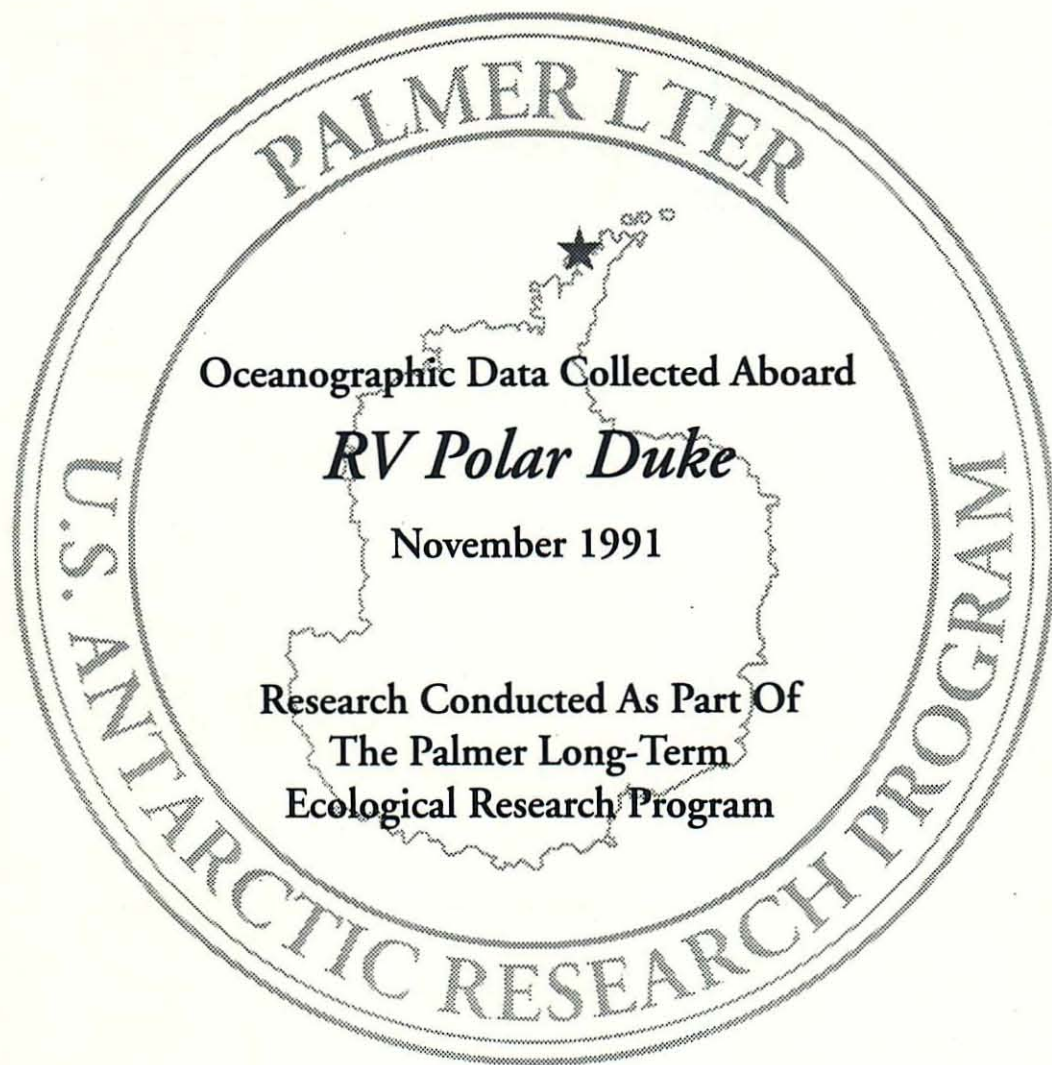


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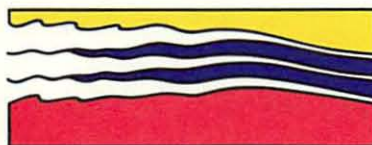


C. M. Lascara, R. C. Smith, D. Menzies and K. S. Baker

CCPO Technical Report No. 93-01

CENTER FOR COASTAL PHYSICAL OCEANOGRAPHY

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**Oceanographic Data Collected Aboard**  
*RV Polar Duke*  
**November 1991**

**Research Conducted As Part of the**  
**Palmer Long-Term Ecological Research Program**

**December 1993**

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## INTRODUCTION

From 7-21 November 1991, a multidisciplinary cruise was conducted aboard the RV *Polar Duke* as part of the Palmer Long-Term Ecological Research (LTER) program off the Antarctic Peninsula. Stations were occupied at specified grid locations (Figure 1) within the Palmer LTER survey grid (Waters and Smith, 1992). The cruise departed on 1 November and returned on 25 November to Punta Arenas, Chile.

Oceanographic data were collected using a Bio-Optical Profiling System (BOPS) (for a complete description see Smith *et al.*, 1984 and Smith and Baker, 1984). The BOPS package was configured with a SeaBird CTD sensor to measure temperature, conductivity, and pressure; a BioSpherical PAR and spectral irradiance sensor; and a SeaTech fluorometer. This data report presents the following hydrographic variables which were measured directly or derived from measured variables as part of this cruise: temperature, potential temperature, salinity, density, dynamic height, and Brunt-Väisälä frequency.

Upon return from the cruise, the BOPS data were initially processed at the Center for Remote Sensing and Environmental Optics at University of California, Santa Barbara. Final processing and report generation were completed at the Center for Coastal Physical Oceanography (CCPO) at Old Dominion University. Tapes of this data at one-meter resolution have been sent to the National Oceanographic Data Center.

## SAMPLING PROCEDURES

### *In Situ Data Collection*

The BOPS was used to collect 44 vertical profiles of temperature and conductivity at 27 stations within the Palmer LTER grid (Figure 1). Observations were made to 500 meters or to within 50 m of the bottom for shallower stations. The BOPS unit was lowered and raised at approximately 30 m min<sup>-1</sup>. Data were collected on both down and up casts; down cast data were used to generate this report. A 12-place rosette frame outfitted with 12 12-liter Go Flo bottles was lowered with the BOPS. The bottles were closed at selected depths on the up cast to obtain water for nutrient and biological analyses. Horizontal spacing between the hydrographic stations was 20 km on most transects; alongshelf spacing between transects was 100 km.

### *CTD Sensor Calibration*

The temperature and conductivity sensors on the CTD were subjected to pre- and post-cruise calibrations by Sea-Bird Electronics. The change in the temperature sensor between the two calibrations was 0.0003°C mo<sup>-1</sup>. The change

in the conductivity sensor was  $0.00001 \text{ Siemens m}^{-1} \text{ mo}^{-1}$ . Both of these changes are negligible and consequently no corrections were applied to the temperature or conductivity data presented in this report. There were no water samples collected during this cruise to determine salinities using a shipboard salinometer.

#### *Data Processing and Derived Quantities*

For each cast, the raw data (temperature and conductivity) from the BOPS were converted to engineering units and averaged into 1-meter depth bins. The conductivity data were corrected for thermal mass effects and pressure reversals. Data from the top 2 m of the water column were ignored due to sensor adjustment and rough surface conditions.

The procedures given in UNESCO (1983) were used to compute salinity from the temperature and conductivity data. Temperature and salinity profiles were plotted for each cast and visually inspected for consistency with acceptable, historical values for the region and for unrealistic spikes. All data were considered acceptable and no editing was performed. A 5-meter running average was applied to the temperature and salinity data to generate smoothed profiles for subsequent processing.

Potential temperature ( $\theta$ ) was determined from temperature profiles based on algorithms given in UNESCO (1983). The potential temperature and salinity data were used to calculate the density-related quantity,  $\sigma_0$ , which is the density anomaly for a water parcel that is moved adiabatically to the surface and was calculated using the International Equation of State of Seawater, 1980 as described in UNESCO (1983). Dynamic height values, reported in dynamic meters, were calculated relative to the first depth bin closest to the surface. The Brunt-Väisälä frequency, which is a measure of water column stability, was calculated from the 1-db vertical profiles of potential density and density gradient at each station using the approach described in Fofonoff and Bray (1981).

As a final step, all data were interpolated, using a cubic spline, to the standard depths that are reported in the following tables.

## GRAPHICAL AND TABULAR DATA CHARACTERISTICS

A reference list of all 44 BOPS casts is presented in Table 1 which contains the cast or event number, latitude, longitude, Julian day, GMT, and station.

The remainder of this data report presents graphical and tabular representations of station information and oceanographic measurements. For each BOPS cast, a table of station information is provided as described below.

- Station and event numbers (in parenthesis to the right of the station number) are given for each station. The event number is a unique number assigned to each shipboard activity.
- The day of the BOPS cast is reported in Julian Days.
- Time for the BOPS cast is given in Greenwich Mean Time and corresponds to the time when the BOPS departed the surface on the down cast.
- Latitude and longitude locations correspond to the navigational fix, from the FURNO GPS receiver system, at the time the BOPS cast started.
- Bottom depths were determined acoustically with the 50kHz Digitrak system on board the ship.

The second table given for each BOPS cast provides the following oceanographic variables as described below.

- Sample depth is given in meters at 5 m, 10-m intervals from 10 to 160 m and 20-m intervals from 160 to 500 m.
- *In situ* temperature is given in degrees Celsius.
- Salinity is based on the practical salinity scale.
- Potential temperature is given in degrees Celsius.
- Density is given as  $\sigma_0$  and is reported as  $\text{kg m}^{-3}$ .
- Dynamic height is given in dynamic meters.
- Brunt Väisälä frequency is given in  $\text{rad}^2 \text{sec}^{-2}$ .

The graphical presentation consists of vertical profiles of temperature (solid line) and salinity (dotted line) for each station to 500 meters. Also shown are potential temperature-salinity diagrams for each station. The symbols on

the potential temperature-salinity curves are provided as reference points and correspond to depths of 50 m, 100 m, and 200 m.

### ACKNOWLEDGMENTS

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## REFERENCES

- Fofonoff, N. P. and N. A. Bray. 1981. Available potential energy for MODE eddies, *J. Phys. Oceanogr.*, 11, 30-46.
- Smith, R. C., C. R. Booth and J. L. Star. 1984. Oceanographic bio-optical profiling system, *Applied Optics*, 23, 2791-2797.
- Smith, R. C. and K. S. Baker. 1984. The analysis of ocean optical data. Proceedings of the SPIE, Ocean Optics VII, 489, 119-126.
- UNESCO. 1983. Algorithms for computation of fundamental properties of seawater, by N. P. Fofonoff and R. C. Millard, Jr., Tech. Pap. Mar. Sci., 44, 53 pp.
- Waters, K. J. and R. C. Smith. 1992. Palmer LTER: A sampling grid for the Palmer LTER program. *Antarctic Journal of the U. S.*, 27, 236-239.

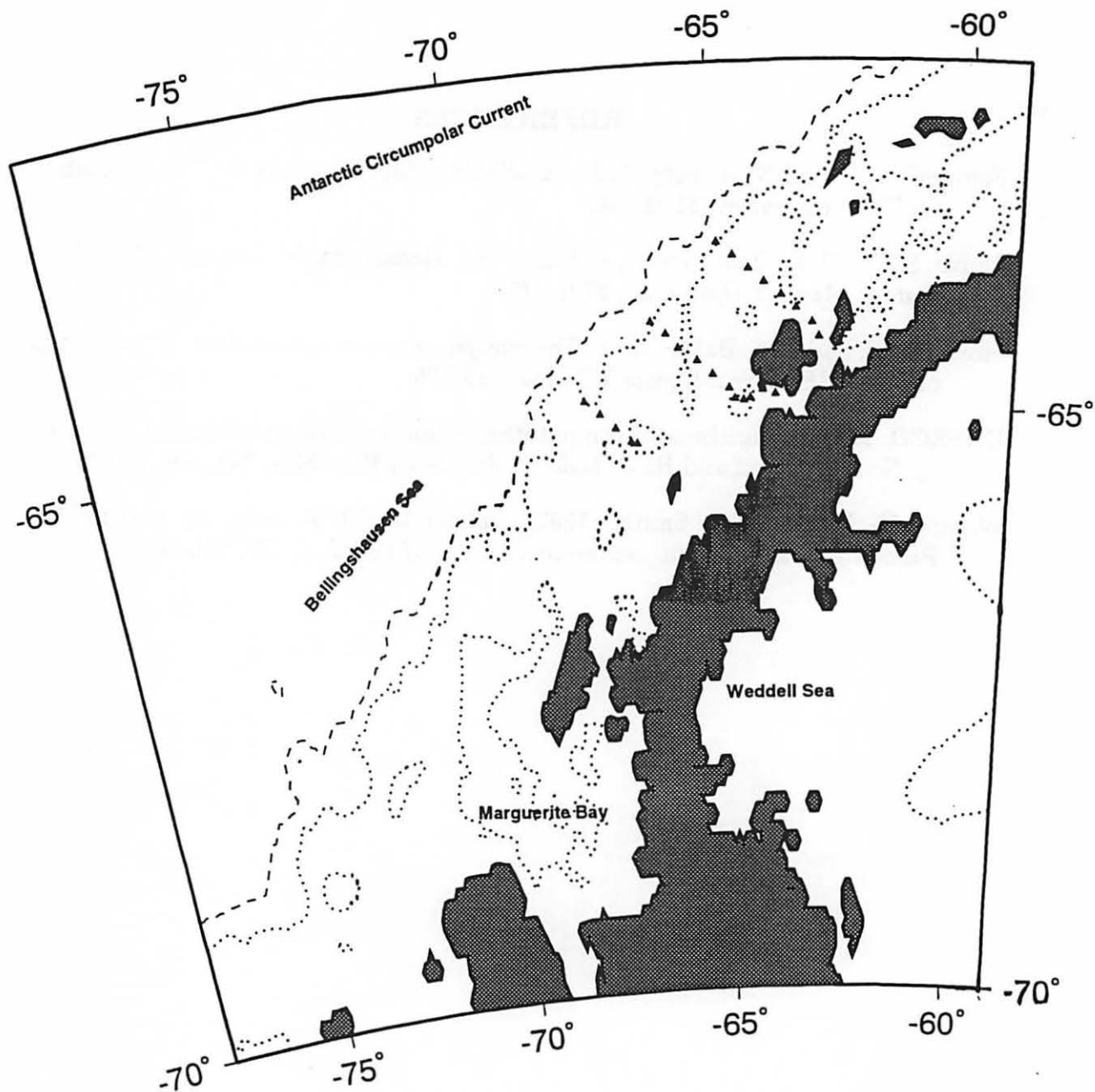


Figure 1. Distribution of BOPS stations, indicated by triangle, occupied during the November 1991 LTER cruise. The 500 and 2000 meter isobaths are indicated by the dotted and dashed line, respectively. The southernmost and northernmost transect lines sampled during this cruise correspond to the 500 and 700 lines, respectively of the Palmer LTER peninsula-scale grid.

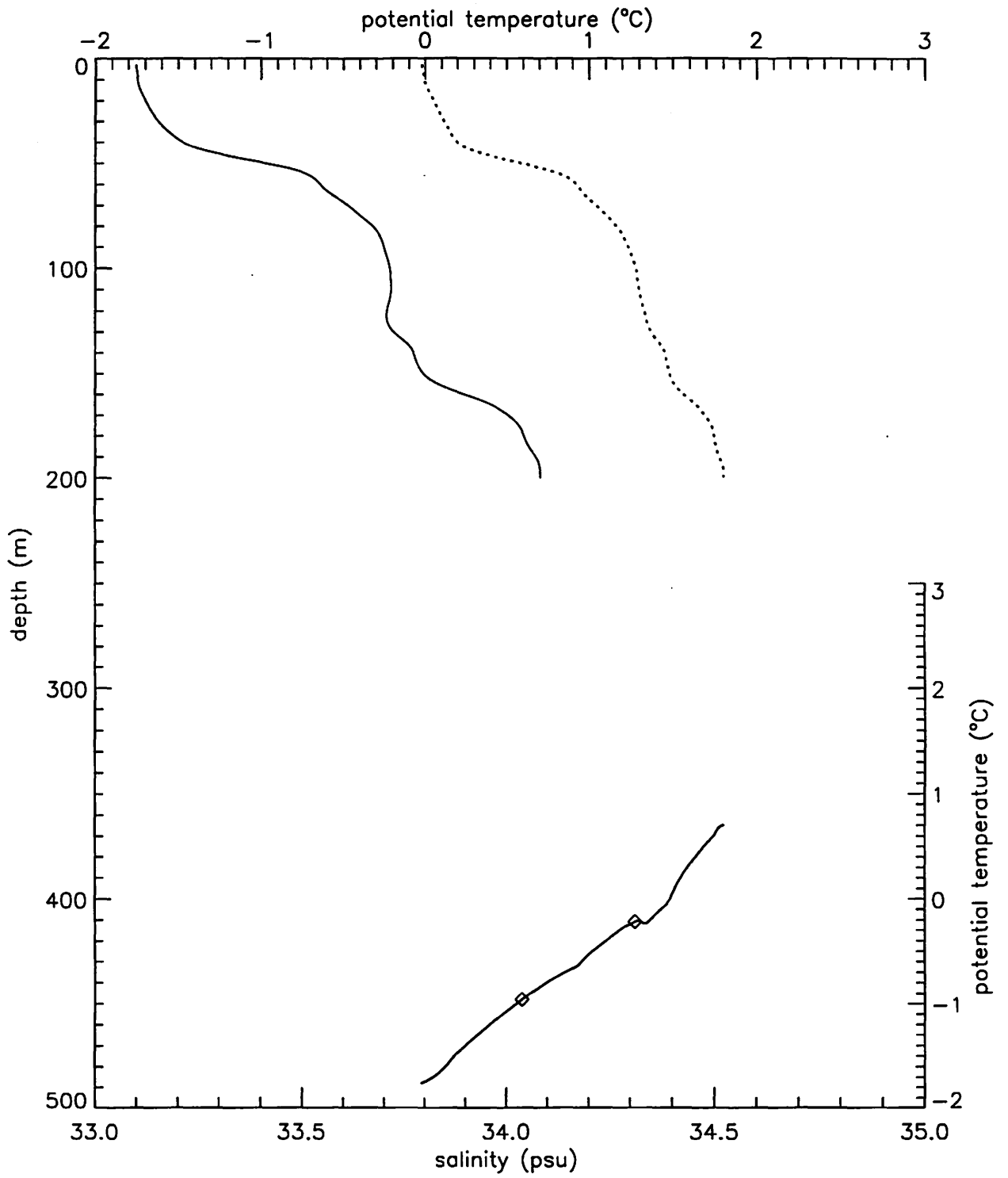
Table 1. Listing of BOPS Stations.

Event	Latitude	Longitude	Day	GMT	Station
1	-64.838	-64.052	311	0007	620.030
2	-64.905	-64.295	311	0707	607.040
3	-64.903	-64.298	311	1007	607.040
4	-64.903	-64.298	311	1307	607.040
6	-64.903	-64.298	311	1607	607.040
7	-64.903	-64.303	311	1907	607.040
9	-64.907	-64.315	311	2207	607.040
13	-64.907	-64.607	313	1309	600.050
16	-64.857	-64.772	313	1609	600.060
18	-64.923	-64.437	314	1310	600.040
19	-64.933	-64.462	314	1610	600.040
21	-64.932	-64.452	314	2110	600.040
24	-64.933	-64.452	315	1611	600.040
26	-64.875	-63.793	316	1712	625.020
30	-64.263	-63.042	317	0713	700.040
39	-64.387	-62.908	317	1713	700.020
48	-64.137	-63.352	318	0314	700.060
58	-64.022	-63.650	318	1114	700.080
62	-63.903	-63.977	318	1514	700.100
68	-63.785	-64.282	318	1914	700.120
76	-63.667	-64.587	319	0015	700.140
90	-63.547	-64.883	319	1015	700.160
91	-63.550	-64.888	319	1315	700.160
92	-63.550	-64.892	319	1815	700.160
93	-63.547	-64.892	319	2215	700.160
102	-64.212	-66.258	320	0716	600.160
112	-64.863	-67.697	320	1516	500.160
118	-64.985	-67.397	320	1916	500.140
126	-65.110	-67.083	321	0017	500.120
136	-65.233	-66.777	321	0717	500.100
137	-65.110	-67.085	321	0917	500.120
138	-65.110	-67.082	321	1117	500.120
142	-65.110	-67.087	321	1917	500.120
146	-65.110	-67.085	321	2317	500.120
150	-65.252	-66.648	322	0918	500.095
157	-64.325	-65.955	322	2018	600.140
162	-64.455	-65.655	323	0019	600.120
172	-64.570	-65.338	323	0719	600.100
178	-64.692	-65.040	323	1019	600.080
182	-64.815	-64.715	323	1519	600.060
183	-64.453	-65.715	323	1919	600.120
196	-64.808	-64.063	324	2320	palC
197	-64.790	-64.073	325	0021	palB
198	-64.778	-64.073	325	0021	palA

LTER 91a Station: 620.030 (1) JulianDay: 311 GMT: 0007  
 Latitude: 64° 50.30' S Longitude: 64° 3.10' W Depth: 318 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.753	-1.753	33.793	27.198	0.0017	4.64e-06
10	-1.744	-1.744	33.798	27.202	0.0060	1.04e-05
20	-1.697	-1.698	33.820	27.219	0.0145	1.79e-05
30	-1.618	-1.618	33.846	27.238	0.0228	1.96e-05
40	-1.468	-1.469	33.880	27.262	0.0309	4.95e-05
50	-0.955	-0.957	34.039	27.373	0.0384	1.33e-04
60	-0.638	-0.640	34.172	27.468	0.0448	3.93e-05
70	-0.470	-0.473	34.219	27.498	0.0507	3.35e-05
80	-0.320	-0.323	34.267	27.530	0.0563	2.46e-05
90	-0.249	-0.252	34.295	27.550	0.0616	1.52e-05
100	-0.214	-0.217	34.312	27.562	0.0668	8.18e-06
110	-0.205	-0.209	34.321	27.569	0.0719	7.46e-06
120	-0.231	-0.235	34.333	27.580	0.0769	1.16e-05
130	-0.188	-0.192	34.350	27.592	0.0819	1.67e-05
140	-0.067	-0.072	34.382	27.611	0.0866	1.11e-05
150	-0.005	-0.011	34.394	27.617	0.0913	5.46e-06
160	0.253	0.247	34.427	27.631	0.0958	2.21e-05
180	0.615	0.608	34.500	27.668	0.1044	4.61e-06
200	0.717	0.709	34.522	27.680	0.1126	-1.21e-06

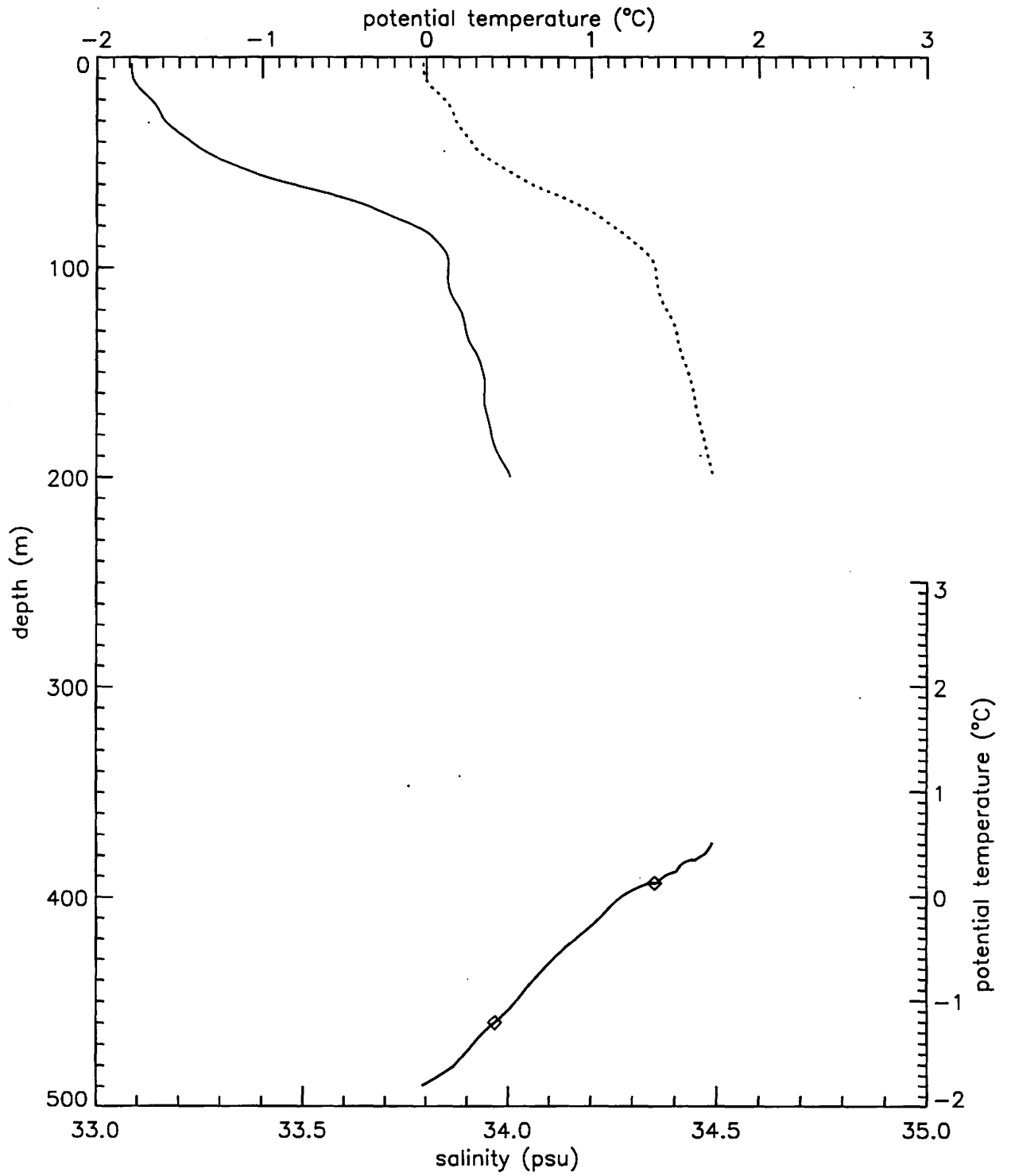
Station: 620.030



LTER 91a	Station: 607.040 (2)	JulianDay: 311	GMT: 0707
	Latitude: 64° 54.30' S	Longitude: 64° 17.70' W	Depth: 400 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.789	-1.789	33.791	27.198	0.0017	2.62e-06
10	-1.779	-1.779	33.796	27.202	0.0060	1.83e-05
20	-1.671	-1.672	33.843	27.237	0.0144	3.22e-05
30	-1.588	-1.588	33.872	27.258	0.0225	1.88e-05
40	-1.428	-1.429	33.909	27.283	0.0304	2.58e-05
50	-1.196	-1.198	33.968	27.324	0.0380	5.37e-05
60	-0.823	-0.825	34.057	27.382	0.0451	6.31e-05
70	-0.370	-0.373	34.173	27.457	0.0516	6.17e-05
80	-0.075	-0.078	34.251	27.506	0.0575	4.07e-05
90	0.093	0.090	34.314	27.548	0.0630	3.81e-05
100	0.136	0.133	34.353	27.577	0.0681	1.23e-05
110	0.144	0.140	34.361	27.583	0.0731	6.43e-06
120	0.211	0.207	34.380	27.595	0.0780	1.73e-05
130	0.248	0.243	34.404	27.612	0.0827	8.25e-06
140	0.305	0.299	34.415	27.618	0.0874	8.61e-06
150	0.351	0.345	34.432	27.629	0.0920	1.00e-05
160	0.360	0.354	34.445	27.639	0.0964	8.01e-06
180	0.405	0.398	34.467	27.654	0.1052	8.19e-06
200	0.522	0.514	34.490	27.666	0.1136	4.86e-06

Station: 607.040

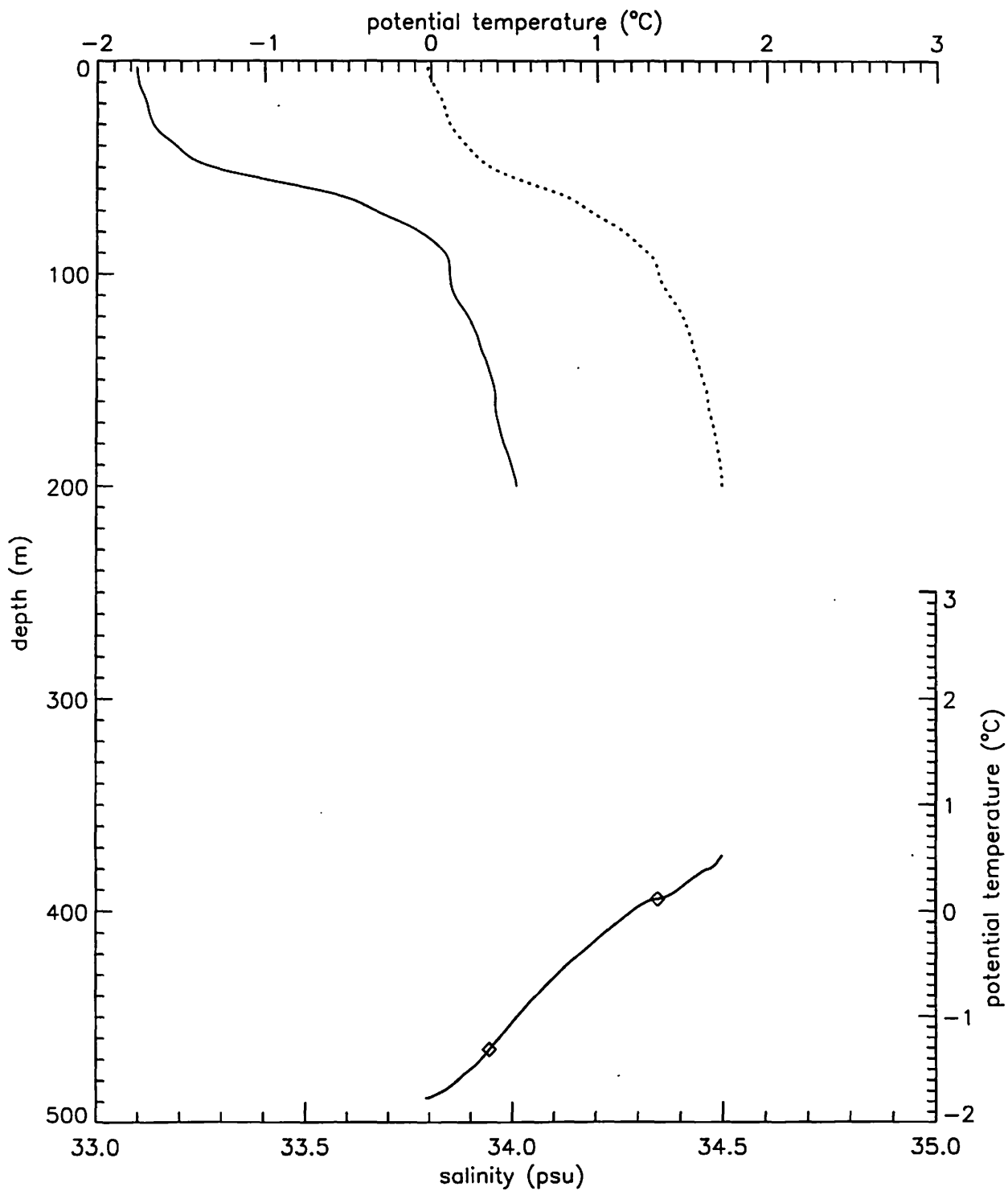


LTER 91a	Station: 607.040 (3)	JulianDay: 311	GMT: 1007
	Latitude: 64° 54.20' S	Longitude: 64° 17.90' W	Depth: 400 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.762	-1.762	33.793	27.199	0.0017	7.87e-06
10	-1.752	-1.753	33.802	27.206	0.0060	1.80e-05
20	-1.704	-1.704	33.829	27.226	0.0144	1.39e-05
30	-1.663	-1.663	33.846	27.239	0.0227	1.97e-05
40	-1.527	-1.528	33.887	27.269	0.0307	3.22e-05
50	-1.305	-1.306	33.945	27.309	0.0385	5.72e-05
60	-0.716	-0.718	34.077	27.394	0.0456	8.47e-05
70	-0.337	-0.339	34.182	27.462	0.0520	5.19e-05
80	-0.063	-0.066	34.264	27.516	0.0578	4.25e-05
90	0.092	0.089	34.321	27.554	0.0632	3.19e-05
100	0.119	0.115	34.346	27.572	0.0683	1.18e-05
110	0.149	0.145	34.371	27.591	0.0733	2.22e-05
120	0.231	0.227	34.403	27.612	0.0781	1.44e-05
130	0.292	0.287	34.422	27.624	0.0827	8.98e-06
140	0.336	0.330	34.436	27.633	0.0872	9.58e-06
150	0.380	0.374	34.451	27.643	0.0916	9.58e-06
160	0.401	0.395	34.463	27.651	0.0960	5.64e-06
180	0.455	0.448	34.484	27.665	0.1045	4.25e-06
200	0.533	0.525	34.497	27.671	0.1128	-1.21e-06



