

NOAA Data Report ERL PMEL-47

**CTD/O₂ MEASUREMENTS DURING 1989 AND 1990 AS PART OF THE
EQUATORIAL PACIFIC OCEAN CLIMATE STUDIES (EPOCS)**

K. McTaggart
Pacific Marine Environmental Laboratory

L. Stratton
Joint Institute for the Study of Atmosphere and Ocean
University of Washington
Seattle, Washington

L. Mangum
Pacific Marine Environmental Laboratory

Pacific Marine Environmental Laboratory
Seattle, Washington
July 1993



**UNITED STATES
DEPARTMENT OF COMMERCE**

Ronald H. Brown
Secretary

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CTD/O₂ Measurements During 1989 and 1990 as Part of the Equatorial Pacific Ocean Climate Studies (EPOCS)

K. McTaggart¹, L. Stratton², and L. Mangum¹

ABSTRACT: During 1989 and 1990, CTD/O₂ data were collected in the eastern equatorial Pacific as part of the Equatorial Pacific Ocean Climate Studies (EPOCS) program. Summaries of Neil Brown Instrument System CTD/O₂ measurements and hydrographic data acquired on seven cruises during 1989 and 1990 are presented. Section plots of oceanographic variables along the equator, 110°W, 140°W, and 7°N are given. Station location, meteorological conditions, abbreviated CTD data listings, profiles, and potential temperature-salinity diagrams are shown for each cast. Hydrographic data are listed for each cruise.

1. INTRODUCTION

Oceanographic observations in the eastern equatorial Pacific have been collected since 1979 as part of NOAA's Equatorial Pacific Ocean Climate Studies (EPOCS) program. An objective of the EPOCS program is to investigate the processes which cause sea surface temperature (SST) fluctuations on annual and interannual time scales in this area. The Tropical Ocean Global Atmosphere (TOGA) research program investigates the dominant mechanisms that produce large scale, interannual variations of sea surface temperature in vast regions of the tropical Pacific Ocean. Both programs are designed to further understand the role of the tropical ocean in modifying the world's climate. Summaries of Neil Brown Instrument System CTD/O₂ measurements and hydrographic data collected on seven cruises during 1989 and 1990 as part of PMEL's EPOCS and TOGA contributions are presented here. CTD/O₂ data from 1979 through 1988 can be found in previous data reports (Mangum *et al.*, 1980; Mangum and Hayes, 1983; Mangum and Hayes, 1985; Mangum *et al.*, 1987; Lynch *et al.*, 1988; Mangum *et al.*, 1993).

Data collected in 1989 and 1990 included both meridional sections across the equator along 110°W and 140°W, and zonal sections along the equator eastward of 176.5°W and along 7°N eastward of 147.6°W. Figures 1a-1g show the cruise tracks and CTD station locations for each cruise. Cruise name notation is either EPx-yy-zz or TGx-yy-zz, where x is the sequential EPOCS or TOGA cruise number during each year, yy is the year (89 or 90), and zz is the ship code (either MB for the NOAA ship *Malcolm Baldrige* or DI for the NOAA ship *Discoverer*).

Neil Brown Instrument Systems (NBIS) Mark III CTDs were used to acquire the data. A Beckman dissolved oxygen probe was installed on TG1-89-MB and TG2-89-MB cruises only. Pressure, temperature, conductivity and dissolved oxygen were sampled at a rate of 25 to 31 Hz

¹NOAA/Pacific Marine Environmental Laboratory, 7600 Sand Point Way N.E., Seattle, WA 98115-0070

²Joint Institute for the Study of Atmosphere and Ocean, University of Washington, Seattle, WA 98195

(depending on the instrument), as described by Brown (1974). Typical lowering rates were 30 m/min to 50 meters, 45 m/min from 50 meters to 200 meters, and 60 m/min from 200 meters to depth. CTD/O₂ data were recorded on the downcast. Water samples were collected on the upcast for calibration purposes using an electronically fired rosette sampler.

2. NBIS CTD DATA PROCESSING

Aboard the NOAA ship *Malcolm Baldrige*, CTD/O₂ data were collected using the shipboard Scientific Computer System (SCS) and AOML LOGGER software. Preliminary processing and calibration of the CTD/O₂ data were accomplished at sea using the shipboard microVAX system and PMEL programs. For those cruises aboard the NOAA ship *Discoverer*, CTD data were collected using a 286-AT personal computer equipped with EG&G Oceansoft, NBIS Mark III CTD acquisition software. PMEL microVAX computers and programs were aboard the *Discoverer* for preliminary processing and calibration of the data at sea.

Final calibrations for the conductivity and oxygen sensors were determined post-cruise by comparison with bottle data and applied to 1-decibar averaged data. Final processing of all CTD/O₂ data were completed at PMEL on a VAX computer system. Detailed information on the calibration and processing routines used are described in Mangum *et al.* (1991) and McTaggart *et al.* (1993).

3. DATA PRESENTATION

Potential temperature, sigma-T, and sigma-theta were calculated using the 1980 equation of state algorithms described by Fofonoff and Millard (1983). Dynamic height in dynamic meters was calculated by integrating from the sea surface. When the uppermost pressure was not equal to 0 db, surface values of temperature and salinity were filled with the values associated with the shallowest pressure for which values did exist (provided this pressure was less than 10 db).

Final data are in PMEL's Equatorial Pacific Information Collection (EPIC) format (Soreide and Hayes, 1988). The majority of the plots which follow were produced using Plot Plus Scientific Graphics System (Denbo, 1992). Tables 2-6 define the abbreviations and units used in the CTD/O₂ data summary listings. Hydrographic bottle data at discrete depths are listed for each cruise.

4. ACKNOWLEDGMENTS

The assistance of the officers and crew of the NOAA ships *Malcolm Baldrige* and *Discoverer* is gratefully acknowledged. Computer programming and technical support were provided by N. Soreide, M. Renton, and M. Stapp. Salinity analyses and oxygen titrations were completed by each ship's survey department personnel. This research was supported in part by NOAA's EPOCS program and the U.S. TOGA program.

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FIGURES AND TABLES

TG1-89-MB CRUISE TRACK
May 9 - June 1, 1989
Honolulu, HI - Papeete, Tahiti

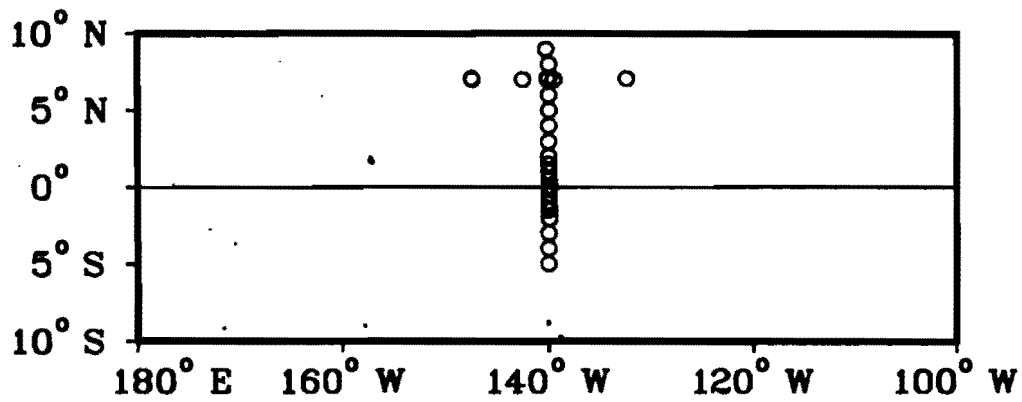
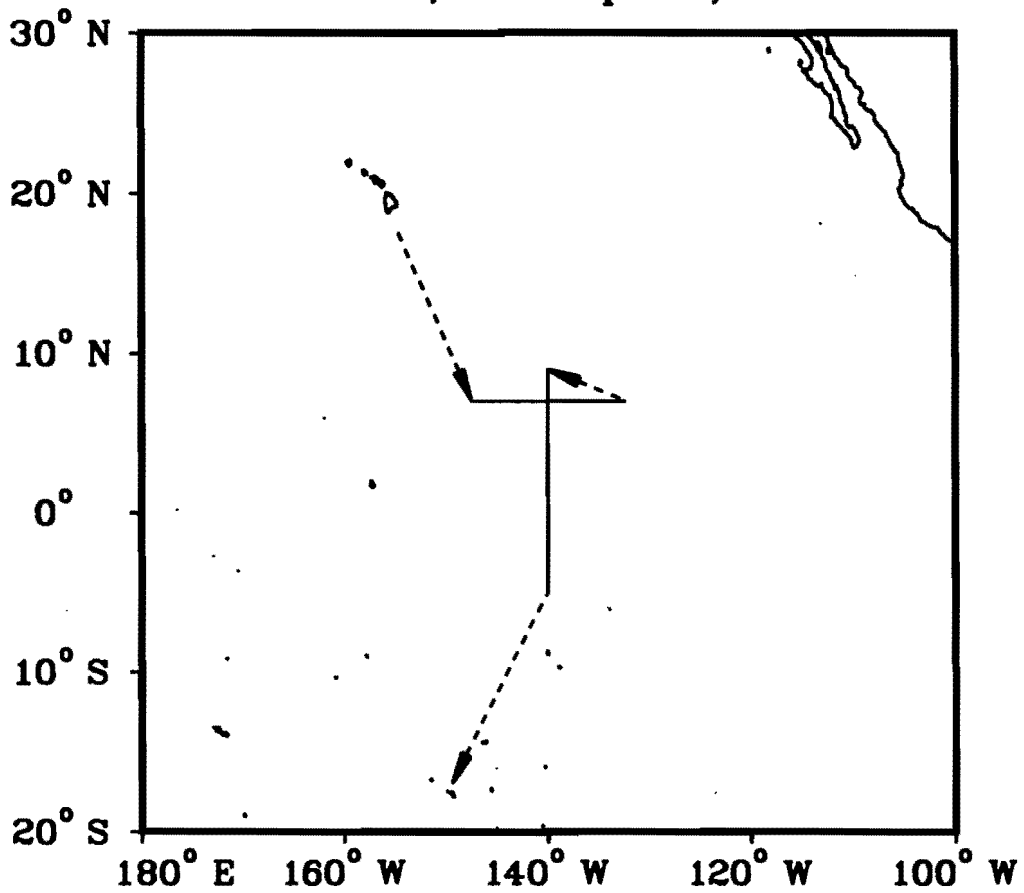


Fig. 1a. TG1-89-MB cruise track and station locations.

TABLE 1a. TG1-89 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 1 | 7 3.9N | 147 36.0W | 13 MAY 89 | 1326 | 54 | 17 | 4196 | 4034 |
| 2 | 7 1.2N | 147 34.4W | 13 MAY 89 | 2002 | 90 | 17 | 5690 | 306 |
| 3 | 7 4.8N | 147 30.50 | 13 MAY 89 | 1059 | 50 | 10 | | 1005 |
| 4 | 6 59.7N | 147 31.0W | 14 MAY 89 | 111 | 36 | 10 | 4817 | 1005 |
| 5 | 6 59.6N | 142 30.9W | 15 MAY 89 | 29 | 74 | 18 | 4891 | 1003 |
| 6 | 7 4.5N | 140 2.2W | 17 MAY 89 | 1228 | 12 | 5 | 4831 | 5103 |
| 7 | 7 3.7N | 140 9.2W | 17 MAY 89 | 421 | 160 | 12 | 4856 | 301 |
| 8 | 6 59.6N | 139 28.9W | 18 MAY 89 | 1650 | 350 | 2 | 4599 | 1003 |
| 9 | 7 3.2N | 132 23.4W | 19 MAY 89 | 132 | 62 | 5 | 4600 | 1005 |
| 10 | 8 59.9N | 140 15.6W | 21 MAY 89 | 0 | 74 | 13 | 4702 | 125 |
| 12 | 8 58.3N | 140 16.5W | 21 MAY 89 | 909 | 87 | 14 | 4756 | 4942 |
| 13 | 8 57.7N | 140 17.0W | 22 MAY 89 | 1149 | 80 | 13 | 5872 | 303 |
| 14 | 7 59.8N | 139 59.6W | 22 MAY 89 | 1720 | 65 | 12 | 5019 | 1005 |
| 15 | 7 1.1N | 140 8.1W | 22 MAY 89 | 2336 | 45 | 12 | 4838 | 1002 |
| 16 | 5 59.6N | 140 0.1W | 22 MAY 89 | 515 | 50 | 13 | 4697 | 1002 |
| 17 | 4 59.5N | 139 59.6W | 23 MAY 89 | 1140 | 66 | 14 | 4335 | 4448 |
| 18 | 5 0.6N | 139 58.2W | 23 MAY 89 | 111 | 76 | 10 | 4373 | 1002 |
| 19 | 3 59.9N | 139 59.8W | 23 MAY 89 | 856 | 50 | 12 | 4323 | 1003 |
| 20 | 2 58.4N | 140 1.2W | 24 MAY 89 | 1441 | 70 | 10 | 4242 | 1005 |
| 21 | 2 0.8N | 140 0.3W | 24 MAY 89 | 641 | 127 | 15 | 4264 | 4426 |
| 22 | 2 0.4N | 140 0.6W | 24 MAY 89 | 906 | 126 | 18 | 5873 | 301 |
| 23 | 2 0.4N | 140 1.2W | 25 MAY 89 | 2233 | 100 | 14 | 4375 | 1004 |
| 24 | 1 30.3N | 140 0.0W | 25 MAY 89 | 242 | 119 | 19 | 4343 | 1003 |
| 25 | 0 59.9N | 140 0.6W | 25 MAY 89 | 606 | 98 | 11 | 4246 | 996 |
| 26 | 0 29.9N | 139 59.1W | 25 MAY 89 | 943 | 95 | 10 | 4250 | 1002 |
| 27 | 0 8.5S | 139 56.5W | 26 MAY 89 | 1418 | 127 | 16 | 4204 | 1005 |
| 29 | 0 0.0N | 139 54.0W | 27 MAY 89 | 1033 | 109 | 11 | 4258 | 300 |
| 30 | 0 2.9N | 139 53.6W | 27 MAY 89 | 1233 | 71 | 13 | 4251 | 4393 |
| 31 | 0 29.2S | 139 58.5W | 27 MAY 89 | 1840 | 173 | 12 | 4162 | 1005 |
| 32 | 0 59.5S | 139 59.5W | 27 MAY 89 | 2210 | 295 | 11 | 4389 | 1001 |
| 33 | 1 29.8S | 139 59.7W | 28 MAY 89 | 124 | 226 | 13 | 4350 | 1003 |
| 34 | 2 3.0S | 139 58.3W | 28 MAY 89 | 605 | 70 | 10 | 4219 | 3809 |
| 35 | 2 2.8S | 139 56.9W | 28 MAY 89 | 803 | 351 | 16 | 4347 | 301 |
| 36 | 3 0.0S | 139 59.7W | 28 MAY 89 | 1328 | 290 | 15 | 4374 | 1002 |
| 37 | 4 0.1S | 140 0.1W | 28 MAY 89 | 1913 | 82 | 17 | 4379 | 1004 |
| 38 | 5 0.0S | 140 0.5W | 29 MAY 89 | 58 | 101 | 19 | 4264 | 1002 |

TG2-89-MB CRUISE TRACK
June 7 - 29, 1989
Papeete, Tahiti - Honolulu, HI

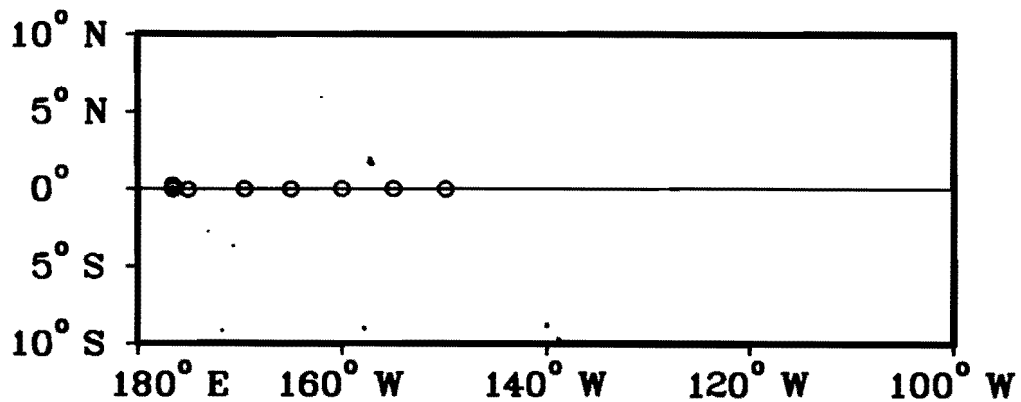
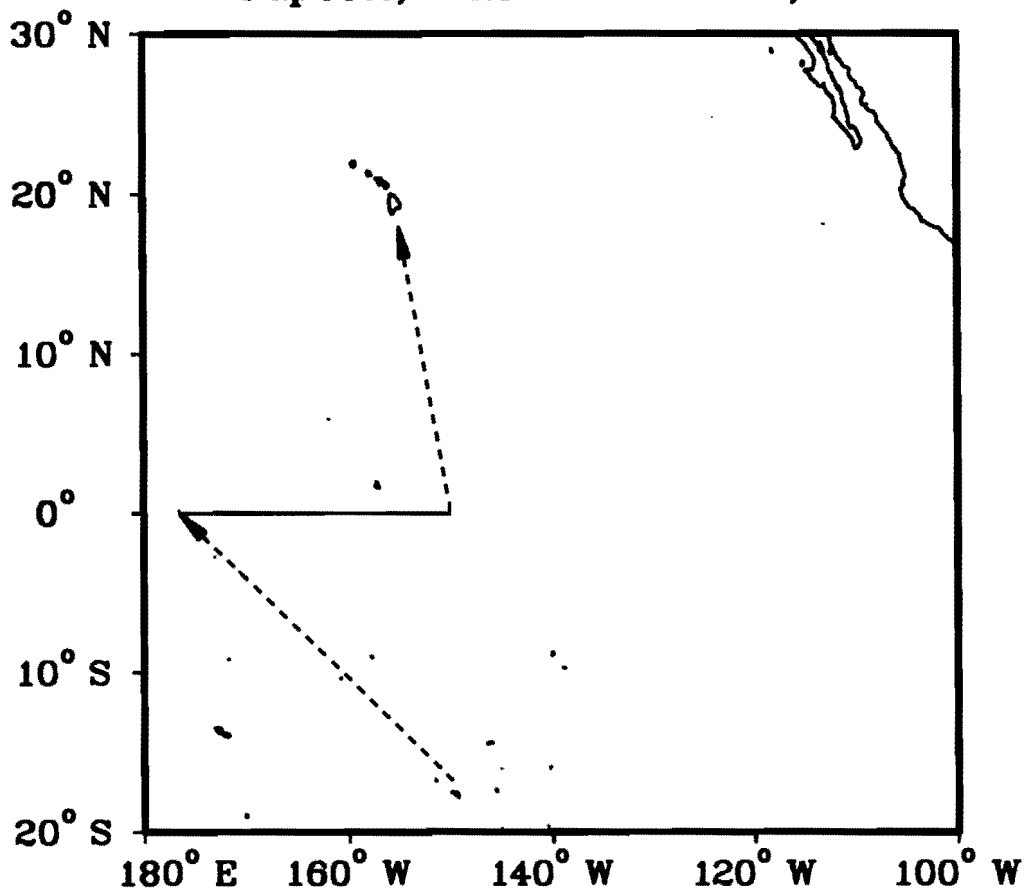


Fig. 1b. TG2-89-MB cruise track and station locations.

TABLE 1b. TG2-89 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 39 | 0 1.0S | 176 30.8W | 15 JUN 89 | 833 | 155 | 9 | 5121 | 5354 |
| 40 | 0 1.6S | 176 30.1W | 16 JUN 89 | 1434 | 208 | 8 | 6077 | 301 |
| 41 | 0 13.1N | 176 31.9W | 16 JUN 89 | 1942 | 25 | 8 | 1604 | 506 |
| 42 | 0 1.9S | 175 1.5W | 17 JUN 89 | 1325 | 108 | 11 | 5413 | 5362 |
| 43 | 0 3.3S | 175 2.0W | 17 JUN 89 | 1713 | 138 | 9 | 6077 | 303 |
| 44 | 0 0.6N | 169 31.3W | 18 JUN 89 | 807 | 79 | 13 | 5384 | 5217 |
| 45 | 0 0.8S | 169 31.0W | 19 JUN 89 | 1107 | 82 | 15 | 5369 | 334 |
| 46 | 0 0.8S | 169 33.0W | 19 JUN 89 | 1204 | 85 | 13 | 5369 | 78 |
| 47 | 0 0.9S | 165 0.7W | 20 JUN 89 | 426 | 97 | 8 | 5795 | 5827 |
| 48 | 0 1.3S | 165 1.5W | 20 JUN 89 | 809 | 103 | 8 | 5794 | 502 |
| 49 | 0 0.4N | 160 0.1W | 21 JUN 89 | 915 | 72 | 12 | 5145 | 5157 |
| 50 | 0 0.7N | 160 0.6W | 22 JUN 89 | 1145 | 66 | 8 | 5182 | 302 |
| 51 | 0 0.9N | 154 59.8W | 22 JUN 89 | 1142 | 95 | 9 | 4711 | 4665 |
| 52 | 0 0.5N | 154 59.4W | 23 JUN 89 | 1402 | 102 | 9 | 6079 | 301 |
| 53 | 0 0.0S | 149 58.4W | 24 JUN 89 | 1317 | 136 | 12 | 4455 | 4460 |
| 54 | 0 0.6S | 149 57.9W | 24 JUN 89 | 1540 | 308 | 10 | 3211 | 300 |

EP3-89-DI CRUISE TRACK
October 16 - November 14, 1989
Seattle, WA - Honolulu, HI

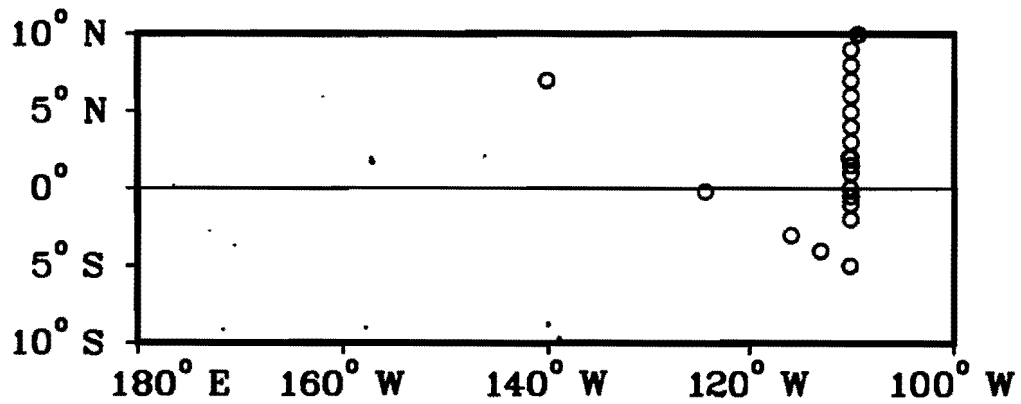
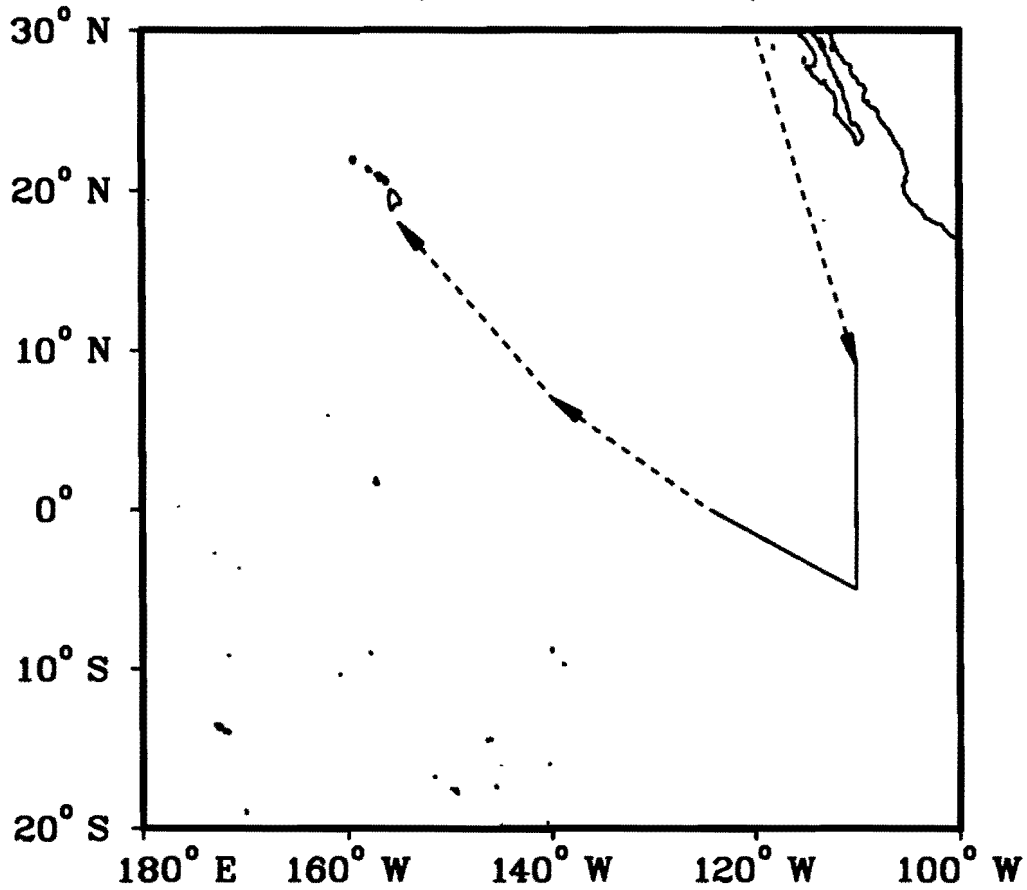


Fig. 1c. EP3-89-DI cruise track and station locations.

TABLE 1c. EP3-89 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 1 | 9 59.2N | 109 18.8W | 25 OCT 89 | 455 | 80 | 8 | 3419 | 3207 |
| 2 | 10 0.0N | 109 18.8W | 25 OCT 89 | 821 | 70 | 10 | 3271 | 401 |
| 3 | 9 1.1N | 109 59.9W | 26 OCT 89 | 131 | 40 | 11 | 3901 | 1003 |
| 4 | 8 0.6N | 109 59.8W | 26 OCT 89 | 917 | 30 | 18 | 3610 | 1002 |
| 5 | 6 59.8N | 110 0.5W | 26 OCT 89 | 1539 | 40 | 10 | 3743 | 1002 |
| 6 | 5 59.8N | 110 0.4W | 26 OCT 89 | 2155 | 190 | 20 | 3696 | 1004 |
| 7 | 4 57.6N | 110 1.5W | 27 OCT 89 | 505 | 175 | 21 | 3880 | 3843 |
| 8 | 4 0.1N | 109 59.9W | 27 OCT 89 | 1257 | 165 | 22 | 3881 | 1001 |
| 9 | 3 0.3N | 109 59.7W | 27 OCT 89 | 1923 | 155 | 20 | 3887 | 1000 |
| 10 | 2 0.0N | 110 0.2W | 28 OCT 89 | 233 | 150 | 16 | 3722 | 3528 |
| 11 | 1 29.9N | 110 0.0W | 28 OCT 89 | 924 | 140 | 10 | 1591 | 1001 |
| 12 | 0 59.8N | 110 0.5W | 29 OCT 89 | 921 | 115 | 14 | 3740 | 1004 |
| 13 | 1 59.9N | 110 10.3W | 30 OCT 89 | 654 | 120 | 10 | 3800 | 500 |
| 14 | 0 1.4N | 110 3.9W | 31 OCT 89 | 1007 | 145 | 12 | 3758 | 3701 |
| 15 | 0 30.2S | 109 59.5W | 31 OCT 89 | 1547 | 125 | 15 | 3953 | 1003 |
| 16 | 0 59.8S | 110 1.2W | 1 NOV 89 | 542 | 120 | 14 | 3992 | 1003 |
| 17 | 1 57.9S | 110 1.3W | 1 NOV 89 | 1143 | 125 | 16 | 4005 | 1004 |
| 18 | 1 59.1S | 110 0.1W | 2 NOV 89 | 348 | 110 | 14 | 3953 | 503 |
| 19 | 4 57.7S | 110 4.9W | 3 NOV 89 | 746 | 120 | 14 | 3514 | 1006 |
| 20 | 4 0.5S | 112 57.4W | 3 NOV 89 | 2140 | 120 | 14 | 4169 | 702 |
| 21 | 3 0.7S | 115 49.9W | 4 NOV 89 | 1030 | 110 | 12 | 4321 | 1003 |
| 22 | 0 13.1S | 124 26.8W | 6 NOV 89 | 1213 | 110 | 15 | 4496 | 4509 |
| 23 | 7 0.4N | 140 11.6W | 10 NOV 89 | 1700 | 160 | 12 | 5025 | 1003 |
| 24 | 6 57.3N | 140 9.3W | 10 NOV 89 | 1914 | 160 | 17 | 4994 | 306 |
| 25 | 7 0.6N | 140 8.6W | 10 NOV 89 | 2014 | 165 | 15 | 4971 | 302 |

EP4-89-DI CRUISE TRACK
November 19 – December 15, 1989
Honolulu, HI – Seattle, WA

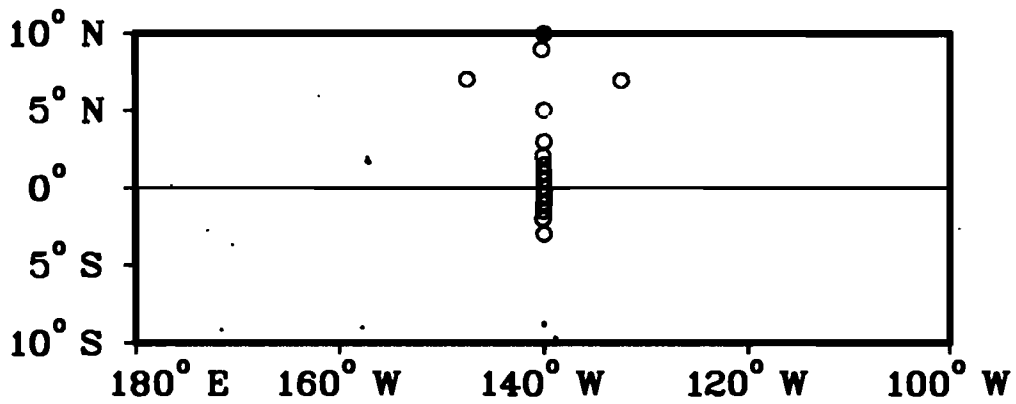
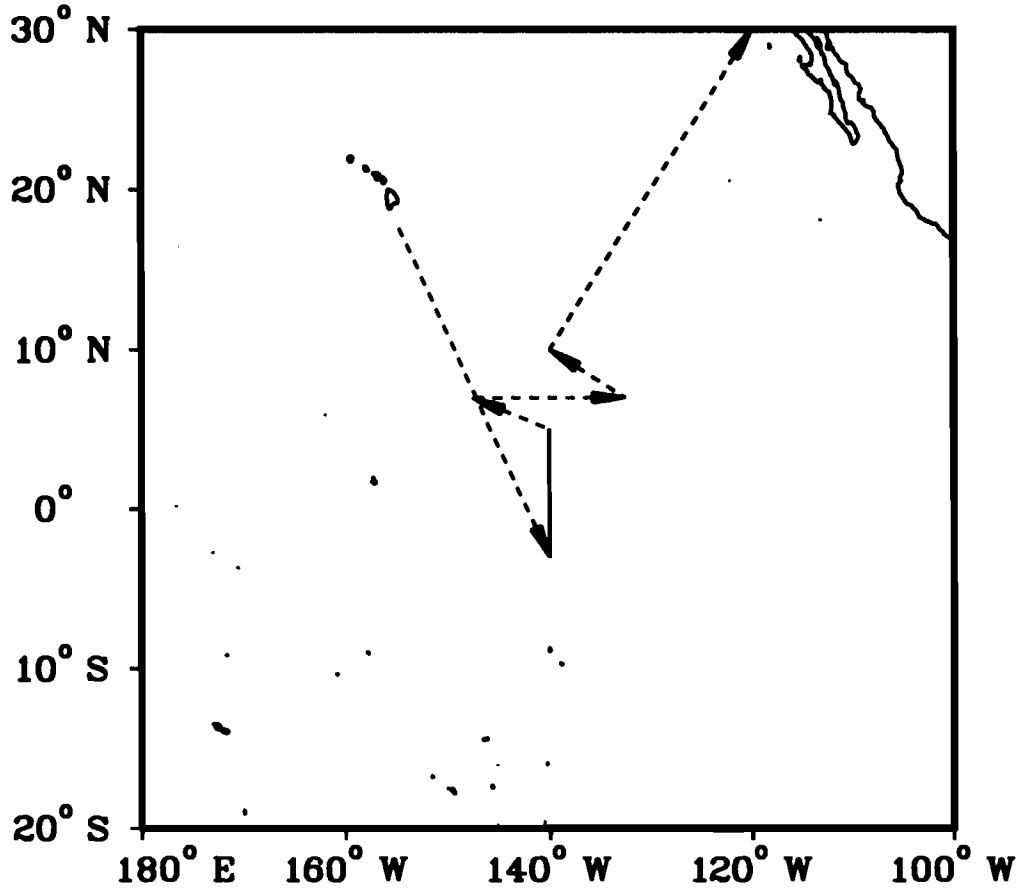


Fig. 1d. EP4-89-DI cruise track and station locations.

TABLE 1d. EP4-89 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 1 | 2 59.4S | 140 0.0W | 26 NOV 89 | 1051 | 105 | 19 | 4491 | 1001 |
| 2 | 2 0.8S | 140 6.7W | 27 NOV 89 | 708 | 100 | 20 | 4292 | 301 |
| 3 | 1 59.4S | 140 6.0W | 27 NOV 89 | 1100 | 95 | 19 | 4296 | 4237 |
| 4 | 1 30.3S | 140 0.3W | 27 NOV 89 | 2054 | 95 | 18 | 4334 | 1005 |
| 5 | 0 59.2S | 140 0.7W | 28 NOV 89 | 53 | 90 | 20 | 4270 | 1003 |
| 6 | 0 29.0S | 140 1.7W | 28 NOV 89 | 456 | 90 | 20 | 4297 | 1001 |
| 7 | 0 0.0S | 139 55.6W | 28 NOV 89 | 1002 | 95 | 14 | 4409 | 4364 |
| 8 | 0 1.7N | 139 59.4W | 29 NOV 89 | 526 | 90 | 17 | 4330 | 1002 |
| 9 | 0 30.9N | 139 58.9W | 29 NOV 89 | 929 | 90 | 14 | 4341 | 1001 |
| 10 | 0 59.6N | 139 59.5W | 29 NOV 89 | 1320 | 110 | 12 | 4313 | 1003 |
| 11 | 1 29.4N | 139 59.4W | 29 NOV 89 | 1727 | 110 | 15 | 4515 | 1001 |
| 12 | 2 2.6N | 140 6.0W | 29 NOV 89 | 2341 | 120 | 13 | 4386 | 1000 |
| 13 | 2 59.2N | 140 0.6W | 30 NOV 89 | 545 | 140 | 10 | 4304 | 1002 |
| 14 | 4 59.9N | 139 59.6W | 1 DEC 89 | 522 | 170 | 10 | 4395 | 1001 |
| 15 | 7 1.2N | 147 27.9W | 2 DEC 89 | 1250 | 35 | 19 | 4982 | 999 |
| 16 | 6 56.1N | 132 23.5W | 6 DEC 89 | 1101 | 125 | 11 | 4487 | 1001 |
| 17 | 8 58.1N | 140 13.5W | 8 DEC 89 | 303 | 80 | 14 | 4878 | 1001 |
| 18 | 9 59.7N | 140 0.6W | 8 DEC 89 | 951 | 55 | 25 | 4962 | 1004 |

EP1-90-MB CRUISE TRACK
April 21 - May 22, 1990
Honolulu, HI - Panama

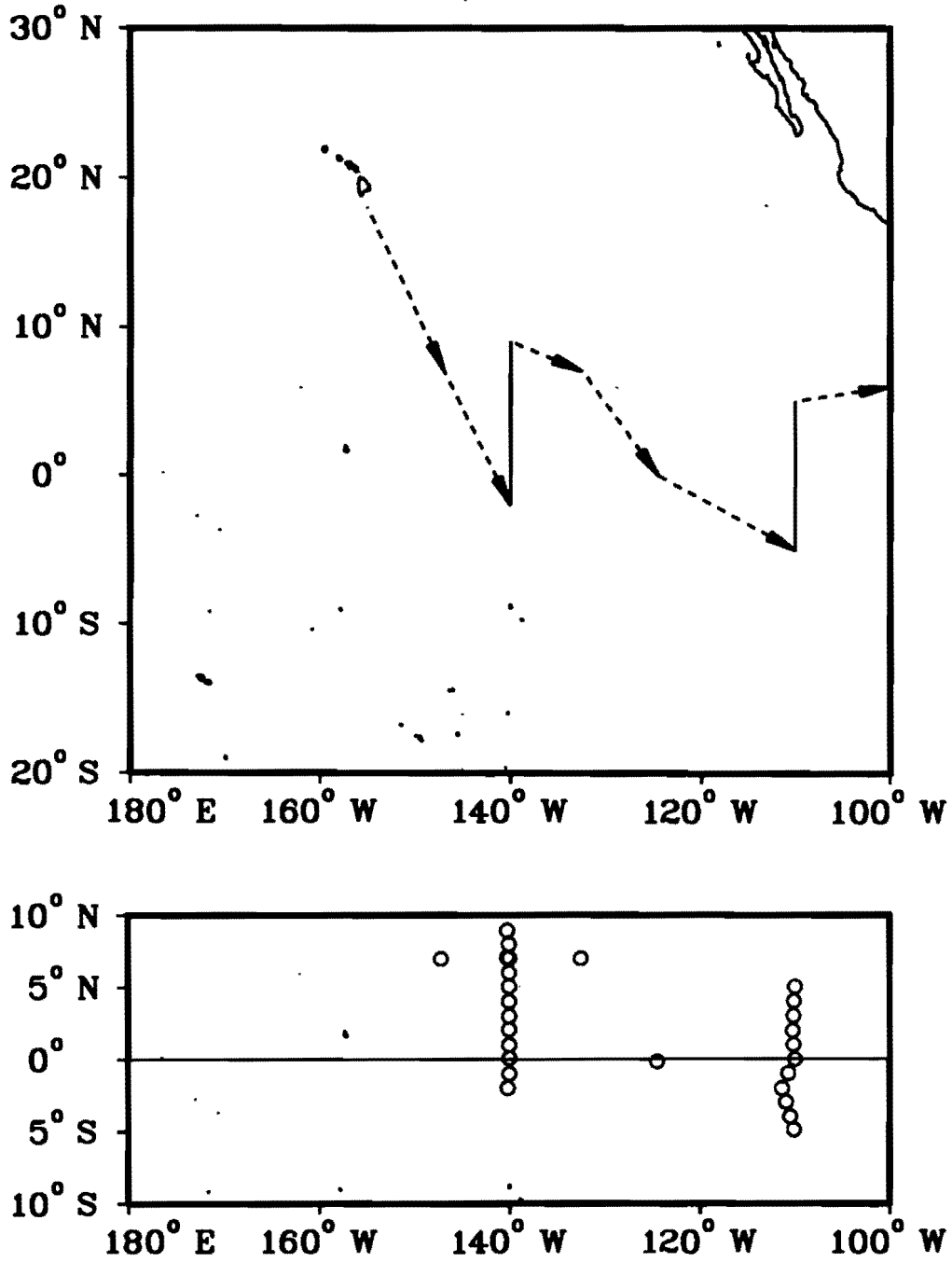


Fig. 1e. EP1-90-MB cruise track and station locations.

TABLE 1e. EP1-90 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|-----------|----------|-----------|-----------|------|----------|--------------|--------------|--------------|
| 1 | 6 58.3N | 147 13.2W | 24 APR 90 | 1428 | 55 | 20 | 4722 | 999 |
| 2 | 1 59.9S | 140 10.2W | 28 APR 90 | 1450 | 90 | 10 | 4289 | 999 |
| 3 | 1 0.2S | 140 0.1W | 29 APR 90 | 458 | 105 | 13 | 4097 | 1000 |
| 4 | 0 4.1N | 139 59.5W | 29 APR 90 | 1041 | 103 | 12 | 4331 | 1001 |
| 5 | 1 0.2N | 140 1.0W | 30 APR 90 | 1056 | 117 | 18 | 4374 | 1001 |
| 6 | 2 5.1N | 140 0.8W | 1 MAY 90 | 835 | 128 | 10 | 4381 | 999 |
| 7 | 3 0.2N | 139 59.9W | 1 MAY 90 | 1345 | 83 | 12 | 4446 | 999 |
| 8 | 4 0.7N | 140 0.3W | 1 MAY 90 | 1944 | 64 | 16 | 4242 | 999 |
| 9 | 5 2.8N | 140 0.7W | 2 MAY 90 | 432 | 55 | 10 | 4434 | 1004 |
| 10 | 5 59.4N | 140 0.8W | 2 MAY 90 | 2135 | 45 | 18 | 4583 | 1001 |
| 11 | 7 1.7N | 140 10.6W | 3 MAY 90 | 259 | 50 | 24 | 4879 | 116 |
| 12 | 7 1.7N | 140 10.6W | 3 MAY 90 | 328 | 50 | 24 | 4879 | 101 |
| 13 | 7 1.7N | 140 10.6W | 3 MAY 90 | 358 | 50 | 24 | 4879 | 105 |
| 14 | 7 4.7N | 140 12.1W | 3 MAY 90 | 932 | 68 | 22 | 4783 | 999 |
| 15 | 7 1.3N | 139 58.8W | 4 MAY 90 | 806 | 42 | 22 | 5020 | 99 |
| 16 | 7 59.8N | 140 0.4W | 4 MAY 90 | 1307 | 25 | 18 | 5064 | 1000 |
| 17 | 8 56.7N | 140 11.2W | 5 MAY 90 | 1009 | 30 | 20 | 5126 | 1004 |
| 18 | 7 0.2N | 132 25.2W | 7 MAY 90 | 1030 | 110 | 4 | 4568 | 1000 |
| 19 | 0 10.8S | 124 30.1W | 9 MAY 90 | 1125 | 113 | 20 | 4259 | 1002 |
| 20 | 4 53.6S | 110 5.4W | 12 MAY 90 | 2201 | 124 | 18 | 3502 | 1001 |
| 21 | 4 0.1S | 110 28.5W | 13 MAY 90 | 259 | 144 | 21 | 3786 | 999 |
| 22 | 2 59.6S | 110 54.2W | 13 MAY 90 | 838 | 140 | 18 | 3940 | 1000 |
| 23 | 2 3.3S | 111 20.1W | 13 MAY 90 | 1438 | 129 | 20 | 4071 | 1000 |
| 24 | 0 59.8S | 110 39.2W | 13 MAY 90 | 2358 | 124 | 24 | 4071 | 1017 |
| 25 | 0 1.2S | 109 56.8W | 14 MAY 90 | 1043 | 115 | 12 | 3833 | 1000 |
| 26 | 1 0.1N | 110 6.0W | 15 MAY 90 | 745 | 119 | 22 | 3779 | 999 |
| 27 | 1 58.1N | 110 11.2W | 15 MAY 90 | 1300 | 120 | 20 | 3818 | 1005 |
| 28 | 3 0.2N | 110 6.4W | 15 MAY 90 | 2309 | 144 | 15 | 3850 | 1001 |
| 29 | 4 0.2N | 110 3.0W | 16 MAY 90 | 411 | 166 | 16 | 3913 | 999 |
| 30 | 5 0.3N | 109 56.7W | 16 MAY 90 | 919 | 245 | 6 | 3816 | 1006 |

TABLE 1f. EP2-90 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 1 | 23 6.5N | 135 22.1W | 17 OCT 90 | 2110 | 0 | 10 | 4548 | 996 |
| 2 | 8 56.4N | 140 8.2W | 20 OCT 90 | 1411 | 300 | 7 | 5132 | 1010 |
| 3 | 7 59.6N | 139 59.2W | 21 OCT 90 | 258 | 240 | 15 | 5959 | 987 |
| 4 | 7 0.4N | 139 59.0W | 21 OCT 90 | 1106 | 280 | 10 | 4975 | 1010 |
| 5 | 6 59.9N | 139 59.8W | 21 OCT 90 | 1441 | 180 | 8 | 4989 | 93 |
| 6 | 6 59.8N | 139 56.8W | 21 OCT 90 | 1620 | 150 | 10 | 4986 | 103 |
| 7 | 6 58.3N | 139 57.5W | 21 OCT 90 | 1725 | 155 | 11 | 5005 | 104 |
| 8 | 5 59.9N | 140 0.0W | 22 OCT 90 | 1101 | 170 | 13 | 4830 | 996 |
| 9 | 5 1.9N | 140 3.3W | 23 OCT 90 | 1120 | 140 | 12 | 4269 | 1010 |
| 10 | 3 59.7N | 139 59.7W | 23 OCT 90 | 1924 | 120 | 19 | 4355 | 1010 |
| 11 | 3 0.0N | 140 0.6W | 24 OCT 90 | 200 | 140 | 16 | 4307 | 997 |
| 12 | 2 2.3N | 140 4.3W | 24 OCT 90 | 935 | 110 | 16 | 4391 | 1010 |
| 13 | 1 30.3N | 139 59.1W | 24 OCT 90 | 2316 | 110 | 20 | 4446 | 1016 |
| 14 | 0 59.7N | 140 5.4W | 25 OCT 90 | 417 | 95 | 18 | 4652 | 1005 |
| 15 | 0 29.7N | 140 0.1W | 25 OCT 90 | 914 | 105 | 15 | 4343 | 1011 |
| 16 | 0 0.3S | 139 59.7W | 26 OCT 90 | 529 | 100 | 16 | 4329 | 4342 |
| 17 | 0 30.0S | 139 59.7W | 26 OCT 90 | 1129 | 110 | 17 | 4293 | 1012 |
| 18 | 0 59.8S | 140 2.8W | 27 OCT 90 | 1716 | 120 | 15 | 4246 | 1011 |
| 19 | 2 2.5S | 140 4.7W | 28 OCT 90 | 740 | 100 | 14 | 4319 | 4363 |
| 20 | 1 30.4S | 140 0.6W | 28 OCT 90 | 1331 | 95 | 14 | 4340 | 1022 |
| 21 | 1 58.2S | 140 0.3W | 29 OCT 90 | 228 | 110 | 18 | 4212 | 512 |
| 22 | 3 0.3S | 139 59.9W | 29 OCT 90 | 853 | 110 | 18 | 4502 | 1010 |
| 23 | 4 0.3S | 139 59.6W | 29 OCT 90 | 1516 | 100 | 18 | 4468 | 1010 |
| 24 | 5 1.0S | 139 58.4W | 30 OCT 90 | 754 | 90 | 22 | 4299 | 4336 |
| 25 | 7 3.0N | 132 26.0W | 2 NOV 90 | 629 | 220 | 6 | 4727 | 4605 |
| 26 | 7 0.0N | 130 0.1W | 2 NOV 90 | 2045 | 210 | 13 | 4626 | 1013 |
| 27 | 7 0.3N | 137 30.0W | 3 NOV 90 | 835 | 170 | 5 | 4709 | 1006 |
| 28 | 6 59.9N | 140 0.2W | 3 NOV 90 | 2030 | 40 | 4 | 4981 | 1011 |
| 29 | 6 59.5N | 142 31.0W | 4 NOV 90 | 746 | 110 | 10 | 5805 | 1008 |
| 30 | 7 0.3N | 144 59.7W | 4 NOV 90 | 1846 | 150 | 8 | 5137 | 1012 |
| 31 | 7 2.9N | 147 28.9W | 5 NOV 90 | 953 | 150 | 8 | 4981 | 1180 |
| 32 | 7 3.4N | 147 26.2W | 5 NOV 90 | 2310 | 160 | 11 | 4959 | 4962 |

EP3-90-MB CRUISE TRACK
November 14 - December 14, 1990
Honolulu, HI - Seattle, WA

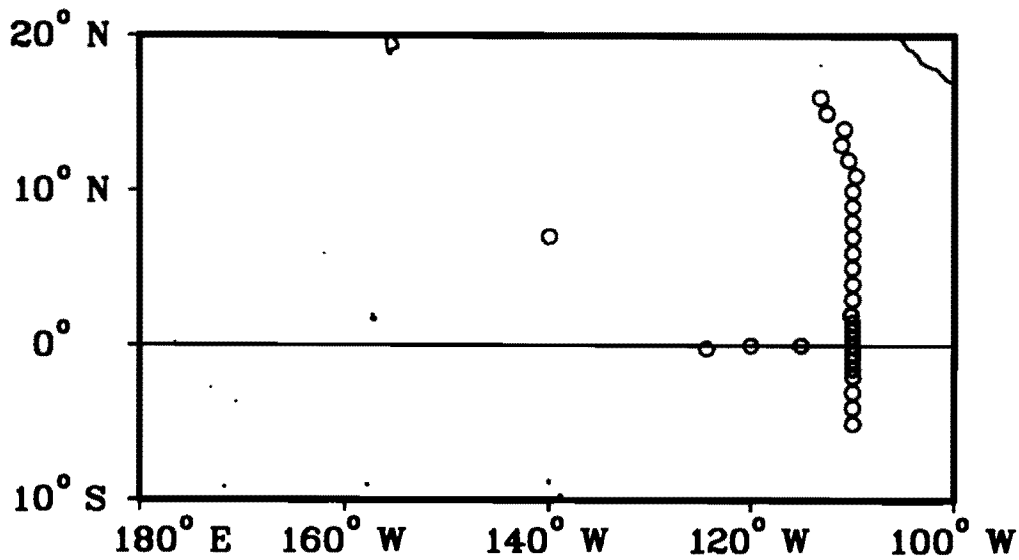
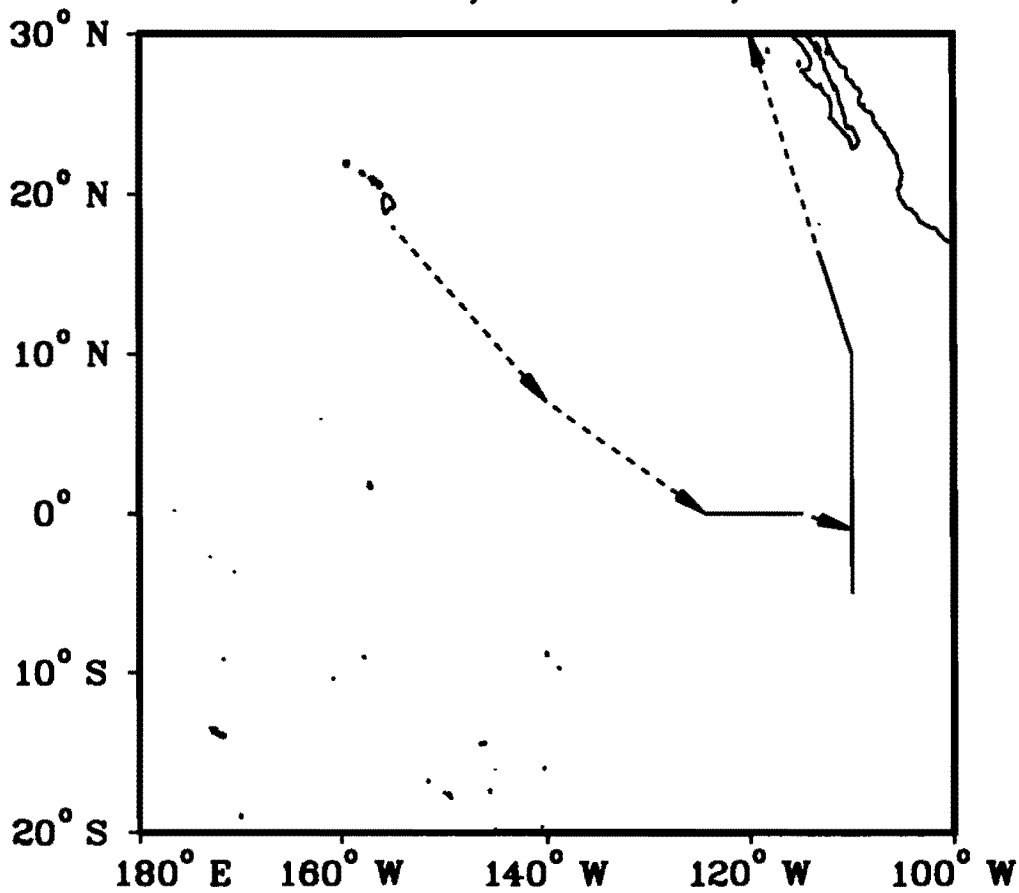


Fig. 1g. EP3-90-MB cruise track and station locations.

TABLE 1g. EP3-90 CTD cast summary.

| CAST # | LATITUDE | LONGITUDE | DATE | TIME | W/D T | W/S (kts) | DEPTH (m) | CAST (db) |
|--------|----------|-----------|-----------|------|-------|-----------|-----------|-----------|
| 1 | 7 1.0N | 139 58.0W | 19 NOV 90 | 1317 | 150 | 14 | 5019 | 520 |
| 2 | 0 12.0S | 124 29.0W | 22 NOV 90 | 1057 | 105 | 13 | 4445 | 4185 |
| 3 | 0 0.7S | 120 0.2W | 24 NOV 90 | 903 | 120 | 18 | 4185 | 1006 |
| 4 | 0 0.1N | 115 0.1W | 25 NOV 90 | 755 | 90 | 13 | 4047 | 541 |
| 5 | 0 58.5S | 110 1.3W | 26 NOV 90 | 1252 | 140 | 14 | 3958 | 1010 |
| 6 | 4 0.2S | 110 0.1W | 27 NOV 90 | 1104 | 110 | 14 | 3828 | 1010 |
| 7 | 5 1.8S | 109 58.8W | 28 NOV 90 | 315 | 120 | 15 | 3480 | 3256 |
| 8 | 3 0.1S | 109 59.9W | 28 NOV 90 | 1412 | 125 | 17 | 3744 | 1012 |
| 9 | 1 59.9S | 109 59.0W | 29 NOV 90 | 228 | 130 | 12 | 3942 | 3732 |
| 10 | 1 29.9S | 110 0.0W | 29 NOV 90 | 843 | 125 | 18 | 3852 | 1008 |
| 11 | 0 30.8S | 110 0.3W | 29 NOV 90 | 1418 | 130 | 17 | 3665 | 1009 |
| 12 | 0 0.5S | 110 3.6W | 30 NOV 90 | 107 | 120 | 16 | 3765 | 3615 |
| 13 | 0 30.5N | 109 59.9W | 30 NOV 90 | 613 | 125 | 17 | 3742 | 1049 |
| 14 | 1 0.2N | 110 0.4W | 30 NOV 90 | 1013 | 120 | 14 | 3819 | 1010 |
| 15 | 1 29.8N | 110 0.6W | 1 DEC 90 | 706 | 165 | 16 | 3764 | 1029 |
| 16 | 1 58.6N | 110 9.4W | 1 DEC 90 | 1253 | 140 | 11 | 3838 | 3643 |
| 17 | 2 0.7N | 110 9.0W | 2 DEC 90 | 515 | 160 | 12 | 3801 | 520 |
| 18 | 3 0.0N | 110 0.0W | 2 DEC 90 | 1103 | 175 | 15 | 3884 | 1012 |
| 19 | 3 59.3N | 109 59.5W | 2 DEC 90 | 1613 | 170 | 18 | 3882 | 1027 |
| 20 | 5 1.1N | 110 1.0W | 3 DEC 90 | 19 | 180 | 17 | 3898 | 3634 |
| 21 | 5 59.6N | 109 59.5W | 3 DEC 90 | 738 | 190 | 20 | 3709 | 1028 |
| 22 | 6 59.8N | 109 59.8W | 3 DEC 90 | 1324 | 195 | 18 | 3748 | 1010 |
| 23 | 7 59.6N | 110 0.6W | 3 DEC 90 | 1921 | 190 | 14 | 3617 | 1046 |
| 24 | 8 59.7N | 110 0.3W | 4 DEC 90 | 144 | 190 | 18 | 4085 | 1009 |
| 25 | 9 59.9N | 110 0.5W | 4 DEC 90 | 710 | 235 | 29 | 3360 | 1028 |
| 26 | 10 59.5N | 109 40.4W | 5 DEC 90 | 338 | 220 | 10 | 3653 | 1009 |
| 27 | 12 0.1N | 110 24.1W | 5 DEC 90 | 1023 | 160 | 5 | 3913 | 1011 |
| 28 | 12 59.5N | 111 6.8W | 5 DEC 90 | 1713 | 180 | 4 | 3814 | 1029 |
| 29 | 14 0.0N | 110 49.3W | 5 DEC 90 | 2350 | 100 | 15 | 4035 | 1009 |
| 30 | 15 0.5N | 112 30.8W | 6 DEC 90 | 604 | 30 | 18 | 3859 | 1031 |
| 31 | 16 0.4N | 113 9.2W | 6 DEC 90 | 1234 | 10 | 16 | 3912 | 1009 |

TABLE 2. Weather condition code used to describe each set of CTD measurements.

| Code | Weather Condition |
|------|--|
| 0 | Clear (no cloud) |
| 1 | Partly cloudy |
| 2 | Continuous layer(s) of cloud(s) |
| 3 | Sandstorm, dust storm, or blowing snow |
| 4 | Fog, thick dust or haze |
| 5 | Drizzle |
| 6 | Rain |
| 7 | Snow, or rain and snow mixed |
| 8 | Shower(s) |
| 9 | Thunderstorms |

TABLE 3. Sea state code used to describe each set of CTD measurements.

| Code | Height (meters) | Description |
|------|-----------------|----------------|
| 0 | 0 | Calm-glassy |
| 1 | 0–0.1 | Calm-rippled |
| 2 | 0.1–0.5 | Smooth-wavelet |
| 3 | 0.5–1.25 | Slight |
| 4 | 1.25–2.5 | Moderate |
| 5 | 2.5–4 | Rough |
| 6 | 4–6 | Very rough |
| 7 | 6–9 | High |
| 8 | 9–14 | Very high |
| 9 | >14 | Phenomenal |

TABLE 4. Visibility code used to describe each set of CTD measurements.

| Code | Visibility |
|------|------------------|
| 0 | <50 meters |
| 1 | 50–200 meters |
| 2 | 200–500 meters |
| 3 | 500–1,000 meters |
| 4 | 1–2 km |
| 5 | 2–4 km |
| 6 | 4–10 km |
| 7 | 10–20 km |
| 8 | 20–50 km |
| 9 | 50 km or more |

TABLE 5. Cloud type.

| Code | Cloud Types |
|------|--------------------|
| 0 | Cirrus |
| 1 | Cirrocumulus |
| 2 | Cirrostratus |
| 3 | Alto cumulus |
| 4 | Altostratus |
| 5 | Nimbostratus |
| 6 | Stratocumulus |
| 7 | Stratus |
| 8 | Cumulus |
| 9 | Cumulonimbus |
| X | Clouds not visible |

TABLE 6. Cloud amount.

| Code | Cloud Amount |
|------|--------------------------------|
| 0 | 0 |
| 1 | 1/10 or less but not zero |
| 2 | 2/10-3/10 |
| 3 | 4/10 |
| 4 | 5/10 |
| 5 | 6/10 |
| 6 | 7/10-8/10 |
| 7 | 9/10 |
| 8 | 10/10 |
| 9 | Sky obscured or not determined |

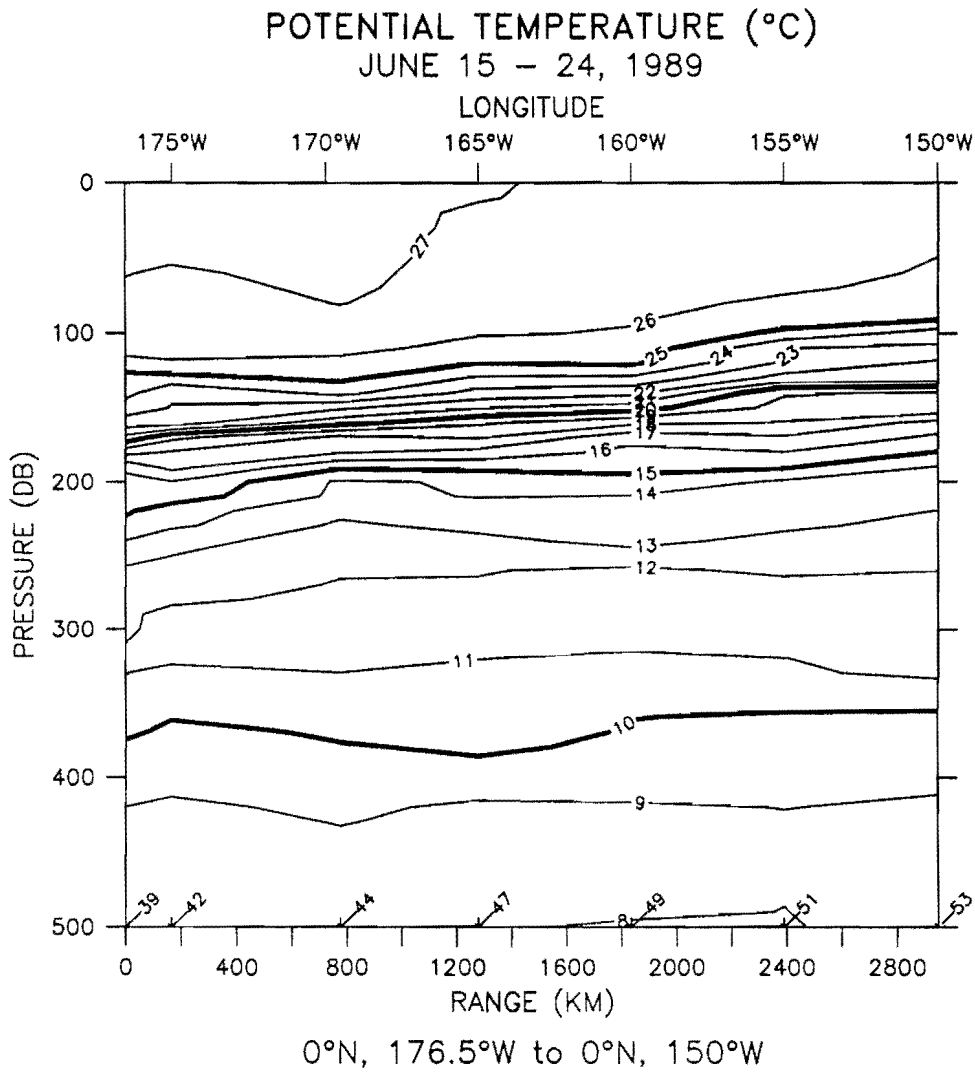


Fig. 2. TG2-89-MB spring potential temperature (C) section along the equator. Contour interval is 1°C.

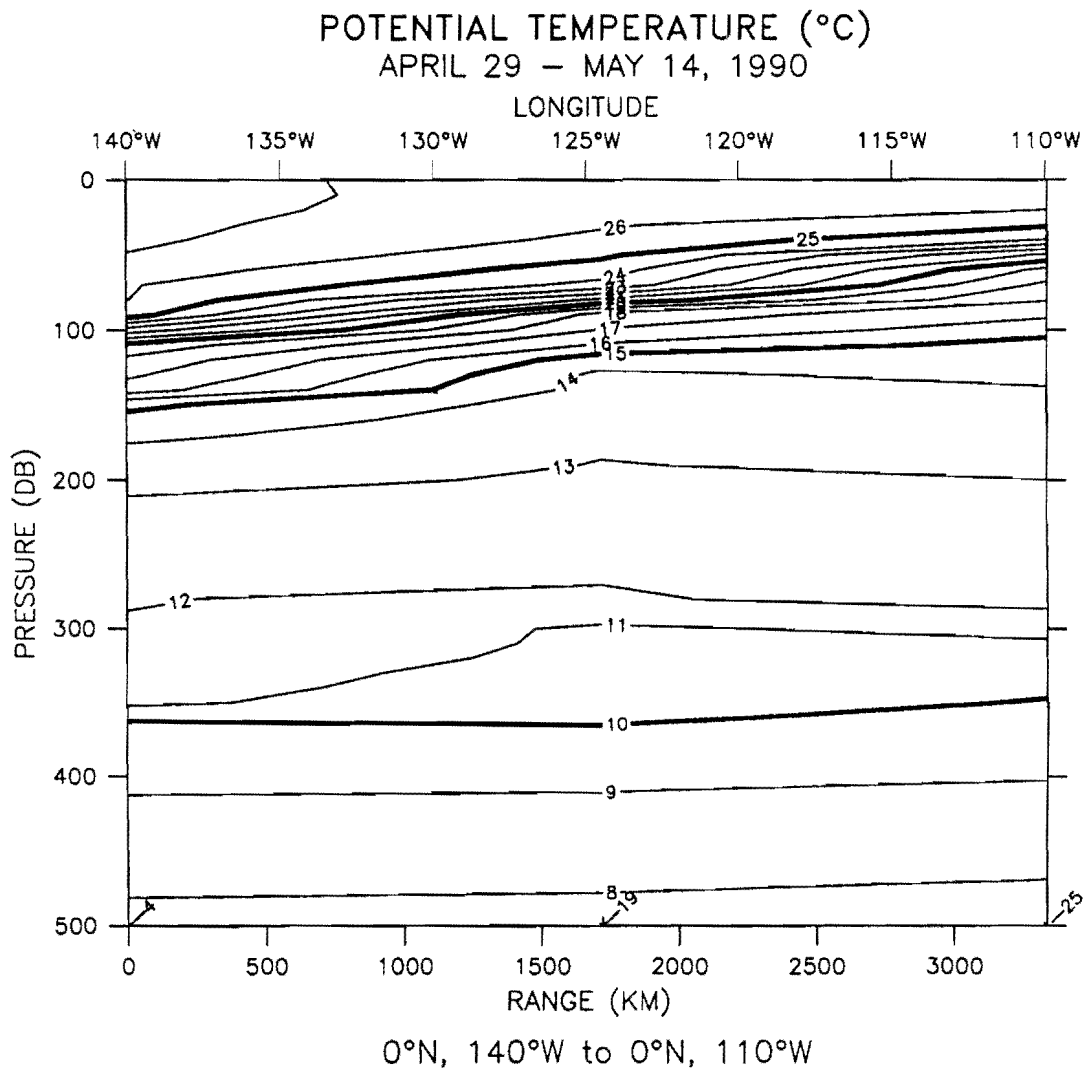


Fig. 3. EP1-90-MB spring potential temperature (C) section along the equator. Contour interval is 1°C.

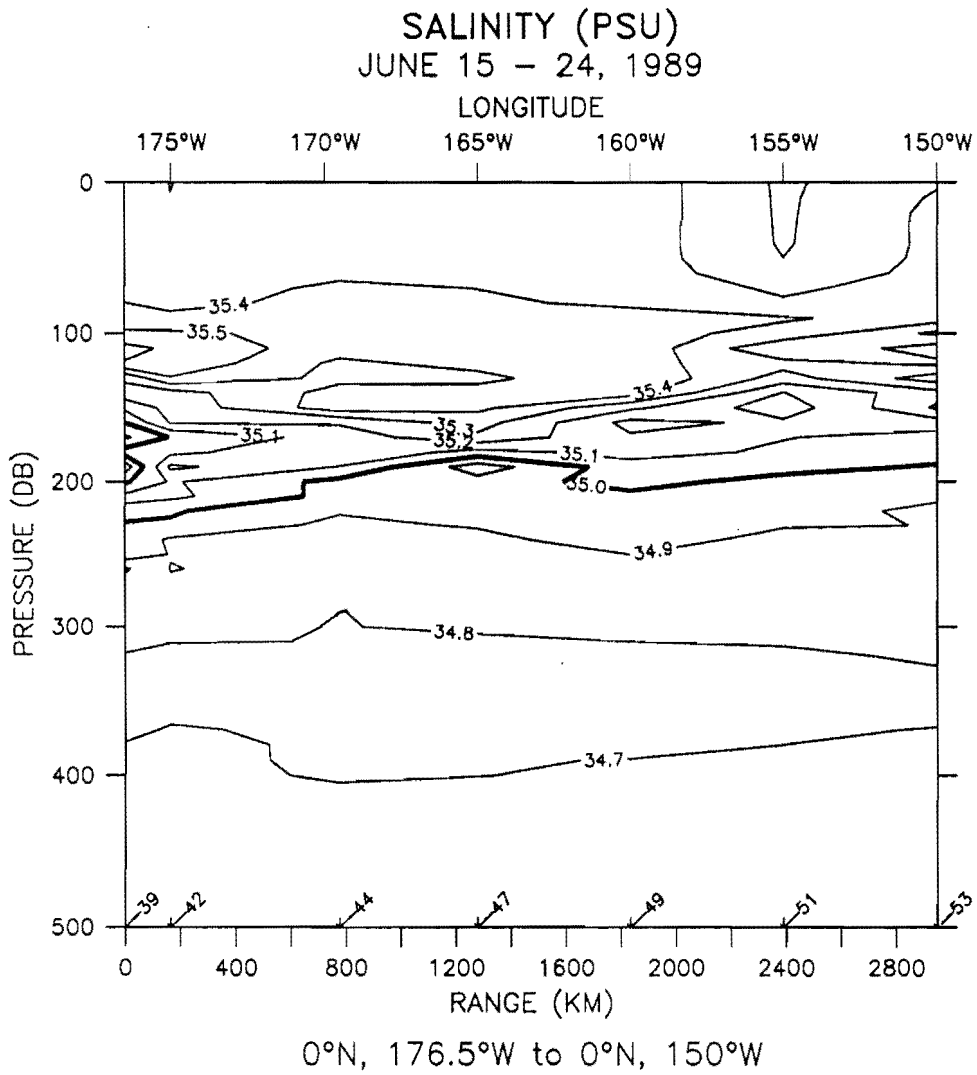


Fig. 4. TG2-89-MB spring salinity (psu) section along the equator. Contour interval is 0.1 psu.

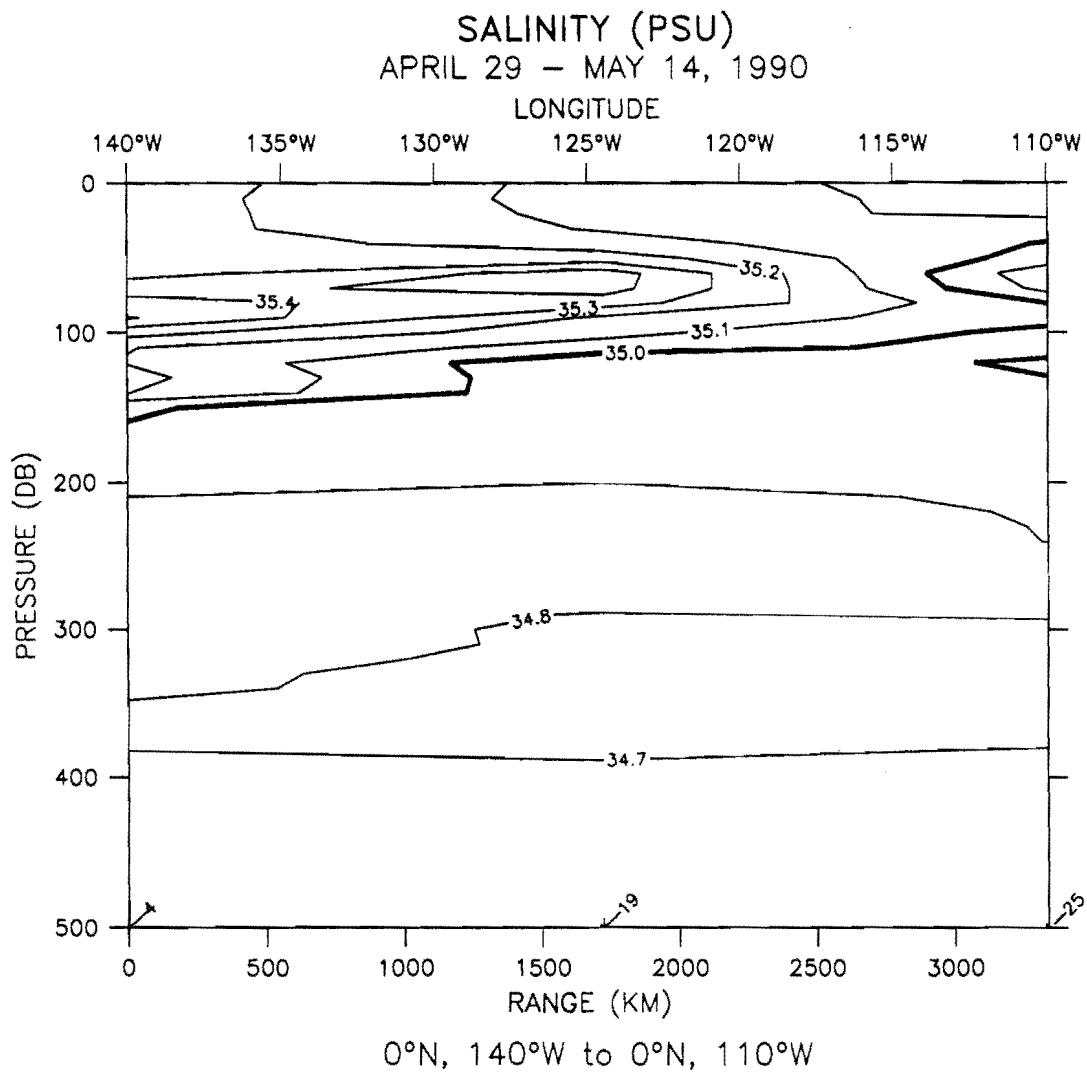


Fig. 5. EP1-90-MB spring salinity (psu) section along the equator. Contour interval is 0.1 psu.

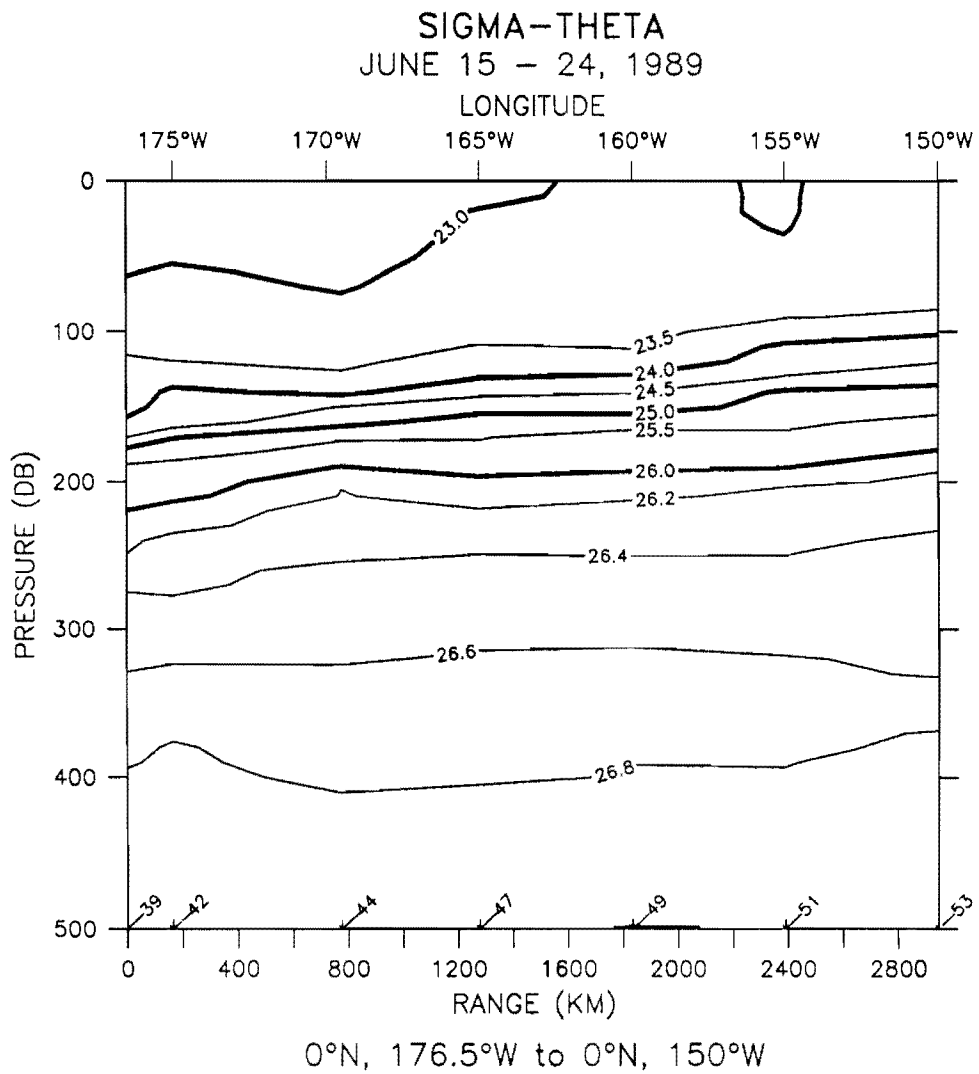


Fig. 6. TG2-89-MB spring potential density (kg/m^3) section along the equator. Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

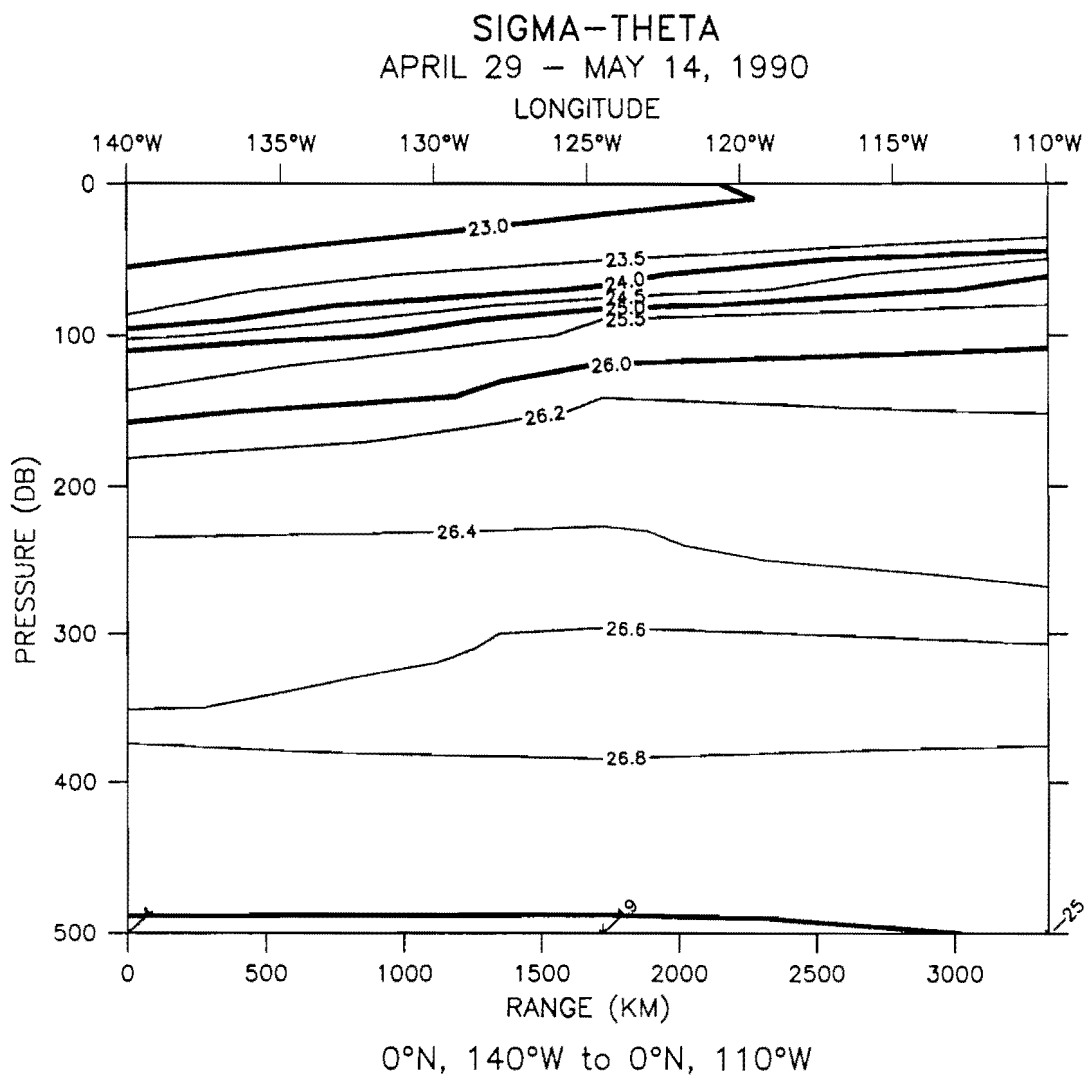


Fig. 7. EPI-90-MB spring potential density (kg/m^3) section along the equator. Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

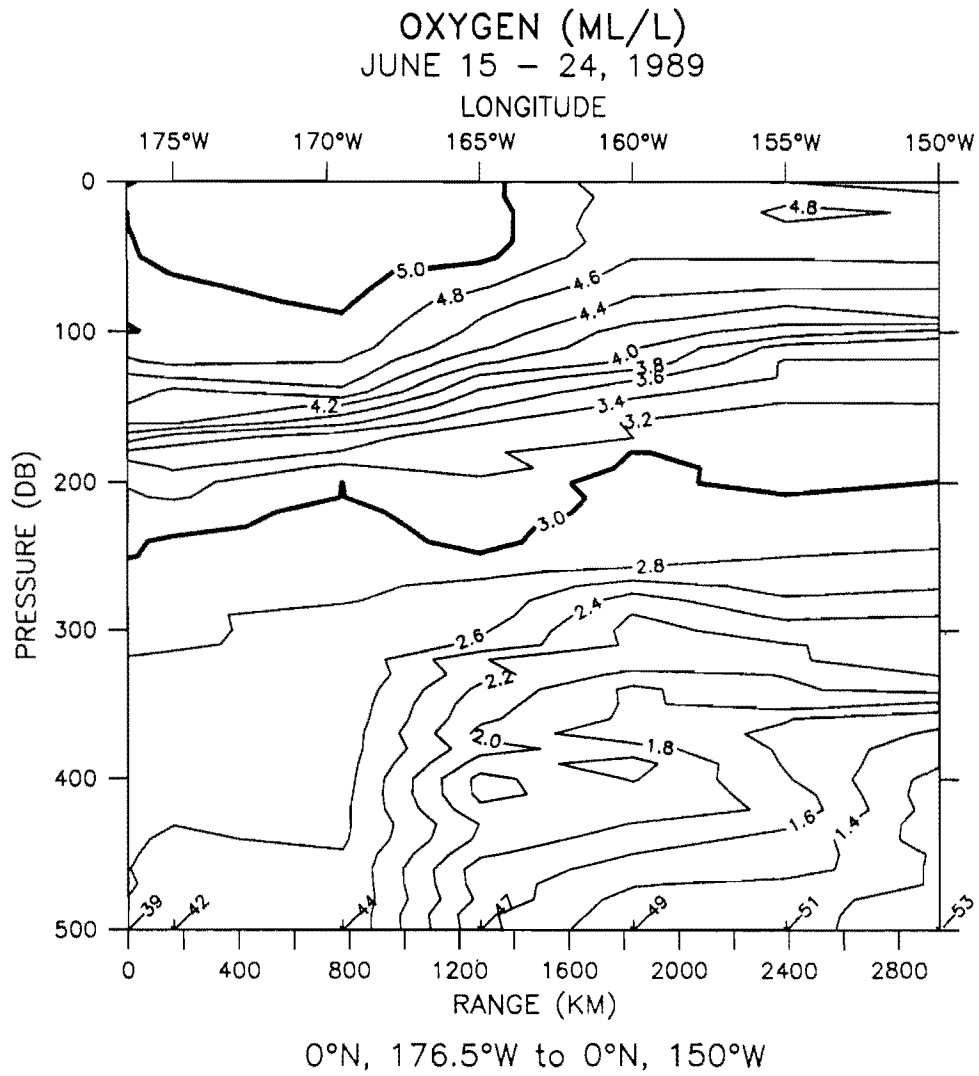


Fig. 8. TG2-89-MB spring oxygen (ml/l) section along the equator. Contour interval is 0.2 ml/l.

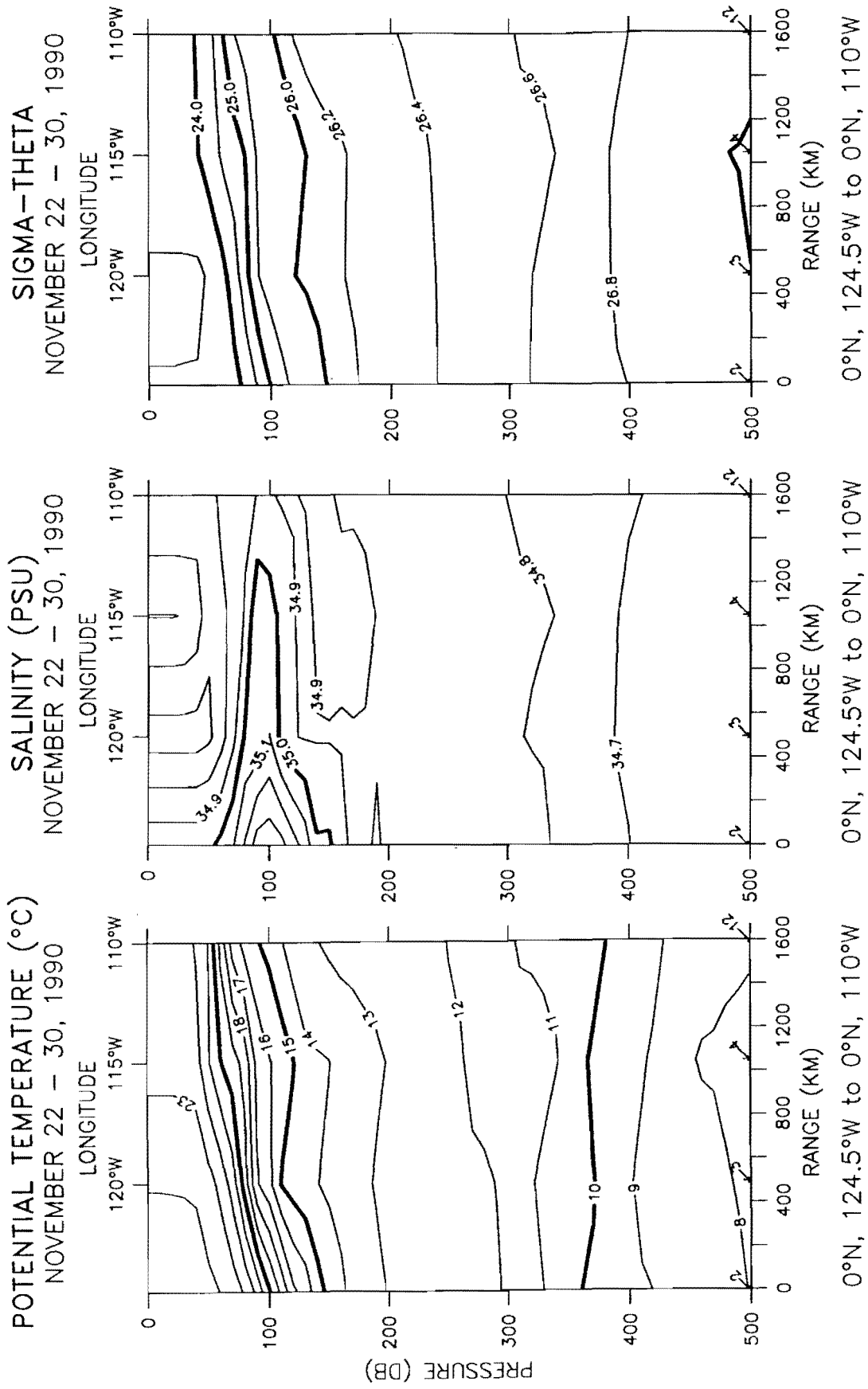
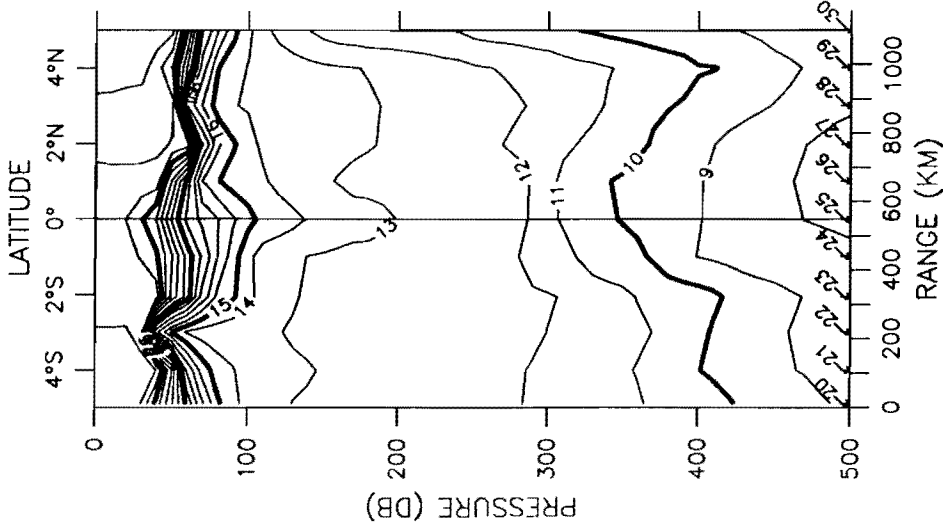


Fig. 9. EP3-90-MB fall potential temperature (C), salinity (psu), and potential density (kg/m^3) sections along the equator. Contour intervals are 1°C , 0.1 psu, and 0.5 less than 26.0 and 0.2 greater than 26.0 .

POTENTIAL TEMPERATURE (°C)

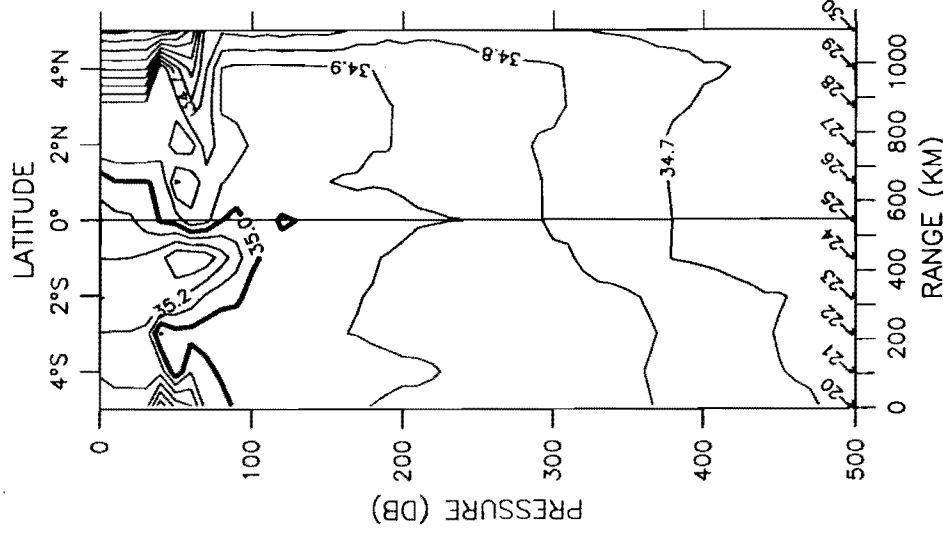
MAY 12 - 16, 1990



5°S, 110°W to 5°N, 110°W

SALINITY (PSU)

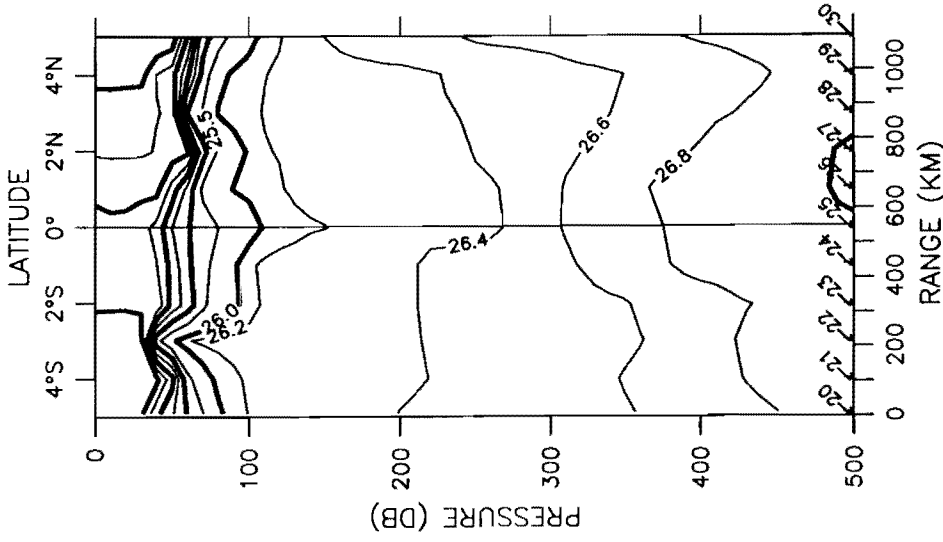
MAY 12 - 16, 1990



5°S, 110°W to 5°N, 110°W

SIGMA-THETA

MAY 12 - 16, 1990



5°S, 110°W to 5°N, 110°W

Fig. 10. EPI-90-MB spring potential temperature (C), salinity (psu), and potential density (kg/m^3) sections along 110°W. Contour intervals are 1°C, 0.1 psu, and 0.5 less than 26.0 and 0.2 greater than 26.0.

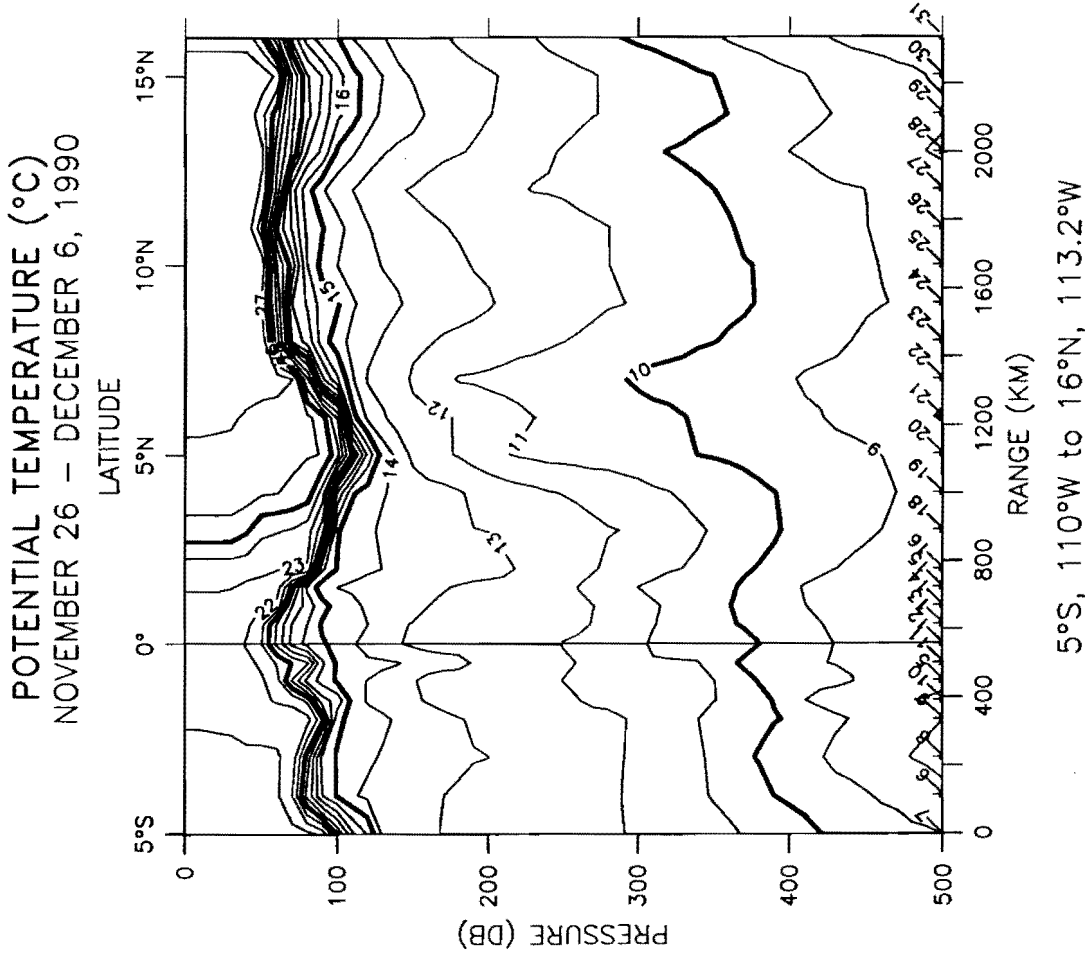
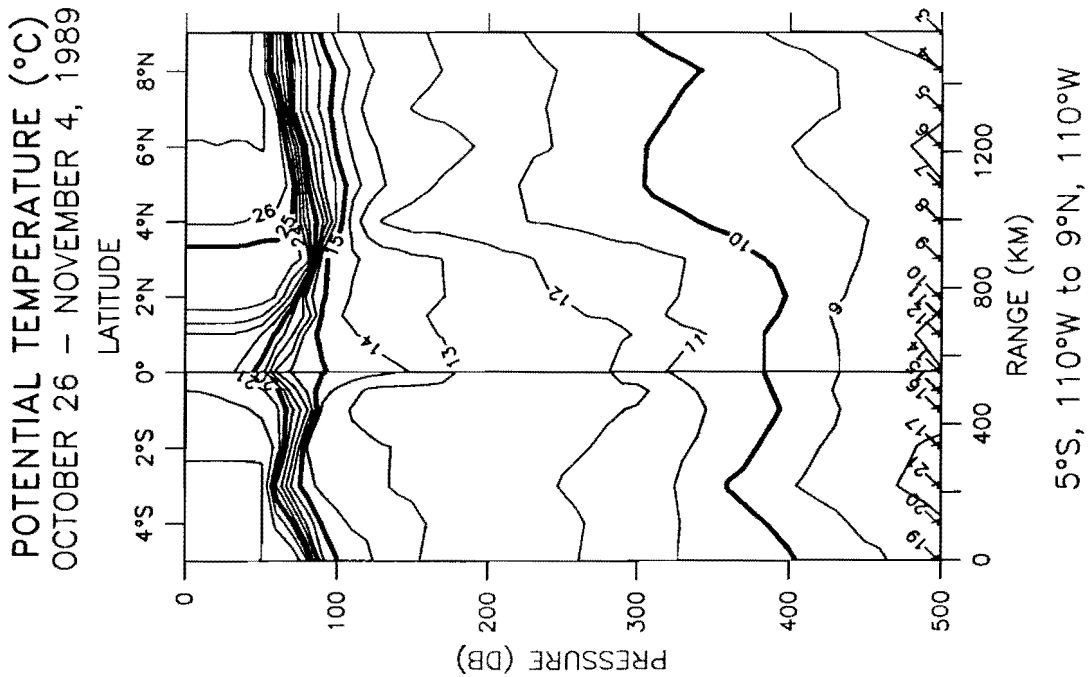


Fig. 11. EP3-89-DI and EP3-90-MB fall potential temperature (C) sections along 110°W. Contour interval is 1°C.

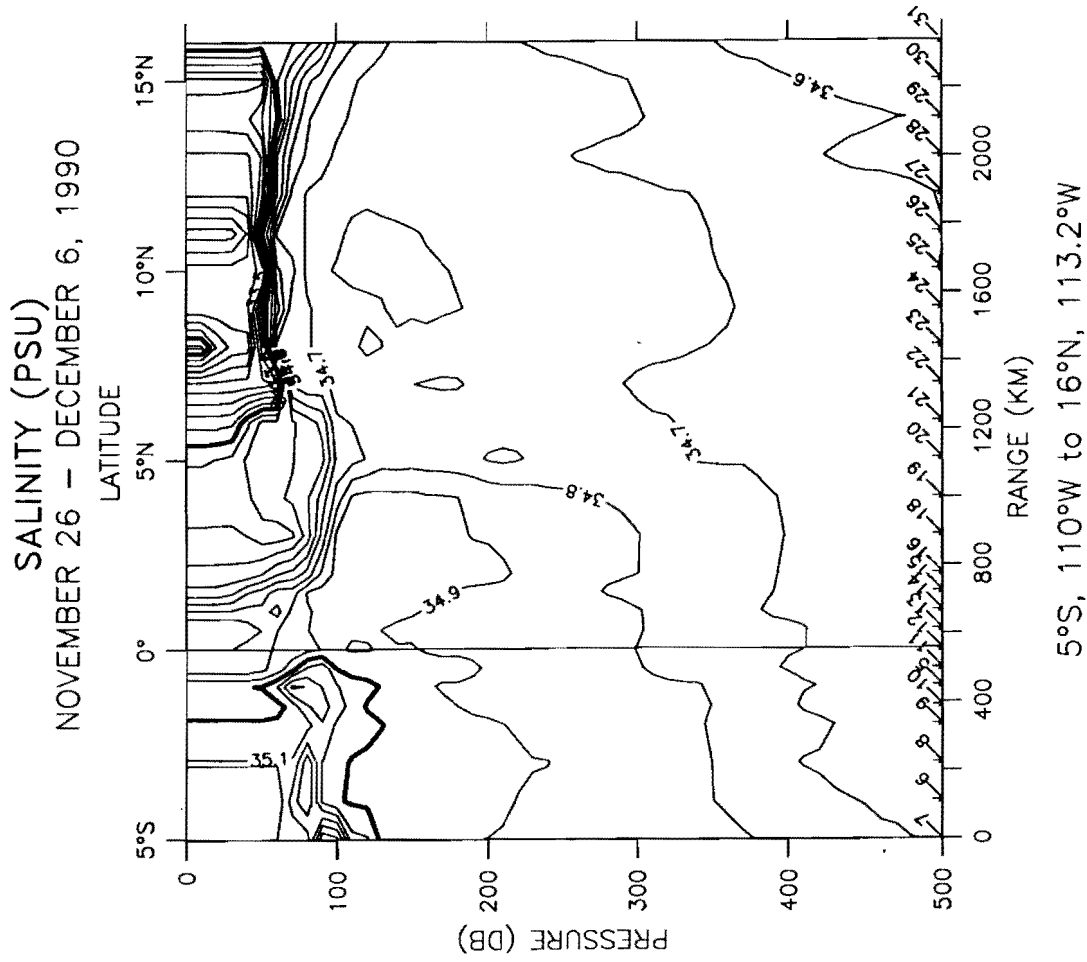
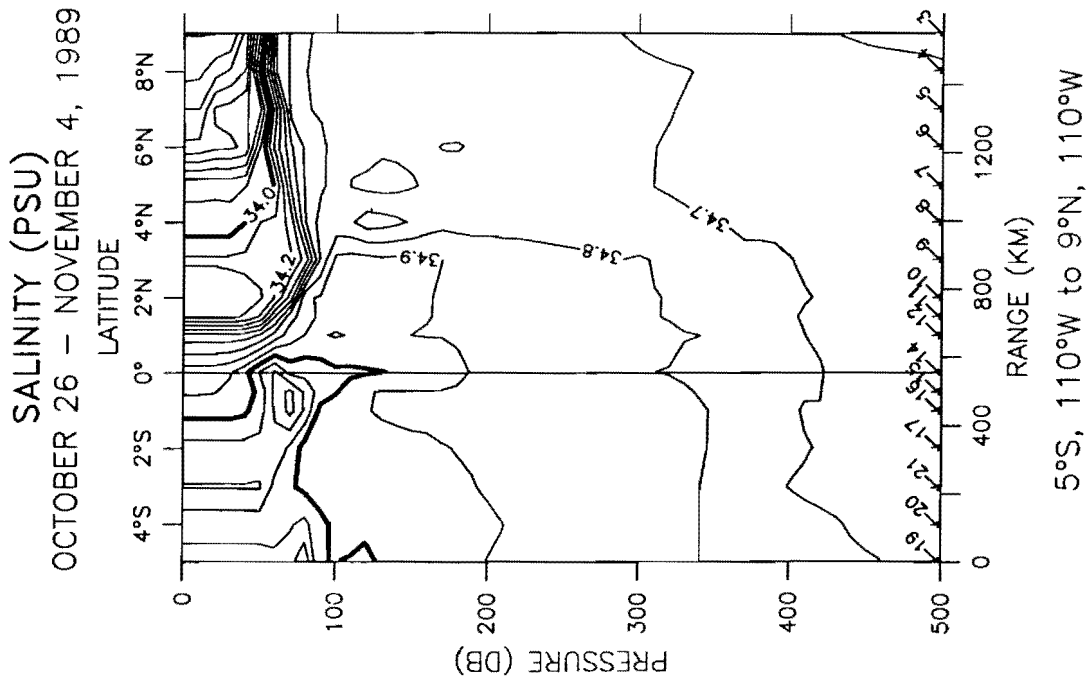


Fig. 12. EP3-89-DI and EP3-90-MB fall salinity (psu) sections along 110°W. Contour interval is 0.1 psu.

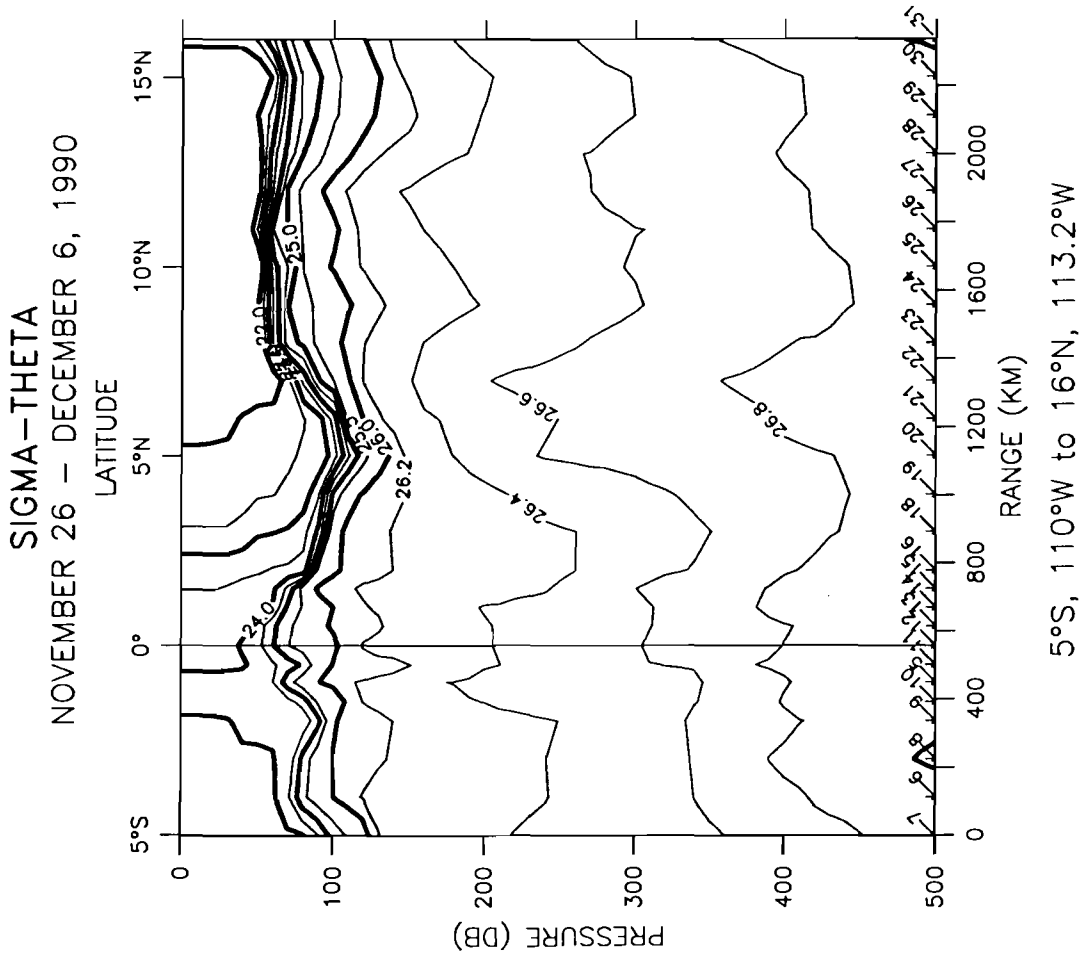
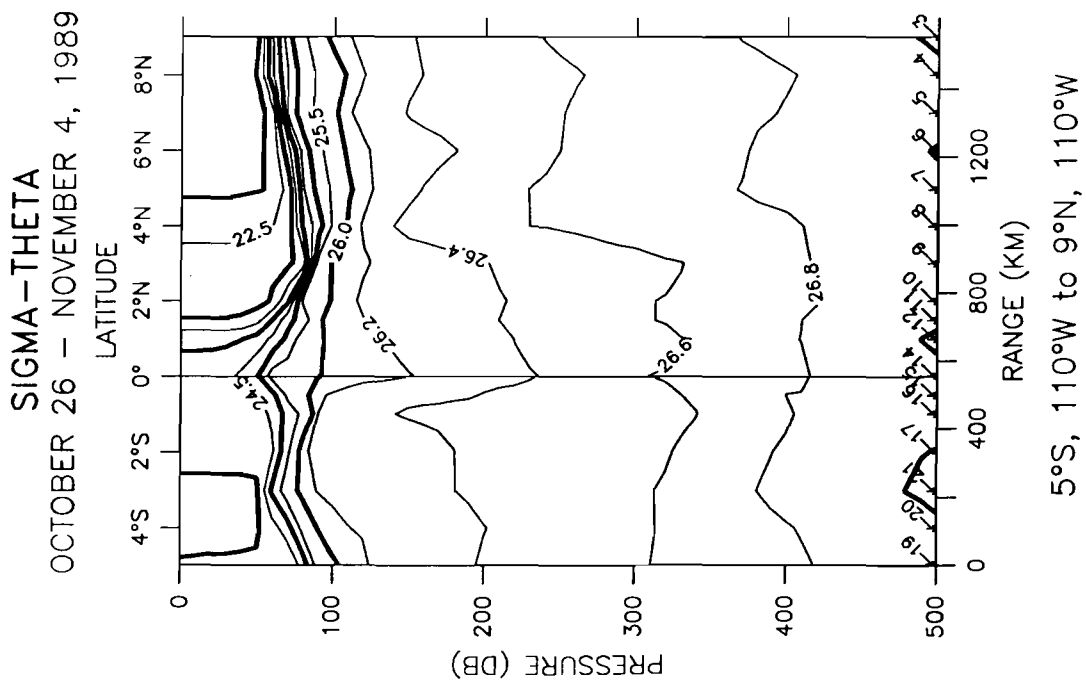


Fig. 13. EP3-89-DI and EP3-90-MB fall potential density (kg/m^3) sections along 110°W . Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

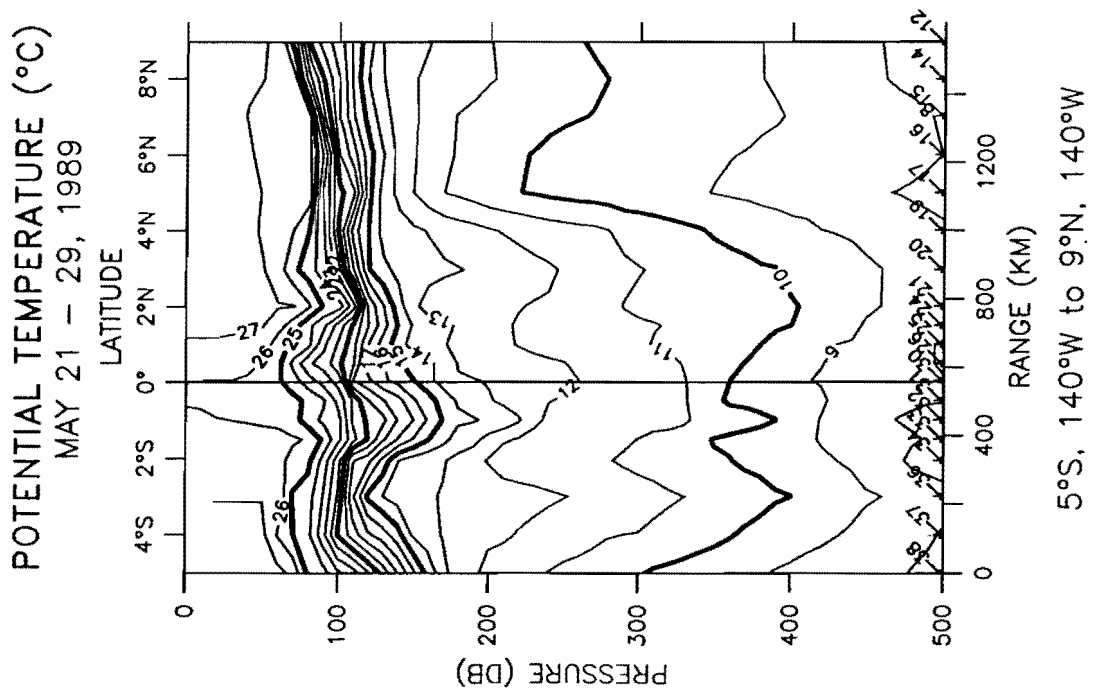
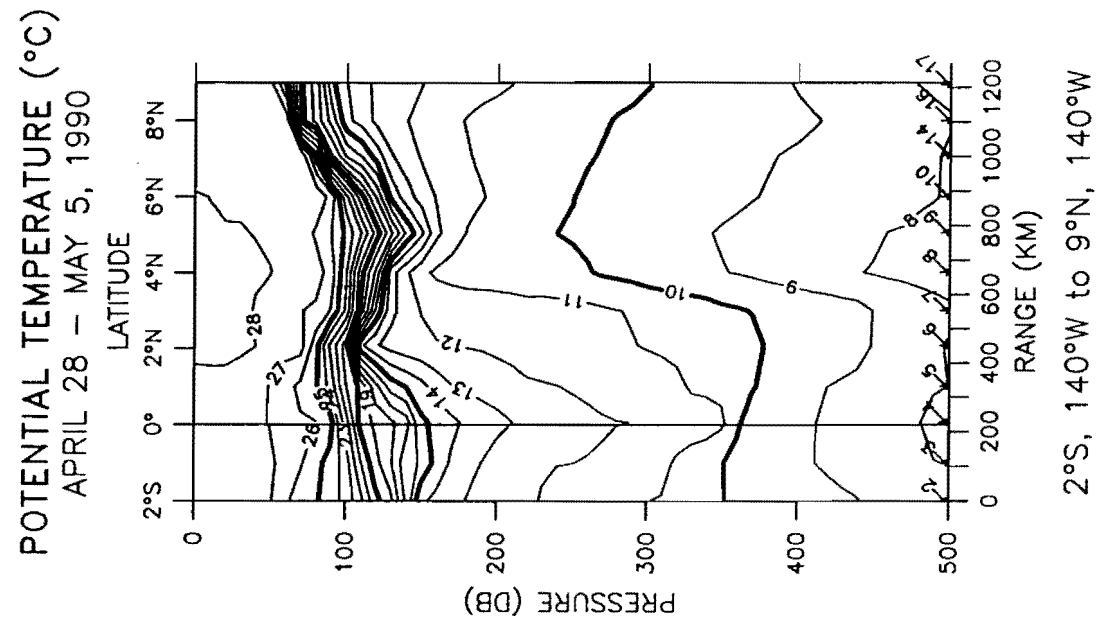


Fig. 14. TGI-89-MB and EP1-90-MB spring potential temperature (C) sections along 140°W. Contour interval is 1°C.

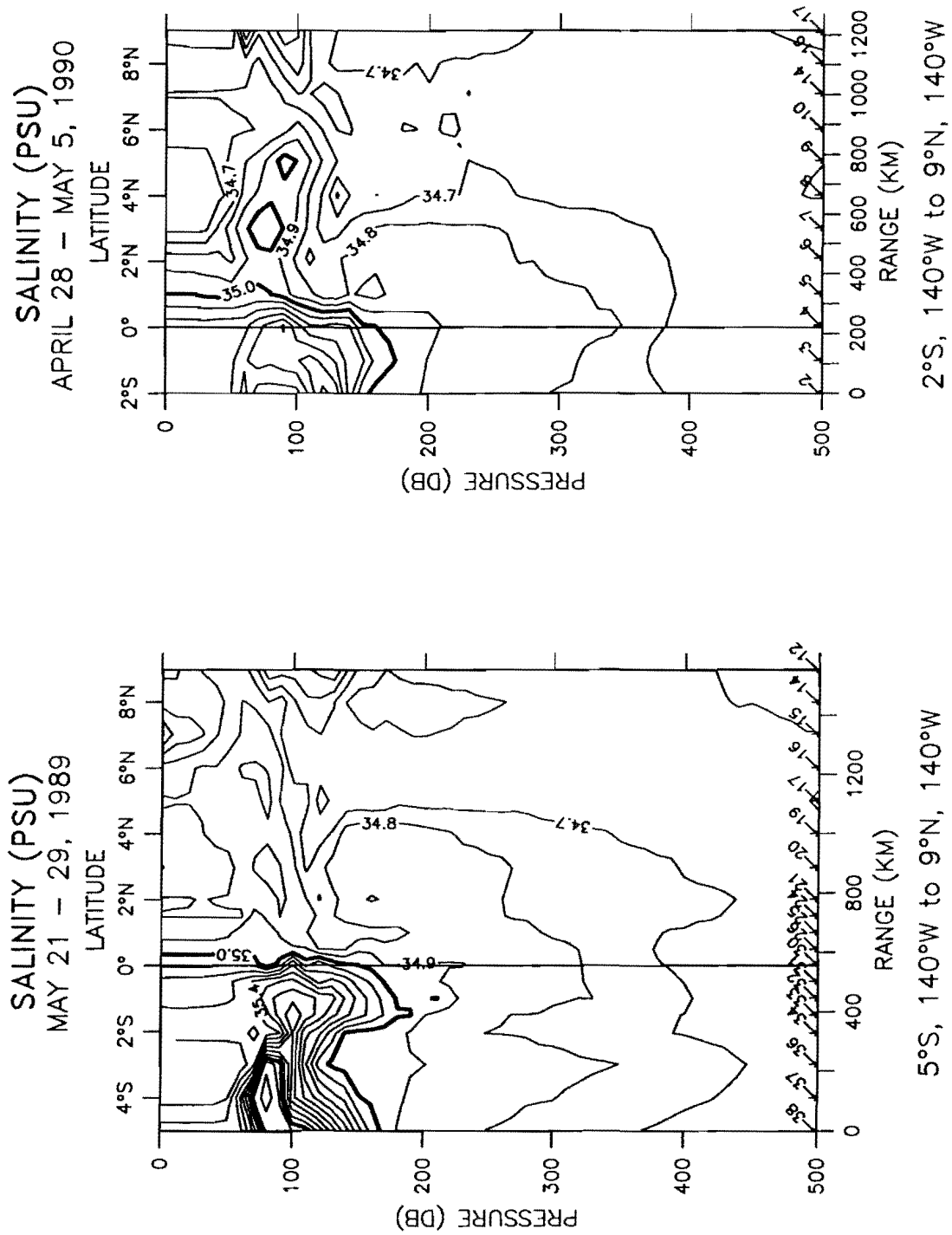


Fig. 15. TGI-89-MB and EPI-90-MB spring salinity (psu) sections along 140°W. Contour interval is 0.1 psu.

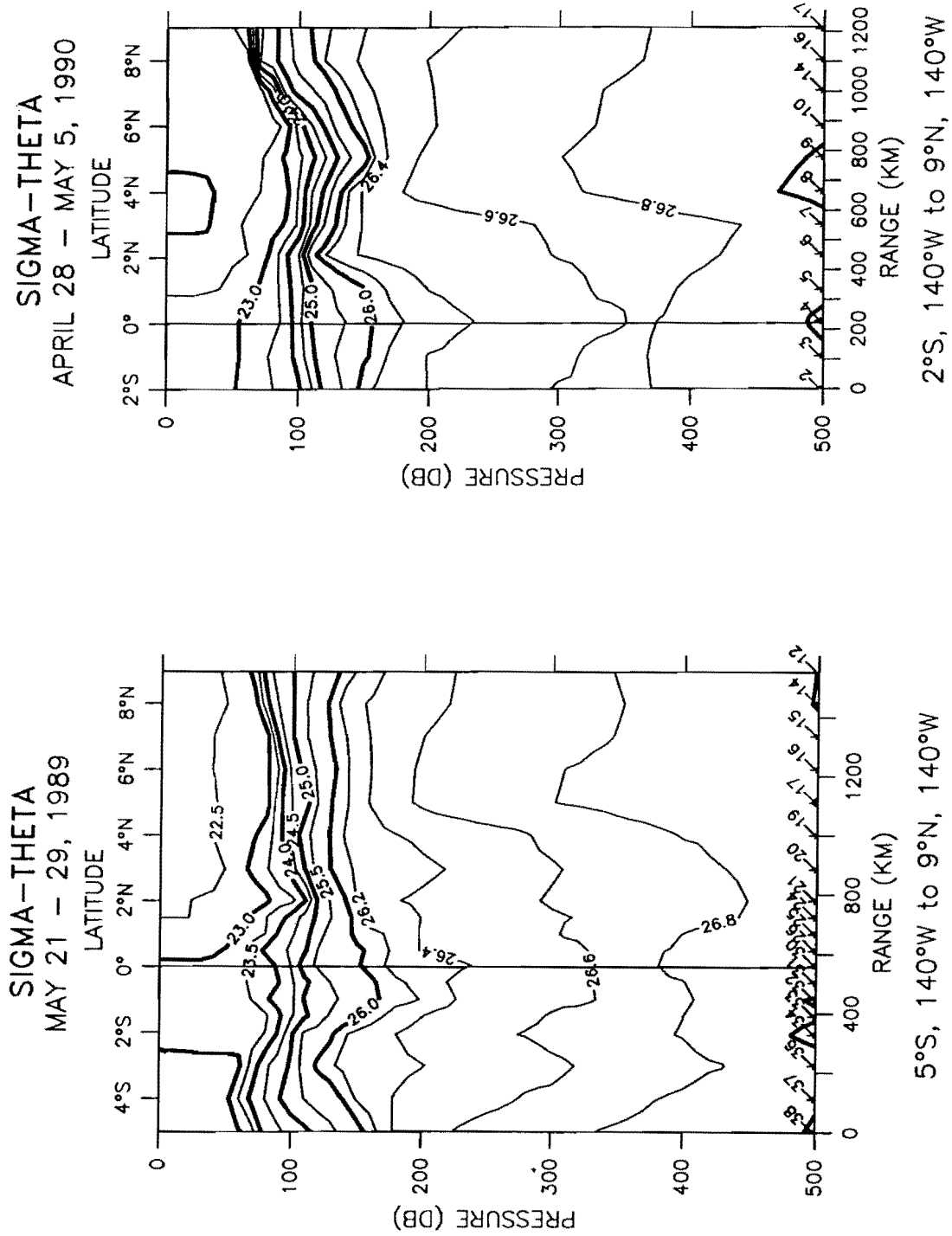


Fig. 16. TGI-89-MB and EPI-90-MB spring potential density (kg/m^3) sections along 140°W . Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

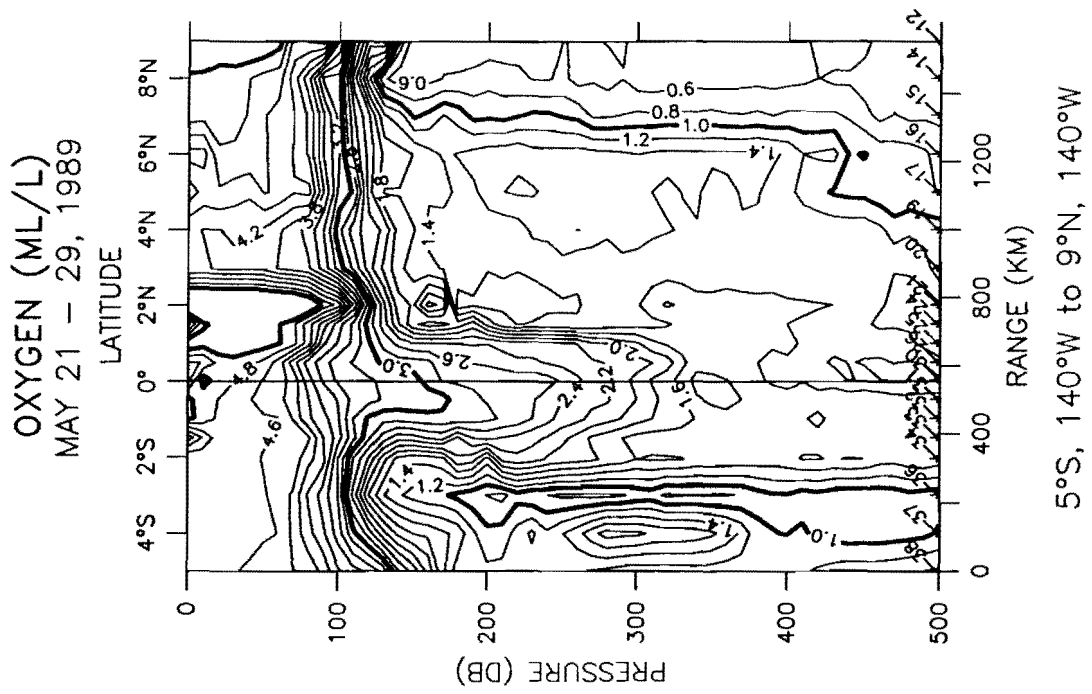


Fig. 17. TGI-89-MB spring oxygen (ml/l) section along 140°W. Contour interval is 0.2 ml/l. CTD oxygen data were not collected on EP1-90-MB.

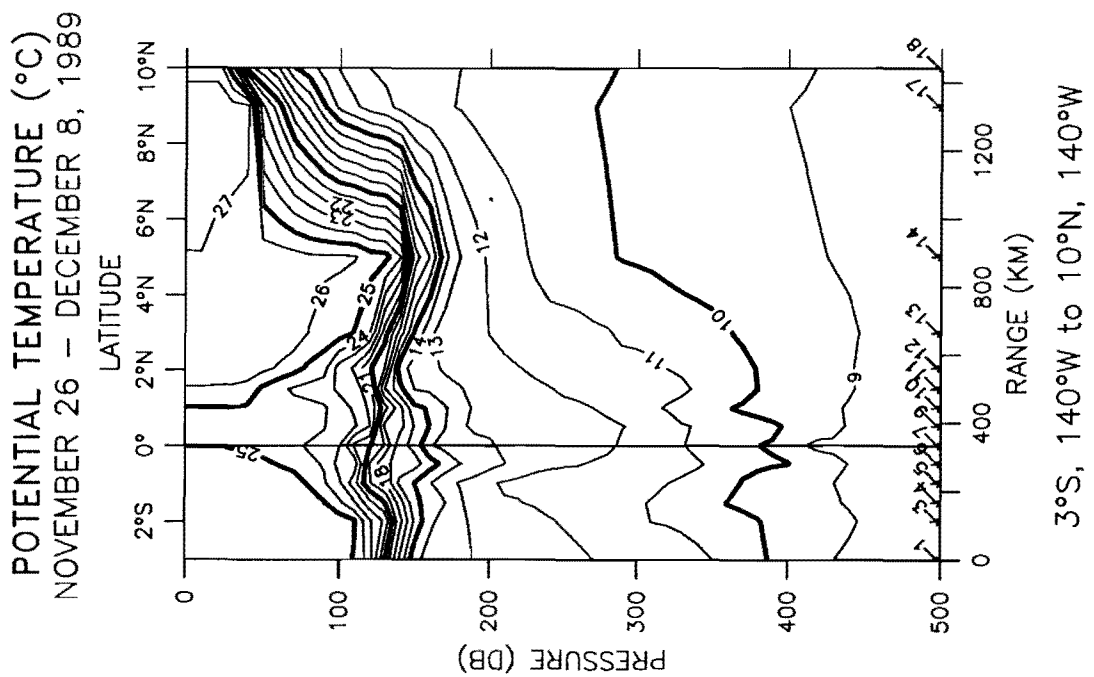
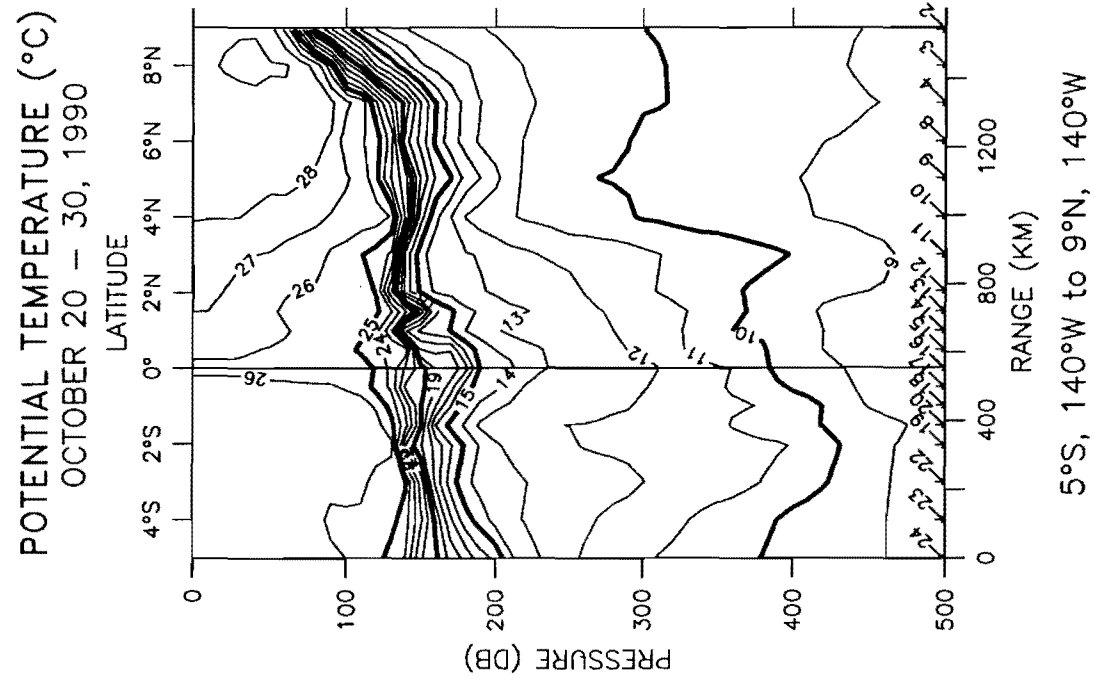


Fig. 18. EP4-89-DI and EP2-90-MB fall potential temperature (C) sections along 140°W. Contour interval is 1°C.

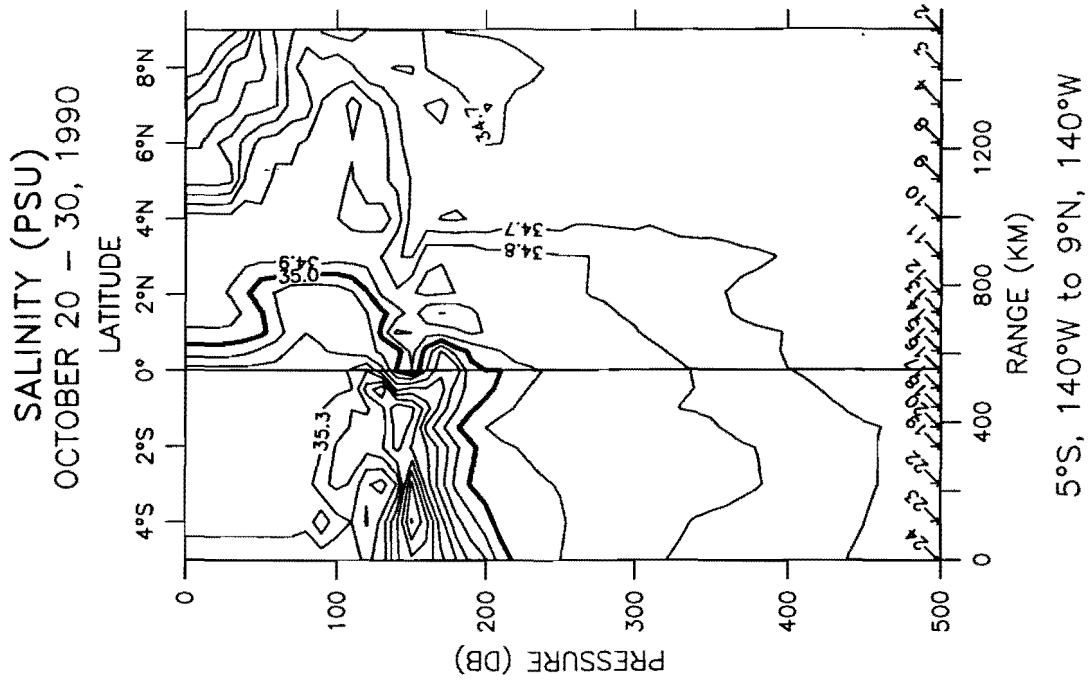
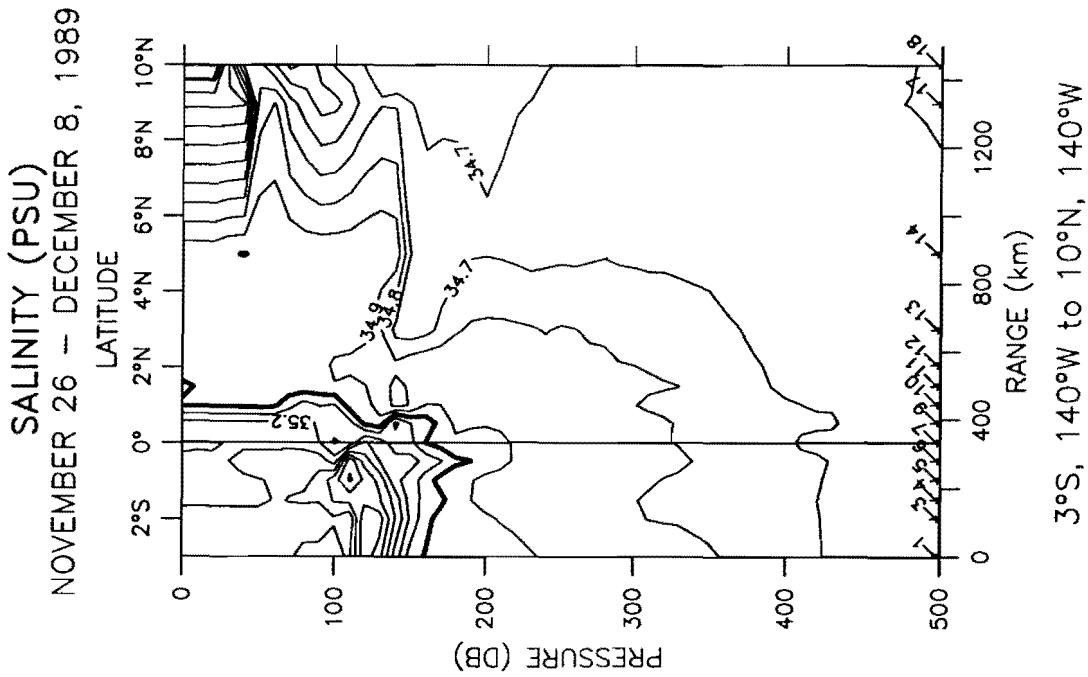


Fig. 19. EP4-89-DI and EP2-90-MB fall salinity (psu) sections along 140°W. Contour interval is 0.1 psu.

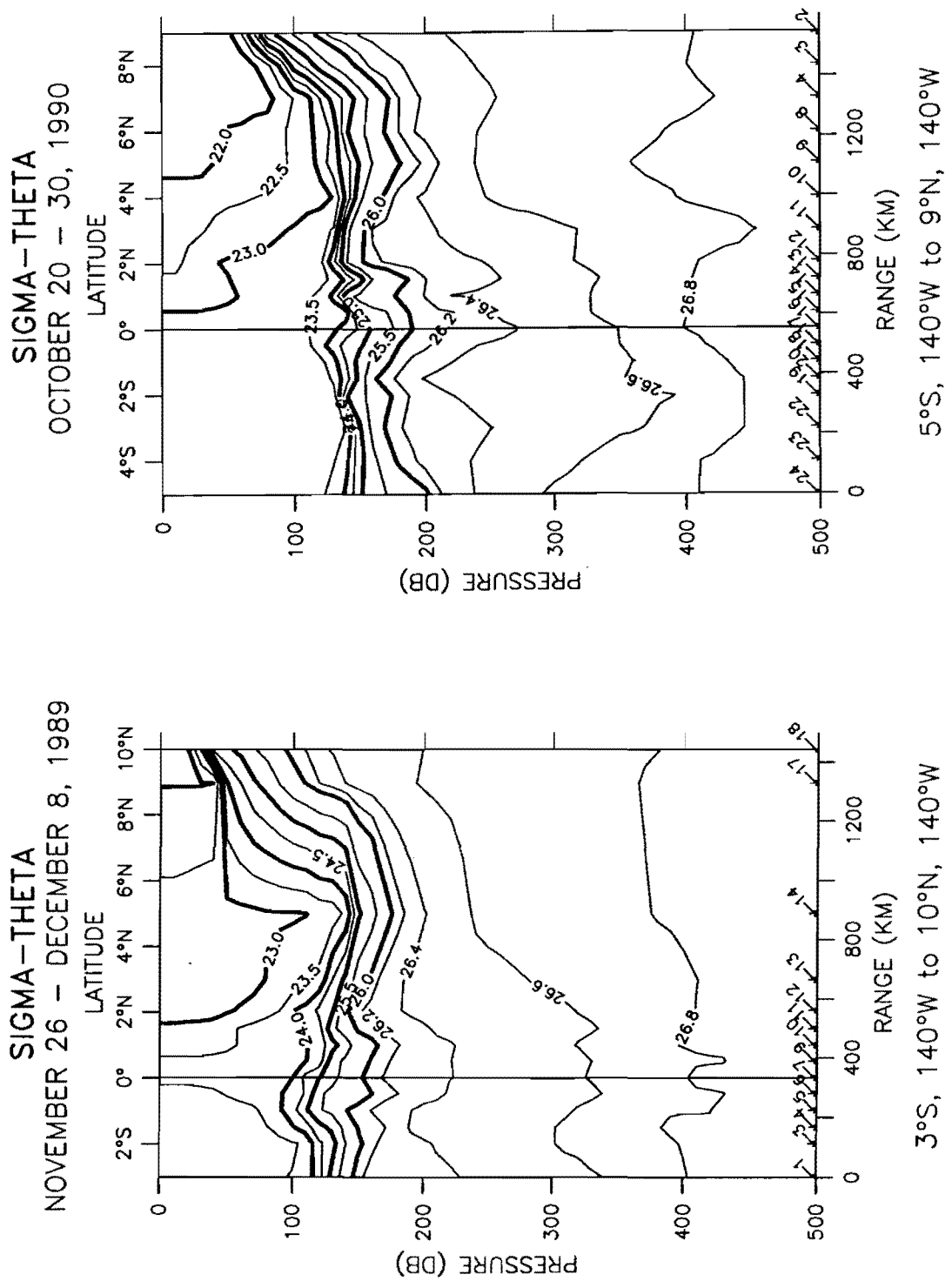


Fig. 20. EP4-89-DI and EP2-90-MB fall potential density (kg/m^3) sections along 140°W . Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

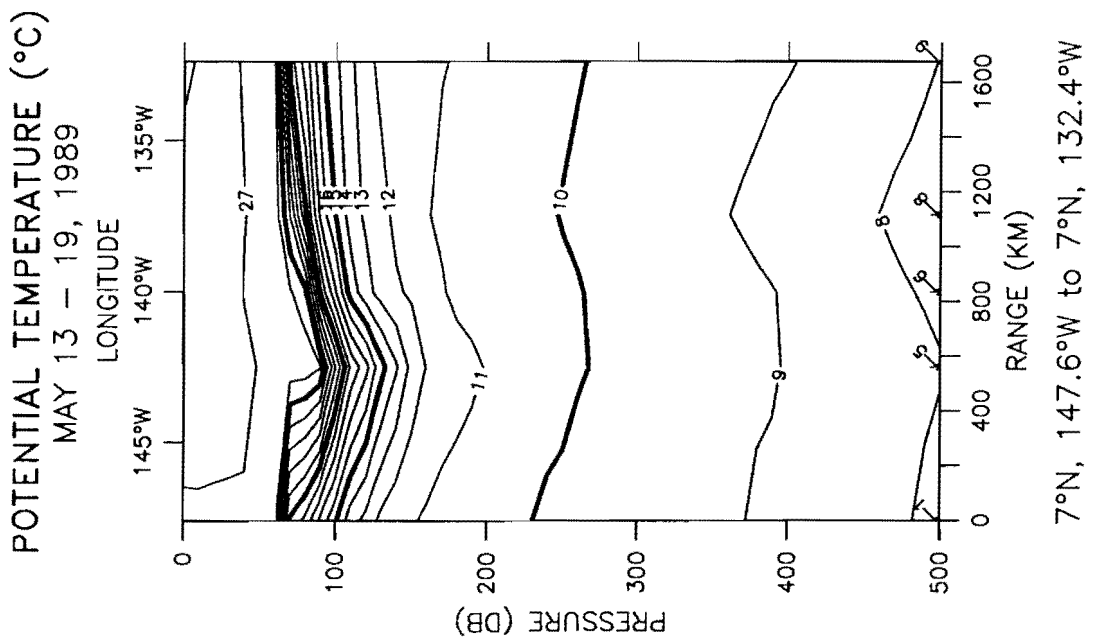
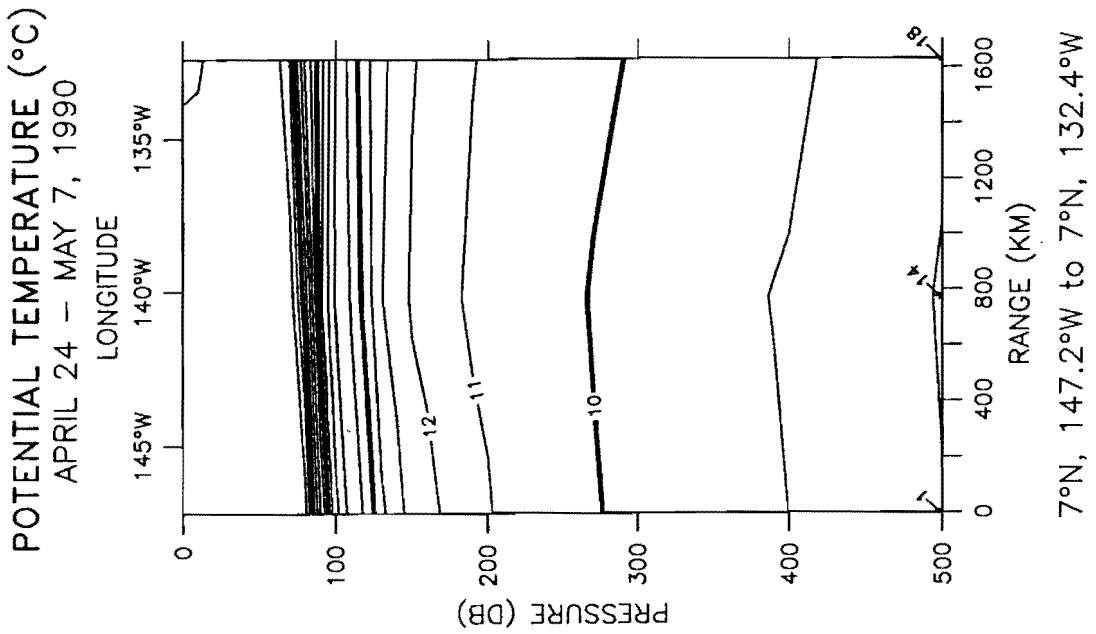


Fig. 21. TGI-89-MB and EPI-90-MB spring potential temperature (C) sections along 7°N. Contour interval is 1°C.

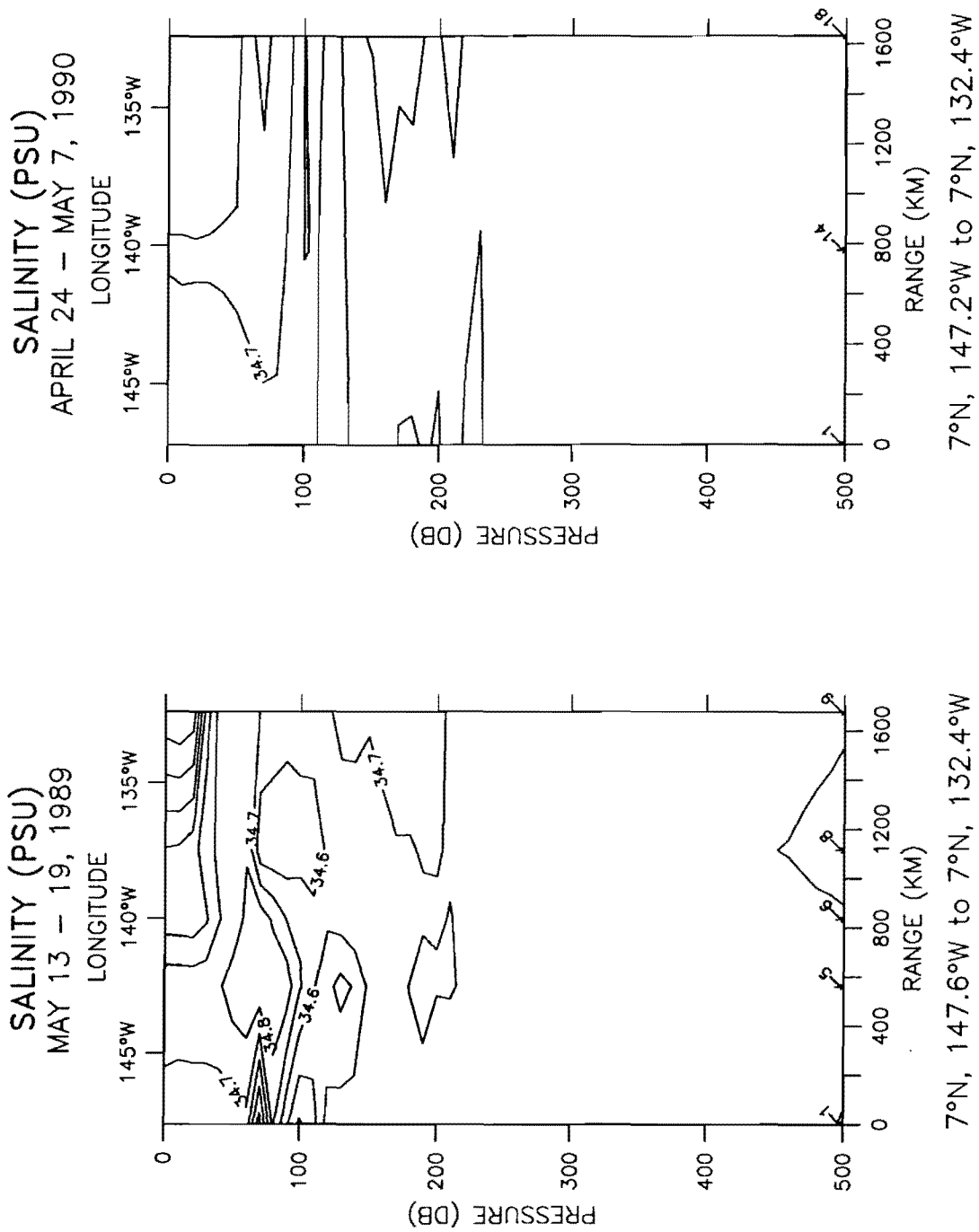


Fig. 22. TG1-89-MB and EP1-90-MB spring salinity (psu) sections along 7°N. Contour interval is 0.1 psu.

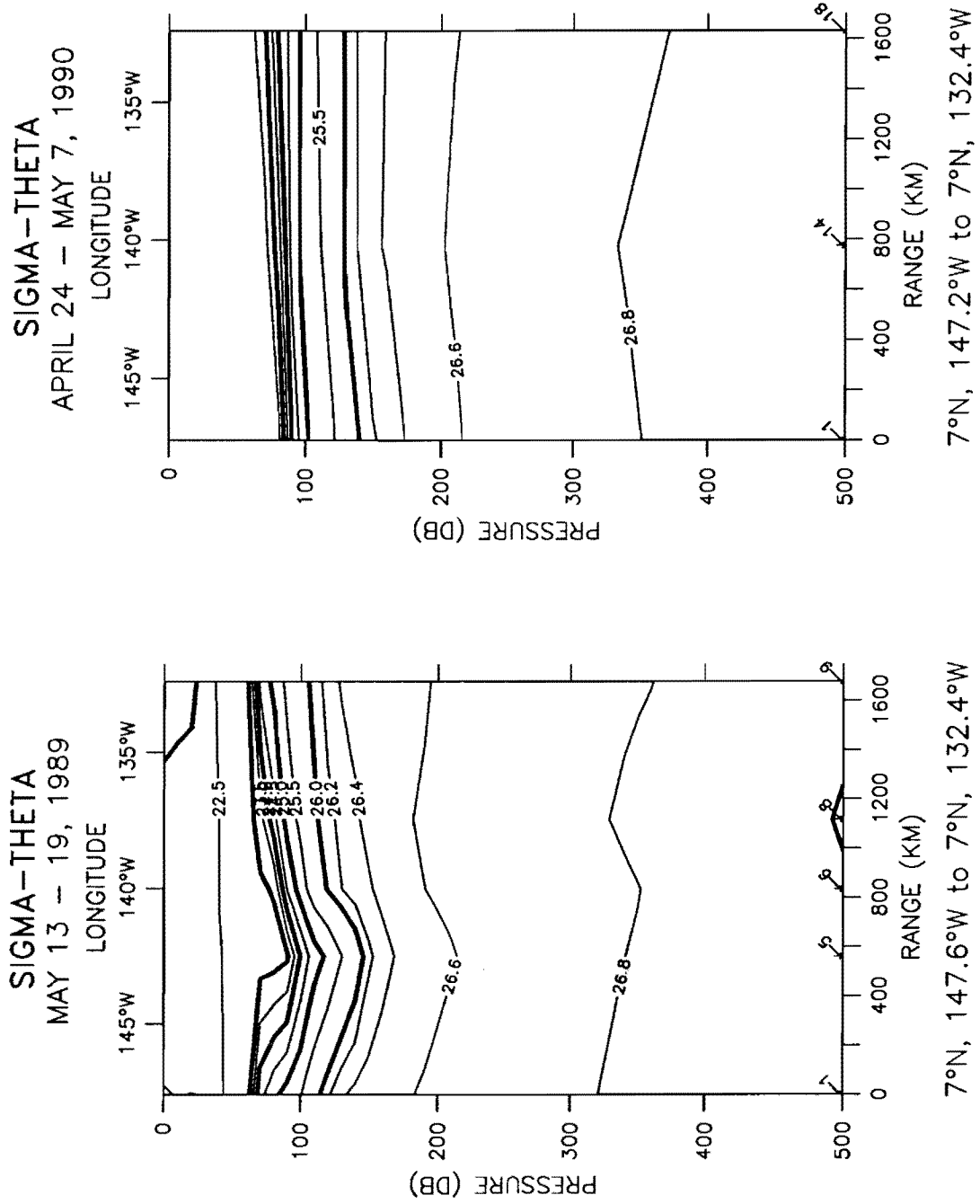


Fig. 23. TGI-89-MB and EPI-90-MB spring potential density (kg/m^3) sections along 7°N. Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

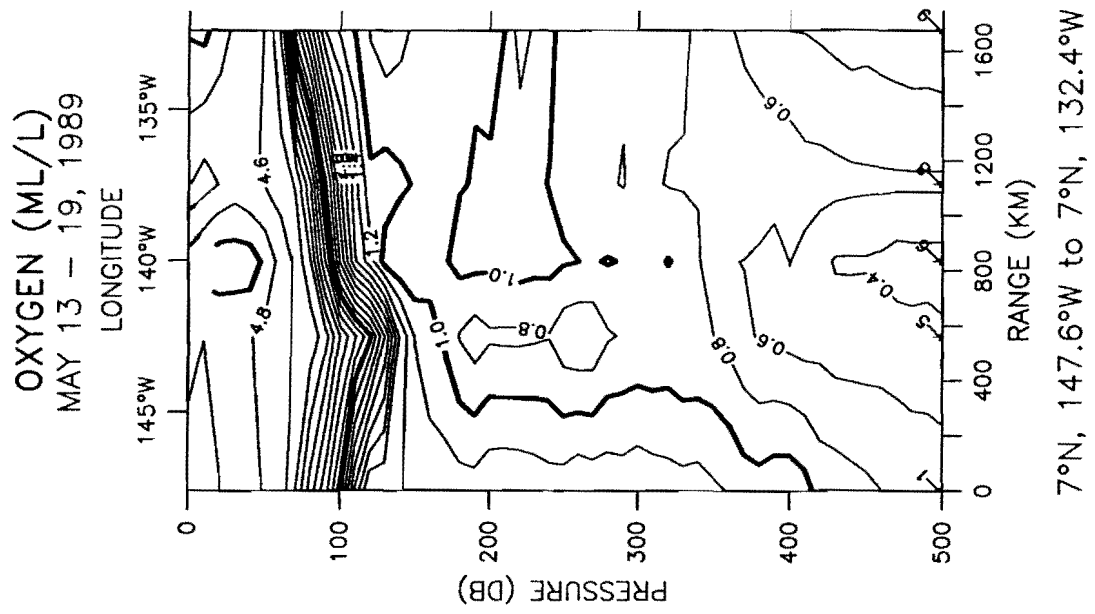


Fig. 24. TG1-89-MB spring oxygen (ml/l) section along 7°N. Contour interval is 0.2 ml/l. CTD oxygen data were not collected on EP1-90-MB.

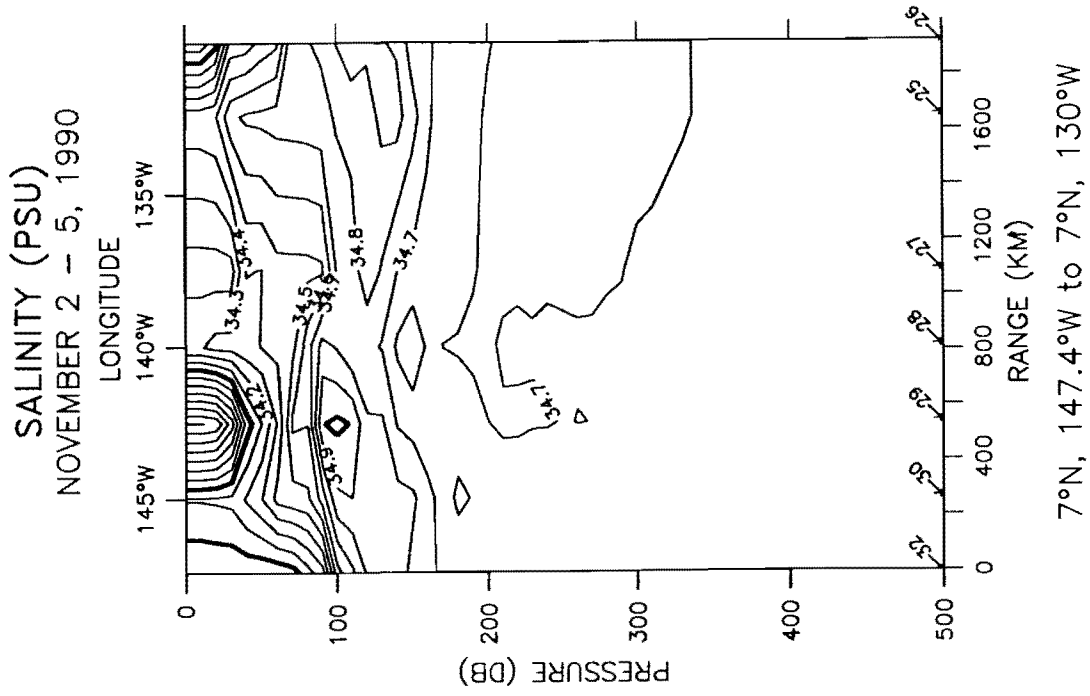
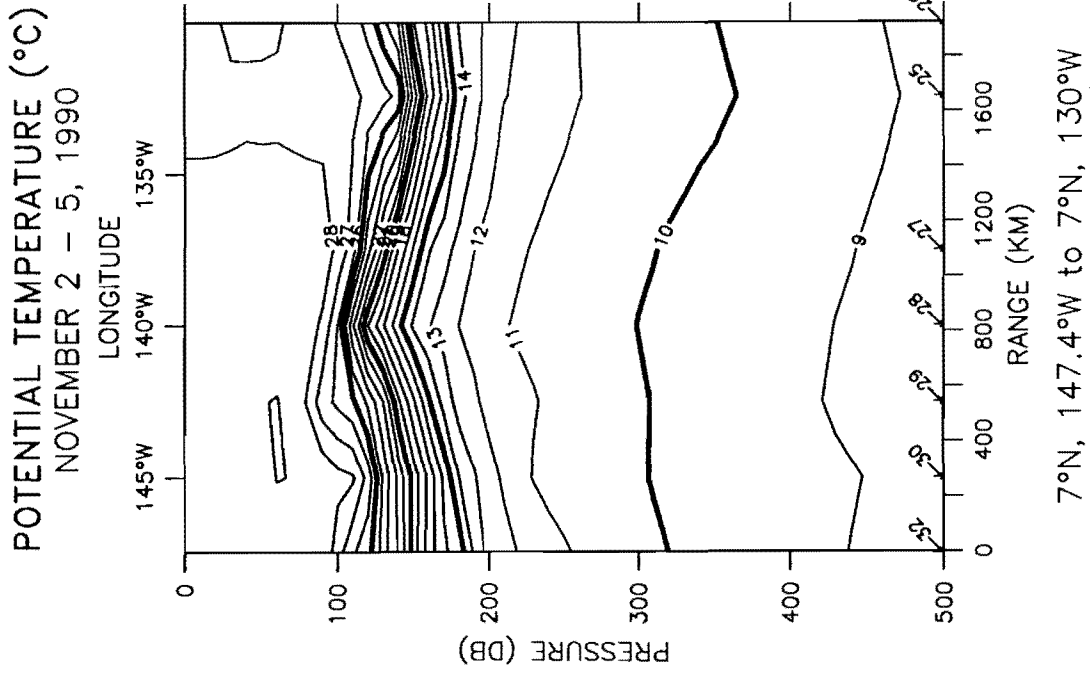


Fig. 25. EP2-90-MB fall potential temperature (C) and salinity (psu) sections along 7°N. Contour intervals are 1°C and 0.1 psu.

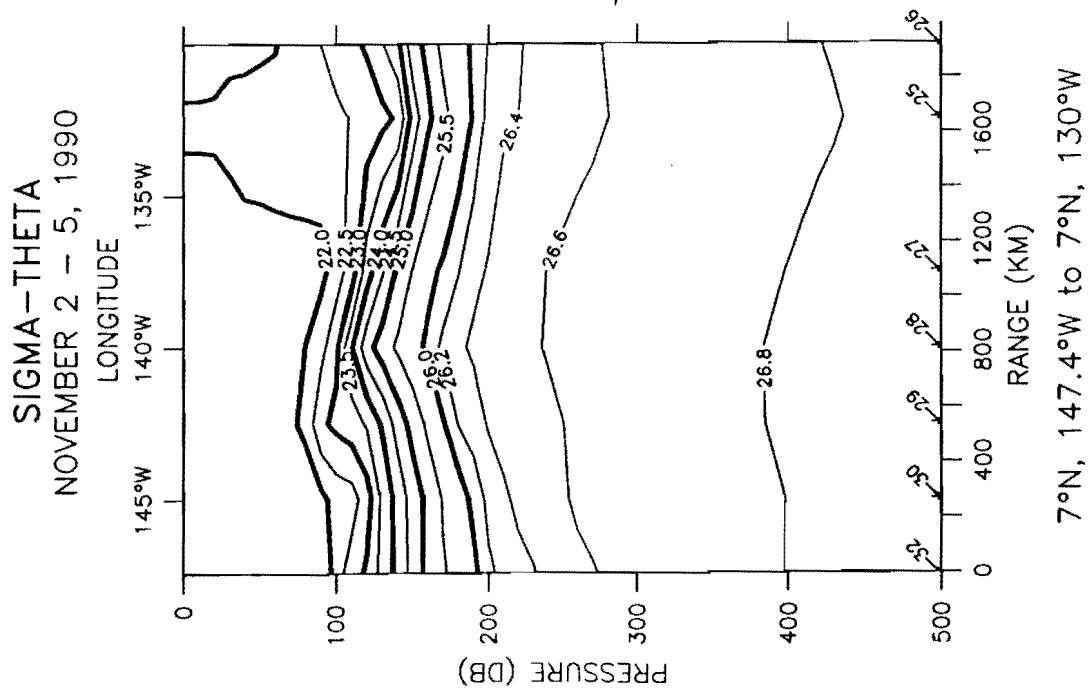
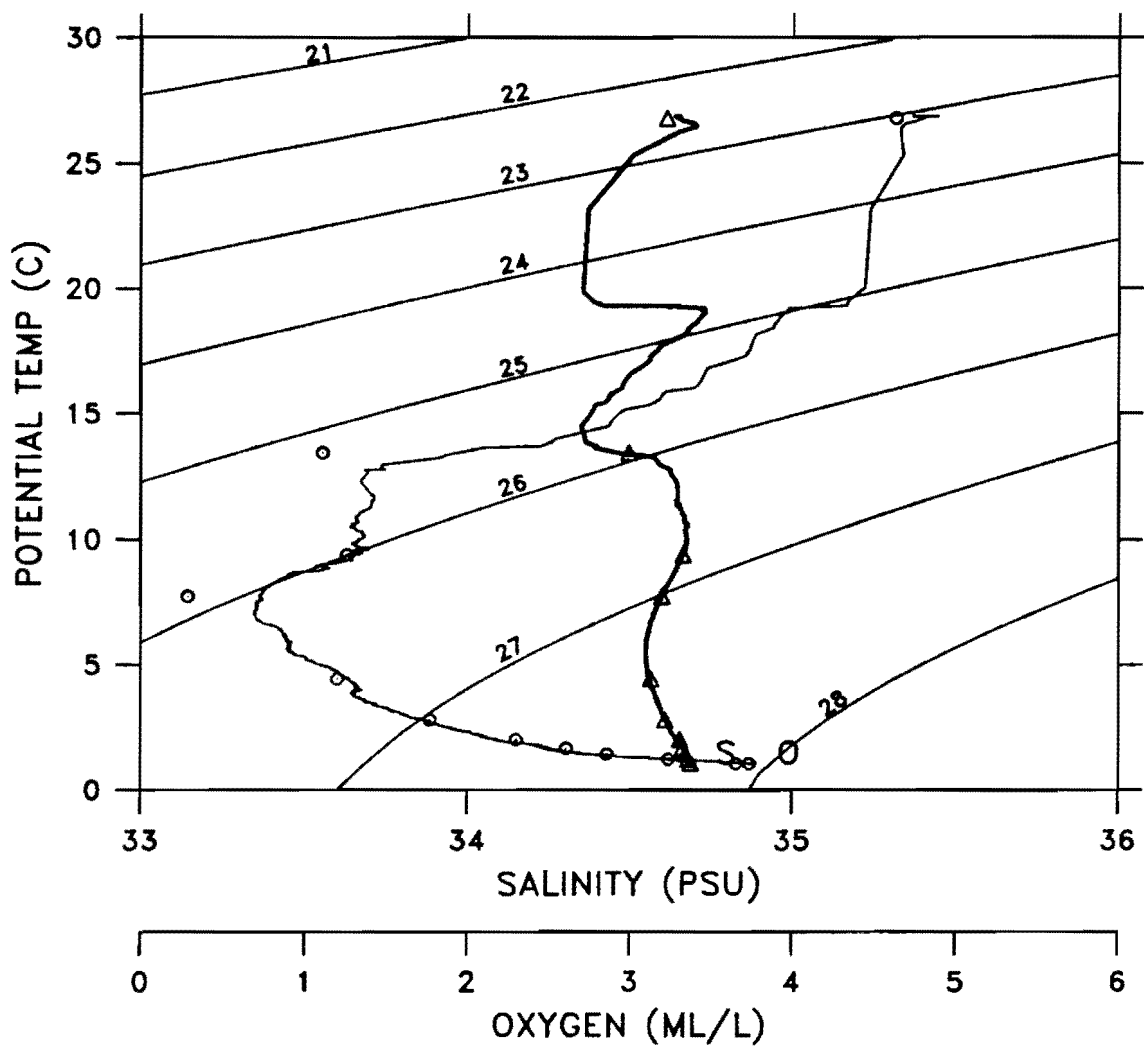


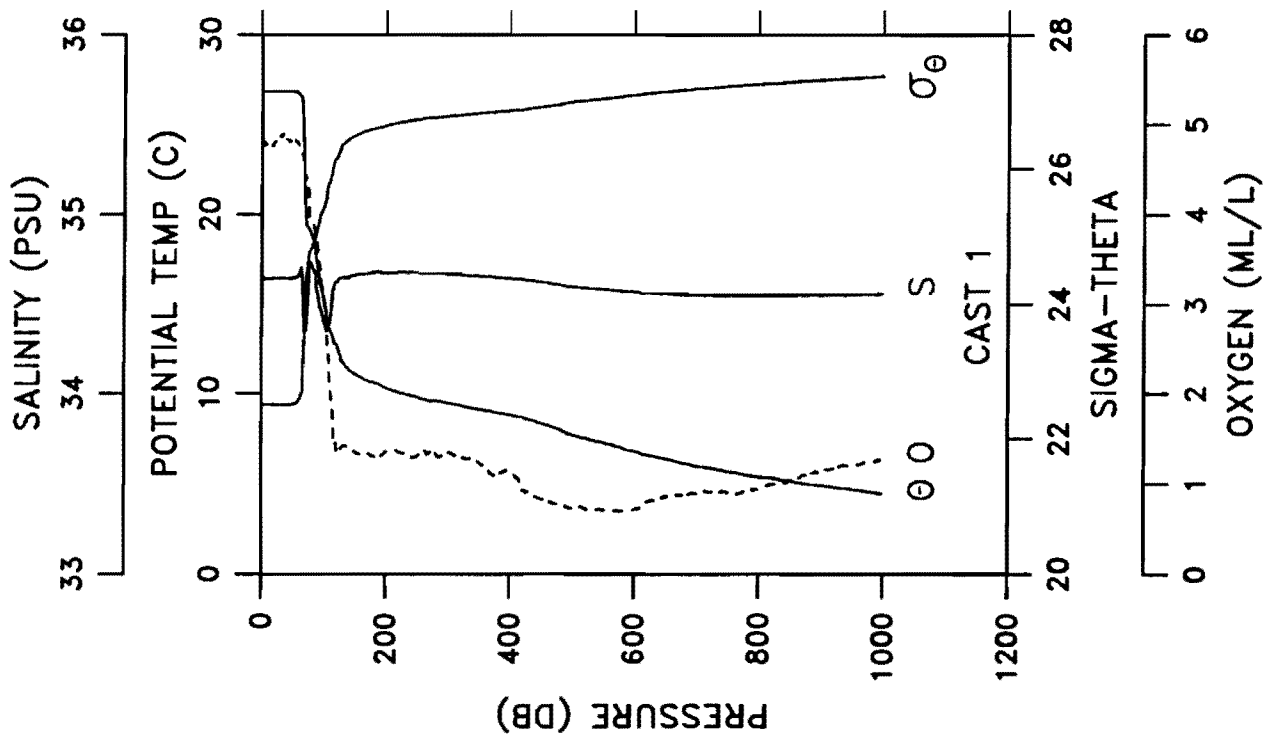
Fig. 26. EP2-90-MB fall potential density (kg/m^3) section along 7°N. Contour interval is 0.5 less than 26.0 and 0.2 greater than 26.0.

TG1-89-MB
May 9–June 1, 1989
CTD/O₂ and Hydrographic Data Summary

CAST TG1-89-MB -001 DATE 13 MAY 89' TIME 1326 GMT
LAT 07 03.9N LONG 147 36.0W

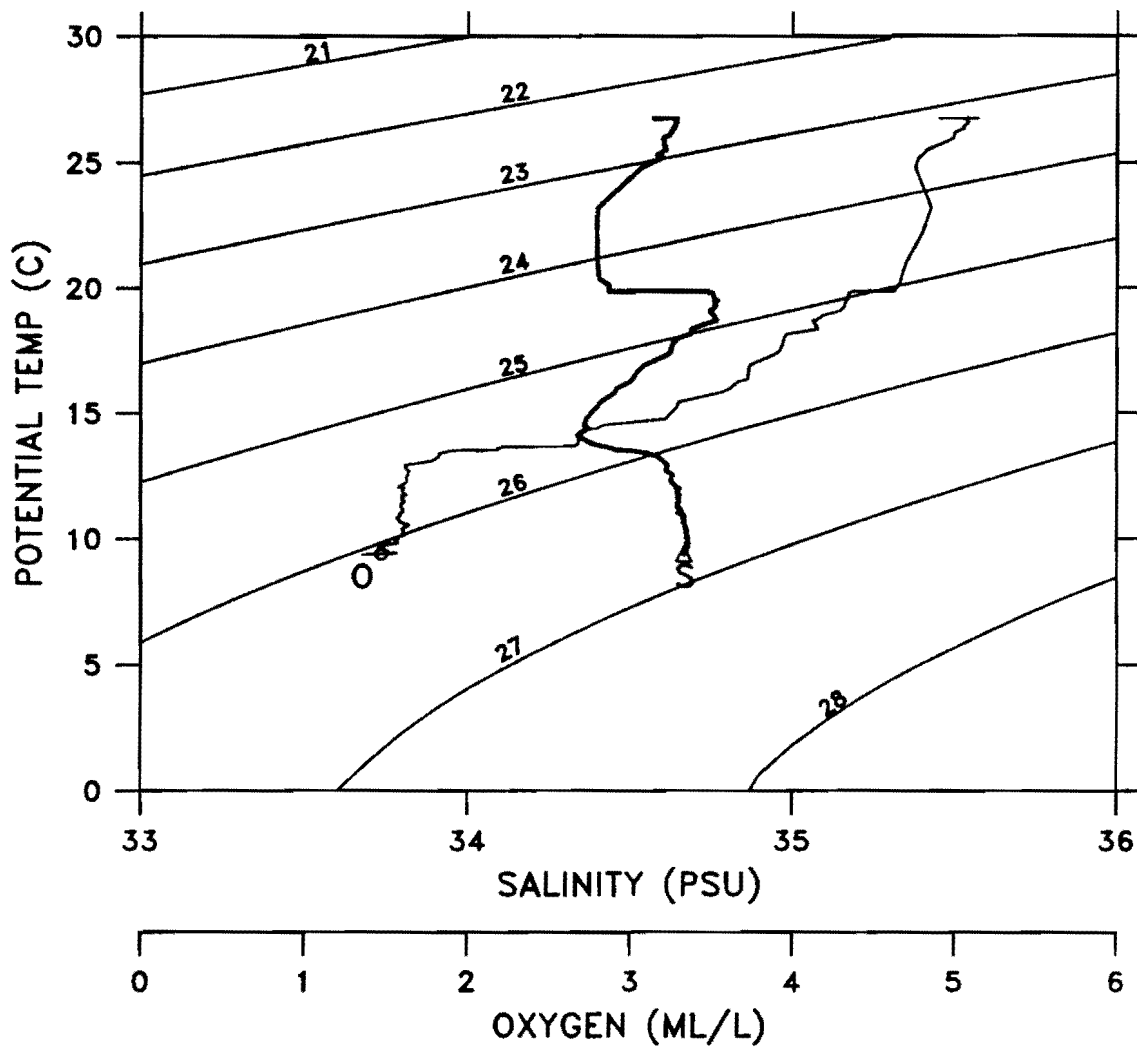


CAST TG1-89-MB -001 DATE 13 MAY 89 TIME 1326 GMT
 LAT 07 03.9N LONG 147 36.0W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 054 T SPD 17 KT VISIBILITY
 CLOUD AMOUNT DRY 27.0 WET 23.7 DEPTH 4196 M

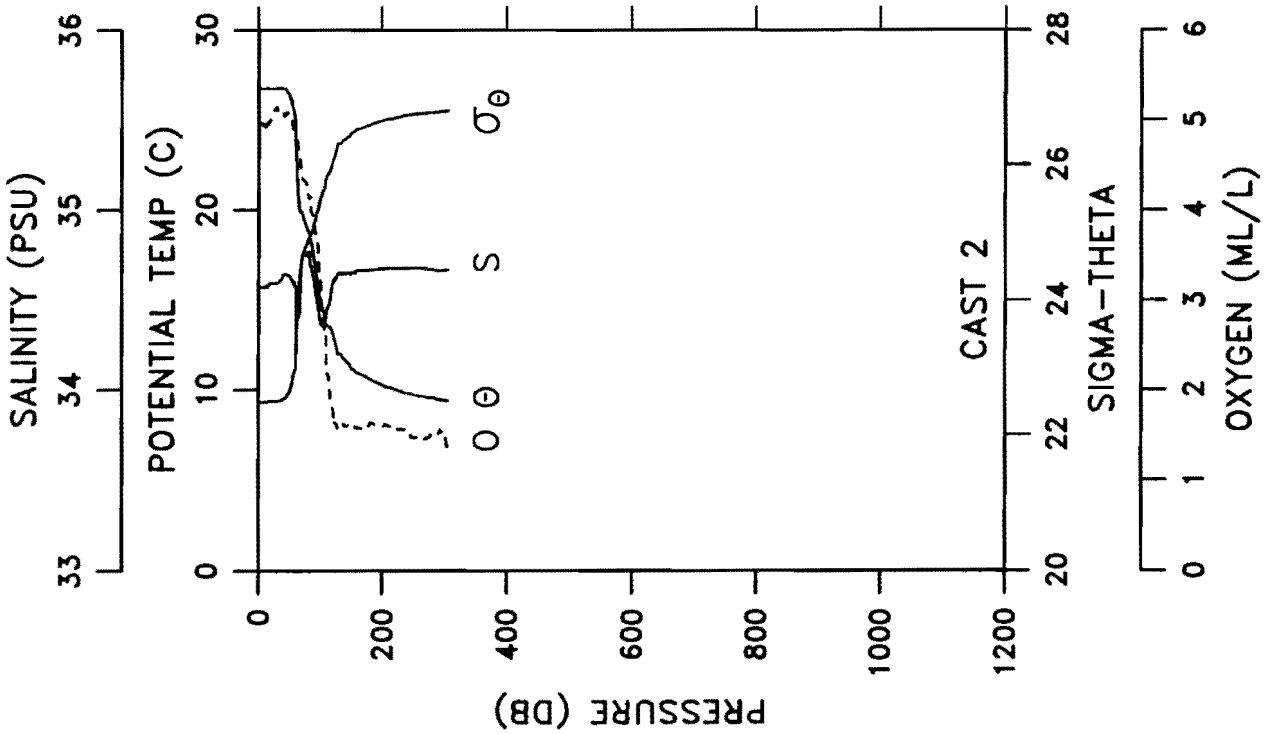


| PRES (DB) | POT TEMP (C) | SAL (FSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.839 | 34.653 | 4.75 | 22.510 | 0.000 |
| 10 | 26.850 | 34.640 | 4.77 | 22.496 | 0.053 |
| 20 | 26.847 | 34.645 | 4.80 | 22.501 | 0.107 |
| 30 | 26.852 | 34.644 | 4.88 | 22.498 | 0.160 |
| 40 | 26.851 | 34.643 | 4.83 | 22.498 | 0.214 |
| 50 | 26.842 | 34.645 | 4.79 | 22.503 | 0.267 |
| 60 | 26.848 | 34.676 | 4.75 | 22.587 | 0.321 |
| 70 | 19.866 | 34.356 | 4.41 | 24.307 | 0.368 |
| 80 | 18.781 | 34.715 | 3.92 | 24.860 | 0.401 |
| 90 | 16.834 | 34.531 | 3.48 | 25.194 | 0.431 |
| 100 | 15.145 | 34.386 | 2.96 | 25.468 | 0.457 |
| 110 | 13.470 | 34.446 | 1.98 | 25.869 | 0.480 |
| 120 | 12.717 | 34.624 | 1.39 | 26.159 | 0.500 |
| 130 | 11.751 | 34.648 | 1.42 | 26.364 | 0.518 |
| 140 | 11.289 | 34.649 | 1.41 | 26.450 | 0.534 |
| 150 | 11.097 | 34.662 | 1.36 | 26.495 | 0.550 |
| 160 | 10.888 | 34.666 | 1.31 | 26.536 | 0.565 |
| 170 | 10.710 | 34.669 | 1.32 | 26.570 | 0.580 |
| 180 | 10.623 | 34.678 | 1.29 | 26.593 | 0.595 |
| 190 | 10.483 | 34.676 | 1.29 | 26.616 | 0.610 |
| 200 | 10.310 | 34.672 | 1.36 | 26.643 | 0.624 |
| 250 | 9.802 | 34.675 | 1.31 | 26.732 | 0.694 |
| 300 | 9.446 | 34.664 | 1.35 | 26.783 | 0.761 |
| 350 | 9.119 | 34.656 | 1.24 | 26.830 | 0.826 |
| 400 | 8.833 | 34.645 | 1.14 | 26.867 | 0.889 |
| 450 | 8.357 | 34.624 | 0.84 | 26.925 | 0.951 |
| 500 | 7.732 | 34.598 | 0.72 | 26.998 | 1.010 |
| 550 | 7.299 | 34.584 | 0.70 | 27.050 | 1.065 |
| 600 | 6.810 | 34.568 | 0.71 | 27.105 | 1.119 |
| 650 | 6.388 | 34.558 | 0.86 | 27.154 | 1.170 |
| 700 | 5.975 | 34.552 | 0.89 | 27.202 | 1.219 |
| 750 | 5.679 | 34.549 | 0.90 | 27.237 | 1.266 |
| 800 | 5.385 | 34.548 | 0.94 | 27.272 | 1.312 |
| 900 | 4.906 | 34.552 | 1.14 | 27.331 | 1.399 |
| 1000 | 4.440 | 34.559 | 1.27 | 27.389 | 1.480 |
| 1500 | 2.833 | 34.609 | 1.70 | 27.588 | 1.821 |
| 2000 | 2.025 | 34.645 | 2.16 | 27.685 | 2.093 |
| 2500 | 1.671 | 34.666 | 2.49 | 27.729 | 2.334 |
| 3000 | 1.449 | 34.677 | 2.74 | 27.755 | 2.566 |
| 3500 | 1.233 | 34.686 | 3.23 | 27.777 | 2.788 |
| 4000 | 1.058 | 34.695 | 3.71 | 27.797 | 3.004 |
| 4034 | 1.051 | 34.696 | 3.78 | 27.797 | 3.018 |

CAST TG1-89-MB -002 DATE 13 MAY 89 TIME 2002 GMT
LAT 07 01.2N LONG 147 34.4W

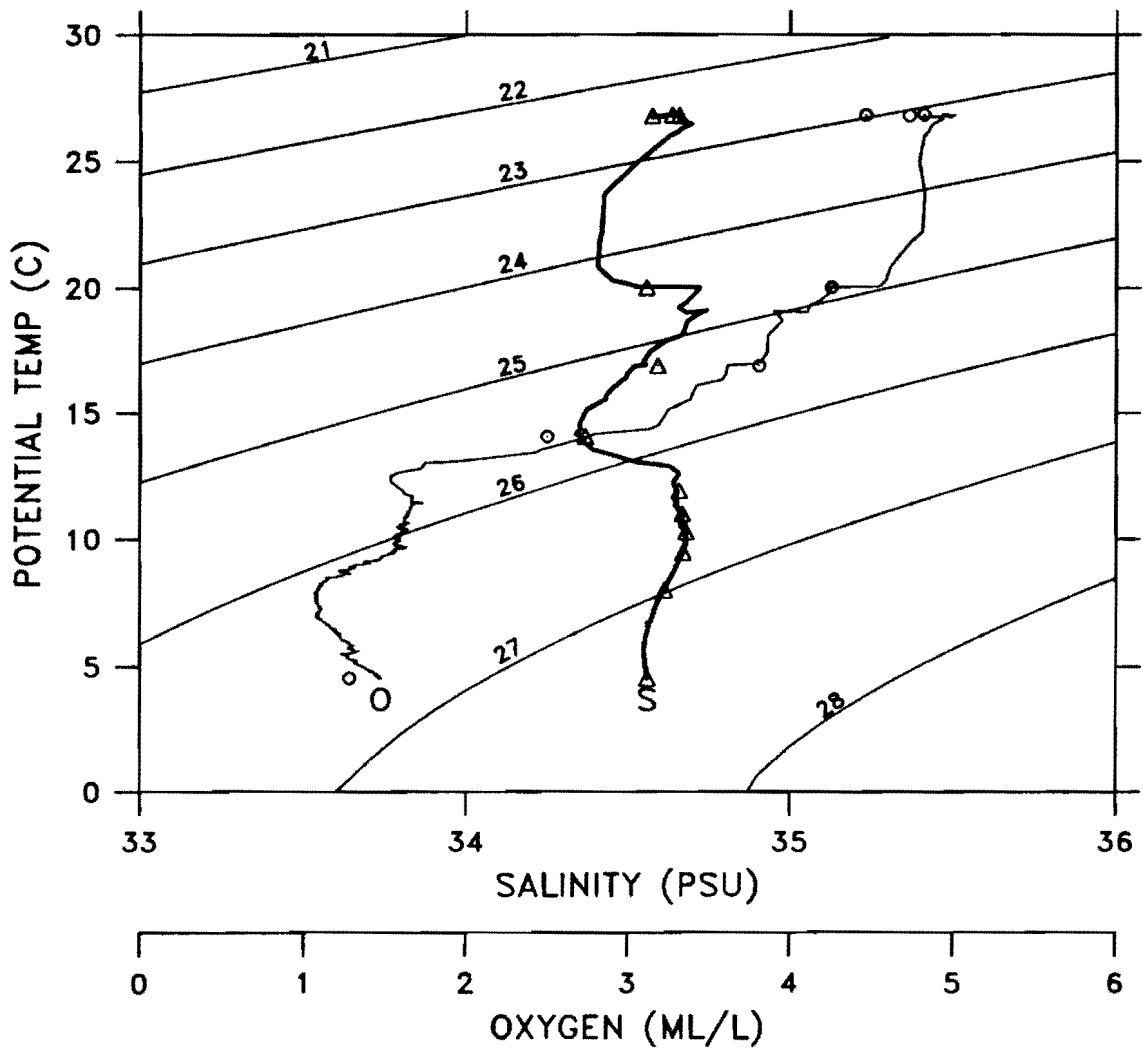


CAST TG1-89-MB -002 DATE 13 MAY 89 TIME 2002 GMT
 LAT 07 01.2N LONG 147 34.4W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 080 T SPD 17 KT VISIBILITY
 CLOUD AMOUNT DRY 26.1 WET 24.2 DEPTH 5690 M

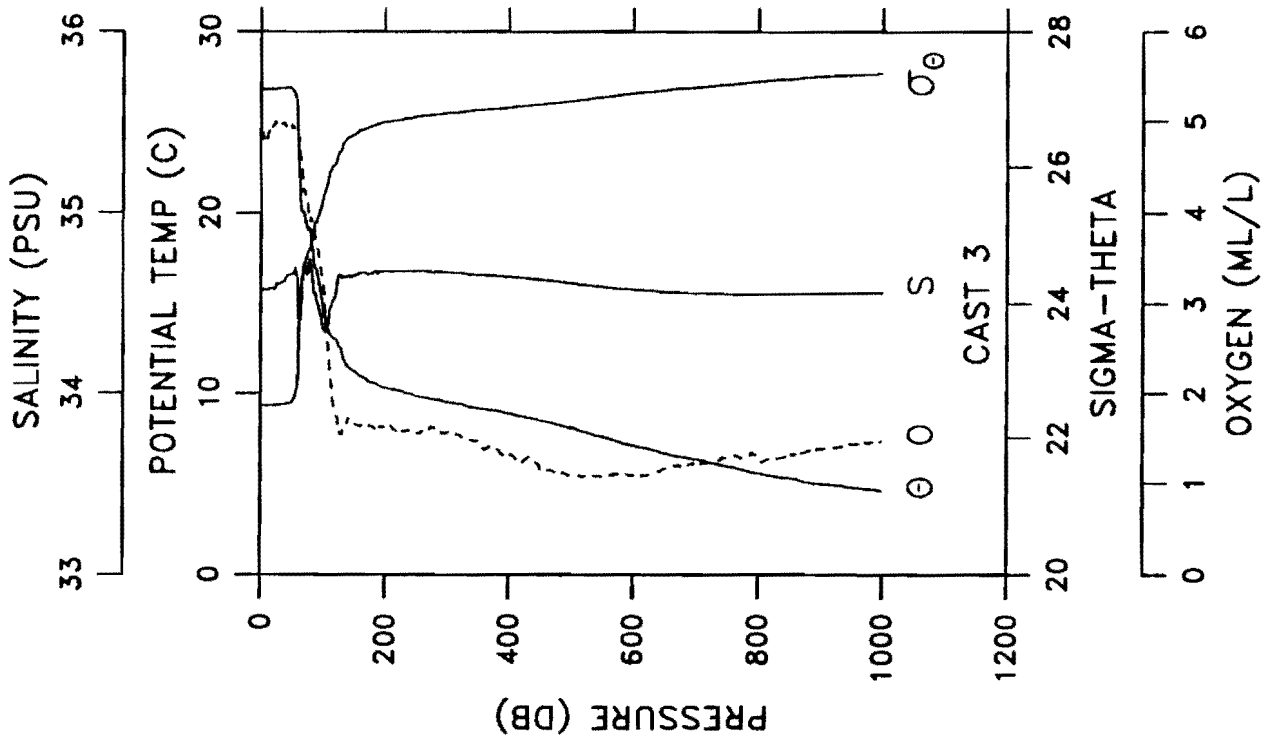


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D |
|-----------|--------------|-----------|------------|----------------|---------|
| 0 | 26.750 | 34.571 | 4.96 | 22.476 | 0.000 |
| 10 | 26.737 | 34.574 | 4.90 | 22.482 | 0.054 |
| 20 | 26.741 | 34.583 | 5.02 | 22.495 | 0.107 |
| 30 | 26.743 | 34.597 | 5.10 | 22.498 | 0.161 |
| 40 | 26.753 | 34.644 | 5.05 | 22.530 | 0.214 |
| 50 | 26.338 | 34.631 | 5.06 | 22.652 | 0.267 |
| 60 | 23.199 | 34.399 | 4.86 | 23.422 | 0.317 |
| 70 | 19.800 | 34.756 | 4.34 | 24.629 | 0.354 |
| 80 | 18.768 | 34.766 | 4.15 | 24.902 | 0.386 |
| 90 | 17.125 | 34.580 | 3.82 | 25.163 | 0.416 |
| 100 | 14.772 | 34.365 | 3.22 | 25.532 | 0.442 |
| 110 | 13.574 | 34.451 | 2.17 | 25.852 | 0.465 |
| 120 | 13.111 | 34.600 | 1.79 | 26.062 | 0.486 |
| 130 | 12.020 | 34.652 | 1.60 | 26.316 | 0.505 |
| 140 | 11.634 | 34.645 | 1.60 | 26.383 | 0.522 |
| 150 | 11.190 | 34.655 | 1.80 | 26.473 | 0.538 |
| 160 | 10.944 | 34.665 | 1.59 | 26.525 | 0.554 |
| 170 | 10.801 | 34.665 | 1.57 | 26.551 | 0.569 |
| 180 | 10.589 | 34.667 | 1.63 | 26.590 | 0.584 |
| 190 | 10.436 | 34.670 | 1.60 | 26.620 | 0.599 |
| 200 | 10.273 | 34.673 | 1.60 | 26.650 | 0.613 |
| 250 | 9.721 | 34.677 | 1.47 | 26.748 | 0.682 |
| 300 | 9.427 | 34.667 | 1.54 | 26.789 | 0.748 |
| 306 | 9.386 | 34.667 | 1.35 | 26.795 | 0.756 |

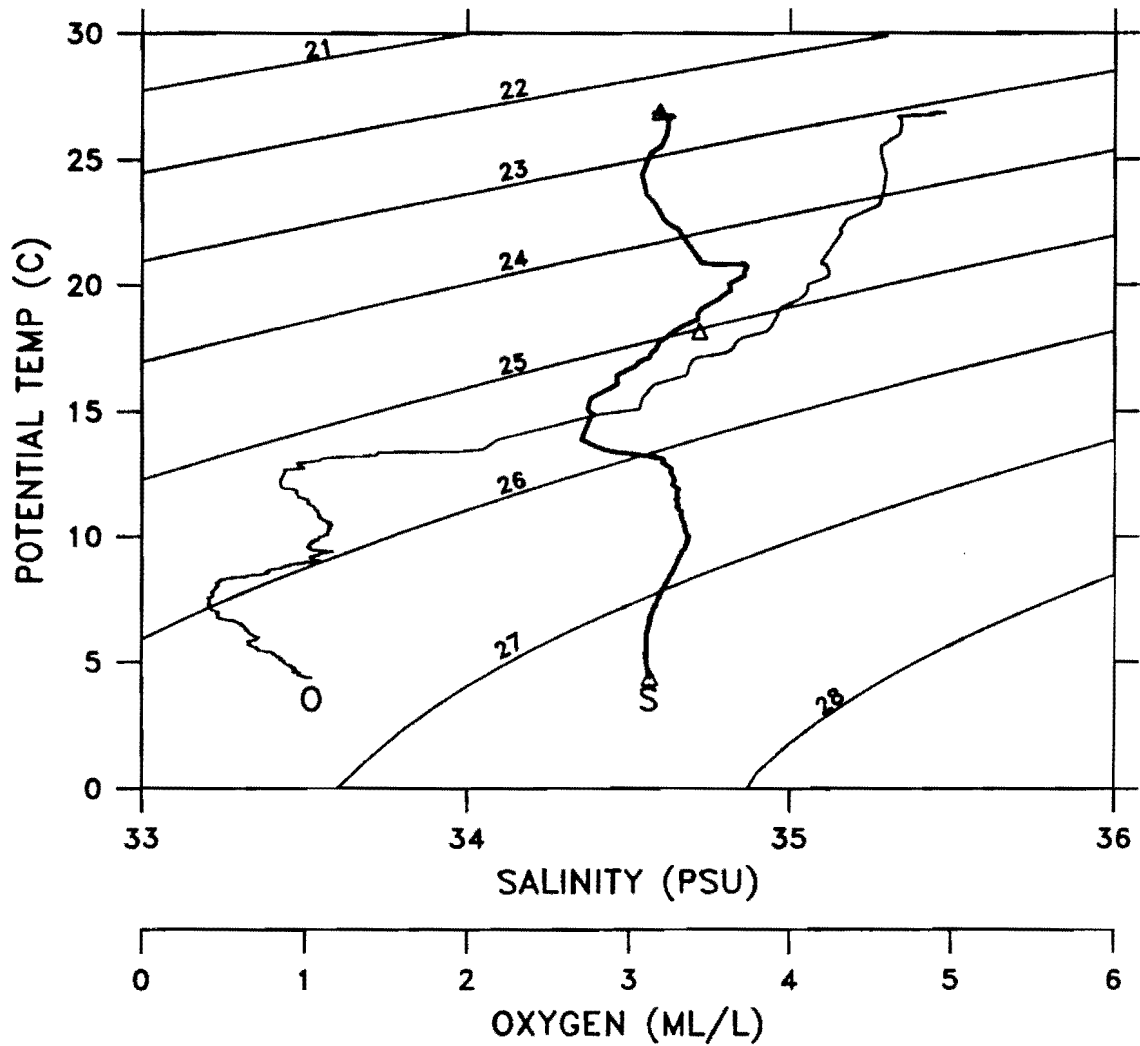
CAST TG1-89-MB -003 DATE 13 MAY 89 TIME 1059 GMT
LAT 07 04.8N LONG 147 30.5W



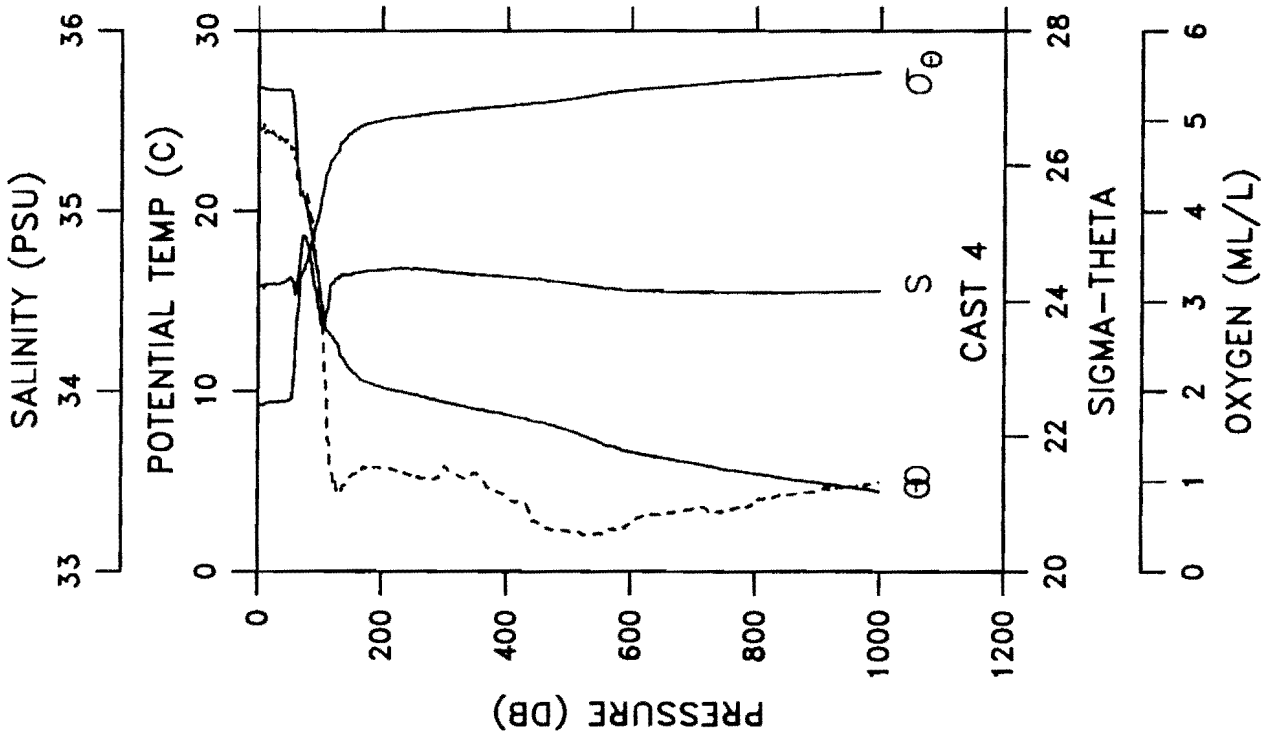
CAST 161-89-MB -003 DATE 13 MAY 89 TIME 1059 GMT
 LAT 07 04.8N LONG 147 30.5W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 050 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 26.1 WET DEPTH M



CAST TG1-89-MB -004 DATE 14 MAY 89 TIME 0111 GMT
LAT 06 59.7N LONG 147 31.0W

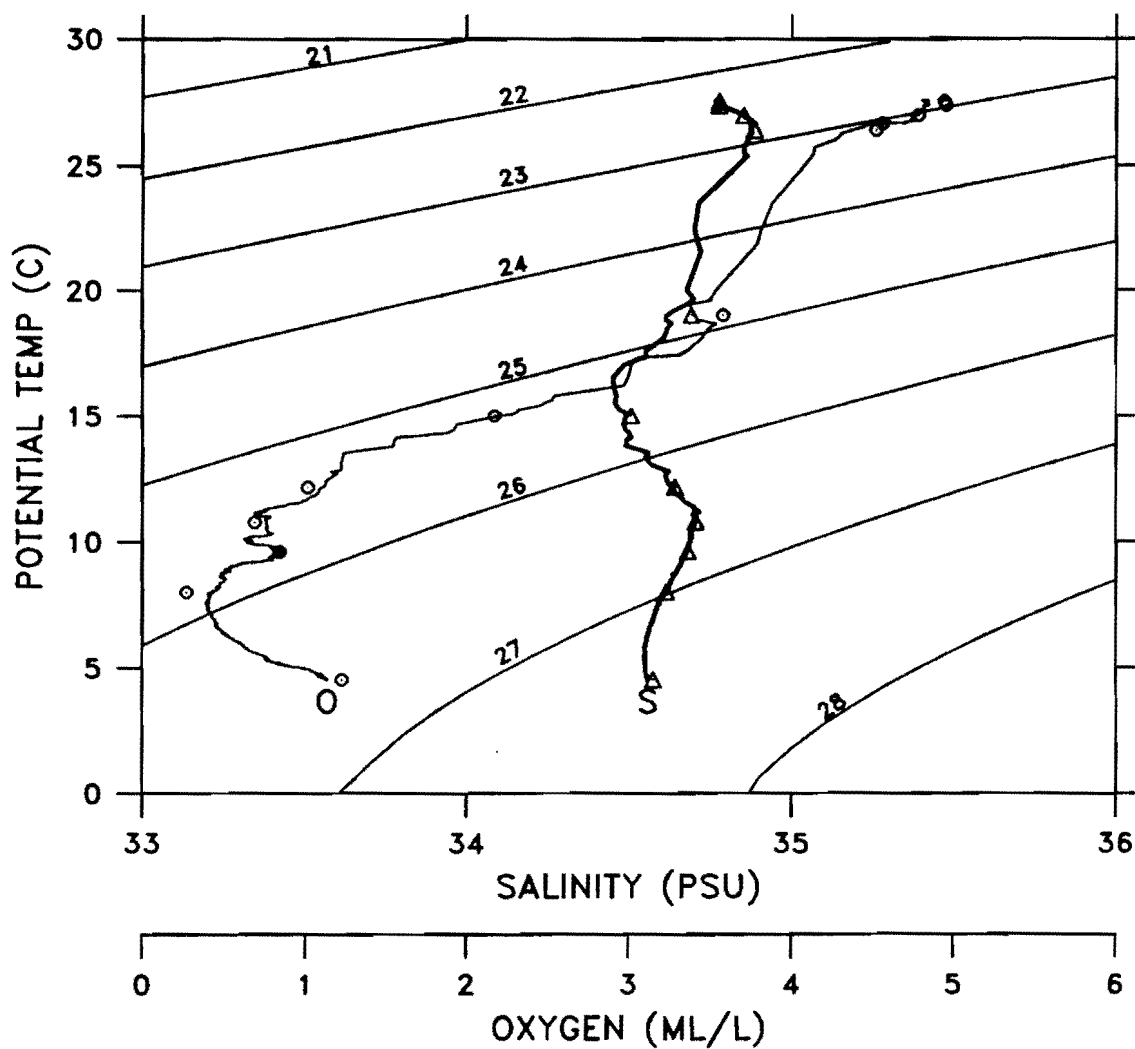


CAST T61-89-MB -004 DATE 14 MAY 89 TIME 0111 GMT
 LAT 06 59.7N LONG 147 31.0W WEATHER SEA STATE
 BAROMETER 08 WIND DIR 036 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 29.1 WET 25.0 DEPTH 4817 M

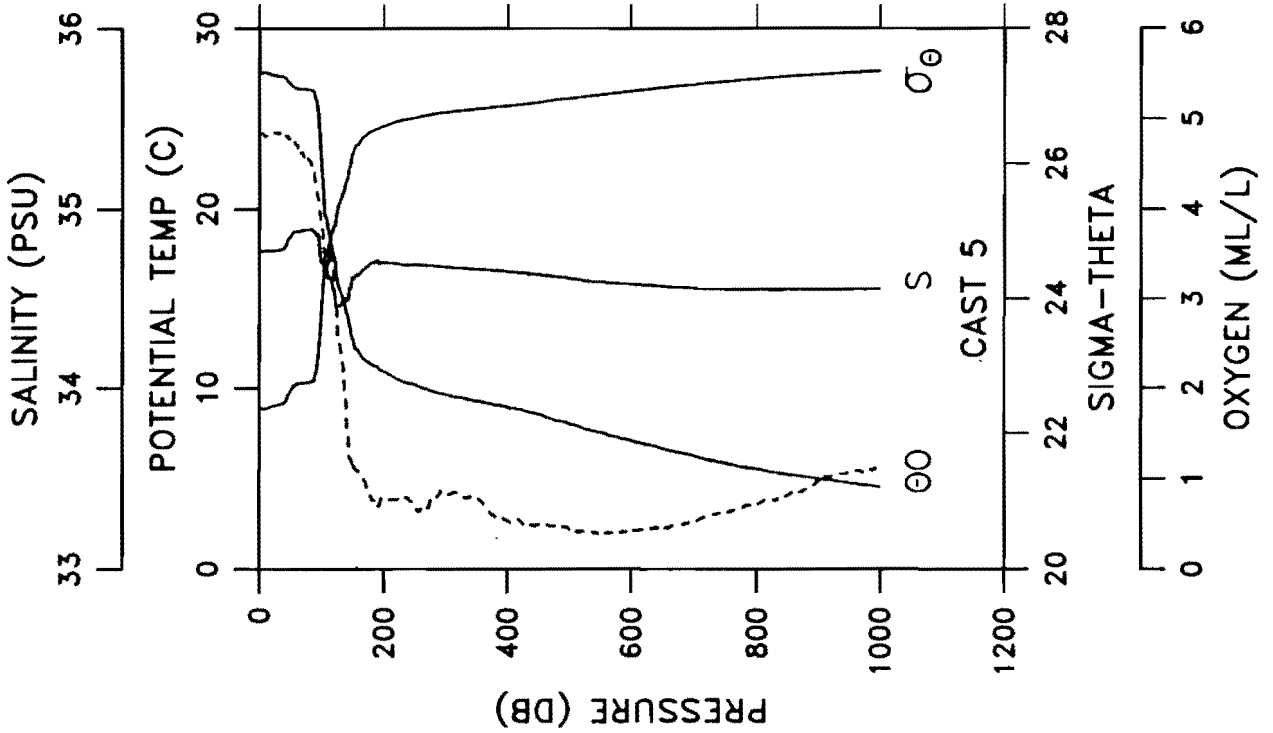


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.806 | 34.588 | 4.90 | 22.471 | 0.000 |
| 10 | 26.770 | 34.593 | 4.86 | 22.487 | 0.054 |
| 20 | 26.730 | 34.598 | 4.86 | 22.503 | 0.107 |
| 30 | 26.708 | 34.597 | 4.86 | 22.509 | 0.160 |
| 40 | 26.713 | 34.604 | 4.75 | 22.513 | 0.214 |
| 50 | 26.716 | 34.630 | 4.74 | 22.532 | 0.267 |
| 60 | 23.602 | 34.552 | 4.57 | 23.421 | 0.318 |
| 70 | 20.846 | 34.836 | 4.20 | 24.414 | 0.357 |
| 80 | 19.774 | 34.817 | 4.11 | 24.682 | 0.392 |
| 90 | 17.749 | 34.592 | 3.67 | 25.022 | 0.423 |
| 100 | 15.530 | 34.392 | 3.08 | 25.379 | 0.451 |
| 110 | 13.402 | 34.444 | 1.95 | 25.881 | 0.475 |
| 120 | 13.033 | 34.608 | 1.08 | 26.083 | 0.495 |
| 130 | 12.408 | 34.634 | 0.87 | 26.227 | 0.514 |
| 140 | 11.658 | 34.647 | 0.96 | 26.380 | 0.531 |
| 150 | 11.166 | 34.645 | 1.06 | 26.468 | 0.548 |
| 160 | 10.837 | 34.659 | 1.09 | 26.540 | 0.563 |
| 170 | 10.577 | 34.666 | 1.15 | 26.591 | 0.578 |
| 180 | 10.448 | 34.671 | 1.17 | 26.618 | 0.593 |
| 190 | 10.311 | 34.671 | 1.16 | 26.642 | 0.607 |
| 200 | 10.243 | 34.674 | 1.14 | 26.656 | 0.621 |
| 250 | 9.841 | 34.680 | 1.08 | 26.729 | 0.691 |
| 300 | 9.416 | 34.665 | 1.15 | 26.788 | 0.757 |
| 350 | 9.033 | 34.651 | 1.09 | 26.840 | 0.822 |
| 400 | 8.712 | 34.640 | 0.83 | 26.882 | 0.885 |
| 450 | 8.325 | 34.624 | 0.55 | 26.930 | 0.946 |
| 500 | 7.859 | 34.602 | 0.45 | 26.983 | 1.005 |
| 550 | 7.179 | 34.580 | 0.42 | 27.064 | 1.061 |
| 600 | 6.637 | 34.563 | 0.54 | 27.125 | 1.114 |
| 650 | 6.306 | 34.557 | 0.63 | 27.164 | 1.164 |
| 700 | 6.014 | 34.552 | 0.69 | 27.197 | 1.213 |
| 750 | 5.650 | 34.552 | 0.66 | 27.242 | 1.260 |
| 800 | 5.402 | 34.550 | 0.76 | 27.271 | 1.306 |
| 900 | 4.916 | 34.552 | 0.89 | 27.330 | 1.392 |
| 1000 | 4.407 | 34.562 | 0.99 | 27.394 | 1.474 |
| 1005 | 4.396 | 34.563 | 1.04 | 27.396 | 1.478 |

CAST TG1-89-MB -005 DATE 15 MAY 89 TIME 0029 GMT
LAT 06 59.6N LONG 142 30.9W

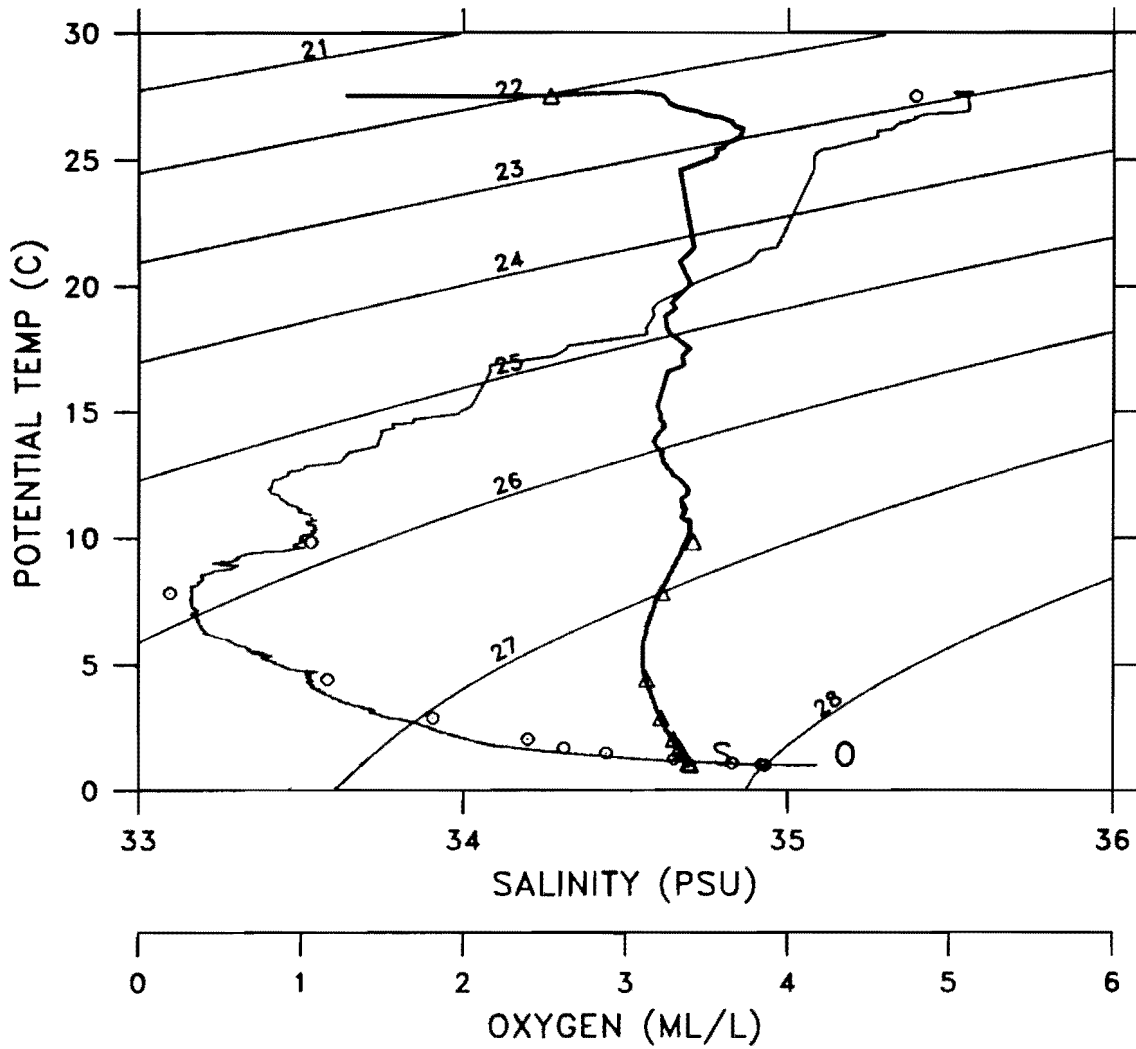


CAST TG1-89-MB --005 DATE 15 MAY 89 TIME 0029 GMT
 LAT 06 59.6N LONG 142 30.9W WEATHER SEA STATE
 BAROMETER 08 WIND DIR 074 T SPD 18 KT VISIBILITY
 CLOUD AMOUNT DRY 28.2 WET 25.0 DEPTH 4891 M

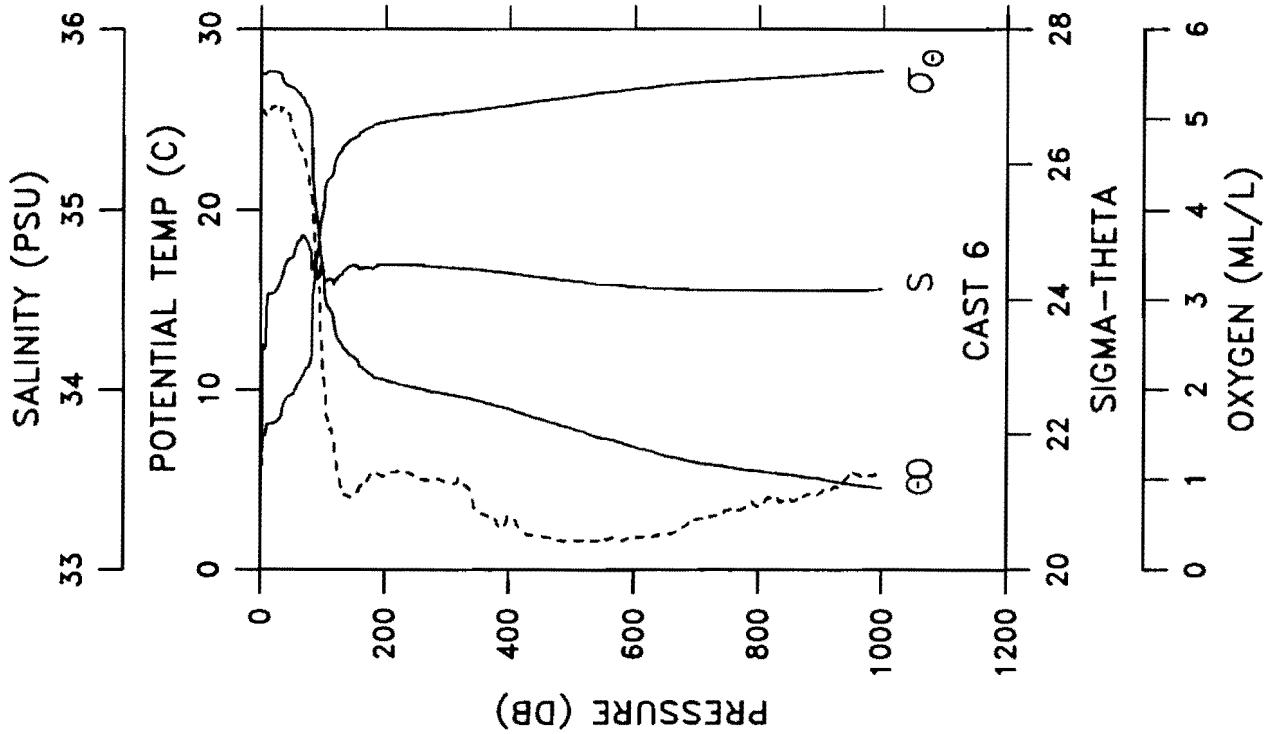


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.563 | 34.768 | 4.84 | 22.364 | 0.000 |
| 10 | 27.573 | 34.770 | 4.80 | 22.363 | 0.055 |
| 20 | 27.463 | 34.768 | 4.83 | 22.397 | 0.109 |
| 30 | 27.381 | 34.771 | 4.83 | 22.425 | 0.163 |
| 40 | 27.315 | 34.786 | 4.81 | 22.458 | 0.218 |
| 50 | 26.915 | 34.854 | 4.73 | 22.637 | 0.271 |
| 60 | 26.670 | 34.876 | 4.70 | 22.731 | 0.322 |
| 70 | 26.654 | 34.883 | 4.59 | 22.741 | 0.374 |
| 80 | 26.619 | 34.887 | 4.53 | 22.756 | 0.425 |
| 90 | 26.079 | 34.863 | 4.28 | 22.907 | 0.476 |
| 100 | 21.882 | 34.712 | 3.79 | 24.034 | 0.522 |
| 110 | 18.818 | 34.614 | 3.42 | 24.774 | 0.556 |
| 120 | 17.278 | 34.533 | 3.04 | 25.080 | 0.586 |
| 130 | 15.355 | 34.466 | 2.39 | 25.483 | 0.613 |
| 140 | 14.148 | 34.508 | 1.56 | 25.777 | 0.637 |
| 150 | 12.713 | 34.612 | 1.19 | 26.150 | 0.657 |
| 160 | 11.970 | 34.642 | 1.08 | 26.317 | 0.675 |
| 170 | 11.566 | 34.673 | 0.96 | 26.418 | 0.692 |
| 180 | 11.339 | 34.701 | 0.78 | 26.482 | 0.708 |
| 190 | 11.185 | 34.717 | 0.70 | 26.522 | 0.724 |
| 200 | 10.937 | 34.702 | 0.77 | 26.555 | 0.739 |
| 250 | 10.235 | 34.693 | 0.67 | 26.672 | 0.812 |
| 300 | 9.673 | 34.680 | 0.83 | 26.758 | 0.881 |
| 350 | 9.302 | 34.667 | 0.80 | 26.808 | 0.947 |
| 400 | 8.953 | 34.654 | 0.53 | 26.855 | 1.012 |
| 450 | 8.564 | 34.638 | 0.49 | 26.904 | 1.074 |
| 500 | 8.051 | 34.615 | 0.43 | 26.964 | 1.134 |
| 550 | 7.568 | 34.594 | 0.40 | 27.019 | 1.192 |
| 600 | 7.139 | 34.580 | 0.41 | 27.069 | 1.247 |
| 650 | 6.688 | 34.568 | 0.45 | 27.124 | 1.300 |
| 700 | 6.269 | 34.558 | 0.53 | 27.169 | 1.351 |
| 750 | 5.866 | 34.550 | 0.63 | 27.215 | 1.399 |
| 800 | 5.543 | 34.550 | 0.72 | 27.254 | 1.445 |
| 900 | 5.011 | 34.552 | 0.96 | 27.319 | 1.534 |
| 1000 | 4.555 | 34.557 | 1.13 | 27.375 | 1.616 |
| 1003 | 4.526 | 34.559 | 1.13 | 27.379 | 1.619 |

CAST TG1-89-MB -006 DATE 17 MAY 89 TIME 1228 GMT
LAT 07 04.5N LONG 140 02.2W

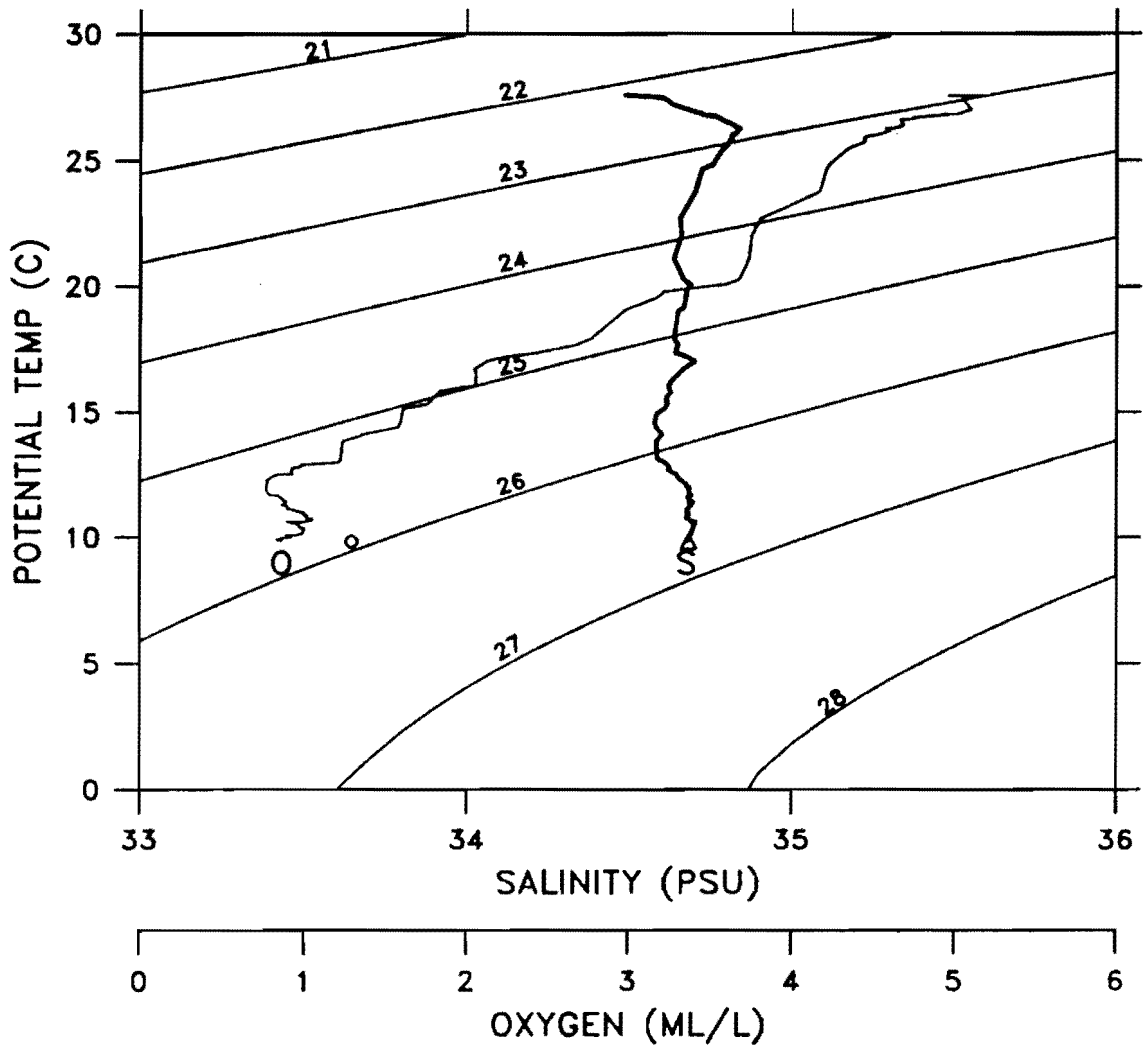


CAST TG1-89-MB -006 DATE 17 MAY 89 TIME 1228 GMT
 LAT 07 04.5N LONG 140 02.2W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 012 T SPD 05 KT VISIBILITY
 CLOUD AMOUNT DRY 26.2 WET 24.0 DEPTH 4831 M

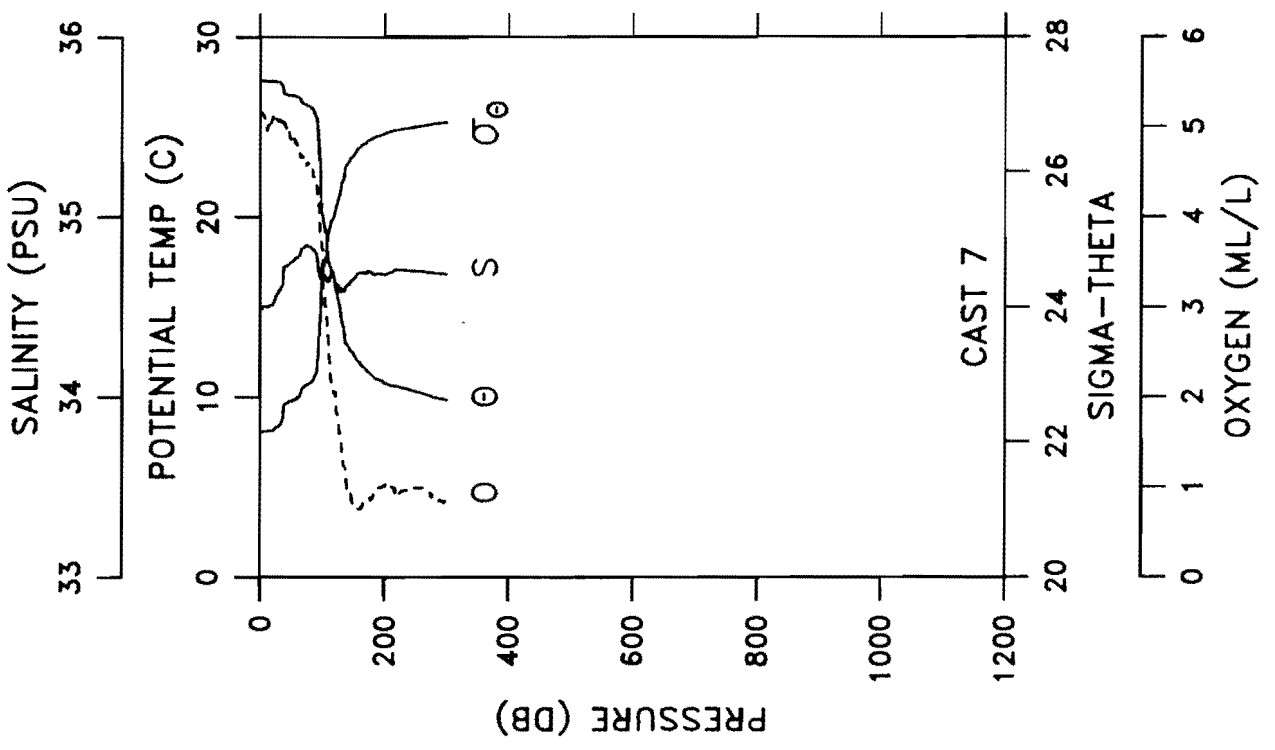


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SGK-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.496 | 33.639 | 5.11 | 21.537 | 0.000 |
| 10 | 27.605 | 34.485 | 5.02 | 22.138 | 0.059 |
| 20 | 27.638 | 34.537 | 5.13 | 22.166 | 0.116 |
| 30 | 27.560 | 34.589 | 5.12 | 22.230 | 0.172 |
| 40 | 26.926 | 34.697 | 5.11 | 22.515 | 0.227 |
| 50 | 26.788 | 34.734 | 4.94 | 22.587 | 0.280 |
| 60 | 26.458 | 34.827 | 4.73 | 22.761 | 0.332 |
| 70 | 26.102 | 34.859 | 4.56 | 22.897 | 0.383 |
| 80 | 25.377 | 34.779 | 4.21 | 23.061 | 0.432 |
| 90 | 19.975 | 34.693 | 3.40 | 24.535 | 0.473 |
| 100 | 17.036 | 34.677 | 2.36 | 25.259 | 0.503 |
| 110 | 14.523 | 34.618 | 1.62 | 25.781 | 0.528 |
| 120 | 13.362 | 34.615 | 1.28 | 26.022 | 0.549 |
| 130 | 12.599 | 34.641 | 0.92 | 26.195 | 0.569 |
| 140 | 12.113 | 34.681 | 0.82 | 26.320 | 0.586 |
| 150 | 11.877 | 34.692 | 0.80 | 26.374 | 0.603 |
| 160 | 11.319 | 34.678 | 0.92 | 26.467 | 0.620 |
| 170 | 11.087 | 34.684 | 0.98 | 26.514 | 0.636 |
| 180 | 10.799 | 34.672 | 1.06 | 26.557 | 0.651 |
| 190 | 10.662 | 34.695 | 1.08 | 26.599 | 0.666 |
| 200 | 10.546 | 34.698 | 1.04 | 26.622 | 0.680 |
| 250 | 10.116 | 34.696 | 1.02 | 26.695 | 0.751 |
| 300 | 9.750 | 34.681 | 0.96 | 26.746 | 0.820 |
| 350 | 9.392 | 34.670 | 0.68 | 26.798 | 0.887 |
| 400 | 8.929 | 34.651 | 0.60 | 26.856 | 0.952 |
| 450 | 8.346 | 34.626 | 0.38 | 26.928 | 1.013 |
| 500 | 7.842 | 34.606 | 0.32 | 26.988 | 1.072 |
| 550 | 7.276 | 34.588 | 0.33 | 27.056 | 1.128 |
| 600 | 6.825 | 34.575 | 0.35 | 27.108 | 1.182 |
| 650 | 6.316 | 34.561 | 0.41 | 27.166 | 1.233 |
| 700 | 5.955 | 34.556 | 0.56 | 27.208 | 1.281 |
| 750 | 5.699 | 34.552 | 0.66 | 27.237 | 1.328 |
| 800 | 5.470 | 34.553 | 0.70 | 27.265 | 1.374 |
| 900 | 5.030 | 34.552 | 0.85 | 27.317 | 1.462 |
| 1000 | 4.521 | 34.559 | 1.04 | 27.380 | 1.544 |
| 1500 | 2.925 | 34.607 | 1.52 | 27.578 | 1.889 |
| 2000 | 2.042 | 34.644 | 2.02 | 27.683 | 2.166 |
| 2500 | 1.691 | 34.666 | 2.33 | 27.728 | 2.408 |
| 3000 | 1.496 | 34.675 | 2.60 | 27.750 | 2.642 |
| 3500 | 1.259 | 34.686 | 3.06 | 27.776 | 2.868 |
| 4000 | 1.089 | 34.693 | 3.54 | 27.793 | 3.085 |
| 4500 | 1.014 | 34.695 | 3.88 | 27.800 | 3.302 |
| 5000 | 0.999 | 34.696 | 4.08 | 27.802 | 3.525 |
| 5103 | 0.999 | 34.696 | 4.16 | 27.801 | 3.572 |

CAST TG1-89-MB -007 DATE 17 MAY 89 TIME 0421 GMT
LAT 07 03.7N LONG 140 09.2W



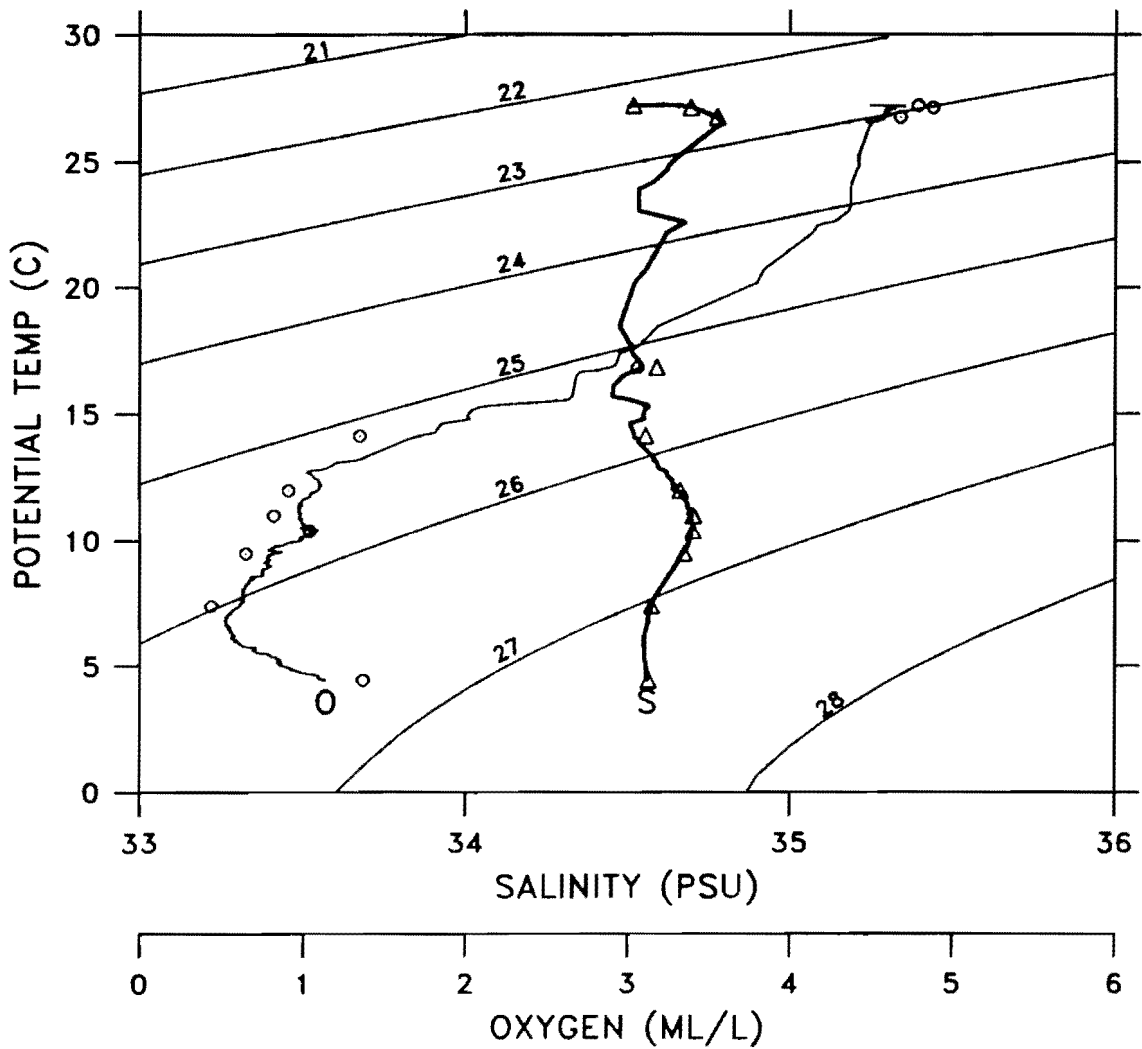
CAST TG1-89-MB -007 DATE 17 MAY 89 TIME 0421 GMT
 LAT 07 03.7N LONG 140 08.2W WEATHER SEA STATE
 BAROMETER 08 WIND DIR 160 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 27.7 WET 24.6 DEPTH 4856 M



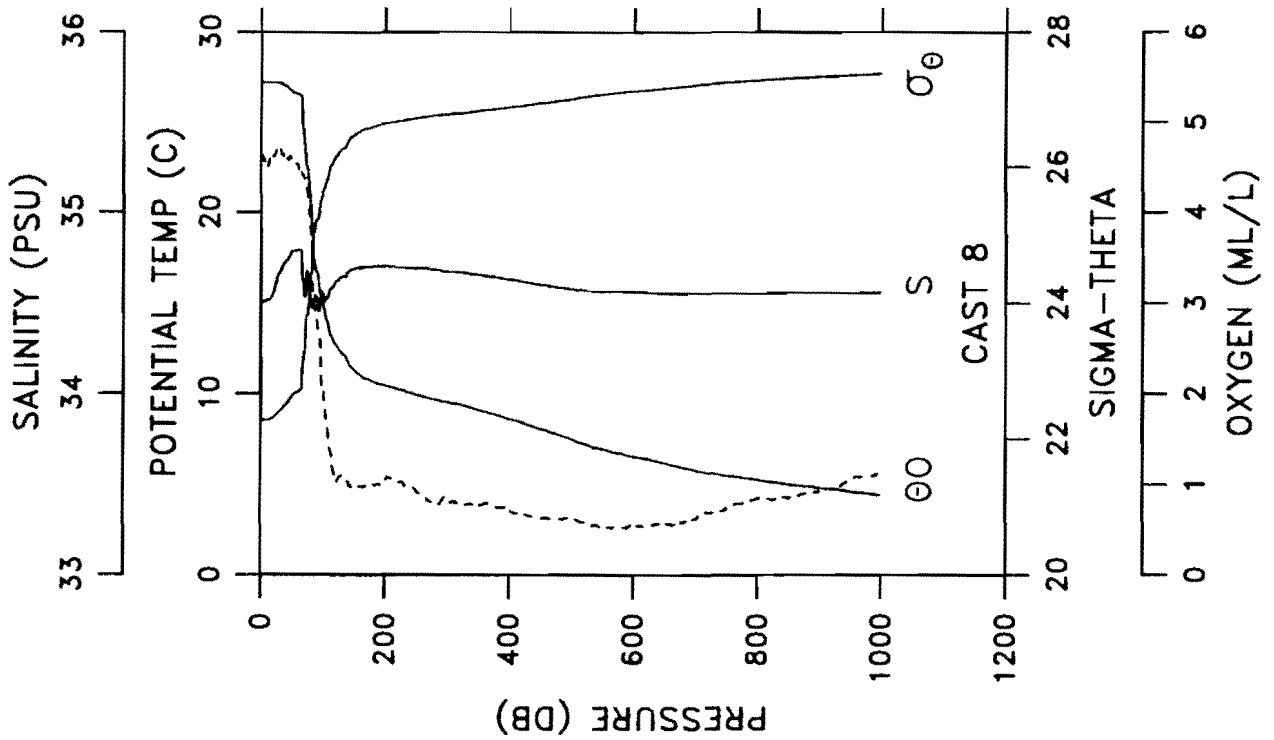
| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.575 | 34.488 | 5.16 | 22.150 | 0.000 |
| 10 | 27.567 | 34.502 | 5.02 | 22.163 | 0.057 |
| 20 | 27.566 | 34.511 | 5.10 | 22.170 | 0.113 |
| 30 | 27.509 | 34.588 | 5.06 | 22.246 | 0.169 |
| 40 | 26.833 | 34.725 | 5.02 | 22.566 | 0.224 |
| 50 | 26.761 | 34.747 | 4.86 | 22.605 | 0.277 |
| 60 | 26.702 | 34.772 | 4.80 | 22.643 | 0.330 |
| 70 | 26.327 | 34.830 | 4.67 | 22.804 | 0.381 |
| 80 | 26.151 | 34.835 | 4.60 | 22.864 | 0.432 |
| 90 | 25.608 | 34.804 | 4.40 | 23.009 | 0.481 |
| 100 | 20.280 | 34.671 | 3.68 | 24.438 | 0.525 |
| 110 | 17.673 | 34.654 | 2.68 | 25.088 | 0.558 |
| 120 | 16.522 | 34.655 | 2.06 | 25.363 | 0.565 |
| 130 | 14.588 | 34.581 | 1.59 | 25.739 | 0.610 |
| 140 | 12.922 | 34.619 | 0.98 | 26.114 | 0.631 |
| 150 | 12.460 | 34.650 | 0.81 | 26.229 | 0.650 |
| 160 | 11.943 | 34.689 | 0.76 | 26.359 | 0.667 |
| 170 | 11.580 | 34.684 | 0.85 | 26.423 | 0.684 |
| 180 | 11.249 | 34.694 | 0.89 | 26.492 | 0.700 |
| 190 | 10.982 | 34.685 | 0.99 | 26.534 | 0.715 |
| 200 | 10.788 | 34.679 | 1.01 | 26.564 | 0.731 |
| 250 | 10.327 | 34.700 | 1.00 | 26.662 | 0.803 |
| 300 | 9.843 | 34.682 | 0.86 | 26.731 | 0.873 |
| 301 | 9.826 | 34.681 | 0.86 | 26.733 | 0.875 |

CAST TG1-89-MB -008 DATE 18 MAY 89 TIME 1650 GMT

LAT 06 59.6N LONG 137 28.9W

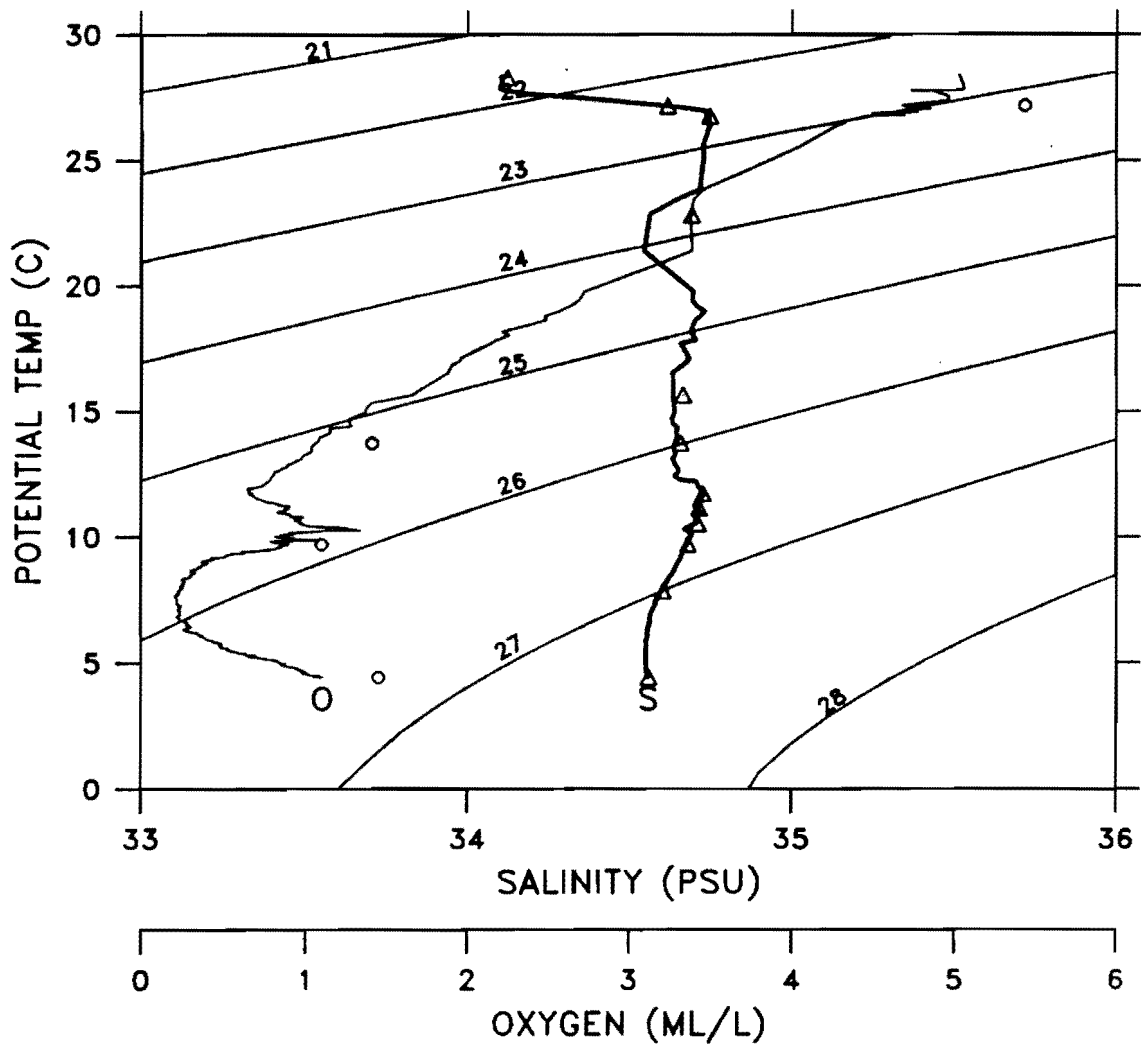


CAST 161-89-MB -008 DATE 18 MAY 89 TIME 1650 GMT
 LAT 06 59.6N LONG 137 28.9W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 350 T SPD 02 KT VISIBILITY
 CLOUD AMOUNT DRY 28.1 WET 24.5 DEPTH 4599 M

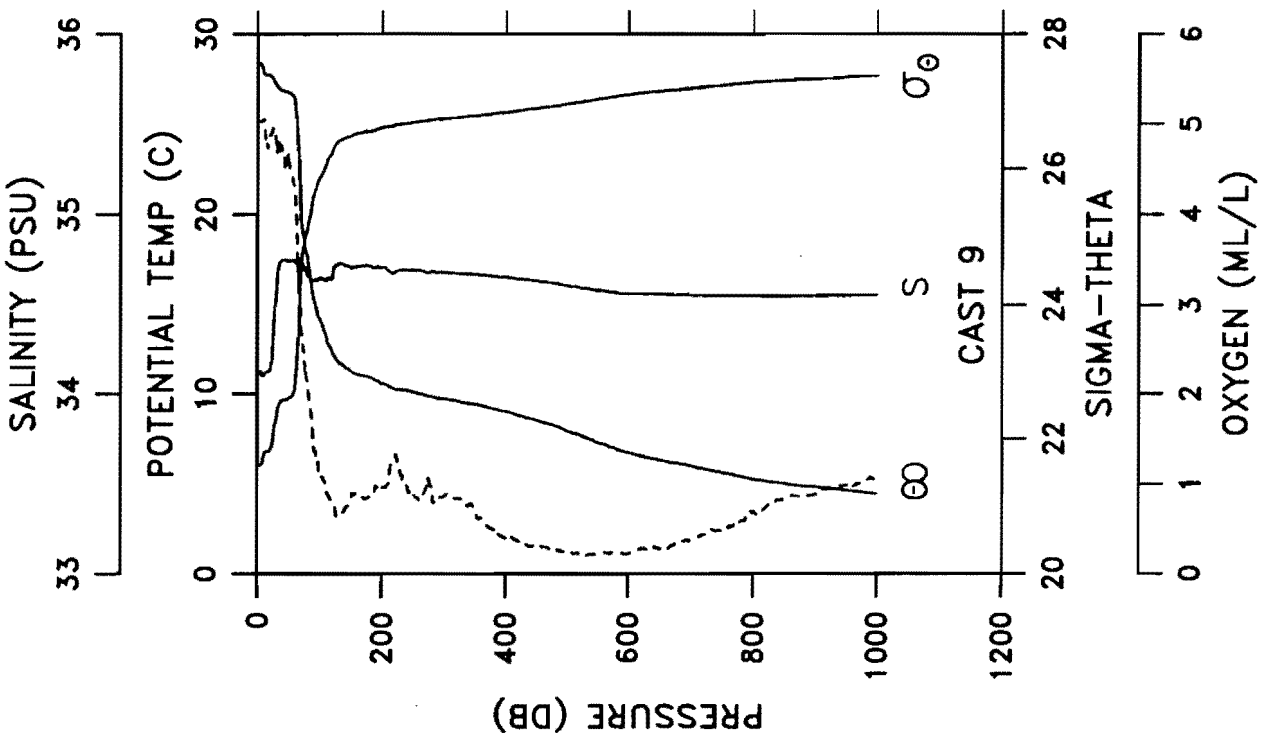


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.221 | 34.506 | 4.61 | 22.277 | 0.000 |
| 10 | 27.224 | 34.514 | 4.51 | 22.282 | 0.055 |
| 20 | 27.226 | 34.556 | 4.61 | 22.313 | 0.111 |
| 30 | 27.209 | 34.667 | 4.70 | 22.402 | 0.166 |
| 40 | 27.029 | 34.723 | 4.62 | 22.502 | 0.220 |
| 50 | 26.743 | 34.783 | 4.58 | 22.638 | 0.272 |
| 60 | 26.577 | 34.791 | 4.51 | 22.697 | 0.324 |
| 70 | 23.901 | 34.533 | 4.37 | 23.319 | 0.374 |
| 80 | 20.164 | 34.521 | 3.80 | 24.354 | 0.415 |
| 90 | 16.718 | 34.531 | 2.84 | 25.222 | 0.445 |
| 100 | 14.898 | 34.547 | 2.01 | 25.646 | 0.471 |
| 110 | 13.496 | 34.563 | 1.45 | 25.955 | 0.493 |
| 120 | 12.777 | 34.612 | 1.04 | 26.138 | 0.513 |
| 130 | 12.243 | 34.642 | 1.10 | 26.265 | 0.531 |
| 140 | 11.797 | 34.668 | 1.04 | 26.370 | 0.549 |
| 150 | 11.358 | 34.686 | 0.98 | 26.466 | 0.565 |
| 160 | 11.045 | 34.689 | 0.98 | 26.525 | 0.581 |
| 170 | 10.849 | 34.698 | 0.98 | 26.568 | 0.596 |
| 180 | 10.691 | 34.698 | 0.99 | 26.596 | 0.611 |
| 190 | 10.582 | 34.703 | 1.01 | 26.619 | 0.625 |
| 200 | 10.463 | 34.701 | 1.01 | 26.639 | 0.640 |
| 250 | 9.962 | 34.690 | 0.95 | 26.717 | 0.710 |
| 300 | 9.553 | 34.672 | 0.87 | 26.771 | 0.778 |
| 350 | 9.114 | 34.555 | 0.76 | 26.830 | 0.843 |
| 400 | 8.607 | 34.628 | 0.74 | 26.890 | 0.906 |
| 450 | 8.069 | 34.601 | 0.64 | 26.950 | 0.966 |
| 500 | 7.530 | 34.575 | 0.63 | 27.010 | 1.024 |
| 550 | 6.971 | 34.563 | 0.54 | 27.079 | 1.079 |
| 600 | 6.554 | 34.559 | 0.55 | 27.133 | 1.131 |
| 650 | 6.212 | 34.554 | 0.58 | 27.173 | 1.181 |
| 700 | 5.808 | 34.551 | 0.62 | 27.223 | 1.229 |
| 750 | 5.498 | 34.552 | 0.72 | 27.261 | 1.275 |
| 800 | 5.286 | 34.552 | 0.85 | 27.287 | 1.319 |
| 900 | 4.833 | 34.557 | 0.92 | 27.344 | 1.404 |
| 1000 | 4.442 | 34.561 | 1.12 | 27.390 | 1.485 |
| 1003 | 4.427 | 34.560 | 1.14 | 27.391 | 1.488 |

CAST TG1-89-MB -009 DATE 19 MAY 89 TIME 0132 GMT
LAT 07 03.2N LONG 132 23.4W

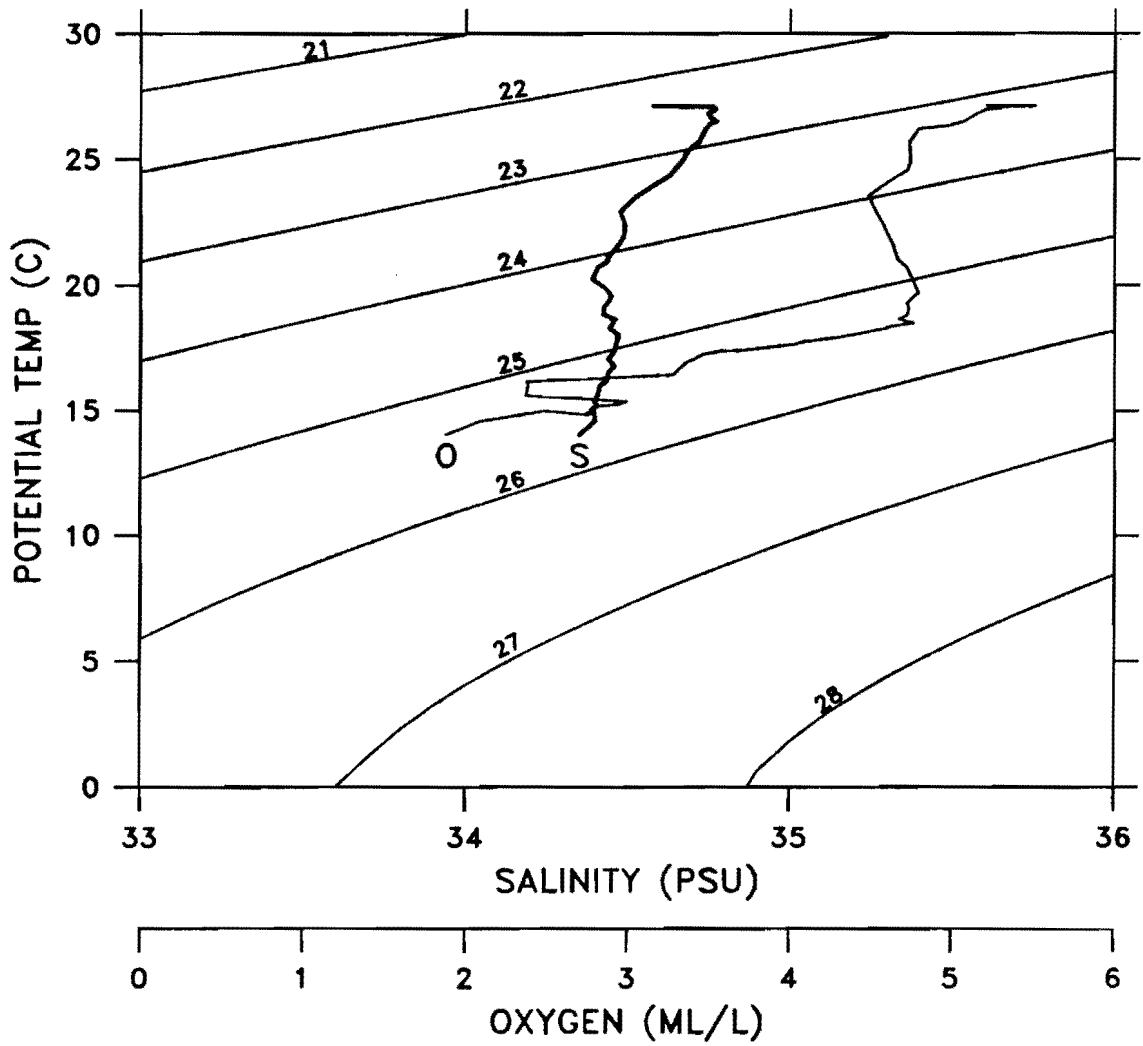


CAST 161-89-MB -009 DATE 19 MAY 89 TIME 0132 GMT
 LAT 07 03.2N LONG 132 23.4W WEATHER SEA STATE
 BAROMETER 06 WIND DIR 062 T SPD 05 KT VISIBILITY
 CLOUD AMOUNT DRY 27.9 WET 25.0 DEPTH 4600 M

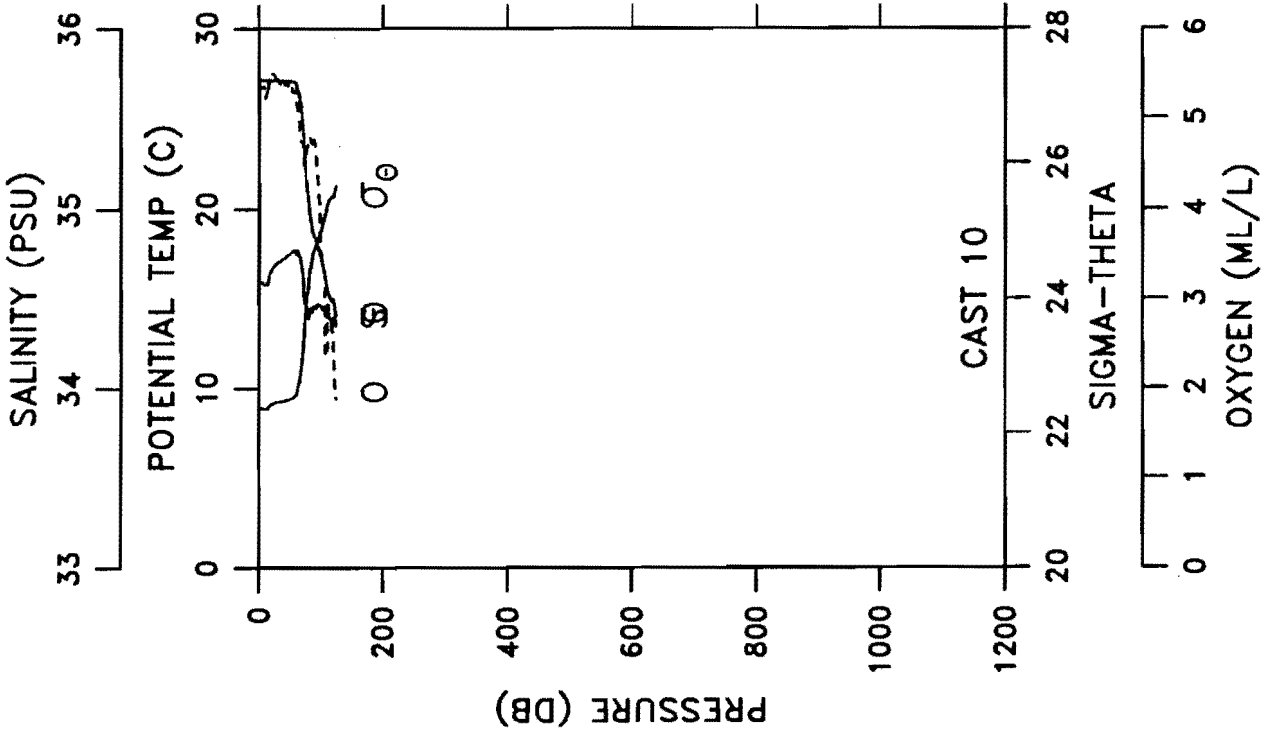


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 28.365 | 34.127 | 5.02 | 21.621 | 0.000 |
| 10 | 27.827 | 34.101 | 5.06 | 21.777 | 0.062 |
| 20 | 27.714 | 34.140 | 4.88 | 21.843 | 0.121 |
| 30 | 27.221 | 34.556 | 4.76 | 22.315 | 0.179 |
| 40 | 26.870 | 34.749 | 4.69 | 22.573 | 0.233 |
| 50 | 26.755 | 34.742 | 4.58 | 22.603 | 0.285 |
| 60 | 25.958 | 34.739 | 4.17 | 22.852 | 0.337 |
| 70 | 19.420 | 34.696 | 2.69 | 24.683 | 0.390 |
| 80 | 17.441 | 34.672 | 2.05 | 25.158 | 0.410 |
| 90 | 15.228 | 34.639 | 1.38 | 25.644 | 0.436 |
| 100 | 14.157 | 34.647 | 1.15 | 25.882 | 0.458 |
| 110 | 13.131 | 34.635 | 0.98 | 26.084 | 0.479 |
| 120 | 12.236 | 34.688 | 0.78 | 26.302 | 0.497 |
| 130 | 11.751 | 34.731 | 0.67 | 26.428 | 0.514 |
| 140 | 11.474 | 34.718 | 0.74 | 26.470 | 0.530 |
| 150 | 11.277 | 34.703 | 0.85 | 26.494 | 0.546 |
| 160 | 11.100 | 34.715 | 0.89 | 26.536 | 0.561 |
| 170 | 11.028 | 34.719 | 0.84 | 26.552 | 0.576 |
| 180 | 10.957 | 34.718 | 0.85 | 26.564 | 0.592 |
| 190 | 10.797 | 34.706 | 0.98 | 26.583 | 0.607 |
| 200 | 10.594 | 34.707 | 0.97 | 26.621 | 0.621 |
| 250 | 10.136 | 34.697 | 0.93 | 26.693 | 0.693 |
| 300 | 9.751 | 34.683 | 0.86 | 26.747 | 0.761 |
| 350 | 9.437 | 34.670 | 0.73 | 26.789 | 0.828 |
| 400 | 9.047 | 34.657 | 0.40 | 26.842 | 0.893 |
| 450 | 8.566 | 34.636 | 0.33 | 26.902 | 0.956 |
| 500 | 7.972 | 34.609 | 0.24 | 26.971 | 1.016 |
| 550 | 7.323 | 34.582 | 0.22 | 27.044 | 1.073 |
| 600 | 6.774 | 34.565 | 0.23 | 27.107 | 1.127 |
| 650 | 6.357 | 34.559 | 0.28 | 27.159 | 1.178 |
| 700 | 6.021 | 34.557 | 0.37 | 27.200 | 1.227 |
| 750 | 5.657 | 34.554 | 0.49 | 27.243 | 1.274 |
| 800 | 5.281 | 34.552 | 0.70 | 27.287 | 1.319 |
| 900 | 4.876 | 34.553 | 0.89 | 27.335 | 1.404 |
| 1000 | 4.462 | 34.557 | 1.05 | 27.385 | 1.486 |
| 1005 | 4.441 | 34.559 | 1.10 | 27.388 | 1.490 |

