

*Oceanography Branch CTD Data Report*  
*CTD\_REPORT\_2009005HB*

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Science Center, Woods Hole, Massachusetts 02543-1097.**

DATE: Revised: March 1, 2010

# Oceanography Branch CTD Data Report

## CTD\_REPORT\_2009005HB

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

HB 09-05  
Fall Bottom Trawl Survey  
Data Coverage: Sept 13 – Nov 19, 2009

This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's 2009 Fall Bottom Trawl survey aboard the NOAA FSV *Henry B. Bigelow*. All data was obtained with Seabird Electronics SBE Model 19 profiling CTD (s/n 4501). A correction of +0.033 PSU was applied to the salinity data.

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/hb0905.dat>

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

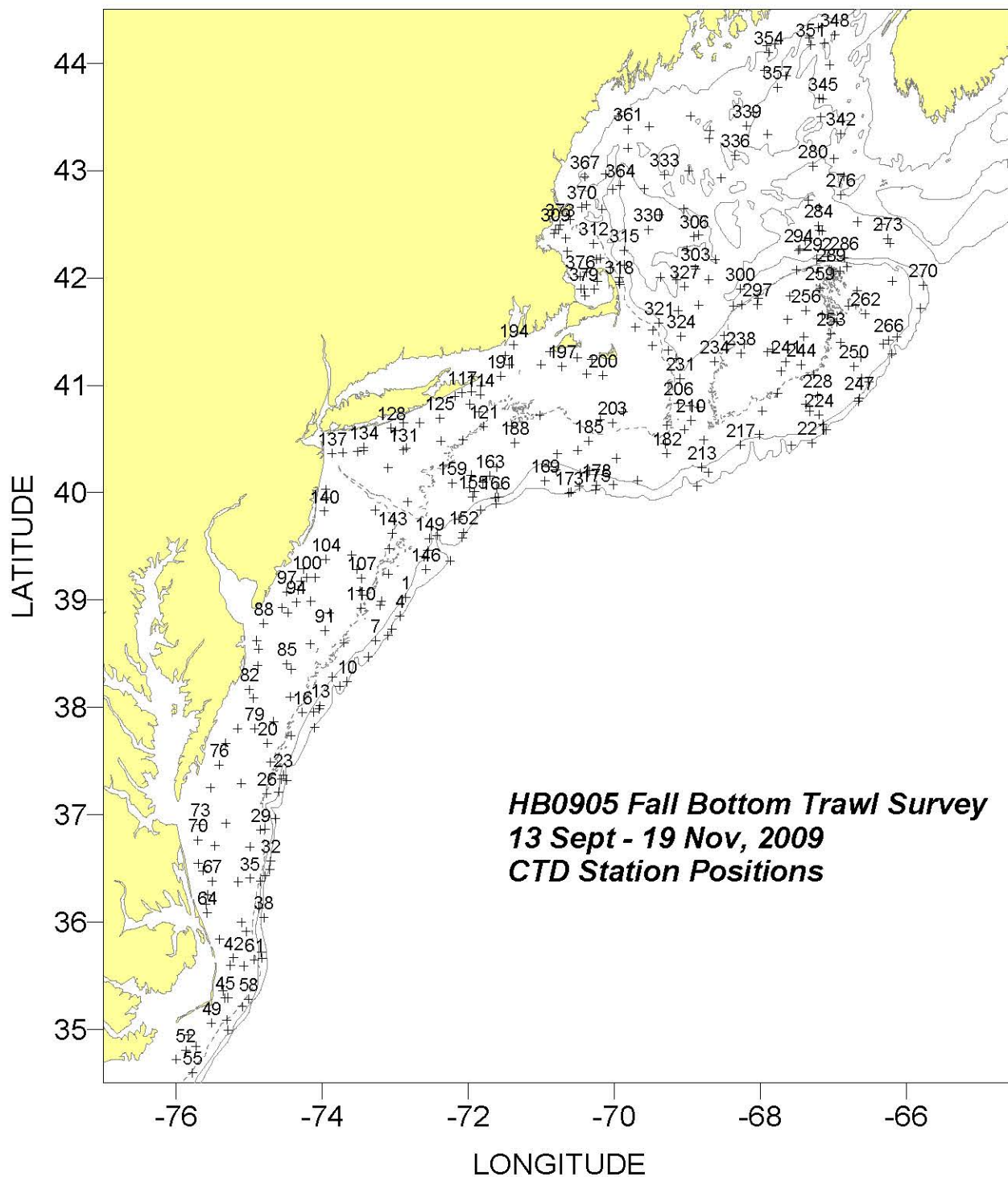
<http://www.nefsc.noaa.gov/HydroAtlas/>

choose: **2009 Cruises**

**SEP\_TRAWL\_HB0905**

**CTD\_REPORT\_2009005HB.pdf**

Revised: March 1, 2010



Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the 2009 Fall Bottom Trawl Survey HB0905

|        |     | SURFACE                  |       |         |      |      |      |      | BOTTOM |         |      |      |      |         |  |  |
|--------|-----|--------------------------|-------|---------|------|------|------|------|--------|---------|------|------|------|---------|--|--|
| CRUISE | CD  | #obs                     | T/S   | Anomaly | SDV1 | SDV2 | Flag | #obs | T/S    | Anomaly | SDV1 | SDV2 | Flag | Purpose |  |  |
|        |     | Gulf of Maine West       |       |         |      |      |      |      |        |         |      |      |      |         |  |  |
| HB0905 | 315 | 47                       | 10.65 | 0.45    | 0.16 | 0.64 | 0    | 47   | 7.93   | 0.65    | 0.14 | 1.08 | 0    | 10      |  |  |
| HB0905 | 315 | 47                       | 32.54 | -0.19   | 0.10 | 0.33 | 0    | 47   | 33.43  | -0.17   | 0.08 | 0.23 | 0    | 10      |  |  |
|        |     | Gulf of Maine East       |       |         |      |      |      |      |        |         |      |      |      |         |  |  |
| HB0905 | 312 | 35                       | 11.05 | 0.01    | 0.16 | 1.11 | 1    | 33   | 8.69   | 0.19    | 0.17 | 2.08 | 1    | 10      |  |  |
| HB0905 | 312 | 35                       | 32.37 | -0.36   | 0.12 | 0.64 | 1    | 33   | 34.26  | -0.12   | 0.09 | 0.47 | 1    | 10      |  |  |
|        |     | Georges Bank             |       |         |      |      |      |      |        |         |      |      |      |         |  |  |
| HB0905 | 299 | 60                       | 13.58 | -0.28   | 0.15 | 1.84 | 0    | 48   | 12.26  | 0.03    | 0.17 | 1.37 | 0    | 10      |  |  |
| HB0905 | 299 | 60                       | 32.80 | 0.03    | 0.09 | 0.68 | 0    | 48   | 32.92  | -0.08   | 0.10 | 0.33 | 0    | 10      |  |  |
|        |     | Mid Atlantic Bight North |       |         |      |      |      |      |        |         |      |      |      |         |  |  |
| HB0905 | 276 | 59                       | 18.23 | 0.66    | 0.17 | 1.05 | 0    | 42   | 13.96  | 1.23    | 0.22 | 2.06 | 0    | 10      |  |  |
| HB0905 | 276 | 59                       | 32.93 | 0.19    | 0.11 | 0.64 | 0    | 42   | 33.57  | 0.08    | 0.13 | 0.58 | 0    | 10      |  |  |
|        |     | Mid Atlantic Bight South |       |         |      |      |      |      |        |         |      |      |      |         |  |  |
| HB0905 | 264 | 92                       | 21.35 | -0.14   | 0.14 | 1.09 | 0    | 70   | 17.20  | 3.02    | 0.18 | 2.75 | 0    | 10      |  |  |
| HB0905 | 264 | 92                       | 32.41 | 0.11    | 0.11 | 1.27 | 0    | 70   | 32.86  | -0.41   | 0.11 | 1.06 | 0    | 10      |  |  |

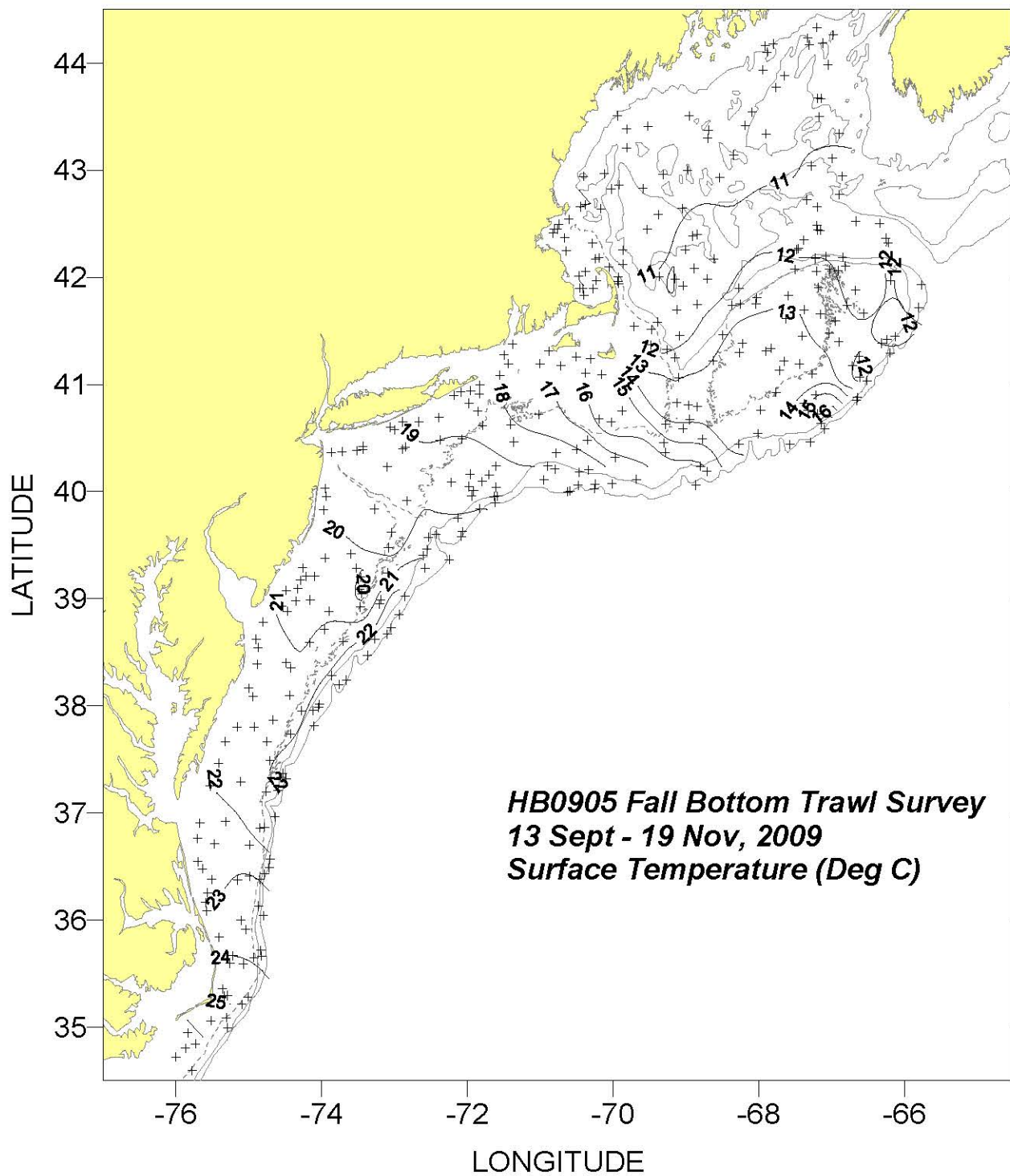
"CRUISE", the code name for a cruise: "CD", the calendar mid-date of all the stations within a region for a cruise:

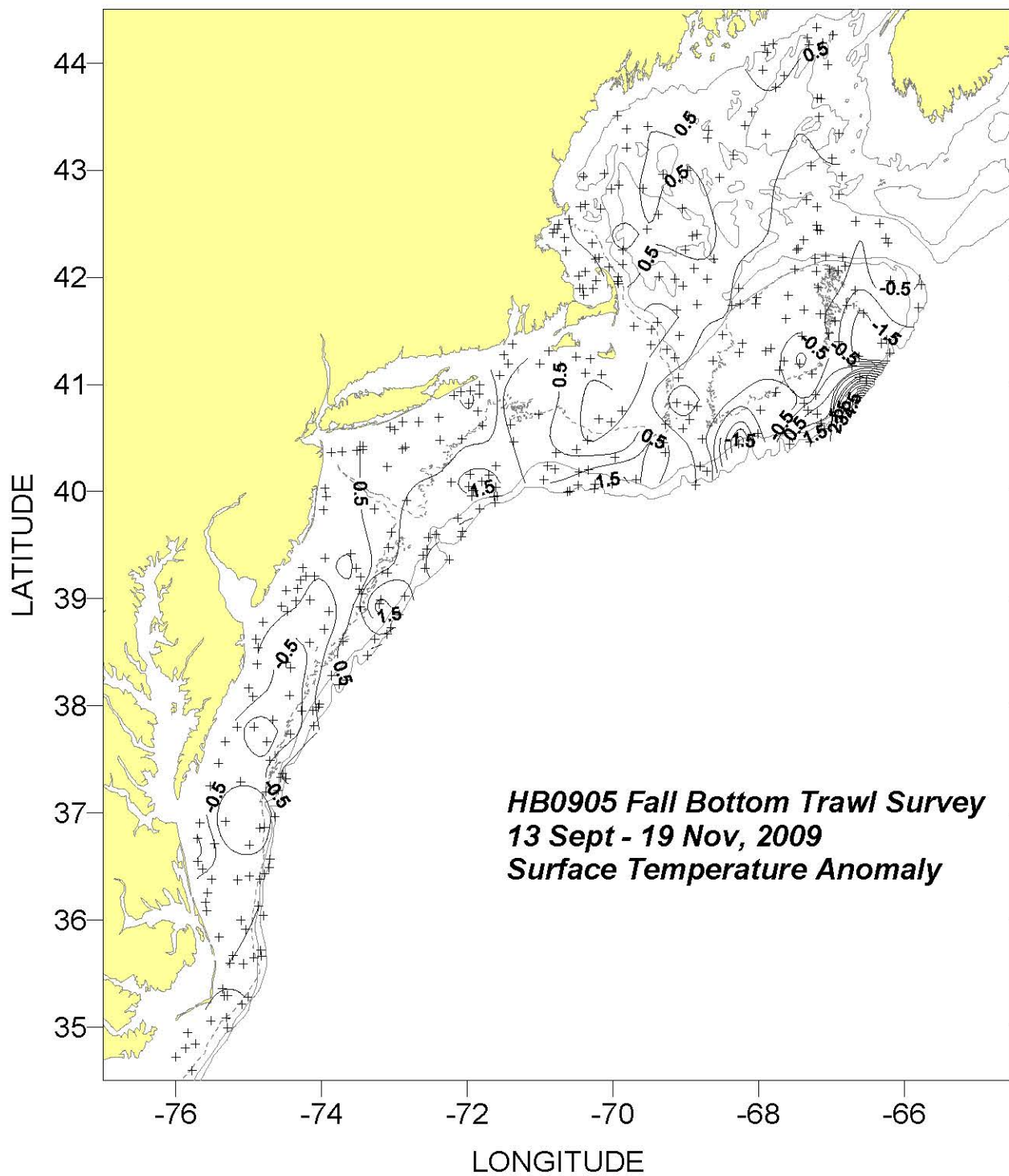
"#obs", the number of observations include in each average: "T/S", the areal average temp/salt: "Anomaly", the areal average temp/salt anomaly:

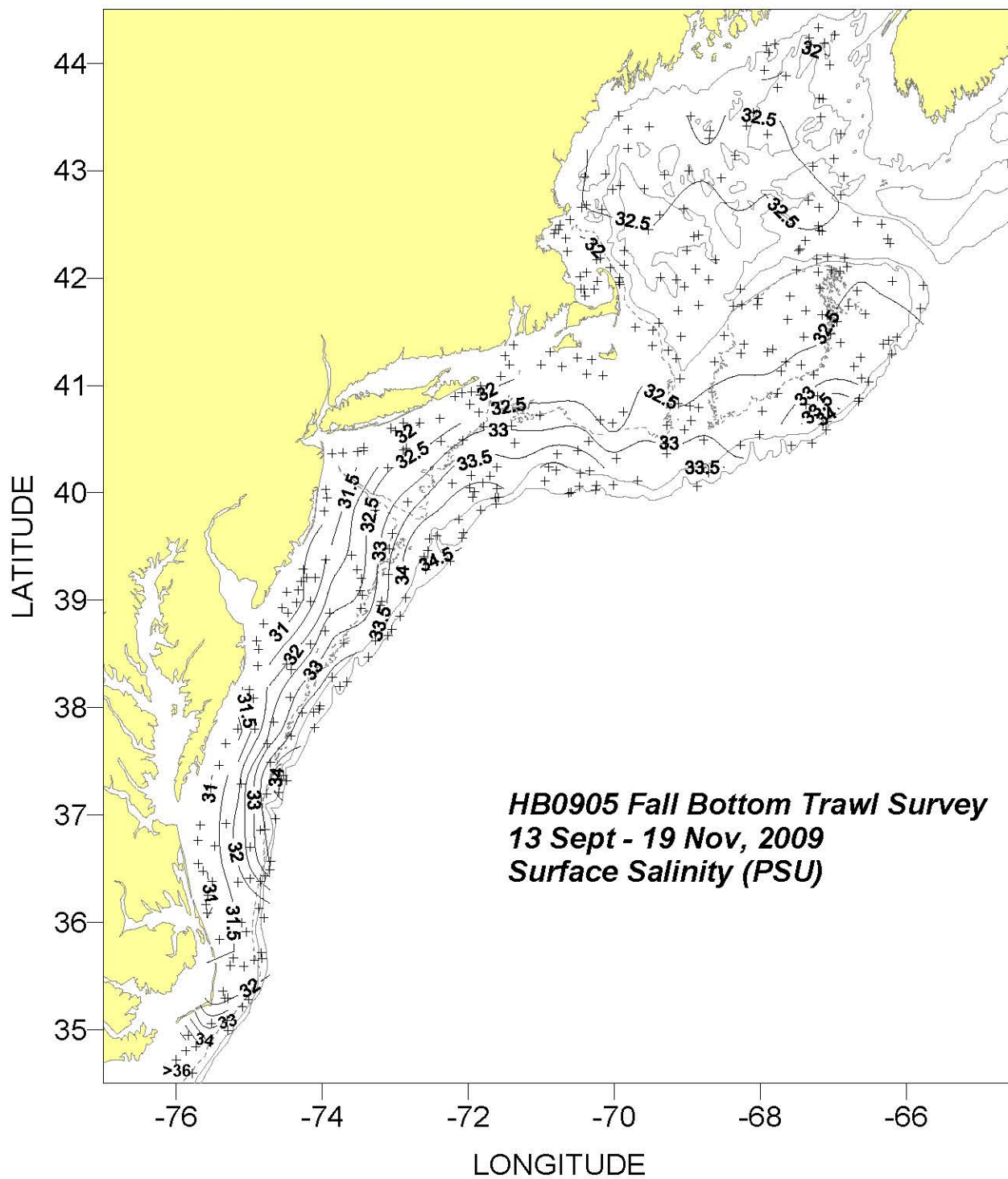
"SDV1", the standard deviation associated with the average temp/salt anomaly: "SDV2", the standard deviation of the individual anomalies from which the average anomaly was derived

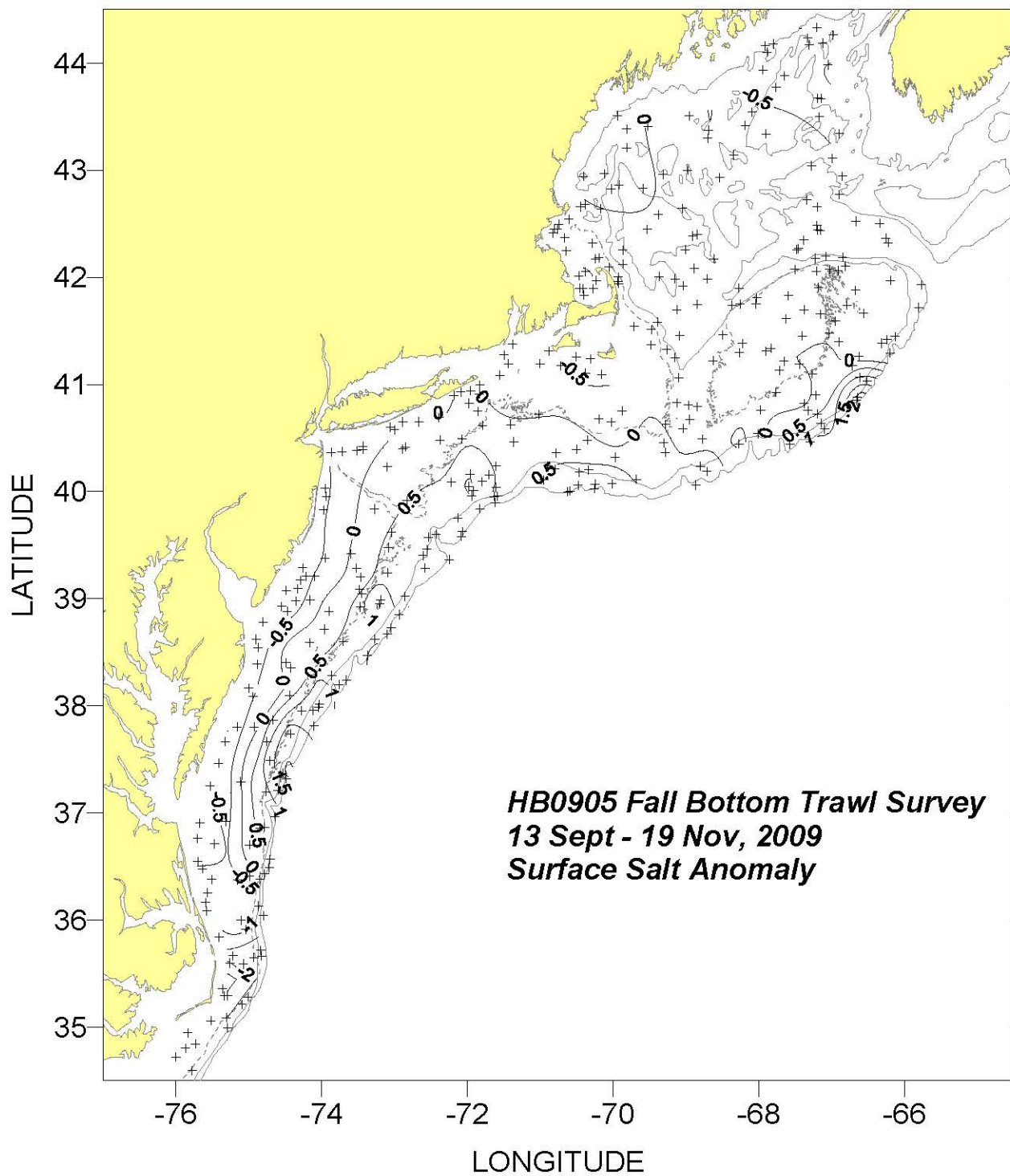
"Flag", a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.

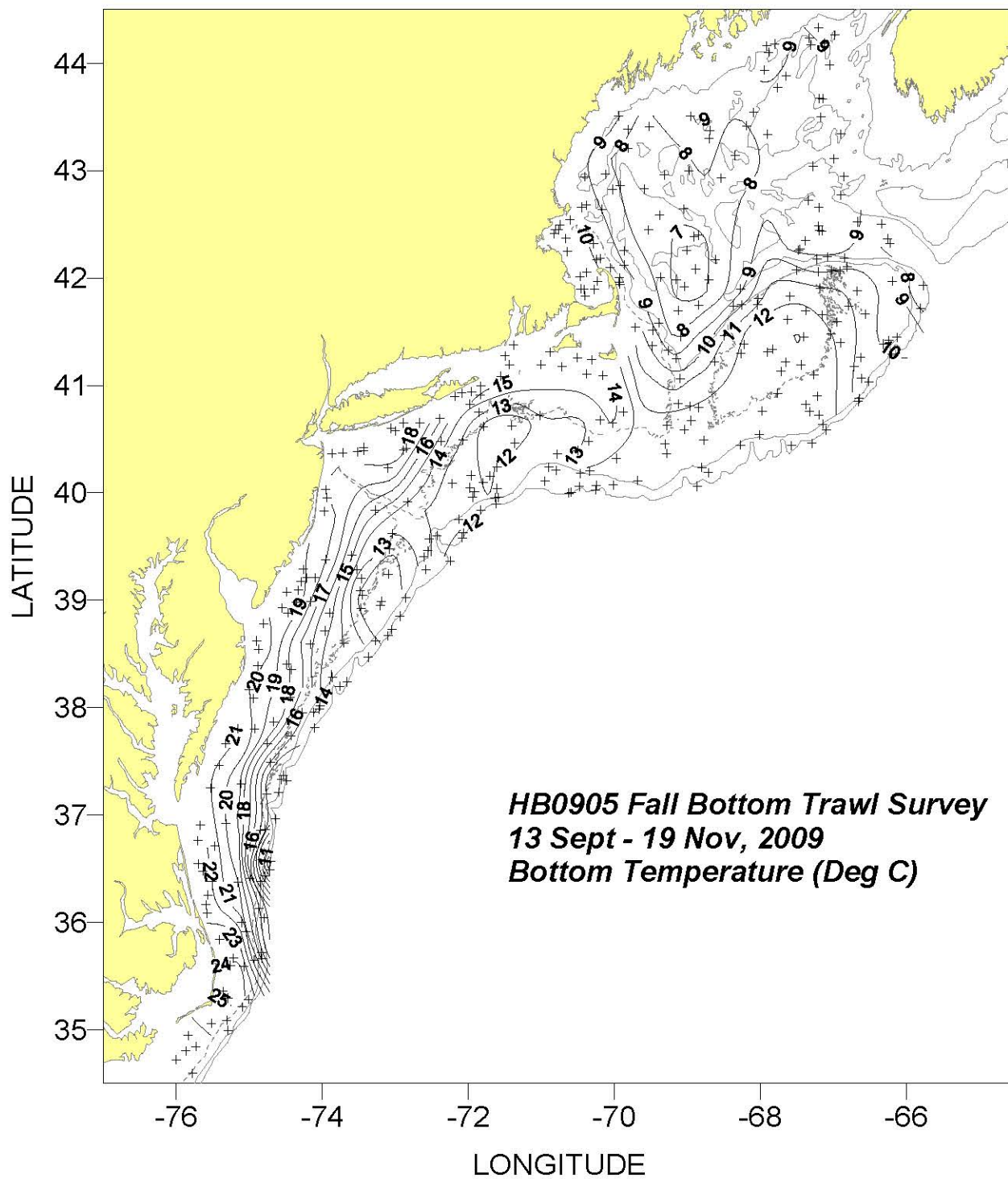
"Purpose", 2 digit code assigned by DMS to identify a unique NEFSC program survey.

