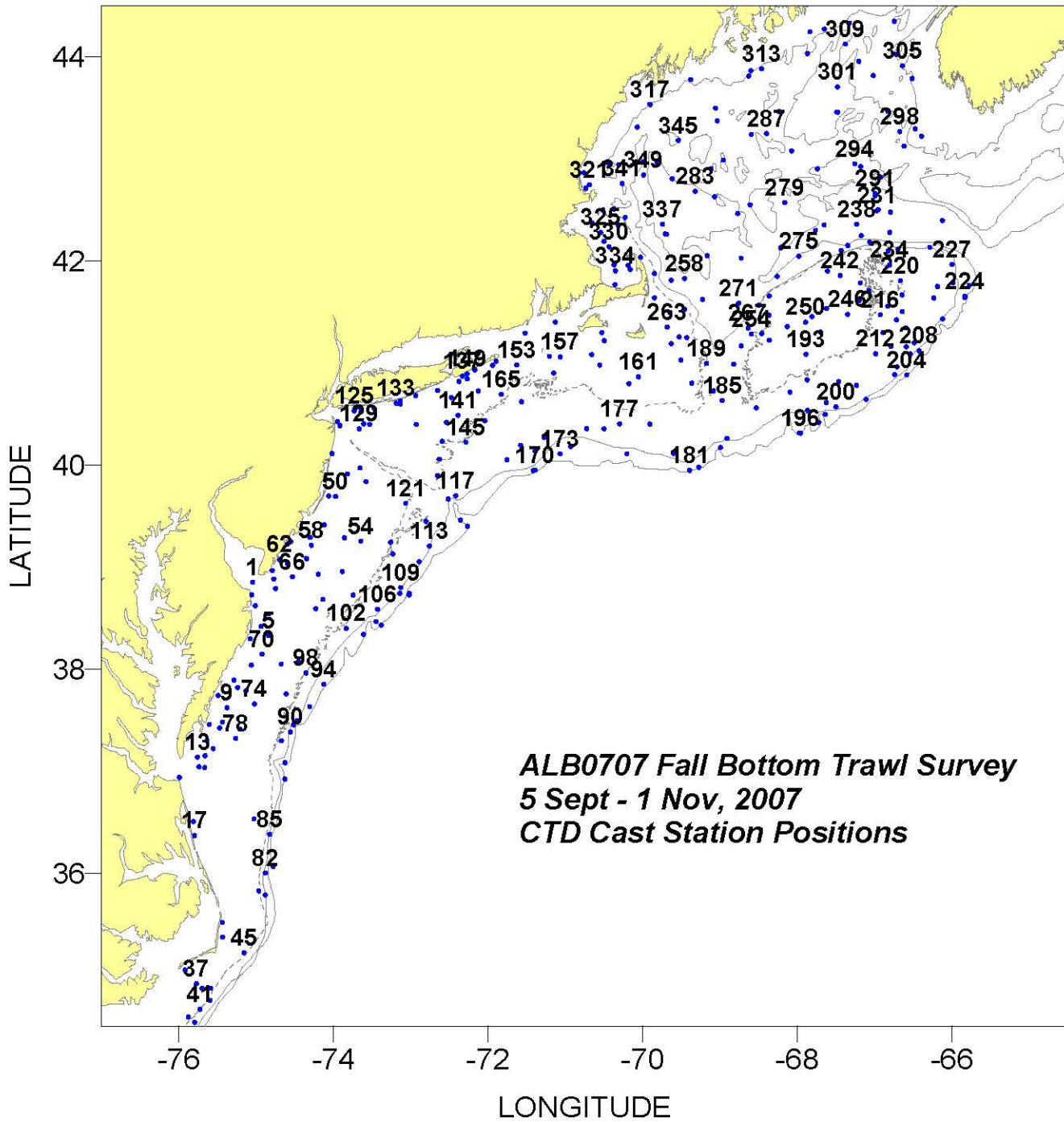
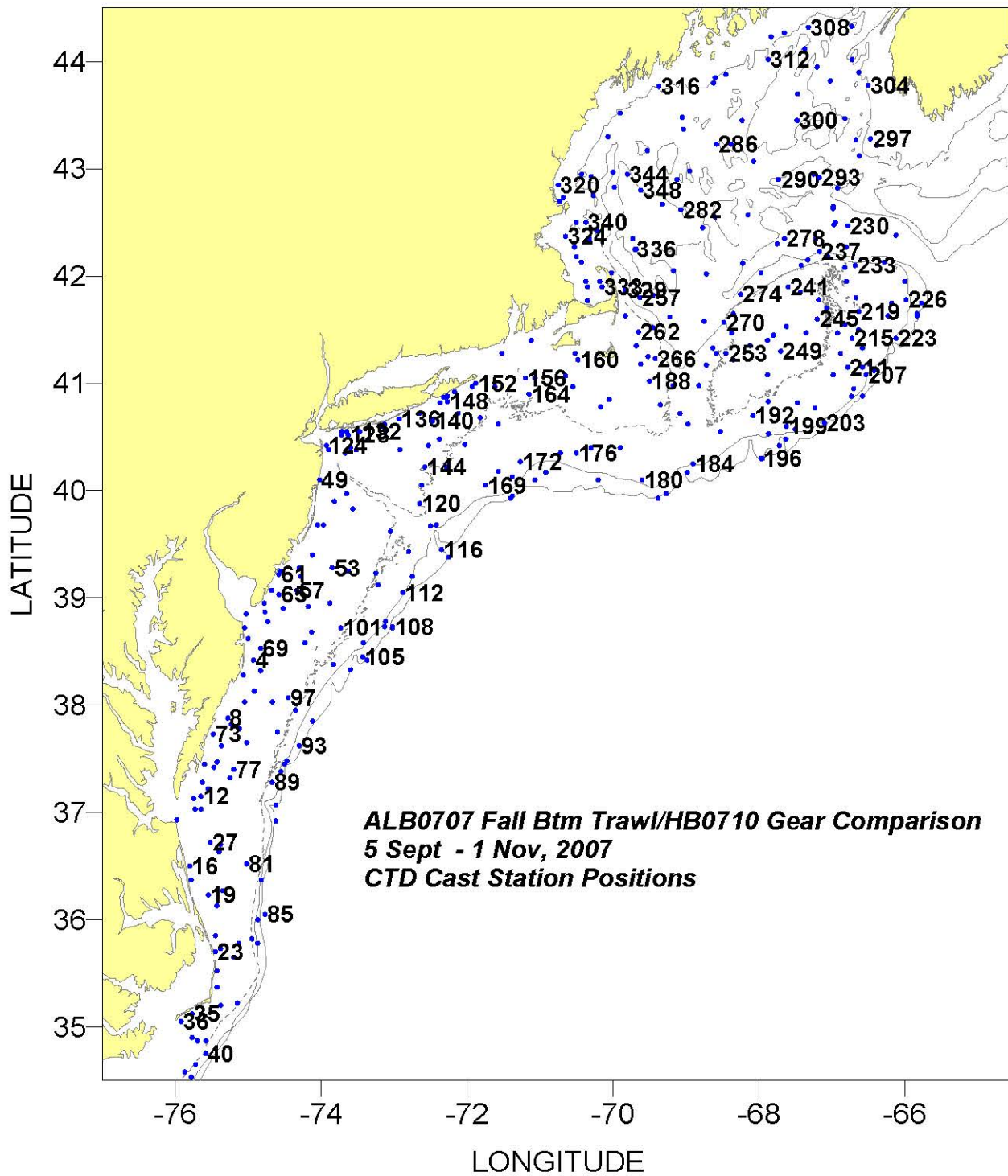


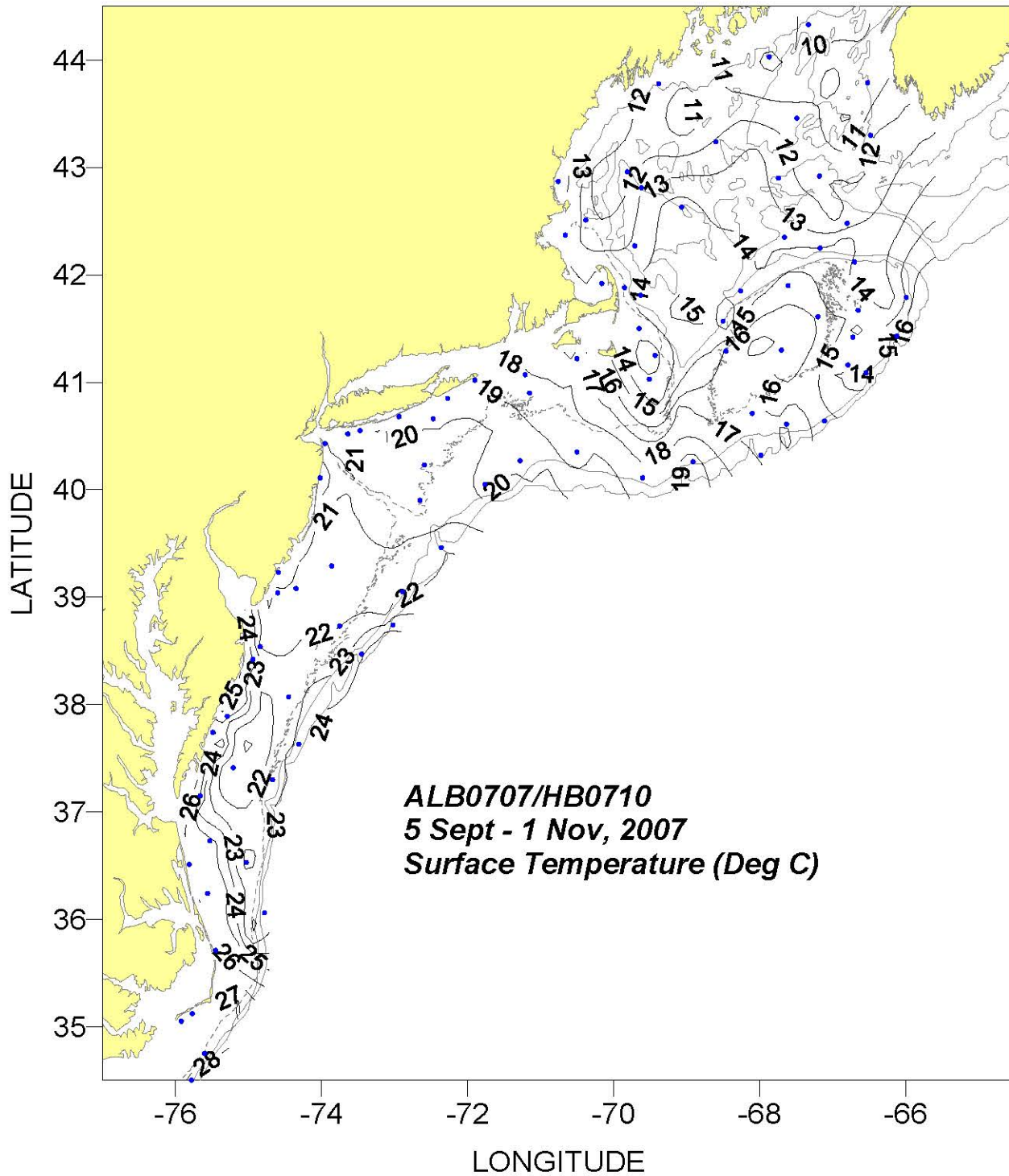
*Oceanography Branch CTD Data Report*  
*CTD REPORT 2007007AL*

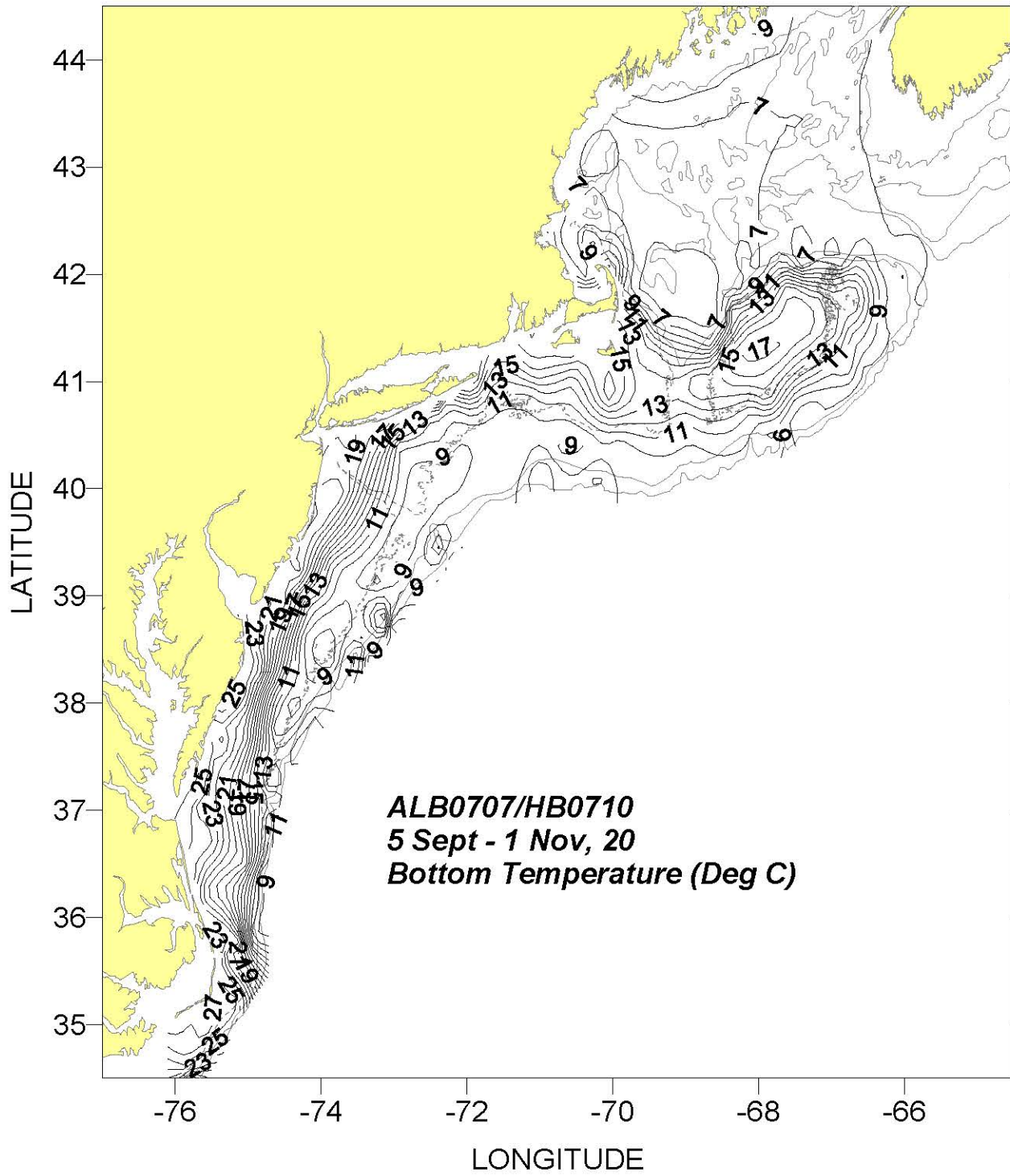
**For further information, contact Tamara Holzwarth-Davis  
National Marine Fisheries Service, Northeast Fisheries Science  
Center, Woods Hole, Massachusetts 02543-1097.**

