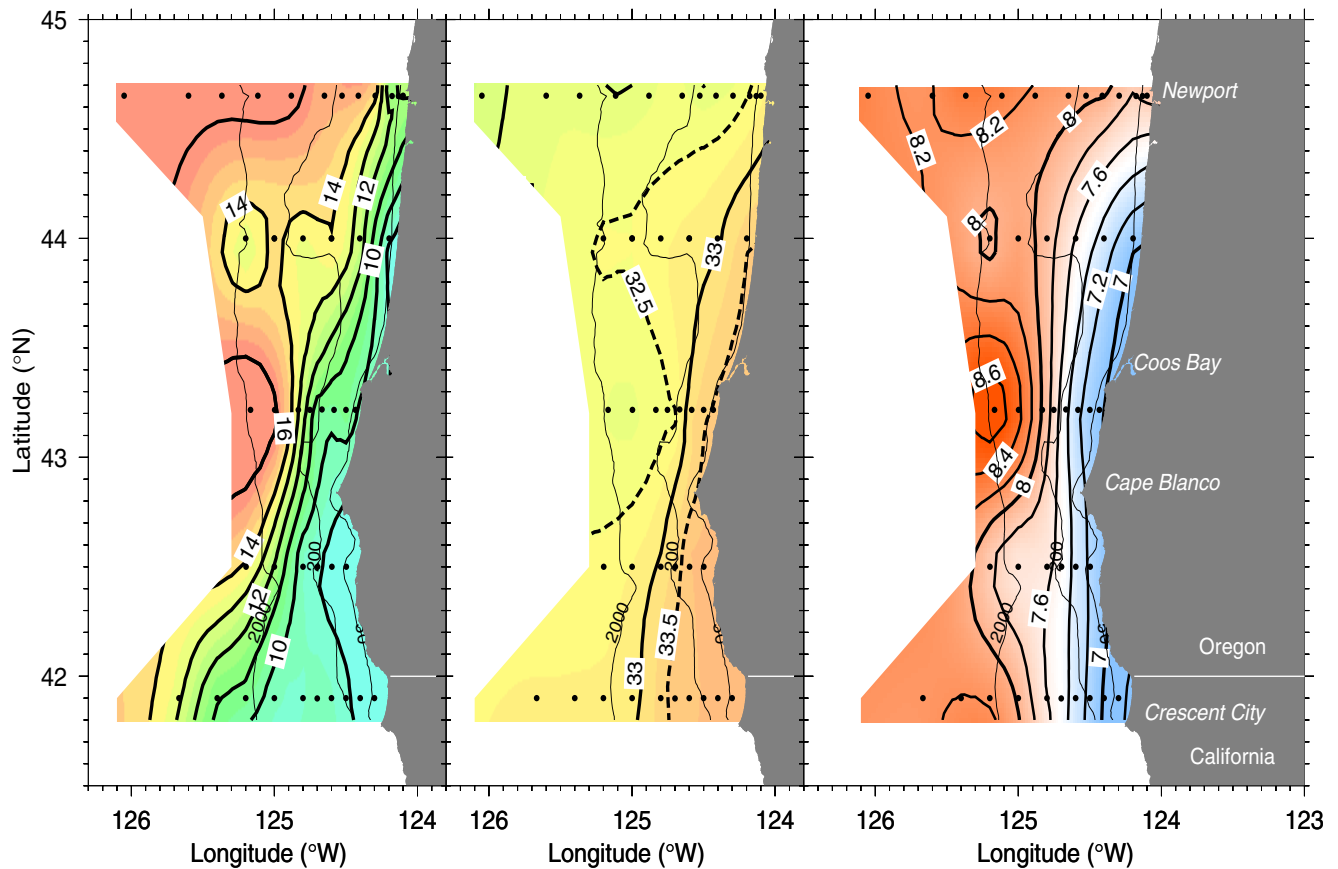


College of Oceanic and Atmospheric Sciences

T (C) at 10 m, Sep 2001

S (psu) at 10 m, Sep 2001

Geopot. Anom. (0/500 dbar), Sep 2001



Hydrographic Data from the GLOBEC Long-Term Observation Program off Oregon, 2001

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Data Report 187
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Hydrographic Data from the GLOBEC Long-Term Observation Program off Oregon, 2001

Introduction

As part of the GLOBEC Northeast Pacific Program, a Long Term Observation Program (LTOP) of repeated hydrographic observations along lines off Oregon began in September 1997 (Fleischbein et al, 1999; Fleischbein et al, 2000). Of these lines, NH, off Newport, had been sampled frequently during the decade from 1961 to 1970. Two other lines, FM off Coos Bay and CR off Crescent City, had been sampled repeatedly in 1981-1983. During 2001, the LTOP program continued sampling along these two lines and two additional lines off Oregon and California. The program includes measurements of upper ocean currents by the ship-borne Acoustic Doppler profiling system, nutrient, chlorophyll and zooplankton sampling at selected stations, and deployment of satellite-tracked drifters at selected sites; those results will be presented elsewhere. This report presents the CTD data from eight cruises made between January and November 2001.

During the 2001 cruises, sampling occurred on five separate lines (Figure 1): the Newport Hydro (NH) line which extends 150 km west along 44°39.1'N off Newport, Oregon; the Heceta Head (HH) line which extends 100 km west along 44°00'N off Heceta Head, Oregon; the Five Mile Point (FM) line which extends 65 km west along 43°13'N from Coos Bay, Oregon; the Rogue River (RR) line which extends 65 km west long 42°30'N from the Rogue River, Oregon; and the CR line which extends 150 km west along 41°54'N from Crescent City, California. Station names on each line reflect historical usage: for the NH line, the numerical suffix indicates the distance from shore in nautical miles; for the FM and CR lines, the station location names are those used during SuperCODE in 1981-1984 (Fleischbein et al., 1985). The stations on the other lines were numbered sequentially starting with the most inshore station. Each section includes at least two stations beyond the 1000 m isobath, and the maximum CTD sampling depth is 1000 m. The NH-line was sampled on seven cruises, and the FM line on three (Table 1,2).

All of the cruises were on the R/V Wecoma, operated by Oregon State University, and sailed to and from her homeport of Newport, Oregon. The cruise name convention is as follows: the first letter designates the ship (W for Wecoma), the next four digits indicate the beginning year and month, and the final letter distinguishes between cruises starting in the same month (A for first, B for second, etc). Two of the cruises (W0103A, W0110A; Figure 3) were primarily mooring cruises (Dr. P. Michael Kosro, Principle Investigator), and another cruise (W0101B, Figure 3) was an instrument test cruise for the COAST COOP project (J. A. Barth, Principle Investigator); only the CTD data from these cruises are included in this report. Several persons participated in almost all LTOP CTD cruises (Table 3). This overlap of personnel ensured that similar sampling protocols were used throughout; these protocols are described below.

W0101B sampled the NH line out to NH-45 (Table 8, Figure 3) on 24 - 25 January. Immediately following this cruise, the first LTOP CTD cruise of 2001, W0101C, began on January 27 (Table 3, Figure 2), working out along the NH line. A forecasted storm held off until all the sampling was completed as scheduled.

During cruise W0103A, whose primary purpose was to service the GLOBEC LTOP moorings off Newport, Coos Bay and Rogue River, CTD sections were completed along our standard FM and RR Lines (Table 9, Figure 3). This sampling reduced the urgency of CTD sampling along these lines during W0103B, but rosette sampling of the inshore stations for

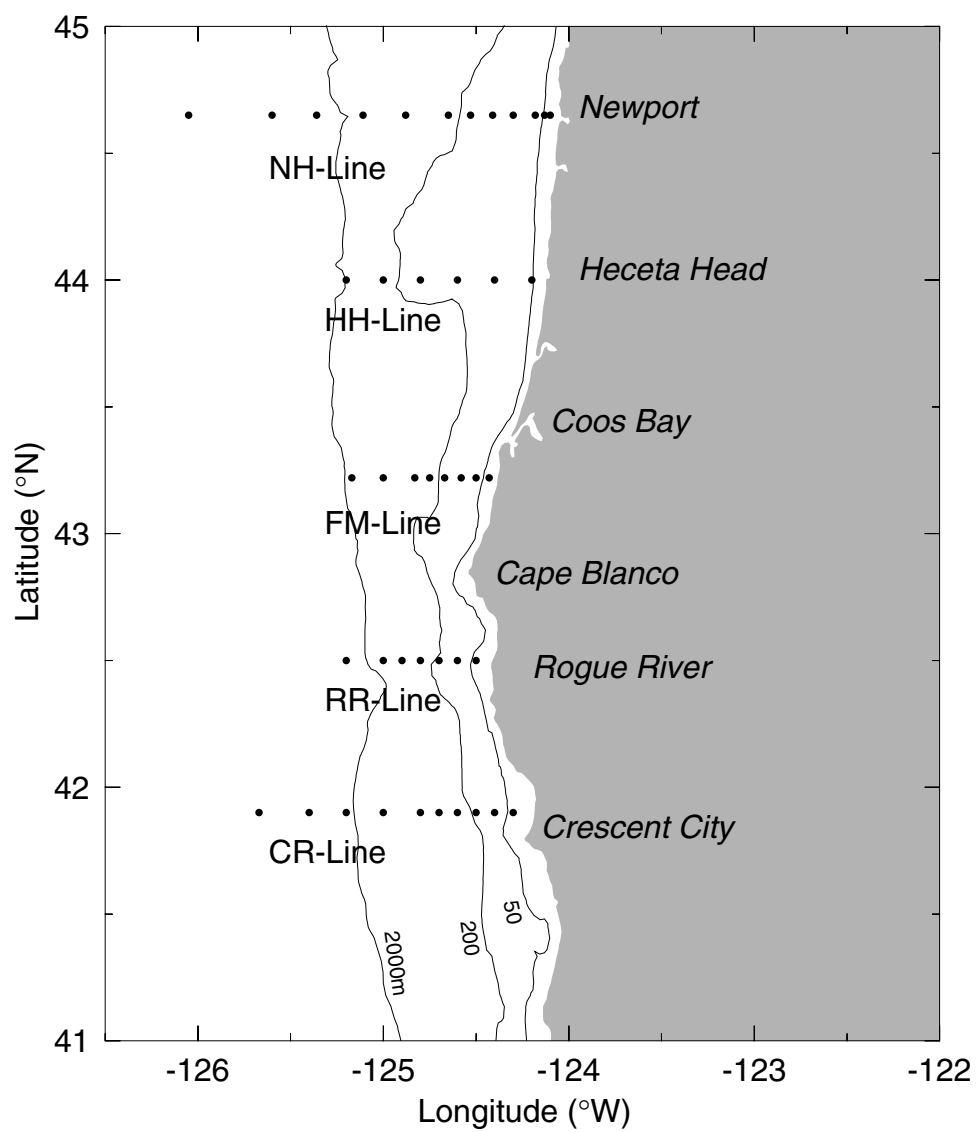


Figure 1. Location of standard sampling lines.

biochemical analyses was still deemed to be of high priority, especially for the FM-line. The NH line was completed working out from NH-1, and then due to strong winds off central Oregon, the CR-line was completed next out to CR-9a (Table 4, Figure 2). The most offshore stations (CR-10 and CR-11) were omitted because stations at CR-8 and CR-9a were sufficiently representative of offshore waters at that time of year. Sampling began at the inshore end of the RR-line to avoid moored crab pots. Since a strong storm was forecast to arrive the next day and sampling along the FM-line had higher priority than sampling along the RR-line, we broke off sampling after completing the station at RR-3. The FM-line was completed out to FM-7, then sampling was discontinued to be sure the ship could arrive in port at high tide before the storm hit.

During W0107A, only the NH-line was completed, beginning at NH-1 (Table 5, Figure 2). After completing 12 CTD's and net tows along the Newport Line, we began the transit to the FM-line, but the ship had a breakdown in the main drive shaft that was unreparable at sea. The ship made its way slowly to Newport using the bow thruster, until a tugboat from Astoria, Oregon was able to reach it, and tow the Wecoma in the rest of the way to Newport.

On W0109A, CTD sampling started at NH-1 and continued out to NH-35 (Table 6, Figure 2). A single vertical net tow was done at NH-1. The HTI (bio-acoustic system) was deployed, and both MOCNESS and vertical net tows were started at NH-35 to have most of the zooplankton sampling along the Newport Line completed in the dark. Net tows continued all night working towards shore along the Newport Line to NH-5, and then running offshore to resume CTD sampling at NH-45. The NH-line was completed with the usual CTD's and nets out to NH-85. The ship began the transit to the inshore end of the FM-line slowly in order to respool wire on the trawl winch, and arrived in daylight to begin sampling at FM-1 at 0805 PDT, 6 September. The wind began to pick up as the Wecoma worked its way offshore, and the choppy seas caused the CTD wire to pop out of the sheave, putting a minor ding in the wire. The data did not appear to be affected, but to prevent future problems, the CTD wire was reterminated following FM-9 on the run to the Crescent City Line. Sampling began at CR-1 in daylight with the wind and seas continuing to pick up. Following the MOCNESS at CR-2, the ship had to wait on station while sample processing was completed on deck due to the rough seas. At CR-3, power was lost to the MOCNESS, and the net tow was restarted after fixing the loose connector. By the end of the CTD cast at CR-5, winds were steady at 40 kts., and the seas made it impossible to continue sampling safely. The ship hove to, waiting for the better weather that was forecast. By daylight the next day, the winds were down to 20-25 kts., and CTD sampling resumed at CR-6. The MOCNESS had been damaged overnight by high waves bending its vertical support bars, so the MOCNESS tow was skipped at CR-6. Repairs to the MOCNESS frame were finished following the CTD at CR-7, and a MOCNESS tow was completed. The offshore station (CR-11) was omitted to allow sufficient time to complete the Rogue River and Heceta Head Lines. Winds continued to drop, and the RR-line and HH-line were completed, except RR-5 and HH-9 were both omitted to ensure sufficient time for zooplankton sampling.

During the LTOP mooring cruise W0110A (Table 10, Figure 3), the NH-line was completed working towards shore from NH-85 to NH-3 during favorable weather. The LTOP CTD cruise in November, W0111B, was not so fortunate, and was only able to complete part of the NH-line (Table 7, Figure 2), before storm-force winds halted the sampling following the CTD at NH-35. High winds and rough seas continued for 24 hours, and with another front moving in, the ship returned to Newport as soon as possible.

Satellite-tracked drifters were deployed on three cruises: in March, July and September 2001 (Table 11).

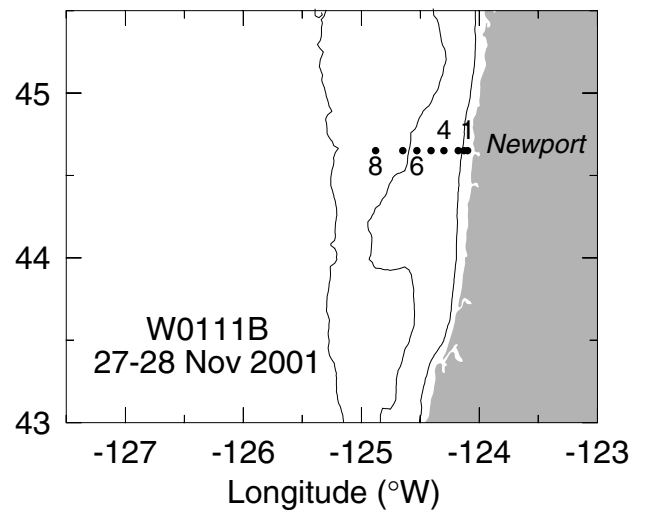
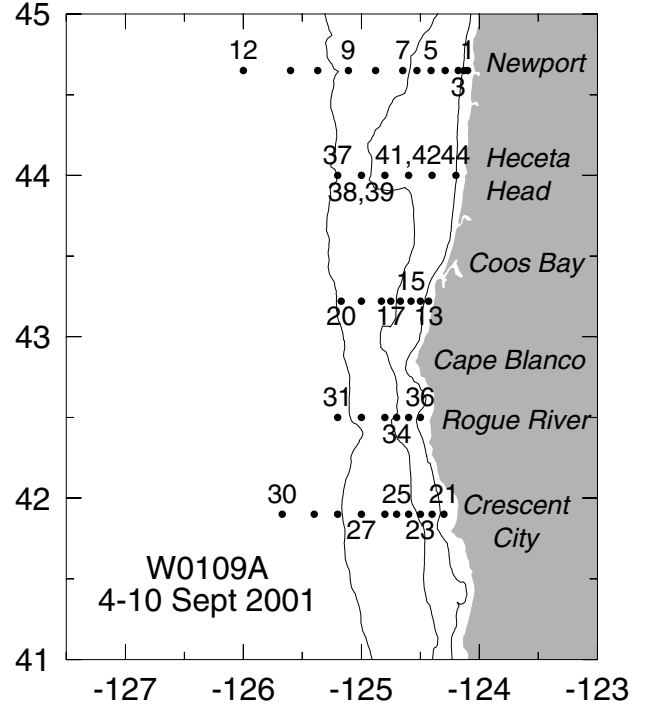
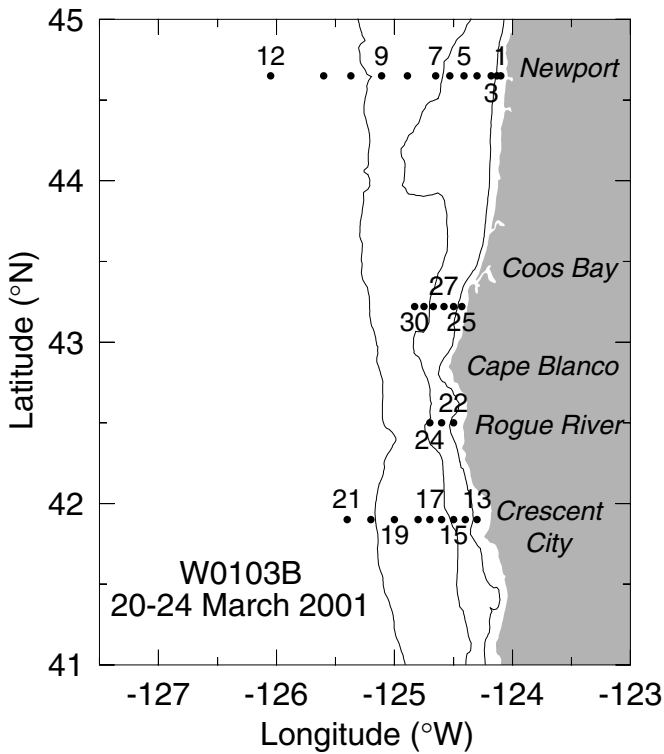
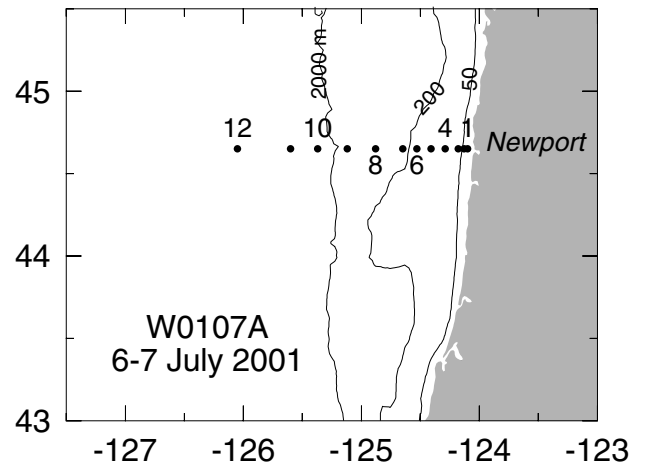
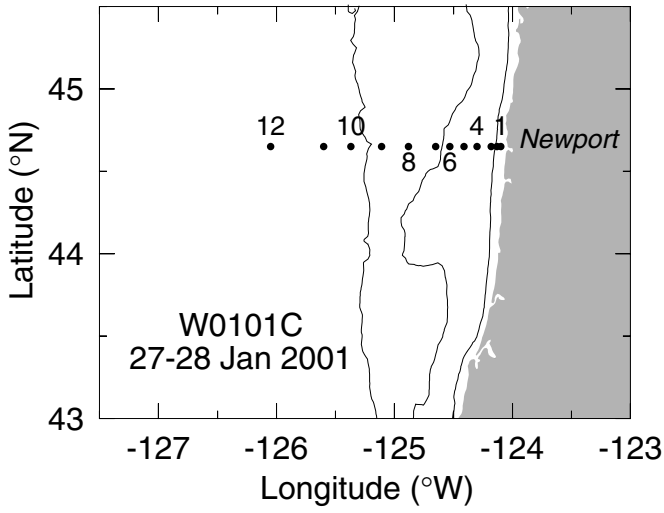


Figure 2. Location of CTD stations during W0101C, W0103B, W0107A, W0109A, W0111B.

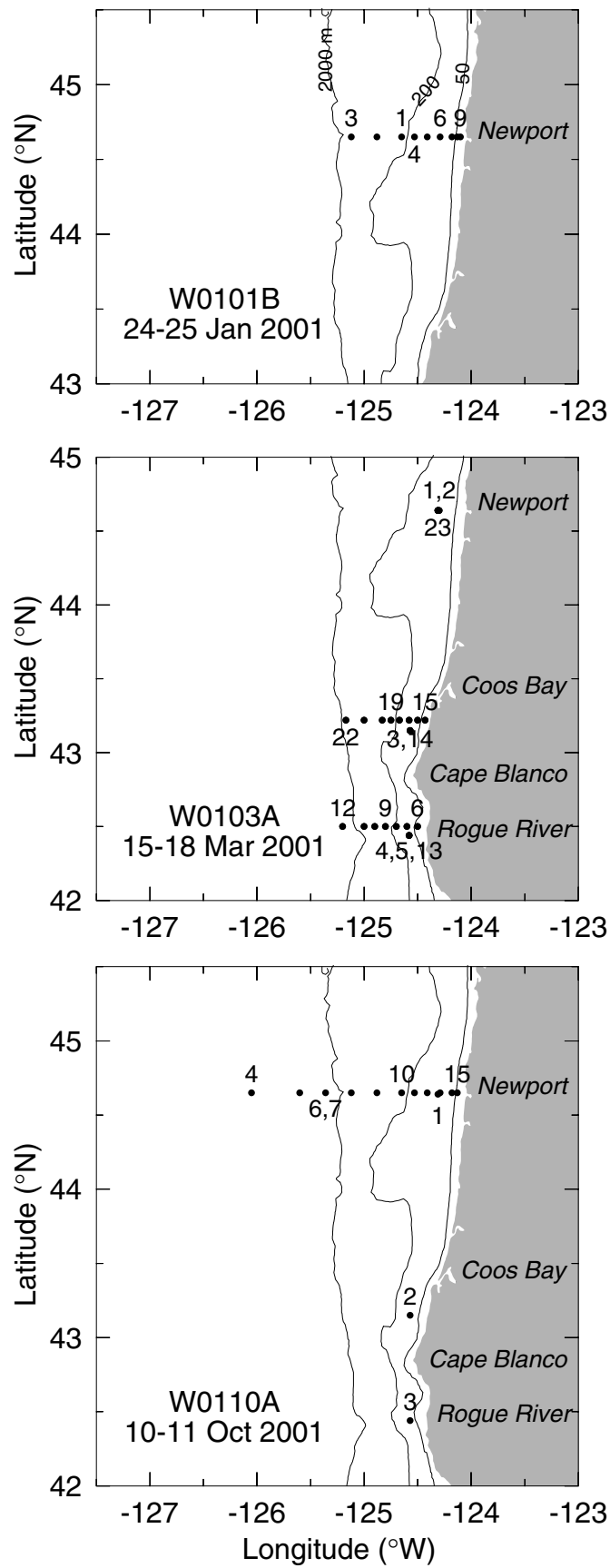


Figure 3. Location of CTD stations during W0101B, W0103A, W0110A.

Table 1. Stations occupied along the 5 hydrographic lines: Newport, Five Mile, Crescent City, Rogue River and Heceta Head during the 2001 GLOBEC cruises.

Station	W0101B 24-25 Jan	W0101C 27-28 Jan	W0103A 15-18 Mar	W0103B 20-24 Mar	W0107A 6-8 July	W0109A 4-10 Sept	W0110A 10-11 Oct	W0111B 27-29 Nov
NH-1	9	1		1	1	1		1
-3	8	2		2	2	2	15	2
-5	7	3		3	3	3	14	3
-10	6	4		4	4	4	13	4
-15	5	5		5	5	5	12	5
-20	4	6		6	6	6	11	6
-25	1	7		7	7	7	10	7
-35	2	8		8	8	8	9	8
-45	3	9		9	9	9	8	
-55		10		10	10	10	6/7	
-65		11		11	11	11	5	
-85		12		12	12	12	4	
FM-1			15	25		13		
-3			16	26		14		
-4			17	27		15		
-5			18	28		16		
-6			19	29		17		
-7			20	30		18		
-8			21			19		
-9			22			20		
CR-1				13		21		
-2				14		22		
-3				15		23		
-4				16		24		
-5				17		25		
-6				18		26		
-7				19		27		
-8				20		28		
-9				21		29		
-10						30		
RR-1			6	22		36		
-2			7	23		35		
-3			8	24		34		
-4			9			33		
-5			10					
-6			11			32		
-7			12			31		
HH-1						44		
-2						43		
-3						41/42		
-4						40		
-5						38/39		
-7						37		

Table 2. Names, affiliations, and responsibilities of scientific personnel participating on the LTOP Cruises.

			W0101C	W0103B	W0107A	W0109A	W0111B
Robert L. Smith	OSU	CTD	x	x	x	x	x
Adriana Huyer	OSU	CTD	x	x	x	x	x
Jane Fleischbein	OSU	CTD	x	x	x	x	x
Margaret Sparrow	OSU	CTD	x	x	x	x	x
Dale Hubbard	OSU	CTD, oxygen		x	x		x
Andrew Ross	OSU	CTD, oxygen	x				
Chi Meredith	OSU	CTD, oxygen				x	
Julie Arrington	OSU	nuts, chl	x		x	x	x
Mike Wetz	OSU	nuts, chl		x			x
Woody Moses	OSU	nuts, chl	x	x	x	x	
Sylvie Larock	OSU	nuts, chl			x		
Lee Karp-Boss	OSU	nuts, chl		x			
Jennifer Harman	OSU	nuts, chl	x		x	x	
Doris Grellinger	OSU	nuts, chl		x			
Kaylene Shearing	OSU	nuts, chl	x			x	
Jennifer Crane	OSU	nuts, chl					x
Linda Hunn	OSU	nuts, chl		x			
Evelyn Sherr	OSU	microzooplankton	x				
Carlos López	OSU	microzooplankton		x	x	x	x
William T. Peterson	NOAA	zooplankton	x				
Julie Keister	HMSC	zooplankton	x	x	x		x
Leah Feinberg	HMSC	zooplankton	x	x	x		
Anders Roestad	HMSC	zooplankton	x	x	x	x	x
Mitch Vance	HMSC	zooplankton		x			x
Jesse Lamb	HMSC	zooplankton			x		
Carolyn Tracy Shaw	HMSC	zooplankton				x	x
Todd Miller	OSU	zooplankton				x	
Jaime Gomez	OSU	zooplankton				x	
Linda Fayler	OSU	martec	x	x	x	x	x
Daryl Swensen	OSU	martec	x	x	x	x	x

Table 3. CTD stations occupied during W0101C.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)	Chlor., Nuts.
1	NH-1	27 Jan	1945	44°39.1'N	124°06.0'W	3.0km	29	1023.0	055	7	
2	NH-3		2027	44°39.1'	124°07.8'	5.4	49	1023.0	055	10	
3	NH-5		2120	44°39.1'	124°10.5'	8.9	57	1021.0	010	7	Y
4	NH-10		2339	44°39.1'	124°17.8'	18.5	82	1020.2	340	10	
5	NH-15	28 Jan	0052	44°39.1'	124°24.7'	27.6	94	1020.0	010	10	Y
6	NH-20		0243	44°39.1'	124°31.7'	36.9	141	1020.2	005	10	
7	NH-25		0401	44°39.1'	124°38.9'	46.3	293	1020.0	040	6	Y
8	NH-35		0727	44°39.1'	124°53.0'	65.0	436	1018.5	070	5	Y
9	NH-45		1237	44°39.1'	125°06.9'	83.2	691	1016.8	140	5	Y
10	NH-55		1506	44°39.1'	125°22.0'	103.2	2866	1014.2	160	12	
11	NH-65		1704	44°39.1'	125°36.0'	121.5	2857	1013.8	165	15	Y
12	NH-85		1949	44°39.1'	126°03.0'	157.2	2885	1010.9	175	22	Y

Table 4. CTD stations occupied during W0103B.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)	Chlor., Nuts.
1	NH-1	20 Mar	1930	44°39.1'N	124°06.0'W	3.0km	29	1023.8	350	18	
2	NH-3		2007	44°39.0'	124°07.9'	5.6	47	1023.3	350	20	
3	NH-5		2102	44°38.8'	124°11.0'	9.6	60	1023.3	350	20	Y
4	NH-10		2248	44°39.1'	124°18.0'	18.9	80	1023.0	350	23	
5	NH-15		2359	44°39.1'	124°24.7'	27.6	91	1022.0	355	22	Y
6	NH-20	21 Mar	0207	44°39.1'	124°31.7'	36.9	142	1022.0	355	23	
7	NH-25		0324	44°39.1'	124°39.0'	46.5	298	1021.5	355	23	Y
8	NH-35		0718	44°39.1'	124°53.1'	65	454	1022.3	010	27	Y
9	NH-45		1430	44°39.1'	125°06.9'	83.2	694	1022.2	010	23	Y
10	NH-55		1723	44°39.1'	125°22.0'	103.2	2866	1023.6	010	26	
11	NH-65		1943	44°39.1'	125°36.0'	121.5	2861	1024.0	010	21	Y
12	NH-85		2253	44°39.1'	126°03.3'	157.2	2883	1023.0	015	23	Y
13	CR-1	22 Mar	1528	41°54.0'	124°18.0'	7.8	42	1018.5	150	10	Y
14	CR-2		1651	41°54.0'	124°24.0'	16.1	69	1019.3	170	6	
15	CR-3		1819	41°54.0'	124°30.0'	24.4	138	1019.9	205	5	Y
16	CR-4		2009	41°54.0'	124°36.0'	32.6	504	1019.5	170	10	Y
17	CR-5		2311	41°54.0'	124°42.0'	40.9	658	1018.9	170	5	Y
18	CR-6	23 Mar	0035	41°54.0'	124°48.0'	49.3	696	1018.1	095	4	
19	CR-7		0353	41°54.0'	124°00.0'	65.7	835	1018.3	155	6	Y
20	CR-8		0545	41°54.0'	124°12.0'	82.2	2716	1018.4	145	10	
21	CR-9a		0756	41°54.0'	124°24.0'	98.9	3097	1018.1	150	12	Y
22	RR-1		1435	42°30.0'	124°29.9'	7.2	36	1017.9	165	12	Y
23	RR-2		1549	42°30.0'	124°36.0'	15.6	88	1018.6	170	12	Y
24	RR-3		1735	42°30.0'	124°42.0'	23.7	135	1018.9	170	12	Y
25	FM-1		2229	43°13.0'	124°26.0'	3.3	34	1017.1	205	13	
26	FM-3		2322	43°13.0'	124°30.0'	8.7	67	1016.8	210	14	Y
27	FM-4	24 Mar	0058	43°13.0'	124°35.0'	15.4	85	1016.0	195	15	Y
28	FM-5		0239	43°13.0'	124°40.0'	22.2	156	1015.0	200	15	Y
29	FM-6		0433	43°13.0'	124°45.0'	28.9	311	1014.9	170	21	
30	FM-7		0615	43°13.0'	124°50.0'	35.7	344	1014.0	155	19	Y

Table 5. CTD stations occupied during W0107A.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)	Chlor., Nuts.
1	NH-1	6 July	1855	44°39.1'N	124°06.0'W	3.0km	29	1023.3	305	16	
2	NH-3		1936	44°39.1'	124°07.8'	5.4	48	1022.1	340	15	
3	NH-5		2021	44°39.0'	124°10.8'	9.3	61	1023.1	340	17	Y
4	NH-10		2218	44°39.1'	124°17.7'	18.3	82	1022.0	330	14	
5	NH-15		2333	44°39.1'	124°24.7'	27.6	93	1021.9	340	23	Y
6	NH-20		0149	44°39.1'	124°31.8'	37.0	143	1021.0	348	21	
7	NH-25		0309	44°39.1'	124°39.1'	46.5	291	1020.4	350	21	Y
8	NH-35		0634	44°39.1'	124°53.0'	65.0	440	1020.9	345	20	Y
9	NH-45		1000	44°39.1'	125°07.0'	83.3	706	1020.0	350	20	Y
10	NH-55		1444	44°39.2'	125°22.0'	103.2	2863	1021.2		15	
11	NH-65		1532	44°39.1'	125°36.0'	121.5	2859	1021.6	345	12	Y
12	NH-85		1819	44°39.1'	126°03.0'	157.2	2883	1022.2	340	7	Y

Table 7. CTD stations occupied during W0111B.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)	Chlor., Nuts.
1	NH-1	27 Nov	1924	44°39.1'N	124°06.0'W	3.0km	29	1026.1	090	13	
2	NH-3		2009	44°39.2'	124°07.8'	5.4	48	1026.0	085	13	
3	NH-5		2058	44°39.2'	124°10.5'	8.9	58	1026.0	100	12	Y
4	NH-10		2241	44°39.0'	124°17.6'	18.3	81	1023.0	110	11	
5	NH-15		2349	44°39.1'	124°24.6'	27.6	95	1022.1	105	14	Y
6	NH-20	28 Nov	0132	44°39.1'	124°31.7'	36.9	142	1020.0	135	16	
7	NH-25		0248	44°39.1'	124°39.0'	46.5	296	1019.2	150	12	Y
8	NH-35		0614	44°39.2'	124°53.0'	65.0	441	1012.6	170	33	Y

Table 6. CTD stations occupied during W0109A.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)	Chlor., Nuts.
1	NH-1	4 Sept	1847	44°39.1'N	124°06.0'W	3.0km	29	1018.8	345	18	
2	NH-3		1920	44°39.0'	124°07.9'	5.6	49	1018.8	345	19	
3	NH-5		1951	44°39.0'	124°10.6'	9.1	60	1018.5	345	19	Y
4	NH-10		2101	44°39.1'	124°17.7'	18.3	83	1018.5	355	14	
5	NH-15		2152	44°39.1'	124°24.8'	27.8	92	1018.9	350	18	Y
6	NH-20		2301	44°39.1'	124°31.6'	36.7	143	1018.9	350	18	
7	NH-25		2357	44°39.1'	124°39.0'	46.5	295	1019.0	350	17	Y
8	NH-35	5 Sept	0137	44°39.1'	124°52.1'	64.8	436	1019.4	340	16	Y
9	NH-45		1921	44°39.1'	125°06.9'	83.2	694	1024.0	010	10	Y
10	NH-55		2320	44°39.1'	125°22.0'	103.2	2868	1025.0	330	13	
11	NH-65	6 Sept	0118	44°39.1'	125°36.0'	121.5	2859	1025.2	350	15	Y
12	NH-85		0414	44°39.1'	126°03.3'	153.2	2883	1026.0	355	13	Y
13	FM-1		1505	43°13.0	124°26.0	3.3	34	1025.1	005	10	
14	FM-3		1601	43°13.0	124°30.0	8.7	63	1025.3	015	11	Y
15	FM-4		1726	43°13.0	124°35.0	15.4	85	1025.7	030	10	Y
16	FM-5		1905	43°13.1	124°40.0	22.2	158	1024.8	020	14	Y
17	FM-6		2049	43°13.0	124°45.1	29.1	320	1024.0	000	17	
18	FM-7		2207	43°13.0	124°50.0	35.7	345	1023.5	000	20	Y
19	FM-8	7 Sept	0118	43°13.0	124°59.9	49.1	1097	1023.0	000	25	Y
20	FM-9		0322	43°13.0	125°10.0	62.6	1659	1023.3	000	30	Y
21	CR-1		1341	41°54.0	124°18.0	7.8	41	1015.5	345	26	Y
22	CR-2		1449	41°54.0	124°24.0	16.1	69	1016.4	345	27	
23	CR-3		1707	41°54.0	124°30.0	24.4	135	1016.9	345	29	Y
24	CR-4		2035	41°54.0	124°36.1	32.6	515	1016.0	345	33	Y
25	CR-5	8 Sept	0018	41°53.9	124°42.0	40.9	659	1013.8	345	40	Y
26	CR-6		1342	41°54.0	124°48.0	49.3	697	1009.9	355	25	
27	CR-7		1600	41°54.0	125°00.0	65.7	848	1011.4	005	22	Y
28	CR-8		2101	41°54.0	125°12.0	82.2	2763	1012.0	020	16	
29	CR-9a		2250	41°54.0	125°24.0	98.9	3097	1012.1	050	13	Y
30	CR-10	9 Sept	0101	41°54.0	125°40.0	120.9	2930	1012.0	020	11	Y
31	RR-7		0540	42°30.0	125°11.9	64.4	2970	1012.6	075	6	Y
32	RR-6		0746	42°30.0	125°00.0	48.3	1989	1012.3	115	7	Y
33	RR-4		0958	42°30.0	124°48.0	31.9	593	1012.8	140	6	Y
34	RR-3		1133	42°30.0	124°41.9	23.5	132	1012.5	160	6	Y
35	RR-2		1250	42°30.0	124°35.9	15.4	87	1012.9	160	6	Y
36	RR-1		1407	42°30.0	124°29.9	7.2	37	1013.0	155	5	Y
37	HH-7		2258	44°00.0	125°12.0	84.8	1701	1013.4	000	12	Y
38	HH-5	10 Sept	0119	44°00.0	125°00.0	68.9	936	1013.9	000	12	
39	HH-5		0134	44°00.0	125°00.0	68.9	936				Y
40	HH-4		0603	44°00.0	124°48.0	53.0	110	1014.4	000	7	Y
41	HH-3		0849	44°00.0	124°36.0	36.9	154	1014.8	000	8	
42	HH-3		0915	44°00.0	124°36.0	36.9	154				Y
43	HH-2		1150	44°00.0	124°24.1	21.1	122	1014.4	345	8	Y
44	HH-1		1437	44°00.0	124°11.9	4.8	54	1014.5	345	7	Y

Table 8. CTD stations occupied during W0101B. Atmospheric Pressure is from NOAA weather buoy 46050 (National Data Buoy Center, 2001), at 44.62° N., 124.53° W., at the nearest hour.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Atm. Pr. (mbar)
1	NH-25	24 Jan	0511	44°39.1'N	124°39.0'W	46.5	1011.0
2	NH-35		0646	44°39.1'	124°53.0'	65.0	1012.4
3	NH-45		0825	44°39.1'	125°07.0'	83.3	1012.9
4	NH-20		2018	44°39.2'	124°31.7'	36.9	1016.5
5	NH-15		2118	44°39.1'	124°24.7'	27.6	1016.3
6	NH-10		2217	44°39.1'	124°17.7'	18.3	1016.0
7	NH-5		2312	44°39.2'	124°10.5'	8.9	1016.4
8	NH-3		2349	44°39.1'	124°07.7'	5.2	1016.7
9	NH-1	25 Jan	0021	44°39.1'	125°06.0'	3.0	1016.7

Table 9. CTD stations occupied during W0103A. Atmospheric Pressure, wind direction and speed are from NOAA weather buoy 46050 (National Data Buoy Center, 2001), at 44.62° N., 124.53° W., at the nearest hour.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)
1	NH10SF	15 Mar	1945	44°38.5'N	124°18.0'W	18.9km	81	1017.8	312	8.3
2	NH10SF	16 Mar	0258	44°38.3'	124°18.5'	19.4	82	1020.4	322	7.1
3	CBOS		1540	43°09.1'	124°34.4'		100	1022.3	142	2.1
4	YS	17 Mar	0024	42°26.3'	124°34.6'		77	1019.6	178	6.1
5	YS		0036	42°26.2'	124°34.7'	15.4	77	1018.9	186	7.8
6	RR-1		0245	42°30.0'	124°30.0'	7.2	36	1017.1	156	10.1
7	RR-2		0326	42°30.0'	124°36.0'	15.6	86	1017.1	156	10.1
8	RR-3		0417	42°30.0'	124°42.0'	23.7	131	1017.6	156	9.2
9	RR-4		0508	42°30.0'	124°48.0'	31.9	592	1017.2	160	9.9
10	RR-5		0616	42°30.0'	124°54.0'	40.0	1159	1016.7	164	9.7
11	RR-6		0734	42°30.0'	125°00.0'	48.3	1766	1015.7	177	12.4
12	RR-7		0921	42°30.0'	125°12.0'	64.6	2972	1016.4	177	11.8
13	RRM-3		1809	42°26.4'	124°34.7'		76	1018.1	225	5
14	CBOS		2300	43°09.3'	124°34.2'		100	1019.6	210	4.1
15	FM-1	18 Mar	0020	43°13.1'	124°26.0'	3.3	34	1019.6	202	4.7
16	FM-3		0057	43°13.0'	124°29.7'	8.3	66	1019.4	190	4.8
17	FM-4		0140	43°13.0'	124°34.9'	15.2	87	1018.5	183	6.4
18	FM-5		0222	43°13.0'	124°39.9'	22.0	155	1018.5	183	6.4
19	FM-6		0445	43°13.0'	124°44.9'	28.7	309	1019	185	6.9
20	FM-7		0536	43°13.0'	124°50.0'	35.7	343	1018.8	185	8.5
21	FM-8		0646	43°13.0'	125°00.0'	49.1	1086	1018.9	187	8.1
22	FM-9		0823	44°13.0'	125°09.9'	62.6	1699	1018.8	194	7.7
23	NH10SF		1722	44°38.5'	124°18.3'	19.3	80	1018.8	195	10.2

Table 10. CTD stations occupied during W0110A. For Stations 10-15, atmospheric pressure, wind direction and speed are from NOAA weather buoy 46050 (National Data Buoy Center, 2001), at 44.62° N., 124.53° W., at the nearest hour.

Sta. No.	Station Name	Date UT	Time UT	Latitude	Longitude	Dist. From Shore	Depth (m)	Atm. Pr. (mbar)	Wind Dir. (°T)	Wind Spd. (kt)
1	NH10SF	9 Oct	0329	44°38.5'N	124°18.4'W	19.4	83	1026.2	145	7
2	CBOS		1443	43°09.2'	124°34.4'		102	1027.1	050	6
3	RRM		2245	42°26.3'	124°34.4'		76	1022.8	345	30
4	NH-85	10 Oct	1621	44°39.1'	124°03.1'	157.2	2884	1015.3	200	28
5	NH-65		1911	44°39.1'	124°35.8'	121.3	2836	1014.9	215	23
6	NH-55		2102	44°39.0'	124°21.9'	103.0	2867	1014.9	225	18
7	NH-55		2119	44°39.1'	124°21.8'	102.8	2867	1014.9	225	18
8	NH-45		2314	44°39.0'	124°07.0'	83.3	702	1015.0	280	12
9	NH-35	11 Oct	0058	44°39.0'	124°53.0'	65.0	446	1015.2	320	8
10	NH-25		0236	44°39.1'	124°39.0'	46.5	295	1014.6	334	4
11	NH-20		0334	44°39.1'	124°31.7'	36.9	143	1015.3	315	6.4
12	NH-15		0424	44°39.1'	124°24.7'	27.6	93	1015.3	315	6.4
13	NH-10		0510	44°39.1'	124°17.7'	18.3	82	1015.8	306	2.7
14	NH-5		0600	44°39.1'	124°10.6'	9.1	59	1016.1	284	4.1
15	NH-3		0638	44°39.1'	124°07.7'	5.2	47	1016.8	265	3.4

Table 11. Location, time and date of drifter deployments. All drifters were of the standard WOCE holey-sock design and drogued at a depth of 15 m. OSU drifters were deployed under the supervision of Jack Barth, through the GLOBEC LTOP program.

Cruise Name	Drifter Number	Name of Site	Latitude (N)	Longitude (W)	Time (UTC)	Date (UTC)
W0103B	22915	NH-10	44°38.96'	124°18.35'	2310	20 March 2001
	22933	NH-15	44°39.93'	124°26.12'	0111	21 March 2001
	22935	NH-25	44°41.46'	124°40.68'	0539	21 March 2001
	22936	NH-45	44°39.16'	125°07.32'	1521	21 March 2001
	22937	NH-65	44°39.2'	125°36.1'	2051	21 March 2001
W0107A	27438	NH-10	44°39.10'	124°17.48'	2243	6 July 2001
	27439	NH-15	44°39.97'	124°26.57'	0110	7 July 2001
	27440	NH-25	44°41.05'	124°39.33'	0458	7 July 2001
	27441	NH-45	44°41.06'	125°09.31'	1215	7 July 2001
	27442	NH-65	44°39.06'	125°36.14'	1637	7 July 2001
W0109A	27641	NH-10	44°39.13'	124°17.75'	1341	5 Sept. 2001
	27462	NH-15	44°39.22'	124°25.07'	1445	5 Sept. 2001
	27463	NH-25	44°39.15'	124°39.12'	1642	5 Sept. 2001
	27464	NH-45	44°41.96'	125°06.86'	2131	5 Sept. 2001
	27465	NH-65	44°39.18'	125°36.12'	0224	6 Sept. 2001

CTD Data Acquisition and Calibration

All CTD/rosette casts were made with a Sea-Bird 9/11-plus CTD system equipped with dual ducted temperature and conductivity sensors (Table 12). For all Wecoma cruises, a SeaTech transmissometer (S/N 1024D - 20cm) and SeaTech fluorometer were mounted adjacent to the CTD and a Sea-Bird Beckman-type dissolved oxygen sensor was mounted on the rosette adjacent to the CTD sensors.

The Sea Tech fluorometer (SN101S) had the time constant set to 1 second, and the range set to medium ($X3 = 10 \text{ mg m}^{-3}$ chlorophyll). Both the fluorometer and transmissometer data were recorded as voltages by the CTD system. All fluorometer results are presented as fluorescence voltage.

Air Calibrations of transmissometer #1024D during cruises resulted in the following corrections of transmission voltage for these cruises:

W0101B	$V_c = (4.681/4.795) * 0.9987 * (V_x - 0.000)$
W0101C	$V_c = (4.681/4.795) * 0.9987 * (V_x - 0.000)$
W0103A	$V_c = (4.681/4.758) * 0.9987 * (V_x - 0.000)$
W0103B	$V_c = (4.681/4.813) * 0.9987 * (V_x - 0.000)$
W0107A	$V_c = (4.681/4.847) * 0.9987 * (V_x - 0.000)$
W0109A	$V_c = (4.681/4.847) * 0.9987 * (V_x - 0.000)$
W01010A	$V_c = (4.681/4.847) * 0.9987 * (V_x - 0.000)$
W0111B	$V_c = (4.681/4.864) * 0.9987 * (V_x - 0.000)$

where V_c = calibrated output voltage and V_x = raw output voltage.

The calibrated voltage (V_c) is converted to percent light transmission (%T) by the formula: $\%T = 20 * V_c$. Calibrated transmission voltage is plotted for all cruises in Appendix A and presented as percent light transmission in the data listings.

The pressure sensors were Digiquartz pressure transducers and calibrated by Sea-Bird (Table 12). The Sea-Bird CTD temperature and conductivity sensors were also calibrated by Sea-Bird at least once a year (Table 12). The deck unit provided a correction for the time lag between T0 and C0, and no correction for the lag between T1 and C1. Plots of T0-T1 differences were used to check the stability of the temperature calibrations. At each CTD station, samples were collected at one or more depths for *in situ* calibration of the conductivity sensors. Twelve 5-liter Niskin bottles were attached to the rosette and at most stations all of the bottles were fired. Nearly all of bottles were used for biological analyses, with one bottle reserved specifically for the CTD calibration. Usually one or two of the biologist's sample depths also coincided with a mixed region for an additional salinity sample, and duplicate salt samples were drawn from 1 to 3 Niskin bottles at each station. The pressure, temperature and conductivity data for each bottle firing depth were extracted from the recorded up cast data using the Sea-Bird Seasoft DATCNV and ROSSUM utilities.

One set of the duplicate salinity samples was usually run on a Guildline Portasal on board ship during the cruise, and the rest were run on a Guildline Autosol in a lab on shore. IAPSO Standard Water was used to standardize and check the salinometer at the beginning and end of each batch of 24 samples. The Guildline Portasal determines water sample salinity with a precision of ± 0.002 and an accuracy of ± 0.003 . Sample conductivity was calculated using the sample salinity value with the CTD temperature and pressure values; a value of

Table 12. Instruments and sensors used for CTD sampling, and dates of laboratory calibration. Cruise station numbers are listed for each CTD used, and a dot represents a sensor used for all stations of a cruise. CTD primary (P) and secondary (S) temperature and conductivity sensors are shown, with the sensor pair used in final processing marked (*).

Instrument/ Sensor No.	Sea-Bird Calibrations		W0101B 24-25 Jan	W0101C 27-28 Jan	W0103A 15-18 March	W0103B 20-24 March	W0107A 6-8 July	W0109A 4-10 Sept	W0110A 9-11 Oct	W0111B 27-29 Nov
CTD/Rosette										
Ctd-256			1-9	1-12	1-23	1-30	1-12	1-44	1-15	
Pressure 50130	18Dec97		•	•	•	•	•	•	•	
Ctd-2843										1-8
Pressure 39017	18Dec97									•
Temperature										
1366	01Sep00	31Aug01	S	S	S*	S*				
1367	16May00	10Apr01	P*	P*	P	P				
1369	08Feb01	11Dec01					P*	P*	P*	P*
1371	08Feb01	11Dec01					S	S	S	S
Conductivity										
1021	15Feb00	10Apr01	S	S			P*	P*	P*	P*
1030	06Jun00	10Apr01	P*	P*	P	P	S	S	S	S
1041	09Feb01				S*	S*				
Transmissometer										
SeaTech 1024D	11Feb98		•	•	•	•	•	•	•	•
Fluorometer										
SeaTech 101S	01Nov94		•	•	•	•	•	•	•	•
Oxygen										
130504	17Feb00	20Feb01	•	•	•	•	•	•	•	•

4.2914 S m⁻¹ for the conductivity of standard sea water at 15°C (Culkin and Smith, 1980) was used to convert the measured sample conductivity ratios to conductivity. Occasionally the CTD-sample differences were larger than three standard deviations from the mean; these occurred in regions of sharp vertical gradients and were eliminated from the final calibration data sets. The results of the CTD - bottle comparison are shown in Table 13. When analysis showed a correction was needed, conductivity was corrected using the formula:

$$\text{corrected conductivity} = \text{correction (slope)} * \text{measured conductivity} + 0.0 \text{ (offset)}$$

In all cases when a correction was needed, a slope correction to conductivity was used with no offset.

The preferred sensor pair used in final CTD data processing for each cruise is shown in Table 12. The preferred pair was chosen by examining temperature and conductivity data for each cast for the least number of spikes (caused by biological detritus or electrical interference), and the calibration data. The results from W0101C were used to process the CTD data from cruise W0101B, which had no *in situ* calibration data. Unusual circumstances are summarized in Table 14.

Table 13. Results of *in situ* conductivity calibration for both sensor pairs. Columns show the range of station numbers, number of samples (N), correction applied to CTD conductivity, and the average and standard deviations of the bottle - ctd salinity differences.

Cruise	Stations	N(S0/S1)	Correction		Average		Standard Deviation	
			C0	C1	S0	S1	S0	S1
W0101C	1-12	27/26	no corr.	.999879956	0.003	-0.004	0.003	0.002
W0103A/B	1-23,1-30	94/94	no corr.	no corr.	0.001	0.000	0.001	0.003
W0107A	1-12	25/25	no corr.	no corr.	-0.002	-0.003	0.003	0.003
W0109A	1-44	88/88	no corr.	no corr.	0.001	0.000	0.003	0.004
W0110A	1-15	20/20	no corr.	no corr.	0.002	0.003	0.005	0.006
W0111B	1-8	15/15	no corr.	no corr.	0.000	0.001	0.003	0.003

Table 14. Data Acquisition and Processing Notes.

W0109A	<p>During station 19, FM-8, choppy seas caused the CTD wire to pop out of the sheave, putting a ding in the wire, but there was no noticeable affect on the data. The CTD was reterminated on the run to Crescent City line to prevent a future problem.</p> <p>Due to rough weather the ship suspended operations for about 12 hours between CR-5 and CR-6.</p> <p>During the upcast of station 23 and the downcasts of stations 38 and 41 the power shut off to the pumps momentarily, causing large spikes in the data. The remaining 4 bottles of station 23 were not fired since the rosette had been reset. Stations 38 and 41 were aborted and redone as stations 39 and 42 respectively.</p>
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CTD Data Processing

The CTD data were processed using the Sea-Bird SEASOFT software, and included all of the normal steps, i.e., using SEASOFT modules DATCNV, ALIGNCTD, WILDEDIT, CELLM, FILTER, LOOPEDIT, DERIVE and BINA VG to obtain 1-dbar average values of pressure, primary and secondary temperature, primary and secondary conductivity, dissolved oxygen concentration and the two voltages from the fluorometer and transmissometer. The ALIGNCTD module was run with the T-C offset for the primary sensor pair as 0.000 sec, and the T-C offset for the secondary sensor pair as 0.073 sec; oxygen was advanced 3.0 sec relative to pressure. The dissolved oxygen concentration was calculated by the DERIVE module using the manufacturer's calibration. CTD oxygen and results of oxygen titration of samples collected at a few stations are compared in Appendix B.

CTD Data Presentation

Derived parameters, including salinity, potential temperature (θ), density anomaly (σ_θ) and specific volume anomaly were computed from the processed and calibrated 1-dbar values of temperature and conductivity using standard algorithms (Fofonoff and Millard, 1983).

For each station, we present a plot of the vertical temperature, salinity, and σ_t profiles, and a listing of the observed and derived variables at standard pressures. Header data includes the CTD Station Number and Name, Latitude (degrees and minutes North), Longitude (degrees and minutes West), Date and Time (UTC), and Bottom Depth (in meters).

Following the station plots and standard depth listings, vertical sections of temperature, salinity, σ_θ and dissolved oxygen are shown for each hydrographic line.