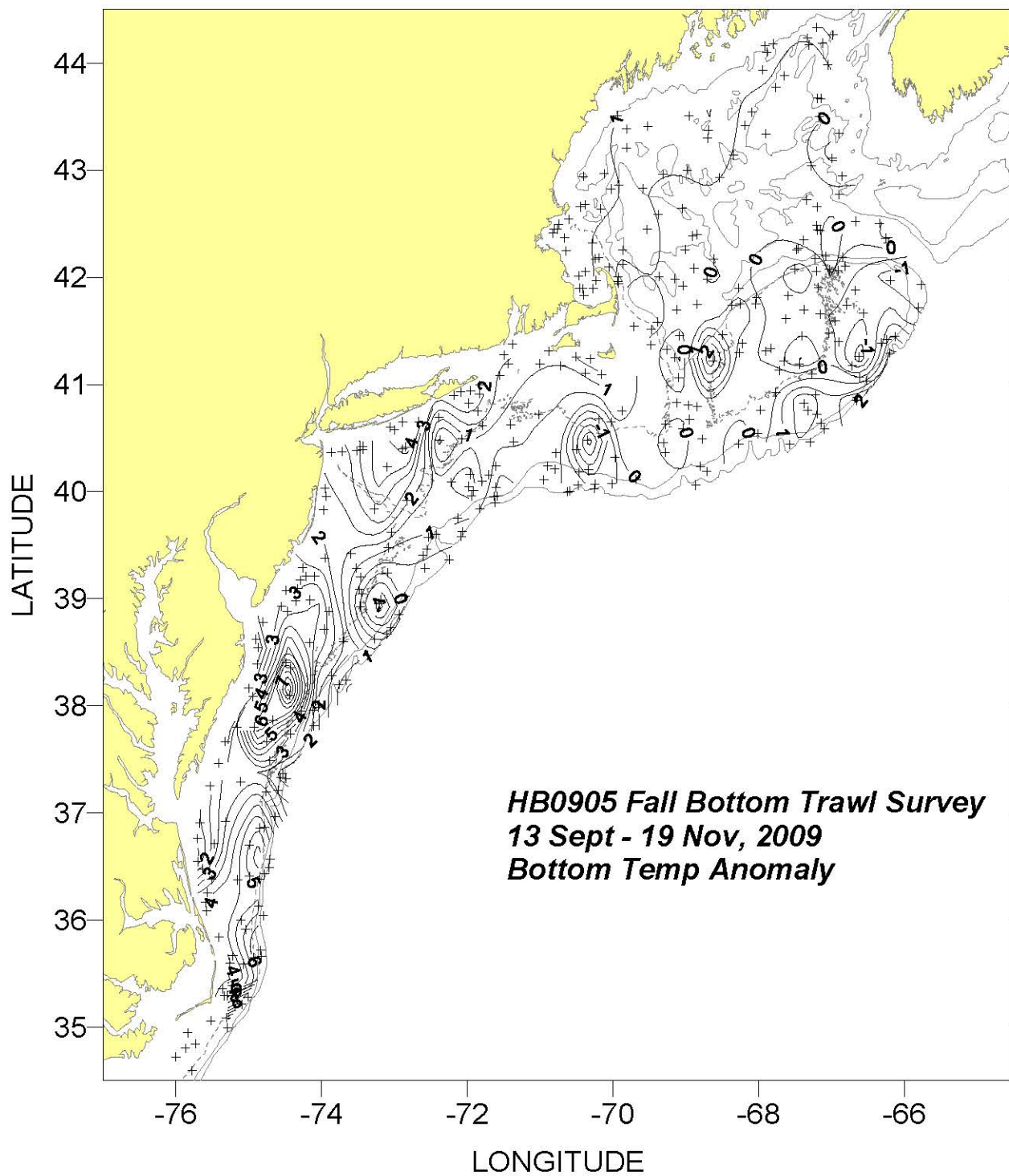


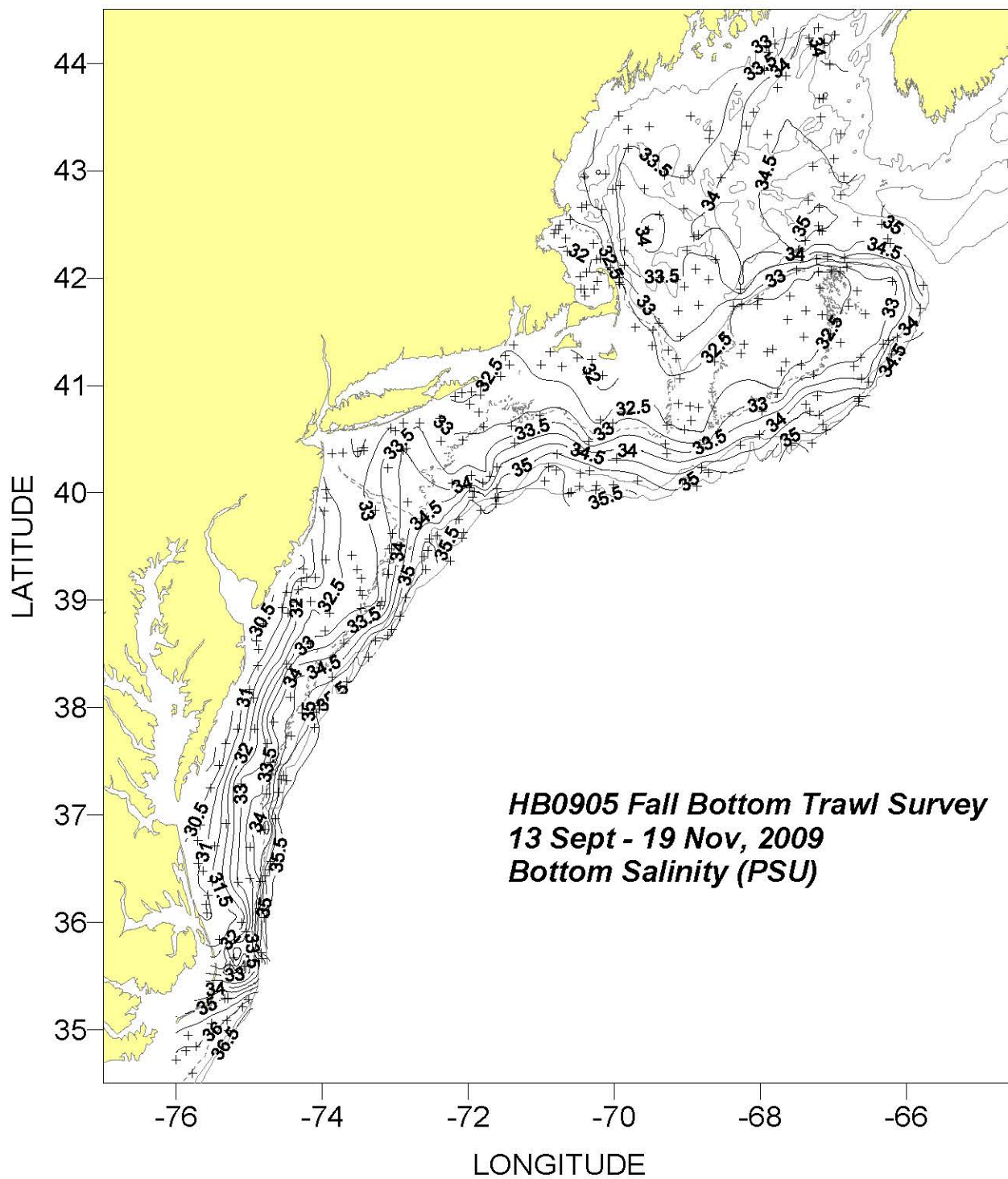


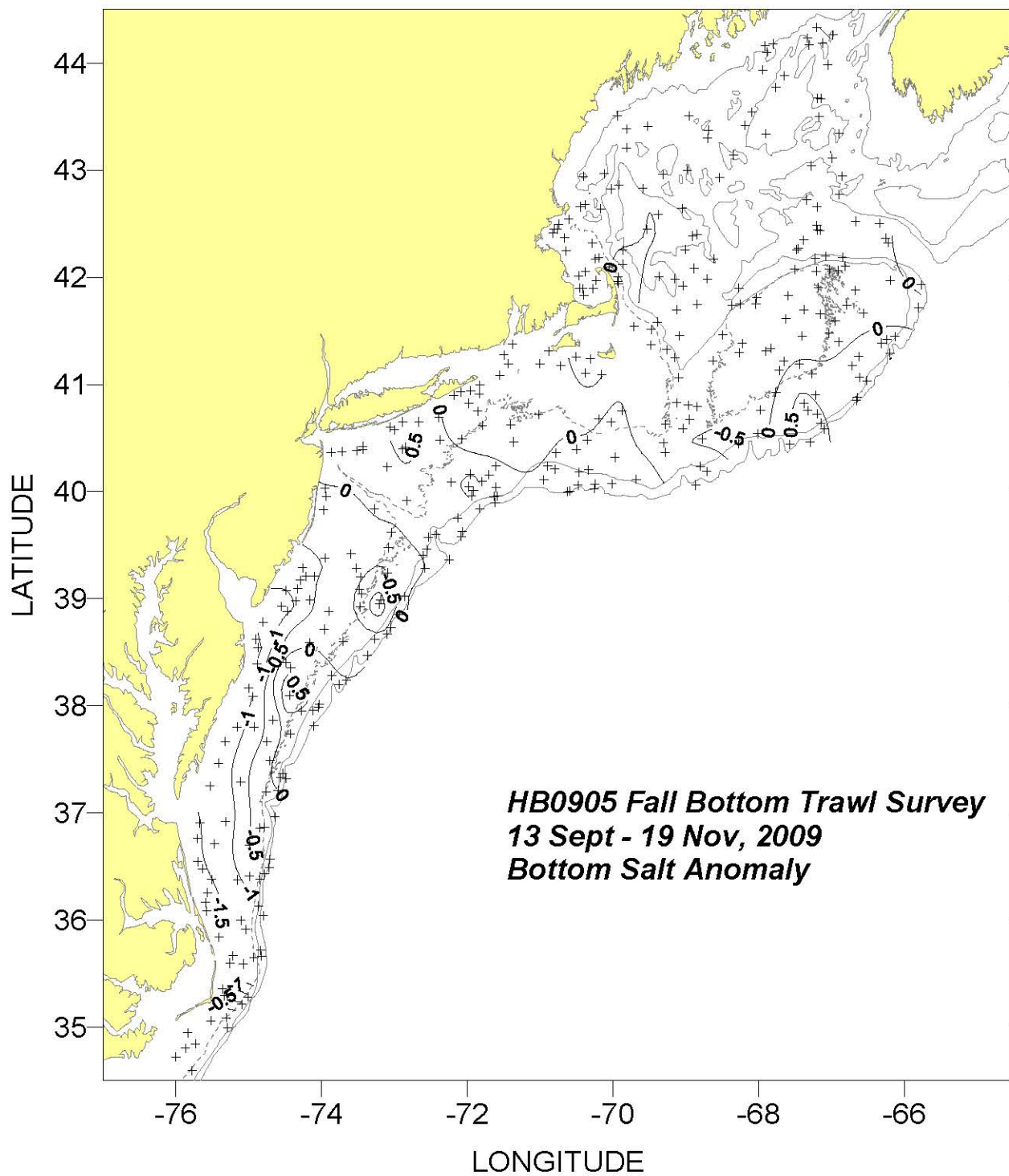












# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 1      | 1     | 3901.4 | 7251.2 | 13  | 9  | 2009 | 3:00       | 110          | 23.23    | 33.74    | 13.25    | 35.72    | 9                  |
| 2      | 2     | 3859.4 | 7311.2 | 13  | 9  | 2009 | 7:34       | 69           | 23.58    | 34.51    | 9.25     | 33.10    | 7                  |
| 3      | 3     | 3856.9 | 7312.3 | 13  | 9  | 2009 | 9:03       | 74           | 23.71    | 34.43    | 8.83     | 33.01    | 8                  |
| 4      | 4     | 3851.1 | 7256.2 | 13  | 9  | 2009 | 12:19      | 163          | 23.14    | 33.75    | 11.72    | 35.51    | 5                  |
| 5      | 5     | 3843.7 | 7302.8 | 13  | 9  | 2009 | 16:47      | 236          | 22.86    | 33.68    | 10.94    | 35.42    | 15                 |
| 6      | 6     | 3840.2 | 7305.8 | 13  | 9  | 2009 | 19:12      | 256          | 22.92    | 33.70    | 10.36    | 35.35    | 9                  |
| 7      | 7     | 3837.4 | 7316.2 | 13  | 9  | 2009 | 21:43      | 111          | 22.62    | 33.64    | 14.14    | 35.87    | 8                  |
| 8      | 8     | 3828.2 | 7322.2 | 13  | 9  | 2009 | 23:58      | 117          | 22.60    | 33.46    | 13.20    | 35.71    | 14                 |
| 9      | 9     | 3836.1 | 7342.1 | 14  | 9  | 2009 | 2:49       | 61           | 23.01    | 34.00    | 9.66     | 32.77    | 10                 |
| 10     | 10    | 3814.4 | 7339.7 | 14  | 9  | 2009 | 6:39       | 210          | 22.63    | 33.63    | 10.93    | 35.42    | 7                  |
| 11     | 11    | 3811.9 | 7345.6 | 14  | 9  | 2009 | 9:00       | 121          | 22.70    | 33.87    | 13.81    | 35.73    | 4                  |
| 12     | 12    | 3817.0 | 7351.7 | 14  | 9  | 2009 | 10:48      | 82           | 22.39    | 34.15    | 13.13    | 34.80    | 6                  |
| 13     | 13    | 3800.9 | 7401.8 | 14  | 9  | 2009 | 13:33      | 112          | 22.61    | 34.26    | 13.95    | 35.63    | 8                  |
| 14     | 14    | 3759.2 | 7402.4 | 14  | 9  | 2009 | 15:37      | 124          | 22.76    | 34.46    | 13.81    | 35.68    | 11                 |
| 15     | 15    | 3757.4 | 7406.8 | 14  | 9  | 2009 | 17:04      | 109          | 22.77    | 34.39    | 13.40    | 35.59    | 3                  |
| 16     | 16    | 3757.2 | 7416.3 | 14  | 9  | 2009 | 18:51      | 73           | 23.48    | 35.05    | 12.78    | 34.54    | 7                  |
| 17     | 18    | 3748.7 | 7406.3 | 14  | 9  | 2009 | 23:12      | 311          | 23.05    | 34.32    | 8.96     | 35.21    | 10                 |
| 18     | 19    | 3744.3 | 7425.7 | 15  | 9  | 2009 | 2:37       | 66           | 20.95    | 34.22    | 10.99    | 33.43    | 10                 |
| 19     | 20    | 3739.9 | 7444.9 | 15  | 9  | 2009 | 4:56       | 50           | 20.59    | 32.46    | 18.17    | 33.11    | 6                  |
| 20     | 21    | 3729.2 | 7442.3 | 15  | 9  | 2009 | 6:40       | 53           | 20.75    | 34.32    | 12.27    | 33.26    | 6                  |
| 21     | 22    | 3719.8 | 7433.5 | 15  | 9  | 2009 | 9:07       | 102          | 23.55    | 35.28    | 13.41    | 35.57    | 3                  |
| 22     | 23    | 3722.2 | 7431.9 | 15  | 9  | 2009 | 10:25      | 105          | 23.39    | 35.36    | 13.77    | 35.62    | 7                  |
| 23     | 24    | 3719.2 | 7429.2 | 15  | 9  | 2009 | 12:31      | 264          | 23.55    | 35.18    | 8.70     | 35.19    | 5                  |
| 24     | 25    | 3712.7 | 7435.9 | 15  | 9  | 2009 | 15:37      | 96           | 23.72    | 35.26    | 12.86    | 35.18    | 7                  |
| 25     | 26    | 3711.9 | 7445.6 | 15  | 9  | 2009 | 17:25      | 70           | 20.66    | 33.30    | 10.01    | 33.54    | 6                  |
| 26     | 27    | 3657.8 | 7438.3 | 15  | 9  | 2009 | 20:15      | 114          | 21.01    | 34.64    | 12.57    | 35.60    | 1                  |
| 27     | 28    | 3652.0 | 7446.9 | 15  | 9  | 2009 | 22:08      | 64           | 20.52    | 33.53    | 11.61    | 33.36    | 8                  |
| 28     | 29    | 3651.5 | 7450.8 | 15  | 9  | 2009 | 23:40      | 54           | 21.80    | 33.18    | 20.70    | 34.63    | 6                  |
| 29     | 30    | 3642.0 | 7459.2 | 16  | 9  | 2009 | 1:36       | 26           | 22.64    | 33.52    | 21.96    | 33.79    | 5                  |
| 30     | 31    | 3629.2 | 7443.1 | 16  | 9  | 2009 | 4:58       | 495          | 22.00    | 33.72    | 6.47     | 35.07    | 11                 |
| 31     | 32    | 3634.1 | 7442.6 | 16  | 9  | 2009 | 10:58      | 350          | 22.17    | 33.60    | 7.48     | 35.11    | 3                  |
| 32     | 33    | 3625.8 | 7446.8 | 16  | 9  | 2009 | 13:07      | 170          | 22.62    | 32.35    | 12.40    | 35.54    | 6                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 33     | 34    | 3622.8 | 7450.8 | 16  | 9  | 2009 | 15:52      | 75           | 22.96    | 32.88    | 17.36    | 33.94    | 4                  |
| 34     | 35    | 3624.4 | 7459.4 | 16  | 9  | 2009 | 17:37      | 38           | 23.03    | 31.79    | 19.84    | 33.42    | 5                  |
| 35     | 36    | 3622.5 | 7509.2 | 16  | 9  | 2009 | 19:07      | 32           | 23.32    | 31.50    | 21.78    | 33.19    | 5                  |
| 36     | 37    | 3607.8 | 7452.1 | 16  | 9  | 2009 | 21:46      | 86           | 24.18    | 31.40    | 14.27    | 34.44    | 6                  |
| 37     | 38    | 3602.5 | 7448.0 | 16  | 9  | 2009 | 23:49      | 156          | 23.70    | 31.41    | 11.80    | 35.52    | 5                  |
| 38     | 39    | 3559.8 | 7506.2 | 17  | 9  | 2009 | 2:34       | 29           | 24.10    | 31.32    | 22.92    | 31.42    | 8                  |
| 39     | 40    | 3554.7 | 7502.6 | 17  | 9  | 2009 | 4:01       | 38           | 23.70    | 31.39    | 24.33    | 32.81    | 9                  |
| 40     | 42    | 3539.9 | 7513.0 | 17  | 9  | 2009 | 8:10       | 36           | 24.03    | 31.54    | 26.75    | 35.06    | 2                  |
| 41     | 43    | 3535.8 | 7515.6 | 17  | 9  | 2009 | 9:46       | 29           | 24.05    | 31.43    | 23.76    | 31.47    | 8                  |
| 42     | 44    | 3521.5 | 7521.5 | 17  | 9  | 2009 | 12:43      | 25           | 24.13    | 30.42    | 26.19    | 34.84    | 4                  |
| 43     | 45    | 3517.6 | 7519.9 | 17  | 9  | 2009 | 14:58      | 25           | 24.09    | 30.69    | 26.22    | 34.80    | 3                  |
| 44     | 46    | 3517.7 | 7517.4 | 17  | 9  | 2009 | 16:19      | 23           | 24.17    | 30.72    | 26.39    | 34.98    | 6                  |
| 45     | 47    | 3505.3 | 7518.2 | 17  | 9  | 2009 | 18:30      | 65           | 25.30    | 32.01    | 26.70    | 36.11    | 5                  |
| 46     | 49    | 3503.6 | 7530.9 | 17  | 9  | 2009 | 21:34      | 28           | 24.66    | 31.18    | 27.11    | 35.85    | 7                  |
| 47     | 50    | 3456.7 | 7550.2 | 18  | 9  | 2009 | 0:03       | 26           | 25.55    | 34.24    | 26.81    | 35.81    | 7                  |
| 48     | 51    | 3450.6 | 7543.9 | 18  | 9  | 2009 | 1:34       | 36           | 26.22    | 35.06    | 26.97    | 36.00    | 5                  |
| 49     | 52    | 3448.2 | 7552.0 | 18  | 9  | 2009 | 3:17       | 32           | 27.10    | 36.14    | 27.13    | 36.14    | 4                  |
| 50     | 53    | 3443.2 | 7559.9 | 18  | 9  | 2009 | 5:31       | 33           | 28.62    | 36.23    | 27.50    | 36.17    | 3                  |
| 51     | 54    | 3429.9 | 7549.5 | 18  | 9  | 2009 | 8:03       | 110          | 29.31    | 36.16    | 24.33    | 36.50    | 3                  |
| 52     | 55    | 3435.6 | 7546.6 | 18  | 9  | 2009 | 9:45       | 66           | 29.23    | 36.21    | 28.28    | 36.27    | 2                  |
| 53     | 56    | 3459.6 | 7517.4 | 18  | 9  | 2009 | 13:22      | 148          | 29.08    | 36.21    | 21.32    | 36.42    | 7                  |
| 54     | 57    | 3512.8 | 7505.7 | 18  | 9  | 2009 | 17:10      | 102          | 25.21    | 32.89    | 26.50    | 36.12    | 4                  |
| 55     | 58    | 3516.9 | 7500.4 | 18  | 9  | 2009 | 19:01      | 125          | 25.56    | 33.29    | 22.22    | 36.30    | 4                  |
| 56     | 59    | 3539.8 | 7449.3 | 18  | 9  | 2009 | 22:47      | 102          | 23.14    | 31.71    | 14.95    | 34.13    | 7                  |
| 57     | 60    | 3543.1 | 7450.0 | 19  | 9  | 2009 | 0:55       | 218          | 23.22    | 31.64    | 11.65    | 35.50    | 9                  |
| 58     | 61    | 3539.0 | 7455.8 | 19  | 9  | 2009 | 3:09       | 53           | 23.04    | 31.64    | 24.86    | 33.69    | 5                  |
| 59     | 62    | 3535.4 | 7504.4 | 19  | 9  | 2009 | 4:52       | 39           | 23.91    | 31.32    | 23.71    | 31.66    | 7                  |
| 60     | 63    | 3550.4 | 7524.4 | 19  | 9  | 2009 | 7:35       | 27           | 23.24    | 30.49    | 23.53    | 31.14    | 3                  |
| 61     | 64    | 3605.1 | 7534.4 | 19  | 9  | 2009 | 9:49       | 25           | 23.08    | 30.88    | 23.19    | 31.00    | 3                  |
| 62     | 65    | 3609.9 | 7535.4 | 19  | 9  | 2009 | 11:55      | 25           | 22.79    | 30.87    | 22.84    | 30.96    | 3                  |
| 63     | 66    | 3615.2 | 7533.8 | 19  | 9  | 2009 | 13:45      | 28           | 22.79    | 30.85    | 22.64    | 31.00    | 4                  |
| 64     | 67    | 3622.8 | 7530.3 | 19  | 9  | 2009 | 15:46      | 30           | 22.35    | 30.90    | 22.02    | 31.49    | 6                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 65     | 68    | 3628.6 | 7537.9 | 19  | 9  | 2009 | 17:19      | 24           | 22.83    | 30.90    | 22.81    | 31.18    | 6                  |
| 66     | 69    | 3632.8 | 7541.9 | 19  | 9  | 2009 | 19:10      | 20           | 22.92    | 30.97    | 22.92    | 30.98    | 7                  |
| 67     | 70    | 3645.7 | 7542.2 | 19  | 9  | 2009 | 21:37      | 19           | 22.81    | 30.69    | 22.81    | 30.70    | 6                  |
| 68     | 71    | 3642.7 | 7528.2 | 20  | 9  | 2009 | 0:07       | 30           | 22.22    | 30.77    | 21.89    | 31.33    | 5                  |
| 69     | 72    | 3655.2 | 7519.1 | 20  | 9  | 2009 | 2:12       | 29           | 21.46    | 31.31    | 20.92    | 31.79    | 5                  |
| 70     | 73    | 3654.3 | 7540.3 | 20  | 9  | 2009 | 5:13       | 21           | 22.78    | 30.70    | 22.79    | 30.70    | 2                  |
