

*Oceanography Branch CTD Data Report*  
*CTD\_REPORT\_2012002HB*

**For further information, contact Tamara Holzwarth-Davis  
National Marine Fisheries Service, Northeast Fisheries  
Science Center, Woods Hole, Massachusetts 02543-1097.**

DATE: October 4, 2012

# Oceanography Branch CTD Data Report

## CTD\_REPORT\_2012002HB

NOAA Fisheries Service  
Northeast Fisheries Science Center  
Woods Hole, MA 02543

HB 12-02  
ECOMON

Data Coverage: May 31 – June 13, 2012  
Mid Atlantic Bight, Georges Bank, Gulf of Maine

This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's HB1202 ECOMON Survey aboard the NOAA FSV *Henry B. Bigelow*. Data was obtained with a Seabird Electronics SBE Model 19/19+ profiling CTD (s/n 4759) and a Seabird Electronics SBE Model 9/11+ CTD. Sea water samples were taken for the purpose of correcting salinity values for both instruments. No salinity correction was necessary for any instrument.

Data presented here have been audited, however, corrections and/or updates may be applied at a later time. The most recent and complete station data can be found in an NODC formatted ASCII file at:  
<ftp://ftp.nefsc.noaa.gov/pub/hydro/hb1202.dat>

This report may be viewed on the Oceanography Branch website at:

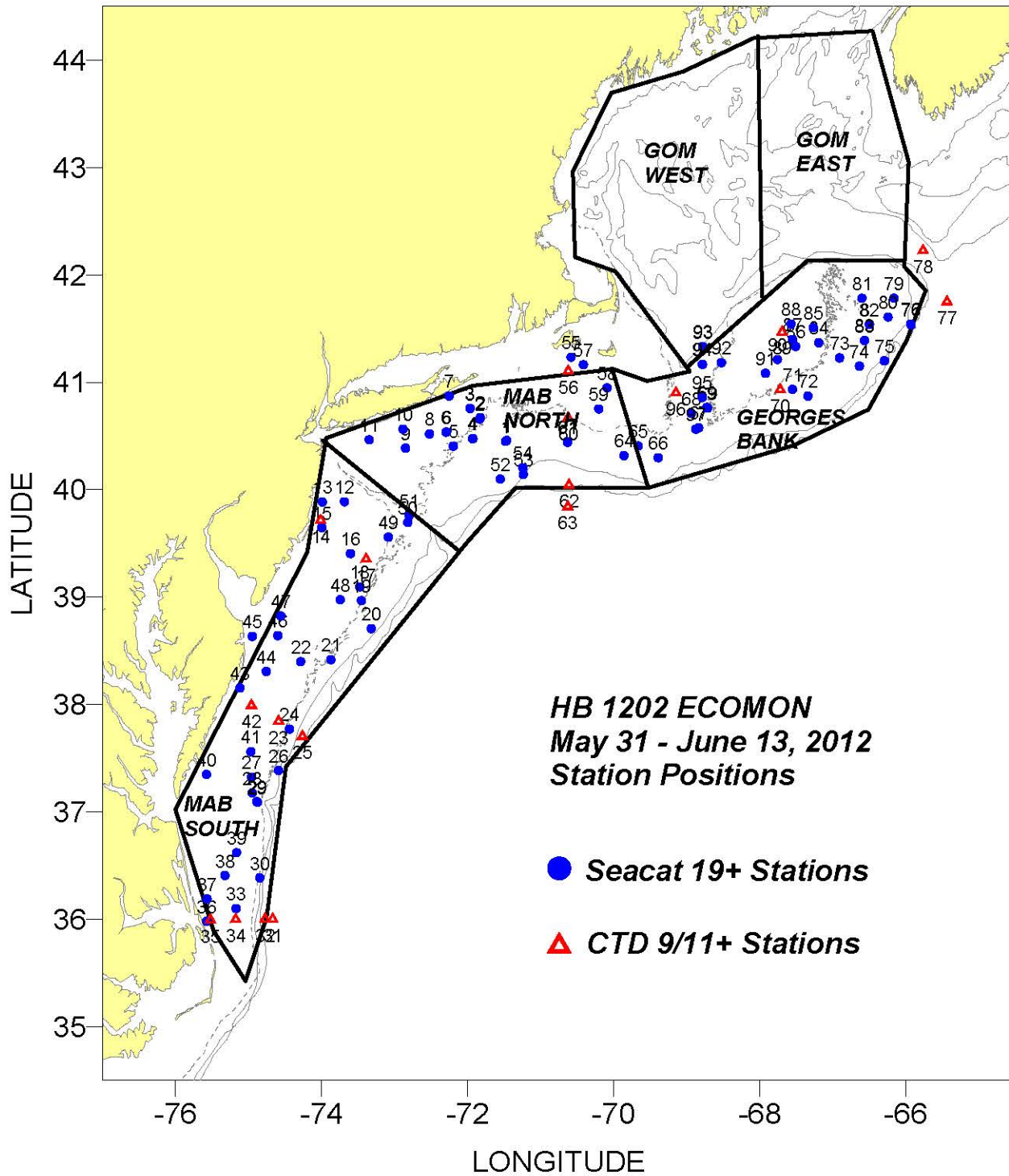
<http://www.nefsc.noaa.gov/HydroAtlas/>

choose: **2012 Cruises**

**MAY\_ECOMON\_HB1202**

**CTD\_REPORT\_2012002HB.pdf**

Revised: October 4, 2012



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the 2012 HB1202 ECOMON  
May 31 - June 13, 2012**

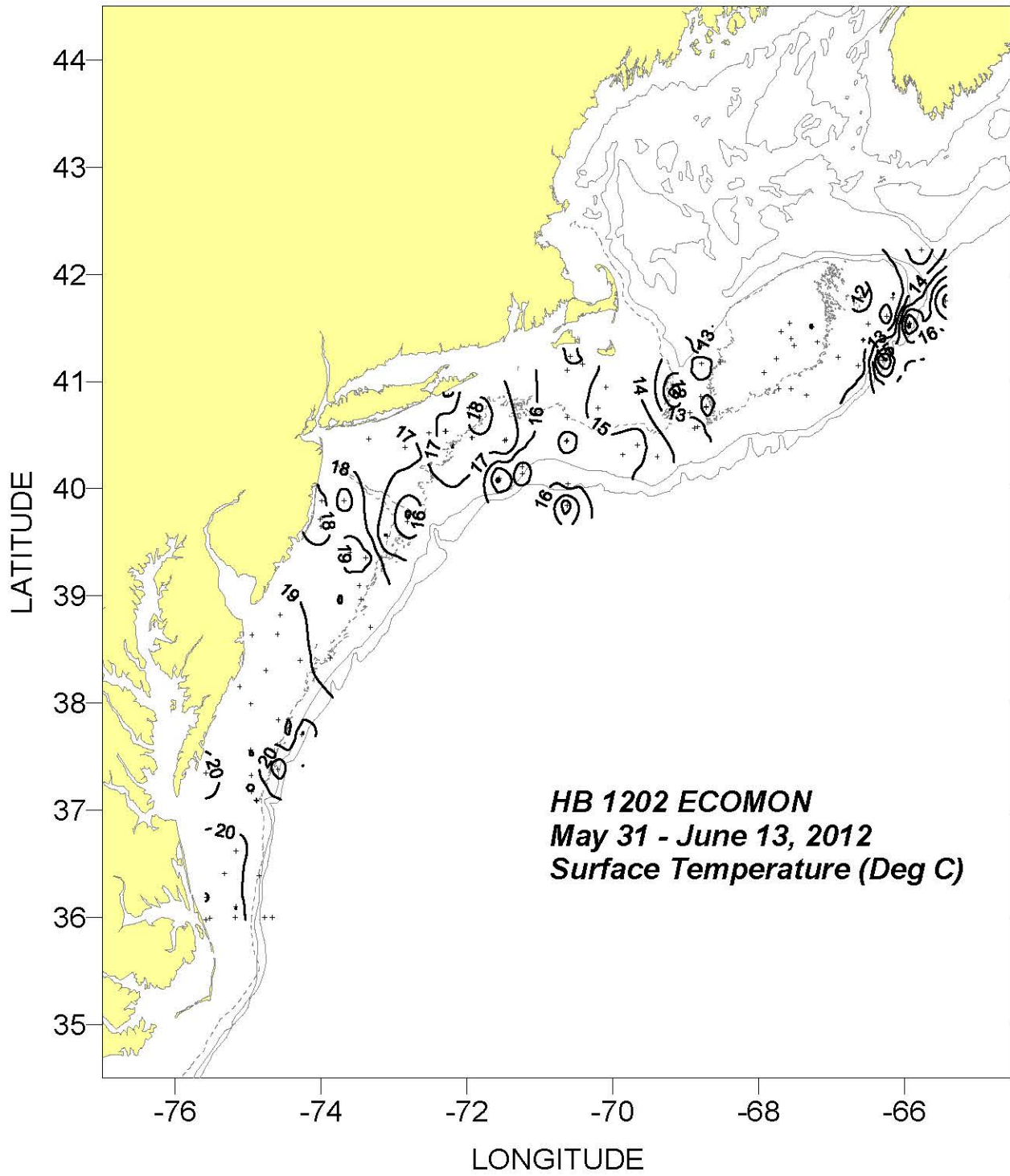
| CRUISE              | CD  | SURFACE |       |         |      |      |      | BOTTOM |       |         |      |      |      | Purpose |
|---------------------|-----|---------|-------|---------|------|------|------|--------|-------|---------|------|------|------|---------|
|                     |     | #obs    | T/S   | Anomaly | SDV1 | SDV2 | Flag | #obs   | T/S   | Anomaly | SDV1 | SDV2 | Flag |         |
| <b>Georges Bank</b> |     |         |       |         |      |      |      |        |       |         |      |      |      |         |
| hb1202              | 164 | 36      | 12.56 | 2.11    | 0.19 | 1.30 | 0    | 32     | 10.48 | 2.10    | 0.20 | 1.15 | 0    | 22      |
| hb1202              | 164 | 36      | 32.87 | 0.09    | 0.11 | 0.48 | 0    | 32     | 33.01 | 0.02    | 0.12 | 0.28 | 0    | 22      |
| <b>MAB North</b>    |     |         |       |         |      |      |      |        |       |         |      |      |      |         |
| hb1202              | 157 | 32      | 16.07 | 2.91    | 0.24 | 1.90 | 0    | 27     | 9.28  | 1.51    | 0.30 | 1.69 | 0    | 22      |
| hb1202              | 157 | 32      | 32.14 | -0.26   | 0.16 | 0.34 | 0    | 27     | 32.85 | -0.49   | 0.17 | 0.45 | 0    | 22      |
| <b>MAB South</b>    |     |         |       |         |      |      |      |        |       |         |      |      |      |         |
| hb1202              | 155 | 37      | 19.23 | 2.38    | 0.22 | 1.25 | 1    | 35     | 12.49 | 3.12    | 0.24 | 1.22 | 1    | 22      |
| hb1202              | 155 | 37      | 32.27 | 0.13    | 0.17 | 0.53 | 1    | 35     | 33.19 | 0.00    | 0.14 | 0.41 | 1    | 22      |

