32.72	-0.09	0.34	-9.99	1	90
DEL9110	5	1991	288	1991.79	29	32.57	-0.04	0.13	0.33	0	25	34.21	0.15	0.11	0.42	0	10
DEL9111	5	1991	317	1991.87	7	32.28	-0.43	0.24	0.55	1	7	33.17	-0.78	0.23	0.40	1	24
DEL9113	5	1991	345	1991.95	7	32.63	-0.20	0.23	0.19	1	6	33.57	0.15	0.23	0.26	1	24
ALB9203	5	1992	101	1992.28	30	32.06	-0.65	0.12	0.27	1	26	33.96	-0.05	0.10	0.30	1	10
AJ9201	5	1992	235	1992.64	15	32.13	-0.36	0.20	0.39	1	0	0.00	-9.99	-9.99	-9.99	1	93
ALB9211	5	1992	293	1992.80	33	32.31	-0.28	0.13	0.31	0	26	34.01	-0.14	0.11	0.37	0	10
DEL9212	5	1992	306	1992.84	9	32.41	-0.18	0.20	0.10	1	9	33.43	-0.13	0.20	0.47	1	24

DEL9214	5	1992	351	1992.96	4	32.64	-0.03	0.27	-9.99	1	4	33.06	0.79	0.26	-9.99	1	24
ALB9304	5	1993	109	1993.30	30	31.99	-0.49	0.13	0.28	0	24	33.58	-0.26	0.10	0.39	0	10
DEL9308	5	1993	205	1993.56	13	31.93	-0.37	0.19	0.16	1	12	34.52	-0.15	0.13	0.32	1	10
AJ9301	5	1993	230	1993.63	6	32.08	-0.27	0.30	0.23	1	2	32.42	-0.37	-9.99	-9.99	1	93
ORB9304	5	1993	229	1993.63	8	32.00	-0.52	0.19	0.18	1	7	32.65	0.06	0.20	0.34	1	60
DEL9311	5	1993	290	1993.80	34	32.61	0.05	0.11	0.44	1	33	34.28	0.14	0.09	0.30	1	10
DEL9312	5	1993	312	1993.85	8	32.29	-0.32	0.21	0.20	1	9	33.36	-0.11	0.20	0.13	1	24
DEL9314	5	1993	342	1993.94	5	32.40	-0.39	0.24	0.09	1	5	33.12	0.46	0.24	0.74	1	24
DEL9403	5	1994	109	1994.30	22	32.23	-0.24	0.15	0.41	0	22	34.21	0.32	0.12	0.43	0	10
ALB9404	5	1994	158	1994.43	3	32.45	-0.25	0.34	0.16	1	3	33.39	-0.15	0.30	0.31	1	20
DEL9406	5	1994	176	1994.48	5	32.54	-0.21	0.25	0.25	1	5	32.83	0.04	0.24	0.10	1	80
ALB9405	5	1994	195	1994.53	5	32.31	-0.41	0.24	0.21	1	4	33.37	0.76	0.27	0.73	1	60
ALB9406	5	1994	214	1994.59	7	32.46	0.12	0.24	0.19	1	7	34.68	0.30	0.18	0.12	1	10
ALB9407	5	1994	239	1994.65	8	32.43	-0.12	0.20	0.10	1	8	33.68	0.67	0.19	0.52	1	80
ALB9409	5	1994	290	1994.79	28	32.40	-0.18	0.13	0.55	0	27	34.02	-0.01	0.11	0.53	0	10
ALB9410	5	1994	318	1994.87	4	32.92	0.26	0.27	0.04	1	3	33.14	0.38	0.30	0.05	1	20
ALB9501	5	1995	10	1995.03	12	31.85	-0.62	0.23	0.38	1	7	33.22	-0.33	0.27	0.42	1	22
EN261	5	1995	49	1995.13	8	32.66	-0.37	0.22	0.30	1	7	33.41	-0.17	0.21	0.35	1	20
EN263	5	1995	79	1995.22	15	32.88	-0.01	0.16	0.42	1	12	33.47	-0.05	0.16	0.25	1	20
EN265	5	1995	108	1995.30	4	32.17	-0.63	0.32	-9.99	1	2	22.10	-9.99	-9.99	-9.99	1	20
ALB9504	5	1995	108	1995.30	15	32.12	-0.36	0.19	0.51	0	11	33.44	0.01	0.18	0.36	0	10
ALB9505	5	1995	135	1995.37	7	32.44	-0.26	0.24	0.34	1	6	33.26	-0.17	0.24	0.38	1	20
ALB9506	5	1995	164	1995.45	10	32.27	-0.30	0.21	0.19	1	5	33.24	-0.01	0.24	0.14	1	20
ALB9508	5	1995	199	1995.54	4	32.09	-0.92	0.32	-9.99	1	1	33.05	-9.99	-9.99	-9.99	1	20
KAT9505	5	1995	205	1995.56	3	32.06	-0.50	0.39	0.09	1	3	33.69	-0.16	0.39	0.65	1	81
ALB9507	5	1995	212	1995.58	3	32.00	-1.27	0.30	-9.99	1	3	33.15	1.08	0.29	-9.99	1	60
ALB9510	5	1995	234	1995.64	5	32.10	-0.48	0.29	0.25	1	3	33.72	-0.63	0.28	0.30	1	10
AJ9502	5	1995	234	1995.64	12	32.30	-0.11	0.21	0.32	1	1	32.58	0.35	-9.99	-9.99	1	93
ALB9512	5	1995	284	1995.78	17	32.45	-0.07	0.16	0.36	1	12	34.09	0.07	0.15	0.16	1	10
EN278	5	1996	54	1996.15	10	32.59	-0.45	0.20	0.38	1	6	33.39	-0.21	0.24	0.28	1	20
OC275	5	1996	79	1996.22	8	32.35	-0.61	0.22	0.30	1	7	33.29	-0.05	0.22	0.53	1	20
EN282	5	1996	108	1996.30	7	32.28	-0.12	0.24	0.23	1	1	35.08	0.11	-9.99	-9.99	1	20
ALB9604	5	1996	115	1996.31	22	32.03	-0.41	0.13	0.21	0	18	33.90	-0.07	0.10	0.53	0	10
ALB9605	5	1996	135	1996.37	12	32.09	-0.48	0.19	0.35	1	8	33.74	0.11	0.22	0.49	1	20
ALB9606	5	1996	146	1996.40	3	32.23	-0.69	0.32	0.09	1	3	32.48	-0.48	0.32	0.08	1	81
ALB9607	5	1996	163	1996.45	6	31.91	-0.61	0.26	0.33	1	5	32.94	-0.29	0.22	0.35	1	20
ALB9608	5	1996	176	1996.48	3	32.05	-0.70	0.31	0.11	1	3	32.76	-0.11	0.31	0.30	1	81
ALB9609	5	1996	234	1996.64	21	31.79	-0.68	0.12	0.17	1	21	32.46	-0.17	0.12	0.29	1	60
IS9601	5	1996	237	1996.65	13	32.07	-0.31	0.20	0.34	1	2	32.82	-0.16	-9.99	-9.99	1	93
ALB9610	5	1996	248	1996.68	3	31.99	-0.53	0.32	0.18	1	2	32.68	0.07	-9.99	-9.99	1	81
ALB9611	5	1996	289	1996.79	26	31.79	-0.76	0.13	0.32	0	26	34.17	0.09	0.11	0.37	0	10
ALB9612	5	1996	314	1996.86	8	31.99	-0.62	0.23	0.21	1	8	34.28	-0.11	0.16	0.11	1	90
ALB9701	5	1997	19	1997.05	4	32.10	-0.59	0.34	0.30	1	3	34.88	0.59	0.36	0.55	1	20
ALB9702	5	1997	29	1997.08	7	32.26	-0.20	0.27	0.48	1	2	33.42	0.26	-9.99	-9.99	1	22
OC298	5	1997	51	1997.14	20	32.29	-0.61	0.14	0.29	1	19	33.39	-0.25	0.13	0.61	1	20
OC300	5	1997	84	1997.23	12	32.08	-0.69	0.18	0.14	1	9	33.78	-0.25	0.17	0.48	1	20
ALB9704	5	1997	105	1997.29	28	32.05	-0.40	0.12	0.33	0	24	33.66	-0.20	0.10	0.46	0	10
OC302	5	1997	120	1997.33	6	32.27	-0.32	0.27	0.28	1	5	34.33	0.15	0.24	0.59	1	20
ALB9705	5	1997	146	1997.40	12	32.21	-0.49	0.19	0.36	1	11	33.45	-0.05	0.17	0.60	1	20
ALB9707	5	1997	176	1997.48	8	32.02	-0.51	0.22	0.14	1	7	33.62	0.07	0.23	0.44	1	20
ALB9709	5	1997	223	1997.61	26	31.93	-0.57	0.11	0.16	1	26	32.72	0.04	0.11	0.27	1	60
ALB9711	5	1997	290	1997.79	33	32.46	-0.13	0.13	0.36	0	27	33.88	-0.26	0.11	0.39	0	10
ALB9801	5	1998	14	1998.04	7	32.66	-0.21	0.22	0.10	1	6	33.07	-0.23	0.22	0.09	1	20
ALB9802	5	1998	26	1998.07	18	31.26	-1.64	0.24	0.48	1	6	33.06	-0.71	0.25	0.52	1	22
OC317	5	1998	46	1998.13	10	32.25	-0.58	0.20	0.39	1	9	33.44	-0.61	0.18	0.48	1	20
OC319	5	1998	83	1998.23	10	32.10	-0.73	0.19	0.31	1	9	32.94	-0.63	0.18	0.42	1	20
ALB9804	5	1998	100	1998.27	40	31.64	-0.84	0.12	0.26	0	32	33.47	-0.37	0.10	0.40	0	10
OC322	5	1998	113	1998.31	12	31.84	-0.92	0.18	0.23	1	10	33.26	-0.52	0.17	0.49	1	20
ALB9806	5	1998	139	1998.38	14	31.96	-0.76	0.17	0.21	1	13	33.06	-0.55	0.15	0.40	1	20
ALB9807	5	1998	159	1998.44	33	31.75	-0.58	0.17	0.18	1	22	33.37	-0.15	0.19	0.49	1	22
ALB9808	5	1998	175	1998.48	9	31.58	-0.92	0.21	0.12	1	7	33.74	-0.28	0.20	0.46	1	20
ALB9809	5	1998	225	1998.62	8	31.14	-1.35	0.19	0.23	1	8	32.44	-0.19	0.19	0.68	1	60
IS9801	5	1998	239	1998.65	18	31.80	-0.66	0.16	0.40	0	13	33.71	-0.23	0.14	0.43	0	22
ALB9811	5	1998	298	1998.82	30	31.91	-0.69	0.12	0.34	0	28	33.78	-0.28	0.10	0.37	0	10
DEL9813	5	1998	321	1998.88	12	32.02	-0.62	0.21	0.41	0	8	33.58	-0.21	0.18	0.46	0	22
DEL9901	5	1999	22	1999.06	17	32.23	-0.42	0.23	0.62	1	6	33.57	-0.14	0.23	0.40	1	22
ALB9901	5	1999	21	1999.06	12	32.41	-0.49	0.18	0.21	1	11	33.48	-0.16	0.17	0.47	1	20
OC336	5	1999	50	1999.14	15	32.46	-0.45	0.15	0.40	1	15	33.51	-0.01	0.15	0.45	1	20
EN320	5	1999	79	1999.22	14	32.58	-0.24	0.17	0.27	1	12	33.60	-0.36	0.16	0.57	1	20
ALB9903	5	1999	106	1999.29	32	32.12	-0.33	0.14	0.24	0	30	34.07	0.06	0.12	0.40	0	10
OC341	5	1999	114	1999.31	12	32.33	-0.46	0.18	0.21	1	11	33.83	0.07	0.18	0.49	1	20