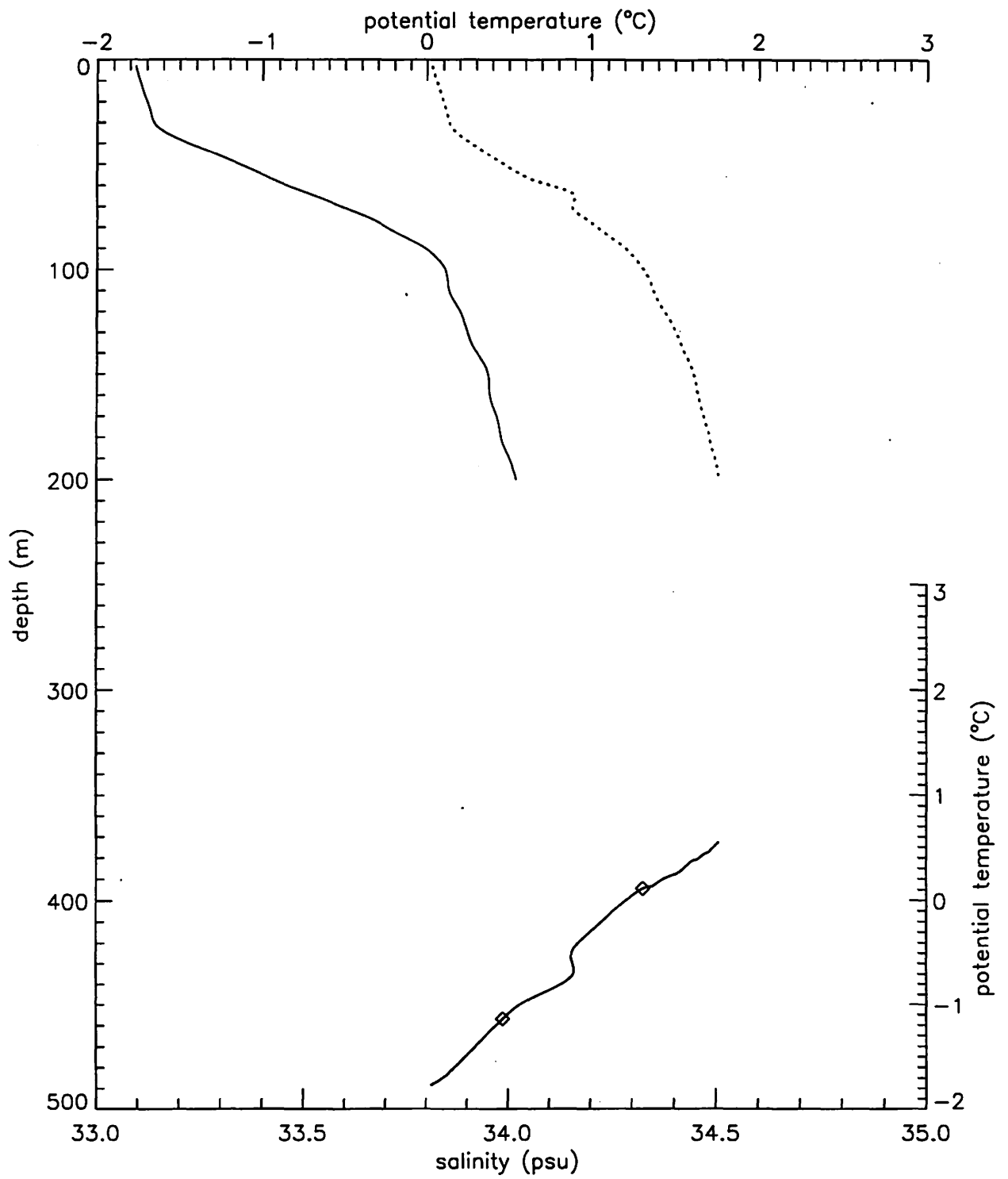
Station: 607.040



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	<b>Latitude:</b> 64° 54.20' S	<b>Longitude:</b> 64° 17.90' W	<b>Depth:</b> 400 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.763	-1.763	33.814	27.215	0.0017	7.06e-06
10	-1.740	-1.741	33.823	27.222	0.0059	1.31e-05
20	-1.699	-1.699	33.839	27.235	0.0142	1.06e-05
30	-1.657	-1.658	33.854	27.246	0.0224	1.77e-05
40	-1.448	-1.449	33.908	27.284	0.0303	4.95e-05
50	-1.135	-1.137	33.988	27.338	0.0379	5.46e-05
60	-0.852	-0.853	34.103	27.421	0.0448	8.89e-05
70	-0.522	-0.524	34.154	27.448	0.0510	7.27e-07
80	-0.244	-0.247	34.215	27.485	0.0571	4.12e-05
90	-0.003	-0.006	34.283	27.528	0.0627	3.58e-05
100	0.117	0.113	34.326	27.556	0.0681	2.32e-05
110	0.141	0.137	34.350	27.575	0.0732	1.33e-05
120	0.209	0.205	34.376	27.592	0.0781	2.06e-05
130	0.256	0.251	34.405	27.612	0.0829	1.55e-05
140	0.316	0.310	34.426	27.626	0.0875	1.26e-05
150	0.383	0.377	34.446	27.638	0.0920	9.77e-06
160	0.393	0.387	34.456	27.646	0.0964	5.70e-06
180	0.463	0.456	34.483	27.664	0.1050	7.34e-06
200	0.556	0.548	34.506	27.677	0.1132	-1.21e-06

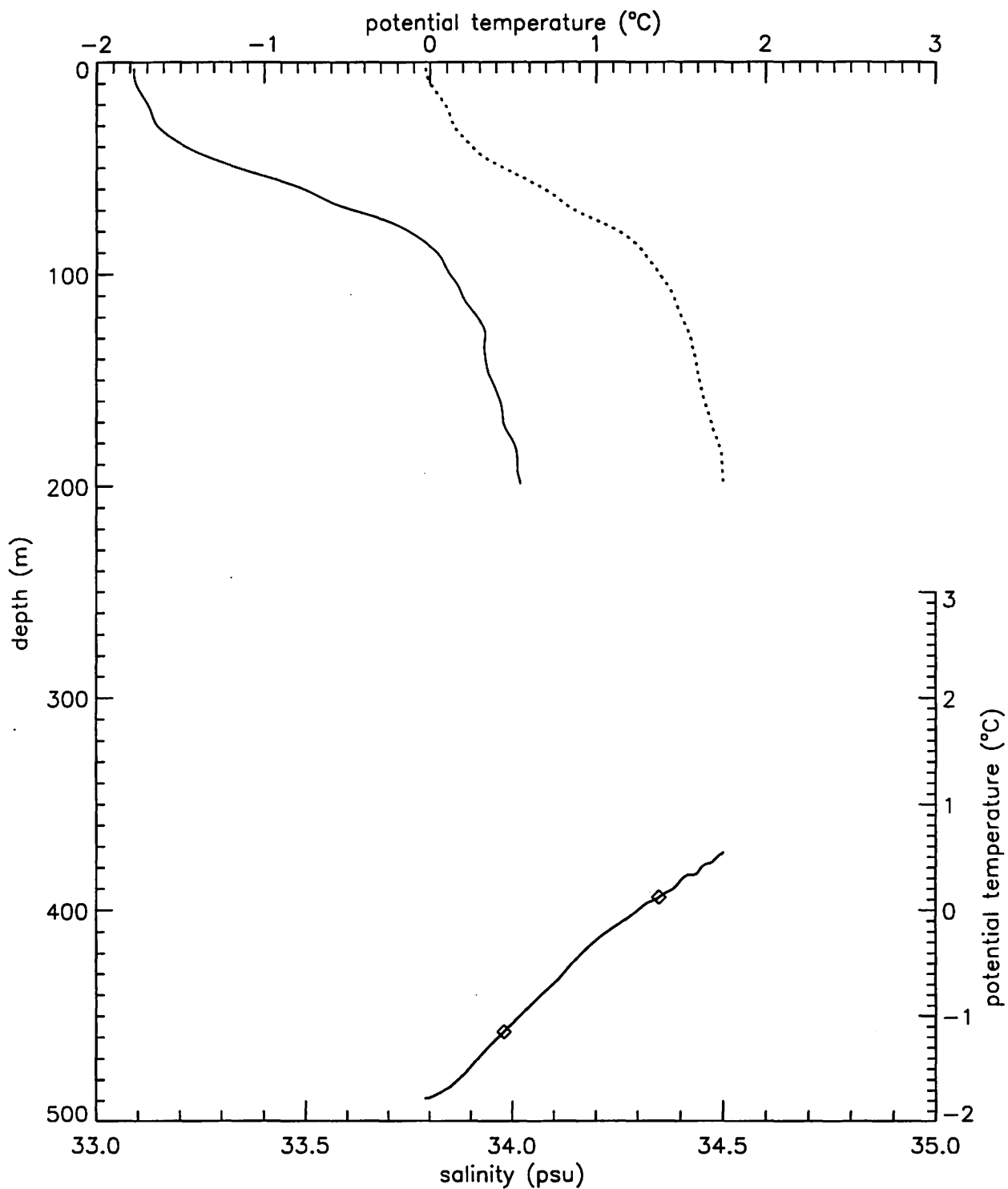
Station: 607.040



<b>LTER 91a</b>	<b>Station:</b> 607.040 (6)	<b>JulianDay:</b> 311	<b>GMT:</b> 1607
	<b>Latitude:</b> 64° 54.20' S	<b>Longitude:</b> 64° 17.90' W	<b>Depth:</b> 400 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.777	-1.777	33.790	27.196	0.0017	7.46e-06
10	-1.765	-1.765	33.800	27.205	0.0060	2.08e-05
20	-1.695	-1.695	33.836	27.232	0.0144	2.17e-05
30	-1.636	-1.636	33.858	27.248	0.0226	2.13e-05
40	-1.463	-1.464	33.903	27.280	0.0306	3.57e-05
50	-1.145	-1.146	33.980	27.332	0.0381	6.29e-05
60	-0.761	-0.763	34.079	27.398	0.0451	5.14e-05
70	-0.462	-0.464	34.151	27.443	0.0516	5.47e-05
80	-0.126	-0.128	34.255	27.511	0.0575	5.37e-05
90	0.047	0.044	34.313	27.549	0.0630	2.65e-05
100	0.127	0.123	34.350	27.575	0.0681	2.42e-05
110	0.202	0.198	34.383	27.597	0.0730	1.41e-05
120	0.291	0.287	34.402	27.608	0.0778	1.28e-05
130	0.341	0.335	34.424	27.623	0.0824	1.08e-05
140	0.343	0.337	34.435	27.632	0.0870	7.28e-06
150	0.382	0.376	34.445	27.638	0.0914	4.67e-06
160	0.432	0.426	34.456	27.644	0.0958	8.61e-06
180	0.517	0.510	34.489	27.665	0.1044	9.10e-06

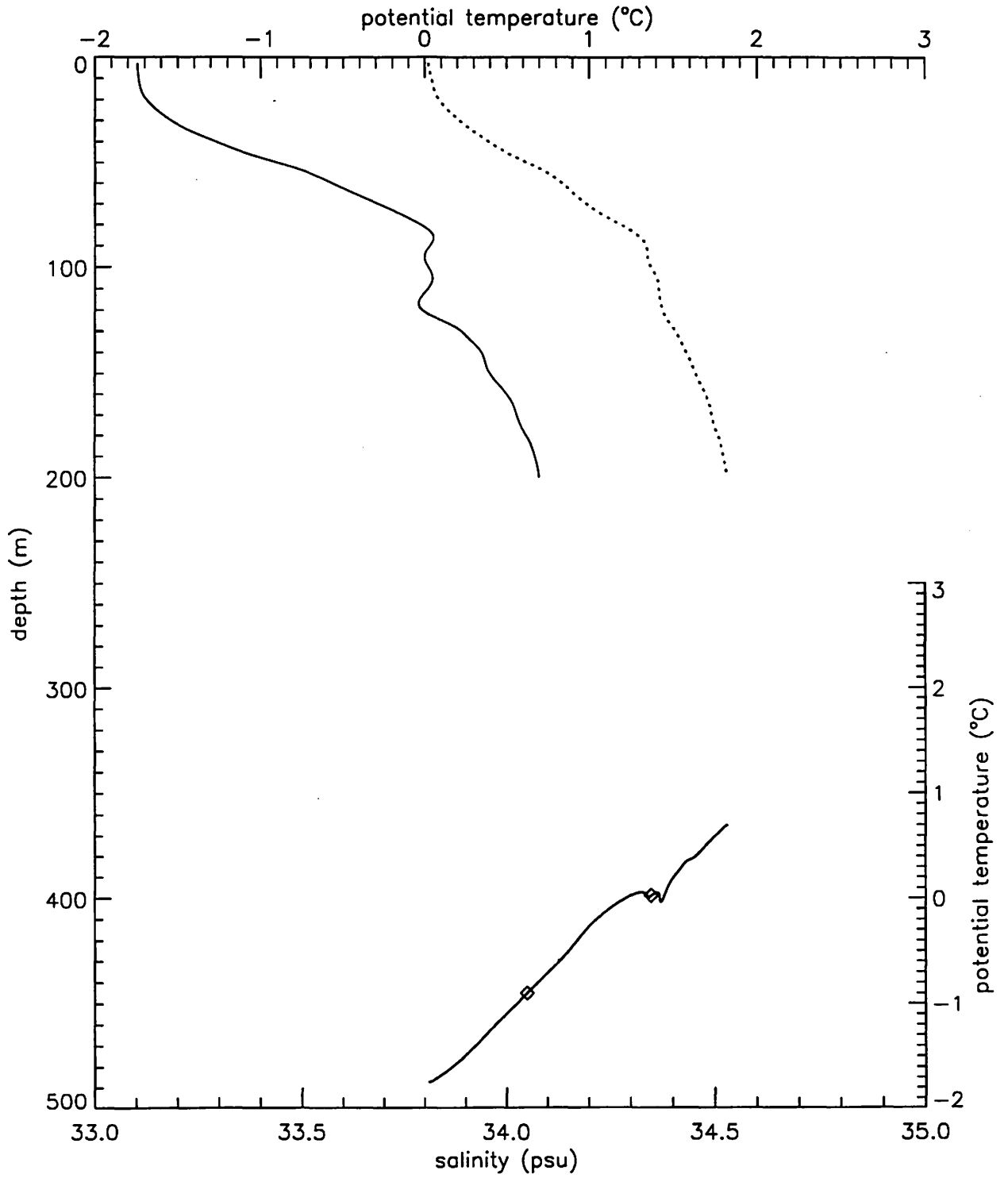
Station: 607.040



**LTER 91a Station: 607.040 (7) JulianDay: 311 GMT: 1907**  
**Latitude: 64° 54.20' S Longitude: 64° 18.20' W Depth: 400 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.741	-1.741	33.810	27.212	0.0017	5.25e-06
10	-1.736	-1.736	33.816	27.217	0.0059	8.90e-06
20	-1.689	-1.690	33.834	27.230	0.0143	2.42e-05
30	-1.539	-1.539	33.885	27.268	0.0224	4.32e-05
40	-1.265	-1.266	33.957	27.317	0.0301	5.14e-05
50	-0.898	-0.899	34.050	27.380	0.0373	6.45e-05
60	-0.567	-0.568	34.136	27.435	0.0438	3.86e-05
70	-0.288	-0.290	34.196	27.472	0.0500	3.93e-05
80	-0.023	-0.026	34.278	27.524	0.0558	5.49e-05
90	0.035	0.031	34.337	27.569	0.0610	2.13e-05
100	0.028	0.024	34.348	27.579	0.0661	1.44e-05
110	0.026	0.022	34.367	27.594	0.0709	9.64e-06
120	-0.013	-0.017	34.376	27.603	0.0757	6.61e-06
130	0.231	0.226	34.407	27.616	0.0805	1.51e-05
140	0.355	0.350	34.433	27.629	0.0850	1.41e-05
150	0.406	0.400	34.455	27.644	0.0895	1.24e-05
160	0.511	0.504	34.479	27.658	0.0938	1.07e-05
180	0.629	0.621	34.508	27.674	0.1022	8.80e-06
200	0.709	0.700	34.529	27.686	0.1103	-1.21e-06

Station: 607.040

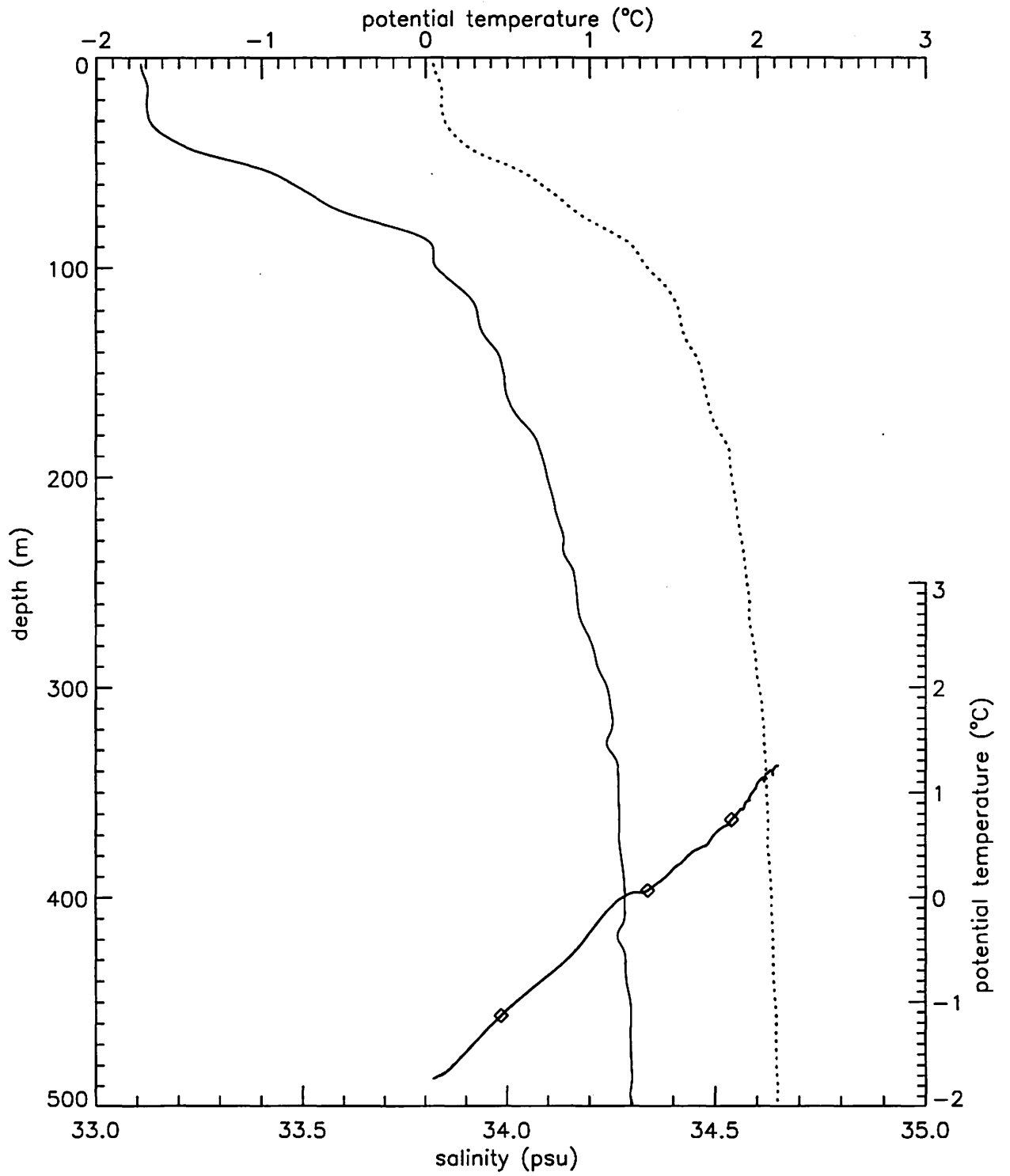


**LTER 91a Station: 607.040 (9) JulianDay: 311 GMT: 2207**  
**Latitude: 64° 54.40' S Longitude: 64° 18.90' W Depth: 400 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.727	-1.727	33.819	27.219	0.0017	7.47e-06
10	-1.705	-1.705	33.829	27.227	0.0059	1.39e-05
20	-1.694	-1.695	33.838	27.233	0.0141	1.21e-07
30	-1.676	-1.676	33.845	27.239	0.0224	1.68e-05
40	-1.521	-1.522	33.887	27.269	0.0304	4.10e-05
50	-1.127	-1.128	33.985	27.335	0.0381	7.66e-05
60	-0.810	-0.811	34.080	27.400	0.0450	4.79e-05
70	-0.598	-0.600	34.145	27.444	0.0514	3.94e-05
80	-0.223	-0.226	34.223	27.490	0.0575	4.82e-05
90	0.046	0.043	34.303	27.541	0.0631	3.76e-05
100	0.069	0.066	34.339	27.569	0.0683	2.69e-05
110	0.220	0.216	34.387	27.600	0.0732	2.30e-05
120	0.319	0.314	34.413	27.616	0.0779	9.94e-06
130	0.350	0.345	34.423	27.622	0.0825	7.28e-06
140	0.444	0.438	34.448	27.636	0.0871	1.73e-05
150	0.483	0.477	34.468	27.650	0.0914	7.89e-06
160	0.500	0.494	34.478	27.657	0.0957	6.61e-06
180	0.670	0.662	34.514	27.676	0.1041	1.72e-05
200	0.753	0.745	34.539	27.691	0.1121	3.34e-06
220	0.821	0.811	34.554	27.699	0.1200	3.46e-06
240	0.882	0.872	34.570	27.708	0.1277	4.25e-07
260	0.941	0.929	34.582	27.714	0.1353	-2.43e-07
280	1.033	1.020	34.593	27.717	0.1428	3.04e-06
300	1.121	1.106	34.605	27.721	0.1503	4.01e-06
320	1.150	1.135	34.616	27.728	0.1577	3.83e-06
340	1.189	1.173	34.622	27.730	0.1650	1.40e-06
360	1.195	1.178	34.625	27.732	0.1723	1.40e-06
380	1.207	1.189	34.628	27.733	0.1796	1.95e-06
400	1.230	1.211	34.634	27.737	0.1868	1.34e-06
420	1.191	1.171	34.638	27.743	0.1940	-6.69e-07
440	1.244	1.222	34.640	27.741	0.2012	4.26e-07
460	1.270	1.247	34.645	27.743	0.2084	3.04e-07
480	1.275	1.251	34.646	27.744	0.2155	1.16e-06
500	1.285	1.260	34.649	27.746	0.2227	-1.83e-06



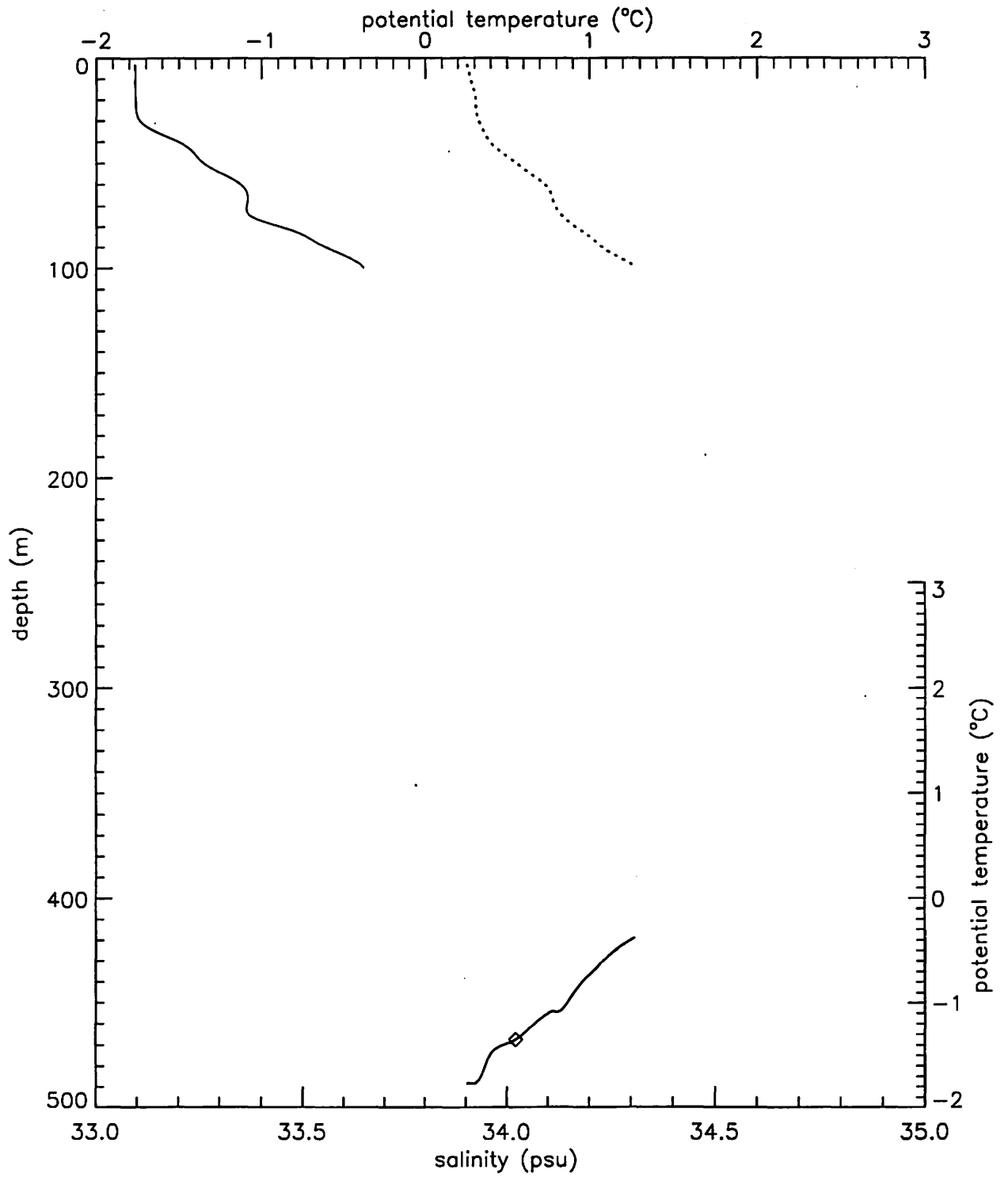
Station: 607.040



LTER 91a	Station: 600.050 (13)	JulianDay: 313	GMT: 1309
	Latitude: 64° 54.40' S	Longitude: 64° 36.40' W	Depth: 400 m

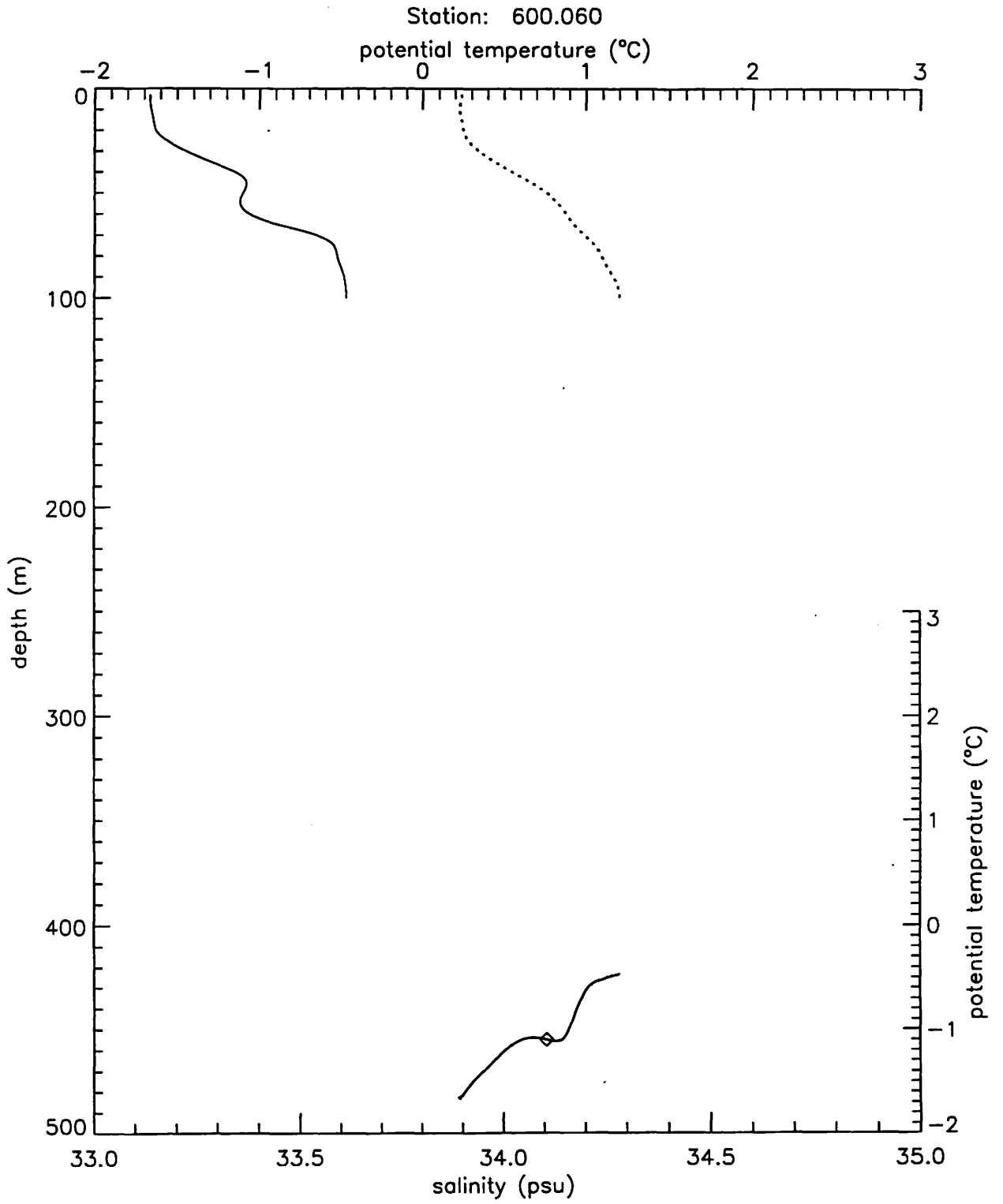
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.765	-1.765	33.904	27.289	0.0015	7.87e-06
10	-1.765	-1.765	33.911	27.294	0.0054	1.09e-05
20	-1.762	-1.763	33.923	27.304	0.0130	4.60e-06
30	-1.734	-1.735	33.930	27.310	0.0206	1.17e-05
40	-1.502	-1.503	33.958	27.326	0.0280	2.59e-05
50	-1.349	-1.350	34.022	27.373	0.0352	5.05e-05
60	-1.124	-1.126	34.092	27.422	0.0419	3.52e-05
70	-1.087	-1.089	34.117	27.441	0.0482	2.01e-05
80	-0.880	-0.882	34.167	27.474	0.0544	3.89e-05
90	-0.604	-0.607	34.232	27.515	0.0601	4.30e-05
100	-0.375	-0.378	34.309	27.567	0.0654	3.33e-05

Station: 600.050



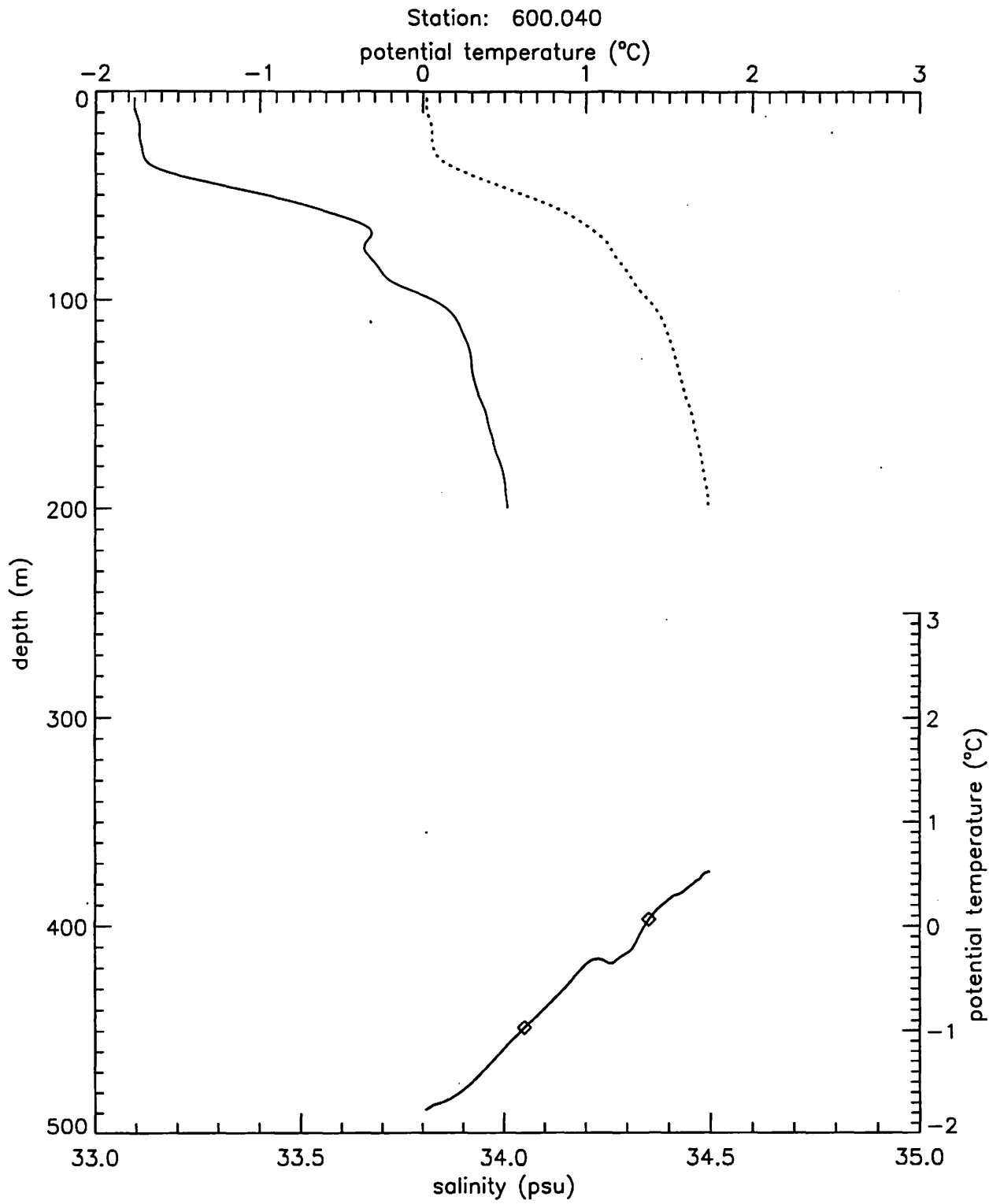
<b>LTER 91a</b>	<b>Station:</b>	<b>600.060 (16)</b>	<b>JulianDay:</b>	<b>313</b>	<b>GMT:</b>	<b>1609</b>
	<b>Latitude:</b>	<b>64° 51.40' S</b>	<b>Longitude:</b>	<b>64° 46.30' W</b>	<b>Depth:</b>	<b>400 m</b>