CAST TG1-89-MB -010 DATE 21 MAY 89 TIME GMT
LAT 08 59.9N LONG 140 15.6W

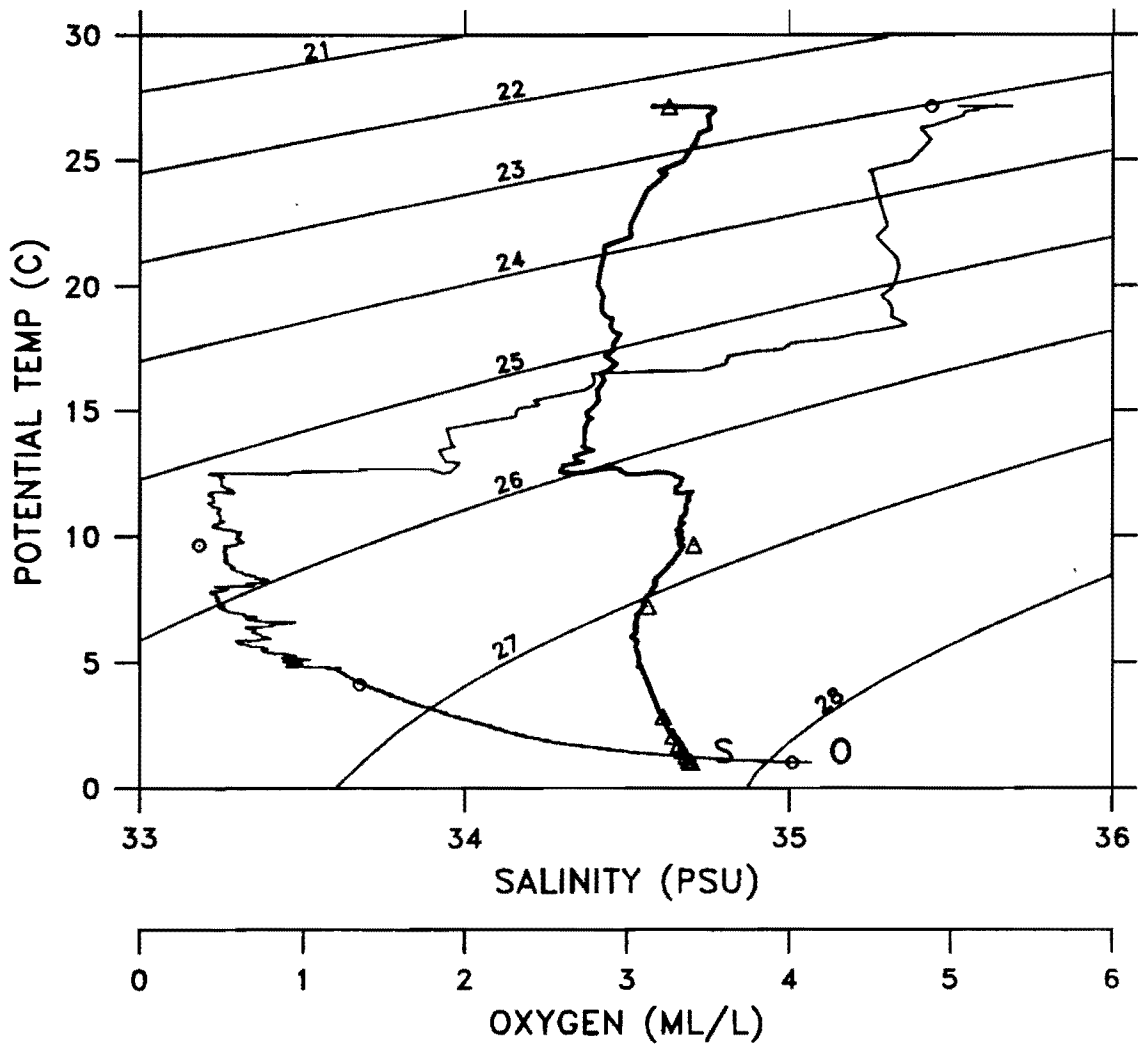


CAST TG1-89-MB -010 DATE 21 MAY 89 TIME GMT
 LAT 08 59.9N LONG 140 15.6W WEATHER SEA STATE
 BAROMETER 13 WIND DIR 074 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 26.2 WET 24.9 DEPTH 4702 M

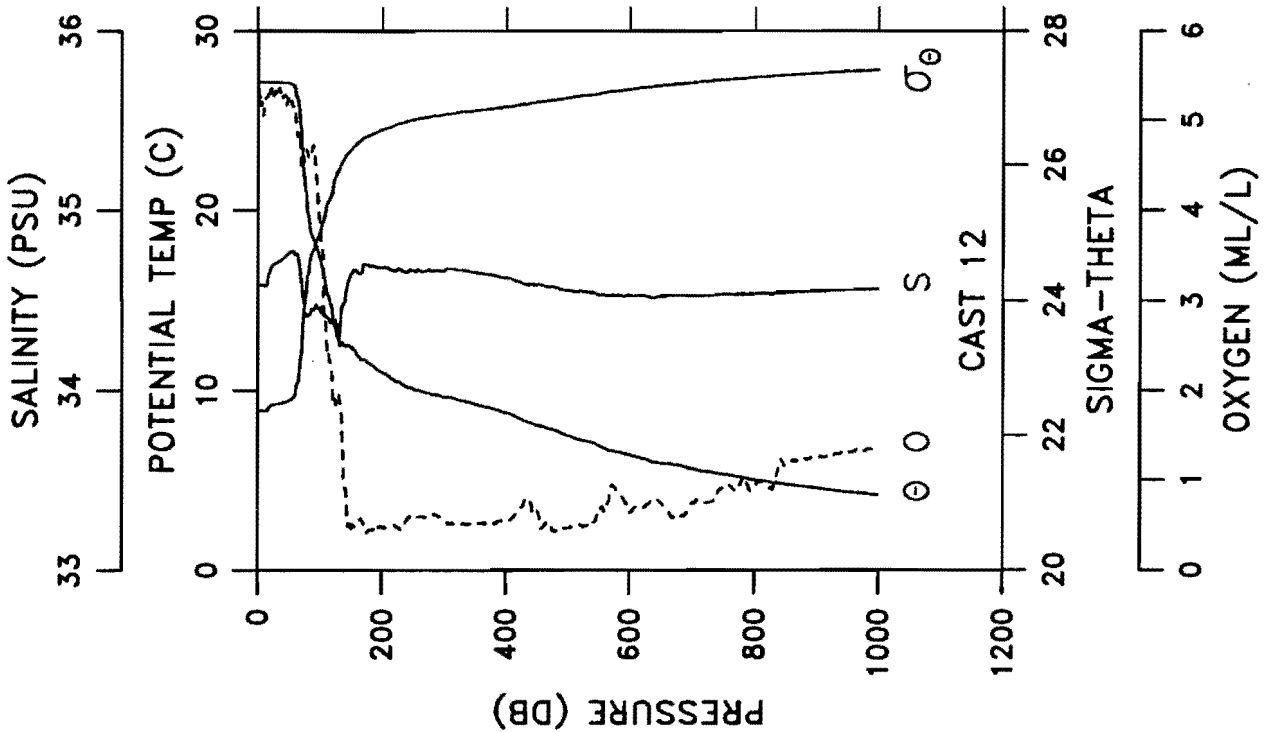


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.122 | 34.593 | 5.33 | 22.374 | 0.000 |
| 10 | 27.130 | 34.582 | 5.21 | 22.363 | 0.055 |
| 20 | 27.095 | 34.658 | 5.49 | 22.432 | 0.109 |
| 30 | 27.103 | 34.706 | 5.45 | 22.465 | 0.163 |
| 40 | 27.099 | 34.724 | 5.46 | 22.480 | 0.217 |
| 50 | 27.081 | 34.753 | 5.32 | 22.508 | 0.270 |
| 60 | 26.956 | 34.770 | 5.21 | 22.561 | 0.324 |
| 70 | 24.950 | 34.670 | 4.74 | 23.109 | 0.375 |
| 80 | 20.728 | 34.407 | 4.72 | 24.117 | 0.417 |
| 90 | 18.494 | 34.453 | 4.76 | 24.732 | 0.452 |
| 100 | 17.411 | 34.459 | 3.71 | 25.002 | 0.483 |
| 110 | 15.817 | 34.410 | 2.37 | 25.336 | 0.511 |
| 120 | 14.944 | 34.386 | 2.57 | 25.512 | 0.537 |
| 125 | 14.047 | 34.350 | 1.88 | 25.676 | 0.549 |

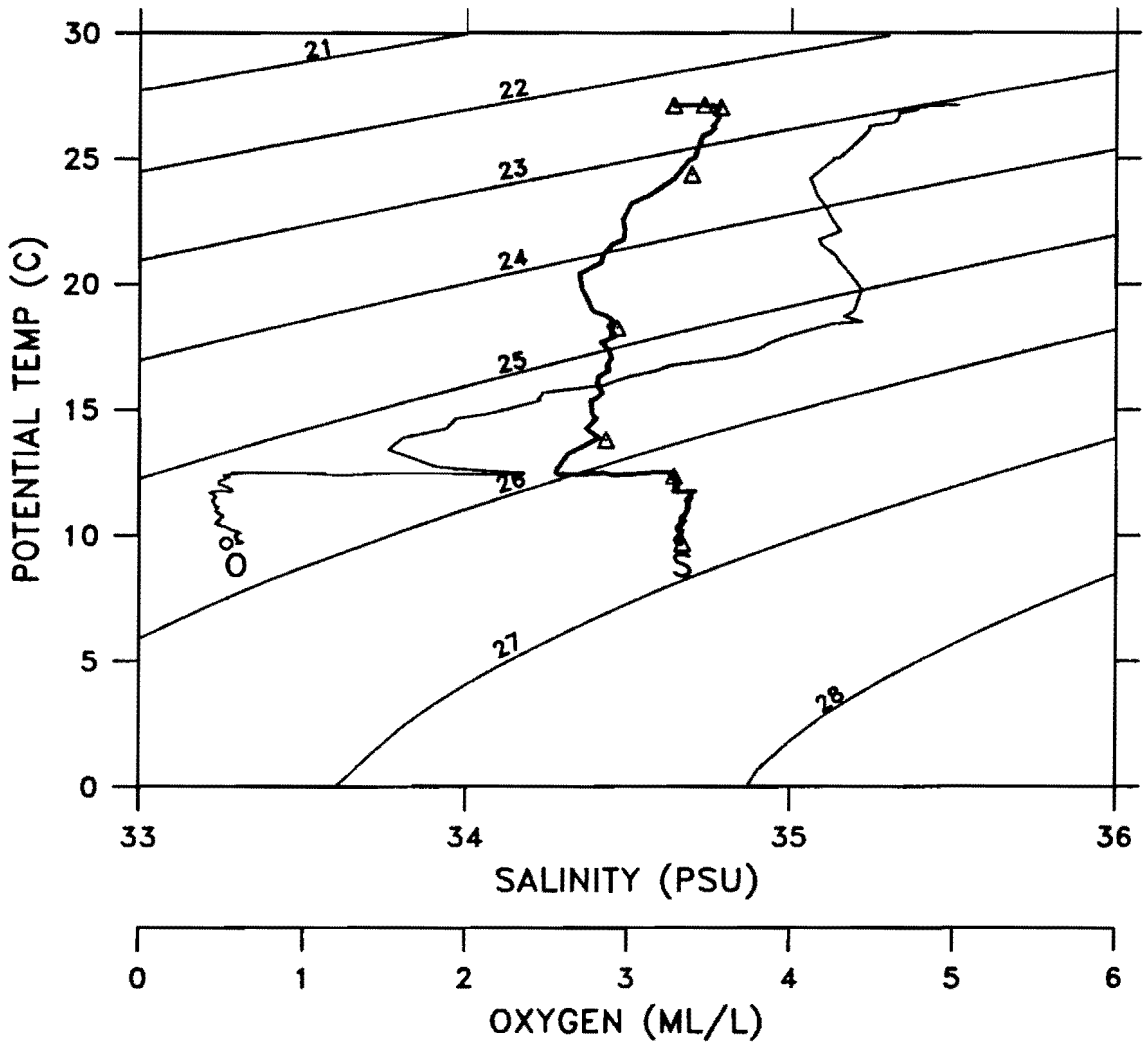
CAST TG1-89-MB -012 DATE 21 MAY 89 TIME 0909 GMT
LAT 08 58.3N LONG 140 16.5W



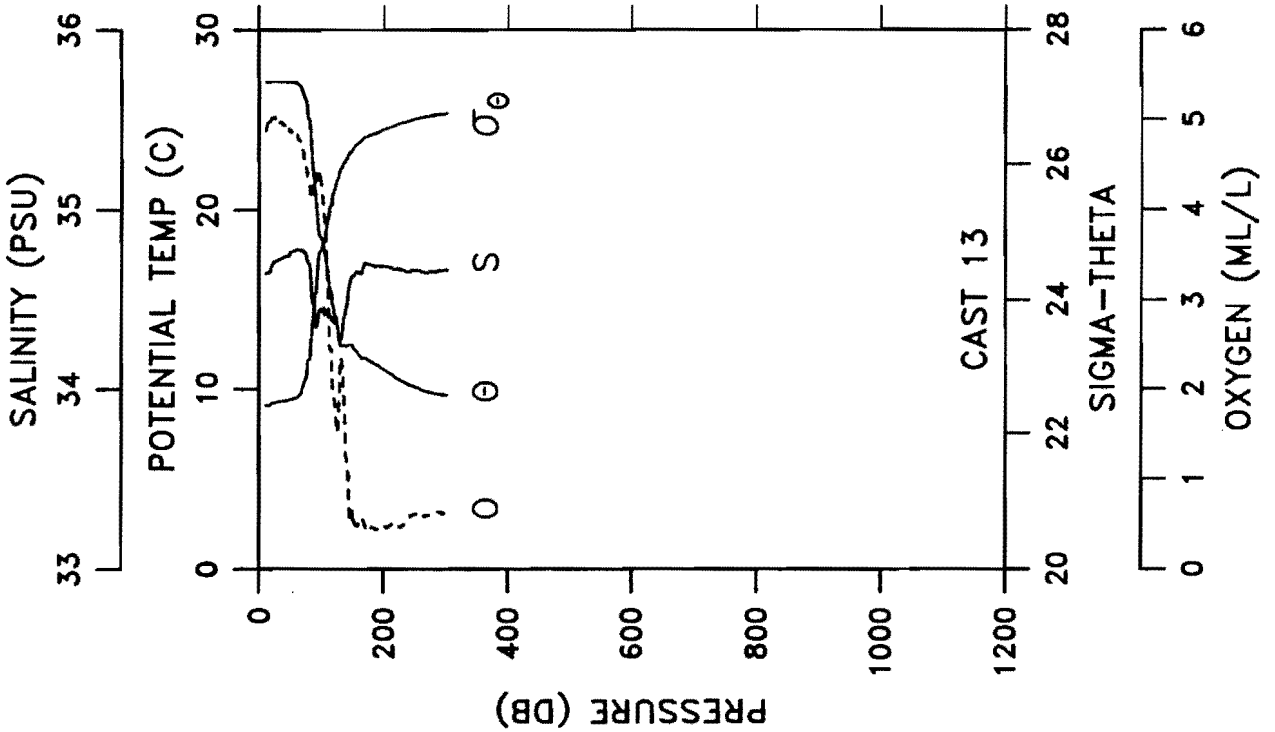
CAST TG1-89-MB -012 DATE 21 MAY 89 TIME 0909 GMT
 LAT 08 58.3N LONG 140 16.5W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 087 T SPD 14 KT VISIBILITY
 CLOUD AMOUNT DRY 26.8 WET 24.5 DEPTH 4756 M



CAST TG1-89-MB -013 DATE 22 MAY 89 TIME 1149 GMT
LAT 08 57.7N LONG 140 17.0W

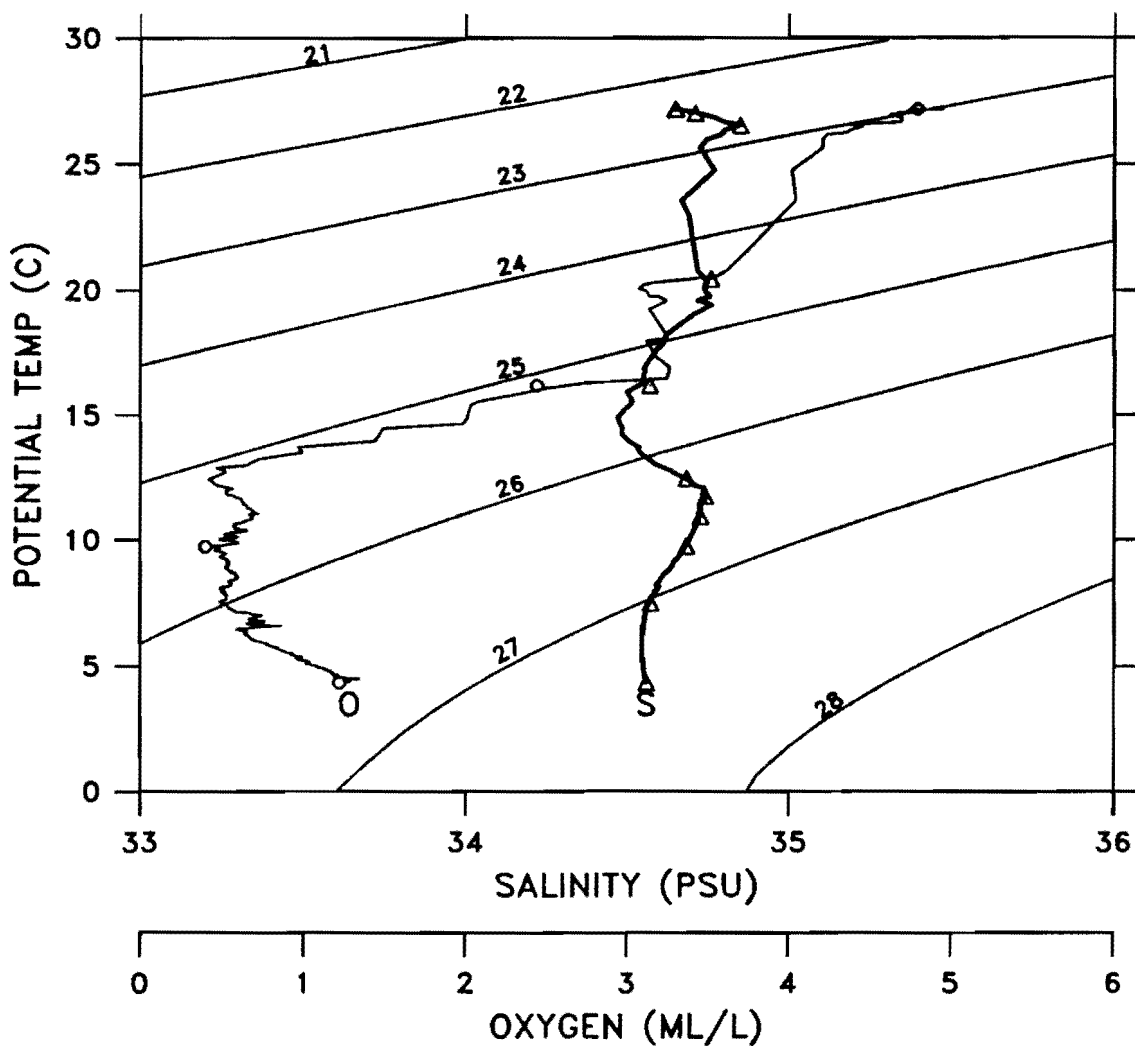


CAST TG1-89-MB -013 DATE 22 MAY 89 TIME 1149 GMT
 LAT 08 57.7N LONG 140 17.0W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 080 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 26.8 WET 24.5 DEPTH 5872 M

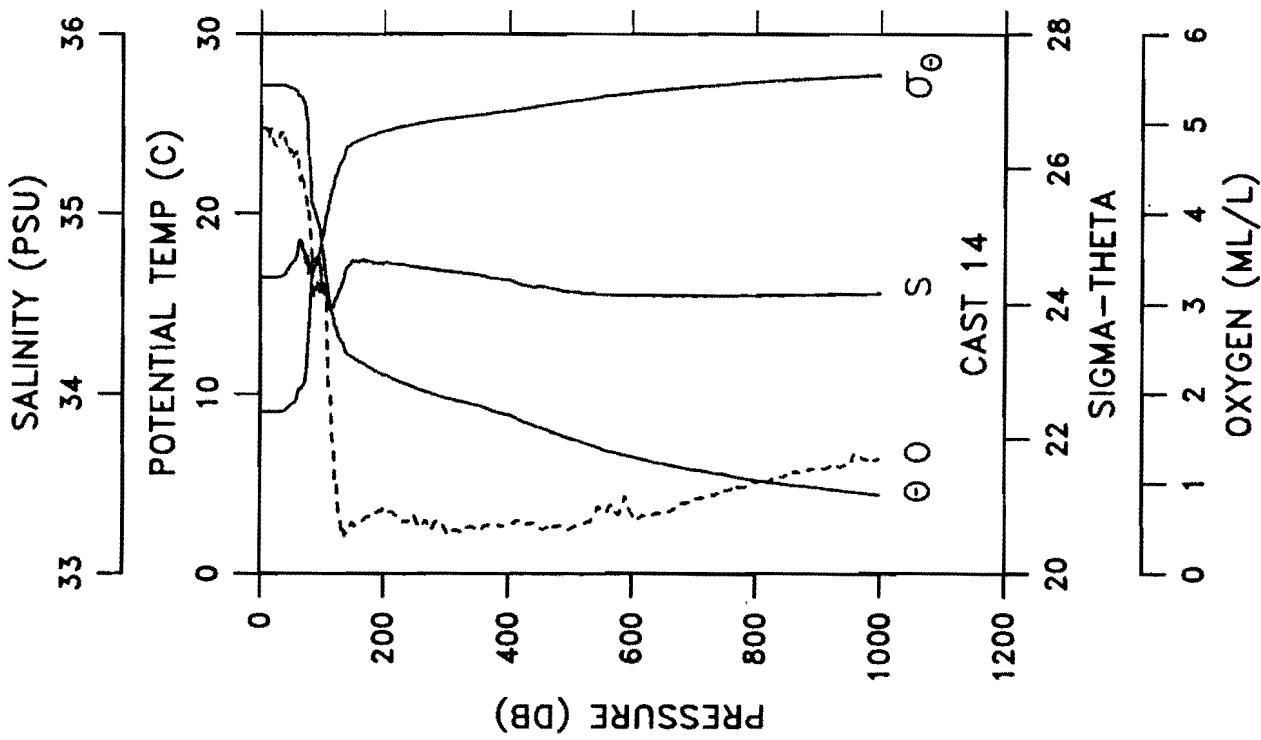


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 11 | 27.093 | 34.644 | 4.87 | 22.422 | 0.000 |
| 12 | 27.101 | 34.650 | 4.92 | 22.424 | 0.005 |
| 20 | 27.119 | 34.689 | 5.01 | 22.447 | 0.049 |
| 30 | 27.110 | 34.720 | 4.98 | 22.474 | 0.102 |
| 40 | 27.112 | 34.740 | 4.93 | 22.488 | 0.156 |
| 50 | 27.092 | 34.765 | 4.86 | 22.514 | 0.210 |
| 60 | 27.040 | 34.781 | 4.83 | 22.542 | 0.263 |
| 70 | 26.422 | 34.771 | 4.63 | 22.730 | 0.316 |
| 80 | 24.947 | 34.689 | 4.26 | 23.124 | 0.365 |
| 90 | 20.424 | 34.348 | 4.36 | 24.154 | 0.407 |
| 100 | 18.177 | 34.446 | 4.12 | 24.805 | 0.441 |
| 110 | 15.983 | 34.404 | 2.85 | 25.292 | 0.470 |
| 120 | 14.125 | 34.384 | 1.79 | 25.686 | 0.485 |
| 130 | 12.430 | 34.289 | 2.34 | 25.955 | 0.517 |
| 140 | 12.433 | 34.506 | 1.14 | 26.122 | 0.537 |
| 150 | 12.325 | 34.634 | 0.55 | 26.243 | 0.556 |
| 160 | 11.894 | 34.652 | 0.55 | 26.339 | 0.573 |
| 170 | 11.752 | 34.706 | 0.46 | 26.408 | 0.590 |
| 180 | 11.503 | 34.690 | 0.47 | 26.443 | 0.606 |
| 190 | 11.346 | 34.691 | 0.44 | 26.472 | 0.623 |
| 200 | 11.099 | 34.690 | 0.47 | 26.516 | 0.638 |
| 250 | 10.116 | 34.663 | 0.61 | 26.669 | 0.713 |
| 300 | 9.684 | 34.663 | 0.61 | 26.743 | 0.782 |
| 303 | 9.668 | 34.667 | 0.59 | 26.749 | 0.786 |

CAST TG1-89-MB -014 DATE 22 MAY 89 TIME 1720 GMT
LAT 07 59.8N LONG 139 59.6W

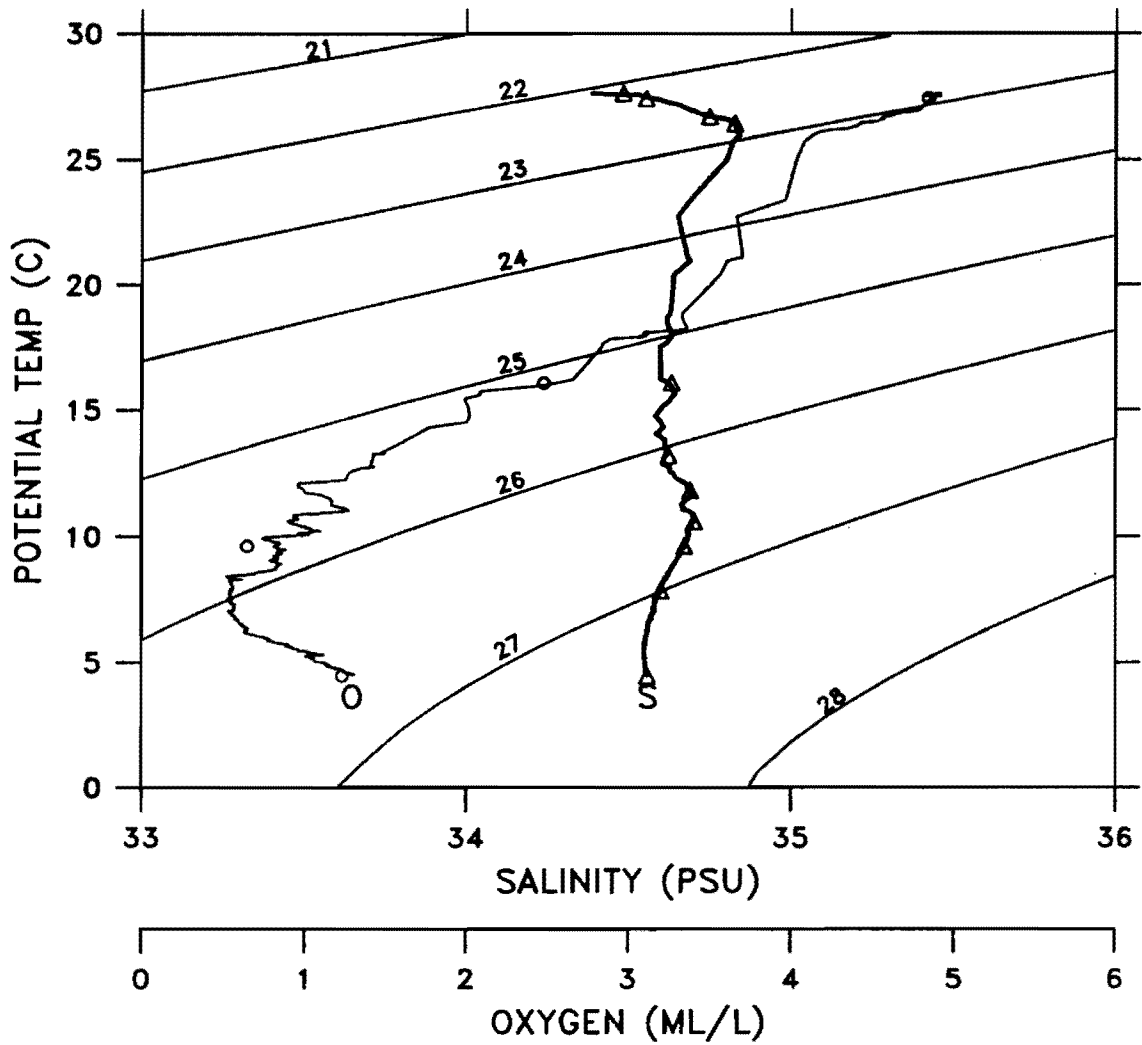


CAST TG1-89-MB -014 DATE 22 MAY 89 TIME 1720 GMT
 LAT 07 59.8N LONG 139 59.6W WEATHER SEA STATE
 BAROMETER 13 WIND DR 065 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 27.5 WET 25.0 DEPTH 5019 M

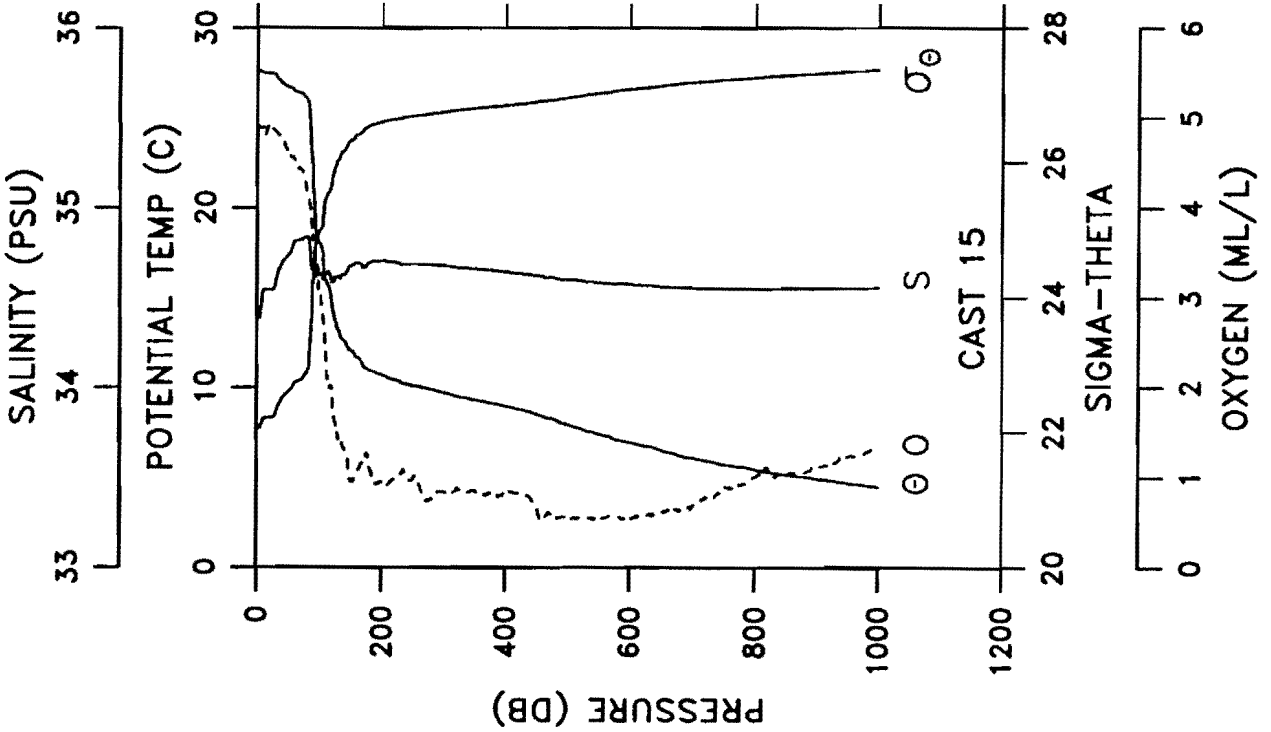


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.170 | 34.649 | 4.95 | 22.401 | 0.000 |
| 10 | 27.168 | 34.649 | 4.95 | 22.402 | 0.054 |
| 20 | 27.166 | 34.648 | 4.82 | 22.402 | 0.109 |
| 30 | 27.166 | 34.651 | 4.85 | 22.404 | 0.163 |
| 40 | 27.149 | 34.670 | 4.80 | 22.423 | 0.217 |
| 50 | 27.007 | 34.722 | 4.71 | 22.508 | 0.271 |
| 60 | 26.663 | 34.803 | 4.69 | 22.678 | 0.324 |
| 70 | 26.220 | 34.792 | 4.29 | 22.810 | 0.376 |
| 80 | 22.219 | 34.699 | 3.84 | 23.929 | 0.422 |
| 90 | 19.766 | 34.755 | 3.14 | 24.638 | 0.458 |
| 100 | 17.978 | 34.610 | 3.12 | 24.980 | 0.490 |
| 110 | 15.540 | 34.517 | 2.08 | 25.481 | 0.517 |
| 120 | 13.848 | 34.518 | 1.22 | 25.847 | 0.541 |
| 130 | 12.973 | 34.596 | 0.64 | 26.086 | 0.562 |
| 140 | 12.227 | 34.704 | 0.46 | 26.316 | 0.580 |
| 150 | 12.050 | 34.738 | 0.57 | 26.377 | 0.597 |
| 160 | 11.796 | 34.735 | 0.54 | 26.423 | 0.614 |
| 170 | 11.658 | 34.739 | 0.61 | 26.452 | 0.630 |
| 180 | 11.411 | 34.731 | 0.64 | 26.491 | 0.646 |
| 190 | 11.236 | 34.724 | 0.68 | 26.518 | 0.661 |
| 200 | 11.042 | 34.725 | 0.72 | 26.555 | 0.677 |
| 250 | 10.359 | 34.704 | 0.64 | 26.659 | 0.751 |
| 300 | 9.782 | 34.683 | 0.48 | 26.742 | 0.820 |
| 350 | 9.363 | 34.663 | 0.50 | 26.796 | 0.887 |
| 400 | 8.851 | 34.634 | 0.54 | 26.856 | 0.952 |
| 450 | 8.145 | 34.599 | 0.51 | 26.937 | 1.013 |
| 500 | 7.525 | 34.570 | 0.50 | 27.006 | 1.071 |
| 550 | 6.958 | 34.556 | 0.71 | 27.075 | 1.127 |
| 600 | 6.516 | 34.552 | 0.67 | 27.132 | 1.179 |
| 650 | 6.135 | 34.548 | 0.67 | 27.179 | 1.228 |
| 700 | 5.778 | 34.548 | 0.82 | 27.224 | 1.276 |
| 750 | 5.525 | 34.547 | 0.92 | 27.254 | 1.322 |
| 800 | 5.190 | 34.547 | 1.01 | 27.294 | 1.366 |
| 900 | 4.777 | 34.553 | 1.17 | 27.347 | 1.451 |
| 1000 | 4.376 | 34.560 | 1.28 | 27.397 | 1.531 |
| 1005 | 4.355 | 34.561 | 1.28 | 27.399 | 1.534 |

CAST TG1-89-MB -015 DATE 22 MAY 89 TIME 2336 GMT
LAT 07 01.1N LONG 140 08.1W

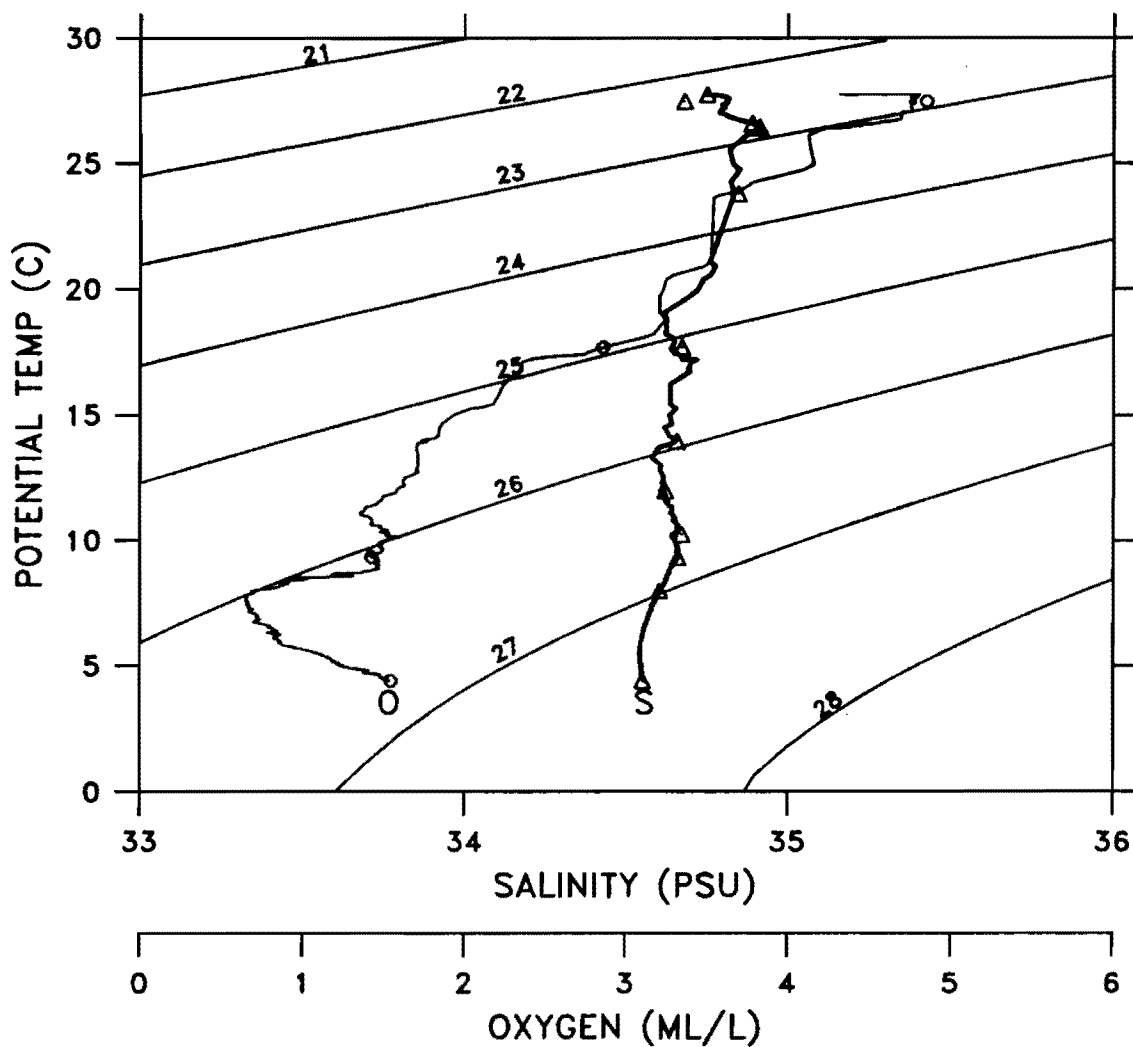


CAST TG1-89-MB -015 DATE 22 MAY 89 TIME 2336 GMT
 LAT 07 01.1N LONG 140 08.1W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 045 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 25.0 DEPTH 4838 M

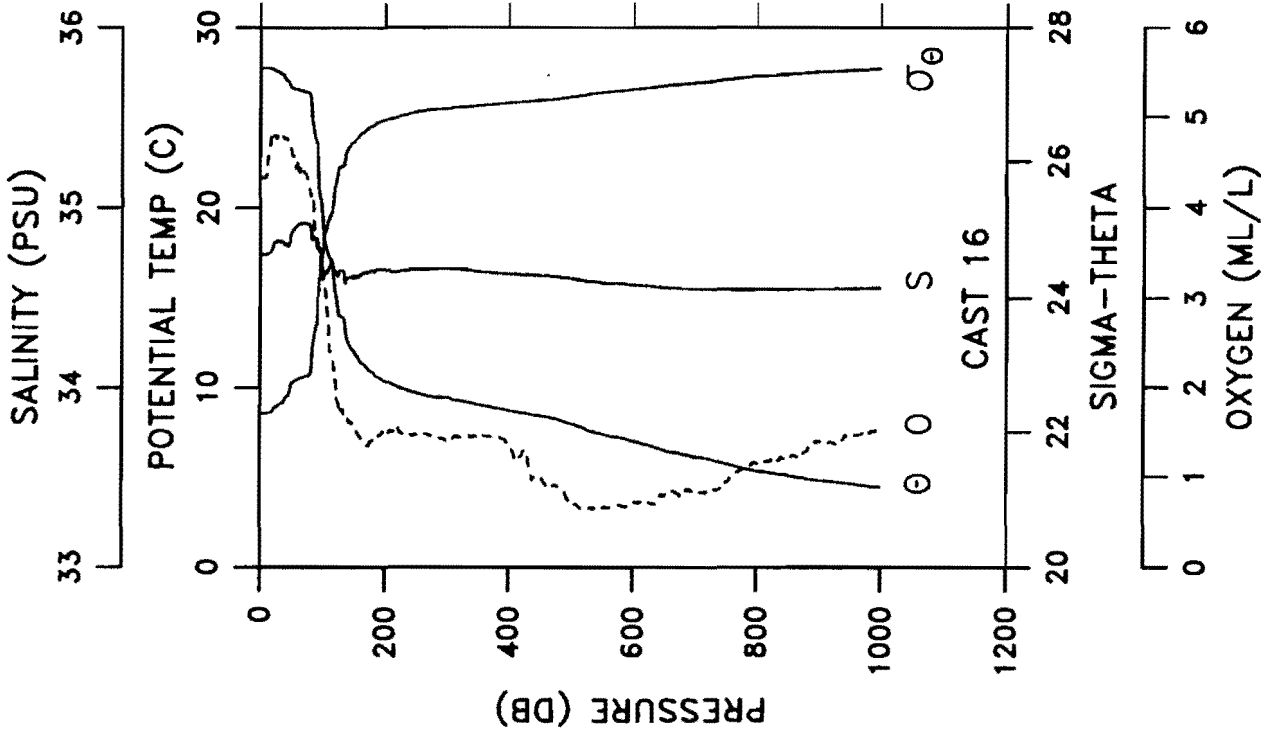


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 27.607 | 34.390 | 4.91 | 22.065 | 0.000 |
| 10 | 27.546 | 34.541 | 4.89 | 22.199 | 0.057 |
| 20 | 27.494 | 34.545 | 4.92 | 22.219 | 0.113 |
| 30 | 27.377 | 34.592 | 4.85 | 22.282 | 0.169 |
| 40 | 26.943 | 34.693 | 4.79 | 22.508 | 0.224 |
| 50 | 26.725 | 34.740 | 4.61 | 22.611 | 0.277 |
| 60 | 26.510 | 34.816 | 4.53 | 22.737 | 0.329 |
| 70 | 26.410 | 34.824 | 4.42 | 22.774 | 0.360 |
| 80 | 26.029 | 34.838 | 4.16 | 22.904 | 0.430 |
| 90 | 20.944 | 34.691 | 3.61 | 24.275 | 0.475 |
| 100 | 17.989 | 34.632 | 3.11 | 24.992 | 0.507 |
| 110 | 15.955 | 34.630 | 2.41 | 25.474 | 0.535 |
| 120 | 14.526 | 34.599 | 2.01 | 25.767 | 0.560 |
| 130 | 13.244 | 34.619 | 1.42 | 26.050 | 0.581 |
| 140 | 12.581 | 34.630 | 1.29 | 26.190 | 0.600 |
| 150 | 12.095 | 34.676 | 0.96 | 26.319 | 0.617 |
| 160 | 11.675 | 34.693 | 1.06 | 26.413 | 0.634 |
| 170 | 11.180 | 34.669 | 1.21 | 26.486 | 0.651 |
| 180 | 10.946 | 34.693 | 1.11 | 26.547 | 0.666 |
| 190 | 10.811 | 34.702 | 0.93 | 26.578 | 0.681 |
| 200 | 10.690 | 34.702 | 0.96 | 26.598 | 0.696 |
| 250 | 10.093 | 34.689 | 0.98 | 26.694 | 0.768 |
| 300 | 9.699 | 34.676 | 0.84 | 26.750 | 0.836 |
| 350 | 9.304 | 34.661 | 0.86 | 26.804 | 0.903 |
| 400 | 8.947 | 34.645 | 0.84 | 26.848 | 0.968 |
| 450 | 8.484 | 34.622 | 0.66 | 26.904 | 1.030 |
| 500 | 7.921 | 34.602 | 0.56 | 26.974 | 1.090 |
| 550 | 7.400 | 34.585 | 0.54 | 27.035 | 1.147 |
| 600 | 6.957 | 34.576 | 0.55 | 27.091 | 1.201 |
| 650 | 6.534 | 34.563 | 0.62 | 27.138 | 1.254 |
| 700 | 6.102 | 34.556 | 0.67 | 27.189 | 1.303 |
| 750 | 5.718 | 34.550 | 0.89 | 27.233 | 1.351 |
| 800 | 5.438 | 34.549 | 1.01 | 27.266 | 1.397 |
| 900 | 4.953 | 34.551 | 1.14 | 27.325 | 1.484 |
| 1000 | 4.496 | 34.557 | 1.29 | 27.381 | 1.566 |
| 1002 | 4.487 | 34.557 | 1.29 | 27.382 | 1.568 |

CAST TG1-89-MB -016 DATE 22 MAY 89 TIME 0515 GMT
LAT 05 59.6N LONG 140 00.1W

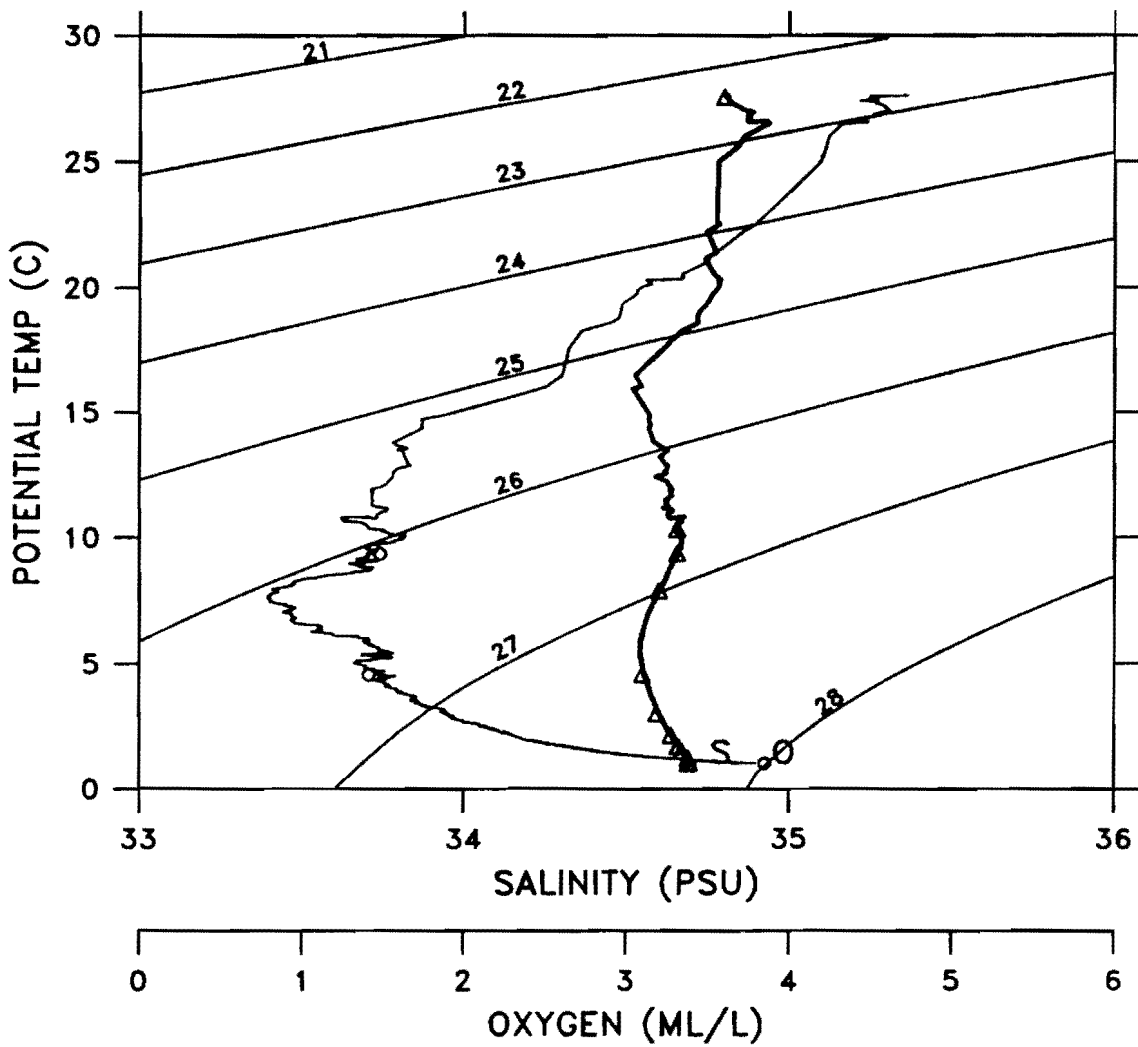


CAST TG1-89-MB --016 DATE 22 MAY 89 TIME 0515 GMT
 LAT 05 59.6N LONG 140 00.1W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 050 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 24.3 DEPTH 4697 M

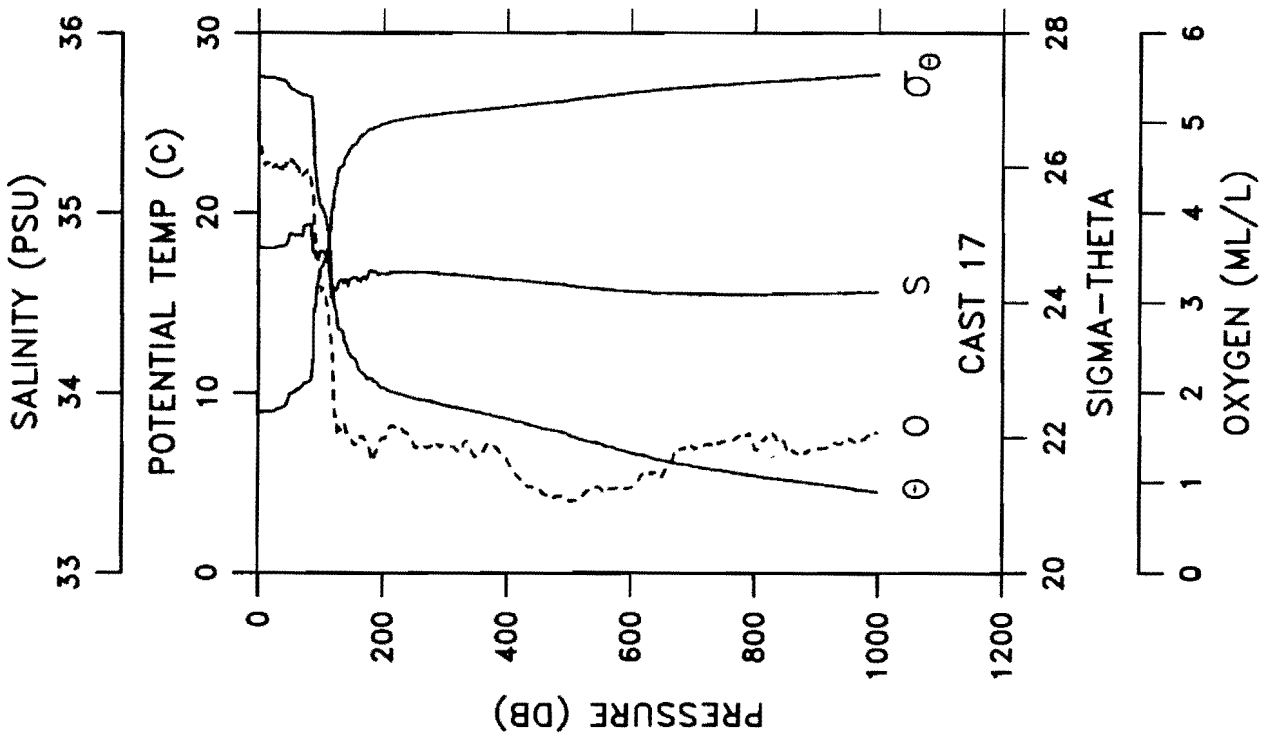


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.748 | 34.745 | 4.32 | 22.287 | 0.000 |
| 10 | 27.746 | 34.745 | 4.32 | 22.288 | 0.055 |
| 20 | 27.702 | 34.788 | 4.76 | 22.334 | 0.111 |
| 30 | 27.505 | 34.816 | 4.77 | 22.419 | 0.165 |
| 40 | 27.188 | 34.804 | 4.75 | 22.512 | 0.219 |
| 50 | 26.655 | 34.869 | 4.62 | 22.731 | 0.272 |
| 60 | 26.549 | 34.911 | 4.50 | 22.796 | 0.323 |
| 70 | 26.440 | 34.918 | 4.39 | 22.835 | 0.373 |
| 80 | 26.227 | 34.892 | 4.17 | 22.863 | 0.424 |
| 90 | 23.727 | 34.831 | 3.58 | 23.596 | 0.470 |
| 100 | 19.066 | 34.620 | 3.21 | 24.715 | 0.507 |
| 110 | 17.331 | 34.675 | 2.52 | 25.187 | 0.537 |
| 120 | 15.323 | 34.650 | 2.11 | 25.632 | 0.563 |
| 130 | 13.975 | 34.656 | 1.75 | 25.927 | 0.585 |
| 140 | 12.614 | 34.615 | 1.68 | 26.171 | 0.605 |
| 150 | 12.074 | 34.615 | 1.58 | 26.277 | 0.623 |
| 160 | 11.469 | 34.628 | 1.46 | 26.400 | 0.641 |
| 170 | 11.162 | 34.645 | 1.38 | 26.470 | 0.657 |
| 180 | 10.899 | 34.654 | 1.41 | 26.525 | 0.672 |
| 190 | 10.576 | 34.665 | 1.47 | 26.591 | 0.688 |
| 200 | 10.379 | 34.660 | 1.51 | 26.621 | 0.702 |
| 250 | 9.737 | 34.659 | 1.48 | 26.730 | 0.773 |
| 300 | 9.459 | 34.668 | 1.40 | 26.784 | 0.839 |
| 350 | 9.079 | 34.650 | 1.46 | 26.831 | 0.904 |
| 400 | 8.744 | 34.635 | 1.36 | 26.873 | 0.967 |
| 450 | 8.455 | 34.627 | 1.01 | 26.912 | 1.029 |
| 500 | 7.987 | 34.611 | 0.69 | 26.971 | 1.089 |
| 550 | 7.400 | 34.586 | 0.65 | 27.036 | 1.146 |
| 600 | 7.015 | 34.576 | 0.71 | 27.083 | 1.201 |
| 650 | 6.537 | 34.562 | 0.78 | 27.137 | 1.253 |
| 700 | 6.140 | 34.554 | 0.84 | 27.183 | 1.303 |
| 750 | 5.745 | 34.548 | 0.94 | 27.228 | 1.351 |
| 800 | 5.322 | 34.548 | 1.16 | 27.279 | 1.396 |
| 800 | 4.802 | 34.552 | 1.40 | 27.343 | 1.482 |
| 1000 | 4.415 | 34.558 | 1.53 | 27.390 | 1.563 |
| 1002 | 4.403 | 34.558 | 1.53 | 27.392 | 1.565 |

CAST TG1-89-MB -017 DATE 23 MAY 89 TIME 1140 GMT
LAT 04 59.5N LONG 139 59.6W

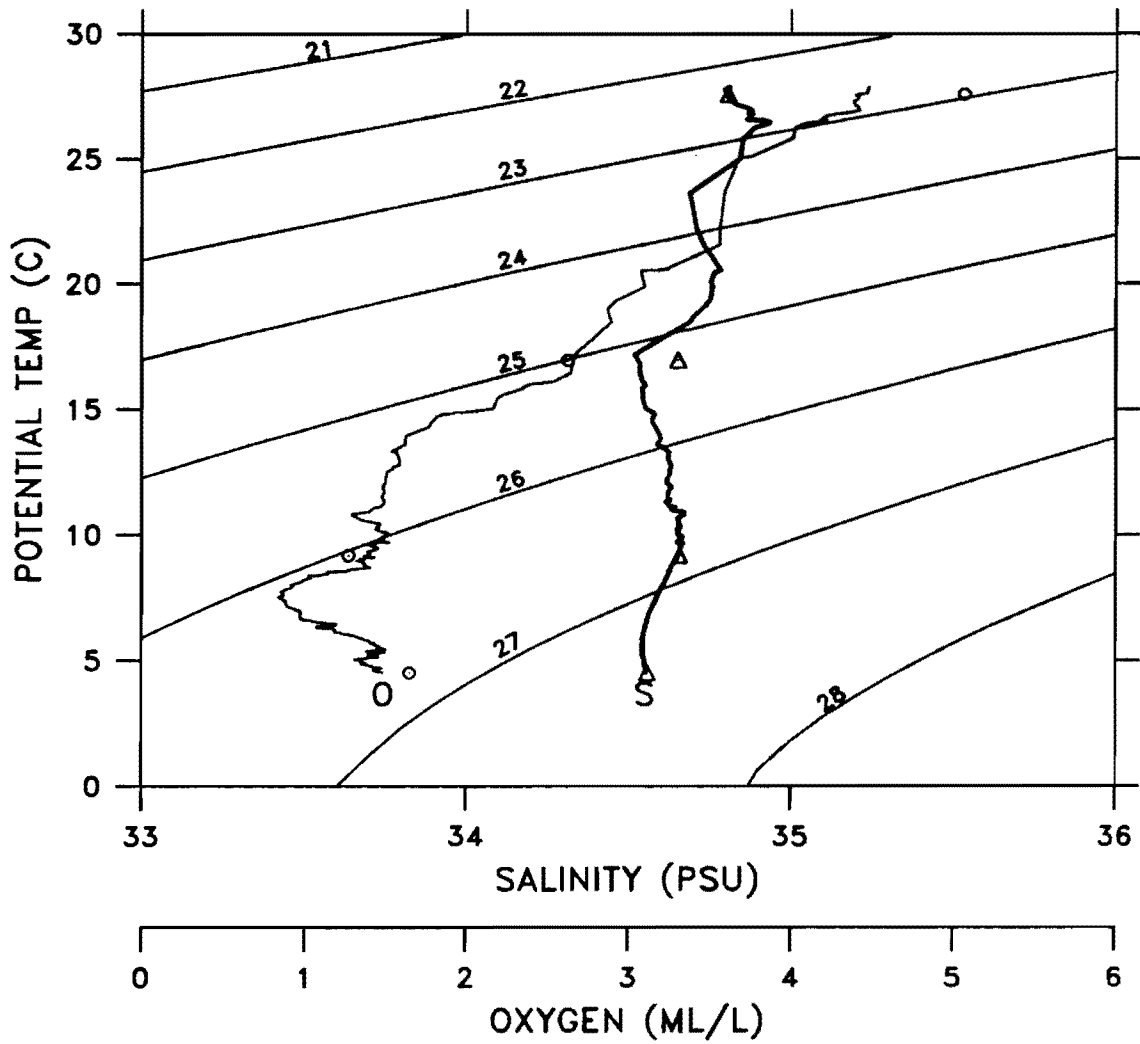


CAST TG1-89-MB -017 DATE 23 MAY 89 TIME 1140 GMT
 LAT 04 59.5N LONG 139 59.6W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 066 T SPD 14 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 25.0 DEPTH 4335 M

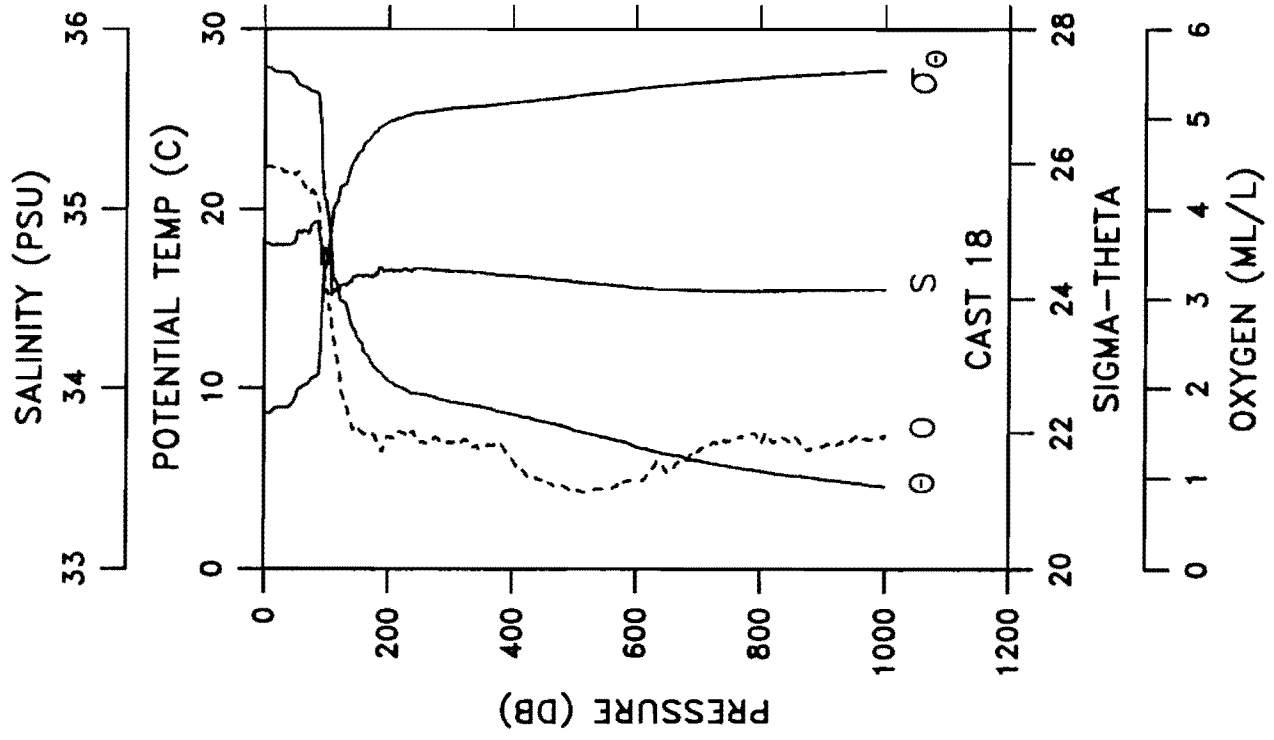


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.591 | 34.811 | 4.72 | 22.387 | 0.000 |
| 10 | 27.563 | 34.804 | 4.52 | 22.392 | 0.054 |
| 20 | 27.552 | 34.804 | 4.57 | 22.395 | 0.109 |
| 30 | 27.465 | 34.811 | 4.50 | 22.429 | 0.163 |
| 40 | 27.376 | 34.816 | 4.44 | 22.481 | 0.217 |
| 50 | 26.938 | 34.882 | 4.62 | 22.651 | 0.270 |
| 60 | 26.766 | 34.873 | 4.56 | 22.699 | 0.322 |
| 70 | 26.541 | 34.871 | 4.41 | 22.768 | 0.374 |
| 80 | 26.503 | 34.932 | 4.48 | 22.826 | 0.425 |
| 90 | 22.541 | 34.784 | 3.79 | 23.903 | 0.472 |
| 100 | 20.302 | 34.789 | 3.12 | 24.523 | 0.509 |
| 110 | 19.078 | 34.726 | 2.97 | 24.793 | 0.542 |
| 120 | 15.233 | 34.556 | 2.08 | 25.579 | 0.571 |
| 130 | 13.484 | 34.623 | 1.58 | 26.004 | 0.593 |
| 140 | 12.729 | 34.628 | 1.59 | 26.159 | 0.613 |
| 150 | 11.969 | 34.638 | 1.48 | 26.314 | 0.631 |
| 160 | 11.353 | 34.624 | 1.43 | 26.419 | 0.648 |
| 170 | 11.003 | 34.639 | 1.49 | 26.484 | 0.664 |
| 180 | 10.813 | 34.679 | 1.32 | 26.560 | 0.679 |
| 190 | 10.573 | 34.668 | 1.37 | 26.594 | 0.694 |
| 200 | 10.286 | 34.680 | 1.50 | 26.638 | 0.708 |
| 250 | 9.710 | 34.669 | 1.43 | 26.743 | 0.778 |
| 300 | 9.325 | 34.658 | 1.41 | 26.798 | 0.844 |
| 350 | 8.967 | 34.645 | 1.29 | 26.846 | 0.908 |
| 400 | 8.570 | 34.630 | 1.26 | 26.896 | 0.971 |
| 450 | 8.120 | 34.612 | 0.93 | 26.952 | 1.031 |
| 500 | 7.663 | 34.594 | 0.79 | 27.005 | 1.089 |
| 550 | 7.195 | 34.578 | 0.94 | 27.059 | 1.144 |
| 600 | 6.675 | 34.563 | 0.94 | 27.119 | 1.197 |
| 650 | 6.270 | 34.554 | 1.07 | 27.166 | 1.248 |
| 700 | 5.933 | 34.546 | 1.40 | 27.202 | 1.296 |
| 750 | 5.654 | 34.546 | 1.46 | 27.237 | 1.343 |
| 800 | 5.392 | 34.546 | 1.39 | 27.270 | 1.389 |
| 900 | 4.912 | 34.551 | 1.39 | 27.330 | 1.476 |
| 1000 | 4.456 | 34.559 | 1.55 | 27.387 | 1.557 |
| 1500 | 2.992 | 34.603 | 1.89 | 27.569 | 1.905 |
| 2000 | 2.142 | 34.639 | 2.31 | 27.671 | 2.187 |
| 2500 | 1.715 | 34.663 | 2.60 | 27.724 | 2.435 |
| 3000 | 1.517 | 34.672 | 2.80 | 27.745 | 2.672 |
| 3500 | 1.231 | 34.686 | 3.26 | 27.777 | 2.897 |
| 4000 | 1.076 | 34.693 | 3.63 | 27.794 | 3.113 |
| 4448 | 1.032 | 34.695 | 3.77 | 27.798 | 3.307 |

CAST TG1-89-MB -018 DATE 23 MAY 89 TIME 0111 GMT
LAT 05 00.6N LONG 139 58.2W

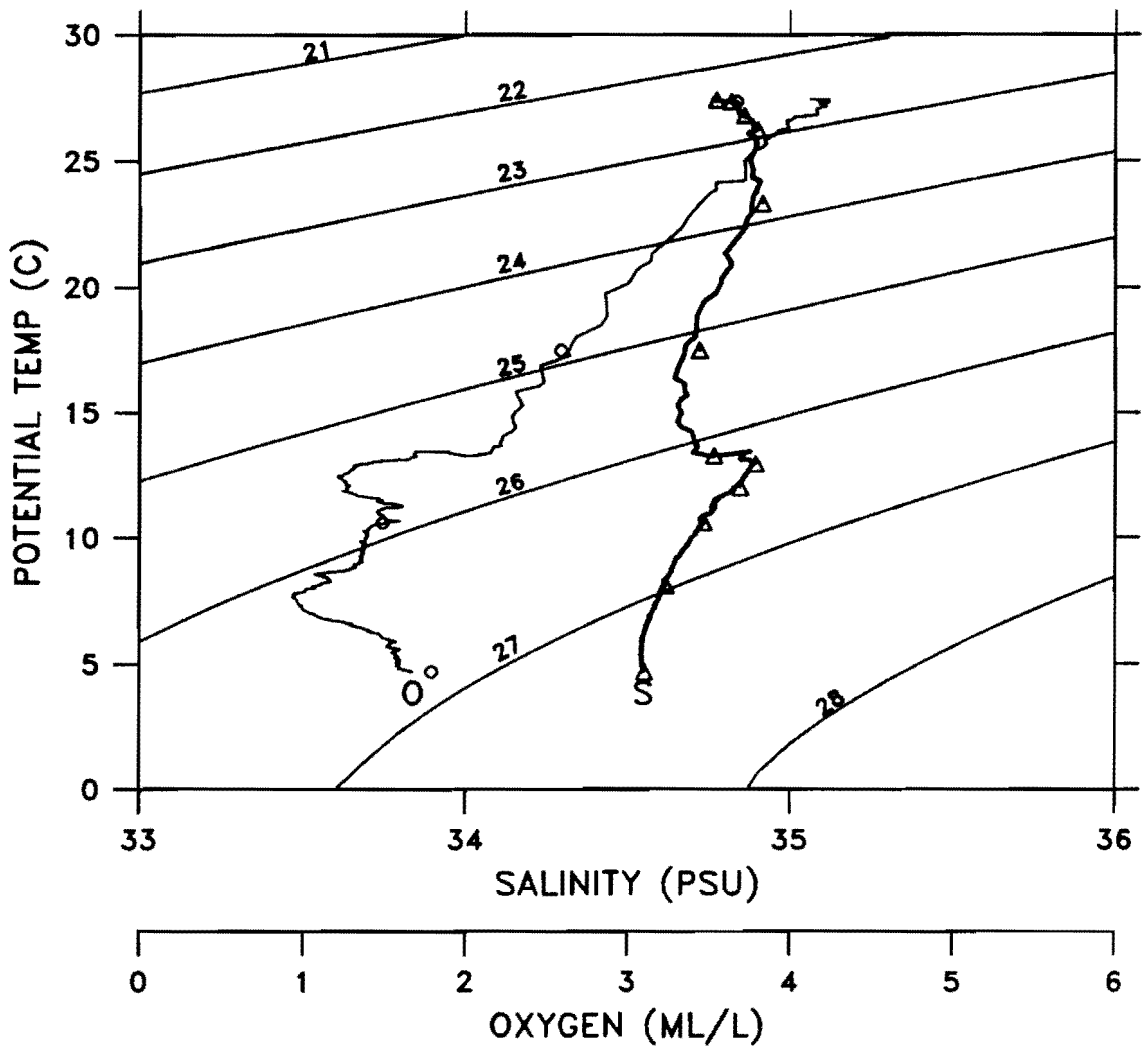


CAST TG1-89-MB -018 DATE 23 MAY 89 TIME 0111 GMT
 LAT 05 00.6N LONG 139 58.2W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 076 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 28.7 WET 25.5 DEPTH 4373 M

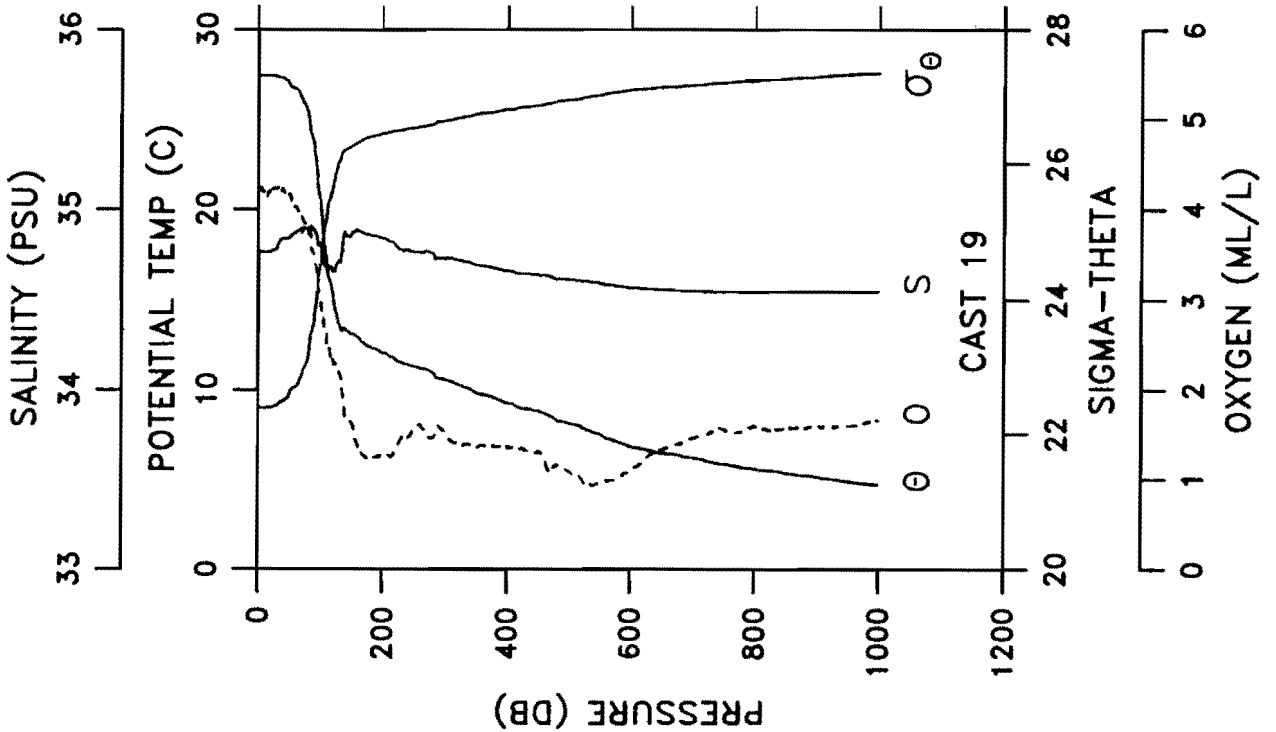


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 27.868 | 34.810 | 4.47 | 22.297 | 0.000 |
| 10 | 27.837 | 34.806 | 4.47 | 22.304 | 0.055 |
| 20 | 27.602 | 34.801 | 4.46 | 22.376 | 0.110 |
| 30 | 27.582 | 34.801 | 4.42 | 22.383 | 0.165 |
| 40 | 27.556 | 34.800 | 4.40 | 22.391 | 0.219 |
| 50 | 27.172 | 34.831 | 4.38 | 22.538 | 0.273 |
| 60 | 26.803 | 34.869 | 4.31 | 22.684 | 0.326 |
| 70 | 26.661 | 34.873 | 4.21 | 22.732 | 0.377 |
| 80 | 26.481 | 34.926 | 4.18 | 22.829 | 0.428 |
| 90 | 25.032 | 34.846 | 3.68 | 23.217 | 0.478 |
| 100 | 20.043 | 34.754 | 3.10 | 24.564 | 0.516 |
| 110 | 16.459 | 34.535 | 2.65 | 25.286 | 0.547 |
| 120 | 15.207 | 34.549 | 2.18 | 25.579 | 0.573 |
| 130 | 14.786 | 34.580 | 1.85 | 25.695 | 0.596 |
| 140 | 13.512 | 34.600 | 1.60 | 25.979 | 0.618 |
| 150 | 12.804 | 34.632 | 1.59 | 26.147 | 0.638 |
| 160 | 12.031 | 34.623 | 1.49 | 26.291 | 0.656 |
| 170 | 11.637 | 34.622 | 1.49 | 26.365 | 0.674 |
| 180 | 11.100 | 34.630 | 1.43 | 26.470 | 0.690 |
| 190 | 10.795 | 34.666 | 1.29 | 26.553 | 0.705 |
| 200 | 10.419 | 34.659 | 1.47 | 26.614 | 0.720 |
| 250 | 9.661 | 34.668 | 1.41 | 26.751 | 0.790 |
| 300 | 9.247 | 34.651 | 1.40 | 26.806 | 0.856 |
| 350 | 8.974 | 34.644 | 1.32 | 26.844 | 0.920 |
| 400 | 8.553 | 34.628 | 1.22 | 26.898 | 0.982 |
| 450 | 8.145 | 34.613 | 0.97 | 26.949 | 1.043 |
| 500 | 7.641 | 34.591 | 0.87 | 27.006 | 1.101 |
| 550 | 7.289 | 34.581 | 0.88 | 27.049 | 1.157 |
| 600 | 6.745 | 34.561 | 0.97 | 27.108 | 1.210 |
| 650 | 6.346 | 34.553 | 1.08 | 27.155 | 1.261 |
| 700 | 5.983 | 34.547 | 1.30 | 27.197 | 1.310 |
| 750 | 5.649 | 34.543 | 1.41 | 27.236 | 1.357 |
| 800 | 5.372 | 34.543 | 1.38 | 27.269 | 1.403 |
| 900 | 4.928 | 34.550 | 1.35 | 27.327 | 1.490 |
| 1000 | 4.523 | 34.554 | 1.48 | 27.376 | 1.573 |
| 1002 | 4.515 | 34.554 | 1.48 | 27.377 | 1.574 |

CAST TG1-89-MB -019 DATE 23 MAY 89 TIME 0856 GMT
LAT 03 59.9N LONG 139 59.8W

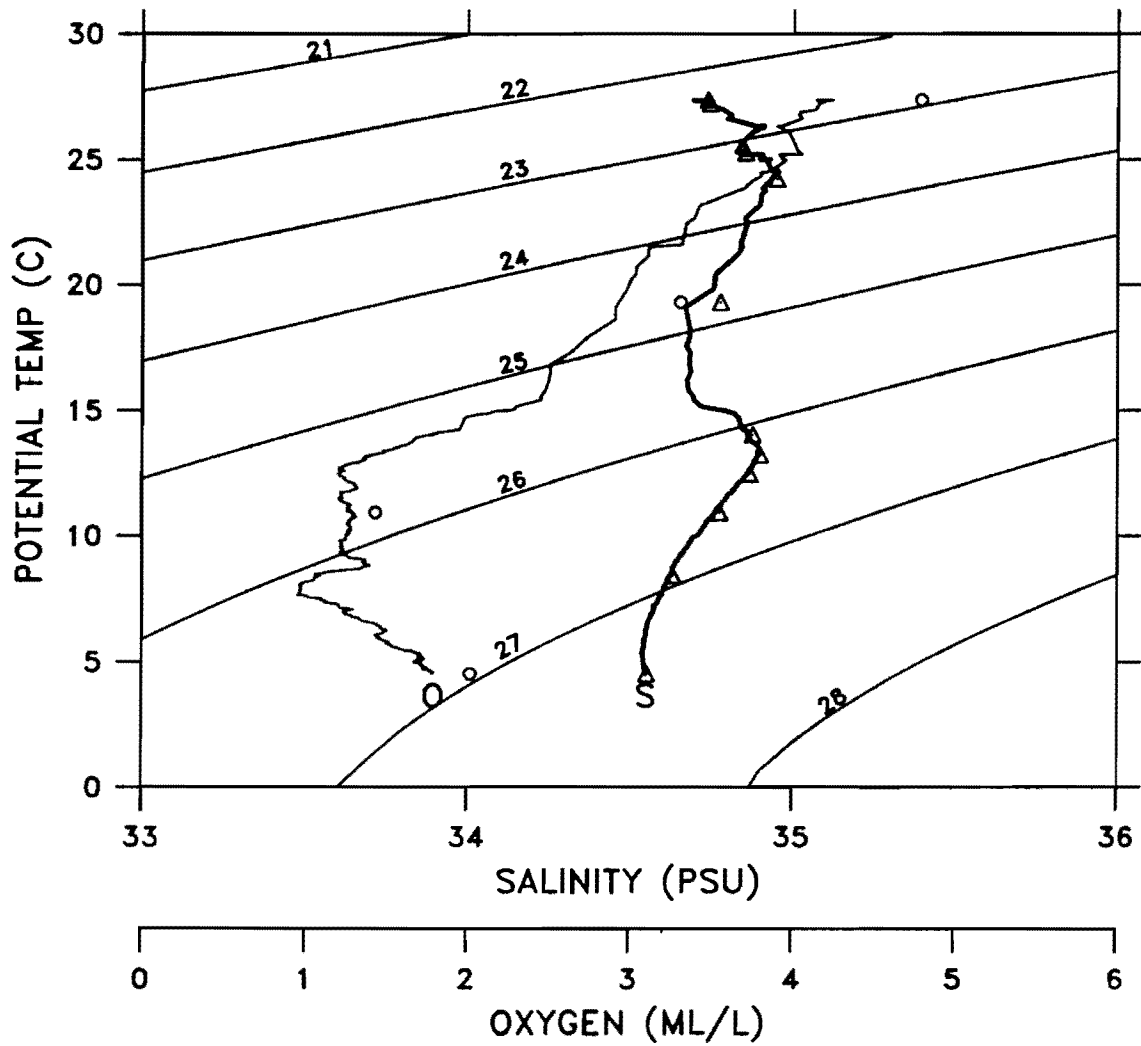


CAST TG1-89-MB -019 DATE 23 MAY 89 TIME 0856 GMT
 LAT 03 59.9N LONG 139 59.8W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 050 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 28.1 WET 25.0 DEPTH 4323 M

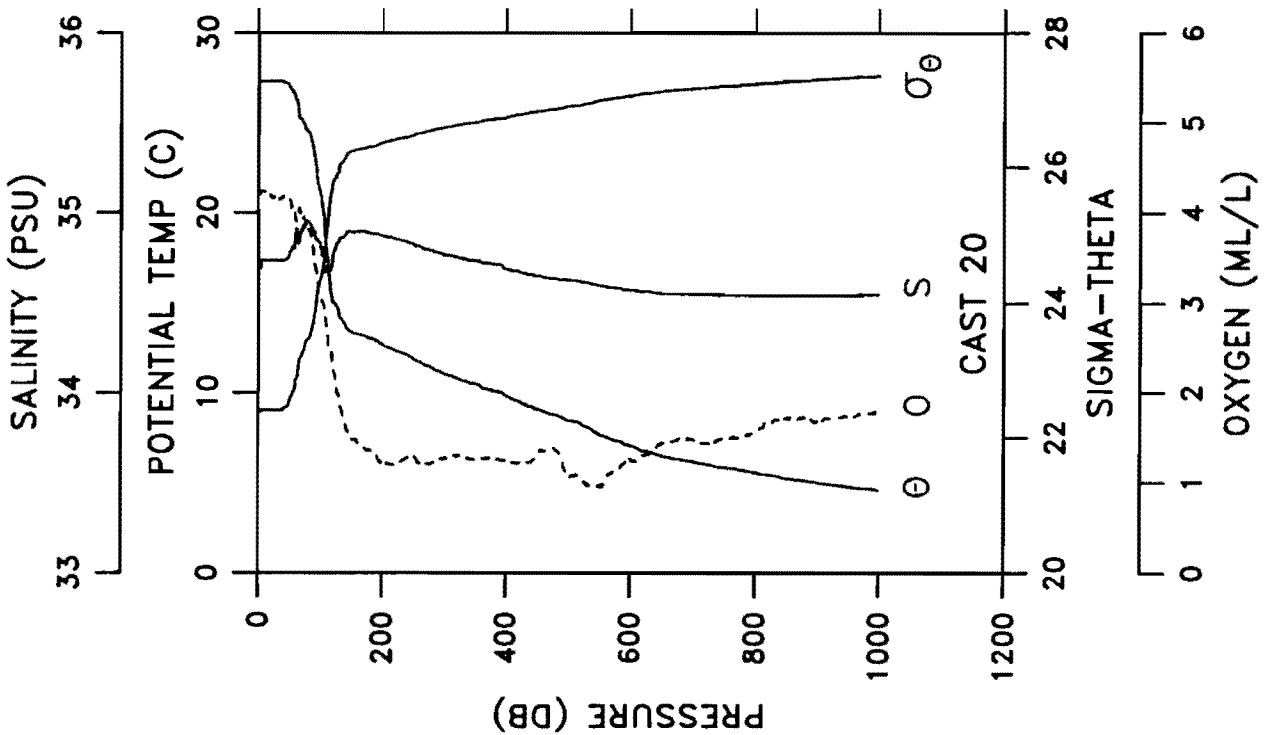


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 27.439 | 34.764 | 4.23 | 22.402 | 0.000 |
| 10 | 27.448 | 34.764 | 4.19 | 22.398 | 0.054 |
| 20 | 27.431 | 34.765 | 4.19 | 22.405 | 0.109 |
| 30 | 27.362 | 34.793 | 4.23 | 22.448 | 0.163 |
| 40 | 27.268 | 34.839 | 4.20 | 22.513 | 0.217 |
| 50 | 26.851 | 34.842 | 4.17 | 22.648 | 0.270 |
| 60 | 26.690 | 34.874 | 4.03 | 22.724 | 0.321 |
| 70 | 25.978 | 34.879 | 3.88 | 22.951 | 0.372 |
| 80 | 25.022 | 34.876 | 3.72 | 23.242 | 0.420 |
| 90 | 22.967 | 34.884 | 3.40 | 23.856 | 0.464 |
| 100 | 19.760 | 34.771 | 2.86 | 24.651 | 0.500 |
| 110 | 16.387 | 34.645 | 2.48 | 25.387 | 0.530 |
| 120 | 14.891 | 34.661 | 2.29 | 25.735 | 0.554 |
| 130 | 13.534 | 34.709 | 2.16 | 26.060 | 0.575 |
| 140 | 13.330 | 34.855 | 1.89 | 26.214 | 0.594 |
| 150 | 13.138 | 34.875 | 1.61 | 26.269 | 0.612 |
| 160 | 12.945 | 34.880 | 1.35 | 26.312 | 0.630 |
| 170 | 12.600 | 34.869 | 1.27 | 26.372 | 0.647 |
| 180 | 12.425 | 34.858 | 1.22 | 26.397 | 0.664 |
| 190 | 12.295 | 34.852 | 1.25 | 26.418 | 0.681 |
| 200 | 12.081 | 34.838 | 1.28 | 26.448 | 0.697 |
| 250 | 11.349 | 34.766 | 1.56 | 26.530 | 0.776 |
| 300 | 10.606 | 34.727 | 1.53 | 26.634 | 0.852 |
| 350 | 9.857 | 34.692 | 1.36 | 26.736 | 0.924 |
| 400 | 9.273 | 34.660 | 1.36 | 26.808 | 0.991 |
| 450 | 8.825 | 34.639 | 1.32 | 26.864 | 1.056 |
| 500 | 8.126 | 34.613 | 1.09 | 26.951 | 1.117 |
| 550 | 7.547 | 34.592 | 0.96 | 27.020 | 1.175 |
| 600 | 6.813 | 34.570 | 1.12 | 27.106 | 1.229 |
| 650 | 6.465 | 34.559 | 1.34 | 27.144 | 1.280 |
| 700 | 6.216 | 34.552 | 1.46 | 27.171 | 1.331 |
| 750 | 5.864 | 34.546 | 1.56 | 27.211 | 1.379 |
| 800 | 5.575 | 34.542 | 1.59 | 27.244 | 1.426 |
| 900 | 5.140 | 34.545 | 1.60 | 27.289 | 1.516 |
| 1000 | 4.707 | 34.549 | 1.65 | 27.351 | 1.601 |
| 1003 | 4.702 | 34.549 | 1.67 | 27.352 | 1.604 |

CAST TG1-89-MB -020 DATE 24 MAY 89 TIME 1441 GMT
LAT 02 58.4N LONG 140 01.2W

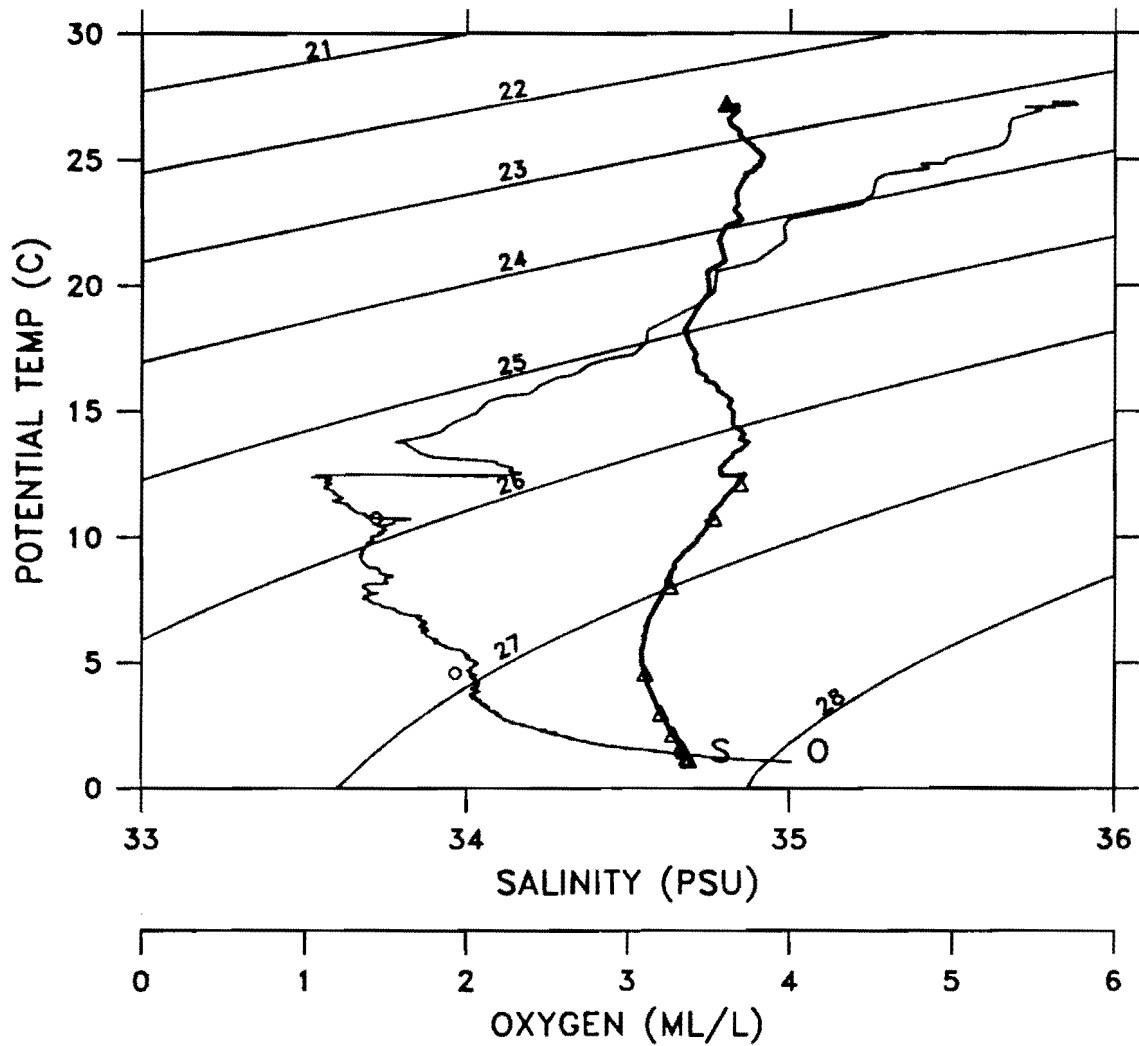


CAST TG1-89-MB -020 DATE 24 MAY 89 TIME 1441 GMT
 LAT 02 58.4N LONG 140 01.2W WEATHER SEA STATE
 BAROMETER 10 WIND DFR 070 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 27.7 WET 25.0 DEPTH 4242 M

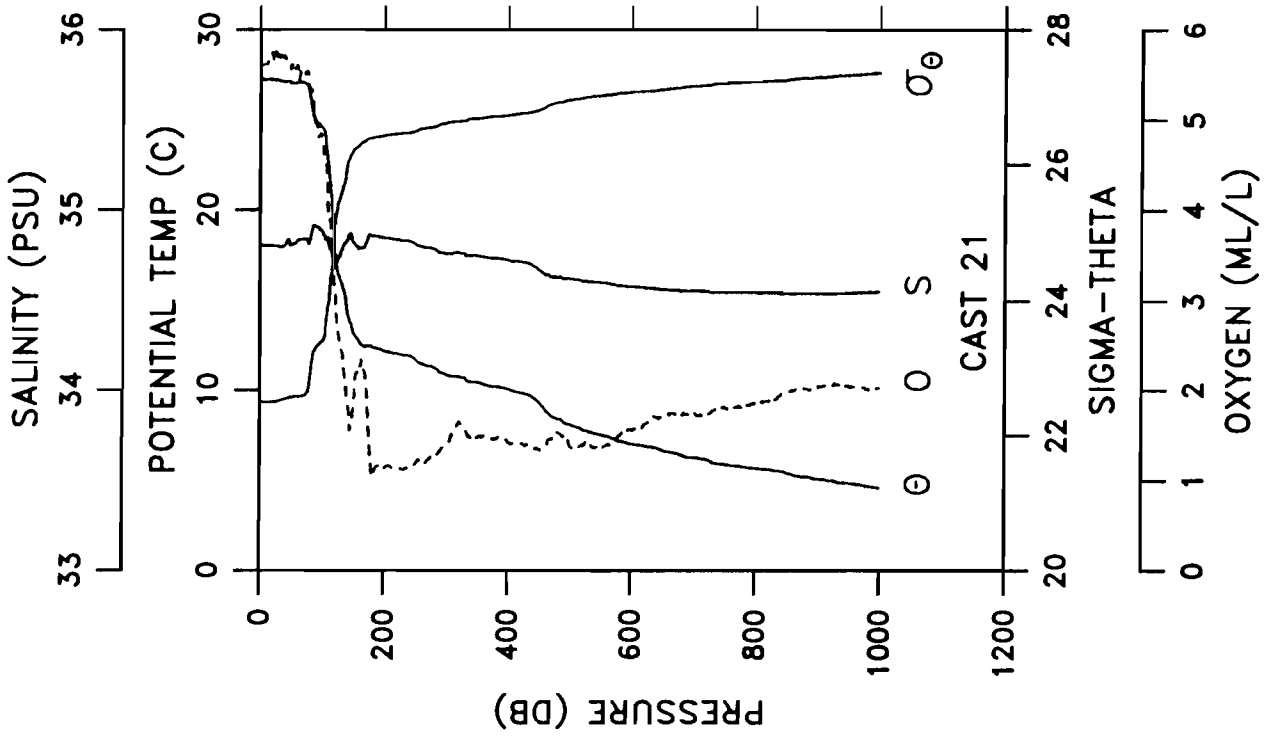


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.317 | 34.893 | 4.20 | 22.387 | 0.000 |
| 10 | 27.340 | 34.737 | 4.23 | 22.413 | 0.054 |
| 20 | 27.341 | 34.738 | 4.17 | 22.412 | 0.109 |
| 30 | 27.341 | 34.736 | 4.16 | 22.412 | 0.163 |
| 40 | 27.314 | 34.731 | 4.16 | 22.417 | 0.217 |
| 50 | 27.065 | 34.762 | 4.14 | 22.520 | 0.271 |
| 60 | 26.446 | 34.845 | 3.99 | 22.779 | 0.323 |
| 70 | 25.201 | 34.909 | 3.91 | 23.213 | 0.372 |
| 80 | 24.485 | 34.956 | 3.83 | 23.465 | 0.418 |
| 90 | 23.366 | 34.901 | 3.52 | 23.754 | 0.461 |
| 100 | 21.149 | 34.827 | 3.11 | 24.323 | 0.500 |
| 110 | 17.936 | 34.883 | 2.74 | 25.046 | 0.533 |
| 120 | 15.049 | 34.763 | 2.29 | 25.779 | 0.559 |
| 130 | 14.225 | 34.848 | 1.95 | 26.023 | 0.581 |
| 140 | 13.734 | 34.877 | 1.66 | 26.148 | 0.600 |
| 150 | 13.377 | 34.895 | 1.50 | 26.236 | 0.619 |
| 160 | 13.272 | 34.896 | 1.45 | 26.258 | 0.637 |
| 170 | 13.162 | 34.895 | 1.39 | 26.279 | 0.655 |
| 180 | 13.039 | 34.898 | 1.36 | 26.299 | 0.672 |
| 190 | 12.904 | 34.896 | 1.31 | 26.324 | 0.690 |
| 200 | 12.679 | 34.874 | 1.21 | 26.360 | 0.707 |
| 250 | 11.908 | 34.823 | 1.32 | 26.470 | 0.791 |
| 300 | 11.034 | 34.766 | 1.27 | 26.587 | 0.869 |
| 350 | 10.478 | 34.734 | 1.26 | 26.662 | 0.943 |
| 400 | 9.832 | 34.689 | 1.23 | 26.738 | 1.013 |
| 450 | 9.095 | 34.651 | 1.32 | 26.830 | 1.080 |
| 500 | 8.485 | 34.629 | 1.07 | 26.909 | 1.144 |
| 550 | 7.702 | 34.597 | 0.97 | 27.002 | 1.204 |
| 600 | 7.078 | 34.574 | 1.28 | 27.072 | 1.260 |
| 650 | 6.509 | 34.554 | 1.43 | 27.135 | 1.312 |
| 700 | 6.183 | 34.550 | 1.48 | 27.174 | 1.362 |
| 750 | 5.835 | 34.546 | 1.50 | 27.215 | 1.411 |
| 800 | 5.589 | 34.544 | 1.58 | 27.246 | 1.458 |
| 900 | 5.006 | 34.544 | 1.69 | 27.313 | 1.547 |
| 1000 | 4.554 | 34.550 | 1.78 | 27.369 | 1.630 |
| 1005 | 4.538 | 34.550 | 1.79 | 27.371 | 1.634 |

CAST TG1-89-MB -021 DATE 24 MAY 89 TIME 0641 GMT
LAT 02 00.8N LONG 140 00.3W

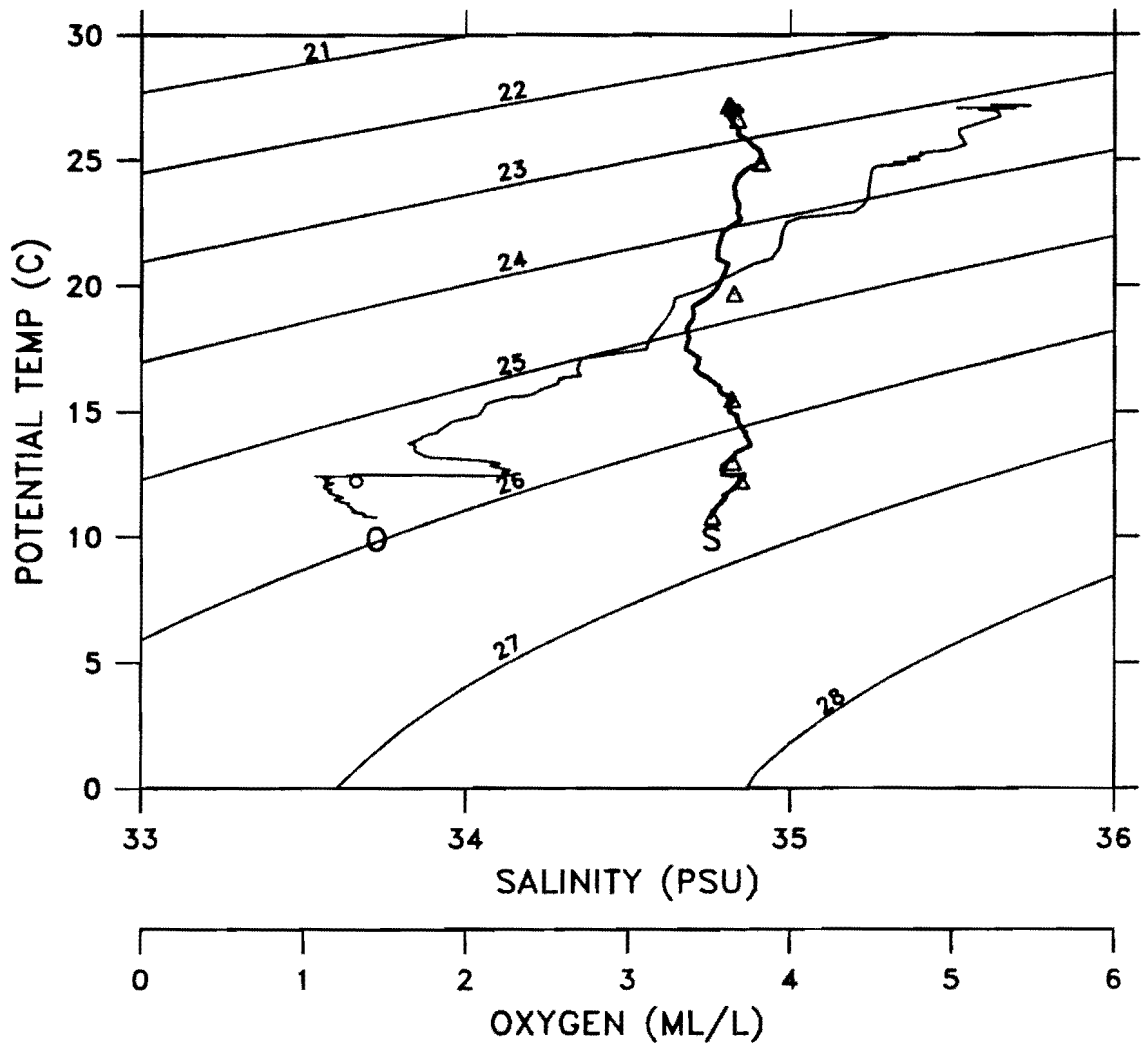


CAST TG1-89-MB -021 DATE 24 MAY 89 TIME 0641 GMT
 LAT 02 00.8N LONG 140 00.3W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 127 T SPD 15 KT VISIBILITY
 CLOUD AMOUNT DRY 27.3 WET 24.0 DEPTH 4264 M

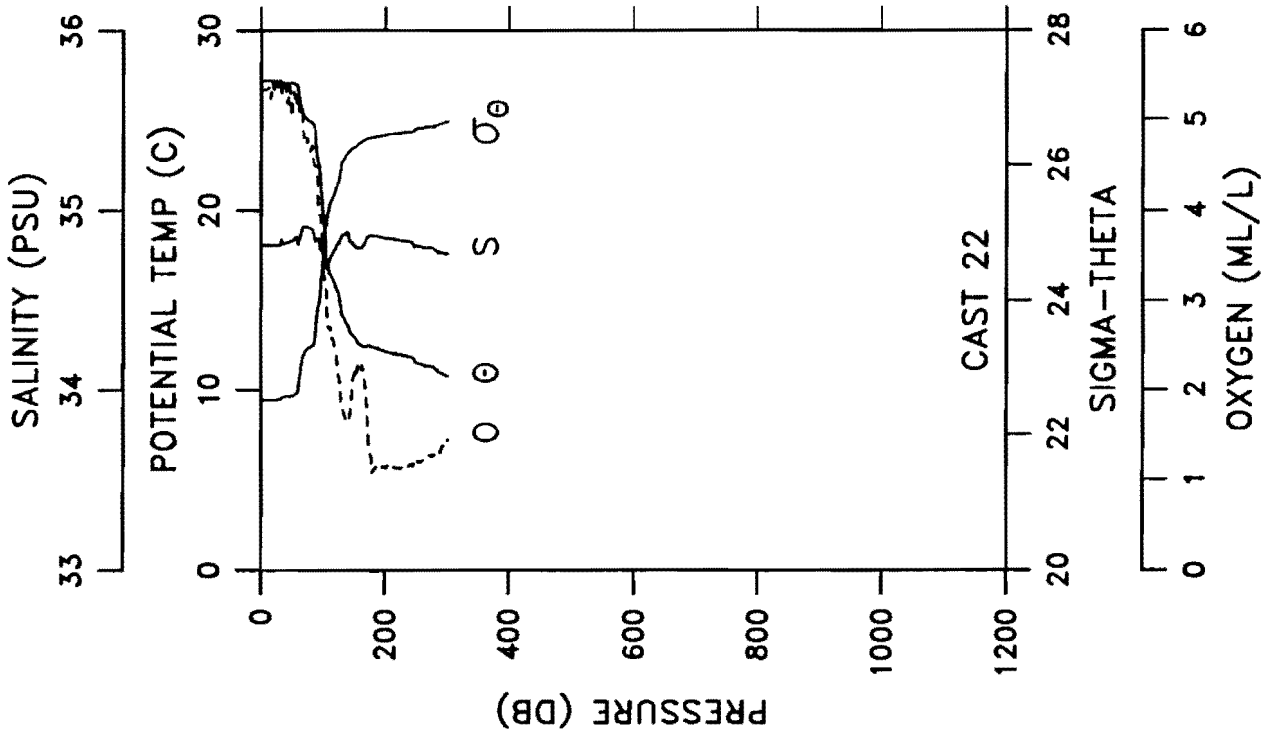


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SGK-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.254 | 34.806 | 5.61 | 22.492 | 0.000 |
| 10 | 27.252 | 34.806 | 5.62 | 22.493 | 0.053 |
| 20 | 27.245 | 34.804 | 5.70 | 22.494 | 0.107 |
| 30 | 27.162 | 34.796 | 5.70 | 22.514 | 0.160 |
| 40 | 27.108 | 34.804 | 5.68 | 22.538 | 0.214 |
| 50 | 27.033 | 34.806 | 5.58 | 22.563 | 0.267 |
| 60 | 27.062 | 34.831 | 5.58 | 22.573 | 0.320 |
| 70 | 27.055 | 34.841 | 5.54 | 22.582 | 0.373 |
| 80 | 26.147 | 34.846 | 5.35 | 22.873 | 0.425 |
| 90 | 24.874 | 34.912 | 4.95 | 23.315 | 0.472 |
| 100 | 24.546 | 34.885 | 4.72 | 23.394 | 0.518 |
| 110 | 22.387 | 34.803 | 3.96 | 23.961 | 0.561 |
| 120 | 17.749 | 34.690 | 3.11 | 25.098 | 0.595 |
| 130 | 16.042 | 34.776 | 2.45 | 25.567 | 0.621 |
| 140 | 14.370 | 34.830 | 1.87 | 25.978 | 0.644 |
| 150 | 13.183 | 34.824 | 1.78 | 26.221 | 0.663 |
| 160 | 12.665 | 34.786 | 2.28 | 26.294 | 0.681 |
| 170 | 12.426 | 34.814 | 2.13 | 26.363 | 0.699 |
| 180 | 12.456 | 34.861 | 1.09 | 26.394 | 0.716 |
| 190 | 12.323 | 34.854 | 1.16 | 26.414 | 0.732 |
| 200 | 12.203 | 34.848 | 1.12 | 26.432 | 0.749 |
| 250 | 11.755 | 34.818 | 1.17 | 26.495 | 0.830 |
| 300 | 10.862 | 34.759 | 1.38 | 26.613 | 0.907 |
| 350 | 10.430 | 34.749 | 1.48 | 26.682 | 0.979 |
| 400 | 10.058 | 34.725 | 1.44 | 26.728 | 1.050 |
| 450 | 9.352 | 34.674 | 1.36 | 26.806 | 1.119 |
| 500 | 8.130 | 34.625 | 1.41 | 26.960 | 1.181 |
| 550 | 7.581 | 34.603 | 1.38 | 27.024 | 1.238 |
| 600 | 7.055 | 34.581 | 1.57 | 27.081 | 1.293 |
| 650 | 6.709 | 34.565 | 1.71 | 27.116 | 1.346 |
| 700 | 6.287 | 34.558 | 1.77 | 27.166 | 1.397 |
| 750 | 5.916 | 34.551 | 1.81 | 27.209 | 1.446 |
| 800 | 5.688 | 34.548 | 1.86 | 27.235 | 1.493 |
| 900 | 5.097 | 34.544 | 2.05 | 27.303 | 1.584 |
| 1000 | 4.593 | 34.551 | 2.03 | 27.365 | 1.669 |
| 1500 | 3.080 | 34.598 | 2.15 | 27.556 | 2.029 |
| 2000 | 2.179 | 34.639 | 2.53 | 27.868 | 2.517 |
| 2500 | 1.658 | 34.664 | 2.93 | 27.729 | 2.565 |
| 3000 | 1.504 | 34.672 | 3.14 | 27.747 | 2.799 |
| 3500 | 1.218 | 34.687 | 3.56 | 27.779 | 3.024 |
| 4000 | 1.111 | 34.693 | 3.80 | 27.791 | 3.240 |
| 4426 | 1.047 | 34.694 | 3.97 | 27.796 | 3.427 |

CAST TG1-89-MB -022 DATE 24 MAY 89 TIME 0906 GMT
LAT 02 00.4N LONG 140 00.6W

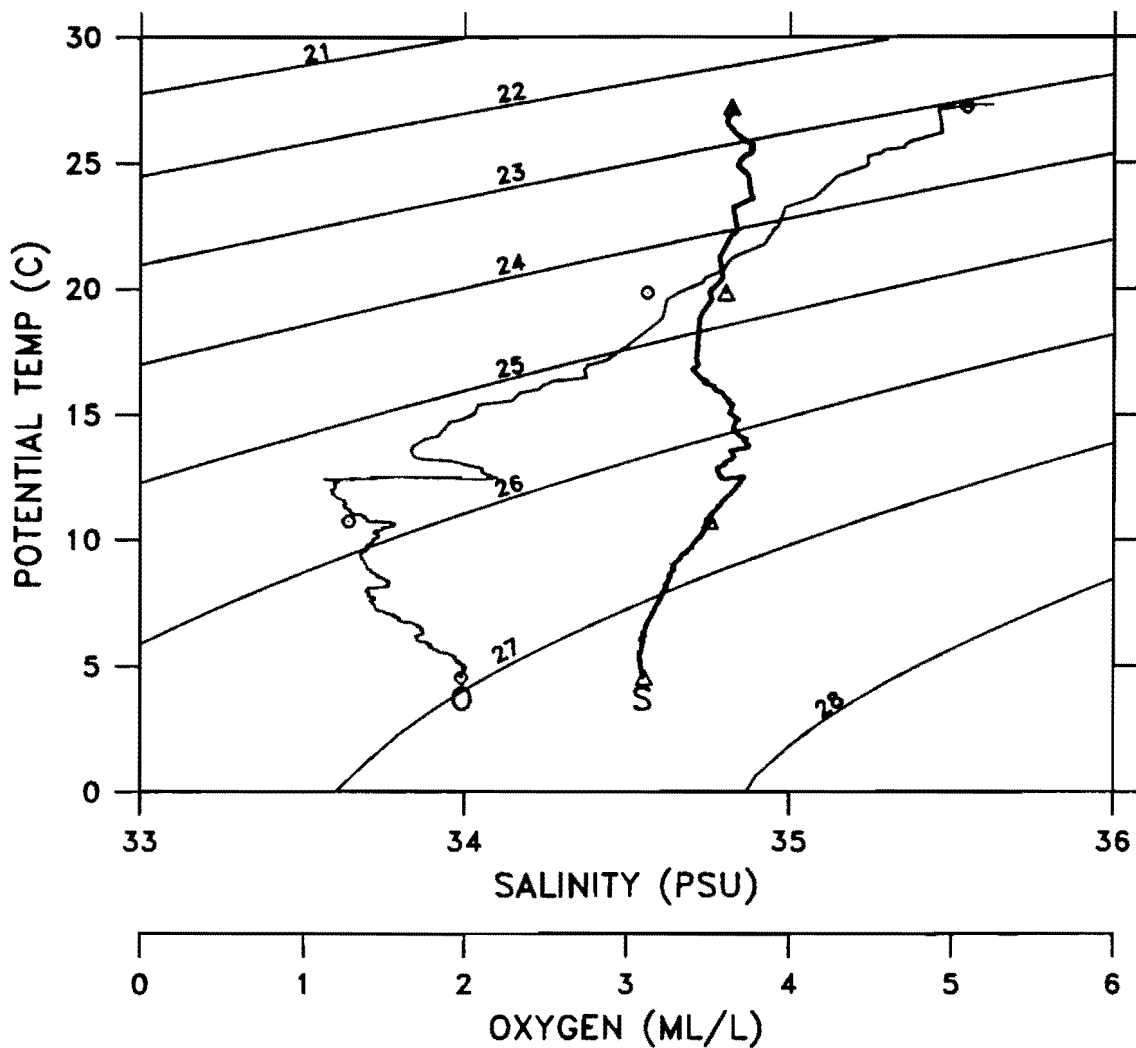


CAST TG1-89-MB -022 DATE 24 MAY 89 TIME 0906 GMT
 LAT 02 00.4N LONG 140 00.6W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 126 T SPD 18 KT VISIBILITY
 CLOUD AMOUNT DRY 27.6 WET 24.0 DEPTH 5873 M

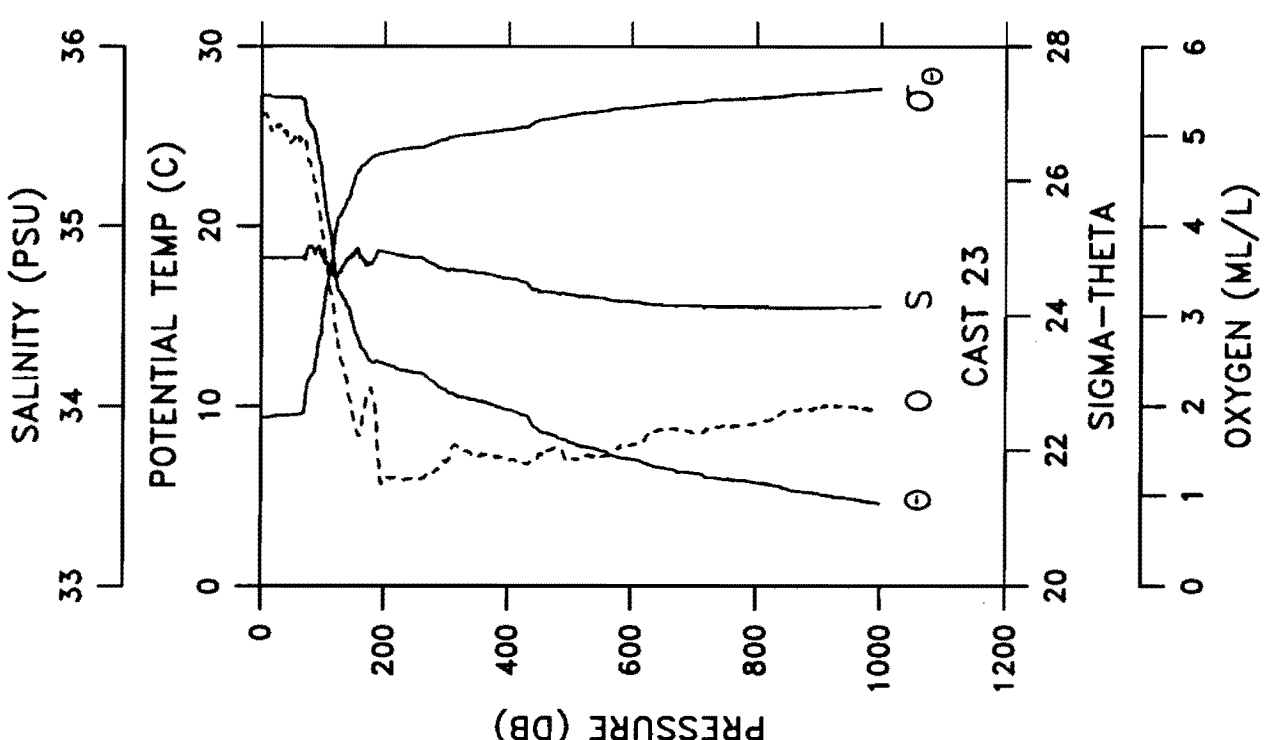


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.190 | 34.809 | 5.33 | 22.515 | 0.000 |
| 10 | 27.188 | 34.809 | 5.34 | 22.516 | 0.053 |
| 20 | 27.189 | 34.807 | 5.30 | 22.514 | 0.106 |
| 30 | 27.154 | 34.808 | 5.43 | 22.526 | 0.160 |
| 40 | 27.054 | 34.819 | 5.39 | 22.566 | 0.213 |
| 50 | 27.069 | 34.833 | 5.06 | 22.572 | 0.266 |
| 60 | 26.716 | 34.811 | 5.29 | 22.668 | 0.318 |
| 70 | 25.196 | 34.911 | 4.82 | 23.216 | 0.367 |
| 80 | 24.871 | 34.902 | 4.66 | 23.308 | 0.413 |
| 90 | 23.221 | 34.844 | 4.46 | 23.753 | 0.458 |
| 100 | 19.874 | 34.777 | 3.47 | 24.626 | 0.496 |
| 110 | 16.702 | 34.709 | 2.69 | 25.362 | 0.526 |
| 120 | 15.893 | 34.782 | 2.46 | 25.605 | 0.551 |
| 130 | 14.206 | 34.858 | 1.82 | 26.035 | 0.574 |
| 140 | 13.621 | 34.879 | 1.68 | 26.173 | 0.593 |
| 150 | 12.999 | 34.812 | 2.16 | 26.248 | 0.611 |
| 160 | 12.546 | 34.794 | 2.26 | 26.324 | 0.629 |
| 170 | 12.441 | 34.836 | 1.90 | 26.377 | 0.646 |
| 180 | 12.409 | 34.862 | 1.09 | 26.403 | 0.663 |
| 190 | 12.306 | 34.855 | 1.13 | 26.418 | 0.679 |
| 200 | 12.173 | 34.844 | 1.13 | 26.436 | 0.696 |
| 250 | 11.531 | 34.804 | 1.23 | 26.526 | 0.776 |
| 300 | 10.771 | 34.759 | 1.42 | 26.630 | 0.853 |
| 301 | 10.757 | 34.759 | 1.44 | 26.632 | 0.854 |

CAST TG1-89-MB -023 DATE 25 MAY 89 TIME 2233 GMT
LAT 02 00.4N LONG 140 01.2W

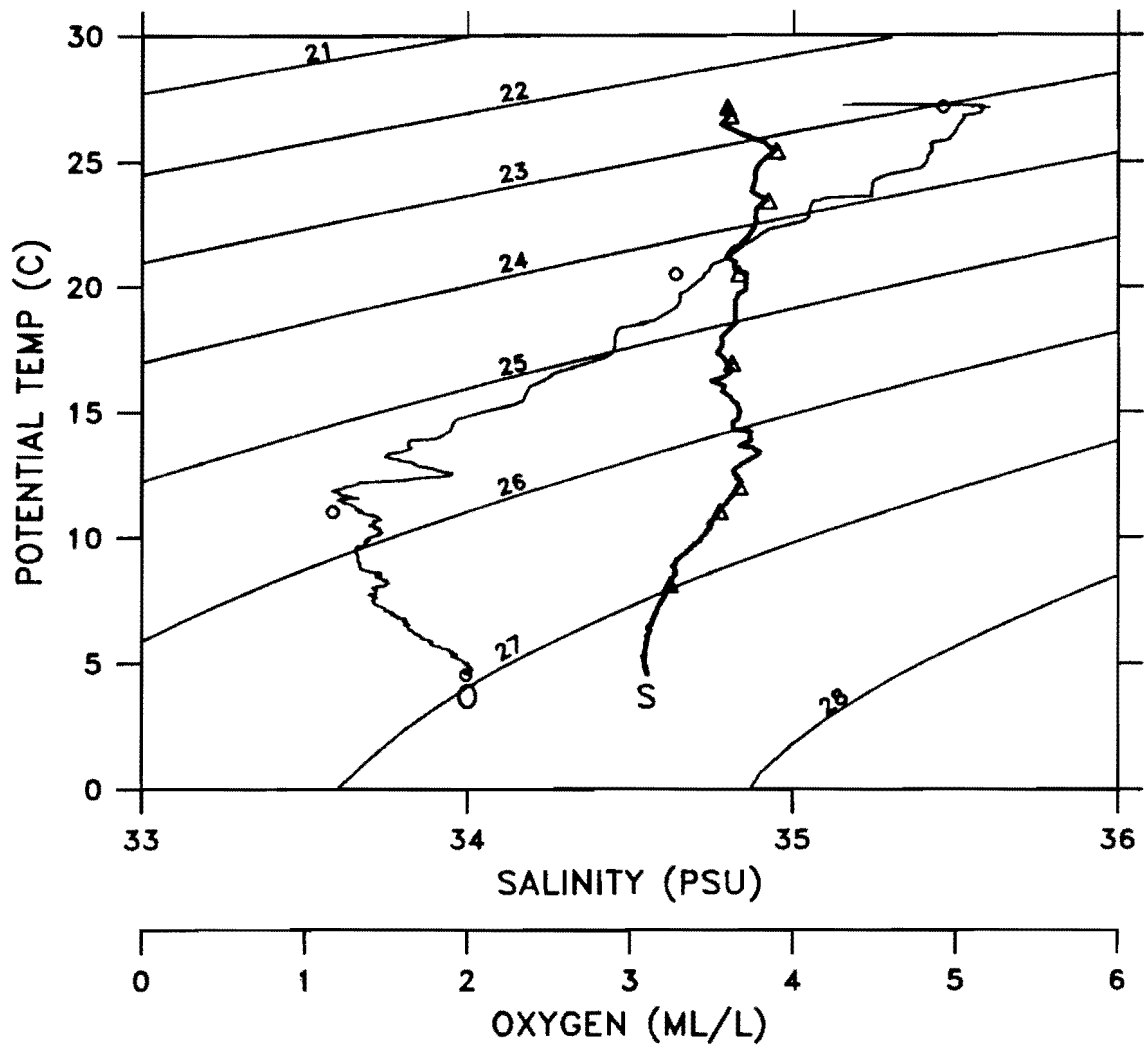


CAST TG1-89-MB -023 DATE 25 MAY 89 TIME 2233 GMT
 LAT 02 00.4N LONG 140 01.2W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 100 T SPD 14 KT VISIBILITY
 CLOUD AMOUNT DRY 27.7 WET 24.0 DEPTH 4.375 M

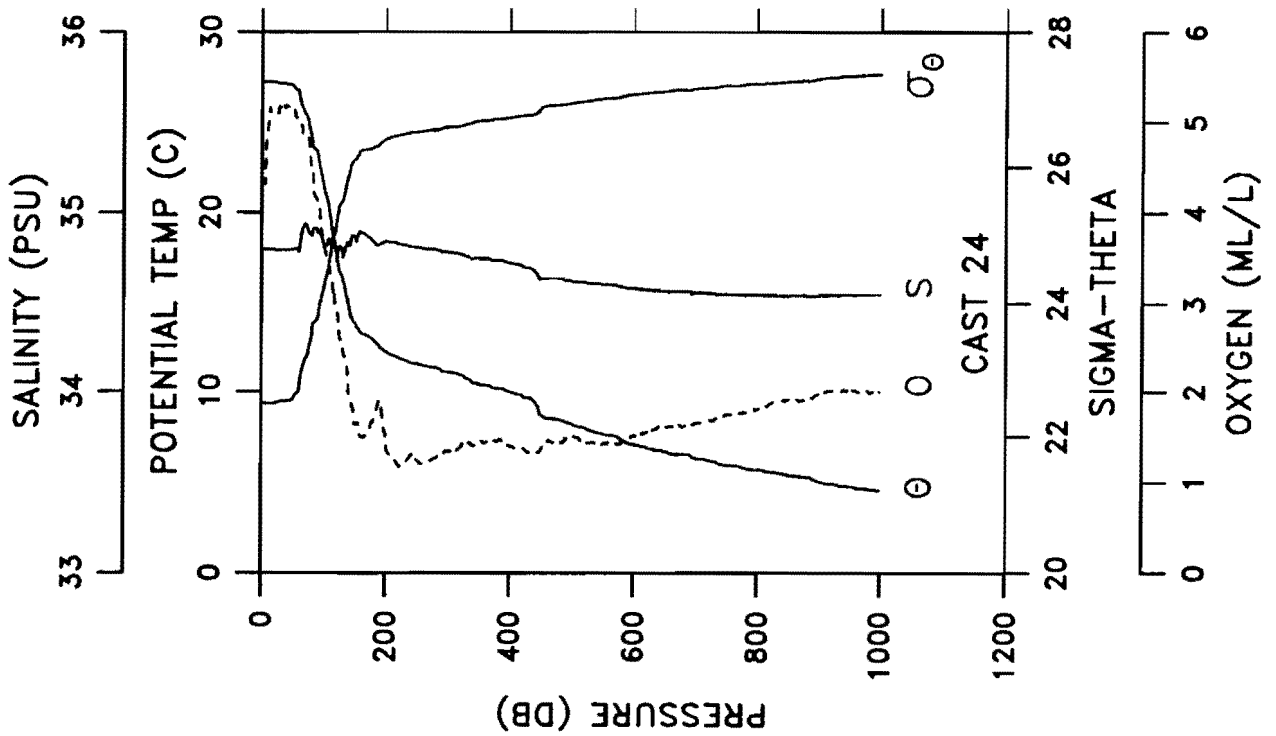


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.266 | 34.824 | 5.24 | 22.502 | 0.000 |
| 10 | 27.265 | 34.824 | 5.19 | 22.503 | 0.053 |
| 20 | 27.194 | 34.822 | 5.07 | 22.524 | 0.107 |
| 30 | 27.170 | 34.823 | 5.12 | 22.532 | 0.160 |
| 40 | 27.163 | 34.823 | 5.05 | 22.535 | 0.213 |
| 50 | 27.150 | 34.825 | 4.93 | 22.540 | 0.266 |
| 60 | 27.129 | 34.824 | 5.00 | 22.546 | 0.319 |
| 70 | 26.993 | 34.832 | 4.91 | 22.595 | 0.372 |
| 80 | 25.571 | 34.881 | 4.69 | 23.079 | 0.422 |
| 90 | 24.522 | 34.872 | 4.32 | 23.391 | 0.469 |
| 100 | 22.371 | 34.845 | 3.91 | 23.997 | 0.512 |
| 110 | 20.076 | 34.772 | 3.40 | 24.569 | 0.548 |
| 120 | 17.257 | 34.718 | 2.90 | 25.237 | 0.580 |
| 130 | 16.190 | 34.755 | 2.50 | 25.517 | 0.606 |
| 140 | 15.521 | 34.816 | 2.24 | 25.716 | 0.630 |
| 150 | 14.436 | 34.829 | 1.87 | 25.963 | 0.652 |
| 160 | 13.543 | 34.822 | 1.67 | 26.145 | 0.671 |
| 170 | 12.920 | 34.793 | 2.06 | 26.249 | 0.690 |
| 180 | 12.439 | 34.792 | 2.15 | 26.343 | 0.707 |
| 190 | 12.482 | 34.861 | 1.50 | 26.388 | 0.724 |
| 200 | 12.347 | 34.855 | 1.19 | 26.410 | 0.741 |
| 250 | 11.842 | 34.825 | 1.18 | 26.483 | 0.822 |
| 300 | 10.893 | 34.758 | 1.37 | 26.607 | 0.900 |
| 350 | 10.320 | 34.739 | 1.44 | 26.694 | 0.972 |
| 400 | 9.813 | 34.707 | 1.40 | 26.756 | 1.042 |
| 450 | 8.607 | 34.632 | 1.46 | 26.892 | 1.109 |
| 500 | 7.974 | 34.618 | 1.38 | 26.978 | 1.169 |
| 550 | 7.501 | 34.598 | 1.43 | 27.032 | 1.226 |
| 600 | 7.017 | 34.579 | 1.56 | 27.085 | 1.280 |
| 650 | 6.541 | 34.561 | 1.73 | 27.135 | 1.332 |
| 700 | 6.238 | 34.557 | 1.71 | 27.172 | 1.382 |
| 750 | 5.911 | 34.550 | 1.77 | 27.209 | 1.431 |
| 800 | 5.703 | 34.546 | 1.81 | 27.233 | 1.478 |
| 900 | 5.088 | 34.542 | 1.98 | 27.302 | 1.569 |
| 1000 | 4.561 | 34.552 | 1.98 | 27.370 | 1.653 |
| 1004 | 4.547 | 34.551 | 1.98 | 27.371 | 1.656 |

CAST TG1-89-MB -024 DATE 25 MAY 89 TIME 0242 GMT
LAT 01 30.3N LONG 140 00.0W

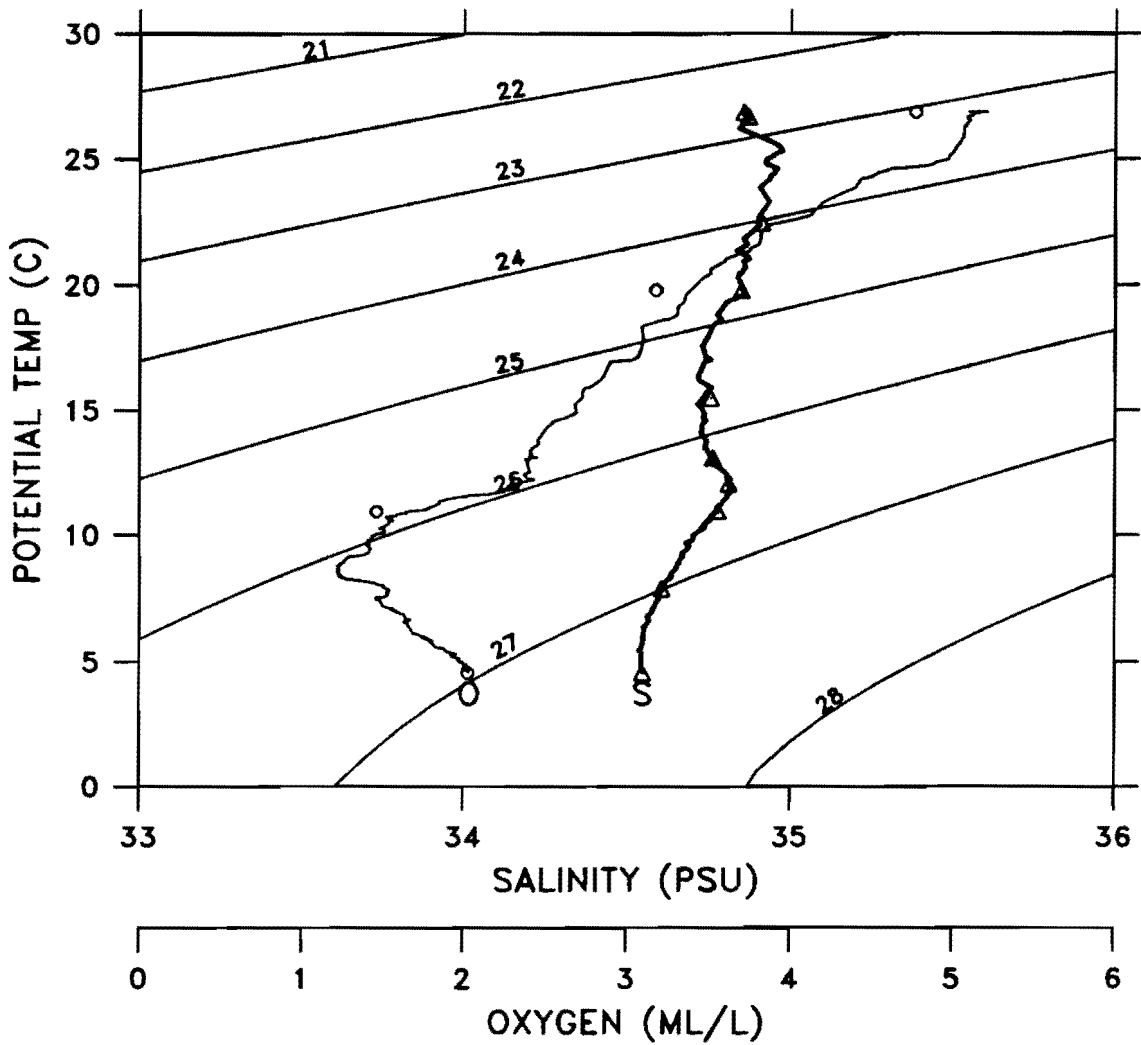


CAST TG1-89-MB -024 DATE 25 MAY 89 TIME 0242 GMT
 LAT 01 30.3N LONG 140 00.0W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 119 T SPD 19 KT VISIBILITY
 CLOUD AMOUNT DRY 27.5 WET 23.7 DEPTH 4343 M

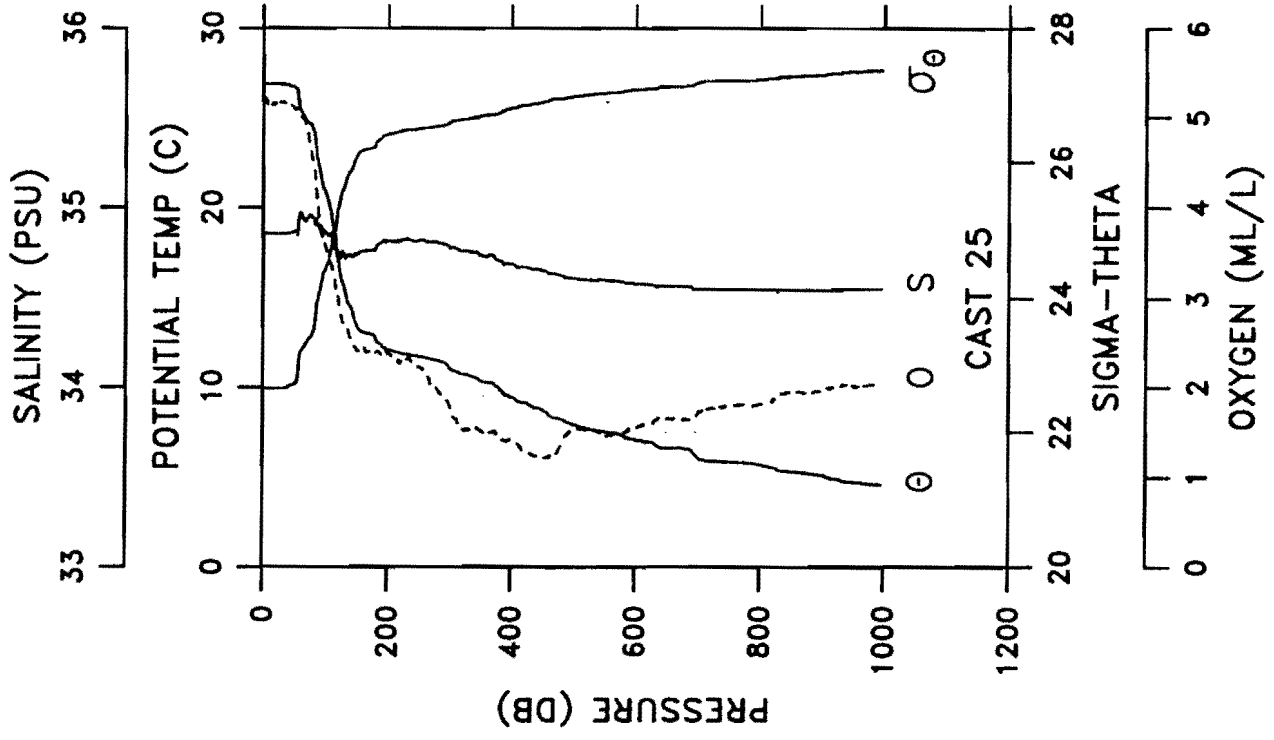


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SGK-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.213 | 34.798 | 4.31 | 22.499 | 0.000 |
| 10 | 27.218 | 34.796 | 4.95 | 22.496 | 0.053 |
| 20 | 27.219 | 34.796 | 5.09 | 22.496 | 0.107 |
| 30 | 27.127 | 34.793 | 5.15 | 22.523 | 0.160 |
| 40 | 27.106 | 34.792 | 5.19 | 22.529 | 0.213 |
| 50 | 27.032 | 34.795 | 5.16 | 22.555 | 0.267 |
| 60 | 26.454 | 34.780 | 5.02 | 22.727 | 0.319 |
| 70 | 25.435 | 34.941 | 4.85 | 23.166 | 0.368 |
| 80 | 24.229 | 34.883 | 4.49 | 23.487 | 0.414 |
| 90 | 23.266 | 34.901 | 4.11 | 23.783 | 0.456 |
| 100 | 21.544 | 34.816 | 3.68 | 24.206 | 0.495 |
| 110 | 19.844 | 34.854 | 3.35 | 24.692 | 0.531 |
| 120 | 18.006 | 34.781 | 2.90 | 25.104 | 0.561 |
| 130 | 16.421 | 34.794 | 2.51 | 25.493 | 0.588 |
| 140 | 14.882 | 34.835 | 2.02 | 25.871 | 0.611 |
| 150 | 13.879 | 34.869 | 1.64 | 26.112 | 0.631 |
| 160 | 13.328 | 34.891 | 1.50 | 26.242 | 0.650 |
| 170 | 13.162 | 34.873 | 1.55 | 26.262 | 0.668 |
| 180 | 12.919 | 34.842 | 1.68 | 26.287 | 0.686 |
| 190 | 12.559 | 34.819 | 1.90 | 26.341 | 0.704 |
| 200 | 12.287 | 34.840 | 1.52 | 26.410 | 0.721 |
| 250 | 11.574 | 34.808 | 1.24 | 26.521 | 0.801 |
| 300 | 11.092 | 34.779 | 1.34 | 26.587 | 0.878 |
| 350 | 10.414 | 34.747 | 1.44 | 26.684 | 0.952 |
| 400 | 10.000 | 34.721 | 1.40 | 26.735 | 1.023 |
| 450 | 8.744 | 34.637 | 1.34 | 26.875 | 1.091 |
| 500 | 8.263 | 34.627 | 1.50 | 26.941 | 1.152 |
| 550 | 7.673 | 34.606 | 1.42 | 27.013 | 1.210 |
| 600 | 7.080 | 34.583 | 1.52 | 27.079 | 1.265 |
| 650 | 6.687 | 34.569 | 1.60 | 27.123 | 1.318 |
| 700 | 6.347 | 34.561 | 1.66 | 27.161 | 1.369 |
| 750 | 5.959 | 34.554 | 1.75 | 27.206 | 1.419 |
| 800 | 5.697 | 34.549 | 1.80 | 27.235 | 1.466 |
| 900 | 5.037 | 34.543 | 1.97 | 27.309 | 1.557 |
| 1000 | 4.536 | 34.553 | 2.00 | 27.373 | 1.640 |
| 1003 | 4.531 | 34.553 | 2.00 | 27.374 | 1.643 |

CAST TG1-89-MB -025 DATE 25 MAY 89 TIME 0606 GMT
LAT 00 59.9N LONG 140 00.6W

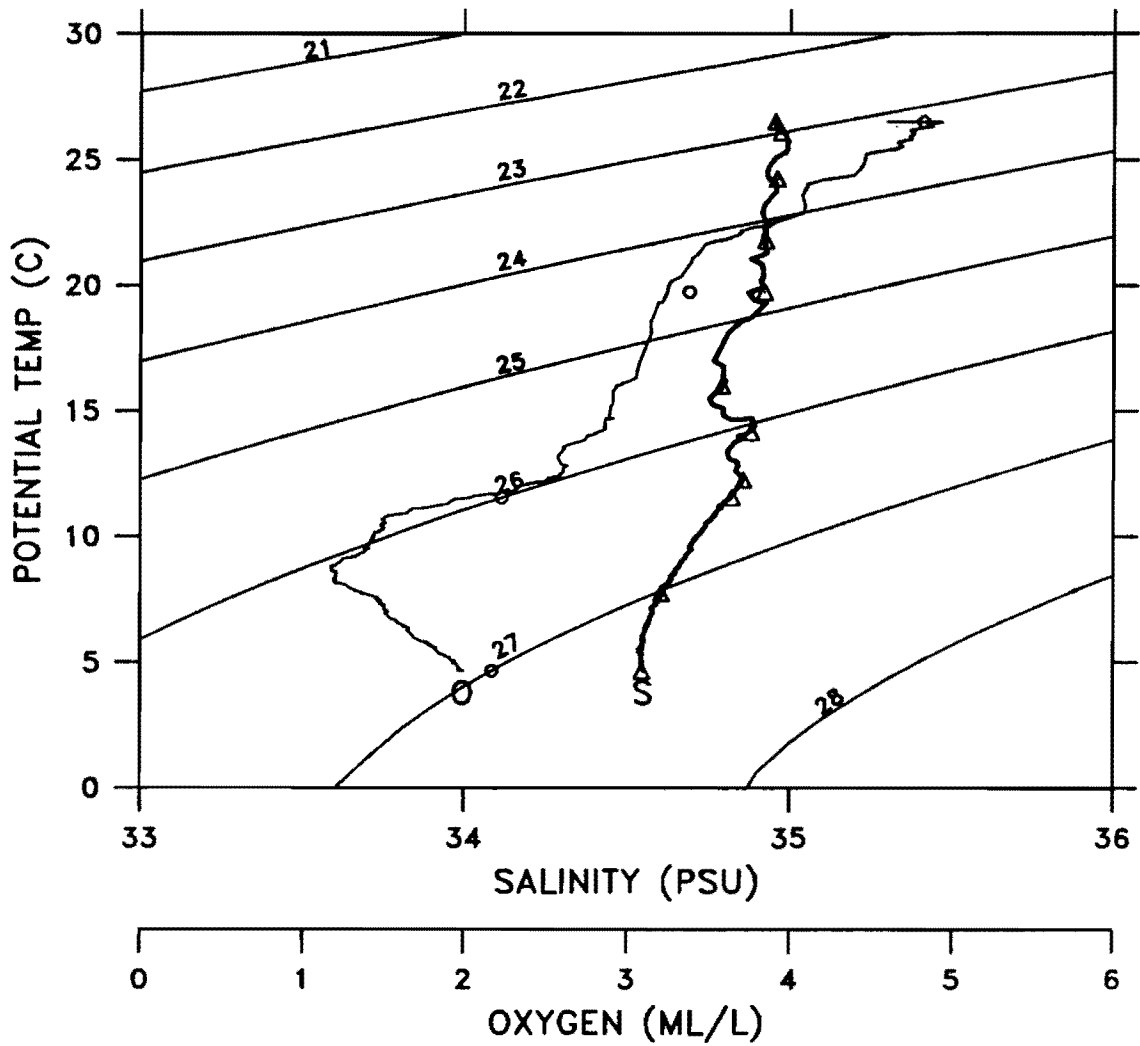


CAST TG1-89-MB -025 DATE 25 MAY 89 TIME 0606 GMT
 LAT 00 59.9N LONG 140 00.6W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 098 T SPD 11 KT VISIBILITY
 CLOUD AMOUNT DRY 27.2 WET 23.7 DEPTH 4246 M

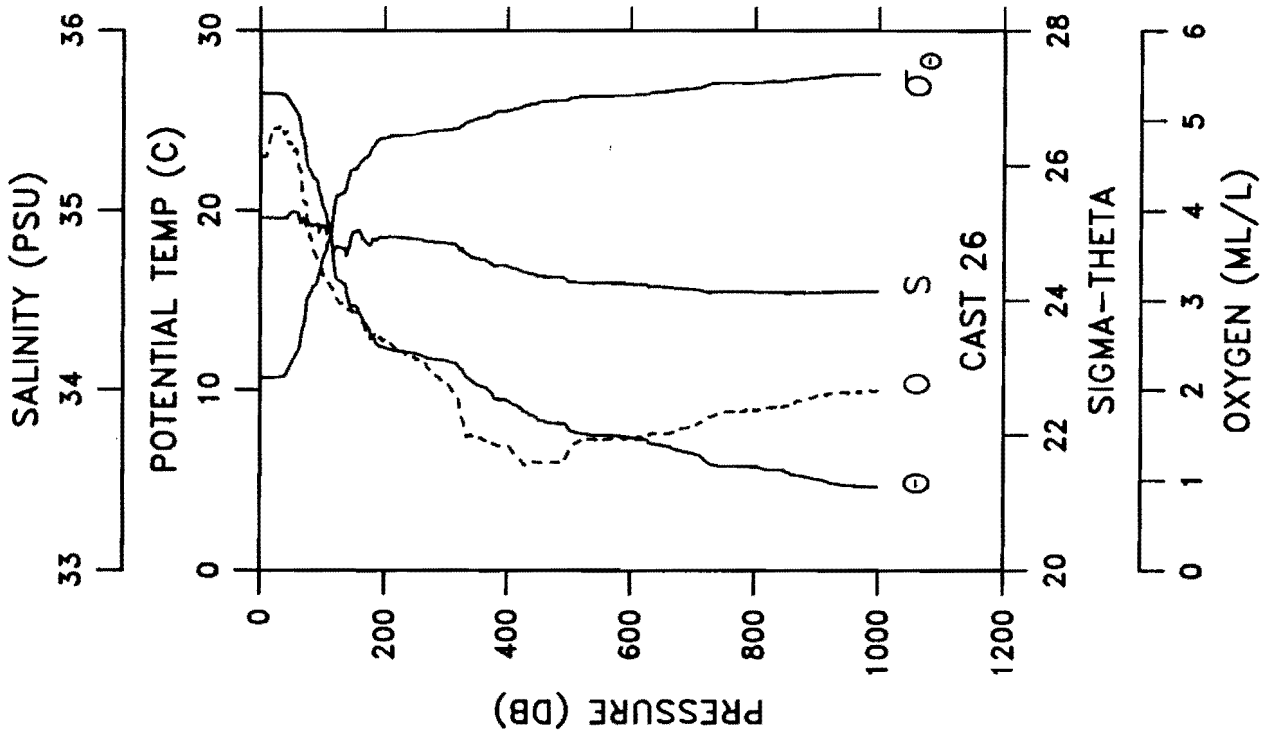


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.876 | 34.857 | 5.21 | 22.652 | 0.000 |
| 10 | 26.883 | 34.856 | 5.10 | 22.649 | 0.052 |
| 20 | 26.879 | 34.855 | 5.16 | 22.649 | 0.104 |
| 30 | 26.864 | 34.856 | 5.16 | 22.654 | 0.156 |
| 40 | 26.832 | 34.855 | 5.13 | 22.664 | 0.208 |
| 50 | 26.697 | 34.865 | 5.10 | 22.714 | 0.260 |
| 60 | 25.376 | 34.971 | 5.01 | 23.207 | 0.310 |
| 70 | 24.785 | 34.924 | 4.87 | 23.351 | 0.356 |
| 80 | 24.289 | 34.937 | 4.51 | 23.508 | 0.401 |
| 90 | 22.200 | 34.891 | 3.84 | 24.080 | 0.442 |
| 100 | 20.824 | 34.861 | 3.57 | 24.437 | 0.479 |
| 110 | 19.304 | 34.804 | 3.35 | 24.795 | 0.512 |
| 120 | 17.008 | 34.760 | 3.03 | 25.329 | 0.542 |
| 130 | 15.527 | 34.737 | 2.73 | 25.653 | 0.567 |
| 140 | 14.532 | 34.739 | 2.55 | 25.873 | 0.590 |
| 150 | 13.488 | 34.738 | 2.42 | 26.093 | 0.610 |
| 160 | 13.145 | 34.761 | 2.42 | 26.179 | 0.629 |
| 170 | 13.063 | 34.765 | 2.41 | 26.199 | 0.648 |
| 180 | 12.772 | 34.775 | 2.40 | 26.265 | 0.666 |
| 190 | 12.414 | 34.805 | 2.37 | 26.358 | 0.684 |
| 200 | 12.154 | 34.816 | 2.39 | 26.418 | 0.700 |
| 250 | 11.749 | 34.817 | 2.23 | 26.495 | 0.781 |
| 300 | 11.199 | 34.787 | 1.83 | 26.574 | 0.860 |
| 350 | 10.404 | 34.738 | 1.52 | 26.678 | 0.934 |
| 400 | 9.453 | 34.692 | 1.43 | 26.803 | 1.003 |
| 450 | 8.736 | 34.653 | 1.23 | 26.889 | 1.067 |
| 500 | 7.932 | 34.611 | 1.51 | 26.979 | 1.127 |
| 550 | 7.542 | 34.603 | 1.46 | 27.030 | 1.184 |
| 600 | 7.099 | 34.580 | 1.56 | 27.075 | 1.239 |
| 650 | 6.645 | 34.570 | 1.65 | 27.128 | 1.292 |
| 700 | 6.129 | 34.554 | 1.69 | 27.184 | 1.343 |
| 750 | 5.867 | 34.552 | 1.80 | 27.215 | 1.391 |
| 800 | 5.727 | 34.550 | 1.81 | 27.232 | 1.438 |
| 900 | 5.128 | 34.547 | 1.98 | 27.301 | 1.528 |
| 996 | 4.581 | 34.553 | 2.04 | 27.368 | 1.608 |

CAST TG1-89-MB -026 DATE 25 MAY 89 TIME 0943 GMT
LAT 00 29.9N LONG 139 59.1W

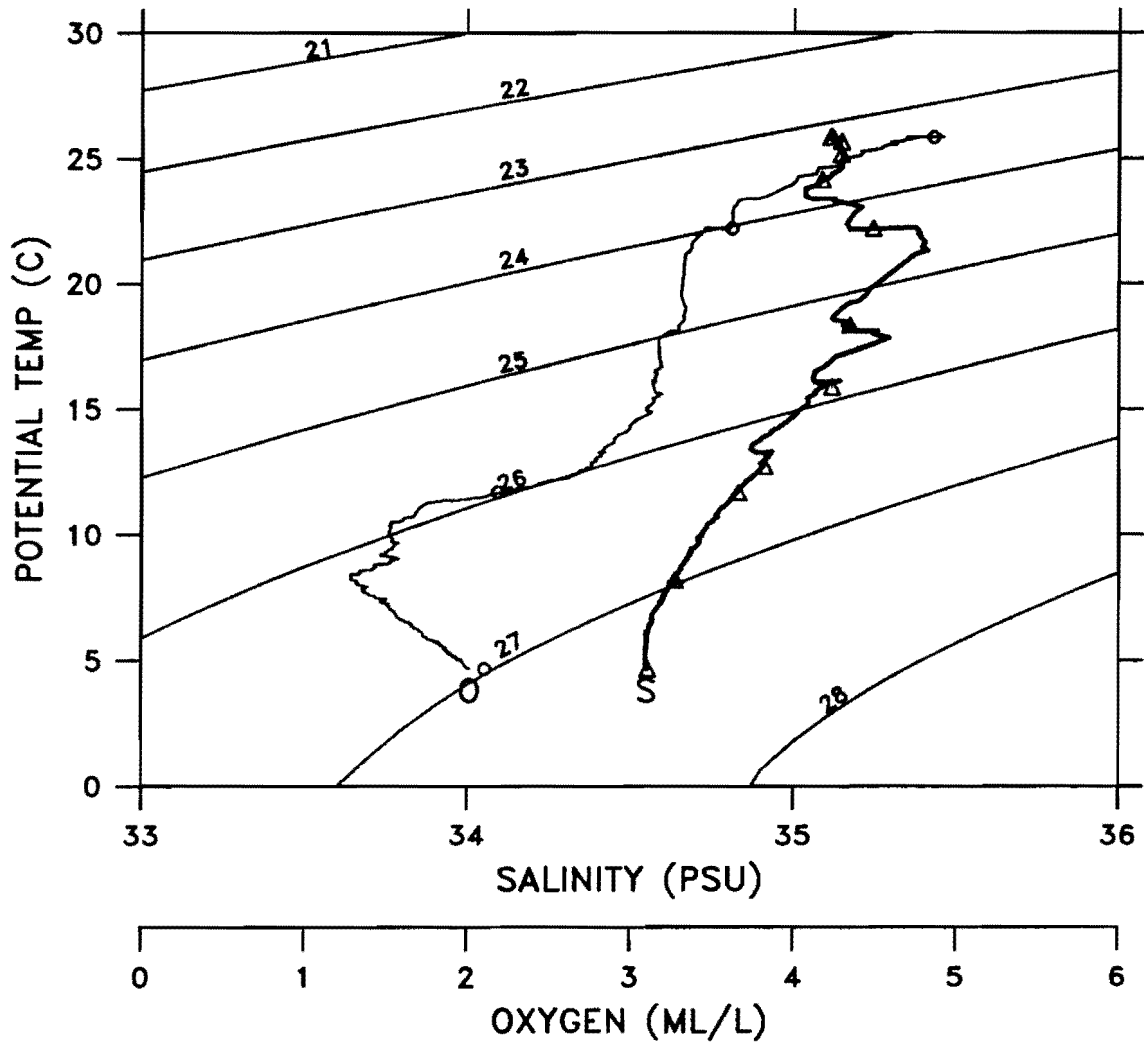


CAST TG1-89-MB -026 DATE 25 MAY 89 TIME 0943 GMT
 LAT 00 28.9N LONG 139 59.1W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 095 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 26.8 WET 24.0 DEPTH 4250 M

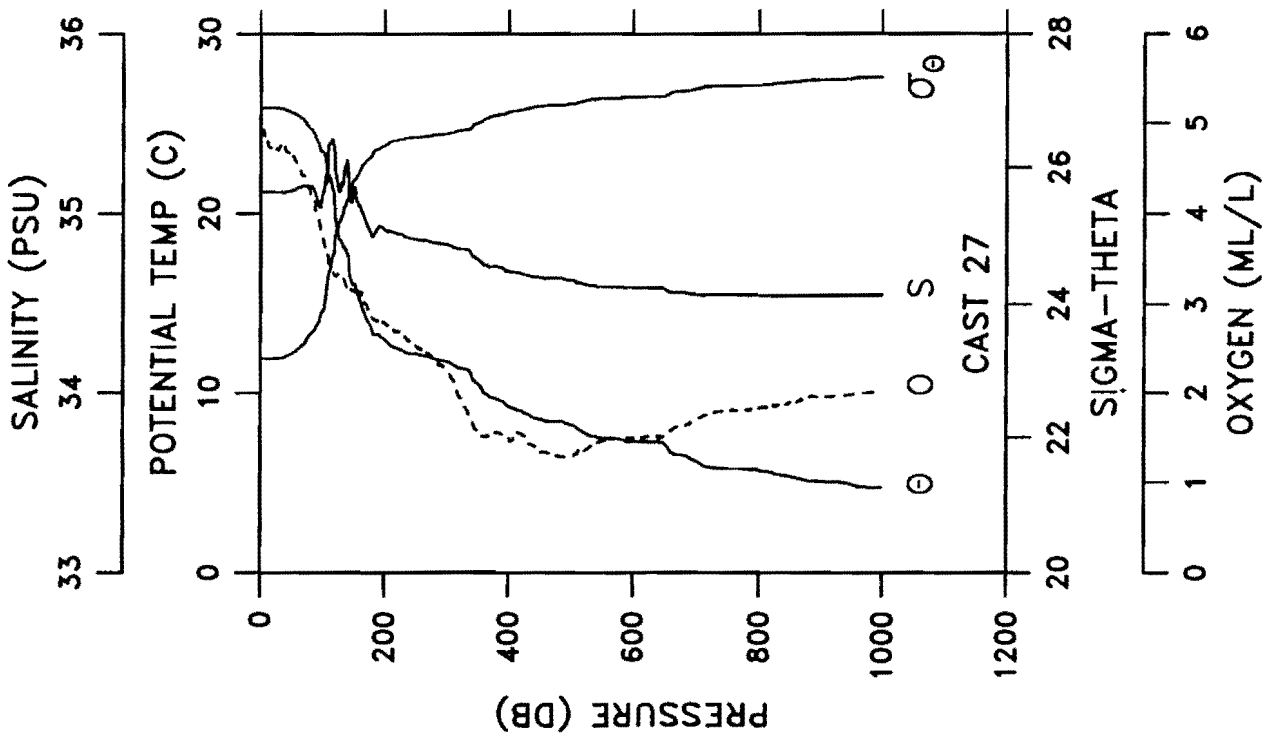


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.517 | 34.958 | 4.60 | 22.842 | 0.000 |
| 10 | 26.515 | 34.958 | 4.60 | 22.843 | 0.050 |
| 20 | 26.512 | 34.959 | 4.87 | 22.844 | 0.100 |
| 30 | 26.493 | 34.958 | 4.93 | 22.849 | 0.150 |
| 40 | 26.413 | 34.958 | 4.86 | 22.875 | 0.200 |
| 50 | 25.870 | 34.989 | 4.74 | 23.067 | 0.249 |
| 60 | 25.297 | 34.986 | 4.51 | 23.242 | 0.297 |
| 70 | 23.720 | 34.956 | 4.09 | 23.693 | 0.341 |
| 80 | 22.131 | 34.925 | 3.70 | 24.125 | 0.381 |
| 90 | 21.639 | 34.923 | 3.48 | 24.261 | 0.418 |
| 100 | 20.182 | 34.908 | 3.27 | 24.645 | 0.453 |
| 110 | 19.107 | 34.909 | 3.18 | 24.926 | 0.485 |
| 120 | 16.343 | 34.793 | 3.06 | 25.510 | 0.513 |
| 130 | 16.041 | 34.795 | 2.97 | 25.581 | 0.538 |
| 140 | 15.103 | 34.795 | 2.90 | 25.792 | 0.561 |
| 150 | 14.710 | 34.883 | 2.90 | 25.946 | 0.583 |
| 160 | 14.242 | 34.878 | 2.85 | 26.042 | 0.603 |
| 170 | 13.644 | 34.824 | 2.83 | 26.128 | 0.623 |
| 180 | 12.935 | 34.840 | 2.59 | 26.282 | 0.642 |
| 190 | 12.464 | 34.847 | 2.58 | 26.381 | 0.659 |
| 200 | 12.356 | 34.852 | 2.56 | 26.406 | 0.676 |
| 250 | 12.023 | 34.844 | 2.34 | 26.464 | 0.757 |
| 300 | 11.614 | 34.822 | 2.08 | 26.524 | 0.837 |
| 350 | 10.316 | 34.736 | 1.50 | 26.682 | 0.913 |
| 400 | 9.428 | 34.694 | 1.38 | 26.809 | 0.981 |
| 450 | 8.346 | 34.636 | 1.19 | 26.936 | 1.044 |
| 500 | 7.786 | 34.606 | 1.36 | 26.986 | 1.103 |
| 550 | 7.509 | 34.600 | 1.44 | 27.032 | 1.159 |
| 600 | 7.375 | 34.594 | 1.47 | 27.047 | 1.215 |
| 650 | 6.943 | 34.580 | 1.50 | 27.096 | 1.269 |
| 700 | 6.520 | 34.566 | 1.61 | 27.142 | 1.321 |
| 750 | 5.806 | 34.551 | 1.76 | 27.223 | 1.370 |
| 800 | 5.748 | 34.551 | 1.77 | 27.230 | 1.417 |
| 900 | 5.059 | 34.546 | 1.93 | 27.308 | 1.508 |
| 1000 | 4.655 | 34.551 | 1.99 | 27.359 | 1.591 |
| 1002 | 4.654 | 34.551 | 1.99 | 27.359 | 1.593 |

CAST TG1-89-MB -027 DATE 26 MAY 89 TIME 1418 GMT
LAT 00 08.5S LONG 139 56.5W

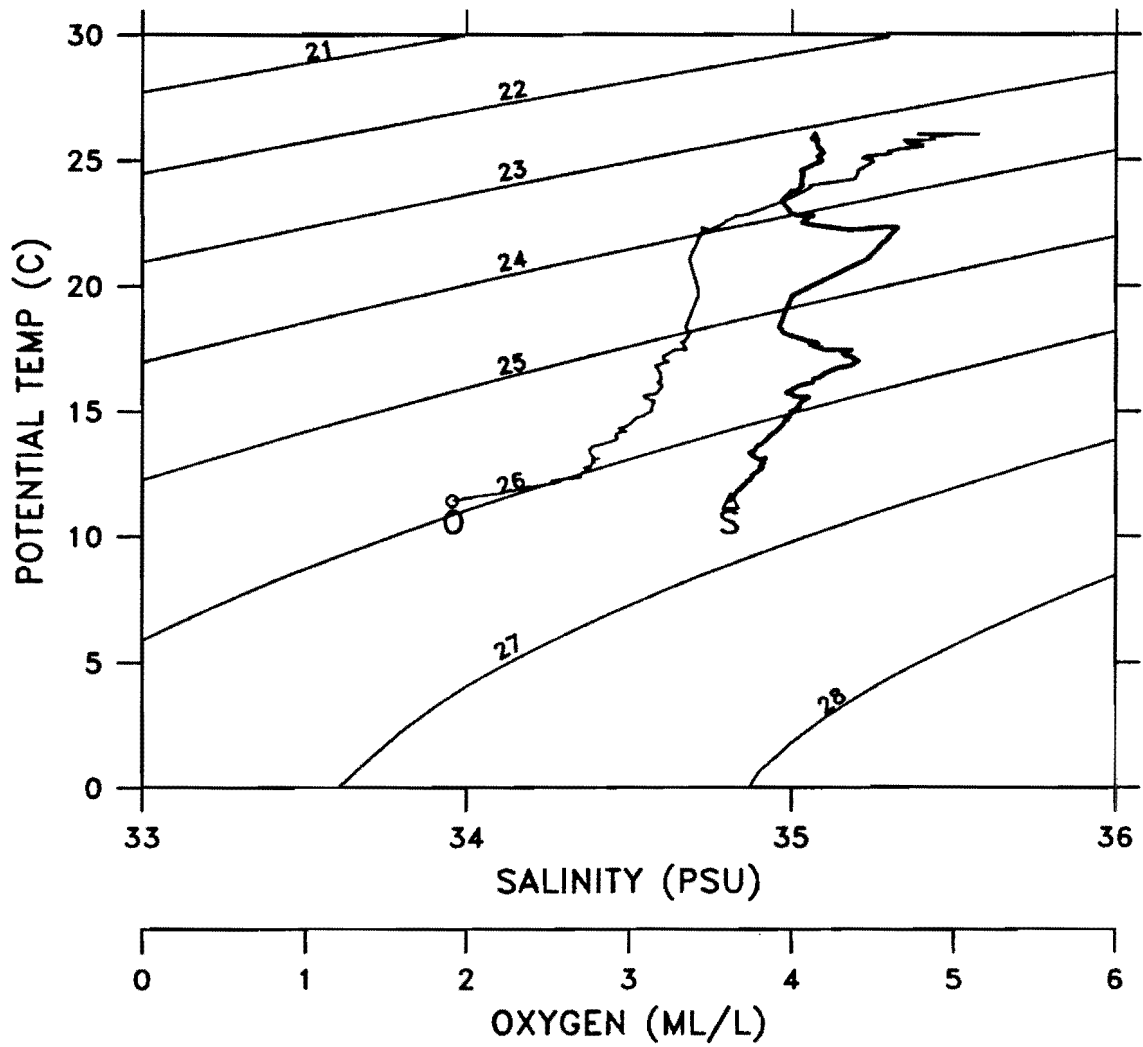


CAST TG1-88-MB -027 DATE 26 MAY 89 TIME 1418 GMT
 LAT 00 08.55 LONG 139 56.5W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 127 T SPD 16 KT VISIBILITY
 CLOUD AMOUNT DRY 26.5 WET 24.0 DEPTH 4204 M

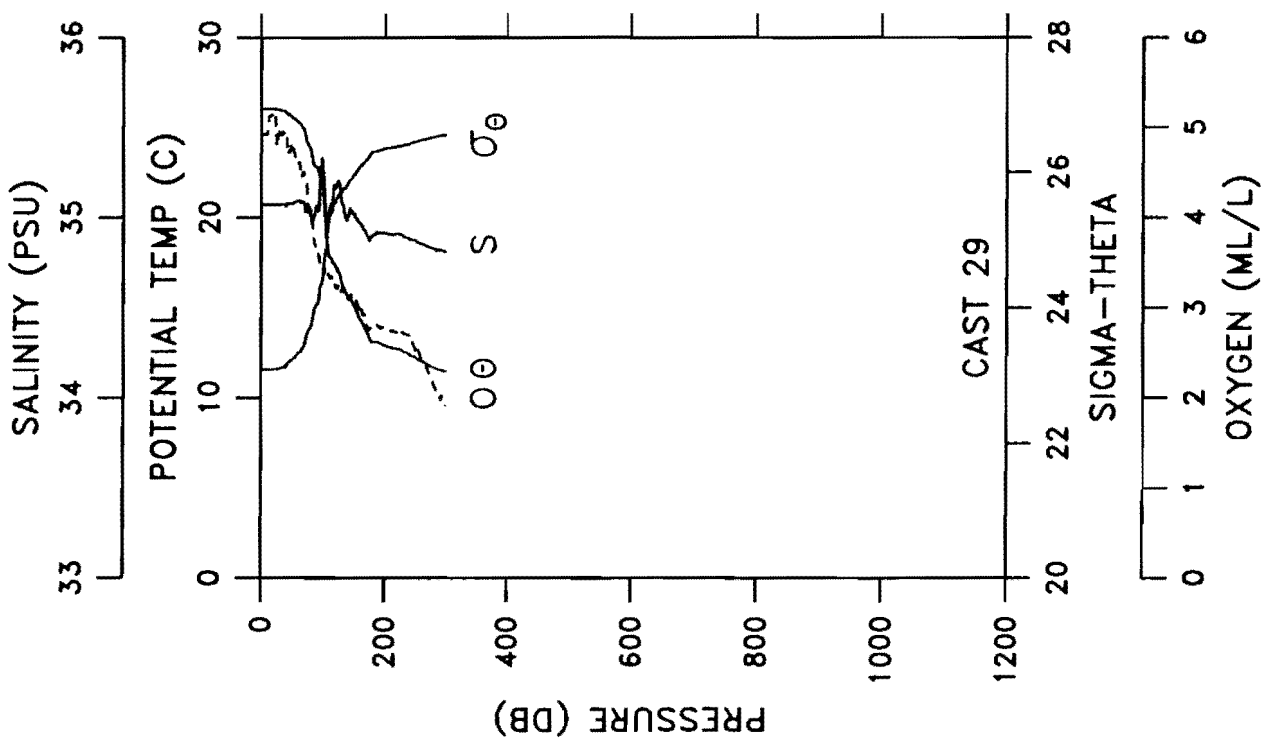


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 25.835 | 35.117 | 4.92 | 23.175 | 0.000 |
| 10 | 25.833 | 35.116 | 4.80 | 23.175 | 0.047 |
| 20 | 25.833 | 35.116 | 4.73 | 23.175 | 0.094 |
| 30 | 25.821 | 35.115 | 4.72 | 23.178 | 0.141 |
| 40 | 25.727 | 35.117 | 4.69 | 23.208 | 0.188 |
| 50 | 25.602 | 35.122 | 4.61 | 23.251 | 0.234 |
| 60 | 25.419 | 35.142 | 4.55 | 23.322 | 0.280 |
| 70 | 25.148 | 35.150 | 4.42 | 23.411 | 0.326 |
| 80 | 24.669 | 35.142 | 4.21 | 23.551 | 0.370 |
| 90 | 24.112 | 35.085 | 4.01 | 23.674 | 0.413 |
| 100 | 23.413 | 35.114 | 3.73 | 23.901 | 0.455 |
| 110 | 22.134 | 35.382 | 3.45 | 24.472 | 0.493 |
| 120 | 19.773 | 35.233 | 3.31 | 25.001 | 0.526 |
| 130 | 18.493 | 35.165 | 3.32 | 25.277 | 0.554 |
| 140 | 17.792 | 35.282 | 3.17 | 25.541 | 0.580 |
| 150 | 16.105 | 35.124 | 3.16 | 25.820 | 0.604 |
| 160 | 15.204 | 35.043 | 3.13 | 25.961 | 0.625 |
| 170 | 14.248 | 34.952 | 3.00 | 26.098 | 0.646 |
| 180 | 13.482 | 34.870 | 2.84 | 26.195 | 0.665 |
| 190 | 13.286 | 34.922 | 2.85 | 26.275 | 0.683 |
| 200 | 12.994 | 34.913 | 2.79 | 26.327 | 0.700 |
| 250 | 12.165 | 34.860 | 2.52 | 26.449 | 0.784 |
| 300 | 11.739 | 34.832 | 2.26 | 26.508 | 0.865 |
| 350 | 10.501 | 34.752 | 1.55 | 26.672 | 0.942 |
| 400 | 9.268 | 34.686 | 1.49 | 26.828 | 1.010 |
| 450 | 8.548 | 34.651 | 1.34 | 26.916 | 1.072 |
| 500 | 8.216 | 34.636 | 1.28 | 26.955 | 1.133 |
| 550 | 7.466 | 34.600 | 1.47 | 27.038 | 1.190 |
| 600 | 7.282 | 34.594 | 1.50 | 27.060 | 1.245 |
| 650 | 7.172 | 34.587 | 1.51 | 27.069 | 1.300 |
| 700 | 6.187 | 34.556 | 1.70 | 27.178 | 1.351 |
| 750 | 5.769 | 34.551 | 1.80 | 27.227 | 1.398 |
| 800 | 5.663 | 34.549 | 1.83 | 27.239 | 1.445 |
| 900 | 5.035 | 34.548 | 1.94 | 27.313 | 1.534 |
| 1000 | 4.678 | 34.552 | 2.01 | 27.357 | 1.619 |
| 1005 | 4.673 | 34.551 | 2.02 | 27.357 | 1.623 |

CAST TG1-89-MB -029 DATE 27 MAY 89 TIME 1033 GMT
LAT 00 00.0N LONG 139 54.0W

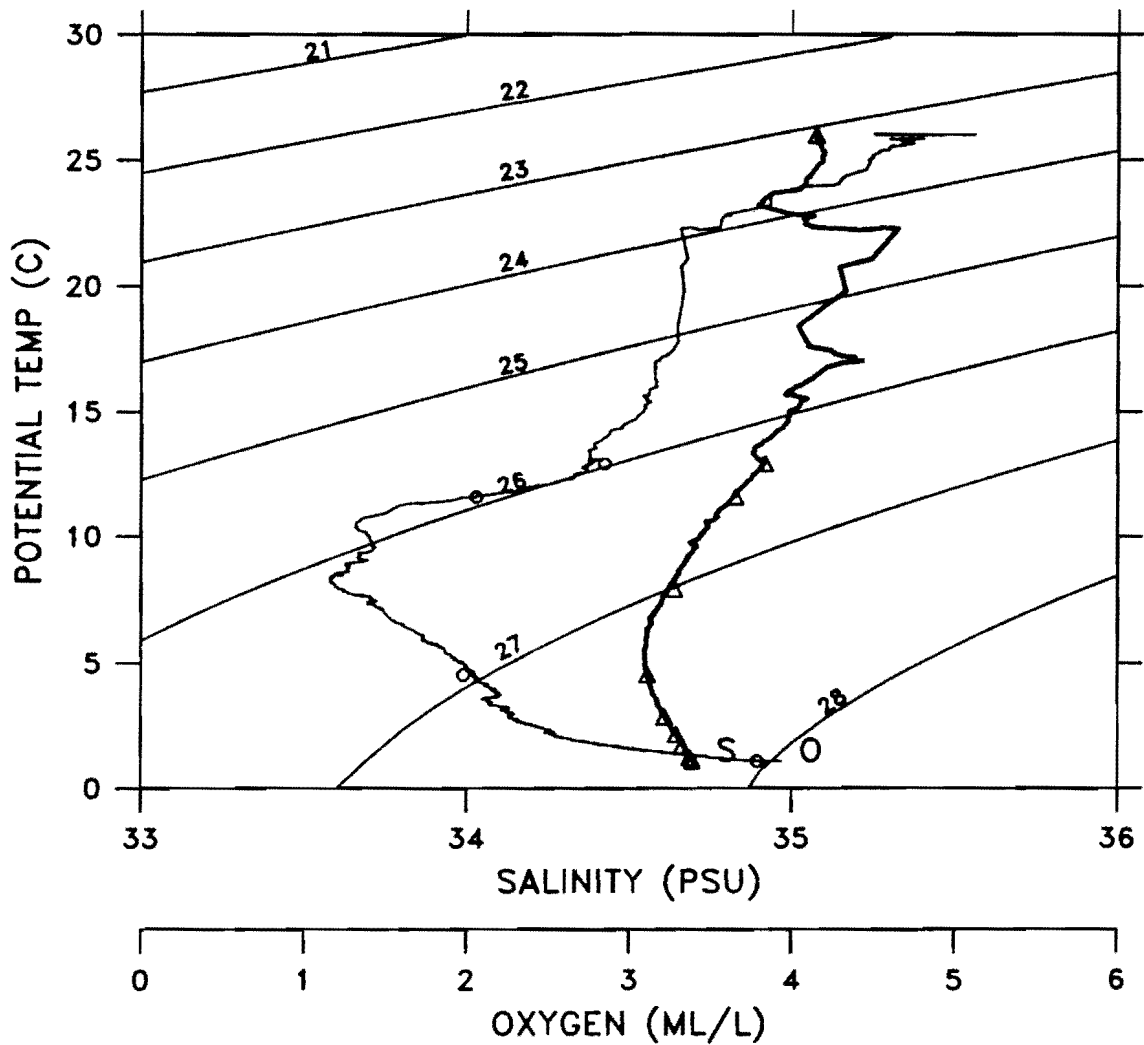


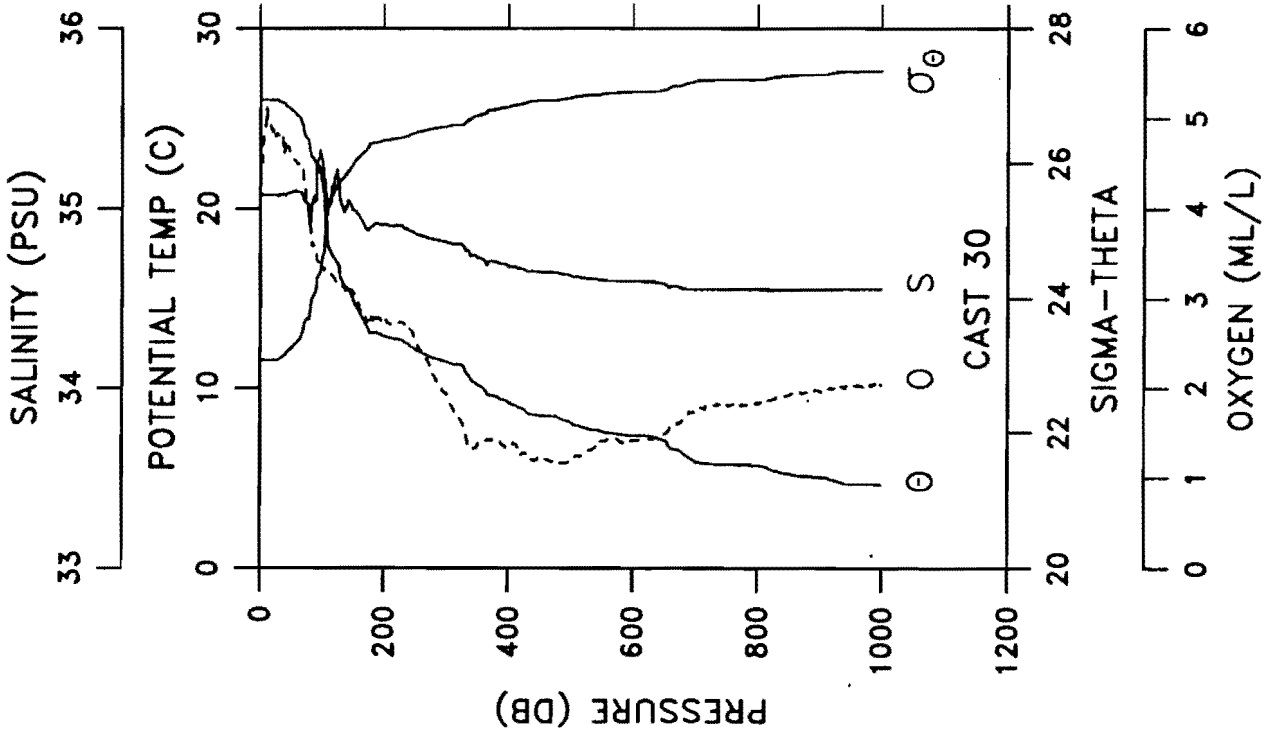
CAST T61-89-MB -029 DATE 27 MAY 89 TIME 1033 GMT
 LAT 00 00.0N LONG 139 54.0W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 109 T SPD 11 KT VISIBILITY
 CLOUD AMOUNT DRY 26.5 WET 23.2 DEPTH 4258 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.020 | 35.073 | 4.91 | 23.084 | 0.000 |
| 10 | 26.018 | 35.073 | 4.92 | 23.085 | 0.048 |
| 20 | 26.002 | 35.072 | 5.14 | 23.089 | 0.096 |
| 30 | 25.955 | 35.072 | 4.99 | 23.103 | 0.143 |
| 40 | 25.850 | 35.062 | 4.86 | 23.129 | 0.191 |
| 50 | 25.572 | 35.079 | 4.81 | 23.227 | 0.238 |
| 60 | 25.270 | 35.097 | 4.60 | 23.334 | 0.284 |
| 70 | 24.743 | 35.057 | 4.46 | 23.464 | 0.329 |
| 80 | 23.752 | 35.000 | 4.08 | 23.716 | 0.372 |
| 90 | 22.785 | 35.060 | 3.67 | 24.042 | 0.412 |
| 100 | 21.479 | 35.267 | 3.40 | 24.567 | 0.449 |
| 110 | 17.799 | 35.051 | 3.35 | 25.362 | 0.479 |
| 120 | 17.222 | 35.185 | 3.22 | 25.589 | 0.504 |
| 130 | 16.357 | 35.086 | 3.20 | 25.732 | 0.528 |
| 140 | 15.641 | 35.008 | 3.10 | 25.836 | 0.550 |
| 150 | 15.120 | 35.023 | 3.15 | 25.964 | 0.572 |
| 160 | 14.376 | 34.967 | 2.97 | 26.083 | 0.592 |
| 170 | 13.700 | 34.909 | 2.84 | 26.180 | 0.611 |
| 180 | 13.084 | 34.900 | 2.78 | 26.299 | 0.630 |
| 190 | 13.057 | 34.914 | 2.79 | 26.316 | 0.647 |
| 200 | 12.886 | 34.913 | 2.77 | 26.347 | 0.665 |
| 250 | 12.239 | 34.872 | 2.53 | 26.444 | 0.749 |
| 300 | 11.433 | 34.811 | 1.92 | 26.550 | 0.829 |
| 300 | 11.433 | 34.811 | 1.92 | 26.550 | 0.829 |

CAST TG1-89-MB -030 DATE 27 MAY 89 TIME 1233 GMT
LAT 00 02.9N LONG 139 53.6W

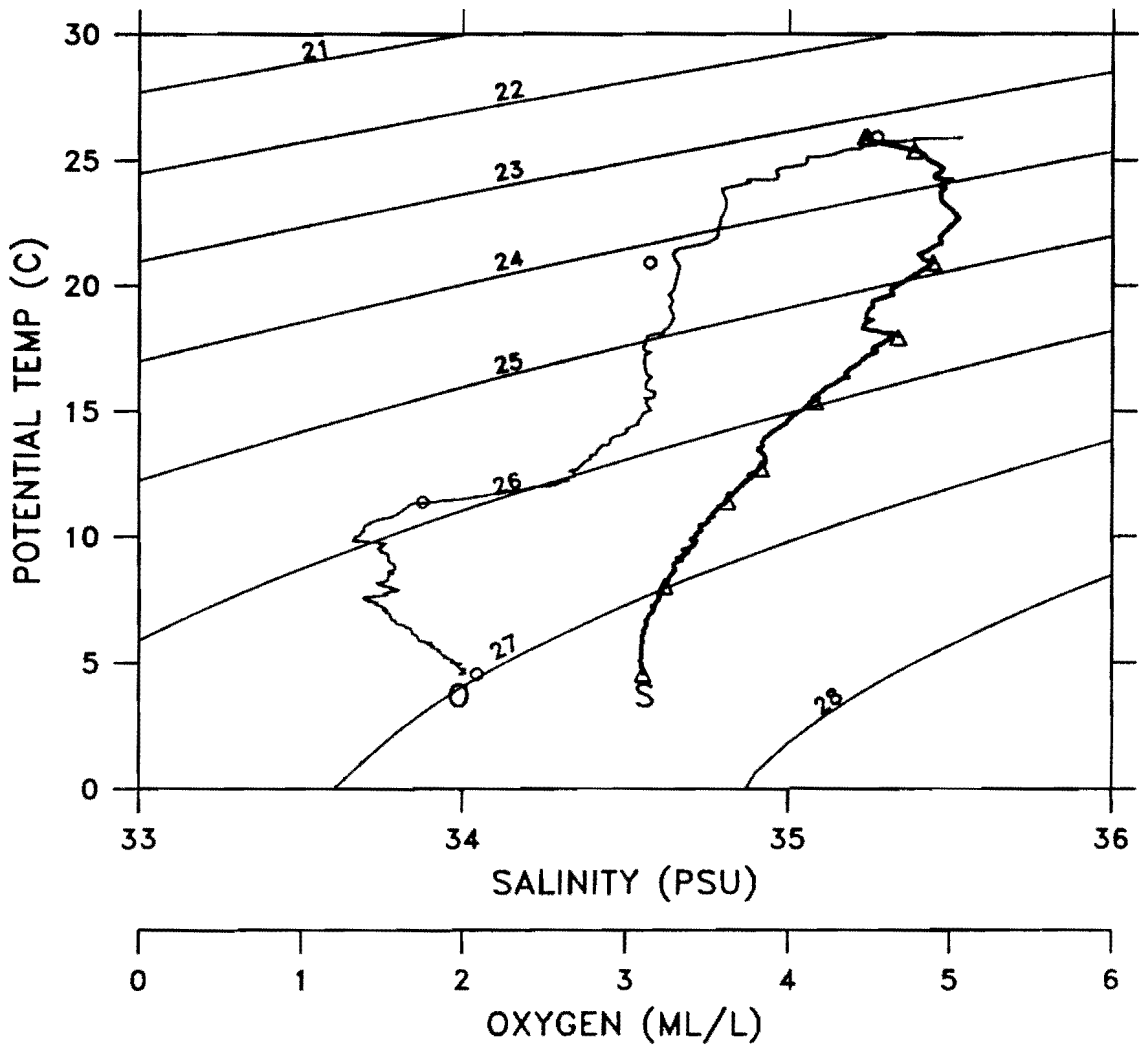




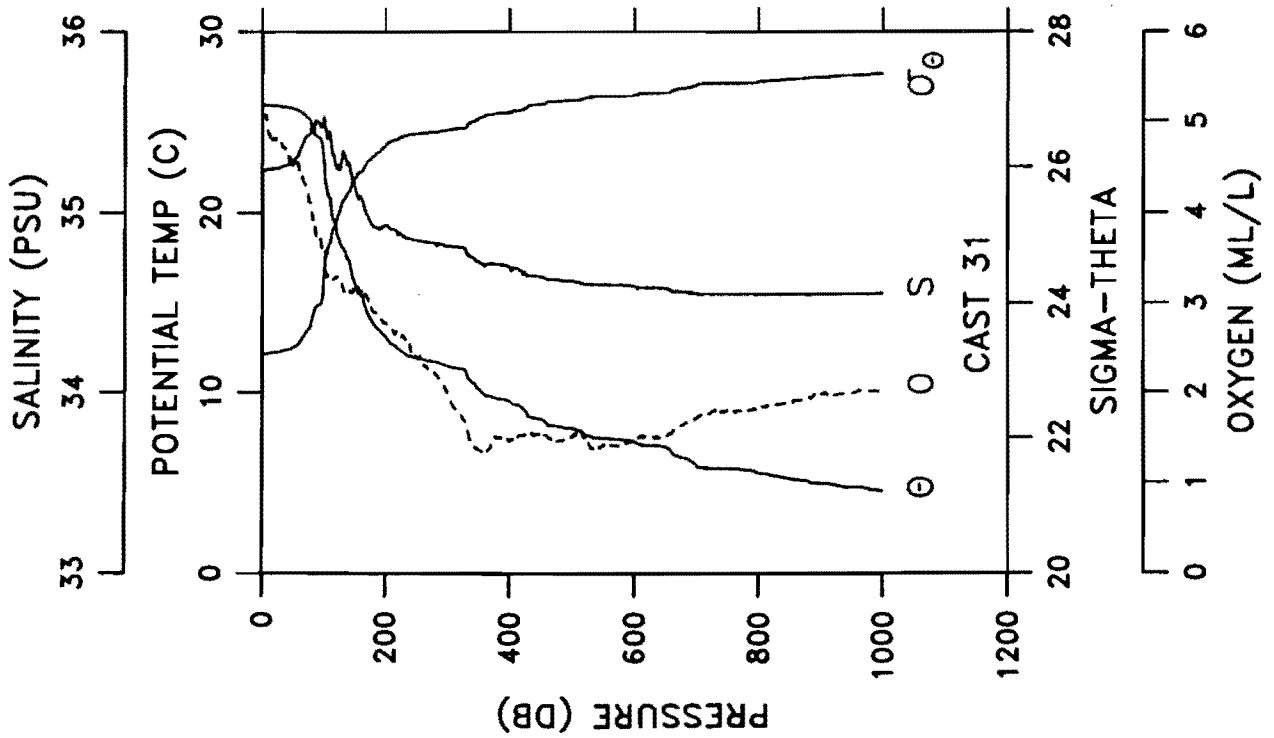
CAST TG1-89-MB -030 DATE 27 MAY 89 TIME 1233 GMT
 LAT 00 02.9N LONG 139 53.6W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 071 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 26.4 WET 23.2 DEPTH 4251 M

| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.017 | 35.075 | 4.50 | 23.086 | 0.000 |
| 10 | 26.008 | 35.074 | 5.12 | 23.088 | 0.048 |
| 20 | 25.999 | 35.075 | 4.85 | 23.082 | 0.086 |
| 30 | 25.997 | 35.069 | 4.80 | 23.088 | 0.143 |
| 40 | 25.810 | 35.078 | 4.66 | 23.153 | 0.191 |
| 50 | 25.476 | 35.090 | 4.59 | 23.265 | 0.237 |
| 60 | 25.139 | 35.091 | 4.49 | 23.369 | 0.283 |
| 70 | 24.370 | 35.054 | 4.32 | 23.574 | 0.328 |
| 80 | 23.426 | 34.911 | 3.87 | 23.745 | 0.370 |
| 90 | 22.492 | 35.039 | 3.56 | 24.110 | 0.410 |
| 100 | 21.570 | 35.277 | 3.34 | 24.550 | 0.446 |
| 110 | 17.991 | 35.036 | 3.30 | 25.303 | 0.477 |
| 120 | 17.202 | 35.158 | 3.22 | 25.588 | 0.503 |
| 130 | 16.186 | 35.043 | 3.17 | 25.739 | 0.526 |
| 140 | 15.629 | 35.004 | 3.09 | 25.836 | 0.549 |
| 150 | 15.017 | 34.990 | 3.08 | 25.961 | 0.570 |
| 160 | 14.280 | 34.961 | 2.89 | 26.099 | 0.590 |
| 170 | 13.632 | 34.894 | 2.78 | 26.183 | 0.609 |
| 180 | 13.075 | 34.898 | 2.77 | 26.300 | 0.627 |
| 190 | 13.074 | 34.916 | 2.77 | 26.313 | 0.645 |
| 200 | 12.911 | 34.916 | 2.75 | 26.346 | 0.662 |
| 250 | 12.190 | 34.863 | 2.56 | 26.447 | 0.747 |
| 300 | 11.498 | 34.815 | 1.95 | 26.541 | 0.827 |
| 350 | 10.224 | 34.728 | 1.34 | 26.701 | 0.902 |
| 400 | 9.227 | 34.677 | 1.34 | 26.829 | 0.969 |
| 450 | 8.485 | 34.649 | 1.23 | 26.925 | 1.031 |
| 500 | 8.102 | 34.628 | 1.18 | 26.967 | 1.091 |
| 550 | 7.606 | 34.605 | 1.41 | 27.022 | 1.148 |
| 600 | 7.333 | 34.597 | 1.42 | 27.055 | 1.204 |
| 650 | 7.058 | 34.583 | 1.48 | 27.082 | 1.259 |
| 700 | 5.901 | 34.552 | 1.73 | 27.211 | 1.309 |
| 750 | 5.738 | 34.552 | 1.81 | 27.232 | 1.366 |
| 800 | 5.654 | 34.551 | 1.83 | 27.241 | 1.402 |
| 900 | 5.017 | 34.549 | 1.97 | 27.316 | 1.491 |
| 1000 | 4.605 | 34.554 | 2.03 | 27.366 | 1.573 |
| 1500 | 2.971 | 34.604 | 2.29 | 27.572 | 1.929 |
| 2000 | 2.192 | 34.640 | 2.50 | 27.668 | 2.209 |
| 2500 | 1.697 | 34.665 | 2.87 | 27.727 | 2.455 |
| 3000 | 1.459 | 34.677 | 3.18 | 27.754 | 2.686 |
| 3500 | 1.215 | 34.691 | 3.53 | 27.782 | 2.909 |
| 4000 | 1.079 | 34.697 | 3.81 | 27.797 | 3.122 |
| 4393 | 1.073 | 34.698 | 3.92 | 27.797 | 3.292 |

CAST TG1-89-MB -031 DATE 27 MAY 89 TIME 1840 GMT
LAT 00 29.2S LONG 139 58.5W

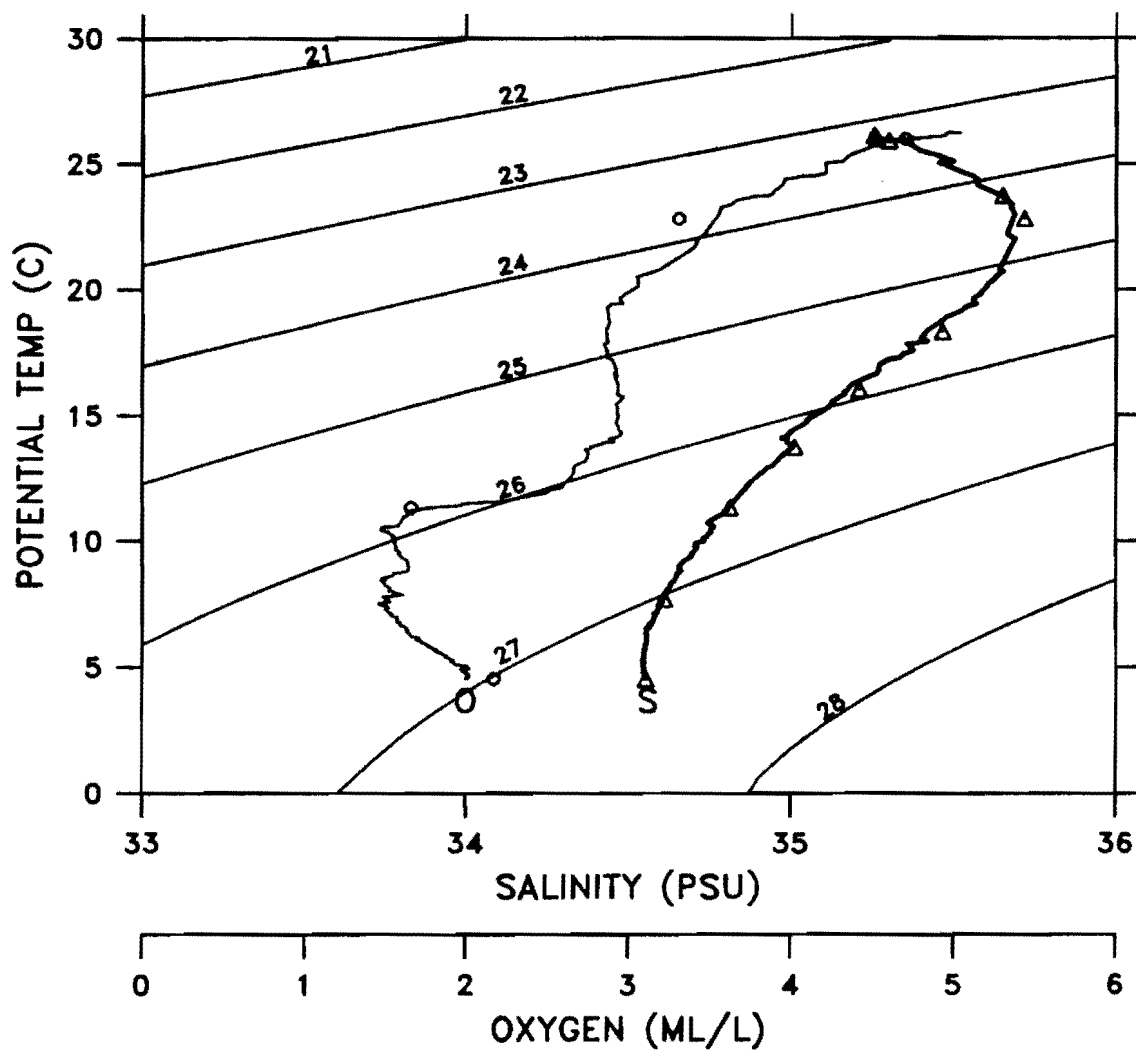


CAST TG1-89-MB -031 DATE 27 MAY 89 TIME 1840 GMT
 LAT 00 29.2S LONG 139 58.5W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 173 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 27.1 WET 24.0 DEPTH 4162 M

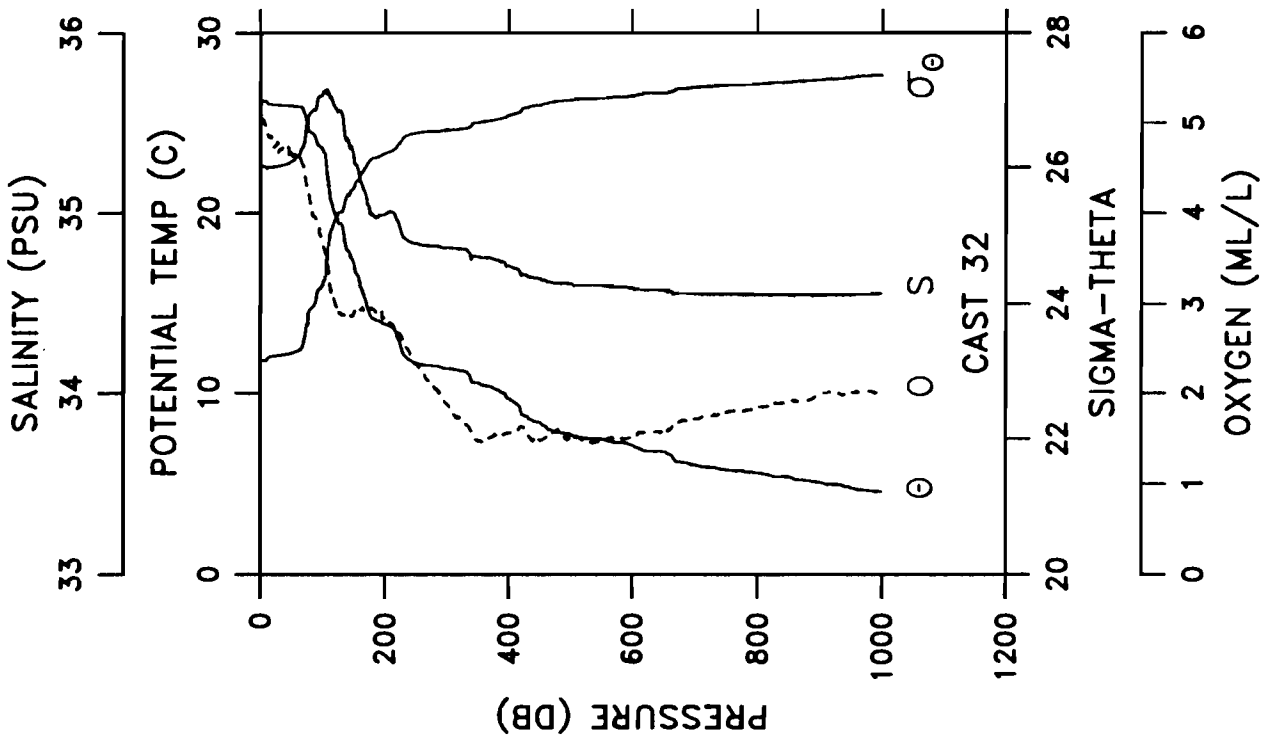


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 25.896 | 35.230 | 5.06 | 23.241 | 0.000 |
| 10 | 25.867 | 35.239 | 4.87 | 23.257 | 0.046 |
| 20 | 25.844 | 35.241 | 4.80 | 23.266 | 0.092 |
| 30 | 25.806 | 35.248 | 4.77 | 23.283 | 0.138 |
| 40 | 25.756 | 35.261 | 4.62 | 23.308 | 0.184 |
| 50 | 25.697 | 35.280 | 4.52 | 23.340 | 0.230 |
| 60 | 25.561 | 35.333 | 4.47 | 23.423 | 0.275 |
| 70 | 25.300 | 35.410 | 4.30 | 23.562 | 0.319 |
| 80 | 24.767 | 35.469 | 4.02 | 23.769 | 0.362 |
| 90 | 24.142 | 35.496 | 3.74 | 23.976 | 0.402 |
| 100 | 22.684 | 35.526 | 3.58 | 24.425 | 0.441 |
| 110 | 20.777 | 35.436 | 3.34 | 24.888 | 0.473 |
| 120 | 19.044 | 35.249 | 3.28 | 25.202 | 0.503 |
| 130 | 18.069 | 35.336 | 3.18 | 25.513 | 0.529 |
| 140 | 17.352 | 35.274 | 3.14 | 25.641 | 0.554 |
| 150 | 16.134 | 35.147 | 3.13 | 25.831 | 0.577 |
| 160 | 15.478 | 35.085 | 3.13 | 25.932 | 0.598 |
| 170 | 14.509 | 34.992 | 3.08 | 26.074 | 0.619 |
| 180 | 13.891 | 34.926 | 2.90 | 26.153 | 0.638 |
| 190 | 13.518 | 34.907 | 2.83 | 26.216 | 0.657 |
| 200 | 13.122 | 34.927 | 2.79 | 26.312 | 0.675 |
| 250 | 11.933 | 34.849 | 2.40 | 26.485 | 0.758 |
| 300 | 11.501 | 34.813 | 2.00 | 26.538 | 0.837 |
| 350 | 10.204 | 34.733 | 1.37 | 26.709 | 0.913 |
| 400 | 9.536 | 34.699 | 1.47 | 26.795 | 0.980 |
| 450 | 8.549 | 34.648 | 1.55 | 26.914 | 1.044 |
| 500 | 8.028 | 34.623 | 1.51 | 26.974 | 1.103 |
| 550 | 7.470 | 34.603 | 1.41 | 27.040 | 1.159 |
| 600 | 7.306 | 34.594 | 1.45 | 27.056 | 1.215 |
| 650 | 6.994 | 34.584 | 1.51 | 27.092 | 1.269 |
| 700 | 6.042 | 34.551 | 1.71 | 27.193 | 1.319 |
| 750 | 5.790 | 34.553 | 1.81 | 27.226 | 1.366 |
| 800 | 5.560 | 34.549 | 1.83 | 27.251 | 1.413 |
| 900 | 4.982 | 34.549 | 1.98 | 27.320 | 1.501 |
| 1000 | 4.562 | 34.555 | 2.02 | 27.372 | 1.585 |
| 1005 | 4.552 | 34.556 | 1.98 | 27.374 | 1.589 |

CAST TG1-89-MB -032 DATE 27 MAY 89 TIME 2210 GMT
LAT 00 59.5S LONG 139 59.5W

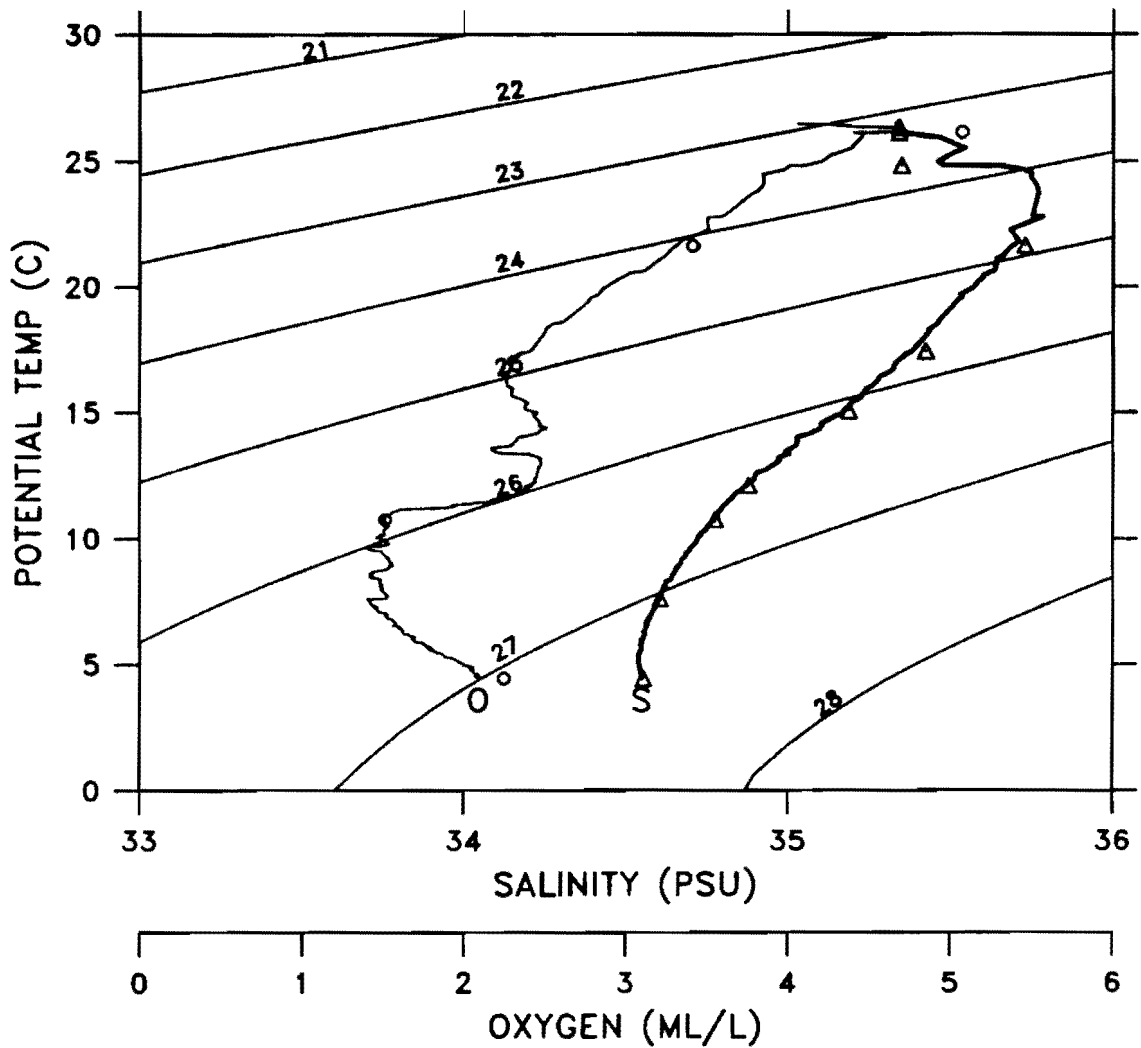


CAST TG1-89-MB -032 DATE 27 MAY 89 TIME 2210 GMT
 LAT 00 59.5S LONG 139 59.5W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 295 T SPD 11 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 24.0 DEPTH 4389 M

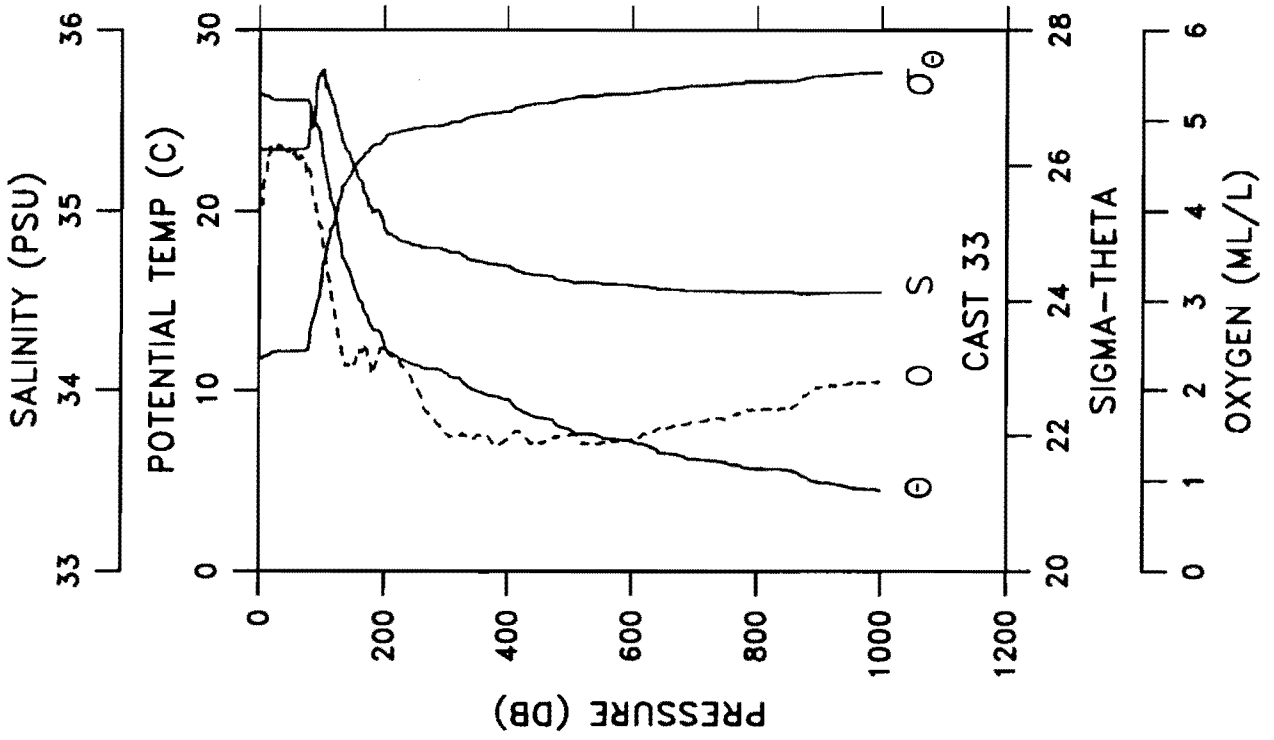


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.240 | 35.257 | 5.03 | 23.154 | 0.000 |
| 10 | 26.170 | 35.244 | 4.95 | 23.166 | 0.047 |
| 20 | 26.022 | 35.254 | 4.75 | 23.220 | 0.094 |
| 30 | 25.999 | 35.258 | 4.71 | 23.230 | 0.140 |
| 40 | 25.974 | 35.266 | 4.75 | 23.244 | 0.187 |
| 50 | 25.943 | 35.285 | 4.62 | 23.266 | 0.233 |
| 60 | 25.910 | 35.316 | 4.61 | 23.302 | 0.279 |
| 70 | 25.429 | 35.423 | 4.39 | 23.531 | 0.324 |
| 80 | 24.458 | 35.563 | 4.04 | 23.932 | 0.366 |
| 90 | 23.788 | 35.634 | 3.89 | 24.186 | 0.405 |
| 100 | 23.370 | 35.680 | 3.62 | 24.344 | 0.442 |
| 110 | 20.807 | 35.640 | 3.20 | 25.035 | 0.475 |
| 120 | 19.820 | 35.584 | 2.97 | 25.256 | 0.504 |
| 130 | 19.314 | 35.538 | 2.87 | 25.353 | 0.531 |
| 140 | 17.902 | 35.394 | 2.87 | 25.599 | 0.556 |
| 150 | 17.035 | 35.271 | 2.91 | 25.715 | 0.579 |
| 160 | 15.893 | 35.163 | 2.93 | 25.899 | 0.602 |
| 170 | 14.948 | 35.068 | 2.94 | 26.037 | 0.623 |
| 180 | 14.170 | 34.987 | 2.94 | 26.142 | 0.642 |
| 190 | 14.081 | 34.991 | 2.89 | 26.164 | 0.661 |
| 200 | 13.854 | 34.991 | 2.85 | 26.212 | 0.680 |
| 250 | 11.713 | 34.833 | 2.32 | 26.515 | 0.765 |
| 300 | 11.379 | 34.810 | 1.88 | 26.559 | 0.843 |
| 350 | 10.563 | 34.762 | 1.48 | 26.669 | 0.919 |
| 400 | 9.686 | 34.709 | 1.56 | 26.778 | 0.990 |
| 450 | 8.404 | 34.642 | 1.49 | 26.932 | 1.053 |
| 500 | 7.760 | 34.612 | 1.51 | 27.005 | 1.111 |
| 550 | 7.505 | 34.602 | 1.47 | 27.034 | 1.166 |
| 600 | 7.171 | 34.589 | 1.52 | 27.072 | 1.221 |
| 650 | 6.796 | 34.577 | 1.59 | 27.114 | 1.274 |
| 700 | 6.045 | 34.557 | 1.72 | 27.197 | 1.324 |
| 750 | 5.765 | 34.551 | 1.79 | 27.228 | 1.371 |
| 800 | 5.587 | 34.550 | 1.83 | 27.248 | 1.418 |
| 900 | 5.083 | 34.546 | 1.99 | 27.306 | 1.507 |
| 1000 | 4.555 | 34.555 | 2.00 | 27.373 | 1.590 |
| 1001 | 4.554 | 34.555 | 2.00 | 27.373 | 1.591 |

CAST TG1-89-MB -033 DATE 28 MAY 89 TIME 0124 GMT
LAT 01 29.8S LONG 139 59.7W

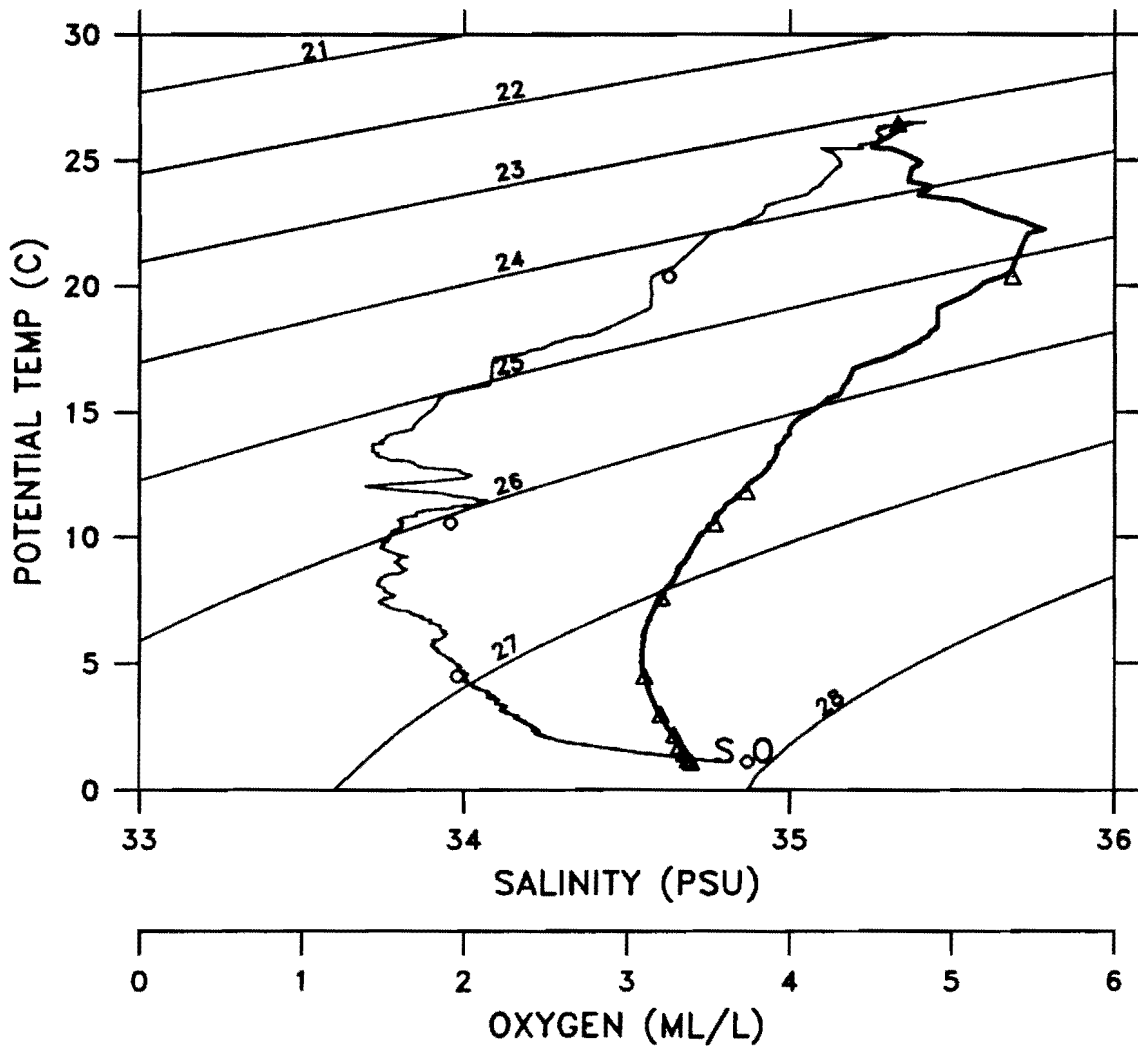


CAST TG1-89-MB -033 DATE 28 MAY 89 TIME 0124 GMT
 LAT 01 29.8S LONG 139 59.7W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 226 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 27.2 WET 23.8 DEPTH 4350 M

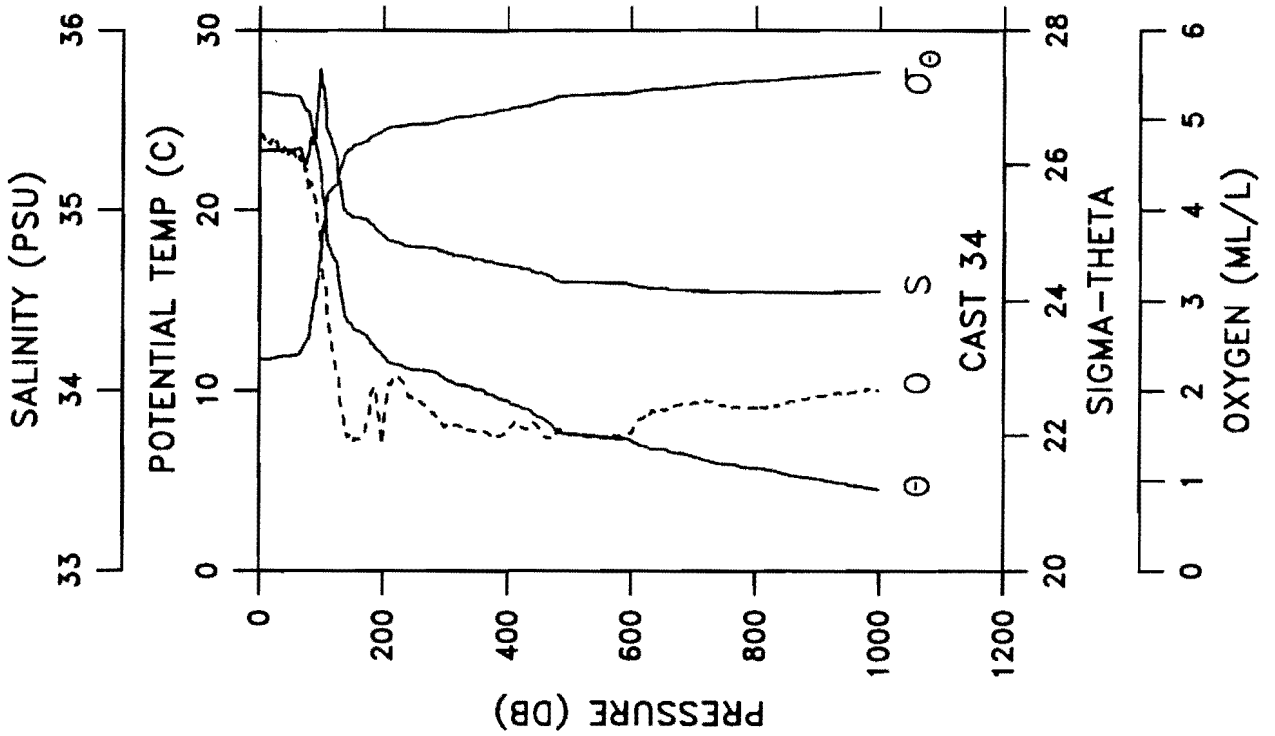


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.469 | 35.343 | 4.06 | 23.147 | 0.000 |
| 10 | 26.354 | 35.341 | 4.42 | 23.181 | 0.047 |
| 20 | 26.186 | 35.337 | 4.71 | 23.231 | 0.094 |
| 30 | 26.151 | 35.340 | 4.73 | 23.244 | 0.140 |
| 40 | 26.141 | 35.340 | 4.69 | 23.248 | 0.187 |
| 50 | 26.132 | 35.341 | 4.63 | 23.251 | 0.233 |
| 60 | 26.128 | 35.342 | 4.58 | 23.253 | 0.279 |
| 70 | 26.121 | 35.344 | 4.55 | 23.257 | 0.326 |
| 80 | 25.919 | 35.468 | 4.45 | 23.414 | 0.372 |
| 90 | 24.832 | 35.648 | 4.01 | 23.884 | 0.414 |
| 100 | 23.280 | 35.759 | 3.70 | 24.430 | 0.453 |
| 110 | 21.363 | 35.669 | 3.27 | 24.905 | 0.485 |
| 120 | 19.926 | 35.567 | 2.86 | 25.215 | 0.515 |
| 130 | 18.199 | 35.435 | 2.50 | 25.557 | 0.541 |
| 140 | 16.923 | 35.330 | 2.28 | 25.787 | 0.564 |
| 150 | 15.963 | 35.243 | 2.30 | 25.944 | 0.586 |
| 160 | 15.067 | 35.174 | 2.42 | 26.092 | 0.606 |
| 170 | 14.320 | 35.093 | 2.48 | 26.192 | 0.625 |
| 180 | 13.598 | 35.008 | 2.17 | 26.278 | 0.644 |
| 190 | 13.376 | 35.005 | 2.40 | 26.321 | 0.661 |
| 200 | 12.630 | 34.904 | 2.46 | 26.393 | 0.678 |
| 250 | 11.428 | 34.815 | 2.05 | 26.553 | 0.757 |
| 300 | 10.976 | 34.788 | 1.53 | 26.815 | 0.833 |
| 350 | 9.986 | 34.726 | 1.49 | 26.744 | 0.905 |
| 400 | 9.512 | 34.700 | 1.46 | 26.800 | 0.972 |
| 450 | 8.498 | 34.646 | 1.42 | 26.920 | 1.035 |
| 500 | 7.842 | 34.612 | 1.51 | 26.993 | 1.094 |
| 550 | 7.451 | 34.598 | 1.42 | 27.039 | 1.150 |
| 600 | 7.174 | 34.588 | 1.46 | 27.070 | 1.205 |
| 650 | 6.543 | 34.569 | 1.57 | 27.141 | 1.258 |
| 700 | 6.208 | 34.560 | 1.66 | 27.179 | 1.308 |
| 750 | 6.038 | 34.556 | 1.67 | 27.197 | 1.357 |
| 800 | 5.676 | 34.550 | 1.77 | 27.238 | 1.404 |
| 900 | 4.938 | 34.543 | 2.02 | 27.320 | 1.496 |
| 1000 | 4.456 | 34.552 | 2.10 | 27.392 | 1.578 |
| 1003 | 4.452 | 34.552 | 2.09 | 27.382 | 1.581 |

CAST TG1-89-MB -034 DATE 28 MAY 89 TIME 0605 GMT
LAT 02 03.0S LONG 139 58.3W

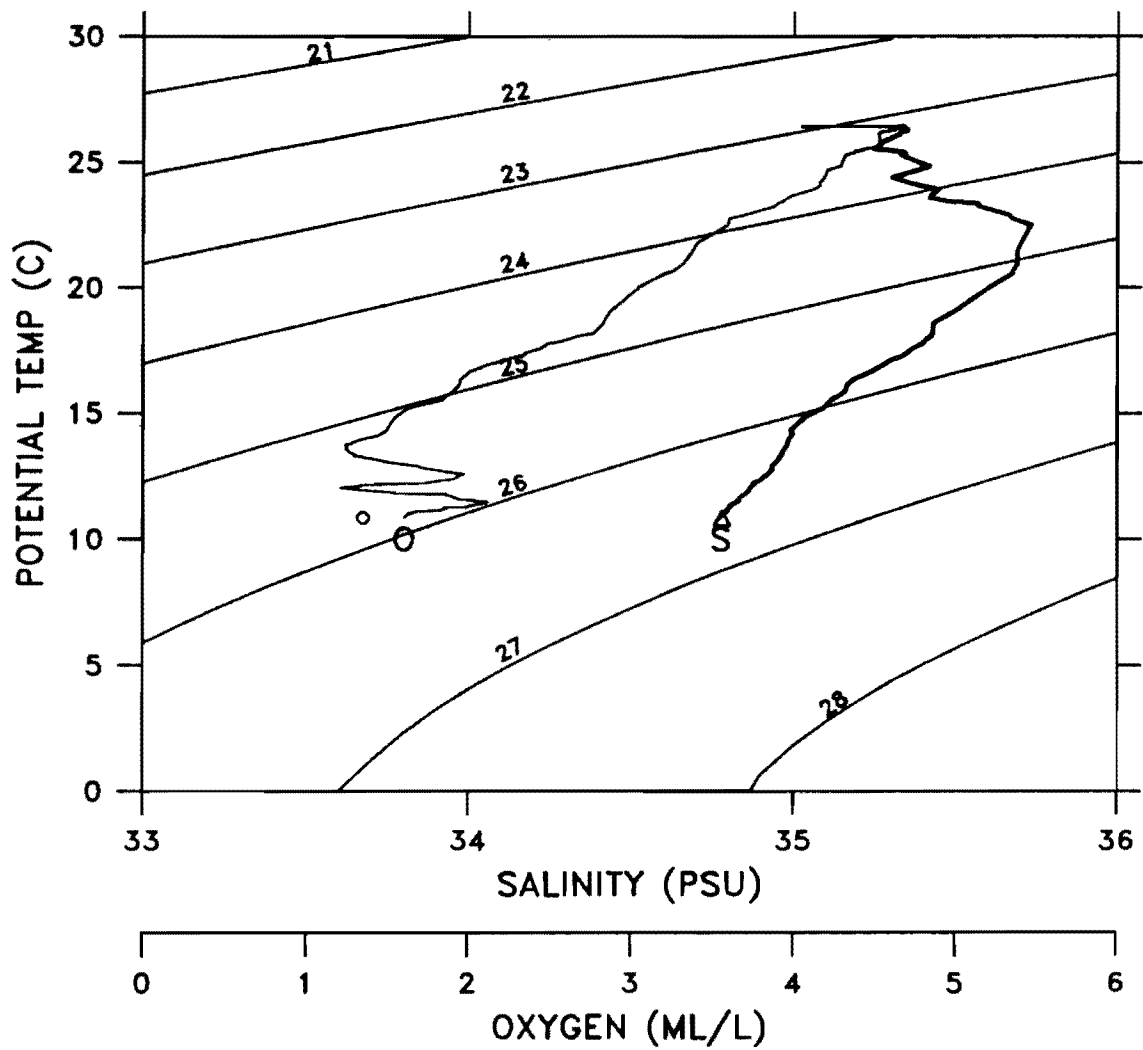


CAST TG1-89-MB --034 DATE 28 MAY 89 TIME 0605 GMT
 LAT 02 03.0S LONG 139 58.3W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 070 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 27.1 WET 23.8 DEPTH 4219 M

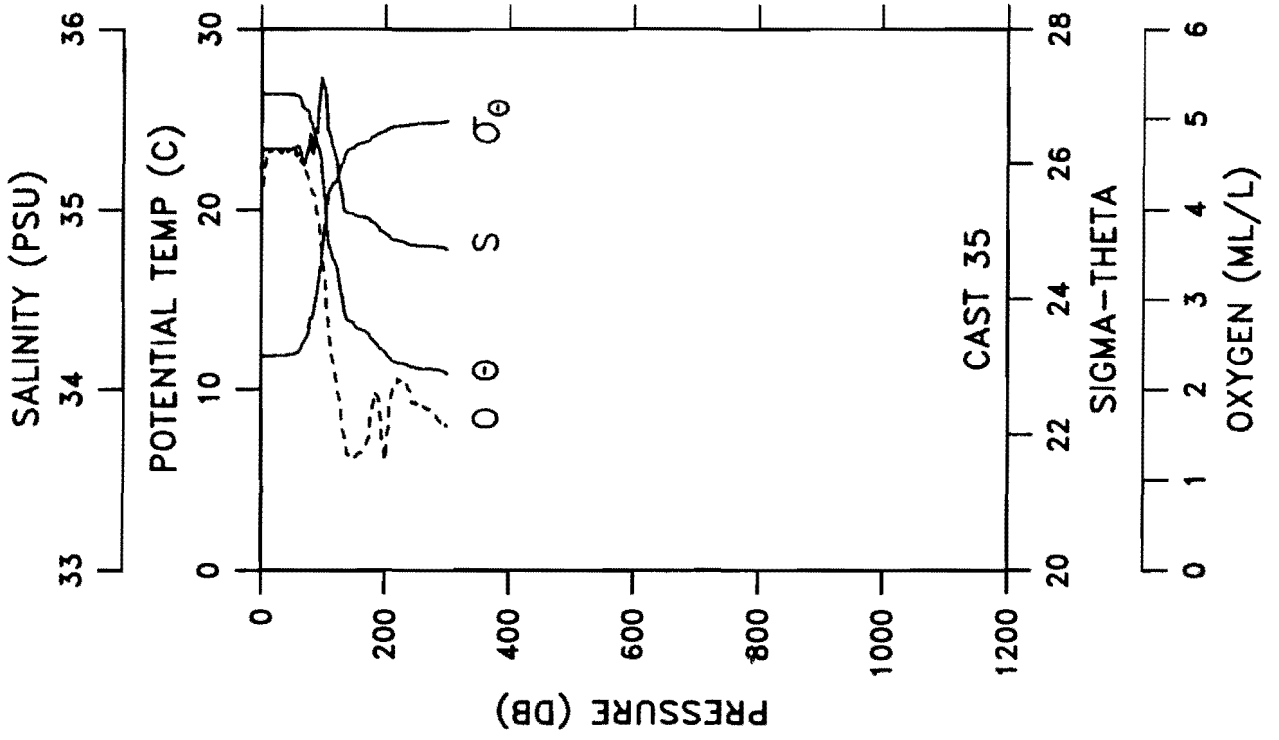


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 26.496 | 35.324 | 4.83 | 23.124 | 0.000 |
| 10 | 26.483 | 35.328 | 4.74 | 23.131 | 0.047 |
| 20 | 26.463 | 35.328 | 4.78 | 23.137 | 0.095 |
| 30 | 26.374 | 35.327 | 4.69 | 23.165 | 0.142 |
| 40 | 26.355 | 35.329 | 4.68 | 23.172 | 0.189 |
| 50 | 26.345 | 35.331 | 4.58 | 23.177 | 0.236 |
| 60 | 26.317 | 35.337 | 4.56 | 23.190 | 0.283 |
| 70 | 25.720 | 35.272 | 4.54 | 23.328 | 0.330 |
| 80 | 25.275 | 35.348 | 4.27 | 23.522 | 0.375 |
| 90 | 23.612 | 35.395 | 4.09 | 24.056 | 0.416 |
| 100 | 21.406 | 35.710 | 3.40 | 24.924 | 0.450 |
| 110 | 18.090 | 35.427 | 2.79 | 25.578 | 0.478 |
| 120 | 17.373 | 35.358 | 2.39 | 25.685 | 0.502 |
| 130 | 15.704 | 35.156 | 1.88 | 25.936 | 0.524 |
| 140 | 14.039 | 34.990 | 1.52 | 26.172 | 0.544 |
| 150 | 13.556 | 34.986 | 1.44 | 26.254 | 0.562 |
| 160 | 13.304 | 34.959 | 1.47 | 26.300 | 0.580 |
| 170 | 13.113 | 34.927 | 1.54 | 26.332 | 0.598 |
| 180 | 12.691 | 34.927 | 1.97 | 26.399 | 0.615 |
| 190 | 12.286 | 34.888 | 1.90 | 26.447 | 0.631 |
| 200 | 11.929 | 34.861 | 1.51 | 26.495 | 0.647 |
| 250 | 11.145 | 34.799 | 1.91 | 26.593 | 0.723 |
| 300 | 10.659 | 34.770 | 1.60 | 26.658 | 0.798 |
| 350 | 10.063 | 34.730 | 1.55 | 26.731 | 0.868 |
| 400 | 9.465 | 34.697 | 1.53 | 26.806 | 0.936 |
| 450 | 8.567 | 34.655 | 1.60 | 26.917 | 1.000 |
| 500 | 7.609 | 34.607 | 1.51 | 27.023 | 1.058 |
| 550 | 7.439 | 34.601 | 1.48 | 27.042 | 1.113 |
| 600 | 7.238 | 34.591 | 1.53 | 27.064 | 1.168 |
| 650 | 6.738 | 34.570 | 1.80 | 27.116 | 1.221 |
| 700 | 6.340 | 34.554 | 1.86 | 27.156 | 1.272 |
| 750 | 5.927 | 34.553 | 1.85 | 27.209 | 1.321 |
| 800 | 5.882 | 34.551 | 1.81 | 27.238 | 1.368 |
| 900 | 5.094 | 34.547 | 1.94 | 27.305 | 1.459 |
| 1000 | 4.511 | 34.554 | 2.01 | 27.377 | 1.542 |
| 1500 | 2.995 | 34.600 | 2.29 | 27.566 | 1.891 |
| 2000 | 2.177 | 34.643 | 2.46 | 27.671 | 2.176 |
| 2500 | 1.751 | 34.664 | 2.82 | 27.723 | 2.424 |
| 3000 | 1.448 | 34.677 | 3.15 | 27.755 | 2.656 |
| 3500 | 1.230 | 34.690 | 3.44 | 27.780 | 2.879 |
| 3809 | 1.124 | 34.695 | 3.64 | 27.792 | 3.011 |

CAST TG1-89-MB -035 DATE 28 MAY 89 TIME 0803 GMT
LAT 02 02.8S LONG 139 56.9W

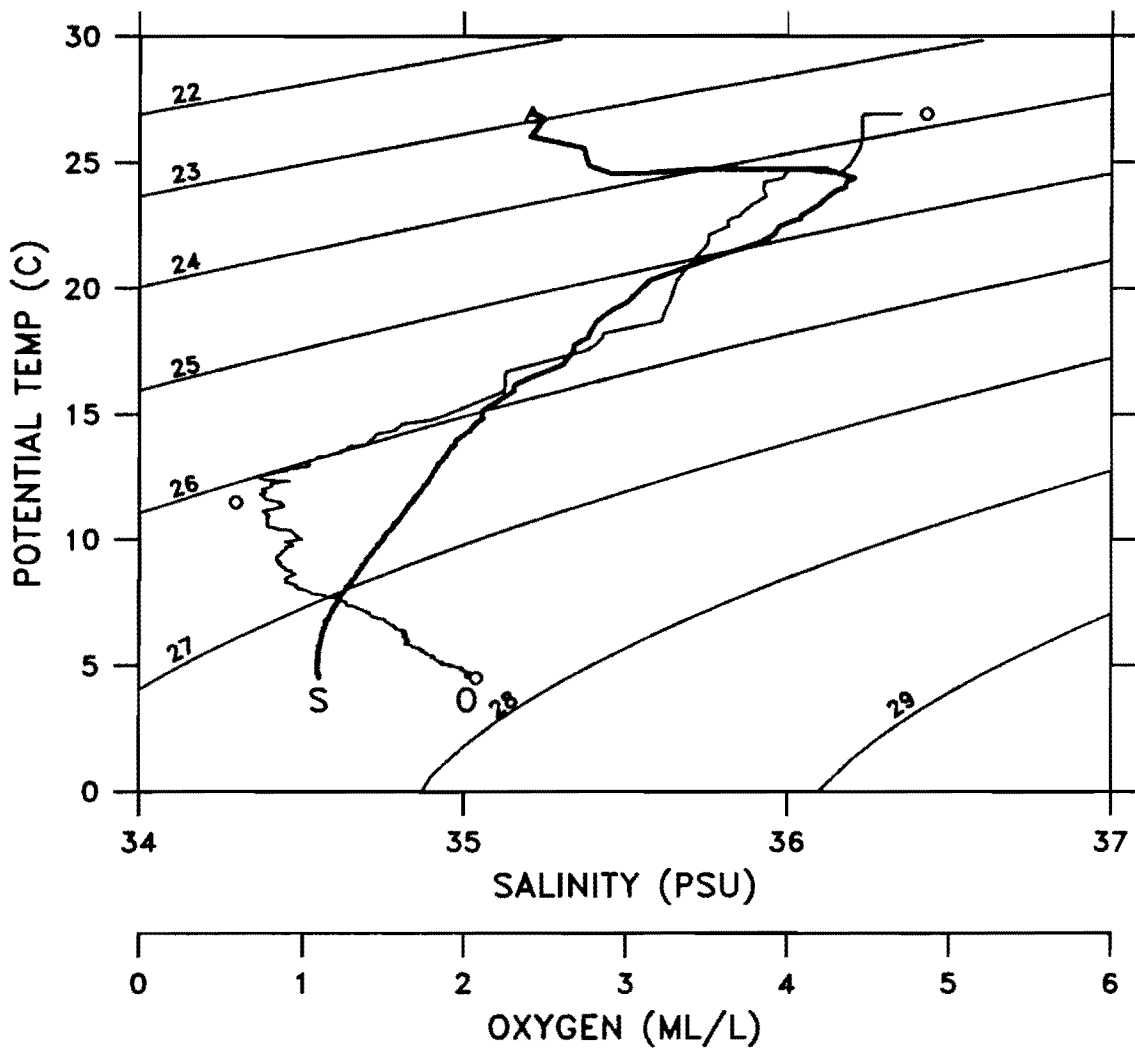


CAST TG1-89-MB -035 DATE 28 MAY 89 TIME 0803 GMT
 LAT 02 02.8S LONG 139 56.9W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 351 T SPD 16 KT VISIBILITY
 CLOUD AMOUNT DRY 27.0 WET 23.0 DEPTH 4.347 M

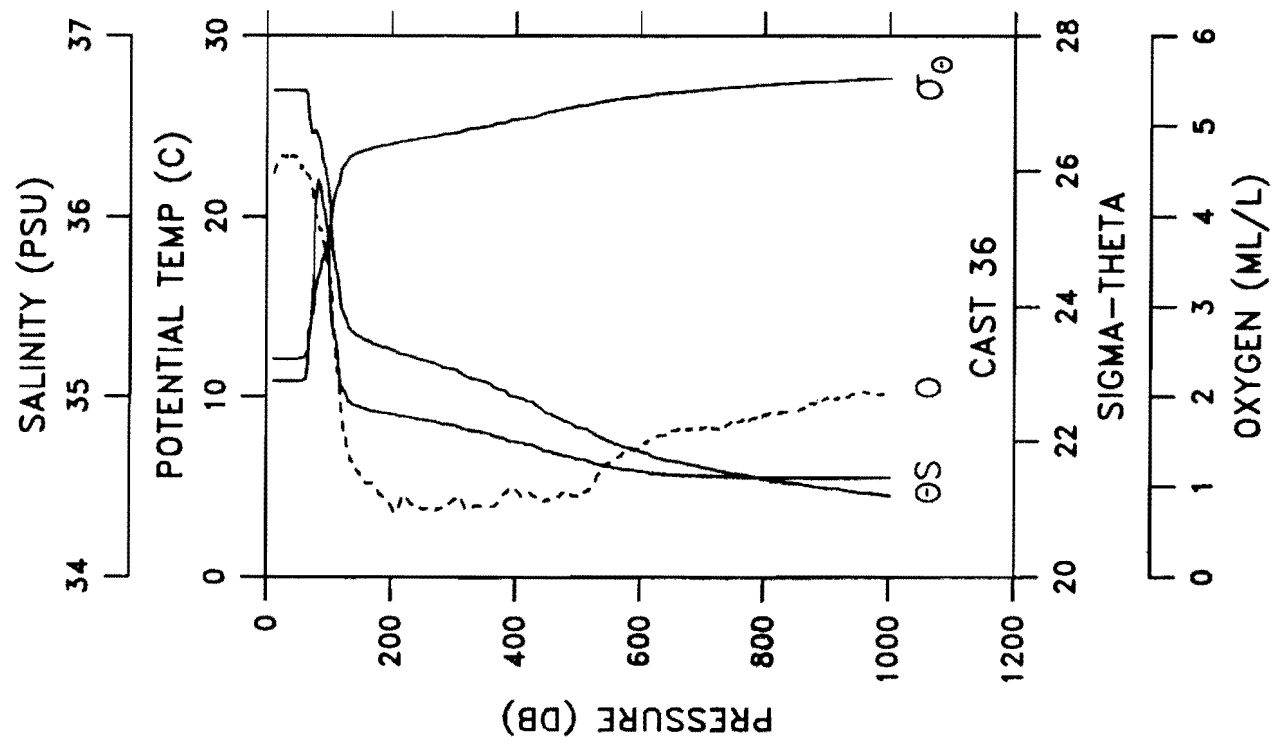


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.401 | 35.339 | 4.04 | 23.165 | 0.000 |
| 10 | 26.410 | 35.334 | 4.62 | 23.159 | 0.047 |
| 20 | 26.409 | 35.333 | 4.67 | 23.158 | 0.094 |
| 30 | 26.384 | 35.334 | 4.64 | 23.167 | 0.141 |
| 40 | 26.385 | 35.334 | 4.68 | 23.167 | 0.188 |
| 50 | 26.339 | 35.338 | 4.61 | 23.184 | 0.235 |
| 60 | 26.243 | 35.349 | 4.62 | 23.223 | 0.282 |
| 70 | 25.497 | 35.258 | 4.41 | 23.386 | 0.328 |
| 80 | 24.789 | 35.403 | 4.24 | 23.718 | 0.372 |
| 90 | 23.595 | 35.418 | 3.97 | 24.079 | 0.413 |
| 100 | 21.451 | 35.687 | 3.38 | 24.894 | 0.448 |
| 110 | 17.894 | 35.404 | 2.59 | 25.609 | 0.475 |
| 120 | 16.967 | 35.282 | 2.14 | 25.739 | 0.498 |
| 130 | 15.209 | 35.090 | 1.63 | 25.996 | 0.520 |
| 140 | 13.830 | 34.984 | 1.28 | 26.211 | 0.539 |
| 150 | 13.568 | 34.971 | 1.24 | 26.256 | 0.558 |
| 160 | 13.324 | 34.962 | 1.30 | 26.298 | 0.575 |
| 170 | 13.189 | 34.956 | 1.41 | 26.321 | 0.593 |
| 180 | 12.744 | 34.935 | 1.81 | 26.394 | 0.610 |
| 190 | 12.357 | 34.902 | 1.90 | 26.445 | 0.627 |
| 200 | 12.032 | 34.870 | 1.21 | 26.483 | 0.643 |
| 250 | 11.205 | 34.802 | 1.86 | 26.584 | 0.719 |
| 300 | 10.899 | 34.780 | 1.61 | 26.622 | 0.794 |
| 301 | 10.845 | 34.778 | 1.60 | 26.631 | 0.796 |

CAST TG1-89-MB -036 DATE 28 MAY 89 TIME 1328 GMT
LAT 03 00.0S LONG 139 59.7W

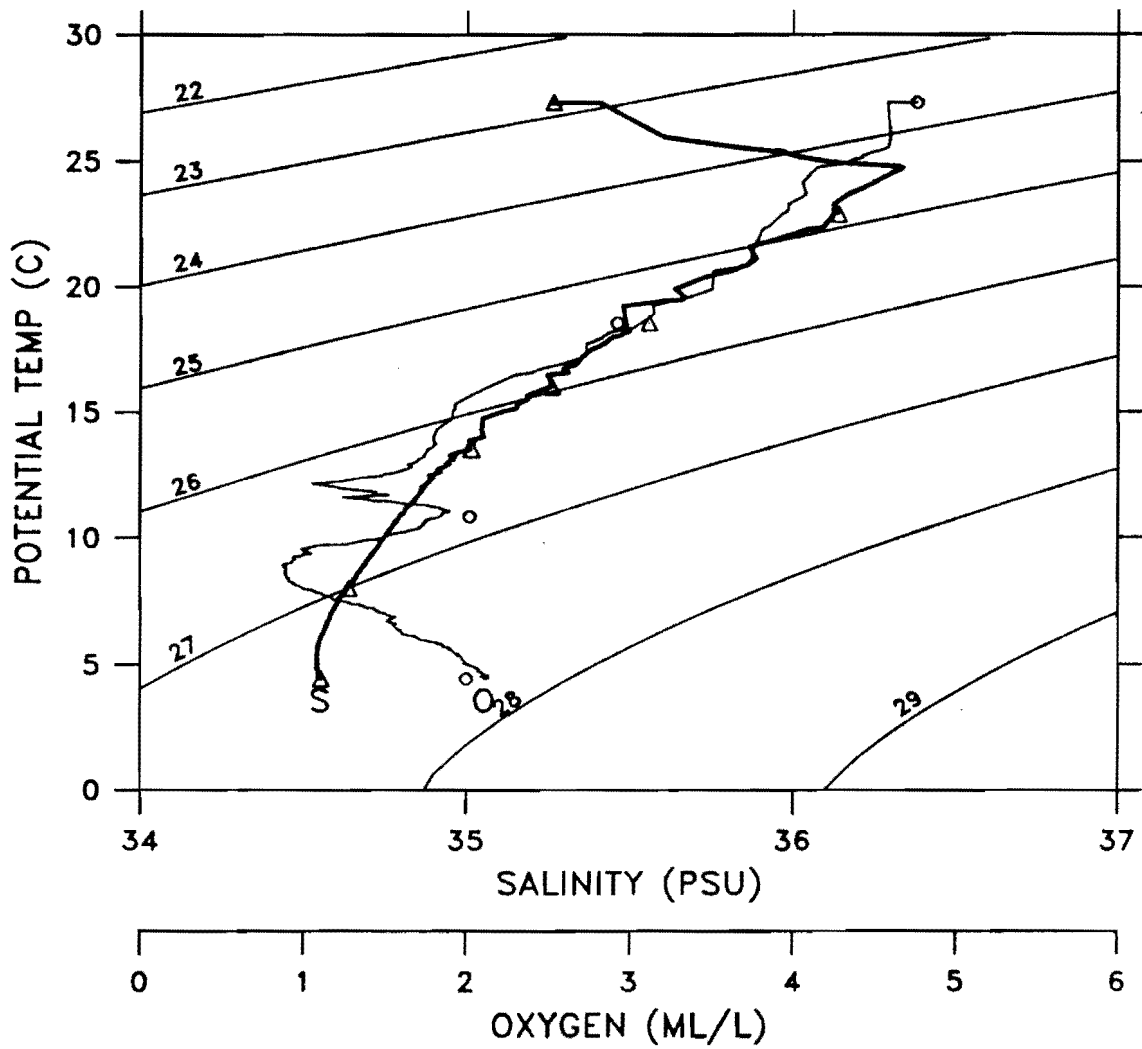


CAST TG1-89-MB -036 DATE 28 MAY 89 TIME 1328 GMT
 LAT 03 00.0S LONG 139 59.7W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 290 T SPD 15 KT VISIBILITY
 CLOUD AMOUNT DRY 27.1 WET 23.3 DEPTH 4374 M

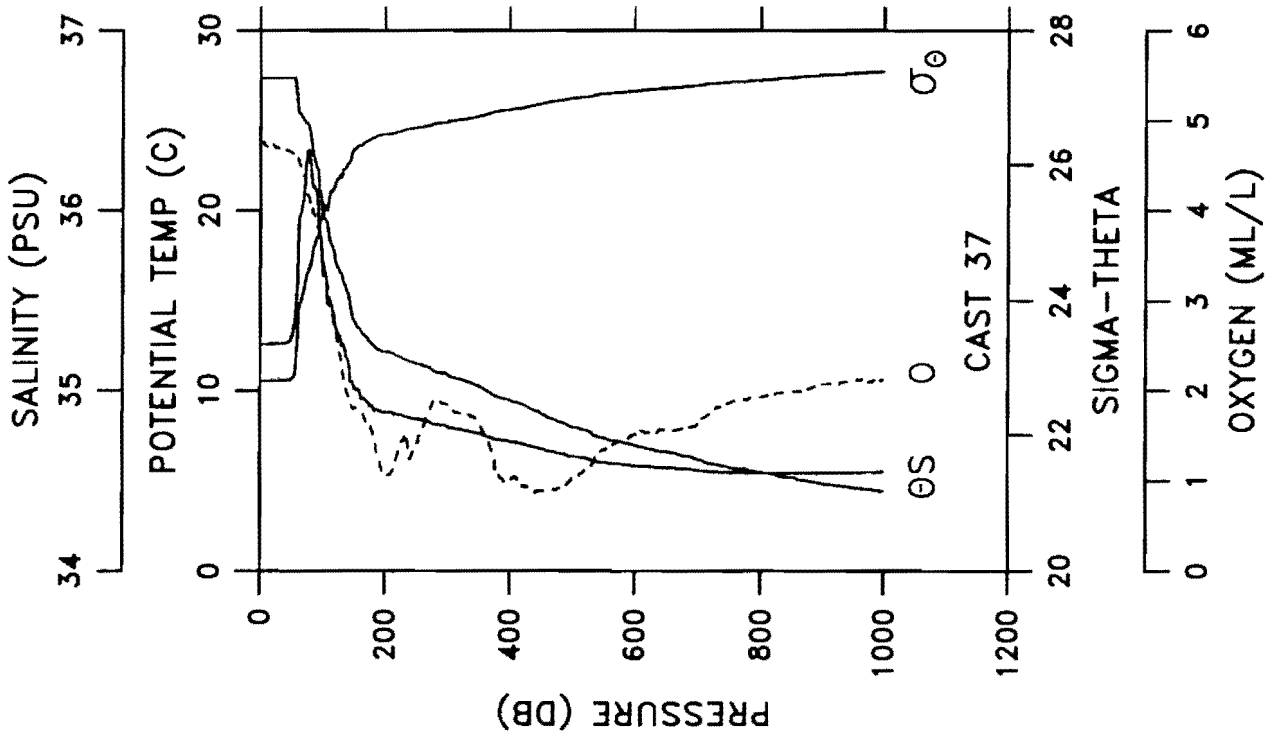


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 11 | 26.943 | 35.210 | 4.47 | 22.896 | 0.000 |
| 12 | 26.941 | 35.208 | 4.50 | 22.896 | 0.005 |
| 20 | 26.951 | 35.208 | 4.63 | 22.892 | 0.045 |
| 30 | 26.952 | 35.208 | 4.64 | 22.892 | 0.094 |
| 40 | 26.950 | 35.208 | 4.67 | 22.892 | 0.144 |
| 50 | 26.944 | 35.212 | 4.64 | 22.897 | 0.194 |
| 60 | 26.925 | 35.221 | 4.49 | 22.910 | 0.244 |
| 70 | 24.866 | 35.385 | 4.38 | 23.675 | 0.291 |
| 80 | 24.504 | 36.170 | 3.98 | 24.378 | 0.330 |
| 90 | 22.949 | 36.051 | 3.71 | 24.748 | 0.364 |
| 100 | 20.843 | 35.690 | 3.39 | 25.063 | 0.395 |
| 110 | 17.160 | 35.318 | 2.54 | 25.721 | 0.421 |
| 120 | 14.819 | 35.058 | 1.82 | 26.057 | 0.442 |
| 130 | 14.005 | 34.979 | 1.42 | 26.170 | 0.462 |
| 140 | 13.548 | 34.952 | 1.23 | 26.245 | 0.480 |
| 150 | 13.336 | 34.943 | 1.13 | 26.281 | 0.498 |
| 160 | 13.129 | 34.930 | 1.04 | 26.313 | 0.515 |
| 170 | 12.929 | 34.917 | 1.03 | 26.343 | 0.533 |
| 180 | 12.839 | 34.913 | 0.94 | 26.358 | 0.550 |
| 190 | 12.734 | 34.908 | 0.87 | 26.375 | 0.567 |
| 200 | 12.617 | 34.902 | 0.79 | 26.393 | 0.584 |
| 250 | 12.033 | 34.871 | 0.76 | 26.483 | 0.666 |
| 300 | 11.522 | 34.842 | 0.85 | 26.557 | 0.745 |
| 350 | 10.846 | 34.800 | 0.78 | 26.648 | 0.820 |
| 400 | 10.008 | 34.747 | 0.98 | 26.754 | 0.891 |
| 450 | 9.103 | 34.696 | 0.86 | 26.864 | 0.957 |
| 500 | 8.264 | 34.651 | 0.90 | 26.960 | 1.019 |
| 550 | 7.514 | 34.609 | 1.26 | 27.038 | 1.077 |
| 600 | 6.925 | 34.583 | 1.43 | 27.101 | 1.131 |
| 650 | 6.408 | 34.565 | 1.60 | 27.157 | 1.182 |
| 700 | 6.062 | 34.557 | 1.65 | 27.195 | 1.231 |
| 750 | 5.702 | 34.552 | 1.70 | 27.236 | 1.278 |
| 800 | 5.413 | 34.549 | 1.79 | 27.269 | 1.324 |
| 900 | 4.915 | 34.545 | 1.98 | 27.324 | 1.411 |
| 1000 | 4.518 | 34.552 | 2.04 | 27.374 | 1.494 |
| 1002 | 4.487 | 34.550 | 2.02 | 27.376 | 1.495 |

CAST TG1-89-MB -037 DATE 28 MAY 89 TIME 1913 GMT
LAT 04 00.1S LONG 140 00.1W

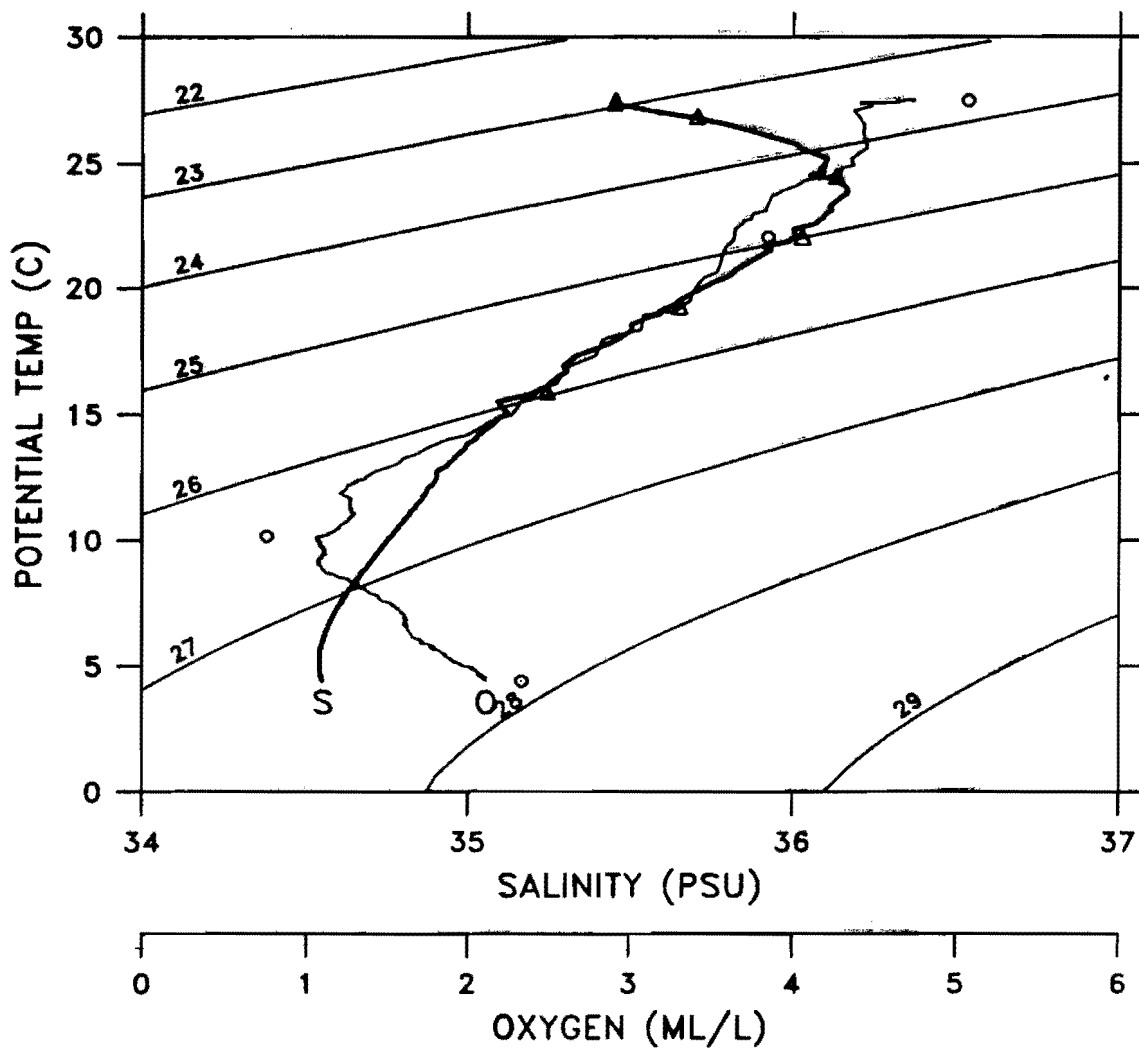


CAST 161-89-MB -037 DATE 28 MAY 89 TIME 1913 GMT
 LAT 04 00.1S LONG 140 00.1W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 082 T SPD 17 KT VISIBILITY
 CLOUD AMOUNT DRY 27.6 WET 23.5 DEPTH 4379 M

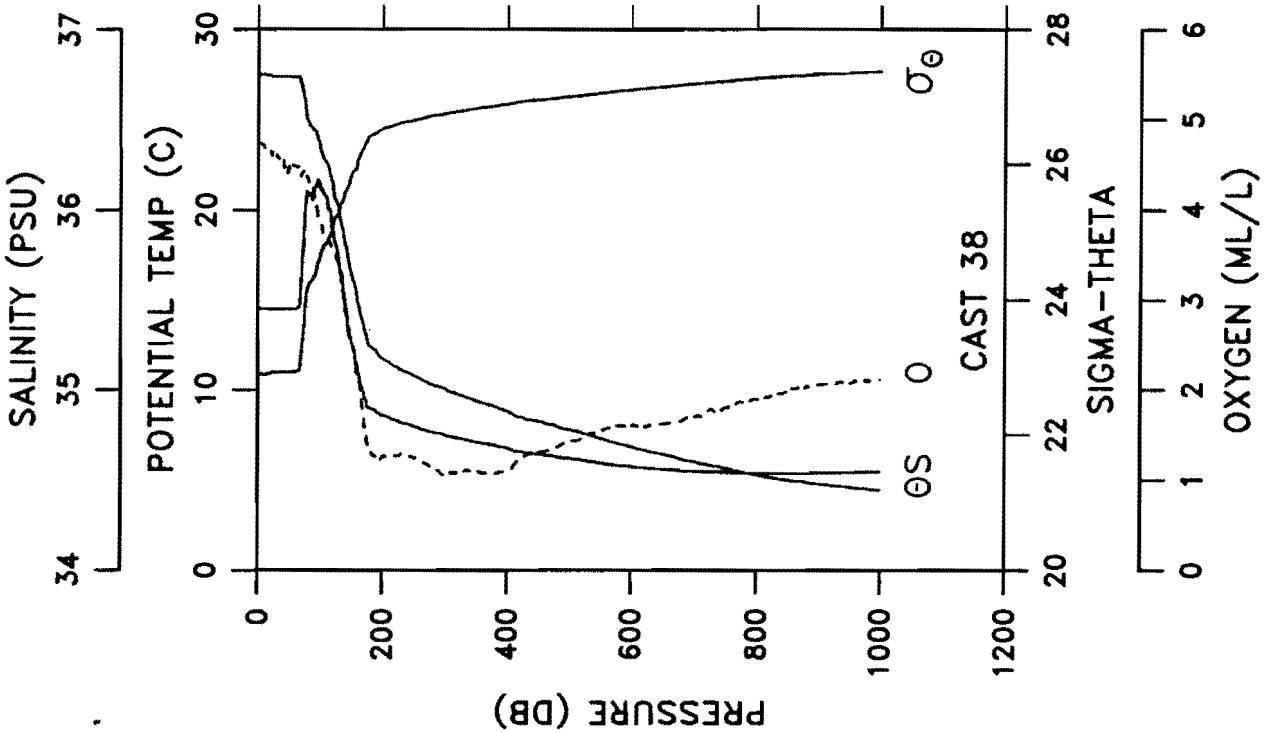


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.332 | 35.260 | 4.76 | 22.809 | 0.000 |
| 10 | 27.329 | 35.261 | 4.71 | 22.811 | 0.050 |
| 20 | 27.321 | 35.261 | 4.74 | 22.814 | 0.101 |
| 30 | 27.324 | 35.263 | 4.69 | 22.814 | 0.151 |
| 40 | 27.323 | 35.264 | 4.68 | 22.815 | 0.202 |
| 50 | 27.334 | 35.296 | 4.64 | 22.836 | 0.252 |
| 60 | 25.966 | 35.603 | 4.60 | 23.500 | 0.301 |
| 70 | 25.029 | 36.091 | 4.36 | 24.159 | 0.341 |
| 80 | 24.327 | 36.273 | 4.08 | 24.509 | 0.376 |
| 90 | 22.402 | 36.095 | 3.85 | 24.938 | 0.409 |
| 100 | 19.914 | 35.640 | 3.51 | 25.274 | 0.438 |
| 110 | 18.559 | 35.488 | 3.08 | 25.507 | 0.464 |
| 120 | 17.231 | 35.356 | 2.73 | 25.733 | 0.488 |
| 130 | 16.495 | 35.247 | 2.30 | 25.824 | 0.510 |
| 140 | 15.410 | 35.172 | 1.96 | 26.015 | 0.531 |
| 150 | 13.893 | 35.007 | 1.80 | 26.216 | 0.551 |
| 160 | 13.426 | 34.980 | 1.76 | 26.291 | 0.568 |
| 170 | 12.948 | 34.949 | 1.64 | 26.365 | 0.586 |
| 180 | 12.588 | 34.914 | 1.55 | 26.408 | 0.603 |
| 190 | 12.289 | 34.887 | 1.25 | 26.446 | 0.619 |
| 200 | 12.178 | 34.878 | 1.05 | 26.461 | 0.635 |
| 250 | 11.529 | 34.841 | 1.39 | 26.555 | 0.714 |
| 300 | 10.962 | 34.804 | 1.85 | 26.630 | 0.789 |
| 350 | 10.282 | 34.764 | 1.65 | 26.719 | 0.861 |
| 400 | 9.470 | 34.716 | 1.00 | 26.820 | 0.928 |
| 450 | 8.716 | 34.674 | 0.89 | 26.908 | 0.991 |
| 500 | 7.935 | 34.632 | 1.03 | 26.995 | 1.051 |
| 550 | 7.351 | 34.600 | 1.34 | 27.055 | 1.107 |
| 600 | 6.953 | 34.583 | 1.51 | 27.097 | 1.160 |
| 650 | 6.597 | 34.572 | 1.56 | 27.137 | 1.212 |
| 700 | 6.176 | 34.557 | 1.63 | 27.180 | 1.262 |
| 750 | 5.734 | 34.542 | 1.86 | 27.225 | 1.310 |
| 800 | 5.484 | 34.543 | 1.92 | 27.255 | 1.356 |
| 800 | 4.829 | 34.542 | 2.08 | 27.332 | 1.444 |
| 1000 | 4.432 | 34.552 | 2.12 | 27.384 | 1.526 |
| 1004 | 4.430 | 34.552 | 2.11 | 27.384 | 1.529 |