ALB9904	5	1999	145	1999.40	14	32.34	-0.37	0.17	0.30	1	13	33.43	-0.04	0.16	0.44	1	20
AJ9901	5	1999	159	1999.44	18	32.05	-0.26	0.16	0.23	0	11	33.53	-0.10	0.17	0.30	0	22
ALB9906	5	1999	173	1999.47	7	32.31	-0.25	0.24	0.13	1	7	33.78	0.13	0.22	0.30	1	20
AJ9902	5	1999	226	1999.62	13	32.75	0.50	0.20	0.35	1	6	33.22	0.52	0.31	0.19	1	93
IS9901	5	1999	240	1999.66	19	32.54	0.12	0.18	0.32	0	15	34.40	0.35	0.15	0.42	0	22
ALB9910	5	1999	299	1999.82	35	33.25	0.62	0.12	0.41	0	31	34.52	0.31	0.10	0.35	0	10
ALB9911	5	1999	323	1999.89	10	33.41	0.64	0.19	0.42	0	8	34.29	0.39	0.18	0.28	0	22
ALB0002	5	2000	115	2000.32	32	32.49	0.04	0.13	0.27	0	27	33.92	0.07	0.10	0.45	0	10
DEL0006	5	2000	157	2000.43	8	32.41	0.07	0.26	0.13	1	8	33.63	-0.03	0.16	0.25	0	22
ALB0005	5	2000	240	2000.66	12	32.49	0.05	0.19	0.17	0	9	34.14	0.15	0.18	0.27	0	22
DEL0008	5	2000	273	2000.75	32	32.47	0.03	0.11	0.14	1	33	34.36	0.10	0.08	0.11	1	16
ALB0006	5	2000	283	2000.77	28	32.66	0.10	0.13	0.28	0	23	34.24	0.09	0.11	0.28	0	10
ALB0007	5	2000	318	2000.87	14	31.70	-1.02	0.16	0.79	0	12	33.96	-0.26	0.14	0.38	0	22
ALB0103	5	2001	108	2001.29	30	31.84	-0.61	0.13	0.33	0	30	33.76	-0.11	0.10	0.36	0	10
DEL0105	5	2001	154	2001.42	19	31.84	-0.52	0.17	0.22	0	11	33.66	-0.10	0.14	0.26	0	22
ALB0108	5	2001	212	2001.58	5	32.18	-0.05	0.28	0.05	1	5	34.26	-0.02	0.22	0.07	1	93
DEL0108	5	2001	220	2001.60	4	32.14	-0.10	0.32	0.07	1	4	34.26	-0.02	0.25	0.12	1	93
ALB0107	5	2001	226	2001.62	8	31.43	-0.94	0.19	0.11	1	8	32.73	-0.01	0.19	0.15	1	60
ALB0109	5	2001	237	2001.65	21	32.09	-0.25	0.15	0.38	0	17	34.01	0.01	0.13	0.33	0	22
DEL0109	5	2001	269	2001.74	34	32.19	-0.27	0.11	0.23	1	34	34.53	0.00	0.08	0.13	1	16
ALB0110	5	2001	284	2001.78	31	32.45	-0.14	0.13	0.17	0	31	34.24	-0.03	0.10	0.23	0	10
ALB0111	5	2001	316	2001.87	12	32.84	0.19	0.19	0.34	0	10	34.22	-0.01	0.15	0.31	0	22
ALB0202	5	2002	27	2002.07	15	32.42	-0.36	0.16	0.33	0	11	33.99	0.00	0.14	0.38	0	22
ALB0204	5	2002	108	2002.30	35	32.28	-0.19	0.13	0.32	0	33	34.00	0.05	0.10	0.31	0	10
ALB0206	5	2002	154	2002.42	19	32.33	-0.03	0.14	0.21	0	10	34.03	0.15	0.15	0.25	0	22
ALB0208	5	2002	222	2002.61	7	32.56	0.07	0.22	0.16	1	7	32.97	0.04	0.22	0.64	1	60
ALB0209	5	2002	234	2002.64	5	32.42	-0.08	0.24	0.20	1	2	66.46	1.10	-9.99	-9.99	1	91
NOB0201	5	2002	237	2002.65	15	32.58	0.15	0.18	0.33	0	13	34.27	0.21	0.14	0.24	0	22
DEL0208	5	2002	267	2002.73	22	32.55	0.12	0.14	0.15	1	22	34.44	0.15	0.11	0.21	1	16
ALB0210	5	2002	291	2002.80	28	32.97	0.39	0.13	0.29	0	28	34.41	0.31	0.10	0.35	0	10
DEL0210	5	2002	316	2002.87	6	33.02	0.26	0.26	0.16	1	3	34.55	0.08	0.27	0.23	1	22
DEL0303	5	2003	105	2003.29	24	32.22	-0.25	0.13	0.39	0	29	33.80	-0.11	0.09	0.33	0	10
DEL0305	5	2003	148	2003.41	13	32.38	-0.03	0.20	0.24	1	12	34.00	0.12	0.17	0.19	1	22
ALB0301	5	2003	237	2003.65	7	32.33	-0.17	0.21	0.12	1	7	32.76	0.09	0.21	0.14	1	60
ARM0301	5	2003	237	2003.65	16	32.51	0.12	0.14	0.31	0	9	34.40	0.12	0.14	0.33	0	22
DEL0308	5	2003	262	2003.72	38	32.44	-0.03	0.11	0.19	1	38	34.72	0.17	0.08	0.22	1	16
ALB0306	5	2003	315	2003.86	8	32.76	0.12	0.23	0.08	1	6	34.51	0.55	0.25	0.72	1	22