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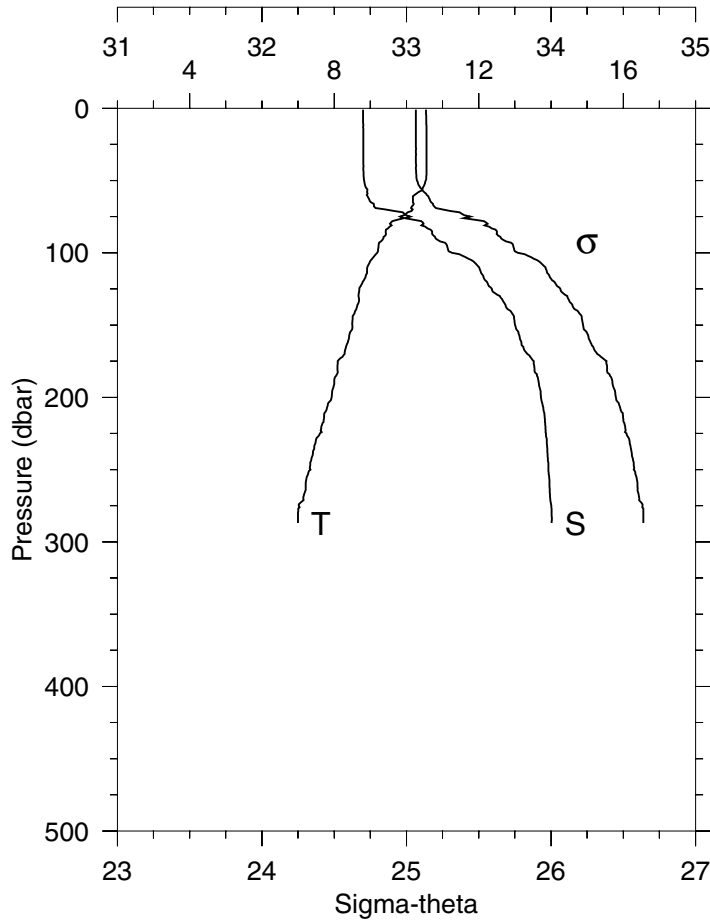
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CTD Data

Profiles of Temperature, Salinity and Density Anomaly
Tabulated Values at Standard Depths

W0101B

Station 1 NH-25 Temperature, Salinity



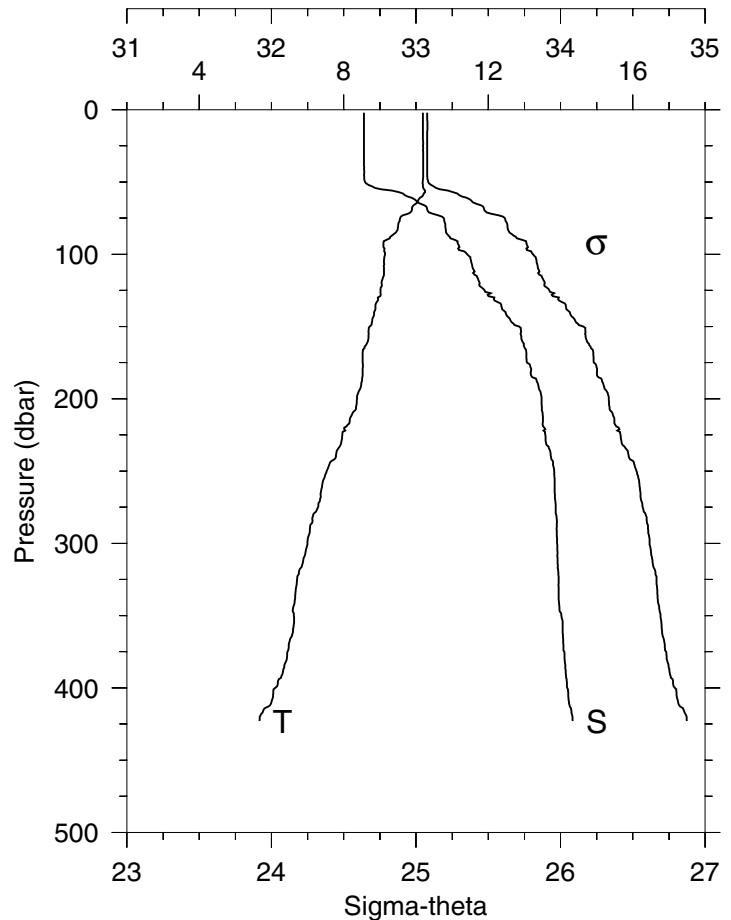
STA: 1 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
24 JAN 2001 0511 GMT DEPTH

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.54	32.699	10.54	25.064	0.029	0.64	88.9
10	10.55	32.700	10.55	25.064	0.289	0.72	89.0
20	10.55	32.701	10.55	25.065	0.578	0.73	89.0
30	10.55	32.702	10.55	25.065	0.867	0.70	89.0
40	10.56	32.703	10.55	25.066	1.156	0.70	89.0
50	10.53	32.706	10.52	25.073	1.445	0.58	89.5
60	10.22	32.726	10.22	25.141	1.732	0.35	90.1
70	10.17	32.851	10.17	25.247	2.011	0.31	90.1
80	9.54	33.119	9.53	25.561	2.267	0.19	89.9
90	9.36	33.202	9.35	25.656	2.506	0.17	89.8
100	9.19	33.315	9.18	25.771	2.733	0.16	89.6
110	8.91	33.502	8.90	25.961	2.946	0.15	89.4
120	8.79	33.556	8.78	26.023	3.149	0.15	89.5
130	8.67	33.646	8.65	26.112	3.345	0.15	89.7
140	8.59	33.718	8.57	26.182	3.534	0.14	89.7
150	8.50	33.752	8.48	26.221	3.717	0.14	89.8
175	8.09	33.880	8.08	26.384	4.156	0.15	90.1
200	7.92	33.931	7.90	26.449	4.565	0.15	90.4
225	7.60	33.966	7.58	26.523	4.957	0.14	90.4
250	7.34	33.981	7.32	26.572	5.335	0.15	90.4
275	7.02	34.003	6.99	26.634	5.702	0.15	89.8
287	6.99	34.004	6.97	26.639	5.874	0.15	89.7

STA: 2 NH-35 LAT: 44 39.1 N LONG: 124 53.0 W
24 JAN 2001 0646 GMT DEPTH

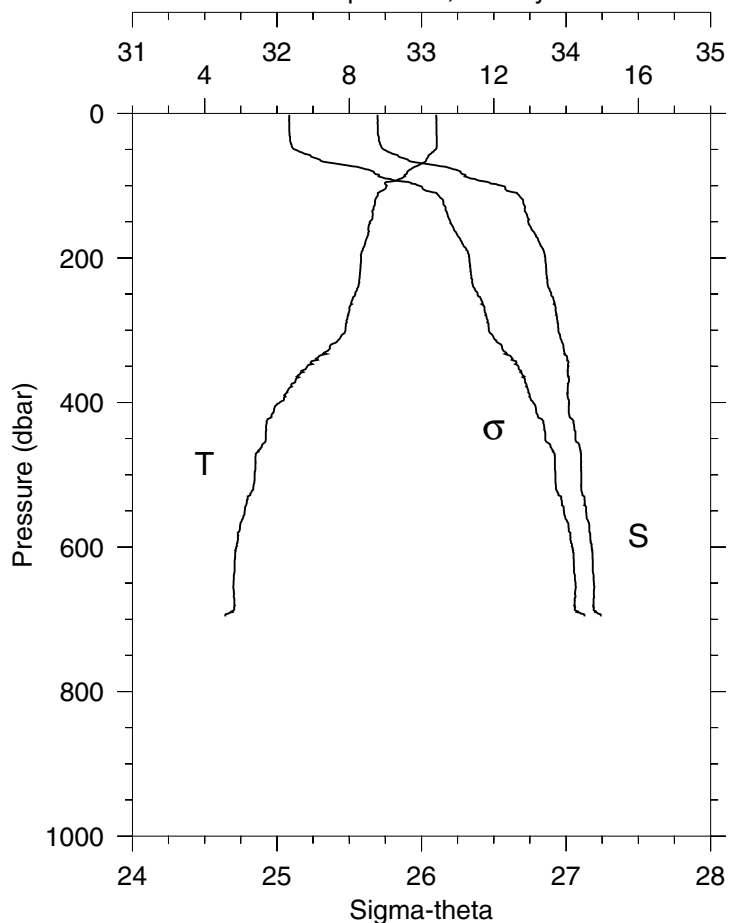
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.19	32.640	10.19	25.078	0.057	0.60	89.2
10	10.19	32.640	10.19	25.079	0.287	0.61	89.2
20	10.19	32.640	10.19	25.078	0.575	0.65	89.2
30	10.20	32.640	10.19	25.078	0.863	0.64	89.2
40	10.20	32.641	10.19	25.078	1.151	0.72	89.2
50	10.18	32.647	10.18	25.085	1.439	0.55	89.5
60	10.17	32.940	10.16	25.317	1.717	0.26	89.9
70	9.88	33.081	9.87	25.475	1.974	0.19	89.2
80	9.51	33.203	9.50	25.632	2.214	0.17	89.1
90	9.18	33.269	9.17	25.736	2.448	0.16	89.3
100	9.14	33.354	9.13	25.809	2.671	0.15	89.6
110	9.11	33.394	9.10	25.845	2.889	0.14	89.6
120	9.05	33.440	9.04	25.891	3.103	0.14	89.7
130	8.94	33.543	8.93	25.989	3.313	0.14	89.7
140	8.84	33.619	8.83	26.064	3.513	0.14	89.8
150	8.71	33.714	8.70	26.158	3.706	0.14	89.9
175	8.52	33.768	8.51	26.231	4.165	0.14	90.0
200	8.36	33.868	8.34	26.334	4.606	0.14	89.9
225	7.96	33.894	7.94	26.415	5.028	0.14	90.5
250	7.53	33.955	7.51	26.525	5.427	0.14	90.8
275	7.29	33.967	7.27	26.568	5.807	0.15	90.8
300	7.00	33.976	6.97	26.617	6.175	0.15	90.8
350	6.62	34.006	6.59	26.691	6.887	0.15	90.7
400	6.10	34.046	6.07	26.791	7.566	0.15	89.6
423	5.67	34.084	5.63	26.875	7.856	0.14	89.3

Station 2 NH-35 Temperature, Salinity



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Station 3 NH-45 Temperature, Salinity

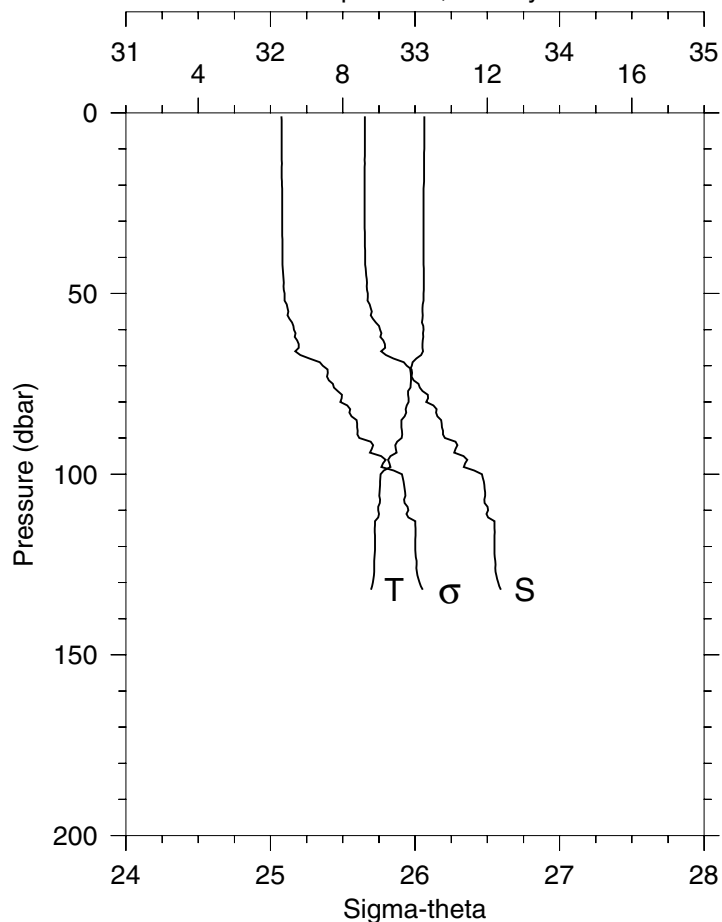
 STA: 3 NH-45 LAT: 44 39.1 N LONG: 125 7.1 W
 24 JAN 2001 0825 GMT DEPTH


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.41	32.696	10.41	25.085	0.057	0.62	89.0
10	10.42	32.697	10.41	25.084	0.287	0.61	89.0
20	10.42	32.698	10.41	25.085	0.574	0.63	89.0
30	10.42	32.699	10.41	25.087	0.861	0.64	89.1
40	10.42	32.710	10.42	25.094	1.148	0.60	89.2
50	10.39	32.738	10.39	25.121	1.434	0.49	89.5
60	10.19	32.841	10.18	25.236	1.712	0.31	89.8
70	9.98	33.042	9.97	25.428	1.979	0.23	89.7
80	9.61	33.266	9.61	25.663	2.221	0.17	89.3
90	9.44	33.340	9.43	25.750	2.452	0.17	89.1
100	9.04	33.556	9.03	25.983	2.664	0.16	88.9
110	8.79	33.661	8.78	26.104	2.864	0.15	88.4
120	8.72	33.703	8.70	26.149	3.054	0.14	88.2
130	8.67	33.716	8.66	26.166	3.241	0.14	88.1
140	8.65	33.729	8.63	26.180	3.427	0.14	88.0
150	8.57	33.738	8.55	26.199	3.612	0.14	88.2
175	8.47	33.806	8.45	26.269	4.063	0.14	88.5
200	8.32	33.856	8.31	26.330	4.499	0.14	88.7
225	8.29	33.867	8.27	26.345	4.928	0.14	88.8
250	8.17	33.897	8.14	26.387	5.353	0.14	89.2
275	8.00	33.930	7.97	26.438	5.764	0.14	89.1
300	7.90	33.946	7.87	26.466	6.168	0.14	89.5
350	6.84	34.016	6.81	26.670	6.926	0.14	90.3
400	6.08	34.020	6.04	26.773	7.609	0.14	90.7
450	5.69	34.064	5.66	26.856	8.245	0.15	90.8
500	5.38	34.105	5.34	26.926	8.842	0.15	90.7
600	4.87	34.178	4.82	27.043	9.971	0.15	90.3
696	4.57	34.241	4.51	27.128	10.990	0.15	90.5

 STA: 4 NH-20 LAT: 44 39.2 N LONG: 124 31.8 W
 25 JAN 2001 2018 GMT DEPTH

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.26	32.653	10.26	25.076	0.029	0.61	88.3
10	10.26	32.653	10.26	25.077	0.288	0.63	88.3
20	10.24	32.652	10.24	25.079	0.575	0.76	88.2
30	10.23	32.652	10.23	25.081	0.863	0.77	88.3
40	10.24	32.654	10.23	25.082	1.151	0.70	88.8
50	10.24	32.674	10.23	25.097	1.438	0.49	89.7
60	10.24	32.758	10.23	25.163	1.722	0.33	89.9
70	9.91	32.942	9.90	25.362	1.998	0.27	89.9
80	9.82	33.077	9.81	25.483	2.253	0.20	89.2
90	9.63	33.207	9.62	25.615	2.495	0.17	88.9
100	9.05	33.463	9.03	25.910	2.720	0.16	88.0
110	8.98	33.506	8.97	25.953	2.928	0.16	87.1
120	8.89	33.550	8.88	26.002	3.131	0.16	85.3
130	8.83	33.575	8.82	26.031	3.332	0.16	84.7
132	8.78	33.594	8.77	26.054	3.372	0.17	84.8

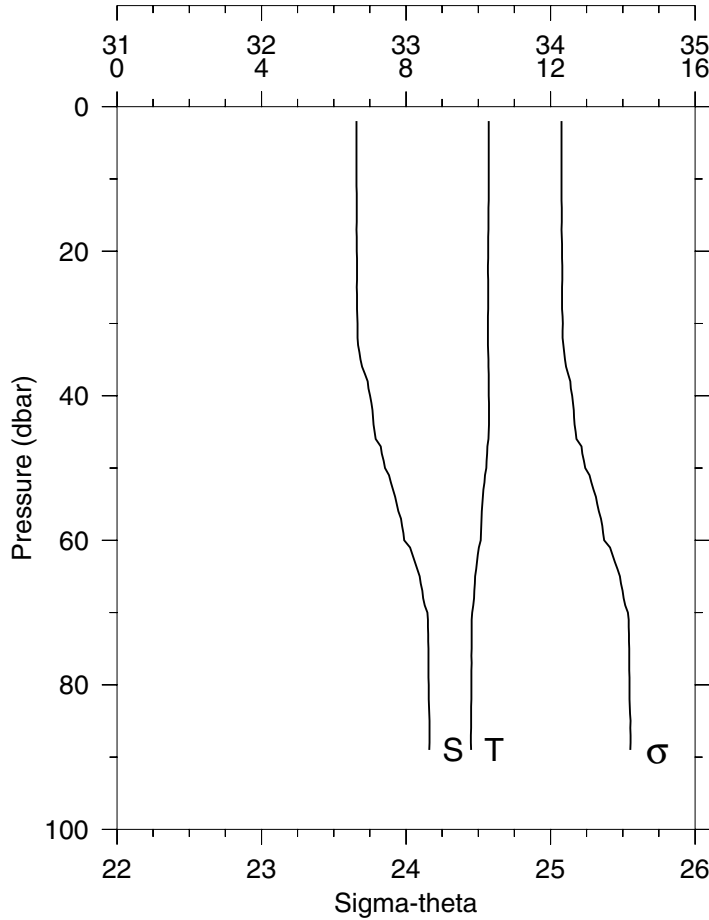
Station 4 NH-20 Temperature, Salinity



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Station 5 NH-15 Temperature, Salinity

STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.8 W
24 JAN 2001 2118 GMT DEPTH

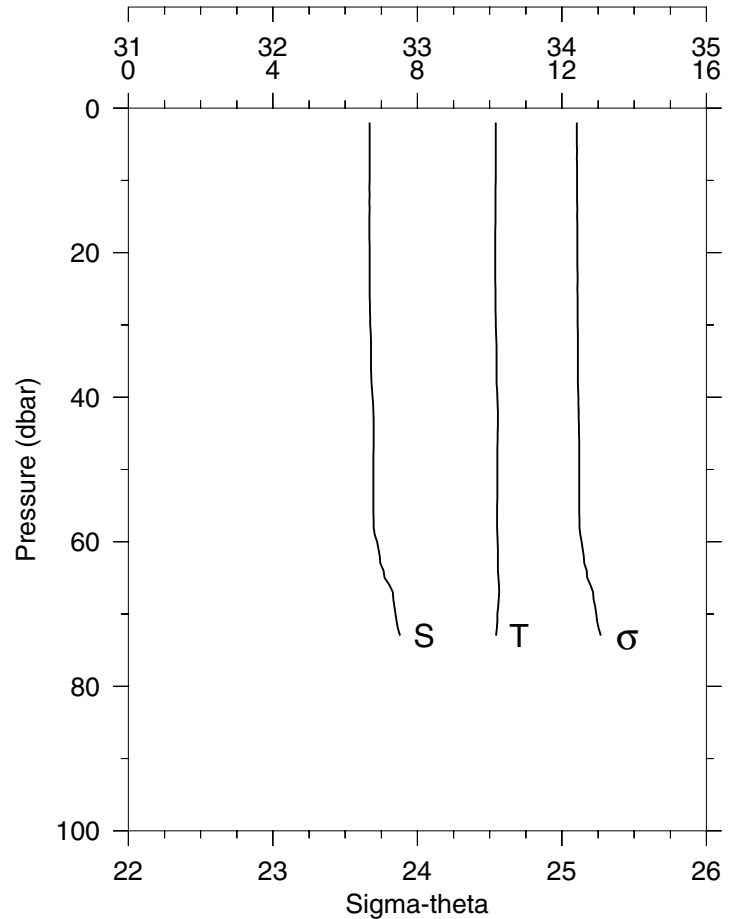


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.29	32.657	10.29	25.075	0.058	0.43	89.3
10	10.29	32.657	10.29	25.076	0.288	0.43	89.2
20	10.28	32.659	10.27	25.079	0.575	0.93	89.3
30	10.27	32.664	10.26	25.085	0.863	0.60	89.5
40	10.29	32.751	10.28	25.149	1.148	0.30	87.9
50	10.22	32.854	10.22	25.241	1.426	0.29	85.4
60	10.06	32.988	10.06	25.372	1.692	0.25	85.7
70	9.83	33.147	9.82	25.536	1.943	0.22	83.5
80	9.81	33.157	9.80	25.547	2.188	0.22	82.1
89	9.80	33.161	9.79	25.552	2.408	0.23	81.5

STA: 6 NH-10 LAT: 44 39.1 N LONG: 124 17.8 W
24 JAN 2001 2217 GMT DEPTH

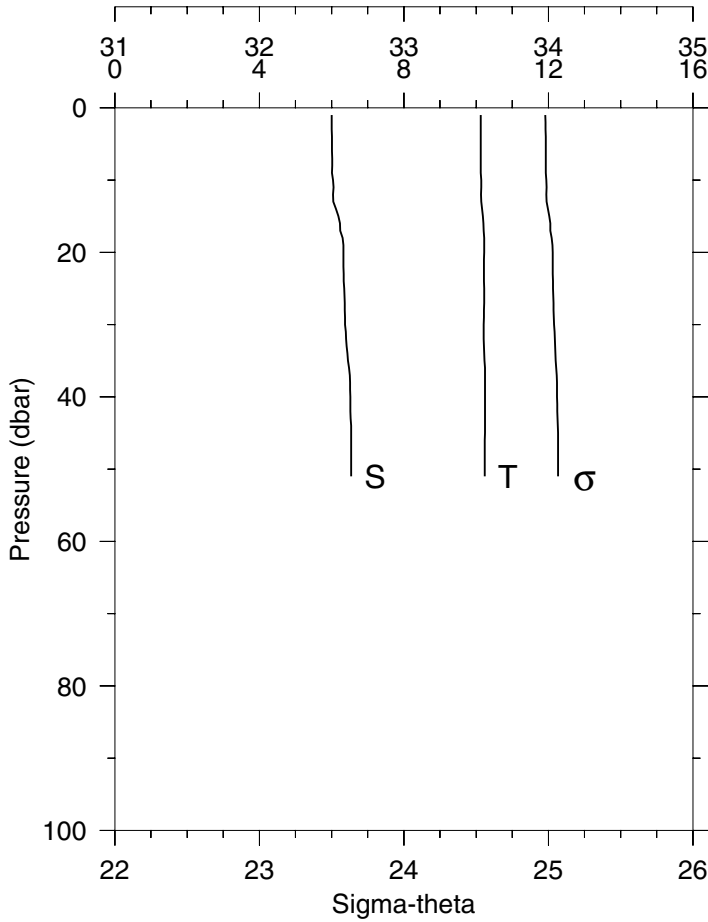
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.17	32.669	10.17	25.104	0.057	0.48	89.4
10	10.17	32.669	10.17	25.105	0.285	0.50	89.3
20	10.16	32.669	10.15	25.107	0.570	0.55	89.5
30	10.17	32.673	10.16	25.108	0.855	0.54	89.5
40	10.21	32.689	10.21	25.114	1.140	0.44	89.6
50	10.21	32.696	10.21	25.119	1.425	0.38	89.3
60	10.22	32.721	10.21	25.137	1.709	0.51	89.0
70	10.22	32.849	10.21	25.238	1.987	0.36	85.7
73	10.18	32.880	10.17	25.269	2.069	0.26	85.0

Station 6 NH-10 Temperature, Salinity



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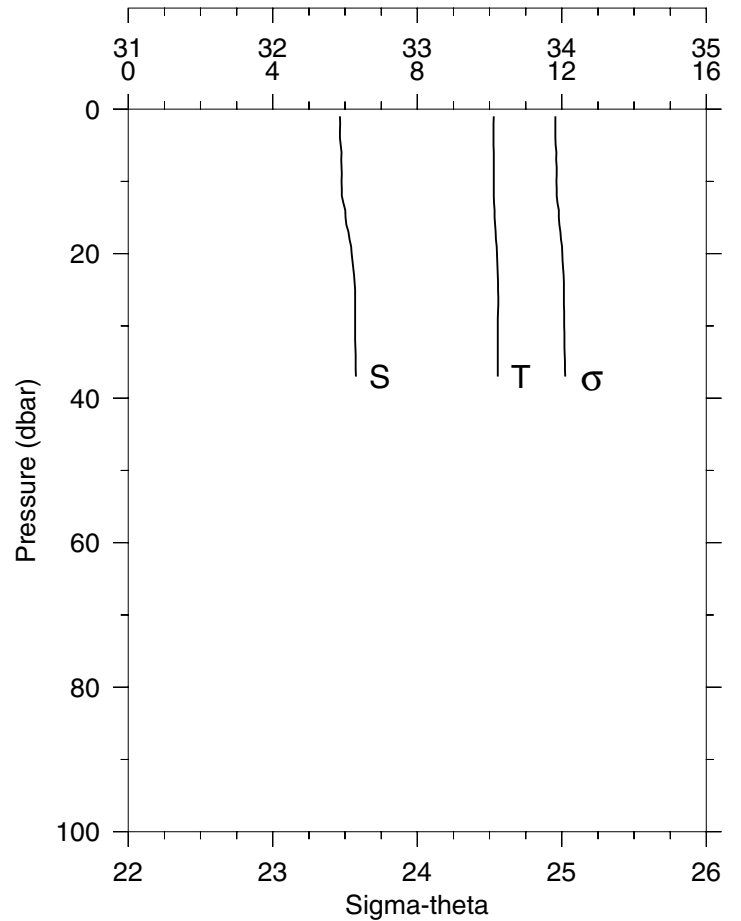
Station 7 NH-5 Temperature, Salinity



STA: 7 NH-5 LAT: 44 39.2 N LONG: 124 10.6 W
24 JAN 2001 2312 GMT DEPTH

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.13	32.500	10.13	24.979	0.030	0.43	86.2
10	10.14	32.510	10.14	24.986	0.297	0.57	86.4
20	10.22	32.582	10.22	25.029	0.591	0.76	87.5
30	10.21	32.592	10.20	25.039	0.883	1.03	87.6
40	10.25	32.629	10.24	25.060	1.174	0.47	86.6
50	10.24	32.634	10.23	25.066	1.464	0.50	84.9
51	10.24	32.634	10.23	25.066	1.493	0.46	85.1

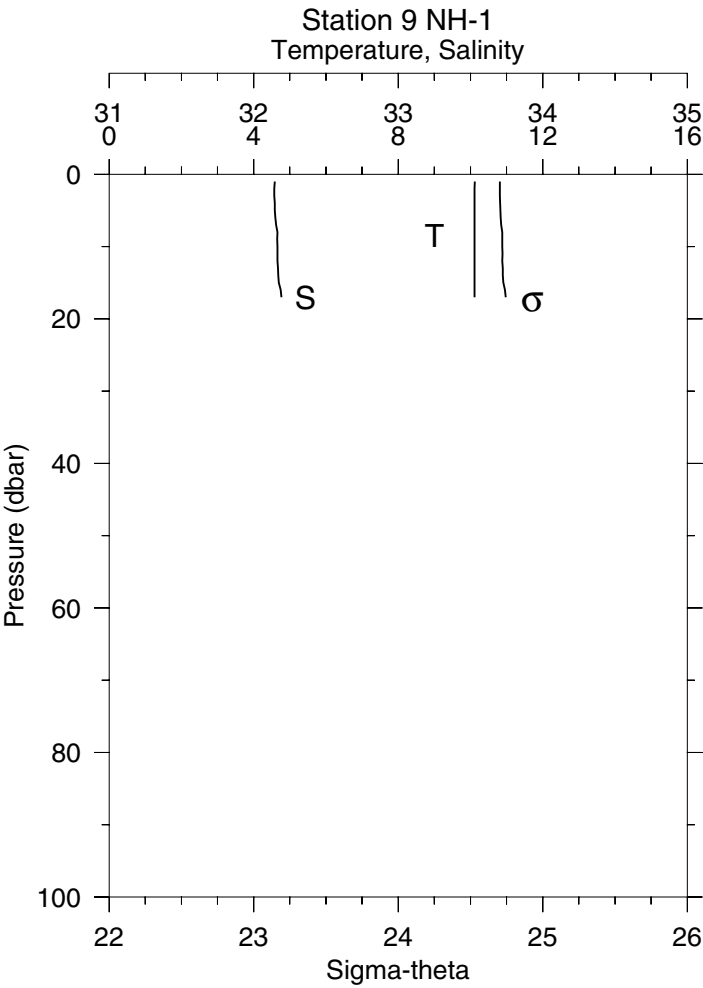
Station 8 NH-3 Temperature, Salinity



STA: 8 NH-3 LAT: 44 39.1 N LONG: 124 7.8 W
24 JAN 2001 2349 GMT DEPTH

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.11	32.465	10.11	24.955	0.030	1.31	86.5
10	10.11	32.476	10.11	24.963	0.299	0.66	86.3
20	10.20	32.546	10.20	25.003	0.596	0.57	87.1
30	10.23	32.570	10.23	25.017	0.890	0.56	87.2
37	10.23	32.576	10.22	25.023	1.095	0.36	86.4

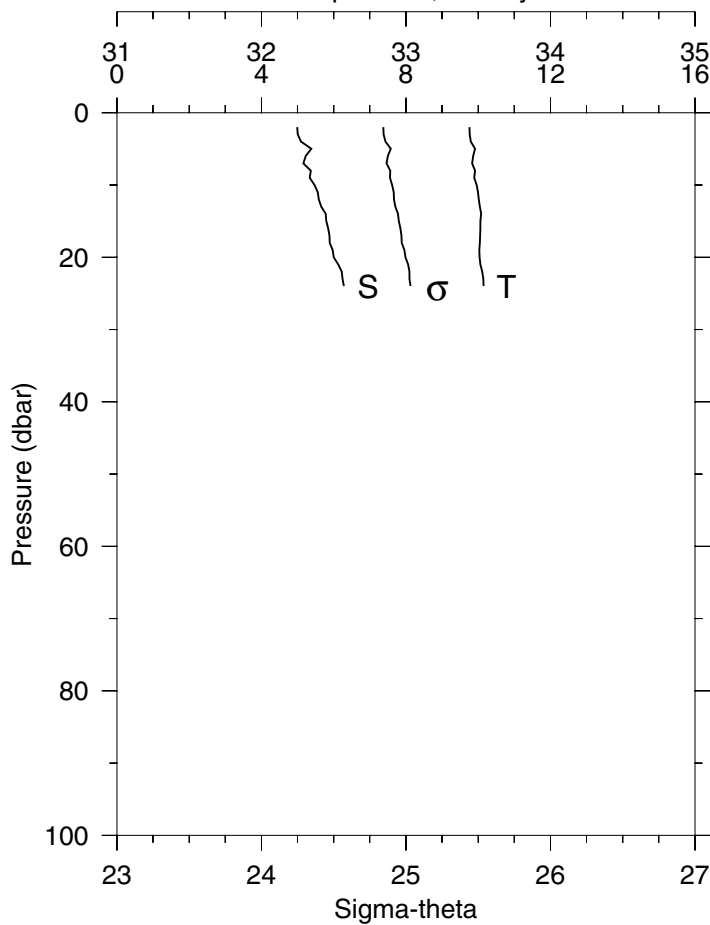
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STA: 9 NH-1		LAT: 44 39.1 N		LONG: 124 6.1 W			
25 JAN 2001		0021 GMT		DEPTH			
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(V)
1	10.12	32.145	10.12	24.704	0.032	0.50	80.00
10	10.11	32.164	10.11	24.720	0.323	0.85	80.10
17	10.11	32.192	10.11	24.743	0.547	0.62	79.90

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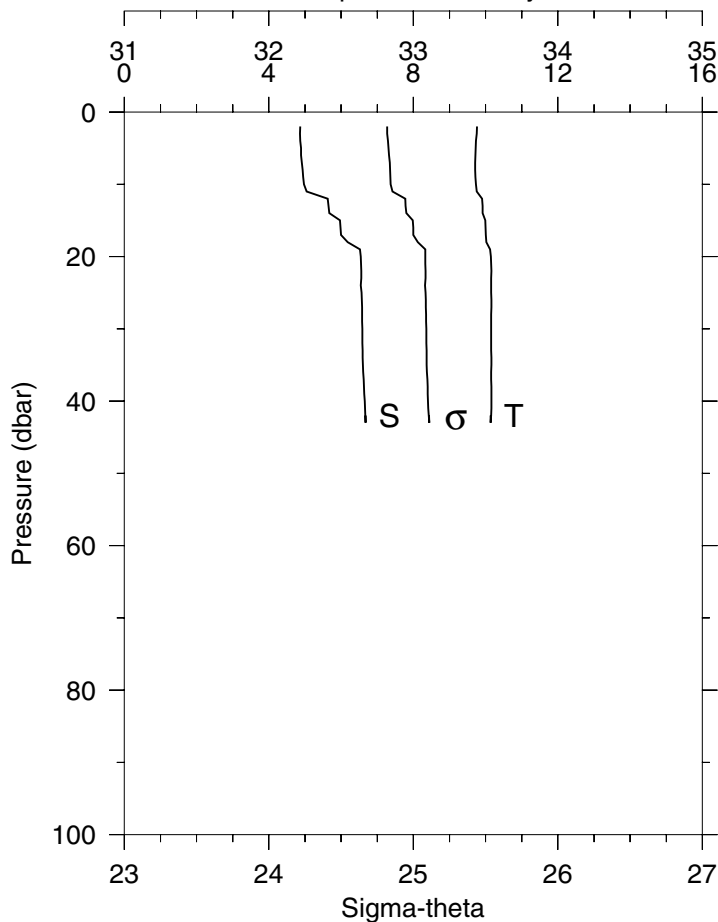
Station 1 NH-1
Temperature, Salinity



STA: 1 NH-1 LAT: 44 39.1 N LONG: 124 6.1 W
27 JAN 2001 1945 GMT DEPTH 29

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.76	32.248	9.76	24.844	0.062	0.46	79.2
10	9.95	32.368	9.95	24.905	0.307	0.55	82.6
20	10.03	32.501	10.03	24.996	0.607	0.55	85.6
24	10.15	32.571	10.15	25.032	0.725	0.67	82.3

Station 2 NH-3
Temperature, Salinity



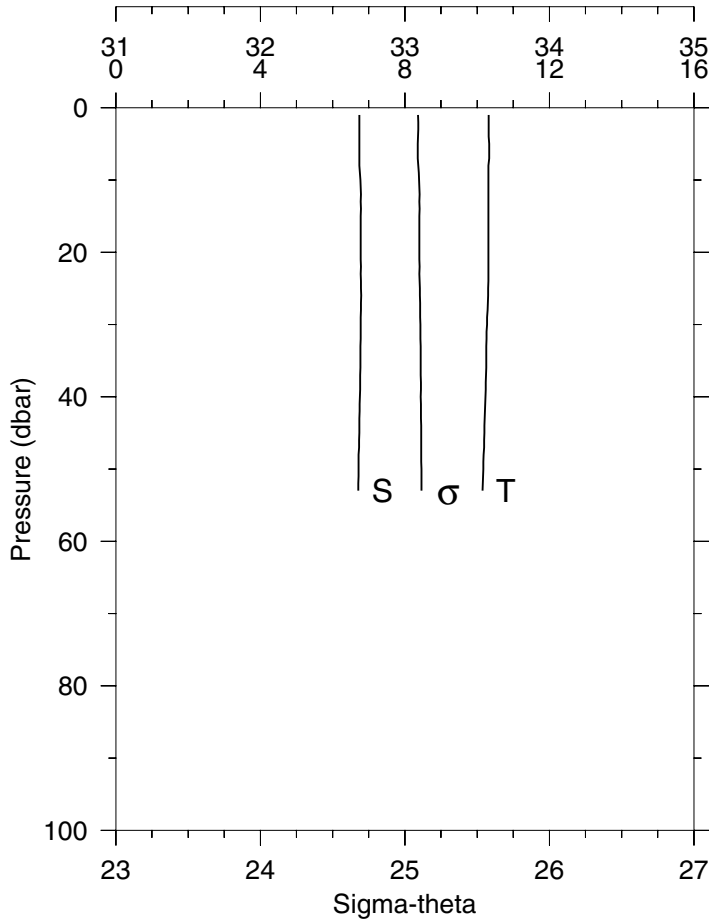
STA: 2 NH-3 LAT: 44 39.1 N LONG: 124 7.9 W
27 JAN 2001 2027 GMT DEPTH 49

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.77	32.217	9.76	24.819	0.062	0.45	81.0
10	9.74	32.243	9.74	24.843	0.311	0.62	81.2
20	10.15	32.636	10.15	25.083	0.608	0.79	86.1
30	10.16	32.647	10.15	25.090	0.896	0.46	85.8
40	10.16	32.664	10.16	25.102	1.182	0.50	85.1
42	10.14	32.669	10.14	25.109	1.239	0.68	83.0

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Station 3 NH-5 Temperature, Salinity

STA: 3 NH-5 LAT: 44 39.1 N LONG: 124 10.6 W
27 JAN 2001 2120 GMT DEPTH 57

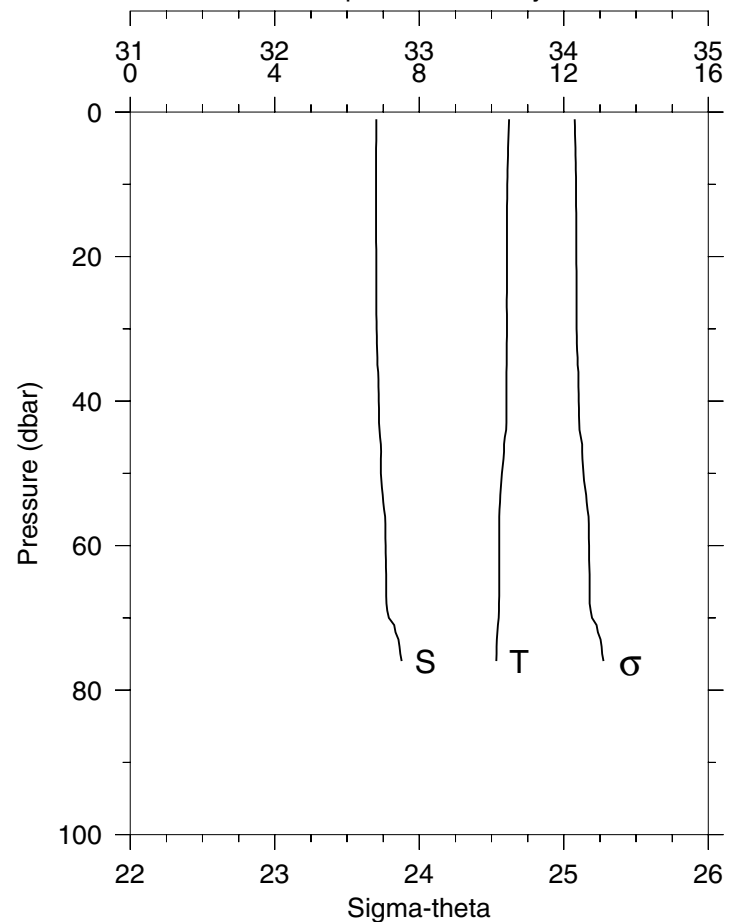


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.32	32.685	10.32	25.091	0.029	0.37	89.1
10	10.31	32.692	10.31	25.098	0.286	0.40	89.2
20	10.31	32.694	10.31	25.100	0.572	0.50	88.9
30	10.27	32.694	10.27	25.107	0.857	0.52	88.3
40	10.23	32.688	10.23	25.109	1.142	0.48	87.3
50	10.17	32.679	10.16	25.114	1.427	0.91	86.2
53	10.15	32.678	10.15	25.115	1.513	0.97	86.4

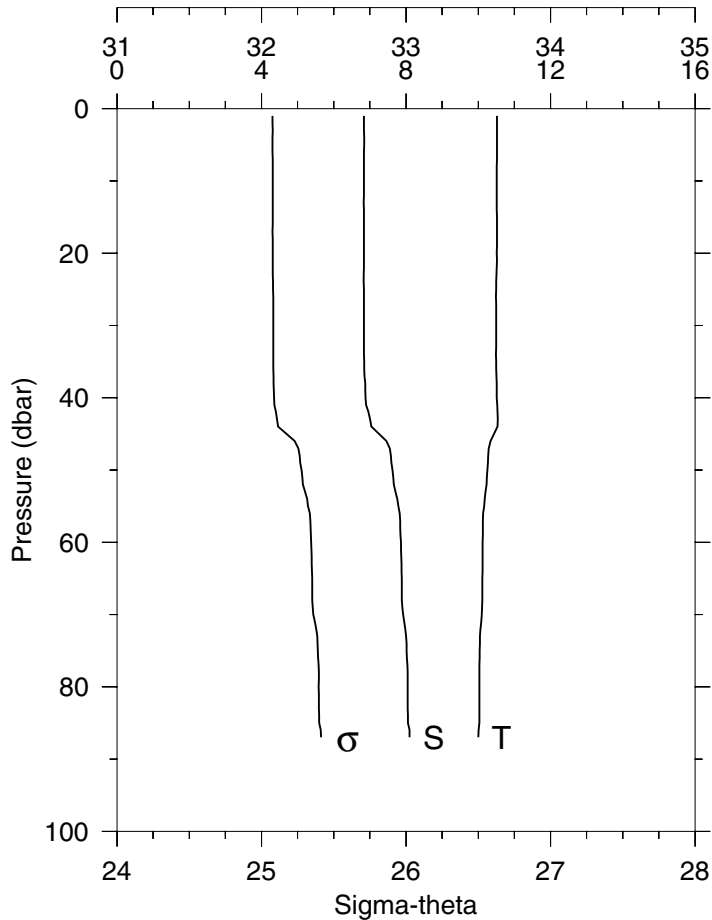
Station 4 NH-10 Temperature, Salinity

STA: 4 NH-10 LAT: 44 39.1 N LONG: 124 17.8 W
27 JAN 2001 2339 GMT DEPTH 82

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.49	32.702	10.49	25.076	0.029	0.51	88.8
10	10.44	32.701	10.44	25.084	0.287	0.54	88.7
20	10.43	32.702	10.42	25.087	0.574	0.56	88.7
30	10.43	32.704	10.42	25.089	0.861	0.56	88.9
40	10.41	32.720	10.41	25.104	1.147	0.55	88.6
50	10.29	32.735	10.28	25.137	1.432	0.57	87.9
60	10.21	32.768	10.20	25.176	1.712	0.49	84.5
70	10.20	32.790	10.19	25.195	1.992	0.47	83.8
76	10.13	32.878	10.12	25.275	2.155	0.40	82.0

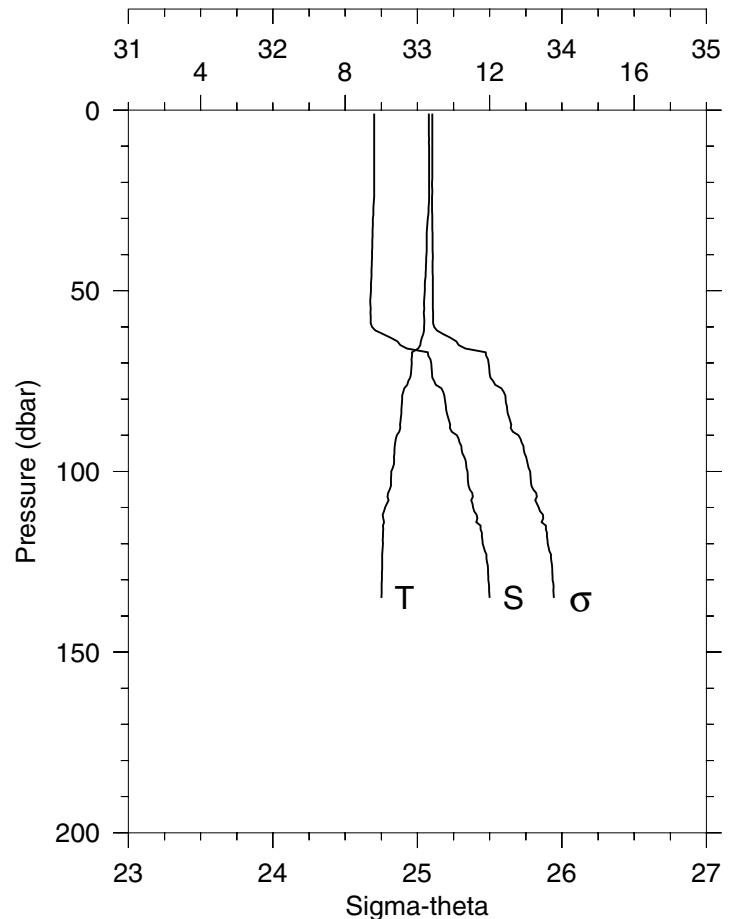


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Station 5 NH-15
Temperature, Salinity

STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.8 W
28 JAN 2001 0052 GMT DEPTH 92

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.52	32.708	10.52	25.076	0.029	0.34	89.7
10	10.51	32.708	10.51	25.077	0.288	0.34	89.8
20	10.51	32.708	10.51	25.077	0.575	0.36	89.8
30	10.49	32.709	10.49	25.081	0.863	0.39	89.7
40	10.51	32.720	10.51	25.087	1.151	0.43	89.7
50	10.25	32.906	10.25	25.276	1.430	0.28	88.1
60	10.12	32.965	10.11	25.344	1.695	0.26	85.5
70	10.10	32.979	10.09	25.359	1.958	0.25	83.7
80	10.03	33.011	10.02	25.395	2.218	0.24	84.4
87	10.00	33.025	9.99	25.411	2.399	0.23	84.8

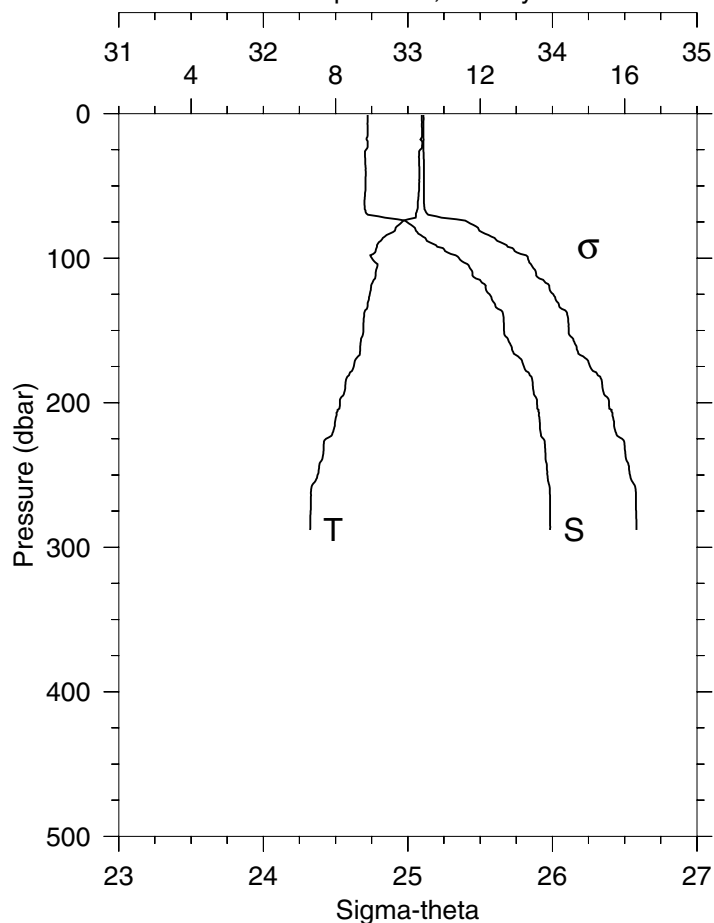
Station 6 NH-20
Temperature, Salinity

STA: 6 NH-20 LAT: 44 39.1 N LONG: 124 31.8 W
28 JAN 2001 0243 GMT DEPTH 141

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.32	32.700	10.32	25.103	0.028	0.71	88.5
10	10.32	32.700	10.32	25.103	0.285	0.74	88.5
20	10.33	32.700	10.32	25.102	0.570	0.73	88.5
30	10.28	32.692	10.28	25.104	0.856	0.77	88.8
40	10.25	32.687	10.24	25.106	1.141	0.73	89.1
50	10.21	32.679	10.20	25.106	1.427	0.68	89.2
60	10.19	32.686	10.18	25.116	1.713	0.60	89.6
70	9.84	33.095	9.83	25.492	1.979	0.19	89.5
80	9.58	33.189	9.57	25.610	2.224	0.18	88.7
90	9.43	33.272	9.42	25.699	2.460	0.16	87.8
100	9.28	33.346	9.27	25.781	2.686	0.16	87.5
110	9.10	33.386	9.09	25.840	2.906	0.15	88.2
120	9.04	33.452	9.03	25.902	3.119	0.16	88.3
130	9.02	33.491	9.00	25.936	3.328	0.16	84.9
135	9.01	33.500	8.99	25.945	3.432	0.16	84.5

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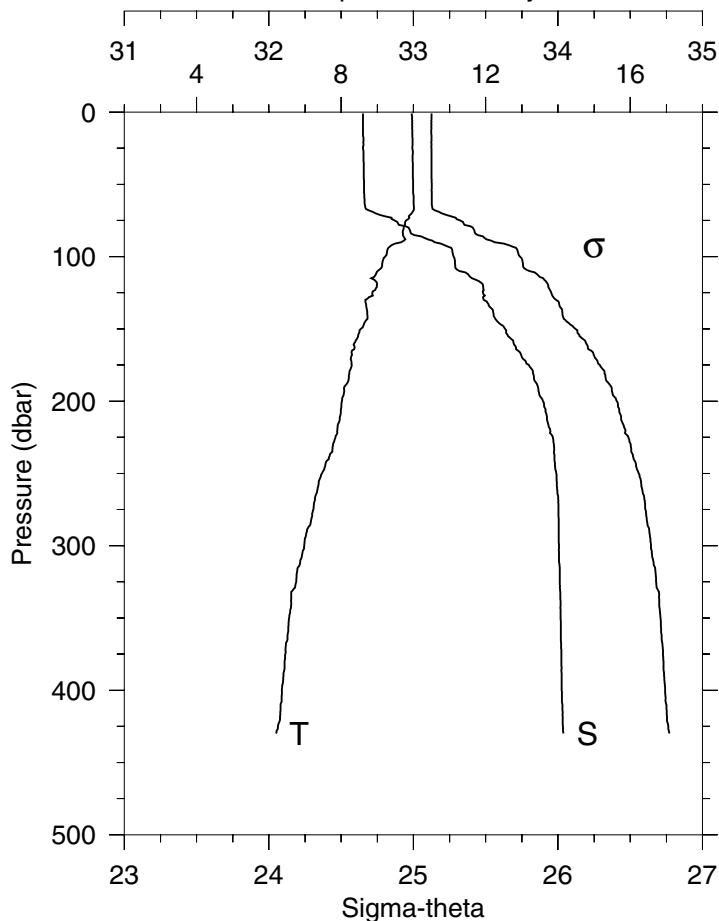
Station 7 NH-25 Temperature, Salinity



STA: 7 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
28 JAN 2001 0401 GMT DEPTH 293

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.39	32.721	10.39	25.108	0.028	0.68	88.6
10	10.39	32.721	10.39	25.108	0.285	0.74	88.5
20	10.40	32.722	10.39	25.108	0.569	0.75	88.6
30	10.31	32.704	10.30	25.109	0.854	0.76	88.6
40	10.32	32.708	10.31	25.110	1.140	0.76	88.8
50	10.31	32.707	10.31	25.111	1.425	0.71	89.1
60	10.28	32.699	10.27	25.111	1.710	0.68	89.3
70	10.22	32.723	10.21	25.140	1.995	0.50	89.8
80	9.66	33.051	9.65	25.489	2.256	0.19	90.4
90	9.17	33.174	9.16	25.664	2.498	0.17	90.5
100	9.01	33.355	9.00	25.831	2.723	0.15	90.0
110	9.11	33.446	9.10	25.886	2.938	0.16	87.7
120	8.98	33.538	8.97	25.979	3.147	0.15	87.8
130	8.90	33.588	8.89	26.030	3.349	0.15	87.8
140	8.79	33.660	8.77	26.105	3.545	0.14	88.3
150	8.77	33.665	8.75	26.112	3.737	0.14	88.9
175	8.50	33.802	8.48	26.261	4.201	0.14	89.4
200	8.12	33.894	8.10	26.391	4.629	0.14	89.4
225	7.74	33.937	7.71	26.481	5.037	0.15	89.7
250	7.50	33.965	7.48	26.537	5.425	0.14	89.8
275	7.31	33.983	7.28	26.579	5.800	0.15	90.1
288	7.30	33.984	7.27	26.582	5.994	0.15	90.0

Station 8 NH-35 Temperature, Salinity

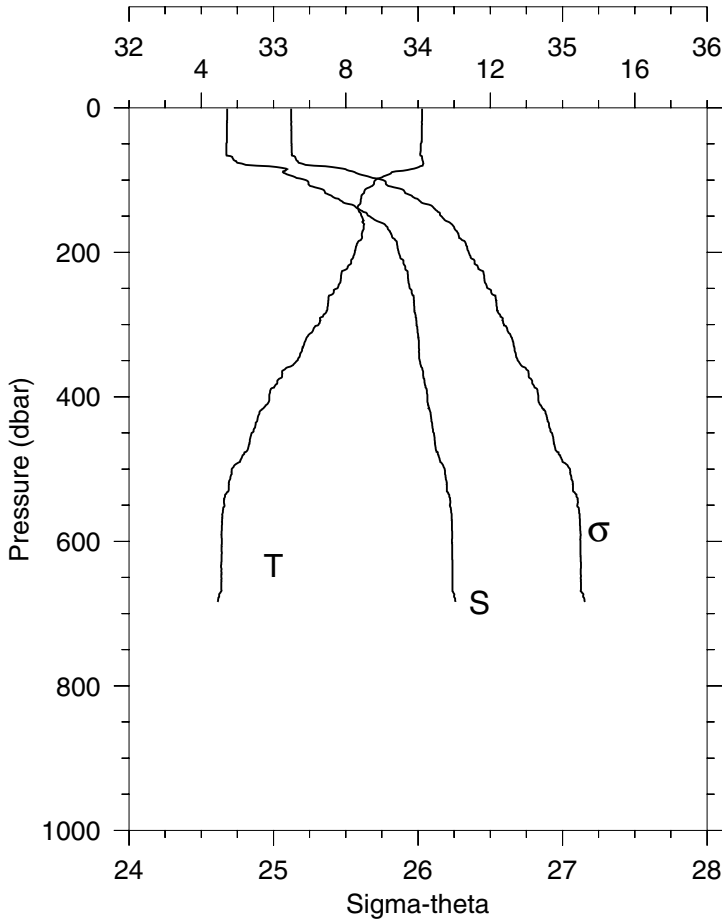


STA: 8 NH-35 LAT: 44 39.1 N LONG: 124 53.0 W
28 JAN 2001 0727 GMT DEPTH 436

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.96	32.651	9.96	25.126	0.028	0.59	89.0
10	9.97	32.651	9.97	25.124	0.283	0.74	89.0
20	9.98	32.654	9.97	25.125	0.566	0.67	89.0
30	9.98	32.655	9.98	25.126	0.850	0.88	89.1
40	9.99	32.657	9.98	25.126	1.133	0.65	89.2
50	9.99	32.658	9.99	25.127	1.417	0.60	89.3
60	10.01	32.662	10.00	25.127	1.701	0.61	89.3
70	9.95	32.736	9.94	25.194	1.983	0.39	90.0
80	9.73	32.967	9.72	25.411	2.250	0.23	90.2
90	9.66	33.147	9.65	25.563	2.502	0.17	89.9
100	9.22	33.278	9.20	25.738	2.733	0.15	89.9
110	9.01	33.319	9.00	25.802	2.957	0.15	90.1
120	8.99	33.481	8.97	25.933	3.170	0.14	90.0
130	8.67	33.487	8.66	25.987	3.376	0.14	90.4
140	8.73	33.555	8.71	26.032	3.577	0.13	90.6
150	8.55	33.635	8.53	26.122	3.773	0.14	90.6
175	8.30	33.799	8.28	26.290	4.230	0.14	90.7
200	8.02	33.896	8.00	26.407	4.655	0.14	90.7
225	7.84	33.964	7.82	26.487	5.058	0.14	89.8
250	7.47	33.988	7.45	26.559	5.444	0.14	90.4
275	7.23	34.003	7.20	26.605	5.815	0.15	90.5
300	6.98	34.007	6.95	26.643	6.178	0.15	90.4
350	6.56	34.019	6.53	26.710	6.878	0.15	90.5
400	6.36	34.026	6.32	26.742	7.560	0.15	90.3
430	6.20	34.038	6.16	26.772	7.962	0.15	89.4

W0101C

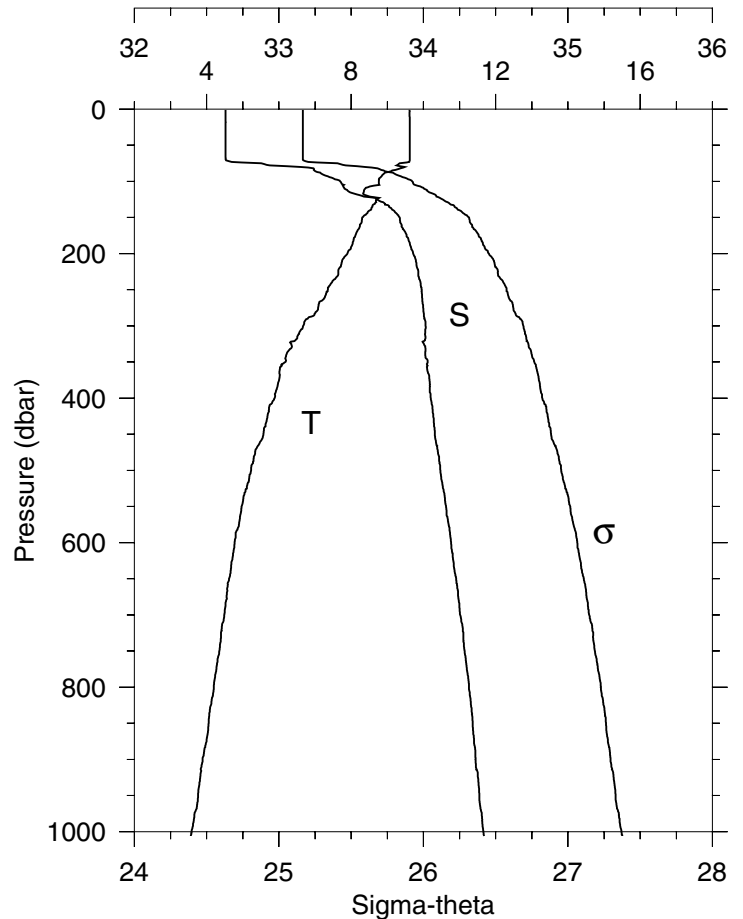
Station 9 NH-45 Temperature, Salinity



STA: 9 NH-45 LAT: 44 39.1 N LONG: 125 7.0 W
28 JAN 2001 1237 GMT DEPTH 691

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.11	32.679	10.11	25.122	0.028	0.63	89.0
10	10.11	32.679	10.11	25.122	0.283	0.60	89.0
20	10.11	32.679	10.10	25.123	0.567	0.63	89.1
30	10.11	32.678	10.10	25.123	0.850	0.60	89.3
40	10.10	32.678	10.10	25.123	1.134	0.59	89.3
50	10.07	32.674	10.07	25.125	1.418	0.58	89.3
60	10.07	32.673	10.06	25.125	1.702	0.58	89.4
70	10.11	32.717	10.10	25.153	1.985	0.44	89.8
80	10.12	32.883	10.11	25.280	2.264	0.31	90.1
90	9.25	33.071	9.24	25.570	2.516	0.17	90.5
100	8.82	33.224	8.81	25.758	2.750	0.15	90.6
110	8.65	33.286	8.64	25.832	2.972	0.15	90.6
120	8.46	33.380	8.45	25.936	3.184	0.13	90.7
130	8.41	33.478	8.40	26.019	3.387	0.13	90.7
140	8.35	33.588	8.33	26.116	3.582	0.13	90.8
150	8.44	33.663	8.42	26.161	3.771	0.14	90.7
175	8.44	33.814	8.43	26.279	4.224	0.14	90.6
200	8.25	33.866	8.23	26.350	4.656	0.14	90.3
225	7.94	33.920	7.92	26.438	5.073	0.14	90.1
250	7.76	33.943	7.74	26.483	5.473	0.15	90.2
275	7.50	33.974	7.47	26.545	5.858	0.14	90.2
300	7.25	33.991	7.22	26.594	6.234	0.15	90.3
350	6.66	34.012	6.63	26.691	6.948	0.15	90.4
400	5.88	34.064	5.85	26.832	7.605	0.15	90.1
450	5.40	34.109	5.36	26.927	8.213	0.14	90.2
500	4.84	34.185	4.80	27.051	8.779	0.15	90.5
600	4.57	34.235	4.52	27.123	9.794	0.15	90.5
684	4.45	34.259	4.40	27.155	10.628	0.15	90.5

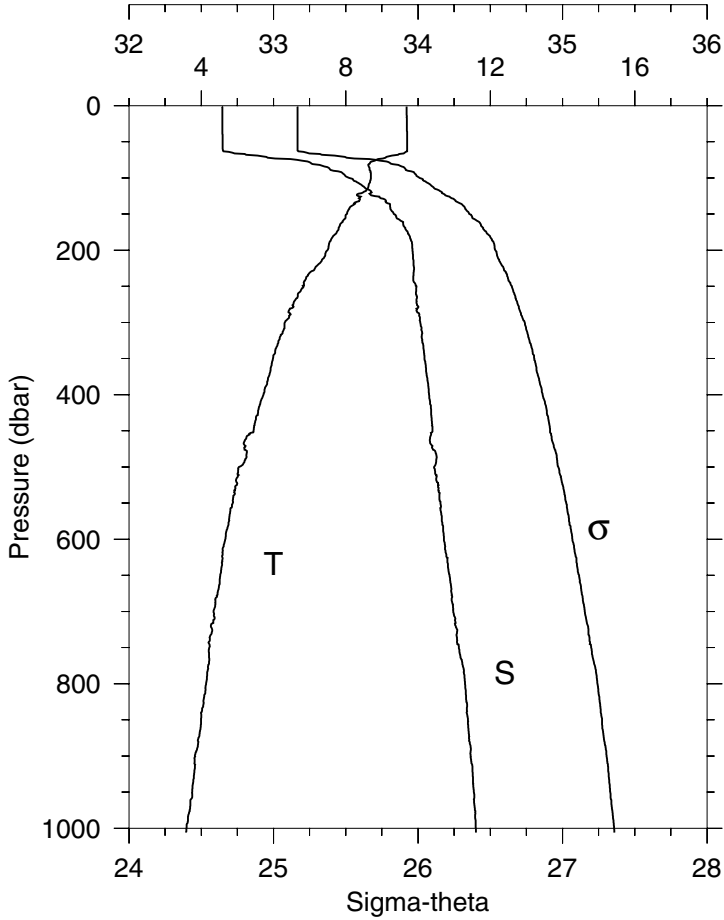
Station 10 NH-55 Temperature, Salinity



STA: 10 NH-55 LAT: 44 39.1 N LONG: 125 22.0 W
28 JAN 2001 1506 GMT DEPTH 2866

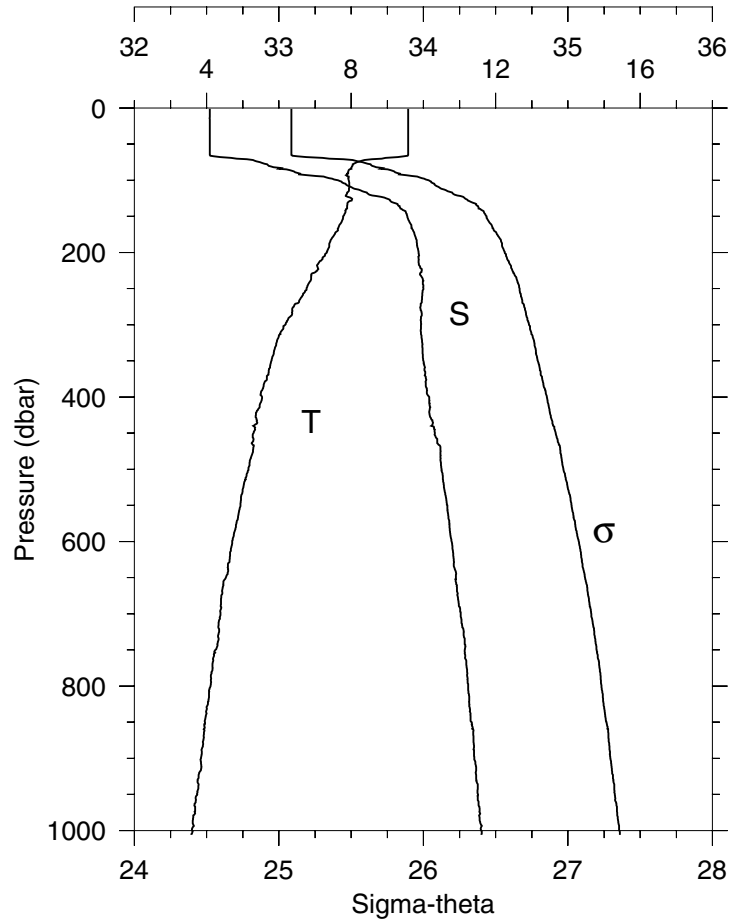
P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.62	32.631	9.62	25.165	0.028	0.35	90.2
10	9.62	32.631	9.62	25.166	0.279	0.35	90.2
20	9.62	32.631	9.62	25.166	0.558	0.38	90.2
30	9.62	32.631	9.62	25.165	0.838	0.36	90.2
40	9.62	32.631	9.62	25.166	1.118	0.38	90.2
50	9.62	32.631	9.62	25.166	1.398	0.42	90.2
60	9.62	32.631	9.62	25.166	1.678	0.37	90.2
70	9.63	32.632	9.62	25.166	1.958	0.36	90.2
80	9.48	33.153	9.48	25.597	2.221	0.18	90.3
90	8.89	33.301	8.88	25.807	2.449	0.16	90.3
100	8.77	33.424	8.76	25.923	2.663	0.15	90.5
110	8.39	33.454	8.38	26.004	2.869	0.14	90.7
120	8.45	33.574	8.44	26.089	3.066	0.14	90.7
130	8.66	33.728	8.65	26.177	3.255	0.14	90.5
140	8.52	33.792	8.51	26.249	3.437	0.14	89.3
150	8.31	33.836	8.29	26.316	3.613	0.14	89.8
175	8.12	33.883	8.10	26.382	4.038	0.14	90.2
200	7.89	33.930	7.87	26.453	4.447	0.14	90.2
225	7.64	33.964	7.62	26.516	4.839	0.14	90.3
250	7.35	33.988	7.33	26.576	5.219	0.15	90.4
275	7.08	33.998	7.06	26.622	5.587	0.14	90.3
300	6.67	34.015	6.64	26.692	5.941	0.14	90.3
350	6.18	34.030	6.15	26.767	6.619	0.15	90.6
400	5.88	34.051	5.84	26.822	7.264	0.15	90.6
450	5.57	34.080	5.53	26.884	7.882	0.15	90.4
500	5.23	34.117	5.19	26.953	8.472	0.15	90.6
600	4.77	34.191	4.73	27.065	9.572	0.15	90.6
800	4.20	34.316	4.14	27.227	11.532	0.15	90.8
1000	3.59	34.415	3.51	27.370	13.230	0.15	90.7
1006	3.56	34.420	3.49	27.376	13.277	0.15	90.7

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Station 11 NH-65
Temperature, Salinity

STA: 11 NH-65 LAT: 44 39.1 N LONG: 125 36.0 W
28 JAN 2001 1704 GMT DEPTH 2857

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.68	32.642	9.68	25.164	0.028	0.38	90.0
10	9.69	32.645	9.68	25.166	0.279	0.39	90.0
20	9.69	32.645	9.69	25.166	0.558	0.38	90.0
30	9.69	32.646	9.69	25.166	0.838	0.39	90.0
40	9.70	32.647	9.69	25.166	1.118	0.38	90.0
50	9.70	32.647	9.69	25.166	1.397	0.39	90.0
60	9.70	32.648	9.69	25.167	1.677	0.40	90.0
70	9.18	32.925	9.18	25.466	1.949	0.26	90.6
80	8.66	33.262	8.65	25.811	2.181	0.19	90.7
90	8.68	33.416	8.67	25.930	2.394	0.16	90.6
100	8.70	33.525	8.69	26.012	2.597	0.15	90.5
110	8.63	33.610	8.62	26.089	2.794	0.14	90.5
120	8.48	33.679	8.47	26.167	2.984	0.13	90.6
130	8.39	33.771	8.38	26.252	3.166	0.14	90.6
140	8.12	33.807	8.11	26.321	3.341	0.14	90.7
150	8.03	33.832	8.02	26.354	3.511	0.14	90.7
175	7.75	33.929	7.73	26.472	3.918	0.14	90.8
200	7.49	33.961	7.47	26.535	4.304	0.15	90.7
225	7.15	33.972	7.13	26.592	4.679	0.14	90.8
250	6.83	33.990	6.81	26.650	5.040	0.15	90.8
275	6.55	33.993	6.52	26.690	5.390	0.15	90.8
300	6.31	34.015	6.29	26.738	5.731	0.15	90.6
350	5.98	34.045	5.95	26.804	6.386	0.15	90.5
400	5.72	34.076	5.69	26.861	7.015	0.15	90.6
450	5.45	34.099	5.41	26.913	7.617	0.15	90.6
500	5.04	34.111	5.00	26.970	8.196	0.14	90.9
600	4.67	34.180	4.62	27.068	9.283	0.15	90.9
800	4.13	34.325	4.07	27.242	11.227	0.15	90.8
1000	3.59	34.400	3.52	27.357	12.914	0.15	90.9
1006	3.58	34.401	3.51	27.360	12.962	0.14	90.8