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.664	-1.664	33.894	27.278	0.0016	-2.62e-06
10	-1.657	-1.657	33.891	27.276	0.0055	3.63e-07
20	-1.630	-1.630	33.900	27.282	0.0133	1.04e-05
30	-1.443	-1.444	33.939	27.309	0.0210	4.35e-05
40	-1.144	-1.145	34.022	27.366	0.0283	6.34e-05
50	-1.098	-1.099	34.106	27.432	0.0350	5.13e-05
60	-1.057	-1.059	34.152	27.469	0.0411	2.16e-05
70	-0.656	-0.658	34.196	27.488	0.0471	2.47e-05
80	-0.523	-0.526	34.238	27.516	0.0527	2.07e-05
90	-0.481	-0.484	34.266	27.537	0.0582	1.96e-05
100	-0.466	-0.469	34.281	27.549	0.0635	7.88e-06



<b>LTER 91a</b>	<b>Station:</b> 600.040 (18)	<b>JulianDay:</b> 314	<b>GMT:</b> 1310
	<b>Latitude:</b> 64° 55.40' S	<b>Longitude:</b> 64° 26.20' W	<b>Depth:</b> 1310 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.765	-1.765	33.808	27.211	0.0017	4.04e-07
10	-1.756	-1.757	33.811	27.213	0.0059	7.81e-06
20	-1.734	-1.734	33.822	27.221	0.0143	2.85e-06
30	-1.710	-1.711	33.832	27.229	0.0227	2.75e-05
40	-1.518	-1.519	33.916	27.292	0.0307	8.26e-05
50	-0.965	-0.966	34.051	27.383	0.0380	8.54e-05
60	-0.511	-0.513	34.168	27.459	0.0444	5.37e-05
70	-0.324	-0.327	34.240	27.509	0.0503	4.19e-05
80	-0.319	-0.322	34.276	27.538	0.0558	2.35e-05
90	-0.214	-0.217	34.312	27.562	0.0610	1.67e-05
100	0.067	0.064	34.352	27.580	0.0661	2.01e-05
110	0.216	0.212	34.387	27.600	0.0710	1.41e-05
120	0.275	0.270	34.405	27.611	0.0757	1.01e-05
130	0.306	0.301	34.420	27.622	0.0803	9.28e-06
140	0.328	0.323	34.433	27.631	0.0849	8.01e-06
150	0.377	0.371	34.448	27.640	0.0894	9.40e-06
160	0.413	0.407	34.460	27.648	0.0937	5.82e-06
180	0.492	0.485	34.481	27.660	0.1023	3.94e-06
200	0.533	0.524	34.494	27.668	0.1107	0.00e+00

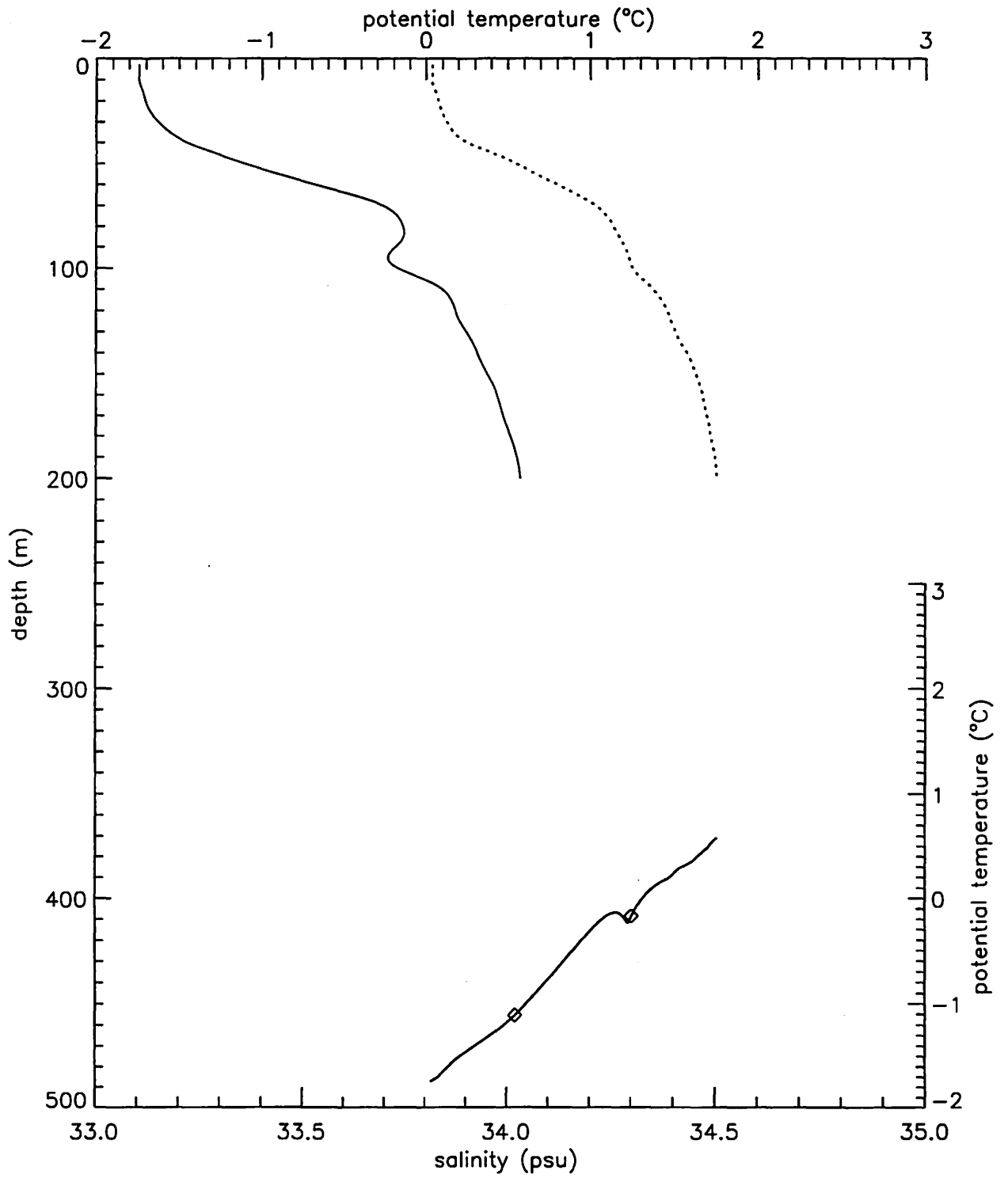


<b>LTER 91a</b>	<b>Station:</b> 600.040 (19)	<b>JulianDay:</b> 314	<b>GMT:</b> 1610
	<b>Latitude:</b> 64° 56.00' S	<b>Longitude:</b> 64° 27.70' W	<b>Depth:</b> 1310 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.742	-1.742	33.815	27.216	0.0017	0.00e+00
10	-1.742	-1.742	33.815	27.216	0.0059	5.02e-06
20	-1.704	-1.704	33.830	27.227	0.0143	1.05e-05
30	-1.625	-1.625	33.851	27.242	0.0225	2.09e-05
40	-1.452	-1.452	33.902	27.279	0.0305	6.66e-05
50	-1.103	-1.105	34.021	27.364	0.0379	6.88e-05
60	-0.680	-0.682	34.121	27.428	0.0446	6.05e-05
70	-0.264	-0.266	34.214	27.485	0.0508	3.98e-05
80	-0.139	-0.142	34.256	27.513	0.0565	2.14e-05
90	-0.187	-0.190	34.285	27.538	0.0620	2.36e-05
100	-0.167	-0.171	34.302	27.552	0.0673	1.30e-05
110	0.105	0.101	34.352	27.578	0.0724	2.63e-05
120	0.187	0.183	34.385	27.600	0.0773	1.56e-05
130	0.255	0.250	34.405	27.612	0.0820	1.19e-05
140	0.323	0.317	34.432	27.630	0.0866	1.82e-05
150	0.385	0.379	34.453	27.644	0.0911	9.95e-06
160	0.445	0.438	34.469	27.653	0.0954	6.67e-06
180	0.529	0.521	34.489	27.665	0.1039	4.19e-06
200	0.590	0.581	34.504	27.673	0.1122	0.00e+00



Station: 600.040



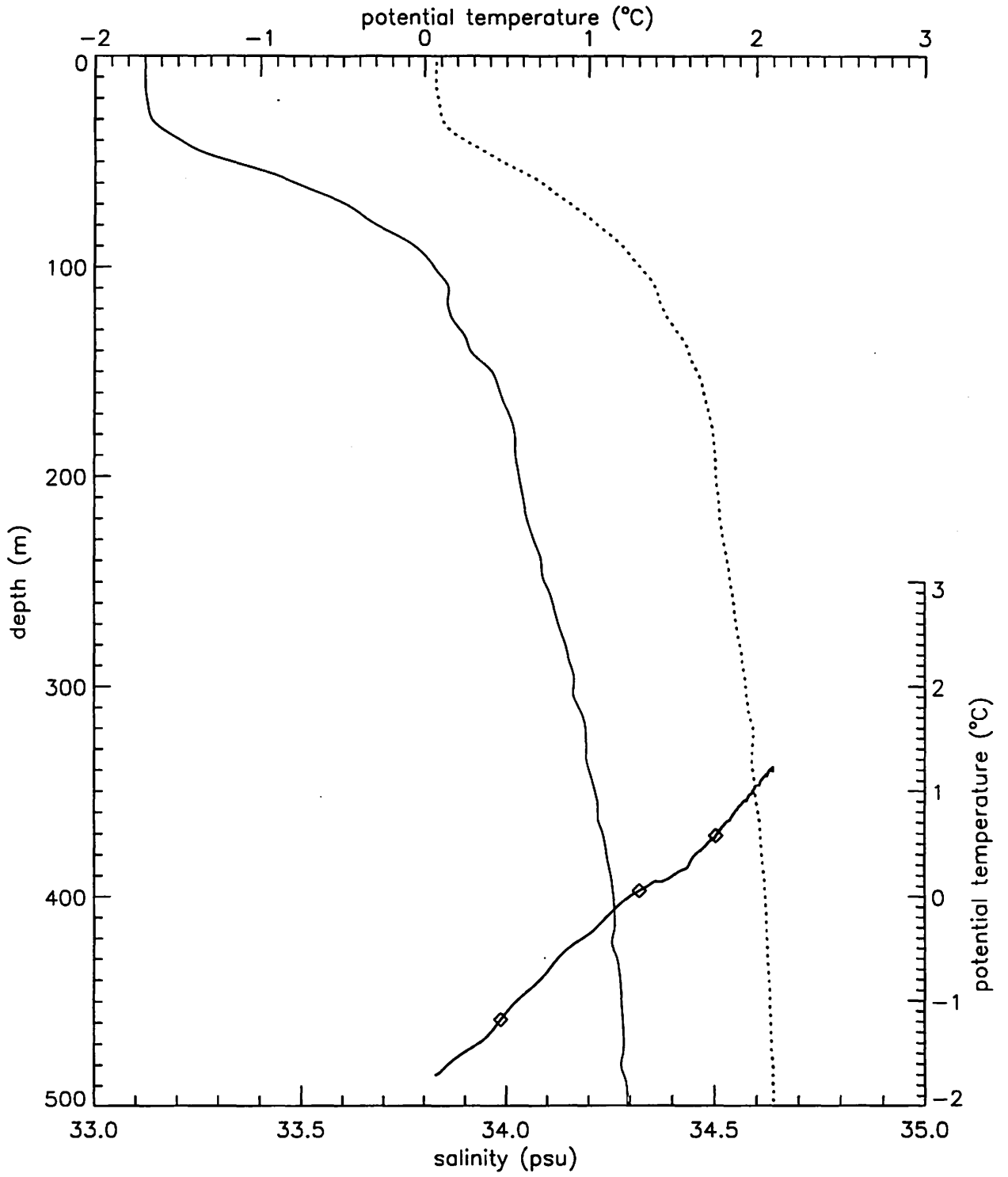
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**LTER 91a Station: 600.040 (21) JulianDay: 314 GMT: 2110**  
**Latitude: 64° 55.90' S Longitude: 64° 27.10' W Depth: 1310 m**

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Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.697	-1.697	33.827	27.225	0.0017	0.00e+00
10	-1.697	-1.697	33.827	27.225	0.0058	6.66e-07
20	-1.688	-1.689	33.832	27.228	0.0142	6.54e-06
30	-1.656	-1.657	33.842	27.236	0.0224	1.70e-05
40	-1.483	-1.484	33.898	27.276	0.0305	5.74e-05
50	-1.173	-1.175	33.987	27.338	0.0380	5.91e-05
60	-0.789	-0.791	34.085	27.404	0.0450	4.88e-05
70	-0.488	-0.490	34.154	27.447	0.0514	4.59e-05
80	-0.293	-0.295	34.220	27.492	0.0574	3.68e-05
90	-0.062	-0.065	34.279	27.527	0.0630	2.90e-05
100	0.061	0.057	34.322	27.556	0.0684	2.94e-05
110	0.151	0.147	34.360	27.581	0.0735	1.54e-05
120	0.150	0.145	34.376	27.595	0.0784	1.69e-05
130	0.223	0.218	34.408	27.616	0.0831	2.23e-05
140	0.285	0.279	34.437	27.637	0.0876	9.70e-06
150	0.418	0.412	34.458	27.646	0.0920	1.20e-05
160	0.470	0.463	34.474	27.656	0.0963	6.55e-06
180	0.560	0.553	34.497	27.669	0.1048	3.70e-06
200	0.587	0.579	34.504	27.673	0.1130	1.76e-06
220	0.636	0.626	34.513	27.678	0.1212	2.61e-06
240	0.725	0.714	34.531	27.687	0.1293	5.22e-06
260	0.795	0.783	34.546	27.695	0.1373	2.31e-06
280	0.873	0.860	34.561	27.702	0.1451	3.71e-06
300	0.924	0.910	34.575	27.710	0.1528	3.04e-06
320	0.998	0.983	34.593	27.719	0.1604	4.19e-06
340	1.021	1.005	34.592	27.717	0.1679	2.25e-06
360	1.074	1.057	34.604	27.723	0.1754	6.38e-06
380	1.127	1.109	34.613	27.727	0.1828	2.25e-06
400	1.169	1.150	34.621	27.731	0.1901	1.22e-06
420	1.164	1.143	34.625	27.735	0.1974	2.31e-06
440	1.212	1.191	34.631	27.736	0.2047	1.46e-06
460	1.229	1.206	34.634	27.737	0.2120	1.03e-06
480	1.219	1.195	34.639	27.742	0.2192	1.34e-06
500	1.260	1.235	34.641	27.741	0.2264	1.22e-06

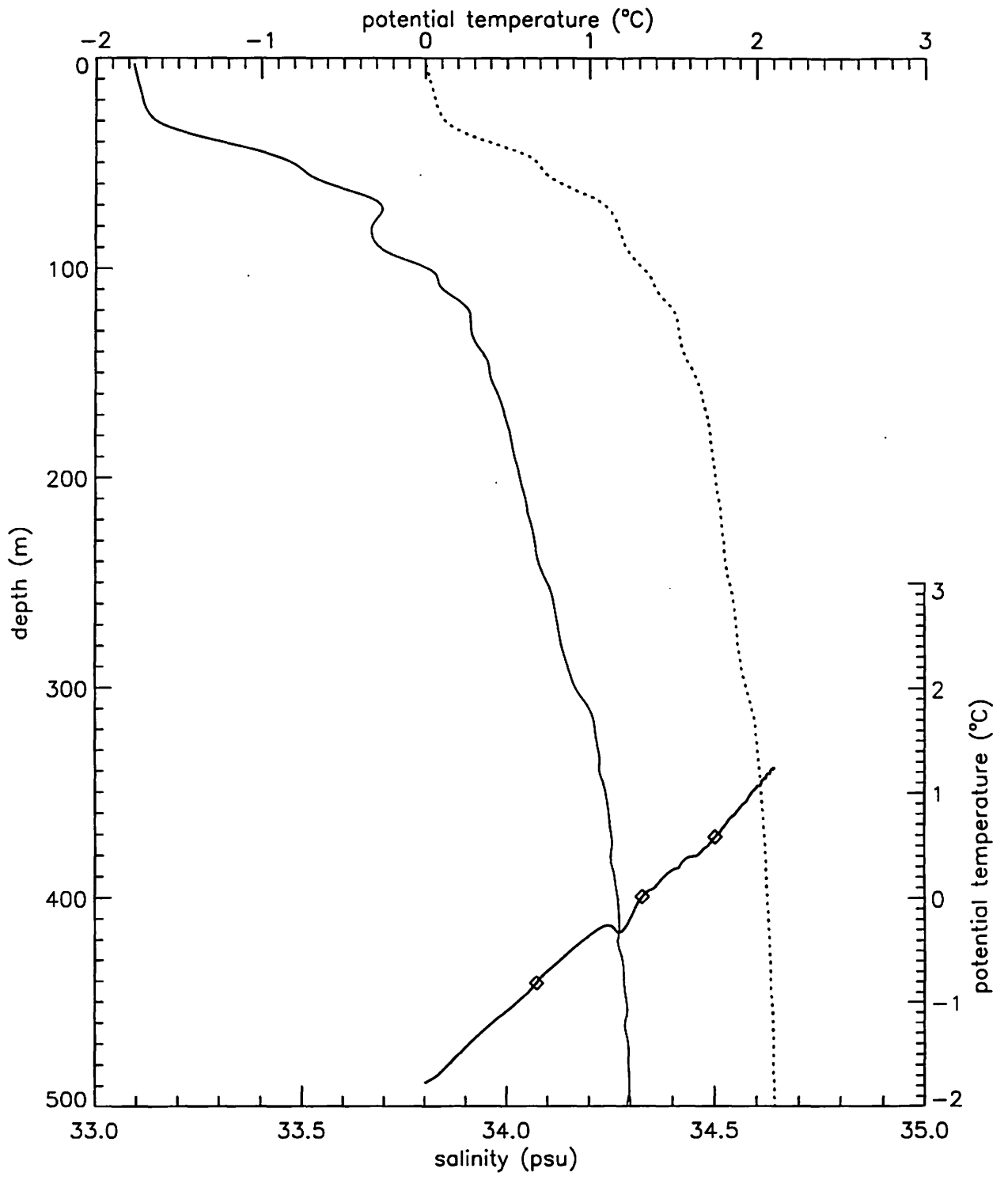
Station: 600.040



LTER 91a Station: 600.040 (24) JulianDay: 315 GMT: 1611  
 Latitude: 64° 56.00' S Longitude: 64° 27.10' W Depth: 1310 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.765	-1.765	33.802	27.206	0.0017	7.06e-06
10	-1.748	-1.749	33.810	27.212	0.0060	1.17e-05
20	-1.716	-1.716	33.824	27.223	0.0144	9.99e-06
30	-1.635	-1.636	33.848	27.240	0.0226	3.78e-05
40	-1.233	-1.234	33.956	27.316	0.0305	9.37e-05
50	-0.812	-0.813	34.074	27.396	0.0376	3.93e-05
60	-0.586	-0.588	34.133	27.434	0.0441	6.19e-05
70	-0.269	-0.271	34.237	27.503	0.0501	4.75e-05
80	-0.325	-0.327	34.270	27.533	0.0557	1.69e-05
90	-0.275	-0.278	34.289	27.546	0.0610	1.34e-05
100	0.017	0.014	34.329	27.564	0.0662	2.13e-05
110	0.114	0.110	34.361	27.585	0.0712	1.79e-05
120	0.273	0.268	34.402	27.609	0.0761	1.96e-05
130	0.290	0.285	34.415	27.619	0.0807	4.06e-06
140	0.355	0.350	34.426	27.624	0.0853	1.01e-05
150	0.402	0.396	34.452	27.642	0.0898	1.69e-05
160	0.451	0.444	34.469	27.653	0.0941	7.52e-06
180	0.530	0.523	34.490	27.665	0.1026	2.91e-06
200	0.589	0.581	34.502	27.672	0.1110	2.79e-06
220	0.650	0.641	34.516	27.679	0.1191	1.70e-06
240	0.705	0.694	34.527	27.685	0.1273	2.25e-06
260	0.800	0.789	34.547	27.695	0.1352	2.91e-06
280	0.848	0.836	34.557	27.700	0.1431	1.82e-06
300	0.932	0.918	34.576	27.710	0.1508	5.29e-06
320	1.051	1.036	34.599	27.720	0.1583	1.88e-06
340	1.081	1.065	34.608	27.726	0.1658	1.70e-06
360	1.137	1.119	34.615	27.728	0.1731	2.07e-06
380	1.150	1.132	34.622	27.732	0.1805	1.58e-06
400	1.194	1.174	34.626	27.733	0.1877	1.76e-06
420	1.198	1.178	34.632	27.737	0.1950	2.19e-06
440	1.235	1.213	34.635	27.738	0.2023	9.12e-07
460	1.243	1.220	34.640	27.741	0.2095	1.40e-06
480	1.264	1.240	34.641	27.741	0.2167	4.87e-07
500	1.255	1.230	34.643	27.743	0.2239	1.22e-06

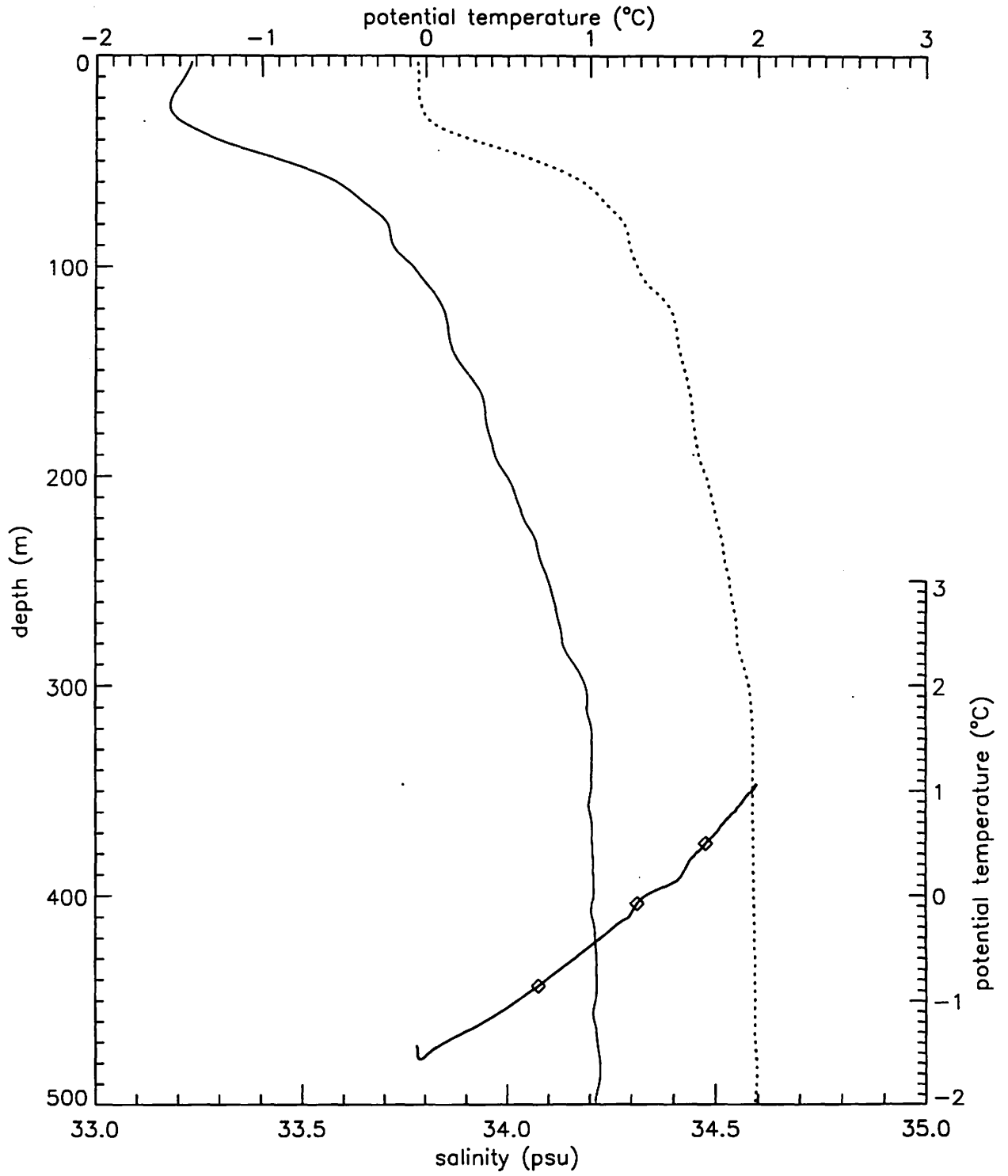
Station: 600.040



LTER 91a Station: 625.020 (26) JulianDay: 316 GMT: 1712  
 Latitude: 64° 52.50' S Longitude: 63° 47.60' W Depth: 1310 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.432	-1.432	33.779	27.178	0.0018	4.03e-06
10	-1.467	-1.468	33.781	27.181	0.0061	3.75e-06
20	-1.544	-1.545	33.783	27.184	0.0149	8.35e-06
30	-1.510	-1.511	33.804	27.201	0.0235	3.84e-05
40	-1.260	-1.261	33.915	27.283	0.0318	1.10e-04
50	-0.857	-0.858	34.076	27.399	0.0390	9.10e-05
60	-0.541	-0.542	34.182	27.472	0.0453	4.98e-05
70	-0.372	-0.374	34.237	27.508	0.0511	2.98e-05
80	-0.230	-0.232	34.283	27.539	0.0566	1.98e-05
90	-0.198	-0.201	34.295	27.547	0.0619	5.70e-06
100	-0.072	-0.075	34.314	27.556	0.0671	1.10e-05
110	0.032	0.028	34.346	27.577	0.0722	3.18e-05
120	0.113	0.109	34.392	27.610	0.0771	1.95e-05
130	0.143	0.139	34.407	27.620	0.0817	5.22e-06
140	0.171	0.166	34.414	27.625	0.0863	5.64e-06
150	0.250	0.245	34.427	27.630	0.0908	3.82e-06
160	0.343	0.336	34.439	27.635	0.0953	4.19e-06
180	0.395	0.388	34.451	27.642	0.1042	3.46e-06
200	0.506	0.498	34.477	27.656	0.1129	8.38e-06
220	0.609	0.600	34.502	27.670	0.1213	5.52e-06
240	0.711	0.701	34.522	27.680	0.1295	4.31e-06
260	0.796	0.785	34.540	27.690	0.1376	4.80e-06
280	0.848	0.836	34.552	27.696	0.1454	3.04e-06
300	0.986	0.972	34.579	27.709	0.1532	4.80e-06
320	1.023	1.008	34.588	27.713	0.1608	1.82e-07
340	1.028	1.012	34.589	27.714	0.1684	0.00e+00
360	1.019	1.002	34.589	27.715	0.1760	-1.03e-06
380	1.036	1.018	34.590	27.715	0.1836	-2.43e-07
400	1.043	1.024	34.591	27.715	0.1912	1.76e-06
420	1.052	1.032	34.593	27.716	0.1988	-6.08e-07
440	1.062	1.041	34.594	27.716	0.2063	0.00e+00
460	1.050	1.028	34.594	27.717	0.2139	-1.40e-06
480	1.085	1.062	34.598	27.718	0.2215	9.74e-07

Station: 625.020

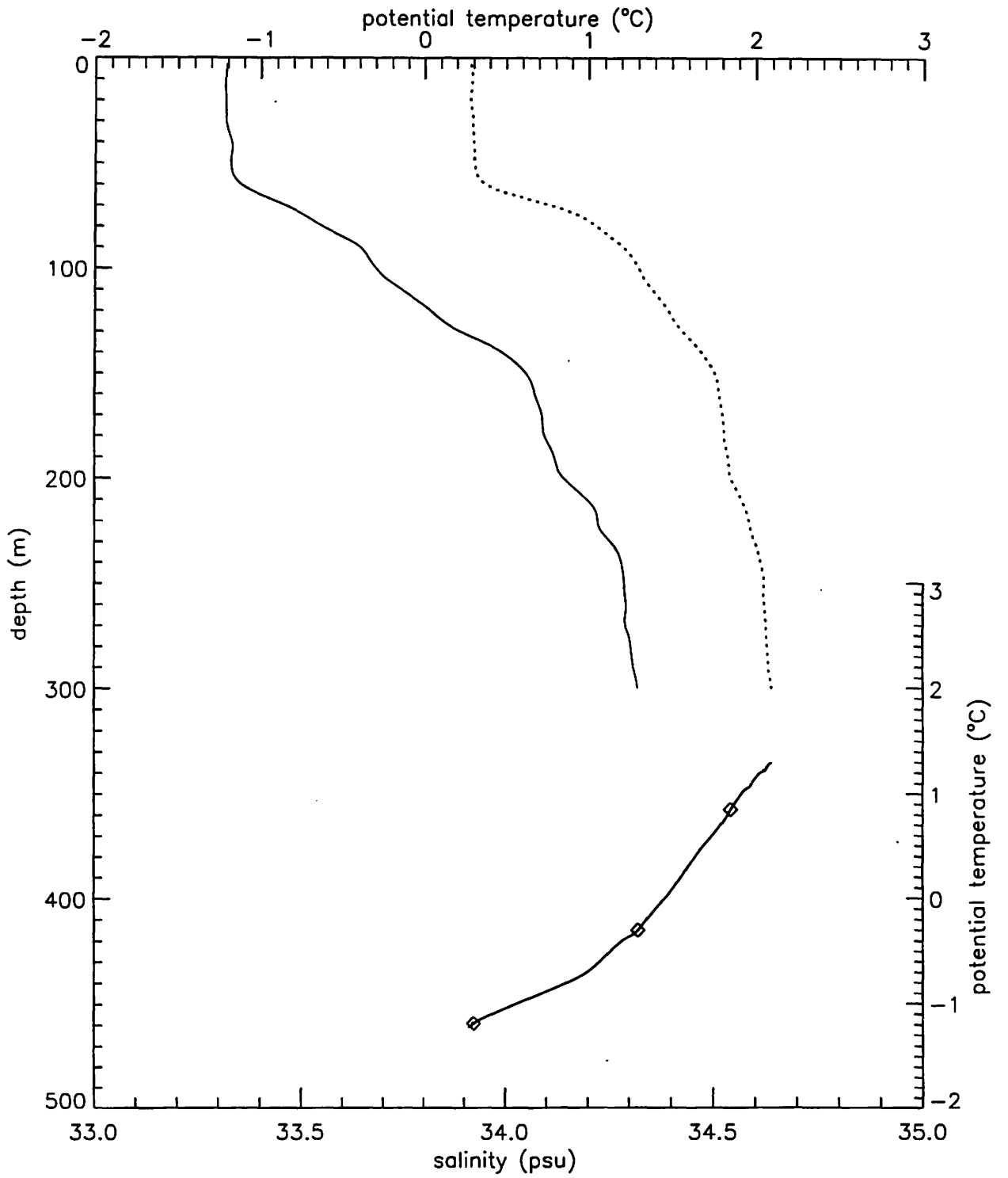


LTER 91a	Station: 700.040 (30)	JulianDay: 317	GMT: 0713
	Latitude: 64° 15.80' S	Longitude: 63° 2.50' W	Depth: 420 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.208	-1.208	33.915	27.281	0.0016	3.03e-06
10	-1.213	-1.213	33.916	27.282	0.0055	1.21e-07
20	-1.211	-1.212	33.913	27.280	0.0133	7.27e-07
30	-1.207	-1.208	33.919	27.284	0.0211	2.60e-06
40	-1.175	-1.176	33.921	27.285	0.0288	1.76e-06
50	-1.179	-1.180	33.924	27.287	0.0366	3.63e-06
60	-1.121	-1.123	33.951	27.307	0.0442	6.50e-05
70	-0.854	-0.855	34.114	27.430	0.0513	1.17e-04
80	-0.624	-0.626	34.221	27.507	0.0572	4.52e-05
90	-0.392	-0.395	34.285	27.548	0.0627	3.31e-05
100	-0.295	-0.298	34.321	27.573	0.0678	1.70e-05
110	-0.135	-0.139	34.355	27.592	0.0727	2.16e-05
120	0.043	0.038	34.393	27.614	0.0775	1.70e-05
130	0.229	0.224	34.428	27.632	0.0821	1.92e-05
140	0.488	0.483	34.473	27.654	0.0864	1.81e-05
150	0.632	0.625	34.503	27.669	0.0907	9.40e-06
160	0.687	0.680	34.514	27.675	0.0948	3.52e-06
180	0.748	0.740	34.526	27.681	0.1029	1.64e-06
200	0.863	0.855	34.542	27.687	0.1110	5.89e-06
220	1.070	1.060	34.585	27.708	0.1188	6.74e-06
240	1.215	1.203	34.613	27.721	0.1264	6.25e-06
260	1.244	1.232	34.622	27.726	0.1338	3.04e-06
280	1.273	1.259	34.629	27.729	0.1411	1.03e-06
300	1.315	1.300	34.640	27.736	0.1484	7.90e-06