Table 15. Spring Bottom Trawl Survey regional temperature values. See text for explanation.

Reg	Year	Day	Yrday	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Pc
<b>Southern Middle Atlantic Bight:</b>																
1	1968	70	1968.19	55	5.06	-1.04	0.18	1.22	0	42	5.53	-0.50	0.23	1.35	0	10
1	1969	69	1969.19	49	4.98	-1.05	0.20	1.32	0	35	5.00	-0.93	0.25	1.40	0	10
1	1970	116	1970.32	52	8.20	-1.60	0.19	1.24	0	35	6.88	-1.16	0.23	1.18	0	10
1	1971	94	1971.26	50	6.31	-0.76	0.18	0.95	0	38	6.50	-0.22	0.23	1.68	0	10
1	1972	75	1972.21	54	7.50	1.45	0.19	1.34	0	45	8.11	2.14	0.21	1.40	0	10
1	1973	102	1973.28	165	9.36	0.67	0.13	1.51	0	147	8.80	1.02	0.17	1.68	0	10
1	1974	91	1974.25	105	9.87	2.14	0.16	2.99	0	92	10.19	3.12	0.20	1.52	0	10
1	1975	74	1975.20	64	6.95	1.08	0.16	1.20	1	48	6.50	1.38	0.20	1.73	1	10
1	1976	77	1976.21	102	7.92	1.93	0.14	1.26	0	93	8.29	2.42	0.17	1.46	0	10
1	1977	87	1977.24	100	7.19	0.39	0.13	1.33	0	92	6.22	0.07	0.17	1.34	0	10
1	1978	87	1978.24	90	6.13	-0.58	0.14	1.16	0	82	6.11	0.01	0.17	1.50	0	10
1	1979	93	1979.25	95	7.30	0.16	0.14	1.64	0	80	6.56	0.18	0.19	1.50	0	10
1	1980	90	1980.25	82	7.58	0.63	0.15	1.64	0	72	7.26	0.94	0.20	1.33	0	10
1	1981	93	1981.25	90	7.17	0.16	0.15	1.22	0	81	6.77	0.47	0.18	1.33	0	10
1	1982	78	1982.21	34	6.42	-0.07	0.24	0.87	1	28	5.85	0.07	0.28	0.99	1	10
1	1983	79	1983.22	82	7.36	1.26	0.15	1.05	0	73	7.36	1.39	0.19	1.30	0	10
1	1984	73	1984.20	65	6.66	0.74	0.16	1.13	0	55	7.00	1.22	0.20	1.89	0	10
1	1985	66	1985.18	34	8.08	1.57	0.29	1.39	1	21	6.11	1.29	0.30	0.98	1	10
1	1986	72	1986.20	41	7.17	1.20	0.21	2.02	0	37	6.77	1.15	0.25	1.62	0	10
1	1987	89	1987.24	46	6.63	0.00	0.19	1.83	0	60	6.17	-0.20	0.21	1.85	0	10
1	1988	71	1988.19	35	6.14	0.41	0.22	1.79	0	32	6.83	1.04	0.26	1.41	0	10
1	1989	62	1989.17	26	7.82	0.89	0.28	1.22	1	18	7.06	1.33	0.34	1.82	1	10
1	1990	70	1990.19	30	8.05	2.27	0.24	1.43	0	25	7.52	1.87	0.30	1.29	0	10

