

*Oceans and Climate Branch CTD Data Report
CTD_REPORT_2021003HB*

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

DATE: 5 December 2022

Oceans and Climate Branch CTD Data Report

CTD_REPORT_2021003HB

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

HB 2103
Fall Bottom Trawl Survey
Data Coverage: September 12 – November 15, 2021
Mid Atlantic Bight, Georges Bank, Gulf of Maine

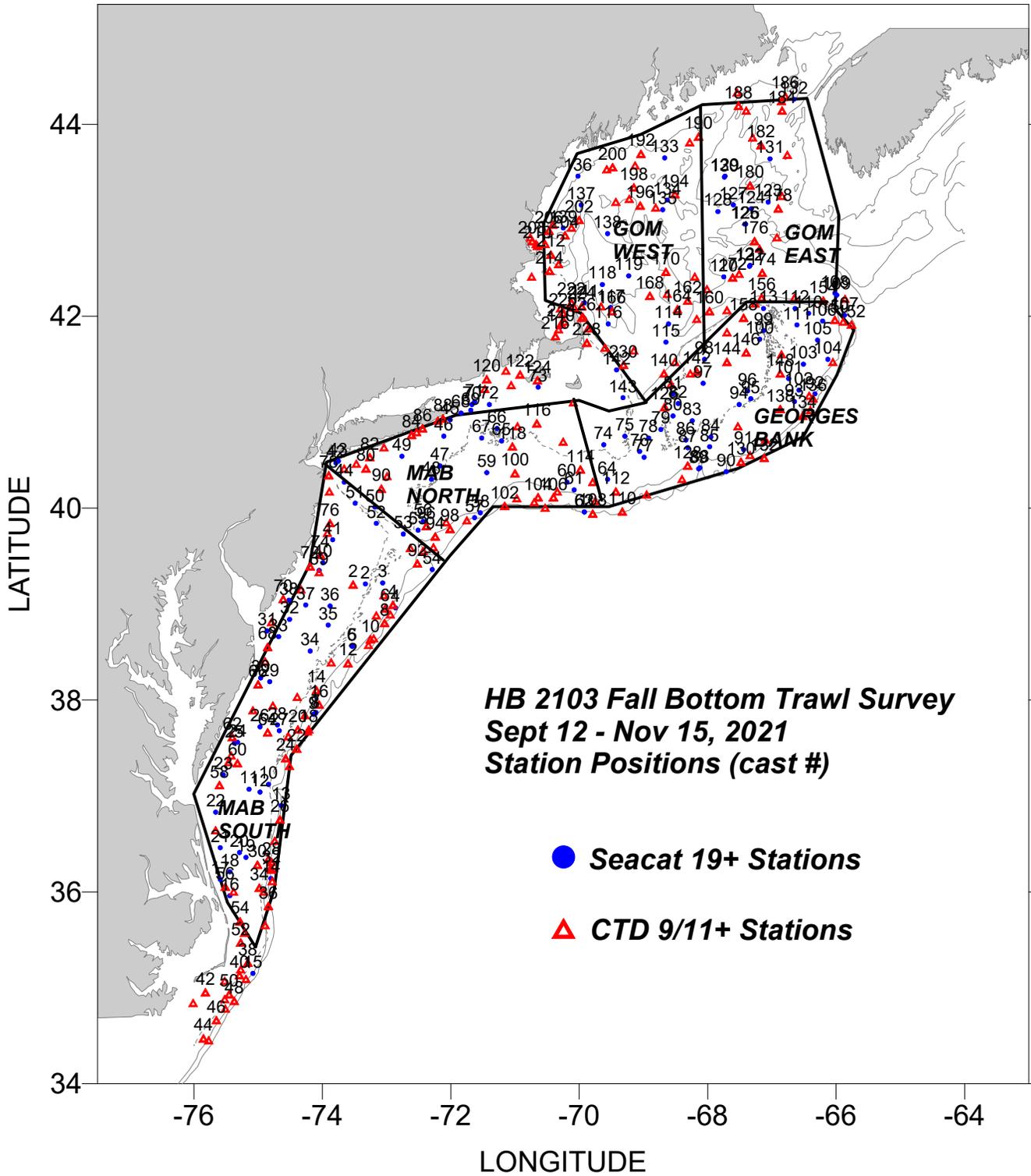
This report presents a summary of surface and bottom temperature and salinity data collected during the Northeast Fisheries Science Center's HB2103 Fall Bottom Trawl Survey aboard the NOAA FSV *Henry B Bigelow*. Data was obtained with a Sea-Bird Electronics SBE Model 19+V2 profiling CTD (s/n 4759) during double oblique bongo tows and a SBE Model 9/11+ s/n 0832 during vertical casts. Sea water samples were taken for the purpose of calibrating salinity values. An SBE43 Dissolved Oxygen sensor was attached to the SBE 9/11+.

The SBE19+V2 was deployed on 110 double oblique bongo casts as well as 32 vertical and water sampling casts. The SBE9/11+ was used successfully on 229 stations.

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 by contacting [Dr. Chris Melrose](#)

Revised: February 2, 2022



**Areal average surface and bottom temperature/salinity and temperature/salinity anomalies for the
HB2103 Fall Bottom Trawl Survey
September 12 - November 15, 2021**

| | | SURFACE TEMPERATURE | | | | | | BOTTOM TEMPERATURE | | | | | |
|--------|-----|---------------------|-------------|---------|------|------|------|--------------------|-------------|---------|------|------|------|
| Region | CD | #obs | Temp (degC) | Anomaly | SDV1 | SDV2 | Flag | #obs | Temp (degC) | Anomaly | SDV1 | SDV2 | Flag |
| WGOM | 309 | 53 | 13.24 | 2.50 | 0.15 | 0.37 | 0 | 53 | 9.93 | 2.83 | 0.13 | 1.36 | 0 |
| EGOM | 308 | 32 | 13.43 | 2.21 | 0.14 | 0.46 | 0 | 26 | 10.30 | 2.01 | 0.21 | 1.25 | 0 |
| GB | 291 | 60 | 17.32 | 2.68 | 0.18 | 1.24 | 0 | 60 | 14.38 | 1.79 | 0.17 | 1.41 | 0 |
| MABN | 270 | 52 | 21.84 | 3.63 | 0.23 | 0.88 | 0 | 52 | 16.01 | 3.44 | 0.27 | 1.77 | 0 |
| MABS | 261 | 96 | 23.61 | 1.81 | 0.19 | 0.93 | 0 | 98 | 15.87 | 1.84 | 0.23 | 2.47 | 0 |

| | | SURFACE SALINITY | | | | | | BOTTOM SALINITY | | | | | |
|--------|-----|------------------|----------|---------|------|------|------|-----------------|----------|---------|------|------|------|
| Region | CD | #obs | Salinity | Anomaly | SDV1 | SDV2 | Flag | #obs | Salinity | Anomaly | SDV1 | SDV2 | Flag |
| WGOM | 309 | 53 | 32.67 | 0.01 | 0.06 | 0.25 | 0 | 53 | 33.82 | 0.20 | 0.04 | 0.28 | 0 |
| EGOM | 308 | 32 | 32.41 | -0.33 | 0.08 | 0.73 | 0 | 26 | 34.68 | 0.21 | 0.05 | 0.24 | 0 |
| GB | 291 | 60 | 33.03 | 0.23 | 0.06 | 0.48 | 0 | 60 | 33.39 | 0.14 | 0.06 | 0.37 | 0 |
| MABN | 270 | 52 | 33.42 | 0.75 | 0.10 | 0.74 | 0 | 52 | 34.17 | 0.53 | 0.09 | 0.68 | 0 |
| MABS | 261 | 96 | 32.27 | -0.04 | 0.11 | 1.06 | 0 | 98 | 33.74 | 0.13 | 0.08 | 0.99 | 0 |

"Region"; WGOM is the Western Gulf of Maine; EGOM is the Eastern Gulf of Maine; GB is Georges Bank; MABN is the northern Mid-Atlantic Bight; MABS is the southern Mid-Atlantic Bight;

"CD": the calendar mid-date of all the stations within a region for a cruise;

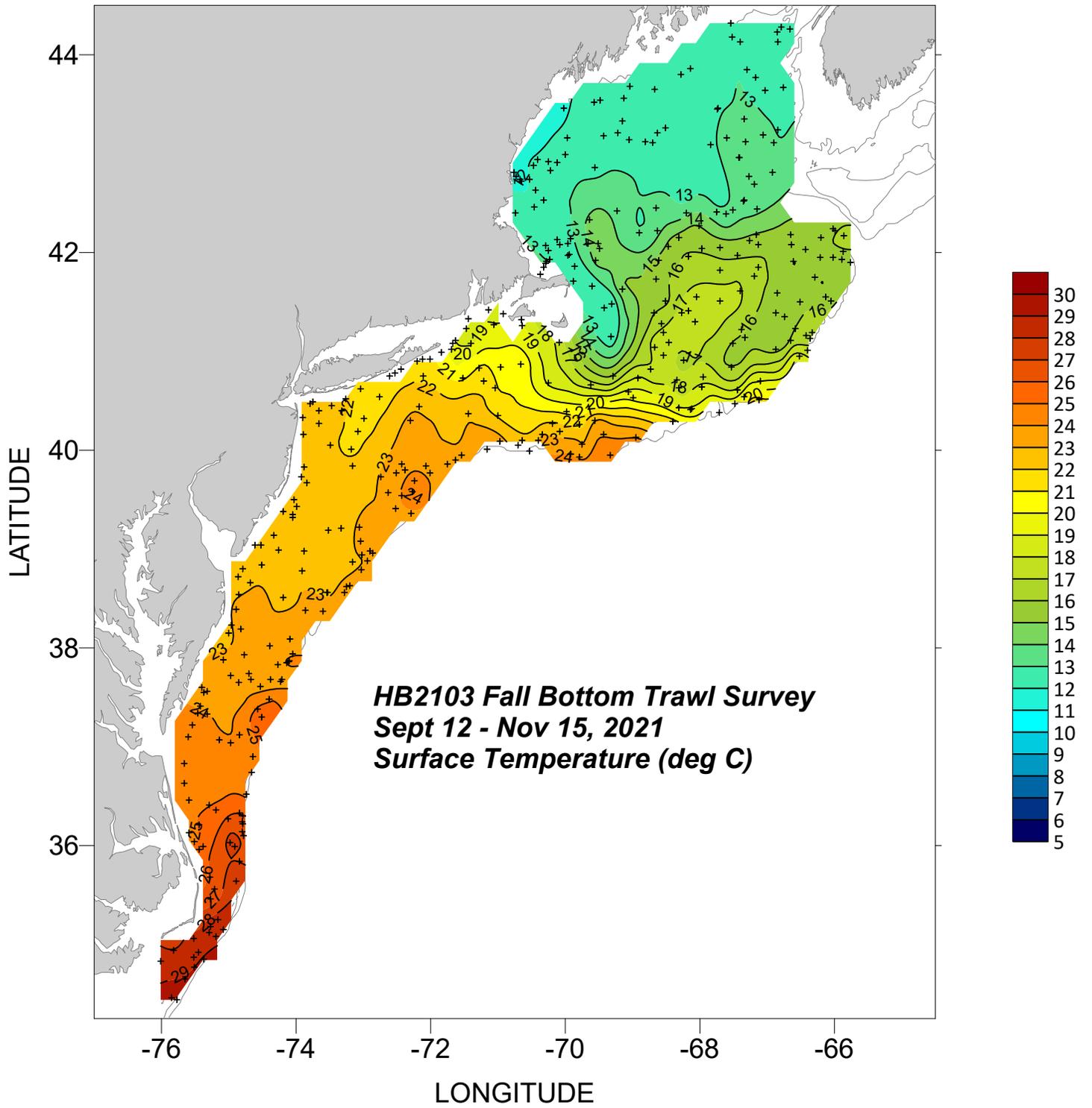
"#obs": the number of observations include in each average;