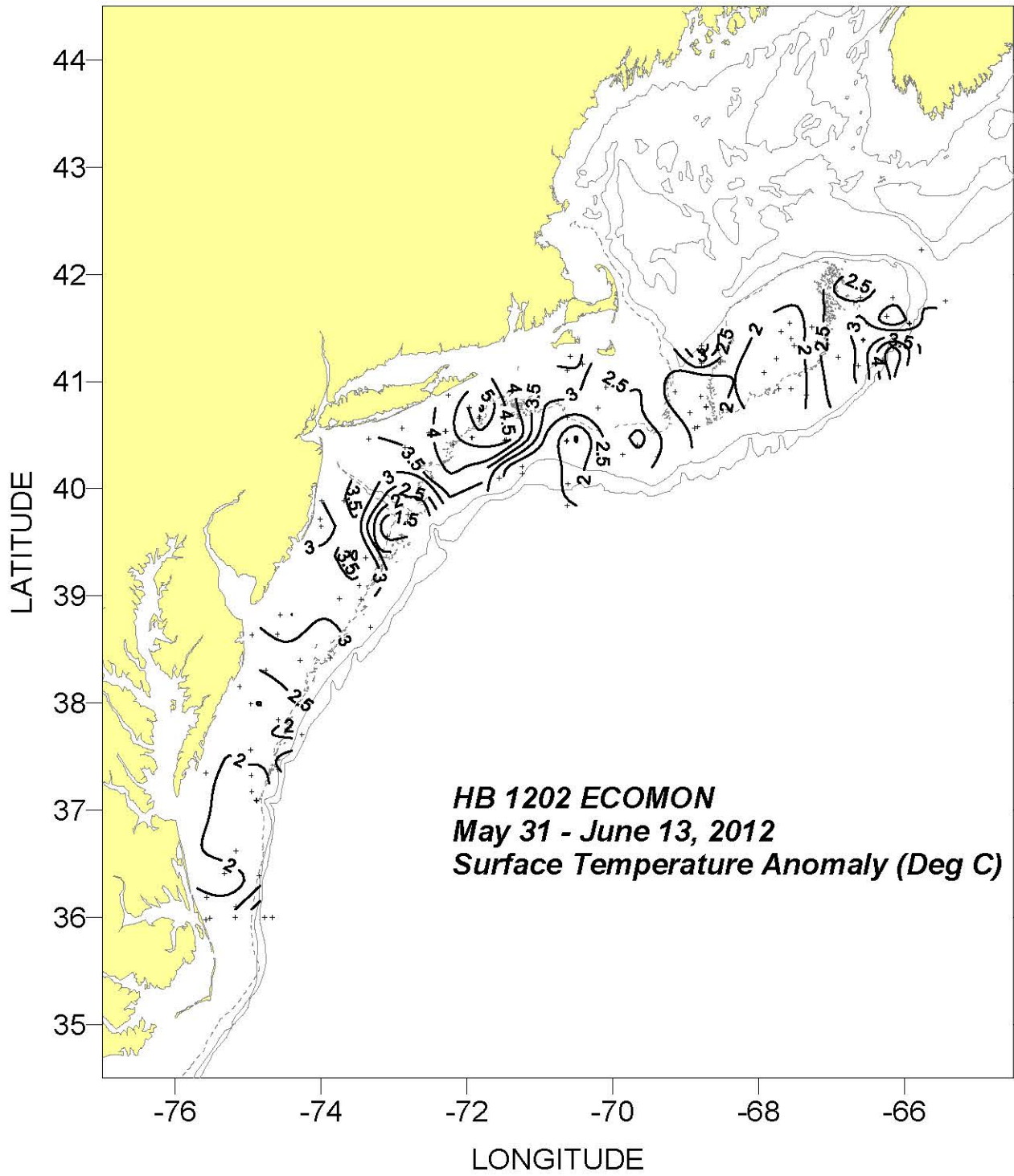
"CRUISE", the code name for a cruise: "CD", the calendar mid-date of all the stations within a region for a cruise:

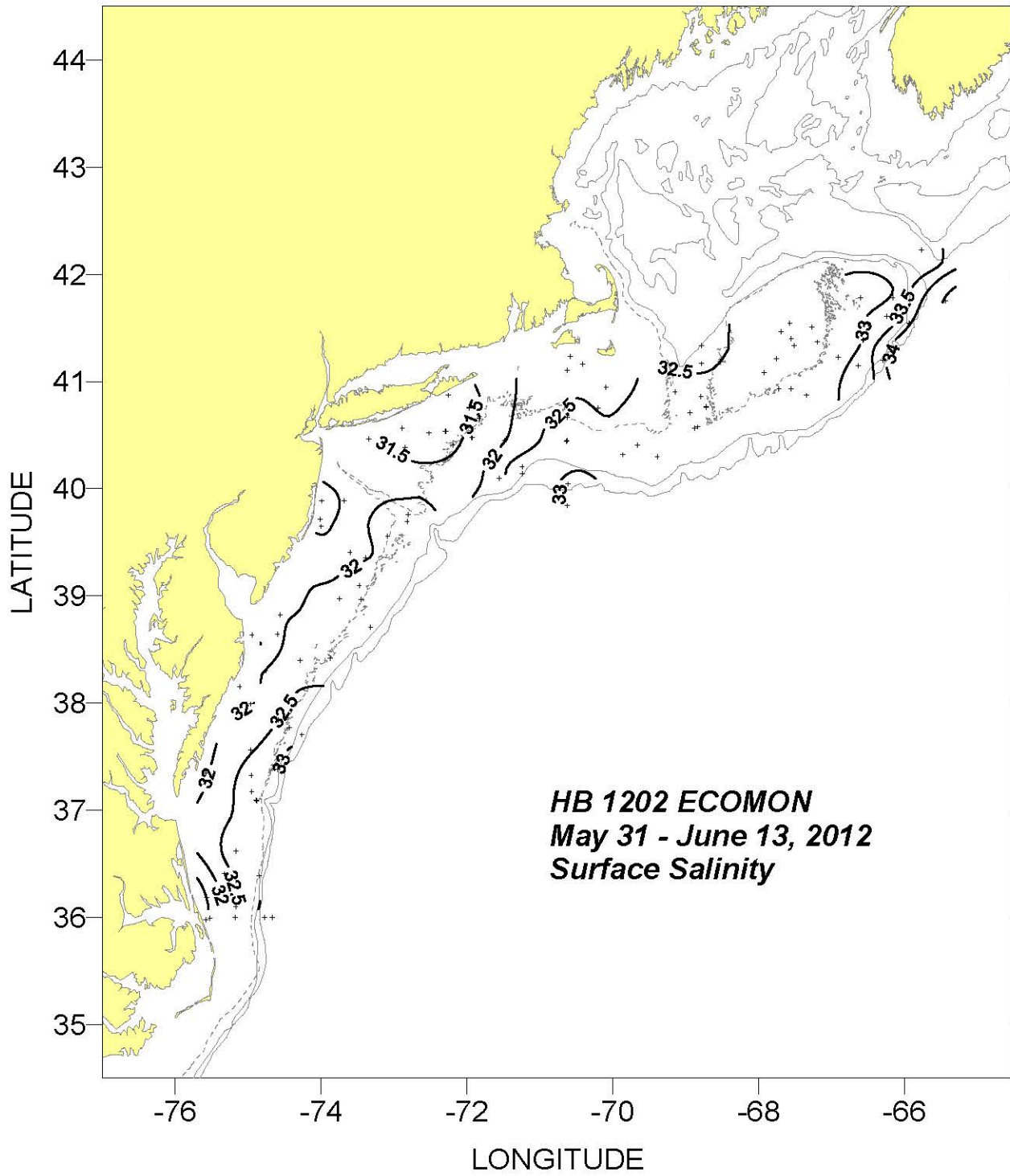
"#obs", the number of observations include in each average: "T/S", the areal average temp/salt: "Anomaly", the areal average temp/salt anomaly:

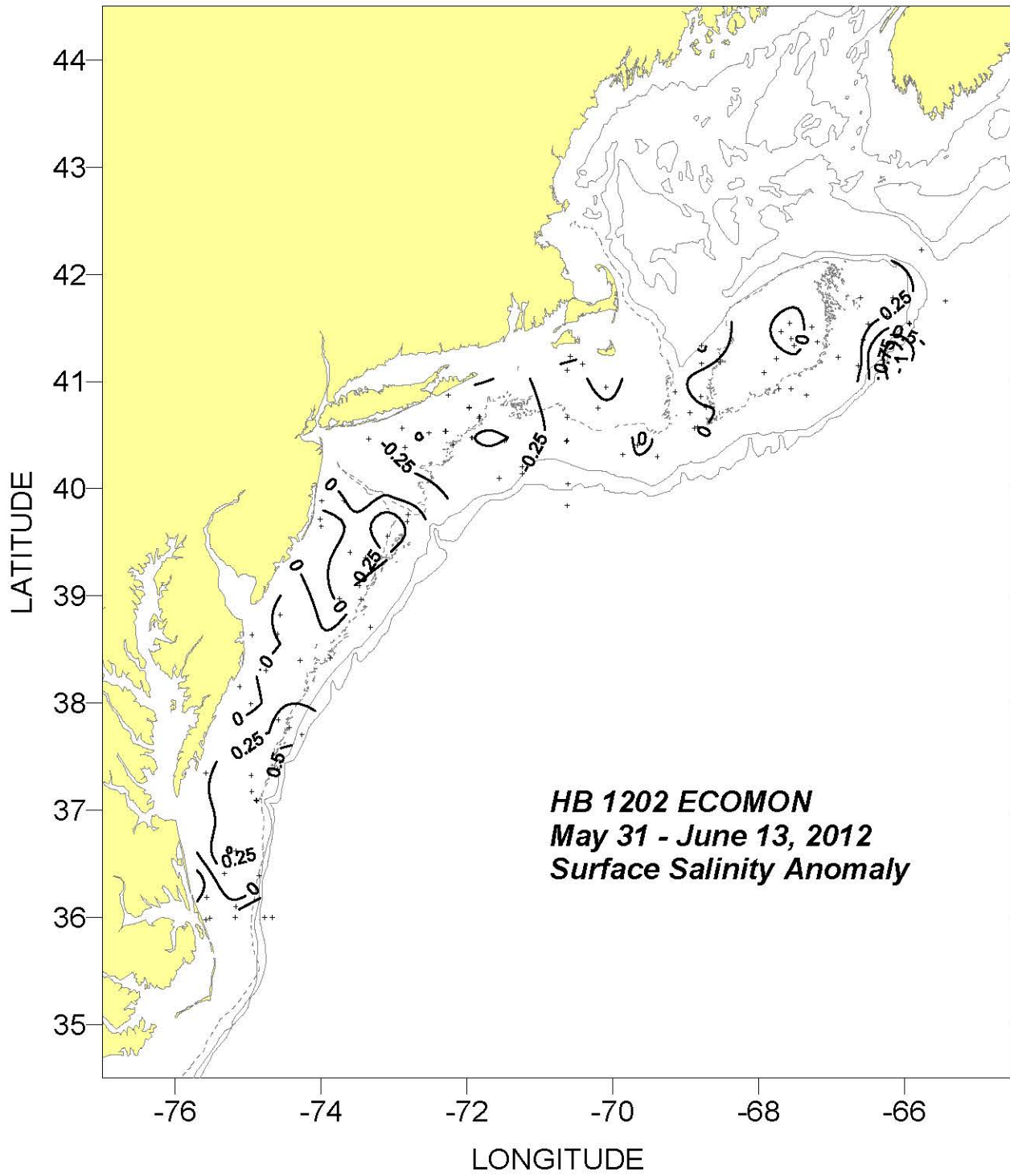
"SDV1", the standard deviation associated with the average temp/salt anomaly: "SDV2", the standard deviation of the individual anomalies from which the average anomaly was derived  
"Flag", a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.

"Purpose", 2 digit code assigned by DMS to identify a unique NEFSC program survey.