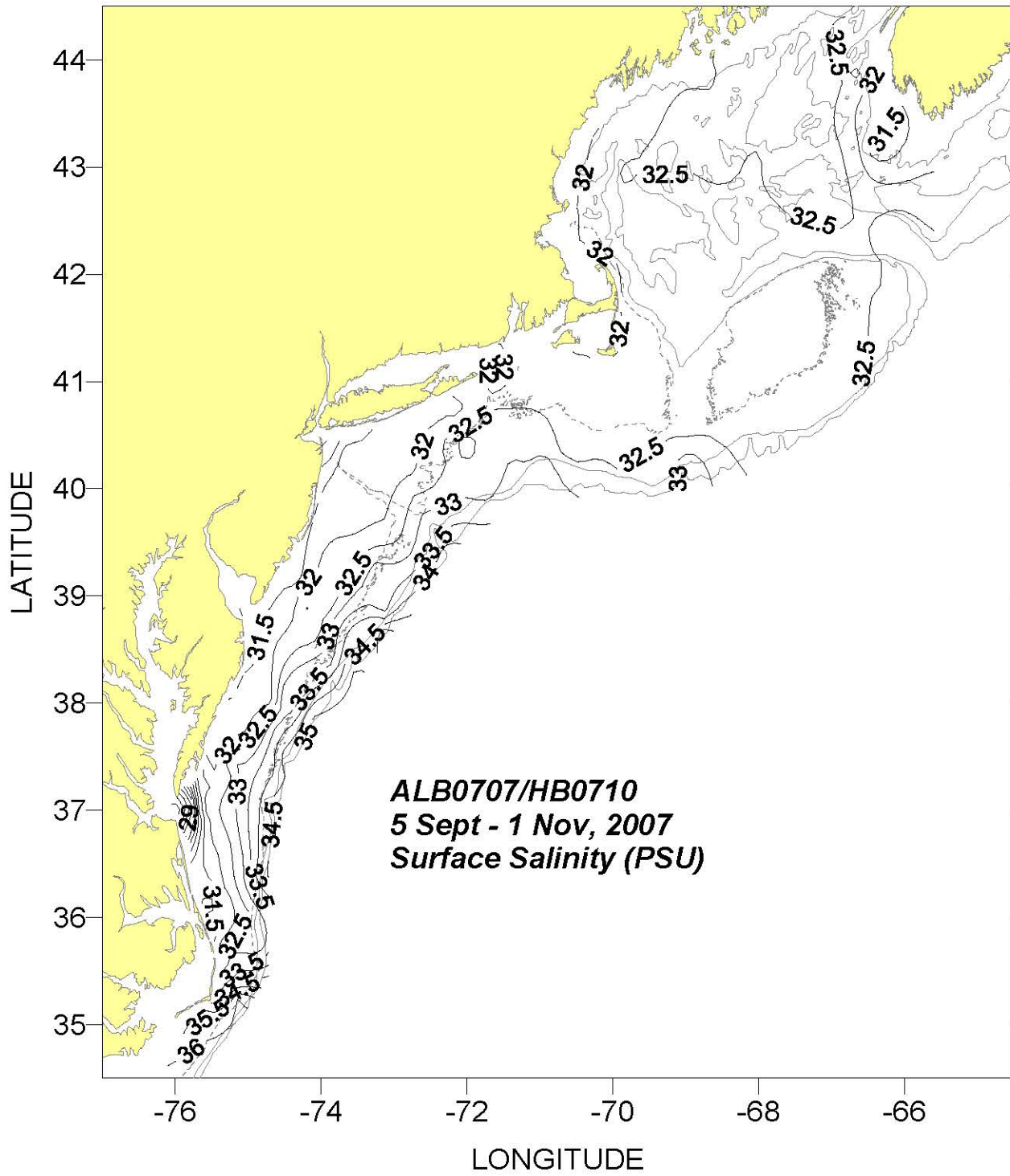
Date: January 17, 2008

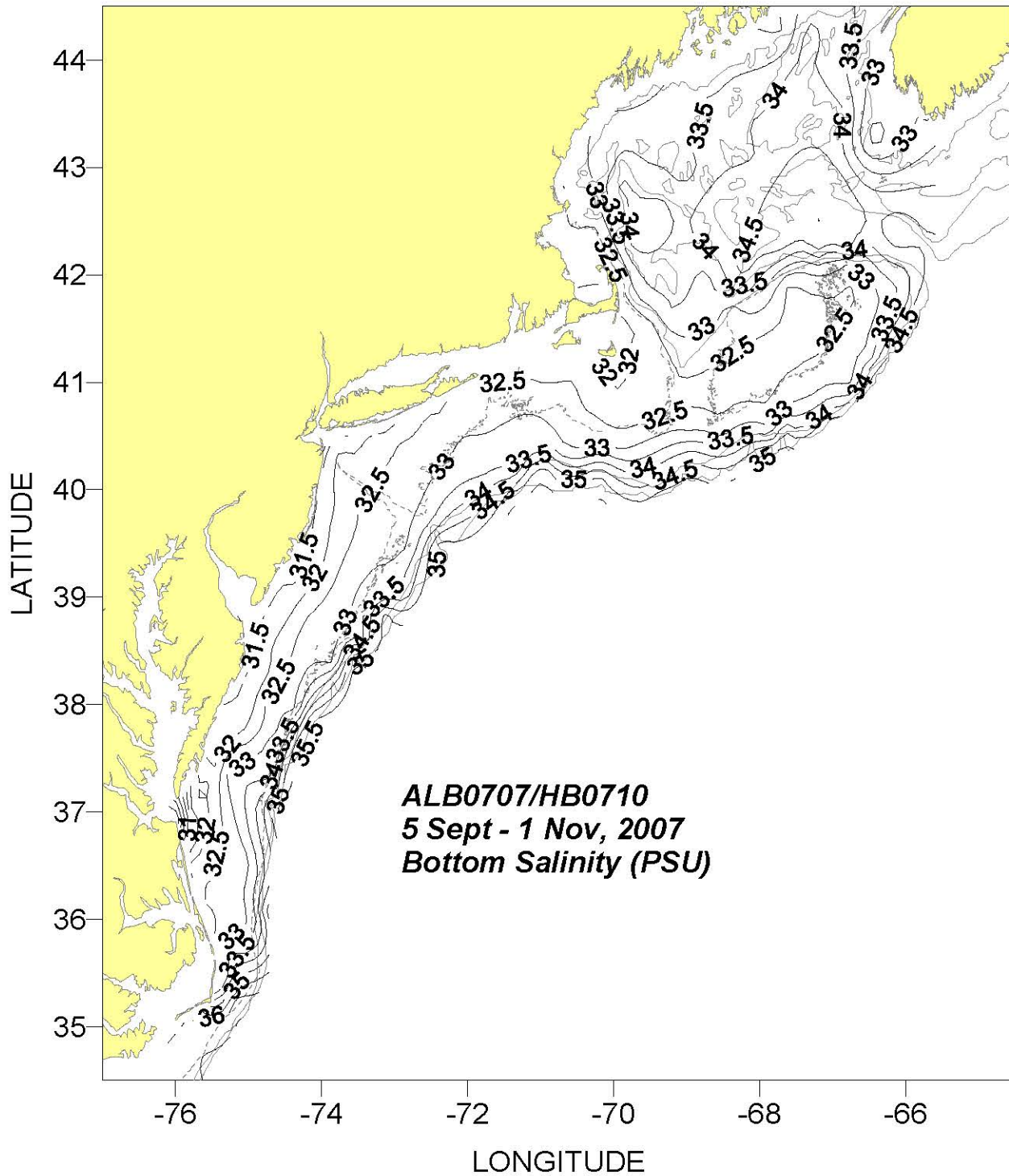


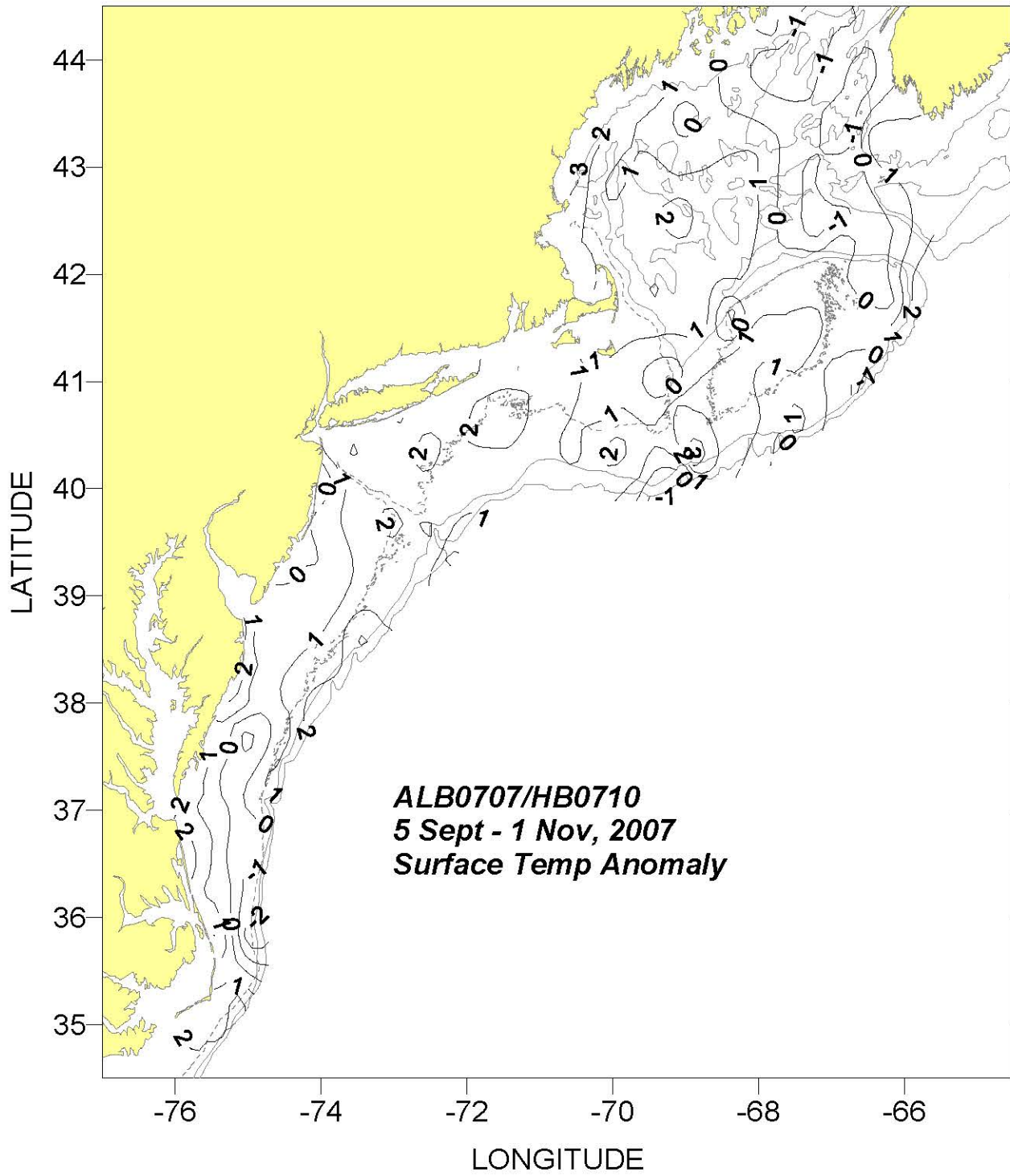




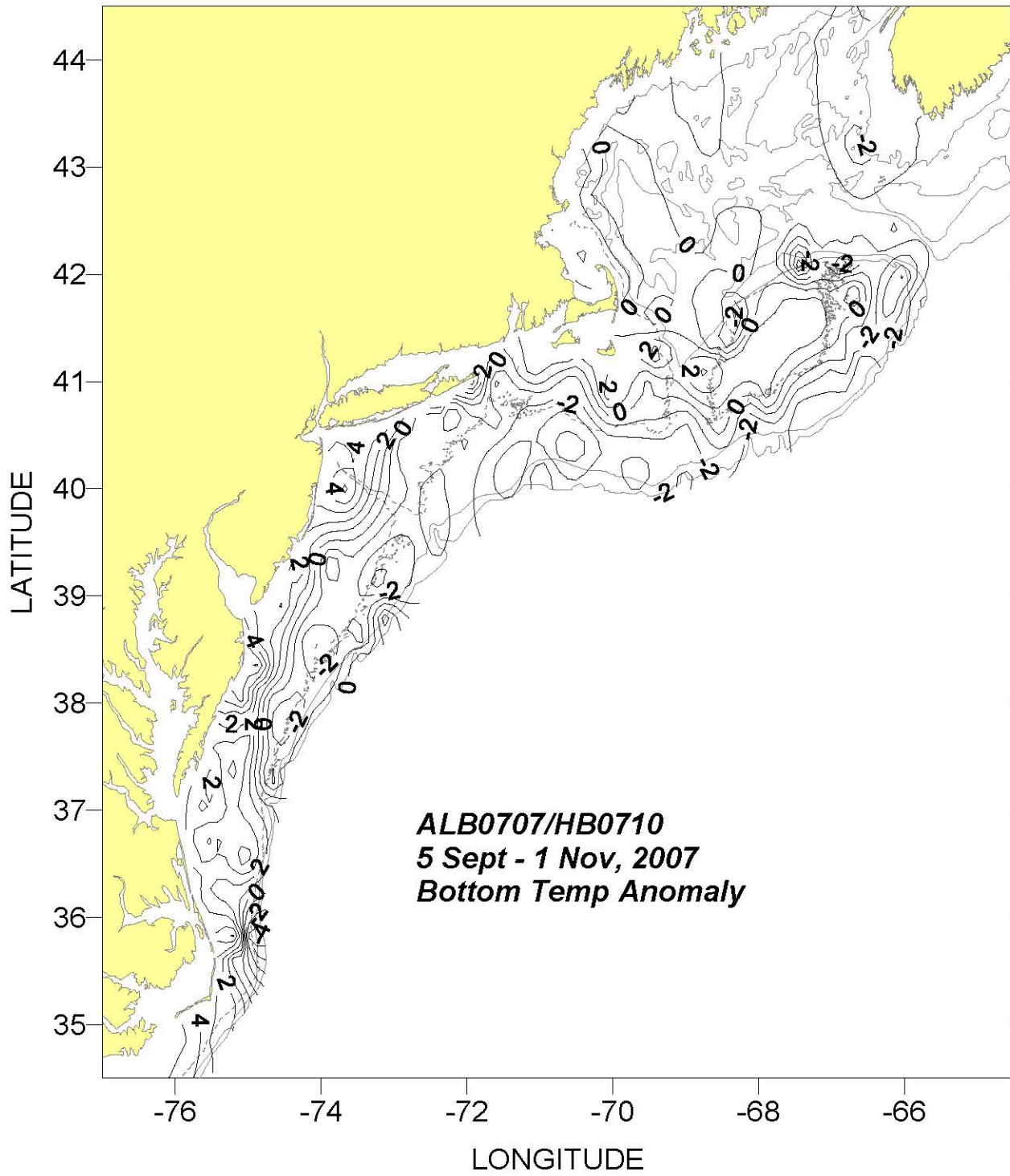


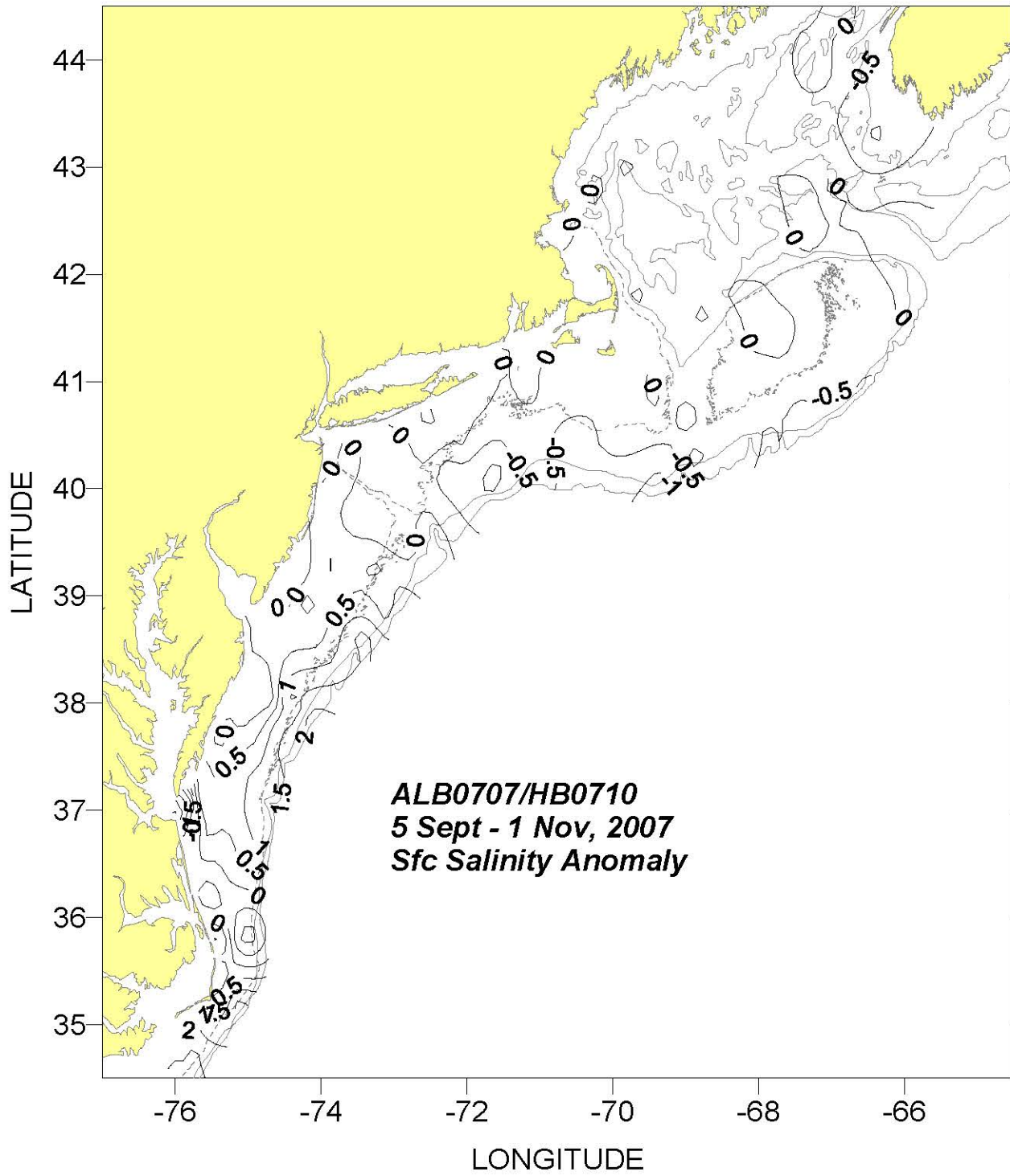


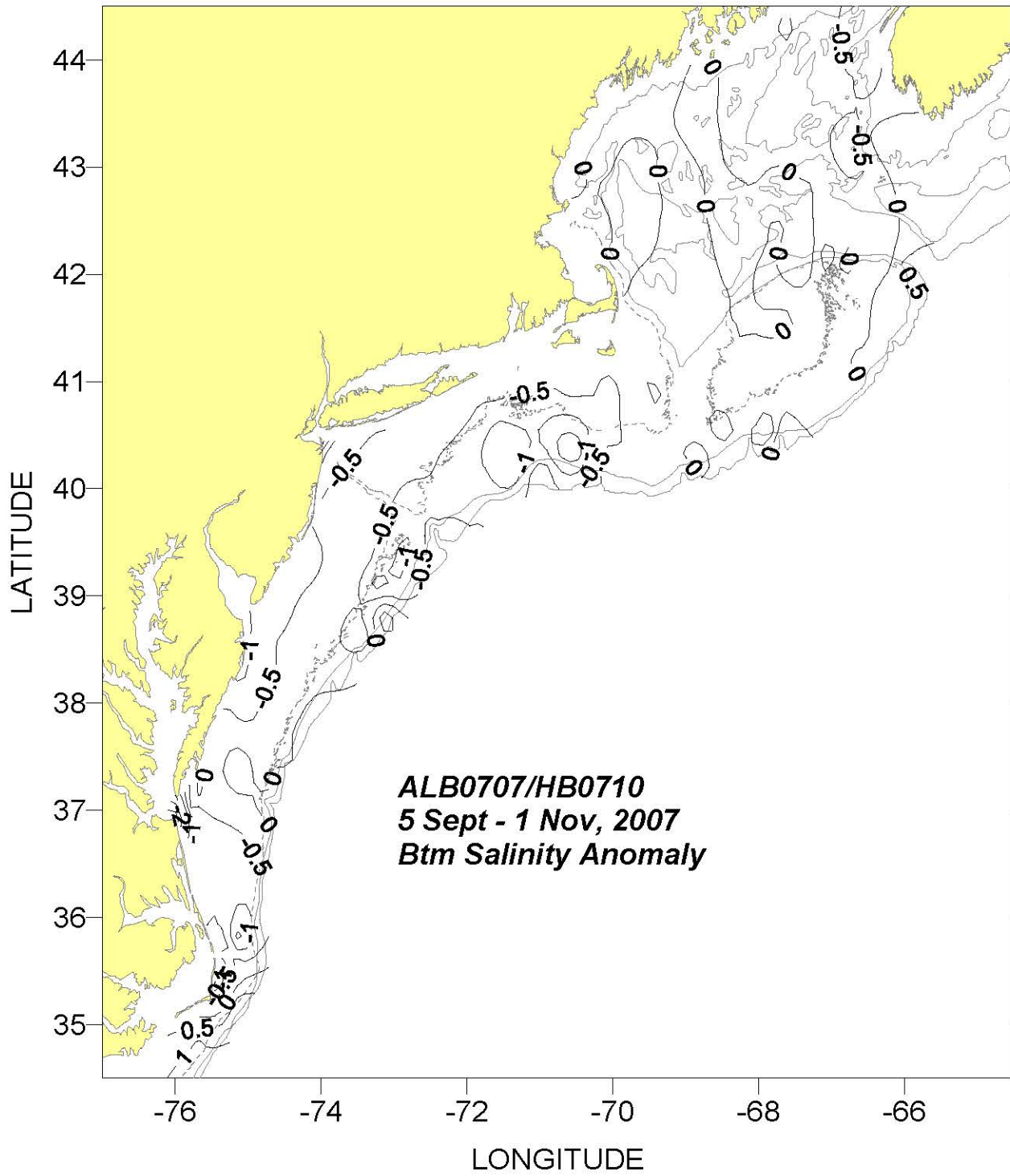












Areal average surface and bottom temp/salt and anomalies for the Fall Bottom Trawl Survey ALB0707/Gear Comparison HB0710

| CRUISE                          | CD  | #OBS | Surface |         |      |      | Bottom |      |       |         |      |      |      |
|---------------------------------|-----|------|---------|---------|------|------|--------|------|-------|---------|------|------|------|
|                                 |     |      | T/S     | Anomaly | SDV1 | SDV2 | Flag   | #OBS | T/S   | Anomaly | SDV1 | SDV2 | Flag |
| <b>Gulf of Maine West</b>       |     |      |         |         |      |      |        |      |       |         |      |      |      |
| ALB0707/HB0710                  | 295 | 43   | 12.97   | 1.06    | 0.15 | 1.03 | 0      | 42   | 7.15  | -0.35   | 0.14 | 1.36 | 0    |
| ALB0707/HB0710                  | 295 | 43   | 32.36   | -0.17   | 0.10 | 0.15 | 0      | 42   | 33.51 | -0.05   | 0.08 | 0.20 | 0    |
| <b>Gulf of Maine East</b>       |     |      |         |         |      |      |        |      |       |         |      |      |      |
| ALB0707/HB0710                  | 291 | 33   | 12.01   | -0.38   | 0.16 | 1.13 | 0      | 31   | 7.60  | -1.03   | 0.17 | 1.63 | 0    |