CAST TG1-89-MB -038 DATE 29 MAY 89 TIME 0058 GMT
LAT 05 00.0S LONG 140 00.5W



CAST TG1-89-MB -038 DATE 29 MAY 89 TIME 0058 GMT
 LAT 05 00.0S LONG 140 00.5W WEATHER SEA STATE
 BAROMETER 08 WIND DIR 101 T SPD 19 KT VISIBILITY
 CLOUD AMOUNT DRY 27.9 WET 24.0 DEPTH 4264 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 27.502 | 35.453 | 4.74 | 22.899 | 0.000 |
| 10 | 27.499 | 35.452 | 4.69 | 22.900 | 0.050 |
| 20 | 27.442 | 35.447 | 4.65 | 22.914 | 0.099 |
| 30 | 27.407 | 35.450 | 4.62 | 22.928 | 0.148 |
| 40 | 27.398 | 35.450 | 4.57 | 22.931 | 0.198 |
| 50 | 27.394 | 35.450 | 4.46 | 22.932 | 0.247 |
| 60 | 27.383 | 35.451 | 4.49 | 22.937 | 0.297 |
| 70 | 26.784 | 35.712 | 4.41 | 23.325 | 0.345 |
| 80 | 24.919 | 36.089 | 4.35 | 24.199 | 0.387 |
| 90 | 24.460 | 36.127 | 4.16 | 24.359 | 0.423 |
| 100 | 23.278 | 36.111 | 3.84 | 24.697 | 0.458 |
| 110 | 22.575 | 36.063 | 3.69 | 24.864 | 0.490 |
| 120 | 21.253 | 35.896 | 3.57 | 25.108 | 0.520 |
| 130 | 19.744 | 35.684 | 3.38 | 25.352 | 0.548 |
| 140 | 18.075 | 35.475 | 2.86 | 25.619 | 0.573 |
| 150 | 16.368 | 35.262 | 2.55 | 25.865 | 0.596 |
| 160 | 14.800 | 35.083 | 2.18 | 26.081 | 0.617 |
| 170 | 13.475 | 34.973 | 1.69 | 26.276 | 0.636 |
| 180 | 12.406 | 34.898 | 1.31 | 26.432 | 0.653 |
| 190 | 12.197 | 34.886 | 1.25 | 26.463 | 0.669 |
| 200 | 11.735 | 34.860 | 1.25 | 26.531 | 0.685 |
| 250 | 10.796 | 34.797 | 1.25 | 26.655 | 0.759 |
| 300 | 10.089 | 34.754 | 1.06 | 26.745 | 0.829 |
| 350 | 9.401 | 34.711 | 1.09 | 26.827 | 0.895 |
| 400 | 8.824 | 34.676 | 1.10 | 26.893 | 0.958 |
| 450 | 8.253 | 34.645 | 1.31 | 26.957 | 1.018 |
| 500 | 7.797 | 34.620 | 1.43 | 27.006 | 1.075 |
| 550 | 7.313 | 34.594 | 1.56 | 27.055 | 1.131 |
| 600 | 6.849 | 34.575 | 1.61 | 27.105 | 1.184 |
| 650 | 6.441 | 34.560 | 1.62 | 27.148 | 1.236 |
| 700 | 6.013 | 34.550 | 1.70 | 27.185 | 1.285 |
| 750 | 5.663 | 34.542 | 1.80 | 27.233 | 1.332 |
| 800 | 5.290 | 34.540 | 1.89 | 27.276 | 1.378 |
| 800 | 4.791 | 34.540 | 2.06 | 27.335 | 1.464 |
| 1000 | 4.426 | 34.546 | 2.11 | 27.380 | 1.545 |
| 1002 | 4.420 | 34.546 | 2.11 | 27.381 | 1.547 |

CAST TGI-89-MB -001 LAT 07 03.9N LONG 147 36.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.774 | 34.613 | 4.63 | 26.774 | 22.500 |
| 101. | 13.438 | 34.497 | 1.11 | 13.424 | 25.918 |
| 300. | 9.428 | 34.665 | 1.26 | 9.394 | 26.792 |
| 502. | 7.776 | 34.599 | 0.29 | 7.725 | 27.000 |
| 1002. | 4.510 | 34.565 | 1.20 | 4.430 | 27.394 |
| 1503. | 2.918 | 34.609 | 1.77 | 2.811 | 27.590 |
| 2006. | 2.166 | 34.656 | 2.30 | 2.026 | 27.694 |
| 2506. | 1.851 | 34.664 | 2.61 | 1.673 | 27.728 |
| 3006. | 1.663 | 34.674 | 2.86 | 1.442 | 27.753 |
| 3506. | 1.493 | 34.682 | 3.24 | 1.226 | 27.774 |
| 4004. | 1.372 | 34.690 | 3.66 | 1.056 | 27.793 |
| 4029. | 1.371 | 34.689 | 3.74 | 1.052 | 27.792 |

CAST TGI-89-MB -002 LAT 07 01.2N LONG 147 34.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.745 | 34.584* | 0.00 | 26.745* | 22.488* |
| 0. | 26.744 | 34.582* | 0.00 | 26.744* | 22.486* |
| 21. | 26.752 | 34.601* | 0.00 | 26.747* | 22.500* |
| 40. | 26.739 | 34.643* | 0.00 | 26.730* | 22.537* |
| 61. | 24.472 | 34.719* | 0.00 | 24.459* | 23.294* |
| 81. | 18.708 | 34.782* | 0.00 | 18.694* | 24.933* |
| 102. | 14.860 | 34.321* | 0.00 | 14.845* | 25.483* |
| 125. | 12.548 | 34.712* | 0.00 | 12.531* | 26.263* |
| 152. | 11.188 | 34.660* | 0.00 | 11.169* | 26.481* |
| 201. | 10.251 | 34.677* | 0.00 | 10.227* | 26.661* |
| 302. | 9.438 | 34.668* | 0.00 | 9.404* | 26.793* |
| 302. | 9.448 | 34.666 | 1.47 | 9.414 | 26.790 |

CAST TGI-89-MB -003 LAT 07 04.8N LONG 147 30.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.781 | 34.574 | 4.73 | 26.781 | 22.469 |
| 20. | 26.833 | 34.635 | 4.82 | 26.829 | 22.499 |
| 41. | 26.823 | 34.657 | 4.46 | 26.814 | 22.521 |
| 59. | 20.038 | 34.557 | 4.25 | 20.027 | 24.418 |
| 82. | 16.896 | 34.591 | 3.81 | 16.883 | 25.229 |
| 100. | 14.095 | 34.369 | 2.50 | 14.081 | 25.683 |
| 126. | 11.948 | 34.657 | 0.00 | 11.932 | 26.336 |
| 152. | 11.038 | 34.667 | 0.00 | 11.019 | 26.513 |
| 200. | 10.315 | 34.678 | 0.00 | 10.291 | 26.651 |
| 302. | 9.496 | 34.669 | 0.00 | 9.462 | 26.784 |
| 502. | 8.043 | 34.612 | 0.00 | 7.991 | 26.971 |
| 1003. | 4.615 | 34.560 | 1.28 | 4.534 | 27.379 |

* Calculated from CTD values

CAST TGI-89-MB -004 LAT 06 59.7N LONG 147 31.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.871 | 34.594 | 0.00 | 26.871 | 22.455 |
| 0. | 26.849 | 34.596* | 0.00 | 26.849* | 22.464* |
| 0. | 26.833 | 34.592* | 0.00 | 26.833* | 22.466* |
| 0. | 26.844 | 34.601* | 0.00 | 26.844* | 22.469* |
| 79. | 18.197 | 34.719 | 0.00 | 18.183 | 25.013 |
| 80. | 18.269 | 34.665* | 0.00 | 18.255* | 24.953* |
| 80. | 18.488 | 34.635* | 0.00 | 18.474* | 24.876* |
| 79. | 18.589 | 34.748* | 0.00 | 18.575* | 24.937* |
| 1004. | 4.475 | 34.563 | 0.00 | 4.395 | 27.397 |
| 1004. | 4.476 | 34.564* | 0.00 | 4.396* | 27.397* |
| 1004. | 4.476 | 34.563* | 0.00 | 4.396* | 27.397* |
| 1003. | 4.478 | 34.563* | 0.00 | 4.398* | 27.396* |

CAST TGI-89-MB -005 LAT 06 59.6N LONG 142 30.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.525 | 34.778 | 4.94 | 27.525 | 22.384 |
| 21. | 27.368 | 34.777 | 4.95 | 27.363 | 22.436 |
| 41. | 26.973 | 34.853 | 4.78 | 26.964 | 22.621 |
| 61. | 26.664 | 34.889* | 4.56 | 26.650* | 22.747* |
| 79. | 26.410 | 34.886 | 4.52 | 26.392 | 22.826 |
| 102. | 19.019 | 34.693 | 3.58 | 19.001 | 24.787 |
| 126. | 15.025 | 34.508 | 2.17 | 15.006 | 25.592 |
| 149. | 12.192 | 34.642 | 1.01 | 12.172 | 26.279 |
| 200. | 10.816 | 34.706 | 0.69 | 10.792 | 26.584 |
| 302. | 9.651 | 34.682 | 0.84 | 9.617 | 26.769 |
| 502. | 8.040 | 34.615 | 0.27 | 7.988 | 26.974 |
| 1003. | 4.604 | 34.576 | 1.22 | 4.523 | 27.393 |

CAST TGI-89-MB -006 LAT 07 04.5N LONG 140 02.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.473 | 34.269 | 4.79 | 27.473 | 22.018 |
| 300. | 9.875 | 34.710 | 1.06 | 9.840 | 26.753 |
| 501. | 7.917 | 34.612 | 0.19 | 7.866 | 26.989 |
| 992. | 4.498 | 34.564 | 1.16 | 4.419 | 27.395 |
| 1504. | 2.995 | 34.609 | 1.81 | 2.887 | 27.583 |
| 2005. | 2.186 | 34.649 | 2.40 | 2.046 | 27.687 |
| 2506. | 1.871 | 34.667 | 2.62 | 1.692 | 27.729 |
| 3008. | 1.717 | 34.677 | 2.88 | 1.495 | 27.751 |
| 3507. | 1.519 | 34.685* | 3.30 | 1.252* | 27.775* |
| 4009. | 1.405 | 34.693 | 3.66 | 1.088 | 27.793 |
| 4510. | 1.387 | 34.699 | 3.84 | 1.014 | 27.803 |
| 5106. | 1.444 | 34.702 | 3.86 | 0.999 | 27.806 |

CAST TGI-89-MB -007 LAT 07 03.7N LONG 140 09.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.554 | 34.506* | 0.00 | 27.554* | 22.170* |
| 0. | 27.567 | 34.505* | 0.00 | 27.567* | 22.165* |
| 21. | 27.531 | 34.560* | 0.00 | 27.526* | 22.220* |
| 41. | 26.774 | 34.749* | 0.00 | 26.765* | 22.606* |
| 60. | 26.600 | 34.787* | 0.00 | 26.586* | 22.691* |
| 82. | 26.052 | 34.841* | 0.00 | 26.034* | 22.905* |
| 100. | 20.068 | 34.700* | 0.00 | 20.049* | 24.521* |
| 126. | 15.644 | 34.671* | 0.00 | 15.624* | 25.580* |
| 151. | 12.390 | 34.666* | 0.00 | 12.370* | 26.259* |
| 201. | 10.749 | 34.684* | 0.00 | 10.725* | 26.579* |
| 301. | 9.855 | 34.683* | 0.00 | 9.820* | 26.735* |
| 301. | 9.861 | 34.687 | 1.29 | 9.826 | 26.737 |

CAST TGI-89-MB -008 LAT 06 59.6N LONG 137 28.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.222 | 34.517 | 4.79 | 27.222 | 22.285 |
| 21. | 27.143 | 34.696 | 4.88 | 27.138 | 22.447 |
| 39. | 26.779 | 34.778 | 4.68 | 26.770 | 22.626 |
| 60. | 26.288 | 34.810* | 0.00 | 26.275* | 22.806* |
| 82. | 16.819 | 34.590 | 3.06 | 16.806 | 25.246 |
| 97. | 14.149 | 34.555 | 1.35 | 14.135 | 25.816 |
| 126. | 12.012 | 34.663 | 0.91 | 11.996 | 26.329 |
| 151. | 11.016 | 34.704 | 0.82 | 10.997 | 26.546 |
| 199. | 10.409 | 34.703 | 1.04 | 10.385 | 26.654 |
| 298. | 9.521 | 34.675 | 0.65 | 9.487 | 26.785 |
| 501. | 7.427 | 34.574 | 0.44 | 7.378 | 27.030 |
| 1002. | 4.506 | 34.564 | 1.37 | 4.426 | 27.394 |

CAST TGI-89-MB -009 LAT 07 03.2N LONG 132 23.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 28.286 | 34.124 | 0.00 | 28.286 | 21.645 |
| 21. | 27.152 | 34.620 | 5.43 | 27.147 | 22.387 |
| 40. | 26.755 | 34.750 | 0.00 | 26.746 | 22.612 |
| 60. | 22.828 | 34.695 | 0.00 | 22.816 | 23.757 |
| 81. | 15.679 | 34.668 | 0.00 | 15.666 | 25.569 |
| 100. | 13.746 | 34.662 | 1.41 | 13.732 | 25.983 |
| 127. | 11.758 | 34.730 | 0.00 | 11.742 | 26.429 |
| 148. | 11.194 | 34.718 | 0.00 | 11.176 | 26.524 |
| 202. | 10.548 | 34.715 | 0.00 | 10.524 | 26.639 |
| 301. | 9.732 | 34.684 | 1.10 | 9.698 | 26.757 |
| 503. | 7.856 | 34.606 | 0.00 | 7.805 | 26.994 |
| 1003. | 4.522 | 34.561 | 1.45 | 4.442 | 27.390 |

* Calculated from CTD values

CAST TGI-89-MB -012 LAT 08 58.3N LONG 140 16.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.100 | 34.630 | 4.88 | 27.100 | 22.409 |
| 299. | 9.690 | 34.707 | 0.36 | 9.656 | 26.782 |
| 502. | 7.278 | 34.564 | 0.00 | 7.229 | 27.044 |
| 1002. | 4.185 | 34.568* | 1.35 | 4.108* | 27.431* |
| 1504. | 2.920 | 34.613 | 0.00 | 2.813 | 27.593 |
| 2004. | 2.176 | 34.642 | 0.00 | 2.036 | 27.682 |
| 2505. | 1.866 | 34.661 | 0.00 | 1.688 | 27.724 |
| 3009. | 1.698 | 34.672 | 0.00 | 1.476 | 27.749 |
| 3508. | 1.521 | 34.683 | 0.00 | 1.253 | 27.773 |
| 4009. | 1.398 | 34.692 | 0.00 | 1.081 | 27.792 |
| 4509. | 1.389 | 34.695 | 0.00 | 1.016 | 27.799 |
| 4938. | 1.427 | 34.701 | 4.02 | 1.003 | 27.805 |

CAST TGI-89-MB -013 LAT 08 57.7N LONG 140 17.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.097 | 34.642 | 0.00 | 27.097 | 22.419 |
| 12. | 27.100 | 34.643 | 0.00 | 27.097 | 22.420 |
| 21. | 27.099 | 34.641 | 0.00 | 27.094 | 22.419 |
| 37. | 27.116 | 34.735 | 0.00 | 27.108 | 22.486 |
| 61. | 27.036 | 34.786 | 0.00 | 27.022 | 22.552 |
| 81. | 24.394 | 34.698 | 0.00 | 24.377 | 23.303 |
| 101. | 18.283 | 34.467 | 0.00 | 18.266 | 24.799 |
| 125. | 13.820 | 34.432 | 0.00 | 13.802 | 25.790 |
| 152. | 12.385 | 34.644 | 0.00 | 12.365 | 26.243 |
| 201. | 11.117 | 34.693* | 0.00 | 11.092* | 26.520* |
| 302. | 9.701 | 34.666* | 0.00 | 9.667* | 26.748* |
| 301. | 9.710 | 34.670 | 0.53 | 9.676 | 26.749 |

CAST TGI-89-MB -014 LAT 07 59.8N LONG 139 59.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.171 | 34.649 | 0.00 | 27.171 | 22.401 |
| 22. | 27.173 | 34.651 | 4.79 | 27.168 | 22.403 |
| 41. | 27.031 | 34.710 | 0.00 | 27.022 | 22.495 |
| 61. | 26.545 | 34.850 | 0.00 | 26.531 | 22.756 |
| 80. | 20.459 | 34.758 | 0.00 | 20.444 | 24.461 |
| 100. | 16.190 | 34.571 | 2.44 | 16.174 | 25.379 |
| 125. | 12.461 | 34.684 | 0.00 | 12.444 | 26.259 |
| 151. | 11.747 | 34.742 | 0.00 | 11.728 | 26.441 |
| 200. | 10.941 | 34.726 | 0.00 | 10.917 | 26.578 |
| 302. | 9.775 | 34.683 | 0.40 | 9.740 | 26.749 |
| 500. | 7.544 | 34.574 | 0.00 | 7.494 | 27.014 |
| 1006. | 4.432 | 34.561 | 1.22 | 4.352 | 27.400 |

CAST TGI-89-MB -015 LAT 07 01.1N LONG 140 08.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.615 | 34.483 | 0.00 | 27.615 | 22.133 |
| 21. | 27.417 | 34.554 | 4.84 | 27.412 | 22.252 |
| 39. | 26.702 | 34.750 | 0.00 | 26.693 | 22.629 |
| 60. | 26.426 | 34.828 | 0.00 | 26.413 | 22.776 |
| 81. | 21.035 | 34.606* | 0.00 | 21.020* | 24.190* |
| 101. | 16.107 | 34.633 | 2.48 | 16.091 | 25.445 |
| 125. | 13.205 | 34.624 | 0.00 | 13.188 | 26.064 |
| 151. | 11.848 | 34.692 | 0.00 | 11.829 | 26.383 |
| 200. | 10.616 | 34.704 | 0.00 | 10.592 | 26.618 |
| 301. | 9.655 | 34.674 | 0.65 | 9.621 | 26.762 |
| 502. | 7.891 | 34.601 | 0.00 | 7.840 | 26.985 |
| 1003. | 4.553 | 34.558 | 1.23 | 4.473 | 27.384 |

CAST TGI-89-MB -016 LAT 05 59.6N LONG 140 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.736 | 34.754 | 0.00 | 27.736 | 22.298 |
| 21. | 27.468 | 34.684 | 4.85 | 27.463 | 22.333 |
| 42. | 26.578 | 34.892 | 0.00 | 26.568 | 22.775 |
| 61. | 26.434 | 34.914 | 0.00 | 26.420 | 22.839 |
| 81. | 23.800 | 34.850 | 0.00 | 23.783 | 23.593 |
| 101. | 17.714 | 34.676 | 2.86 | 17.697 | 25.099 |
| 124. | 13.983 | 34.661 | 0.00 | 13.965 | 25.933 |
| 147. | 11.989 | 34.624 | 0.00 | 11.970 | 26.303 |
| 202. | 10.260 | 34.675 | 0.00 | 10.236 | 26.658 |
| 301. | 9.371 | 34.663 | 1.42 | 9.337 | 26.800 |
| 501. | 8.029 | 34.606 | 0.00 | 7.977 | 26.968 |
| 1002. | 4.488 | 34.554 | 1.54 | 4.408 | 27.388 |

CAST TGI-89-MB -017 LAT 04 59.5N LONG 139 59.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.528 | 34.800 | 0.00 | 27.528 | 22.400 |
| 201. | 10.341 | 34.658 | 0.00 | 10.317 | 26.631 |
| 301. | 9.396 | 34.658 | 1.48 | 9.362 | 26.792 |
| 500. | 7.951 | 34.603 | 0.00 | 7.900 | 26.977 |
| 1003. | 4.631 | 34.551 | 1.41 | 4.550 | 27.370 |
| 1504. | 3.107 | 34.595 | 0.00 | 2.998 | 27.562 |
| 2004. | 2.294 | 34.639 | 0.00 | 2.153 | 27.670 |
| 2505. | 1.891 | 34.661 | 0.00 | 1.712 | 27.722 |
| 3008. | 1.735 | 34.672 | 0.00 | 1.512 | 27.746 |
| 3508. | 1.500 | 34.691 | 0.00 | 1.233 | 27.781 |
| 4010. | 1.391 | 34.692 | 0.00 | 1.074 | 27.793 |
| 4448. | 1.397 | 34.692 | 3.85 | 1.031 | 27.796 |

* Calculated from CTD values

CAST TGI-89-MB -018 LAT 05 00.6N LONG 139 58.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 21. | 27.567 | 34.806 | 5.06 | 27.562 | 22.393 |
| 101. | 16.981 | 34.653 | 2.63 | 16.964 | 25.257 |
| 302. | 9.211 | 34.657 | 1.27 | 9.178 | 26.821 |
| 1003. | 4.590 | 34.559 | 1.65 | 4.509 | 27.381 |

CAST TGI-89-MB -019 LAT 03 59.9N LONG 139 59.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.424 | 34.773 | 0.00 | 27.424 | 22.413 |
| 20. | 27.354 | 34.818 | 3.67 | 27.349 | 22.471 |
| 40. | 26.803 | 34.859 | 0.00 | 26.794 | 22.679 |
| 60. | 26.223 | 34.901 | 0.00 | 26.210 | 22.895 |
| 81. | 23.325 | 34.915 | 0.00 | 23.308 | 23.782 |
| 102. | 17.517 | 34.722 | 2.59 | 17.500 | 25.182 |
| 125. | 13.309 | 34.766 | 0.00 | 13.292 | 26.153 |
| 152. | 12.984 | 34.895 | 0.00 | 12.963 | 26.320 |
| 202. | 12.019 | 34.847 | 0.00 | 11.993 | 26.472 |
| 302. | 10.619 | 34.735 | 1.49 | 10.583 | 26.644 |
| 502. | 8.166 | 34.619 | 0.00 | 8.114 | 26.958 |
| 1004. | 4.776 | 34.553 | 1.79 | 4.694 | 27.356 |

CAST TGI-89-MB -020 LAT 02 58.4N LONG 140 01.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.342 | 34.739 | 0.00 | 27.342 | 22.414 |
| 21. | 27.338 | 34.739 | 4.79 | 27.333 | 22.417 |
| 40. | 27.205 | 34.747 | 0.00 | 27.196 | 22.467 |
| 62. | 25.289 | 34.856 | 0.00 | 25.275 | 23.150 |
| 81. | 24.219 | 34.951 | 0.00 | 24.202 | 23.546 |
| 101. | 19.341 | 34.779 | 3.31 | 19.323 | 24.771 |
| 125. | 14.045 | 34.879 | 0.00 | 14.027 | 26.089 |
| 151. | 13.227 | 34.902 | 0.00 | 13.206 | 26.276 |
| 200. | 12.477 | 34.870 | 0.00 | 12.450 | 26.402 |
| 301. | 10.968 | 34.778 | 1.43 | 10.931 | 26.616 |
| 502. | 8.489 | 34.632 | 0.00 | 8.436 | 26.919 |
| 1004. | 4.624 | 34.553 | 2.02 | 4.543 | 27.373 |

CAST TGI-89-MB -021 LAT 02 00.8N LONG 140 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.223 | 34.806 | 0.00 | 27.223 | 22.502 |
| 200. | 12.154 | 34.848 | 0.00 | 12.128 | 26.447 |
| 302. | 10.784 | 34.767 | 1.44 | 10.747 | 26.640 |
| 501. | 8.093 | 34.631 | 0.00 | 8.041 | 26.978 |
| 1002. | 4.660 | 34.554 | 1.93 | 4.579 | 27.369 |
| 1504. | 3.112 | 34.603 | 0.00 | 3.002 | 27.568 |
| 2005. | 2.300 | 34.641 | 0.00 | 2.159 | 27.671 |
| 2506. | 1.829 | 34.667 | 0.00 | 1.651 | 27.732 |
| 3007. | 1.723 | 34.675 | 0.00 | 1.501 | 27.749 |
| 3508. | 1.480 | 34.685 | 0.00 | 1.213 | 27.778 |
| 4009. | 1.428 | 34.690 | 0.00 | 1.110 | 27.789 |

CAST TGI-89-MB -022 LAT 02 00.4N LONG 140 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.191 | 34.815 | 0.00 | 27.191 | 22.519 |
| 11. | 27.185 | 34.816 | 0.00 | 27.182 | 22.523 |
| 21. | 27.172 | 34.811 | 0.00 | 27.167 | 22.524 |
| 41. | 27.068 | 34.824 | 0.00 | 27.059 | 22.569 |
| 61. | 26.613 | 34.841 | 0.00 | 26.599 | 22.727 |
| 80. | 24.899 | 34.910 | 0.00 | 24.882 | 23.311 |
| 82. | 24.874 | 34.913 | 0.00 | 24.856 | 23.321 |
| 101. | 19.686 | 34.830 | 0.00 | 19.668 | 24.720 |
| 127. | 15.515 | 34.824 | 0.00 | 15.495 | 25.727 |
| 151. | 12.992 | 34.826 | 0.00 | 12.971 | 26.264 |
| 201. | 12.226 | 34.852 | 1.32 | 12.200 | 26.436 |
| 301. | 10.799 | 34.763 | 0.00 | 10.762 | 26.634 |

CAST TGI-89-MB -023 LAT 02 00.4N LONG 140 01.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 20. | 27.174 | 34.825 | 5.09 | 27.169 | 22.534 |
| 101. | 19.874 | 34.808 | 3.13 | 19.855 | 24.655 |
| 301. | 10.770 | 34.759 | 1.28 | 10.733 | 26.636 |
| 1004. | 4.629 | 34.555 | 1.98 | 4.548 | 27.374 |

* Calculated from CTD values

CAST TGI-89-MB -024 LAT 01 30.3N LONG 140 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 21. | 27.155 | 34.799 | 4.92 | 27.150 | 22.520 |
| 42. | 26.817 | 34.807 | 0.00 | 26.807 | 22.636 |
| 59. | 25.440 | 34.949 | 0.00 | 25.427 | 23.174 |
| 92. | 23.429 | 34.924 | 0.00 | 23.412 | 23.758 |
| 101. | 20.521 | 34.835 | 3.28 | 20.502 | 24.504 |
| 119. | 16.959 | 34.814 | 0.00 | 16.939 | 25.387 |
| 151. | 13.449 | 34.906* | 0.00 | 13.428* | 26.234* |
| 202. | 12.047 | 34.837 | 0.00 | 12.021 | 26.459 |
| 302. | 11.080 | 34.776 | 1.17 | 11.042 | 26.594 |
| 501. | 8.160 | 34.623 | 0.00 | 8.108 | 26.962 |
| 1005. | 4.612 | 34.550* | 1.99 | 4.531* | 27.372* |

CAST TGI-89-MB -025 LAT 00 59.9N LONG 140 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 21. | 26.869 | 34.858 | 4.77 | 26.864 | 22.656 |
| 41. | 26.706 | 34.872 | 0.00 | 26.697 | 22.720 |
| 82. | 22.476 | 34.912 | 0.00 | 22.460 | 24.023 |
| 102. | 19.819 | 34.851 | 3.18 | 19.800 | 24.702 |
| 123. | 15.508 | 34.758 | 0.00 | 15.489 | 25.678 |
| 152. | 13.122 | 34.765 | 0.00 | 13.101 | 26.191 |
| 202. | 12.081 | 34.813 | 0.00 | 12.055 | 26.434 |
| 301. | 10.975 | 34.781 | 1.46 | 10.938 | 26.617 |
| 502. | 7.942 | 34.609 | 0.00 | 7.891 | 26.983 |
| 1002. | 4.651 | 34.549 | 2.03 | 4.570 | 27.366 |

CAST TGI-89-MB -026 LAT 00 29.9N LONG 139 59.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.503 | 34.955 | 0.00 | 26.503 | 22.844 |
| 22. | 26.509 | 34.956 | 4.82 | 26.504 | 22.844 |
| 40. | 26.100 | 34.972 | 0.00 | 26.091 | 22.986 |
| 61. | 24.256 | 34.960 | 0.00 | 24.243 | 23.541 |

CAST TGI-89-MB -027 LAT 00 08.5S LONG 139 56.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 25.832 | 35.113 | 0.00 | 25.832 | 23.173 |
| 21. | 25.831 | 35.119 | 4.86 | 25.826 | 23.179 |
| 42. | 25.666 | 35.147 | 0.00 | 25.657 | 23.253 |
| 62. | 25.191 | 35.146 | 0.00 | 25.178 | 23.399 |
| 81. | 24.174 | 35.087 | 0.00 | 24.157 | 23.662 |
| 100. | 22.222 | 35.245 | 3.62 | 22.202 | 24.349 |
| 127. | 18.382 | 35.173 | 0.00 | 18.360 | 25.316 |
| 150. | 15.919 | 35.118 | 0.00 | 15.895 | 25.863 |
| 201. | 12.743 | 34.911 | 0.00 | 12.716 | 26.381 |
| 302. | 11.714 | 34.831 | 2.19 | 11.675 | 26.520 |
| 502. | 8.245 | 34.637 | 0.00 | 8.193 | 26.960 |
| 1005. | 4.754 | 34.554 | 2.11 | 4.672 | 27.359 |

CAST TGI-89-MB -029 LAT 00 00.0N LONG 139 54.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 301. | 11.462 | 34.814. | 1.91 | 11.424 | 26.554 |

CAST TGI-89-MB -030 LAT 00 02.9N LONG 139 53.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.001 | 35.074 | 0.00 | 26.001 | 23.091 |
| 201. | 12.933 | 34.919 | 2.85 | 12.905 | 26.350 |
| 302. | 11.615 | 34.827 | 2.06 | 11.576 | 26.535 |
| 502. | 7.970 | 34.638 | 0.00 | 7.919 | 27.002 |
| 1003. | 4.612 | 34.555 | 1.98 | 4.531 | 27.375 |
| 1503. | 2.956 | 34.608 | 0.00 | 2.848 | 27.586 |
| 2005. | 2.278 | 34.644 | 0.00 | 2.137 | 27.676 |
| 2508. | 1.860 | 34.662 | 0.00 | 1.682 | 27.726 |
| 3008. | 1.668 | 34.671* | 0.00 | 1.447* | 27.750* |
| 3509. | 1.481 | 34.686 | 0.00 | 1.214 | 27.779 |
| 4010. | 1.396 | 34.693 | 0.00 | 1.079 | 27.793 |
| 4394. | 1.434 | 34.693 | 3.79 | 1.073 | 27.794 |

* Calculated from CTD values

CAST TGI-89-MB -031 LAT 00 29.2S LONG 139 58.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 25.935 | 35.238 | 0.00 | 25.935 | 23.235 |
| 20. | 25.930 | 35.246 | 4.55 | 25.926 | 23.244 |
| 41. | 26.672 | 34.530* | 0.00 | 26.663* | 22.473* |
| 60. | 25.384 | 35.391 | 0.00 | 25.371 | 23.525 |
| 82. | 24.168 | 35.490* | 0.00 | 24.151* | 23.969* |
| 101. | 20.924 | 35.447 | 3.15 | 20.905 | 24.862 |
| 125. | 17.937 | 35.340 | 0.00 | 17.916 | 25.554 |
| 150. | 15.380 | 35.083 | 0.00 | 15.357 | 25.958 |
| 201. | 12.756 | 34.916 | 0.00 | 12.729 | 26.383 |
| 302. | 11.431 | 34.814 | 1.75 | 11.393 | 26.559 |
| 503. | 8.051 | 34.622 | 0.00 | 7.999 | 26.977 |
| 1005. | 4.633 | 34.554 | 2.09 | 4.552 | 27.372 |

CAST TGI-89-MB -032 LAT 00 59.5S LONG 139 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.142 | 35.255 | 0.00 | 26.142 | 23.183 |
| 21. | 25.998 | 35.263 | 4.70 | 25.993 | 23.236 |
| 43. | 25.936 | 35.299 | 0.00 | 25.926 | 23.284 |
| 81. | 23.742 | 35.651 | 0.00 | 23.725 | 24.217 |
| 101. | 22.825 | 35.718 | 3.31 | 22.805 | 24.536 |
| 126. | 18.349 | 35.465 | 0.00 | 18.327 | 25.548 |
| 150. | 16.048 | 35.210 | 0.00 | 16.024 | 25.905 |
| 203. | 13.744 | 35.011 | 0.00 | 13.715 | 26.256 |
| 302. | 11.363 | 34.811 | 1.66 | 11.325 | 26.569 |
| 502. | 7.739 | 34.611 | 0.00 | 7.688 | 27.015 |
| 1003. | 4.631 | 34.554 | 2.17 | 4.550 | 27.373 |

CAST TGI-89-MB -033 LAT 01 29.8S LONG 139 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.326 | 35.344 | 0.00 | 26.326 | 23.193 |
| 20. | 26.151 | 35.340* | 5.07 | 26.146* | 23.246* |
| 41. | 26.141 | 35.343 | 0.00 | 26.132 | 23.253 |
| 61. | 26.131 | 35.343 | 0.00 | 26.117 | 23.257 |
| 79. | 24.850 | 35.351 | 0.00 | 24.833 | 23.659 |
| 101. | 21.650 | 35.728 | 3.42 | 21.630 | 24.876 |
| 126. | 17.467 | 35.425 | 0.00 | 17.446 | 25.734 |
| 152. | 15.083 | 35.188 | 0.00 | 15.060 | 26.105 |
| 200. | 12.160 | 34.881 | 0.00 | 12.134 | 26.472 |
| 303. | 10.797 | 34.779 | 1.51 | 10.760 | 26.647 |
| 500. | 7.654 | 34.608 | 0.00 | 7.604 | 27.025 |
| 1004. | 4.531 | 34.556 | 2.25 | 4.451 | 27.385 |

CAST TGI-89-MB -034 LAT 02 03.0S LONG 139 58.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.440 | 35.333 | 0.00 | 26.440 | 23.149 |
| 102. | 20.380 | 35.687 | 3.26 | 20.361 | 25.191 |
| 200. | 11.844 | 34.867 | 0.00 | 11.818 | 26.521 |
| 302. | 10.581 | 34.770 | 1.92 | 10.545 | 26.678 |
| 502. | 7.650 | 34.607 | 0.00 | 7.600 | 27.024 |
| 1003. | 4.569 | 34.554 | 1.96 | 4.489 | 27.379 |
| 1503. | 3.104 | 34.604 | 0.00 | 2.995 | 27.570 |
| 2005. | 2.326 | 34.646 | 0.00 | 2.184 | 27.673 |
| 2508. | 1.911 | 34.660 | 0.00 | 1.732 | 27.720 |
| 3007. | 1.670 | 34.677 | 0.00 | 1.449 | 27.755 |
| 3510. | 1.491 | 34.688 | 0.00 | 1.224 | 27.779 |
| 3809. | 1.420 | 34.697 | 3.74 | 1.124 | 27.794 |

CAST TGI-89-MB -035 LAT 02 02.8S LONG 139 56.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 301. | 10.871 | 34.783 | 1.35 | 10.834 | 26.637 |

CAST TGI-89-MB -036 LAT 03 00.0S LONG 139 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.927 | 35.212 | 0.00 | 26.927 | 22.903 |
| 22. | 26.945 | 35.207* | 4.86 | 26.940* | 22.895* |
| 100. | 19.170 | 35.567* | 0.00 | 19.152* | 25.417* |
| 302. | 11.536 | 34.838* | 0.59 | 11.498* | 26.559* |
| 502. | 8.291 | 34.647* | 0.00 | 8.238* | 26.961* |
| 1002. | 4.570 | 34.553* | 2.08 | 4.490* | 27.378* |

* Calculated from CTD values

CAST TGI-89-MB -037 LAT 04 00.1S LONG 140 00.1W

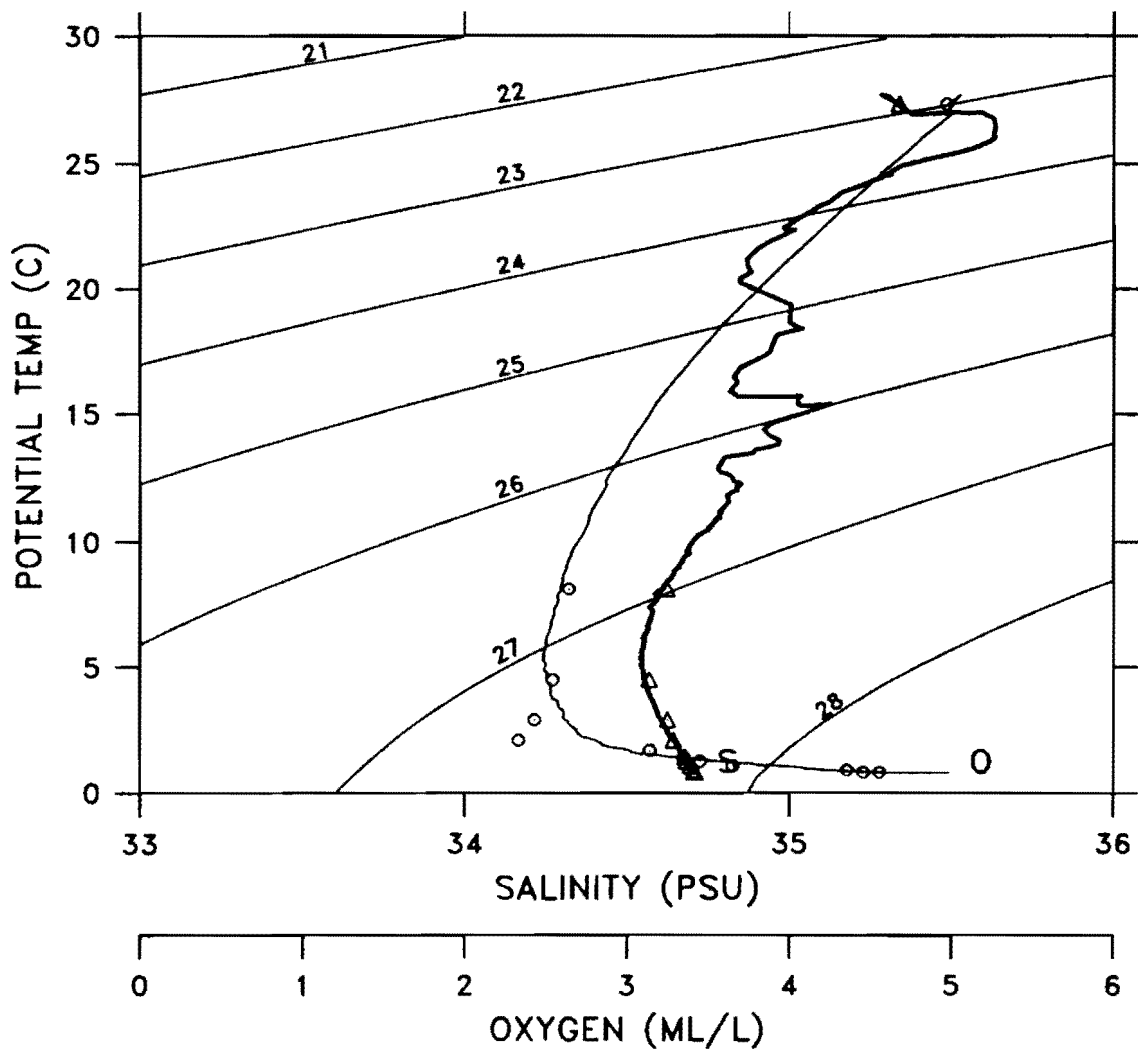
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.349 | 35.265 | 0.00 | 27.349 | 22.807 |
| 22. | 27.334 | 35.265 | 4.76 | 27.329 | 22.814 |
| 81. | 22.907 | 36.140 | 0.00 | 22.891 | 24.832 |
| 101. | 18.578 | 35.559 | 2.92 | 18.560 | 25.561 |
| 127. | 16.016 | 35.262 | 0.00 | 15.996 | 25.951 |
| 152. | 13.544 | 35.016 | 0.00 | 13.523 | 26.300 |
| 300. | 10.877 | 34.798* | 2.02 | 10.840* | 26.648* |
| 500. | 8.032 | 34.638 | 0.00 | 7.981 | 26.993 |
| 1004. | 4.510 | 34.553 | 2.00 | 4.430 | 27.385 |

CAST TGI-89-MB -038 LAT 05 00.0S LONG 140 00.5W

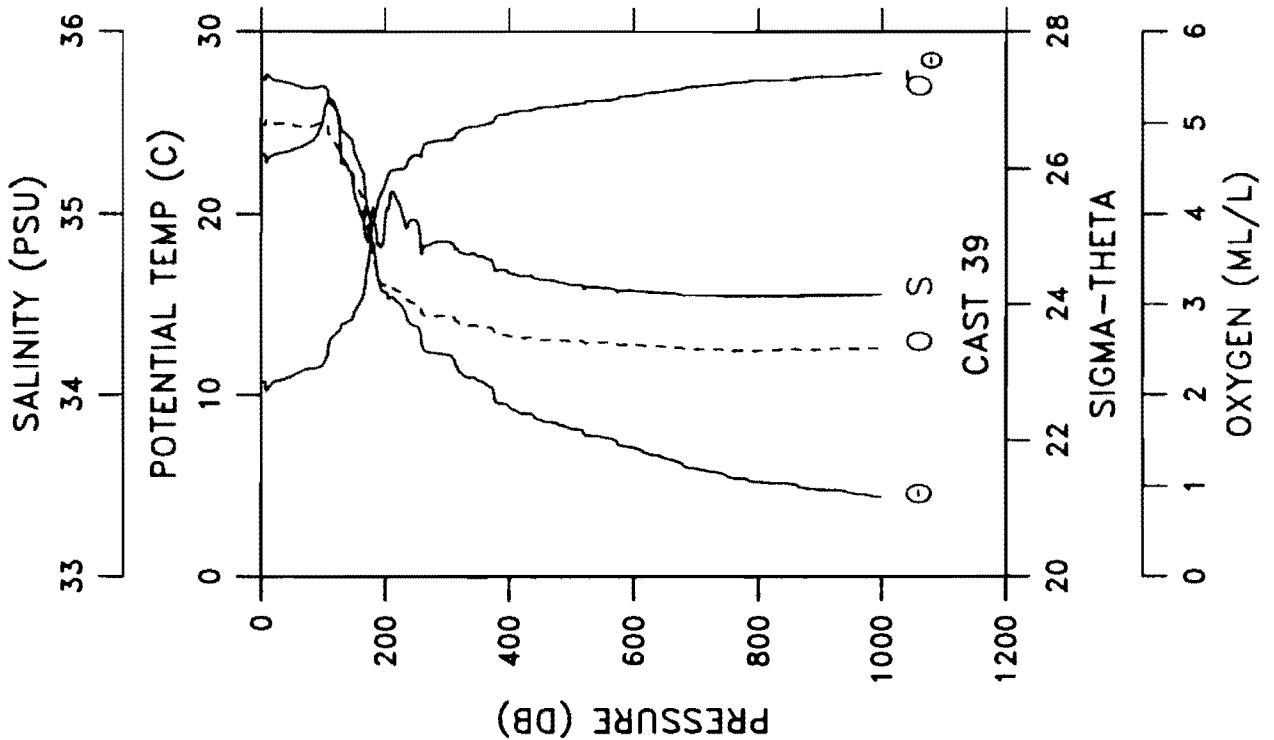
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.482 | 35.456 | 0.00 | 27.482 | 22.908 |
| 20. | 27.497 | 35.456 | 5.07 | 27.492 | 22.905 |
| 41. | 27.404 | 35.453 | 0.00 | 27.395 | 22.934 |
| 60. | 26.885 | 35.709 | 0.00 | 26.871 | 23.295 |
| 80. | 24.509 | 36.133 | 0.00 | 24.492 | 24.354 |
| 102. | 22.083 | 36.029 | 3.85 | 22.063 | 24.984 |
| 126. | 19.308 | 35.654 | 0.00 | 19.285 | 25.449 |
| 150. | 15.934 | 35.242 | 0.00 | 15.910 | 25.955 |
| 301. | 10.214 | 34.757* | 0.76 | 10.178* | 26.732* |
| 1002. | 4.496 | 34.539* | 2.33 | 4.416* | 27.375* |

TG2-89-MB
June 7-29, 1989
CTD/O₂ and Hydrographic Data Summary

CAST TG2-89-MB -039 DATE 15 JUN 89 TIME 0833 GMT
LAT 00 01.0S LONG 176 30.8W

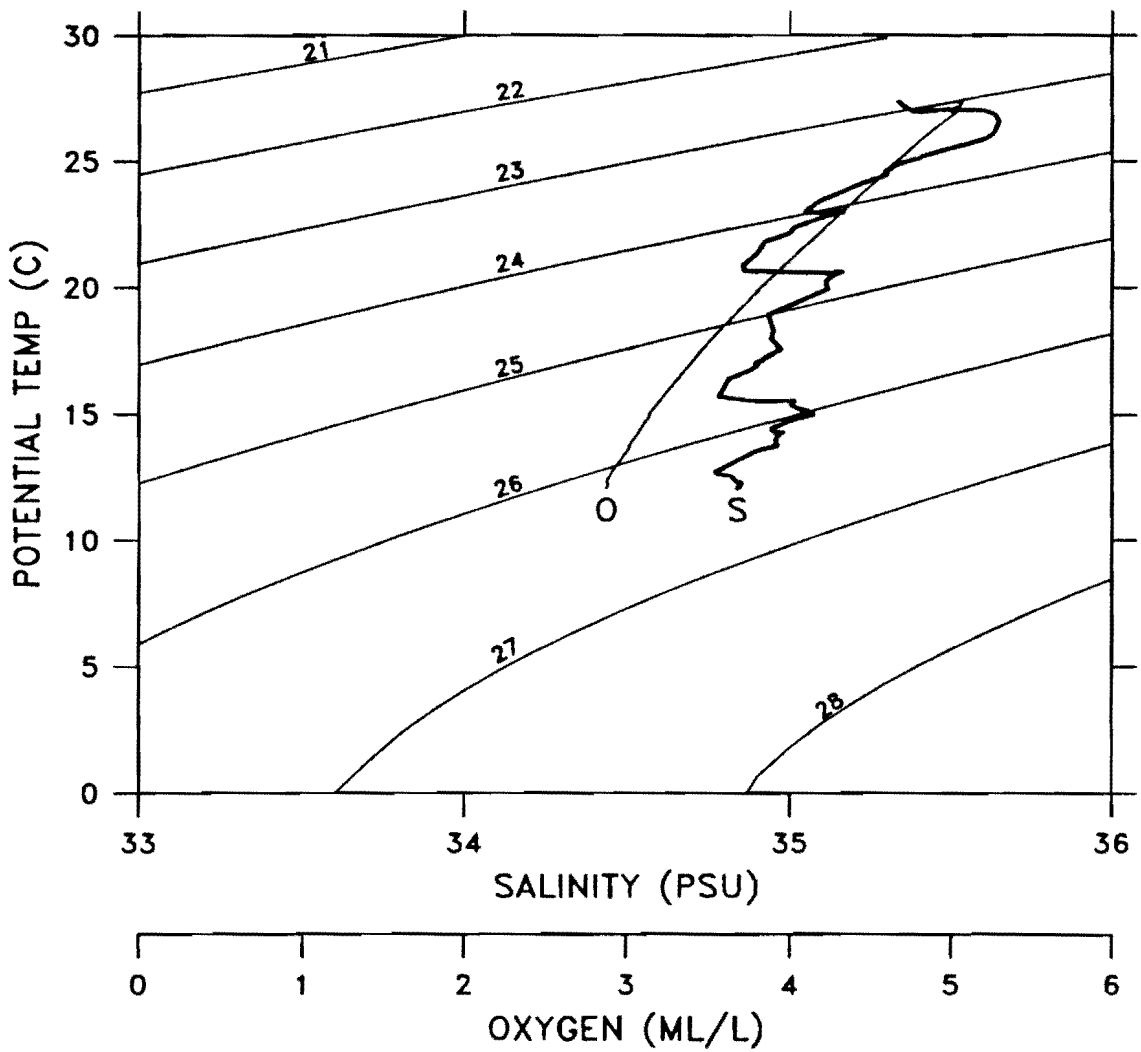


CAST 162-89-MB -039 DATE 15 JUN 89 TIME 0833 GMT
 LAT 00 01.05 LONG 176 30.8W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 155 T SPD 09 KT VISIBILITY
 CLOUD AMOUNT DRY 27.9 WET 24.0 DEPTH 5121 M

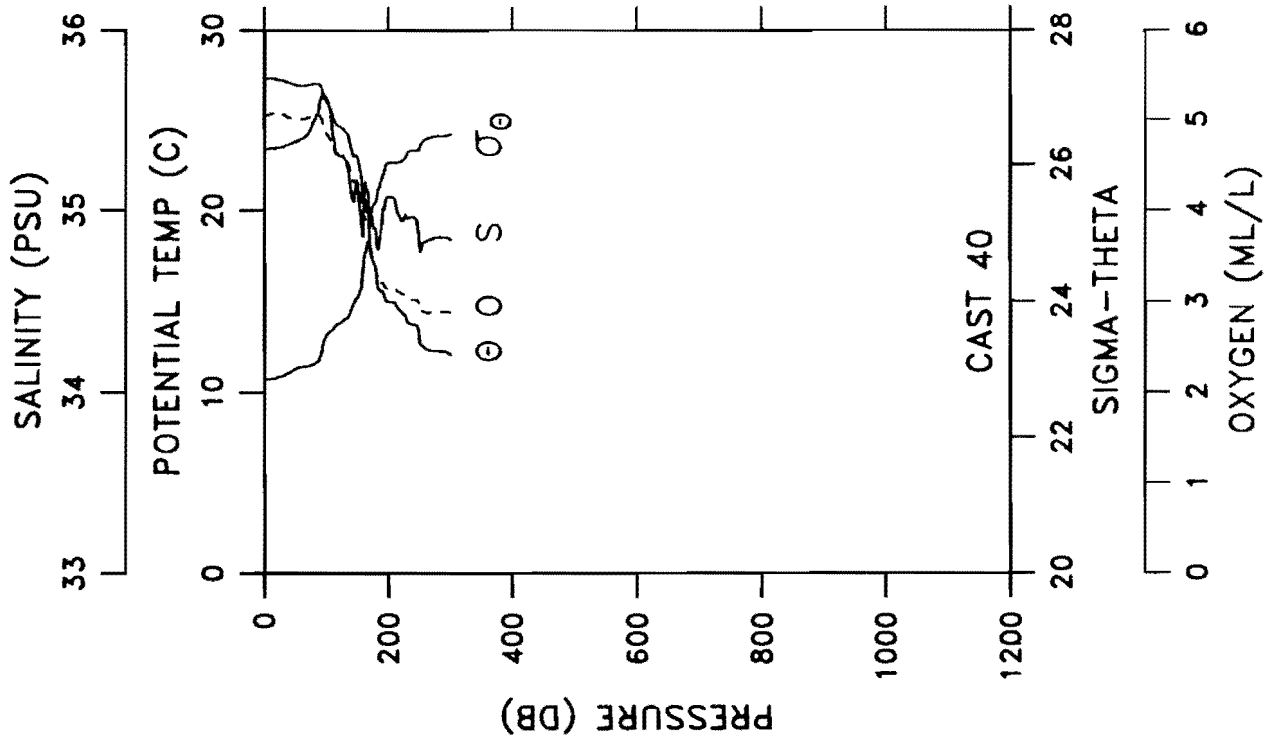


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.368 | 35.334 | 4.98 | 22.853 | 0.000 |
| 10 | 27.636 | 35.308 | 5.04 | 22.747 | 0.050 |
| 20 | 27.351 | 35.328 | 5.00 | 22.854 | 0.101 |
| 30 | 27.296 | 35.337 | 5.00 | 22.879 | 0.151 |
| 40 | 27.215 | 35.344 | 4.99 | 22.910 | 0.200 |
| 50 | 27.144 | 35.355 | 4.99 | 22.941 | 0.250 |
| 60 | 27.028 | 35.368 | 4.97 | 22.988 | 0.299 |
| 70 | 26.921 | 35.381 | 4.96 | 23.032 | 0.348 |
| 80 | 26.913 | 35.402 | 4.97 | 23.050 | 0.396 |
| 90 | 26.961 | 35.437 | 4.99 | 23.062 | 0.445 |
| 100 | 27.006 | 35.520 | 5.01 | 23.110 | 0.493 |
| 110 | 26.273 | 35.632 | 4.87 | 23.427 | 0.540 |
| 120 | 25.765 | 35.593 | 4.78 | 23.556 | 0.584 |
| 130 | 24.568 | 35.315 | 4.56 | 23.712 | 0.628 |
| 140 | 24.349 | 35.265 | 4.53 | 23.740 | 0.670 |
| 150 | 23.452 | 35.122 | 4.37 | 23.896 | 0.712 |
| 160 | 22.605 | 35.002 | 4.23 | 24.050 | 0.752 |
| 170 | 20.670 | 34.882 | 3.91 | 24.494 | 0.789 |
| 180 | 18.389 | 35.042 | 3.57 | 25.209 | 0.821 |
| 190 | 16.202 | 34.838 | 3.28 | 25.577 | 0.848 |
| 200 | 15.697 | 34.985 | 3.21 | 25.806 | 0.871 |
| 250 | 13.798 | 34.967 | 3.02 | 26.205 | 0.973 |
| 300 | 12.222 | 34.849 | 2.87 | 26.430 | 1.060 |
| 350 | 10.790 | 34.767 | 2.76 | 26.632 | 1.137 |
| 400 | 9.332 | 34.676 | 2.64 | 26.811 | 1.207 |
| 450 | 8.625 | 34.640 | 2.60 | 26.896 | 1.271 |
| 500 | 8.146 | 34.609 | 2.59 | 26.945 | 1.332 |
| 550 | 7.687 | 34.592 | 2.57 | 27.000 | 1.391 |
| 600 | 7.119 | 34.578 | 2.55 | 27.070 | 1.446 |
| 650 | 6.559 | 34.565 | 2.53 | 27.137 | 1.499 |
| 700 | 5.991 | 34.554 | 2.50 | 27.201 | 1.548 |
| 750 | 5.554 | 34.544 | 2.49 | 27.248 | 1.595 |
| 800 | 5.240 | 34.547 | 2.48 | 27.288 | 1.640 |
| 900 | 4.809 | 34.550 | 2.49 | 27.340 | 1.726 |
| 1000 | 4.412 | 34.556 | 2.51 | 27.389 | 1.807 |
| 1500 | 2.927 | 34.603 | 2.62 | 27.575 | 2.158 |
| 2000 | 2.105 | 34.642 | 2.79 | 27.677 | 2.437 |
| 2500 | 1.686 | 34.664 | 3.02 | 27.727 | 2.681 |
| 3000 | 1.436 | 34.676 | 3.28 | 27.755 | 2.910 |
| 3500 | 1.254 | 34.687 | 3.58 | 27.777 | 3.133 |
| 4000 | 1.093 | 34.697 | 3.91 | 27.796 | 3.350 |
| 4500 | 0.907 | 34.707 | 4.26 | 27.816 | 3.561 |
| 5000 | 0.820 | 34.710 | 4.66 | 27.824 | 3.766 |
| 5354 | 0.813 | 34.710 | 4.98 | 27.825 | 3.915 |

CAST TG2-89-MB -040 DATE 16 JUN 89 TIME 1434 GMT
LAT 00 01.6S LONG 176 30.1W

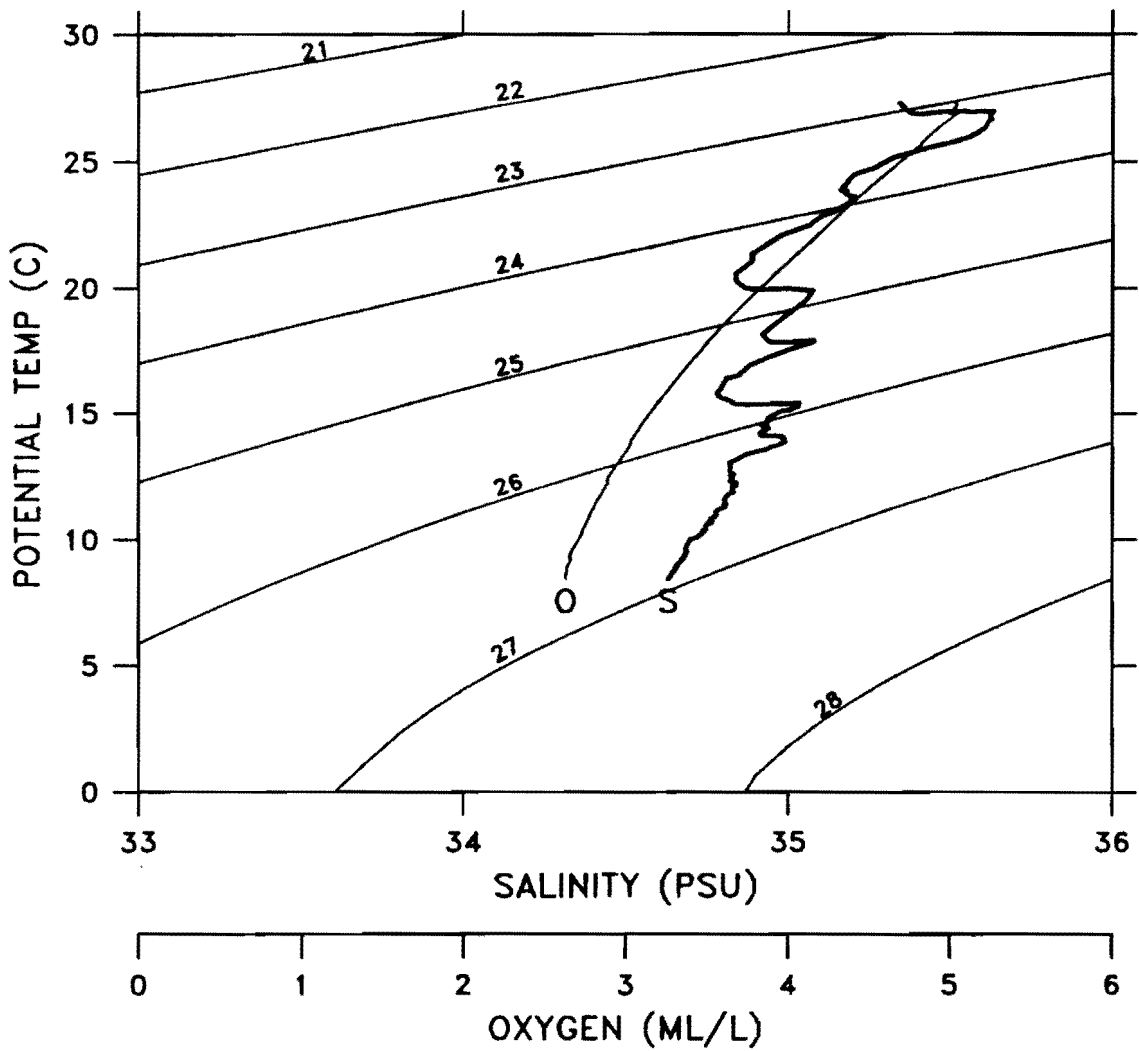


CAST TG2-89-MB -040 DATE 16 JUN 89 TIME 1434 GMT
 LAT 00 01.6S LONG 176 30.1W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 208 T SPD 08 KT VISIBILITY
 CLOUD AMOUNT DRY 27.4 WET 24.0 DEPTH 6077 M

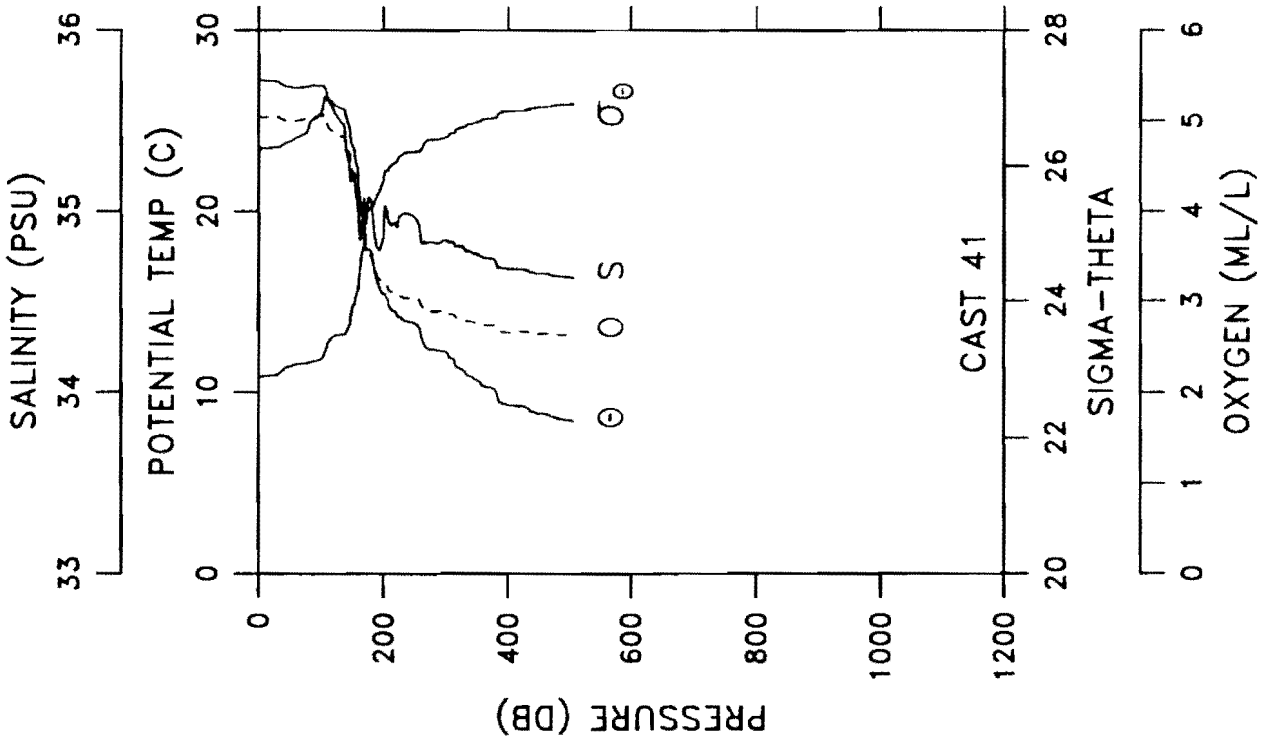


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.338 | 35.337 | 5.04 | 22.865 | 0.000 |
| 10 | 27.335 | 35.340 | 5.07 | 22.868 | 0.050 |
| 20 | 27.272 | 35.344 | 5.06 | 22.892 | 0.100 |
| 30 | 27.220 | 35.349 | 5.06 | 22.912 | 0.149 |
| 40 | 27.099 | 35.364 | 5.03 | 22.963 | 0.199 |
| 50 | 26.968 | 35.379 | 5.01 | 23.015 | 0.247 |
| 60 | 26.922 | 35.395 | 5.01 | 23.042 | 0.296 |
| 70 | 26.953 | 35.420 | 5.02 | 23.051 | 0.344 |
| 80 | 27.036 | 35.499 | 5.05 | 23.084 | 0.393 |
| 90 | 26.950 | 35.611 | 5.04 | 23.196 | 0.440 |
| 100 | 25.974 | 35.619 | 4.84 | 23.511 | 0.486 |
| 110 | 25.175 | 35.409 | 4.70 | 23.599 | 0.529 |
| 120 | 24.646 | 35.301 | 4.61 | 23.678 | 0.572 |
| 130 | 24.348 | 35.275 | 4.56 | 23.747 | 0.615 |
| 140 | 23.353 | 35.081 | 4.38 | 23.894 | 0.656 |
| 150 | 22.879 | 35.121 | 4.30 | 24.062 | 0.696 |
| 160 | 20.615 | 34.983 | 3.92 | 24.587 | 0.733 |
| 170 | 18.279 | 34.950 | 3.57 | 25.166 | 0.765 |
| 180 | 16.767 | 34.881 | 3.36 | 25.479 | 0.791 |
| 190 | 15.551 | 35.001 | 3.21 | 25.851 | 0.815 |
| 200 | 14.996 | 35.072 | 3.14 | 26.029 | 0.836 |
| 250 | 13.075 | 34.827 | 2.95 | 26.244 | 0.934 |
| 300 | 12.094 | 34.843 | 2.88 | 26.449 | 1.019 |
| 301 | 12.056 | 34.838 | 2.88 | 26.453 | 1.020 |

CAST TG2-89-MB -041 DATE 16 JUN 89 TIME 1942 GMT
LAT 00 13.1N LONG 176 31.9W

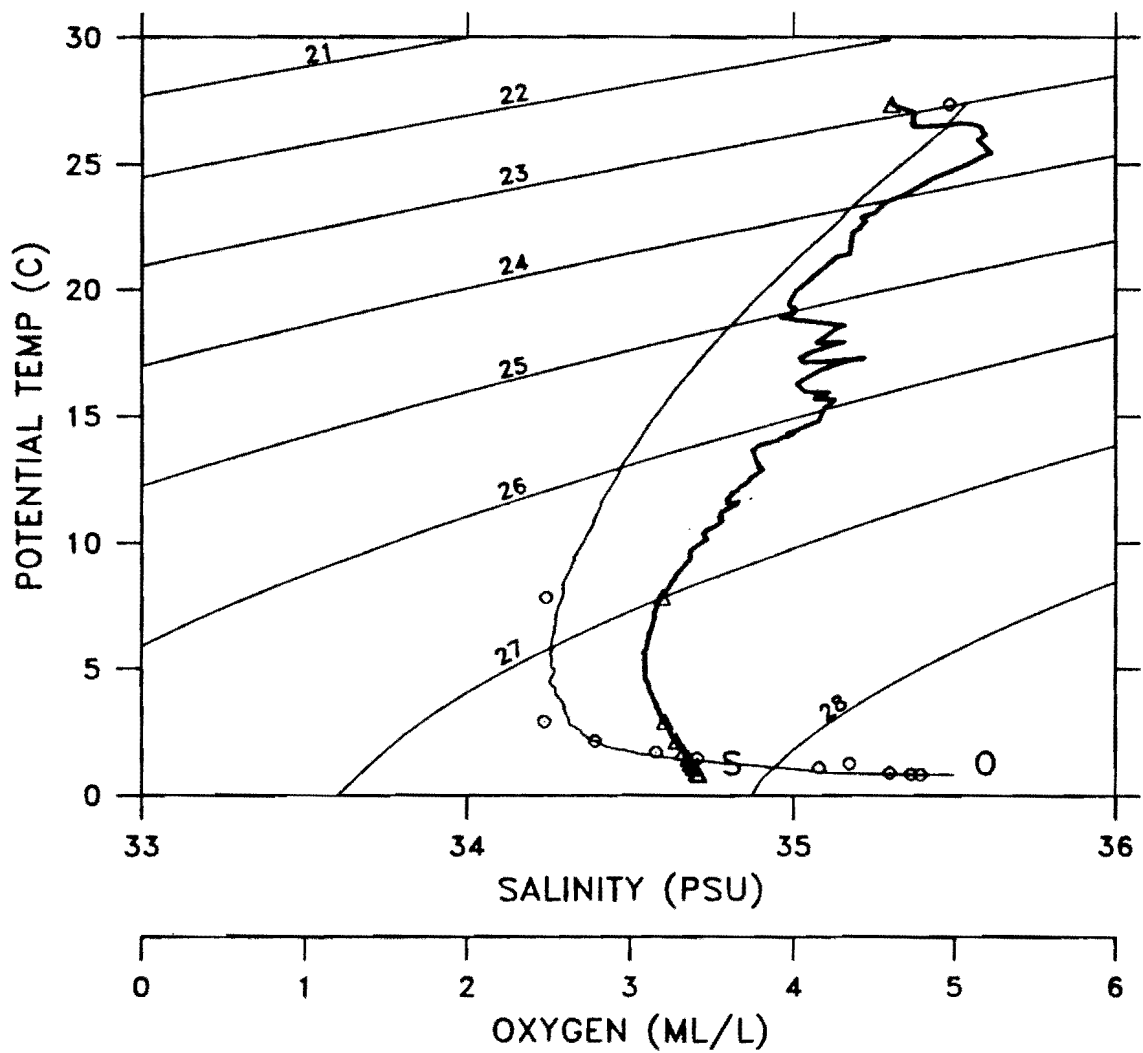


CAST TG2-89-MB -041 DATE 16 JUN 89 TIME 1942 GMT
 LAT 00 13.1N LONG 176 31.9W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 025 T SPD 08 KT VISIBILITY
 CLOUD AMOUNT DRY 28.0 WET 24.5 DEPTH 1604 M

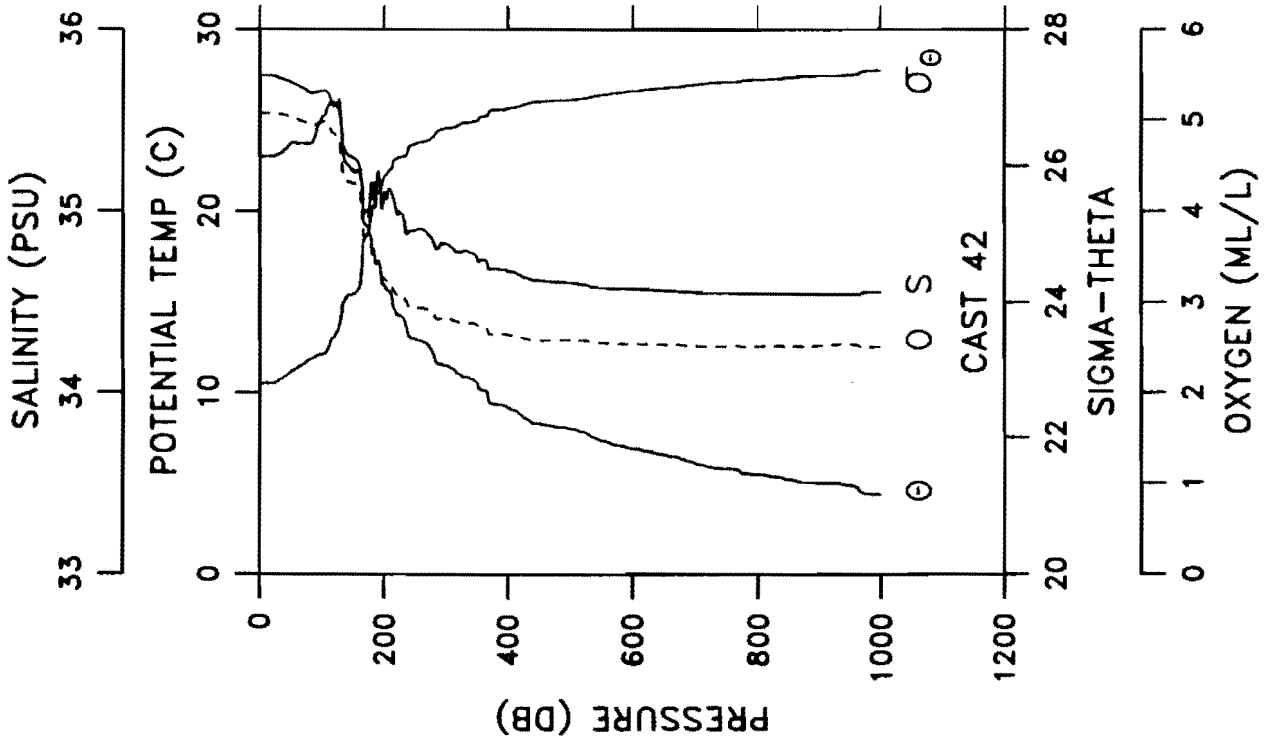


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.278 | 35.349 | 5.03 | 22.894 | 0.000 |
| 10 | 27.253 | 35.351 | 5.04 | 22.903 | 0.050 |
| 20 | 27.233 | 35.352 | 5.04 | 22.910 | 0.099 |
| 30 | 27.186 | 35.355 | 5.04 | 22.928 | 0.149 |
| 40 | 27.007 | 35.370 | 5.01 | 22.996 | 0.198 |
| 50 | 26.896 | 35.385 | 5.00 | 23.043 | 0.246 |
| 60 | 26.851 | 35.408 | 5.00 | 23.075 | 0.294 |
| 70 | 26.868 | 35.423 | 5.01 | 23.080 | 0.343 |
| 80 | 26.924 | 35.460 | 5.03 | 23.091 | 0.391 |
| 90 | 26.966 | 35.511 | 5.05 | 23.116 | 0.439 |
| 100 | 26.974 | 35.548 | 5.06 | 23.141 | 0.486 |
| 110 | 26.451 | 35.617 | 4.96 | 23.359 | 0.533 |
| 120 | 25.960 | 35.560 | 4.87 | 23.471 | 0.578 |
| 130 | 25.735 | 35.501 | 4.83 | 23.496 | 0.623 |
| 140 | 25.235 | 35.345 | 4.74 | 23.533 | 0.667 |
| 150 | 23.623 | 35.206 | 4.44 | 23.910 | 0.710 |
| 160 | 21.385 | 34.890 | 4.05 | 24.306 | 0.749 |
| 170 | 18.834 | 34.988 | 3.65 | 25.055 | 0.782 |
| 180 | 17.758 | 35.061 | 3.50 | 25.379 | 0.809 |
| 190 | 16.038 | 34.795 | 3.27 | 25.582 | 0.835 |
| 200 | 15.342 | 34.876 | 3.19 | 25.802 | 0.859 |
| 250 | 13.753 | 34.971 | 3.03 | 26.217 | 0.957 |
| 300 | 12.229 | 34.841 | 2.89 | 26.422 | 1.045 |
| 350 | 10.713 | 34.766 | 2.76 | 26.645 | 1.122 |
| 400 | 9.320 | 34.679 | 2.65 | 26.815 | 1.192 |
| 450 | 8.833 | 34.654 | 2.63 | 26.874 | 1.257 |
| 500 | 8.478 | 34.633 | 2.63 | 26.913 | 1.319 |
| 506 | 8.436 | 34.629 | 2.63 | 26.916 | 1.326 |

CAST TG2-89-MB -042 DATE 17 JUN 89 TIME 1325 GMT
LAT 00 01.9S LONG 175 01.5W

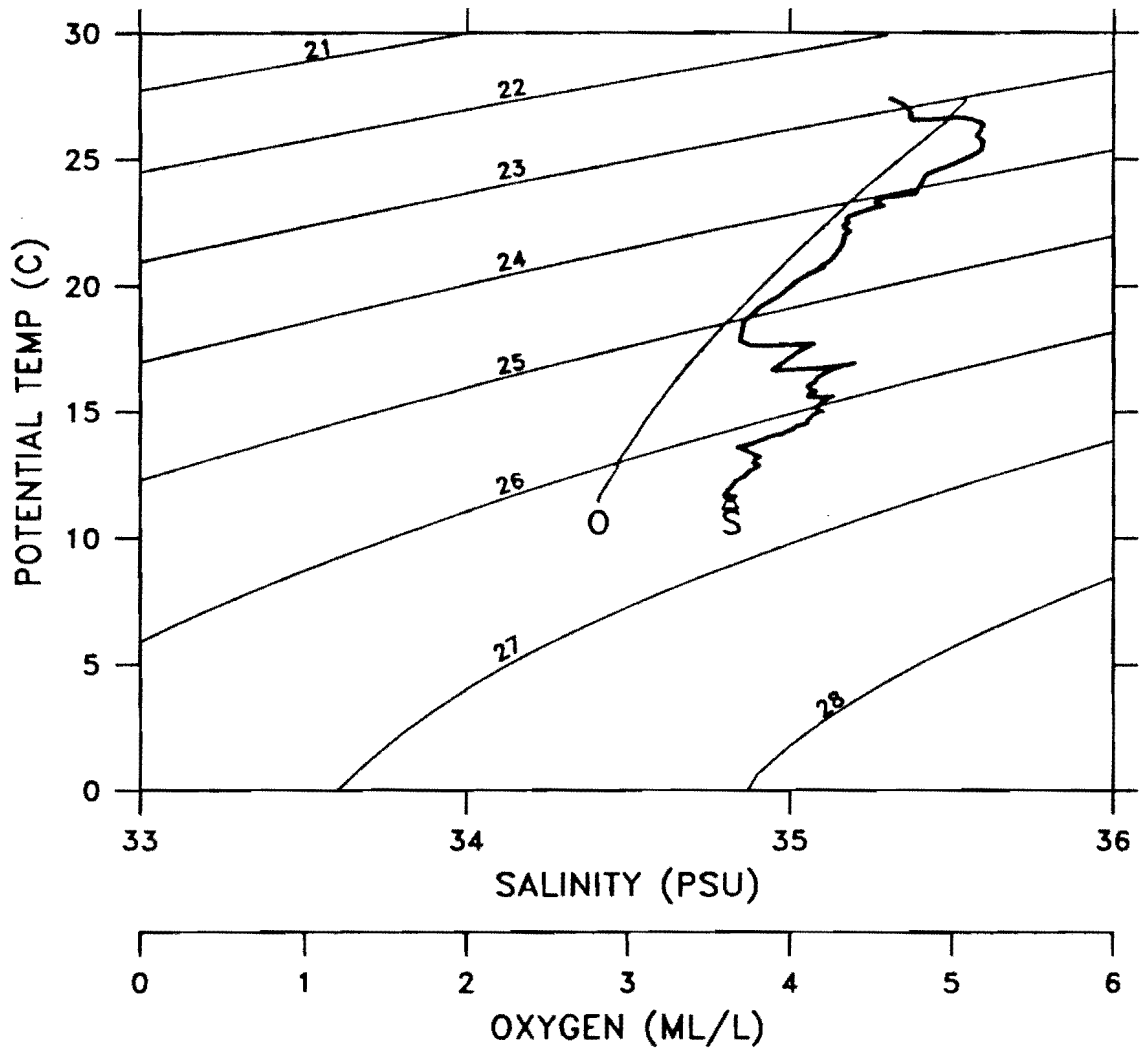


CAST TG2-89-MB -042 DATE 17 JUN 89 TIME 1325 GMT
 LAT 00 01.9S LONG 175 01.5W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 108 T SPD 11 KT VISIBILITY
 CLOUD AMOUNT DRY 28.2 WET 24.5 DEPTH 5413 M

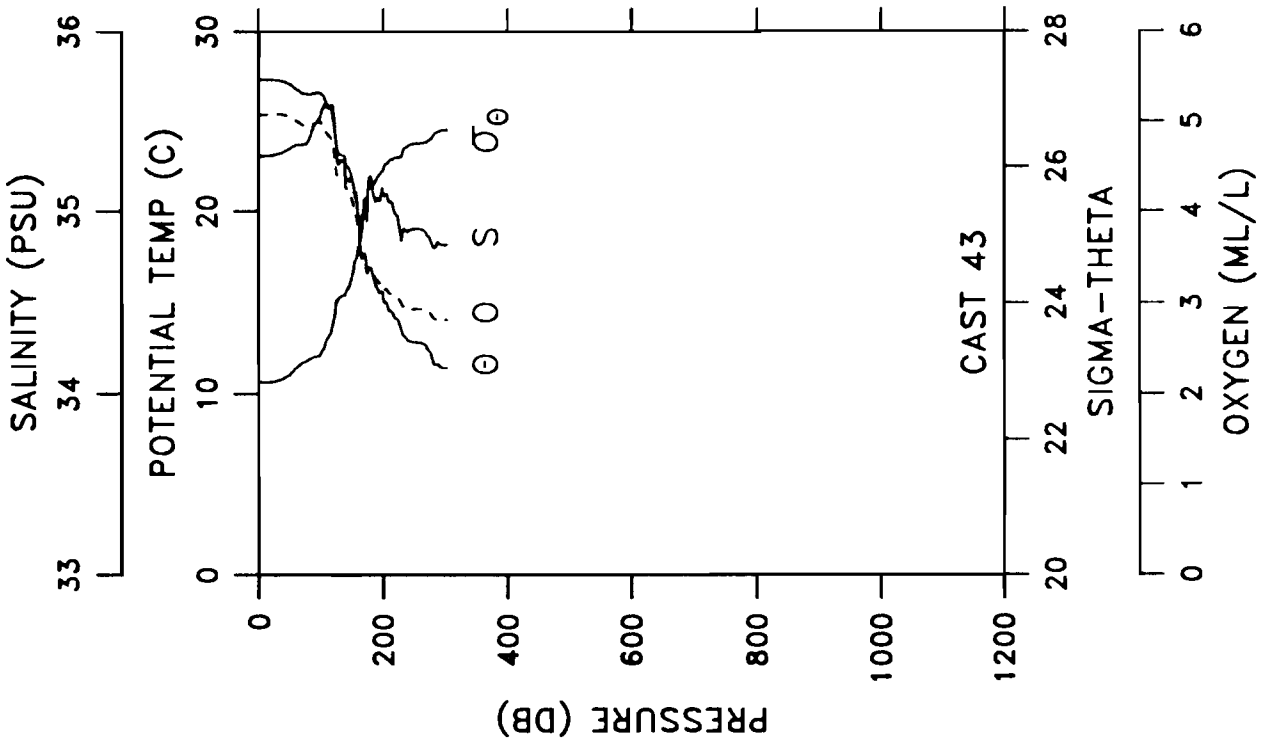


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.443 | 35.289 | 5.07 | 22.803 | 0.000 |
| 10 | 27.438 | 35.301 | 5.07 | 22.806 | 0.050 |
| 20 | 27.438 | 35.300 | 5.08 | 22.805 | 0.101 |
| 30 | 27.327 | 35.313 | 5.06 | 22.851 | 0.151 |
| 40 | 27.205 | 35.340 | 5.05 | 22.910 | 0.201 |
| 50 | 27.071 | 35.372 | 5.03 | 22.977 | 0.251 |
| 60 | 26.912 | 35.374 | 5.01 | 23.030 | 0.299 |
| 70 | 26.729 | 35.375 | 4.98 | 23.088 | 0.348 |
| 80 | 26.505 | 35.370 | 4.94 | 23.156 | 0.395 |
| 90 | 26.503 | 35.427 | 4.95 | 23.199 | 0.443 |
| 100 | 26.610 | 35.515 | 4.98 | 23.232 | 0.490 |
| 110 | 26.470 | 35.583 | 4.96 | 23.327 | 0.536 |
| 120 | 25.884 | 35.577 | 4.84 | 23.507 | 0.581 |
| 130 | 24.738 | 35.491 | 4.63 | 23.794 | 0.624 |
| 140 | 23.144 | 35.258 | 4.34 | 24.090 | 0.664 |
| 150 | 22.963 | 35.234 | 4.32 | 24.123 | 0.702 |
| 160 | 22.473 | 35.207 | 4.24 | 24.243 | 0.740 |
| 170 | 19.227 | 35.005 | 3.71 | 24.968 | 0.774 |
| 180 | 17.895 | 35.072 | 3.52 | 25.354 | 0.803 |
| 190 | 17.287 | 35.221 | 3.44 | 25.617 | 0.828 |
| 200 | 15.946 | 35.110 | 3.27 | 25.845 | 0.852 |
| 250 | 13.001 | 34.895 | 2.95 | 26.312 | 0.950 |
| 300 | 11.522 | 34.826 | 2.82 | 26.545 | 1.034 |
| 350 | 10.628 | 34.757 | 2.76 | 26.653 | 1.110 |
| 400 | 9.198 | 34.672 | 2.64 | 26.830 | 1.177 |
| 450 | 8.306 | 34.623 | 2.58 | 26.932 | 1.239 |
| 500 | 8.027 | 34.608 | 2.59 | 26.962 | 1.299 |
| 550 | 7.359 | 34.580 | 2.55 | 27.038 | 1.356 |
| 600 | 6.919 | 34.574 | 2.54 | 27.094 | 1.410 |
| 650 | 6.577 | 34.565 | 2.53 | 27.134 | 1.462 |
| 700 | 6.110 | 34.556 | 2.52 | 27.188 | 1.512 |
| 750 | 5.811 | 34.551 | 2.51 | 27.222 | 1.560 |
| 800 | 5.486 | 34.547 | 2.51 | 27.259 | 1.606 |
| 900 | 5.020 | 34.547 | 2.52 | 27.314 | 1.695 |
| 1000 | 4.385 | 34.556 | 2.51 | 27.392 | 1.778 |
| 1500 | 2.910 | 34.603 | 2.62 | 27.576 | 2.132 |
| 2000 | 2.110 | 34.641 | 2.79 | 27.675 | 2.410 |
| 2500 | 1.692 | 34.662 | 3.02 | 27.724 | 2.655 |
| 3000 | 1.443 | 34.674 | 3.29 | 27.752 | 2.885 |
| 3500 | 1.251 | 34.685 | 3.58 | 27.775 | 3.109 |
| 4000 | 1.085 | 34.695 | 3.91 | 27.795 | 3.327 |
| 4500 | 0.881 | 34.706 | 4.26 | 27.817 | 3.536 |
| 5000 | 0.822 | 34.708 | 4.67 | 27.822 | 3.741 |
| 5362 | 0.814 | 34.708 | 4.99 | 27.823 | 3.894 |

CAST TG2-89-MB -043 DATE 17 JUN 89 TIME 1713 GMT
LAT 00 03.3S LONG 175 02.0W

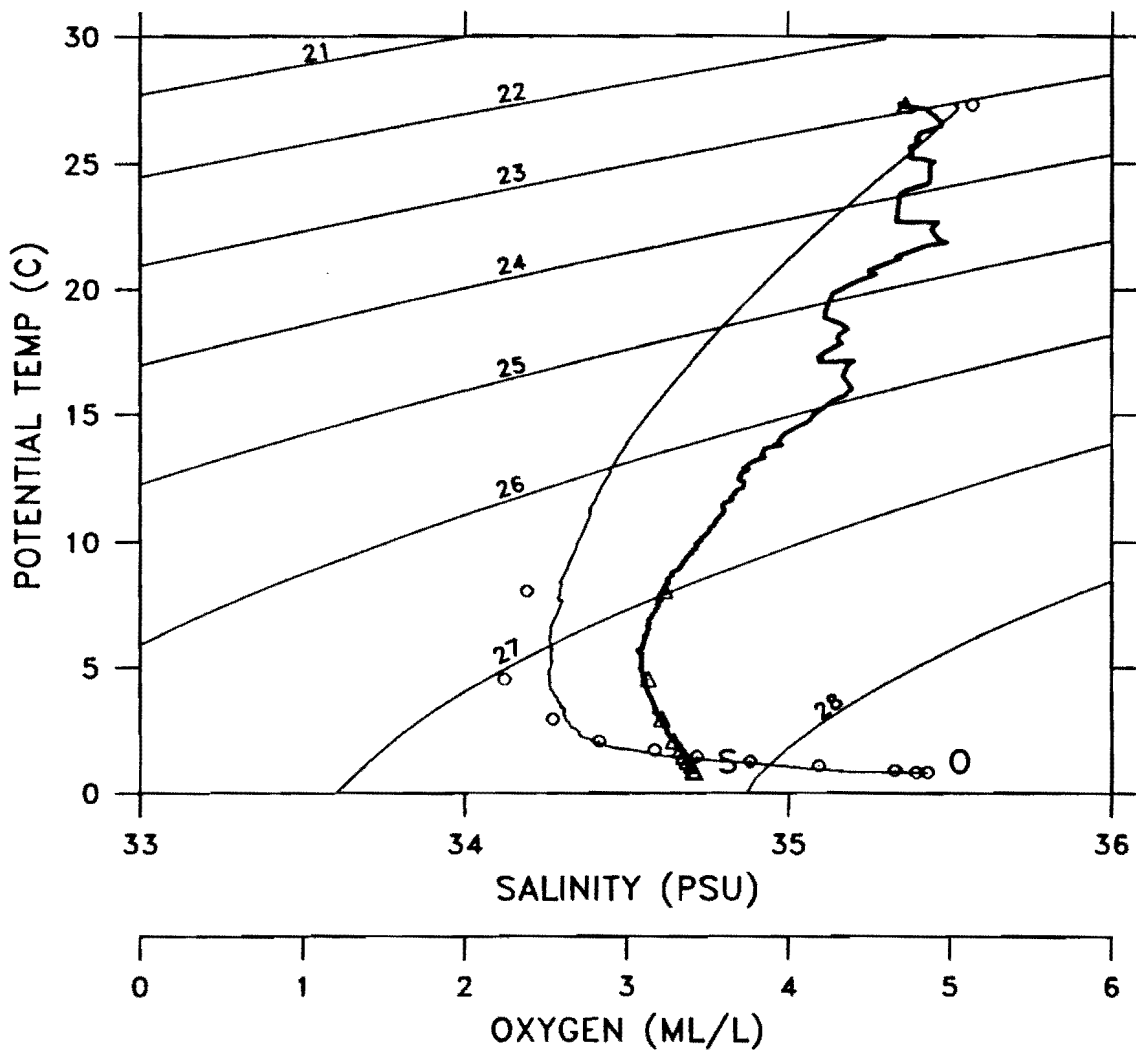


CAST TG2-89-MB --043 DATE 17 JUN 89 TIME 1713 GMT
 LAT 00 03.3S LONG 175 02.0W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 138 T SPD 09 KT VISIBILITY
 CLOUD AMOUNT DRY 27.6 WET 24.5 DEPTH 6077 M

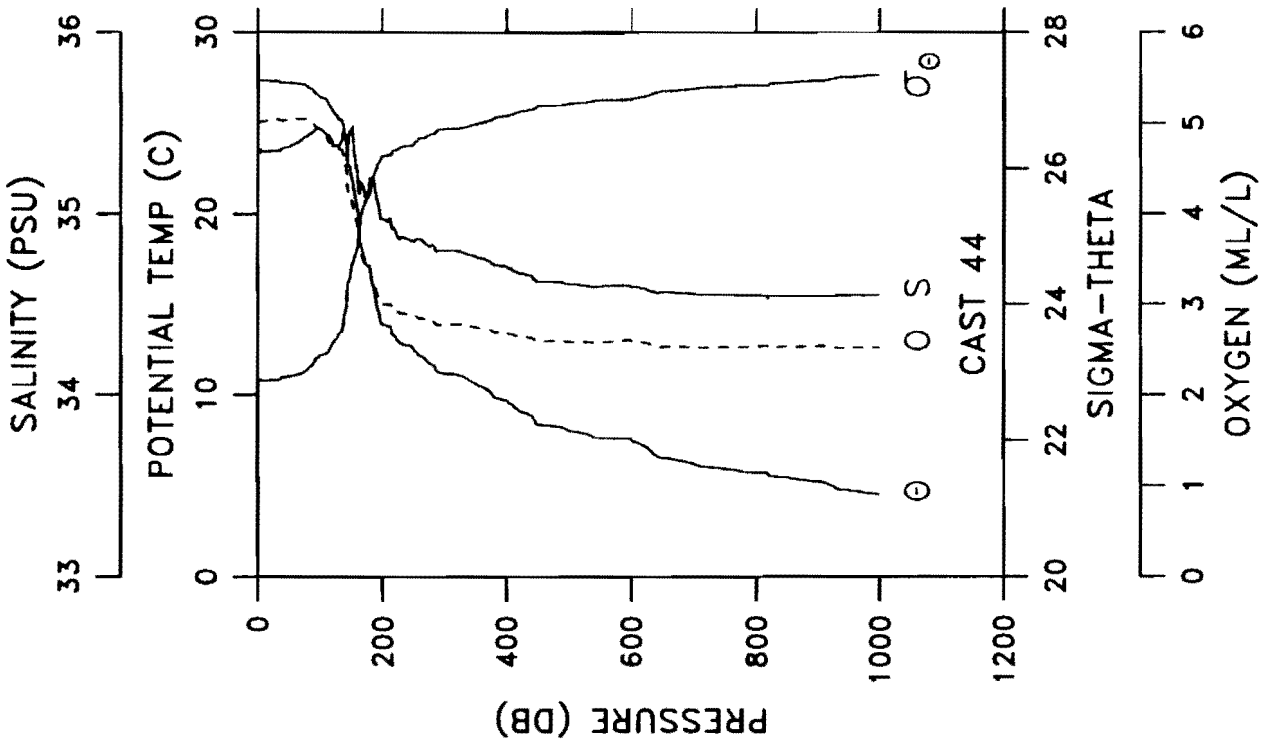


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.353 | 35.318 | 5.08 | 22.846 | 0.000 |
| 10 | 27.360 | 35.311 | 5.08 | 22.839 | 0.050 |
| 20 | 27.352 | 35.313 | 5.08 | 22.842 | 0.100 |
| 30 | 27.311 | 35.322 | 5.08 | 22.863 | 0.150 |
| 40 | 27.238 | 35.335 | 5.08 | 22.896 | 0.200 |
| 50 | 27.100 | 35.352 | 5.06 | 22.953 | 0.250 |
| 60 | 26.808 | 35.373 | 5.00 | 23.062 | 0.298 |
| 70 | 26.584 | 35.375 | 4.97 | 23.135 | 0.346 |
| 80 | 26.529 | 35.403 | 4.96 | 23.173 | 0.394 |
| 90 | 26.602 | 35.491 | 4.99 | 23.216 | 0.441 |
| 100 | 26.549 | 35.561 | 4.98 | 23.286 | 0.488 |
| 110 | 25.974 | 35.579 | 4.87 | 23.481 | 0.533 |
| 120 | 24.949 | 35.530 | 4.67 | 23.759 | 0.577 |
| 130 | 23.200 | 35.279 | 4.35 | 24.089 | 0.616 |
| 140 | 22.604 | 35.176 | 4.25 | 24.183 | 0.655 |
| 150 | 21.777 | 35.166 | 4.12 | 24.408 | 0.692 |
| 160 | 19.599 | 34.967 | 3.77 | 24.843 | 0.725 |
| 170 | 17.678 | 35.067 | 3.48 | 25.403 | 0.754 |
| 180 | 16.920 | 35.192 | 3.38 | 25.681 | 0.778 |
| 190 | 15.818 | 35.079 | 3.25 | 25.851 | 0.801 |
| 200 | 15.225 | 35.085 | 3.18 | 25.989 | 0.823 |
| 250 | 12.864 | 34.905 | 2.93 | 26.347 | 0.917 |
| 300 | 11.455 | 34.815 | 2.82 | 26.548 | 1.000 |
| 303 | 11.455 | 34.818 | 2.82 | 26.551 | 1.005 |

CAST TG2-89-MB -044 DATE 18 JUN 89 TIME 0807 GMT
LAT 00 00.6N LONG 169 31.3W

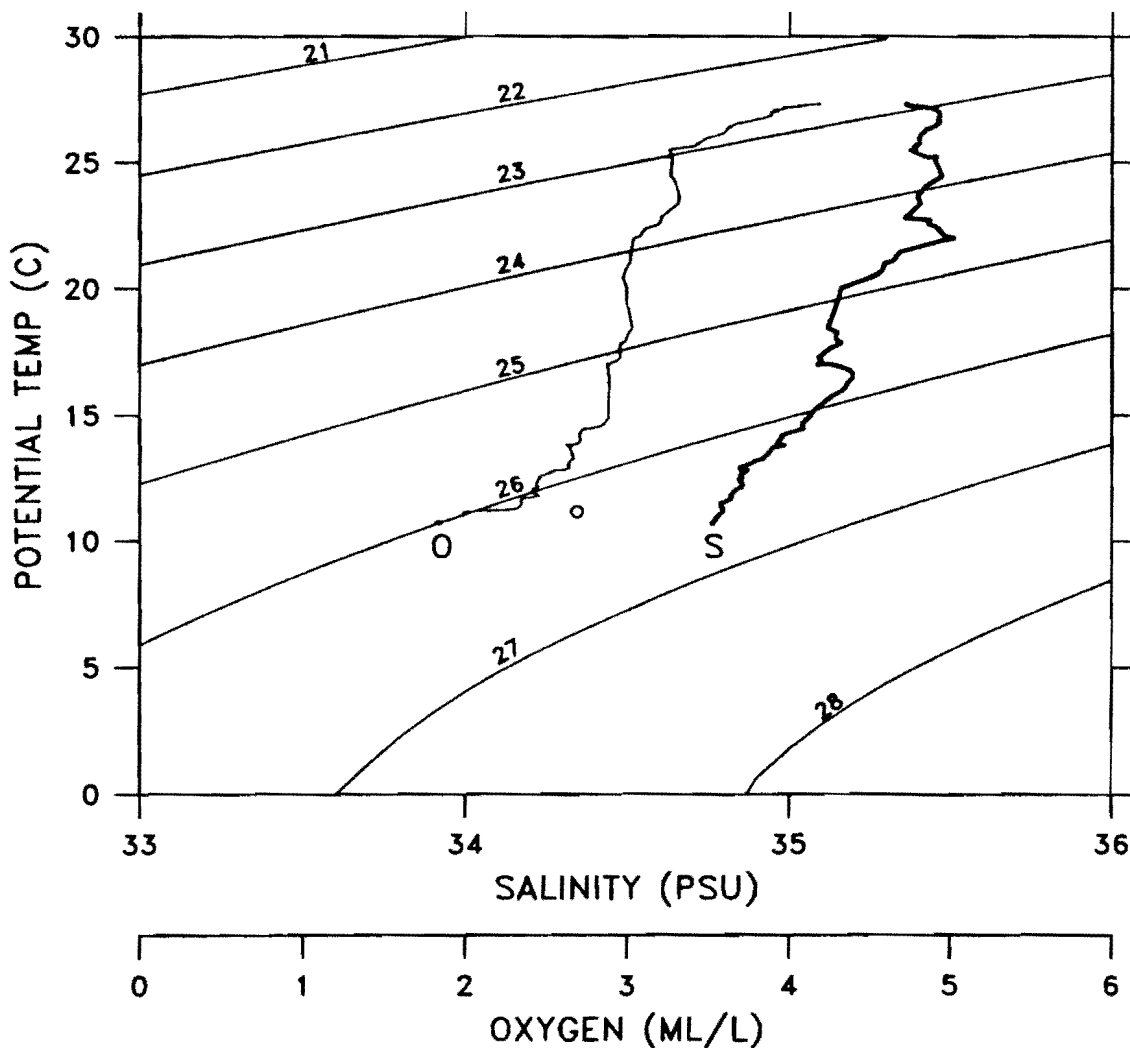


CAST TG2-89-MB -044 DATE 18 JUN 89 TIME 0807 GMT
 LAT 00 00.6N LONG 169 31.3W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 079 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 24.5 DEPTH 5384 M

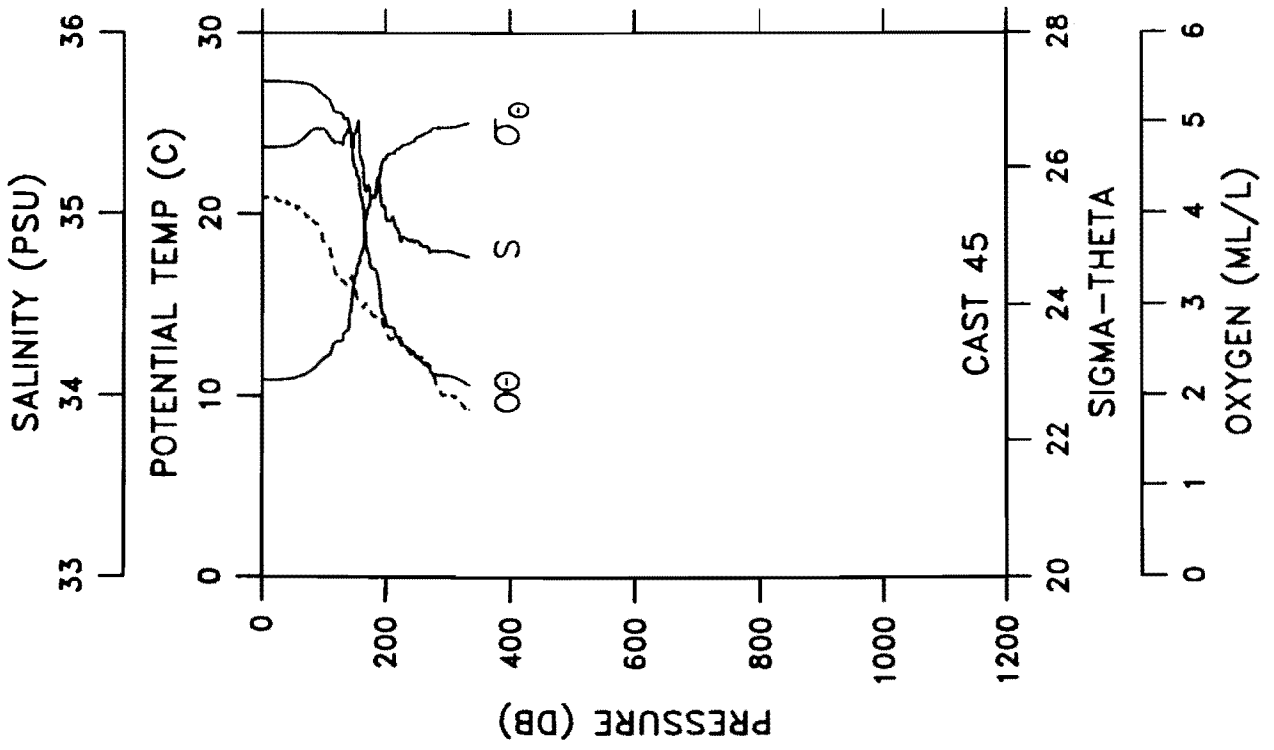


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.331 | 35.343 | 5.01 | 22.872 | 0.000 |
| 10 | 27.335 | 35.347 | 5.02 | 22.873 | 0.050 |
| 20 | 27.327 | 35.350 | 5.03 | 22.878 | 0.100 |
| 30 | 27.322 | 35.351 | 5.04 | 22.881 | 0.149 |
| 40 | 27.230 | 35.364 | 5.03 | 22.920 | 0.199 |
| 50 | 27.218 | 35.374 | 5.04 | 22.932 | 0.249 |
| 60 | 27.197 | 35.390 | 5.05 | 22.951 | 0.298 |
| 70 | 27.165 | 35.409 | 5.05 | 22.976 | 0.347 |
| 80 | 27.034 | 35.432 | 5.03 | 23.034 | 0.396 |
| 90 | 26.778 | 35.460 | 4.99 | 23.137 | 0.444 |
| 100 | 26.492 | 35.473 | 4.94 | 23.238 | 0.491 |
| 110 | 26.328 | 35.441 | 4.92 | 23.265 | 0.538 |
| 120 | 25.679 | 35.379 | 4.80 | 23.421 | 0.584 |
| 130 | 25.238 | 35.374 | 4.72 | 23.553 | 0.628 |
| 140 | 24.307 | 35.437 | 4.54 | 23.882 | 0.671 |
| 150 | 22.171 | 35.454 | 4.16 | 24.516 | 0.709 |
| 160 | 20.320 | 35.212 | 3.86 | 24.840 | 0.742 |
| 170 | 17.725 | 35.146 | 3.48 | 25.452 | 0.770 |
| 180 | 17.058 | 35.190 | 3.39 | 25.648 | 0.795 |
| 190 | 15.126 | 35.095 | 3.15 | 26.019 | 0.816 |
| 200 | 13.869 | 34.971 | 3.00 | 26.193 | 0.836 |
| 250 | 12.564 | 34.847 | 2.89 | 26.362 | 0.925 |
| 300 | 11.164 | 34.797 | 2.77 | 26.588 | 1.005 |
| 350 | 10.623 | 34.767 | 2.75 | 26.662 | 1.080 |
| 400 | 9.717 | 34.712 | 2.69 | 26.775 | 1.150 |
| 450 | 8.388 | 34.627 | 2.59 | 26.922 | 1.214 |
| 500 | 8.057 | 34.611 | 2.58 | 26.960 | 1.275 |
| 550 | 7.666 | 34.598 | 2.58 | 27.008 | 1.333 |
| 600 | 7.558 | 34.595 | 2.60 | 27.021 | 1.390 |
| 650 | 6.559 | 34.569 | 2.53 | 27.139 | 1.443 |
| 700 | 6.209 | 34.555 | 2.52 | 27.175 | 1.494 |
| 750 | 5.948 | 34.552 | 2.52 | 27.206 | 1.542 |
| 800 | 5.752 | 34.550 | 2.53 | 27.228 | 1.590 |
| 900 | 5.233 | 34.547 | 2.53 | 27.289 | 1.681 |
| 1000 | 4.511 | 34.554 | 2.52 | 27.377 | 1.765 |
| 1500 | 2.936 | 34.602 | 2.62 | 27.573 | 2.120 |
| 2000 | 2.065 | 34.644 | 2.79 | 27.681 | 2.398 |
| 2500 | 1.720 | 34.662 | 3.02 | 27.722 | 2.642 |
| 3000 | 1.444 | 34.676 | 3.29 | 27.754 | 2.873 |
| 3500 | 1.257 | 34.684 | 3.58 | 27.774 | 3.098 |
| 4000 | 1.094 | 34.695 | 3.91 | 27.794 | 3.317 |
| 4500 | 0.900 | 34.706 | 4.26 | 27.815 | 3.527 |
| 5000 | 0.823 | 34.708 | 4.67 | 27.823 | 3.733 |
| 5217 | 0.818 | 34.708 | 4.86 | 27.823 | 3.824 |

CAST TG2-89-MB -045 DATE 19 JUN 89 TIME 1107 GMT
LAT 00 00.8S LONG 169 31.0W

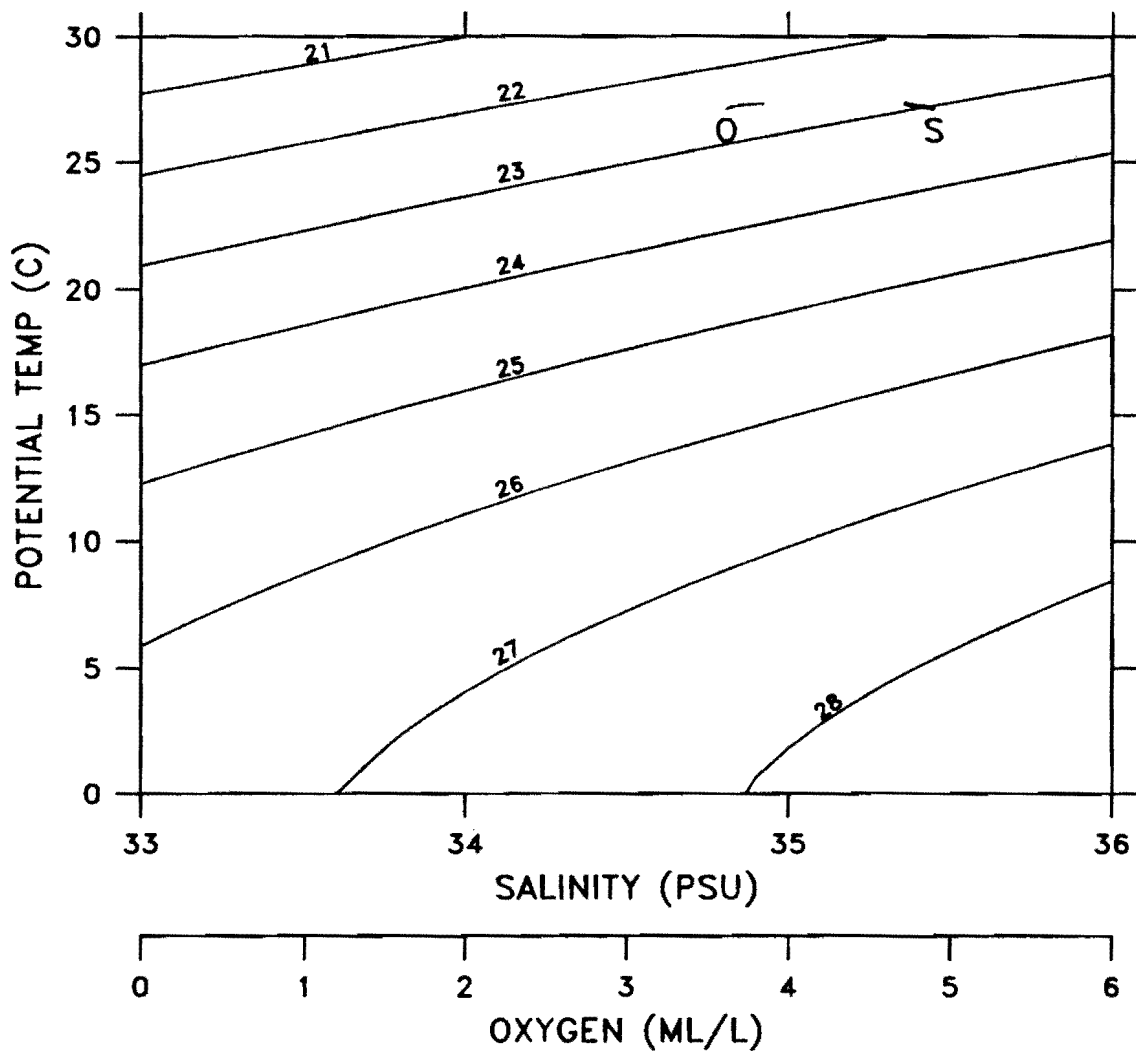


CAST TG2-89-MB -045 DATE 19 JUN 89 TIME 1107 GMT
 LAT 00 00.8S LONG 169 31.0W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 082 T SPD 15 KT VISIBILITY
 CLOUD AMOUNT DRY 27.4 WET 24.5 DEPTH 5369 M

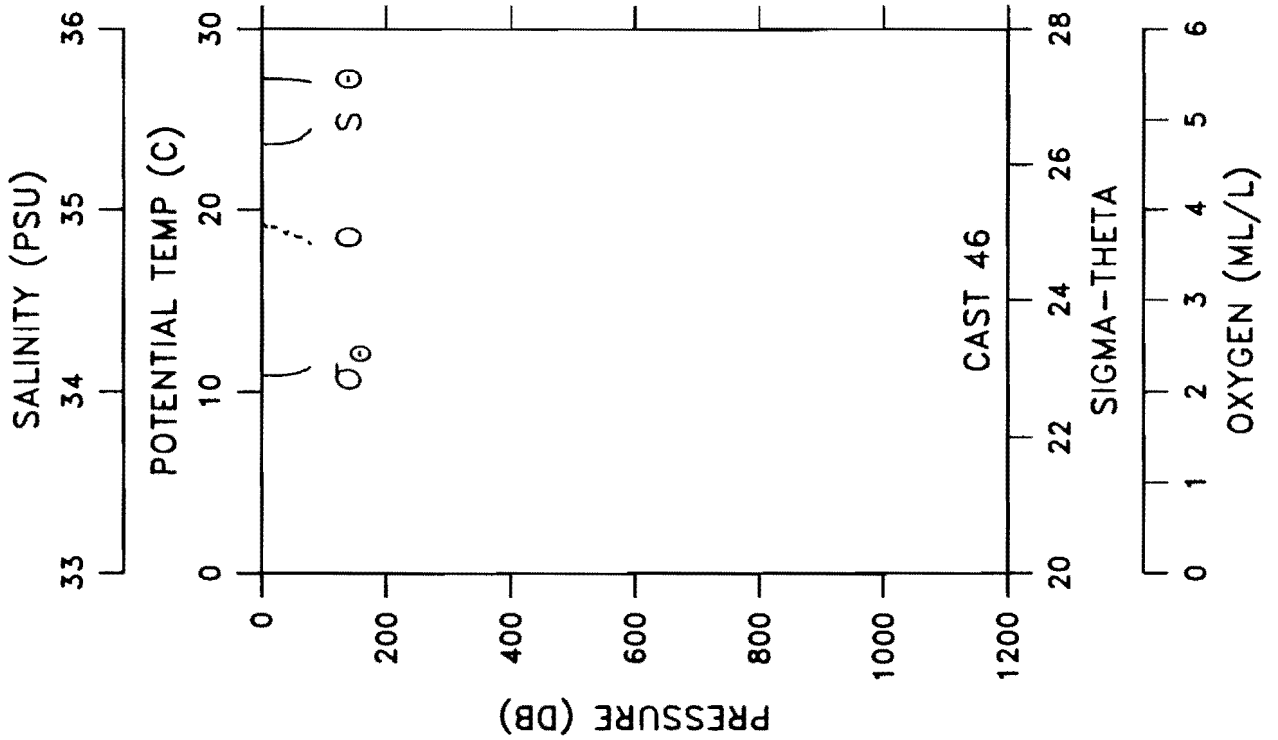


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.306 | 35.364 | 4.18 | 22.896 | 0.000 |
| 10 | 27.286 | 35.362 | 4.18 | 22.901 | 0.050 |
| 20 | 27.285 | 35.362 | 4.16 | 22.901 | 0.099 |
| 30 | 27.277 | 35.363 | 4.15 | 22.905 | 0.149 |
| 40 | 27.267 | 35.366 | 4.14 | 22.910 | 0.198 |
| 50 | 27.237 | 35.376 | 4.07 | 22.927 | 0.248 |
| 60 | 27.202 | 35.398 | 4.07 | 22.955 | 0.297 |
| 70 | 27.160 | 35.423 | 3.98 | 22.987 | 0.346 |
| 80 | 27.063 | 35.453 | 3.90 | 23.041 | 0.395 |
| 90 | 26.798 | 35.464 | 3.87 | 23.134 | 0.443 |
| 100 | 26.537 | 35.463 | 3.69 | 23.216 | 0.491 |
| 110 | 26.267 | 35.425 | 3.62 | 23.273 | 0.537 |
| 120 | 25.565 | 35.390 | 3.33 | 23.465 | 0.583 |
| 130 | 25.483 | 35.379 | 3.27 | 23.482 | 0.627 |
| 140 | 25.164 | 35.448 | 3.28 | 23.632 | 0.671 |
| 150 | 22.568 | 35.431 | 3.20 | 24.386 | 0.710 |
| 160 | 21.010 | 35.296 | 3.01 | 24.718 | 0.744 |
| 170 | 18.107 | 35.143 | 3.00 | 25.356 | 0.774 |
| 180 | 16.997 | 35.089 | 2.88 | 25.584 | 0.800 |
| 190 | 16.020 | 35.171 | 2.89 | 25.876 | 0.823 |
| 200 | 14.219 | 34.981 | 2.71 | 26.127 | 0.843 |
| 250 | 12.125 | 34.856 | 2.44 | 26.453 | 0.932 |
| 300 | 11.146 | 34.798 | 2.00 | 26.592 | 1.010 |
| 334 | 10.632 | 34.767 | 1.85 | 26.660 | 1.060 |

CAST TG2-89-MB -046 DATE 19 JUN 89 TIME 1204 GMT
LAT 00 00.8S LONG 169 33.0W

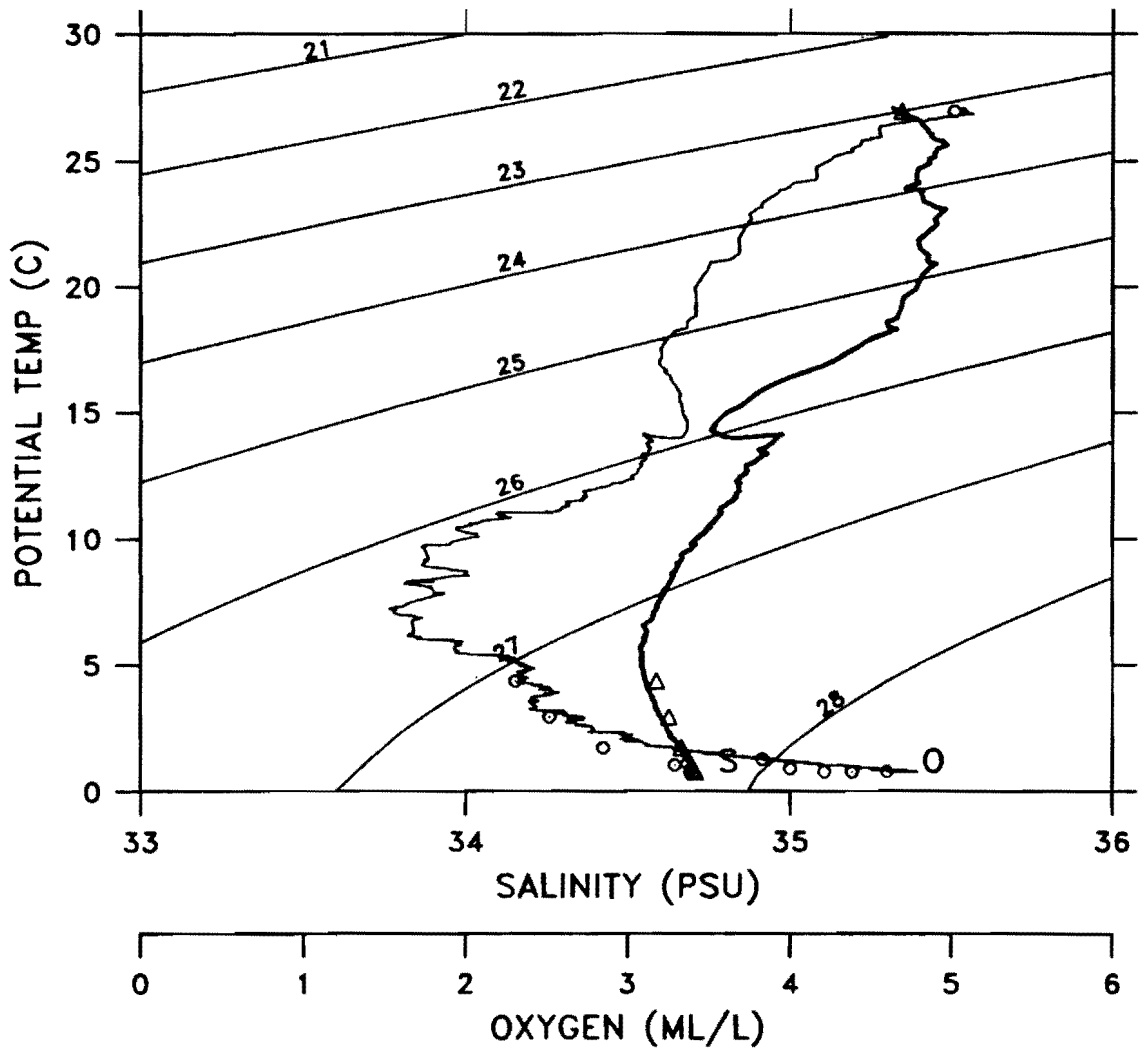


CAST TG2-89-MB -046 DATE 19 JUN 89 TIME 1204 GMT
 LAT 00 00.8S LONG 169 33.0W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 085 T SPD 13 KT VISIBILITY
 CLOUD AMOUNT DRY 27.4 WET 24.5 DEPTH 5369 M

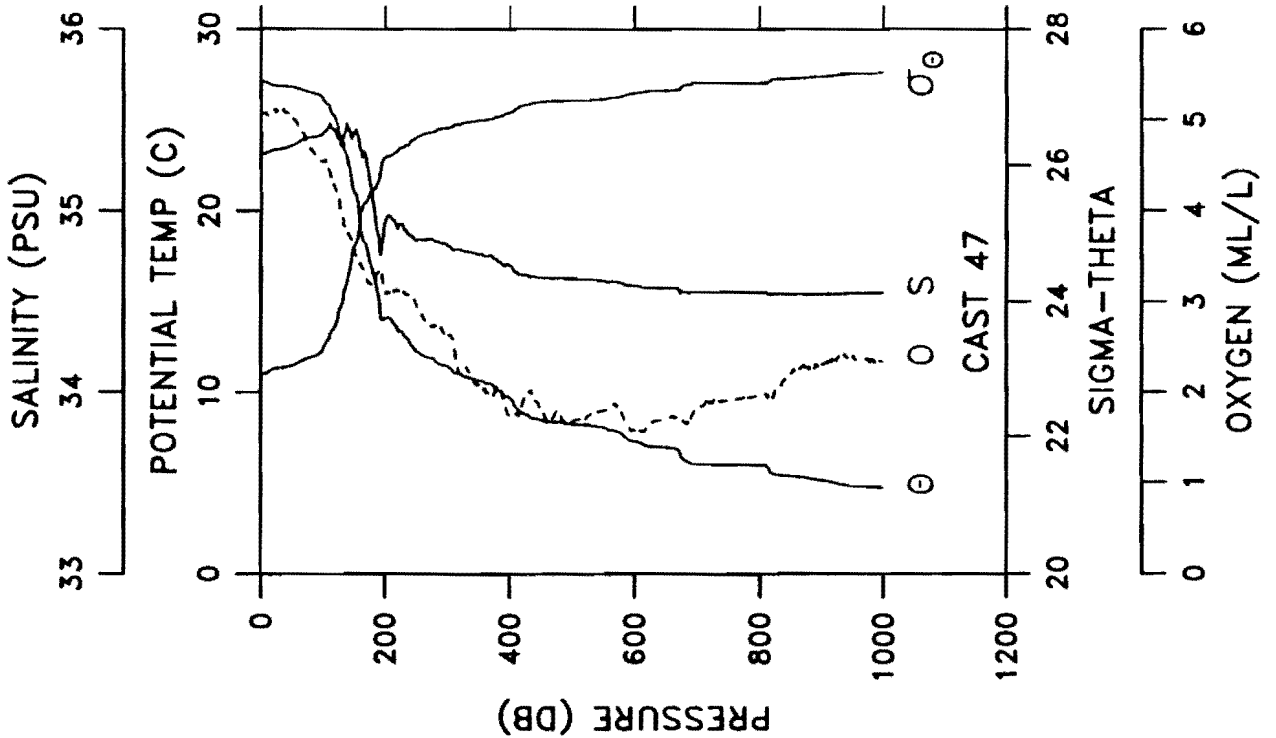


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 27.291 | 35.364 | 3.84 | 22.900 | 0.000 |
| 10 | 27.283 | 35.363 | 3.84 | 22.903 | 0.050 |
| 20 | 27.285 | 35.364 | 3.81 | 22.903 | 0.099 |
| 30 | 27.281 | 35.365 | 3.78 | 22.905 | 0.149 |
| 40 | 27.263 | 35.371 | 3.74 | 22.915 | 0.198 |
| 50 | 27.237 | 35.380 | 3.73 | 22.930 | 0.248 |
| 60 | 27.209 | 35.393 | 3.70 | 22.949 | 0.297 |
| 70 | 27.168 | 35.420 | 3.64 | 22.983 | 0.346 |
| 78 | 27.086 | 35.447 | 3.62 | 23.029 | 0.385 |

CAST TG2-89-MB -047 DATE 20 JUN 89 TIME 0426 GMT
LAT 00 00.9S LONG 165 00.7W

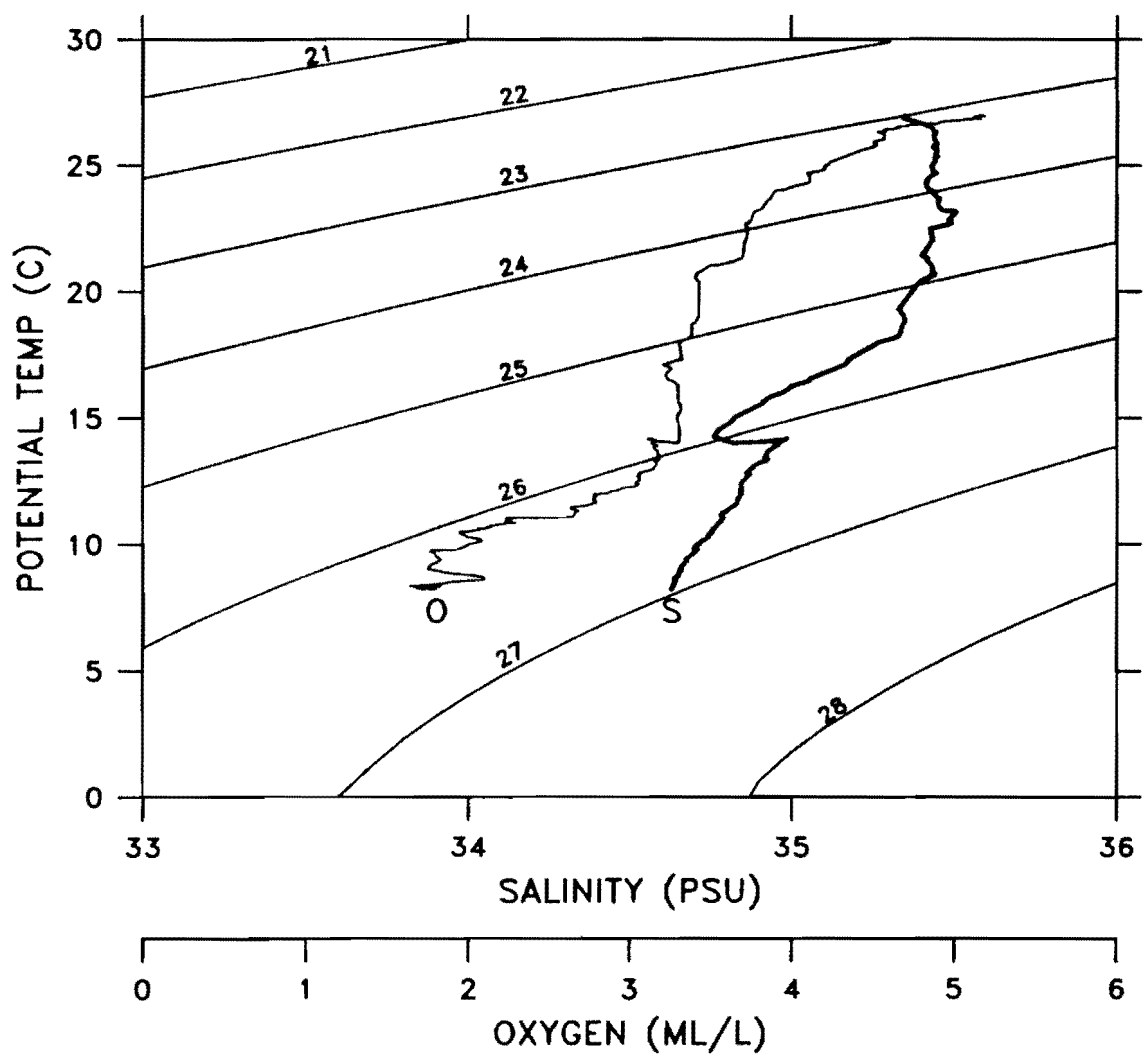


CAST TG2-89-MB -047 DATE 20 JUN 89 TIME 0426 GMT
 LAT 00 00.9S LONG 165 00.7W WEATHER SEA STATE
 BAROMETER 09 WIND DIR 097 T SPD 08 KT VISIBILITY
 CLOUD AMOUNT DRY 27.8 WET 23.5 DEPTH 5795 M

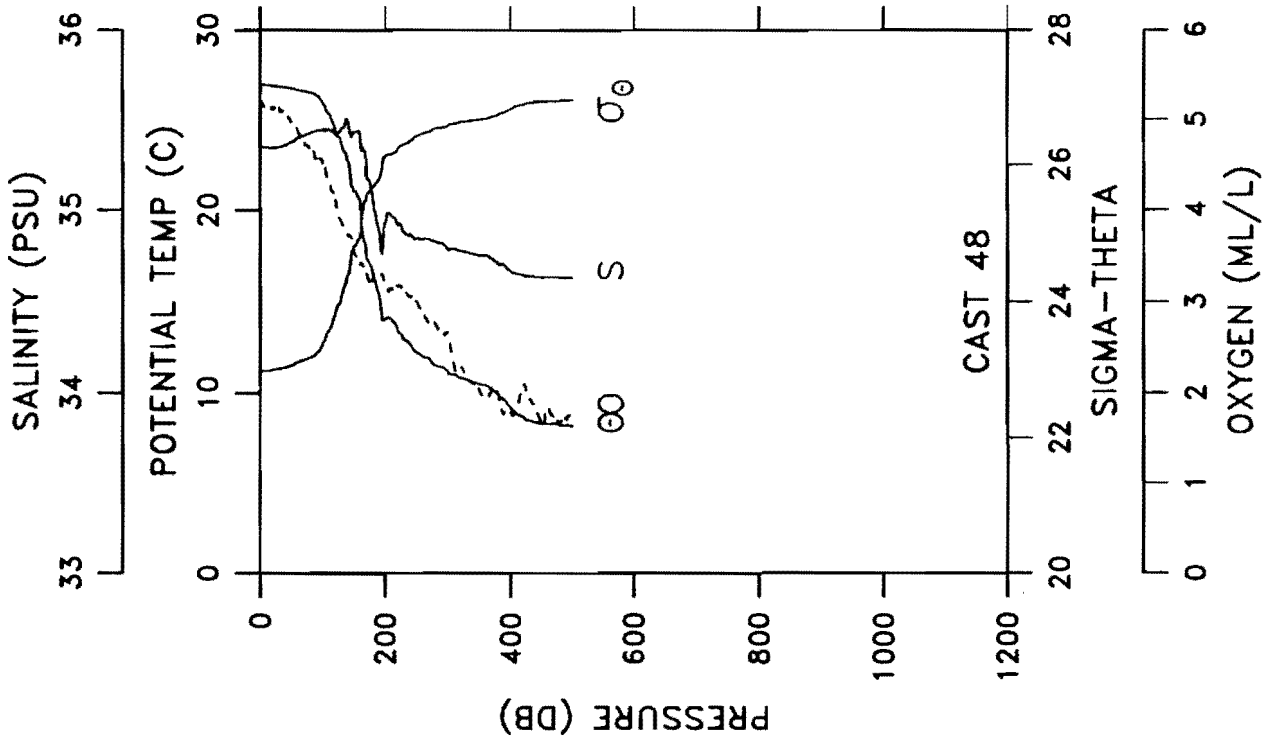


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 27.066 | 35.317 | 5.07 | 22.931 | 0.000 |
| 10 | 27.044 | 35.324 | 5.06 | 22.950 | 0.049 |
| 20 | 26.881 | 35.338 | 5.10 | 23.012 | 0.098 |
| 30 | 26.855 | 35.343 | 5.11 | 23.025 | 0.146 |
| 40 | 26.832 | 35.352 | 5.09 | 23.038 | 0.195 |
| 50 | 26.799 | 35.364 | 5.05 | 23.058 | 0.243 |
| 60 | 26.709 | 35.381 | 4.92 | 23.100 | 0.291 |
| 70 | 26.593 | 35.399 | 4.82 | 23.150 | 0.339 |
| 80 | 26.501 | 35.408 | 4.68 | 23.186 | 0.386 |
| 90 | 26.414 | 35.410 | 4.61 | 23.215 | 0.433 |
| 100 | 26.089 | 35.434 | 4.55 | 23.335 | 0.480 |
| 110 | 25.612 | 35.487 | 4.43 | 23.523 | 0.525 |
| 120 | 25.000 | 35.433 | 4.23 | 23.670 | 0.568 |
| 130 | 23.860 | 35.368 | 3.96 | 23.963 | 0.610 |
| 140 | 22.663 | 35.448 | 3.76 | 24.372 | 0.647 |
| 150 | 21.054 | 35.425 | 3.62 | 24.804 | 0.681 |
| 160 | 19.135 | 35.344 | 3.42 | 25.250 | 0.712 |
| 170 | 18.057 | 35.279 | 3.27 | 25.473 | 0.738 |
| 180 | 16.642 | 35.058 | 3.24 | 25.644 | 0.763 |
| 190 | 15.237 | 34.849 | 3.33 | 25.804 | 0.786 |
| 200 | 14.097 | 34.938 | 3.11 | 26.119 | 0.807 |
| 250 | 12.286 | 34.834 | 2.98 | 26.405 | 0.898 |
| 300 | 11.450 | 34.815 | 2.63 | 26.550 | 0.978 |
| 350 | 10.625 | 34.763 | 2.08 | 26.658 | 1.053 |
| 400 | 9.687 | 34.702 | 1.73 | 26.772 | 1.124 |
| 450 | 8.431 | 34.637 | 1.83 | 26.923 | 1.186 |
| 500 | 8.192 | 34.627 | 1.66 | 26.953 | 1.246 |
| 550 | 8.030 | 34.619 | 1.79 | 26.970 | 1.306 |
| 600 | 7.254 | 34.591 | 1.57 | 27.061 | 1.363 |
| 650 | 6.904 | 34.578 | 1.70 | 27.100 | 1.416 |
| 700 | 5.993 | 34.555 | 1.79 | 27.202 | 1.467 |
| 750 | 5.956 | 34.555 | 1.91 | 27.206 | 1.515 |
| 800 | 5.927 | 34.554 | 1.95 | 27.210 | 1.563 |
| 900 | 5.108 | 34.543 | 2.31 | 27.300 | 1.653 |
| 1000 | 4.690 | 34.508 | 2.33 | 27.354 | 1.738 |
| 1500 | 2.944 | 34.600 | 2.69 | 27.571 | 2.096 |
| 2000 | 2.054 | 34.644 | 2.98 | 27.682 | 2.381 |
| 2500 | 1.714 | 34.661 | 3.29 | 27.723 | 2.626 |
| 3000 | 1.428 | 34.674 | 3.59 | 27.754 | 2.857 |
| 3500 | 1.250 | 34.684 | 3.92 | 27.774 | 3.082 |
| 4000 | 1.073 | 34.694 | 4.19 | 27.795 | 3.301 |
| 4500 | 0.902 | 34.703 | 4.53 | 27.813 | 3.510 |
| 5000 | 0.786 | 34.707 | 4.75 | 27.824 | 3.714 |
| 5827 | 0.762 | 34.708 | 4.69 | 27.826 | 4.065 |

CAST TG2-89-MB -048 DATE 20 JUN 89 TIME 0809 GMT
LAT 00 01.3S LONG 165 01.5W

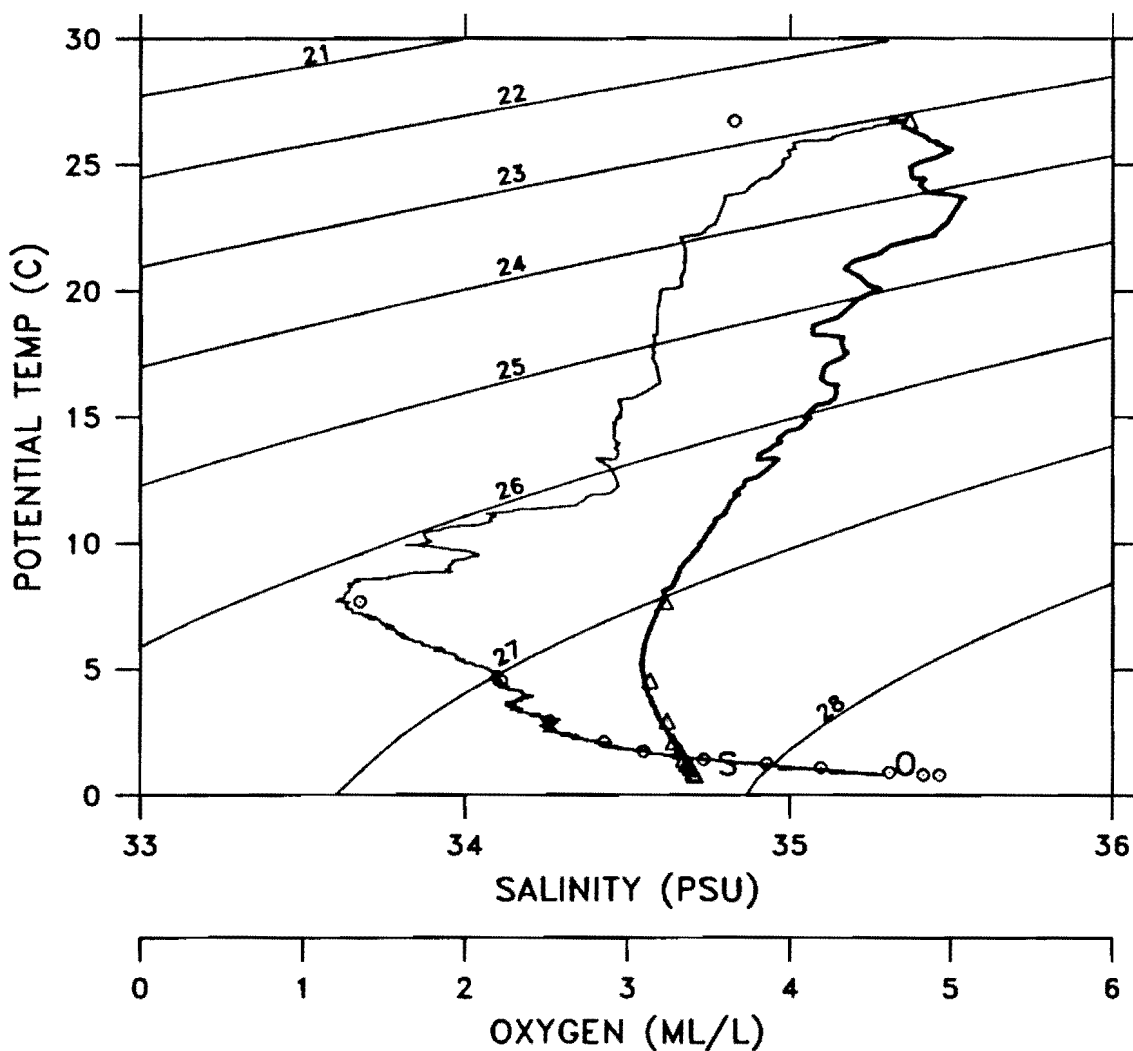


CAST TG2-89-MB --048 DATE 20 JUN 89 TIME 0809 GMT
 LAT 00 01.3S LONG 165 01.5W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 103 T SPD 08 KT VISIBILITY
 CLOUD AMOUNT DRY 27.1 WET 24.0 DEPTH 5794 M

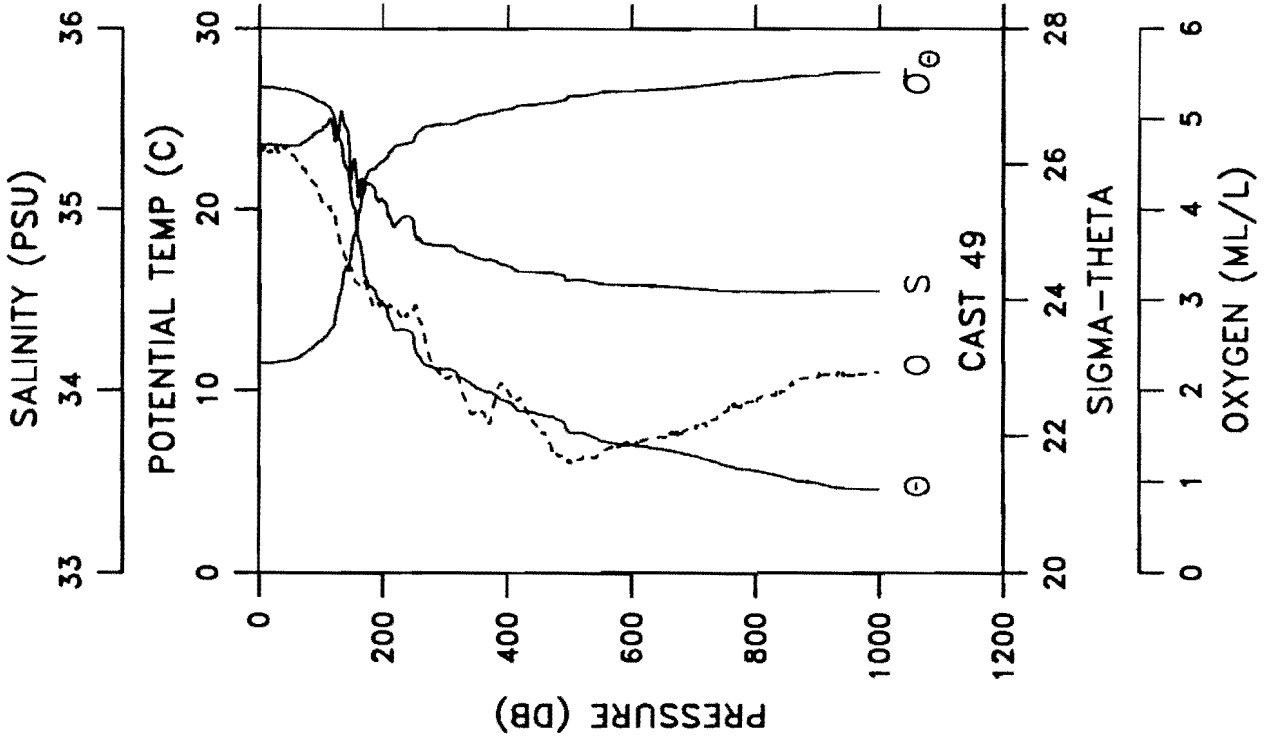


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.961 | 35.347 | 5.17 | 22.994 | 0.000 |
| 10 | 26.946 | 35.345 | 5.16 | 22.997 | 0.049 |
| 20 | 26.880 | 35.344 | 5.11 | 23.018 | 0.097 |
| 30 | 26.849 | 35.347 | 5.13 | 23.030 | 0.146 |
| 40 | 26.816 | 35.358 | 5.08 | 23.048 | 0.194 |
| 50 | 26.754 | 35.376 | 4.98 | 23.081 | 0.242 |
| 60 | 26.667 | 35.397 | 4.86 | 23.125 | 0.290 |
| 70 | 26.600 | 35.411 | 4.74 | 23.157 | 0.337 |
| 80 | 26.517 | 35.427 | 4.65 | 23.195 | 0.385 |
| 90 | 26.344 | 35.439 | 4.58 | 23.258 | 0.432 |
| 100 | 25.866 | 35.446 | 4.50 | 23.414 | 0.477 |
| 110 | 25.287 | 35.440 | 4.31 | 23.588 | 0.522 |
| 120 | 24.318 | 35.414 | 4.12 | 23.862 | 0.564 |
| 130 | 23.564 | 35.450 | 3.85 | 24.113 | 0.604 |
| 140 | 22.694 | 35.494 | 3.73 | 24.398 | 0.641 |
| 150 | 21.027 | 35.428 | 3.54 | 24.814 | 0.675 |
| 160 | 20.369 | 35.392 | 3.43 | 24.964 | 0.706 |
| 170 | 17.318 | 35.170 | 3.32 | 25.570 | 0.733 |
| 180 | 16.556 | 35.055 | 3.23 | 25.662 | 0.757 |
| 190 | 15.431 | 34.888 | 3.32 | 25.791 | 0.780 |
| 200 | 14.058 | 34.932 | 3.18 | 26.123 | 0.801 |
| 250 | 12.258 | 34.844 | 3.03 | 26.419 | 0.892 |
| 300 | 11.165 | 34.780 | 2.66 | 26.575 | 0.971 |
| 350 | 10.527 | 34.753 | 2.03 | 26.668 | 1.045 |
| 400 | 9.249 | 34.669 | 1.81 | 26.819 | 1.114 |
| 450 | 8.334 | 34.634 | 1.68 | 26.936 | 1.176 |
| 500 | 8.187 | 34.629 | 1.78 | 26.954 | 1.236 |
| 502 | 8.185 | 34.628 | 1.81 | 26.954 | 1.238 |

CAST TG2-89-MB -049 DATE 21 JUN 89 TIME 0915 GMT
LAT 00 00.4N LONG 160 00.1W

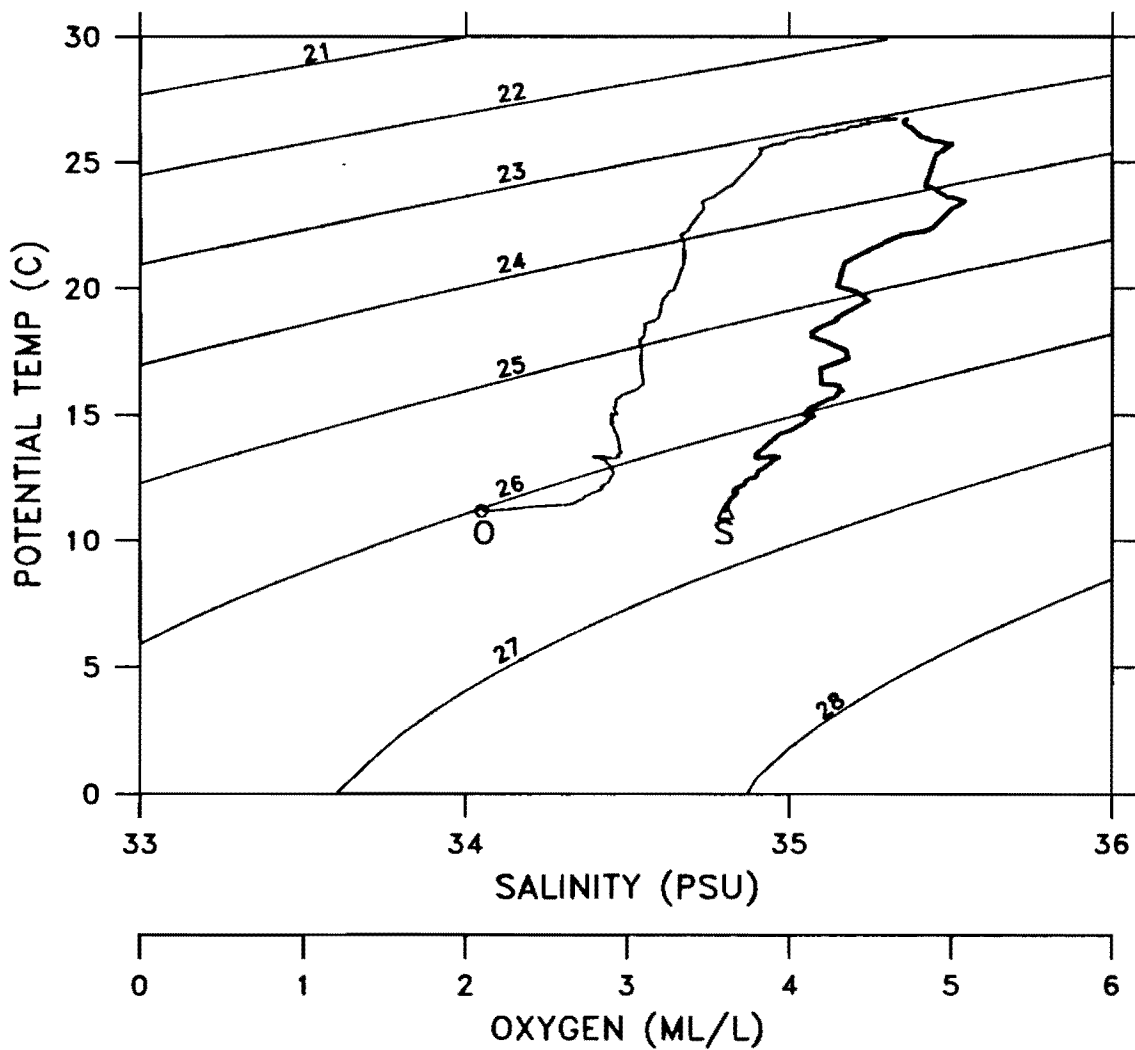


CAST 162-89-MB --049 DATE 21 JUN 89 TIME 0915 GMT
 LAT 00 00.4N LONG 160 00.1W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 072 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 27.0 WET 23.5 DEPTH 5145 M

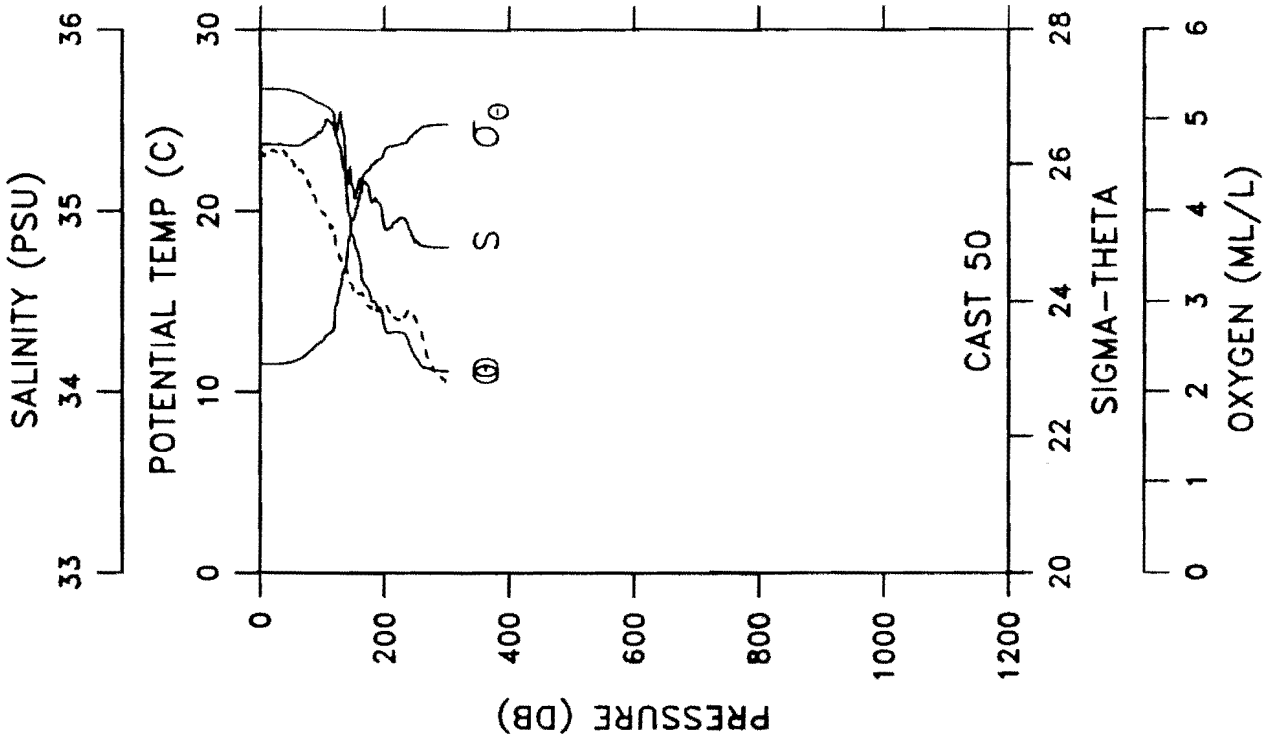


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.767 | 35.359 | 4.64 | 23.065 | 0.000 |
| 10 | 26.762 | 35.359 | 4.71 | 23.066 | 0.048 |
| 20 | 26.767 | 35.359 | 4.66 | 23.065 | 0.096 |
| 30 | 26.696 | 35.355 | 4.62 | 23.084 | 0.144 |
| 40 | 26.666 | 35.353 | 4.67 | 23.092 | 0.192 |
| 50 | 26.612 | 35.352 | 4.61 | 23.108 | 0.240 |
| 60 | 26.542 | 35.352 | 4.53 | 23.131 | 0.287 |
| 70 | 26.404 | 35.369 | 4.45 | 23.187 | 0.335 |
| 80 | 26.259 | 35.391 | 4.37 | 23.249 | 0.382 |
| 90 | 26.091 | 35.423 | 4.28 | 23.326 | 0.428 |
| 100 | 25.926 | 35.435 | 4.09 | 23.387 | 0.473 |
| 110 | 25.720 | 35.475 | 4.03 | 23.481 | 0.518 |
| 120 | 25.193 | 35.432 | 3.96 | 23.611 | 0.562 |
| 130 | 23.823 | 35.497 | 3.64 | 24.072 | 0.603 |
| 140 | 22.262 | 35.447 | 3.45 | 24.486 | 0.640 |
| 150 | 20.465 | 35.222 | 3.32 | 24.808 | 0.674 |
| 160 | 18.262 | 35.069 | 3.18 | 25.261 | 0.704 |
| 170 | 16.313 | 35.112 | 3.20 | 25.763 | 0.729 |
| 180 | 15.729 | 35.139 | 3.00 | 25.917 | 0.751 |
| 190 | 15.154 | 35.056 | 2.96 | 25.982 | 0.773 |
| 200 | 14.810 | 35.048 | 2.93 | 26.052 | 0.793 |
| 250 | 12.587 | 34.899 | 2.93 | 26.398 | 0.885 |
| 300 | 11.161 | 34.801 | 2.14 | 26.591 | 0.962 |
| 350 | 10.129 | 34.735 | 1.77 | 26.723 | 1.036 |
| 400 | 9.391 | 34.687 | 2.02 | 26.810 | 1.103 |
| 450 | 8.719 | 34.651 | 1.60 | 26.890 | 1.167 |
| 500 | 7.738 | 34.610 | 1.21 | 27.007 | 1.228 |
| 550 | 7.245 | 34.592 | 1.30 | 27.063 | 1.283 |
| 600 | 7.045 | 34.585 | 1.45 | 27.086 | 1.337 |
| 650 | 6.791 | 34.576 | 1.49 | 27.114 | 1.390 |
| 700 | 6.416 | 34.566 | 1.58 | 27.156 | 1.441 |
| 750 | 5.932 | 34.551 | 1.77 | 27.207 | 1.491 |
| 800 | 5.641 | 34.549 | 1.87 | 27.242 | 1.537 |
| 900 | 4.954 | 34.545 | 2.15 | 27.320 | 1.626 |
| 1000 | 4.588 | 34.553 | 2.16 | 27.368 | 1.708 |
| 1500 | 2.938 | 34.602 | 2.51 | 27.573 | 2.064 |
| 2000 | 2.148 | 34.639 | 2.81 | 27.670 | 2.349 |
| 2500 | 1.747 | 34.660 | 3.08 | 27.719 | 2.597 |
| 3000 | 1.442 | 34.675 | 3.41 | 27.753 | 2.831 |
| 3500 | 1.255 | 34.684 | 3.80 | 27.774 | 3.054 |
| 4000 | 1.107 | 34.693 | 4.01 | 27.792 | 3.272 |
| 4500 | 0.895 | 34.704 | 4.40 | 27.815 | 3.483 |
| 5000 | 0.804 | 34.707 | 4.56 | 27.823 | 3.689 |
| 5157 | 0.796 | 34.708 | 4.52 | 27.824 | 3.755 |

CAST TG2-89-MB -050 DATE 22 JUN 89 TIME 1145 GMT
LAT 00 00.7N LONG 160 00.6W

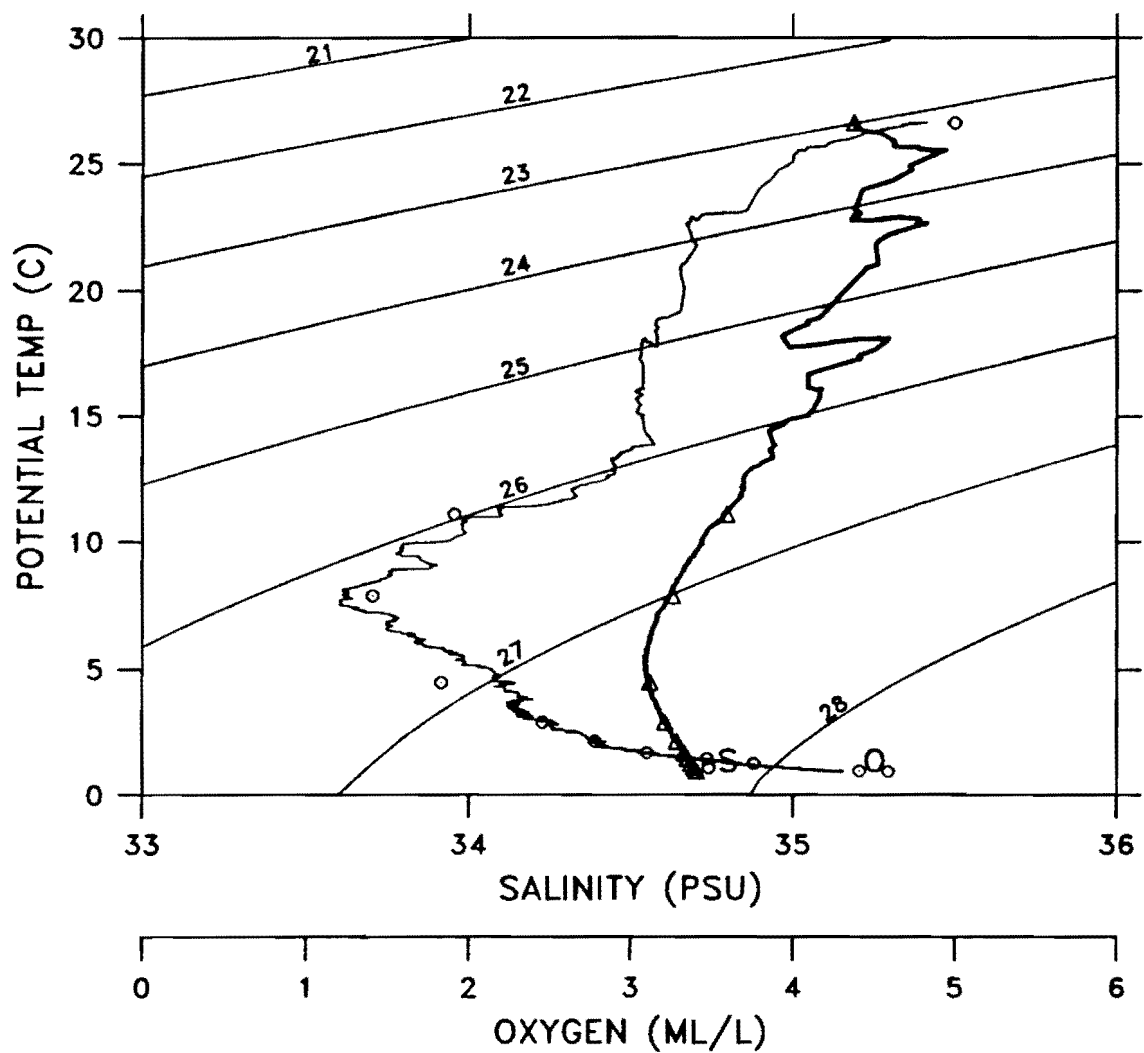


CAST TG2-89-MB -050 DATE 22 JUN 89 TIME 1145 GMT
 LAT 00 00.7N LONG 160 00.6W WEATHER SEA STATE
 BAROMETER 10 WIND DIR 066 T SPD 08 KT VISIBILITY
 CLOUD AMOUNT DRY 26.8 WET 23.5 DEPTH 5182 M

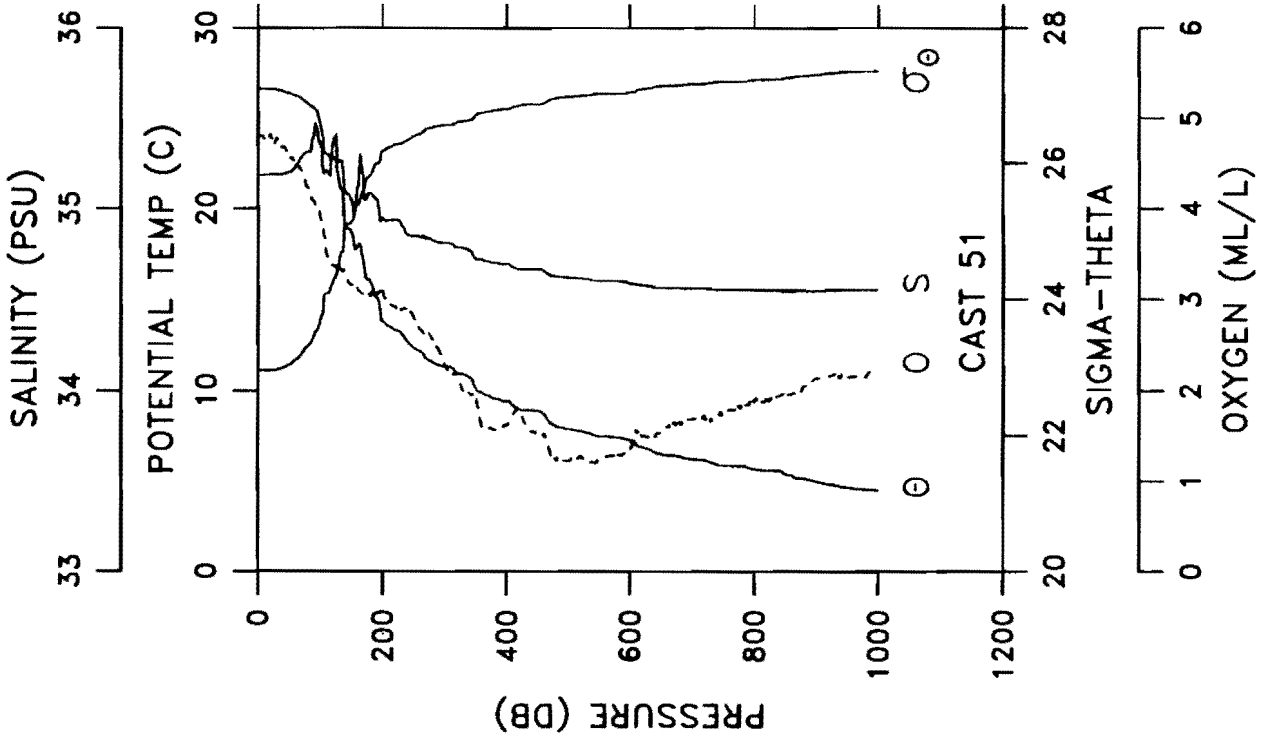


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.721 | 35.362 | 4.63 | 23.082 | 0.000 |
| 10 | 26.722 | 35.362 | 4.63 | 23.081 | 0.048 |
| 20 | 26.722 | 35.362 | 4.67 | 23.081 | 0.096 |
| 30 | 26.722 | 35.362 | 4.64 | 23.081 | 0.144 |
| 40 | 26.681 | 35.358 | 4.61 | 23.081 | 0.191 |
| 50 | 26.615 | 35.355 | 4.55 | 23.109 | 0.239 |
| 60 | 26.523 | 35.353 | 4.49 | 23.137 | 0.287 |
| 70 | 26.403 | 35.370 | 4.37 | 23.188 | 0.334 |
| 80 | 26.187 | 35.392 | 4.26 | 23.273 | 0.381 |
| 90 | 25.983 | 35.413 | 4.09 | 23.352 | 0.427 |
| 100 | 25.832 | 35.447 | 3.97 | 23.425 | 0.472 |
| 110 | 25.626 | 35.495 | 3.88 | 23.525 | 0.517 |
| 120 | 24.489 | 35.431 | 3.71 | 23.823 | 0.560 |
| 130 | 23.162 | 35.500 | 3.47 | 24.268 | 0.599 |
| 140 | 20.539 | 35.158 | 3.33 | 24.740 | 0.634 |
| 150 | 18.603 | 35.120 | 3.11 | 25.215 | 0.664 |
| 160 | 17.327 | 35.177 | 3.09 | 25.573 | 0.690 |
| 170 | 15.869 | 35.149 | 3.00 | 25.893 | 0.713 |
| 180 | 15.008 | 35.049 | 2.93 | 26.009 | 0.734 |
| 190 | 14.698 | 35.047 | 2.90 | 26.075 | 0.754 |
| 200 | 13.621 | 34.917 | 2.95 | 26.203 | 0.773 |
| 250 | 11.900 | 34.841 | 2.81 | 26.485 | 0.861 |
| 300 | 11.159 | 34.802 | 2.13 | 26.593 | 0.938 |
| 302 | 11.157 | 34.802 | 2.11 | 26.593 | 0.941 |

CAST TG2-89-MB -051 DATE 22 JUN 89 TIME 1142 GMT
LAT 00 00.9N LONG 154 59.8W

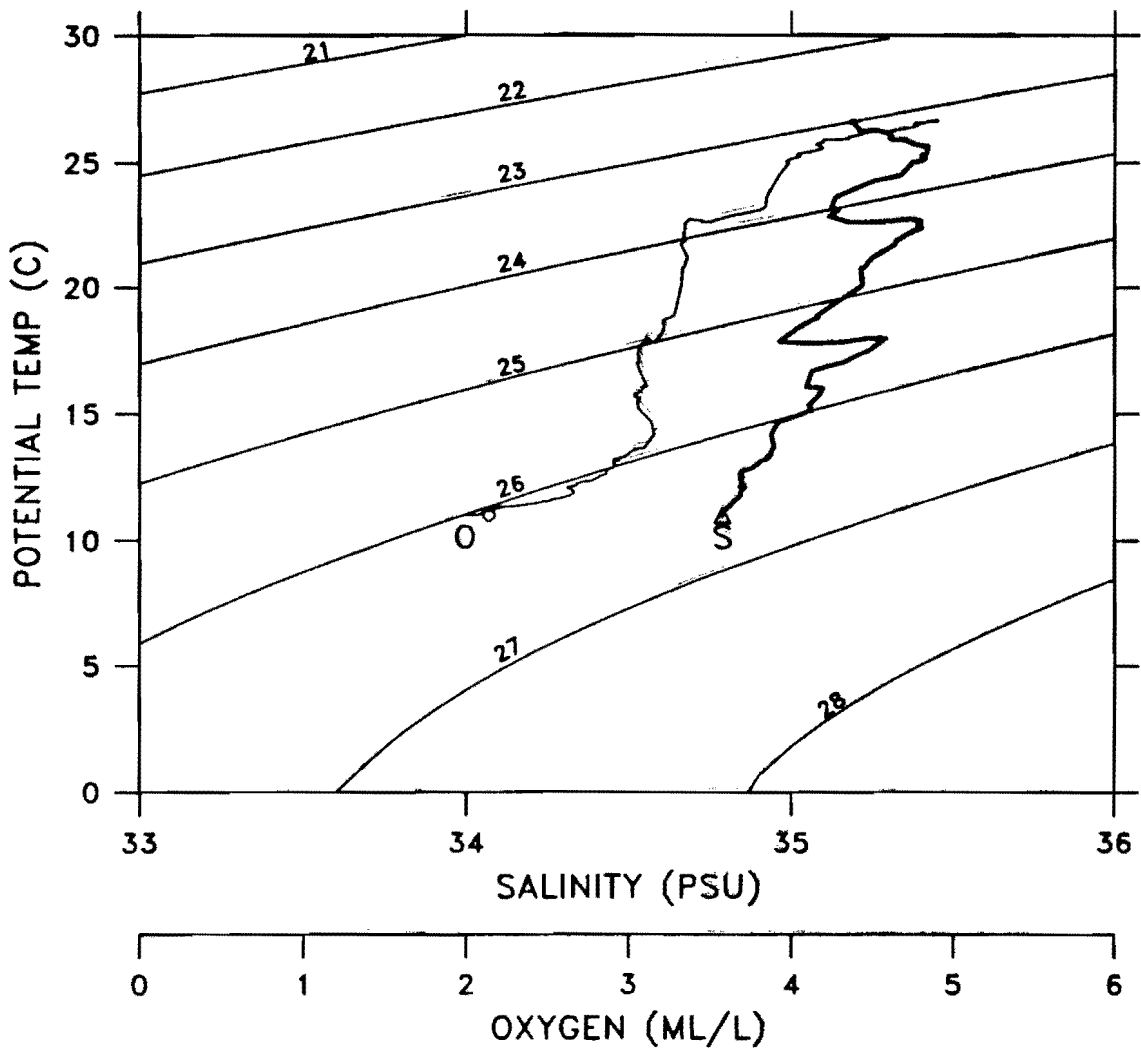


CST TG2-89-MB -051 DATE 22 JUN 89 TIME 1142 GMT
 LAT 00 00.9N LONG 154 59.8W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 095 T SPD 09 KT VISIBILITY
 CLOUD AMOUNT DRY 26.3 WET 22.9 DEPTH 4711 M

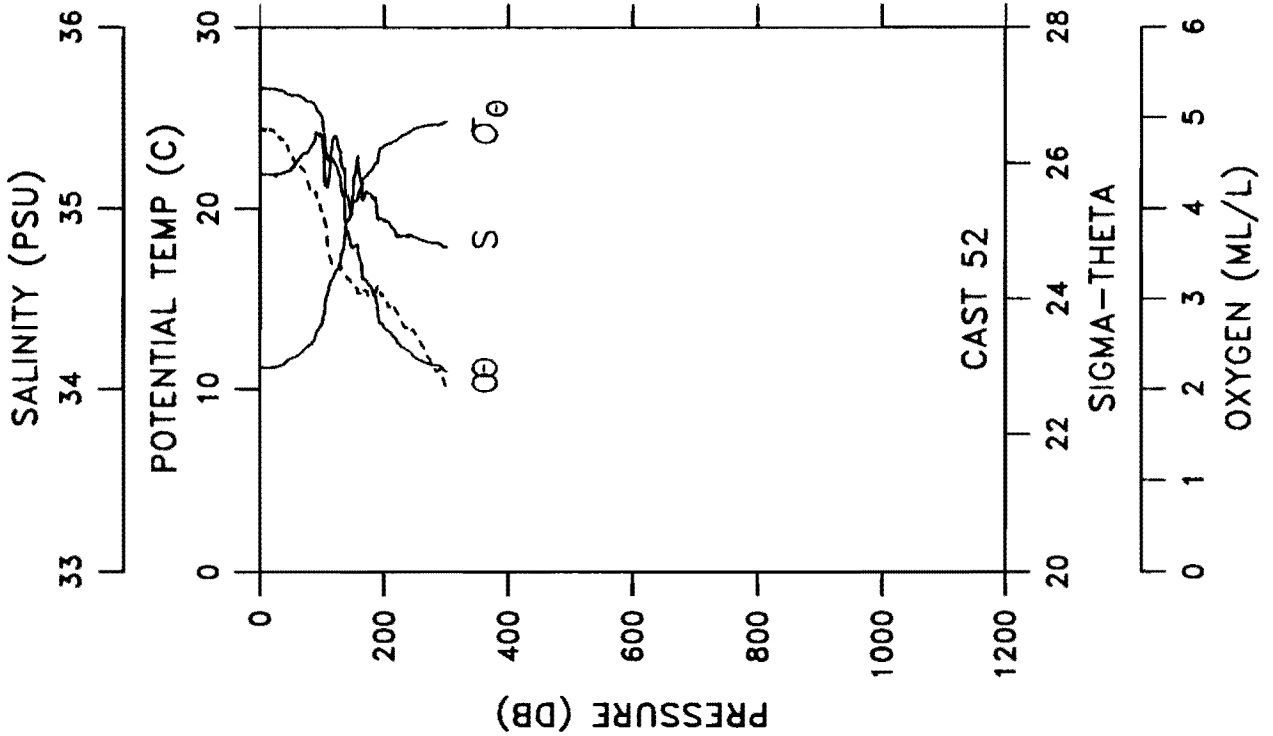


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH (DYN-M) | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|----------------|-----------------|
| 0 | 26.638 | 35.183 | 4.80 | 22.973 | 0.000 |
| 10 | 26.636 | 35.186 | 4.77 | 22.975 | 0.049 |
| 20 | 26.640 | 35.187 | 4.83 | 22.975 | 0.098 |
| 30 | 26.605 | 35.189 | 4.78 | 22.987 | 0.147 |
| 40 | 26.523 | 35.190 | 4.68 | 23.015 | 0.195 |
| 50 | 26.421 | 35.200 | 4.62 | 23.054 | 0.244 |
| 60 | 26.274 | 35.233 | 4.48 | 23.125 | 0.292 |
| 70 | 26.128 | 35.282 | 4.42 | 23.208 | 0.339 |
| 80 | 25.845 | 35.314 | 4.24 | 23.320 | 0.385 |
| 90 | 25.568 | 35.411 | 4.08 | 23.479 | 0.431 |
| 100 | 24.758 | 35.369 | 3.91 | 23.695 | 0.474 |
| 110 | 23.025 | 35.206 | 3.52 | 24.084 | 0.515 |
| 120 | 22.868 | 35.337 | 3.37 | 24.229 | 0.553 |
| 130 | 21.618 | 35.257 | 3.39 | 24.521 | 0.589 |
| 140 | 19.105 | 35.096 | 3.29 | 25.069 | 0.621 |
| 150 | 18.673 | 35.043 | 3.15 | 25.138 | 0.650 |
| 160 | 17.929 | 35.119 | 3.11 | 25.382 | 0.678 |
| 170 | 16.889 | 35.105 | 3.08 | 25.622 | 0.703 |
| 180 | 15.976 | 35.083 | 3.03 | 25.818 | 0.726 |
| 190 | 15.074 | 35.051 | 3.06 | 25.996 | 0.747 |
| 200 | 13.827 | 34.947 | 3.10 | 26.183 | 0.767 |
| 250 | 12.367 | 34.848 | 2.80 | 26.401 | 0.857 |
| 300 | 11.361 | 34.810 | 2.28 | 26.562 | 0.937 |
| 350 | 10.152 | 34.722 | 1.91 | 26.709 | 1.011 |
| 400 | 9.441 | 34.694 | 1.62 | 26.807 | 1.079 |
| 450 | 8.900 | 34.664 | 1.52 | 26.871 | 1.143 |
| 500 | 7.895 | 34.619 | 1.22 | 26.991 | 1.202 |
| 550 | 7.488 | 34.602 | 1.25 | 27.037 | 1.259 |
| 600 | 7.261 | 34.586 | 1.36 | 27.056 | 1.314 |
| 650 | 6.502 | 34.566 | 1.54 | 27.145 | 1.367 |
| 700 | 6.216 | 34.559 | 1.69 | 27.177 | 1.417 |
| 750 | 5.679 | 34.554 | 1.73 | 27.215 | 1.465 |
| 800 | 5.658 | 34.550 | 1.88 | 27.240 | 1.513 |
| 900 | 4.985 | 34.545 | 2.14 | 27.317 | 1.603 |
| 1000 | 4.489 | 34.553 | 2.28 | 27.379 | 1.685 |
| 1500 | 2.933 | 34.602 | 2.51 | 27.573 | 2.038 |
| 2000 | 2.147 | 34.640 | 2.74 | 27.672 | 2.322 |
| 2500 | 1.711 | 34.664 | 3.12 | 27.725 | 2.570 |
| 3000 | 1.473 | 34.674 | 3.41 | 27.751 | 2.804 |
| 3500 | 1.250 | 34.686 | 3.67 | 27.776 | 3.029 |
| 4000 | 1.091 | 34.695 | 3.94 | 27.795 | 3.245 |
| 4500 | 0.970 | 34.701 | 4.13 | 27.807 | 3.460 |
| 4665 | 0.933 | 34.702 | 4.31 | 27.810 | 3.530 |

CAST TG2-89-MB -052 DATE 23 JUN 89 TIME 1402 GMT
LAT 00 00.5N LONG 154 59.4W

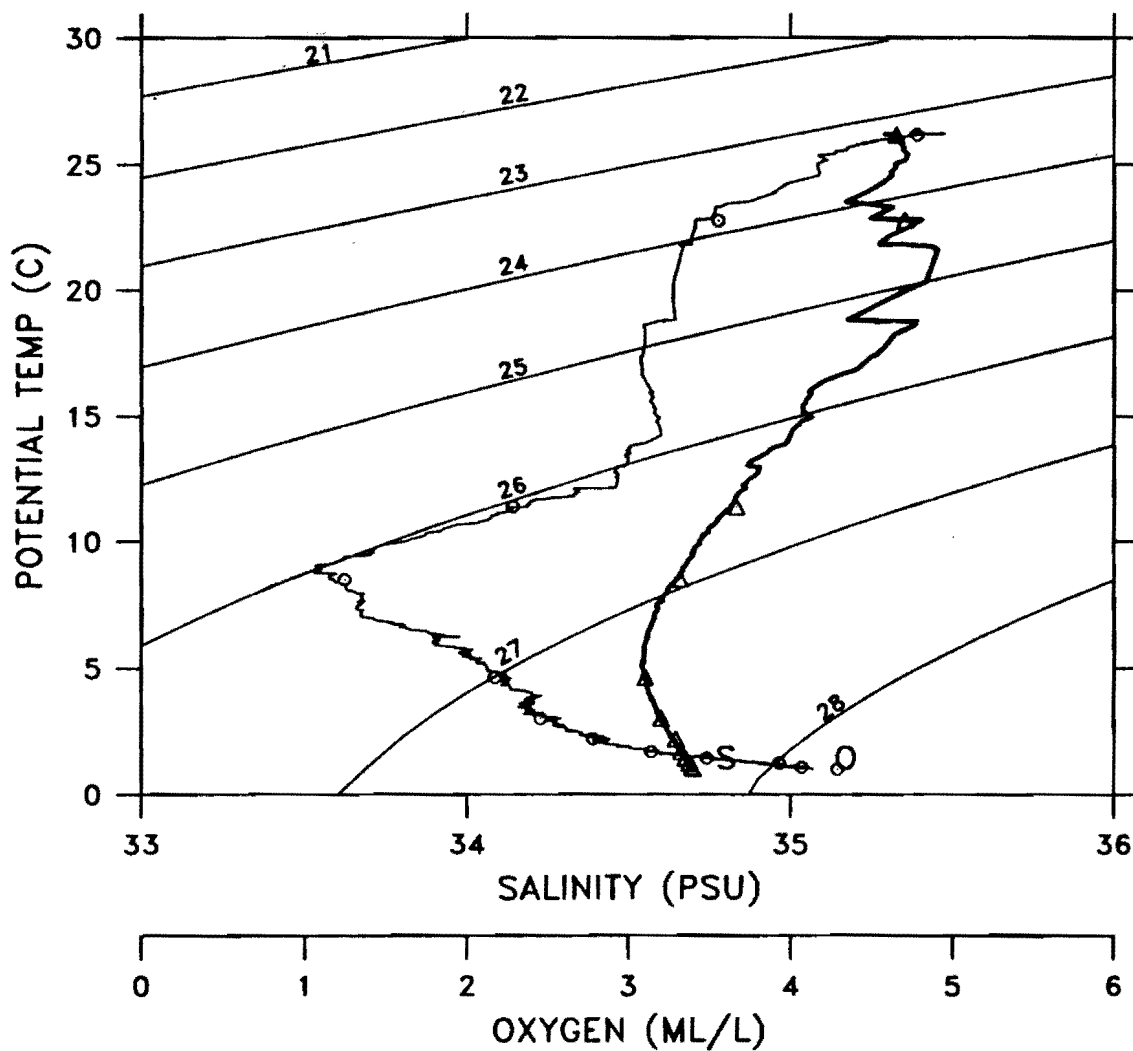


CAST TC2-89-MB -052 DATE 23 JUN 89 TIME 1402 GMT
 LAT 00 00.5N LONG 154 59.4W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 102 T SPD 09 KT VISIBILITY
 CLOUD AMOUNT DRY 26.3 WET 22.9 DEPTH 6079 M

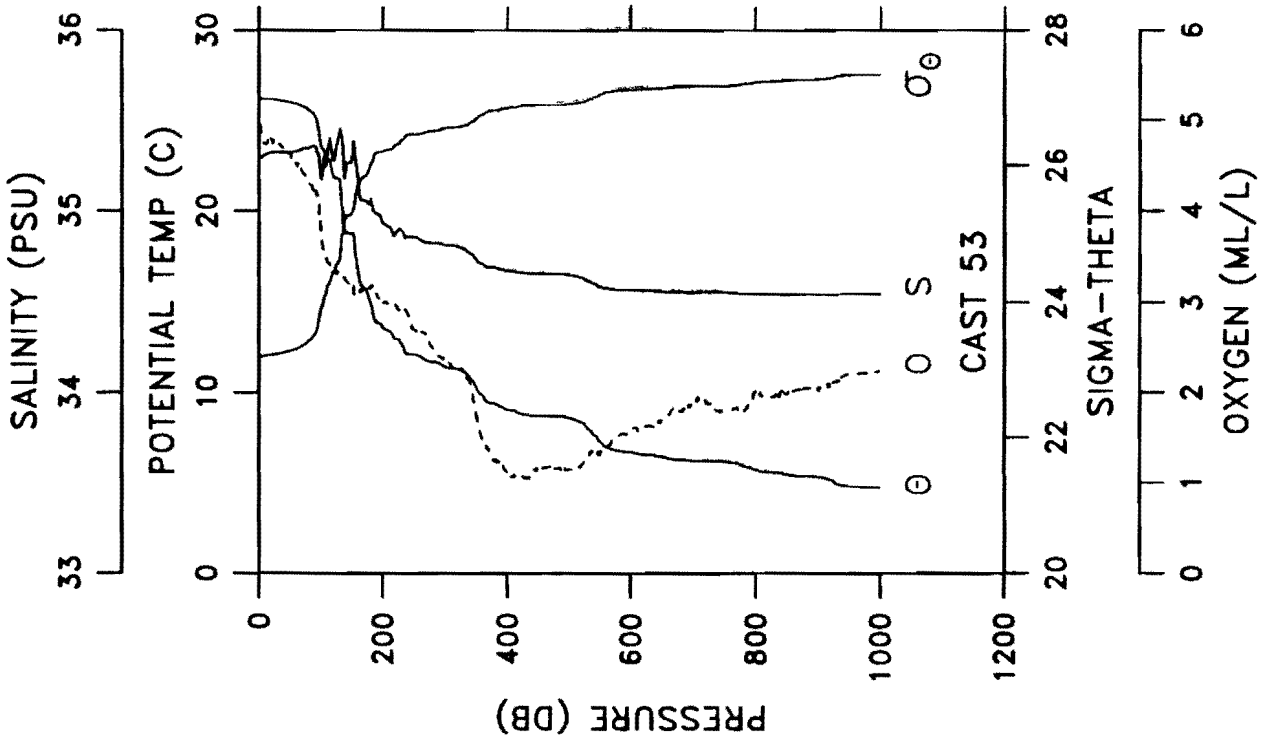


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.618 | 35.191 | 4.88 | 22.985 | 0.000 |
| 10 | 26.622 | 35.189 | 4.88 | 22.983 | 0.049 |
| 20 | 26.597 | 35.191 | 4.86 | 22.992 | 0.097 |
| 30 | 26.544 | 35.193 | 4.79 | 23.010 | 0.146 |
| 40 | 26.395 | 35.202 | 4.76 | 23.064 | 0.195 |
| 50 | 26.245 | 35.226 | 4.59 | 23.129 | 0.242 |
| 60 | 26.249 | 35.269 | 4.47 | 23.160 | 0.290 |
| 70 | 26.085 | 35.305 | 4.42 | 23.239 | 0.337 |
| 80 | 25.887 | 35.333 | 4.21 | 23.322 | 0.383 |
| 90 | 25.558 | 35.420 | 4.19 | 23.489 | 0.428 |
| 100 | 24.995 | 35.371 | 3.98 | 23.625 | 0.472 |
| 110 | 22.693 | 35.155 | 3.54 | 24.141 | 0.512 |
| 120 | 22.526 | 35.390 | 3.35 | 24.367 | 0.549 |
| 130 | 21.179 | 35.248 | 3.36 | 24.635 | 0.584 |
| 140 | 18.765 | 35.074 | 3.23 | 25.139 | 0.615 |
| 150 | 17.860 | 35.155 | 3.15 | 25.426 | 0.643 |
| 160 | 17.254 | 35.192 | 3.06 | 25.602 | 0.669 |
| 170 | 16.041 | 35.093 | 3.09 | 25.811 | 0.692 |
| 180 | 15.543 | 35.069 | 3.06 | 25.905 | 0.714 |
| 190 | 14.178 | 34.937 | 3.16 | 26.101 | 0.734 |
| 200 | 13.386 | 34.932 | 2.99 | 26.263 | 0.753 |
| 250 | 11.768 | 34.842 | 2.62 | 26.511 | 0.838 |
| 300 | 10.996 | 34.788 | 2.01 | 26.612 | 0.915 |
| 301 | 10.992 | 34.788 | 1.99 | 26.612 | 0.917 |

CAST TG2-89-MB -053 DATE 24 JUN 89 TIME 1317 GMT
LAT 00 00.0S LONG 149 58.4W

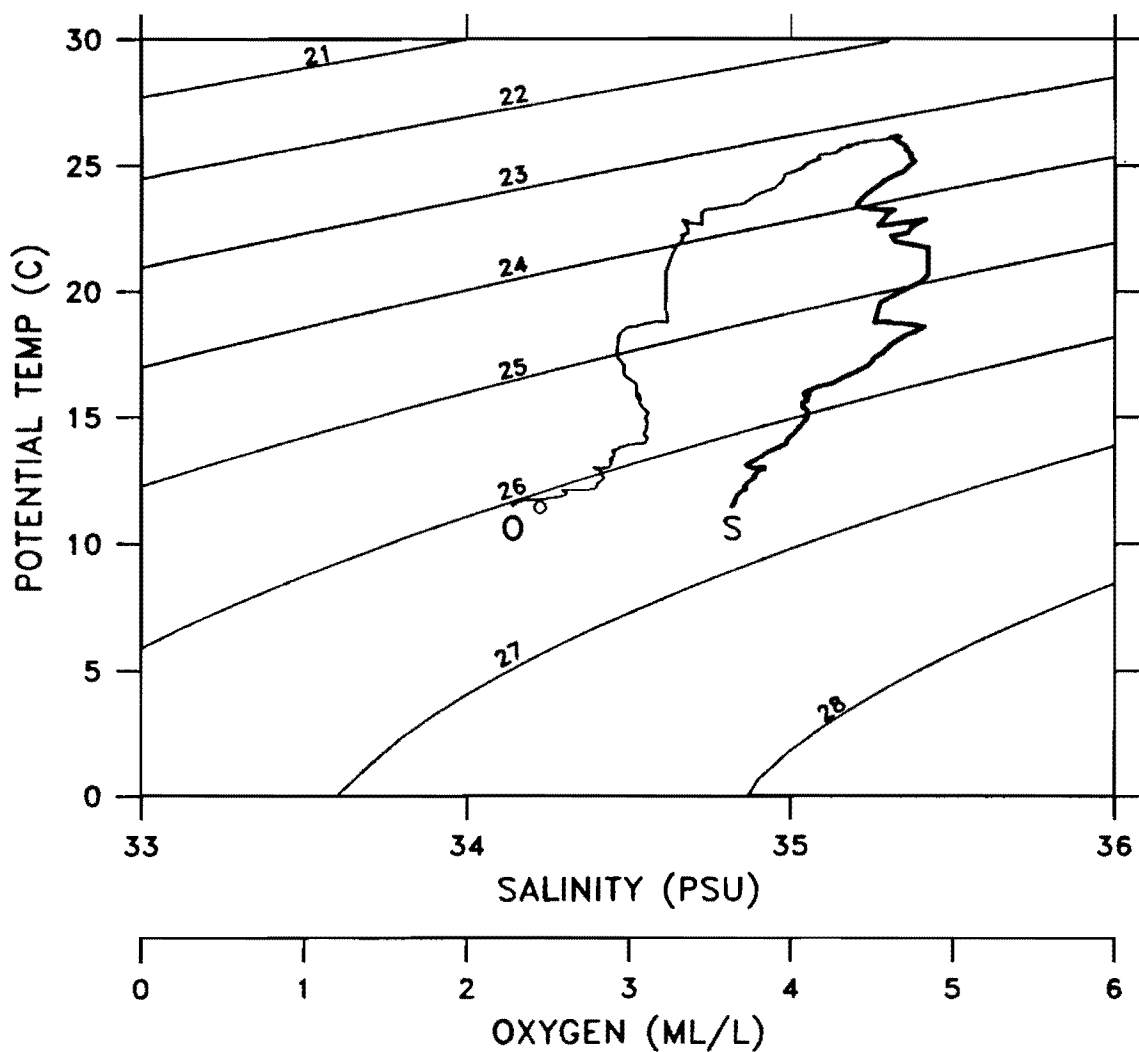


CAST TG2-89-MB -053 DATE 24 JUN 89 TIME 1317 GMT
 LAT 00 00.0S LONG 149 58.4W WEATHER SEA STATE
 BAROMETER 11 WIND DIR 136 T SPD 12 KT VISIBILITY
 CLOUD AMOUNT DRY 26.0 WET 22.6 DEPTH 4455 M

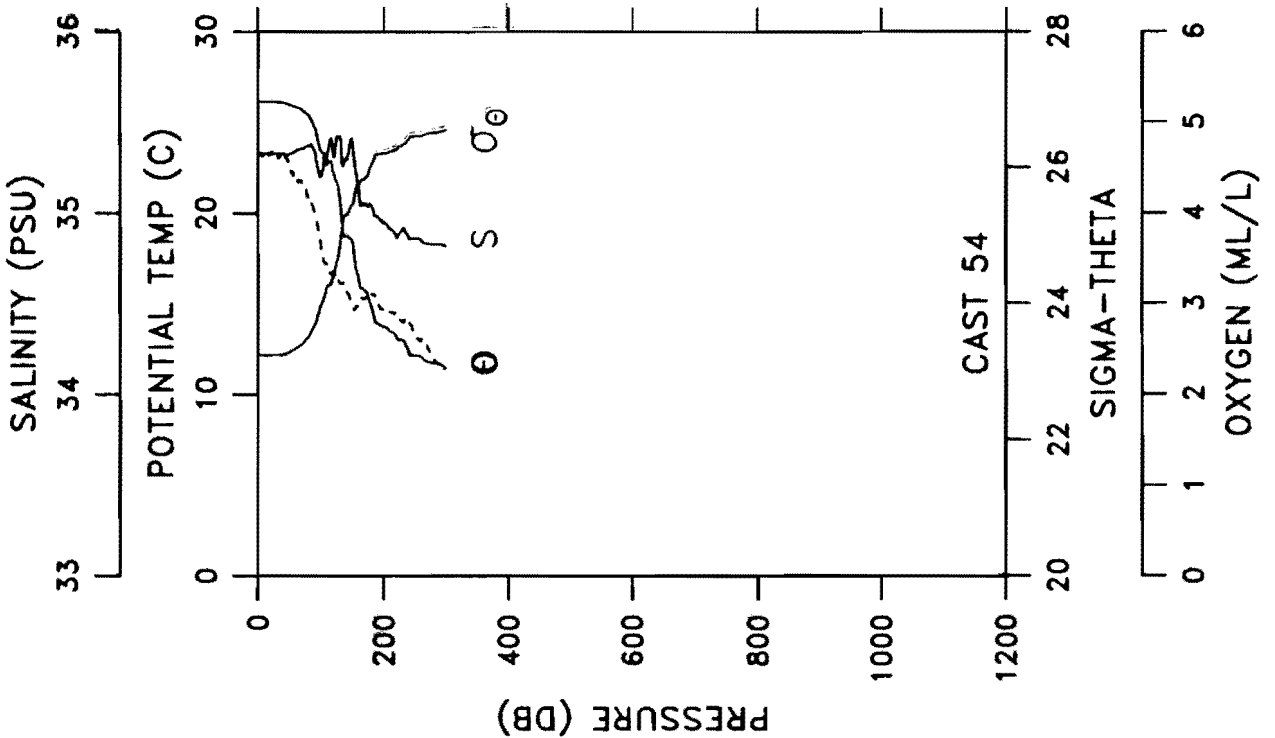


| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.201 | 35.291 | 4.95 | 23.192 | 0.000 |
| 10 | 26.195 | 35.311 | 4.73 | 23.209 | 0.047 |
| 20 | 26.178 | 35.324 | 4.79 | 23.224 | 0.093 |
| 30 | 26.141 | 35.325 | 4.76 | 23.237 | 0.140 |
| 40 | 26.080 | 35.324 | 4.67 | 23.255 | 0.186 |
| 50 | 25.994 | 35.325 | 4.64 | 23.283 | 0.232 |
| 60 | 25.918 | 35.331 | 4.53 | 23.311 | 0.278 |
| 70 | 25.770 | 35.346 | 4.41 | 23.368 | 0.324 |
| 80 | 25.542 | 35.350 | 4.31 | 23.441 | 0.369 |
| 90 | 25.197 | 35.356 | 4.20 | 23.552 | 0.413 |
| 100 | 23.497 | 35.177 | 3.71 | 23.925 | 0.455 |
| 110 | 22.782 | 35.353 | 3.43 | 24.266 | 0.494 |
| 120 | 21.805 | 35.275 | 3.39 | 24.483 | 0.530 |
| 130 | 21.601 | 35.454 | 3.33 | 24.676 | 0.564 |
| 140 | 18.823 | 35.266 | 3.24 | 25.271 | 0.593 |
| 150 | 18.802 | 35.315 | 3.18 | 25.313 | 0.621 |
| 160 | 16.675 | 35.155 | 3.08 | 25.711 | 0.646 |
| 170 | 15.793 | 35.058 | 3.15 | 25.841 | 0.668 |
| 180 | 14.953 | 35.066 | 3.19 | 26.034 | 0.690 |
| 190 | 13.916 | 34.985 | 3.10 | 26.194 | 0.709 |
| 200 | 13.634 | 34.933 | 2.99 | 26.213 | 0.728 |
| 250 | 12.105 | 34.861 | 2.70 | 26.461 | 0.815 |
| 300 | 11.404 | 34.816 | 2.37 | 26.559 | 0.894 |
| 350 | 10.236 | 34.727 | 1.74 | 26.699 | 0.970 |
| 400 | 9.065 | 34.677 | 1.11 | 26.855 | 1.036 |
| 450 | 8.741 | 34.662 | 1.17 | 26.895 | 1.098 |
| 500 | 8.612 | 34.655 | 1.15 | 26.909 | 1.160 |
| 550 | 7.324 | 34.591 | 1.31 | 27.051 | 1.220 |
| 600 | 6.702 | 34.573 | 1.59 | 27.124 | 1.272 |
| 650 | 6.480 | 34.563 | 1.70 | 27.146 | 1.323 |
| 700 | 6.231 | 34.558 | 1.88 | 27.174 | 1.373 |
| 750 | 6.181 | 34.559 | 1.80 | 27.181 | 1.422 |
| 800 | 5.744 | 34.552 | 2.02 | 27.231 | 1.470 |
| 900 | 5.347 | 34.547 | 2.06 | 27.276 | 1.562 |
| 1000 | 4.712 | 34.550 | 2.23 | 27.352 | 1.647 |
| 1500 | 3.004 | 34.600 | 2.52 | 27.566 | 2.000 |
| 2000 | 2.190 | 34.638 | 2.82 | 27.666 | 2.286 |
| 2500 | 1.715 | 34.663 | 3.11 | 27.724 | 2.537 |
| 3000 | 1.459 | 34.675 | 3.46 | 27.753 | 2.769 |
| 3500 | 1.258 | 34.686 | 3.80 | 27.776 | 2.993 |
| 4000 | 1.091 | 34.695 | 4.07 | 27.794 | 3.209 |
| 4460 | 1.022 | 34.698 | 4.14 | 27.801 | 3.408 |

CAST TG2-89-MB -054 DATE 24 JUN 89 TIME 1540 GMT
LAT 00 00.6S LONG 149 57.9W



CAST TG2-89-MB -054 DATE 24 JUN 89 TIME 1540 GMT
 LAT 00 00.6S LONG 149 57.9W WEATHER SEA STATE
 BAROMETER 12 WIND DIR 308 T SPD 10 KT VISIBILITY
 CLOUD AMOUNT DRY 26.1 WET 22.6 DEPTH 3211 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | OXY (ML/L) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|------------|--------|-----------------|
| 0 | 26.152 | 35.328 | 4.64 | 23.235 | 0.000 |
| 10 | 26.152 | 35.327 | 4.65 | 23.234 | 0.046 |
| 20 | 26.156 | 35.327 | 4.66 | 23.233 | 0.093 |
| 30 | 26.142 | 35.326 | 4.65 | 23.237 | 0.139 |
| 40 | 26.105 | 35.322 | 4.66 | 23.246 | 0.186 |
| 50 | 25.969 | 35.324 | 4.53 | 23.283 | 0.232 |
| 60 | 25.862 | 35.341 | 4.40 | 23.336 | 0.278 |
| 70 | 25.695 | 35.355 | 4.31 | 23.398 | 0.323 |
| 80 | 25.406 | 35.371 | 4.17 | 23.489 | 0.368 |
| 90 | 24.700 | 35.338 | 3.99 | 23.689 | 0.411 |
| 100 | 23.365 | 35.210 | 3.58 | 23.989 | 0.452 |
| 110 | 22.746 | 35.339 | 3.37 | 24.265 | 0.490 |
| 120 | 22.232 | 35.309 | 3.33 | 24.389 | 0.527 |
| 130 | 20.676 | 35.424 | 3.22 | 24.906 | 0.560 |
| 140 | 18.736 | 35.296 | 3.14 | 25.315 | 0.588 |
| 150 | 18.377 | 35.382 | 2.95 | 25.472 | 0.615 |
| 160 | 16.313 | 35.127 | 3.04 | 25.774 | 0.638 |
| 170 | 15.727 | 35.050 | 3.07 | 25.849 | 0.661 |
| 180 | 14.859 | 35.045 | 3.10 | 26.038 | 0.682 |
| 190 | 13.898 | 34.985 | 3.03 | 26.198 | 0.701 |
| 200 | 13.688 | 34.948 | 2.93 | 26.212 | 0.720 |
| 250 | 12.108 | 34.861 | 2.64 | 26.461 | 0.808 |
| 300 | 11.440 | 34.818 | 2.28 | 26.553 | 0.887 |
| 300 | 11.440 | 34.818 | 2.28 | 26.553 | 0.887 |

CAST TG2-89-MB -039 LAT 00 01.0S LONG 176 30.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 27.341 | 35.340 | 4.97 | 27.341 | 22.867 |
| 502. | 8.151 | 34.623 | 2.64 | 8.099 | 26.963 |
| 1002. | 4.566 | 34.568 | 2.54 | 4.486 | 27.391 |
| 1502. | 3.021 | 34.625 | 2.43 | 2.913 | 27.594 |
| 2006. | 2.238 | 34.643 | 2.33 | 2.097 | 27.678 |
| 2502. | 1.874 | 34.662* | 3.14 | 1.696* | 27.724* |
| 3008. | 1.650 | 34.678 | 3.35 | 1.429 | 27.757 |
| 3504. | 1.524 | 34.683 | 3.45 | 1.257 | 27.773 |
| 4009. | 1.392 | 34.695 | 3.65 | 1.075 | 27.795 |
| 4485. | 1.272 | 34.707 | 4.36 | 0.906 | 27.816 |
| 5012. | 1.248 | 34.706 | 4.46 | 0.821 | 27.821 |
| 5353. | 1.284 | 34.710 | 4.56 | 0.813 | 27.825 |

CAST TG2-89-MB -042 LAT 00 01.9S LONG 175 01.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.357 | 35.306 | 4.97 | 27.357 | 22.836 |
| 502. | 7.861 | 34.599 | 2.48 | 7.810 | 26.987 |
| 1504. | 3.002 | 34.607 | 2.47 | 2.894 | 27.581 |
| 2005. | 2.260 | 34.642 | 2.78 | 2.119 | 27.675 |
| 2506. | 1.864 | 34.663 | 3.16 | 1.686 | 27.726 |
| 3009. | 1.652 | 34.679 | 3.41 | 1.431 | 27.758 |
| 3507. | 1.517 | 34.685 | 4.35 | 1.250 | 27.775 |
| 4009. | 1.395 | 34.694 | 4.16 | 1.078 | 27.794 |
| 4511. | 1.248 | 34.702 | 4.60 | 0.879 | 27.814 |
| 5012. | 1.249 | 34.707 | 4.73 | 0.822 | 27.822 |
| 5363. | 1.285 | 34.710 | 4.79 | 0.813 | 27.825 |

CAST TG2-89-MB -043 LAT 00 03.3S LONG 175 02.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 301. | 11.493 | 34.816 | 0.00 | 11.455 | 26.549 |

CAST TG2-89-MB -044 LAT 00 00.6N LONG 169 31.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.298 | 35.362 | 5.14 | 27.298 | 22.897 |
| 501. | 8.082 | 34.617 | 2.38 | 8.030 | 26.969 |
| 1002. | 4.611 | 34.566 | 2.24 | 4.530 | 27.384 |
| 1503. | 3.048 | 34.607 | 2.54 | 2.939 | 27.577 |
| 2000. | 2.212 | 34.644 | 2.83 | 2.072 | 27.681 |
| 2504. | 1.884 | 34.663 | 3.17 | 1.705 | 27.725 |
| 3008. | 1.669 | 34.675 | 3.43 | 1.448 | 27.753 |
| 3507. | 1.522 | 34.685 | 3.76 | 1.254 | 27.775 |
| 4009. | 1.398 | 34.698 | 4.19 | 1.081 | 27.797 |
| 4510. | 1.264 | 34.703 | 4.66 | 0.895 | 27.814 |
| 5014. | 1.249 | 34.705 | 4.79 | 0.821 | 27.820 |
| 5213. | 1.270 | 34.708 | 4.86 | 0.817 | 27.823 |

CAST TG2-89-MB -045 LAT 00 00.8S LONG 169 31.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 303. | 11.182 | 34.799* | 2.69 | 11.144* | 26.593* |

CAST TG2-89-MB -047 LAT 00 00.9S LONG 165 00.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 0. | 26.959 | 35.346 | 5.02 | 26.959 | 22.994 |
| 1003. | 4.426 | 34.589 | 2.31 | 4.347 | 27.423 |
| 1503. | 3.036 | 34.627 | 2.52 | 2.927 | 27.594 |
| 2005. | 2.195 | 34.646* | 0.00 | 2.055* | 27.684* |
| 2505. | 1.893 | 34.666 | 2.85 | 1.714 | 27.726 |
| 3509. | 1.528 | 34.684 | 3.83 | 1.260 | 27.774 |
| 4010. | 1.352 | 34.697 | 3.29 | 1.036 | 27.799 |
| 4511. | 1.253 | 34.701 | 4.00 | 0.884 | 27.813 |
| 5013. | 1.207 | 34.707 | 4.60 | 0.781 | 27.824 |
| 5513. | 1.253 | 34.708 | 4.38 | 0.764 | 27.826 |
| 5826. | 1.293 | 34.707 | 4.21 | 0.762 | 27.825 |

* Calculated from CTD values

CAST TG2-89-MB -049 LAT 00 00.4N LONG 160 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.719 | 35.371 | 3.66 | 26.719 | 23.089 |
| 501. | 7.734 | 34.616 | 1.35 | 7.684 | 27.019 |
| 1002. | 4.630 | 34.569 | 2.22 | 4.549 | 27.385 |
| 1504. | 3.040 | 34.622 | 2.52 | 2.931 | 27.590 |
| 2005. | 2.249 | 34.641 | 2.86 | 2.108 | 27.675 |
| 2506. | 1.912 | 34.662 | 3.10 | 1.733 | 27.722 |
| 3008. | 1.636 | 34.674 | 3.47 | 1.415 | 27.755 |
| 3508. | 1.516 | 34.684 | 3.86 | 1.249 | 27.775 |
| 4010. | 1.406 | 34.695 | 4.19 | 1.089 | 27.794 |
| 4511. | 1.262 | 34.703 | 4.62 | 0.893 | 27.814 |
| 5011. | 1.229 | 34.707 | 4.83 | 0.802 | 27.823 |
| 5155. | 1.240 | 34.709 | 4.93 | 0.796 | 27.825 |

CAST TG2-89-MB -050 LAT 00 00.7N LONG 160 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 301. | 11.196 | 34.805 | 2.10 | 11.158 | 26.595 |

CAST TG2-89-MB -051 LAT 00 00.9N LONG 154 59.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.625 | 35.188 | 5.00 | 26.625 | 22.981 |
| 302. | 11.115 | 34.796 | 1.91 | 11.077 | 26.603 |
| 501. | 7.931 | 34.627 | 1.41 | 7.880 | 26.999 |
| 1002. | 4.571 | 34.559 | 1.83 | 4.491 | 27.383 |
| 1503. | 3.014 | 34.605 | 2.45 | 2.906 | 27.578 |
| 2005. | 2.290 | 34.641 | 2.78 | 2.149 | 27.672 |
| 2504. | 1.873 | 34.664 | 3.10 | 1.695 | 27.726 |
| 3007. | 1.688 | 34.674 | 3.47 | 1.466 | 27.751 |
| 3507. | 1.526 | 34.684 | 3.76 | 1.258 | 27.774 |
| 4009. | 1.409 | 34.694 | 3.48 | 1.092 | 27.793 |
| 4511. | 1.340 | 34.701 | 4.41 | 0.969 | 27.807 |
| 4664. | 1.322 | 34.704 | 4.59 | 0.933 | 27.812 |

* Calculated from CTD values

CAST TG2-89-MB -052 LAT 00 00.5N LONG 154 59.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 301. | 11.030 | 34.790 | 2.14 | 10.993 | 26.614 |

CAST TG2-89-MB -053 LAT 00 00.0S LONG 149 58.4W

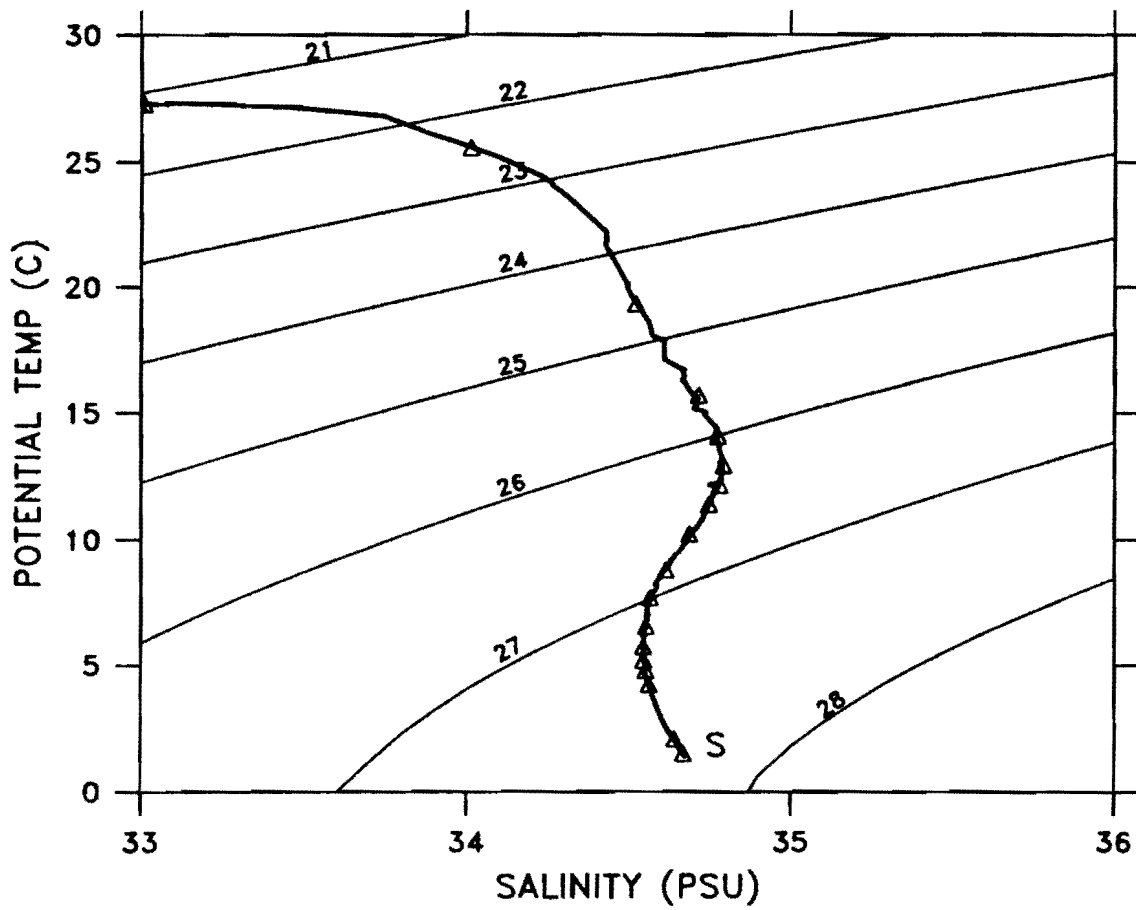
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.153 | 35.326 | 4.78 | 26.153 | 23.233 |
| 100. | 22.793 | 35.353 | 3.55 | 22.773 | 24.268 |
| 300. | 11.406 | 34.832 | 2.28 | 11.368 | 26.578 |
| 501. | 8.538 | 34.658 | 1.24 | 8.485 | 26.932 |
| 1004. | 4.719 | 34.553 | 2.17 | 4.637 | 27.362 |
| 1504. | 3.137 | 34.601 | 2.45 | 3.027 | 27.564 |
| 2005. | 2.360 | 34.646 | 2.78 | 2.218 | 27.671 |
| 2506. | 1.891 | 34.662 | 3.14 | 1.712 | 27.723 |
| 3007. | 1.665 | 34.675 | 3.48 | 1.444 | 27.753 |
| 3507. | 1.522 | 34.686 | 3.93 | 1.255 | 27.776 |
| 4009. | 1.406 | 34.696 | 4.07 | 1.089 | 27.795 |
| 4465. | 1.388 | 34.698 | 4.29 | 1.020 | 27.801 |

CAST TG2-89-MB -054 LAT 00 00.6S LONG 149 57.9W

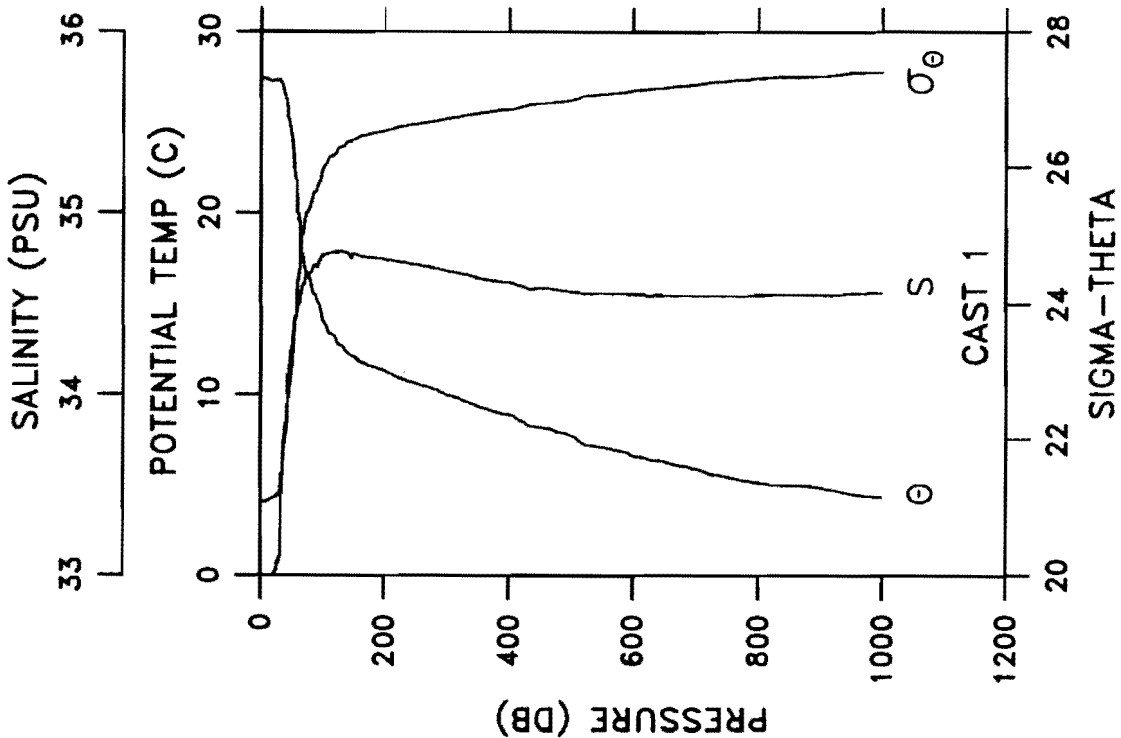
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 301. | 11.452 | 34.813* | 2.45 | 11.414* | 26.555* |

EP3-89-DI
October 16–November 14, 1989
CTD and Hydrographic Data Summary

CAST EP3-89-DI -001 DATE 25 OCT 89 TIME 0455 GMT
LAT 09 59.2N LONG 109 18.8W

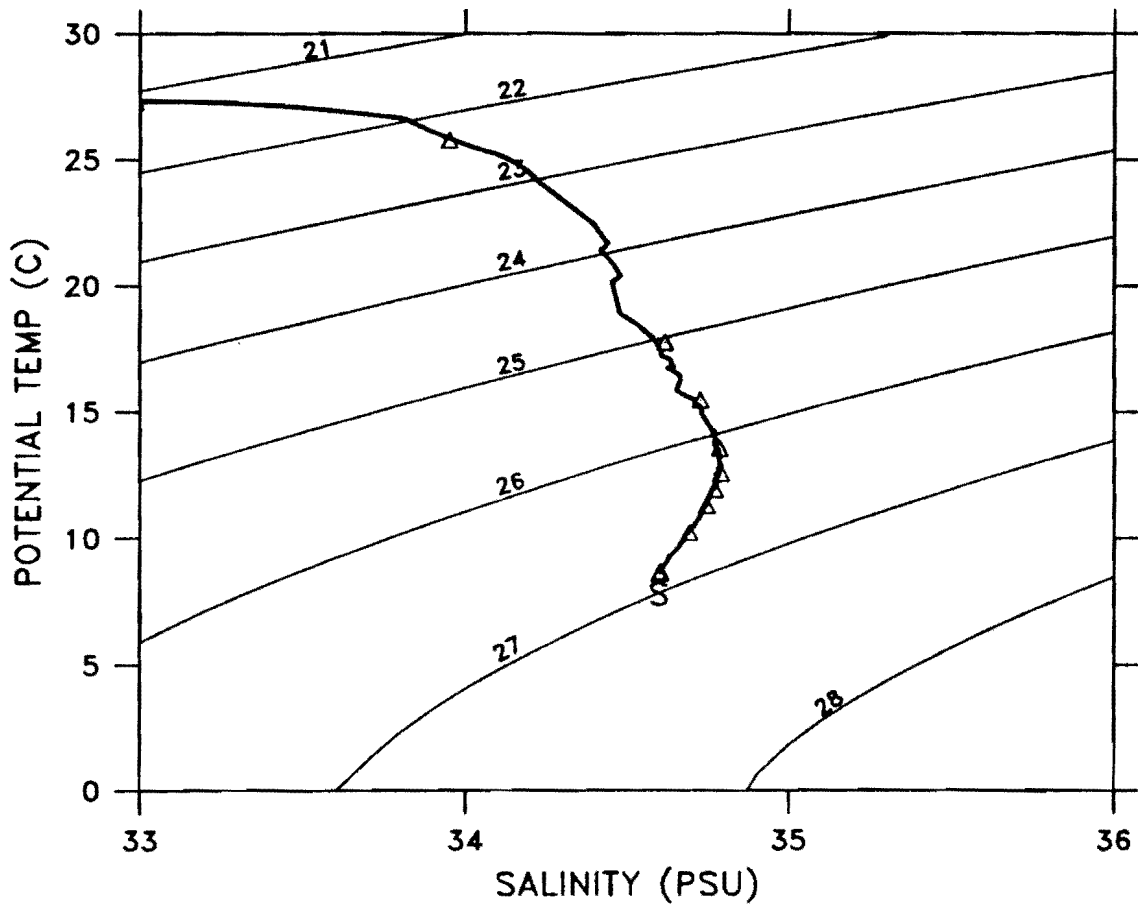


CAST EP3-89-DJ -001 DATE 25 OCT 89 TIME 0455 GMT
 LAT 09 59.2N LONG 109 18.8W WEATHER 1 SEA STATE 2
 BAROMETER 13 WIND DIR 080 T SPD 08 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 26.5 WET 24.7 DEPTH 3419 M

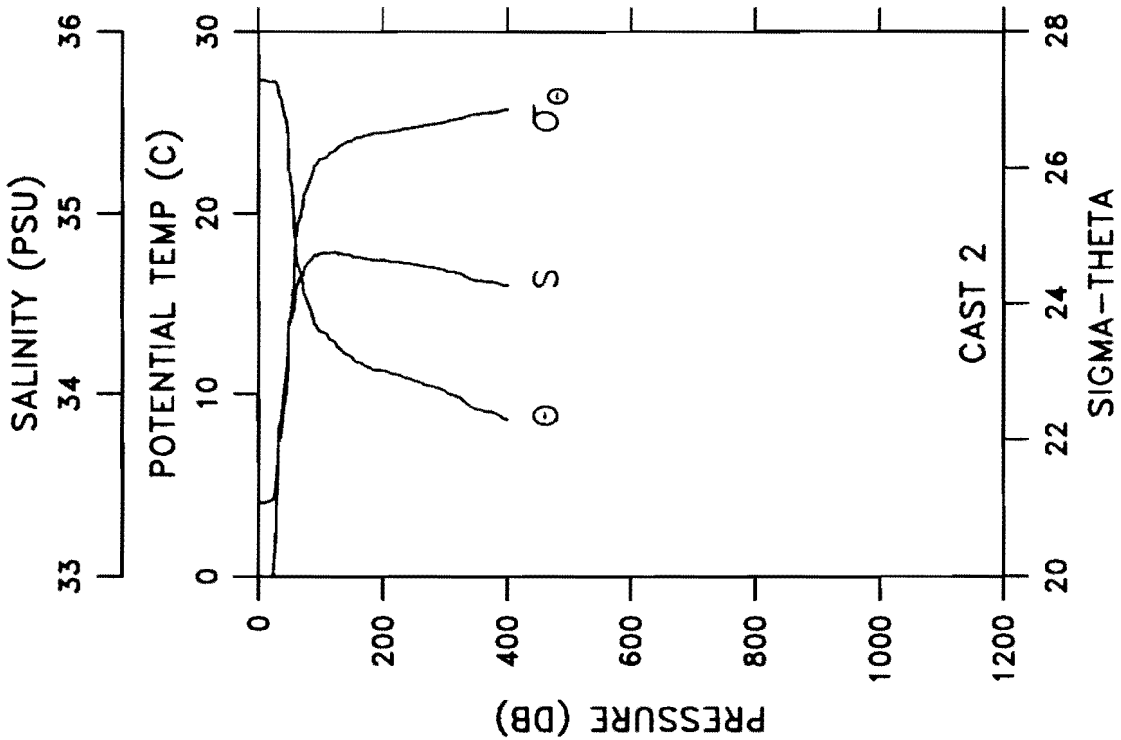


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.354 | 32.975 | 21.083 | 0.000 |
| 10 | 27.349 | 32.973 | 21.083 | 0.067 |
| 20 | 27.255 | 32.995 | 21.130 | 0.134 |
| 30 | 27.321 | 33.111 | 21.195 | 0.200 |
| 40 | 26.256 | 33.856 | 22.093 | 0.261 |
| 50 | 24.094 | 34.262 | 23.057 | 0.313 |
| 60 | 19.915 | 34.497 | 24.401 | 0.354 |
| 70 | 16.883 | 34.641 | 25.267 | 0.385 |
| 80 | 16.032 | 34.679 | 25.494 | 0.412 |
| 90 | 15.149 | 34.701 | 25.710 | 0.435 |
| 100 | 14.044 | 34.771 | 26.001 | 0.457 |
| 110 | 13.384 | 34.783 | 26.147 | 0.477 |
| 120 | 13.116 | 34.792 | 26.209 | 0.495 |
| 130 | 12.718 | 34.791 | 26.288 | 0.513 |
| 140 | 12.280 | 34.782 | 26.367 | 0.530 |
| 150 | 12.085 | 34.777 | 26.400 | 0.547 |
| 160 | 11.780 | 34.764 | 26.448 | 0.564 |
| 170 | 11.677 | 34.756 | 26.462 | 0.580 |
| 180 | 11.562 | 34.756 | 26.483 | 0.596 |
| 190 | 11.434 | 34.752 | 26.503 | 0.611 |
| 200 | 11.342 | 34.748 | 26.517 | 0.627 |
| 250 | 10.645 | 34.720 | 26.621 | 0.702 |
| 300 | 10.001 | 34.684 | 26.705 | 0.774 |
| 350 | 9.360 | 34.645 | 26.782 | 0.843 |
| 400 | 8.889 | 34.621 | 26.839 | 0.908 |
| 450 | 8.153 | 34.589 | 26.929 | 0.970 |
| 500 | 7.724 | 34.567 | 26.975 | 1.029 |
| 550 | 7.060 | 34.562 | 27.066 | 1.084 |
| 600 | 6.592 | 34.555 | 27.124 | 1.137 |
| 650 | 6.254 | 34.550 | 27.164 | 1.187 |
| 700 | 5.851 | 34.546 | 27.213 | 1.236 |
| 750 | 5.412 | 34.548 | 27.268 | 1.281 |
| 800 | 5.089 | 34.550 | 27.308 | 1.325 |
| 900 | 4.813 | 34.553 | 27.342 | 1.409 |
| 1000 | 4.300 | 34.562 | 27.406 | 1.488 |
| 1500 | 3.034 | 34.599 | 27.562 | 1.838 |
| 2000 | 2.068 | 34.640 | 27.678 | 2.125 |
| 2500 | 1.687 | 34.661 | 27.725 | 2.369 |
| 3000 | 1.513 | 34.670 | 27.744 | 2.604 |
| 3207 | 1.420 | 34.674 | 27.754 | 2.700 |

CAST EP3-89-DI -002 DATE 25 OCT 89 TIME 0821 GMT
LAT 10 00.0N LONG 109 18.8W

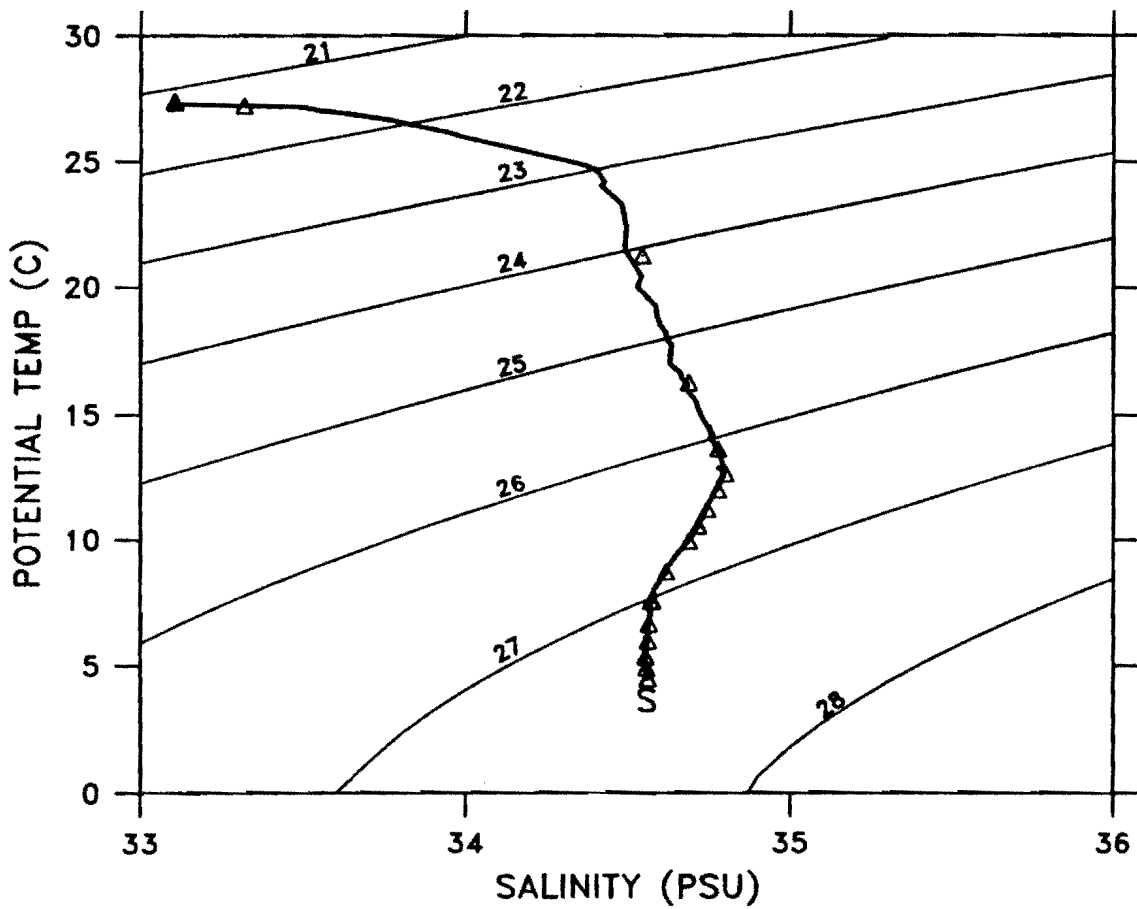


CAST EP3-89-D1-002 DATE 25 OCT 89 TIME 0621 GMT
 LAT 10 00.0N LONG 109 18.8W WEATHER 1 SEA STATE 3
 BAROMETER 12 WIND DIR 070 T SPD 10 KT VISIBILITY 0
 CLOUD X AMOUNT 1 DRY 26. WET 24.3 DEPTH 3271 M

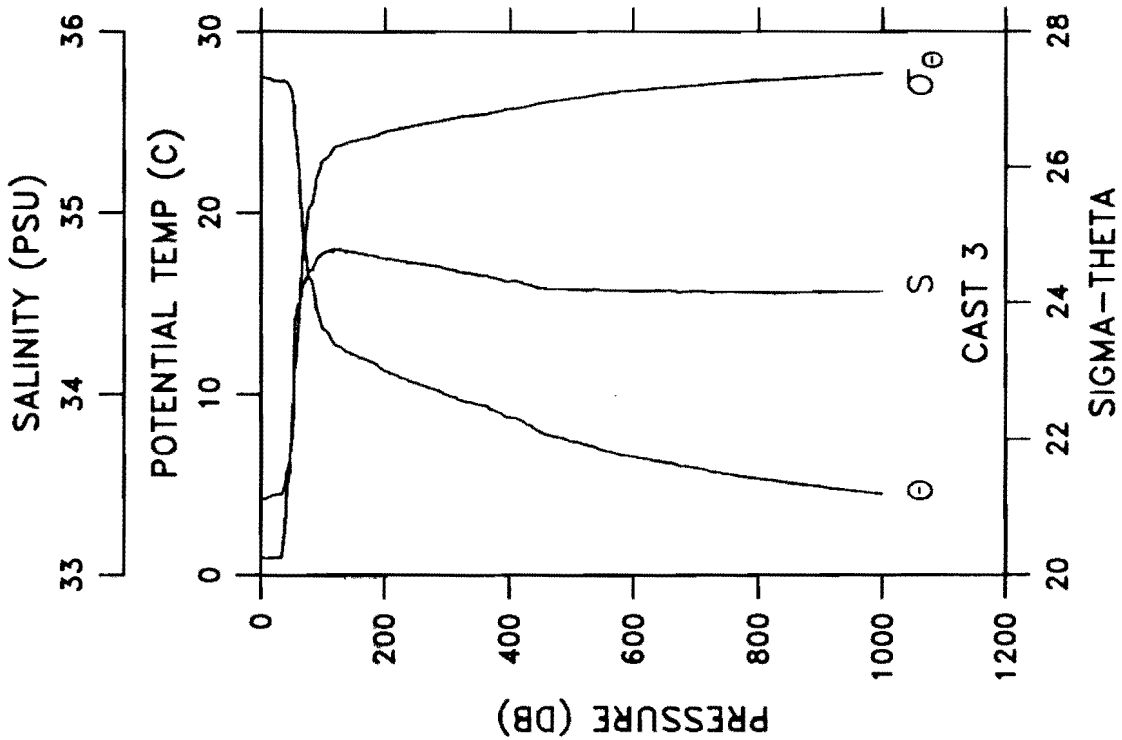


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SKG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.356 | 32.970 | 21.079 | 0.000 |
| 10 | 27.347 | 32.969 | 21.081 | 0.067 |
| 20 | 27.266 | 32.974 | 21.110 | 0.134 |
| 30 | 27.061 | 33.478 | 21.554 | 0.199 |
| 40 | 25.595 | 33.997 | 22.403 | 0.257 |
| 50 | 22.235 | 34.407 | 23.703 | 0.307 |
| 60 | 17.787 | 34.589 | 25.011 | 0.343 |
| 70 | 16.277 | 34.666 | 25.428 | 0.370 |
| 80 | 14.942 | 34.730 | 25.777 | 0.394 |
| 90 | 13.825 | 34.768 | 26.045 | 0.415 |
| 100 | 13.429 | 34.780 | 26.136 | 0.434 |
| 110 | 13.237 | 34.781 | 26.176 | 0.453 |
| 120 | 12.921 | 34.787 | 26.244 | 0.471 |
| 130 | 12.474 | 34.781 | 26.328 | 0.489 |
| 140 | 12.184 | 34.774 | 26.379 | 0.506 |
| 150 | 11.989 | 34.767 | 26.411 | 0.522 |
| 160 | 11.723 | 34.759 | 26.455 | 0.539 |
| 170 | 11.556 | 34.752 | 26.481 | 0.555 |
| 180 | 11.414 | 34.747 | 26.503 | 0.570 |
| 190 | 11.288 | 34.742 | 26.523 | 0.586 |
| 200 | 11.278 | 34.742 | 26.525 | 0.601 |
| 250 | 10.738 | 34.720 | 26.605 | 0.677 |
| 300 | 10.207 | 34.690 | 26.675 | 0.750 |
| 350 | 9.174 | 34.630 | 26.801 | 0.819 |
| 400 | 8.635 | 34.603 | 26.865 | 0.883 |
| 401 | 8.631 | 34.603 | 26.866 | 0.884 |

CAST EP3-89-DI -003 DATE 26 OCT 89 TIME 0131 GMT
LAT 09 01.1N LONG 109 59.9W

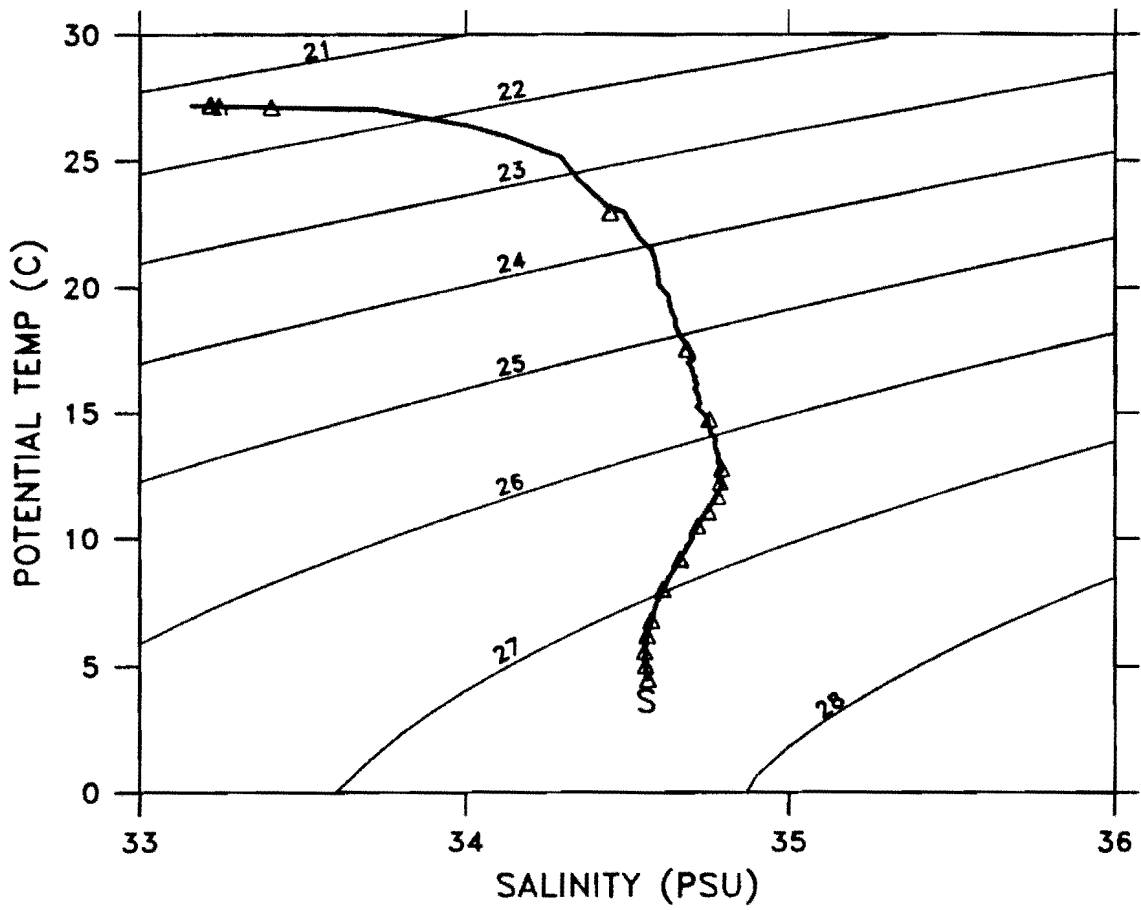


CAST EP3-89-D1 -003 DATE 26 OCT 89 TIME 0131 GMT
 LAT 09 01.1N LONG 109 59.9W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 040 T SPD 11 KT VISIBILITY 9
 CLOUD 6 AMOUNT 3 DRY 26.7 WET 24.0 DEPTH 3901 M

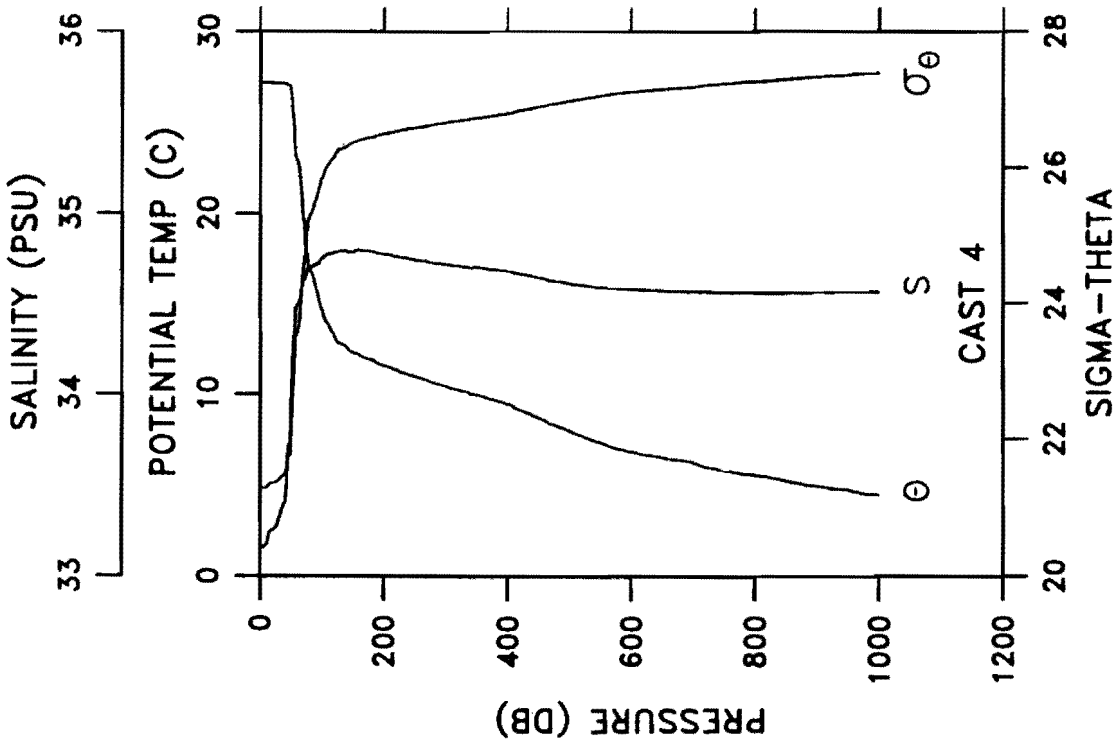


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.486 | 33.095 | 21.131 | 0.000 |
| 10 | 27.422 | 33.093 | 21.150 | 0.066 |
| 20 | 27.309 | 33.097 | 21.189 | 0.133 |
| 30 | 27.284 | 33.098 | 21.197 | 0.199 |
| 40 | 27.243 | 33.343 | 21.395 | 0.264 |
| 50 | 26.481 | 33.825 | 21.999 | 0.325 |
| 60 | 22.595 | 34.493 | 23.666 | 0.375 |
| 70 | 18.207 | 34.616 | 24.928 | 0.410 |
| 80 | 16.284 | 34.678 | 25.435 | 0.437 |
| 90 | 14.574 | 34.743 | 25.867 | 0.461 |
| 100 | 13.529 | 34.774 | 26.111 | 0.481 |
| 110 | 13.200 | 34.787 | 26.188 | 0.500 |
| 120 | 12.629 | 34.793 | 26.307 | 0.518 |
| 130 | 12.527 | 34.793 | 26.327 | 0.535 |
| 140 | 12.271 | 34.784 | 26.370 | 0.552 |
| 150 | 12.146 | 34.780 | 26.391 | 0.569 |
| 160 | 11.978 | 34.772 | 26.417 | 0.586 |
| 170 | 11.879 | 34.767 | 26.431 | 0.602 |
| 180 | 11.743 | 34.761 | 26.453 | 0.618 |
| 190 | 11.530 | 34.753 | 26.486 | 0.634 |
| 200 | 11.294 | 34.744 | 26.523 | 0.650 |
| 250 | 10.643 | 34.719 | 26.621 | 0.725 |
| 300 | 9.980 | 34.688 | 26.712 | 0.797 |
| 350 | 9.442 | 34.653 | 26.775 | 0.865 |
| 400 | 8.715 | 34.617 | 26.864 | 0.930 |
| 450 | 7.946 | 34.580 | 26.953 | 0.991 |
| 500 | 7.409 | 34.571 | 27.023 | 1.048 |
| 550 | 6.942 | 34.570 | 27.089 | 1.103 |
| 600 | 6.587 | 34.565 | 27.132 | 1.155 |
| 650 | 6.247 | 34.566 | 27.178 | 1.204 |
| 700 | 5.937 | 34.562 | 27.215 | 1.252 |
| 750 | 5.581 | 34.558 | 27.256 | 1.299 |
| 800 | 5.345 | 34.556 | 27.283 | 1.344 |
| 900 | 4.918 | 34.556 | 27.333 | 1.430 |
| 1000 | 4.493 | 34.562 | 27.385 | 1.511 |
| 1003 | 4.488 | 34.562 | 27.386 | 1.514 |

CAST EP3-89-DI -004 DATE 26 OCT 89 TIME 0917 GMT
LAT 08 00.6N LONG 109 59.8W

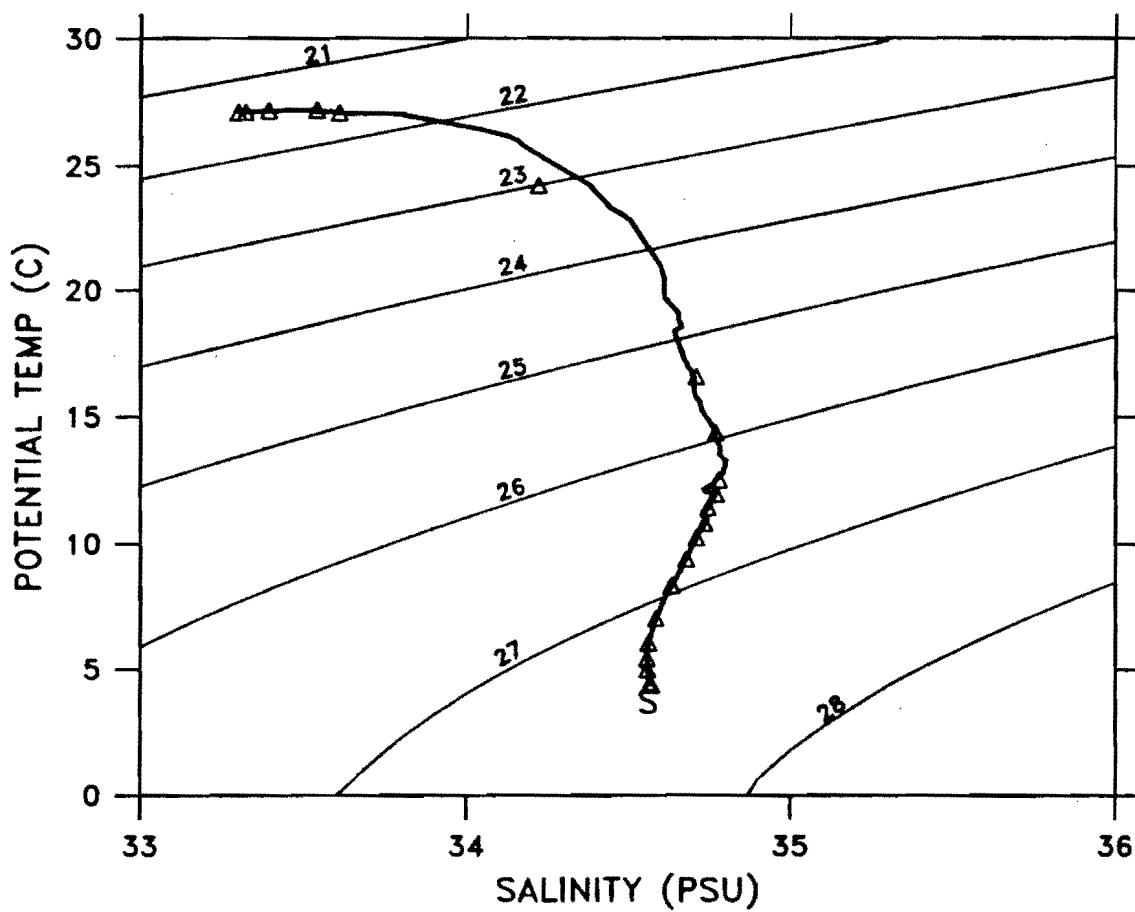


CAST EP3-89-DI -004 DATE 26 OCT 89 TIME 0917 GMT
 LAT 08 00.6N LONG 109 59.8W WEATHER 1 SEA STATE 4
 BAROMETER 09 WIND DIR 030 T SPD 18 KT VISIBILITY 7
 CLOUD 8 AMOUNT 3 DRY 26.2 WET 24.4 DEPTH 3610 M

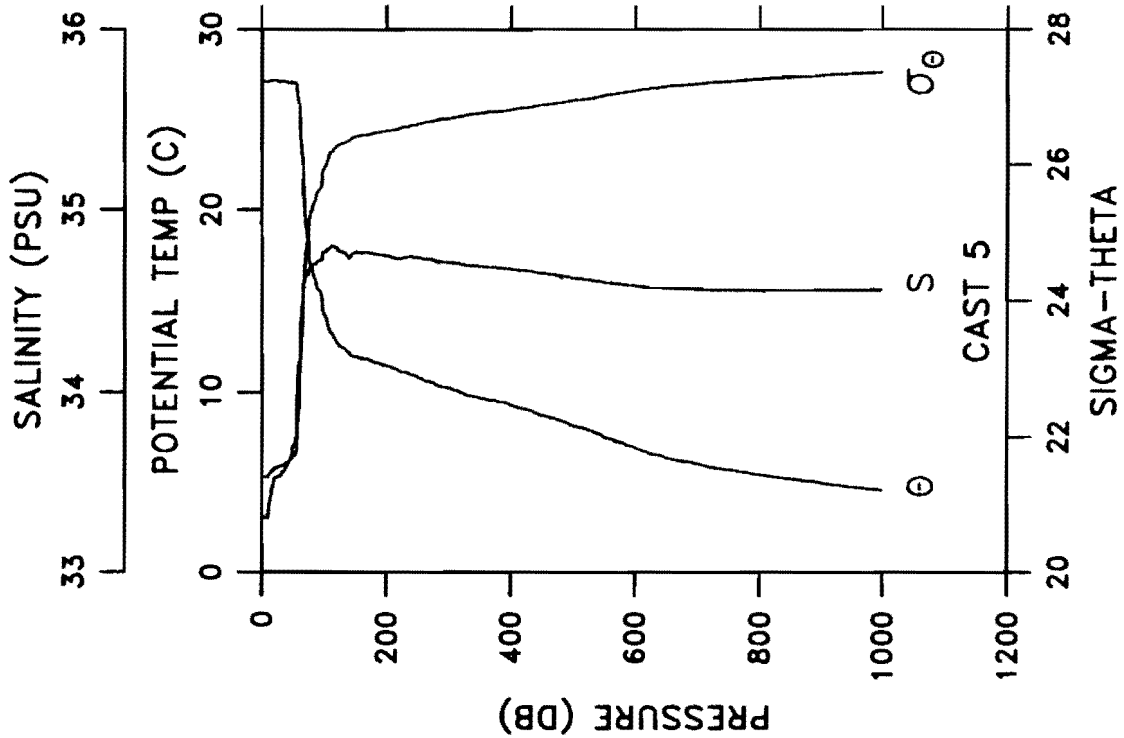


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.160 | 33.160 | 21.284 | 0.000 |
| 10 | 27.167 | 33.175 | 21.293 | 0.065 |
| 20 | 27.137 | 33.253 | 21.362 | 0.129 |
| 30 | 27.138 | 33.317 | 21.409 | 0.194 |
| 40 | 27.107 | 33.408 | 21.487 | 0.257 |
| 50 | 26.402 | 34.003 | 22.158 | 0.318 |
| 60 | 22.877 | 34.495 | 23.587 | 0.366 |
| 70 | 19.532 | 34.629 | 24.602 | 0.405 |
| 80 | 16.788 | 34.700 | 25.335 | 0.434 |
| 90 | 15.799 | 34.716 | 25.576 | 0.460 |
| 100 | 14.637 | 34.747 | 25.856 | 0.483 |
| 110 | 13.774 | 34.771 | 26.058 | 0.503 |
| 120 | 13.138 | 34.784 | 26.199 | 0.522 |
| 130 | 12.780 | 34.788 | 26.273 | 0.540 |
| 140 | 12.576 | 34.784 | 26.311 | 0.558 |
| 150 | 12.268 | 34.784 | 26.370 | 0.575 |
| 160 | 12.135 | 34.795 | 26.404 | 0.592 |
| 170 | 11.982 | 34.791 | 26.431 | 0.608 |
| 180 | 11.898 | 34.787 | 26.443 | 0.624 |
| 190 | 11.703 | 34.775 | 26.471 | 0.640 |
| 200 | 11.562 | 34.771 | 26.495 | 0.656 |
| 250 | 10.955 | 34.739 | 26.581 | 0.734 |
| 300 | 10.446 | 34.716 | 26.654 | 0.807 |
| 350 | 9.967 | 34.701 | 26.724 | 0.878 |
| 400 | 9.479 | 34.678 | 26.789 | 0.947 |
| 450 | 8.703 | 34.644 | 26.886 | 1.011 |
| 500 | 7.983 | 34.612 | 26.972 | 1.071 |
| 550 | 7.342 | 34.590 | 27.048 | 1.128 |
| 600 | 6.822 | 34.578 | 27.111 | 1.181 |
| 650 | 6.542 | 34.571 | 27.143 | 1.233 |
| 700 | 6.246 | 34.563 | 27.176 | 1.282 |
| 750 | 5.825 | 34.560 | 27.227 | 1.330 |
| 800 | 5.552 | 34.557 | 27.259 | 1.376 |
| 900 | 4.950 | 34.559 | 27.331 | 1.464 |
| 1000 | 4.490 | 34.565 | 27.388 | 1.546 |
| 1002 | 4.483 | 34.563 | 27.388 | 1.547 |

CAST EP3-89-DI -005 DATE 26 OCT 89 TIME 1539 GMT
LAT 06 59.8N LONG 110 00.5W

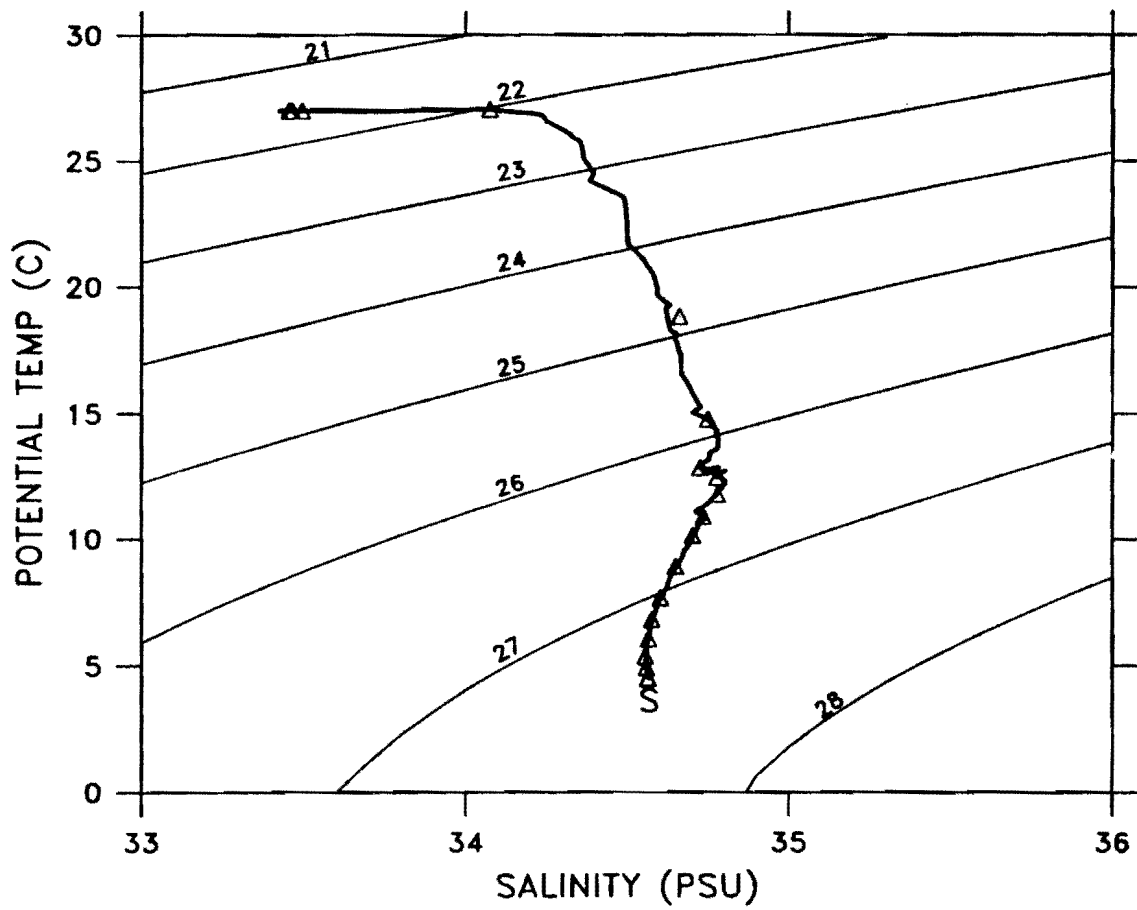


CAST EP3-89-D1 -005 DATE 26 OCT 89 TIME 1539 GMT
 LAT 06 59.8N LONG 110 00.5W WEATHER 5 SEA STATE 4
 BAROMETER 13 WIND DIR 040 T SPD 10 KT VISIBILITY 7
 CLOUD 1 AMOUNT 8 DRY 25.0 WET 24.5 DEPTH 3743 M

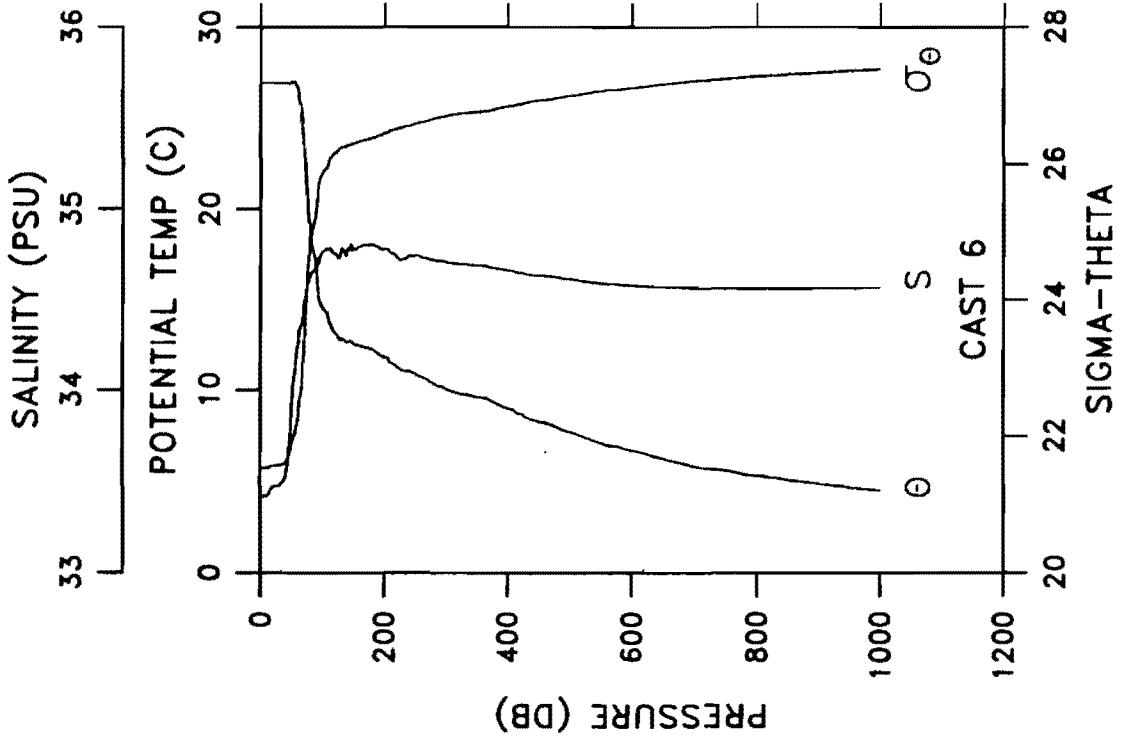


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.112 | 33.303 | 21.407 | 0.000 |
| 10 | 27.109 | 33.301 | 21.406 | 0.064 |
| 20 | 27.198 | 33.516 | 21.540 | 0.127 |
| 30 | 27.140 | 33.539 | 21.575 | 0.189 |
| 40 | 27.112 | 33.589 | 21.622 | 0.252 |
| 50 | 27.069 | 33.700 | 21.719 | 0.313 |
| 60 | 25.828 | 34.172 | 22.464 | 0.372 |
| 70 | 19.272 | 34.639 | 24.677 | 0.415 |
| 80 | 16.798 | 34.692 | 25.327 | 0.444 |
| 90 | 15.842 | 34.717 | 25.612 | 0.469 |
| 100 | 14.257 | 34.767 | 25.954 | 0.492 |
| 110 | 13.286 | 34.799 | 26.180 | 0.512 |
| 120 | 12.763 | 34.793 | 26.280 | 0.530 |
| 130 | 12.463 | 34.764 | 26.317 | 0.547 |
| 140 | 12.151 | 34.731 | 26.352 | 0.565 |
| 150 | 11.964 | 34.765 | 26.414 | 0.581 |
| 160 | 11.840 | 34.762 | 26.435 | 0.598 |
| 170 | 11.816 | 34.764 | 26.441 | 0.614 |
| 180 | 11.639 | 34.756 | 26.468 | 0.630 |
| 190 | 11.539 | 34.752 | 26.484 | 0.646 |
| 200 | 11.448 | 34.747 | 26.497 | 0.662 |
| 250 | 10.878 | 34.736 | 26.592 | 0.739 |
| 300 | 10.243 | 34.710 | 26.684 | 0.811 |
| 350 | 9.697 | 34.689 | 26.761 | 0.880 |
| 400 | 9.317 | 34.675 | 26.813 | 0.947 |
| 450 | 8.727 | 34.651 | 26.889 | 1.011 |
| 500 | 8.159 | 34.625 | 26.956 | 1.072 |
| 550 | 7.538 | 34.603 | 27.030 | 1.130 |
| 600 | 6.944 | 34.583 | 27.099 | 1.184 |
| 650 | 6.389 | 34.570 | 27.163 | 1.235 |
| 700 | 6.057 | 34.565 | 27.202 | 1.284 |
| 750 | 5.725 | 34.560 | 27.240 | 1.331 |
| 800 | 5.436 | 34.558 | 27.274 | 1.377 |
| 900 | 4.994 | 34.559 | 27.327 | 1.464 |
| 1000 | 4.588 | 34.562 | 27.375 | 1.546 |
| 1002 | 4.585 | 34.562 | 27.375 | 1.548 |

CAST EP3-89-DI -006 DATE 26 OCT 89 TIME 2155 GMT
LAT 05 59.8N LONG 110 00.4W

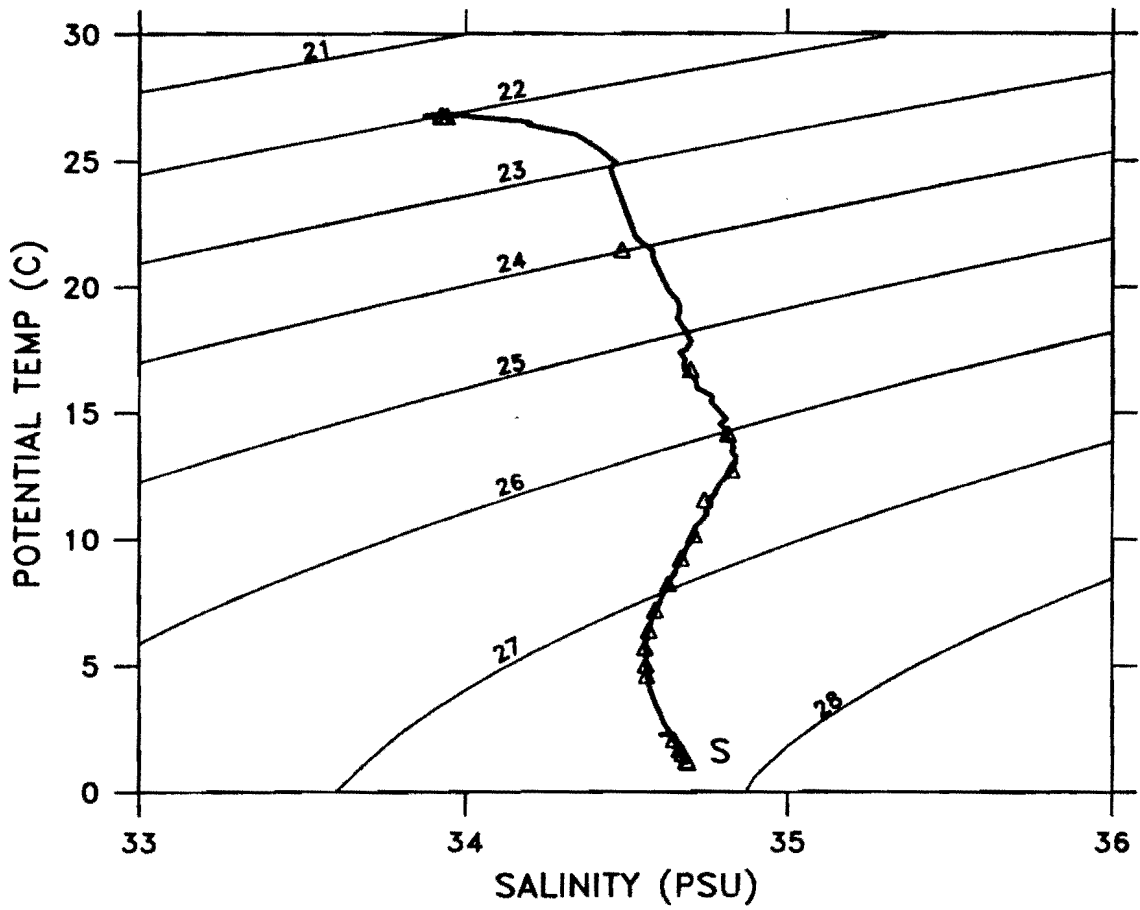


CAST EP3-89-DI -006 DATE 26 OCT 89 TIME 2155 GMT
 LAT 05 59.8N LONG 110 00.4W WEATHER 2 SEA STATE 3
 BAROMETER 08 WIND DIR 190 T SPD 20 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 25.0 WET 23.7 DEPTH 3696 M