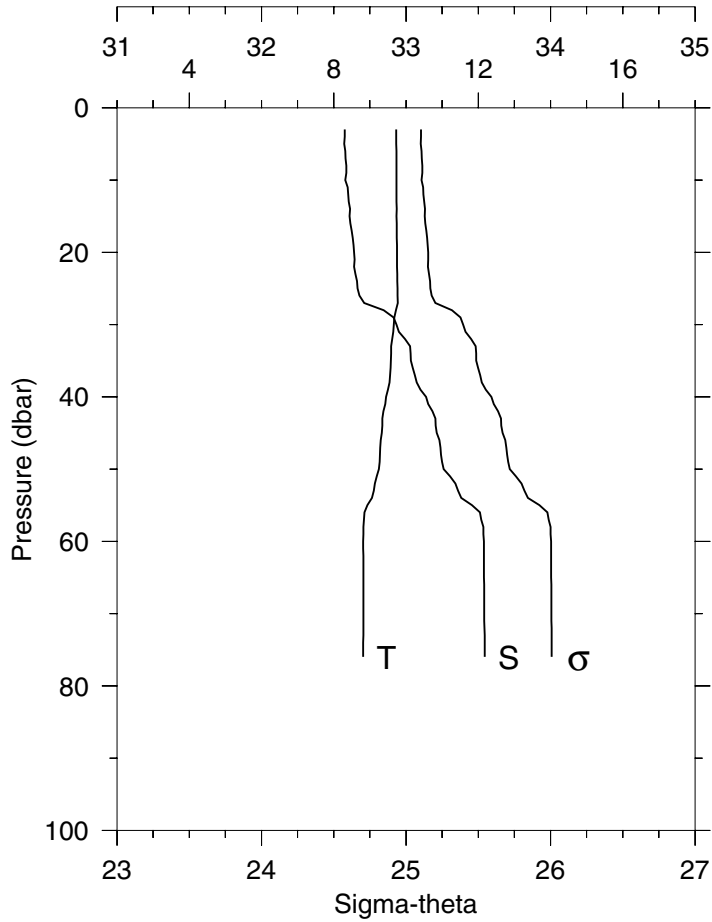
Station 12 NH-85
Temperature, Salinity

STA: 12 NH-85 LAT: 44 39.1 N LONG: 126 3.0 W
28 JAN 2001 1949 GMT DEPTH 2885

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.58	32.521	9.58	25.086	0.029	0.33	90.2
10	9.58	32.521	9.58	25.087	0.287	0.37	90.1
20	9.58	32.521	9.58	25.087	0.573	0.35	90.1
30	9.58	32.521	9.58	25.087	0.860	0.36	90.1
40	9.58	32.522	9.58	25.087	1.148	0.35	90.1
50	9.58	32.521	9.58	25.087	1.435	0.36	90.2
60	9.58	32.522	9.57	25.087	1.723	0.37	90.2
70	8.85	32.708	8.84	25.349	2.006	0.21	90.6
80	8.04	32.930	8.03	25.645	2.248	0.15	90.7
90	7.92	33.132	7.91	25.821	2.474	0.14	90.8
100	7.93	33.410	7.92	26.037	2.682	0.13	90.8
110	7.95	33.506	7.94	26.110	2.876	0.13	90.8
120	7.87	33.626	7.86	26.216	3.062	0.13	90.8
130	7.93	33.779	7.91	26.328	3.237	0.13	90.8
140	7.86	33.851	7.85	26.394	3.404	0.13	90.8
150	7.78	33.890	7.76	26.437	3.567	0.14	90.8
175	7.55	33.939	7.53	26.509	3.961	0.14	90.8
200	7.33	33.967	7.31	26.562	4.340	0.14	90.8
225	7.06	33.988	7.04	26.616	4.708	0.15	90.8
250	6.77	33.999	6.74	26.665	5.063	0.14	90.8
275	6.41	33.980	6.39	26.697	5.411	0.15	90.8
300	6.17	33.983	6.15	26.731	5.751	0.14	90.9
350	5.79	33.999	5.76	26.791	6.409	0.14	90.9
400	5.53	34.040	5.50	26.855	7.041	0.15	90.9
450	5.30	34.079	5.26	26.915	7.647	0.15	90.9
500	5.16	34.126	5.12	26.969	8.226	0.14	90.9
600	4.71	34.196	4.66	27.076	9.313	0.15	90.9
800	4.11	34.310	4.05	27.232	11.250	0.15	90.9
1000	3.60	34.400	3.53	27.356	12.949	0.14	90.7
1006	3.58	34.402	3.51	27.360	12.997	0.14	90.8

W0103A

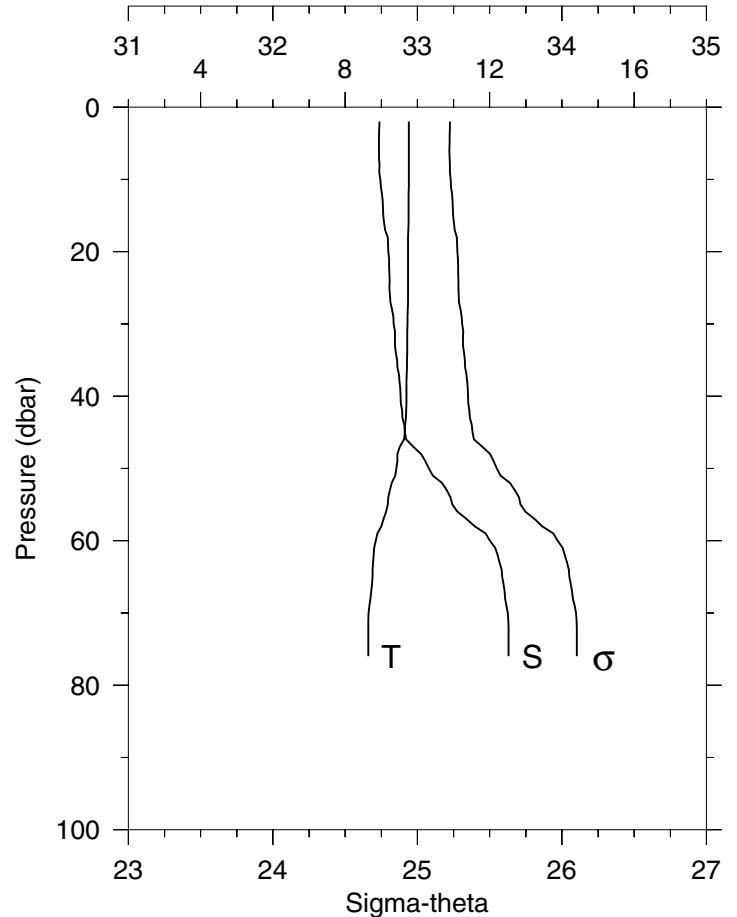
Station 1 NH10SF Temperature, Salinity



STA: 1 NH10S LAT: 44 38.5 N LONG: 124 18.1 W
15 MAR 2001 1945 GMT DEPTH 81

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	9.73	32.576	9.73	25.104	0.085	0.92	86.9
10	9.73	32.579	9.73	25.107	0.285	1.22	86.6
20	9.75	32.641	9.75	25.153	0.567	0.94	85.3
30	9.66	32.933	9.66	25.395	0.842	0.73	87.2
40	9.44	33.139	9.44	25.591	1.091	0.26	87.6
50	9.25	33.261	9.24	25.718	1.323	0.28	84.1
60	8.82	33.539	8.81	26.004	1.534	0.17	86.9
70	8.82	33.541	8.81	26.006	1.734	0.17	86.9
76	8.82	33.544	8.81	26.008	1.854	0.17	87.1

Station 2 NH10SF Temperature, Salinity



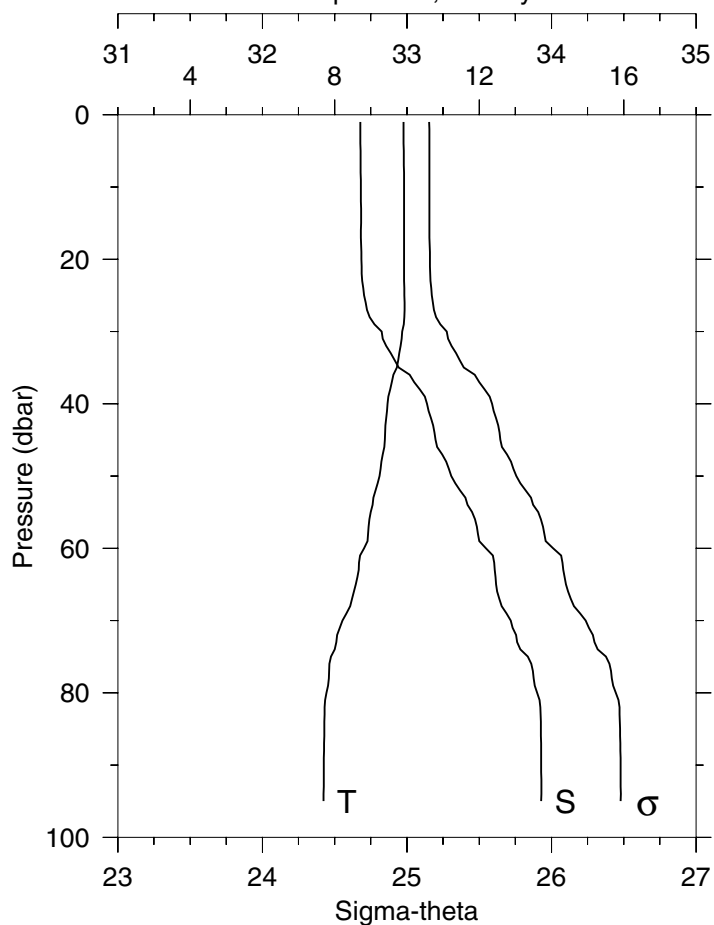
STA: 2 NH10S LAT: 44 38.3 N LONG: 124 18.5 W
16 MAR 2001 0258 GMT DEPTH 82

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.76	32.738	9.76	25.225	0.055	2.41	81.9
10	9.76	32.744	9.76	25.230	0.274	2.65	81.7
20	9.74	32.798	9.74	25.276	0.545	2.65	81.3
30	9.73	32.836	9.72	25.309	0.812	2.00	81.5
40	9.69	32.884	9.69	25.351	1.077	2.08	82.4
50	9.41	33.080	9.41	25.550	1.333	0.57	83.8
60	8.85	33.502	8.84	25.971	1.558	0.26	86.4
70	8.65	33.626	8.64	26.098	1.754	0.19	86.3
76	8.64	33.631	8.63	26.104	1.869	0.18	85.3

W0103A

Station 3 CBOS

Temperature, Salinity



STA: 3 CBOS LAT: 43 9.2 N LONG: 124 34.5 W
16 MAR 2001 1540 GMT DEPTH 100

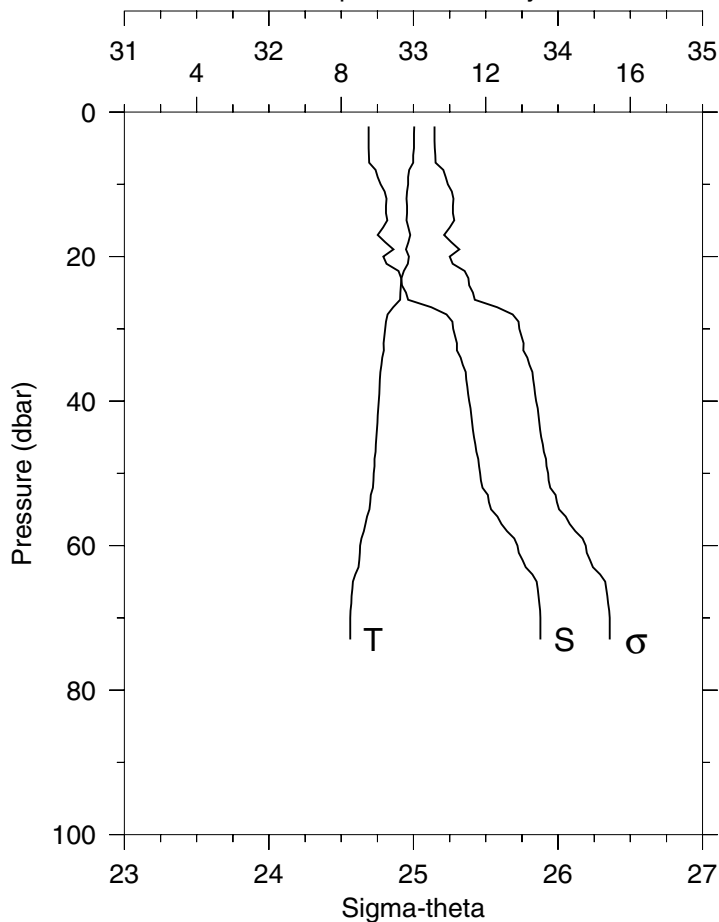
P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.91	32.677	9.91	25.154	0.028	1.75	87.0
10	9.92	32.681	9.92	25.155	0.280	2.17	87.1
20	9.92	32.685	9.92	25.159	0.560	0.73	87.2
30	9.87	32.825	9.87	25.276	0.838	1.06	87.5
40	9.46	33.139	9.46	25.589	1.094	1.07	87.7
50	9.24	33.307	9.23	25.756	1.326	0.32	87.2
60	8.81	33.547	8.81	26.011	1.538	0.26	84.9
70	8.22	33.718	8.21	26.236	1.728	0.19	83.5
80	7.78	33.901	7.77	26.445	1.895	0.23	79.9
90	7.70	33.929	7.69	26.479	2.051	0.36	71.5
95	7.69	33.929	7.68	26.479	2.129	0.25	69.3

STA: 4 YS LAT: 42 26.3 N LONG: 124 34.6 W
17 MAR 2001 0024 GMT DEPTH 77

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.02	32.690	10.02	25.146	0.056	0.92	88.0
10	9.85	32.772	9.85	25.238	0.279	1.81	84.2
20	9.87	32.792	9.87	25.250	0.549	1.88	84.0
30	9.22	33.275	9.22	25.733	0.799	0.69	85.1
40	9.04	33.386	9.04	25.849	1.019	0.37	85.4
50	8.90	33.462	8.90	25.931	1.230	0.39	85.7
60	8.52	33.719	8.52	26.191	1.428	0.19	88.0
70	8.25	33.879	8.24	26.357	1.601	0.17	86.3
73	8.25	33.879	8.24	26.357	1.651	0.18	86.4

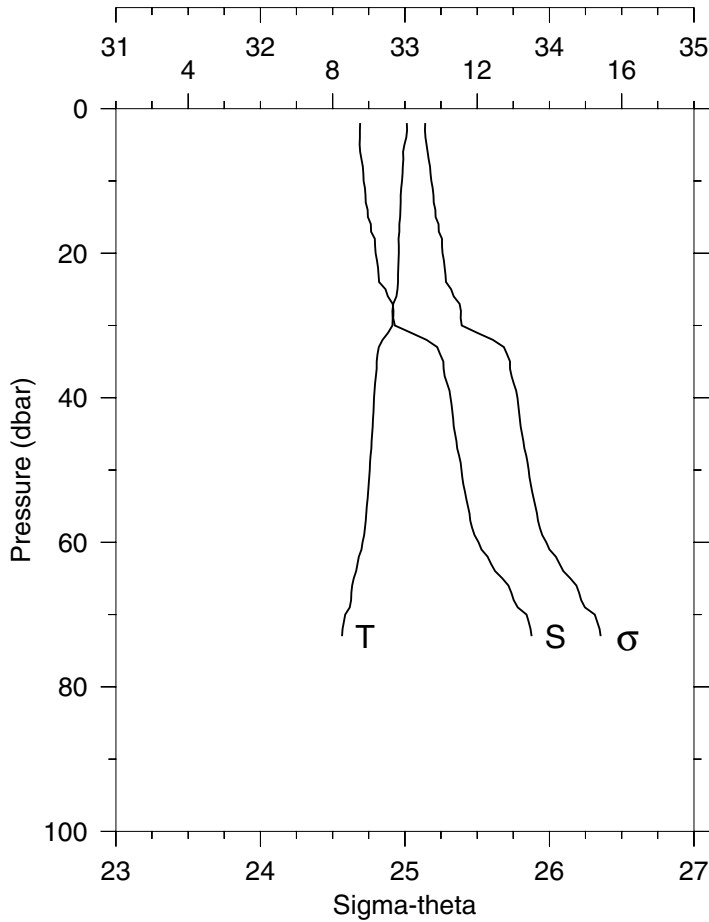
Station 4 YS

Temperature, Salinity



W0103A

Station 5 YS Temperature, Salinity



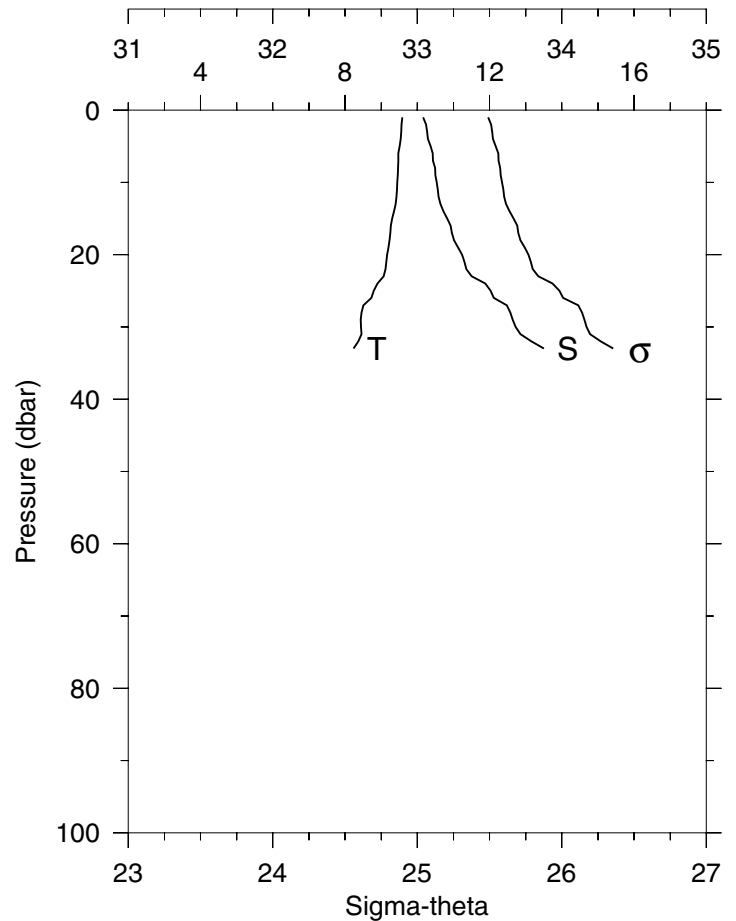
STA: 5 YS LAT: 42 26.2 N LONG: 124 34.8 W
17 MAR 2001 0036 GMT DEPTH 77

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.05	32.690	10.05	25.140	0.056	0.64	88.4
10	9.92	32.715	9.92	25.182	0.280	1.27	87.2
20	9.83	32.798	9.83	25.261	0.554	2.44	83.0
30	9.65	32.930	9.65	25.394	0.819	1.77	82.0
40	9.15	33.316	9.14	25.778	1.049	0.79	84.9
50	9.02	33.391	9.02	25.856	1.268	0.37	85.4
60	8.83	33.509	8.82	25.979	1.477	0.33	85.8
70	8.34	33.842	8.34	26.314	1.665	0.17	87.9
73	8.26	33.877	8.25	26.355	1.716	0.17	86.5

STA: 6 RR-1 LAT: 42 30.0 N LONG: 124 30.0 W
17 MAR 2001 0245 GMT DEPTH 36

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.59	33.040	9.59	25.490	0.025	1.15	81.4
10	9.45	33.134	9.44	25.587	0.244	1.26	80.4
20	9.16	33.309	9.16	25.769	0.475	1.80	81.2
30	8.44	33.680	8.44	26.172	0.678	0.23	86.4
33	8.24	33.876	8.23	26.356	0.731	0.23	87.4

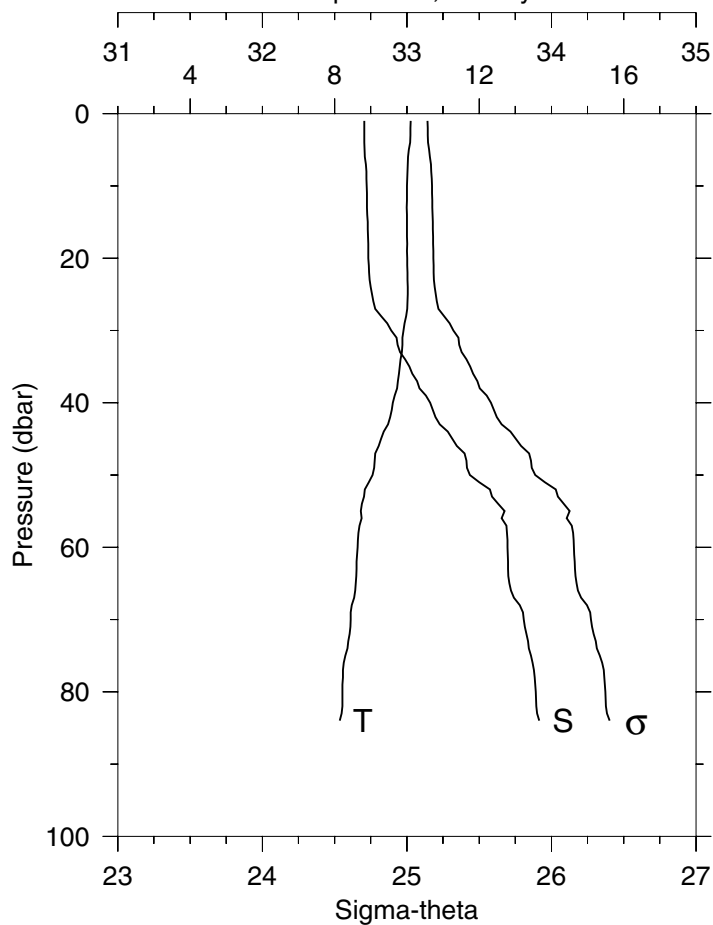
Station 6 RR-1 Temperature, Salinity



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Station 7 RR-2 Temperature, Salinity

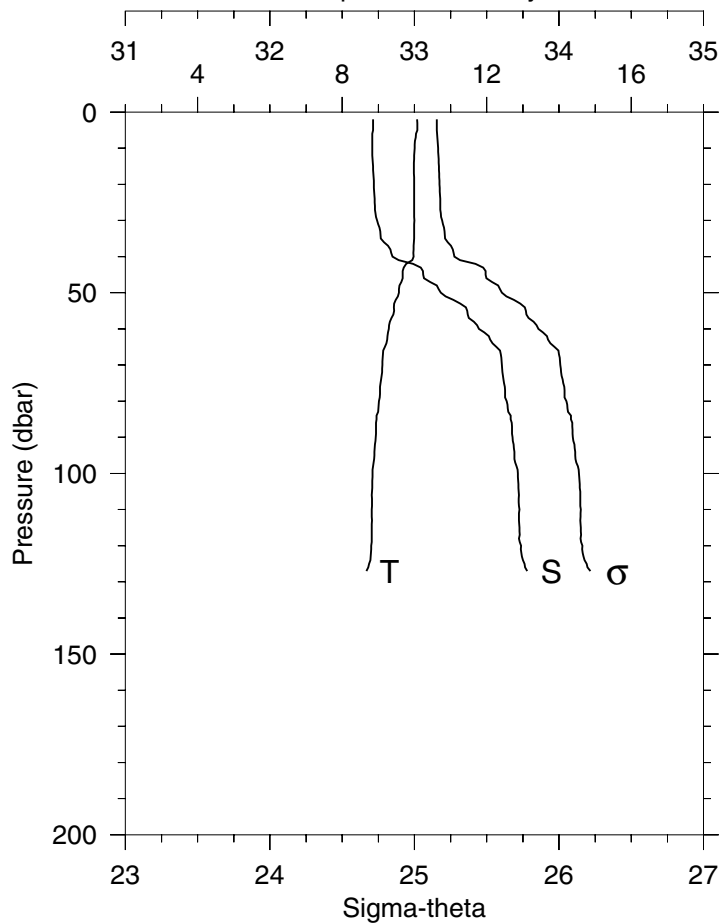
STA: 7 RR-2 LAT: 42 30.0 N LONG: 124 36.0 W
17 MAR 2001 0326 GMT DEPTH 86



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.11	32.705	10.11	25.143	0.028	0.31	87.3
10	10.00	32.722	10.00	25.173	0.280	0.66	88.0
20	10.01	32.733	10.00	25.182	0.558	0.85	88.1
30	9.91	32.892	9.90	25.322	0.833	0.85	89.2
40	9.61	33.160	9.61	25.581	1.086	0.24	89.8
50	9.05	33.436	9.04	25.887	1.311	0.18	88.3
60	8.63	33.696	8.63	26.155	1.504	0.17	88.2
70	8.44	33.809	8.43	26.274	1.687	0.16	88.8
80	8.22	33.892	8.21	26.373	1.857	0.16	87.3
84	8.14	33.915	8.13	26.402	1.923	0.17	86.8

Station 8 RR-3 Temperature, Salinity

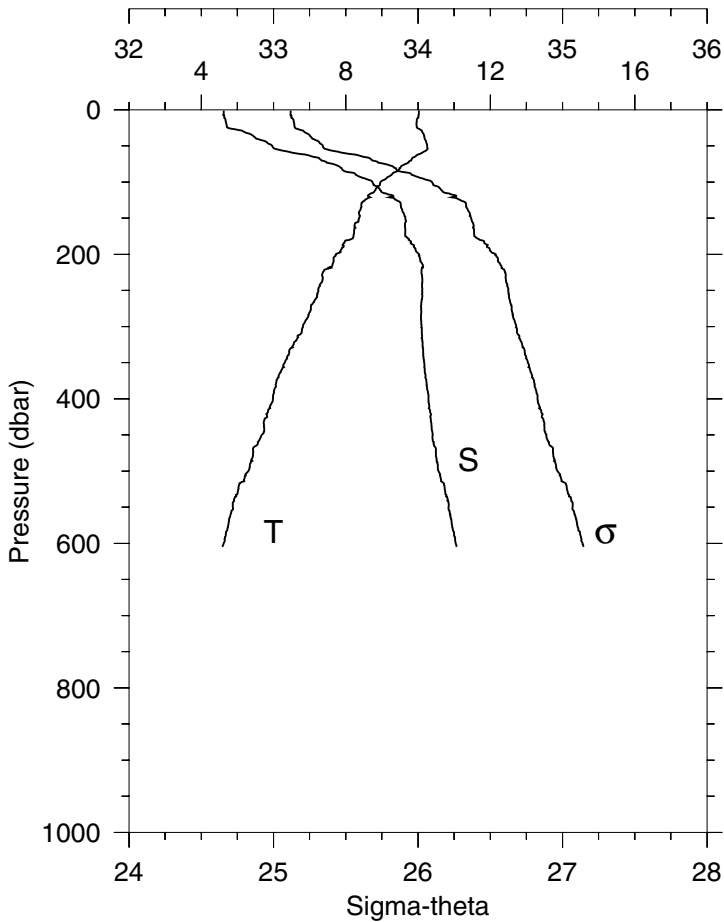
STA: 8 RR-3 LAT: 42 30.0 N LONG: 124 42.0 W
17 MAR 2001 0417 GMT DEPTH 131



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.07	32.713	10.07	25.154	0.056	0.56	88.5
10	10.00	32.709	10.00	25.164	0.280	0.64	88.2
20	9.99	32.719	9.99	25.174	0.559	0.69	88.6
30	10.00	32.742	9.99	25.191	0.837	0.62	89.2
40	9.97	32.848	9.97	25.277	1.111	0.40	90.1
50	9.57	33.182	9.56	25.605	1.361	0.20	89.4
60	9.29	33.447	9.28	25.857	1.585	0.18	89.2
70	9.11	33.605	9.10	26.010	1.789	0.16	89.3
80	9.02	33.639	9.01	26.051	1.988	0.16	89.2
90	8.93	33.678	8.92	26.096	2.182	0.16	89.1
100	8.84	33.715	8.83	26.139	2.372	0.15	89.0
110	8.82	33.726	8.81	26.151	2.560	0.16	89.1
120	8.80	33.737	8.79	26.162	2.748	0.15	89.1
127	8.67	33.781	8.65	26.218	2.877	0.16	89.4

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Station 9 RR-4 Temperature, Salinity



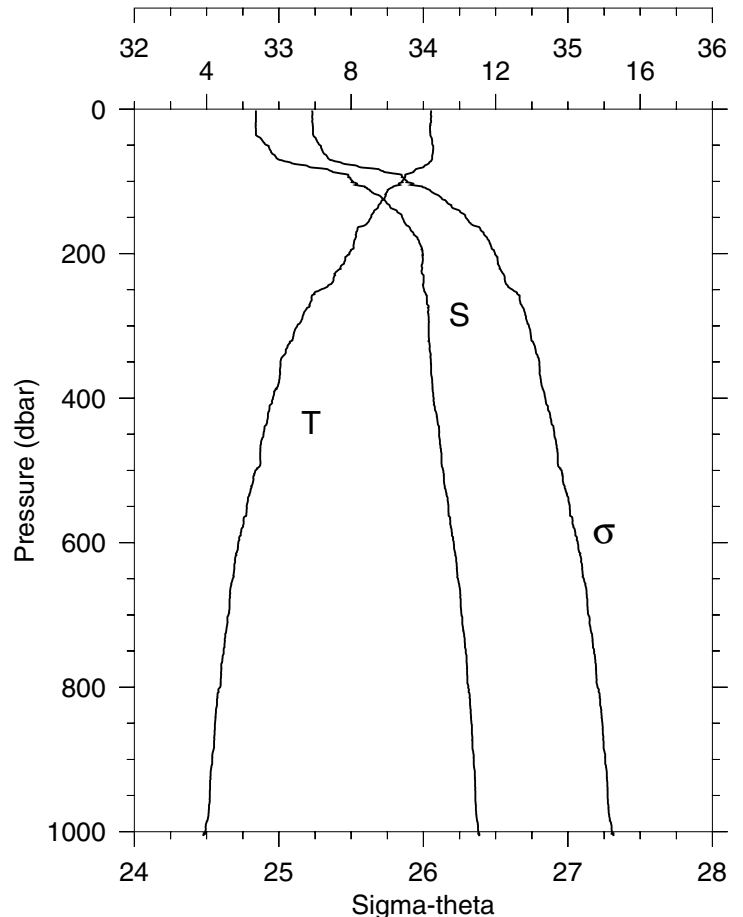
STA: 9 RR-4 LAT: 42 30.0 N LONG: 124 48.0 W
17 MAR 2001 0508 GMT DEPTH 592

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.02	32.655	10.02	25.118	0.028	0.64	87.6
10	10.01	32.658	10.01	25.123	0.284	1.25	86.8
20	9.96	32.674	9.96	25.144	0.566	1.35	85.6
30	10.11	32.792	10.11	25.210	0.845	1.00	88.4
40	10.19	32.881	10.18	25.268	1.118	0.65	88.8
50	10.25	32.990	10.25	25.341	1.384	0.42	90.0
60	10.10	33.143	10.09	25.487	1.642	0.26	90.4
70	9.81	33.333	9.80	25.684	1.880	0.20	90.0
80	9.51	33.463	9.50	25.834	2.103	0.18	89.7
90	9.27	33.571	9.26	25.958	2.315	0.16	89.5
100	8.96	33.684	8.95	26.096	2.514	0.16	89.3
110	8.83	33.734	8.81	26.157	2.704	0.15	89.2
120	8.62	33.828	8.61	26.262	2.887	0.15	89.6
130	8.44	33.880	8.42	26.331	3.061	0.16	89.6
140	8.39	33.892	8.37	26.348	3.231	0.15	89.6
150	8.36	33.912	8.35	26.367	3.399	0.15	89.8
175	8.22	33.912	8.20	26.390	3.815	0.15	89.2
200	7.72	34.007	7.70	26.538	4.212	0.15	91.0
225	7.37	34.024	7.35	26.602	4.585	0.15	91.0
250	7.24	34.028	7.22	26.624	4.949	0.15	90.8
275	7.03	34.022	7.01	26.648	5.308	0.15	90.9
300	6.81	34.024	6.78	26.680	5.662	0.15	90.6
350	6.31	34.042	6.28	26.761	6.343	0.15	90.6
400	5.99	34.072	5.95	26.826	6.989	0.15	89.5
450	5.68	34.102	5.64	26.888	7.609	0.15	88.9
500	5.30	34.142	5.26	26.965	8.196	0.16	89.3
600	4.62	34.261	4.57	27.138	9.244	0.15	90.4
605	4.59	34.267	4.54	27.146	9.293	0.15	90.4

Station 10 RR-5 Temperature, Salinity

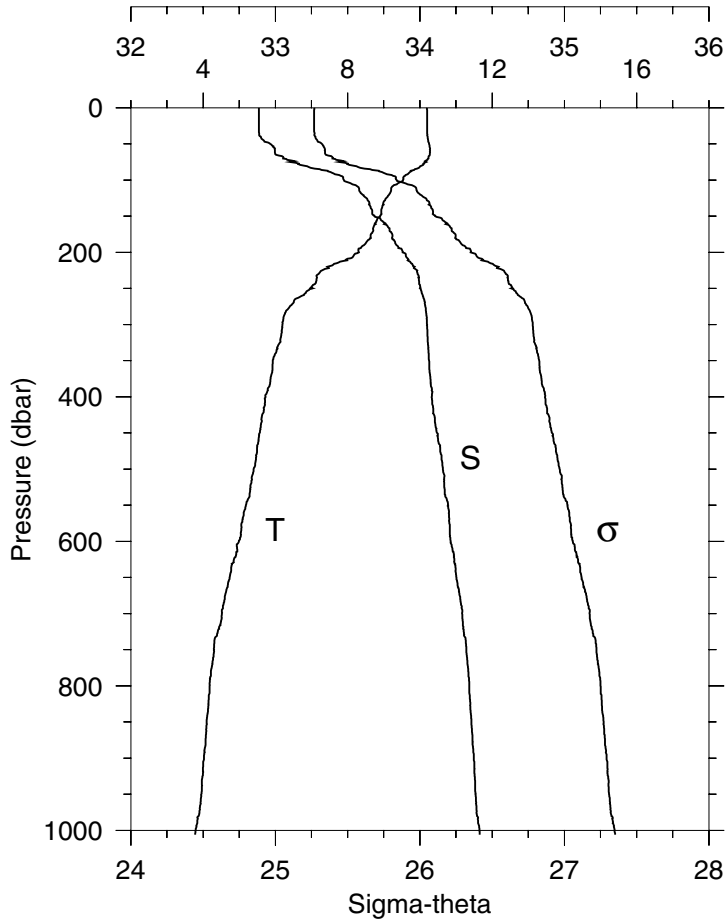
STA: 10 RR-5 LAT: 42 30.0 N LONG: 124 54.0 W
17 MAR 2001 0616 GMT DEPTH 1159

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.21	32.842	10.21	25.233	0.055	1.90	84.3
10	10.22	32.841	10.22	25.231	0.273	2.03	84.0
20	10.19	32.840	10.19	25.234	0.546	2.20	83.9
30	10.19	32.841	10.18	25.236	0.819	2.68	84.1
40	10.23	32.873	10.22	25.254	1.091	1.55	86.4
50	10.26	32.917	10.25	25.283	1.362	0.74	88.4
60	10.27	32.947	10.26	25.306	1.629	0.47	89.3
70	10.24	33.001	10.23	25.353	1.894	0.40	89.7
80	10.01	33.210	10.00	25.555	2.148	0.24	90.5
90	9.53	33.465	9.52	25.834	2.378	0.19	90.5
100	9.41	33.510	9.40	25.888	2.592	0.18	90.4
110	9.07	33.611	9.06	26.021	2.799	0.16	90.3
120	8.96	33.699	8.94	26.108	2.995	0.15	90.3
130	8.82	33.745	8.80	26.166	3.184	0.15	89.9
140	8.65	33.811	8.64	26.245	3.367	0.16	90.6
150	8.55	33.854	8.53	26.294	3.544	0.15	90.6
175	8.13	33.942	8.11	26.426	3.964	0.14	90.1
200	7.95	33.997	7.93	26.496	4.362	0.15	90.9
225	7.58	33.987	7.56	26.543	4.748	0.15	90.4
250	7.16	34.005	7.13	26.617	5.121	0.14	90.3
275	6.78	34.032	6.76	26.689	5.474	0.15	91.3
300	6.51	34.037	6.48	26.730	5.816	0.15	91.4
350	6.04	34.052	6.01	26.802	6.475	0.15	91.4
400	5.84	34.071	5.80	26.843	7.111	0.14	90.8
450	5.57	34.109	5.53	26.906	7.721	0.15	90.7
500	5.35	34.139	5.31	26.957	8.311	0.15	90.9
600	4.88	34.210	4.83	27.068	9.414	0.15	90.7
800	4.38	34.310	4.32	27.204	11.388	0.15	90.8
1000	3.96	34.379	3.89	27.304	13.172	0.15	90.0
1006	3.91	34.389	3.83	27.318	13.223	0.15	90.0



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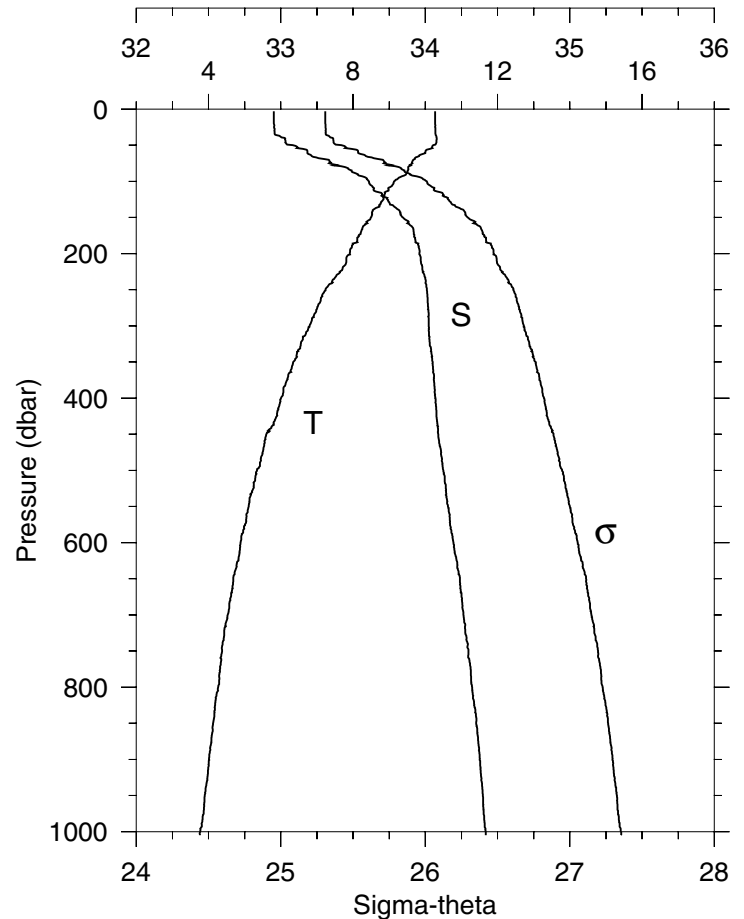
Station 11 RR-6 Temperature, Salinity



STA: 11 RR-6 LAT: 42 30.0 N LONG: 125 0.1 W
17 MAR 2001 0734 GMT DEPTH 1766

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
0	10.20	32.885	10.20	25.268	0.000	0.89	86.3
10	10.20	32.885	10.20	25.268	0.269	0.95	87.4
20	10.20	32.885	10.20	25.268	0.539	1.02	87.4
30	10.20	32.885	10.20	25.268	0.809	1.01	87.4
40	10.21	32.898	10.21	25.276	1.079	0.84	88.5
50	10.26	32.964	10.25	25.321	1.346	0.46	89.6
60	10.28	32.997	10.27	25.343	1.610	0.49	89.9
70	10.23	33.054	10.23	25.395	1.872	0.33	90.4
80	10.04	33.199	10.03	25.540	2.124	0.27	90.6
90	9.70	33.393	9.69	25.750	2.359	0.19	90.7
100	9.53	33.474	9.52	25.840	2.578	0.18	90.7
110	9.22	33.576	9.20	25.971	2.789	0.17	90.5
120	9.15	33.601	9.14	26.001	2.993	0.16	90.4
130	8.99	33.648	8.98	26.063	3.192	0.16	90.5
140	8.94	33.665	8.93	26.085	3.387	0.16	90.5
150	8.90	33.684	8.89	26.106	3.581	0.16	90.6
175	8.64	33.809	8.62	26.245	4.043	0.15	90.1
200	8.31	33.881	8.29	26.351	4.482	0.15	89.8
225	7.28	33.981	7.26	26.580	4.880	0.15	89.9
250	7.03	34.000	7.00	26.631	5.244	0.15	90.0
275	6.40	34.038	6.37	26.745	5.588	0.15	90.3
300	6.20	34.050	6.17	26.780	5.915	0.15	90.5
350	5.93	34.063	5.90	26.825	6.557	0.14	90.9
400	5.73	34.082	5.69	26.865	7.181	0.15	91.3
450	5.57	34.118	5.53	26.914	7.786	0.15	91.4
500	5.40	34.159	5.36	26.967	8.367	0.15	91.3
600	4.99	34.213	4.94	27.058	9.468	0.15	91.3
800	4.18	34.342	4.12	27.250	11.392	0.14	90.7
1000	3.79	34.413	3.72	27.348	13.105	0.14	90.7
1006	3.78	34.414	3.71	27.350	13.154	0.15	90.7

Station 12 RR-7 Temperature, Salinity

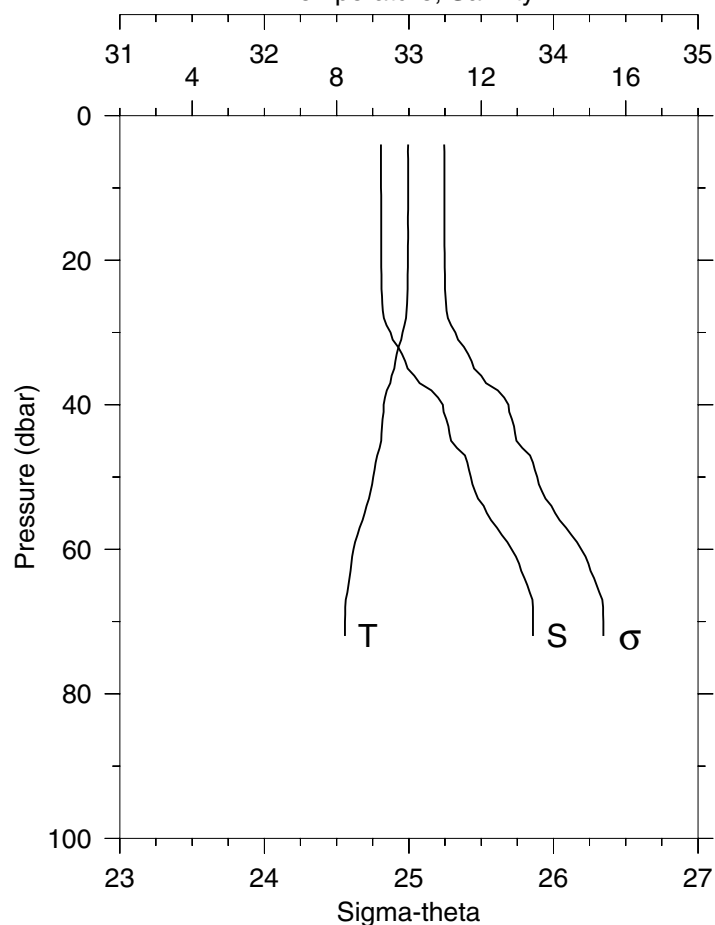


STA: 12 RR-7 LAT: 42 30.0 N LONG: 125 12.1 W
17 MAR 2001 0921 GMT DEPTH 2972

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	10.27	32.951	10.27	25.308	0.080	0.85	87.7
10	10.27	32.951	10.27	25.308	0.266	0.86	87.6
20	10.27	32.952	10.27	25.308	0.531	0.88	87.7
30	10.28	32.956	10.28	25.310	0.797	0.95	87.8
40	10.32	33.027	10.31	25.359	1.062	0.59	89.9
50	10.22	33.083	10.22	25.419	1.323	0.39	90.5
60	10.00	33.184	10.00	25.535	1.572	0.19	90.4
70	9.67	33.332	9.66	25.706	1.811	0.18	90.4
80	9.52	33.442	9.52	25.816	2.038	0.17	90.8
90	9.47	33.533	9.46	25.897	2.253	0.16	90.8
100	9.14	33.611	9.13	26.010	2.458	0.15	90.9
110	8.98	33.645	8.97	26.063	2.657	0.15	90.7
120	8.87	33.698	8.86	26.121	2.850	0.14	90.8
130	8.77	33.752	8.76	26.179	3.037	0.15	90.8
140	8.55	33.819	8.53	26.266	3.219	0.15	91.1
150	8.50	33.844	8.48	26.294	3.395	0.15	91.1
175	8.15	33.925	8.13	26.410	3.815	0.14	91.0
200	7.91	33.960	7.89	26.474	4.217	0.14	91.2
225	7.63	33.987	7.61	26.535	4.606	0.15	91.2
250	7.24	34.010	7.22	26.609	4.979	0.15	91.2
275	7.01	34.021	6.98	26.650	5.339	0.15	91.2
300	6.80	34.024	6.77	26.682	5.692	0.15	91.3
350	6.34	34.051	6.31	26.763	6.372	0.15	91.3
400	6.01	34.069	5.97	26.820	7.021	0.15	91.3
450	5.60	34.090	5.56	26.887	7.646	0.14	91.3
500	5.34	34.125	5.30	26.947	8.240	0.15	91.3
600	4.88	34.195	4.84	27.056	9.353	0.15	91.4
800	4.26	34.324	4.20	27.227	11.314	0.15	91.3
1000	3.77	34.418	3.69	27.354	13.023	0.15	91.1
1005	3.76	34.418	3.69	27.355	13.063	0.15	91.1

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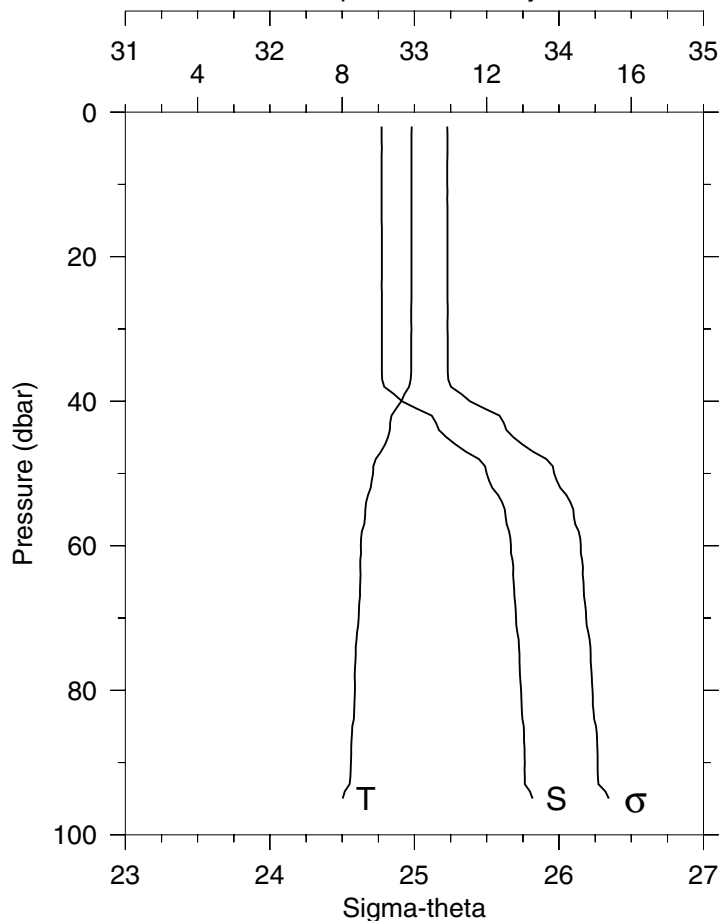
Station 13 RRM3 Temperature, Salinity



STA: 13 RRM-3 LAT: 42 26.4 N LONG: 124 34.8 W
17 MAR 2001 1809 GMT DEPTH 76

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
4	9.98	32.807	9.98	25.244	0.109	0.67	88.3
10	9.98	32.807	9.97	25.245	0.272	0.65	88.3
20	9.97	32.809	9.97	25.247	0.543	0.69	88.4
30	9.82	32.872	9.82	25.321	0.814	1.00	87.8
40	9.30	33.234	9.30	25.689	1.063	0.76	85.2
50	9.01	33.429	9.01	25.887	1.285	0.25	86.4
60	8.46	33.711	8.46	26.193	1.484	0.21	84.9
70	8.23	33.859	8.22	26.346	1.657	0.21	79.3
72	8.23	33.859	8.22	26.345	1.691	0.20	78.1

Station 14 CBOS Temperature, Salinity

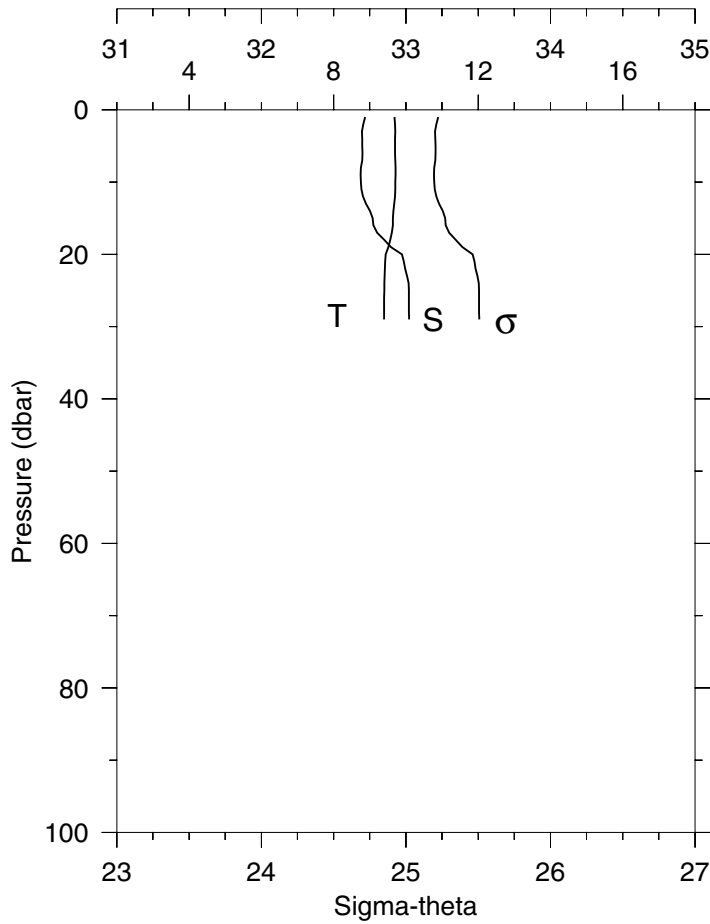


STA: 14 CBOS LAT: 43 9.4 N LONG: 124 34.2 W
17 MAR 2001 2300 GMT DEPTH 100

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.92	32.773	9.92	25.227	0.055	1.90	85.5
10	9.92	32.773	9.92	25.227	0.273	2.13	85.8
20	9.92	32.774	9.91	25.229	0.547	2.01	85.8
30	9.91	32.774	9.91	25.229	0.820	2.78	85.8
40	9.64	32.913	9.63	25.384	1.092	1.49	86.0
50	8.85	33.499	8.85	25.966	1.320	0.36	82.6
60	8.52	33.667	8.51	26.151	1.513	0.23	74.0
70	8.45	33.702	8.45	26.188	1.698	0.25	68.8
80	8.35	33.738	8.34	26.232	1.878	0.29	70.0
90	8.24	33.763	8.23	26.268	2.056	0.28	71.0
95	8.01	33.817	8.00	26.345	2.143	0.25	76.3

W0103A

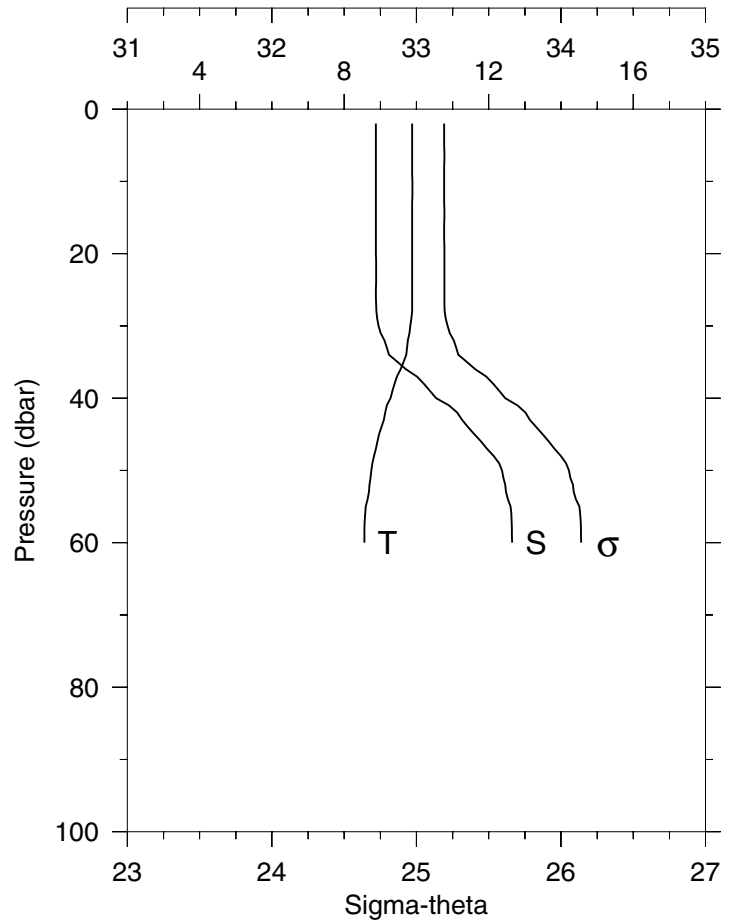
Station 15 FM-1
Temperature, Salinity



STA: 15 FM-1 LAT: 43 13.2 N LONG: 124 26.0 W
18 MAR 2001 0020 GMT DEPTH 34

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.68	32.718	9.68	25.223	0.027	2.82	77.9
10	9.71	32.689	9.71	25.196	0.275	2.72	78.0
20	9.44	32.973	9.44	25.462	0.544	1.77	76.0
29	9.40	33.022	9.39	25.507	0.767	1.92	70.6

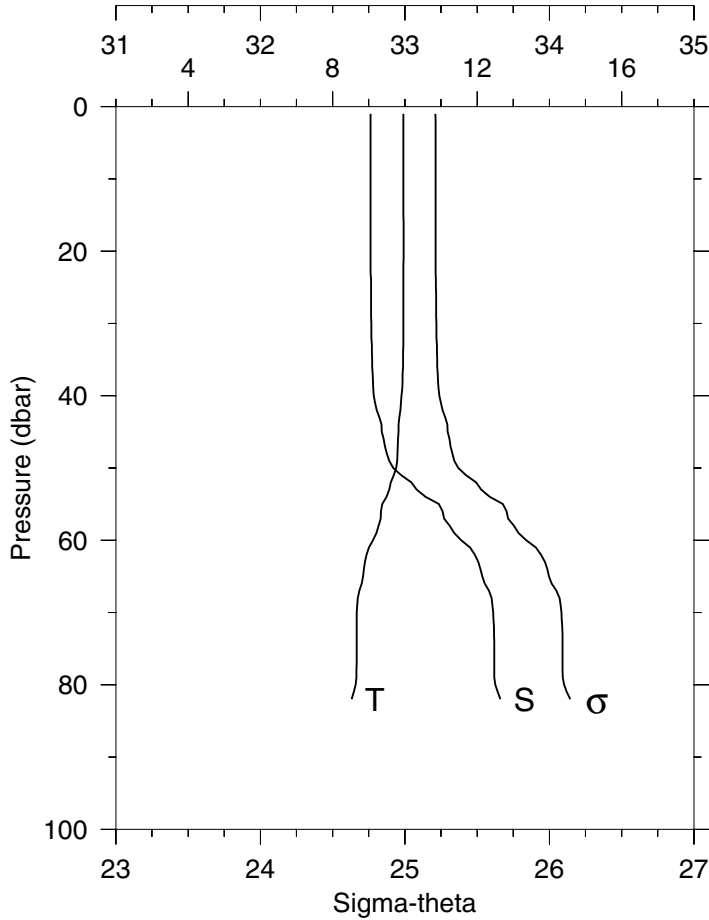
Station 16 FM-3
Temperature, Salinity



STA: 16 FM-3 LAT: 43 13.1 N LONG: 124 29.8 W
18 MAR 2001 0057 GMT DEPTH 66

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.88	32.720	9.88	25.192	0.055	1.53	88.1
10	9.89	32.720	9.88	25.192	0.277	0.96	88.0
20	9.88	32.720	9.88	25.193	0.553	1.35	88.2
30	9.83	32.738	9.83	25.215	0.830	1.11	87.6
40	9.29	33.136	9.28	25.614	1.089	0.93	81.1
50	8.75	33.592	8.75	26.055	1.302	0.27	81.5
60	8.56	33.662	8.55	26.140	1.493	0.30	76.8

W0103A

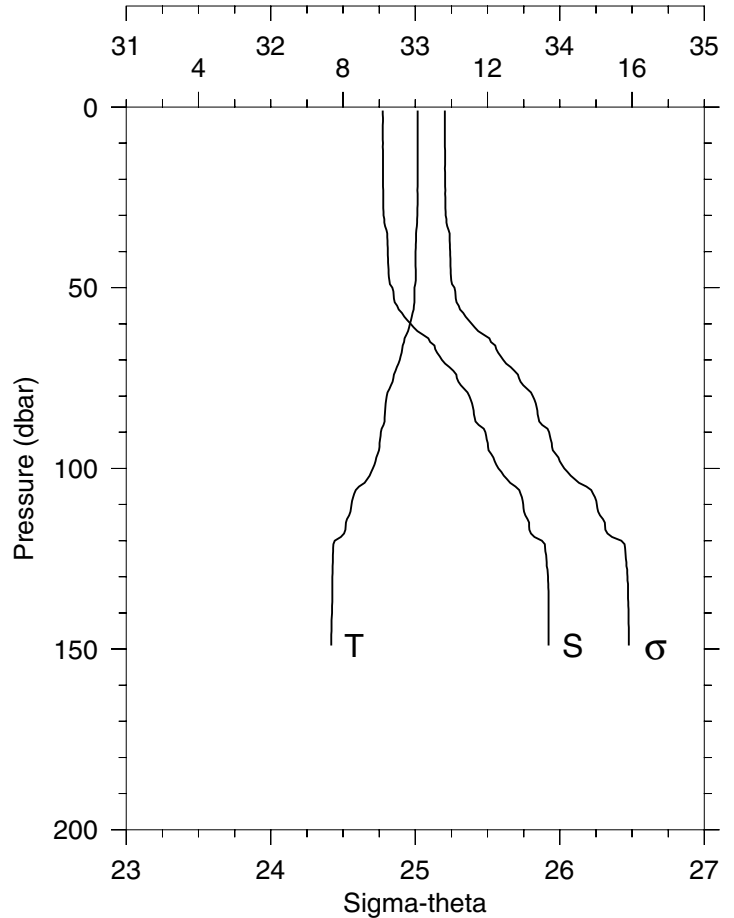
Station 17 FM-4
Temperature, Salinity

STA: 17 FM-4 LAT: 43 13.1 N LONG: 124 35.0 W
18 MAR 2001 0140 GMT DEPTH 87

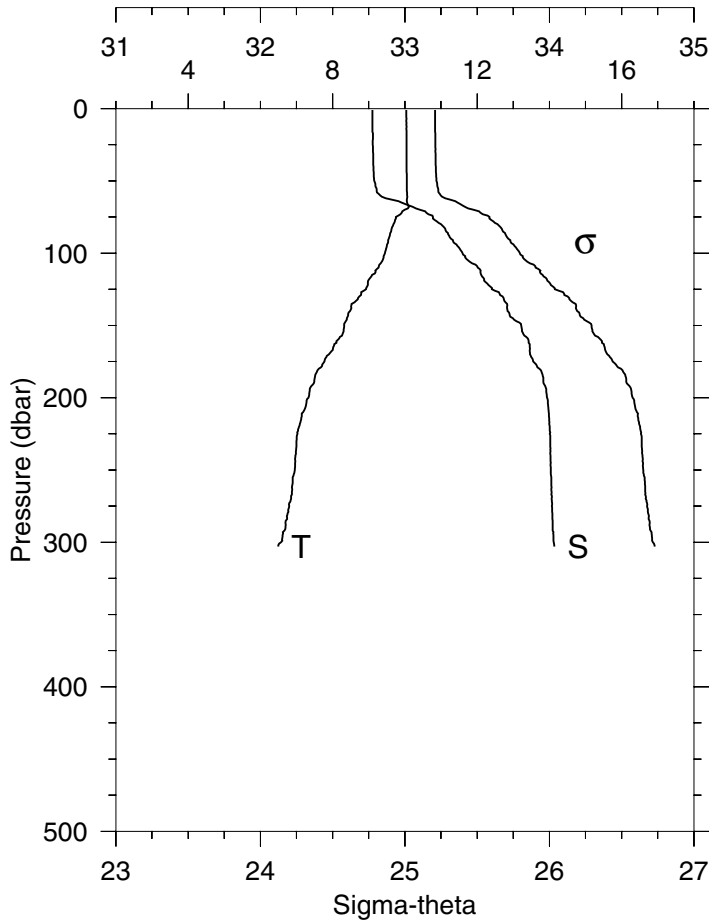
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.96	32.762	9.96	25.211	0.027	3.41	85.6
10	9.96	32.762	9.96	25.212	0.275	1.77	85.4
20	9.96	32.762	9.96	25.212	0.550	2.47	85.7
30	9.96	32.767	9.95	25.217	0.824	2.28	86.0
40	9.91	32.784	9.90	25.239	1.099	1.93	86.2
50	9.76	32.919	9.75	25.369	1.366	1.10	87.8
60	9.12	33.389	9.11	25.839	1.602	0.30	88.5
70	8.67	33.611	8.66	26.084	1.803	0.23	86.3
80	8.63	33.626	8.62	26.101	1.996	0.21	85.3
82	8.53	33.661	8.52	26.145	2.034	0.21	85.3

STA: 18 FM-5 LAT: 43 13.1 N LONG: 124 40.0 W
18 MAR 2001 0222 GMT DEPTH 155

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.06	32.775	10.06	25.205	0.028	0.69	88.5
10	10.06	32.776	10.06	25.205	0.275	0.75	88.3
20	10.07	32.776	10.06	25.206	0.551	0.68	88.3
30	10.06	32.781	10.05	25.211	0.826	0.83	88.1
40	10.01	32.809	10.01	25.241	1.100	0.69	88.7
50	9.98	32.841	9.98	25.271	1.372	0.68	89.0
60	9.85	32.968	9.85	25.391	1.638	0.41	90.1
70	9.57	33.185	9.56	25.608	1.886	0.20	90.5
80	9.21	33.374	9.20	25.813	2.114	0.20	90.0
90	9.05	33.485	9.04	25.926	2.329	0.18	89.9
100	8.83	33.576	8.82	26.032	2.534	0.17	88.2
110	8.24	33.747	8.23	26.256	2.720	0.20	84.7
120	7.77	33.876	7.76	26.426	2.892	0.21	83.5
130	7.71	33.918	7.69	26.469	3.051	0.20	83.3
140	7.69	33.923	7.68	26.475	3.208	0.19	81.8
149	7.67	33.923	7.66	26.478	3.349	0.23	80.6