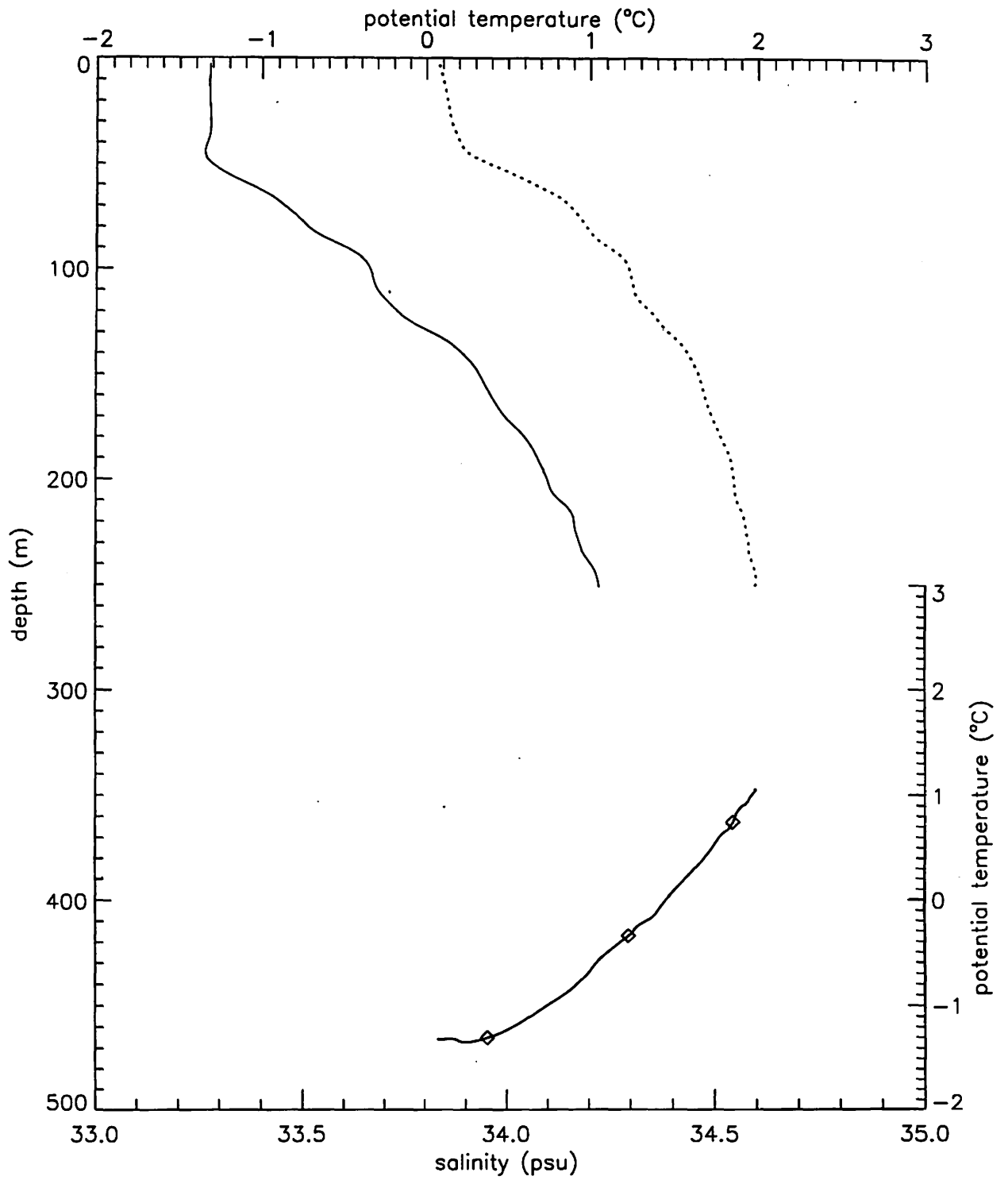
Station: 700.040



**LTER 91a Station: 700.020 (39) JulianDay: 317 GMT: 1713**  
**Latitude: 64° 23.20' S Longitude: 62° 54.50' W Depth: 300 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.316	-1.316	33.833	27.218	0.0017	1.05e-05
10	-1.318	-1.318	33.841	27.225	0.0059	1.09e-05
20	-1.315	-1.315	33.852	27.234	0.0142	6.96e-06
30	-1.311	-1.311	33.863	27.242	0.0224	1.25e-05
40	-1.331	-1.332	33.883	27.260	0.0305	2.52e-05
50	-1.304	-1.305	33.953	27.315	0.0383	8.12e-05
60	-1.080	-1.082	34.067	27.400	0.0453	7.28e-05
70	-0.865	-0.867	34.152	27.461	0.0516	3.71e-05
80	-0.721	-0.724	34.193	27.488	0.0576	2.33e-05
90	-0.483	-0.486	34.249	27.523	0.0633	4.13e-05
100	-0.340	-0.343	34.294	27.553	0.0686	1.33e-05
110	-0.292	-0.296	34.306	27.560	0.0738	9.88e-06
120	-0.173	-0.177	34.346	27.587	0.0788	2.87e-05
130	0.038	0.033	34.390	27.612	0.0836	2.60e-05
140	0.230	0.225	34.435	27.638	0.0882	1.75e-05
150	0.335	0.329	34.460	27.652	0.0925	9.52e-06
160	0.406	0.400	34.474	27.660	0.0968	7.04e-06
180	0.614	0.606	34.513	27.678	0.1051	1.10e-05
200	0.752	0.744	34.543	27.695	0.1130	2.19e-06
220	0.917	0.907	34.570	27.706	0.1208	6.86e-06
240	1.020	1.009	34.590	27.715	0.1284	6.31e-06

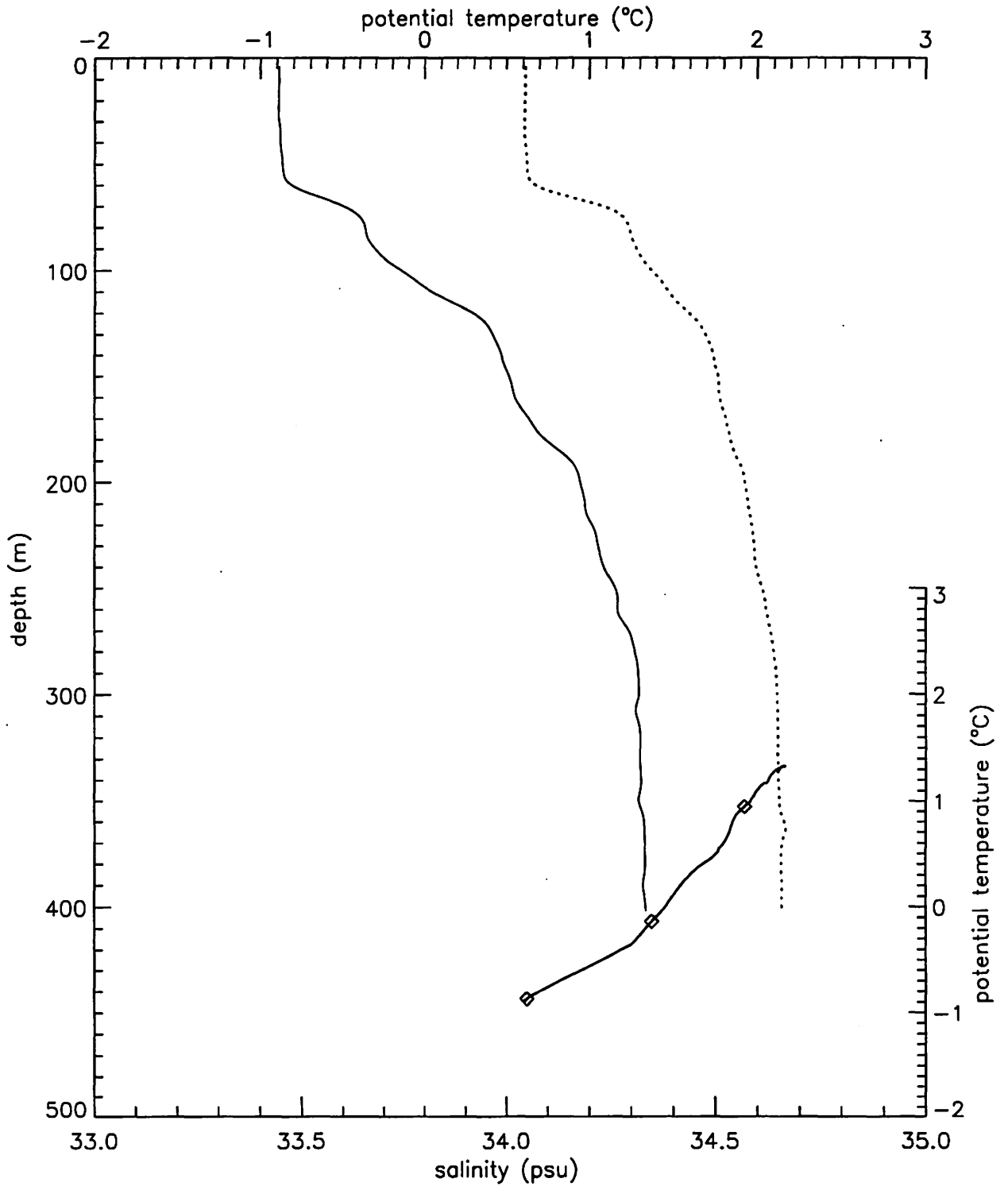
Station: 700.020



LTER 91a Station: 700.060 (48) JulianDay: 318 GMT: 0314  
 Latitude: 64° 8.20' S Longitude: 63° 21.10' W Depth: 470 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-0.887	-0.888	34.045	27.375	0.0007	0.00e+00
10	-0.888	-0.888	34.046	27.376	0.0042	0.00e+00
20	-0.891	-0.891	34.044	27.374	0.0111	-6.66e-07
30	-0.886	-0.887	34.044	27.374	0.0180	-4.24e-07
40	-0.879	-0.880	34.046	27.375	0.0249	2.85e-06
50	-0.865	-0.866	34.050	27.378	0.0318	2.54e-06
60	-0.814	-0.815	34.071	27.393	0.0386	6.32e-05
70	-0.497	-0.499	34.232	27.510	0.0449	9.44e-05
80	-0.363	-0.366	34.295	27.555	0.0502	1.41e-05
90	-0.301	-0.304	34.312	27.566	0.0554	1.55e-05
100	-0.137	-0.141	34.349	27.588	0.0604	2.39e-05
110	0.045	0.041	34.389	27.611	0.0651	1.87e-05
120	0.296	0.292	34.438	27.636	0.0697	2.81e-05
130	0.420	0.415	34.477	27.661	0.0740	1.61e-05
140	0.473	0.468	34.495	27.673	0.0782	6.55e-06
150	0.521	0.515	34.507	27.679	0.0823	3.46e-06
160	0.555	0.549	34.510	27.680	0.0863	3.70e-06
180	0.741	0.733	34.536	27.689	0.0943	1.15e-06
200	0.954	0.945	34.570	27.703	0.1022	4.73e-06
220	1.025	1.015	34.586	27.712	0.1098	2.37e-06
240	1.098	1.087	34.597	27.716	0.1174	3.28e-06
260	1.180	1.168	34.621	27.730	0.1248	5.34e-06
280	1.285	1.272	34.639	27.736	0.1320	4.01e-06
300	1.310	1.295	34.647	27.741	0.1391	2.49e-06
320	1.319	1.303	34.649	27.743	0.1462	-2.43e-07
340	1.326	1.309	34.650	27.743	0.1533	1.82e-06
360	1.344	1.326	34.664	27.753	0.1603	7.48e-06
380	1.353	1.334	34.657	27.747	0.1673	2.43e-07
400	1.357	1.337	34.658	27.748	0.1744	-4.05e-07

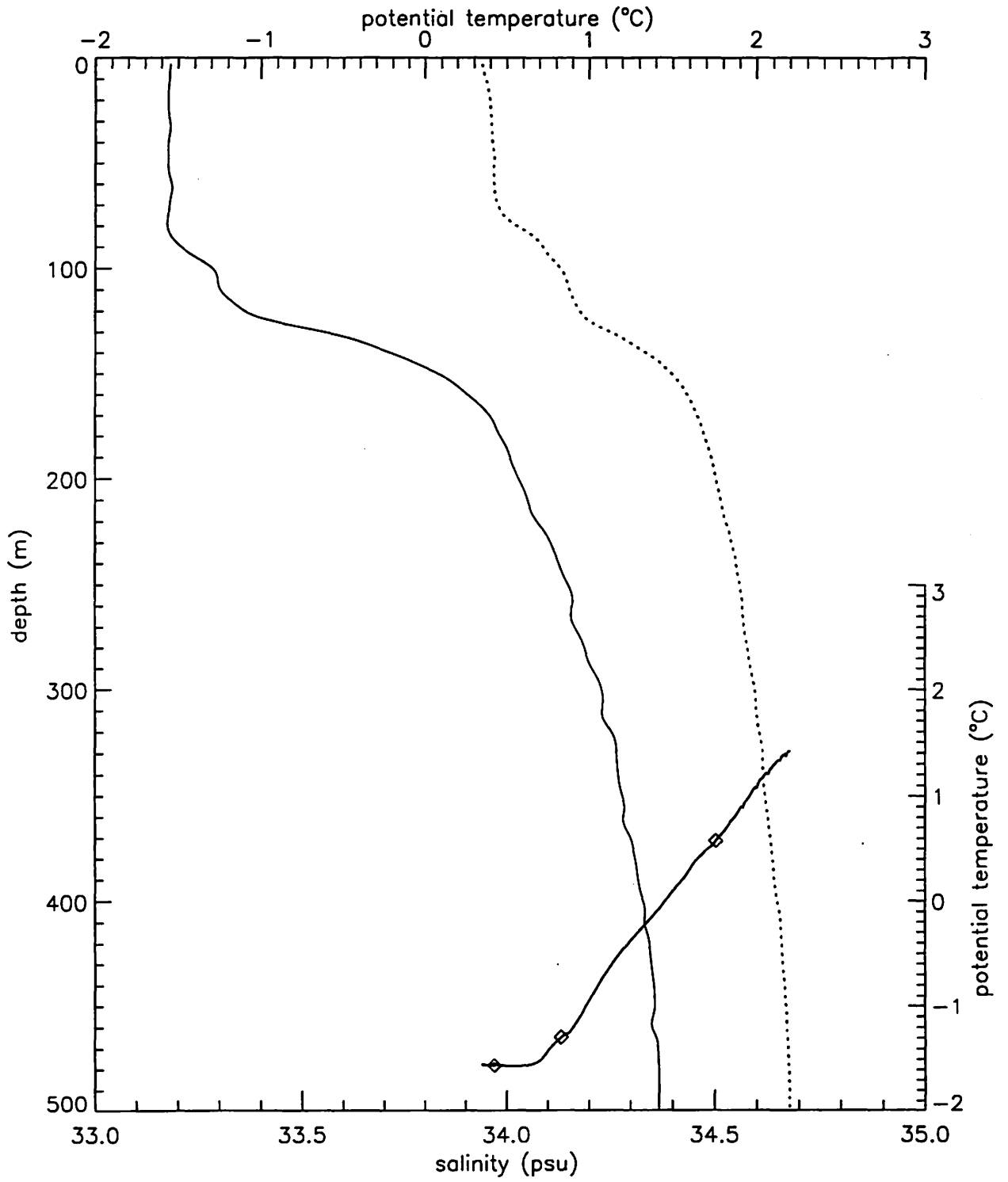
Station: 700.060



LTER 91a Station: 700.080 (58) JulianDay: 318 GMT: 1114  
 Latitude: 64° 1.30' S Longitude: 63° 39.00' W Depth: 600 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.548	-1.549	33.942	27.314	0.0015	7.87e-06
10	-1.552	-1.552	33.949	27.320	0.0052	1.04e-05
20	-1.560	-1.561	33.959	27.328	0.0126	4.84e-06
30	-1.548	-1.548	33.962	27.331	0.0200	2.12e-06
40	-1.558	-1.559	33.965	27.333	0.0273	4.24e-06
50	-1.558	-1.559	33.970	27.337	0.0346	-2.42e-07
60	-1.537	-1.538	33.970	27.336	0.0418	1.94e-06
70	-1.551	-1.553	33.978	27.344	0.0490	1.76e-05
80	-1.563	-1.565	34.027	27.383	0.0561	5.55e-05
90	-1.478	-1.480	34.089	27.431	0.0626	2.79e-05
100	-1.289	-1.291	34.132	27.460	0.0688	2.45e-05
110	-1.243	-1.245	34.153	27.475	0.0748	1.21e-05
120	-1.093	-1.096	34.178	27.491	0.0807	2.07e-05
130	-0.606	-0.610	34.253	27.532	0.0863	4.91e-05
140	-0.202	-0.207	34.338	27.582	0.0914	4.14e-05
150	0.095	0.090	34.399	27.616	0.0962	2.32e-05
160	0.271	0.265	34.435	27.636	0.1007	1.22e-05
180	0.471	0.464	34.476	27.657	0.1094	8.31e-06
200	0.583	0.574	34.503	27.673	0.1178	4.67e-06
220	0.696	0.687	34.527	27.685	0.1260	6.86e-06
240	0.828	0.818	34.551	27.697	0.1339	2.91e-06
260	0.911	0.899	34.566	27.703	0.1417	3.46e-06
280	0.987	0.974	34.578	27.708	0.1494	3.04e-06
300	1.091	1.077	34.596	27.715	0.1570	3.40e-06
320	1.150	1.135	34.606	27.720	0.1645	2.13e-06
340	1.193	1.177	34.616	27.725	0.1719	4.86e-07
360	1.225	1.207	34.627	27.731	0.1793	3.59e-06
380	1.296	1.277	34.638	27.736	0.1866	1.28e-06
400	1.345	1.325	34.649	27.741	0.1938	5.41e-06
420	1.382	1.361	34.659	27.746	0.2010	7.30e-07
440	1.410	1.388	34.667	27.751	0.2080	2.19e-06
460	1.399	1.376	34.672	27.756	0.2150	0.00e+00
480	1.442	1.418	34.676	27.756	0.2220	6.09e-07
500	1.445	1.419	34.678	27.758	0.2290	0.00e+00

Station: 700.080

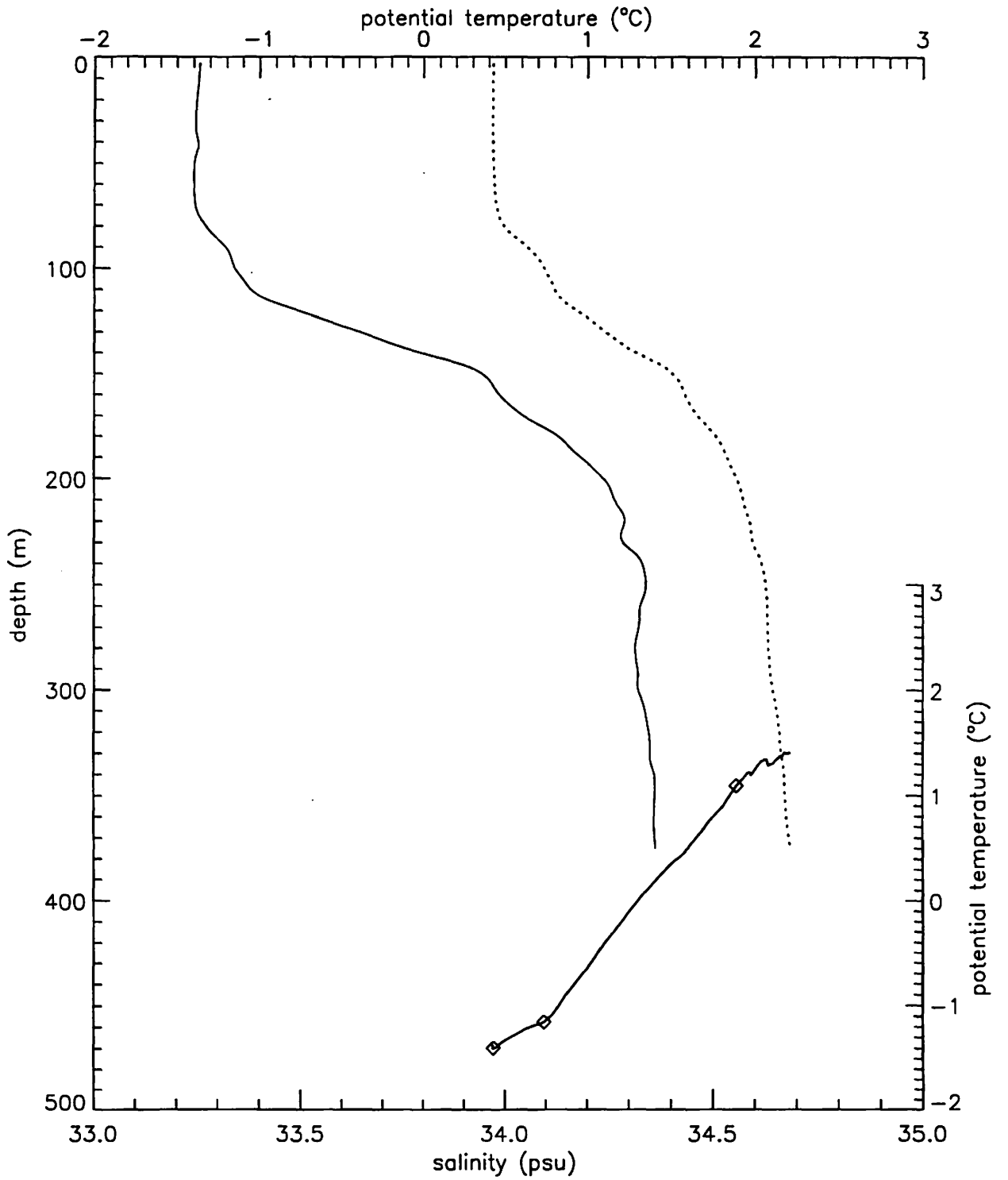


**LTER 91a Station: 700.100 (62) JulianDay: 318 GMT: 1514**  
**Latitude: 63° 54.20' S Longitude: 63° 58.60' W Depth: 430 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.365	-1.365	33.970	27.331	0.0015	0.00e+00
10	-1.368	-1.368	33.970	27.331	0.0051	-4.84e-07
20	-1.381	-1.382	33.969	27.331	0.0125	3.63e-07
30	-1.387	-1.388	33.969	27.331	0.0198	0.00e+00
40	-1.372	-1.373	33.970	27.331	0.0271	6.06e-07
50	-1.394	-1.395	33.972	27.333	0.0344	2.91e-06
60	-1.396	-1.398	33.973	27.335	0.0417	1.57e-06
70	-1.388	-1.390	33.979	27.339	0.0490	6.97e-06
80	-1.327	-1.328	33.998	27.352	0.0561	2.79e-05
90	-1.205	-1.207	34.056	27.396	0.0630	3.94e-05
100	-1.147	-1.150	34.096	27.426	0.0696	2.08e-05
110	-1.053	-1.056	34.121	27.443	0.0759	1.67e-05
120	-0.766	-0.770	34.175	27.476	0.0820	4.09e-05
130	-0.390	-0.394	34.244	27.516	0.0877	3.42e-05
140	-0.016	-0.021	34.318	27.556	0.0931	4.63e-05
150	0.362	0.356	34.402	27.604	0.0981	2.98e-05
160	0.471	0.465	34.433	27.623	0.1027	1.11e-05
180	0.836	0.828	34.507	27.661	0.1116	1.81e-05
200	1.106	1.097	34.556	27.682	0.1199	8.92e-06
220	1.234	1.223	34.587	27.699	0.1279	9.29e-06
240	1.339	1.327	34.616	27.714	0.1356	7.89e-06
260	1.329	1.317	34.630	27.726	0.1431	2.98e-06
280	1.301	1.288	34.632	27.730	0.1504	2.55e-06
300	1.321	1.306	34.643	27.738	0.1576	4.92e-06
320	1.385	1.369	34.659	27.746	0.1647	2.55e-06
340	1.419	1.402	34.670	27.752	0.1717	1.34e-06
360	1.418	1.400	34.676	27.757	0.1787	3.22e-06

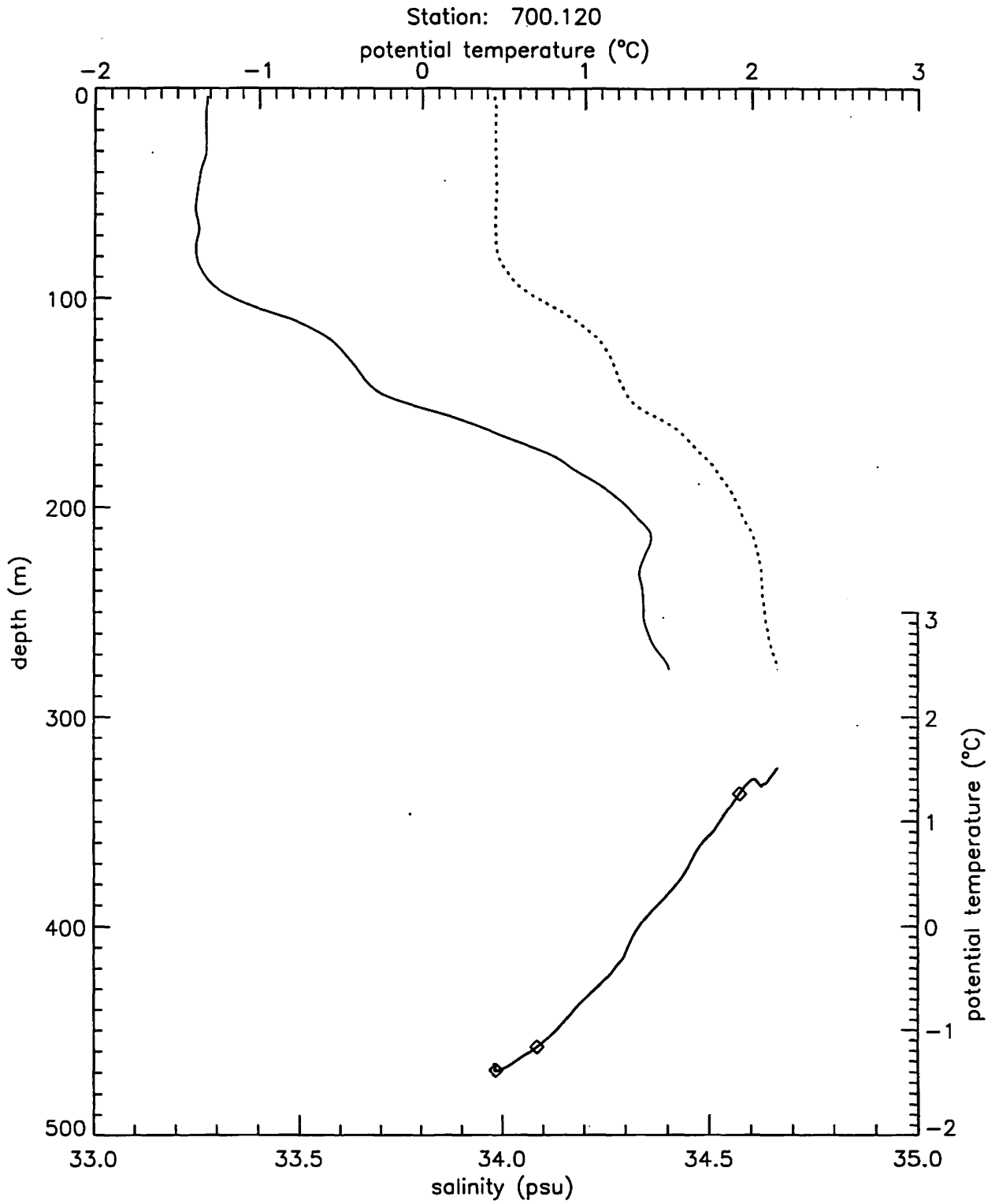


Station: 700.100



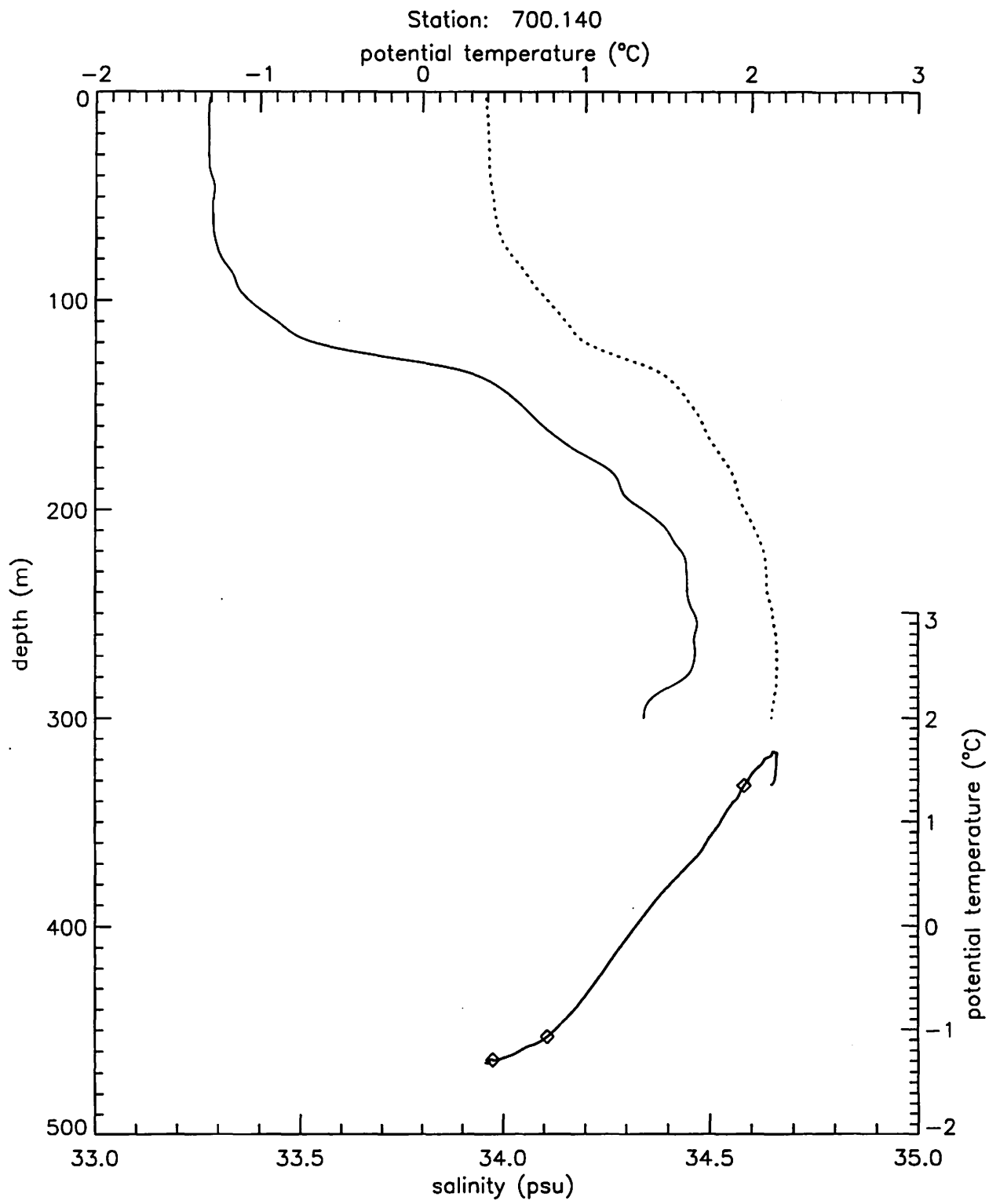
LTER 91a Station: 700.120 (68) JulianDay: 318 GMT: 1914  
 Latitude: 63° 47.10' S Longitude: 64° 16.90' W Depth: 330 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.318	-1.318	33.978	27.336	0.0007	3.94e-06
10	-1.323	-1.323	33.981	27.339	0.0044	2.54e-06
20	-1.325	-1.326	33.980	27.338	0.0116	-7.87e-07
30	-1.321	-1.322	33.981	27.339	0.0189	2.00e-06
40	-1.357	-1.358	33.982	27.341	0.0261	1.64e-06
50	-1.376	-1.377	33.984	27.342	0.0333	-9.09e-07
60	-1.381	-1.383	33.981	27.341	0.0406	-6.06e-07
70	-1.370	-1.371	33.982	27.341	0.0478	2.24e-06
80	-1.379	-1.381	33.988	27.347	0.0550	1.40e-05
90	-1.322	-1.324	34.020	27.370	0.0620	2.94e-05
100	-1.154	-1.156	34.085	27.417	0.0687	5.88e-05
110	-0.805	-0.808	34.174	27.477	0.0749	4.49e-05
120	-0.559	-0.563	34.236	27.516	0.0807	2.78e-05
130	-0.436	-0.440	34.266	27.535	0.0861	1.22e-05
140	-0.335	-0.340	34.286	27.547	0.0914	1.14e-05
150	-0.091	-0.096	34.317	27.560	0.0967	2.54e-05
160	0.325	0.319	34.404	27.608	0.1016	4.09e-05
180	0.916	0.908	34.510	27.658	0.1106	1.89e-05
200	1.272	1.262	34.573	27.684	0.1189	8.80e-06
220	1.391	1.380	34.614	27.709	0.1268	1.23e-05
240	1.361	1.349	34.628	27.722	0.1343	1.03e-06
260	1.399	1.387	34.642	27.731	0.1417	3.28e-06