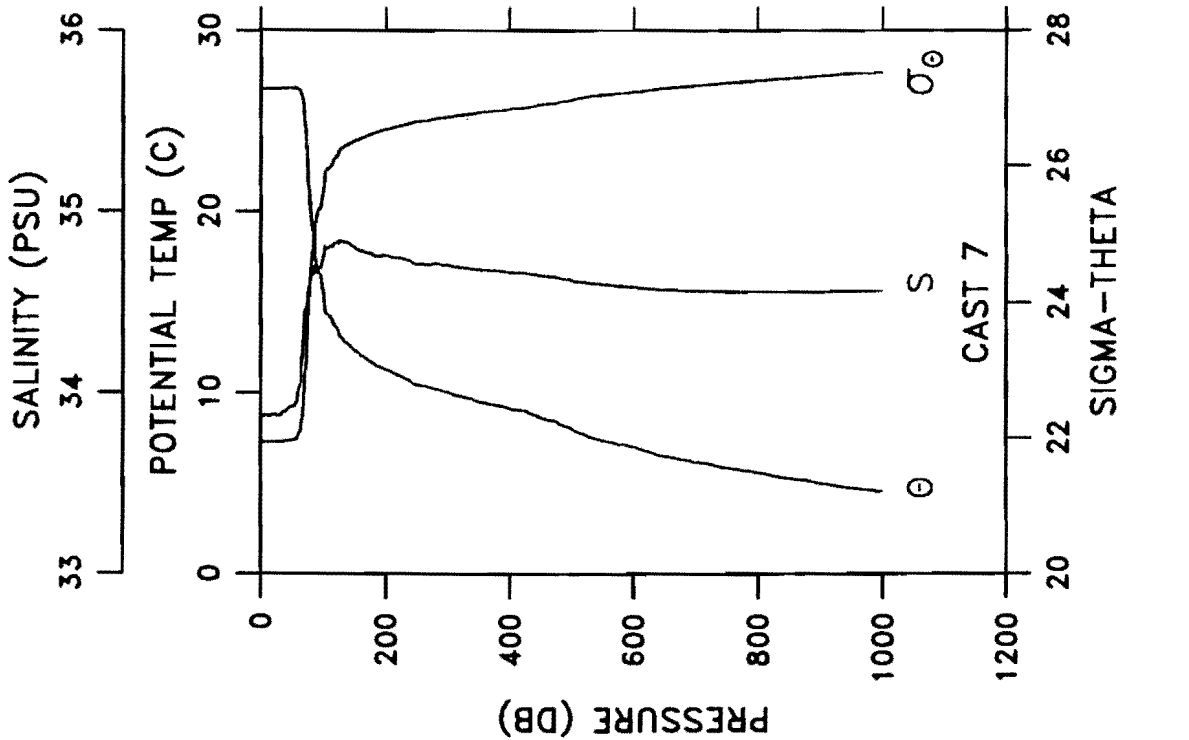


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.977 | 33.421 | 21.538 | 0.000 |
| 10 | 26.976 | 33.428 | 21.544 | 0.063 |
| 20 | 26.992 | 33.476 | 21.575 | 0.125 |
| 30 | 26.970 | 33.482 | 21.586 | 0.187 |
| 40 | 26.980 | 33.522 | 21.613 | 0.249 |
| 50 | 27.026 | 33.916 | 21.896 | 0.310 |
| 60 | 26.689 | 34.244 | 22.249 | 0.368 |
| 70 | 23.575 | 34.489 | 23.381 | 0.420 |
| 80 | 18.722 | 34.627 | 24.808 | 0.457 |
| 90 | 16.565 | 34.671 | 25.365 | 0.486 |
| 100 | 14.597 | 34.764 | 25.678 | 0.509 |
| 110 | 13.843 | 34.783 | 26.053 | 0.530 |
| 120 | 13.162 | 34.754 | 26.170 | 0.549 |
| 130 | 12.856 | 34.784 | 26.255 | 0.567 |
| 140 | 12.679 | 34.780 | 26.287 | 0.585 |
| 150 | 12.546 | 34.782 | 26.315 | 0.603 |
| 160 | 12.430 | 34.793 | 26.346 | 0.620 |
| 170 | 12.337 | 34.803 | 26.372 | 0.637 |
| 180 | 12.226 | 34.806 | 26.395 | 0.654 |
| 190 | 12.003 | 34.790 | 26.426 | 0.670 |
| 200 | 11.774 | 34.777 | 26.460 | 0.687 |
| 250 | 10.868 | 34.743 | 26.600 | 0.764 |
| 300 | 10.073 | 34.704 | 26.709 | 0.836 |
| 350 | 9.632 | 34.689 | 26.772 | 0.904 |
| 400 | 9.012 | 34.662 | 26.852 | 0.970 |
| 450 | 8.330 | 34.632 | 26.935 | 1.032 |
| 500 | 7.748 | 34.614 | 27.008 | 1.090 |
| 550 | 7.152 | 34.591 | 27.076 | 1.145 |
| 600 | 6.756 | 34.580 | 27.122 | 1.198 |
| 650 | 6.315 | 34.572 | 27.174 | 1.248 |
| 700 | 5.880 | 34.565 | 27.224 | 1.296 |
| 750 | 5.645 | 34.561 | 27.251 | 1.342 |
| 800 | 5.344 | 34.561 | 27.287 | 1.387 |
| 850 | 4.906 | 34.562 | 27.339 | 1.472 |
| 900 | 4.496 | 34.568 | 27.389 | 1.554 |
| 1000 | 4.484 | 34.568 | 27.391 | 1.557 |

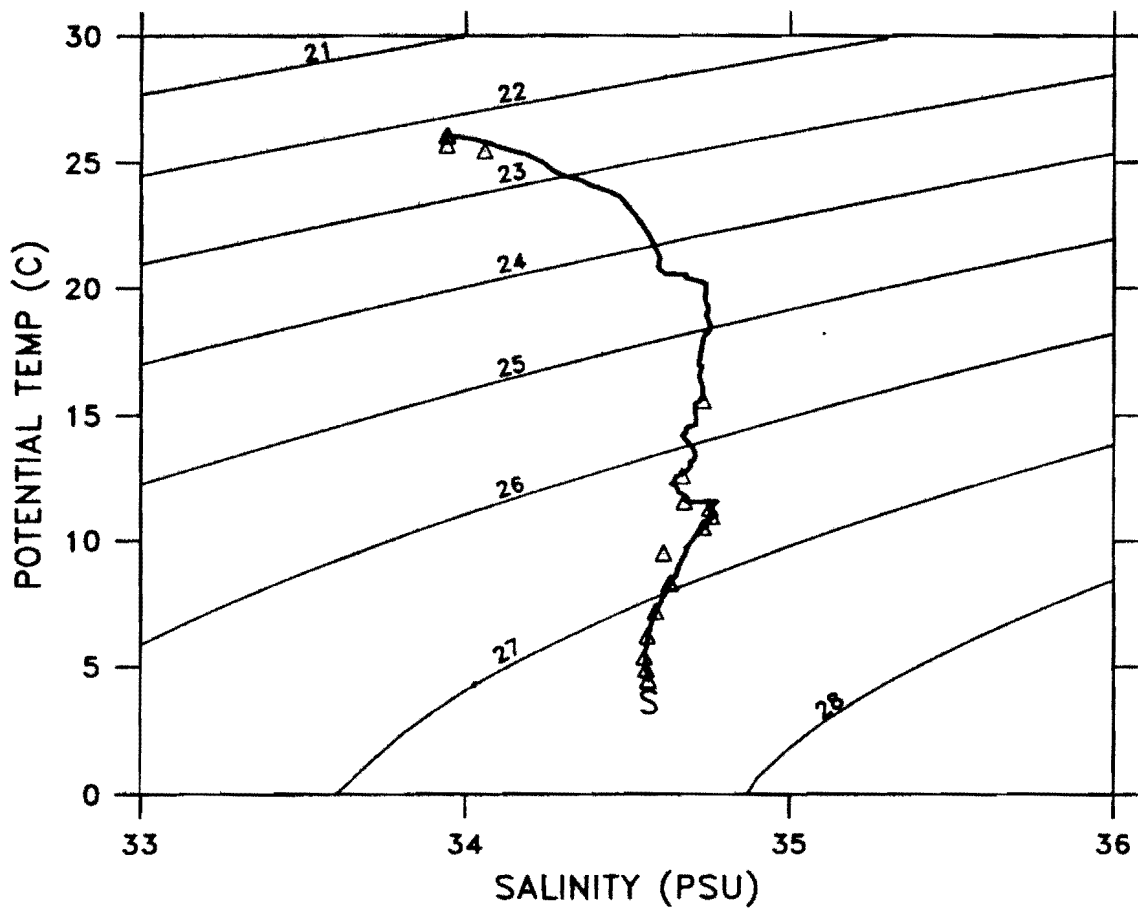
CAST EP3-89-DI -007 DATE 27 OCT 89 TIME 0505 GMT
LAT 04 57.6N LONG 110 01.5W



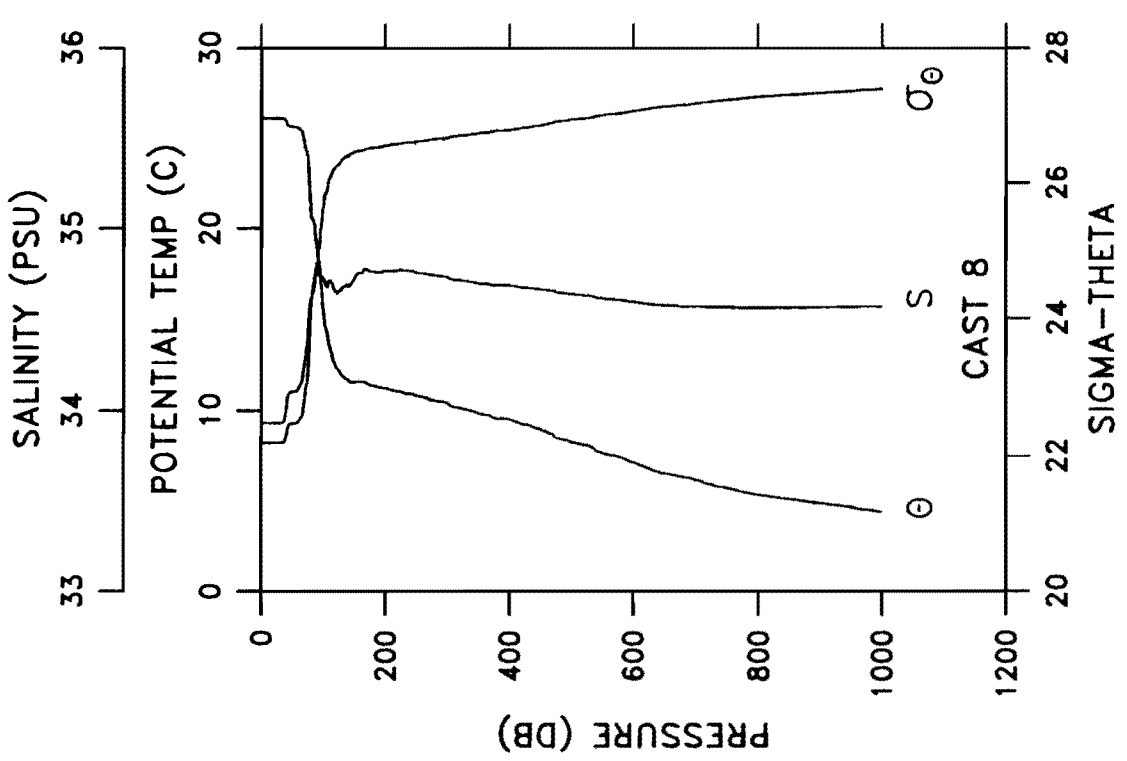
CAST EP3-89-D1 -007 DATE 27 OCT 89 TIME 0505 GMT
 LAT 04 57.6N LONG 110 01.5W WEATHER 2 SEA STATE 4
 BAROMETER 12 WIND DIR 175 T SPD 21 KT VISIBILITY 7
 CLOUD 7 AMOUNT 7 DRY 24.7 WET 22.9 DEPTH 3880 M



CAST EP3-89-DI -008 DATE 27 OCT 89 TIME 1257 GMT
LAT 04 00.1N LONG 109 59.9W

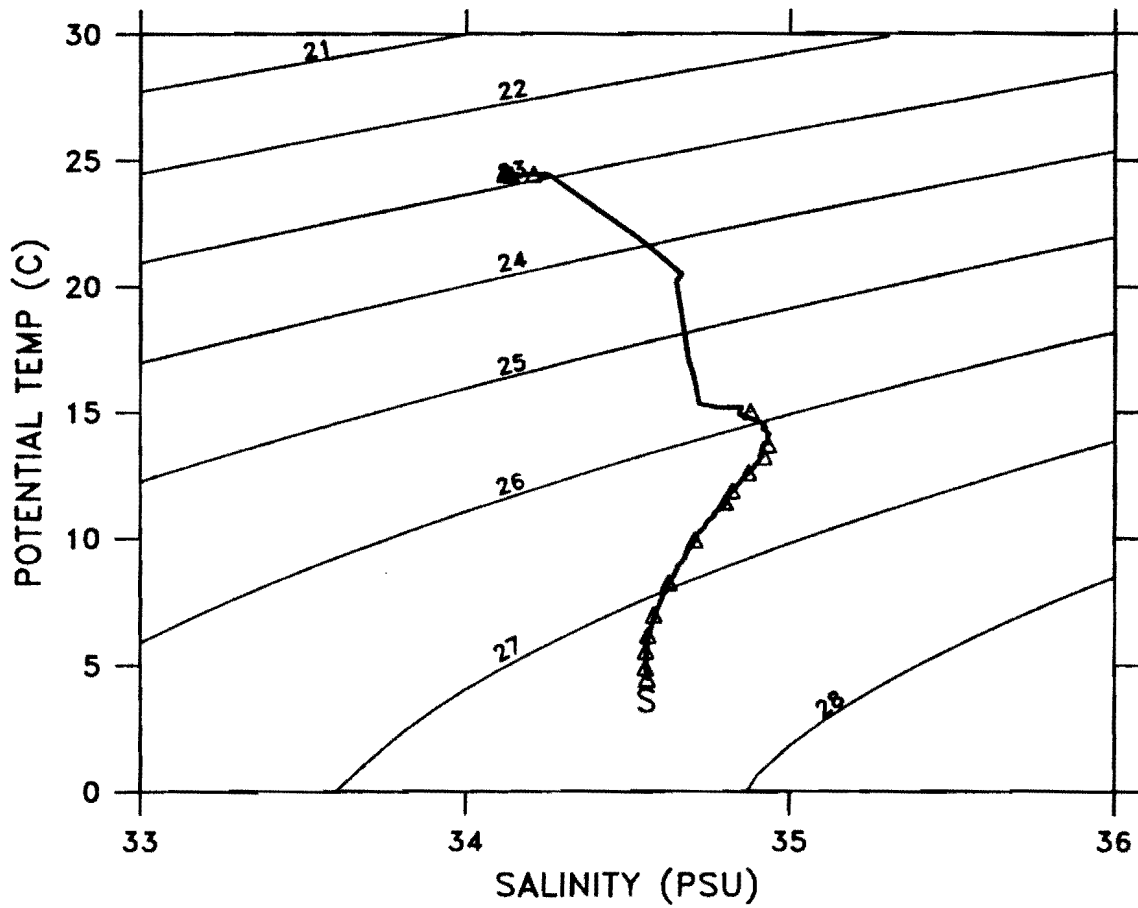


CAST EP3-89-D1 -008 DATE 27 OCT 89 TIME 1257 GMT
 LAT 04 00.1N LONG 109 59.9W WEATHER 2 SEA STATE 4
 BAROMETER 11 WIND DIR 165 T SPD 22 KT VISIBILITY 7
 CLOUD 7 AMOUNT 7 DRY 23.6 WET 21.7 DEPTH 3881 M

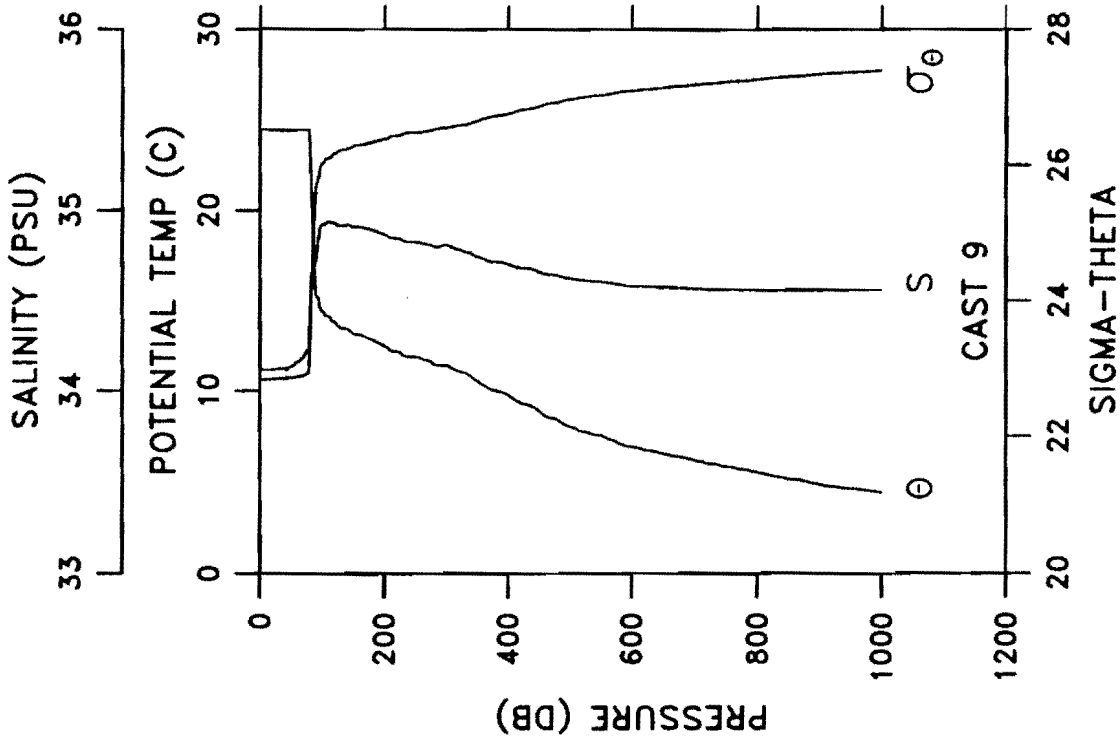


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.100 | 33.932 | 22.198 | 0.000 |
| 10 | 26.098 | 33.931 | 22.199 | 0.056 |
| 20 | 26.099 | 33.931 | 22.199 | 0.113 |
| 30 | 26.095 | 33.932 | 22.200 | 0.169 |
| 40 | 25.986 | 34.000 | 22.292 | 0.225 |
| 50 | 25.612 | 34.101 | 22.477 | 0.279 |
| 60 | 25.542 | 34.119 | 22.512 | 0.333 |
| 70 | 24.866 | 34.250 | 22.817 | 0.385 |
| 80 | 21.195 | 34.603 | 24.140 | 0.432 |
| 90 | 19.142 | 34.751 | 24.795 | 0.467 |
| 100 | 15.615 | 34.731 | 25.629 | 0.495 |
| 110 | 13.546 | 34.709 | 26.058 | 0.517 |
| 120 | 12.397 | 34.648 | 26.239 | 0.535 |
| 130 | 11.919 | 34.661 | 26.341 | 0.553 |
| 140 | 11.681 | 34.680 | 26.401 | 0.570 |
| 150 | 11.529 | 34.713 | 26.456 | 0.586 |
| 160 | 11.562 | 34.751 | 26.479 | 0.602 |
| 170 | 11.499 | 34.772 | 26.507 | 0.617 |
| 180 | 11.356 | 34.760 | 26.524 | 0.633 |
| 190 | 11.256 | 34.753 | 26.537 | 0.648 |
| 200 | 11.205 | 34.763 | 26.554 | 0.664 |
| 250 | 10.830 | 34.754 | 26.615 | 0.738 |
| 300 | 10.412 | 34.731 | 26.671 | 0.811 |
| 350 | 9.860 | 34.694 | 26.737 | 0.881 |
| 400 | 9.562 | 34.684 | 26.779 | 0.949 |
| 450 | 9.025 | 34.664 | 26.851 | 1.015 |
| 500 | 8.291 | 34.636 | 26.944 | 1.076 |
| 550 | 7.733 | 34.612 | 27.009 | 1.135 |
| 600 | 7.179 | 34.593 | 27.073 | 1.191 |
| 650 | 6.580 | 34.574 | 27.141 | 1.243 |
| 700 | 6.201 | 34.569 | 27.186 | 1.293 |
| 750 | 5.755 | 34.560 | 27.236 | 1.341 |
| 800 | 5.381 | 34.559 | 27.281 | 1.386 |
| 800 | 4.920 | 34.563 | 27.338 | 1.472 |
| 1000 | 4.447 | 34.568 | 27.395 | 1.553 |
| 1001 | 4.445 | 34.569 | 27.396 | 1.554 |

CAST EP3-89-DI -009 DATE 27 OCT 89 TIME 1923 GMT
LAT 03 00.3N LONG 109 59.7W

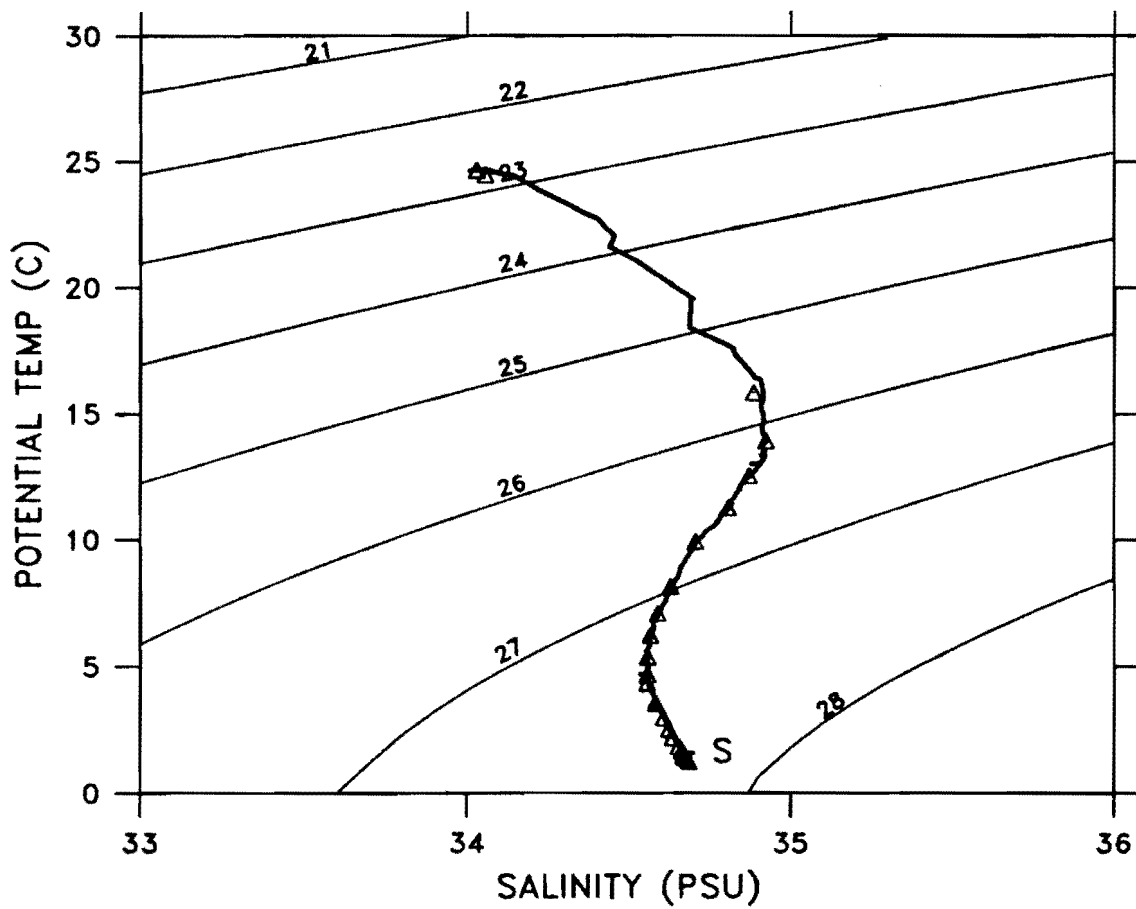


CAST EP3-89-DI -009 DATE 27 OCT 89 TIME 1923 GMT
 LAT 03 00.3N LONG 109 59.7W WEATHER 1 SEA STATE 4
 BAROMETER 13 WIND DIR 155 T SPD 20 KT VISIBILITY 7
 CLOUD 8 AMOUNT 5 DRY 24.0 WET 21.4 DEPTH 3887 M

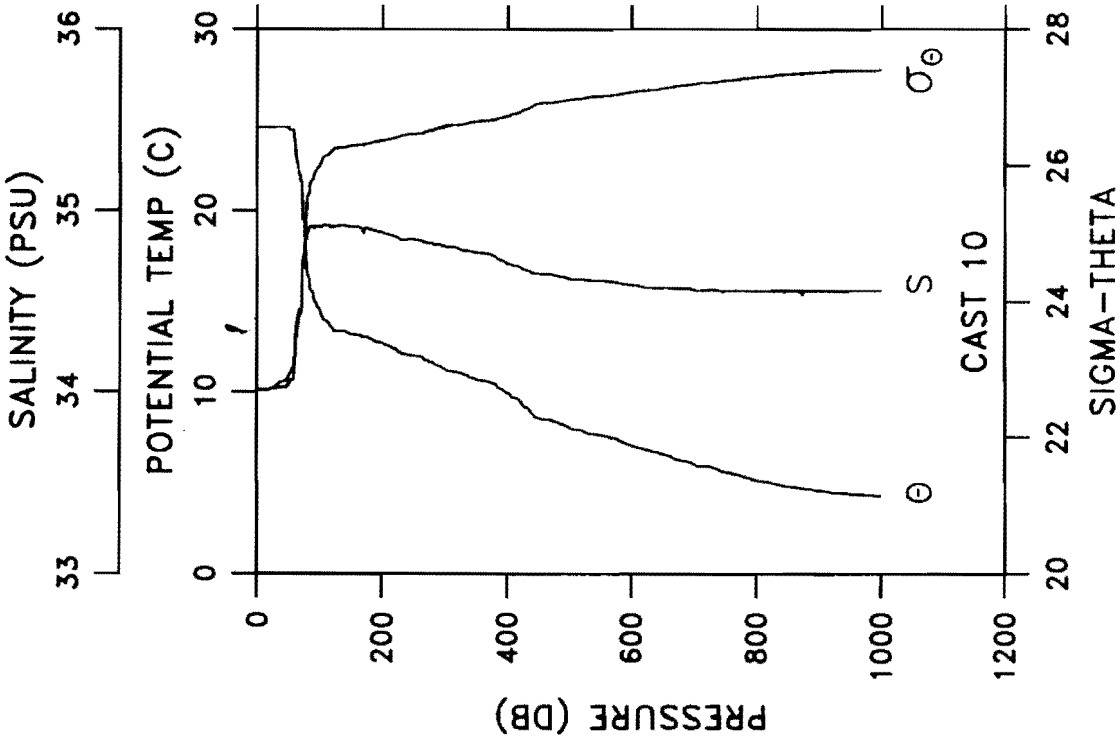


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.477 | 34.118 | 22.834 | 0.000 |
| 10 | 24.467 | 34.117 | 22.836 | 0.050 |
| 20 | 24.444 | 34.119 | 22.844 | 0.100 |
| 30 | 24.433 | 34.121 | 22.850 | 0.150 |
| 40 | 24.428 | 34.128 | 22.856 | 0.201 |
| 50 | 24.426 | 34.136 | 22.862 | 0.251 |
| 60 | 24.434 | 34.159 | 22.878 | 0.301 |
| 70 | 24.448 | 34.186 | 22.894 | 0.351 |
| 80 | 23.603 | 34.347 | 23.266 | 0.400 |
| 90 | 15.340 | 34.719 | 25.681 | 0.433 |
| 100 | 14.407 | 34.925 | 26.043 | 0.454 |
| 110 | 14.134 | 34.937 | 26.111 | 0.474 |
| 120 | 13.812 | 34.932 | 26.175 | 0.493 |
| 130 | 13.488 | 34.914 | 26.228 | 0.511 |
| 140 | 13.446 | 34.923 | 26.243 | 0.530 |
| 150 | 13.181 | 34.910 | 26.267 | 0.547 |
| 160 | 13.110 | 34.908 | 26.300 | 0.565 |
| 170 | 12.994 | 34.900 | 26.318 | 0.583 |
| 180 | 12.841 | 34.893 | 26.342 | 0.600 |
| 190 | 12.694 | 34.883 | 26.364 | 0.617 |
| 200 | 12.498 | 34.867 | 26.390 | 0.634 |
| 250 | 11.881 | 34.826 | 26.478 | 0.716 |
| 300 | 11.424 | 34.809 | 26.550 | 0.795 |
| 350 | 10.577 | 34.745 | 26.653 | 0.870 |
| 400 | 9.800 | 34.702 | 26.753 | 0.941 |
| 450 | 8.903 | 34.660 | 26.868 | 1.007 |
| 500 | 8.057 | 34.625 | 26.971 | 1.067 |
| 550 | 7.572 | 34.607 | 27.028 | 1.124 |
| 600 | 6.945 | 34.584 | 27.099 | 1.178 |
| 650 | 6.572 | 34.577 | 27.144 | 1.230 |
| 700 | 6.185 | 34.568 | 27.188 | 1.280 |
| 750 | 5.848 | 34.562 | 27.226 | 1.328 |
| 800 | 5.555 | 34.561 | 27.261 | 1.374 |
| 850 | 4.887 | 34.559 | 27.339 | 1.461 |
| 900 | 4.454 | 34.564 | 27.391 | 1.542 |
| 1000 | 4.454 | 34.564 | 27.391 | 1.542 |

CAST EP3-89-DI -010 DATE 28 OCT 89 TIME 0233 GMT
LAT 02 00.0N LONG 110 00.2W

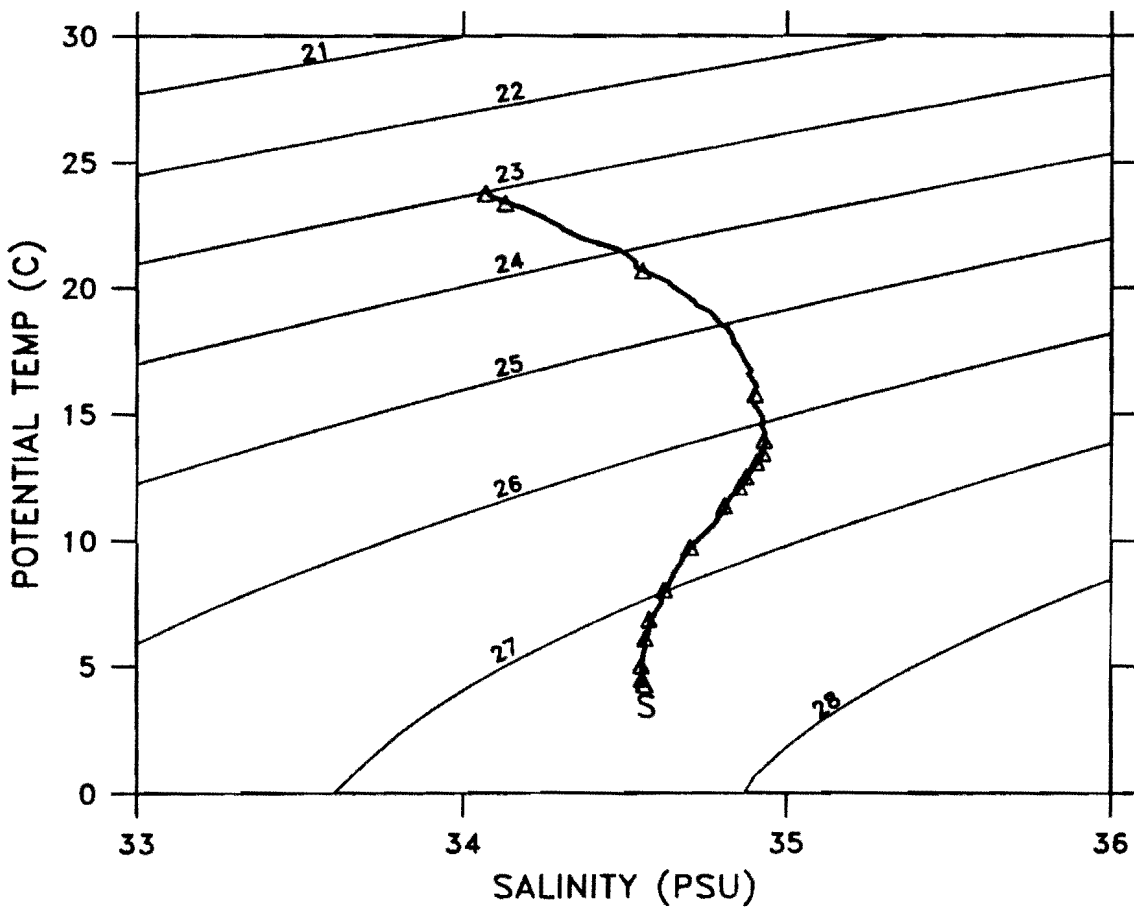


CAST EP3-89-DI -010 DATE 28 OCT 89 TIME 0233 GMT
 LAT 02 00.0N LONG 110 00.2W WEATHER 2 SEA STATE 4
 BAROMETER 13 WIND DIR 150 T SPD 16 KT VISIBILITY 6
 CLOUD 8 AMOUNT 5 DRY 22.5 WET 20.8 DEPTH 3722 M

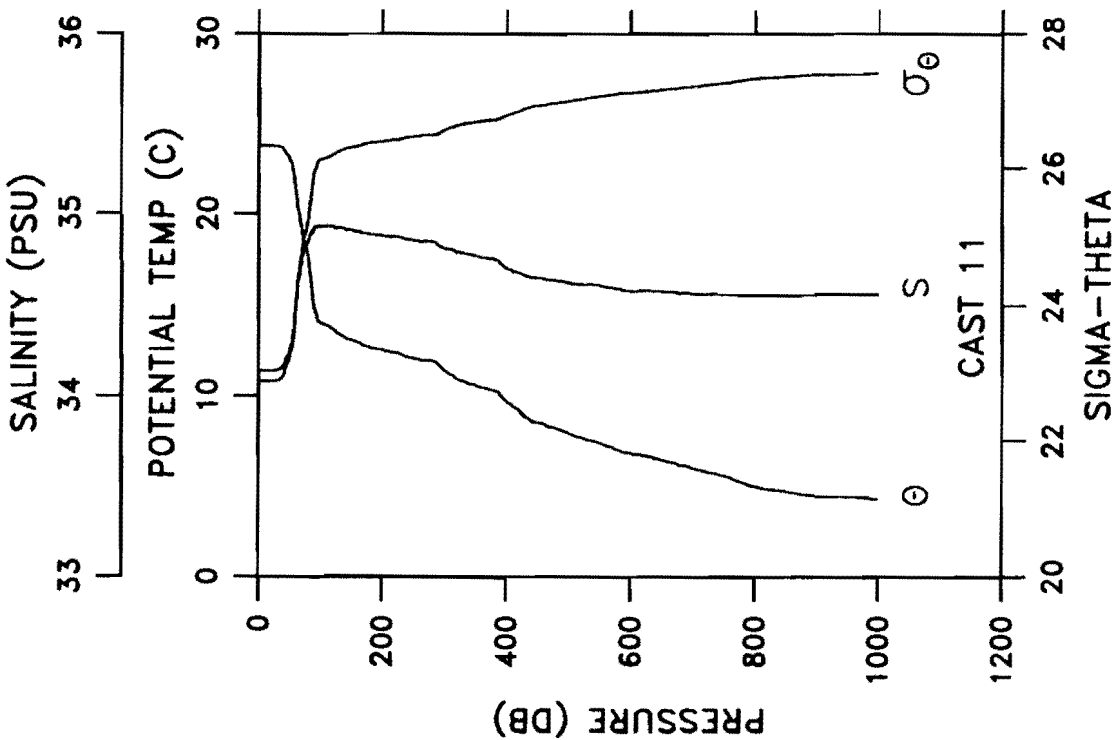


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.621 | 34.010 | 22.709 | 0.000 |
| 10 | 24.617 | 34.009 | 22.710 | 0.051 |
| 20 | 24.626 | 34.013 | 22.710 | 0.103 |
| 30 | 24.645 | 34.037 | 22.723 | 0.154 |
| 40 | 24.656 | 34.057 | 22.734 | 0.205 |
| 50 | 24.552 | 34.088 | 22.789 | 0.257 |
| 60 | 23.922 | 34.211 | 23.069 | 0.307 |
| 70 | 21.616 | 34.441 | 23.901 | 0.349 |
| 80 | 16.425 | 34.888 | 25.564 | 0.380 |
| 90 | 15.133 | 34.909 | 25.873 | 0.403 |
| 100 | 14.445 | 34.912 | 26.025 | 0.424 |
| 110 | 13.900 | 34.922 | 26.148 | 0.443 |
| 120 | 13.429 | 34.913 | 26.239 | 0.462 |
| 130 | 13.328 | 34.919 | 26.265 | 0.480 |
| 140 | 13.316 | 34.921 | 26.269 | 0.497 |
| 150 | 13.161 | 34.915 | 26.295 | 0.515 |
| 160 | 13.126 | 34.914 | 26.301 | 0.533 |
| 170 | 13.011 | 34.876 | 26.295 | 0.550 |
| 180 | 12.930 | 34.899 | 26.329 | 0.568 |
| 190 | 12.750 | 34.889 | 26.357 | 0.585 |
| 200 | 12.674 | 34.884 | 26.368 | 0.602 |
| 250 | 11.984 | 34.844 | 26.472 | 0.685 |
| 300 | 11.264 | 34.812 | 26.581 | 0.764 |
| 350 | 10.688 | 34.774 | 26.656 | 0.838 |
| 400 | 9.941 | 34.713 | 26.738 | 0.910 |
| 450 | 8.575 | 34.656 | 26.916 | 0.976 |
| 500 | 8.077 | 34.631 | 26.973 | 1.036 |
| 550 | 7.635 | 34.619 | 27.029 | 1.093 |
| 600 | 7.079 | 34.596 | 27.080 | 1.147 |
| 650 | 6.593 | 34.580 | 27.143 | 1.199 |
| 700 | 6.026 | 34.566 | 27.207 | 1.248 |
| 750 | 5.577 | 34.562 | 27.259 | 1.295 |
| 800 | 5.137 | 34.559 | 27.310 | 1.339 |
| 800 | 4.571 | 34.561 | 27.376 | 1.421 |
| 1000 | 4.271 | 34.564 | 27.411 | 1.499 |
| 1500 | 2.933 | 34.612 | 27.582 | 1.840 |
| 2000 | 2.208 | 34.640 | 27.667 | 2.121 |
| 2500 | 1.667 | 34.668 | 27.731 | 2.367 |
| 3000 | 1.423 | 34.678 | 27.757 | 2.598 |
| 3500 | 1.231 | 34.690 | 27.780 | 2.818 |
| 3528 | 1.226 | 34.689 | 27.780 | 2.830 |

CAST EP3-89-DI -011 DATE 28 OCT 89 TIME 0924 GMT
LAT 01 29.9N LONG 110 00.0W

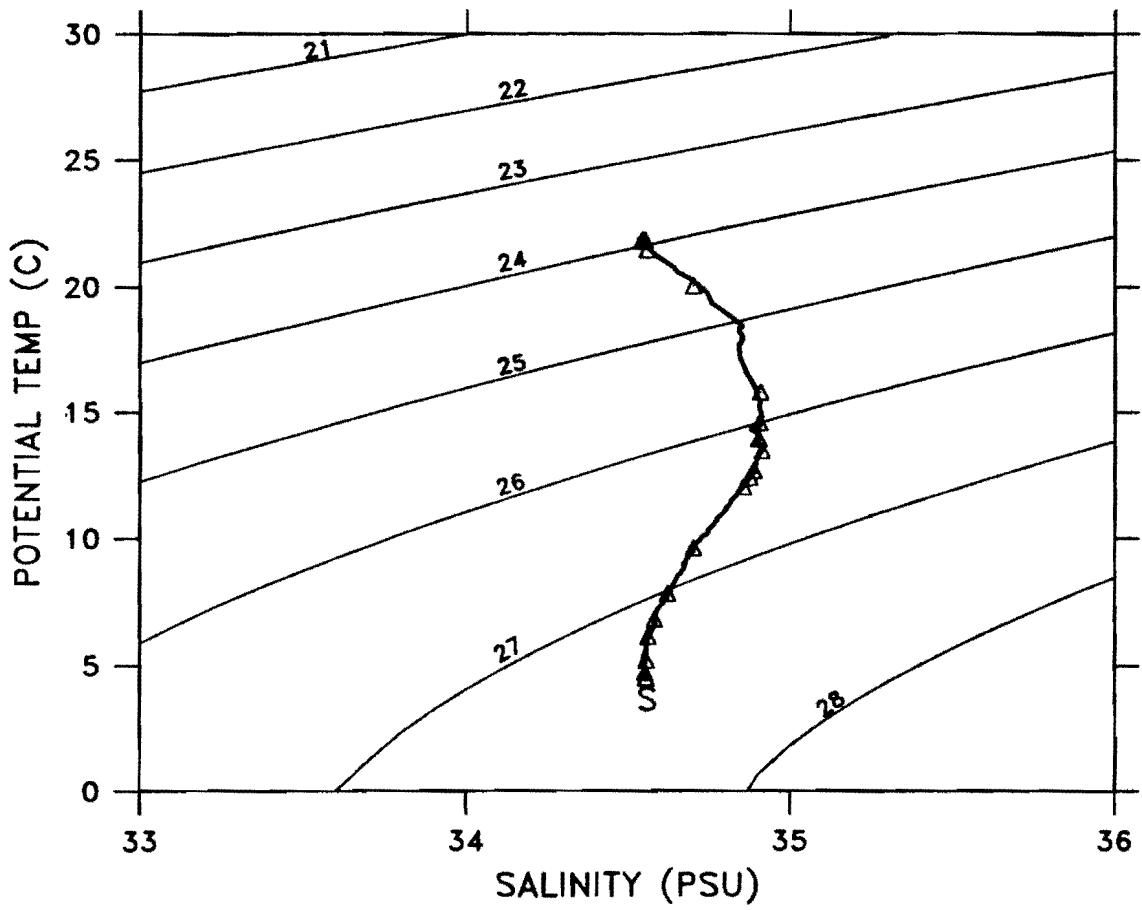


CAST EP3-89-D1-011 DATE 28 OCT 89 TIME 0924 GMT
 LAT 01 29.9N LONG 110 00.0W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 140 T SPD 10 KT VISIBILITY 7
 CLOUD X AMOUNT 2 DRY 21.6 WET 20.1 DEPTH 1581 M

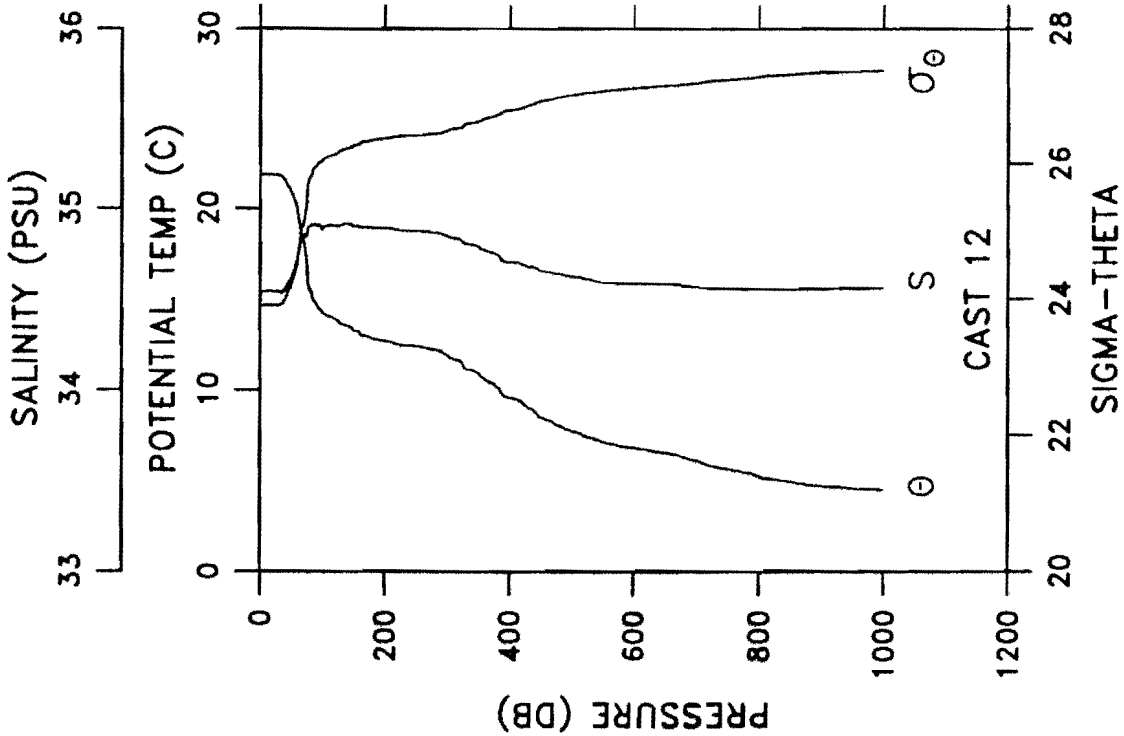


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.700 | 34.079 | 23.034 | 0.000 |
| 10 | 23.696 | 34.080 | 23.036 | 0.048 |
| 20 | 23.701 | 34.081 | 23.035 | 0.087 |
| 30 | 23.688 | 34.083 | 23.040 | 0.145 |
| 40 | 23.530 | 34.110 | 23.107 | 0.193 |
| 50 | 23.005 | 34.215 | 23.338 | 0.240 |
| 60 | 21.375 | 34.500 | 24.012 | 0.283 |
| 70 | 19.015 | 34.767 | 24.840 | 0.318 |
| 80 | 17.696 | 34.847 | 25.230 | 0.347 |
| 90 | 14.854 | 34.926 | 25.948 | 0.371 |
| 100 | 14.041 | 34.930 | 26.125 | 0.390 |
| 110 | 13.918 | 34.932 | 26.153 | 0.409 |
| 120 | 13.721 | 34.932 | 26.194 | 0.428 |
| 130 | 13.445 | 34.925 | 26.245 | 0.446 |
| 140 | 13.241 | 34.916 | 26.280 | 0.464 |
| 150 | 13.111 | 34.912 | 26.303 | 0.482 |
| 160 | 12.992 | 34.903 | 26.320 | 0.499 |
| 170 | 12.816 | 34.894 | 26.348 | 0.517 |
| 180 | 12.682 | 34.888 | 26.370 | 0.534 |
| 190 | 12.626 | 34.885 | 26.379 | 0.551 |
| 200 | 12.587 | 34.883 | 26.385 | 0.567 |
| 250 | 12.096 | 34.858 | 26.461 | 0.650 |
| 300 | 11.449 | 34.813 | 26.548 | 0.731 |
| 350 | 10.605 | 34.774 | 26.671 | 0.805 |
| 400 | 9.732 | 34.706 | 26.769 | 0.876 |
| 450 | 8.527 | 34.651 | 26.919 | 0.940 |
| 500 | 7.953 | 34.625 | 26.987 | 0.999 |
| 550 | 7.379 | 34.612 | 27.060 | 1.055 |
| 600 | 6.822 | 34.581 | 27.114 | 1.108 |
| 650 | 6.440 | 34.579 | 27.163 | 1.159 |
| 700 | 5.989 | 34.566 | 27.211 | 1.207 |
| 750 | 5.583 | 34.564 | 27.260 | 1.254 |
| 800 | 4.964 | 34.557 | 27.328 | 1.297 |
| 900 | 4.424 | 34.561 | 27.392 | 1.377 |
| 1000 | 4.270 | 34.565 | 27.412 | 1.454 |
| 1001 | 4.268 | 34.565 | 27.412 | 1.455 |

CAST EP3-89-DI -012 DATE 29 OCT 89 TIME 0921 GMT
LAT 00 59.8N LONG 110 00.5W

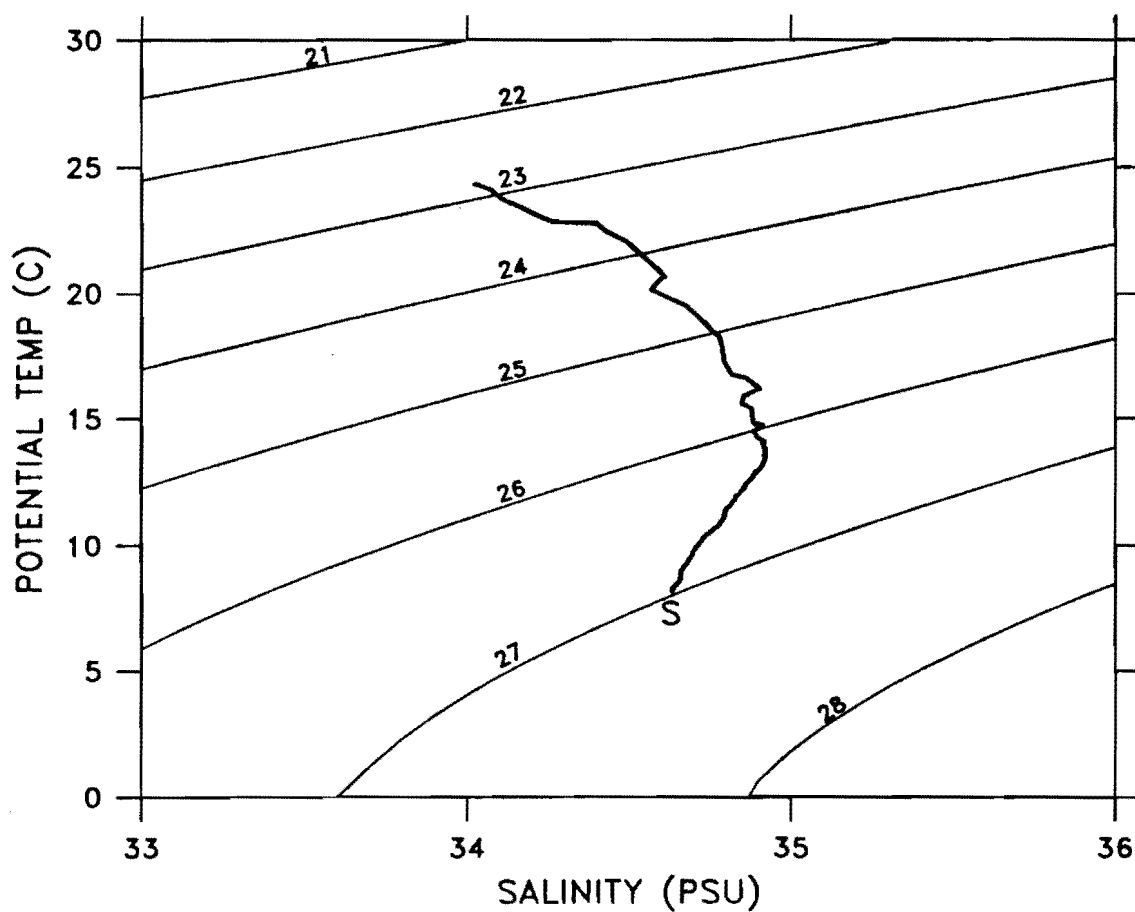


CAST EP3-89-D1 -012 DATE 29 OCT 89 TIME 0921 GMT
 LAT 00 59.8N LONG 110 00.5W WEATHER 2 SEA STATE 3
 BAROMETER 12 WIND DIR 115 T SPD 14 KT VISIBILITY 6
 CLOUD X AMOUNT 7 DRY 20.8 WET 19.9 DEPTH 3740 M

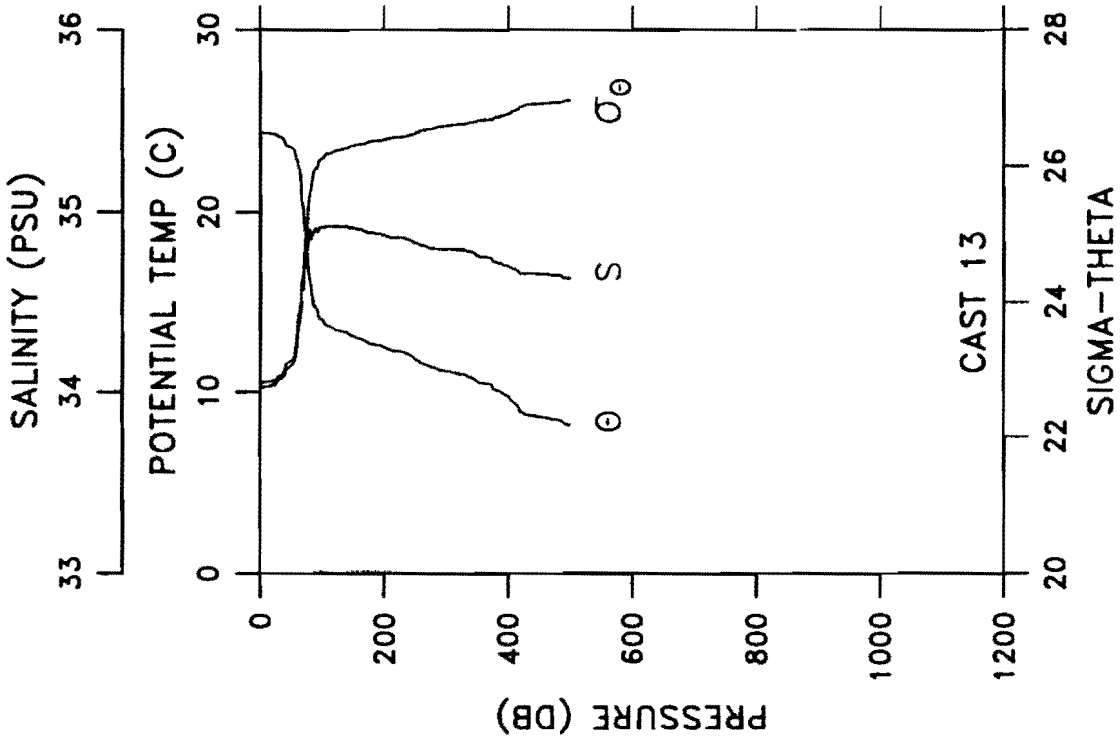


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 21.886 | 34.539 | 23.901 | 0.000 |
| 10 | 21.889 | 34.541 | 23.901 | 0.040 |
| 20 | 21.886 | 34.541 | 23.902 | 0.080 |
| 30 | 21.886 | 34.541 | 23.902 | 0.120 |
| 40 | 21.588 | 34.551 | 23.989 | 0.160 |
| 50 | 20.961 | 34.616 | 24.213 | 0.198 |
| 60 | 19.785 | 34.743 | 24.623 | 0.233 |
| 70 | 18.099 | 34.852 | 25.135 | 0.264 |
| 80 | 15.474 | 34.905 | 25.794 | 0.289 |
| 90 | 14.713 | 34.908 | 25.964 | 0.310 |
| 100 | 14.225 | 34.892 | 26.057 | 0.330 |
| 110 | 14.041 | 34.905 | 26.106 | 0.350 |
| 120 | 13.900 | 34.903 | 26.134 | 0.369 |
| 130 | 13.828 | 34.907 | 26.194 | 0.388 |
| 140 | 13.509 | 34.916 | 26.225 | 0.406 |
| 150 | 13.248 | 34.900 | 26.266 | 0.424 |
| 160 | 13.108 | 34.896 | 26.291 | 0.442 |
| 170 | 12.943 | 34.895 | 26.324 | 0.459 |
| 180 | 12.799 | 34.892 | 26.350 | 0.477 |
| 190 | 12.734 | 34.891 | 26.373 | 0.511 |
| 200 | 12.683 | 34.877 | 26.417 | 0.595 |
| 250 | 12.402 | 34.847 | 26.488 | 0.677 |
| 300 | 11.913 | 34.789 | 26.626 | 0.755 |
| 350 | 10.921 | 34.703 | 26.791 | 0.825 |
| 400 | 9.580 | 34.655 | 26.924 | 0.889 |
| 450 | 8.520 | 34.620 | 27.013 | 0.948 |
| 500 | 7.749 | 34.590 | 27.074 | 1.003 |
| 550 | 7.162 | 34.586 | 27.117 | 1.055 |
| 600 | 6.825 | 34.581 | 27.154 | 1.106 |
| 650 | 6.523 | 34.566 | 27.193 | 1.155 |
| 700 | 6.134 | 34.556 | 27.243 | 1.202 |
| 750 | 5.673 | 34.556 | 27.293 | 1.247 |
| 800 | 5.260 | 34.554 | 27.354 | 1.331 |
| 850 | 4.722 | 34.559 | 27.381 | 1.412 |
| 900 | 4.509 | 34.559 | 27.382 | 1.415 |
| 1000 | 4.505 | 34.559 | 27.382 | 1.415 |

CAST EP3-89-DI -013 DATE 30 OCT 89 TIME 0654 GMT
LAT 01 59.9N LONG 110 10.3W

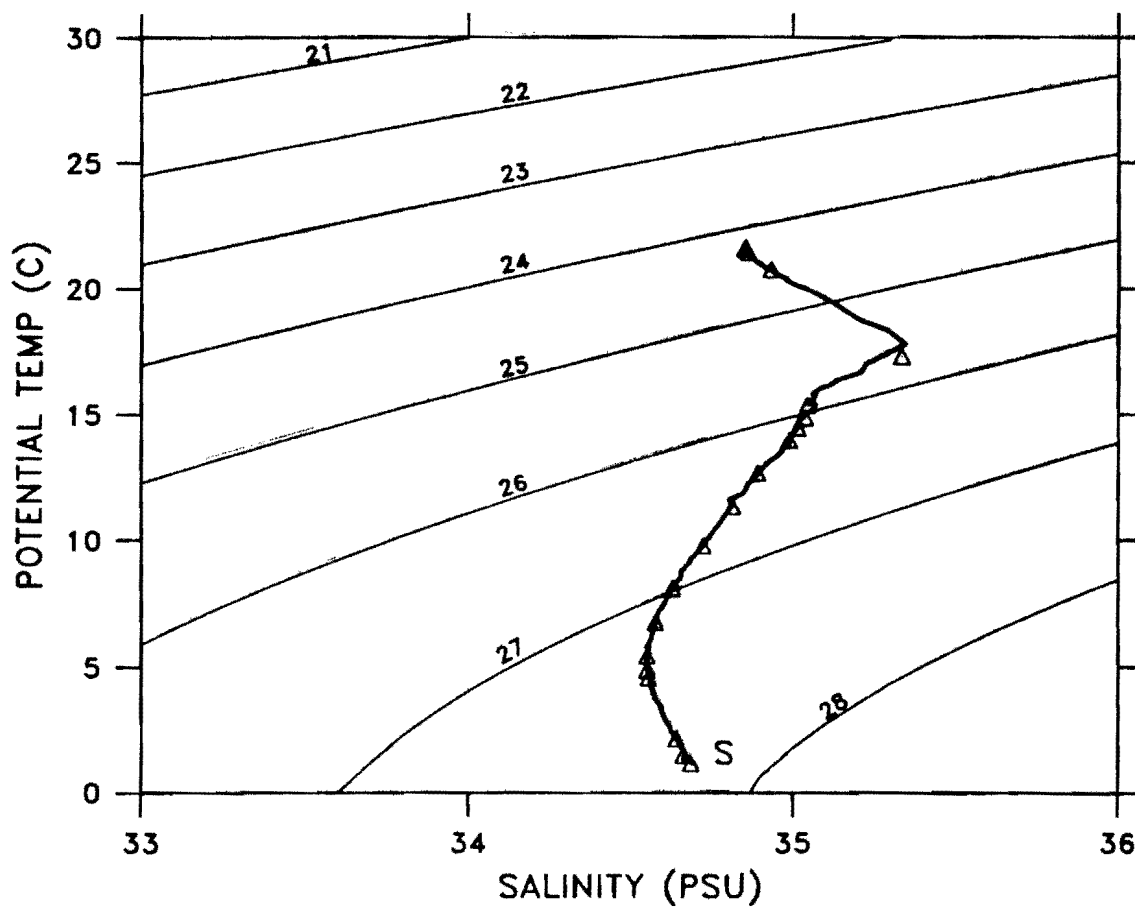


CAST EP3-89-01 -013 DATE 30 OCT 89 TIME 0654 GMT
 LAT 01 59.9N LONG 110 10.3W WEATHER 0 SEA STATE 3
 BAROMETER 14 WIND DIR 120 T SPD 10 KT VISIBILITY 7
 CLOUD X AMOUNT 0 DRY 22.0 WET 20.2 DEPTH 3800 M

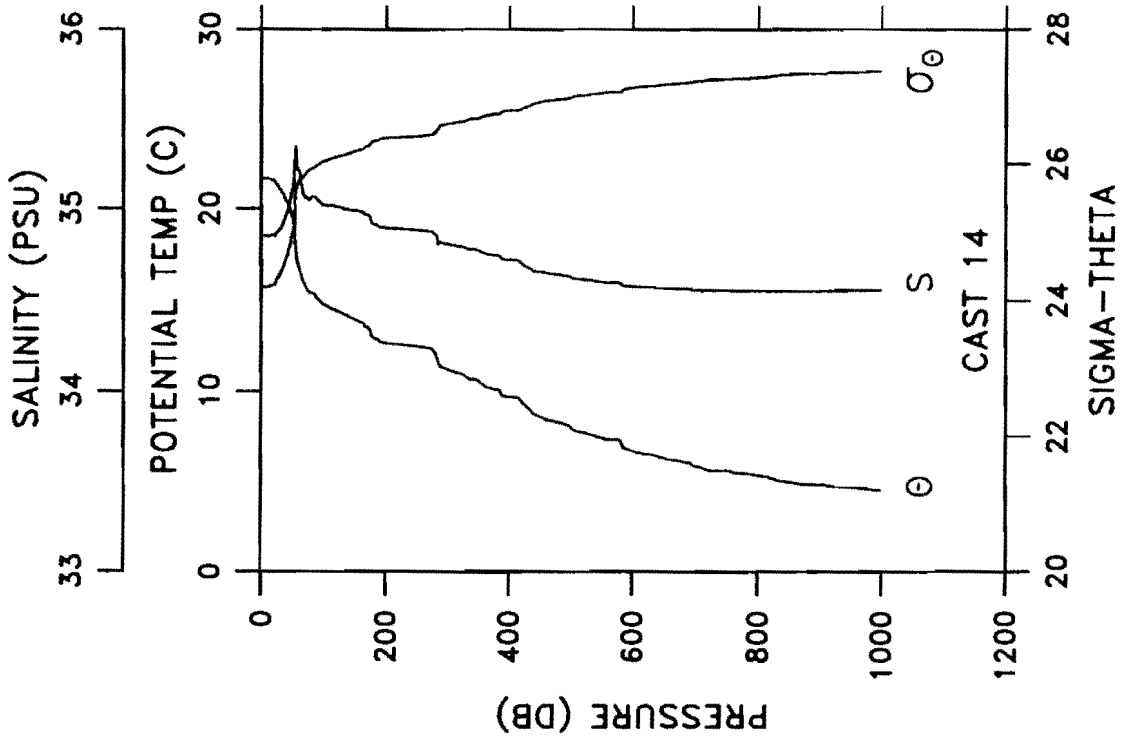


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.307 | 34.022 | 22.812 | 0.000 |
| 10 | 24.305 | 34.028 | 22.817 | 0.050 |
| 20 | 24.274 | 34.037 | 22.833 | 0.101 |
| 30 | 24.135 | 34.066 | 22.896 | 0.151 |
| 40 | 23.823 | 34.097 | 23.011 | 0.200 |
| 50 | 23.528 | 34.145 | 23.134 | 0.248 |
| 60 | 22.798 | 34.333 | 23.487 | 0.294 |
| 70 | 20.137 | 34.569 | 24.398 | 0.334 |
| 80 | 16.259 | 34.897 | 25.610 | 0.363 |
| 90 | 14.727 | 34.912 | 25.965 | 0.385 |
| 100 | 14.049 | 34.917 | 26.113 | 0.405 |
| 110 | 13.704 | 34.922 | 26.189 | 0.424 |
| 120 | 13.541 | 34.918 | 26.220 | 0.442 |
| 130 | 13.425 | 34.920 | 26.246 | 0.460 |
| 140 | 13.343 | 34.920 | 26.262 | 0.478 |
| 150 | 13.153 | 34.913 | 26.295 | 0.496 |
| 160 | 13.014 | 34.906 | 26.318 | 0.513 |
| 170 | 12.861 | 34.891 | 26.337 | 0.531 |
| 180 | 12.702 | 34.885 | 26.364 | 0.548 |
| 190 | 12.629 | 34.880 | 26.374 | 0.565 |
| 200 | 12.515 | 34.872 | 26.390 | 0.582 |
| 250 | 11.837 | 34.829 | 26.488 | 0.664 |
| 300 | 11.161 | 34.794 | 26.586 | 0.742 |
| 350 | 10.615 | 34.760 | 26.658 | 0.816 |
| 400 | 9.791 | 34.703 | 26.756 | 0.887 |
| 450 | 8.624 | 34.659 | 26.911 | 0.951 |
| 500 | 8.149 | 34.634 | 26.964 | 1.011 |
| 500 | 8.149 | 34.634 | 26.964 | 1.011 |

CAST EP3-89-DI -014 DATE 31 OCT 89 TIME 1007 GMT
LAT 00 01.4N LONG 110 03.9W

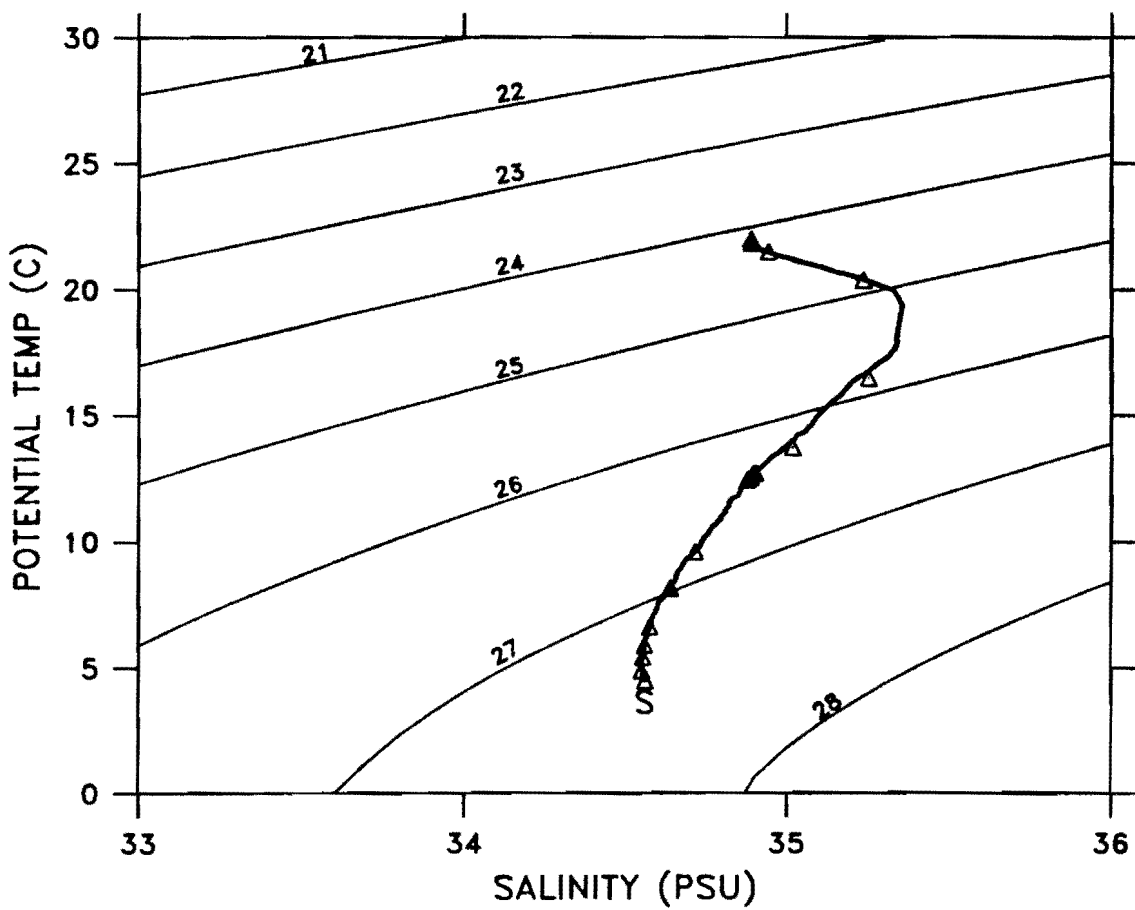


CAST EP3-89-DI -014 DATE 31 OCT 89 TIME 1007 GMT
 LAT 00 01.4N LONG 110 03.9W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 145 T SPD 12 KT VISIBILITY 7
 CLOUD X AMOUNT 6 DRY 20.3 WET 21.5 DEPTH 3758 M

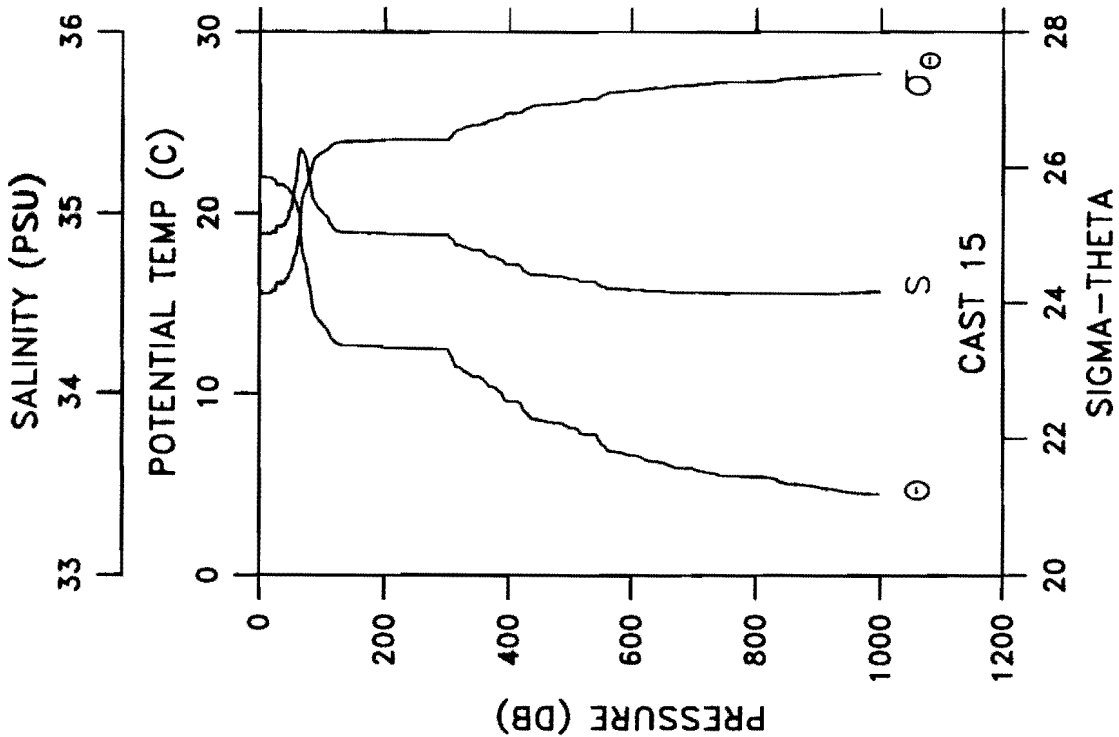


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 21.703 | 34.851 | 24.189 | 0.000 |
| 10 | 21.690 | 34.851 | 24.192 | 0.037 |
| 20 | 21.587 | 34.856 | 24.225 | 0.074 |
| 30 | 21.126 | 34.883 | 24.372 | 0.111 |
| 40 | 20.463 | 34.965 | 24.614 | 0.145 |
| 50 | 19.538 | 35.108 | 24.966 | 0.177 |
| 60 | 16.809 | 35.214 | 25.725 | 0.203 |
| 70 | 15.825 | 35.060 | 25.834 | 0.225 |
| 80 | 15.432 | 35.064 | 25.926 | 0.246 |
| 90 | 15.105 | 35.050 | 25.988 | 0.267 |
| 100 | 14.753 | 35.018 | 26.041 | 0.287 |
| 110 | 14.582 | 35.018 | 26.077 | 0.307 |
| 120 | 14.445 | 35.011 | 26.102 | 0.326 |
| 130 | 14.299 | 35.003 | 26.127 | 0.345 |
| 140 | 14.120 | 34.994 | 26.158 | 0.364 |
| 150 | 13.953 | 34.990 | 26.190 | 0.383 |
| 160 | 13.805 | 34.982 | 26.214 | 0.402 |
| 170 | 13.540 | 34.967 | 26.258 | 0.420 |
| 180 | 12.959 | 34.915 | 26.336 | 0.438 |
| 190 | 12.734 | 34.896 | 26.366 | 0.455 |
| 200 | 12.661 | 34.896 | 26.381 | 0.472 |
| 250 | 12.477 | 34.884 | 26.407 | 0.556 |
| 300 | 11.215 | 34.806 | 26.586 | 0.637 |
| 350 | 10.595 | 34.774 | 26.672 | 0.711 |
| 400 | 9.709 | 34.722 | 26.785 | 0.781 |
| 450 | 8.593 | 34.658 | 26.915 | 0.845 |
| 500 | 8.017 | 34.630 | 26.981 | 0.905 |
| 550 | 7.433 | 34.603 | 27.045 | 0.961 |
| 600 | 6.719 | 34.578 | 27.125 | 1.015 |
| 650 | 6.333 | 34.569 | 27.169 | 1.065 |
| 700 | 5.876 | 34.558 | 27.219 | 1.114 |
| 750 | 5.621 | 34.555 | 27.249 | 1.160 |
| 800 | 5.373 | 34.552 | 27.276 | 1.205 |
| 900 | 4.870 | 34.554 | 27.337 | 1.290 |
| 1000 | 4.558 | 34.558 | 27.375 | 1.372 |
| 1500 | 2.978 | 34.605 | 27.572 | 1.720 |
| 2000 | 2.164 | 34.643 | 27.672 | 2.006 |
| 2500 | 1.714 | 34.664 | 27.724 | 2.255 |
| 3000 | 1.485 | 34.675 | 27.751 | 2.489 |
| 3500 | 1.255 | 34.687 | 27.777 | 2.714 |
| 3701 | 1.157 | 34.692 | 27.788 | 2.801 |

CAST EP3-89-DI -015 DATE 31 OCT 89 TIME 1547 GMT
LAT 00 30.2S LONG 109 59.5W

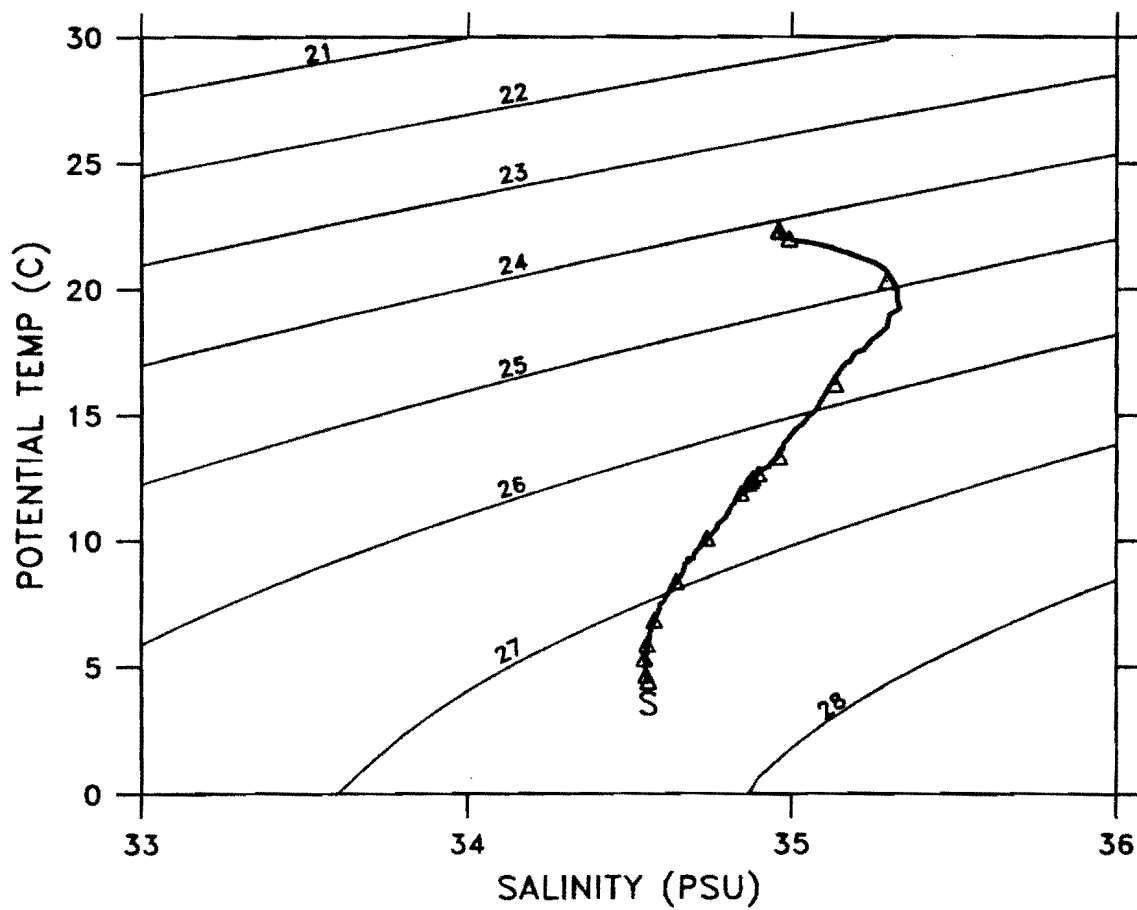


CAST EP3-89-DI --015 DATE 31 OCT 89 TIME 1547 GMT
 LAT 00 30.2S LONG 109 59.5W WEATHER 0 SEA STATE 3
 BAROMETER 15 WIND DIR 125 T SPD 15 KT VISIBILITY 8
 CLOUD 4 AMOUNT 1 DRY 23.0 WET 20.7 DEPTH 3953 M

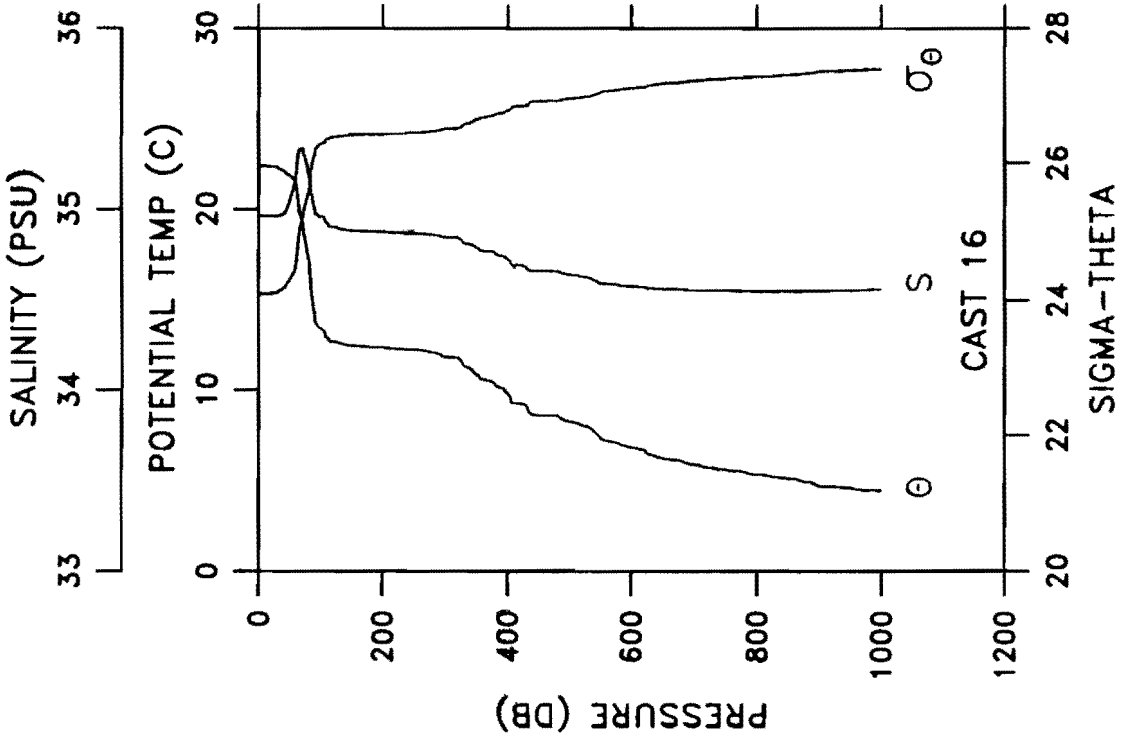


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.007 | 34.888 | 24.132 | 0.000 |
| 10 | 21.987 | 34.887 | 24.137 | 0.038 |
| 20 | 21.862 | 34.893 | 24.171 | 0.075 |
| 30 | 21.563 | 34.929 | 24.287 | 0.112 |
| 40 | 21.559 | 34.932 | 24.290 | 0.149 |
| 50 | 21.158 | 35.035 | 24.479 | 0.184 |
| 60 | 20.395 | 35.237 | 24.839 | 0.218 |
| 70 | 17.590 | 35.329 | 25.626 | 0.245 |
| 80 | 15.898 | 35.173 | 25.905 | 0.267 |
| 90 | 14.288 | 35.051 | 26.166 | 0.287 |
| 100 | 13.834 | 35.007 | 26.228 | 0.305 |
| 110 | 13.382 | 34.959 | 26.284 | 0.323 |
| 120 | 12.816 | 34.907 | 26.358 | 0.340 |
| 130 | 12.650 | 34.895 | 26.382 | 0.357 |
| 140 | 12.638 | 34.896 | 26.385 | 0.374 |
| 150 | 12.630 | 34.895 | 26.386 | 0.391 |
| 160 | 12.616 | 34.894 | 26.388 | 0.407 |
| 170 | 12.605 | 34.893 | 26.389 | 0.424 |
| 180 | 12.585 | 34.893 | 26.393 | 0.441 |
| 190 | 12.561 | 34.890 | 26.396 | 0.458 |
| 200 | 12.507 | 34.887 | 26.403 | 0.474 |
| 250 | 12.444 | 34.882 | 26.412 | 0.558 |
| 300 | 12.403 | 34.880 | 26.419 | 0.642 |
| 350 | 10.922 | 34.796 | 26.631 | 0.719 |
| 400 | 9.577 | 34.714 | 26.800 | 0.790 |
| 450 | 8.523 | 34.656 | 26.925 | 0.854 |
| 500 | 8.095 | 34.634 | 26.973 | 0.913 |
| 550 | 7.301 | 34.595 | 27.058 | 0.970 |
| 600 | 6.611 | 34.575 | 27.137 | 1.022 |
| 650 | 6.225 | 34.567 | 27.181 | 1.072 |
| 700 | 5.867 | 34.559 | 27.221 | 1.119 |
| 750 | 5.478 | 34.554 | 27.265 | 1.165 |
| 800 | 5.406 | 34.553 | 27.273 | 1.210 |
| 900 | 4.873 | 34.552 | 27.335 | 1.296 |
| 1000 | 4.479 | 34.561 | 27.386 | 1.377 |
| 1003 | 4.477 | 34.561 | 27.386 | 1.379 |

CAST EP3-89-DI -016 DATE 01 NOV 89 TIME 0542 GMT
LAT 00 59.8S LONG 110 01.2W

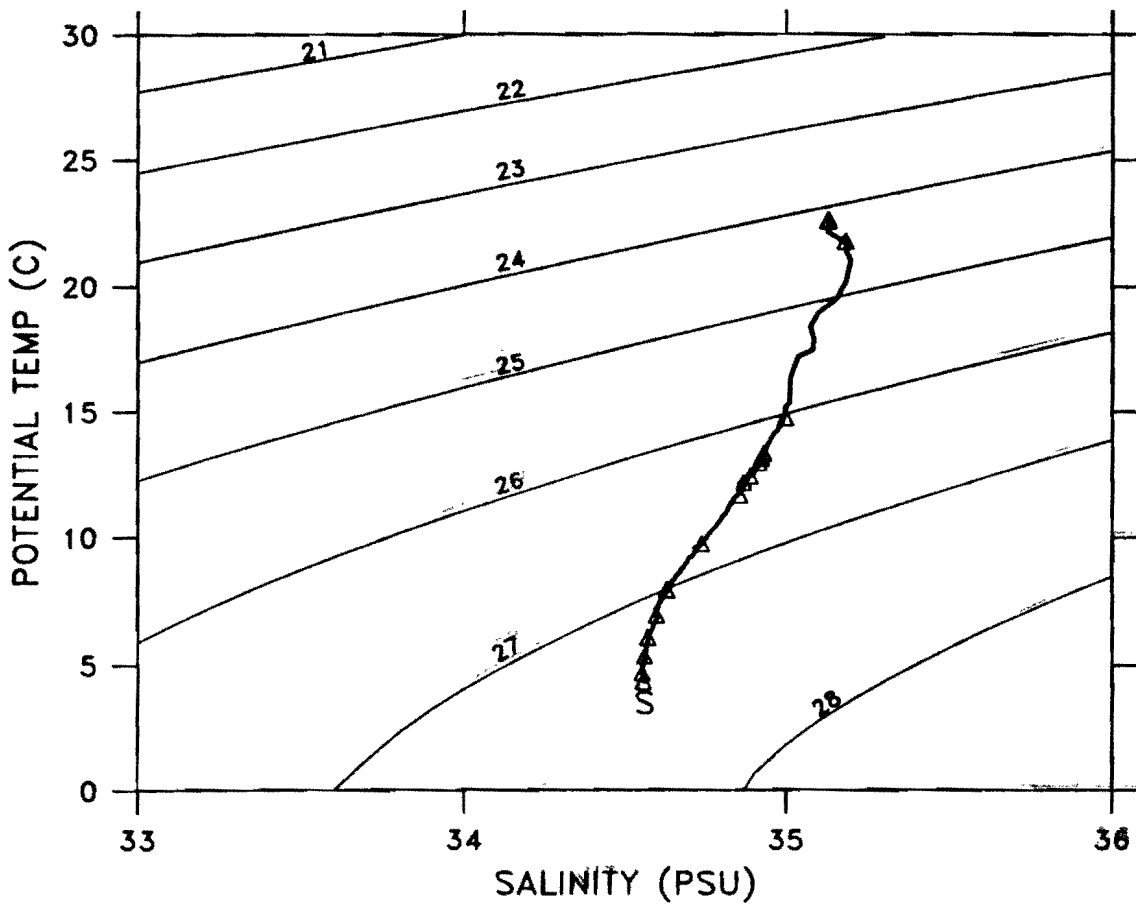


CAST EP3-89-DI -016 DATE 01 NOV 89 TIME 0542 GMT
 LAT 00 59.8S LONG 110 01.2W WEATHER 0 SEA STATE 4
 BAROMETER 14 WIND DIR 120 T SPD 14 KT VISIBILITY 7
 CLOUD X AMOUNT 0 DRY 21.9 WET 20.5 DEPTH 3992 M

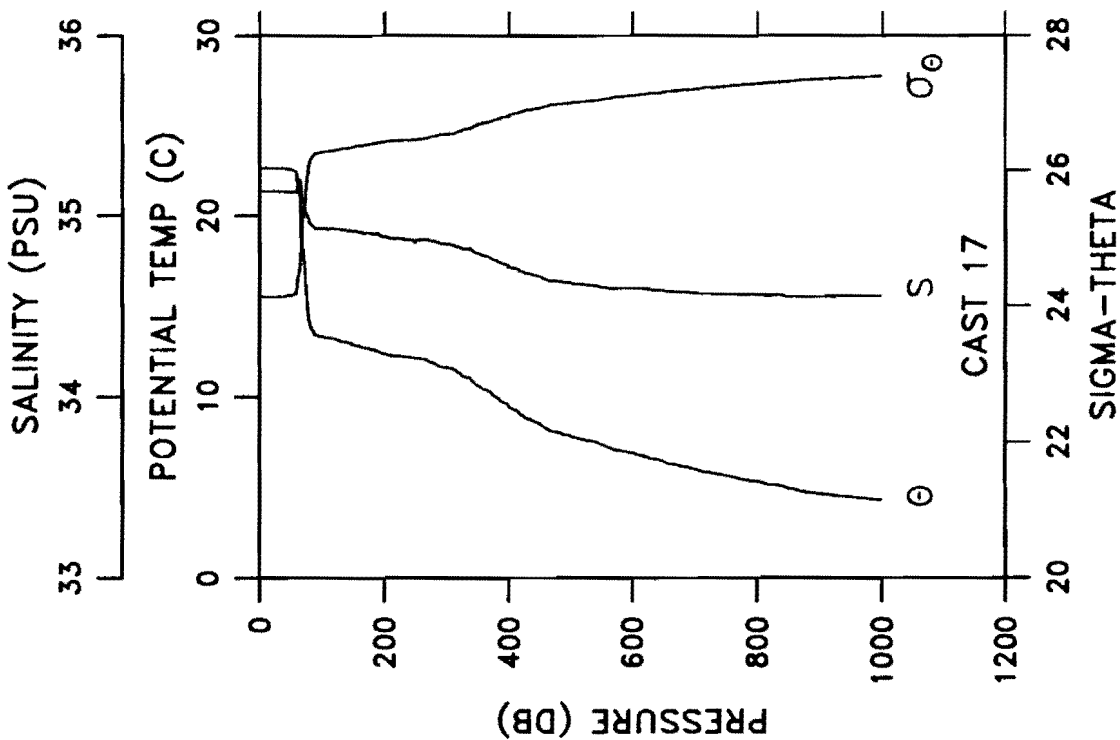


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.336 | 34.963 | 24.096 | 0.000 |
| 10 | 22.334 | 34.963 | 24.097 | 0.038 |
| 20 | 22.329 | 34.963 | 24.099 | 0.076 |
| 30 | 22.289 | 34.962 | 24.109 | 0.114 |
| 40 | 22.084 | 34.978 | 24.185 | 0.152 |
| 50 | 21.813 | 35.056 | 24.314 | 0.189 |
| 60 | 21.221 | 35.212 | 24.597 | 0.224 |
| 70 | 19.231 | 35.333 | 25.218 | 0.254 |
| 80 | 17.101 | 35.180 | 25.629 | 0.280 |
| 90 | 13.850 | 34.975 | 26.200 | 0.301 |
| 100 | 13.401 | 34.960 | 26.281 | 0.319 |
| 110 | 12.907 | 34.922 | 26.351 | 0.336 |
| 120 | 12.710 | 34.904 | 26.377 | 0.353 |
| 130 | 12.608 | 34.893 | 26.389 | 0.369 |
| 140 | 12.530 | 34.887 | 26.399 | 0.386 |
| 150 | 12.478 | 34.884 | 26.407 | 0.402 |
| 160 | 12.455 | 34.883 | 26.411 | 0.419 |
| 170 | 12.437 | 34.882 | 26.413 | 0.435 |
| 180 | 12.410 | 34.880 | 26.417 | 0.452 |
| 190 | 12.394 | 34.879 | 26.420 | 0.469 |
| 200 | 12.393 | 34.879 | 26.420 | 0.485 |
| 250 | 12.245 | 34.870 | 26.442 | 0.567 |
| 300 | 11.869 | 34.849 | 26.497 | 0.649 |
| 350 | 10.855 | 34.794 | 26.641 | 0.727 |
| 400 | 9.813 | 34.729 | 26.772 | 0.798 |
| 450 | 8.637 | 34.663 | 26.912 | 0.862 |
| 500 | 8.281 | 34.643 | 26.951 | 0.923 |
| 550 | 7.417 | 34.595 | 27.041 | 0.981 |
| 600 | 6.839 | 34.580 | 27.111 | 1.034 |
| 650 | 6.232 | 34.565 | 27.179 | 1.085 |
| 700 | 5.879 | 34.558 | 27.219 | 1.133 |
| 750 | 5.607 | 34.556 | 27.251 | 1.179 |
| 800 | 5.308 | 34.551 | 27.283 | 1.224 |
| 900 | 4.892 | 34.552 | 27.355 | 1.310 |
| 1000 | 4.415 | 34.562 | 27.394 | 1.390 |
| 1003 | 4.402 | 34.562 | 27.395 | 1.392 |

CAST EP3-89-DI -017 DATE 01 NOV 89 TIME 1143 GMT
LAT 01 57.9S LONG 110 01.3W

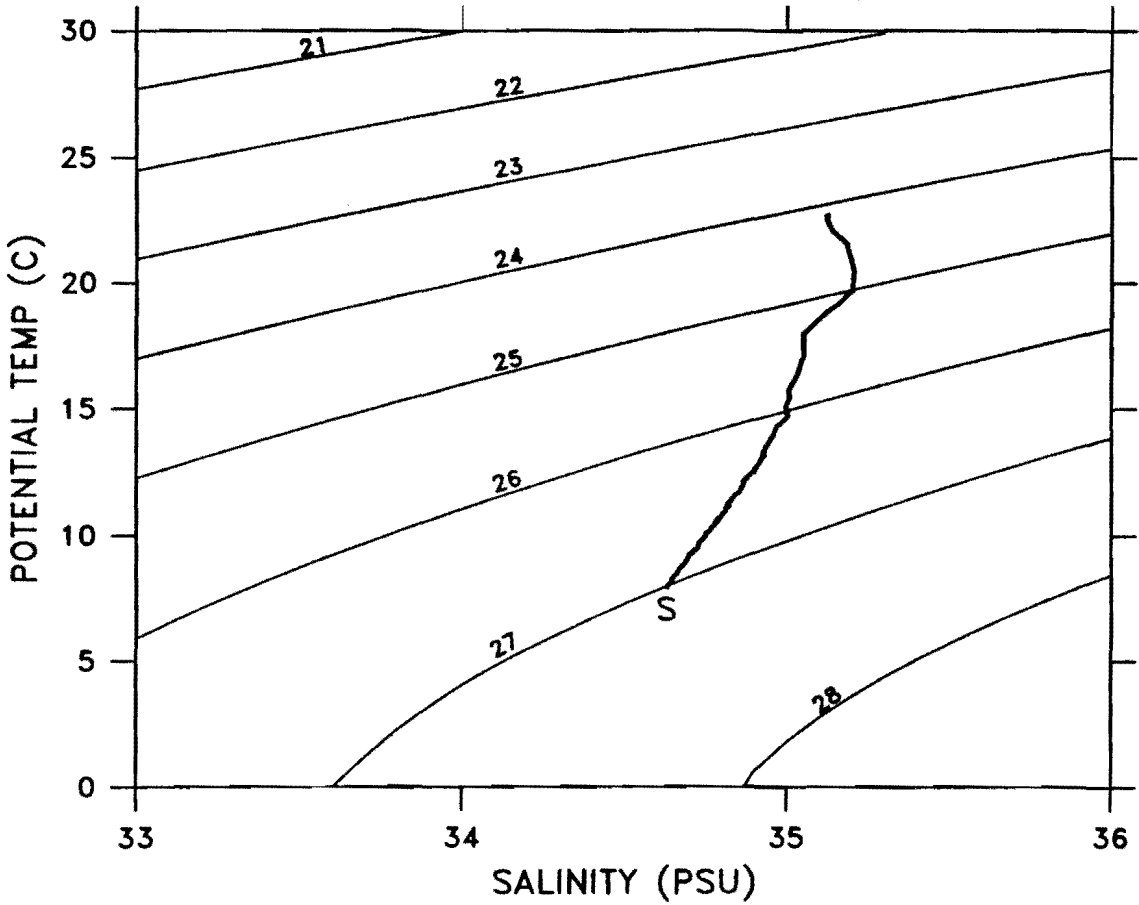


CAST EP3-89-D1 -017 DATE 01 NOV 89 TIME 1143 GMT
 LAT 01 57.9S LONG 110 01.5W WEATHER 1 SEA STATE 3
 BAROMETER 11 WIND DIR 125 T SPD 16 KT VISIBILITY 7
 CLOUD X AMOUNT 1 DRY 22.2 WET 20.4 DEPTH 4005 M

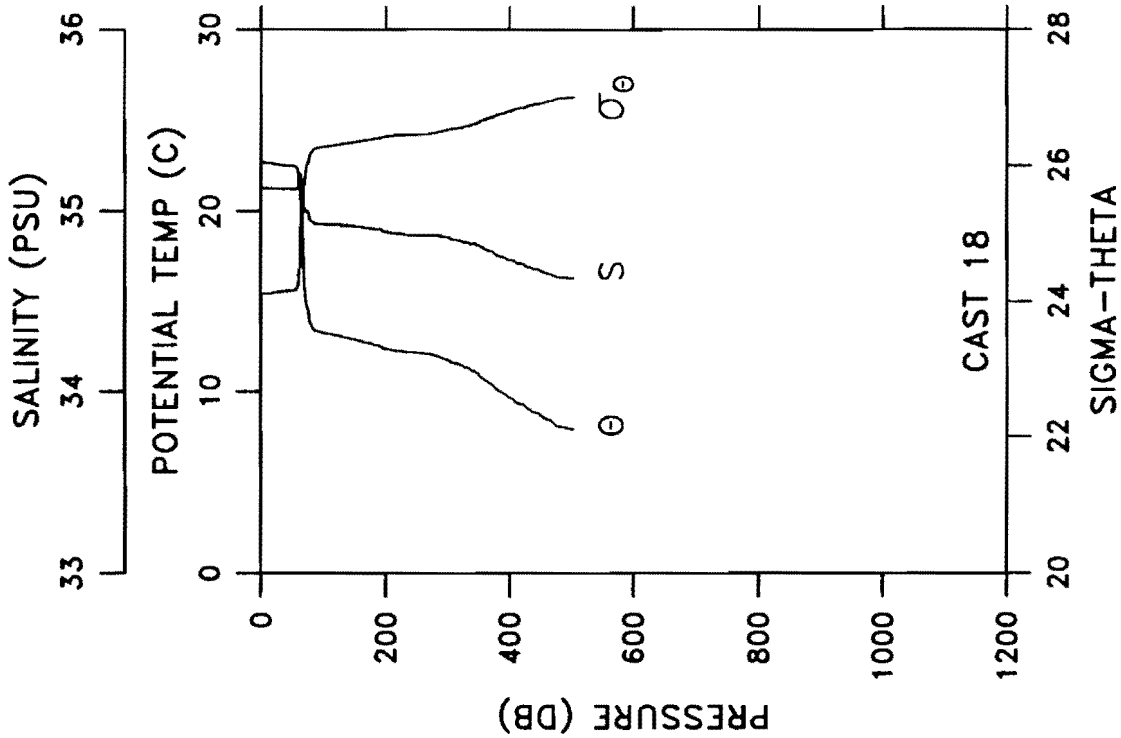


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.636 | 35.134 | 24.141 | 0.000 |
| 10 | 22.632 | 35.134 | 24.142 | 0.038 |
| 20 | 22.635 | 35.134 | 24.142 | 0.075 |
| 30 | 22.632 | 35.134 | 24.142 | 0.113 |
| 40 | 22.614 | 35.133 | 24.147 | 0.151 |
| 50 | 22.576 | 35.129 | 24.154 | 0.189 |
| 60 | 21.840 | 35.171 | 24.394 | 0.226 |
| 70 | 17.860 | 35.085 | 25.368 | 0.257 |
| 80 | 13.970 | 34.956 | 26.160 | 0.279 |
| 90 | 13.386 | 34.929 | 26.261 | 0.297 |
| 100 | 13.295 | 34.928 | 26.278 | 0.315 |
| 110 | 13.228 | 34.927 | 26.291 | 0.332 |
| 120 | 13.156 | 34.926 | 26.328 | 0.350 |
| 130 | 13.027 | 34.922 | 26.328 | 0.367 |
| 140 | 12.980 | 34.919 | 26.335 | 0.385 |
| 150 | 12.852 | 34.913 | 26.356 | 0.402 |
| 160 | 12.766 | 34.911 | 26.371 | 0.419 |
| 170 | 12.672 | 34.903 | 26.383 | 0.435 |
| 180 | 12.572 | 34.898 | 26.400 | 0.452 |
| 190 | 12.485 | 34.896 | 26.415 | 0.469 |
| 200 | 12.363 | 34.885 | 26.430 | 0.485 |
| 250 | 12.117 | 34.866 | 26.464 | 0.567 |
| 300 | 11.604 | 34.842 | 26.542 | 0.647 |
| 350 | 10.618 | 34.792 | 26.682 | 0.722 |
| 400 | 9.461 | 34.721 | 26.825 | 0.791 |
| 450 | 8.535 | 34.665 | 26.929 | 0.853 |
| 500 | 7.876 | 34.630 | 27.002 | 0.912 |
| 550 | 7.383 | 34.605 | 27.054 | 0.967 |
| 600 | 6.934 | 34.600 | 27.113 | 1.021 |
| 650 | 6.467 | 34.586 | 27.165 | 1.071 |
| 700 | 6.035 | 34.572 | 27.211 | 1.120 |
| 750 | 5.690 | 34.567 | 27.250 | 1.166 |
| 800 | 5.352 | 34.562 | 27.287 | 1.211 |
| 900 | 4.898 | 34.554 | 27.357 | 1.296 |
| 1000 | 4.339 | 34.559 | 27.400 | 1.375 |
| 1004 | 4.337 | 34.559 | 27.400 | 1.378 |

CAST EP3-89-DI -018 DATE 02 NOV 89 TIME 0348 GMT
LAT 01 59.1S LONG 110 00.1W

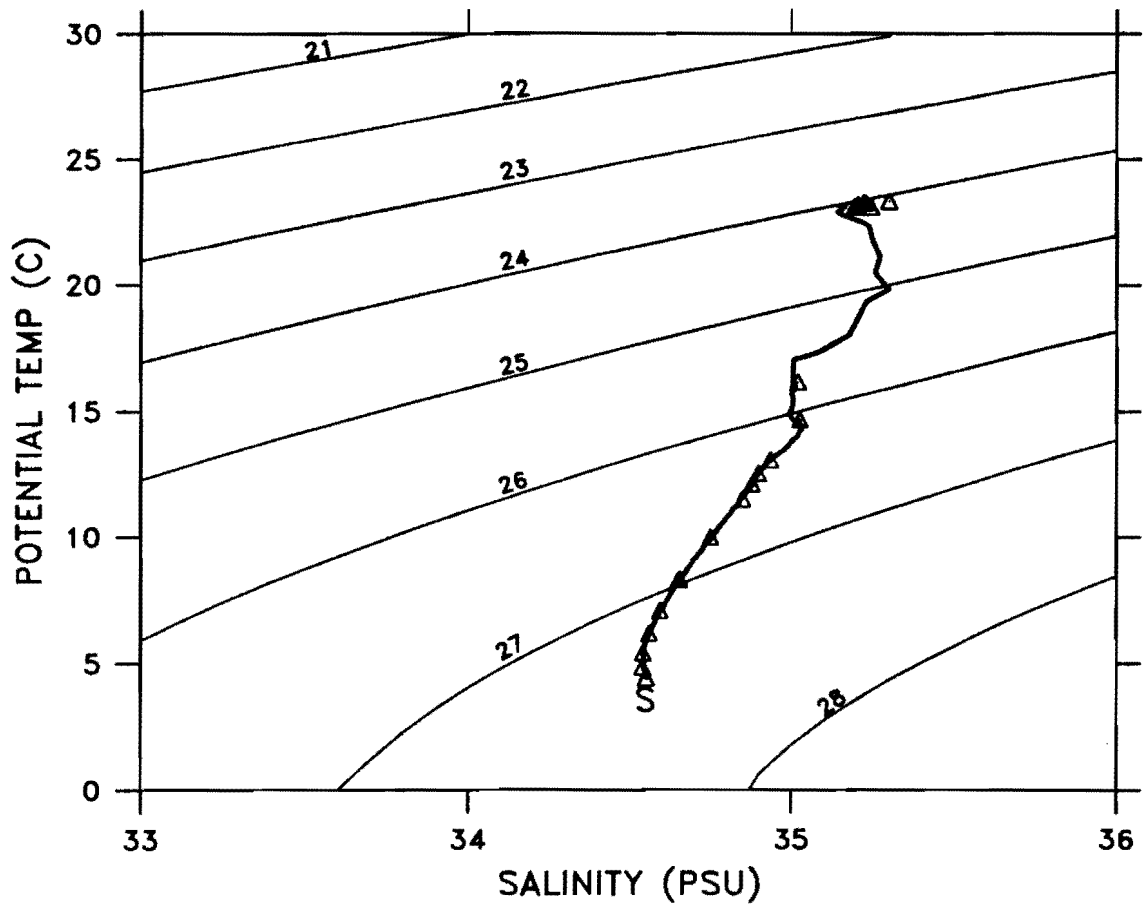


CAST EP3-89-DJ -018 DATE 02 NOV 89 TIME 0348 GMT
 LAT 01 59.1S LONG 110 00.1W WEATHER 1 SEA STATE 4
 BAROMETER 13 WIND DIR 110 T SPD 14 KT VISIBILITY 7
 CLOUD 6 AMOUNT 6 DRY 22.5 WET 20.6 DEPTH 3953 M

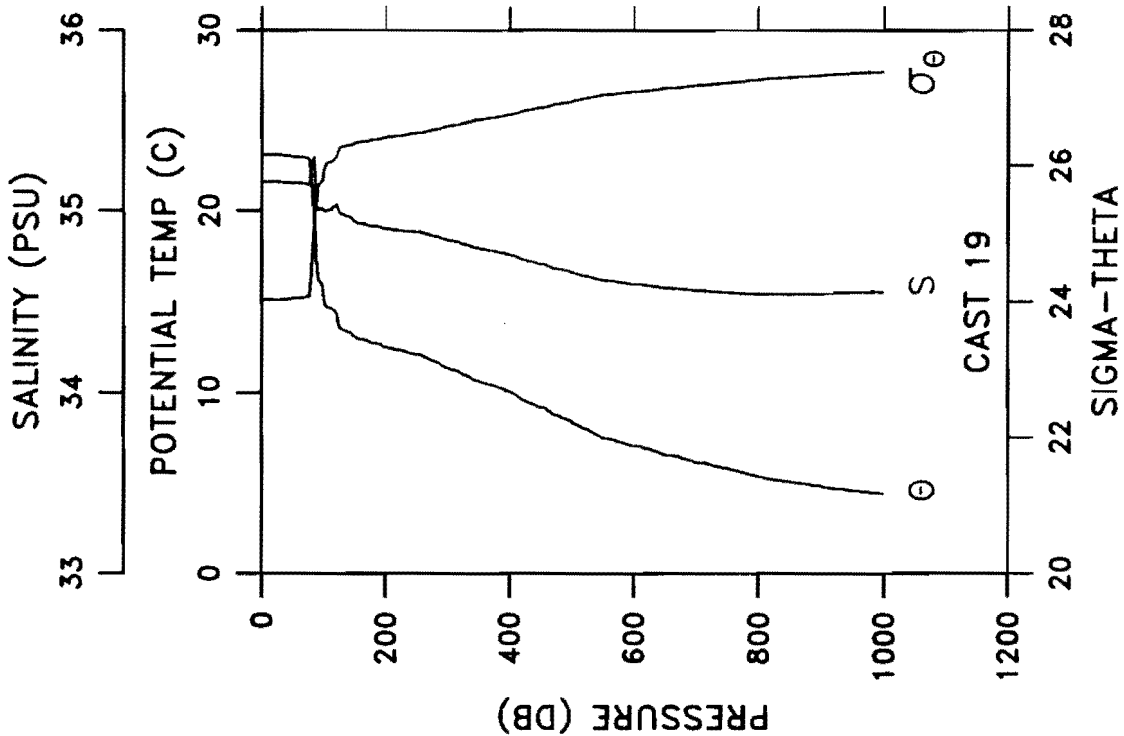


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.679 | 35.125 | 24.123 | 0.000 |
| 10 | 22.673 | 35.125 | 24.124 | 0.038 |
| 20 | 22.618 | 35.124 | 24.139 | 0.076 |
| 30 | 22.591 | 35.123 | 24.146 | 0.113 |
| 40 | 22.541 | 35.123 | 24.160 | 0.151 |
| 50 | 22.517 | 35.123 | 24.166 | 0.189 |
| 60 | 22.064 | 35.138 | 24.306 | 0.226 |
| 70 | 15.697 | 35.003 | 25.820 | 0.255 |
| 80 | 13.788 | 34.950 | 26.194 | 0.275 |
| 90 | 13.368 | 34.930 | 26.265 | 0.293 |
| 100 | 13.280 | 34.929 | 26.282 | 0.311 |
| 110 | 13.217 | 34.928 | 26.294 | 0.328 |
| 120 | 13.139 | 34.927 | 26.309 | 0.346 |
| 130 | 13.031 | 34.921 | 26.326 | 0.363 |
| 140 | 12.977 | 34.920 | 26.336 | 0.380 |
| 150 | 12.897 | 34.916 | 26.349 | 0.397 |
| 160 | 12.795 | 34.912 | 26.366 | 0.414 |
| 170 | 12.708 | 34.905 | 26.378 | 0.431 |
| 180 | 12.613 | 34.901 | 26.393 | 0.448 |
| 190 | 12.541 | 34.902 | 26.408 | 0.465 |
| 200 | 12.367 | 34.887 | 26.431 | 0.481 |
| 250 | 12.145 | 34.867 | 26.458 | 0.563 |
| 300 | 11.757 | 34.857 | 26.525 | 0.643 |
| 350 | 10.970 | 34.812 | 26.635 | 0.720 |
| 400 | 9.674 | 34.730 | 26.797 | 0.790 |
| 450 | 8.667 | 34.670 | 26.913 | 0.854 |
| 500 | 7.912 | 34.631 | 26.998 | 0.913 |
| 503 | 7.908 | 34.631 | 26.998 | 0.916 |

CAST EP3-89-DI -019 DATE 03 NOV 89 TIME 0746 GMT
LAT 04 57.7S LONG 110 04.9W

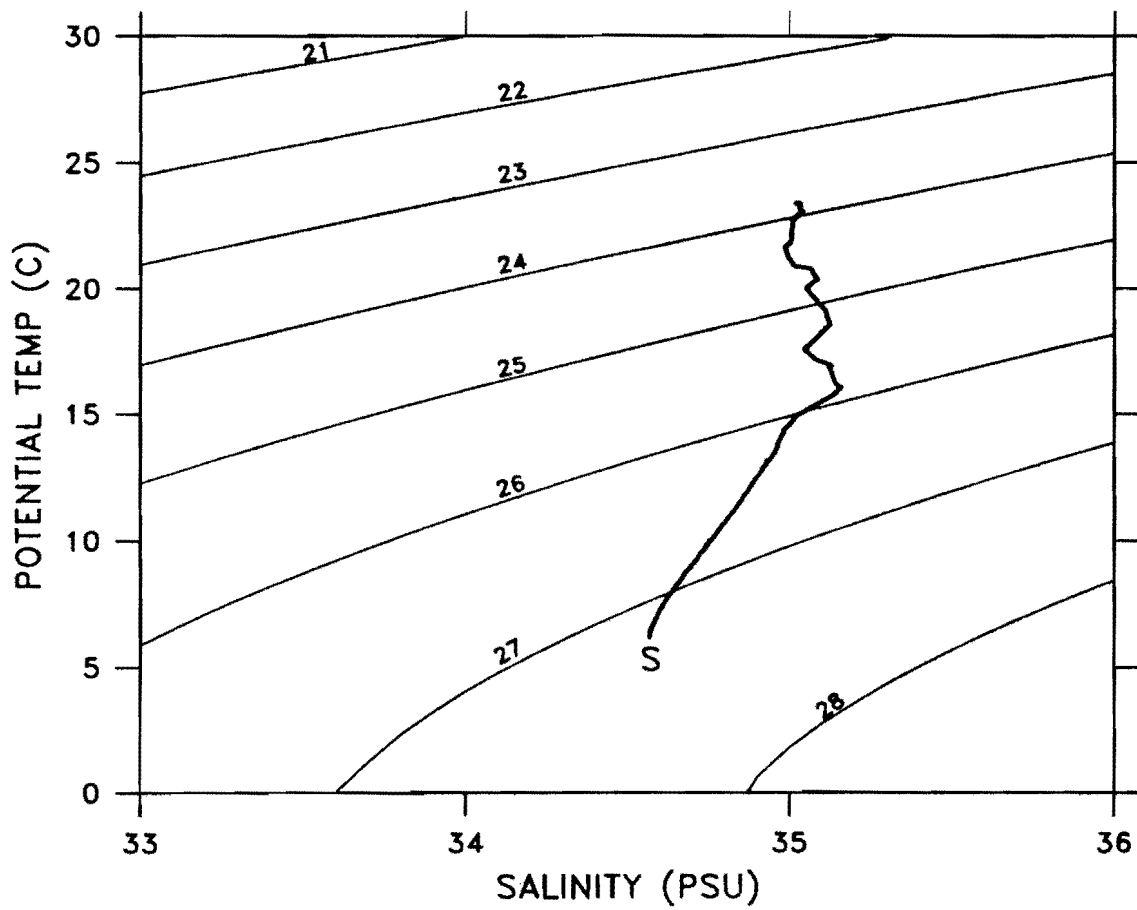


CAST EP3-89-D1 -019 DATE 03 NOV 89 TIME 0746 GMT
 LAT 04 57.7S LONG 110 04.9W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 120 T SPD 14 KT VISIBILITY 9
 CLOUD X AMOUNT 2 DRY 22.5 WET 21.0 DEPTH 3514 M

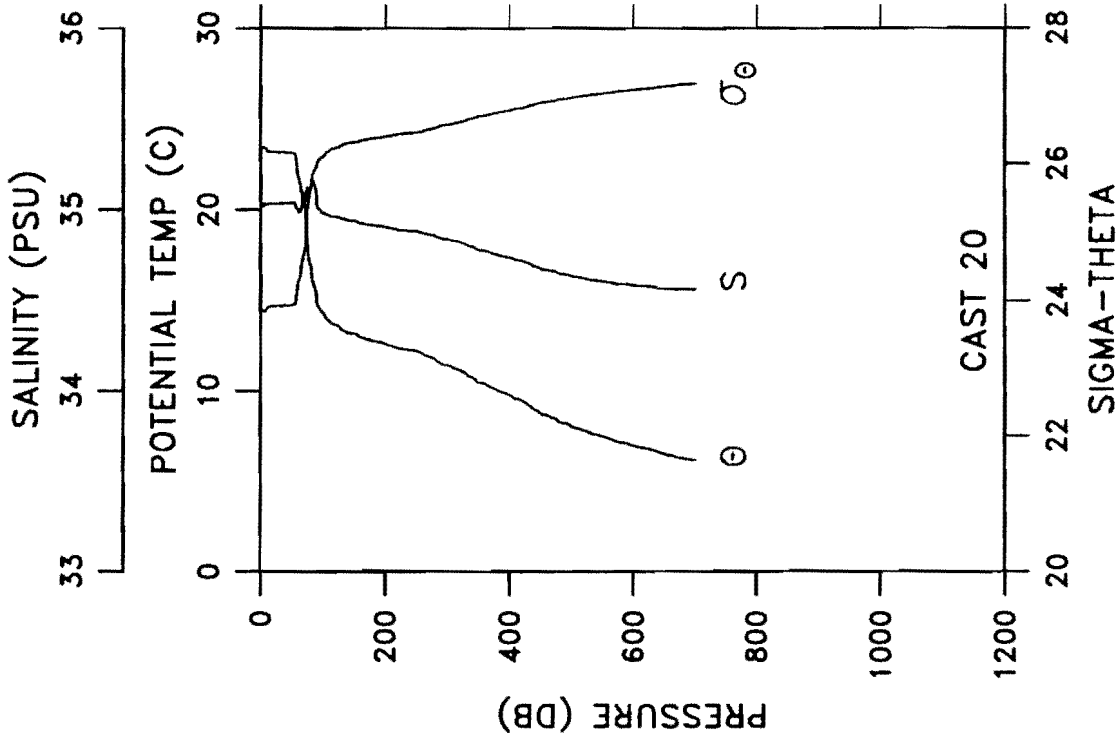


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.091 | 35.162 | 24.032 | 0.000 |
| 10 | 23.085 | 35.160 | 24.032 | 0.039 |
| 20 | 23.098 | 35.162 | 24.030 | 0.077 |
| 30 | 23.096 | 35.161 | 24.030 | 0.116 |
| 40 | 23.062 | 35.157 | 24.037 | 0.155 |
| 50 | 22.997 | 35.152 | 24.052 | 0.194 |
| 60 | 22.981 | 35.153 | 24.057 | 0.233 |
| 70 | 22.947 | 35.150 | 24.064 | 0.271 |
| 80 | 21.114 | 35.272 | 24.671 | 0.309 |
| 90 | 16.184 | 35.004 | 25.709 | 0.336 |
| 100 | 15.013 | 34.998 | 25.968 | 0.359 |
| 110 | 14.662 | 35.004 | 26.050 | 0.378 |
| 120 | 14.363 | 35.037 | 26.139 | 0.398 |
| 130 | 13.480 | 34.980 | 26.281 | 0.416 |
| 140 | 13.341 | 34.967 | 26.299 | 0.434 |
| 150 | 13.069 | 34.939 | 26.332 | 0.451 |
| 160 | 12.941 | 34.928 | 26.350 | 0.468 |
| 170 | 12.871 | 34.922 | 26.359 | 0.485 |
| 180 | 12.738 | 34.914 | 26.379 | 0.502 |
| 190 | 12.690 | 34.911 | 26.386 | 0.519 |
| 200 | 12.514 | 34.900 | 26.412 | 0.536 |
| 250 | 12.112 | 34.883 | 26.477 | 0.618 |
| 300 | 11.346 | 34.838 | 26.587 | 0.696 |
| 350 | 10.644 | 34.795 | 26.680 | 0.770 |
| 400 | 10.076 | 34.759 | 26.751 | 0.841 |
| 450 | 9.201 | 34.708 | 26.857 | 0.907 |
| 500 | 8.407 | 34.662 | 26.947 | 0.969 |
| 550 | 7.507 | 34.618 | 27.046 | 1.026 |
| 600 | 7.066 | 34.598 | 27.093 | 1.080 |
| 650 | 6.571 | 34.576 | 27.143 | 1.132 |
| 700 | 6.151 | 34.562 | 27.187 | 1.182 |
| 750 | 5.820 | 34.552 | 27.222 | 1.230 |
| 800 | 5.366 | 34.544 | 27.270 | 1.276 |
| 900 | 4.827 | 34.543 | 27.333 | 1.363 |
| 1000 | 4.414 | 34.554 | 27.387 | 1.444 |
| 1006 | 4.423 | 34.555 | 27.387 | 1.448 |

CAST EP3-89-DI -020 DATE 03 NOV 89 TIME 2140 GMT
LAT 04 00.5S LONG 112 57.4W

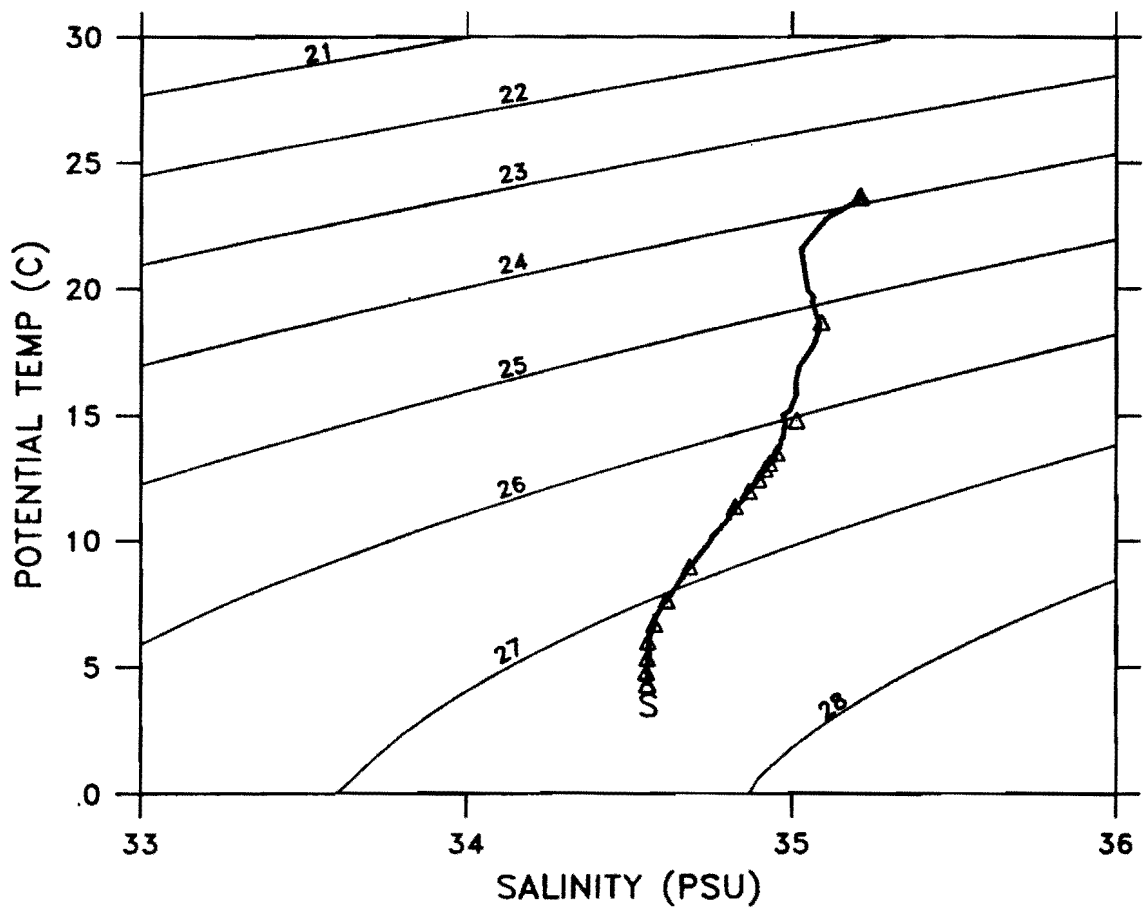


CAST EP3-89-DI -020 DATE 03 NOV 89 TIME 2140 GMT
 LAT 04 00.5S LONG 112 57.4W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 120 T SPD 14 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 25.7 WET 22.5 DEPTH 4169 M

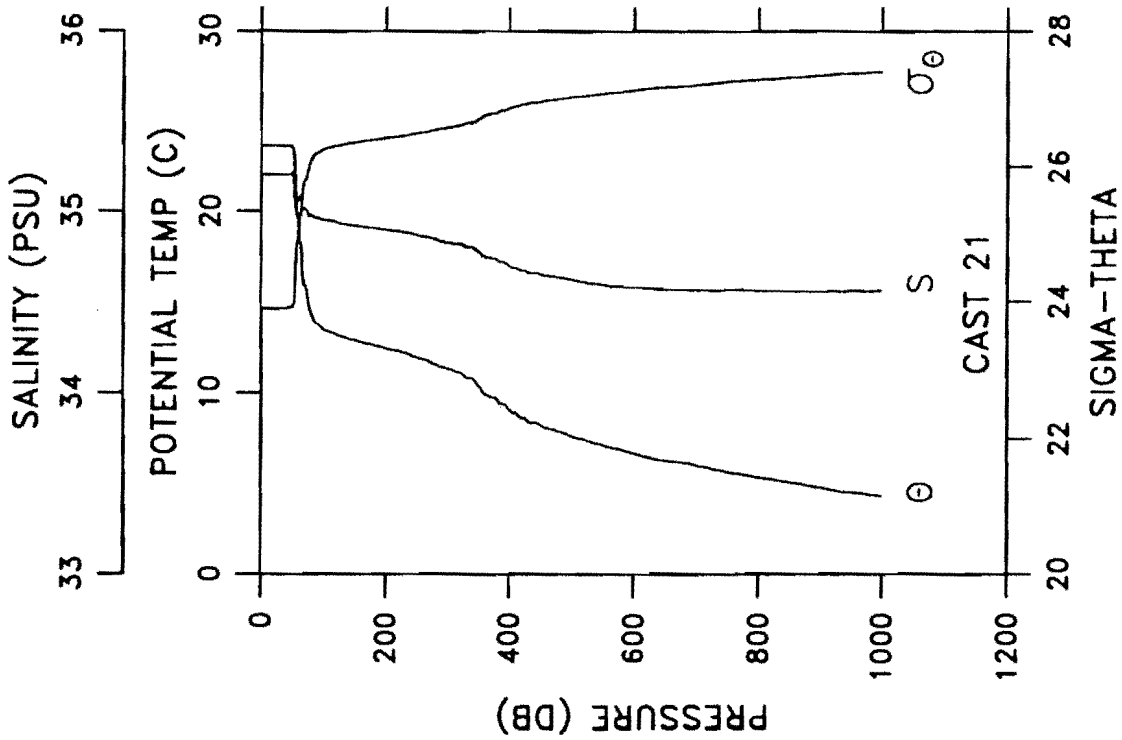


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.375 | 35.031 | 23.850 | 0.000 |
| 10 | 23.242 | 35.031 | 23.889 | 0.040 |
| 20 | 23.129 | 35.034 | 23.924 | 0.080 |
| 30 | 23.115 | 35.035 | 23.928 | 0.120 |
| 40 | 23.106 | 35.037 | 23.932 | 0.160 |
| 50 | 23.090 | 35.039 | 23.939 | 0.200 |
| 60 | 21.813 | 35.001 | 24.273 | 0.239 |
| 70 | 20.338 | 35.086 | 24.739 | 0.273 |
| 80 | 16.937 | 35.129 | 25.629 | 0.301 |
| 90 | 14.930 | 35.023 | 26.006 | 0.322 |
| 100 | 14.316 | 34.984 | 26.109 | 0.342 |
| 110 | 13.869 | 34.968 | 26.191 | 0.361 |
| 120 | 13.680 | 34.963 | 26.226 | 0.379 |
| 130 | 13.422 | 34.951 | 26.270 | 0.397 |
| 140 | 13.246 | 34.944 | 26.300 | 0.415 |
| 150 | 13.186 | 34.941 | 26.310 | 0.432 |
| 160 | 12.986 | 34.926 | 26.339 | 0.450 |
| 170 | 12.876 | 34.921 | 26.357 | 0.467 |
| 180 | 12.786 | 34.916 | 26.371 | 0.484 |
| 190 | 12.732 | 34.913 | 26.380 | 0.501 |
| 200 | 12.625 | 34.908 | 26.397 | 0.518 |
| 250 | 12.240 | 34.886 | 26.455 | 0.600 |
| 300 | 11.444 | 34.843 | 26.572 | 0.679 |
| 350 | 10.477 | 34.783 | 26.701 | 0.753 |
| 400 | 9.802 | 34.741 | 26.784 | 0.822 |
| 450 | 8.793 | 34.680 | 26.901 | 0.887 |
| 500 | 8.077 | 34.639 | 26.979 | 0.947 |
| 550 | 7.503 | 34.609 | 27.040 | 1.003 |
| 600 | 6.982 | 34.588 | 27.097 | 1.057 |
| 650 | 6.526 | 34.571 | 27.145 | 1.109 |
| 700 | 6.181 | 34.565 | 27.186 | 1.159 |
| 702 | 6.178 | 34.566 | 27.187 | 1.161 |

CAST EP3-89-DI -021 DATE 04 NOV 89 TIME 1030 GMT
LAT 03 00.7S LONG 115 49.9W

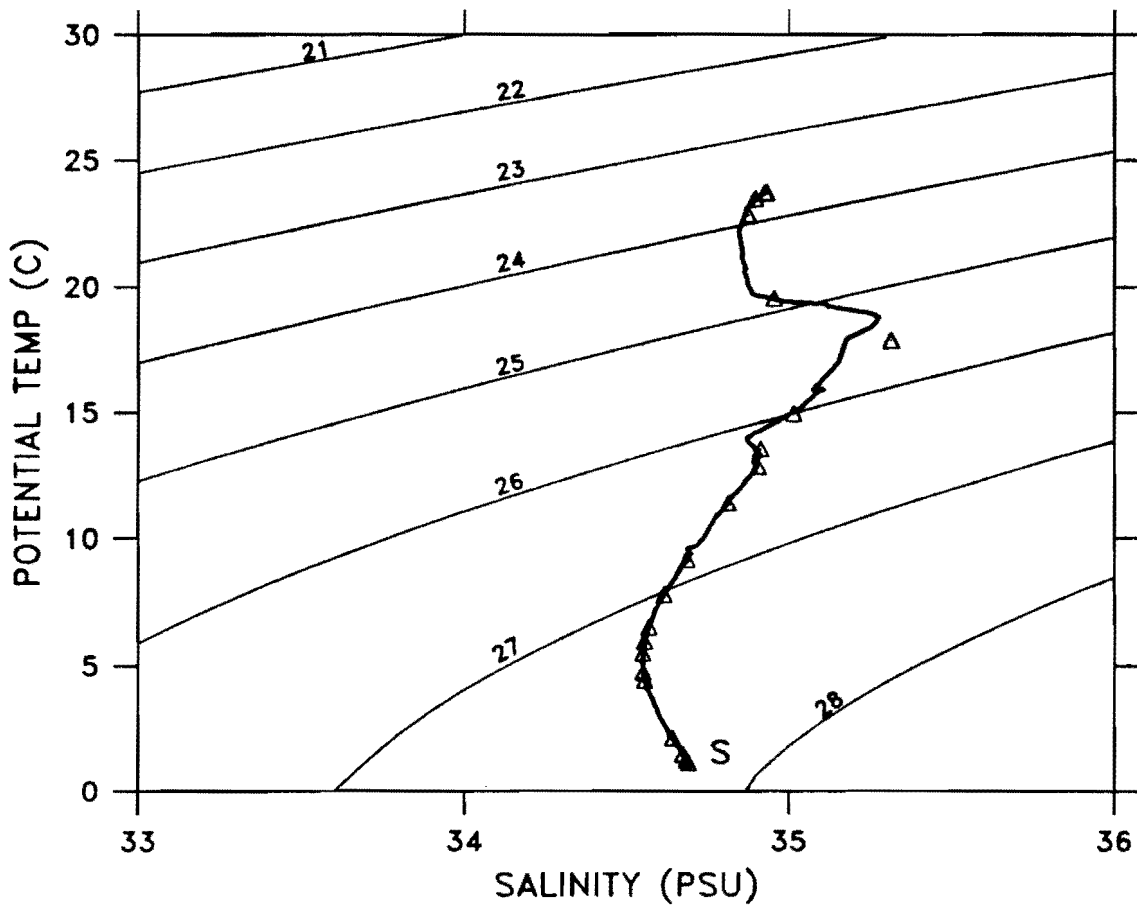


CAST EP3-89-D1 -021 DATE 04 NOV 89 TIME 1030 GMT
 LAT 03 00.7S LONG 115 49.9W WEATHER 2 SEA STATE 4
 BAROMETER 12 WIND DIR 110 T SPD 12 KT VISIBILITY 6
 CLOUD X AMOUNT 6 DRY 22.3 WET 21.3 DEPTH 4321 M

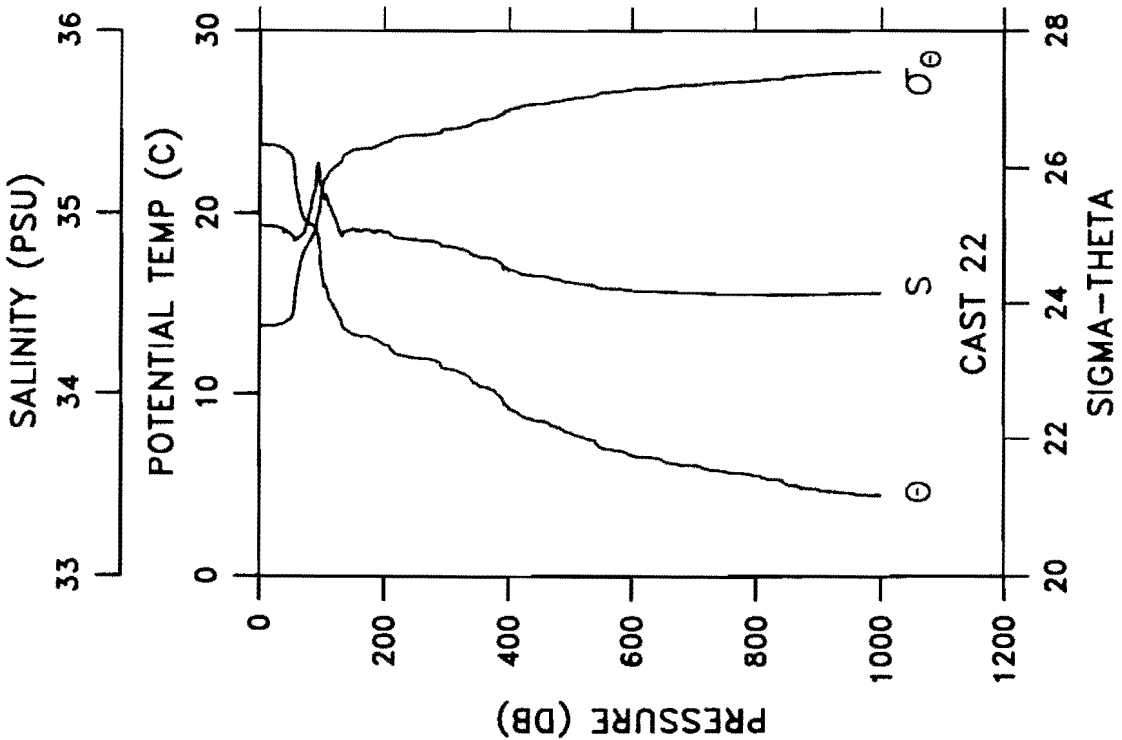


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.675 | 35.205 | 23.894 | 0.000 |
| 10 | 23.676 | 35.205 | 23.894 | 0.040 |
| 20 | 23.675 | 35.206 | 23.895 | 0.080 |
| 30 | 23.671 | 35.206 | 23.896 | 0.120 |
| 40 | 23.653 | 35.206 | 23.901 | 0.160 |
| 50 | 23.596 | 35.213 | 23.923 | 0.200 |
| 60 | 19.015 | 35.072 | 25.074 | 0.235 |
| 70 | 15.854 | 35.015 | 25.794 | 0.260 |
| 80 | 14.320 | 34.976 | 26.101 | 0.280 |
| 90 | 13.759 | 34.962 | 26.209 | 0.299 |
| 100 | 13.444 | 34.950 | 26.265 | 0.317 |
| 110 | 13.319 | 34.948 | 26.288 | 0.335 |
| 120 | 13.180 | 34.938 | 26.309 | 0.352 |
| 130 | 13.054 | 34.929 | 26.327 | 0.369 |
| 140 | 12.937 | 34.922 | 26.346 | 0.387 |
| 150 | 12.870 | 34.919 | 26.357 | 0.404 |
| 160 | 12.768 | 34.915 | 26.374 | 0.421 |
| 170 | 12.680 | 34.910 | 26.388 | 0.437 |
| 180 | 12.616 | 34.907 | 26.398 | 0.454 |
| 190 | 12.534 | 34.902 | 26.410 | 0.471 |
| 200 | 12.420 | 34.896 | 26.428 | 0.487 |
| 250 | 11.955 | 34.868 | 26.496 | 0.569 |
| 300 | 11.336 | 34.828 | 26.580 | 0.646 |
| 350 | 10.441 | 34.778 | 26.703 | 0.720 |
| 400 | 9.069 | 34.698 | 26.868 | 0.787 |
| 450 | 8.280 | 34.652 | 26.958 | 0.847 |
| 500 | 7.641 | 34.621 | 27.029 | 0.904 |
| 550 | 7.171 | 34.594 | 27.075 | 0.959 |
| 600 | 6.695 | 34.581 | 27.130 | 1.011 |
| 650 | 6.297 | 34.567 | 27.172 | 1.061 |
| 700 | 6.038 | 34.562 | 27.202 | 1.110 |
| 750 | 5.653 | 34.564 | 27.251 | 1.157 |
| 800 | 5.366 | 34.560 | 27.283 | 1.202 |
| 900 | 4.818 | 34.557 | 27.345 | 1.287 |
| 1000 | 4.356 | 34.558 | 27.397 | 1.367 |
| 1003 | 4.330 | 34.557 | 27.399 | 1.370 |

CAST EP3-89-DI -022 DATE 06 NOV 89 TIME 1213 GMT
LAT 00 13.1S LONG 124 26.8W

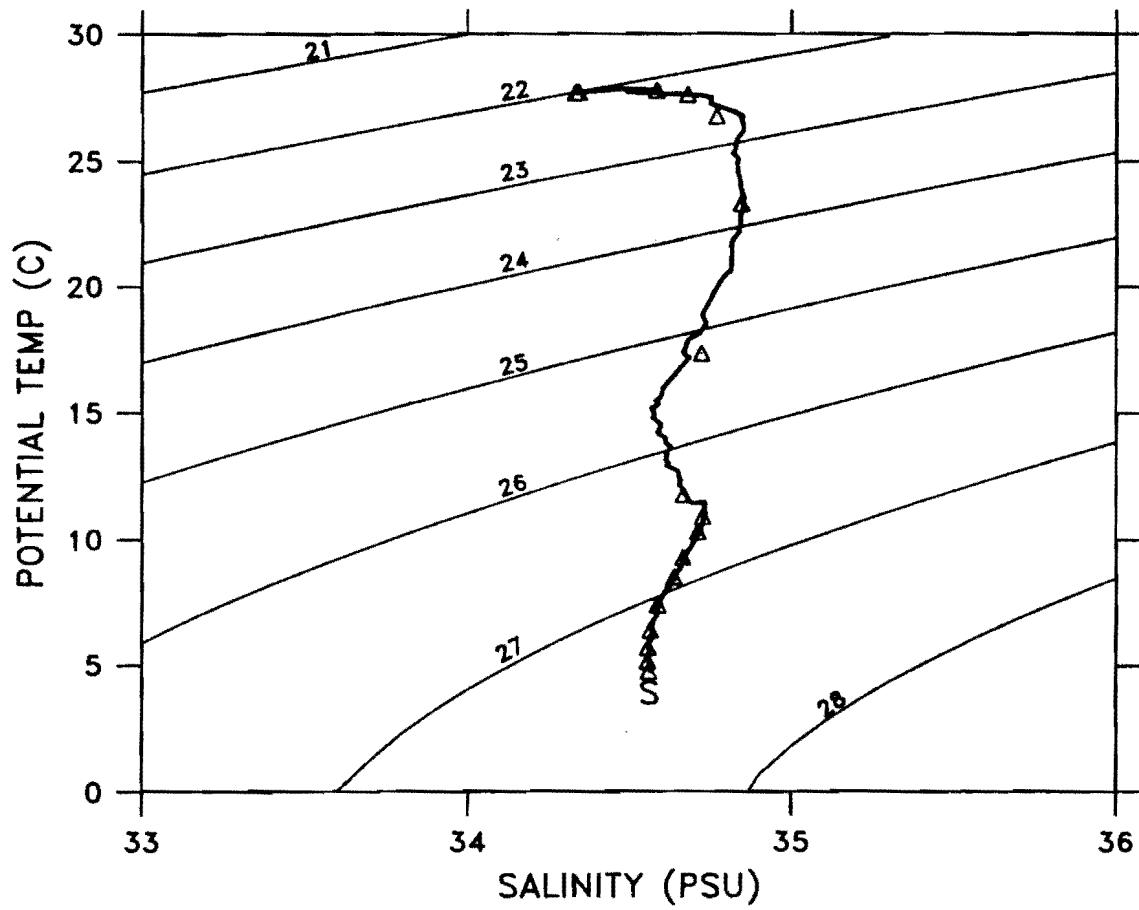


CAST EP3-89-DI -022 DATE 06 NOV 89 TIME 1213 GMT
 LAT 00 13.1S LONG 124 26.8W WEATHER 1 SEA STATE 3
 BAROMETER 11 WIND DIR 110 T SPD 15 KT VISIBILITY 6
 CLOUD 6 AMOUNT 5 DRY 22.8 WET 21.7 DEPTH 4496 M

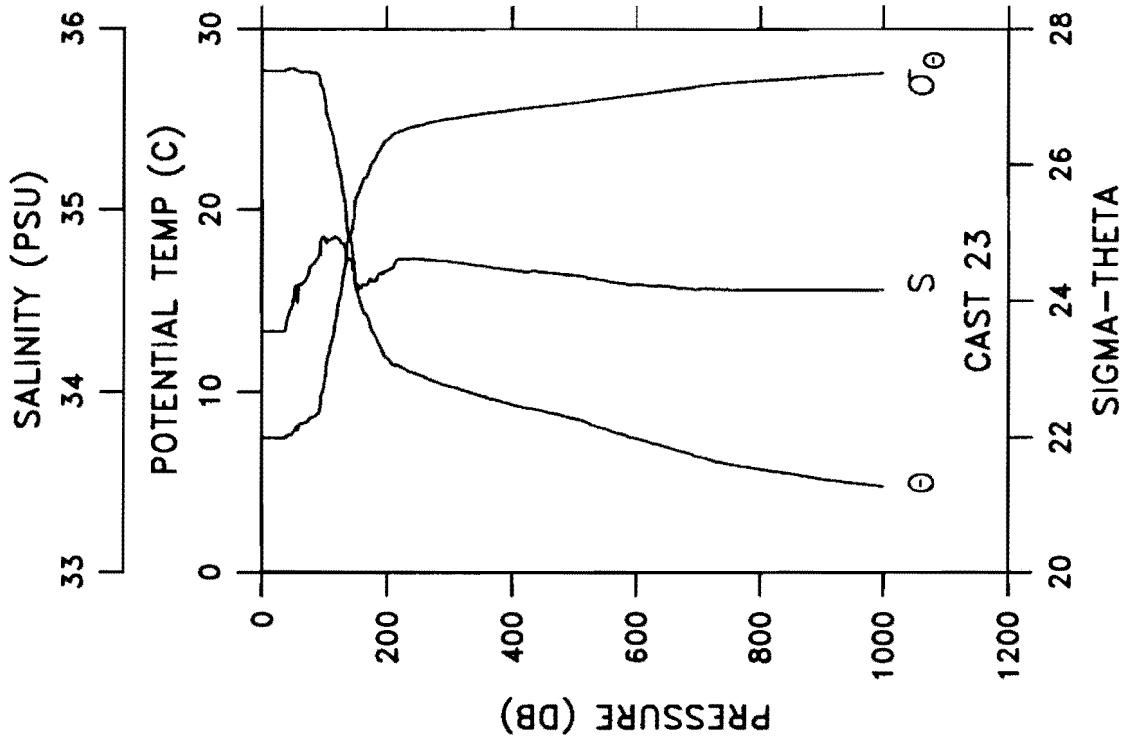


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.762 | 34.931 | 23.662 | 0.000 |
| 10 | 23.755 | 34.931 | 23.663 | 0.042 |
| 20 | 23.749 | 34.925 | 23.661 | 0.085 |
| 30 | 23.663 | 34.921 | 23.683 | 0.127 |
| 40 | 23.504 | 34.907 | 23.718 | 0.169 |
| 50 | 23.257 | 34.886 | 23.774 | 0.210 |
| 60 | 21.152 | 34.856 | 24.344 | 0.250 |
| 70 | 19.726 | 34.888 | 24.749 | 0.283 |
| 80 | 19.400 | 35.007 | 24.925 | 0.315 |
| 90 | 19.132 | 35.165 | 25.115 | 0.344 |
| 100 | 16.546 | 35.122 | 25.716 | 0.370 |
| 110 | 15.413 | 35.055 | 25.923 | 0.392 |
| 120 | 14.720 | 34.977 | 26.016 | 0.413 |
| 130 | 14.107 | 34.891 | 26.081 | 0.433 |
| 140 | 13.509 | 34.901 | 26.213 | 0.451 |
| 150 | 13.290 | 34.913 | 26.267 | 0.469 |
| 160 | 13.213 | 34.903 | 26.276 | 0.487 |
| 170 | 13.191 | 34.908 | 26.284 | 0.505 |
| 180 | 13.122 | 34.900 | 26.291 | 0.523 |
| 190 | 12.850 | 34.902 | 26.328 | 0.540 |
| 200 | 12.701 | 34.895 | 26.371 | 0.557 |
| 250 | 11.978 | 34.853 | 26.480 | 0.639 |
| 300 | 11.383 | 34.817 | 26.563 | 0.719 |
| 350 | 10.475 | 34.763 | 26.685 | 0.794 |
| 400 | 9.165 | 34.688 | 26.848 | 0.863 |
| 450 | 8.476 | 34.653 | 26.929 | 0.925 |
| 500 | 7.857 | 34.621 | 26.998 | 0.984 |
| 550 | 7.020 | 34.585 | 27.089 | 1.039 |
| 600 | 6.584 | 34.572 | 27.138 | 1.091 |
| 650 | 6.288 | 34.564 | 27.171 | 1.141 |
| 700 | 6.030 | 34.560 | 27.201 | 1.189 |
| 750 | 5.721 | 34.554 | 27.235 | 1.236 |
| 800 | 5.492 | 34.552 | 27.262 | 1.282 |
| 900 | 4.739 | 34.552 | 27.350 | 1.368 |
| 1000 | 4.417 | 34.558 | 27.390 | 1.448 |
| 1500 | 2.968 | 34.602 | 27.571 | 1.793 |
| 2000 | 2.096 | 34.644 | 27.679 | 2.074 |
| 2500 | 1.650 | 34.665 | 27.730 | 2.317 |
| 3000 | 1.461 | 34.674 | 27.751 | 2.548 |
| 3500 | 1.250 | 34.685 | 27.775 | 2.772 |
| 4000 | 1.113 | 34.693 | 27.791 | 2.988 |
| 4500 | 1.105 | 34.694 | 27.792 | 3.211 |
| 4509 | 1.104 | 34.694 | 27.792 | 3.215 |

CAST EP3-89-DI -023 DATE 10 NOV 89 TIME 1700 GMT
LAT 07 00.4N LONG 140 11.6W

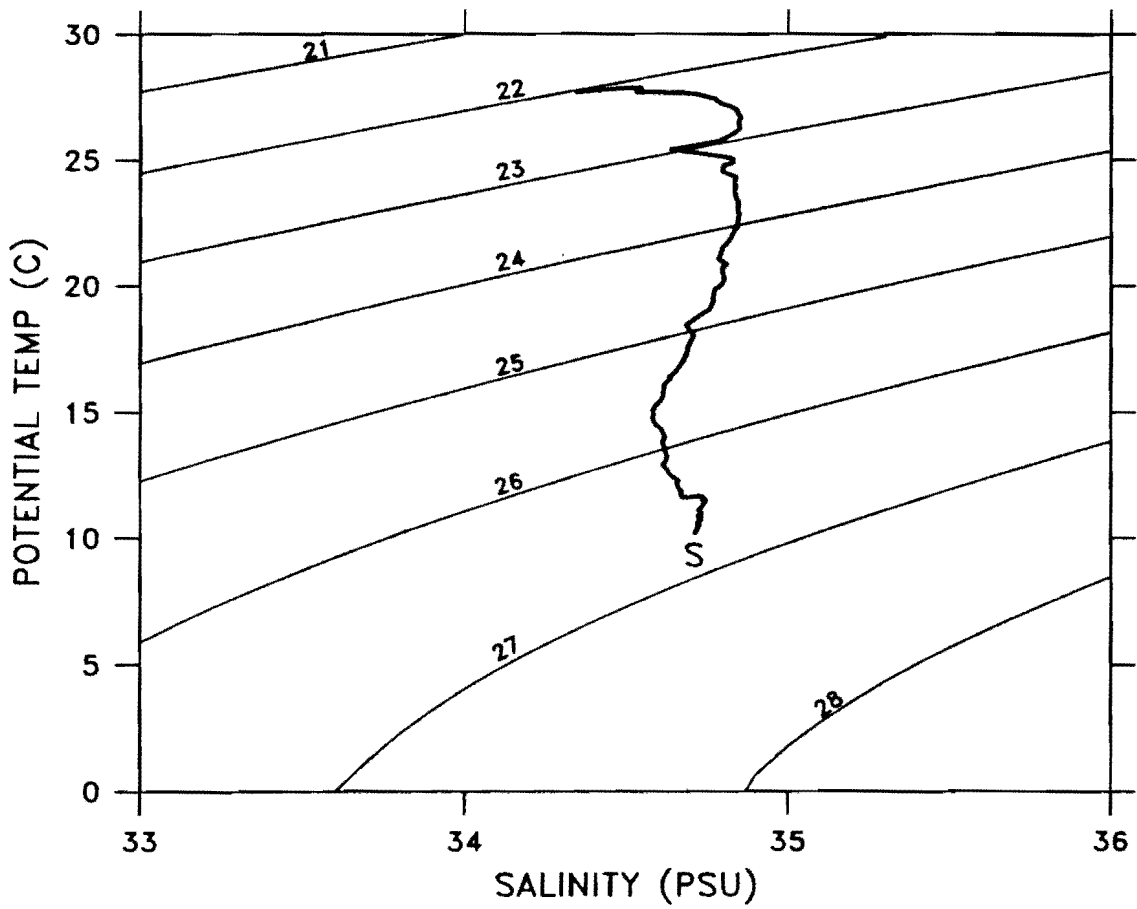


CAST EP3-89-DI -023 DATE 10 NOV 89 TIME 1700 GMT
 LAT 07 00.4N LONG 140 11.6W WEATHER 2 SEA STATE 3
 BAROMETER 12 WIND DIR 160 T SPD 12 KT VISIBILITY 7
 CLOUD 6 AMOUNT 7 DRY 25.9 WET 23.8 DEPTH 5025 M

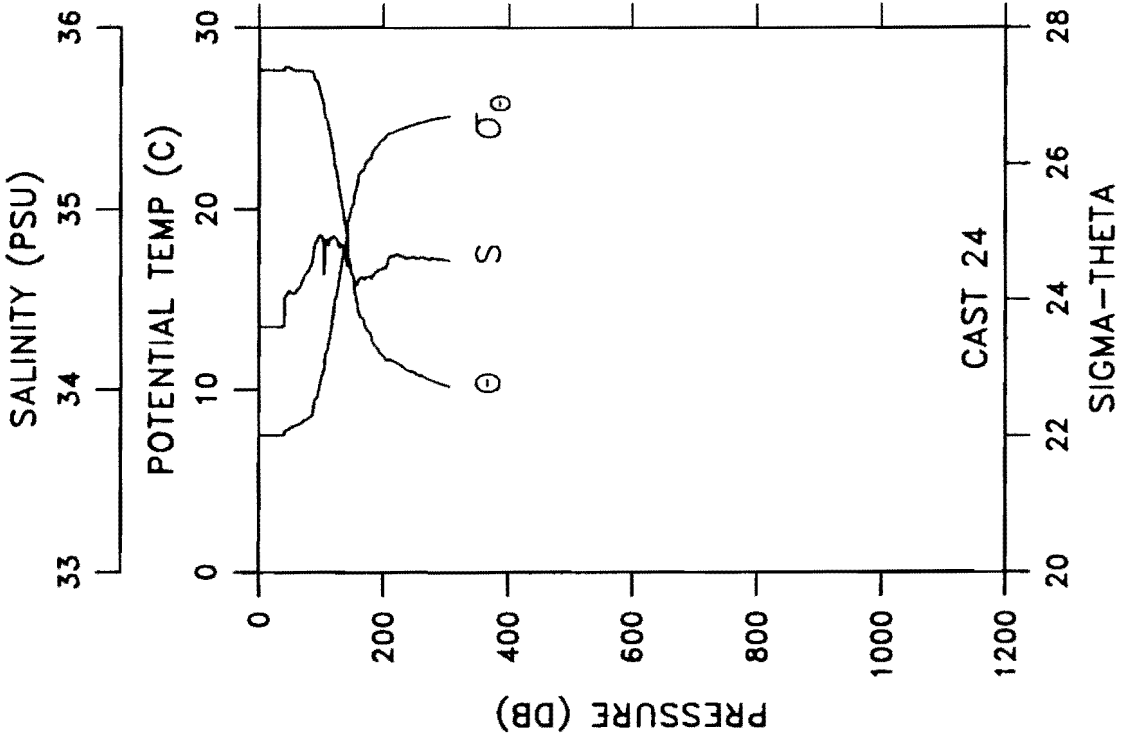


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.689 | 34.332 | 21.995 | 0.000 |
| 10 | 27.686 | 34.332 | 21.997 | 0.058 |
| 20 | 27.684 | 34.332 | 21.997 | 0.116 |
| 30 | 27.686 | 34.331 | 21.995 | 0.175 |
| 40 | 27.744 | 34.392 | 22.023 | 0.233 |
| 50 | 27.840 | 34.497 | 22.071 | 0.291 |
| 60 | 27.664 | 34.592 | 22.199 | 0.348 |
| 70 | 27.642 | 34.616 | 22.225 | 0.404 |
| 80 | 27.585 | 34.697 | 22.303 | 0.460 |
| 90 | 27.540 | 34.736 | 22.348 | 0.516 |
| 100 | 26.350 | 34.854 | 22.816 | 0.569 |
| 110 | 24.503 | 34.836 | 23.369 | 0.616 |
| 120 | 23.033 | 34.850 | 23.812 | 0.660 |
| 130 | 20.976 | 34.815 | 24.361 | 0.699 |
| 140 | 18.503 | 34.734 | 24.944 | 0.732 |
| 150 | 15.842 | 34.600 | 25.476 | 0.761 |
| 160 | 14.662 | 34.584 | 25.725 | 0.785 |
| 170 | 14.042 | 34.608 | 25.876 | 0.808 |
| 180 | 13.152 | 34.610 | 26.060 | 0.828 |
| 190 | 12.445 | 34.651 | 26.233 | 0.847 |
| 200 | 11.833 | 34.666 | 26.361 | 0.865 |
| 250 | 10.941 | 34.730 | 26.577 | 0.944 |
| 300 | 10.325 | 34.716 | 26.675 | 1.017 |
| 350 | 9.806 | 34.694 | 26.746 | 1.087 |
| 400 | 9.337 | 34.671 | 26.806 | 1.154 |
| 450 | 8.979 | 34.659 | 26.855 | 1.219 |
| 500 | 8.555 | 34.642 | 26.908 | 1.282 |
| 550 | 7.993 | 34.613 | 26.971 | 1.342 |
| 600 | 7.465 | 34.593 | 27.033 | 1.400 |
| 650 | 6.976 | 34.582 | 27.083 | 1.455 |
| 700 | 6.426 | 34.563 | 27.153 | 1.507 |
| 750 | 6.014 | 34.561 | 27.204 | 1.556 |
| 800 | 5.726 | 34.560 | 27.240 | 1.603 |
| 900 | 5.190 | 34.560 | 27.304 | 1.694 |
| 1000 | 4.776 | 34.563 | 27.354 | 1.779 |
| 1003 | 4.763 | 34.562 | 27.355 | 1.781 |

CAST EP3-89-DI -024 DATE 10 NOV 89 TIME 1914 GMT
LAT 06 57.3N LONG 140 09.3W

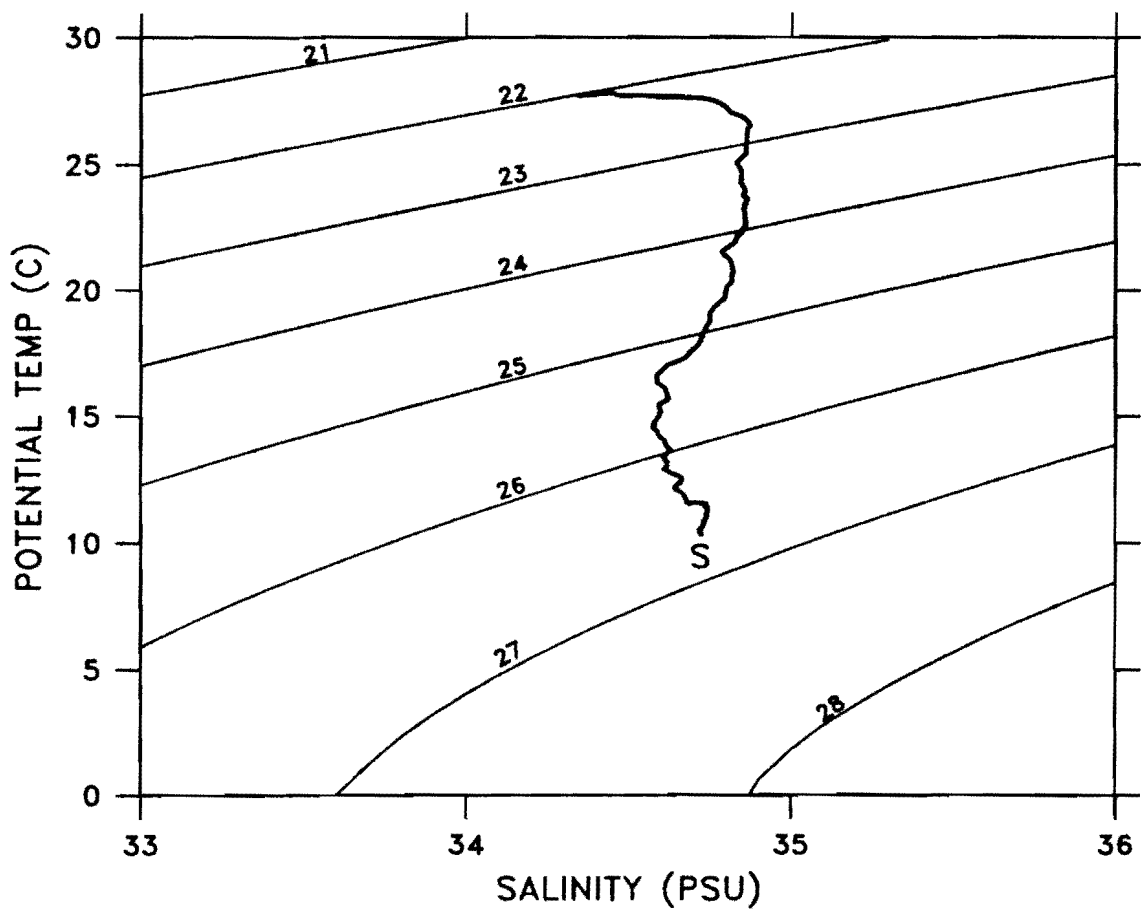


CAST EP3-89-DI -024 DATE 10 NOV 89 TIME 1914 GMT
 LAT 06 57.3N LONG 140 09.3W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 160 T SPD 17 KT VISIBILITY 8
 CLOUD 8 AMOUNT 3 DRY 26.2 WET 23.8 DEPTH 4994 M

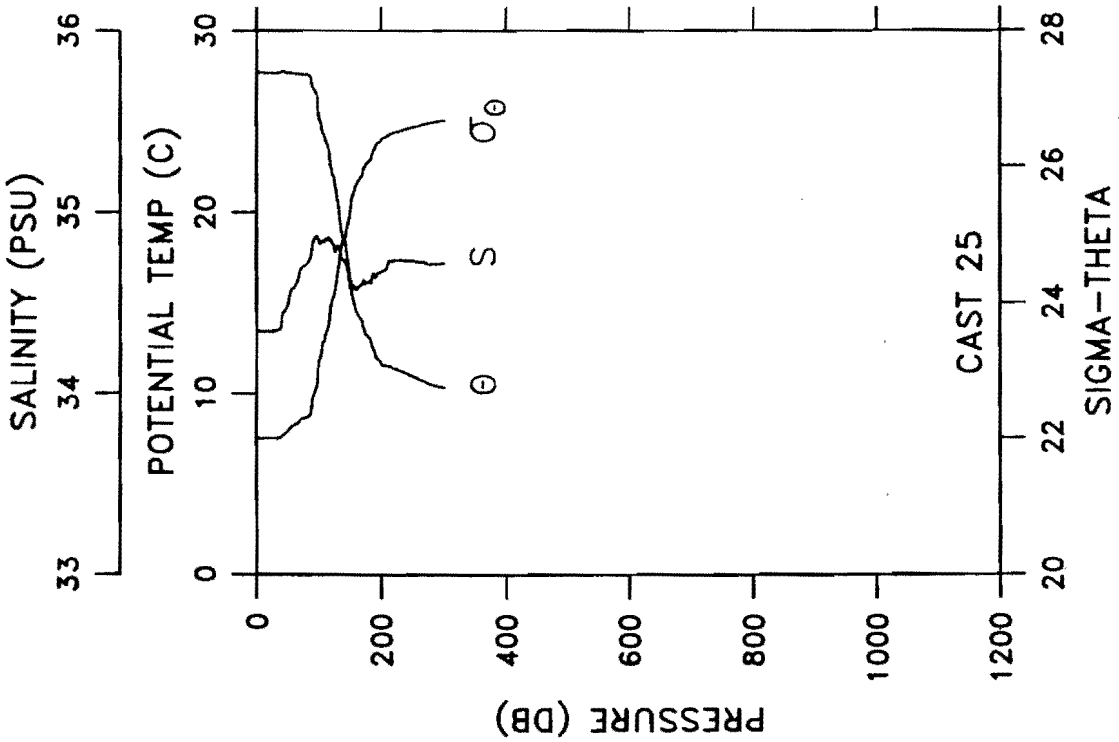


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.679 | 34.347 | 22.010 | 0.000 |
| 10 | 27.677 | 34.348 | 22.011 | 0.058 |
| 20 | 27.676 | 34.347 | 22.011 | 0.116 |
| 30 | 27.671 | 34.347 | 22.012 | 0.174 |
| 40 | 27.674 | 34.351 | 22.015 | 0.232 |
| 50 | 27.791 | 34.546 | 22.123 | 0.290 |
| 60 | 27.671 | 34.550 | 22.165 | 0.347 |
| 70 | 27.651 | 34.611 | 22.217 | 0.403 |
| 80 | 27.633 | 34.670 | 22.268 | 0.460 |
| 90 | 27.130 | 34.813 | 22.538 | 0.515 |
| 100 | 26.170 | 34.845 | 22.866 | 0.567 |
| 110 | 24.758 | 34.801 | 23.266 | 0.615 |
| 120 | 22.826 | 34.850 | 23.871 | 0.659 |
| 130 | 20.838 | 34.811 | 24.395 | 0.697 |
| 140 | 18.836 | 34.726 | 24.855 | 0.731 |
| 150 | 16.340 | 34.638 | 25.392 | 0.759 |
| 160 | 14.287 | 34.611 | 25.827 | 0.783 |
| 170 | 13.588 | 34.618 | 25.978 | 0.805 |
| 180 | 13.079 | 34.624 | 26.086 | 0.825 |
| 190 | 12.317 | 34.657 | 26.262 | 0.843 |
| 200 | 11.843 | 34.671 | 26.364 | 0.861 |
| 250 | 10.951 | 34.733 | 26.577 | 0.940 |
| 300 | 10.236 | 34.716 | 26.690 | 1.012 |
| 306 | 10.163 | 34.713 | 26.700 | 1.021 |

CAST EP3-89-DI -025 DATE 10 NOV 89 TIME 2014 GMT
LAT 07 00.6N LONG 140 08.6W



CAST EP3-89-DI -025 DATE 10 NOV 89 TIME 2014 GMT
 LAT 07 00.6N LONG 140 08.6W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 165 T SPD 15 KT VISIBILITY 8
 CLOUD 8 AMOUNT 3 DRY 27.2 WET 24.8 DEPTH 4971 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.706 | 34.345 | 22.000 | 0.000 |
| 10 | 27.696 | 34.344 | 22.002 | 0.058 |
| 20 | 27.688 | 34.345 | 22.006 | 0.116 |
| 30 | 27.689 | 34.345 | 22.006 | 0.174 |
| 40 | 27.741 | 34.399 | 22.029 | 0.233 |
| 50 | 27.688 | 34.488 | 22.113 | 0.290 |
| 60 | 27.641 | 34.587 | 22.203 | 0.347 |
| 70 | 27.612 | 34.686 | 22.287 | 0.403 |
| 80 | 27.593 | 34.717 | 22.316 | 0.459 |
| 90 | 26.908 | 34.836 | 22.626 | 0.513 |
| 100 | 25.171 | 34.837 | 23.168 | 0.564 |
| 110 | 23.986 | 34.856 | 23.539 | 0.610 |
| 120 | 22.338 | 34.847 | 24.008 | 0.652 |
| 130 | 20.558 | 34.814 | 24.473 | 0.690 |
| 140 | 18.485 | 34.736 | 24.951 | 0.722 |
| 150 | 16.308 | 34.590 | 25.362 | 0.751 |
| 160 | 14.543 | 34.575 | 25.744 | 0.775 |
| 170 | 13.798 | 34.617 | 25.934 | 0.797 |
| 180 | 13.109 | 34.620 | 26.077 | 0.817 |
| 190 | 12.175 | 34.641 | 26.277 | 0.836 |
| 200 | 11.660 | 34.678 | 26.404 | 0.853 |
| 250 | 10.970 | 34.736 | 26.576 | 0.932 |
| 300 | 10.339 | 34.723 | 26.677 | 1.005 |
| 302 | 10.325 | 34.722 | 26.679 | 1.008 |

CAST EP3-89-DI -001 LAT 09 59.2N LONG 109 18.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.301 | 32.982 | 0.00 | 27.301 | 21.105 |
| 9. | 27.275 | 32.992 | 0.00 | 27.273 | 21.121 |
| 19. | 27.280 | 33.008 | 0.00 | 27.276 | 21.133 |
| 39. | 25.579 | 34.013 | 0.00 | 25.570 | 22.423 |
| 58. | 19.327 | 34.523 | 0.00 | 19.317 | 24.577 |
| 78. | 15.700 | 34.716 | 0.00 | 15.688 | 25.601 |
| 98. | 14.083 | 34.775 | 0.00 | 14.069 | 25.999 |
| 122. | 12.937 | 34.792 | 0.00 | 12.920 | 26.248 |
| 148. | 12.161 | 34.780 | 0.00 | 12.142 | 26.392 |
| 199. | 11.414 | 34.748 | 0.00 | 11.389 | 26.509 |
| 297. | 10.240 | 34.688 | 0.00 | 10.205 | 26.674 |
| 398. | 8.827 | 34.615 | 0.00 | 8.784 | 26.851 |
| 497. | 7.727 | 34.568 | 0.00 | 7.677 | 26.982 |
| 597. | 6.596 | 34.555 | 0.00 | 6.541 | 27.131 |
| 697. | 5.805 | 34.547 | 0.00 | 5.744 | 27.227 |
| 793. | 5.258 | 34.547 | 0.00 | 5.191 | 27.294 |
| 891. | 4.867 | 34.554 | 0.00 | 4.794 | 27.345 |
| 997. | 4.305 | 34.564 | 0.00 | 4.227 | 27.416 |
| 1994. | 2.222 | 34.642 | 0.00 | 2.083 | 27.678 |
| 2992. | 1.737 | 34.670 | 0.00 | 1.516 | 27.744 |

CAST EP3-89-DI -003 LAT 09 01.1N LONG 109 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.431 | 33.102 | 0.00 | 27.431 | 21.154 |
| 1. | 27.433 | 33.102 | 0.00 | 27.433 | 21.153 |
| 8. | 27.434 | 33.102 | 0.00 | 27.432 | 21.153 |
| 18. | 27.331 | 33.104 | 0.00 | 27.327 | 21.188 |
| 38. | 27.251 | 33.315 | 0.00 | 27.242 | 21.374 |
| 58. | 21.260 | 34.546 | 0.00 | 21.249 | 24.082 |
| 77. | 16.258 | 34.687 | 0.00 | 16.246 | 25.451 |
| 98. | 13.650 | 34.778 | 0.00 | 13.636 | 26.092 |
| 122. | 12.645 | 34.801 | 0.00 | 12.629 | 26.313 |
| 148. | 12.015 | 34.777 | 0.00 | 11.996 | 26.417 |
| 198. | 11.229 | 34.745 | 0.00 | 11.204 | 26.540 |
| 247. | 10.559 | 34.717 | 0.00 | 10.529 | 26.640 |
| 296. | 9.981 | 34.689 | 0.00 | 9.947 | 26.719 |
| 397. | 8.761 | 34.619 | 0.00 | 8.718 | 26.865 |
| 496. | 7.593 | 34.573 | 0.00 | 7.544 | 27.006 |
| 496. | 7.603 | 34.578 | 0.00 | 7.554 | 27.008 |
| 497. | 7.604 | 34.577 | 0.00 | 7.555 | 27.007 |
| 596. | 6.697 | 34.567 | 0.00 | 6.641 | 27.127 |
| 696. | 6.034 | 34.564 | 0.00 | 5.972 | 27.212 |
| 794. | 5.418 | 34.556 | 0.00 | 5.350 | 27.282 |
| 895. | 4.979 | 34.558 | 0.00 | 4.905 | 27.336 |
| 1001. | 4.564 | 34.563 | 0.00 | 4.484 | 27.387 |
| 1001. | 4.567 | 34.564 | 0.00 | 4.487 | 27.388 |
| 1000. | 4.566 | 34.565 | 0.00 | 4.486 | 27.388 |

CAST EP3-89-DI -002 LAT 10 00.0N LONG 109 18.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 8. | 27.345 | 32.977 | 0.00 | 27.343 | 21.088 |
| 19. | 27.262 | 32.986 | 0.00 | 27.258 | 21.122 |
| 38. | 25.765 | 33.950 | 0.00 | 25.757 | 22.319 |
| 58. | 17.774 | 34.619 | 0.00 | 17.764 | 25.039 |
| 78. | 15.476 | 34.726 | 0.00 | 15.464 | 25.659 |
| 99. | 13.553 | 34.785 | 0.00 | 13.539 | 26.117 |
| 122. | 12.560 | 34.789 | 0.00 | 12.544 | 26.321 |
| 147. | 11.947 | 34.771 | 0.00 | 11.928 | 26.426 |
| 198. | 11.318 | 34.746 | 0.00 | 11.293 | 26.525 |
| 298. | 10.244 | 34.694 | 0.00 | 10.209 | 26.678 |
| 397. | 8.692 | 34.605 | 0.00 | 8.649 | 26.865 |
| 398. | 8.689 | 34.605 | 0.00 | 8.646 | 26.865 |
| 398. | 8.681 | 34.604 | 0.00 | 8.638 | 26.866 |
| 398. | 8.674 | 34.604 | 0.00 | 8.631 | 26.867 |
| 397. | 8.660 | 34.605 | 0.00 | 8.618 | 26.870 |
| 400. | 8.645 | 34.604 | 0.00 | 8.602 | 26.871 |
| 399. | 8.645 | 34.602 | 0.00 | 8.602 | 26.870 |
| 400. | 8.643 | 34.602 | 0.00 | 8.600 | 26.870 |
| 401. | 8.638 | 34.603 | 0.00 | 8.595 | 26.872 |
| 403. | 8.633 | 34.602 | 0.00 | 8.590 | 26.872 |
| 402. | 8.635 | 34.602 | 0.00 | 8.592 | 26.871 |
| 402. | 8.634 | 34.602 | 0.00 | 8.591 | 26.871 |
| 402. | 8.640 | 34.602 | 0.00 | 8.597 | 26.870 |
| 402. | 8.640 | 34.603 | 0.00 | 8.597 | 26.871 |

CAST EP3-89-DI -004 LAT 08 00.6N LONG 109 59.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.177 | 33.214 | 0.00 | 27.177 | 21.319 |
| 0. | 27.176 | 33.217 | 0.00 | 27.176 | 21.322 |
| 9. | 27.193 | 33.217 | 0.00 | 27.191 | 21.317 |
| 18. | 27.154 | 33.242 | 0.00 | 27.150 | 21.349 |
| 38. | 27.122 | 33.401 | 0.00 | 27.113 | 21.480 |
| 58. | 22.977 | 34.449 | 0.00 | 22.965 | 23.527 |
| 77. | 17.557 | 34.685 | 0.00 | 17.544 | 25.143 |
| 98. | 14.756 | 34.753 | 0.00 | 14.741 | 25.839 |
| 123. | 12.783 | 34.792 | 0.00 | 12.766 | 26.279 |
| 147. | 12.255 | 34.788 | 0.00 | 12.236 | 26.380 |
| 199. | 11.686 | 34.781 | 0.00 | 11.661 | 26.484 |
| 248. | 11.077 | 34.751 | 0.00 | 11.046 | 26.574 |
| 298. | 10.529 | 34.718 | 0.00 | 10.493 | 26.647 |
| 396. | 9.214 | 34.664 | 0.00 | 9.170 | 26.828 |
| 497. | 8.051 | 34.611 | 0.00 | 8.000 | 26.969 |
| 496. | 8.046 | 34.611 | 0.00 | 7.995 | 26.969 |
| 497. | 8.046 | 34.611 | 0.00 | 7.995 | 26.969 |
| 597. | 6.853 | 34.576 | 0.00 | 6.797 | 27.113 |
| 696. | 6.272 | 34.563 | 0.00 | 6.209 | 27.181 |
| 796. | 5.657 | 34.556 | 0.00 | 5.588 | 27.253 |
| 894. | 5.107 | 34.558 | 0.00 | 5.032 | 27.321 |
| 996. | 4.567 | 34.566 | 0.00 | 4.487 | 27.389 |
| 996. | 4.567 | 34.566 | 0.00 | 4.485 | 27.389 |
| 996. | 4.565 | 34.565 | 0.00 | 4.485 | 27.388 |

CAST EP3-89-DI -005 LAT 06 59.8N LONG 110 00.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.106 | 33.297 | 0.00 | 27.106 | 21.404 |
| 1. | 27.110 | 33.319 | 0.00 | 27.110 | 21.419 |
| 9. | 27.164 | 33.390 | 0.00 | 27.162 | 21.456 |
| 18. | 27.195 | 33.537 | 0.00 | 27.191 | 21.558 |
| 38. | 27.093 | 33.606 | 0.00 | 27.084 | 21.643 |
| 59. | 24.223 | 34.222 | 0.00 | 24.211 | 22.992 |
| 78. | 16.590 | 34.708 | 0.00 | 16.577 | 25.391 |
| 98. | 14.374 | 34.779 | 0.00 | 14.360 | 25.932 |
| 123. | 12.533 | 34.768 | 0.00 | 12.517 | 26.318 |
| 147. | 11.985 | 34.770 | 0.00 | 11.966 | 26.418 |
| 198. | 11.452 | 34.746 | 0.00 | 11.427 | 26.500 |
| 246. | 10.838 | 34.735 | 0.00 | 10.808 | 26.604 |
| 298. | 10.272 | 34.710 | 0.00 | 10.237 | 26.685 |
| 395. | 9.437 | 34.678 | 0.00 | 9.392 | 26.803 |
| 495. | 8.372 | 34.633 | 0.00 | 8.320 | 26.938 |
| 494. | 8.382 | 34.633 | 0.00 | 8.330 | 26.936 |
| 495. | 8.371 | 34.632 | 0.00 | 8.319 | 26.937 |
| 596. | 7.062 | 34.584 | 0.00 | 7.005 | 27.091 |
| 697. | 6.116 | 34.562 | 0.00 | 6.053 | 27.200 |
| 795. | 5.491 | 34.557 | 0.00 | 5.423 | 27.274 |
| 892. | 5.058 | 34.558 | 0.00 | 4.984 | 27.327 |
| 1046. | 4.473 | 34.571 | 0.00 | 4.390 | 27.404 |
| 1045. | 4.474 | 34.565 | 0.00 | 4.391 | 27.399 |

CAST EP3-89-DI -007 LAT 04 57.6N LONG 110 01.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.744 | 33.925 | 0.00 | 26.744 | 21.992 |
| 8. | 26.742 | 33.924 | 0.00 | 26.740 | 21.992 |
| 19. | 26.759 | 33.923 | 0.00 | 26.755 | 21.987 |
| 38. | 26.758 | 33.928 | 0.00 | 26.749 | 21.992 |
| 58. | 26.751 | 33.942 | 0.00 | 26.738 | 22.006 |
| 78. | 21.507 | 34.485 | 0.00 | 21.492 | 23.969 |
| 98. | 16.697 | 34.699 | 0.00 | 16.681 | 25.359 |
| 122. | 14.158 | 34.814 | 0.00 | 14.140 | 26.014 |
| 147. | 12.742 | 34.825 | 0.00 | 12.722 | 26.313 |
| 197. | 11.563 | 34.742 | 0.00 | 11.538 | 26.476 |
| 295. | 10.191 | 34.710 | 0.00 | 10.156 | 26.699 |
| 397. | 9.281 | 34.670 | 0.00 | 9.237 | 26.822 |
| 495. | 8.290 | 34.631 | 0.00 | 8.238 | 26.948 |
| 597. | 7.252 | 34.590 | 0.00 | 7.194 | 27.059 |
| 696. | 6.455 | 34.571 | 0.00 | 6.391 | 27.163 |
| 796. | 5.787 | 34.559 | 0.00 | 5.717 | 27.240 |
| 896. | 5.105 | 34.561 | 0.00 | 5.030 | 27.324 |
| 994. | 4.689 | 34.564 | 0.00 | 4.608 | 27.374 |
| 1992. | 2.212 | 34.648 | 0.00 | 2.073 | 27.684 |
| 2500. | 1.857 | 34.666 | 0.00 | 1.679 | 27.729 |
| 2986. | 1.733 | 34.675 | 0.00 | 1.512 | 27.748 |
| 3493. | 1.507 | 34.687 | 0.00 | 1.241 | 27.777 |
| 3839. | 1.475 | 34.691 | 0.00 | 1.174 | 27.785 |

CAST EP3-89-DI -006 LAT 05 59.8N LONG 110 00.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.984 | 33.449 | 0.00 | 26.984 | 21.557 |
| 1. | 26.984 | 33.450 | 0.00 | 26.984 | 21.558 |
| 6. | 26.988 | 33.459 | 0.00 | 26.987 | 21.564 |
| 9. | 26.993 | 33.456 | 0.00 | 26.991 | 21.560 |
| 18. | 26.992 | 33.491 | 0.00 | 26.988 | 21.588 |
| 57. | 27.052 | 34.076 | 0.00 | 27.039 | 22.012 |
| 78. | 18.849 | 34.664 | 0.00 | 18.835 | 24.807 |
| 99. | 14.783 | 34.752 | 0.00 | 14.768 | 25.832 |
| 123. | 12.860 | 34.728 | 0.00 | 12.843 | 26.214 |
| 148. | 12.474 | 34.780 | 0.00 | 12.454 | 26.331 |
| 197. | 11.810 | 34.782 | 0.00 | 11.785 | 26.461 |
| 246. | 10.915 | 34.738 | 0.00 | 10.885 | 26.593 |
| 298. | 10.162 | 34.705 | 0.00 | 10.127 | 26.700 |
| 396. | 8.948 | 34.652 | 0.00 | 8.905 | 26.861 |
| 495. | 7.672 | 34.605 | 0.00 | 7.622 | 27.020 |
| 495. | 7.680 | 34.605 | 0.00 | 7.637 | 27.018 |
| 494. | 7.686 | 34.605 | 0.00 | 7.637 | 27.017 |
| 595. | 6.845 | 34.578 | 0.00 | 6.789 | 27.116 |
| 696. | 6.089 | 34.568 | 0.00 | 6.027 | 27.208 |
| 795. | 5.438 | 34.558 | 0.00 | 5.370 | 27.281 |
| 894. | 4.995 | 34.562 | 0.00 | 4.921 | 27.337 |
| 998. | 4.568 | 34.566 | 0.00 | 4.488 | 27.389 |
| 996. | 4.573 | 34.565 | 0.00 | 4.493 | 27.388 |
| 994. | 4.580 | 34.567 | 0.00 | 4.500 | 27.388 |

CAST EP3-89-DI -008 LAT 04 00.1N LONG 109 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.068 | 33.941 | 0.00 | 26.068 | 22.215 |
| 1. | 26.063 | 33.942 | 0.00 | 26.063 | 22.218 |
| 9. | 26.067 | 33.942 | 0.00 | 26.065 | 22.217 |
| 18. | 26.071 | 33.943 | 0.00 | 26.067 | 22.217 |
| 40. | 25.690 | 33.941 | 0.00 | 25.681 | 22.335 |
| 59. | 25.466 | 34.059 | 0.00 | 25.453 | 22.494 |
| 100. | 15.582 | 34.733 | 0.00 | 15.567 | 25.641 |
| 123. | 12.607 | 34.671 | 0.00 | 12.591 | 26.220 |
| 147. | 11.559 | 34.678 | 0.00 | 11.540 | 26.426 |
| 198. | 11.303 | 34.755 | 0.00 | 11.278 | 26.534 |
| 247. | 10.986 | 34.761 | 0.00 | 10.956 | 26.598 |
| 297. | 10.550 | 34.734 | 0.00 | 10.514 | 26.656 |
| 397. | 9.547 | 34.615 | 0.00 | 9.502 | 26.735 |
| 491. | 8.386 | 34.635 | 0.00 | 8.334 | 26.937 |
| 493. | 8.359 | 34.634 | 0.00 | 8.307 | 26.940 |
| 496. | 8.357 | 34.634 | 0.00 | 8.305 | 26.941 |
| 598. | 7.247 | 34.590 | 0.00 | 7.189 | 27.070 |
| 695. | 6.279 | 34.565 | 0.00 | 6.216 | 27.181 |
| 795. | 5.452 | 34.556 | 0.00 | 5.384 | 27.278 |
| 901. | 4.965 | 34.561 | 0.00 | 4.891 | 27.340 |
| 994. | 4.524 | 34.567 | 0.00 | 4.445 | 27.394 |
| 994. | 4.524 | 34.567 | 0.00 | 4.445 | 27.394 |
| 995. | 4.526 | 34.568 | 0.00 | 4.447 | 27.395 |

CAST EP3-89-DI -009 LAT 03 00.3N LONG 109 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 24.553 | 34.121 | 0.00 | 24.553 | 22.813 |
| 1. | 24.565 | 34.121 | 0.00 | 24.565 | 22.810 |
| 7. | 24.511 | 34.123 | 0.00 | 24.510 | 22.828 |
| 17. | 24.462 | 34.120 | 0.00 | 24.458 | 22.841 |
| 38. | 24.447 | 34.123 | 0.00 | 24.439 | 22.849 |
| 58. | 24.444 | 34.139 | 0.00 | 24.432 | 22.863 |
| 77. | 24.470 | 34.208 | 0.00 | 24.454 | 22.909 |
| 97. | 15.030 | 34.879 | 0.00 | 15.015 | 25.876 |
| 123. | 13.723 | 34.934 | 0.00 | 13.706 | 26.198 |
| 146. | 13.239 | 34.921 | 0.00 | 13.219 | 26.288 |
| 195. | 12.611 | 34.873 | 0.00 | 12.585 | 26.378 |
| 248. | 11.905 | 34.823 | 0.00 | 11.873 | 26.476 |
| 297. | 11.458 | 34.802 | 0.00 | 11.420 | 26.545 |
| 395. | 9.960 | 34.708 | 0.00 | 9.914 | 26.739 |
| 496. | 8.261 | 34.629 | 0.00 | 8.209 | 26.951 |
| 496. | 8.262 | 34.630 | 0.00 | 8.210 | 26.952 |
| 596. | 7.024 | 34.583 | 0.00 | 6.967 | 27.095 |
| 697. | 6.217 | 34.565 | 0.00 | 6.154 | 27.189 |
| 796. | 5.609 | 34.558 | 0.00 | 5.540 | 27.261 |
| 896. | 4.967 | 34.557 | 0.00 | 4.893 | 27.336 |
| 994. | 4.520 | 34.561 | 0.00 | 4.441 | 27.390 |
| 993. | 4.525 | 34.561 | 0.00 | 4.446 | 27.390 |
| 995. | 4.523 | 34.562 | 0.00 | 4.444 | 27.391 |

CAST EP3-89-DI -011 LAT 01 29.9N LONG 110 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 23.758 | 34.070 | 0.00 | 23.758 | 23.010 |
| 1. | 23.759 | 34.070 | 0.00 | 23.759 | 23.010 |
| 9. | 23.776 | 34.068 | 0.00 | 23.764 | 23.007 |
| 18. | 23.773 | 34.068 | 0.00 | 23.769 | 23.005 |
| 40. | 23.385 | 34.129 | 0.00 | 23.377 | 23.166 |
| 59. | 20.669 | 34.557 | 0.00 | 20.658 | 24.250 |
| 79. | 15.782 | 34.902 | 0.00 | 15.770 | 25.726 |
| 99. | 13.978 | 34.930 | 0.00 | 13.964 | 26.141 |
| 123. | 13.465 | 34.926 | 0.00 | 13.448 | 26.245 |
| 147. | 13.104 | 34.906 | 0.00 | 13.084 | 26.304 |
| 198. | 12.554 | 34.874 | 0.00 | 12.527 | 26.390 |
| 249. | 12.135 | 34.854 | 0.00 | 12.102 | 26.457 |
| 298. | 11.416 | 34.808 | 0.00 | 11.378 | 26.557 |
| 396. | 9.768 | 34.704 | 0.00 | 9.722 | 26.768 |
| 496. | 8.067 | 34.626 | 0.00 | 8.016 | 26.978 |
| 496. | 8.069 | 34.624 | 0.00 | 8.018 | 26.976 |
| 596. | 8.058 | 34.625 | 0.00 | 8.007 | 26.979 |
| 695. | 6.900 | 34.579 | 0.00 | 6.843 | 27.109 |
| 695. | 6.158 | 34.566 | 0.00 | 6.095 | 27.198 |
| 796. | 5.078 | 34.554 | 0.00 | 5.012 | 27.320 |
| 895. | 4.553 | 34.556 | 0.00 | 4.482 | 27.382 |
| 1002. | 4.344 | 34.561 | 0.00 | 4.265 | 27.409 |
| 999. | 4.347 | 34.561 | 0.00 | 4.269 | 27.409 |
| 998. | 4.347 | 34.566 | 0.00 | 4.269 | 27.413 |

CAST EP3-89-DI -010 LAT 02 00.0N LONG 110 00.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 24.647 | 34.030 | 0.00 | 24.647 | 22.717 |
| 23. | 24.654 | 34.029 | 0.00 | 24.649 | 22.715 |
| 48. | 24.475 | 34.056 | 0.00 | 24.465 | 22.791 |
| 73. | 15.846 | 34.885 | 0.00 | 15.835 | 25.698 |
| 97. | 13.928 | 34.923 | 0.00 | 13.914 | 26.146 |
| 199. | 12.565 | 34.871 | 0.00 | 12.538 | 26.385 |
| 298. | 11.298 | 34.807 | 0.00 | 11.261 | 26.578 |
| 397. | 9.968 | 34.708 | 0.00 | 9.922 | 26.738 |
| 496. | 8.204 | 34.631 | 0.00 | 8.152 | 26.961 |
| 496. | 7.139 | 34.592 | 0.00 | 7.081 | 27.086 |
| 696. | 6.270 | 34.569 | 0.00 | 6.207 | 27.186 |
| 794. | 5.437 | 34.561 | 0.00 | 5.369 | 27.284 |
| 895. | 4.734 | 34.560 | 0.00 | 4.662 | 27.365 |
| 995. | 4.403 | 34.559 | 0.00 | 4.325 | 27.401 |
| 1244. | 3.644 | 34.585 | 0.00 | 3.551 | 27.502 |
| 1493. | 3.064 | 34.610 | 0.00 | 2.956 | 27.578 |
| 1742. | 2.646 | 34.626 | 0.00 | 2.522 | 27.629 |
| 1993. | 2.333 | 34.638 | 0.00 | 2.192 | 27.666 |
| 2244. | 2.006 | 34.656 | 0.00 | 1.848 | 27.708 |
| 2493. | 1.842 | 34.665 | 0.00 | 1.665 | 27.729 |
| 2743. | 1.761 | 34.671 | 0.00 | 1.563 | 27.742 |
| 2994. | 1.643 | 34.671 | 0.00 | 1.424 | 27.752 |
| 3242. | 1.557 | 34.684 | 0.00 | 1.315 | 27.770 |
| 3442. | 1.444 | 34.684 | 0.00 | 1.220 | 27.770 |

CAST EP3-89-DI -012 LAT 00 59.8N LONG 110 00.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 21.815 | 34.551 | 0.00 | 21.815 | 23.930 |
| 0. | 21.815 | 34.550 | 0.00 | 21.815 | 23.929 |
| 9. | 21.806 | 34.543 | 0.00 | 21.804 | 23.927 |
| 19. | 21.816 | 34.546 | 0.00 | 21.812 | 23.927 |
| 39. | 21.441 | 34.559 | 0.00 | 21.433 | 24.041 |
| 57. | 20.042 | 34.702 | 0.00 | 20.031 | 24.527 |
| 79. | 15.794 | 34.909 | 0.00 | 15.782 | 25.728 |
| 98. | 14.601 | 34.907 | 0.00 | 14.586 | 25.991 |
| 123. | 13.970 | 34.904 | 0.00 | 13.952 | 26.124 |
| 147. | 13.475 | 34.914 | 0.00 | 13.454 | 26.235 |
| 196. | 12.717 | 34.889 | 0.00 | 12.690 | 26.369 |
| 246. | 12.455 | 34.876 | 0.00 | 12.422 | 26.412 |
| 297. | 12.087 | 34.857 | 0.00 | 12.048 | 26.469 |
| 397. | 9.661 | 34.703 | 0.00 | 9.616 | 26.785 |
| 496. | 7.859 | 34.624 | 0.00 | 7.809 | 27.007 |
| 496. | 7.859 | 34.623 | 0.00 | 7.810 | 27.006 |
| 495. | 7.859 | 34.623 | 0.00 | 7.809 | 27.006 |
| 594. | 6.879 | 34.583 | 0.00 | 6.823 | 27.115 |
| 697. | 6.197 | 34.563 | 0.00 | 6.134 | 27.190 |
| 797. | 5.282 | 34.557 | 0.00 | 5.215 | 27.299 |
| 894. | 4.795 | 34.553 | 0.00 | 4.722 | 27.353 |
| 1000. | 4.571 | 34.557 | 0.00 | 4.491 | 27.382 |
| 999. | 4.585 | 34.555 | 0.00 | 4.505 | 27.378 |
| 998. | 4.585 | 34.556 | 0.00 | 4.505 | 27.379 |

CAST EP3-89-DI -014 LAT 00 01.4N LONG 110 03.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 21.630 | 34.855 | 0.00 | 21.630 | 24.212 |
| 0. | 21.592 | 34.854 | 0.00 | 21.592 | 24.222 |
| 0. | 21.587 | 34.855 | 0.00 | 21.587 | 24.224 |
| 8. | 21.571 | 34.856 | 0.00 | 21.569 | 24.230 |
| 18. | 21.419 | 34.865 | 0.00 | 21.416 | 24.279 |
| 36. | 20.748 | 34.934 | 0.00 | 20.741 | 24.515 |
| 58. | 17.330 | 35.334 | 0.00 | 17.320 | 25.695 |
| 79. | 15.382 | 35.044 | 0.00 | 15.370 | 25.925 |
| 98. | 14.867 | 35.037 | 0.00 | 14.852 | 26.034 |
| 123. | 14.474 | 35.014 | 0.00 | 14.456 | 26.102 |
| 147. | 13.971 | 34.988 | 0.00 | 13.950 | 26.189 |
| 199. | 12.663 | 34.893 | 0.00 | 12.636 | 26.383 |
| 297. | 11.349 | 34.816 | 0.00 | 11.312 | 26.576 |
| 396. | 9.805 | 34.725 | 0.00 | 9.759 | 26.778 |
| 497. | 8.122 | 34.629 | 0.00 | 8.071 | 26.972 |
| 596. | 6.794 | 34.577 | 0.00 | 6.738 | 27.122 |
| 795. | 5.498 | 34.551 | 0.00 | 5.430 | 27.269 |
| 907. | 4.942 | 34.551 | 0.00 | 4.867 | 27.335 |
| 994. | 4.638 | 34.556 | 0.00 | 4.558 | 27.373 |
| 1992. | 2.298 | 34.642 | 0.00 | 2.158 | 27.672 |
| 2989. | 1.717 | 34.664 | 0.00 | 1.497 | 27.741 |
| 3695. | 1.442 | 34.688 | 0.00 | 1.157 | 27.784 |

CAST EP3-89-DI -015 LAT 00 30.2S LONG 109 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 22.028 | 34.890 | 0.00 | 22.028 | 24.128 |
| 1. | 22.014 | 34.890 | 0.00 | 22.014 | 24.132 |
| 8. | 21.991 | 34.890 | 0.00 | 21.989 | 24.139 |
| 18. | 21.872 | 34.891 | 0.00 | 21.869 | 24.173 |
| 38. | 21.522 | 34.944 | 0.00 | 21.515 | 24.312 |
| 59. | 20.386 | 35.236 | 0.00 | 20.375 | 24.843 |
| 77. | 16.490 | 35.253 | 0.00 | 16.478 | 25.833 |
| 98. | 13.713 | 35.018 | 0.00 | 13.699 | 26.265 |
| 123. | 12.709 | 34.903 | 0.00 | 12.692 | 26.380 |
| 146. | 12.652 | 34.895 | 0.00 | 12.632 | 26.385 |
| 197. | 12.532 | 34.888 | 0.00 | 12.506 | 26.405 |
| 247. | 12.482 | 34.880 | 0.00 | 12.449 | 26.410 |
| 296. | 12.446 | 34.876 | 0.00 | 12.406 | 26.415 |
| 398. | 9.652 | 34.717 | 0.00 | 9.607 | 26.798 |
| 496. | 8.238 | 34.641 | 0.00 | 8.186 | 26.964 |
| 495. | 8.248 | 34.640 | 0.00 | 8.196 | 26.962 |
| 496. | 8.222 | 34.639 | 0.00 | 8.170 | 26.965 |
| 595. | 6.674 | 34.575 | 0.00 | 6.618 | 27.136 |
| 696. | 5.961 | 34.560 | 0.00 | 5.899 | 27.218 |
| 794. | 5.474 | 34.554 | 0.00 | 5.406 | 27.274 |
| 895. | 4.950 | 34.550 | 0.00 | 4.876 | 27.333 |
| 1001. | 4.558 | 34.561 | 0.00 | 4.478 | 27.386 |
| 999. | 4.558 | 34.561 | 0.00 | 4.478 | 27.386 |
| 998. | 4.558 | 34.562 | 0.00 | 4.478 | 27.387 |

CAST EP3-89-DI -016 LAT 00 59.8S LONG 110 01.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 22.305 | 34.962 | 0.00 | 22.305 | 24.105 |
| 1. | 22.305 | 34.962 | 0.00 | 22.305 | 24.105 |
| 8. | 22.292 | 34.961 | 0.00 | 22.290 | 24.108 |
| 19. | 22.281 | 34.963 | 0.00 | 22.277 | 24.113 |
| 37. | 21.981 | 34.993 | 0.00 | 21.974 | 24.221 |
| 58. | 20.317 | 35.293 | 0.00 | 20.306 | 24.905 |
| 77. | 16.224 | 35.133 | 0.00 | 16.212 | 25.802 |
| 99. | 13.357 | 34.962 | 0.00 | 13.343 | 26.295 |
| 121. | 12.679 | 34.899 | 0.00 | 12.663 | 26.382 |
| 148. | 12.504 | 34.882 | 0.00 | 12.484 | 26.404 |
| 198. | 12.410 | 34.876 | 0.00 | 12.384 | 26.419 |
| 248. | 12.287 | 34.868 | 0.00 | 12.254 | 26.438 |
| 297. | 11.919 | 34.846 | 0.00 | 11.880 | 26.493 |
| 395. | 10.137 | 34.742 | 0.00 | 10.090 | 26.735 |
| 494. | 8.427 | 34.646 | 0.00 | 8.375 | 26.939 |
| 496. | 8.423 | 34.646 | 0.00 | 8.371 | 26.940 |
| 495. | 8.430 | 34.647 | 0.00 | 8.378 | 26.940 |
| 595. | 6.901 | 34.578 | 0.00 | 6.844 | 27.108 |
| 696. | 5.946 | 34.556 | 0.00 | 5.884 | 27.217 |
| 796. | 5.376 | 34.548 | 0.00 | 5.309 | 27.281 |
| 896. | 4.735 | 34.553 | 0.00 | 4.663 | 27.359 |
| 993. | 4.496 | 34.560 | 0.00 | 4.417 | 27.392 |
| 986. | 4.507 | 34.561 | 0.00 | 4.429 | 27.391 |
| 988. | 4.503 | 34.559 | 0.00 | 4.424 | 27.390 |

CAST EP3-89-DI -017 LAT 01 57.9S LONG 110 01.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 22.624 | 35.130 | 0.00 | 22.624 | 24.142 |
| 0. | 22.621 | 35.130 | 0.00 | 22.621 | 24.143 |
| 9. | 22.620 | 35.131 | 0.00 | 22.618 | 24.144 |
| 17. | 22.627 | 35.131 | 0.00 | 22.624 | 24.143 |
| 38. | 22.609 | 35.130 | 0.00 | 22.601 | 24.148 |
| 59. | 21.802 | 35.182 | 0.00 | 21.791 | 24.416 |
| 78. | 14.755 | 34.997 | 0.00 | 14.743 | 26.027 |
| 98. | 13.322 | 34.930 | 0.00 | 13.308 | 26.277 |
| 122. | 13.148 | 34.923 | 0.00 | 13.131 | 26.307 |
| 147. | 12.955 | 34.915 | 0.00 | 12.935 | 26.341 |
| 199. | 12.451 | 34.888 | 0.00 | 12.424 | 26.421 |
| 248. | 12.199 | 34.868 | 0.00 | 12.166 | 26.455 |
| 297. | 11.694 | 34.855 | 0.00 | 11.656 | 26.542 |
| 397. | 9.780 | 34.736 | 0.00 | 9.734 | 26.791 |
| 494. | 7.974 | 34.629 | 0.00 | 7.923 | 26.994 |
| 496. | 7.973 | 34.628 | 0.00 | 7.922 | 26.994 |
| 495. | 7.965 | 34.629 | 0.00 | 7.914 | 26.996 |
| 601. | 7.011 | 34.597 | 0.00 | 6.953 | 27.108 |
| 695. | 6.138 | 34.570 | 0.00 | 6.076 | 27.203 |
| 796. | 5.420 | 34.560 | 0.00 | 5.352 | 27.285 |
| 895. | 4.761 | 34.553 | 0.00 | 4.689 | 27.356 |
| 997. | 4.417 | 34.556 | 0.00 | 4.338 | 27.397 |
| 996. | 4.418 | 34.555 | 0.00 | 4.339 | 27.396 |
| 996. | 4.418 | 34.555 | 0.00 | 4.339 | 27.396 |

CAST EP3-89-DI -019 LAT 04 57.7S LONG 110 04.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 23.276 | 35.227 | 0.00 | 23.276 | 24.027 |
| 0. | 23.272 | 35.226 | 0.00 | 23.272 | 24.028 |
| 9. | 23.257 | 35.222 | 0.00 | 23.255 | 24.030 |
| 19. | 23.216 | 35.204 | 0.00 | 23.212 | 24.029 |
| 38. | 23.126 | 35.195 | 0.00 | 23.118 | 24.049 |
| 58. | 23.335 | 35.299 | 0.00 | 23.323 | 24.068 |
| 78. | 23.100 | 35.244 | 0.00 | 23.084 | 24.096 |
| 98. | 16.205 | 35.020 | 0.00 | 16.189 | 25.720 |
| 122. | 14.676 | 35.027 | 0.00 | 14.658 | 26.068 |
| 150. | 13.065 | 34.935 | 0.00 | 13.044 | 26.334 |
| 197. | 12.549 | 34.898 | 0.00 | 12.523 | 26.409 |
| 248. | 12.121 | 34.878 | 0.00 | 12.088 | 26.478 |
| 296. | 11.529 | 34.849 | 0.00 | 11.491 | 26.568 |
| 394. | 10.030 | 34.750 | 0.00 | 9.984 | 26.760 |
| 498. | 8.337 | 34.651 | 0.00 | 8.285 | 26.957 |
| 496. | 8.348 | 34.654 | 0.00 | 8.296 | 26.958 |
| 497. | 8.380 | 34.655 | 0.00 | 8.328 | 26.954 |
| 598. | 7.126 | 34.595 | 0.00 | 7.068 | 27.091 |
| 693. | 6.223 | 34.561 | 0.00 | 6.160 | 27.185 |
| 795. | 5.469 | 34.542 | 0.00 | 5.401 | 27.265 |
| 896. | 4.912 | 34.541 | 0.00 | 4.839 | 27.330 |
| 995. | 4.497 | 34.551 | 0.00 | 4.418 | 27.385 |
| 996. | 4.499 | 34.552 | 0.00 | 4.420 | 27.385 |
| 997. | 4.500 | 34.553 | 0.00 | 4.421 | 27.386 |

CAST EP3-89-DI -021 LAT 03 00.7S LONG 115 49.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 23.670 | 35.210 | 0.00 | 23.670 | 23.899 |
| 0. | 23.672 | 35.208 | 0.00 | 23.672 | 23.897 |
| 1. | 23.673 | 35.209 | 0.00 | 23.673 | 23.898 |
| 9. | 23.672 | 35.208 | 0.00 | 23.670 | 23.898 |
| 19. | 23.672 | 35.207 | 0.00 | 23.668 | 23.898 |
| 40. | 23.623 | 35.206 | 0.00 | 23.615 | 23.913 |
| 59. | 18.670 | 35.090 | 0.00 | 18.660 | 25.177 |
| 78. | 14.806 | 35.013 | 0.00 | 14.794 | 26.028 |
| 98. | 13.525 | 34.953 | 0.00 | 13.511 | 26.253 |
| 123. | 13.099 | 34.931 | 0.00 | 13.082 | 26.324 |
| 147. | 12.872 | 34.917 | 0.00 | 12.852 | 26.359 |
| 197. | 12.472 | 34.898 | 0.00 | 12.446 | 26.424 |
| 247. | 12.010 | 34.868 | 0.00 | 11.978 | 26.491 |
| 298. | 11.403 | 34.826 | 0.00 | 11.365 | 26.574 |
| 398. | 8.997 | 34.686 | 0.00 | 8.953 | 26.880 |
| 498. | 7.654 | 34.616 | 0.00 | 7.604 | 27.031 |
| 499. | 7.642 | 34.616 | 0.00 | 7.592 | 27.033 |
| 499. | 7.649 | 34.617 | 0.00 | 7.599 | 27.032 |
| 596. | 6.749 | 34.578 | 0.00 | 6.693 | 27.129 |
| 696. | 6.060 | 34.559 | 0.00 | 5.998 | 27.205 |
| 794. | 5.418 | 34.557 | 0.00 | 5.350 | 27.283 |
| 895. | 4.872 | 34.554 | 0.00 | 4.799 | 27.345 |
| 1000. | 4.383 | 34.554 | 0.00 | 4.304 | 27.399 |
| 999. | 4.390 | 34.559 | 0.00 | 4.311 | 27.403 |

CAST EP3-89-DI -022 LAT 00 13.1S LONG 124 26.8W

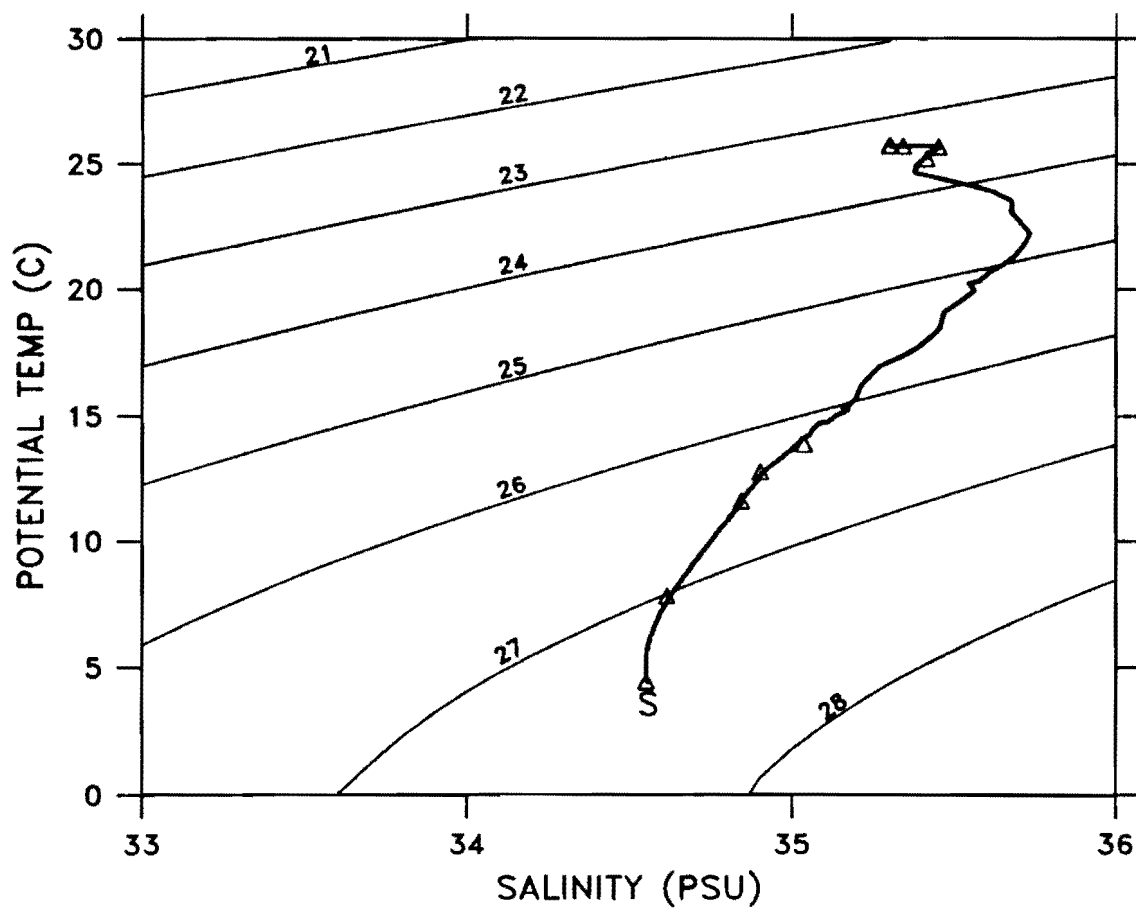
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 23.715 | 34.931 | 0.00 | 23.715 | 23.675 |
| 9. | 23.703 | 34.930 | 0.00 | 23.701 | 23.678 |
| 9. | 23.701 | 34.930 | 0.00 | 23.699 | 23.679 |
| 19. | 23.696 | 34.927 | 0.00 | 23.692 | 23.679 |
| 38. | 23.470 | 34.897 | 0.00 | 23.462 | 23.723 |
| 58. | 22.838 | 34.876 | 0.00 | 22.826 | 23.891 |
| 79. | 19.550 | 34.955 | 0.00 | 19.536 | 24.850 |
| 97. | 17.883 | 35.316 | 0.00 | 17.866 | 25.548 |
| 122. | 14.957 | 35.015 | 0.00 | 14.939 | 25.998 |
| 147. | 13.552 | 34.914 | 0.00 | 13.531 | 26.219 |
| 198. | 12.854 | 34.906 | 0.00 | 12.827 | 26.355 |
| 297. | 11.419 | 34.815 | 0.00 | 11.381 | 26.562 |
| 397. | 9.186 | 34.687 | 0.00 | 9.142 | 26.851 |
| 497. | 7.823 | 34.616 | 0.00 | 7.773 | 27.006 |
| 596. | 6.574 | 34.569 | 0.00 | 6.519 | 27.145 |
| 696. | 6.019 | 34.556 | 0.00 | 5.957 | 27.207 |
| 795. | 5.554 | 34.550 | 0.00 | 5.486 | 27.261 |
| 895. | 4.818 | 34.551 | 0.00 | 4.745 | 27.348 |
| 995. | 4.495 | 34.556 | 0.00 | 4.416 | 27.389 |
| 1994. | 2.251 | 34.643 | 0.00 | 2.111 | 27.677 |
| 2994. | 1.682 | 34.674 | 0.00 | 1.462 | 27.751 |
| 3495. | 1.513 | 34.685 | 0.00 | 1.247 | 27.775 |
| 3994. | 1.431 | 34.692 | 0.00 | 1.115 | 27.790 |

CAST EP3-89-DI -023 LAT 07 00.4N LONG 140 11.6W

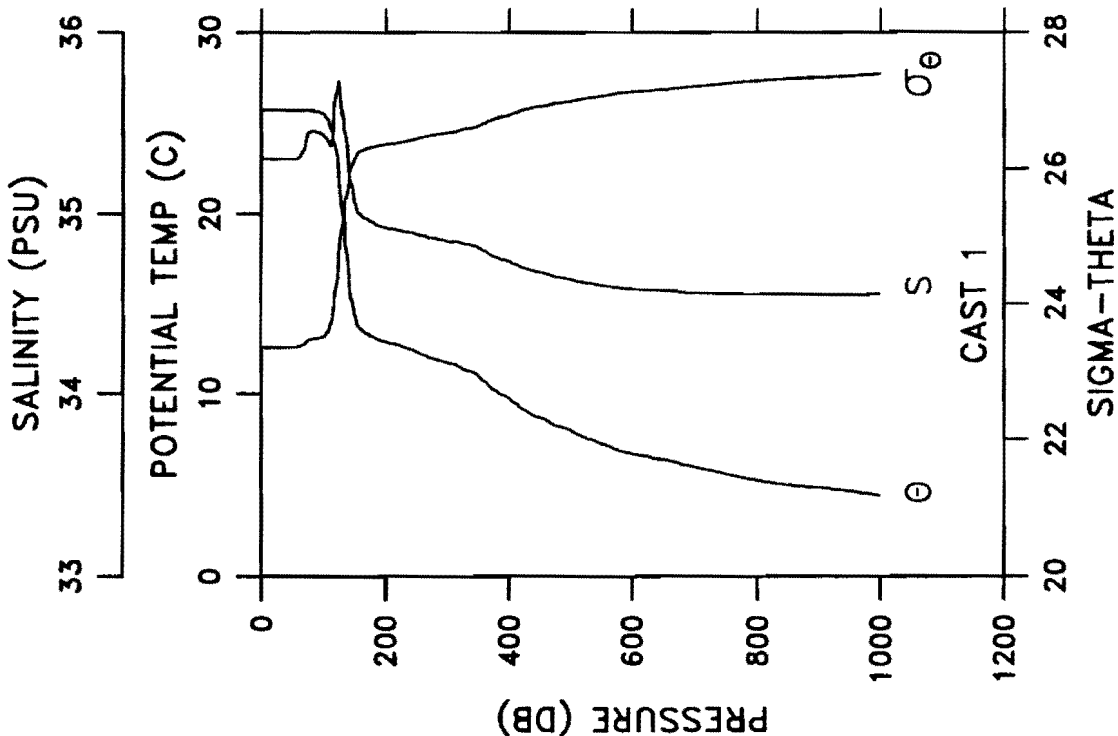
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.711 | 34.343 | 0.00 | 27.711 | 21.997 |
| 0. | 27.711 | 34.342 | 0.00 | 27.711 | 21.996 |
| 9. | 27.704 | 34.336 | 0.00 | 27.702 | 21.994 |
| 20. | 27.696 | 34.334 | 0.00 | 27.691 | 21.996 |
| 38. | 27.704 | 34.332 | 0.00 | 27.695 | 21.994 |
| 57. | 27.811 | 34.581 | 0.00 | 27.798 | 22.148 |
| 78. | 27.640 | 34.677 | 0.00 | 27.622 | 22.277 |
| 98. | 26.806 | 34.768 | 0.00 | 26.784 | 22.614 |
| 122. | 23.341 | 34.846 | 0.00 | 23.316 | 23.727 |
| 148. | 17.371 | 34.721 | 0.00 | 17.346 | 25.218 |
| 197. | 11.801 | 34.665 | 0.00 | 11.776 | 26.372 |
| 246. | 10.952 | 34.725 | 0.00 | 10.922 | 26.576 |
| 296. | 10.351 | 34.710 | 0.00 | 10.316 | 26.672 |
| 397. | 9.327 | 34.663 | 0.00 | 9.283 | 26.809 |
| 496. | 8.552 | 34.636 | 0.00 | 8.499 | 26.912 |
| 497. | 8.545 | 34.635 | 0.00 | 8.492 | 26.913 |
| 498. | 8.550 | 34.635 | 0.00 | 8.497 | 26.912 |
| 596. | 7.457 | 34.585 | 0.00 | 7.398 | 27.036 |
| 695. | 6.460 | 34.563 | 0.00 | 6.396 | 27.156 |
| 794. | 5.791 | 34.556 | 0.00 | 5.721 | 27.237 |
| 895. | 5.249 | 34.555 | 0.00 | 5.173 | 27.302 |
| 995. | 4.850 | 34.558 | 0.00 | 4.768 | 27.351 |
| 997. | 4.848 | 34.558 | 0.00 | 4.766 | 27.352 |
| 995. | 4.850 | 34.558 | 0.00 | 4.768 | 27.351 |

EP4-89-DI
November 19–December 15, 1989
CTD and Hydrographic Data Summary

CAST EP4-89-DI -001 DATE 26 NOV 89 TIME 1051 GMT
LAT 02 59.4S LONG 140 00.0W

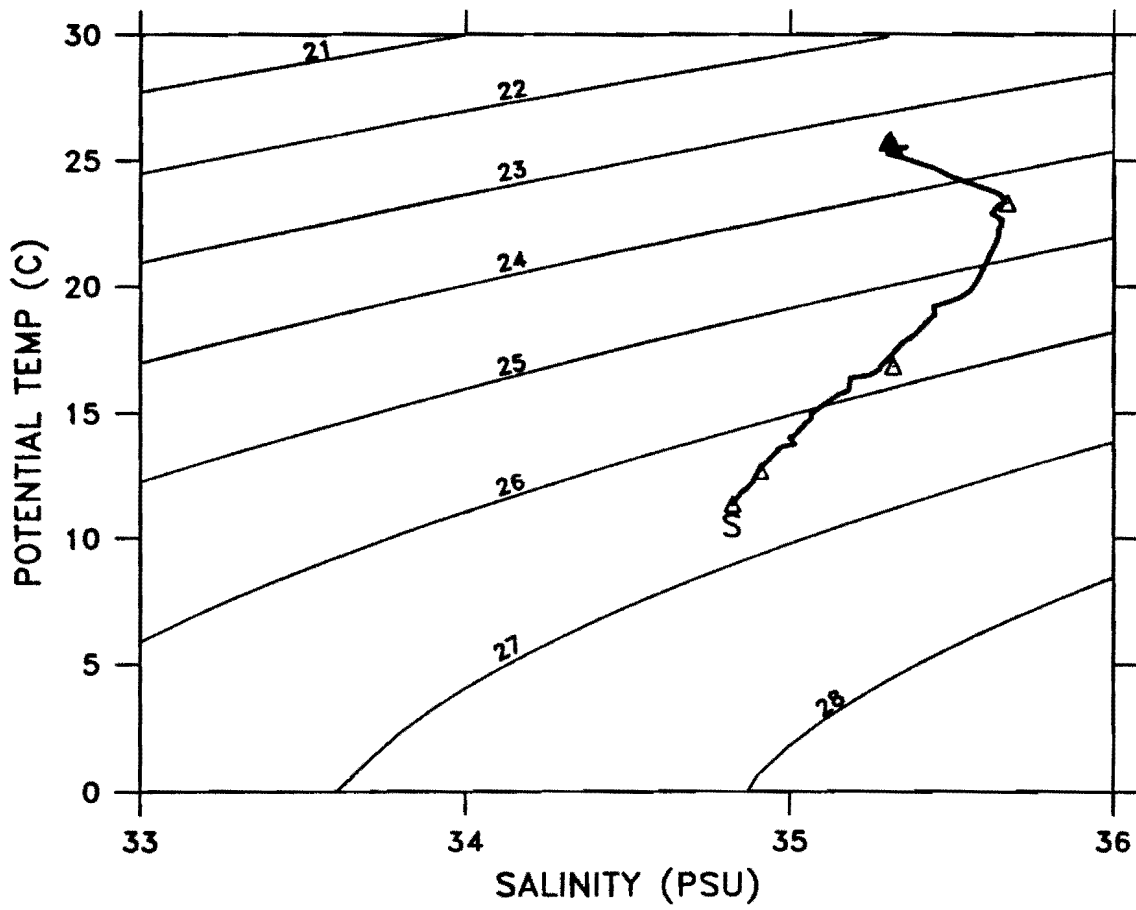


CAST EP4-89-DI -001 DATE 26 NOV 89 TIME 1051 GMT
 LAT 02 59.4S LONG 140 00.0W WEATHER 1 SEA STATE 4
 BAROMETER 10 WIND DIR 105 T SPD 19 KT VISIBILITY 8
 CLOUD AMOUNT 6 DRY 25.0 WET 22.5 DEPTH 4491 M

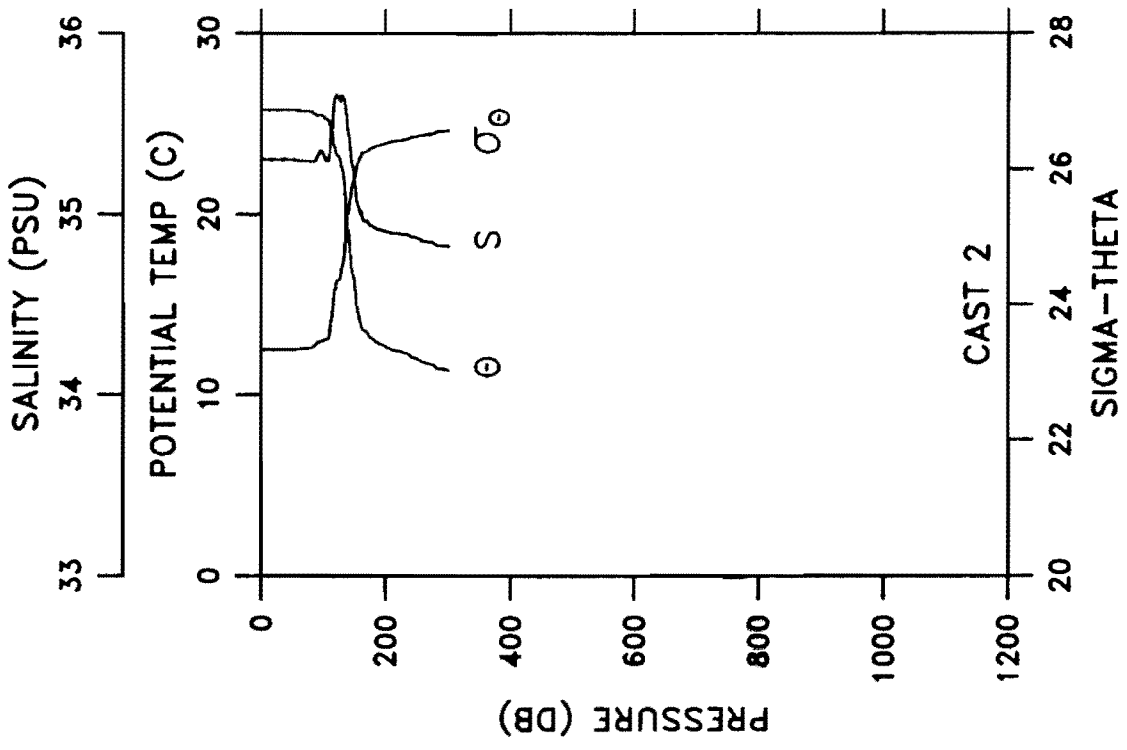


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.744 | 35.305 | 23.345 | 0.000 |
| 10 | 25.742 | 35.306 | 23.346 | 0.045 |
| 20 | 25.744 | 35.307 | 23.346 | 0.091 |
| 30 | 25.745 | 35.307 | 23.346 | 0.136 |
| 40 | 25.732 | 35.306 | 23.349 | 0.181 |
| 50 | 25.715 | 35.304 | 23.354 | 0.227 |
| 60 | 25.693 | 35.310 | 23.364 | 0.272 |
| 70 | 25.716 | 35.365 | 23.399 | 0.317 |
| 80 | 25.701 | 35.454 | 23.471 | 0.362 |
| 90 | 25.647 | 35.453 | 23.487 | 0.406 |
| 100 | 25.546 | 35.440 | 23.508 | 0.451 |
| 110 | 24.941 | 35.381 | 23.649 | 0.494 |
| 120 | 23.602 | 35.665 | 24.264 | 0.535 |
| 130 | 20.224 | 35.543 | 25.118 | 0.567 |
| 140 | 16.954 | 35.268 | 25.733 | 0.593 |
| 150 | 14.398 | 35.059 | 26.149 | 0.613 |
| 160 | 13.606 | 34.996 | 26.267 | 0.631 |
| 170 | 13.354 | 34.971 | 26.299 | 0.649 |
| 180 | 13.181 | 34.955 | 26.322 | 0.666 |
| 190 | 12.983 | 34.933 | 26.345 | 0.684 |
| 200 | 12.875 | 34.924 | 26.359 | 0.701 |
| 250 | 12.312 | 34.898 | 26.443 | 0.785 |
| 300 | 11.723 | 34.848 | 26.524 | 0.865 |
| 350 | 11.017 | 34.817 | 26.630 | 0.942 |
| 400 | 9.778 | 34.739 | 26.786 | 1.012 |
| 450 | 8.707 | 34.677 | 26.912 | 1.076 |
| 500 | 8.016 | 34.638 | 26.987 | 1.135 |
| 550 | 7.255 | 34.602 | 27.070 | 1.191 |
| 600 | 6.729 | 34.584 | 27.129 | 1.243 |
| 650 | 6.427 | 34.575 | 27.162 | 1.294 |
| 700 | 6.026 | 34.563 | 27.205 | 1.342 |
| 750 | 5.649 | 34.555 | 27.245 | 1.389 |
| 800 | 5.298 | 34.551 | 27.285 | 1.434 |
| 850 | 4.895 | 34.553 | 27.333 | 1.520 |
| 900 | 4.420 | 34.558 | 27.390 | 1.601 |
| 1000 | 4.418 | 34.557 | 27.389 | 1.602 |

CAST EP4-89-DI -002 DATE 27 NOV 89 TIME 0708 GMT
LAT 02 00.8S LONG 140 06.7W

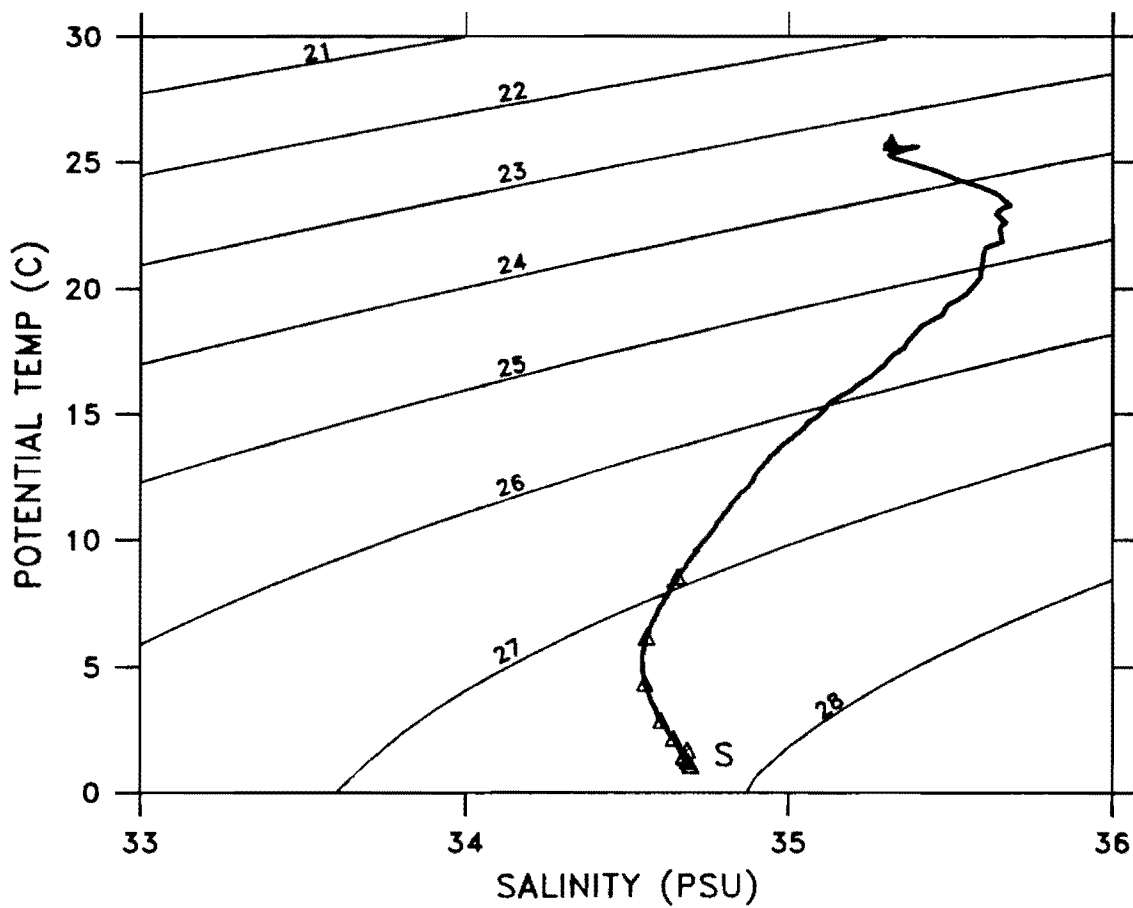


CAST EP4-89-D1 -002 DATE 27 NOV 89 TIME 0708 GMT
 LAT 02 00.8S LONG 140 06.7W WEATHER 0 SEA STATE 3
 BAROMETER 11 WIND DIR 100 T SPD 20 KT VISIBILITY 7
 CLOUD X AMOUNT 0 DRY 25.3 WET 23.2 DEPTH 4292 M

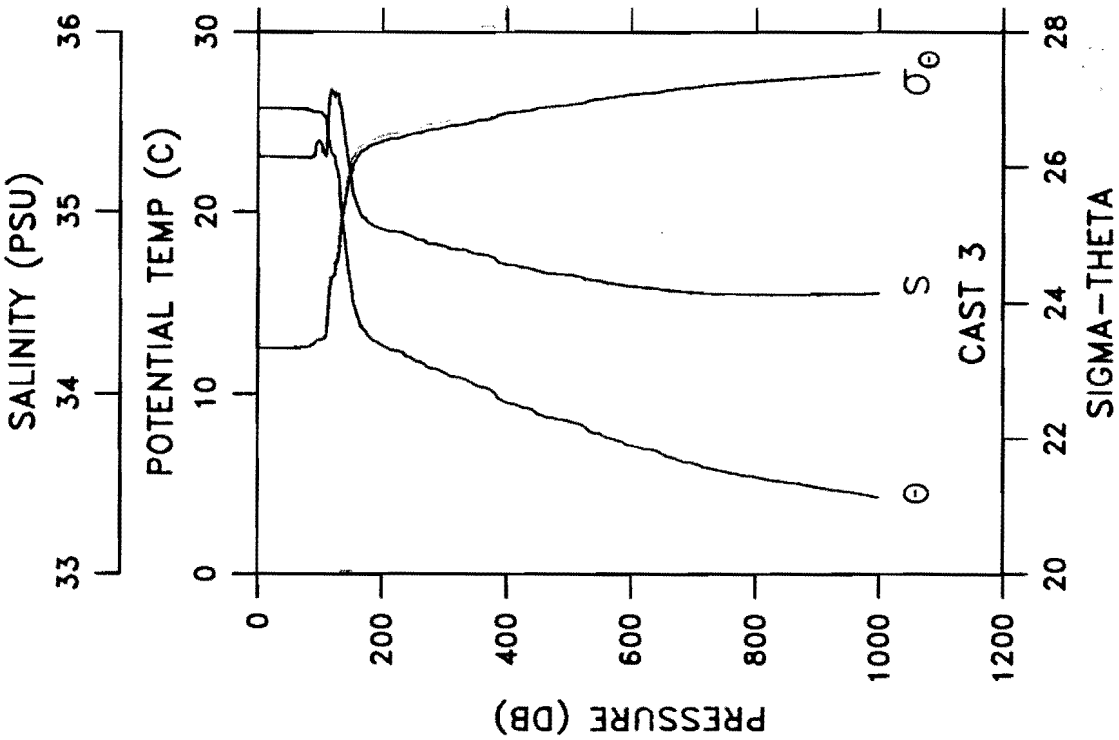


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.775 | 35.312 | 23.340 | 0.000 |
| 10 | 25.779 | 35.306 | 23.335 | 0.045 |
| 20 | 25.777 | 35.306 | 23.336 | 0.091 |
| 30 | 25.778 | 35.306 | 23.335 | 0.136 |
| 40 | 25.777 | 35.306 | 23.336 | 0.182 |
| 50 | 25.769 | 35.304 | 23.337 | 0.227 |
| 60 | 25.712 | 35.299 | 23.350 | 0.273 |
| 70 | 25.701 | 35.297 | 23.353 | 0.318 |
| 80 | 25.662 | 35.295 | 23.362 | 0.364 |
| 90 | 25.482 | 35.332 | 23.446 | 0.409 |
| 100 | 25.409 | 35.331 | 23.468 | 0.454 |
| 110 | 24.894 | 35.396 | 23.675 | 0.498 |
| 120 | 23.331 | 35.661 | 24.341 | 0.537 |
| 130 | 22.442 | 35.654 | 24.591 | 0.573 |
| 140 | 18.882 | 35.447 | 25.394 | 0.602 |
| 150 | 15.891 | 35.182 | 25.913 | 0.626 |
| 160 | 13.891 | 35.007 | 26.216 | 0.645 |
| 170 | 13.464 | 34.959 | 26.267 | 0.664 |
| 180 | 13.070 | 34.931 | 26.326 | 0.681 |
| 190 | 12.830 | 34.914 | 26.361 | 0.698 |
| 200 | 12.675 | 34.904 | 26.384 | 0.715 |
| 250 | 11.996 | 34.868 | 26.458 | 0.798 |
| 300 | 11.360 | 34.822 | 26.572 | 0.876 |
| 301 | 11.358 | 34.821 | 26.572 | 0.877 |

CAST EP4-89-DI -003 DATE 27 NOV 89 TIME 1100 GMT
LAT 01 59.4S LONG 140 06.0W

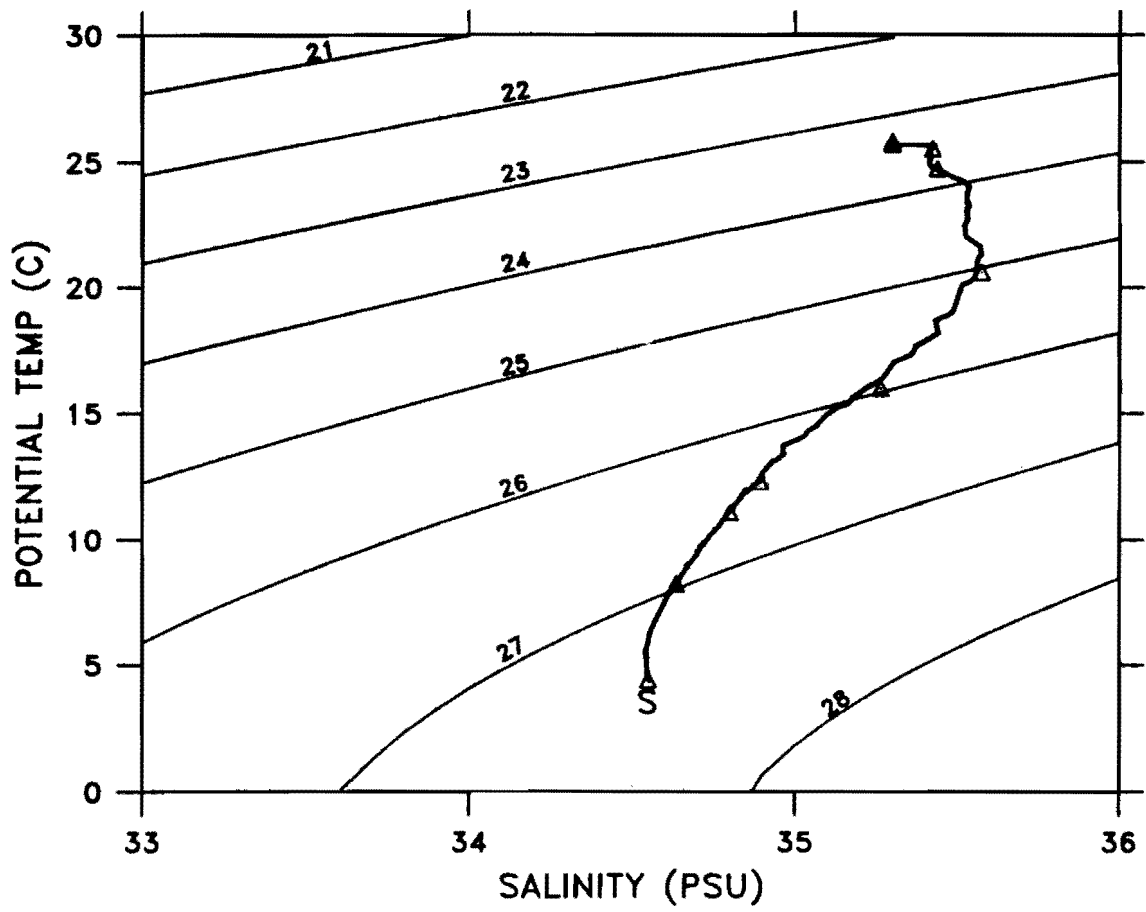


CAST EP4-89-D1 --003 DATE 27 NOV 89 TIME 1100 GMT
 LAT 01 59.4S LONG 140 06.0W WEATHER 1 SEA STATE 4
 BAROMETER 10 WIND DIR 095 T SPD 19 KT VISIBILITY 8
 CLOUD X AMOUNT 3 DRY 25.0 WET 22.9 DEPTH 4296 M

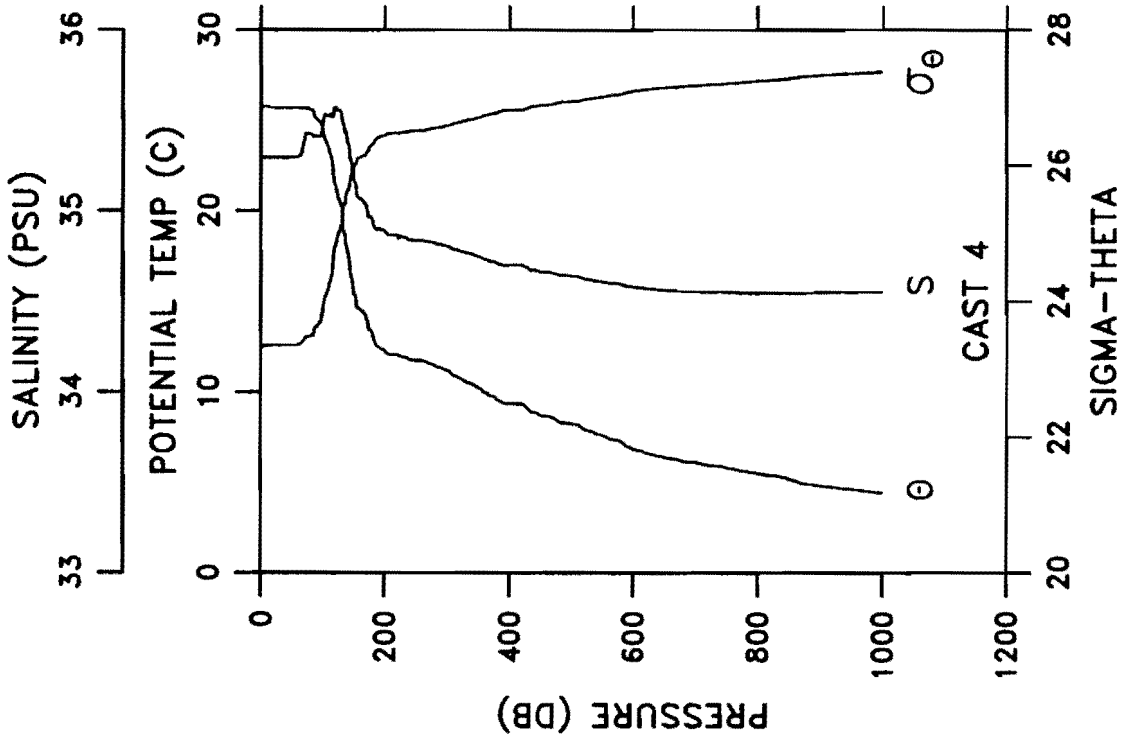


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.753 | 35.320 | 23.353 | 0.000 |
| 10 | 25.765 | 35.308 | 23.341 | 0.045 |
| 20 | 25.763 | 35.308 | 23.342 | 0.091 |
| 30 | 25.761 | 35.307 | 23.341 | 0.136 |
| 40 | 25.756 | 35.306 | 23.343 | 0.181 |
| 50 | 25.751 | 35.305 | 23.343 | 0.227 |
| 60 | 25.748 | 35.306 | 23.344 | 0.272 |
| 70 | 25.729 | 35.303 | 23.348 | 0.318 |
| 80 | 25.695 | 35.301 | 23.357 | 0.364 |
| 90 | 25.577 | 35.310 | 23.400 | 0.409 |
| 100 | 25.560 | 35.390 | 23.466 | 0.454 |
| 110 | 25.153 | 35.322 | 23.539 | 0.498 |
| 120 | 23.228 | 35.670 | 24.377 | 0.537 |
| 130 | 21.870 | 35.659 | 24.757 | 0.571 |
| 140 | 18.508 | 35.410 | 25.461 | 0.600 |
| 150 | 15.952 | 35.192 | 25.907 | 0.623 |
| 160 | 14.328 | 35.037 | 26.147 | 0.643 |
| 170 | 13.585 | 34.968 | 26.250 | 0.661 |
| 180 | 13.137 | 34.936 | 26.317 | 0.679 |
| 190 | 12.896 | 34.920 | 26.352 | 0.696 |
| 200 | 12.698 | 34.906 | 26.381 | 0.713 |
| 250 | 11.930 | 34.863 | 26.497 | 0.796 |
| 300 | 11.208 | 34.813 | 26.592 | 0.873 |
| 350 | 10.497 | 34.772 | 26.688 | 0.947 |
| 400 | 9.523 | 34.713 | 26.809 | 1.016 |
| 450 | 8.900 | 34.677 | 26.882 | 1.081 |
| 500 | 8.494 | 34.655 | 26.928 | 1.143 |
| 550 | 7.806 | 34.624 | 27.008 | 1.201 |
| 600 | 7.122 | 34.593 | 27.081 | 1.257 |
| 650 | 6.673 | 34.576 | 27.130 | 1.309 |
| 700 | 6.150 | 34.559 | 27.185 | 1.359 |
| 750 | 5.700 | 34.552 | 27.237 | 1.407 |
| 800 | 5.391 | 34.549 | 27.272 | 1.452 |
| 900 | 4.803 | 34.550 | 27.341 | 1.538 |
| 1000 | 4.273 | 34.557 | 27.405 | 1.618 |
| 1500 | 2.792 | 34.607 | 27.580 | 1.957 |
| 2000 | 2.182 | 34.641 | 27.669 | 2.235 |
| 2500 | 1.705 | 34.661 | 27.723 | 2.484 |
| 3000 | 1.430 | 34.672 | 27.752 | 2.715 |
| 3500 | 1.241 | 34.685 | 27.776 | 2.940 |
| 4000 | 1.099 | 34.693 | 27.792 | 3.156 |
| 4237 | 1.055 | 34.696 | 27.797 | 3.258 |

CAST EP4-89-DI -004 DATE 27 NOV 89 TIME 2054 GMT
LAT 01 30.3S LONG 140 00.3W

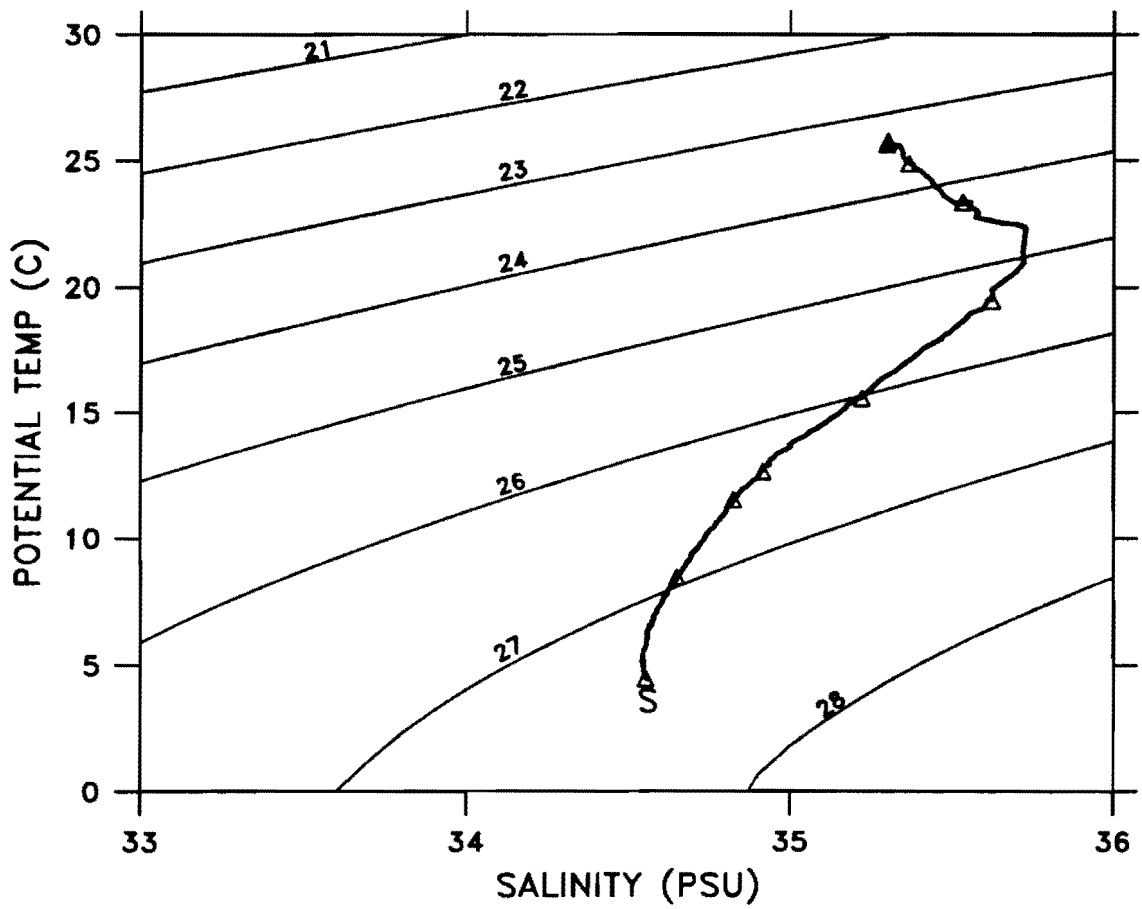


CAST EP4-89-D1 -004 DATE 27 NOV 89 TIME 2054 GMT
 LAT 01 30.3S LONG 140 00.3W WEATHER 2 SEA STATE 3
 BAROMETER 11 WIND DIR 095 T SPD 18 KT VISIBILITY 8
 CLOUD 6 AMOUNT 5 DRY 25.8 WET 23.7 DEPTH 4334 M

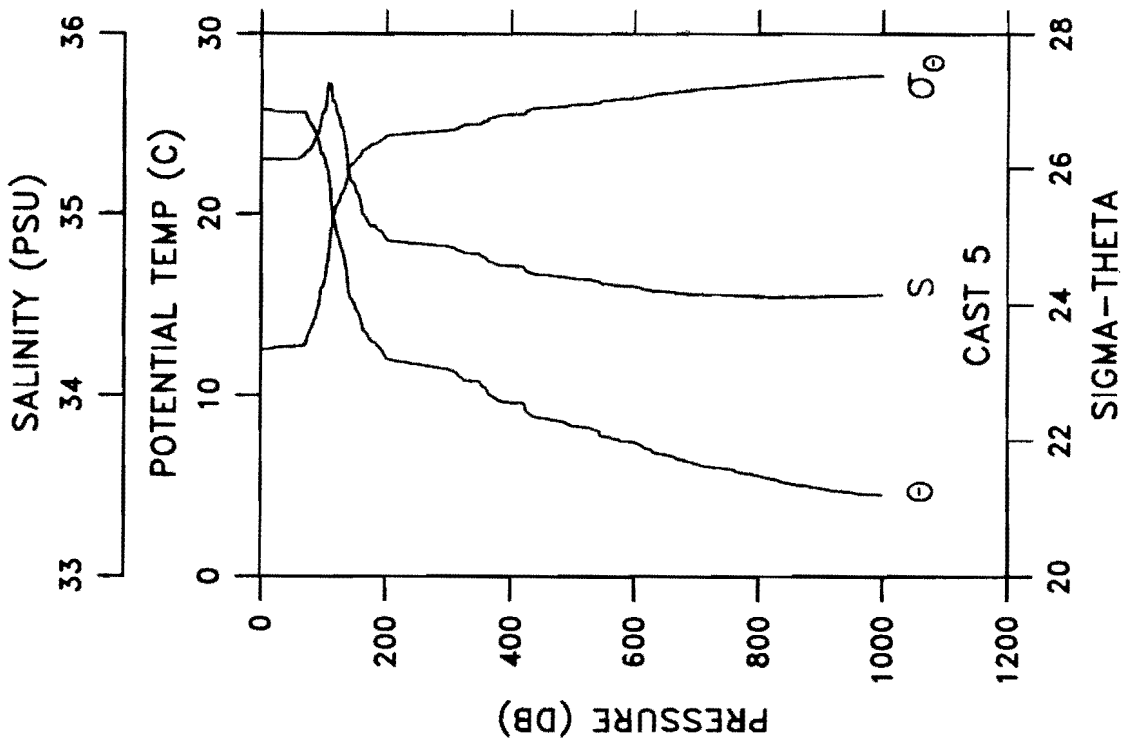


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.767 | 35.290 | 23.326 | 0.000 |
| 10 | 25.761 | 35.296 | 23.333 | 0.045 |
| 20 | 25.713 | 35.296 | 23.348 | 0.091 |
| 30 | 25.708 | 35.296 | 23.349 | 0.136 |
| 40 | 25.702 | 35.296 | 23.351 | 0.181 |
| 50 | 25.700 | 35.297 | 23.352 | 0.227 |
| 60 | 25.698 | 35.300 | 23.356 | 0.272 |
| 70 | 25.665 | 35.413 | 23.451 | 0.317 |
| 80 | 25.597 | 35.425 | 23.481 | 0.362 |
| 90 | 25.099 | 35.415 | 23.626 | 0.405 |
| 100 | 24.231 | 35.515 | 23.964 | 0.447 |
| 110 | 23.201 | 35.534 | 24.282 | 0.486 |
| 120 | 21.321 | 35.572 | 24.843 | 0.520 |
| 130 | 20.089 | 35.512 | 25.130 | 0.550 |
| 140 | 17.662 | 35.369 | 25.639 | 0.576 |
| 150 | 15.370 | 35.162 | 26.016 | 0.598 |
| 160 | 14.554 | 35.066 | 26.121 | 0.617 |
| 170 | 14.105 | 35.029 | 26.188 | 0.637 |
| 180 | 13.224 | 34.949 | 26.309 | 0.655 |
| 190 | 12.477 | 34.901 | 26.420 | 0.671 |
| 200 | 12.276 | 34.887 | 26.449 | 0.688 |
| 250 | 11.709 | 34.838 | 26.517 | 0.767 |
| 300 | 11.175 | 34.805 | 26.592 | 0.845 |
| 350 | 10.235 | 34.747 | 26.715 | 0.917 |
| 400 | 9.381 | 34.702 | 26.823 | 0.985 |
| 450 | 8.760 | 34.665 | 26.894 | 1.048 |
| 500 | 8.275 | 34.842 | 26.851 | 1.110 |
| 550 | 7.663 | 34.610 | 27.017 | 1.168 |
| 600 | 6.885 | 34.580 | 27.104 | 1.222 |
| 650 | 6.410 | 34.562 | 27.154 | 1.273 |
| 700 | 6.141 | 34.556 | 27.184 | 1.323 |
| 750 | 5.847 | 34.550 | 27.217 | 1.371 |
| 800 | 5.492 | 34.545 | 27.256 | 1.417 |
| 900 | 4.820 | 34.550 | 27.339 | 1.505 |
| 1000 | 4.401 | 34.554 | 27.389 | 1.586 |
| 1005 | 4.368 | 34.554 | 27.393 | 1.590 |

CAST EP4-89-DI -005 DATE 28 NOV 89 TIME 0053 GMT
LAT 00 59.2S LONG 140 00.7W

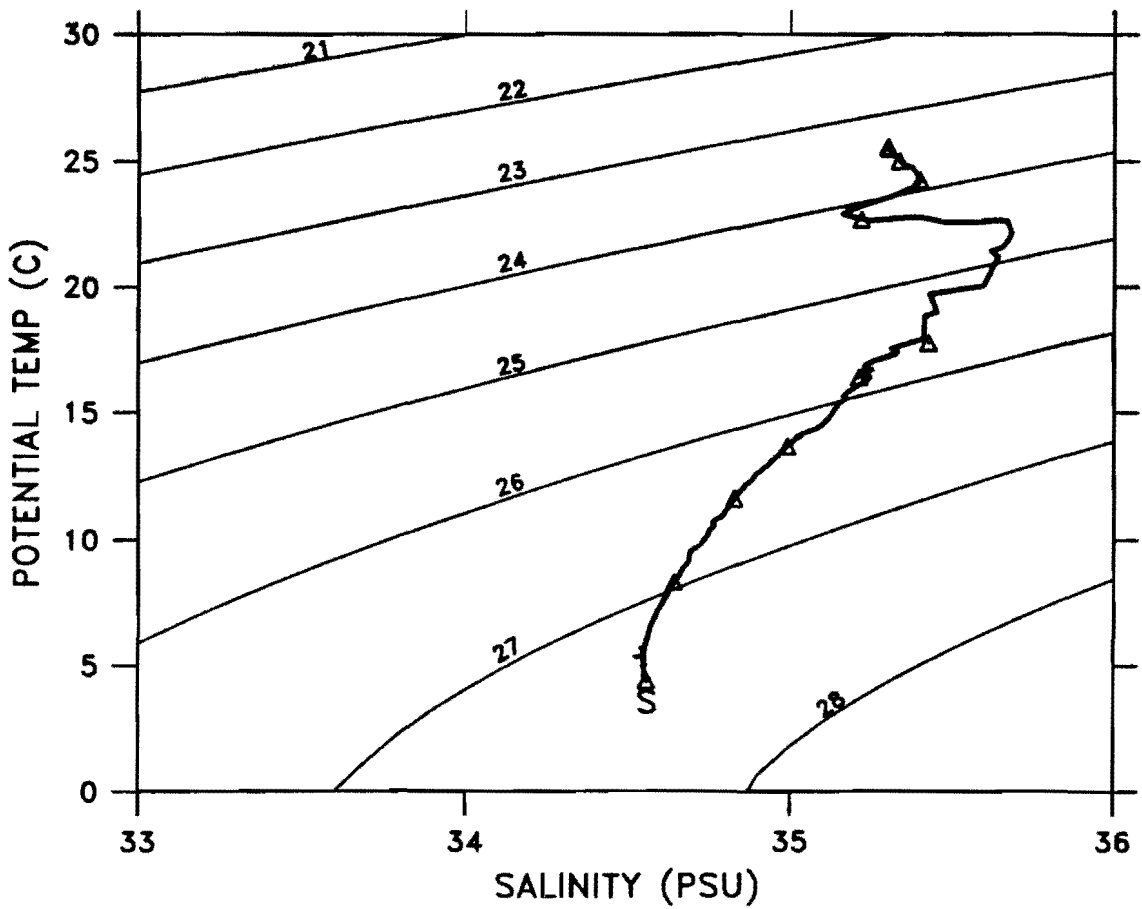


CAST EP4-89-D1 -005 DATE 28 NOV 89 TIME 0053 GMT
 LAT 00 59.2S LONG 140 00.7W WEATHER 1 SEA STATE 3
 BAROMETER 09 WIND DIR 090 T SPD 20 KT VISIBILITY 8
 CLOUD 6 AMOUNT 4 DRY 27.2 WET 23.6 DEPTH 4270 M

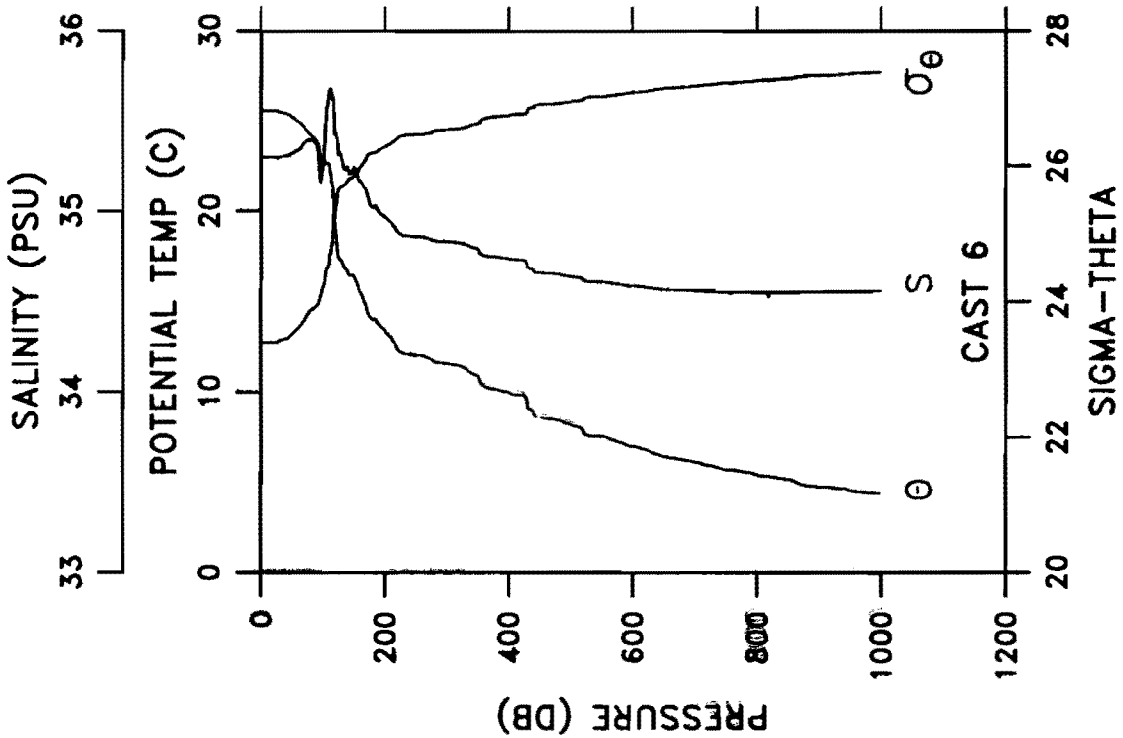


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SKG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.762 | 35.299 | 23.335 | 0.000 |
| 10 | 25.735 | 35.298 | 23.343 | 0.045 |
| 20 | 25.677 | 35.297 | 23.360 | 0.091 |
| 30 | 25.623 | 35.298 | 23.377 | 0.136 |
| 40 | 25.614 | 35.297 | 23.379 | 0.181 |
| 50 | 25.611 | 35.298 | 23.381 | 0.226 |
| 60 | 25.608 | 35.304 | 23.386 | 0.271 |
| 70 | 25.586 | 35.329 | 23.412 | 0.316 |
| 80 | 24.889 | 35.365 | 23.653 | 0.360 |
| 90 | 24.126 | 35.438 | 23.937 | 0.401 |
| 100 | 23.150 | 35.558 | 24.315 | 0.439 |
| 110 | 21.390 | 35.717 | 24.934 | 0.473 |
| 120 | 19.076 | 35.576 | 25.445 | 0.501 |
| 130 | 17.970 | 35.468 | 25.639 | 0.526 |
| 140 | 15.725 | 35.229 | 25.986 | 0.548 |
| 150 | 14.982 | 35.150 | 26.093 | 0.568 |
| 160 | 14.112 | 35.053 | 26.205 | 0.587 |
| 170 | 13.355 | 34.962 | 26.292 | 0.605 |
| 180 | 12.938 | 34.937 | 26.357 | 0.622 |
| 190 | 12.642 | 34.908 | 26.393 | 0.639 |
| 200 | 12.084 | 34.867 | 26.470 | 0.656 |
| 250 | 11.713 | 34.838 | 26.518 | 0.735 |
| 300 | 11.415 | 34.820 | 26.560 | 0.813 |
| 350 | 10.751 | 34.779 | 26.648 | 0.887 |
| 400 | 9.615 | 34.714 | 26.794 | 0.956 |
| 450 | 8.769 | 34.668 | 26.895 | 1.021 |
| 500 | 8.333 | 34.649 | 26.948 | 1.082 |
| 550 | 7.740 | 34.617 | 27.012 | 1.141 |
| 600 | 7.417 | 34.602 | 27.046 | 1.197 |
| 650 | 6.732 | 34.576 | 27.122 | 1.250 |
| 700 | 6.223 | 34.559 | 27.175 | 1.301 |
| 750 | 5.932 | 34.557 | 27.211 | 1.349 |
| 800 | 5.551 | 34.547 | 27.251 | 1.396 |
| 900 | 4.834 | 34.548 | 27.336 | 1.484 |
| 1000 | 4.474 | 34.556 | 27.383 | 1.565 |
| 1003 | 4.466 | 34.556 | 27.384 | 1.567 |