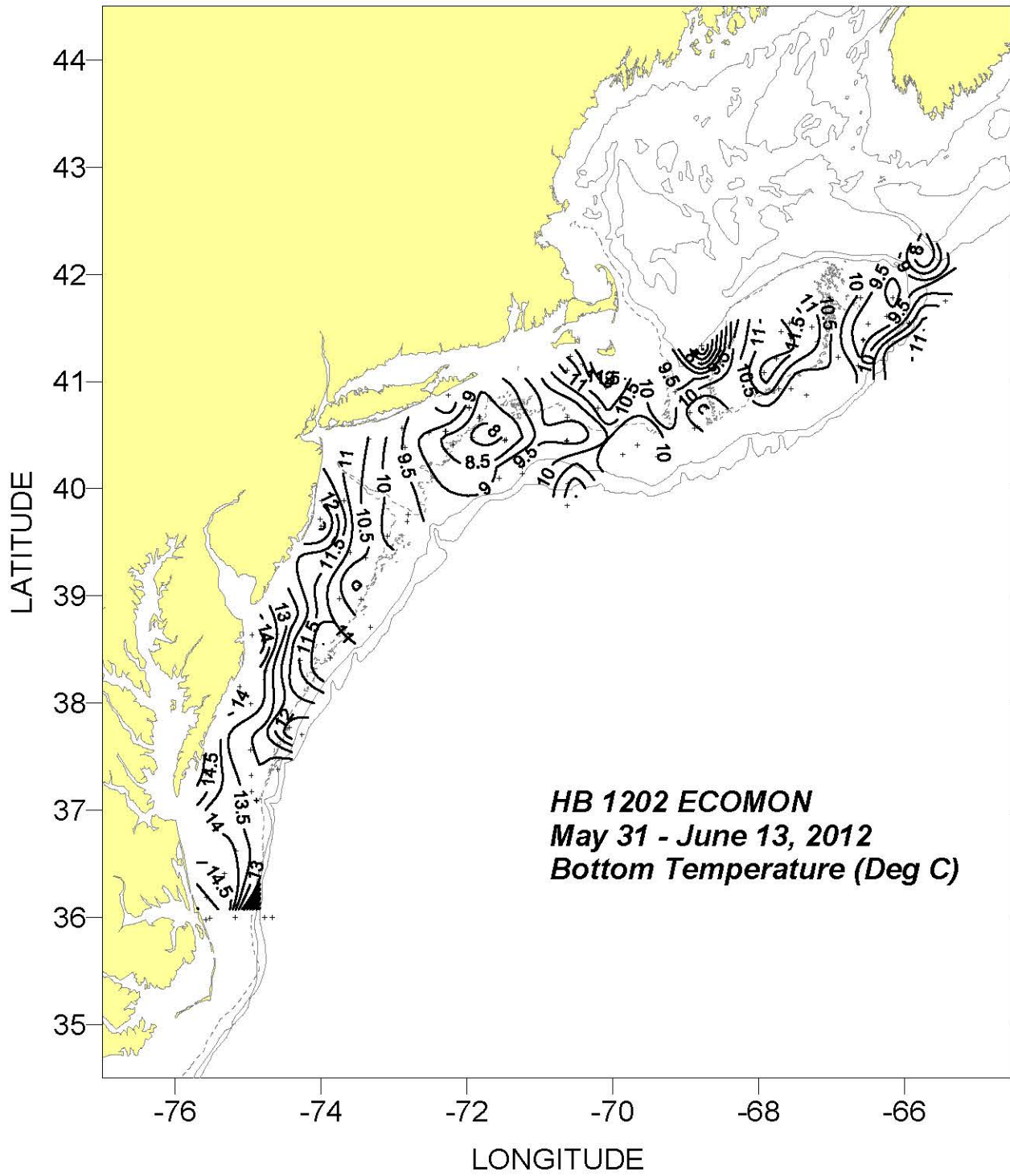


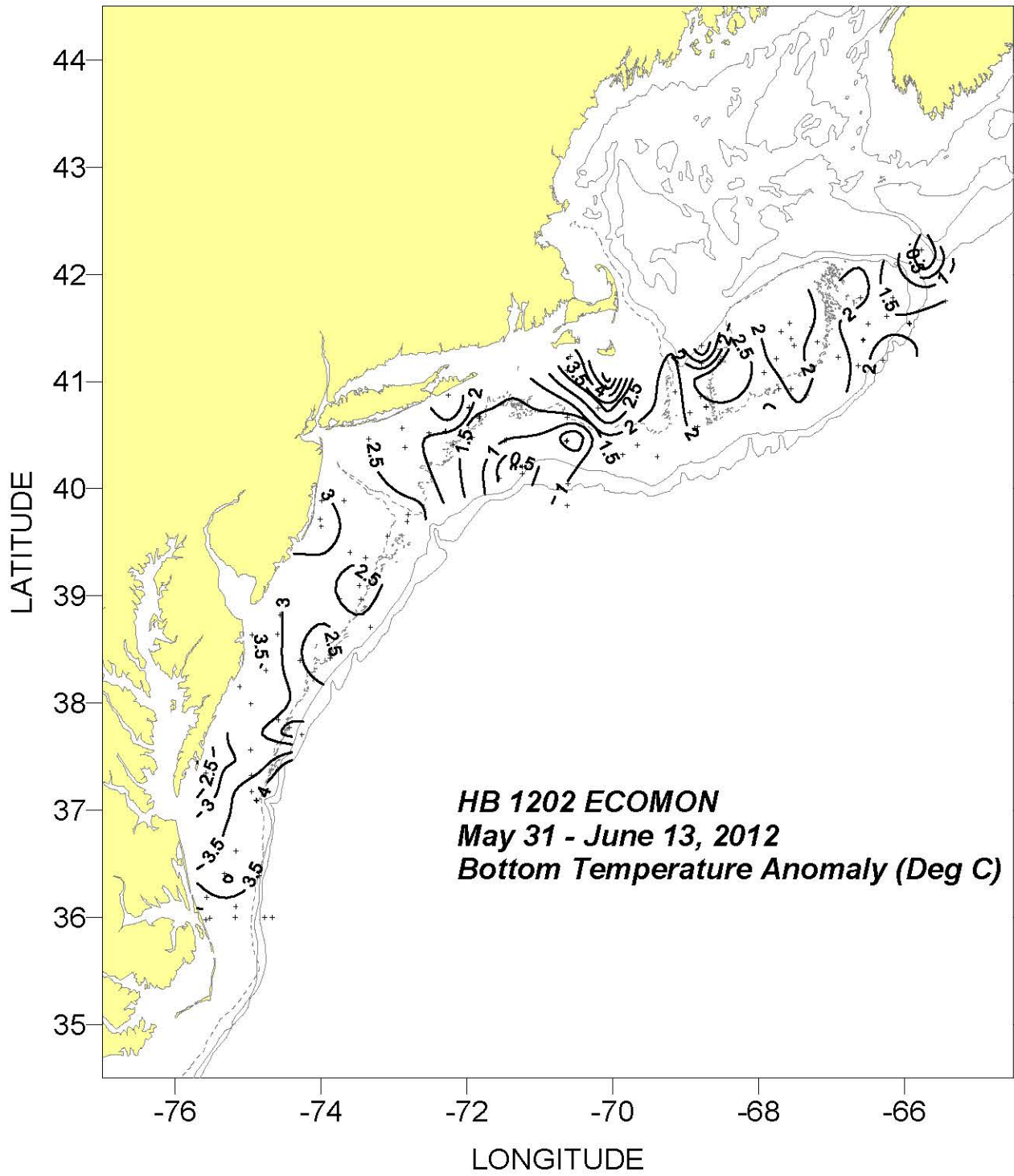


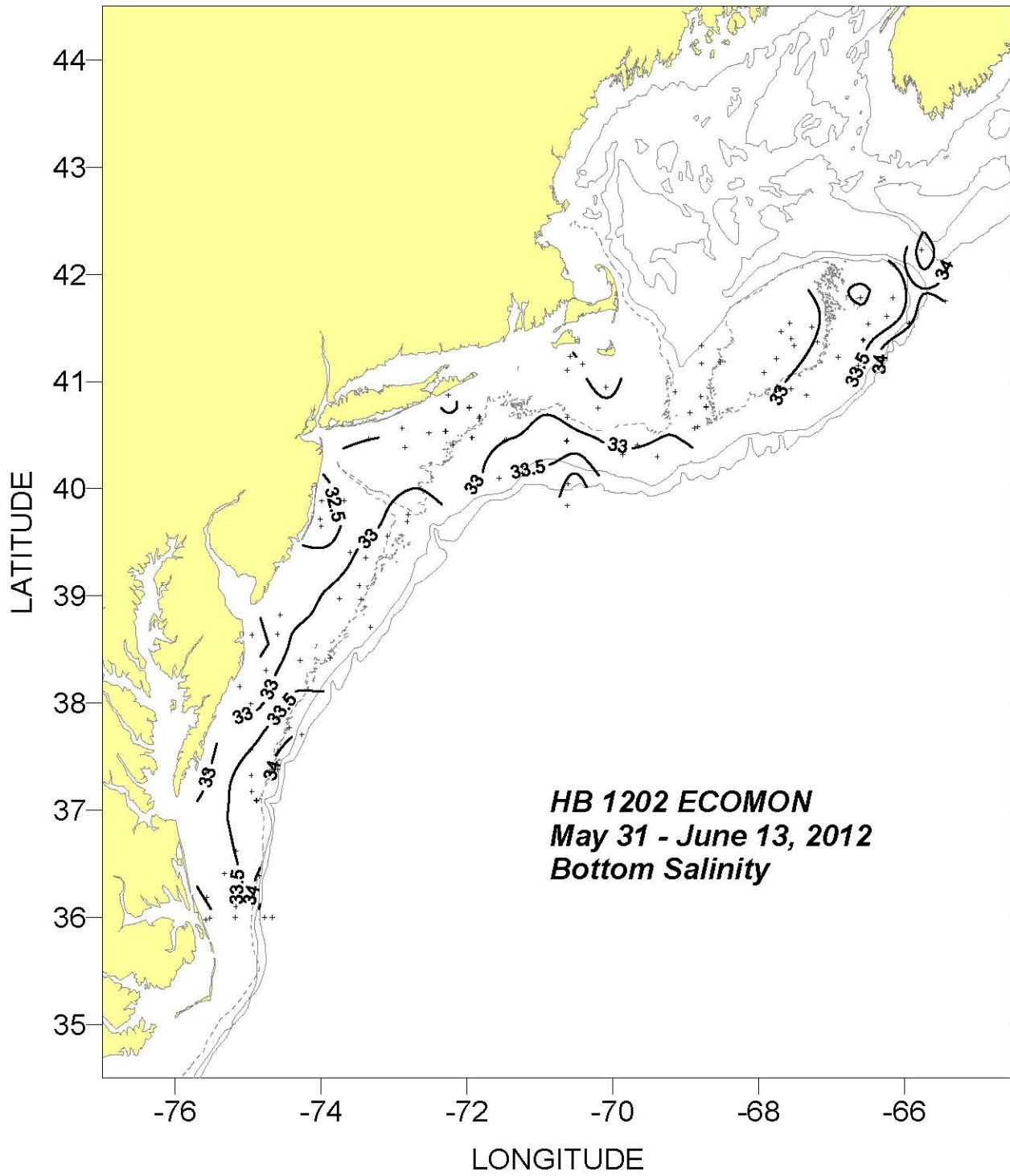


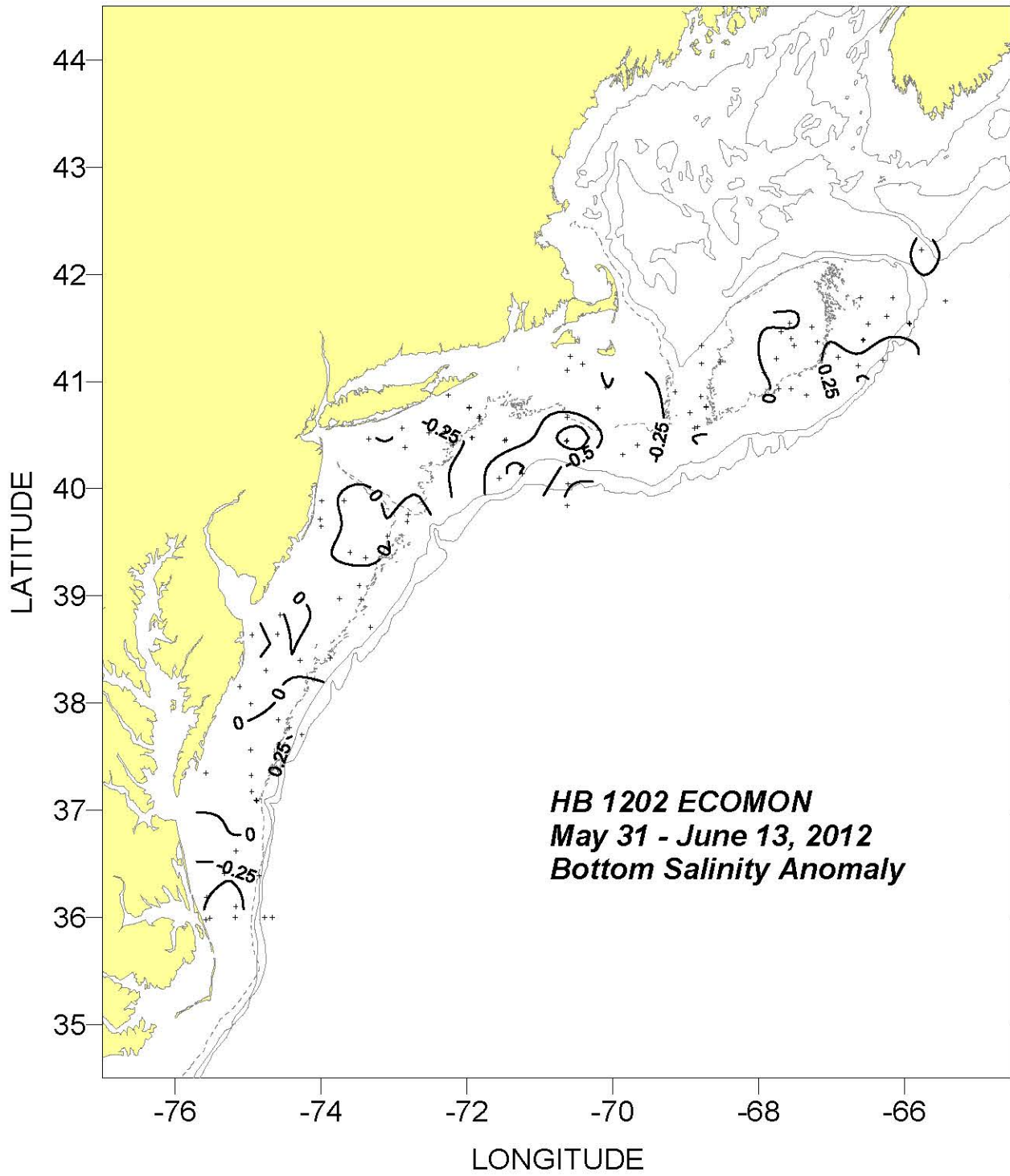












**HB1202 ECOMON**  
**May 31 - June 13,2012**

| Cast #   | Sta #     | Lat (deg N)    | Long (deg W)   | Day      | Mo       | Year        | Time (GMT)   | Btm Depth  | Surface Temp | Surface Salt | Deepest Observed Temp | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|----------|-----------|----------------|----------------|----------|----------|-------------|--------------|------------|--------------|--------------|-----------------------|-----------------------|--------------------|----------------------|
| 1        | 1         | 4027.50        | 7127.90        | 31       | 5        | 2012        | 18:19        | 74         | 18.0         | 32.0         | 7.5                   | 32.9                  | 5                  | B                    |
| 2        | 1         | 4027.00        | 7128.80        | 31       | 5        | 2012        | 18:46        | 75         | 18.2         | 32.0         | 7.6                   | 32.9                  | 6                  | B                    |
| 3        | 1         | 4027.10        | 7128.70        | 31       | 5        | 2012        | 19:15        | 75         | 18.4         | 32.0         | 7.5                   | 32.9                  | 10                 | B                    |
| 6        | 2         | 4039.50        | 7150.10        | 1        | 6        | 2012        | 2:40         | 55         | 18.4         | 31.4         | 8.0                   | 32.7                  | 5                  | B                    |
| 4        | 2         | 4040.30        | 7149.60        | 31       | 5        | 2012        | 21:40        | 57         | 18.9         | 31.4         | 8.0                   | 32.7                  | 9                  | B                    |
| 5        | 2         | 4040.20        | 7149.40        | 31       | 5        | 2012        | 22:27        | 56         | 18.8         | 31.4         | 8.1                   | 32.7                  | 7                  | B                    |
| 7        | 3         | 4045.40        | 7157.90        | 1        | 6        | 2012        | 3:37         | 48         | 18.0         | 31.3         | 8.5                   | 32.6                  | 5                  | B                    |
| 8        | 3         | 4045.30        | 7157.90        | 1        | 6        | 2012        | 4:01         | 48         | 17.9         | 31.3         | 8.5                   | 32.6                  | 4                  | B                    |
| 9        | 3         | 4045.50        | 7158.00        | 1        | 6        | 2012        | 4:19         | 48         | 17.7         | 31.3         | 8.5                   | 32.6                  | 6                  | B                    |
| 10       | 4         | 4028.50        | 7155.60        | 1        | 6        | 2012        | 7:07         | 69         | 17.9         | 31.8         | 7.2                   | 32.7                  | 7                  | B                    |