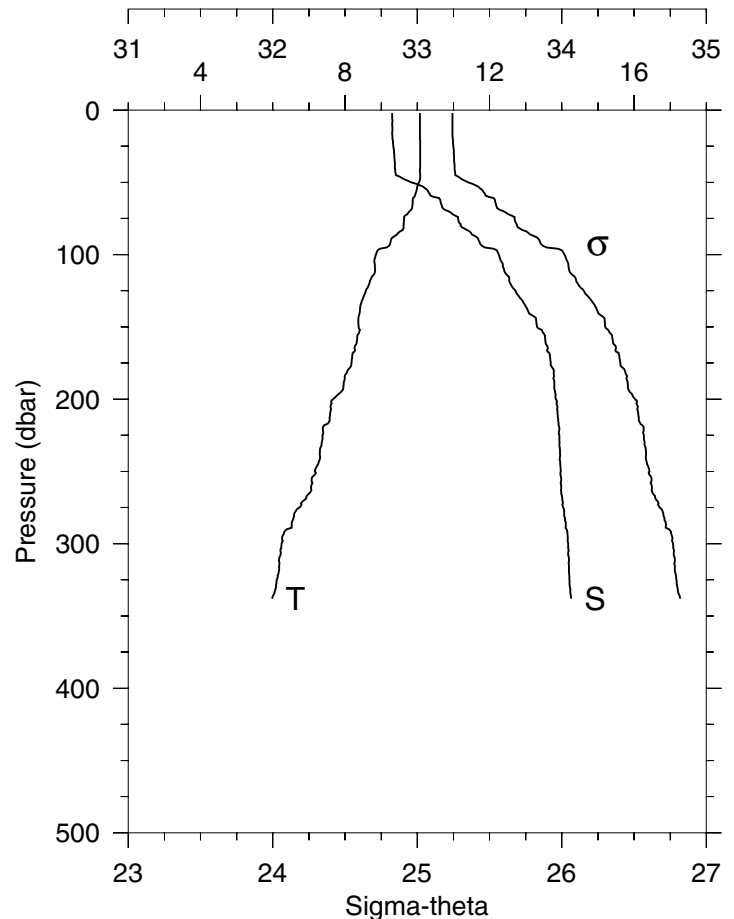
Station 18 FM-5
Temperature, Salinity

W0103A

Station 19 FM-6
Temperature, Salinity

STA: 19 FM-6 LAT: 43 13.1 N LONG: 124 45.0 W
18 MAR 2001 0445 GMT DEPTH 309

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.04	32.776	10.04	25.209	0.027	1.64	87.8
10	10.04	32.776	10.04	25.209	0.275	1.00	87.8
20	10.04	32.778	10.04	25.211	0.550	1.07	87.6
30	10.04	32.778	10.04	25.211	0.825	1.13	87.7
40	10.05	32.782	10.04	25.214	1.101	1.33	87.6
50	10.05	32.788	10.05	25.218	1.376	1.10	87.7
60	10.06	32.829	10.06	25.248	1.650	0.73	88.7
70	9.99	33.104	9.99	25.474	1.912	0.26	90.2
80	9.69	33.250	9.68	25.640	2.154	0.19	90.0
90	9.55	33.320	9.54	25.716	2.386	0.18	90.0
100	9.44	33.398	9.43	25.795	2.611	0.17	89.8
110	9.27	33.503	9.26	25.905	2.827	0.17	89.7
120	8.97	33.558	8.96	25.996	3.034	0.16	90.3
130	8.74	33.676	8.72	26.125	3.231	0.15	90.4
140	8.48	33.710	8.46	26.192	3.417	0.15	90.8
150	8.32	33.805	8.30	26.291	3.597	0.17	89.8
175	7.77	33.888	7.76	26.437	4.018	0.17	86.0
200	7.33	33.983	7.31	26.575	4.400	0.15	89.8
225	7.02	34.003	7.00	26.634	4.763	0.16	90.0
250	6.95	34.010	6.93	26.649	5.119	0.16	89.8
275	6.80	34.017	6.77	26.676	5.471	0.16	90.0
300	6.57	34.030	6.55	26.716	5.817	0.16	87.8
303	6.49	34.033	6.47	26.729	5.857	0.16	87.0

Station 20 FM-7
Temperature, Salinity

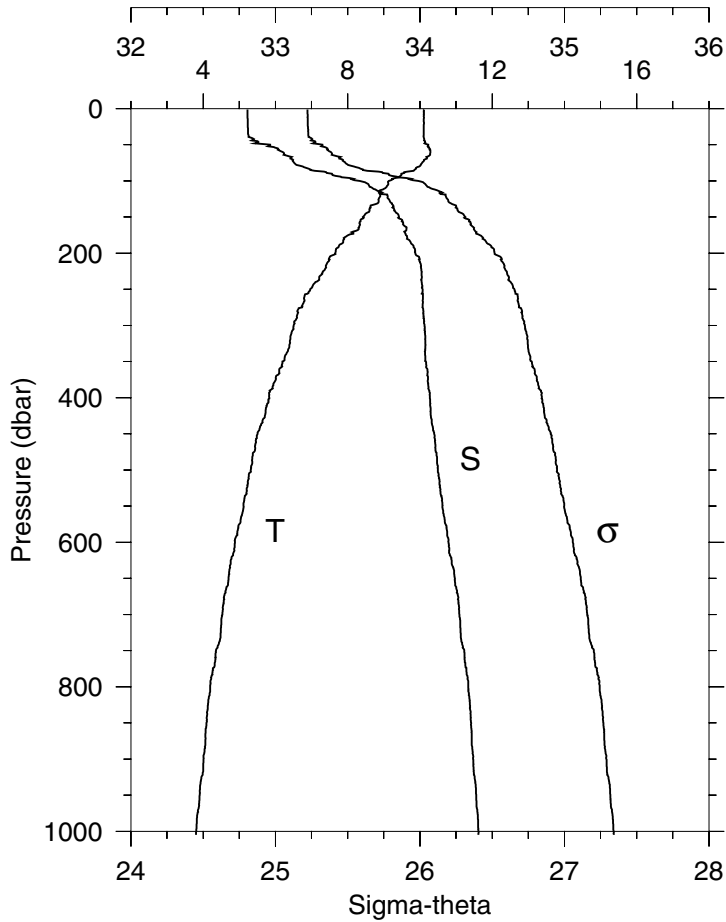
STA: 20 FM-7 LAT: 43 13.1 N LONG: 124 50.0 W
18 MAR 2001 0536 GMT DEPTH 343

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.07	32.826	10.07	25.243	0.054	0.89	87.7
10	10.07	32.827	10.07	25.244	0.272	0.94	87.7
20	10.08	32.829	10.07	25.245	0.544	0.99	87.7
30	10.08	32.840	10.08	25.253	0.815	1.00	88.0
40	10.08	32.845	10.07	25.258	1.086	0.93	88.2
50	10.05	32.960	10.04	25.353	1.355	0.44	90.0
60	9.92	33.111	9.91	25.492	1.609	0.23	90.5
70	9.79	33.216	9.78	25.596	1.854	0.21	90.6
80	9.62	33.301	9.61	25.690	2.087	0.19	90.6
90	9.27	33.425	9.26	25.844	2.311	0.17	90.5
100	8.86	33.564	8.85	26.018	2.519	0.16	90.6
110	8.83	33.599	8.82	26.050	2.717	0.15	90.5
120	8.67	33.643	8.66	26.110	2.912	0.15	90.8
130	8.50	33.711	8.49	26.189	3.099	0.16	91.0
140	8.40	33.771	8.39	26.250	3.280	0.15	91.0
150	8.38	33.829	8.36	26.300	3.455	0.15	90.9
175	8.18	33.924	8.16	26.406	3.876	0.15	90.7
200	7.67	33.959	7.65	26.508	4.276	0.15	90.7
225	7.37	33.983	7.35	26.569	4.656	0.15	90.6
250	7.17	33.992	7.14	26.606	5.027	0.15	90.2
275	6.74	34.009	6.71	26.677	5.386	0.15	90.2
300	6.24	34.044	6.22	26.770	5.723	0.15	90.4
338	5.99	34.064	5.96	26.819	6.214	0.15	89.4

W0103A

Station 21 FM-8 Temperature, Salinity

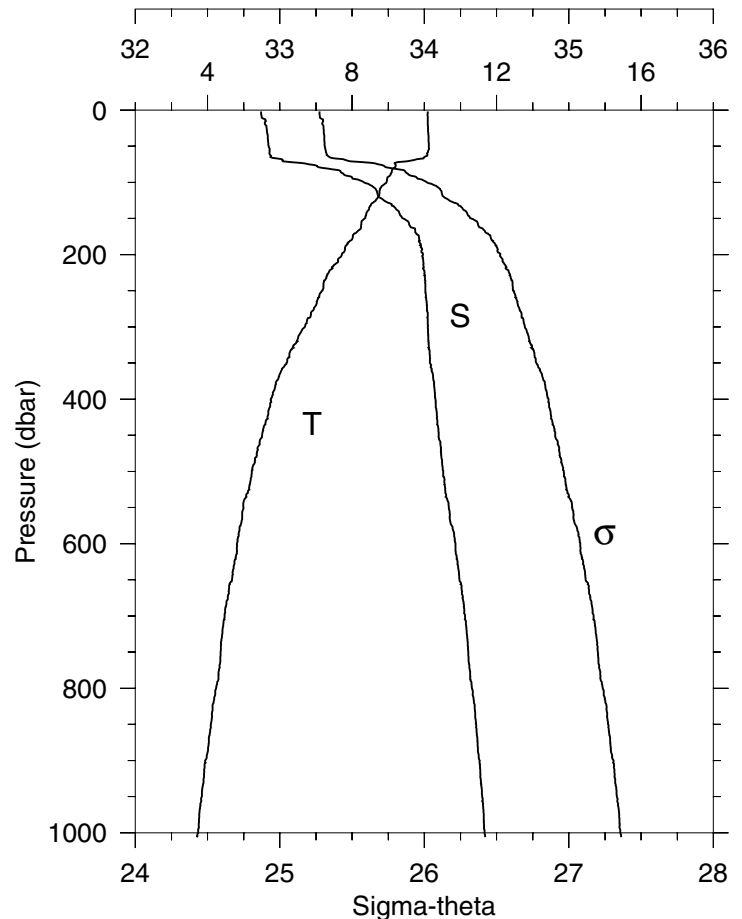
STA: 21 FM-8 LAT: 43 13.1 N LONG: 125 0.1 W
18 MAR 2001 0646 GMT DEPTH 1086



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.11	32.806	10.11	25.221	0.027	1.00	87.4
10	10.11	32.807	10.11	25.223	0.274	1.47	87.4
20	10.11	32.808	10.10	25.223	0.548	1.51	87.4
30	10.10	32.810	10.10	25.227	0.821	1.85	87.4
40	10.11	32.827	10.10	25.239	1.095	0.85	87.9
50	10.23	32.963	10.22	25.325	1.366	0.63	89.8
60	10.29	33.049	10.28	25.382	1.628	0.31	90.5
70	10.14	33.118	10.13	25.461	1.885	0.25	90.5
80	9.98	33.190	9.97	25.544	2.135	0.21	90.4
90	9.48	33.391	9.47	25.783	2.370	0.18	90.2
100	9.14	33.584	9.12	25.990	2.584	0.16	90.3
110	9.04	33.671	9.03	26.073	2.783	0.15	90.3
120	8.90	33.775	8.89	26.177	2.972	0.14	90.2
130	8.85	33.797	8.84	26.203	3.156	0.15	90.3
140	8.60	33.823	8.59	26.261	3.336	0.15	90.7
150	8.42	33.854	8.41	26.313	3.511	0.14	90.5
175	8.02	33.903	8.00	26.413	3.932	0.15	91.2
200	7.66	33.969	7.64	26.517	4.327	0.15	91.2
225	7.31	34.012	7.29	26.600	4.700	0.15	91.2
250	6.96	34.018	6.94	26.654	5.061	0.15	91.2
275	6.74	34.017	6.71	26.684	5.410	0.15	91.2
300	6.51	34.031	6.48	26.725	5.752	0.15	91.3
350	6.20	34.041	6.16	26.774	6.420	0.15	91.2
400	5.83	34.069	5.80	26.843	7.059	0.15	91.3
450	5.51	34.098	5.47	26.905	7.673	0.15	91.2
500	5.32	34.124	5.28	26.949	8.260	0.15	91.1
600	4.88	34.197	4.83	27.058	9.372	0.15	91.3
800	4.20	34.335	4.14	27.243	11.322	0.15	90.9
1000	3.81	34.404	3.73	27.339	13.034	0.15	90.7
1005	3.80	34.405	3.73	27.341	13.075	0.15	90.6

Station 22 FM-9 Temperature, Salinity

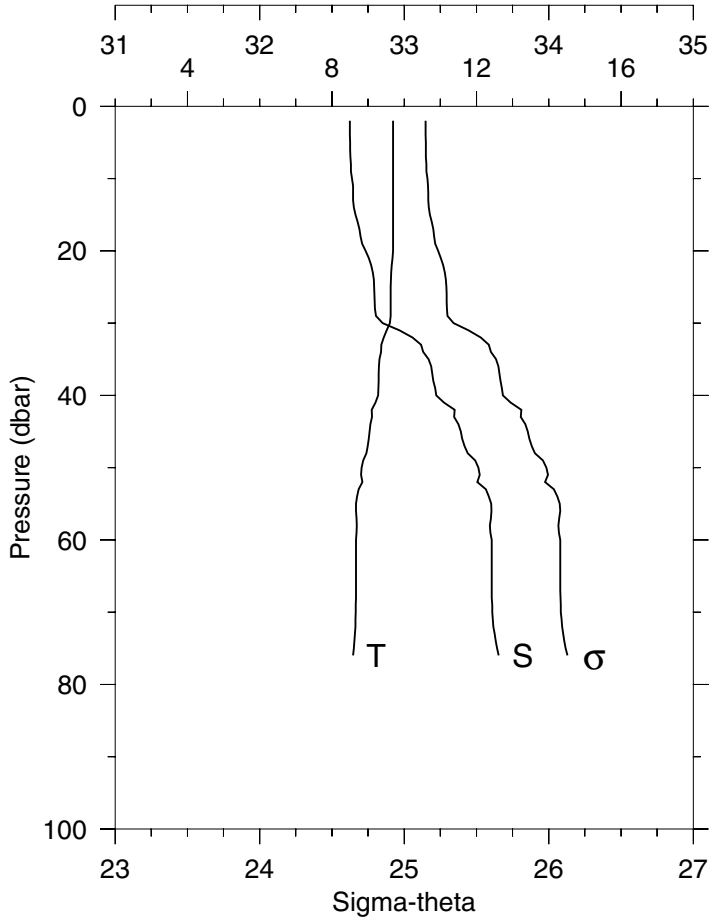
STA: 22 FM-9 LAT: 43 13.1 N LONG: 125 9.9 W
18 MAR 2001 0823 GMT DEPTH 1699



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.09	32.871	10.09	25.275	0.054	0.53	89.6
10	10.09	32.874	10.09	25.277	0.269	0.55	89.7
20	10.10	32.898	10.10	25.295	0.536	0.49	90.0
30	10.11	32.911	10.10	25.305	0.802	0.57	89.9
40	10.12	32.917	10.11	25.308	1.069	0.58	90.1
50	10.12	32.923	10.12	25.311	1.335	0.51	90.0
60	10.08	32.928	10.07	25.323	1.601	0.47	90.1
70	9.60	33.018	9.59	25.472	1.862	0.38	90.4
80	9.16	33.299	9.15	25.763	2.096	0.19	90.8
90	9.06	33.450	9.05	25.898	2.311	0.17	90.8
100	8.95	33.582	8.94	26.018	2.516	0.15	90.9
110	8.77	33.665	8.76	26.111	2.711	0.15	91.0
120	8.73	33.685	8.71	26.134	2.901	0.15	90.9
130	8.53	33.772	8.52	26.232	3.086	0.14	91.0
140	8.43	33.823	8.41	26.288	3.264	0.15	91.0
150	8.35	33.852	8.34	26.323	3.438	0.14	91.1
175	8.02	33.962	8.00	26.458	3.850	0.15	91.1
200	7.72	33.991	7.70	26.526	4.241	0.14	91.1
225	7.35	34.001	7.33	26.586	4.618	0.15	91.2
250	7.18	34.007	7.16	26.615	4.984	0.15	91.2
275	6.94	34.019	6.92	26.658	5.342	0.15	91.3
300	6.69	34.024	6.66	26.696	5.691	0.15	91.3
350	6.19	34.039	6.16	26.774	6.362	0.15	91.2
400	5.75	34.077	5.72	26.859	6.995	0.15	91.3
450	5.51	34.099	5.47	26.906	7.603	0.15	91.2
500	5.22	34.131	5.18	26.965	8.186	0.15	91.3
600	4.81	34.215	4.77	27.080	9.279	0.15	91.1
800	4.24	34.330	4.18	27.235	11.215	0.15	91.2
1000	3.74	34.417	3.66	27.356	12.905	0.14	91.1
1006	3.70	34.422	3.62	27.364	12.953	0.14	91.1

W0103A

Station 23 NH10SF
Temperature, Salinity



STA: 23 NH10S LAT: 44 38.5 N LONG: 124 18.3 W
18 MAR 2001 1722 GMT DEPTH 80

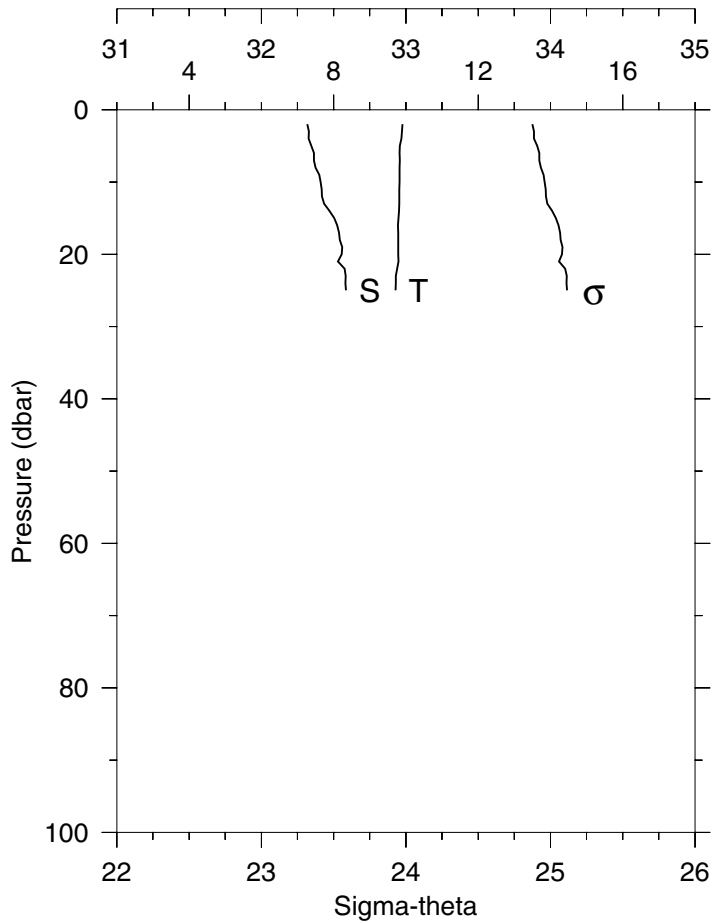
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.69	32.623	9.69	25.147	0.056	2.31	83.0
10	9.69	32.639	9.69	25.160	0.281	1.71	83.0
20	9.69	32.733	9.69	25.234	0.558	3.17	81.2
30	9.60	32.851	9.60	25.341	0.826	3.53	81.3
40	9.28	33.222	9.27	25.683	1.065	0.41	86.0
50	8.82	33.514	8.82	25.984	1.280	0.22	86.7
60	8.67	33.605	8.66	26.079	1.476	0.24	84.4
70	8.66	33.610	8.65	26.084	1.669	0.33	80.4
76	8.59	33.653	8.58	26.130	1.784	0.30	80.7

Station 1 NH-1

Temperature, Salinity

STA: 1 NH-1 LAT: 44 39.0 N LONG: 124 6.1 W
20 MAR 2001 1931 GMT DEPTH 29

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.91	32.318	9.91	24.875	0.061	1.29	73.0
10	9.82	32.409	9.82	24.959	0.304	2.71	75.5
20	9.79	32.556	9.78	25.080	0.596	2.51	78.8
25	9.71	32.585	9.71	25.115	0.739	2.79	70.7

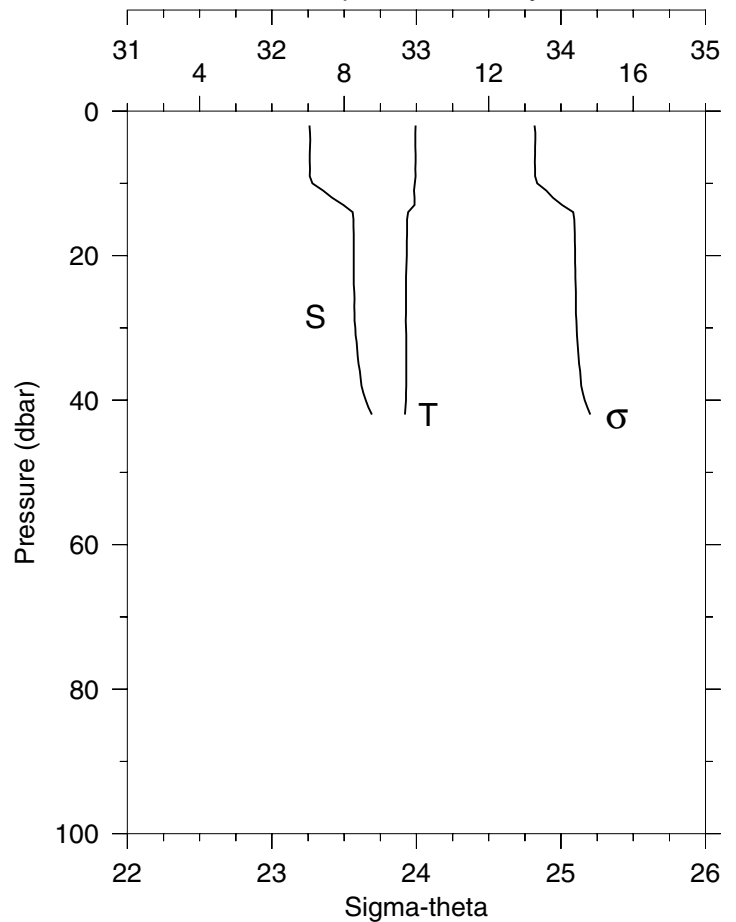


Station 2 NH-3

Temperature, Salinity

STA: 2 NH-3 LAT: 44 39.0 N LONG: 124 8.0 W
20 MAR 2001 2007 GMT DEPTH 47

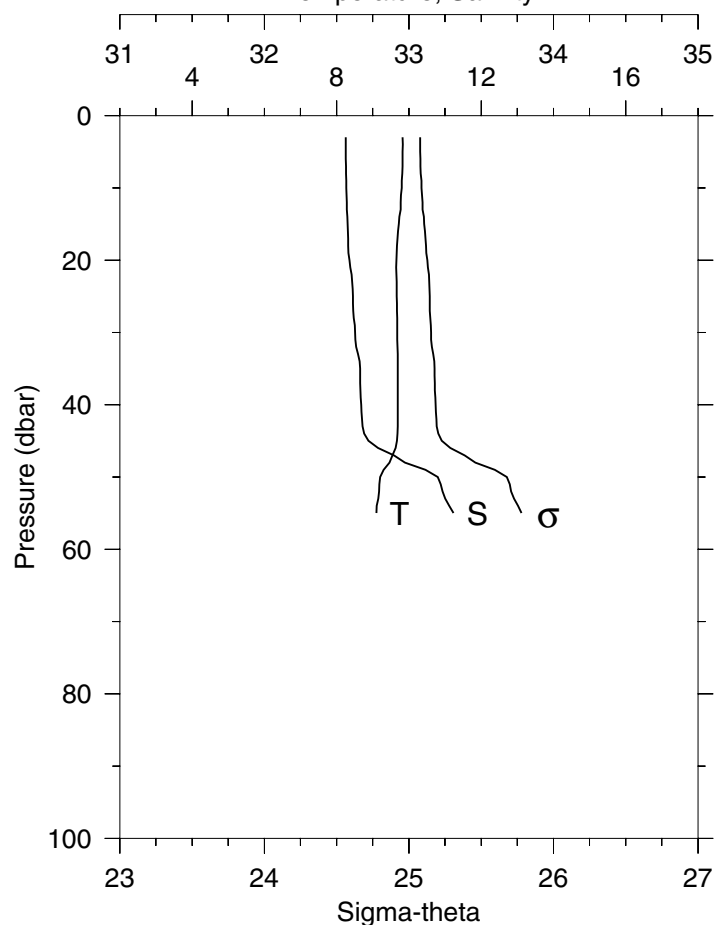
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.98	32.260	9.98	24.817	0.062	1.88	76.6
10	9.96	32.280	9.95	24.836	0.312	1.47	76.8
20	9.73	32.567	9.73	25.098	0.603	3.33	82.7
30	9.72	32.577	9.71	25.109	0.889	2.81	82.8
40	9.71	32.649	9.70	25.165	1.172	1.35	79.8
42	9.69	32.691	9.68	25.202	1.228	1.36	78.9



W0103B

Station 3 NH-5 Temperature, Salinity

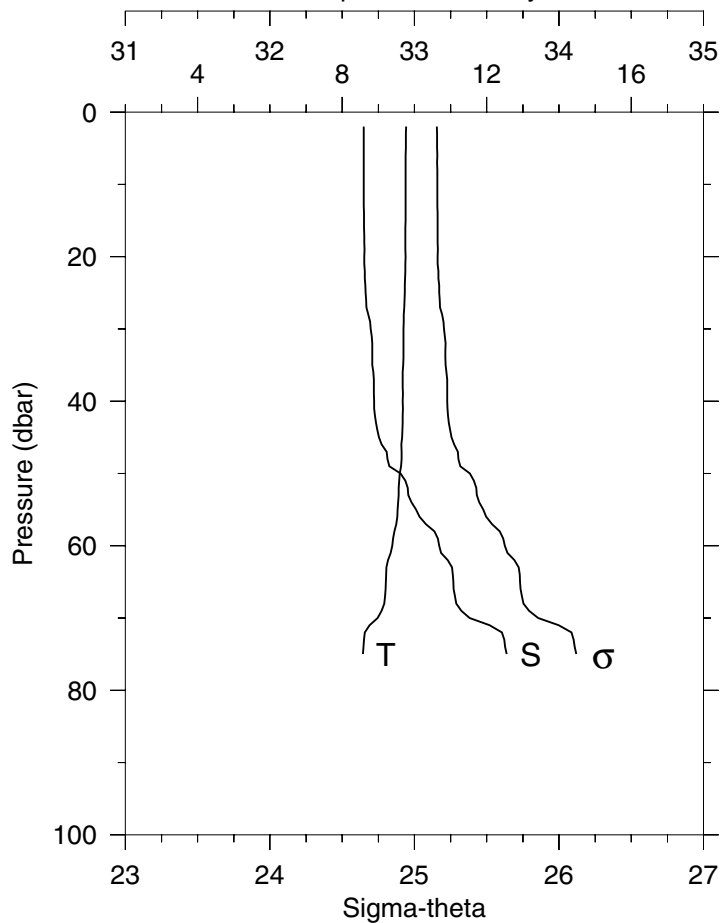
STA: 3 NH-5 LAT: 44 38.8 N LONG: 124 11.1 W
20 MAR 2001 2102 GMT DEPTH 60



P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	9.83	32.562	9.83	25.078	0.086	1.39	82.2
10	9.80	32.567	9.80	25.087	0.287	2.17	82.4
20	9.65	32.588	9.65	25.127	0.572	1.58	84.2
30	9.68	32.627	9.68	25.153	0.854	1.29	86.2
40	9.69	32.669	9.69	25.184	1.133	1.79	84.1
50	9.20	33.199	9.20	25.677	1.399	0.46	78.8
55	9.10	33.308	9.09	25.779	1.512	0.59	70.0

Station 4 NH-10 Temperature, Salinity

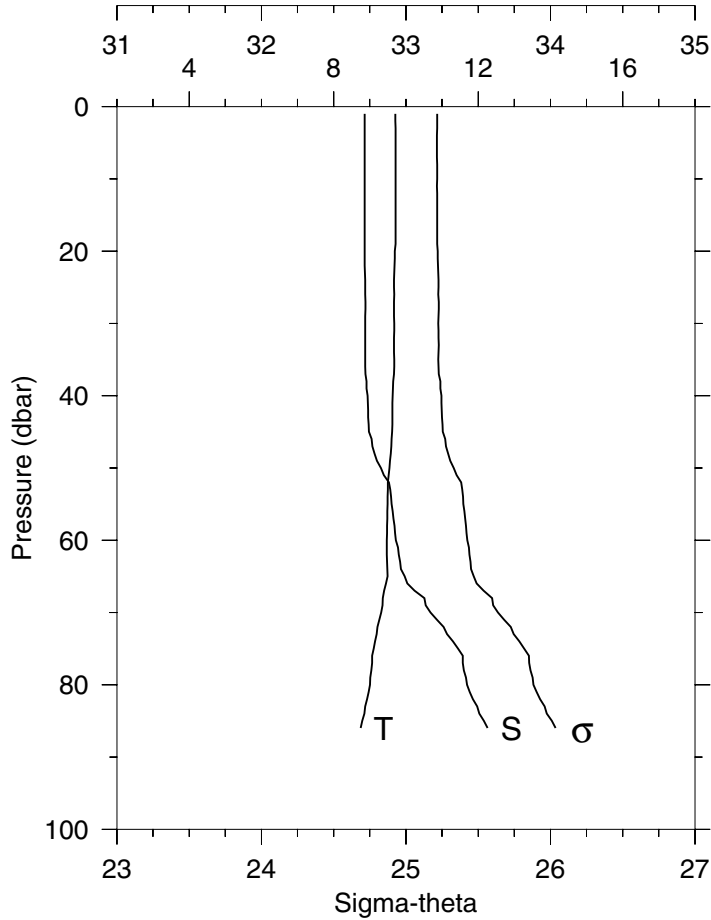
STA: 4 NH-10 LAT: 44 39.1 N LONG: 124 18.0 W
20 MAR 2001 2248 GMT DEPTH 80



P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	9.77	32.649	9.77	25.155	0.056	2.26	84.7
10	9.75	32.649	9.75	25.158	0.280	1.59	84.8
20	9.75	32.653	9.75	25.161	0.560	1.78	85.1
30	9.70	32.697	9.70	25.204	0.838	1.08	86.5
40	9.68	32.722	9.67	25.227	1.113	0.77	86.3
50	9.59	32.903	9.59	25.383	1.383	0.68	87.8
60	9.39	33.171	9.38	25.626	1.632	0.19	89.1
70	8.98	33.382	8.97	25.856	1.859	0.20	87.0
75	8.58	33.639	8.57	26.120	1.956	0.19	84.9

W0103B

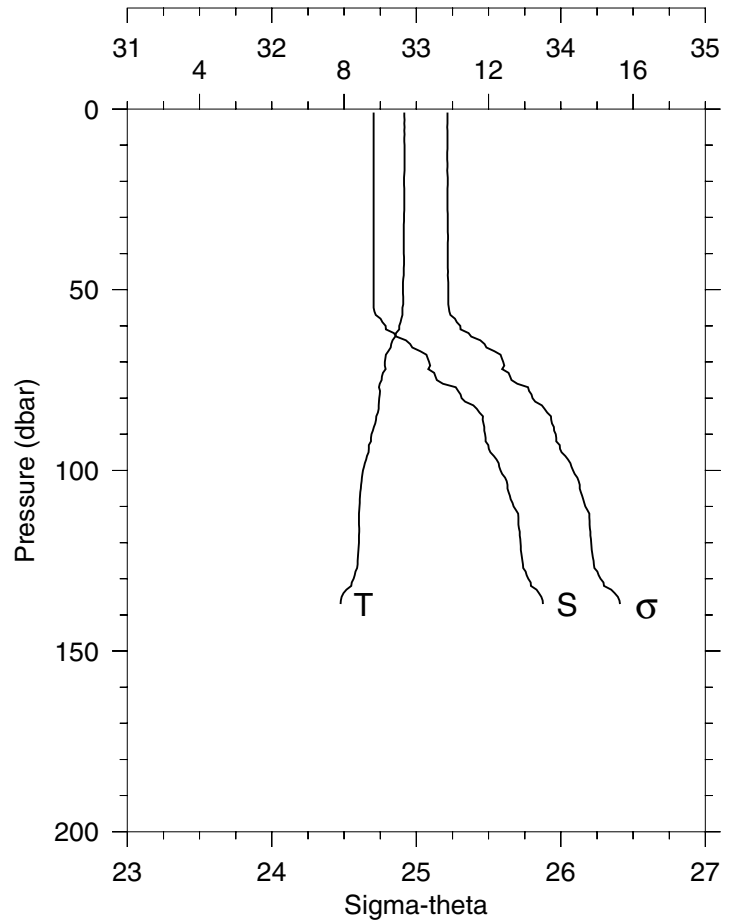
Station 5 NH-15 Temperature, Salinity



STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.8 W
20 MAR 2001 2355 GMT DEPTH 91

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.71	32.714	9.71	25.216	0.027	0.70	86.5
10	9.71	32.714	9.71	25.216	0.274	0.74	86.6
20	9.69	32.715	9.69	25.220	0.549	0.82	86.7
30	9.67	32.717	9.67	25.224	0.823	0.81	87.5
40	9.63	32.735	9.62	25.246	1.097	0.67	88.5
50	9.54	32.826	9.53	25.331	1.367	0.40	89.6
60	9.47	32.931	9.46	25.425	1.625	0.31	89.6
70	9.32	33.170	9.31	25.636	1.873	0.20	88.2
80	9.01	33.422	9.00	25.883	2.094	0.17	88.1
86	8.75	33.564	8.74	26.035	2.217	0.16	86.5

Station 6 NH-20 Temperature, Salinity



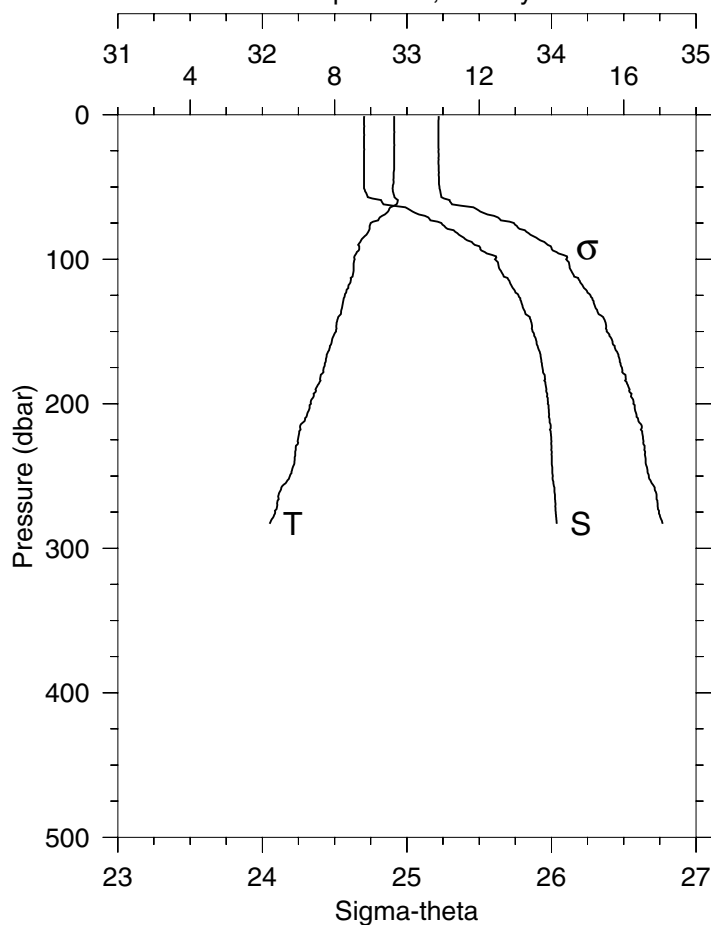
STA: 6 NH-20 LAT: 44 39.1 N LONG: 124 31.8 W
21 MAR 2001 0207 GMT DEPTH 142

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.67	32.705	9.67	25.215	0.027	0.93	86.1
10	9.67	32.705	9.67	25.215	0.274	0.96	86.6
20	9.66	32.705	9.66	25.217	0.549	0.90	87.0
30	9.66	32.704	9.66	25.217	0.824	0.93	86.9
40	9.65	32.704	9.65	25.218	1.098	0.84	87.3
50	9.63	32.705	9.62	25.222	1.373	0.76	88.3
60	9.53	32.788	9.52	25.304	1.646	0.37	89.9
70	9.13	33.088	9.12	25.602	1.899	0.19	90.5
80	8.98	33.314	8.97	25.804	2.129	0.16	90.4
90	8.76	33.475	8.75	25.964	2.339	0.15	90.4
100	8.53	33.583	8.52	26.084	2.539	0.14	90.5
110	8.43	33.674	8.42	26.170	2.728	0.14	90.3
120	8.41	33.722	8.40	26.211	2.911	0.14	89.5
130	8.26	33.775	8.25	26.275	3.091	0.14	89.6
137	7.90	33.877	7.89	26.409	3.209	0.15	88.5

W0103B

Station 7 NH-25 Temperature, Salinity

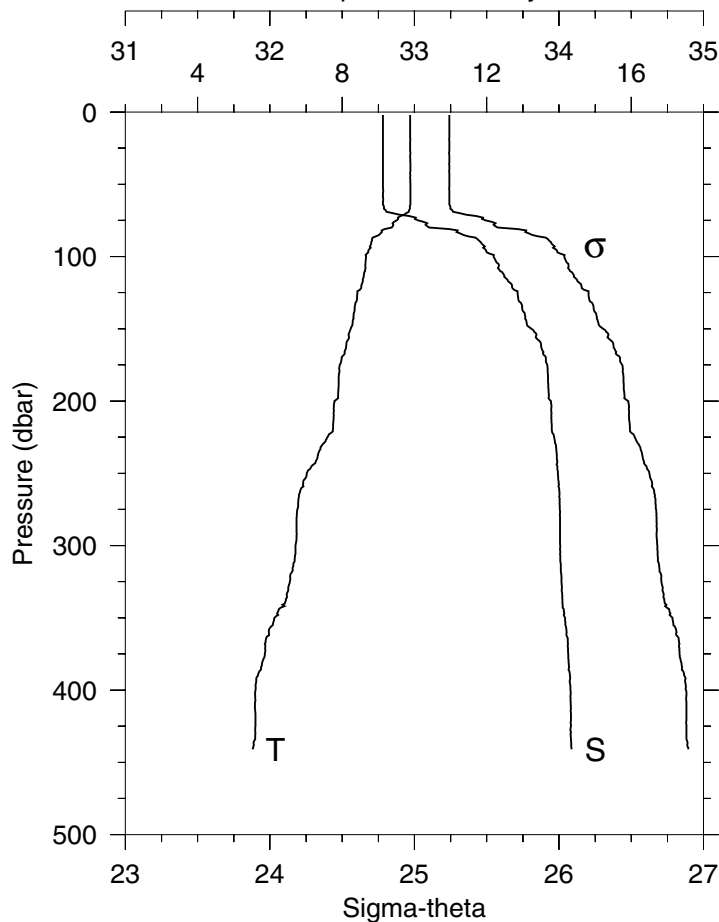
STA: 7 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
21 MAR 2001 0324 GMT DEPTH 296



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.65	32.705	9.64	25.219	0.027	0.81	87.5
10	9.65	32.704	9.65	25.218	0.274	0.83	87.6
20	9.65	32.704	9.65	25.218	0.548	0.85	87.7
30	9.65	32.704	9.65	25.218	0.823	0.88	87.7
40	9.63	32.703	9.63	25.221	1.098	0.86	88.0
50	9.61	32.703	9.60	25.225	1.372	0.74	88.7
60	9.74	32.825	9.73	25.298	1.645	0.42	89.9
70	9.31	33.124	9.31	25.601	1.898	0.20	90.3
80	8.95	33.324	8.94	25.815	2.127	0.19	90.4
90	8.65	33.469	8.64	25.975	2.338	0.16	90.6
100	8.56	33.610	8.55	26.101	2.536	0.14	90.5
110	8.51	33.661	8.50	26.148	2.725	0.15	90.4
120	8.37	33.733	8.36	26.225	2.909	0.14	90.4
130	8.23	33.791	8.22	26.292	3.086	0.14	90.5
140	8.10	33.850	8.08	26.359	3.258	0.14	90.5
150	8.04	33.869	8.02	26.383	3.425	0.15	90.6
175	7.70	33.938	7.68	26.487	3.826	0.15	90.2
200	7.34	33.975	7.32	26.567	4.208	0.15	90.3
225	6.98	33.998	6.96	26.635	4.572	0.15	90.4
250	6.76	34.009	6.74	26.674	4.926	0.14	90.5
275	6.35	34.030	6.33	26.744	5.264	0.15	89.7
283	6.20	34.037	6.18	26.769	5.370	0.15	89.7

Station 8 NH-35 Temperature, Salinity

STA: 8 NH-35 LAT: 44 39.1 N LONG: 124 53.1 W
21 MAR 2001 0718 GMT DEPTH 450

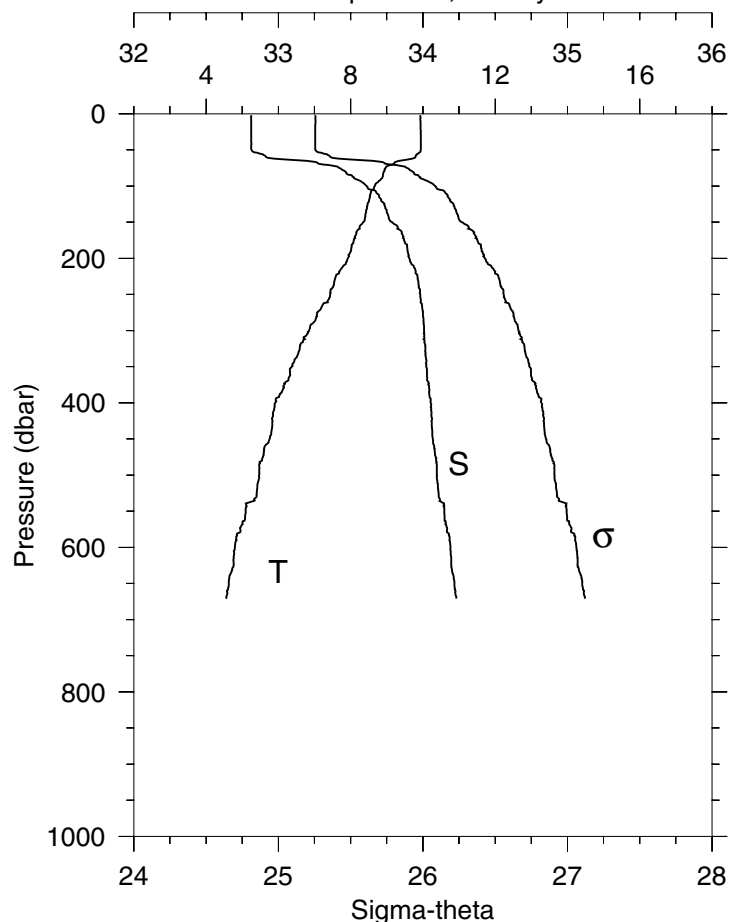


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.88	32.782	9.88	25.241	0.054	0.79	87.3
10	9.88	32.783	9.88	25.241	0.272	0.88	87.6
20	9.88	32.783	9.88	25.241	0.544	0.98	87.6
30	9.88	32.782	9.88	25.241	0.816	0.90	87.6
40	9.89	32.782	9.88	25.241	1.089	0.90	87.5
50	9.89	32.782	9.88	25.241	1.362	0.90	87.6
60	9.89	32.784	9.88	25.242	1.635	0.89	87.8
70	9.78	32.849	9.77	25.312	1.907	0.57	89.5
80	9.37	33.102	9.36	25.575	2.157	0.21	90.3
90	8.81	33.460	8.80	25.945	2.375	0.15	90.3
100	8.66	33.548	8.65	26.036	2.578	0.15	90.3
110	8.63	33.593	8.62	26.076	2.774	0.14	90.3
120	8.53	33.675	8.52	26.155	2.965	0.14	90.2
130	8.41	33.719	8.39	26.210	3.149	0.14	90.3
140	8.32	33.763	8.30	26.258	3.328	0.14	90.4
150	8.23	33.809	8.22	26.306	3.505	0.14	90.4
175	7.93	33.919	7.91	26.438	3.922	0.15	90.6
200	7.79	33.945	7.77	26.480	4.323	0.14	90.6
225	7.60	33.966	7.57	26.524	4.715	0.14	90.6
250	7.02	33.993	7.00	26.626	5.087	0.15	90.7
275	6.76	34.005	6.74	26.671	5.442	0.15	90.6
300	6.71	34.009	6.68	26.681	5.791	0.15	90.6
350	6.12	34.042	6.09	26.785	6.475	0.15	90.0
400	5.60	34.079	5.56	26.879	7.101	0.15	90.0
441	5.52	34.087	5.48	26.895	7.599	0.15	90.2

W0103B

Station 9 NH-45 Temperature, Salinity

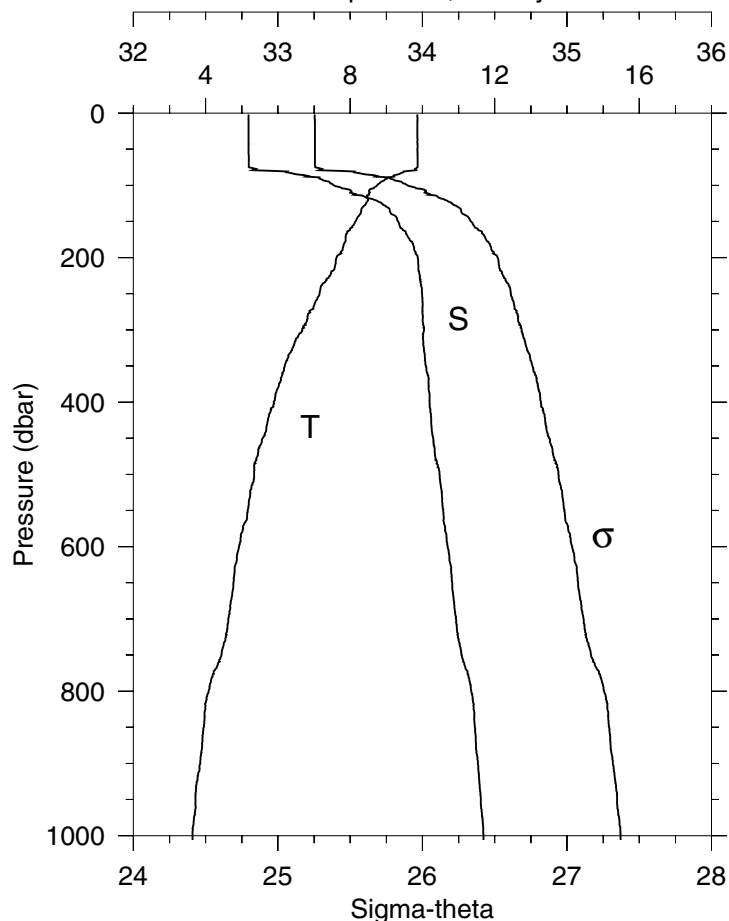
STA: 9 NH-45 LAT: 44 39.1 N LONG: 125 7.0 W
21 MAR 2001 1430 GMT DEPTH 694



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.93	32.812	9.93	25.256	0.054	0.49	89.4
10	9.93	32.812	9.93	25.256	0.271	0.61	89.4
20	9.94	32.812	9.94	25.255	0.541	0.50	89.4
30	9.94	32.812	9.94	25.255	0.812	0.50	89.4
40	9.94	32.812	9.94	25.255	1.084	0.58	89.4
50	9.94	32.813	9.94	25.255	1.355	0.50	89.3
60	9.79	32.916	9.78	25.361	1.621	0.33	89.8
70	9.15	33.309	9.15	25.772	1.861	0.21	90.1
80	8.92	33.463	8.91	25.928	2.074	0.16	90.1
90	8.85	33.531	8.84	25.994	2.279	0.15	89.9
100	8.66	33.610	8.65	26.085	2.476	0.15	89.6
110	8.56	33.681	8.55	26.157	2.666	0.15	89.2
120	8.51	33.711	8.50	26.187	2.851	0.14	88.9
130	8.45	33.740	8.44	26.219	3.034	0.14	89.0
140	8.41	33.759	8.39	26.241	3.214	0.14	89.0
150	8.35	33.786	8.34	26.270	3.393	0.15	89.0
175	8.09	33.870	8.07	26.376	3.819	0.15	89.2
200	7.92	33.906	7.90	26.429	4.231	0.14	89.4
225	7.59	33.962	7.57	26.522	4.627	0.14	90.2
250	7.43	33.981	7.41	26.559	5.008	0.14	90.3
275	7.07	34.001	7.05	26.625	5.378	0.15	90.4
300	6.85	34.008	6.82	26.661	5.736	0.15	90.6
350	6.37	34.024	6.34	26.739	6.426	0.15	90.7
400	5.91	34.053	5.88	26.820	7.083	0.15	90.8
450	5.76	34.068	5.72	26.851	7.713	0.15	90.7
500	5.47	34.097	5.43	26.910	8.320	0.15	90.8
600	4.79	34.190	4.75	27.062	9.448	0.15	90.8
671	4.55	34.232	4.50	27.122	10.182	0.15	90.7

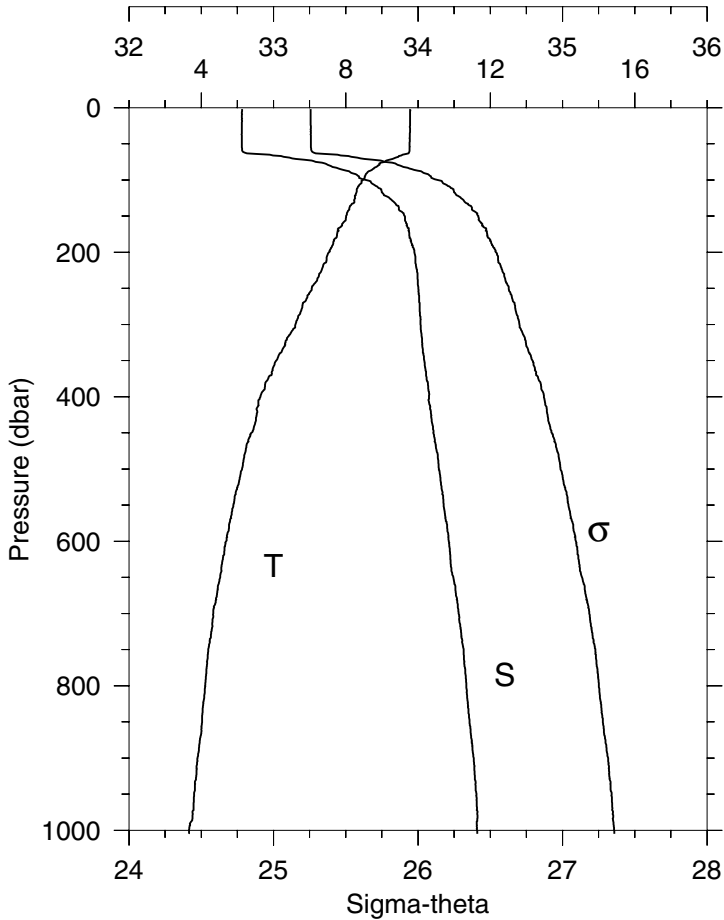
Station 10 NH-55 Temperature, Salinity

STA: 10 NH-55 LAT: 44 39.1 N LONG: 125 22.0 W
21 MAR 2001 1723 GMT DEPTH 2866



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.86	32.797	9.86	25.255	0.054	0.35	89.0
10	9.86	32.797	9.86	25.256	0.271	0.41	89.1
20	9.86	32.797	9.86	25.256	0.541	0.55	89.1
30	9.86	32.797	9.86	25.256	0.812	0.51	89.2
40	9.86	32.797	9.86	25.256	1.083	0.50	89.2
50	9.86	32.797	9.86	25.257	1.355	0.56	89.2
60	9.86	32.798	9.86	25.256	1.626	0.76	89.2
70	9.87	32.798	9.86	25.257	1.898	0.49	89.2
80	9.60	32.987	9.59	25.447	2.167	0.46	89.9
90	9.01	33.285	9.00	25.775	2.405	0.18	90.3
100	8.74	33.388	8.73	25.897	2.621	0.16	90.5
110	8.54	33.499	8.53	26.015	2.825	0.15	90.5
120	8.49	33.666	8.48	26.155	3.018	0.14	90.5
130	8.35	33.753	8.34	26.245	3.201	0.14	90.5
140	8.27	33.787	8.25	26.284	3.378	0.14	90.6
150	8.15	33.831	8.13	26.336	3.550	0.14	90.6
175	7.87	33.912	7.86	26.441	3.963	0.14	90.7
200	7.62	33.967	7.60	26.521	4.357	0.15	90.7
225	7.45	33.981	7.43	26.557	4.738	0.15	90.7
250	7.15	33.998	7.13	26.612	5.107	0.15	90.8
275	6.87	34.000	6.85	26.652	5.467	0.15	90.8
300	6.67	34.010	6.65	26.687	5.819	0.15	90.8
350	6.19	34.023	6.16	26.761	6.498	0.15	90.9
400	5.88	34.050	5.85	26.821	7.145	0.15	90.9
450	5.58	34.073	5.54	26.877	7.769	0.15	90.9
500	5.34	34.117	5.30	26.940	8.365	0.15	90.5
600	4.92	34.175	4.87	27.036	9.492	0.15	90.6
800	4.08	34.338	4.02	27.258	11.497	0.15	90.6
1000	3.63	34.422	3.56	27.371	13.151	0.14	90.6
1006	3.64	34.422	3.56	27.370	13.198	0.15	90.5

Station 11 NH-65 Temperature, Salinity



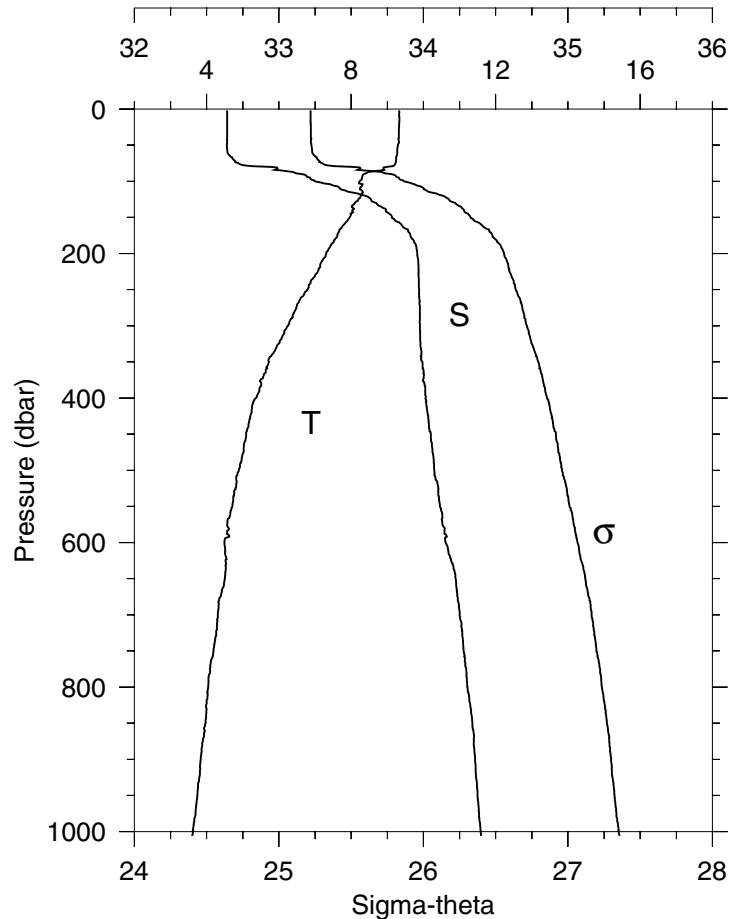
STA: 11 NH-65 LAT: 44 39.1 N LONG: 125 36.0 W
21 MAR 2001 1943 GMT DEPTH 2861

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.78	32.782	9.78	25.256	0.054	0.29	89.3
10	9.78	32.781	9.78	25.257	0.270	0.32	89.3
20	9.78	32.781	9.78	25.257	0.541	0.38	89.3
30	9.78	32.781	9.77	25.257	0.812	0.48	89.1
40	9.77	32.781	9.77	25.258	1.083	0.49	89.3
50	9.77	32.780	9.76	25.259	1.354	0.48	89.4
60	9.76	32.785	9.76	25.264	1.625	0.52	89.4
70	9.33	33.130	9.32	25.604	1.881	0.26	90.0
80	8.89	33.390	8.88	25.877	2.104	0.18	90.2
90	8.59	33.537	8.58	26.038	2.310	0.16	90.3
100	8.48	33.641	8.47	26.137	2.503	0.15	90.4
110	8.33	33.722	8.32	26.223	2.687	0.15	90.5
120	8.28	33.762	8.27	26.262	2.866	0.15	90.5
130	8.24	33.830	8.22	26.322	3.040	0.14	90.3
140	8.10	33.867	8.08	26.372	3.208	0.15	90.4
150	8.01	33.908	7.99	26.417	3.373	0.14	90.3
175	7.76	33.940	7.74	26.479	3.773	0.14	90.4
200	7.53	33.974	7.52	26.539	4.160	0.15	90.4
225	7.33	33.993	7.31	26.583	4.535	0.16	90.3
250	7.06	34.002	7.03	26.628	4.900	0.15	90.5
275	6.80	34.011	6.77	26.671	5.255	0.15	90.4
300	6.60	34.017	6.58	26.702	5.603	0.15	90.4
350	6.08	34.043	6.05	26.791	6.271	0.15	90.6
400	5.64	34.076	5.61	26.871	6.899	0.15	90.6
450	5.39	34.106	5.36	26.925	7.499	0.15	90.6
500	5.13	34.144	5.09	26.986	8.070	0.15	90.4
600	4.68	34.213	4.64	27.092	9.141	0.15	90.8
800	4.11	34.335	4.05	27.252	11.039	0.15	90.5
1000	3.66	34.408	3.59	27.357	12.717	0.15	90.5
1005	3.65	34.409	3.58	27.359	12.756	0.15	90.5

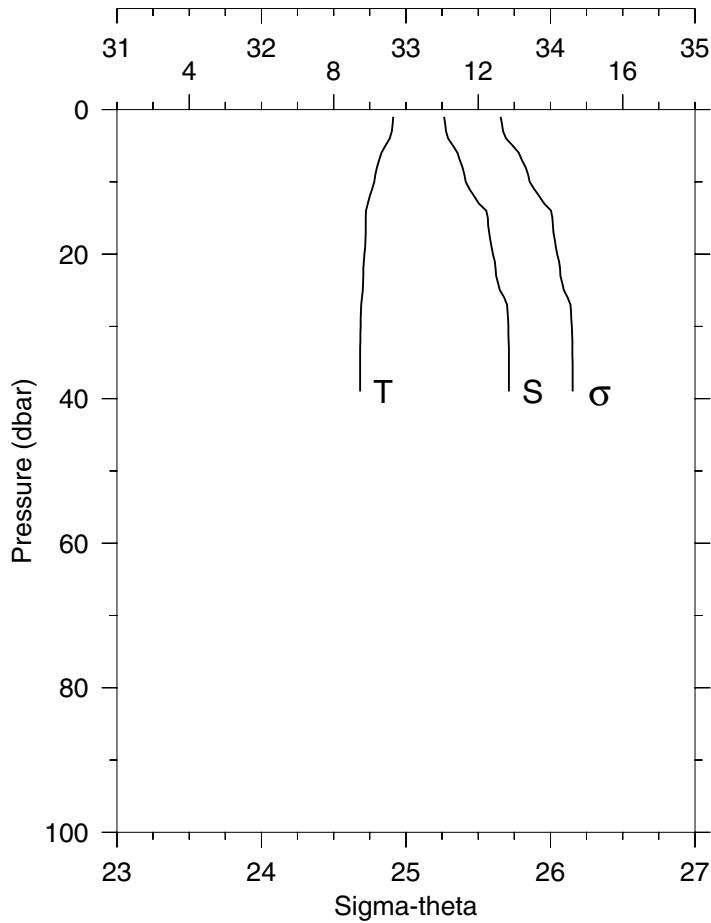
Station 12 NH-85 Temperature, Salinity

STA: 12 NH-85 LAT: 44 39.1 N LONG: 126 3.0 W
21 MAR 2001 2253 GMT DEPTH 2883

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.33	32.641	9.33	25.220	0.055	0.31	89.1
10	9.33	32.641	9.33	25.220	0.274	0.37	89.1
20	9.33	32.641	9.32	25.221	0.548	0.36	89.1
30	9.32	32.641	9.31	25.222	0.822	0.51	89.1
40	9.32	32.641	9.31	25.222	1.097	0.52	89.1
50	9.30	32.640	9.29	25.225	1.371	0.59	89.1
60	9.28	32.644	9.27	25.231	1.645	0.57	89.3
70	9.24	32.686	9.24	25.269	1.917	0.44	90.1
80	8.98	32.945	8.97	25.514	2.184	0.27	90.5
90	8.35	33.160	8.34	25.779	2.420	0.20	90.7
100	8.24	33.249	8.23	25.866	2.638	0.19	90.7
110	8.24	33.425	8.23	26.003	2.845	0.16	90.8
120	8.27	33.596	8.25	26.134	3.041	0.15	90.8
130	8.10	33.673	8.09	26.219	3.227	0.14	90.8
140	8.04	33.739	8.02	26.281	3.405	0.14	90.8
150	7.96	33.782	7.95	26.326	3.578	0.13	90.8
175	7.62	33.911	7.60	26.477	3.987	0.14	90.8
200	7.31	33.958	7.29	26.557	4.370	0.14	90.8
225	7.08	33.966	7.06	26.596	4.740	0.14	90.8
250	6.79	33.970	6.77	26.639	5.101	0.15	90.8
275	6.48	33.976	6.46	26.685	5.452	0.15	90.8
300	6.25	33.975	6.22	26.715	5.796	0.15	90.8
350	5.72	33.993	5.69	26.795	6.459	0.14	90.9
400	5.37	34.015	5.34	26.855	7.089	0.15	90.8
450	5.09	34.051	5.05	26.917	7.692	0.14	90.8
500	4.89	34.076	4.85	26.960	8.273	0.15	90.9
600	4.49	34.155	4.45	27.067	9.366	0.15	90.9
800	4.04	34.304	3.98	27.234	11.298	0.15	90.8
1000	3.62	34.397	3.54	27.353	12.995	0.14	90.8
1006	3.60	34.400	3.53	27.356	13.043	0.15	90.8