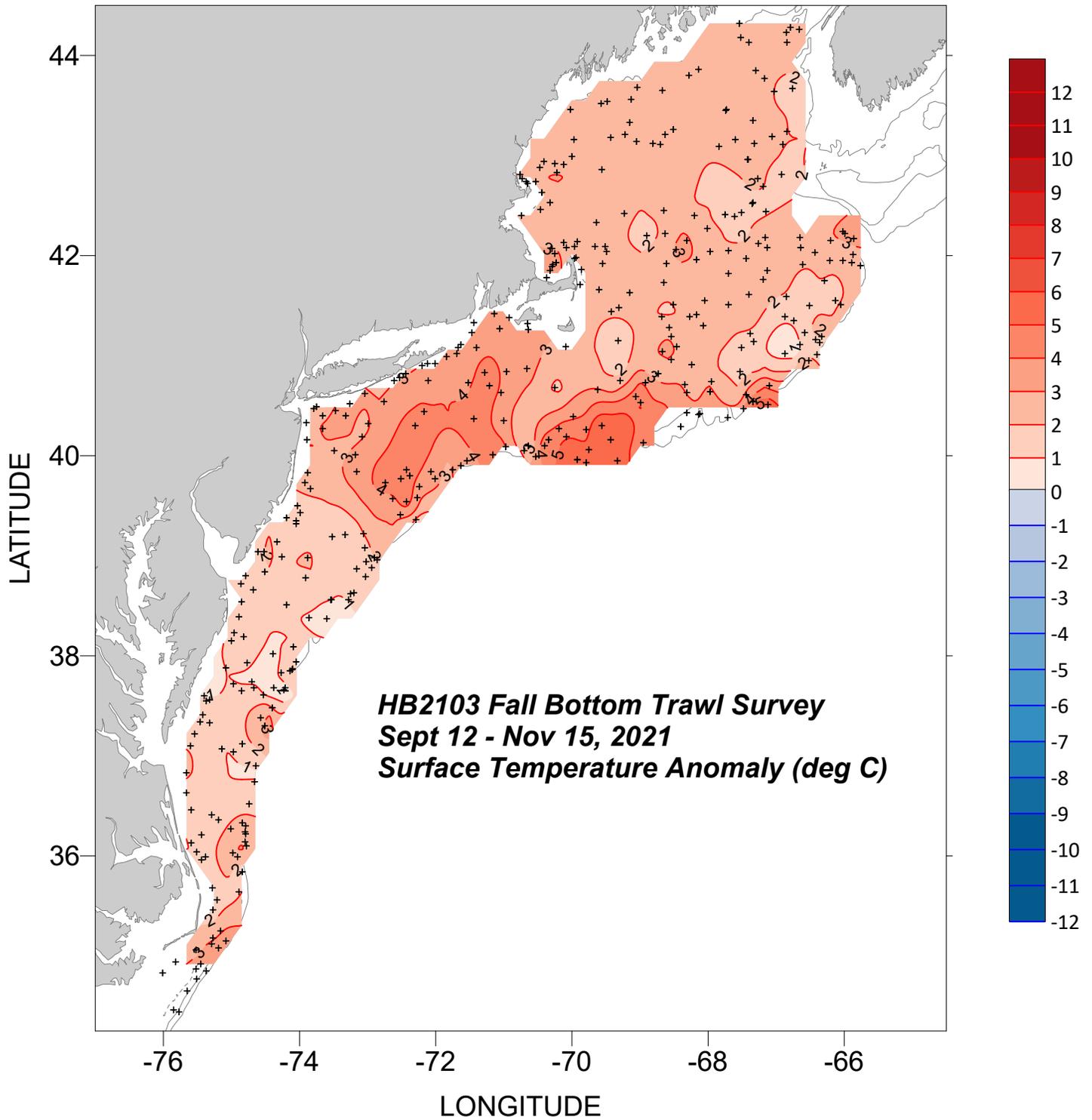
"Temp (degC)"/"Salt": the areal averaged temperature or salinity; "Anomaly": the areal averaged temp/salt anomaly;

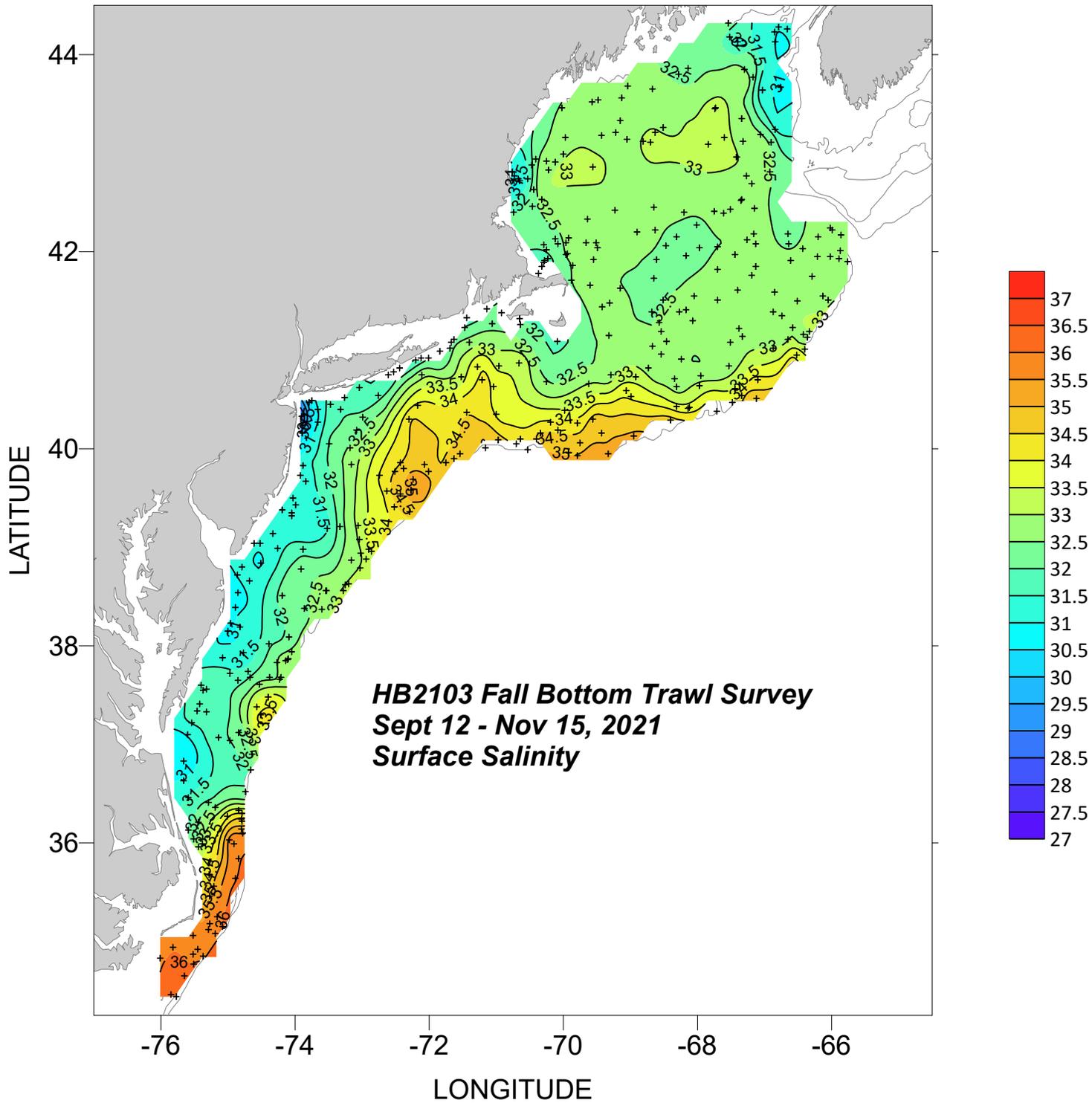
"SDV1": the standard deviation associated with the average temp/salt anomaly;

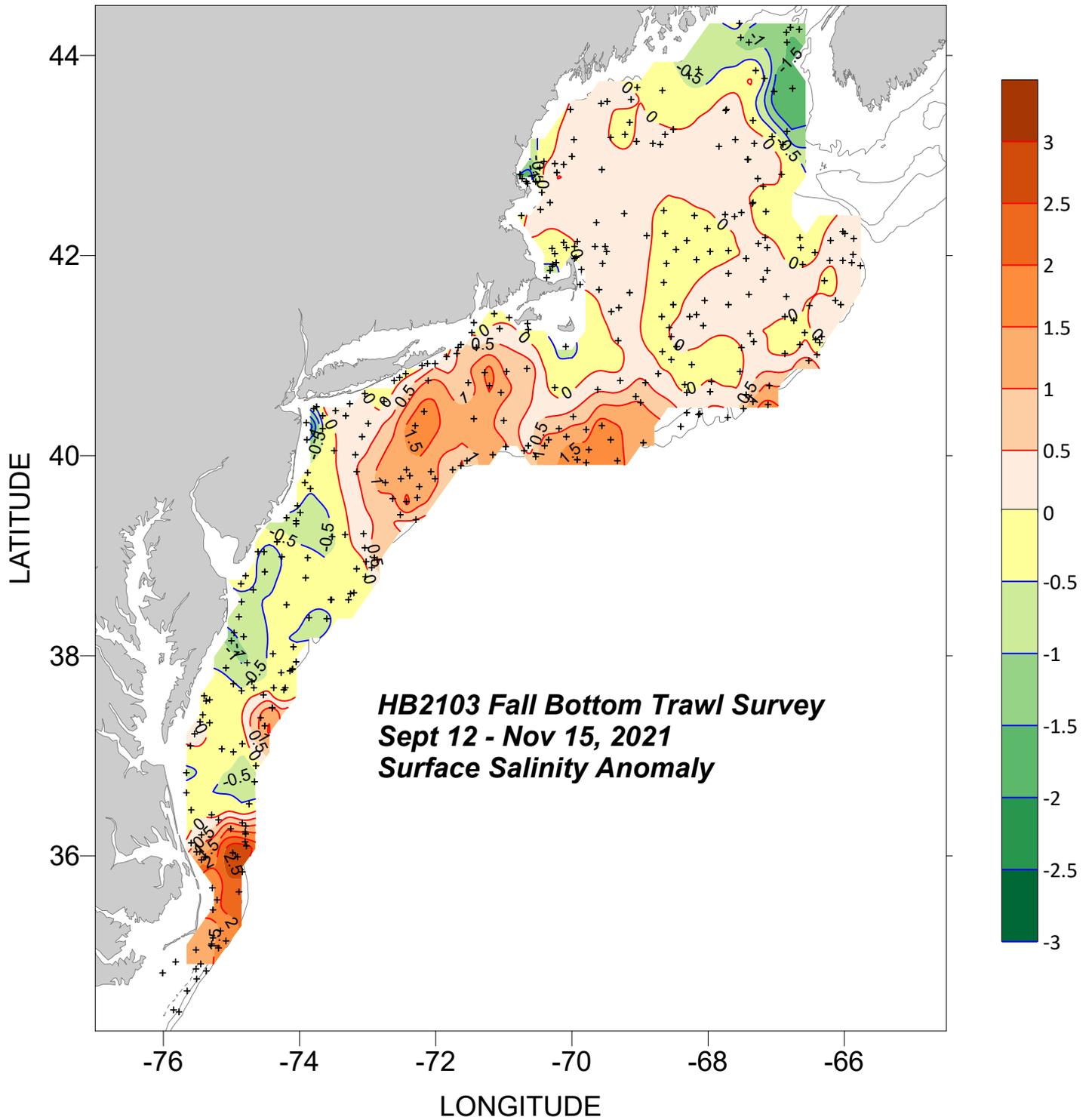
"SDV2": the standard deviation of the individual anomalies from which the average anomaly was derived;

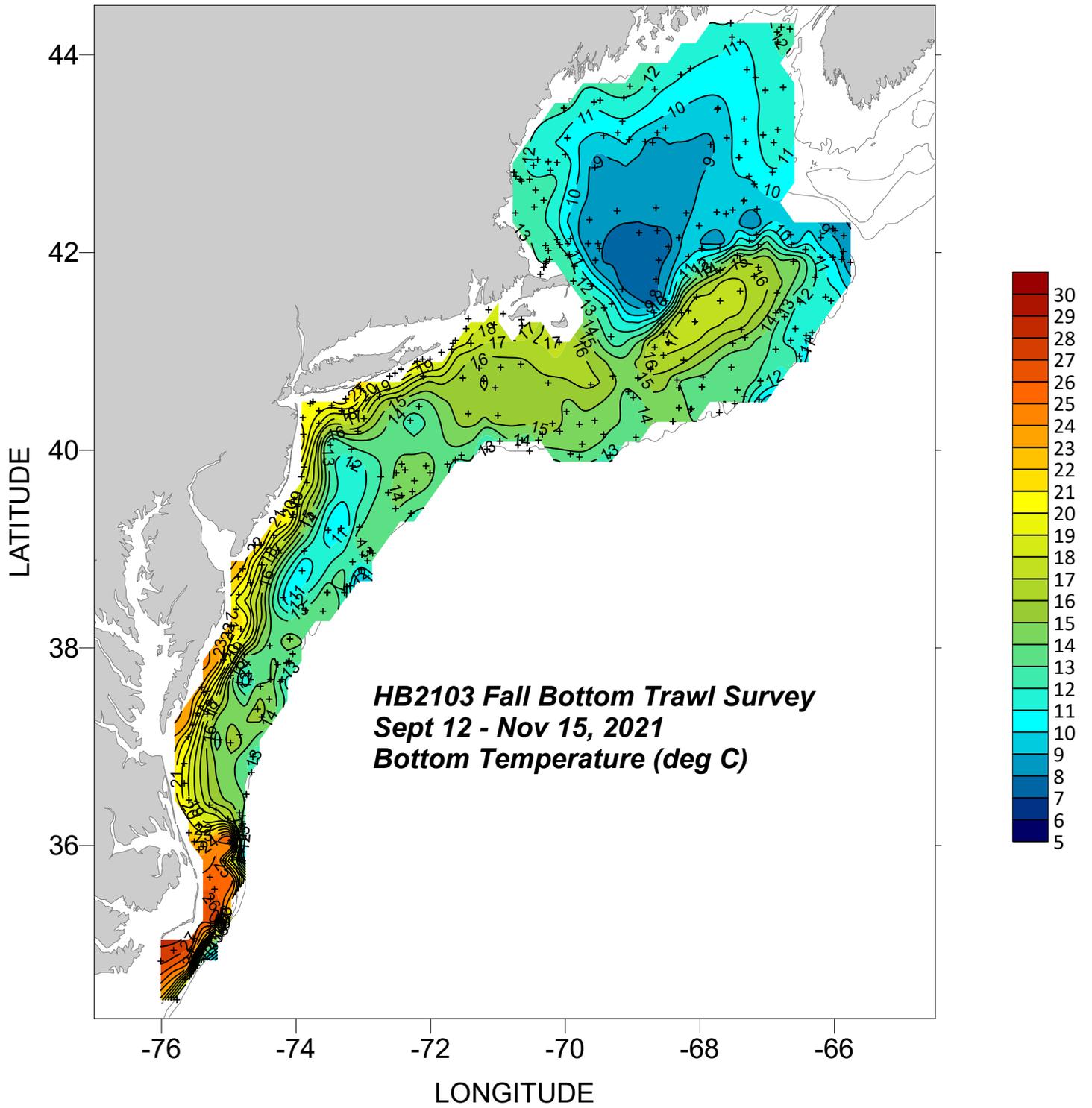
"Flag": a value of "1" indicates that a true areal average could not be calculated due to poor station coverage. The areal averages listed were derived from a simple average of the observations within the region.