| 11       | 4         | 4028.50        | 7155.60        | 1        | 6        | 2012        | 7:33         | 69         | 17.7         | 31.8         | 7.2                   | 32.7                  | 5                  | B                    |
| 12       | 4         | 4028.50        | 7155.90        | 1        | 6        | 2012        | 7:49         | 69         | 17.8         | 31.8         | 7.2                   | 32.7                  | 5                  | B                    |
| 13       | 5         | 4024.30        | 7211.70        | 1        | 6        | 2012        | 9:10         | 62         | 18.1         | 31.6         | 8.2                   | 32.8                  | 6                  | B                    |
| 14       | 6         | 4032.20        | 7217.20        | 1        | 6        | 2012        | 10:08        | 53         | 17.3         | 31.1         | 8.3                   | 32.8                  | 5                  | B                    |
| 15       | 6         | 4032.30        | 7217.50        | 1        | 6        | 2012        | 10:22        | 53         | 17.3         | 31.2         | 8.3                   | 32.8                  | 5                  | B                    |
| 16       | 6         | 4032.10        | 7217.70        | 1        | 6        | 2012        | 10:40        | 54         | 17.2         | 31.1         | 8.3                   | 32.8                  | 7                  | B                    |
| 17       | 7         | 4052.30        | 7215.20        | 1        | 6        | 2012        | 12:36        | 26         | 15.5         | 30.5         | 13.0                  | 31.6                  | 7                  | B                    |
| 18       | 8         | 4031.10        | 7231.30        | 1        | 6        | 2012        | 14:46        | 45         | 16.4         | 30.6         | 8.6                   | 32.8                  | 3                  | B                    |
| 19       | 9         | 4023.20        | 7251.00        | 1        | 6        | 2012        | 16:19        | 47         | 17.3         | 31.3         | 8.7                   | 32.8                  | 4                  | B                    |
| 20       | 10        | 4033.80        | 7253.10        | 1        | 6        | 2012        | 17:25        | 34         | 16.8         | 30.9         | 10.2                  | 32.0                  | 6                  | B                    |
| 21       | 11        | 4027.90        | 7320.80        | 1        | 6        | 2012        | 19:21        | 28         | 17.7         | 31.4         | 11.5                  | 32.1                  | 6                  | B                    |
| 22       | 12        | 3953.20        | 7341.20        | 1        | 6        | 2012        | 22:49        | 33         | 19.7         | 31.5         | 10.2                  | 32.9                  | 5                  | B                    |
| 23       | 13        | 3953.10        | 7359.40        | 2        | 6        | 2012        | 0:19         | 20         | 18.0         | 31.3         | 12.2                  | 32.2                  | 2                  | B                    |