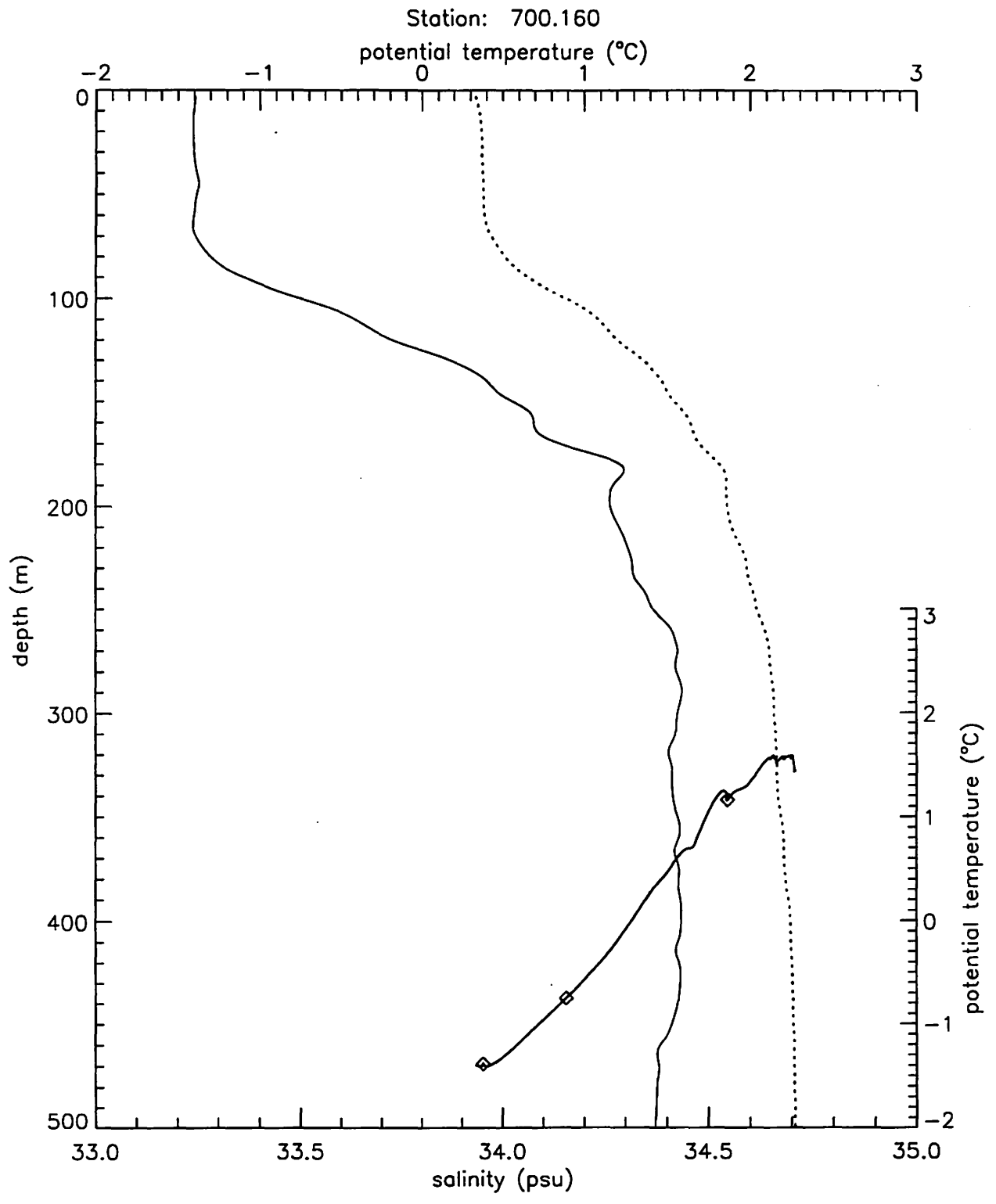
**LTER 91a Station: 700.140 (76) JulianDay: 319 GMT: 0015**  
**Latitude: 63° 40.00' S Longitude: 64° 35.20' W Depth: 340 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.311	-1.311	33.957	27.318	0.0015	2.83e-06
10	-1.314	-1.314	33.959	27.321	0.0052	3.15e-06
20	-1.314	-1.314	33.962	27.323	0.0126	1.57e-06
30	-1.311	-1.312	33.964	27.325	0.0200	1.39e-06
40	-1.294	-1.295	33.966	27.326	0.0274	2.91e-06
50	-1.283	-1.285	33.974	27.331	0.0348	5.88e-06
60	-1.286	-1.287	33.981	27.337	0.0420	7.75e-06
70	-1.275	-1.276	33.994	27.348	0.0492	1.54e-05
80	-1.228	-1.230	34.028	27.373	0.0563	2.77e-05
90	-1.149	-1.151	34.066	27.402	0.0630	2.75e-05
100	-1.064	-1.067	34.108	27.433	0.0695	2.99e-05
110	-0.895	-0.898	34.152	27.462	0.0757	2.52e-05
120	-0.677	-0.681	34.199	27.491	0.0817	4.38e-05
130	0.011	0.007	34.324	27.560	0.0872	6.46e-05
140	0.444	0.438	34.414	27.609	0.0920	2.80e-05
150	0.614	0.608	34.455	27.632	0.0967	1.90e-05
160	0.748	0.741	34.484	27.647	0.1011	8.43e-06
180	1.137	1.128	34.546	27.672	0.1096	1.06e-05
200	1.357	1.347	34.583	27.686	0.1178	7.71e-06
220	1.589	1.577	34.629	27.706	0.1257	5.89e-06
240	1.627	1.615	34.638	27.711	0.1334	5.77e-06
260	1.673	1.660	34.658	27.724	0.1410	6.68e-06
280	1.624	1.610	34.660	27.729	0.1484	9.42e-06
300	1.370	1.355	34.648	27.738	0.1556	-7.29e-06



LTER 91a Station: 700.160 (90) JulianDay: 319 GMT: 1015  
 Latitude: 63° 32.80' S Longitude: 64° 53.00' W Depth: 1000 m

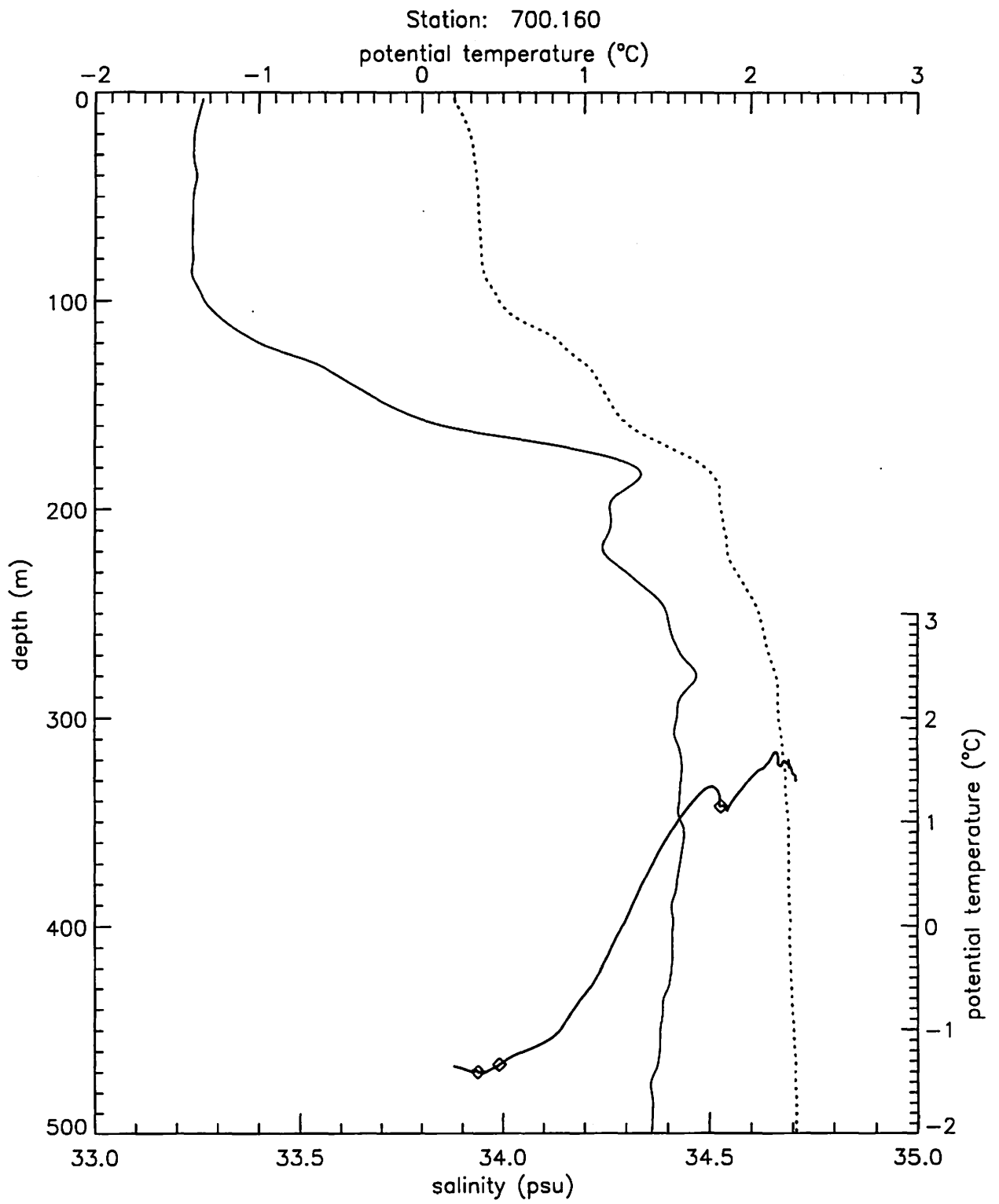
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.395	-1.395	33.935	27.303	0.0015	7.87e-06
10	-1.403	-1.403	33.941	27.309	0.0053	8.11e-06
20	-1.405	-1.406	33.947	27.314	0.0128	2.24e-06
30	-1.401	-1.401	33.949	27.315	0.0203	1.27e-06
40	-1.383	-1.384	33.951	27.316	0.0278	8.48e-07
50	-1.382	-1.383	33.952	27.317	0.0352	1.39e-06
60	-1.400	-1.402	33.955	27.320	0.0427	5.94e-06
70	-1.390	-1.392	33.972	27.333	0.0500	2.01e-05
80	-1.299	-1.300	34.006	27.359	0.0572	2.84e-05
90	-1.087	-1.090	34.065	27.398	0.0640	4.85e-05
100	-0.744	-0.746	34.156	27.459	0.0704	5.98e-05
110	-0.409	-0.412	34.236	27.509	0.0763	3.07e-05
120	-0.186	-0.191	34.281	27.535	0.0818	2.75e-05
130	0.178	0.173	34.344	27.568	0.0870	2.49e-05
140	0.408	0.403	34.388	27.590	0.0920	1.64e-05
150	0.570	0.564	34.418	27.605	0.0968	1.78e-05
160	0.701	0.694	34.456	27.627	0.1015	1.59e-05
180	1.228	1.219	34.527	27.650	0.1104	1.88e-05
200	1.169	1.160	34.546	27.670	0.1189	2.91e-06
220	1.276	1.266	34.580	27.689	0.1272	1.46e-05
240	1.367	1.355	34.605	27.704	0.1350	6.56e-06
260	1.542	1.529	34.636	27.716	0.1427	6.56e-06
280	1.574	1.560	34.650	27.725	0.1502	2.73e-06
300	1.581	1.566	34.658	27.731	0.1576	3.52e-06
320	1.526	1.510	34.664	27.740	0.1649	1.64e-06
340	1.554	1.537	34.668	27.741	0.1721	2.13e-06
360	1.591	1.572	34.680	27.748	0.1792	4.07e-06
380	1.590	1.570	34.685	27.753	0.1863	3.10e-06
400	1.606	1.585	34.697	27.761	0.1932	1.16e-06
420	1.595	1.573	34.700	27.764	0.2000	-1.22e-07
440	1.588	1.565	34.703	27.767	0.2068	3.65e-06
460	1.485	1.462	34.706	27.777	0.2135	6.02e-06
480	1.467	1.442	34.707	27.779	0.2201	1.64e-06
500	1.457	1.431	34.708	27.781	0.2266	0.00e+00



LTER 91a Station: 700.160 (91) JulianDay: 319 GMT: 1315  
 Latitude: 63° 33.00' S Longitude: 64° 53.30' W Depth: 1000 m

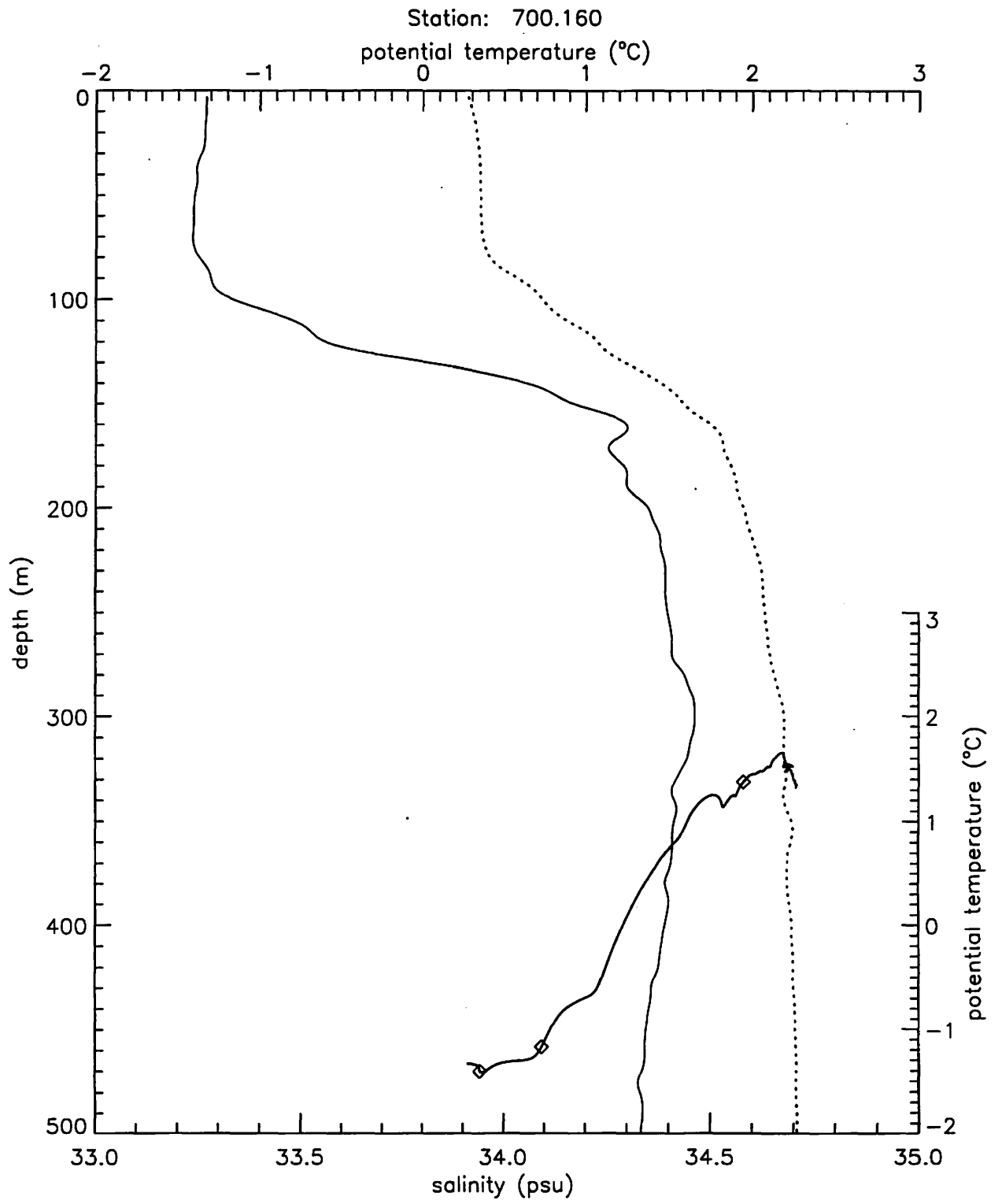
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.348	-1.348	33.882	27.259	0.0016	1.92e-05
10	-1.365	-1.365	33.897	27.272	0.0056	2.21e-05
20	-1.395	-1.395	33.918	27.290	0.0134	1.22e-05
30	-1.398	-1.398	33.928	27.298	0.0211	5.27e-06
40	-1.379	-1.380	33.934	27.302	0.0287	3.88e-06
50	-1.400	-1.401	33.938	27.306	0.0362	2.79e-06
60	-1.403	-1.404	33.941	27.308	0.0438	2.36e-06
70	-1.407	-1.408	33.944	27.311	0.0513	3.15e-06
80	-1.400	-1.402	33.948	27.314	0.0587	4.12e-06
90	-1.396	-1.398	33.960	27.324	0.0662	1.88e-05
100	-1.329	-1.331	33.991	27.347	0.0734	2.44e-05
110	-1.201	-1.204	34.052	27.392	0.0804	6.58e-05
120	-1.001	-1.004	34.140	27.456	0.0867	3.81e-05
130	-0.653	-0.657	34.201	27.492	0.0927	3.06e-05
140	-0.431	-0.436	34.237	27.511	0.0984	1.07e-05
150	-0.206	-0.211	34.264	27.523	0.1039	1.18e-05
160	0.136	0.130	34.308	27.540	0.1093	2.09e-05
180	1.322	1.313	34.490	27.615	0.1195	3.44e-05
200	1.160	1.151	34.528	27.656	0.1284	7.28e-06
220	1.123	1.113	34.544	27.671	0.1369	4.25e-06
240	1.414	1.402	34.595	27.692	0.1451	1.26e-05
260	1.539	1.526	34.632	27.713	0.1529	5.10e-06
280	1.689	1.674	34.660	27.725	0.1604	1.05e-05
300	1.571	1.556	34.667	27.739	0.1677	5.35e-06
320	1.599	1.582	34.678	27.746	0.1748	3.59e-06
340	1.589	1.571	34.685	27.752	0.1818	3.28e-06
360	1.614	1.595	34.691	27.755	0.1888	1.34e-06
380	1.575	1.556	34.691	27.758	0.1957	2.25e-06
400	1.553	1.533	34.694	27.763	0.2025	-7.30e-07
420	1.545	1.523	34.695	27.764	0.2094	2.62e-06
440	1.492	1.470	34.700	27.772	0.2161	2.37e-06
460	1.474	1.451	34.705	27.777	0.2227	2.68e-06
480	1.426	1.401	34.707	27.783	0.2292	7.30e-07
500	1.430	1.404	34.708	27.783	0.2357	0.00e+00





LTER 91a	Station: 700.160 (92)	JulianDay: 319	GMT: 1815
	Latitude: 63° 33.00' S	Longitude: 64° 53.50' W	Depth: 1000 m

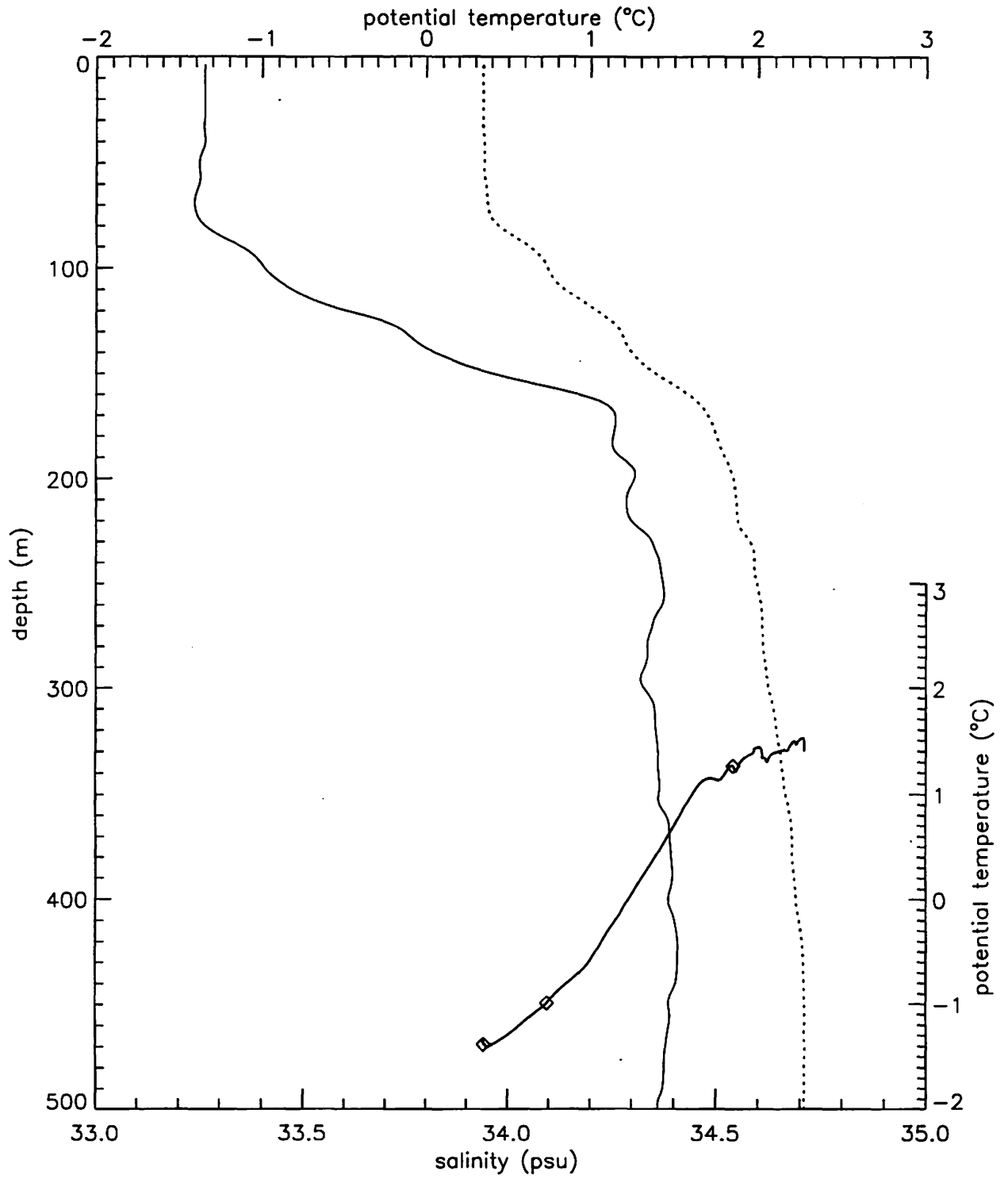
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.327	-1.327	33.913	27.284	0.0016	1.05e-05
10	-1.328	-1.328	33.921	27.290	0.0054	1.20e-05
20	-1.337	-1.338	33.931	27.299	0.0131	4.96e-06
30	-1.357	-1.357	33.939	27.305	0.0207	5.93e-06
40	-1.384	-1.385	33.941	27.308	0.0283	9.08e-07
50	-1.399	-1.400	33.942	27.309	0.0358	1.39e-06
60	-1.404	-1.406	33.943	27.310	0.0433	1.64e-06
70	-1.410	-1.412	33.947	27.314	0.0508	6.85e-06
80	-1.370	-1.372	33.966	27.328	0.0582	2.69e-05
90	-1.298	-1.301	34.033	27.380	0.0653	6.08e-05
100	-1.165	-1.167	34.094	27.425	0.0719	2.52e-05
110	-0.801	-0.804	34.152	27.458	0.0782	5.14e-05
120	-0.607	-0.611	34.228	27.512	0.0840	2.69e-05
130	0.033	0.029	34.294	27.535	0.0895	2.83e-05
140	0.644	0.639	34.381	27.571	0.0947	3.24e-05
150	0.935	0.929	34.437	27.597	0.0997	1.59e-05
160	1.252	1.245	34.499	27.627	0.1044	3.91e-05
180	1.237	1.229	34.549	27.667	0.1131	1.09e-05
200	1.386	1.376	34.580	27.682	0.1213	6.31e-06
220	1.466	1.455	34.610	27.700	0.1294	1.14e-05
240	1.492	1.480	34.626	27.712	0.1371	1.94e-06
260	1.529	1.516	34.636	27.717	0.1447	3.46e-06
280	1.607	1.593	34.653	27.725	0.1522	3.95e-06
300	1.671	1.656	34.677	27.739	0.1595	2.55e-06
320	1.628	1.611	34.678	27.743	0.1667	6.08e-06
340	1.553	1.536	34.677	27.749	0.1737	3.22e-06
360	1.541	1.523	34.694	27.763	0.1805	-8.33e-06
380	1.499	1.480	34.685	27.759	0.1874	2.31e-06
400	1.497	1.477	34.695	27.767	0.1942	3.53e-06
420	1.460	1.439	34.699	27.773	0.2009	3.47e-06
440	1.404	1.382	34.703	27.780	0.2075	2.49e-06
460	1.380	1.357	34.706	27.784	0.2139	1.89e-06
480	1.353	1.329	34.706	27.787	0.2203	-1.40e-06
500	1.360	1.334	34.708	27.788	0.2267	1.22e-06



LTER 91a Station: 700.160 (93) JulianDay: 319 GMT: 2215  
 Latitude: 63° 32.80' S Longitude: 64° 53.50' W Depth: 1000 m

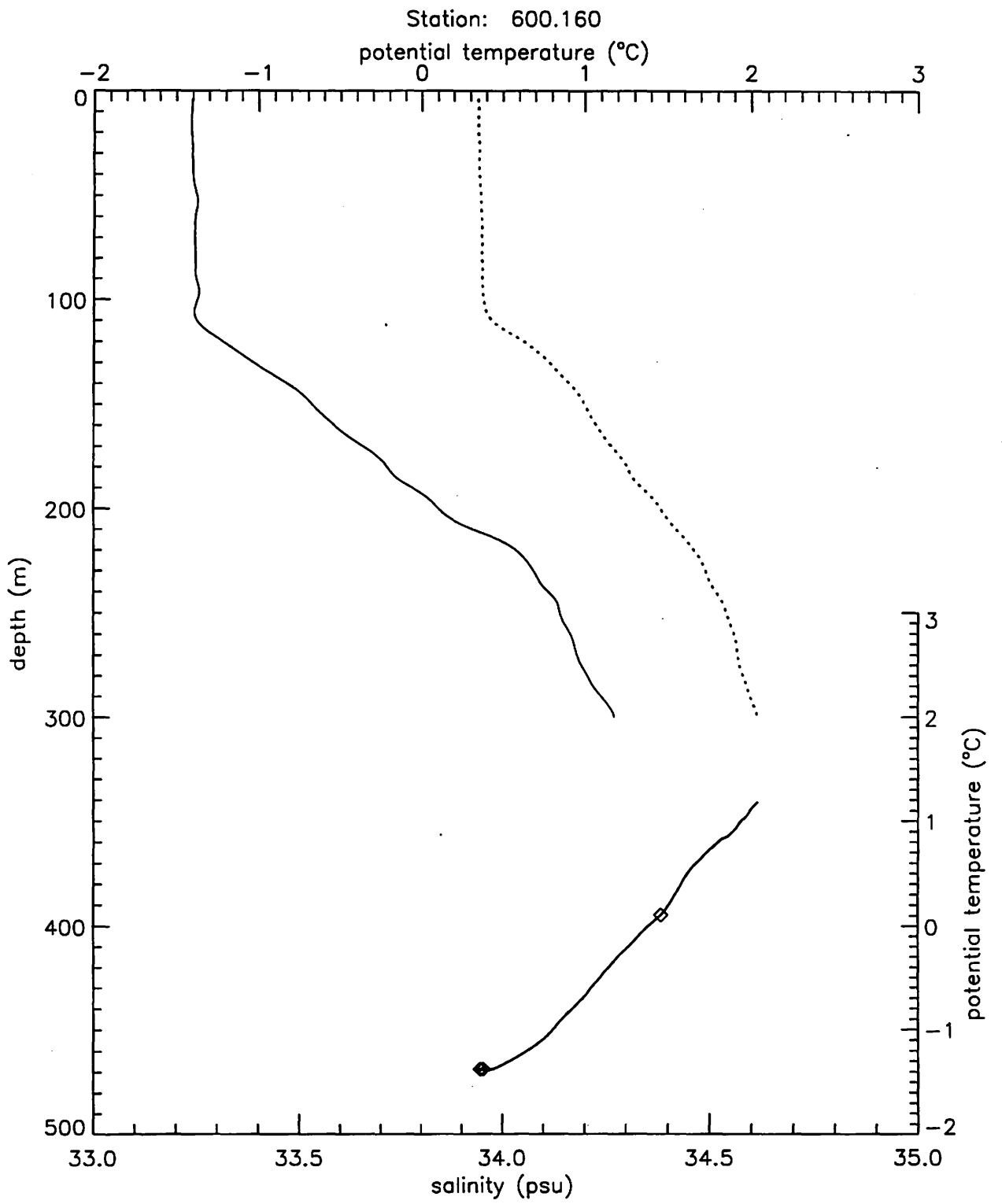
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.347	-1.347	33.939	27.305	0.0008	0.00e+00
10	-1.347	-1.347	33.938	27.305	0.0046	-7.27e-07
20	-1.346	-1.347	33.939	27.305	0.0121	-1.21e-07
30	-1.347	-1.348	33.938	27.305	0.0197	1.51e-06
40	-1.343	-1.344	33.942	27.307	0.0273	2.06e-06
50	-1.378	-1.379	33.942	27.309	0.0348	1.21e-06
60	-1.378	-1.379	33.946	27.312	0.0423	5.57e-06
70	-1.407	-1.408	33.951	27.317	0.0498	6.00e-06
80	-1.344	-1.346	33.978	27.337	0.0571	3.98e-05
90	-1.123	-1.125	34.053	27.390	0.0641	4.45e-05
100	-0.984	-0.986	34.097	27.421	0.0707	1.87e-05
110	-0.821	-0.824	34.136	27.446	0.0771	4.10e-05
120	-0.497	-0.501	34.213	27.495	0.0830	3.72e-05
130	-0.132	-0.137	34.273	27.526	0.0886	1.56e-05
140	0.056	0.051	34.300	27.539	0.0941	1.76e-05
150	0.410	0.404	34.357	27.565	0.0993	2.87e-05
160	0.938	0.931	34.434	27.595	0.1043	2.17e-05
180	1.146	1.138	34.502	27.636	0.1137	1.41e-05
200	1.275	1.265	34.542	27.659	0.1224	1.10e-05
220	1.260	1.250	34.553	27.669	0.1309	2.25e-06
240	1.430	1.418	34.591	27.688	0.1391	-6.07e-08
260	1.445	1.432	34.607	27.699	0.1471	9.66e-06
280	1.356	1.343	34.611	27.710	0.1549	3.83e-06
300	1.339	1.324	34.625	27.722	0.1624	2.13e-06
320	1.411	1.395	34.644	27.732	0.1698	4.01e-06
340	1.429	1.412	34.659	27.743	0.1770	4.01e-06
360	1.476	1.458	34.677	27.754	0.1840	2.43e-06
380	1.508	1.489	34.684	27.757	0.1910	5.47e-07
400	1.490	1.469	34.691	27.765	0.1978	2.80e-06
420	1.547	1.525	34.705	27.772	0.2045	3.10e-06
440	1.534	1.511	34.710	27.777	0.2111	3.89e-06
460	1.496	1.472	34.711	27.780	0.2177	8.52e-07
480	1.468	1.443	34.710	27.782	0.2242	-3.04e-07
500	1.431	1.406	34.710	27.784	0.2307	0.00e+00

Station: 700.160



LTER 91a	Station: 600.160 (102)	JulianDay: 320	GMT: 0716
	Latitude: 64° 12.70' S	Longitude: 66° 15.50' W	Depth: 402 m