CAST EP4-89-DI.-006 DATE 28 NOV 89 TIME 0456 GMT
LAT 00 29.0S LONG 140 01.7W

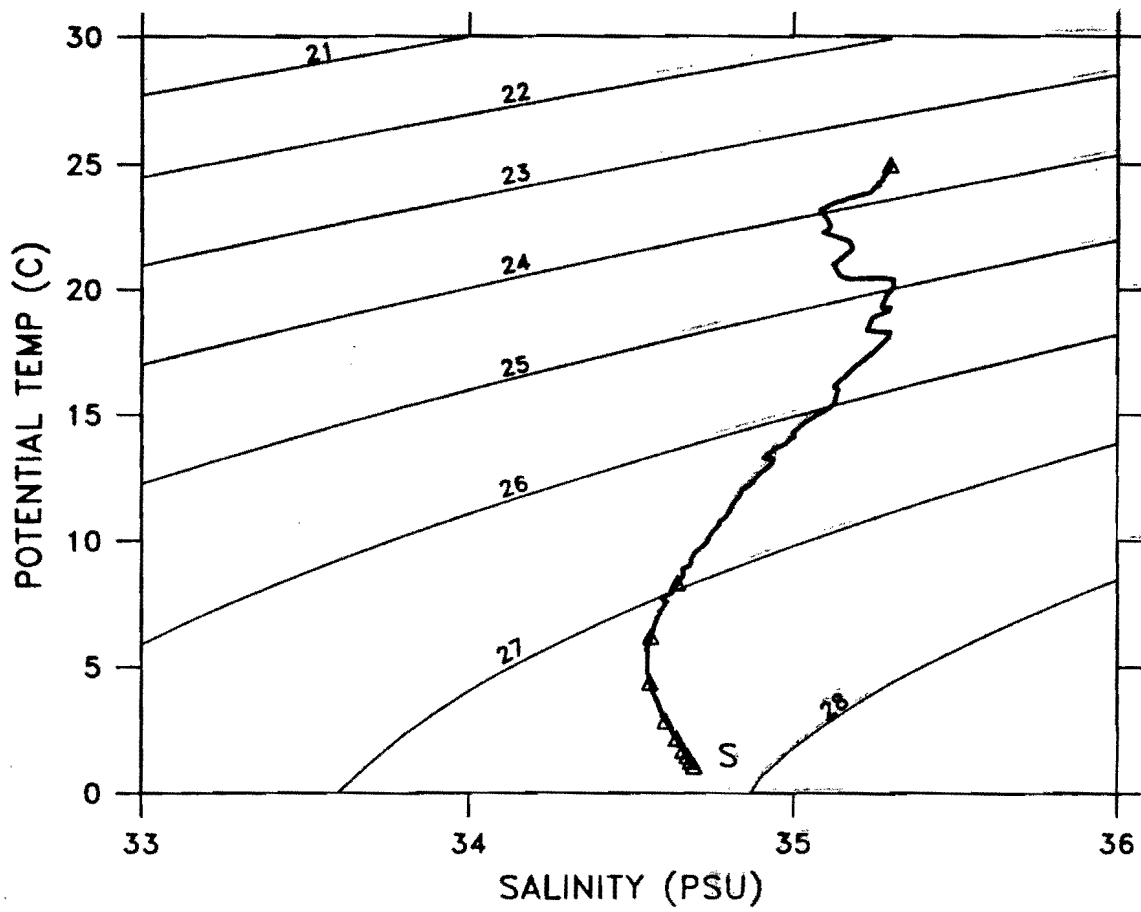


CAST EP4-89-D1 -006 DATE 28 NOV 89 TIME 0456 GMT
 LAT 00 29.05 LONG 140 01.7W WEATHER 0 SEA STATE 3
 BAROMETER 12 WIND DIR 090 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT 1 DRY 25.0 WET 22.9 DEPTH 4297 M

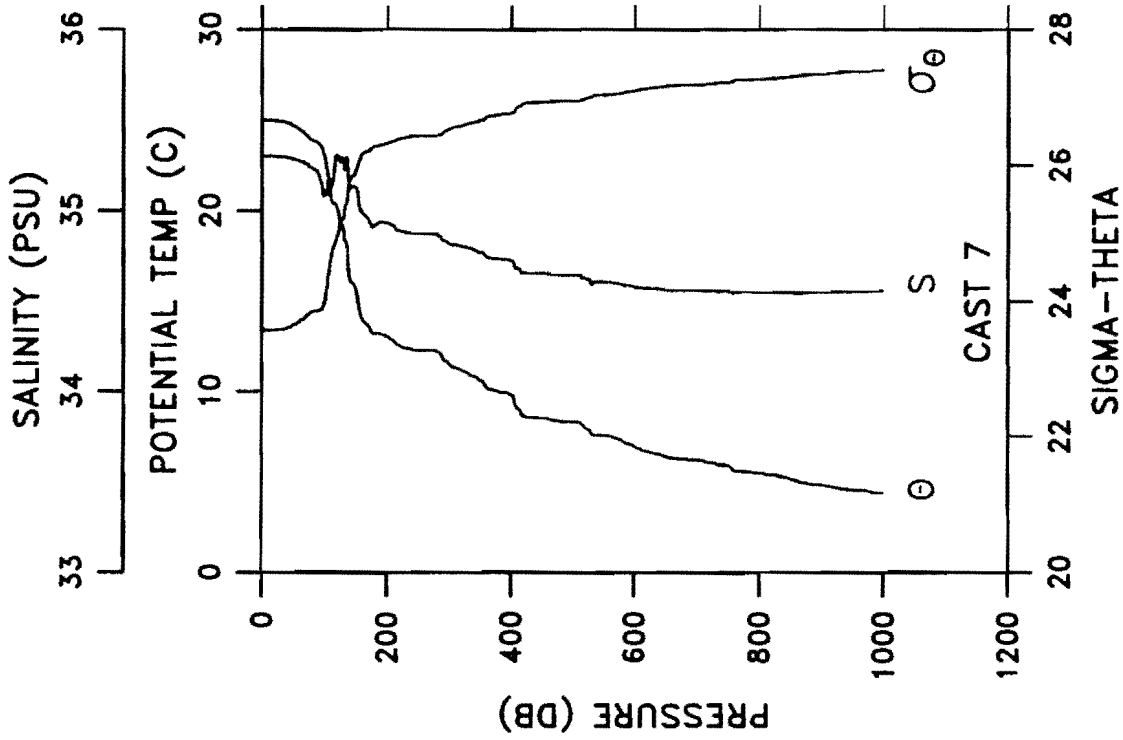


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.561 | 35.297 | 23.395 | 0.000 |
| 10 | 25.563 | 35.297 | 23.395 | 0.045 |
| 20 | 25.563 | 35.298 | 23.396 | 0.080 |
| 30 | 25.474 | 35.300 | 23.424 | 0.134 |
| 40 | 25.394 | 35.306 | 23.454 | 0.179 |
| 50 | 25.198 | 35.320 | 23.524 | 0.223 |
| 60 | 24.971 | 35.336 | 23.607 | 0.267 |
| 70 | 24.649 | 35.379 | 23.736 | 0.309 |
| 80 | 24.241 | 35.396 | 23.871 | 0.350 |
| 90 | 23.914 | 35.360 | 23.941 | 0.390 |
| 100 | 22.662 | 35.238 | 24.213 | 0.429 |
| 110 | 22.631 | 35.666 | 24.547 | 0.465 |
| 120 | 18.995 | 35.449 | 25.367 | 0.496 |
| 130 | 17.215 | 35.296 | 25.691 | 0.520 |
| 140 | 16.680 | 35.243 | 25.777 | 0.543 |
| 150 | 16.398 | 35.244 | 25.844 | 0.565 |
| 160 | 15.528 | 35.165 | 25.983 | 0.586 |
| 170 | 14.717 | 35.112 | 26.121 | 0.607 |
| 180 | 14.041 | 35.020 | 26.195 | 0.625 |
| 190 | 13.772 | 35.001 | 26.237 | 0.644 |
| 200 | 13.406 | 34.972 | 26.269 | 0.662 |
| 250 | 12.048 | 34.858 | 26.470 | 0.745 |
| 300 | 11.594 | 34.831 | 26.535 | 0.825 |
| 350 | 10.908 | 34.790 | 26.629 | 0.902 |
| 400 | 10.017 | 34.736 | 26.743 | 0.972 |
| 450 | 8.625 | 34.660 | 26.912 | 1.038 |
| 500 | 8.245 | 34.640 | 26.954 | 1.099 |
| 550 | 7.584 | 34.610 | 27.028 | 1.156 |
| 600 | 7.028 | 34.587 | 27.090 | 1.211 |
| 650 | 6.435 | 34.567 | 27.154 | 1.263 |
| 700 | 6.137 | 34.561 | 27.186 | 1.312 |
| 750 | 5.710 | 34.553 | 27.236 | 1.360 |
| 800 | 5.416 | 34.548 | 27.286 | 1.406 |
| 900 | 4.747 | 34.553 | 27.350 | 1.492 |
| 1000 | 4.395 | 34.559 | 27.393 | 1.572 |
| 1001 | 4.394 | 34.559 | 27.394 | 1.573 |

CAST EP4-89-DI -007 DATE 28 NOV 89 TIME 1002 GMT
LAT 00 00.0S LONG 139 55.6W

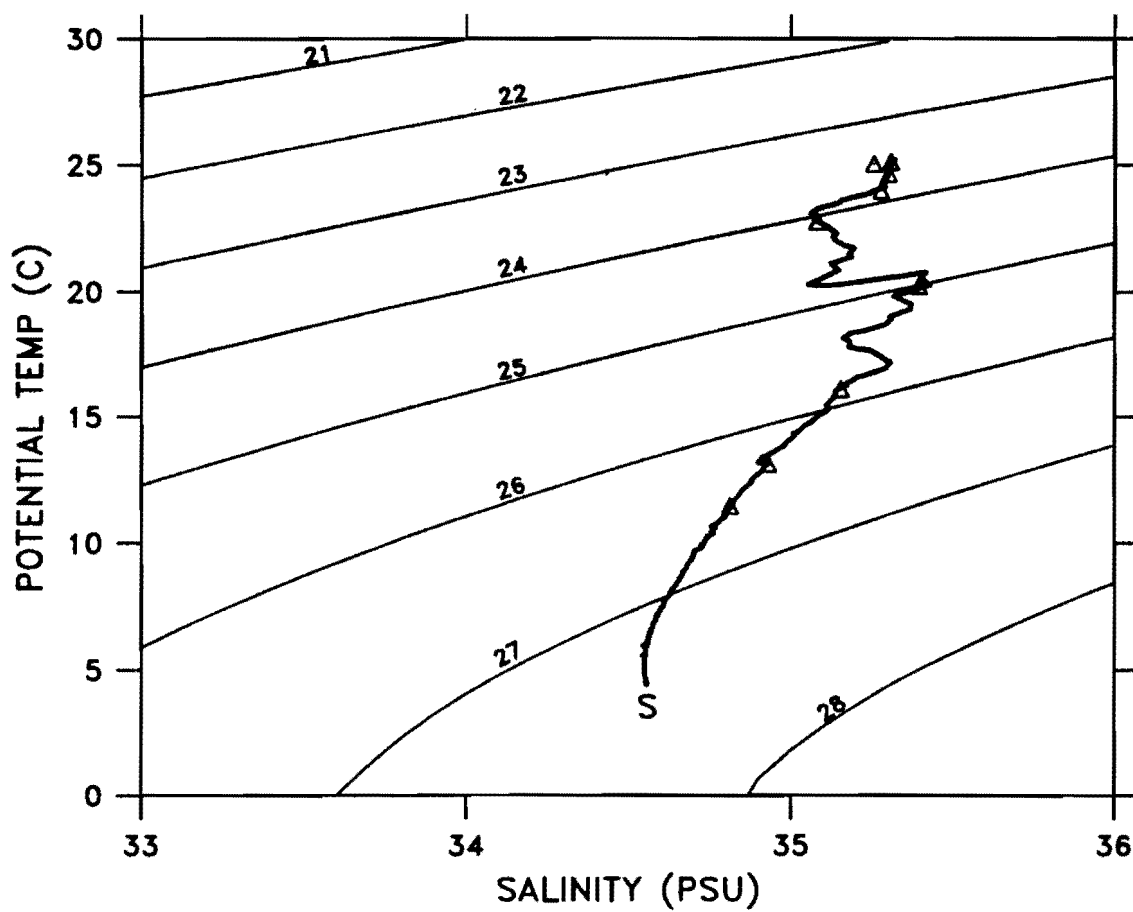


CAST EPA-89-DI -007 DATE 28 NOV 89 TIME 1002 GMT
 LAT 00 00.0S LONG 139 55.6W WEATHER 0 SEA STATE 3
 BAROMETER 10 WIND DIR 095 T SPD 14 KT VISIBILITY 8
 CLOUD X AMOUNT 0 DRY 24.2 WET 23.3 DEPTH 4409 M

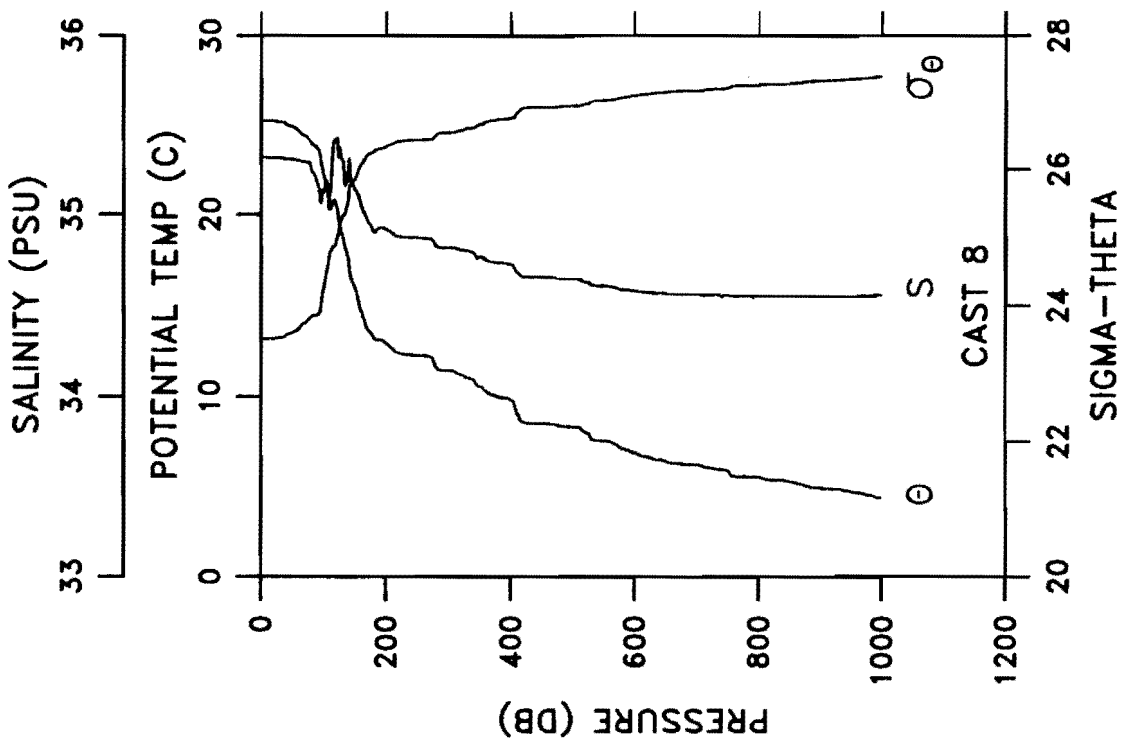


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.978 | 35.304 | 23.579 | 0.000 |
| 10 | 24.980 | 35.302 | 23.577 | 0.043 |
| 20 | 24.969 | 35.302 | 23.580 | 0.086 |
| 30 | 24.923 | 35.299 | 23.593 | 0.129 |
| 40 | 24.860 | 35.296 | 23.609 | 0.172 |
| 50 | 24.673 | 35.287 | 23.659 | 0.215 |
| 60 | 24.476 | 35.275 | 23.709 | 0.257 |
| 70 | 24.195 | 35.260 | 23.782 | 0.299 |
| 80 | 23.887 | 35.236 | 23.855 | 0.340 |
| 90 | 23.752 | 35.200 | 23.867 | 0.381 |
| 100 | 23.016 | 35.088 | 23.997 | 0.421 |
| 110 | 20.785 | 35.130 | 24.652 | 0.457 |
| 120 | 20.139 | 35.308 | 24.962 | 0.489 |
| 130 | 18.976 | 35.284 | 25.230 | 0.518 |
| 140 | 16.327 | 35.138 | 25.780 | 0.543 |
| 150 | 15.699 | 35.129 | 25.916 | 0.565 |
| 160 | 14.096 | 34.999 | 26.167 | 0.585 |
| 170 | 13.717 | 34.956 | 26.213 | 0.604 |
| 180 | 13.231 | 34.917 | 26.282 | 0.622 |
| 190 | 13.212 | 34.938 | 26.303 | 0.639 |
| 200 | 13.093 | 34.935 | 26.325 | 0.657 |
| 250 | 12.303 | 34.874 | 26.434 | 0.741 |
| 300 | 11.521 | 34.819 | 26.539 | 0.823 |
| 350 | 10.633 | 34.772 | 26.664 | 0.898 |
| 400 | 9.817 | 34.726 | 26.770 | 0.968 |
| 450 | 8.522 | 34.657 | 26.925 | 1.030 |
| 500 | 8.308 | 34.646 | 26.949 | 1.090 |
| 550 | 7.559 | 34.609 | 27.032 | 1.148 |
| 600 | 6.962 | 34.583 | 27.096 | 1.202 |
| 650 | 6.404 | 34.565 | 27.157 | 1.253 |
| 700 | 6.200 | 34.563 | 27.182 | 1.303 |
| 750 | 5.908 | 34.558 | 27.215 | 1.351 |
| 800 | 5.490 | 34.552 | 27.262 | 1.397 |
| 900 | 4.847 | 34.552 | 27.337 | 1.484 |
| 1000 | 4.393 | 34.560 | 27.394 | 1.564 |
| 1500 | 2.888 | 34.608 | 27.582 | 1.909 |
| 2000 | 2.175 | 34.641 | 27.670 | 2.189 |
| 2500 | 1.701 | 34.665 | 27.726 | 2.435 |
| 3000 | 1.484 | 34.674 | 27.750 | 2.667 |
| 3500 | 1.261 | 34.686 | 27.775 | 2.893 |
| 4000 | 1.077 | 34.696 | 27.796 | 3.109 |
| 4364 | 1.062 | 34.697 | 27.798 | 3.266 |

CAST EP4-89-DI -008 DATE 29 NOV 89 TIME 0526 GMT
LAT 00 01.7N LONG 139 59.4W

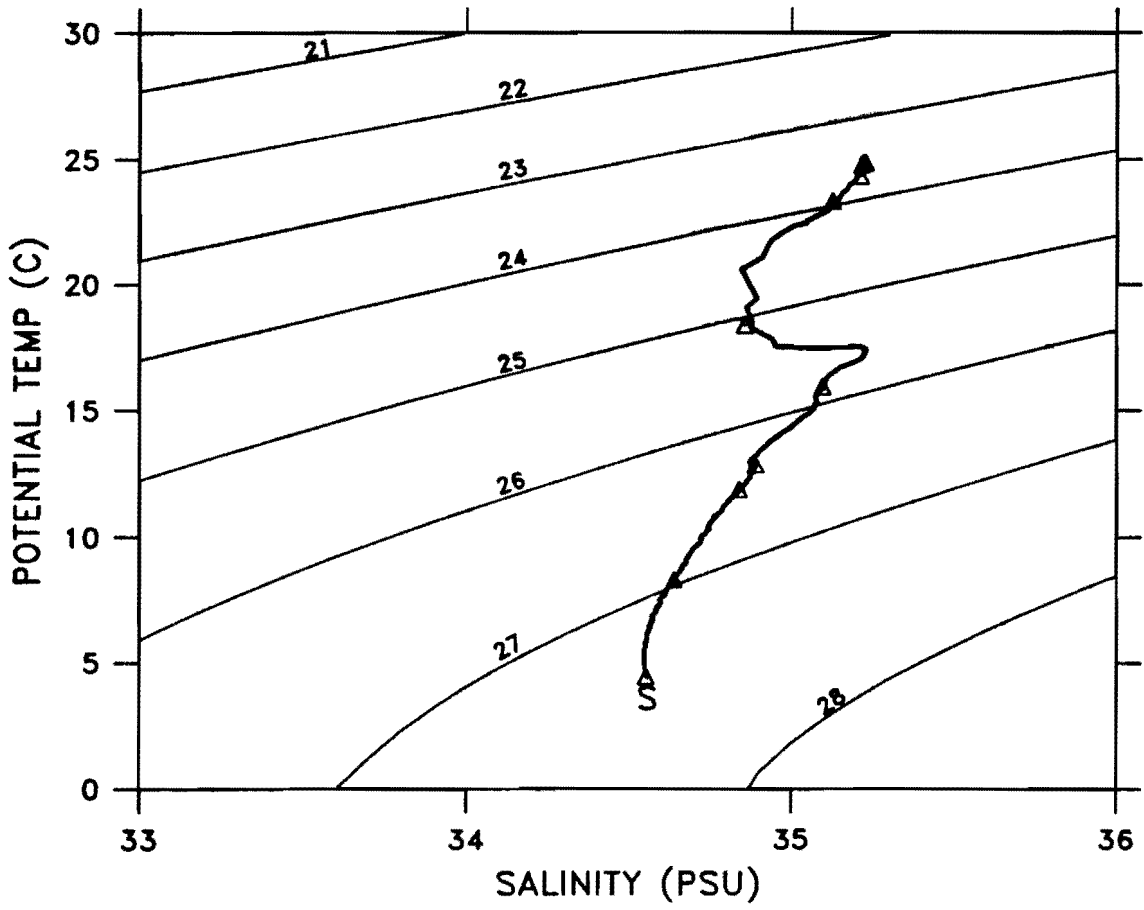


CAST EP4-89-D1 -008 DATE 29 NOV 89 TIME 0526 GMT
 LAT 00 01.7N LONG 139 59.4W WEATHER 1 SEA STATE 4
 BAROMETER 14 WIND DIR 090 T SPD 17 KT VISIBILITY 7
 CLOUD X AMOUNT 1 DRY 25.0 WET 23.0 DEPTH 4330 M

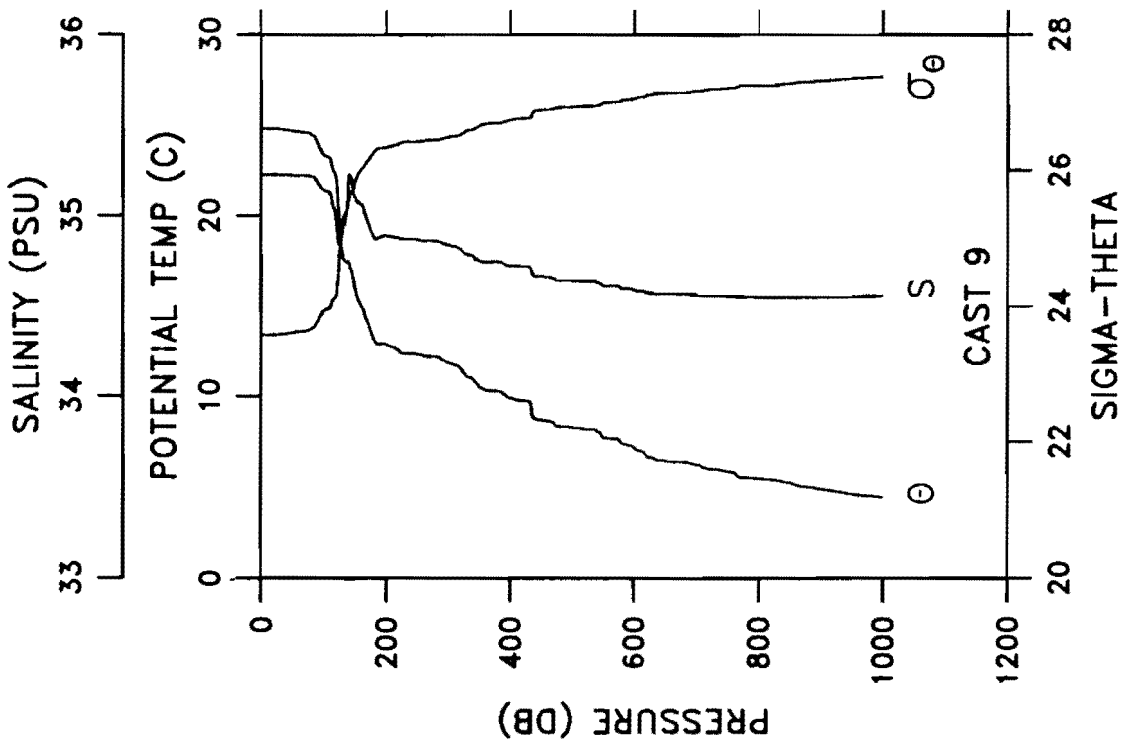


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-0 (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.208 | 35.321 | 23.522 | 0.000 |
| 10 | 25.212 | 35.316 | 23.518 | 0.044 |
| 20 | 25.202 | 35.316 | 23.520 | 0.087 |
| 30 | 25.133 | 35.313 | 23.540 | 0.131 |
| 40 | 25.021 | 35.310 | 23.571 | 0.174 |
| 50 | 24.888 | 35.307 | 23.609 | 0.218 |
| 60 | 24.680 | 35.301 | 23.667 | 0.260 |
| 70 | 24.395 | 35.294 | 23.748 | 0.302 |
| 80 | 23.990 | 35.250 | 23.836 | 0.344 |
| 90 | 23.679 | 35.169 | 23.866 | 0.384 |
| 100 | 22.209 | 35.128 | 24.258 | 0.424 |
| 110 | 20.275 | 35.125 | 24.786 | 0.458 |
| 120 | 20.453 | 35.414 | 24.958 | 0.489 |
| 130 | 18.792 | 35.300 | 25.305 | 0.518 |
| 140 | 17.182 | 35.308 | 25.708 | 0.544 |
| 150 | 15.939 | 35.134 | 25.866 | 0.566 |
| 160 | 14.705 | 35.051 | 26.077 | 0.587 |
| 170 | 13.733 | 34.966 | 26.218 | 0.606 |
| 180 | 13.273 | 34.913 | 26.271 | 0.624 |
| 190 | 13.159 | 34.928 | 26.306 | 0.642 |
| 200 | 12.968 | 34.920 | 26.338 | 0.659 |
| 250 | 12.292 | 34.873 | 26.435 | 0.743 |
| 300 | 11.448 | 34.817 | 26.551 | 0.823 |
| 350 | 10.574 | 34.767 | 26.671 | 0.899 |
| 400 | 9.828 | 34.724 | 26.766 | 0.969 |
| 450 | 8.509 | 34.656 | 26.926 | 1.030 |
| 500 | 8.323 | 34.647 | 26.948 | 1.091 |
| 550 | 7.558 | 34.610 | 27.032 | 1.148 |
| 600 | 6.889 | 34.582 | 27.105 | 1.203 |
| 650 | 6.434 | 34.568 | 27.155 | 1.254 |
| 700 | 6.206 | 34.564 | 27.182 | 1.303 |
| 750 | 5.911 | 34.558 | 27.215 | 1.351 |
| 800 | 5.554 | 34.553 | 27.255 | 1.397 |
| 900 | 4.940 | 34.551 | 27.326 | 1.485 |
| 1000 | 4.395 | 34.559 | 27.393 | 1.567 |
| 1002 | 4.389 | 34.559 | 27.394 | 1.569 |

CAST EP4-89-DI -009 DATE 29 NOV 89 TIME 0929 GMT
LAT 00 30.9N LONG 139 58.9W

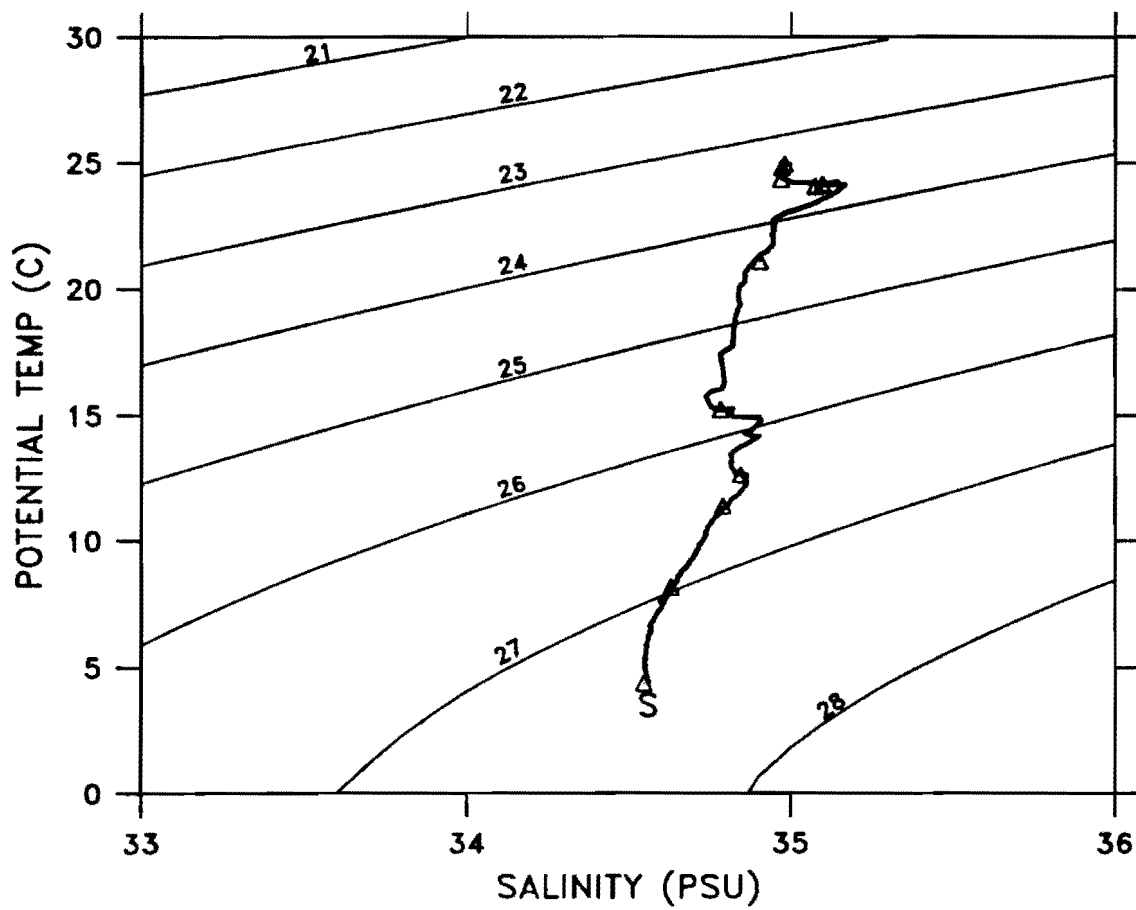


CAST EP4-89-DI --009 DATE 29 NOV 89 TIME 0929 GMT
 LAT 00 30.9N LONG 139 58.9W WEATHER 0 SEA STATE 3
 BAROMETER 10 WIND DIR 090 T SPD 14 KT VISIBILITY 8
 CLOUD X AMOUNT 0 DRY 24.5 WET 22.6 DEPTH 4341 M

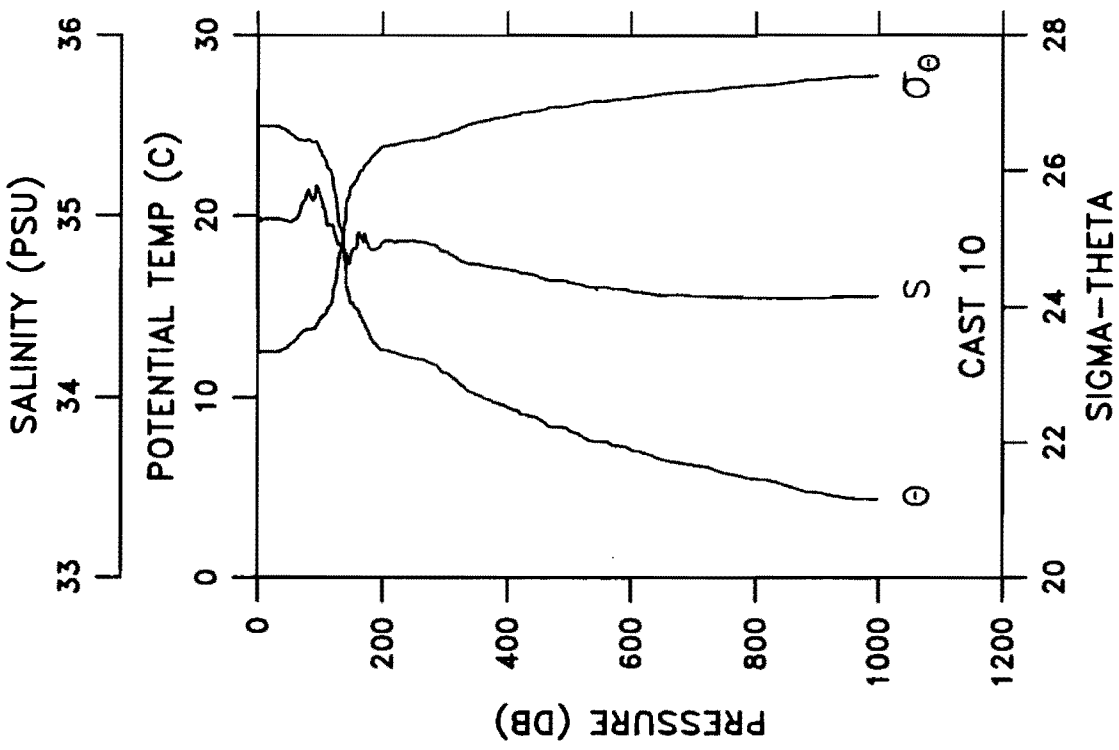


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.830 | 35.223 | 23.564 | 0.000 |
| 10 | 24.826 | 35.226 | 23.566 | 0.043 |
| 20 | 24.822 | 35.226 | 23.568 | 0.086 |
| 30 | 24.802 | 35.225 | 23.573 | 0.130 |
| 40 | 24.755 | 35.225 | 23.587 | 0.173 |
| 50 | 24.705 | 35.223 | 23.601 | 0.216 |
| 60 | 24.650 | 35.222 | 23.617 | 0.259 |
| 70 | 24.624 | 35.220 | 23.624 | 0.302 |
| 80 | 24.520 | 35.219 | 23.653 | 0.345 |
| 90 | 24.068 | 35.191 | 23.767 | 0.387 |
| 100 | 23.573 | 35.143 | 23.935 | 0.428 |
| 110 | 23.174 | 35.131 | 23.984 | 0.467 |
| 120 | 22.041 | 34.969 | 24.185 | 0.506 |
| 130 | 17.842 | 34.939 | 25.265 | 0.538 |
| 140 | 17.424 | 35.230 | 25.590 | 0.564 |
| 150 | 15.926 | 35.101 | 25.843 | 0.588 |
| 160 | 15.003 | 35.063 | 26.020 | 0.609 |
| 170 | 14.094 | 34.969 | 26.144 | 0.628 |
| 180 | 13.128 | 34.880 | 26.275 | 0.647 |
| 190 | 12.863 | 34.885 | 26.332 | 0.664 |
| 200 | 12.840 | 34.891 | 26.341 | 0.682 |
| 250 | 12.318 | 34.871 | 26.428 | 0.766 |
| 300 | 11.863 | 34.840 | 26.492 | 0.848 |
| 350 | 10.516 | 34.752 | 26.669 | 0.925 |
| 400 | 9.918 | 34.725 | 26.751 | 0.996 |
| 450 | 8.722 | 34.666 | 26.901 | 1.062 |
| 500 | 8.296 | 34.644 | 26.950 | 1.122 |
| 550 | 7.744 | 34.616 | 27.010 | 1.181 |
| 600 | 7.214 | 34.594 | 27.070 | 1.237 |
| 650 | 6.483 | 34.570 | 27.150 | 1.289 |
| 700 | 6.258 | 34.564 | 27.175 | 1.339 |
| 750 | 5.877 | 34.557 | 27.218 | 1.387 |
| 800 | 5.490 | 34.553 | 27.263 | 1.433 |
| 900 | 4.890 | 34.552 | 27.333 | 1.521 |
| 1000 | 4.444 | 34.559 | 27.388 | 1.602 |
| 1001 | 4.437 | 34.559 | 27.389 | 1.603 |

CAST EP4-89-DI -010 DATE 29 NOV 89 TIME 1320 GMT
LAT 00 59.6N LONG 139 59.5W

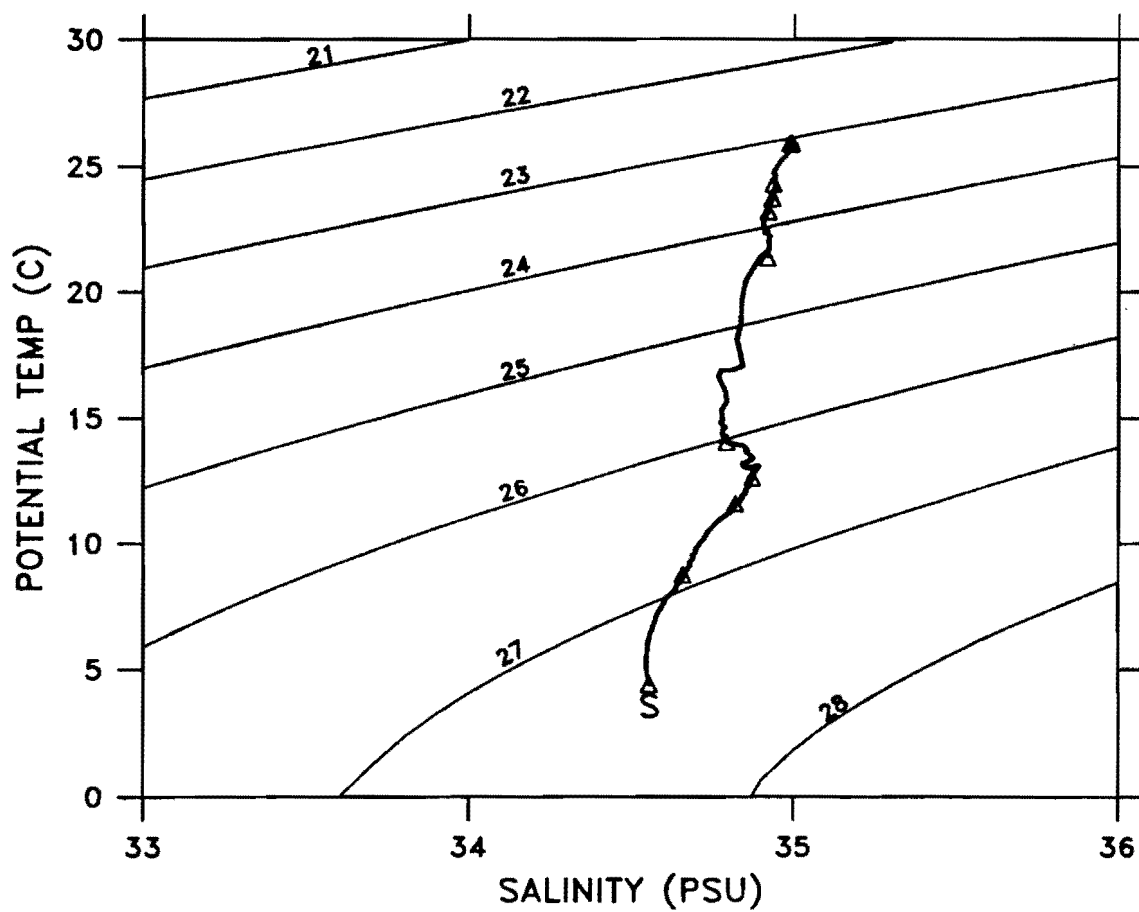


CAST EP4-89-DI -010 DATE 29 NOV 89 TIME 1320 GMT
 LAT 00 59.6N LONG 139 59.5W WEATHER 0 SEA STATE 3
 BAROMETER 13 WIND DIR 110 T SPD 12 KT VISIBILITY 7
 CLOUD X AMOUNT 1 DRY 23.8 WET 22.0 DEPTH 4313 M

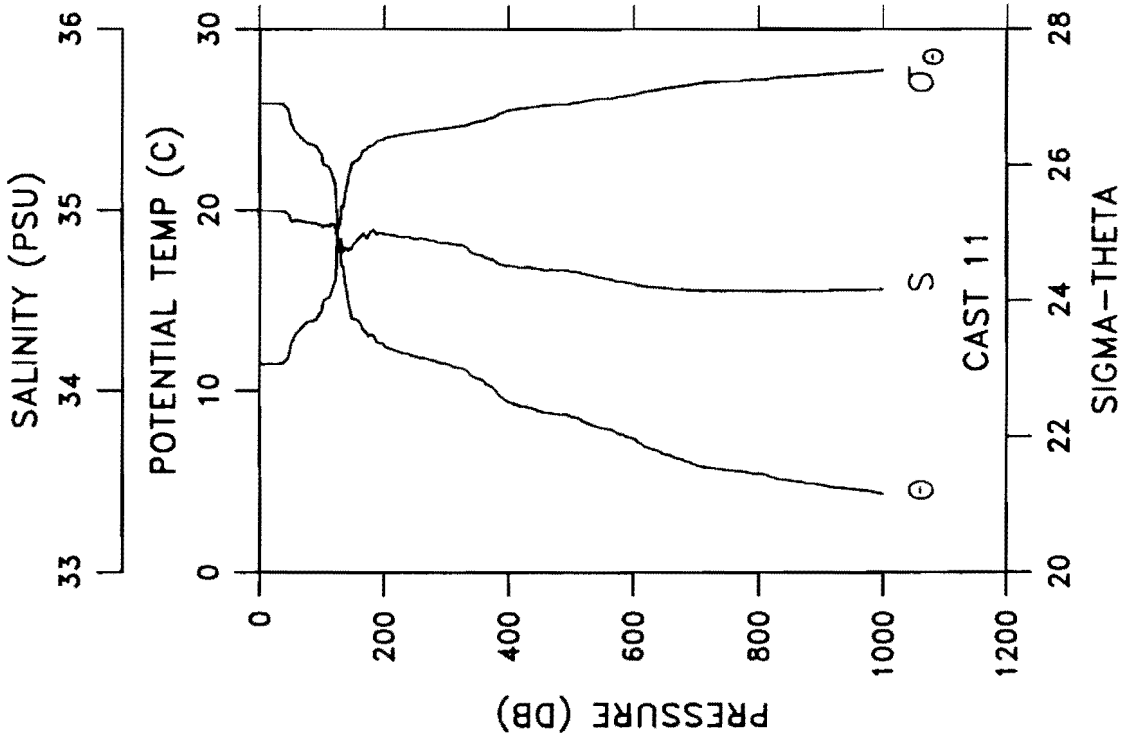


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.947 | 34.996 | 23.356 | 0.000 |
| 10 | 24.967 | 34.982 | 23.340 | 0.045 |
| 20 | 24.965 | 34.983 | 23.341 | 0.091 |
| 30 | 24.959 | 34.982 | 23.342 | 0.136 |
| 40 | 24.852 | 34.977 | 23.371 | 0.181 |
| 50 | 24.628 | 34.966 | 23.429 | 0.226 |
| 60 | 24.358 | 34.977 | 23.519 | 0.271 |
| 70 | 24.226 | 35.060 | 23.621 | 0.314 |
| 80 | 24.259 | 35.143 | 23.674 | 0.357 |
| 90 | 24.098 | 35.093 | 23.684 | 0.399 |
| 100 | 23.801 | 35.104 | 23.840 | 0.441 |
| 110 | 22.784 | 34.949 | 23.958 | 0.481 |
| 120 | 21.831 | 34.948 | 24.227 | 0.520 |
| 130 | 19.423 | 34.845 | 24.795 | 0.556 |
| 140 | 17.422 | 34.782 | 25.247 | 0.586 |
| 150 | 15.237 | 34.803 | 25.768 | 0.610 |
| 160 | 14.899 | 34.903 | 25.920 | 0.632 |
| 170 | 14.172 | 34.902 | 26.076 | 0.652 |
| 180 | 13.335 | 34.818 | 26.185 | 0.672 |
| 190 | 12.895 | 34.816 | 26.272 | 0.690 |
| 200 | 12.609 | 34.853 | 26.357 | 0.707 |
| 250 | 12.174 | 34.861 | 26.448 | 0.791 |
| 300 | 11.372 | 34.804 | 26.555 | 0.872 |
| 350 | 10.164 | 34.734 | 26.716 | 0.945 |
| 400 | 9.492 | 34.704 | 26.807 | 1.013 |
| 450 | 8.844 | 34.667 | 26.882 | 1.077 |
| 500 | 8.167 | 34.637 | 26.964 | 1.137 |
| 550 | 7.582 | 34.611 | 27.030 | 1.194 |
| 600 | 7.152 | 34.588 | 27.073 | 1.250 |
| 650 | 6.590 | 34.566 | 27.133 | 1.302 |
| 700 | 6.292 | 34.563 | 27.170 | 1.353 |
| 750 | 5.867 | 34.554 | 27.217 | 1.401 |
| 800 | 5.523 | 34.554 | 27.259 | 1.447 |
| 900 | 4.774 | 34.553 | 27.347 | 1.534 |
| 1000 | 4.368 | 34.561 | 27.398 | 1.614 |
| 1003 | 4.354 | 34.561 | 27.400 | 1.616 |

CAST EP4-89-DI -011 DATE 29 NOV 89 TIME 1727 GMT
LAT 01 29.4N LONG 139 59.4W

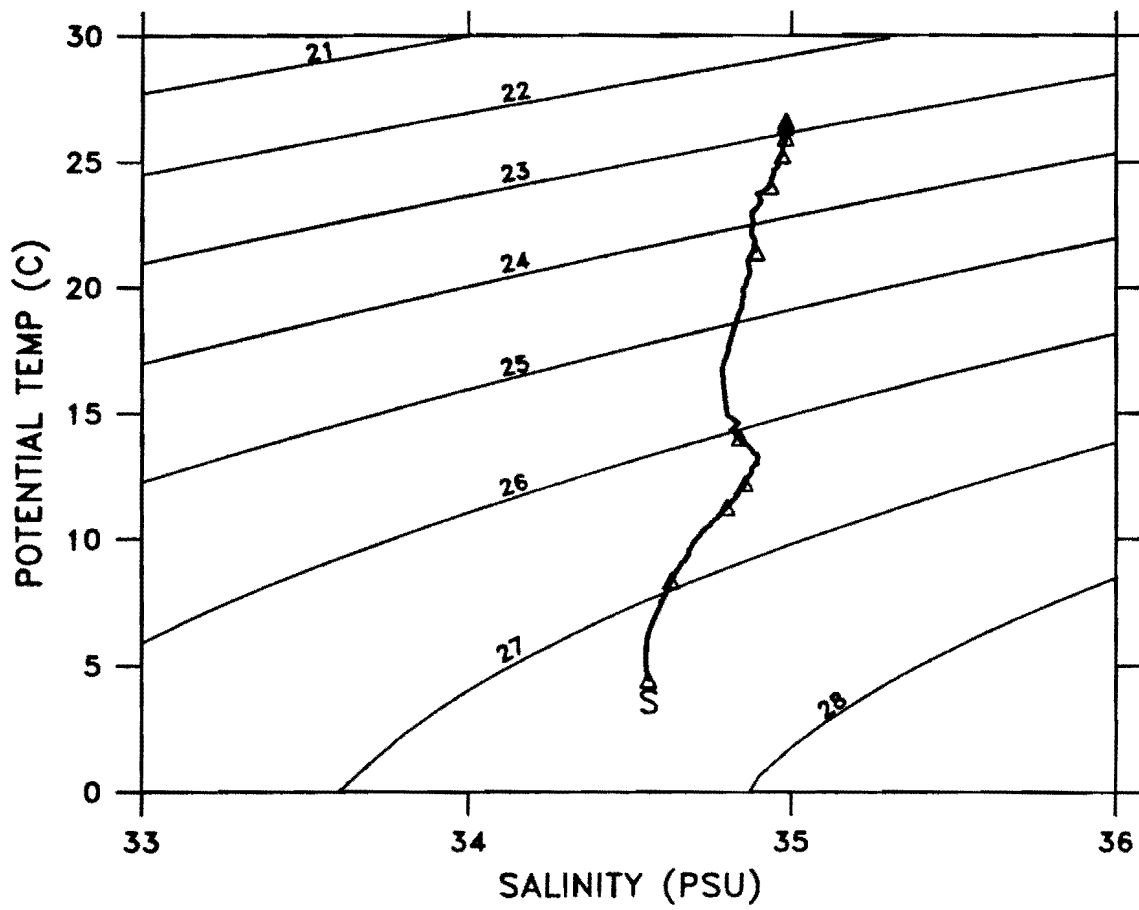


CAST EP4-89-DI -011 DATE 29 NOV 89 TIME 1727 GMT
 LAT 01 29.4N LONG 139 59.4W WEATHER 0 SEA STATE 3
 BAROMETER 16 WIND DIR 110 T SPD 15 KT VISIBILITY 6
 CLOUD 3 AMOUNT 1 DRY 25.0 WET 22.5 DEPTH 4515 M

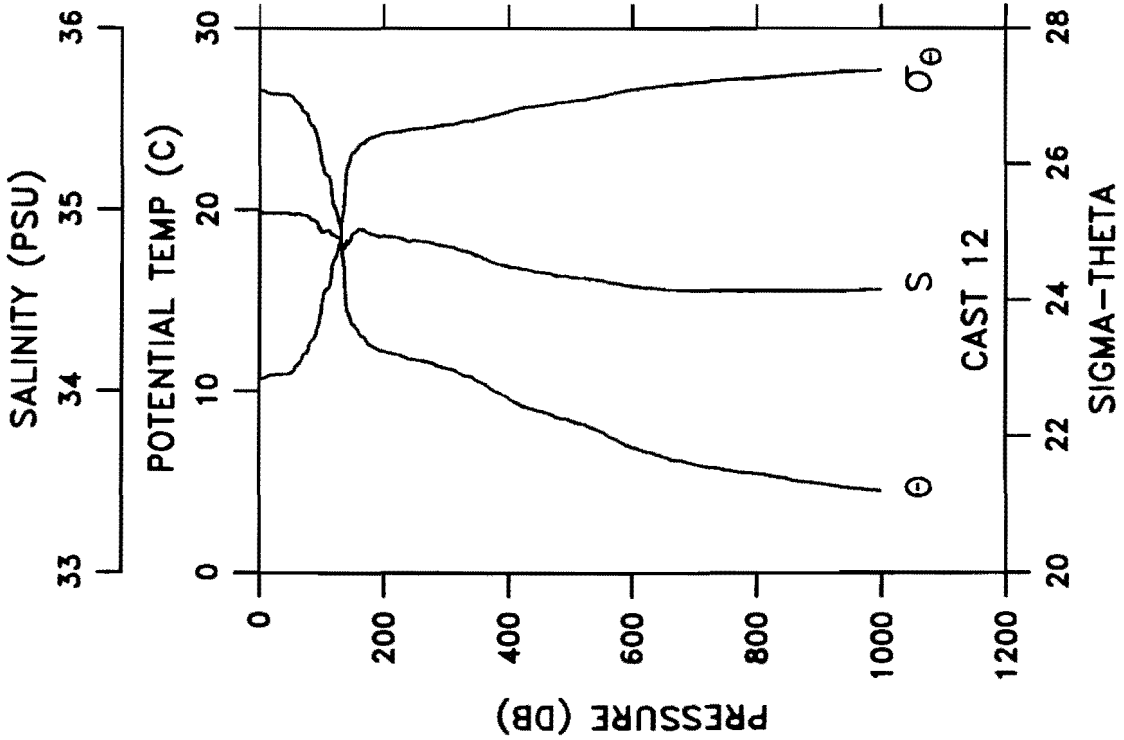


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.901 | 35.007 | 23.071 | 0.000 |
| 10 | 25.915 | 34.998 | 23.060 | 0.048 |
| 20 | 25.913 | 34.998 | 23.061 | 0.096 |
| 30 | 25.902 | 34.997 | 23.064 | 0.144 |
| 40 | 25.784 | 34.991 | 23.095 | 0.192 |
| 50 | 24.806 | 34.941 | 23.357 | 0.239 |
| 60 | 24.236 | 34.943 | 23.530 | 0.284 |
| 70 | 23.897 | 34.937 | 23.625 | 0.327 |
| 80 | 23.665 | 34.932 | 23.690 | 0.369 |
| 90 | 23.549 | 34.927 | 23.720 | 0.412 |
| 100 | 22.712 | 34.906 | 23.946 | 0.453 |
| 110 | 22.399 | 34.913 | 24.041 | 0.492 |
| 120 | 21.470 | 34.903 | 24.293 | 0.530 |
| 130 | 17.041 | 34.843 | 25.385 | 0.561 |
| 140 | 15.298 | 34.777 | 25.735 | 0.586 |
| 150 | 13.978 | 34.811 | 26.046 | 0.607 |
| 160 | 13.834 | 34.851 | 26.107 | 0.627 |
| 170 | 13.243 | 34.850 | 26.228 | 0.646 |
| 180 | 13.113 | 34.887 | 26.283 | 0.663 |
| 190 | 12.643 | 34.870 | 26.364 | 0.681 |
| 200 | 12.533 | 34.864 | 26.381 | 0.698 |
| 250 | 11.904 | 34.840 | 26.484 | 0.780 |
| 300 | 11.511 | 34.820 | 26.542 | 0.859 |
| 350 | 10.697 | 34.753 | 26.638 | 0.935 |
| 400 | 9.413 | 34.692 | 26.810 | 1.005 |
| 450 | 8.929 | 34.674 | 26.874 | 1.070 |
| 500 | 8.637 | 34.661 | 26.910 | 1.132 |
| 550 | 7.984 | 34.626 | 26.983 | 1.192 |
| 600 | 7.411 | 34.594 | 27.042 | 1.249 |
| 650 | 6.573 | 34.568 | 27.137 | 1.302 |
| 700 | 5.989 | 34.555 | 27.203 | 1.352 |
| 750 | 5.692 | 34.554 | 27.239 | 1.399 |
| 800 | 5.504 | 34.552 | 27.260 | 1.445 |
| 900 | 4.882 | 34.553 | 27.334 | 1.531 |
| 1000 | 4.384 | 34.562 | 27.397 | 1.612 |
| 1001 | 4.382 | 34.562 | 27.397 | 1.613 |

CAST EP4-89-DI -012 DATE 29 NOV 89 TIME 2341 GMT
LAT 02 02.6N LONG 140 06.0W

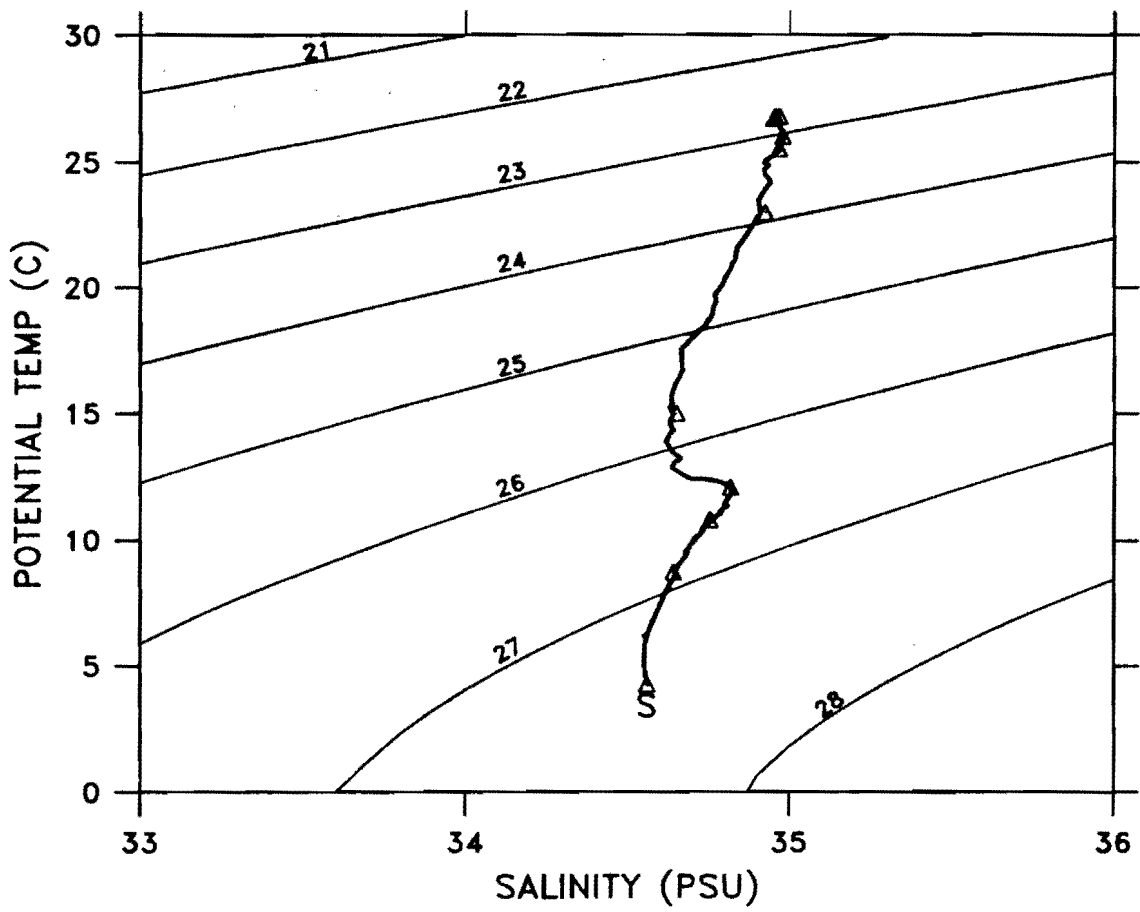


CAST EP4-89-D1 -012 DATE 29 NOV 89 TIME 2341 GMT
 LAT 02 02.8N LONG 140 06.0W WEATHER 1 SEA STATE 3
 BAROMETER 12 WIND DIR 120 T SPD 13 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 25.5 WET 22.8 DEPTH 4386 M

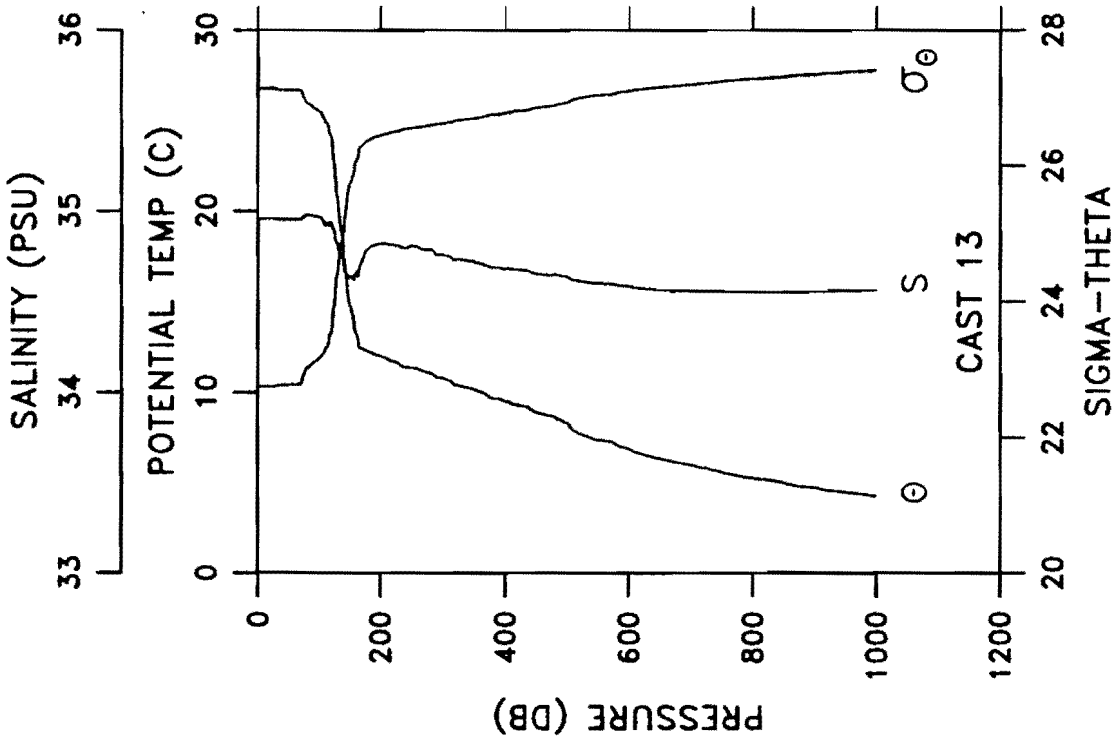


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.573 | 34.980 | 22.840 | 0.000 |
| 10 | 26.507 | 34.981 | 22.862 | 0.050 |
| 20 | 26.383 | 34.980 | 22.901 | 0.100 |
| 30 | 26.367 | 34.981 | 22.906 | 0.149 |
| 40 | 26.348 | 34.981 | 22.912 | 0.199 |
| 50 | 26.279 | 34.977 | 22.931 | 0.248 |
| 60 | 25.917 | 34.980 | 23.046 | 0.297 |
| 70 | 25.400 | 34.971 | 23.199 | 0.345 |
| 80 | 24.839 | 34.958 | 23.361 | 0.392 |
| 90 | 24.349 | 34.937 | 23.492 | 0.437 |
| 100 | 22.573 | 34.880 | 23.967 | 0.479 |
| 110 | 21.847 | 34.887 | 24.176 | 0.517 |
| 120 | 20.149 | 34.858 | 24.616 | 0.553 |
| 130 | 19.017 | 34.838 | 24.894 | 0.586 |
| 140 | 14.421 | 34.821 | 25.960 | 0.611 |
| 150 | 13.630 | 34.870 | 26.164 | 0.631 |
| 160 | 13.198 | 34.895 | 26.272 | 0.649 |
| 170 | 12.908 | 34.885 | 26.323 | 0.667 |
| 180 | 12.492 | 34.868 | 26.392 | 0.684 |
| 190 | 12.307 | 34.856 | 26.419 | 0.701 |
| 200 | 12.186 | 34.854 | 26.444 | 0.717 |
| 250 | 11.707 | 34.831 | 26.514 | 0.797 |
| 300 | 11.259 | 34.800 | 26.573 | 0.875 |
| 350 | 10.550 | 34.749 | 26.661 | 0.950 |
| 400 | 9.603 | 34.686 | 26.774 | 1.020 |
| 450 | 8.925 | 34.657 | 26.862 | 1.085 |
| 500 | 8.400 | 34.629 | 26.922 | 1.147 |
| 550 | 7.799 | 34.612 | 26.989 | 1.207 |
| 600 | 6.896 | 34.579 | 27.102 | 1.262 |
| 650 | 6.376 | 34.562 | 27.158 | 1.313 |
| 700 | 5.950 | 34.554 | 27.207 | 1.362 |
| 750 | 5.628 | 34.552 | 27.245 | 1.408 |
| 800 | 5.414 | 34.551 | 27.271 | 1.454 |
| 900 | 4.876 | 34.552 | 27.335 | 1.540 |
| 1000 | 4.454 | 34.558 | 27.387 | 1.621 |
| 1000 | 4.454 | 34.559 | 27.387 | 1.621 |

CAST EP4-89-DI -013 DATE 30 NOV 89 TIME 0545 GMT
LAT 02 59.2N LONG 140 00.6W

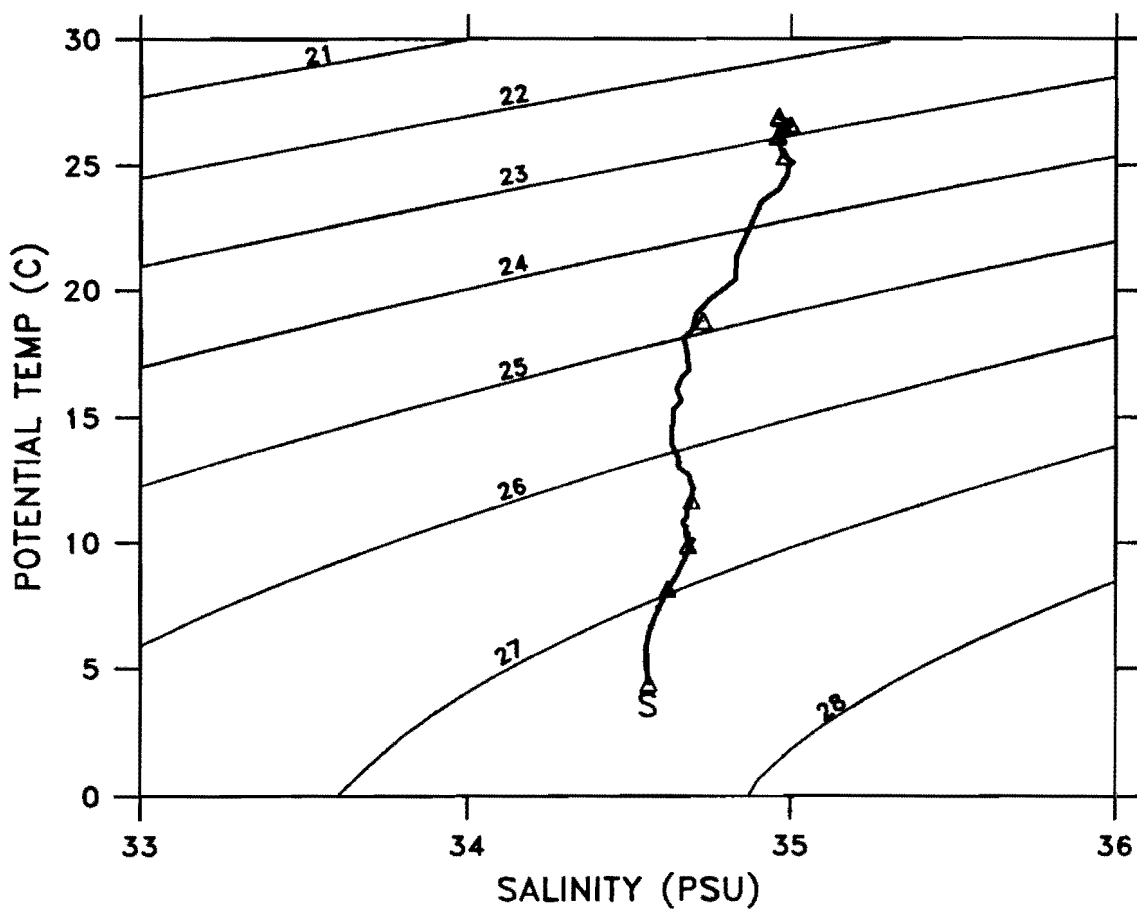


CAST EP4-88-D1 -013 DATE 30 NOV 89 TIME 0545 GMT
 LAT 02 59.2N LONG 140 00.6W WEATHER 0 SEA STATE 2
 BAROMETER 15 WIND DIR 140 T SPD 10 KT VISIBILITY 6
 CLOUD 2 AMOUNT 1 DRY 25.1 WET 22.8 DEPTH 4304 M

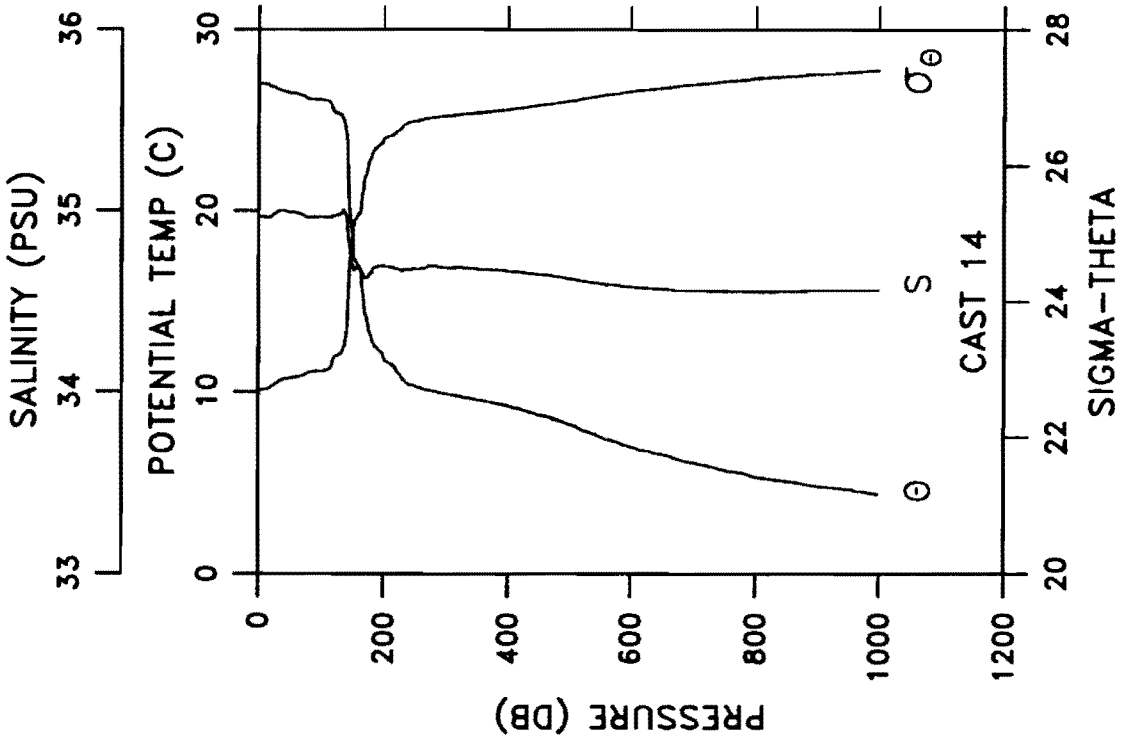


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.781 | 34.957 | 22.757 | 0.000 |
| 10 | 26.787 | 34.958 | 22.756 | 0.051 |
| 20 | 26.793 | 34.960 | 22.756 | 0.102 |
| 30 | 26.766 | 34.958 | 22.763 | 0.153 |
| 40 | 26.708 | 34.955 | 22.779 | 0.204 |
| 50 | 26.701 | 34.955 | 22.781 | 0.255 |
| 60 | 26.695 | 34.955 | 22.783 | 0.305 |
| 70 | 26.651 | 34.955 | 22.797 | 0.356 |
| 80 | 25.988 | 34.982 | 23.025 | 0.406 |
| 90 | 25.704 | 34.975 | 23.108 | 0.454 |
| 100 | 25.496 | 34.969 | 23.168 | 0.502 |
| 110 | 24.918 | 34.928 | 23.313 | 0.549 |
| 120 | 23.982 | 34.928 | 23.594 | 0.594 |
| 130 | 20.449 | 34.804 | 24.495 | 0.632 |
| 140 | 17.541 | 34.667 | 25.130 | 0.664 |
| 150 | 14.768 | 34.637 | 25.744 | 0.689 |
| 160 | 13.228 | 34.665 | 26.088 | 0.710 |
| 170 | 12.417 | 34.729 | 26.299 | 0.729 |
| 180 | 12.255 | 34.790 | 26.378 | 0.746 |
| 190 | 12.094 | 34.814 | 26.427 | 0.763 |
| 200 | 11.988 | 34.819 | 26.452 | 0.779 |
| 250 | 11.379 | 34.808 | 26.557 | 0.858 |
| 300 | 10.794 | 34.759 | 26.626 | 0.933 |
| 350 | 10.197 | 34.722 | 26.701 | 1.005 |
| 400 | 9.518 | 34.680 | 26.783 | 1.073 |
| 450 | 8.926 | 34.655 | 26.860 | 1.139 |
| 500 | 8.361 | 34.639 | 26.936 | 1.201 |
| 550 | 7.396 | 34.601 | 27.049 | 1.258 |
| 600 | 6.869 | 34.584 | 27.107 | 1.312 |
| 650 | 6.340 | 34.565 | 27.165 | 1.363 |
| 700 | 5.992 | 34.557 | 27.204 | 1.411 |
| 750 | 5.593 | 34.554 | 27.251 | 1.458 |
| 800 | 5.284 | 34.553 | 27.287 | 1.503 |
| 900 | 4.757 | 34.557 | 27.352 | 1.588 |
| 1000 | 4.276 | 34.564 | 27.410 | 1.666 |
| 1002 | 4.270 | 34.563 | 27.411 | 1.668 |

CAST EP4-89-DI -014 DATE 01 DEC 89 TIME 0522 GMT
LAT 04 59.9N LONG 139 59.6W

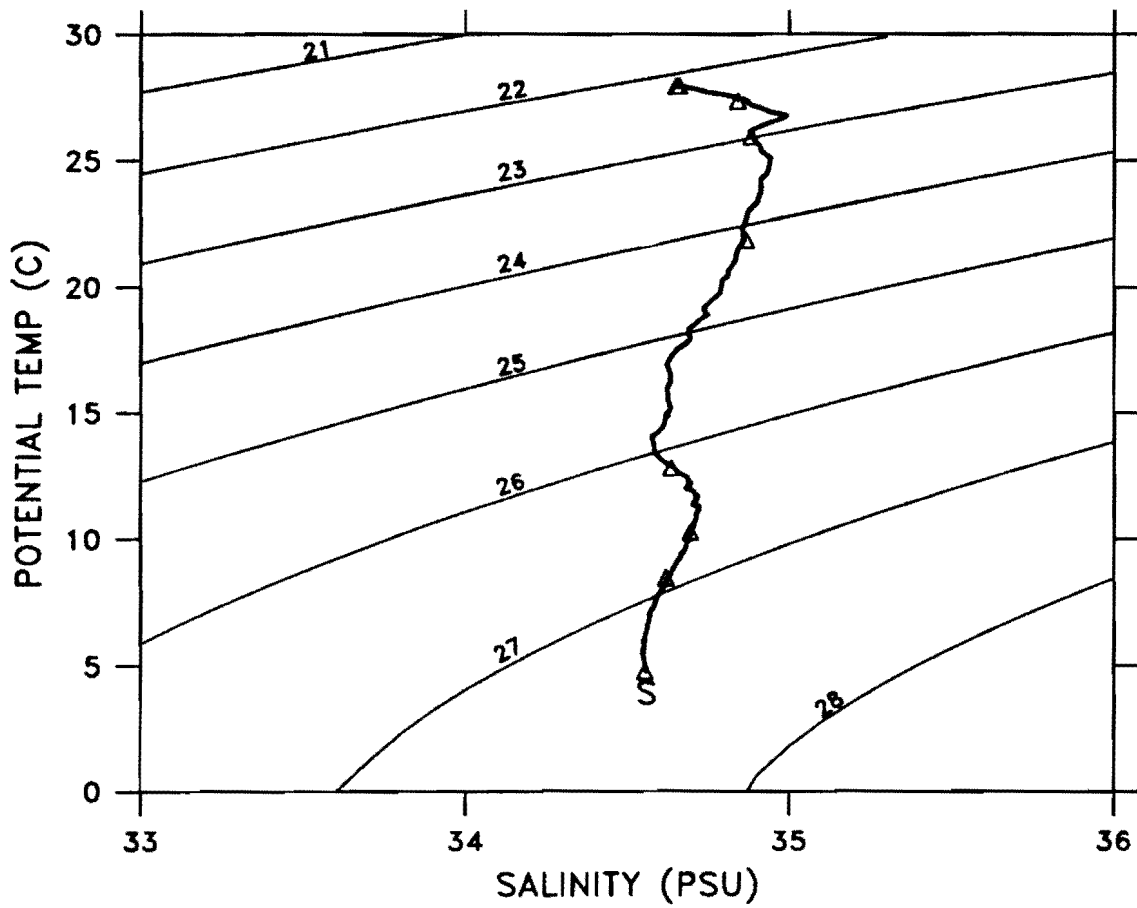


CAST EP4-88-DI --014 DATE 01 DEC 89 TIME 0522 GMT
 LAT 04 59.9N LONG 139 59.6W WEATHER 1 SEA STATE 2
 BAROMETER 15 WIND DIR 170 T SPD 10 KT VISIBILITY 7
 CLOUD X AMOUNT 2 DRY 26.1 WET 23.2 DEPTH 4395 M

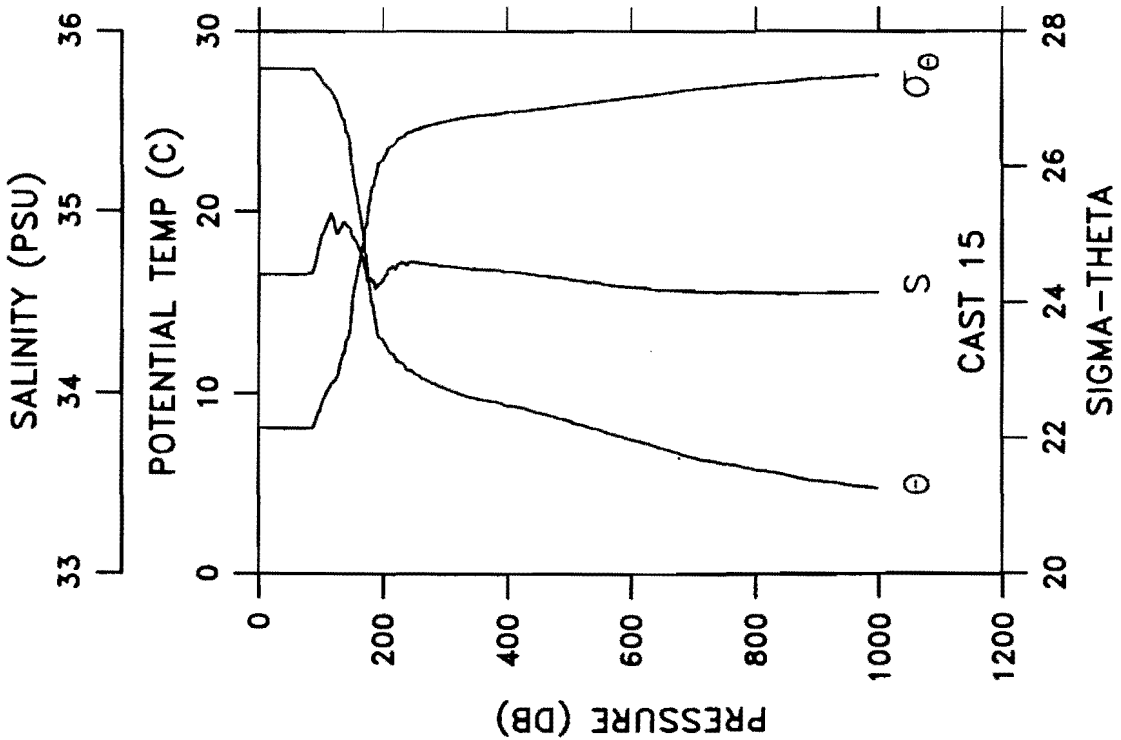


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.982 | 34.970 | 22.703 | 0.000 |
| 10 | 26.986 | 34.965 | 22.698 | 0.051 |
| 20 | 26.843 | 34.965 | 22.744 | 0.103 |
| 30 | 26.734 | 34.996 | 22.801 | 0.154 |
| 40 | 26.586 | 35.002 | 22.853 | 0.204 |
| 50 | 26.514 | 34.993 | 22.869 | 0.254 |
| 60 | 26.467 | 34.990 | 22.882 | 0.304 |
| 70 | 26.360 | 34.978 | 22.906 | 0.354 |
| 80 | 26.163 | 34.963 | 22.957 | 0.404 |
| 90 | 26.143 | 34.965 | 22.964 | 0.453 |
| 100 | 26.127 | 34.966 | 22.970 | 0.502 |
| 110 | 26.062 | 34.965 | 22.990 | 0.551 |
| 120 | 25.450 | 34.974 | 23.186 | 0.600 |
| 130 | 25.325 | 34.984 | 23.232 | 0.647 |
| 140 | 24.040 | 34.966 | 23.605 | 0.693 |
| 150 | 18.443 | 34.696 | 24.930 | 0.728 |
| 160 | 16.937 | 34.685 | 25.289 | 0.756 |
| 170 | 14.292 | 34.630 | 25.840 | 0.781 |
| 180 | 13.006 | 34.654 | 26.124 | 0.802 |
| 190 | 12.386 | 34.691 | 26.276 | 0.820 |
| 200 | 11.795 | 34.695 | 26.392 | 0.838 |
| 250 | 10.343 | 34.683 | 26.646 | 0.915 |
| 300 | 9.892 | 34.687 | 26.726 | 0.985 |
| 350 | 9.567 | 34.680 | 26.775 | 1.053 |
| 400 | 9.228 | 34.668 | 26.822 | 1.119 |
| 450 | 8.720 | 34.649 | 26.888 | 1.183 |
| 500 | 8.212 | 34.627 | 26.950 | 1.244 |
| 550 | 7.543 | 34.601 | 27.028 | 1.302 |
| 600 | 6.984 | 34.581 | 27.091 | 1.357 |
| 650 | 6.577 | 34.570 | 27.138 | 1.409 |
| 700 | 6.127 | 34.561 | 27.190 | 1.458 |
| 750 | 5.723 | 34.556 | 27.237 | 1.506 |
| 800 | 5.349 | 34.555 | 27.281 | 1.551 |
| 850 | 4.840 | 34.559 | 27.344 | 1.637 |
| 900 | 4.398 | 34.564 | 27.397 | 1.718 |
| 1000 | 4.398 | 34.564 | 27.398 | 1.719 |

CAST EP4-89-DI -015 DATE 02 DEC 89 TIME 1250 GMT
LAT 07 01.2N LONG 147 27.9W

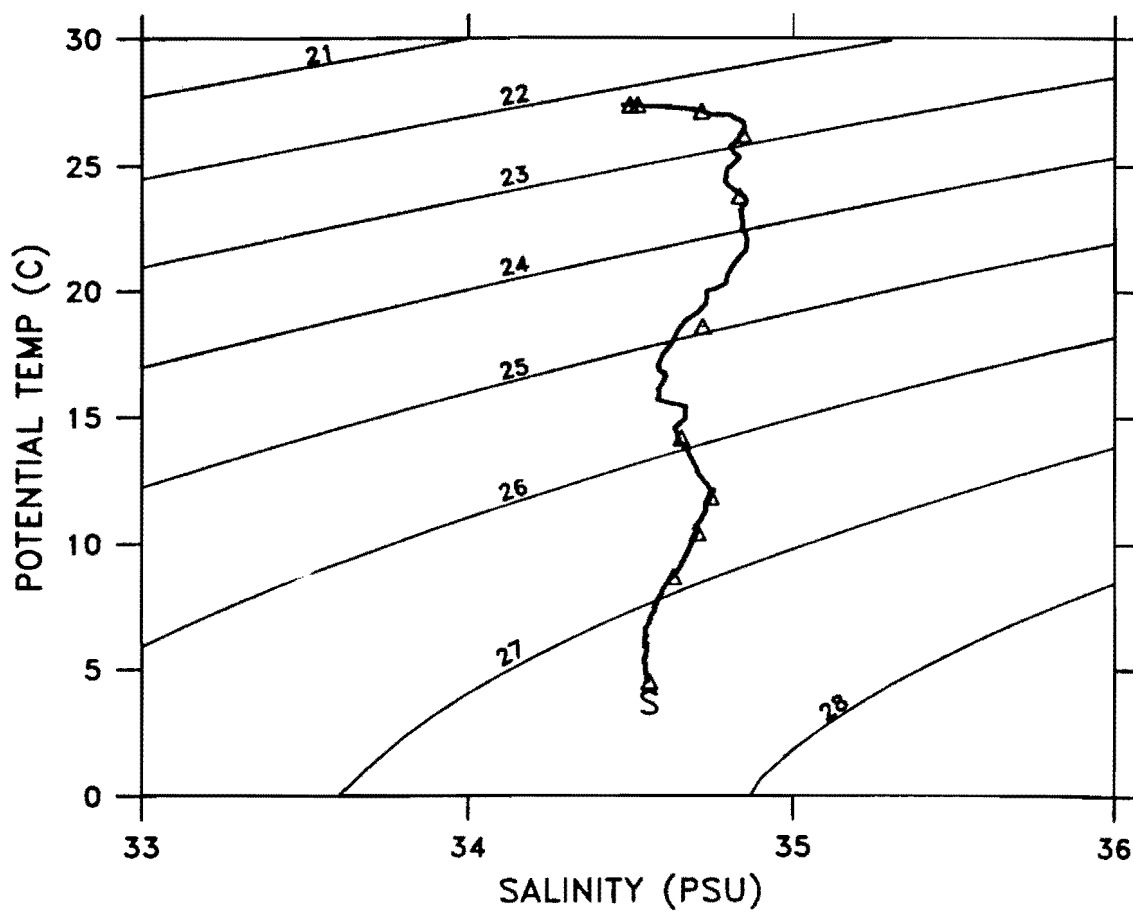


CAST EP4-89-DI -015 DATE 02 DEC 89 TIME 1250 GMT
 LAT 07 01.2N LONG 147 27.9W WEATHER 8 SEA STATE 3
 BAROMETER 12 WIND DIR 035 T SPD 19 KT VISIBILITY 7
 CLOUD 9 AMOUNT 6 DRY 26.3 WET 24.5 DEPTH 4982 M

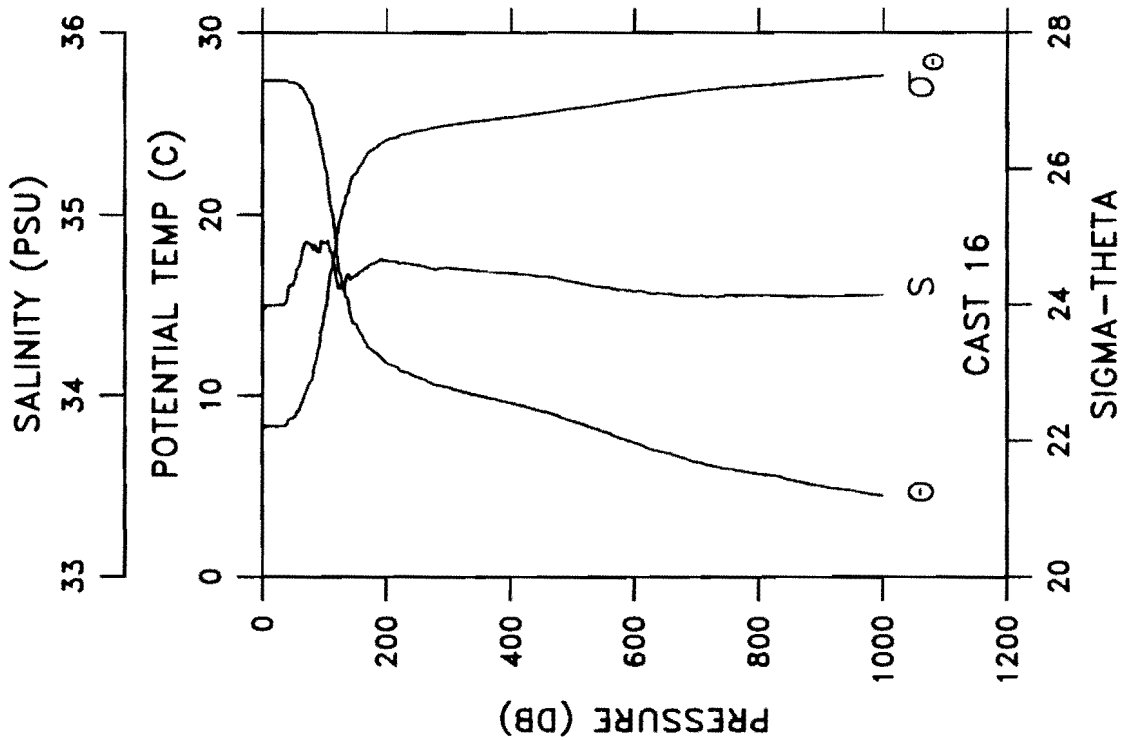


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.932 | 34.657 | 22.161 | 0.000 |
| 10 | 27.935 | 34.653 | 22.157 | 0.057 |
| 20 | 27.942 | 34.653 | 22.155 | 0.113 |
| 30 | 27.943 | 34.653 | 22.155 | 0.170 |
| 40 | 27.942 | 34.653 | 22.154 | 0.227 |
| 50 | 27.942 | 34.653 | 22.155 | 0.284 |
| 60 | 27.942 | 34.653 | 22.155 | 0.341 |
| 70 | 27.944 | 34.654 | 22.155 | 0.398 |
| 80 | 27.945 | 34.660 | 22.159 | 0.455 |
| 90 | 27.803 | 34.713 | 22.246 | 0.511 |
| 100 | 27.368 | 34.868 | 22.503 | 0.566 |
| 110 | 26.883 | 34.945 | 22.716 | 0.619 |
| 120 | 26.493 | 34.946 | 22.840 | 0.670 |
| 130 | 25.532 | 34.910 | 23.113 | 0.720 |
| 140 | 24.412 | 34.928 | 23.466 | 0.767 |
| 150 | 22.282 | 34.855 | 24.030 | 0.810 |
| 160 | 20.315 | 34.795 | 24.523 | 0.846 |
| 170 | 17.891 | 34.693 | 25.065 | 0.879 |
| 180 | 15.211 | 34.635 | 25.645 | 0.905 |
| 190 | 13.414 | 34.584 | 25.988 | 0.928 |
| 200 | 12.967 | 34.824 | 26.109 | 0.948 |
| 250 | 11.138 | 34.720 | 26.533 | 1.033 |
| 300 | 10.302 | 34.700 | 26.666 | 1.107 |
| 350 | 9.727 | 34.683 | 26.751 | 1.177 |
| 400 | 9.340 | 34.667 | 26.803 | 1.244 |
| 450 | 8.966 | 34.648 | 26.848 | 1.310 |
| 500 | 8.498 | 34.629 | 26.907 | 1.373 |
| 550 | 7.981 | 34.607 | 26.969 | 1.433 |
| 600 | 7.464 | 34.586 | 27.028 | 1.491 |
| 650 | 7.011 | 34.569 | 27.078 | 1.546 |
| 700 | 6.480 | 34.562 | 27.144 | 1.598 |
| 750 | 6.148 | 34.556 | 27.183 | 1.649 |
| 800 | 5.788 | 34.553 | 27.226 | 1.697 |
| 800 | 5.173 | 34.553 | 27.301 | 1.788 |
| 899 | 4.769 | 34.557 | 27.351 | 1.873 |

CAST EP4-89-DI -016 DATE 06 DEC 89 TIME 1101 GMT
LAT 06 56.1N LONG 132 23.5W

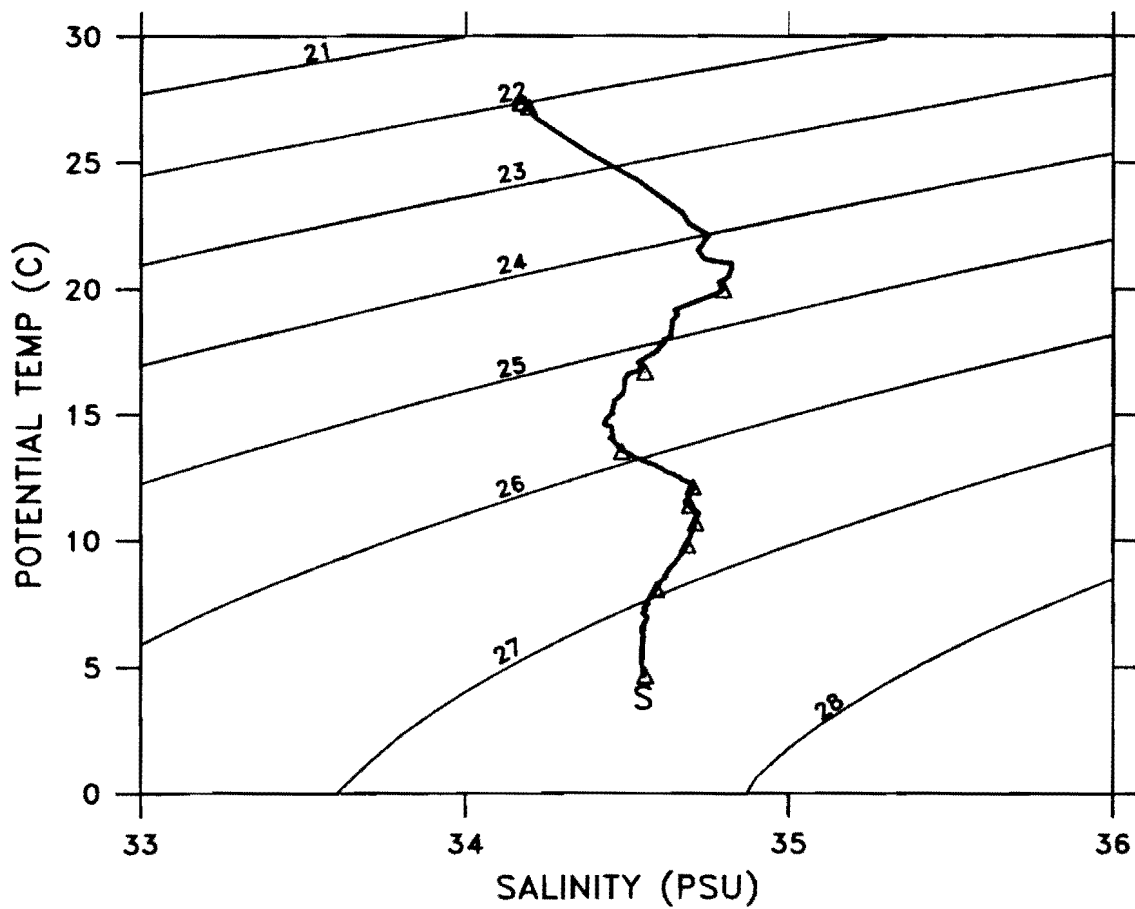


CAST EP4-89-D1 -016 DATE 06 DEC 89 TIME 1101 GMT
 LAT 06 56.1N LONG 132 23.5W WEATHER 1 SEA STATE 2
 BAROMETER 10 WIND DIR 125 T SPD 11 KT VISIBILITY 8
 CLOUD X AMOUNT 2 DRY 25.8 WET 23.6 DEPTH 4487 M

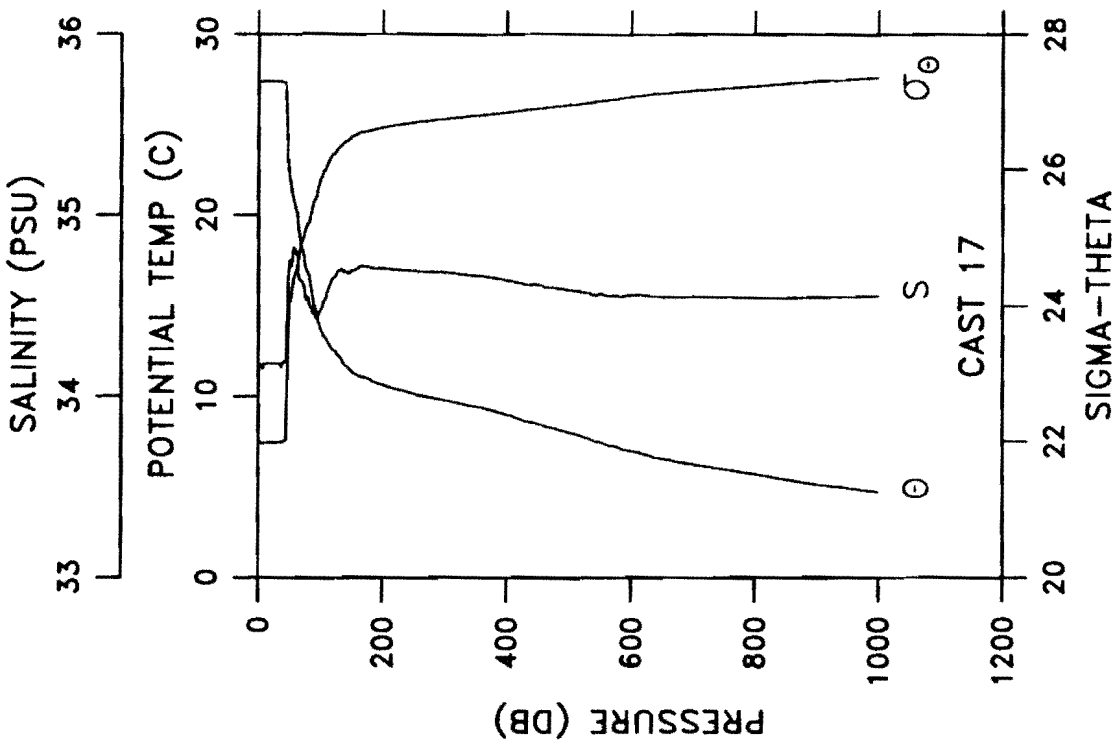


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.380 | 34.491 | 22.215 | 0.000 |
| 10 | 27.389 | 34.495 | 22.215 | 0.056 |
| 20 | 27.390 | 34.497 | 22.216 | 0.112 |
| 30 | 27.391 | 34.500 | 22.218 | 0.168 |
| 40 | 27.360 | 34.542 | 22.260 | 0.224 |
| 50 | 27.288 | 34.621 | 22.342 | 0.280 |
| 60 | 27.128 | 34.721 | 22.469 | 0.334 |
| 70 | 26.621 | 34.848 | 22.726 | 0.387 |
| 80 | 25.867 | 34.818 | 22.939 | 0.437 |
| 90 | 24.458 | 34.793 | 23.350 | 0.485 |
| 100 | 22.665 | 34.846 | 23.915 | 0.527 |
| 110 | 20.395 | 34.796 | 24.503 | 0.565 |
| 120 | 17.817 | 34.625 | 25.031 | 0.597 |
| 130 | 15.828 | 34.590 | 25.472 | 0.625 |
| 140 | 14.643 | 34.645 | 25.777 | 0.649 |
| 150 | 13.942 | 34.662 | 25.939 | 0.670 |
| 160 | 13.346 | 34.690 | 26.083 | 0.691 |
| 170 | 12.847 | 34.717 | 26.245 | 0.709 |
| 180 | 12.409 | 34.731 | 26.302 | 0.727 |
| 190 | 12.138 | 34.755 | 26.373 | 0.745 |
| 200 | 11.817 | 34.746 | 26.427 | 0.761 |
| 250 | 11.029 | 34.722 | 26.554 | 0.840 |
| 300 | 10.451 | 34.705 | 26.644 | 0.915 |
| 350 | 9.997 | 34.688 | 26.710 | 0.986 |
| 400 | 9.630 | 34.676 | 26.761 | 1.055 |
| 450 | 9.159 | 34.658 | 26.825 | 1.122 |
| 500 | 8.618 | 34.629 | 26.888 | 1.186 |
| 550 | 8.042 | 34.598 | 26.952 | 1.248 |
| 600 | 7.427 | 34.574 | 27.024 | 1.306 |
| 650 | 6.869 | 34.559 | 27.090 | 1.361 |
| 700 | 6.343 | 34.548 | 27.151 | 1.413 |
| 750 | 5.984 | 34.554 | 27.202 | 1.462 |
| 800 | 5.689 | 34.552 | 27.238 | 1.510 |
| 900 | 5.043 | 34.546 | 27.311 | 1.600 |
| 1000 | 4.505 | 34.556 | 27.379 | 1.683 |
| 1001 | 4.501 | 34.556 | 27.379 | 1.684 |

CAST EP4-89-DI -017. DATE 08 DEC 89 TIME 0303 GMT
LAT 08 58.1N LONG 140 13.5W

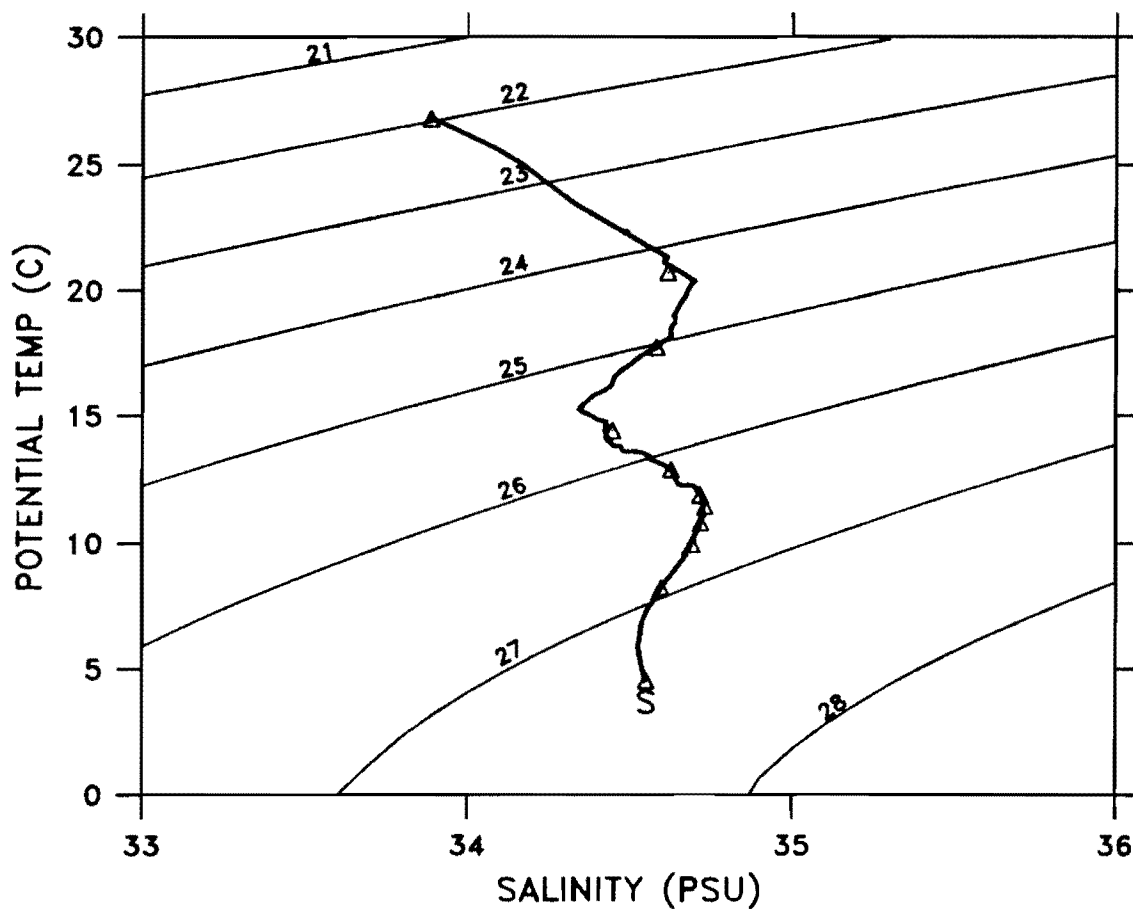


CAST EP4-89-DI -017 DATE 08 DEC 89 TIME 0303 GMT
 LAT 08 58.1N LONG 140 13.5W WEATHER 5 SEA STATE 4
 BAROMETER 09 WIND DIR 080 T SPD 14 KT VISIBILITY 6
 CLOUD 7 AMOUNT 8 DRY 24.5 WET 22.4 DEPTH 4878 M

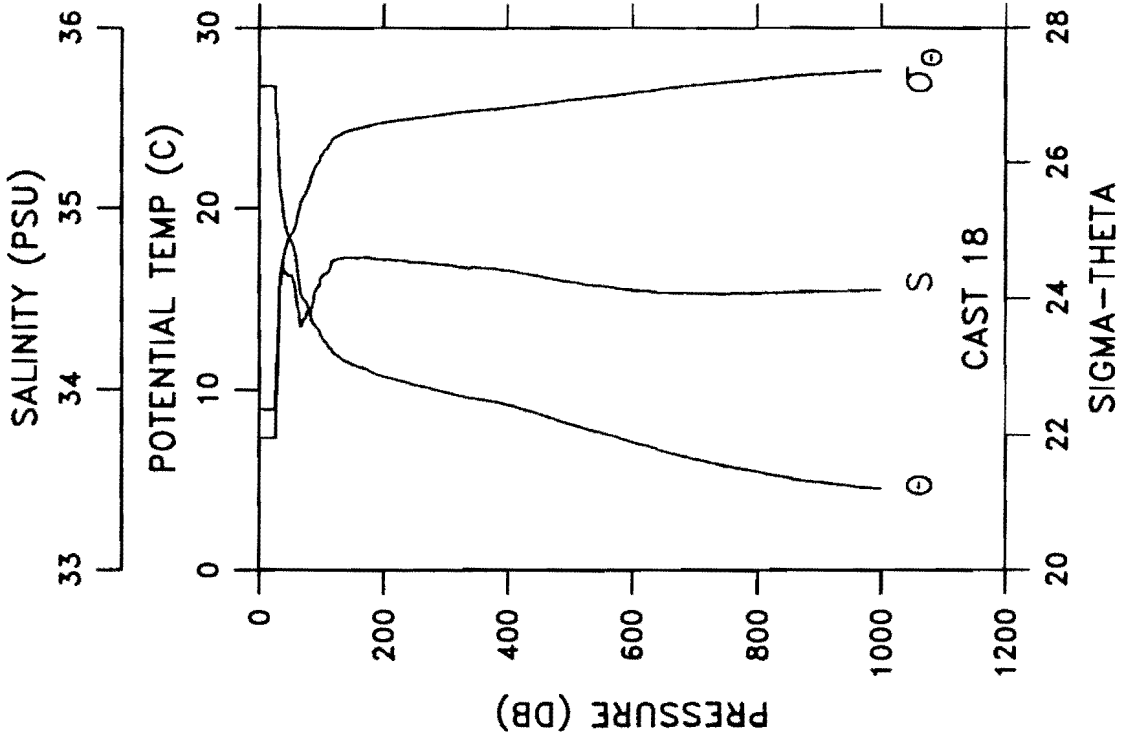


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.377 | 34.175 | 21.978 | 0.000 |
| 10 | 27.384 | 34.180 | 21.980 | 0.058 |
| 20 | 27.386 | 34.179 | 21.978 | 0.117 |
| 30 | 27.381 | 34.180 | 21.981 | 0.175 |
| 40 | 27.345 | 34.189 | 21.999 | 0.234 |
| 50 | 22.121 | 34.752 | 23.997 | 0.285 |
| 60 | 20.409 | 34.805 | 24.506 | 0.322 |
| 70 | 18.193 | 34.635 | 24.946 | 0.355 |
| 80 | 16.841 | 34.546 | 25.204 | 0.383 |
| 90 | 15.047 | 34.457 | 25.544 | 0.410 |
| 100 | 13.693 | 34.473 | 25.845 | 0.433 |
| 110 | 13.119 | 34.559 | 26.028 | 0.454 |
| 120 | 12.555 | 34.649 | 26.210 | 0.473 |
| 130 | 12.242 | 34.695 | 26.307 | 0.491 |
| 140 | 11.712 | 34.691 | 26.404 | 0.508 |
| 150 | 11.387 | 34.700 | 26.472 | 0.524 |
| 160 | 11.180 | 34.707 | 26.515 | 0.540 |
| 170 | 11.072 | 34.721 | 26.546 | 0.555 |
| 180 | 10.948 | 34.716 | 26.564 | 0.570 |
| 190 | 10.743 | 34.706 | 26.593 | 0.585 |
| 200 | 10.641 | 34.708 | 26.613 | 0.600 |
| 250 | 10.153 | 34.695 | 26.688 | 0.671 |
| 300 | 9.786 | 34.686 | 26.743 | 0.740 |
| 350 | 9.441 | 34.667 | 26.786 | 0.808 |
| 400 | 9.001 | 34.641 | 26.837 | 0.873 |
| 450 | 8.487 | 34.615 | 26.898 | 0.936 |
| 500 | 8.016 | 34.588 | 26.948 | 0.997 |
| 550 | 7.455 | 34.564 | 27.012 | 1.055 |
| 600 | 6.970 | 34.558 | 27.075 | 1.110 |
| 650 | 6.543 | 34.549 | 27.126 | 1.163 |
| 700 | 6.238 | 34.551 | 27.168 | 1.213 |
| 750 | 5.945 | 34.548 | 27.203 | 1.262 |
| 800 | 5.693 | 34.547 | 27.233 | 1.310 |
| 900 | 5.078 | 34.546 | 27.307 | 1.400 |
| 1000 | 4.666 | 34.552 | 27.358 | 1.485 |
| 1001 | 4.664 | 34.552 | 27.358 | 1.486 |

CAST EP4-89-DI -018 DATE 08 DEC 89 TIME 0951 GMT
LAT 09 59.7N LONG 140 00.6W



CAST EP4-89-DI -018 DATE 08 DEC 89 TIME 0951 GMT
 LAT 08 59.7N LONG 140 00.6W WEATHER 2 SEA STATE 4
 BAROMETER 10 WIND DIR 055 T SPD 25 KT VISIBILITY 8
 CLOUD X AMOUNT 8 DRY 25.8 WET 23.9 DEPTH 4962 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.788 | 33.893 | 21.954 | 0.000 |
| 10 | 26.787 | 33.892 | 21.953 | 0.059 |
| 20 | 26.783 | 33.891 | 21.954 | 0.117 |
| 30 | 24.434 | 34.227 | 22.929 | 0.174 |
| 40 | 19.466 | 34.654 | 24.638 | 0.212 |
| 50 | 18.259 | 34.624 | 24.921 | 0.243 |
| 60 | 16.999 | 34.499 | 25.131 | 0.273 |
| 70 | 15.050 | 34.370 | 25.476 | 0.299 |
| 80 | 14.388 | 34.423 | 25.660 | 0.324 |
| 90 | 13.510 | 34.542 | 25.935 | 0.346 |
| 100 | 12.910 | 34.816 | 26.114 | 0.366 |
| 110 | 12.460 | 34.640 | 26.222 | 0.385 |
| 120 | 11.973 | 34.711 | 26.370 | 0.402 |
| 130 | 11.765 | 34.721 | 26.417 | 0.419 |
| 140 | 11.548 | 34.725 | 26.461 | 0.435 |
| 150 | 11.370 | 34.724 | 26.494 | 0.451 |
| 160 | 11.254 | 34.722 | 26.513 | 0.466 |
| 170 | 11.156 | 34.725 | 26.533 | 0.482 |
| 180 | 10.996 | 34.722 | 26.560 | 0.497 |
| 190 | 10.820 | 34.717 | 26.588 | 0.512 |
| 200 | 10.733 | 34.715 | 26.602 | 0.527 |
| 250 | 10.281 | 34.699 | 26.669 | 0.599 |
| 300 | 9.859 | 34.683 | 26.729 | 0.669 |
| 350 | 9.500 | 34.671 | 26.780 | 0.736 |
| 400 | 9.178 | 34.653 | 26.818 | 0.803 |
| 450 | 8.662 | 34.622 | 26.873 | 0.867 |
| 500 | 8.119 | 34.591 | 26.935 | 0.928 |
| 550 | 7.664 | 34.570 | 26.986 | 0.987 |
| 600 | 7.137 | 34.546 | 27.042 | 1.044 |
| 650 | 6.607 | 34.534 | 27.106 | 1.098 |
| 700 | 6.178 | 34.528 | 27.157 | 1.150 |
| 750 | 5.809 | 34.524 | 27.201 | 1.199 |
| 800 | 5.489 | 34.529 | 27.244 | 1.246 |
| 900 | 4.931 | 34.538 | 27.317 | 1.334 |
| 1000 | 4.532 | 34.546 | 27.368 | 1.417 |
| 1004 | 4.507 | 34.547 | 27.371 | 1.421 |

CAST EP4-89-DI -001 LAT 02 59.4S LONG 140 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 1. | 25.734 | 35.300 | 0.00 | 25.734 | 23.344 |
| 19. | 25.745 | 35.302 | 0.00 | 25.741 | 23.344 |
| 39. | 25.736 | 35.299 | 0.00 | 25.727 | 23.346 |
| 59. | 25.723 | 35.342 | 0.00 | 25.710 | 23.384 |
| 79. | 25.688 | 35.450 | 0.00 | 25.671 | 23.477 |
| 98. | 25.227 | 35.413 | 0.00 | 25.206 | 23.592 |
| 123. | 20.956 | 35.656* | 0.00 | 20.933* | 25.013* |
| 147. | 13.889 | 35.036 | 0.00 | 13.868 | 26.243 |
| 199. | 12.788 | 34.904 | 0.00 | 12.761 | 26.367 |
| 296. | 11.637 | 34.845 | 0.00 | 11.599 | 26.545 |
| 498. | 7.856 | 34.617 | 0.00 | 7.805 | 27.002 |
| 991. | 4.529 | 34.553 | 0.00 | 4.450 | 27.383 |

CAST EP4-89-DI -004 LAT 01 30.3S LONG 140 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 25.813 | 35.298 | 0.00 | 25.813 | 23.318 |
| 19. | 25.735 | 35.297 | 0.00 | 25.731 | 23.343 |
| 39. | 25.717 | 35.299 | 0.00 | 25.708 | 23.352 |
| 59. | 25.715 | 35.298 | 0.00 | 25.702 | 23.353 |
| 79. | 25.544 | 35.422 | 0.00 | 25.527 | 23.501 |
| 99. | 24.746 | 35.437 | 0.00 | 24.725 | 23.757 |
| 123. | 20.616 | 35.572 | 0.00 | 20.593 | 25.041 |
| 146. | 15.999 | 35.262 | 0.00 | 15.976 | 25.956 |
| 201. | 12.335 | 34.894 | 0.00 | 12.308 | 26.448 |
| 297. | 11.111 | 34.802 | 0.00 | 11.074 | 26.608 |
| 500. | 8.281 | 34.638 | 0.00 | 8.229 | 26.955 |
| 997. | 4.457 | 34.552 | 0.00 | 4.378 | 27.390 |

CAST EP4-89-DI -002 LAT 02 00.8S LONG 140 06.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 25.780 | 35.308 | 0.00 | 25.780 | 23.336 |
| 9. | 25.781 | 35.307 | 0.00 | 25.779 | 23.336 |
| 18. | 25.784 | 35.307 | 0.00 | 25.780 | 23.335 |
| 30. | 25.781 | 35.307 | 0.00 | 25.774 | 23.337 |
| 38. | 25.779 | 35.307 | 0.00 | 25.771 | 23.338 |
| 59. | 25.782 | 35.306 | 0.00 | 25.769 | 23.338 |
| 78. | 25.712 | 35.299 | 0.00 | 25.695 | 23.356 |
| 98. | 25.547 | 35.320 | 0.00 | 25.525 | 23.424 |
| 123. | 23.336 | 35.671 | 0.00 | 23.311 | 24.354 |
| 146. | 16.866 | 35.318 | 0.00 | 16.842 | 25.797 |
| 199. | 12.701 | 34.909 | 0.00 | 12.674 | 26.388 |
| 298. | 11.394 | 34.823 | 0.00 | 11.356 | 26.573 |

CAST EP4-89-DI -005 LAT 00 59.2S LONG 140 00.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 25.734 | 35.300 | 0.00 | 25.734 | 23.344 |
| 18. | 25.727 | 35.299 | 0.00 | 25.723 | 23.347 |
| 39. | 25.628 | 35.296 | 0.00 | 25.619 | 23.377 |
| 58. | 25.623 | 35.297 | 0.00 | 25.610 | 23.380 |
| 78. | 24.878 | 35.365 | 0.00 | 24.861 | 23.661 |
| 97. | 23.354 | 35.533 | 0.00 | 23.334 | 24.243 |
| 122. | 19.487 | 35.624 | 0.00 | 19.465 | 25.379 |
| 148. | 15.568 | 35.218 | 0.00 | 15.545 | 26.020 |
| 197. | 12.649 | 34.914 | 0.00 | 12.622 | 26.402 |
| 298. | 11.557 | 34.822 | 0.00 | 11.519 | 26.542 |
| 498. | 8.504 | 34.649 | 0.00 | 8.451 | 26.930 |
| 992. | 4.557 | 34.553 | 0.00 | 4.478 | 27.380 |

CAST EP4-89-DI -003 LAT 01 59.4S LONG 140 06.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 25.764 | 35.316 | 0.00 | 25.764 | 23.347 |
| 495. | 8.609 | 34.656 | 0.00 | 8.556 | 26.919 |
| 696. | 6.241 | 34.561 | 0.00 | 6.178 | 27.183 |
| 995. | 4.423 | 34.556 | 0.00 | 4.344 | 27.397 |
| 1494. | 2.967 | 34.605 | 0.00 | 2.860 | 27.583 |
| 1994. | 2.296 | 34.643 | 0.00 | 2.156 | 27.673 |
| 2491. | 1.873 | 34.685 | 0.00 | 1.696 | 27.743 |
| 2994. | 1.648 | 34.675 | 0.00 | 1.429 | 27.755 |
| 3492. | 1.511 | 34.686 | 0.00 | 1.245 | 27.776 |
| 3989. | 1.411 | 34.694 | 0.00 | 1.096 | 27.793 |
| 4242. | 1.399 | 34.696 | 0.00 | 1.056 | 27.797 |

CAST EP4-89-DI -006 LAT 00 29.0S LONG 140 01.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 25.536 | 35.298 | 0.00 | 25.536 | 23.404 |
| 18. | 25.518 | 35.298 | 0.00 | 25.514 | 23.411 |
| 38. | 25.476 | 35.301 | 0.00 | 25.468 | 23.427 |
| 58. | 25.011 | 35.333 | 0.00 | 24.999 | 23.595 |
| 78. | 24.283 | 35.395 | 0.00 | 24.266 | 23.863 |
| 98. | 22.724 | 35.215 | 0.00 | 22.704 | 24.183 |
| 122. | 17.794 | 35.424 | 0.00 | 17.773 | 25.654 |
| 148. | 16.425 | 35.210 | 0.00 | 16.401 | 25.817 |
| 197. | 13.679 | 34.990 | 0.00 | 13.651 | 26.253 |
| 298. | 11.632 | 34.828 | 0.00 | 11.594 | 26.533 |
| 485. | 8.365 | 34.642 | 0.00 | 8.314 | 26.946 |

* Calculated from CTD values

CAST EP4-89-DI -007 LAT 00 00.0S LONG 139 55.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 24.958 | 35.298 | 0.00 | 24.958 | 23.581 |
| 497. | 8.360 | 34.643 | 0.00 | 8.308 | 26.947 |
| 697. | 6.268 | 34.561 | 0.00 | 6.205 | 27.180 |
| 997. | 4.462 | 34.559 | 0.00 | 4.383 | 27.395 |
| 1497. | 2.976 | 34.607 | 0.00 | 2.869 | 27.583 |
| 1992. | 2.314 | 34.642 | 0.00 | 2.173 | 27.671 |
| 2491. | 1.880 | 34.662 | 0.00 | 1.703 | 27.724 |
| 2993. | 1.709 | 34.674 | 0.00 | 1.488 | 27.749 |
| 3491. | 1.529 | 34.685 | 0.00 | 1.263 | 27.774 |
| 3948. | 1.398 | 34.695 | 0.00 | 1.087 | 27.794 |
| 4353. | 1.418 | 34.695 | 0.00 | 1.062 | 27.796 |

CAST EP4-89-DI -010 LAT 00 59.6N LONG 139 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 19. | 24.960 | 34.981 | 0.00 | 24.956 | 23.342 |
| 39. | 24.818 | 34.973 | 0.00 | 24.810 | 23.380 |
| 57. | 24.360 | 34.969 | 0.00 | 24.348 | 23.516 |
| 78. | 24.095 | 35.075 | 0.00 | 24.078 | 23.677 |
| 96. | 24.173 | 35.097 | 0.00 | 24.153 | 23.671 |
| 122. | 21.134 | 34.905 | 0.00 | 21.110 | 24.393 |
| 147. | 15.237 | 34.783 | 0.00 | 15.215 | 25.758 |
| 197. | 12.641 | 34.845 | 0.00 | 12.614 | 26.350 |
| 297. | 11.410 | 34.790 | 0.00 | 11.372 | 26.544 |
| 504. | 8.218 | 34.631 | 0.00 | 8.165 | 26.959 |
| 995. | 4.441 | 34.547 | 0.00 | 4.362 | 27.388 |

CAST EP4-89-DI -008 LAT 00 01.7N LONG 139 59.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 4. | 25.191 | 35.317* | 0.00 | 25.190* | 23.525* |
| 9. | 25.193 | 35.316* | 0.00 | 25.191* | 23.524* |
| 18. | 25.165 | 35.315* | 0.00 | 25.161* | 23.532* |
| 29. | 25.121 | 35.308 | 0.00 | 25.115 | 23.541 |
| 39. | 25.048 | 35.255 | 0.00 | 25.040 | 23.524 |
| 59. | 24.659 | 35.301 | 0.00 | 24.646 | 23.678 |
| 80. | 24.015 | 35.277 | 0.00 | 23.998 | 23.853 |
| 99. | 22.807 | 35.079 | 0.00 | 22.787 | 24.056 |
| 122. | 20.249 | 35.395 | 0.00 | 20.226 | 25.004 |
| 147. | 16.124 | 35.152 | 0.00 | 16.101 | 25.842 |
| 197. | 13.113 | 34.930 | 0.00 | 13.086 | 26.322 |
| 296. | 11.482 | 34.813 | 0.00 | 11.444 | 26.549 |

CAST EP4-89-DI -011 LAT 01 29.4N LONG 139 59.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 25.935 | 34.994 | 0.00 | 25.935 | 23.051 |
| 18. | 25.918 | 34.987 | 0.00 | 25.914 | 23.052 |
| 39. | 25.885 | 34.993 | 0.00 | 25.876 | 23.068 |
| 60. | 24.304 | 34.937 | 0.00 | 24.291 | 23.509 |
| 77. | 23.722 | 34.933 | 0.00 | 23.706 | 23.679 |
| 98. | 23.199 | 34.922 | 0.00 | 23.179 | 23.824 |
| 124. | 21.351 | 34.919 | 0.00 | 21.327 | 24.344 |
| 148. | 14.064 | 34.793 | 0.00 | 14.043 | 26.019 |
| 197. | 12.654 | 34.872 | 0.00 | 12.627 | 26.368 |
| 296. | 11.641 | 34.820 | 0.00 | 11.603 | 26.525 |
| 498. | 8.784 | 34.661 | 0.00 | 8.730 | 26.896 |
| 996. | 4.462 | 34.558 | 0.00 | 4.383 | 27.394 |

CAST EP4-89-DI -009 LAT 00 30.9N LONG 139 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 1. | 24.836 | 35.228 | 0.00 | 24.836 | 23.565 |
| 1. | 24.840 | 35.222 | 0.00 | 24.840 | 23.560 |
| 19. | 24.833 | 35.225 | 0.00 | 24.829 | 23.565 |
| 38. | 24.770 | 35.215 | 0.00 | 24.762 | 23.578 |
| 58. | 24.656 | 35.220* | 0.00 | 24.643* | 23.617* |
| 78. | 24.334 | 35.212 | 0.00 | 24.317 | 23.709 |
| 98. | 23.347 | 35.126 | 0.00 | 23.327 | 23.936 |
| 123. | 18.383 | 34.857 | 0.00 | 18.362 | 25.074 |
| 148. | 15.935 | 35.095 | 0.00 | 15.912 | 25.842 |
| 197. | 12.894 | 34.890 | 0.00 | 12.867 | 26.335 |
| 297. | 11.933 | 34.840 | 0.00 | 11.894 | 26.486 |
| 496. | 8.330 | 34.642 | 0.00 | 8.278 | 26.951 |
| 995. | 4.522 | 34.556 | 0.00 | 4.443 | 27.386 |

CAST EP4-89-DI -012 LAT 02 02.6N LONG 140 06.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 26.598 | 34.982 | 0.00 | 26.598 | 22.834 |
| 17. | 26.394 | 34.979 | 0.00 | 26.390 | 22.897 |
| 38. | 26.365 | 34.980 | 0.00 | 26.356 | 22.909 |
| 57. | 25.956 | 34.980 | 0.00 | 25.943 | 23.038 |
| 78. | 25.267 | 34.971 | 0.00 | 25.250 | 23.245 |
| 98. | 24.031 | 34.935 | 0.00 | 24.010 | 23.591 |
| 122. | 21.398 | 34.891 | 0.00 | 21.374 | 24.310 |
| 148. | 14.041 | 34.839 | 0.00 | 14.020 | 26.059 |
| 198. | 12.216 | 34.855 | 0.00 | 12.190 | 26.441 |
| 296. | 11.280 | 34.799 | 0.00 | 11.243 | 26.575 |
| 497. | 8.379 | 34.628 | 0.00 | 8.327 | 26.933 |
| 995. | 4.529 | 34.558 | 0.00 | 4.450 | 27.387 |

* Calculated from CTD values

CAST EP4-89-DI -013 LAT 02 59.2N LONG 140 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.768 | 34.969 | 0.00 | 26.768 | 22.770 |
| 18. | 26.761 | 34.956 | 0.00 | 26.757 | 22.764 |
| 40. | 26.714 | 34.952 | 0.00 | 26.705 | 22.778 |
| 59. | 26.708 | 34.951 | 0.00 | 26.695 | 22.780 |
| 77. | 26.017 | 34.979 | 0.00 | 26.000 | 23.020 |
| 98. | 25.534 | 34.968 | 0.00 | 25.512 | 23.162 |
| 123. | 23.005 | 34.924 | 0.00 | 22.980 | 23.883 |
| 147. | 15.016 | 34.652 | 0.00 | 14.994 | 25.706 |
| 198. | 12.107 | 34.817 | 0.00 | 12.081 | 26.432 |
| 298. | 10.855 | 34.754 | 0.00 | 10.819 | 26.617 |
| 480. | 8.787 | 34.642 | 0.00 | 8.735 | 26.880 |
| 998. | 4.343 | 34.561 | 0.00 | 4.265 | 27.409 |

CAST EP4-89-DI -016 LAT 06 56.1N LONG 132 23.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.372 | 34.500 | 0.00 | 27.372 | 22.224 |
| 18. | 27.374 | 34.499 | 0.00 | 27.370 | 22.224 |
| 39. | 27.388 | 34.523 | 0.00 | 27.379 | 22.239 |
| 59. | 27.139 | 34.719 | 0.00 | 27.126 | 22.468 |
| 77. | 26.218 | 34.847 | 0.00 | 26.201 | 22.857 |
| 97. | 23.781 | 34.836 | 0.00 | 23.761 | 23.589 |
| 122. | 18.589 | 34.723 | 0.00 | 18.568 | 24.920 |
| 147. | 14.185 | 34.658 | 0.00 | 14.164 | 25.889 |
| 201. | 11.873 | 34.749 | 0.00 | 11.847 | 26.424 |
| 298. | 10.458 | 34.708 | 0.00 | 10.422 | 26.651 |
| 494. | 8.708 | 34.633 | 0.00 | 8.655 | 26.886 |
| 995. | 4.581 | 34.560 | 0.00 | 4.501 | 27.383 |

CAST EP4-89-DI -014 LAT 04 59.9N LONG 139 59.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.928 | 34.963 | 0.00 | 26.928 | 22.715 |
| 18. | 26.850 | 34.962 | 0.00 | 26.846 | 22.740 |
| 39. | 26.580 | 35.000 | 0.00 | 26.571 | 22.856 |
| 58. | 26.448 | 34.981 | 0.00 | 26.435 | 22.885 |
| 75. | 26.184 | 34.962 | 0.00 | 26.167 | 22.954 |
| 99. | 26.124 | 34.958 | 0.00 | 26.102 | 22.972 |
| 123. | 25.354 | 34.980 | 0.00 | 25.327 | 23.228 |
| 145. | 18.793 | 34.729 | 0.00 | 18.767 | 24.874 |
| 199. | 11.686 | 34.694 | 0.00 | 11.661 | 26.416 |
| 297. | 9.893 | 34.683 | 0.00 | 9.859 | 26.729 |
| 494. | 8.190 | 34.622 | 0.00 | 8.139 | 26.956 |
| 996. | 4.476 | 34.563 | 0.00 | 4.397 | 27.397 |

CAST EP4-89-DI -017 LAT 08 58.1N LONG 140 13.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.341 | 34.167 | 0.00 | 27.341 | 21.984 |
| 17. | 27.360 | 34.173 | 0.00 | 27.356 | 21.983 |
| 38. | 27.201 | 34.193 | 0.00 | 27.192 | 22.051 |
| 60. | 19.979 | 34.797 | 0.00 | 19.968 | 24.617 |
| 78. | 16.696 | 34.555 | 0.00 | 16.683 | 25.248 |
| 98. | 13.545 | 34.483 | 0.00 | 13.531 | 25.885 |
| 124. | 12.144 | 34.703 | 0.00 | 12.128 | 26.334 |
| 149. | 11.409 | 34.694 | 0.00 | 11.390 | 26.466 |
| 198. | 10.716 | 34.711 | 0.00 | 10.692 | 26.606 |
| 296. | 9.823 | 34.686 | 0.00 | 9.789 | 26.743 |
| 496. | 8.070 | 34.591 | 0.00 | 8.019 | 26.950 |
| 993. | 4.755 | 34.556 | 0.00 | 4.674 | 27.360 |

CAST EP4-89-DI -015 LAT 07 01.2N LONG 147 27.9W

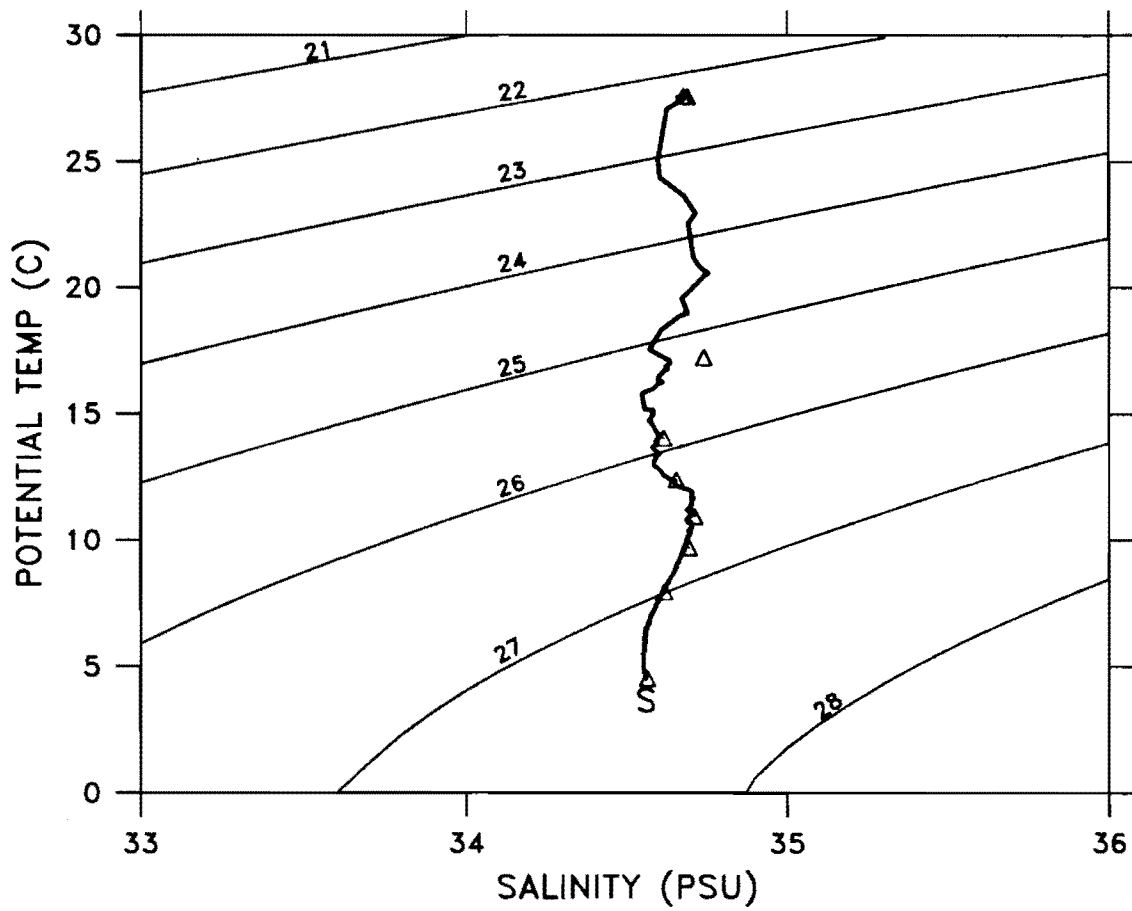
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.942 | 34.654 | 0.00 | 27.942 | 22.156 |
| 19. | 27.947 | 34.653 | 0.00 | 27.943 | 22.155 |
| 38. | 27.954 | 34.654 | 0.00 | 27.945 | 22.155 |
| 59. | 27.958 | 34.651 | 0.00 | 27.944 | 22.153 |
| 78. | 27.957 | 34.659 | 0.00 | 27.939 | 22.160 |
| 98. | 27.338 | 34.841 | 0.00 | 27.315 | 22.499 |
| 123. | 25.940 | 34.883 | 0.00 | 25.913 | 22.974 |
| 148. | 21.900 | 34.866 | 0.00 | 21.871 | 24.154 |
| 198. | 12.824 | 34.636 | 0.00 | 12.797 | 26.152 |
| 297. | 10.288 | 34.695 | 0.00 | 10.253 | 26.671 |
| 504. | 8.527 | 34.620 | 0.00 | 8.473 | 26.904 |
| 991. | 4.857 | 34.535 | 0.00 | 4.776 | 27.348 |

CAST EP4-89-DI -018 LAT 09 59.7N LONG 140 00.6W

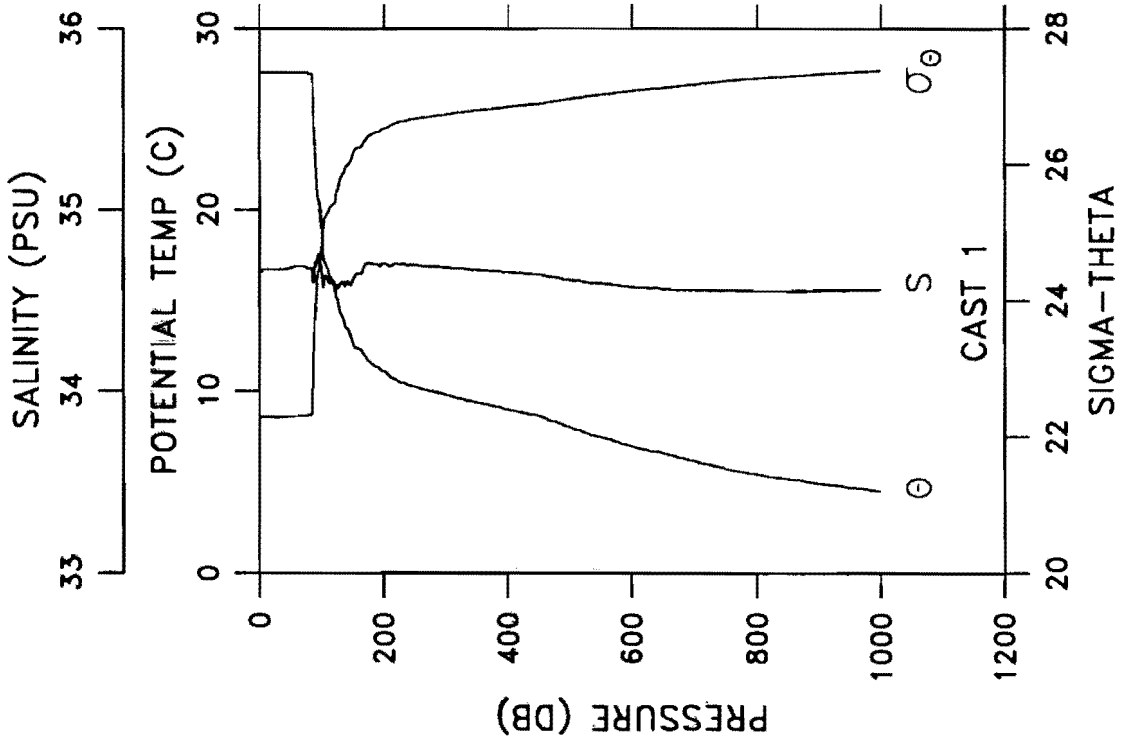
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.761 | 33.885 | 0.00 | 26.761 | 21.956 |
| 17. | 26.761 | 33.885 | 0.00 | 26.757 | 21.957 |
| 37. | 20.702 | 34.616 | 0.00 | 20.695 | 24.285 |
| 57. | 17.698 | 34.581 | 0.00 | 17.688 | 25.028 |
| 78. | 14.395 | 34.446 | 0.00 | 14.384 | 25.679 |
| 98. | 12.873 | 34.626 | 0.00 | 12.860 | 26.132 |
| 122. | 11.891 | 34.716 | 0.00 | 11.875 | 26.393 |
| 147. | 11.447 | 34.731 | 0.00 | 11.429 | 26.488 |
| 197. | 10.811 | 34.718 | 0.00 | 10.787 | 26.595 |
| 297. | 9.969 | 34.691 | 0.00 | 9.935 | 26.722 |
| 502. | 8.246 | 34.595 | 0.00 | 8.194 | 26.927 |
| 1000. | 4.587 | 34.549 | 0.00 | 4.507 | 27.373 |

EP1-90-MB
April 21–May 22, 1990
CTD and Hydrographic Data Summary

CAST EP1-90-MB -001 DATE 24 APR 90 TIME 1428 GMT
LAT 06 58.3N LONG 147 13.2W

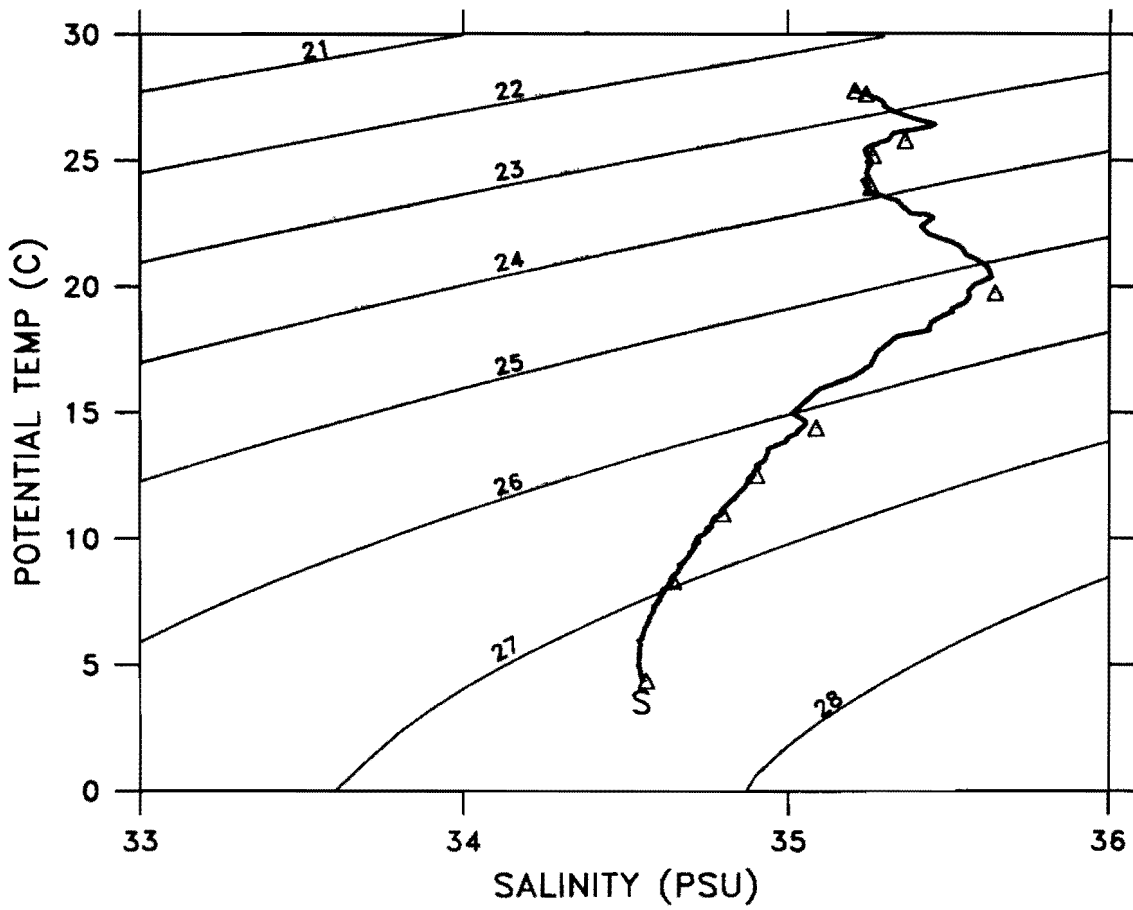


CAST EPI-90-MB -001 DATE 24 APR 90 TIME 1428 GMT
 LAT 06 58.3N LONG 147 13.2W WEATHER 2 SEA STATE 2
 BAROMETER 08 WIND DIR 055 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.0 WET 25.0 DEPTH 4722 M

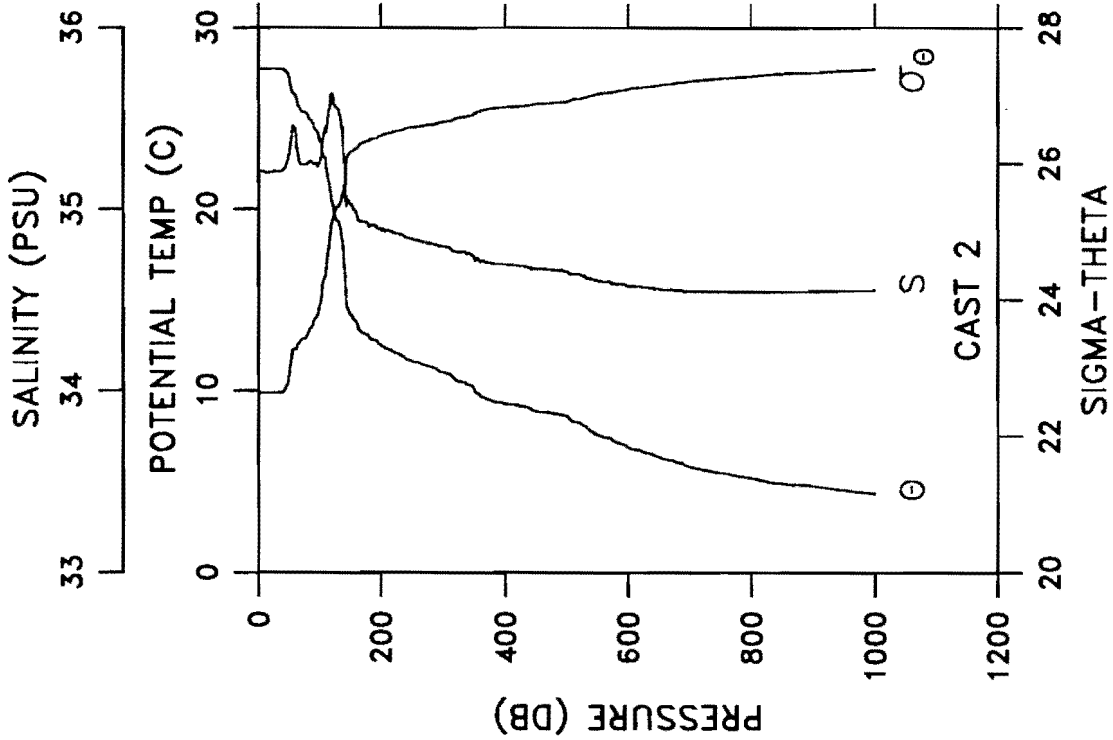


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.566 | 34.658 | 22.281 | 0.000 |
| 10 | 27.578 | 34.671 | 22.286 | 0.055 |
| 20 | 27.581 | 34.671 | 22.285 | 0.111 |
| 30 | 27.580 | 34.671 | 22.286 | 0.166 |
| 40 | 27.580 | 34.672 | 22.286 | 0.222 |
| 50 | 27.579 | 34.680 | 22.293 | 0.277 |
| 60 | 27.568 | 34.688 | 22.303 | 0.333 |
| 70 | 27.556 | 34.687 | 22.306 | 0.389 |
| 80 | 27.506 | 34.676 | 22.314 | 0.444 |
| 90 | 21.974 | 34.698 | 23.997 | 0.493 |
| 100 | 18.334 | 34.607 | 24.890 | 0.528 |
| 110 | 16.536 | 34.601 | 25.318 | 0.556 |
| 120 | 15.840 | 34.549 | 25.438 | 0.582 |
| 130 | 14.234 | 34.598 | 25.828 | 0.605 |
| 140 | 13.438 | 34.603 | 25.997 | 0.626 |
| 150 | 12.573 | 34.614 | 26.179 | 0.646 |
| 160 | 12.331 | 34.646 | 26.251 | 0.664 |
| 170 | 11.939 | 34.701 | 26.369 | 0.682 |
| 180 | 11.516 | 34.702 | 26.449 | 0.698 |
| 190 | 11.331 | 34.699 | 26.481 | 0.714 |
| 200 | 11.104 | 34.702 | 26.525 | 0.730 |
| 250 | 10.244 | 34.696 | 26.673 | 0.803 |
| 300 | 9.792 | 34.681 | 26.738 | 0.873 |
| 350 | 9.373 | 34.669 | 26.799 | 0.940 |
| 400 | 8.997 | 34.656 | 26.850 | 1.005 |
| 450 | 8.651 | 34.644 | 26.895 | 1.067 |
| 500 | 8.046 | 34.615 | 26.965 | 1.128 |
| 550 | 7.511 | 34.596 | 27.029 | 1.185 |
| 600 | 6.996 | 34.576 | 27.085 | 1.239 |
| 650 | 6.611 | 34.565 | 27.129 | 1.292 |
| 700 | 6.179 | 34.559 | 27.182 | 1.342 |
| 750 | 5.746 | 34.556 | 27.234 | 1.390 |
| 800 | 5.449 | 34.552 | 27.267 | 1.435 |
| 900 | 4.937 | 34.555 | 27.330 | 1.523 |
| 999 | 4.521 | 34.562 | 27.382 | 1.604 |

CAST EP1-90-MB -002 DATE 28 APR 90 TIME 1450 GMT
LAT 01 59.9S LONG 140 10.2W

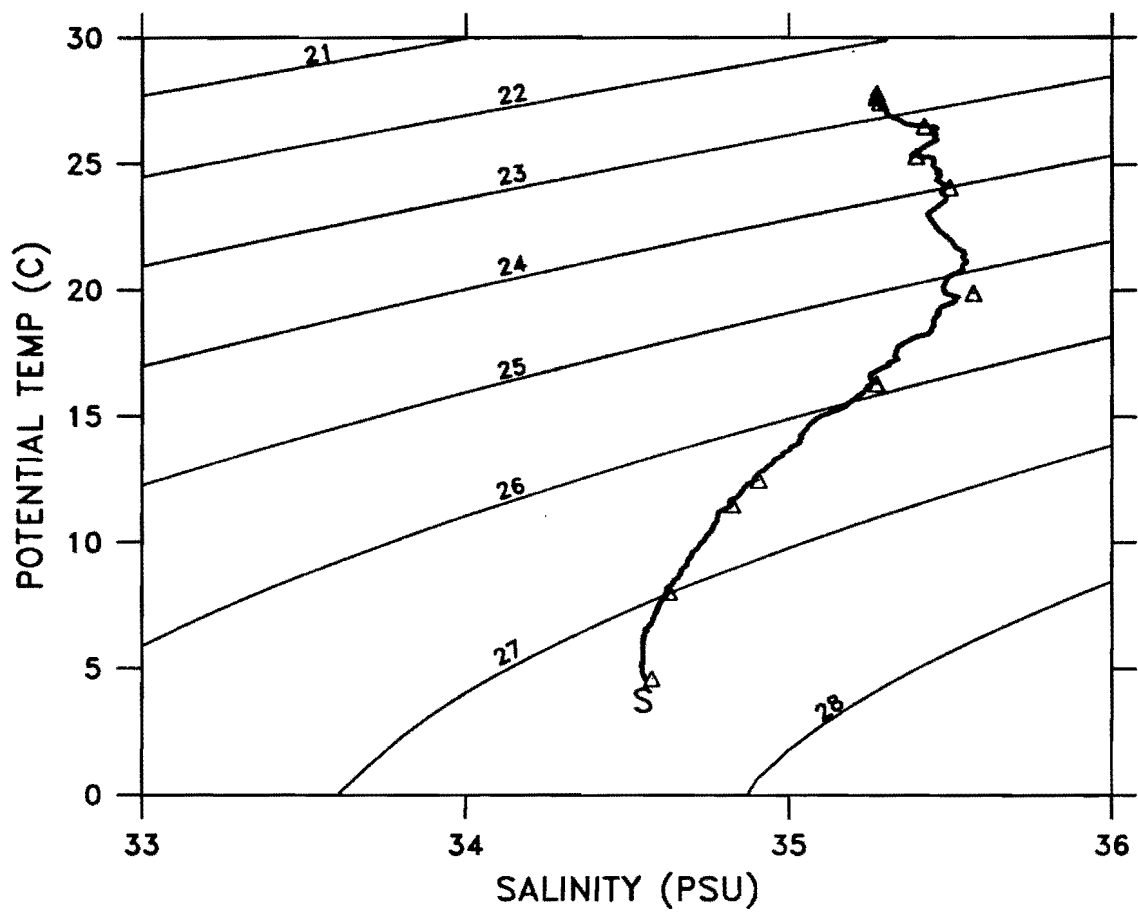


CAST EP1-90-MB -002 DATE 28 APR 90 TIME 1450 GMT
 LAT 01 59.9S LONG 140 10.2W WEATHER 1 SEA STATE 2
 BAROMETER 08 WIND DIR 090 T SPD 10 KT VISIBILITY 7
 CLOUD AMOUNT DRY 29.2 WET 24.0 DEPTH 4289 M

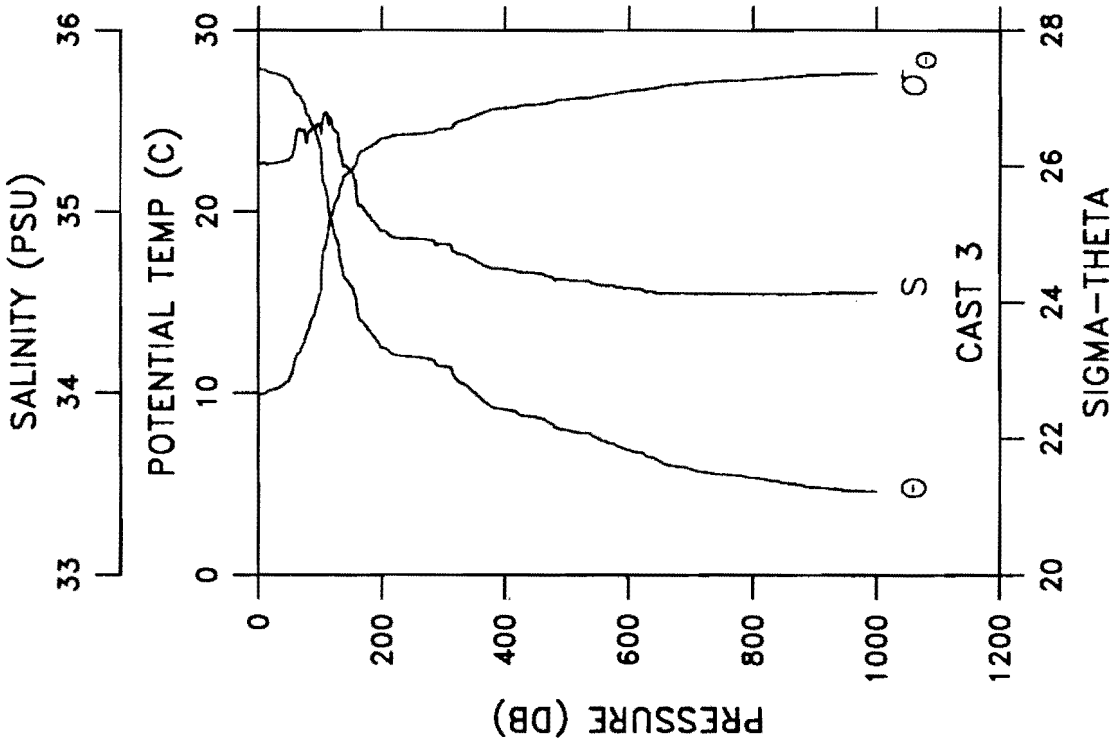


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.731 | 35.208 | 22.641 | 0.000 |
| 10 | 27.740 | 35.203 | 22.634 | 0.052 |
| 20 | 27.740 | 35.203 | 22.634 | 0.104 |
| 30 | 27.739 | 35.203 | 22.635 | 0.156 |
| 40 | 27.722 | 35.215 | 22.649 | 0.208 |
| 50 | 27.116 | 35.303 | 22.911 | 0.260 |
| 60 | 26.296 | 35.438 | 23.273 | 0.307 |
| 70 | 25.381 | 35.242 | 23.410 | 0.352 |
| 80 | 25.171 | 35.248 | 23.478 | 0.397 |
| 90 | 24.477 | 35.246 | 23.687 | 0.441 |
| 100 | 23.747 | 35.259 | 23.914 | 0.482 |
| 110 | 22.386 | 35.419 | 24.429 | 0.520 |
| 120 | 20.366 | 35.637 | 25.151 | 0.552 |
| 130 | 19.314 | 35.549 | 25.362 | 0.579 |
| 140 | 16.891 | 35.256 | 25.738 | 0.604 |
| 150 | 14.186 | 35.026 | 26.168 | 0.624 |
| 160 | 13.745 | 34.972 | 26.220 | 0.643 |
| 170 | 13.161 | 34.930 | 26.307 | 0.661 |
| 180 | 12.964 | 34.908 | 26.330 | 0.678 |
| 190 | 12.773 | 34.910 | 26.369 | 0.695 |
| 200 | 12.489 | 34.885 | 26.406 | 0.712 |
| 250 | 11.621 | 34.835 | 26.533 | 0.793 |
| 300 | 11.018 | 34.796 | 26.614 | 0.869 |
| 350 | 10.085 | 34.727 | 26.725 | 0.941 |
| 400 | 9.288 | 34.694 | 26.833 | 1.007 |
| 450 | 8.873 | 34.670 | 26.881 | 1.071 |
| 500 | 8.613 | 34.657 | 26.911 | 1.133 |
| 550 | 7.591 | 34.608 | 27.026 | 1.192 |
| 600 | 6.885 | 34.575 | 27.100 | 1.247 |
| 650 | 6.337 | 34.558 | 27.160 | 1.298 |
| 700 | 5.803 | 34.546 | 27.219 | 1.347 |
| 750 | 5.493 | 34.546 | 27.257 | 1.393 |
| 800 | 5.199 | 34.543 | 27.289 | 1.437 |
| 850 | 4.760 | 34.546 | 27.343 | 1.521 |
| 900 | 4.362 | 34.555 | 27.394 | 1.601 |

CAST EP1-90-MB -003 DATE 29 MAY 90 TIME 0458 GMT
LAT 01 00.2S LONG 140 00.1W

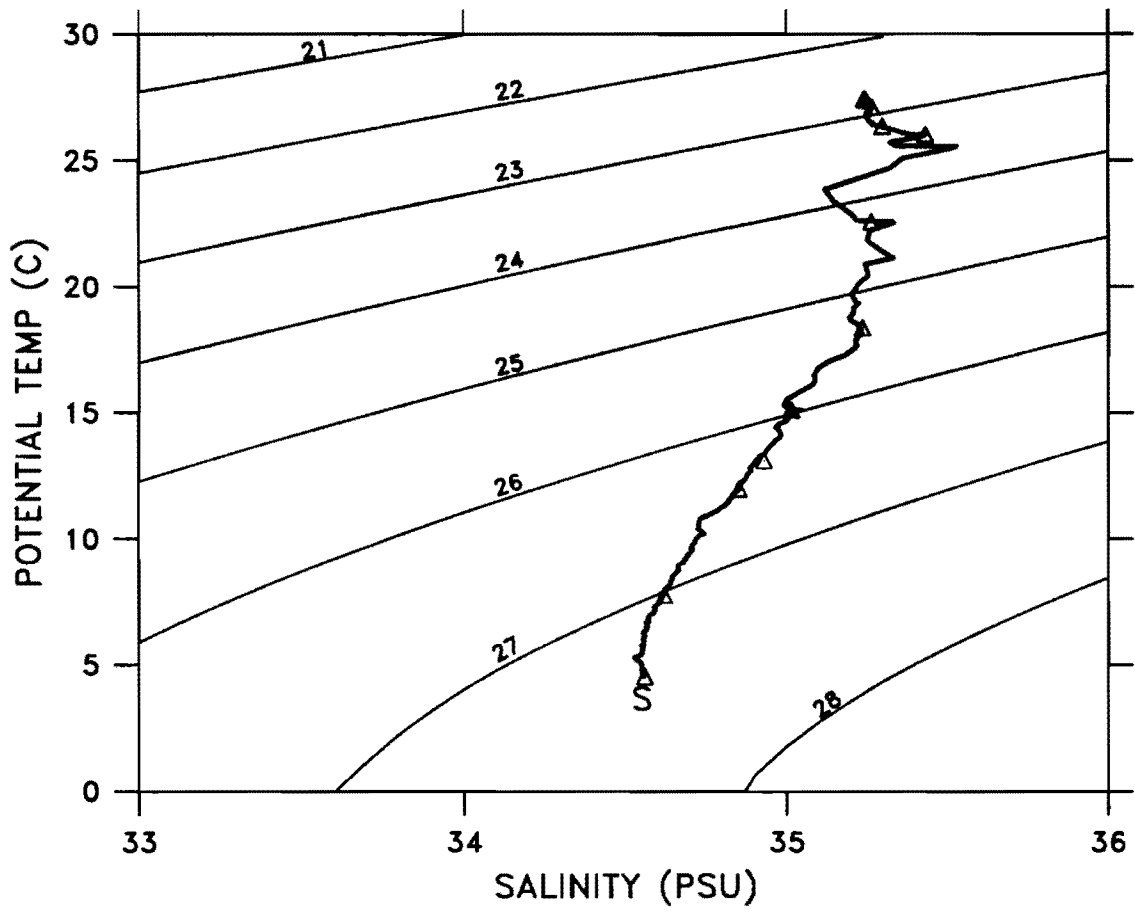


CAST EP1-90-MB -003 DATE 29 MAY 90 TIME 0458 GMT
 LAT 01 00.25 LONG 140 00.1W WEATHER 2 SEA STATE 2
 BAROMETER 09 WIND DIR 105 T SPD 13 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.6 DEPTH 4097 M

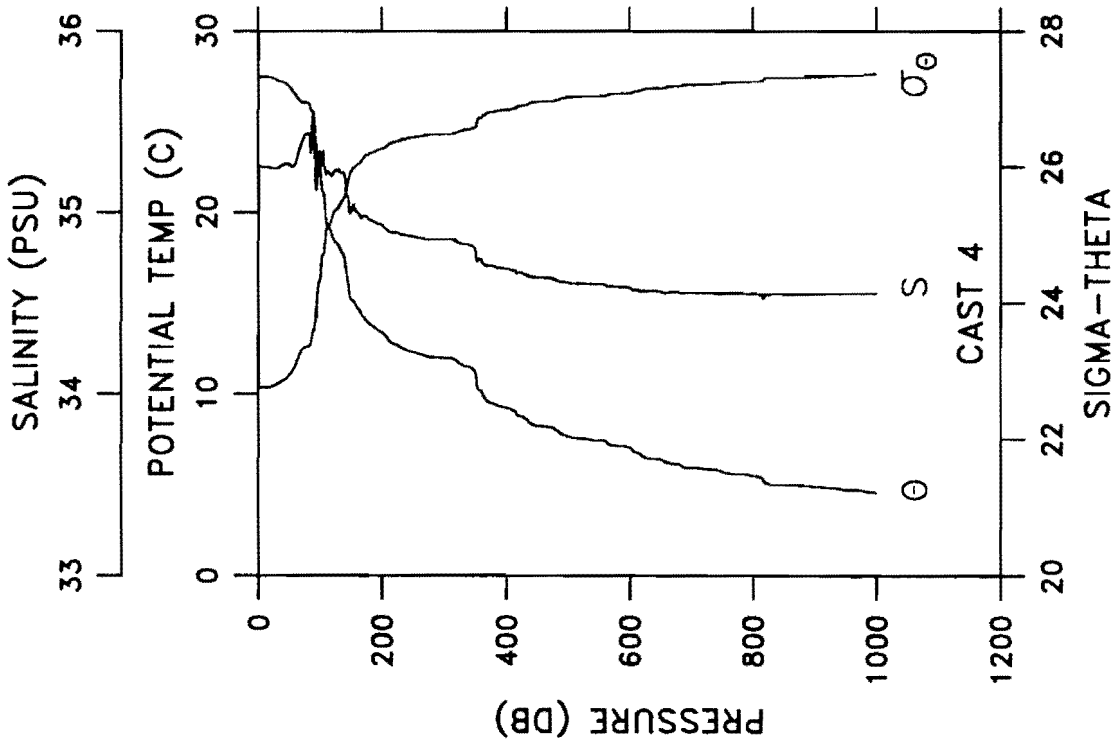


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.858 | 35.264 | 22.642 | 0.000 |
| 10 | 27.826 | 35.269 | 22.656 | 0.052 |
| 20 | 27.666 | 35.265 | 22.705 | 0.104 |
| 30 | 27.603 | 35.270 | 22.729 | 0.155 |
| 40 | 27.483 | 35.276 | 22.773 | 0.206 |
| 50 | 27.271 | 35.280 | 22.844 | 0.257 |
| 60 | 26.547 | 35.382 | 23.152 | 0.306 |
| 70 | 26.170 | 35.454 | 23.325 | 0.352 |
| 80 | 25.292 | 35.422 | 23.573 | 0.397 |
| 90 | 24.703 | 35.465 | 23.785 | 0.440 |
| 100 | 23.608 | 35.486 | 24.127 | 0.479 |
| 110 | 21.133 | 35.548 | 24.876 | 0.513 |
| 120 | 19.346 | 35.469 | 25.292 | 0.542 |
| 130 | 18.140 | 35.386 | 25.534 | 0.568 |
| 140 | 16.371 | 35.260 | 25.863 | 0.591 |
| 150 | 15.915 | 35.225 | 25.941 | 0.612 |
| 160 | 14.707 | 35.065 | 26.087 | 0.633 |
| 170 | 13.893 | 35.024 | 26.229 | 0.651 |
| 180 | 13.427 | 34.977 | 26.289 | 0.669 |
| 190 | 12.986 | 34.930 | 26.342 | 0.687 |
| 200 | 12.495 | 34.896 | 26.413 | 0.704 |
| 250 | 12.009 | 34.853 | 26.473 | 0.785 |
| 300 | 11.473 | 34.821 | 26.550 | 0.865 |
| 350 | 10.058 | 34.737 | 26.737 | 0.938 |
| 400 | 9.086 | 34.683 | 26.856 | 1.004 |
| 450 | 8.662 | 34.680 | 26.906 | 1.066 |
| 500 | 7.966 | 34.625 | 26.985 | 1.126 |
| 550 | 7.481 | 34.600 | 27.036 | 1.183 |
| 600 | 6.881 | 34.580 | 27.104 | 1.237 |
| 650 | 6.252 | 34.552 | 27.166 | 1.288 |
| 700 | 5.827 | 34.549 | 27.218 | 1.336 |
| 750 | 5.523 | 34.550 | 27.256 | 1.382 |
| 800 | 5.344 | 34.549 | 27.277 | 1.427 |
| 900 | 4.826 | 34.550 | 27.338 | 1.513 |
| 1000 | 4.597 | 34.555 | 27.368 | 1.595 |
| 1000 | 4.597 | 34.555 | 27.368 | 1.595 |

CAST EP1-90-MB -004 DATE 29 APR 90 TIME 1041 GMT
LAT 00 04.1N LONG 139 59.5W

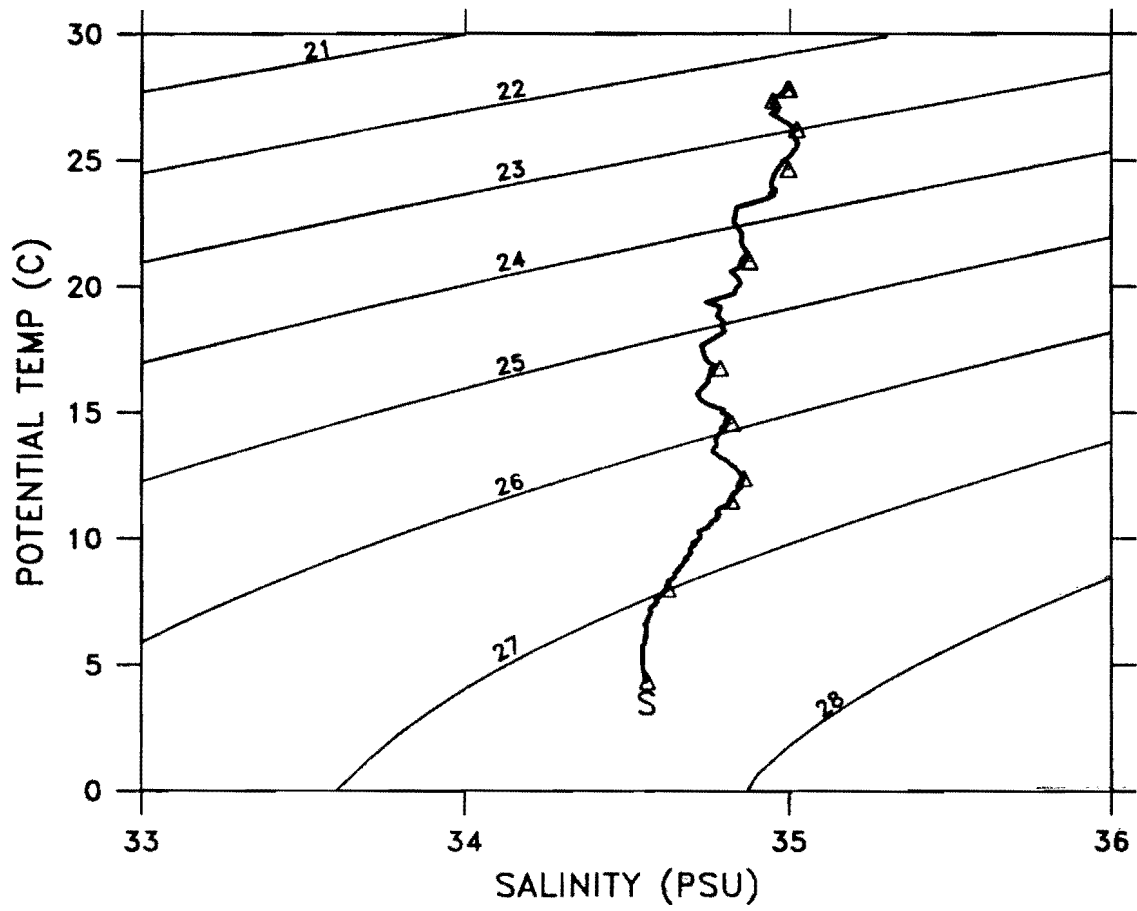


CAST EP1-90-MB -004 DATE 29 APR 90 TIME 1041 GMT
 LAT 00 04.1N LONG 139 58.5W WEATHER 1 SEA STATE 2
 BAROMETER 08 WIND DIR 103 T SPD 12 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.3 DEPTH 4331 M

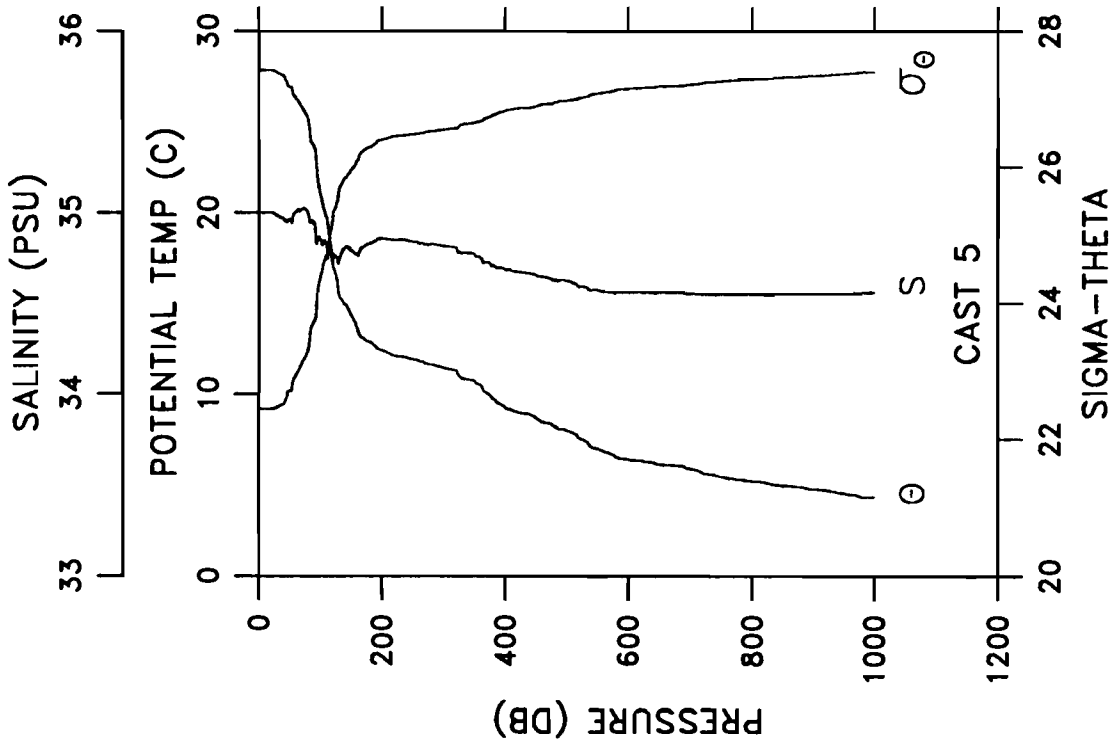


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.441 | 35.256 | 22.771 | 0.000 |
| 10 | 27.463 | 35.246 | 22.757 | 0.051 |
| 20 | 27.432 | 35.246 | 22.766 | 0.102 |
| 30 | 27.286 | 35.240 | 22.809 | 0.152 |
| 40 | 27.181 | 35.257 | 22.855 | 0.203 |
| 50 | 26.959 | 35.263 | 22.931 | 0.253 |
| 60 | 26.521 | 35.261 | 23.069 | 0.301 |
| 70 | 26.081 | 35.369 | 23.288 | 0.349 |
| 80 | 26.020 | 35.430 | 23.353 | 0.394 |
| 90 | 25.464 | 35.508 | 23.585 | 0.439 |
| 100 | 22.541 | 35.337 | 24.322 | 0.479 |
| 110 | 19.688 | 35.203 | 25.000 | 0.512 |
| 120 | 18.758 | 35.196 | 25.233 | 0.541 |
| 130 | 18.177 | 35.230 | 25.405 | 0.567 |
| 140 | 17.463 | 35.202 | 25.559 | 0.593 |
| 150 | 15.217 | 35.009 | 25.932 | 0.618 |
| 160 | 14.750 | 34.999 | 26.027 | 0.636 |
| 170 | 14.248 | 34.979 | 26.119 | 0.656 |
| 180 | 13.815 | 34.960 | 26.196 | 0.675 |
| 190 | 13.594 | 34.944 | 26.229 | 0.694 |
| 200 | 13.361 | 34.931 | 26.267 | 0.712 |
| 250 | 12.306 | 34.866 | 26.427 | 0.797 |
| 300 | 11.984 | 34.851 | 26.477 | 0.879 |
| 350 | 11.212 | 34.795 | 26.577 | 0.959 |
| 400 | 9.232 | 34.689 | 26.837 | 1.026 |
| 450 | 8.243 | 34.640 | 26.955 | 1.088 |
| 500 | 7.660 | 34.612 | 27.019 | 1.146 |
| 550 | 7.442 | 34.603 | 27.044 | 1.201 |
| 600 | 7.031 | 34.583 | 27.086 | 1.255 |
| 650 | 6.392 | 34.563 | 27.157 | 1.306 |
| 700 | 5.949 | 34.557 | 27.210 | 1.355 |
| 750 | 5.718 | 34.552 | 27.234 | 1.402 |
| 800 | 5.494 | 34.550 | 27.260 | 1.448 |
| 850 | 4.898 | 34.550 | 27.331 | 1.534 |
| 900 | 4.541 | 34.555 | 27.375 | 1.617 |
| 1000 | 4.538 | 34.555 | 27.375 | 1.617 |

CAST EP1-90-MB -005 DATE 30 APR 90 TIME 1056 GMT
LAT 01 00.2N LONG 140 01.0W

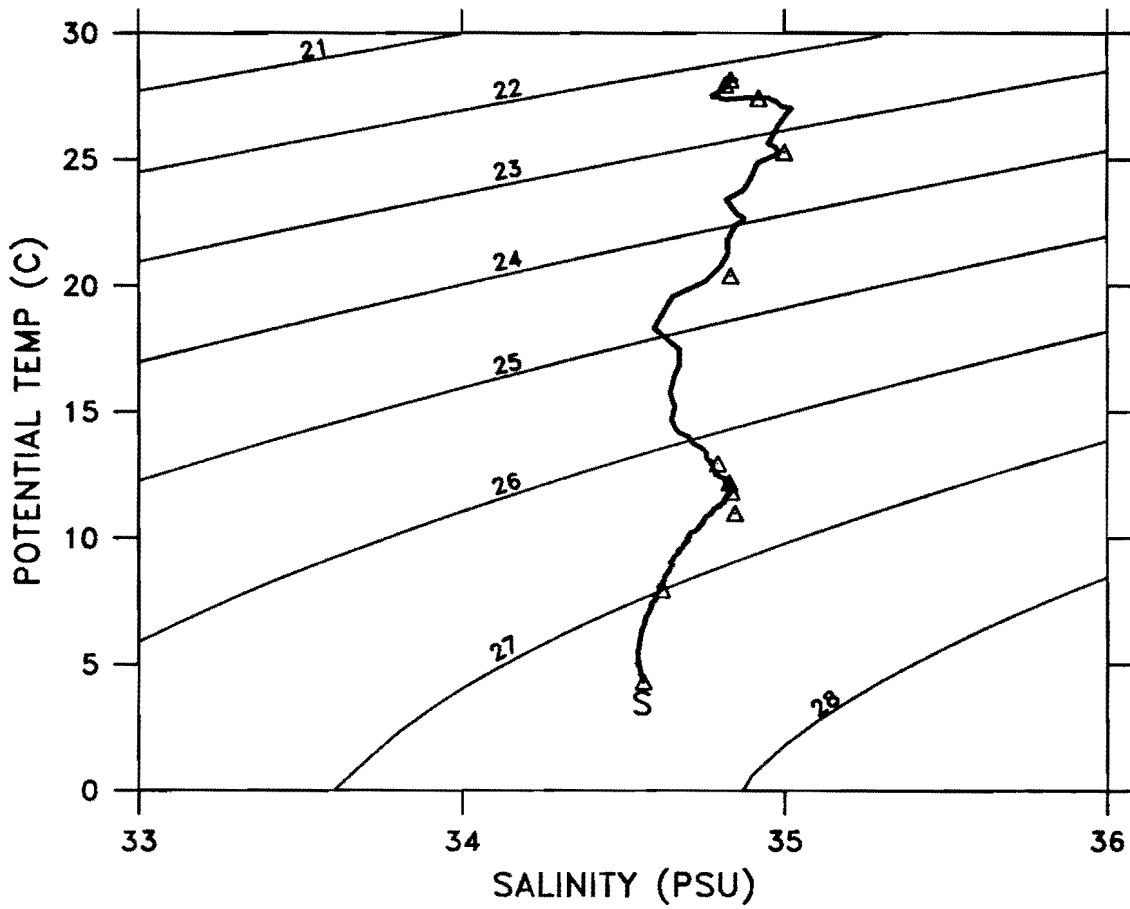


CAST EP1-90-MB -005 DATE 30 APR 90 TIME 1056 GMT
 LAT 01 00.2N LONG 140 01.0W WEATHER 1 SEA STATE 2
 BAROMETER 10 WIND DIR 117 T SPD 18 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.0 DEPTH 4374 M

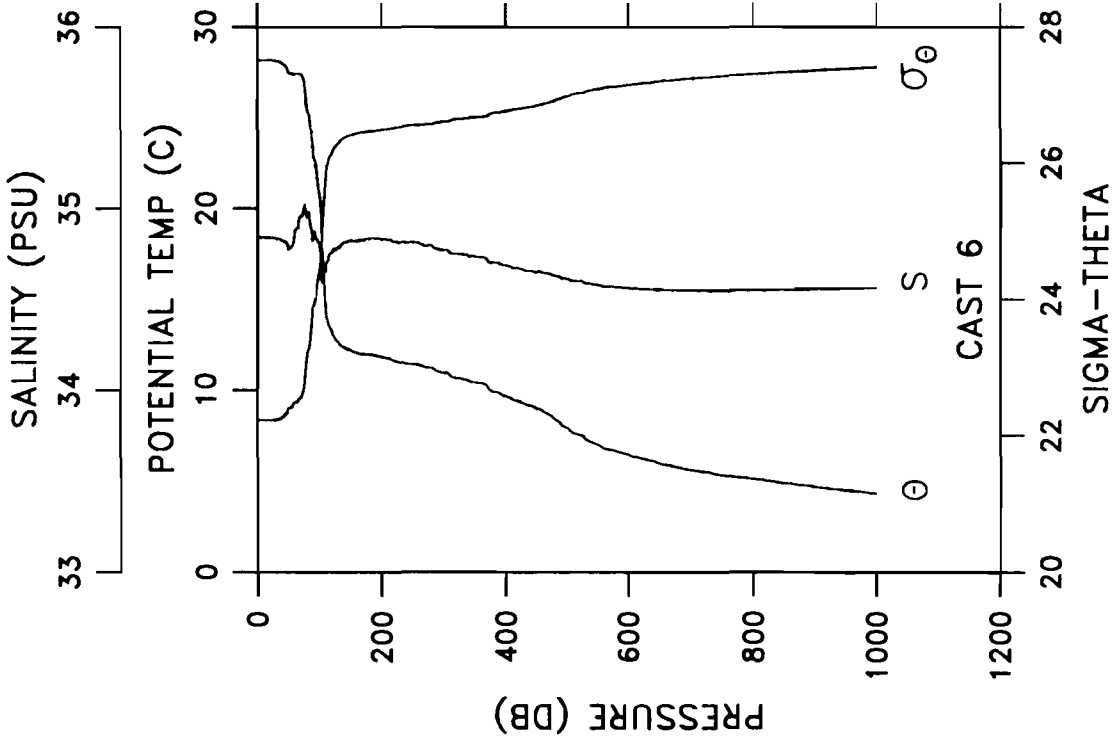


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.835 | 35.002 | 22.452 | 0.000 |
| 10 | 27.843 | 35.000 | 22.448 | 0.054 |
| 20 | 27.845 | 35.000 | 22.448 | 0.108 |
| 30 | 27.718 | 34.979 | 22.473 | 0.162 |
| 40 | 27.576 | 34.970 | 22.512 | 0.215 |
| 50 | 26.937 | 34.963 | 22.712 | 0.268 |
| 60 | 26.339 | 35.007 | 22.935 | 0.318 |
| 70 | 25.805 | 35.018 | 23.110 | 0.367 |
| 80 | 25.183 | 35.001 | 23.289 | 0.414 |
| 90 | 23.612 | 34.951 | 23.720 | 0.458 |
| 100 | 21.061 | 34.852 | 24.366 | 0.497 |
| 110 | 19.748 | 34.831 | 24.700 | 0.531 |
| 120 | 17.274 | 34.737 | 25.248 | 0.561 |
| 130 | 15.514 | 34.727 | 25.648 | 0.587 |
| 140 | 14.945 | 34.807 | 25.836 | 0.610 |
| 150 | 14.327 | 34.790 | 25.956 | 0.631 |
| 160 | 13.595 | 34.769 | 26.094 | 0.651 |
| 170 | 13.053 | 34.811 | 26.236 | 0.670 |
| 180 | 12.880 | 34.827 | 26.284 | 0.688 |
| 190 | 12.614 | 34.845 | 26.350 | 0.705 |
| 200 | 12.397 | 34.857 | 26.402 | 0.722 |
| 250 | 11.921 | 34.841 | 26.481 | 0.804 |
| 300 | 11.437 | 34.815 | 26.552 | 0.883 |
| 350 | 10.745 | 34.774 | 26.646 | 0.958 |
| 400 | 9.275 | 34.687 | 26.829 | 1.027 |
| 450 | 8.697 | 34.657 | 26.898 | 1.090 |
| 500 | 8.000 | 34.624 | 26.979 | 1.150 |
| 550 | 6.987 | 34.572 | 27.063 | 1.206 |
| 600 | 6.382 | 34.561 | 27.156 | 1.257 |
| 650 | 6.111 | 34.559 | 27.190 | 1.306 |
| 700 | 5.867 | 34.554 | 27.217 | 1.354 |
| 750 | 5.434 | 34.548 | 27.266 | 1.400 |
| 800 | 5.189 | 34.548 | 27.295 | 1.444 |
| 900 | 4.756 | 34.553 | 27.349 | 1.529 |
| 1000 | 4.334 | 34.560 | 27.401 | 1.608 |
| 1001 | 4.332 | 34.559 | 27.401 | 1.609 |

CAST EP1-90-MB -006 DATE 01 MAY 90 TIME 0835 GMT
LAT 02 05.1N LONG 140 00.8W

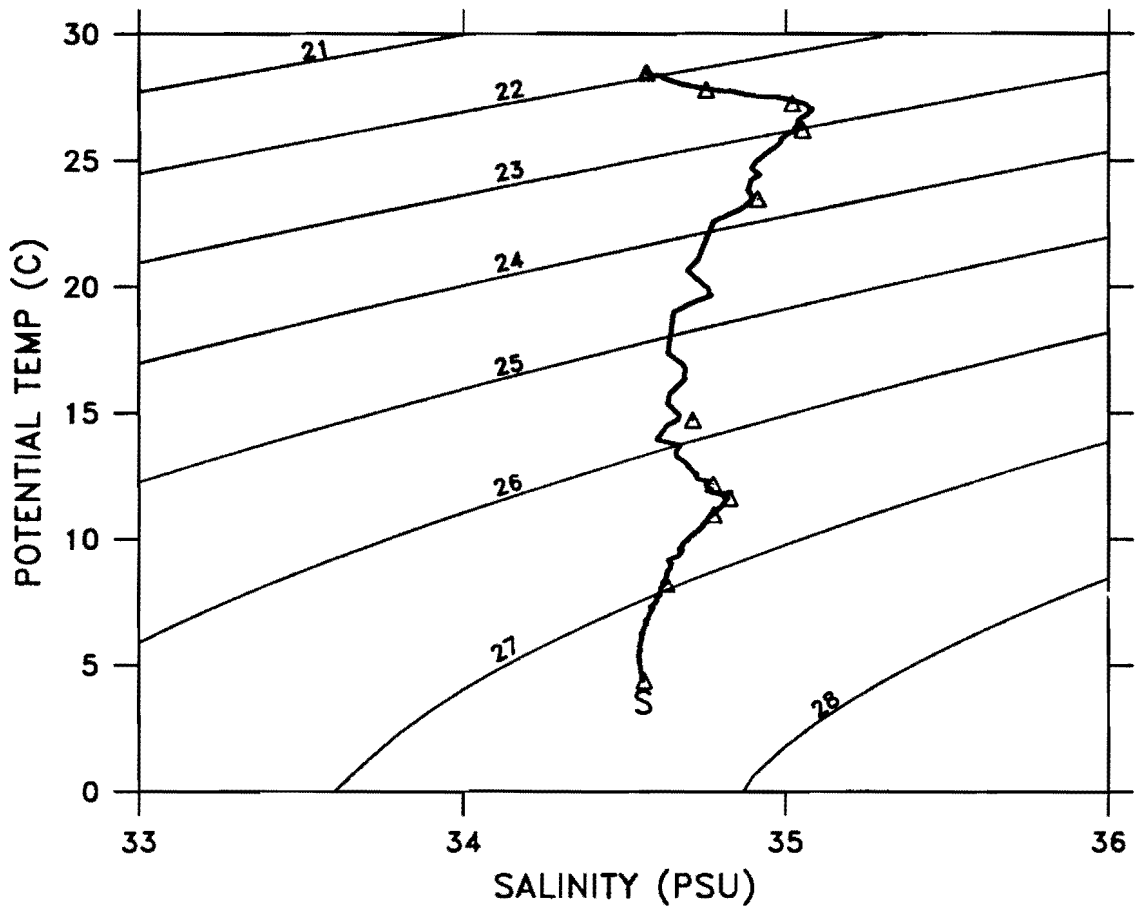


CAST EP1-90-MB-006 DATE 01 MAY 90 TIME 0835 GMT
 LAT 02 05.1N LONG 140 00.8W WEATHER 1 SEA STATE 2
 BAROMETER 12 WIND DIR 128 T SPD 10 KT VISIBILITY 7
 CLOUD AMOUNT DRY 28.0 WET 26.0 DEPTH 4381 M

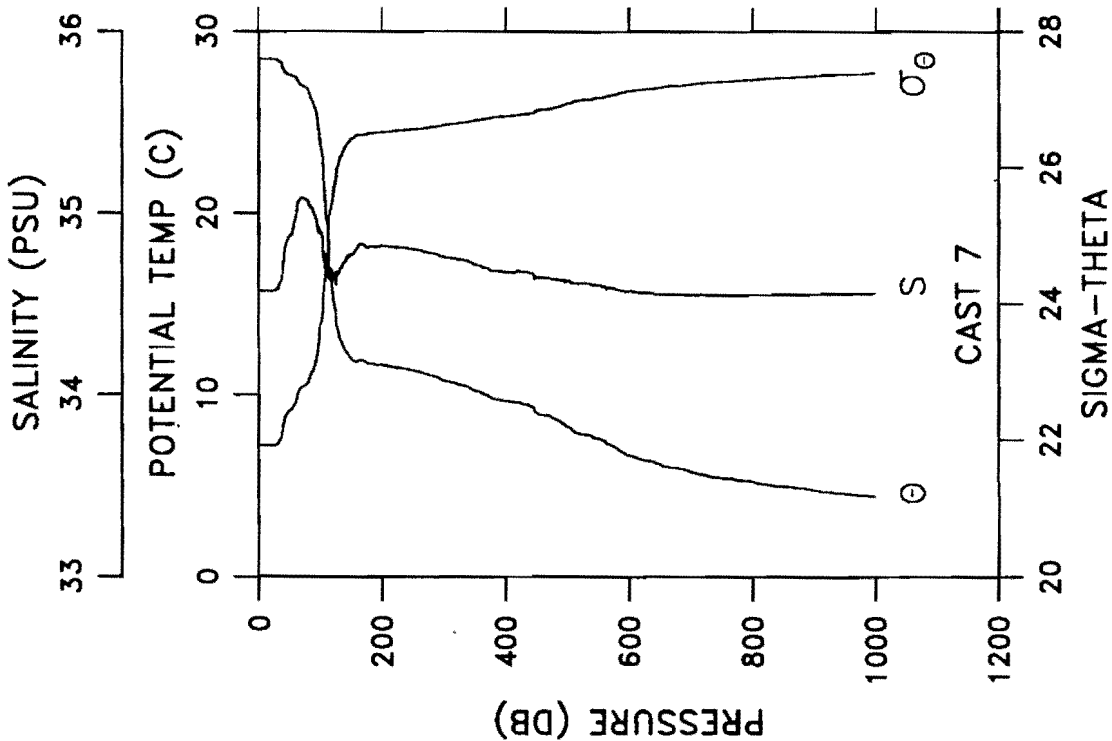


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.139 | 34.851 | 22.239 | 0.000 |
| 10 | 28.160 | 34.839 | 22.224 | 0.056 |
| 20 | 28.158 | 34.839 | 22.224 | 0.112 |
| 30 | 28.116 | 34.830 | 22.231 | 0.168 |
| 40 | 28.017 | 34.824 | 22.259 | 0.224 |
| 50 | 27.490 | 34.777 | 22.395 | 0.279 |
| 60 | 27.436 | 34.863 | 22.492 | 0.334 |
| 70 | 27.399 | 34.955 | 22.558 | 0.387 |
| 80 | 25.445 | 34.977 | 23.190 | 0.438 |
| 90 | 22.765 | 34.867 | 23.902 | 0.482 |
| 100 | 20.509 | 34.782 | 24.462 | 0.520 |
| 110 | 14.205 | 34.669 | 25.889 | 0.548 |
| 120 | 13.119 | 34.761 | 26.185 | 0.568 |
| 130 | 12.610 | 34.792 | 26.310 | 0.586 |
| 140 | 12.328 | 34.813 | 26.381 | 0.603 |
| 150 | 12.205 | 34.827 | 26.416 | 0.619 |
| 160 | 12.041 | 34.822 | 26.444 | 0.636 |
| 170 | 11.991 | 34.828 | 26.458 | 0.652 |
| 180 | 11.946 | 34.833 | 26.470 | 0.668 |
| 190 | 11.906 | 34.836 | 26.480 | 0.684 |
| 200 | 11.833 | 34.829 | 26.489 | 0.700 |
| 250 | 11.414 | 34.814 | 26.555 | 0.777 |
| 300 | 10.949 | 34.772 | 26.608 | 0.854 |
| 350 | 10.437 | 34.737 | 26.671 | 0.927 |
| 400 | 9.670 | 34.687 | 26.764 | 0.997 |
| 450 | 8.983 | 34.651 | 26.848 | 1.064 |
| 500 | 7.916 | 34.613 | 26.983 | 1.125 |
| 550 | 6.994 | 34.579 | 27.088 | 1.180 |
| 600 | 6.465 | 34.564 | 27.148 | 1.231 |
| 650 | 5.961 | 34.554 | 27.205 | 1.280 |
| 700 | 5.612 | 34.550 | 27.246 | 1.326 |
| 750 | 5.319 | 34.548 | 27.279 | 1.371 |
| 800 | 5.110 | 34.549 | 27.305 | 1.415 |
| 900 | 4.671 | 34.555 | 27.360 | 1.498 |
| 999 | 4.308 | 34.563 | 27.406 | 1.576 |

CAST EP1-90-MB -007 DATE 01 MAY 90 TIME 1345 GMT
LAT 03 00.2N LONG 139 59.9W

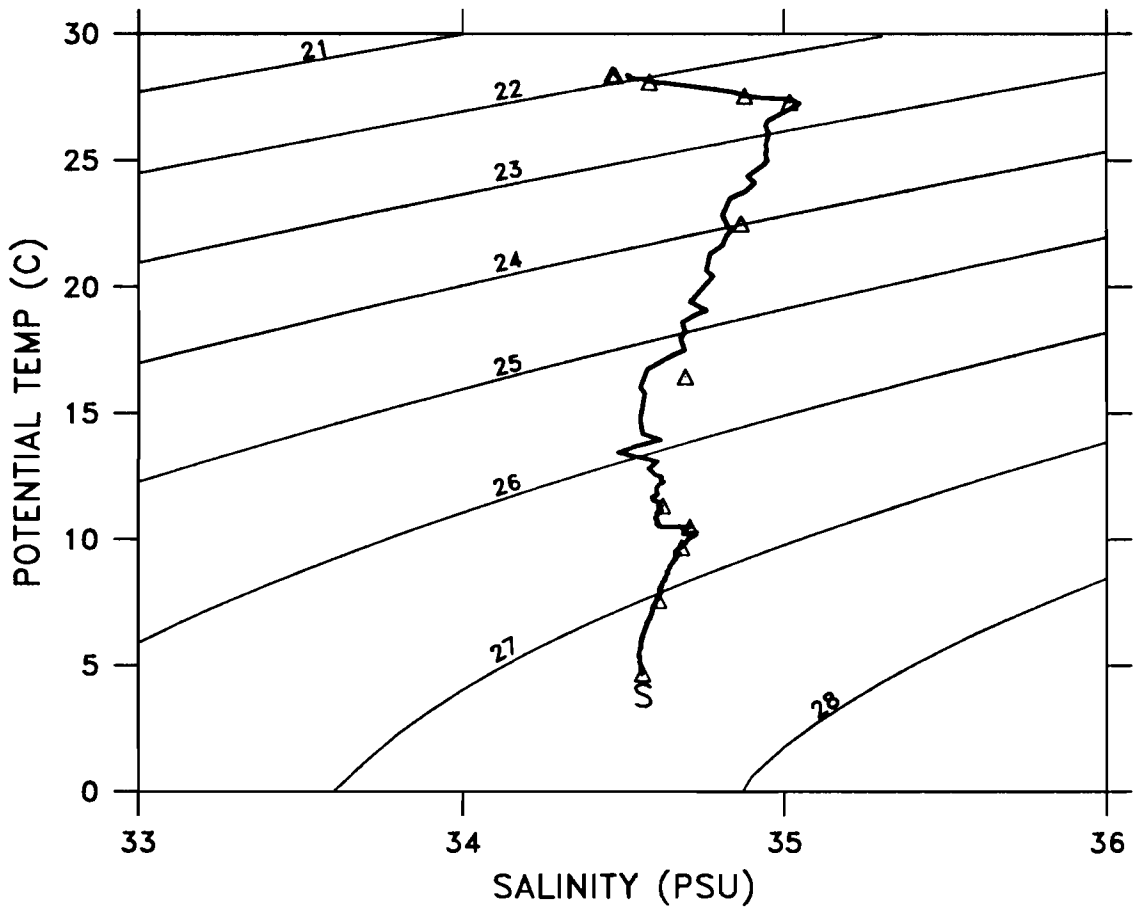


CAST EP1-90-MB -007 DATE 01 MAY 90 TIME 1345 GMT
 LAT 03 00.2N LONG 139 59.9W WEATHER 1 SEA STATE 2
 BAROMETER 09 WIND DIR 083 T SPD 12 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 26.0 DEPTH 4446 M

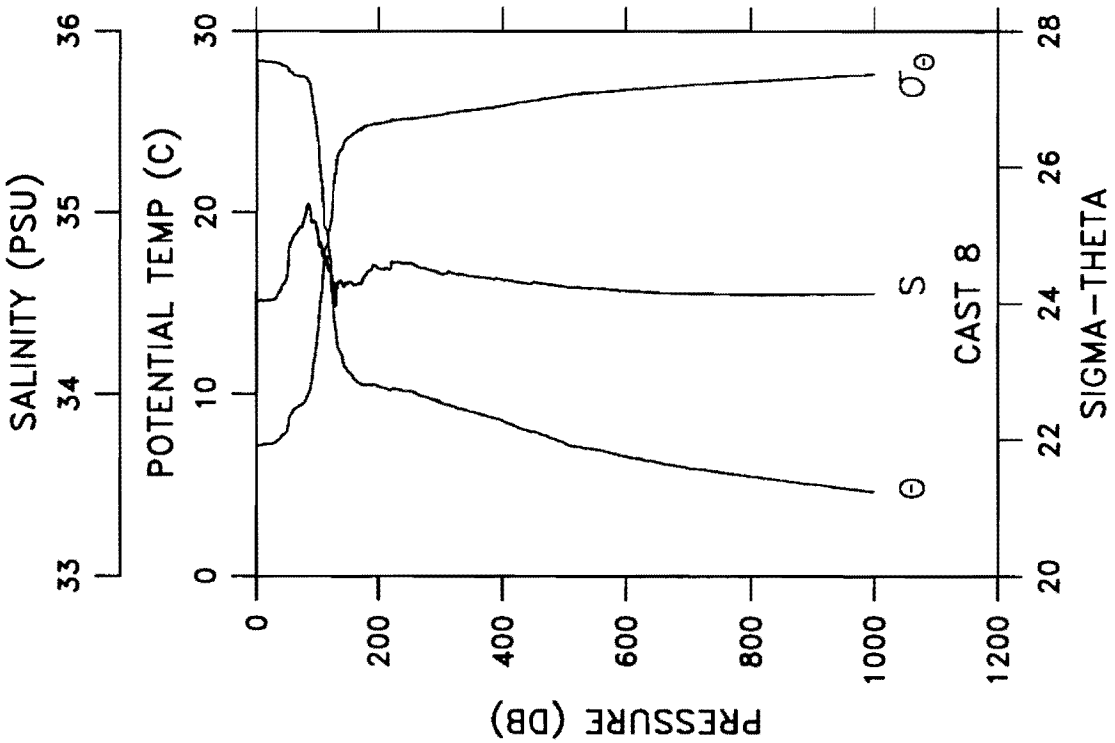


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.469 | 34.570 | 21.920 | 0.000 |
| 10 | 28.472 | 34.569 | 21.918 | 0.059 |
| 20 | 28.473 | 34.569 | 21.918 | 0.118 |
| 30 | 28.445 | 34.579 | 21.934 | 0.177 |
| 40 | 27.911 | 34.720 | 22.216 | 0.235 |
| 50 | 27.612 | 34.872 | 22.427 | 0.290 |
| 60 | 27.500 | 34.971 | 22.538 | 0.344 |
| 70 | 27.040 | 35.081 | 22.768 | 0.396 |
| 80 | 26.833 | 35.068 | 22.825 | 0.448 |
| 90 | 25.950 | 34.994 | 23.046 | 0.496 |
| 100 | 23.840 | 34.883 | 23.602 | 0.542 |
| 110 | 19.747 | 34.764 | 24.650 | 0.582 |
| 120 | 15.746 | 34.641 | 25.530 | 0.610 |
| 130 | 13.311 | 34.660 | 26.068 | 0.632 |
| 140 | 12.407 | 34.727 | 26.299 | 0.651 |
| 150 | 11.963 | 34.771 | 26.419 | 0.668 |
| 160 | 11.812 | 34.807 | 26.476 | 0.684 |
| 170 | 11.850 | 34.828 | 26.485 | 0.700 |
| 180 | 11.698 | 34.816 | 26.504 | 0.715 |
| 190 | 11.626 | 34.813 | 26.515 | 0.731 |
| 200 | 11.624 | 34.821 | 26.522 | 0.746 |
| 250 | 11.317 | 34.802 | 26.564 | 0.823 |
| 300 | 10.767 | 34.760 | 26.631 | 0.899 |
| 350 | 10.214 | 34.717 | 26.695 | 0.971 |
| 400 | 9.649 | 34.676 | 26.759 | 1.041 |
| 450 | 8.993 | 34.648 | 26.844 | 1.108 |
| 500 | 8.224 | 34.629 | 26.949 | 1.170 |
| 550 | 7.558 | 34.602 | 27.027 | 1.228 |
| 600 | 6.631 | 34.569 | 27.130 | 1.282 |
| 650 | 6.158 | 34.554 | 27.180 | 1.332 |
| 700 | 5.740 | 34.546 | 27.227 | 1.379 |
| 750 | 5.405 | 34.547 | 27.268 | 1.425 |
| 800 | 5.201 | 34.547 | 27.293 | 1.469 |
| 850 | 4.734 | 34.552 | 27.351 | 1.553 |
| 999 | 4.399 | 34.558 | 27.393 | 1.632 |

CAST EP1-90-MB -008 DATE 01 MAY 90 TIME 1944 GMT
LAT 04 00.7N LONG 140 00.3W

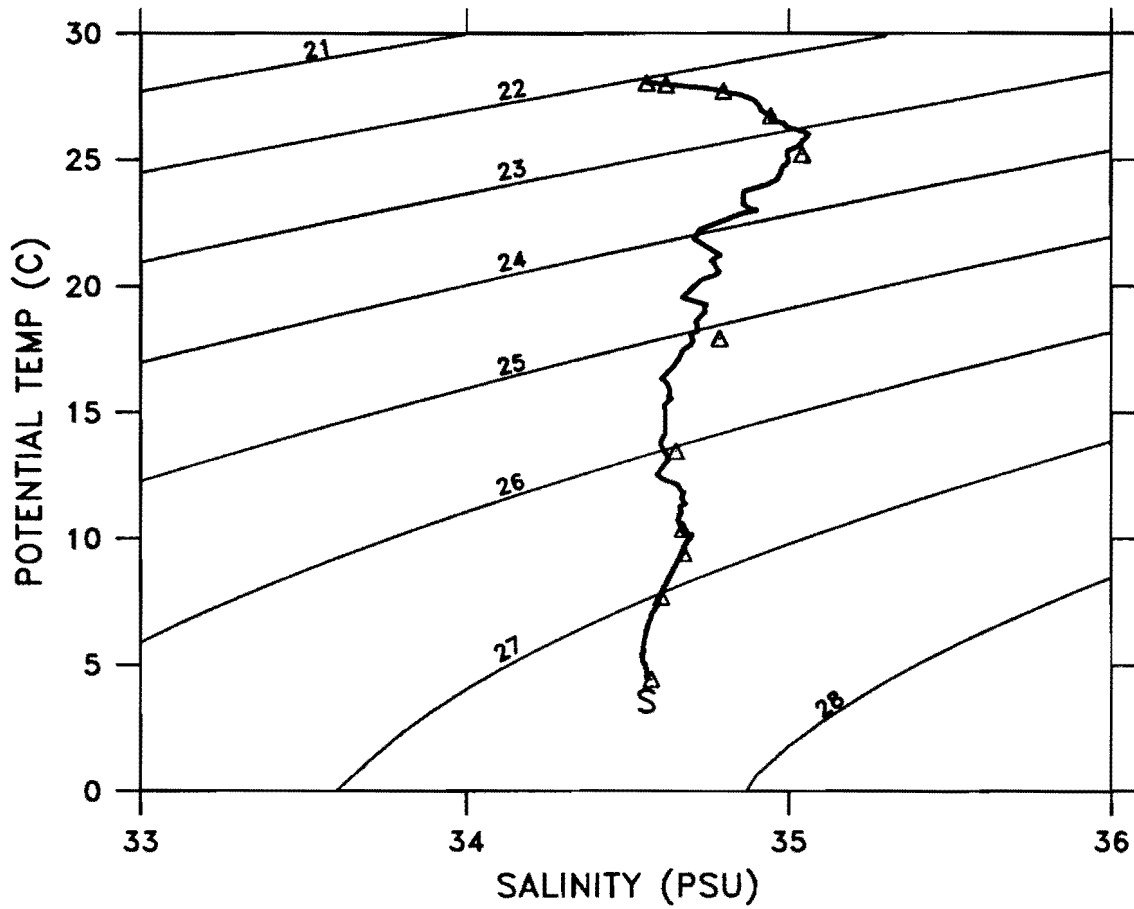


CAST EP1-90-MB -008 DATE 01 MAY 90 TIME 1944 GMT
 LAT 04 00.7N LONG 140 00.3W WEATHER 2 SEA STATE 2
 BAROMETER 12 WIND DIR 064 T SPD 16 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.5 WET 26.1 DEPTH 4242 M

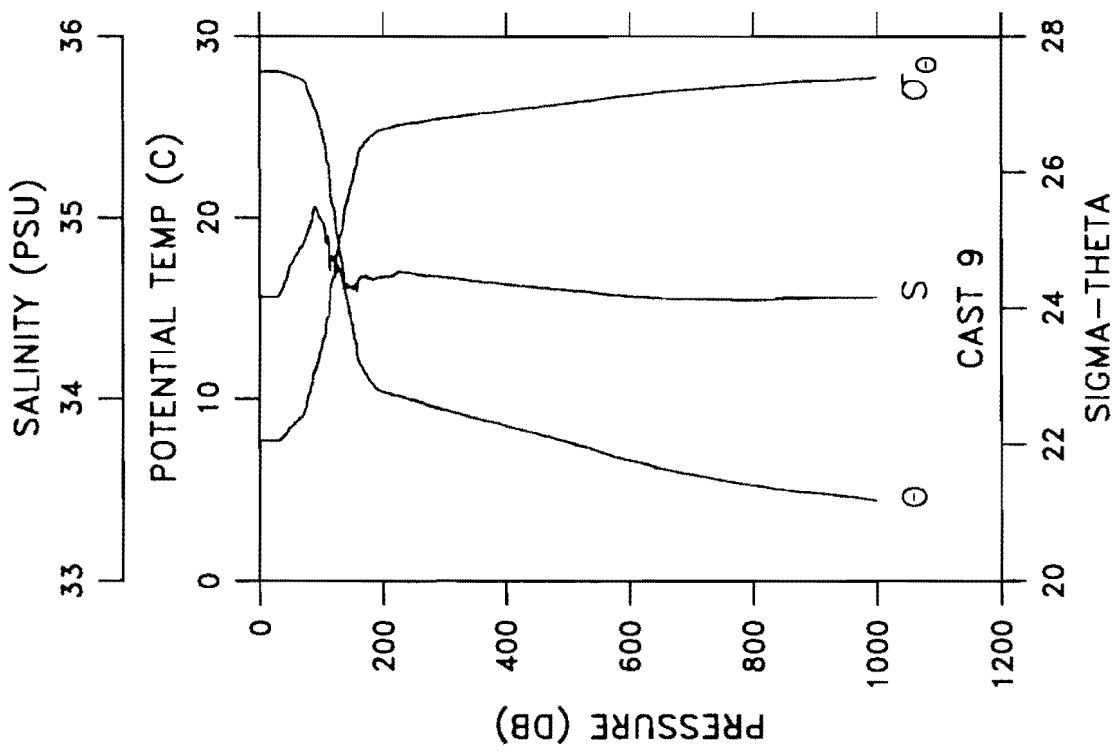


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.360 | 34.511 | 21.912 | 0.000 |
| 10 | 28.327 | 34.512 | 21.923 | 0.059 |
| 20 | 28.294 | 34.516 | 21.936 | 0.118 |
| 30 | 28.253 | 34.524 | 21.956 | 0.177 |
| 40 | 28.135 | 34.576 | 22.034 | 0.235 |
| 50 | 28.032 | 34.639 | 22.115 | 0.293 |
| 60 | 27.618 | 34.863 | 22.418 | 0.348 |
| 70 | 27.495 | 34.914 | 22.496 | 0.402 |
| 80 | 27.440 | 34.981 | 22.564 | 0.455 |
| 90 | 26.561 | 34.948 | 22.820 | 0.508 |
| 100 | 24.113 | 34.910 | 23.542 | 0.555 |
| 110 | 20.419 | 34.778 | 24.483 | 0.594 |
| 120 | 17.718 | 34.663 | 25.099 | 0.626 |
| 130 | 13.435 | 34.484 | 25.906 | 0.651 |
| 140 | 12.130 | 34.606 | 26.259 | 0.669 |
| 150 | 11.241 | 34.613 | 26.431 | 0.686 |
| 160 | 10.810 | 34.599 | 26.498 | 0.702 |
| 170 | 10.591 | 34.610 | 26.545 | 0.717 |
| 180 | 10.487 | 34.659 | 26.602 | 0.732 |
| 190 | 10.502 | 34.697 | 26.628 | 0.747 |
| 200 | 10.419 | 34.693 | 26.640 | 0.761 |
| 250 | 10.150 | 34.722 | 26.709 | 0.831 |
| 300 | 9.554 | 34.665 | 26.766 | 0.899 |
| 350 | 9.032 | 34.650 | 26.839 | 0.964 |
| 400 | 8.543 | 34.632 | 26.903 | 1.027 |
| 450 | 7.952 | 34.616 | 26.980 | 1.086 |
| 500 | 7.361 | 34.596 | 27.050 | 1.142 |
| 550 | 6.975 | 34.584 | 27.095 | 1.195 |
| 600 | 6.586 | 34.570 | 27.137 | 1.247 |
| 650 | 6.266 | 34.561 | 27.171 | 1.297 |
| 700 | 5.950 | 34.554 | 27.207 | 1.345 |
| 750 | 5.718 | 34.552 | 27.234 | 1.392 |
| 800 | 5.492 | 34.549 | 27.260 | 1.438 |
| 900 | 5.067 | 34.551 | 27.312 | 1.527 |
| 999 | 4.668 | 34.555 | 27.361 | 1.610 |

CAST EP1-90-MB -009 DATE 02 MAY 90 TIME 0432 GMT
LAT 05 02.8N LONG 140 00.7W

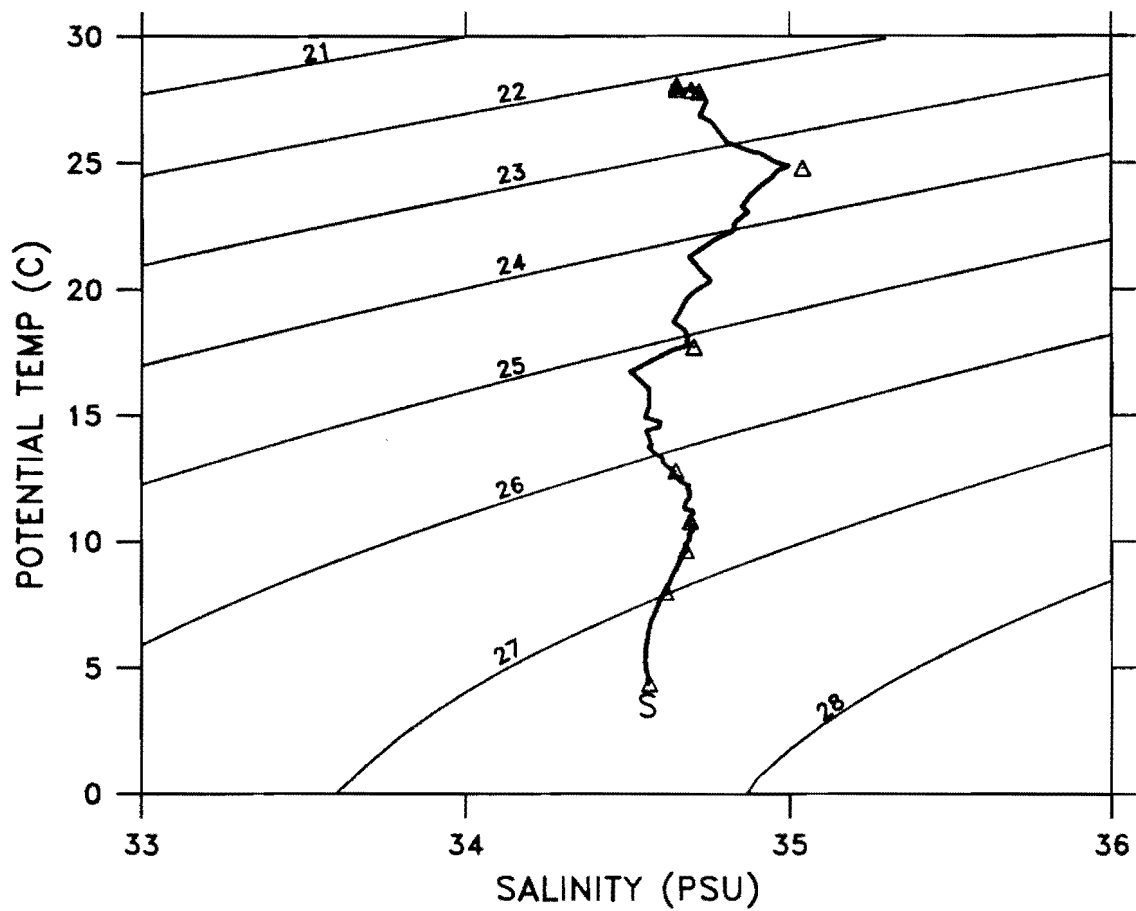


CAST EP1-90-MB -009 DATE 02 MAY 90 TIME 0432 GMT
 LAT 05 02.8N LONG 140 00.7W WEATHER 2 SEA STATE 2
 BAROMETER 11 WIND DIR 055 T SPD 10 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.0 DEPTH 4434 M

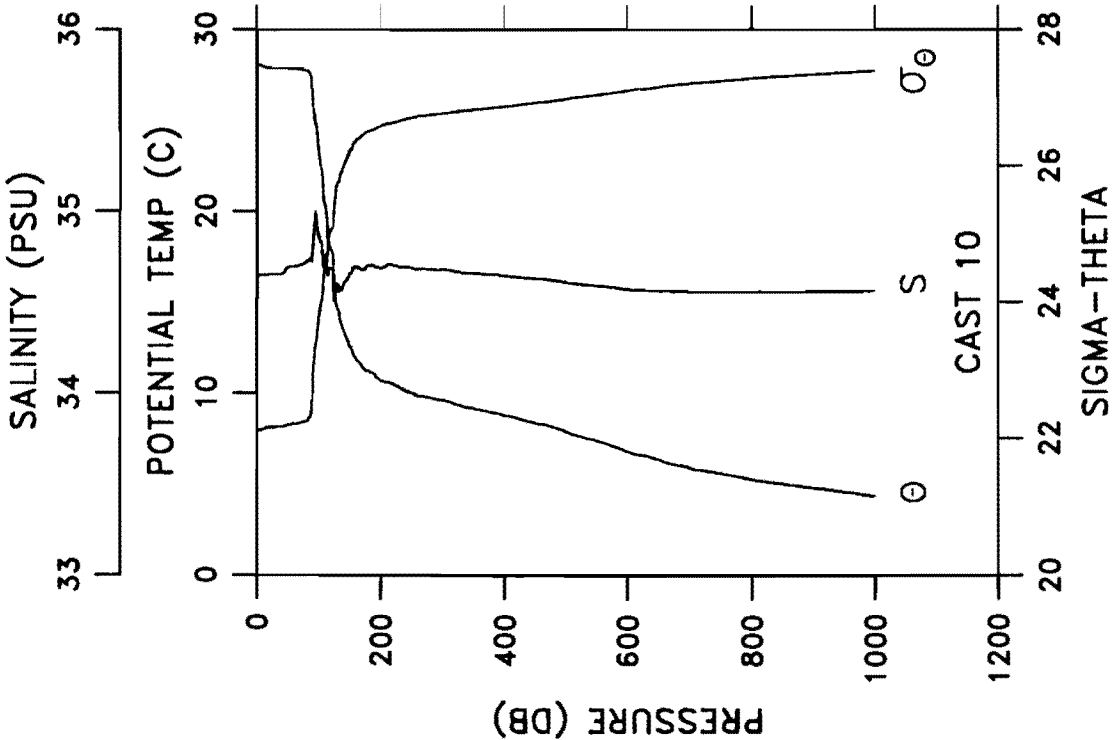


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.035 | 34.568 | 22.060 | 0.000 |
| 10 | 28.044 | 34.562 | 22.053 | 0.058 |
| 20 | 28.044 | 34.563 | 22.054 | 0.115 |
| 30 | 28.043 | 34.564 | 22.055 | 0.173 |
| 40 | 27.970 | 34.638 | 22.135 | 0.230 |
| 50 | 27.848 | 34.737 | 22.249 | 0.287 |
| 60 | 27.727 | 34.796 | 22.332 | 0.343 |
| 70 | 27.605 | 34.843 | 22.407 | 0.397 |
| 80 | 26.808 | 34.943 | 22.738 | 0.451 |
| 90 | 26.004 | 35.081 | 23.080 | 0.501 |
| 100 | 24.816 | 34.993 | 23.394 | 0.547 |
| 110 | 23.013 | 34.902 | 23.857 | 0.591 |
| 120 | 20.535 | 34.780 | 24.453 | 0.629 |
| 130 | 18.130 | 34.697 | 25.009 | 0.661 |
| 140 | 15.763 | 34.632 | 25.519 | 0.689 |
| 150 | 14.180 | 34.618 | 25.855 | 0.712 |
| 160 | 12.194 | 34.646 | 26.277 | 0.732 |
| 170 | 11.485 | 34.674 | 26.433 | 0.749 |
| 180 | 10.951 | 34.661 | 26.521 | 0.765 |
| 190 | 10.545 | 34.664 | 26.595 | 0.780 |
| 200 | 10.386 | 34.671 | 26.629 | 0.795 |
| 250 | 9.942 | 34.692 | 26.721 | 0.865 |
| 300 | 9.403 | 34.673 | 26.797 | 0.932 |
| 350 | 8.939 | 34.650 | 26.854 | 0.996 |
| 400 | 8.521 | 34.632 | 26.906 | 1.058 |
| 450 | 8.118 | 34.618 | 26.956 | 1.118 |
| 500 | 7.648 | 34.600 | 27.013 | 1.175 |
| 550 | 7.125 | 34.582 | 27.072 | 1.230 |
| 600 | 6.632 | 34.567 | 27.128 | 1.282 |
| 650 | 6.192 | 34.558 | 27.179 | 1.332 |
| 700 | 5.861 | 34.551 | 27.216 | 1.380 |
| 750 | 5.540 | 34.550 | 27.255 | 1.427 |
| 800 | 5.271 | 34.547 | 27.285 | 1.471 |
| 900 | 4.838 | 34.559 | 27.344 | 1.556 |
| 1000 | 4.443 | 34.563 | 27.391 | 1.637 |
| 1004 | 4.429 | 34.563 | 27.393 | 1.640 |

CAST EP1-90-MB -010 DATE 02 MAY 90 TIME 2135 GMT
LAT 05 59.4N LONG 140 00.8W

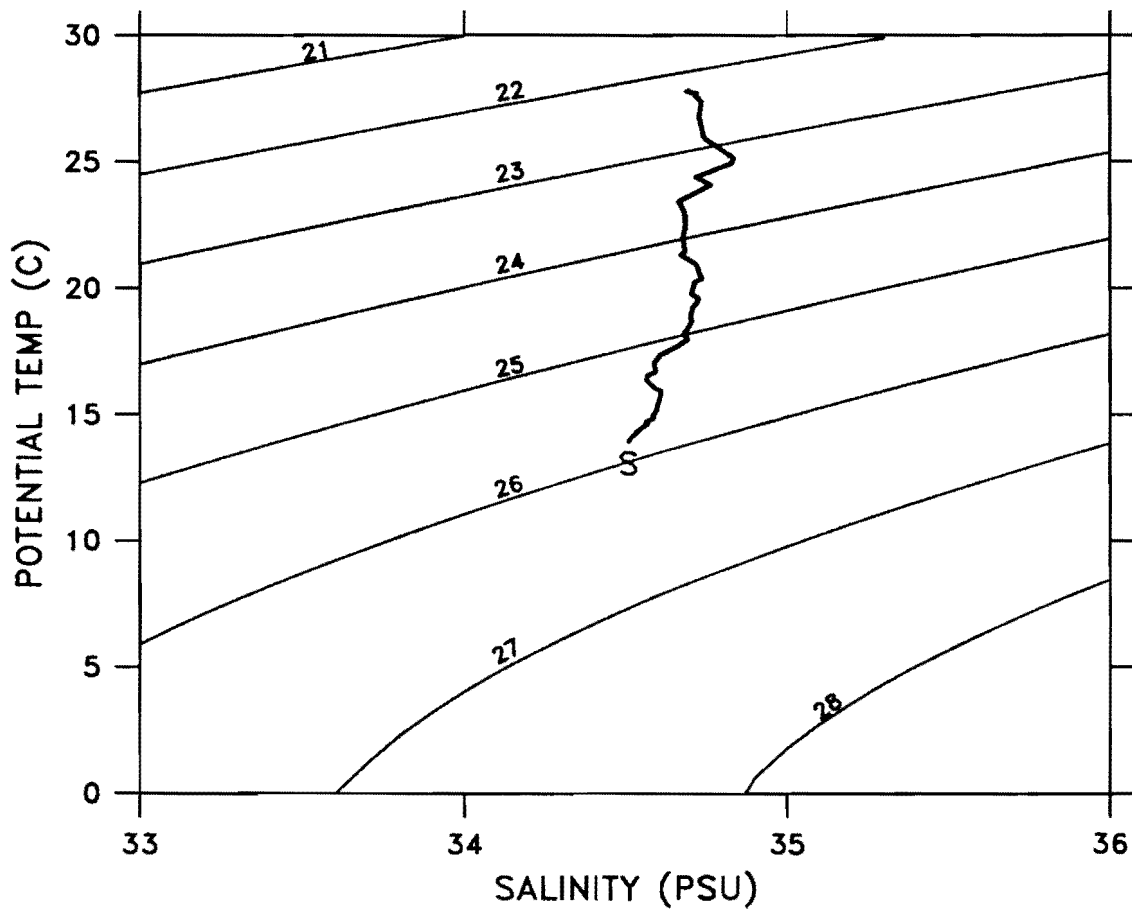


CAST EP1-90-MB -010 DATE 02 MAY 90 TIME 2135 GMT
 LAT 05 59.4N LONG 140 00.8W WEATHER 1 SEA STATE 2
 BAROMETER 09 WIND DIR 045 T SPD 18 KT VISIBILITY 7
 CLOUD AMOUNT DRY 28.0 WET 26.5 DEPTH 4583 M

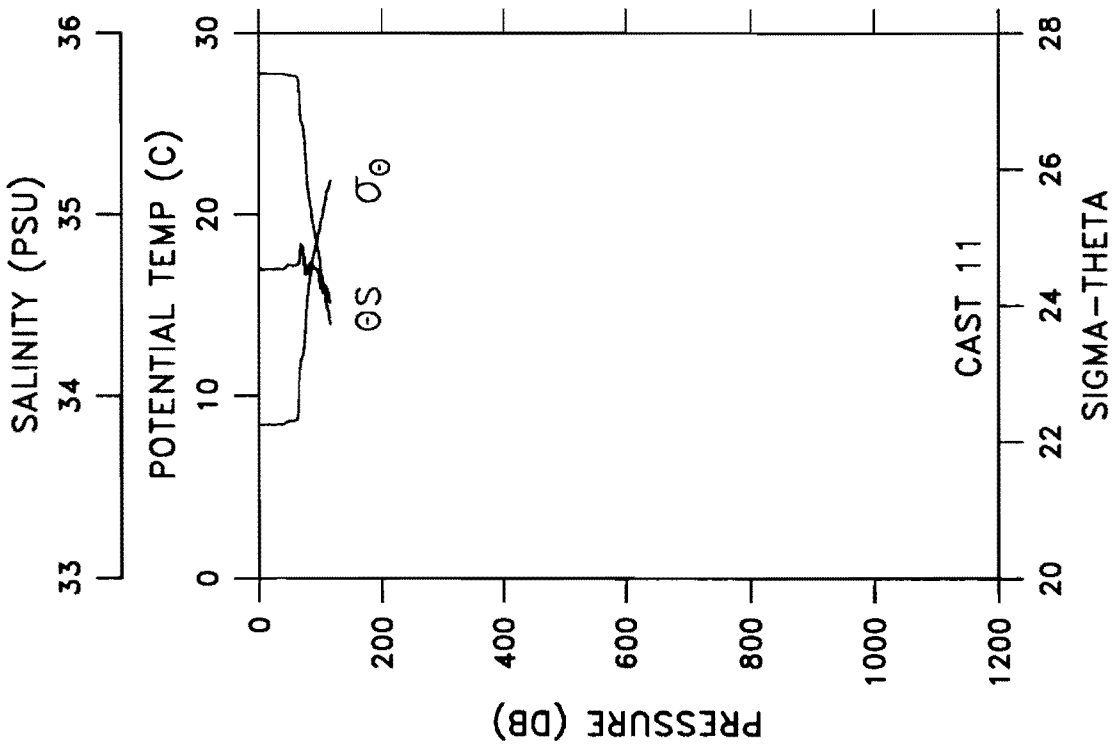


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.043 | 34.639 | 22.111 | 0.000 |
| 10 | 27.994 | 34.648 | 22.134 | 0.057 |
| 20 | 27.909 | 34.651 | 22.164 | 0.114 |
| 30 | 27.897 | 34.651 | 22.168 | 0.170 |
| 40 | 27.891 | 34.653 | 22.171 | 0.227 |
| 50 | 27.899 | 34.689 | 22.196 | 0.284 |
| 60 | 27.859 | 34.694 | 22.213 | 0.340 |
| 70 | 27.826 | 34.703 | 22.230 | 0.396 |
| 80 | 27.781 | 34.720 | 22.258 | 0.452 |
| 90 | 26.583 | 34.764 | 22.674 | 0.508 |
| 100 | 23.267 | 34.856 | 23.749 | 0.554 |
| 110 | 20.375 | 34.757 | 24.478 | 0.592 |
| 120 | 17.868 | 34.687 | 25.065 | 0.624 |
| 130 | 14.685 | 34.597 | 25.731 | 0.650 |
| 140 | 13.416 | 34.593 | 25.994 | 0.672 |
| 150 | 12.533 | 34.658 | 26.221 | 0.692 |
| 160 | 11.915 | 34.689 | 26.364 | 0.709 |
| 170 | 11.448 | 34.678 | 26.443 | 0.726 |
| 180 | 11.216 | 34.702 | 26.505 | 0.742 |
| 190 | 11.056 | 34.700 | 26.533 | 0.757 |
| 200 | 10.701 | 34.685 | 26.584 | 0.772 |
| 250 | 10.018 | 34.689 | 26.706 | 0.844 |
| 300 | 9.625 | 34.681 | 26.767 | 0.912 |
| 350 | 9.175 | 34.660 | 26.824 | 0.977 |
| 400 | 8.793 | 34.644 | 26.873 | 1.041 |
| 450 | 8.376 | 34.631 | 26.927 | 1.102 |
| 500 | 7.896 | 34.609 | 26.983 | 1.162 |
| 550 | 7.389 | 34.591 | 27.042 | 1.218 |
| 600 | 6.801 | 34.571 | 27.108 | 1.272 |
| 650 | 6.375 | 34.563 | 27.159 | 1.323 |
| 700 | 5.897 | 34.555 | 27.214 | 1.371 |
| 750 | 5.610 | 34.553 | 27.249 | 1.418 |
| 800 | 5.276 | 34.553 | 27.289 | 1.462 |
| 900 | 4.807 | 34.559 | 27.348 | 1.547 |
| 1000 | 4.367 | 34.563 | 27.400 | 1.627 |
| 1001 | 4.366 | 34.563 | 27.400 | 1.628 |

CAST EP1-90-MB -011 DATE 03 MAY 90 TIME 0259 GMT
LAT 07 01.7N LONG 140 10.6W

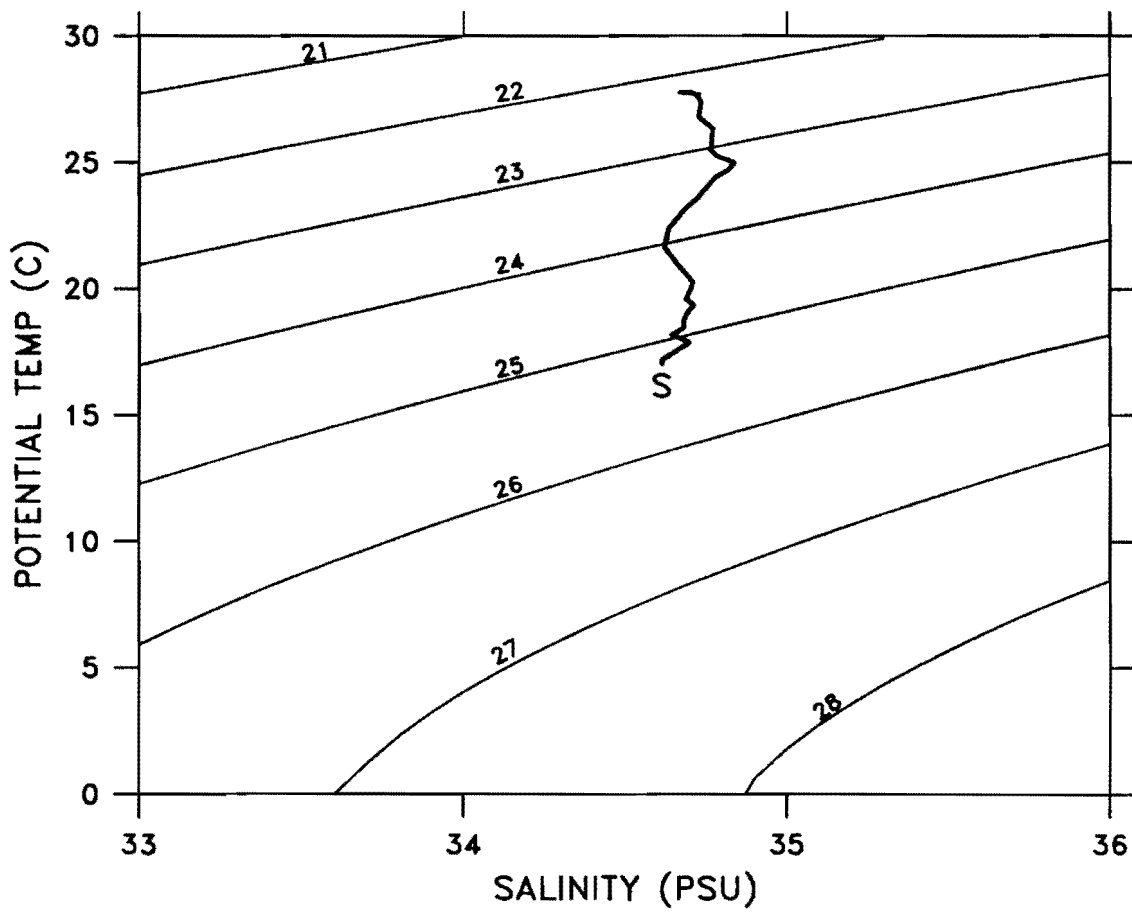


CAST EP1-90-MB -011 DATE 03 MAY 90 TIME 0259 GMT
 LAT 07 01.7N LONG 140 10.6W WEATHER 2 SEA STATE 2
 BAROMETER 08 WIND DIR 050 T SPD 24 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.5 WET 26.0 DEPTH 4879 M

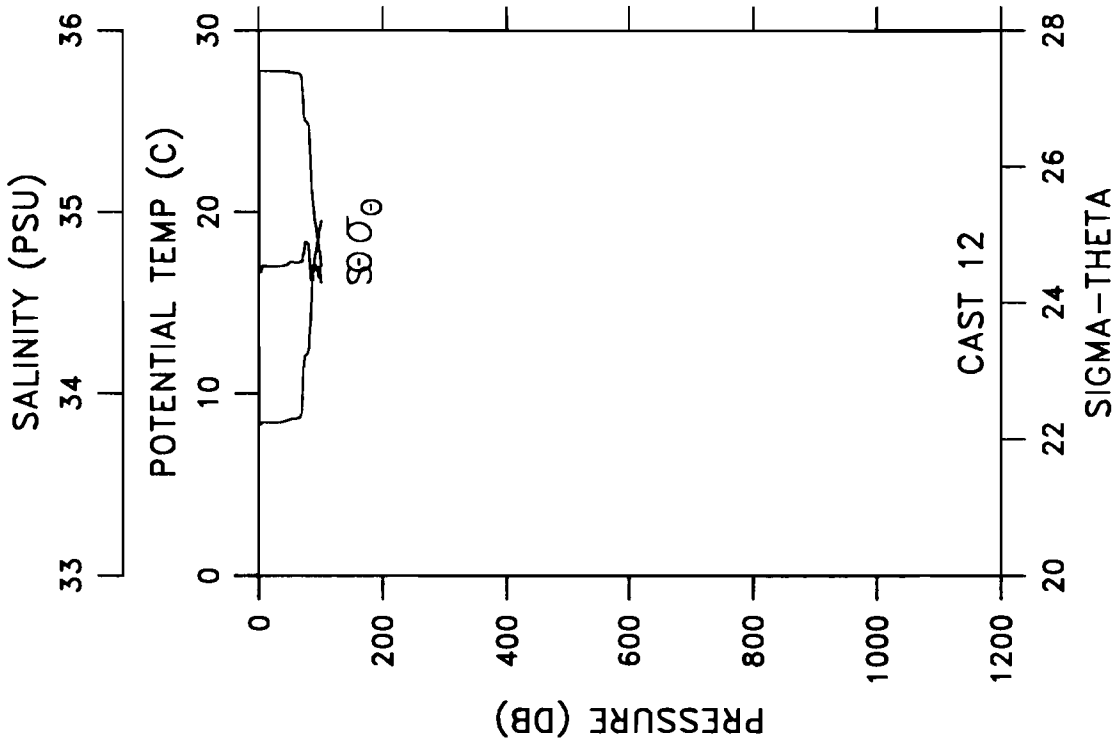


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.773 | 34.702 | 22.247 | 0.000 |
| 10 | 27.772 | 34.696 | 22.242 | 0.056 |
| 20 | 27.763 | 34.697 | 22.246 | 0.112 |
| 30 | 27.756 | 34.697 | 22.248 | 0.168 |
| 40 | 27.751 | 34.699 | 22.251 | 0.223 |
| 50 | 27.665 | 34.720 | 22.295 | 0.279 |
| 60 | 27.617 | 34.718 | 22.309 | 0.335 |
| 70 | 24.961 | 34.830 | 23.227 | 0.386 |
| 80 | 21.317 | 34.673 | 24.160 | 0.429 |
| 90 | 19.025 | 34.705 | 24.781 | 0.464 |
| 100 | 17.034 | 34.591 | 25.193 | 0.494 |
| 110 | 14.959 | 34.587 | 25.663 | 0.520 |
| 116 | 13.907 | 34.510 | 25.829 | 0.533 |

CAST EP1-90-MB -012 DATE 03 MAY 90 TIME 0328 GMT
LAT 07 01.7N LONG 140 10.6W

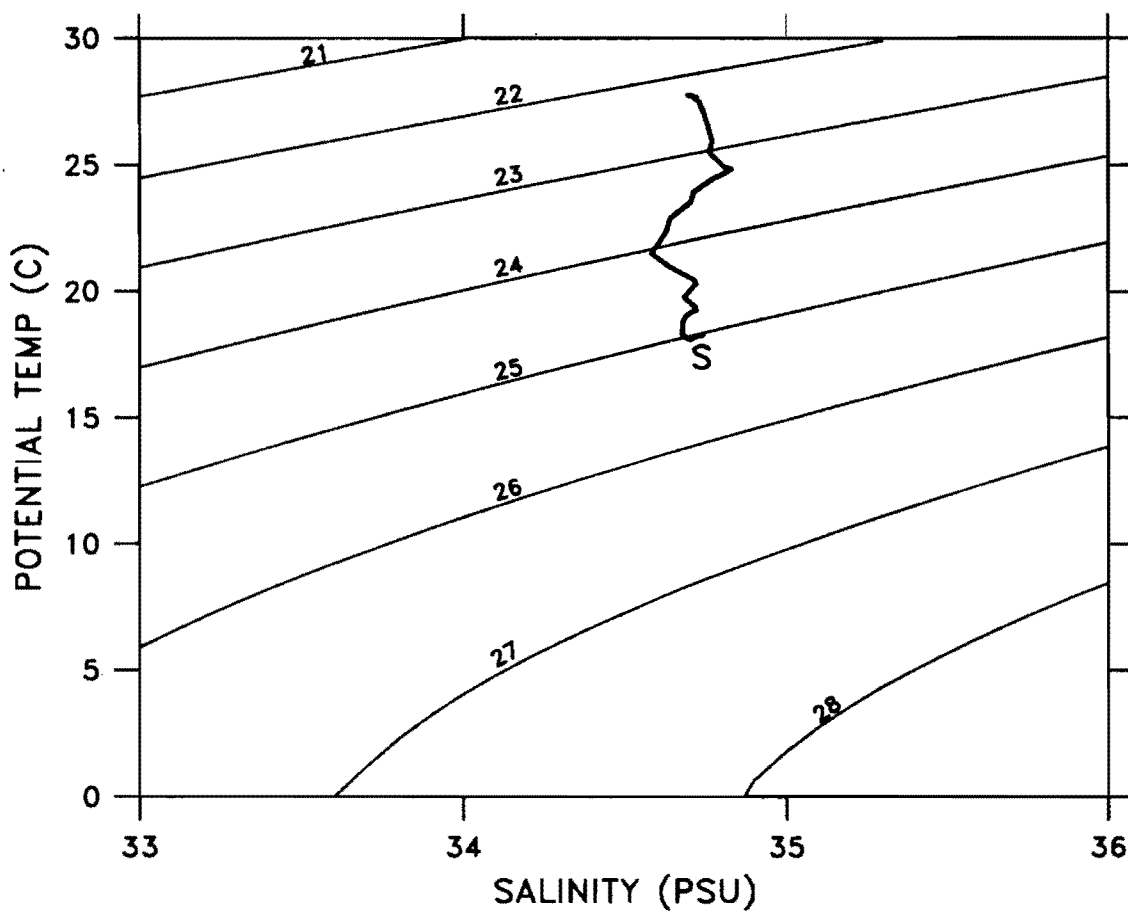


CAST EP1-90-MB -012 DATE 03 MAY 90 TIME 0328 GMT
 LAT 07 01.7N LONG 140 10.6W WEATHER 2 SEA STATE 2
 BAROMETER 08 WIND DIR 050 T SPD 24 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.5 WET 26.0 DEPTH 4879 M

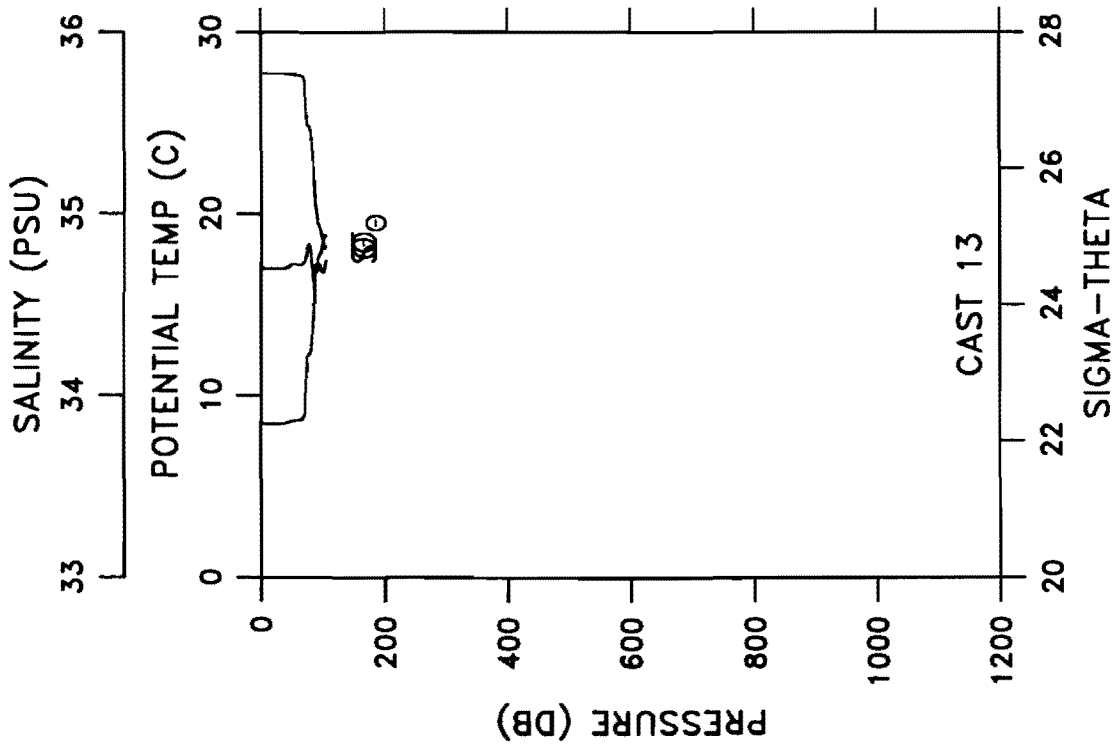


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.768 | 34.666 | 22.221 | 0.000 |
| 10 | 27.775 | 34.701 | 22.245 | 0.056 |
| 20 | 27.771 | 34.699 | 22.245 | 0.112 |
| 30 | 27.773 | 34.699 | 22.244 | 0.168 |
| 40 | 27.748 | 34.703 | 22.255 | 0.224 |
| 50 | 27.691 | 34.722 | 22.289 | 0.279 |
| 60 | 27.645 | 34.719 | 22.301 | 0.335 |
| 70 | 26.795 | 34.725 | 22.578 | 0.390 |
| 80 | 24.723 | 34.818 | 23.290 | 0.438 |
| 90 | 19.600 | 34.685 | 24.627 | 0.477 |
| 100 | 17.195 | 34.611 | 25.171 | 0.508 |
| 101 | 17.033 | 34.611 | 25.209 | 0.511 |

CAST EP1-90-MB -013 DATE 03 MAY 90 TIME 0358 GMT
LAT 07 01.7N LONG 140 10.6W

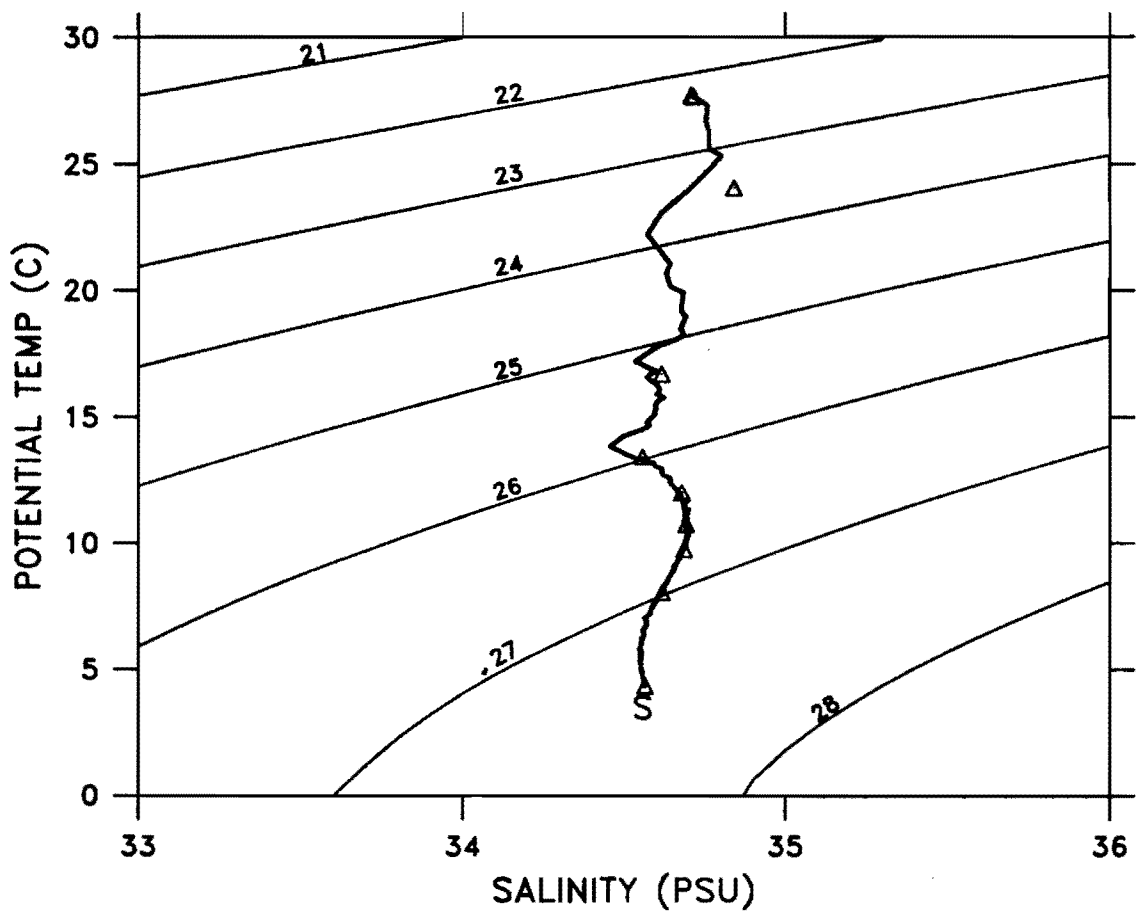


CAST EP1-90-MB -013 DATE 03 MAY 90 TIME 0358 GMT
 LAT 07 01.7N LONG 140 10.6W WEATHER 2 SEA STATE 2
 BAROMETER 09 WIND DIR 050 T SPD 24 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 26.0 DEPTH 4879 M

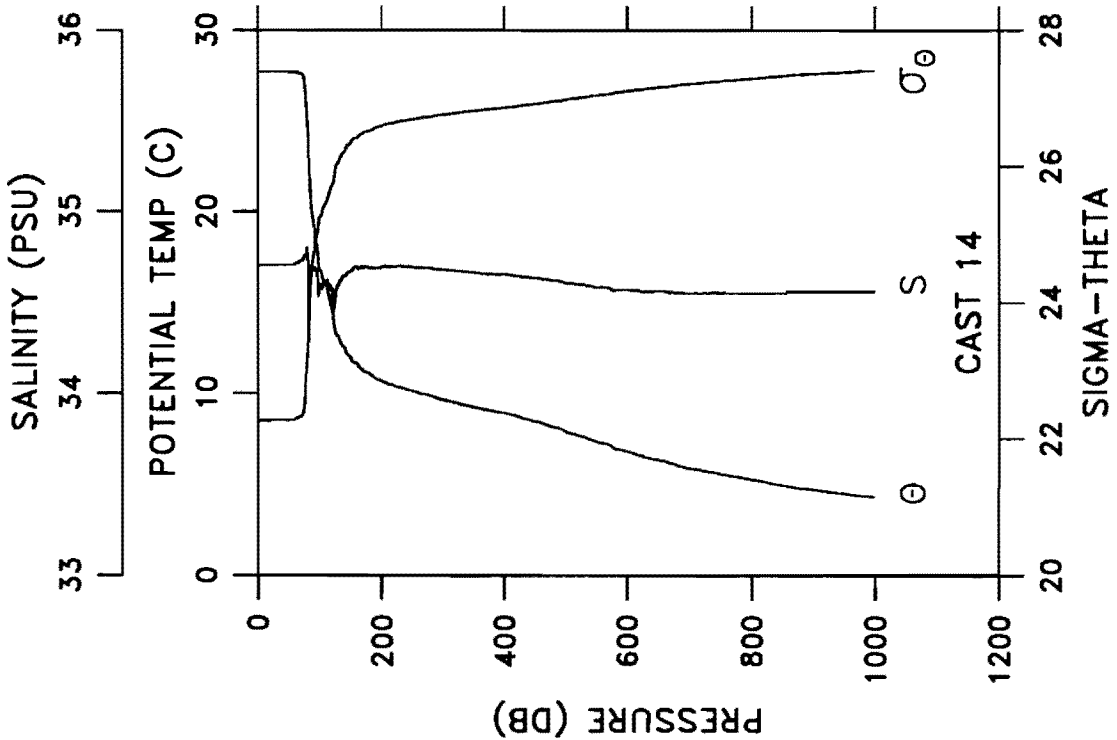


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.736 | 34.713 | 22.267 | 0.000 |
| 10 | 27.755 | 34.699 | 22.250 | 0.056 |
| 20 | 27.759 | 34.698 | 22.248 | 0.112 |
| 30 | 27.755 | 34.698 | 22.250 | 0.167 |
| 40 | 27.736 | 34.702 | 22.258 | 0.223 |
| 50 | 27.683 | 34.724 | 22.293 | 0.279 |
| 60 | 27.644 | 34.719 | 22.301 | 0.334 |
| 70 | 27.460 | 34.735 | 22.373 | 0.390 |
| 80 | 24.664 | 34.810 | 23.301 | 0.439 |
| 90 | 20.087 | 34.707 | 24.517 | 0.479 |
| 100 | 18.514 | 34.681 | 24.901 | 0.512 |
| 105 | 18.254 | 34.744 | 25.014 | 0.526 |

CAST EP1-90-MB -014 DATE 03 MAY 90 TIME 0932 GMT
LAT 07 04.7N LONG 140 12.1W

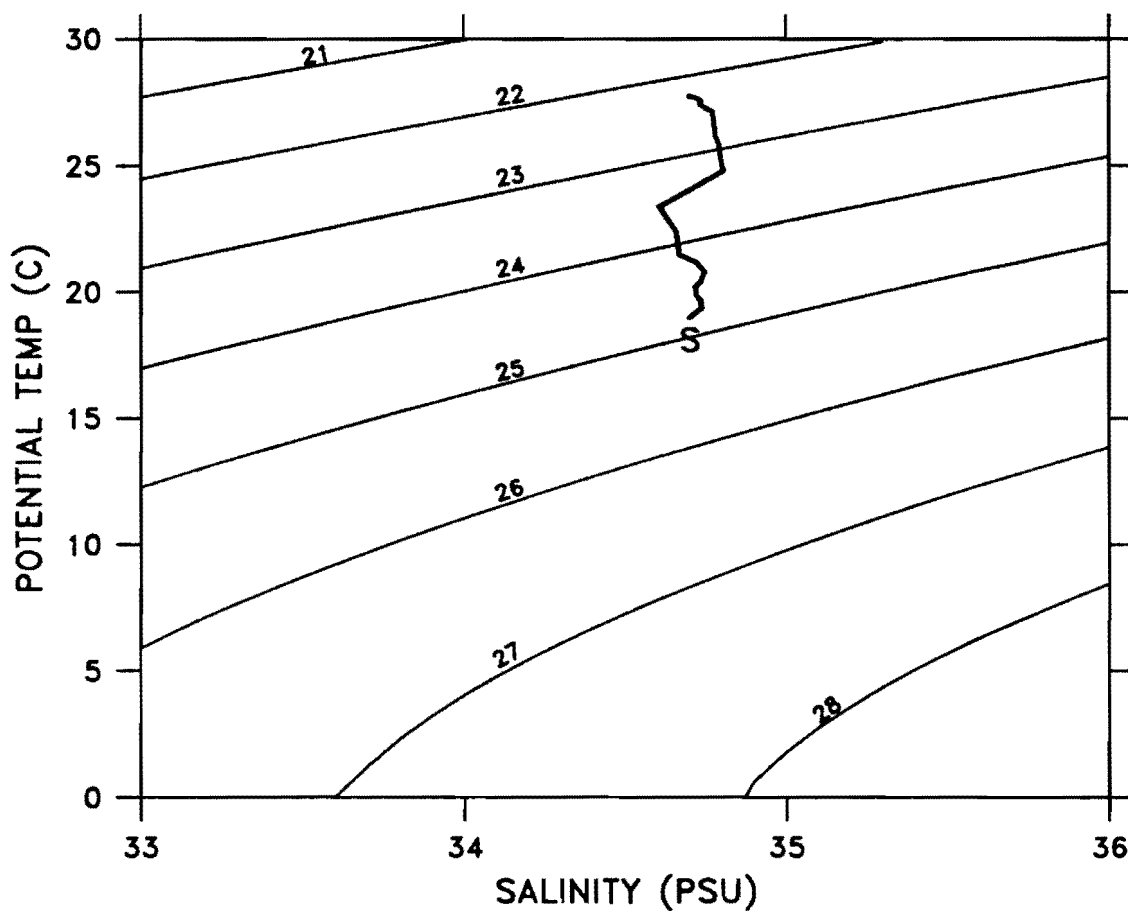


CAST EP1-90-MB -014 DATE 03 MAY 90 TIME 0932 GMT
 LAT 07 04.7N LONG 140 12.1W WEATHER 1 SEA STATE 3
 BAROMETER 10 WIND DIR 066 T SPD 22 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.5 DEPTH 4783 M

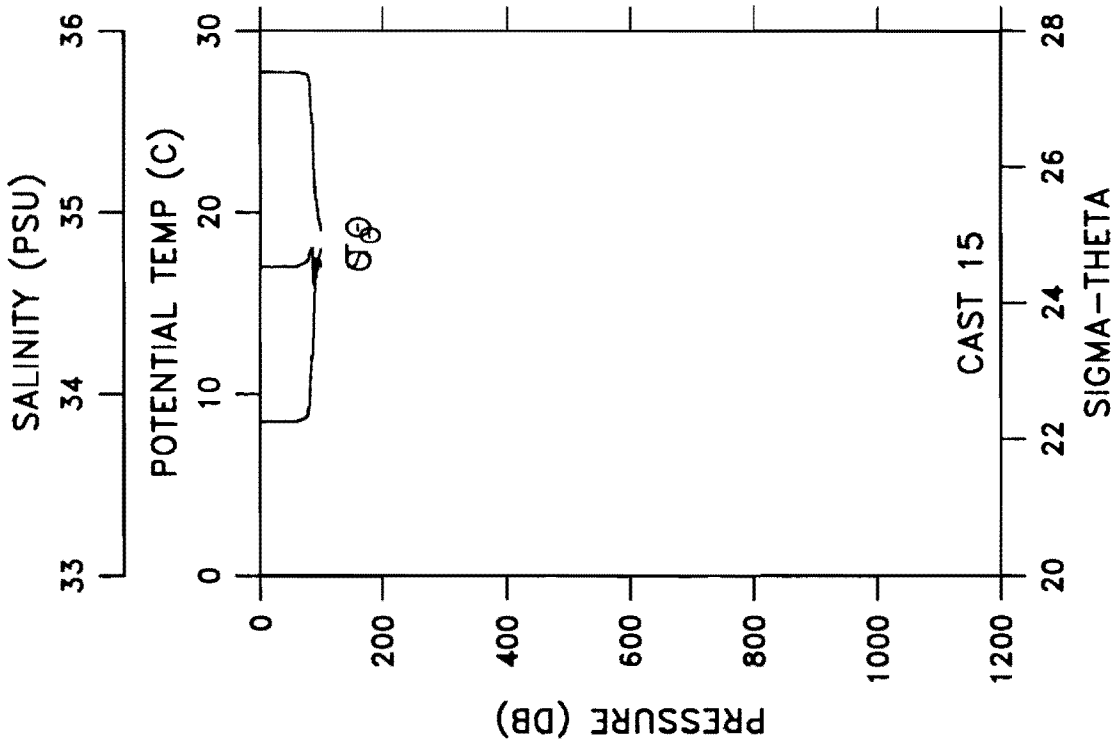


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.720 | 34.706 | 22.267 | 0.000 |
| 10 | 27.716 | 34.706 | 22.268 | 0.056 |
| 20 | 27.715 | 34.706 | 22.268 | 0.111 |
| 30 | 27.714 | 34.706 | 22.268 | 0.167 |
| 40 | 27.708 | 34.708 | 22.272 | 0.223 |
| 50 | 27.701 | 34.709 | 22.275 | 0.278 |
| 60 | 27.675 | 34.711 | 22.286 | 0.334 |
| 70 | 27.593 | 34.728 | 22.324 | 0.389 |
| 80 | 24.515 | 34.742 | 23.295 | 0.442 |
| 90 | 19.172 | 34.678 | 24.732 | 0.480 |
| 100 | 16.791 | 34.800 | 25.257 | 0.509 |
| 110 | 15.914 | 34.801 | 25.461 | 0.536 |
| 120 | 14.492 | 34.554 | 25.739 | 0.560 |
| 130 | 13.041 | 34.597 | 26.073 | 0.580 |
| 140 | 12.437 | 34.643 | 26.228 | 0.599 |
| 150 | 11.868 | 34.677 | 26.363 | 0.617 |
| 160 | 11.630 | 34.693 | 26.421 | 0.633 |
| 170 | 11.241 | 34.688 | 26.489 | 0.649 |
| 180 | 11.070 | 34.690 | 26.522 | 0.665 |
| 190 | 10.814 | 34.691 | 26.569 | 0.680 |
| 200 | 10.709 | 34.696 | 26.591 | 0.695 |
| 250 | 10.144 | 34.694 | 26.689 | 0.767 |
| 300 | 9.661 | 34.682 | 26.761 | 0.835 |
| 350 | 9.257 | 34.666 | 26.816 | 0.901 |
| 400 | 8.929 | 34.656 | 26.861 | 0.965 |
| 450 | 8.466 | 34.636 | 26.917 | 1.027 |
| 500 | 7.884 | 34.606 | 26.982 | 1.087 |
| 550 | 7.360 | 34.585 | 27.042 | 1.143 |
| 600 | 6.823 | 34.572 | 27.106 | 1.197 |
| 650 | 6.357 | 34.563 | 27.161 | 1.248 |
| 700 | 5.896 | 34.553 | 27.212 | 1.296 |
| 750 | 5.567 | 34.552 | 27.253 | 1.343 |
| 800 | 5.279 | 34.552 | 27.287 | 1.388 |
| 900 | 4.731 | 34.560 | 27.357 | 1.472 |
| 999 | 4.344 | 34.565 | 27.404 | 1.550 |