| <b>1</b> | <b>14</b> | <b>3942.90</b> | <b>7400.70</b> | <b>2</b> | <b>6</b> | <b>2012</b> | <b>1:47</b>  | <b>21</b>  | <b>17.5</b>  | <b>31.4</b>  | <b>15.0</b>           | <b>31.7</b>           | <b>3</b>           | <b>W</b>             |
| 24       | 15        | 3938.80        | 7359.80        | 2        | 6        | 2012        | 2:22         | 25         | 17.5         | 31.4         | 12.9                  | 32.1                  | 8                  | B                    |
| 25       | 16        | 3924.30        | 7336.20        | 2        | 6        | 2012        | 4:39         | 40         | 20.1         | 31.6         | 10.8                  | 33.0                  | 4                  | B                    |
| <b>2</b> | <b>17</b> | <b>3921.20</b> | <b>7323.40</b> | <b>2</b> | <b>6</b> | <b>2012</b> | <b>5:58</b>  | <b>49</b>  | <b>19.4</b>  | <b>32.1</b>  | <b>10.2</b>           | <b>33.0</b>           | <b>1</b>           | <b>W</b>             |
| 26       | 18        | 3905.70        | 7328.50        | 2        | 6        | 2012        | 7:39         | 57         | 19.0         | 32.5         | 9.8                   | 33.1                  | 2                  | B                    |
| 27       | 19        | 3858.00        | 7327.20        | 2        | 6        | 2012        | 8:38         | 59         | 18.5         | 32.3         | 9.4                   | 33.2                  | 4                  | B                    |
| 28       | 20        | 3842.40        | 7319.10        | 2        | 6        | 2012        | 10:16        | 82         | 18.9         | 32.5         | 12.1                  | 34.5                  | 6                  | B                    |
| 29       | 21        | 3825.00        | 7352.40        | 2        | 6        | 2012        | 13:06        | 64         | 18.5         | 32.6         | 9.1                   | 33.3                  | 6                  | B                    |
| 30       | 22        | 3823.90        | 7417.10        | 2        | 6        | 2012        | 14:55        | 51         | 19.1         | 32.6         | 10.7                  | 33.3                  | 6                  | B                    |
| <b>3</b> | <b>23</b> | <b>3750.70</b> | <b>7435.20</b> | <b>2</b> | <b>6</b> | <b>2012</b> | <b>17:53</b> | <b>53</b>  | <b>20.1</b>  | <b>32.3</b>  | <b>11.6</b>           | <b>33.5</b>           | <b>3</b>           | <b>W</b>             |
| 31       | 24        | 3746.20        | 7426.30        | 2        | 6        | 2012        | 19:01        | 63         | 18.5         | 32.6         | 10.0                  | 33.6                  | 3                  | B                    |
| <b>4</b> | <b>25</b> | <b>3742.20</b> | <b>7415.70</b> | <b>2</b> | <b>6</b> | <b>2012</b> | <b>20:13</b> | <b>105</b> | <b>21.1</b>  | <b>34.0</b>  | <b>15.0</b>           | <b>36.0</b>           | <b>4</b>           | <b>W</b>             |
| 32       | 26        | 3723.10        | 7435.40        | 2        | 6        | 2012        | 22:53        | 87         | 21.8         | 34.5         | 14.4                  | 35.4                  | 4                  | B                    |