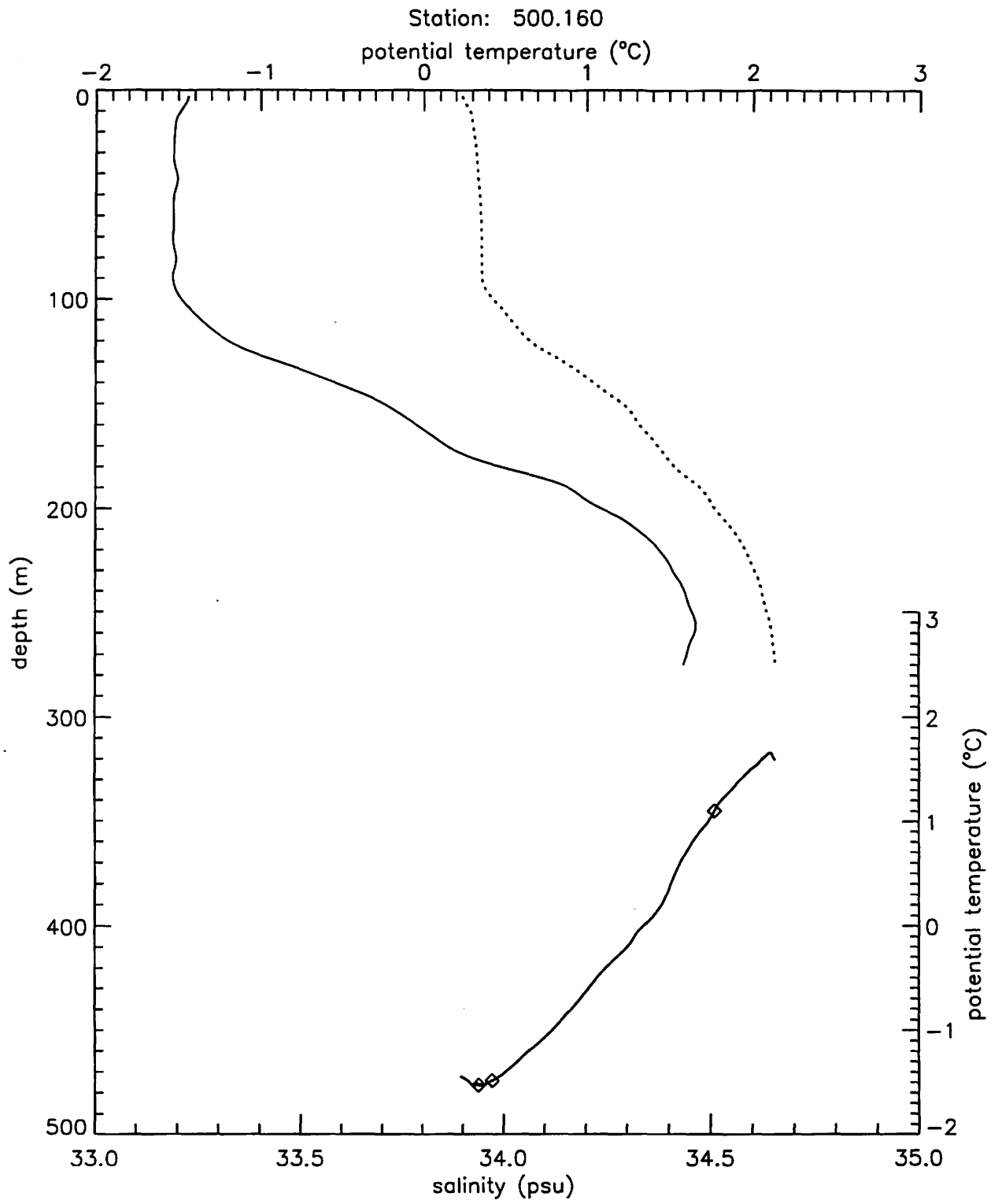
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.405	-1.405	33.939	27.307	0.0008	0.00e+00
10	-1.407	-1.408	33.940	27.308	0.0045	9.08e-07
20	-1.407	-1.408	33.940	27.308	0.0121	1.45e-06
30	-1.401	-1.402	33.942	27.310	0.0196	-1.21e-07
40	-1.397	-1.398	33.942	27.310	0.0271	1.27e-06
50	-1.371	-1.372	33.946	27.312	0.0347	1.76e-06
60	-1.383	-1.384	33.948	27.314	0.0421	2.00e-06
70	-1.384	-1.386	33.950	27.315	0.0496	0.00e+00
80	-1.383	-1.385	33.949	27.315	0.0570	7.27e-07
90	-1.375	-1.378	33.950	27.315	0.0645	6.06e-08
100	-1.370	-1.372	33.953	27.318	0.0719	7.09e-06
110	-1.372	-1.375	33.975	27.335	0.0793	3.71e-05
120	-1.214	-1.217	34.053	27.394	0.0863	5.40e-05
130	-1.026	-1.030	34.116	27.438	0.0927	3.21e-05
140	-0.821	-0.825	34.164	27.469	0.0988	2.91e-05
150	-0.666	-0.671	34.202	27.494	0.1047	1.53e-05
160	-0.532	-0.537	34.230	27.510	0.1104	1.78e-05
180	-0.204	-0.211	34.303	27.555	0.1212	1.74e-05
200	0.114	0.107	34.384	27.603	0.1312	1.88e-05
220	0.592	0.583	34.464	27.641	0.1404	1.86e-05
240	0.792	0.782	34.516	27.670	0.1490	1.75e-05
260	0.927	0.915	34.559	27.697	0.1570	6.74e-06
280	1.031	1.018	34.581	27.707	0.1648	8.14e-06
300	1.194	1.179	34.615	27.724	0.1724	6.08e-06



LTER 91a	Station: 500.160 (112)	JulianDay: 320	GMT: 1516
	Latitude: 64° 51.80' S	Longitude: 67° 41.80' W	Depth: 300 m

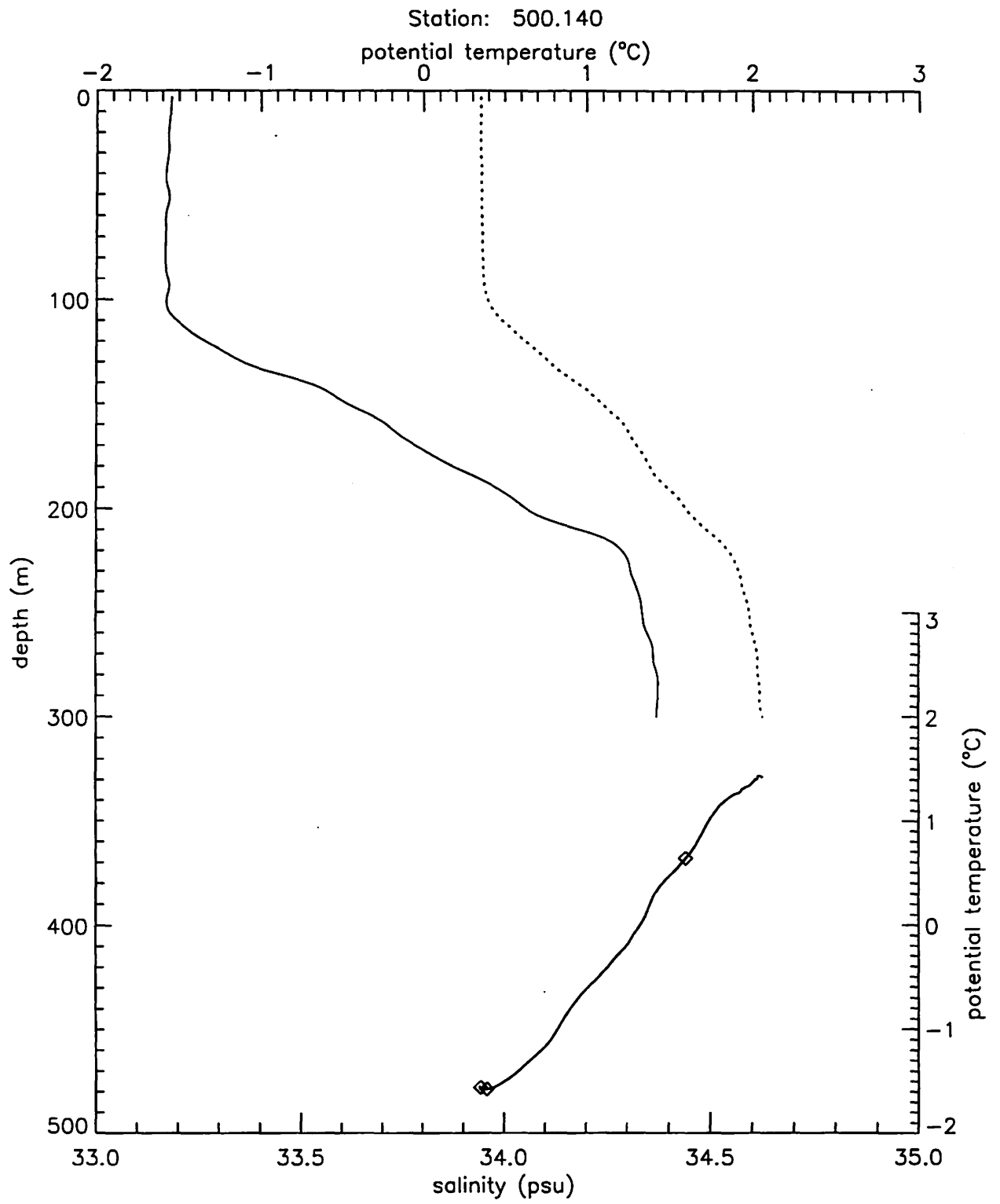
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.447	-1.447	33.898	27.275	0.0016	1.92e-05
10	-1.486	-1.487	33.914	27.289	0.0055	1.92e-05
20	-1.522	-1.523	33.924	27.298	0.0131	5.93e-06
30	-1.528	-1.528	33.930	27.303	0.0208	4.00e-06
40	-1.509	-1.509	33.934	27.306	0.0283	2.66e-06
50	-1.524	-1.525	33.939	27.311	0.0359	4.48e-06
60	-1.528	-1.529	33.942	27.313	0.0433	9.09e-07
70	-1.530	-1.531	33.943	27.314	0.0508	6.66e-07
80	-1.512	-1.513	33.943	27.314	0.0583	7.27e-07
90	-1.529	-1.531	33.946	27.316	0.0657	6.85e-06
100	-1.480	-1.482	33.972	27.336	0.0731	3.07e-05
110	-1.359	-1.362	34.016	27.368	0.0801	2.73e-05
120	-1.196	-1.199	34.062	27.401	0.0869	4.16e-05
130	-0.881	-0.884	34.146	27.457	0.0933	5.14e-05
140	-0.539	-0.543	34.219	27.501	0.0992	3.70e-05
150	-0.241	-0.246	34.290	27.545	0.1047	3.44e-05
160	-0.038	-0.044	34.329	27.567	0.1098	2.18e-05
180	0.482	0.475	34.414	27.607	0.1196	1.30e-05
200	1.107	1.098	34.510	27.645	0.1287	1.12e-05
220	1.454	1.444	34.582	27.679	0.1372	1.21e-05
240	1.609	1.596	34.623	27.701	0.1453	5.28e-06
260	1.669	1.655	34.647	27.715	0.1530	8.20e-06





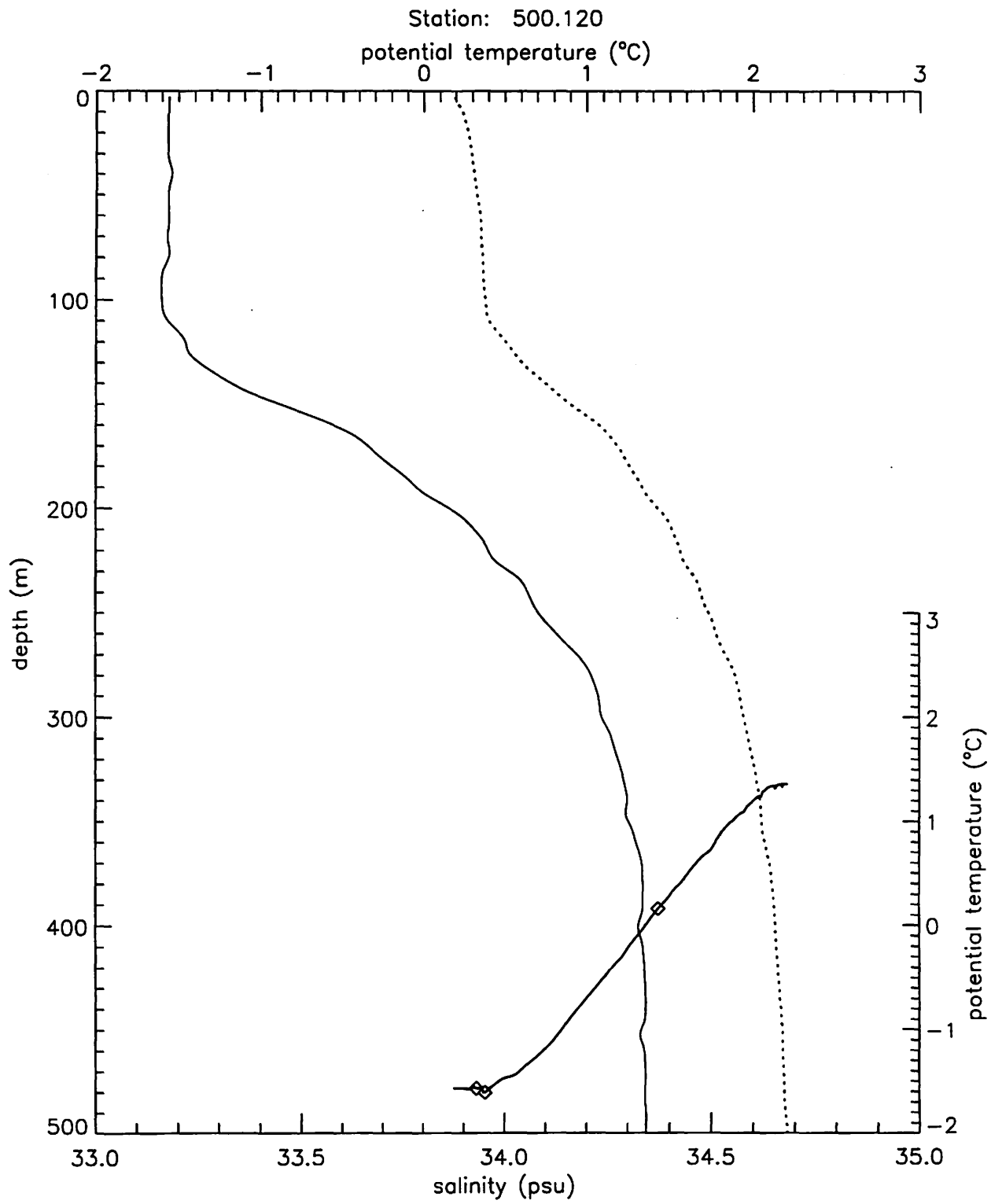
LTER 91a Station: 500.140 (118) JulianDay: 320 GMT: 1916  
 Latitude: 64° 59.10' S Longitude: 67° 23.80' W Depth: 360 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.547	-1.547	33.941	27.313	0.0015	4.04e-07
10	-1.550	-1.550	33.941	27.313	0.0053	2.42e-07
20	-1.562	-1.562	33.941	27.313	0.0128	1.21e-07
30	-1.561	-1.562	33.941	27.314	0.0202	1.76e-06
40	-1.577	-1.578	33.943	27.315	0.0277	-6.06e-07
50	-1.557	-1.558	33.943	27.315	0.0352	4.85e-07
60	-1.578	-1.579	33.944	27.316	0.0426	2.00e-06
70	-1.578	-1.579	33.945	27.318	0.0501	7.88e-07
80	-1.579	-1.581	33.946	27.318	0.0575	7.27e-07
90	-1.563	-1.565	33.949	27.320	0.0649	3.33e-06
100	-1.573	-1.575	33.959	27.329	0.0723	1.66e-05
110	-1.509	-1.511	33.996	27.357	0.0794	3.67e-05
120	-1.338	-1.341	34.053	27.397	0.0863	3.95e-05
130	-1.107	-1.110	34.113	27.438	0.0927	3.30e-05
140	-0.705	-0.709	34.180	27.477	0.0988	3.88e-05
150	-0.462	-0.467	34.239	27.515	0.1046	3.13e-05
160	-0.220	-0.226	34.293	27.547	0.1100	2.22e-05
180	0.195	0.188	34.355	27.576	0.1202	8.92e-06
200	0.648	0.640	34.442	27.620	0.1299	1.80e-05
220	1.233	1.223	34.544	27.664	0.1388	2.08e-05
240	1.332	1.320	34.582	27.687	0.1471	7.95e-06
260	1.386	1.373	34.602	27.700	0.1550	4.86e-06
280	1.448	1.434	34.615	27.706	0.1628	1.46e-06
300	1.444	1.429	34.626	27.715	0.1705	7.90e-06



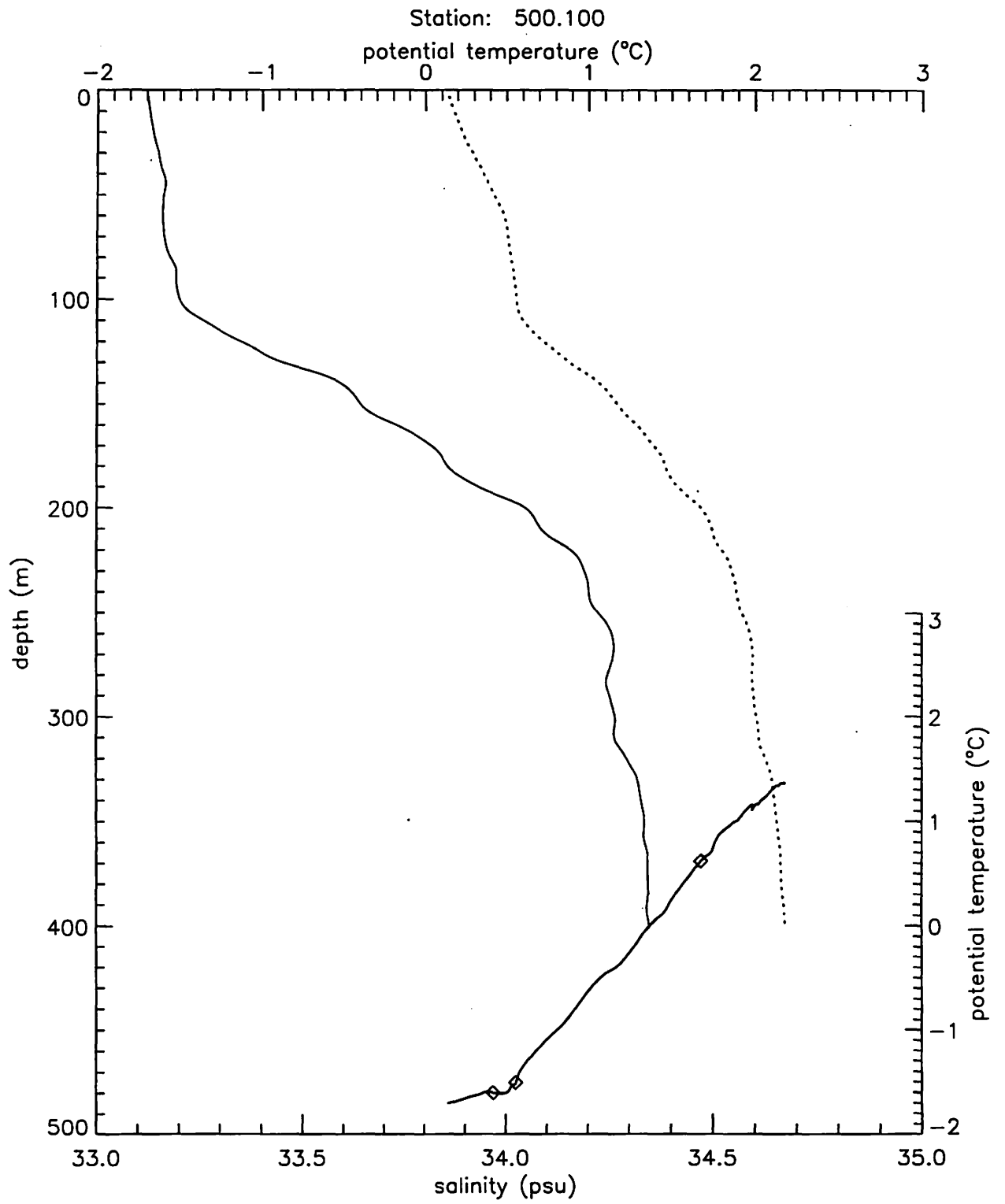
LTER 91a Station: 500.120 (126) JulianDay: 321 GMT: 0017  
 Latitude: 65° 6.60' S Longitude: 67° 5.00' W Depth: 670 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.559	-1.559	33.880	27.264	0.0016	1.84e-05
10	-1.561	-1.561	33.895	27.276	0.0056	1.88e-05
20	-1.564	-1.564	33.910	27.288	0.0133	7.87e-06
30	-1.563	-1.563	33.918	27.295	0.0210	5.81e-06
40	-1.539	-1.540	33.925	27.300	0.0287	4.84e-06
50	-1.560	-1.561	33.932	27.306	0.0363	7.15e-06
60	-1.558	-1.559	33.940	27.313	0.0438	3.88e-06
70	-1.564	-1.566	33.942	27.315	0.0512	1.39e-06
80	-1.558	-1.560	33.946	27.318	0.0587	4.06e-06
90	-1.600	-1.602	33.949	27.321	0.0661	2.79e-06
100	-1.599	-1.601	33.953	27.325	0.0734	3.64e-06
110	-1.561	-1.563	33.964	27.332	0.0807	1.84e-05
120	-1.455	-1.458	34.005	27.362	0.0879	2.99e-05
130	-1.370	-1.372	34.045	27.392	0.0947	3.19e-05
140	-1.171	-1.174	34.102	27.432	0.1012	3.63e-05
150	-0.877	-0.881	34.162	27.470	0.1074	3.81e-05
160	-0.548	-0.553	34.231	27.512	0.1131	3.34e-05
180	-0.186	-0.192	34.305	27.555	0.1239	1.55e-05
200	0.170	0.162	34.374	27.592	0.1339	2.15e-05
220	0.412	0.403	34.427	27.621	0.1433	9.95e-06
240	0.657	0.647	34.476	27.647	0.1523	8.20e-06
260	0.833	0.821	34.513	27.666	0.1609	5.77e-06
280	1.045	1.032	34.559	27.688	0.1691	7.53e-06
300	1.110	1.095	34.579	27.701	0.1771	4.56e-06
320	1.209	1.193	34.600	27.711	0.1849	4.80e-06
340	1.265	1.248	34.618	27.721	0.1924	4.80e-06
360	1.318	1.300	34.629	27.727	0.1999	5.59e-06
380	1.362	1.343	34.646	27.738	0.2072	3.77e-06
400	1.335	1.315	34.655	27.746	0.2144	2.07e-06
420	1.372	1.351	34.660	27.748	0.2214	2.43e-06
440	1.382	1.359	34.668	27.754	0.2285	4.26e-06
460	1.377	1.353	34.673	27.758	0.2354	-1.28e-06
480	1.381	1.357	34.676	27.761	0.2423	8.52e-07
500	1.387	1.362	34.682	27.765	0.2491	-6.09e-07



LTER 91a Station: 500.100 (136) JulianDay: 321 GMT: 0717  
 Latitude: 65° 14.00' S Longitude: 66° 46.60' W Depth: 430 m

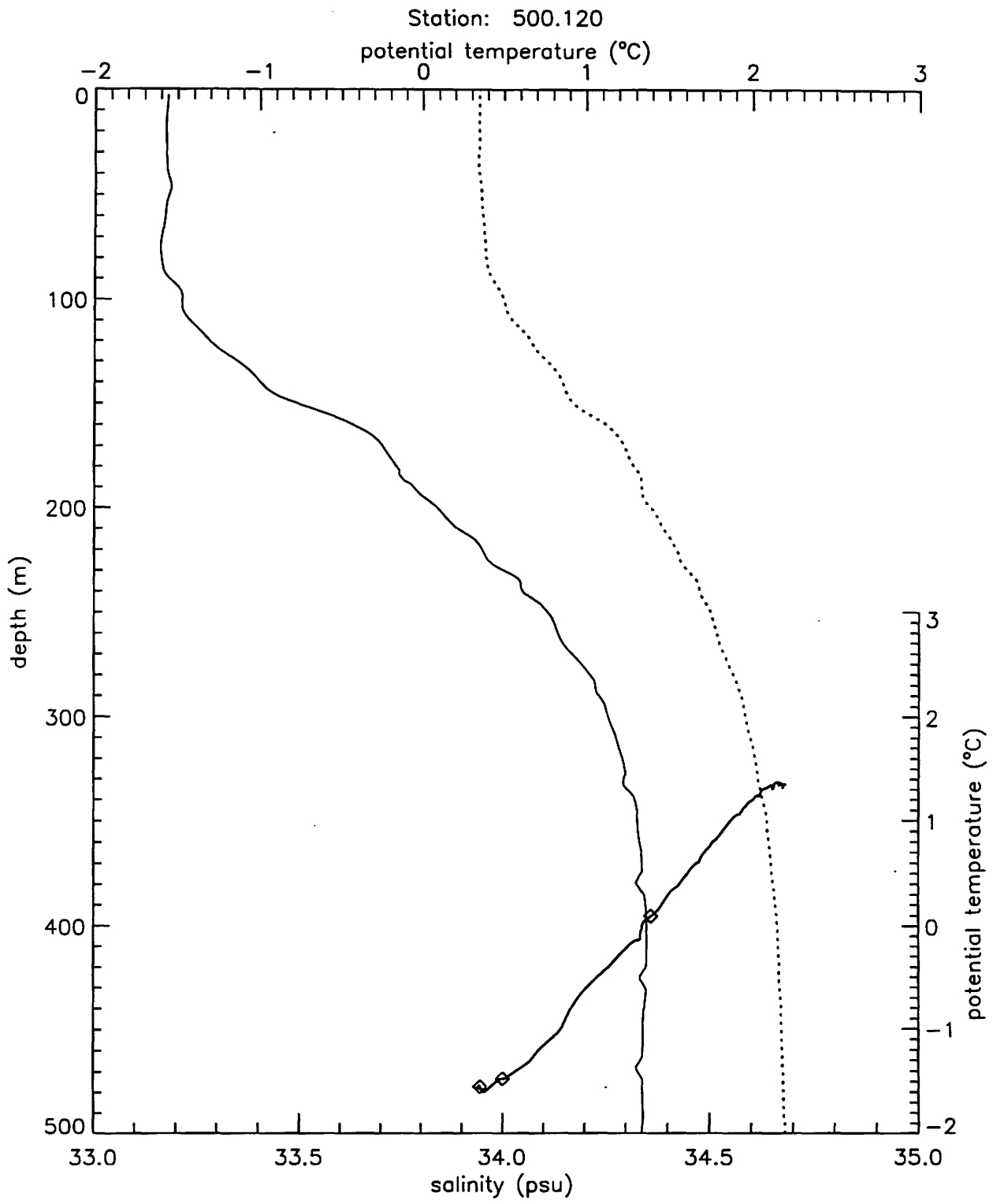
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.691	-1.692	33.860	27.251	0.0016	1.05e-05
10	-1.684	-1.684	33.870	27.259	0.0056	1.60e-05
20	-1.660	-1.660	33.891	27.276	0.0136	1.59e-05
30	-1.629	-1.629	33.917	27.296	0.0213	2.19e-05
40	-1.598	-1.599	33.944	27.317	0.0289	1.87e-05
50	-1.596	-1.597	33.970	27.338	0.0362	2.15e-05
60	-1.602	-1.604	33.994	27.358	0.0434	1.33e-05
70	-1.591	-1.593	34.004	27.366	0.0504	5.57e-06
80	-1.554	-1.556	34.012	27.371	0.0573	4.42e-06
90	-1.518	-1.520	34.020	27.376	0.0642	5.33e-06
100	-1.498	-1.500	34.025	27.380	0.0711	2.73e-06
110	-1.351	-1.354	34.042	27.389	0.0779	2.04e-05
120	-1.122	-1.125	34.092	27.422	0.0844	3.76e-05
130	-0.868	-0.871	34.156	27.464	0.0907	4.03e-05
140	-0.515	-0.519	34.227	27.507	0.0965	3.39e-05
150	-0.391	-0.396	34.270	27.537	0.1020	2.48e-05
160	-0.166	-0.171	34.318	27.564	0.1072	2.37e-05
180	0.150	0.143	34.387	27.604	0.1170	9.22e-06
200	0.630	0.622	34.472	27.645	0.1263	2.07e-05
220	0.907	0.897	34.522	27.668	0.1348	1.62e-05
240	1.018	1.007	34.557	27.689	0.1430	5.53e-06
260	1.158	1.146	34.589	27.705	0.1508	6.07e-06
280	1.132	1.119	34.594	27.711	0.1585	2.13e-06
300	1.178	1.164	34.604	27.716	0.1661	5.29e-06
320	1.249	1.234	34.626	27.729	0.1736	9.72e-06
340	1.337	1.321	34.647	27.740	0.1808	2.25e-06
360	1.360	1.342	34.659	27.748	0.1879	3.10e-06
380	1.382	1.362	34.664	27.751	0.1949	2.07e-06
400	1.390	1.370	34.673	27.757	0.2018	-3.04e-07



**LTER 91a Station: 500.120 (137) JulianDay: 321 GMT: 0917**  
**Latitude: 65° 6.60' S Longitude: 67° 5.10' W Depth: 670 m**

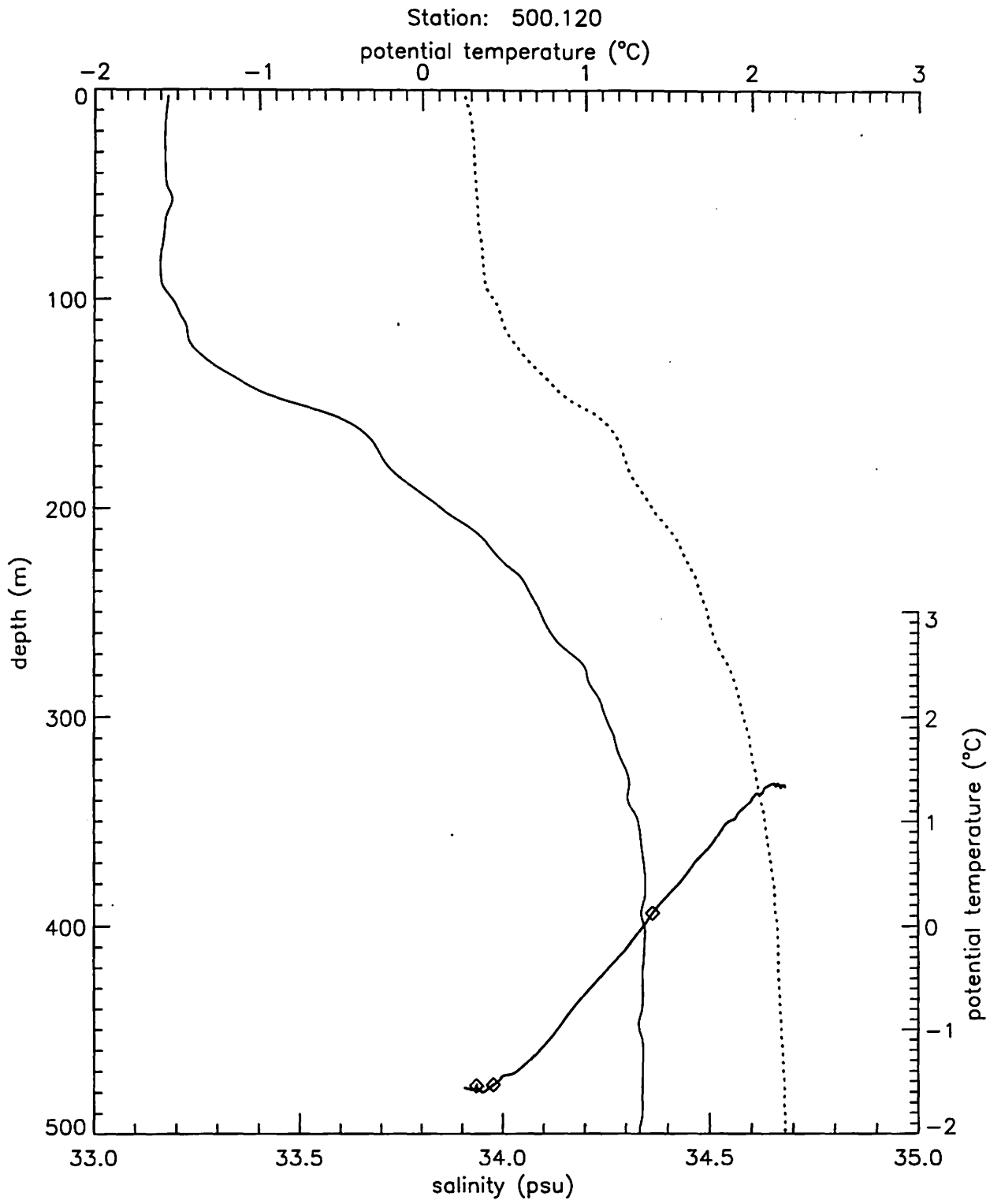
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.561	-1.561	33.938	27.311	0.0015	0.00e+00
10	-1.565	-1.565	33.938	27.311	0.0053	2.42e-07
20	-1.568	-1.568	33.938	27.311	0.0128	7.87e-07
30	-1.566	-1.566	33.938	27.311	0.0203	-1.63e-06
40	-1.557	-1.558	33.939	27.311	0.0278	3.27e-06
50	-1.547	-1.548	33.945	27.316	0.0353	3.94e-06
60	-1.571	-1.573	33.948	27.319	0.0427	3.57e-06
70	-1.593	-1.594	33.953	27.324	0.0501	4.36e-06
80	-1.595	-1.597	33.956	27.327	0.0575	4.24e-06
90	-1.545	-1.547	33.972	27.338	0.0648	1.81e-05
100	-1.467	-1.469	34.000	27.359	0.0719	1.43e-05
110	-1.421	-1.423	34.022	27.375	0.0788	2.71e-05
120	-1.302	-1.304	34.066	27.407	0.0855	2.33e-05
130	-1.128	-1.131	34.106	27.434	0.0920	3.02e-05
140	-0.990	-0.994	34.143	27.459	0.0982	1.34e-05
150	-0.767	-0.772	34.171	27.473	0.1042	2.82e-05
160	-0.423	-0.428	34.250	27.522	0.1099	4.12e-05
180	-0.151	-0.157	34.318	27.563	0.1205	1.93e-05
200	0.101	0.094	34.359	27.584	0.1305	2.10e-05
220	0.380	0.371	34.420	27.617	0.1401	1.27e-05
240	0.632	0.622	34.476	27.648	0.1491	8.44e-06
260	0.846	0.834	34.518	27.668	0.1577	7.23e-06
280	1.042	1.029	34.556	27.686	0.1659	1.03e-05
300	1.155	1.140	34.585	27.703	0.1738	4.13e-06
320	1.242	1.226	34.608	27.715	0.1815	3.52e-06
340	1.319	1.302	34.627	27.725	0.1890	5.11e-06
360	1.348	1.330	34.641	27.734	0.1964	3.77e-06
380	1.328	1.309	34.652	27.744	0.2036	3.65e-06
400	1.393	1.373	34.662	27.748	0.2107	1.46e-06
420	1.392	1.370	34.666	27.751	0.2177	3.83e-06
440	1.383	1.360	34.671	27.756	0.2247	2.56e-06
460	1.375	1.352	34.674	27.759	0.2316	2.98e-06
480	1.375	1.350	34.677	27.762	0.2384	6.69e-07
500	1.373	1.347	34.681	27.765	0.2453	0.00e+00