<b>Northern Middle Atlantic Bight:</b>																
2	1968	73	1968.20	30	2.96	-1.62	0.23	0.93	0	20	3.66	-1.70	0.29	2.23	0	10
2	1969	71	1969.20	38	3.94	-0.53	0.20	1.31	0	28	5.02	-0.42	0.25	1.70	0	10
2	1970	111	1970.30	42	5.74	-0.62	0.20	1.13	0	32	5.00	-1.19	0.26	1.53	0	10
2	1971	82	1971.22	47	3.92	-0.87	0.19	0.64	0	32	6.10	0.31	0.25	2.04	0	10
2	1972	76	1972.21	46	5.26	0.76	0.20	1.09	0	33	5.93	0.99	0.24	1.39	0	10
2	1973	92	1973.25	111	5.46	1.03	0.16	1.62	0	100	7.49	1.76	0.22	1.77	0	10
2	1974	94	1974.26	81	7.05	1.59	0.18	1.87	0	68	8.04	2.47	0.23	1.43	0	10
2	1975	74	1975.20	56	4.32	-0.49	0.19	2.30	0	37	6.25	0.29	0.30	1.50	0	10
2	1976	73	1976.20	64	5.98	1.50	0.17	1.05	0	54	7.45	2.25	0.21	1.27	0	10
2	1977	103	1977.28	54	5.93	0.25	0.19	1.22	0	46	5.17	-0.90	0.24	1.66	0	10
2	1978	99	1978.27	64	4.67	-0.65	0.18	0.70	0	54	3.84	-1.40	0.24	1.25	0	10
2	1979	106	1979.29	73	5.62	-0.17	0.17	0.98	0	64	5.81	0.11	0.20	1.24	0	10
2	1980	100	1980.27	119	5.93	0.61	0.14	0.95	0	110	6.01	0.30	0.15	0.94	0	10
2	1981	104	1981.28	58	5.93	0.29	0.19	0.66	0	51	5.25	-0.49	0.24	1.31	0	10
2	1982	104	1982.28	32	4.16	-1.39	0.22	1.04	1	29	4.53	-0.32	0.24	2.02	1	10
2	1983	91	1983.25	60	5.89	1.12	0.19	0.85	0	49	5.81	0.96	0.22	1.09	0	10
2	1984	81	1984.22	52	4.79	0.27	0.19	0.84	0	42	5.30	-0.10	0.22	1.29	0	10
2	1985	77	1985.21	19	5.45	1.05	0.30	1.26	0	16	6.29	1.13	0.34	1.44	0	10
2	1986	89	1986.24	21	6.80	1.82	0.27	0.73	0	18	7.01	1.54	0.33	0.98	0	10
2	1987	100	1987.27	27	6.36	0.90	0.26	1.63	0	22	6.11	-0.08	0.31	1.45	0	10
2	1988	81	1988.22	23	4.56	0.22	0.26	0.93	0	29	6.46	1.42	0.25	1.26	0	10
2	1989	75	1989.21	10	4.96	0.69	0.40	2.42	1	8	4.34	0.61	0.44	3.21	1	10
2	1990	78	1990.21	22	6.26	1.80	0.26	0.77	0	19	6.19	1.49	0.31	1.42	0	10

<b>Georges Bank:</b>																
3	1968	94	1968.26	49	4.18	-0.89	0.16	0.55	0	36	4.07	-1.07	0.19	0.58	0	10
3	1969	83	1969.23	59	5.14	0.45	0.15	1.12	0	45	4.91	0.17	0.18	0.67	0	10
3	1970	84	1970.23	54	4.29	-0.66	0.15	0.94	0	41	4.33	-0.84	0.20	1.00	0	10
3	1971	89	1971.24	84	4.17	-0.87	0.13	0.74	0	68	4.71	-0.62	0.15	0.97	0	10
3	1972	96	1972.26	87	5.23	0.11	0.14	1.11	0	73	5.23	0.18	0.17	0.76	0	10
3	1973	106	1973.29	59	5.44	0.02	0.16	0.81	0	47	6.29	0.90	0.19	1.43	0	10
3	1974	100	1974.27	56	5.94	0.75	0.16	1.10	0	44	6.50	1.13	0.21	0.91	0	10
3	1975	100	1975.27	81	5.10	-0.21	0.12	1.44	0	63	5.94	0.70	0.15	1.00	0	10
3	1976	93	1976.25	58	5.95	1.09	0.15	0.67	0	50	5.97	0.86	0.17	1.05	0	10
3	1977	112	1977.31	60	7.24	1.39	0.15	1.09	0	48	6.04	0.40	0.19	1.13	0	10
3	1978	107	1978.29	59	4.68	-0.82	0.14	0.87	0	50	4.65	-0.92	0.17	0.98	0	10
3	1979	107	1979.29	101	5.59	-0.04	0.12	0.69	0	89	5.45	-0.18	0.14	0.86	0	10

3	1980	116	1980.32	57	6.48	0.41	0.15	1.16	0	49	6.52	0.64	0.17	1.09	0	10
3	1981	117	1981.32	57	5.78	-0.29	0.15	0.73	0	43	5.64	-0.18	0.19	0.66	0	10
3	1982	110	1982.30	60	5.17	-0.49	0.15	0.72	0	47	4.93	-0.60	0.18	0.98	0	10
3	1983	102	1983.28	56	6.35	1.06	0.15	0.92	0	46	6.00	0.71	0.19	0.81	0	10
3	1984	92	1984.25	55	5.64	0.69	0.16	0.91	0	44	5.94	0.97	0.19	1.08	0	10
3	1985	87	1985.24	22	5.63	0.76	0.22	1.37	0	17	5.15	0.42	0.29	0.67	0	10
3	1986	101	1986.28	23	6.58	0.98	0.22	0.81	0	19	6.39	1.36	0.26	1.08	0	10
3	1987	111	1987.30	26	6.70	0.61	0.21	2.11	0	22	6.29	0.54	0.26	1.50	0	10
3	1988	88	1988.24	23	4.60	-0.13	0.22	0.73	0	28	5.05	-0.26	0.22	1.01	0	10
3	1989	85	1989.23	27	4.57	0.02	0.22	0.61	0	23	4.96	0.00	0.25	1.03	0	10
3	1990	92	1990.25	25	5.39	0.60	0.21	0.69	0	23	5.42	0.57	0.24	0.77	0	10

### Gulf of Maine West:

4	1968	96	1968.26	46	3.44	-0.92	0.16	0.57	0	43	4.68	-0.21	0.15	1.15	0	10
4	1969	96	1969.26	40	3.59	-0.94	0.18	1.15	0	35	5.05	0.01	0.16	0.77	0	10
4	1970	89	1970.24	46	3.75	-0.59	0.16	0.87	0	44	6.20	1.03	0.14	1.02	0	10
4	1971	105	1971.29	56	3.85	-1.11	0.16	0.53	0	52	6.14	0.99	0.14	1.19	0	10
4	1972	103	1972.28	46	4.60	-0.17	0.16	0.61	0	46	5.84	0.83	0.14	1.04	0	10
4	1973	123	1973.34	40	6.55	0.20	0.19	0.78	0	40	5.63	0.36	0.16	0.79	0	10
4	1974	118	1974.32	41	5.19	-0.70	0.17	2.74	0	29	6.54	1.27	0.18	0.64	0	10
4	1975	123	1975.34	75	5.96	-0.62	0.18	2.76	1	67	6.27	0.88	0.16	1.55	1	10
4	1976	109	1976.30	55	6.10	0.76	0.15	0.72	0	55	6.74	1.65	0.13	0.89	0	10
4	1977	128	1977.35	57	6.51	-0.31	0.15	1.37	0	54	5.04	-0.17	0.13	1.05	0	10
4	1978	131	1978.36	55	6.22	-1.01	0.14	0.95	0	55	5.33	0.13	0.12	0.70	0	10
4	1979	115	1979.32	74	5.71	0.11	0.13	1.05	0	71	4.76	-0.28	0.11	0.71	0	10
4	1980	119	1980.33	46	6.08	0.08	0.17	0.73	0	45	5.09	-0.09	0.15	0.73	0	10
4	1981	136	1981.37	51	7.89	0.15	0.15	0.68	0	51	5.02	-0.31	0.13	0.75	0	10
4	1982	122	1982.33	51	6.05	-0.26	0.16	1.05	0	50	5.41	0.26	0.14	0.81	0	10
4	1983	114	1983.31	51	5.85	0.40	0.15	0.76	0	50	5.40	0.31	0.13	0.87	0	10
4	1984	106	1984.29	49	4.81	-0.15	0.16	0.78	0	49	5.59	0.42	0.14	0.52	0	10
4	1985	98	1985.27	17	4.90	0.33	0.26	0.67	0	17	5.22	0.09	0.23	0.93	0	10
4	1986	111	1986.30	24	6.11	0.90	0.21	0.64	0	24	6.47	1.30	0.18	1.03	0	10
4	1987	114	1987.31	21	4.61	-0.80	0.23	1.14	0	21	5.18	0.04	0.19	1.04	0	10
4	1988	103	1988.28	22	4.58	-0.23	0.23	0.82	0	22	5.96	1.15	0.20	0.76	0	10
4	1989	97	1989.27	16	4.28	-0.52	0.27	1.05	0	16	4.79	-0.19	0.23	0.83	0	10
4	1990	94	1990.26	11	4.39	-0.07	0.32	0.81	0	11	4.61	0.02	0.27	0.63	0	10