CAST EP1-90-MB -015 DATE 04 MAY 90 TIME 0806 GMT
LAT 07 01.3N LONG 139 58.8W

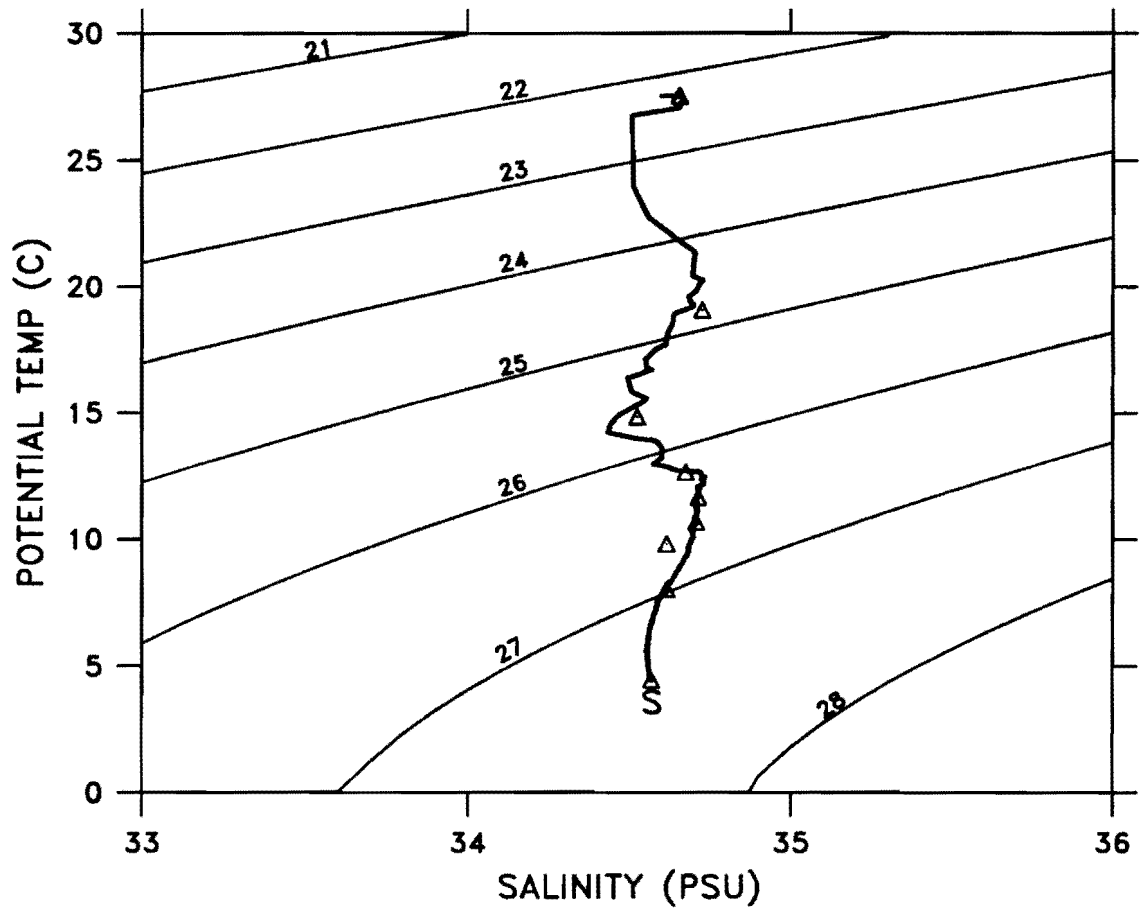


CAST EP1-90-MB -015 DATE 04 MAY 90 TIME 0806 GMT
 LAT 07 01.3N LONG 139 58.8W WEATHER 2 SEA STATE 3
 BAROMETER 12 WIND DIR 042 T SPD 22 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 26.0 DEPTH 5020 M

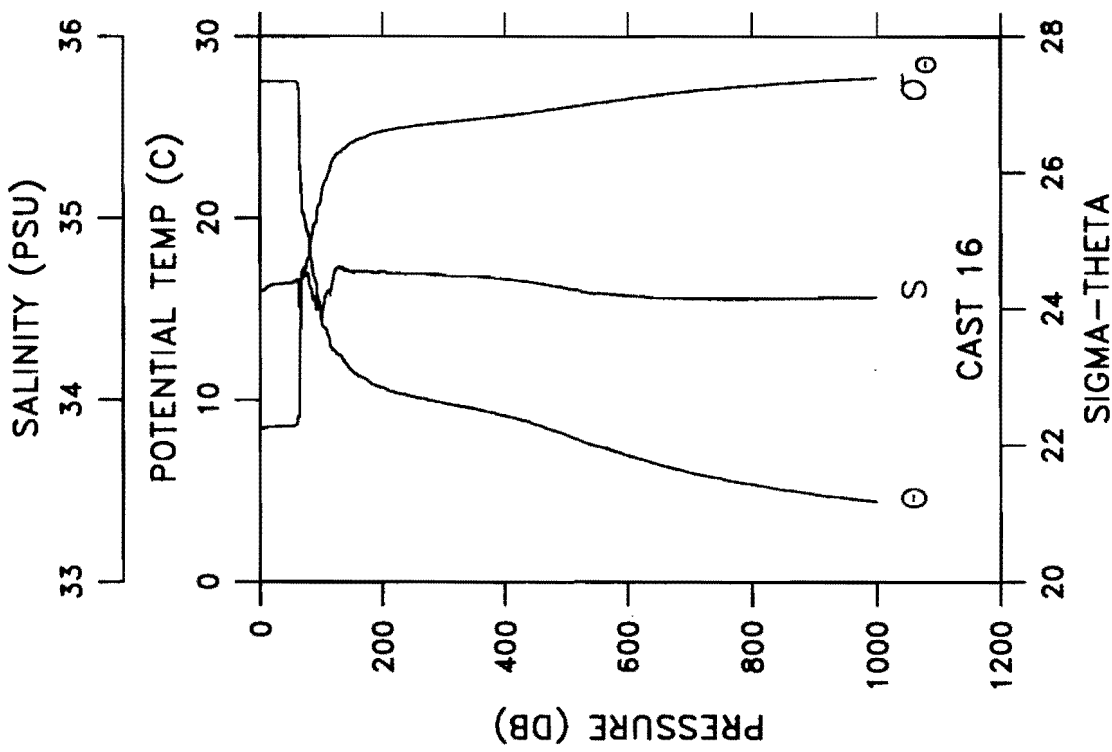


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.724 | 34.700 | 22.261 | 0.000 |
| 10 | 27.727 | 34.699 | 22.260 | 0.056 |
| 20 | 27.726 | 34.700 | 22.260 | 0.111 |
| 30 | 27.723 | 34.700 | 22.261 | 0.167 |
| 40 | 27.721 | 34.700 | 22.262 | 0.223 |
| 50 | 27.721 | 34.700 | 22.262 | 0.279 |
| 60 | 27.716 | 34.700 | 22.264 | 0.335 |
| 70 | 27.665 | 34.718 | 22.294 | 0.390 |
| 80 | 27.152 | 34.770 | 22.498 | 0.445 |
| 90 | 20.785 | 34.746 | 24.360 | 0.490 |
| 99 | 18.974 | 34.697 | 24.797 | 0.520 |

CAST EP1-90-MB -016 DATE 04 MAY 90 TIME 1307 GMT
LAT 07 59.8N LONG 140 00.4W

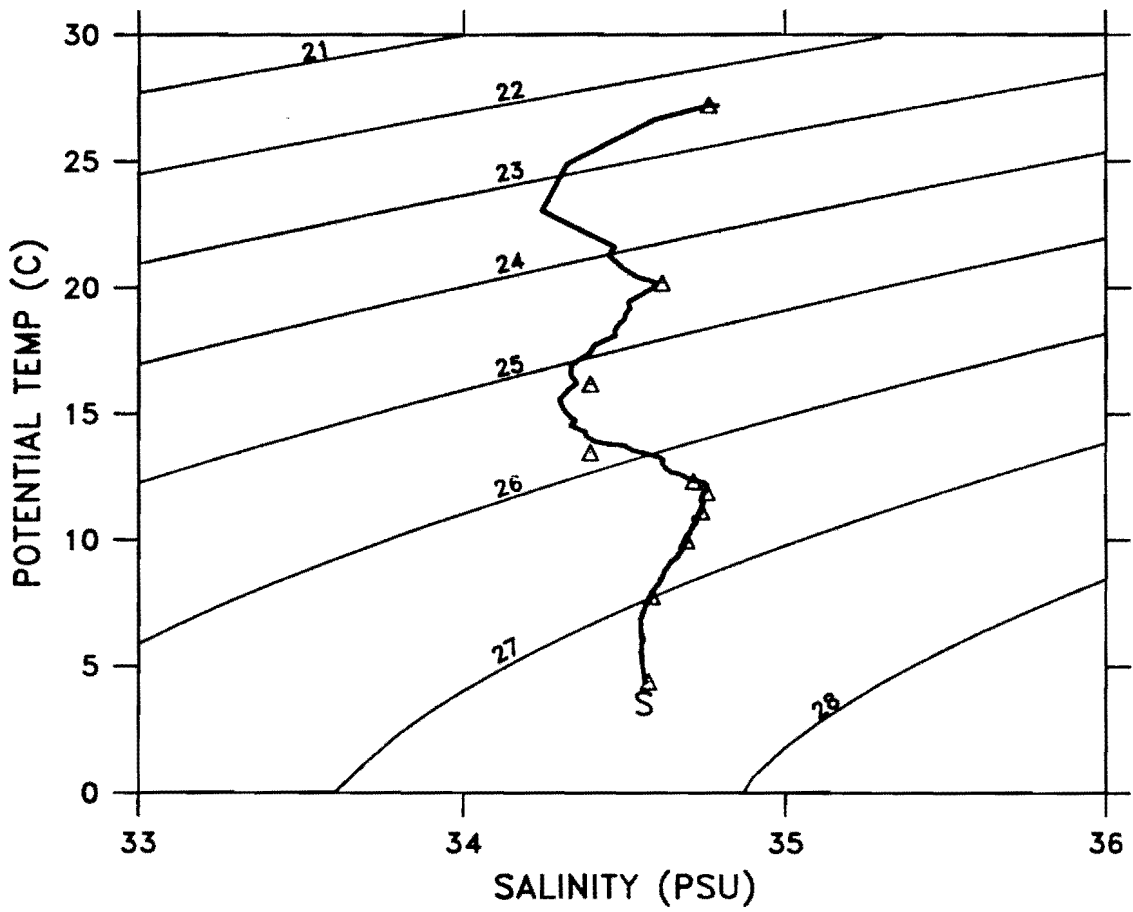


CAST EP1-90-MB -016 DATE 04 MAY 90 TIME 1307 GMT
 LAT 07 59.8N LONG 140 00.4W WEATHER 1 SEA STATE 2
 BAROMETER 09 WIND DIR 025 T SPD 18 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.5 WET 25.0 DEPTH 5064 M

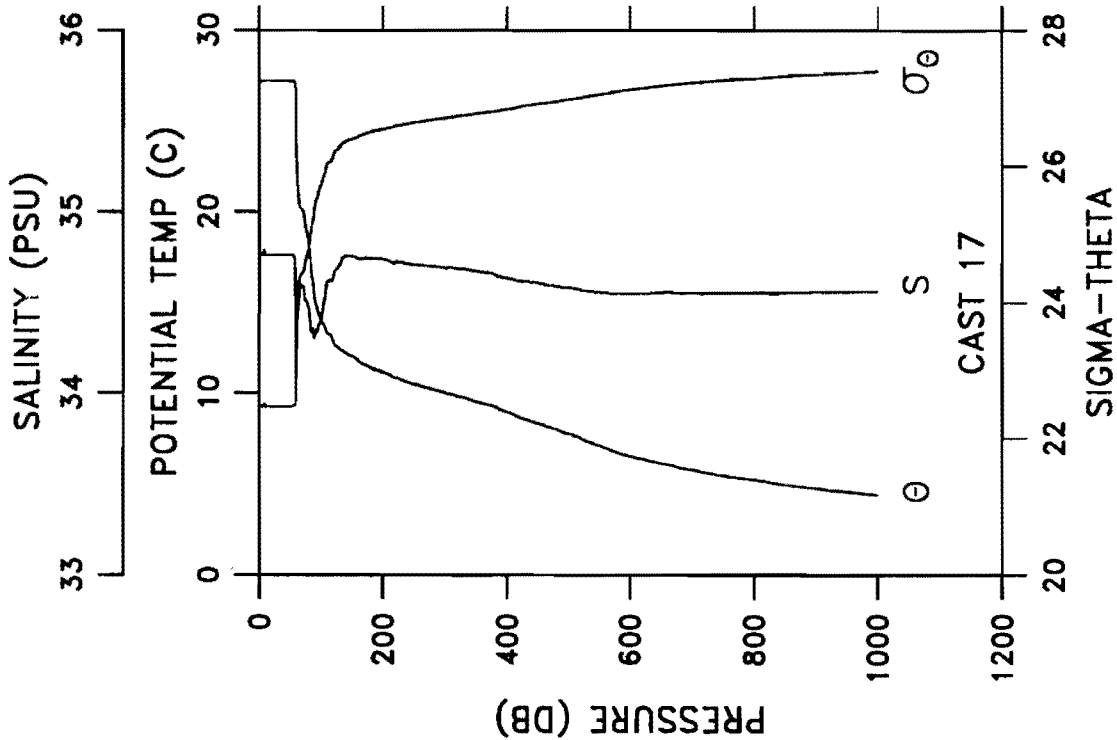


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.528 | 34.599 | 22.249 | 0.000 |
| 10 | 27.530 | 34.615 | 22.260 | 0.056 |
| 20 | 27.532 | 34.634 | 22.273 | 0.111 |
| 30 | 27.528 | 34.636 | 22.277 | 0.167 |
| 40 | 27.530 | 34.640 | 22.279 | 0.223 |
| 50 | 27.528 | 34.641 | 22.280 | 0.278 |
| 60 | 27.481 | 34.660 | 22.309 | 0.334 |
| 70 | 20.255 | 34.727 | 24.488 | 0.378 |
| 80 | 18.504 | 34.631 | 24.865 | 0.411 |
| 90 | 16.524 | 34.528 | 25.265 | 0.440 |
| 100 | 14.226 | 34.435 | 25.704 | 0.465 |
| 110 | 13.587 | 34.599 | 25.962 | 0.487 |
| 120 | 12.710 | 34.682 | 26.205 | 0.506 |
| 130 | 12.460 | 34.732 | 26.293 | 0.524 |
| 140 | 12.001 | 34.717 | 26.370 | 0.541 |
| 150 | 11.579 | 34.706 | 26.441 | 0.558 |
| 160 | 11.316 | 34.704 | 26.488 | 0.574 |
| 170 | 11.191 | 34.707 | 26.513 | 0.589 |
| 180 | 10.933 | 34.706 | 26.559 | 0.605 |
| 190 | 10.764 | 34.699 | 26.584 | 0.620 |
| 200 | 10.681 | 34.707 | 26.605 | 0.634 |
| 250 | 10.178 | 34.695 | 26.684 | 0.706 |
| 300 | 9.826 | 34.685 | 26.736 | 0.775 |
| 350 | 9.522 | 34.681 | 26.784 | 0.843 |
| 400 | 9.115 | 34.664 | 26.837 | 0.908 |
| 450 | 8.647 | 34.644 | 26.896 | 0.972 |
| 500 | 8.078 | 34.614 | 26.960 | 1.032 |
| 550 | 7.459 | 34.587 | 27.029 | 1.089 |
| 600 | 6.956 | 34.573 | 27.088 | 1.144 |
| 650 | 6.453 | 34.562 | 27.148 | 1.196 |
| 700 | 6.015 | 34.559 | 27.202 | 1.245 |
| 750 | 5.667 | 34.557 | 27.242 | 1.292 |
| 800 | 5.358 | 34.556 | 27.281 | 1.337 |
| 900 | 4.820 | 34.561 | 27.348 | 1.423 |
| 1000 | 4.420 | 34.567 | 27.397 | 1.503 |
| 1000 | 4.420 | 34.567 | 27.397 | 1.503 |

CAST EP1-90-MB -017 DATE 05 MAY 90 TIME 1009 GMT、
LAT 08 56.7N LONG 140 11.2W

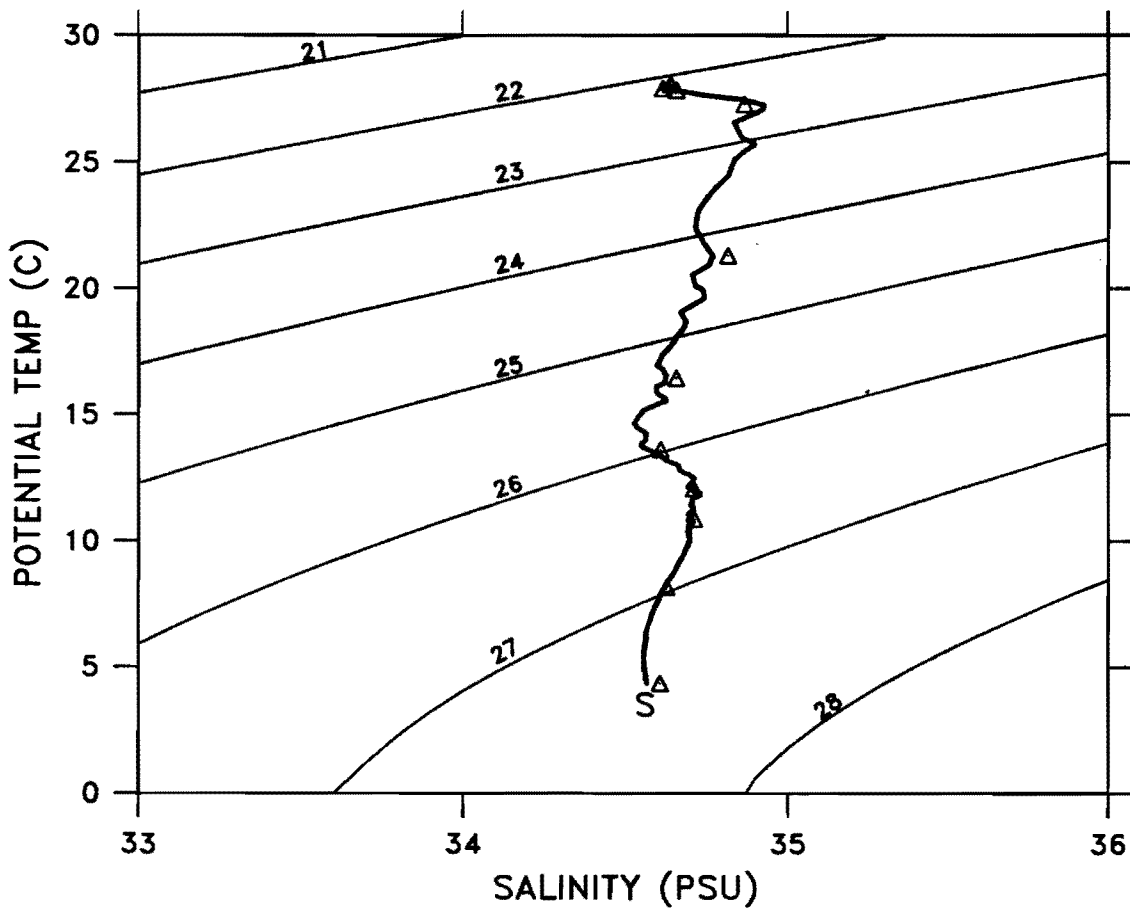


CAST EP1-90-MB -017 DATE 05 MAY 90 TIME 1009 GMT
 LAT 08 56.7N LONG 140 11.2W WEATHER 1 SEA STATE 2
 BAROMETER 12 WIND DIR 030 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT DRY 25.5 WET 24.0 DEPTH 5126 M

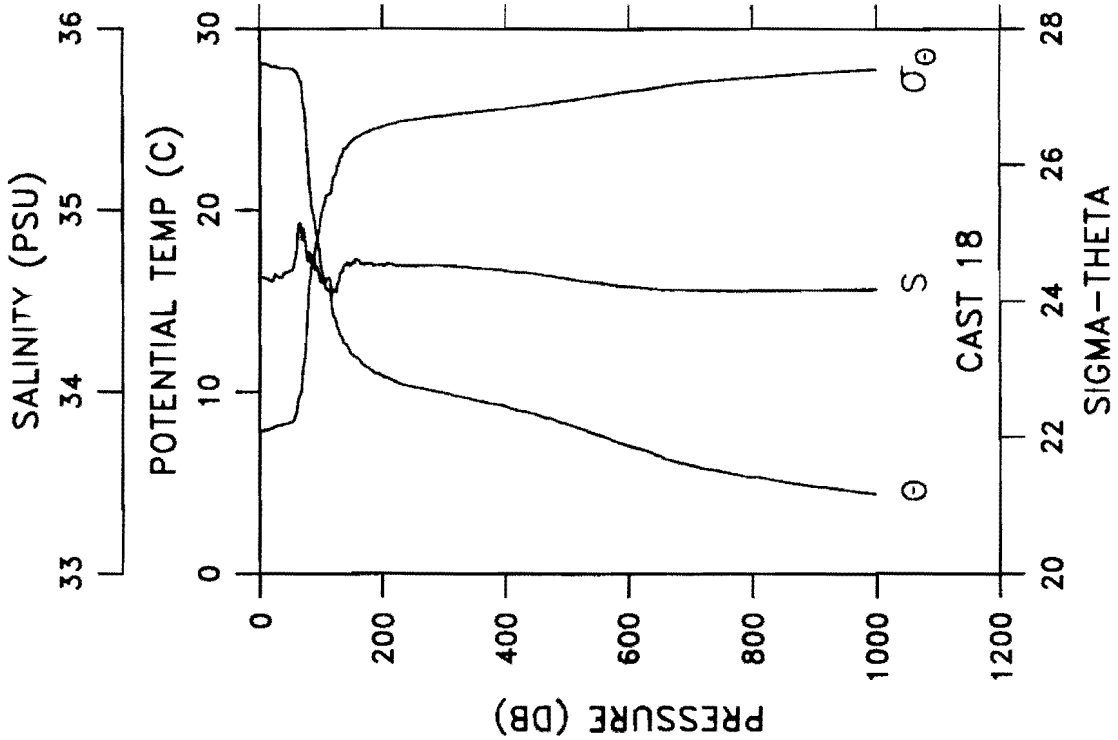


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.212 | 34.763 | 22.474 | 0.000 |
| 10 | 27.224 | 34.761 | 22.468 | 0.054 |
| 20 | 27.222 | 34.762 | 22.469 | 0.107 |
| 30 | 27.222 | 34.761 | 22.469 | 0.161 |
| 40 | 27.222 | 34.762 | 22.469 | 0.215 |
| 50 | 27.207 | 34.761 | 22.474 | 0.269 |
| 60 | 24.889 | 34.320 | 22.863 | 0.322 |
| 70 | 20.075 | 34.591 | 24.431 | 0.361 |
| 80 | 18.305 | 34.469 | 24.791 | 0.394 |
| 90 | 15.212 | 34.309 | 25.393 | 0.423 |
| 100 | 14.023 | 34.392 | 25.713 | 0.448 |
| 110 | 13.271 | 34.611 | 26.037 | 0.469 |
| 120 | 12.801 | 34.631 | 26.147 | 0.489 |
| 130 | 12.386 | 34.705 | 26.286 | 0.507 |
| 140 | 12.189 | 34.757 | 26.364 | 0.524 |
| 150 | 12.011 | 34.754 | 26.396 | 0.541 |
| 160 | 11.770 | 34.740 | 26.431 | 0.557 |
| 170 | 11.544 | 34.742 | 26.475 | 0.573 |
| 180 | 11.395 | 34.740 | 26.501 | 0.589 |
| 190 | 11.244 | 34.741 | 26.530 | 0.605 |
| 200 | 11.132 | 34.737 | 26.547 | 0.620 |
| 250 | 10.467 | 34.710 | 26.645 | 0.694 |
| 300 | 10.021 | 34.693 | 26.709 | 0.765 |
| 350 | 9.517 | 34.674 | 26.779 | 0.833 |
| 400 | 8.948 | 34.635 | 26.841 | 0.899 |
| 450 | 8.319 | 34.607 | 26.917 | 0.961 |
| 500 | 7.748 | 34.580 | 26.982 | 1.020 |
| 550 | 7.111 | 34.558 | 27.056 | 1.077 |
| 600 | 6.506 | 34.549 | 27.131 | 1.129 |
| 650 | 6.141 | 34.555 | 27.183 | 1.179 |
| 700 | 5.777 | 34.555 | 27.229 | 1.226 |
| 750 | 5.470 | 34.553 | 27.265 | 1.272 |
| 800 | 5.232 | 34.555 | 27.295 | 1.316 |
| 900 | 4.777 | 34.558 | 27.351 | 1.400 |
| 1000 | 4.403 | 34.564 | 27.397 | 1.480 |
| 1004 | 4.389 | 34.564 | 27.399 | 1.484 |

CAST EP1-90-MB -018 DATE 07 MAY 90 TIME 1030 GMT
LAT 07 00.2N LONG 132 25.2W

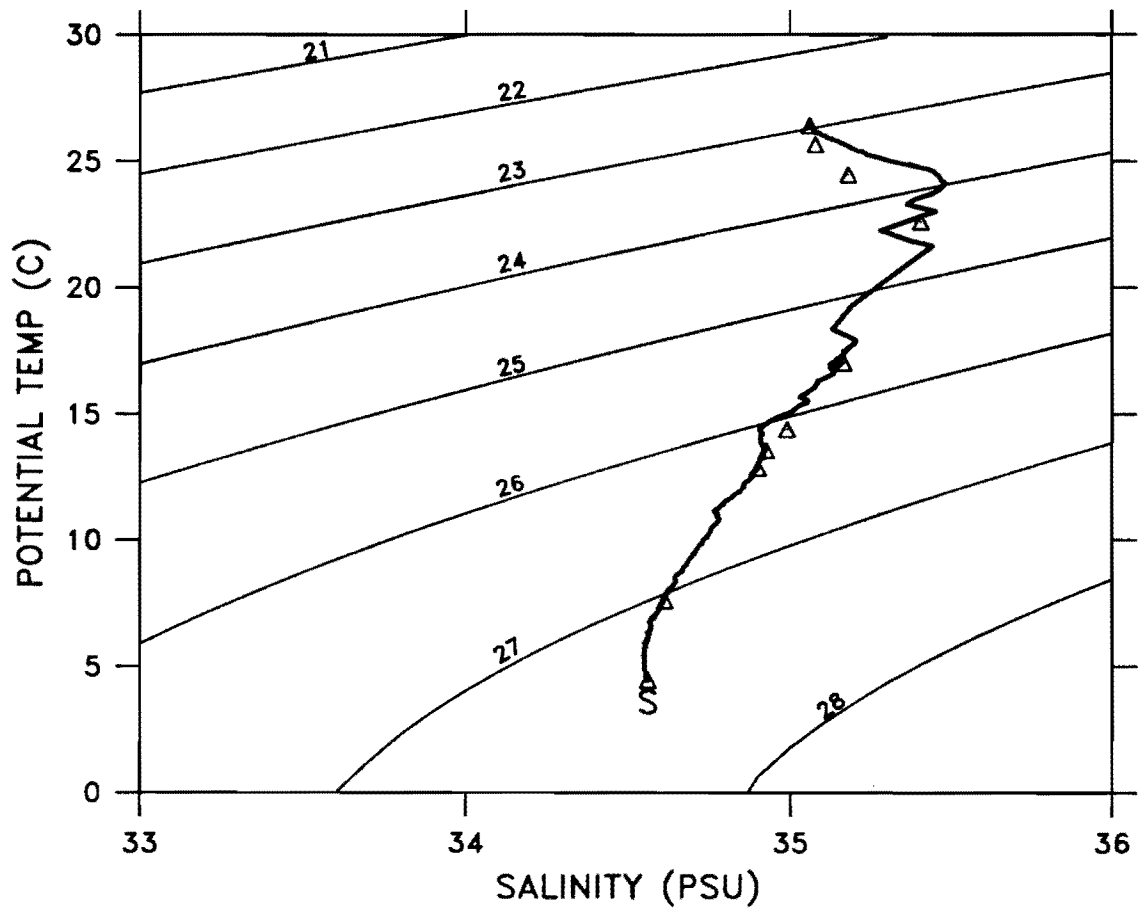


CAST EP1-90-MB -018 DATE 07 MAY 90 TIME 1030 GMT
 LAT 07 00.2N LONG 132 25.2W WEATHER 1 SEA STATE 2
 BAROMETER 07 WIND DIR 110 T SPD 04 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.5 WET 25.0 DEPTH 4568 M

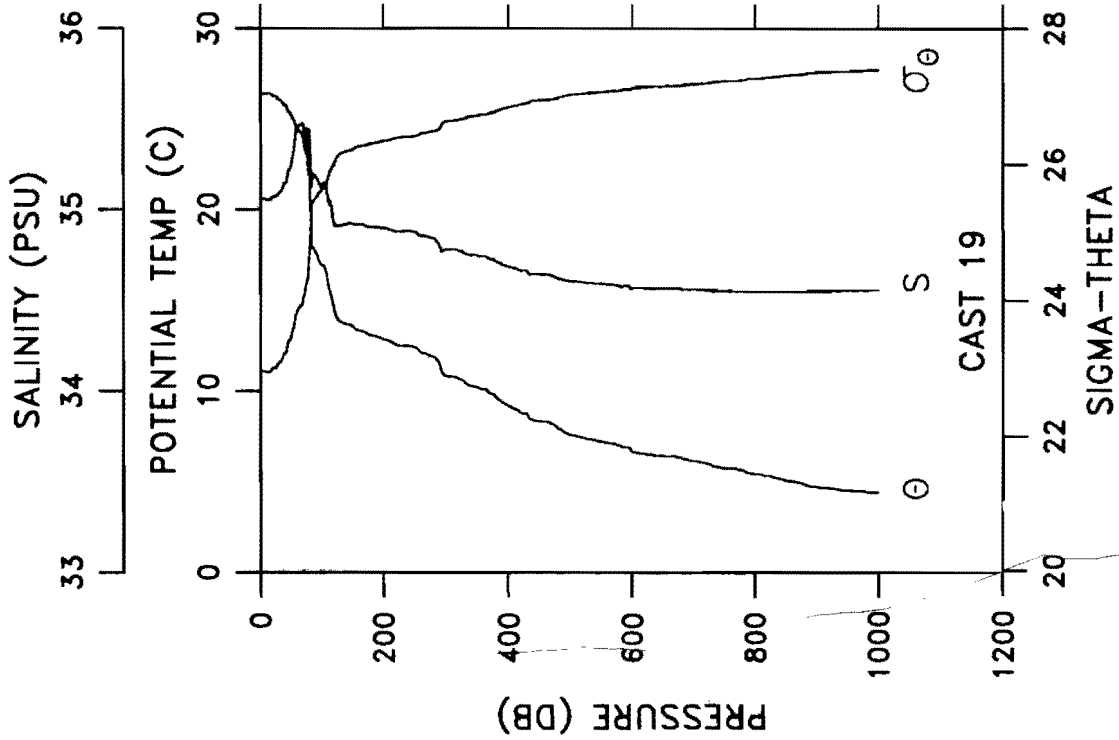


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.066 | 34.628 | 22.096 | 0.000 |
| 10 | 28.043 | 34.622 | 22.099 | 0.057 |
| 20 | 27.904 | 34.608 | 22.134 | 0.114 |
| 30 | 27.852 | 34.633 | 22.169 | 0.171 |
| 40 | 27.815 | 34.651 | 22.194 | 0.228 |
| 50 | 27.792 | 34.664 | 22.212 | 0.284 |
| 60 | 27.575 | 34.771 | 22.363 | 0.340 |
| 70 | 25.957 | 34.857 | 22.941 | 0.393 |
| 80 | 21.868 | 34.737 | 24.056 | 0.438 |
| 90 | 19.435 | 34.718 | 24.695 | 0.473 |
| 100 | 16.951 | 34.598 | 25.218 | 0.503 |
| 110 | 15.605 | 34.622 | 25.547 | 0.529 |
| 120 | 14.232 | 34.564 | 25.802 | 0.553 |
| 130 | 13.291 | 34.612 | 26.034 | 0.575 |
| 140 | 12.615 | 34.697 | 26.235 | 0.594 |
| 150 | 12.063 | 34.702 | 26.346 | 0.611 |
| 160 | 11.846 | 34.724 | 26.405 | 0.628 |
| 170 | 11.483 | 34.706 | 26.458 | 0.644 |
| 180 | 11.247 | 34.707 | 26.503 | 0.660 |
| 190 | 11.038 | 34.698 | 26.534 | 0.676 |
| 200 | 10.894 | 34.699 | 26.561 | 0.691 |
| 250 | 10.271 | 34.693 | 26.666 | 0.764 |
| 300 | 9.942 | 34.694 | 26.723 | 0.834 |
| 350 | 9.542 | 34.681 | 26.780 | 0.902 |
| 400 | 9.198 | 34.666 | 26.825 | 0.967 |
| 450 | 8.757 | 34.649 | 26.883 | 1.031 |
| 500 | 8.242 | 34.625 | 26.943 | 1.092 |
| 550 | 7.635 | 34.601 | 27.014 | 1.151 |
| 600 | 7.031 | 34.577 | 27.082 | 1.206 |
| 650 | 6.490 | 34.566 | 27.146 | 1.258 |
| 700 | 5.956 | 34.559 | 27.210 | 1.307 |
| 750 | 5.613 | 34.557 | 27.251 | 1.353 |
| 800 | 5.317 | 34.556 | 27.286 | 1.398 |
| 900 | 4.785 | 34.558 | 27.350 | 1.483 |
| 1000 | 4.363 | 34.565 | 27.402 | 1.563 |
| 1000 | 4.363 | 34.565 | 27.402 | 1.563 |

CAST EP1-90-MB -019 DATE 09 MAY 90 TIME 1125 GMT
LAT 00 10.8S LONG 124 30.1W

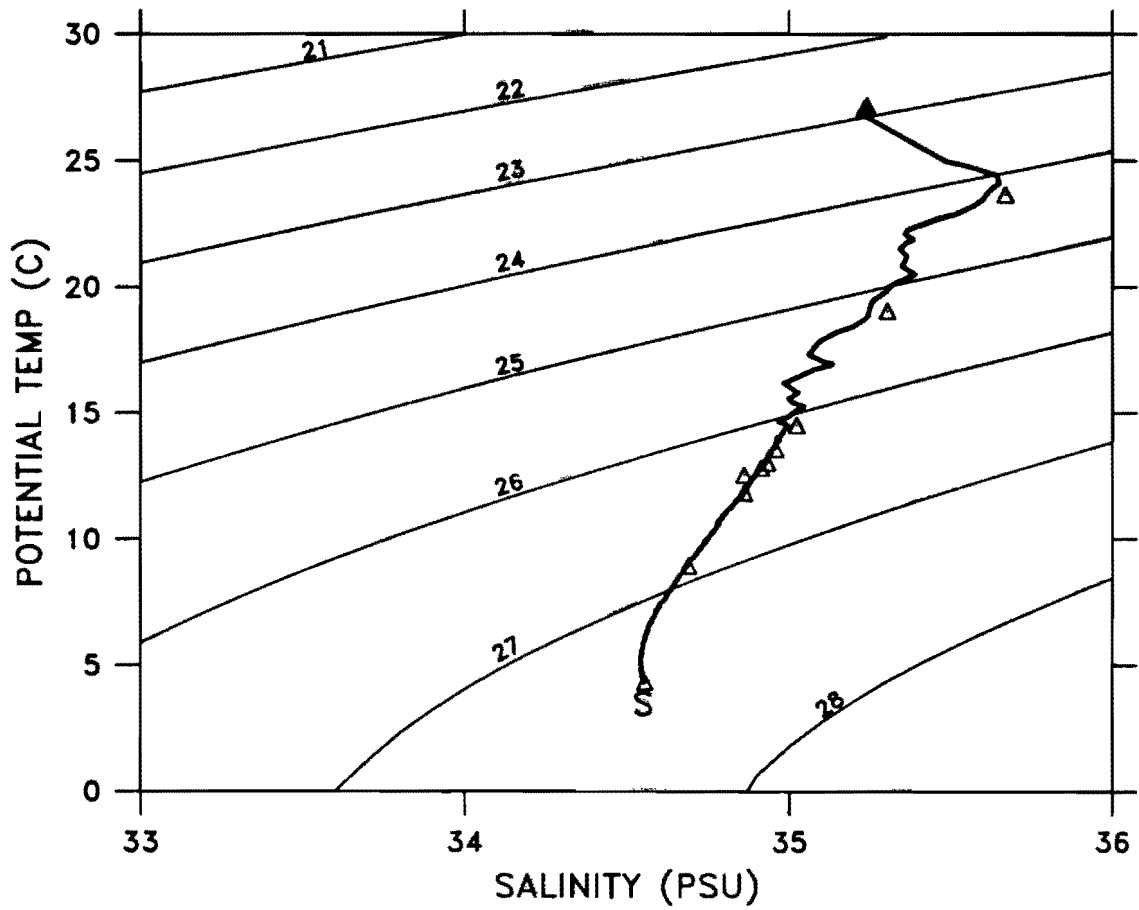


CAST EP1-90-MB -019 DATE 09 MAY 90 TIME 1125 GMT
 LAT 00 10.8S LONG 124 30.1W WEATHER 1 SEA STATE 2
 BAROMETER 09 WIND DIR 113 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.0 WET 25.0 DEPTH 4259 M

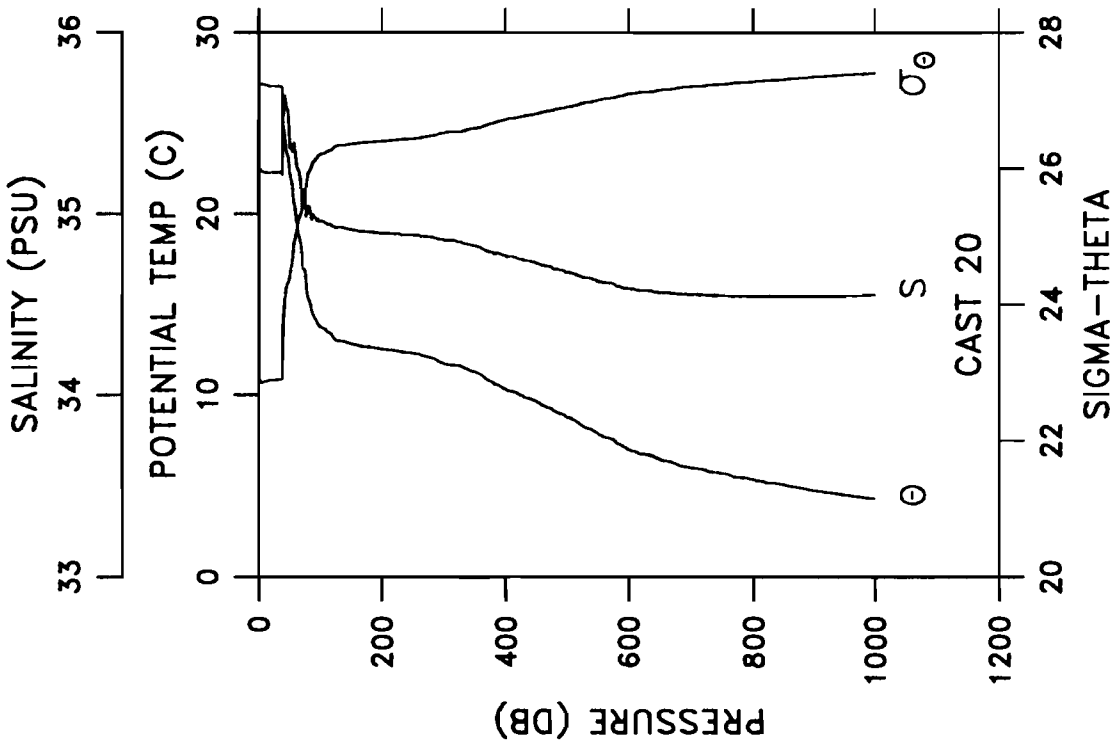


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.390 | 35.061 | 22.959 | 0.000 |
| 10 | 26.420 | 35.056 | 22.946 | 0.049 |
| 20 | 26.277 | 35.069 | 23.001 | 0.098 |
| 30 | 26.085 | 35.091 | 23.077 | 0.146 |
| 40 | 25.791 | 35.146 | 23.210 | 0.194 |
| 50 | 25.202 | 35.256 | 23.475 | 0.239 |
| 60 | 24.495 | 35.455 | 23.840 | 0.282 |
| 70 | 23.717 | 35.442 | 24.061 | 0.321 |
| 80 | 20.754 | 35.348 | 24.827 | 0.358 |
| 90 | 17.625 | 35.180 | 25.503 | 0.384 |
| 100 | 16.935 | 35.130 | 25.631 | 0.409 |
| 110 | 15.877 | 35.053 | 25.818 | 0.432 |
| 120 | 14.438 | 34.908 | 26.023 | 0.453 |
| 130 | 13.803 | 34.912 | 26.161 | 0.472 |
| 140 | 13.652 | 34.919 | 26.198 | 0.491 |
| 150 | 13.548 | 34.921 | 26.221 | 0.509 |
| 160 | 13.323 | 34.917 | 26.264 | 0.527 |
| 170 | 13.227 | 34.912 | 26.280 | 0.545 |
| 180 | 13.054 | 34.905 | 26.309 | 0.563 |
| 190 | 12.969 | 34.902 | 26.324 | 0.580 |
| 200 | 12.843 | 34.900 | 26.347 | 0.598 |
| 250 | 12.402 | 34.876 | 26.416 | 0.682 |
| 300 | 10.838 | 34.781 | 26.635 | 0.762 |
| 350 | 10.226 | 34.750 | 26.718 | 0.834 |
| 400 | 9.185 | 34.688 | 26.844 | 0.901 |
| 450 | 8.338 | 34.646 | 26.945 | 0.963 |
| 500 | 7.583 | 34.608 | 27.028 | 1.021 |
| 550 | 7.239 | 34.595 | 27.066 | 1.076 |
| 600 | 6.681 | 34.567 | 27.121 | 1.129 |
| 650 | 6.449 | 34.568 | 27.153 | 1.179 |
| 700 | 6.185 | 34.562 | 27.183 | 1.229 |
| 750 | 5.775 | 34.553 | 27.228 | 1.277 |
| 800 | 5.457 | 34.551 | 27.265 | 1.323 |
| 900 | 4.734 | 34.553 | 27.351 | 1.410 |
| 1000 | 4.449 | 34.559 | 27.388 | 1.490 |
| 1002 | 4.449 | 34.559 | 27.388 | 1.491 |

CAST EP1-90-MB -020 DATE 12 MAY 90 TIME 2201 GMT
LAT 04 53.6S LONG 110 05.4W

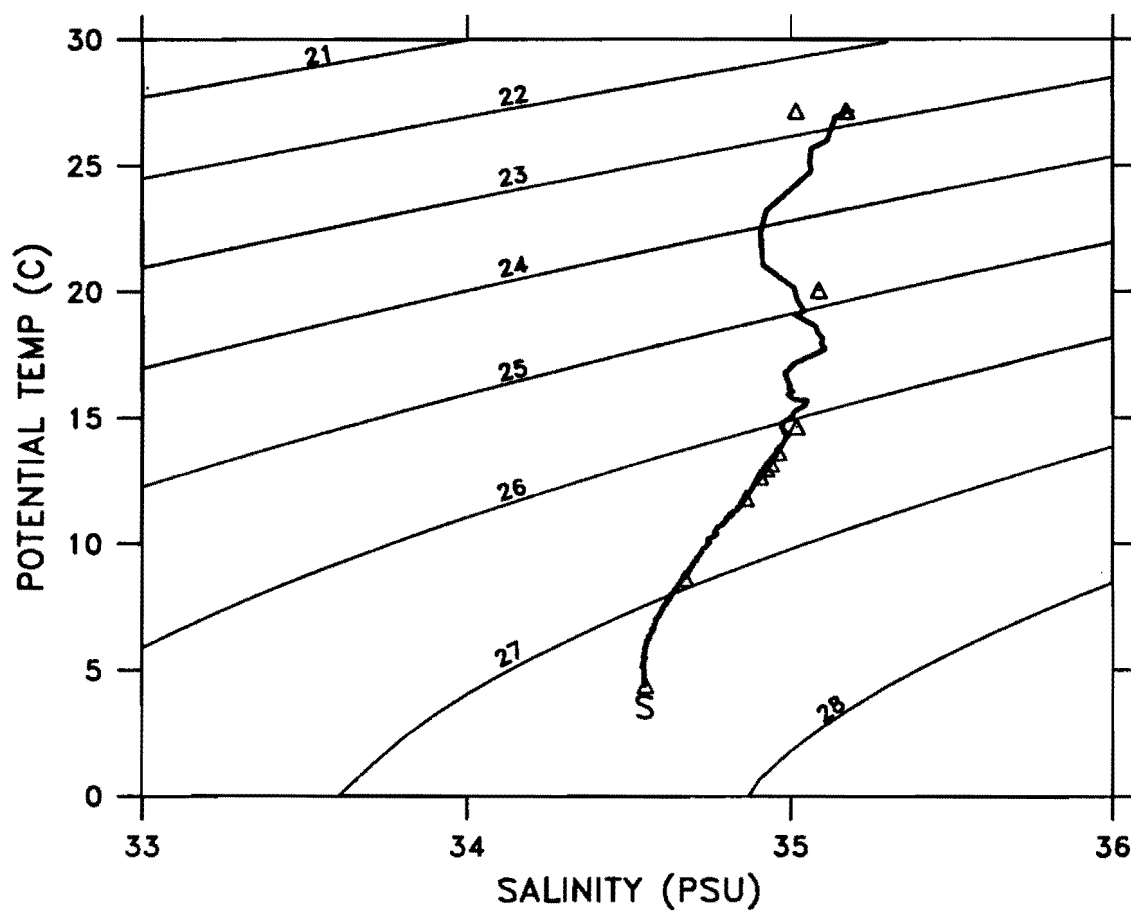


CAST EP1-90-MB -020 DATE 12 MAY 90 TIME 2201 GMT
 LAT 04 53.6S LONG 110 05.4W WEATHER 1 SEA STATE 2
 BAROMETER 10 WIND DIR 124 T SPD 18 KT VISIBILITY 7
 CLOUD AMOUNT DRY 28.0 WET 25.0 DEPTH 3502 M

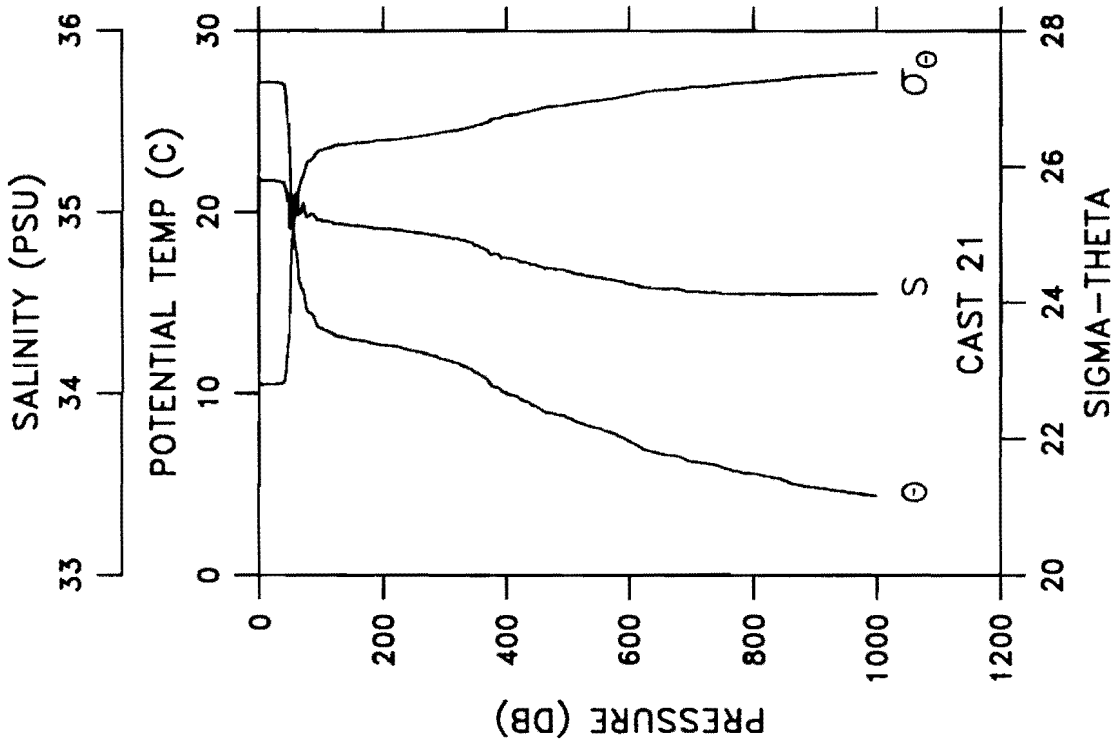


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.105 | 35.252 | 22.876 | 0.000 |
| 10 | 27.084 | 35.229 | 22.862 | 0.050 |
| 20 | 27.020 | 35.228 | 22.886 | 0.100 |
| 30 | 27.010 | 35.229 | 22.889 | 0.149 |
| 40 | 24.762 | 35.561 | 23.840 | 0.198 |
| 50 | 22.258 | 35.367 | 24.426 | 0.235 |
| 60 | 19.841 | 35.301 | 25.035 | 0.267 |
| 70 | 17.300 | 35.058 | 25.488 | 0.295 |
| 80 | 15.267 | 35.046 | 25.949 | 0.318 |
| 90 | 14.270 | 34.978 | 26.114 | 0.338 |
| 100 | 13.736 | 34.957 | 26.209 | 0.356 |
| 110 | 13.513 | 34.943 | 26.245 | 0.374 |
| 120 | 13.204 | 34.929 | 26.298 | 0.392 |
| 130 | 12.991 | 34.925 | 26.337 | 0.409 |
| 140 | 12.933 | 34.918 | 26.344 | 0.426 |
| 150 | 12.828 | 34.912 | 26.360 | 0.444 |
| 160 | 12.759 | 34.907 | 26.370 | 0.460 |
| 170 | 12.670 | 34.902 | 26.384 | 0.477 |
| 180 | 12.644 | 34.900 | 26.387 | 0.494 |
| 190 | 12.593 | 34.895 | 26.393 | 0.511 |
| 200 | 12.540 | 34.892 | 26.401 | 0.528 |
| 250 | 12.319 | 34.882 | 26.437 | 0.611 |
| 300 | 11.771 | 34.855 | 26.520 | 0.692 |
| 350 | 11.289 | 34.824 | 26.586 | 0.770 |
| 400 | 10.329 | 34.769 | 26.715 | 0.843 |
| 450 | 9.629 | 34.723 | 26.799 | 0.912 |
| 500 | 8.767 | 34.676 | 26.902 | 0.977 |
| 550 | 7.874 | 34.630 | 27.002 | 1.036 |
| 600 | 7.011 | 34.588 | 27.093 | 1.092 |
| 650 | 6.479 | 34.564 | 27.146 | 1.144 |
| 700 | 6.001 | 34.555 | 27.201 | 1.193 |
| 750 | 5.703 | 34.549 | 27.234 | 1.240 |
| 800 | 5.368 | 34.542 | 27.269 | 1.286 |
| 850 | 4.762 | 34.544 | 27.341 | 1.372 |
| 900 | 4.321 | 34.552 | 27.396 | 1.453 |
| 1000 | 4.320 | 34.552 | 27.396 | 1.453 |

CAST EP1-90-MB -021 DATE 13 MAY 90 TIME 0259 GMT
LAT 04 00.1S LONG 110 28.5W

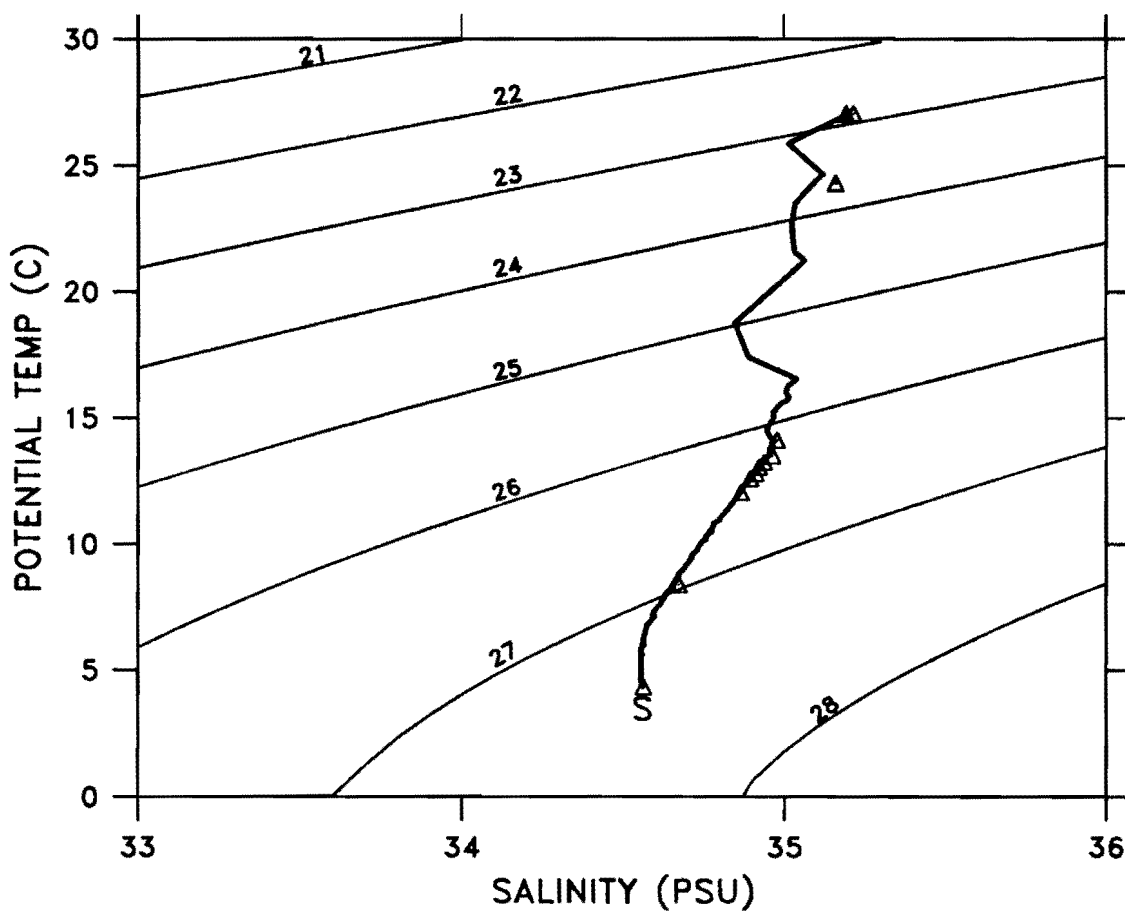


CAST EP1-90-MB -021 DATE 13 MAY 90 TIME 0259 GMT
 LAT 04 00.1S LONG 110 28.5W WEATHER 1 SEA STATE 2
 BAROMETER 10 WIND DIR 144 T SPD 21 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.3 WET 24.3 DEPTH 3786 M

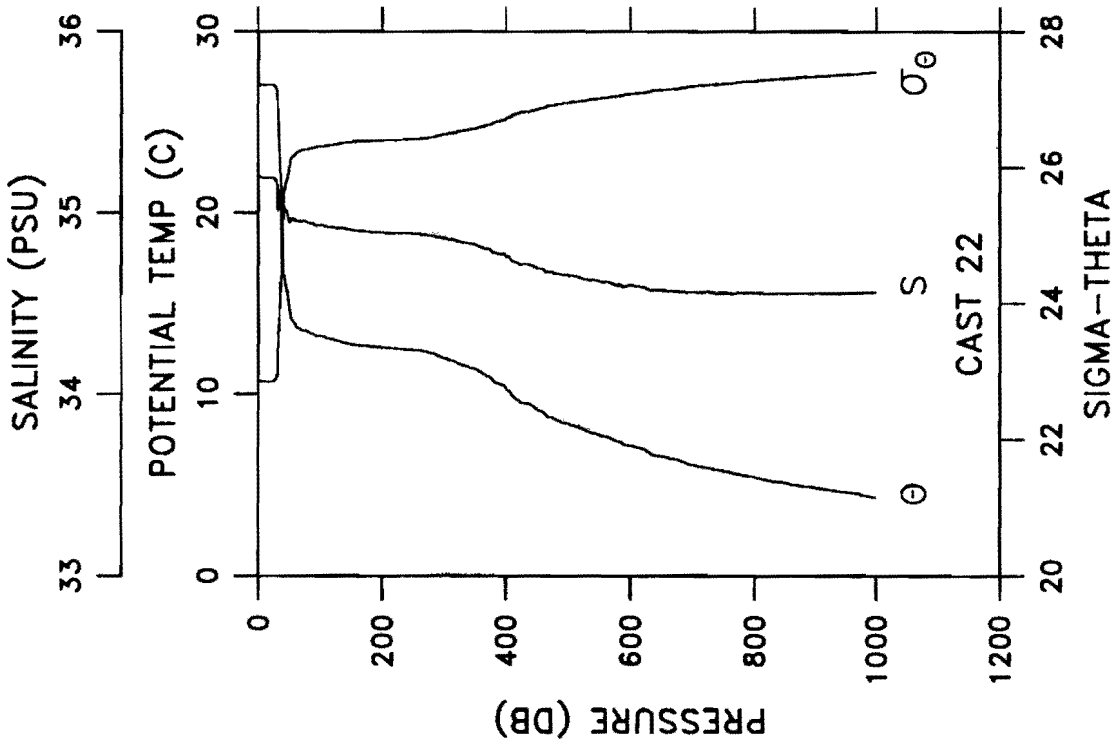


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.146 | 35.191 | 22.817 | 0.000 |
| 10 | 27.162 | 35.173 | 22.799 | 0.080 |
| 20 | 27.166 | 35.174 | 22.798 | 0.101 |
| 30 | 27.144 | 35.170 | 22.802 | 0.152 |
| 40 | 27.065 | 35.166 | 22.824 | 0.202 |
| 50 | 23.198 | 34.924 | 23.820 | 0.250 |
| 60 | 17.928 | 35.094 | 25.363 | 0.281 |
| 70 | 15.707 | 35.034 | 25.841 | 0.305 |
| 80 | 14.463 | 34.980 | 26.074 | 0.325 |
| 90 | 14.098 | 34.981 | 26.152 | 0.344 |
| 100 | 13.591 | 34.956 | 26.240 | 0.363 |
| 110 | 13.444 | 34.952 | 26.266 | 0.380 |
| 120 | 13.232 | 34.934 | 26.295 | 0.398 |
| 130 | 13.106 | 34.934 | 26.321 | 0.416 |
| 140 | 13.057 | 34.930 | 26.328 | 0.433 |
| 150 | 12.962 | 34.924 | 26.342 | 0.450 |
| 160 | 12.923 | 34.922 | 26.349 | 0.467 |
| 170 | 12.876 | 34.920 | 26.356 | 0.484 |
| 180 | 12.775 | 34.914 | 26.372 | 0.501 |
| 190 | 12.692 | 34.910 | 26.385 | 0.518 |
| 200 | 12.659 | 34.906 | 26.389 | 0.535 |
| 250 | 12.352 | 34.890 | 26.436 | 0.619 |
| 300 | 11.860 | 34.862 | 26.509 | 0.700 |
| 350 | 11.133 | 34.819 | 26.611 | 0.778 |
| 400 | 10.022 | 34.746 | 26.750 | 0.850 |
| 450 | 9.251 | 34.703 | 26.845 | 0.917 |
| 500 | 8.661 | 34.671 | 26.915 | 0.979 |
| 550 | 8.092 | 34.640 | 26.977 | 1.039 |
| 600 | 7.365 | 34.600 | 27.053 | 1.096 |
| 650 | 6.700 | 34.579 | 27.128 | 1.149 |
| 700 | 6.263 | 34.564 | 27.174 | 1.200 |
| 750 | 5.939 | 34.553 | 27.207 | 1.249 |
| 800 | 5.598 | 34.550 | 27.247 | 1.295 |
| 800 | 4.849 | 34.548 | 27.334 | 1.383 |
| 999 | 4.390 | 34.550 | 27.387 | 1.464 |

CAST EP1-90-MB -022 DATE 13 MAY 90 TIME 0838 GMT
LAT 02 59.6S LONG 110 54.2W

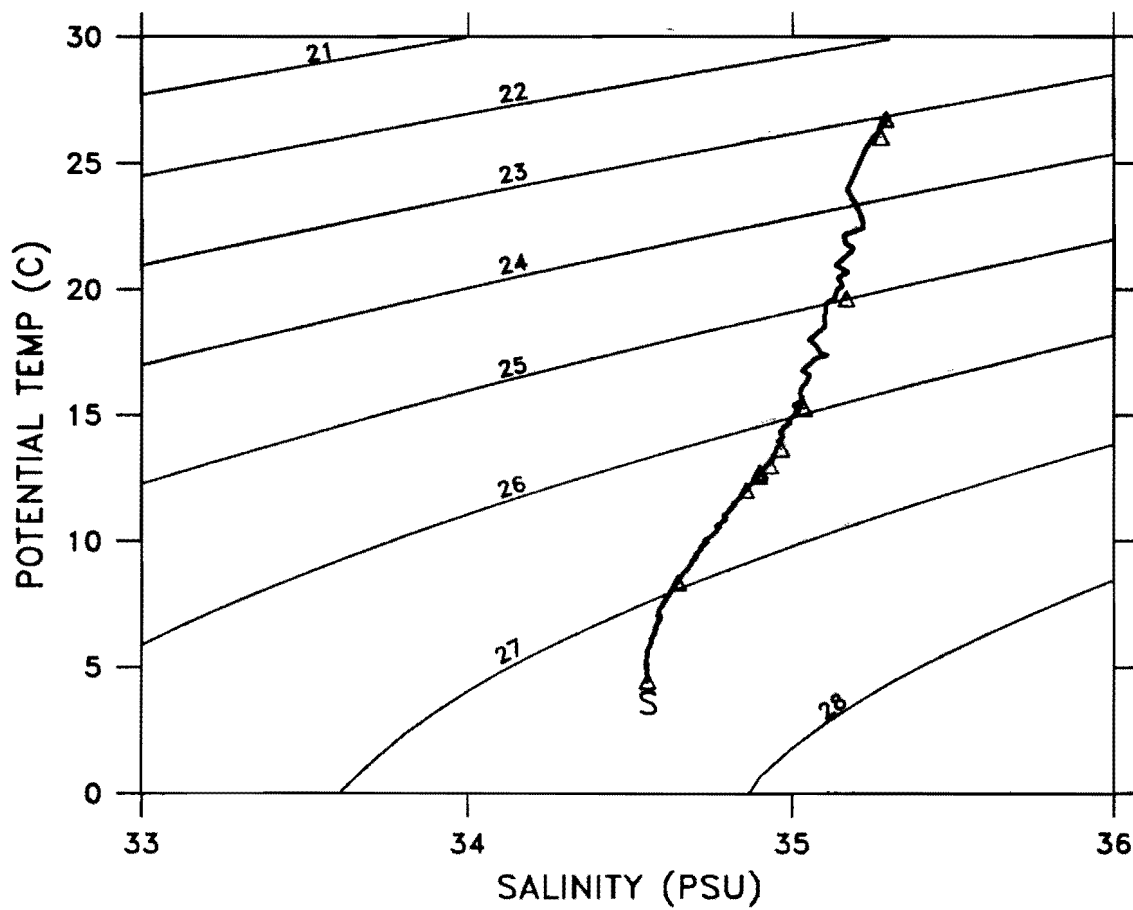


CAST EP1-90-MB -022 DATE 13 MAY 90 TIME 0838 GMT
 LAT 02 59.6S LONG 110 54.2W WEATHER 1 SEA STATE 2
 BAROMETER 11 WIND DIR 140 T SPD 18 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.0 WET 24.5 DEPTH 3940 M

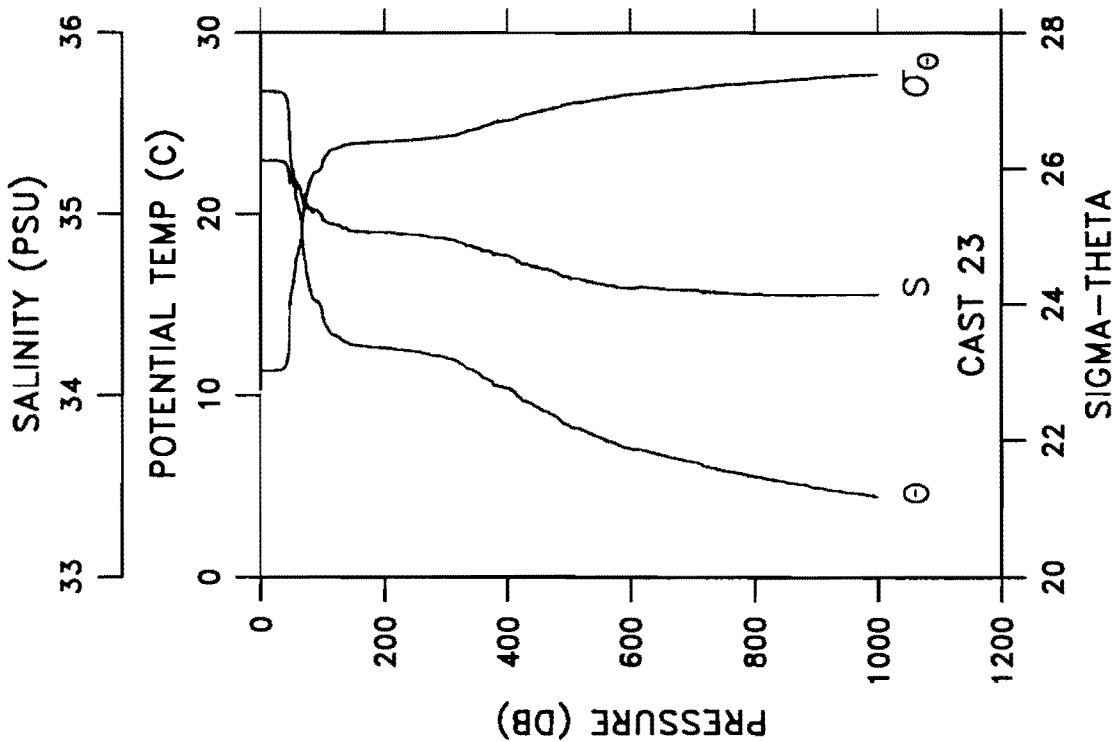


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.044 | 35.198 | 22.854 | 0.000 |
| 10 | 27.040 | 35.193 | 22.853 | 0.050 |
| 20 | 27.052 | 35.193 | 22.849 | 0.100 |
| 30 | 26.849 | 35.172 | 22.898 | 0.150 |
| 40 | 17.403 | 34.888 | 25.333 | 0.190 |
| 50 | 15.025 | 34.966 | 25.941 | 0.213 |
| 60 | 13.880 | 34.965 | 26.186 | 0.232 |
| 70 | 13.532 | 34.948 | 26.245 | 0.250 |
| 80 | 13.470 | 34.946 | 26.257 | 0.268 |
| 90 | 13.306 | 34.937 | 26.283 | 0.285 |
| 100 | 13.188 | 34.932 | 26.303 | 0.303 |
| 110 | 13.096 | 34.923 | 26.314 | 0.320 |
| 120 | 13.034 | 34.920 | 26.325 | 0.337 |
| 130 | 12.929 | 34.914 | 26.341 | 0.355 |
| 140 | 12.837 | 34.913 | 26.359 | 0.372 |
| 150 | 12.752 | 34.905 | 26.370 | 0.388 |
| 160 | 12.699 | 34.901 | 26.377 | 0.405 |
| 170 | 12.667 | 34.899 | 26.381 | 0.422 |
| 180 | 12.639 | 34.895 | 26.384 | 0.439 |
| 190 | 12.607 | 34.893 | 26.388 | 0.456 |
| 200 | 12.576 | 34.891 | 26.393 | 0.473 |
| 250 | 12.428 | 34.883 | 26.416 | 0.556 |
| 300 | 11.991 | 34.861 | 26.483 | 0.639 |
| 350 | 11.411 | 34.825 | 26.564 | 0.718 |
| 400 | 10.320 | 34.757 | 26.707 | 0.793 |
| 450 | 9.147 | 34.693 | 26.855 | 0.859 |
| 500 | 8.368 | 34.653 | 26.946 | 0.921 |
| 550 | 7.753 | 34.620 | 27.012 | 0.979 |
| 600 | 7.161 | 34.598 | 27.080 | 1.035 |
| 650 | 6.591 | 34.572 | 27.138 | 1.087 |
| 700 | 6.122 | 34.563 | 27.192 | 1.137 |
| 750 | 5.785 | 34.557 | 27.230 | 1.185 |
| 800 | 5.460 | 34.556 | 27.269 | 1.230 |
| 900 | 4.856 | 34.556 | 27.340 | 1.317 |
| 1000 | 4.340 | 34.560 | 27.400 | 1.397 |
| 1000 | 4.340 | 34.560 | 27.400 | 1.397 |

CAST EP1-90-MB -023 DATE 13 MAY 90 TIME 1438 GMT
LAT 02 03.3S LONG 111 20.1W

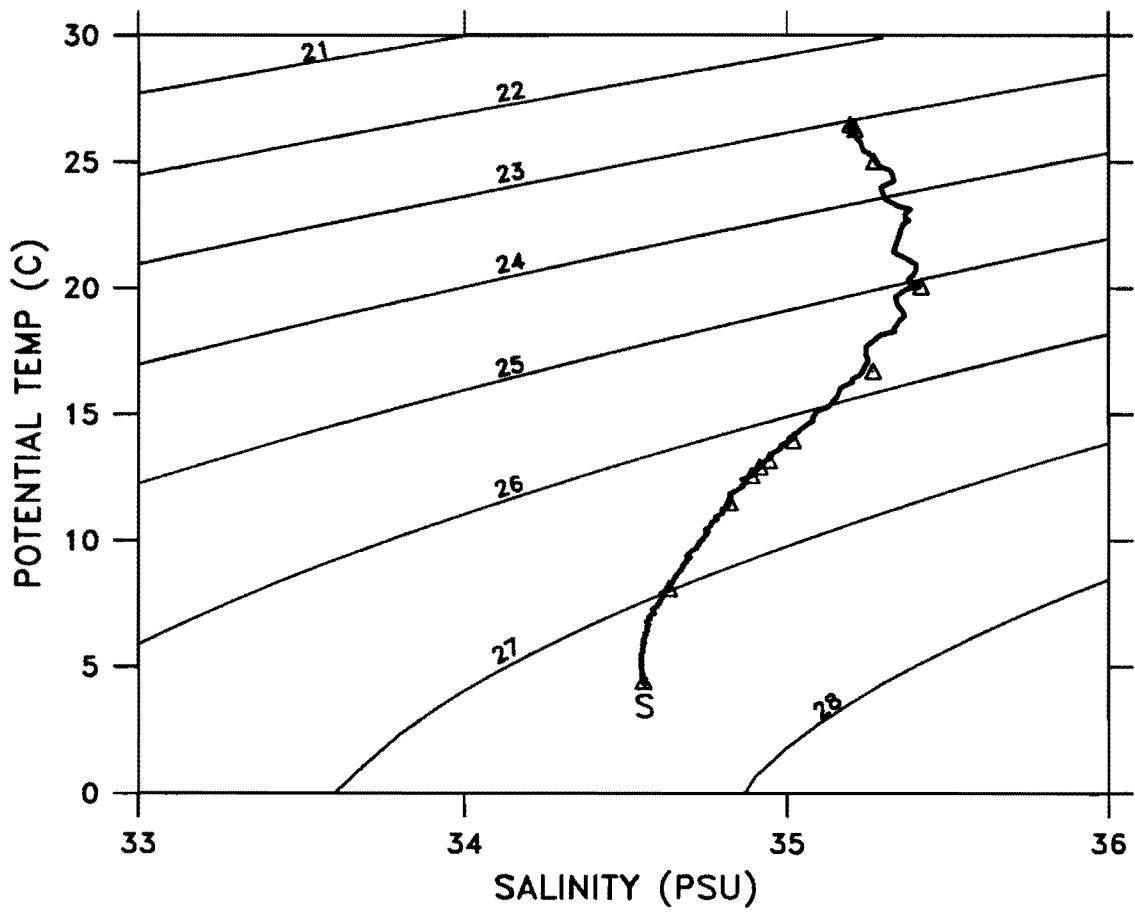


CAST EP1-90-MB -023 DATE 13 MAY 90 TIME 1438 GMT
 LAT 02 03.3S LONG 111 20.1W WEATHER 2 SEA STATE 2
 BAROMETER 12 WIND DIR 129 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.7 WET 25.0 DEPTH 4071 M

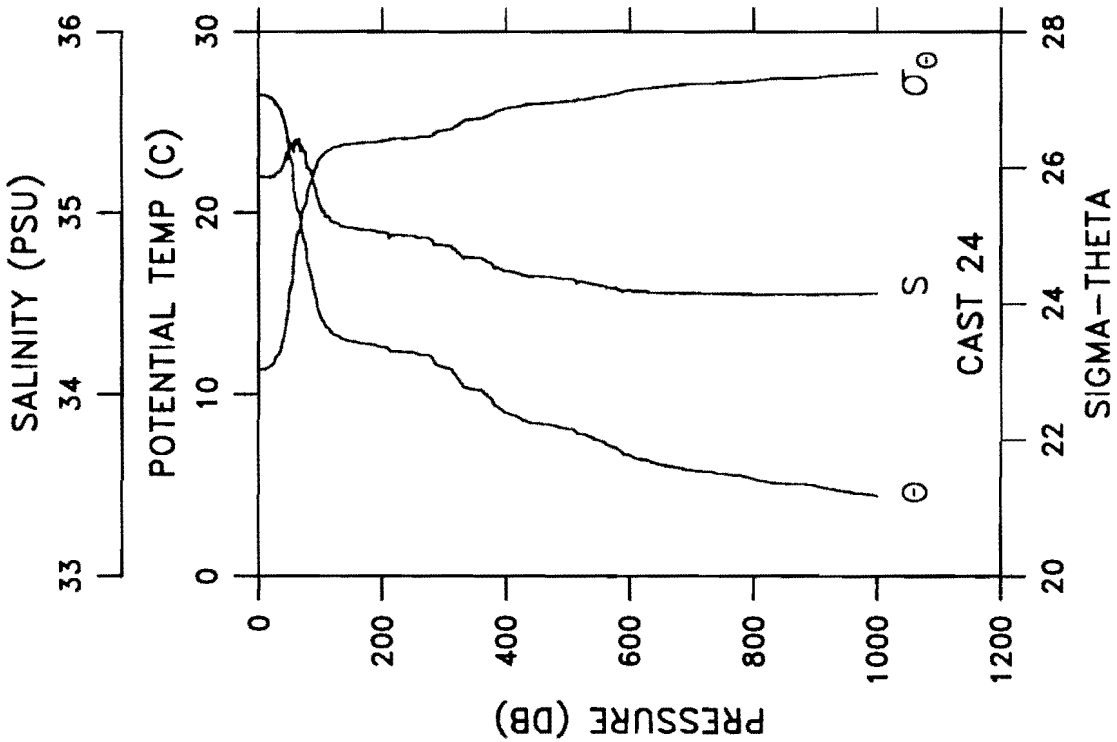


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.730 | 35.302 | 23.033 | 0.000 |
| 10 | 26.734 | 35.295 | 23.027 | 0.048 |
| 20 | 26.737 | 35.295 | 23.026 | 0.097 |
| 30 | 26.710 | 35.292 | 23.033 | 0.145 |
| 40 | 26.540 | 35.287 | 23.082 | 0.193 |
| 50 | 22.690 | 35.218 | 24.190 | 0.238 |
| 60 | 20.598 | 35.158 | 24.724 | 0.272 |
| 70 | 17.759 | 35.073 | 25.369 | 0.302 |
| 80 | 15.788 | 35.026 | 25.817 | 0.326 |
| 90 | 15.182 | 35.021 | 25.948 | 0.347 |
| 100 | 14.347 | 34.962 | 26.085 | 0.368 |
| 110 | 13.556 | 34.950 | 26.242 | 0.386 |
| 120 | 13.272 | 34.938 | 26.291 | 0.404 |
| 130 | 13.077 | 34.924 | 26.319 | 0.421 |
| 140 | 12.900 | 34.917 | 26.349 | 0.438 |
| 150 | 12.759 | 34.904 | 26.367 | 0.455 |
| 160 | 12.725 | 34.902 | 26.372 | 0.472 |
| 170 | 12.689 | 34.901 | 26.379 | 0.489 |
| 180 | 12.634 | 34.898 | 26.387 | 0.506 |
| 190 | 12.622 | 34.897 | 26.389 | 0.523 |
| 200 | 12.613 | 34.897 | 26.391 | 0.540 |
| 250 | 12.390 | 34.883 | 26.424 | 0.623 |
| 300 | 12.063 | 34.862 | 26.470 | 0.706 |
| 350 | 11.254 | 34.811 | 26.583 | 0.785 |
| 400 | 10.385 | 34.770 | 26.706 | 0.858 |
| 450 | 9.333 | 34.706 | 26.834 | 0.928 |
| 500 | 8.349 | 34.649 | 26.946 | 0.988 |
| 550 | 7.679 | 34.614 | 27.019 | 1.046 |
| 600 | 7.052 | 34.590 | 27.088 | 1.101 |
| 650 | 6.714 | 34.587 | 27.133 | 1.154 |
| 700 | 6.342 | 34.581 | 27.178 | 1.204 |
| 750 | 5.856 | 34.564 | 27.227 | 1.252 |
| 800 | 5.539 | 34.558 | 27.261 | 1.298 |
| 900 | 4.915 | 34.556 | 27.334 | 1.386 |
| 1000 | 4.443 | 34.556 | 27.386 | 1.467 |
| 1000 | 4.443 | 34.556 | 27.386 | 1.467 |

CAST EP1-90-MB -024 DATE 13 MAY 90 TIME 2358 GMT
LAT 00 59.8S LONG 110 39.2W

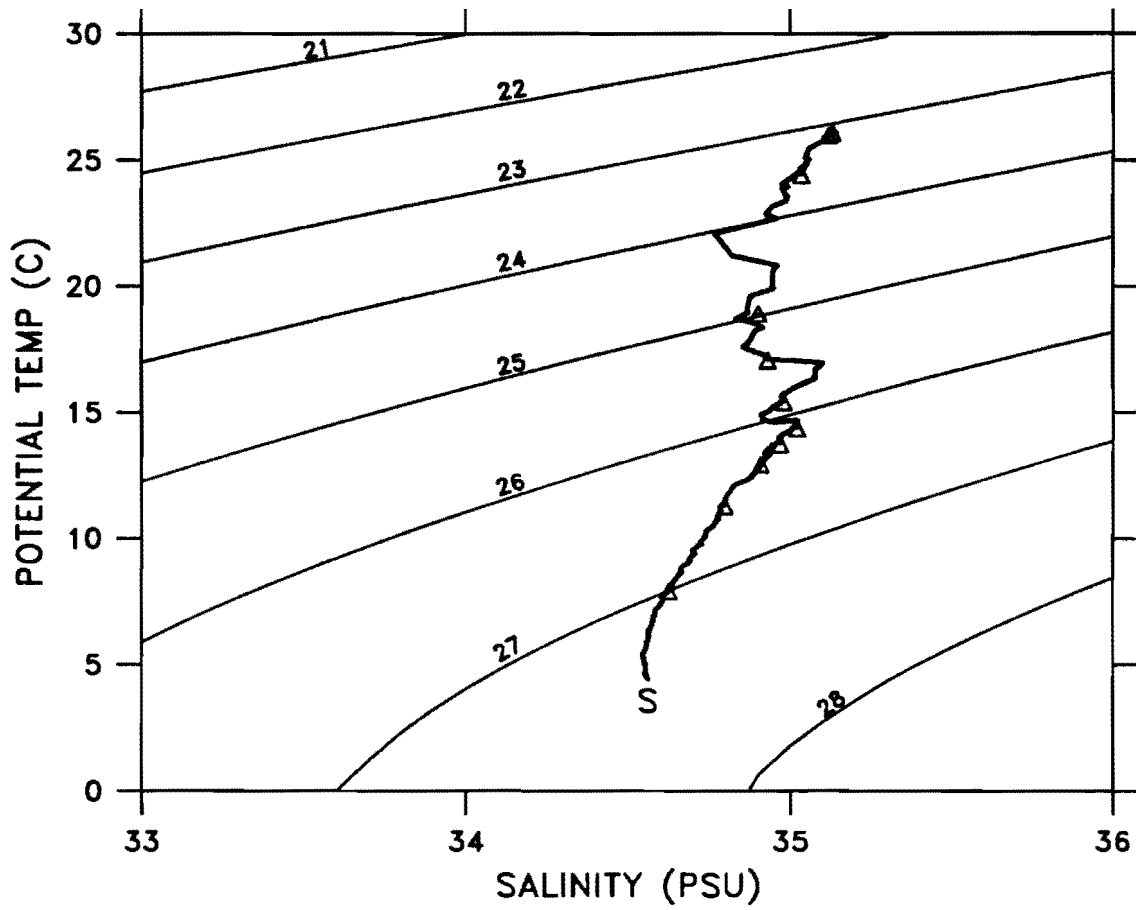


CAST EP1-90-MB -024 DATE 13 MAY 90 TIME 2358 GMT
 LAT 00 59.8S LONG 110 39.2W WEATHER 2 SEA STATE 2
 BAROMETER 08 WIND DIR 124 T SPD 24 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.0 DEPTH 4071 M

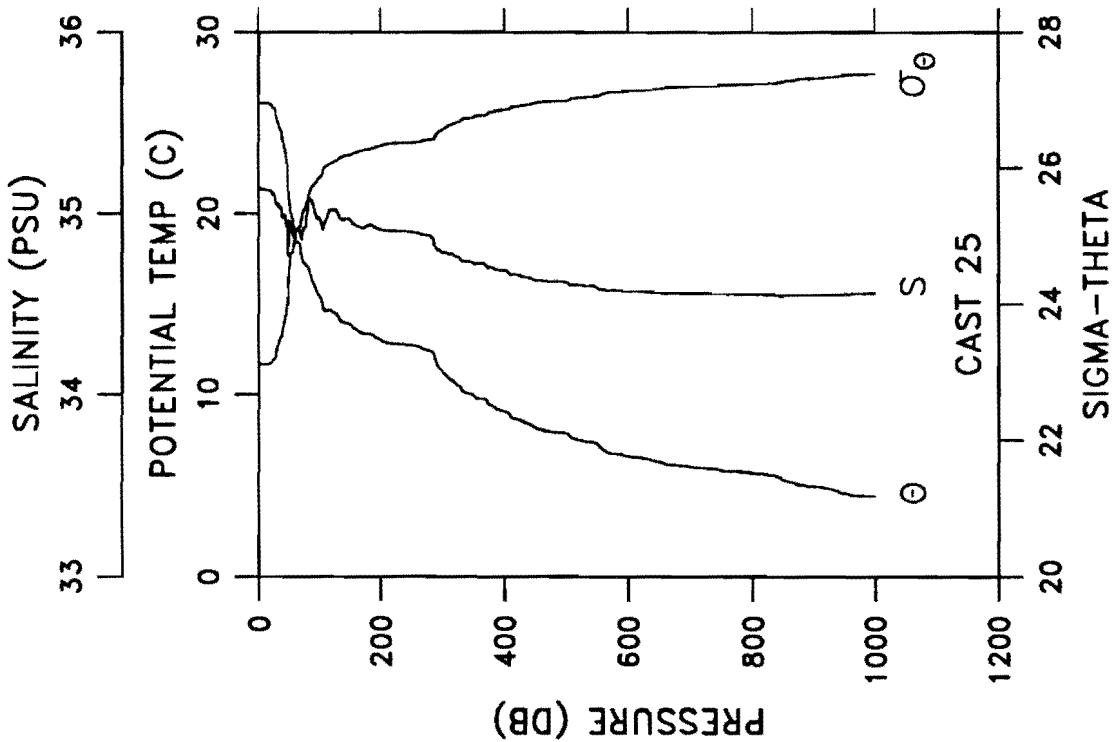


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.507 | 35.198 | 23.025 | 0.000 |
| 10 | 26.503 | 35.197 | 23.026 | 0.048 |
| 20 | 26.325 | 35.200 | 23.084 | 0.096 |
| 30 | 25.920 | 35.219 | 23.225 | 0.144 |
| 40 | 25.232 | 35.269 | 23.476 | 0.189 |
| 50 | 23.143 | 35.384 | 24.185 | 0.230 |
| 60 | 20.580 | 35.397 | 24.911 | 0.265 |
| 70 | 18.890 | 35.368 | 25.332 | 0.294 |
| 80 | 17.037 | 35.249 | 25.698 | 0.319 |
| 90 | 15.548 | 35.142 | 25.961 | 0.341 |
| 100 | 14.217 | 35.024 | 26.160 | 0.360 |
| 110 | 13.664 | 34.980 | 26.242 | 0.379 |
| 120 | 13.285 | 34.948 | 26.295 | 0.397 |
| 130 | 13.157 | 34.933 | 26.310 | 0.414 |
| 140 | 12.980 | 34.921 | 26.336 | 0.431 |
| 150 | 12.912 | 34.918 | 26.347 | 0.448 |
| 160 | 12.836 | 34.909 | 26.356 | 0.466 |
| 170 | 12.776 | 34.905 | 26.365 | 0.483 |
| 180 | 12.754 | 34.904 | 26.368 | 0.500 |
| 190 | 12.700 | 34.897 | 26.373 | 0.516 |
| 200 | 12.588 | 34.892 | 26.392 | 0.533 |
| 250 | 12.298 | 34.873 | 26.433 | 0.616 |
| 300 | 11.481 | 34.818 | 26.546 | 0.897 |
| 350 | 10.252 | 34.751 | 26.715 | 0.771 |
| 400 | 8.977 | 34.680 | 26.871 | 0.837 |
| 450 | 8.398 | 34.650 | 26.939 | 0.899 |
| 500 | 8.111 | 34.635 | 26.971 | 0.958 |
| 550 | 7.471 | 34.600 | 27.037 | 1.015 |
| 600 | 6.647 | 34.572 | 27.130 | 1.068 |
| 650 | 6.134 | 34.560 | 27.188 | 1.118 |
| 700 | 5.820 | 34.557 | 27.225 | 1.165 |
| 750 | 5.624 | 34.554 | 27.248 | 1.211 |
| 800 | 5.353 | 34.549 | 27.276 | 1.257 |
| 900 | 4.967 | 34.549 | 27.322 | 1.343 |
| 1000 | 4.421 | 34.557 | 27.389 | 1.425 |
| 1017 | 4.293 | 34.560 | 27.405 | 1.438 |

CAST EP1-90-MB -025 DATE 14 MAY 90 TIME 1043 GMT
LAT 00 01.2S LONG 109 56.8W

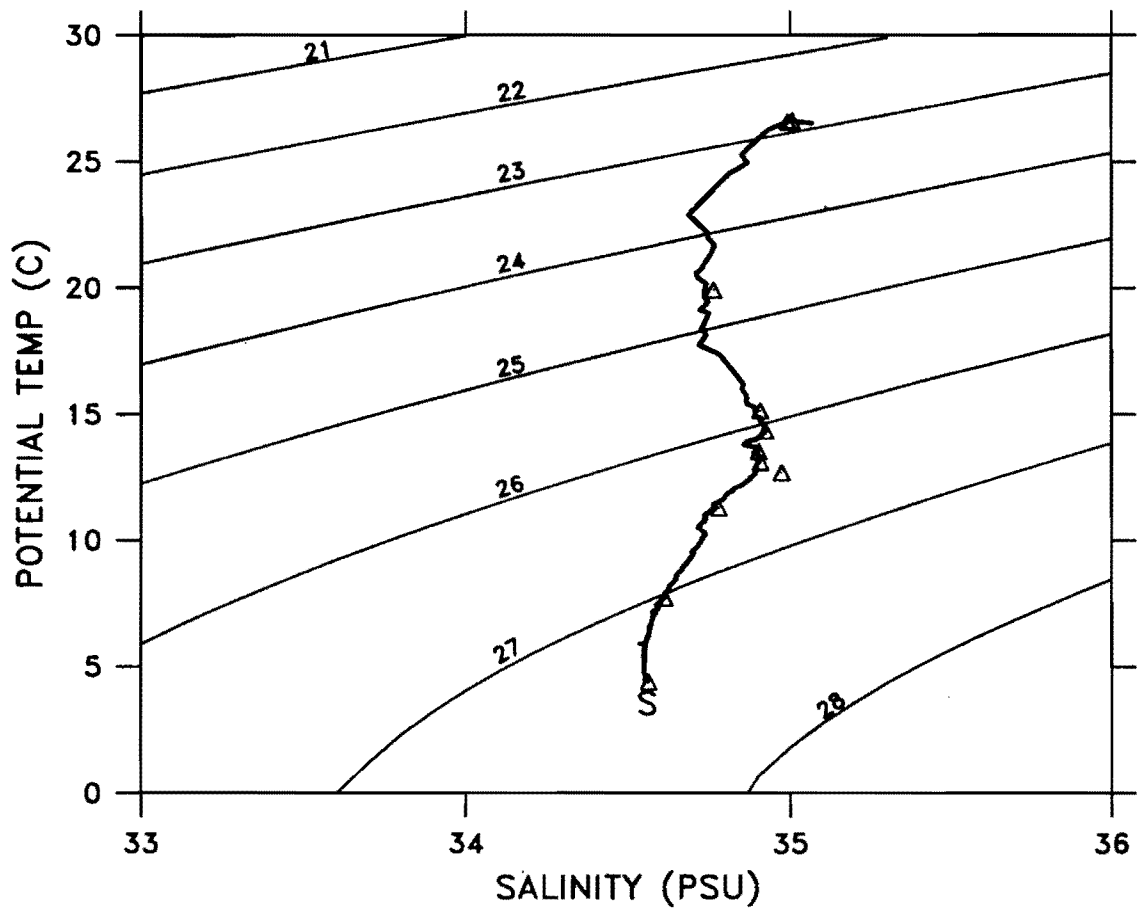


CAST EPI-90-MB -025 DATE 14 MAY 90 TIME 1043 GMT
 LAT 00 01.2S LONG 109 56.8W WEATHER 1 SEA STATE 2
 BAROMETER 08 WIND DIR 115 T SPD 12 KT VISIBILITY 7
 CLOUD AMOUNT DRY 25.5 WET 24.0 DEPTH 3833 M

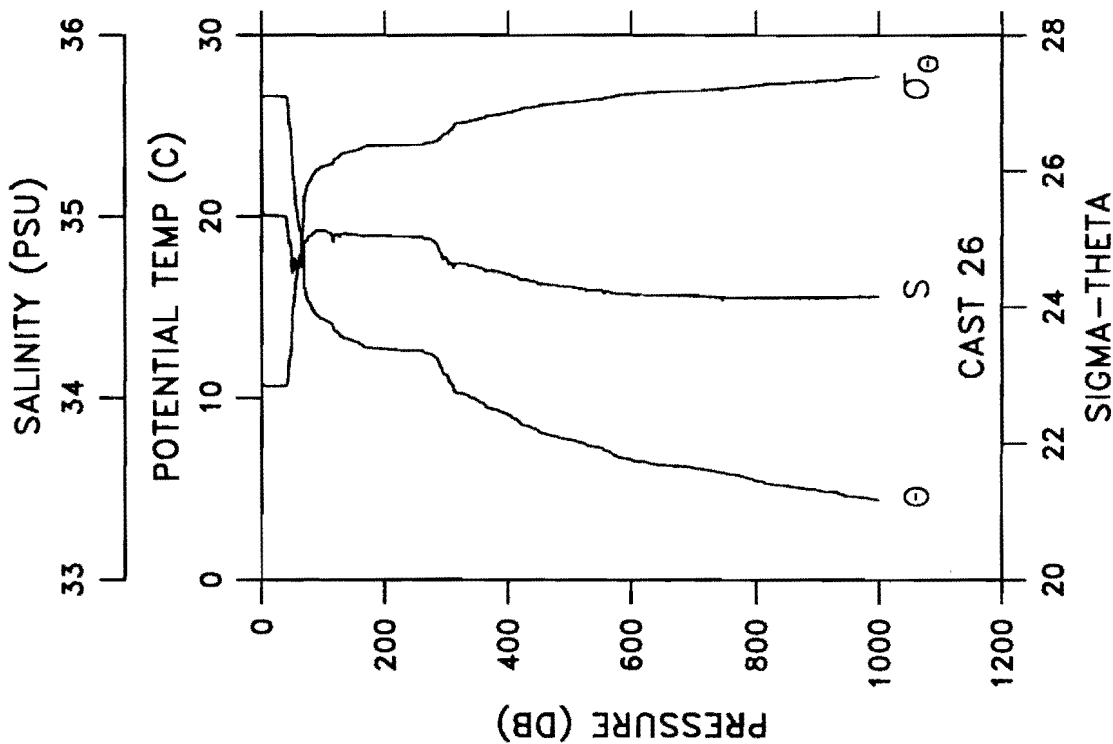


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.085 | 35.140 | 23.114 | 0.000 |
| 10 | 26.099 | 35.132 | 23.104 | 0.048 |
| 20 | 25.995 | 35.120 | 23.127 | 0.095 |
| 30 | 25.123 | 35.046 | 23.340 | 0.142 |
| 40 | 23.966 | 34.994 | 23.649 | 0.186 |
| 50 | 20.845 | 34.959 | 24.506 | 0.228 |
| 60 | 18.720 | 34.830 | 24.964 | 0.258 |
| 70 | 17.757 | 34.869 | 25.233 | 0.287 |
| 80 | 17.061 | 34.998 | 25.499 | 0.313 |
| 90 | 16.152 | 35.038 | 25.743 | 0.336 |
| 100 | 15.398 | 34.972 | 25.863 | 0.359 |
| 110 | 14.624 | 34.960 | 26.024 | 0.379 |
| 120 | 14.615 | 35.018 | 26.071 | 0.399 |
| 130 | 14.282 | 34.998 | 26.126 | 0.419 |
| 140 | 13.930 | 34.964 | 26.175 | 0.438 |
| 150 | 13.825 | 34.961 | 26.194 | 0.456 |
| 160 | 13.547 | 34.932 | 26.230 | 0.475 |
| 170 | 13.358 | 34.919 | 26.258 | 0.493 |
| 180 | 13.330 | 34.934 | 26.276 | 0.511 |
| 190 | 13.175 | 34.923 | 26.299 | 0.529 |
| 200 | 12.992 | 34.910 | 26.326 | 0.546 |
| 250 | 12.708 | 34.897 | 26.372 | 0.632 |
| 300 | 11.277 | 34.780 | 26.554 | 0.715 |
| 350 | 9.966 | 34.727 | 26.745 | 0.787 |
| 400 | 9.075 | 34.685 | 26.860 | 0.853 |
| 450 | 8.183 | 34.631 | 26.957 | 0.914 |
| 500 | 7.883 | 34.620 | 26.993 | 0.971 |
| 550 | 7.266 | 34.592 | 27.060 | 1.027 |
| 600 | 6.596 | 34.573 | 27.138 | 1.079 |
| 650 | 6.301 | 34.563 | 27.169 | 1.129 |
| 700 | 6.021 | 34.561 | 27.204 | 1.177 |
| 750 | 5.834 | 34.556 | 27.223 | 1.225 |
| 800 | 5.697 | 34.556 | 27.240 | 1.272 |
| 900 | 4.981 | 34.552 | 27.323 | 1.361 |
| 1000 | 4.428 | 34.561 | 27.391 | 1.442 |
| 1000 | 4.428 | 34.561 | 27.391 | 1.442 |

CAST EP1-90-MB -026 DATE 15 MAY 90 TIME 0745 GMT
LAT 01 00.1N LONG 110 06.0W

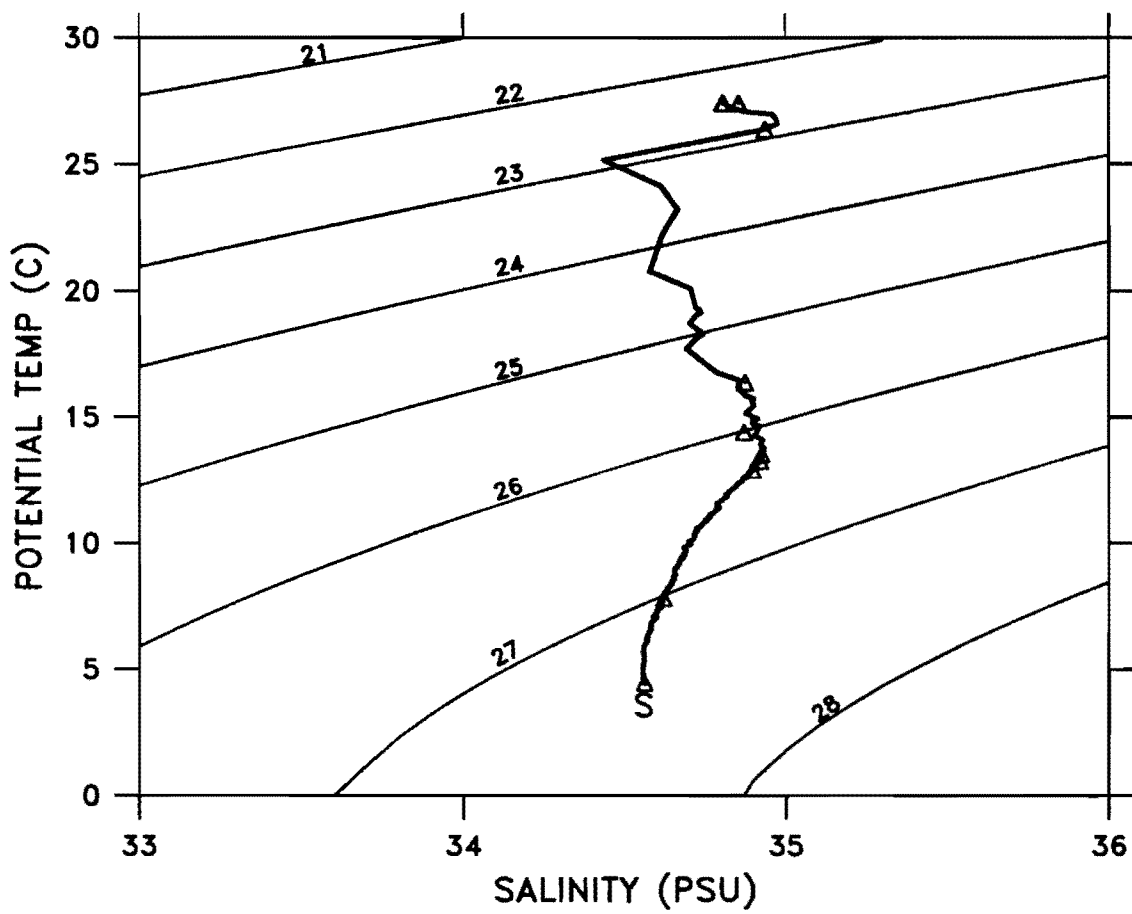


CAST EP1-90-MB -026 DATE 15 MAY 90 TIME 0745 GMT
 LAT 01 00.1N LONG 110 06.0W WEATHER 1 SEA STATE 2
 BAROMETER 10 WIND DIR 119 T SPD 22 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.3 WET 25.0 DEPTH 3779 M

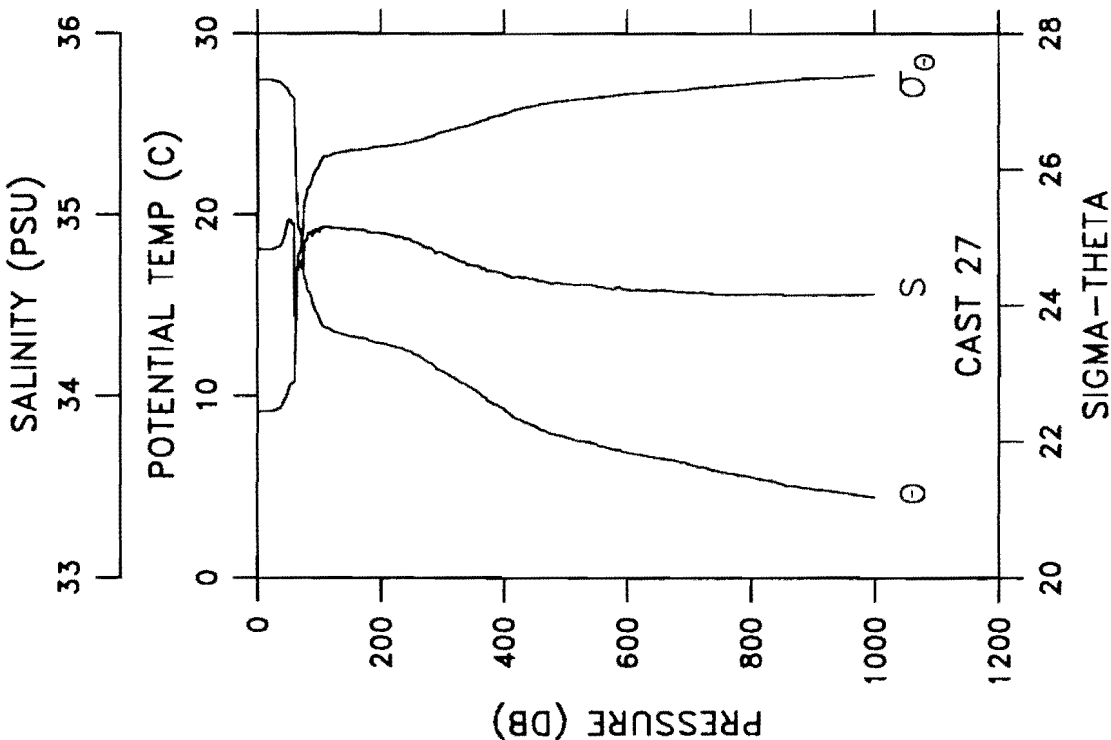


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.538 | 35.067 | 22.917 | 0.000 |
| 10 | 26.633 | 35.004 | 22.840 | 0.050 |
| 20 | 26.630 | 35.003 | 22.840 | 0.100 |
| 30 | 26.629 | 35.003 | 22.840 | 0.150 |
| 40 | 26.592 | 34.993 | 22.844 | 0.201 |
| 50 | 22.913 | 34.688 | 23.724 | 0.248 |
| 60 | 19.628 | 34.736 | 24.659 | 0.284 |
| 70 | 16.023 | 34.853 | 25.630 | 0.314 |
| 80 | 15.071 | 34.895 | 25.876 | 0.336 |
| 90 | 14.545 | 34.922 | 26.012 | 0.357 |
| 100 | 14.306 | 34.924 | 26.064 | 0.376 |
| 110 | 14.154 | 34.911 | 26.086 | 0.396 |
| 120 | 13.680 | 34.900 | 26.177 | 0.415 |
| 130 | 13.338 | 34.904 | 26.250 | 0.433 |
| 140 | 13.222 | 34.903 | 26.274 | 0.451 |
| 150 | 13.114 | 34.901 | 26.294 | 0.469 |
| 160 | 12.952 | 34.896 | 26.323 | 0.487 |
| 170 | 12.763 | 34.895 | 26.359 | 0.504 |
| 180 | 12.734 | 34.895 | 26.365 | 0.521 |
| 190 | 12.721 | 34.894 | 26.367 | 0.538 |
| 200 | 12.695 | 34.893 | 26.372 | 0.555 |
| 250 | 12.605 | 34.889 | 26.386 | 0.640 |
| 300 | 11.288 | 34.773 | 26.547 | 0.723 |
| 350 | 9.903 | 34.725 | 26.754 | 0.794 |
| 400 | 9.070 | 34.682 | 26.858 | 0.859 |
| 450 | 8.148 | 34.628 | 26.960 | 0.920 |
| 500 | 7.707 | 34.611 | 27.012 | 0.977 |
| 550 | 7.267 | 34.593 | 27.061 | 1.033 |
| 600 | 6.630 | 34.569 | 27.130 | 1.085 |
| 650 | 6.330 | 34.567 | 27.168 | 1.135 |
| 700 | 6.181 | 34.562 | 27.183 | 1.184 |
| 750 | 5.884 | 34.555 | 27.216 | 1.232 |
| 800 | 5.466 | 34.551 | 27.264 | 1.279 |
| 900 | 4.954 | 34.549 | 27.323 | 1.366 |
| 999 | 4.401 | 34.558 | 27.392 | 1.447 |

CAST EP1-90-MB -027 DATE 15 MAY 90 TIME 1300 GMT
LAT 01 58.1N LONG 110 11.2W

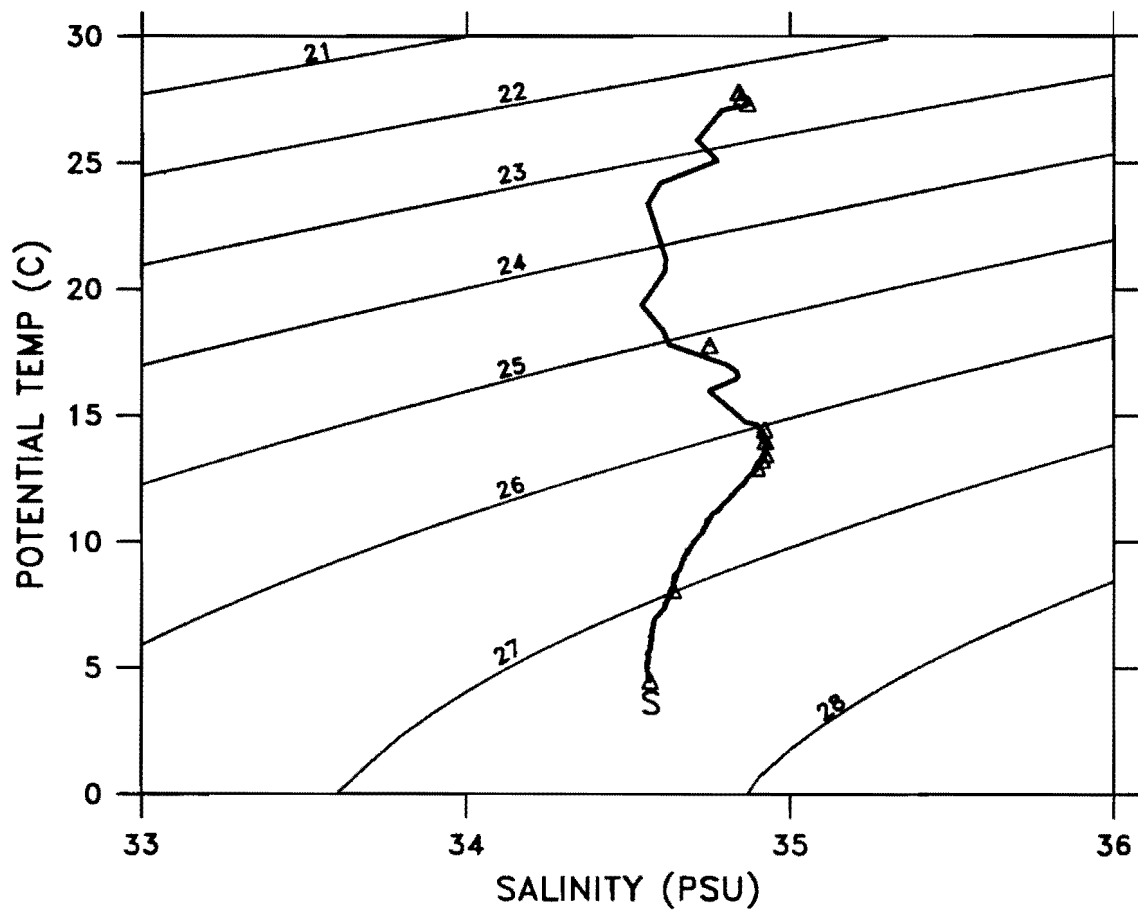


CAST EP1-90-MB -027 DATE 15 MAY 90 TIME 1300 GMT
 LAT 01 58.1N LONG 110 11.2W WEATHER 2 SEA STATE 2
 BAROMETER 08 WIND DIR 120 T SPD 20 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.0 WET 25.0 DEPTH 3818 M

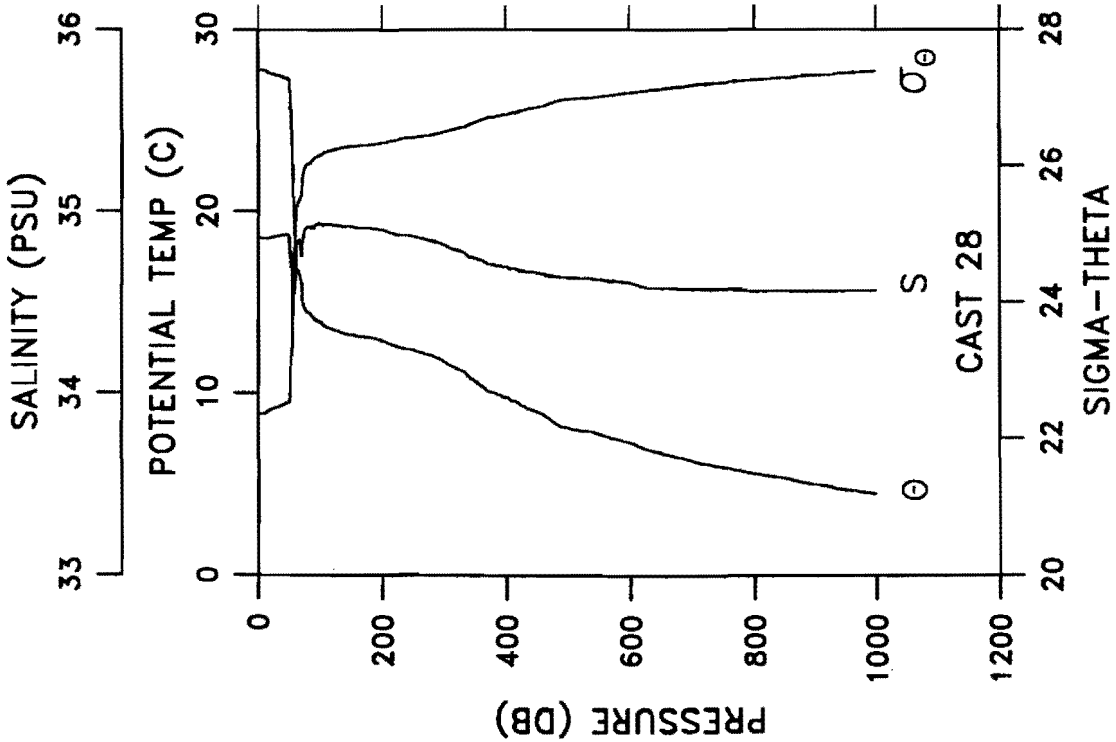


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.422 | 34.816 | 22.446 | 0.000 |
| 10 | 27.434 | 34.807 | 22.436 | 0.054 |
| 20 | 27.432 | 34.807 | 22.436 | 0.108 |
| 30 | 27.396 | 34.812 | 22.452 | 0.162 |
| 40 | 27.229 | 34.833 | 22.521 | 0.216 |
| 50 | 26.921 | 34.960 | 22.715 | 0.268 |
| 60 | 26.412 | 34.949 | 22.868 | 0.319 |
| 70 | 19.134 | 34.738 | 24.788 | 0.357 |
| 80 | 16.205 | 34.853 | 25.588 | 0.385 |
| 90 | 15.141 | 34.876 | 25.846 | 0.408 |
| 100 | 14.356 | 34.909 | 26.042 | 0.429 |
| 110 | 13.752 | 34.932 | 26.187 | 0.447 |
| 120 | 13.618 | 34.927 | 26.211 | 0.466 |
| 130 | 13.486 | 34.929 | 26.240 | 0.484 |
| 140 | 13.390 | 34.923 | 26.255 | 0.502 |
| 150 | 13.267 | 34.920 | 26.278 | 0.520 |
| 160 | 13.223 | 34.917 | 26.284 | 0.538 |
| 170 | 13.175 | 34.916 | 26.293 | 0.555 |
| 180 | 13.059 | 34.901 | 26.305 | 0.573 |
| 190 | 12.944 | 34.901 | 26.328 | 0.591 |
| 200 | 12.892 | 34.896 | 26.335 | 0.608 |
| 250 | 12.377 | 34.856 | 26.405 | 0.694 |
| 300 | 11.350 | 34.788 | 26.547 | 0.775 |
| 350 | 10.380 | 34.717 | 26.665 | 0.850 |
| 400 | 9.272 | 34.670 | 26.816 | 0.918 |
| 450 | 8.330 | 34.643 | 26.944 | 0.980 |
| 500 | 7.736 | 34.619 | 27.014 | 1.038 |
| 550 | 7.353 | 34.601 | 27.055 | 1.093 |
| 600 | 6.890 | 34.588 | 27.110 | 1.146 |
| 650 | 6.597 | 34.583 | 27.145 | 1.198 |
| 700 | 6.254 | 34.573 | 27.183 | 1.248 |
| 750 | 5.839 | 34.561 | 27.226 | 1.296 |
| 800 | 5.543 | 34.562 | 27.264 | 1.342 |
| 850 | 4.888 | 34.557 | 27.337 | 1.428 |
| 900 | 4.464 | 34.563 | 27.389 | 1.510 |
| 1000 | 4.464 | 34.563 | 27.389 | 1.510 |
| 1005 | 4.448 | 34.564 | 27.392 | 1.514 |

CAST EP1-90-MB -028 DATE 15 MAY 90 TIME 2309 GMT
LAT 03 00.2N LONG 110 06.4W

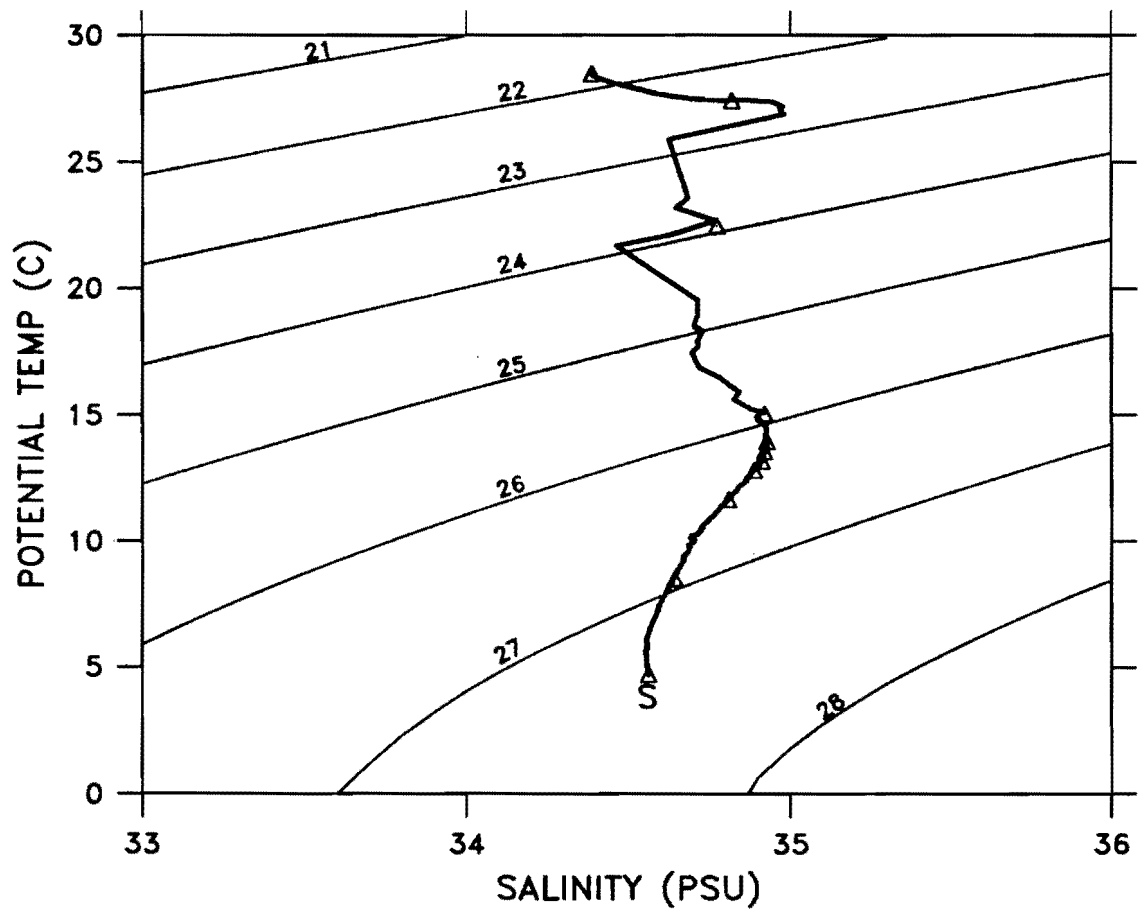


CAST EP1-90-MB -028 DATE 15 MAY 90 TIME 2309 GMT
 LAT 03 00.2N LONG 110 06.4W WEATHER 1 SEA STATE 2
 BAROMETER 08 WIND DIR 144 T SPD 15 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.5 WET 25.0 DEPTH 3650 M

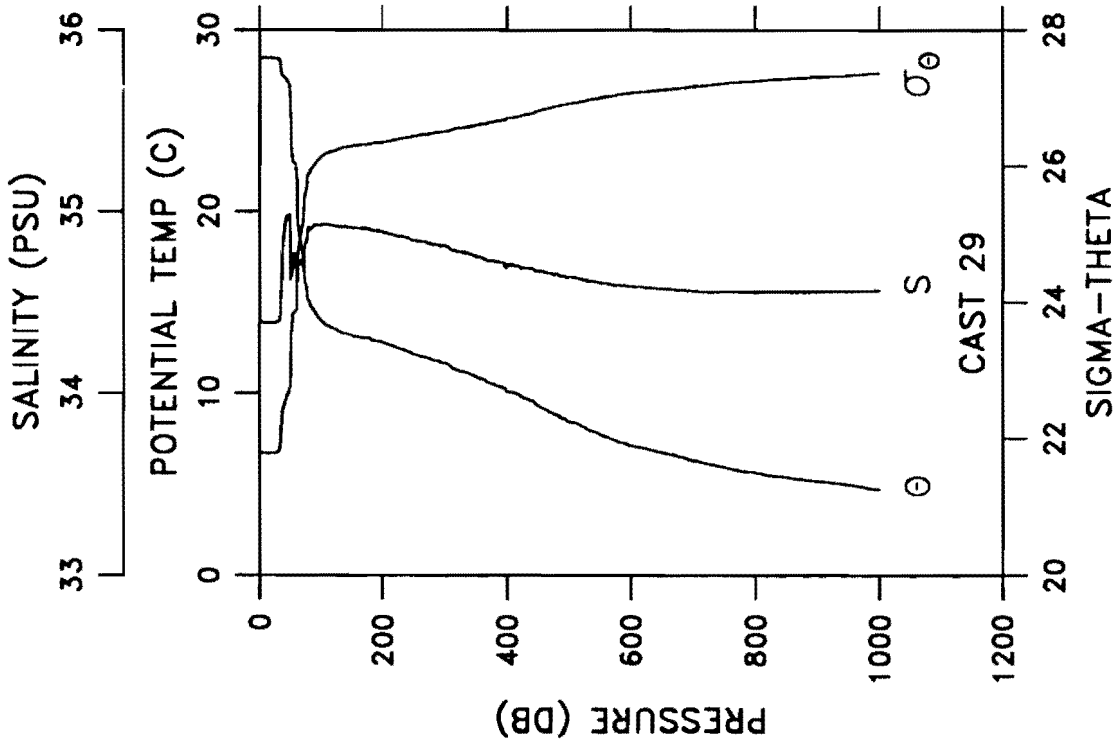


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.792 | 34.853 | 22.354 | 0.000 |
| 10 | 27.748 | 34.850 | 22.366 | 0.055 |
| 20 | 27.582 | 34.854 | 22.423 | 0.109 |
| 30 | 27.495 | 34.862 | 22.457 | 0.163 |
| 40 | 27.407 | 34.868 | 22.490 | 0.217 |
| 50 | 27.267 | 34.866 | 22.534 | 0.270 |
| 60 | 17.821 | 34.625 | 25.030 | 0.313 |
| 70 | 15.932 | 34.754 | 25.575 | 0.338 |
| 80 | 14.432 | 34.912 | 26.028 | 0.359 |
| 90 | 14.045 | 34.917 | 26.115 | 0.378 |
| 100 | 13.904 | 34.932 | 26.156 | 0.397 |
| 110 | 13.614 | 34.926 | 26.211 | 0.416 |
| 120 | 13.500 | 34.922 | 26.232 | 0.434 |
| 130 | 13.390 | 34.921 | 26.254 | 0.452 |
| 140 | 13.254 | 34.914 | 26.276 | 0.470 |
| 150 | 13.228 | 34.916 | 26.282 | 0.488 |
| 160 | 13.137 | 34.908 | 26.295 | 0.505 |
| 170 | 13.083 | 34.909 | 26.304 | 0.523 |
| 180 | 13.065 | 34.907 | 26.308 | 0.540 |
| 190 | 12.981 | 34.901 | 26.321 | 0.558 |
| 200 | 12.873 | 34.897 | 26.339 | 0.575 |
| 250 | 12.365 | 34.861 | 26.411 | 0.660 |
| 300 | 11.725 | 34.815 | 26.498 | 0.743 |
| 350 | 10.882 | 34.743 | 26.633 | 0.820 |
| 400 | 9.774 | 34.694 | 26.752 | 0.891 |
| 450 | 8.960 | 34.659 | 26.857 | 0.957 |
| 500 | 8.093 | 34.635 | 26.973 | 1.018 |
| 550 | 7.751 | 34.624 | 27.016 | 1.075 |
| 600 | 7.293 | 34.607 | 27.068 | 1.131 |
| 650 | 6.733 | 34.576 | 27.122 | 1.184 |
| 700 | 6.285 | 34.571 | 27.177 | 1.234 |
| 750 | 5.950 | 34.571 | 27.220 | 1.283 |
| 800 | 5.591 | 34.560 | 27.257 | 1.329 |
| 900 | 5.006 | 34.560 | 27.326 | 1.417 |
| 1000 | 4.483 | 34.566 | 27.389 | 1.499 |
| 1001 | 4.482 | 34.565 | 27.389 | 1.500 |

CAST EP1-90-MB -029 DATE 16 MAY 90 TIME 0411 GMT
LAT 04 00.2N LONG 110 03.0W

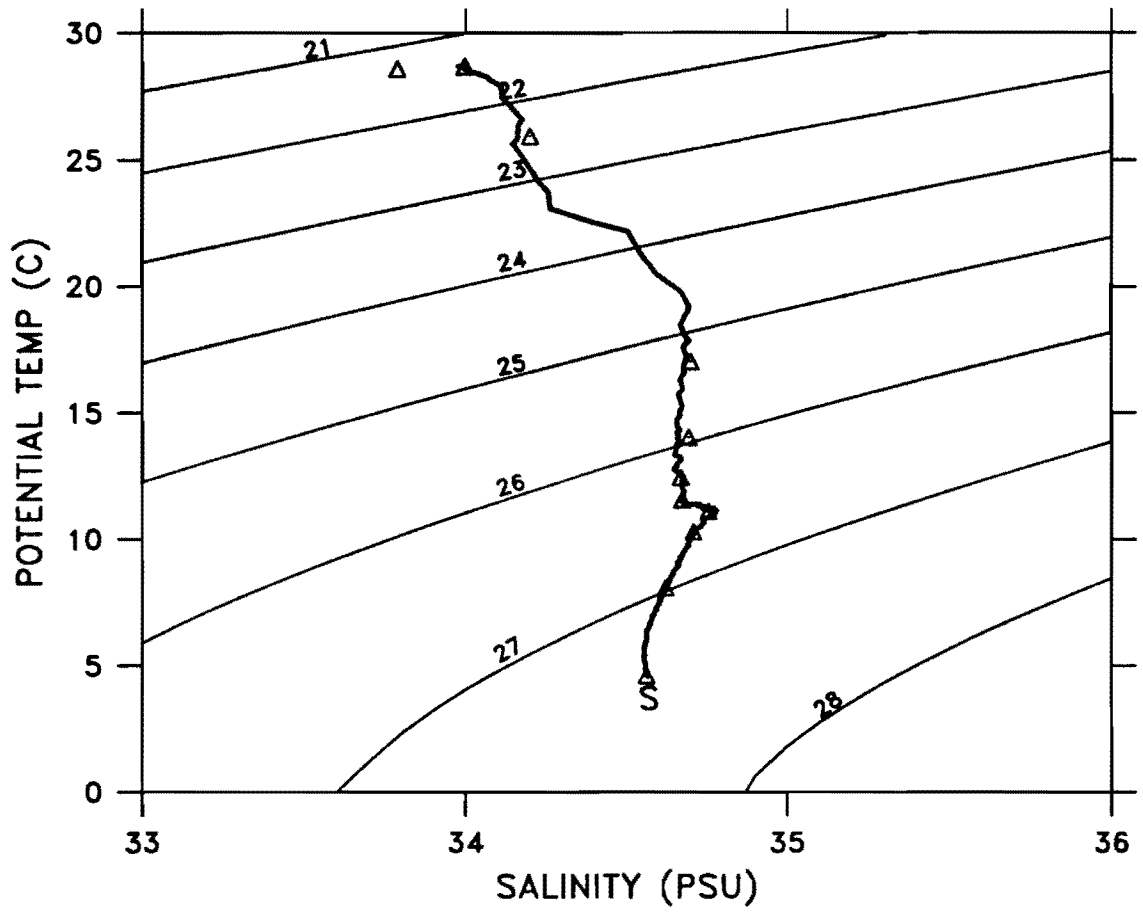


CAST EP1-90-MB -029 DATE 16 MAY 90 TIME 0411 GMT
 LAT 04 00.2N LONG 110 03.0W WEATHER 2 SEA STATE 2
 BAROMETER 10 WIND DIR 166 T SPD 16 KT VISIBILITY 7
 CLOUD AMOUNT DRY 27.8 WET 25.3 DEPTH 3913 M

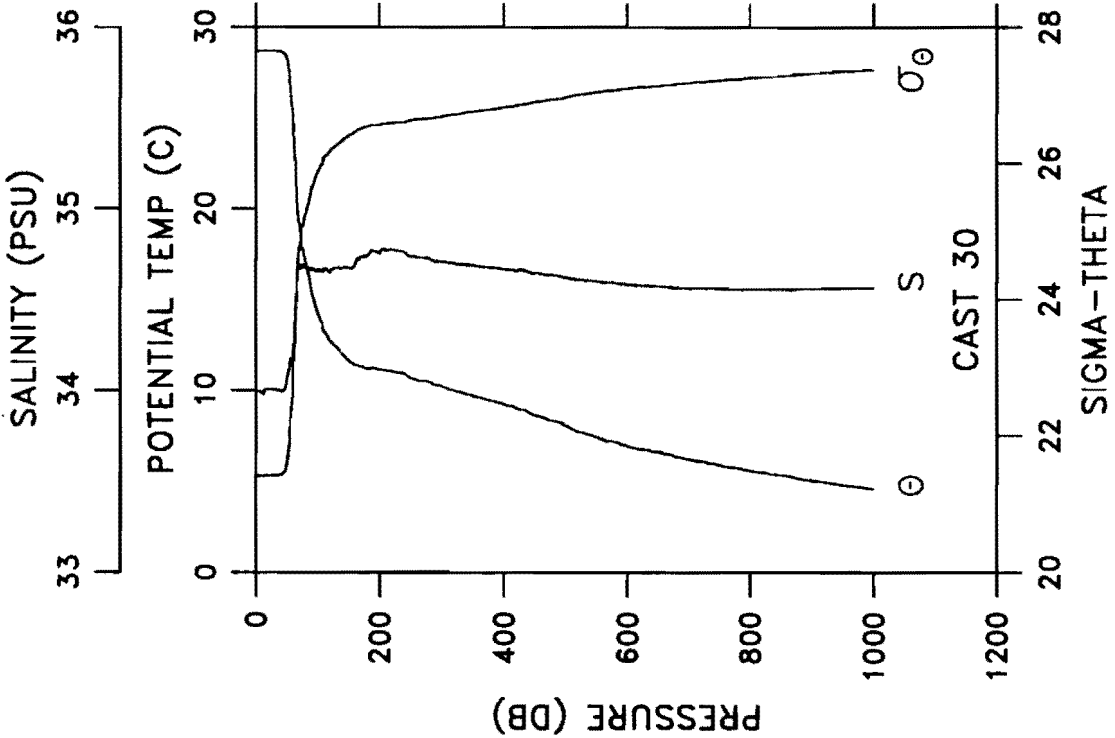


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.444 | 34.397 | 21.798 | 0.000 |
| 10 | 28.460 | 34.386 | 21.785 | 0.060 |
| 20 | 28.458 | 34.388 | 21.787 | 0.120 |
| 30 | 28.413 | 34.392 | 21.804 | 0.181 |
| 40 | 27.402 | 34.895 | 22.511 | 0.237 |
| 50 | 25.892 | 34.626 | 22.787 | 0.290 |
| 60 | 21.690 | 34.463 | 23.898 | 0.331 |
| 70 | 17.448 | 34.698 | 25.176 | 0.362 |
| 80 | 15.035 | 34.905 | 25.892 | 0.386 |
| 90 | 14.386 | 34.927 | 26.050 | 0.406 |
| 100 | 13.933 | 34.927 | 26.145 | 0.425 |
| 110 | 13.697 | 34.927 | 26.195 | 0.444 |
| 120 | 13.541 | 34.922 | 26.223 | 0.462 |
| 130 | 13.351 | 34.917 | 26.258 | 0.480 |
| 140 | 13.252 | 34.915 | 26.276 | 0.498 |
| 150 | 13.151 | 34.910 | 26.293 | 0.516 |
| 160 | 13.075 | 34.908 | 26.307 | 0.533 |
| 170 | 13.024 | 34.906 | 26.316 | 0.551 |
| 180 | 12.965 | 34.900 | 26.323 | 0.568 |
| 190 | 12.841 | 34.893 | 26.342 | 0.586 |
| 200 | 12.788 | 34.885 | 26.347 | 0.603 |
| 250 | 12.111 | 34.841 | 26.445 | 0.687 |
| 300 | 11.646 | 34.811 | 26.510 | 0.768 |
| 350 | 10.902 | 34.754 | 26.602 | 0.845 |
| 400 | 10.059 | 34.705 | 26.712 | 0.919 |
| 450 | 9.310 | 34.675 | 26.814 | 0.988 |
| 500 | 8.413 | 34.639 | 26.928 | 1.051 |
| 550 | 7.744 | 34.609 | 27.005 | 1.111 |
| 600 | 7.115 | 34.588 | 27.079 | 1.166 |
| 650 | 6.732 | 34.574 | 27.120 | 1.219 |
| 700 | 6.280 | 34.562 | 27.171 | 1.270 |
| 750 | 5.907 | 34.559 | 27.216 | 1.318 |
| 800 | 5.601 | 34.554 | 27.250 | 1.365 |
| 900 | 5.141 | 34.559 | 27.309 | 1.454 |
| 999 | 4.692 | 34.563 | 27.364 | 1.538 |

CAST EP1-90-MB -030 DATE 16 MAY 90 TIME 0919 GMT
LAT 05 00.3N LONG 109 56.7W



CAST EP1-90-MB -030 DATE 16 MAY 90 TIME 0919 GMT
 LAT 05 00.3N LONG 109 56.7W WEATHER 2 SEA STATE 2
 BAROMETER 09 WIND DIR 245 T SPD 06 KT VISIBILITY 7
 CLOUD AMOUNT DRY 26.5 WET 26.5 DEPTH 3816 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.695 | 33.995 | 21.413 | 0.000 |
| 10 | 28.689 | 33.984 | 21.407 | 0.064 |
| 20 | 28.702 | 34.005 | 21.419 | 0.128 |
| 30 | 28.691 | 34.003 | 21.421 | 0.191 |
| 40 | 28.655 | 33.995 | 21.427 | 0.255 |
| 50 | 28.263 | 34.067 | 21.610 | 0.319 |
| 60 | 24.157 | 34.223 | 23.009 | 0.375 |
| 70 | 19.035 | 34.689 | 24.776 | 0.415 |
| 80 | 17.045 | 34.682 | 25.260 | 0.444 |
| 90 | 15.307 | 34.671 | 25.651 | 0.469 |
| 100 | 14.231 | 34.654 | 25.872 | 0.492 |
| 110 | 13.240 | 34.670 | 26.089 | 0.512 |
| 120 | 12.684 | 34.652 | 26.187 | 0.531 |
| 130 | 12.380 | 34.673 | 26.263 | 0.549 |
| 140 | 11.974 | 34.672 | 26.340 | 0.567 |
| 150 | 11.613 | 34.672 | 26.408 | 0.584 |
| 160 | 11.384 | 34.690 | 26.465 | 0.600 |
| 170 | 11.324 | 34.735 | 26.510 | 0.616 |
| 180 | 11.170 | 34.739 | 26.542 | 0.631 |
| 190 | 11.219 | 34.767 | 26.555 | 0.646 |
| 200 | 11.121 | 34.753 | 26.561 | 0.662 |
| 250 | 10.871 | 34.738 | 26.631 | 0.736 |
| 300 | 10.245 | 34.709 | 26.683 | 0.808 |
| 350 | 9.701 | 34.689 | 26.760 | 0.877 |
| 400 | 9.236 | 34.668 | 26.821 | 0.944 |
| 450 | 8.617 | 34.644 | 26.900 | 1.007 |
| 500 | 8.064 | 34.621 | 26.967 | 1.068 |
| 550 | 7.426 | 34.600 | 27.044 | 1.124 |
| 600 | 6.931 | 34.581 | 27.099 | 1.178 |
| 650 | 6.601 | 34.574 | 27.138 | 1.230 |
| 700 | 6.207 | 34.562 | 27.180 | 1.280 |
| 750 | 5.889 | 34.561 | 27.220 | 1.328 |
| 800 | 5.575 | 34.556 | 27.255 | 1.375 |
| 900 | 5.039 | 34.559 | 27.321 | 1.463 |
| 1000 | 4.585 | 34.564 | 27.377 | 1.546 |
| 1006 | 4.560 | 34.567 | 27.382 | 1.551 |

CAST EP1-90-MB -001 LAT 06 58.3N LONG 147 13.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 4. | 27.577 | 34.675 | 4.77 | 27.576 | 22.290 |
| 18. | 27.586 | 34.676 | 5.14 | 27.582 | 22.289 |
| 38. | 27.589 | 34.676 | 4.73 | 27.580 | 22.290 |
| 58. | 27.591 | 34.688 | 4.81 | 27.578 | 22.299 |
| 77. | 27.543 | 34.701* | 4.93 | 27.525* | 22.326* |
| 97. | 17.259 | 34.739 | 4.25 | 17.243 | 25.257 |
| 122. | 14.055 | 34.615 | 2.10 | 14.037 | 25.882 |
| 147. | 12.407 | 34.654 | 0.83 | 12.388 | 26.246 |
| 196. | 10.964 | 34.710 | 0.71 | 10.940 | 26.561 |
| 296. | 9.735 | 34.694 | 1.08 | 9.701 | 26.764 |
| 495. | 7.991 | 34.618 | 0.32 | 7.940 | 26.983 |
| 994. | 4.601 | 34.565 | 1.10 | 4.521 | 27.385 |

CAST EP1-90-MB -002 LAT 01 59.9S LONG 140 10.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 3. | 27.741 | 35.210 | 4.86 | 27.740 | 22.639 |
| 18. | 27.744 | 35.211 | 4.84 | 27.740 | 22.640 |
| 38. | 27.615 | 35.245 | 4.84 | 27.606 | 22.709 |
| 58. | 25.784 | 35.369 | 4.66 | 25.771 | 23.385 |
| 78. | 25.201 | 35.267 | 4.58 | 25.184 | 23.489 |
| 98. | 23.958 | 35.260 | 4.32 | 23.937 | 23.858 |
| 123. | 19.755 | 35.649 | 2.99 | 19.732 | 25.329 |
| 146. | 14.415 | 35.087 | 1.07 | 14.393 | 26.172 |
| 197. | 12.547 | 34.902 | 0.49 | 12.521 | 26.413 |
| 296. | 11.017 | 34.798 | 1.34 | 10.980 | 26.622 |
| 496. | 8.354 | 34.648 | 1.23 | 8.302 | 26.952 |
| 994. | 4.442 | 34.566 | 2.21 | 4.363 | 27.403 |

CAST EP1-90-MB -003 LAT 01 00.2S LONG 140 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 27.783 | 35.271 | 5.10 | 27.783 | 22.672 |
| 18. | 27.649 | 35.270 | 5.05 | 27.645 | 22.716 |
| 38. | 27.449 | 35.280 | 5.03 | 27.440 | 22.789 |
| 57. | 26.507 | 35.417 | 4.86 | 26.494 | 23.195 |
| 78. | 25.320 | 35.392 | 4.45 | 25.303 | 23.547 |
| 98. | 24.091 | 35.496 | 4.18 | 24.070 | 23.998 |
| 122. | 19.902 | 35.569 | 3.09 | 19.879 | 25.229 |
| 148. | 16.308 | 35.269 | 2.21 | 16.284 | 25.890 |
| 196. | 12.490 | 34.906 | 1.54 | 12.464 | 26.427 |
| 297. | 11.519 | 34.824 | 1.11 | 11.481 | 26.551 |
| 492. | 8.067 | 34.630 | 1.00 | 8.016 | 26.981 |
| 995. | 4.676 | 34.577 | 1.95 | 4.595 | 27.386 |

* Calculated from CTD values

CAST EP1-90-MB -004 LAT 00 04.1N LONG 139 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.434 | 35.242 | 4.95 | 27.434 | 22.763 |
| 18. | 27.399 | 35.246 | 4.98 | 27.395 | 22.778 |
| 38. | 27.131 | 35.267 | 4.91 | 27.122 | 22.882 |
| 58. | 26.361 | 35.300 | 4.49 | 26.348 | 23.153 |
| 78. | 26.049 | 35.433 | 4.26 | 26.032 | 23.452 |
| 98. | 22.591 | 35.265 | 3.33 | 22.571 | 24.259 |
| 122. | 18.378 | 35.237 | 3.22 | 18.357 | 25.366 |
| 147. | 15.145 | 35.014 | 3.24 | 15.123 | 25.957 |
| 197. | 13.125 | 34.930 | 2.89 | 13.098 | 26.320 |
| 296. | 12.019 | 34.852 | 1.67 | 11.980 | 26.478 |
| 495. | 7.811 | 34.620 | 1.11 | 7.761 | 27.011 |
| 995. | 4.623 | 34.559 | 2.03 | 4.543 | 27.377 |

CAST EP1-90-MB -005 LAT 01 00.2N LONG 140 01.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.821 | 34.998 | 5.07 | 27.821 | 22.454 |
| 18. | 27.804 | 34.992 | 5.07 | 27.800 | 22.456 |
| 38. | 27.368 | 34.949 | 4.93 | 27.359 | 22.566 |
| 58. | 26.227 | 35.022 | 4.75 | 26.214 | 22.985 |
| 78. | 24.644 | 34.997 | 4.32 | 24.627 | 23.454 |
| 97. | 20.998 | 34.877 | 3.52 | 20.979 | 24.407 |
| 123. | 16.783 | 34.786 | 2.96 | 16.763 | 25.407 |
| 147. | 14.586 | 34.823 | 3.16 | 14.564 | 25.931 |
| 198. | 12.416 | 34.860 | 1.60 | 12.390 | 26.406 |
| 296. | 11.520 | 34.822 | 1.10 | 11.482 | 26.549 |
| 496. | 8.035 | 34.627 | 1.06 | 7.984 | 26.984 |
| 994. | 4.413 | 34.563 | 2.08 | 4.335 | 27.403 |

CAST EP1-90-MB -006 LAT 02 05.1N LONG 140 00.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 28.143 | 34.834 | 5.48 | 28.143 | 22.225 |
| 18. | 28.145 | 34.834 | 5.43 | 28.141 | 22.226 |
| 37. | 27.948 | 34.818 | 5.41 | 27.939 | 22.280 |
| 58. | 27.425 | 34.920 | 5.11 | 27.412 | 22.528 |
| 78. | 25.312 | 35.000 | 4.34 | 25.295 | 23.253 |
| 97. | 20.402 | 34.833 | 3.45 | 20.384 | 24.534 |
| 122. | 12.960 | 34.794 | 2.01 | 12.943 | 26.245 |
| 147. | 12.216 | 34.829 | 1.69 | 12.197 | 26.419 |
| 197. | 11.842 | 34.836 | 1.30 | 11.817 | 26.497 |
| 296. | 10.997 | 34.846 | 1.14 | 10.960 | 26.663 |
| 496. | 7.994 | 34.622 | 0.78 | 7.943 | 26.986 |
| 994. | 4.397 | 34.565 | 1.99 | 4.319 | 27.407 |

CAST EPI-90-MB -007 LAT 03 00.2N LONG 139 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 28.467 | 34.568 | 5.57 | 28.467 | 21.919 |
| 18. | 28.469 | 34.570 | 5.55 | 28.465 | 21.921 |
| 38. | 27.799 | 34.755 | 5.61 | 27.790 | 22.281 |
| 58. | 27.280 | 35.020 | 5.07 | 27.267 | 22.649 |
| 78. | 26.239 | 35.052 | 4.84 | 26.222 | 23.005 |
| 97. | 23.507 | 34.913 | 4.22 | 23.487 | 23.728 |
| 122. | 14.742 | 34.714 | 2.83 | 14.724 | 25.812 |
| 148. | 12.190 | 34.777 | 2.40 | 12.171 | 26.384 |
| 197. | 11.648 | 34.827 | 1.83 | 11.623 | 26.527 |
| 295. | 11.002 | 34.778 | 1.42 | 10.966 | 26.609 |
| 495. | 8.265 | 34.634 | 0.57 | 8.213 | 26.955 |
| 995. | 4.476 | 34.563 | 1.92 | 4.397 | 27.397 |

CAST EPI-90-MB -010 LAT 05 59.4N LONG 140 00.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 28.043 | 34.653 | 5.75 | 28.043 | 22.122 |
| 18. | 28.035 | 34.653 | 5.74 | 28.031 | 22.126 |
| 38. | 27.904 | 34.653 | 5.73 | 27.895 | 22.170 |
| 58. | 27.884 | 34.698 | 5.55 | 27.871 | 22.212 |
| 78. | 27.825 | 34.722 | 5.50 | 27.807 | 22.251 |
| 97. | 24.813 | 35.040 | 4.32 | 24.792 | 23.436 |
| 122. | 17.719 | 34.706 | 3.46 | 17.698 | 25.122 |
| 147. | 12.822 | 34.650 | 1.23 | 12.802 | 26.162 |
| 197. | 10.814 | 34.695 | 1.08 | 10.790 | 26.576 |
| 296. | 9.663 | 34.682 | 1.23 | 9.629 | 26.767 |
| 495. | 8.035 | 34.619 | 0.43 | 7.984 | 26.977 |
| 994. | 4.450 | 34.566 | 1.64 | 4.371 | 27.402 |

CAST EPI-90-MB -008 LAT 04 00.7N LONG 140 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 28.374 | 34.465 | 5.69 | 28.374 | 21.872 |
| 18. | 28.348 | 34.473 | 5.49 | 28.344 | 21.888 |
| 37. | 28.092 | 34.579 | 5.43 | 28.083 | 22.053 |
| 58. | 27.550 | 34.877 | 5.34 | 27.536 | 22.455 |
| 77. | 27.310 | 35.017 | 5.38 | 27.292 | 22.639 |
| 98. | 22.506 | 34.866 | 3.97 | 22.486 | 23.980 |
| 123. | 16.450 | 34.692 | 2.77 | 16.430 | 25.413 |
| 148. | 11.329 | 34.621 | 2.60 | 11.311 | 26.424 |
| 197. | 10.502 | 34.706 | 2.73 | 10.479 | 26.640 |
| 296. | 9.699 | 34.680 | 2.31 | 9.665 | 26.759 |
| 496. | 7.620 | 34.608 | 0.78 | 7.571 | 27.029 |
| 994. | 4.755 | 34.558 | 1.92 | 4.674 | 27.362 |

CAST EPI-90-MB -014 LAT 07 04.7N LONG 140 12.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.717 | 34.709 | 5.91 | 27.717 | 22.270 |
| 18. | 27.716 | 34.709 | 6.00 | 27.712 | 22.272 |
| 38. | 27.720 | 34.710 | 6.11 | 27.711 | 22.273 |
| 58. | 27.679 | 34.715 | 0.00 | 27.666 | 22.291 |
| 78. | 24.078 | 34.840 | 4.73 | 24.062 | 23.504 |
| 98. | 16.705 | 34.618 | 0.00 | 16.689 | 25.295 |
| 122. | 13.428 | 34.558 | 1.62 | 13.411 | 25.968 |
| 148. | 12.021 | 34.680 | 0.83 | 12.002 | 26.341 |
| 197. | 10.760 | 34.693 | 1.16 | 10.736 | 26.584 |
| 296. | 9.779 | 34.687 | 0.51 | 9.745 | 26.751 |
| 496. | 8.081 | 34.620 | 0.21 | 8.030 | 26.971 |
| 994. | 4.427 | 34.567 | 1.46 | 4.348 | 27.405 |

CAST EPI-90-MB -009 LAT 05 02.8N LONG 140 00.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 28.046 | 34.561 | 5.84 | 28.046 | 22.052 |
| 18. | 28.051 | 34.562 | 5.84 | 28.047 | 22.052 |
| 38. | 27.986 | 34.621 | 5.80 | 27.977 | 22.119 |
| 58. | 27.739 | 34.799 | 5.59 | 27.726 | 22.335 |
| 78. | 26.758 | 34.946 | 5.21 | 26.740 | 22.762 |
| 97. | 25.230 | 35.041 | 4.82 | 25.209 | 23.310 |
| 122. | 17.958 | 34.786 | 3.66 | 17.937 | 25.125 |
| 147. | 13.493 | 34.652 | 1.62 | 13.472 | 26.028 |
| 196. | 10.391 | 34.673 | 1.55 | 10.368 | 26.634 |
| 296. | 9.440 | 34.675 | 0.89 | 9.407 | 26.798 |
| 495. | 7.722 | 34.606 | 0.84 | 7.672 | 27.013 |
| 995. | 4.519 | 34.575 | 1.61 | 4.440 | 27.401 |

CAST EPI-90-MB -016 LAT 07 59.8N LONG 140 00.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 2. | 27.532 | 34.649* | 0.00 | 27.532* | 22.285* |
| 18. | 27.539 | 34.652 | 5.62 | 27.535 | 22.286 |
| 37. | 27.544 | 34.651 | 5.74 | 27.535 | 22.285 |
| 57. | 27.541 | 34.655 | 5.72 | 27.528 | 22.291 |
| 78. | 19.084 | 34.724 | 5.18 | 19.070 | 24.793 |
| 98. | 14.861 | 34.524 | 2.56 | 14.846 | 25.639 |
| 122. | 12.680 | 34.673 | 0.22 | 12.664 | 26.207 |
| 147. | 11.688 | 34.712 | 0.43 | 11.669 | 26.428 |
| 197. | 10.710 | 34.705 | 0.84 | 10.686 | 26.602 |
| 296. | 9.849 | 34.614 | 1.32 | 9.815 | 26.682 |
| 495. | 8.077 | 34.614 | 0.11 | 8.026 | 26.967 |
| 994. | 4.513 | 34.568 | 1.04 | 4.434 | 27.396 |

* Calculated from CTD values

CAST EPI-90-MB -017 LAT 08 56.7N LONG 140 11.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 27.207 | 34.762 | 5.89 | 27.207 | 22.475 |
| 18. | 27.216 | 34.761 | 6.05 | 27.212 | 22.472 |
| 38. | 27.219 | 34.761 | 5.99 | 27.210 | 22.473 |
| 58. | 20.190 | 34.616 | 0.00 | 20.179 | 24.423 |
| 77. | 16.207 | 34.393 | 4.59 | 16.195 | 25.237 |
| 97. | 13.468 | 34.393 | 1.03 | 13.454 | 25.831 |
| 122. | 12.339 | 34.714 | 0.24 | 12.323 | 26.305 |
| 147. | 11.909 | 34.756 | 0.41 | 11.890 | 26.421 |
| 197. | 11.143 | 34.739 | 0.54 | 11.119 | 26.551 |
| 296. | 9.998 | 34.693 | 0.39 | 9.964 | 26.719 |
| 495. | 7.806 | 34.585 | 0.30 | 7.756 | 26.984 |
| 994. | 4.480 | 34.574 | 1.34 | 4.401 | 27.405 |

CAST EPI-90-MB -020 LAT 04 53.6S LONG 110 05.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.163 | 35.242 | 6.48 | 27.163 | 22.850 |
| 18. | 27.024 | 35.232 | 6.42 | 27.020 | 22.888 |
| 38. | 23.677 | 35.669 | 3.89 | 23.669 | 24.247 |
| 57. | 19.052 | 35.304 | 1.19 | 19.042 | 25.244 |
| 77. | 14.522 | 35.022 | 1.21 | 14.511 | 26.096 |
| 98. | 13.577 | 34.958 | 0.96 | 13.563 | 26.246 |
| 122. | 13.029 | 34.932 | 1.28 | 13.012 | 26.338 |
| 148. | 12.836 | 34.913 | 1.08 | 12.816 | 26.363 |
| 196. | 12.567 | 34.862 | 0.34 | 12.541 | 26.378 |
| 296. | 11.868 | 34.862 | 0.58 | 11.830 | 26.515 |
| 495. | 8.977 | 34.690 | 0.70 | 8.923 | 26.888 |
| 995. | 4.403 | 34.555 | 2.82 | 4.325 | 27.398 |

CAST EPI-90-MB -018 LAT 07 00.2N LONG 132 25.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 28.037 | 34.640 | 0.00 | 28.037 | 22.114 |
| 1. | 28.050 | 34.638 | 5.86 | 28.050 | 22.108 |
| 18. | 27.887 | 34.614 | 5.84 | 27.883 | 22.145 |
| 38. | 27.837 | 34.656 | 5.80 | 27.828 | 22.194 |
| 58. | 27.287 | 34.866 | 5.32 | 27.274 | 22.531 |
| 77. | 21.314 | 34.815 | 4.35 | 21.299 | 24.273 |
| 97. | 16.466 | 34.656 | 3.17 | 16.450 | 25.380 |
| 122. | 13.614 | 34.607 | 1.23 | 13.597 | 25.968 |
| 146. | 12.081 | 34.710 | 1.07 | 12.062 | 26.353 |
| 197. | 10.885 | 34.711 | 1.48 | 10.861 | 26.576 |
| 495. | 8.222 | 34.626 | 0.19 | 8.170 | 26.955 |
| 994. | 4.443 | 34.605 | 1.70 | 4.364 | 27.433 |

CAST EPI-90-MB -021 LAT 04 00.1S LONG 110 28.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 27.161 | 35.016 | 6.51 | 27.161 | 22.680 |
| 18. | 27.160 | 35.174 | 6.52 | 27.156 | 22.801 |
| 38. | 27.146 | 35.170 | 6.53 | 27.137 | 22.804 |
| 58. | 20.054 | 35.087 | 4.91 | 20.043 | 24.818 |
| 78. | 14.654 | 35.018 | 1.80 | 14.642 | 26.065 |
| 97. | 13.618 | 34.962 | 0.75 | 13.604 | 26.241 |
| 122. | 13.187 | 34.938 | 0.89 | 13.170 | 26.311 |
| 147. | 12.993 | 34.924 | 0.73 | 12.973 | 26.340 |
| 198. | 12.664 | 34.905 | 0.66 | 12.637 | 26.392 |
| 297. | 11.838 | 34.861 | 0.38 | 11.799 | 26.520 |
| 496. | 8.673 | 34.675 | 0.51 | 8.620 | 26.924 |
| 994. | 4.463 | 34.552 | 2.92 | 4.384 | 27.389 |

CAST EPI-90-MB -019 LAT 00 10.8S LONG 124 30.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 2. | 26.436 | 35.047* | 0.00 | 26.436* | 22.934* |
| 1. | 26.411 | 35.060 | 6.43 | 26.411 | 22.952 |
| 18. | 26.319 | 35.069* | 6.51 | 26.315* | 22.989* |
| 38. | 25.666 | 35.077 | 6.21 | 25.658 | 23.200 |
| 59. | 24.479 | 35.179 | 5.73 | 24.466 | 23.640 |
| 78. | 22.613 | 35.407 | 4.38 | 22.597 | 24.360 |
| 98. | 17.024 | 35.164 | 4.89 | 17.008 | 25.639 |
| 121. | 14.402 | 34.990 | 4.22 | 14.384 | 26.099 |
| 147. | 13.574 | 34.927 | 4.18 | 13.553 | 26.224 |
| 198. | 12.876 | 34.902 | 3.40 | 12.849 | 26.348 |
| 495. | 7.648 | 34.612 | 1.91 | 7.599 | 27.029 |
| 994. | 4.529 | 34.560 | 3.98 | 4.450 | 27.388 |

CAST EPI-90-MB -022 LAT 02 59.6S LONG 110 54.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 27.030 | 35.192 | 6.55 | 27.030 | 22.855 |
| 18. | 27.041 | 35.216 | 6.48 | 27.037 | 22.871 |
| 38. | 24.306 | 35.160 | 5.57 | 24.298 | 23.676 |
| 58. | 14.125 | 34.977 | 2.05 | 14.117 | 26.145 |
| 78. | 13.504 | 34.963 | 2.05 | 13.493 | 26.265 |
| 97. | 13.247 | 34.936 | 2.15 | 13.234 | 26.297 |
| 122. | 13.058 | 34.920 | 1.93 | 13.041 | 26.323 |
| 147. | 12.814 | 34.911 | 2.40 | 12.794 | 26.366 |
| 197. | 12.622 | 34.894 | 1.79 | 12.595 | 26.392 |
| 297. | 12.083 | 34.865 | 0.41 | 12.044 | 26.476 |
| 496. | 8.441 | 34.674 | 0.90 | 8.388 | 26.959 |
| 994. | 4.420 | 34.563 | 2.63 | 4.341 | 27.403 |

* Calculated from CTD values

CAST EP1-90-MB -023 LAT 02 03.3S LONG 111 20.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.729 | 35.291 | 6.64 | 26.729 | 23.025 |
| 18. | 26.729 | 35.290 | 6.79 | 26.725 | 23.026 |
| 38. | 26.028 | 35.275 | 6.64 | 26.020 | 23.237 |
| 57. | 19.643 | 35.168 | 4.48 | 19.633 | 24.988 |
| 77. | 15.264 | 35.037 | 2.12 | 15.252 | 25.946 |
| 97. | 13.663 | 34.967 | 2.03 | 13.649 | 26.236 |
| 122. | 13.000 | 34.934 | 1.92 | 12.983 | 26.346 |
| 148. | 12.738 | 34.901 | 1.96 | 12.718 | 26.373 |
| 197. | 12.606 | 34.899 | 0.75 | 12.580 | 26.399 |
| 297. | 12.048 | 34.860 | 0.27 | 12.009 | 26.479 |
| 495. | 8.400 | 34.652 | 1.07 | 8.348 | 26.948 |
| 994. | 4.523 | 34.558 | 2.63 | 4.444 | 27.387 |

CAST EP1-90-MB -026 LAT 01 00.1N LONG 110 06.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 2. | 26.630 | 35.006 | 6.55 | 26.630 | 22.842 |
| 18. | 26.628 | 35.005 | 6.62 | 26.624 | 22.843 |
| 38. | 26.597 | 34.992 | 6.59 | 26.588 | 22.845 |
| 58. | 19.926 | 34.766 | 4.11 | 19.915 | 24.607 |
| 78. | 15.145 | 34.908 | 2.07 | 15.133 | 25.872 |
| 97. | 14.344 | 34.925 | 2.27 | 14.330 | 26.060 |
| 122. | 13.537 | 34.904 | 2.53 | 13.520 | 26.213 |
| 147. | 13.126 | 34.909 | 2.87 | 13.106 | 26.302 |
| 197. | 12.720 | 34.974 | 2.72 | 12.693 | 26.435 |
| 296. | 11.317 | 34.782 | 1.42 | 11.280 | 26.555 |
| 495. | 7.757 | 34.615 | 1.55 | 7.707 | 27.015 |
| 994. | 4.460 | 34.565 | 2.65 | 4.381 | 27.400 |

CAST EP1-90-MB -024 LAT 00 59.8S LONG 110 39.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 26.464 | 35.197 | 6.56 | 26.464 | 23.038 |
| 18. | 26.283 | 35.212 | 6.39 | 26.279 | 23.108 |
| 37. | 25.032 | 35.272 | 6.12 | 25.024 | 23.541 |
| 58. | 20.071 | 35.418 | 3.76 | 20.060 | 25.066 |
| 78. | 16.733 | 35.269 | 2.37 | 16.720 | 25.788 |
| 98. | 13.980 | 35.019 | 2.45 | 13.966 | 26.210 |
| 122. | 13.195 | 34.944 | 2.93 | 13.178 | 26.314 |
| 147. | 12.932 | 34.915 | 2.97 | 12.912 | 26.345 |
| 197. | 12.608 | 34.890 | 2.79 | 12.582 | 26.391 |
| 296. | 11.545 | 34.822 | 0.45 | 11.507 | 26.544 |
| 495. | 8.150 | 34.635 | 1.26 | 8.099 | 26.973 |
| 994. | 4.501 | 34.557 | 2.75 | 4.422 | 27.389 |

CAST EP1-90-MB -027 LAT 01 58.1N LONG 110 11.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 2. | 27.410 | 34.804 | 6.92 | 27.410 | 22.441 |
| 0. | 27.399 | 34.807 | 6.68 | 27.399 | 22.447 |
| 19. | 27.394 | 34.854 | 6.86 | 27.390 | 22.485 |
| 38. | 27.173 | 34.853* | 6.78 | 27.164* | 22.557* |
| 58. | 26.384 | 34.935 | 6.21 | 26.371 | 22.870 |
| 77. | 16.361 | 34.874 | 2.87 | 16.349 | 25.571 |
| 98. | 14.409 | 34.871 | 1.76 | 14.395 | 26.004 |
| 122. | 13.522 | 34.925 | 1.99 | 13.505 | 26.233 |
| 147. | 13.273 | 34.920 | 1.87 | 13.253 | 26.281 |
| 197. | 12.912 | 34.897 | 1.55 | 12.885 | 26.337 |
| 495. | 7.858 | 34.623 | 1.00 | 7.808 | 27.007 |
| 994. | 4.545 | 34.563 | 2.45 | 4.466 | 27.389 |

CAST EP1-90-MB -025 LAT 00 01.2S LONG 109 56.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|---------|
| 1. | 26.078 | 35.129 | 6.50 | 26.078 | 23.108 |
| 18. | 26.003 | 35.117 | 6.44 | 25.999 | 23.124 |
| 38. | 24.431 | 35.033 | 5.64 | 24.423 | 23.542 |
| 58. | 18.927 | 34.901 | 4.19 | 18.917 | 24.968 |
| 77. | 17.060 | 34.930 | 3.82 | 17.047 | 25.450 |
| 97. | 15.412 | 34.979 | 3.90 | 15.397 | 25.869 |
| 122. | 14.368 | 35.020 | 3.55 | 14.350 | 26.129 |
| 146. | 13.743 | 34.968 | 3.45 | 13.722 | 26.221 |
| 197. | 12.947 | 34.908 | 2.83 | 12.920 | 26.338 |
| 295. | 11.313 | 34.797 | 0.70 | 11.276 | 26.568 |
| 495. | 7.961 | 34.624 | 1.37 | 7.910 | 26.992 |
| 994. | 4.507 | 34.563* | 2.53 | 4.428* | 27.393* |

CAST EP1-90-MB -028 LAT 03 00.2N LONG 110 06.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 27.785 | 34.842 | 7.17 | 27.785 | 22.348 |
| 1. | 27.782 | 34.844 | 6.85 | 27.782 | 22.351 |
| 18. | 27.579 | 34.852 | 7.19 | 27.575 | 22.424 |
| 38. | 27.348 | 34.870 | 7.12 | 27.339 | 22.513 |
| 58. | 17.803 | 34.752 | 4.44 | 17.793 | 25.134 |
| 77. | 14.857 | 34.922 | 1.88 | 14.446 | 26.033 |
| 97. | 14.016 | 34.924 | 1.90 | 14.002 | 26.129 |
| 122. | 13.487 | 34.925 | 1.96 | 13.470 | 26.240 |
| 148. | 13.258 | 34.915 | 1.77 | 13.237 | 26.280 |
| 197. | 12.950 | 34.899 | 1.28 | 12.923 | 26.331 |
| 495. | 8.145 | 34.639 | 0.66 | 8.094 | 26.977 |
| 994. | 4.565 | 34.567 | 1.92 | 4.485 | 27.390 |

* Calculated from CTD values

CAST EP1-90-MB -029 LAT 04 00.2N LONG 110 03.0W

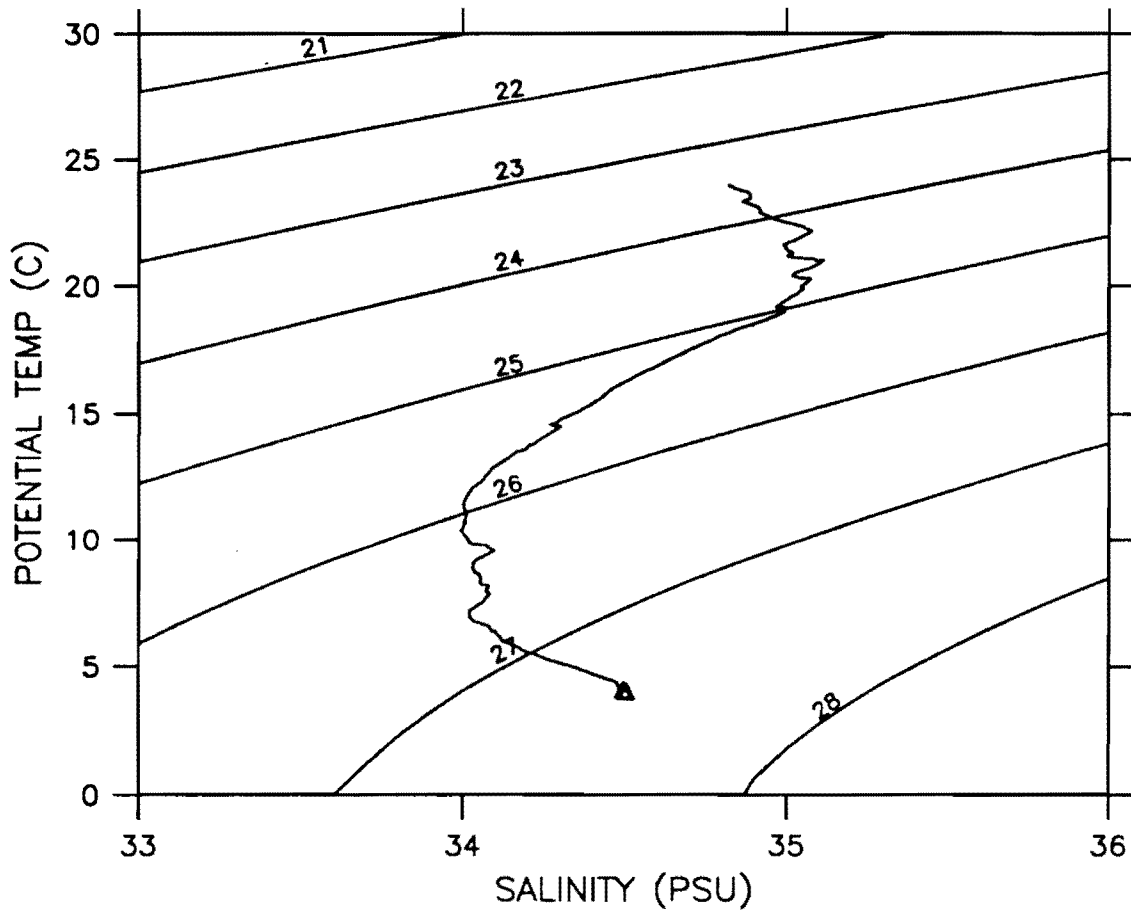
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 0. | 28.456 | 34.389 | 6.94 | 28.456 | 21.788 |
| 18. | 28.465 | 34.387 | 7.16 | 28.461 | 21.785 |
| 38. | 27.422 | 34.820 | 6.90 | 27.413 | 22.452 |
| 57. | 22.478 | 34.774 | 5.05 | 22.467 | 23.916 |
| 78. | 15.044 | 34.920 | 1.80 | 15.032 | 25.904 |
| 97. | 13.949 | 34.928 | 1.69 | 13.935 | 26.146 |
| 122. | 13.549 | 34.920 | 1.78 | 13.532 | 26.223 |
| 147. | 13.187 | 34.911 | 1.69 | 13.167 | 26.291 |
| 197. | 12.825 | 34.888 | 1.44 | 12.798 | 26.347 |
| 296. | 11.674 | 34.809 | 1.21 | 11.636 | 26.510 |
| 496. | 8.554 | 34.645 | 0.53 | 8.501 | 26.919 |
| 994. | 4.790 | 34.564 | 1.69 | 4.709 | 27.363 |

CAST EP1-90-MB -030 LAT 05 00.3N LONG 109 56.7W

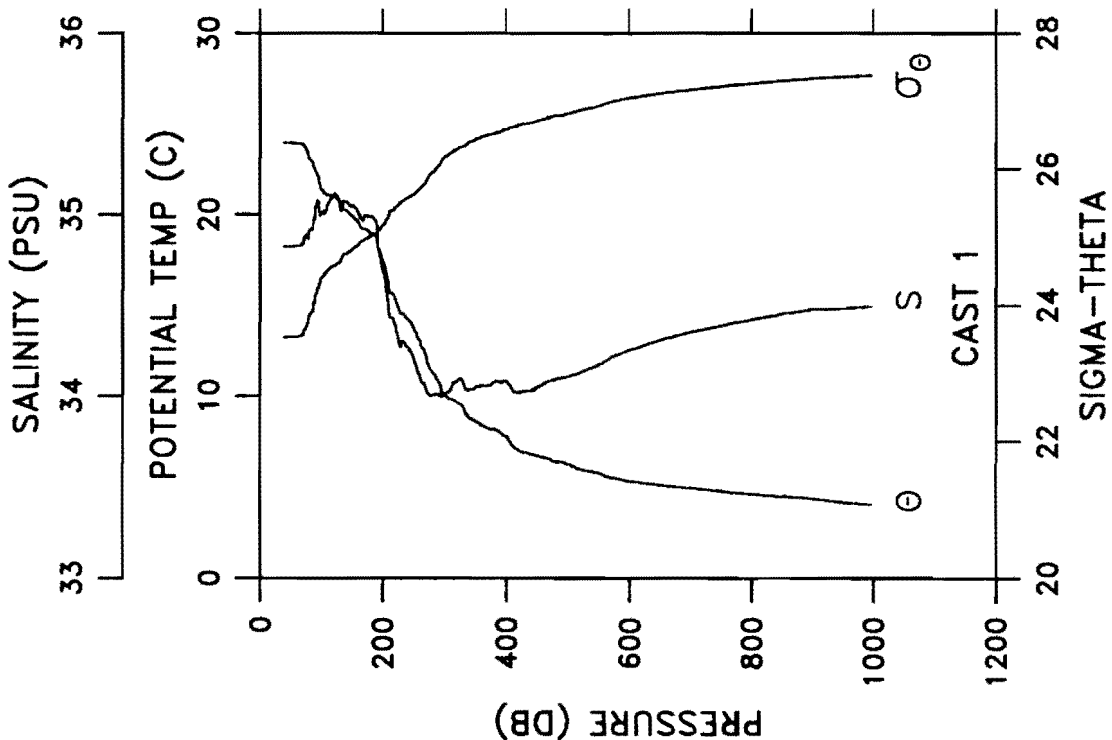
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP | SIG-TH |
|-----------|----------|-----------|------------|----------|--------|
| 1. | 28.582 | 33.787 | 4.82 | 28.582 | 21.294 |
| 18. | 28.698 | 33.998 | 4.84 | 28.694 | 21.416 |
| 38. | 28.667 | 33.996 | 4.73 | 28.658 | 21.426 |
| 58. | 25.956 | 34.197 | 4.01 | 25.943 | 22.447 |
| 77. | 17.038 | 34.698 | 1.89 | 17.025 | 25.277 |
| 97. | 14.036 | 34.692 | 1.66 | 14.022 | 25.945 |
| 123. | 12.448 | 34.668 | 1.31 | 12.432 | 26.249 |
| 147. | 11.570 | 34.672 | 1.39 | 11.551 | 26.419 |
| 196. | 11.125 | 34.753 | 1.91 | 11.101 | 26.565 |
| 296. | 10.320 | 34.707 | 1.71 | 10.285 | 26.675 |
| 495. | 8.107 | 34.622 | 0.27 | 8.056 | 26.969 |
| 994. | 4.676 | 34.563 | 1.28 | 4.596 | 27.375 |

EP2-90-MB
October 12–November 8, 1990
CTD and Hydrographic Data Summary

CAST EP2-90-DI -001 DATE 17 OCT 90 TIME 2110 GMT
LAT 23 06.5N LONG 135 22.1W

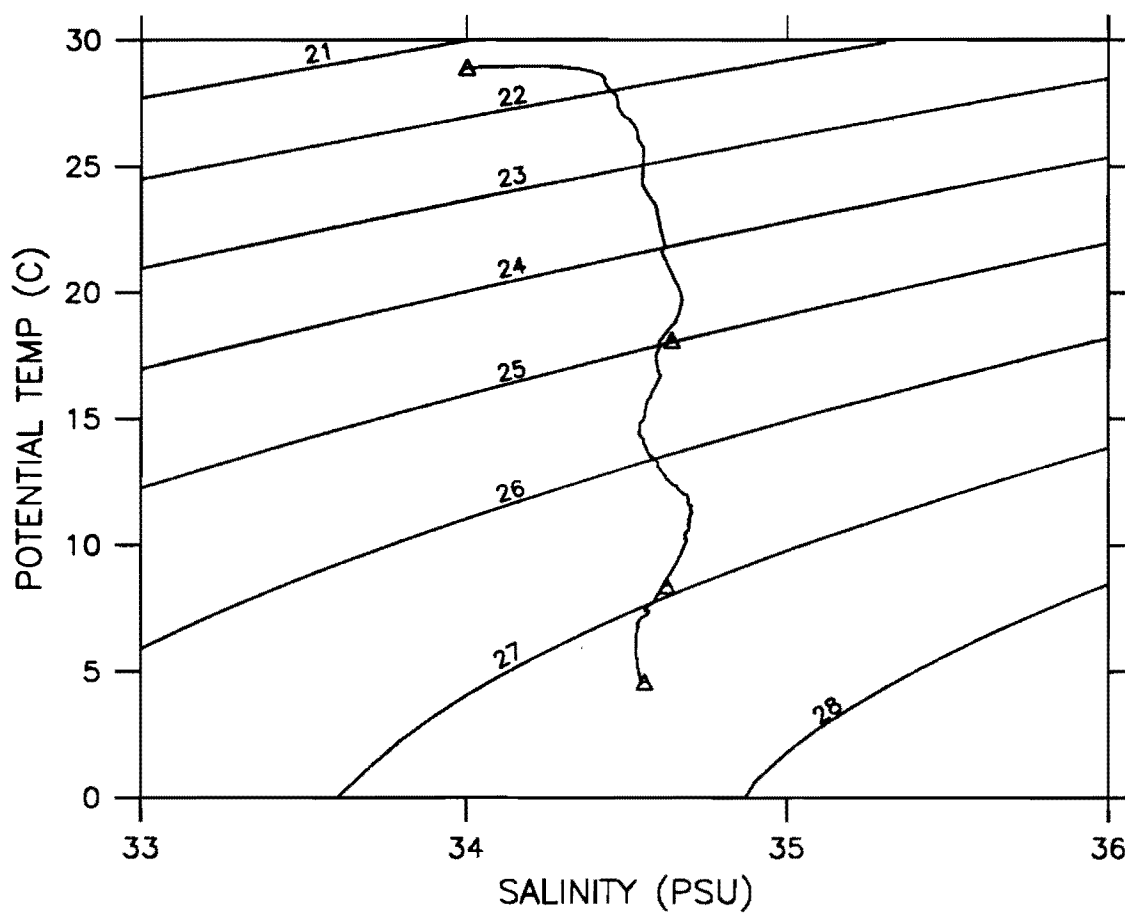


CAST EP2-90-DI-001 DATE 17 OCT 90 TIME 2110 GMT
 LAT 23 06.5N LONG 135 22.1W WEATHER 1 SEA STATE 1
 BAROMETER 18 WIND DIR 000 T SPD 10 KT VISIBILITY 9
 CLOUD 8 AMOUNT 6 DRY 23.0 WET 20.3 DEPTH 4548 M

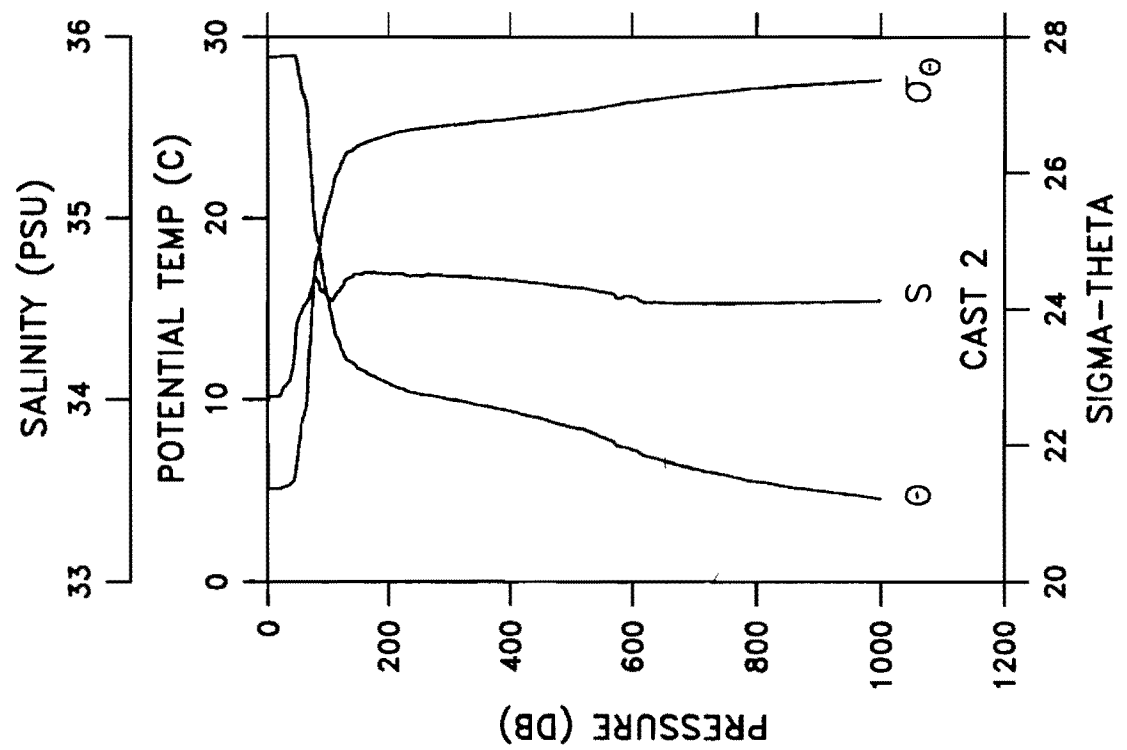


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 39 | 23.956 | 34.823 | 23.522 | 0.000 |
| 40 | 23.956 | 34.823 | 23.522 | 0.004 |
| 41 | 23.956 | 34.823 | 23.522 | 0.008 |
| 42 | 23.956 | 34.823 | 23.522 | 0.013 |
| 43 | 23.955 | 34.823 | 23.522 | 0.017 |
| 50 | 23.948 | 34.824 | 23.525 | 0.048 |
| 60 | 23.931 | 34.827 | 23.532 | 0.092 |
| 70 | 23.851 | 34.839 | 23.565 | 0.138 |
| 80 | 23.132 | 34.905 | 23.825 | 0.178 |
| 90 | 22.571 | 34.973 | 24.037 | 0.218 |
| 100 | 21.372 | 35.003 | 24.396 | 0.255 |
| 110 | 21.083 | 35.049 | 24.510 | 0.291 |
| 120 | 21.002 | 35.108 | 24.577 | 0.325 |
| 130 | 20.688 | 35.069 | 24.632 | 0.359 |
| 140 | 20.233 | 35.069 | 24.754 | 0.392 |
| 150 | 19.952 | 35.044 | 24.809 | 0.424 |
| 160 | 19.577 | 35.014 | 24.884 | 0.455 |
| 170 | 19.181 | 34.988 | 24.967 | 0.486 |
| 180 | 18.988 | 34.983 | 25.019 | 0.516 |
| 190 | 18.745 | 34.945 | 25.045 | 0.546 |
| 200 | 17.419 | 34.688 | 25.176 | 0.575 |
| 250 | 13.769 | 34.203 | 25.620 | 0.705 |
| 300 | 10.005 | 34.016 | 26.184 | 0.814 |
| 350 | 8.637 | 34.045 | 26.427 | 0.902 |
| 400 | 7.783 | 34.080 | 26.583 | 0.982 |
| 450 | 6.719 | 34.048 | 26.707 | 1.054 |
| 500 | 6.254 | 34.106 | 26.814 | 1.121 |
| 550 | 5.753 | 34.170 | 26.928 | 1.183 |
| 600 | 5.318 | 34.252 | 27.045 | 1.239 |
| 650 | 5.110 | 34.304 | 27.111 | 1.292 |
| 700 | 4.950 | 34.350 | 27.166 | 1.341 |
| 750 | 4.784 | 34.388 | 27.215 | 1.389 |
| 800 | 4.618 | 34.420 | 27.259 | 1.434 |
| 900 | 4.366 | 34.479 | 27.333 | 1.520 |
| 996 | 4.057 | 34.493 | 27.377 | 1.588 |

CAST EP2-90-DI -002 DATE 20 OCT 90 TIME 1411 GMT
LAT 08 56.4N LONG 140 08.2W

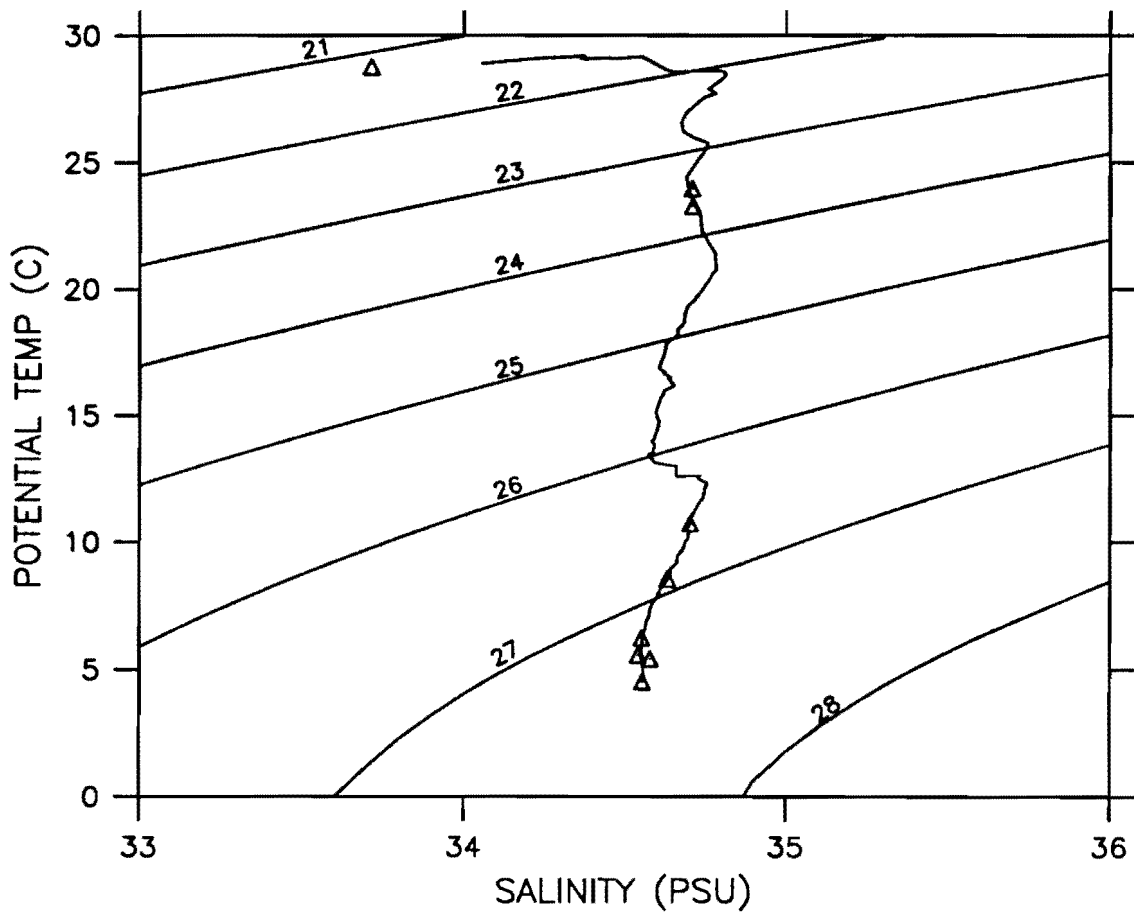


CAST EP2-90-DI -002 DATE 20 OCT 90 TIME 1411 GMT
 LAT 08 56.4N LONG 140 08.2W WEATHER 6 SEA STATE 3
 BAROMETER 10 WIND DIR 300 T SPD 07 KT VISIBILITY 7
 CLOUD AMOUNT 9 DRY 24.7 WET 23.9 DEPTH 5132 M

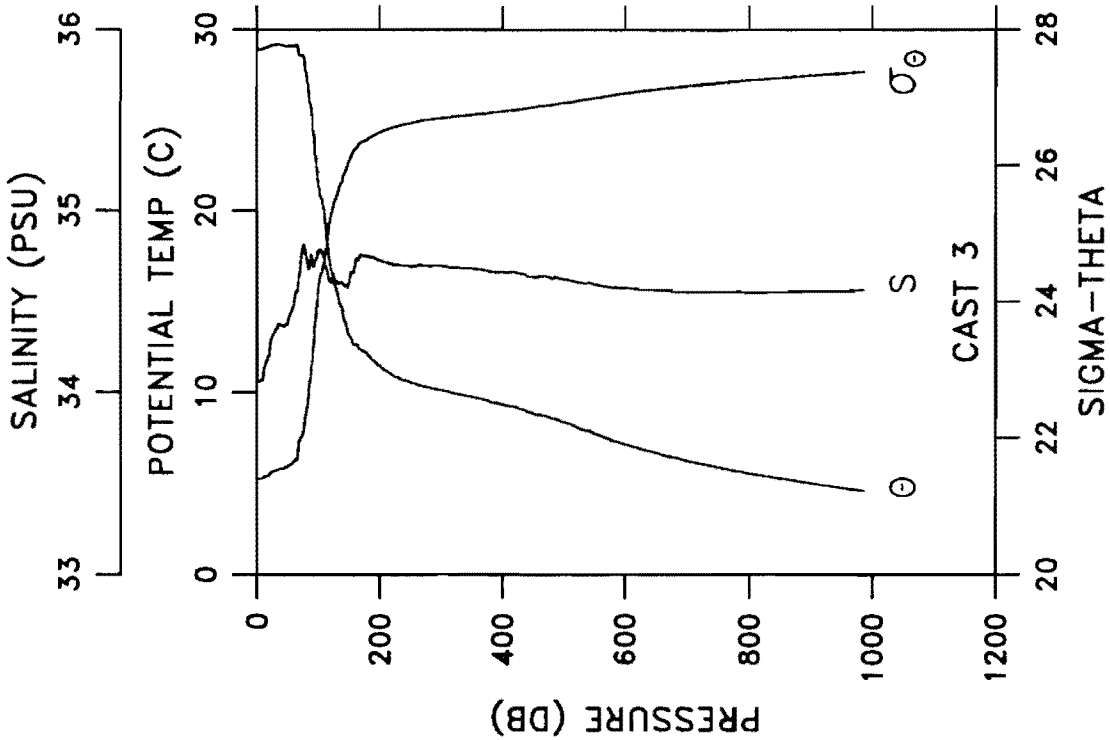


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.885 | 34.004 | 21.357 | 0.000 |
| 10 | 28.892 | 34.015 | 21.363 | 0.064 |
| 20 | 28.896 | 34.019 | 21.365 | 0.129 |
| 30 | 28.942 | 34.077 | 21.393 | 0.193 |
| 40 | 28.956 | 34.157 | 21.448 | 0.257 |
| 50 | 28.346 | 34.431 | 21.856 | 0.319 |
| 60 | 26.763 | 34.516 | 22.431 | 0.375 |
| 70 | 23.542 | 34.588 | 23.465 | 0.428 |
| 80 | 19.148 | 34.664 | 24.728 | 0.463 |
| 90 | 17.122 | 34.597 | 25.177 | 0.494 |
| 100 | 15.527 | 34.563 | 25.519 | 0.520 |
| 110 | 13.913 | 34.580 | 25.868 | 0.544 |
| 120 | 12.981 | 34.607 | 26.093 | 0.564 |
| 130 | 12.256 | 34.662 | 26.278 | 0.582 |
| 140 | 12.058 | 34.677 | 26.328 | 0.600 |
| 150 | 11.719 | 34.692 | 26.404 | 0.617 |
| 160 | 11.571 | 34.703 | 26.440 | 0.633 |
| 170 | 11.351 | 34.701 | 26.479 | 0.649 |
| 180 | 11.194 | 34.698 | 26.505 | 0.665 |
| 190 | 11.046 | 34.695 | 26.530 | 0.680 |
| 200 | 10.897 | 34.695 | 26.557 | 0.696 |
| 250 | 10.320 | 34.684 | 26.651 | 0.769 |
| 300 | 10.008 | 34.683 | 26.703 | 0.840 |
| 350 | 9.684 | 34.671 | 26.753 | 0.909 |
| 400 | 9.355 | 34.660 | 26.794 | 0.976 |
| 450 | 8.969 | 34.643 | 26.844 | 1.042 |
| 500 | 8.485 | 34.621 | 26.903 | 1.105 |
| 550 | 7.936 | 34.595 | 26.966 | 1.166 |
| 600 | 7.261 | 34.568 | 27.042 | 1.223 |
| 650 | 6.663 | 34.536 | 27.099 | 1.277 |
| 700 | 6.209 | 34.533 | 27.157 | 1.329 |
| 750 | 5.881 | 34.529 | 27.196 | 1.378 |
| 800 | 5.511 | 34.534 | 27.245 | 1.425 |
| 900 | 5.010 | 34.540 | 27.309 | 1.514 |
| 1000 | 4.563 | 34.548 | 27.366 | 1.598 |
| 1010 | 4.514 | 34.549 | 27.372 | 1.608 |

CAST EP2-90-DI -003 DATE 21 OCT 90 TIME 0258 GMT
LAT 07 59.6N LONG 139 59.2W

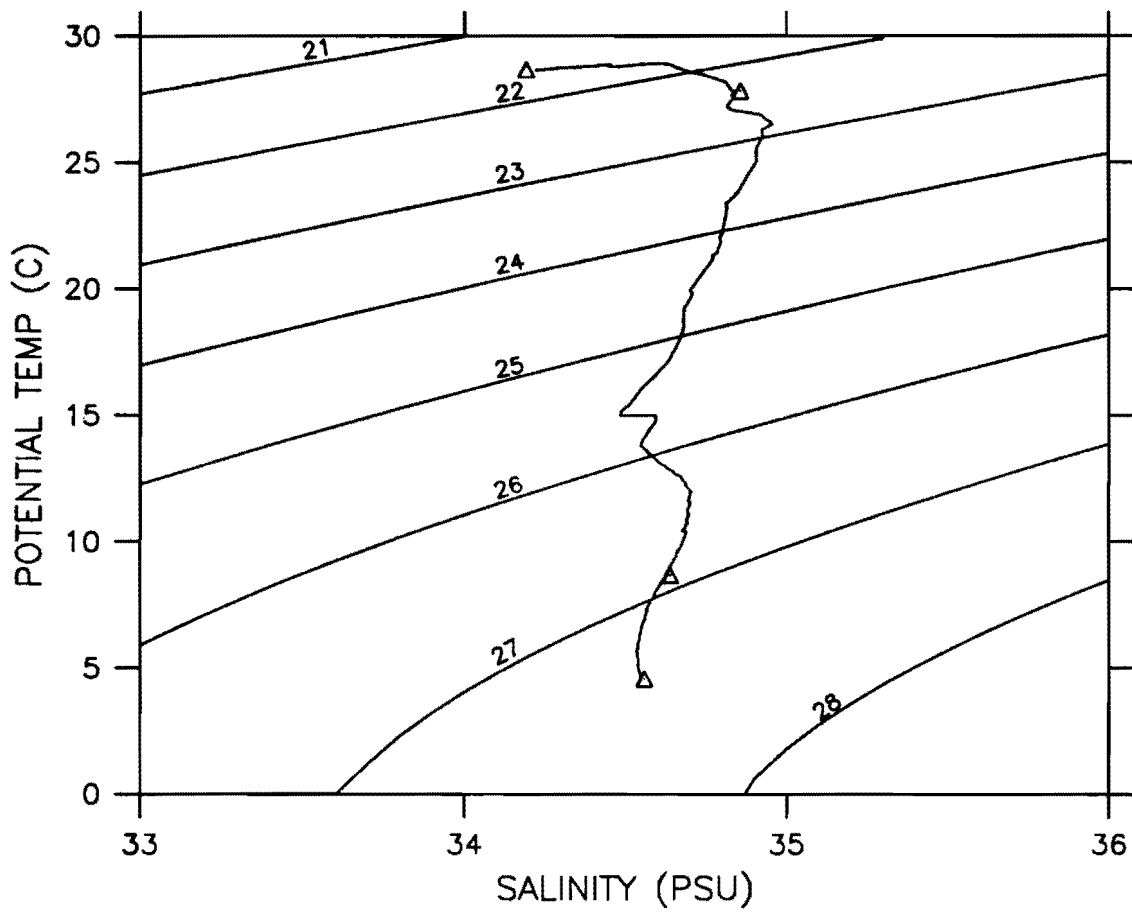


CAST EP2-90-DI -003 DATE 21 OCT 90 TIME 0258 GMT
 LAT 07 59.6N LONG 139 59.2W WEATHER 6 SEA STATE 4
 BAROMETER 10 WIND DIR 240 T SPD 15 KT VISIBILITY 5
 CLOUD 5 AMOUNT 8 DRY 24.5 WET 23.6 DEPTH 5959 M

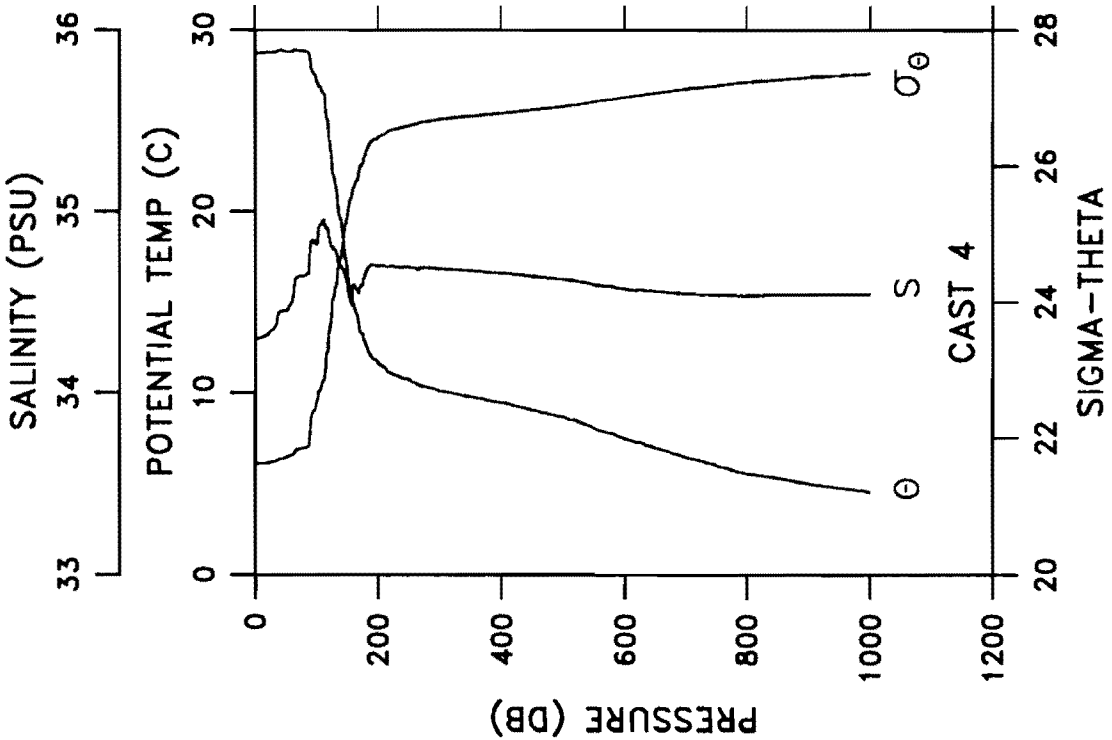


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.888 | 34.058 | 21.397 | 0.000 |
| 10 | 28.901 | 34.066 | 21.398 | 0.064 |
| 20 | 29.057 | 34.198 | 21.445 | 0.128 |
| 30 | 29.159 | 34.336 | 21.514 | 0.191 |
| 40 | 29.140 | 34.367 | 21.544 | 0.253 |
| 50 | 29.073 | 34.375 | 21.573 | 0.316 |
| 60 | 29.089 | 34.476 | 21.643 | 0.378 |
| 70 | 28.546 | 34.673 | 21.972 | 0.439 |
| 80 | 27.559 | 34.749 | 22.351 | 0.496 |
| 90 | 25.152 | 34.731 | 23.094 | 0.548 |
| 100 | 21.408 | 34.782 | 24.218 | 0.591 |
| 110 | 19.558 | 34.715 | 24.661 | 0.626 |
| 120 | 16.878 | 34.605 | 25.241 | 0.656 |
| 130 | 15.587 | 34.608 | 25.541 | 0.682 |
| 140 | 14.212 | 34.595 | 25.830 | 0.706 |
| 150 | 13.128 | 34.596 | 26.055 | 0.727 |
| 160 | 12.612 | 34.706 | 26.243 | 0.745 |
| 170 | 12.339 | 34.757 | 26.335 | 0.763 |
| 180 | 12.063 | 34.749 | 26.382 | 0.780 |
| 190 | 11.725 | 34.743 | 26.442 | 0.797 |
| 200 | 11.454 | 34.729 | 26.482 | 0.813 |
| 250 | 10.538 | 34.693 | 26.619 | 0.889 |
| 300 | 10.123 | 34.696 | 26.694 | 0.960 |
| 350 | 9.749 | 34.682 | 26.746 | 1.030 |
| 400 | 9.342 | 34.664 | 26.800 | 1.097 |
| 450 | 8.827 | 34.634 | 26.860 | 1.162 |
| 500 | 8.380 | 34.623 | 26.924 | 1.224 |
| 550 | 7.737 | 34.594 | 26.994 | 1.284 |
| 600 | 7.151 | 34.576 | 27.064 | 1.340 |
| 650 | 6.685 | 34.563 | 27.118 | 1.393 |
| 700 | 6.225 | 34.555 | 27.173 | 1.444 |
| 750 | 5.876 | 34.552 | 27.215 | 1.492 |
| 800 | 5.524 | 34.551 | 27.257 | 1.539 |
| 900 | 4.994 | 34.556 | 27.324 | 1.627 |
| 987 | 4.578 | 34.565 | 27.378 | 1.699 |

CAST EP2-90-DI -004 DATE 21 OCT 90 TIME 1106 GMT
LAT 07 00.4N LONG 139 59.0W

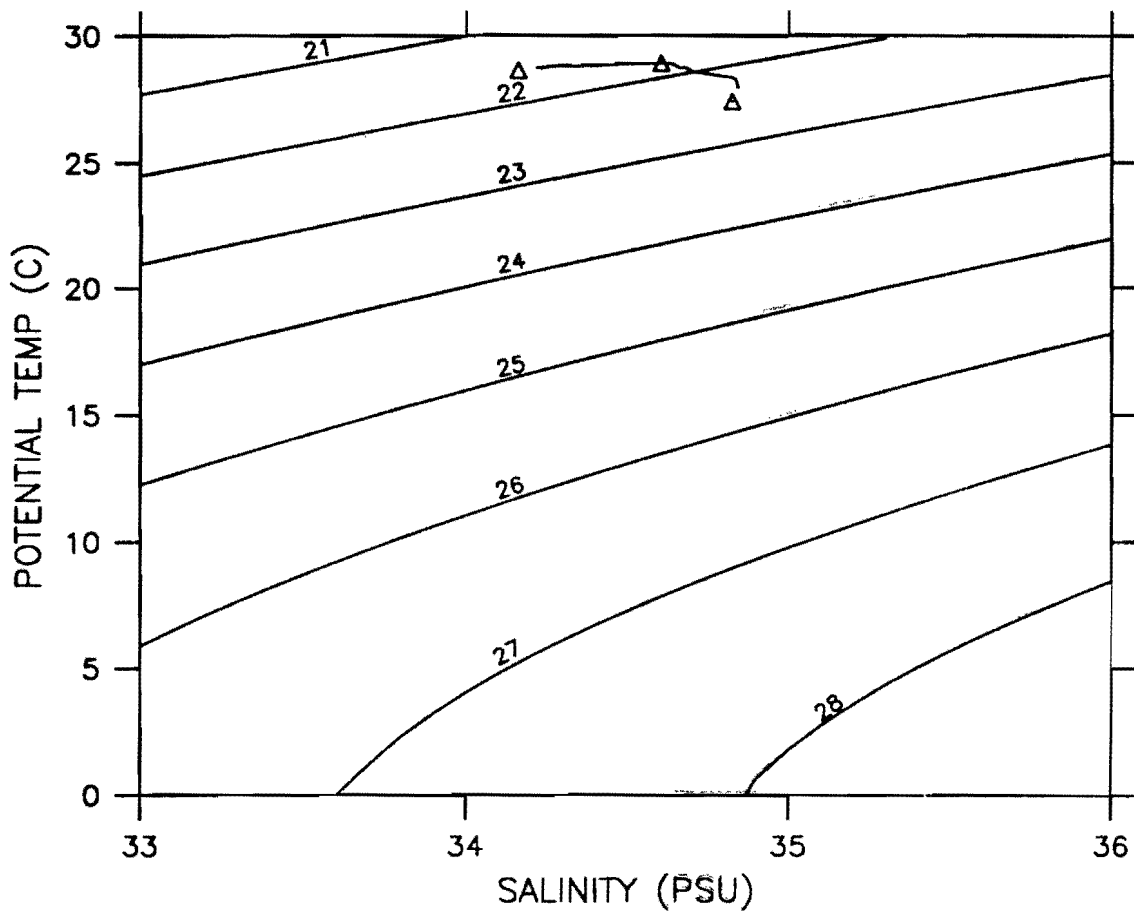


CAST EP2-90-DI -004 DATE 21 OCT 90 TIME 1106 GMT
 LAT 07 00.4N LONG 139 59.0W WEATHER 6 SEA STATE 3
 BAROMETER 11 WIND DIR 280 T SPD 10 KT VISIBILITY 6
 CLOUD AMOUNT 9 DRY 23.7 WET 22.5 DEPTH 4975 M



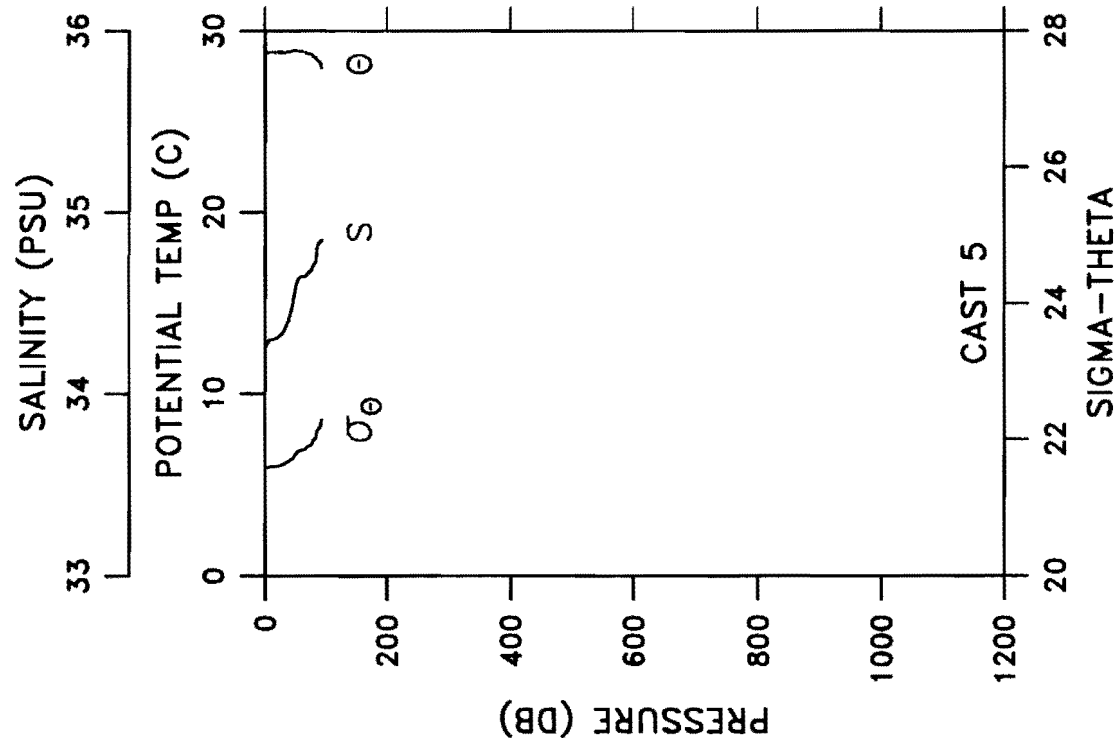
| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.645 | 34.222 | 21.600 | 0.000 |
| 10 | 28.741 | 34.302 | 21.629 | 0.062 |
| 20 | 28.753 | 34.315 | 21.635 | 0.123 |
| 30 | 28.777 | 34.355 | 21.656 | 0.185 |
| 40 | 28.880 | 34.451 | 21.694 | 0.246 |
| 50 | 28.810 | 34.450 | 21.717 | 0.308 |
| 60 | 28.811 | 34.498 | 21.752 | 0.368 |
| 70 | 28.867 | 34.638 | 21.839 | 0.429 |
| 80 | 28.843 | 34.843 | 21.851 | 0.489 |
| 90 | 28.170 | 34.812 | 22.200 | 0.548 |
| 100 | 27.179 | 34.816 | 22.524 | 0.603 |
| 110 | 26.545 | 34.951 | 22.827 | 0.655 |
| 120 | 24.015 | 34.858 | 23.531 | 0.703 |
| 130 | 21.556 | 34.788 | 24.182 | 0.744 |
| 140 | 19.538 | 34.699 | 24.654 | 0.779 |
| 150 | 16.979 | 34.622 | 25.230 | 0.810 |
| 160 | 14.975 | 34.595 | 25.666 | 0.835 |
| 170 | 13.589 | 34.568 | 25.943 | 0.858 |
| 180 | 12.658 | 34.657 | 26.196 | 0.877 |
| 190 | 11.994 | 34.704 | 26.381 | 0.895 |
| 200 | 11.650 | 34.699 | 26.422 | 0.912 |
| 250 | 10.726 | 34.694 | 26.587 | 0.990 |
| 300 | 10.082 | 34.681 | 26.689 | 1.062 |
| 350 | 9.781 | 34.672 | 26.734 | 1.132 |
| 400 | 9.461 | 34.659 | 26.777 | 1.200 |
| 450 | 9.042 | 34.641 | 26.831 | 1.267 |
| 500 | 8.671 | 34.625 | 26.877 | 1.331 |
| 550 | 8.047 | 34.595 | 26.949 | 1.392 |
| 600 | 7.465 | 34.572 | 27.016 | 1.451 |
| 650 | 6.962 | 34.560 | 27.077 | 1.507 |
| 700 | 6.451 | 34.548 | 27.137 | 1.559 |
| 750 | 6.013 | 34.541 | 27.188 | 1.609 |
| 800 | 5.559 | 34.536 | 27.241 | 1.657 |
| 900 | 5.017 | 34.539 | 27.308 | 1.747 |
| 1000 | 4.557 | 34.545 | 27.365 | 1.831 |
| 1010 | 4.524 | 34.546 | 27.369 | 1.839 |

CAST EP2-90-DI -005 DATE 21 OCT 90 TIME 1441 GMT
LAT 06 59.9N LONG 139 59.8W

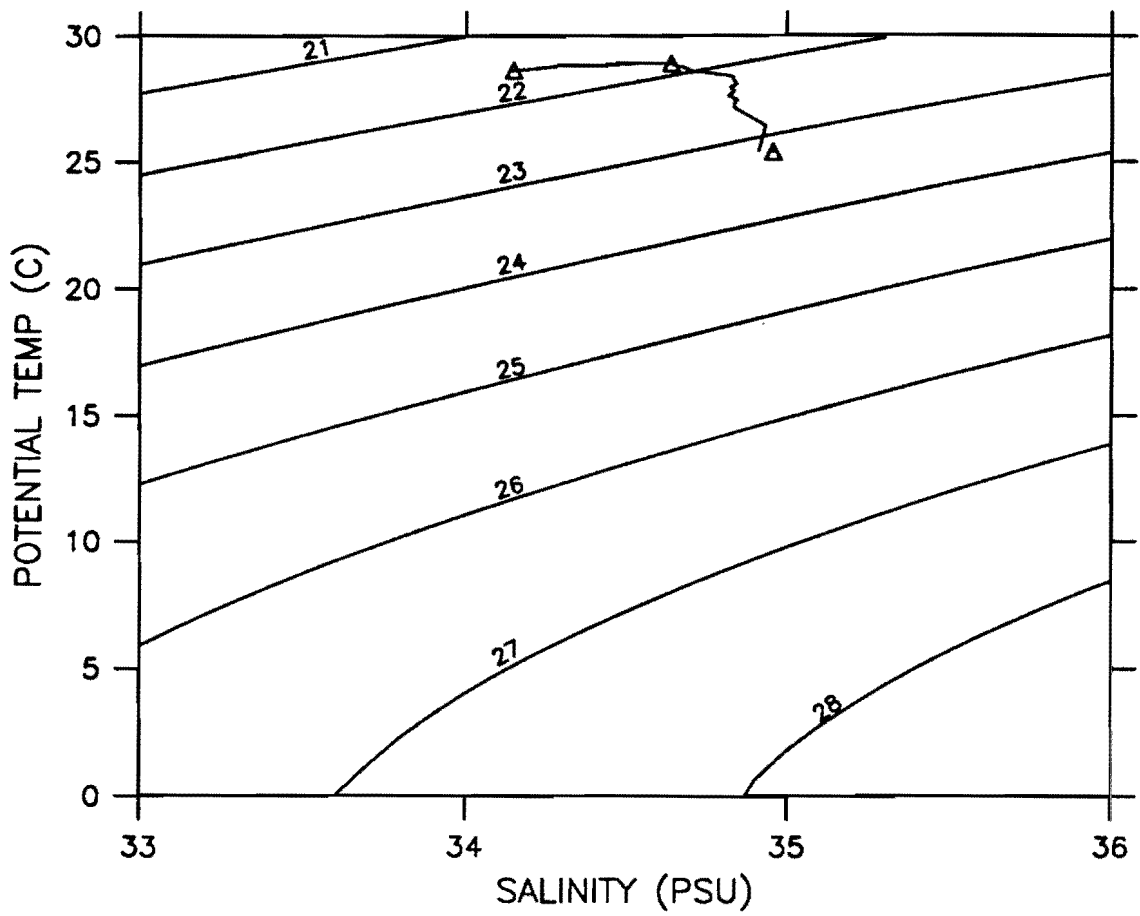


CAST EP2-90-DI --005 DATE 21 OCT 90 TIME 1441 GMT
 LAT 06 59.9N LONG 139 59.8W WEATHER 2 SEA STATE 3
 BAROMETER 10 WIND DIR 180 T SPD 08 KT VISIBILITY 7
 CLOUD 7 AMOUNT 6 DRY 25.0 WET 23.0 DEPTH 4989 M

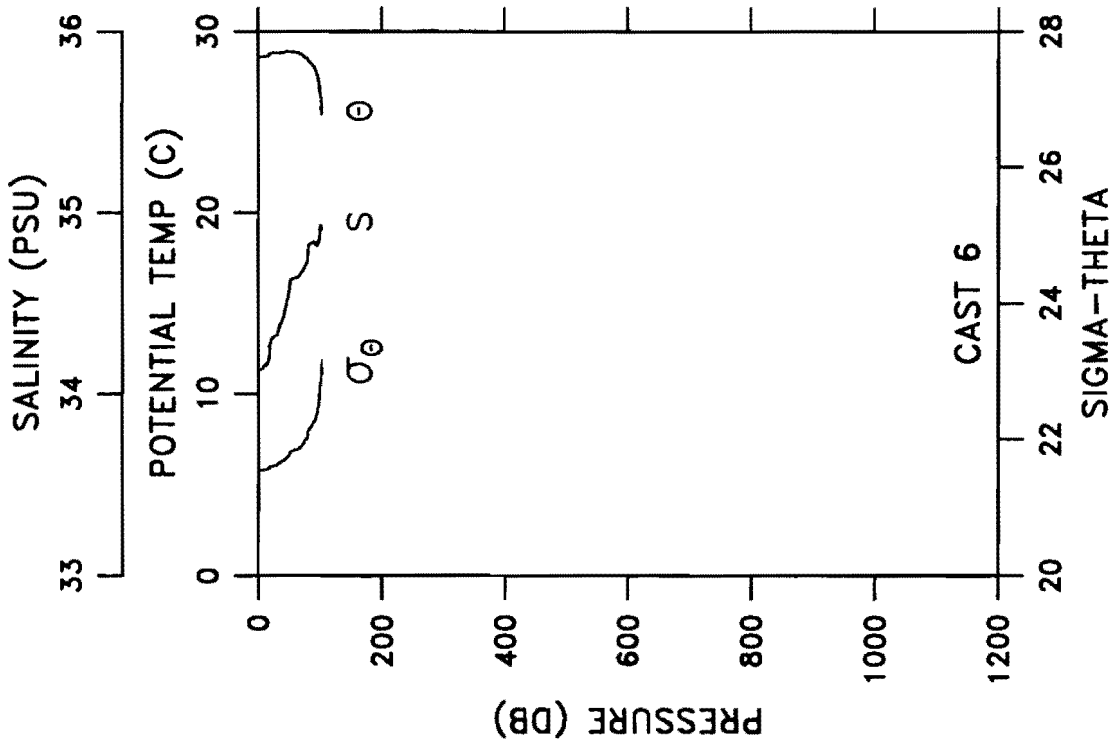
| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.729 | 34.223 | 21.573 | 0.000 |
| 10 | 28.827 | 34.298 | 21.597 | 0.062 |
| 20 | 28.824 | 34.307 | 21.605 | 0.124 |
| 30 | 28.816 | 34.340 | 21.632 | 0.186 |
| 40 | 28.842 | 34.425 | 21.688 | 0.248 |
| 50 | 28.920 | 34.593 | 21.787 | 0.308 |
| 60 | 28.878 | 34.645 | 21.841 | 0.369 |
| 70 | 28.738 | 34.665 | 21.902 | 0.428 |
| 80 | 28.554 | 34.714 | 22.000 | 0.487 |
| 90 | 28.313 | 34.838 | 22.172 | 0.545 |
| 93 | 27.969 | 34.847 | 22.292 | 0.562 |



CAST EP2-90-DI -006 DATE 21 OCT 90 TIME 1620 GMT
LAT 06 59.8N LONG 139 56.8W

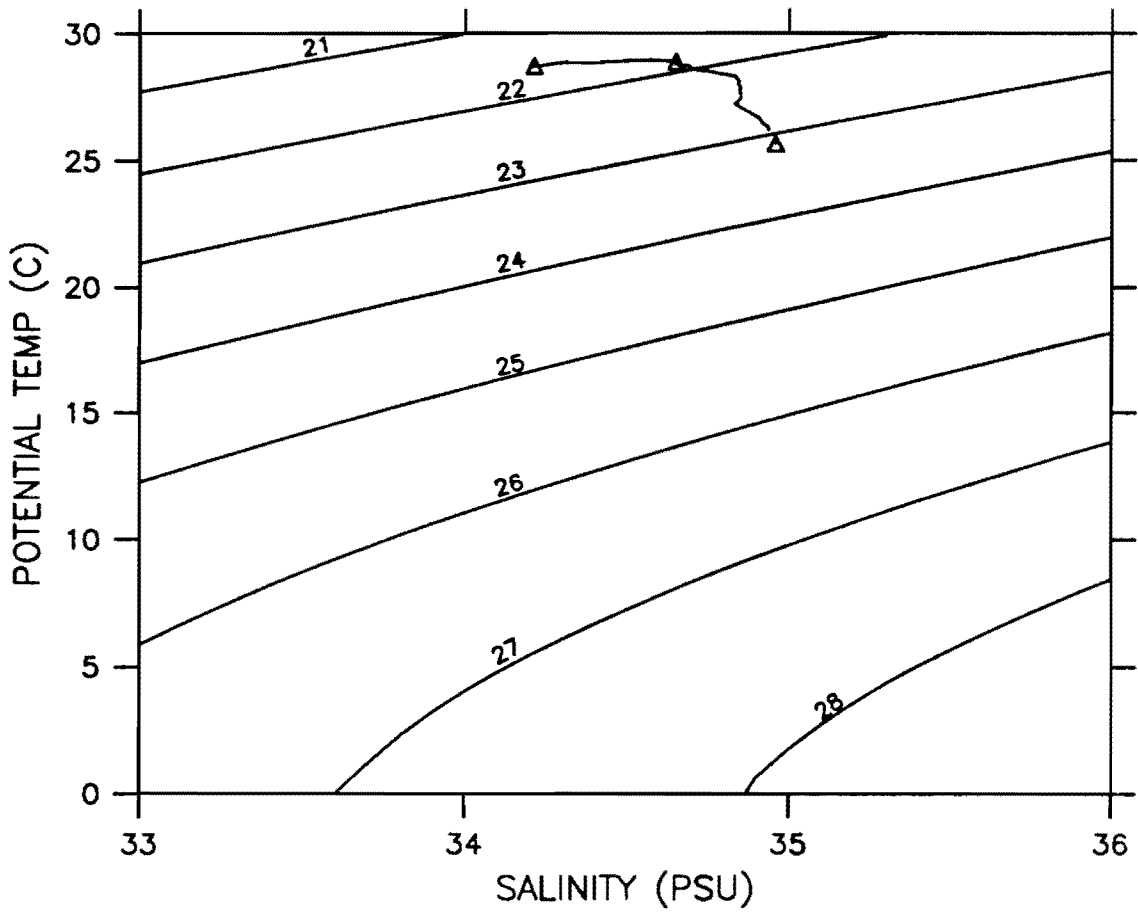


CAST EP2-90-D1 -006 DATE 21 OCT 90 TIME 1620 GMT
 LAT 06 59.8N LONG 139 56.8W WEATHER 1 SEA STATE 1
 BAROMETER 10 WIND DIR 150 T SPD 10 KT VISIBILITY
 CLOUD 3 AMOUNT 6 DRY 26.0 WET 23.8 DEPTH 4986 M

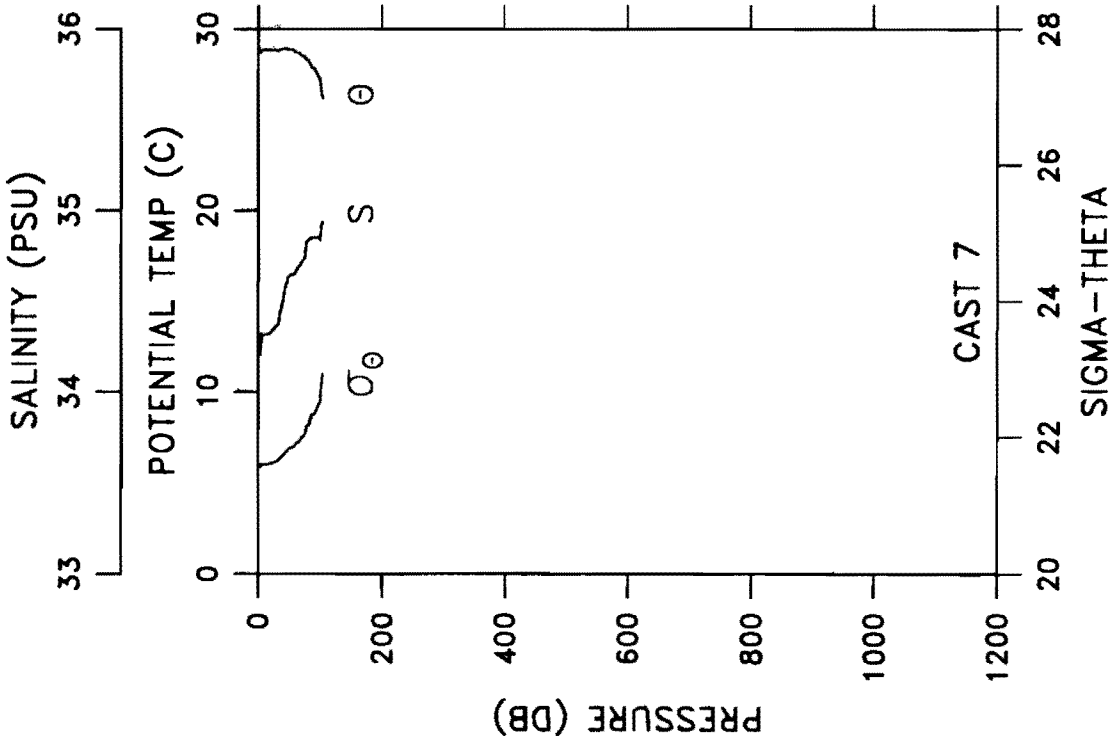


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.607 | 34.136 | 21.548 | 0.000 |
| 10 | 28.629 | 34.155 | 21.555 | 0.062 |
| 20 | 28.802 | 34.282 | 21.593 | 0.125 |
| 30 | 28.827 | 34.324 | 21.617 | 0.187 |
| 40 | 28.834 | 34.416 | 21.684 | 0.248 |
| 50 | 28.918 | 34.589 | 21.770 | 0.309 |
| 60 | 28.864 | 34.640 | 21.841 | 0.369 |
| 70 | 28.760 | 34.673 | 21.900 | 0.429 |
| 80 | 28.536 | 34.737 | 22.023 | 0.488 |
| 90 | 28.075 | 34.842 | 22.253 | 0.545 |
| 100 | 26.751 | 34.884 | 22.712 | 0.600 |
| 103 | 25.407 | 34.912 | 23.152 | 0.615 |

CAST EP2-90-DI -007 DATE 21 OCT 90 TIME 1725 GMT
LAT 06 58.3N LONG 139 57.5W

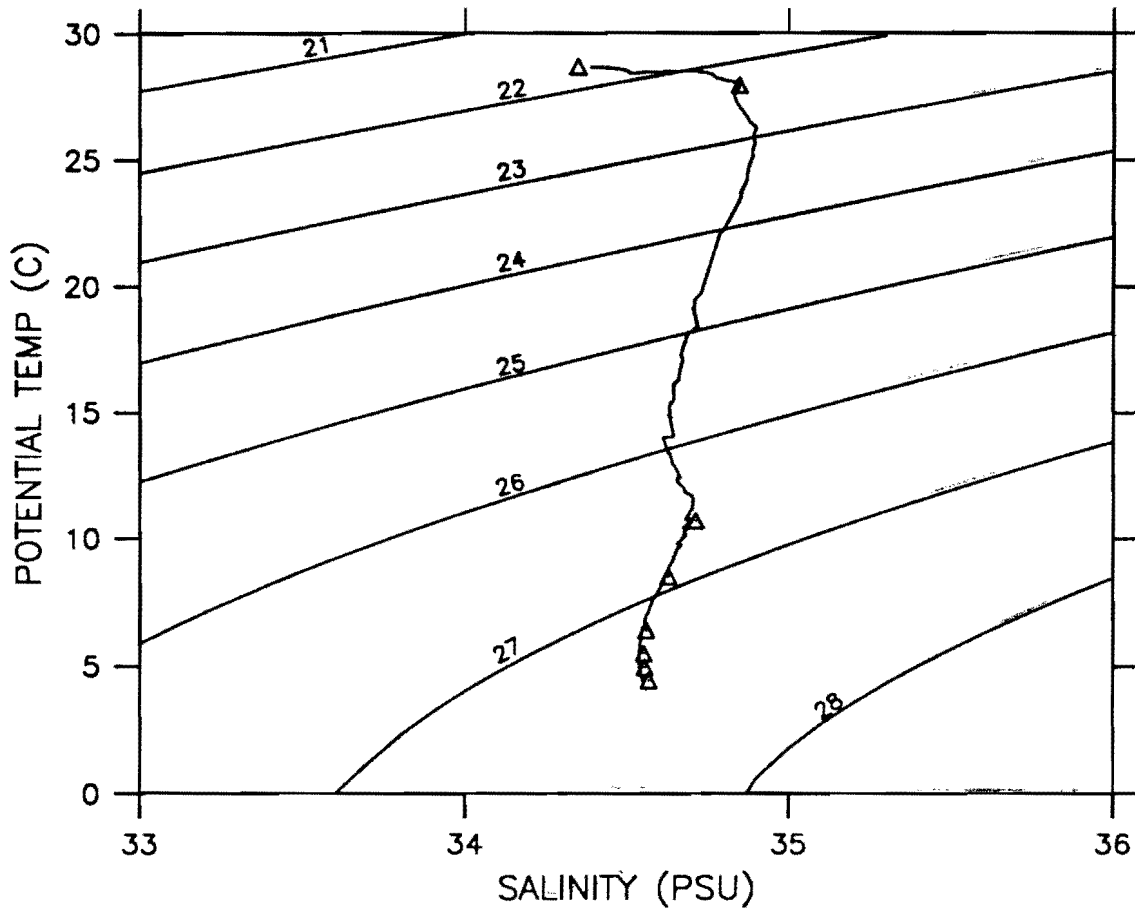


CAST EP2-90-D1 -007 DATE 21 OCT 90 TIME 1725 GMT
 LAT 06 58.3N LONG 139 57.5W WEATHER 1 SEA STATE 1
 BAROMETER 10 WIND DIR 155 T SPD 11 KT VISIBILITY 8
 CLOUD 6 AMOUNT 7 DRY 26.6 WET 24.7 DEPTH 5005 M

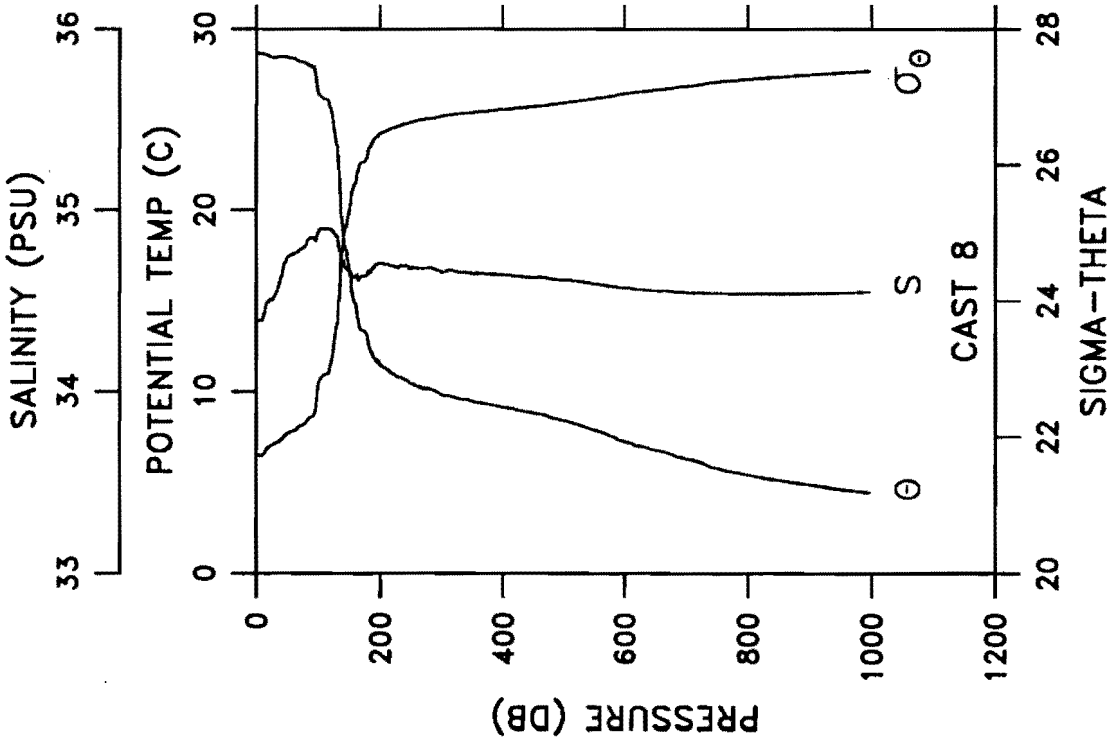


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.692 | 34.202 | 21.569 | 0.000 |
| 10 | 28.852 | 34.313 | 21.600 | 0.062 |
| 20 | 28.845 | 34.326 | 21.612 | 0.124 |
| 30 | 28.823 | 34.362 | 21.846 | 0.186 |
| 40 | 28.904 | 34.503 | 21.725 | 0.247 |
| 50 | 28.881 | 34.636 | 21.833 | 0.308 |
| 60 | 28.723 | 34.661 | 21.904 | 0.367 |
| 70 | 28.543 | 34.715 | 22.004 | 0.426 |
| 80 | 28.298 | 34.832 | 22.173 | 0.484 |
| 90 | 27.837 | 34.851 | 22.338 | 0.540 |
| 100 | 27.207 | 34.833 | 22.528 | 0.595 |
| 104 | 26.177 | 34.935 | 22.931 | 0.615 |

CAST EP2-90-DI -008 DATE 22 OCT 90 TIME 1101 GMT
LAT 05 59.9N LONG 140 00.0W

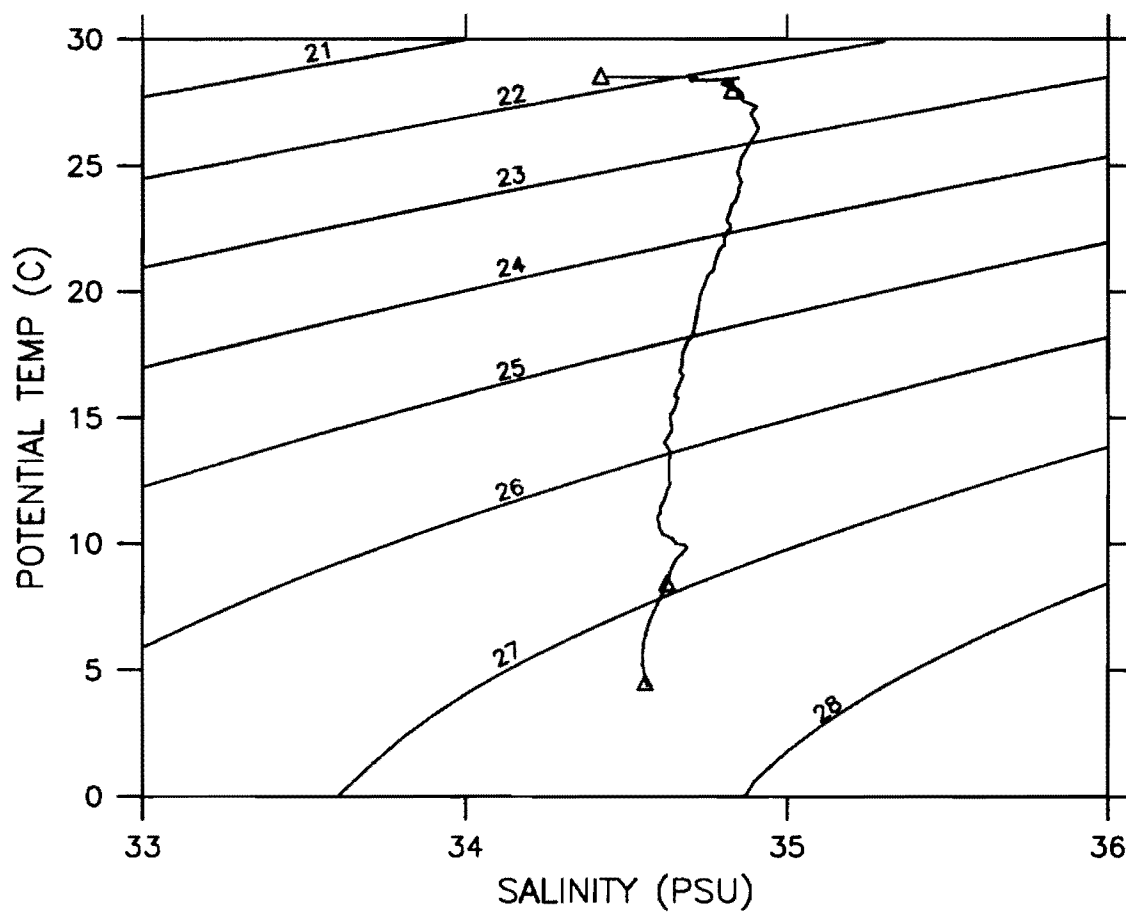


CAST EP2-90-DI -008 DATE 22 OCT 90 TIME 1101 GMT
 LAT 05 59.9N LONG 140 00.0W WEATHER 1 SEA STATE 3
 BAROMETER 10 WIND DIR 170 T SPD 13 KT VISIBILITY 7
 CLOUD AMOUNT 9 DRY 26.2 WET 23.8 DEPTH 4830 M

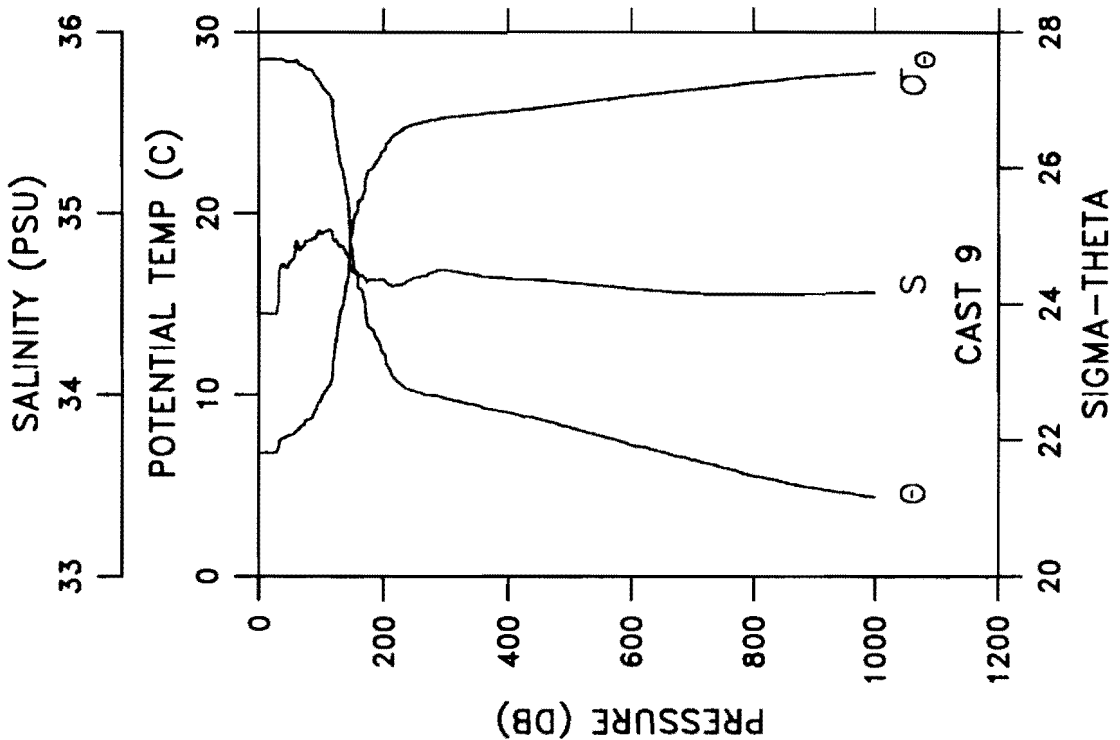


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.654 | 34.392 | 21.725 | 0.000 |
| 10 | 28.641 | 34.392 | 21.729 | 0.061 |
| 20 | 28.533 | 34.493 | 21.841 | 0.121 |
| 30 | 28.428 | 34.537 | 21.908 | 0.180 |
| 40 | 28.477 | 34.633 | 21.964 | 0.239 |
| 50 | 28.437 | 34.742 | 22.059 | 0.297 |
| 60 | 28.385 | 34.757 | 22.088 | 0.355 |
| 70 | 28.212 | 34.782 | 22.164 | 0.412 |
| 80 | 28.112 | 34.816 | 22.222 | 0.469 |
| 90 | 27.933 | 34.846 | 22.303 | 0.525 |
| 100 | 26.415 | 34.886 | 22.819 | 0.578 |
| 110 | 26.115 | 34.895 | 22.920 | 0.629 |
| 120 | 25.523 | 34.890 | 23.100 | 0.678 |
| 130 | 23.542 | 34.853 | 23.666 | 0.723 |
| 140 | 18.408 | 34.719 | 24.856 | 0.759 |
| 150 | 16.611 | 34.662 | 25.348 | 0.788 |
| 160 | 14.783 | 34.634 | 25.738 | 0.812 |
| 170 | 13.372 | 34.633 | 26.034 | 0.833 |
| 180 | 12.640 | 34.657 | 26.199 | 0.853 |
| 190 | 11.808 | 34.688 | 26.384 | 0.871 |
| 200 | 11.462 | 34.703 | 26.460 | 0.887 |
| 250 | 10.428 | 34.674 | 26.623 | 0.964 |
| 300 | 9.815 | 34.656 | 26.715 | 1.035 |
| 350 | 9.460 | 34.650 | 26.770 | 1.103 |
| 400 | 9.156 | 34.643 | 26.814 | 1.169 |
| 450 | 8.817 | 34.628 | 26.856 | 1.234 |
| 500 | 8.392 | 34.615 | 26.912 | 1.296 |
| 550 | 7.868 | 34.595 | 26.976 | 1.357 |
| 600 | 7.225 | 34.570 | 27.049 | 1.414 |
| 650 | 6.773 | 34.555 | 27.100 | 1.468 |
| 700 | 6.291 | 34.546 | 27.156 | 1.519 |
| 750 | 5.785 | 34.542 | 27.218 | 1.568 |
| 800 | 5.425 | 34.540 | 27.261 | 1.614 |
| 900 | 4.862 | 34.541 | 27.325 | 1.702 |
| 996 | 4.442 | 34.549 | 27.380 | 1.781 |

CAST EP2-90-DI -009 DATE 23 OCT 90 TIME 1120 GMT
LAT 05 01.9N LONG 140 03.3W

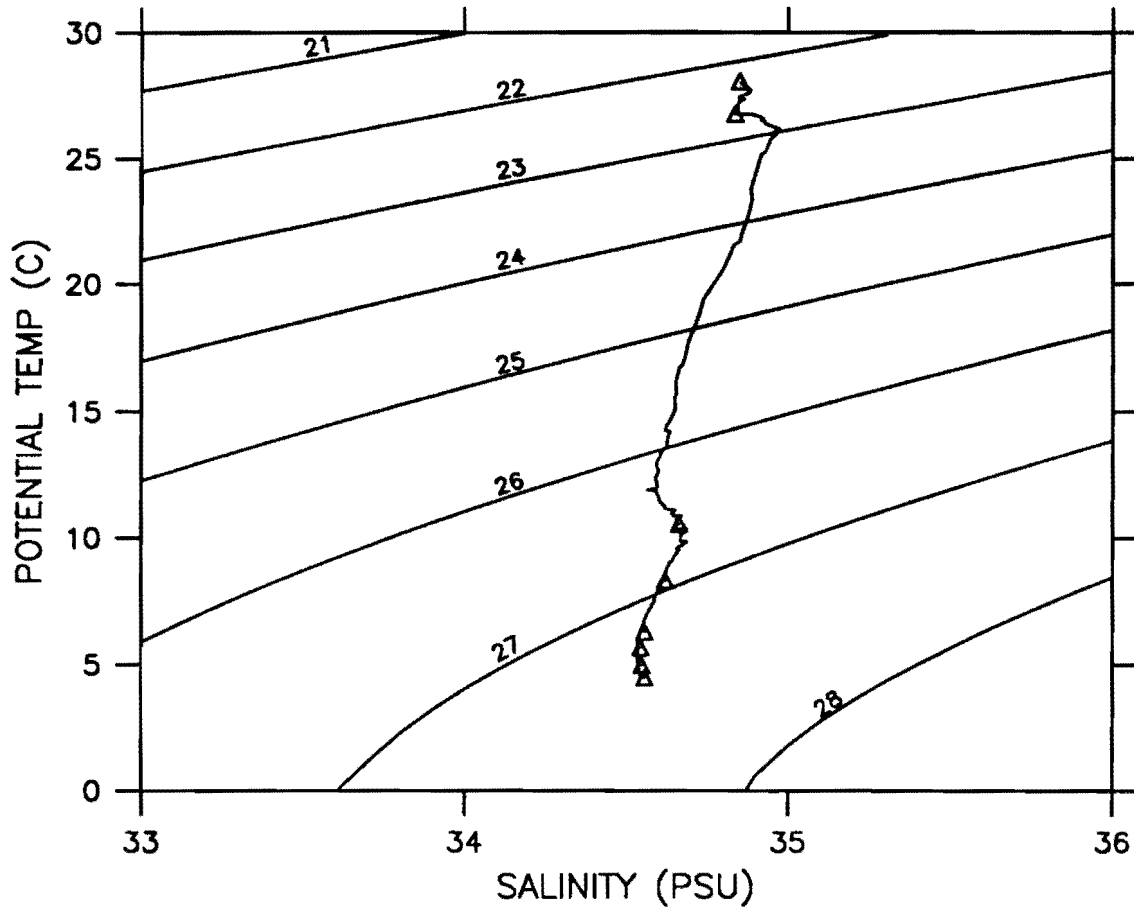


CAST EP2-90-D1 -009 DATE 23 OCT 90 TIME 1120 GMT
 LAT 05 01.9N LONG 140 03.3W WEATHER 1 SEA STATE 3
 BAROMETER 09 WIND DIR 140 T SPD 12 KT VISIBILITY 7
 CLOUD AMOUNT 9 DRY 26.6 WET 24.0 DEPTH 4269 M

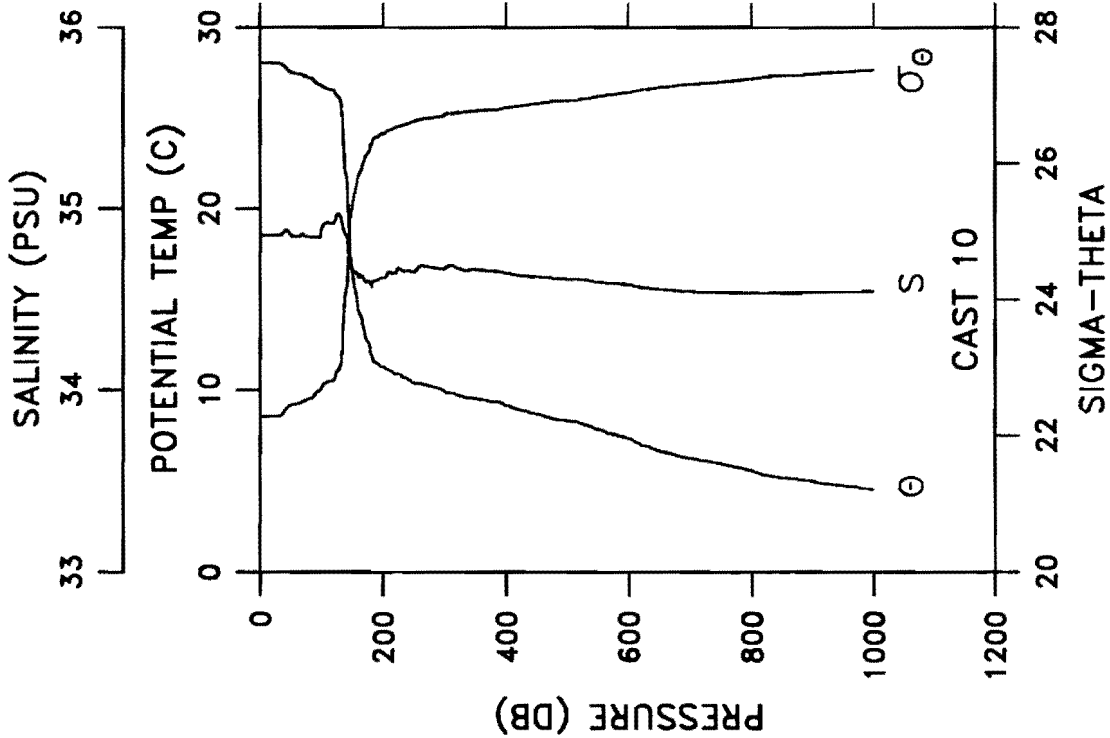


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SKG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.502 | 34.448 | 21.817 | 0.000 |
| 10 | 28.496 | 34.447 | 21.818 | 0.060 |
| 20 | 28.500 | 34.446 | 21.816 | 0.120 |
| 30 | 28.492 | 34.473 | 21.839 | 0.180 |
| 40 | 28.458 | 34.715 | 22.032 | 0.238 |
| 50 | 28.363 | 34.725 | 22.071 | 0.296 |
| 60 | 28.421 | 34.835 | 22.134 | 0.354 |
| 70 | 28.140 | 34.613 | 22.211 | 0.411 |
| 80 | 27.941 | 34.848 | 22.302 | 0.467 |
| 90 | 27.640 | 34.861 | 22.409 | 0.522 |
| 100 | 27.096 | 34.890 | 22.606 | 0.576 |
| 110 | 26.619 | 34.905 | 22.769 | 0.628 |
| 120 | 25.231 | 34.857 | 23.164 | 0.678 |
| 130 | 22.912 | 34.814 | 23.819 | 0.723 |
| 140 | 21.303 | 34.779 | 24.245 | 0.762 |
| 150 | 17.975 | 34.689 | 25.041 | 0.796 |
| 160 | 15.874 | 34.652 | 25.509 | 0.823 |
| 170 | 15.079 | 34.637 | 25.676 | 0.847 |
| 180 | 13.626 | 34.635 | 25.983 | 0.869 |
| 190 | 13.000 | 34.632 | 26.109 | 0.889 |
| 200 | 12.270 | 34.635 | 26.254 | 0.908 |
| 250 | 10.221 | 34.642 | 26.635 | 0.986 |
| 300 | 9.806 | 34.686 | 26.740 | 1.056 |
| 350 | 9.420 | 34.659 | 26.783 | 1.124 |
| 400 | 9.028 | 34.641 | 26.833 | 1.189 |
| 450 | 8.660 | 34.632 | 26.884 | 1.252 |
| 500 | 8.201 | 34.618 | 26.944 | 1.314 |
| 550 | 7.742 | 34.602 | 27.000 | 1.372 |
| 600 | 7.218 | 34.582 | 27.060 | 1.428 |
| 650 | 6.854 | 34.571 | 27.101 | 1.482 |
| 700 | 6.411 | 34.561 | 27.153 | 1.534 |
| 750 | 5.984 | 34.555 | 27.203 | 1.583 |
| 800 | 5.539 | 34.551 | 27.255 | 1.630 |
| 800 | 4.877 | 34.557 | 27.338 | 1.718 |
| 1000 | 4.394 | 34.565 | 27.399 | 1.798 |
| 1010 | 4.373 | 34.566 | 27.401 | 1.806 |

CAST EP2-90-DI -010 DATE 23 OCT 90 TIME 1924 GMT
LAT 03 59.7N LONG 139 59.7W

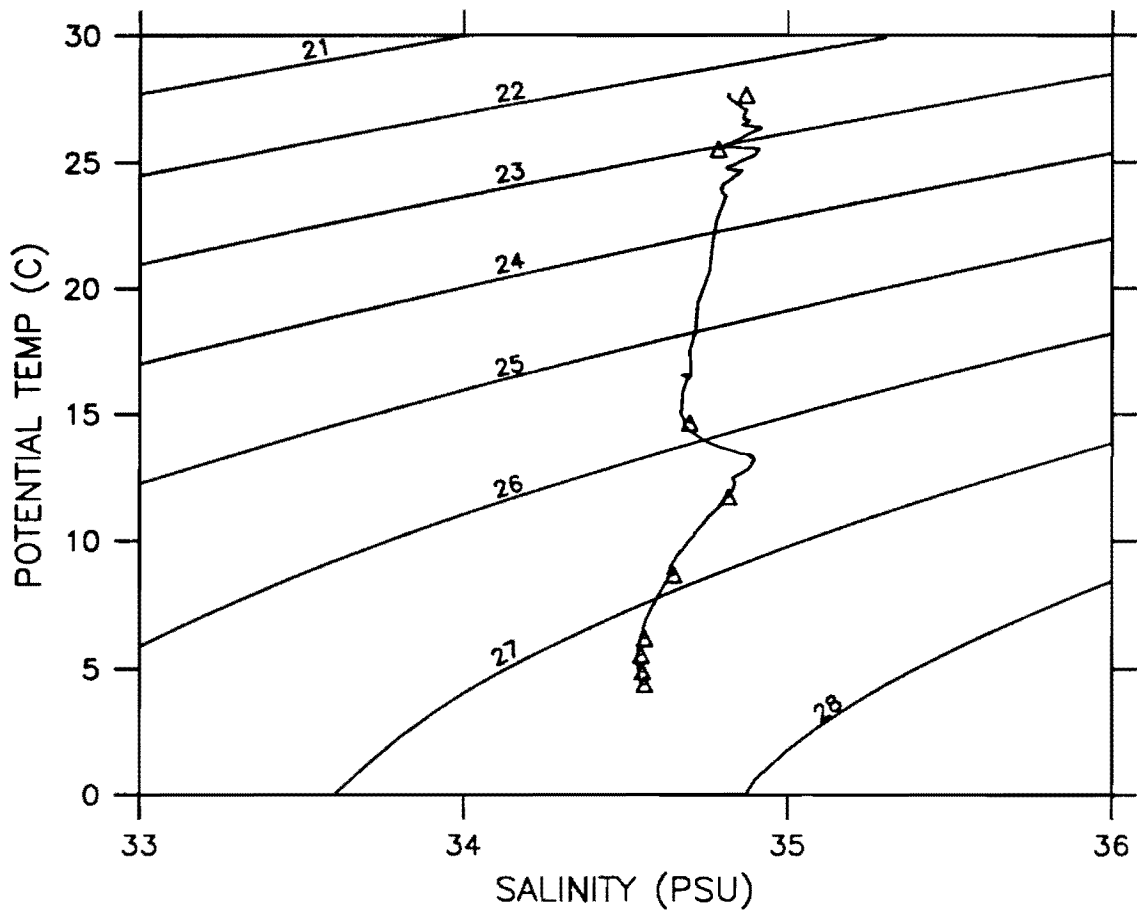


CAST EP2-90-DI -010 DATE 23 OCT 90 TIME 1924 GMT
 LAT 03 59.7N LONG 139 59.7W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 120 T SPD 19 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 27.3 WET 23.7 DEPTH 4355 M

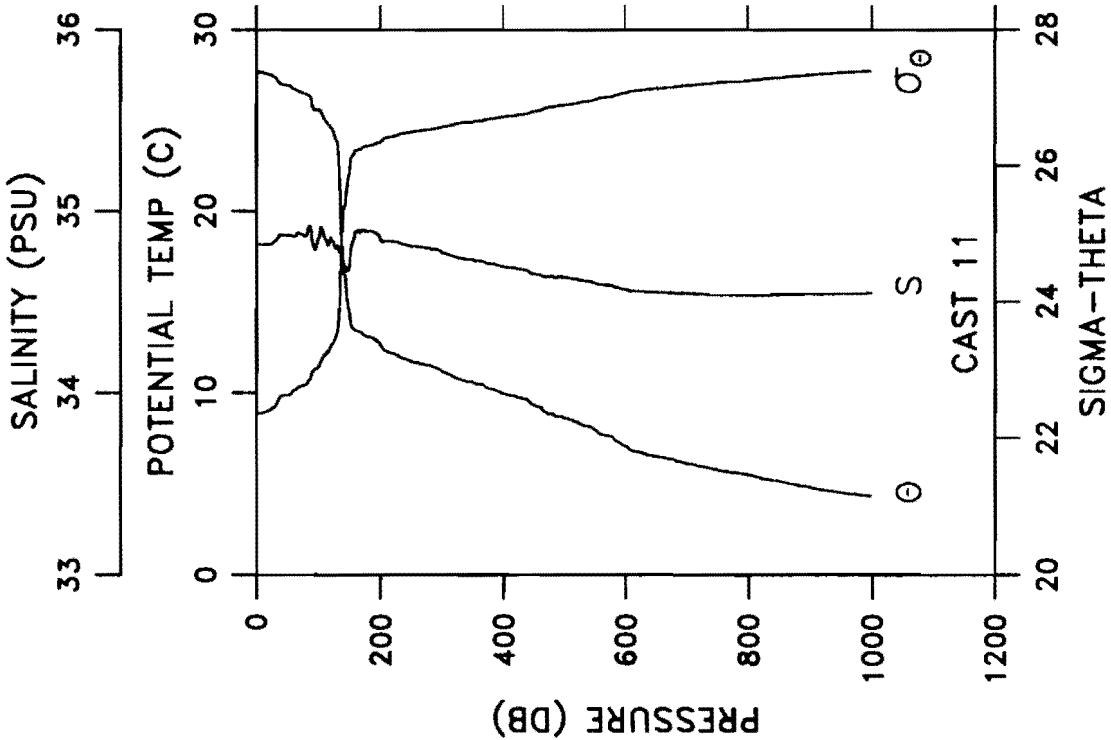


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-0 (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.041 | 34.853 | 22.273 | 0.000 |
| 10 | 28.023 | 34.852 | 22.278 | 0.056 |
| 20 | 28.018 | 34.853 | 22.280 | 0.111 |
| 30 | 28.013 | 34.853 | 22.282 | 0.167 |
| 40 | 27.803 | 34.877 | 22.369 | 0.222 |
| 50 | 27.485 | 34.847 | 22.449 | 0.276 |
| 60 | 27.444 | 34.850 | 22.464 | 0.330 |
| 70 | 27.332 | 34.854 | 22.504 | 0.384 |
| 80 | 27.196 | 34.845 | 22.541 | 0.437 |
| 90 | 26.921 | 34.844 | 22.627 | 0.491 |
| 100 | 26.745 | 34.898 | 22.724 | 0.543 |
| 110 | 26.586 | 34.922 | 22.793 | 0.594 |
| 120 | 26.487 | 34.927 | 22.828 | 0.645 |
| 130 | 25.911 | 34.956 | 23.029 | 0.695 |
| 140 | 21.704 | 34.852 | 24.189 | 0.738 |
| 150 | 16.372 | 34.858 | 25.400 | 0.768 |
| 160 | 14.252 | 34.621 | 25.842 | 0.792 |
| 170 | 13.020 | 34.596 | 26.077 | 0.813 |
| 180 | 11.942 | 34.590 | 26.282 | 0.832 |
| 190 | 11.476 | 34.606 | 26.382 | 0.849 |
| 200 | 11.269 | 34.619 | 26.430 | 0.866 |
| 250 | 10.389 | 34.651 | 26.613 | 0.943 |
| 300 | 9.898 | 34.689 | 26.712 | 1.015 |
| 350 | 9.534 | 34.665 | 26.770 | 1.083 |
| 400 | 9.148 | 34.645 | 26.817 | 1.149 |
| 450 | 8.681 | 34.625 | 26.876 | 1.214 |
| 500 | 8.318 | 34.612 | 26.921 | 1.275 |
| 550 | 7.848 | 34.597 | 26.980 | 1.335 |
| 600 | 7.341 | 34.581 | 27.041 | 1.392 |
| 650 | 6.861 | 34.556 | 27.116 | 1.446 |
| 700 | 6.250 | 34.545 | 27.161 | 1.497 |
| 750 | 5.963 | 34.539 | 27.194 | 1.546 |
| 800 | 5.573 | 34.536 | 27.240 | 1.594 |
| 900 | 4.990 | 34.538 | 27.310 | 1.682 |
| 1000 | 4.511 | 34.547 | 27.371 | 1.766 |
| 1010 | 4.473 | 34.548 | 27.376 | 1.774 |

CAST EP2-90-DI -011 DATE 24 OCT 90 TIME 0200 GMT
LAT 03 00.0N LONG 140 00.6W

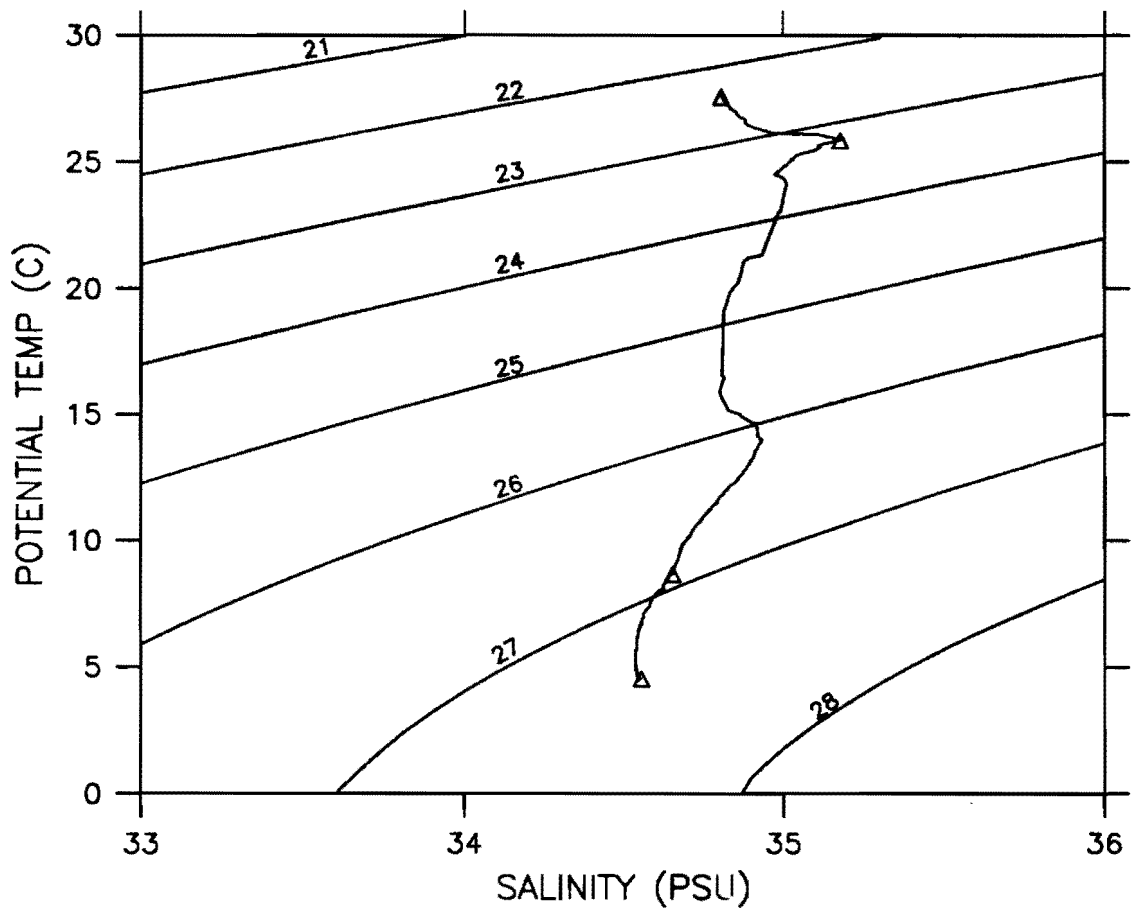


CAST EP2-90-DI -011 DATE 24 OCT 90 TIME 0200 GMT
 LAT 03 00.0N LONG 140 00.6W WEATHER 1 SEA STATE 4
 BAROMETER 08 WIND DIR 140 T SPD 16 KT VISIBILITY
 CLOUD 1 AMOUNT 2 DRY 26.1 WET 23.5 DEPTH 4307 M