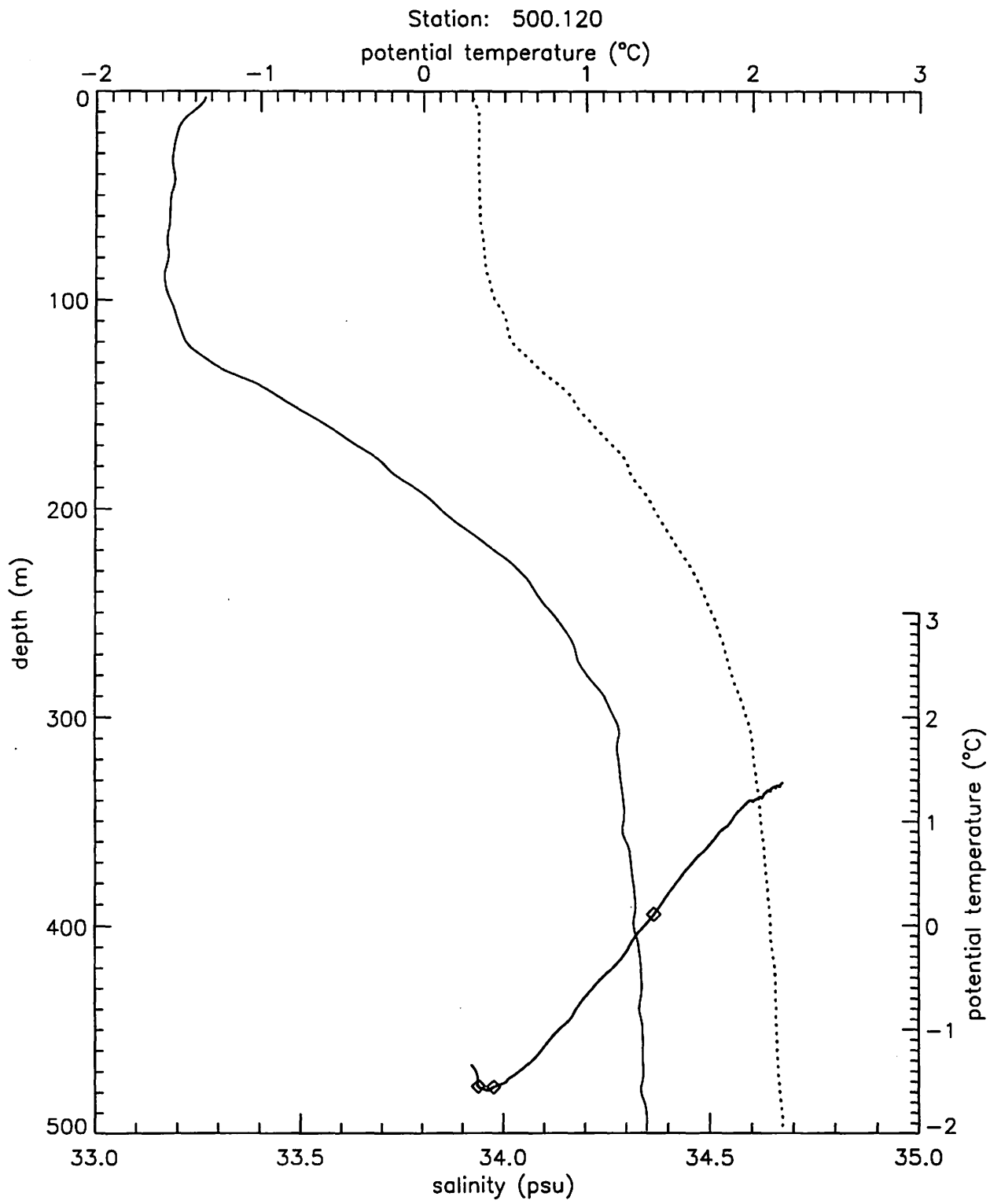
**LTER 91a Station: 500.120 (138) JulianDay: 321 GMT: 1117**  
**Latitude: 65° 6.60' S Longitude: 67° 4.90' W Depth: 670 m**

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.557	-1.557	33.907	27.286	0.0016	1.05e-05
10	-1.566	-1.566	33.915	27.292	0.0054	1.05e-05
20	-1.573	-1.574	33.924	27.300	0.0131	4.78e-06
30	-1.572	-1.573	33.928	27.303	0.0207	2.24e-06
40	-1.569	-1.570	33.930	27.305	0.0283	2.24e-06
50	-1.535	-1.536	33.935	27.308	0.0358	2.42e-06
60	-1.563	-1.565	33.937	27.311	0.0433	3.33e-06
70	-1.578	-1.580	33.944	27.316	0.0508	6.91e-06
80	-1.596	-1.598	33.949	27.321	0.0582	3.45e-06
90	-1.595	-1.597	33.954	27.325	0.0656	6.30e-06
100	-1.526	-1.529	33.977	27.342	0.0729	2.08e-05
110	-1.456	-1.458	33.997	27.356	0.0800	1.21e-05
120	-1.423	-1.426	34.023	27.376	0.0869	2.47e-05
130	-1.303	-1.306	34.063	27.405	0.0936	3.06e-05
140	-1.090	-1.094	34.115	27.440	0.1000	2.98e-05
150	-0.778	-0.783	34.174	27.476	0.1061	4.51e-05
160	-0.427	-0.433	34.252	27.523	0.1118	3.01e-05
180	-0.202	-0.208	34.303	27.554	0.1225	9.59e-06
200	0.129	0.122	34.364	27.587	0.1326	1.58e-05
220	0.440	0.432	34.433	27.625	0.1420	1.13e-05
240	0.670	0.660	34.477	27.647	0.1510	8.38e-06
260	0.806	0.794	34.508	27.663	0.1596	5.83e-06
280	1.027	1.014	34.554	27.686	0.1679	1.21e-05
300	1.140	1.126	34.581	27.700	0.1759	6.50e-06
320	1.234	1.219	34.602	27.711	0.1836	3.04e-06
340	1.277	1.260	34.623	27.725	0.1912	6.99e-06
360	1.359	1.341	34.640	27.732	0.1985	4.19e-06
380	1.385	1.366	34.654	27.742	0.2058	3.89e-06
400	1.381	1.361	34.663	27.749	0.2129	1.28e-06
420	1.374	1.353	34.665	27.752	0.2199	1.52e-06
440	1.369	1.346	34.669	27.756	0.2268	3.89e-06
460	1.374	1.350	34.675	27.760	0.2337	1.40e-06
480	1.373	1.349	34.680	27.764	0.2406	0.00e+00
500	1.357	1.332	34.681	27.767	0.2474	4.26e-06



LTER 91a Station: 500.120 (142) JulianDay: 321 GMT: 1917  
 Latitude: 65° 6.60' S Longitude: 67° 5.20' W Depth: 670 m

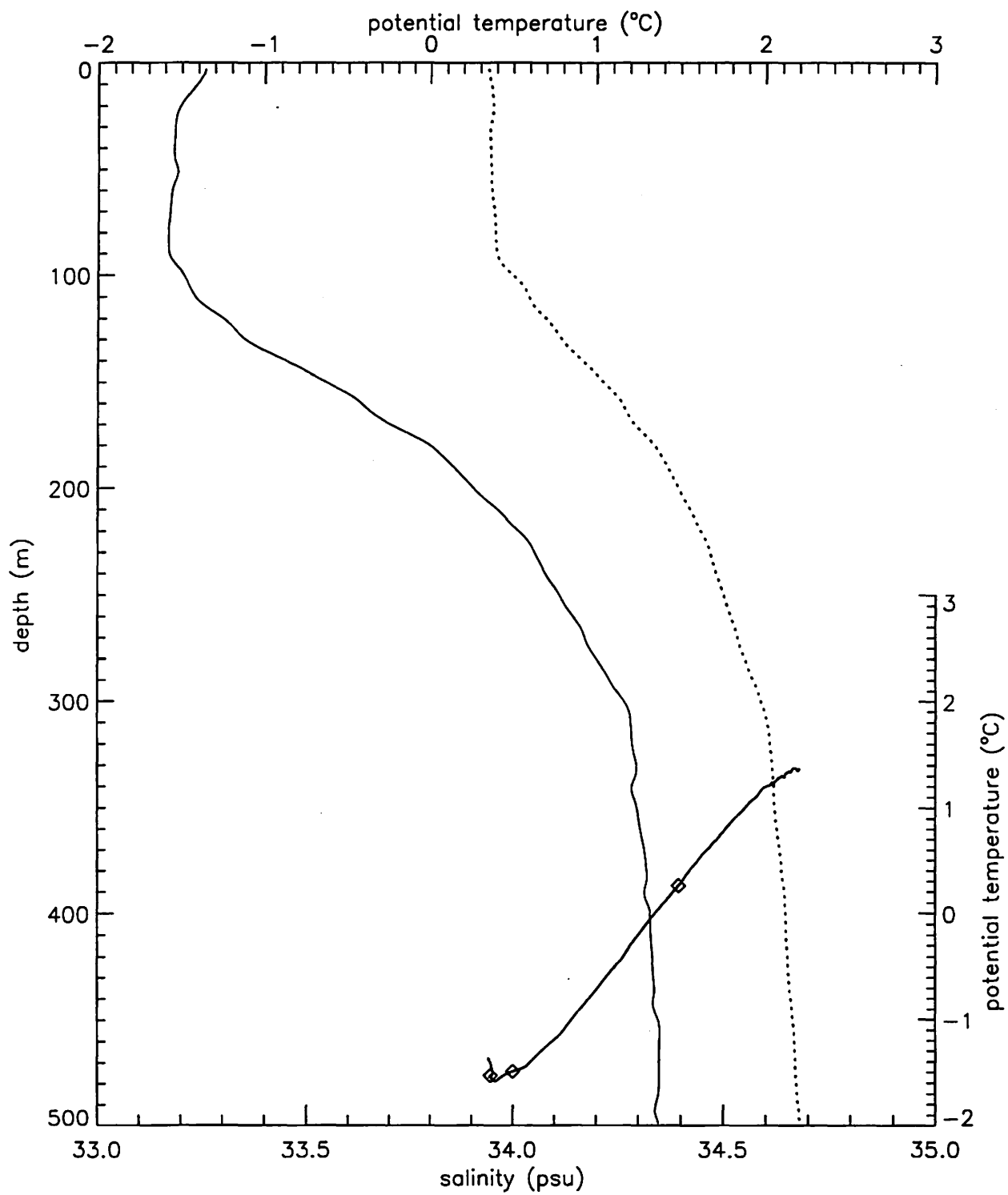
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.348	-1.348	33.924	27.293	0.0015	1.53e-05
10	-1.416	-1.416	33.934	27.304	0.0054	1.42e-05
20	-1.507	-1.508	33.937	27.309	0.0129	1.33e-06
30	-1.532	-1.533	33.936	27.309	0.0205	3.63e-07
40	-1.523	-1.524	33.937	27.309	0.0280	5.45e-07
50	-1.542	-1.543	33.939	27.311	0.0355	2.24e-06
60	-1.550	-1.551	33.940	27.313	0.0430	1.76e-06
70	-1.565	-1.566	33.947	27.318	0.0504	6.48e-06
80	-1.559	-1.561	33.952	27.323	0.0578	4.42e-06
90	-1.579	-1.581	33.963	27.332	0.0652	1.07e-05
100	-1.546	-1.548	33.977	27.343	0.0724	1.87e-05
110	-1.500	-1.503	34.006	27.364	0.0794	1.03e-05
120	-1.450	-1.452	34.019	27.374	0.0864	2.34e-05
130	-1.293	-1.296	34.071	27.411	0.0931	3.41e-05
140	-1.026	-1.030	34.128	27.448	0.0994	3.80e-05
150	-0.816	-0.820	34.175	27.478	0.1054	1.75e-05
160	-0.596	-0.601	34.218	27.503	0.1112	2.75e-05
180	-0.221	-0.227	34.303	27.555	0.1220	1.01e-05
200	0.116	0.108	34.366	27.589	0.1321	1.35e-05
220	0.452	0.443	34.427	27.619	0.1417	1.51e-05
240	0.709	0.699	34.483	27.649	0.1506	1.14e-05
260	0.903	0.892	34.523	27.669	0.1592	7.65e-06
280	1.026	1.013	34.553	27.685	0.1674	5.04e-06
300	1.189	1.175	34.587	27.702	0.1754	7.53e-06
320	1.216	1.201	34.604	27.714	0.1831	2.01e-06
340	1.248	1.231	34.618	27.722	0.1906	2.92e-06
360	1.265	1.247	34.627	27.729	0.1980	1.46e-06
380	1.309	1.290	34.636	27.733	0.2053	2.68e-06
400	1.312	1.293	34.645	27.740	0.2126	6.69e-07
420	1.358	1.337	34.655	27.745	0.2198	3.16e-06
440	1.348	1.326	34.658	27.748	0.2269	2.43e-07
460	1.370	1.347	34.661	27.749	0.2340	2.19e-06
480	1.363	1.339	34.668	27.755	0.2410	2.74e-06



LTER 91a	Station: 500.120 (146)	JulianDay: 321	GMT: 2317
	Latitude: 65° 6.60' S	Longitude: 67° 5.10' W	Depth: 670 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.365	-1.365	33.940	27.307	0.0015	9.08e-06
10	-1.405	-1.405	33.946	27.313	0.0053	9.93e-06
20	-1.505	-1.505	33.951	27.320	0.0127	2.00e-06
30	-1.537	-1.538	33.944	27.315	0.0202	-3.63e-06
40	-1.544	-1.545	33.945	27.316	0.0277	1.64e-06
50	-1.523	-1.524	33.946	27.317	0.0351	6.06e-07
60	-1.555	-1.556	33.948	27.319	0.0425	4.00e-06
70	-1.568	-1.570	33.954	27.324	0.0499	4.24e-06
80	-1.577	-1.579	33.957	27.327	0.0573	1.64e-06
90	-1.572	-1.574	33.961	27.330	0.0646	1.04e-05
100	-1.483	-1.485	34.000	27.359	0.0718	3.81e-05
110	-1.413	-1.416	34.038	27.388	0.0786	1.98e-05
120	-1.247	-1.250	34.080	27.416	0.0853	3.00e-05
130	-1.112	-1.115	34.118	27.443	0.0916	2.36e-05
140	-0.863	-0.867	34.168	27.474	0.0977	3.13e-05
150	-0.621	-0.626	34.218	27.505	0.1035	2.72e-05
160	-0.415	-0.420	34.261	27.530	0.1090	1.55e-05
180	0.005	-0.001	34.339	27.572	0.1195	1.90e-05
200	0.267	0.259	34.395	27.604	0.1293	1.27e-05
220	0.544	0.535	34.447	27.630	0.1386	1.23e-05
240	0.705	0.695	34.484	27.650	0.1475	8.14e-06
260	0.873	0.862	34.518	27.667	0.1560	9.29e-06
280	1.015	1.002	34.551	27.684	0.1643	9.48e-06
300	1.180	1.166	34.589	27.704	0.1722	6.99e-06
320	1.227	1.212	34.610	27.718	0.1798	2.73e-06
340	1.227	1.210	34.619	27.725	0.1874	1.76e-06
360	1.278	1.261	34.627	27.728	0.1948	2.13e-06
380	1.319	1.300	34.638	27.734	0.2021	3.47e-06
400	1.339	1.319	34.647	27.740	0.2093	6.08e-07
420	1.355	1.334	34.652	27.743	0.2165	1.64e-06
440	1.360	1.338	34.659	27.748	0.2236	3.41e-06
460	1.397	1.374	34.667	27.752	0.2307	1.70e-06
480	1.396	1.371	34.672	27.757	0.2377	2.68e-06

Station: 500.120

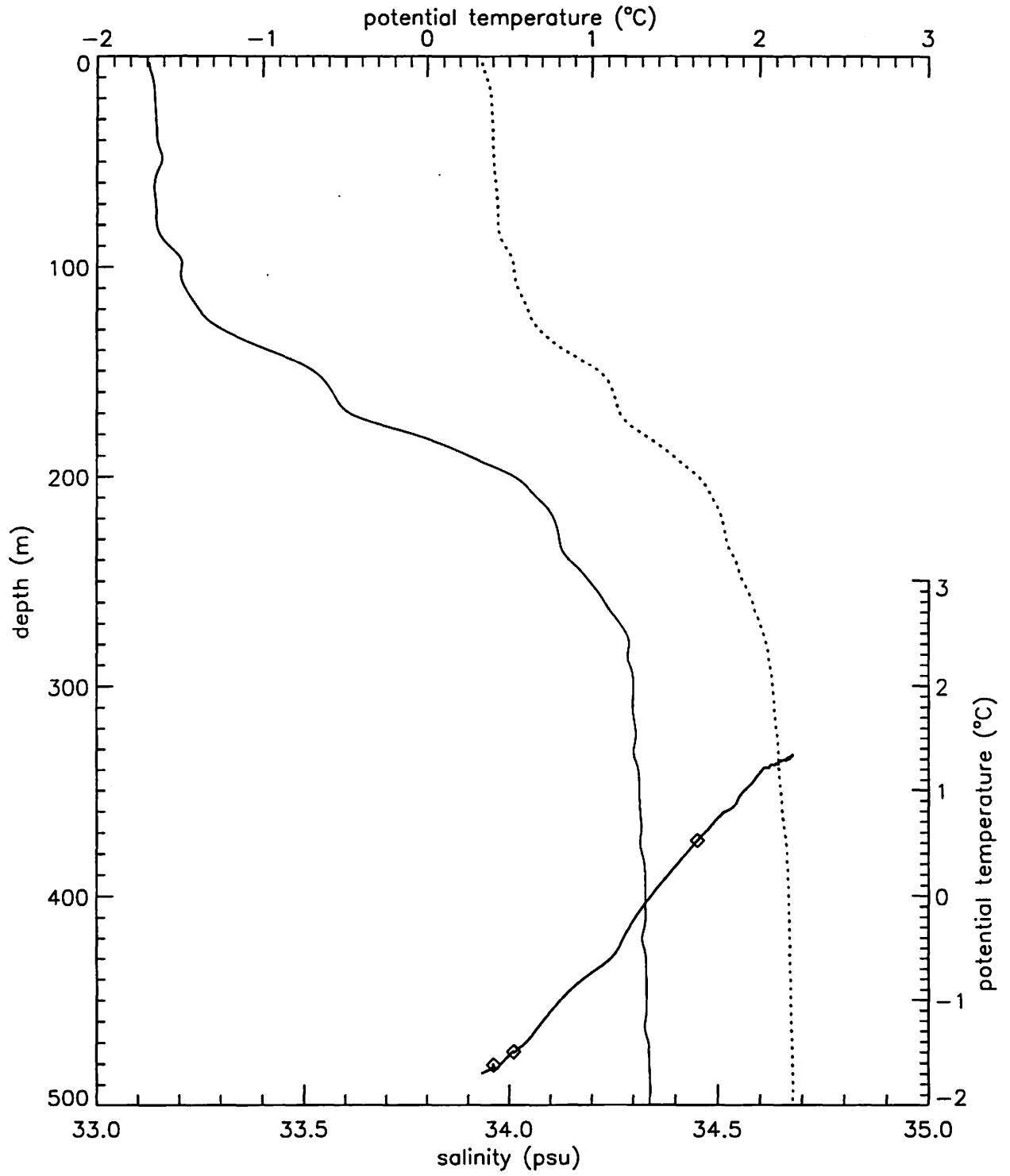


LTER 91a Station: 500.095 (150) JulianDay: 322 GMT: 0918  
 Latitude: 65° 15.10' S Longitude: 66° 38.90' W Depth: 450 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.687	-1.687	33.935	27.312	0.0015	9.69e-06
10	-1.668	-1.668	33.945	27.319	0.0052	1.24e-05
20	-1.654	-1.654	33.956	27.328	0.0126	3.75e-06
30	-1.645	-1.645	33.958	27.330	0.0200	2.06e-06
40	-1.637	-1.638	33.960	27.331	0.0273	1.21e-07
50	-1.610	-1.611	33.962	27.332	0.0346	2.85e-06
60	-1.652	-1.653	33.967	27.337	0.0419	4.42e-06
70	-1.645	-1.646	33.971	27.340	0.0491	2.00e-06
80	-1.638	-1.639	33.973	27.341	0.0563	3.15e-06
90	-1.565	-1.567	33.989	27.353	0.0635	1.76e-05
100	-1.488	-1.490	34.011	27.368	0.0705	7.51e-06
110	-1.468	-1.470	34.021	27.376	0.0774	1.28e-05
120	-1.386	-1.388	34.044	27.392	0.0842	1.40e-05
130	-1.241	-1.245	34.073	27.410	0.0908	2.56e-05
140	-0.966	-0.970	34.131	27.448	0.0971	4.62e-05
150	-0.692	-0.697	34.214	27.504	0.1031	4.22e-05
160	-0.578	-0.583	34.250	27.528	0.1086	1.17e-05
180	-0.087	-0.093	34.324	27.565	0.1192	3.39e-05
200	0.533	0.525	34.452	27.634	0.1288	2.46e-05
220	0.777	0.768	34.509	27.666	0.1374	8.32e-06
240	0.870	0.860	34.541	27.686	0.1457	9.17e-06
260	1.086	1.074	34.582	27.704	0.1536	7.71e-06
280	1.237	1.224	34.615	27.720	0.1612	9.48e-06
300	1.264	1.249	34.630	27.731	0.1686	3.77e-06
320	1.276	1.261	34.638	27.737	0.1758	3.10e-06
340	1.296	1.279	34.646	27.742	0.1830	4.86e-07
360	1.309	1.291	34.654	27.747	0.1900	2.43e-06
380	1.321	1.302	34.664	27.755	0.1970	9.73e-07
400	1.341	1.321	34.668	27.757	0.2039	7.91e-07
420	1.322	1.301	34.670	27.760	0.2107	7.91e-07
440	1.349	1.327	34.673	27.760	0.2176	8.52e-07
460	1.344	1.321	34.674	27.762	0.2244	1.52e-06
480	1.369	1.344	34.677	27.762	0.2313	5.48e-07
500	1.372	1.347	34.678	27.763	0.2381	0.00e+00



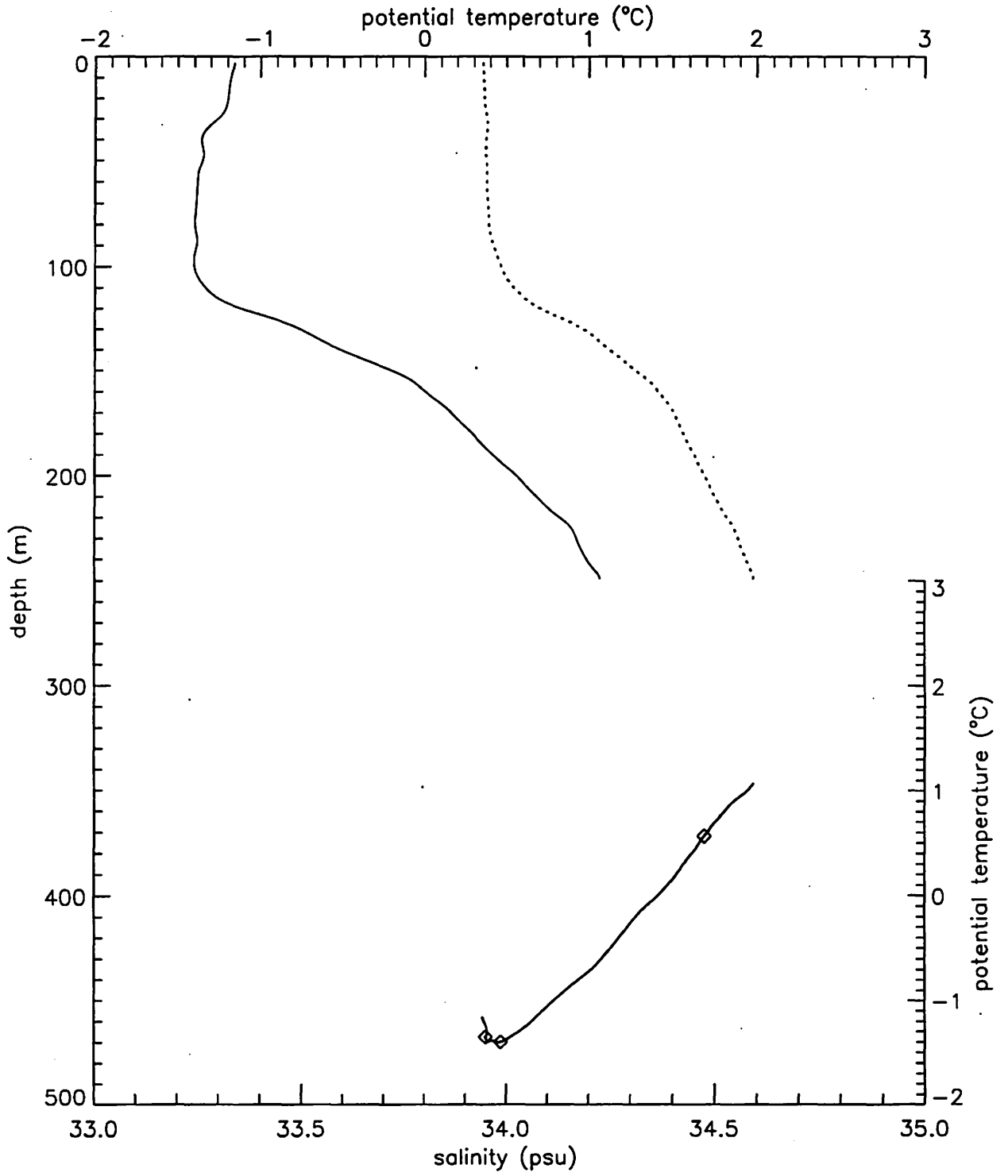
Station: 500.095



LTER 91a	Station: 600.140 (157)	JulianDay: 322	GMT: 2018
	Latitude: 64° 19.50' S	Longitude: 65° 57.30' W	Depth: 315 m

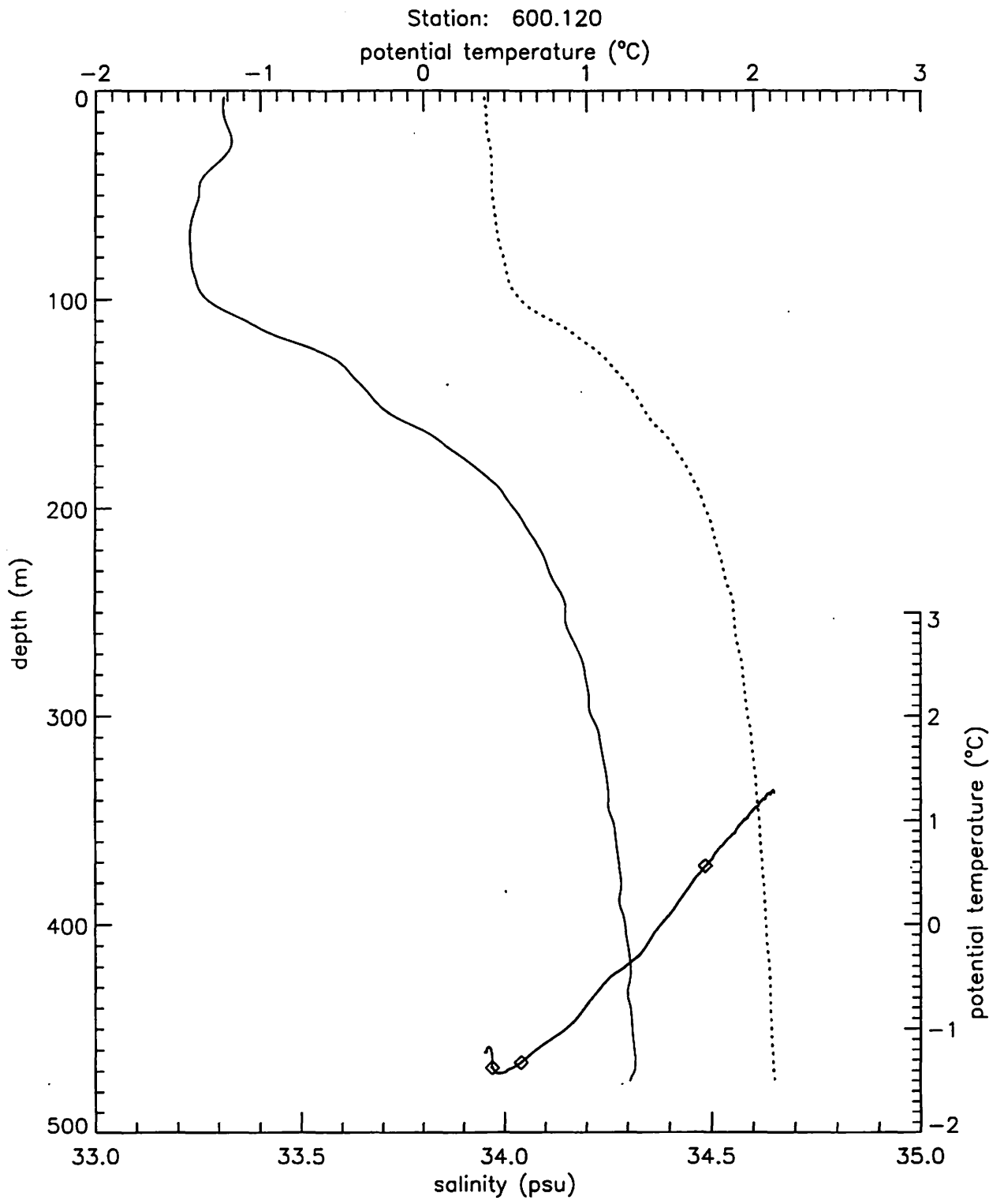
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.162	-1.162	33.942	27.302	0.0015	3.63e-06
10	-1.178	-1.178	33.944	27.304	0.0053	3.33e-06
20	-1.196	-1.196	33.945	27.305	0.0129	2.36e-06
30	-1.257	-1.258	33.952	27.313	0.0204	8.42e-06
40	-1.356	-1.357	33.950	27.314	0.0279	-2.42e-06
50	-1.350	-1.351	33.950	27.315	0.0354	3.21e-06
60	-1.379	-1.381	33.952	27.317	0.0429	4.85e-07
70	-1.388	-1.390	33.954	27.319	0.0503	2.73e-06
80	-1.394	-1.396	33.957	27.322	0.0577	4.42e-06
90	-1.384	-1.386	33.968	27.330	0.0650	1.30e-05
100	-1.398	-1.400	33.987	27.346	0.0723	1.64e-05
110	-1.330	-1.332	34.018	27.369	0.0793	3.18e-05
120	-1.113	-1.116	34.085	27.416	0.0860	6.10e-05
130	-0.753	-0.757	34.189	27.487	0.0922	5.18e-05
140	-0.506	-0.511	34.250	27.525	0.0978	3.21e-05
150	-0.198	-0.203	34.312	27.561	0.1031	3.45e-05
160	0.006	0.001	34.365	27.594	0.1081	2.36e-05
180	0.299	0.292	34.425	27.627	0.1174	1.04e-05
200	0.571	0.563	34.476	27.651	0.1263	1.11e-05
220	0.836	0.826	34.530	27.679	0.1347	1.56e-05
240	0.998	0.987	34.575	27.705	0.1426	1.13e-05