### Gulf of Maine East:

5	1968	108	1968.30	29	4.49	-0.79	0.18	0.79	0	25	5.62	-0.98	0.21	0.88	0	10
5	1969	92	1969.25	32	3.34	-0.97	0.18	1.72	0	25	5.71	-0.80	0.21	1.23	0	10
5	1970	90	1970.25	37	3.17	-0.98	0.16	0.92	0	35	6.46	-0.13	0.17	0.89	0	10
5	1971	111	1971.30	49	4.16	-0.93	0.15	0.61	0	45	6.28	-0.22	0.16	0.86	0	10
5	1972	109	1972.30	58	4.35	-0.39	0.15	0.80	0	57	6.72	0.43	0.16	0.81	0	10
5	1973	125	1973.34	30	5.12	-0.75	0.16	0.76	0	29	7.49	0.91	0.17	1.47	0	10
5	1974	117	1974.32	34	5.28	-0.04	0.18	1.07	0	17	7.09	0.98	0.24	1.35	1	10
5	1975	122	1975.33	23	3.97	-1.71	0.19	1.26	0	23	7.02	-0.02	0.20	1.01	0	10
5	1976	114	1976.31	29	6.26	1.02	0.18	0.67	0	29	7.51	0.75	0.19	0.84	0	10
5	1977	124	1977.34	33	5.96	0.11	0.17	0.75	0	33	6.25	-0.38	0.17	0.96	0	10
5	1978	129	1978.35	39	4.94	-1.20	0.15	1.06	0	37	5.76	-0.91	0.16	0.87	0	10
5	1979	120	1979.33	41	5.22	-0.21	0.15	0.87	0	39	6.18	-0.30	0.16	1.16	0	10
5	1980	124	1980.34	28	5.51	-0.28	0.18	0.72	0	28	6.36	-0.30	0.19	1.37	0	10
5	1981	129	1981.35	27	6.24	0.02	0.18	0.61	0	25	6.20	-0.34	0.19	0.77	0	10
5	1982	120	1982.33	32	5.14	-0.34	0.16	0.80	0	31	6.18	-0.36	0.16	1.16	0	10
5	1983	109	1983.30	32	4.55	-0.39	0.16	1.04	0	31	6.03	-0.56	0.17	1.18	0	10
5	1984	111	1984.30	32	3.97	-1.06	0.16	1.22	0	32	6.28	-0.39	0.17	1.14	0	10
5	1985	97	1985.27	10	3.66	-0.85	0.29	1.23	0	9	6.19	0.13	0.30	0.94	0	10
5	1986	108	1986.30	16	6.04	1.27	0.23	0.73	0	16	8.46	1.90	0.24	0.88	0	10
5	1987	116	1987.32	19	3.92	-1.32	0.21	0.78	0	19	5.97	-0.39	0.22	1.17	0	10
5	1988	98	1988.27	14	3.58	-0.88	0.24	0.75	0	15	6.26	0.15	0.23	1.09	0	10
5	1989	94	1989.26	11	4.26	-0.37	0.29	1.83	1	11	6.44	-0.28	0.30	1.61	1	10
5	1990	104	1990.28	14	4.72	0.27	0.27	0.69	0	14	6.00	-0.02	0.27	0.72	0	10

Table 16. Fall Bottom Trawl Survey regional temperature values. See text for explanation.