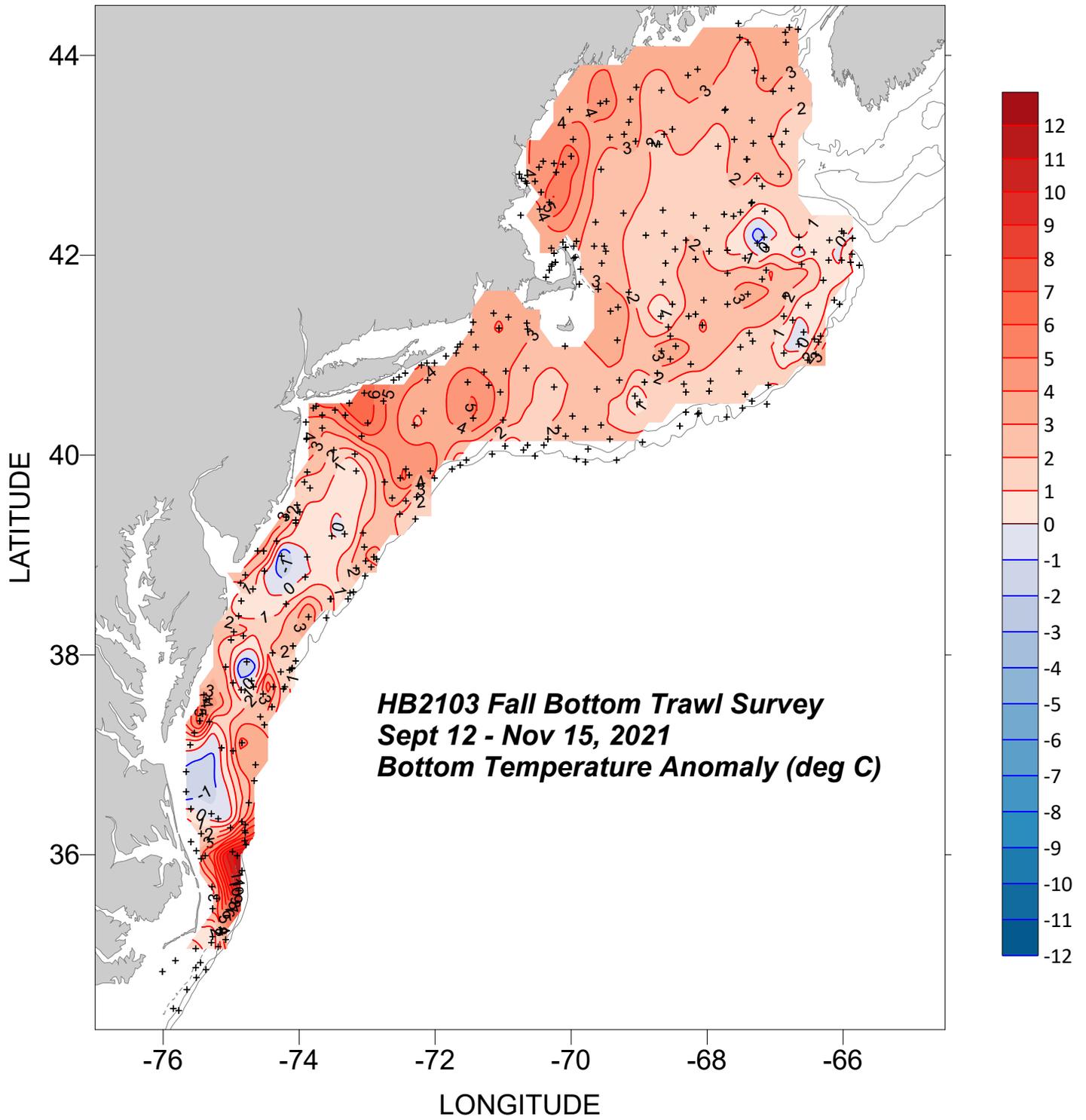


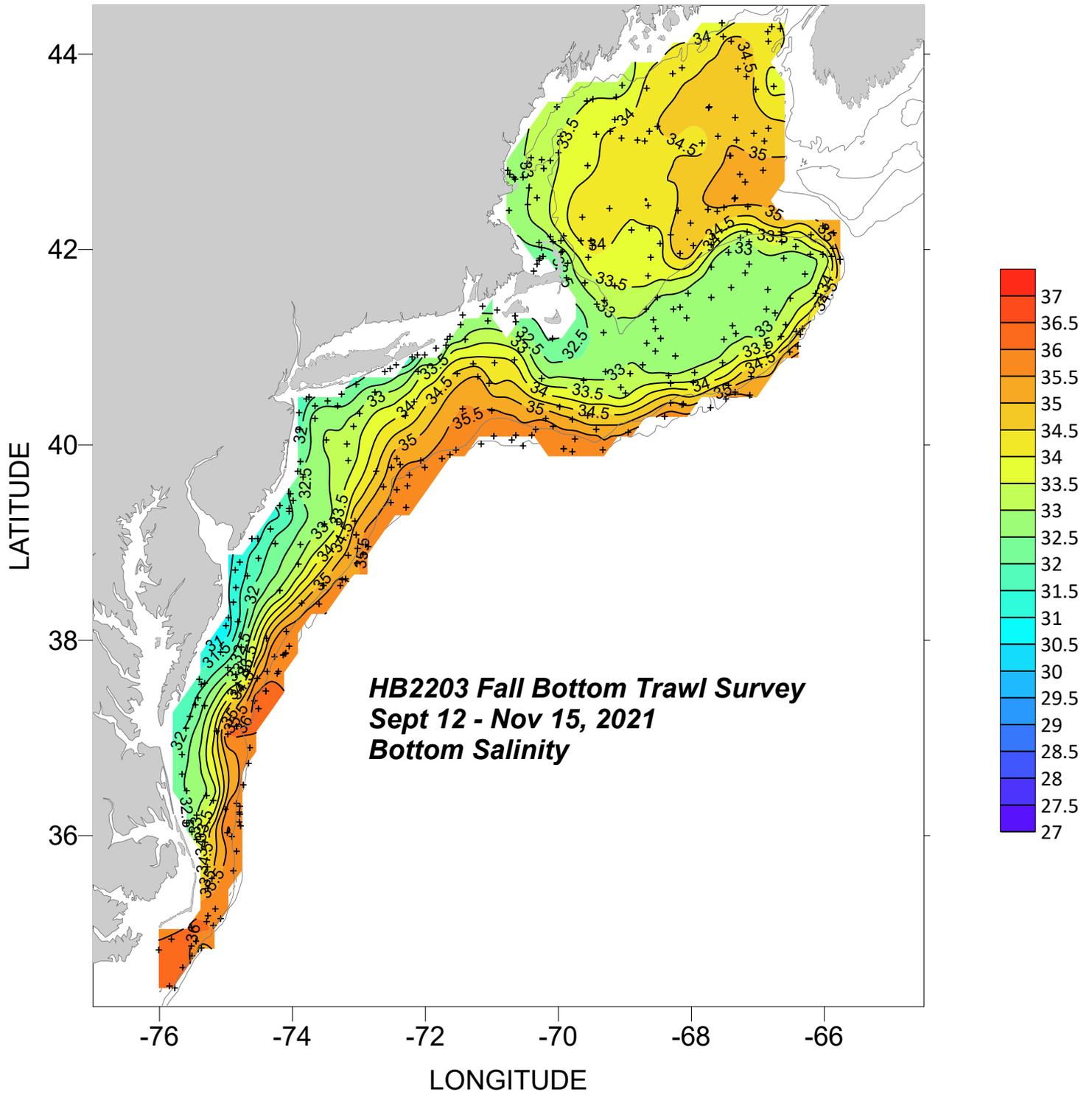


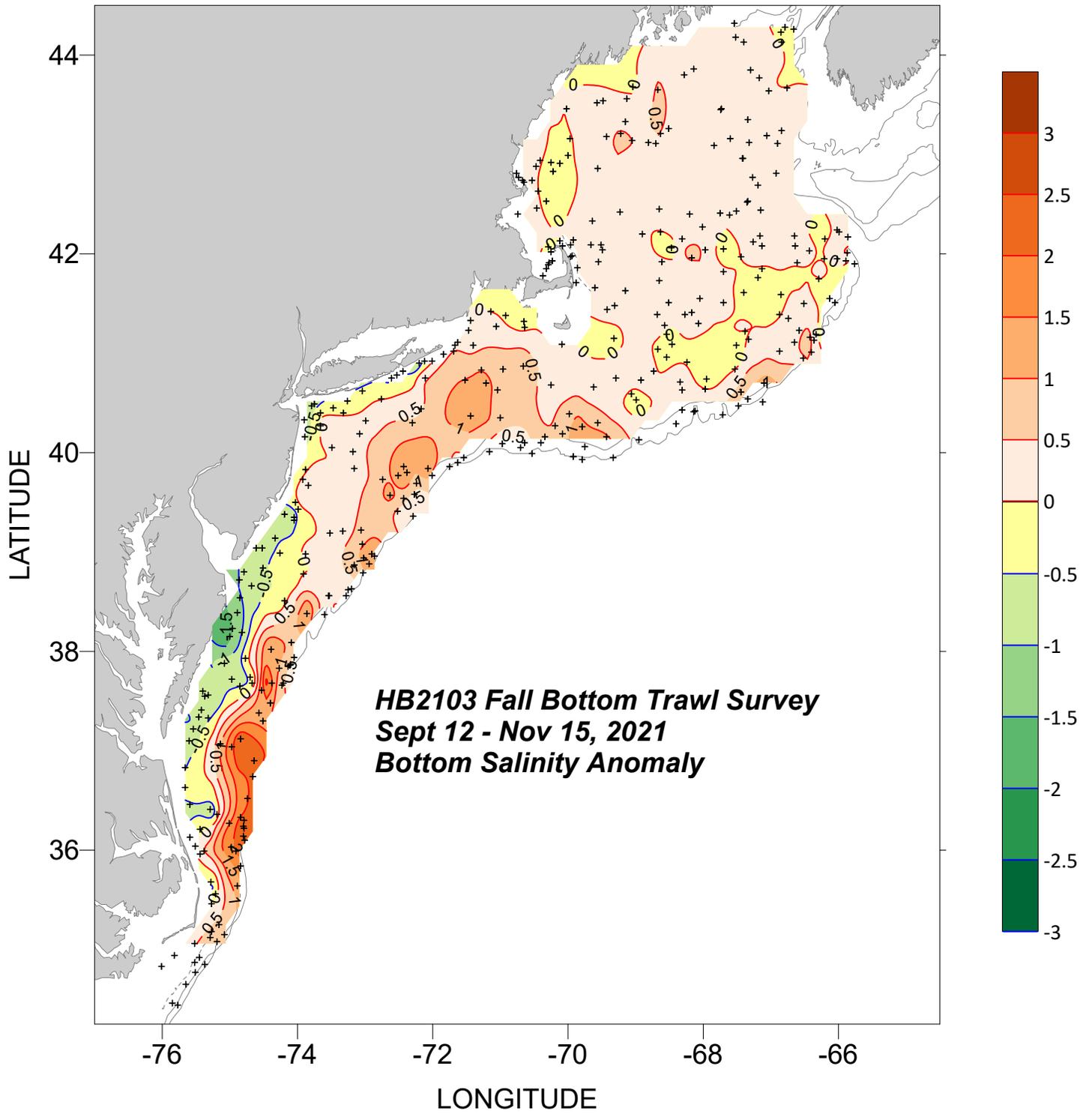












HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 2 | 3253 | 3911.3 | 7331.3 | 12 | 9 | 2021 | 8:08 | 40 | 22.24 | 31.13 | 10.28 | 32.84 | 1 | W |
| 2 | 3369 | 3912.8 | 7319.9 | 12 | 9 | 2021 | 11:57 | 55 | 22.34 | 32.36 | 9.14 | 33.00 | 4 | B |
| 3 | 3088 | 3913.4 | 7303.7 | 12 | 9 | 2021 | 14:17 | 74 | 23.21 | 33.16 | 13.18 | 35.06 | 4 | B |
| 3 | 3070 | 3904.5 | 7302.5 | 12 | 9 | 2021 | 16:02 | 82 | 23.27 | 33.05 | 13.75 | 35.33 | 4 | V |
| 4 | 3039 | 3858.9 | 7254.0 | 12 | 9 | 2021 | 18:17 | 102 | NaN | NaN | 14.22 | 35.78 | 5 | V |
| 4 | 3043 | 3857.6 | 7251.4 | 12 | 9 | 2021 | 20:04 | 128 | 23.85 | 34.07 | 13.41 | 35.70 | 1 | B |
| 5 | 3227 | 3852.8 | 7256.3 | 12 | 9 | 2021 | 22:10 | 122 | 22.54 | 32.60 | 13.92 | 35.76 | 4 | V |
| 6 | 3229 | 3856.3 | 7301.4 | 13 | 9 | 2021 | 0:07 | 84 | NaN | NaN | 14.12 | 35.59 | 4 | V |
| 7 | 3278 | 3852.4 | 7309.7 | 13 | 9 | 2021 | 1:44 | 79 | NaN | NaN | 13.73 | 35.35 | 2 | V |
| 8 | 3341 | 3847.5 | 7301.7 | 13 | 9 | 2021 | 4:28 | 529 | 23.10 | 33.08 | 7.18 | 35.12 | 9 | W |
| 9 | 3697 | 3837.7 | 7312.0 | 13 | 9 | 2021 | 7:48 | 306 | NaN | NaN | 10.61 | 35.37 | 3 | V |
| 10 | 3231 | 3837.2 | 7315.0 | 13 | 9 | 2021 | 9:44 | 119 | 23.12 | 33.03 | 13.75 | 35.74 | 2 | V |
| 11 | 3173 | 3833.6 | 7316.7 | 13 | 9 | 2021 | 11:39 | 135 | 23.02 | 33.09 | 13.05 | 35.67 | 3 | V |
| 5 | 3044 | 3833.8 | 7331.9 | 13 | 9 | 2021 | 13:45 | 75 | 22.93 | 32.74 | 13.40 | 35.12 | 4 | B |
| 6 | 3044 | 3833.5 | 7332.2 | 13 | 9 | 2021 | 13:58 | 76 | 22.91 | 32.73 | 13.49 | 35.17 | 2 | W |
| 12 | 3200 | 3822.4 | 7336.0 | 13 | 9 | 2021 | 15:50 | 126 | 23.18 | 32.79 | 13.87 | 35.75 | 4 | V |
| 13 | 3105 | 3822.9 | 7351.3 | 13 | 9 | 2021 | 18:14 | 72 | 23.17 | 32.28 | 13.47 | 35.09 | 4 | V |
| 14 | 3098 | 3805.3 | 7405.6 | 13 | 9 | 2021 | 20:49 | 78 | 23.48 | 31.96 | 14.85 | 35.94 | 5 | V |
| 15 | 3069 | 3801.3 | 7423.7 | 13 | 9 | 2021 | 22:56 | 52 | 22.96 | 31.81 | 12.83 | 34.91 | 3 | V |
| 16 | 3363 | 3756.6 | 7403.2 | 14 | 9 | 2021 | 1:26 | 131 | 24.17 | 32.91 | 13.80 | 35.72 | 3 | W |
| 7 | 3198 | 3752.0 | 7406.1 | 14 | 9 | 2021 | 3:00 | 242 | 24.10 | 32.71 | 13.63 | 35.70 | 39 | B |
| 8 | 3198 | 3751.6 | 7406.5 | 14 | 9 | 2021 | 3:26 | 232 | 24.10 | 32.74 | 12.88 | 35.64 | 7 | V |
| 9 | 3372 | 3751.0 | 7408.5 | 14 | 9 | 2021 | 5:06 | 143 | 24.03 | 32.80 | 13.70 | 35.71 | 2 | W |
| 17 | 3122 | 3749.9 | 7415.9 | 14 | 9 | 2021 | 6:48 | 91 | 24.01 | 32.71 | 14.70 | 35.97 | 2 | V |
| 18 | 3029 | 3741.0 | 7412.7 | 14 | 9 | 2021 | 8:30 | 244 | 23.36 | 32.41 | 10.88 | 35.40 | 2 | V |
| 19 | 3205 | 3739.9 | 7413.9 | 14 | 9 | 2021 | 10:20 | 187 | 22.87 | 32.23 | 13.02 | 35.68 | 3 | V |
| 20 | 3051 | 3740.9 | 7422.9 | 14 | 9 | 2021 | 12:23 | 76 | 23.24 | 32.34 | 14.36 | 35.94 | 3 | V |
| 21 | 3362 | 3736.4 | 7431.7 | 14 | 9 | 2021 | 13:55 | 65 | 23.12 | 32.54 | 15.12 | 35.99 | 3 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 22 | 3064 | 3728.9 | 7424.0 | 14 | 9 | 2021 | 15:54 | 146 | 25.23 | 33.96 | 14.91 | 36.07 | 5 | V |
| 23 | 3347 | 3728.5 | 7423.8 | 14 | 9 | 2021 | 17:24 | 285 | 25.43 | 34.07 | 9.71 | 35.28 | 4 | V |
| 24 | 3171 | 3722.9 | 7434.3 | 14 | 9 | 2021 | 19:48 | 93 | 25.21 | 33.73 | 15.65 | 36.22 | 5 | V |
| 25 | 3354 | 3718.0 | 7430.7 | 14 | 9 | 2021 | 21:36 | 152 | 26.32 | 34.48 | 15.34 | 36.15 | 3 | V |
| 10 | 3007 | 3707.1 | 7450.5 | 15 | 9 | 2021 | 0:26 | 59 | 24.02 | 31.90 | 15.73 | 36.16 | 7 | B |
| 11 | 3361 | 3703.9 | 7508.2 | 15 | 9 | 2021 | 2:41 | 37 | 24.12 | 31.87 | 12.92 | 34.17 | 5 | B |
| 12 | 3291 | 3702.2 | 7458.4 | 15 | 9 | 2021 | 4:36 | 46 | 24.07 | 32.06 | 16.04 | 36.11 | 4 | B |
| 13 | 3275 | 3653.9 | 7438.1 | 15 | 9 | 2021 | 6:54 | 231 | 24.46 | 32.61 | 11.84 | 35.54 | 4 | W |
| 26 | 3186 | 3644.7 | 7439.5 | 15 | 9 | 2021 | 8:54 | 241 | 24.38 | 31.91 | 12.29 | 35.60 | 3 | V |
| 27 | 3087 | 3630.9 | 7444.5 | 15 | 9 | 2021 | 11:40 | 206 | 24.79 | 31.92 | 14.26 | 35.92 | 6 | V |
| 28 | 3063 | 3618.1 | 7447.1 | 15 | 9 | 2021 | 14:25 | 186 | 25.81 | 33.56 | 13.64 | 35.80 | 2 | V |
| 29 | 3191 | 3619.8 | 7450.5 | 15 | 9 | 2021 | 16:13 | 83 | 25.86 | 33.01 | 14.61 | 35.84 | 2 | V |
| 30 | 3340 | 3616.1 | 7500.3 | 15 | 9 | 2021 | 18:46 | 43 | 26.21 | 34.13 | 16.34 | 35.67 | 2 | V |