| 71     | 74    | 3715.1 | 7531.8 | 20  | 9  | 2009 | 8:16       | 21           | 22.16    | 30.31    | 22.23    | 30.53    | 2                  |
| 72     | 75    | 3717.5 | 7506.7 | 20  | 9  | 2009 | 10:52      | 33           | 20.92    | 31.65    | 20.41    | 33.44    | 2                  |
| 73     | 76    | 3727.9 | 7524.6 | 20  | 9  | 2009 | 13:38      | 22           | 21.92    | 30.20    | 21.91    | 30.22    | 2                  |
| 74     | 77    | 3739.9 | 7519.4 | 20  | 9  | 2009 | 16:10      | 16           | 21.82    | 30.41    | 21.67    | 30.51    | 6                  |
| 75     | 78    | 3748.1 | 7509.6 | 20  | 9  | 2009 | 18:28      | 20           | 21.76    | 30.74    | 21.30    | 30.89    | 5                  |
| 76     | 79    | 3748.1 | 7455.4 | 20  | 9  | 2009 | 20:10      | 32           | 21.07    | 32.19    | 20.66    | 32.37    | 4                  |
| 77     | 80    | 3752.0 | 7440.0 | 20  | 9  | 2009 | 22:17      | 45           | 21.00    | 31.95    | 20.34    | 34.34    | 3                  |
| 78     | 81    | 3805.2 | 7456.4 | 21  | 9  | 2009 | 0:43       | 22           | 21.34    | 31.50    | 21.20    | 31.63    | 5                  |
| 79     | 82    | 3810.0 | 7459.8 | 21  | 9  | 2009 | 2:22       | 20           | 21.40    | 31.19    | 21.41    | 31.18    | 5                  |
| 80     | 83    | 3805.8 | 7426.1 | 21  | 9  | 2009 | 6:33       | 42           | 20.30    | 31.97    | 21.17    | 34.42    | 3                  |
| 81     | 84    | 3821.2 | 7425.2 | 21  | 9  | 2009 | 8:04       | 40           | 20.90    | 33.44    | 21.77    | 34.36    | 2                  |
| 82     | 85    | 3824.1 | 7429.2 | 21  | 9  | 2009 | 10:15      | 35           | 19.44    | 32.39    | 19.12    | 32.55    | 9                  |
| 83     | 86    | 3823.4 | 7452.8 | 21  | 9  | 2009 | 12:49      | 25           | 21.24    | 31.01    | 21.29    | 31.09    | 3                  |
| 84     | 87    | 3832.7 | 7452.3 | 21  | 9  | 2009 | 15:36      | 21           | 21.54    | 30.54    | 21.38    | 30.62    | 6                  |
| 85     | 88    | 3846.9 | 7448.3 | 21  | 9  | 2009 | 19:43      | 17           | 21.83    | 30.36    | 21.34    | 30.42    | 3                  |
| 86     | 89    | 3837.3 | 7453.8 | 21  | 9  | 2009 | 21:47      | 21           | 21.70    | 29.36    | 21.41    | 30.77    | 4                  |
| 87     | 90    | 3835.5 | 7409.8 | 22  | 9  | 2009 | 1:49       | 54           | 20.44    | 31.43    | 14.25    | 33.25    | 2                  |
| 88     | 91    | 3842.9 | 7357.6 | 22  | 9  | 2009 | 3:40       | 49           | 20.30    | 33.65    | 12.75    | 32.75    | 2                  |
| 89     | 92    | 3852.9 | 7353.9 | 22  | 9  | 2009 | 5:31       | 38           | 19.82    | 32.48    | 14.35    | 32.53    | 6                  |
| 90     | 93    | 3859.3 | 7409.5 | 22  | 9  | 2009 | 7:46       | 39           | 19.95    | 32.07    | 18.58    | 32.49    | 8                  |
| 91     | 94    | 3858.8 | 7421.1 | 22  | 9  | 2009 | 9:30       | 29           | 20.94    | 30.55    | 19.51    | 32.27    | 7                  |
| 92     | 95    | 3853.0 | 7428.3 | 22  | 9  | 2009 | 11:22      | 22           | 20.61    | 31.07    | 20.37    | 31.17    | 4                  |
| 93     | 96    | 3855.6 | 7433.0 | 22  | 9  | 2009 | 12:55      | 23           | 20.88    | 30.74    | 20.67    | 30.99    | 3                  |
| 94     | 97    | 3904.6 | 7429.2 | 22  | 9  | 2009 | 14:38      | 23           | 21.18    | 30.06    | 20.58    | 30.94    | 3                  |
| 95     | 98    | 3905.7 | 7419.5 | 22  | 9  | 2009 | 16:13      | 27           | 20.82    | 30.72    | 19.67    | 32.14    | 7                  |
| 96     | 99    | 3910.4 | 7417.5 | 22  | 9  | 2009 | 17:31      | 23           | 21.06    | 30.40    | 19.96    | 31.76    | 4                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 97     | 100   | 3912.6 | 7412.6 | 22  | 9  | 2009 | 18:52      | 22           | 20.98    | 30.98    | 19.96    | 31.58    | 6                  |
| 98     | 102   | 3917.4 | 7415.3 | 22  | 9  | 2009 | 21:34      | 20           | 21.38    | 30.21    | 20.30    | 30.90    | 5                  |
| 99     | 103   | 3912.6 | 7405.7 | 22  | 9  | 2009 | 23:00      | 26           | 21.14    | 31.13    | 19.96    | 31.60    | 4                  |
| 100    | 104   | 3922.7 | 7357.0 | 23  | 9  | 2009 | 0:52       | 28           | 20.94    | 31.54    | 19.21    | 32.33    | 3                  |
| 101    | 105   | 3925.1 | 7335.6 | 23  | 9  | 2009 | 4:05       | 40           | 19.74    | 31.87    | 14.84    | 32.80    | 2                  |
| 102    | 106   | 3917.1 | 7331.3 | 23  | 9  | 2009 | 5:55       | 46           | 19.33    | 32.28    | 12.98    | 32.68    | 9                  |
| 103    | 107   | 3912.1 | 7327.8 | 23  | 9  | 2009 | 7:28       | 49           | 20.38    | 31.83    | 11.60    | 32.67    | 4                  |
| 104    | 108   | 3905.3 | 7328.8 | 23  | 9  | 2009 | 9:01       | 54           | 20.10    | 32.14    | 11.49    | 32.78    | 2                  |
| 105    | 109   | 3902.8 | 7326.7 | 23  | 9  | 2009 | 10:45      | 55           | 19.19    | 32.37    | 11.11    | 32.84    | 1                  |
| 106    | 110   | 3855.4 | 7328.2 | 23  | 9  | 2009 | 12:58      | 59           | 20.42    | 33.54    | 10.40    | 32.92    | 3                  |
| 107    | 111   | 3914.6 | 7305.6 | 23  | 9  | 2009 | 16:51      | 72           | 20.80    | 34.01    | 10.90    | 33.58    | 4                  |
| 108    | 112   | 4059.7 | 7149.8 | 28  | 9  | 2009 | 22:22      | 27           | 18.82    | 31.24    | 17.44    | 32.24    | 4                  |
| 109    | 114   | 4054.8 | 7150.1 | 29  | 9  | 2009 | 1:22       | 40           | 18.54    | 31.49    | 14.84    | 32.64    | 2                  |
| 110    | 115   | 4056.5 | 7157.2 | 29  | 9  | 2009 | 3:00       | 30           | 18.76    | 31.30    | 17.60    | 32.35    | 3                  |
| 111    | 116   | 4053.9 | 7210.9 | 29  | 9  | 2009 | 4:52       | 25           | 18.72    | 31.31    | 17.00    | 32.44    | 2                  |
| 112    | 117   | 4055.9 | 7205.1 | 29  | 9  | 2009 | 6:25       | 26           | 18.58    | 31.36    | 17.36    | 32.22    | 8                  |
| 113    | 119   | 4049.5 | 7158.4 | 29  | 9  | 2009 | 9:13       | 40           | 18.19    | 31.94    | 16.24    | 32.81    | 9                  |
| 114    | 120   | 4045.0 | 7151.2 | 29  | 9  | 2009 | 10:37      | 51           | 17.84    | 32.18    | 11.80    | 32.74    | 7                  |
| 115    | 121   | 4037.1 | 7147.5 | 29  | 9  | 2009 | 12:19      | 61           | 18.66    | 33.10    | 10.78    | 32.92    | 6                  |
| 116    | 122   | 4029.5 | 7204.4 | 29  | 9  | 2009 | 14:31      | 60           | 19.09    | 33.36    | 11.39    | 33.12    | 3                  |
| 117    | 124   | 4028.8 | 7222.4 | 29  | 9  | 2009 | 18:21      | 55           | 18.66    | 32.17    | 11.70    | 33.17    | 1                  |
| 118    | 125   | 4041.5 | 7223.3 | 29  | 9  | 2009 | 20:47      | 40           | 18.52    | 31.70    | 13.70    | 32.93    | 5                  |
| 119    | 126   | 4039.1 | 7239.9 | 29  | 9  | 2009 | 23:25      | 34           | 18.67    | 32.01    | 19.27    | 33.51    | 3                  |
| 120    | 127   | 4039.1 | 7253.2 | 30  | 9  | 2009 | 1:27       | 27           | 18.94    | 31.96    | 19.29    | 33.21    | 4                  |
| 121    | 128   | 4036.1 | 7303.2 | 30  | 9  | 2009 | 2:55       | 22           | 19.08    | 31.60    | 19.14    | 33.04    | 3                  |
| 122    | 129   | 4034.7 | 7259.9 | 30  | 9  | 2009 | 4:16       | 25           | 19.08    | 31.47    | 19.28    | 33.22    | 2                  |
| 123    | 130   | 4024.9 | 7251.1 | 30  | 9  | 2009 | 6:09       | 46           | 18.88    | 32.22    | 19.06    | 34.26    | 11                 |
| 124    | 131   | 4023.8 | 7253.3 | 30  | 9  | 2009 | 7:26       | 42           | 18.94    | 32.33    | 17.80    | 34.05    | 5                  |
| 125    | 132   | 4013.9 | 7306.0 | 30  | 9  | 2009 | 9:25       | 44           | 19.05    | 32.73    | 18.93    | 33.85    | 6                  |
| 126    | 133   | 4023.7 | 7326.0 | 30  | 9  | 2009 | 12:10      | 28           | 19.10    | 30.88    | 18.90    | 32.64    | 3                  |
| 127    | 134   | 4025.4 | 7326.0 | 30  | 9  | 2009 | 13:19      | 25           | 19.11    | 31.17    | 18.92    | 32.45    | 3                  |
| 128    | 135   | 4022.9 | 7331.0 | 30  | 9  | 2009 | 15:15      | 26           | 18.91    | 31.21    | 19.02    | 32.33    | 3                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 129    | 136   | 4022.4 | 7343.1 | 30  | 9  | 2009 | 16:51      | 26           | 19.20    | 31.44    | 18.34    | 33.00    | 4                  |
| 130    | 137   | 4021.9 | 7351.8 | 30  | 9  | 2009 | 18:34      | 26           | 19.17    | 31.44    | 14.21    | 32.89    | 3                  |
| 131    | 138   | 4001.7 | 7356.9 | 30  | 9  | 2009 | 21:25      | 23           | 19.45    | 30.91    | 18.73    | 32.50    | 3                  |
| 132    | 139   | 3957.3 | 7356.1 | 30  | 9  | 2009 | 22:53      | 23           | 19.43    | 30.83    | 18.60    | 32.46    | 3                  |
| 133    | 140   | 3949.6 | 7358.3 | 1   | 10 | 2009 | 0:18       | 21           | 19.46    | 30.70    | 19.16    | 32.05    | 4                  |
| 134    | 141   | 3950.3 | 7316.3 | 1   | 10 | 2009 | 4:01       | 44           | 18.73    | 32.75    | 17.34    | 33.23    | 9                  |
| 135    | 142   | 3954.9 | 7249.8 | 1   | 10 | 2009 | 7:04       | 55           | 18.99    | 33.19    | 13.56    | 33.11    | 10                 |
| 136    | 143   | 3937.1 | 7302.5 | 1   | 10 | 2009 | 9:46       | 64           | 18.81    | 33.23    | 11.45    | 33.60    | 7                  |
| 137    | 144   | 3928.7 | 7305.0 | 1   | 10 | 2009 | 11:38      | 67           | 19.32    | 33.84    | 11.37    | 33.34    | 5                  |
| 138    | 145   | 3924.3 | 7236.3 | 1   | 10 | 2009 | 14:18      | 110          | 20.94    | 34.87    | 13.52    | 35.69    | 5                  |
| 139    | 146   | 3917.1 | 7234.9 | 1   | 10 | 2009 | 15:52      | 139          | 20.96    | 34.84    | 12.00    | 35.55    | 1                  |
| 140    | 147   | 3921.9 | 7214.8 | 1   | 10 | 2009 | 18:19      | 279          | 20.23    | 34.65    | 9.64     | 35.25    | 3                  |
| 141    | 148   | 3927.7 | 7233.2 | 1   | 10 | 2009 | 21:30      | 108          | 20.40    | 34.75    | 13.57    | 35.68    | 2                  |