Reg	Year	Day	Yrday	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Npts	Temp	Dtemp	SDV1	SDV2	Flg	Pc
<b>Southern Middle Atlantic Bight:</b>																
1	1963	346	1963.95	10	10.61	-1.46	0.42	0.67	1	7	10.30	-1.36	0.49	0.75	1	10
1	1964	301	1964.82	7	13.77	-2.41	0.50	1.77	1	5	9.74	-2.65	0.59	2.18	1	10
1	1965	311	1965.85	8	14.11	-2.19	0.53	1.91	1	2	10.55	-2.86	-9.99	-9.99	1	10
1	1966	315	1966.86	10	12.96	-2.59	0.47	1.91	1	3	11.33	-1.80	0.72	3.36	1	10
1	1967	297	1967.81	60	16.61	-0.76	0.18	0.88	0	37	12.80	-1.70	0.24	1.94	0	10
1	1968	290	1968.79	62	19.32	1.12	0.17	1.11	0	50	12.75	-1.91	0.20	2.79	0	10
1	1969	287	1969.79	49	17.61	-1.04	0.19	5.65	0	39	15.09	0.96	0.23	2.20	0	10
1	1970	259	1970.71	60	22.23	0.24	0.17	3.09	0	46	9.92	-3.29	0.21	2.36	0	10
1	1971	281	1971.77	57	20.85	1.45	0.19	2.70	0	40	12.86	-1.54	0.24	3.89	0	10
1	1972	289	1972.79	119	17.64	-0.47	0.14	1.81	0	100	13.81	0.20	0.19	1.96	0	10
1	1973	278	1973.76	123	20.95	1.22	0.14	2.95	0	111	15.20	0.54	0.18	1.69	0	10
1	1974	273	1974.75	99	20.62	0.27	0.14	2.21	0	87	15.65	0.72	0.19	1.61	0	10
1	1975	303	1975.83	105	16.53	0.15	0.14	1.86	0	90	14.36	-0.19	0.18	1.65	0	10
1	1976	283	1976.78	107	19.21	0.17	0.14	0.97	0	97	14.66	-0.18	0.16	1.91	0	10
1	1977	275	1977.75	100	19.17	-0.96	0.14	3.77	0	88	14.03	-0.81	0.18	1.78	0	10
1	1978	259	1978.71	89	22.11	0.09	0.15	3.36	0	82	12.58	-1.62	0.18	2.45	0	10
1	1979	272	1979.74	86	20.36	-0.23	0.15	1.36	0	76	13.55	-1.10	0.19	2.24	0	10
1	1980	274	1980.75	88	19.66	-0.52	0.15	7.13	0	65	13.40	-0.95	0.19	2.40	0	10
1	1981	272	1981.74	85	19.47	-1.15	0.15	1.25	0	72	14.58	-0.13	0.18	1.85	0	10
1	1982	270	1982.74	89	20.73	0.06	0.15	1.33	0	80	14.11	-0.63	0.18	1.94	0	10
1	1983	269	1983.74	97	21.45	0.54	0.14	1.06	0	85	14.59	-0.16	0.18	2.07	0	10
1	1984	265	1984.73	82	20.98	-0.36	0.15	1.46	0	73	13.31	-1.20	0.18	2.51	0	10
1	1985	273	1985.75	39	21.96	1.49	0.22	1.70	0	35	16.02	1.40	0.27	1.99	0	10
1	1986	265	1986.73	42	21.17	-0.19	0.20	1.51	0	57	15.09	0.72	0.21	2.76	0	10
1	1987	261	1987.72	38	22.39	0.43	0.21	3.54	0	33	13.64	-0.80	0.26	2.53	0	10
1	1988	263	1988.72	34	21.29	-0.41	0.22	1.29	0	31	11.70	-2.77	0.26	3.05	0	10
1	1989	263	1989.72	34	22.68	1.20	0.25	0.89	0	30	13.53	-0.79	0.29	3.58	0	10
1	1990	261	1990.71	37	22.38	0.60	0.22	1.08	0	34	17.43	1.31	0.24	2.86	1	10
<b>Northern Middle Atlantic Bight:</b>																
2	1963	346	1963.95	30	10.25	-0.92	0.24	1.16	1	20	11.41	0.10	0.29	1.34	1	10
2	1964	300	1964.82	31	13.22	-1.94	0.24	1.09	0	21	10.77	-2.54	0.31	1.36	0	10
2	1965	310	1965.85	31	13.09	-1.12	0.23	1.63	0	21	10.22	-3.04	0.29	1.77	0	10
2	1966	314	1966.86	32	12.40	-1.56	0.24	1.42	0	23	9.51	-3.49	0.30	1.55	0	10
2	1967	304	1967.83	46	13.82	-1.09	0.19	2.08	0	29	9.29	-3.52	0.27	1.10	0	10
2	1968	292	1968.80	38	16.44	0.38	0.20	1.13	0	29	11.02	-1.86	0.25	2.01	0	10
2	1969	291	1969.80	44	14.67	-1.59	0.20	6.39	0	28	12.27	-0.37	0.28	1.49	0	10
2	1970	294	1970.80	39	16.62	0.67	0.21	1.92	0	30	10.53	-2.54	0.26	1.93	0	10
2	1971	281	1971.77	46	18.68	1.47	0.19	2.38	0	38	10.96	-1.52	0.22	2.17	0	10
2	1972	286	1972.78	74	16.98	0.45	0.17	3.73	0	57	12.62	-0.07	0.22	1.50	0	10
2	1973	278	1973.76	87	16.52	-0.19	0.18	4.32	0	71	13.01	0.54	0.25	1.94	0	10
2	1974	276	1974.76	57	17.75	0.04	0.19	1.21	0	48	13.19	0.24	0.25	2.01	0	10
2	1975	289	1975.79	62	15.98	-0.26	0.18	2.17	0	53	12.38	-0.63	0.23	1.49	0	10
2	1976	281	1976.77	62	17.25	0.17	0.18	2.01	0	52	12.94	0.03	0.22	1.64	0	10
2	1977	285	1977.78	61	16.26	-0.51	0.18	1.72	0	51	13.19	0.25	0.23	1.30	0	10
2	1978	283	1978.78	85	16.07	-0.78	0.15	3.39	0	71	12.23	-0.18	0.18	2.02	0	10
2	1979	285	1979.78	89	16.32	-0.47	0.15	1.37	0	79	11.91	-0.94	0.18	1.54	0	10
2	1980	284	1980.78	53	17.88	1.02	0.19	5.34	0	46	12.98	0.19	0.24	1.95	0	10
2	1981	284	1981.78	55	14.47	-2.20	0.19	1.21	0	50	11.40	-1.34	0.23	1.26	0	10
2	1982	282	1982.77	61	17.31	0.36	0.18	1.29	0	50	13.04	0.12	0.23	1.68	0	10
2	1983	279	1983.76	51	18.11	0.84	0.18	0.87	0	42	12.06	-0.59	0.22	1.99	0	10
2	1984	275	1984.75	45	17.48	-0.27	0.23	1.46	0	37	12.62	0.22	0.27	2.17	0	10
2	1985	288	1985.79	19	17.54	1.03	0.29	1.66	0	15	14.21	1.29	0.34	1.68	0	10
2	1986	280	1986.77	27	17.90	0.61	0.24	1.33	0	26	12.88	0.04	0.28	1.68	0	10
2	1987	272	1987.75	21	17.70	-0.11	0.27	0.82	0	21	11.85	-0.65	0.30	2.37	0	10
2	1988	271	1988.74	27	18.41	0.39	0.26	1.19	0	22	11.86	-0.66	0.30	2.30	0	10
2	1989	271	1989.74	25	19.19	1.46	0.30	1.05	0	24	12.79	0.54	0.32	2.48	0	10
2	1990	268	1990.73	17	18.71	0.49	0.40	1.00	0	14	13.71	1.36	0.45	1.50	0	10
<b>Georges Bank:</b>																
3	1963	338	1963.93	44	8.93	-1.53	0.18	1.51	0	31	8.81	-1.56	0.22	1.48	0	10
3	1964	314	1964.86	50	10.69	-1.93	0.17	1.07	0	34	9.28	-2.19	0.22	1.03	0	10

3	1965	302	1965.83	55	12.29	-1.39	0.16	1.59	0	40	10.97	-1.23	0.20	1.72	0	10
3	1966	307	1966.84	54	11.43	-1.83	0.16	1.21	0	37	9.99	-1.96	0.23	1.88	0	10
3	1967	336	1967.92	49	8.81	-1.86	0.15	0.92	0	36	8.55	-1.91	0.18	1.02	0	10
3	1968	307	1968.84	51	12.81	-0.38	0.15	1.29	0	41	12.24	0.21	0.19	1.37	0	10
3	1969	305	1969.84	57	12.33	-1.10	0.14	1.77	0	30	11.83	-0.62	0.22	1.17	0	10
3	1970	301	1970.82	55	13.16	-0.71	0.15	1.79	0	39	10.92	-1.00	0.20	1.65	0	10
3	1971	294	1971.81	57	14.63	0.47	0.14	2.91	0	49	12.19	-0.05	0.17	1.77	0	10
3	1972	297	1972.81	52	12.91	-1.05	0.15	1.35	0	40	11.89	-0.36	0.19	1.54	0	10
3	1973	292	1973.80	57	14.57	0.19	0.15	1.31	0	42	13.38	0.92	0.19	1.60	0	10
3	1974	287	1974.79	53	15.27	0.41	0.15	1.34	0	44	12.98	0.43	0.18	1.38	0	10
3	1975	285	1975.78	60	14.71	-0.11	0.14	1.92	0	48	11.81	-0.67	0.17	1.47	0	10
3	1976	303	1976.83	51	13.52	0.01	0.15	1.05	0	44	13.32	1.05	0.19	1.16	0	10
3	1977	299	1977.82	72	13.34	-0.38	0.14	1.82	0	60	13.12	0.71	0.16	2.46	0	10
3	1978	292	1978.80	117	14.08	-0.29	0.11	1.23	0	104	11.53	-0.75	0.13	1.48	0	10
3	1979	298	1979.82	102	14.36	0.43	0.11	1.09	0	91	13.23	0.90	0.13	1.52	0	10
3	1980	294	1980.80	75	15.08	0.74	0.14	1.88	0	61	13.13	0.88	0.17	1.16	0	10
3	1981	295	1981.81	58	12.60	-1.60	0.14	1.92	0	48	11.48	-1.01	0.18	1.41	0	10
3	1982	295	1982.81	67	14.01	-0.16	0.15	1.75	0	58	11.56	-0.84	0.16	1.60	0	10
3	1983	290	1983.79	88	15.11	0.64	0.13	1.18	0	77	11.75	-0.73	0.16	1.87	0	10
3	1984	284	1984.78	64	14.99	0.11	0.20	0.94	0	55	13.14	0.75	0.23	2.50	0	10
3	1985	295	1985.81	25	15.57	1.42	0.21	1.40	0	21	13.13	1.05	0.26	2.50	0	10
3	1986	289	1986.79	21	14.07	-0.44	0.22	1.24	0	29	12.57	0.29	0.21	2.13	0	10
3	1987	281	1987.77	29	14.03	-1.25	0.20	0.92	0	26	11.08	-1.73	0.23	2.27	0	10
3	1988	284	1988.78	22	13.82	-0.98	0.25	1.53	0	19	11.34	-1.10	0.28	1.43	0	10
3	1989	286	1989.78	33	14.36	-0.22	0.20	1.01	0	31	11.79	-0.72	0.22	1.82	0	10