| 31 | 3280 | 3614.7 | 7447.8 | 15 | 9 | 2021 | 21:33 | 122 | 26.56 | 34.66 | 14.37 | 35.89 | 4 | W |
| 32 | 3311 | 3613.1 | 7447.2 | 15 | 9 | 2021 | 22:59 | 142 | 26.71 | 35.29 | 13.38 | 35.76 | 4 | V |
| 14 | 3210 | 3608.3 | 7447.7 | 16 | 9 | 2021 | 1:38 | 155 | 26.76 | 35.34 | 13.08 | 35.71 | 5 | B |
| 33 | 3239 | 3606.1 | 7446.7 | 16 | 9 | 2021 | 3:09 | 293 | 26.71 | 35.58 | 11.01 | 35.44 | 4 | V |
| 34 | 3104 | 3601.8 | 7458.8 | 16 | 9 | 2021 | 5:59 | 43 | 27.50 | 35.68 | 29.85 | 36.11 | 4 | V |
| 35 | 3197 | 3559.4 | 7454.7 | 16 | 9 | 2021 | 7:24 | 79 | 27.39 | 36.00 | 14.86 | 35.94 | 3 | W |
| 36 | 3124 | 3550.6 | 7450.5 | 16 | 9 | 2021 | 9:03 | 306 | 26.56 | 36.00 | 11.05 | 35.45 | 2 | V |
| 37 | 3144 | 3538.6 | 7453.6 | 16 | 9 | 2021 | 13:06 | 61 | 27.77 | 36.01 | 26.37 | 36.07 | 5 | V |
| 38 | 3192 | 3515.1 | 7509.8 | 16 | 9 | 2021 | 17:37 | 30 | 28.60 | 35.86 | 28.21 | 35.94 | 3 | V |
| 39 | 3233 | 3511.0 | 7516.3 | 16 | 9 | 2021 | 20:25 | 27 | 28.73 | 35.83 | 23.44 | 36.40 | 5 | V |
| 40 | 3034 | 3507.1 | 7517.2 | 16 | 9 | 2021 | 22:08 | 52 | 28.66 | 35.78 | 22.39 | 36.42 | 10 | V |
| 41 | 3561 | 3503.6 | 7531.0 | 17 | 9 | 2021 | 0:20 | 28 | 28.34 | 35.91 | 26.14 | 36.05 | 3 | V |
| 42 | 3235 | 3456.2 | 7549.3 | 17 | 9 | 2021 | 3:08 | 25 | 27.88 | 36.07 | 27.50 | 36.13 | 3 | V |
| 43 | 3108 | 3449.8 | 7600.8 | 17 | 9 | 2021 | 5:29 | 31 | 28.61 | 35.92 | 27.31 | 36.24 | 2 | V |
| 44 | 3025 | 3427.7 | 7551.0 | 17 | 9 | 2021 | 8:54 | 118 | 29.39 | 36.18 | 21.61 | 36.42 | 3 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 45 | 3322 | 3426.4 | 7545.9 | 17 | 9 | 2021 | 13:35 | 283 | 29.40 | 36.26 | 15.11 | 36.00 | 1 | V |
| 46 | 3092 | 3439.0 | 7539.1 | 17 | 9 | 2021 | 16:37 | 141 | NaN | NaN | 21.79 | 36.40 | 4 | V |
| 47 | 3170 | 3446.5 | 7530.7 | 17 | 9 | 2021 | 19:03 | 180 | NaN | NaN | 14.81 | 35.95 | 2 | V |
| 48 | 3011 | 3451.0 | 7522.3 | 17 | 9 | 2021 | 21:37 | 372 | NaN | NaN | 9.69 | 35.26 | 9 | V |
| 49 | 3001 | 3452.3 | 7531.4 | 18 | 9 | 2021 | 1:45 | 69 | 28.82 | 35.83 | 27.55 | 36.15 | 4 | V |
| 50 | 3358 | 3455.0 | 7527.3 | 18 | 9 | 2021 | 2:59 | 81 | 28.85 | 35.84 | 27.14 | 36.21 | 4 | V |
| 51 | 3160 | 3504.6 | 7511.4 | 18 | 9 | 2021 | 5:52 | 167 | 28.76 | 35.90 | 15.89 | 36.10 | 1 | V |
| 15 | 3187 | 3509.2 | 7504.6 | 18 | 9 | 2021 | 8:10 | 273 | 29.21 | 36.11 | 10.84 | 35.38 | 4 | W |
| 52 | 3139 | 3527.3 | 7515.9 | 18 | 9 | 2021 | 12:25 | 28 | 25.93 | 34.67 | 26.03 | 35.00 | 4 | V |
| 53 | 3114 | 3533.5 | 7512.9 | 18 | 9 | 2021 | 14:09 | 31 | 26.52 | 35.62 | 25.47 | 35.34 | 4 | V |
| 54 | 3265 | 3540.6 | 7516.9 | 18 | 9 | 2021 | 15:55 | 29 | 25.89 | 33.90 | 24.49 | 34.18 | 4 | V |
| 16 | 3261 | 3557.5 | 7526.1 | 18 | 9 | 2021 | 19:19 | 20 | 25.82 | 33.45 | 23.29 | 33.22 | 7 | B |
| 55 | 3127 | 3559.2 | 7522.9 | 18 | 9 | 2021 | 21:58 | 26 | 25.14 | 32.70 | 23.44 | 33.97 | 4 | V |
| 56 | 3189 | 3602.2 | 7530.4 | 18 | 9 | 2021 | 23:28 | 28 | 24.64 | 32.34 | 22.39 | 32.70 | 6 | V |
| 17 | 3342 | 3607.9 | 7535.5 | 19 | 9 | 2021 | 1:01 | 24 | 24.68 | 31.57 | 23.13 | 31.93 | 6 | B |
| 18 | 3109 | 3612.5 | 7526.1 | 19 | 9 | 2021 | 2:46 | 29 | 25.20 | 32.58 | 19.35 | 33.18 | 7 | W |
| 19 | 3017 | 3621.5 | 7511.4 | 19 | 9 | 2021 | 5:09 | 38 | 25.10 | 32.31 | 15.99 | 32.90 | 5 | B |
| 20 | 3023 | 3624.8 | 7517.3 | 19 | 9 | 2021 | 6:47 | 28 | 24.94 | 32.03 | 16.53 | 32.77 | 5 | B |
| 21 | 3199 | 3627.4 | 7535.3 | 19 | 9 | 2021 | 9:18 | 25 | 24.64 | 31.56 | 19.00 | 32.54 | 4 | W |
| 57 | 3246 | 3637.6 | 7539.7 | 19 | 9 | 2021 | 11:41 | 21 | 24.49 | 31.11 | 19.76 | 32.43 | 4 | V |
| 22 | 3193 | 3649.7 | 7539.8 | 19 | 9 | 2021 | 13:29 | 20 | 24.98 | 30.39 | 19.81 | 32.26 | 5 | B |
| 58 | 3327 | 3705.8 | 7535.9 | 19 | 9 | 2021 | 15:46 | 20 | 24.81 | 31.03 | 20.89 | 32.05 | 6 | V |
| 23 | 3332 | 3713.0 | 7532.4 | 19 | 9 | 2021 | 17:13 | 22 | 24.25 | 31.72 | 22.28 | 31.93 | 5 | B |
| 59 | 3031 | 3720.7 | 7527.7 | 19 | 9 | 2021 | 18:46 | 26 | 24.38 | 31.78 | 21.59 | 32.05 | 4 | V |
| 60 | 3042 | 3719.7 | 7519.1 | 19 | 9 | 2021 | 20:42 | 30 | 24.02 | 31.58 | 16.22 | 32.50 | 3 | V |
| 61 | 3373 | 3724.9 | 7525.1 | 19 | 9 | 2021 | 22:20 | 27 | 24.02 | 31.62 | 20.30 | 32.14 | 3 | V |
| 24 | 3162 | 3733.8 | 7519.3 | 20 | 9 | 2021 | 0:11 | 23 | 23.39 | 31.78 | 21.46 | 31.89 | 6 | B |
| 25 | 3004 | 3733.0 | 7522.2 | 20 | 9 | 2021 | 1:31 | 25 | 23.30 | 31.78 | 23.10 | 31.79 | 6 | B |

**HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021**

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|-----------|-------------|---------------|---------------|-----------|----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 62 | 3236 | 3736.2 | 7523.9 | 20 | 9 | 2021 | 3:12 | 18 | 23.23 | 31.75 | 23.18 | 31.77 | 5 | V |
| 63 | 3068 | 3752.9 | 7504.5 | 20 | 9 | 2021 | 6:30 | 18 | 23.35 | 31.38 | 23.36 | 31.39 | 4 | W |
| 26 | 3230 | 3743.2 | 7458.2 | 20 | 9 | 2021 | 8:44 | 32 | 23.23 | 31.60 | 14.77 | 32.33 | 4 | B |
| 64 | 3116 | 3739.1 | 7450.8 | 20 | 9 | 2021 | 10:33 | 47 | 23.16 | 31.77 | 12.04 | 32.77 | 4 | V |
| 27 | 3348 | 3740.9 | 7440.5 | 20 | 9 | 2021 | 12:25 | 56 | 23.54 | 32.19 | 10.61 | 33.10 | 5 | B |
| 28 | 3166 | 3744.5 | 7441.9 | 20 | 9 | 2021 | 14:01 | 50 | 22.92 | 31.55 | 11.14 | 32.81 | 4 | B |
| 65 | 3244 | 3755.7 | 7446.4 | 20 | 9 | 2021 | 17:08 | 28 | 23.58 | 31.00 | 14.61 | 32.38 | 7 | V |
| 66 | 3201 | 3809.2 | 7459.8 | 20 | 9 | 2021 | 19:59 | 21 | 22.49 | 30.74 | 20.97 | 30.51 | 4 | V |
| 29 | 3240 | 3811.5 | 7449.3 | 20 | 9 | 2021 | 21:49 | 19 | 23.67 | 31.16 | 23.44 | 31.26 | 7 | B |
| 30 | 3060 | 3814.1 | 7457.4 | 20 | 9 | 2021 | 23:30 | 21 | 22.94 | 30.93 | 22.78 | 30.92 | 5 | W |
| 67 | 3276 | 3823.6 | 7453.4 | 21 | 9 | 2021 | 1:28 | 22 | 23.27 | 30.89 | 19.58 | 31.07 | 5 | V |
| 68 | 3248 | 3832.2 | 7450.9 | 21 | 9 | 2021 | 3:00 | 24 | 23.05 | 30.56 | 19.14 | 31.45 | 4 | V |
| 31 | 3080 | 3843.3 | 7451.3 | 21 | 9 | 2021 | 4:52 | 20 | 22.12 | 31.05 | 22.13 | 31.05 | 4 | B |
| 69 | 3052 | 3848.2 | 7447.1 | 21 | 9 | 2021 | 6:15 | 20 | 22.24 | 31.29 | 22.25 | 31.29 | 4 | V |
| 32 | 3204 | 3850.4 | 7430.3 | 21 | 9 | 2021 | 8:15 | 20 | 22.86 | 30.73 | 17.77 | 31.83 | 4 | B |
| 33 | 3289 | 3839.4 | 7441.0 | 21 | 9 | 2021 | 10:34 | 24 | 22.95 | 31.20 | 20.02 | 31.53 | 3 | W |
| 34 | 3277 | 3830.8 | 7411.4 | 21 | 9 | 2021 | 13:54 | 57 | 22.80 | 32.34 | 9.92 | 32.84 | 4 | B |
| 35 | 3295 | 3846.7 | 7354.8 | 21 | 9 | 2021 | 16:33 | 48 | 22.96 | 32.52 | 9.88 | 32.92 | 3 | B |
| 36 | 3300 | 3859.0 | 7353.0 | 21 | 9 | 2021 | 18:26 | 36 | 22.94 | 31.67 | 11.59 | 32.82 | 5 | B |
| 37 | 3333 | 3859.7 | 7415.6 | 21 | 9 | 2021 | 21:59 | 31 | 22.63 | 31.31 | 16.33 | 32.25 | 5 | B |
| 38 | 3129 | 3902.4 | 7431.3 | 22 | 9 | 2021 | 0:26 | 19 | 22.94 | 31.17 | 22.25 | 31.26 | 6 | W |
| 70 | 3119 | 3902.3 | 7436.7 | 22 | 9 | 2021 | 2:54 | 22 | 22.52 | 31.28 | 21.61 | 31.36 | 7 | V |
| 71 | 3089 | 3908.6 | 7419.7 | 22 | 9 | 2021 | 5:15 | 24 | 22.65 | 31.37 | 19.39 | 31.76 | 4 | W |
| 72 | 3212 | 3922.8 | 7411.1 | 22 | 9 | 2021 | 7:33 | 19 | 22.76 | 31.05 | 22.36 | 31.14 | 4 | V |
| 73 | 3368 | 3919.2 | 7402.7 | 22 | 9 | 2021 | 9:04 | 26 | 22.86 | 31.04 | 19.74 | 31.77 | 5 | V |
| 39 | 3331 | 3920.8 | 7402.8 | 22 | 9 | 2021 | 10:27 | 24 | 22.92 | 31.06 | 20.33 | 31.71 | 5 | B |
| 40 | 3271 | 3925.9 | 7359.6 | 22 | 9 | 2021 | 12:17 | 26 | 22.81 | 30.94 | 17.41 | 32.18 | 5 | B |
| 74 | 3336 | 3929.9 | 7402.0 | 22 | 9 | 2021 | 13:59 | 25 | 22.61 | 31.26 | 18.74 | 32.44 | 3 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|-----------|-------------|---------------|---------------|-----------|----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 41 | 3015 | 3940.3 | 7350.1 | 22 | 9 | 2021 | 17:08 | 25 | 22.64 | 31.23 | 19.55 | 32.68 | 4 | B |
| 75 | 3269 | 3944.0 | 7355.0 | 22 | 9 | 2021 | 18:50 | 25 | 22.60 | 31.33 | 17.91 | 32.38 | 2 | V |
| 76 | 3002 | 3950.0 | 7352.8 | 22 | 9 | 2021 | 20:29 | 25 | 22.59 | 31.41 | 19.50 | 32.25 | 4 | V |
| 77 | 3270 | 4009.6 | 7353.5 | 22 | 9 | 2021 | 23:20 | 21 | 22.62 | 30.12 | 22.21 | 31.73 | 4 | V |
| 78 | 3046 | 4019.8 | 7353.9 | 23 | 9 | 2021 | 1:24 | 22 | 22.49 | 27.90 | 20.31 | 31.64 | 3 | V |
| 42 | 3218 | 4028.2 | 7347.3 | 23 | 9 | 2021 | 3:18 | 28 | 22.49 | 30.71 | 19.39 | 32.05 | 5 | B |
| 43 | 3040 | 4029.5 | 7345.1 | 23 | 9 | 2021 | 4:34 | 25 | 22.51 | 30.78 | 20.57 | 31.85 | 4 | W |
| 79 | 3268 | 4023.8 | 7339.5 | 23 | 9 | 2021 | 6:32 | 24 | 22.40 | 31.19 | 20.59 | 32.28 | 3 | V |
| 44 | 3216 | 4016.0 | 7339.4 | 23 | 9 | 2021 | 8:34 | 27 | 22.50 | 31.19 | 19.33 | 32.80 | 5 | B |
| 80 | 3058 | 4024.0 | 7319.2 | 23 | 9 | 2021 | 10:56 | 31 | 22.19 | 31.86 | 20.31 | 32.50 | 3 | V |
| 81 | 3132 | 4026.8 | 7328.4 | 23 | 9 | 2021 | 13:08 | 26 | 22.24 | 31.74 | 20.40 | 32.40 | 3 | V |
| 82 | 3207 | 4031.3 | 7315.4 | 23 | 9 | 2021 | 15:07 | 25 | 22.21 | 31.85 | 21.69 | 32.06 | 3 | V |
| 83 | 3079 | 4036.9 | 7302.2 | 23 | 9 | 2021 | 16:50 | 22 | 21.69 | 31.75 | 21.76 | 31.97 | 3 | V |
| 84 | 3151 | 4045.2 | 7236.4 | 23 | 9 | 2021 | 19:21 | 26 | 21.43 | 31.61 | 21.18 | 31.72 | 2 | V |
| 85 | 3353 | 4046.7 | 7231.5 | 23 | 9 | 2021 | 20:37 | 26 | 21.56 | 31.50 | 20.86 | 32.21 | 2 | V |
| 86 | 3359 | 4048.9 | 7226.3 | 23 | 9 | 2021 | 22:03 | 25 | 21.37 | 31.58 | 20.91 | 31.81 | 3 | V |
| 87 | 3101 | 4053.9 | 7212.2 | 24 | 9 | 2021 | 0:12 | 23 | 21.46 | 31.43 | 21.47 | 31.45 | 5 | W |
| 88 | 3196 | 4055.5 | 7207.1 | 24 | 9 | 2021 | 1:28 | 24 | 21.58 | 31.28 | 20.76 | 32.20 | 4 | V |
| 45 | 3022 | 4055.5 | 7200.4 | 24 | 9 | 2021 | 2:38 | 29 | 21.29 | 32.08 | 20.29 | 32.48 | 4 | B |
| 46 | 3036 | 4045.1 | 7206.7 | 24 | 9 | 2021 | 5:11 | 44 | 21.86 | 33.05 | 16.49 | 33.42 | 3 | W |
| 47 | 3103 | 4026.2 | 7210.1 | 24 | 9 | 2021 | 8:43 | 61 | 22.90 | 34.15 | 13.00 | 33.98 | 3 | B |
| 48 | 3110 | 4018.2 | 7217.8 | 24 | 9 | 2021 | 10:40 | 57 | 23.33 | 34.52 | 12.14 | 34.05 | 4 | B |
| 49 | 3138 | 4032.2 | 7245.7 | 24 | 9 | 2021 | 15:44 | 41 | 21.48 | 31.56 | 15.82 | 33.06 | 6 | B |
| 89 | 3302 | 4019.2 | 7259.7 | 24 | 9 | 2021 | 18:11 | 41 | 21.58 | 32.20 | 16.96 | 33.18 | 3 | V |
| 90 | 3366 | 4011.2 | 7304.6 | 24 | 9 | 2021 | 20:03 | 44 | 21.65 | 32.04 | 15.48 | 33.22 | 3 | V |
| 50 | 3195 | 4000.8 | 7310.8 | 24 | 9 | 2021 | 22:11 | 46 | 21.95 | 32.78 | 12.39 | 33.17 | 4 | B |
| 51 | 3093 | 4003.3 | 7329.2 | 25 | 9 | 2021 | 0:39 | 70 | 22.06 | 32.06 | 11.18 | 33.12 | 3 | W |
| 52 | 3258 | 3950.3 | 7309.7 | 25 | 9 | 2021 | 3:31 | 50 | 22.05 | 32.71 | 11.25 | 33.14 | 4 | B |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 53 | 3082 | 3943.8 | 7244.4 | 25 | 9 | 2021 | 5:58 | 71 | 23.19 | 34.17 | 12.74 | 34.39 | 4 | B |
| 91 | 3281 | 3934.4 | 7237.6 | 25 | 9 | 2021 | 8:17 | 79 | 23.10 | 34.16 | 13.91 | 35.20 | 1 | W |
| 92 | 3126 | 3924.4 | 7231.0 | 25 | 9 | 2021 | 10:17 | 127 | 23.31 | 34.04 | 14.37 | 35.68 | 3 | V |
| 54 | 3319 | 3921.3 | 7217.3 | 25 | 9 | 2021 | 12:21 | 205 | 23.71 | 34.43 | 12.52 | 35.61 | 2 | B |
| 93 | 3279 | 3934.5 | 7216.3 | 25 | 9 | 2021 | 15:21 | 120 | 24.53 | 35.46 | 14.58 | 35.80 | 2 | V |
| 94 | 3339 | 3941.5 | 7214.4 | 25 | 9 | 2021 | 17:25 | 120 | 24.28 | 35.19 | 14.96 | 35.74 | 4 | V |
| 95 | 3282 | 3932.6 | 7226.0 | 25 | 9 | 2021 | 20:19 | 306 | 24.48 | 35.34 | 11.57 | 35.50 | 29 | V |
| 55 | 3367 | 3946.3 | 7230.4 | 25 | 9 | 2021 | 22:51 | 70 | 23.52 | 34.41 | 14.42 | 35.23 | 7 | B |
| 56 | 3152 | 3951.7 | 7225.9 | 26 | 9 | 2021 | 0:15 | 77 | 23.53 | 34.46 | 14.40 | 35.36 | 5 | B |
| 96 | 3345 | 3948.3 | 7223.0 | 26 | 9 | 2021 | 1:42 | 85 | 23.56 | 34.58 | 14.80 | 35.52 | 4 | V |
| 97 | 3174 | 3950.6 | 7204.2 | 26 | 9 | 2021 | 4:05 | 97 | 23.83 | 34.79 | 14.59 | 35.44 | 3 | V |
| 98 | 3111 | 3946.4 | 7200.7 | 26 | 9 | 2021 | 5:52 | 134 | 23.93 | 35.01 | 14.33 | 35.79 | 3 | V |
| 99 | 3134 | 3951.8 | 7145.2 | 26 | 9 | 2021 | 8:28 | 218 | 22.74 | 34.28 | 13.19 | 35.70 | 1 | V |
| 57 | 3083 | 3954.1 | 7137.8 | 26 | 9 | 2021 | 10:46 | 203 | 23.48 | 34.82 | 12.66 | 35.63 | 5 | B |
| 58 | 3027 | 3956.7 | 7132.2 | 26 | 9 | 2021 | 14:18 | 133 | 22.80 | 34.37 | 14.78 | 35.86 | 1 | W |
| 59 | 3169 | 4022.0 | 7126.6 | 26 | 9 | 2021 | 17:57 | 79 | 22.92 | 34.56 | 15.96 | 35.61 | 4 | B |
| 100 | 3179 | 4021.2 | 7100.2 | 26 | 9 | 2021 | 21:01 | 94 | 21.77 | 33.79 | 15.96 | 35.77 | 5 | V |
| 101 | 3241 | 4005.5 | 7058.2 | 27 | 9 | 2021 | 1:10 | 167 | 23.47 | 34.75 | 13.13 | 35.70 | 4 | V |
| 102 | 3003 | 4000.7 | 7109.8 | 27 | 9 | 2021 | 4:34 | 272 | 24.13 | 35.31 | 10.64 | 35.37 | 1 | V |
| 103 | 3209 | 4003.3 | 7042.1 | 27 | 9 | 2021 | 8:16 | 137 | 22.56 | 34.43 | 13.64 | 35.76 | 3 | V |
| 104 | 3283 | 4006.2 | 7038.3 | 27 | 9 | 2021 | 10:06 | 129 | 21.76 | 33.96 | 14.35 | 35.83 | 3 | W |
| 105 | 3181 | 3959.7 | 7031.8 | 27 | 9 | 2021 | 12:23 | 335 | 23.10 | 34.75 | 9.70 | 35.29 | 4 | V |
| 106 | 3217 | 4006.1 | 7024.2 | 27 | 9 | 2021 | 15:01 | 127 | 23.56 | 34.89 | 14.70 | 35.84 | 1 | V |
| 107 | 3360 | 4009.6 | 7020.1 | 27 | 9 | 2021 | 17:01 | 120 | 22.63 | 34.42 | 15.12 | 35.86 | 3 | V |
| 60 | 2998 | 4016.3 | 7011.3 | 27 | 9 | 2021 | 19:03 | 95 | 22.11 | 34.07 | 15.44 | 35.52 | 4 | B |
| 61 | 3316 | 4011.5 | 7004.8 | 27 | 9 | 2021 | 21:06 | 104 | 22.72 | 34.62 | 15.33 | 35.73 | 7 | W |
| 62 | 3334 | 3957.4 | 6955.0 | 28 | 9 | 2021 | 0:49 | 253 | 24.34 | 34.96 | 13.27 | 35.71 | 52 | B |
| 63 | 3334 | 3957.5 | 6955.0 | 28 | 9 | 2021 | 1:25 | 230 | 24.32 | 34.94 | 13.03 | 35.67 | 16 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 108 | 2999 | 3955.6 | 6947.4 | 28 | 9 | 2021 | 3:46 | 223 | 23.84 | 35.05 | 13.54 | 35.75 | 2 | V |
| 109 | 3296 | 4003.8 | 6945.2 | 28 | 9 | 2021 | 6:41 | 117 | 22.94 | 34.84 | 14.75 | 35.86 | 3 | V |
| 110 | 2997 | 3957.0 | 6919.8 | 28 | 9 | 2021 | 10:00 | 269 | 24.47 | 35.08 | 11.90 | 35.53 | 1 | V |
| 111 | 3301 | 4007.9 | 6856.9 | 28 | 9 | 2021 | 13:38 | 155 | 24.30 | 35.20 | 13.74 | 35.75 | 3 | V |
| 112 | 3313 | 4009.5 | 6925.8 | 28 | 9 | 2021 | 17:31 | 91 | 24.24 | 34.91 | 14.96 | 35.53 | 2 | V |
| 64 | 3371 | 4018.2 | 6933.8 | 28 | 9 | 2021 | 20:22 | 75 | 23.26 | 34.82 | 13.87 | 34.48 | 3 | B |
| 113 | 3030 | 4015.8 | 6947.6 | 28 | 9 | 2021 | 23:12 | 85 | 21.55 | 34.02 | 14.71 | 35.10 | 5 | V |
| 114 | 3057 | 4023.3 | 6958.9 | 29 | 9 | 2021 | 1:41 | 80 | 20.87 | 33.51 | 14.21 | 34.53 | 6 | V |
| 115 | 3588 | 4041.1 | 7015.1 | 29 | 9 | 2021 | 4:45 | 46 | 18.47 | 32.34 | 15.45 | 32.99 | 3 | V |