| 142    | 149   | 3934.4 | 7231.9 | 1   | 10 | 2009 | 23:07      | 89           | 20.88    | 34.88    | 14.81    | 35.63    | 2                  |
| 143    | 150   | 3936.2 | 7225.6 | 2   | 10 | 2009 | 1:47       | 367          | 20.36    | 34.68    | 8.29     | 35.14    | 4                  |
| 144    | 151   | 3934.8 | 7204.8 | 2   | 10 | 2009 | 5:20       | 207          | 20.49    | 34.79    | 11.45    | 35.48    | 9                  |
| 145    | 152   | 3937.7 | 7204.0 | 2   | 10 | 2009 | 7:55       | 161          | 21.11    | 35.13    | 12.95    | 35.67    | 8                  |
| 146    | 153   | 3945.2 | 7207.9 | 2   | 10 | 2009 | 10:00      | 116          | 19.80    | 34.38    | 13.56    | 35.69    | 7                  |
| 147    | 154   | 3950.4 | 7149.8 | 2   | 10 | 2009 | 12:22      | 182          | 19.55    | 34.26    | 11.29    | 35.46    | 5                  |
| 148    | 155   | 3957.6 | 7156.2 | 2   | 10 | 2009 | 14:37      | 94           | 19.69    | 34.68    | 15.08    | 35.72    | 6                  |
| 149    | 156   | 4000.5 | 7154.9 | 2   | 10 | 2009 | 16:16      | 87           | 20.69    | 34.84    | 13.73    | 35.31    | 2                  |
| 150    | 157   | 4002.8 | 7158.6 | 2   | 10 | 2009 | 17:51      | 82           | 20.09    | 34.41    | 12.35    | 34.67    | 2                  |
| 151    | 159   | 4005.3 | 7213.3 | 2   | 10 | 2009 | 20:19      | 76           | 19.33    | 33.67    | 10.39    | 33.62    | 1                  |
| 152    | 160   | 4009.7 | 7157.6 | 2   | 10 | 2009 | 22:31      | 74           | 20.00    | 34.38    | 10.79    | 33.85    | 6                  |
| 153    | 161   | 4005.7 | 7147.9 | 3   | 10 | 2009 | 0:12       | 81           | 19.70    | 34.21    | 10.88    | 33.64    | 3                  |
| 154    | 163   | 4009.4 | 7142.1 | 3   | 10 | 2009 | 2:25       | 83           | 19.33    | 33.93    | 10.66    | 33.68    | 7                  |
| 155    | 164   | 4014.4 | 7136.3 | 3   | 10 | 2009 | 4:16       | 86           | 18.17    | 33.16    | 12.57    | 34.53    | 8                  |
| 156    | 165   | 4002.4 | 7136.4 | 3   | 10 | 2009 | 6:31       | 92           | 19.66    | 34.17    | 12.83    | 35.34    | 4                  |
| 157    | 166   | 3957.3 | 7137.8 | 3   | 10 | 2009 | 8:03       | 110          | 20.56    | 34.67    | 13.40    | 35.68    | 5                  |
| 158    | 167   | 3953.9 | 7136.8 | 3   | 10 | 2009 | 9:16       | 215          | 21.16    | 35.06    | 11.19    | 35.45    | 7                  |
| 159    | 168   | 3957.4 | 7134.9 | 3   | 10 | 2009 | 11:22      | 112          | 20.55    | 34.69    | 13.24    | 35.69    | 5                  |
| 160    | 169   | 4006.5 | 7056.8 | 3   | 10 | 2009 | 14:53      | 154          | 18.74    | 34.00    | 12.56    | 35.63    | 7                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 161    | 171   | 4014.3 | 7053.8 | 3   | 10 | 2009 | 19:21      | 126          | 18.92    | 34.17    | 12.86    | 35.65    | 2                  |
| 162    | 172   | 4012.5 | 7047.6 | 3   | 10 | 2009 | 20:43      | 127          | 20.58    | 34.86    | 13.37    | 35.71    | 1                  |
| 163    | 173   | 3959.9 | 7037.1 | 3   | 10 | 2009 | 23:22      | 248          | 22.00    | 34.85    | 10.96    | 35.41    | 45                 |
| 164    | 173   | 4000.3 | 7035.2 | 4   | 10 | 2009 | 0:01       | 243          | 21.98    | 34.87    | 9.64     | 35.27    | 10                 |
| 165    | 174   | 4003.5 | 7028.8 | 4   | 10 | 2009 | 2:15       | 242          | 20.78    | 34.63    | 8.59     | 35.16    | 6                  |
| 166    | 175   | 4001.6 | 7015.2 | 4   | 10 | 2009 | 4:46       | 216          | 19.70    | 34.41    | 11.15    | 35.45    | 5                  |
| 167    | 176   | 4010.9 | 7027.7 | 4   | 10 | 2009 | 8:15       | 121          | 18.44    | 33.88    | 13.79    | 35.58    | 10                 |
| 168    | 177   | 4012.1 | 7020.0 | 4   | 10 | 2009 | 9:52       | 110          | 19.62    | 34.52    | 13.70    | 35.46    | 7                  |
| 169    | 178   | 4004.2 | 7014.6 | 4   | 10 | 2009 | 11:36      | 166          | 20.19    | 34.66    | 11.62    | 35.50    | 4                  |
| 170    | 180   | 4004.5 | 7000.7 | 4   | 10 | 2009 | 14:36      | 148          | 20.82    | 34.79    | 12.29    | 35.58    | 5                  |
| 171    | 181   | 4006.8 | 6940.7 | 4   | 10 | 2009 | 16:53      | 101          | 17.75    | 33.44    | 13.51    | 35.27    | 5                  |
| 172    | 182   | 4021.9 | 6916.9 | 4   | 10 | 2009 | 20:07      | 81           | 17.50    | 33.28    | 11.89    | 33.76    | 4                  |
| 173    | 183   | 4027.2 | 6918.3 | 4   | 10 | 2009 | 21:58      | 74           | 19.21    | 34.18    | 12.34    | 33.44    | 7                  |
| 174    | 184   | 4019.2 | 6958.1 | 5   | 10 | 2009 | 3:27       | 86           | 16.21    | 32.43    | 12.78    | 34.46    | 9                  |
| 175    | 185   | 4028.9 | 7021.1 | 5   | 10 | 2009 | 6:05       | 68           | 16.47    | 32.73    | 11.17    | 33.03    | 4                  |
| 176    | 186   | 4023.7 | 7029.8 | 5   | 10 | 2009 | 7:40       | 83           | 16.99    | 33.00    | 13.07    | 34.47    | 6                  |
| 177    | 187   | 4021.6 | 7046.9 | 5   | 10 | 2009 | 9:38       | 96           | 17.59    | 33.54    | 13.81    | 35.06    | 9                  |
| 178    | 188   | 4027.9 | 7121.6 | 5   | 10 | 2009 | 12:53      | 72           | 18.95    | 33.72    | 11.66    | 33.90    | 5                  |
| 179    | 189   | 4037.5 | 7124.2 | 5   | 10 | 2009 | 14:46      | 66           | 17.54    | 32.74    | 9.78     | 33.01    | 3                  |
| 180    | 190   | 4043.3 | 7101.1 | 5   | 10 | 2009 | 17:28      | 60           | 16.63    | 32.09    | 11.76    | 33.08    | 4                  |
| 181    | 191   | 4105.2 | 7133.1 | 5   | 10 | 2009 | 22:07      | 28           | 17.58    | 31.71    | 17.21    | 32.53    | 6                  |
| 182    | 192   | 4111.6 | 7126.3 | 6   | 10 | 2009 | 0:06       | 37           | 17.54    | 31.74    | 15.98    | 32.89    | 6                  |
| 183    | 193   | 4116.6 | 7129.5 | 6   | 10 | 2009 | 1:38       | 43           | 17.42    | 31.69    | 16.27    | 32.63    | 6                  |
| 184    | 194   | 4122.5 | 7122.6 | 6   | 10 | 2009 | 3:46       | 34           | 17.39    | 31.62    | 16.74    | 32.33    | 4                  |
| 185    | 195   | 4118.7 | 7052.9 | 6   | 10 | 2009 | 7:00       | 34           | 17.10    | 31.86    | 16.82    | 32.07    | 5                  |
| 186    | 196   | 4111.6 | 7100.2 | 6   | 10 | 2009 | 8:53       | 34           | 17.09    | 31.92    | 16.54    | 32.30    | 10                 |
| 187    | 197   | 4110.6 | 7042.9 | 6   | 10 | 2009 | 13:25      | 33           | 16.59    | 31.79    | 15.25    | 32.35    | 6                  |
| 188    | 198   | 4115.5 | 7030.4 | 6   | 10 | 2009 | 15:22      | 29           | 16.58    | 31.67    | 15.87    | 32.09    | 3                  |
| 189    | 199   | 4114.3 | 7018.4 | 6   | 10 | 2009 | 17:13      | 24           | 16.58    | 31.71    | 16.01    | 31.88    | 3                  |
| 190    | 200   | 4105.5 | 7009.2 | 6   | 10 | 2009 | 19:07      | 26           | 16.46    | 31.75    | 16.41    | 31.76    | 4                  |
| 191    | 201   | 4106.5 | 7022.7 | 6   | 10 | 2009 | 21:22      | 38           | 16.04    | 31.93    | 14.92    | 32.26    | 4                  |
| 192    | 202   | 4045.2 | 6952.5 | 7   | 10 | 2009 | 1:22       | 43           | 15.02    | 32.06    | 15.47    | 32.87    | 3                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 193    | 203   | 4038.9 | 7001.5 | 7   | 10 | 2009 | 2:58       | 50           | 15.32    | 32.32    | 14.06    | 32.92    | 2                  |
| 194    | 204   | 4040.6 | 7011.4 | 19  | 10 | 2009 | 20:06      | 46           | 13.10    | 32.19    | 13.08    | 32.36    | 4                  |
| 195    | 205   | 4037.7 | 6916.6 | 20  | 10 | 2009 | 1:19       | 52           | 13.02    | 32.48    | 13.03    | 32.48    | 3                  |
| 196    | 206   | 4049.7 | 6907.2 | 20  | 10 | 2009 | 3:39       | 69           | 13.22    | 32.46    | 12.44    | 32.42    | 5                  |
| 197    | 208   | 4048.5 | 6857.9 | 20  | 10 | 2009 | 8:25       | 71           | 13.87    | 32.37    | 13.31    | 32.45    | 4                  |
| 198    | 209   | 4047.6 | 6850.6 | 20  | 10 | 2009 | 10:28      | 68           | 14.05    | 32.35    | 14.05    | 32.34    | 5                  |
| 199    | 210   | 4040.4 | 6856.9 | 20  | 10 | 2009 | 12:37      | 69           | 13.83    | 32.35    | 13.59    | 32.38    | 7                  |
| 200    | 211   | 4035.3 | 6902.4 | 20  | 10 | 2009 | 14:37      | 68           | 13.29    | 32.42    | 13.01    | 32.45    | 6                  |
| 201    | 212   | 4029.5 | 6846.5 | 20  | 10 | 2009 | 17:19      | 74           | 13.15    | 32.43    | 12.60    | 32.61    | 3                  |
| 202    | 213   | 4014.1 | 6847.9 | 20  | 10 | 2009 | 19:34      | 113          | 15.52    | 34.09    | 12.22    | 34.95    | 5                  |
| 203    | 214   | 4003.7 | 6851.9 | 20  | 10 | 2009 | 21:49      | 407          | 18.68    | 35.24    | 8.04     | 35.14    | 11                 |
| 204    | 215   | 4011.4 | 6842.6 | 21  | 10 | 2009 | 1:07       | 144          | 17.05    | 34.52    | 12.51    | 35.22    | 4                  |
| 205    | 217   | 4026.7 | 6816.1 | 21  | 10 | 2009 | 5:28       | 115          | 12.09    | 32.60    | 11.90    | 34.28    | 6                  |
| 206    | 218   | 4032.4 | 6800.7 | 21  | 10 | 2009 | 8:04       | 101          | 12.30    | 32.61    | 11.82    | 33.97    | 7                  |
| 207    | 219   | 4026.5 | 6734.2 | 21  | 10 | 2009 | 11:52      | 143          | 18.58    | 35.14    | 13.84    | 35.74    | 1                  |
| 208    | 221   | 4027.8 | 6717.5 | 21  | 10 | 2009 | 15:37      | 263          | 19.16    | 35.24    | 9.71     | 35.27    | 4                  |
| 209    | 222   | 4035.1 | 6705.6 | 21  | 10 | 2009 | 18:31      | 193          | 19.54    | 35.21    | 12.74    | 35.64    | 6                  |
| 210    | 223   | 4038.3 | 6708.6 | 21  | 10 | 2009 | 20:46      | 122          | 18.41    | 35.01    | 12.02    | 34.80    | 3                  |
| 211    | 224   | 4043.6 | 6711.6 | 21  | 10 | 2009 | 22:55      | 99           | 12.58    | 32.96    | 13.52    | 34.47    | 7                  |
| 212    | 226   | 4045.5 | 6719.3 | 22  | 10 | 2009 | 2:13       | 95           | 12.70    | 32.66    | 13.55    | 34.38    | 6                  |