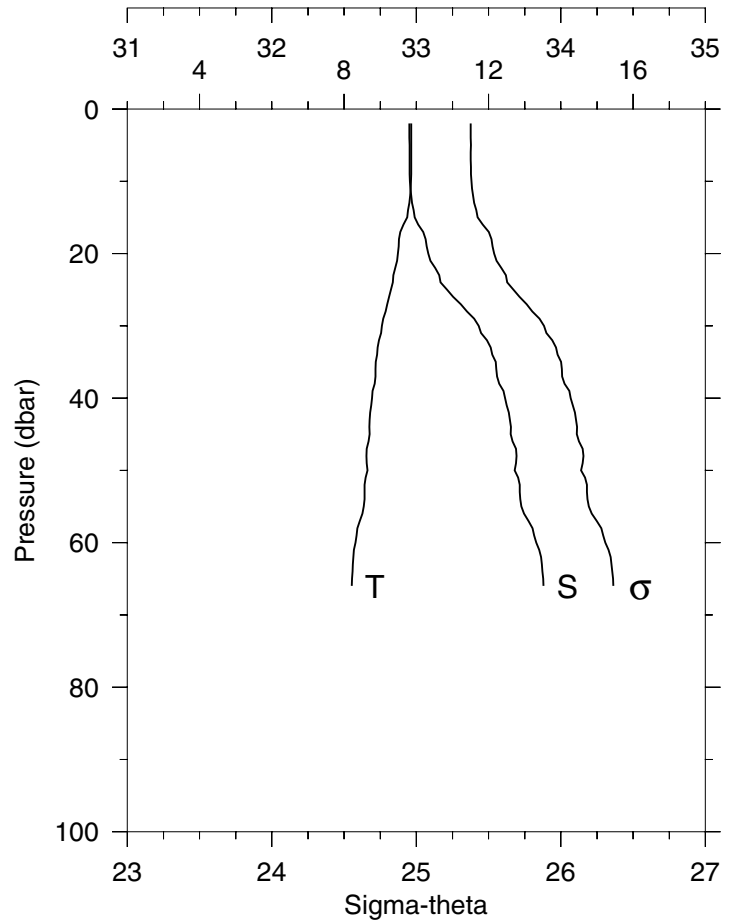
Station 13 CR-1 Temperature, Salinity



STA: 13 CR-1 LAT: 41 54.0 N LONG: 124 18.0 W
22 MAR 2001 1525 GMT DEPTH 42

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.65	33.264	9.65	25.656	0.023	1.83	81.4
10	9.12	33.414	9.12	25.857	0.224	1.21	84.9
20	8.85	33.601	8.85	26.047	0.426	0.51	84.8
30	8.75	33.708	8.74	26.147	0.616	0.51	72.3
39	8.73	33.713	8.73	26.154	0.784	0.64	68.9

Station 14 CR-2 Temperature, Salinity

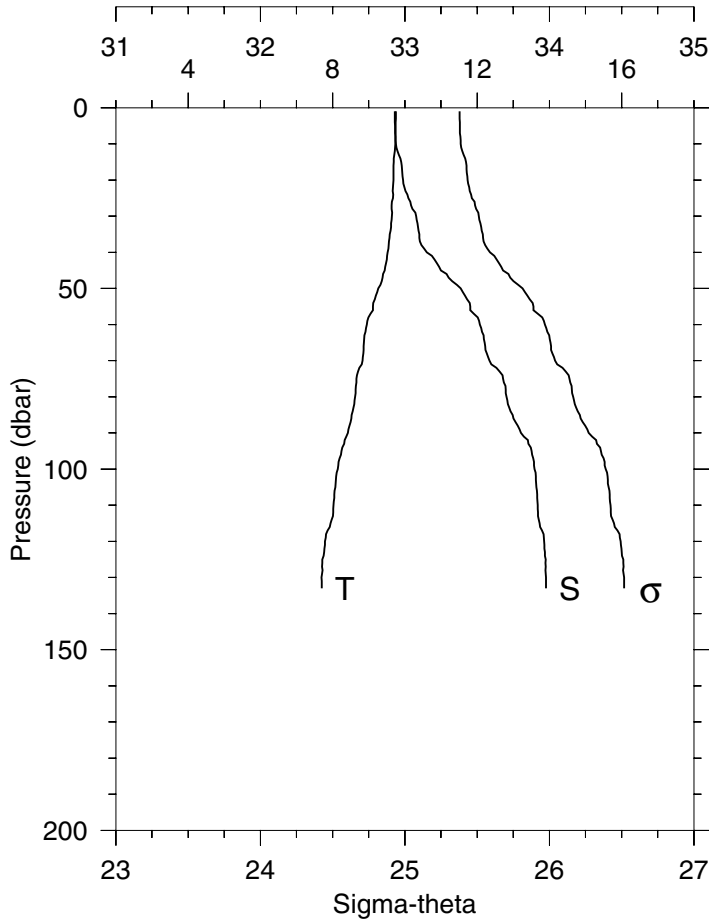


STA: 14 CR-2 LAT: 41 54.0 N LONG: 124 24.0 W
22 MAR 2001 1651 GMT DEPTH 69

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.86	32.952	9.86	25.377	0.052	0.49	87.7
10	9.85	32.956	9.85	25.381	0.259	0.50	87.7
20	9.49	33.082	9.49	25.539	0.511	0.74	86.8
30	9.05	33.432	9.04	25.884	0.741	0.38	86.8
40	8.78	33.614	8.77	26.069	0.943	0.34	86.4
50	8.65	33.681	8.64	26.141	1.132	0.28	86.9
60	8.32	33.830	8.31	26.308	1.312	0.20	87.6
66	8.22	33.880	8.21	26.364	1.413	0.19	85.1

W0103B

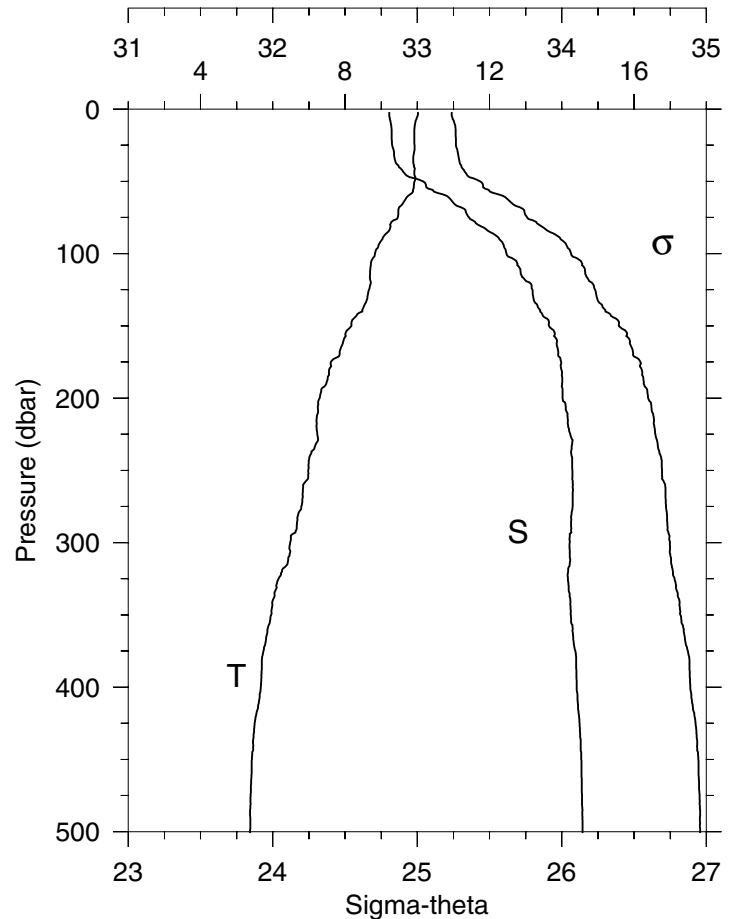
Station 15 CR-3 Temperature, Salinity



STA: 15 CR-3 LAT: 41 54.0 N LONG: 124 30.0 W
22 MAR 2001 1819 GMT DEPTH 138

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.75	32.931	9.75	25.379	0.026	0.67	86.9
10	9.73	32.937	9.73	25.386	0.259	0.96	86.9
20	9.68	32.987	9.68	25.434	0.514	0.93	86.5
30	9.64	33.078	9.64	25.512	0.765	0.68	87.4
40	9.52	33.151	9.51	25.589	1.009	0.42	88.5
50	9.26	33.385	9.26	25.813	1.239	0.19	89.3
60	8.94	33.519	8.94	25.969	1.450	0.24	87.8
70	8.82	33.585	8.82	26.039	1.650	0.22	87.1
80	8.62	33.703	8.61	26.164	1.839	0.21	86.3
90	8.42	33.802	8.41	26.271	2.021	0.21	87.0
100	8.14	33.897	8.13	26.389	2.189	0.16	87.3
110	8.02	33.919	8.01	26.423	2.352	0.17	87.2
120	7.79	33.964	7.78	26.493	2.511	0.15	85.9
130	7.69	33.976	7.68	26.517	2.664	0.16	78.6
133	7.70	33.976	7.68	26.516	2.710	0.17	78.7

Station 16 CR-4 Temperature, Salinity

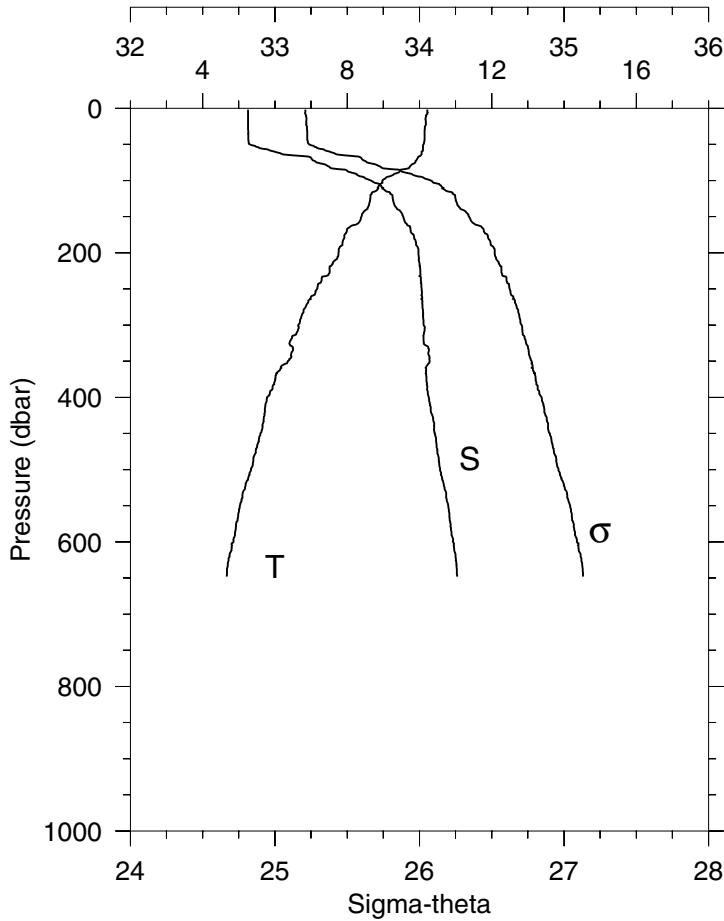


STA: 16 CR-4 LAT: 41 54.0 N LONG: 124 36.0 W
22 MAR 2001 2009 GMT DEPTH 504

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.01	32.807	10.01	25.239	0.054	1.42	85.6
10	9.94	32.817	9.94	25.259	0.272	1.62	85.8
20	9.92	32.823	9.92	25.267	0.542	1.16	86.2
30	9.91	32.839	9.91	25.281	0.811	1.03	86.3
40	9.91	32.872	9.91	25.306	1.079	1.43	85.7
50	9.93	33.040	9.92	25.435	1.341	0.44	87.9
60	9.75	33.203	9.74	25.592	1.591	0.20	89.2
70	9.48	33.334	9.47	25.739	1.824	0.18	89.0
80	9.25	33.418	9.24	25.842	2.046	0.18	89.1
90	9.03	33.568	9.02	25.993	2.255	0.16	88.8
100	8.83	33.618	8.82	26.065	2.453	0.16	88.3
110	8.70	33.709	8.69	26.156	2.644	0.15	89.4
120	8.71	33.777	8.70	26.207	2.829	0.15	89.8
130	8.62	33.802	8.61	26.242	3.010	0.15	89.8
140	8.48	33.851	8.46	26.303	3.186	0.15	89.4
150	8.17	33.911	8.16	26.395	3.354	0.16	88.3
175	7.61	33.996	7.59	26.545	3.748	0.16	89.9
200	7.30	34.005	7.28	26.597	4.120	0.15	89.8
225	7.24	34.058	7.21	26.647	4.479	0.15	90.5
250	6.98	34.073	6.96	26.694	4.827	0.15	90.7
275	6.79	34.075	6.77	26.722	5.168	0.15	90.7
300	6.48	34.056	6.45	26.749	5.504	0.15	90.7
350	5.95	34.062	5.93	26.821	6.155	0.14	90.7
400	5.67	34.104	5.64	26.890	6.768	0.15	89.2
450	5.42	34.135	5.38	26.945	7.356	0.15	88.6
500	5.37	34.144	5.33	26.958	7.933	0.15	87.2
501	5.37	34.144	5.33	26.958	7.944	0.15	87.2

W0103B

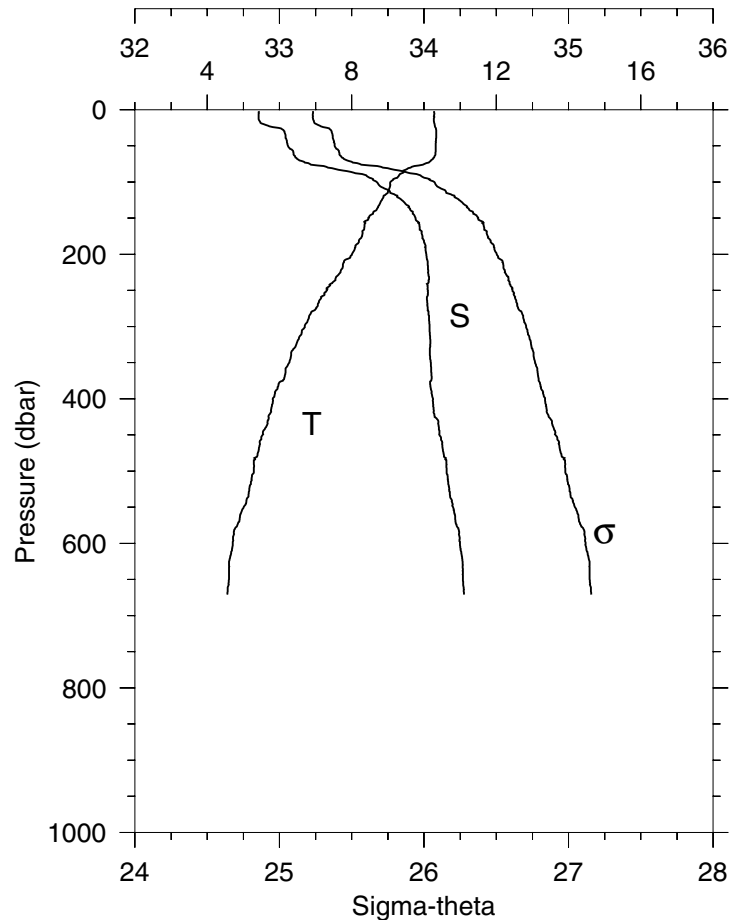
Station 17 CR-5 Temperature, Salinity



STA: 17 CR-5 LAT: 41 54.0 N LONG: 124 42.0 W
22 MAR 2001 2311 GMT DEPTH 658

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.23	32.814	10.23	25.208	0.055	0.86	85.9
10	10.18	32.813	10.18	25.216	0.275	1.00	85.9
20	10.17	32.814	10.17	25.217	0.549	0.98	86.1
30	10.14	32.814	10.14	25.222	0.824	0.99	87.0
40	10.14	32.815	10.14	25.224	1.098	0.82	87.6
50	10.11	32.825	10.10	25.237	1.372	0.69	88.3
60	10.06	32.995	10.06	25.377	1.639	0.32	89.5
70	9.94	33.254	9.93	25.601	1.889	0.21	89.9
80	9.74	33.367	9.73	25.721	2.123	0.19	90.0
90	9.35	33.550	9.34	25.929	2.341	0.17	89.9
100	8.97	33.664	8.96	26.079	2.542	0.15	89.8
110	8.84	33.747	8.83	26.164	2.732	0.15	90.2
120	8.64	33.812	8.63	26.246	2.915	0.15	90.3
130	8.62	33.821	8.61	26.257	3.093	0.15	90.3
140	8.54	33.848	8.53	26.290	3.270	0.15	90.2
150	8.39	33.887	8.38	26.343	3.441	0.15	89.2
175	7.92	33.959	7.91	26.471	3.852	0.16	88.6
200	7.76	33.993	7.74	26.521	4.242	0.16	89.8
225	7.51	34.005	7.49	26.567	4.621	0.16	90.1
250	7.17	34.015	7.14	26.623	4.988	0.15	90.1
275	6.85	34.021	6.82	26.672	5.344	0.15	89.9
300	6.64	34.029	6.62	26.706	5.690	0.15	90.2
350	6.36	34.070	6.32	26.776	6.363	0.15	90.8
400	5.78	34.065	5.75	26.845	7.005	0.15	90.8
450	5.59	34.108	5.56	26.902	7.617	0.15	90.2
500	5.34	34.143	5.30	26.961	8.204	0.14	89.9
600	4.85	34.232	4.80	27.088	9.284	0.15	89.8
648	4.67	34.260	4.61	27.132	9.767	0.15	87.3

Station 18 CR-6 Temperature, Salinity

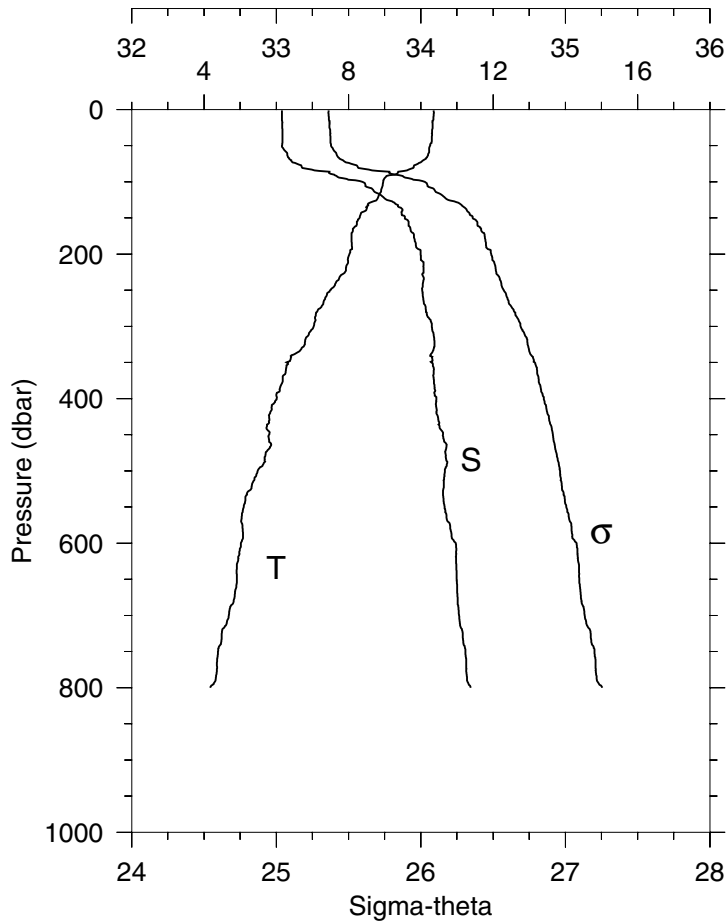


STA: 18 CR-6 LAT: 41 54.0 N LONG: 124 48.0 W
23 MAR 2001 0035 GMT DEPTH 696

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.28	32.856	10.28	25.232	0.055	1.05	86.3
10	10.28	32.856	10.28	25.231	0.273	1.06	86.1
20	10.29	32.891	10.29	25.257	0.545	0.85	87.7
30	10.34	33.034	10.33	25.361	0.810	0.74	88.6
40	10.34	33.046	10.33	25.371	1.071	0.65	88.9
50	10.32	33.058	10.32	25.382	1.331	0.52	89.2
60	10.32	33.097	10.31	25.414	1.589	0.41	89.5
70	10.19	33.139	10.18	25.468	1.844	0.34	89.7
80	9.63	33.335	9.62	25.715	2.086	0.23	90.0
90	9.32	33.590	9.31	25.965	2.302	0.16	89.7
100	9.07	33.674	9.06	26.071	2.502	0.16	90.1
110	9.03	33.740	9.02	26.129	2.695	0.15	90.1
120	8.88	33.816	8.87	26.212	2.881	0.15	90.1
130	8.78	33.871	8.76	26.271	3.060	0.15	90.3
140	8.65	33.911	8.63	26.323	3.234	0.15	90.5
150	8.47	33.940	8.45	26.373	3.403	0.15	90.5
175	8.28	33.989	8.27	26.440	3.811	0.16	90.6
200	8.01	34.016	7.99	26.503	4.206	0.15	90.7
225	7.69	34.028	7.67	26.559	4.587	0.15	90.8
250	7.31	34.027	7.29	26.612	4.956	0.15	90.8
275	7.02	34.025	6.99	26.652	5.316	0.15	90.6
300	6.70	34.039	6.67	26.706	5.663	0.15	90.5
350	6.27	34.047	6.24	26.769	6.335	0.15	90.8
400	5.82	34.062	5.78	26.838	6.979	0.14	90.9
450	5.53	34.107	5.50	26.909	7.593	0.15	90.8
500	5.29	34.156	5.25	26.977	8.170	0.15	90.7
600	4.71	34.248	4.66	27.118	9.236	0.15	90.5
671	4.55	34.277	4.50	27.158	9.933	0.14	90.0

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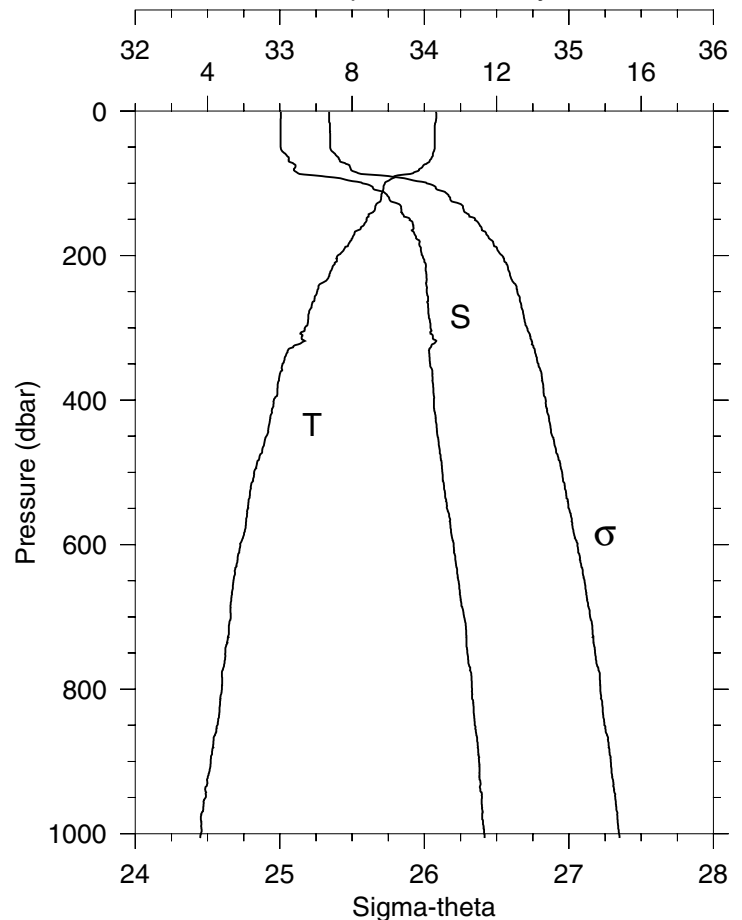
Station 19 CR-7 Temperature, Salinity



STA: 19 CR-7 LAT: 41 54.1 N LONG: 125 0.1 W
23 MAR 2001 0353 GMT DEPTH 835

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.36	33.039	10.36	25.361	0.026	1.23	86.9
10	10.35	33.039	10.35	25.363	0.261	1.19	86.9
20	10.32	33.041	10.32	25.369	0.521	1.21	87.1
30	10.31	33.043	10.31	25.373	0.781	1.19	87.8
40	10.30	33.043	10.30	25.374	1.041	1.02	87.9
50	10.26	33.039	10.25	25.378	1.301	0.66	88.6
60	10.22	33.074	10.21	25.413	1.559	0.46	89.8
70	10.07	33.103	10.06	25.461	1.815	0.31	90.0
80	9.80	33.177	9.79	25.564	2.062	0.28	90.1
90	9.28	33.400	9.27	25.823	2.292	0.23	90.1
100	8.96	33.597	8.95	26.028	2.501	0.18	90.4
110	8.91	33.665	8.90	26.090	2.697	0.16	90.3
120	8.83	33.733	8.81	26.156	2.888	0.15	90.3
130	8.55	33.821	8.54	26.268	3.071	0.15	90.4
140	8.48	33.873	8.46	26.319	3.245	0.15	90.3
150	8.30	33.890	8.29	26.359	3.415	0.15	90.6
175	8.08	33.953	8.06	26.442	3.825	0.15	90.7
200	8.02	33.999	8.00	26.487	4.224	0.15	90.8
225	7.90	34.019	7.88	26.522	4.613	0.15	90.8
250	7.49	34.009	7.47	26.574	4.992	0.15	90.9
275	7.21	34.034	7.18	26.633	5.359	0.15	90.9
300	7.03	34.076	7.01	26.690	5.712	0.15	91.0
350	6.28	34.072	6.25	26.788	6.384	0.15	91.0
400	6.01	34.108	5.98	26.851	7.021	0.15	90.9
450	5.80	34.153	5.76	26.913	7.629	0.15	90.9
500	5.48	34.167	5.44	26.963	8.214	0.15	91.0
600	5.02	34.242	4.97	27.077	9.319	0.15	90.9
800	4.17	34.346	4.11	27.254	11.290	0.14	90.1
800	4.17	34.346	4.11	27.254	11.290	0.14	90.1

Station 20 CR-8 Temperature, Salinity



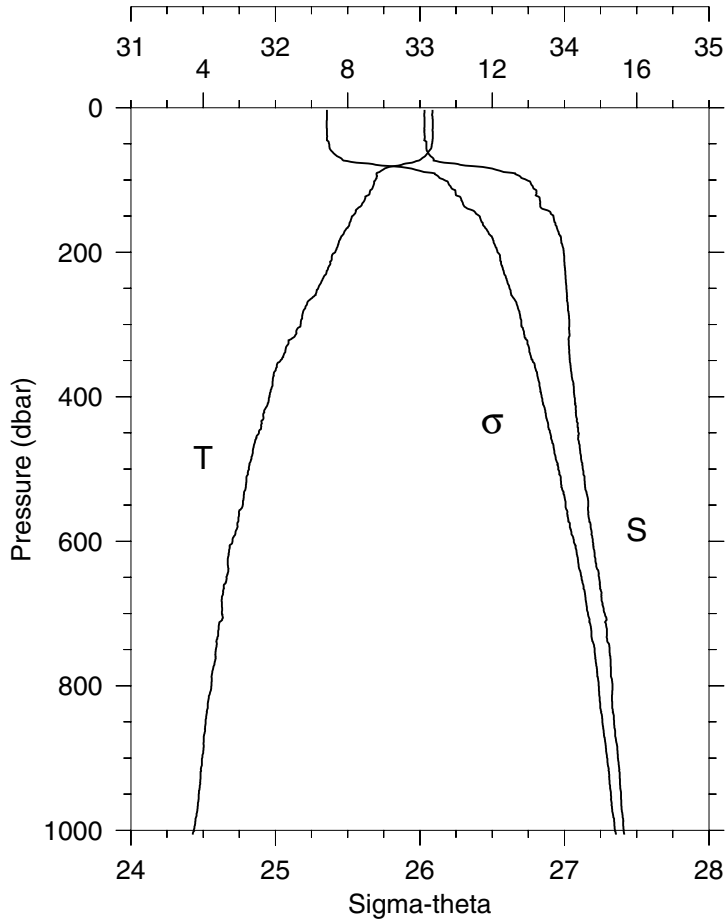
STA: 20 CR-8 LAT: 41 54.0 N LONG: 125 12.1 W
23 MAR 2001 0545 GMT DEPTH 2716

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.33	33.007	10.33	25.342	0.026	0.63	89.0
10	10.33	33.007	10.33	25.341	0.262	0.51	88.9
20	10.29	33.005	10.29	25.347	0.525	0.80	88.5
30	10.29	33.006	10.28	25.347	0.787	0.78	88.5
40	10.29	33.006	10.28	25.348	1.050	0.72	88.7
50	10.28	33.006	10.28	25.349	1.312	0.73	88.7
60	10.24	33.041	10.23	25.384	1.574	0.52	89.1
70	10.14	33.064	10.14	25.418	1.831	0.41	89.7
80	9.86	33.097	9.86	25.491	2.083	0.34	90.0
90	9.18	33.292	9.17	25.754	2.327	0.25	90.1
100	8.90	33.572	8.89	26.017	2.538	0.19	90.4
110	8.85	33.681	8.84	26.110	2.733	0.16	90.3
120	8.80	33.757	8.79	26.178	2.920	0.15	90.2
130	8.66	33.831	8.65	26.258	3.102	0.15	90.2
140	8.58	33.840	8.57	26.278	3.279	0.15	90.3
150	8.40	33.900	8.39	26.352	3.451	0.15	90.4
175	8.01	33.942	8.00	26.444	3.863	0.14	90.7
200	7.60	33.986	7.59	26.538	4.254	0.15	90.8
225	7.38	34.013	7.36	26.592	4.628	0.14	90.9
250	7.03	34.017	7.01	26.643	4.990	0.15	90.9
275	6.83	34.027	6.81	26.679	5.342	0.15	91.0
300	6.69	34.043	6.67	26.710	5.688	0.15	91.0
350	6.07	34.040	6.04	26.789	6.354	0.15	91.0
400	5.84	34.067	5.80	26.840	6.990	0.15	91.0
450	5.63	34.092	5.59	26.886	7.609	0.15	90.9
500	5.29	34.125	5.25	26.953	8.200	0.15	90.9
600	4.90	34.202	4.86	27.059	9.312	0.15	90.9
800	4.39	34.330	4.33	27.218	11.284	0.15	90.9
1000	3.82	34.414	3.74	27.346	13.012	0.14	90.9
1006	3.79	34.417	3.72	27.351	13.061	0.14	90.9

W0103B

Station 21 CR-9a Temperature, Salinity

STA: 21 CR-9a LAT: 41 54.0 N LONG: 125 24.0 W
23 MAR 2001 0756 GMT DEPTH 3097

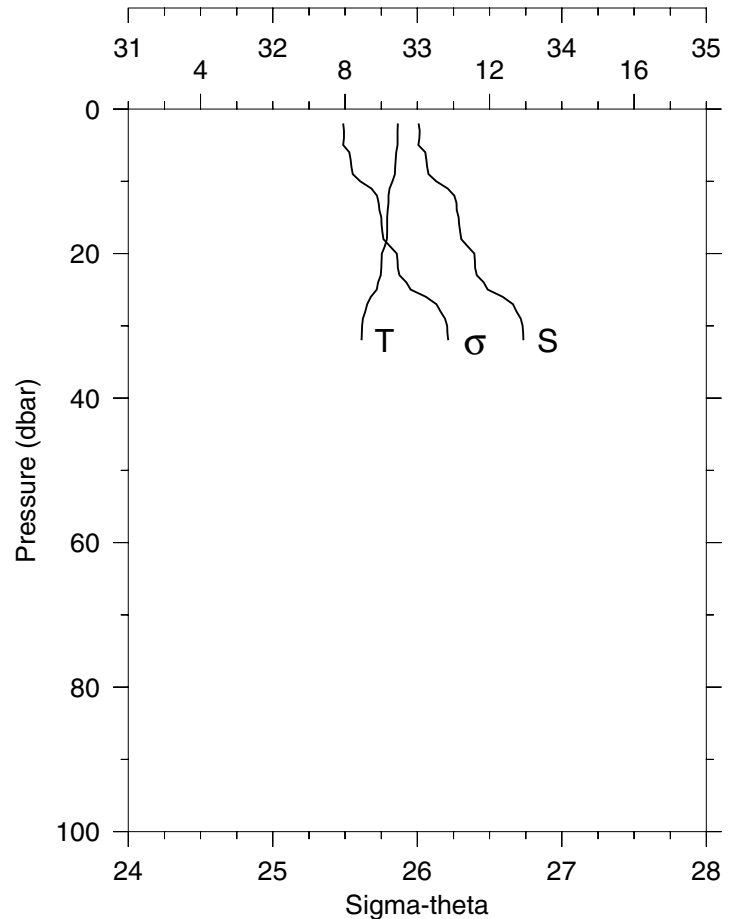


P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
3	10.35	33.031	10.35	25.356	0.078	0.94	87.7
10	10.34	33.029	10.33	25.357	0.261	0.92	87.6
20	10.36	33.031	10.35	25.355	0.522	0.98	87.6
30	10.35	33.031	10.35	25.356	0.784	1.01	87.6
40	10.36	33.034	10.35	25.358	1.045	1.01	87.8
50	10.33	33.045	10.33	25.371	1.307	0.83	88.2
60	10.25	33.049	10.24	25.388	1.567	0.71	88.9
70	10.05	33.092	10.05	25.455	1.823	0.41	89.7
80	9.39	33.315	9.38	25.738	2.067	0.28	90.1
90	8.81	33.635	8.80	26.081	2.274	0.18	90.4
100	8.77	33.739	8.76	26.169	2.463	0.16	90.4
110	8.70	33.782	8.69	26.214	2.646	0.15	90.3
120	8.60	33.804	8.59	26.247	2.826	0.15	90.4
130	8.44	33.832	8.43	26.292	3.001	0.15	90.5
140	8.26	33.848	8.25	26.332	3.175	0.15	90.6
150	8.13	33.923	8.11	26.411	3.341	0.14	90.7
175	7.88	33.962	7.86	26.479	3.742	0.15	90.8
200	7.65	33.994	7.63	26.538	4.128	0.15	90.8
225	7.43	34.004	7.41	26.577	4.503	0.15	90.9
250	7.18	34.014	7.16	26.621	4.870	0.15	90.9
275	6.84	34.024	6.81	26.676	5.226	0.15	91.0
300	6.70	34.033	6.67	26.702	5.572	0.15	91.0
350	6.14	34.037	6.11	26.778	6.243	0.15	91.0
400	5.84	34.068	5.80	26.841	6.880	0.15	91.0
450	5.54	34.098	5.51	26.901	7.492	0.15	90.9
500	5.27	34.127	5.23	26.956	8.079	0.15	90.9
600	4.81	34.195	4.76	27.064	9.183	0.15	90.9
800	4.23	34.332	4.17	27.237	11.121	0.15	90.9
1000	3.74	34.409	3.67	27.349	12.831	0.14	90.8
1006	3.71	34.413	3.63	27.356	12.879	0.15	90.8

STA: 22 RR-1 LAT: 42 30.0 N LONG: 124 29.9 W
23 MAR 2001 1435 GMT DEPTH 36

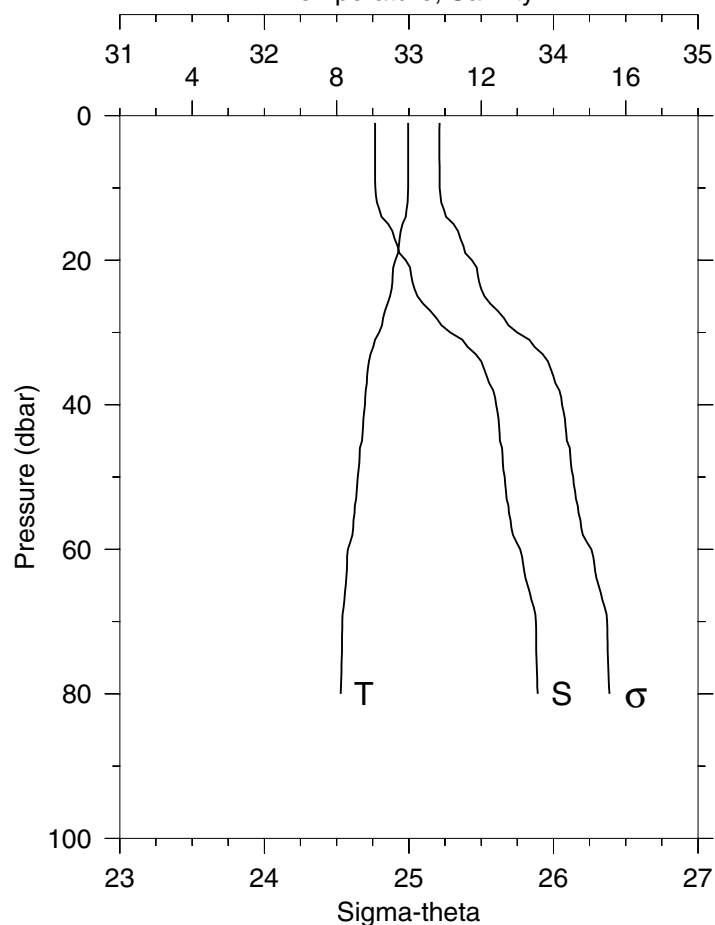
P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.46	33.009	9.46	25.487	0.050	1.58	84.3
10	9.31	33.130	9.31	25.605	0.246	1.65	81.1
20	9.02	33.394	9.02	25.858	0.470	1.64	82.1
30	8.47	33.729	8.47	26.206	0.670	0.43	83.3
32	8.46	33.735	8.45	26.213	0.706	0.41	83.4

Station 22 RR-1 Temperature, Salinity



W0103B

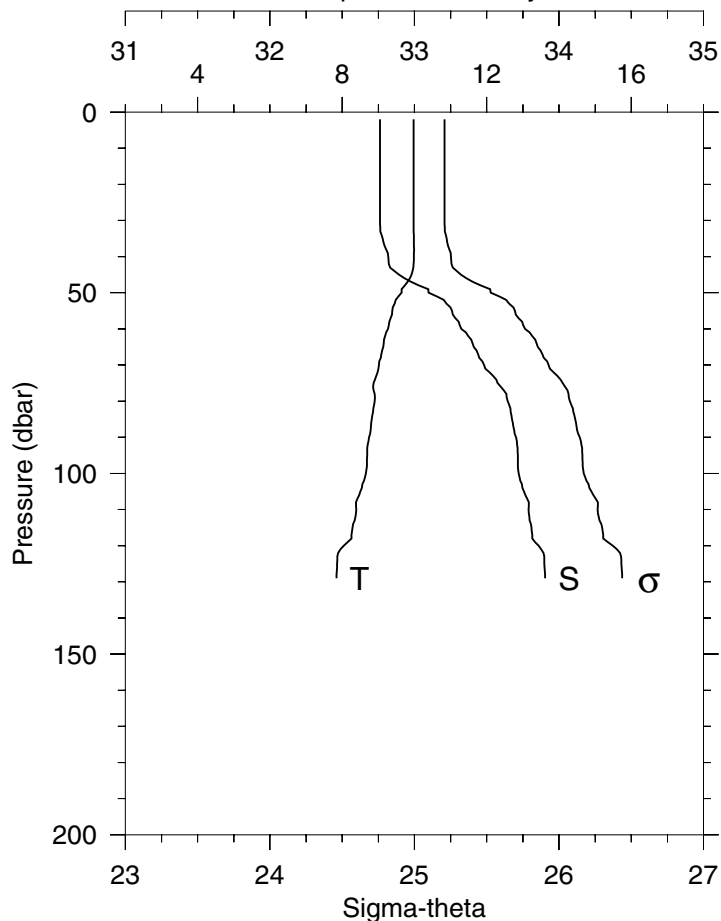
Station 23 RR-2 Temperature, Salinity



STA: 23 RR-2 LAT: 42 30.0 N LONG: 124 36.0 W
23 MAR 2001 1549 GMT DEPTH 88

P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.98	32.766	9.98	25.212	0.027	0.71	88.1
10	9.98	32.768	9.98	25.213	0.275	0.72	88.2
20	9.62	32.978	9.62	25.436	0.541	0.73	87.3
30	9.18	33.287	9.17	25.750	0.783	0.44	86.7
40	8.78	33.604	8.78	26.060	0.988	0.20	88.1
50	8.59	33.662	8.58	26.136	1.179	0.17	87.6
60	8.31	33.769	8.30	26.262	1.362	0.19	86.9
70	8.16	33.879	8.15	26.371	1.533	0.23	84.1
80	8.11	33.891	8.11	26.387	1.698	0.22	83.5

Station 24 RR-3 Temperature, Salinity



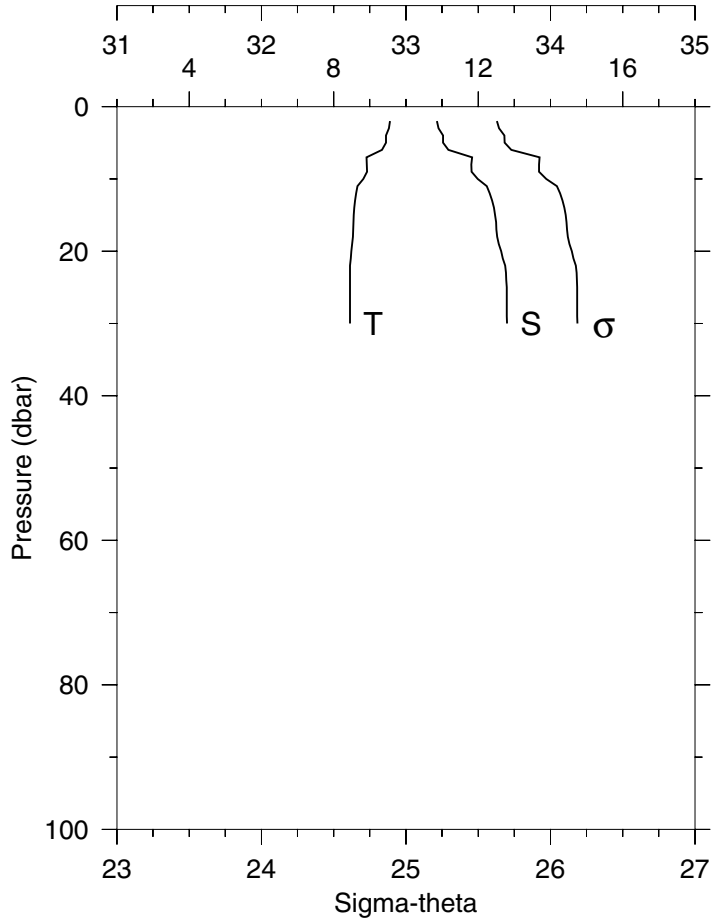
STA: 24 RR-3 LAT: 42 30.0 N LONG: 124 42.0 W
23 MAR 2001 1735 GMT DEPTH 135

P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.98	32.761	9.98	25.208	0.055	0.65	88.0
10	9.98	32.761	9.98	25.208	0.275	0.79	88.0
20	9.98	32.761	9.97	25.208	0.550	0.66	88.0
30	9.98	32.761	9.97	25.209	0.826	0.68	88.0
40	9.98	32.819	9.98	25.253	1.100	0.60	89.1
50	9.64	33.098	9.64	25.528	1.362	0.30	90.0
60	9.27	33.325	9.26	25.766	1.593	0.22	89.9
70	9.02	33.481	9.01	25.928	1.807	0.19	89.2
80	8.90	33.646	8.89	26.075	2.007	0.16	89.8
90	8.75	33.702	8.74	26.143	2.198	0.16	89.8
100	8.65	33.721	8.64	26.172	2.384	0.16	89.8
110	8.39	33.790	8.38	26.267	2.564	0.16	89.5
120	8.05	33.859	8.03	26.373	2.738	0.16	88.5
129	7.85	33.904	7.83	26.438	2.883	0.17	87.0

W0103B

Station 25 FM-1 Temperature, Salinity

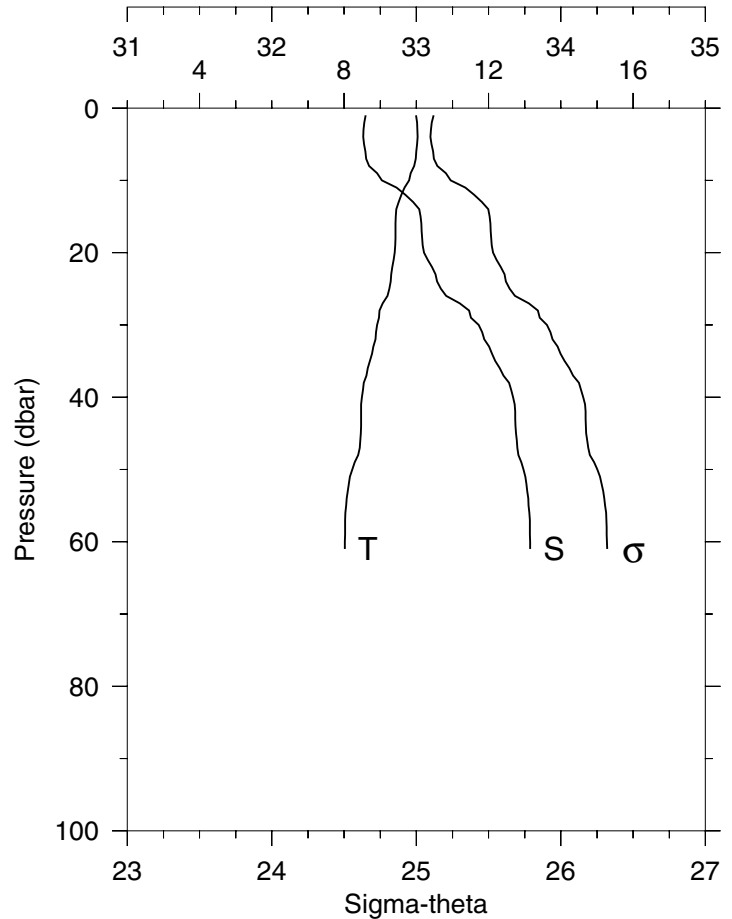
STA: 25 FM-1 LAT: 43 13.1 N LONG: 124 26.0 W
23 MAR 2001 2229 GMT DEPTH 34



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.56	33.214	9.56	25.630	0.047	0.82	80.2
10	8.82	33.497	8.82	25.970	0.223	0.89	81.1
20	8.49	33.658	8.49	26.147	0.414	0.27	82.1
30	8.45	33.699	8.44	26.186	0.597	0.39	67.5

Station 26 FM-3 Temperature, Salinity

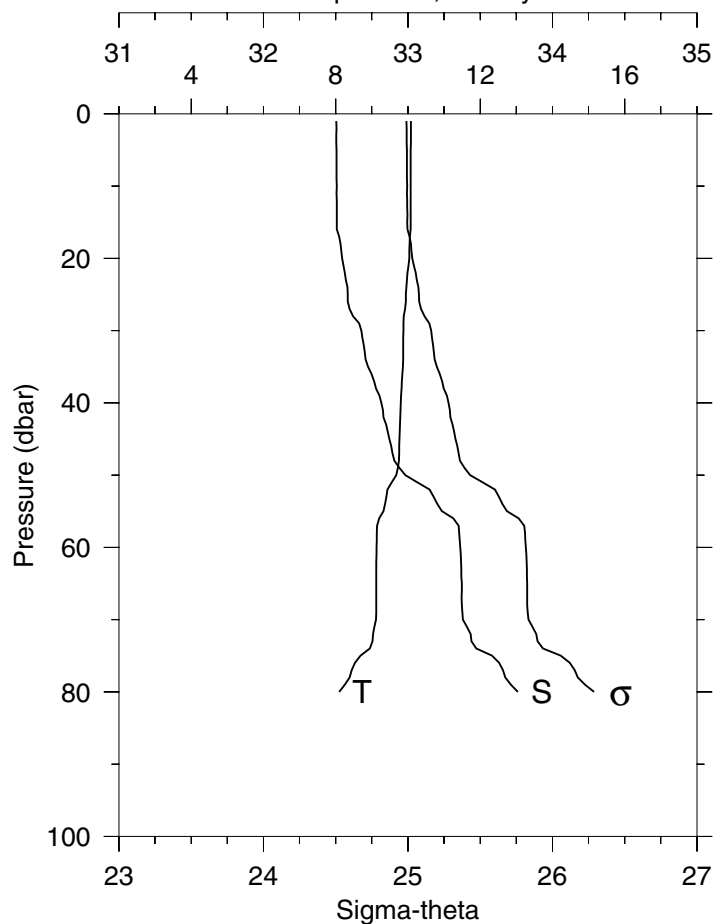
STA: 26 FM-3 LAT: 43 13.1 N LONG: 124 30.0 W
23 MAR 2001 2322 GMT DEPTH 67



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.99	32.650	9.99	25.120	0.028	1.73	83.7
10	9.80	32.761	9.80	25.238	0.283	1.97	83.2
20	9.40	33.054	9.40	25.532	0.533	1.15	83.5
30	8.91	33.431	8.91	25.904	0.763	0.49	85.5
40	8.49	33.669	8.49	26.155	0.960	0.27	86.6
50	8.23	33.741	8.22	26.253	1.143	0.20	86.4
60	8.02	33.787	8.02	26.319	1.315	0.20	86.1
61	8.02	33.788	8.02	26.320	1.332	0.23	86.1

W0103B

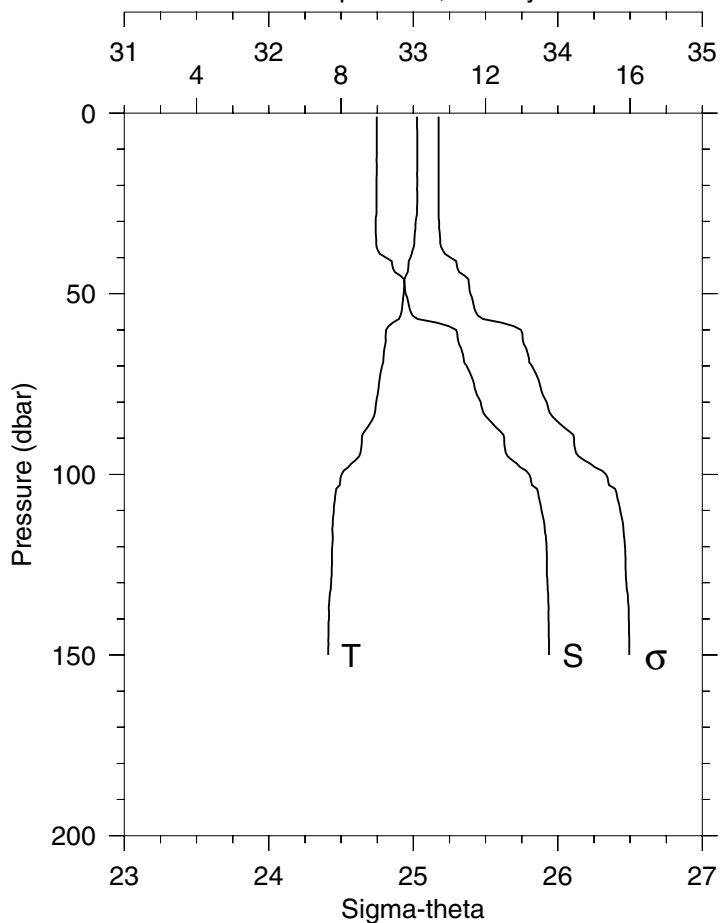
Station 27 FM-4 Temperature, Salinity



STA: 27 FM-4 LAT: 43 13.1 N LONG: 124 35.0 W
24 MAR 2001 0058 GMT DEPTH 87

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.08	32.504	10.08	24.990	0.030	3.05	82.5
10	10.07	32.507	10.07	24.994	0.296	2.94	83.0
20	10.04	32.544	10.03	25.030	0.590	2.27	82.4
30	9.87	32.678	9.87	25.161	0.878	1.56	86.2
40	9.80	32.815	9.80	25.281	1.153	0.69	88.5
50	9.68	32.981	9.67	25.430	1.417	0.48	89.2
60	9.13	33.361	9.13	25.815	1.647	0.19	89.4
70	9.11	33.381	9.11	25.834	1.865	0.20	89.2
80	8.09	33.761	8.09	26.288	2.063	0.19	87.1

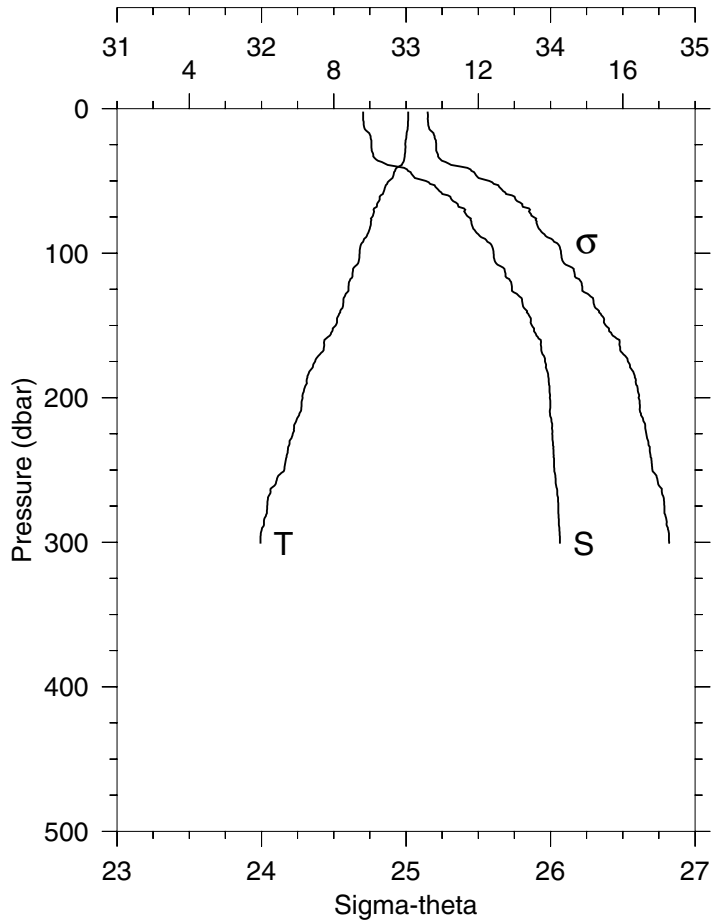
Station 28 FM-5 Temperature, Salinity



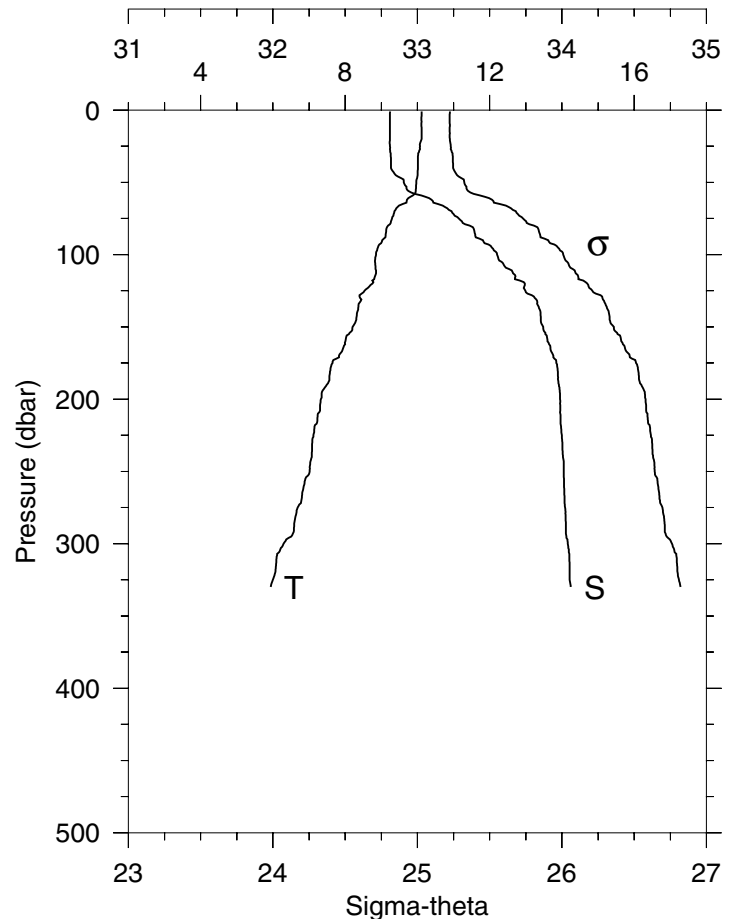
STA: 28 FM-5 LAT: 43 13.1 N LONG: 124 40.0 W
24 MAR 2001 0239 GMT DEPTH 156

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	10.10	32.747	10.10	25.176	0.028	1.27	85.7
10	10.11	32.747	10.11	25.176	0.278	1.71	86.8
20	10.11	32.746	10.11	25.175	0.557	1.17	86.8
30	10.07	32.740	10.06	25.178	0.835	1.33	86.3
40	9.92	32.811	9.91	25.258	1.112	0.99	86.9
50	9.74	32.947	9.73	25.394	1.375	0.41	88.9
60	9.25	33.296	9.24	25.746	1.624	0.22	89.7
70	9.14	33.369	9.13	25.821	1.846	0.19	89.7
80	8.97	33.466	8.96	25.923	2.060	0.17	89.4
90	8.57	33.629	8.56	26.112	2.261	0.17	88.2
100	8.01	33.802	8.00	26.333	2.445	0.19	86.2
110	7.80	33.888	7.79	26.432	2.610	0.21	85.0
120	7.75	33.922	7.74	26.465	2.768	0.26	83.6
130	7.72	33.928	7.71	26.474	2.926	0.24	83.1
140	7.67	33.936	7.65	26.490	3.082	0.25	82.9
150	7.64	33.939	7.63	26.495	3.237	0.22	82.5

W0103B

Station 29 FM-6
Temperature, SalinitySTA: 29 FM-6 LAT: 43 13.2 N LONG: 124 45.0 W
24 MAR 2001 0433 GMT DEPTH 311

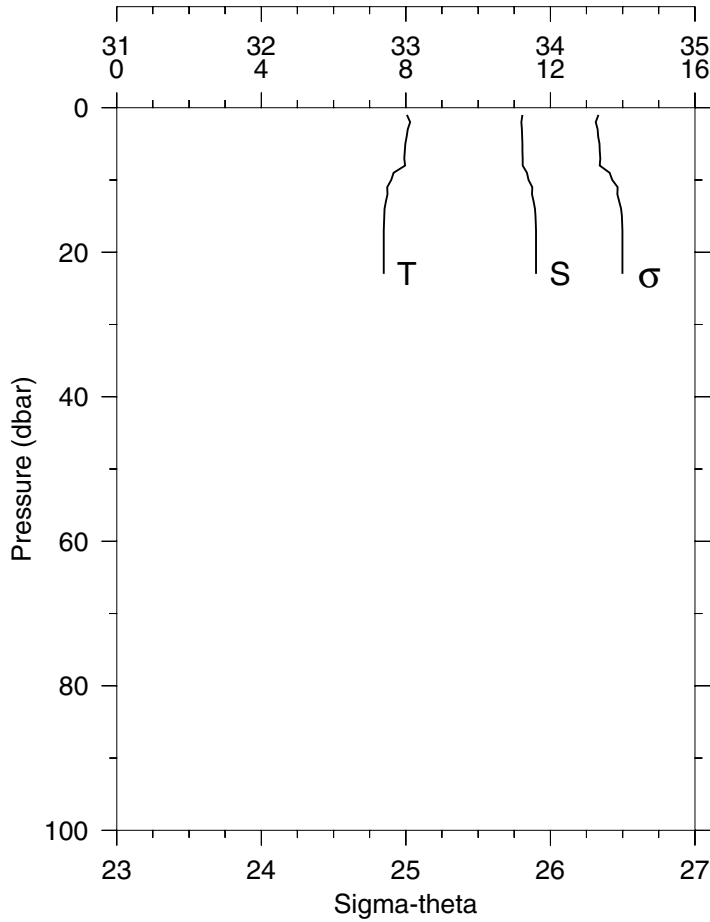
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.06	32.703	10.06	25.150	0.056	1.09	86.6
10	10.06	32.707	10.05	25.153	0.281	1.14	86.5
20	10.01	32.754	10.00	25.198	0.559	1.14	87.3
30	9.98	32.766	9.97	25.213	0.835	0.84	88.3
40	9.80	32.938	9.80	25.376	1.106	0.52	89.7
50	9.52	33.136	9.52	25.576	1.356	0.28	90.1
60	9.30	33.289	9.30	25.732	1.590	0.19	90.1
70	9.10	33.409	9.09	25.859	1.811	0.17	89.9
80	9.02	33.455	9.01	25.906	2.024	0.16	90.0
90	8.85	33.546	8.84	26.006	2.231	0.15	90.0
100	8.72	33.605	8.70	26.073	2.427	0.15	89.9
110	8.56	33.671	8.54	26.149	2.620	0.15	89.9
120	8.42	33.727	8.41	26.213	2.806	0.14	89.7
130	8.30	33.785	8.29	26.277	2.986	0.15	89.9
140	8.18	33.837	8.16	26.336	3.159	0.15	90.2
150	8.05	33.871	8.04	26.382	3.327	0.15	90.1
175	7.48	33.961	7.47	26.536	3.722	0.16	89.2
200	7.14	33.994	7.12	26.610	4.091	0.16	88.8
225	6.87	34.012	6.85	26.662	4.448	0.16	90.0
250	6.63	34.026	6.60	26.705	4.793	0.16	89.8
275	6.16	34.053	6.13	26.788	5.122	0.15	88.2
300	5.97	34.064	5.94	26.821	5.441	0.16	86.9
301	5.97	34.064	5.94	26.820	5.453	0.16	86.9

STA: 30 FM-7 LAT: 43 13.1 N LONG: 124 50.0 W
24 MAR 2001 0615 GMT DEPTH 344Station 30 FM-7
Temperature, Salinity

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.11	32.811	10.11	25.224	0.027	0.66	88.6
10	10.11	32.809	10.11	25.224	0.274	0.72	88.5
20	10.11	32.810	10.11	25.224	0.547	0.71	88.5
30	10.02	32.815	10.02	25.243	0.821	0.84	88.3
40	10.02	32.818	10.01	25.247	1.093	0.74	88.7
50	9.97	32.906	9.96	25.324	1.362	0.48	89.5
60	9.81	33.055	9.80	25.467	1.623	0.34	89.9
70	9.36	33.236	9.36	25.681	1.864	0.20	90.2
80	9.19	33.362	9.18	25.807	2.091	0.17	90.1
90	9.03	33.453	9.02	25.905	2.307	0.16	90.3
100	8.86	33.552	8.85	26.009	2.512	0.15	89.8
110	8.84	33.634	8.83	26.075	2.710	0.16	90.2
120	8.76	33.744	8.75	26.175	2.901	0.15	90.3
130	8.42	33.812	8.40	26.281	3.082	0.15	90.1
140	8.33	33.852	8.32	26.325	3.255	0.15	90.5
150	8.21	33.871	8.19	26.359	3.426	0.15	90.6
175	7.65	33.962	7.63	26.513	3.831	0.15	90.7
200	7.32	33.987	7.30	26.579	4.208	0.15	90.5
225	7.12	33.999	7.10	26.617	4.575	0.15	90.6
250	7.02	34.013	6.99	26.642	4.934	0.15	90.9
275	6.68	34.022	6.66	26.695	5.285	0.16	90.5
300	6.29	34.041	6.27	26.761	5.625	0.17	89.8
330	5.94	34.061	5.91	26.821	6.011	0.15	90.1