| 116 | 3352 | 4051.9 | 7039.5 | 29 | 9 | 2021 | 7:54 | 54 | 20.83 | 33.54 | 15.56 | 34.07 | 4 | W |
| 117 | 3135 | 4050.2 | 7057.6 | 29 | 9 | 2021 | 9:47 | 58 | 20.60 | 33.29 | 15.39 | 34.16 | 4 | V |
| 118 | 3225 | 4037.5 | 7102.2 | 29 | 9 | 2021 | 12:28 | 68 | 20.84 | 33.94 | 14.82 | 34.21 | 4 | V |
| 65 | 3259 | 4042.1 | 7112.6 | 29 | 9 | 2021 | 14:05 | 60 | 21.86 | 34.23 | 16.32 | 35.04 | 4 | B |
| 66 | 3260 | 4049.6 | 7116.8 | 29 | 9 | 2021 | 15:37 | 61 | 21.54 | 34.23 | 14.81 | 34.28 | 4 | B |
| 67 | 3318 | 4044.0 | 7131.1 | 29 | 9 | 2021 | 17:39 | 65 | 20.75 | 32.97 | 15.41 | 34.77 | 4 | B |
| 68 | 3150 | 4059.6 | 7150.4 | 29 | 9 | 2021 | 20:11 | 25 | 20.56 | 31.16 | 20.47 | 31.38 | 8 | W |
| 69 | 3323 | 4101.5 | 7141.1 | 13 | 10 | 2021 | 22:38 | 44 | 18.72 | 32.67 | 17.16 | 33.42 | 4 | B |
| 70 | 3131 | 4104.9 | 7140.2 | 14 | 10 | 2021 | 1:01 | 34 | 18.88 | 32.38 | 18.29 | 33.15 | 6 | W |
| 71 | 3053 | 4106.4 | 7137.7 | 14 | 10 | 2021 | 2:29 | 26 | 19.04 | 32.29 | 18.96 | 32.39 | 6 | B |
| 72 | 3208 | 4104.7 | 7124.0 | 14 | 10 | 2021 | 4:40 | 37 | 18.69 | 32.72 | 17.79 | 33.05 | 5 | B |
| 119 | 3157 | 4113.7 | 7128.3 | 14 | 10 | 2021 | 6:37 | 38 | 19.09 | 31.82 | 18.48 | 32.67 | 4 | V |
| 120 | 3176 | 4120.0 | 7126.5 | 14 | 10 | 2021 | 8:53 | 25 | 18.89 | 31.74 | 18.50 | 32.62 | 3 | V |
| 121 | 3094 | 4125.5 | 7108.5 | 14 | 10 | 2021 | 11:36 | 22 | 18.91 | 31.90 | 18.66 | 32.18 | 3 | V |
| 122 | 3106 | 4122.6 | 7055.1 | 14 | 10 | 2021 | 14:22 | 30 | 18.70 | 32.21 | 18.49 | 32.28 | 4 | V |
| 123 | 3305 | 4116.4 | 7103.7 | 14 | 10 | 2021 | 17:22 | 41 | 18.89 | 32.20 | 18.08 | 32.80 | 3 | V |
| 73 | 3306 | 4115.7 | 7038.7 | 14 | 10 | 2021 | 20:05 | 28 | 19.01 | 32.00 | 17.66 | 32.37 | 6 | B |
| 124 | 3054 | 4119.2 | 7039.2 | 14 | 10 | 2021 | 21:50 | 19 | 19.17 | 32.04 | 18.45 | 32.10 | 5 | W |
| 125 | 3228 | 4105.1 | 7005.5 | 15 | 10 | 2021 | 1:57 | 24 | 17.91 | 31.78 | 17.95 | 31.85 | 6 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|-----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 74 | 3180 | 4039.4 | 6937.0 | 15 | 10 | 2021 | 7:41 | 51 | 17.18 | 32.94 | 16.60 | 32.98 | 5 | B |
| 75 | 3364 | 4044.8 | 6917.2 | 15 | 10 | 2021 | 10:27 | 59 | 15.60 | 32.58 | 15.54 | 32.77 | 3 | B |
| 76 | 3215 | 4035.5 | 6903.5 | 15 | 10 | 2021 | 12:45 | 73 | 19.69 | 34.00 | 13.31 | 33.09 | 3 | B |
| 77 | 3290 | 4032.1 | 6859.6 | 15 | 10 | 2021 | 14:31 | 75 | 19.39 | 33.86 | 13.38 | 33.00 | 3 | B |
| 78 | 3016 | 4043.7 | 6855.1 | 15 | 10 | 2021 | 17:01 | 69 | 18.25 | 33.33 | 14.86 | 33.39 | 4 | B |
| 79 | 3074 | 4049.0 | 6844.0 | 15 | 10 | 2021 | 20:15 | 67 | 16.76 | 32.64 | 16.34 | 32.67 | 5 | B |
| 80 | 3263 | 4057.4 | 6832.2 | 15 | 10 | 2021 | 23:13 | 58 | 17.45 | 32.60 | 17.43 | 32.60 | 4 | B |
| 126 | 3141 | 4102.2 | 6840.1 | 16 | 10 | 2021 | 1:41 | 54 | 17.70 | 32.61 | 17.69 | 32.61 | 2 | W |
| 127 | 3090 | 4116.6 | 6834.2 | 16 | 10 | 2021 | 4:23 | 60 | 16.94 | 32.64 | 15.51 | 32.68 | 3 | V |
| 81 | 3037 | 4111.1 | 6832.5 | 16 | 10 | 2021 | 6:26 | 61 | 17.22 | 32.64 | 17.15 | 32.64 | 4 | B |
| 82 | 3202 | 4105.4 | 6827.4 | 16 | 10 | 2021 | 11:39 | 52 | 17.54 | 32.60 | 17.28 | 32.60 | 4 | B |
| 83 | 3255 | 4054.7 | 6814.6 | 16 | 10 | 2021 | 16:10 | 50 | 16.57 | 32.59 | 16.36 | 32.59 | 5 | B |
| 84 | 3357 | 4044.4 | 6757.1 | 16 | 10 | 2021 | 19:06 | 77 | 17.51 | 32.55 | 13.59 | 32.97 | 5 | B |
| 85 | 3249 | 4038.2 | 6758.0 | 16 | 10 | 2021 | 21:35 | 87 | 18.64 | 33.38 | 12.85 | 33.41 | 3 | W |
| 86 | 3314 | 4042.7 | 6820.2 | 17 | 10 | 2021 | 0:54 | 62 | 17.61 | 32.57 | 14.24 | 32.76 | 4 | B |
| 87 | 3145 | 4038.1 | 6818.4 | 17 | 10 | 2021 | 2:50 | 81 | 17.12 | 32.57 | 13.29 | 33.54 | 4 | B |
| 128 | 3148 | 4026.0 | 6818.4 | 17 | 10 | 2021 | 5:36 | 111 | 18.71 | 33.53 | 14.78 | 35.25 | 3 | V |
| 129 | 3262 | 4017.2 | 6824.1 | 17 | 10 | 2021 | 12:06 | 145 | 21.57 | 34.90 | 14.59 | 35.81 | 2 | V |
| 88 | 3065 | 4025.1 | 6807.4 | 17 | 10 | 2021 | 17:05 | 550 | 18.70 | 33.52 | 14.40 | 35.74 | 348 | B |
| 89 | 3065 | 4024.5 | 6808.4 | 17 | 10 | 2021 | 17:33 | 485 | 19.48 | 33.94 | 10.05 | 35.36 | 30 | V |
| 90 | 3307 | 4022.5 | 6742.9 | 17 | 10 | 2021 | 21:39 | 175 | 20.98 | 34.70 | 14.62 | 35.80 | 5 | B |
| 130 | 3328 | 4028.4 | 6728.9 | 18 | 10 | 2021 | 0:49 | 149 | 19.32 | 33.86 | 13.89 | 35.70 | 1 | V |
| 91 | 3056 | 4036.7 | 6726.4 | 18 | 10 | 2021 | 3:10 | 101 | 17.72 | 33.23 | 13.17 | 34.58 | 6 | B |
| 131 | 3349 | 4032.3 | 6720.6 | 18 | 10 | 2021 | 5:27 | 146 | 21.00 | 34.79 | 14.61 | 35.78 | 4 | V |
| 132 | 3234 | 4030.4 | 6707.4 | 18 | 10 | 2021 | 8:16 | 344 | 21.52 | 34.91 | 8.57 | 35.19 | 5 | V |
| 133 | 3055 | 4041.8 | 6705.9 | 18 | 10 | 2021 | 11:42 | 110 | NaN | NaN | 13.24 | 35.09 | 3 | W |
| 134 | 3251 | 4056.7 | 6631.2 | 18 | 10 | 2021 | 15:55 | 212 | 19.65 | 34.42 | 13.37 | 35.72 | 1 | V |
| 135 | 3120 | 4100.9 | 6623.9 | 18 | 10 | 2021 | 19:06 | 490 | 16.65 | 32.93 | 6.56 | 35.09 | 2 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|-----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 136 | 3257 | 4107.8 | 6621.9 | 18 | 10 | 2021 | 21:42 | 154 | 16.62 | 32.75 | 12.67 | 34.80 | 7 | V |
| 92 | 3312 | 4111.2 | 6619.6 | 18 | 10 | 2021 | 23:50 | 125 | 17.99 | 33.41 | 11.78 | 34.45 | 9 | B |
| 137 | 3008 | 4109.5 | 6625.3 | 19 | 10 | 2021 | 1:55 | 101 | 17.29 | 33.06 | 11.59 | 34.25 | 5 | V |
| 93 | 3175 | 4106.5 | 6638.9 | 19 | 10 | 2021 | 4:33 | 84 | 15.80 | 32.86 | 11.46 | 33.25 | 4 | B |
| 138 | 3041 | 4101.5 | 6652.3 | 19 | 10 | 2021 | 7:19 | 74 | 15.04 | 32.78 | 12.13 | 33.08 | 4 | V |
| 139 | 3033 | 4050.5 | 6731.9 | 19 | 10 | 2021 | 11:43 | 79 | 15.54 | 32.71 | 12.52 | 33.11 | 5 | W |
| 94 | 3032 | 4104.5 | 6730.3 | 19 | 10 | 2021 | 14:41 | 61 | 15.84 | 32.66 | 14.69 | 32.78 | 3 | B |
| 95 | 3071 | 4108.7 | 6719.8 | 19 | 10 | 2021 | 16:54 | 58 | 15.64 | 32.68 | 14.47 | 32.82 | 5 | W |
| 96 | 3346 | 4113.0 | 6723.0 | 19 | 10 | 2021 | 19:08 | 49 | 16.38 | 32.59 | 16.36 | 32.60 | 3 | B |
| 140 | 3294 | 4123.7 | 6840.9 | 20 | 10 | 2021 | 9:23 | 101 | 15.76 | 32.33 | 8.30 | 33.06 | 3 | V |
| 141 | 3537 | 4130.3 | 6830.4 | 20 | 10 | 2021 | 11:42 | 100 | 15.73 | 32.48 | 8.92 | 32.97 | 3 | V |
| 142 | 3117 | 4124.4 | 6810.1 | 20 | 10 | 2021 | 15:44 | 46 | 17.75 | 32.61 | 17.68 | 32.62 | 6 | V |
| 143 | 3590 | 4123.2 | 6816.4 | 20 | 10 | 2021 | 18:52 | 50 | 17.25 | 32.63 | 17.29 | 32.63 | 5 | V |
| 97 | 3297 | 4118.1 | 6804.4 | 20 | 10 | 2021 | 21:35 | 42 | 18.01 | 32.62 | 18.05 | 32.61 | 6 | B |
| 98 | 3128 | 4133.2 | 6803.2 | 21 | 10 | 2021 | 0:15 | 32 | 17.46 | 32.65 | 17.44 | 32.65 | 8 | B |
| 144 | 3009 | 4130.9 | 6742.1 | 21 | 10 | 2021 | 3:46 | 45 | 17.57 | 32.62 | 17.58 | 32.62 | 3 | W |
| 145 | 3206 | 4149.1 | 6742.1 | 21 | 10 | 2021 | 7:20 | 39 | 16.32 | 32.66 | 16.31 | 32.66 | 2 | V |
| 99 | 3061 | 4150.9 | 6707.8 | 21 | 10 | 2021 | 12:04 | 60 | 16.27 | 32.70 | 16.31 | 32.70 | 4 | B |
| 100 | 3266 | 4145.8 | 6711.5 | 21 | 10 | 2021 | 14:05 | 53 | 16.35 | 32.70 | 16.36 | 32.70 | 5 | B |
| 146 | 3194 | 4136.5 | 6723.9 | 21 | 10 | 2021 | 17:02 | 63 | 17.34 | 32.64 | 17.31 | 32.63 | 4 | V |
| 147 | 3338 | 4135.1 | 6650.8 | 21 | 10 | 2021 | 20:13 | 66 | 15.72 | 32.71 | 15.41 | 32.72 | 6 | V |
| 148 | 3185 | 4123.7 | 6652.3 | 21 | 10 | 2021 | 22:52 | 73 | 15.12 | 32.76 | 14.54 | 32.80 | 7 | V |
| 101 | 3329 | 4120.8 | 6644.4 | 22 | 10 | 2021 | 1:00 | 75 | 15.21 | 32.76 | 11.92 | 33.05 | 5 | B |
| 102 | 3013 | 4113.8 | 6634.9 | 22 | 10 | 2021 | 3:05 | 89 | 15.89 | 32.69 | 11.50 | 33.20 | 7 | B |
| 103 | 3292 | 4129.9 | 6630.7 | 22 | 10 | 2021 | 5:59 | 90 | 15.20 | 32.70 | 11.55 | 33.05 | 4 | B |
| 149 | 3146 | 4130.4 | 6602.9 | 22 | 10 | 2021 | 8:56 | 125 | 15.82 | 32.99 | 12.39 | 34.57 | 4 | V |
| 104 | 3130 | 4133.0 | 6607.5 | 22 | 10 | 2021 | 10:47 | 102 | 14.57 | 32.65 | 10.70 | 33.23 | 5 | B |
| 105 | 3237 | 4144.8 | 6617.5 | 22 | 10 | 2021 | 14:12 | 86 | 15.25 | 32.61 | 12.22 | 32.91 | 4 | W |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|-----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 106 | 3254 | 4156.7 | 6612.5 | 22 | 10 | 2021 | 16:29 | 86 | 15.33 | 32.57 | 10.95 | 32.96 | 5 | B |
| 150 | 3220 | 4157.1 | 6601.0 | 22 | 10 | 2021 | 18:22 | 94 | 15.51 | 32.56 | 10.59 | 33.07 | 5 | V |
| 151 | 3035 | 4155.8 | 6553.1 | 22 | 10 | 2021 | 20:46 | 125 | 15.77 | 32.56 | 8.70 | 33.66 | 3 | V |
| 152 | 3115 | 4154.0 | 6545.4 | 22 | 10 | 2021 | 22:45 | 204 | 15.66 | 32.71 | 8.20 | 35.06 | 6 | V |
| 107 | 3018 | 4200.5 | 6552.0 | 23 | 10 | 2021 | 1:17 | 197 | 16.49 | 32.95 | 9.67 | 35.13 | 4 | B |
| 153 | 3298 | 4210.4 | 6551.8 | 23 | 10 | 2021 | 4:18 | 244 | NaN | NaN | 7.86 | 35.16 | 2 | V |
| 108 | 3163 | 4214.5 | 6600.9 | 23 | 10 | 2021 | 8:17 | 243 | 15.99 | 32.77 | 8.61 | 35.16 | 41 | B |
| 109 | 3163 | 4213.3 | 6559.5 | 23 | 10 | 2021 | 8:47 | 235 | 16.00 | 32.76 | 8.51 | 35.14 | 2 | W |
| 154 | 3177 | 4209.0 | 6612.0 | 23 | 10 | 2021 | 14:53 | 166 | 15.80 | 32.64 | 9.08 | 34.36 | 3 | V |
| 110 | 3168 | 4201.9 | 6625.7 | 23 | 10 | 2021 | 17:29 | 90 | 15.51 | 32.61 | 12.13 | 32.88 | 4 | B |
| 111 | 3350 | 4154.4 | 6636.3 | 23 | 10 | 2021 | 20:10 | 71 | 14.96 | 32.67 | 14.87 | 32.68 | 5 | B |
| 112 | 3140 | 4204.9 | 6638.2 | 23 | 10 | 2021 | 22:46 | 77 | 15.92 | 32.36 | 9.05 | 33.19 | 7 | B |
| 155 | 3242 | 4210.8 | 6639.0 | 24 | 10 | 2021 | 0:43 | 200 | 15.54 | 32.42 | 9.71 | 35.04 | 5 | V |
| 156 | 3014 | 4210.6 | 6709.8 | 24 | 10 | 2021 | 4:13 | 154 | NaN | NaN | 7.57 | 33.45 | 2 | V |
| 113 | 3000 | 4204.5 | 6707.8 | 24 | 10 | 2021 | 6:20 | 57 | 15.82 | 32.68 | 15.77 | 32.69 | 4 | B |
| 157 | 3330 | 4207.1 | 6715.6 | 24 | 10 | 2021 | 8:46 | 71 | 15.26 | 32.59 | 9.45 | 32.95 | 4 | W |
| 158 | 3335 | 4158.3 | 6726.1 | 24 | 10 | 2021 | 11:38 | 42 | NaN | NaN | 15.44 | 32.59 | 4 | V |
| 159 | 3224 | 4203.1 | 6742.1 | 24 | 10 | 2021 | 14:11 | 167 | 15.67 | 32.43 | 7.94 | 33.89 | 4 | V |
| 160 | 3045 | 4202.7 | 6758.5 | 24 | 10 | 2021 | 16:56 | 199 | NaN | NaN | 9.54 | NaN | 1 | V |