| 213    | 227   | 4049.4 | 6722.4 | 22  | 10 | 2009 | 4:00       | 89           | 12.98    | 32.47    | 13.69    | 34.58    | 5                  |
| 214    | 228   | 4054.1 | 6713.0 | 22  | 10 | 2009 | 6:04       | 85           | 12.25    | 32.77    | 14.63    | 34.36    | 7                  |
| 215    | 229   | 4055.7 | 6745.7 | 22  | 10 | 2009 | 9:07       | 61           | 13.06    | 32.43    | 12.74    | 32.52    | 9                  |
| 216    | 230   | 4045.7 | 6758.3 | 22  | 10 | 2009 | 11:25      | 74           | 12.93    | 32.42    | 13.32    | 33.37    | 6                  |
| 217    | 231   | 4103.9 | 6905.7 | 22  | 10 | 2009 | 17:36      | 85           | 12.78    | 32.16    | 10.43    | 32.46    | 5                  |
| 218    | 232   | 4115.1 | 6908.8 | 22  | 10 | 2009 | 20:27      | 98           | 12.65    | 32.07    | 7.98     | 32.81    | 6                  |
| 219    | 233   | 4119.5 | 6915.5 | 22  | 10 | 2009 | 22:22      | 98           | 11.98    | 32.26    | 6.74     | 32.94    | 6                  |
| 220    | 234   | 4113.3 | 6837.6 | 28  | 10 | 2009 | 4:24       | 64           | 12.71    | 32.37    | 12.40    | 32.39    | 2                  |
| 221    | 235   | 4127.7 | 6829.6 | 28  | 10 | 2009 | 6:43       | 88           | 12.34    | 32.24    | 8.52     | 32.72    | 8                  |
| 222    | 237   | 4123.0 | 6813.3 | 28  | 10 | 2009 | 10:38      | 47           | 14.45    | 32.32    | 14.37    | 32.33    | 6                  |
| 223    | 238   | 4117.9 | 6816.0 | 28  | 10 | 2009 | 13:37      | 47           | 14.33    | 32.33    | 14.28    | 32.35    | 6                  |
| 224    | 239   | 4118.8 | 6753.9 | 28  | 10 | 2009 | 17:01      | 33           | 14.28    | 32.34    | 14.29    | 32.34    | 4                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 225    | 240   | 4107.9 | 6742.9 | 29  | 10 | 2009 | 22:52      | 50           | 13.21    | 32.36    | 13.18    | 32.37    | 6                  |
| 226    | 241   | 4113.1 | 6738.9 | 30  | 10 | 2009 | 0:13       | 40           | 13.24    | 32.37    | 13.22    | 32.38    | 6                  |
| 227    | 242   | 4120.3 | 6749.9 | 30  | 10 | 2009 | 3:01       | 41           | 14.20    | 32.30    | 14.22    | 32.30    | 4                  |
| 228    | 243   | 4127.2 | 6724.0 | 30  | 10 | 2009 | 6:33       | 38           | 13.68    | 32.33    | 13.69    | 32.32    | 4                  |
| 229    | 244   | 4111.5 | 6726.3 | 30  | 10 | 2009 | 9:37       | 47           | 12.61    | 32.49    | 12.55    | 32.53    | 9                  |
| 230    | 245   | 4106.0 | 6715.8 | 30  | 10 | 2009 | 11:34      | 62           | 12.47    | 32.56    | 12.59    | 32.81    | 7                  |
| 231    | 246   | 4051.1 | 6639.3 | 30  | 10 | 2009 | 15:51      | 193          | 23.95    | 36.18    | 12.53    | 35.01    | 8                  |
| 232    | 247   | 4052.8 | 6638.8 | 30  | 10 | 2009 | 18:46      | 138          | 21.76    | 35.80    | 13.40    | 34.71    | 8                  |
| 233    | 248   | 4102.1 | 6630.9 | 30  | 10 | 2009 | 21:32      | 100          | 11.26    | 32.76    | 10.84    | 33.60    | 1                  |
| 234    | 249   | 4104.1 | 6636.7 | 30  | 10 | 2009 | 23:10      | 88           | 11.40    | 32.78    | 10.38    | 33.33    | 4                  |
| 235    | 250   | 4110.5 | 6642.8 | 31  | 10 | 2009 | 1:10       | 80           | 11.32    | 32.71    | 10.51    | 33.10    | 5                  |
| 236    | 251   | 4115.7 | 6637.3 | 31  | 10 | 2009 | 3:01       | 85           | 11.52    | 32.64    | 10.03    | 33.08    | 5                  |
| 237    | 252   | 4123.9 | 6653.8 | 31  | 10 | 2009 | 5:16       | 70           | 12.15    | 32.55    | 11.82    | 32.66    | 6                  |
| 238    | 253   | 4128.6 | 6701.8 | 31  | 10 | 2009 | 6:58       | 64           | 12.39    | 32.53    | 12.14    | 32.58    | 7                  |
| 239    | 254   | 4135.5 | 6656.7 | 31  | 10 | 2009 | 8:37       | 64           | 12.72    | 32.46    | 12.21    | 32.55    | 8                  |
| 240    | 255   | 4139.5 | 6709.2 | 31  | 10 | 2009 | 10:40      | 59           | 12.71    | 32.46    | 12.71    | 32.46    | 7                  |
| 241    | 256   | 4141.9 | 6722.4 | 31  | 10 | 2009 | 12:40      | 48           | 13.47    | 32.36    | 13.36    | 32.37    | 9                  |
| 242    | 257   | 4136.8 | 6737.5 | 31  | 10 | 2009 | 15:07      | 50           | 13.38    | 32.38    | 13.35    | 32.38    | 5                  |
| 243    | 258   | 4149.8 | 6735.6 | 31  | 10 | 2009 | 17:55      | 44           | 13.18    | 32.42    | 13.15    | 32.42    | 3                  |
| 244    | 259   | 4154.4 | 6710.8 | 31  | 10 | 2009 | 20:47      | 60           | 12.88    | 32.44    | 12.82    | 32.45    | 6                  |
| 245    | 260   | 4144.4 | 6647.2 | 31  | 10 | 2009 | 23:58      | 69           | 11.46    | 32.60    | 11.09    | 32.64    | 3                  |
| 246    | 261   | 4152.8 | 6640.4 | 1   | 11 | 2009 | 2:13       | 68           | 11.50    | 32.54    | 10.79    | 32.67    | 4                  |
| 247    | 262   | 4139.9 | 6633.7 | 1   | 11 | 2009 | 5:16       | 71           | 10.83    | 32.69    | 10.45    | 32.73    | 8                  |
| 248    | 263   | 4123.2 | 6618.6 | 1   | 11 | 2009 | 9:46       | 96           | 11.77    | 32.62    | 9.02     | 33.09    | 6                  |
| 249    | 264   | 4117.6 | 6611.8 | 1   | 11 | 2009 | 11:55      | 186          | 11.57    | 32.63    | 11.89    | 35.45    | 6                  |
| 250    | 266   | 4125.1 | 6614.3 | 1   | 11 | 2009 | 16:02      | 147          | 11.80    | 32.65    | 9.21     | 33.84    | 2                  |
| 251    | 267   | 4127.0 | 6607.6 | 1   | 11 | 2009 | 17:52      | 124          | 11.36    | 32.55    | 8.77     | 33.99    | 4                  |
| 252    | 269   | 4143.1 | 6548.1 | 1   | 11 | 2009 | 21:53      | 145          | 11.76    | 32.50    | 7.14     | 33.93    | 5                  |
| 253    | 270   | 4155.9 | 6546.1 | 2   | 11 | 2009 | 0:01       | 205          | 11.62    | 32.10    | 6.65     | 35.03    | 6                  |
| 254    | 271   | 4158.2 | 6611.4 | 2   | 11 | 2009 | 3:10       | 88           | 12.17    | 32.45    | 9.33     | 32.77    | 6                  |
| 255    | 272   | 4219.5 | 6613.4 | 2   | 11 | 2009 | 6:33       | 233          | 12.18    | 32.43    | 8.85     | 34.96    | 7                  |
| 256    | 273   | 4222.1 | 6615.2 | 2   | 11 | 2009 | 8:19       | 241          | 11.91    | 32.43    | 8.84     | 35.01    | 4                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 257    | 274   | 4230.3 | 6620.3 | 2   | 11 | 2009 | 10:19      | 234          | 11.15    | 31.85    | 8.87     | 35.00    | 8                  |
| 258    | 275   | 4231.4 | 6639.9 | 2   | 11 | 2009 | 12:49      | 260          | 11.63    | 32.47    | 8.86     | 35.03    | 9                  |
| 259    | 276   | 4246.4 | 6653.7 | 2   | 11 | 2009 | 16:13      | 199          | 11.33    | 32.49    | 9.01     | 34.79    | 3                  |
| 260    | 277   | 4256.8 | 6651.1 | 2   | 11 | 2009 | 19:32      | 188          | 11.85    | 32.54    | 9.08     | 34.33    | 2                  |
| 261    | 278   | 4306.8 | 6659.2 | 2   | 11 | 2009 | 22:46      | 171          | 11.30    | 32.40    | 8.98     | 34.43    | 8                  |
| 262    | 280   | 4302.5 | 6716.6 | 3   | 11 | 2009 | 2:16       | 218          | 11.02    | 32.74    | 8.94     | 34.77    | 4                  |
| 263    | 281   | 4243.5 | 6720.4 | 3   | 11 | 2009 | 6:49       | 227          | 10.66    | 33.02    | 8.51     | 34.80    | 6                  |
| 264    | 283   | 4239.4 | 6711.7 | 3   | 11 | 2009 | 10:40      | 264          | 11.15    | 32.66    | 8.84     | 35.06    | 8                  |
| 265    | 284   | 4229.1 | 6712.0 | 3   | 11 | 2009 | 13:40      | 343          | 10.93    | 32.76    | 8.71     | 35.08    | 6                  |
| 266    | 285   | 4226.3 | 6709.3 | 3   | 11 | 2009 | 15:58      | 259          | 11.00    | 32.74    | 8.98     | 35.07    | 57                 |
| 267    | 285   | 4226.5 | 6711.3 | 3   | 11 | 2009 | 16:40      | 354          | 11.00    | 32.75    | 8.63     | 35.08    | 2                  |
| 268    | 286   | 4211.3 | 6650.9 | 3   | 11 | 2009 | 20:45      | 200          | 12.03    | 32.37    | 7.88     | 34.47    | 8                  |
| 269    | 287   | 4206.4 | 6648.5 | 3   | 11 | 2009 | 23:17      | 69           | 11.87    | 32.41    | 8.50     | 32.82    | 5                  |
| 270    | 288   | 4203.8 | 6654.5 | 4   | 11 | 2009 | 0:58       | 66           | 11.65    | 32.48    | 11.18    | 32.55    | 6                  |
| 271    | 289   | 4204.6 | 6701.7 | 4   | 11 | 2009 | 2:47       | 62           | 11.98    | 32.50    | 12.00    | 32.50    | 4                  |
| 272    | 290   | 4211.8 | 6704.9 | 4   | 11 | 2009 | 4:28       | 186          | 12.19    | 32.34    | 6.86     | 33.93    | 7                  |
| 273    | 291   | 4203.5 | 6712.5 | 4   | 11 | 2009 | 6:49       | 48           | 12.42    | 32.47    | 12.35    | 32.47    | 8                  |
| 274    | 292   | 4210.7 | 6713.2 | 4   | 11 | 2009 | 8:38       | 174          | 12.14    | 32.28    | 6.11     | 33.48    | 9                  |
| 275    | 293   | 4221.0 | 6722.7 | 4   | 11 | 2009 | 11:30      | 322          | 11.37    | 32.39    | 8.70     | 35.07    | 1                  |
| 276    | 294   | 4216.2 | 6727.4 | 4   | 11 | 2009 | 15:22      | 282          | 11.78    | 32.42    | 8.62     | 34.92    | 4                  |
| 277    | 294   | 4215.6 | 6728.5 | 4   | 11 | 2009 | 16:10      | 278          | 11.79    | 32.42    | 8.66     | 34.97    | 3                  |
| 278    | 295   | 4204.5 | 6730.2 | 4   | 11 | 2009 | 19:40      | 80           | 12.38    | 32.35    | 9.12     | 32.68    | 1                  |
| 279    | 296   | 4148.5 | 6801.6 | 4   | 11 | 2009 | 23:04      | 51           | 12.57    | 32.39    | 11.04    | 32.50    | 5                  |
| 280    | 297   | 4145.2 | 6802.3 | 5   | 11 | 2009 | 0:40       | 36           | 12.58    | 32.38    | 12.57    | 32.38    | 2                  |
| 281    | 298   | 4145.0 | 6815.1 | 5   | 11 | 2009 | 2:40       | 67           | 13.01    | 32.36    | 12.42    | 32.38    | 3                  |
| 282    | 299   | 4144.5 | 6821.8 | 5   | 11 | 2009 | 4:13       | 99           | 12.78    | 32.36    | 9.96     | 32.56    | 7                  |
| 283    | 300   | 4153.9 | 6816.2 | 5   | 11 | 2009 | 6:07       | 224          | 11.76    | 32.25    | 7.20     | 34.18    | 7                  |