Station: 600.140



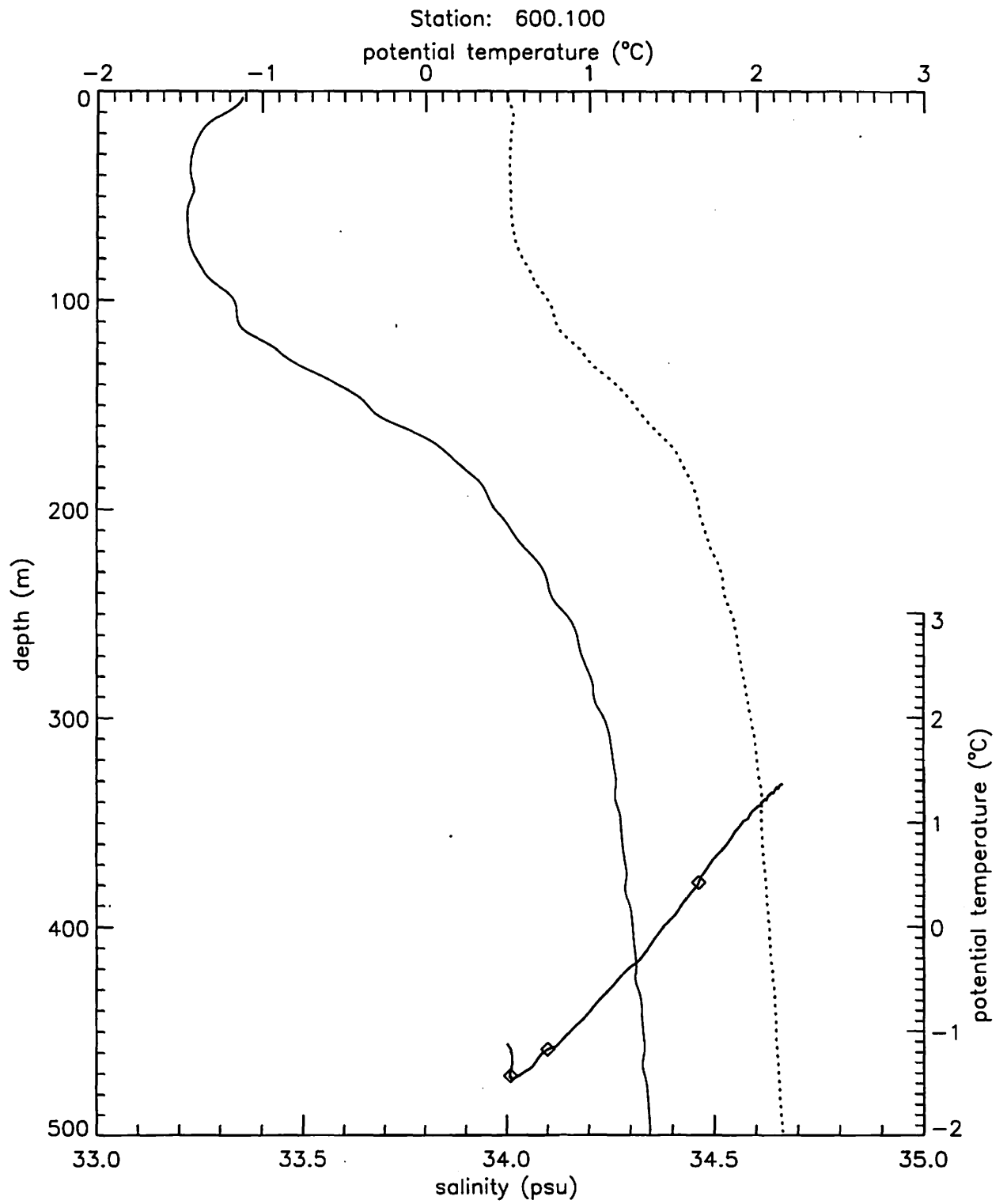
LTER 91a Station: 600.120 (162) JulianDay: 323 GMT: 0019  
 Latitude: 64° 27.30' S Longitude: 65° 39.30' W Depth: 520 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.223	-1.223	33.952	27.312	0.0015	5.85e-06
10	-1.224	-1.225	33.955	27.314	0.0053	2.00e-06
20	-1.184	-1.185	33.957	27.315	0.0128	4.24e-06
30	-1.202	-1.202	33.967	27.323	0.0202	8.60e-06
40	-1.332	-1.332	33.969	27.329	0.0276	2.66e-06
50	-1.371	-1.372	33.970	27.331	0.0349	4.48e-06
60	-1.408	-1.410	33.977	27.338	0.0422	7.33e-06
70	-1.426	-1.428	33.984	27.345	0.0494	6.30e-06
80	-1.419	-1.421	33.997	27.355	0.0565	1.05e-05
90	-1.392	-1.394	34.008	27.363	0.0635	1.18e-05
100	-1.320	-1.322	34.041	27.387	0.0704	3.40e-05
110	-1.088	-1.091	34.117	27.441	0.0770	5.97e-05
120	-0.805	-0.809	34.194	27.492	0.0830	4.01e-05
130	-0.509	-0.513	34.255	27.530	0.0885	2.91e-05
140	-0.390	-0.395	34.297	27.558	0.0938	2.47e-05
150	-0.279	-0.284	34.331	27.580	0.0989	1.58e-05
160	-0.077	-0.082	34.364	27.597	0.1038	2.16e-05
180	0.322	0.315	34.440	27.637	0.1130	1.35e-05
200	0.570	0.561	34.486	27.660	0.1216	8.86e-06
220	0.734	0.724	34.518	27.676	0.1300	7.10e-06
240	0.854	0.843	34.545	27.690	0.1381	7.83e-06
260	0.911	0.900	34.559	27.697	0.1460	1.70e-06
280	1.008	0.995	34.577	27.706	0.1537	2.19e-06
300	1.045	1.031	34.587	27.712	0.1614	2.92e-06
320	1.118	1.103	34.601	27.718	0.1690	2.13e-06
340	1.151	1.135	34.610	27.723	0.1765	3.34e-06
360	1.199	1.181	34.618	27.726	0.1839	5.47e-07
380	1.231	1.212	34.625	27.730	0.1913	2.92e-06
400	1.253	1.233	34.630	27.733	0.1986	7.30e-07
420	1.287	1.266	34.638	27.737	0.2059	2.62e-06
440	1.288	1.266	34.642	27.740	0.2131	-8.52e-07
460	1.310	1.287	34.646	27.741	0.2203	4.87e-07



LTER 91a Station: 600.100 (172) JulianDay: 323 GMT: 0719  
 Latitude: 64° 34.20' S Longitude: 65° 20.30' W Depth: 560 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.131	-1.131	34.003	27.350	0.0014	1.29e-05
10	-1.217	-1.217	34.013	27.361	0.0050	1.42e-05
20	-1.375	-1.375	34.010	27.364	0.0120	-1.15e-06
30	-1.426	-1.427	34.006	27.363	0.0190	-7.87e-07
40	-1.433	-1.434	34.007	27.363	0.0260	9.69e-07
50	-1.424	-1.425	34.009	27.365	0.0331	2.54e-06
60	-1.453	-1.454	34.011	27.367	0.0400	3.15e-06
70	-1.444	-1.446	34.019	27.373	0.0470	9.39e-06
80	-1.401	-1.403	34.038	27.388	0.0538	1.82e-05
90	-1.316	-1.318	34.066	27.408	0.0605	1.75e-05
100	-1.169	-1.172	34.100	27.430	0.0669	2.13e-05
110	-1.144	-1.147	34.119	27.444	0.0732	1.35e-05
120	-0.976	-0.979	34.160	27.472	0.0793	3.31e-05
130	-0.793	-0.797	34.205	27.501	0.0851	2.76e-05
140	-0.534	-0.539	34.263	27.537	0.0907	3.20e-05
150	-0.354	-0.359	34.309	27.566	0.0959	2.37e-05
160	-0.160	-0.166	34.349	27.589	0.1009	2.24e-05
180	0.233	0.226	34.425	27.630	0.1102	1.07e-05
200	0.435	0.427	34.463	27.649	0.1190	2.85e-06
220	0.637	0.628	34.495	27.663	0.1276	8.50e-06
240	0.776	0.766	34.524	27.678	0.1358	5.04e-06
260	0.939	0.927	34.553	27.691	0.1439	3.58e-06
280	1.021	1.008	34.569	27.698	0.1518	4.68e-06
300	1.102	1.088	34.587	27.707	0.1596	2.98e-06
320	1.158	1.143	34.601	27.715	0.1672	2.67e-06
340	1.176	1.160	34.612	27.723	0.1747	-1.82e-06
360	1.218	1.201	34.615	27.723	0.1822	1.34e-06
380	1.236	1.218	34.624	27.728	0.1897	2.68e-06
400	1.282	1.263	34.631	27.731	0.1970	1.52e-06
420	1.305	1.284	34.638	27.735	0.2044	4.01e-06
440	1.339	1.317	34.646	27.739	0.2116	1.83e-06
460	1.355	1.332	34.651	27.742	0.2188	4.75e-06
480	1.376	1.352	34.657	27.745	0.2260	1.40e-06
500	1.392	1.366	34.663	27.749	0.2331	0.00e+00

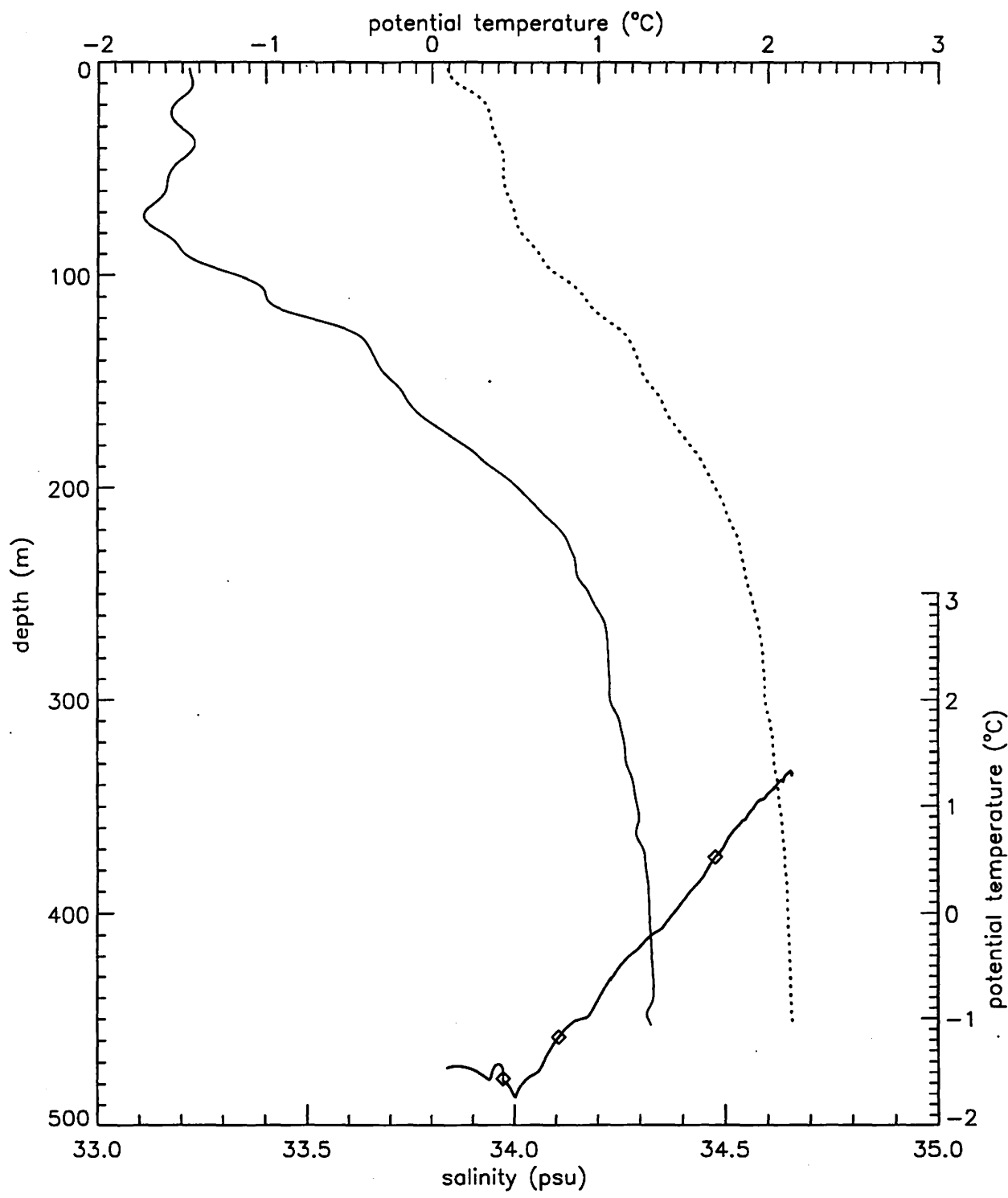


LTER 91a Station: 600.080 (178) JulianDay: 323 GMT: 1019  
 Latitude: 64° 41.50' S Longitude: 65° 2.40' W Depth: 380 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.453	-1.453	33.839	27.228	0.0017	1.21e-05
10	-1.438	-1.438	33.859	27.243	0.0058	4.92e-05
20	-1.545	-1.545	33.931	27.305	0.0136	3.31e-05
30	-1.513	-1.513	33.945	27.315	0.0211	7.15e-06
40	-1.432	-1.433	33.968	27.331	0.0286	1.68e-05
50	-1.558	-1.559	33.973	27.339	0.0358	2.73e-06
60	-1.596	-1.597	33.979	27.346	0.0430	1.61e-05
70	-1.719	-1.720	34.000	27.366	0.0501	1.27e-05
80	-1.610	-1.612	34.018	27.377	0.0570	2.23e-05
90	-1.480	-1.482	34.060	27.408	0.0637	2.26e-05
100	-1.171	-1.174	34.107	27.436	0.0702	3.96e-05
110	-0.993	-0.996	34.167	27.478	0.0763	2.95e-05
120	-0.732	-0.736	34.213	27.505	0.0821	3.13e-05
130	-0.408	-0.412	34.272	27.539	0.0875	2.17e-05
140	-0.332	-0.336	34.295	27.554	0.0928	1.10e-05
150	-0.228	-0.233	34.318	27.567	0.0980	2.04e-05
160	-0.132	-0.138	34.353	27.591	0.1029	1.44e-05
180	0.207	0.200	34.419	27.627	0.1124	1.91e-05
200	0.530	0.522	34.477	27.655	0.1211	1.16e-05
220	0.785	0.775	34.522	27.675	0.1295	1.08e-05
240	0.882	0.872	34.547	27.689	0.1376	4.61e-06
260	1.029	1.017	34.573	27.701	0.1455	5.40e-06
280	1.075	1.062	34.589	27.711	0.1532	1.94e-06
300	1.087	1.072	34.594	27.714	0.1608	2.00e-06
320	1.169	1.153	34.612	27.723	0.1683	2.31e-06
340	1.226	1.210	34.623	27.728	0.1757	3.22e-06
360	1.250	1.232	34.634	27.736	0.1830	4.50e-06
380	1.305	1.286	34.642	27.738	0.1903	2.74e-06
400	1.325	1.305	34.647	27.741	0.1974	3.65e-07
420	1.341	1.320	34.652	27.744	0.2046	1.16e-06
440	1.350	1.328	34.655	27.746	0.2117	3.89e-06



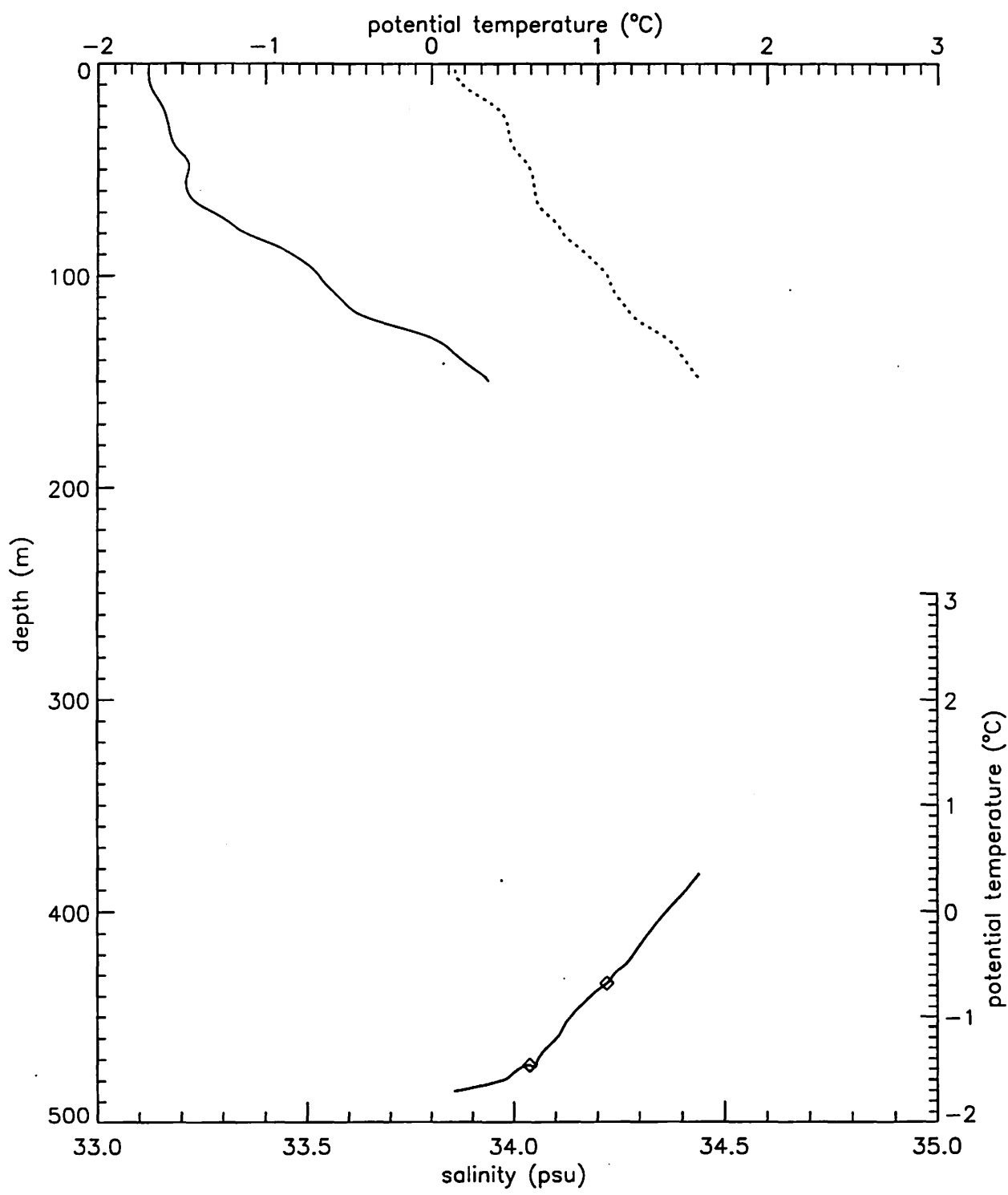
Station: 600.080



<b>LTER 91a</b>	<b>Station:</b> 600.060 (182)	<b>JulianDay:</b> 323	<b>GMT:</b> 1519
	<b>Latitude:</b> 64° 48.90' S	<b>Longitude:</b> 64° 42.90' W	<b>Depth:</b> 730 m

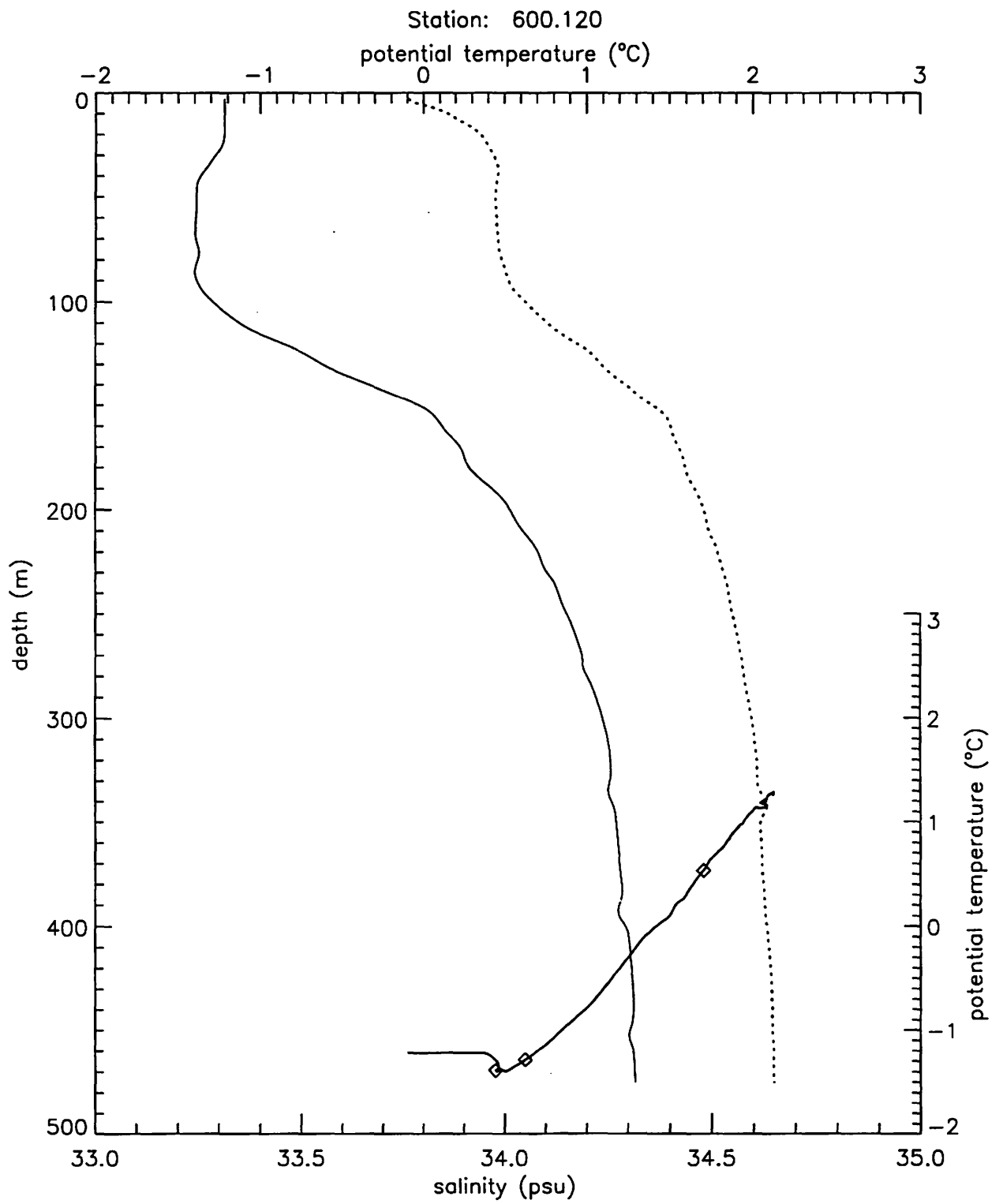
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.701	-1.702	33.858	27.250	0.0016	1.03e-05
10	-1.689	-1.689	33.875	27.263	0.0056	4.04e-05
20	-1.619	-1.620	33.952	27.324	0.0133	4.90e-05
30	-1.578	-1.579	33.985	27.350	0.0206	9.93e-06
40	-1.529	-1.530	34.000	27.361	0.0277	2.16e-05
50	-1.458	-1.459	34.038	27.389	0.0346	1.96e-05
60	-1.466	-1.467	34.050	27.400	0.0413	5.39e-06
70	-1.317	-1.318	34.073	27.413	0.0479	2.83e-05
80	-1.115	-1.117	34.117	27.442	0.0543	2.42e-05
90	-0.838	-0.841	34.174	27.478	0.0604	3.61e-05
100	-0.678	-0.681	34.223	27.511	0.0661	2.07e-05
110	-0.557	-0.561	34.248	27.526	0.0716	2.05e-05
120	-0.382	-0.386	34.289	27.551	0.0770	3.02e-05
130	0.020	0.015	34.367	27.594	0.0820	3.32e-05
140	0.194	0.189	34.407	27.618	0.0868	1.81e-05
150	0.356	0.350	34.441	27.636	0.0913	1.03e-05

Station: 600.060



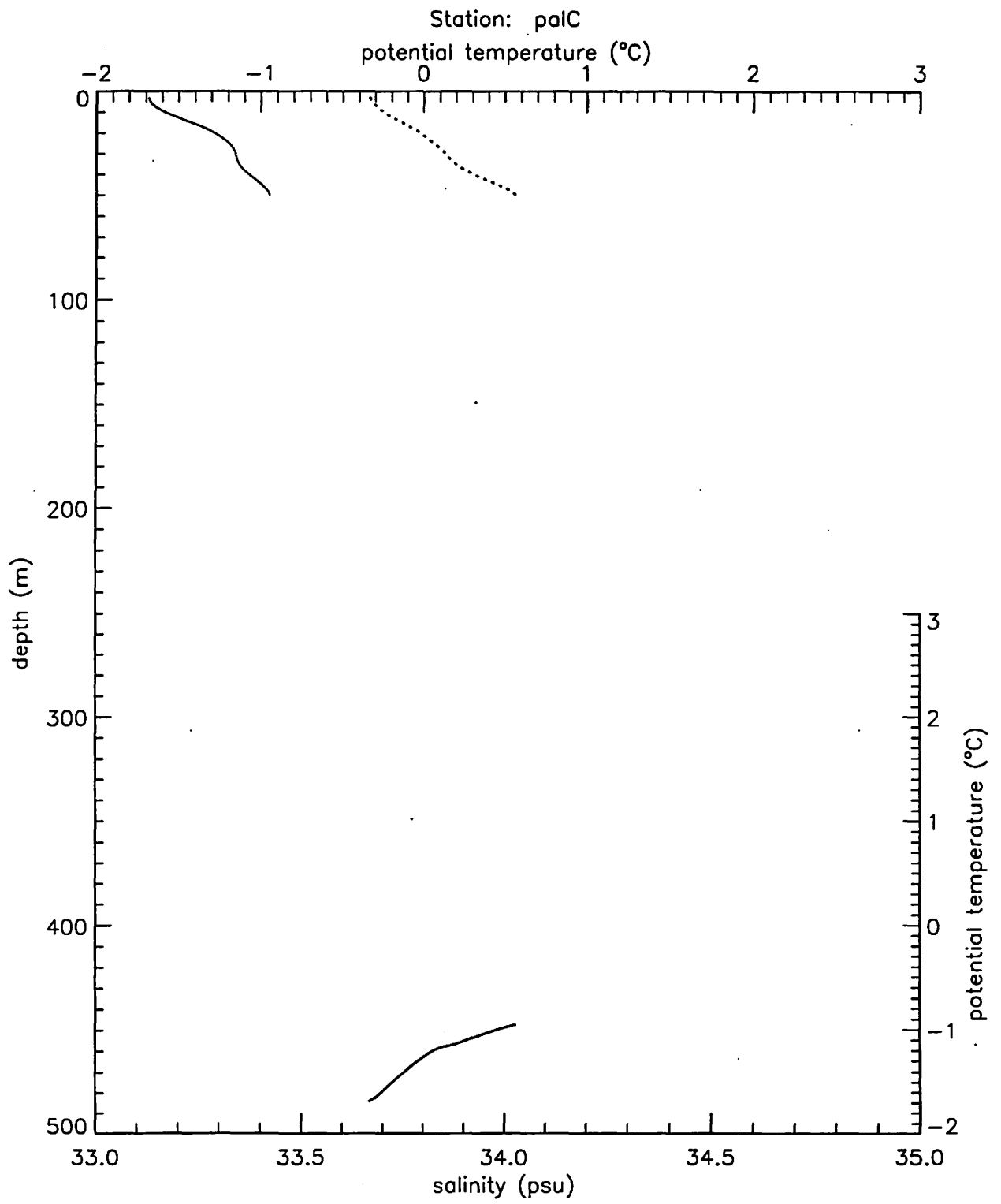
LTER 91a Station: 600.120 (183) JulianDay: 323 GMT: 1919  
 Latitude: 64° 27.20' S Longitude: 65° 42.90' W Depth: 520 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.217	-1.217	33.782	27.174	0.0018	1.04e-04
10	-1.216	-1.217	33.859	27.236	0.0060	9.61e-05
20	-1.218	-1.218	33.940	27.302	0.0139	4.18e-05
30	-1.268	-1.269	33.973	27.330	0.0214	2.31e-05
40	-1.361	-1.362	33.984	27.342	0.0286	-1.64e-06
50	-1.386	-1.388	33.978	27.338	0.0359	0.00e+00
60	-1.390	-1.391	33.981	27.341	0.0431	2.60e-06
70	-1.389	-1.391	33.984	27.343	0.0503	3.21e-06
80	-1.378	-1.380	33.993	27.350	0.0575	1.33e-05
90	-1.381	-1.383	34.011	27.365	0.0645	1.63e-05
100	-1.284	-1.286	34.051	27.395	0.0713	3.58e-05
110	-1.121	-1.124	34.106	27.433	0.0779	3.84e-05
120	-0.857	-0.861	34.178	27.482	0.0840	4.76e-05
130	-0.620	-0.624	34.236	27.519	0.0896	2.73e-05
140	-0.332	-0.337	34.293	27.553	0.0950	3.27e-05
150	-0.021	-0.026	34.359	27.590	0.1001	3.82e-05
160	0.118	0.112	34.402	27.618	0.1048	9.71e-06
180	0.289	0.282	34.437	27.637	0.1138	6.25e-06
200	0.541	0.532	34.482	27.658	0.1226	7.34e-06
220	0.714	0.704	34.515	27.674	0.1310	9.53e-06
240	0.840	0.830	34.541	27.688	0.1391	3.70e-06
260	0.945	0.933	34.561	27.697	0.1470	3.77e-06
280	1.016	1.003	34.578	27.706	0.1548	2.25e-06
300	1.111	1.097	34.596	27.714	0.1625	3.83e-06
320	1.160	1.144	34.608	27.720	0.1700	1.82e-06
340	1.168	1.152	34.631	27.738	0.1774	6.32e-06
360	1.208	1.191	34.619	27.726	0.1848	1.64e-06
380	1.232	1.213	34.625	27.730	0.1921	2.37e-06
400	1.255	1.236	34.632	27.734	0.1994	-6.08e-07
420	1.293	1.272	34.641	27.738	0.2067	1.52e-06
440	1.304	1.282	34.645	27.741	0.2139	1.83e-06
460	1.304	1.281	34.648	27.743	0.2211	-1.22e-06



<b>LTER 91a</b>	<b>Station:</b>	<b>palC (196)</b>	<b>JulianDay:</b>	<b>324</b>	<b>GMT:</b>	<b>2320</b>
	<b>Latitude:</b>	<b>64° 48.50' S</b>	<b>Longitude:</b>	<b>64° 3.80' W</b>	<b>Depth:</b>	<b>47 m</b>

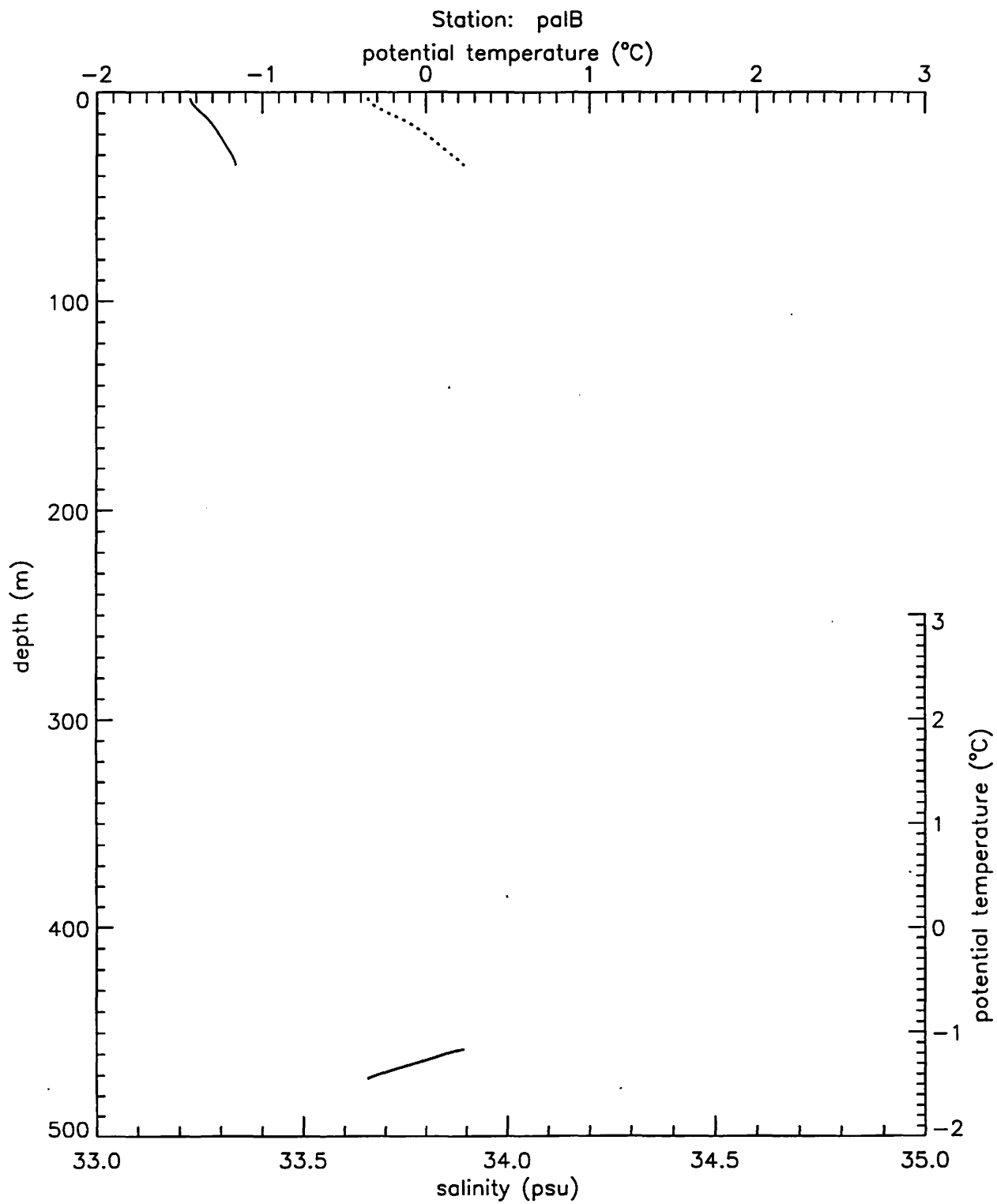
Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.673	-1.673	33.671	27.097	0.0019	2.42e-05
10	-1.582	-1.582	33.701	27.119	0.0066	5.17e-05
20	-1.284	-1.285	33.791	27.183	0.0157	5.38e-05
30	-1.152	-1.153	33.854	27.230	0.0242	4.15e-05
40	-1.067	-1.068	33.925	27.285	0.0322	7.69e-05
50	-0.944	-0.945	34.028	27.363	0.0396	4.48e-05



LTER 91a	Station: palB (197)	JulianDay: 325	GMT: 0021
	Latitude: 64° 47.40' S	Longitude: 64° 4.40' W	Depth: 80 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.428	-1.428	33.663	27.083	0.0019	2.92e-05
10	-1.366	-1.367	33.708	27.118	0.0067	7.21e-05
20	-1.262	-1.262	33.798	27.188	0.0157	5.19e-05
30	-1.183	-1.184	33.863	27.238	0.0241	4.78e-05





<b>LTER 91a</b>	<b>Station:</b> paLA (198)	<b>JulianDay:</b> 325	<b>GMT:</b> 0021
	<b>Latitude:</b> 64° 46.70' S	<b>Longitude:</b> 64° 4.40' W	<b>Depth:</b> 45 m

Depth	Temp	Ptemp	Salinity	Sigma0	DynHt	N <sup>2</sup>
5	-1.591	-1.591	33.584	27.024	0.0021	4.70e-05
10	-1.480	-1.480	33.661	27.084	0.0071	1.45e-04
20	-1.242	-1.243	33.843	27.224	0.0159	6.80e-05
30	-1.166	-1.167	33.900	27.267	0.0241	4.16e-05
40	-1.109	-1.110	33.947	27.304	0.0318	1.39e-05