W0107A

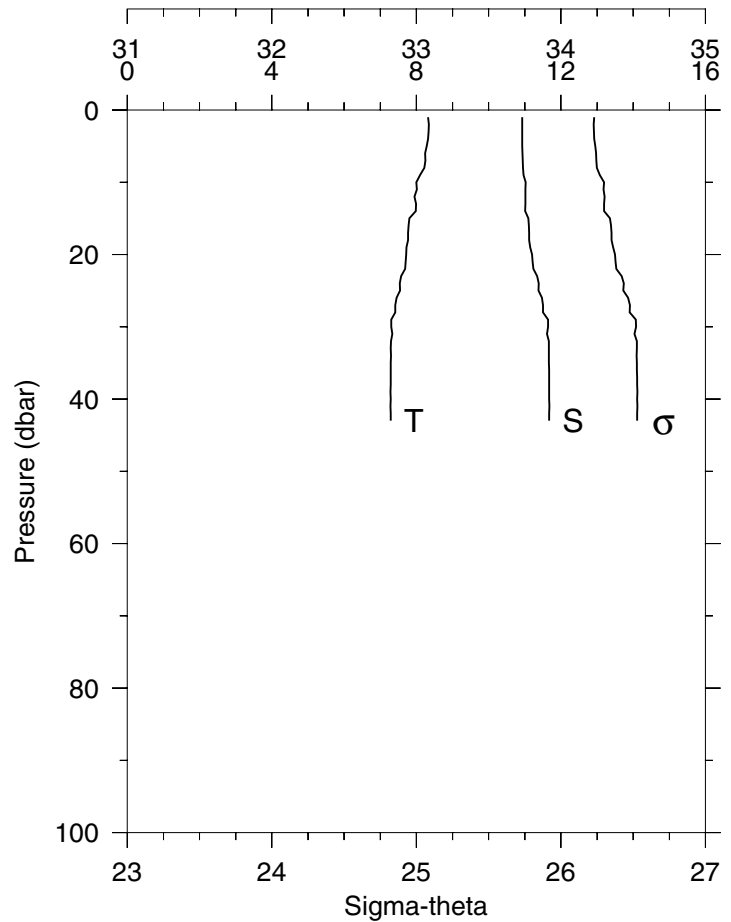
Station 1 NH-1
Temperature, Salinity



STA: 1 NH-1 LAT: 44 39.1 N LONG: 124 6.1 W
06 JUL 2001 1855 GMT DEPTH 29

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	8.03	33.807	8.03	26.333	0.017	1.13	82.4
10	7.60	33.849	7.59	26.429	0.167	2.02	81.3
20	7.39	33.901	7.39	26.499	0.321	1.49	80.5
23	7.39	33.901	7.39	26.499	0.367	1.49	79.8

Station 2 NH-3
Temperature, Salinity



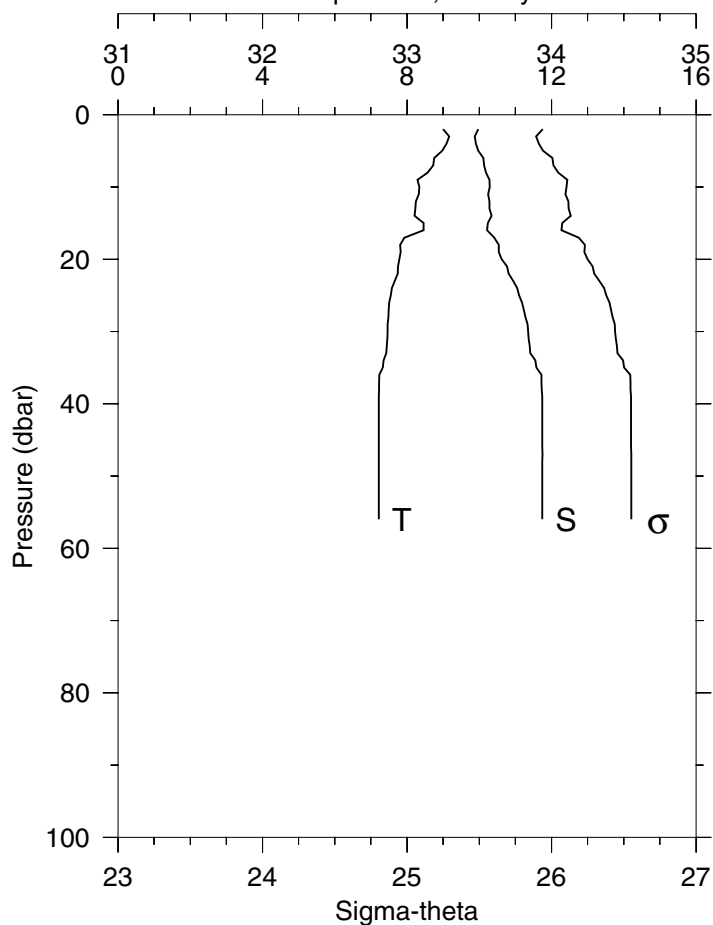
STA: 2 NH-3 LAT: 44 39.1 N LONG: 124 7.9 W
06 JUL 2001 1936 GMT DEPTH 48

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	8.32	33.732	8.32	26.230	0.018	0.33	85.1
10	8.00	33.757	8.00	26.299	0.177	0.59	84.9
20	7.72	33.800	7.71	26.374	0.346	0.73	86.1
30	7.30	33.912	7.30	26.521	0.504	0.33	87.3
40	7.29	33.919	7.29	26.528	0.654	0.26	87.2
43	7.29	33.918	7.29	26.527	0.699	0.26	87.2

W0107A

Station 3 NH-5 Temperature, Salinity

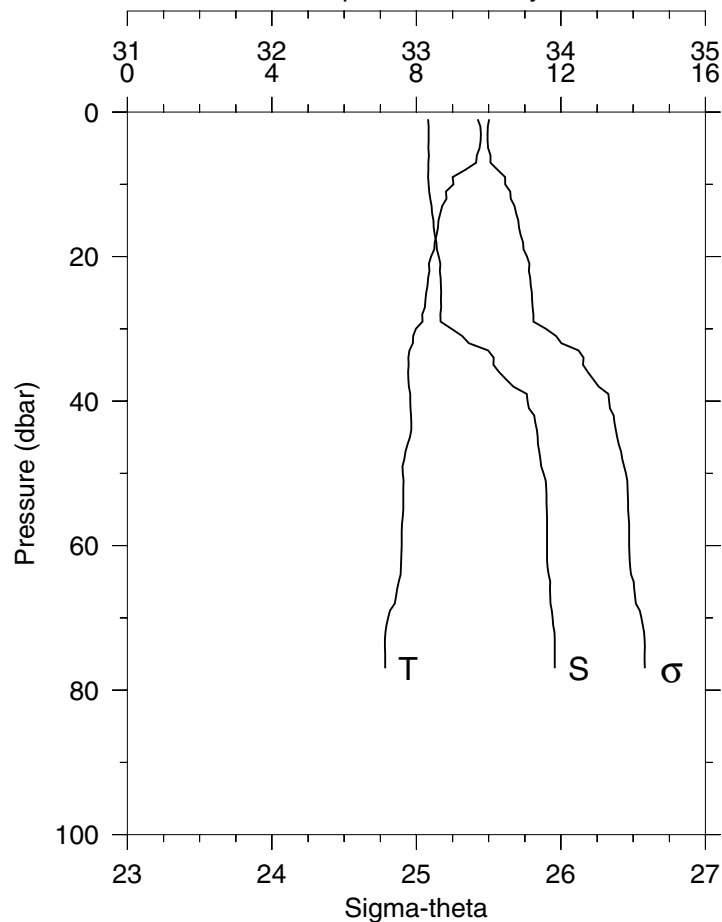
STA: 3 NH-5 LAT: 44 39.0 N LONG: 124 10.9 W
06 JUL 2001 2021 GMT DEPTH 61



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.00	33.493	9.00	25.939	0.041	1.14	81.3
10	8.34	33.572	8.34	26.103	0.201	2.18	83.3
20	7.79	33.656	7.78	26.250	0.388	0.32	88.3
30	7.46	33.837	7.46	26.439	0.553	0.19	89.6
40	7.22	33.935	7.21	26.551	0.706	0.17	87.6
50	7.22	33.936	7.21	26.552	0.854	0.18	87.3
56	7.22	33.936	7.21	26.552	0.943	0.18	87.2

Station 4 NH-10 Temperature, Salinity

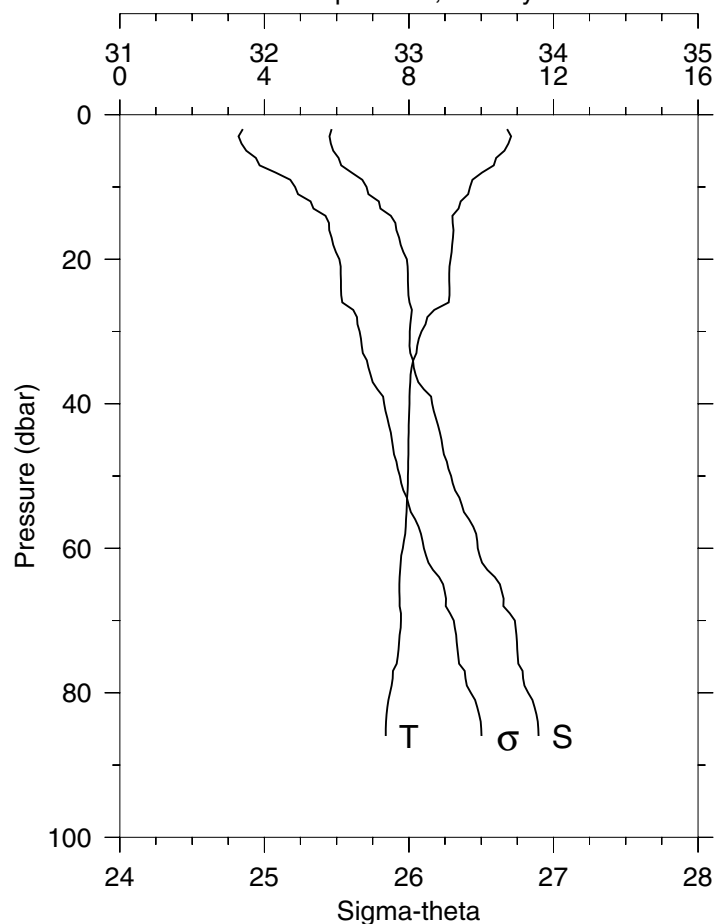
STA: 4 NH-10 LAT: 44 39.1 N LONG: 124 17.8 W
06 JUL 2001 2218 GMT DEPTH 82



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.70	33.081	9.70	25.504	0.025	1.65	81.9
10	9.03	33.084	9.03	25.614	0.245	2.32	83.3
20	8.41	33.155	8.40	25.766	0.474	2.29	86.2
30	7.99	33.243	7.98	25.897	0.693	0.52	89.1
40	7.83	33.769	7.82	26.333	0.879	0.14	90.5
50	7.63	33.880	7.62	26.450	1.042	0.14	90.5
60	7.59	33.904	7.59	26.473	1.198	0.14	90.5
70	7.22	33.943	7.21	26.557	1.351	0.17	88.0
77	7.13	33.958	7.13	26.581	1.454	0.20	86.9

W0107A

Station 5 NH-15 Temperature, Salinity

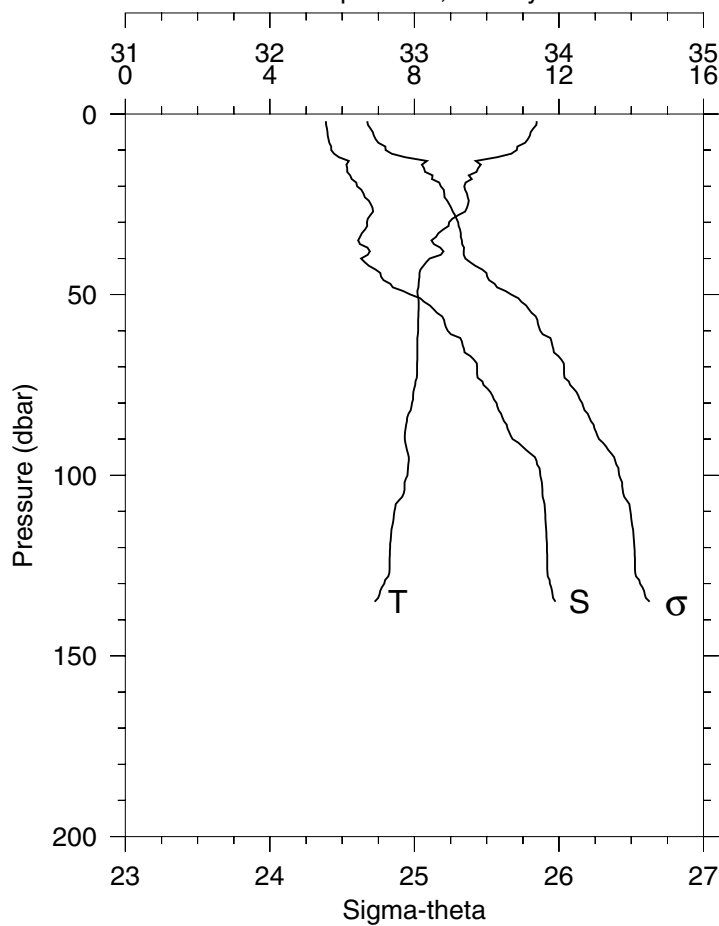
 STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.8 W
 06 JUL 2001 2333 GMT DEPTH 93


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.72	32.465	10.72	24.851	0.062	0.92	82.6
10	9.69	32.706	9.69	25.212	0.300	3.25	80.7
20	9.15	32.986	9.15	25.518	0.557	2.87	82.4
30	8.35	33.006	8.34	25.658	0.798	1.40	86.9
40	8.01	33.161	8.01	25.829	1.024	0.25	90.0
50	7.97	33.291	7.97	25.937	1.236	0.19	90.2
60	7.83	33.476	7.82	26.103	1.435	0.15	90.2
70	7.78	33.732	7.77	26.311	1.615	0.14	90.4
80	7.47	33.825	7.47	26.429	1.783	0.16	89.8
86	7.36	33.897	7.35	26.502	1.876	0.18	88.8

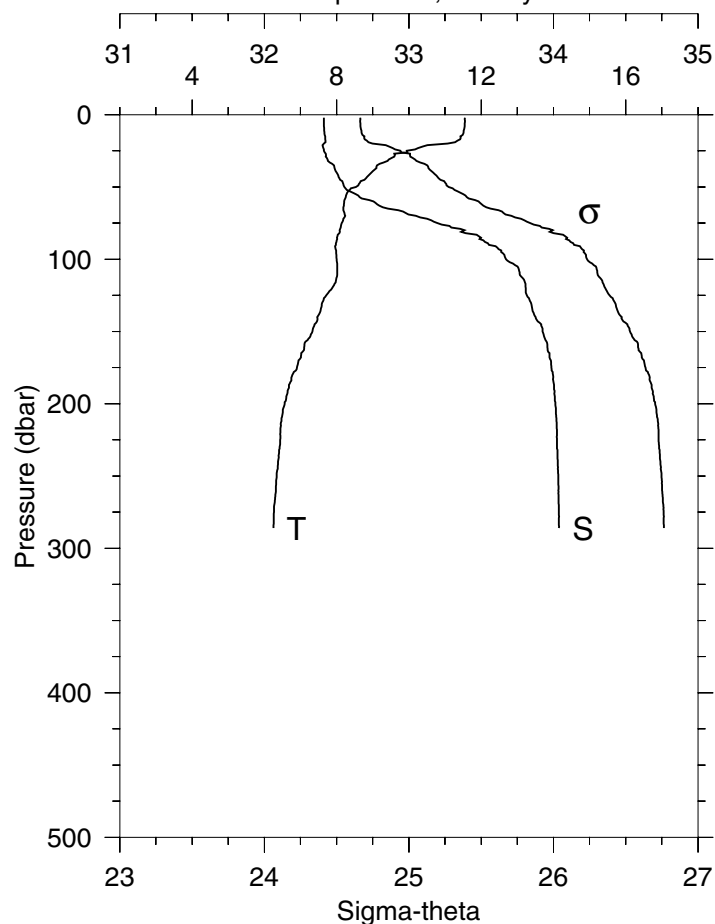
 STA: 6 NH-20 LAT: 44 39.1 N LONG: 124 31.8 W
 07 JUL 2001 0149 GMT DEPTH 143

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	11.39	32.388	11.39	24.674	0.065	1.83	79.7
10	10.84	32.424	10.83	24.800	0.322	2.19	80.9
20	9.38	32.603	9.38	25.182	0.612	1.85	84.5
30	8.96	32.671	8.95	25.302	0.885	1.41	86.0
40	8.42	32.630	8.42	25.352	1.149	1.39	87.6
50	8.09	32.973	8.09	25.670	1.396	0.33	89.9
60	8.10	33.230	8.10	25.870	1.616	0.21	90.4
70	8.07	33.434	8.06	26.035	1.820	0.17	90.6
80	7.93	33.569	7.93	26.161	2.013	0.15	90.6
90	7.73	33.679	7.72	26.277	2.193	0.14	90.2
100	7.81	33.871	7.80	26.417	2.360	0.14	90.6
110	7.45	33.903	7.44	26.494	2.518	0.15	88.8
120	7.32	33.917	7.31	26.522	2.671	0.16	87.5
130	7.17	33.937	7.15	26.561	2.822	0.17	86.4
135	6.90	33.975	6.88	26.627	2.895	0.18	86.6

Station 6 NH-20 Temperature, Salinity

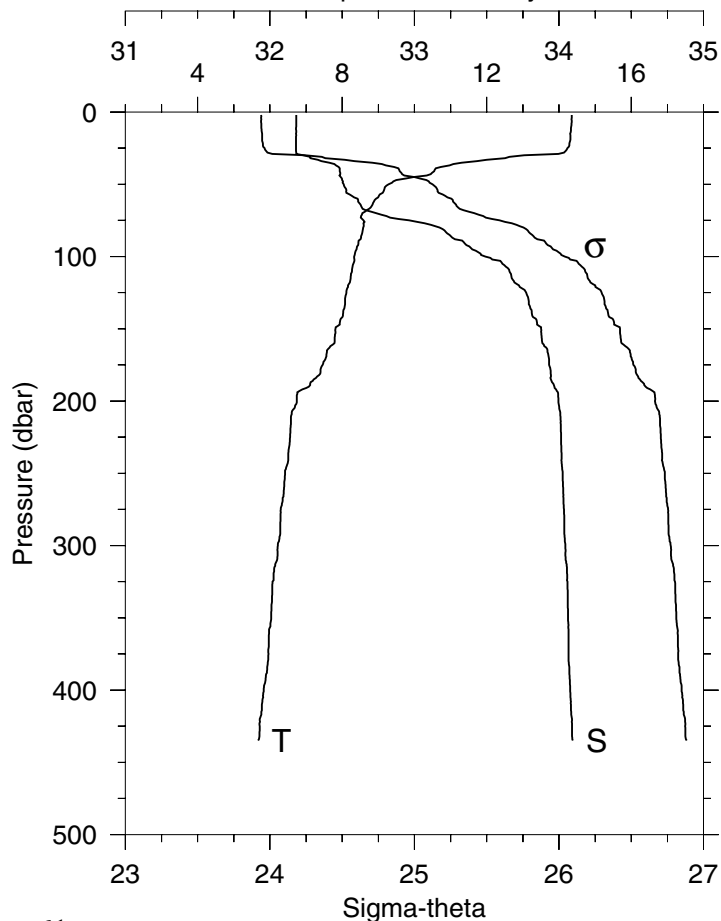


W0107A

Station 7 NH-25
Temperature, Salinity

STA: 7 NH-25 LAT: 44 39.0 N LONG: 124 39.0 W
07 JUL 2001 0309 GMT DEPTH 291

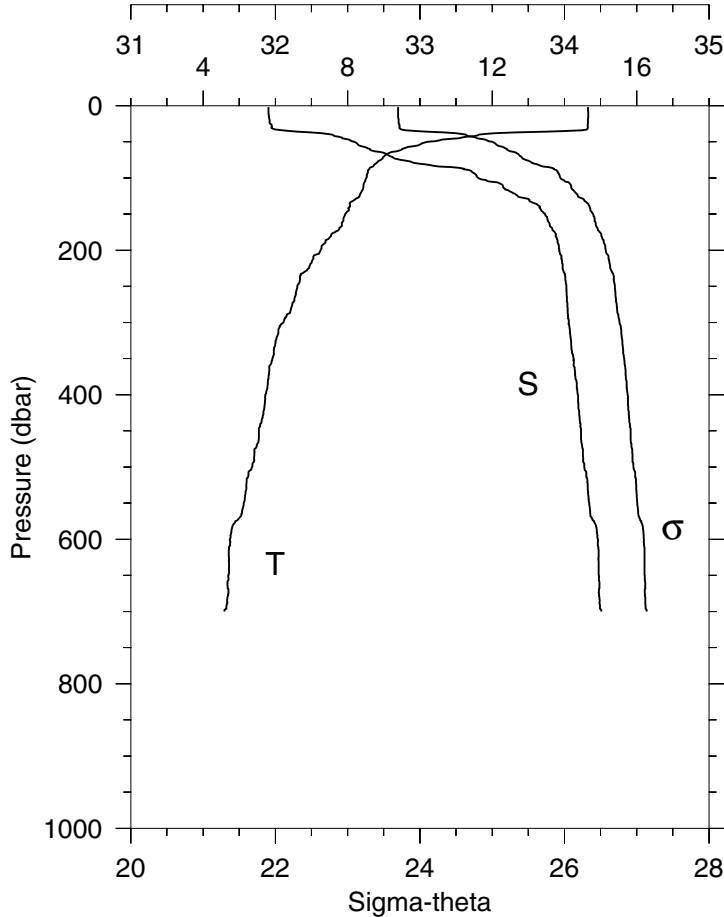
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	11.55	32.411	11.55	24.662	0.065	2.64	78.8
10	11.53	32.413	11.53	24.668	0.327	2.72	79.0
20	11.07	32.411	11.07	24.748	0.651	2.53	80.7
30	9.52	32.431	9.52	25.026	0.953	0.64	88.8
40	8.96	32.500	8.95	25.169	1.239	0.61	89.2
50	8.53	32.554	8.52	25.276	1.513	0.63	89.2
60	8.21	32.754	8.20	25.481	1.773	0.42	89.7
70	8.24	33.049	8.23	25.709	2.014	0.28	90.4
80	8.08	33.384	8.07	25.994	2.230	0.19	90.6
90	7.98	33.554	7.97	26.143	2.424	0.14	90.7
100	8.00	33.672	7.99	26.233	2.605	0.14	90.7
110	8.02	33.766	8.00	26.305	2.780	0.14	90.7
120	7.88	33.809	7.86	26.359	2.950	0.14	90.6
130	7.60	33.843	7.59	26.425	3.115	0.14	90.3
140	7.46	33.877	7.45	26.472	3.275	0.15	89.7
150	7.33	33.925	7.32	26.529	3.429	0.16	89.6
175	6.90	33.986	6.88	26.636	3.795	0.15	89.3
200	6.56	34.013	6.54	26.703	4.141	0.15	89.8
225	6.44	34.024	6.42	26.728	4.477	0.15	90.0
250	6.34	34.033	6.32	26.748	4.810	0.15	89.7
275	6.26	34.038	6.24	26.762	5.140	0.15	89.5
286	6.25	34.038	6.23	26.764	5.284	0.15	89.1

Station 8 NH-35
Temperature, Salinity

STA: 8 NH-35 LAT: 44 39.0 N LONG: 124 53.0 W
07 JUL 2001 0634 GMT DEPTH 440

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.35	32.183	14.35	23.939	0.079	0.67	83.7
10	14.34	32.182	14.34	23.940	0.396	0.67	83.6
20	14.31	32.181	14.31	23.947	0.792	0.75	83.6
30	13.04	32.231	13.04	24.242	1.184	0.69	86.2
40	10.56	32.484	10.56	24.894	1.514	0.51	88.3
50	9.28	32.510	9.28	25.126	1.810	1.08	87.8
60	8.94	32.607	8.93	25.256	2.089	0.75	88.9
70	8.56	32.735	8.56	25.414	2.355	0.47	89.9
80	8.59	33.174	8.58	25.754	2.596	0.26	90.5
90	8.45	33.341	8.44	25.905	2.814	0.21	90.6
100	8.33	33.490	8.32	26.041	3.019	0.17	90.7
110	8.27	33.656	8.26	26.180	3.208	0.15	90.7
120	8.16	33.724	8.15	26.250	3.390	0.14	90.7
130	8.08	33.789	8.06	26.314	3.565	0.14	90.6
140	8.02	33.814	8.01	26.342	3.736	0.14	90.7
150	7.81	33.877	7.80	26.422	3.902	0.14	90.6
175	7.46	33.931	7.44	26.515	4.298	0.14	90.3
200	6.75	33.997	6.73	26.665	4.665	0.15	90.1
225	6.56	34.014	6.54	26.704	5.007	0.15	90.0
250	6.42	34.025	6.39	26.732	5.346	0.15	89.9
275	6.30	34.035	6.28	26.755	5.679	0.15	89.8
300	6.22	34.044	6.19	26.773	6.008	0.15	90.2
350	6.04	34.063	6.01	26.811	6.651	0.15	89.8
400	5.83	34.078	5.80	26.849	7.282	0.15	89.8
435	5.68	34.096	5.64	26.883	7.713	0.15	89.4

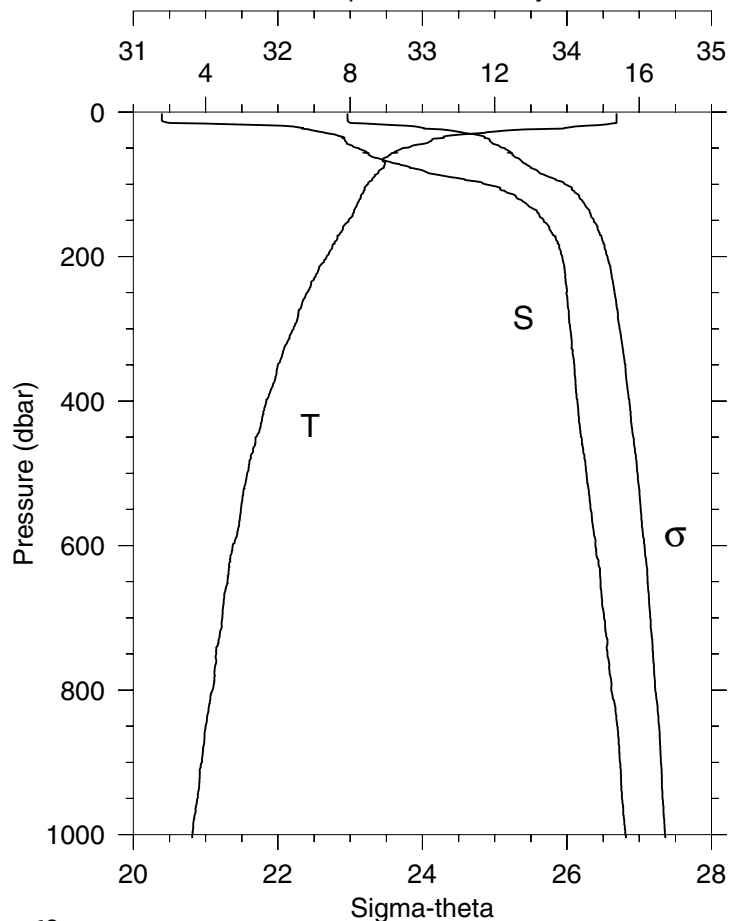
W0107A

Station 9 NH-45
Temperature, SalinitySTA: 9 NH-45 LAT: 44 39.1 N LONG: 125 7.1 W
07 JUL 2001 1000 GMT DEPTH 706

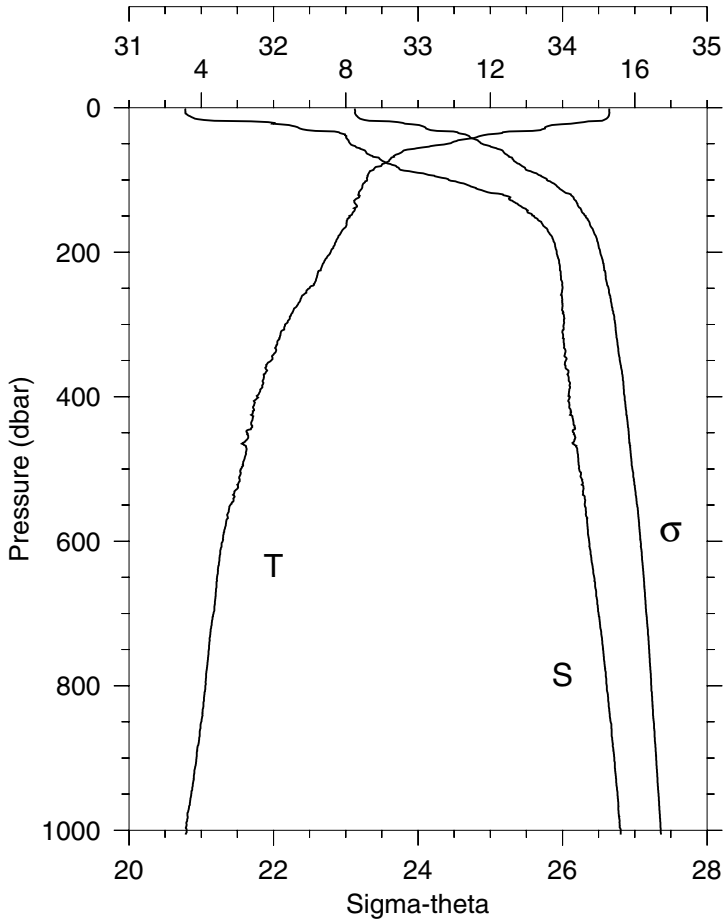
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.65	31.953	14.65	23.699	0.084	0.22	88.7
10	14.66	31.953	14.65	23.698	0.419	0.23	88.8
20	14.65	31.960	14.65	23.705	0.838	0.24	88.8
30	14.65	31.972	14.64	23.715	1.256	0.23	88.7
40	11.64	32.391	11.63	24.631	1.641	0.33	89.3
50	10.21	32.546	10.21	25.002	1.955	0.73	88.0
60	9.50	32.653	9.50	25.203	2.242	0.67	88.9
70	9.01	32.798	9.00	25.395	2.509	0.40	89.8
80	8.78	32.991	8.77	25.581	2.760	0.33	90.3
90	8.56	33.352	8.56	25.897	2.984	0.22	90.5
100	8.51	33.404	8.50	25.945	3.193	0.21	90.6
110	8.44	33.572	8.43	26.089	3.392	0.17	90.7
120	8.37	33.636	8.36	26.149	3.584	0.15	90.7
130	8.20	33.756	8.19	26.270	3.767	0.14	90.7
140	8.06	33.831	8.05	26.349	3.939	0.14	90.4
150	7.93	33.864	7.92	26.394	4.107	0.14	90.7
175	7.65	33.932	7.63	26.489	4.510	0.14	90.7
200	7.24	33.965	7.23	26.573	4.889	0.15	90.5
225	6.92	33.988	6.90	26.635	5.252	0.15	90.3
250	6.60	34.013	6.58	26.698	5.600	0.15	90.2
275	6.47	34.020	6.44	26.722	5.942	0.15	90.1
300	6.22	34.029	6.20	26.761	6.276	0.15	90.6
350	5.92	34.063	5.89	26.826	6.918	0.15	90.3
400	5.72	34.093	5.69	26.874	7.538	0.15	90.3
450	5.54	34.114	5.50	26.914	8.141	0.15	90.4
500	5.35	34.137	5.31	26.955	8.728	0.15	90.3
600	4.74	34.231	4.70	27.100	9.820	0.15	90.4
700	4.59	34.254	4.54	27.136	10.833	0.15	90.5

Station 10 NH-55
Temperature, SalinitySTA: 10 NH-55 LAT: 44 39.2 N LONG: 125 22.0 W
07 JUL 2001 1344 GMT DEPTH 2863

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	15.37	31.197	15.37	22.964	0.098	0.19	89.1
10	15.37	31.198	15.37	22.965	0.489	0.19	89.2
20	14.23	32.103	14.23	23.903	0.953	0.26	89.3
30	11.39	32.358	11.39	24.650	1.316	0.29	89.1
40	10.25	32.465	10.24	24.932	1.626	0.61	87.5
50	9.45	32.558	9.45	25.136	1.920	0.61	88.5
60	9.07	32.635	9.07	25.256	2.196	0.39	89.6
70	8.97	32.789	8.96	25.394	2.461	0.28	90.2
80	8.82	32.990	8.82	25.573	2.712	0.24	90.5
90	8.66	33.191	8.65	25.757	2.946	0.21	90.6
100	8.48	33.437	8.47	25.976	3.159	0.18	90.7
110	8.37	33.576	8.35	26.103	3.356	0.18	90.7
120	8.28	33.658	8.27	26.180	3.543	0.14	90.7
130	8.18	33.735	8.16	26.257	3.724	0.14	90.7
140	8.09	33.800	8.07	26.321	3.898	0.14	90.7
150	7.96	33.839	7.94	26.371	4.067	0.14	90.7
175	7.65	33.922	7.63	26.482	4.472	0.14	90.6
200	7.35	33.967	7.33	26.559	4.855	0.15	90.7
225	7.05	33.988	7.03	26.617	5.222	0.15	90.7
250	6.81	33.997	6.79	26.657	5.580	0.15	90.7
275	6.57	34.012	6.55	26.702	5.928	0.15	90.5
300	6.43	34.022	6.41	26.728	6.269	0.14	90.3
350	6.00	34.051	5.97	26.807	6.925	0.15	90.5
400	5.68	34.072	5.65	26.863	7.555	0.14	90.7
450	5.39	34.099	5.35	26.920	8.160	0.14	90.8
500	5.15	34.135	5.11	26.976	8.737	0.15	90.8
600	4.75	34.197	4.70	27.073	9.827	0.14	90.8
800	4.19	34.307	4.13	27.221	11.779	0.14	90.9
1000	3.63	34.405	3.56	27.357	13.473	0.14	90.9
1005	3.63	34.409	3.56	27.361	13.513	0.15	90.9



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Station 11 NH-65
Temperature, Salinity

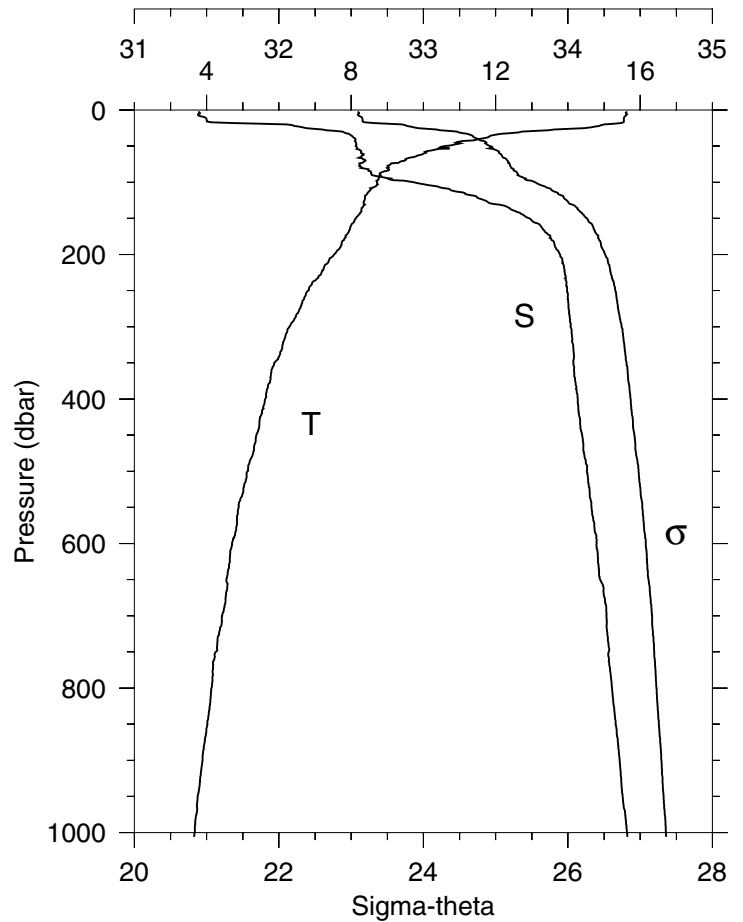
STA: 11 NH-65 LAT: 44 39.1 N LONG: 125 36.0 W
07 JUL 2001 1532 GMT DEPTH 2859

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	15.30	31.387	15.30	23.126	0.047	0.15	89.1
10	15.29	31.405	15.29	23.141	0.473	0.16	89.2
20	14.59	31.963	14.59	23.720	0.934	0.21	89.3
30	13.43	32.201	13.43	24.141	1.325	0.24	89.3
40	11.67	32.503	11.66	24.713	1.668	0.38	88.7
50	10.83	32.531	10.82	24.885	1.982	0.44	88.6
60	9.59	32.635	9.58	25.174	2.274	0.71	89.0
70	9.25	32.732	9.24	25.306	2.548	0.43	89.9
80	8.99	32.842	8.98	25.433	2.810	0.33	90.3
90	8.64	32.999	8.64	25.608	3.059	0.26	90.4
100	8.59	33.213	8.58	25.784	3.288	0.22	90.5
110	8.46	33.383	8.45	25.937	3.502	0.19	90.6
120	8.35	33.587	8.34	26.114	3.703	0.15	90.7
130	8.23	33.659	8.22	26.188	3.890	0.13	90.7
140	8.26	33.746	8.24	26.253	4.072	0.14	90.7
150	8.09	33.802	8.08	26.322	4.248	0.14	90.7
175	7.85	33.912	7.83	26.445	4.663	0.14	90.7
200	7.58	33.960	7.56	26.521	5.054	0.14	90.7
225	7.30	33.982	7.28	26.578	5.430	0.15	90.7
250	6.99	34.000	6.97	26.635	5.795	0.15	90.7
275	6.64	34.001	6.62	26.683	6.148	0.14	90.7
300	6.32	34.007	6.29	26.732	6.490	0.15	90.7
350	5.93	34.023	5.90	26.793	7.151	0.15	90.7
400	5.55	34.050	5.52	26.861	7.779	0.14	90.8
450	5.27	34.077	5.23	26.917	8.383	0.15	90.8
500	5.09	34.114	5.05	26.967	8.964	0.14	90.8
600	4.59	34.185	4.55	27.080	10.046	0.14	90.9
800	4.11	34.306	4.05	27.228	11.981	0.14	90.9
1000	3.60	34.402	3.52	27.359	13.681	0.15	90.9
1006	3.57	34.402	3.49	27.361	13.729	0.14	90.9

Station 12 NH-85
Temperature, Salinity

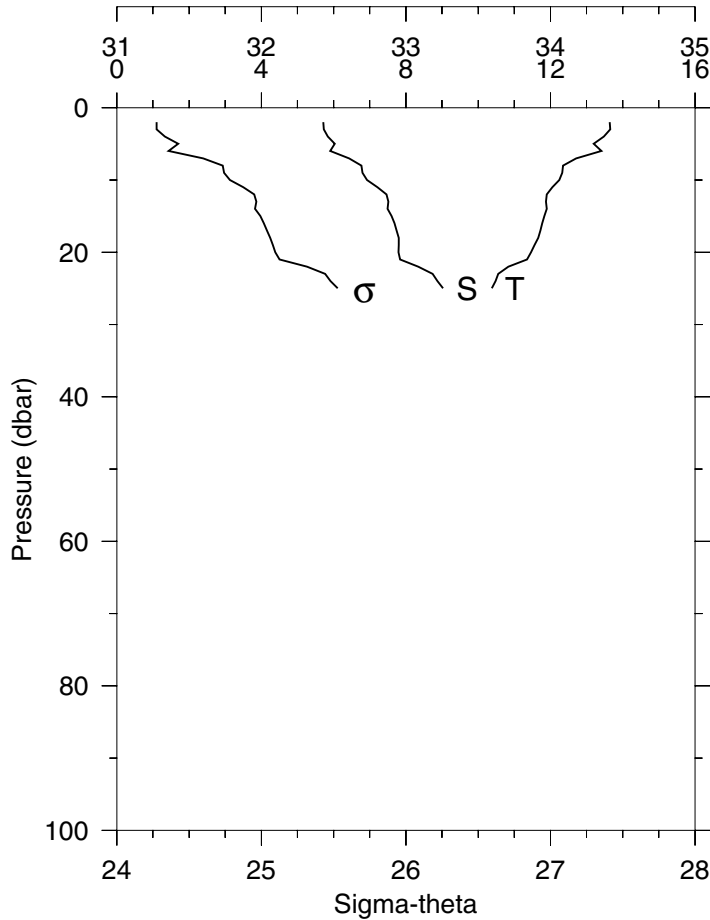
STA: 12 NH-85 LAT: 44 39.1 N LONG: 126 3.0 W
07 JUL 2001 1819 GMT DEPTH 2883

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	15.63	31.444	15.63	23.096	0.095	0.14	89.1
10	15.56	31.487	15.56	23.146	0.476	0.14	89.1
20	15.00	32.056	15.00	23.705	0.939	0.17	89.1
30	12.72	32.441	12.72	24.467	1.330	0.23	88.6
40	11.57	32.530	11.57	24.752	1.660	0.35	88.0
50	10.61	32.531	10.60	24.923	1.970	0.63	86.9
60	10.02	32.569	10.01	25.053	2.267	1.21	86.7
70	9.48	32.600	9.48	25.164	2.553	0.82	88.4
80	8.99	32.565	8.98	25.215	2.831	0.54	89.5
90	8.82	32.644	8.81	25.304	3.101	0.33	90.2
100	8.71	32.936	8.70	25.548	3.358	0.24	90.5
110	8.53	33.185	8.52	25.772	3.593	0.20	90.6
120	8.38	33.369	8.37	25.939	3.808	0.17	90.6
130	8.35	33.480	8.34	26.031	4.012	0.15	90.7
140	8.29	33.636	8.27	26.162	4.204	0.14	90.6
150	8.13	33.732	8.11	26.261	4.386	0.14	90.7
175	7.84	33.879	7.83	26.419	4.810	0.14	90.6
200	7.53	33.946	7.51	26.518	5.207	0.14	90.6
225	7.18	33.978	7.16	26.592	5.582	0.14	90.6
250	6.81	33.994	6.79	26.655	5.942	0.15	90.6
275	6.58	34.005	6.56	26.695	6.290	0.14	90.6
300	6.29	34.019	6.26	26.744	6.629	0.14	90.7
350	5.88	34.038	5.85	26.812	7.280	0.15	90.7
400	5.62	34.068	5.59	26.868	7.905	0.15	90.7
450	5.38	34.098	5.34	26.921	8.507	0.14	90.8
500	5.13	34.131	5.09	26.976	9.085	0.14	90.8
600	4.70	34.199	4.65	27.079	10.169	0.15	90.8
800	4.14	34.305	4.07	27.226	12.112	0.15	90.8
1000	3.67	34.409	3.59	27.357	13.818	0.14	90.8
1006	3.65	34.412	3.58	27.361	13.866	0.14	90.8



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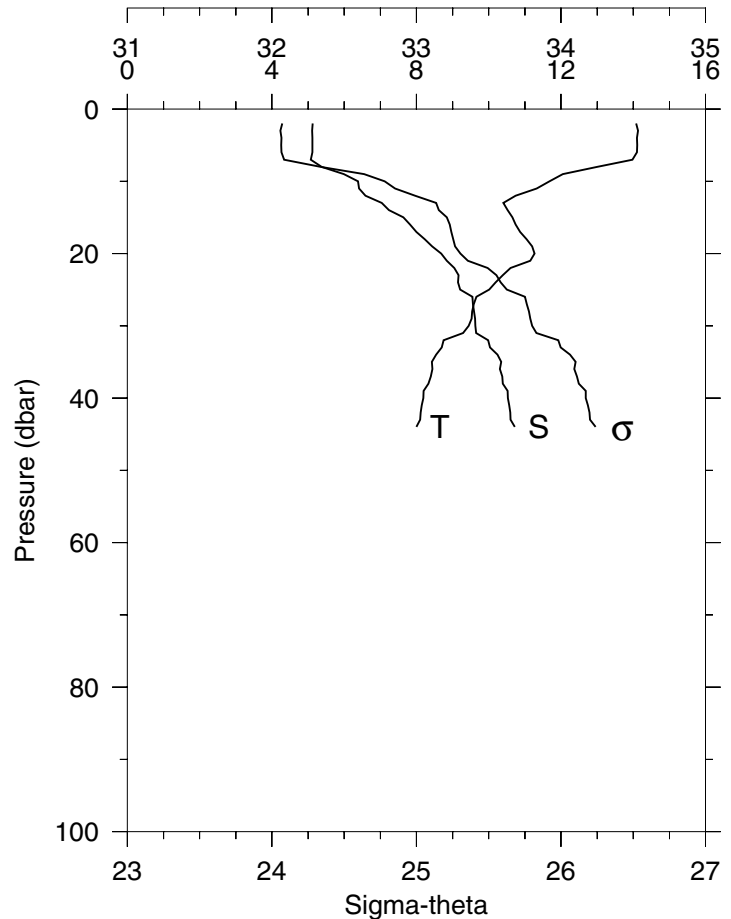
Station 1 NH-1
Temperature, Salinity



STA: 1 NH-1 LAT: 44 39.1 N LONG: 124 6.1 W
04 SEP 2001 1847 GMT DEPTH 29

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	13.64	32.429	13.64	24.275	0.073	2.32	78.3
10	12.24	32.731	12.24	24.782	0.347	2.69	79.0
20	11.47	32.949	11.46	25.096	0.643	1.88	79.4
25	10.38	33.256	10.38	25.527	0.775	2.01	62.9

Station 2 NH-3
Temperature, Salinity

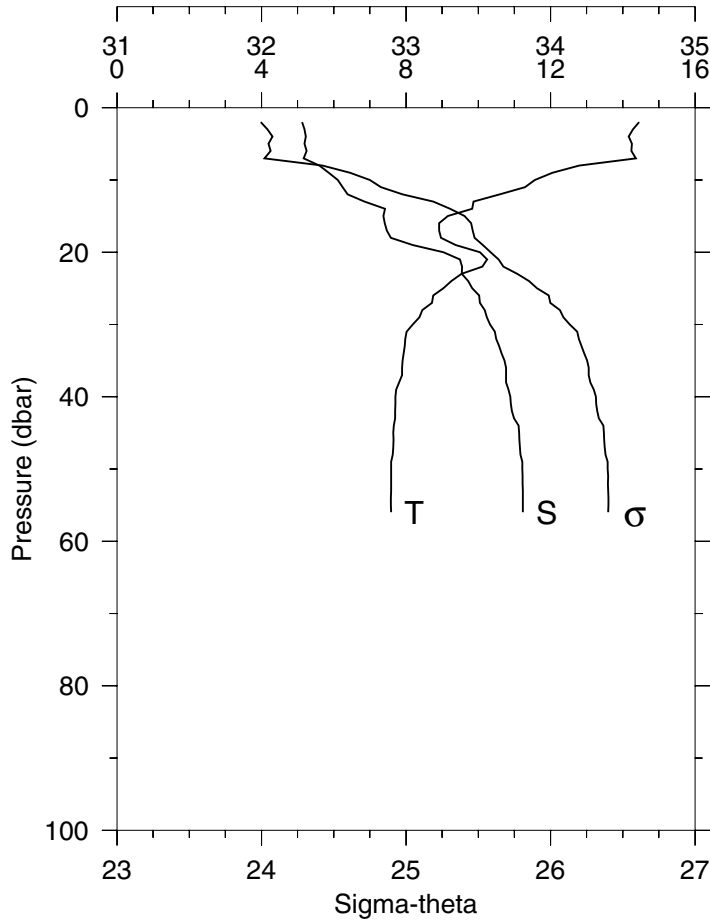


STA: 2 NH-3 LAT: 44 39.0 N LONG: 124 8.0 W
04 SEP 2001 1920 GMT DEPTH 49

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.08	32.282	14.08	24.071	0.077	1.55	80.6
10	11.69	32.596	11.68	24.781	0.372	1.79	82.3
20	11.27	33.172	11.26	25.305	0.654	0.69	87.7
30	9.44	33.408	9.44	25.801	0.890	0.46	86.8
40	8.19	33.632	8.19	26.172	1.086	0.55	83.0
44	8.00	33.681	8.00	26.239	1.159	0.62	81.5

W0109A

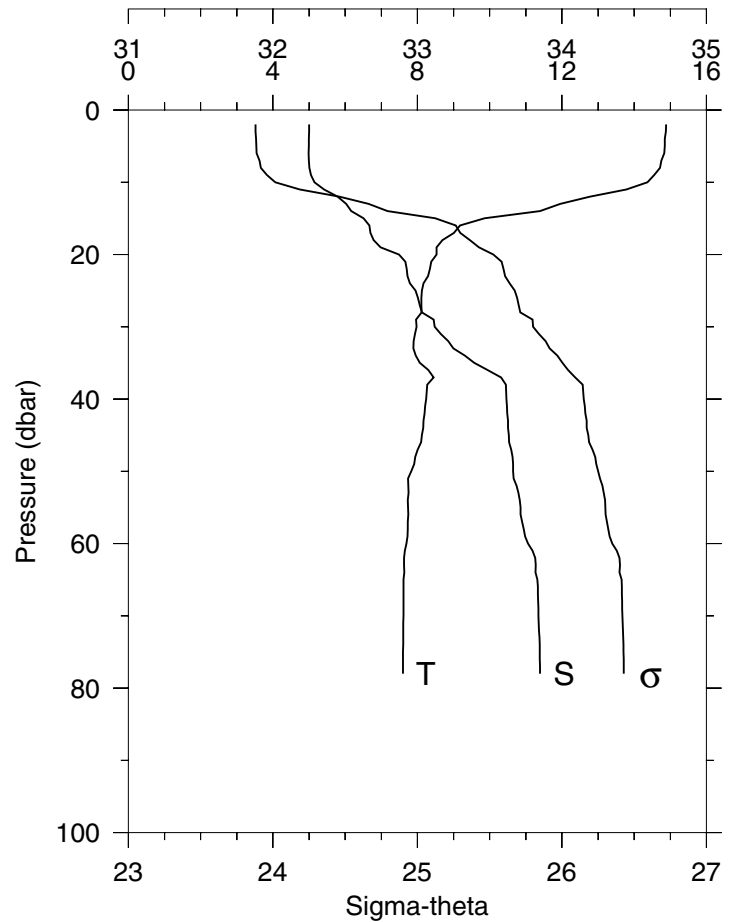
Station 3 NH-5 Temperature, Salinity



STA: 3 NH-5 LAT: 44 39.0 N LONG: 124 10.7 W
04 SEP 2001 1951 GMT DEPTH 60

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	14.45	32.281	14.45	23.994	0.078	1.00	84.4
10	11.57	32.528	11.57	24.750	0.375	1.17	85.6
20	10.05	33.258	10.04	25.585	0.643	0.62	88.2
30	8.18	33.581	8.18	26.133	0.854	0.28	89.9
40	7.70	33.721	7.70	26.314	1.032	0.25	89.1
50	7.59	33.805	7.58	26.396	1.198	0.42	85.8
56	7.59	33.808	7.58	26.399	1.296	0.78	82.6

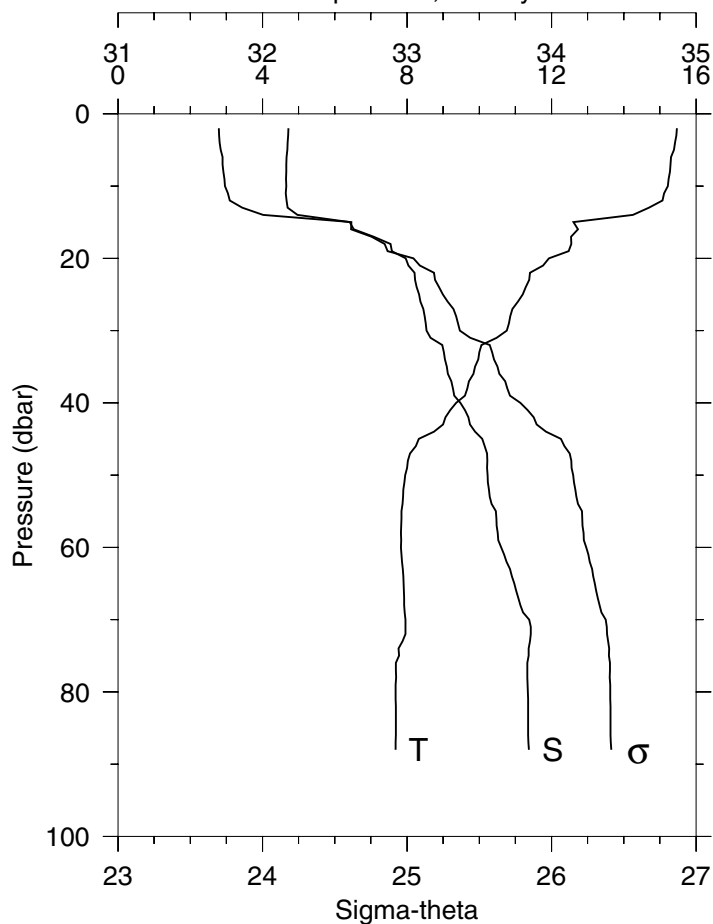
Station 4 NH-10 Temperature, Salinity



STA: 4 NH-10 LAT: 44 39.1 N LONG: 124 17.8 W
04 SEP 2001 2101 GMT DEPTH 83

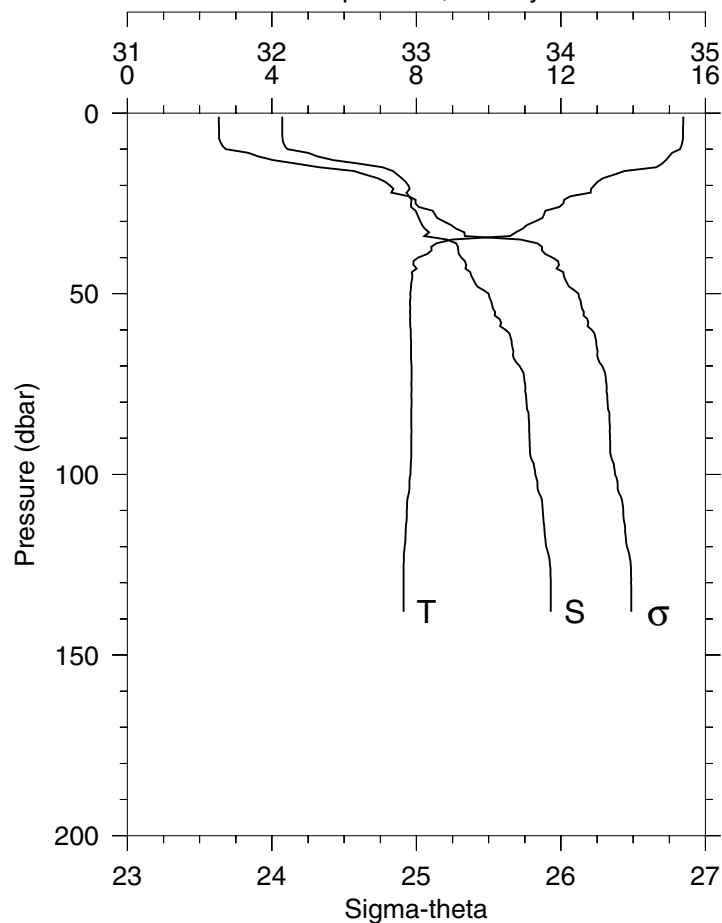
P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	14.88	32.250	14.88	23.879	0.080	1.29	82.6
10	14.36	32.288	14.36	24.017	0.399	2.14	83.8
20	8.53	32.872	8.53	25.525	0.701	0.45	89.2
30	7.98	33.119	7.97	25.801	0.933	0.31	89.8
40	8.24	33.616	8.24	26.152	1.133	0.37	89.5
50	7.83	33.663	7.82	26.250	1.315	0.29	89.9
60	7.70	33.765	7.69	26.349	1.487	0.18	89.7
70	7.61	33.837	7.61	26.418	1.650	0.25	87.6
78	7.60	33.848	7.59	26.428	1.778	0.29	86.5

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Station 5 NH-15
Temperature, Salinity

STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.8 W
04 SEP 2001 2152 GMT DEPTH 92

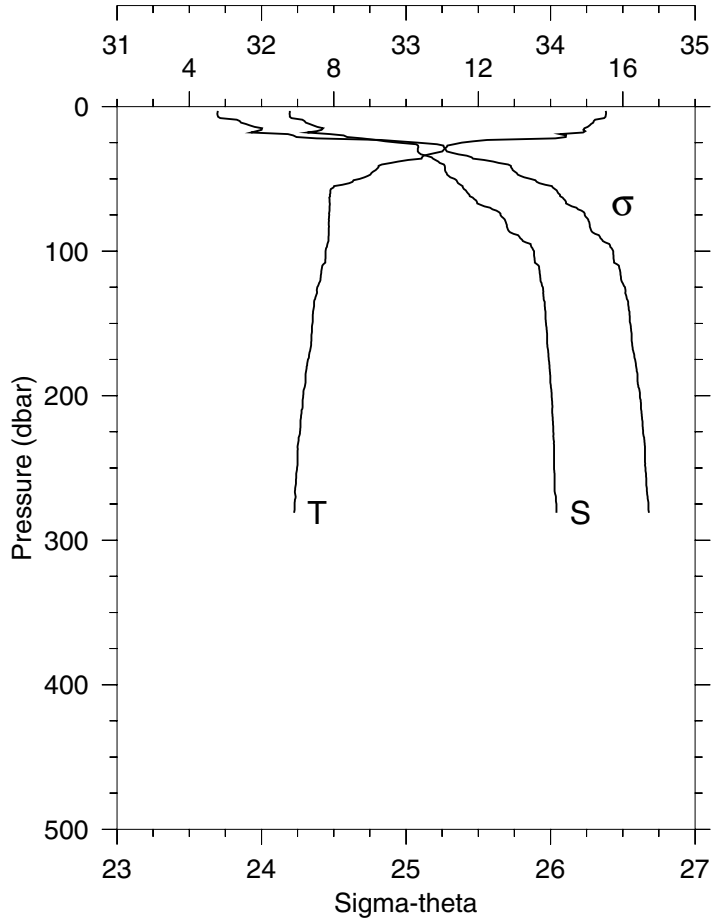
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	15.47	32.179	15.47	23.697	0.084	1.55	85.0
10	15.22	32.165	15.22	23.740	0.417	2.33	84.7
20	11.93	32.991	11.92	25.044	0.775	1.03	86.8
30	10.76	33.135	10.76	25.366	1.047	0.62	88.4
40	9.36	33.369	9.35	25.785	1.284	0.54	88.6
50	7.95	33.557	7.94	26.149	1.484	0.37	89.6
60	7.83	33.652	7.83	26.240	1.666	0.23	90.0
70	7.96	33.845	7.95	26.374	1.838	0.16	90.4
80	7.69	33.836	7.68	26.407	2.002	0.26	89.1
88	7.68	33.844	7.68	26.414	2.131	0.25	89.0

Station 6 NH-20
Temperature, Salinity

STA: 6 NH-20 LAT: 44 39.1 N LONG: 124 31.6 W
04 SEP 2001 2301 GMT DEPTH 143

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	15.39	32.072	15.39	23.632	0.043	1.20	82.5
10	15.30	32.107	15.30	23.680	0.425	1.55	82.5
20	12.92	32.945	12.92	24.818	0.784	0.85	88.4
30	11.29	33.027	11.28	25.189	1.080	0.60	89.2
40	8.04	33.312	8.04	25.943	1.319	0.28	90.0
50	7.83	33.500	7.83	26.121	1.517	0.20	90.3
60	7.84	33.618	7.84	26.213	1.703	0.18	90.3
70	7.86	33.713	7.86	26.285	1.880	0.16	90.2
80	7.87	33.762	7.86	26.323	2.051	0.36	90.3
90	7.86	33.783	7.85	26.340	2.221	0.15	90.4
100	7.84	33.822	7.82	26.375	2.388	0.15	90.5
110	7.74	33.875	7.72	26.431	2.551	0.15	90.4
120	7.68	33.899	7.67	26.458	2.711	0.16	90.5
130	7.65	33.929	7.64	26.486	2.867	0.17	88.2
138	7.65	33.930	7.63	26.487	2.992	0.17	88.1

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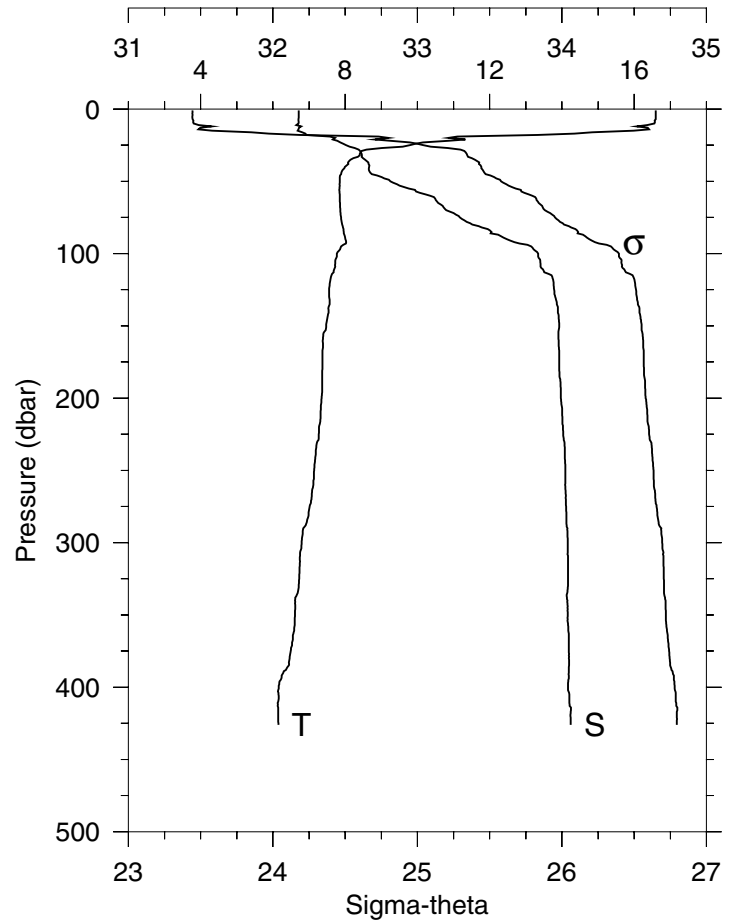
Station 7 NH-25
Temperature, Salinity

STA: 7 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
04 SEP 2001 2357 GMT DEPTH 295