| ALB0707/HB0710                  | 291 | 33   | 32.43   | -0.20   | 0.12 | 0.30 | 0      | 31   | 34.03 | -0.23   | 0.09 | 0.39 | 0    |
| <b>Georges Bank</b>             |     |      |         |         |      |      |        |      |       |         |      |      |      |
| ALB0707/HB0710                  | 281 | 54   | 15.78   | 0.71    | 0.14 | 1.15 | 0      | 47   | 11.85 | -0.86   | 0.18 | 2.40 | 0    |
| ALB0707/HB0710                  | 281 | 54   | 32.46   | -0.25   | 0.09 | 0.32 | 0      | 47   | 32.80 | -0.18   | 0.10 | 0.34 | 0    |
| <b>Mid Atlantic Bight North</b> |     |      |         |         |      |      |        |      |       |         |      |      |      |
| ALB0707/HB0710                  | 274 | 54   | 19.18   | 1.49    | 0.19 | 0.90 | 0      | 51   | 11.48 | -1.15   | 0.22 | 3.61 | 0    |
| ALB0707/HB0710                  | 274 | 53   | 32.39   | -0.29   | 0.13 | 0.45 | 0      | 51   | 32.85 | -0.72   | 0.13 | 0.50 | 0    |
| <b>Mid Atlantic Bight South</b> |     |      |         |         |      |      |        |      |       |         |      |      |      |
| ALB0707/HB0710                  | 262 | 82   | 22.50   | 0.91    | 0.15 | 1.04 | 0      | 75   | 15.04 | 0.67    | 0.18 | 2.94 | 0    |
| ALB0707/HB0710                  | 263 | 79   | 32.67   | 0.36    | 0.12 | 0.80 | 0      | 73   | 32.74 | -0.50   | 0.11 | 0.62 | 0    |

"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.