**HB1202 ECOMON**  
**May 31 - June 13,2012**

| Cast #    | Sta #     | Lat (deg N)    | Long (deg W)   | Day       | Mo       | Year        | Time (GMT)   | Btm Depth   | Surface Temp | Surface Salt | Deepest Observed Temp | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|-----------|-----------|----------------|----------------|-----------|----------|-------------|--------------|-------------|--------------|--------------|-----------------------|-----------------------|--------------------|----------------------|
| 33        | 27        | 3719.40        | 7457.50        | 3         | 6        | 2012        | 0:43         | 43          | 19.8         | 32.8         | 12.0                  | 33.4                  | 4                  | B                    |
| 34        | 28        | 3710.60        | 7457.00        | 3         | 6        | 2012        | 1:45         | 43          | 20.2         | 32.7         | 15.0                  | 34.2                  | 2                  | B                    |
| 35        | 29        | 3705.70        | 7453.20        | 3         | 6        | 2012        | 2:25         | 52          | 19.6         | 32.8         | 12.9                  | 33.9                  | 4                  | B                    |
| 36        | 29        | 3705.40        | 7452.80        | 3         | 6        | 2012        | 2:37         | 55          | 19.7         | 32.8         | 12.8                  | 33.8                  | 3                  | W                    |
| 37        | 30        | 3623.10        | 7450.70        | 3         | 6        | 2012        | 6:04         | 75          | 19.4         | 32.9         | 12.4                  | 34.2                  | 6                  | B                    |
| <b>5</b>  | <b>31</b> | <b>3600.10</b> | <b>7440.10</b> | <b>3</b>  | <b>6</b> | <b>2012</b> | <b>8:22</b>  | <b>1253</b> | <b>19.4</b>  | <b>33.8</b>  | <b>5.9</b>            | <b>35.0</b>           | <b>751</b>         | <b>W</b>             |
| <b>6</b>  | <b>32</b> | <b>3600.10</b> | <b>7446.40</b> | <b>3</b>  | <b>6</b> | <b>2012</b> | <b>9:43</b>  | <b>423</b>  | <b>19.1</b>  | <b>33.2</b>  | <b>7.2</b>            | <b>35.1</b>           | <b>5</b>           | <b>W</b>             |
| 38        | 33        | 3606.00        | 7510.20        | 3         | 6        | 2012        | 14:40        | 38          | 20.0         | 32.5         | 14.6                  | 33.2                  | 6                  | B                    |
| <b>7</b>  | <b>34</b> | <b>3559.90</b> | <b>7510.50</b> | <b>3</b>  | <b>6</b> | <b>2012</b> | <b>15:38</b> | <b>36</b>   | <b>20.4</b>  | <b>31.8</b>  | <b>15.1</b>           | <b>33.1</b>           | <b>5</b>           | <b>W</b>             |
| <b>8</b>  | <b>35</b> | <b>3559.60</b> | <b>7531.30</b> | <b>3</b>  | <b>6</b> | <b>2012</b> | <b>17:53</b> | <b>23</b>   | <b>21.0</b>  | <b>31.0</b>  | <b>16.2</b>           | <b>32.6</b>           | <b>3</b>           | <b>W</b>             |
| 39        | 36        | 3558.80        | 7534.50        | 3         | 6        | 2012        | 18:28        | 22          | 20.7         | 31.0         | 16.1                  | 32.7                  | 3                  | B                    |
| 40        | 37        | 3611.30        | 7534.10        | 3         | 6        | 2012        | 20:01        | 27          | 21.1         | 30.5         | 15.6                  | 32.9                  | 4                  | B                    |
| 41        | 38        | 3624.40        | 7519.40        | 3         | 6        | 2012        | 22:13        | 35          | 20.9         | 32.5         | 14.9                  | 33.0                  | 4                  | B                    |
| 42        | 39        | 3637.20        | 7509.90        | 4         | 6        | 2012        | 0:01         | 36          | 20.2         | 32.8         | 14.3                  | 33.5                  | 5                  | B                    |
| 43        | 40        | 3720.90        | 7534.50        | 4         | 6        | 2012        | 5:24         | 15          | 20.4         | 31.4         | 16.7                  | 32.3                  | 4                  | B                    |
| 44        | 41        | 3733.60        | 7458.00        | 4         | 6        | 2012        | 8:55         | 34          | 20.0         | 32.1         | 12.6                  | 33.5                  | 5                  | B                    |
| <b>9</b>  | <b>42</b> | <b>3759.50</b> | <b>7457.60</b> | <b>4</b>  | <b>6</b> | <b>2012</b> | <b>11:53</b> | <b>26</b>   | <b>19.4</b>  | <b>31.9</b>  | <b>14.3</b>           | <b>32.6</b>           | <b>2</b>           | <b>W</b>             |
| 45        | 43        | 3809.30        | 7507.00        | 4         | 6        | 2012        | 13:43        | 19          | 19.5         | 31.0         | 16.4                  | 31.9                  | 3                  | B                    |
| 46        | 44        | 3818.40        | 7445.40        | 4         | 6        | 2012        | 16:01        | 23          | 19.7         | 32.0         | 13.8                  | 32.7                  | 3                  | B                    |
| 47        | 45        | 3838.00        | 7456.80        | 4         | 6        | 2012        | 18:52        | 19          | 19.3         | 30.7         | 17.5                  | 31.4                  | 3                  | B                    |
| 48        | 46        | 3838.40        | 7435.90        | 4         | 6        | 2012        | 20:55        | 33          | 19.6         | 32.0         | 12.4                  | 33.0                  | 5                  | B                    |
| 49        | 47        | 3849.40        | 7433.40        | 4         | 6        | 2012        | 22:28        | 26          | 19.9         | 31.9         | 13.7                  | 32.7                  | 6                  | B                    |
| 50        | 48        | 3858.50        | 7344.60        | 5         | 6        | 2012        | 3:37         | 47          | 19.1         | 32.0         | 10.7                  | 33.1                  | 3                  | B                    |
| 51        | 49        | 3933.40        | 7305.10        | 5         | 6        | 2012        | 10:13        | 51          | 15.9         | 32.4         | 9.7                   | 33.0                  | 4                  | B                    |
| 52        | 50        | 3941.70        | 7249.20        | 5         | 6        | 2012        | 12:18        | 74          | 15.2         | 32.4         | 9.6                   | 33.5                  | 3                  | B                    |
| 53        | 51        | 3945.50        | 7248.10        | 5         | 6        | 2012        | 12:58        | 72          | 14.8         | 32.4         | 9.3                   | 33.3                  | 4                  | B                    |
| 54        | 52        | 4005.90        | 7133.10        | 5         | 6        | 2012        | 20:37        | 91          | 13.6         | 32.7         | 9.6                   | 33.8                  | 4                  | B                    |
| 55        | 53        | 4008.50        | 7114.20        | 5         | 6        | 2012        | 22:38        | 124         | 14.4         | 33.0         | 10.7                  | 34.3                  | 3                  | B                    |
| 56        | 54        | 4012.20        | 7114.50        | 5         | 6        | 2012        | 23:21        | 103         | 14.7         | 33.1         | 9.7                   | 33.9                  | 4                  | B                    |
| 57        | 55        | 4114.00        | 7034.90        | 9         | 6        | 2012        | 22:30        | 31          | 16.6         | 32.1         | 13.0                  | 32.3                  | 5                  | B                    |
| <b>10</b> | <b>56</b> | <b>4106.30</b> | <b>7037.20</b> | <b>9</b>  | <b>6</b> | <b>2012</b> | <b>23:32</b> | <b>44</b>   | <b>14.9</b>  | <b>32.5</b>  | <b>10.3</b>           | <b>32.7</b>           | <b>5</b>           | <b>W</b>             |
| 58        | 57        | 4109.80        | 7024.80        | 10        | 6        | 2012        | 0:43         | 38          | 16.2         | 32.3         | 12.4                  | 32.4                  | 4                  | B                    |
| 59        | 58        | 4056.90        | 7005.40        | 10        | 6        | 2012        | 2:58         | 21          | 13.9         | 32.1         | 13.9                  | 32.1                  | 3                  | B                    |
| 60        | 59        | 4045.10        | 7012.20        | 10        | 6        | 2012        | 4:31         | 44          | 14.6         | 32.5         | 10.8                  | 32.6                  | 5                  | B                    |
| <b>11</b> | <b>60</b> | <b>4040.10</b> | <b>7037.30</b> | <b>10</b> | <b>6</b> | <b>2012</b> | <b>6:52</b>  | <b>63</b>   | <b>15.5</b>  | <b>32.7</b>  | <b>8.8</b>            | <b>32.8</b>           | <b>6</b>           | <b>W</b>             |