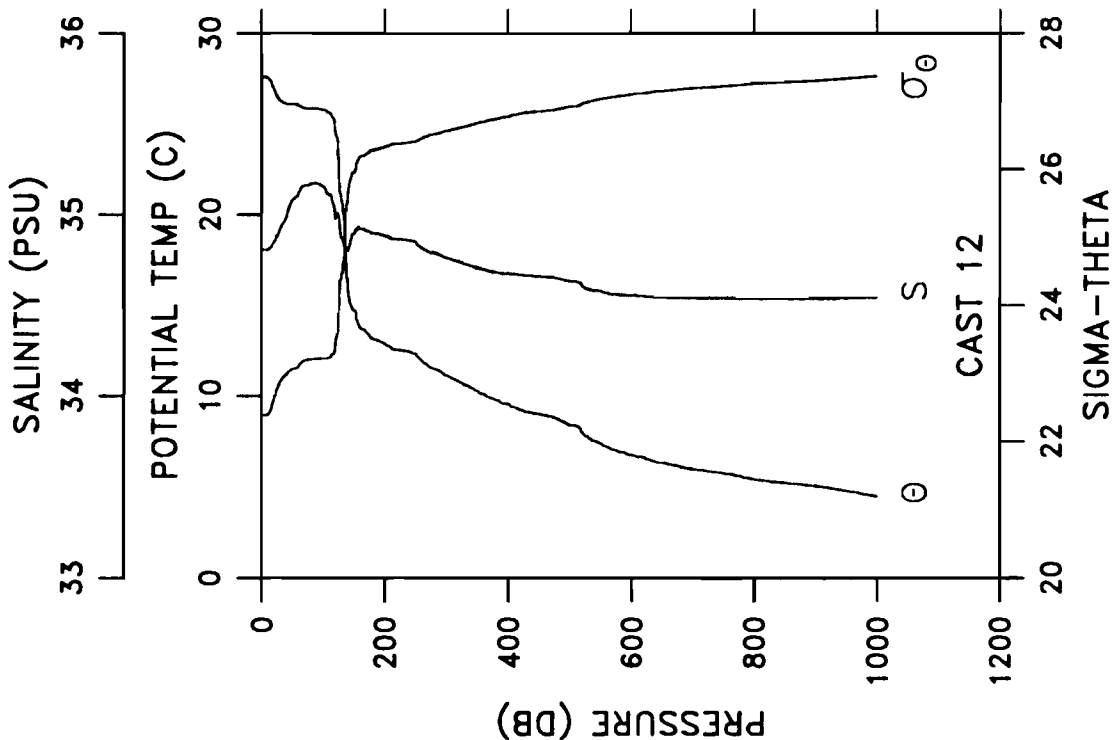


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.671 | 34.816 | 22.366 | 0.000 |
| 10 | 27.647 | 34.817 | 22.374 | 0.055 |
| 20 | 27.558 | 34.816 | 22.403 | 0.109 |
| 30 | 27.394 | 34.831 | 22.466 | 0.163 |
| 40 | 27.006 | 34.870 | 22.620 | 0.216 |
| 50 | 26.955 | 34.868 | 22.634 | 0.268 |
| 60 | 26.738 | 34.862 | 22.698 | 0.321 |
| 70 | 26.582 | 34.874 | 22.758 | 0.372 |
| 80 | 26.449 | 34.866 | 22.794 | 0.423 |
| 90 | 25.824 | 34.835 | 22.965 | 0.473 |
| 100 | 25.572 | 34.853 | 23.057 | 0.522 |
| 110 | 25.028 | 34.850 | 23.221 | 0.570 |
| 120 | 24.591 | 34.852 | 23.355 | 0.616 |
| 130 | 23.814 | 34.795 | 23.543 | 0.661 |
| 140 | 16.573 | 34.701 | 25.366 | 0.697 |
| 150 | 14.330 | 34.698 | 25.895 | 0.721 |
| 160 | 13.412 | 34.883 | 26.219 | 0.740 |
| 170 | 13.259 | 34.897 | 26.261 | 0.758 |
| 180 | 13.071 | 34.890 | 26.294 | 0.776 |
| 190 | 12.939 | 34.883 | 26.315 | 0.794 |
| 200 | 12.581 | 34.842 | 26.354 | 0.811 |
| 250 | 11.715 | 34.807 | 26.494 | 0.893 |
| 300 | 11.208 | 34.775 | 26.563 | 0.972 |
| 350 | 10.592 | 34.733 | 26.841 | 1.046 |
| 400 | 9.961 | 34.693 | 26.719 | 1.118 |
| 450 | 9.317 | 34.654 | 26.798 | 1.188 |
| 500 | 8.607 | 34.634 | 26.894 | 1.252 |
| 550 | 7.950 | 34.604 | 26.971 | 1.313 |
| 600 | 7.073 | 34.569 | 27.069 | 1.369 |
| 650 | 6.488 | 34.553 | 27.136 | 1.422 |
| 700 | 6.096 | 34.546 | 27.182 | 1.472 |
| 750 | 5.751 | 34.538 | 27.219 | 1.520 |
| 800 | 5.479 | 34.537 | 27.251 | 1.566 |
| 900 | 4.811 | 34.541 | 27.333 | 1.654 |
| 997 | 4.338 | 34.548 | 27.391 | 1.732 |

CAST EP2-90-DI -012 DATE 24 OCT 90 TIME 0935 GMT
LAT 02 02.3N LONG 140 04.3W

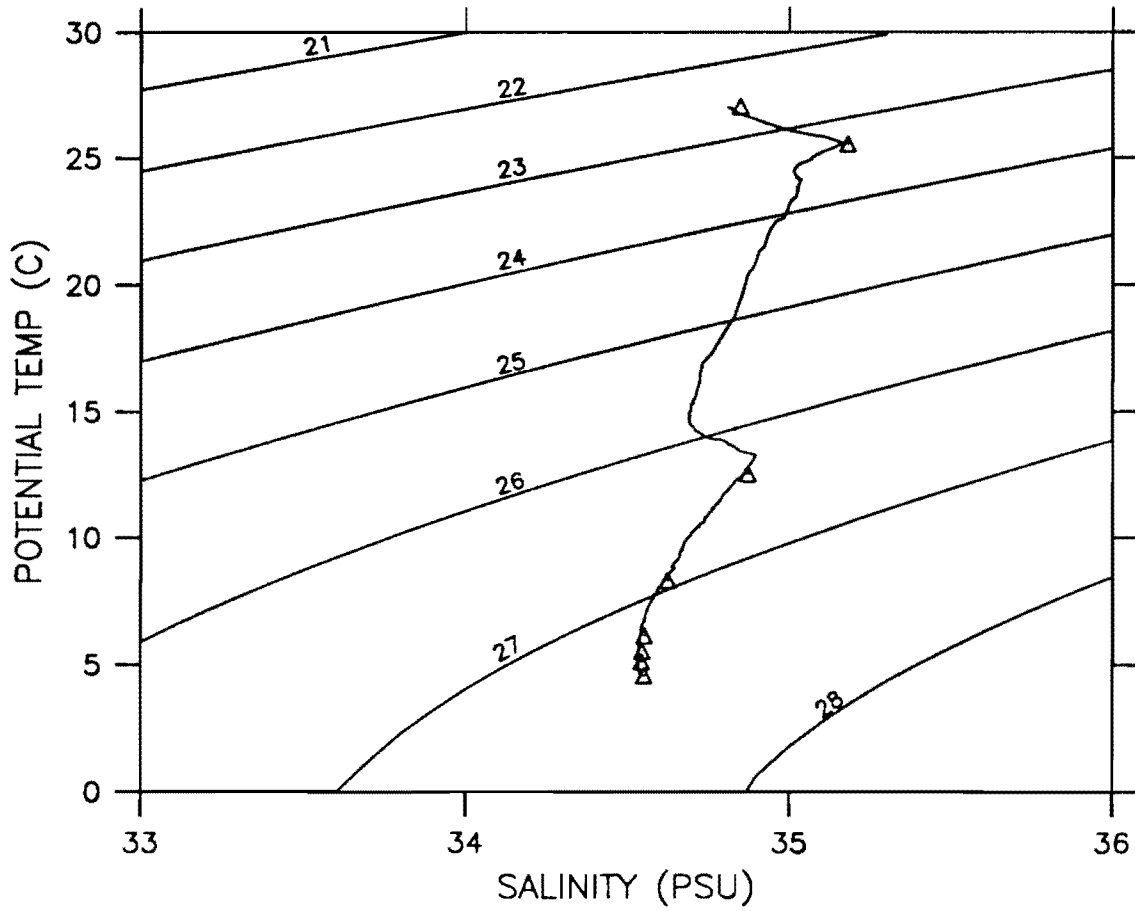


CAST EP2-90-DI -012 DATE 24 OCT 90 TIME 0935 GMT
 LAT 02 02.3N LONG 140 04.3W WEATHER 0 SEA STATE 4
 BAROMETER 10 WIND DIR 110 T SPD 16 KT VISIBILITY 9
 CLOUD AMOUNT 0 DRY 25.9 WET 23.6 DEPTH 4391 M

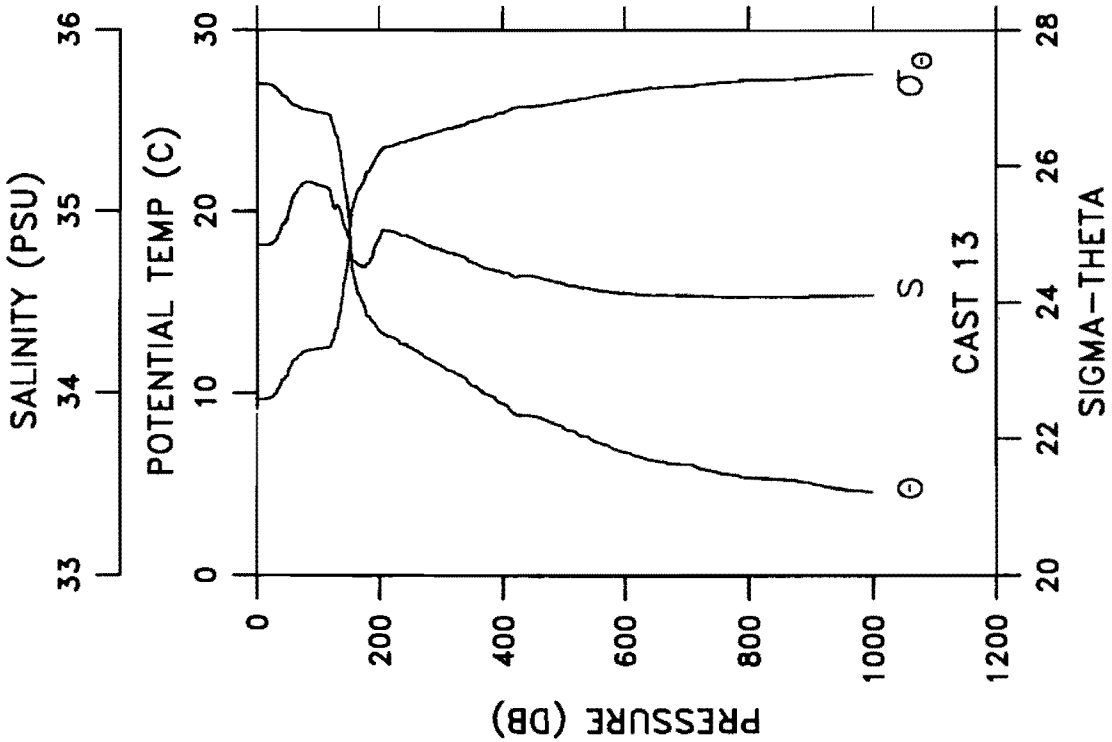


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.606 | 34.807 | 22.379 | 0.000 |
| 10 | 27.591 | 34.802 | 22.381 | 0.054 |
| 20 | 26.977 | 34.851 | 22.615 | 0.108 |
| 30 | 26.308 | 34.920 | 22.878 | 0.159 |
| 40 | 26.124 | 34.979 | 22.981 | 0.209 |
| 50 | 26.092 | 35.078 | 23.066 | 0.257 |
| 60 | 26.086 | 35.105 | 23.087 | 0.305 |
| 70 | 25.891 | 35.158 | 23.188 | 0.353 |
| 80 | 25.856 | 35.168 | 23.207 | 0.400 |
| 90 | 25.848 | 35.174 | 23.214 | 0.446 |
| 100 | 25.792 | 35.158 | 23.219 | 0.493 |
| 110 | 25.637 | 35.109 | 23.230 | 0.540 |
| 120 | 24.878 | 35.007 | 23.386 | 0.587 |
| 130 | 21.058 | 34.876 | 24.385 | 0.628 |
| 140 | 16.509 | 34.815 | 25.489 | 0.659 |
| 150 | 14.734 | 34.894 | 25.949 | 0.682 |
| 160 | 13.785 | 34.923 | 26.173 | 0.702 |
| 170 | 13.551 | 34.912 | 26.213 | 0.720 |
| 180 | 13.193 | 34.898 | 26.276 | 0.738 |
| 190 | 13.063 | 34.894 | 26.299 | 0.756 |
| 200 | 12.868 | 34.886 | 26.331 | 0.774 |
| 250 | 12.340 | 34.852 | 26.409 | 0.859 |
| 300 | 11.146 | 34.763 | 26.565 | 0.938 |
| 350 | 10.289 | 34.709 | 26.676 | 1.013 |
| 400 | 9.573 | 34.675 | 26.770 | 1.082 |
| 450 | 9.005 | 34.660 | 26.851 | 1.147 |
| 500 | 8.404 | 34.632 | 26.924 | 1.210 |
| 550 | 7.373 | 34.578 | 27.034 | 1.269 |
| 600 | 6.762 | 34.554 | 27.100 | 1.322 |
| 650 | 6.315 | 34.544 | 27.152 | 1.374 |
| 700 | 5.986 | 34.540 | 27.191 | 1.423 |
| 750 | 5.746 | 34.539 | 27.220 | 1.471 |
| 800 | 5.412 | 34.536 | 27.259 | 1.517 |
| 900 | 5.042 | 34.536 | 27.303 | 1.606 |
| 1000 | 4.497 | 34.544 | 27.370 | 1.690 |
| 1010 | 4.472 | 34.545 | 27.374 | 1.698 |

CAST EP2-90-DI -013 DATE 24 OCT 90 TIME 2316 GMT
LAT 01 30.3N LONG 139 59.1W

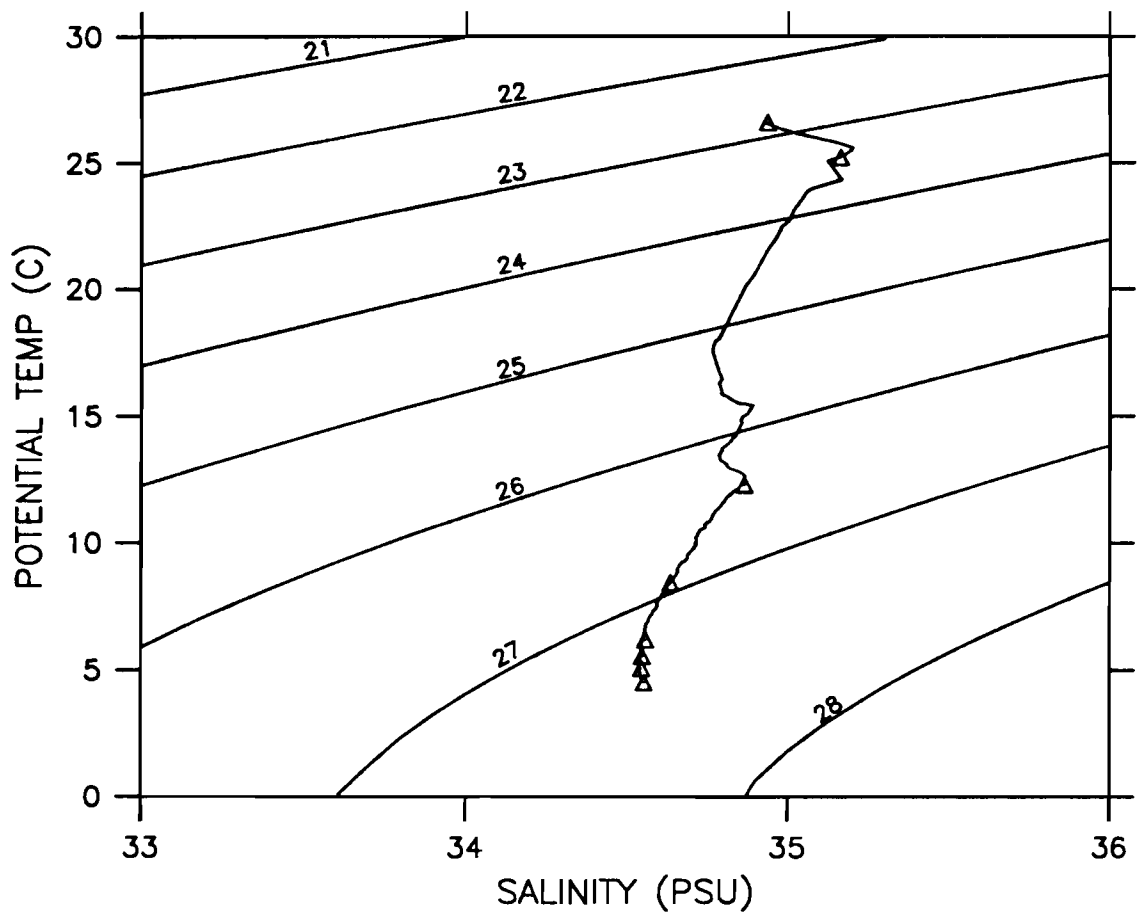


CAST EP2-80-DI -013 DATE 24 OCT 90 TIME 2316 GMT
 LAT 01 30.3N LONG 139 59.1W WEATHER 1 SEA STATE 4
 BAROMETER 08 WIND DIR 110 T SPD 20 KT VISIBILITY 9
 CLOUD 3 AMOUNT 2 DRY 26.1 WET 23.8 DEPTH 4446 M

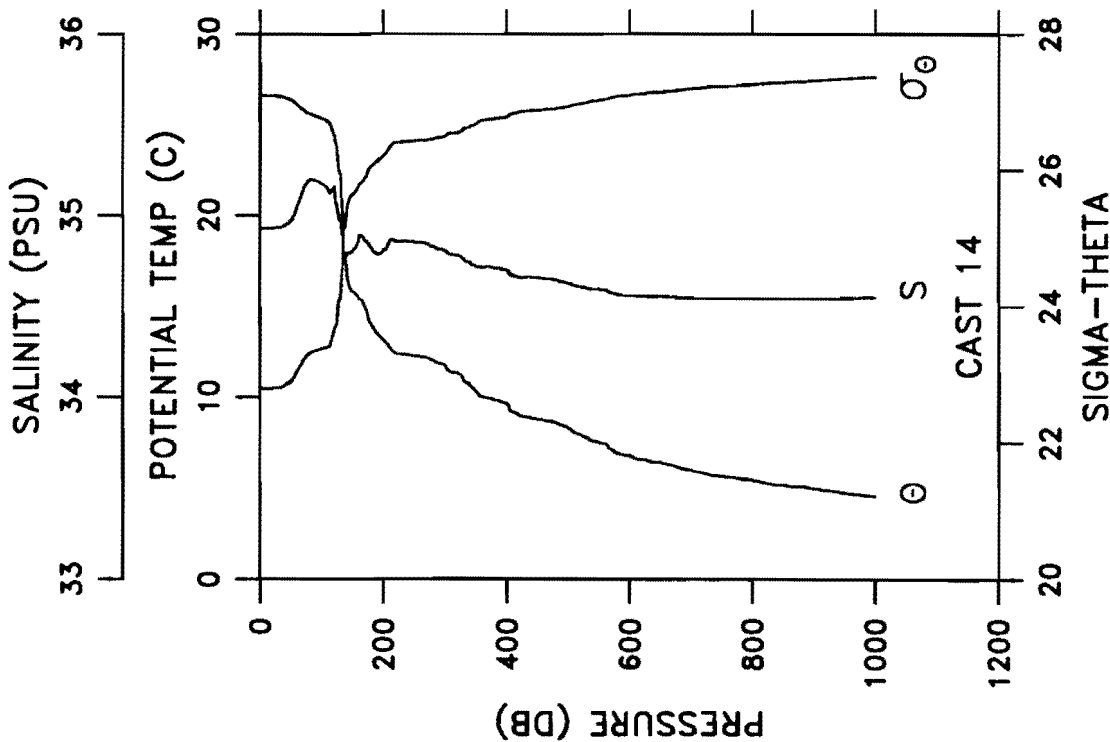


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.999 | 34.814 | 22.580 | 0.000 |
| 10 | 26.997 | 34.814 | 22.581 | 0.053 |
| 20 | 26.981 | 34.817 | 22.588 | 0.105 |
| 30 | 26.814 | 34.838 | 22.657 | 0.158 |
| 40 | 26.383 | 34.925 | 22.859 | 0.209 |
| 50 | 26.145 | 34.984 | 22.978 | 0.258 |
| 60 | 25.854 | 35.091 | 23.150 | 0.306 |
| 70 | 25.710 | 35.134 | 23.227 | 0.354 |
| 80 | 25.599 | 35.162 | 23.282 | 0.400 |
| 90 | 25.531 | 35.156 | 23.299 | 0.446 |
| 100 | 25.456 | 35.145 | 23.313 | 0.492 |
| 110 | 25.392 | 35.135 | 23.325 | 0.538 |
| 120 | 25.250 | 35.103 | 23.345 | 0.584 |
| 130 | 24.169 | 35.027 | 23.614 | 0.628 |
| 140 | 22.213 | 34.944 | 24.117 | 0.669 |
| 150 | 19.677 | 34.858 | 24.739 | 0.705 |
| 160 | 16.170 | 34.724 | 25.498 | 0.733 |
| 170 | 15.256 | 34.697 | 25.683 | 0.757 |
| 180 | 14.243 | 34.711 | 25.913 | 0.780 |
| 190 | 13.889 | 34.770 | 26.034 | 0.800 |
| 200 | 13.419 | 34.851 | 26.193 | 0.820 |
| 250 | 12.493 | 34.857 | 26.383 | 0.908 |
| 300 | 11.502 | 34.787 | 26.518 | 0.990 |
| 350 | 10.417 | 34.720 | 26.661 | 1.066 |
| 400 | 9.454 | 34.665 | 26.782 | 1.136 |
| 450 | 8.753 | 34.645 | 26.879 | 1.200 |
| 500 | 8.077 | 34.604 | 26.952 | 1.262 |
| 550 | 7.390 | 34.571 | 27.026 | 1.320 |
| 600 | 6.775 | 34.554 | 27.098 | 1.374 |
| 650 | 6.307 | 34.541 | 27.151 | 1.425 |
| 700 | 6.117 | 34.540 | 27.174 | 1.475 |
| 750 | 5.669 | 34.536 | 27.227 | 1.523 |
| 800 | 5.368 | 34.533 | 27.262 | 1.569 |
| 900 | 5.059 | 34.534 | 27.299 | 1.658 |
| 1000 | 4.584 | 34.540 | 27.358 | 1.742 |
| 1018 | 4.537 | 34.541 | 27.364 | 1.756 |

CAST EP2-90-DI -014 DATE 25 OCT 90 TIME 0417 GMT
LAT 00 59.7N LONG 140 05.4W

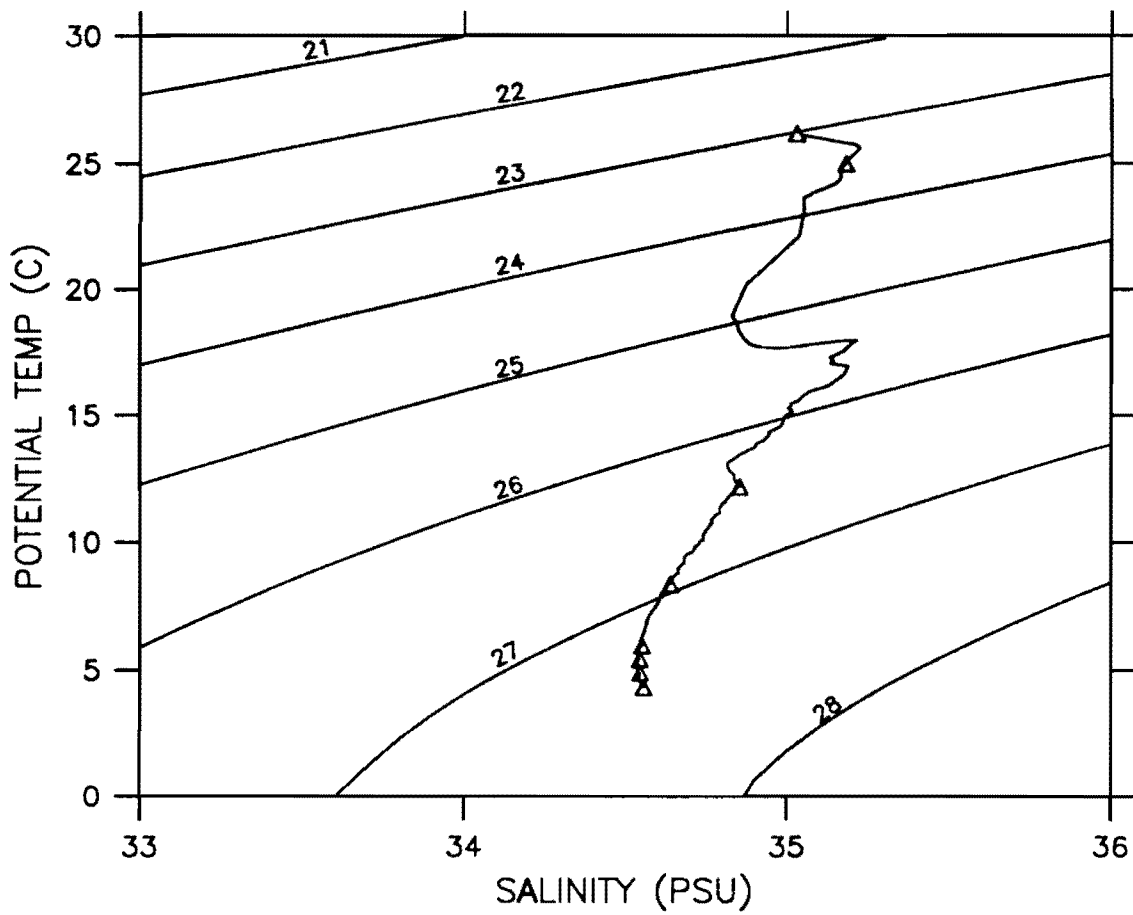


CAST EP2-90-DI -014 DATE 25 OCT 90 TIME 0417 GMT
 LAT 00 59.7N LONG 140 05.4W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 095 T SPD 18 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 25.3 WET 23.2 DEPTH 4652 M

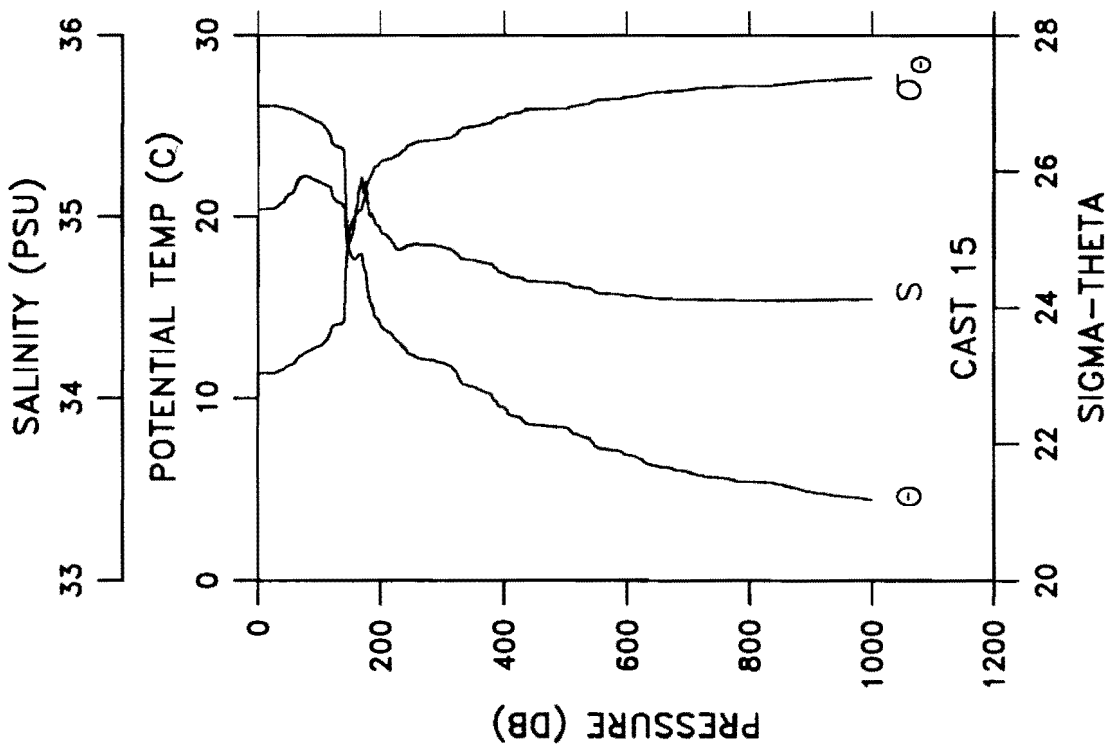


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.821 | 34.928 | 22.786 | 0.000 |
| 10 | 26.618 | 34.928 | 22.787 | 0.051 |
| 20 | 26.611 | 34.929 | 22.790 | 0.101 |
| 30 | 26.578 | 34.934 | 22.804 | 0.152 |
| 40 | 26.509 | 34.943 | 22.833 | 0.202 |
| 50 | 26.369 | 34.972 | 22.898 | 0.252 |
| 60 | 26.089 | 35.051 | 23.046 | 0.302 |
| 70 | 25.827 | 35.139 | 23.194 | 0.349 |
| 80 | 25.604 | 35.199 | 23.308 | 0.396 |
| 90 | 25.468 | 35.191 | 23.344 | 0.442 |
| 100 | 25.339 | 35.176 | 23.372 | 0.487 |
| 110 | 25.171 | 35.143 | 23.399 | 0.532 |
| 120 | 24.418 | 35.159 | 23.638 | 0.577 |
| 130 | 22.278 | 34.973 | 24.120 | 0.618 |
| 140 | 17.124 | 34.777 | 25.315 | 0.650 |
| 150 | 15.823 | 34.801 | 25.636 | 0.674 |
| 160 | 15.476 | 34.867 | 25.765 | 0.698 |
| 170 | 14.944 | 34.857 | 25.875 | 0.720 |
| 180 | 14.003 | 34.824 | 26.051 | 0.741 |
| 190 | 13.499 | 34.785 | 26.126 | 0.760 |
| 200 | 13.159 | 34.805 | 26.210 | 0.779 |
| 250 | 12.240 | 34.853 | 26.430 | 0.864 |
| 300 | 11.687 | 34.806 | 26.498 | 0.946 |
| 350 | 10.301 | 34.721 | 26.683 | 1.023 |
| 400 | 9.639 | 34.698 | 26.777 | 1.091 |
| 450 | 8.775 | 34.656 | 26.885 | 1.155 |
| 500 | 8.293 | 34.625 | 26.935 | 1.217 |
| 550 | 7.484 | 34.595 | 27.031 | 1.275 |
| 600 | 6.755 | 34.559 | 27.106 | 1.328 |
| 650 | 6.413 | 34.555 | 27.148 | 1.379 |
| 700 | 5.985 | 34.547 | 27.197 | 1.429 |
| 750 | 5.657 | 34.543 | 27.234 | 1.476 |
| 800 | 5.432 | 34.541 | 27.261 | 1.522 |
| 850 | 4.952 | 34.542 | 27.318 | 1.609 |
| 900 | 4.559 | 34.547 | 27.366 | 1.693 |
| 1000 | 4.551 | 34.546 | 27.367 | 1.697 |

CAST EP2-90-DI -015 DATE 25 OCT 90 TIME 0914 GMT
LAT 00 29.7N LONG 140 00.1W

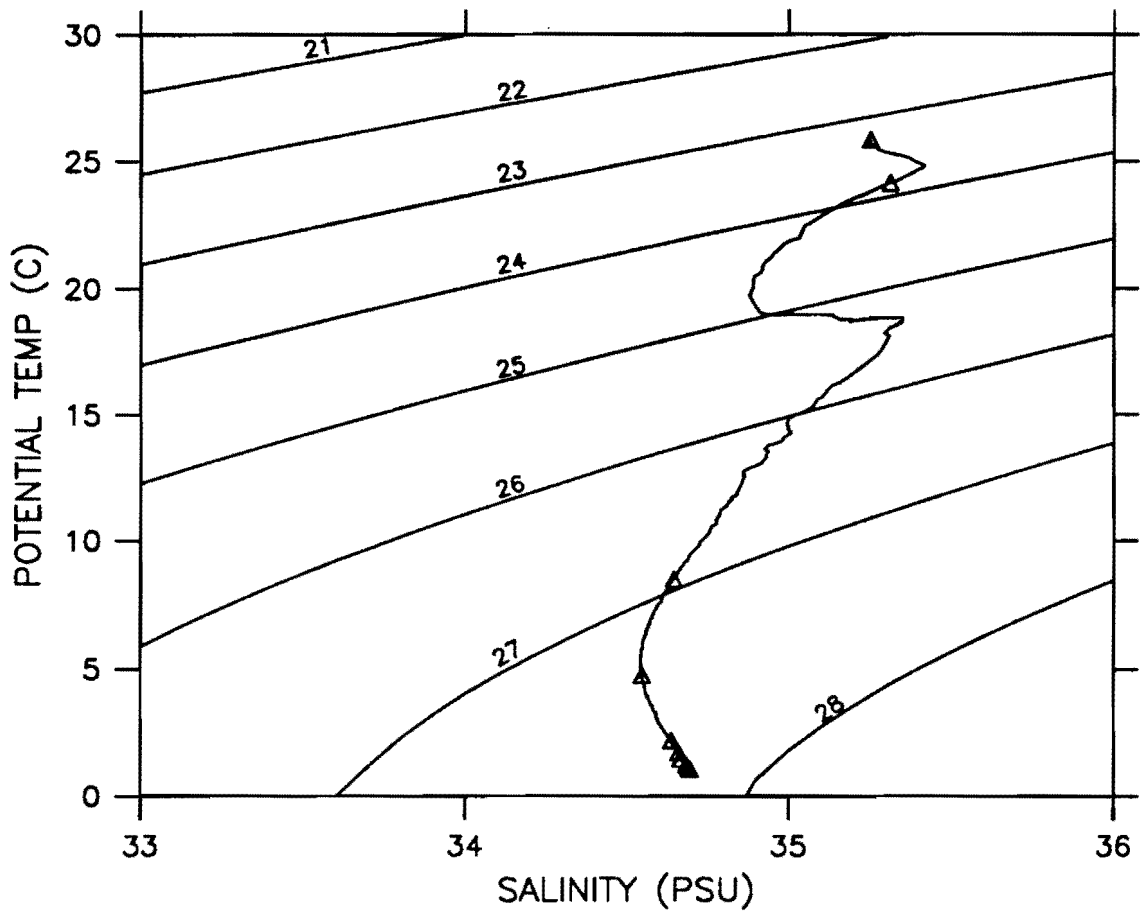


CAST EP2-90-DI -015 DATE 25 OCT 90 TIME 0914 GMT
 LAT 00 29.7N LONG 140 00.1W WEATHER 1 SEA STATE 3
 BAROMETER 12 WIND DIR 105 T SPD 15 KT VISIBILITY 7
 CLOUD AMOUNT 9 DRY 25.1 WET 23.2 DEPTH 4343 M

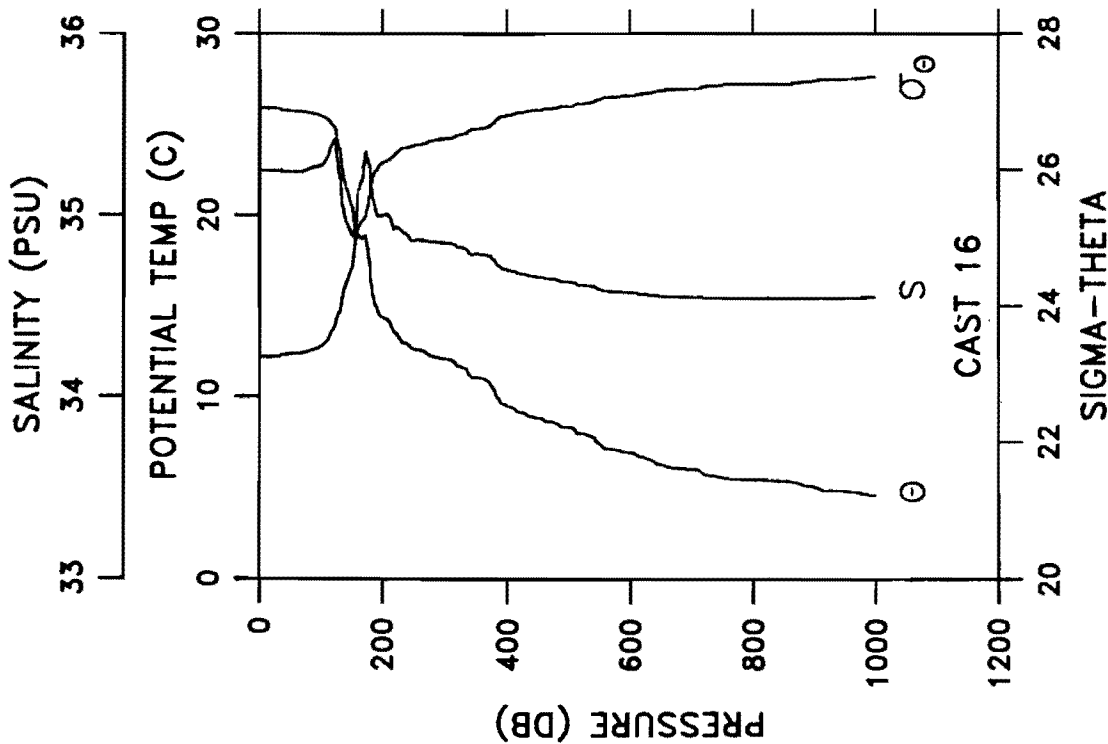


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.107 | 35.041 | 23.033 | 0.000 |
| 10 | 26.105 | 35.041 | 23.034 | 0.048 |
| 20 | 26.106 | 35.040 | 23.033 | 0.097 |
| 30 | 26.091 | 35.050 | 23.044 | 0.145 |
| 40 | 26.031 | 35.075 | 23.082 | 0.193 |
| 50 | 25.936 | 35.120 | 23.145 | 0.241 |
| 60 | 25.852 | 35.155 | 23.198 | 0.288 |
| 70 | 25.714 | 35.213 | 23.285 | 0.334 |
| 80 | 25.550 | 35.221 | 23.342 | 0.380 |
| 90 | 25.353 | 35.205 | 23.390 | 0.426 |
| 100 | 25.197 | 35.190 | 23.427 | 0.471 |
| 110 | 24.880 | 35.172 | 23.509 | 0.515 |
| 120 | 24.110 | 35.131 | 23.709 | 0.559 |
| 130 | 23.853 | 35.081 | 23.748 | 0.601 |
| 140 | 23.614 | 35.051 | 23.795 | 0.643 |
| 150 | 18.041 | 34.867 | 25.161 | 0.676 |
| 160 | 17.722 | 35.040 | 25.372 | 0.703 |
| 170 | 17.908 | 35.208 | 25.455 | 0.730 |
| 180 | 15.717 | 35.048 | 25.848 | 0.753 |
| 190 | 14.585 | 34.982 | 26.049 | 0.774 |
| 200 | 13.982 | 34.927 | 26.135 | 0.794 |
| 250 | 12.385 | 34.844 | 26.394 | 0.886 |
| 300 | 11.936 | 34.834 | 26.473 | 0.968 |
| 350 | 10.638 | 34.761 | 26.655 | 1.045 |
| 400 | 9.490 | 34.691 | 26.797 | 1.115 |
| 450 | 8.542 | 34.645 | 26.913 | 1.178 |
| 500 | 8.392 | 34.634 | 26.927 | 1.239 |
| 550 | 7.332 | 34.584 | 27.045 | 1.298 |
| 600 | 6.862 | 34.566 | 27.094 | 1.352 |
| 650 | 6.263 | 34.552 | 27.165 | 1.403 |
| 700 | 5.975 | 34.548 | 27.198 | 1.452 |
| 750 | 5.649 | 34.543 | 27.236 | 1.499 |
| 800 | 5.424 | 34.541 | 27.261 | 1.544 |
| 900 | 4.878 | 34.542 | 27.326 | 1.633 |
| 1000 | 4.432 | 34.550 | 27.382 | 1.715 |
| 1011 | 4.348 | 34.552 | 27.393 | 1.723 |

CAST EP2-90-DI -016 DATE 26 OCT 90 TIME 0529 GMT
LAT 00 00.3S LONG 139 59.7W

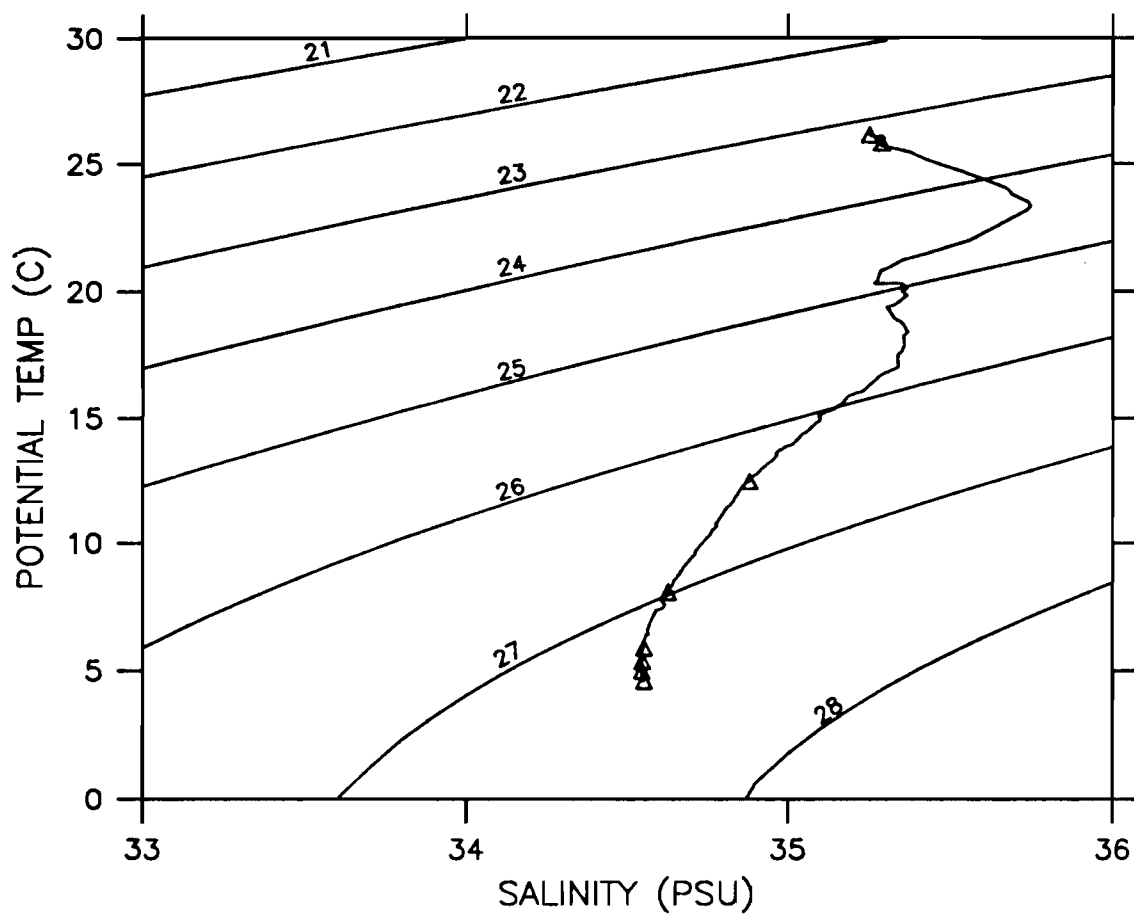


CAST EP2-90-DI -016 DATE 26 OCT 90 TIME 0529 GMT
 LAT 00 00.3S LONG 139 59.7W WEATHER 0 SEA STATE 4
 BAROMETER 13 WIND DIR 100 T SPD 16 KT VISIBILITY 8
 CLOUD 8 AMOUNT 1 DRY 25.2 WET 23.6 DEPTH 4329 M

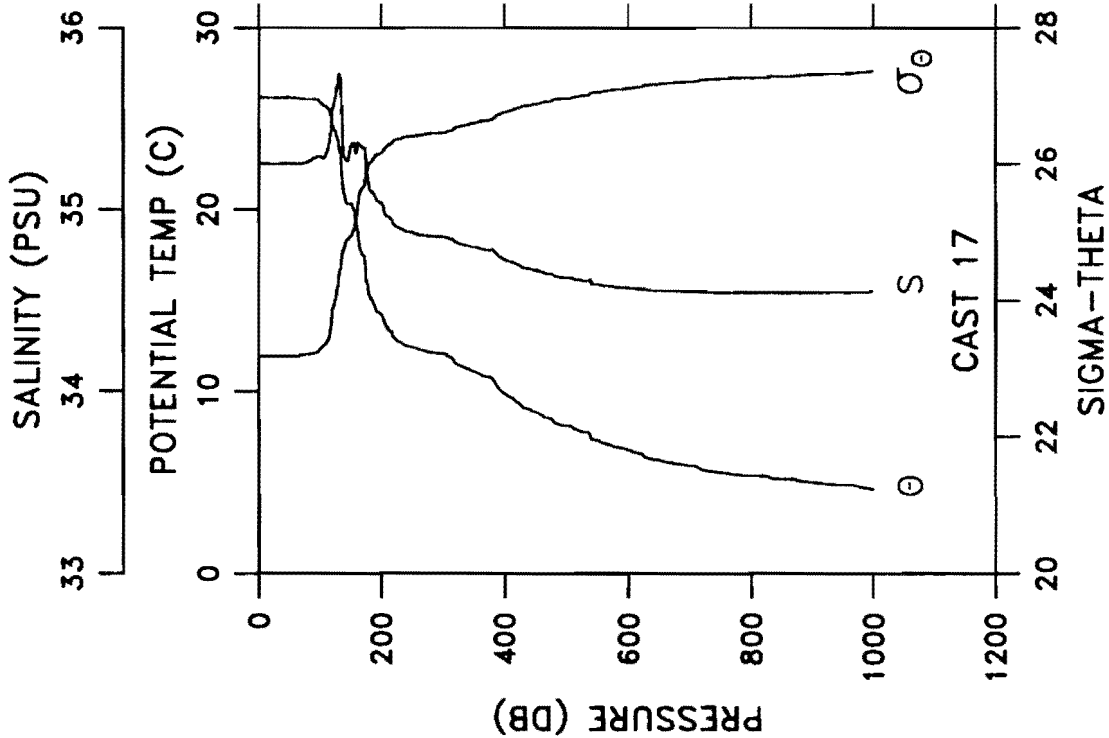


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.900 | 35.245 | 23.251 | 0.000 |
| 10 | 25.898 | 35.245 | 23.252 | 0.046 |
| 20 | 25.897 | 35.245 | 23.252 | 0.092 |
| 30 | 25.892 | 35.244 | 23.256 | 0.139 |
| 40 | 25.774 | 35.239 | 23.286 | 0.185 |
| 50 | 25.736 | 35.238 | 23.297 | 0.231 |
| 60 | 25.721 | 35.238 | 23.301 | 0.277 |
| 70 | 25.702 | 35.240 | 23.309 | 0.323 |
| 80 | 25.651 | 35.252 | 23.334 | 0.368 |
| 90 | 25.588 | 35.266 | 23.384 | 0.414 |
| 100 | 25.465 | 35.272 | 23.406 | 0.459 |
| 110 | 25.304 | 35.314 | 23.487 | 0.504 |
| 120 | 24.945 | 35.397 | 23.660 | 0.548 |
| 130 | 23.714 | 35.234 | 23.904 | 0.590 |
| 140 | 21.801 | 34.990 | 24.267 | 0.628 |
| 150 | 20.340 | 34.905 | 24.547 | 0.664 |
| 160 | 18.980 | 35.098 | 25.102 | 0.696 |
| 170 | 18.841 | 35.279 | 25.276 | 0.724 |
| 180 | 17.378 | 35.270 | 25.632 | 0.750 |
| 190 | 14.967 | 35.018 | 25.994 | 0.772 |
| 200 | 14.393 | 35.000 | 26.104 | 0.792 |
| 250 | 12.635 | 34.862 | 26.359 | 0.883 |
| 300 | 12.092 | 34.849 | 26.455 | 0.967 |
| 350 | 11.053 | 34.789 | 26.602 | 1.047 |
| 400 | 9.494 | 34.701 | 26.804 | 1.118 |
| 450 | 8.825 | 34.661 | 26.881 | 1.183 |
| 500 | 8.339 | 34.635 | 26.936 | 1.244 |
| 550 | 7.422 | 34.593 | 27.039 | 1.302 |
| 600 | 6.956 | 34.575 | 27.091 | 1.356 |
| 650 | 6.296 | 34.555 | 27.163 | 1.407 |
| 700 | 6.029 | 34.550 | 27.194 | 1.456 |
| 750 | 5.571 | 34.545 | 27.247 | 1.503 |
| 800 | 5.468 | 34.543 | 27.258 | 1.549 |
| 900 | 5.048 | 34.548 | 27.307 | 1.638 |
| 1000 | 4.604 | 34.548 | 27.362 | 1.722 |
| 1500 | 2.850 | 34.602 | 27.581 | 2.073 |
| 2000 | 2.164 | 34.638 | 27.668 | 2.355 |
| 2500 | 1.711 | 34.659 | 27.721 | 2.605 |
| 3000 | 1.442 | 34.672 | 27.751 | 2.838 |
| 3500 | 1.224 | 34.684 | 27.776 | 3.063 |
| 4000 | 1.082 | 34.690 | 27.791 | 3.278 |
| 4342 | 1.059 | 34.692 | 27.794 | 3.427 |

CAST EP2-90-DI -017 DATE 26 OCT 90 TIME 1129 GMT
LAT 00 30.0S LONG 139 59.7W

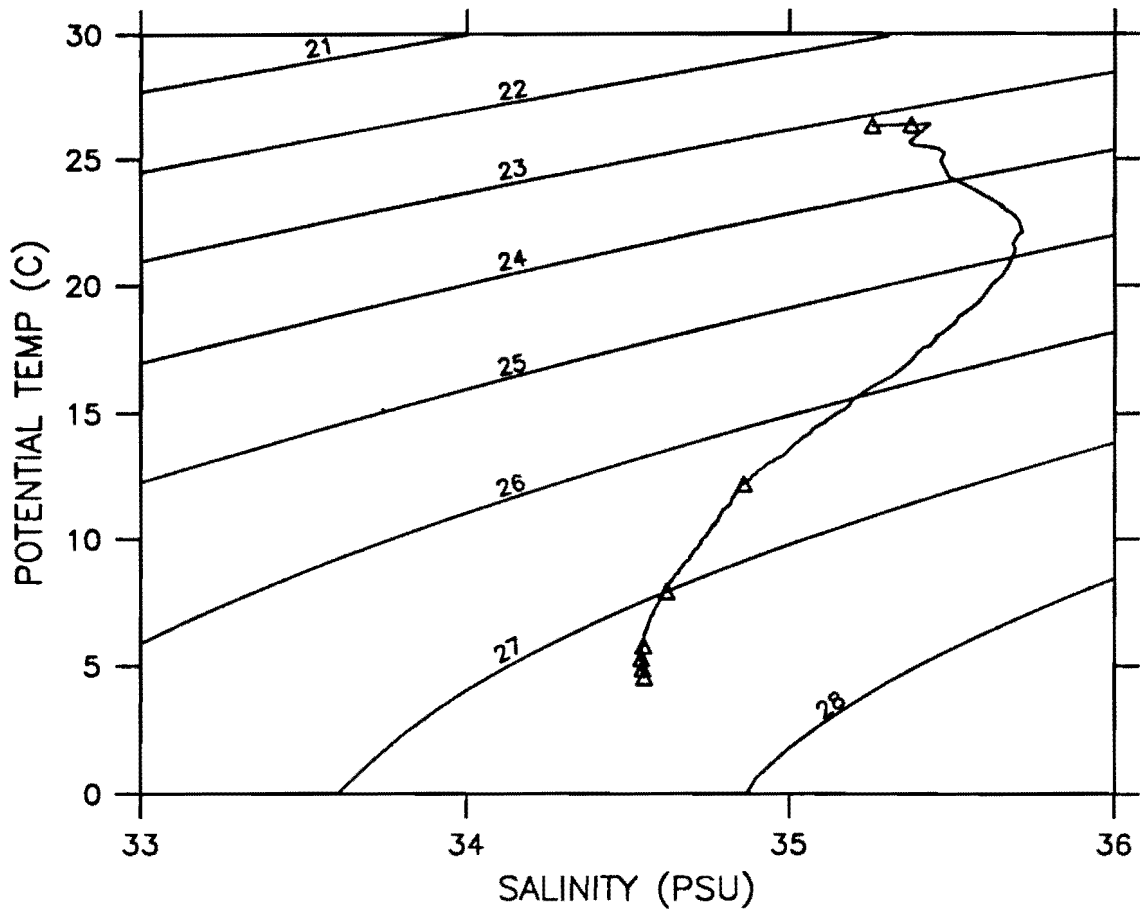


CAST EP2-90-DI -017 DATE 26 OCT 90 TIME 1129 GMT
 LAT 00 30.0S LONG 139 59.7W WEATHER 0 SEA STATE 4
 BAROMETER 11 WIND DIR 110 T SPD 17 KT VISIBILITY 8
 CLOUD AMOUNT 9 DRY 25.0 WET 23.0 DEPTH 4293 M

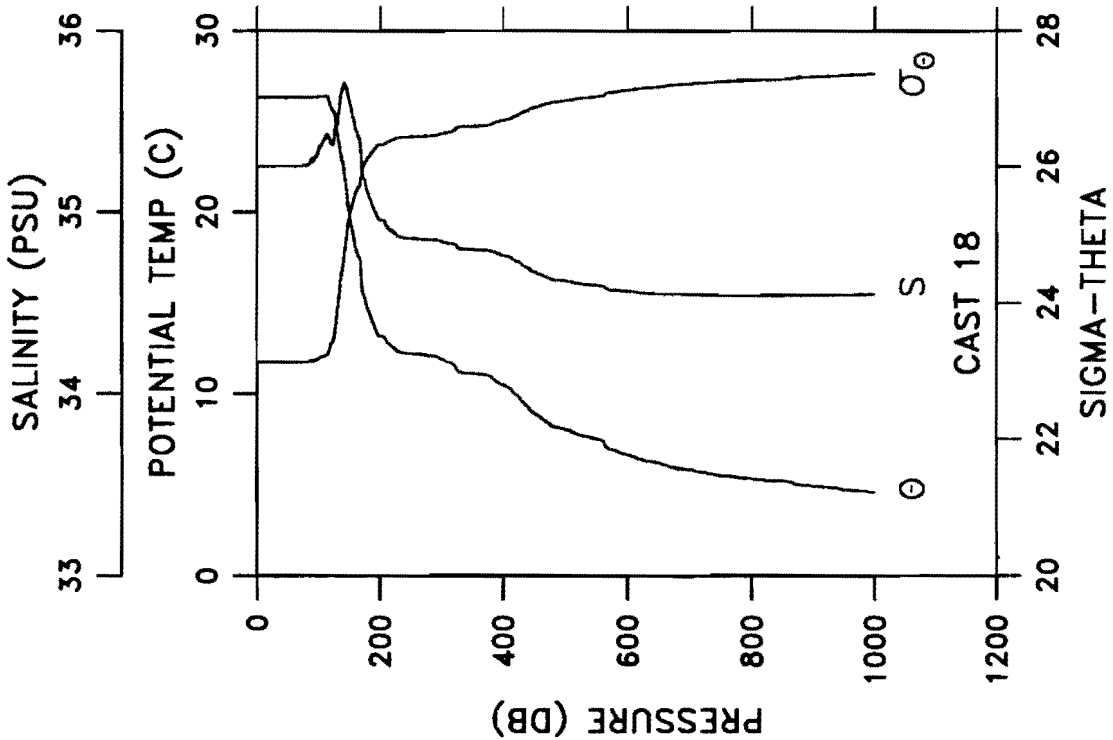


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.164 | 35.254 | 23.176 | 0.000 |
| 10 | 26.162 | 35.254 | 23.177 | 0.047 |
| 20 | 26.156 | 35.254 | 23.178 | 0.094 |
| 30 | 26.165 | 35.253 | 23.175 | 0.141 |
| 40 | 26.163 | 35.254 | 23.176 | 0.188 |
| 50 | 26.160 | 35.253 | 23.176 | 0.235 |
| 60 | 26.146 | 35.252 | 23.180 | 0.282 |
| 70 | 26.101 | 35.253 | 23.185 | 0.329 |
| 80 | 26.088 | 35.264 | 23.207 | 0.376 |
| 90 | 26.087 | 35.283 | 23.221 | 0.423 |
| 100 | 25.924 | 35.292 | 23.279 | 0.470 |
| 110 | 25.666 | 35.299 | 23.365 | 0.516 |
| 120 | 24.641 | 35.545 | 23.864 | 0.560 |
| 130 | 23.808 | 35.686 | 24.219 | 0.599 |
| 140 | 20.809 | 35.286 | 24.764 | 0.633 |
| 150 | 20.316 | 35.342 | 24.940 | 0.665 |
| 160 | 19.154 | 35.315 | 25.224 | 0.684 |
| 170 | 17.501 | 35.337 | 25.654 | 0.720 |
| 180 | 15.336 | 35.138 | 26.005 | 0.742 |
| 190 | 14.593 | 35.069 | 26.114 | 0.762 |
| 200 | 14.250 | 35.033 | 26.161 | 0.781 |
| 250 | 12.425 | 34.873 | 26.409 | 0.869 |
| 300 | 12.061 | 34.850 | 26.461 | 0.952 |
| 350 | 11.084 | 34.793 | 26.600 | 1.030 |
| 400 | 9.869 | 34.725 | 26.760 | 1.103 |
| 450 | 8.849 | 34.666 | 26.881 | 1.168 |
| 500 | 8.096 | 34.624 | 26.964 | 1.229 |
| 550 | 7.308 | 34.590 | 27.053 | 1.286 |
| 600 | 6.785 | 34.570 | 27.109 | 1.339 |
| 650 | 6.242 | 34.556 | 27.171 | 1.389 |
| 700 | 5.912 | 34.550 | 27.209 | 1.437 |
| 750 | 5.539 | 34.544 | 27.250 | 1.484 |
| 800 | 5.383 | 34.543 | 27.268 | 1.529 |
| 900 | 5.011 | 34.544 | 27.313 | 1.617 |
| 1000 | 4.626 | 34.549 | 27.361 | 1.702 |
| 1012 | 4.589 | 34.549 | 27.365 | 1.711 |

CAST EP2-90-DI -018 DATE 27 OCT 90 TIME 1716 GMT
LAT 00 59.8S LONG 140 02.8W

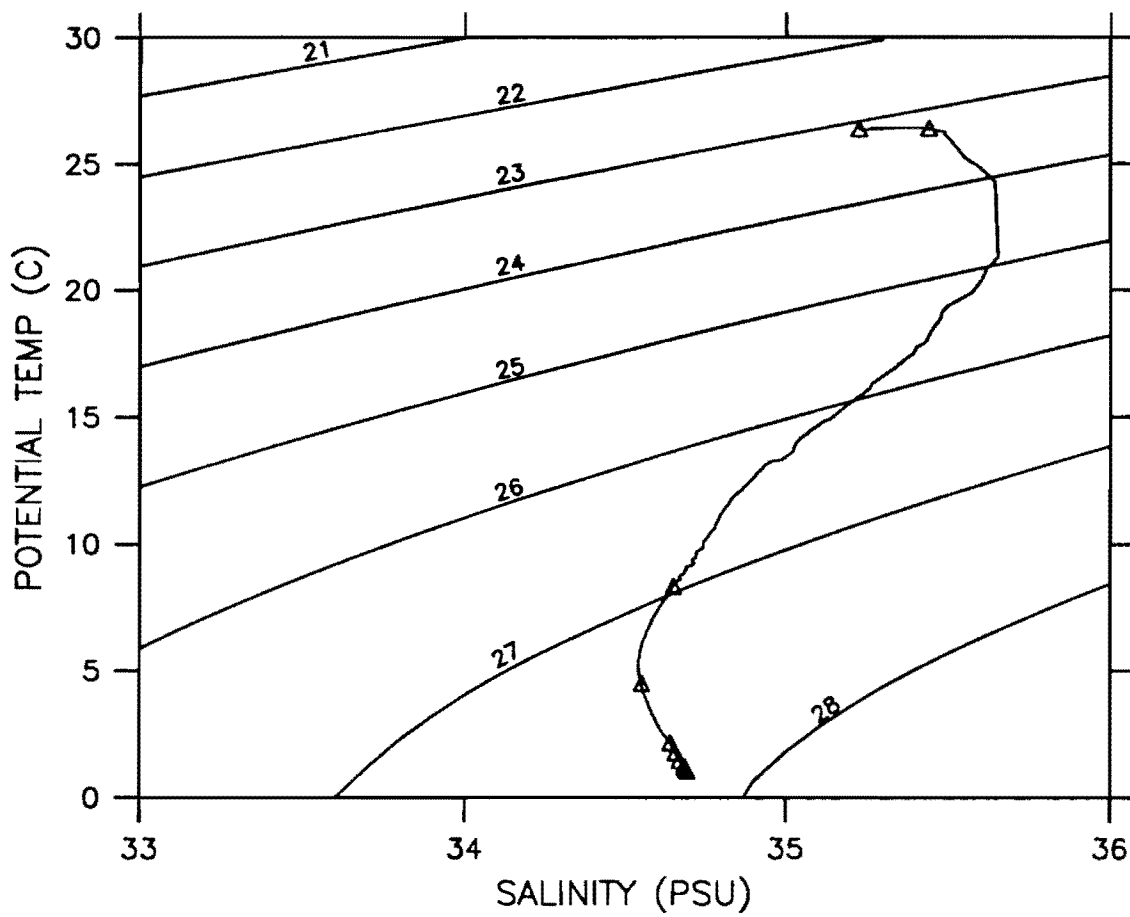


CAST EP2-90-DI -018 DATE 27 OCT 90 TIME 1716 GMT
 LAT 00 59.8S LONG 140 02.8W WEATHER 1 SEA STATE 3
 BAROMETER 15 WIND DIR 120 T SPD 15 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 26.0 WET 24.1 DEPTH 4246 M

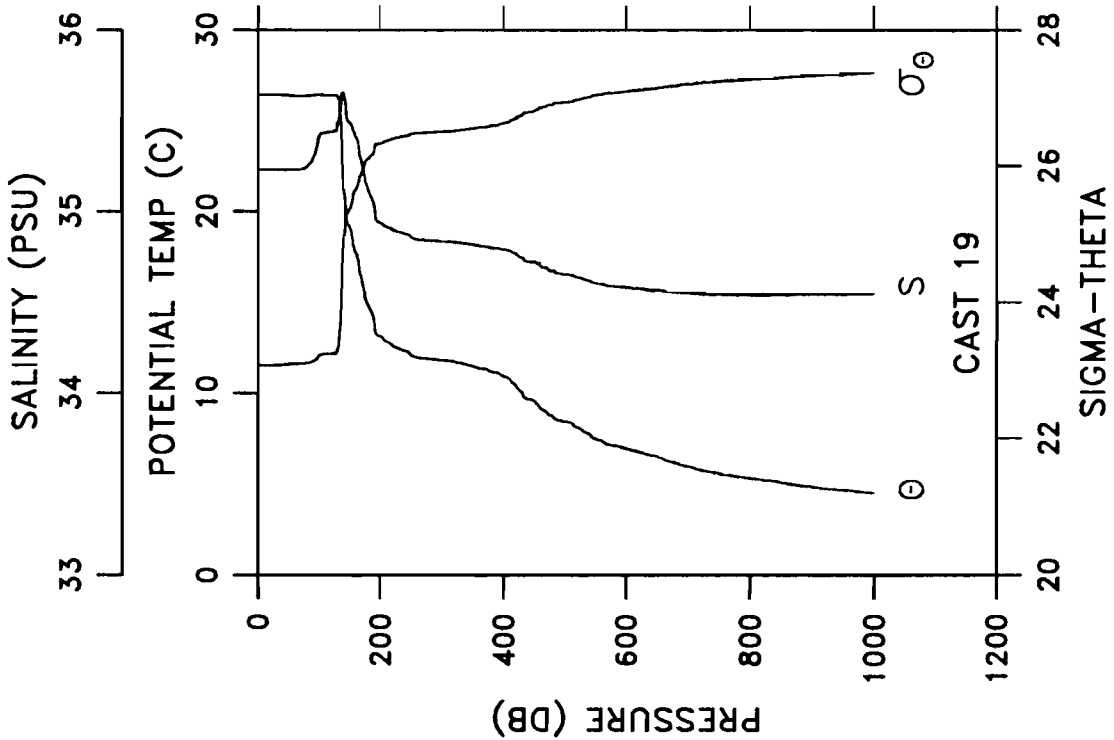


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.316 | 35.255 | 23.128 | 0.000 |
| 10 | 26.314 | 35.255 | 23.129 | 0.047 |
| 20 | 26.312 | 35.254 | 23.129 | 0.095 |
| 30 | 26.309 | 35.254 | 23.130 | 0.142 |
| 40 | 26.310 | 35.254 | 23.130 | 0.190 |
| 50 | 26.309 | 35.254 | 23.130 | 0.237 |
| 60 | 26.307 | 35.253 | 23.130 | 0.285 |
| 70 | 26.308 | 35.255 | 23.131 | 0.332 |
| 80 | 26.306 | 35.255 | 23.132 | 0.380 |
| 90 | 26.333 | 35.297 | 23.156 | 0.428 |
| 100 | 26.341 | 35.319 | 23.169 | 0.475 |
| 110 | 26.368 | 35.399 | 23.221 | 0.522 |
| 120 | 25.863 | 35.386 | 23.369 | 0.569 |
| 130 | 24.635 | 35.475 | 23.812 | 0.613 |
| 140 | 22.711 | 35.691 | 24.542 | 0.651 |
| 150 | 20.077 | 35.622 | 25.217 | 0.681 |
| 160 | 18.000 | 35.451 | 25.618 | 0.707 |
| 170 | 16.037 | 35.251 | 25.933 | 0.730 |
| 180 | 14.658 | 35.108 | 26.131 | 0.751 |
| 190 | 13.823 | 35.017 | 26.238 | 0.769 |
| 200 | 13.184 | 34.958 | 26.323 | 0.787 |
| 250 | 12.206 | 34.856 | 26.438 | 0.871 |
| 300 | 11.877 | 34.839 | 26.488 | 0.953 |
| 350 | 11.116 | 34.796 | 26.586 | 1.031 |
| 400 | 10.497 | 34.763 | 26.681 | 1.106 |
| 450 | 8.924 | 34.671 | 26.873 | 1.174 |
| 500 | 8.018 | 34.620 | 26.973 | 1.234 |
| 550 | 7.507 | 34.597 | 27.030 | 1.291 |
| 600 | 6.855 | 34.564 | 27.123 | 1.345 |
| 650 | 6.211 | 34.552 | 27.172 | 1.394 |
| 700 | 5.824 | 34.546 | 27.217 | 1.442 |
| 750 | 5.502 | 34.543 | 27.254 | 1.488 |
| 800 | 5.336 | 34.541 | 27.272 | 1.533 |
| 900 | 4.906 | 34.544 | 27.325 | 1.621 |
| 1000 | 4.578 | 34.548 | 27.365 | 1.704 |
| 1011 | 4.555 | 34.549 | 27.368 | 1.713 |

CAST EP2-90-DI -019 DATE 28 OCT 90 TIME 0740 GMT
LAT 02 02.5S LONG 140 04.7W

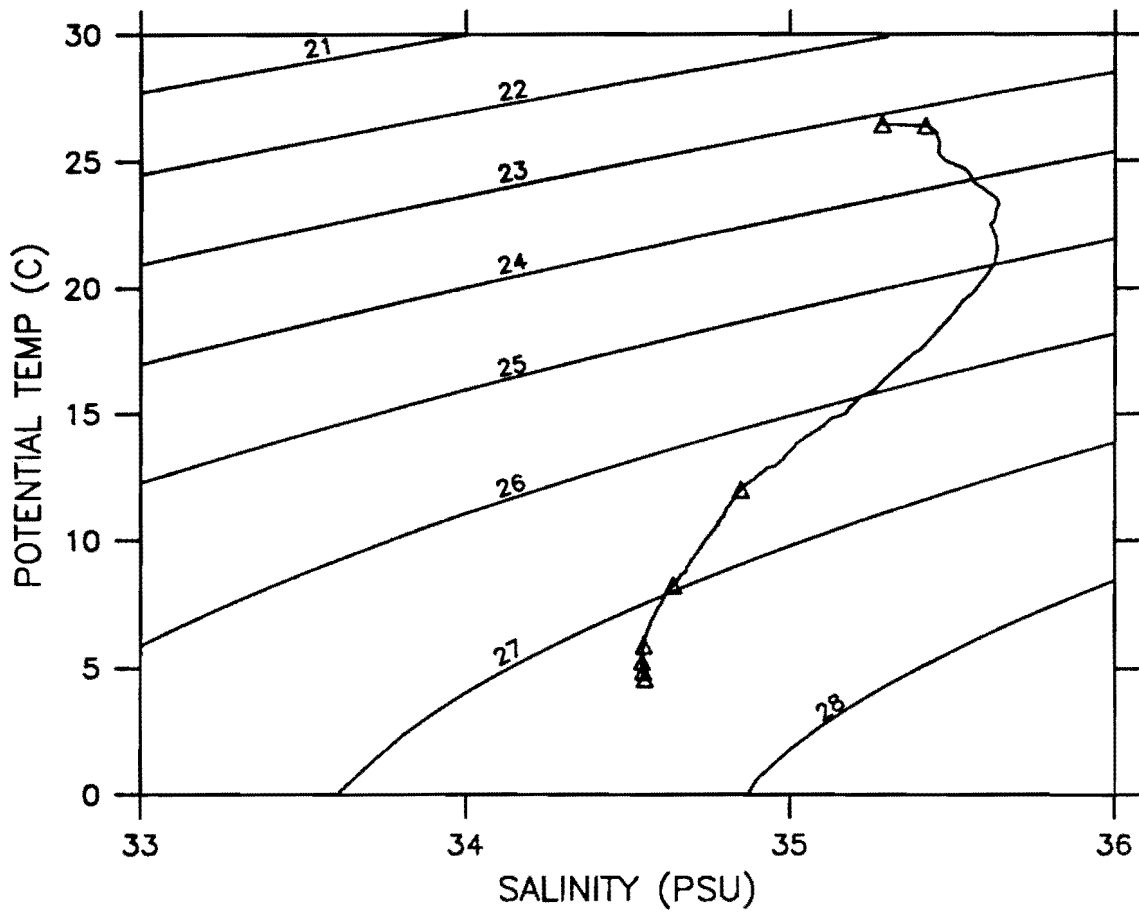


CAST EP2-90-DI -019 DATE 28 OCT 90 TIME 0740 GMT
 LAT 02 02.55 LONG 140 04.7W WEATHER 1 SEA STATE 3
 BAROMETER 15 WIND DIR 100 T SPD 14 KT VISIBILITY 8
 CLOUD 8 AMOUNT 3 DRY 25.7 WET 24.0 DEPTH 4319 M

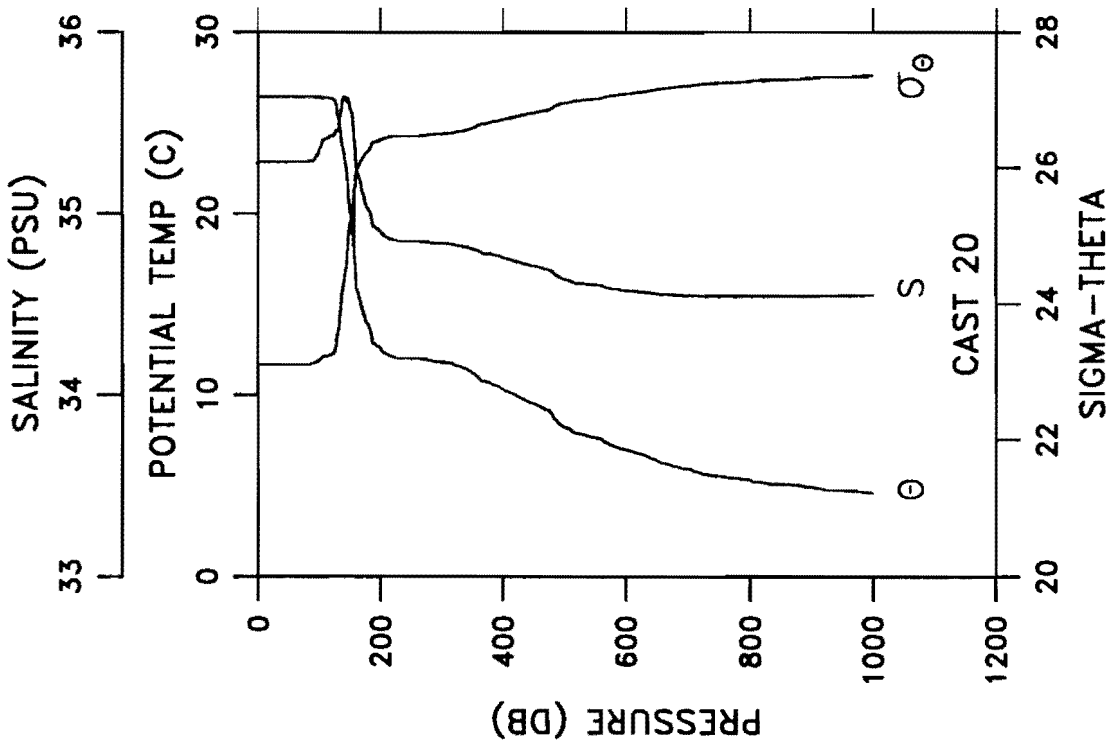


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.441 | 35.229 | 23.070 | 0.000 |
| 10 | 26.438 | 35.229 | 23.070 | 0.048 |
| 20 | 26.438 | 35.229 | 23.071 | 0.096 |
| 30 | 26.428 | 35.229 | 23.074 | 0.144 |
| 40 | 26.418 | 35.229 | 23.077 | 0.192 |
| 50 | 26.372 | 35.231 | 23.093 | 0.240 |
| 60 | 26.366 | 35.230 | 23.094 | 0.288 |
| 70 | 26.363 | 35.232 | 23.097 | 0.336 |
| 80 | 26.371 | 35.249 | 23.107 | 0.384 |
| 90 | 26.404 | 35.298 | 23.134 | 0.431 |
| 100 | 26.432 | 35.418 | 23.215 | 0.479 |
| 110 | 26.402 | 35.432 | 23.235 | 0.526 |
| 120 | 26.399 | 35.436 | 23.239 | 0.573 |
| 130 | 26.260 | 35.492 | 23.325 | 0.619 |
| 140 | 20.989 | 35.631 | 24.979 | 0.659 |
| 150 | 19.088 | 35.482 | 25.369 | 0.687 |
| 160 | 17.674 | 35.403 | 25.662 | 0.711 |
| 170 | 16.122 | 35.262 | 25.922 | 0.734 |
| 180 | 14.800 | 35.116 | 26.106 | 0.754 |
| 190 | 13.896 | 35.027 | 26.231 | 0.773 |
| 200 | 13.112 | 34.937 | 26.322 | 0.791 |
| 250 | 12.099 | 34.860 | 26.462 | 0.875 |
| 300 | 11.803 | 34.835 | 26.499 | 0.855 |
| 350 | 11.474 | 34.817 | 26.547 | 1.035 |
| 400 | 10.941 | 34.791 | 26.624 | 1.112 |
| 450 | 9.562 | 34.724 | 26.810 | 1.182 |
| 500 | 8.423 | 34.652 | 26.937 | 1.245 |
| 550 | 7.478 | 34.604 | 27.040 | 1.303 |
| 600 | 6.943 | 34.581 | 27.097 | 1.357 |
| 650 | 6.499 | 34.565 | 27.145 | 1.409 |
| 700 | 5.946 | 34.549 | 27.203 | 1.458 |
| 750 | 5.590 | 34.543 | 27.243 | 1.504 |
| 800 | 5.300 | 34.540 | 27.275 | 1.550 |
| 900 | 4.840 | 34.542 | 27.330 | 1.636 |
| 1000 | 4.501 | 34.547 | 27.372 | 1.719 |
| 1500 | 2.921 | 34.599 | 27.572 | 2.073 |
| 2000 | 2.109 | 34.644 | 27.678 | 2.353 |
| 2500 | 1.751 | 34.658 | 27.717 | 2.602 |
| 3000 | 1.474 | 34.670 | 27.747 | 2.838 |
| 3500 | 1.227 | 34.685 | 27.777 | 3.063 |
| 4000 | 1.101 | 34.692 | 27.791 | 3.280 |
| 4363 | 1.035 | 34.696 | 27.798 | 3.438 |

CAST EP2-90-DI -020 DATE 28 OCT 90 TIME 1331 GMT
LAT 01 30.4S LONG 140 00.6W

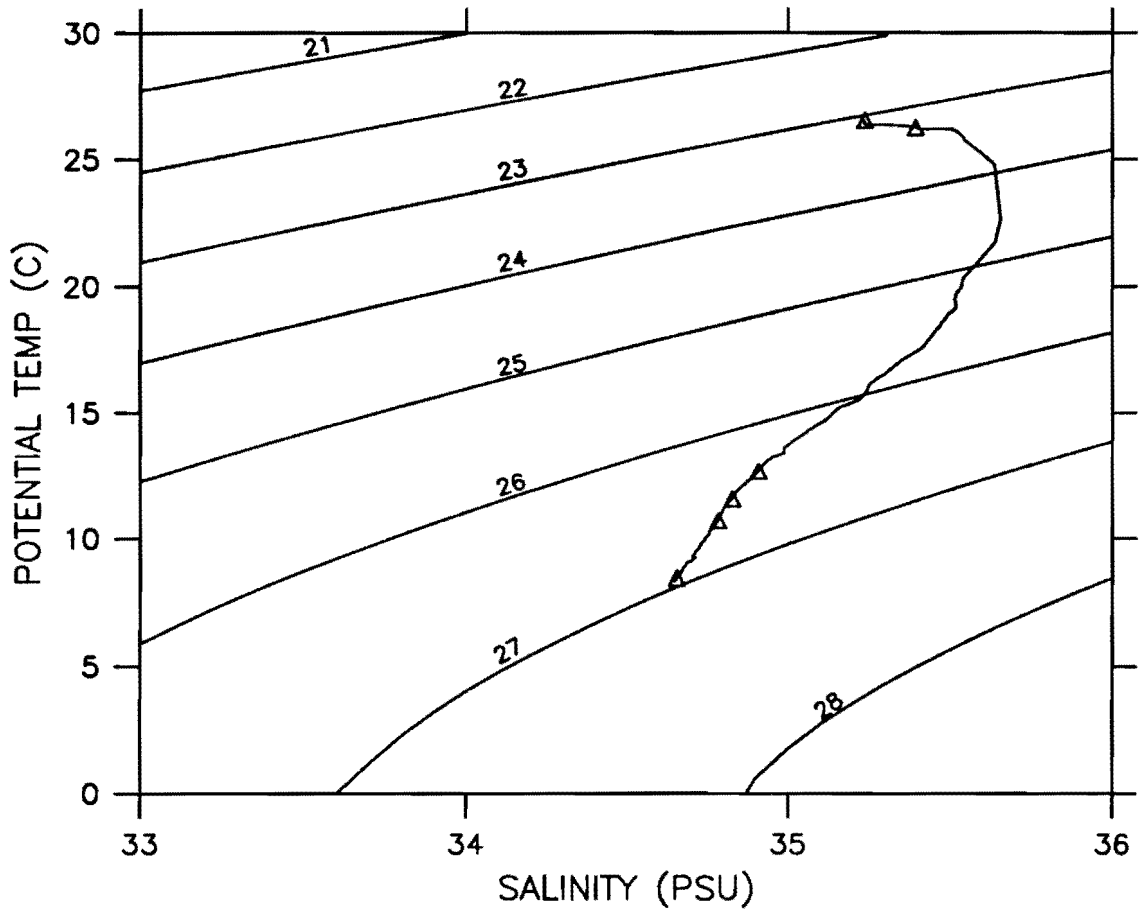


CAST EP2-90-DI -020 DATE 28 OCT 90 TIME 1331 GMT
 LAT 01 30.4S LONG 140 00.6W WEATHER 1 SEA STATE 4
 BAROMETER 14 WIND DIR 095 T SPD 14 KT VISIBILITY 7
 CLOUD 1 AMOUNT 2 DRY 25.3 WET 23.2 DEPTH 4340 M

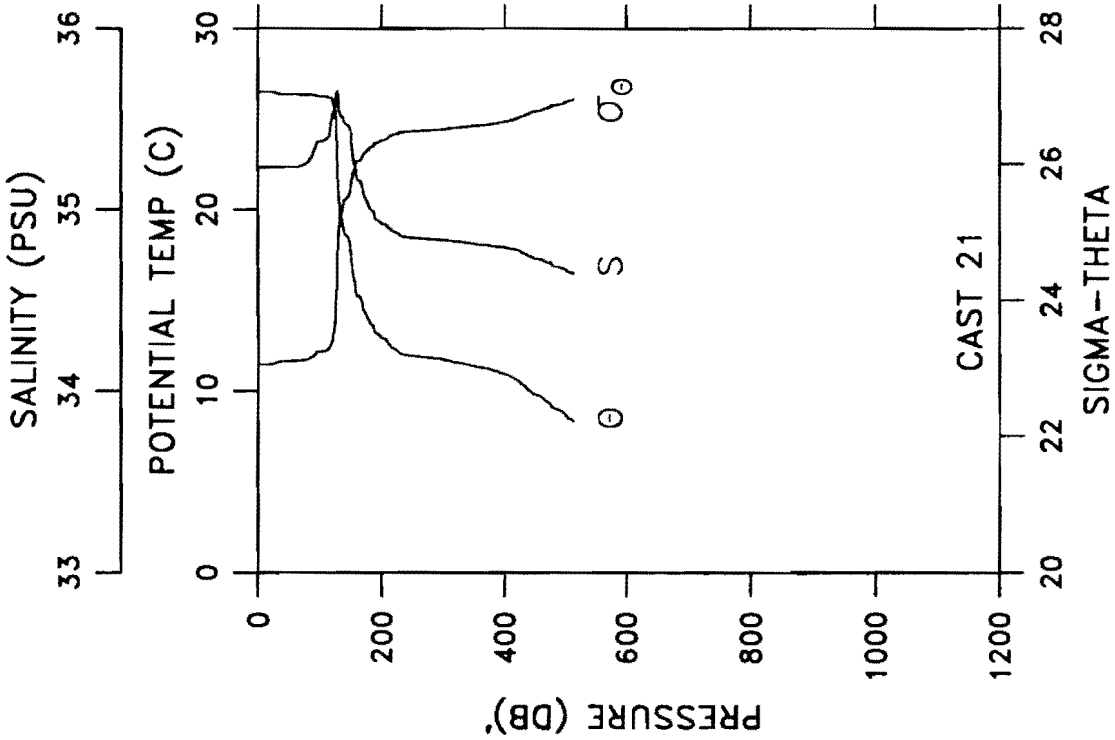


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.438 | 35.283 | 23.111 | 0.000 |
| 10 | 26.436 | 35.283 | 23.112 | 0.048 |
| 20 | 26.435 | 35.283 | 23.112 | 0.095 |
| 30 | 26.441 | 35.283 | 23.110 | 0.143 |
| 40 | 26.440 | 35.283 | 23.111 | 0.190 |
| 50 | 26.442 | 35.283 | 23.110 | 0.238 |
| 60 | 26.441 | 35.283 | 23.111 | 0.286 |
| 70 | 26.436 | 35.285 | 23.113 | 0.334 |
| 80 | 26.432 | 35.286 | 23.116 | 0.381 |
| 90 | 26.424 | 35.289 | 23.120 | 0.429 |
| 100 | 26.399 | 35.352 | 23.176 | 0.477 |
| 110 | 26.375 | 35.411 | 23.228 | 0.524 |
| 120 | 26.361 | 35.428 | 23.245 | 0.571 |
| 130 | 25.329 | 35.456 | 23.587 | 0.616 |
| 140 | 23.318 | 35.645 | 24.332 | 0.656 |
| 150 | 20.072 | 35.578 | 25.185 | 0.689 |
| 160 | 15.965 | 35.261 | 25.957 | 0.714 |
| 170 | 14.696 | 35.118 | 26.130 | 0.734 |
| 180 | 13.815 | 35.019 | 26.241 | 0.753 |
| 190 | 12.790 | 34.925 | 26.377 | 0.770 |
| 200 | 12.529 | 34.899 | 26.409 | 0.787 |
| 250 | 11.995 | 34.846 | 26.471 | 0.868 |
| 300 | 11.784 | 34.834 | 26.501 | 0.949 |
| 350 | 11.253 | 34.804 | 26.577 | 1.028 |
| 400 | 10.296 | 34.755 | 26.710 | 1.101 |
| 450 | 9.505 | 34.712 | 26.811 | 1.170 |
| 500 | 8.207 | 34.635 | 26.956 | 1.235 |
| 550 | 7.632 | 34.606 | 27.019 | 1.290 |
| 600 | 6.948 | 34.575 | 27.091 | 1.345 |
| 650 | 6.368 | 34.558 | 27.156 | 1.397 |
| 700 | 5.909 | 34.547 | 27.207 | 1.445 |
| 750 | 5.529 | 34.544 | 27.251 | 1.492 |
| 800 | 5.313 | 34.542 | 27.276 | 1.537 |
| 900 | 4.919 | 34.544 | 27.323 | 1.623 |
| 1000 | 4.601 | 34.550 | 27.364 | 1.706 |
| 1022 | 4.547 | 34.551 | 27.371 | 1.724 |

CAST EP2-90-DI -021 DATE 29 OCT 90 TIME 0228 GMT
LAT 01 58.2S LONG 140 00.3W

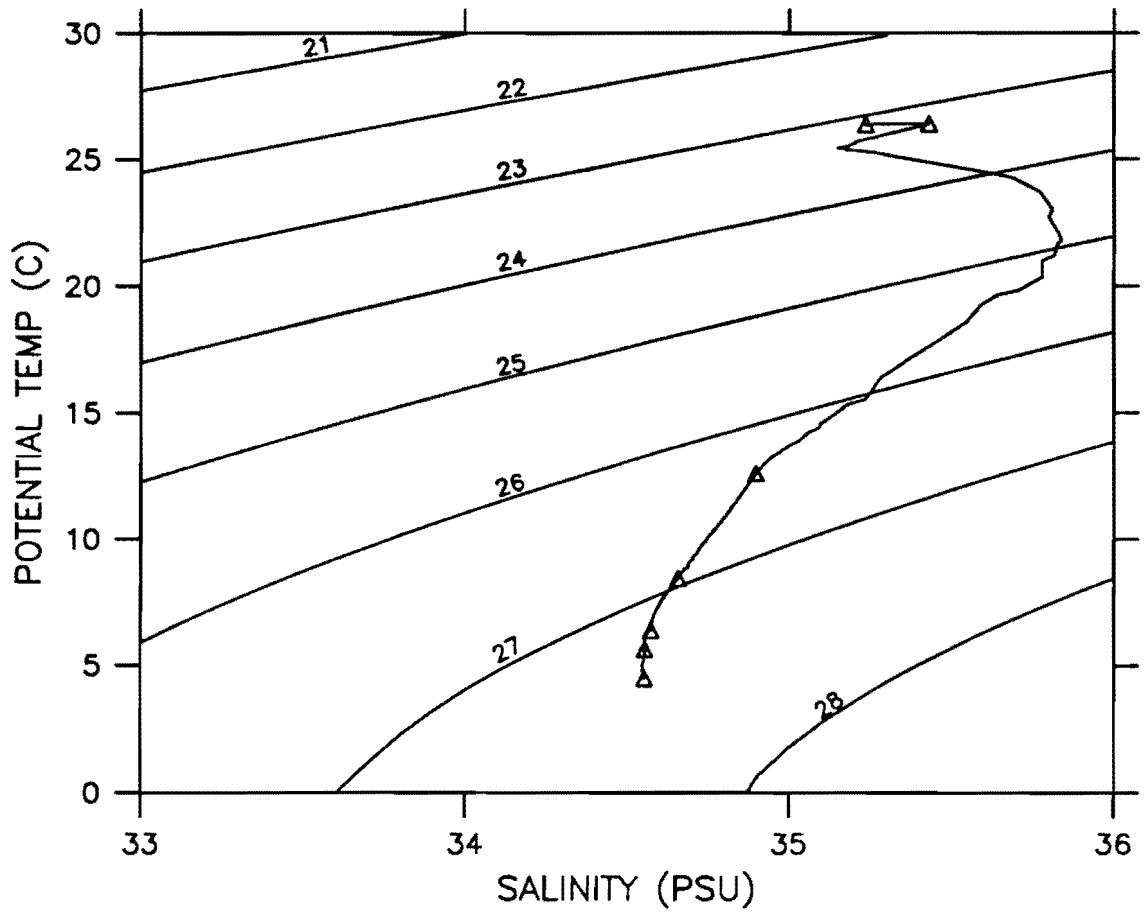


CAST EP2-90-DJ-021 DATE 29 OCT 90 TIME 0228 GMT
 LAT 01 58.2S LONG 140 00.3W WEATHER 1 SEA STATE 5
 BAROMETER 12 WIND DIR 110 T SPD 18 KT VISIBILITY 7
 CLOUD 1 AMOUNT 2 DRY 26.5 WET 23.9 DEPTH 4212 M

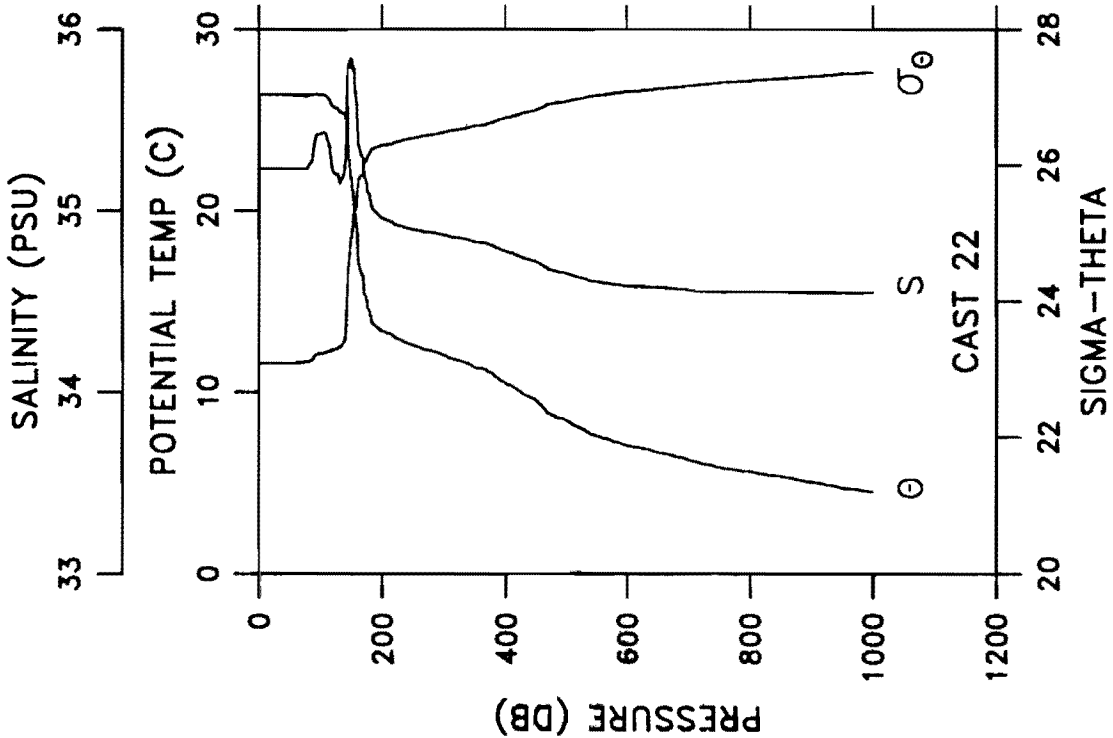


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.503 | 35.233 | 23.053 | 0.000 |
| 10 | 26.500 | 35.233 | 23.054 | 0.048 |
| 20 | 26.493 | 35.233 | 23.057 | 0.096 |
| 30 | 26.424 | 35.235 | 23.079 | 0.144 |
| 40 | 26.366 | 35.233 | 23.097 | 0.192 |
| 50 | 26.361 | 35.237 | 23.101 | 0.240 |
| 60 | 26.354 | 35.237 | 23.103 | 0.288 |
| 70 | 26.342 | 35.243 | 23.112 | 0.336 |
| 80 | 26.338 | 35.260 | 23.126 | 0.383 |
| 90 | 26.320 | 35.326 | 23.181 | 0.431 |
| 100 | 26.255 | 35.377 | 23.240 | 0.478 |
| 110 | 26.233 | 35.391 | 23.258 | 0.524 |
| 120 | 25.913 | 35.534 | 23.465 | 0.570 |
| 130 | 20.308 | 35.538 | 25.092 | 0.609 |
| 140 | 18.600 | 35.471 | 25.484 | 0.636 |
| 150 | 17.129 | 35.353 | 25.755 | 0.660 |
| 160 | 15.235 | 35.160 | 26.044 | 0.682 |
| 170 | 14.447 | 35.080 | 26.155 | 0.701 |
| 180 | 13.802 | 35.008 | 26.236 | 0.720 |
| 190 | 13.200 | 34.947 | 26.312 | 0.738 |
| 200 | 12.915 | 34.922 | 26.350 | 0.755 |
| 250 | 11.912 | 34.843 | 26.484 | 0.837 |
| 300 | 11.714 | 34.831 | 26.513 | 0.917 |
| 350 | 11.358 | 34.811 | 26.563 | 0.996 |
| 400 | 10.910 | 34.790 | 26.629 | 1.072 |
| 450 | 8.774 | 34.728 | 26.779 | 1.144 |
| 500 | 8.604 | 34.666 | 26.920 | 1.209 |
| 512 | 8.305 | 34.646 | 26.950 | 1.224 |

CAST EP2-90-DI -022 DATE 29 OCT 90 TIME 0853 GMT
LAT 03 00.3S LONG 139 59.9W

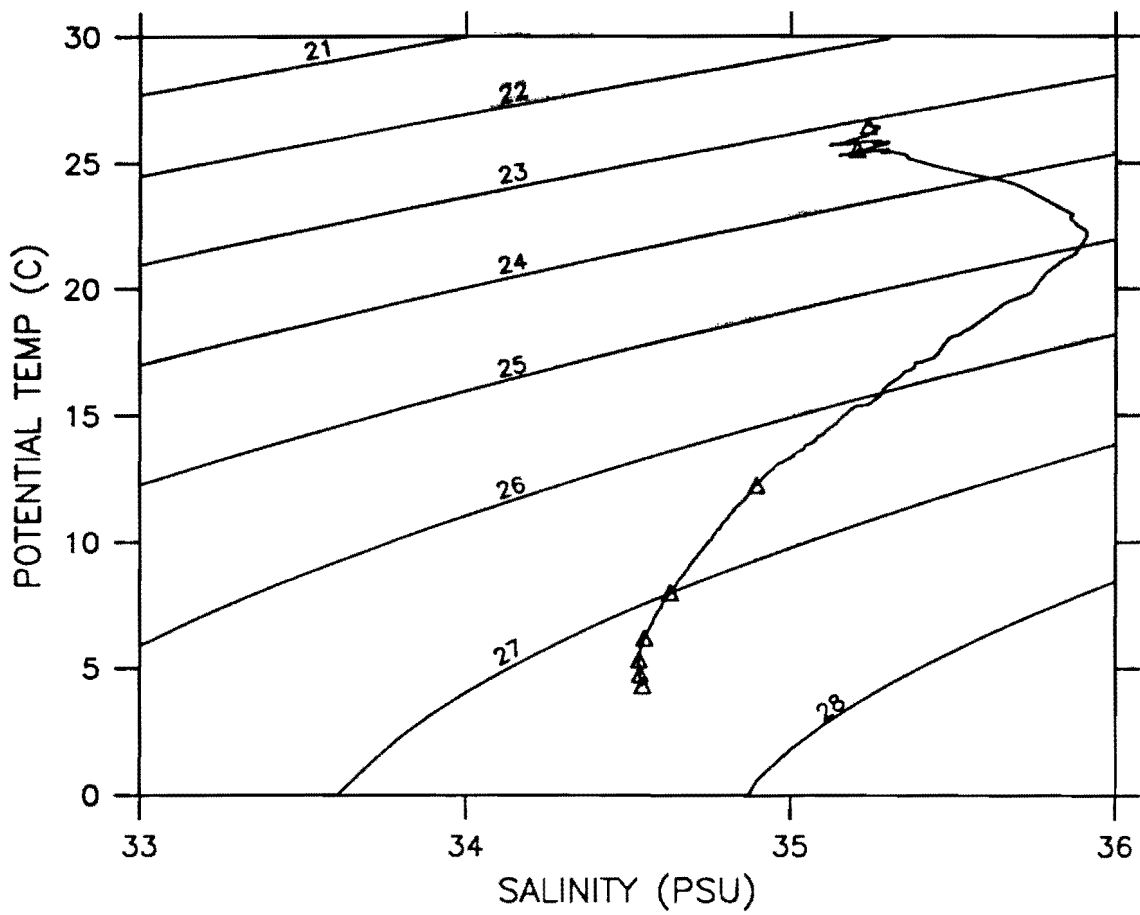


CAST EP2-90-D1 -022 DATE 29 OCT 90 TIME 0853 GMT
 LAT 03 00.3S LONG 139 59.9W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 110 T SPD 16 KT VISIBILITY 8
 CLOUD AMOUNT 9 DRY 25.9 WET 24.0 DEPTH 4502 M

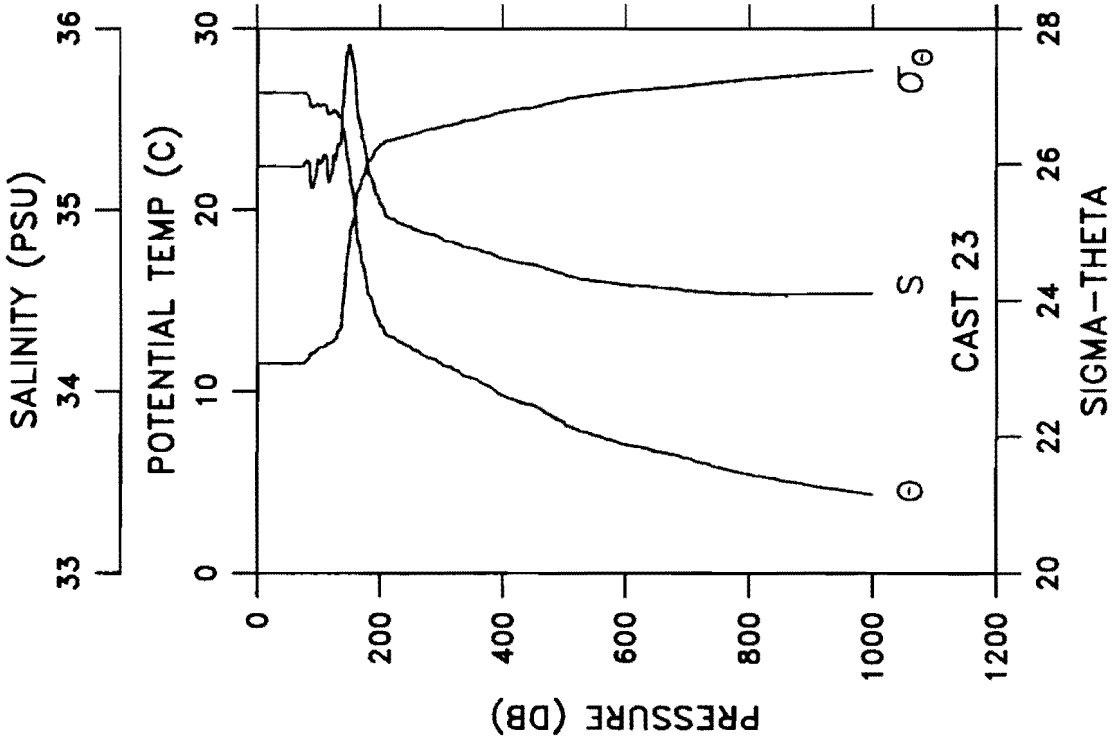


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.362 | 35.232 | 23.091 | 0.000 |
| 10 | 26.379 | 35.232 | 23.091 | 0.048 |
| 20 | 26.382 | 35.232 | 23.091 | 0.095 |
| 30 | 26.385 | 35.232 | 23.090 | 0.143 |
| 40 | 26.383 | 35.232 | 23.090 | 0.191 |
| 50 | 26.381 | 35.231 | 23.090 | 0.239 |
| 60 | 26.377 | 35.232 | 23.092 | 0.287 |
| 70 | 26.370 | 35.231 | 23.094 | 0.335 |
| 80 | 26.347 | 35.246 | 23.112 | 0.383 |
| 90 | 26.390 | 35.374 | 23.196 | 0.430 |
| 100 | 26.407 | 35.423 | 23.227 | 0.477 |
| 110 | 26.257 | 35.393 | 23.251 | 0.524 |
| 120 | 25.715 | 35.215 | 23.286 | 0.571 |
| 130 | 25.438 | 35.155 | 23.326 | 0.617 |
| 140 | 25.157 | 35.305 | 23.526 | 0.662 |
| 150 | 21.677 | 35.828 | 24.939 | 0.698 |
| 160 | 17.829 | 35.457 | 25.665 | 0.726 |
| 170 | 15.531 | 35.237 | 26.037 | 0.748 |
| 180 | 14.299 | 35.074 | 26.182 | 0.767 |
| 190 | 13.596 | 34.980 | 26.264 | 0.786 |
| 200 | 13.355 | 34.959 | 26.290 | 0.803 |
| 250 | 12.574 | 34.897 | 26.398 | 0.890 |
| 300 | 12.024 | 34.864 | 26.480 | 0.973 |
| 350 | 11.341 | 34.826 | 26.578 | 1.052 |
| 400 | 10.465 | 34.774 | 26.695 | 1.127 |
| 450 | 9.506 | 34.717 | 26.814 | 1.196 |
| 500 | 8.402 | 34.652 | 26.840 | 1.258 |
| 550 | 7.584 | 34.607 | 27.027 | 1.316 |
| 600 | 7.046 | 34.584 | 27.085 | 1.371 |
| 650 | 6.667 | 34.576 | 27.131 | 1.424 |
| 700 | 6.259 | 34.562 | 27.174 | 1.474 |
| 750 | 5.862 | 34.553 | 27.217 | 1.523 |
| 800 | 5.617 | 34.553 | 27.247 | 1.569 |
| 900 | 5.037 | 34.548 | 27.313 | 1.658 |
| 1000 | 4.510 | 34.549 | 27.373 | 1.742 |
| 1010 | 4.480 | 34.551 | 27.378 | 1.750 |

CAST EP2-90-DI -023 DATE 29 OCT 90 TIME 1516 GMT
LAT 04 00.3S LONG 139 59.6W

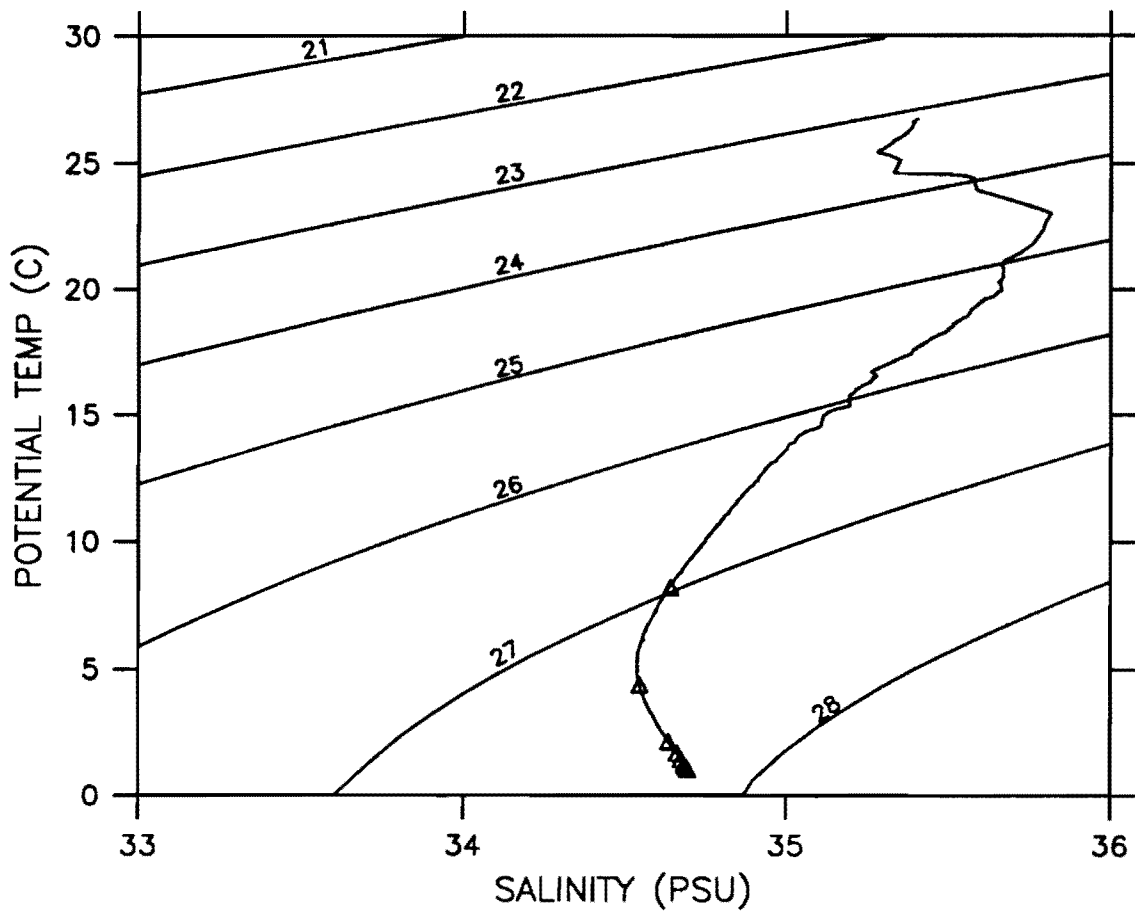


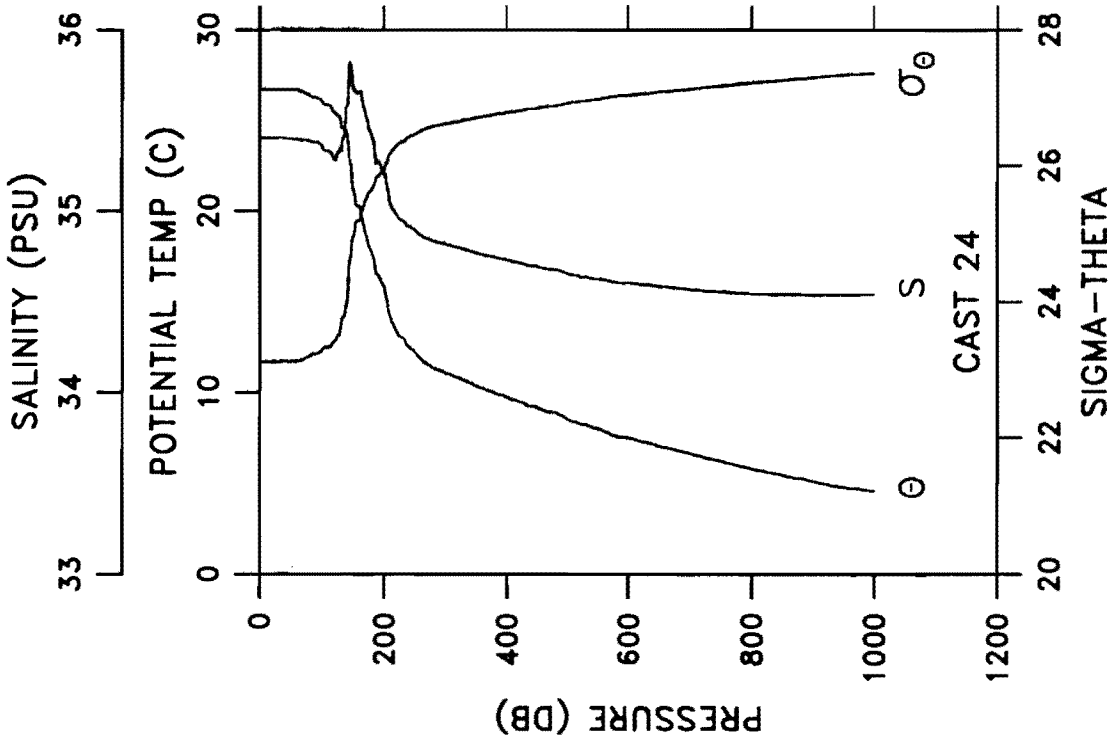
CAST EP2-90-D1 -023 DATE 29 OCT 90 TIME 1516 GMT
 LAT 04 00.35 LONG 139 59.6W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 100 T SPD 18 KT VISIBILITY 8
 CLOUD 6 AMOUNT 4 DRY 25.8 WET 23.2 DEPTH 4468 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.472 | 35.239 | 23.067 | 0.000 |
| 10 | 26.470 | 35.239 | 23.068 | 0.048 |
| 20 | 26.471 | 35.239 | 23.068 | 0.096 |
| 30 | 26.473 | 35.240 | 23.068 | 0.144 |
| 40 | 26.468 | 35.239 | 23.068 | 0.192 |
| 50 | 26.472 | 35.238 | 23.067 | 0.240 |
| 60 | 26.469 | 35.239 | 23.069 | 0.288 |
| 70 | 26.467 | 35.239 | 23.069 | 0.336 |
| 80 | 26.402 | 35.272 | 23.114 | 0.385 |
| 90 | 25.705 | 35.118 | 23.216 | 0.432 |
| 100 | 25.780 | 35.266 | 23.305 | 0.478 |
| 110 | 25.810 | 35.301 | 23.322 | 0.524 |
| 120 | 25.362 | 35.189 | 23.375 | 0.570 |
| 130 | 25.390 | 35.331 | 23.478 | 0.615 |
| 140 | 24.470 | 35.585 | 23.946 | 0.659 |
| 150 | 22.294 | 35.908 | 24.826 | 0.694 |
| 160 | 19.832 | 35.739 | 25.371 | 0.723 |
| 170 | 17.261 | 35.441 | 25.791 | 0.748 |
| 180 | 15.406 | 35.237 | 26.065 | 0.769 |
| 190 | 14.610 | 35.134 | 26.161 | 0.789 |
| 200 | 13.631 | 35.036 | 26.292 | 0.808 |
| 250 | 12.437 | 34.908 | 26.433 | 0.893 |
| 300 | 11.515 | 34.842 | 26.559 | 0.973 |
| 350 | 10.726 | 34.790 | 26.661 | 1.047 |
| 400 | 9.781 | 34.733 | 26.781 | 1.118 |
| 450 | 9.240 | 34.701 | 26.845 | 1.183 |
| 500 | 8.240 | 34.647 | 26.960 | 1.245 |
| 550 | 7.585 | 34.609 | 27.031 | 1.302 |
| 600 | 7.073 | 34.588 | 27.085 | 1.357 |
| 650 | 6.685 | 34.575 | 27.127 | 1.410 |
| 700 | 6.312 | 34.566 | 27.162 | 1.461 |
| 750 | 5.820 | 34.542 | 27.214 | 1.508 |
| 800 | 5.446 | 34.537 | 27.256 | 1.556 |
| 900 | 4.833 | 34.537 | 27.328 | 1.644 |
| 1000 | 4.333 | 34.546 | 27.390 | 1.725 |
| 1010 | 4.326 | 34.546 | 27.390 | 1.733 |

CAST EP2-90-DI -024 DATE 30 OCT 90 TIME 0754 GMT
LAT 05 01.0S LONG 139 58.4W

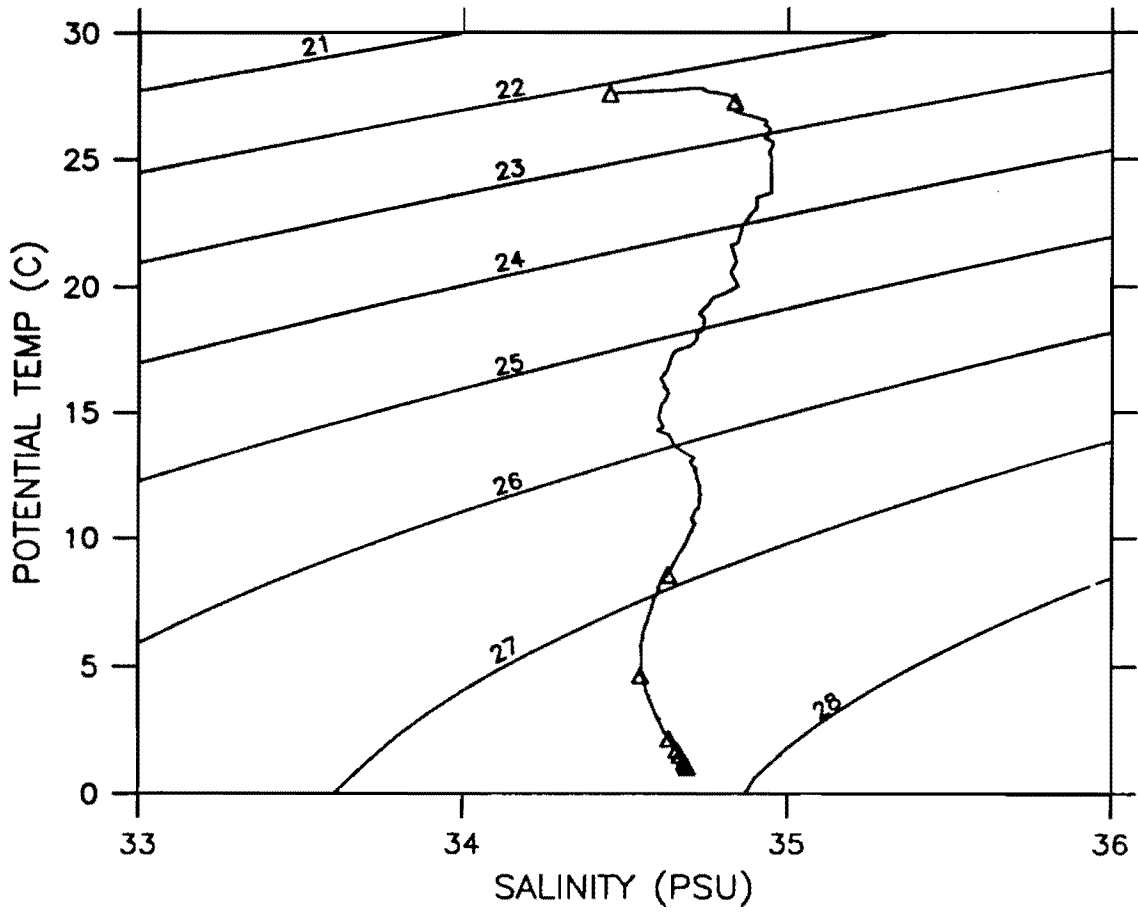




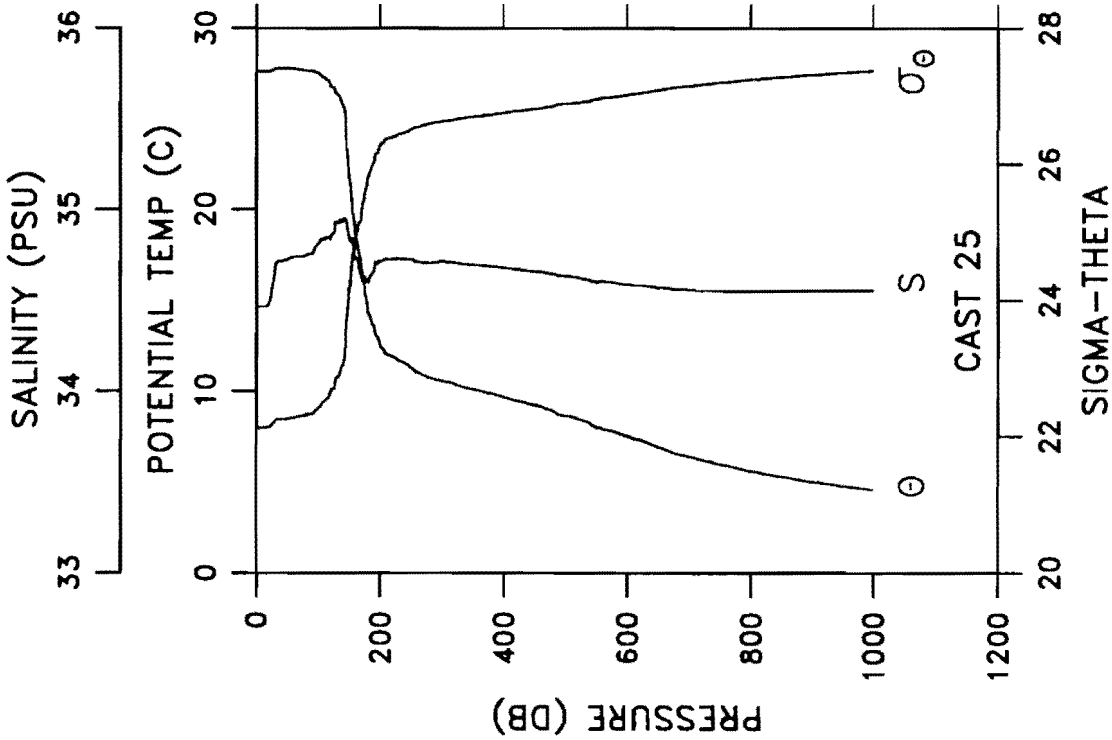
CAST EP2-90-D1 -024 DATE 30 OCT 90 TIME 0754 GMT
 LAT 05 01.0S LONG 139 58.4W WEATHER 0 SEA STATE 4
 BAROMETER 12 WIND DIR 090 T SPD 22 KT VISIBILITY 9
 CLOUD AMOUNT 0 DRY 26.0 WET 24.2 DEPTH 4299 M

| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.730 | 35.406 | 23.112 | 0.000 |
| 10 | 26.727 | 35.406 | 23.113 | 0.048 |
| 20 | 26.727 | 35.406 | 23.113 | 0.095 |
| 30 | 26.718 | 35.405 | 23.115 | 0.143 |
| 40 | 26.712 | 35.404 | 23.116 | 0.190 |
| 50 | 26.697 | 35.401 | 23.119 | 0.238 |
| 60 | 26.676 | 35.398 | 23.123 | 0.286 |
| 70 | 26.570 | 35.396 | 23.155 | 0.333 |
| 80 | 26.393 | 35.388 | 23.205 | 0.380 |
| 90 | 26.282 | 35.381 | 23.234 | 0.427 |
| 100 | 25.991 | 35.350 | 23.302 | 0.474 |
| 110 | 25.861 | 35.331 | 23.329 | 0.520 |
| 120 | 25.436 | 35.284 | 23.424 | 0.565 |
| 130 | 24.625 | 35.333 | 23.708 | 0.609 |
| 140 | 23.937 | 35.586 | 24.105 | 0.650 |
| 150 | 21.148 | 35.672 | 24.966 | 0.684 |
| 160 | 20.244 | 35.660 | 25.202 | 0.712 |
| 170 | 18.697 | 35.526 | 25.501 | 0.739 |
| 180 | 17.718 | 35.411 | 25.658 | 0.764 |
| 190 | 16.466 | 35.273 | 25.851 | 0.787 |
| 200 | 15.849 | 35.208 | 25.943 | 0.808 |
| 250 | 12.253 | 34.901 | 26.464 | 0.898 |
| 300 | 11.089 | 34.823 | 26.622 | 0.974 |
| 350 | 10.366 | 34.770 | 26.710 | 1.047 |
| 400 | 9.752 | 34.732 | 26.785 | 1.116 |
| 450 | 9.153 | 34.695 | 26.855 | 1.181 |
| 500 | 8.487 | 34.656 | 26.930 | 1.244 |
| 550 | 8.008 | 34.626 | 26.979 | 1.303 |
| 600 | 7.505 | 34.604 | 27.036 | 1.360 |
| 650 | 7.038 | 34.586 | 27.087 | 1.415 |
| 700 | 6.649 | 34.568 | 27.127 | 1.468 |
| 750 | 6.232 | 34.555 | 27.171 | 1.519 |
| 800 | 5.801 | 34.545 | 27.218 | 1.568 |
| 900 | 5.119 | 34.538 | 27.295 | 1.659 |
| 1000 | 4.573 | 34.542 | 27.361 | 1.744 |
| 1500 | 2.878 | 34.600 | 27.577 | 2.090 |
| 2000 | 2.158 | 34.637 | 27.688 | 2.372 |
| 2500 | 1.714 | 34.662 | 27.723 | 2.623 |
| 3000 | 1.453 | 34.675 | 27.753 | 2.855 |
| 3500 | 1.258 | 34.684 | 27.774 | 3.079 |
| 4000 | 1.105 | 34.693 | 27.791 | 3.298 |
| 4336 | 1.044 | 34.696 | 27.798 | 3.444 |

CAST EP2-90-DI -025 DATE 02 NOV 90 TIME 0629 GMT
LAT 07 03.0N LONG 132 26.0W

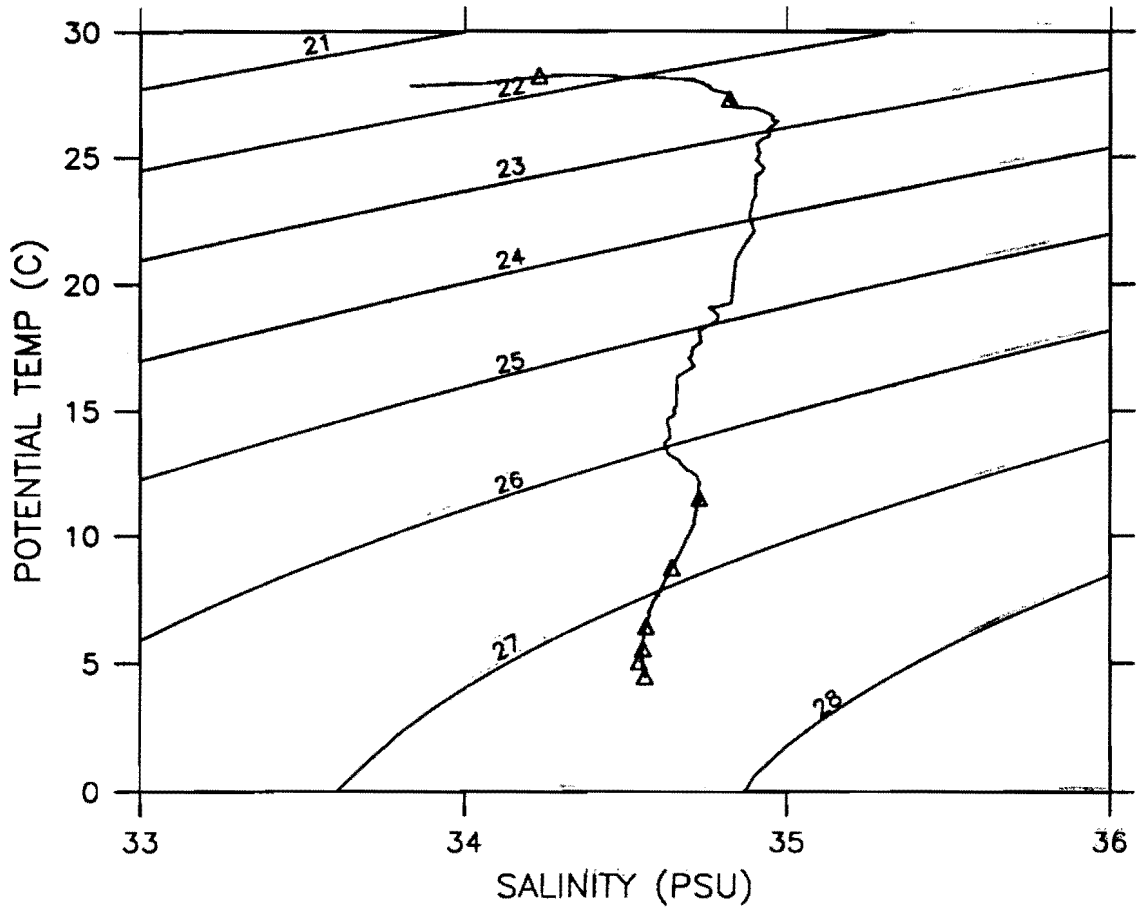


CAST EP2-90-D1 -025 DATE 02 NOV 90 TIME 0629 GMT
 LAT 07 03.0N LONG 132 26.0W WEATHER 2 SEA STATE 2
 BAROMETER 15 WIND DIR 220 T SPD 06 KT VISIBILITY 8
 CLOUD 8 AMOUNT 7 DRY 25.0 WET 23.5 DEPTH 4727 M

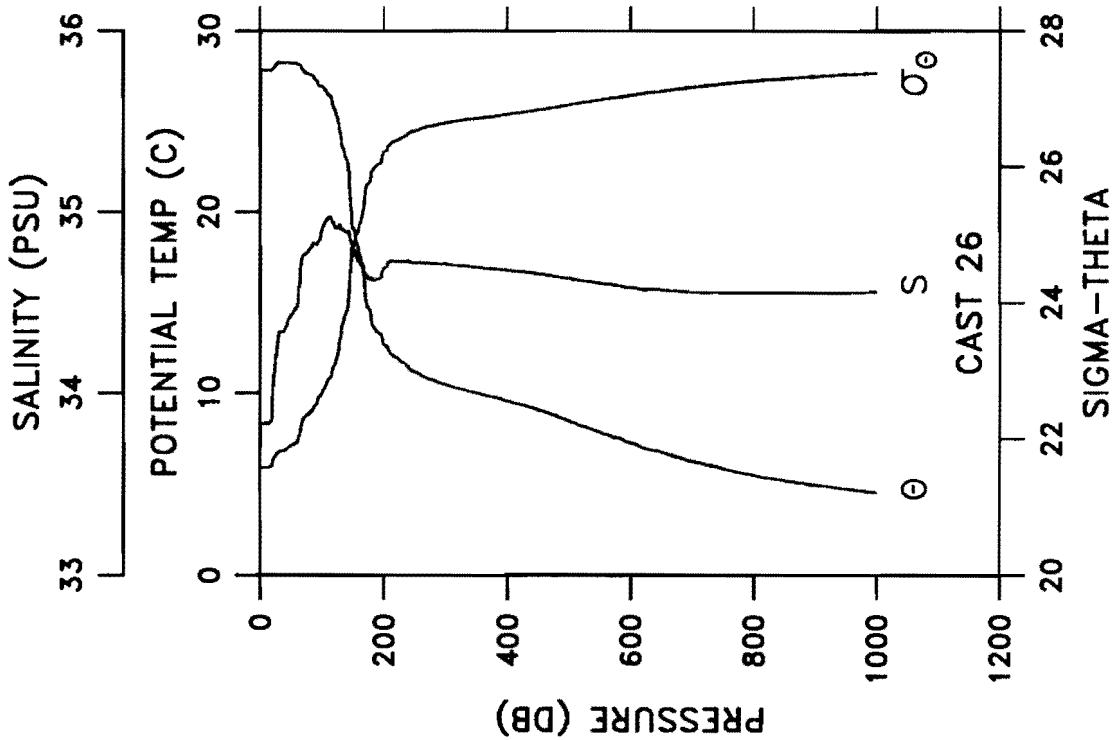


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.595 | 34.464 | 22.125 | 0.000 |
| 10 | 27.592 | 34.464 | 22.126 | 0.057 |
| 20 | 27.612 | 34.485 | 22.136 | 0.114 |
| 30 | 27.755 | 34.674 | 22.232 | 0.170 |
| 40 | 27.783 | 34.716 | 22.254 | 0.226 |
| 50 | 27.791 | 34.725 | 22.258 | 0.282 |
| 60 | 27.767 | 34.738 | 22.276 | 0.338 |
| 70 | 27.717 | 34.742 | 22.295 | 0.394 |
| 80 | 27.664 | 34.748 | 22.317 | 0.449 |
| 90 | 27.634 | 34.760 | 22.335 | 0.505 |
| 100 | 27.508 | 34.814 | 22.416 | 0.560 |
| 110 | 27.243 | 34.838 | 22.520 | 0.614 |
| 120 | 26.801 | 34.850 | 22.670 | 0.667 |
| 130 | 26.361 | 34.927 | 22.867 | 0.718 |
| 140 | 25.749 | 34.940 | 23.068 | 0.768 |
| 150 | 21.888 | 34.843 | 24.187 | 0.812 |
| 160 | 18.723 | 34.741 | 24.895 | 0.846 |
| 170 | 18.667 | 34.628 | 25.308 | 0.876 |
| 180 | 14.398 | 34.616 | 25.807 | 0.900 |
| 190 | 13.538 | 34.684 | 26.024 | 0.922 |
| 200 | 12.506 | 34.719 | 26.274 | 0.941 |
| 250 | 11.274 | 34.725 | 26.512 | 1.024 |
| 300 | 10.561 | 34.714 | 26.632 | 1.099 |
| 350 | 10.115 | 34.697 | 26.696 | 1.171 |
| 400 | 9.675 | 34.681 | 26.758 | 1.241 |
| 450 | 9.238 | 34.660 | 26.814 | 1.308 |
| 500 | 8.633 | 34.634 | 26.890 | 1.373 |
| 550 | 8.005 | 34.601 | 26.960 | 1.434 |
| 600 | 7.533 | 34.587 | 27.018 | 1.492 |
| 650 | 6.948 | 34.571 | 27.068 | 1.548 |
| 700 | 6.402 | 34.560 | 27.153 | 1.599 |
| 750 | 5.978 | 34.554 | 27.203 | 1.649 |
| 800 | 5.606 | 34.551 | 27.247 | 1.696 |
| 850 | 5.016 | 34.550 | 27.317 | 1.785 |
| 1000 | 4.577 | 34.556 | 27.371 | 1.868 |
| 1500 | 3.025 | 34.600 | 27.563 | 2.223 |
| 2000 | 2.129 | 34.637 | 27.671 | 2.508 |
| 2500 | 1.698 | 34.662 | 27.724 | 2.754 |
| 3000 | 1.496 | 34.673 | 27.748 | 2.989 |
| 3500 | 1.241 | 34.683 | 27.774 | 3.215 |
| 4000 | 1.069 | 34.690 | 27.792 | 3.431 |
| 4500 | 1.038 | 34.691 | 27.795 | 3.649 |
| 4605 | 1.036 | 34.692 | 27.795 | 3.696 |

CAST EP2-90-DI -026 DATE 02 NOV 90 TIME 2045 GMT
LAT 07 00.0N LONG 130 00.1W

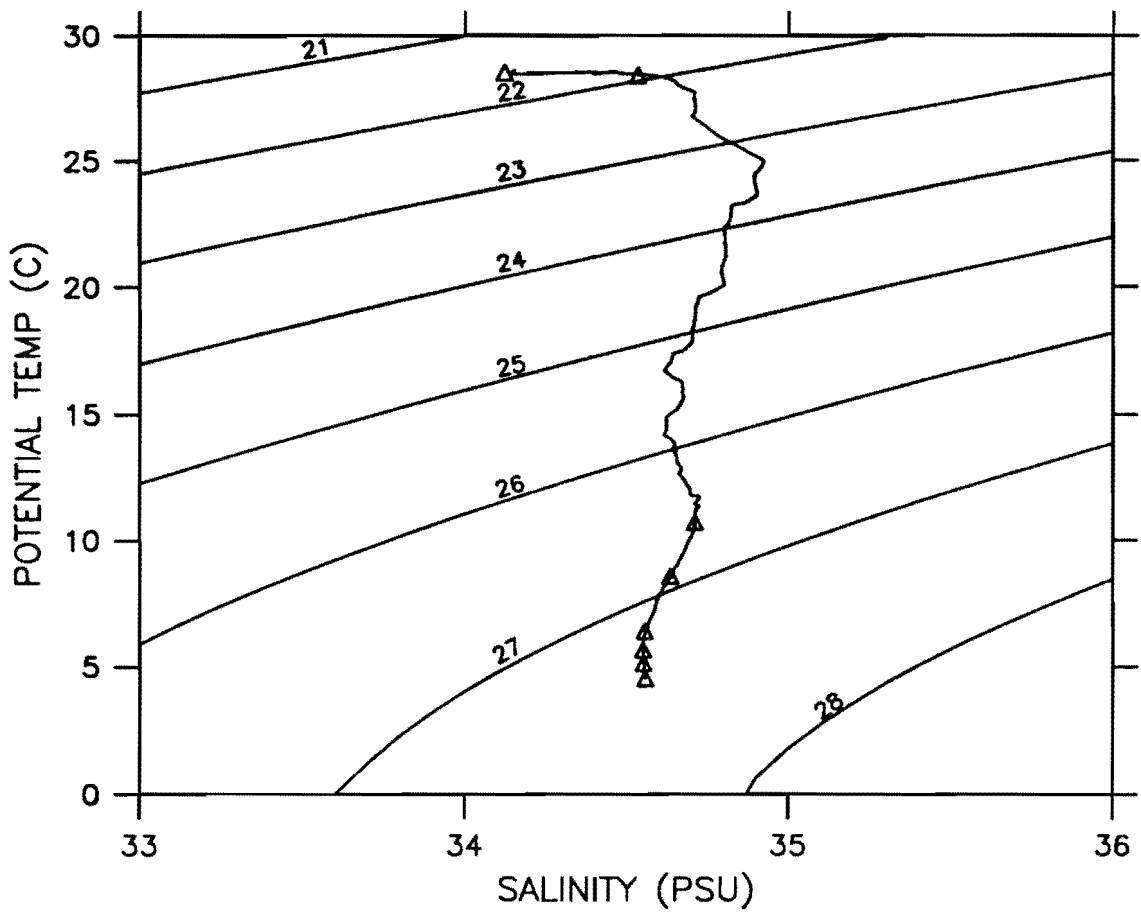


CAST EP2-90-D1 -026 DATE 02 NOV 90 TIME 2045 GMT
 LAT 07 00.0N LONG 130 00.1W WEATHER 6 SEA STATE 3
 BAROMETER 12 WIND DIR 210 T SPD 13 KT VISIBILITY 8
 CLOUD 1 AMOUNT 5 DRY 25.4 WET 24.5 DEPTH 4626 M

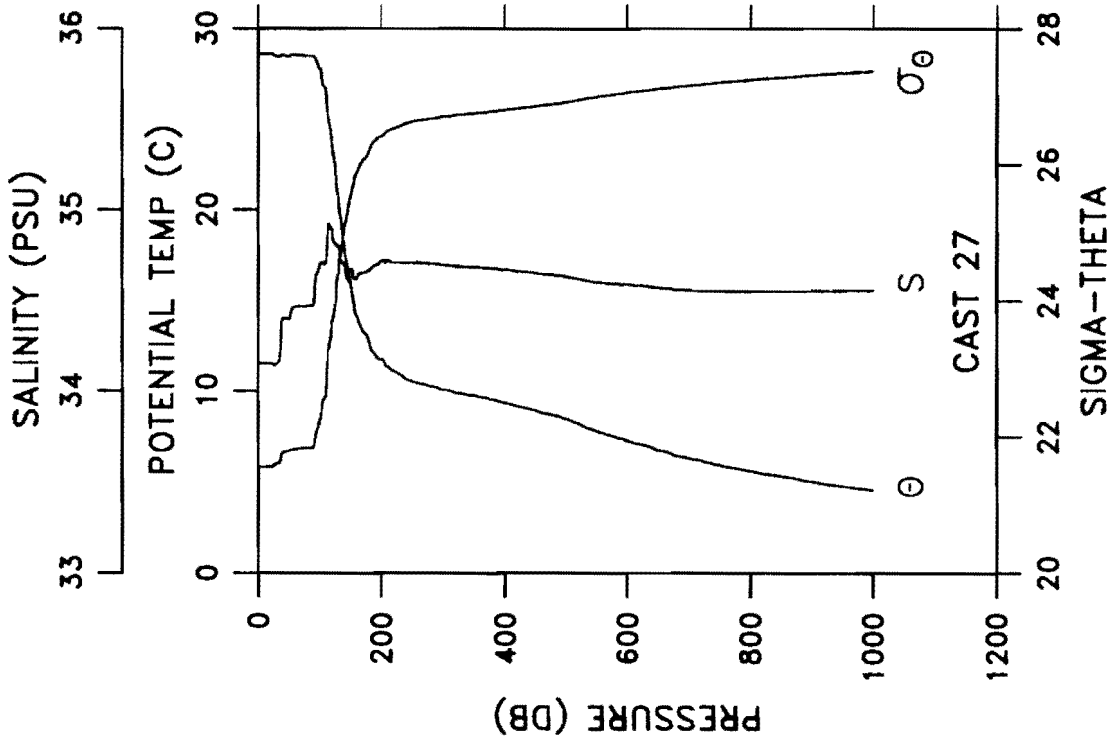


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.822 | 33.833 | 21.577 | 0.000 |
| 10 | 27.820 | 33.833 | 21.578 | 0.062 |
| 20 | 27.874 | 33.962 | 21.657 | 0.124 |
| 30 | 28.261 | 34.336 | 21.812 | 0.185 |
| 40 | 28.240 | 34.349 | 21.829 | 0.245 |
| 50 | 26.213 | 34.433 | 21.901 | 0.305 |
| 60 | 26.153 | 34.481 | 21.956 | 0.364 |
| 70 | 27.761 | 34.761 | 22.289 | 0.421 |
| 80 | 27.588 | 34.792 | 22.374 | 0.476 |
| 90 | 27.262 | 34.820 | 22.500 | 0.530 |
| 100 | 26.931 | 34.903 | 22.669 | 0.583 |
| 110 | 26.444 | 34.965 | 22.870 | 0.634 |
| 120 | 25.680 | 34.922 | 23.076 | 0.684 |
| 130 | 24.292 | 34.906 | 23.485 | 0.731 |
| 140 | 22.882 | 34.887 | 23.884 | 0.773 |
| 150 | 19.098 | 34.759 | 24.813 | 0.809 |
| 160 | 17.714 | 34.733 | 25.139 | 0.839 |
| 170 | 15.201 | 34.656 | 25.663 | 0.866 |
| 180 | 13.919 | 34.638 | 25.925 | 0.889 |
| 190 | 13.371 | 34.629 | 26.031 | 0.910 |
| 200 | 12.673 | 34.689 | 26.217 | 0.929 |
| 250 | 11.174 | 34.719 | 26.526 | 1.013 |
| 300 | 10.477 | 34.713 | 26.846 | 1.088 |
| 350 | 10.013 | 34.695 | 26.712 | 1.159 |
| 400 | 9.567 | 34.679 | 26.775 | 1.228 |
| 450 | 9.080 | 34.660 | 26.840 | 1.294 |
| 500 | 8.501 | 34.632 | 26.909 | 1.358 |
| 550 | 7.883 | 34.608 | 26.984 | 1.418 |
| 600 | 7.290 | 34.583 | 27.050 | 1.474 |
| 650 | 6.762 | 34.570 | 27.113 | 1.528 |
| 700 | 6.265 | 34.559 | 27.170 | 1.579 |
| 750 | 5.861 | 34.554 | 27.218 | 1.628 |
| 800 | 5.501 | 34.553 | 27.262 | 1.674 |
| 900 | 4.958 | 34.552 | 27.325 | 1.761 |
| 1000 | 4.544 | 34.559 | 27.377 | 1.844 |
| 1013 | 4.466 | 34.561 | 27.387 | 1.854 |

CAST EP2-90-DI -027 DATE 03 NOV 90 TIME 0835 GMT
LAT 07 00.3N LONG 137 30.0W

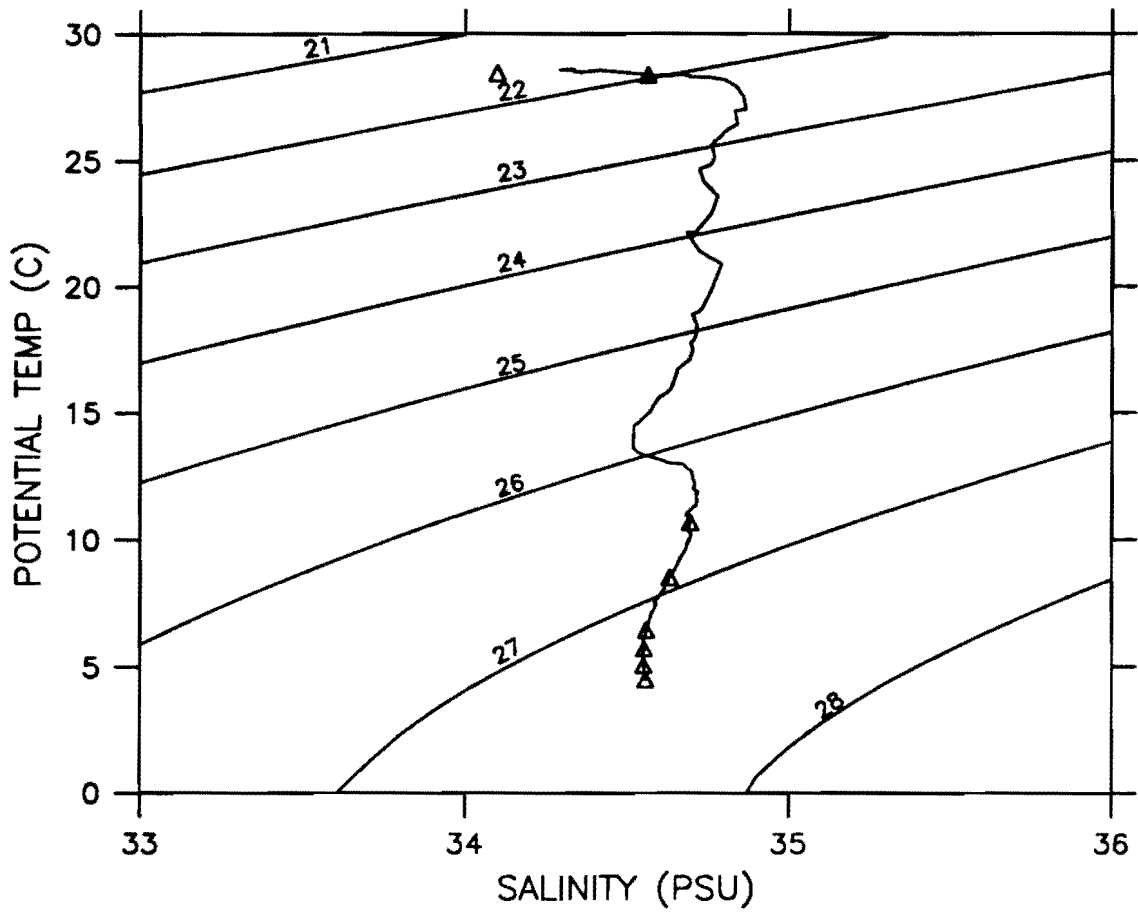


CAST EP2-90-DI -027 DATE 03 NOV 90 TIME 0835 GMT
 LAT 07 00.3N LONG 137 30.0W WEATHER 1 SEA STATE 3
 BAROMETER 11 WIND DIR 170 T SPD 05 KT VISIBILITY 8
 CLOUD 8 AMOUNT 3 DRY 25.9 WET 23.8 DEPTH 4709 M

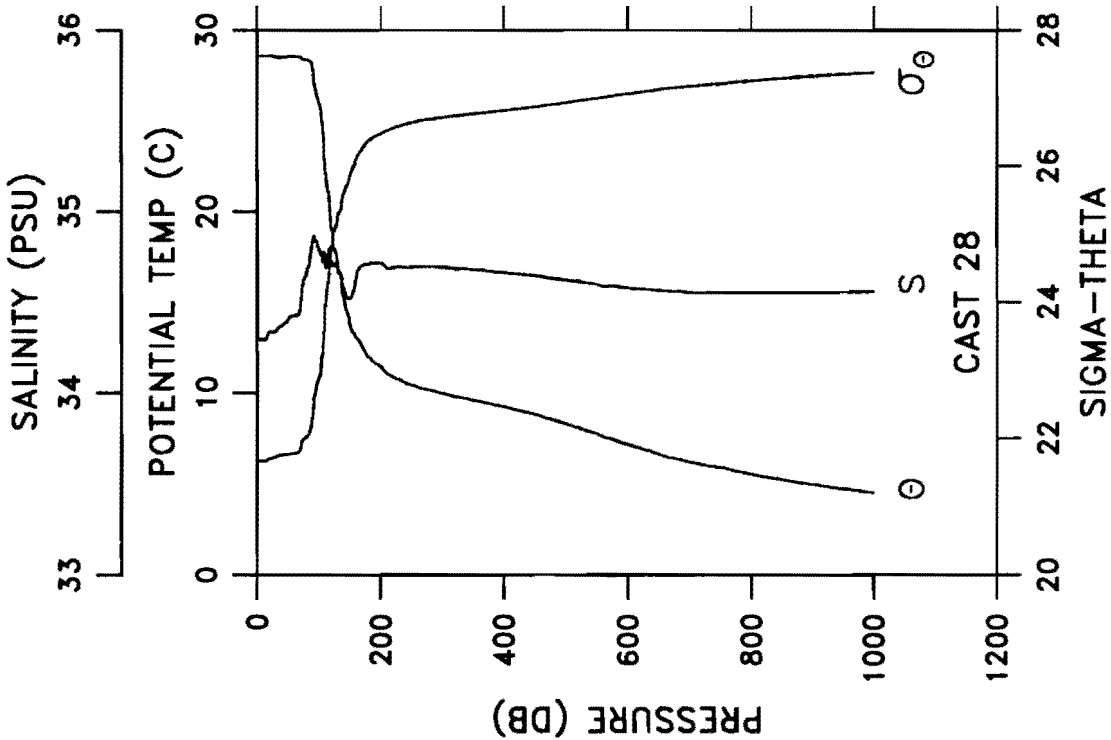


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.610 | 34.151 | 21.559 | 0.000 |
| 10 | 28.608 | 34.151 | 21.559 | 0.062 |
| 20 | 28.613 | 34.151 | 21.557 | 0.125 |
| 30 | 28.461 | 34.151 | 21.607 | 0.167 |
| 40 | 28.532 | 34.403 | 21.773 | 0.248 |
| 50 | 28.488 | 34.398 | 21.791 | 0.309 |
| 60 | 28.550 | 34.467 | 21.816 | 0.369 |
| 70 | 28.513 | 34.470 | 21.830 | 0.429 |
| 80 | 28.498 | 34.471 | 21.836 | 0.489 |
| 90 | 28.477 | 34.484 | 21.852 | 0.549 |
| 100 | 27.769 | 34.703 | 22.248 | 0.607 |
| 110 | 26.400 | 34.741 | 22.715 | 0.661 |
| 120 | 23.307 | 34.866 | 23.745 | 0.707 |
| 130 | 20.607 | 34.792 | 24.443 | 0.746 |
| 140 | 17.844 | 34.702 | 25.083 | 0.778 |
| 150 | 15.860 | 34.672 | 25.528 | 0.805 |
| 160 | 14.084 | 34.629 | 25.883 | 0.828 |
| 170 | 13.302 | 34.654 | 26.064 | 0.849 |
| 180 | 12.710 | 34.661 | 26.189 | 0.868 |
| 190 | 12.004 | 34.693 | 26.351 | 0.886 |
| 200 | 11.757 | 34.717 | 26.416 | 0.903 |
| 250 | 10.529 | 34.708 | 26.633 | 0.979 |
| 300 | 10.078 | 34.695 | 28.700 | 1.051 |
| 350 | 9.749 | 34.683 | 28.747 | 1.120 |
| 400 | 9.358 | 34.670 | 26.802 | 1.187 |
| 450 | 8.929 | 34.650 | 26.856 | 1.252 |
| 500 | 8.457 | 34.629 | 26.913 | 1.315 |
| 550 | 7.793 | 34.598 | 26.989 | 1.374 |
| 600 | 7.273 | 34.588 | 27.058 | 1.431 |
| 650 | 6.758 | 34.571 | 27.114 | 1.485 |
| 700 | 6.328 | 34.558 | 27.161 | 1.536 |
| 750 | 5.949 | 34.552 | 27.205 | 1.585 |
| 800 | 5.628 | 34.550 | 27.244 | 1.632 |
| 900 | 5.048 | 34.554 | 27.316 | 1.721 |
| 1000 | 4.579 | 34.558 | 27.372 | 1.804 |
| 1006 | 4.553 | 34.558 | 27.376 | 1.809 |

CAST EP2-90-DI -028 DATE 03 NOV 90 TIME 2030 GMT
LAT 06 59.9N LONG 140 00.2W

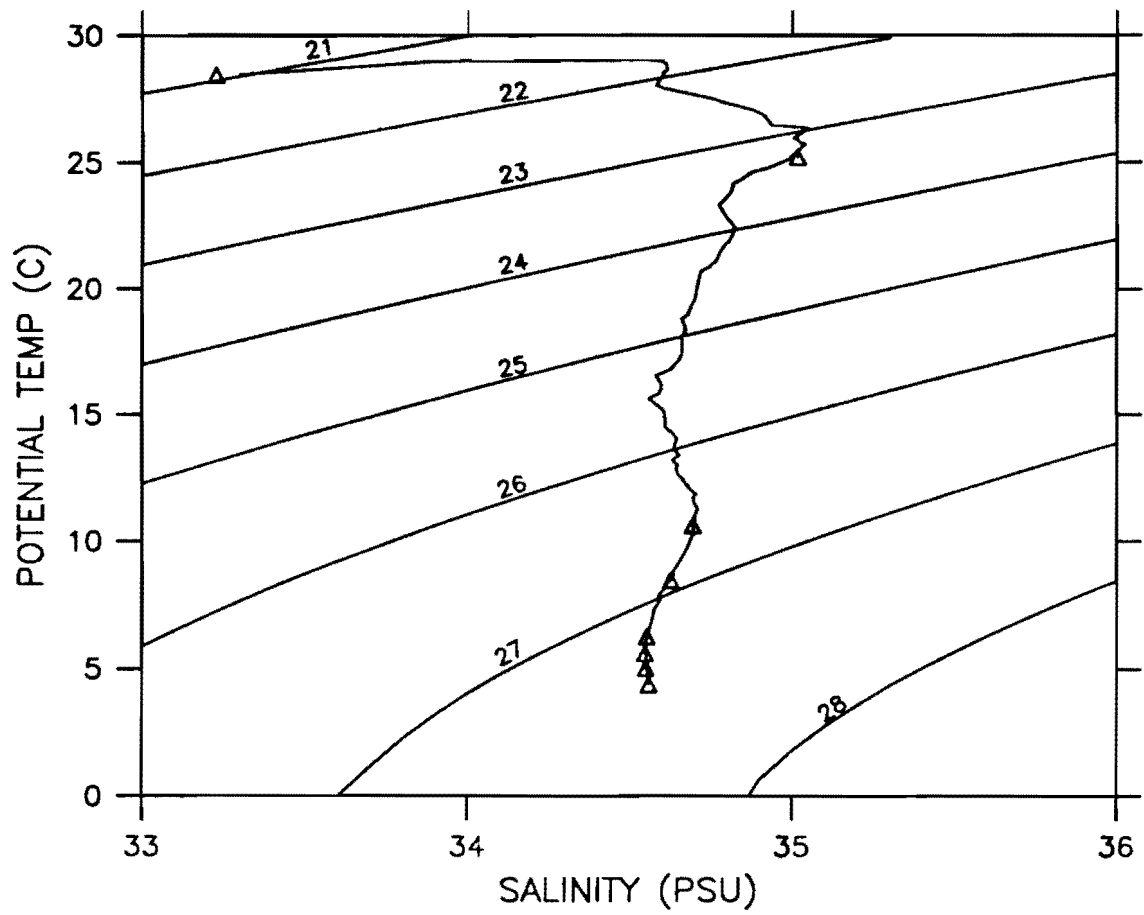


CAST EP2-90-D1 -028 DATE 03 NOV 90 TIME 2030 GMT
 LAT 06 59.9N LONG 140 00.2W WEATHER 5 SEA STATE 3
 BAROMETER 11 WIND DIR 040 T SPD 04 KT VISIBILITY 7
 CLOUD 5 AMOUNT DRY 25.1 WET 24.1 DEPTH 4981 M

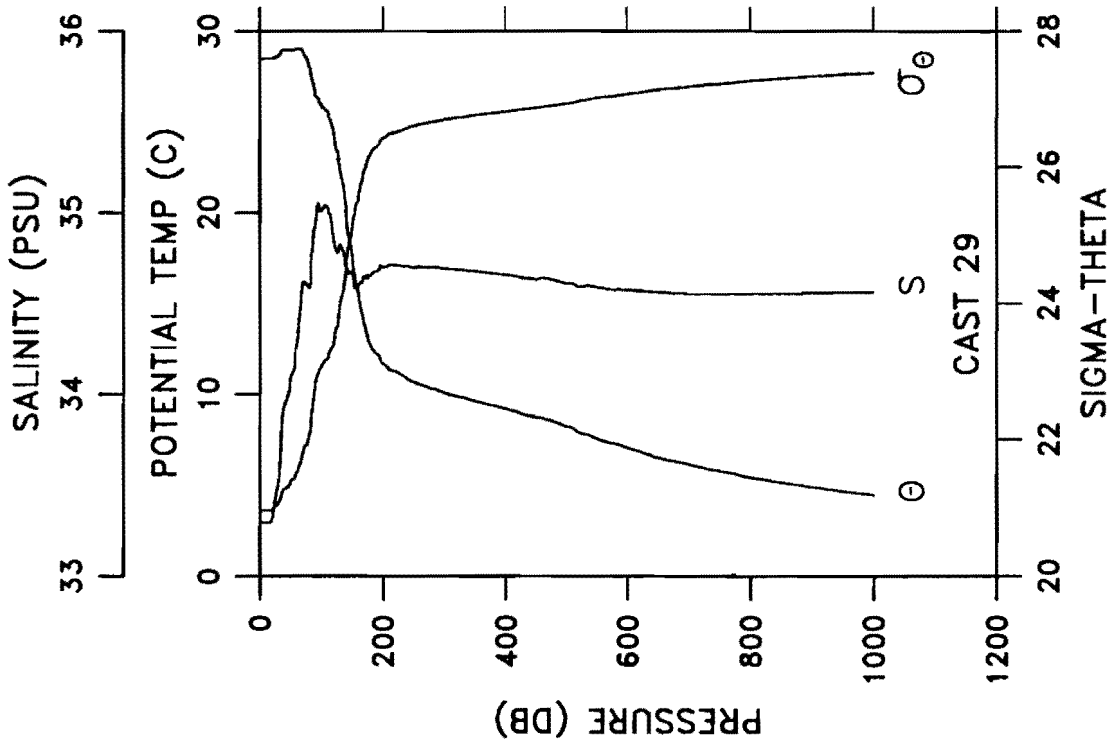


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.589 | 34.293 | 21.672 | 0.000 |
| 10 | 28.587 | 34.293 | 21.673 | 0.061 |
| 20 | 28.595 | 34.335 | 21.701 | 0.123 |
| 30 | 28.534 | 34.337 | 21.723 | 0.184 |
| 40 | 28.512 | 34.371 | 21.756 | 0.244 |
| 50 | 28.551 | 34.404 | 21.768 | 0.305 |
| 60 | 28.563 | 34.426 | 21.780 | 0.365 |
| 70 | 28.505 | 34.473 | 21.835 | 0.426 |
| 80 | 28.385 | 34.653 | 22.009 | 0.485 |
| 90 | 27.846 | 34.842 | 22.328 | 0.542 |
| 100 | 25.976 | 34.792 | 22.886 | 0.594 |
| 110 | 22.162 | 34.709 | 23.953 | 0.641 |
| 120 | 18.996 | 34.721 | 24.810 | 0.677 |
| 130 | 17.108 | 34.693 | 25.254 | 0.706 |
| 140 | 15.277 | 34.580 | 25.588 | 0.732 |
| 150 | 13.807 | 34.518 | 25.856 | 0.756 |
| 160 | 13.069 | 34.618 | 26.084 | 0.776 |
| 170 | 12.592 | 34.701 | 26.243 | 0.795 |
| 180 | 11.981 | 34.707 | 26.366 | 0.813 |
| 190 | 11.652 | 34.714 | 26.433 | 0.829 |
| 200 | 11.460 | 34.714 | 26.469 | 0.845 |
| 250 | 10.442 | 34.694 | 26.637 | 0.921 |
| 300 | 9.985 | 34.690 | 26.713 | 0.992 |
| 350 | 9.608 | 34.679 | 26.768 | 1.060 |
| 400 | 9.248 | 34.663 | 26.815 | 1.127 |
| 450 | 8.818 | 34.647 | 26.871 | 1.191 |
| 500 | 8.299 | 34.621 | 26.931 | 1.253 |
| 550 | 7.755 | 34.597 | 26.994 | 1.312 |
| 600 | 7.183 | 34.578 | 27.061 | 1.368 |
| 650 | 6.644 | 34.565 | 27.125 | 1.421 |
| 700 | 6.213 | 34.554 | 27.173 | 1.471 |
| 750 | 5.901 | 34.553 | 27.212 | 1.520 |
| 800 | 5.551 | 34.552 | 27.255 | 1.566 |
| 900 | 4.971 | 34.553 | 27.324 | 1.654 |
| 1000 | 4.514 | 34.559 | 27.380 | 1.737 |
| 1011 | 4.476 | 34.559 | 27.385 | 1.745 |

CAST EP2-90-DI -029 DATE 04 NOV 90 TIME 0746 GMT
LAT 06 59.5N LONG 142 31.0W

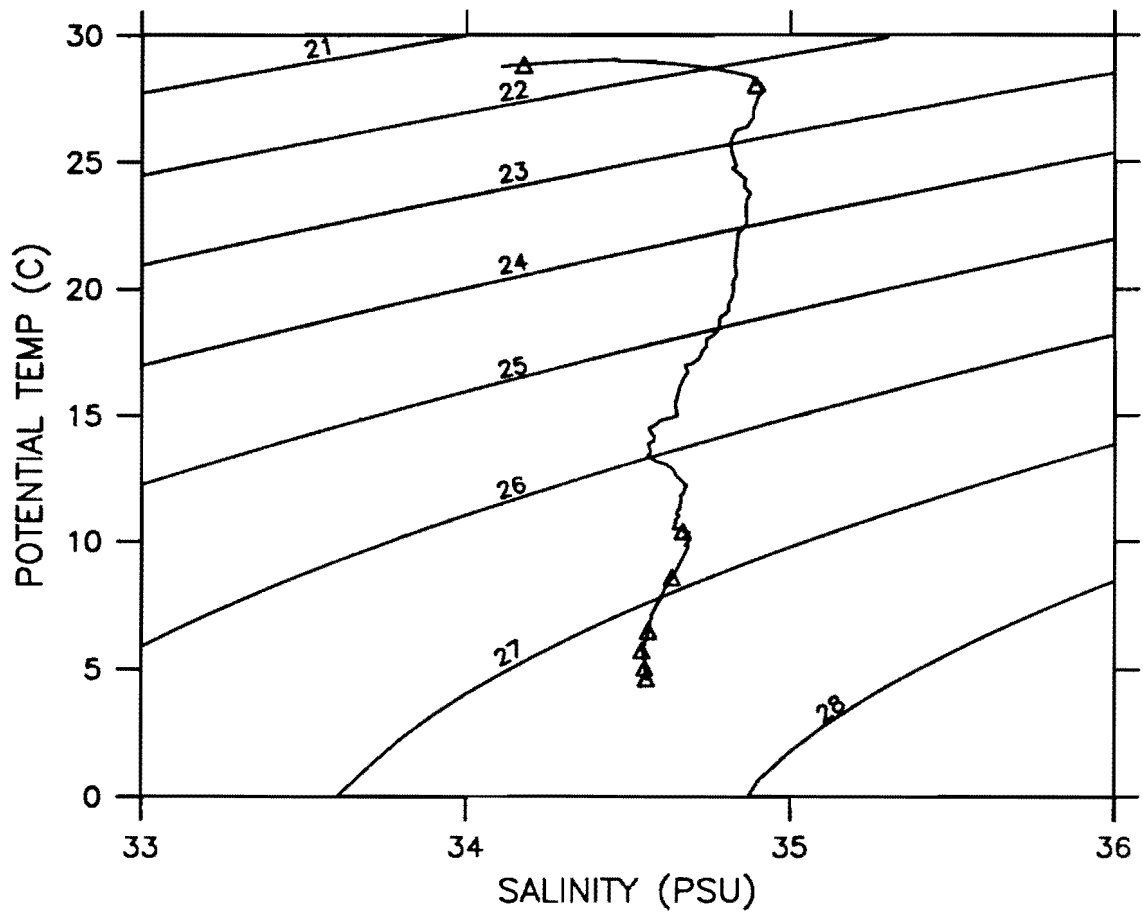


CAST EP2-90-DI -029 DATE 04 NOV 90 TIME 0746 GMT
 LAT 06 59.5N LONG 142 31.0W WEATHER 6 SEA STATE 2
 BAROMETER 11 WIND DIR 110 T SPD 10 KT VISIBILITY 6
 CLOUD 5 AMOUNT 8 DRY 24.7 WET 24.0 DEPTH 5805 M

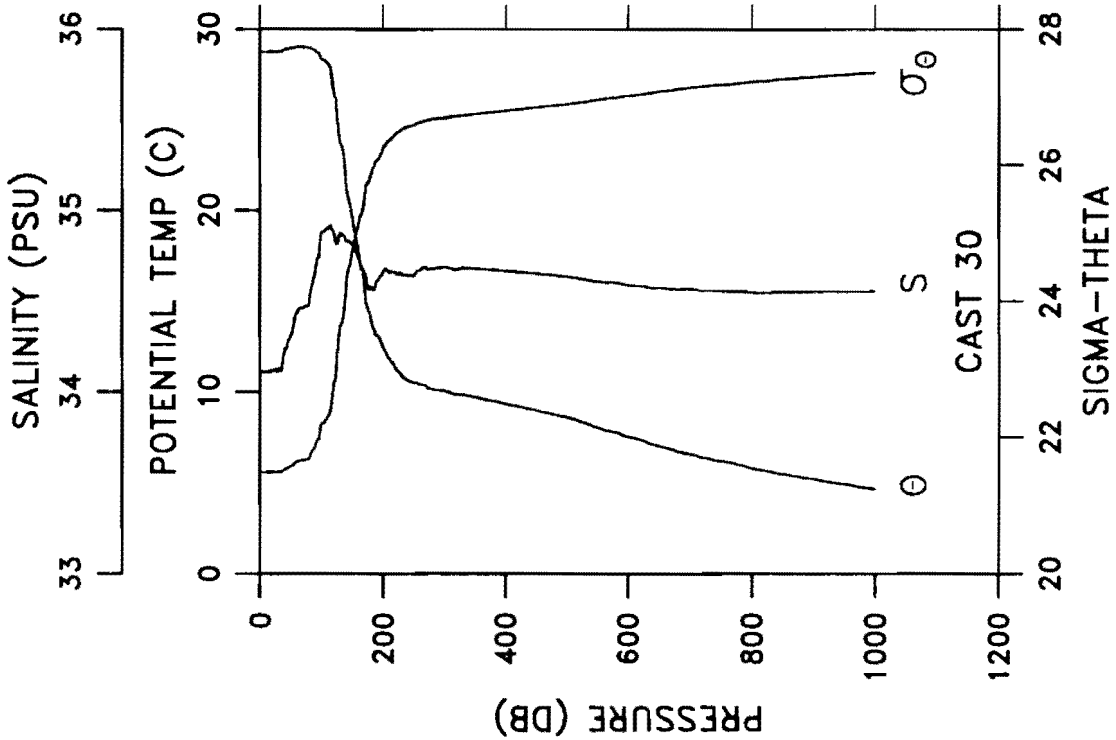


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.475 | 33.295 | 20.960 | 0.000 |
| 10 | 28.473 | 33.295 | 20.961 | 0.068 |
| 20 | 28.493 | 33.326 | 20.978 | 0.136 |
| 30 | 28.676 | 33.551 | 21.086 | 0.204 |
| 40 | 28.985 | 33.952 | 21.284 | 0.270 |
| 50 | 28.959 | 34.106 | 21.409 | 0.334 |
| 60 | 29.041 | 34.310 | 21.535 | 0.398 |
| 70 | 28.636 | 34.619 | 21.901 | 0.459 |
| 80 | 27.921 | 34.604 | 22.125 | 0.518 |
| 90 | 26.408 | 34.994 | 22.903 | 0.570 |
| 100 | 25.800 | 35.022 | 23.114 | 0.619 |
| 110 | 25.216 | 34.993 | 23.272 | 0.667 |
| 120 | 23.821 | 34.813 | 23.554 | 0.712 |
| 130 | 22.018 | 34.813 | 24.072 | 0.754 |
| 140 | 19.254 | 34.690 | 24.721 | 0.791 |
| 150 | 17.242 | 34.660 | 25.197 | 0.821 |
| 160 | 15.187 | 34.605 | 25.627 | 0.847 |
| 170 | 13.666 | 34.639 | 25.978 | 0.869 |
| 180 | 12.555 | 34.655 | 26.215 | 0.889 |
| 190 | 12.199 | 34.679 | 26.302 | 0.907 |
| 200 | 11.645 | 34.700 | 26.423 | 0.924 |
| 250 | 10.666 | 34.696 | 26.599 | 1.002 |
| 300 | 10.074 | 34.691 | 26.699 | 1.074 |
| 350 | 9.627 | 34.677 | 26.763 | 1.143 |
| 400 | 9.211 | 34.657 | 26.816 | 1.209 |
| 450 | 8.713 | 34.631 | 26.875 | 1.273 |
| 500 | 8.212 | 34.609 | 26.935 | 1.335 |
| 550 | 7.546 | 34.590 | 27.019 | 1.393 |
| 600 | 7.023 | 34.572 | 27.079 | 1.449 |
| 650 | 6.485 | 34.562 | 27.143 | 1.501 |
| 700 | 6.122 | 34.553 | 27.184 | 1.550 |
| 750 | 5.781 | 34.550 | 27.225 | 1.598 |
| 800 | 5.396 | 34.553 | 27.274 | 1.644 |
| 900 | 4.877 | 34.557 | 27.338 | 1.730 |
| 1000 | 4.463 | 34.562 | 27.386 | 1.812 |
| 1008 | 4.436 | 34.562 | 27.391 | 1.818 |

CAST EP2-90-DI -030 DATE 04 NOV 90 TIME 1846 GMT
LAT 07 00.3N LONG 144 59.7W

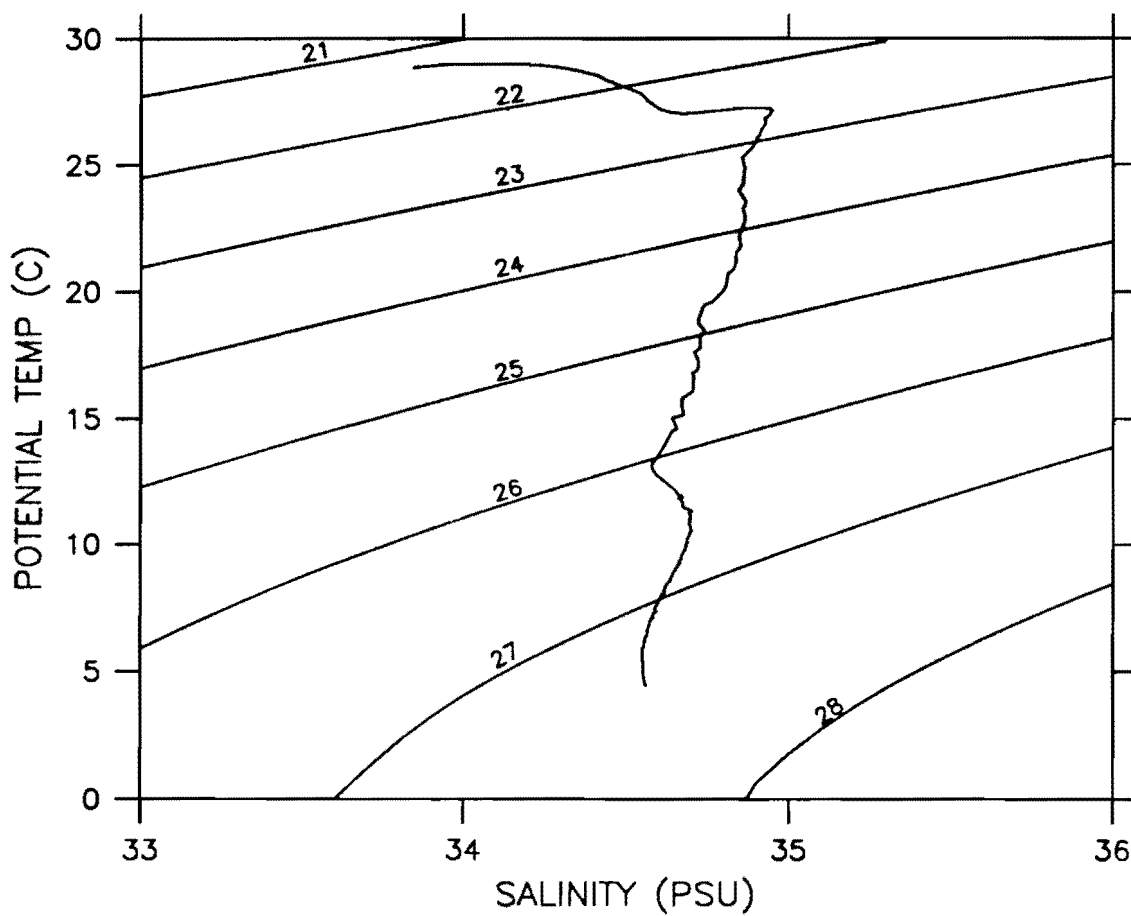


CAST EP2-90-DI -030 DATE 04 NOV 90 TIME 1846 GMT
 LAT 07 00.3N LONG 144 59.7W WEATHER 5 SEA STATE 3
 BAROMETER 10 WIND DIR 150 T SPD 08 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 25.0 WET 24.4 DEPTH 5137 M

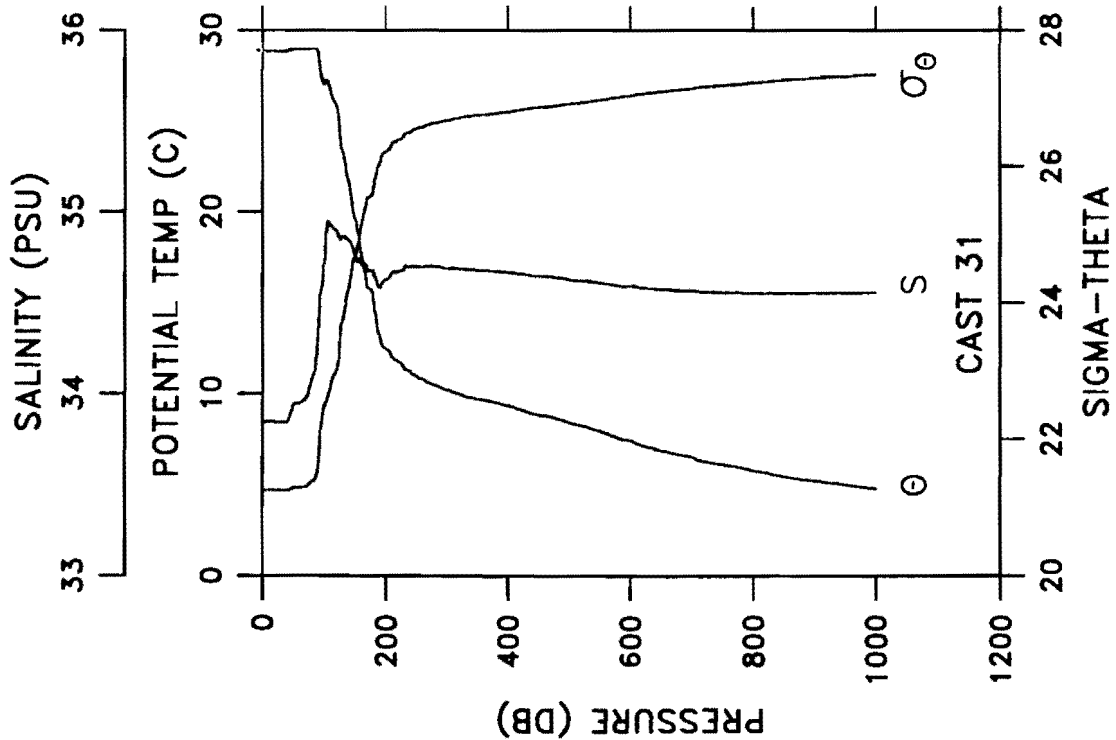


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.739 | 34.108 | 21.484 | 0.000 |
| 10 | 28.737 | 34.108 | 21.484 | 0.063 |
| 20 | 28.747 | 34.115 | 21.486 | 0.126 |
| 30 | 28.764 | 34.126 | 21.489 | 0.189 |
| 40 | 28.857 | 34.216 | 21.525 | 0.252 |
| 50 | 28.926 | 34.301 | 21.566 | 0.315 |
| 60 | 29.007 | 34.435 | 21.640 | 0.377 |
| 70 | 28.998 | 34.482 | 21.663 | 0.439 |
| 80 | 28.981 | 34.481 | 21.663 | 0.501 |
| 90 | 28.841 | 34.644 | 21.852 | 0.561 |
| 100 | 28.334 | 34.880 | 22.197 | 0.620 |
| 110 | 28.121 | 34.899 | 22.282 | 0.676 |
| 120 | 28.603 | 34.877 | 22.753 | 0.731 |
| 130 | 23.744 | 34.876 | 23.625 | 0.778 |
| 140 | 21.661 | 34.833 | 24.187 | 0.820 |
| 150 | 19.624 | 34.817 | 24.722 | 0.855 |
| 160 | 17.699 | 34.738 | 25.148 | 0.885 |
| 170 | 15.780 | 34.650 | 25.529 | 0.913 |
| 180 | 13.976 | 34.578 | 25.867 | 0.936 |
| 190 | 13.093 | 34.608 | 26.071 | 0.956 |
| 200 | 12.378 | 34.665 | 26.257 | 0.976 |
| 250 | 10.496 | 34.638 | 26.584 | 1.056 |
| 300 | 10.073 | 34.687 | 26.696 | 1.128 |
| 350 | 9.725 | 34.680 | 26.749 | 1.197 |
| 400 | 9.338 | 34.666 | 26.802 | 1.264 |
| 450 | 8.977 | 34.653 | 26.850 | 1.330 |
| 500 | 8.602 | 34.635 | 26.896 | 1.393 |
| 550 | 8.038 | 34.609 | 26.961 | 1.454 |
| 600 | 7.525 | 34.586 | 27.020 | 1.512 |
| 650 | 7.014 | 34.574 | 27.082 | 1.567 |
| 700 | 6.569 | 34.565 | 27.135 | 1.620 |
| 750 | 6.187 | 34.555 | 27.177 | 1.671 |
| 800 | 5.777 | 34.547 | 27.223 | 1.719 |
| 900 | 5.208 | 34.551 | 27.295 | 1.811 |
| 1000 | 4.663 | 34.556 | 27.362 | 1.895 |
| 1012 | 4.617 | 34.557 | 27.368 | 1.905 |

CAST EP2-90-DI -031 DATE 05 NOV 90 TIME 0953 GMT
LAT 07 02.9N LONG 147 28.9W

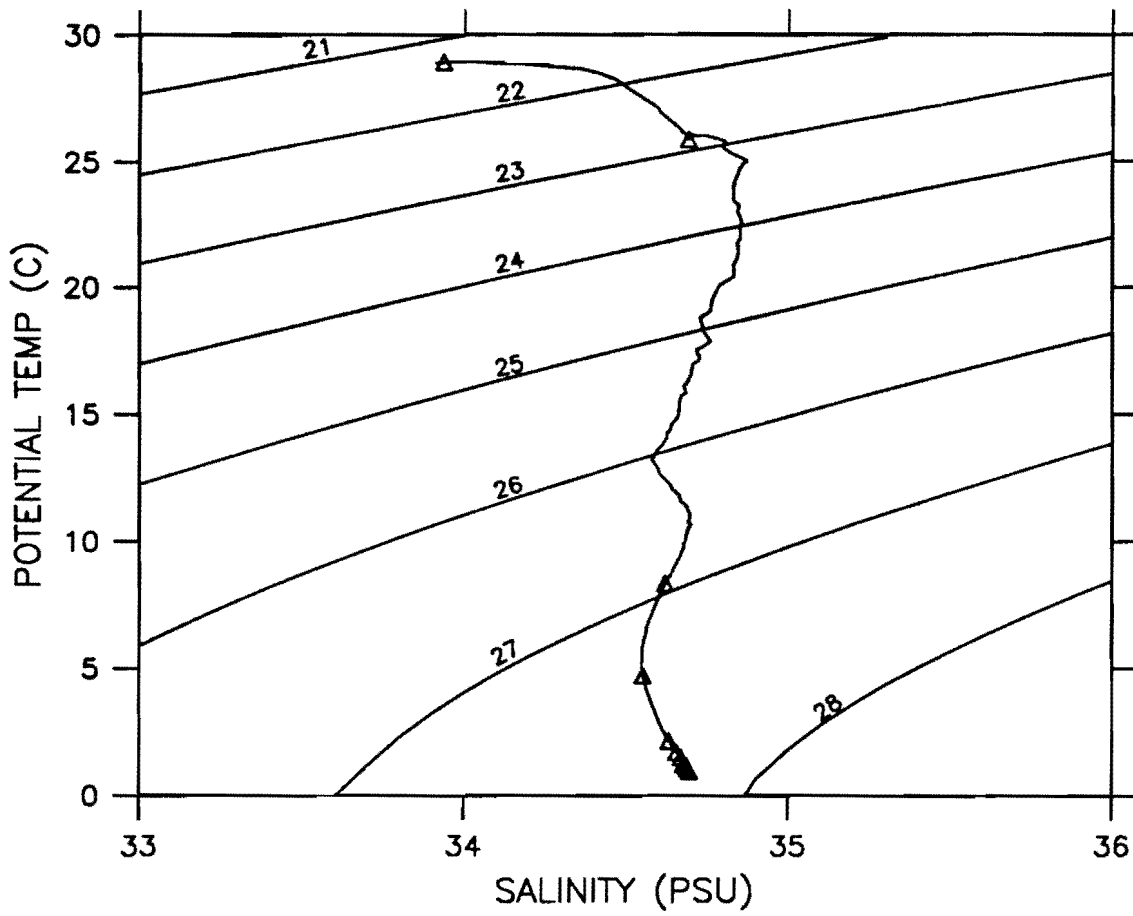


CAST EP2-90-DI -031 DATE 05 NOV 90 TIME 0953 GMT
 LAT 07 02.9N LONG 147 28.9W WEATHER 1 SEA STATE 3
 BAROMETER 08 WIND DIR 150 T SPD 08 KT VISIBILITY 8
 CLOUD AMOUNT 3 DRY 27.3 WET 24.8 DEPTH 4981 M

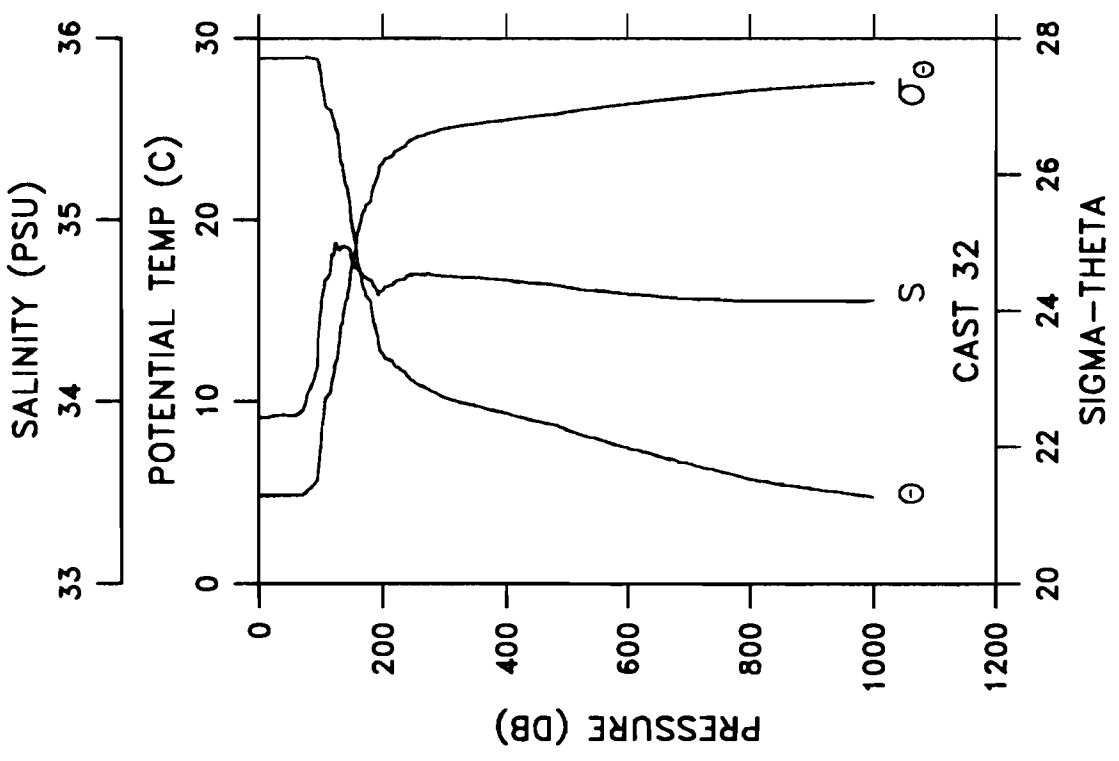


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.846 | 33.847 | 21.252 | 0.000 |
| 10 | 28.844 | 33.847 | 21.253 | 0.065 |
| 20 | 28.846 | 33.846 | 21.251 | 0.131 |
| 30 | 28.843 | 33.843 | 21.250 | 0.196 |
| 40 | 28.842 | 33.844 | 21.251 | 0.262 |
| 50 | 28.963 | 33.941 | 21.283 | 0.327 |
| 60 | 28.961 | 33.950 | 21.291 | 0.392 |
| 70 | 28.982 | 33.975 | 21.303 | 0.457 |
| 80 | 28.986 | 34.081 | 21.381 | 0.522 |
| 90 | 28.785 | 34.333 | 21.637 | 0.586 |
| 100 | 27.050 | 34.720 | 22.493 | 0.643 |
| 110 | 26.636 | 34.929 | 22.782 | 0.695 |
| 120 | 25.836 | 34.896 | 23.008 | 0.745 |
| 130 | 23.286 | 34.860 | 23.746 | 0.791 |
| 140 | 21.549 | 34.839 | 24.222 | 0.830 |
| 150 | 19.590 | 34.764 | 24.690 | 0.865 |
| 160 | 17.625 | 34.712 | 25.144 | 0.896 |
| 170 | 15.831 | 34.673 | 25.535 | 0.922 |
| 180 | 15.040 | 34.644 | 25.689 | 0.947 |
| 190 | 13.128 | 34.582 | 26.044 | 0.968 |
| 200 | 12.437 | 34.626 | 26.215 | 0.987 |
| 250 | 10.945 | 34.699 | 26.552 | 1.070 |
| 300 | 10.212 | 34.689 | 26.673 | 1.144 |
| 350 | 9.712 | 34.679 | 26.751 | 1.214 |
| 400 | 9.349 | 34.667 | 26.801 | 1.281 |
| 450 | 8.842 | 34.647 | 26.867 | 1.345 |
| 500 | 8.418 | 34.626 | 26.917 | 1.408 |
| 550 | 7.973 | 34.610 | 26.972 | 1.468 |
| 600 | 7.439 | 34.590 | 27.034 | 1.525 |
| 650 | 6.873 | 34.573 | 27.100 | 1.579 |
| 700 | 6.541 | 34.566 | 27.140 | 1.631 |
| 750 | 6.103 | 34.556 | 27.189 | 1.681 |
| 800 | 5.764 | 34.553 | 27.229 | 1.729 |
| 900 | 5.198 | 34.552 | 27.297 | 1.820 |
| 1000 | 4.759 | 34.556 | 27.351 | 1.906 |
| 1080 | 4.428 | 34.561 | 27.392 | 1.971 |

CAST EP2-90-DI -032 DATE 05 NOV 90 TIME 2310 GMT
LAT 07 03.4N LONG 147 26.2W



CAST EP2-90-D1 -032 DATE 05 NOV 90 TIME 2310 GMT
 LAT 07 03.4N LONG 147 26.2W WEATHER 2 SEA STATE 3
 BAROMETER 07 WIND DIR 160 T SPD 11 KT VISIBILITY 9
 CLOUD 6 AMOUNT 8 DRY 27.7 WET 25.6 DEPTH 4959 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (σ _{YN} -M) |
|-----------|--------------|-----------|--------|------------------------------|
| 0 | 28.905 | 33.911 | 21.281 | 0.000 |
| 10 | 28.903 | 33.911 | 21.281 | 0.065 |
| 20 | 28.904 | 33.918 | 21.286 | 0.130 |
| 30 | 28.900 | 33.921 | 21.290 | 0.195 |
| 40 | 28.911 | 33.926 | 21.290 | 0.260 |
| 50 | 28.896 | 33.920 | 21.291 | 0.325 |
| 60 | 28.904 | 33.924 | 21.291 | 0.391 |
| 70 | 28.936 | 33.954 | 21.302 | 0.456 |
| 80 | 28.935 | 34.061 | 21.383 | 0.520 |
| 90 | 28.862 | 34.155 | 21.478 | 0.584 |
| 100 | 27.452 | 34.563 | 22.246 | 0.646 |
| 110 | 26.127 | 34.661 | 22.755 | 0.699 |
| 120 | 25.408 | 34.617 | 23.080 | 0.749 |
| 130 | 23.439 | 34.833 | 23.681 | 0.785 |
| 140 | 21.678 | 34.849 | 24.139 | 0.835 |
| 150 | 19.582 | 34.771 | 24.698 | 0.871 |
| 160 | 17.552 | 34.720 | 25.168 | 0.902 |
| 170 | 16.157 | 34.684 | 25.470 | 0.929 |
| 180 | 15.548 | 34.669 | 25.596 | 0.954 |
| 190 | 13.792 | 34.613 | 25.932 | 0.976 |
| 200 | 12.628 | 34.610 | 26.165 | 0.996 |
| 250 | 11.124 | 34.700 | 26.520 | 1.082 |
| 300 | 10.222 | 34.690 | 26.673 | 1.157 |
| 350 | 9.748 | 34.680 | 26.745 | 1.227 |
| 400 | 9.341 | 34.668 | 26.803 | 1.294 |
| 450 | 8.903 | 34.649 | 26.859 | 1.359 |
| 500 | 8.419 | 34.629 | 26.919 | 1.421 |
| 550 | 7.945 | 34.610 | 26.976 | 1.481 |
| 600 | 7.432 | 34.592 | 27.037 | 1.538 |
| 650 | 6.975 | 34.577 | 27.089 | 1.593 |
| 700 | 6.566 | 34.566 | 27.136 | 1.646 |
| 750 | 6.171 | 34.559 | 27.182 | 1.696 |
| 800 | 5.723 | 34.554 | 27.235 | 1.744 |
| 900 | 5.208 | 34.553 | 27.296 | 1.835 |
| 1000 | 4.744 | 34.556 | 27.352 | 1.920 |
| 1500 | 3.101 | 34.599 | 27.556 | 2.285 |
| 2000 | 2.159 | 34.638 | 27.669 | 2.573 |
| 2500 | 1.712 | 34.664 | 27.725 | 2.819 |
| 3000 | 1.503 | 34.674 | 27.749 | 3.055 |
| 3500 | 1.242 | 34.685 | 27.776 | 3.280 |
| 4000 | 1.099 | 34.693 | 27.792 | 3.498 |
| 4500 | 0.997 | 34.696 | 27.802 | 3.714 |
| 4962 | 0.979 | 34.697 | 27.803 | 3.918 |

CAST EP2-90-DI -004 LAT 07 00.4N LONG 139 59.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.655 | 34.193 | 0.00 | 28.655 | 21.575 |
| 92. | 27.840 | 34.857 | 0.00 | 27.818 | 22.348 |
| 490. | 8.704 | 34.640 | 0.00 | 8.651 | 26.892 |
| 990. | 4.649 | 34.558 | 0.00 | 4.569 | 27.374 |

CAST EP2-90-DI -001 LAT 23 06.5N LONG 135 22.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 986. | 4.116 | 34.501 | 0.00 | 4.041 | 27.385 |
| 989. | 4.114 | 34.502 | 0.00 | 4.038 | 27.386 |
| 990. | 4.114 | 34.501 | 0.00 | 4.038 | 27.385 |
| 992. | 4.114 | 34.501 | 0.00 | 4.038 | 27.385 |
| 992. | 4.114 | 34.503 | 0.00 | 4.038 | 27.387 |
| 992. | 4.114 | 34.504 | 0.00 | 4.038 | 27.388 |
| 1001. | 4.098 | 34.507 | 0.00 | 4.021 | 27.392 |
| 994. | 4.113 | 34.505 | 0.00 | 4.037 | 27.389 |
| 990. | 4.119 | 34.501 | 0.00 | 4.043 | 27.385 |
| 990. | 4.124 | 34.500 | 0.00 | 4.048 | 27.384 |
| 981. | 4.156 | 34.496 | 0.00 | 4.081 | 27.377 |

CAST EP2-90-DI -005 LAT 06 59.9N LONG 139 59.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.644 | 34.164 | 0.00 | 28.644 | 21.557 |
| 55. | 28.922 | 34.606 | 0.00 | 28.909 | 21.801 |
| 107. | 27.447 | 34.827 | 0.00 | 27.422 | 22.454 |

CAST EP2-90-DI -002 LAT 08 56.4N LONG 140 08.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.921 | 34.001 | 0.00 | 28.921 | 21.343 |
| 90. | 18.118 | 34.643 | 0.00 | 18.102 | 24.974 |
| 490. | 8.444 | 34.627 | 0.00 | 8.392 | 26.922 |
| 987. | 4.663 | 34.558 | 0.00 | 4.583 | 27.372 |

CAST EP2-90-DI -006 LAT 06 59.8N LONG 139 56.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 1. | 28.627 | 34.148 | 0.00 | 28.627 | 21.551 |
| 52. | 28.901 | 34.636 | 0.00 | 28.888 | 21.830 |
| 105. | 25.388 | 34.956 | 0.00 | 25.365 | 23.198 |

CAST EP2-90-DI -003 LAT 07 59.6N LONG 139 59.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.748 | 33.713 | 0.00 | 28.748 | 21.184 |
| 93. | 23.282 | 34.712 | 0.00 | 23.263 | 23.641 |
| 93. | 23.976 | 34.710 | 0.00 | 23.957 | 23.436 |
| 241. | 10.748 | 34.703 | 0.00 | 10.719 | 26.595 |
| 487. | 8.592 | 34.632 | 0.00 | 8.540 | 26.903 |
| 695. | 6.295 | 34.552 | 0.00 | 6.232 | 27.169 |
| 795. | 5.631 | 34.541 | 0.00 | 5.562 | 27.245 |
| 822. | 5.485 | 34.578 | 0.00 | 5.414 | 27.292 |
| 999. | 4.603 | 34.554 | 0.00 | 4.523 | 27.376 |

CAST EP2-90-DI -007 LAT 06 58.3N LONG 139 57.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.705 | 34.214 | 0.00 | 28.705 | 21.574 |
| 54. | 28.874 | 34.652 | 0.00 | 28.861 | 21.851 |
| 107. | 25.678 | 34.958 | 0.00 | 25.654 | 23.111 |

CAST EP2-90-DI -010 LAT 03 59.7N LONG 139 5

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SI |
|-----------|----------|-----------|------------|--------------|----|
| 0. | 28.096 | 34.850 | 0.00 | 28.096 | 22 |
| 94. | 26.818 | 34.836 | 0.00 | 26.797 | 22 |
| 245. | 10.581 | 34.665 | 0.00 | 10.552 | 26 |
| 491. | 8.378 | 34.622 | 0.00 | 8.326 | 26 |
| 691. | 6.356 | 34.558 | 0.00 | 6.293 | 27 |
| 790. | 5.721 | 34.546 | 0.00 | 5.652 | 27 |
| 901. | 5.034 | 34.550 | 0.00 | 4.959 | 27 |
| 1003. | 4.566 | 34.558 | 0.00 | 4.486 | 27 |

CAST EP2-90-DI -008 LAT 05 59.9N LONG 140 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.675 | 34.348 | 0.00 | 28.675 | 21.685 |
| 92. | 27.953 | 34.846 | 0.00 | 27.931 | 22.303 |
| 244. | 10.758 | 34.713 | 0.00 | 10.728 | 26.601 |
| 491. | 8.575 | 34.629 | 0.00 | 8.523 | 26.903 |
| 691. | 6.467 | 34.561 | 0.00 | 6.403 | 27.154 |
| 790. | 5.574 | 34.554 | 0.00 | 5.506 | 27.262 |
| 885. | 5.040 | 34.557 | 0.00 | 4.967 | 27.328 |
| 996. | 4.527 | 34.569 | 0.00 | 4.448 | 27.396 |

CAST EP2-90-DI -011 LAT 03 00.0N LONG 140 0.

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SI |
|-----------|----------|-----------|------------|--------------|----|
| 0. | 27.647 | 34.870 | 0.00 | 27.647 | 22 |
| 93. | 25.533 | 34.785 | 0.00 | 25.512 | 23 |
| 145. | 14.670 | 34.697 | 0.00 | 14.649 | 25 |
| 243. | 11.762 | 34.817 | 0.00 | 11.731 | 26 |
| 490. | 8.751 | 34.648 | 0.00 | 8.698 | 26 |
| 692. | 6.268 | 34.559 | 0.00 | 6.205 | 27 |
| 791. | 5.618 | 34.548 | 0.00 | 5.550 | 27 |
| 889. | 4.957 | 34.552 | 0.00 | 4.884 | 27 |
| 982. | 4.460 | 34.559 | 0.00 | 4.382 | 27 |

CAST EP2-90-DI -009 LAT 05 01.9N LONG 140 03.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 0. | 28.526 | 34.420 | 0.00 | 28.526 | 21.788 |
| 91. | 27.981 | 34.829 | 0.00 | 27.960 | 22.281 |
| 492. | 8.502 | 34.627 | 0.00 | 8.450 | 26.913 |
| 990. | 4.590 | 34.560 | 0.00 | 4.511 | 27.382 |

CAST EP2-90-DI -012 LAT 02 02.3N LONG 140 0.

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SI |
|-----------|----------|-----------|------------|--------------|----|
| 0. | 27.545 | 34.805 | 0.00 | 27.545 | 22 |
| 94. | 25.851 | 35.175 | 0.00 | 25.830 | 23 |
| 492. | 8.697 | 34.652 | 0.00 | 8.644 | 26 |
| 989. | 4.609 | 34.554 | 0.00 | 4.530 | 27 |

CAST EP2-90-DI -016 LAT 00 00.3S LONG 139 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 12. | 25.844 | 35.250 | 0.00 | 25.841 | 23.273 |
| 113. | 24.172 | 35.311 | 0.00 | 24.148 | 23.835 |
| 480. | 8.532 | 34.646 | 0.00 | 8.481 | 26.923 |
| 979. | 4.846 | 34.548 | 0.00 | 4.766 | 27.344 |
| 1977. | 2.336 | 34.639 | 0.00 | 2.196 | 27.667 |
| 2477. | 1.893 | 34.661 | 0.00 | 1.717 | 27.722 |
| 2978. | 1.679 | 34.667 | 0.00 | 1.460 | 27.746 |
| 3480. | 1.496 | 34.685 | 0.00 | 1.232 | 27.776 |
| 3727. | 1.406 | 34.692 | 0.00 | 1.119 | 27.790 |
| 4003. | 1.397 | 34.694 | 0.00 | 1.081 | 27.794 |
| 4346. | 1.414 | 34.697 | 0.00 | 1.059 | 27.798 |

CAST EP2-90-DI -017 LAT 00 30.0S LONG 139 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.134 | 35.250 | 0.00 | 26.131 | 23.183 |
| 102. | 25.833 | 35.288 | 0.00 | 25.810 | 23.312 |
| 244. | 12.494 | 34.881 | 0.00 | 12.461 | 26.408 |
| 502. | 8.131 | 34.628 | 0.00 | 8.079 | 26.970 |
| 703. | 5.963 | 34.553 | 0.00 | 5.901 | 27.212 |
| 803. | 5.446 | 34.548 | 0.00 | 5.377 | 27.273 |
| 903. | 5.060 | 34.547 | 0.00 | 4.985 | 27.318 |
| 1006. | 4.675 | 34.553 | 0.00 | 4.594 | 27.367 |

CAST EP2-90-DI -018 LAT 00 59.8S LONG 140 02.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 26.327 | 35.253 | 0.00 | 26.324 | 23.125 |
| 107. | 26.373 | 35.373 | 0.00 | 26.349 | 23.207 |
| 253. | 12.235 | 34.861 | 0.00 | 12.201 | 26.443 |
| 502. | 7.981 | 34.621 | 0.00 | 7.930 | 26.987 |
| 699. | 5.847 | 34.550 | 0.00 | 5.786 | 27.224 |
| 803. | 5.350 | 34.543 | 0.00 | 5.282 | 27.280 |
| 908. | 4.955 | 34.547 | 0.00 | 4.880 | 27.330 |
| 1007. | 4.636 | 34.552 | 0.00 | 4.555 | 27.371 |

CAST EP2-90-DI -013 LAT 01 30.3N LONG 139 59.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 12. | 27.025 | 34.851 | 0.00 | 27.022 | 22.601 |
| 87. | 25.547 | 35.181 | 0.00 | 25.528 | 23.318 |
| 255. | 12.553 | 34.874 | 0.00 | 12.519 | 26.391 |
| 494. | 8.361 | 34.626 | 0.00 | 8.309 | 26.934 |
| 686. | 6.203 | 34.553 | 0.00 | 6.141 | 27.182 |
| 784. | 5.605 | 34.546 | 0.00 | 5.537 | 27.252 |
| 896. | 5.191 | 34.544 | 0.00 | 5.116 | 27.300 |
| 1002. | 4.659 | 34.552 | 0.00 | 4.578 | 27.368 |

CAST EP2-90-DI -014 LAT 00 59.7N LONG 140 05.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 26.584 | 34.937 | 0.00 | 26.581 | 22.805 |
| 104. | 25.227 | 35.161 | 0.00 | 25.204 | 23.402 |
| 229. | 12.331 | 34.866 | 0.00 | 12.301 | 26.428 |
| 476. | 8.475 | 34.636 | 0.00 | 8.424 | 26.924 |
| 674. | 6.257 | 34.558 | 0.00 | 6.196 | 27.178 |
| 775. | 5.618 | 34.548 | 0.00 | 5.551 | 27.252 |
| 875. | 5.140 | 34.546 | 0.00 | 5.067 | 27.308 |
| 1016. | 4.592 | 34.554 | 0.00 | 4.510 | 27.377 |

CAST EP2-90-DI -015 LAT 00 29.7N LONG 140 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.166 | 35.030 | 0.00 | 26.163 | 23.007 |
| 107. | 25.004 | 35.181 | 0.00 | 24.981 | 23.486 |
| 254. | 12.197 | 34.855 | 0.00 | 12.164 | 26.446 |
| 504. | 8.429 | 34.641 | 0.00 | 8.376 | 26.935 |
| 703. | 6.040 | 34.554 | 0.00 | 5.977 | 27.203 |
| 803. | 5.490 | 34.547 | 0.00 | 5.421 | 27.267 |
| 902. | 4.955 | 34.548 | 0.00 | 4.881 | 27.331 |
| 1013. | 4.382 | 34.559 | 0.00 | 4.302 | 27.404 |

CAST EP2-90-DI -019 LAT 02 02.5S LONG 140 04.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.396 | 35.228 | 0.00 | 26.393 | 23.084 |
| 105. | 26.439 | 35.444 | 0.00 | 26.415 | 23.240 |
| 505. | 8.401 | 34.651 | 0.00 | 8.348 | 26.947 |
| 1004. | 4.570 | 34.550 | 0.00 | 4.490 | 27.376 |
| 2003. | 2.291 | 34.641 | 0.00 | 2.150 | 27.672 |
| 2500. | 1.943 | 34.658 | 0.00 | 1.764 | 27.716 |
| 3005. | 1.695 | 34.671 | 0.00 | 1.473 | 27.748 |
| 3510. | 1.488 | 34.685 | 0.00 | 1.221 | 27.777 |
| 3733. | 1.436 | 34.690 | 0.00 | 1.147 | 27.786 |
| 3987. | 1.416 | 34.692 | 0.00 | 1.101 | 27.791 |
| 4362. | 1.391 | 34.695 | 0.00 | 1.035 | 27.798 |

CAST EP2-90-DI -020 LAT 01 30.4S LONG 140 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.418 | 35.284 | 0.00 | 26.415 | 23.119 |
| 108. | 26.383 | 35.416 | 0.00 | 26.359 | 23.237 |
| 256. | 12.010 | 34.848 | 0.00 | 11.977 | 26.476 |
| 505. | 8.299 | 34.639 | 0.00 | 8.246 | 26.954 |
| 704. | 5.960 | 34.549 | 0.00 | 5.898 | 27.209 |
| 809. | 5.329 | 34.544 | 0.00 | 5.261 | 27.283 |
| 908. | 4.949 | 34.547 | 0.00 | 4.874 | 27.331 |
| 1006. | 4.659 | 34.552 | 0.00 | 4.578 | 27.368 |

CAST EP2-90-DI -021 LAT 01 58.2S LONG 140 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 26.510 | 35.235 | 0.00 | 26.507 | 23.053 |
| 109. | 26.249 | 35.391 | 0.00 | 26.225 | 23.260 |
| 209. | 12.686 | 34.908 | 0.00 | 12.658 | 26.390 |
| 308. | 11.603 | 34.827 | 0.00 | 11.564 | 26.538 |
| 405. | 10.756 | 34.784 | 0.00 | 10.706 | 26.660 |
| 505. | 8.496 | 34.655 | 0.00 | 8.442 | 26.936 |

CAST EP2-90-DI -022 LAT 03 00.3S LONG 139 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.368 | 35.236 | 0.00 | 26.365 | 23.099 |
| 102. | 26.411 | 35.432 | 0.00 | 26.388 | 23.240 |
| 105. | 26.408 | 35.432 | 0.00 | 26.384 | 23.241 |
| 247. | 12.638 | 34.896 | 0.00 | 12.605 | 26.392 |
| 503. | 8.496 | 34.658 | 0.00 | 8.443 | 26.938 |
| 703. | 6.458 | 34.574 | 0.00 | 6.393 | 27.165 |
| 803. | 5.709 | 34.554 | 0.00 | 5.639 | 27.246 |
| 1008. | 4.582 | 34.553 | 0.00 | 4.501 | 27.377 |

CAST EP2-90-DI -023 LAT 04 00.3S LONG 139 59.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 12. | 26.453 | 35.238 | 0.00 | 26.450 | 23.074 |
| 108. | 25.571 | 35.204 | 0.00 | 25.547 | 23.330 |
| 256. | 12.282 | 34.895 | 0.00 | 12.248 | 26.460 |
| 508. | 8.040 | 34.632 | 0.00 | 7.988 | 26.987 |
| 705. | 6.259 | 34.554 | 0.00 | 6.195 | 27.175 |
| 803. | 5.403 | 34.538 | 0.00 | 5.335 | 27.270 |
| 904. | 4.847 | 34.540 | 0.00 | 4.773 | 27.337 |
| 1009. | 4.403 | 34.548 | 0.00 | 4.323 | 27.393 |

CAST EP2-90-DI -024 LAT 05 01.0S LONG 139 58.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 500. | 8.277 | 34.643 | 0.00 | 8.225 | 26.960 |
| 1001. | 4.482 | 34.547 | 0.00 | 4.402 | 27.383 |
| 2003. | 2.291 | 34.637 | 0.00 | 2.150 | 27.669 |
| 2507. | 1.876 | 34.664 | 0.00 | 1.697 | 27.726 |
| 3004. | 1.663 | 34.676 | 0.00 | 1.442 | 27.754 |
| 3508. | 1.518 | 34.685 | 0.00 | 1.251 | 27.775 |

CAST EP2-90-DI -028 LAT 06 59.9N LONG 140 00.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 12. | 28.474 | 34.097 | 0.00 | 28.471 | 21.564 |
| 77. | 28.403 | 34.564 | 0.00 | 28.385 | 21.943 |
| 226. | 10.715 | 34.695 | 0.00 | 10.688 | 26.594 |
| 476. | 8.585 | 34.632 | 0.00 | 8.534 | 26.904 |
| 667. | 6.529 | 34.560 | 0.00 | 6.467 | 27.145 |
| 776. | 5.795 | 34.554 | 0.00 | 5.727 | 27.235 |
| 884. | 5.125 | 34.552 | 0.00 | 5.051 | 27.314 |
| 1004. | 4.567 | 34.558 | 0.00 | 4.487 | 27.383 |

CAST EP2-90-DI -025 LAT 07 03.0N LONG 132 26.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 27.572 | 34.450 | 0.00 | 27.569 | 22.123 |
| 107. | 27.269 | 34.835 | 0.00 | 27.244 | 22.517 |
| 510. | 8.604 | 34.632 | 0.00 | 8.549 | 26.901 |
| 1010. | 4.714 | 34.548 | 0.00 | 4.632 | 27.359 |
| 1977. | 2.302 | 34.636 | 0.00 | 2.163 | 27.667 |
| 2480. | 1.887 | 34.660 | 0.00 | 1.711 | 27.722 |
| 2980. | 1.736 | 34.671 | 0.00 | 1.516 | 27.745 |
| 3484. | 1.521 | 34.683 | 0.00 | 1.256 | 27.773 |
| 3735. | 1.438 | 34.687 | 0.00 | 1.149 | 27.784 |
| 3987. | 1.381 | 34.692 | 0.00 | 1.067 | 27.793 |
| 4611. | 1.422 | 34.692 | 0.00 | 1.037 | 27.795 |

CAST EP2-90-DI -029 LAT 06 59.5N LONG 142 31.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 28.435 | 33.222 | 0.00 | 28.432 | 20.920 |
| 113. | 25.235 | 35.017 | 0.00 | 25.210 | 23.292 |
| 248. | 10.654 | 34.698 | 0.00 | 10.624 | 26.608 |
| 482. | 8.528 | 34.630 | 0.00 | 8.477 | 26.911 |
| 681. | 6.337 | 34.555 | 0.00 | 6.275 | 27.166 |
| 773. | 5.687 | 34.550 | 0.00 | 5.620 | 27.245 |
| 876. | 5.103 | 34.552 | 0.00 | 5.030 | 27.317 |
| 1014. | 4.480 | 34.561 | 0.00 | 4.399 | 27.395 |

CAST EP2-90-DI -026 LAT 07 00.0N LONG 130 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 17. | 28.218 | 34.231 | 0.00 | 28.214 | 21.749 |
| 90. | 27.317 | 34.823 | 0.00 | 27.296 | 22.472 |
| 239. | 11.525 | 34.729 | 0.00 | 11.495 | 26.474 |
| 486. | 8.793 | 34.644 | 0.00 | 8.740 | 26.881 |
| 689. | 6.497 | 34.564 | 0.00 | 6.433 | 27.152 |
| 789. | 5.642 | 34.554 | 0.00 | 5.574 | 27.254 |
| 879. | 5.136 | 34.542 | 0.00 | 5.063 | 27.305 |
| 1006. | 4.573 | 34.560 | 0.00 | 4.492 | 27.384 |

CAST EP2-90-DI -030 LAT 07 00.3N LONG 144 59.7W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 12. | 28.804 | 34.174 | 0.00 | 28.801 | 21.512 |
| 108. | 28.027 | 34.891 | 0.00 | 28.002 | 22.314 |
| 257. | 10.431 | 34.667 | 0.00 | 10.400 | 26.623 |
| 504. | 8.631 | 34.634 | 0.00 | 8.577 | 26.899 |
| 708. | 6.562 | 34.562 | 0.00 | 6.496 | 27.142 |
| 804. | 5.803 | 34.542 | 0.00 | 5.732 | 27.225 |
| 919. | 5.134 | 34.551 | 0.00 | 5.057 | 27.313 |
| 1005. | 4.714 | 34.556 | 0.00 | 4.632 | 27.365 |

CAST EP2-90-DI -027 LAT 07 00.3N LONG 137 30.0W

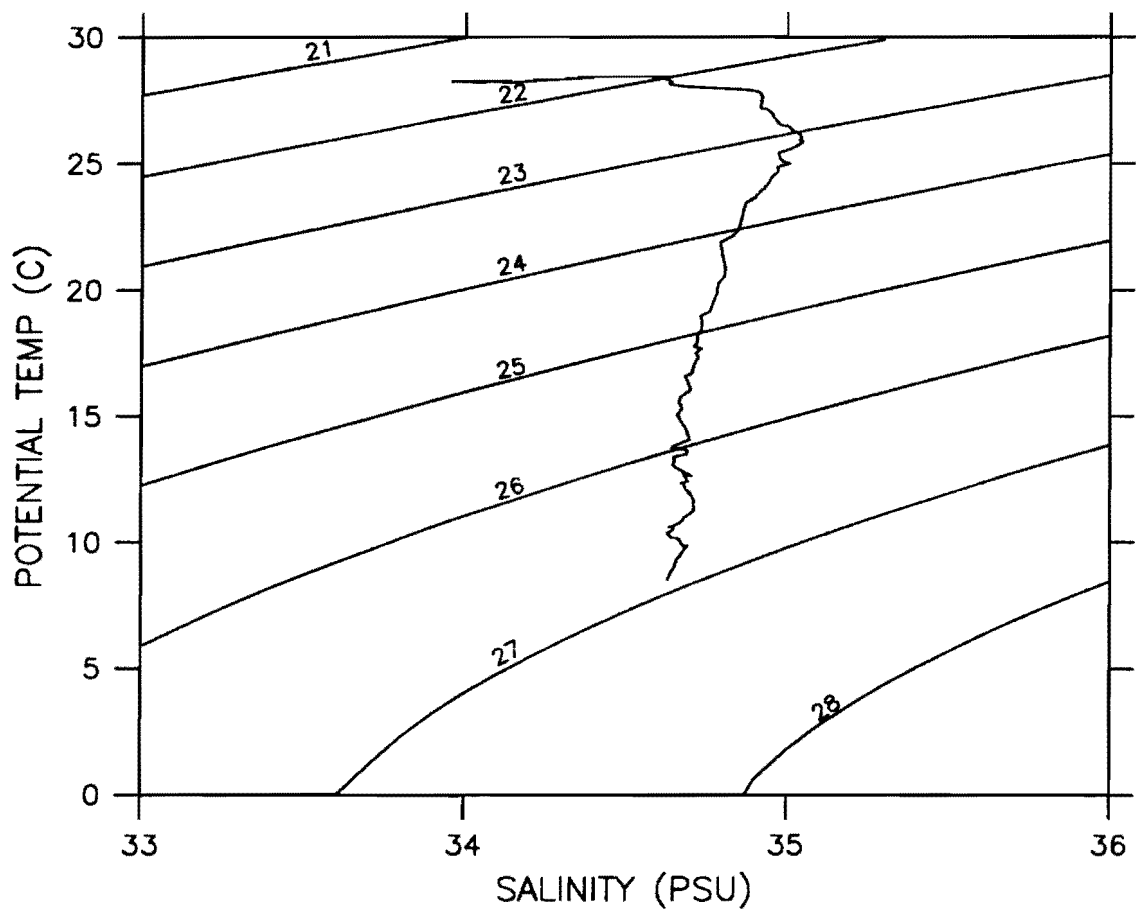
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 28.519 | 34.121 | 0.00 | 28.516 | 21.567 |
| 86. | 28.423 | 34.535 | 0.00 | 28.402 | 21.915 |
| 236. | 10.746 | 34.710 | 0.00 | 10.717 | 26.601 |
| 486. | 8.626 | 34.635 | 0.00 | 8.574 | 26.900 |
| 685. | 6.454 | 34.556 | 0.00 | 6.391 | 27.151 |
| 786. | 5.729 | 34.551 | 0.00 | 5.660 | 27.241 |
| 878. | 5.208 | 34.552 | 0.00 | 5.134 | 27.305 |
| 1002. | 4.631 | 34.558 | 0.00 | 4.550 | 27.376 |

CAST EP2-90-DI -032 LAT 07 03.4N LONG 147 26.2W

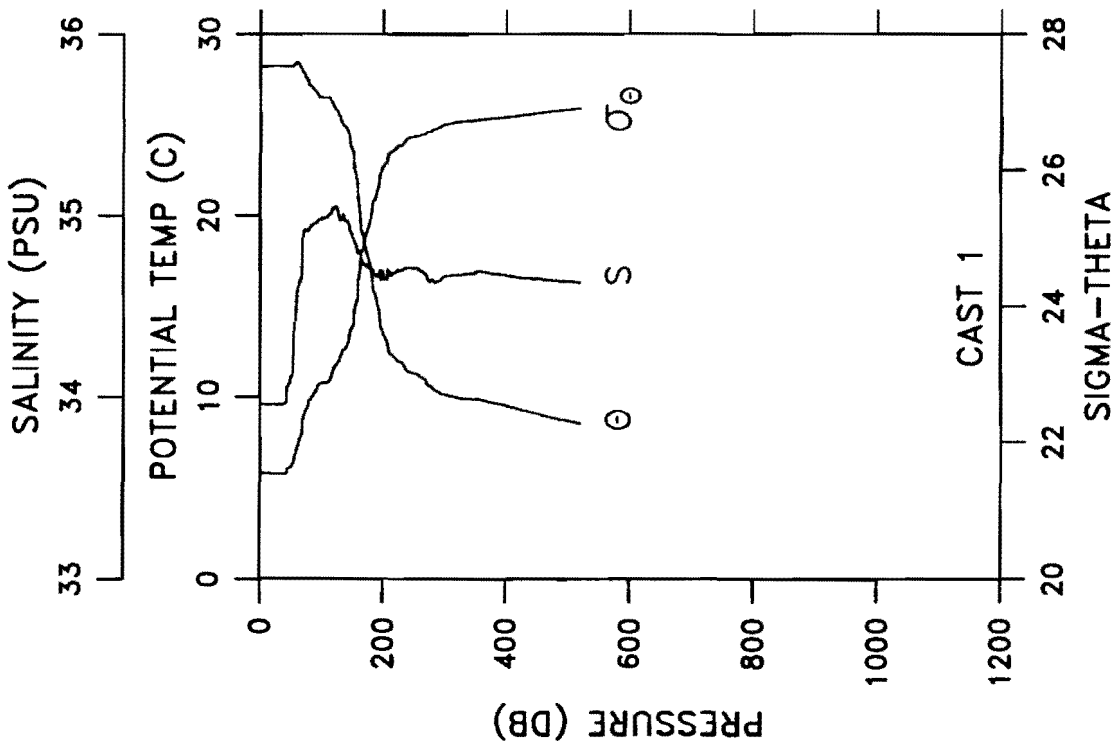
| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|--------------|-------------|--------------|---------------|-----------------|--------|
| 14. | 28.928 | 33.935 | 0.00 | 28.925 | 21.292 |
| 108. | 25.906 | 34.695 | 0.00 | 25.882 | 22.842 |
| 506. | 8.402 | 34.624 | 0.00 | 8.348 | 26.926 |
| 1004. | 4.792 | 34.555 | 0.00 | 4.710 | 27.356 |
| 2007. | 2.294 | 34.637 | 0.00 | 2.152 | 27.669 |
| 2510. | 1.892 | 34.660 | 0.00 | 1.713 | 27.722 |
| 3005. | 1.727 | 34.674 | 0.00 | 1.505 | 27.748 |
| 3513. | 1.524 | 34.682 | 0.00 | 1.256 | 27.772 |
| 3758. | 1.468 | 34.692 | 0.00 | 1.176 | 27.786 |
| 4014. | 1.416 | 34.693 | 0.00 | 1.098 | 27.792 |
| 4952. | 1.404 | 34.700 | 0.00 | 0.979 | 27.806 |

EP3-90-MB
November 14–December 14, 1990
CTD and Hydrographic Data Summary

CAST EP3-90-DI -001 DATE 19 NOV 90 TIME 1317 GMT
LAT 07 01.0N LONG 139 58.0W

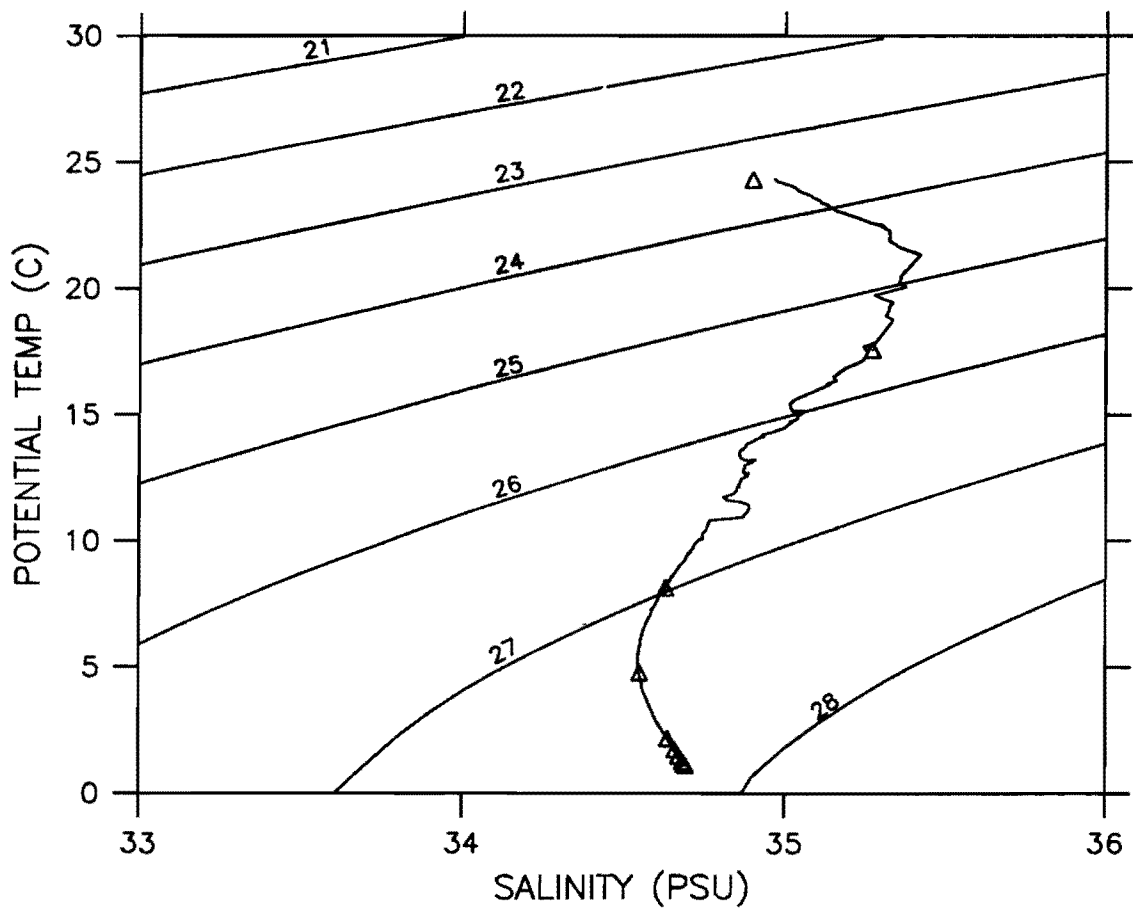


CAST EP3-90-D1 -001 DATE 19 NOV 90 TIME 1317 GMT
 LAT 07 01.0N LONG 139 58.0W WEATHER 1 SEA STATE 3
 BAROMETER 07 WIND DIR 150 T SPD 14 KT VISIBILITY 7
 CLOUD AMOUNT 9 DRY 26.9 WET 25.0 DEPTH 5019 M

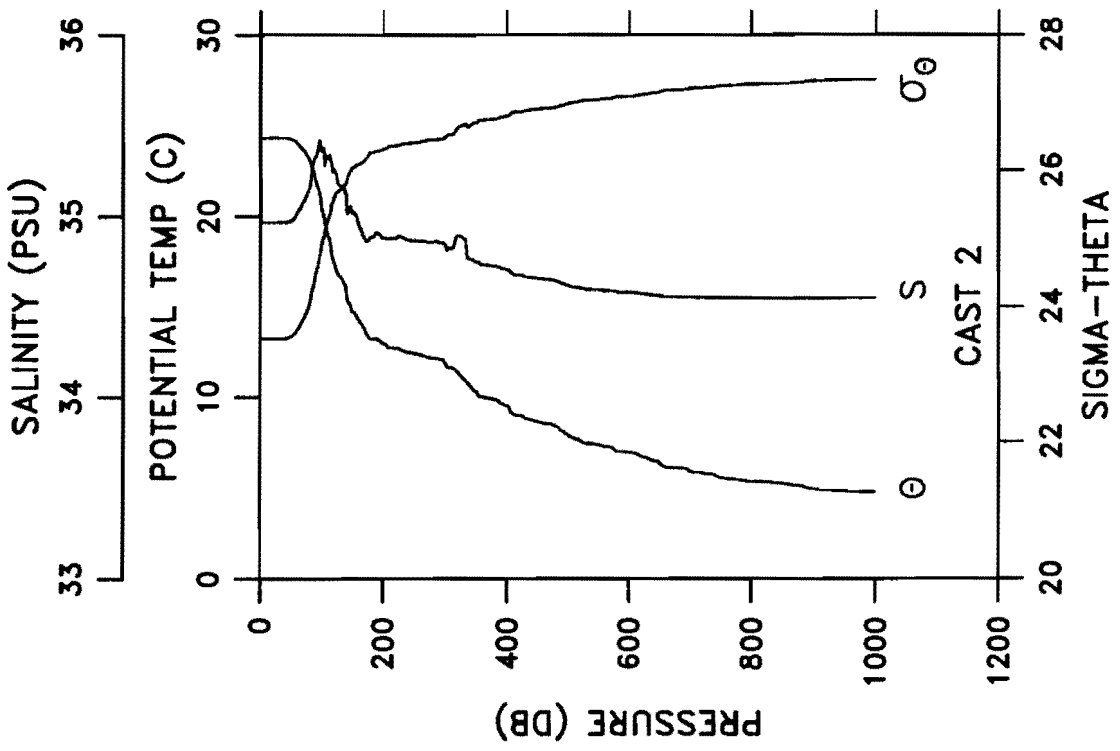


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 28.224 | 33.961 | 21.543 | 0.000 |
| 10 | 28.222 | 33.961 | 21.543 | 0.063 |
| 20 | 28.237 | 33.960 | 21.538 | 0.125 |
| 30 | 28.233 | 33.958 | 21.538 | 0.188 |
| 40 | 28.241 | 33.967 | 21.541 | 0.250 |
| 50 | 28.235 | 34.111 | 21.652 | 0.313 |
| 60 | 28.414 | 34.589 | 21.952 | 0.373 |
| 70 | 27.844 | 34.907 | 22.378 | 0.430 |
| 80 | 27.146 | 34.934 | 22.623 | 0.484 |
| 90 | 26.799 | 34.958 | 22.753 | 0.538 |
| 100 | 26.498 | 34.985 | 22.869 | 0.588 |
| 110 | 26.491 | 34.998 | 22.880 | 0.637 |
| 120 | 25.900 | 35.037 | 23.094 | 0.686 |
| 130 | 25.211 | 34.976 | 23.260 | 0.734 |
| 140 | 24.756 | 34.972 | 23.396 | 0.780 |
| 150 | 23.525 | 34.882 | 23.694 | 0.824 |
| 160 | 20.815 | 34.807 | 24.398 | 0.863 |
| 170 | 18.386 | 34.732 | 24.972 | 0.896 |
| 180 | 16.991 | 34.710 | 25.295 | 0.925 |
| 190 | 15.221 | 34.670 | 25.670 | 0.950 |
| 200 | 13.482 | 34.691 | 26.056 | 0.972 |
| 250 | 11.291 | 34.710 | 26.497 | 1.059 |
| 300 | 10.121 | 34.664 | 26.669 | 1.135 |
| 350 | 9.863 | 34.688 | 26.732 | 1.205 |
| 400 | 9.518 | 34.672 | 26.777 | 1.273 |
| 450 | 9.087 | 34.653 | 26.833 | 1.339 |
| 500 | 8.671 | 34.636 | 26.885 | 1.403 |
| 520 | 8.528 | 34.630 | 26.903 | 1.428 |

CAST EP3-90-DI -002 DATE 22 NOV 90 TIME 1057 GMT
LAT 00 12.0S LONG 124 29.0W

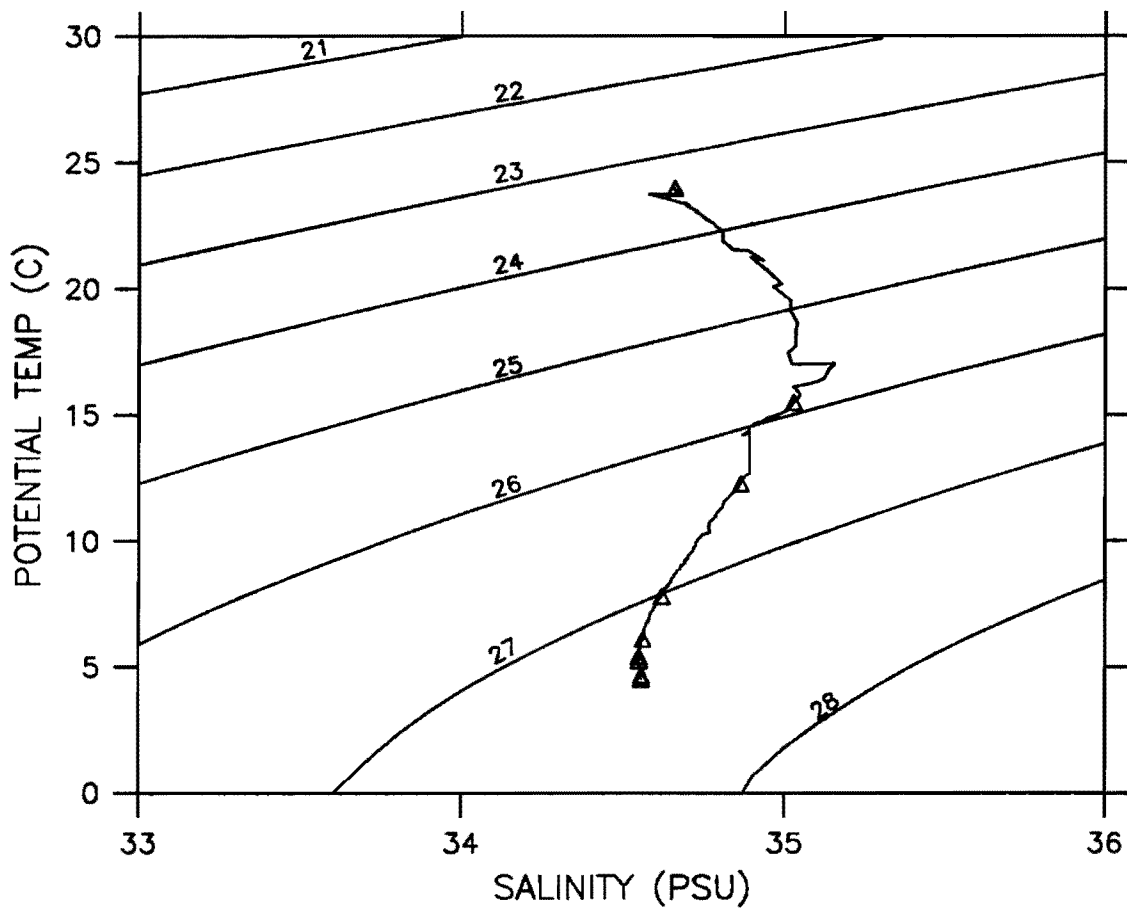


CAST EP3-90-D1 --002 DATE 22 NOV 90 TIME 1057 GMT
 LAT 00 12.0S LONG 124 29.0W WEATHER 1 SEA STATE 3
 BAROMETER 105 T SPD 13 KT VISIBILITY 7
 CLOUD AMOUNT DRY 23.9 WET 22.1 DEPTH 4445 M

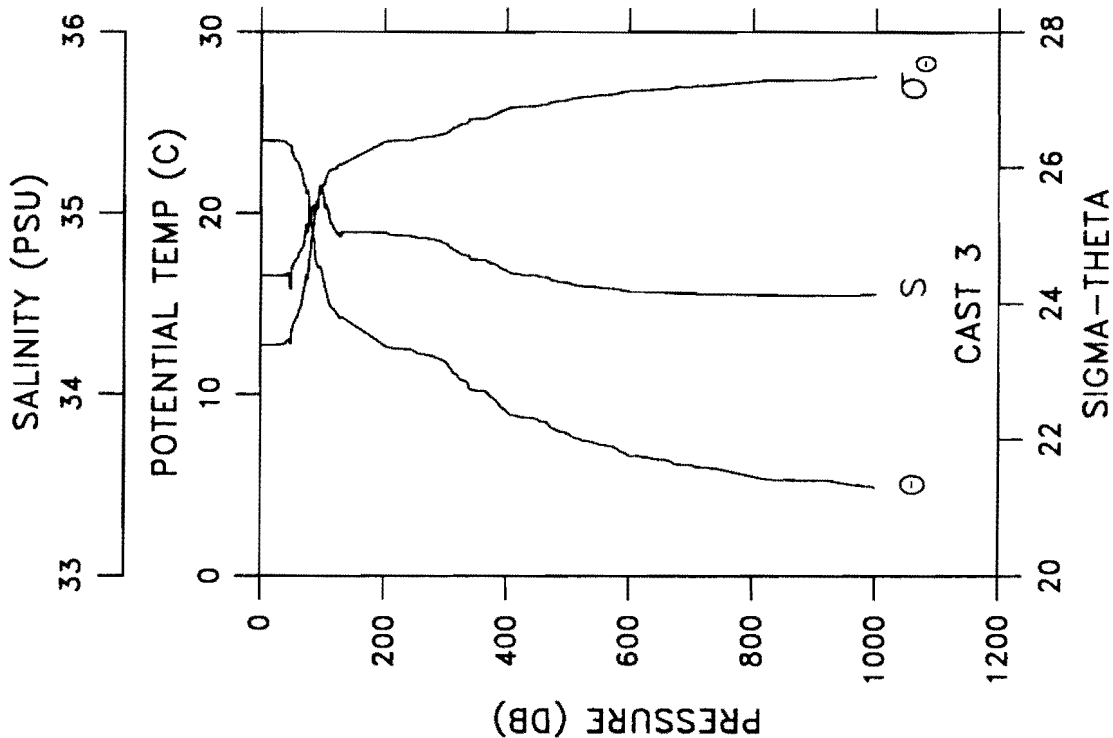


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 24.317 | 34.967 | 23.524 | 0.000 |
| 10 | 24.315 | 34.967 | 23.524 | 0.044 |
| 20 | 24.319 | 34.967 | 23.523 | 0.087 |
| 30 | 24.304 | 34.968 | 23.528 | 0.131 |
| 40 | 24.301 | 34.968 | 23.529 | 0.175 |
| 50 | 24.215 | 34.979 | 23.563 | 0.218 |
| 60 | 23.979 | 35.027 | 23.669 | 0.261 |
| 70 | 23.548 | 35.089 | 23.843 | 0.303 |
| 80 | 22.841 | 35.210 | 24.140 | 0.342 |
| 90 | 21.698 | 35.348 | 24.968 | 0.378 |
| 100 | 20.129 | 35.366 | 25.008 | 0.410 |
| 110 | 18.762 | 35.335 | 25.339 | 0.438 |
| 120 | 17.173 | 35.244 | 25.861 | 0.463 |
| 130 | 16.608 | 35.161 | 25.731 | 0.486 |
| 140 | 15.411 | 35.014 | 25.893 | 0.509 |
| 150 | 14.713 | 35.018 | 26.049 | 0.529 |
| 160 | 14.225 | 34.937 | 26.091 | 0.549 |
| 170 | 13.650 | 34.873 | 26.163 | 0.568 |
| 180 | 13.195 | 34.884 | 26.265 | 0.587 |
| 190 | 13.199 | 34.910 | 26.284 | 0.605 |
| 200 | 12.942 | 34.879 | 26.312 | 0.622 |
| 250 | 12.410 | 34.867 | 26.407 | 0.708 |
| 300 | 11.852 | 34.842 | 26.495 | 0.790 |
| 350 | 10.296 | 34.748 | 26.705 | 0.865 |
| 400 | 9.513 | 34.704 | 26.803 | 0.933 |
| 450 | 8.631 | 34.656 | 26.907 | 0.996 |
| 500 | 7.944 | 34.618 | 26.983 | 1.056 |
| 550 | 7.365 | 34.594 | 27.048 | 1.112 |
| 600 | 6.951 | 34.578 | 27.094 | 1.166 |
| 650 | 6.358 | 34.561 | 27.160 | 1.217 |
| 700 | 5.897 | 34.553 | 27.213 | 1.266 |
| 750 | 5.556 | 34.547 | 27.250 | 1.312 |
| 800 | 5.341 | 34.546 | 27.276 | 1.357 |
| 900 | 4.836 | 34.547 | 27.323 | 1.445 |
| 1000 | 4.771 | 34.548 | 27.344 | 1.529 |
| 1500 | 3.111 | 34.594 | 27.551 | 1.884 |
| 2000 | 2.163 | 34.639 | 27.669 | 2.170 |
| 2500 | 1.730 | 34.660 | 27.720 | 2.420 |
| 3000 | 1.481 | 34.671 | 27.748 | 2.655 |
| 3500 | 1.254 | 34.684 | 27.774 | 2.881 |
| 4000 | 1.109 | 34.691 | 27.769 | 3.098 |
| 4185 | 1.107 | 34.692 | 27.791 | 3.180 |

CAST EP3-90-DI -003 DATE 24 NOV 90 TIME 0903 GMT
LAT 00 00.7S LONG 120 00.2W

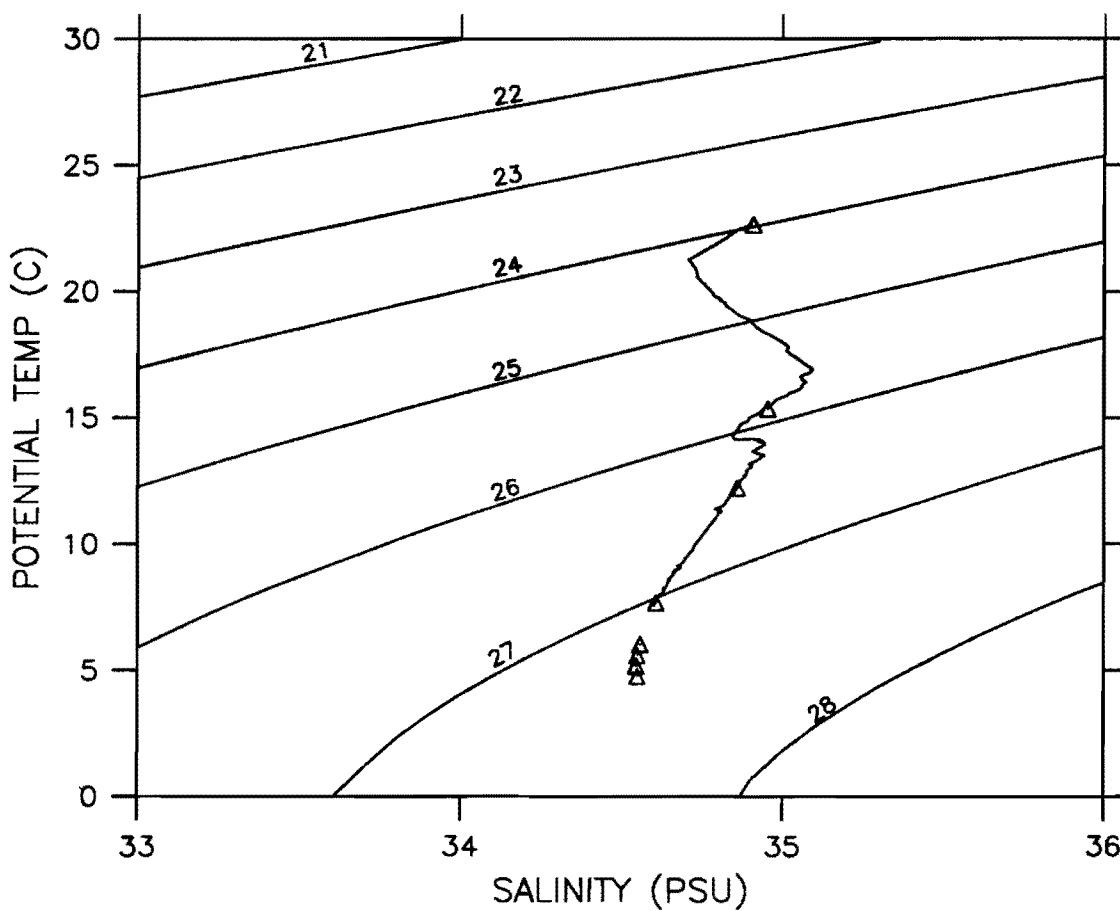


CAST EP3-90-DI -003 DATE 24 NOV 90 TIME 0903 GMT
 LAT 00 00.7S LONG 120 00.2W WEATHER 1 SEA STATE 4
 BAROMETER 12 WIND DIR 120 T SPD 18 KT VISIBILITY 9
 CLOUD AMOUNT 3 DRY 23.1 WET 21.9 DEPTH 4185 M

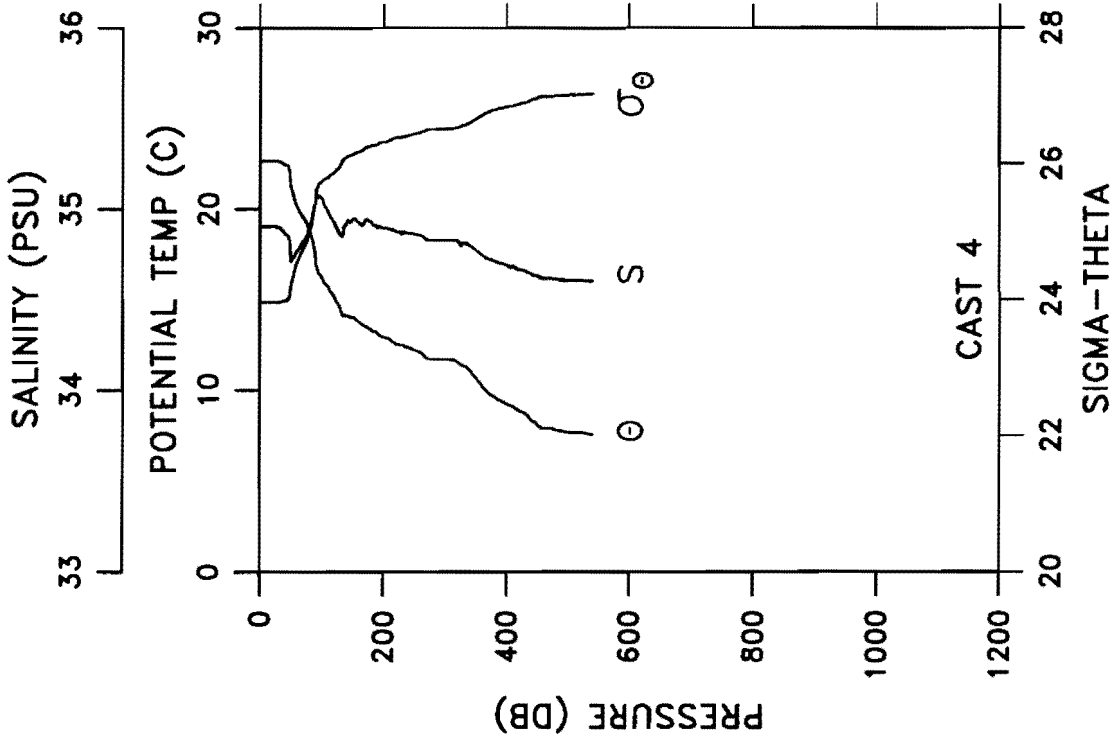


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.976 | 34.655 | 23.389 | 0.000 |
| 10 | 23.974 | 34.655 | 23.390 | 0.045 |
| 20 | 23.968 | 34.654 | 23.390 | 0.090 |
| 30 | 23.959 | 34.655 | 23.394 | 0.135 |
| 40 | 23.915 | 34.655 | 23.407 | 0.180 |
| 50 | 23.412 | 34.683 | 23.576 | 0.224 |
| 60 | 22.683 | 34.762 | 23.846 | 0.266 |
| 70 | 21.520 | 34.877 | 24.259 | 0.305 |
| 80 | 19.525 | 35.018 | 24.901 | 0.339 |
| 90 | 17.115 | 35.019 | 25.502 | 0.367 |
| 100 | 16.314 | 35.102 | 25.754 | 0.391 |
| 110 | 14.958 | 34.970 | 25.959 | 0.412 |
| 120 | 14.556 | 34.904 | 25.996 | 0.433 |
| 130 | 14.254 | 34.893 | 26.052 | 0.453 |
| 140 | 14.030 | 34.893 | 26.099 | 0.473 |
| 150 | 13.806 | 34.893 | 26.146 | 0.492 |
| 160 | 13.582 | 34.893 | 26.192 | 0.511 |
| 170 | 13.358 | 34.893 | 26.238 | 0.529 |
| 180 | 13.135 | 34.892 | 26.283 | 0.547 |
| 190 | 12.911 | 34.892 | 26.328 | 0.565 |
| 200 | 12.687 | 34.892 | 26.372 | 0.582 |
| 250 | 12.376 | 34.869 | 26.416 | 0.666 |
| 300 | 11.799 | 34.832 | 26.497 | 0.748 |
| 350 | 10.204 | 34.743 | 26.716 | 0.823 |
| 400 | 9.056 | 34.681 | 26.860 | 0.890 |
| 450 | 8.622 | 34.655 | 26.908 | 0.952 |
| 500 | 7.808 | 34.613 | 26.999 | 1.011 |
| 550 | 7.250 | 34.590 | 27.061 | 1.066 |
| 600 | 6.607 | 34.567 | 27.132 | 1.120 |
| 650 | 6.403 | 34.562 | 27.154 | 1.170 |
| 700 | 6.109 | 34.558 | 27.190 | 1.219 |
| 750 | 5.839 | 34.554 | 27.221 | 1.267 |
| 800 | 5.471 | 34.549 | 27.262 | 1.313 |
| 900 | 5.243 | 34.546 | 27.287 | 1.403 |
| 1000 | 4.787 | 34.548 | 27.341 | 1.490 |
| 1006 | 4.627 | 34.551 | 27.362 | 1.495 |

CAST EP3-90-DI -004 DATE 25 NOV 90 TIME 0755 GMT
LAT 00 00.1N LONG 115 00.1W

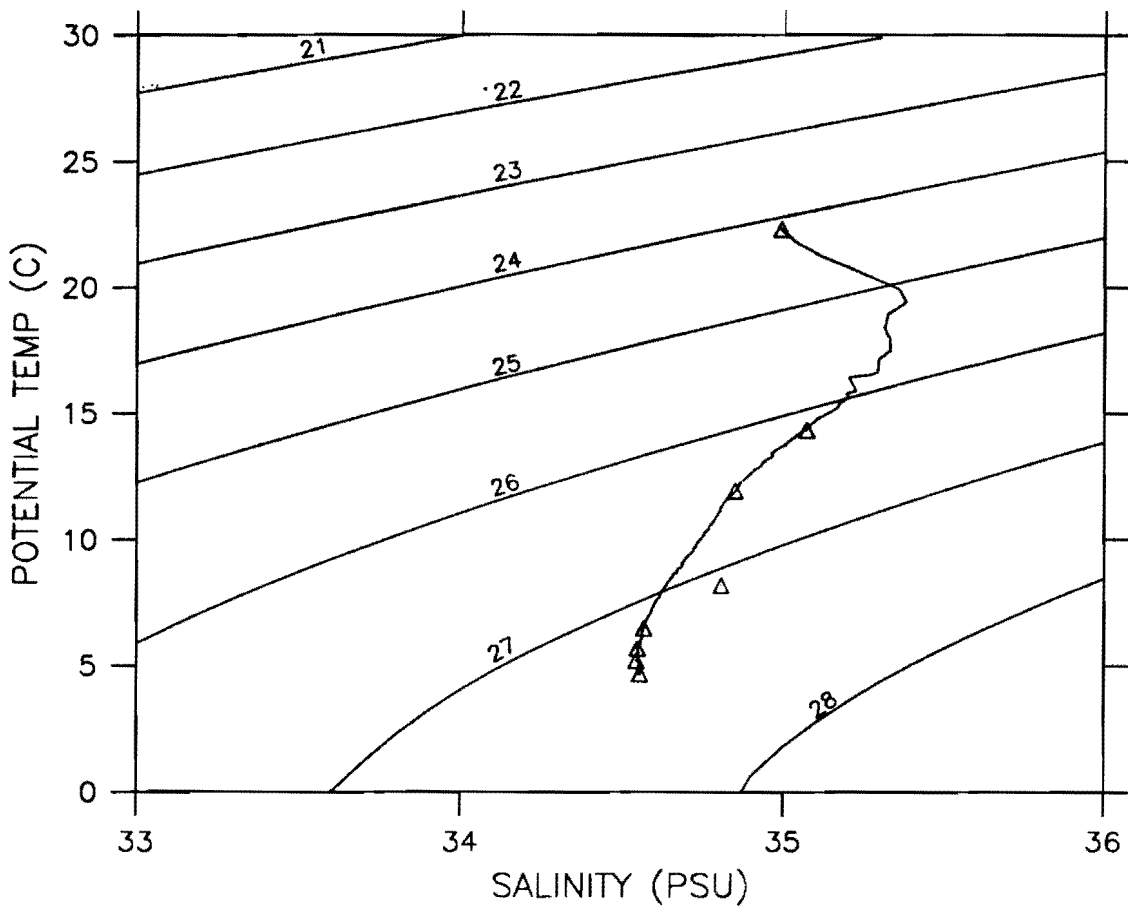


CAST EP3-90-DI --004 DATE 25 NOV 90 TIME 0755 GMT
 LAT 00 00.1N LONG 115 00.1W WEATHER 1 SEA STATE 2
 BAROMETER 13 WIND DIR 090 T SPD 13 KT VISIBILITY 8
 CLOUD AMOUNT 2 DRY 22.3 WET 21.1 DEPTH 4047 M

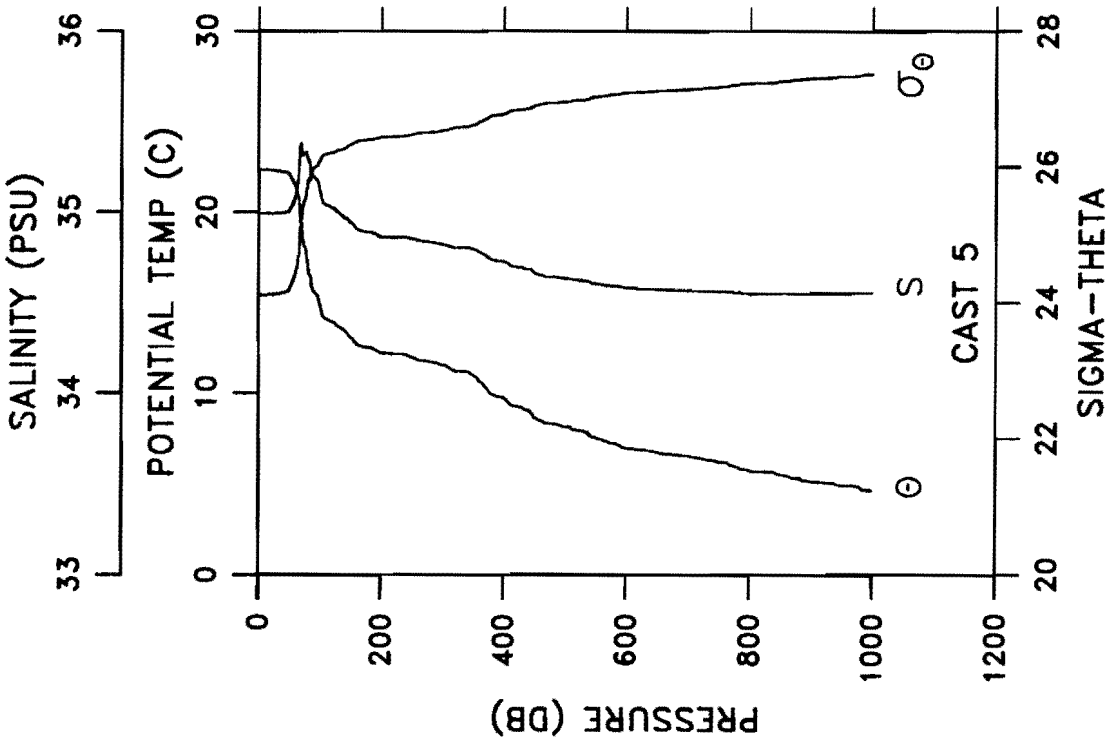


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.856 | 34.903 | 23.960 | 0.000 |
| 10 | 22.854 | 34.903 | 23.961 | 0.039 |
| 20 | 22.852 | 34.903 | 23.961 | 0.079 |
| 30 | 22.617 | 34.897 | 23.966 | 0.118 |
| 40 | 22.433 | 34.860 | 23.991 | 0.158 |
| 50 | 21.132 | 34.717 | 24.244 | 0.196 |
| 60 | 20.084 | 34.776 | 24.575 | 0.231 |
| 70 | 19.484 | 34.824 | 24.768 | 0.264 |
| 80 | 18.669 | 34.912 | 25.039 | 0.295 |
| 90 | 16.804 | 35.086 | 25.628 | 0.322 |
| 100 | 16.103 | 35.048 | 25.762 | 0.345 |
| 110 | 15.606 | 34.973 | 25.817 | 0.368 |
| 120 | 15.081 | 34.911 | 25.887 | 0.389 |
| 130 | 14.325 | 34.849 | 26.002 | 0.410 |
| 140 | 14.125 | 34.928 | 26.106 | 0.430 |
| 150 | 14.037 | 34.945 | 26.138 | 0.449 |
| 160 | 13.759 | 34.923 | 26.178 | 0.468 |
| 170 | 13.539 | 34.941 | 26.238 | 0.487 |
| 180 | 13.322 | 34.924 | 26.269 | 0.505 |
| 190 | 13.161 | 34.896 | 26.281 | 0.523 |
| 200 | 12.947 | 34.894 | 26.322 | 0.540 |
| 250 | 12.216 | 34.861 | 26.440 | 0.625 |
| 300 | 11.705 | 34.829 | 26.513 | 0.705 |
| 350 | 10.651 | 34.772 | 26.661 | 0.783 |
| 400 | 9.230 | 34.681 | 26.839 | 0.850 |
| 450 | 8.113 | 34.633 | 26.969 | 0.912 |
| 500 | 7.677 | 34.607 | 27.013 | 0.969 |
| 541 | 7.539 | 34.602 | 27.029 | 1.015 |

CAST EP3-90-DI -005 DATE 26 NOV 90 TIME 1252 GMT
LAT 00 58.5S LONG 110 01.3W

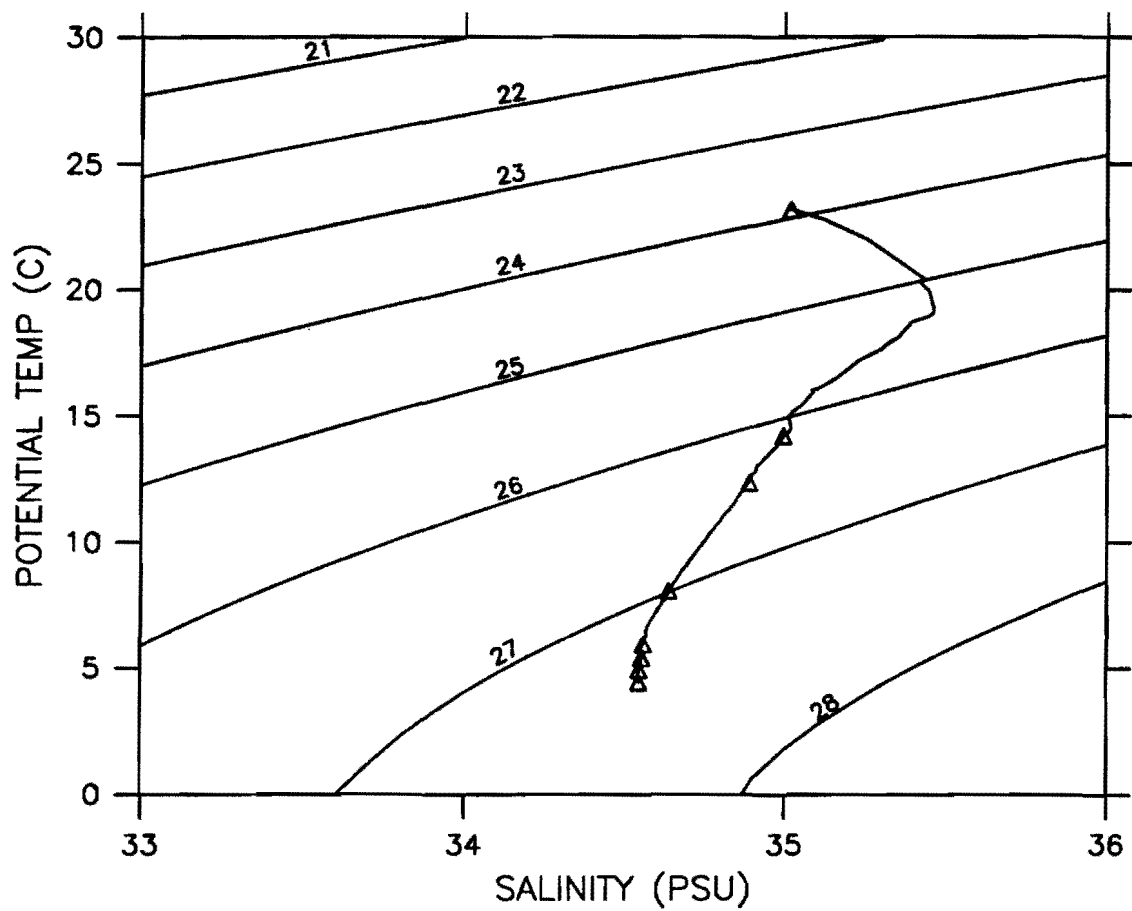


CAST EP3-90-DI -005 DATE 26 NOV 90 TIME 1252 GMT
 LAT 00 58.5S LONG 110 01.3W WEATHER 2 SEA STATE 3
 BAROMETER 13 WIND DIR 140 T SPD 14 KT VISIBILITY 8
 CLOUD 6 AMOUNT 7 DRY 22.2 WET 20.4 DEPTH 3958 M