# ALB0707 Fall Bottom Trawl Survey

(\*includes HB0710 Gear Comparison)

5 Sept - 1 Nov, 2007

| Cast #    | Station # | Latitude  | Longitude     | Day           | Mo        | Year     | Time (GMT)  | Bottom Depth(m) | Sfc Temp  | Sfc Salt     | Btm Temp     | Btm Salt     | Meters from Bottom |          |
|-----------|-----------|-----------|---------------|---------------|-----------|----------|-------------|-----------------|-----------|--------------|--------------|--------------|--------------------|----------|
| 1         | 1         | 3851.0    | 7502.7        | 5             | 9         | 2007     | 23:06       | 13              | 24.28     | 31.12        | 24.24        | 31.19        | 3                  |          |
| 2         | 2         | 3843.6    | 7503.4        | 6             | 9         | 2007     | 1:46        | 11              | 24.66     | 30.92        | 24.68        | 30.93        | 5                  |          |
| 3         | 3         | 3837.2    | 7500.6        | 6             | 9         | 2007     | 5:19        | 12              | 24.50     | 31.14        | 24.52        | 31.15        | 5                  |          |
| 4         | 4         | 3825.1    | 7456.2        | 6             | 9         | 2007     | 8:18        | 13              | 24.18     | 31.51        | 24.18        | 31.51        | 4                  |          |
| 5         | 5         | 3819.7    | 7450.5        | 6             | 9         | 2007     | 11:33       | 16              | 23.72     | 31.47        | 23.42        | 31.56        | 4                  |          |
| 6         | 6         | 3817.8    | 7504.6        | 6             | 9         | 2007     | 13:31       | 11              | 24.94     | 31.46        | 24.95        | 31.45        | 4                  |          |
| 7         | 7         | 3802.3    | 7503.7        | 6             | 9         | 2007     | 16:43       | 17              | 24.74     | 31.60        | 24.44        | 31.58        | 4                  |          |
| 8         | 8         | 3753.5    | 7517.2        | 7             | 9         | 2007     | 4:39        | 11              | 25.16     | 31.69        | 25.16        | 31.69        | 4                  |          |
| 9         | 9         | 3737.3    | 7522.6        | 7             | 9         | 2007     | 7:24        | 17              | 24.90     | 31.87        | 24.89        | 31.87        | 4                  |          |
| 10        | 10        | 3727.4    | 7536.3        | 7             | 9         | 2007     | 9:52        | 11              | 25.74     | 32.17        | 25.74        | 32.17        | 5                  |          |
| 11        | 11        | 3717.8    | 7538.1        | 7             | 9         | 2007     | 13:01       | 14              | 25.62     | 32.15        | 25.64        | 32.15        | 4                  |          |
| 12        | 12        | 3709.0    | 7539.6        | 7             | 9         | 2007     | 15:30       | 13              | 25.68     | 31.79        | 25.41        | 32.07        | 4                  |          |
| 13        | 13        | 3708.2    | 7545.5        | 7             | 9         | 2007     | 16:45       | 11              | 25.83     | 99.99        | 25.55        | 99.99        | 5                  |          |
| 14        | 14        | 3702.5    | 7544.3        | 7             | 9         | 2007     | 18:47       | 14              | 26.35     | 28.34        | 25.10        | 32.04        | 5                  |          |
| 15        | 15        | 3656.3    | 7559.6        | 7             | 9         | 2007     | 20:55       | 15              | 26.42     | 26.31        | 25.96        | 28.41        | 4                  |          |
| 16        | 16        | 3630.3    | 7548.8        | 8             | 9         | 2007     | 0:45        | 13              | 25.77     | 30.98        | 24.64        | 32.05        | 5                  |          |
| 17        | 17        | 3622.1    | 7547.8        | 8             | 9         | 2007     | 2:49        | 12              | 26.01     | 31.21        | 25.43        | 31.88        | 5                  |          |
| <b>1</b>  | <b>*</b>  | <b>19</b> | <b>3614.4</b> | <b>7533.3</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>6:15</b>     | <b>27</b> | <b>25.74</b> | <b>31.08</b> | <b>19.55</b> | <b>32.62</b>       | <b>5</b> |
| <b>2</b>  | <b>*</b>  | <b>20</b> | <b>3616.0</b> | <b>7521.2</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>8:52</b>     | <b>30</b> | <b>25.61</b> | <b>31.93</b> | <b>18.05</b> | <b>32.69</b>       | <b>5</b> |
| <b>3</b>  | <b>*</b>  | <b>21</b> | <b>3608.6</b> | <b>7526.7</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>10:58</b>    | <b>26</b> | <b>25.80</b> | <b>30.90</b> | <b>19.96</b> | <b>32.55</b>       | <b>3</b> |
| <b>4</b>  | <b>*</b>  | <b>22</b> | <b>3551.4</b> | <b>7527.7</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>13:31</b>    | <b>20</b> | <b>25.77</b> | <b>31.36</b> | <b>24.12</b> | <b>32.50</b>       | <b>4</b> |
| <b>5</b>  | <b>*</b>  | <b>23</b> | <b>3542.4</b> | <b>7527.0</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>15:40</b>    | <b>22</b> | <b>26.10</b> | <b>31.53</b> | <b>23.68</b> | <b>32.94</b>       | <b>7</b> |
| <b>6</b>  | <b>*</b>  | <b>24</b> | <b>3544.6</b> | <b>7523.3</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>17:28</b>    | <b>20</b> | <b>26.16</b> | <b>32.11</b> | <b>25.87</b> | <b>33.15</b>       | <b>5</b> |
| <b>7</b>  | <b>*</b>  | <b>25</b> | <b>3638.7</b> | <b>7524.6</b> | <b>8</b>  | <b>9</b> | <b>2007</b> | <b>23:31</b>    | <b>23</b> | <b>24.92</b> | <b>31.98</b> | <b>22.65</b> | <b>32.24</b>       | <b>6</b> |
| <b>8</b>  | <b>*</b>  | <b>26</b> | <b>3642.2</b> | <b>7523.7</b> | <b>9</b>  | <b>9</b> | <b>2007</b> | <b>1:30</b>     | <b>22</b> | <b>25.05</b> | <b>31.93</b> | <b>22.73</b> | <b>32.27</b>       | <b>4</b> |
| <b>9</b>  | <b>*</b>  | <b>27</b> | <b>3643.7</b> | <b>7531.7</b> | <b>9</b>  | <b>9</b> | <b>2007</b> | <b>3:07</b>     | <b>20</b> | <b>25.37</b> | <b>32.19</b> | <b>24.81</b> | <b>32.26</b>       | <b>6</b> |
| <b>11</b> | <b>*</b>  | <b>29</b> | <b>3547.0</b> | <b>7508.4</b> | <b>11</b> | <b>9</b> | <b>2007</b> | <b>0:01</b>     | <b>32</b> | <b>25.23</b> | <b>32.49</b> | <b>23.08</b> | <b>32.86</b>       | <b>6</b> |
| <b>13</b> | <b>*</b>  | <b>31</b> | <b>3539.7</b> | <b>7512.6</b> | <b>11</b> | <b>9</b> | <b>2007</b> | <b>3:16</b>     | <b>35</b> | <b>25.74</b> | <b>33.04</b> | <b>18.94</b> | <b>34.49</b>       | <b>4</b> |
| 18        |           | 32        | 3531.0        | 7526.2        | 11        | 9        | 2007        | 5:52            | 10        | 25.81        | 32.19        | 25.78        | 32.43              | 4        |
| 19        |           | 33        | 3522.3        | 7526.0        | 11        | 9        | 2007        | 7:31            | 12        | 26.70        | 33.48        | 26.69        | 33.48              | 6        |
| <b>14</b> | <b>*</b>  | <b>34</b> | <b>3512.1</b> | <b>7523.4</b> | <b>11</b> | <b>9</b> | <b>2007</b> | <b>8:51</b>     | <b>20</b> | <b>26.95</b> | <b>34.43</b> | <b>27.05</b> | <b>35.03</b>       | <b>4</b> |
| <b>15</b> | <b>*</b>  | <b>35</b> | <b>3507.1</b> | <b>7546.1</b> | <b>11</b> | <b>9</b> | <b>2007</b> | <b>12:45</b>    | <b>19</b> | <b>27.32</b> | <b>35.63</b> | <b>27.50</b> | <b>36.00</b>       | <b>3</b> |
| 20        |           | 36        | 3503.0        | 7555.1        | 11        | 9        | 2007        | 15:45           | 20        | 27.70        | 35.89        | 27.69        | 35.88              | 3        |
| 21        |           | 37        | 3454.9        | 7546.3        | 11        | 9        | 2007        | 17:31           | 22        | 27.47        | 34.97        | 26.32        | 36.26              | 4        |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 22     | 38        | 3452.2   | 7542.0    | 11  | 9  | 2007 | 19:04      | 35              | 27.69    | 35.62    | 27.44    | 36.32    | 4                  |
| 23     | 39        | 3452.3   | 7535.3    | 11  | 9  | 2007 | 20:46      | 48              | 27.74    | 36.08    | 27.13    | 36.32    | 6                  |
| 24     | 40        | 3445.1   | 7535.7    | 11  | 9  | 2007 | 22:22      | 86              | 27.90    | 35.96    | 23.82    | 36.51    | 4                  |
| 25     | 41        | 3439.9   | 7543.6    | 12  | 9  | 2007 | 0:13       | 60              | 28.20    | 36.12    | 25.24    | 36.44    | 5                  |
| 26     | 42        | 3435.3   | 7552.6    | 12  | 9  | 2007 | 2:46       | 46              | 27.58    | 36.15    | 24.54    | 36.47    | 3                  |
| 27     | 43        | 3432.2   | 7547.6    | 12  | 9  | 2007 | 4:28       | 106             | 27.65    | 36.06    | 20.55    | 36.47    | 8                  |
| 28     | 44        | 3429.9   | 7546.5    | 12  | 9  | 2007 | 5:50       | 154             | 28.29    | 36.17    | 17.86    | 36.27    | 5                  |
| 29     | 45        | 3513.1   | 7509.4    | 12  | 9  | 2007 | 11:46      | 25              | 28.20    | 36.13    | 26.62    | 36.30    | 6                  |
| 30     | 46        | 3958.3   | 7339.4    | 18  | 9  | 2007 | 11:25      | 33              | 21.01    | 32.01    | 19.82    | 32.53    | 8                  |
| 31     | 47        | 3954.8   | 7349.2    | 18  | 9  | 2007 | 13:52      | 27              | 20.99    | 31.92    | 20.97    | 31.94    | 9                  |
| 33     | 49        | 4006.7   | 7401.1    | 18  | 9  | 2007 | 17:55      | 15              | 18.74    | 99.99    | 19.34    | 99.99    | 4                  |
| 34     | 50        | 3941.5   | 7358.3    | 18  | 9  | 2007 | 20:51      | 23              | 21.41    | 31.69    | 20.38    | 31.83    | 4                  |
| 35     | 51        | 3941.7   | 7403.6    | 18  | 9  | 2007 | 22:10      | 13              | 20.94    | 31.57    | 20.93    | 31.57    | 3                  |
| 36     | 52        | 3924.8   | 7407.2    | 19  | 9  | 2007 | 0:34       | 20              | 21.10    | 31.66    | 18.96    | 31.59    | 3                  |
| 37     | 53        | 3917.2   | 7351.5    | 19  | 9  | 2007 | 2:58       | 35              | 21.00    | 32.45    | 11.35    | 32.27    | 4                  |
| 38     | 54        | 3915.2   | 7338.7    | 19  | 9  | 2007 | 4:52       | 48              | 21.11    | 32.21    | 9.70     | 32.69    | 7                  |
| 39     | 55        | 3857.3   | 7353.1    | 19  | 9  | 2007 | 7:45       | 37              | 21.26    | 32.09    | 10.14    | 32.63    | 5                  |
| 40     | 56        | 3855.8   | 7411.8    | 19  | 9  | 2007 | 10:07      | 37              | 21.88    | 32.67    | 11.67    | 32.36    | 4                  |
| 41     | 57        | 3904.9   | 7420.9    | 19  | 9  | 2007 | 12:07      | 27              | 21.19    | 31.54    | 18.40    | 31.55    | 4                  |
| 42     | 58        | 3912.8   | 7417.1    | 19  | 9  | 2007 | 14:28      | 23              | 21.26    | 31.37    | 21.19    | 31.39    | 2                  |
| 43     | 59        | 3917.4   | 7418.1    | 19  | 9  | 2007 | 15:46      | 17              | 21.08    | 31.38    | 21.01    | 31.36    | 5                  |
| 44     | 60        | 3915.0   | 7433.2    | 19  | 9  | 2007 | 17:28      | 12              | 20.27    | 31.43    | 20.05    | 31.45    | 3                  |
| 45     | 61        | 3913.5   | 7435.6    | 19  | 9  | 2007 | 18:46      | 11              | 19.95    | 31.43    | 19.95    | 31.45    | 4                  |
| 46     | 62        | 3904.4   | 7441.7    | 19  | 9  | 2007 | 20:37      | 13              | 20.92    | 31.43    | 20.66    | 31.43    | 5                  |
| 47     | 63        | 3904.0   | 7441.5    | 19  | 9  | 2007 | 22:25      | 14              | 20.96    | 31.44    | 20.95    | 31.46    | 4                  |
| 48     | 64        | 3857.9   | 7447.5    | 19  | 9  | 2007 | 23:49      | 12              | 20.82    | 31.41    | 20.79    | 31.43    | 4                  |
| 49     | 65        | 3902.1   | 7435.8    | 20  | 9  | 2007 | 1:27       | 16              | 21.34    | 31.50    | 21.17    | 31.50    | 5                  |
| 50     | 66        | 3854.2   | 7431.8    | 20  | 9  | 2007 | 2:57       | 24              | 21.06    | 31.54    | 20.97    | 31.69    | 4                  |
| 51     | 67        | 3852.9   | 7446.3    | 20  | 9  | 2007 | 4:41       | 13              | 21.11    | 31.41    | 21.10    | 31.42    | 4                  |
| 52     | 68        | 3847.3   | 7444.9    | 20  | 9  | 2007 | 6:01       | 16              | 21.31    | 31.62    | 21.32    | 31.60    | 3                  |
| 53     | 69        | 3832.4   | 7450.5    | 20  | 9  | 2007 | 8:08       | 23              | 21.62    | 31.77    | 21.54    | 31.85    | 4                  |
| 54     | 70        | 3808.7   | 7455.4    | 20  | 9  | 2007 | 11:04      | 23              | 21.72    | 31.79    | 21.74    | 31.78    | 4                  |
| 55     | 71        | 3747.2   | 7507.9    | 20  | 9  | 2007 | 13:51      | 23              | 21.96    | 31.74    | 21.90    | 31.75    | 9                  |