**HB1202 ECOMON**  
**May 31 - June 13,2012**

| Cast #    | Sta #     | Lat (deg N)    | Long (deg W)   | Day       | Mo       | Year        | Time (GMT)   | Btm Depth   | Surface Temp | Surface Salt | Deepest Observed Temp | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|-----------|-----------|----------------|----------------|-----------|----------|-------------|--------------|-------------|--------------|--------------|-----------------------|-----------------------|--------------------|----------------------|
| 61        | 61        | 4026.90        | 7037.70        | 10        | 6        | 2012        | 8:23         | 81          | 15.1         | 32.9         | 8.3                   | 33.1                  | 5                  | B                    |
| 62        | 61        | 4026.40        | 7038.00        | 10        | 6        | 2012        | 8:45         | 82          | 14.4         | 33.0         | 8.1                   | 33.0                  | 24                 | W                    |
| <b>12</b> | <b>62</b> | <b>4002.60</b> | <b>7036.60</b> | <b>10</b> | <b>6</b> | <b>2012</b> | <b>11:10</b> | <b>157</b>  | <b>15.6</b>  | <b>33.4</b>  | <b>13.0</b>           | <b>35.6</b>           | <b>6</b>           | <b>W</b>             |
| <b>13</b> | <b>63</b> | <b>3950.50</b> | <b>7037.60</b> | <b>10</b> | <b>6</b> | <b>2012</b> | <b>12:43</b> | <b>779</b>  | <b>18.7</b>  | <b>34.3</b>  | <b>5.9</b>            | <b>35.0</b>           | <b>277</b>         | <b>W</b>             |
| 63        | 64        | 4019.00        | 6951.50        | 10        | 6        | 2012        | 18:07        | 83          | 15.3         | 32.9         | 8.6                   | 33.2                  | 3                  | B                    |
| 64        | 65        | 4024.40        | 6939.80        | 10        | 6        | 2012        | 21:04        | 70          | 15.6         | 32.8         | 9.7                   | 32.9                  | 4                  | B                    |
| 65        | 66        | 4017.90        | 6923.30        | 10        | 6        | 2012        | 22:47        | 81          | 14.9         | 32.9         | 10.1                  | 33.9                  | 3                  | B                    |
| 66        | 67        | 4034.60        | 6850.10        | 11        | 6        | 2012        | 2:16         | 68          | 13.4         | 32.8         | 10.3                  | 32.9                  | 3                  | B                    |
| 67        | 68        | 4042.60        | 6856.20        | 11        | 6        | 2012        | 3:31         | 70          | 12.7         | 32.8         | 11.0                  | 32.8                  | 4                  | B                    |
| 68        | 69        | 4045.60        | 6842.90        | 11        | 6        | 2012        | 5:00         | 62          | 11.5         | 32.8         | 11.4                  | 32.8                  | 5                  | B                    |
| 69        | 69        | 4046.00        | 6843.20        | 11        | 6        | 2012        | 5:13         | 65          | 11.5         | 32.8         | 11.4                  | 32.8                  | 43                 | W                    |
| <b>14</b> | <b>70</b> | <b>4055.90</b> | <b>6743.10</b> | <b>11</b> | <b>6</b> | <b>2012</b> | <b>10:10</b> | <b>65</b>   | <b>12.1</b>  | <b>32.9</b>  | <b>9.5</b>            | <b>32.9</b>           | <b>5</b>           | <b>W</b>             |
| 70        | 71        | 4056.00        | 6733.00        | 11        | 6        | 2012        | 11:10        | 73          | 12.0         | 32.9         | 9.2                   | 33.0                  | 6                  | B                    |
| 71        | 72        | 4052.30        | 6720.30        | 11        | 6        | 2012        | 12:30        | 87          | 12.9         | 32.9         | 10.9                  | 33.8                  | 6                  | B                    |
| 72        | 73        | 4113.70        | 6654.40        | 11        | 6        | 2012        | 16:00        | 72          | 12.4         | 32.9         | 10.6                  | 33.4                  | 4                  | B                    |
| 73        | 73        | 4113.60        | 6654.40        | 11        | 6        | 2012        | 16:25        | 72          | 12.6         | 32.9         | 10.5                  | 33.4                  | 4                  | B                    |
| 74        | 74        | 4109.00        | 6638.00        | 11        | 6        | 2012        | 18:28        | 86          | 12.5         | 32.9         | 9.6                   | 33.6                  | 4                  | B                    |
| 75        | 74        | 4109.00        | 6638.00        | 11        | 6        | 2012        | 18:52        | 86          | 12.6         | 32.9         | 9.6                   | 33.6                  | 4                  | B                    |
| 76        | 75        | 4112.00        | 6617.30        | 11        | 6        | 2012        | 21:34        | 180         | 18.5         | 35.1         | 12.9                  | 35.3                  | 8                  | B                    |
| 77        | 75        | 4112.00        | 6617.50        | 11        | 6        | 2012        | 22:12        | 150         | 18.4         | 35.1         | 12.7                  | 35.2                  | 7                  | B                    |
| 78        | 76        | 4132.20        | 6555.60        | 12        | 6        | 2012        | 1:17         | 221         | 18.4         | 35.0         | 12.9                  | 35.4                  | 17                 | B                    |
| 79        | 76        | 4132.50        | 6555.90        | 12        | 6        | 2012        | 1:49         | 200         | 18.5         | 35.0         | 13.3                  | 35.1                  | 65                 | W                    |
| <b>15</b> | <b>77</b> | <b>4145.00</b> | <b>6526.00</b> | <b>12</b> | <b>6</b> | <b>2012</b> | <b>4:41</b>  | <b>1983</b> | <b>18.4</b>  | <b>35.2</b>  | <b>6.7</b>            | <b>35.1</b>           | <b>1475</b>        | <b>W</b>             |
| <b>16</b> | <b>78</b> | <b>4213.60</b> | <b>6545.70</b> | <b>12</b> | <b>6</b> | <b>2012</b> | <b>8:28</b>  | <b>228</b>  | <b>12.4</b>  | <b>32.9</b>  | <b>6.8</b>            | <b>35.0</b>           | <b>4</b>           | <b>W</b>             |
| 80        | 79        | 4146.90        | 6609.60        | 12        | 6        | 2012        | 12:10        | 90          | 11.9         | 32.8         | 8.4                   | 33.0                  | 5                  | B                    |
| 81        | 80        | 4136.40        | 6614.40        | 12        | 6        | 2012        | 13:28        | 96          | 11.1         | 32.9         | 8.6                   | 33.0                  | 5                  | B                    |
| 82        | 81        | 4146.90        | 6635.90        | 12        | 6        | 2012        | 15:51        | 71          | 10.8         | 32.8         | 10.1                  | 32.8                  | 3                  | B                    |
| 83        | 82        | 4132.40        | 6629.80        | 12        | 6        | 2012        | 17:38        | 90          | 12.7         | 32.9         | 9.0                   | 32.9                  | 5                  | B                    |
| 84        | 82        | 4132.40        | 6629.70        | 12        | 6        | 2012        | 18:04        | 90          | 12.6         | 32.9         | 9.0                   | 32.9                  | 5                  | B                    |
| 85        | 83        | 4123.30        | 6633.80        | 12        | 6        | 2012        | 19:28        | 91          | 12.4         | 32.9         | 8.6                   | 33.0                  | 4                  | B                    |
| 86        | 83        | 4123.40        | 6633.70        | 12        | 6        | 2012        | 19:49        | 91          | 13.4         | 32.9         | 8.6                   | 33.0                  | 4                  | B                    |
| 87        | 84        | 4122.10        | 6711.40        | 12        | 6        | 2012        | 23:01        | 52          | 12.6         | 32.8         | 11.0                  | 32.8                  | 5                  | B                    |
| 88        | 85        | 4130.50        | 6716.00        | 13        | 6        | 2012        | 0:18         | 50          | 12.0         | 32.7         | 11.8                  | 32.7                  | 4                  | B                    |
| 89        | 86        | 4120.00        | 6730.50        | 13        | 6        | 2012        | 2:07         | 42          | 12.1         | 32.7         | 12.2                  | 32.7                  | 11                 | B                    |
| 90        | 87        | 4123.90        | 6732.90        | 13        | 6        | 2012        | 2:50         | 40          | 12.4         | 32.7         | 12.4                  | 32.7                  | 5                  | B                    |

**HB1202 ECOMON**  
**May 31 - June 13,2012**

| Cast #    | Sta #     | Lat (deg N)    | Long (deg W)   | Day       | Mo       | Year        | Time (GMT)   | Btm Depth | Surface Temp | Surface Salt | Deepest Observed Temp | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|-----------|-----------|----------------|----------------|-----------|----------|-------------|--------------|-----------|--------------|--------------|-----------------------|-----------------------|--------------------|----------------------|
| 91        | 88        | 4132.60        | 6734.20        | 13        | 6        | 2012        | 4:07         | 29        | 12.3         | 32.7         | 12.2                  | 32.7                  | 8                  | B                    |
| <b>17</b> | <b>89</b> | <b>4128.10</b> | <b>6741.50</b> | <b>13</b> | <b>6</b> | <b>2012</b> | <b>5:10</b>  | <b>41</b> | <b>12.4</b>  | <b>32.7</b>  | <b>12.4</b>           | <b>32.7</b>           | <b>5</b>           | <b>W</b>             |
| 92        | 90        | 4112.70        | 6745.30        | 13        | 6        | 2012        | 7:04         | 46        | 12.0         | 32.8         | 12.1                  | 32.8                  | 3                  | B                    |
| 93        | 91        | 4105.00        | 6755.20        | 13        | 6        | 2012        | 8:31         | 44        | 12.1         | 32.8         | 12.1                  | 32.8                  | 3                  | B                    |
| 94        | 92        | 4110.90        | 6831.50        | 13        | 6        | 2012        | 11:43        | 64        | 12.2         | 32.7         | 12.2                  | 32.7                  | 5                  | B                    |
| 95        | 93        | 4120.00        | 6846.70        | 13        | 6        | 2012        | 13:37        | 107       | 14.6         | 32.0         | 6.2                   | 32.8                  | 3                  | B                    |
| 96        | 93        | 4120.00        | 6846.70        | 13        | 6        | 2012        | 14:07        | 107       | 14.6         | 31.9         | 6.2                   | 32.8                  | 2                  | B                    |
| 97        | 93        | 4119.90        | 6846.70        | 13        | 6        | 2012        | 14:34        | 106       | 14.6         | 31.9         | 6.2                   | 32.8                  | 4                  | B                    |
| 98        | 94        | 4110.00        | 6846.90        | 13        | 6        | 2012        | 15:55        | 80        | 11.3         | 32.7         | 9.1                   | 32.6                  | 9                  | B                    |
| 99        | 94        | 4110.00        | 6847.10        | 13        | 6        | 2012        | 16:28        | 78        | 11.0         | 32.7         | 9.1                   | 32.6                  | 5                  | B                    |
| 100       | 94        | 4110.00        | 6847.10        | 13        | 6        | 2012        | 16:55        | 79        | 10.9         | 32.6         | 9.1                   | 32.6                  | 4                  | B                    |
| 101       | 95        | 4051.50        | 6847.20        | 13        | 6        | 2012        | 19:01        | 66        | 12.4         | 32.8         | 11.7                  | 32.8                  | 4                  | B                    |
| <b>18</b> | <b>96</b> | <b>4054.10</b> | <b>6908.70</b> | <b>13</b> | <b>6</b> | <b>2012</b> | <b>21:00</b> | <b>70</b> | <b>10.1</b>  | <b>32.4</b>  | <b>9.0</b>            | <b>32.5</b>           | <b>3</b>           | <b>W</b>             |
| 102       | 97        | 4033.80        | 6852.50        | 13        | 6        | 2012        | 23:49        | 71        | 14.1         | 32.9         | 10.2                  | 32.9                  | 5                  | B                    |

**data in bold are from 9/11+ CTD (s/n 0420)**

Deployment codes: B=bongo cast; W=water sampling cast; and V=vertical cast