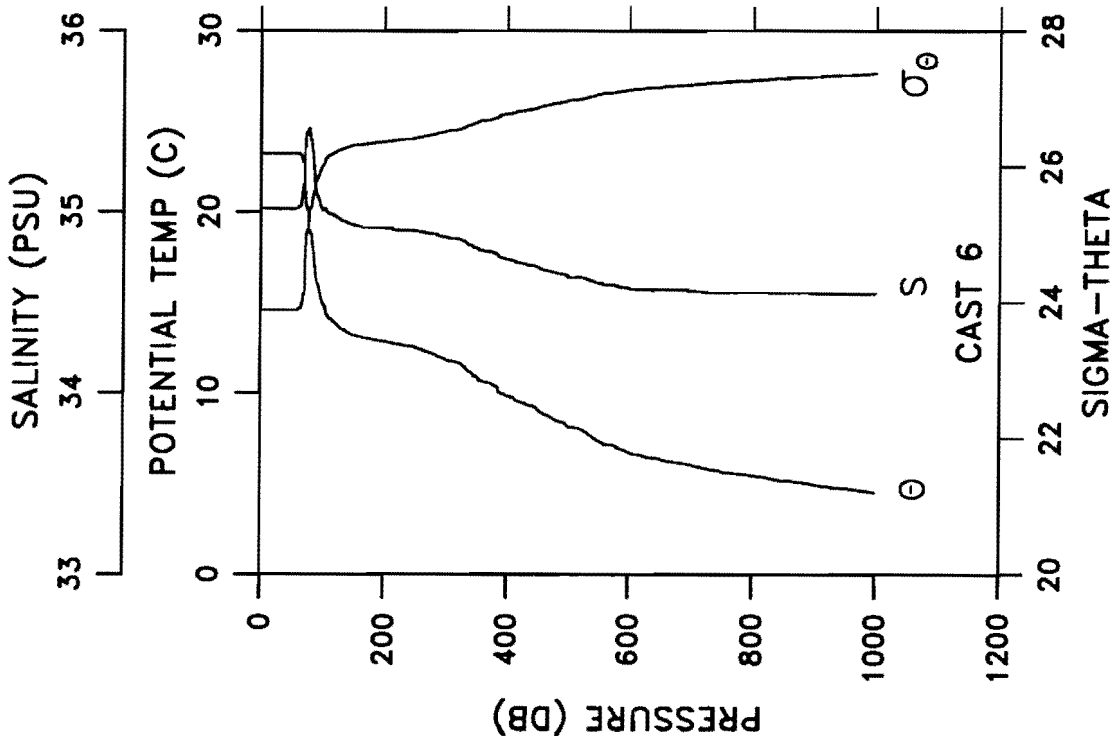


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.341 | 34.992 | 24.117 | 0.000 |
| 10 | 22.339 | 34.992 | 24.118 | 0.038 |
| 20 | 22.308 | 34.981 | 24.126 | 0.076 |
| 30 | 22.264 | 34.994 | 24.141 | 0.114 |
| 40 | 22.237 | 34.995 | 24.149 | 0.151 |
| 50 | 22.121 | 35.008 | 24.191 | 0.189 |
| 60 | 21.331 | 35.098 | 24.480 | 0.225 |
| 70 | 18.919 | 35.324 | 25.291 | 0.257 |
| 80 | 16.630 | 35.293 | 25.828 | 0.281 |
| 90 | 15.599 | 35.196 | 25.990 | 0.302 |
| 100 | 14.847 | 35.109 | 26.091 | 0.322 |
| 110 | 14.124 | 35.038 | 26.191 | 0.341 |
| 120 | 13.983 | 35.024 | 26.210 | 0.359 |
| 130 | 13.683 | 34.994 | 26.250 | 0.378 |
| 140 | 13.455 | 34.969 | 26.277 | 0.395 |
| 150 | 13.092 | 34.945 | 26.333 | 0.413 |
| 160 | 12.707 | 34.907 | 26.380 | 0.430 |
| 170 | 12.571 | 34.893 | 26.398 | 0.447 |
| 180 | 12.523 | 34.890 | 26.403 | 0.463 |
| 190 | 12.421 | 34.881 | 26.416 | 0.480 |
| 200 | 12.235 | 34.863 | 26.438 | 0.496 |
| 250 | 11.985 | 34.853 | 26.479 | 0.578 |
| 300 | 11.564 | 34.820 | 26.532 | 0.657 |
| 350 | 11.033 | 34.796 | 26.611 | 0.734 |
| 400 | 9.751 | 34.727 | 26.781 | 0.804 |
| 450 | 8.670 | 34.866 | 26.909 | 0.869 |
| 500 | 8.171 | 34.634 | 26.961 | 0.929 |
| 550 | 7.584 | 34.606 | 27.026 | 0.987 |
| 600 | 6.983 | 34.582 | 27.092 | 1.041 |
| 650 | 6.747 | 34.574 | 27.118 | 1.094 |
| 700 | 6.568 | 34.568 | 27.138 | 1.146 |
| 750 | 6.236 | 34.560 | 27.175 | 1.196 |
| 800 | 5.759 | 34.550 | 27.228 | 1.245 |
| 800 | 5.151 | 34.550 | 27.301 | 1.336 |
| 1000 | 4.861 | 34.554 | 27.360 | 1.421 |
| 1010 | 4.646 | 34.554 | 27.362 | 1.430 |

CAST EP3-90-DI -006 DATE 27 NOV 90 TIME 1104 GMT
LAT 04 00.2S LONG 110 00.1W

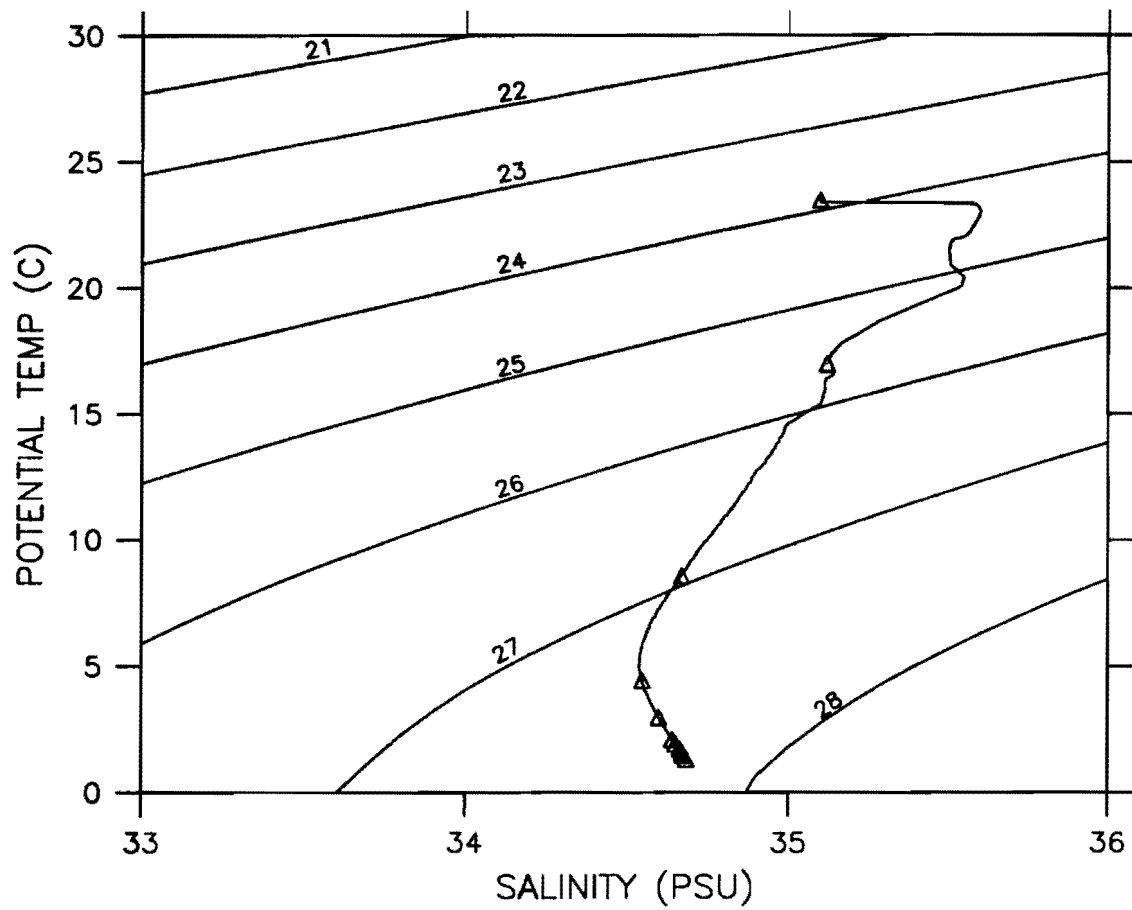


CAST EP3-90-D1 -006 DATE 27 NOV 90 TIME 1104 GMT
 LAT 04 00.2S LONG 110 00.1W WEATHER 1 SEA STATE 4
 BAROMETER 11 WIND DIR 110 T SPD 14 KT VISIBILITY 6
 CLOUD AMOUNT 2 DRY 22.0 WET 19.8 DEPTH 3828 M

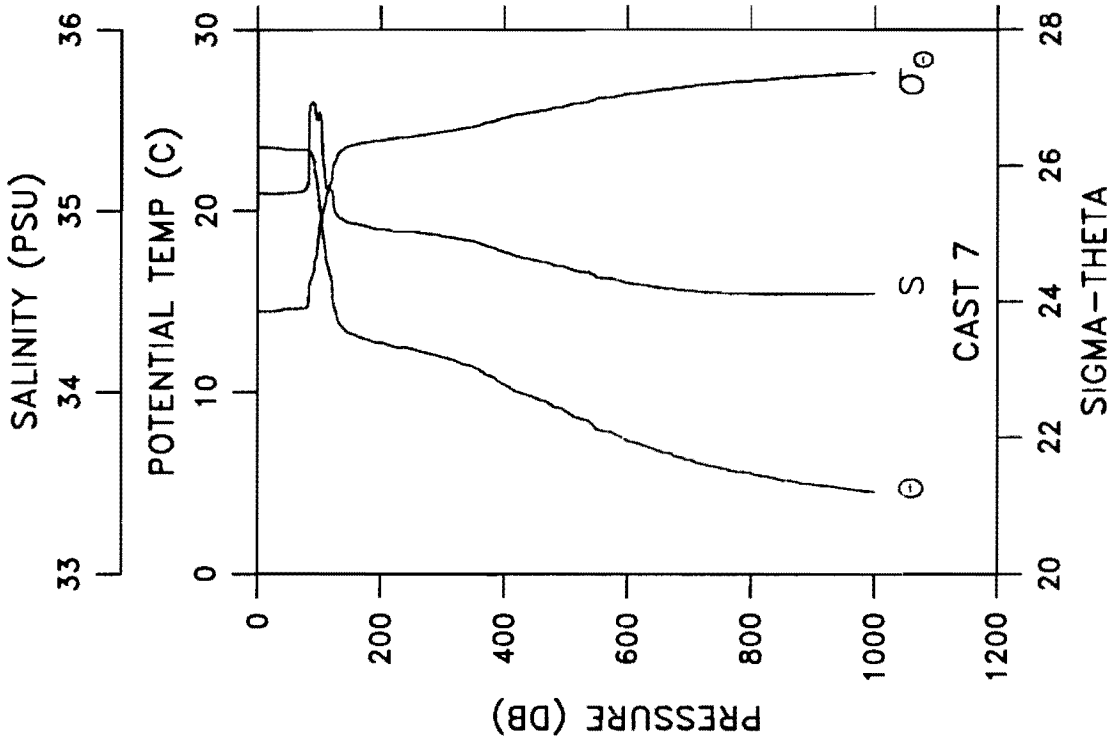


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.208 | 35.018 | 23.889 | 0.000 |
| 10 | 23.206 | 35.018 | 23.889 | 0.040 |
| 20 | 23.205 | 35.017 | 23.889 | 0.080 |
| 30 | 23.202 | 35.017 | 23.890 | 0.120 |
| 40 | 23.203 | 35.017 | 23.889 | 0.161 |
| 50 | 23.199 | 35.017 | 23.891 | 0.201 |
| 60 | 23.174 | 35.024 | 23.903 | 0.241 |
| 70 | 22.002 | 35.254 | 24.412 | 0.280 |
| 80 | 18.712 | 35.393 | 25.396 | 0.309 |
| 90 | 16.042 | 35.083 | 25.802 | 0.333 |
| 100 | 14.907 | 35.009 | 26.001 | 0.354 |
| 110 | 14.101 | 34.988 | 26.157 | 0.373 |
| 120 | 13.811 | 34.977 | 26.210 | 0.392 |
| 130 | 13.510 | 34.952 | 26.253 | 0.410 |
| 140 | 13.317 | 34.937 | 26.281 | 0.428 |
| 150 | 13.150 | 34.926 | 26.306 | 0.445 |
| 160 | 13.074 | 34.918 | 26.315 | 0.463 |
| 170 | 13.003 | 34.914 | 26.327 | 0.480 |
| 180 | 12.935 | 34.912 | 26.339 | 0.497 |
| 190 | 12.868 | 34.912 | 26.352 | 0.515 |
| 200 | 12.830 | 34.911 | 26.358 | 0.532 |
| 250 | 12.511 | 34.896 | 26.410 | 0.617 |
| 300 | 11.880 | 34.860 | 26.504 | 0.699 |
| 350 | 10.921 | 34.801 | 26.635 | 0.776 |
| 400 | 9.851 | 34.736 | 26.772 | 0.847 |
| 450 | 9.069 | 34.695 | 26.868 | 0.913 |
| 500 | 8.135 | 34.641 | 26.972 | 0.974 |
| 550 | 7.361 | 34.606 | 27.058 | 1.031 |
| 600 | 6.729 | 34.576 | 27.122 | 1.084 |
| 650 | 6.364 | 34.568 | 27.165 | 1.134 |
| 700 | 6.047 | 34.561 | 27.200 | 1.183 |
| 750 | 5.854 | 34.553 | 27.243 | 1.230 |
| 800 | 5.433 | 34.558 | 27.272 | 1.275 |
| 800 | 4.949 | 34.548 | 27.323 | 1.362 |
| 1000 | 4.526 | 34.548 | 27.370 | 1.445 |
| 1010 | 4.449 | 34.546 | 27.378 | 1.453 |

CAST EP3-90-DI -007 DATE 28 NOV 90 TIME 0315 GMT
LAT 05 01.8S LONG 109 58.8W

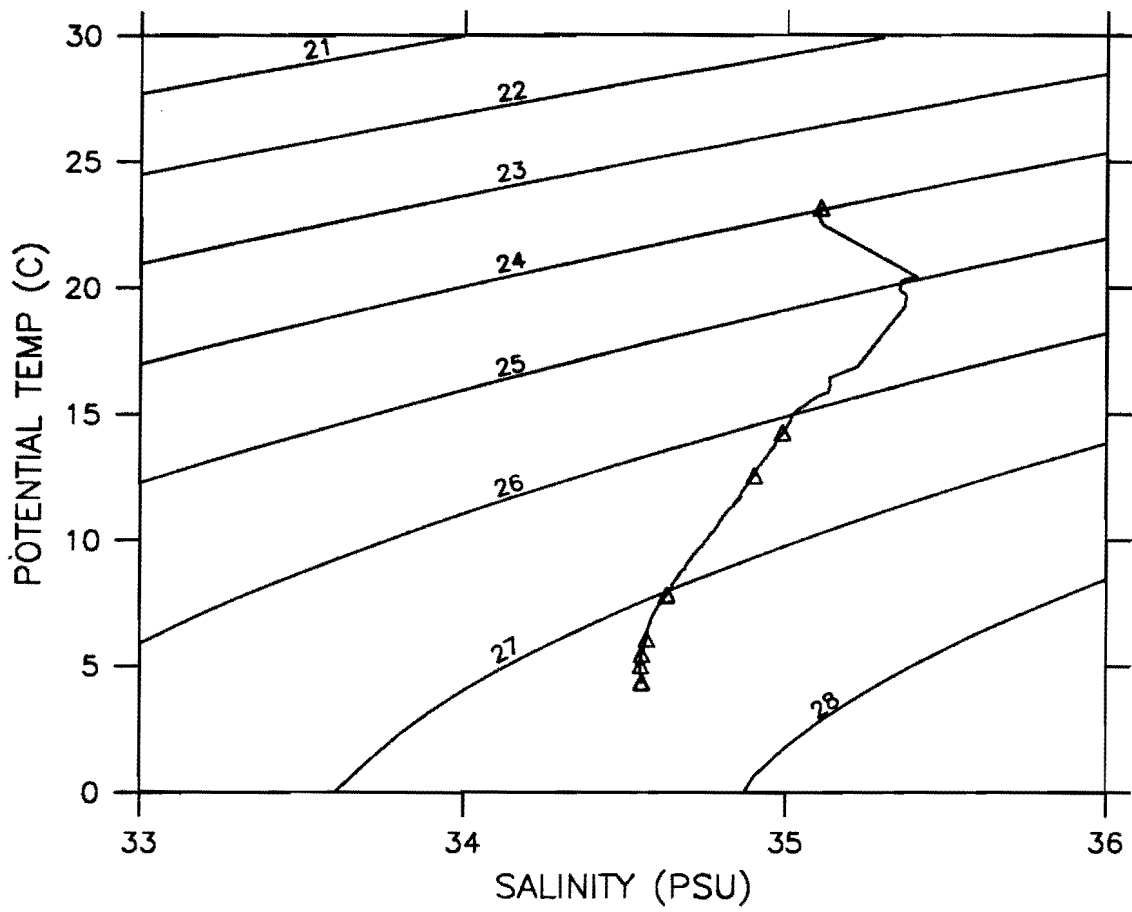


CAST EP3-90-DI -007 DATE 28 NOV 90 TIME 0315 GMT
 LAT 05 01.8S LONG 109 58.8W WEATHER 0 SEA STATE 3
 BAROMETER 12 WIND DIR 120 T SPD 15 KT VISIBILITY 8
 CLOUD AMOUNT 0 DRY 22.7 WET 20.3 DEPTH 3480 M

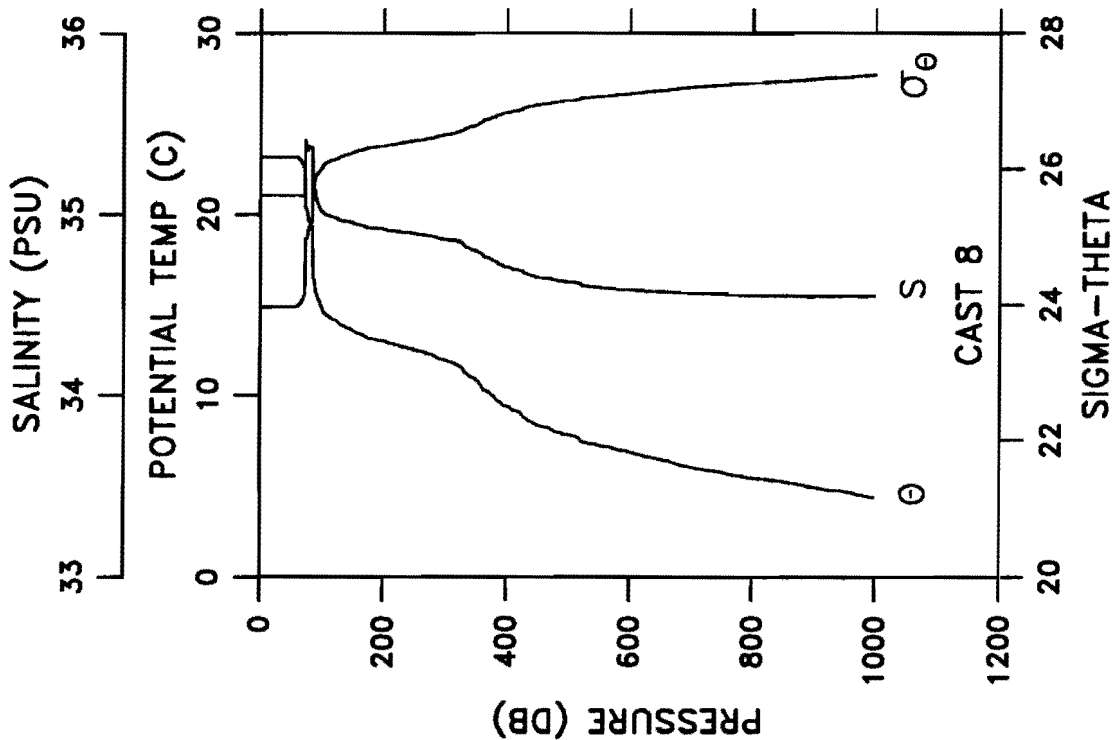


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.523 | 35.098 | 23.857 | 0.000 |
| 10 | 23.521 | 35.098 | 23.858 | 0.040 |
| 20 | 23.509 | 35.095 | 23.860 | 0.081 |
| 30 | 23.486 | 35.096 | 23.867 | 0.121 |
| 40 | 23.427 | 35.097 | 23.885 | 0.162 |
| 50 | 23.397 | 35.101 | 23.897 | 0.202 |
| 60 | 23.389 | 35.103 | 23.900 | 0.242 |
| 70 | 23.392 | 35.108 | 23.903 | 0.282 |
| 80 | 23.396 | 35.144 | 23.929 | 0.322 |
| 90 | 22.819 | 35.595 | 24.439 | 0.359 |
| 100 | 20.073 | 35.540 | 25.156 | 0.392 |
| 110 | 17.324 | 35.130 | 25.537 | 0.418 |
| 120 | 15.977 | 35.112 | 25.840 | 0.442 |
| 130 | 13.898 | 34.970 | 26.186 | 0.462 |
| 140 | 13.452 | 34.948 | 26.262 | 0.480 |
| 150 | 13.211 | 34.933 | 26.299 | 0.498 |
| 160 | 13.117 | 34.929 | 26.315 | 0.515 |
| 170 | 12.963 | 34.920 | 26.339 | 0.532 |
| 180 | 12.878 | 34.913 | 26.350 | 0.550 |
| 190 | 12.756 | 34.901 | 26.365 | 0.567 |
| 200 | 12.721 | 34.900 | 26.371 | 0.584 |
| 250 | 12.392 | 34.888 | 26.427 | 0.668 |
| 300 | 11.905 | 34.859 | 26.498 | 0.749 |
| 350 | 11.382 | 34.832 | 26.576 | 0.828 |
| 400 | 10.425 | 34.773 | 26.702 | 0.902 |
| 450 | 9.688 | 34.729 | 26.794 | 0.971 |
| 500 | 8.981 | 34.690 | 26.879 | 1.036 |
| 550 | 7.982 | 34.634 | 26.989 | 1.097 |
| 600 | 7.361 | 34.604 | 27.057 | 1.154 |
| 650 | 6.788 | 34.577 | 27.115 | 1.207 |
| 700 | 6.283 | 34.561 | 27.170 | 1.258 |
| 750 | 5.863 | 34.550 | 27.215 | 1.307 |
| 800 | 5.562 | 34.545 | 27.248 | 1.354 |
| 900 | 4.925 | 34.541 | 27.320 | 1.442 |
| 1000 | 4.525 | 34.546 | 27.369 | 1.525 |
| 1500 | 2.971 | 34.600 | 27.568 | 1.875 |
| 2000 | 2.104 | 34.641 | 27.676 | 2.154 |
| 2500 | 1.711 | 34.665 | 27.725 | 2.401 |
| 3000 | 1.465 | 34.677 | 27.754 | 2.633 |
| 3256 | 1.320 | 34.685 | 27.770 | 2.748 |

CAST EP3-90-DI -008 DATE 28 NOV 90 TIME 1412 GMT
LAT 03 00.1S LONG 109 59.9W

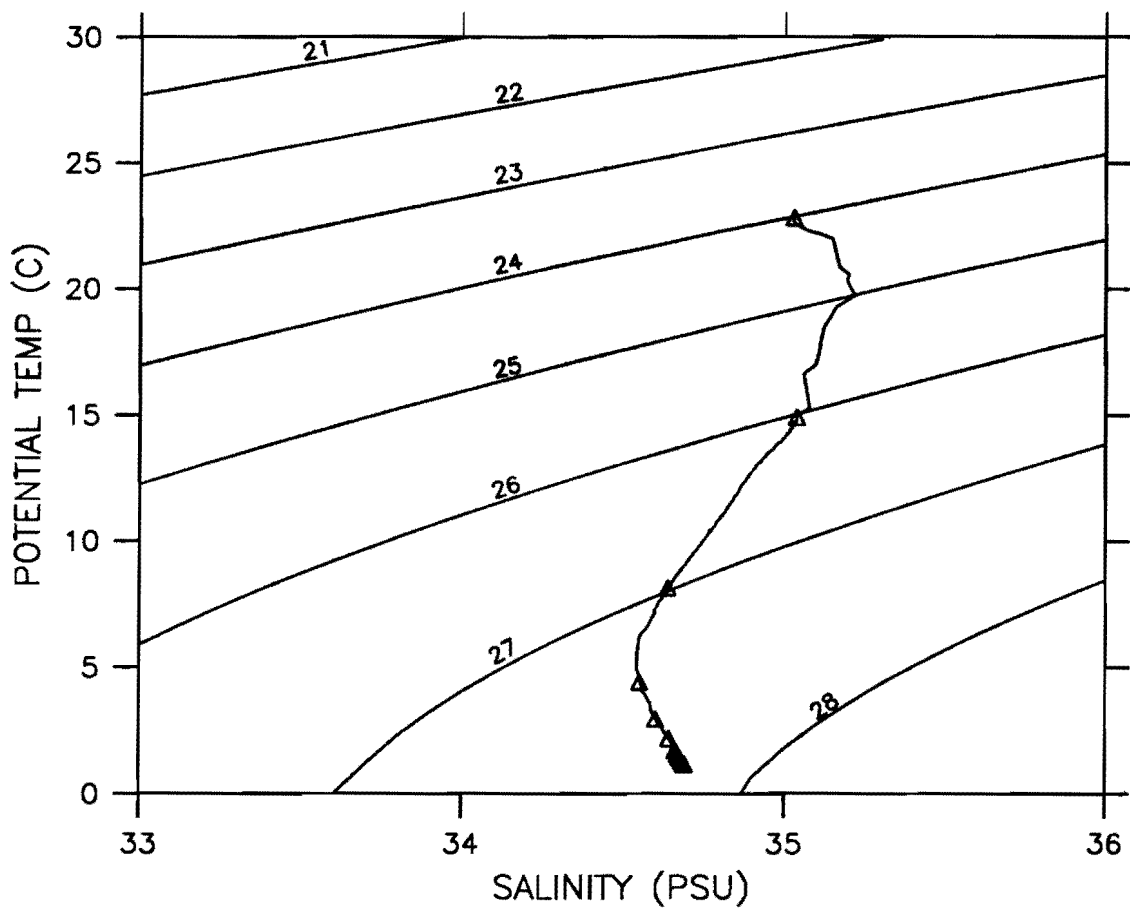


CAST EP3-90-D1 -006 DATE 28 NOV 90 TIME 1412 GMT
 LAT 03 00.1S LONG 109 59.9W WEATHER 1 SEA STATE 3
 BAROMETER 13 WIND DIR 125 T SPD 17 KT VISIBILITY 8
 CLOUD 8 AMOUNT 1 DRY 22.3 WET 20.3 DEPTH 3744 M

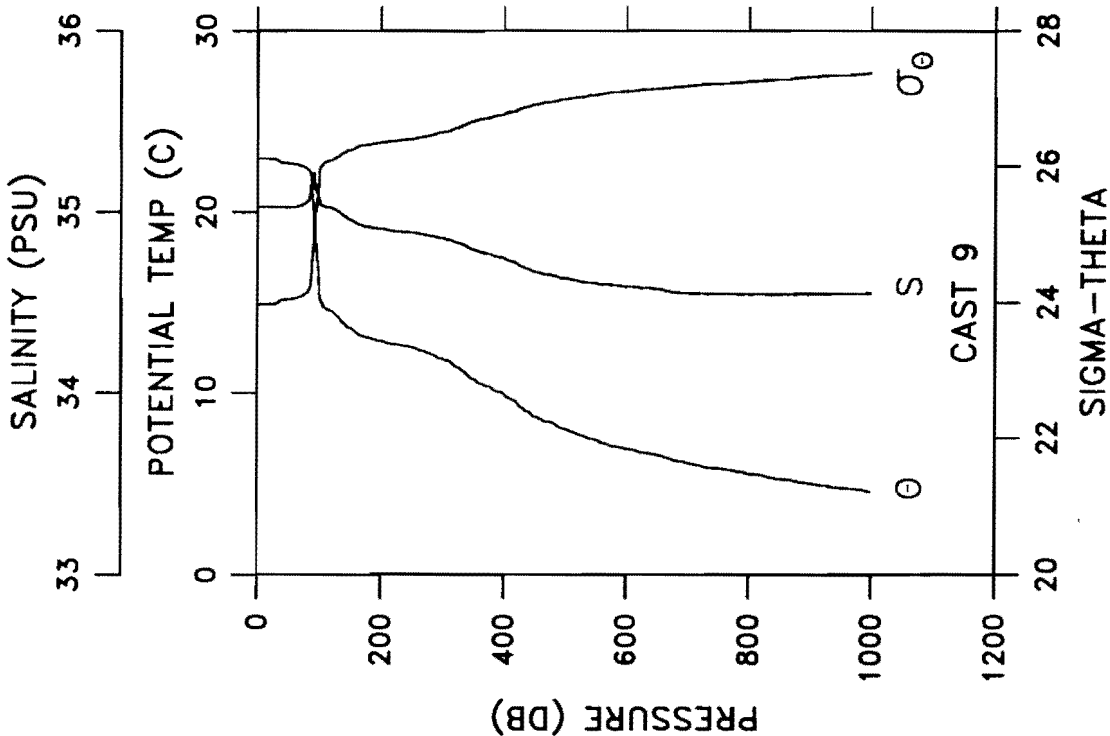


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.174 | 35.107 | 23.966 | 0.000 |
| 10 | 23.172 | 35.107 | 23.967 | 0.039 |
| 20 | 23.153 | 35.106 | 23.972 | 0.079 |
| 30 | 23.157 | 35.107 | 23.971 | 0.118 |
| 40 | 23.155 | 35.107 | 23.971 | 0.158 |
| 50 | 23.156 | 35.107 | 23.971 | 0.197 |
| 60 | 23.118 | 35.106 | 23.981 | 0.237 |
| 70 | 22.578 | 35.112 | 24.141 | 0.276 |
| 80 | 19.564 | 35.374 | 25.163 | 0.307 |
| 90 | 15.706 | 35.098 | 25.890 | 0.332 |
| 100 | 14.878 | 35.015 | 26.011 | 0.353 |
| 110 | 14.380 | 34.994 | 26.103 | 0.372 |
| 120 | 14.177 | 34.983 | 26.138 | 0.391 |
| 130 | 13.900 | 34.967 | 26.183 | 0.410 |
| 140 | 13.741 | 34.963 | 26.213 | 0.429 |
| 150 | 13.572 | 34.953 | 26.241 | 0.447 |
| 160 | 13.397 | 34.943 | 26.269 | 0.465 |
| 170 | 13.221 | 34.933 | 26.297 | 0.483 |
| 180 | 13.096 | 34.924 | 26.315 | 0.500 |
| 190 | 13.024 | 34.923 | 26.329 | 0.518 |
| 200 | 13.002 | 34.921 | 26.332 | 0.535 |
| 250 | 12.471 | 34.895 | 26.417 | 0.620 |
| 300 | 11.921 | 34.863 | 26.498 | 0.703 |
| 350 | 10.914 | 34.800 | 26.635 | 0.780 |
| 400 | 9.391 | 34.708 | 26.826 | 0.849 |
| 450 | 8.328 | 34.651 | 26.950 | 0.911 |
| 500 | 7.802 | 34.627 | 27.011 | 0.968 |
| 550 | 7.234 | 34.598 | 27.069 | 1.023 |
| 600 | 6.853 | 34.582 | 27.110 | 1.076 |
| 650 | 6.447 | 34.571 | 27.156 | 1.127 |
| 700 | 6.023 | 34.565 | 27.206 | 1.176 |
| 750 | 5.748 | 34.559 | 27.236 | 1.223 |
| 800 | 5.434 | 34.551 | 27.268 | 1.269 |
| 900 | 4.942 | 34.547 | 27.323 | 1.357 |
| 1000 | 4.379 | 34.550 | 27.398 | 1.439 |
| 1012 | 4.340 | 34.551 | 27.393 | 1.448 |

CAST EP3-90-DI -009 DATE 29 NOV 90 TIME 0228 GMT
LAT 01 59.9S LONG 109 59.0W

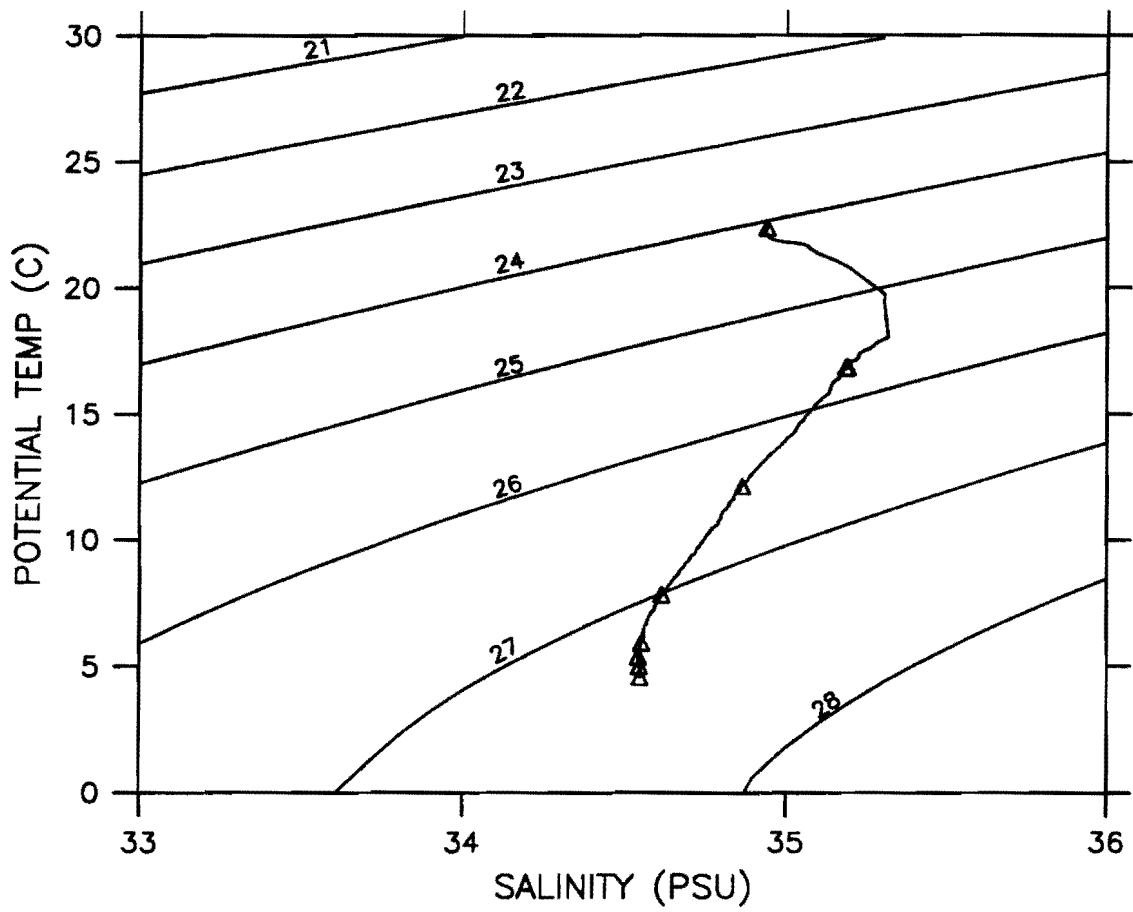


CAST EP3-90-DI -009 DATE 29 NOV 90 TIME 0228 GMT
 LAT 01 59.9S LONG 109 59.0W WEATHER 1 SEA STATE 3
 BAROMETER 12 WIND DIR 130 T SPD 12 KT VISIBILITY 8
 CLOUD AMOUNT 1 DRY 23.7 WET 21.9 DEPTH 3942 M

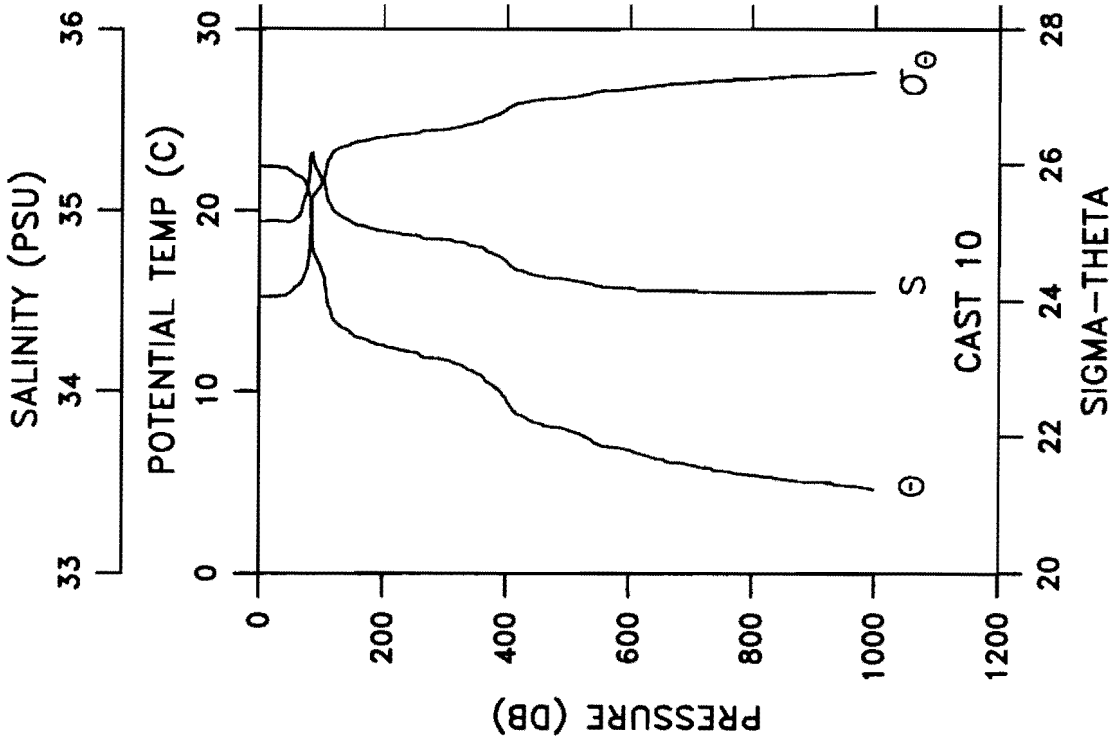


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.943 | 35.029 | 23.974 | 0.000 |
| 10 | 22.941 | 35.029 | 23.974 | 0.039 |
| 20 | 22.924 | 35.026 | 23.977 | 0.079 |
| 30 | 22.893 | 35.029 | 23.988 | 0.118 |
| 40 | 22.711 | 35.026 | 24.037 | 0.157 |
| 50 | 22.686 | 35.026 | 24.045 | 0.196 |
| 60 | 22.640 | 35.028 | 24.060 | 0.234 |
| 70 | 22.558 | 35.035 | 24.089 | 0.273 |
| 80 | 22.397 | 35.060 | 24.153 | 0.311 |
| 90 | 20.284 | 35.193 | 24.835 | 0.347 |
| 100 | 15.273 | 35.076 | 25.971 | 0.373 |
| 110 | 14.651 | 35.028 | 26.071 | 0.393 |
| 120 | 14.517 | 35.024 | 26.096 | 0.413 |
| 130 | 14.208 | 35.004 | 26.147 | 0.432 |
| 140 | 13.850 | 34.977 | 26.202 | 0.451 |
| 150 | 13.601 | 34.958 | 26.238 | 0.469 |
| 160 | 13.320 | 34.937 | 26.280 | 0.487 |
| 170 | 13.110 | 34.924 | 26.312 | 0.504 |
| 180 | 13.038 | 34.917 | 26.321 | 0.522 |
| 190 | 12.939 | 34.911 | 26.337 | 0.539 |
| 200 | 12.852 | 34.907 | 26.351 | 0.556 |
| 250 | 12.527 | 34.888 | 26.401 | 0.642 |
| 300 | 11.895 | 34.857 | 26.498 | 0.724 |
| 350 | 10.751 | 34.791 | 26.658 | 0.801 |
| 400 | 9.939 | 34.743 | 26.762 | 0.871 |
| 450 | 8.676 | 34.669 | 26.911 | 0.936 |
| 500 | 8.003 | 34.633 | 26.986 | 0.996 |
| 550 | 7.414 | 34.605 | 27.050 | 1.052 |
| 600 | 6.914 | 34.589 | 27.107 | 1.105 |
| 650 | 6.594 | 34.574 | 27.139 | 1.157 |
| 700 | 6.133 | 34.552 | 27.182 | 1.207 |
| 750 | 5.841 | 34.549 | 27.217 | 1.255 |
| 800 | 5.516 | 34.546 | 27.254 | 1.301 |
| 900 | 5.006 | 34.545 | 27.314 | 1.390 |
| 1000 | 4.539 | 34.551 | 27.371 | 1.474 |
| 1500 | 2.976 | 34.604 | 27.572 | 1.828 |
| 2000 | 2.204 | 34.642 | 27.668 | 2.111 |
| 2500 | 1.727 | 34.663 | 27.723 | 2.362 |
| 3000 | 1.428 | 34.676 | 27.755 | 2.594 |
| 3500 | 1.282 | 34.685 | 27.773 | 2.817 |
| 3732 | 1.168 | 34.692 | 27.786 | 2.920 |

CAST EP3-90-DI --010 DATE 29 NOV 90 TIME 0843 GMT
LAT 01 29.9S LONG 110 00.0W

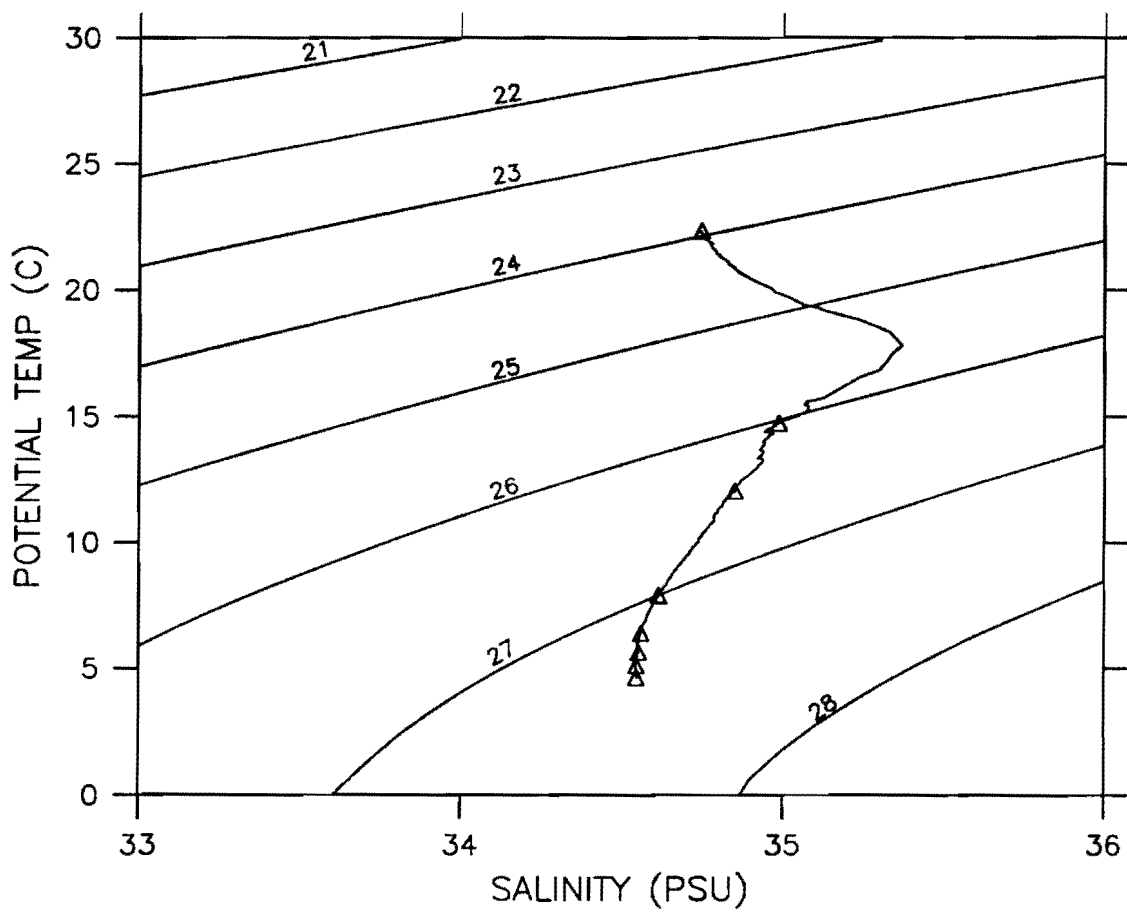


CST EP3-90-DI -010 DATE 29 NOV 90 TIME 0843 GMT
 LAT 01 29.9S LONG 110 00.0W WEATHER 1 SEA STATE 3
 BAROMETER 11 WIND DIR 125 T SPD 18 KT VISIBILITY 7
 CLOUD 8 AMOUNT 2 DRY 22.2 WET 20.8 DEPTH 3852 M

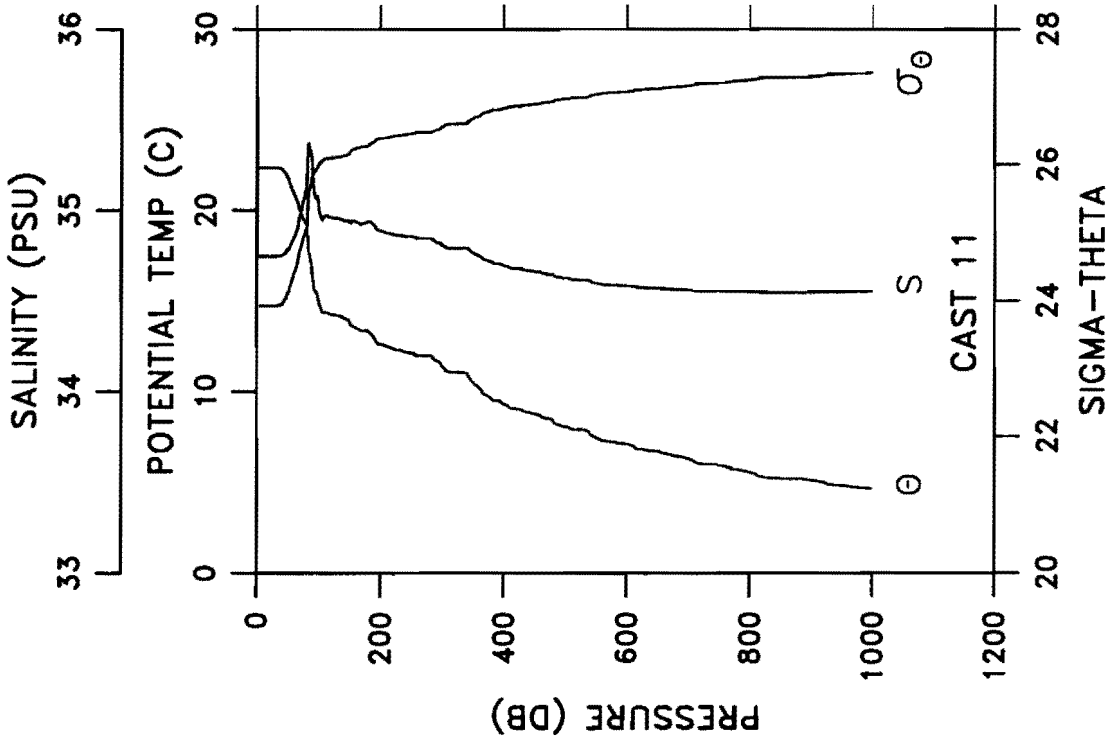


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-0 (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.407 | 34.938 | 24.057 | 0.000 |
| 10 | 22.405 | 34.938 | 24.058 | 0.038 |
| 20 | 22.399 | 34.943 | 24.064 | 0.077 |
| 30 | 22.371 | 34.941 | 24.070 | 0.115 |
| 40 | 22.340 | 34.939 | 24.077 | 0.154 |
| 50 | 22.178 | 34.936 | 24.121 | 0.192 |
| 60 | 21.899 | 34.962 | 24.219 | 0.230 |
| 70 | 21.744 | 35.042 | 24.323 | 0.267 |
| 80 | 20.807 | 35.192 | 24.694 | 0.302 |
| 90 | 17.450 | 35.232 | 25.590 | 0.328 |
| 100 | 16.629 | 35.160 | 25.725 | 0.352 |
| 110 | 14.702 | 35.048 | 26.075 | 0.373 |
| 120 | 13.887 | 34.992 | 26.205 | 0.392 |
| 130 | 13.592 | 34.969 | 26.249 | 0.411 |
| 140 | 13.399 | 34.950 | 26.274 | 0.428 |
| 150 | 13.111 | 34.931 | 26.318 | 0.446 |
| 160 | 12.936 | 34.917 | 26.342 | 0.463 |
| 170 | 12.866 | 34.912 | 26.352 | 0.480 |
| 180 | 12.691 | 34.900 | 26.377 | 0.497 |
| 190 | 12.562 | 34.890 | 26.395 | 0.514 |
| 200 | 12.521 | 34.887 | 26.401 | 0.531 |
| 250 | 12.143 | 34.863 | 26.456 | 0.613 |
| 300 | 11.725 | 34.839 | 26.517 | 0.693 |
| 350 | 11.025 | 34.799 | 26.615 | 0.771 |
| 400 | 9.512 | 34.721 | 26.816 | 0.842 |
| 450 | 8.244 | 34.639 | 26.954 | 0.903 |
| 500 | 7.867 | 34.618 | 26.994 | 0.961 |
| 550 | 7.076 | 34.583 | 27.080 | 1.016 |
| 600 | 6.757 | 34.571 | 27.115 | 1.069 |
| 650 | 6.262 | 34.558 | 27.170 | 1.119 |
| 700 | 5.943 | 34.555 | 27.208 | 1.168 |
| 750 | 5.628 | 34.548 | 27.242 | 1.214 |
| 800 | 5.384 | 34.544 | 27.269 | 1.260 |
| 900 | 5.007 | 34.548 | 27.316 | 1.347 |
| 1000 | 4.590 | 34.549 | 27.364 | 1.431 |
| 1008 | 4.554 | 34.550 | 27.369 | 1.438 |

CAST EP3-90-DI -011 DATE 29 NOV 90 TIME 1418 GMT
LAT 00 30.8S LONG 110 00.3W

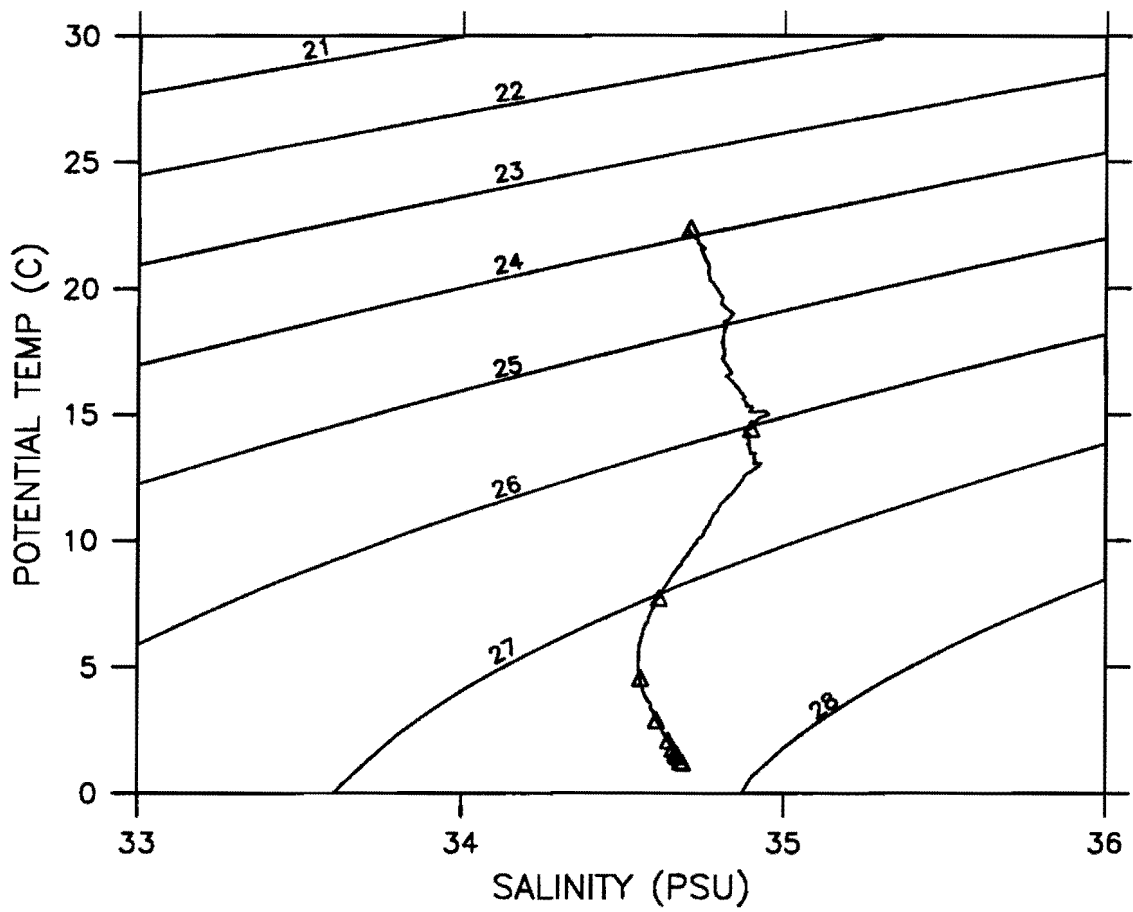


CAST EP3-90-01 -011 DATE 29 NOV 90 TIME 1418 GMT
 LAT 00 30.8S LONG 110 00.5W WEATHER 0 SEA STATE 3
 BAROMETER 13 WIND DIR 130 T SPD 17 KT VISIBILITY 8
 CLOUD 8 AMOUNT 1 DRY 22.3 WET 21.0 DEPTH 3665 M

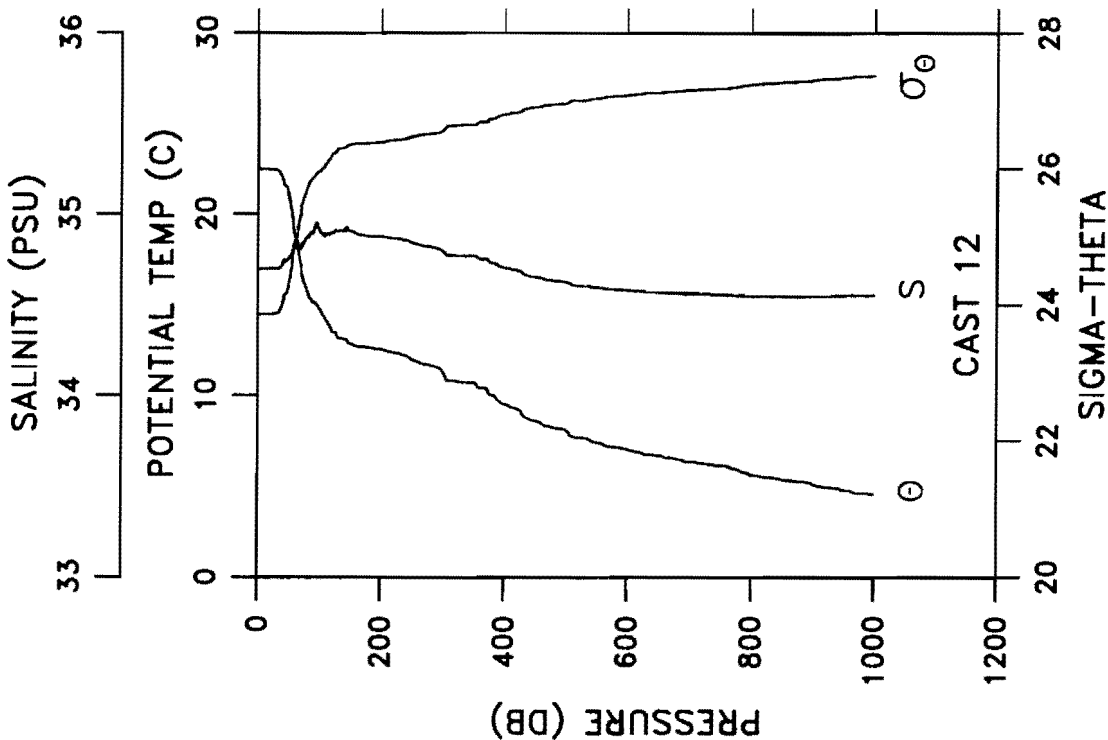


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.361 | 34.745 | 23.924 | 0.000 |
| 10 | 22.359 | 34.745 | 23.925 | 0.040 |
| 20 | 22.358 | 34.745 | 23.925 | 0.080 |
| 30 | 22.354 | 34.746 | 23.927 | 0.119 |
| 40 | 22.281 | 34.750 | 23.951 | 0.159 |
| 50 | 21.796 | 34.779 | 24.109 | 0.198 |
| 60 | 20.885 | 34.852 | 24.414 | 0.235 |
| 70 | 19.930 | 34.975 | 24.762 | 0.269 |
| 80 | 19.208 | 35.122 | 25.063 | 0.299 |
| 90 | 16.156 | 35.181 | 25.852 | 0.323 |
| 100 | 14.832 | 34.989 | 26.009 | 0.344 |
| 110 | 14.349 | 34.968 | 26.089 | 0.364 |
| 120 | 14.255 | 34.961 | 26.103 | 0.383 |
| 130 | 14.196 | 34.957 | 26.113 | 0.402 |
| 140 | 14.056 | 34.944 | 26.133 | 0.422 |
| 150 | 13.733 | 34.932 | 26.191 | 0.441 |
| 160 | 13.488 | 34.936 | 26.245 | 0.459 |
| 170 | 13.333 | 34.925 | 26.268 | 0.477 |
| 180 | 13.279 | 34.939 | 26.290 | 0.495 |
| 190 | 12.916 | 34.916 | 26.345 | 0.512 |
| 200 | 12.587 | 34.887 | 26.388 | 0.529 |
| 250 | 12.121 | 34.855 | 26.454 | 0.612 |
| 300 | 11.377 | 34.806 | 26.556 | 0.693 |
| 350 | 10.511 | 34.765 | 26.680 | 0.768 |
| 400 | 9.294 | 34.693 | 26.830 | 0.835 |
| 450 | 8.754 | 34.661 | 26.892 | 0.898 |
| 500 | 8.052 | 34.625 | 26.972 | 0.959 |
| 550 | 7.434 | 34.598 | 27.041 | 1.016 |
| 600 | 7.099 | 34.584 | 27.077 | 1.070 |
| 650 | 6.676 | 34.569 | 27.124 | 1.123 |
| 700 | 6.281 | 34.559 | 27.169 | 1.173 |
| 750 | 5.911 | 34.558 | 27.213 | 1.221 |
| 800 | 5.544 | 34.551 | 27.255 | 1.268 |
| 900 | 5.106 | 34.547 | 27.304 | 1.356 |
| 1000 | 4.644 | 34.552 | 27.360 | 1.440 |
| 1009 | 4.642 | 34.552 | 27.361 | 1.448 |

CAST EP3-90-DI -012 DATE 30 NOV 90 TIME 0107 GMT
LAT 00 00.5S LONG 110 03.6W

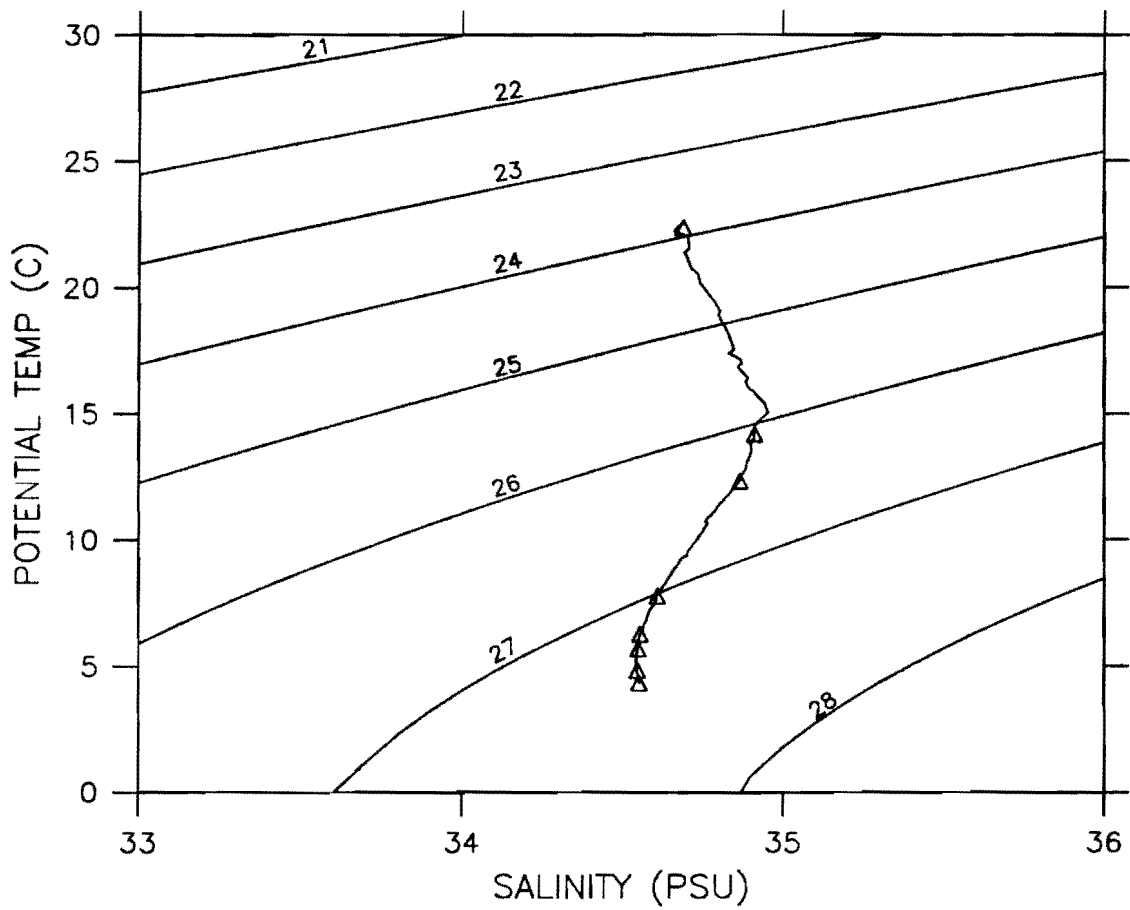


CAST EP3-90-D1 -012 DATE 30 NOV 90 TIME 0107 GMT
 LAT 00 00.5S LONG 110 03.6W WEATHER 2 SEA STATE 3
 BAROMETER 10 WIND DIR 120 T SPD 16 KT VISIBILITY 7
 CLOUD 7 AMOUNT 8 DRY 22.3 WET 20.3 DEPTH 3765 M

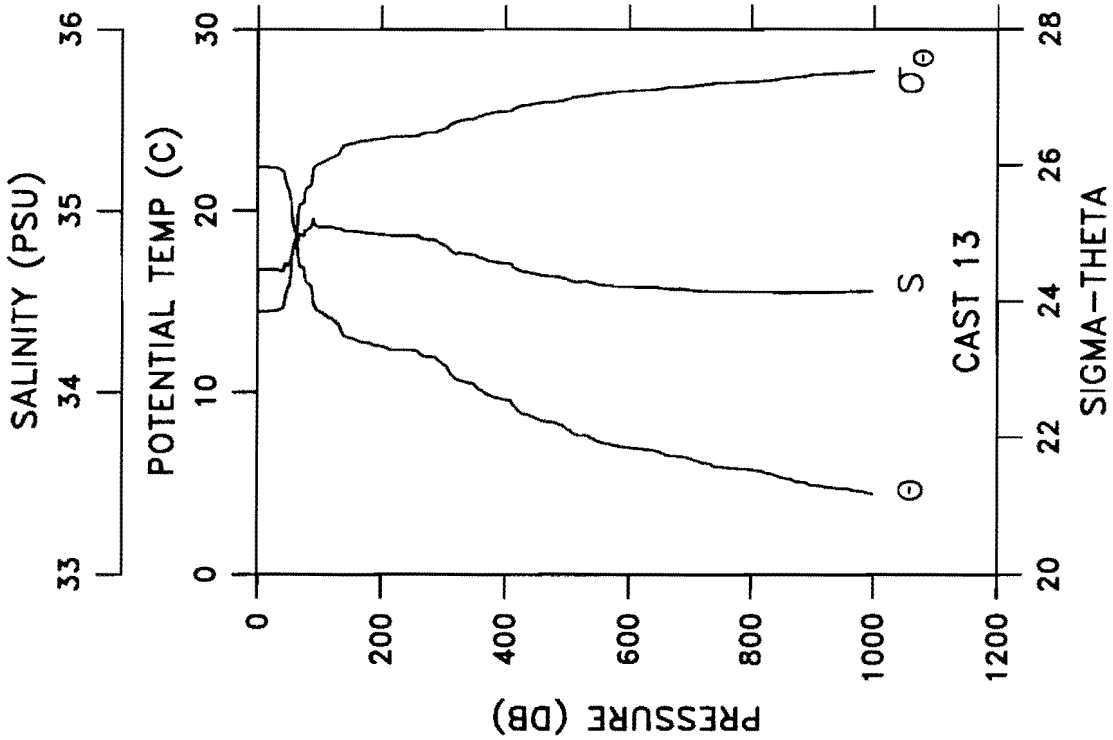


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.475 | 34.700 | 23.858 | 0.000 |
| 10 | 22.473 | 34.700 | 23.858 | 0.040 |
| 20 | 22.459 | 34.701 | 23.863 | 0.081 |
| 30 | 22.420 | 34.701 | 23.874 | 0.121 |
| 40 | 21.891 | 34.733 | 24.047 | 0.161 |
| 50 | 20.971 | 34.763 | 24.323 | 0.199 |
| 60 | 18.740 | 34.824 | 24.954 | 0.232 |
| 70 | 16.656 | 34.837 | 25.471 | 0.260 |
| 80 | 15.690 | 34.879 | 25.725 | 0.284 |
| 90 | 15.111 | 34.904 | 25.874 | 0.306 |
| 100 | 14.729 | 34.909 | 25.961 | 0.327 |
| 110 | 14.147 | 34.892 | 26.074 | 0.347 |
| 120 | 13.470 | 34.894 | 26.216 | 0.366 |
| 130 | 13.139 | 34.907 | 26.294 | 0.385 |
| 140 | 13.065 | 34.905 | 26.307 | 0.402 |
| 150 | 12.841 | 34.906 | 26.353 | 0.419 |
| 160 | 12.695 | 34.890 | 26.369 | 0.436 |
| 170 | 12.667 | 34.884 | 26.370 | 0.453 |
| 180 | 12.616 | 34.878 | 26.376 | 0.470 |
| 190 | 12.572 | 34.876 | 26.382 | 0.487 |
| 200 | 12.537 | 34.876 | 26.389 | 0.504 |
| 250 | 11.959 | 34.843 | 26.475 | 0.587 |
| 300 | 11.273 | 34.797 | 26.568 | 0.666 |
| 350 | 10.700 | 34.769 | 26.650 | 0.739 |
| 400 | 9.532 | 34.705 | 26.801 | 0.809 |
| 450 | 8.625 | 34.655 | 26.908 | 0.873 |
| 500 | 8.120 | 34.628 | 26.964 | 0.933 |
| 550 | 7.413 | 34.596 | 27.043 | 0.989 |
| 600 | 7.039 | 34.583 | 27.085 | 1.043 |
| 650 | 6.690 | 34.571 | 27.123 | 1.096 |
| 700 | 6.323 | 34.561 | 27.164 | 1.147 |
| 750 | 6.140 | 34.558 | 27.185 | 1.196 |
| 800 | 5.612 | 34.549 | 27.245 | 1.244 |
| 900 | 5.083 | 34.549 | 27.308 | 1.334 |
| 1000 | 4.563 | 34.553 | 27.370 | 1.417 |
| 1500 | 2.907 | 34.604 | 27.577 | 1.767 |
| 2000 | 2.121 | 34.641 | 27.674 | 2.050 |
| 2500 | 1.759 | 34.658 | 27.716 | 2.300 |
| 3000 | 1.485 | 34.673 | 27.749 | 2.535 |
| 3500 | 1.267 | 34.683 | 27.773 | 2.761 |
| 3615 | 1.205 | 34.687 | 27.780 | 2.812 |

CAST EP3-90-DI -013 DATE 30 NOV 90 TIME 0613 GMT
LAT 00 30.5N LONG 109 59.9W

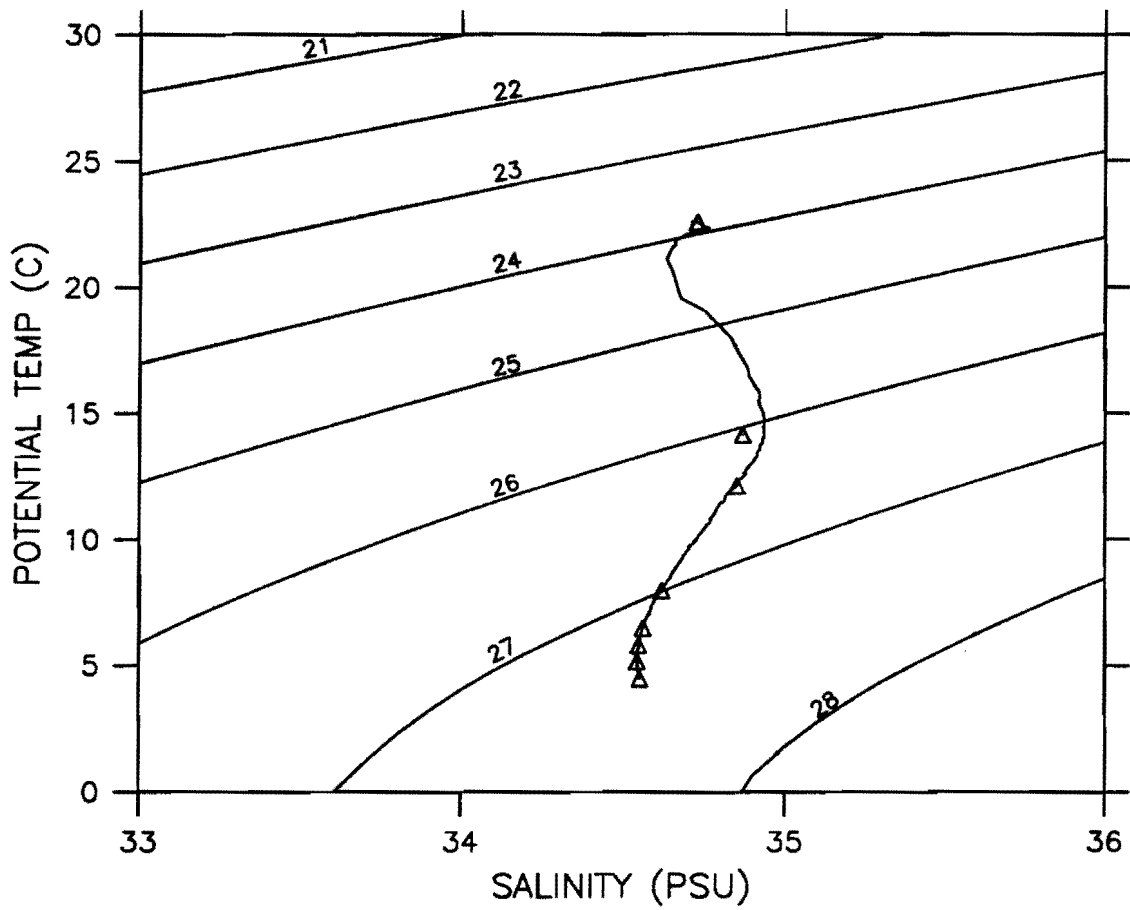


CAST EP3-90-D1 -013 DATE 30 NOV 90 TIME 0613 GMT
 LAT 00 30.5N LONG 109 59.9W WEATHER 1 SEA STATE 3
 BAROMETER 13 WIND DIR 125 T SPD 17 KT VISIBILITY 8
 CLOUD 8 AMOUNT 1 DRY 22.3 WET 20.3 DEPTH 3742 M

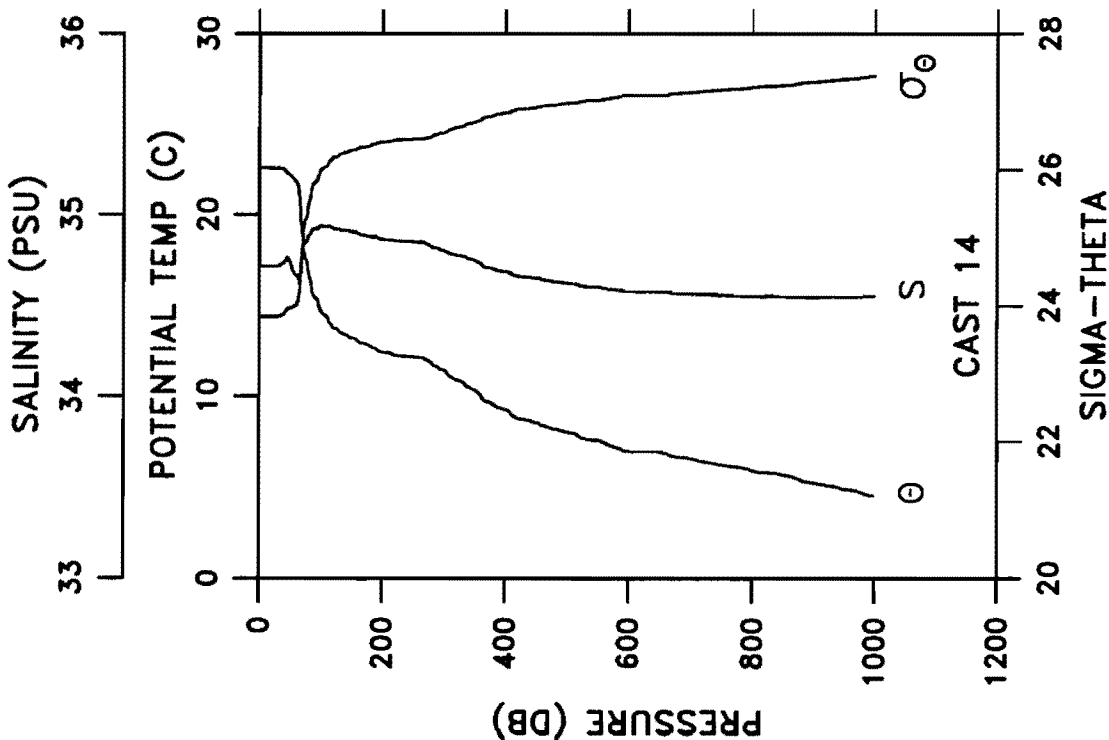


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.430 | 34.676 | 23.852 | 0.000 |
| 10 | 22.428 | 34.676 | 23.853 | 0.040 |
| 20 | 22.394 | 34.677 | 23.863 | 0.081 |
| 30 | 22.379 | 34.675 | 23.866 | 0.121 |
| 40 | 22.225 | 34.665 | 23.902 | 0.162 |
| 50 | 21.181 | 34.704 | 24.221 | 0.200 |
| 60 | 18.890 | 34.798 | 24.896 | 0.234 |
| 70 | 16.895 | 34.862 | 25.434 | 0.261 |
| 80 | 15.995 | 34.896 | 25.670 | 0.286 |
| 90 | 14.841 | 34.936 | 25.958 | 0.308 |
| 100 | 14.440 | 34.910 | 26.025 | 0.328 |
| 110 | 14.229 | 34.908 | 26.069 | 0.348 |
| 120 | 14.015 | 34.911 | 26.115 | 0.368 |
| 130 | 13.743 | 34.900 | 26.164 | 0.387 |
| 140 | 13.078 | 34.888 | 26.291 | 0.405 |
| 150 | 12.966 | 34.886 | 26.312 | 0.422 |
| 160 | 12.840 | 34.884 | 26.336 | 0.440 |
| 170 | 12.719 | 34.880 | 26.357 | 0.457 |
| 180 | 12.683 | 34.877 | 26.362 | 0.474 |
| 190 | 12.549 | 34.872 | 26.384 | 0.491 |
| 200 | 12.521 | 34.870 | 26.388 | 0.508 |
| 250 | 12.302 | 34.863 | 26.425 | 0.591 |
| 300 | 11.498 | 34.812 | 26.539 | 0.672 |
| 350 | 10.429 | 34.757 | 26.688 | 0.746 |
| 400 | 9.587 | 34.710 | 26.795 | 0.814 |
| 450 | 8.566 | 34.652 | 26.914 | 0.877 |
| 500 | 7.953 | 34.622 | 26.984 | 0.937 |
| 550 | 7.291 | 34.593 | 27.058 | 0.993 |
| 600 | 6.937 | 34.581 | 27.098 | 1.046 |
| 650 | 6.692 | 34.572 | 27.124 | 1.099 |
| 700 | 6.347 | 34.562 | 27.162 | 1.149 |
| 750 | 5.861 | 34.553 | 27.217 | 1.198 |
| 800 | 5.729 | 34.553 | 27.234 | 1.245 |
| 900 | 4.876 | 34.550 | 27.333 | 1.334 |
| 1000 | 4.411 | 34.556 | 27.389 | 1.416 |
| 1049 | 4.341 | 34.557 | 27.398 | 1.455 |

CAST EP3-90-DI -014 DATE 30 NOV 90 TIME 1013 GMT
LAT 01 00.2N LONG 110 00.4W

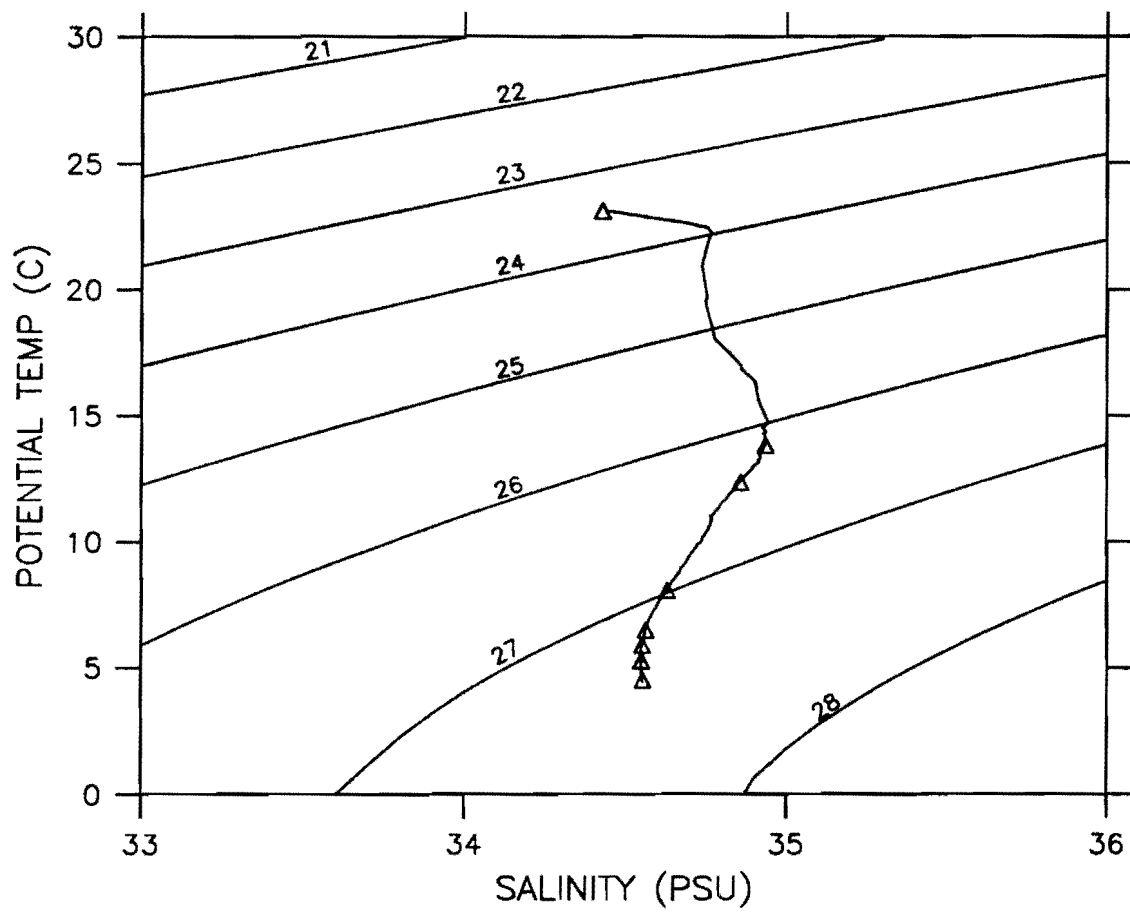


CAST EP3-90-D1 -014 DATE 30 NOV 90 TIME 1013 GMT
 LAT 01 00.2N LONG 110 00.4W WEATHER 6 SEA STATE 4
 BAROMETER 12 WIND DIR 120 T SPD 14 KT VISIBILITY 7
 CLOUD 8 AMOUNT 8 DRY 22.0 WET 21.0 DEPTH 3819 M

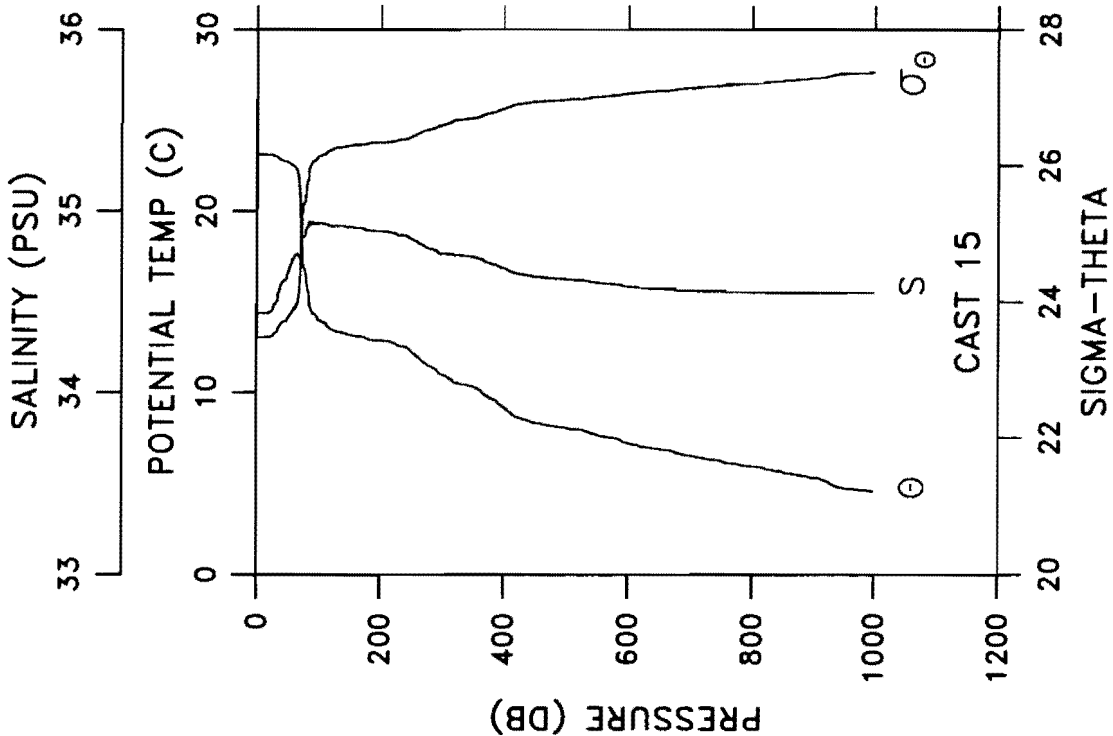


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-0 (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 22.587 | 34.716 | 23.838 | 0.000 |
| 10 | 22.585 | 34.716 | 23.838 | 0.041 |
| 20 | 22.580 | 34.715 | 23.839 | 0.081 |
| 30 | 22.581 | 34.715 | 23.839 | 0.122 |
| 40 | 22.493 | 34.740 | 23.883 | 0.162 |
| 50 | 22.155 | 34.727 | 23.968 | 0.202 |
| 60 | 21.719 | 34.867 | 24.044 | 0.241 |
| 70 | 18.018 | 34.833 | 25.141 | 0.276 |
| 80 | 16.489 | 34.890 | 25.551 | 0.303 |
| 90 | 15.376 | 34.923 | 25.830 | 0.326 |
| 100 | 14.638 | 34.938 | 26.005 | 0.347 |
| 110 | 14.345 | 34.934 | 26.064 | 0.367 |
| 120 | 13.752 | 34.923 | 26.180 | 0.386 |
| 130 | 13.495 | 34.915 | 26.227 | 0.405 |
| 140 | 13.363 | 34.915 | 26.254 | 0.423 |
| 150 | 13.192 | 34.906 | 26.282 | 0.441 |
| 160 | 13.004 | 34.896 | 26.312 | 0.458 |
| 170 | 12.865 | 34.889 | 26.334 | 0.475 |
| 180 | 12.727 | 34.879 | 26.354 | 0.493 |
| 190 | 12.583 | 34.879 | 26.366 | 0.510 |
| 200 | 12.387 | 34.864 | 26.408 | 0.526 |
| 250 | 12.147 | 34.853 | 26.447 | 0.609 |
| 300 | 11.447 | 34.804 | 26.542 | 0.689 |
| 350 | 10.345 | 34.749 | 26.697 | 0.763 |
| 400 | 9.256 | 34.888 | 26.833 | 0.830 |
| 450 | 8.558 | 34.852 | 26.916 | 0.893 |
| 500 | 8.017 | 34.824 | 26.976 | 0.952 |
| 550 | 7.596 | 34.804 | 27.023 | 1.009 |
| 600 | 6.987 | 34.580 | 27.090 | 1.084 |
| 650 | 6.935 | 34.579 | 27.096 | 1.117 |
| 700 | 6.560 | 34.566 | 27.137 | 1.169 |
| 750 | 6.233 | 34.559 | 27.174 | 1.219 |
| 800 | 5.883 | 34.554 | 27.215 | 1.268 |
| 900 | 5.229 | 34.548 | 27.290 | 1.361 |
| 1000 | 4.506 | 34.554 | 27.377 | 1.446 |
| 1010 | 4.489 | 34.555 | 27.360 | 1.454 |

CAST EP3-90-DI -015 DATE 01 DEC 90 TIME 0706 GMT
LAT 01 29.8N LONG 110 00.6W

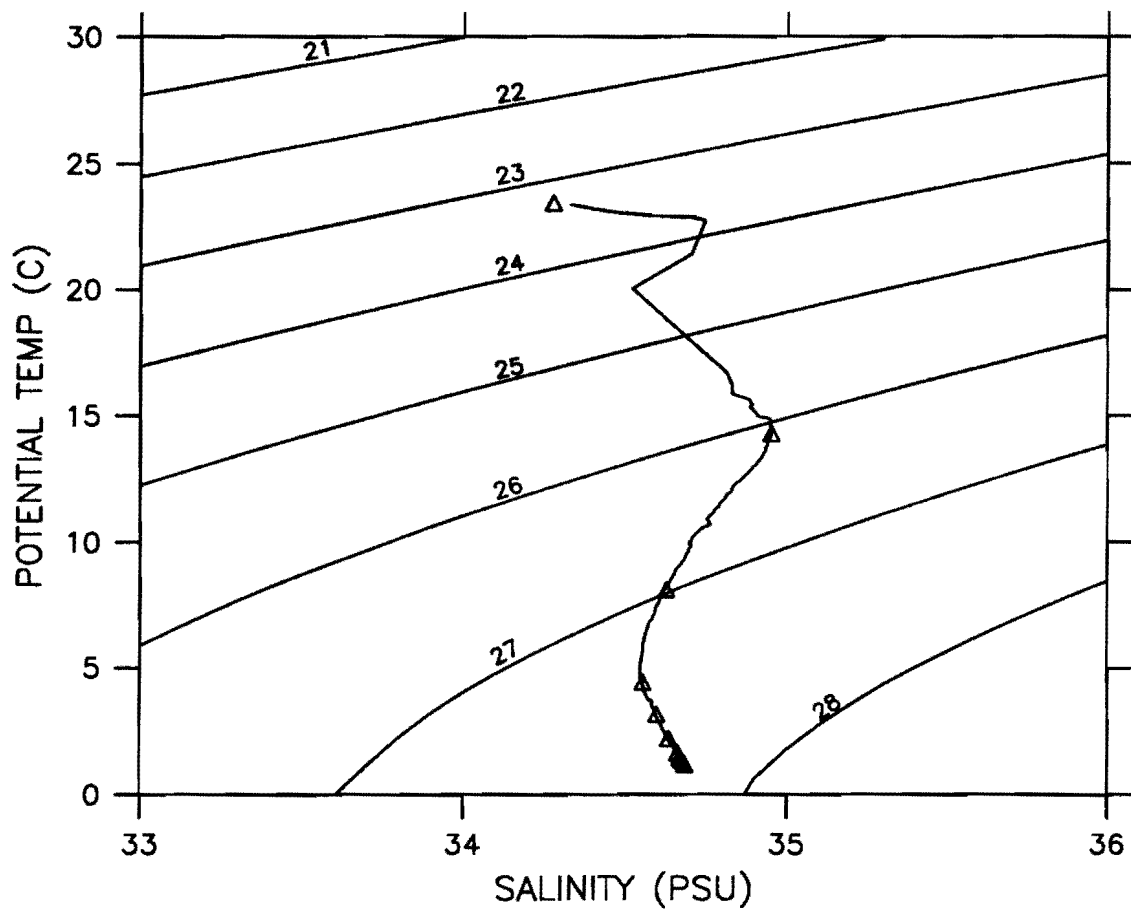


CAST EP3-90-DI -015 DATE 01 DEC 90 TIME 0706 GMT
 LAT 01 29.8N LONG 110 00.6W WEATHER 1 SEA STATE 3
 BAROMETER 13 WIND DIR 165 T SPD 16 KT VISIBILITY 8
 CLOUD 8 AMOUNT 6 DRY 22.5 WET 21.2 DEPTH 3764 M

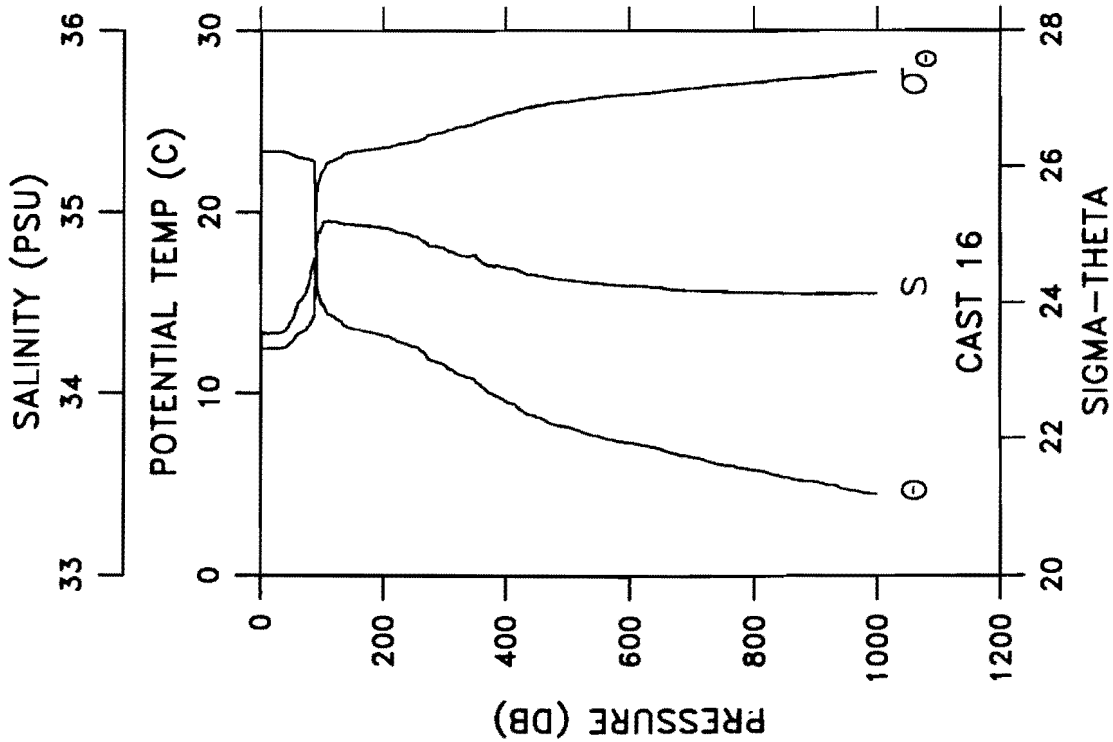


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.123 | 34.438 | 23.474 | 0.000 |
| 10 | 23.121 | 34.438 | 23.474 | 0.044 |
| 20 | 23.124 | 34.440 | 23.475 | 0.088 |
| 30 | 23.034 | 34.487 | 23.536 | 0.132 |
| 40 | 22.807 | 34.600 | 23.687 | 0.175 |
| 50 | 22.707 | 34.658 | 23.760 | 0.217 |
| 60 | 22.450 | 34.755 | 23.906 | 0.258 |
| 70 | 19.694 | 34.753 | 24.655 | 0.296 |
| 80 | 15.831 | 34.910 | 25.717 | 0.323 |
| 90 | 14.348 | 34.937 | 26.066 | 0.344 |
| 100 | 13.988 | 34.934 | 26.139 | 0.363 |
| 110 | 13.819 | 34.930 | 26.171 | 0.382 |
| 120 | 13.469 | 34.919 | 26.236 | 0.400 |
| 130 | 13.326 | 34.919 | 26.265 | 0.418 |
| 140 | 13.278 | 34.918 | 26.274 | 0.436 |
| 150 | 13.161 | 34.915 | 26.295 | 0.454 |
| 160 | 13.073 | 34.907 | 26.307 | 0.471 |
| 170 | 13.056 | 34.906 | 26.309 | 0.489 |
| 180 | 12.939 | 34.895 | 26.325 | 0.506 |
| 190 | 12.858 | 34.892 | 26.338 | 0.524 |
| 200 | 12.836 | 34.890 | 26.341 | 0.541 |
| 250 | 12.258 | 34.848 | 26.422 | 0.626 |
| 300 | 10.984 | 34.765 | 26.596 | 0.705 |
| 350 | 10.337 | 34.749 | 26.698 | 0.778 |
| 400 | 9.208 | 34.687 | 26.840 | 0.845 |
| 450 | 8.327 | 34.640 | 26.942 | 0.907 |
| 500 | 8.069 | 34.627 | 26.971 | 0.966 |
| 550 | 7.651 | 34.607 | 27.017 | 1.023 |
| 600 | 7.209 | 34.586 | 27.064 | 1.079 |
| 650 | 6.874 | 34.573 | 27.100 | 1.133 |
| 700 | 6.503 | 34.562 | 27.141 | 1.185 |
| 750 | 6.206 | 34.560 | 27.178 | 1.235 |
| 800 | 5.916 | 34.553 | 27.210 | 1.284 |
| 900 | 5.286 | 34.550 | 27.285 | 1.377 |
| 1000 | 4.558 | 34.552 | 27.370 | 1.461 |
| 1029 | 4.428 | 34.555 | 27.386 | 1.484 |

CAST EP3-90-DI -016 DATE 01 DEC 90 TIME 1253 GMT
LAT 01 58.6N LONG 110 09.4W

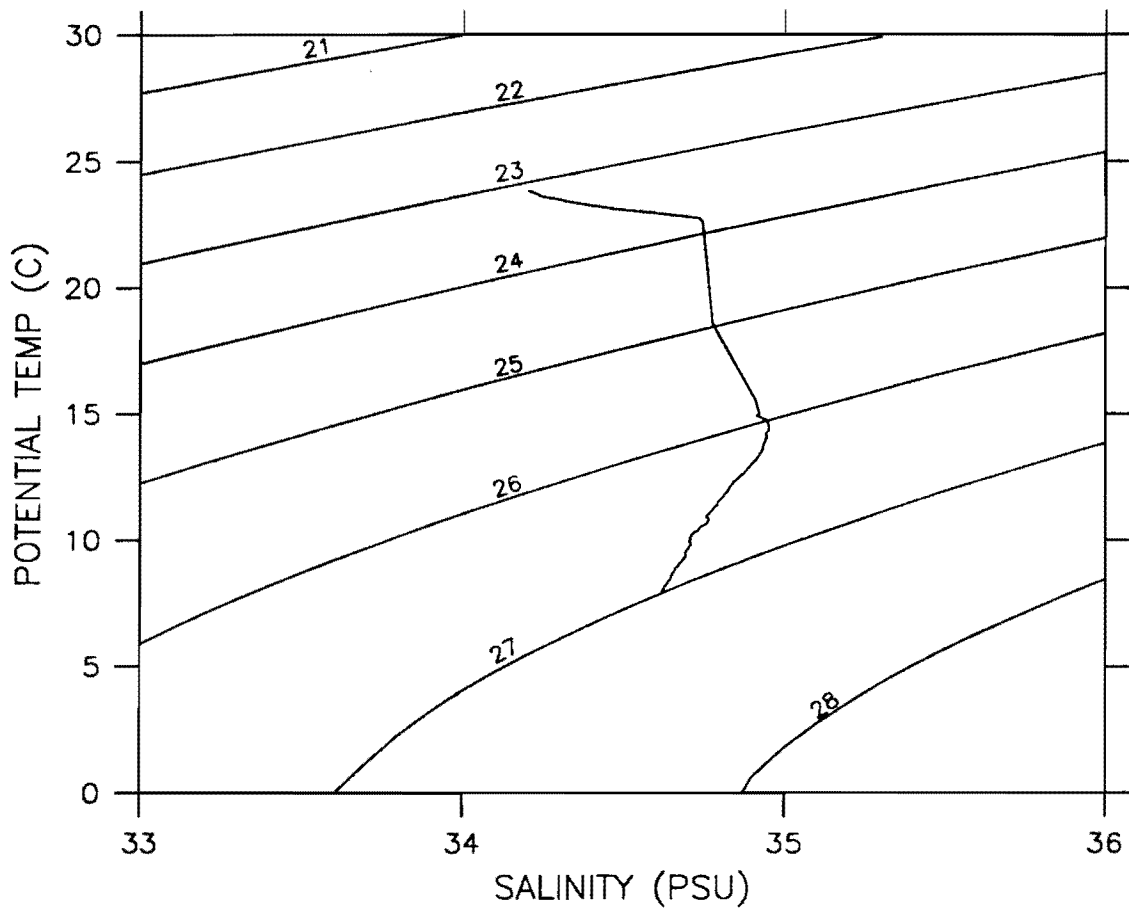


CAST EP3-90-DI -016 DATE 01 DEC 90 TIME 1253 GMT
 LAT 01 58.6N LONG 110 09.4W WEATHER 1 SEA STATE 3
 BAROMETER 11 WIND DIR 140 T SPD 11 KT VISIBILITY 7
 CLOUD 8 AMOUNT 5 DRY 22.3 WET 20.1 DEPTH 3838 M

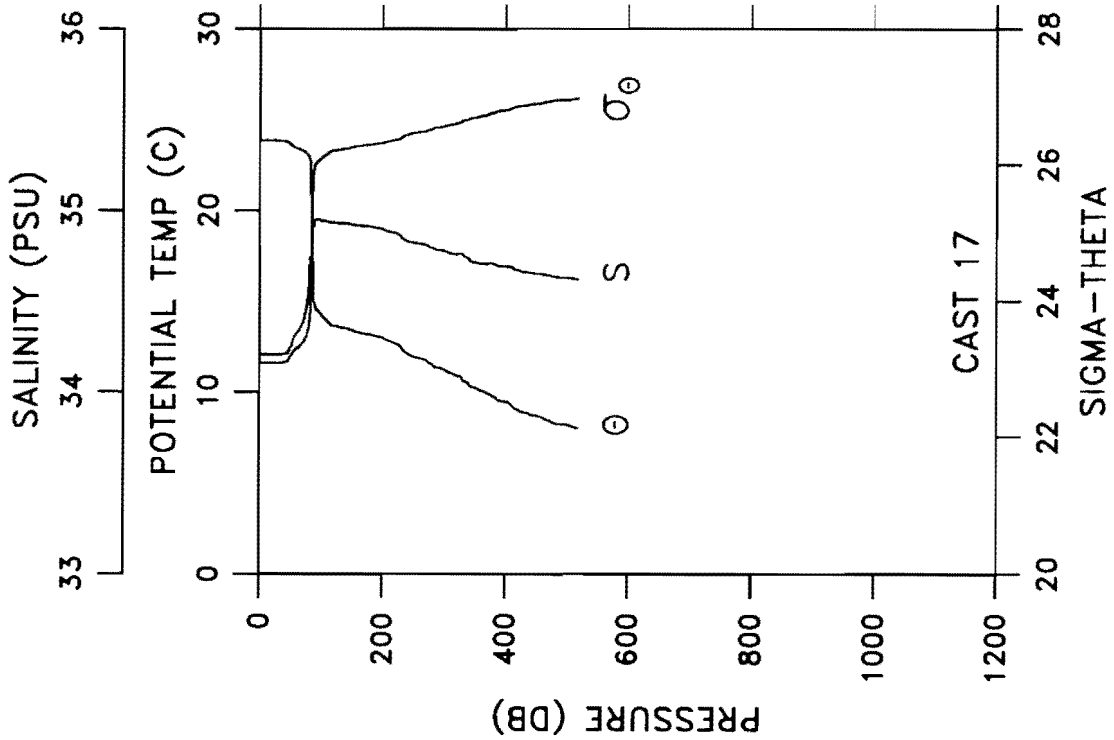


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.360 | 34.330 | 23.323 | 0.000 |
| 10 | 23.358 | 34.330 | 23.324 | 0.045 |
| 20 | 23.359 | 34.332 | 23.325 | 0.091 |
| 30 | 23.357 | 34.334 | 23.327 | 0.137 |
| 40 | 23.328 | 34.346 | 23.345 | 0.182 |
| 50 | 23.187 | 34.404 | 23.429 | 0.227 |
| 60 | 23.036 | 34.498 | 23.544 | 0.271 |
| 70 | 22.991 | 34.542 | 23.590 | 0.315 |
| 80 | 22.905 | 34.640 | 23.690 | 0.358 |
| 90 | 16.240 | 34.831 | 25.563 | 0.396 |
| 100 | 14.915 | 34.933 | 25.940 | 0.418 |
| 110 | 14.368 | 34.952 | 26.073 | 0.438 |
| 120 | 14.203 | 34.951 | 26.107 | 0.457 |
| 130 | 13.985 | 34.939 | 26.144 | 0.477 |
| 140 | 13.689 | 34.935 | 26.203 | 0.495 |
| 150 | 13.583 | 34.931 | 26.221 | 0.514 |
| 160 | 13.525 | 34.929 | 26.232 | 0.532 |
| 170 | 13.429 | 34.925 | 26.248 | 0.550 |
| 180 | 13.385 | 34.923 | 26.256 | 0.568 |
| 190 | 13.287 | 34.917 | 26.271 | 0.586 |
| 200 | 13.218 | 34.914 | 26.283 | 0.604 |
| 250 | 12.582 | 34.867 | 26.374 | 0.692 |
| 300 | 11.593 | 34.801 | 26.512 | 0.774 |
| 350 | 10.712 | 34.767 | 26.646 | 0.850 |
| 400 | 9.589 | 34.694 | 26.786 | 0.920 |
| 450 | 8.690 | 34.652 | 26.895 | 0.985 |
| 500 | 8.163 | 34.627 | 26.957 | 1.045 |
| 550 | 7.657 | 34.609 | 27.018 | 1.103 |
| 600 | 7.310 | 34.595 | 27.057 | 1.158 |
| 650 | 6.982 | 34.586 | 27.096 | 1.212 |
| 700 | 6.493 | 34.569 | 27.148 | 1.264 |
| 750 | 6.082 | 34.561 | 27.196 | 1.314 |
| 800 | 5.776 | 34.558 | 27.232 | 1.362 |
| 900 | 5.139 | 34.549 | 27.302 | 1.452 |
| 1000 | 4.458 | 34.554 | 27.383 | 1.535 |
| 1500 | 3.124 | 34.600 | 27.554 | 1.893 |
| 2000 | 2.193 | 34.638 | 27.666 | 2.183 |
| 2500 | 1.642 | 34.664 | 27.730 | 2.429 |
| 3000 | 1.470 | 34.671 | 27.748 | 2.660 |
| 3500 | 1.246 | 34.684 | 27.775 | 2.886 |
| 3643 | 1.190 | 34.687 | 27.781 | 2.949 |

CAST EP3-90-DI -017 DATE 02 DEC 90 TIME 0515 GMT
LAT 02 00.7N LONG 110 09.0W

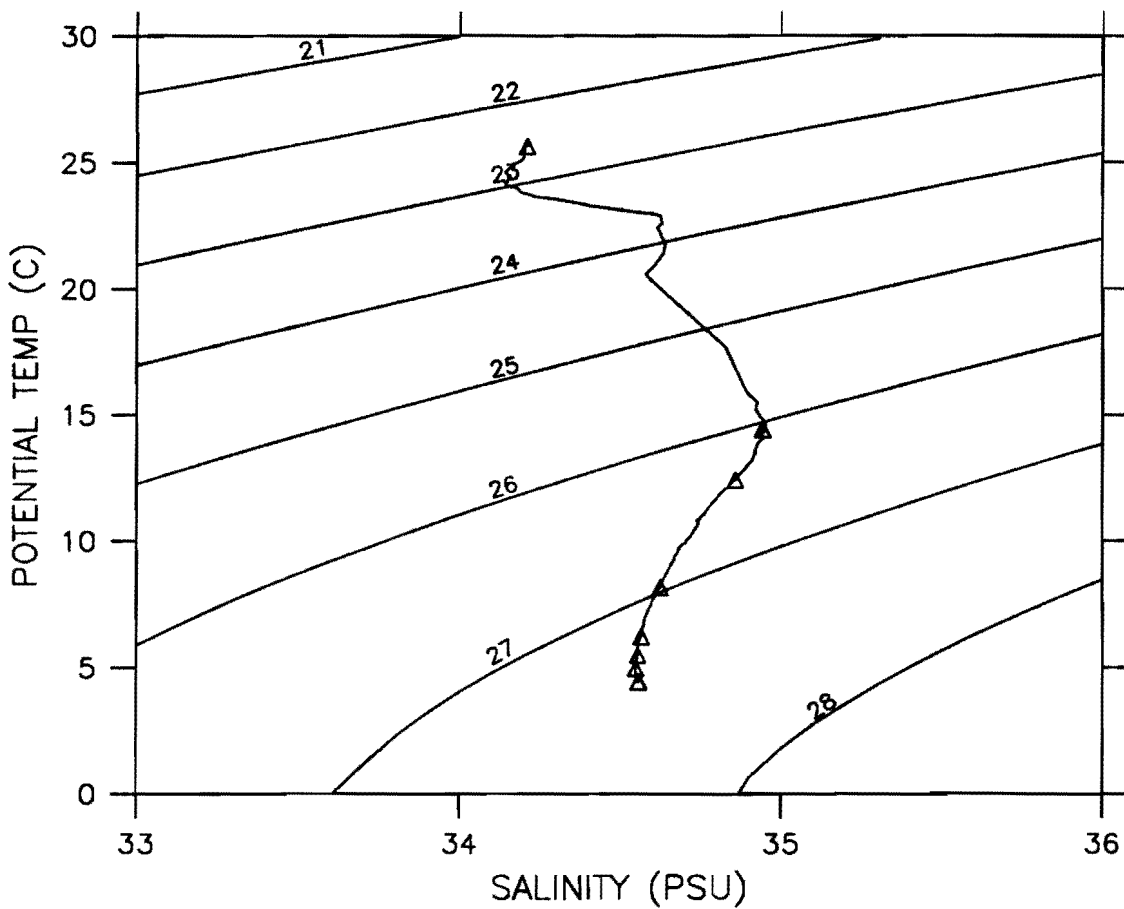


CAST EP3-90-01 -017 DATE 02 DEC 90 TIME 0515 GMT
 LAT 02 00.7N LONG 110 09.0W WEATHER 1 SEA STATE 2
 BAROMETER 14 WIND DIR 160 T SPD 12 KT VISIBILITY 8
 CLOUD 6 AMOUNT 7 DRY 23.0 WET 20.9 DEPTH 3801 M

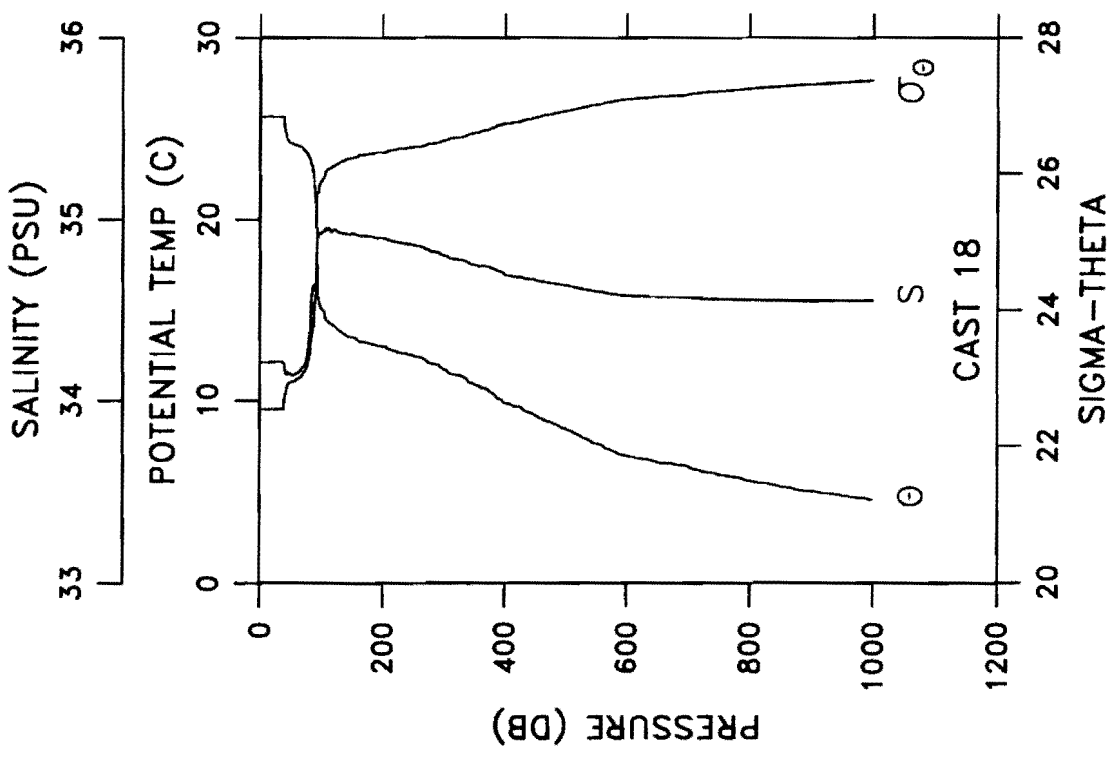


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 23.842 | 34.206 | 23.088 | 0.000 |
| 10 | 23.840 | 34.206 | 23.089 | 0.048 |
| 20 | 23.840 | 34.204 | 23.088 | 0.095 |
| 30 | 23.829 | 34.204 | 23.091 | 0.143 |
| 40 | 23.817 | 34.206 | 23.096 | 0.191 |
| 50 | 23.599 | 34.247 | 23.191 | 0.239 |
| 60 | 23.405 | 34.326 | 23.307 | 0.285 |
| 70 | 23.266 | 34.391 | 23.397 | 0.330 |
| 80 | 22.754 | 34.731 | 23.802 | 0.374 |
| 90 | 14.585 | 34.950 | 26.024 | 0.401 |
| 100 | 14.185 | 34.942 | 26.104 | 0.421 |
| 110 | 13.816 | 34.936 | 26.177 | 0.440 |
| 120 | 13.630 | 34.934 | 26.214 | 0.458 |
| 130 | 13.558 | 34.931 | 26.227 | 0.476 |
| 140 | 13.484 | 34.928 | 26.240 | 0.494 |
| 150 | 13.381 | 34.922 | 26.256 | 0.513 |
| 160 | 13.273 | 34.918 | 26.274 | 0.530 |
| 170 | 13.193 | 34.914 | 26.288 | 0.548 |
| 180 | 13.149 | 34.911 | 26.294 | 0.566 |
| 190 | 13.058 | 34.903 | 26.307 | 0.584 |
| 200 | 12.987 | 34.897 | 26.316 | 0.601 |
| 250 | 11.944 | 34.824 | 26.463 | 0.686 |
| 300 | 11.241 | 34.778 | 26.559 | 0.765 |
| 350 | 10.229 | 34.712 | 26.688 | 0.839 |
| 400 | 9.450 | 34.691 | 26.803 | 0.908 |
| 450 | 8.682 | 34.651 | 26.895 | 0.971 |
| 500 | 8.188 | 34.628 | 26.954 | 1.032 |
| 520 | 7.986 | 34.619 | 26.977 | 1.055 |

CAST EP3-90-DI -018 DATE 02 DEC 90 TIME 1103 GMT
LAT 03 00.0N LONG 110 00.0W

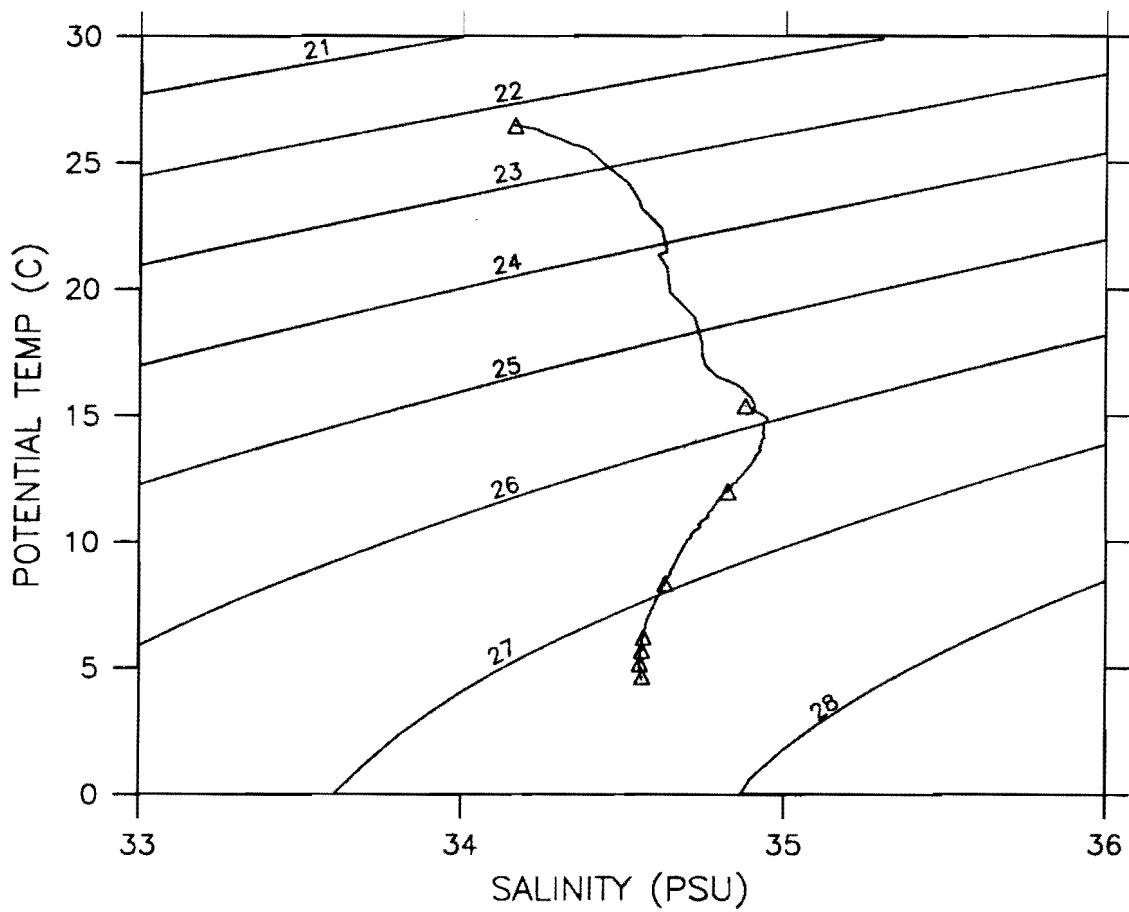


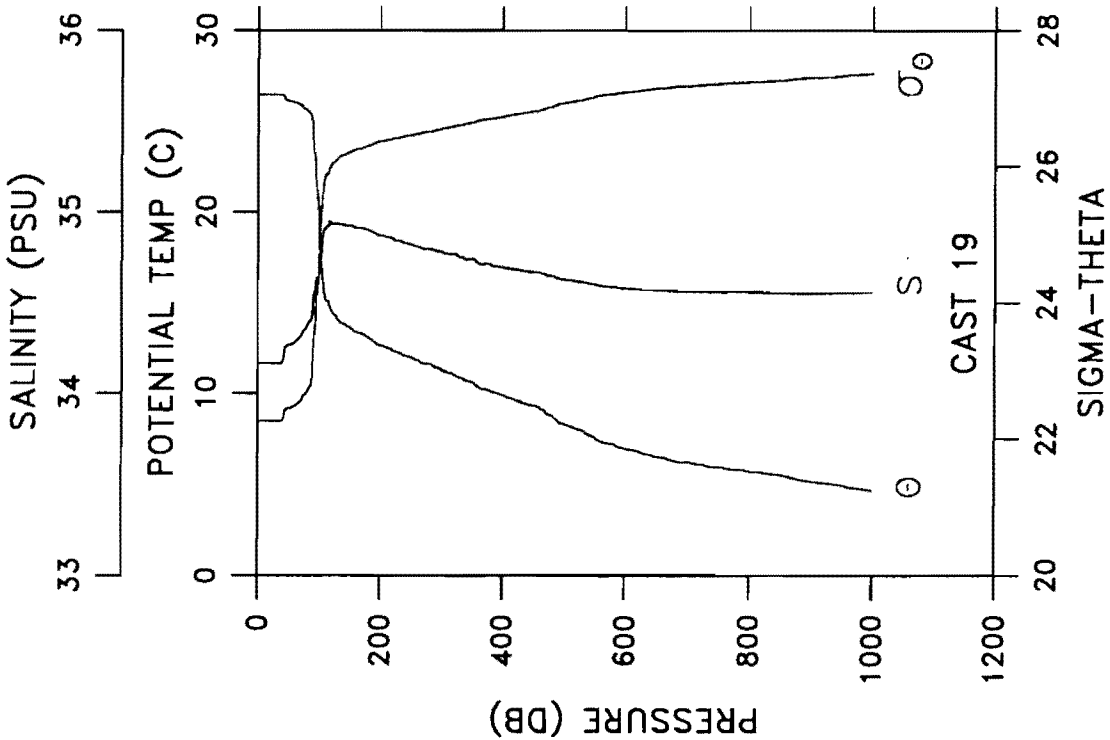
CAST EP3-90-DI -018 DATE 02 DEC 90 TIME 1103 GMT
 LAT 03 00.0N LONG 110 00.0W WEATHER 2 SEA STATE 3
 BAROMETER 10 WIND DIR 175 T SPD 15 KT VISIBILITY 6
 CLOUD 6 AMOUNT 8 DRY 23.5 WET 21.8 DEPTH 3884 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 25.678 | 34.211 | 22.540 | 0.000 |
| 10 | 25.675 | 34.211 | 22.540 | 0.053 |
| 20 | 25.675 | 34.213 | 22.542 | 0.106 |
| 30 | 25.672 | 34.213 | 22.543 | 0.159 |
| 40 | 25.141 | 34.199 | 22.695 | 0.212 |
| 50 | 24.209 | 34.146 | 22.935 | 0.262 |
| 60 | 24.074 | 34.147 | 22.976 | 0.311 |
| 70 | 23.902 | 34.184 | 23.054 | 0.360 |
| 80 | 23.448 | 34.341 | 23.306 | 0.408 |
| 90 | 21.403 | 34.638 | 24.109 | 0.451 |
| 100 | 15.103 | 34.926 | 25.893 | 0.477 |
| 110 | 14.407 | 34.954 | 26.066 | 0.498 |
| 120 | 14.168 | 34.943 | 26.108 | 0.517 |
| 130 | 13.857 | 34.927 | 26.161 | 0.536 |
| 140 | 13.598 | 34.921 | 26.210 | 0.555 |
| 150 | 13.505 | 34.922 | 26.231 | 0.573 |
| 160 | 13.301 | 34.912 | 26.265 | 0.591 |
| 170 | 13.216 | 34.910 | 26.280 | 0.609 |
| 180 | 13.133 | 34.906 | 26.294 | 0.627 |
| 190 | 13.013 | 34.898 | 26.312 | 0.644 |
| 200 | 12.990 | 34.896 | 26.315 | 0.662 |
| 250 | 12.476 | 34.861 | 26.390 | 0.748 |
| 300 | 11.729 | 34.802 | 26.487 | 0.831 |
| 350 | 10.919 | 34.751 | 26.597 | 0.909 |
| 400 | 9.857 | 34.694 | 26.738 | 0.982 |
| 450 | 9.171 | 34.666 | 26.830 | 1.050 |
| 500 | 8.426 | 34.637 | 26.924 | 1.113 |
| 550 | 7.632 | 34.603 | 27.017 | 1.172 |
| 600 | 6.953 | 34.580 | 27.095 | 1.226 |
| 650 | 6.615 | 34.576 | 27.137 | 1.278 |
| 700 | 6.394 | 34.572 | 27.163 | 1.329 |
| 750 | 5.931 | 34.560 | 27.214 | 1.378 |
| 800 | 5.580 | 34.557 | 27.256 | 1.424 |
| 900 | 5.019 | 34.551 | 27.317 | 1.513 |
| 1000 | 4.540 | 34.555 | 27.374 | 1.596 |
| 1012 | 4.458 | 34.557 | 27.385 | 1.606 |

CAST EP3-90-DI -019 DATE 02 DEC 90 TIME 1613 GMT
LAT 03 59.3N LONG 109 59.5W

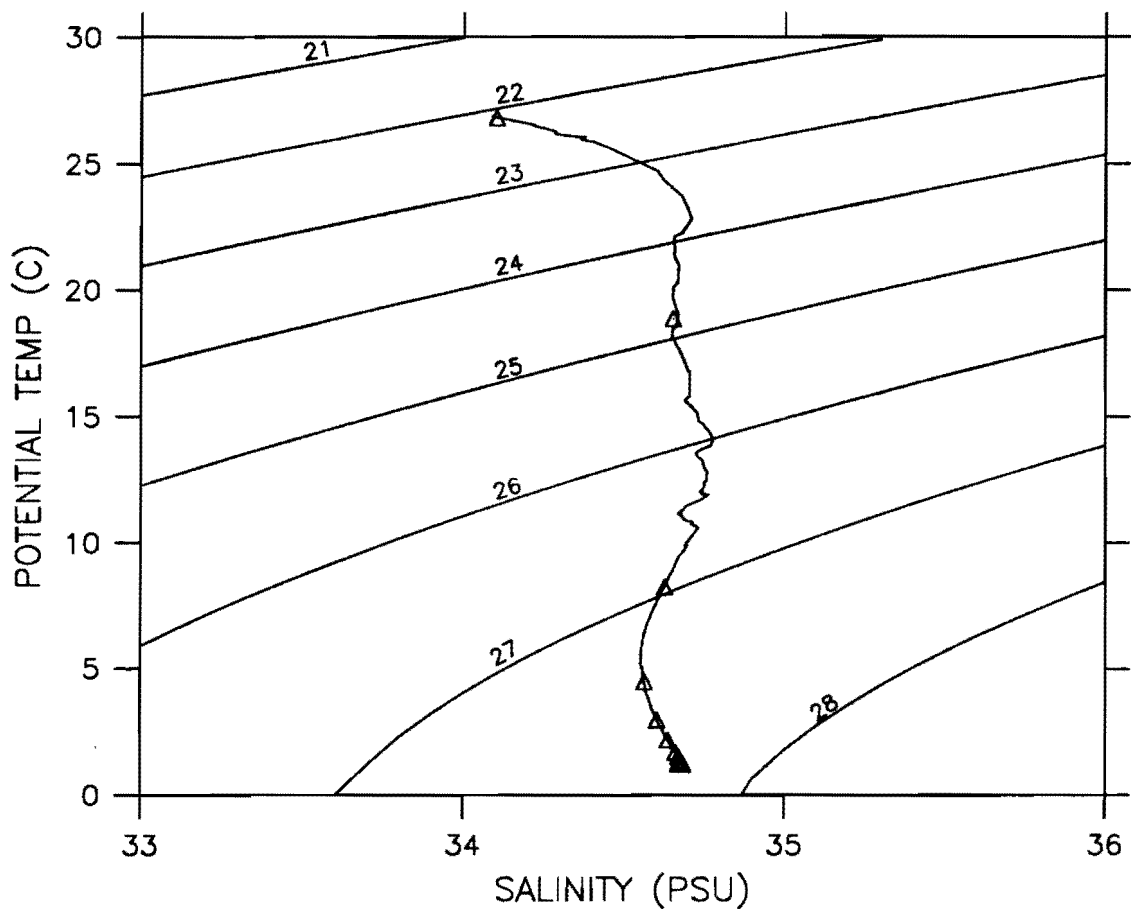




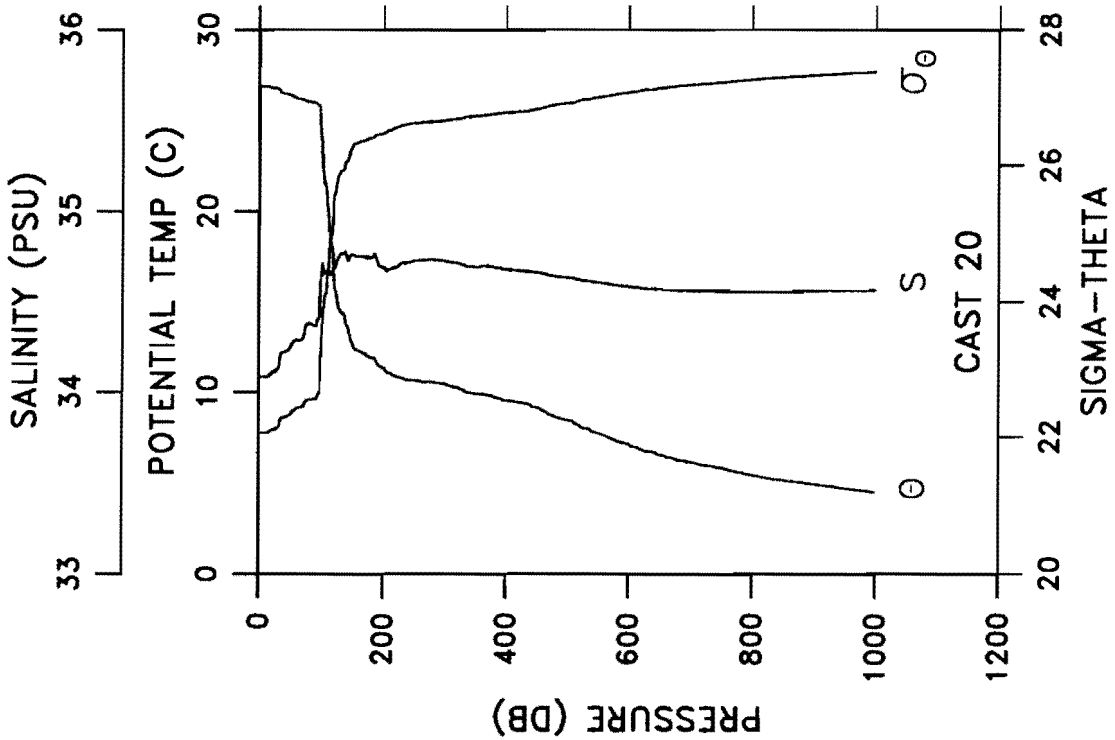
CAST EP3-90-DI -019 DATE 02 DEC 90 TIME 1613 GMT
 LAT 03 59.3N LONG 109 59.5W WEATHER 2 SEA STATE 3
 BAROMETER 13 WIND DIR 170 T SPD 18 KT VISIBILITY 7
 CLOUD 7 AMOUNT 8 DRY 25.1 WET 22.7 DEPTH 3882 M

| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-0 (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.458 | 34.165 | 22.262 | 0.000 |
| 10 | 26.455 | 34.165 | 22.263 | 0.056 |
| 20 | 26.456 | 34.164 | 22.262 | 0.111 |
| 30 | 26.455 | 34.164 | 22.263 | 0.167 |
| 40 | 26.437 | 34.179 | 22.279 | 0.223 |
| 50 | 26.097 | 34.265 | 22.451 | 0.277 |
| 60 | 26.015 | 34.283 | 22.490 | 0.331 |
| 70 | 25.840 | 34.319 | 22.571 | 0.384 |
| 80 | 25.541 | 34.384 | 22.713 | 0.437 |
| 90 | 23.522 | 34.548 | 23.441 | 0.487 |
| 100 | 17.855 | 34.747 | 25.115 | 0.525 |
| 110 | 15.113 | 34.918 | 25.884 | 0.549 |
| 120 | 14.509 | 34.938 | 26.032 | 0.570 |
| 130 | 14.054 | 34.932 | 26.124 | 0.590 |
| 140 | 13.826 | 34.928 | 26.168 | 0.608 |
| 150 | 13.639 | 34.927 | 26.207 | 0.627 |
| 160 | 13.377 | 34.913 | 26.250 | 0.645 |
| 170 | 13.263 | 34.909 | 26.270 | 0.663 |
| 180 | 13.091 | 34.901 | 26.298 | 0.681 |
| 190 | 12.833 | 34.885 | 26.338 | 0.699 |
| 200 | 12.629 | 34.870 | 26.367 | 0.716 |
| 250 | 11.963 | 34.820 | 26.457 | 0.799 |
| 300 | 11.298 | 34.779 | 26.550 | 0.879 |
| 350 | 10.600 | 34.742 | 26.647 | 0.954 |
| 400 | 9.918 | 34.696 | 26.729 | 1.025 |
| 450 | 9.321 | 34.671 | 26.809 | 1.093 |
| 500 | 8.337 | 34.630 | 26.933 | 1.157 |
| 550 | 7.562 | 34.603 | 27.024 | 1.215 |
| 600 | 6.975 | 34.581 | 27.092 | 1.269 |
| 650 | 6.533 | 34.570 | 27.144 | 1.321 |
| 700 | 6.221 | 34.563 | 27.180 | 1.371 |
| 750 | 5.957 | 34.560 | 27.211 | 1.419 |
| 800 | 5.717 | 34.561 | 27.242 | 1.467 |
| 900 | 5.161 | 34.554 | 27.303 | 1.557 |
| 1000 | 4.667 | 34.560 | 27.364 | 1.642 |
| 1027 | 4.533 | 34.561 | 27.380 | 1.664 |

CAST EP3-90-DI -020 DATE 03 DEC 90 TIME 0019 GMT
LAT 05 01.1N LONG 110 01.0W

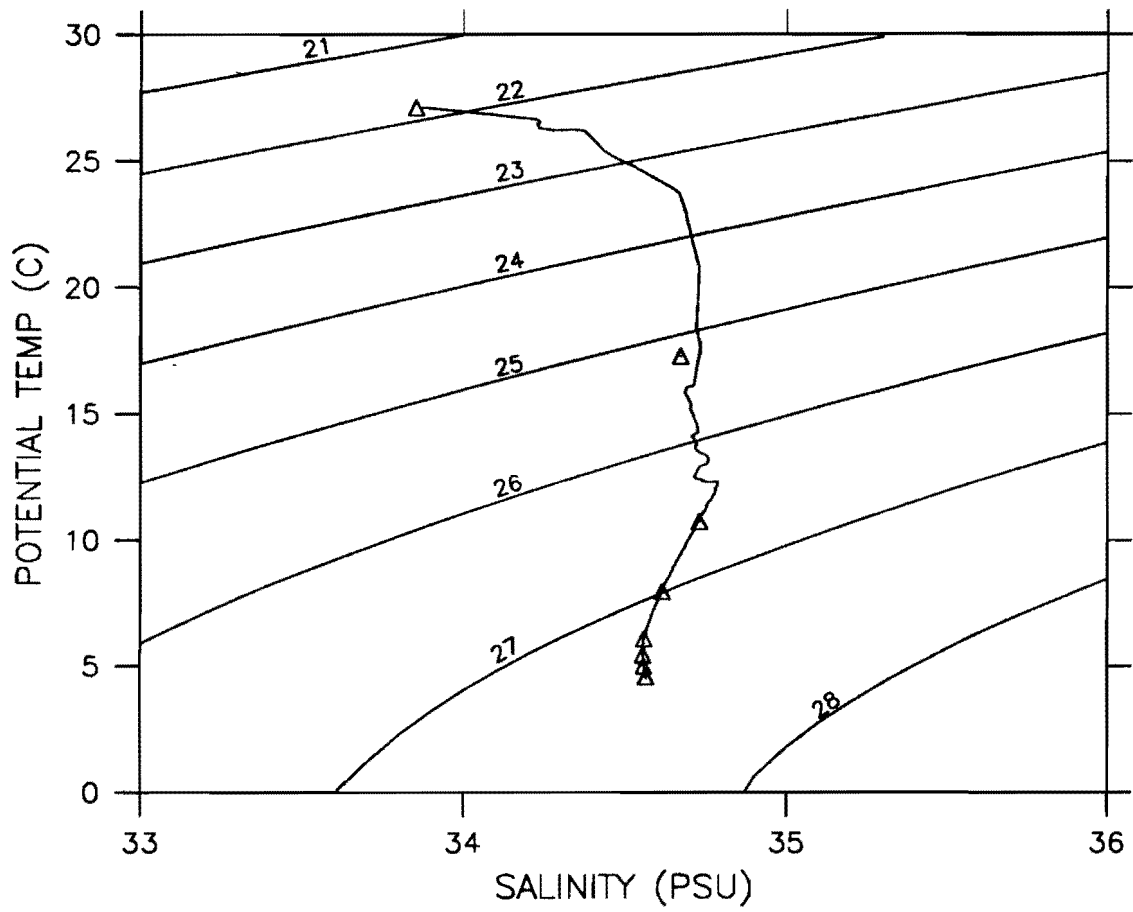


CAST EP3-90-DI -020 DATE 03 DEC 90 TIME 0019 GMT
 LAT 05 01.1N LONG 110 01.0W WEATHER 2 SEA STATE 3
 BAROMETER 09 WIND DIR 180 T SPD 17 KT VISIBILITY 8
 CLOUD 7 AMOUNT 8 DRY 25.1 WET 22.8 DEPTH 3898 M

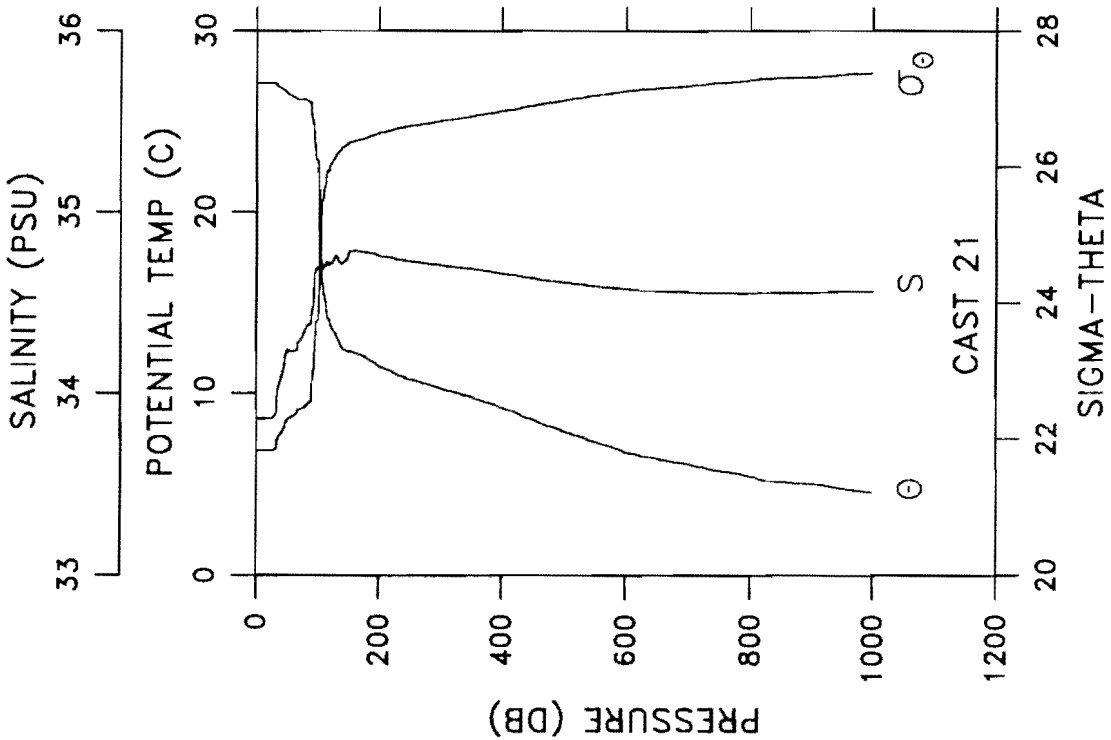


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.890 | 34.086 | 22.067 | 0.000 |
| 10 | 26.888 | 34.086 | 22.067 | 0.057 |
| 20 | 26.836 | 34.102 | 22.098 | 0.115 |
| 30 | 26.768 | 34.128 | 22.137 | 0.172 |
| 40 | 26.507 | 34.220 | 22.289 | 0.228 |
| 50 | 26.427 | 34.241 | 22.329 | 0.284 |
| 60 | 26.247 | 34.290 | 22.423 | 0.338 |
| 70 | 26.173 | 34.280 | 22.446 | 0.393 |
| 80 | 26.050 | 34.382 | 22.553 | 0.446 |
| 90 | 25.981 | 34.367 | 22.564 | 0.499 |
| 100 | 24.359 | 34.623 | 23.251 | 0.551 |
| 110 | 20.297 | 34.668 | 24.431 | 0.591 |
| 120 | 16.713 | 34.705 | 25.356 | 0.622 |
| 130 | 14.537 | 34.758 | 25.886 | 0.645 |
| 140 | 13.731 | 34.751 | 26.052 | 0.666 |
| 150 | 12.685 | 34.760 | 26.270 | 0.685 |
| 160 | 12.289 | 34.751 | 26.341 | 0.702 |
| 170 | 12.135 | 34.749 | 26.369 | 0.720 |
| 180 | 11.913 | 34.741 | 26.405 | 0.736 |
| 190 | 11.609 | 34.726 | 26.450 | 0.753 |
| 200 | 11.363 | 34.690 | 26.468 | 0.769 |
| 250 | 10.669 | 34.726 | 26.622 | 0.845 |
| 300 | 10.469 | 34.693 | 26.657 | 0.917 |
| 350 | 9.928 | 34.677 | 26.725 | 0.988 |
| 400 | 9.533 | 34.677 | 26.779 | 1.057 |
| 450 | 9.144 | 34.662 | 26.831 | 1.123 |
| 500 | 8.448 | 34.634 | 26.919 | 1.186 |
| 550 | 7.752 | 34.608 | 27.003 | 1.245 |
| 600 | 7.122 | 34.586 | 27.076 | 1.301 |
| 650 | 6.539 | 34.569 | 27.142 | 1.353 |
| 700 | 6.147 | 34.562 | 27.188 | 1.402 |
| 750 | 5.840 | 34.558 | 27.224 | 1.450 |
| 800 | 5.441 | 34.555 | 27.270 | 1.496 |
| 900 | 4.949 | 34.561 | 27.333 | 1.583 |
| 1000 | 4.502 | 34.565 | 27.387 | 1.664 |
| 1500 | 2.969 | 34.606 | 27.574 | 2.012 |
| 2000 | 2.194 | 34.639 | 27.666 | 2.297 |
| 2500 | 1.689 | 34.665 | 27.727 | 2.544 |
| 3000 | 1.523 | 34.673 | 27.746 | 2.780 |
| 3500 | 1.254 | 34.684 | 27.774 | 3.006 |
| 3634 | 1.222 | 34.687 | 27.779 | 3.065 |

CAST EP3-90-DI -021 DATE 03 DEC 90 TIME 0738 GMT
LAT 05 59.6N LONG 109 59.5W

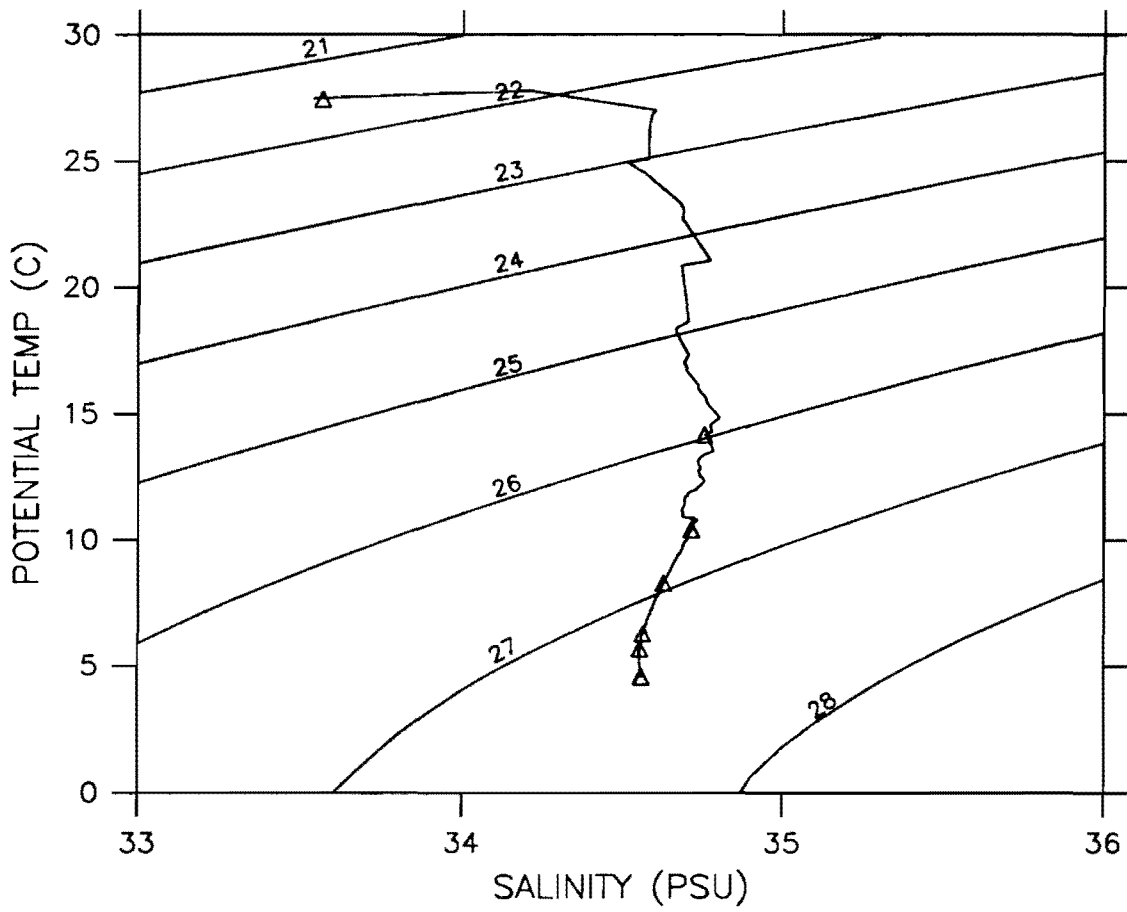


CAST EP3-90-DI -021 DATE 03 DEC 90 TIME 0738 GMT
 LAT 05 59.6N LONG 109 59.5W WEATHER 2 SEA STATE 4
 BAROMETER 11 WIND DIR 190 T SPD 20 KT VISIBILITY 8
 CLOUD 6 AMOUNT 7 DRY 25.3 WET 23.5 DEPTH 3709 M

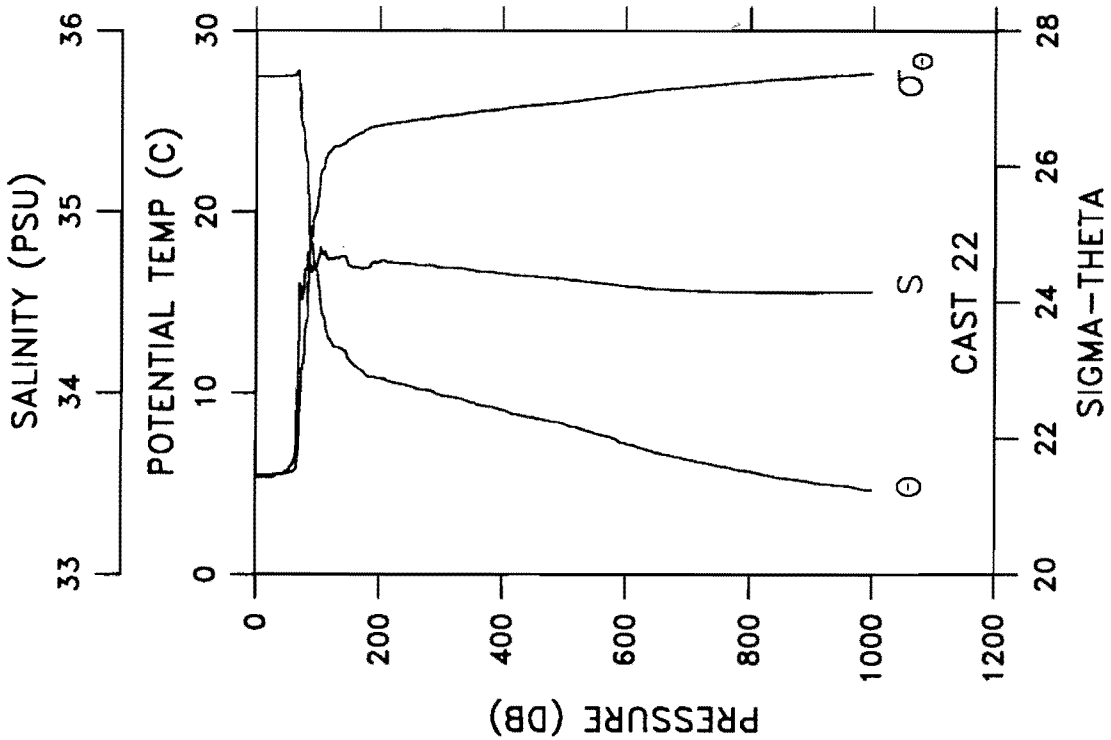


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.122 | 33.861 | 21.823 | 0.000 |
| 10 | 27.119 | 33.861 | 21.824 | 0.060 |
| 20 | 27.122 | 33.861 | 21.823 | 0.120 |
| 30 | 27.111 | 33.879 | 21.840 | 0.180 |
| 40 | 26.856 | 34.078 | 22.071 | 0.238 |
| 50 | 26.577 | 34.235 | 22.278 | 0.295 |
| 60 | 26.379 | 34.230 | 22.336 | 0.350 |
| 70 | 26.213 | 34.286 | 22.430 | 0.405 |
| 80 | 26.225 | 34.350 | 22.475 | 0.459 |
| 90 | 25.444 | 34.429 | 22.776 | 0.513 |
| 100 | 22.872 | 34.689 | 23.736 | 0.559 |
| 110 | 15.443 | 34.703 | 25.646 | 0.590 |
| 120 | 13.787 | 34.725 | 26.020 | 0.611 |
| 130 | 13.161 | 34.762 | 26.176 | 0.631 |
| 140 | 12.466 | 34.716 | 26.279 | 0.649 |
| 150 | 12.287 | 34.766 | 26.353 | 0.666 |
| 160 | 12.215 | 34.787 | 26.383 | 0.683 |
| 170 | 12.104 | 34.783 | 26.401 | 0.700 |
| 180 | 11.923 | 34.780 | 26.434 | 0.717 |
| 190 | 11.720 | 34.772 | 26.466 | 0.733 |
| 200 | 11.478 | 34.759 | 26.501 | 0.749 |
| 250 | 10.789 | 34.730 | 26.604 | 0.825 |
| 300 | 10.288 | 34.710 | 26.677 | 0.898 |
| 350 | 9.833 | 34.690 | 26.739 | 0.968 |
| 400 | 9.209 | 34.663 | 26.821 | 1.035 |
| 450 | 8.566 | 34.640 | 26.905 | 1.098 |
| 500 | 7.905 | 34.613 | 26.984 | 1.158 |
| 550 | 7.342 | 34.594 | 27.051 | 1.214 |
| 600 | 6.769 | 34.577 | 27.118 | 1.267 |
| 650 | 6.418 | 34.568 | 27.157 | 1.318 |
| 700 | 6.115 | 34.561 | 27.191 | 1.367 |
| 750 | 5.733 | 34.555 | 27.235 | 1.415 |
| 800 | 5.413 | 34.555 | 27.274 | 1.461 |
| 900 | 5.025 | 34.557 | 27.322 | 1.547 |
| 1000 | 4.556 | 34.565 | 27.381 | 1.630 |
| 1028 | 4.482 | 34.566 | 27.390 | 1.652 |

CAST EP3-90-DI -022 DATE 03 DEC 90 TIME 1324 GMT
LAT 06 59.8N LONG 109 59.8W

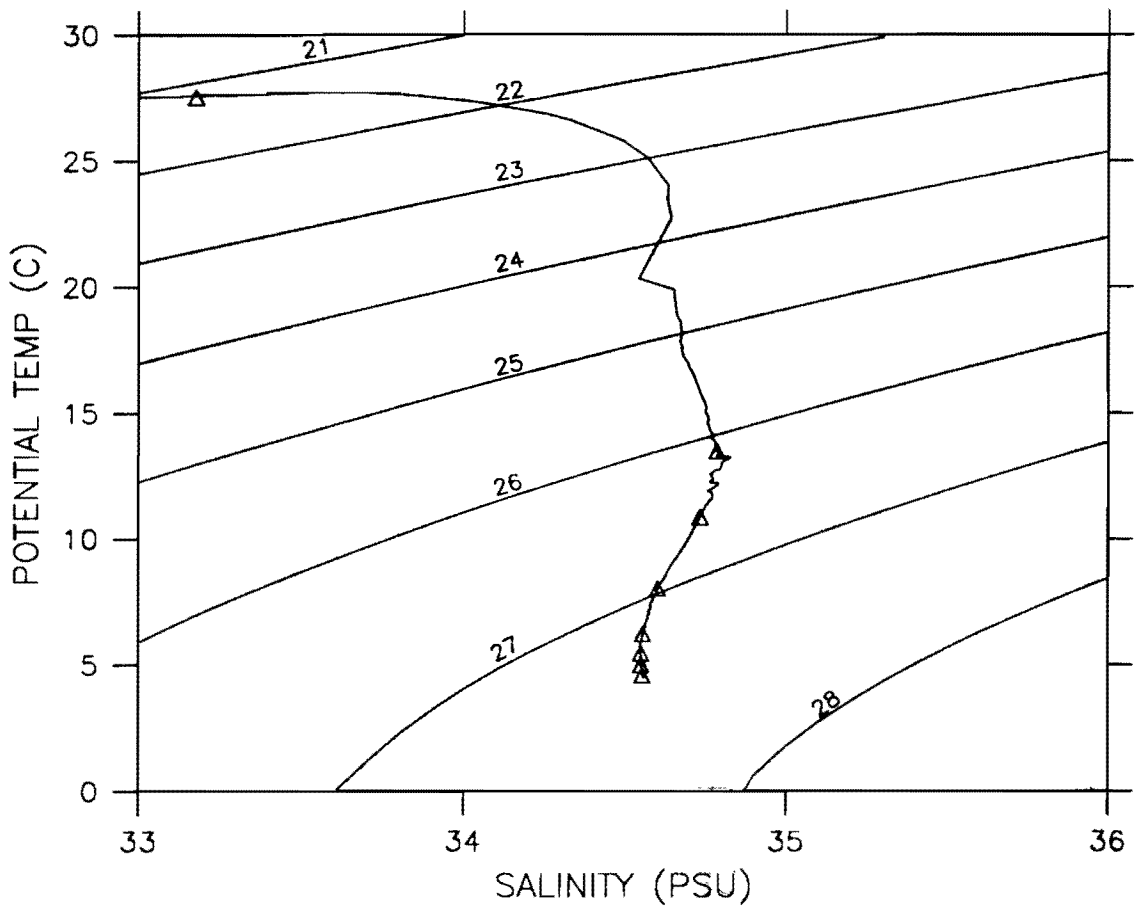


CAST EP3-90-DI -022 DATE 03 DEC 90 TIME 1324 GMT
 LAT 06 59.8N LONG 109 59.8W WEATHER 2 SEA STATE 4
 BAROMETER 10 WIND DIR 195 T SPD 18 KT VISIBILITY 7
 CLOUD 8 AMOUNT 7 DRY 23.5 WET 25.2 DEPTH 3748 M

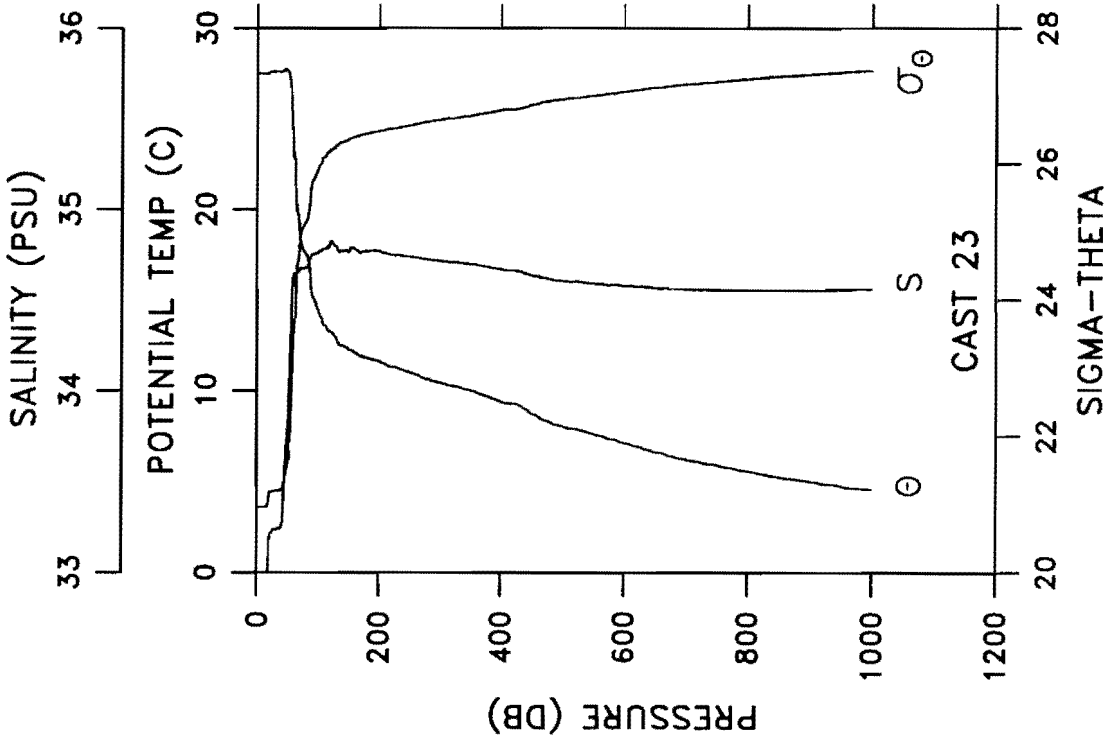


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.472 | 33.535 | 21.466 | 0.000 |
| 10 | 27.469 | 33.535 | 21.467 | 0.063 |
| 20 | 27.470 | 33.535 | 21.467 | 0.127 |
| 30 | 27.479 | 33.541 | 21.469 | 0.190 |
| 40 | 27.487 | 33.551 | 21.473 | 0.253 |
| 50 | 27.500 | 33.570 | 21.483 | 0.317 |
| 60 | 27.513 | 33.615 | 21.513 | 0.380 |
| 70 | 27.007 | 34.602 | 22.418 | 0.441 |
| 80 | 23.194 | 34.684 | 23.639 | 0.490 |
| 90 | 18.290 | 34.667 | 24.947 | 0.526 |
| 100 | 16.134 | 34.734 | 25.513 | 0.553 |
| 110 | 14.112 | 34.762 | 25.981 | 0.576 |
| 120 | 12.890 | 34.742 | 26.216 | 0.594 |
| 130 | 12.520 | 34.745 | 26.291 | 0.612 |
| 140 | 12.399 | 34.749 | 26.318 | 0.630 |
| 150 | 11.834 | 34.701 | 26.389 | 0.647 |
| 160 | 11.470 | 34.692 | 26.450 | 0.663 |
| 170 | 11.244 | 34.685 | 26.486 | 0.679 |
| 180 | 10.918 | 34.687 | 26.547 | 0.694 |
| 190 | 10.884 | 34.718 | 26.577 | 0.710 |
| 200 | 10.805 | 34.719 | 26.592 | 0.724 |
| 250 | 10.366 | 34.711 | 26.663 | 0.797 |
| 300 | 9.873 | 34.692 | 26.734 | 0.867 |
| 350 | 9.455 | 34.675 | 26.790 | 0.935 |
| 400 | 9.053 | 34.658 | 26.842 | 1.000 |
| 450 | 8.656 | 34.642 | 26.892 | 1.062 |
| 500 | 8.297 | 34.629 | 26.938 | 1.124 |
| 550 | 7.755 | 34.609 | 27.004 | 1.182 |
| 600 | 7.228 | 34.590 | 27.064 | 1.239 |
| 650 | 6.710 | 34.573 | 27.122 | 1.292 |
| 700 | 6.330 | 34.563 | 27.165 | 1.343 |
| 750 | 5.984 | 34.558 | 27.206 | 1.392 |
| 800 | 5.684 | 34.555 | 27.241 | 1.439 |
| 800 | 5.099 | 34.554 | 27.311 | 1.528 |
| 1000 | 4.654 | 34.558 | 27.365 | 1.612 |
| 1010 | 4.575 | 34.560 | 27.374 | 1.620 |

CAST EP3-90-DI -023 DATE 03 DEC 90 TIME 1921 GMT
LAT 07 59.6N LONG 110 00.6W

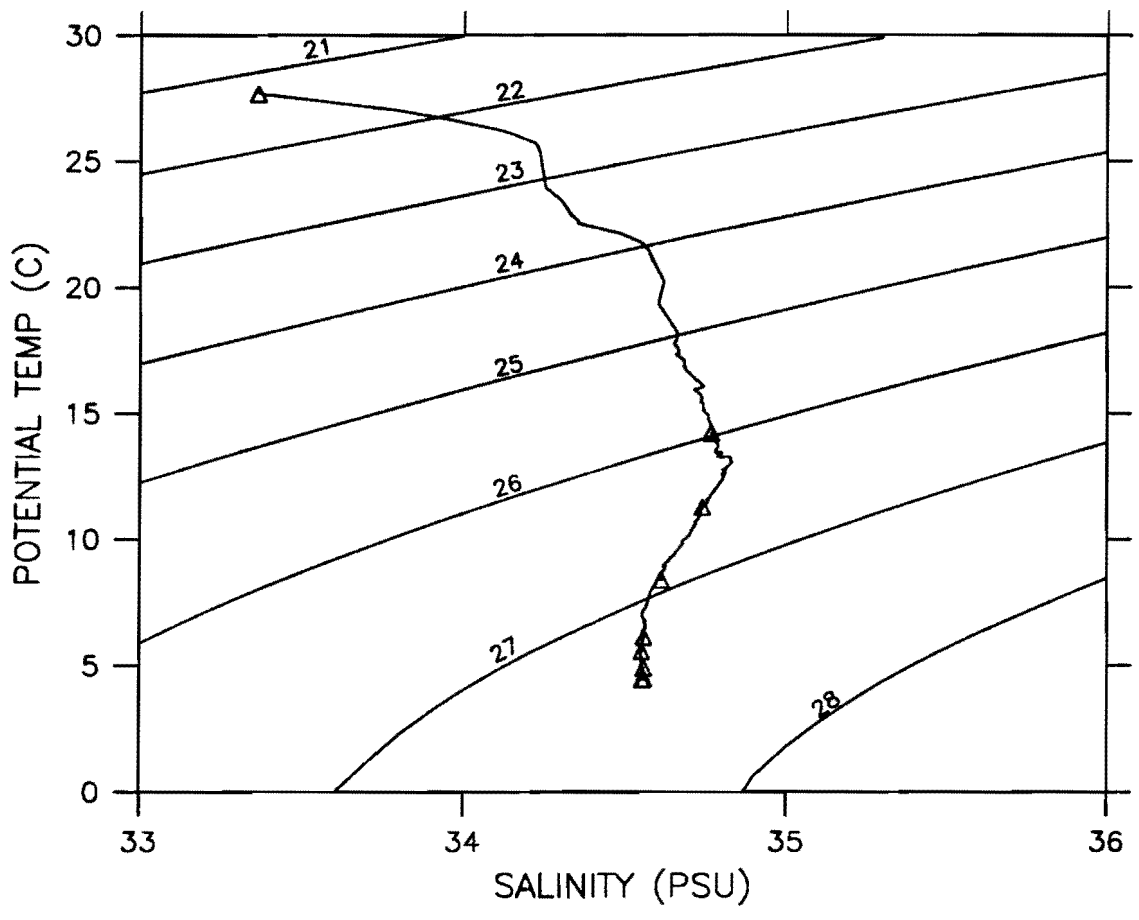


CAST EP3-90-DI -023 DATE 03 DEC 90 TIME 1921 GMT
 LAT 07 59.6N LONG 110 00.6W WEATHER 5 SEA STATE 4
 BAROMETER 12 WIND DIR 190 T SPD 14 KT VISIBILITY 8
 CLOUD 5 AMOUNT 8 DRY 25.1 WET 24.0 DEPTH 3617 M

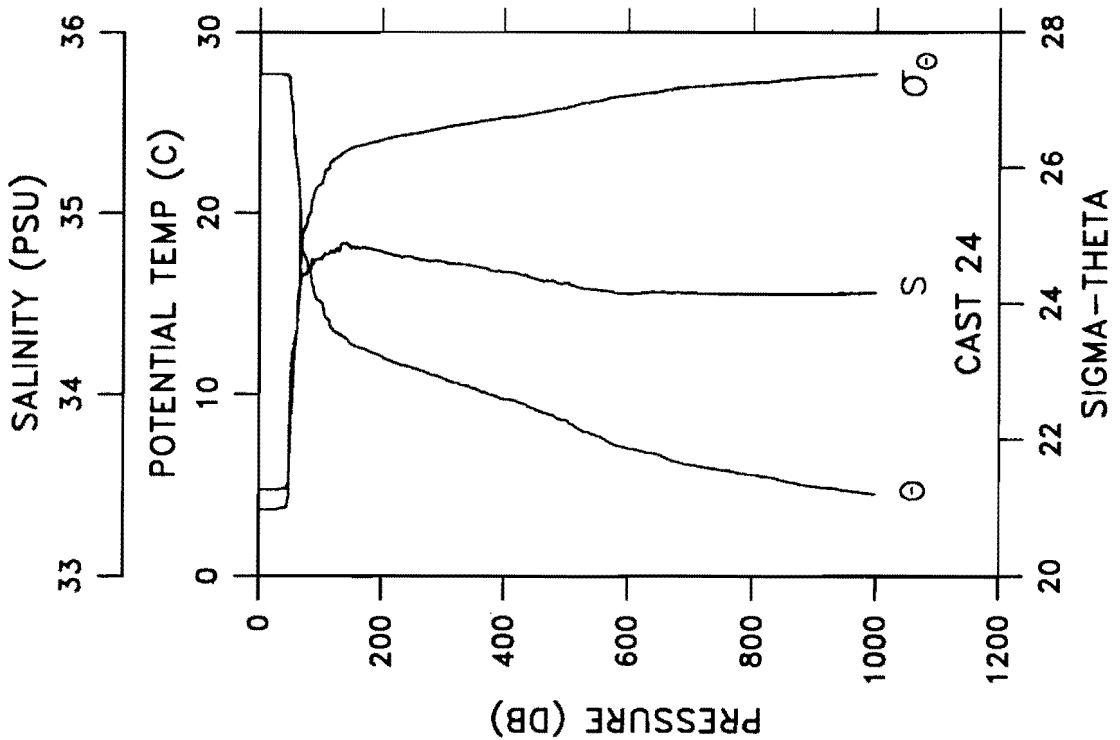


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.508 | 32.879 | 20.961 | 0.000 |
| 10 | 27.506 | 32.879 | 20.962 | 0.068 |
| 20 | 27.573 | 33.107 | 21.112 | 0.136 |
| 30 | 27.614 | 33.236 | 21.196 | 0.202 |
| 40 | 27.605 | 33.252 | 21.211 | 0.268 |
| 50 | 27.694 | 33.746 | 21.553 | 0.332 |
| 60 | 23.481 | 34.634 | 23.518 | 0.388 |
| 70 | 18.863 | 34.663 | 24.800 | 0.425 |
| 80 | 17.570 | 34.678 | 25.131 | 0.454 |
| 90 | 15.426 | 34.748 | 25.684 | 0.481 |
| 100 | 14.456 | 34.763 | 25.908 | 0.503 |
| 110 | 13.635 | 34.782 | 26.095 | 0.523 |
| 120 | 13.291 | 34.820 | 26.195 | 0.542 |
| 130 | 12.929 | 34.801 | 26.254 | 0.560 |
| 140 | 12.467 | 34.769 | 26.320 | 0.578 |
| 150 | 12.229 | 34.764 | 26.362 | 0.595 |
| 160 | 12.097 | 34.783 | 26.403 | 0.612 |
| 170 | 11.871 | 34.762 | 26.429 | 0.628 |
| 180 | 11.789 | 34.770 | 26.451 | 0.644 |
| 190 | 11.701 | 34.772 | 26.469 | 0.661 |
| 200 | 11.621 | 34.772 | 26.484 | 0.676 |
| 250 | 11.016 | 34.740 | 26.571 | 0.754 |
| 300 | 10.458 | 34.717 | 26.652 | 0.828 |
| 350 | 10.039 | 34.699 | 26.710 | 0.899 |
| 400 | 9.412 | 34.669 | 26.792 | 0.968 |
| 450 | 8.742 | 34.635 | 26.873 | 1.033 |
| 500 | 8.053 | 34.605 | 26.956 | 1.094 |
| 550 | 7.641 | 34.591 | 27.006 | 1.152 |
| 600 | 7.133 | 34.577 | 27.067 | 1.208 |
| 650 | 6.634 | 34.566 | 27.127 | 1.261 |
| 700 | 6.239 | 34.560 | 27.174 | 1.311 |
| 750 | 5.921 | 34.556 | 27.212 | 1.360 |
| 800 | 5.581 | 34.553 | 27.252 | 1.406 |
| 900 | 4.996 | 34.553 | 27.321 | 1.495 |
| 1000 | 4.584 | 34.559 | 27.373 | 1.577 |
| 1046 | 4.454 | 34.561 | 27.389 | 1.614 |

CAST EP3-90-DI -024 DATE 04 DEC 90 TIME 0144 GMT
LAT 08 59.7N LONG 110 00.3W

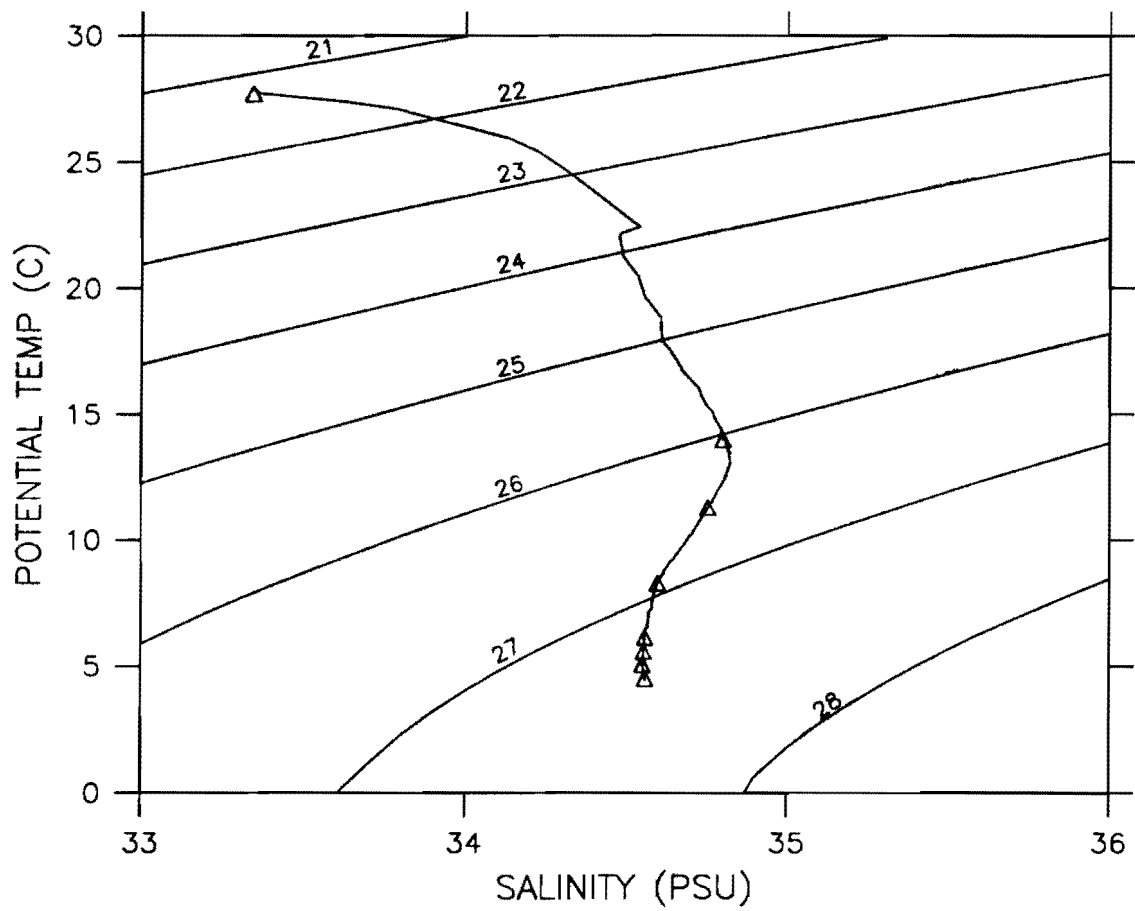


CAST EP3-90-DI -024 DATE 04 DEC 90 TIME 0144 GMT
 LAT 08 59.7N LONG 110 00.3W WEATHER 2 SEA STATE 4
 BAROMETER 12 WIND DIR 190 T SPD 18 KT VISIBILITY 7
 CLOUD 8 AMOUNT 8 DRY 24.8 WET 22.6 DEPTH 4085 M

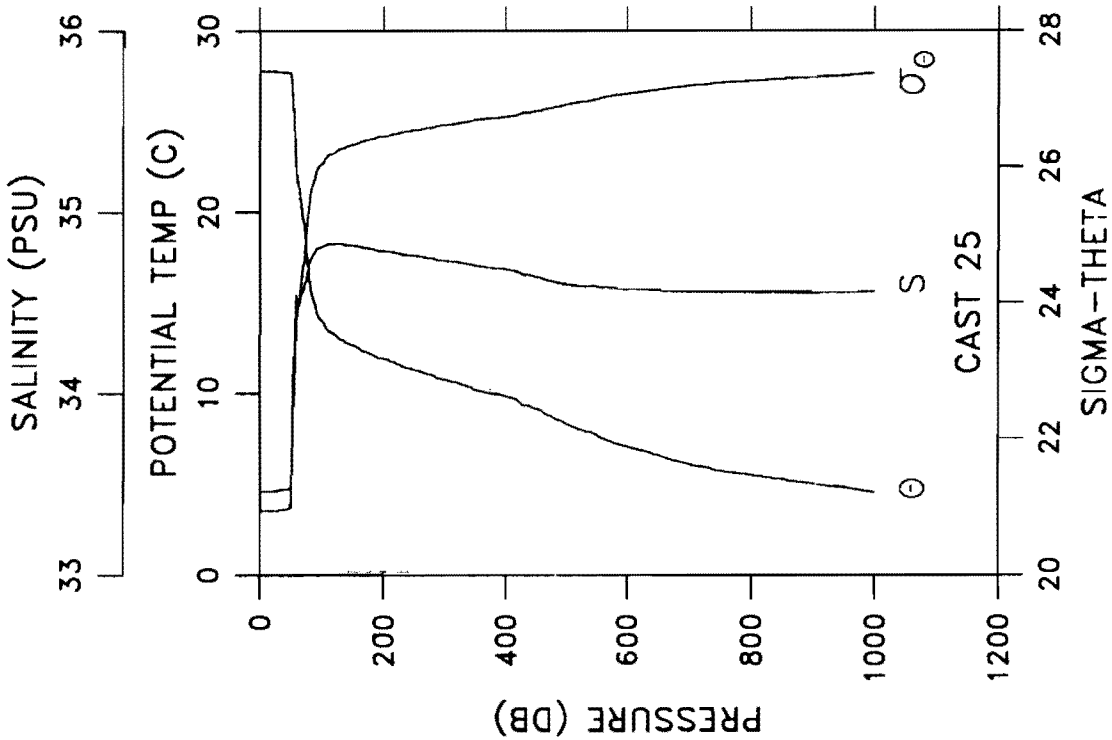


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.885 | 33.365 | 21.270 | 0.000 |
| 10 | 27.883 | 33.365 | 21.270 | 0.065 |
| 20 | 27.893 | 33.364 | 21.267 | 0.130 |
| 30 | 27.884 | 33.367 | 21.271 | 0.196 |
| 40 | 27.869 | 33.373 | 21.281 | 0.261 |
| 50 | 26.864 | 33.949 | 22.034 | 0.325 |
| 60 | 22.646 | 34.353 | 23.546 | 0.375 |
| 70 | 17.941 | 34.662 | 25.029 | 0.412 |
| 80 | 16.876 | 34.684 | 25.302 | 0.440 |
| 90 | 15.452 | 34.737 | 25.670 | 0.465 |
| 100 | 15.110 | 34.745 | 25.752 | 0.488 |
| 110 | 14.157 | 34.771 | 25.978 | 0.509 |
| 120 | 13.512 | 34.782 | 26.121 | 0.529 |
| 130 | 13.279 | 34.792 | 26.176 | 0.548 |
| 140 | 13.110 | 34.830 | 26.240 | 0.566 |
| 150 | 12.742 | 34.814 | 26.301 | 0.584 |
| 160 | 12.619 | 34.811 | 26.323 | 0.602 |
| 170 | 12.512 | 34.810 | 26.343 | 0.619 |
| 180 | 12.352 | 34.802 | 26.368 | 0.636 |
| 190 | 12.228 | 34.796 | 26.387 | 0.653 |
| 200 | 12.077 | 34.788 | 26.410 | 0.669 |
| 250 | 11.434 | 34.758 | 26.508 | 0.750 |
| 300 | 10.878 | 34.731 | 26.589 | 0.828 |
| 350 | 10.327 | 34.708 | 26.668 | 0.902 |
| 400 | 9.724 | 34.675 | 26.745 | 0.972 |
| 450 | 9.169 | 34.637 | 26.807 | 1.040 |
| 500 | 8.582 | 34.614 | 26.882 | 1.105 |
| 550 | 7.703 | 34.577 | 26.986 | 1.165 |
| 600 | 7.024 | 34.555 | 27.065 | 1.221 |
| 650 | 6.667 | 34.563 | 27.120 | 1.274 |
| 700 | 6.124 | 34.560 | 27.189 | 1.324 |
| 750 | 5.839 | 34.555 | 27.221 | 1.372 |
| 800 | 5.567 | 34.553 | 27.253 | 1.418 |
| 900 | 4.933 | 34.553 | 27.328 | 1.506 |
| 1000 | 4.496 | 34.560 | 27.383 | 1.589 |
| 1009 | 4.444 | 34.560 | 27.389 | 1.596 |

CAST EP3-90-DI -025 DATE 04 DEC 90 TIME 0710 GMT
LAT 09 59.9N LONG 110 00.5W

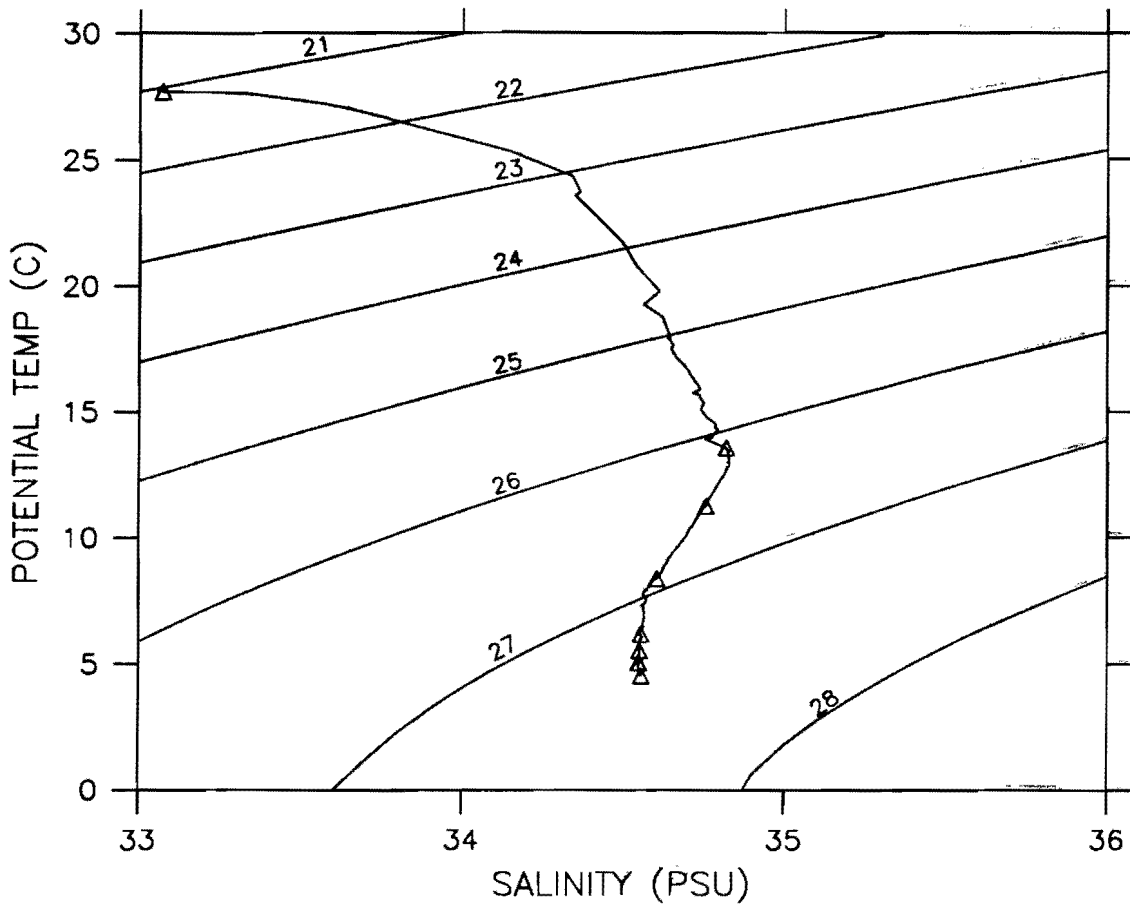


CAST EP3-90-DI -025 DATE 04 DEC 90 TIME 0710 GMT
 LAT 09 59.9N LONG 110 00.5W WEATHER 2 SEA STATE 3
 BAROMETER 14 WIND DIR 235 T SPD 29 KT VISIBILITY 8
 CLOUD 8 AMOUNT 8 DRY 26.0 WET 23.9 DEPTH 3360 M

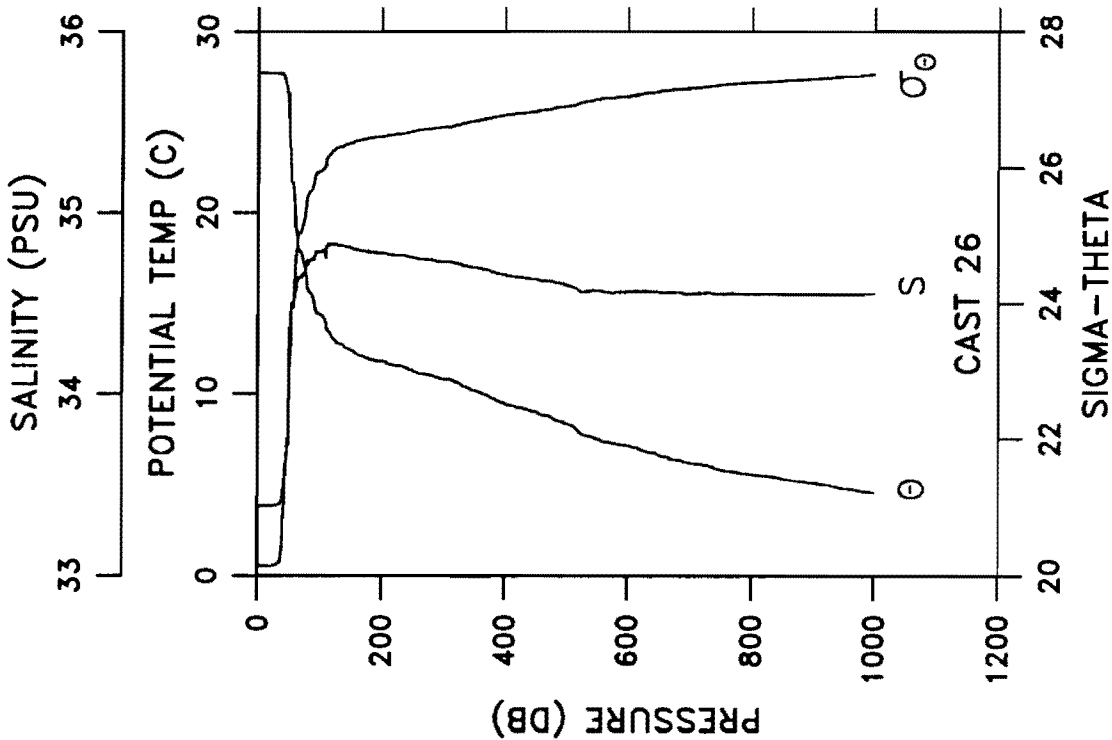


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.780 | 33.354 | 21.231 | 0.000 |
| 10 | 27.778 | 33.354 | 21.231 | 0.066 |
| 20 | 27.778 | 33.353 | 21.231 | 0.131 |
| 30 | 27.752 | 33.355 | 21.241 | 0.197 |
| 40 | 27.717 | 33.363 | 21.258 | 0.262 |
| 50 | 27.620 | 33.426 | 21.337 | 0.327 |
| 60 | 21.973 | 34.480 | 23.832 | 0.379 |
| 70 | 19.488 | 34.571 | 24.569 | 0.416 |
| 80 | 16.011 | 34.728 | 25.537 | 0.445 |
| 90 | 14.605 | 34.788 | 25.895 | 0.468 |
| 100 | 13.989 | 34.807 | 26.041 | 0.488 |
| 110 | 13.417 | 34.822 | 26.171 | 0.507 |
| 120 | 13.225 | 34.824 | 26.211 | 0.526 |
| 130 | 12.965 | 34.823 | 26.264 | 0.544 |
| 140 | 12.768 | 34.817 | 26.298 | 0.562 |
| 150 | 12.645 | 34.814 | 26.320 | 0.579 |
| 160 | 12.443 | 34.810 | 26.356 | 0.596 |
| 170 | 12.279 | 34.802 | 26.383 | 0.613 |
| 180 | 12.150 | 34.796 | 26.403 | 0.630 |
| 190 | 11.958 | 34.786 | 26.432 | 0.646 |
| 200 | 11.897 | 34.785 | 26.442 | 0.663 |
| 250 | 11.297 | 34.756 | 26.532 | 0.742 |
| 300 | 10.766 | 34.730 | 26.608 | 0.819 |
| 350 | 10.184 | 34.701 | 26.688 | 0.892 |
| 400 | 9.843 | 34.683 | 26.732 | 0.962 |
| 450 | 9.150 | 34.640 | 26.812 | 1.030 |
| 500 | 8.292 | 34.598 | 26.914 | 1.094 |
| 550 | 7.707 | 34.587 | 26.993 | 1.153 |
| 600 | 7.061 | 34.572 | 27.073 | 1.209 |
| 650 | 6.614 | 34.568 | 27.131 | 1.261 |
| 700 | 6.111 | 34.560 | 27.191 | 1.311 |
| 750 | 5.757 | 34.557 | 27.233 | 1.359 |
| 800 | 5.517 | 34.557 | 27.263 | 1.405 |
| 900 | 5.040 | 34.554 | 27.317 | 1.493 |
| 1000 | 4.544 | 34.561 | 27.379 | 1.576 |
| 1028 | 4.437 | 34.563 | 27.392 | 1.598 |

CAST EP3-90-DI -026 DATE 05 DEC 90 TIME 0338 GMT
LAT 10 59.5N LONG 109 40.4W

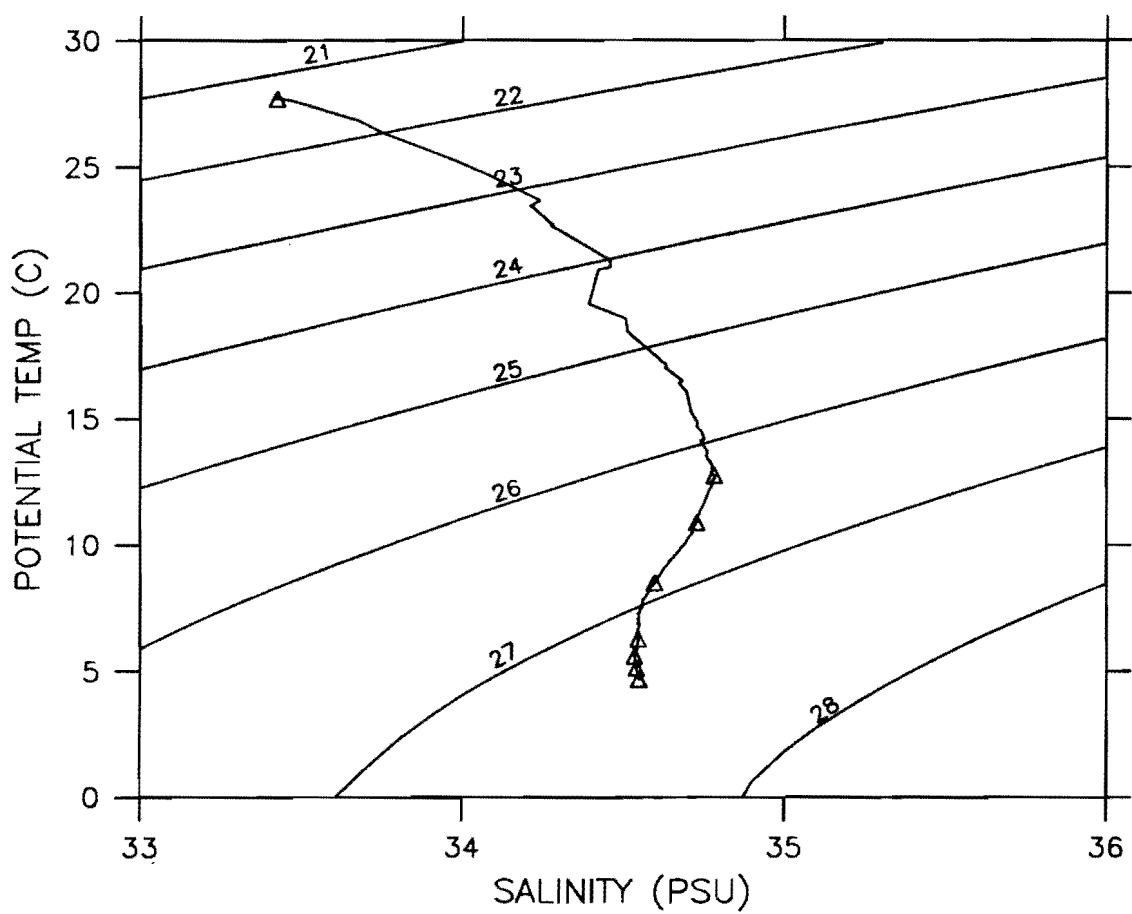


CAST EP3-90-DI -026 DATE 05 DEC 90 TIME 0338 GMT
 LAT 10 59.5N LONG 109 40.4W WEATHER 1 SEA STATE 2
 BAROMETER 14 WIND DIR 220 T SPD 10 KT VISIBILITY 8
 CLOUD 8 AMOUNT 5 DRY 26.4 WET 24.8 DEPTH 3653 M

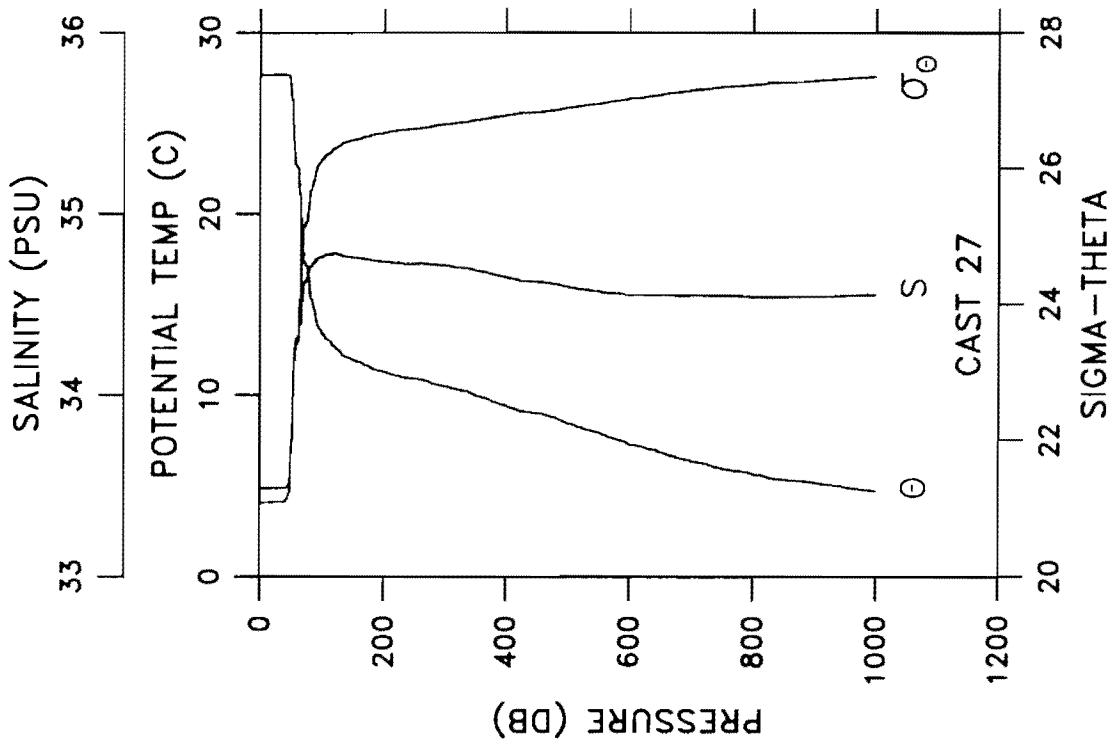


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.731 | 33.056 | 21.022 | 0.000 |
| 10 | 27.729 | 33.056 | 21.023 | 0.068 |
| 20 | 27.722 | 33.054 | 21.024 | 0.135 |
| 30 | 27.709 | 33.063 | 21.035 | 0.203 |
| 40 | 27.689 | 33.207 | 21.149 | 0.270 |
| 50 | 25.310 | 34.147 | 22.604 | 0.332 |
| 60 | 19.779 | 34.613 | 24.526 | 0.373 |
| 70 | 17.782 | 34.648 | 25.057 | 0.404 |
| 80 | 15.752 | 34.716 | 25.586 | 0.431 |
| 90 | 15.064 | 34.740 | 25.758 | 0.455 |
| 100 | 14.378 | 34.784 | 25.940 | 0.476 |
| 110 | 13.559 | 34.817 | 26.138 | 0.496 |
| 120 | 13.045 | 34.828 | 26.251 | 0.515 |
| 130 | 12.758 | 34.820 | 26.302 | 0.532 |
| 140 | 12.531 | 34.816 | 26.344 | 0.550 |
| 150 | 12.370 | 34.806 | 26.368 | 0.567 |
| 160 | 12.148 | 34.795 | 26.402 | 0.584 |
| 170 | 12.043 | 34.789 | 26.418 | 0.600 |
| 180 | 11.903 | 34.784 | 26.440 | 0.616 |
| 190 | 11.811 | 34.779 | 26.454 | 0.633 |
| 200 | 11.779 | 34.777 | 26.459 | 0.649 |
| 250 | 11.292 | 34.754 | 26.531 | 0.728 |
| 300 | 10.817 | 34.729 | 26.598 | 0.804 |
| 350 | 10.174 | 34.699 | 26.687 | 0.878 |
| 400 | 9.466 | 34.659 | 26.776 | 0.947 |
| 450 | 9.015 | 34.635 | 26.831 | 1.013 |
| 500 | 8.356 | 34.602 | 26.908 | 1.077 |
| 550 | 7.521 | 34.572 | 27.009 | 1.136 |
| 600 | 7.171 | 34.564 | 27.052 | 1.192 |
| 650 | 6.622 | 34.563 | 27.126 | 1.245 |
| 700 | 6.199 | 34.555 | 27.176 | 1.295 |
| 750 | 5.827 | 34.555 | 27.223 | 1.344 |
| 800 | 5.554 | 34.555 | 27.257 | 1.390 |
| 900 | 5.101 | 34.550 | 27.307 | 1.479 |
| 1000 | 4.569 | 34.557 | 27.373 | 1.563 |
| 1009 | 4.548 | 34.558 | 27.376 | 1.570 |

CAST EP3-90-DI -027 DATE 05 DEC 90 TIME 1023 GMT
LAT 12 00.1N LONG 110 24.1W

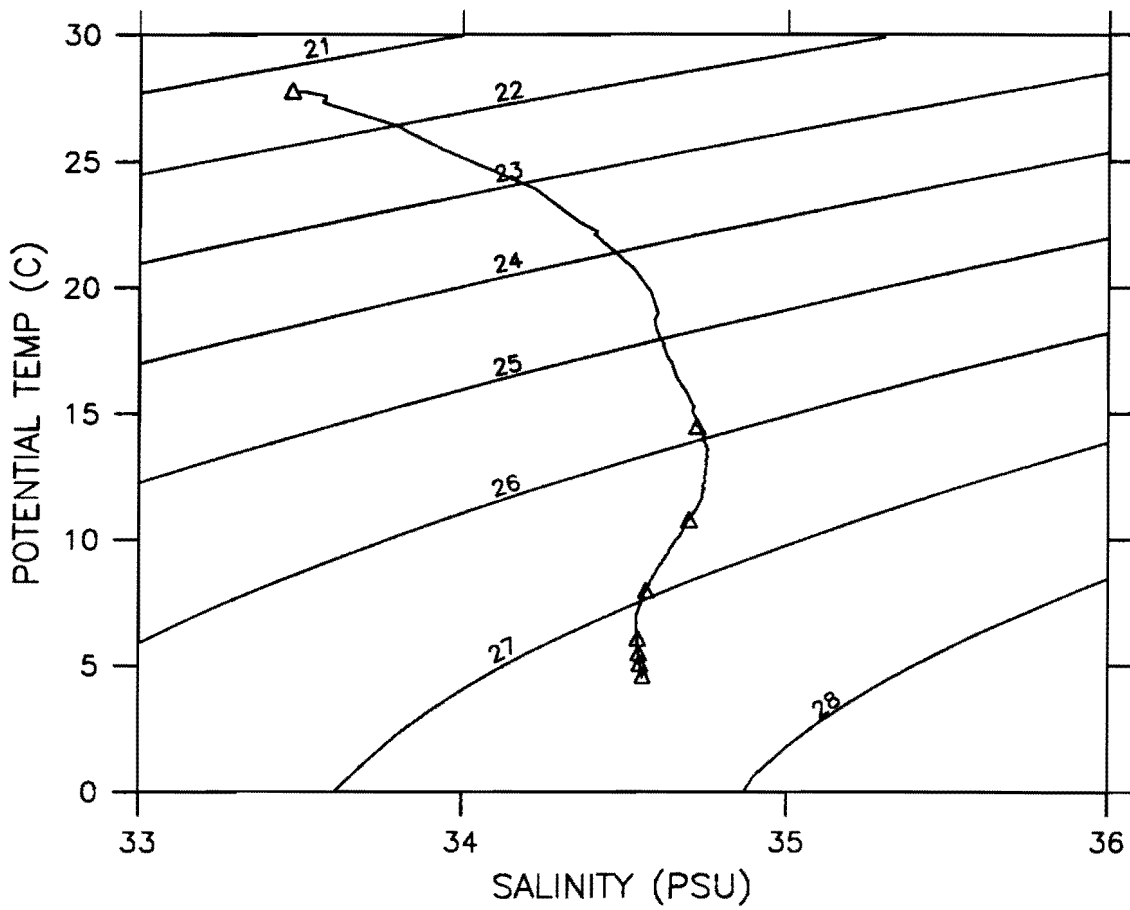


CAST EP3-90-DI -027 DATE 05 DEC 90 TIME 1023 GMT
 LAT 12 00.1N LONG 110 24.1W WEATHER 2 SEA STATE 2
 BAROMETER 13 WIND DIR 160 T SPD 05 KT VISIBILITY 6
 CLOUD 8 AMOUNT 8 DRY 24.1 WET 23.5 DEPTH 3913 M

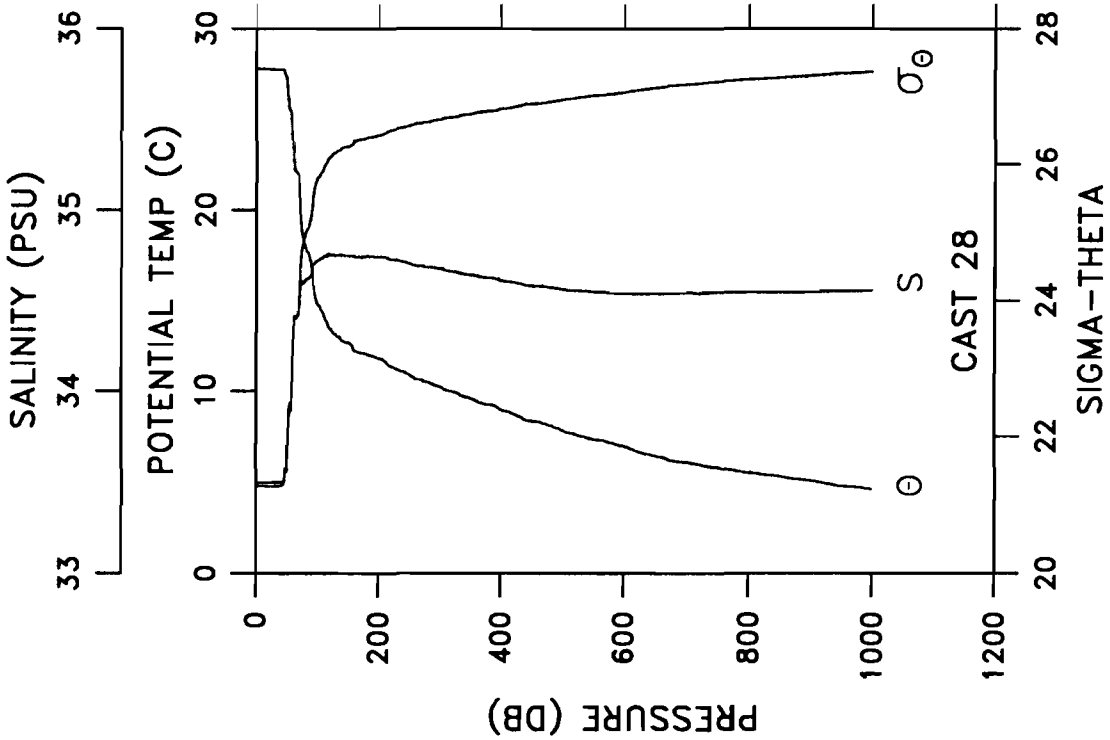


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.694 | 33.410 | 21.301 | 0.000 |
| 10 | 27.692 | 33.410 | 21.301 | 0.065 |
| 20 | 27.689 | 33.410 | 21.302 | 0.130 |
| 30 | 27.701 | 33.412 | 21.300 | 0.195 |
| 40 | 27.698 | 33.412 | 21.301 | 0.260 |
| 50 | 26.821 | 33.671 | 21.776 | 0.324 |
| 60 | 22.568 | 34.288 | 23.519 | 0.374 |
| 70 | 17.337 | 34.618 | 25.142 | 0.411 |
| 80 | 15.346 | 34.709 | 25.672 | 0.438 |
| 90 | 14.128 | 34.738 | 25.958 | 0.460 |
| 100 | 13.376 | 34.764 | 26.134 | 0.480 |
| 110 | 13.009 | 34.776 | 26.218 | 0.498 |
| 120 | 12.631 | 34.782 | 26.298 | 0.516 |
| 130 | 12.310 | 34.775 | 26.355 | 0.533 |
| 140 | 12.077 | 34.763 | 26.391 | 0.550 |
| 150 | 11.922 | 34.759 | 26.417 | 0.567 |
| 160 | 11.811 | 34.755 | 26.435 | 0.583 |
| 170 | 11.649 | 34.749 | 26.461 | 0.599 |
| 180 | 11.472 | 34.743 | 26.490 | 0.615 |
| 190 | 11.347 | 34.738 | 26.509 | 0.631 |
| 200 | 11.271 | 34.737 | 26.522 | 0.646 |
| 250 | 10.899 | 34.723 | 26.578 | 0.723 |
| 300 | 10.476 | 34.714 | 26.647 | 0.797 |
| 350 | 10.004 | 34.688 | 26.708 | 0.869 |
| 400 | 9.429 | 34.651 | 26.775 | 0.937 |
| 450 | 8.991 | 34.624 | 26.825 | 1.003 |
| 500 | 8.438 | 34.596 | 26.891 | 1.068 |
| 550 | 7.937 | 34.572 | 26.948 | 1.129 |
| 600 | 7.287 | 34.550 | 27.025 | 1.187 |
| 650 | 6.867 | 34.549 | 27.082 | 1.242 |
| 700 | 6.347 | 34.549 | 27.152 | 1.294 |
| 750 | 5.953 | 34.546 | 27.200 | 1.344 |
| 800 | 5.631 | 34.539 | 27.234 | 1.392 |
| 900 | 5.163 | 34.543 | 27.294 | 1.482 |
| 1000 | 4.693 | 34.551 | 27.354 | 1.567 |
| 1011 | 4.648 | 34.553 | 27.361 | 1.577 |

CAST EP3-90-DI -028 DATE 05 DEC 90 TIME 1713 GMT
LAT 12 59.5N LONG 111 06.8W

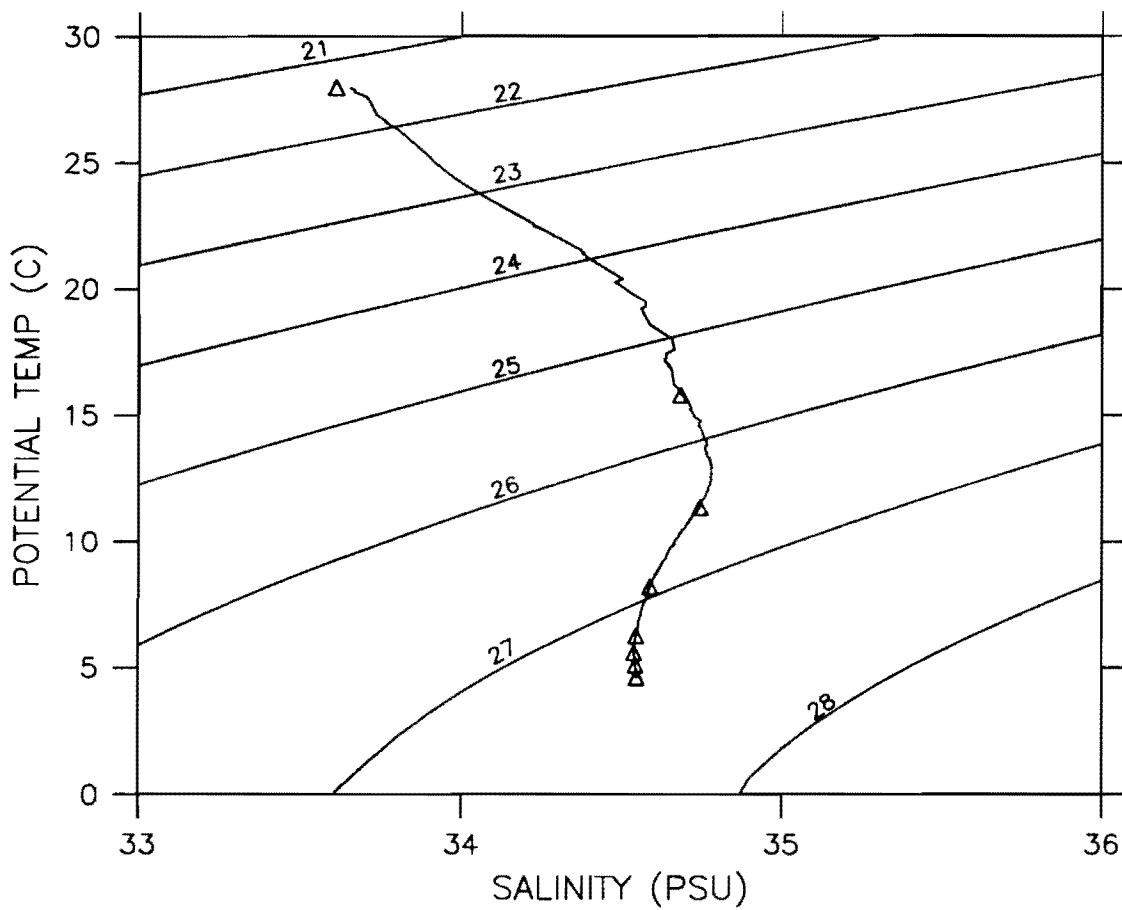


CAST EP3-90-DI -028 DATE 05 DEC 90 TIME 1713 GMT
 LAT 12 59.5N LONG 111 06.8W WEATHER 1 SEA STATE 3
 BAROMETER 15 WIND DIR 180 T SPD 04 KT VISIBILITY 8
 CLOUD 8 AMOUNT 6 DRY 27.6 WET 25.8 DEPTH 3814 M

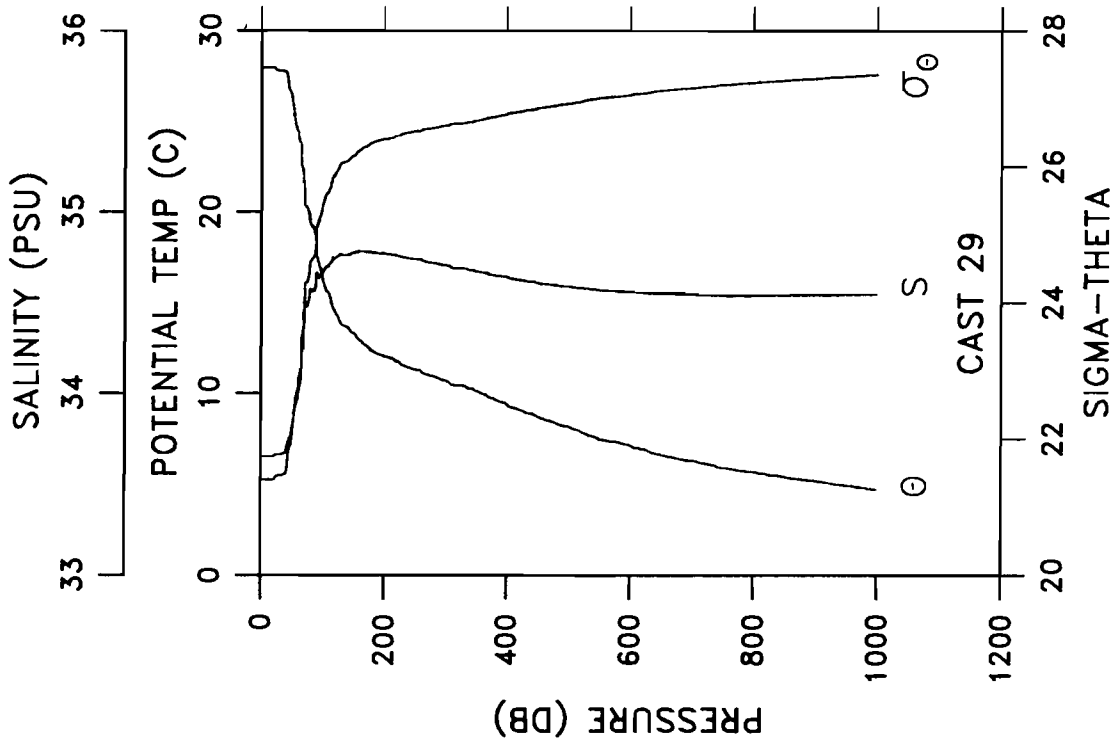


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.783 | 33.478 | 21.323 | 0.000 |
| 10 | 27.780 | 33.478 | 21.324 | 0.065 |
| 20 | 27.781 | 33.476 | 21.322 | 0.129 |
| 30 | 27.762 | 33.477 | 21.329 | 0.194 |
| 40 | 27.761 | 33.480 | 21.332 | 0.259 |
| 50 | 27.135 | 33.609 | 21.630 | 0.323 |
| 60 | 23.259 | 34.292 | 23.324 | 0.377 |
| 70 | 20.737 | 34.529 | 24.208 | 0.418 |
| 80 | 17.897 | 34.615 | 25.004 | 0.450 |
| 90 | 16.712 | 34.655 | 25.318 | 0.479 |
| 100 | 14.771 | 34.723 | 25.809 | 0.503 |
| 110 | 14.127 | 34.745 | 25.964 | 0.524 |
| 120 | 13.437 | 34.755 | 26.115 | 0.544 |
| 130 | 13.075 | 34.754 | 26.188 | 0.563 |
| 140 | 12.778 | 34.752 | 26.245 | 0.581 |
| 150 | 12.679 | 34.749 | 26.263 | 0.599 |
| 160 | 12.226 | 34.743 | 26.347 | 0.617 |
| 170 | 12.123 | 34.743 | 26.366 | 0.634 |
| 180 | 12.042 | 34.748 | 26.386 | 0.651 |
| 190 | 11.938 | 34.745 | 26.403 | 0.667 |
| 200 | 11.809 | 34.742 | 26.425 | 0.684 |
| 250 | 10.930 | 34.707 | 26.561 | 0.763 |
| 300 | 10.247 | 34.677 | 26.658 | 0.837 |
| 350 | 9.618 | 34.643 | 26.738 | 0.907 |
| 400 | 8.990 | 34.611 | 26.816 | 0.974 |
| 450 | 8.343 | 34.582 | 26.894 | 1.037 |
| 500 | 7.842 | 34.561 | 26.953 | 1.098 |
| 550 | 7.338 | 34.549 | 27.017 | 1.156 |
| 600 | 6.976 | 34.539 | 27.059 | 1.212 |
| 650 | 6.443 | 34.538 | 27.130 | 1.264 |
| 700 | 6.075 | 34.545 | 27.184 | 1.314 |
| 750 | 5.789 | 34.545 | 27.220 | 1.362 |
| 800 | 5.513 | 34.546 | 27.254 | 1.409 |
| 900 | 5.088 | 34.548 | 27.307 | 1.498 |
| 1000 | 4.610 | 34.557 | 27.368 | 1.582 |
| 1029 | 4.525 | 34.558 | 27.379 | 1.605 |

CAST EP3-90-DI -029 DATE 05 DEC 90 TIME 2350 GMT
LAT 14 00.0N LONG 110 49.3W

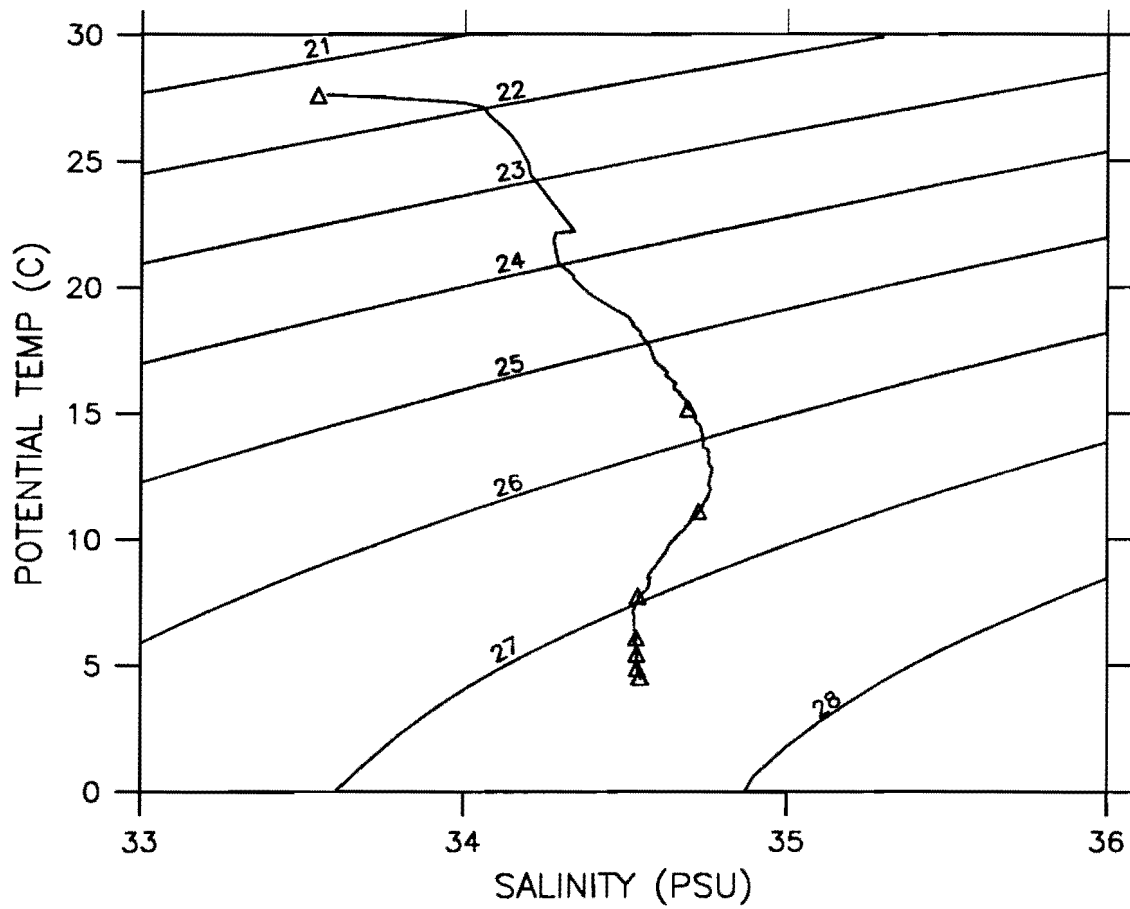


CAST EP3-90-D1-029 DATE 05 DEC 90 TIME 2350 GMT
 LAT 14 00.0N LONG 110 49.3W WEATHER 4 SEA STATE 3
 BAROMETER 12 WIND DIR 100 T SPD 15 KT VISIBILITY 7
 CLOUD 9 AMOUNT 7 DRY 26.5 WET 25.0 DEPTH 4035 M

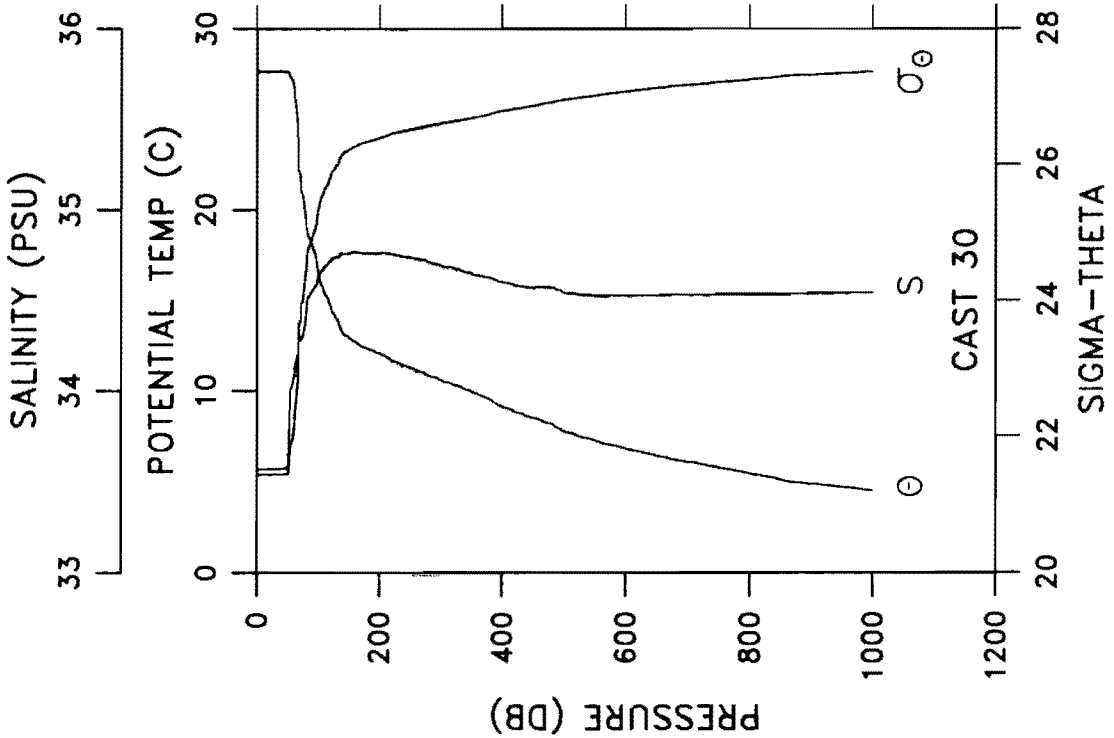


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.950 | 33.652 | 21.400 | 0.000 |
| 10 | 27.948 | 33.652 | 21.401 | 0.064 |
| 20 | 27.954 | 33.653 | 21.399 | 0.128 |
| 30 | 27.787 | 33.665 | 21.462 | 0.191 |
| 40 | 27.733 | 33.677 | 21.489 | 0.255 |
| 50 | 26.258 | 33.803 | 22.052 | 0.315 |
| 60 | 24.396 | 33.976 | 22.751 | 0.369 |
| 70 | 21.266 | 34.391 | 23.959 | 0.415 |
| 80 | 19.289 | 34.576 | 24.624 | 0.451 |
| 90 | 17.587 | 34.667 | 25.119 | 0.483 |
| 100 | 16.216 | 34.665 | 25.441 | 0.510 |
| 110 | 15.389 | 34.714 | 25.666 | 0.535 |
| 120 | 14.467 | 34.748 | 25.894 | 0.557 |
| 130 | 13.777 | 34.764 | 26.052 | 0.577 |
| 140 | 13.617 | 34.761 | 26.083 | 0.597 |
| 150 | 13.300 | 34.775 | 26.158 | 0.616 |
| 160 | 12.900 | 34.781 | 26.244 | 0.635 |
| 170 | 12.638 | 34.781 | 26.296 | 0.653 |
| 180 | 12.329 | 34.776 | 26.352 | 0.670 |
| 190 | 12.144 | 34.772 | 26.385 | 0.687 |
| 200 | 12.019 | 34.770 | 26.407 | 0.704 |
| 250 | 11.306 | 34.740 | 26.518 | 0.784 |
| 300 | 10.701 | 34.706 | 26.601 | 0.861 |
| 350 | 10.129 | 34.675 | 26.676 | 0.934 |
| 400 | 9.396 | 34.642 | 26.774 | 1.004 |
| 450 | 8.741 | 34.612 | 26.856 | 1.070 |
| 500 | 8.186 | 34.590 | 26.924 | 1.132 |
| 550 | 7.498 | 34.572 | 27.011 | 1.191 |
| 600 | 7.153 | 34.563 | 27.053 | 1.247 |
| 650 | 6.620 | 34.554 | 27.120 | 1.300 |
| 700 | 6.314 | 34.548 | 27.155 | 1.351 |
| 750 | 5.904 | 34.540 | 27.202 | 1.400 |
| 800 | 5.681 | 34.540 | 27.229 | 1.448 |
| 900 | 5.183 | 34.543 | 27.291 | 1.539 |
| 1000 | 4.711 | 34.548 | 27.350 | 1.625 |
| 1009 | 4.658 | 34.549 | 27.357 | 1.632 |

CAST EP3-90-DI -030 DATE 06 DEC 90 TIME 0604 GMT
LAT 15 00.5N LONG 112 30.8W

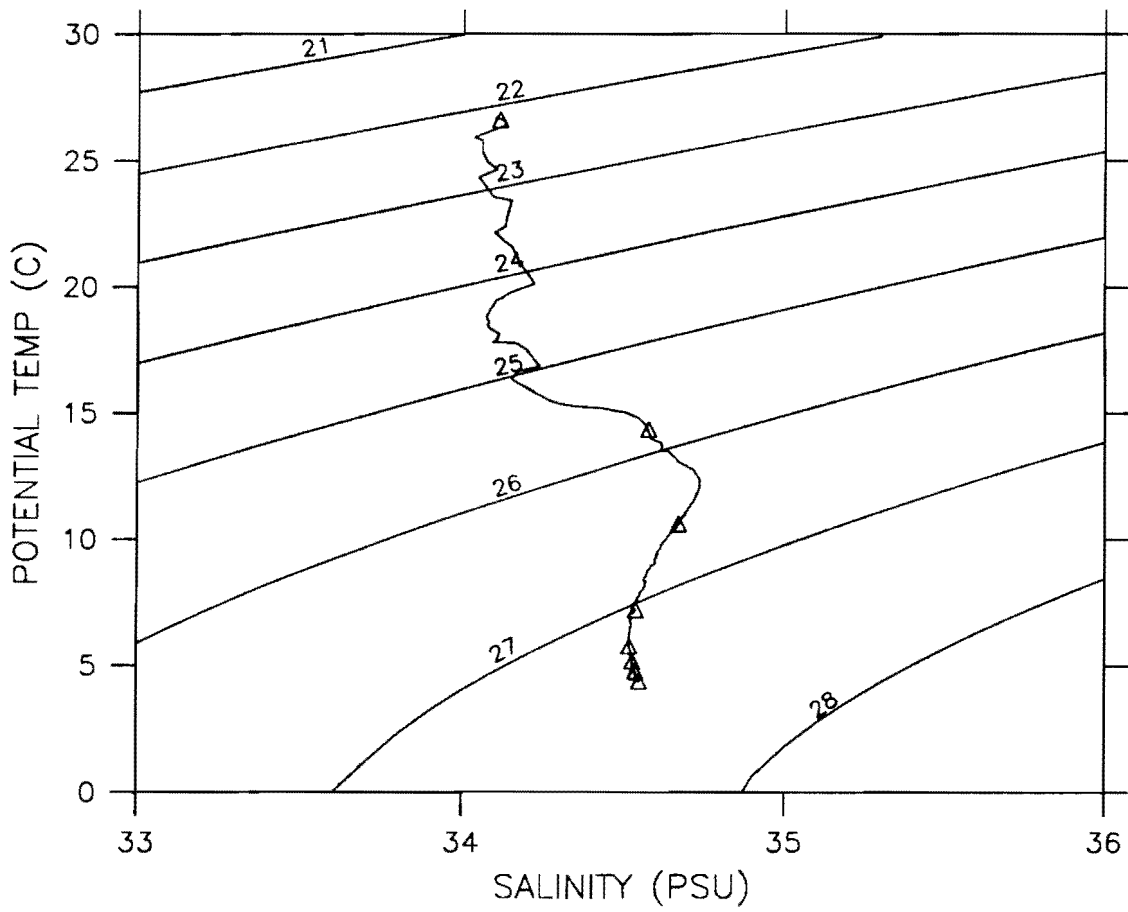


CAST EP3-90-D1 -030 DATE 06 DEC 90 TIME 0604 GMT
 LAT 15 00.5N LONG 112 30.8W WEATHER 1 SEA STATE 3
 BAROMETER 15 WIND DIR 030 T SPD 18 KT VISIBILITY 8
 CLOUD 9 AMOUNT 5 DRY 26.2 WET 24.9 DEPTH 3859 M

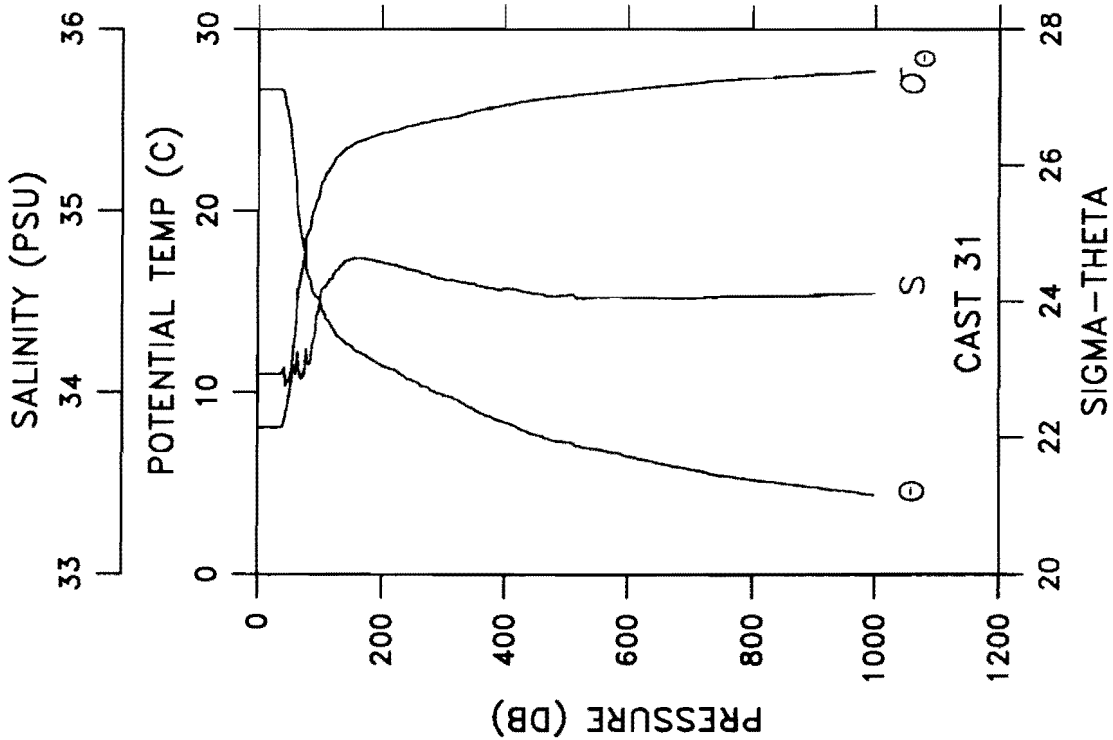


| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 27.632 | 33.571 | 21.442 | 0.000 |
| 10 | 27.629 | 33.571 | 21.443 | 0.063 |
| 20 | 27.631 | 33.571 | 21.442 | 0.127 |
| 30 | 27.628 | 33.571 | 21.443 | 0.191 |
| 40 | 27.631 | 33.572 | 21.443 | 0.254 |
| 50 | 27.627 | 33.576 | 21.447 | 0.318 |
| 60 | 26.739 | 34.082 | 22.112 | 0.378 |
| 70 | 21.804 | 34.277 | 23.724 | 0.427 |
| 80 | 19.095 | 34.467 | 24.591 | 0.465 |
| 90 | 17.945 | 34.555 | 24.946 | 0.496 |
| 100 | 16.352 | 34.638 | 25.389 | 0.525 |
| 110 | 15.379 | 34.682 | 25.644 | 0.550 |
| 120 | 14.592 | 34.723 | 25.847 | 0.572 |
| 130 | 13.973 | 34.738 | 25.991 | 0.593 |
| 140 | 13.157 | 34.758 | 26.174 | 0.613 |
| 150 | 12.922 | 34.761 | 26.224 | 0.631 |
| 160 | 12.714 | 34.767 | 26.270 | 0.649 |
| 170 | 12.466 | 34.760 | 26.314 | 0.667 |
| 180 | 12.347 | 34.759 | 26.336 | 0.684 |
| 190 | 12.231 | 34.757 | 26.357 | 0.702 |
| 200 | 12.100 | 34.761 | 26.385 | 0.719 |
| 250 | 11.305 | 34.738 | 26.516 | 0.800 |
| 300 | 10.605 | 34.693 | 26.607 | 0.876 |
| 350 | 9.999 | 34.651 | 26.680 | 0.949 |
| 400 | 9.145 | 34.602 | 26.784 | 1.019 |
| 450 | 8.511 | 34.569 | 26.858 | 1.084 |
| 500 | 7.792 | 34.545 | 26.947 | 1.145 |
| 550 | 7.287 | 34.529 | 27.007 | 1.204 |
| 600 | 6.832 | 34.527 | 27.069 | 1.259 |
| 650 | 6.422 | 34.528 | 27.125 | 1.312 |
| 700 | 6.099 | 34.530 | 27.169 | 1.362 |
| 750 | 5.784 | 34.533 | 27.211 | 1.411 |
| 800 | 5.474 | 34.535 | 27.251 | 1.458 |
| 900 | 4.906 | 34.538 | 27.320 | 1.546 |
| 1000 | 4.552 | 34.544 | 27.365 | 1.629 |
| 1031 | 4.451 | 34.547 | 27.378 | 1.654 |

CAST EP3-90-DI -031 DATE 06 DEC 90 TIME 1234 GMT
LAT 16 00.4N LONG 113 09.2W



CAST EP3-90-DI -031 DATE 06 DEC 90 TIME 1234 GMT
 LAT 16 00.4N LONG 113 09.2W WEATHER 1 SEA STATE 3
 BAROMETER 13 WIND DIR 010 T SPD 16 KT VISIBILITY 7
 CLOUD 9 AMOUNT 2 DRY 26.0 WET 24.0 DEPTH 3912 M



| PRES (DB) | POT TEMP (C) | SAL (PSU) | SIG-TH | DELTA-D (DYN-M) |
|-----------|--------------|-----------|--------|-----------------|
| 0 | 26.668 | 34.100 | 22.147 | 0.000 |
| 10 | 26.666 | 34.100 | 22.148 | 0.057 |
| 20 | 26.667 | 34.100 | 22.147 | 0.113 |
| 30 | 26.671 | 34.099 | 22.146 | 0.170 |
| 40 | 26.616 | 34.120 | 22.179 | 0.227 |
| 50 | 25.080 | 34.069 | 22.615 | 0.282 |
| 60 | 22.156 | 34.099 | 23.491 | 0.330 |
| 70 | 18.596 | 34.081 | 24.422 | 0.369 |
| 80 | 16.507 | 34.159 | 24.985 | 0.402 |
| 90 | 15.403 | 34.292 | 25.338 | 0.430 |
| 100 | 15.057 | 34.499 | 25.574 | 0.455 |
| 110 | 14.004 | 34.584 | 25.866 | 0.478 |
| 120 | 13.516 | 34.621 | 25.995 | 0.499 |
| 130 | 13.046 | 34.677 | 26.134 | 0.519 |
| 140 | 12.723 | 34.719 | 26.231 | 0.537 |
| 150 | 12.525 | 34.731 | 26.279 | 0.555 |
| 160 | 12.212 | 34.737 | 26.345 | 0.573 |
| 170 | 12.067 | 34.736 | 26.372 | 0.590 |
| 180 | 11.863 | 34.731 | 26.406 | 0.606 |
| 190 | 11.653 | 34.722 | 26.440 | 0.623 |
| 200 | 11.460 | 34.715 | 26.470 | 0.639 |
| 250 | 10.633 | 34.674 | 26.588 | 0.717 |
| 300 | 9.837 | 34.622 | 26.685 | 0.790 |
| 350 | 9.070 | 34.601 | 26.795 | 0.858 |
| 400 | 8.355 | 34.573 | 26.885 | 0.922 |
| 450 | 7.649 | 34.545 | 26.969 | 0.982 |
| 500 | 7.237 | 34.535 | 27.020 | 1.039 |
| 550 | 6.864 | 34.524 | 27.063 | 1.094 |
| 600 | 6.469 | 34.52 | 27.113 | 1.147 |
| 650 | 6.106 | 34.518 | 27.159 | 1.197 |
| 700 | 5.771 | 34.518 | 27.201 | 1.246 |
| 750 | 5.424 | 34.524 | 27.248 | 1.293 |
| 800 | 5.184 | 34.529 | 27.280 | 1.337 |
| 900 | 4.792 | 34.533 | 27.329 | 1.424 |
| 1000 | 4.378 | 34.546 | 27.385 | 1.505 |
| 1009 | 4.350 | 34.547 | 27.389 | 1.513 |

CAST EP3-90-DI -002 LAT 00 12.0S LONG 124 29.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 15. | 24.294 | 34.902 | 0.00 | 24.291 | 23.482 |
| 107. | 17.574 | 35.272 | 0.00 | 17.556 | 25.590 |
| 502. | 8.200 | 34.632 | 0.00 | 8.148 | 26.963 |
| 1004. | 4.861 | 34.551 | 0.00 | 4.778 | 27.345 |
| 1978. | 2.317 | 34.639 | 0.00 | 2.178 | 27.668 |
| 2477. | 1.912 | 34.662 | 0.00 | 1.735 | 27.721 |
| 2980. | 1.702 | 34.674 | 0.00 | 1.483 | 27.750 |
| 3479. | 1.522 | 34.686 | 0.00 | 1.257 | 27.776 |
| 3732. | 1.460 | 34.690 | 0.00 | 1.171 | 27.785 |
| 3982. | 1.423 | 34.695 | 0.00 | 1.108 | 27.793 |
| 3982. | 1.424 | 34.694 | 0.00 | 1.109 | 27.792 |
| 4184. | 1.445 | 34.693 | 0.00 | 1.107 | 27.791 |

CAST EP3-90-DI -003 LAT 00 00.7S LONG 120 00.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 23.956 | 34.657 | 0.00 | 23.953 | 23.397 |
| 104. | 15.493 | 35.028 | 0.00 | 15.477 | 25.889 |
| 257. | 12.279 | 34.865 | 0.00 | 12.245 | 26.438 |
| 502. | 7.854 | 34.618 | 0.00 | 7.803 | 27.003 |
| 704. | 6.145 | 34.560 | 0.00 | 6.082 | 27.195 |
| 807. | 5.470 | 34.548 | 0.00 | 5.401 | 27.270 |
| 910. | 5.318 | 34.548 | 0.00 | 5.241 | 27.289 |
| 1016. | 4.599 | 34.555 | 0.00 | 4.517 | 27.377 |
| 1002. | 4.729 | 34.555 | 0.00 | 4.648 | 27.363 |

CAST EP3-90-DI -004 LAT 00 00.1N LONG 115 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 22.645 | 34.910 | 0.00 | 22.642 | 23.969 |
| 109. | 15.370 | 34.955 | 0.00 | 15.353 | 25.860 |
| 257. | 12.246 | 34.862 | 0.00 | 12.212 | 26.442 |
| 506. | 7.716 | 34.609 | 0.00 | 7.665 | 27.016 |
| 706. | 6.087 | 34.560 | 0.00 | 6.024 | 27.202 |
| 806. | 5.652 | 34.551 | 0.00 | 5.582 | 27.250 |
| 908. | 5.253 | 34.547 | 0.00 | 5.176 | 27.296 |
| 908. | 5.253 | 34.548 | 0.00 | 5.176 | 27.296 |
| 1012. | 4.839 | 34.551 | 0.00 | 4.756 | 27.347 |

CAST EP3-90-DI -005 LAT 00 58.5S LONG 110 01.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 22.301 | 34.992 | 0.00 | 22.298 | 24.129 |
| 104. | 14.353 | 35.070 | 0.00 | 14.338 | 26.170 |
| 259. | 11.960 | 34.849 | 0.00 | 11.926 | 26.486 |
| 503. | 8.235 | 34.806 | 0.00 | 8.182 | 27.094 |
| 702. | 6.553 | 34.567 | 0.00 | 6.488 | 27.147 |
| 805. | 5.756 | 34.548 | 0.00 | 5.685 | 27.235 |
| 884. | 5.276 | 34.544 | 0.00 | 5.201 | 27.290 |
| 996. | 4.744 | 34.555 | 0.00 | 4.663 | 27.361 |
| 1001. | 4.735 | 34.556 | 0.00 | 4.654 | 27.363 |

CAST EP3-90-DI -006 LAT 04 00.2S LONG 110 00.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 15. | 23.188 | 35.018 | 0.00 | 23.185 | 23.895 |
| 110. | 14.216 | 34.996 | 0.00 | 14.200 | 26.142 |
| 257. | 12.389 | 34.891 | 0.00 | 12.355 | 26.437 |
| 507. | 8.125 | 34.638 | 0.00 | 8.072 | 26.979 |
| 705. | 6.001 | 34.561 | 0.00 | 5.938 | 27.214 |
| 804. | 5.465 | 34.555 | 0.00 | 5.396 | 27.276 |
| 805. | 5.463 | 34.557 | 0.00 | 5.394 | 27.278 |
| 904. | 4.990 | 34.548 | 0.00 | 4.915 | 27.327 |
| 1008. | 4.508 | 34.547 | 0.00 | 4.428 | 27.380 |

CAST EP3-90-DI -007 LAT 05 01.8S LONG 109 58.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 21. | 23.485 | 35.097 | 0.00 | 23.481 | 23.869 |
| 108. | 16.990 | 35.119 | 0.00 | 16.972 | 25.613 |
| 507. | 8.638 | 34.671 | 0.00 | 8.584 | 26.927 |
| 1007. | 4.514 | 34.550 | 0.00 | 4.434 | 27.382 |
| 1505. | 3.086 | 34.601 | 0.00 | 2.977 | 27.569 |
| 2007. | 2.242 | 34.643 | 0.00 | 2.101 | 27.678 |
| 2257. | 2.078 | 34.653 | 0.00 | 1.918 | 27.700 |
| 2507. | 1.887 | 34.666 | 0.00 | 1.708 | 27.727 |
| 2763. | 1.772 | 34.674 | 0.00 | 1.572 | 27.743 |

CAST EP3-90-DI -011 LAT 00 30.8S LONG 110 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 22.354 | 34.751 | 0.00 | 22.351 | 23.931 |
| 109. | 14.760 | 34.988 | 0.00 | 14.744 | 26.019 |
| 258. | 12.074 | 34.854 | 0.00 | 12.040 | 26.469 |
| 512. | 7.939 | 34.620 | 0.00 | 7.887 | 26.993 |
| 511. | 7.958 | 34.619 | 0.00 | 7.906 | 26.989 |
| 691. | 6.445 | 34.564 | 0.00 | 6.381 | 27.159 |
| 784. | 5.709 | 34.557 | 0.00 | 5.641 | 27.248 |
| 898. | 5.182 | 34.550 | 0.00 | 5.107 | 27.306 |
| 1005. | 4.724 | 34.549 | 0.00 | 4.642 | 27.358 |

CAST EP3-90-DI -012 LAT 00 00.5S LONG 110 03.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 22.376 | 34.710 | 0.00 | 22.373 | 23.894 |
| 109. | 14.451 | 34.897 | 0.00 | 14.435 | 26.016 |
| 506. | 7.779 | 34.613 | 0.00 | 7.728 | 27.010 |
| 1008. | 4.633 | 34.555 | 0.00 | 4.552 | 27.373 |
| 1505. | 2.996 | 34.605 | 0.00 | 2.888 | 27.580 |
| 2005. | 2.236 | 34.643 | 0.00 | 2.096 | 27.678 |
| 2507. | 1.936 | 34.658 | 0.00 | 1.756 | 27.717 |
| 2757. | 1.776 | 34.667 | 0.00 | 1.576 | 27.737 |
| 3009. | 1.697 | 34.671 | 0.00 | 1.475 | 27.748 |
| 3007. | 1.697 | 34.673 | 0.00 | 1.475 | 27.750 |
| 3508. | 1.537 | 34.682 | 0.00 | 1.269 | 27.771 |
| 3613. | 1.483 | 34.687 | 0.00 | 1.206 | 27.780 |

CAST EP3-90-DI -013 LAT 00 30.5N LONG 109 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 22.350 | 34.692 | 0.00 | 22.347 | 23.888 |
| 107. | 14.216 | 34.912 | 0.00 | 14.200 | 26.077 |
| 228. | 12.353 | 34.867 | 0.00 | 12.323 | 26.424 |
| 225. | 12.352 | 34.866 | 0.00 | 12.322 | 26.424 |
| 508. | 7.817 | 34.612 | 0.00 | 7.766 | 27.004 |
| 712. | 6.334 | 34.559 | 0.00 | 6.269 | 27.170 |
| 812. | 5.757 | 34.553 | 0.00 | 5.686 | 27.239 |
| 910. | 4.918 | 34.551 | 0.00 | 4.843 | 27.337 |
| 1019. | 4.423 | 34.556 | 0.00 | 4.342 | 27.397 |

CAST EP3-90-DI -008 LAT 03 00.1S LONG 109 59.9W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 23.179 | 35.108 | 0.00 | 23.176 | 23.966 |
| 107. | 14.281 | 34.988 | 0.00 | 14.265 | 26.122 |
| 252. | 12.574 | 34.900 | 0.00 | 12.540 | 26.407 |
| 505. | 7.876 | 34.630 | 0.00 | 7.825 | 27.010 |
| 706. | 6.126 | 34.568 | 0.00 | 6.063 | 27.204 |
| 805. | 5.531 | 34.553 | 0.00 | 5.462 | 27.266 |
| 894. | 5.086 | 34.550 | 0.00 | 5.012 | 27.317 |
| 1006. | 4.443 | 34.553 | 0.00 | 4.363 | 27.392 |
| 1008. | 4.424 | 34.553 | 0.00 | 4.344 | 27.394 |

CAST EP3-90-DI -009 LAT 01 59.9S LONG 109 59.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 22.831 | 35.028 | 0.00 | 22.828 | 24.006 |
| 109. | 14.932 | 35.037 | 0.00 | 14.916 | 26.020 |
| 508. | 8.202 | 34.639 | 0.00 | 8.149 | 26.968 |
| 1008. | 4.508 | 34.553 | 0.00 | 4.428 | 27.385 |
| 1507. | 3.062 | 34.602 | 0.00 | 2.953 | 27.572 |
| 2004. | 2.325 | 34.642 | 0.00 | 2.183 | 27.670 |
| 2506. | 1.890 | 34.662 | 0.00 | 1.711 | 27.723 |
| 2752. | 1.758 | 34.669 | 0.00 | 1.559 | 27.740 |
| 3007. | 1.638 | 34.675 | 0.00 | 1.417 | 27.755 |
| 3525. | 1.543 | 34.683 | 0.00 | 1.273 | 27.772 |
| 3733. | 1.457 | 34.688 | 0.00 | 1.168 | 27.783 |
| 3728. | 1.460 | 34.691 | 0.00 | 1.171 | 27.786 |

CAST EP3-90-DI -010 LAT 01 29.9S LONG 110 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 22.379 | 34.941 | 0.00 | 22.376 | 24.069 |
| 105. | 16.841 | 35.184 | 0.00 | 16.824 | 25.698 |
| 107. | 16.865 | 35.190 | 0.00 | 16.847 | 25.697 |
| 254. | 12.167 | 34.864 | 0.00 | 12.134 | 26.458 |
| 505. | 7.893 | 34.616 | 0.00 | 7.842 | 26.996 |
| 707. | 5.991 | 34.555 | 0.00 | 5.928 | 27.210 |
| 806. | 5.446 | 34.545 | 0.00 | 5.377 | 27.270 |
| 911. | 5.070 | 34.548 | 0.00 | 4.994 | 27.318 |
| 1003. | 4.650 | 34.550 | 0.00 | 4.569 | 27.367 |

CAST EP3-90-DI -018 LAT 03 00.0N LONG 110 00.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 25.643 | 34.211 | 0.00 | 25.640 | 22.551 |
| 106. | 14.428 | 34.943 | 0.00 | 14.412 | 26.056 |
| 257. | 12.442 | 34.859 | 0.00 | 12.408 | 26.401 |
| 507. | 8.206 | 34.628 | 0.00 | 8.153 | 26.959 |
| 703. | -6.275 | 34.569 | 0.00 | 6.211 | 27.185 |
| 806. | 5.549 | 34.559 | 0.00 | 5.480 | 27.269 |
| 905. | 5.036 | 34.552 | 0.00 | 4.961 | 27.325 |
| 1010. | 4.498 | 34.560 | 0.00 | 4.418 | 27.392 |
| 1010. | 4.515 | 34.561 | 0.00 | 4.434 | 27.391 |

CAST EP3-90-DI -014 LAT 01 00.2N LONG 110 00.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 22.552 | 34.733 | 0.00 | 22.549 | 23.862 |
| 14. | 22.556 | 34.732 | 0.00 | 22.553 | 23.860 |
| 107. | 14.147 | 34.871 | 0.00 | 14.131 | 26.060 |
| 258. | 12.146 | 34.853 | 0.00 | 12.112 | 26.454 |
| 506. | 8.022 | 34.624 | 0.00 | 7.970 | 26.983 |
| 706. | 6.563 | 34.566 | 0.00 | 6.497 | 27.145 |
| 808. | 5.882 | 34.552 | 0.00 | 5.810 | 27.223 |
| 907. | 5.235 | 34.548 | 0.00 | 5.158 | 27.299 |
| 1006. | 4.558 | 34.556 | 0.00 | 4.477 | 27.382 |

CAST EP3-90-DI -019 LAT 03 59.3N LONG 109 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 15. | 26.458 | 34.166 | 0.00 | 26.455 | 22.264 |
| 109. | 15.389 | 34.881 | 0.00 | 15.372 | 25.799 |
| 257. | 12.005 | 34.828 | 0.00 | 11.971 | 26.462 |
| 506. | 8.387 | 34.634 | 0.00 | 8.334 | 26.936 |
| 706. | 6.271 | 34.567 | 0.00 | 6.207 | 27.184 |
| 804. | 5.760 | 34.562 | 0.00 | 5.689 | 27.246 |
| 804. | 5.759 | 34.562 | 0.00 | 5.688 | 27.246 |
| 904. | 5.243 | 34.556 | 0.00 | 5.167 | 27.304 |
| 1006. | 4.739 | 34.563 | 0.00 | 4.657 | 27.368 |

CAST EP3-90-DI -015 LAT 01 29.8N LONG 110 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 23.120 | 34.428 | 0.00 | 23.117 | 23.468 |
| 106. | 13.833 | 34.935 | 0.00 | 13.818 | 26.176 |
| 254. | 12.370 | 34.857 | 0.00 | 12.336 | 26.414 |
| 505. | 8.134 | 34.630 | 0.00 | 8.082 | 26.971 |
| 706. | 6.560 | 34.565 | 0.00 | 6.494 | 27.145 |
| 805. | 5.957 | 34.554 | 0.00 | 5.885 | 27.215 |
| 904. | 5.347 | 34.550 | 0.00 | 5.270 | 27.287 |
| 905. | 5.345 | 34.552 | 0.00 | 5.268 | 27.289 |
| 1006. | 4.588 | 34.555 | 0.00 | 4.507 | 27.378 |

CAST EP3-90-DI -020 LAT 05 01.1N LONG 110 01.0W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 17. | 26.811 | 34.103 | 0.00 | 26.807 | 22.106 |
| 107. | 18.882 | 34.655 | 0.00 | 18.863 | 24.793 |
| 504. | 8.290 | 34.629 | 0.00 | 8.237 | 26.947 |
| 1005. | 4.574 | 34.567 | 0.00 | 4.493 | 27.389 |
| 1500. | 3.083 | 34.606 | 0.00 | 2.974 | 27.573 |
| 2004. | 2.321 | 34.639 | 0.00 | 2.179 | 27.668 |
| 2507. | 1.867 | 34.664 | 0.00 | 1.689 | 27.727 |
| 3008. | 1.738 | 34.673 | 0.00 | 1.515 | 27.747 |
| 3264. | 1.609 | 34.679 | 0.00 | 1.364 | 27.762 |
| 3518. | 1.519 | 34.672 | 0.00 | 1.251 | 27.765 |
| 3621. | 1.503 | 34.687 | 0.00 | 1.224 | 27.779 |
| 3626. | 1.504 | 34.687 | 0.00 | 1.225 | 27.779 |

CAST EP3-90-DI -016 LAT 01 58.6N LONG 110 09.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 19. | 23.441 | 34.276 | 0.00 | 23.437 | 23.260 |
| 107. | 14.300 | 34.951 | 0.00 | 14.284 | 26.090 |
| 505. | 8.176 | 34.631 | 0.00 | 8.124 | 26.966 |
| 1004. | 4.530 | 34.558 | 0.00 | 4.450 | 27.387 |
| 1505. | 3.287 | 34.601 | 0.00 | 3.175 | 27.550 |
| 2004. | 2.354 | 34.638 | 0.00 | 2.212 | 27.665 |
| 2507. | 1.827 | 34.666 | 0.00 | 1.649 | 27.731 |
| 3007. | 1.684 | 34.674 | 0.00 | 1.462 | 27.751 |
| 3258. | 1.611 | 34.678 | 0.00 | 1.367 | 27.761 |
| 3508. | 1.510 | 34.687 | 0.00 | 1.243 | 27.777 |
| 3643. | 1.470 | 34.689 | 0.00 | 1.190 | 27.783 |
| 3643. | 1.470 | 34.689 | 0.00 | 1.190 | 27.783 |

CAST EP3-90-DI -024 LAT 08 59.7N LONG 110 00.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 17. | 27.654 | 33.361 | 0.00 | 27.650 | 21.278 |
| 106. | 14.245 | 34.769 | 0.00 | 14.230 | 25.961 |
| 259. | 11.312 | 34.743 | 0.00 | 11.279 | 26.525 |
| 504. | 8.443 | 34.615 | 0.00 | 8.390 | 26.913 |
| 705. | 6.190 | 34.561 | 0.00 | 6.126 | 27.190 |
| 807. | 5.629 | 34.554 | 0.00 | 5.559 | 27.255 |
| 910. | 4.972 | 34.560 | 0.00 | 4.897 | 27.338 |
| 1002. | 4.553 | 34.561 | 0.00 | 4.473 | 27.387 |
| 1006. | 4.527 | 34.555 | 0.00 | 4.447 | 27.385 |

CAST EP3-90-DI -025 LAT 09 59.9N LONG 110 00.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 27.691 | 33.341 | 0.00 | 27.688 | 21.251 |
| 108. | 14.007 | 34.803 | 0.00 | 13.992 | 26.037 |
| 259. | 11.318 | 34.757 | 0.00 | 11.286 | 26.535 |
| 507. | 8.360 | 34.600 | 0.00 | 8.307 | 26.914 |
| 706. | 6.216 | 34.561 | 0.00 | 6.152 | 27.186 |
| 807. | 5.651 | 34.557 | 0.00 | 5.581 | 27.255 |
| 906. | 5.131 | 34.554 | 0.00 | 5.055 | 27.315 |
| 903. | 5.137 | 34.553 | 0.00 | 5.061 | 27.314 |
| 1007. | 4.598 | 34.561 | 0.00 | 4.517 | 27.382 |

CAST EP3-90-DI -026 LAT 10 59.5N LONG 109 40.4W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 27.701 | 33.070 | 0.00 | 27.698 | 21.044 |
| 110. | 13.584 | 34.819 | 0.00 | 13.568 | 26.138 |
| 259. | 11.279 | 34.756 | 0.00 | 11.247 | 26.541 |
| 504. | 8.433 | 34.606 | 0.00 | 8.380 | 26.907 |
| 706. | 6.229 | 34.558 | 0.00 | 6.165 | 27.182 |
| 808. | 5.594 | 34.554 | 0.00 | 5.524 | 27.260 |
| 908. | 5.115 | 34.551 | 0.00 | 5.039 | 27.315 |
| 908. | 5.108 | 34.553 | 0.00 | 5.032 | 27.317 |
| 1008. | 4.607 | 34.559 | 0.00 | 4.526 | 27.379 |

CAST EP3-90-DI -021 LAT 05 59.6N LONG 109 59.5W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 15. | 27.110 | 33.851 | 0.00 | 27.107 | 21.821 |
| 107. | 17.278 | 34.673 | 0.00 | 17.260 | 25.202 |
| 258. | 10.743 | 34.731 | 0.00 | 10.712 | 26.618 |
| 505. | 7.990 | 34.616 | 0.00 | 7.938 | 26.982 |
| 706. | 6.129 | 34.560 | 0.00 | 6.066 | 27.197 |
| 806. | 5.494 | 34.556 | 0.00 | 5.425 | 27.273 |
| 916. | 5.064 | 34.559 | 0.00 | 4.988 | 27.327 |
| 1006. | 4.644 | 34.565 | 0.00 | 4.563 | 27.380 |
| 1006. | 4.643 | 34.566 | 0.00 | 4.562 | 27.381 |

CAST EP3-90-DI -022 LAT 06 59.8N LONG 109 59.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 15. | 27.446 | 33.563 | 0.00 | 27.443 | 21.497 |
| 107. | 14.185 | 34.754 | 0.00 | 14.169 | 25.962 |
| 257. | 10.418 | 34.713 | 0.00 | 10.387 | 26.661 |
| 505. | 8.341 | 34.627 | 0.00 | 8.288 | 26.938 |
| 708. | 6.346 | 34.564 | 0.00 | 6.281 | 27.172 |
| 806. | 5.731 | 34.556 | 0.00 | 5.660 | 27.245 |
| 1009. | 4.632 | 34.561 | 0.00 | 4.551 | 27.378 |
| 1005. | 4.652 | 34.559 | 0.00 | 4.571 | 27.374 |

CAST EP3-90-DI -023 LAT 07 59.6N LONG 110 00.6W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 27.537 | 33.175 | 0.00 | 27.533 | 21.176 |
| 110. | 13.498 | 34.786 | 0.00 | 13.483 | 26.130 |
| 259. | 10.892 | 34.734 | 0.00 | 10.860 | 26.594 |
| 506. | 8.086 | 34.605 | 0.00 | 8.034 | 26.959 |
| 707. | 6.272 | 34.559 | 0.00 | 6.208 | 27.178 |
| 806. | 5.525 | 34.553 | 0.00 | 5.456 | 27.267 |
| 898. | 5.056 | 34.554 | 0.00 | 4.981 | 27.324 |
| 900. | 5.056 | 34.553 | 0.00 | 4.981 | 27.323 |
| 1006. | 4.662 | 34.557 | 0.00 | 4.581 | 27.372 |

CAST EP3-90-DI -027 LAT 12 00.1N LONG 110 24.1W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 27.684 | 33.418 | 0.00 | 27.681 | 21.311 |
| 111. | 12.762 | 34.782 | 0.00 | 12.747 | 26.275 |
| 256. | 10.917 | 34.728 | 0.00 | 10.886 | 26.585 |
| 504. | 8.545 | 34.600 | 0.00 | 8.491 | 26.885 |
| 707. | 6.326 | 34.550 | 0.00 | 6.261 | 27.164 |
| 804. | 5.667 | 34.538 | 0.00 | 5.597 | 27.238 |
| 901. | 5.198 | 34.544 | 0.00 | 5.122 | 27.300 |
| 1006. | 4.753 | 34.552 | 0.00 | 4.671 | 27.358 |
| 1006. | 4.750 | 34.551 | 0.00 | 4.668 | 27.357 |

CAST EP3-90-DI -030 LAT 15 00.5N LONG 112 30.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 13. | 27.608 | 33.543 | 0.00 | 27.605 | 21.429 |
| 107. | 15.188 | 34.692 | 0.00 | 15.172 | 25.697 |
| 259. | 11.141 | 34.725 | 0.00 | 11.109 | 26.542 |
| 506. | 7.801 | 34.538 | 0.00 | 7.750 | 26.948 |
| 706. | 6.145 | 34.533 | 0.00 | 6.081 | 27.173 |
| 806. | 5.526 | 34.535 | 0.00 | 5.457 | 27.253 |
| 905. | 4.959 | 34.536 | 0.00 | 4.884 | 27.321 |
| 1005. | 4.626 | 34.544 | 0.00 | 4.545 | 27.365 |
| 1005. | 4.626 | 34.546 | 0.00 | 4.545 | 27.367 |

CAST EP3-90-DI -028 LAT 12 59.5N LONG 111 06.8W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 17. | 27.809 | 33.465 | 0.00 | 27.805 | 21.306 |
| 108. | 14.517 | 34.726 | 0.00 | 14.501 | 25.870 |
| 258. | 10.822 | 34.702 | 0.00 | 10.791 | 26.582 |
| 506. | 8.038 | 34.569 | 0.00 | 7.986 | 26.938 |
| 705. | 6.155 | 34.543 | 0.00 | 6.091 | 27.180 |
| 805. | 5.584 | 34.546 | 0.00 | 5.514 | 27.254 |
| 906. | 5.168 | 34.550 | 0.00 | 5.092 | 27.308 |
| 1004. | 4.690 | 34.558 | 0.00 | 4.609 | 27.369 |
| 1006. | 4.688 | 34.558 | 0.00 | 4.606 | 27.370 |

CAST EP3-90-DI -031 LAT 16 00.4N LONG 113 09.2W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 14. | 26.624 | 34.113 | 0.00 | 26.621 | 22.172 |
| 108. | 14.375 | 34.579 | 0.00 | 14.359 | 25.787 |
| 257. | 10.655 | 34.672 | 0.00 | 10.624 | 26.588 |
| 508. | 7.268 | 34.540 | 0.00 | 7.219 | 27.026 |
| 706. | 5.848 | 34.519 | 0.00 | 5.786 | 27.200 |
| 804. | 5.253 | 34.529 | 0.00 | 5.186 | 27.280 |
| 907. | 4.830 | 34.540 | 0.00 | 4.756 | 27.339 |
| 903. | 4.864 | 34.538 | 0.00 | 4.790 | 27.333 |
| 997. | 4.459 | 34.550 | 0.00 | 4.380 | 27.388 |

CAST EP3-90-DI -029 LAT 14 00.0N LONG 110 49.3W

| PRES (DB) | TEMP (C) | SAL (PSU) | OXY (ML/L) | POT TEMP (C) | SIG-TH |
|-----------|----------|-----------|------------|--------------|--------|
| 16. | 27.989 | 33.608 | 0.00 | 27.985 | 21.355 |
| 108. | 15.823 | 34.687 | 0.00 | 15.806 | 25.552 |
| 258. | 11.380 | 34.746 | 0.00 | 11.348 | 26.515 |
| 506. | 8.251 | 34.591 | 0.00 | 8.198 | 26.923 |
| 705. | 6.314 | 34.547 | 0.00 | 6.250 | 27.163 |
| 806. | 5.652 | 34.540 | 0.00 | 5.582 | 27.241 |
| 912. | 5.173 | 34.545 | 0.00 | 5.096 | 27.303 |
| 1012. | 4.668 | 34.548 | 0.00 | 4.586 | 27.364 |
| 1010. | 4.707 | 34.548 | 0.00 | 4.625 | 27.360 |