| 161 | 3024 | 4216.0 | 6800.8 | 24 | 10 | 2021 | 19:56 | 194 | 15.47 | 32.36 | 9.55 | 34.98 | 6 | V |
| 162 | 3100 | 4209.1 | 6818.7 | 24 | 10 | 2021 | 22:47 | 193 | 15.86 | 32.33 | 9.03 | 34.60 | 3 | V |
| 163 | 3049 | 4157.9 | 6810.5 | 25 | 10 | 2021 | 1:31 | 223 | 15.86 | 32.33 | 9.68 | 35.02 | 5 | V |
| 164 | 3238 | 4203.7 | 6828.3 | 25 | 10 | 2021 | 4:18 | 169 | NaN | NaN | 7.43 | 33.67 | 2 | V |
| 114 | 3075 | 4155.0 | 6836.3 | 25 | 10 | 2021 | 6:58 | 171 | 15.38 | 32.40 | 7.72 | 33.82 | 5 | B |
| 115 | 3273 | 4143.9 | 6839.0 | 25 | 10 | 2021 | 9:30 | 179 | 15.67 | 32.33 | 7.70 | 33.73 | 5 | B |
| 165 | 3308 | 4138.0 | 6908.8 | 25 | 10 | 2021 | 13:04 | 167 | 15.15 | 32.45 | 7.62 | 33.60 | 3 | V |
| 116 | 3326 | 4155.1 | 6932.9 | 25 | 10 | 2021 | 17:00 | 210 | 14.39 | 32.50 | 7.93 | 33.94 | 8 | B |
| 166 | 3076 | 4202.2 | 6929.7 | 25 | 10 | 2021 | 19:33 | 212 | 14.34 | 32.77 | 8.17 | 34.14 | 6 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|-----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 167 | 3077 | 4205.2 | 6939.7 | 25 | 10 | 2021 | 22:21 | 220 | 14.34 | 32.65 | 8.16 | 34.13 | 8 | V |
| 117 | 3309 | 4205.2 | 6930.5 | 26 | 10 | 2021 | 0:17 | 210 | 14.41 | 32.75 | 8.20 | 34.18 | 7 | B |
| 118 | 3243 | 4219.7 | 6938.7 | 26 | 10 | 2021 | 4:54 | 248 | 14.42 | 32.54 | 8.46 | 34.43 | 3 | W |
| 119 | 3184 | 4225.2 | 6913.6 | 26 | 10 | 2021 | 9:03 | 190 | 13.83 | 32.87 | 8.42 | 34.28 | 1 | B |
| 168 | 3149 | 4212.1 | 6853.8 | 4 | 11 | 2021 | 2:32 | 178 | 12.76 | 32.83 | 7.71 | 33.76 | 3 | V |
| 169 | 3085 | 4213.4 | 6837.5 | 4 | 11 | 2021 | 5:21 | 192 | 13.47 | 32.62 | 7.78 | 33.87 | 4 | W |
| 170 | 3081 | 4227.2 | 6839.0 | 4 | 11 | 2021 | 8:30 | 199 | 13.24 | 32.65 | 8.82 | 34.55 | 3 | V |
| 171 | 3047 | 4223.8 | 6811.9 | 4 | 11 | 2021 | 11:55 | 188 | 13.07 | 32.62 | 8.66 | 34.36 | 7 | V |
| 120 | 3356 | 4224.3 | 6745.1 | 4 | 11 | 2021 | 15:32 | 205 | 12.89 | 32.70 | 9.83 | 35.06 | 2 | B |
| 172 | 3211 | 4223.6 | 6736.6 | 4 | 11 | 2021 | 19:14 | 257 | 12.94 | 32.73 | 9.77 | NaN | 3 | V |
| 173 | 3154 | 4225.9 | 6730.8 | 4 | 11 | 2021 | 21:47 | 297 | 13.53 | 32.89 | 9.57 | 35.20 | 3 | W |
| 174 | 3247 | 4226.2 | 6708.8 | 5 | 11 | 2021 | 0:46 | 365 | 13.54 | 32.55 | 9.39 | 35.20 | 4 | V |
| 121 | 3155 | 4231.7 | 6720.1 | 5 | 11 | 2021 | 3:06 | 314 | 13.31 | 32.65 | 9.90 | 35.20 | 111 | B |
| 122 | 3155 | 4231.4 | 6721.2 | 5 | 11 | 2021 | 3:34 | 315 | 13.30 | 32.65 | 9.64 | 35.22 | 5 | W |
| 175 | 3005 | 4241.5 | 6711.2 | 5 | 11 | 2021 | 7:12 | 231 | 13.44 | 32.67 | 9.97 | 35.20 | 4 | V |
| 176 | 3267 | 4246.5 | 6716.0 | 5 | 11 | 2021 | 9:42 | 210 | 13.64 | 32.82 | 9.96 | 34.98 | 6 | V |
| 177 | 3304 | 4248.4 | 6655.1 | 5 | 11 | 2021 | 14:12 | 210 | 12.92 | 32.55 | 11.20 | 35.17 | 4 | V |
| 178 | 3299 | 4306.9 | 6653.8 | 5 | 11 | 2021 | 18:10 | 167 | 13.12 | 32.56 | 11.34 | 34.74 | 3 | V |
| 179 | 3232 | 4314.5 | 6650.2 | 5 | 11 | 2021 | 21:48 | 158 | 12.87 | 31.12 | 11.50 | 34.73 | 4 | W |
| 123 | 3078 | 4311.6 | 6703.6 | 6 | 11 | 2021 | 0:24 | 191 | 13.42 | 32.75 | 12.54 | 33.40 | 131 | B |
| 124 | 3288 | 4307.2 | 6719.2 | 6 | 11 | 2021 | 4:15 | 168 | 13.47 | 32.95 | 10.59 | 35.01 | 7 | B |
| 125 | 3133 | 4257.6 | 6725.1 | 6 | 11 | 2021 | 6:53 | 230 | 13.32 | 33.04 | 10.50 | 35.10 | 29 | B |
| 126 | 3133 | 4257.4 | 6724.6 | 6 | 11 | 2021 | 7:15 | 238 | 13.34 | 33.04 | 10.49 | 35.11 | 7 | V |
| 127 | 3050 | 4309.7 | 6735.8 | 6 | 11 | 2021 | 11:40 | 195 | 13.40 | 32.97 | 9.30 | 34.56 | 14 | B |
| 128 | 3091 | 4305.5 | 6750.3 | 6 | 11 | 2021 | 14:39 | 196 | 12.77 | 33.20 | 8.76 | 34.30 | 6 | V |
| 129 | 3365 | 4327.4 | 6743.7 | 6 | 11 | 2021 | 18:08 | 245 | 12.85 | 33.19 | 9.66 | 34.83 | 43 | B |
| 130 | 3365 | 4326.7 | 6744.4 | 6 | 11 | 2021 | 18:31 | 246 | 12.84 | 33.20 | 9.67 | 34.84 | 4 | W |
| 180 | 3324 | 4321.2 | 6720.4 | 6 | 11 | 2021 | 22:08 | 223 | 13.18 | 32.78 | 10.59 | 34.79 | 3 | V |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 181 | 3310 | 4351.1 | 6718.1 | 7 | 11 | 2021 | 1:51 | 194 | 13.09 | 33.13 | 10.60 | 34.86 | 2 | V |
| 182 | 3048 | 4346.3 | 6710.0 | 7 | 11 | 2021 | 4:25 | 185 | 12.93 | 32.44 | 11.18 | 34.79 | 5 | V |
| 131 | 3164 | 4338.3 | 6701.5 | 7 | 11 | 2021 | 6:50 | 179 | 12.62 | 30.77 | 11.07 | 34.45 | 9 | B |
| 183 | 3118 | 4340.3 | 6645.8 | 7 | 11 | 2021 | 9:30 | 123 | 12.53 | 30.99 | 11.93 | 33.64 | 3 | V |
| 184 | 3165 | 4407.7 | 6650.3 | 7 | 11 | 2021 | 12:59 | 152 | 12.78 | 30.94 | 12.15 | 34.26 | 3 | V |
| 185 | 3203 | 4413.7 | 6651.0 | 7 | 11 | 2021 | 15:06 | 191 | 12.86 | 30.95 | 12.11 | 34.21 | 3 | V |
| 186 | 3067 | 4417.0 | 6647.6 | 7 | 11 | 2021 | 17:13 | 185 | 12.84 | 31.00 | 12.11 | 34.11 | 4 | V |
| 132 | 3006 | 4415.3 | 6639.9 | 7 | 11 | 2021 | 19:42 | 192 | 12.81 | 31.11 | 12.08 | 33.96 | 4 | B |
| 187 | 3072 | 4407.7 | 6723.8 | 8 | 11 | 2021 | 0:09 | 188 | 12.72 | 31.17 | 10.72 | 34.77 | 3 | V |
| 188 | 3213 | 4411.0 | 6731.0 | 8 | 11 | 2021 | 2:43 | 195 | 12.65 | 31.50 | 11.28 | 34.66 | 11 | W |
| 189 | 3161 | 4419.3 | 6732.3 | 8 | 11 | 2021 | 6:18 | 105 | 12.42 | 32.67 | 12.17 | 33.53 | 4 | V |
| 190 | 3059 | 4351.5 | 6808.6 | 8 | 11 | 2021 | 17:09 | 194 | 12.67 | 32.15 | 10.80 | 34.50 | 11 | V |
| 191 | 3317 | 4348.2 | 6816.7 | 8 | 11 | 2021 | 18:55 | 169 | 12.48 | 32.39 | 11.10 | 34.36 | 3 | V |
| 133 | 3096 | 4339.1 | 6840.2 | 8 | 11 | 2021 | 21:56 | 155 | 12.49 | 32.65 | 11.30 | 34.21 | 4 | W |
| 192 | 3453 | 4340.8 | 6902.4 | 9 | 11 | 2021 | 3:38 | 90 | 12.57 | 32.83 | 12.82 | 33.08 | 4 | V |
| 193 | 3143 | 4333.5 | 6907.8 | 9 | 11 | 2021 | 6:33 | 142 | 12.52 | 32.86 | 11.89 | 33.53 | 3 | V |
| 194 | 3158 | 4315.3 | 6830.8 | 9 | 11 | 2021 | 11:27 | 192 | 12.65 | 32.97 | 9.50 | 34.52 | 3 | V |
| 134 | 3351 | 4312.3 | 6837.8 | 9 | 11 | 2021 | 14:20 | 177 | 12.68 | 33.03 | 9.58 | 34.52 | 7 | B |
| 135 | 3136 | 4306.7 | 6841.8 | 9 | 11 | 2021 | 16:37 | 183 | 12.73 | 33.13 | 8.65 | 34.22 | 5 | B |
| 195 | 3147 | 4307.1 | 6848.4 | 9 | 11 | 2021 | 18:51 | 168 | 12.71 | 32.93 | 8.71 | 34.23 | 3 | W |
| 196 | 3095 | 4308.2 | 6903.0 | 9 | 11 | 2021 | 21:31 | 157 | 12.75 | 33.00 | 10.37 | 34.24 | 3 | V |
| 197 | 3182 | 4312.7 | 6913.0 | 9 | 11 | 2021 | 23:51 | 184 | 12.65 | 32.66 | 10.22 | 34.24 | 2 | V |
| 198 | 3028 | 4319.9 | 6909.2 | 10 | 11 | 2021 | 2:03 | 161 | 12.68 | 32.84 | 10.87 | 33.84 | 3 | V |
| 199 | 3026 | 4310.6 | 6925.9 | 10 | 11 | 2021 | 4:36 | 150 | 12.82 | 32.77 | 9.89 | 33.78 | 1 | V |
| 200 | 3287 | 4332.2 | 6929.0 | 10 | 11 | 2021 | 7:30 | 145 | 12.53 | 32.80 | 11.88 | 33.49 | 1 | V |
| 201 | 3167 | 4331.4 | 6934.1 | 10 | 11 | 2021 | 10:08 | 155 | 12.49 | 32.87 | 10.97 | 33.50 | 6 | V |
| 136 | 3325 | 4327.6 | 7001.3 | 10 | 11 | 2021 | 14:05 | 112 | 11.86 | 32.51 | 12.64 | 33.24 | 9 | B |
| 137 | 3066 | 4309.4 | 6958.0 | 10 | 11 | 2021 | 17:13 | 150 | 12.15 | 32.86 | 10.07 | 33.54 | 4 | W |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|--------|-----------|--------------|---------------|-----|----|------|------------|---------------|------------------|----------|-------------------------------|-----------------------|--------------------|----------------------|
| 138 | 3286 | 4251.4 | 6933.8 | 10 | 11 | 2021 | 20:44 | 177 | 12.58 | 33.15 | 8.27 | 33.81 | 5 | B |
| 202 | 3190 | 4259.7 | 7000.1 | 11 | 11 | 2021 | 0:13 | 138 | 12.50 | 32.96 | 11.66 | 33.57 | 3 | V |
| 203 | 3303 | 4254.8 | 7007.3 | 11 | 11 | 2021 | 2:17 | 64 | 12.58 | 32.98 | 11.86 | 33.21 | 4 | V |
| 204 | 4095 | 4249.9 | 7013.3 | 11 | 11 | 2021 | 4:17 | 55 | 12.64 | 33.10 | 12.58 | 33.22 | 4 | V |
| 139 | 3019 | 4255.1 | 7015.2 | 11 | 11 | 2021 | 6:24 | 147 | 12.12 | 32.61 | 9.87 | 33.08 | 7 | B |
| 205 | 3415 | 4256.6 | 7024.7 | 11 | 11 | 2021 | 8:30 | 120 | 12.03 | 32.43 | 11.98 | 33.18 | 3 | V |
| 206 | 3010 | 4252.9 | 7028.0 | 11 | 11 | 2021 | 10:54 | 112 | 12.26 | 31.99 | 11.56 | 33.12 | 5 | V |
| 207 | 3222 | 4248.4 | 7045.8 | 11 | 11 | 2021 | 13:56 | 27 | 11.75 | 30.82 | 12.45 | 32.51 | 6 | V |
| 208 | 3038 | 4246.3 | 7043.8 | 11 | 11 | 2021 | 15:24 | 29 | 11.54 | 30.19 | 12.36 | 32.63 | 3 | V |
| 209 | 3178 | 4244.3 | 7040.0 | 11 | 11 | 2021 | 16:52 | 38 | 11.56 | 29.24 | 12.53 | 32.78 | 3 | V |
| 210 | 3156 | 4243.4 | 7039.0 | 11 | 11 | 2021 | 18:09 | 38 | 11.71 | 29.52 | 12.54 | 32.78 | 4 | V |
| 211 | 3284 | 4244.6 | 7031.7 | 11 | 11 | 2021 | 20:04 | 91 | 12.10 | 32.24 | 11.79 | 32.92 | 1 | V |
| 212 | 3188 | 4237.7 | 7026.2 | 11 | 11 | 2021 | 22:59 | 82 | 12.27 | 32.49 | 12.43 | 32.92 | 3 | W |
| 213 | 3183 | 4231.8 | 7019.2 | 12 | 11 | 2021 | 0:41 | 167 | 12.50 | 32.61 | 12.40 | 33.16 | 3 | V |
| 214 | 3321 | 4227.6 | 7027.6 | 12 | 11 | 2021 | 2:57 | 97 | 12.09 | 32.36 | 12.40 | 33.00 | 4 | V |
| 215 | 3256 | 4223.8 | 7044.5 | 12 | 11 | 2021 | 9:51 | 51 | 12.43 | 32.44 | 12.42 | 32.82 | 4 | V |
| 216 | 3102 | 4147.0 | 7022.2 | 12 | 11 | 2021 | 16:24 | 21 | 13.11 | 31.62 | 12.78 | 31.57 | 5 | V |
| 217 | 3073 | 4151.0 | 7019.1 | 13 | 11 | 2021 | 0:02 | 29 | 13.31 | 31.79 | 13.20 | 31.89 | 4 | V |
| 140 | 3112 | 4153.1 | 7017.2 | 13 | 11 | 2021 | 1:24 | 32 | 13.21 | 31.85 | 12.81 | 32.15 | 5 | W |
| 218 | 3219 | 4154.7 | 7016.7 | 13 | 11 | 2021 | 2:47 | 33 | 13.19 | 31.85 | 13.03 | 31.96 | 4 | V |
| 219 | 3337 | 4155.9 | 7013.7 | 13 | 11 | 2021 | 4:04 | 32 | 13.11 | 31.87 | 12.91 | 32.01 | 4 | V |
| 220 | 3125 | 4201.0 | 7015.1 | 13 | 11 | 2021 | 8:11 | 49 | 12.91 | 31.90 | 12.53 | 32.23 | 2 | V |
| 221 | 3159 | 4204.0 | 7017.2 | 13 | 11 | 2021 | 9:55 | 62 | 12.56 | 32.08 | 12.36 | 32.80 | 4 | V |
| 222 | 3172 | 4207.6 | 7007.1 | 13 | 11 | 2021 | 11:59 | 46 | 12.29 | 32.31 | 12.13 | 33.15 | 3 | V |
| 223 | 3285 | 4204.8 | 7004.8 | 13 | 11 | 2021 | 14:42 | 30 | 12.57 | 32.15 | 12.30 | 32.76 | 4 | V |
| 224 | 3086 | 4205.7 | 6957.7 | 13 | 11 | 2021 | 16:47 | 91 | 12.49 | 32.61 | 11.59 | 33.32 | 3 | V |
| 141 | 3020 | 4208.6 | 6955.3 | 13 | 11 | 2021 | 19:24 | 137 | 12.46 | 32.69 | 9.14 | 33.69 | 5 | B |