| 284    | 301   | 4210.4 | 6836.7 | 5   | 11 | 2009 | 9:37       | 174          | 11.62    | 32.39    | 5.67     | 33.44    | 5                  |
| 285    | 302   | 4159.1 | 6842.1 | 5   | 11 | 2009 | 12:11      | 156          | 11.41    | 32.28    | 5.53     | 33.36    | 7                  |
| 286    | 303   | 4205.1 | 6853.1 | 5   | 11 | 2009 | 15:40      | 148          | 11.36    | 32.36    | 5.39     | 33.13    | 8                  |
| 287    | 304   | 4215.6 | 6900.4 | 5   | 11 | 2009 | 18:28      | 199          | 11.47    | 32.32    | 5.80     | 33.55    | 4                  |
| 288    | 305   | 4224.1 | 6850.4 | 5   | 11 | 2009 | 20:37      | 210          | 11.59    | 32.32    | 7.25     | 34.16    | 3                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 289    | 306   | 4223.2 | 6854.2 | 5   | 11 | 2009 | 22:43      | 214          | 11.56    | 32.25    | 7.11     | 34.11    | 5                  |
| 290    | 307   | 4238.7 | 6902.8 | 6   | 11 | 2009 | 1:43       | 198          | 11.51    | 32.29    | 6.67     | 33.75    | 2                  |
| 291    | 308   | 4224.8 | 7049.2 | 9   | 11 | 2009 | 21:46      | 33           | 11.10    | 31.66    | 10.36    | 32.34    | 2                  |
| 292    | 309   | 4227.2 | 7048.4 | 10  | 11 | 2009 | 0:09       | 43           | 10.96    | 31.67    | 10.28    | 32.42    | 5                  |
| 293    | 310   | 4222.2 | 7039.7 | 10  | 11 | 2009 | 1:43       | 66           | 11.09    | 31.77    | 9.90     | 32.54    | 5                  |
| 294    | 311   | 4214.9 | 7038.6 | 10  | 11 | 2009 | 4:54       | 26           | 10.59    | 31.42    | 10.96    | 31.69    | 5                  |
| 295    | 312   | 4219.1 | 7017.0 | 10  | 11 | 2009 | 7:25       | 35           | 10.55    | 31.84    | 10.39    | 32.09    | 8                  |
| 296    | 313   | 4210.4 | 7014.4 | 10  | 11 | 2009 | 14:30      | 27           | 11.00    | 31.85    | 10.51    | 32.07    | 5                  |
| 297    | 314   | 4210.9 | 7011.4 | 10  | 11 | 2009 | 21:49      | 40           | 10.69    | 31.96    | 10.31    | 32.28    | 6                  |
| 298    | 315   | 4215.4 | 6951.9 | 11  | 11 | 2009 | 0:30       | 214          | 10.20    | 32.45    | 6.33     | 33.75    | 7                  |
| 299    | 316   | 4207.4 | 6951.9 | 11  | 11 | 2009 | 2:19       | 138          | 10.30    | 32.35    | 6.46     | 33.49    | 5                  |
| 300    | 317   | 4200.2 | 6955.5 | 11  | 11 | 2009 | 4:13       | 55           | 10.58    | 32.12    | 9.88     | 32.93    | 4                  |
| 301    | 318   | 4157.9 | 6955.9 | 11  | 11 | 2009 | 6:04       | 35           | 10.90    | 31.99    | 10.34    | 32.44    | 4                  |
| 302    | 319   | 4156.5 | 6955.4 | 11  | 11 | 2009 | 7:52       | 34           | 10.90    | 32.00    | 10.36    | 32.38    | 3                  |
| 303    | 320   | 4132.5 | 6942.7 | 11  | 11 | 2009 | 11:08      | 28           | 10.62    | 32.33    | 10.64    | 32.33    | 4                  |
| 304    | 321   | 4135.0 | 6923.2 | 11  | 11 | 2009 | 16:28      | 106          | 10.61    | 32.24    | 7.27     | 33.12    | 8                  |
| 305    | 322   | 4130.8 | 6928.4 | 11  | 11 | 2009 | 19:23      | 51           | 10.60    | 32.47    | 10.48    | 32.51    | 7                  |
| 306    | 323   | 4122.2 | 6928.7 | 11  | 11 | 2009 | 21:10      | 32           | 10.63    | 32.37    | 10.64    | 32.37    | 7                  |
| 307    | 324   | 4127.3 | 6905.0 | 12  | 11 | 2009 | 1:01       | 148          | 10.88    | 32.50    | 6.63     | 33.07    | 10                 |
| 308    | 325   | 4141.9 | 6907.3 | 12  | 11 | 2009 | 4:46       | 174          | 10.43    | 32.46    | 6.02     | 33.31    | 6                  |
| 309    | 326   | 4144.9 | 6850.6 | 12  | 11 | 2009 | 7:46       | 157          | 11.70    | 32.60    | 5.44     | 33.30    | 8                  |
| 310    | 327   | 4155.3 | 6902.3 | 12  | 11 | 2009 | 10:26      | 191          | 10.42    | 32.54    | 5.93     | 33.48    | 7                  |
| 311    | 328   | 4159.1 | 6908.9 | 12  | 11 | 2009 | 14:01      | 209          | 10.78    | 32.46    | 6.16     | 33.75    | 2                  |
| 312    | 329   | 4200.5 | 6921.9 | 12  | 11 | 2009 | 16:16      | 208          | 10.60    | 32.61    | 6.31     | 33.87    | 5                  |
| 313    | 330   | 4227.0 | 6931.8 | 12  | 11 | 2009 | 19:51      | 257          | 10.57    | 32.66    | 7.02     | 34.16    | 6                  |
| 314    | 331   | 4235.2 | 6922.6 | 12  | 11 | 2009 | 22:32      | 240          | 10.37    | 32.73    | 6.84     | 34.04    | 6                  |
| 315    | 332   | 4249.8 | 6935.4 | 13  | 11 | 2009 | 2:13       | 177          | 10.22    | 33.00    | 6.47     | 33.63    | 8                  |
| 316    | 333   | 4257.6 | 6918.9 | 13  | 11 | 2009 | 5:01       | 165          | 9.89     | 33.18    | 7.15     | 33.53    | 8                  |
| 317    | 334   | 4300.0 | 6858.5 | 13  | 11 | 2009 | 7:52       | 95           | 10.06    | 32.71    | 7.72     | 33.46    | 9                  |
| 318    | 335   | 4255.9 | 6832.2 | 13  | 11 | 2009 | 12:18      | 196          | 10.48    | 32.72    | 7.18     | 34.04    | 11                 |
| 319    | 336   | 4308.6 | 6820.5 | 13  | 11 | 2009 | 15:40      | 199          | 10.19    | 32.88    | 7.06     | 34.02    | 6                  |
| 320    | 337   | 4317.9 | 6841.8 | 13  | 11 | 2009 | 18:57      | 143          | 9.98     | 32.40    | 9.84     | 33.45    | 4                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast # | Sta # | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm Depth(m) | Sfc Temp | Sfc Salt | Btm Temp | Btm Salt | Meters from Bottom |
|--------|-------|--------|--------|-----|----|------|------------|--------------|----------|----------|----------|----------|--------------------|
| 321    | 338   | 4322.5 | 6841.2 | 13  | 11 | 2009 | 20:31      | 132          | 10.02    | 32.43    | 10.06    | 33.21    | 9                  |
| 322    | 339   | 4325.1 | 6811.0 | 13  | 11 | 2009 | 23:40      | 185          | 9.98     | 32.59    | 7.26     | 34.15    | 8                  |
| 323    | 340   | 4332.6 | 6805.3 | 14  | 11 | 2009 | 1:37       | 189          | 9.94     | 32.83    | 7.77     | 34.39    | 1                  |
| 324    | 341   | 4320.4 | 6754.1 | 14  | 11 | 2009 | 4:25       | 245          | 10.12    | 32.95    | 7.83     | 34.40    | 6                  |
| 325    | 342   | 4320.5 | 6653.7 | 14  | 11 | 2009 | 9:49       | 210          | 10.28    | 31.76    | 8.57     | 34.23    | 10                 |
| 326    | 343   | 4330.1 | 6710.2 | 14  | 11 | 2009 | 12:52      | 224          | 10.31    | 31.91    | 8.24     | 34.29    | 29                 |
| 327    | 344   | 4340.4 | 6711.4 | 14  | 11 | 2009 | 15:41      | 144          | 10.20    | 32.59    | 8.36     | 34.04    | 4                  |
| 328    | 345   | 4340.2 | 6708.5 | 14  | 11 | 2009 | 17:38      | 138          | 10.20    | 32.49    | 8.80     | 33.99    | 9                  |
| 329    | 346   | 4359.1 | 6702.9 | 14  | 11 | 2009 | 21:01      | 159          | 10.18    | 32.18    | 8.66     | 34.15    | 7                  |
| 330    | 347   | 4411.2 | 6707.2 | 14  | 11 | 2009 | 23:40      | 125          | 10.26    | 31.74    | 9.91     | 33.29    | 9                  |
| 331    | 348   | 4415.9 | 6658.6 | 15  | 11 | 2009 | 1:58       | 172          | 10.37    | 31.68    | 9.45     | 33.58    | 8                  |
| 332    | 349   | 4419.9 | 6711.9 | 15  | 11 | 2009 | 4:37       | 173          | 10.47    | 31.75    | 9.02     | 33.97    | 8                  |
| 333    | 350   | 4414.2 | 6719.7 | 15  | 11 | 2009 | 6:35       | 219          | 10.40    | 31.75    | 8.59     | 34.28    | 6                  |
| 334    | 351   | 4410.3 | 6718.5 | 15  | 11 | 2009 | 8:31       | 186          | 10.30    | 31.82    | 8.63     | 34.24    | 7                  |
| 335    | 352   | 4410.8 | 6747.8 | 15  | 11 | 2009 | 13:51      | 146          | 10.23    | 32.41    | 10.01    | 33.12    | 8                  |
| 336    | 353   | 4409.8 | 6754.7 | 15  | 11 | 2009 | 16:06      | 82           | 10.30    | 32.10    | 10.13    | 32.71    | 8                  |
| 337    | 354   | 4406.1 | 6752.9 | 15  | 11 | 2009 | 17:49      | 107          | 10.39    | 32.01    | 10.11    | 32.94    | 4                  |
| 338    | 355   | 4356.2 | 6756.6 | 15  | 11 | 2009 | 23:22      | 155          | 10.56    | 31.82    | 9.32     | 33.76    | 5                  |
| 339    | 356   | 4352.9 | 6738.6 | 16  | 11 | 2009 | 1:43       | 205          | 10.37    | 32.04    | 7.82     | 34.35    | 5                  |
| 340    | 357   | 4346.4 | 6745.7 | 16  | 11 | 2009 | 3:35       | 231          | 10.43    | 32.53    | 8.09     | 34.46    | 7                  |
| 341    | 358   | 4330.4 | 6857.3 | 16  | 11 | 2009 | 9:46       | 108          | 10.21    | 32.40    | 10.09    | 33.16    | 5                  |
| 343    | 360   | 4330.6 | 6956.4 | 16  | 11 | 2009 | 18:37      | 111          | 10.10    | 32.85    | 9.95     | 33.12    | 6                  |
| 344    | 361   | 4323.1 | 6948.8 | 16  | 11 | 2009 | 21:19      | 144          | 10.02    | 32.84    | 9.56     | 33.29    | 6                  |
| 345    | 362   | 4324.6 | 6931.2 | 16  | 11 | 2009 | 23:34      | 170          | 10.08    | 32.69    | 6.89     | 33.34    | 7                  |
| 346    | 363   | 4312.6 | 6948.8 | 17  | 11 | 2009 | 2:16       | 175          | 9.97     | 33.11    | 5.92     | 33.56    | 6                  |
| 347    | 364   | 4251.8 | 6955.1 | 17  | 11 | 2009 | 5:05       | 216          | 10.20    | 33.01    | 6.35     | 33.87    | 15                 |
| 348    | 365   | 4249.6 | 7001.2 | 17  | 11 | 2009 | 6:01       | 155          | 10.07    | 33.06    | 8.03     | 33.29    | 7                  |
| 349    | 366   | 4258.1 | 7007.2 | 17  | 11 | 2009 | 8:03       | 131          | 10.00    | 32.95    | 7.59     | 33.00    | 7                  |
| 350    | 367   | 4256.6 | 7024.3 | 17  | 11 | 2009 | 10:28      | 117          | 9.83     | 32.51    | 9.64     | 33.05    | 5                  |
| 351    | 368   | 4238.5 | 7009.9 | 17  | 11 | 2009 | 13:56      | 96           | 9.85     | 32.78    | 9.20     | 33.08    | 5                  |
| 352    | 369   | 4240.7 | 7022.9 | 17  | 11 | 2009 | 15:55      | 58           | 9.89     | 32.69    | 9.89     | 33.04    | 6                  |
| 353    | 370   | 4239.6 | 7026.8 | 17  | 11 | 2009 | 17:21      | 49           | 9.83     | 32.55    | 9.79     | 32.76    | 9                  |