| 56     | 72        | 3749.1   | 7514.3    | 20  | 9  | 2007 | 16:04      | 18              | 22.23    | 31.71    | 22.15    | 31.72    | 5                  |
| 57     | 73        | 3744.3   | 7529.5    | 20  | 9  | 2007 | 18:02      | 14              | 22.54    | 31.83    | 22.54    | 31.83    | 4                  |
| 58     | 74        | 3739.4   | 7501.3    | 20  | 9  | 2007 | 20:46      | 30              | 20.73    | 32.19    | 20.53    | 32.40    | 5                  |
| 59     | 75        | 3728.8   | 7526.1    | 20  | 9  | 2007 | 23:31      | 19              | 22.66    | 31.90    | 22.65    | 31.88    | 3                  |
| 60     | 76        | 3725.3   | 7528.3    | 21  | 9  | 2007 | 0:53       | 20              | 22.68    | 31.92    | 22.69    | 31.97    | 4                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 61     | 77        | 3724.6   | 7512.5    | 21  | 9  | 2007 | 2:49       | 23              | 21.25    | 33.05    | 20.91    | 33.47    | 3                  |
| 62     | 78        | 3719.2   | 7515.9    | 21  | 9  | 2007 | 4:16       | 28              | 21.13    | 32.26    | 20.64    | 33.14    | 6                  |
| 63     | 79        | 3713.2   | 7533.3    | 21  | 9  | 2007 | 6:39       | 18              | 23.07    | 31.85    | 23.06    | 31.85    | 5                  |
| 64     | 80        | 3702.0   | 7539.9    | 21  | 9  | 2007 | 8:22       | 19              | 23.26    | 31.60    | 23.24    | 31.61    | 3                  |
| 65     | 81        | 3631.9   | 7501.6    | 21  | 9  | 2007 | 13:07      | 30              | 21.46    | 33.08    | 19.24    | 32.84    | 4                  |
| 66     | 82        | 3600.0   | 7452.8    | 21  | 9  | 2007 | 17:10      | 89              | 21.66    | 32.57    | 9.27     | 33.28    | 7                  |
| 67     | 83        | 3549.5   | 7457.9    | 21  | 9  | 2007 | 18:58      | 53              | 21.94    | 32.25    | 10.08    | 33.64    | 6                  |
| 68     | 84        | 3547.0   | 7452.9    | 21  | 9  | 2007 | 20:08      | 88              | 23.18    | 32.24    | 9.78     | 33.80    | 4                  |
| 69     | 85        | 3603.8   | 7446.8    | 21  | 9  | 2007 | 22:32      | 269             | 22.82    | 33.34    | 8.92     | 35.11    | 5                  |
| 70     | 86        | 3622.8   | 7449.5    | 22  | 9  | 2007 | 1:57       | 83              | 22.77    | 34.40    | 9.09     | 33.71    | 5                  |
| 71     | 87        | 3655.3   | 7437.7    | 22  | 9  | 2007 | 6:16       | 263             | 23.34    | 34.70    | 9.38     | 35.17    | 14                 |
| 72     | 88        | 3704.9   | 7437.5    | 22  | 9  | 2007 | 8:52       | 98              | 22.92    | 34.64    | 14.08    | 35.50    | 2                  |
| 73     | 89        | 3717.9   | 7440.4    | 22  | 9  | 2007 | 11:08      | 77              | 22.79    | 34.04    | 8.44     | 33.34    | 8                  |
| 74     | 90        | 3723.0   | 7433.4    | 22  | 9  | 2007 | 12:43      | 93              | 22.48    | 34.04    | 11.78    | 34.69    | 2                  |
| 75     | 91        | 3727.2   | 7430.9    | 22  | 9  | 2007 | 14:04      | 96              | 23.08    | 34.71    | 11.40    | 34.54    | 3                  |
| 76     | 92        | 3729.7   | 7428.0    | 22  | 9  | 2007 | 16:25      | 95              | 23.16    | 34.75    | 12.10    | 34.76    | 4                  |
| 77     | 93        | 3737.9   | 7418.4    | 22  | 9  | 2007 | 18:07      | 103             | 23.13    | 34.77    | 12.57    | 35.37    | 4                  |
| 78     | 94        | 3751.1   | 7407.5    | 22  | 9  | 2007 | 20:28      | 150             | 24.23    | 35.09    | 12.43    | 35.51    | 14                 |
| 79     | 95        | 3745.3   | 7436.7    | 22  | 9  | 2007 | 23:55      | 54              | 22.17    | 33.62    | 9.02     | 32.98    | 3                  |
| 80     | 96        | 3802.9   | 7440.5    | 23  | 9  | 2007 | 2:10       | 36              | 21.94    | 31.71    | 13.01    | 32.83    | 5                  |
| 81     | 97        | 3804.4   | 7427.1    | 23  | 9  | 2007 | 4:13       | 40              | 22.81    | 33.86    | 9.81     | 32.75    | 7                  |
| 82     | 98        | 3757.7   | 7421.3    | 23  | 9  | 2007 | 5:43       | 59              | 22.44    | 33.27    | 7.99     | 32.90    | 4                  |
| 83     | 99        | 3835.5   | 7413.7    | 23  | 9  | 2007 | 9:55       | 45              | 22.11    | 32.38    | 8.71     | 32.73    | 5                  |
| 84     | 100       | 3841.0   | 7408.2    | 23  | 9  | 2007 | 11:19      | 47              | 21.88    | 32.05    | 8.93     | 32.70    | 3                  |
| 85     | 101       | 3843.5   | 7344.7    | 23  | 9  | 2007 | 13:41      | 52              | 22.00    | 33.48    | 8.04     | 32.80    | 4                  |
| 86     | 102       | 3823.9   | 7350.0    | 23  | 9  | 2007 | 16:43      | 68              | 22.49    | 33.37    | 7.24     | 32.91    | 3                  |
| 87     | 103       | 3820.3   | 7336.6    | 23  | 9  | 2007 | 18:30      | 132             | 23.47    | 34.92    | 12.80    | 35.44    | 4                  |
| 88     | 104       | 3825.7   | 7322.9    | 23  | 9  | 2007 | 21:57      | 297             | 24.60    | 34.57    | 7.36     | 35.08    | 10                 |
| 89     | 105       | 3827.9   | 7326.9    | 23  | 9  | 2007 | 23:57      | 107             | 23.75    | 35.02    | 12.59    | 35.30    | 4                  |
| 90     | 106       | 3835.1   | 7325.7    | 24  | 9  | 2007 | 1:19       | 80              | 23.25    | 34.74    | 8.62     | 33.37    | 3                  |
| 91     | 107       | 3844.5   | 7308.4    | 24  | 9  | 2007 | 3:35       | 116             | 23.55    | 35.05    | 13.91    | 35.29    | 10                 |
| 92     | 108       | 3843.6   | 7301.2    | 24  | 9  | 2007 | 5:40       | 383             | 23.88    | 34.76    | 10.70    | 35.38    | 181                |
| 93     | 108       | 3844.4   | 7301.1    | 24  | 9  | 2007 | 6:04       | 342             | 23.88    | 34.76    | 6.21     | 35.03    | 7                  |
| 94     | 109       | 3847.9   | 7307.7    | 24  | 9  | 2007 | 8:06       | 84              | 21.67    | 33.36    | 14.04    | 35.31    | 2                  |
| 95     | 110       | 3907.6   | 7313.8    | 24  | 9  | 2007 | 10:46      | 65              | 21.32    | 33.15    | 7.61     | 33.05    | 5                  |
| 96     | 111       | 3914.5   | 7315.6    | 24  | 9  | 2007 | 12:25      | 60              | 21.31    | 33.25    | 8.38     | 33.07    | 5                  |
| 97     | 112       | 3903.1   | 7253.4    | 24  | 9  | 2007 | 15:13      | 90              | 21.88    | 33.67    | 9.07     | 33.53    | 6                  |
| 98     | 113       | 3912.3   | 7245.6    | 24  | 9  | 2007 | 17:08      | 106             | 21.20    | 33.46    | 9.65     | 33.82    | 3                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 99     | 114       | 3926.8   | 7248.2    | 24  | 9  | 2007 | 19:13      | 69              | 21.13    | 32.78    | 8.38     | 33.05    | 4                  |
| 100    | 115       | 3923.9   | 7215.9    | 24  | 9  | 2007 | 22:21      | 201             | 22.12    | 34.33    | 8.87     | 35.18    | 3                  |
| 101    | 116       | 3927.6   | 7221.4    | 25  | 9  | 2007 | 0:03       | 131             | 21.34    | 33.78    | 12.59    | 35.47    | 5                  |
| 102    | 117       | 3941.9   | 7225.1    | 25  | 9  | 2007 | 2:28       | 89              | 20.87    | 33.13    | 9.60     | 33.67    | 4                  |
| 103    | 118       | 3940.0   | 7230.9    | 25  | 9  | 2007 | 3:40       | 81              | 20.91    | 33.31    | 9.06     | 33.51    | 6                  |
| 104    | 119       | 4003.3   | 7237.7    | 25  | 9  | 2007 | 6:40       | 60              | 20.45    | 32.06    | 8.47     | 32.89    | 7                  |
| 105    | 120       | 3953.8   | 7239.1    | 25  | 9  | 2007 | 8:15       | 56              | 20.64    | 32.80    | 8.34     | 32.98    | 4                  |
| 106    | 121       | 3937.5   | 7303.9    | 25  | 9  | 2007 | 11:25      | 47              | 20.79    | 32.07    | 9.05     | 32.70    | 5                  |
| 107    | 122       | 3950.2   | 7334.7    | 25  | 9  | 2007 | 15:25      | 34              | 20.97    | 31.54    | 16.82    | 32.43    | 4                  |
| 108    | 123       | 4023.1   | 7354.9    | 25  | 9  | 2007 | 19:16      | 17              | 21.20    | 30.45    | 19.77    | 31.61    | 5                  |
| 109    | 124       | 4025.5   | 7356.8    | 25  | 9  | 2007 | 20:49      | 11              | 20.98    | 99.99    | 20.97    | 30.40    | 4                  |
| 110    | 125       | 4031.8   | 7343.9    | 25  | 9  | 2007 | 22:43      | 20              | 21.05    | 30.70    | 20.04    | 31.85    | 4                  |
| 111    | 126       | 4033.2   | 7343.4    | 26  | 9  | 2007 | 0:04       | 16              | 21.01    | 30.79    | 20.93    | 31.12    | 4                  |
| 112    | 127       | 4033.5   | 7339.1    | 26  | 9  | 2007 | 1:16       | 11              | 20.88    | 30.99    | 20.82    | 31.06    | 4                  |
| 113    | 128       | 4031.2   | 7338.5    | 26  | 9  | 2007 | 2:43       | 17              | 21.14    | 30.91    | 21.31    | 31.33    | 5                  |
| 114    | 129       | 4021.3   | 7340.0    | 26  | 9  | 2007 | 4:25       | 23              | 21.24    | 31.70    | 19.14    | 32.05    | 4                  |
| 115    | 130       | 4024.2   | 7336.5    | 26  | 9  | 2007 | 5:50       | 19              | 21.27    | 31.70    | 21.27    | 31.70    | 4                  |
| 116    | 131       | 4023.9   | 7331.9    | 26  | 9  | 2007 | 6:58       | 25              | 21.21    | 31.55    | 20.26    | 31.87    | 3                  |
| 117    | 132       | 4033.1   | 7328.4    | 26  | 9  | 2007 | 8:45       | 18              | 20.34    | 31.35    | 18.71    | 31.83    | 2                  |
| 118    | 133       | 4036.3   | 7311.3    | 26  | 9  | 2007 | 10:43      | 21              | 19.55    | 31.58    | 19.05    | 31.85    | 5                  |
| 119    | 134       | 4035.9   | 7308.1    | 26  | 9  | 2007 | 11:58      | 22              | 20.17    | 31.48    | 19.07    | 31.83    | 5                  |
| 120    | 135       | 4037.6   | 7308.2    | 26  | 9  | 2007 | 13:31      | 16              | 19.28    | 31.66    | 19.18    | 31.68    | 5                  |
| 121    | 136       | 4040.8   | 7256.1    | 26  | 9  | 2007 | 15:15      | 19              | 19.13    | 31.81    | 17.94    | 31.97    | 3                  |
| 122    | 137       | 4052.3   | 7219.9    | 26  | 9  | 2007 | 21:10      | 15              | 18.77    | 32.00    | 18.26    | 32.38    | 4                  |
| 123    | 138       | 4049.1   | 7222.5    | 26  | 9  | 2007 | 22:22      | 26              | 19.30    | 32.04    | 16.23    | 32.20    | 5                  |
| 124    | 139       | 4043.8   | 7239.1    | 27  | 9  | 2007 | 0:36       | 28              | 19.72    | 31.77    | 14.71    | 32.32    | 4                  |
| 125    | 140       | 4039.6   | 7228.4    | 27  | 9  | 2007 | 2:32       | 39              | 19.70    | 31.80    | 11.00    | 32.63    | 3                  |
| 126    | 141       | 4029.2   | 7223.3    | 27  | 9  | 2007 | 4:15       | 46              | 20.12    | 32.36    | 10.45    | 32.79    | 4                  |
| 127    | 142       | 4025.1   | 7232.3    | 27  | 9  | 2007 | 5:39       | 46              | 20.51    | 32.23    | 9.96     | 32.71    | 5                  |
| 128    | 143       | 4023.9   | 7255.7    | 27  | 9  | 2007 | 8:07       | 39              | 19.53    | 31.76    | 10.08    | 32.54    | 6                  |
| 129    | 144       | 4013.9   | 7235.6    | 27  | 9  | 2007 | 10:53      | 56              | 20.55    | 32.10    | 8.88     | 32.87    | 5                  |
| 130    | 145       | 4013.4   | 7217.2    | 27  | 9  | 2007 | 12:58      | 62              | 20.50    | 32.48    | 8.82     | 32.99    | 4                  |
| 131    | 146       | 4026.0   | 7202.5    | 27  | 9  | 2007 | 15:10      | 62              | 20.81    | 33.28    | 8.98     | 33.07    | 3                  |
| 132    | 147       | 4043.5   | 7207.5    | 27  | 9  | 2007 | 17:30      | 44              | 19.73    | 31.78    | 10.93    | 32.74    | 3                  |
| 133    | 148       | 4050.7   | 7216.2    | 27  | 9  | 2007 | 19:08      | 28              | 19.70    | 31.80    | 12.16    | 32.54    | 2                  |
| 134    | 149       | 4053.5   | 7216.3    | 27  | 9  | 2007 | 20:16      | 18              | 18.98    | 32.16    | 18.87    | 32.66    | 6                  |
| 135    | 150       | 4055.9   | 7210.2    | 27  | 9  | 2007 | 21:32      | 16              | 18.96    | 32.25    | 16.40    | 32.46    | 4                  |
| 136    | 151       | 4058.5   | 7156.5    | 27  | 9  | 2007 | 23:10      | 24              | 19.23    | 32.05    | 18.19    | 32.58    | 4                  |



| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 137    | 152       | 4100.9   | 7153.8    | 28  | 9  | 2007 | 0:15       | 19              | 19.09    | 32.30    | 18.29    | 32.33    | 5                  |
| 138    | 153       | 4058.9   | 7137.8    | 28  | 9  | 2007 | 2:13       | 43              | 18.29    | 31.69    | 11.60    | 32.72    | 5                  |
| 139    | 154       | 4124.0   | 7107.8    | 2   | 10 | 2007 | 15:19      | 22              | 17.61    | 32.25    | 17.27    | 32.26    | 4                  |
| 140    | 155       | 4117.5   | 7131.3    | 2   | 10 | 2007 | 17:57      | 41              | 17.92    | 31.98    | 14.82    | 32.37    | 5                  |
| 141    | 156       | 4103.9   | 7112.4    | 2   | 10 | 2007 | 20:31      | 35              | 18.08    | 32.18    | 13.78    | 32.49    | 4                  |
| 142    | 157       | 4103.5   | 7104.0    | 2   | 10 | 2007 | 21:49      | 35              | 17.96    | 32.15    | 14.67    | 32.39    | 4                  |
| 143    | 158       | 4104.9   | 7039.6    | 3   | 10 | 2007 | 0:07       | 43              | 17.65    | 32.28    | 13.82    | 32.43    | 4                  |
| 144    | 159       | 4117.8   | 7031.7    | 3   | 10 | 2007 | 2:07       | 20              | 18.53    | 31.95    | 18.19    | 31.96    | 3                  |
| 145    | 160       | 4113.1   | 7029.9    | 3   | 10 | 2007 | 3:34       | 35              | 17.51    | 32.03    | 14.98    | 32.24    | 4                  |
| 146    | 161       | 4051.8   | 7003.3    | 3   | 10 | 2007 | 7:01       | 22              | 16.84    | 32.03    | 16.84    | 32.03    | 4                  |
| 147    | 162       | 4047.8   | 7010.8    | 3   | 10 | 2007 | 8:22       | 39              | 16.91    | 32.20    | 14.43    | 32.42    | 5                  |
| 148    | 163       | 4058.7   | 7033.3    | 3   | 10 | 2007 | 10:49      | 48              | 18.02    | 32.37    | 12.00    | 32.54    | 4                  |
| 149    | 164       | 4054.0   | 7109.0    | 3   | 10 | 2007 | 14:01      | 51              | 18.39    | 32.34    | 10.93    | 32.78    | 4                  |
| 150    | 165       | 4041.5   | 7149.7    | 3   | 10 | 2007 | 17:58      | 55              | 19.83    | 32.53    | 10.83    | 32.80    | 3                  |
| 151    | 166       | 4037.2   | 7134.1    | 3   | 10 | 2007 | 20:13      | 70              | 20.01    | 32.88    | 9.54     | 32.97    | 4                  |
| 152    | 168       | 4011.6   | 7134.7    | 4   | 10 | 2007 | 0:15       | 85              | 19.37    | 32.64    | 9.53     | 33.54    | 3                  |
| 153    | 169       | 4003.1   | 7145.4    | 4   | 10 | 2007 | 2:10       | 90              | 19.47    | 32.60    | 9.57     | 33.67    | 5                  |
| 154    | 170       | 3957.0   | 7123.6    | 4   | 10 | 2007 | 5:15       | 235             | 20.42    | 33.21    | 11.13    | 35.36    | 35                 |
| 155    | 170       | 3956.7   | 7124.9    | 4   | 10 | 2007 | 5:43       | 232             | 20.28    | 33.33    | 9.67     | 35.25    | 4                  |
| 156    | 171       | 4008.1   | 7123.4    | 4   | 10 | 2007 | 7:55       | 89              | 20.14    | 33.27    | 9.27     | 33.62    | 4                  |
| 157    | 172       | 4016.3   | 7116.6    | 4   | 10 | 2007 | 9:34       | 89              | 19.46    | 32.94    | 9.23     | 33.60    | 4                  |
| 158    | 173       | 4006.6   | 7104.1    | 4   | 10 | 2007 | 11:40      | 159             | 19.88    | 33.06    | 11.76    | 35.35    | 4                  |
| 159    | 174       | 4010.8   | 7055.8    | 4   | 10 | 2007 | 13:15      | 132             | 20.24    | 33.36    | 11.66    | 35.14    | 5                  |
| 160    | 175       | 4021.4   | 7043.5    | 4   | 10 | 2007 | 15:22      | 93              | 18.78    | 32.46    | 8.70     | 33.21    | 5                  |
| 161    | 176       | 4021.2   | 7030.0    | 4   | 10 | 2007 | 17:07      | 90              | 18.24    | 32.32    | 8.80     | 33.10    | 3                  |
| 162    | 177       | 4024.2   | 7018.0    | 4   | 10 | 2007 | 18:46      | 77              | 18.96    | 32.36    | 9.00     | 32.94    | 5                  |
| 163    | 178       | 4006.6   | 7012.3    | 4   | 10 | 2007 | 21:19      | 141             | 19.41    | 32.72    | 11.38    | 35.18    | 5                  |
| 164    | 179       | 4024.0   | 6954.5    | 5   | 10 | 2007 | 0:22       | 77              | 18.32    | 32.32    | 9.17     | 32.86    | 5                  |
| 165    | 180       | 4006.7   | 6936.2    | 5   | 10 | 2007 | 3:22       | 97              | 18.42    | 32.41    | 9.06     | 34.09    | 5                  |
| 166    | 181       | 3956.8   | 6923.6    | 5   | 10 | 2007 | 6:04       | 190             | 18.01    | 32.50    | 9.99     | 35.10    | 9                  |
| 167    | 182       | 3958.6   | 6916.4    | 5   | 10 | 2007 | 8:45       | 222             | 18.24    | 32.68    | 9.11     | 35.10    | 5                  |
| 168    | 183       | 4010.3   | 6859.6    | 5   | 10 | 2007 | 11:15      | 138             | 19.82    | 33.46    | 9.41     | 34.86    | 5                  |
| 169    | 184       | 4015.6   | 6854.6    | 5   | 10 | 2007 | 12:43      | 104             | 19.48    | 33.20    | 9.24     | 34.57    | 5                  |
| 170    | 185       | 4037.9   | 6858.3    | 5   | 10 | 2007 | 15:45      | 68              | 17.20    | 32.08    | 11.04    | 32.63    | 5                  |
| 171    | 186       | 4043.6   | 6905.1    | 5   | 10 | 2007 | 17:16      | 79              | 17.68    | 32.24    | 12.29    | 32.57    | 6                  |
| 172    | 187       | 4048.1   | 6921.9    | 5   | 10 | 2007 | 19:12      | 34              | 13.64    | 32.21    | 13.49    | 32.19    | 5                  |
| 173    | 188       | 4101.7   | 6930.3    | 5   | 10 | 2007 | 21:07      | 37              | 13.16    | 32.17    | 13.13    | 32.17    | 4                  |
| 174    | 189       | 4059.7   | 6910.5    | 5   | 10 | 2007 | 23:52      | 60              | 14.38    | 32.42    | 13.09    | 32.47    | 4                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 175    | 190       | 4059.3   | 6849.4    | 6   | 10 | 2007 | 2:25       | 72              | 15.80    | 32.42    | 15.55    | 32.42    | 6                  |
| 176    | 191       | 4033.6   | 6832.0    | 6   | 10 | 2007 | 5:55       | 74              | 16.78    | 32.34    | 11.31    | 32.67    | 6                  |
| 177    | 192       | 4042.8   | 6805.7    | 6   | 10 | 2007 | 8:51       | 76              | 16.46    | 32.30    | 10.81    | 32.73    | 5                  |
| 178    | 193       | 4105.1   | 6753.4    | 6   | 10 | 2007 | 11:30      | 48              | 15.92    | 32.42    | 15.91    | 32.42    | 6                  |
| 179    | 194       | 4050.0   | 6752.4    | 6   | 10 | 2007 | 13:45      | 68              | 15.52    | 32.41    | 14.54    | 32.45    | 5                  |
| 180    | 195       | 4032.1   | 6752.1    | 6   | 10 | 2007 | 16:06      | 99              | 16.61    | 32.33    | 8.58     | 33.15    | 4                  |
| 181    | 196       | 4018.9   | 6758.5    | 6   | 10 | 2007 | 20:37      | 220             | 16.84    | 32.26    | 9.92     | 35.14    | 18                 |
| 182    | 196       | 4018.7   | 6757.5    | 6   | 10 | 2007 | 21:10      | 225             | 16.92    | 32.26    | 9.83     | 35.14    | 4                  |
| 183    | 197       | 4025.1   | 6743.4    | 6   | 10 | 2007 | 23:23      | 139             | 16.09    | 32.37    | 9.55     | 34.84    | 6                  |
| 184    | 198       | 4029.8   | 6738.3    | 7   | 10 | 2007 | 0:58       | 139             | 15.51    | 32.40    | 8.76     | 34.69    | 6                  |
| 185    | 199       | 4036.7   | 6737.5    | 7   | 10 | 2007 | 2:34       | 93              | 16.18    | 32.32    | 8.31     | 33.99    | 4                  |
| 186    | 200       | 4034.2   | 6730.1    | 7   | 10 | 2007 | 4:07       | 106             | 16.78    | 32.27    | 7.55     | 33.89    | 6                  |
| 187    | 201       | 4049.0   | 6728.0    | 7   | 10 | 2007 | 6:41       | 83              | 15.88    | 32.32    | 8.40     | 33.01    | 5                  |
| 188    | 202       | 4046.8   | 6714.1    | 7   | 10 | 2007 | 8:31       | 95              | 15.35    | 32.36    | 7.59     | 33.32    | 6                  |
| 189    | 203       | 4038.6   | 6706.7    | 7   | 10 | 2007 | 10:10      | 138             | 15.33    | 32.38    | 7.95     | 34.69    | 5                  |
| 190    | 204       | 4053.0   | 6635.1    | 7   | 10 | 2007 | 13:33      | 264             | 14.52    | 32.48    | 6.85     | 34.91    | 7                  |
| 191    | 205       | 4053.1   | 6644.6    | 7   | 10 | 2007 | 16:15      | 99              | 14.31    | 32.44    | 7.95     | 33.51    | 5                  |
| 192    | 206       | 4057.7   | 6642.8    | 7   | 10 | 2007 | 17:46      | 90              | 13.60    | 32.51    | 8.75     | 33.05    | 7                  |
| 193    | 207       | 4105.3   | 6632.4    | 7   | 10 | 2007 | 20:08      | 94              | 12.97    | 32.55    | 7.85     | 33.75    | 4                  |
| 194    | 208       | 4107.2   | 6625.6    | 7   | 10 | 2007 | 21:40      | 123             | 13.30    | 32.69    | 7.77     | 34.43    | 6                  |
| 195    | 209       | 4111.9   | 6629.3    | 7   | 10 | 2007 | 23:13      | 95              | 13.72    | 32.67    | 8.41     | 33.33    | 8                  |
| 196    | 210       | 4109.5   | 6635.5    | 8   | 10 | 2007 | 0:49       | 90              | 12.99    | 32.56    | 8.11     | 33.56    | 6                  |
| 197    | 211       | 4109.8   | 6647.4    | 8   | 10 | 2007 | 2:46       | 73              | 14.14    | 32.47    | 11.34    | 32.64    | 5                  |
| 198    | 212       | 4105.4   | 6659.3    | 8   | 10 | 2007 | 5:18       | 68              | 13.97    | 32.48    | 9.97     | 32.74    | 5                  |
| 199    | 213       | 4117.8   | 6653.5    | 8   | 10 | 2007 | 7:46       | 69              | 14.83    | 32.42    | 11.99    | 32.63    | 5                  |
| 200    | 214       | 4120.6   | 6635.8    | 8   | 10 | 2007 | 10:04      | 86              | 14.78    | 32.39    | 9.78     | 32.87    | 5                  |
| 201    | 215       | 4125.3   | 6643.1    | 8   | 10 | 2007 | 11:22      | 80              | 14.75    | 32.40    | 10.35    | 32.81    | 6                  |
| 202    | 216       | 4128.4   | 6655.6    | 8   | 10 | 2007 | 13:07      | 66              | 14.95    | 32.46    | 14.33    | 32.48    | 6                  |
| 203    | 217       | 4133.4   | 6649.7    | 8   | 10 | 2007 | 14:31      | 69              | 15.13    | 32.39    | 13.04    | 32.56    | 6                  |
| 204    | 218       | 4130.2   | 6638.7    | 8   | 10 | 2007 | 16:12      | 77              | 15.20    | 32.38    | 11.29    | 32.69    | 4                  |
| 205    | 219       | 4140.0   | 6638.7    | 8   | 10 | 2007 | 18:00      | 63              | 14.43    | 32.39    | 13.04    | 32.56    | 6                  |
| 206    | 220       | 4148.4   | 6640.0    | 8   | 10 | 2007 | 19:40      | 67              | 14.08    | 32.49    | 13.93    | 32.51    | 5                  |
| 207    | 221       | 4145.0   | 6611.3    | 8   | 10 | 2007 | 22:49      | 90              | 13.56    | 32.52    | 7.78     | 33.23    | 6                  |
| 208    | 222       | 4138.2   | 6614.1    | 9   | 10 | 2007 | 0:19       | 91              | 14.27    | 32.69    | 7.55     | 33.38    | 5                  |
| 209    | 223       | 4125.9   | 6607.3    | 9   | 10 | 2007 | 2:37       | 130             | 16.53    | 32.72    | 7.86     | 34.50    | 3                  |
| 210    | 224       | 4139.2   | 6550.0    | 9   | 10 | 2007 | 6:20       | 261             | 16.78    | 32.69    | 8.47     | 34.84    | 59                 |
| 211    | 224       | 4138.5   | 6550.0    | 9   | 10 | 2007 | 6:46       | 346             | 16.81    | 32.69    | 7.41     | 34.96    | 3                  |
| 212    | 225       | 4145.7   | 6546.6    | 9   | 10 | 2007 | 9:19       | 140             | 17.03    | 99.99    | 8.64     | 34.78    | 4                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 213    | 226       | 4147.2   | 6559.2    | 9   | 10 | 2007 | 10:56      | 103             | 15.02    | 32.81    | 7.19     | 33.83    | 4                  |
| 214    | 227       | 4157.9   | 6600.0    | 9   | 10 | 2007 | 12:43      | 96              | 15.51    | 32.67    | 6.94     | 33.80    | 5                  |
| 215    | 228       | 4208.0   | 6617.2    | 9   | 10 | 2007 | 15:04      | 125             | 13.91    | 32.48    | 7.08     | 33.97    | 5                  |
| 216    | 229       | 4223.8   | 6607.4    | 9   | 10 | 2007 | 17:40      | 250             | 13.90    | 32.89    | 8.21     | 34.89    | 6                  |
| 217    | 230       | 4228.7   | 6647.7    | 9   | 10 | 2007 | 21:52      | 319             | 12.48    | 32.52    | 7.35     | 34.90    | 7                  |
| 218    | 231       | 4229.5   | 6658.2    | 9   | 10 | 2007 | 23:38      | 337             | 11.96    | 32.62    | 7.92     | 34.91    | 135                |
| 219    | 231       | 4230.1   | 6657.2    | 10  | 10 | 2007 | 0:06       | 335             | 11.91    | 32.61    | 7.41     | 34.90    | 4                  |
| 220    | 232       | 4216.8   | 6648.3    | 10  | 10 | 2007 | 2:31       | 285             | 14.93    | 32.29    | 7.45     | 34.87    | 4                  |
| 221    | 233       | 4206.9   | 6641.9    | 10  | 10 | 2007 | 4:35       | 74              | 13.60    | 32.38    | 9.45     | 32.78    | 5                  |
| 222    | 234       | 4157.7   | 6648.4    | 10  | 10 | 2007 | 7:28       | 65              | 14.08    | 32.50    | 11.97    | 32.56    | 5                  |
| 223    | 235       | 4205.7   | 6649.6    | 10  | 10 | 2007 | 9:07       | 68              | 14.52    | 32.28    | 7.04     | 33.04    | 6                  |
| 224    | 236       | 4211.0   | 6703.8    | 10  | 10 | 2007 | 10:46      | 150             | 14.52    | 32.28    | 6.74     | 33.72    | 5                  |
| 225    | 237       | 4214.9   | 6710.4    | 10  | 10 | 2007 | 12:48      | 228             | 14.07    | 32.44    | 7.38     | 34.77    | 6                  |
| 226    | 238       | 4221.6   | 6713.9    | 10  | 10 | 2007 | 14:28      | 311             | 13.11    | 32.61    | 7.37     | 34.90    | 4                  |
| 227    | 239       | 4209.1   | 6720.9    | 10  | 10 | 2007 | 17:04      | 160             | 14.69    | 32.43    | 6.43     | 33.61    | 4                  |
| 228    | 240       | 4206.1   | 6725.9    | 10  | 10 | 2007 | 19:25      | 83              | 14.76    | 32.45    | 5.97     | 33.31    | 4                  |
| 229    | 241       | 4154.0   | 6736.6    | 10  | 10 | 2007 | 21:46      | 38              | 15.65    | 32.45    | 15.18    | 32.45    | 3                  |
| 230    | 242       | 4151.4   | 6726.8    | 10  | 10 | 2007 | 23:21      | 48              | 15.41    | 32.44    | 15.24    | 32.45    | 4                  |
| 231    | 243       | 4147.1   | 6711.1    | 11  | 10 | 2007 | 1:25       | 54              | 15.05    | 32.46    | 15.10    | 32.44    | 5                  |