### Gulf of Maine West:

4	1963	324	1963.89	53	8.79	-0.71	0.16	0.72	0	53	7.11	-0.16	0.14	0.78	0	10
4	1964	319	1964.88	42	8.81	-1.12	0.17	0.83	0	42	5.69	-1.56	0.15	0.82	0	10
4	1965	284	1965.78	46	10.97	-1.93	0.16	1.30	0	46	5.84	-1.54	0.15	1.51	0	10
4	1966	289	1966.79	40	11.38	-1.08	0.17	0.91	0	37	5.39	-1.69	0.16	1.54	0	10
4	1967	322	1967.88	45	8.29	-1.28	0.17	0.68	0	36	6.09	-1.47	0.18	0.96	0	10
4	1968	322	1968.88	41	9.16	-0.66	0.16	0.75	0	38	6.87	-0.69	0.14	1.02	0	10
4	1969	321	1969.88	46	9.46	-0.45	0.17	1.45	0	40	7.08	-0.30	0.15	0.84	0	10
4	1970	317	1970.87	47	9.99	-0.14	0.16	1.42	0	46	7.61	0.27	0.14	1.10	0	10
4	1971	312	1971.85	46	11.61	0.89	0.16	2.83	0	44	8.42	1.08	0.14	1.54	0	10
4	1972	313	1972.86	48	10.09	-0.40	0.17	0.71	0	43	7.82	0.24	0.15	1.39	0	10
4	1973	313	1973.86	51	10.18	-0.33	0.16	0.89	0	46	7.82	0.50	0.15	1.27	0	10
4	1974	299	1974.82	56	11.54	-0.12	0.16	0.82	0	54	8.32	0.88	0.14	1.46	0	10
4	1975	302	1975.83	61	12.10	0.66	0.15	0.80	0	61	7.71	0.44	0.13	1.35	0	10
4	1976	317	1976.87	43	9.88	-0.30	0.16	0.68	0	41	8.52	1.08	0.14	1.12	0	10
4	1977	332	1977.91	80	9.21	-0.01	0.13	0.85	0	77	7.43	0.20	0.12	1.69	0	10
4	1978	302	1978.83	120	11.09	-0.34	0.11	0.70	0	113	6.66	-0.59	0.09	1.07	0	10
4	1979	312	1979.86	136	10.72	0.26	0.10	1.34	0	130	7.29	0.04	0.08	1.30	0	10
4	1980	311	1980.85	49	9.82	-0.75	0.15	1.26	0	48	7.15	-0.44	0.14	1.20	0	10
4	1981	306	1981.84	49	10.50	-0.48	0.15	1.44	0	47	7.08	-0.46	0.14	1.27	0	10
4	1982	308	1982.84	59	11.11	0.34	0.15	0.88	0	58	7.75	0.16	0.13	1.55	0	10
4	1983	306	1983.84	70	11.19	0.23	0.14	0.80	0	70	7.87	0.34	0.13	1.44	0	10
4	1984	300	1984.82	31	12.27	0.82	0.19	0.90	0	26	8.46	0.71	0.18	1.23	0	10
4	1985	308	1985.84	21	12.12	1.32	0.23	0.80	0	21	8.31	0.96	0.18	1.80	0	10
4	1986	302	1986.83	25	11.49	0.08	0.21	0.74	0	30	8.26	0.63	0.17	1.99	0	10
4	1987	296	1987.81	23	11.70	-0.12	0.22	0.82	0	23	7.27	-0.10	0.19	1.98	0	10
4	1988	297	1988.81	29	11.22	-0.67	0.21	0.65	0	29	7.31	-0.03	0.18	1.14	0	10
4	1989	297	1989.81	25	11.97	0.02	0.22	0.77	0	25	6.96	-0.52	0.19	1.53	0	10
4	1990	293	1990.80	19	12.41	0.32	0.25	3.80	1	18	7.19	-0.05	0.22	1.90	1	10

### Gulf of Maine East:

5	1963	325	1963.89	35	8.32	-1.53	0.17	1.36	0	35	6.90	-1.57	0.17	0.93	0	10
5	1964	325	1964.89	34	7.60	-2.13	0.17	1.20	0	33	6.11	-2.36	0.18	0.81	0	10
5	1965	287	1965.79	32	9.79	-2.75	0.20	1.57	0	31	6.63	-2.24	0.20	1.45	0	10
5	1966	292	1966.80	33	9.90	-2.32	0.18	0.89	0	31	6.60	-2.27	0.19	1.29	0	10
5	1967	318	1967.87	32	8.82	-1.55	0.17	0.76	0	24	6.51	-1.93	0.19	0.96	0	10
5	1968	318	1968.87	27	10.15	-0.14	0.18	1.42	0	21	8.67	-0.13	0.20	1.33	0	10
5	1969	320	1969.88	30	10.32	0.02	0.17	1.81	0	26	7.87	-0.74	0.20	0.91	0	10
5	1970	316	1970.86	33	9.68	-0.96	0.16	2.18	0	31	7.76	-0.90	0.18	1.22	0	10
5	1971	314	1971.86	39	11.14	0.49	0.16	3.00	0	38	8.37	-0.30	0.17	1.43	0	10
5	1972	315	1972.86	40	9.73	-0.97	0.16	0.65	0	38	8.72	0.22	0.17	1.38	0	10
5	1973	313	1973.86	31	10.12	-0.67	0.16	0.64	0	27	9.46	0.85	0.18	1.42	0	10
5	1974	303	1974.83	38	11.72	0.15	0.15	0.75	0	34	10.03	1.47	0.17	1.32	0	10