# FSV Henry Bigelow Fall Bottom Trawl Survey HB0905

13 Sept - 19 Nov, 2009

| Cast<br># | Sta<br># | Lat    | Long   | Day | Mo | Year | Time (GMT) | Btm<br>Depth(m) | Sfc<br>Temp | Sfc<br>Salt | Btm<br>Temp | Btm<br>Salt | Meters from<br>Bottom |
|-----------|----------|--------|--------|-----|----|------|------------|-----------------|-------------|-------------|-------------|-------------|-----------------------|
| 354       | 371      | 4232.6 | 7036.2 | 17  | 11 | 2009 | 19:34      | 64              | 10.30       | 31.54       | 10.04       | 32.51       | 7                     |
| 355       | 372      | 4227.1 | 7045.9 | 17  | 11 | 2009 | 22:31      | 46              | 10.33       | 31.80       | 10.37       | 32.15       | 6                     |
| 356       | 373      | 4229.8 | 7044.6 | 17  | 11 | 2009 | 23:36      | 44              | 10.29       | 31.78       | 10.21       | 32.19       | 6                     |
| 357       | 374      | 4205.7 | 7003.3 | 18  | 11 | 2009 | 3:58       | 45              | 10.13       | 32.07       | 10.13       | 32.09       | 6                     |
| 358       | 375      | 4203.2 | 7022.5 | 18  | 11 | 2009 | 6:19       | 56              | 10.55       | 31.87       | 10.24       | 32.09       | 3                     |
| 359       | 376      | 4200.8 | 7027.9 | 18  | 11 | 2009 | 10:03      | 39              | 10.76       | 31.53       | 10.84       | 31.86       | 4                     |
| 360       | 377      | 4154.0 | 7027.5 | 18  | 11 | 2009 | 12:30      | 31              | 11.04       | 31.54       | 11.06       | 31.65       | 5                     |
| 361       | 378      | 4150.0 | 7023.9 | 18  | 11 | 2009 | 13:49      | 26              | 10.77       | 31.57       | 10.87       | 31.60       | 5                     |
| 362       | 379      | 4153.8 | 7025.0 | 18  | 11 | 2009 | 15:23      | 35              | 11.09       | 31.61       | 11.03       | 31.70       | 3                     |
| 363       | 380      | 4153.8 | 7016.3 | 18  | 11 | 2009 | 17:04      | 34              | 11.19       | 31.65       | 10.96       | 31.75       | 9                     |
| 364       | 381      | 4158.2 | 7013.6 | 18  | 11 | 2009 | 18:40      | 37              | 10.97       | 31.86       | 10.72       | 31.95       | 7                     |