| 232    | 244       | 4142.4   | 6704.5    | 11  | 10 | 2007 | 3:01       | 60              | 14.91    | 32.45    | 14.57    | 32.46    | 3                  |
| 233    | 245       | 4136.6   | 6712.1    | 11  | 10 | 2007 | 4:43       | 45              | 15.85    | 32.43    | 15.81    | 32.42    | 4                  |
| 234    | 246       | 4128.5   | 6721.0    | 11  | 10 | 2007 | 6:25       | 48              | 16.58    | 32.43    | 16.59    | 32.43    | 5                  |
| 235    | 247       | 4132.0   | 6737.3    | 11  | 10 | 2007 | 8:31       | 33              | 16.46    | 32.46    | 16.46    | 32.46    | 5                  |
| 236    | 248       | 4127.2   | 6748.7    | 11  | 10 | 2007 | 10:11      | 35              | 16.69    | 32.45    | 16.69    | 32.45    | 4                  |
| 237    | 249       | 4118.1   | 6742.1    | 11  | 10 | 2007 | 12:01      | 38              | 16.97    | 32.44    | 17.00    | 32.41    | 3                  |
| 238    | 250       | 4124.0   | 6753.6    | 11  | 10 | 2007 | 13:36      | 41              | 17.29    | 32.45    | 17.30    | 32.44    | 5                  |
| 239    | 251       | 4121.4   | 6807.8    | 11  | 10 | 2007 | 15:28      | 24              | 17.18    | 32.46    | 17.17    | 32.45    | 5                  |
| 240    | 252       | 4113.4   | 6821.8    | 11  | 10 | 2007 | 17:37      | 50              | 16.83    | 32.46    | 16.77    | 32.44    | 4                  |
| 241    | 253       | 4117.3   | 6827.6    | 11  | 10 | 2007 | 19:06      | 57              | 16.15    | 32.45    | 14.60    | 32.46    | 4                  |
| 242    | 254       | 4117.0   | 6835.7    | 11  | 10 | 2007 | 20:37      | 68              | 15.31    | 32.43    | 10.94    | 32.62    | 4                  |
| 243    | 255       | 4110.1   | 6843.6    | 11  | 10 | 2007 | 22:10      | 63              | 15.27    | 32.42    | 12.04    | 32.56    | 7                  |
| 244    | 256       | 4138.3   | 6950.9    | 16  | 10 | 2007 | 2:16       | 20              | 12.97    | 32.02    | 12.90    | 32.04    | 7                  |
| 245    | 257       | 4148.6   | 6938.0    | 16  | 10 | 2007 | 4:22       | 169             | 15.10    | 32.18    | 6.02     | 33.15    | 5                  |
| 246    | 258       | 4149.7   | 6927.5    | 16  | 10 | 2007 | 6:11       | 189             | 14.17    | 32.08    | 5.75     | 33.44    | 7                  |
| 247    | 259       | 4137.3   | 6913.6    | 16  | 10 | 2007 | 8:52       | 173             | 15.11    | 32.05    | 5.67     | 33.45    | 5                  |
| 248    | 260       | 4131.5   | 6927.5    | 16  | 10 | 2007 | 10:53      | 56              | 14.00    | 32.12    | 8.02     | 32.40    | 5                  |
| 249    | 262       | 4129.7   | 6939.0    | 16  | 10 | 2007 | 16:58      | 29              | 13.36    | 32.03    | 13.04    | 32.01    | 4                  |
| 250    | 263       | 4121.1   | 6941.0    | 16  | 10 | 2007 | 18:45      | 22              | 12.97    | 32.07    | 12.87    | 32.08    | 6                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 251    | 264       | 4111.4   | 6937.9    | 17  | 10 | 2007 | 1:19       | 21              | 12.79    | 32.14    | 12.79    | 32.14    | 5                  |
| 252    | 265       | 4115.3   | 6931.7    | 17  | 10 | 2007 | 4:10       | 23              | 12.39    | 32.20    | 12.40    | 32.20    | 4                  |
| 253    | 266       | 4114.9   | 6925.8    | 17  | 10 | 2007 | 5:45       | 41              | 12.64    | 32.15    | 12.64    | 32.16    | 5                  |
| 254    | 267       | 4120.5   | 6838.2    | 17  | 10 | 2007 | 9:53       | 80              | 14.62    | 32.13    | 7.43     | 32.72    | 4                  |
| 255    | 268       | 4128.1   | 6822.0    | 17  | 10 | 2007 | 11:55      | 55              | 14.30    | 32.45    | 11.99    | 32.50    | 6                  |
| 256    | 269       | 4139.4   | 6821.8    | 17  | 10 | 2007 | 13:45      | 47              | 13.90    | 32.48    | 11.31    | 32.59    | 5                  |
| 257    | 270       | 4134.0   | 6829.7    | 17  | 10 | 2007 | 15:08      | 92              | 13.36    | 32.32    | 6.17     | 32.88    | 5                  |
| 258    | 271       | 4135.1   | 6845.6    | 17  | 10 | 2007 | 17:07      | 151             | 15.12    | 32.21    | 5.48     | 33.32    | 4                  |
| 259    | 272       | 4203.1   | 6910.0    | 17  | 10 | 2007 | 20:57      | 196             | 14.82    | 32.13    | 6.03     | 33.63    | 4                  |
| 260    | 273       | 4201.6   | 6843.6    | 18  | 10 | 2007 | 0:01       | 154             | 14.64    | 32.21    | 5.57     | 33.42    | 3                  |
| 261    | 274       | 4150.9   | 6815.7    | 18  | 10 | 2007 | 3:19       | 194             | 14.36    | 32.47    | 6.82     | 34.30    | 2                  |
| 262    | 275       | 4202.6   | 6758.9    | 18  | 10 | 2007 | 5:43       | 194             | 13.78    | 32.29    | 6.69     | 34.15    | 5                  |
| 263    | 276       | 4207.6   | 6813.0    | 18  | 10 | 2007 | 8:19       | 193             | 14.46    | 32.24    | 7.49     | 34.70    | 6                  |
| 264    | 277       | 4218.0   | 6745.9    | 18  | 10 | 2007 | 11:31      | 223             | 13.88    | 32.28    | 7.46     | 34.88    | 5                  |
| 265    | 278       | 4221.1   | 6739.3    | 18  | 10 | 2007 | 13:04      | 241             | 13.49    | 32.33    | 7.47     | 34.87    | 5                  |
| 266    | 279       | 4234.3   | 6809.8    | 18  | 10 | 2007 | 16:28      | 184             | 13.68    | 32.41    | 6.93     | 34.26    | 3                  |
| 267    | 280       | 4227.9   | 6846.3    | 18  | 10 | 2007 | 19:52      | 202             | 14.29    | 32.28    | 6.71     | 34.20    | 5                  |
| 268    | 281       | 4233.0   | 6836.7    | 18  | 10 | 2007 | 21:43      | 204             | 13.74    | 32.39    | 7.04     | 34.46    | 5                  |
| 269    | 282       | 4237.8   | 6904.3    | 19  | 10 | 2007 | 0:46       | 199             | 14.53    | 32.27    | 6.32     | 33.85    | 6                  |
| 270    | 283       | 4240.9   | 6919.3    | 19  | 10 | 2007 | 2:57       | 208             | 13.99    | 32.32    | 6.56     | 34.04    | 3                  |
| 271    | 284       | 4254.2   | 6907.0    | 19  | 10 | 2007 | 5:39       | 174             | 13.00    | 32.52    | 6.10     | 33.44    | 5                  |
| 272    | 285       | 4259.3   | 6857.4    | 19  | 10 | 2007 | 7:26       | 103             | 12.71    | 32.51    | 6.66     | 33.31    | 6                  |
| 273    | 286       | 4314.4   | 6835.7    | 19  | 10 | 2007 | 10:25      | 178             | 12.06    | 32.71    | 6.43     | 33.87    | 4                  |
| 274    | 287       | 4314.9   | 6823.9    | 19  | 10 | 2007 | 12:34      | 174             | 12.33    | 32.69    | 7.05     | 33.85    | 5                  |
| 275    | 288       | 4327.9   | 6814.3    | 19  | 10 | 2007 | 14:52      | 173             | 11.91    | 32.69    | 6.61     | 33.99    | 6                  |
| 276    | 289       | 4304.7   | 6804.4    | 19  | 10 | 2007 | 18:32      | 195             | 13.42    | 32.44    | 6.62     | 33.97    | 7                  |
| 277    | 290       | 4254.2   | 6744.4    | 19  | 10 | 2007 | 21:07      | 218             | 12.53    | 32.62    | 7.47     | 34.51    | 15                 |
| 278    | 291       | 4239.6   | 6659.6    | 20  | 10 | 2007 | 1:22       | 261             | 11.72    | 32.60    | 7.89     | 34.89    | 60                 |
| 279    | 291       | 4238.3   | 6659.6    | 20  | 10 | 2007 | 1:52       | 280             | 11.70    | 32.60    | 7.85     | 34.89    | 5                  |
| 280    | 292       | 4249.2   | 6655.4    | 20  | 10 | 2007 | 4:18       | 195             | 12.28    | 32.70    | 7.98     | 34.82    | 6                  |
| 281    | 293       | 4255.4   | 6710.9    | 20  | 10 | 2007 | 6:34       | 242             | 11.90    | 32.73    | 7.58     | 34.77    | 4                  |
| 282    | 294       | 4257.1   | 6715.4    | 20  | 10 | 2007 | 8:19       | 261             | 11.36    | 32.76    | 7.68     | 34.77    | 10                 |
| 283    | 295       | 4307.5   | 6637.2    | 20  | 10 | 2007 | 14:11      | 117             | 11.18    | 32.08    | 7.65     | 33.24    | 1                  |
| 284    | 296       | 4313.3   | 6623.6    | 20  | 10 | 2007 | 19:25      | 74              | 12.26    | 31.00    | 8.42     | 32.45    | 4                  |
| 285    | 297       | 4317.7   | 6628.6    | 20  | 10 | 2007 | 22:52      | 67              | 11.94    | 31.07    | 8.90     | 32.33    | 5                  |
| 286    | 298       | 4316.1   | 6640.5    | 21  | 10 | 2007 | 2:10       | 116             | 10.71    | 32.19    | 7.50     | 33.25    | 6                  |
| 287    | 299       | 4328.0   | 6649.7    | 21  | 10 | 2007 | 4:45       | 186             | 9.69     | 32.30    | 7.11     | 34.11    | 2                  |
| 288    | 300       | 4327.4   | 6728.8    | 21  | 10 | 2007 | 8:40       | 214             | 11.82    | 32.65    | 6.93     | 34.18    | 13                 |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 289    | 300       | 4327.6   | 6729.4    | 21  | 10 | 2007 | 9:01       | 214             | 11.73    | 32.66    | 6.94     | 34.17    | 6                  |
| 290    | 301       | 4342.4   | 6728.9    | 21  | 10 | 2007 | 11:25      | 224             | 10.43    | 32.77    | 7.37     | 34.37    | 5                  |
| 291    | 302       | 4357.4   | 6712.3    | 21  | 10 | 2007 | 14:21      | 152             | 10.11    | 32.82    | 7.12     | 33.95    | 6                  |
| 292    | 303       | 4349.0   | 6701.1    | 21  | 10 | 2007 | 17:19      | 152             | 11.70    | 32.68    | 7.09     | 33.85    | 5                  |
| 293    | 304       | 4347.3   | 6630.9    | 21  | 10 | 2007 | 22:25      | 106             | 10.42    | 32.05    | 8.28     | 32.95    | 5                  |
| 294    | 305       | 4354.7   | 6638.5    | 22  | 10 | 2007 | 0:52       | 102             | 9.91     | 32.72    | 7.79     | 33.17    | 6                  |
| 295    | 306       | 4401.5   | 6643.4    | 22  | 10 | 2007 | 4:00       | 114             | 10.34    | 31.97    | 7.52     | 33.34    | 6                  |
| 296    | 307       | 4420.9   | 6644.8    | 22  | 10 | 2007 | 7:04       | 194             | 9.59     | 32.50    | 7.58     | 33.56    | 5                  |
| 297    | 308       | 4419.9   | 6719.5    | 22  | 10 | 2007 | 10:28      | 159             | 9.45     | 32.52    | 7.13     | 34.05    | 4                  |
| 298    | 309       | 4407.6   | 6722.7    | 22  | 10 | 2007 | 12:40      | 184             | 9.71     | 32.75    | 7.10     | 34.14    | 5                  |
| 299    | 310       | 4416.3   | 6739.0    | 22  | 10 | 2007 | 17:07      | 98              | 10.73    | 32.74    | 8.35     | 32.97    | 6                  |
| 300    | 311       | 4414.8   | 6750.2    | 22  | 10 | 2007 | 19:02      | 83              | 11.04    | 32.73    | 9.41     | 32.98    | 4                  |
| 301    | 312       | 4401.9   | 6752.1    | 22  | 10 | 2007 | 21:49      | 123             | 9.61     | 32.60    | 7.91     | 33.37    | 4                  |
| 302    | 313       | 4353.0   | 6827.7    | 23  | 10 | 2007 | 2:31       | 127             | 10.40    | 32.86    | 8.15     | 33.40    | 3                  |
| 303    | 314       | 4351.8   | 6836.1    | 23  | 10 | 2007 | 5:31       | 103             | 11.68    | 32.41    | 8.63     | 33.24    | 6                  |
| 304    | 315       | 4348.7   | 6837.7    | 23  | 10 | 2007 | 8:13       | 111             | 11.62    | 32.41    | 8.27     | 33.34    | 4                  |
| 305    | 316       | 4346.6   | 6922.8    | 23  | 10 | 2007 | 15:16      | 80              | 11.91    | 32.07    | 8.76     | 32.91    | 6                  |
| 306    | 317       | 4331.9   | 6954.2    | 23  | 10 | 2007 | 21:38      | 99              | 12.33    | 32.09    | 7.58     | 32.97    | 8                  |
| 307    | 318       | 4318.7   | 7004.2    | 24  | 10 | 2007 | 1:13       | 162             | 12.97    | 32.05    | 5.76     | 33.27    | 4                  |
| 308    | 319       | 4257.2   | 7026.5    | 24  | 10 | 2007 | 5:35       | 104             | 14.07    | 31.70    | 5.95     | 32.92    | 5                  |
| 309    | 320       | 4251.9   | 7045.7    | 24  | 10 | 2007 | 8:23       | 31              | 11.41    | 32.07    | 8.29     | 32.38    | 6                  |
| 310    | 321       | 4244.8   | 7041.4    | 24  | 10 | 2007 | 9:58       | 34              | 13.42    | 31.94    | 8.16     | 32.48    | 6                  |
| 311    | 322       | 4242.8   | 7044.1    | 24  | 10 | 2007 | 12:07      | 16              | 12.70    | 32.04    | 10.34    | 32.36    | 6                  |
| 312    | 323       | 4230.0   | 7030.9    | 24  | 10 | 2007 | 15:15      | 68              | 13.71    | 31.93    | 7.04     | 32.62    | 6                  |
| 313    | 324       | 4222.3   | 7039.3    | 24  | 10 | 2007 | 19:22      | 67              | 13.82    | 31.95    | 7.32     | 32.37    | 5                  |
| 314    | 325       | 4216.7   | 7032.6    | 24  | 10 | 2007 | 21:17      | 65              | 13.33    | 31.97    | 7.37     | 32.34    | 5                  |
| 315    | 327       | 4211.5   | 7030.1    | 25  | 10 | 2007 | 0:10       | 58              | 13.26    | 31.85    | 7.56     | 32.33    | 5                  |
| 316    | 328       | 4202.2   | 7001.7    | 25  | 10 | 2007 | 3:52       | 21              | 13.68    | 31.84    | 13.24    | 31.91    | 4                  |
| 317    | 329       | 4152.6   | 6950.9    | 25  | 10 | 2007 | 5:33       | 61              | 13.08    | 32.03    | 7.69     | 32.58    | 6                  |
| 318    | 330       | 4208.3   | 7026.1    | 25  | 10 | 2007 | 11:13      | 61              | 14.02    | 31.79    | 7.42     | 32.34    | 4                  |
| 319    | 331       | 4157.6   | 7022.2    | 25  | 10 | 2007 | 13:10      | 44              | 13.49    | 31.82    | 8.04     | 32.23    | 4                  |
| 320    | 332       | 4157.4   | 7011.3    | 25  | 10 | 2007 | 15:11      | 33              | 14.68    | 31.69    | 8.67     | 32.15    | 5                  |
| 321    | 333       | 4154.9   | 7009.7    | 25  | 10 | 2007 | 17:22      | 25              | 14.33    | 31.73    | 12.04    | 31.92    | 5                  |
| 322    | 334       | 4154.1   | 7021.2    | 25  | 10 | 2007 | 19:34      | 32              | 14.19    | 31.76    | 10.09    | 31.94    | 5                  |
| 323    | 335       | 4146.0   | 7021.5    | 25  | 10 | 2007 | 21:17      | 16              | 14.35    | 31.70    | 14.35    | 31.69    | 4                  |
| 324    | 336       | 4215.7   | 6941.6    | 30  | 10 | 2007 | 5:04       | 242             | 13.04    | 32.37    | 6.59     | 34.09    | 43                 |
| 325    | 336       | 4215.9   | 6942.5    | 30  | 10 | 2007 | 5:28       | 240             | 13.05    | 32.37    | 6.64     | 34.13    | 5                  |
| 326    | 337       | 4221.6   | 6944.7    | 30  | 10 | 2007 | 8:04       | 246             | 13.02    | 32.34    | 6.70     | 34.17    | 6                  |