HB2103 Fall Bottom Trawl Survey
Sept 12 - Nov 15, 2021

| Cast # | Site ID # | Lat (DDMM.M) | Long (DDMM.M) | Day | Mo | Year | Time (GMT) | Btm Depth (m) | Sfc Temp (deg C) | Sfc Salt | Deepest Observed Temp (deg C) | Deepest Observed Salt | Meters from Bottom | Method of Deployment |
|------------|-------------|---------------|---------------|-----------|-----------|-------------|--------------|---------------|------------------|--------------|-------------------------------|-----------------------|--------------------|----------------------|
| 225 | 3107 | 4158.6 | 6956.7 | 14 | 11 | 2021 | 11:45 | 34 | 12.24 | 32.43 | 12.26 | 32.61 | 3 | V |
| 226 | 3142 | 4158.2 | 6957.7 | 14 | 11 | 2021 | 13:35 | 29 | 12.22 | 32.43 | 12.25 | 32.48 | 4 | V |
| 227 | 3355 | 4151.3 | 6951.5 | 14 | 11 | 2021 | 15:52 | 55 | 12.21 | 32.68 | 12.20 | 32.71 | 4 | V |
| 228 | 3344 | 4142.5 | 6952.6 | 14 | 11 | 2021 | 17:57 | 20 | 12.10 | 32.58 | 12.06 | 32.59 | 4 | W |
| 229 | 3320 | 4139.4 | 6936.1 | 14 | 11 | 2021 | 19:58 | 86 | 12.29 | 32.66 | 11.53 | 33.18 | 3 | V |
| 230 | 3099 | 4128.9 | 6918.6 | 14 | 11 | 2021 | 23:22 | 89 | 12.16 | 33.00 | 11.51 | 33.21 | 3 | V |
| 142 | 3121 | 4126.3 | 6925.3 | 15 | 11 | 2021 | 1:45 | 43 | 12.08 | 32.76 | 12.08 | 32.88 | 3 | W |
| 143 | 3293 | 4109.0 | 6919.3 | 15 | 11 | 2021 | 4:15 | 51 | 12.04 | 32.70 | 12.07 | 32.71 | 4 | B |

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

Records in bold are collected with an SBE911+ CTD