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	15.53	32.196	15.53	23.697	0.126	1.28	83.0
10	15.20	32.297	15.19	23.848	0.417	1.64	82.3
20	14.43	32.568	14.43	24.220	0.810	1.60	84.9
30	11.04	33.081	11.04	25.275	1.113	0.72	88.3
40	9.33	33.262	9.33	25.706	1.365	0.46	89.3
50	8.71	33.336	8.71	25.861	1.588	0.37	89.5
60	7.91	33.428	7.90	26.054	1.790	0.19	90.4
70	7.88	33.582	7.87	26.179	1.982	0.15	90.4
80	7.86	33.690	7.86	26.267	2.160	0.15	90.3
90	7.86	33.785	7.85	26.342	2.334	0.15	90.4
100	7.77	33.885	7.76	26.433	2.498	0.15	90.6
110	7.68	33.918	7.67	26.472	2.658	0.15	90.6
120	7.63	33.930	7.62	26.490	2.814	0.15	90.7
130	7.52	33.950	7.51	26.521	2.967	0.15	90.6
140	7.44	33.961	7.43	26.541	3.119	0.17	90.5
150	7.41	33.968	7.39	26.552	3.269	0.15	90.5
175	7.29	33.988	7.27	26.585	3.641	0.16	90.5
200	7.16	34.008	7.14	26.619	4.005	0.15	90.3
225	7.07	34.019	7.05	26.640	4.363	0.16	90.2
250	6.98	34.025	6.96	26.657	4.717	0.15	90.3
275	6.92	34.040	6.89	26.677	5.068	0.15	89.2
281	6.90	34.041	6.87	26.681	5.152	0.18	89.0

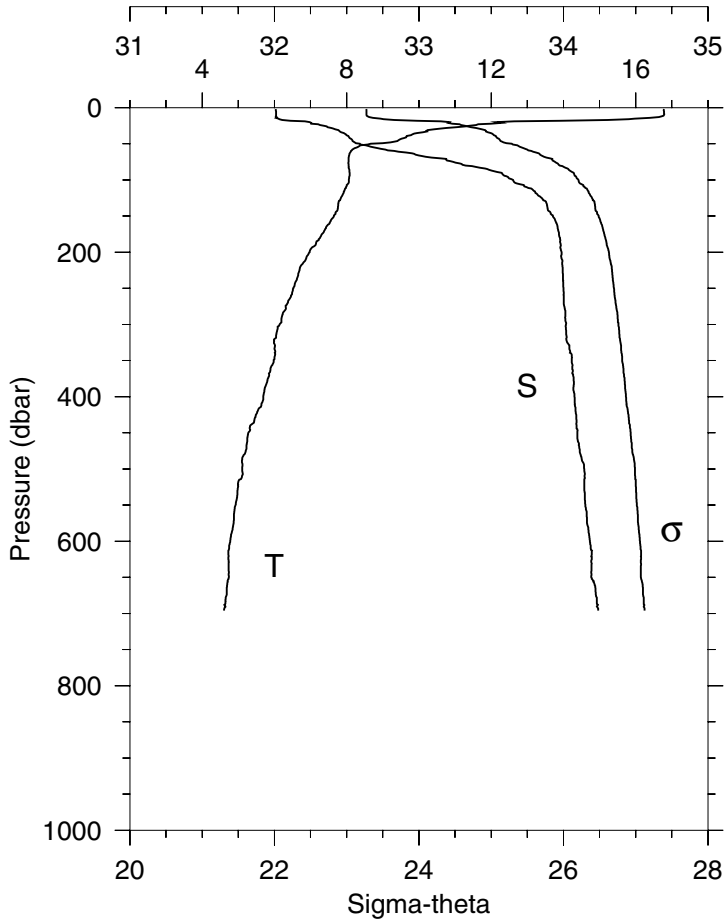
STA: 8 NH-35 LAT: 44 39.1 N LONG: 124 53.0 W
05 SEP 2001 0137 GMT DEPTH 436

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	16.60	32.178	16.60	23.443	0.044	0.66	86.2
10	16.56	32.177	16.56	23.452	0.443	0.68	86.2
20	10.87	32.429	10.86	24.799	0.848	1.70	86.1
30	8.43	32.609	8.43	25.334	1.139	0.61	89.4
40	7.99	32.665	7.99	25.443	1.397	0.40	90.0
50	7.85	32.814	7.85	25.580	1.645	0.28	90.3
60	7.85	33.089	7.85	25.795	1.876	0.20	90.4
70	7.86	33.200	7.86	25.881	2.092	0.18	90.4
80	7.92	33.379	7.91	26.015	2.297	0.16	90.5
90	8.01	33.619	8.00	26.189	2.488	0.14	90.6
100	7.77	33.835	7.76	26.395	2.660	0.15	90.4
110	7.71	33.858	7.70	26.421	2.822	0.16	90.3
120	7.58	33.942	7.57	26.506	2.979	0.16	90.0
130	7.56	33.954	7.55	26.518	3.132	0.16	89.9
140	7.54	33.973	7.53	26.536	3.284	0.16	89.7
150	7.48	33.981	7.46	26.552	3.435	0.17	89.4
175	7.37	33.981	7.36	26.567	3.807	0.18	89.2
200	7.35	33.993	7.33	26.580	4.178	0.17	89.3
225	7.27	34.009	7.25	26.604	4.546	0.16	89.4
250	7.14	34.024	7.12	26.634	4.907	0.16	90.0
275	7.02	34.029	6.99	26.655	5.265	0.15	89.8
300	6.80	34.040	6.77	26.694	5.615	0.16	90.0
350	6.61	34.040	6.58	26.719	6.303	0.15	90.2
400	6.16	34.043	6.12	26.781	6.975	0.15	90.8
426	6.15	34.060	6.11	26.796	7.314	0.15	90.1

Station 8 NH-35
Temperature, Salinity

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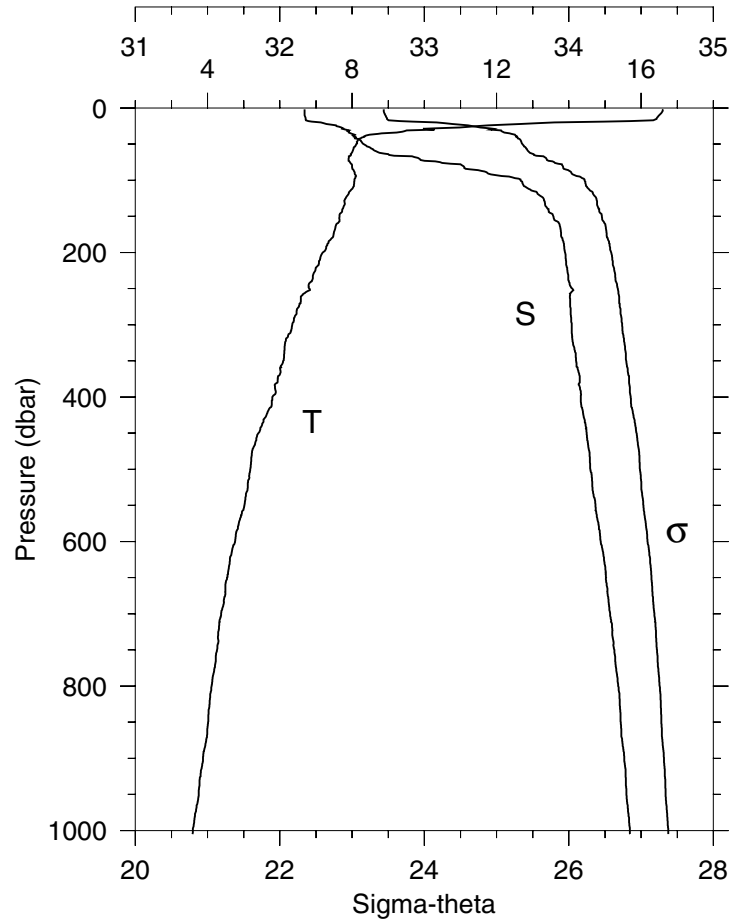
Station 9 NH-45 Temperature, Salinity



STA: 9 NH-45 LAT: 44 39.1 N LONG: 125 7.0 W
05 SEP 2001 1921 GMT DEPTH 694

P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
2	16.79	32.009	16.79	23.271	0.092	0.20	89.2
10	16.78	32.012	16.78	23.274	0.460	0.24	89.3
20	12.16	32.244	12.16	24.420	0.888	0.92	87.3
30	10.42	32.421	10.41	24.870	1.219	0.83	88.4
40	9.66	32.514	9.65	25.068	1.516	0.67	89.1
50	8.66	32.590	8.66	25.285	1.799	0.51	89.5
60	8.12	32.829	8.11	25.553	2.055	0.34	90.3
70	8.05	33.151	8.05	25.816	2.286	0.25	90.4
80	8.05	33.323	8.05	25.950	2.498	0.20	90.5
90	8.08	33.571	8.07	26.142	2.694	0.15	90.8
100	8.06	33.651	8.05	26.208	2.879	0.14	90.8
110	7.98	33.746	7.97	26.294	3.057	0.14	90.9
120	7.89	33.819	7.88	26.364	3.227	0.14	90.9
130	7.78	33.878	7.77	26.427	3.392	0.14	90.9
140	7.75	33.891	7.74	26.441	3.552	0.14	90.9
150	7.64	33.927	7.63	26.486	3.711	0.14	90.9
175	7.31	33.968	7.29	26.565	4.091	0.14	91.0
200	6.97	33.987	6.96	26.627	4.457	0.15	91.0
225	6.69	33.995	6.67	26.671	4.810	0.15	91.0
250	6.52	34.001	6.50	26.699	5.155	0.14	91.0
275	6.31	34.005	6.29	26.730	5.495	0.15	91.1
300	6.14	34.017	6.11	26.762	5.828	0.15	91.1
350	5.98	34.057	5.95	26.814	6.474	0.15	90.9
400	5.69	34.076	5.66	26.865	7.098	0.15	91.0
450	5.28	34.096	5.24	26.931	7.698	0.15	91.1
500	5.11	34.144	5.07	26.989	8.270	0.14	91.0
600	4.77	34.183	4.73	27.058	9.363	0.15	91.1
696	4.61	34.240	4.55	27.123	10.359	0.14	90.9

Station 10 NH-55 Temperature, Salinity

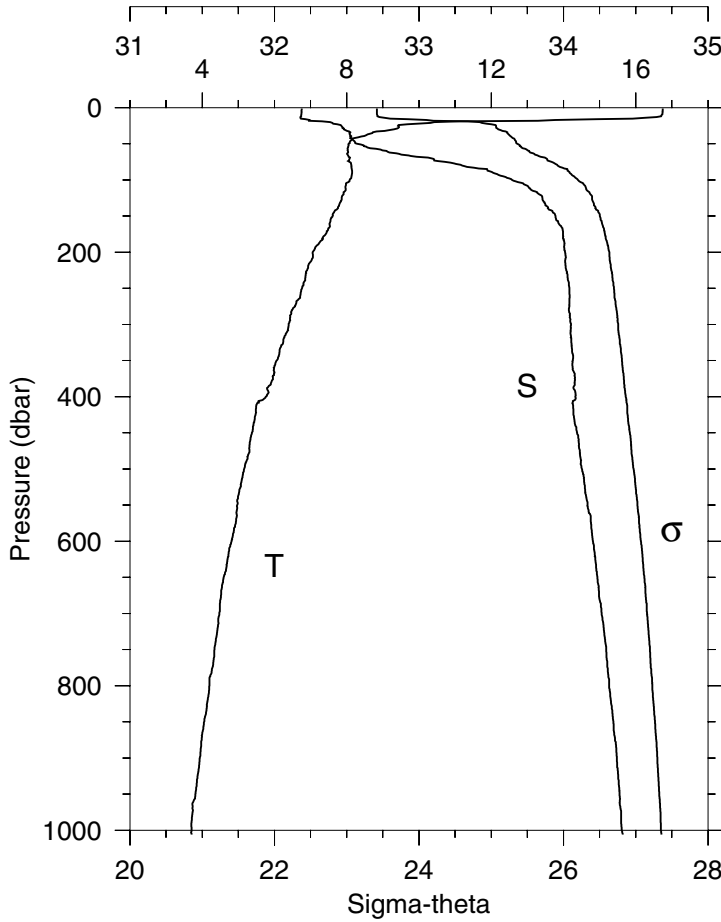


STA: 10 NH-55 LAT: 44 39.1 N LONG: 125 22.0 W
05 SEP 2001 2320 GMT DEPTH 2868

P (DB)	T (C)	S	POT T (C)	SIGMA THETA (J/KG)	DYN HT (J/KG)	FL (V)	TRN (%)
2	16.61	32.171	16.61	23.435	0.089	0.29	88.3
10	16.50	32.172	16.50	23.461	0.443	0.32	88.4
20	13.60	32.283	13.60	24.170	0.875	0.52	88.4
30	10.28	32.456	10.27	24.920	1.205	1.11	87.5
40	8.34	32.515	8.33	25.274	1.486	0.64	89.3
50	8.11	32.579	8.11	25.358	1.750	0.56	89.4
60	8.01	32.665	8.01	25.440	2.008	0.49	89.6
70	7.91	32.965	7.90	25.691	2.251	0.27	90.3
80	8.00	33.268	7.99	25.915	2.471	0.18	90.6
90	8.07	33.437	8.07	26.037	2.675	0.14	90.7
100	8.07	33.666	8.06	26.218	2.864	0.14	90.7
110	8.03	33.706	8.02	26.255	3.043	0.14	90.7
120	7.89	33.791	7.88	26.343	3.216	0.14	90.6
130	7.79	33.833	7.78	26.390	3.382	0.16	90.4
140	7.73	33.859	7.72	26.420	3.547	0.15	90.4
150	7.65	33.892	7.64	26.457	3.707	0.16	90.3
175	7.49	33.947	7.47	26.524	4.095	0.15	90.7
200	7.19	33.974	7.17	26.587	4.470	0.14	90.8
225	6.98	33.990	6.96	26.629	4.834	0.15	90.8
250	6.82	34.023	6.80	26.677	5.188	0.15	90.7
275	6.53	34.010	6.51	26.705	5.532	0.15	90.9
300	6.34	34.020	6.32	26.738	5.871	0.15	91.0
350	6.10	34.050	6.07	26.793	6.528	0.15	90.9
400	5.80	34.082	5.76	26.857	7.159	0.14	90.9
450	5.41	34.124	5.37	26.937	7.761	0.15	90.7
500	5.18	34.149	5.14	26.984	8.330	0.15	90.9
600	4.76	34.221	4.72	27.090	9.408	0.15	90.9
800	4.11	34.342	4.05	27.257	11.304	0.15	90.9
1000	3.59	34.423	3.52	27.376	12.969	0.14	90.9
1005	3.58	34.424	3.51	27.378	13.007	0.14	90.9

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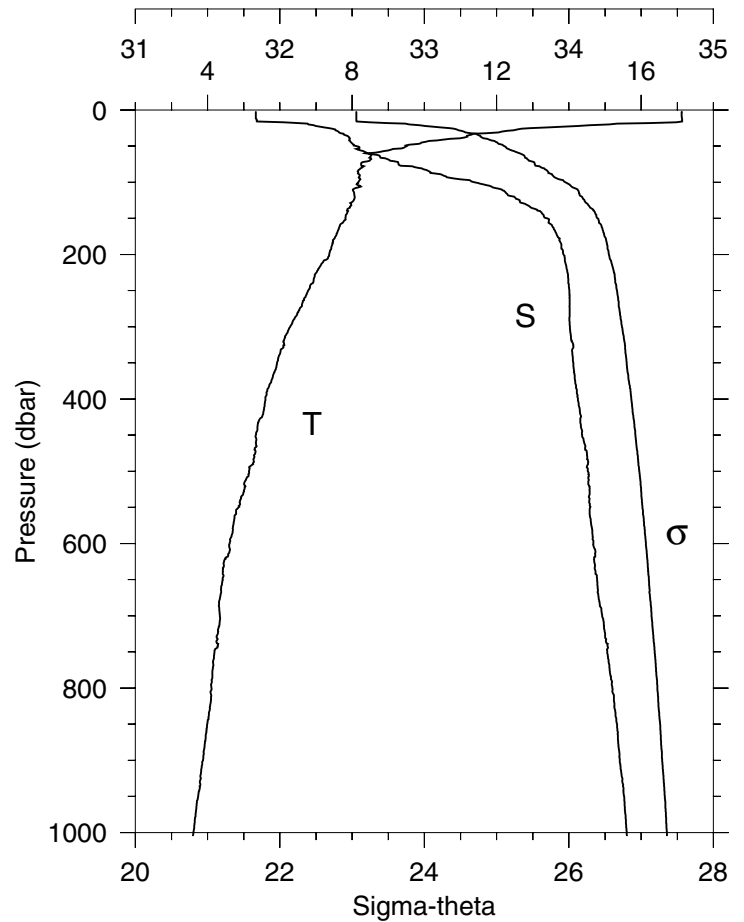
Station 11 NH-65 Temperature, Salinity



STA: 11 NH-65 LAT: 44 39.1 N LONG: 125 36.0 W
06 SEP 2001 0118 GMT DEPTH 2859

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	16.74	32.188	16.74	23.417	0.045	0.28	89.1
10	16.72	32.185	16.72	23.421	0.446	0.29	89.1
20	10.42	32.386	10.42	24.842	0.852	0.65	88.3
30	9.31	32.480	9.30	25.098	1.145	0.86	87.8
40	8.40	32.525	8.39	25.274	1.420	0.57	89.3
50	8.06	32.570	8.05	25.359	1.685	0.42	89.9
60	8.03	32.776	8.02	25.524	1.939	0.35	90.1
70	8.09	33.086	8.08	25.760	2.176	0.24	90.5
80	8.13	33.299	8.12	25.921	2.393	0.17	90.6
90	8.15	33.514	8.14	26.086	2.592	0.15	90.7
100	8.09	33.645	8.07	26.199	2.780	0.14	90.7
110	7.97	33.758	7.96	26.305	2.957	0.14	90.6
120	7.91	33.832	7.90	26.372	3.127	0.15	90.6
130	7.84	33.861	7.82	26.406	3.291	0.14	90.6
140	7.74	33.895	7.73	26.447	3.452	0.15	90.6
150	7.61	33.944	7.59	26.504	3.609	0.15	90.5
175	7.42	33.997	7.41	26.572	3.986	0.16	90.3
200	7.05	34.011	7.04	26.635	4.350	0.15	90.5
225	6.90	34.018	6.88	26.662	4.704	0.15	90.5
250	6.76	34.040	6.74	26.698	5.051	0.15	90.7
275	6.57	34.040	6.54	26.725	5.392	0.15	90.7
300	6.39	34.051	6.36	26.756	5.726	0.15	90.6
350	6.06	34.064	6.03	26.809	6.377	0.15	90.7
400	5.75	34.082	5.72	26.862	7.005	0.15	90.8
450	5.37	34.094	5.33	26.919	7.608	0.15	91.1
500	5.16	34.128	5.12	26.970	8.188	0.14	91.1
600	4.81	34.204	4.76	27.071	9.277	0.15	90.9
800	4.20	34.316	4.14	27.228	11.224	0.14	91.0
1000	3.70	34.404	3.63	27.349	12.927	0.15	91.0
1006	3.70	34.410	3.63	27.354	12.975	0.14	91.0

Station 12 NH-85 Temperature, Salinity

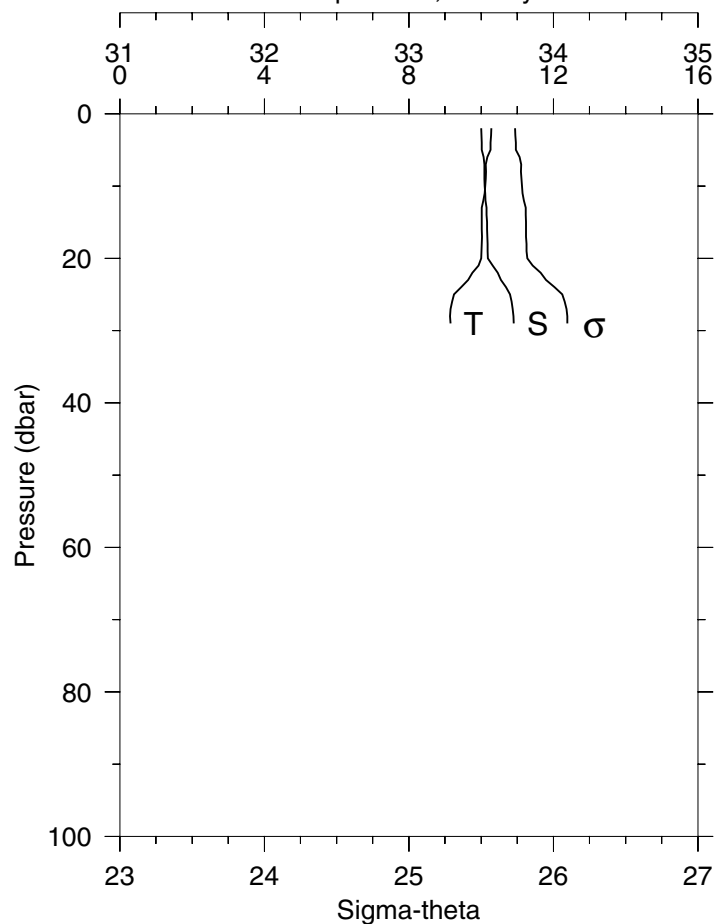


STA: 12 NH-85 LAT: 44 39.1 N LONG: 126 3.0 W
06 SEP 2001 0414 GMT DEPTH 2883

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	17.14	31.835	17.14	23.055	0.096	0.22	90.0
10	17.13	31.834	17.13	23.058	0.480	0.20	90.0
20	15.12	32.198	15.12	23.788	0.945	0.24	89.8
30	12.14	32.406	12.13	24.551	1.310	0.49	89.1
40	10.71	32.485	10.71	24.869	1.632	0.52	88.8
50	9.51	32.527	9.51	25.103	1.927	1.15	88.0
60	8.45	32.590	8.44	25.317	2.204	0.46	90.0
70	8.49	32.761	8.48	25.445	2.463	0.31	90.4
80	8.27	32.957	8.26	25.632	2.708	0.27	90.6
90	8.21	33.125	8.20	25.772	2.937	0.21	90.6
100	8.17	33.347	8.16	25.952	3.152	0.17	90.5
110	8.02	33.535	8.01	26.121	3.351	0.15	90.5
120	8.07	33.621	8.06	26.182	3.539	0.14	90.6
130	7.97	33.698	7.95	26.258	3.720	0.14	90.5
140	7.89	33.801	7.88	26.350	3.894	0.15	90.5
150	7.82	33.848	7.80	26.398	4.060	0.14	90.5
175	7.54	33.922	7.53	26.496	4.459	0.15	90.5
200	7.36	33.963	7.34	26.554	4.840	0.15	90.6
225	7.01	33.990	6.99	26.625	5.208	0.15	90.7
250	6.78	34.003	6.76	26.666	5.563	0.15	90.8
275	6.55	34.005	6.53	26.699	5.911	0.15	90.9
300	6.29	34.007	6.26	26.735	6.250	0.15	91.0
350	5.92	34.031	5.89	26.800	6.905	0.14	91.0
400	5.60	34.063	5.57	26.865	7.534	0.15	91.0
450	5.34	34.092	5.30	26.921	8.135	0.15	91.1
500	5.14	34.131	5.10	26.975	8.712	0.14	91.0
600	4.61	34.169	4.56	27.065	9.802	0.15	91.1
800	4.11	34.301	4.05	27.226	11.761	0.14	91.1
1000	3.61	34.401	3.53	27.357	13.465	0.14	91.1
1005	3.60	34.403	3.52	27.359	13.504	0.14	91.1

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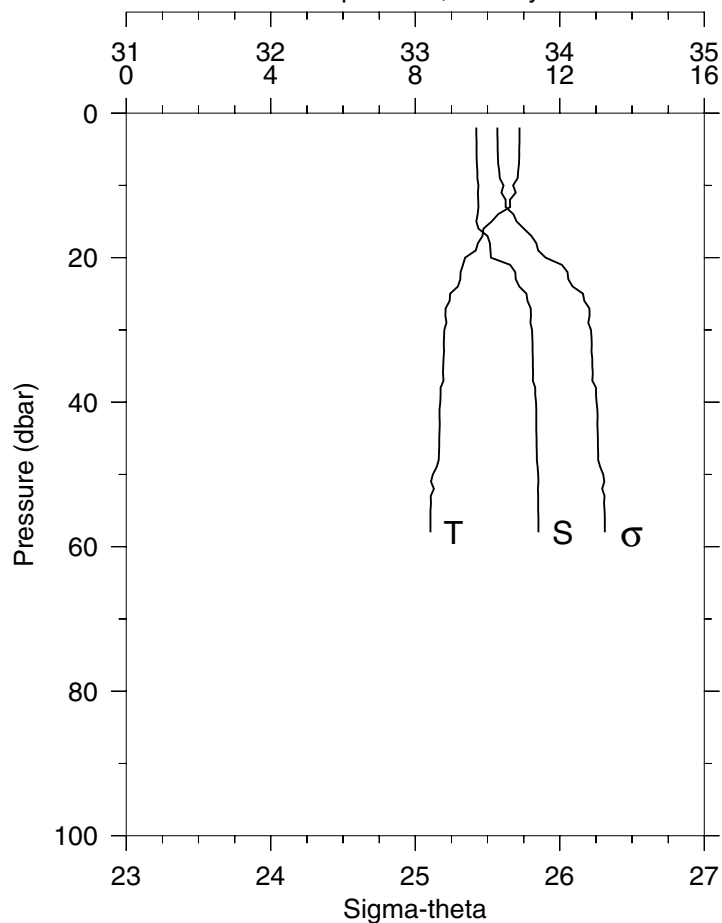
Station 13 FM-1 Temperature, Salinity



STA: 13 FM-1 LAT: 43 13.1 N LONG: 124 26.0 W
06 SEP 2001 1505 GMT DEPTH 34

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.28	33.501	10.28	25.734	0.045	1.04	84.4
10	10.11	33.525	10.11	25.783	0.223	1.28	83.9
20	10.00	33.547	10.00	25.819	0.442	1.15	83.7
29	9.15	33.725	9.15	26.097	0.622	0.78	77.3

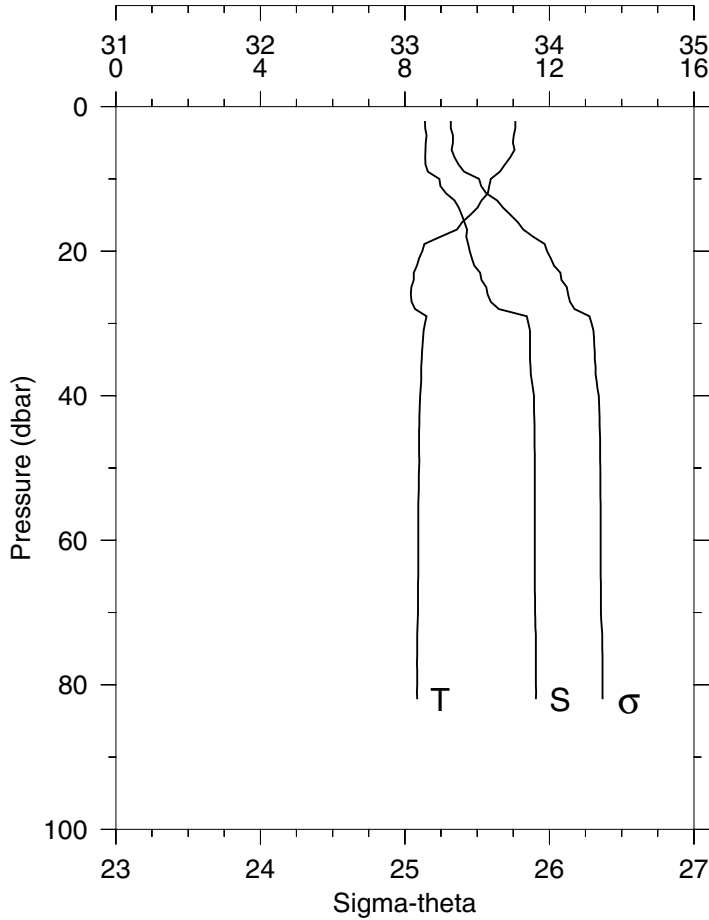
Station 14 FM-3 Temperature, Salinity



STA: 14 FM-3 LAT: 43 13.1 N LONG: 124 30.0 W
06 SEP 2001 1601 GMT DEPTH 63

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.89	33.423	10.89	25.569	0.048	0.58	85.1
10	10.71	33.437	10.71	25.611	0.240	0.74	86.2
20	9.38	33.523	9.38	25.902	0.467	0.74	87.7
30	8.81	33.808	8.80	26.216	0.655	0.64	84.1
40	8.69	33.835	8.69	26.255	0.834	0.56	83.1
50	8.48	33.851	8.48	26.300	1.009	0.43	85.0
58	8.42	33.853	8.41	26.312	1.146	0.34	85.8

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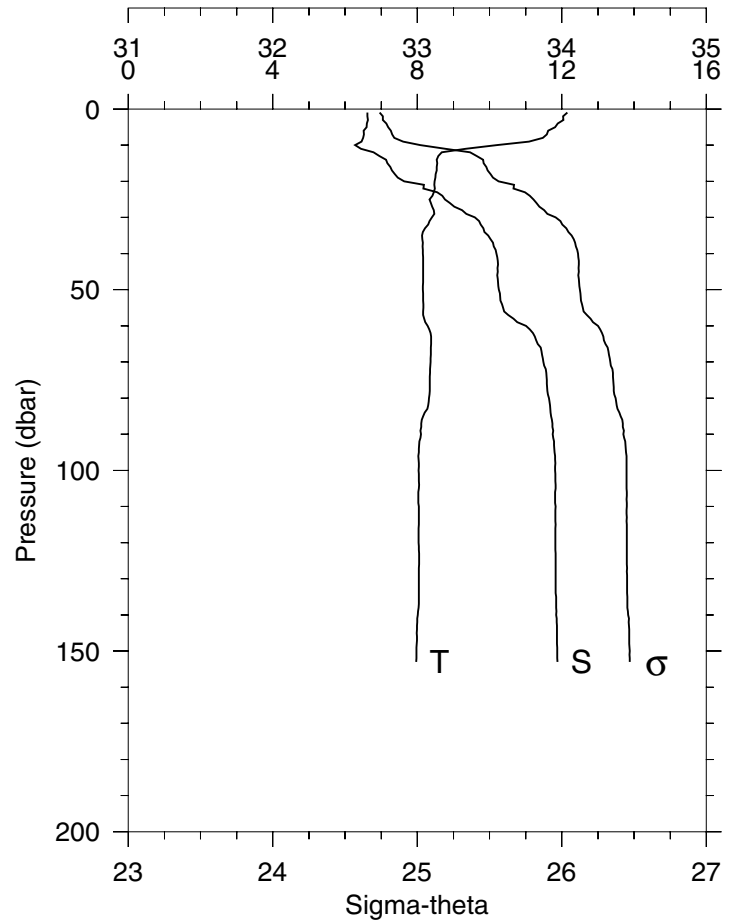
Station 15 FM-4
Temperature, Salinity

STA: 15 FM-4 LAT: 43 13.1 N LONG: 124 35.0 W
06 SEP 2001 1726 GMT DEPTH 85

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	11.06	33.139	11.05	25.318	0.053	0.74	86.2
10	10.38	33.239	10.38	25.514	0.262	0.70	87.6
20	8.48	33.448	8.48	25.984	0.487	0.34	88.9
30	8.55	33.854	8.55	26.291	0.676	0.38	86.9
40	8.43	33.893	8.42	26.342	0.846	0.32	85.1
50	8.39	33.899	8.39	26.352	1.014	0.29	85.2
60	8.37	33.899	8.36	26.355	1.181	0.29	85.7
70	8.36	33.900	8.35	26.357	1.348	0.32	85.7
80	8.34	33.907	8.33	26.367	1.514	0.31	85.7
82	8.34	33.907	8.33	26.367	1.548	0.28	85.7

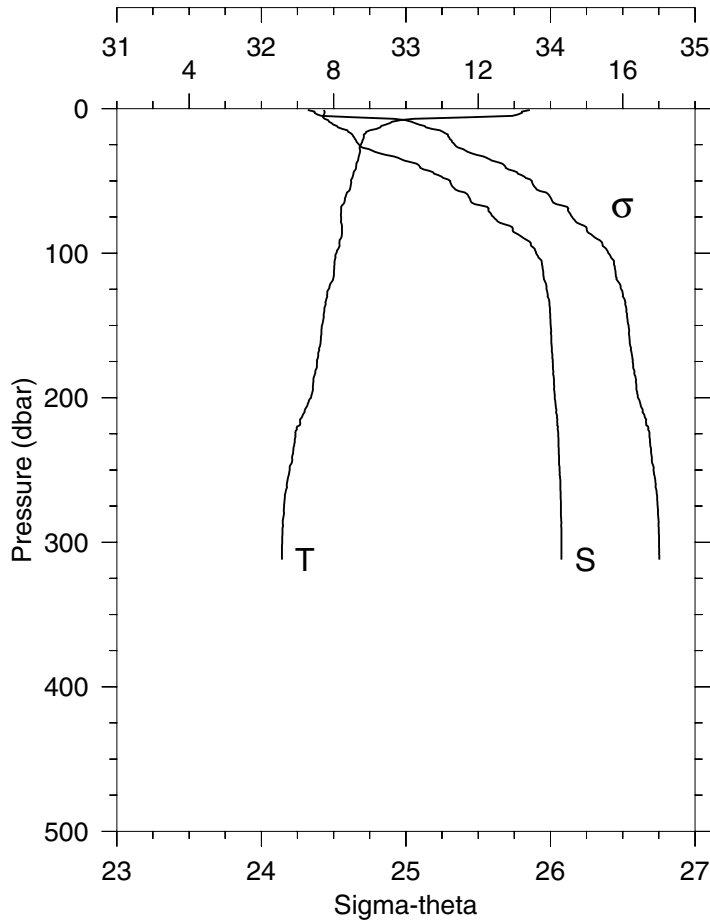
STA: 16 FM-5 LAT: 43 13.2 N LONG: 124 40.0 W
06 SEP 2001 1905 GMT DEPTH 158

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	12.16	32.655	12.16	24.739	0.032	0.71	85.6
10	10.20	32.570	10.20	25.021	0.313	1.01	86.8
20	8.48	32.910	8.48	25.562	0.568	0.72	88.6
30	8.41	33.399	8.40	25.957	0.788	0.35	89.1
40	8.16	33.548	8.15	26.112	0.984	0.21	89.9
50	8.16	33.565	8.15	26.125	1.173	0.21	89.9
60	8.29	33.752	8.28	26.251	1.358	0.23	89.2
70	8.37	33.873	8.36	26.335	1.530	0.24	88.2
80	8.33	33.912	8.32	26.372	1.698	0.22	87.8
90	8.10	33.938	8.09	26.427	1.861	0.20	86.7
100	8.04	33.954	8.03	26.448	2.020	0.19	85.3
110	8.04	33.957	8.03	26.450	2.179	0.20	85.3
120	8.04	33.956	8.03	26.450	2.338	0.20	84.4
130	8.04	33.958	8.03	26.451	2.497	0.23	84.1
140	8.02	33.962	8.00	26.459	2.656	0.25	83.6
150	7.98	33.968	7.96	26.470	2.814	0.18	84.1
153	7.97	33.970	7.96	26.471	2.862	0.20	84.3

Station 16 FM-5
Temperature, Salinity

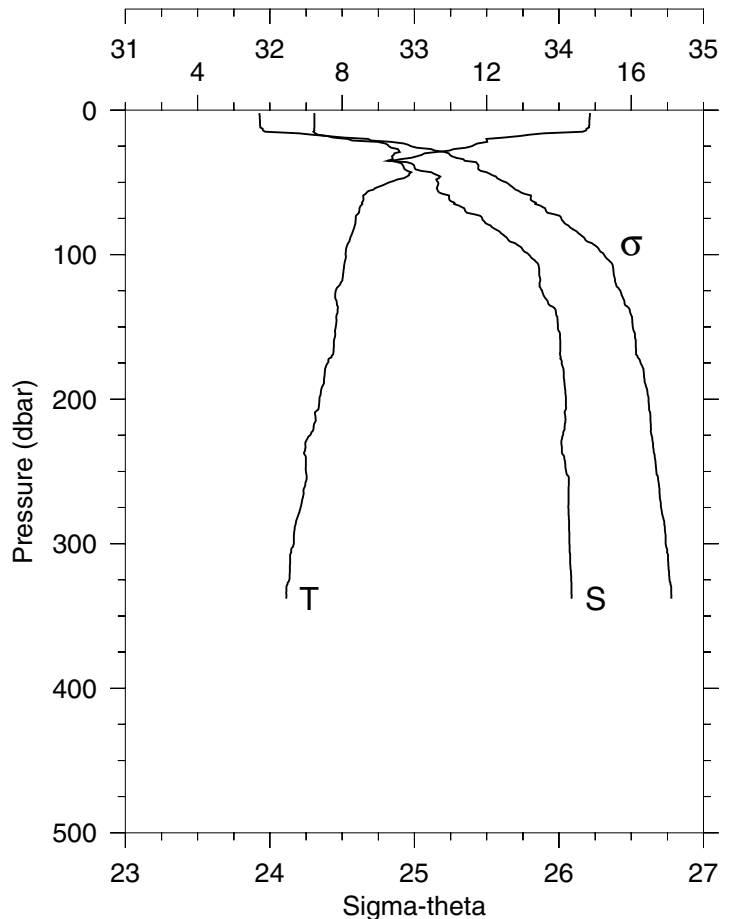
W0109A

Station 17 FM-6 Temperature, Salinity

 STA: 17 FM-6 LAT: 43 13.1 N LONG: 124 45.1 W
 06 SEP 2001 2049 GMT DEPTH 318


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	13.42	32.432	13.42	24.321	0.036	0.80	82.3
10	9.56	32.485	9.56	25.061	0.332	0.70	88.9
20	8.83	32.643	8.83	25.299	0.607	0.55	89.8
30	8.73	32.787	8.73	25.428	0.869	0.46	90.1
40	8.62	33.097	8.61	25.688	1.110	0.36	90.4
50	8.48	33.306	8.48	25.872	1.332	0.26	90.6
60	8.34	33.430	8.33	25.991	1.540	0.22	90.6
70	8.21	33.570	8.20	26.121	1.737	0.22	90.3
80	8.22	33.679	8.21	26.205	1.923	0.23	89.8
90	8.19	33.822	8.18	26.322	2.100	0.19	89.8
100	8.08	33.900	8.07	26.400	2.266	0.17	89.1
110	8.02	33.945	8.01	26.444	2.427	0.17	89.0
120	7.94	33.964	7.93	26.471	2.586	0.17	88.7
130	7.83	33.980	7.81	26.501	2.741	0.15	89.9
140	7.74	33.996	7.73	26.525	2.894	0.15	89.8
150	7.68	34.002	7.66	26.540	3.045	0.16	89.7
175	7.55	34.015	7.53	26.569	3.420	0.16	89.6
200	7.37	34.029	7.35	26.605	3.788	0.15	89.6
225	6.94	34.054	6.92	26.685	4.142	0.15	90.2
250	6.78	34.063	6.76	26.713	4.485	0.16	90.2
275	6.63	34.072	6.61	26.742	4.821	0.16	88.8
300	6.58	34.075	6.55	26.751	5.154	0.16	86.7
312	6.57	34.076	6.54	26.753	5.313	0.16	86.1

Station 18 FM-7 Temperature, Salinity

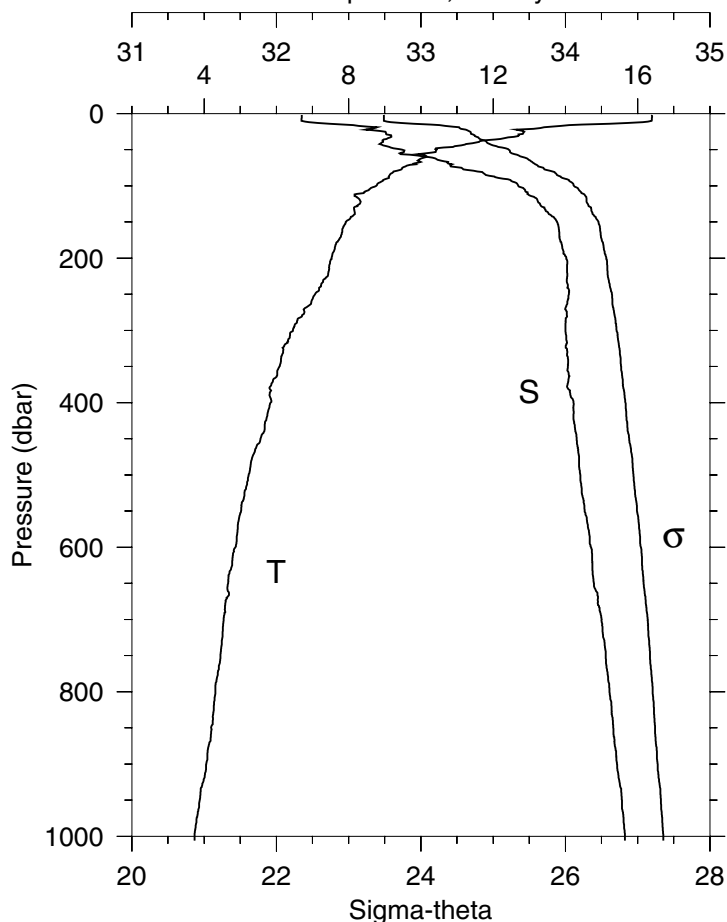
 STA: 18 FM-7 LAT: 43 13.1 N LONG: 124 50.0 W
 06 SEP 2001 2207 GMT DEPTH 343


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.86	32.307	14.86	23.927	0.079	0.65	84.2
10	14.84	32.307	14.84	23.932	0.397	0.99	84.3
20	11.99	32.536	11.99	24.678	0.774	0.80	88.0
30	10.28	32.862	10.27	25.237	1.071	0.67	89.6
40	9.71	33.002	9.71	25.441	1.332	0.39	90.3
50	9.30	33.164	9.29	25.635	1.577	0.26	90.6
60	8.59	33.240	8.58	25.806	1.805	0.22	90.7
70	8.47	33.353	8.47	25.912	2.020	0.21	90.8
80	8.35	33.527	8.34	26.067	2.221	0.15	90.9
90	8.21	33.651	8.20	26.185	2.410	0.14	90.9
100	8.10	33.792	8.09	26.312	2.586	0.14	90.8
110	8.04	33.863	8.03	26.376	2.755	0.15	90.6
120	7.95	33.866	7.94	26.392	2.920	0.14	90.7
130	7.81	33.904	7.80	26.443	3.082	0.14	90.8
140	7.87	33.979	7.86	26.493	3.240	0.15	90.0
150	7.82	33.993	7.80	26.511	3.394	0.16	89.7
175	7.60	34.019	7.58	26.565	3.774	0.15	90.3
200	7.37	34.047	7.35	26.620	4.140	0.15	90.0
225	7.11	34.028	7.09	26.640	4.498	0.15	90.3
250	7.00	34.050	6.97	26.674	4.850	0.15	90.3
275	6.85	34.065	6.82	26.707	5.195	0.15	90.2
300	6.66	34.072	6.63	26.738	5.533	0.15	90.3
338	6.45	34.088	6.42	26.779	6.035	0.15	89.8

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Station 19 FM-8 Temperature, Salinity

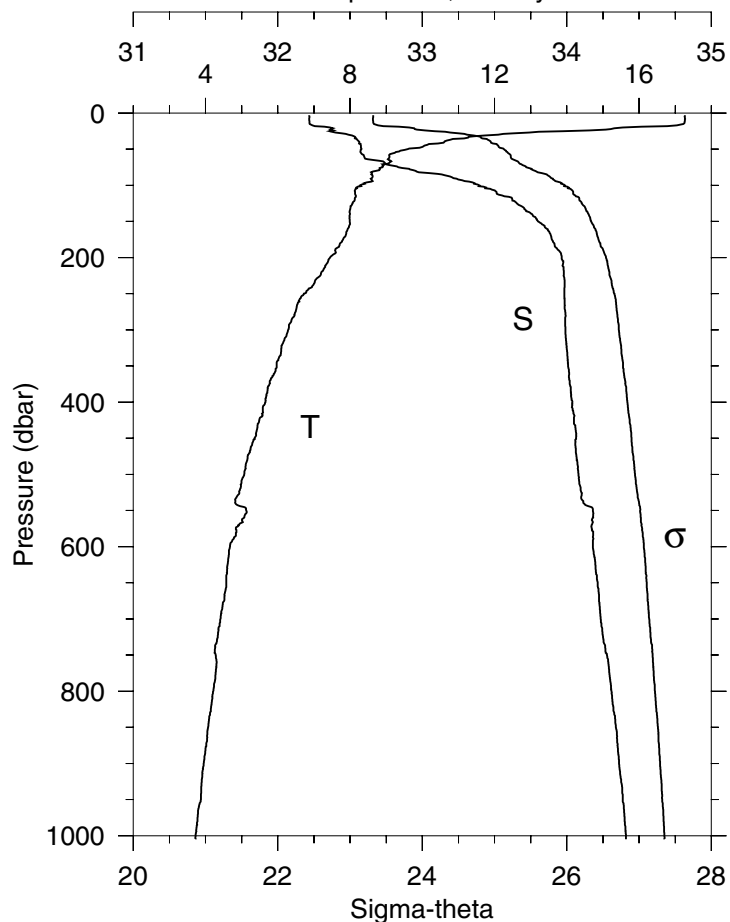
STA: 19 FM-8 LAT: 43 13.1 N LONG: 124 60.0 W
07 SEP 2001 0118 GMT DEPTH 1079



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	16.40	32.176	16.40	23.487	0.088	0.25	89.6
10	16.39	32.174	16.39	23.489	0.439	0.27	89.4
20	13.31	32.677	13.31	24.534	0.825	0.45	89.3
30	12.71	32.794	12.70	24.743	1.153	0.56	89.3
40	11.54	32.729	11.53	24.913	1.465	0.61	88.9
50	10.44	32.869	10.43	25.216	1.756	0.59	89.4
60	10.17	33.043	10.16	25.398	2.025	0.38	90.2
70	9.85	33.215	9.85	25.584	2.273	0.24	90.6
80	9.24	33.392	9.23	25.823	2.504	0.18	90.8
90	9.05	33.569	9.04	25.992	2.715	0.17	90.8
100	8.76	33.674	8.75	26.119	2.909	0.15	90.8
110	8.41	33.739	8.40	26.223	3.094	0.15	90.8
120	8.31	33.807	8.30	26.292	3.270	0.14	90.9
130	8.15	33.855	8.13	26.355	3.442	0.15	90.8
140	8.15	33.895	8.13	26.387	3.610	0.14	90.8
150	7.92	33.942	7.91	26.457	3.771	0.15	90.7
175	7.72	33.963	7.71	26.502	4.163	0.15	90.7
200	7.53	34.005	7.51	26.564	4.544	0.15	90.7
225	7.42	34.014	7.39	26.587	4.915	0.15	90.6
250	7.07	34.024	7.05	26.644	5.278	0.15	90.9
275	6.77	34.010	6.75	26.673	5.632	0.15	91.0
300	6.46	34.000	6.43	26.708	5.977	0.15	91.0
350	6.08	34.017	6.05	26.770	6.645	0.14	91.0
400	5.84	34.056	5.80	26.832	7.290	0.15	90.9
450	5.56	34.078	5.52	26.883	7.912	0.14	91.1
500	5.23	34.103	5.19	26.942	8.504	0.15	91.1
600	4.86	34.177	4.82	27.044	9.622	0.14	91.2
800	4.31	34.304	4.25	27.206	11.620	0.15	91.0
1000	3.73	34.412	3.66	27.353	13.358	0.14	90.6
1006	3.73	34.412	3.66	27.354	13.406	0.15	90.6

Station 20 FM-9 Temperature, Salinity

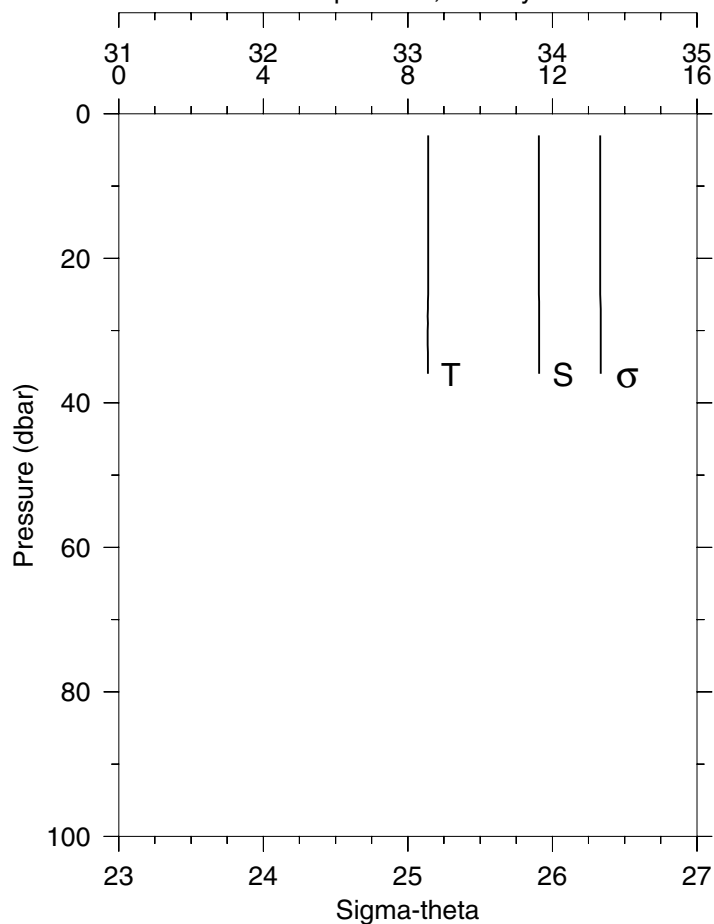
STA: 20 FM-9 LAT: 43 13.1 N LONG: 125 10.1 W
07 SEP 2001 0322 GMT DEPTH 1659



P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	17.27	32.218	17.27	23.319	0.137	0.17	89.9
10	17.27	32.218	17.27	23.318	0.455	0.17	89.9
20	15.55	32.361	15.55	23.820	0.902	0.23	89.3
30	12.10	32.488	12.10	24.621	1.275	0.34	89.3
40	10.61	32.564	10.60	24.948	1.585	0.99	87.4
50	9.60	32.579	9.60	25.128	1.877	1.13	88.5
60	9.09	32.597	9.09	25.224	2.156	0.50	89.9
70	9.04	32.746	9.03	25.349	2.425	0.35	90.4
80	8.70	32.956	8.70	25.565	2.678	0.27	90.6
90	8.60	33.216	8.59	25.785	2.908	0.20	90.8
100	8.28	33.394	8.27	25.973	3.121	0.16	90.9
110	8.14	33.514	8.13	26.088	3.319	0.14	90.9
120	8.13	33.623	8.12	26.175	3.508	0.14	91.0
130	8.02	33.695	8.00	26.249	3.690	0.14	91.0
140	8.00	33.760	7.98	26.303	3.866	0.14	91.0
150	7.99	33.800	7.98	26.335	4.038	0.14	91.0
175	7.80	33.896	7.79	26.438	4.450	0.14	90.9
200	7.45	33.964	7.43	26.544	4.841	0.14	90.9
225	7.17	33.978	7.15	26.593	5.213	0.15	90.9
250	6.72	33.984	6.70	26.659	5.573	0.14	91.0
275	6.50	33.989	6.47	26.693	5.921	0.14	91.0
300	6.29	33.990	6.26	26.721	6.262	0.14	91.0
350	5.97	34.010	5.94	26.778	6.927	0.14	91.1
400	5.66	34.038	5.62	26.839	7.565	0.14	91.1
450	5.36	34.065	5.32	26.896	8.178	0.15	91.1
500	5.07	34.081	5.03	26.943	8.768	0.14	91.2
600	4.68	34.181	4.63	27.068	9.870	0.14	91.2
800	4.21	34.309	4.15	27.221	11.837	0.15	91.1
1000	3.73	34.409	3.65	27.351	13.550	0.14	90.9
1005	3.72	34.410	3.65	27.353	13.590	0.14	91.0

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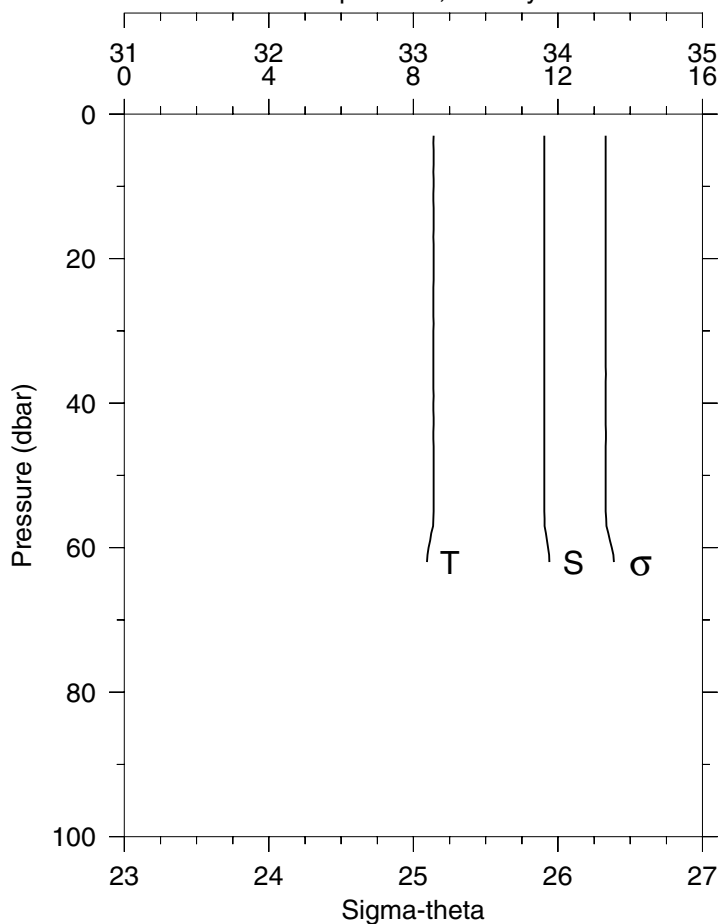
Station 21 CR-1 Temperature, Salinity



STA: 21 CR-1 LAT: 41 54.0 N LONG: 124 18.0 W
07 SEP 2001 1341 GMT DEPTH 41

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	8.56	33.906	8.56	26.330	0.051	0.42	83.0
10	8.56	33.906	8.56	26.331	0.168	0.42	83.1
20	8.56	33.906	8.56	26.331	0.337	0.44	83.0
30	8.55	33.908	8.55	26.334	0.506	0.34	82.8
36	8.55	33.908	8.55	26.334	0.607	0.33	82.7

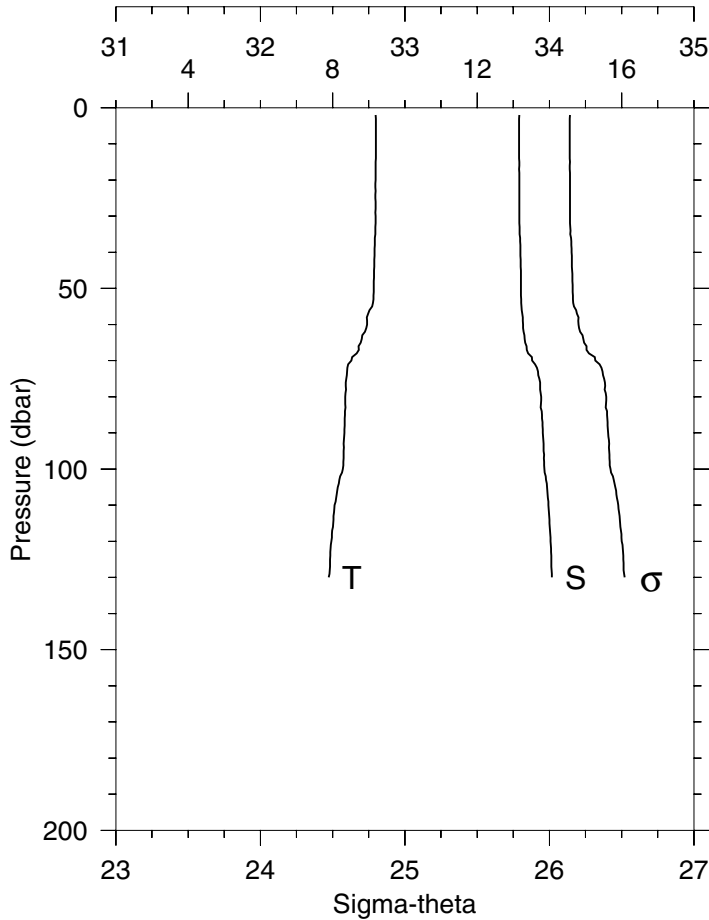
Station 22 CR-2 Temperature, Salinity



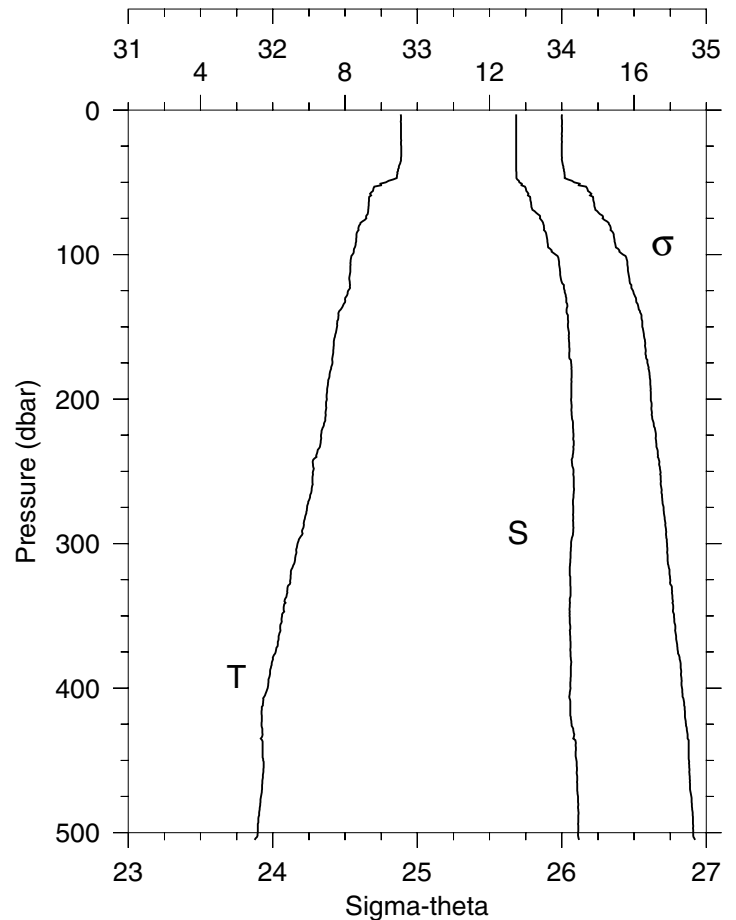
STA: 22 CR-2 LAT: 41 54.0 N LONG: 124 24.0 W
07 SEP 2001 1449 GMT DEPTH 69

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	8.56	33.905	8.56	26.330	0.051	0.27	84.6
10	8.56	33.905	8.56	26.330	0.168	0.54	84.6
20	8.56	33.905	8.56	26.331	0.337	0.30	84.6
30	8.56	33.905	8.55	26.331	0.506	0.32	84.5
40	8.56	33.906	8.55	26.331	0.675	0.35	84.6
50	8.56	33.905	8.55	26.331	0.844	0.66	84.6
60	8.42	33.932	8.41	26.373	1.012	0.22	82.3
62	8.37	33.941	8.37	26.388	1.045	0.22	81.2

W0109A

Station 23 CR-3
Temperature, SalinitySTA: 23 CR-3 LAT: 41 54.0 N LONG: 124 30.0 W
07 SEP 2001 1707 GMT DEPTH 135

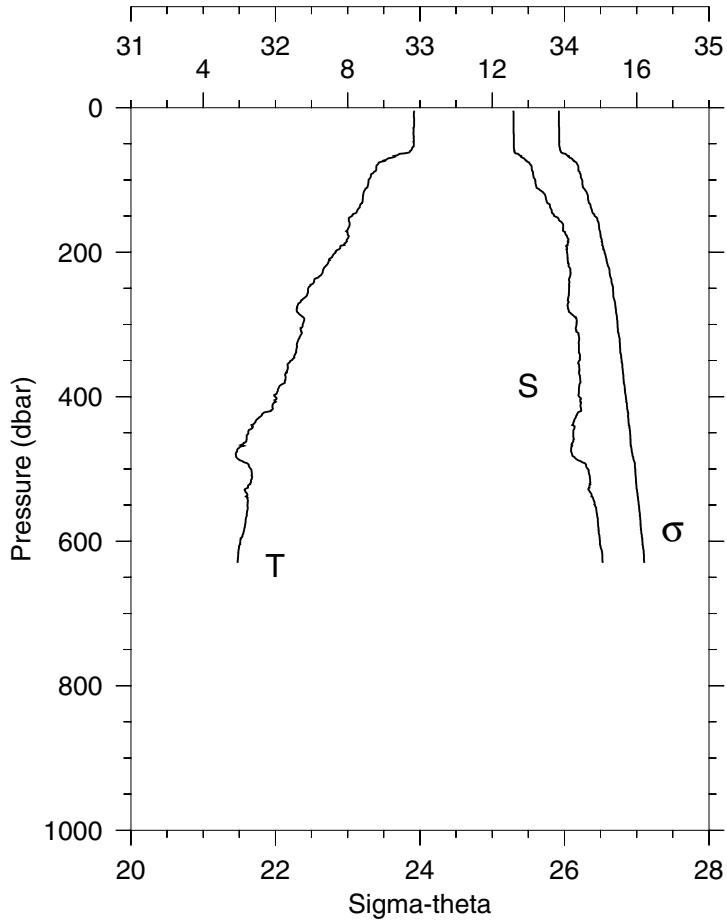
P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.19	33.791	9.19	26.142	0.037	0.59	87.1
10	9.20	33.790	9.20	26.140	0.186	0.88	87.4
20	9.19	33.791	9.18	26.143	0.373	1.15	87.4
30	9.19	33.792	9.18	26.143	0.560	1.07	87.5
40	9.16	33.799	9.16	26.154	0.746	0.86	87.4
50	9.14	33.803	9.13	26.160	0.932	0.97	87.4
60	8.95	33.817	8.94	26.201	1.116	0.59	88.4
70	8.52	33.880	8.51	26.317	1.293	0.28	89.3
80	8.35	33.943	8.34	26.394	1.459	0.18	88.0
90	8.32	33.955	8.31	26.406	1.622	0.19	86.4
100	8.28	33.966	8.27	26.422	1.784	0.17	84.7
110	8.06	33.993	8.05	26.477	1.943	0.17	82.8
120	7.97	34.007	7.95	26.501	2.098	0.17	81.9
130	7.89	34.017	7.88	26.520	2.252	0.18	79.1

Station 24 CR-4
Temperature, SalinitySTA: 24 CR-4 LAT: 41 54.0 N LONG: 124 36.0 W
07 SEP 2001 2035 GMT DEPTH 510