| Cast # | Station # | Latitude | Longitude | Day | Mo | Year | Time (GMT) | Bottom Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-----------|----------|-----------|-----|----|------|------------|-----------------|----------|----------|----------|----------|--------------------|
| 327    | 338       | 4221.1   | 7019.0    | 30  | 10 | 2007 | 11:25      | 30              | 12.12    | 32.12    | 11.51    | 32.17    | 7                  |
| 328    | 339       | 4225.5   | 7013.7    | 30  | 10 | 2007 | 15:33      | 72              | 12.14    | 32.05    | 7.25     | 32.51    | 5                  |
| 329    | 340       | 4230.5   | 7022.5    | 30  | 10 | 2007 | 17:17      | 140             | 12.50    | 32.08    | 7.06     | 32.65    | 5                  |
| 330    | 341       | 4245.5   | 7016.0    | 30  | 10 | 2007 | 20:15      | 92              | 11.71    | 32.33    | 7.67     | 32.82    | 5                  |
| 331    | 342       | 4256.6   | 7018.5    | 30  | 10 | 2007 | 22:43      | 130             | 11.83    | 32.27    | 5.59     | 32.98    | 4                  |
| 332    | 343       | 4258.2   | 7000.0    | 31  | 10 | 2007 | 1:30       | 150             | 11.36    | 32.38    | 5.84     | 33.46    | 5                  |
| 333    | 344       | 4257.8   | 6948.7    | 31  | 10 | 2007 | 3:49       | 200             | 11.20    | 32.57    | 6.53     | 34.00    | 4                  |
| 334    | 345       | 4310.8   | 6932.4    | 31  | 10 | 2007 | 6:37       | 124             | 11.71    | 32.51    | 6.19     | 33.22    | 4                  |
| 335    | 346       | 4329.9   | 6903.5    | 31  | 10 | 2007 | 12:43      | 139             | 10.12    | 32.76    | 7.52     | 33.54    | 6                  |
| 336    | 347       | 4322.4   | 6902.2    | 31  | 10 | 2007 | 15:52      | 144             | 10.57    | 32.69    | 6.92     | 33.59    | 5                  |
| 337    | 348       | 4248.3   | 6937.1    | 31  | 10 | 2007 | 21:45      | 188             | 13.08    | 32.39    | 6.30     | 33.86    | 4                  |
| 338    | 349       | 4250.5   | 6959.3    | 1   | 11 | 2007 | 0:34       | 200             | 11.33    | 32.43    | 6.46     | 33.98    | 5                  |