5	1975	308	1975.84	34	11.40	0.27	0.17	0.93	0	33	8.87	0.14	0.17	1.49	0	10
5	1976	318	1976.87	37	10.18	-0.19	0.16	0.83	0	36	9.73	1.18	0.17	1.05	0	10
5	1977	323	1977.89	33	9.66	-0.30	0.16	0.74	0	30	9.09	0.46	0.19	2.62	0	10
5	1978	303	1978.83	54	11.20	-0.35	0.14	0.73	0	54	8.37	-0.27	0.15	1.27	0	10
5	1979	313	1979.86	49	10.88	0.17	0.16	1.45	0	43	9.24	0.76	0.16	1.32	0	10
5	1980	306	1980.84	36	10.53	-0.74	0.17	0.72	0	31	8.47	-0.14	0.21	1.08	0	10
5	1981	306	1981.84	30	10.55	-0.73	0.16	1.52	0	30	8.04	-0.73	0.18	1.05	0	10
5	1982	302	1982.83	40	11.24	-0.34	0.15	0.74	0	40	7.89	-0.83	0.16	1.15	0	10
5	1983	306	1983.84	40	11.28	-0.06	0.19	0.70	0	39	8.63	-0.23	0.19	1.73	0	10
5	1984	300	1984.82	30	12.61	0.95	0.19	0.72	0	24	9.57	0.67	0.23	2.48	0	10
5	1985	306	1985.84	14	11.21	-0.02	0.26	1.10	0	14	9.40	0.41	0.26	2.42	0	10
5	1986	303	1986.83	17	11.09	-0.26	0.23	0.42	0	29	8.97	0.38	0.19	0.97	0	10
5	1987	294	1987.80	17	10.88	-1.35	0.24	0.79	0	17	8.56	-0.10	0.24	2.32	0	10
5	1988	294	1988.80	14	10.89	-1.22	0.23	0.77	0	14	8.50	-0.52	0.25	1.26	0	10
5	1989	299	1989.82	18	11.36	-0.49	0.25	0.74	0	17	8.11	-0.61	0.26	0.98	0	10
5	1990	292	1990.80	9	12.84	0.94	0.33	5.58	1	9	8.32	-0.36	0.34	2.71	1	10



# Procedures for Issuing Manuscripts in the *Northeast Fisheries Science Center Reference Document (CRD) Series*

---

**Clearance:** All manuscripts submitted for issuance as CRDs must have cleared the NEFSC's manuscript/abstract/webpage review process. If any author is not a federal employee, he/she will be required to sign an "NEFSC Release-of-Copyright Form." If your manuscript includes material lifted from another work which has been copyrighted, then you will need to work with the NEFSC's Editorial Office to arrange for permission to use that material by securing release signatures on the "NEFSC Use-of-Copyrighted-Work Permission Form."

**Organization:** Manuscripts must have an abstract and table of contents, and — if applicable — lists of figures and tables. As much as possible, use traditional scientific manuscript organization for sections: "Introduction," "Study Area"/"Experimental Apparatus," "Methods," "Results," "Discussion" and/or "Conclusions," "Acknowledgments," and "Literature/References Cited."

**Style:** The CRD series is obligated to conform with the style contained in the current edition of the *United States Government Printing Office Style Manual*. That style manual is silent on many aspects of scientific manuscripts. The CRD series relies more on the *CBE Style Manual*. Manuscripts should be prepared to conform with these style manuals.

The CRD series uses the American Fisheries Society's guides to names of fishes, mollusks, and decapod crustaceans, the Society for Marine Mammalogy's guide to names of marine mammals, the Biosciences Information Service's guide to serial title abbreviations, and the International Standardization Organization's guide to statistical terms.

For in-text citation, use the name-date system. A special effort should be made to ensure that all necessary bibliographic information is included in the list of cited works. Personal communications must include date, full name, and full mailing address of the contact.

**Preparation:** Type a clean/neat, single-spaced version of the document. The document must be paginated continuously from beginning to end and must have a "Table of Contents." Begin the preliminary pages of the document — always the "Table of Contents" — with page "iii." Begin the body of the document — normally the "Introduction" — with page "1," and continuously paginate all pages including tables, figures, appendices, and indices. You can insert blank pages as appropriate throughout the document, but account for them in your pagination (*e.g.*, if your last figure ends on an odd-numbered/right-hand page such as "75," and if your next page is the first page of an appendix, then you would normally insert a blank page after the last figure, and paginate the first page of the appendix as "77" to make it begin on an odd-numbered/right-hand page also). Forward the final version to the Editorial Office as both a paper copy and electronically (*i.e.*, e-mail attachment, 3.5-inch floppy disk, high-density zip disk, or CD). For purposes of publishing the CRD series only, the use of Microsoft Word is preferable to the use of Corel WordPerfect.

**Production and Distribution:** The Editorial Office will develop the inside and outside front covers, the inside and outside back covers, and the title and bibliographic control pages (pages "i" and "ii") of the document, then combine those covers and preliminary pages with the text that you have supplied. The document will then be issued online.

Paper copies of the four covers and two preliminary pages will be sent to the sole/senior NEFSC author should he/she wish to prepare some paper copies of the overall document as well. The Editorial Office will only produce four paper copies (*i.e.*, three copies for the NEFSC's libraries and one copy for its own archives) of the overall document.

A number of organizations and individuals in the Northeast Region will be notified by e-mail of the availability of the online version of the document. The sole/senior NEFSC author of the document will receive a list of those so notified.

---

Research Communications Unit  
Northeast Fisheries Science Center  
National Marine Fisheries Service, NOAA  
166 Water St.  
Woods Hole, MA 02543-1026

**MEDIA  
MAIL**

## **Publications and Reports of the Northeast Fisheries Science Center**

The mission of NOAA's National Marine Fisheries Service (NMFS) is "stewardship of living marine resources for the benefit of the nation through their science-based conservation and management and promotion of the health of their environment." As the research arm of the NMFS's Northeast Region, the Northeast Fisheries Science Center (NEFSC) supports the NMFS mission by "planning, developing, and managing multidisciplinary programs of basic and applied research to: 1) better understand the living marine resources (including marine mammals) of the Northwest Atlantic, and the environmental quality essential for their existence and continued productivity; and 2) describe and provide to management, industry, and the public, options for the utilization and conservation of living marine resources and maintenance of environmental quality which are consistent with national and regional goals and needs, and with international commitments." Results of NEFSC research are largely reported in primary scientific media (*e.g.*, anonymously-peer-reviewed scientific journals). However, to assist itself in providing data, information, and advice to its constituents, the NEFSC occasionally releases its results in its own media. Currently, there are three such media:

*NOAA Technical Memorandum NMFS-NE* -- This series is issued irregularly. The series typically includes: data reports of long-term field or lab studies of important species or habitats; synthesis reports for important species or habitats; annual reports of overall assessment or monitoring programs; manuals describing program-wide surveying or experimental techniques; literature surveys of important species or habitat topics; proceedings and collected papers of scientific meetings; and indexed and/or annotated bibliographies. All issues receive internal scientific review and most issues receive technical and copy editing.

*Northeast Fisheries Science Center Reference Document* -- This series is issued irregularly. The series typically includes: data reports on field and lab studies; progress reports on experiments, monitoring, and assessments; background papers for, collected abstracts of, and/or summary reports of scientific meetings; and simple bibliographies. Issues receive internal scientific review, but no technical or copy editing.

*Resource Survey Report* (formerly *Fishermen's Report*) -- This information report is a quick-turnaround report on the distribution and relative abundance of selected living marine resources as derived from each of the NEFSC's periodic research vessel surveys of the Northeast's continental shelf. There is no scientific review, nor any technical or copy editing, of this report.

**OBTAINING A COPY:** To obtain a copy of a *NOAA Technical Memorandum NMFS-NE* or a *Northeast Fisheries Science Center Reference Document*, or to subscribe to the *Resource Survey Report*, either contact the NEFSC Editorial Office (166 Water St., Woods Hole, MA 02543-1026; 508-495-2228) or consult the NEFSC webpage on "Reports and Publications" (<http://www.nefsc.noaa.gov/nefsc/publications/>).

**ANY USE OF TRADE OR BRAND NAMES IN ANY NEFSC PUBLICATION OR REPORT DOES NOT IMPLY ENDORSEMENT.**