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	9.55	33.684	9.55	26.001	0.060	0.29	89.0
10	9.55	33.685	9.55	26.001	0.200	0.37	89.1
20	9.55	33.685	9.55	26.000	0.400	0.65	89.2
30	9.56	33.685	9.55	26.000	0.600	0.41	89.2
40	9.49	33.685	9.48	26.011	0.800	0.52	89.3
50	9.13	33.707	9.12	26.086	0.998	0.33	89.9
60	8.67	33.780	8.66	26.216	1.183	0.20	90.4
70	8.64	33.811	8.63	26.245	1.362	0.18	90.4
80	8.39	33.876	8.39	26.334	1.536	0.17	90.5
90	8.31	33.900	8.30	26.366	1.703	0.26	90.5
100	8.21	33.957	8.20	26.425	1.868	0.17	90.5
110	8.15	33.987	8.14	26.458	2.027	0.16	90.6
120	8.13	34.003	8.12	26.473	2.185	0.16	90.6
130	8.01	34.031	8.00	26.513	2.340	0.16	90.6
140	7.82	34.033	7.81	26.543	2.492	0.16	90.6
150	7.78	34.043	7.76	26.558	2.642	0.16	90.6
175	7.65	34.065	7.64	26.593	3.012	0.16	90.8
200	7.50	34.065	7.48	26.616	3.374	0.16	90.8
225	7.34	34.081	7.32	26.651	3.733	0.16	90.9
250	7.12	34.081	7.09	26.682	4.084	0.15	90.9
275	6.95	34.079	6.92	26.704	4.430	0.15	90.7
300	6.68	34.064	6.66	26.728	4.770	0.15	91.0
350	6.26	34.054	6.22	26.777	5.436	0.15	91.0
400	5.86	34.060	5.82	26.832	6.078	0.15	91.1
450	5.73	34.101	5.69	26.880	6.696	0.15	91.0
500	5.58	34.113	5.54	26.909	7.301	0.15	88.8
505	5.50	34.119	5.46	26.923	7.361	0.15	89.0

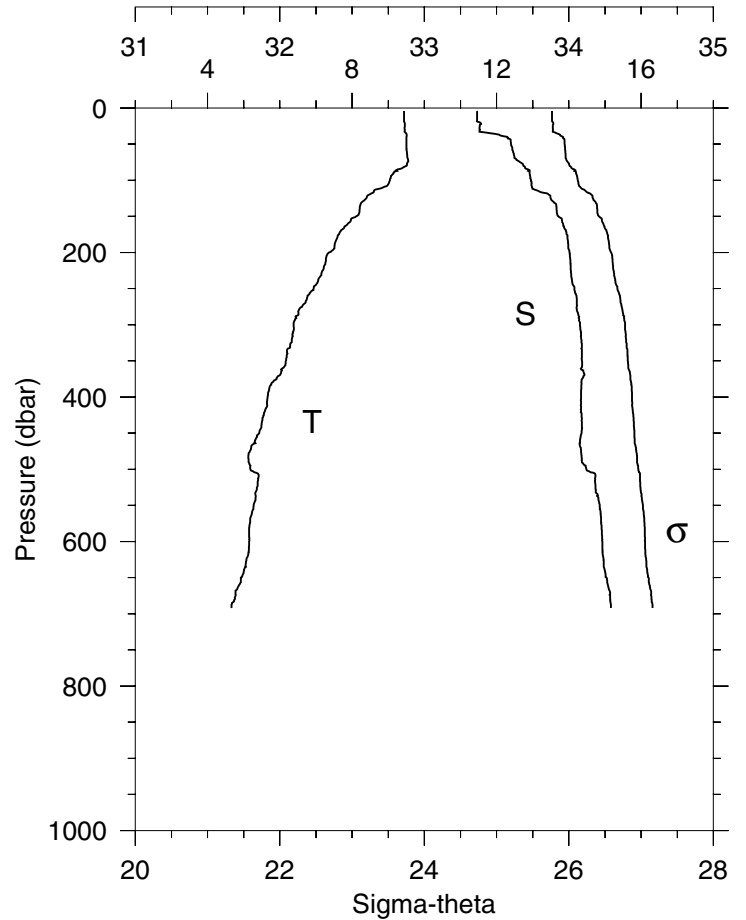
W0109A

Station 25 CR-5 Temperature, Salinity

 STA: 25 CR-5 LAT: 41 54.0 N LONG: 124 42.0 W
 08 SEP 2001 0018 GMT DEPTH 659


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
4	9.84	33.646	9.84	25.923	0.083	0.49	88.5
10	9.83	33.647	9.83	25.924	0.207	0.52	88.9
20	9.84	33.647	9.83	25.924	0.414	0.58	89.0
30	9.83	33.647	9.82	25.926	0.622	0.51	89.1
40	9.83	33.649	9.82	25.927	0.829	0.51	89.0
50	9.83	33.649	9.83	25.926	1.037	0.49	89.0
60	9.73	33.655	9.72	25.948	1.244	0.47	89.2
70	9.12	33.720	9.12	26.098	1.443	0.24	90.1
80	8.80	33.771	8.79	26.188	1.630	0.17	90.5
90	8.71	33.783	8.70	26.212	1.813	0.17	90.5
100	8.57	33.798	8.56	26.245	1.993	0.17	90.5
110	8.55	33.806	8.54	26.255	2.171	0.17	90.5
120	8.43	33.863	8.42	26.319	2.345	0.17	90.4
130	8.41	33.877	8.40	26.332	2.516	0.17	90.3
140	8.29	33.907	8.27	26.375	2.685	0.17	90.3
150	8.12	33.929	8.10	26.418	2.850	0.16	90.5
175	8.00	34.007	7.98	26.497	3.244	0.16	90.0
200	7.67	34.016	7.65	26.553	3.628	0.16	90.0
225	7.32	34.041	7.30	26.623	3.996	0.15	90.2
250	6.91	34.032	6.88	26.672	4.352	0.15	90.8
275	6.60	34.023	6.58	26.707	4.699	0.15	90.9
300	6.76	34.083	6.73	26.733	5.038	0.15	91.0
350	6.43	34.102	6.40	26.792	5.699	0.15	91.0
400	5.99	34.101	5.96	26.848	6.336	0.15	91.1
450	5.25	34.061	5.21	26.907	6.945	0.14	91.1
500	5.32	34.162	5.28	26.979	7.526	0.15	91.0
600	5.03	34.245	4.98	27.079	8.615	0.15	90.8
630	4.95	34.265	4.90	27.104	8.924	0.16	88.8

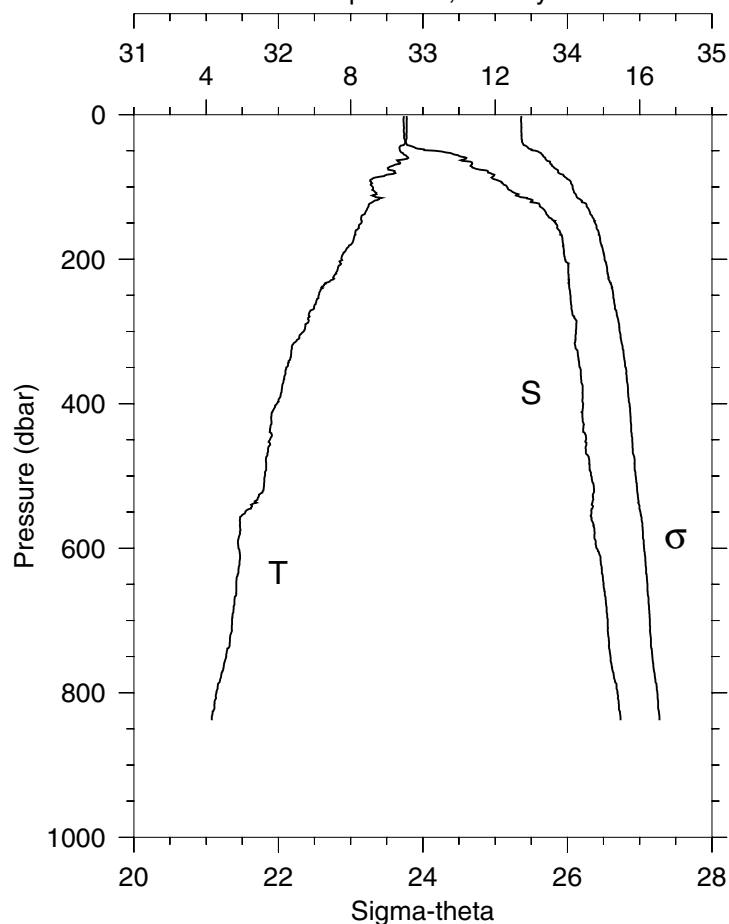
Station 26 CR-6 Temperature, Salinity

 STA: 26 CR-6 LAT: 41 54.0 N LONG: 124 48.0 W
 08 SEP 2001 1342 GMT DEPTH 697


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
4	9.44	33.363	9.44	25.767	0.089	0.50	89.2
10	9.44	33.365	9.44	25.768	0.222	0.48	89.1
20	9.46	33.386	9.45	25.782	0.444	0.51	89.2
30	9.46	33.386	9.46	25.782	0.665	0.50	89.2
40	9.51	33.573	9.50	25.920	0.881	0.53	89.1
50	9.50	33.599	9.50	25.942	1.088	0.50	89.0
60	9.52	33.614	9.51	25.952	1.293	0.50	89.1
70	9.54	33.631	9.53	25.961	1.499	0.54	89.2
80	9.51	33.687	9.50	26.010	1.701	0.54	89.1
90	9.15	33.729	9.14	26.101	1.897	0.49	89.5
100	9.05	33.737	9.03	26.124	2.087	0.36	89.5
110	8.86	33.746	8.85	26.161	2.276	0.38	89.9
120	8.47	33.862	8.46	26.312	2.456	0.17	90.4
130	8.28	33.895	8.26	26.367	2.626	0.17	90.5
140	8.21	33.915	8.20	26.393	2.791	0.17	90.5
150	8.12	33.927	8.10	26.416	2.956	0.17	90.4
175	7.63	33.986	7.62	26.534	3.347	0.16	90.6
200	7.36	34.005	7.34	26.588	3.722	0.16	90.7
225	7.18	34.014	7.16	26.620	4.086	0.16	90.8
250	6.93	34.038	6.91	26.673	4.442	0.16	90.9
275	6.62	34.056	6.59	26.730	4.784	0.15	91.0
300	6.39	34.078	6.36	26.778	5.114	0.15	91.0
350	6.17	34.090	6.14	26.817	5.758	0.15	91.0
400	5.66	34.084	5.63	26.875	6.377	0.15	91.1
450	5.43	34.088	5.39	26.907	6.981	0.14	91.1
500	5.19	34.122	5.15	26.962	7.565	0.15	91.1
600	5.15	34.232	5.10	27.055	8.662	0.15	89.6
692	4.67	34.291	4.62	27.157	9.608	0.16	89.3

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Station 27 CR-7 Temperature, Salinity

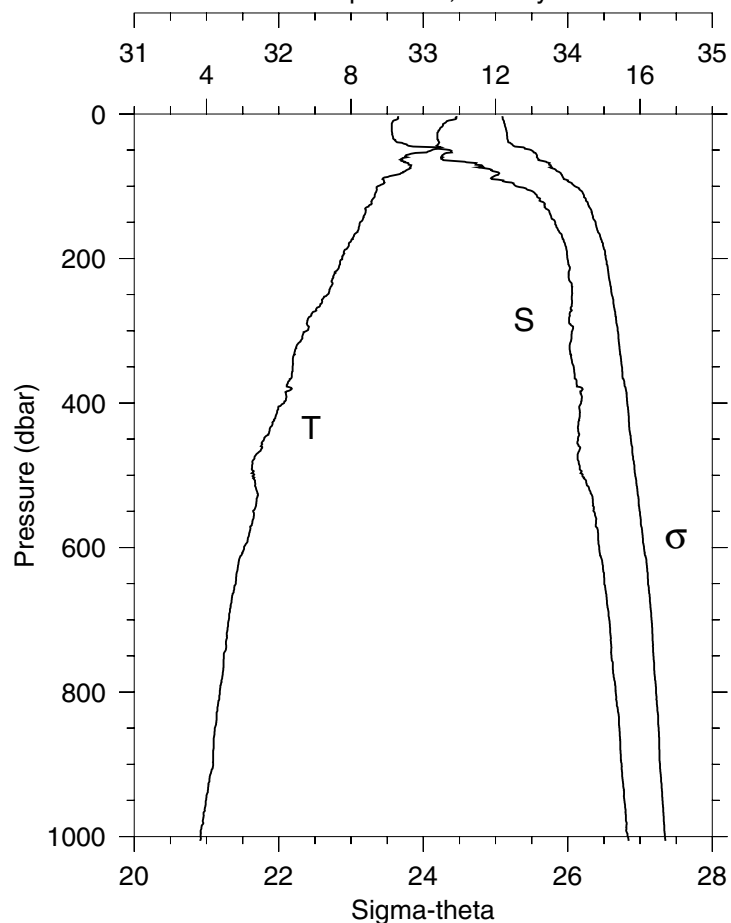
 STA: 27 CR-7 LAT: 41 54.0 N LONG: 125 0.1 W
 08 SEP 2001 1600 GMT DEPTH 838


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.55	32.867	9.55	25.360	0.052	0.41	89.3
10	9.55	32.865	9.55	25.360	0.261	0.40	89.3
20	9.55	32.868	9.55	25.362	0.521	0.50	89.3
30	9.55	32.871	9.54	25.365	0.782	0.51	89.3
40	9.50	32.886	9.50	25.384	1.042	0.55	89.6
50	9.36	33.081	9.36	25.559	1.295	0.34	90.3
60	9.59	33.301	9.59	25.694	1.530	0.23	90.5
70	9.19	33.331	9.18	25.783	1.755	0.21	90.6
80	9.21	33.450	9.21	25.872	1.972	0.18	90.7
90	8.54	33.507	8.53	26.021	2.178	0.15	90.8
100	8.61	33.582	8.60	26.071	2.375	0.16	90.7
110	8.71	33.659	8.70	26.115	2.568	0.17	90.8
120	8.64	33.747	8.62	26.196	2.756	0.16	90.8
130	8.46	33.830	8.45	26.288	2.934	0.15	90.7
140	8.30	33.866	8.29	26.341	3.106	0.15	90.8
150	8.29	33.919	8.28	26.384	3.274	0.15	90.8
175	8.07	33.967	8.05	26.456	3.680	0.15	90.7
200	7.75	33.983	7.73	26.515	4.071	0.15	90.7
225	7.51	34.010	7.49	26.571	4.450	0.16	90.5
250	7.12	34.021	7.09	26.635	4.815	0.15	90.7
275	6.85	34.034	6.82	26.682	5.169	0.16	90.8
300	6.69	34.058	6.66	26.722	5.512	0.15	90.5
350	6.22	34.087	6.19	26.808	6.170	0.16	91.0
400	5.96	34.109	5.92	26.859	6.801	0.15	90.8
450	5.77	34.130	5.73	26.899	7.411	0.15	90.9
500	5.62	34.165	5.58	26.945	8.004	0.15	90.8
600	4.90	34.202	4.85	27.060	9.112	0.15	91.1
800	4.28	34.346	4.22	27.243	11.090	0.15	90.7
838	4.16	34.367	4.09	27.273	11.426	0.15	90.4

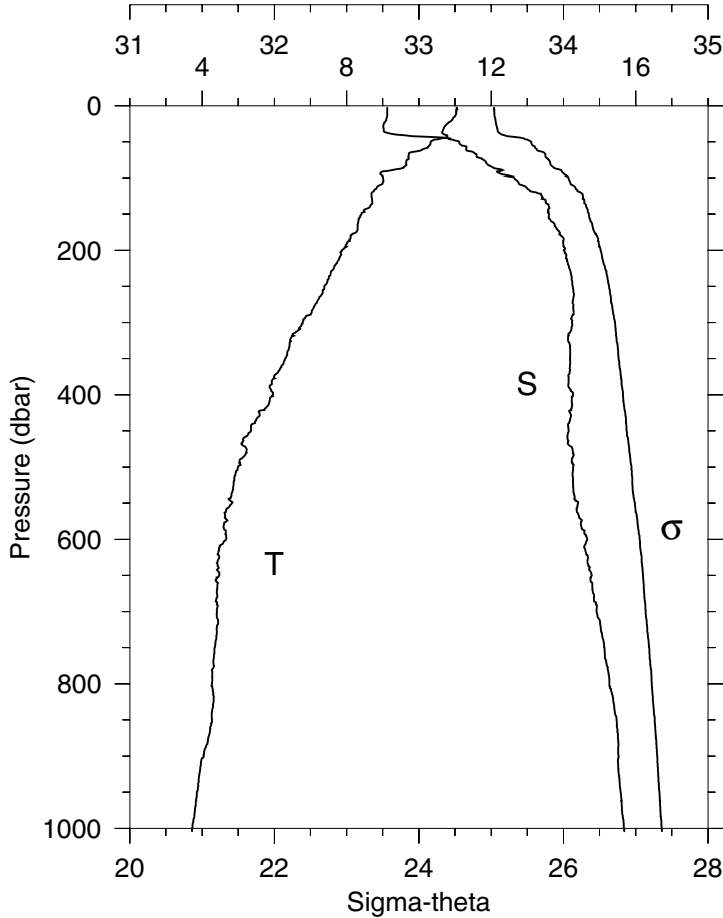
Station 28 CR-8 Temperature, Salinity

 STA: 28 CR-8 LAT: 41 54.0 N LONG: 125 12.1 W
 08 SEP 2001 2101 GMT DEPTH 2763

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	10.93	32.826	10.93	25.096	0.086	0.26	89.4
10	10.65	32.789	10.65	25.116	0.285	0.27	89.5
20	10.47	32.783	10.47	25.143	0.568	0.32	88.4
30	10.39	32.787	10.39	25.160	0.849	0.38	89.5
40	10.44	32.852	10.43	25.203	1.128	0.41	89.8
50	10.24	33.182	10.24	25.492	1.394	0.28	90.7
60	9.55	33.134	9.54	25.570	1.637	0.25	90.6
70	9.60	33.362	9.59	25.741	1.871	0.22	90.6
80	9.45	33.505	9.44	25.877	2.091	0.19	90.7
90	8.87	33.474	8.86	25.945	2.300	0.17	90.8
100	8.73	33.643	8.72	26.099	2.499	0.16	90.8
110	8.67	33.772	8.66	26.210	2.684	0.16	90.8
120	8.57	33.805	8.56	26.251	2.864	0.15	90.8
130	8.41	33.844	8.39	26.307	3.039	0.15	90.8
140	8.37	33.882	8.35	26.343	3.211	0.15	90.8
150	8.25	33.913	8.24	26.385	3.379	0.15	90.8
175	8.00	33.972	7.99	26.469	3.785	0.15	90.8
200	7.75	33.998	7.73	26.526	4.173	0.15	90.8
225	7.51	34.006	7.48	26.569	4.551	0.15	90.8
250	7.35	34.029	7.32	26.609	4.920	0.15	90.9
275	6.93	34.015	6.90	26.656	5.280	0.15	90.9
300	6.77	34.031	6.74	26.690	5.630	0.15	91.0
350	6.38	34.041	6.35	26.750	6.311	0.15	91.0
400	6.15	34.093	6.11	26.822	6.963	0.15	91.1
450	5.59	34.070	5.55	26.873	7.588	0.15	91.1
500	5.30	34.102	5.26	26.933	8.187	0.15	91.1
600	5.04	34.217	4.99	27.056	9.306	0.14	91.1
800	4.37	34.332	4.31	27.222	11.267	0.15	90.9
1000	3.84	34.415	3.76	27.345	13.003	0.15	90.9
1006	3.83	34.420	3.76	27.350	13.052	0.15	90.9



W0109A

Station 29 CR-9
Temperature, Salinity

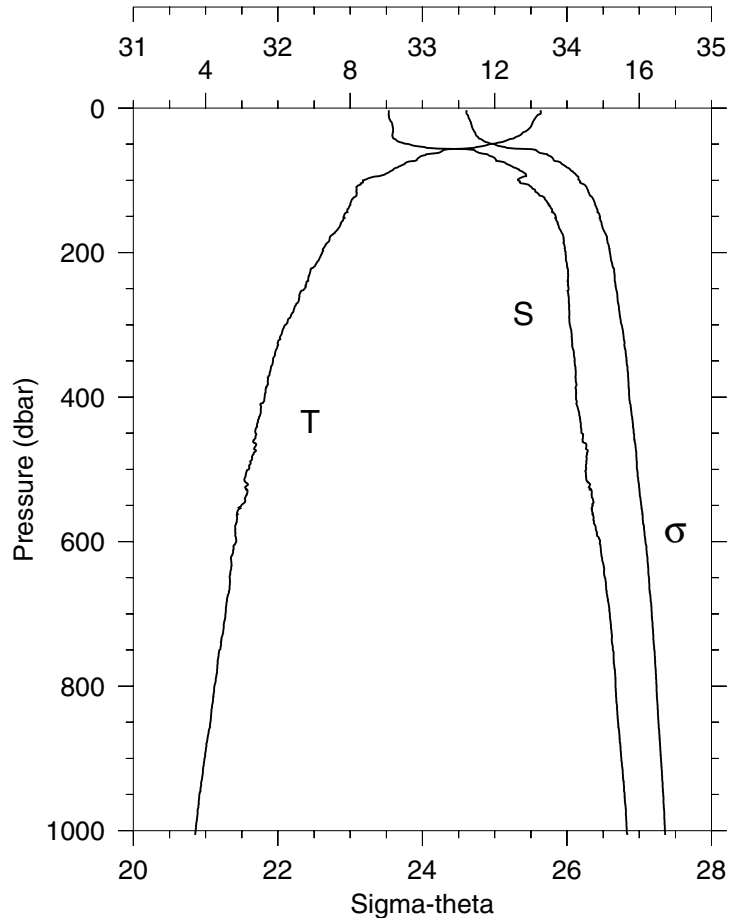
STA: 29 CR-9 LAT: 41 54.0 N LONG: 125 24.0 W
08 SEP 2001 2250 GMT DEPTH 3097

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	11.06	32.779	11.06	25.036	0.058	0.43	88.1
10	11.03	32.780	11.03	25.043	0.291	0.49	88.0
20	10.91	32.774	10.91	25.058	0.581	0.62	86.2
30	10.69	32.754	10.69	25.082	0.870	0.71	88.1
40	10.71	32.844	10.70	25.149	1.156	0.61	88.9
50	10.32	33.278	10.32	25.555	1.415	0.40	89.7
60	10.11	33.327	10.10	25.628	1.655	0.40	89.9
70	9.70	33.399	9.69	25.753	1.884	0.39	89.9
80	9.65	33.471	9.64	25.819	2.105	0.34	90.2
90	9.14	33.564	9.13	25.973	2.318	0.22	90.5
100	9.01	33.659	9.00	26.069	2.517	0.19	90.6
110	8.91	33.714	8.90	26.127	2.711	0.18	90.6
120	8.70	33.812	8.69	26.237	2.896	0.16	90.7
130	8.70	33.875	8.69	26.287	3.073	0.16	90.6
140	8.64	33.899	8.63	26.315	3.247	0.16	90.3
150	8.41	33.900	8.39	26.351	3.418	0.16	90.4
175	8.27	33.973	8.25	26.430	3.832	0.16	89.8
200	7.87	34.003	7.85	26.514	4.226	0.16	90.6
225	7.65	34.041	7.63	26.575	4.606	0.16	90.7
250	7.38	34.064	7.36	26.632	4.971	0.15	90.5
275	7.13	34.068	7.11	26.670	5.327	0.16	90.9
300	6.79	34.059	6.76	26.711	5.674	0.15	90.9
350	6.30	34.046	6.26	26.765	6.346	0.14	91.0
400	5.96	34.065	5.92	26.823	6.993	0.14	91.1
450	5.35	34.036	5.31	26.875	7.615	0.14	90.7
500	5.00	34.067	4.96	26.941	8.210	0.14	91.1
600	4.66	34.164	4.61	27.056	9.328	0.14	91.1
800	4.27	34.318	4.21	27.222	11.301	0.15	91.1
1000	3.73	34.417	3.66	27.357	13.013	0.15	91.1
1005	3.72	34.420	3.64	27.361	13.053	0.14	91.0

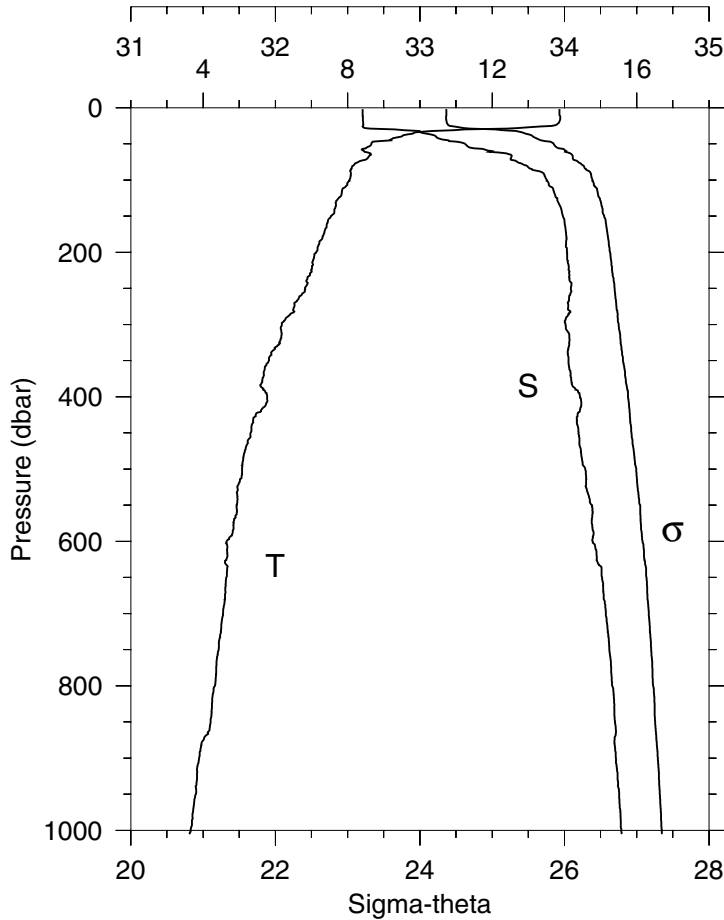
Station 30 CR-10
Temperature, Salinity

STA: 30 CR-10 LAT: 41 54.0 N LONG: 125 40.0 W
09 SEP 2001 0101 GMT DEPTH 2930

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	13.27	32.768	13.27	24.611	0.100	0.84	86.1
10	13.18	32.768	13.18	24.630	0.332	0.86	86.1
20	13.05	32.787	13.05	24.670	0.660	0.91	86.3
30	12.92	32.797	12.92	24.703	0.986	0.87	86.9
40	12.59	32.794	12.59	24.766	1.307	0.76	87.7
50	11.86	32.905	11.85	24.991	1.617	0.60	88.7
60	10.53	33.369	10.53	25.589	1.888	0.46	89.9
70	9.86	33.504	9.85	25.809	2.116	0.34	90.2
80	9.39	33.615	9.38	25.974	2.328	0.25	90.4
90	9.02	33.706	9.02	26.103	2.525	0.21	90.5
100	8.35	33.662	8.34	26.172	2.713	0.14	90.8
110	8.17	33.756	8.16	26.273	2.894	0.14	90.8
120	8.18	33.807	8.16	26.312	3.067	0.14	90.8
130	8.02	33.863	8.01	26.379	3.236	0.13	90.8
140	7.93	33.896	7.91	26.420	3.400	0.14	90.8
150	7.82	33.922	7.81	26.456	3.561	0.14	90.8
175	7.52	33.970	7.50	26.538	3.951	0.15	90.8
200	7.23	33.990	7.21	26.595	4.323	0.14	90.9
225	6.90	34.007	6.88	26.653	4.684	0.15	90.9
250	6.73	34.011	6.71	26.679	5.035	0.14	91.0
275	6.46	34.015	6.44	26.718	5.378	0.15	91.0
300	6.21	34.020	6.18	26.755	5.714	0.14	91.1
350	5.86	34.052	5.84	26.824	6.358	0.14	91.1
400	5.63	34.062	5.60	26.862	6.979	0.15	91.1
450	5.38	34.102	5.34	26.924	7.579	0.15	91.1
500	5.19	34.132	5.15	26.969	8.155	0.14	91.1
600	4.84	34.228	4.80	27.086	9.240	0.15	91.1
800	4.24	34.336	4.18	27.239	11.161	0.14	91.0
1000	3.72	34.414	3.65	27.355	12.860	0.14	91.1
1006	3.71	34.416	3.64	27.358	12.908	0.14	91.0



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Station 31 RR-7
Temperature, Salinity

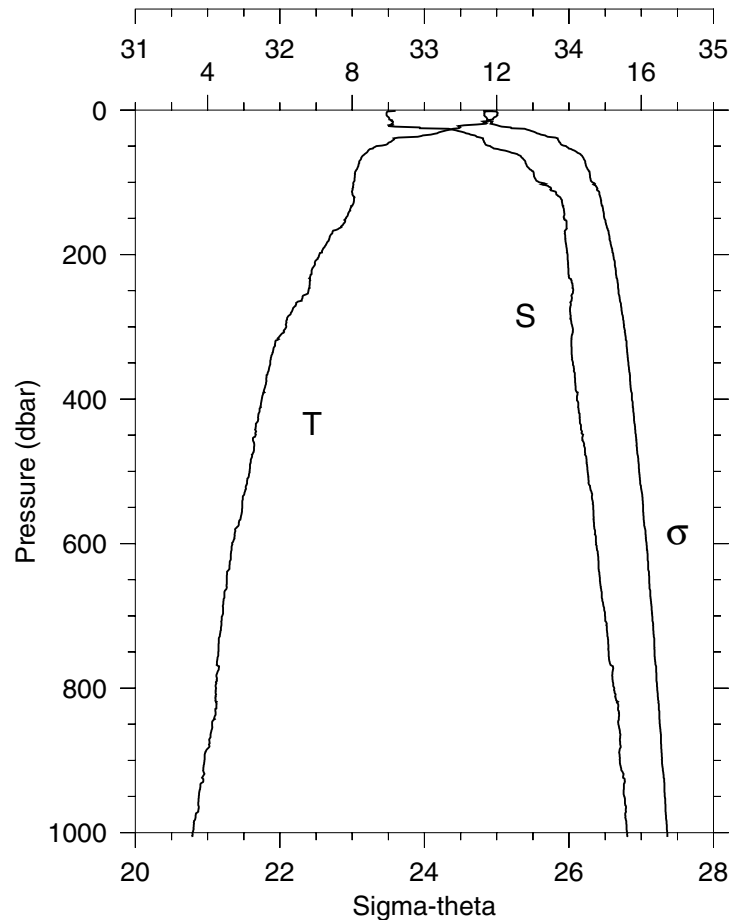
STA: 31 RR-7 LAT: 42 30.0 N LONG: 125 11.9 W
09 SEP 2001 0540 GMT DEPTH 2970

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	13.87	32.603	13.87	24.363	0.071	1.90	81.9
10	13.86	32.604	13.86	24.365	0.355	1.94	81.9
20	13.85	32.607	13.85	24.370	0.711	2.00	82.6
30	11.24	32.824	11.24	25.039	1.055	1.40	86.4
40	9.48	33.112	9.48	25.564	1.312	0.55	89.4
50	8.65	33.312	8.65	25.851	1.540	0.32	90.0
60	8.45	33.492	8.44	26.023	1.748	0.25	90.5
70	8.54	33.628	8.53	26.116	1.941	0.15	90.8
80	8.15	33.739	8.15	26.262	2.124	0.14	90.9
90	8.09	33.851	8.08	26.360	2.296	0.14	90.8
100	8.05	33.878	8.04	26.387	2.462	0.14	90.8
110	7.93	33.913	7.92	26.433	2.626	0.15	90.8
120	7.83	33.934	7.82	26.464	2.784	0.15	90.8
130	7.68	33.955	7.67	26.501	2.940	0.15	90.9
140	7.64	33.979	7.63	26.527	3.094	0.16	90.8
150	7.54	33.990	7.52	26.550	3.245	0.16	90.8
175	7.34	34.011	7.32	26.595	3.614	0.15	90.7
200	7.13	34.018	7.11	26.631	3.975	0.15	90.8
225	6.99	34.030	6.97	26.659	4.330	0.15	90.9
250	6.82	34.044	6.80	26.693	4.678	0.15	90.9
275	6.53	34.026	6.50	26.719	5.019	0.15	91.0
300	6.18	34.007	6.15	26.749	5.355	0.15	91.0
350	5.82	34.028	5.79	26.810	6.005	0.14	91.1
400	5.77	34.107	5.74	26.880	6.626	0.15	91.1
450	5.31	34.098	5.28	26.928	7.222	0.15	91.1
500	5.08	34.145	5.04	26.993	7.794	0.14	91.1
600	4.65	34.195	4.60	27.082	8.870	0.15	91.1
800	4.33	34.330	4.27	27.226	10.802	0.15	90.6
1000	3.66	34.393	3.59	27.345	12.517	0.14	91.1
1005	3.61	34.398	3.54	27.354	12.558	0.14	91.2

Station 32 RR-6
Temperature, Salinity

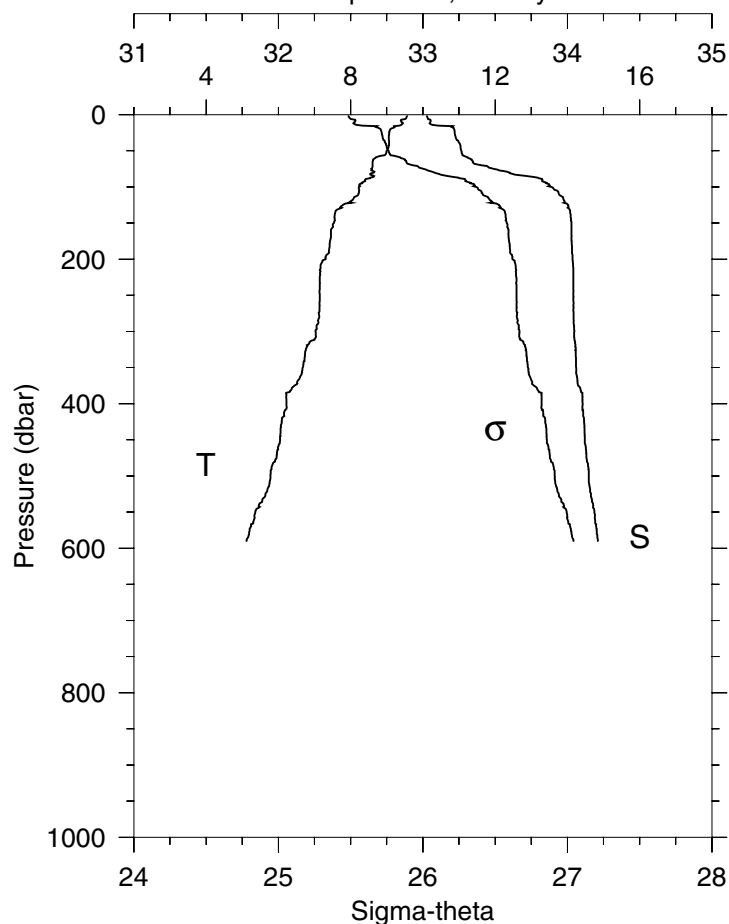
STA: 32 RR-6 LAT: 42 30.0 N LONG: 125 0.1 W
09 SEP 2001 0746 GMT DEPTH 1989

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	11.62	32.801	11.62	24.952	0.030	0.70	87.6
10	11.93	32.753	11.93	24.857	0.309	0.87	87.0
20	11.45	32.781	11.45	24.968	0.613	0.78	87.8
30	10.46	33.257	10.46	25.513	0.885	0.47	89.4
40	9.17	33.405	9.16	25.844	1.117	0.27	89.9
50	8.67	33.455	8.67	25.960	1.329	0.22	90.3
60	8.37	33.622	8.37	26.137	1.525	0.17	90.6
70	8.21	33.695	8.20	26.220	1.708	0.15	90.7
80	8.15	33.721	8.14	26.249	1.887	0.14	90.7
90	8.07	33.758	8.06	26.290	2.062	0.14	90.8
100	8.04	33.795	8.03	26.324	2.235	0.14	90.8
110	8.01	33.871	8.00	26.387	2.402	0.15	90.8
120	8.06	33.935	8.05	26.431	2.564	0.15	90.4
130	8.03	33.954	8.02	26.450	2.724	0.16	90.1
140	7.93	33.966	7.91	26.475	2.882	0.15	90.1
150	7.83	33.968	7.82	26.491	3.038	0.16	90.4
175	7.38	33.974	7.36	26.560	3.419	0.14	90.8
200	7.09	33.990	7.07	26.613	3.788	0.15	90.9
225	6.87	33.997	6.85	26.649	4.145	0.14	90.9
250	6.79	34.029	6.77	26.685	4.495	0.14	90.8
275	6.36	34.008	6.33	26.726	4.837	0.15	91.0
300	6.18	34.023	6.15	26.761	5.169	0.15	91.1
350	5.73	34.028	5.70	26.821	5.812	0.14	91.1
400	5.50	34.055	5.47	26.871	6.432	0.15	91.1
450	5.32	34.096	5.29	26.925	7.030	0.15	91.1
500	5.16	34.129	5.12	26.971	7.607	0.15	91.1
600	4.68	34.188	4.63	27.073	8.696	0.15	91.1
800	4.24	34.313	4.18	27.222	10.653	0.15	91.1
1000	3.58	34.404	3.51	27.362	12.362	0.14	91.1
1006	3.59	34.403	3.51	27.360	12.410	0.14	91.2



W0009A

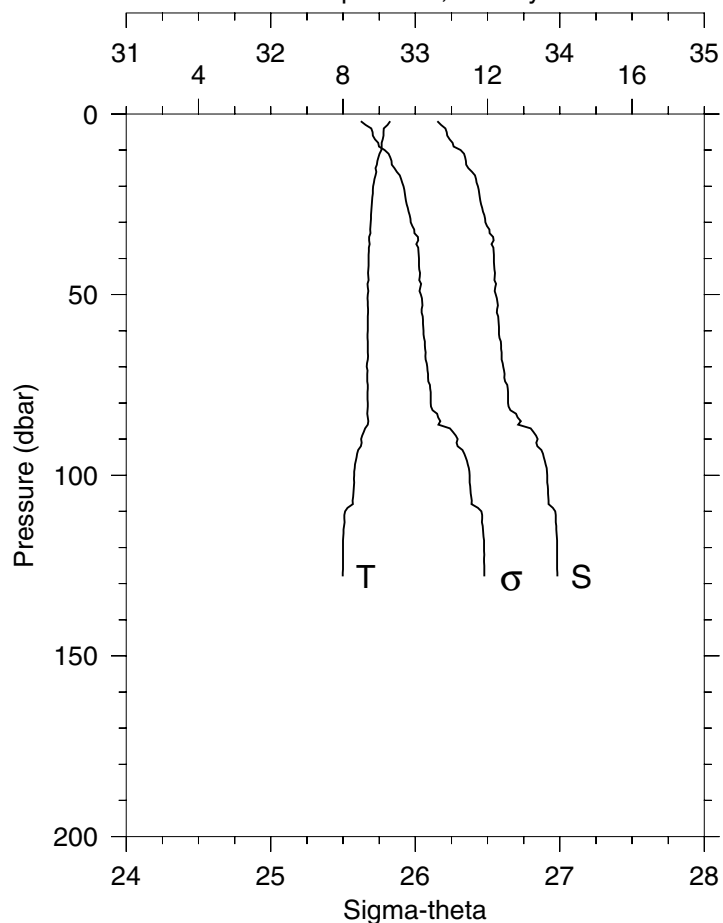
Station 33 RR-4 Temperature, Salinity



STA: 33 RR-4 LAT: 42 30.0 N LONG: 124 48.0 W
09 SEP 2001 0958 GMT DEPTH 593

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	9.55	33.028	9.55	25.487	0.025	0.67	88.4
10	9.40	33.052	9.40	25.530	0.247	0.64	88.6
20	9.10	33.216	9.10	25.707	0.484	0.56	89.2
30	9.06	33.225	9.05	25.720	0.712	0.64	89.0
40	9.06	33.255	9.06	25.743	0.938	0.65	88.9
50	8.99	33.266	8.99	25.763	1.162	0.58	89.1
60	8.69	33.312	8.68	25.846	1.383	0.44	89.9
70	8.61	33.408	8.60	25.934	1.594	0.31	90.2
80	8.64	33.599	8.63	26.079	1.795	0.25	90.1
90	8.40	33.826	8.39	26.294	1.979	0.22	90.2
100	8.23	33.890	8.22	26.370	2.149	0.20	90.0
110	8.21	33.941	8.20	26.413	2.313	0.18	88.4
120	7.99	33.980	7.98	26.476	2.473	0.19	86.9
130	7.70	34.010	7.68	26.543	2.626	0.17	88.6
140	7.55	34.022	7.54	26.573	2.774	0.16	88.5
150	7.53	34.027	7.52	26.580	2.921	0.17	88.5
175	7.42	34.028	7.41	26.597	3.287	0.16	88.4
200	7.30	34.035	7.29	26.620	3.651	0.16	89.2
225	7.15	34.041	7.12	26.646	4.006	0.16	89.0
250	7.14	34.041	7.12	26.648	4.362	0.16	88.8
275	7.11	34.043	7.09	26.652	4.718	0.16	88.8
300	7.03	34.048	7.00	26.669	5.073	0.16	89.1
350	6.68	34.061	6.64	26.727	5.763	0.15	89.8
400	6.22	34.105	6.19	26.822	6.420	0.16	89.3
450	6.04	34.121	6.00	26.858	7.049	0.16	89.2
500	5.78	34.148	5.74	26.912	7.659	0.16	89.1
591	5.11	34.212	5.06	27.044	8.695	0.16	88.8

Station 34 RR-3 Temperature, Salinity

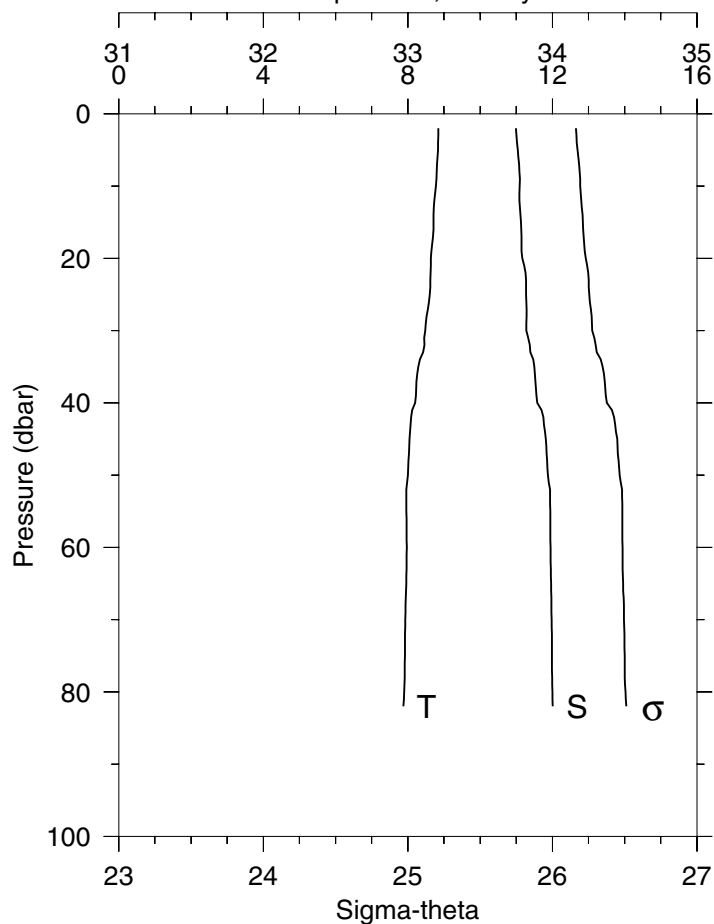


STA: 34 RR-3 LAT: 42 30.0 N LONG: 124 42.0 W
09 SEP 2001 1133 GMT DEPTH 132

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	9.31	33.153	9.31	25.623	0.047	0.53	88.9
10	9.06	33.313	9.06	25.788	0.229	0.50	89.1
20	8.83	33.434	8.83	25.919	0.442	0.46	89.4
30	8.77	33.485	8.77	25.969	0.648	0.45	89.6
40	8.70	33.545	8.70	26.026	0.847	0.46	89.6
50	8.69	33.557	8.68	26.039	1.045	0.43	89.4
60	8.68	33.580	8.68	26.057	1.241	0.46	89.3
70	8.66	33.608	8.65	26.083	1.435	0.47	89.1
80	8.68	33.642	8.67	26.106	1.627	0.45	89.2
90	8.50	33.846	8.49	26.294	1.811	0.25	89.8
100	8.31	33.913	8.30	26.377	1.980	0.20	89.1
110	8.06	33.969	8.05	26.457	2.145	0.18	87.6
120	8.00	33.981	7.99	26.476	2.302	0.18	86.5
128	7.99	33.983	7.98	26.478	2.427	0.18	86.3

W0109A

Station 35 RR-2 Temperature, Salinity



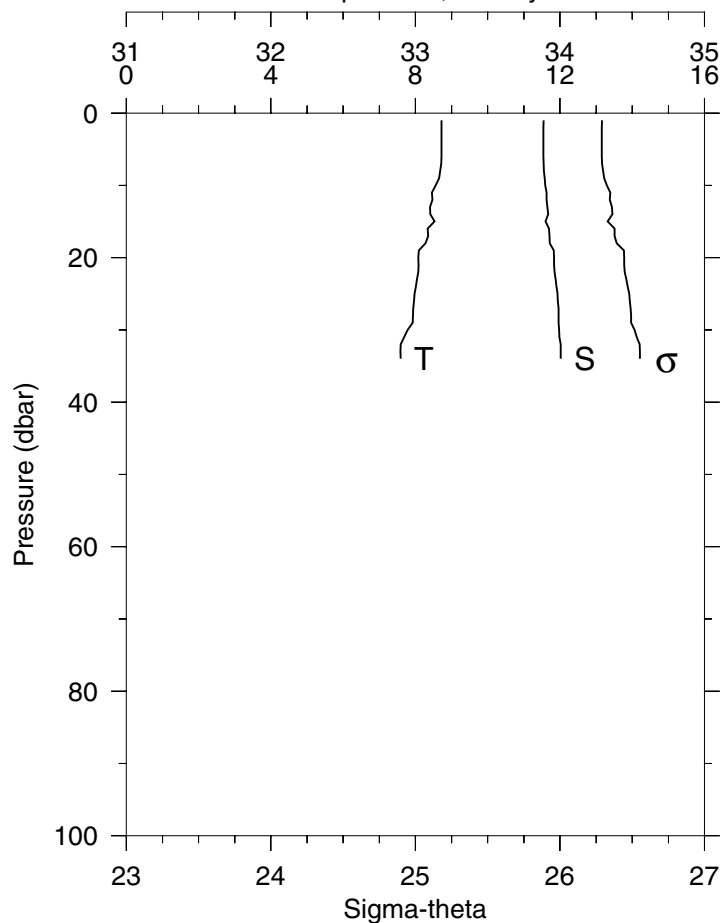
STA: 35 RR-2 LAT: 42 30.0 N LONG: 124 36.0 W
09 SEP 2001 1250 GMT DEPTH 87

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	8.84	33.748	8.84	26.162	0.037	0.52	87.2
10	8.78	33.773	8.78	26.193	0.183	0.45	87.1
20	8.64	33.792	8.64	26.230	0.363	0.52	87.3
30	8.48	33.819	8.48	26.275	0.539	0.41	87.3
40	8.20	33.895	8.20	26.377	0.707	0.22	88.0
50	8.00	33.969	7.99	26.465	0.866	0.16	87.9
60	7.97	33.988	7.96	26.485	1.021	0.17	88.2
70	7.93	33.994	7.92	26.495	1.175	0.17	87.3
80	7.90	34.000	7.89	26.505	1.329	0.17	86.8
82	7.88	34.003	7.87	26.511	1.360	0.17	86.2

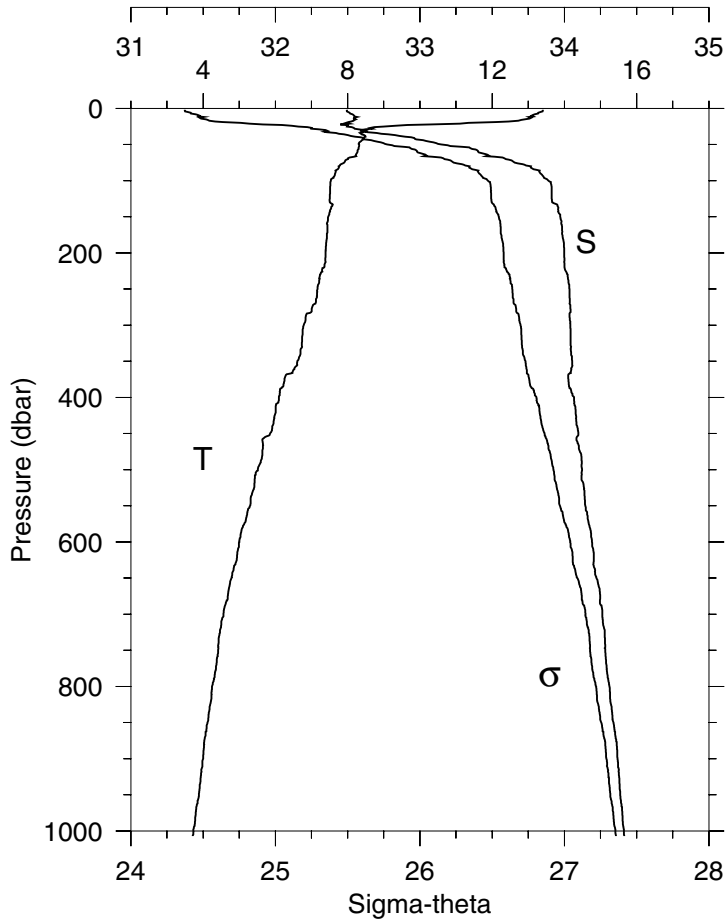
STA: 36 RR-1 LAT: 42 30.0 N LONG: 124 29.9 W
09 SEP 2001 1407 GMT DEPTH 37

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	8.72	33.887	8.72	26.291	0.017	0.38	85.5
10	8.56	33.898	8.56	26.324	0.172	0.43	85.7
20	8.08	33.960	8.08	26.445	0.336	0.21	86.5
30	7.78	33.995	7.78	26.517	0.492	0.18	86.1
34	7.59	34.006	7.59	26.554	0.551	0.33	83.6

Station 36 RR-1 Temperature, Salinity

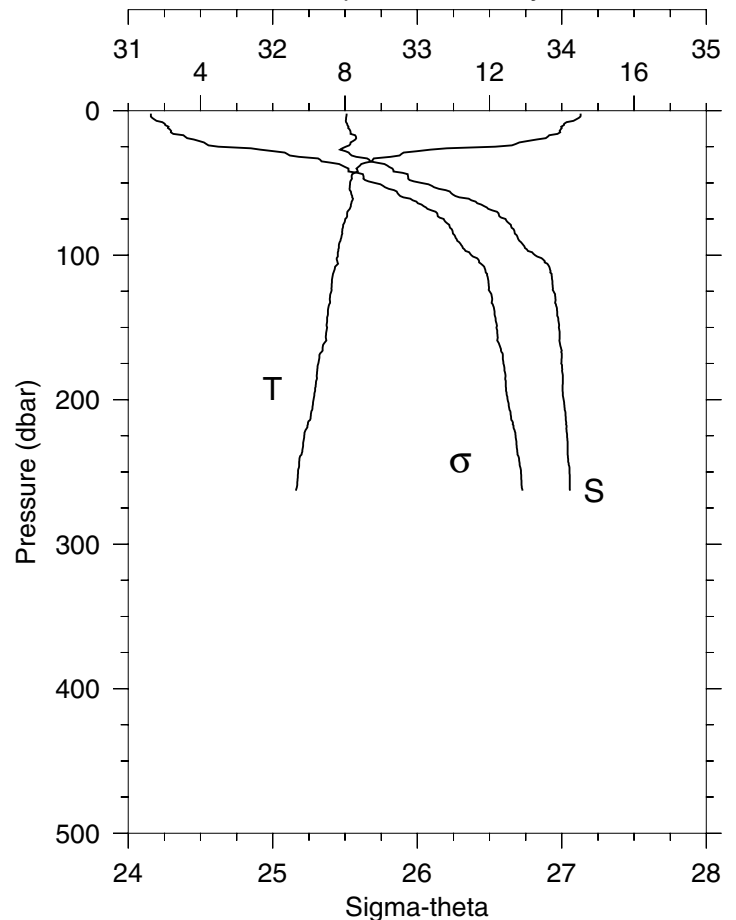


W0109A

Station 37 HH-7
Temperature, Salinity

STA: 37 HH-7 LAT: 44 0.1 N LONG: 125 12.1 W
09 SEP 2001 2258 GMT DEPTH 1701

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	13.41	32.493	13.40	24.372	0.071	0.78	86.6
10	13.09	32.544	13.09	24.474	0.352	1.68	85.4
20	11.34	32.489	11.34	24.761	0.691	1.24	87.6
30	8.37	32.614	8.37	25.347	0.976	0.61	89.7
40	8.46	32.940	8.45	25.589	1.229	0.37	90.4
50	8.32	33.148	8.31	25.774	1.460	0.29	90.5
60	8.27	33.402	8.27	25.980	1.669	0.24	90.4
70	8.01	33.595	8.00	26.170	1.864	0.18	90.4
80	7.75	33.767	7.74	26.343	2.041	0.17	89.9
90	7.66	33.834	7.65	26.409	2.206	0.18	89.7
100	7.54	33.890	7.53	26.471	2.366	0.18	89.4
110	7.52	33.911	7.51	26.491	2.521	0.18	89.1
120	7.51	33.912	7.50	26.492	2.676	0.20	89.1
130	7.50	33.916	7.49	26.496	2.831	0.19	89.1
140	7.52	33.956	7.51	26.526	2.984	0.18	88.7
150	7.46	33.970	7.45	26.546	3.136	0.20	88.4
175	7.43	33.986	7.41	26.563	3.510	0.18	88.5
200	7.39	33.999	7.37	26.579	3.881	0.17	88.5
225	7.30	34.010	7.27	26.601	4.250	0.16	88.9
250	7.16	34.035	7.14	26.639	4.611	0.16	89.4
275	7.02	34.041	6.99	26.664	4.967	0.15	89.7
300	6.78	34.040	6.76	26.695	5.316	0.15	89.3
350	6.61	34.053	6.58	26.730	6.003	0.15	89.6
400	6.10	34.066	6.06	26.807	6.668	0.15	90.6
450	5.85	34.097	5.82	26.862	7.301	0.15	90.6
500	5.51	34.122	5.47	26.924	7.905	0.15	90.6
600	5.00	34.191	4.95	27.039	9.041	0.15	90.6
800	4.25	34.312	4.19	27.219	11.030	0.14	91.0
1000	3.73	34.411	3.66	27.352	12.750	0.14	90.7
1007	3.71	34.414	3.64	27.357	12.806	0.14	90.8

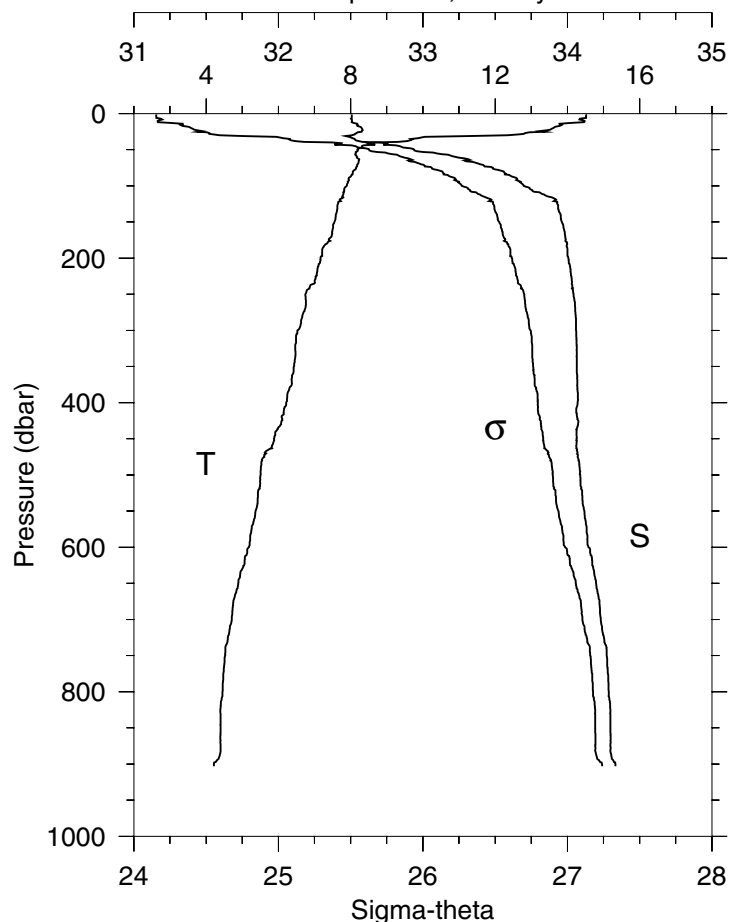
Station 38 HH-5
Temperature, Salinity

STA: 38 HH-5 LAT: 44 0.1 N LONG: 125 0.1 W
10 SEP 2001 0119 GMT DEPTH 936

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	14.52	32.510	14.52	24.156	0.075	2.61	84.3
10	14.06	32.516	14.06	24.257	0.372	2.92	83.4
20	13.31	32.572	13.30	24.453	0.732	2.68	84.9
30	9.56	32.533	9.56	25.099	1.052	0.43	90.0
40	8.31	32.828	8.31	25.523	1.315	0.31	90.3
50	8.14	33.030	8.14	25.707	1.553	0.33	90.2
60	8.20	33.291	8.19	25.903	1.771	0.24	90.5
70	8.06	33.551	8.06	26.128	1.969	0.17	90.5
80	7.95	33.650	7.94	26.223	2.154	0.16	90.4
90	7.87	33.706	7.86	26.277	2.331	0.16	90.3
100	7.80	33.815	7.79	26.374	2.502	0.16	90.2
110	7.71	33.919	7.70	26.470	2.662	0.16	90.3
120	7.63	33.936	7.62	26.494	2.818	0.16	90.1
130	7.58	33.956	7.57	26.518	2.972	0.16	89.8
140	7.53	33.968	7.51	26.534	3.124	0.17	89.6
150	7.50	33.979	7.49	26.547	3.274	0.16	89.6
175	7.26	33.997	7.24	26.595	3.645	0.15	90.2
200	7.13	34.012	7.11	26.625	4.007	0.16	89.9
225	6.87	34.037	6.85	26.680	4.359	0.19	89.7
250	6.70	34.054	6.68	26.717	4.702	0.15	89.8
263	6.64	34.057	6.62	26.728	4.878	0.15	89.8

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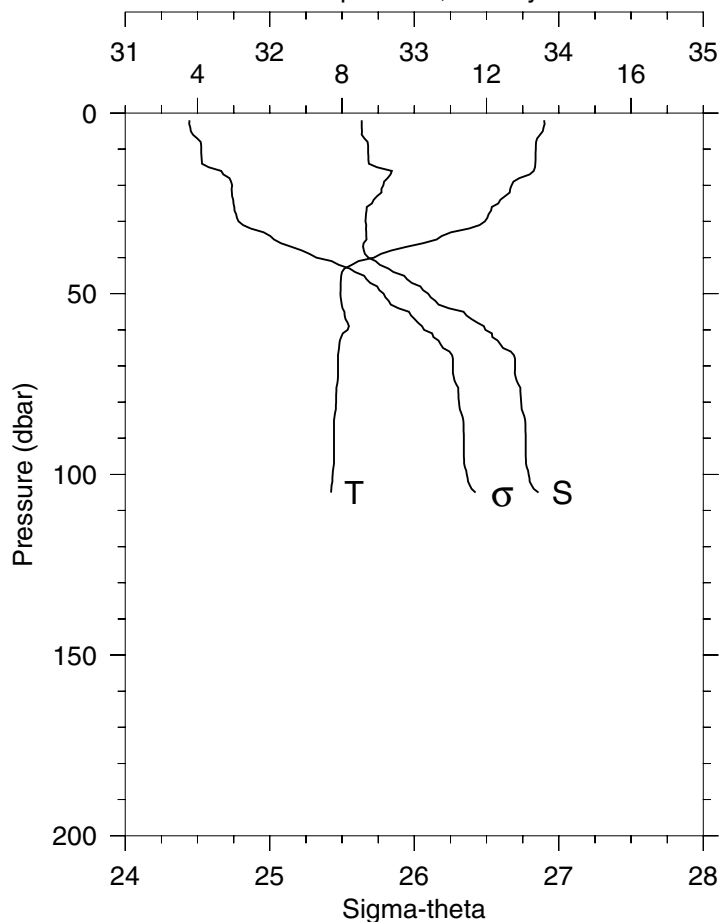
Station 39 HH-5 Temperature, Salinity



STA: 39 HH-5 LAT: 44 0.1 N LONG: 125 0.1 W
10 SEP 2001 0134 GMT DEPTH 936

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	14.51	32.508	14.51	24.156	0.038	2.88	84.1
10	14.47	32.507	14.47	24.165	0.374	2.50	83.8
20	13.61	32.576	13.61	24.395	0.737	3.29	83.7
30	12.35	32.509	12.34	24.591	1.082	2.35	86.5
40	8.64	32.698	8.63	25.373	1.375	0.40	90.3
50	8.19	32.938	8.18	25.628	1.621	0.32	90.2
60	8.18	33.224	8.17	25.854	1.846	0.26	90.5
70	8.19	33.397	8.18	25.988	2.054	0.21	90.6
80	8.06	33.559	8.05	26.135	2.250	0.17	90.5
90	7.95	33.651	7.94	26.224	2.435	0.16	90.4
100	7.89	33.698	7.88	26.269	2.613	0.16	90.3
110	7.80	33.815	7.79	26.375	2.784	0.16	90.2
120	7.71	33.915	7.70	26.467	2.945	0.16	90.3
130	7.63	33.936	7.62	26.494	3.101	0.16	90.1
140	7.59	33.953	7.57	26.514	3.256	0.15	89.9
150	7.55	33.962	7.53	26.527	3.409	0.16	89.8
175	7.40	33.988	7.38	26.569	3.785	0.16	90.2
200	7.17	34.006	7.15	26.615	4.150	0.15	90.0
225	7.04	34.027	7.02	26.650	4.507	0.15	89.4
250	6.75	34.042	6.72	26.701	4.856	0.15	89.9
275	6.70	34.055	6.67	26.719	5.198	0.15	89.7
300	6.52	34.060	6.50	26.746	5.534	0.15	89.9
350	6.43	34.065	6.40	26.763	6.198	0.15	89.8
400	6.22	34.071	6.18	26.796	6.854	0.15	89.9
450	5.88	34.064	5.84	26.833	7.497	0.15	90.8
500	5.50	34.088	5.46	26.898	8.113	0.15	90.9
600	5.18	34.146	5.13	26.983	9.288	0.15	90.8
800	4.45	34.286	4.39	27.177	11.341	0.14	90.9
903	4.21	34.332	4.14	27.240	12.320	0.15	90.0

Station 40 HH-4 Temperature, Salinity

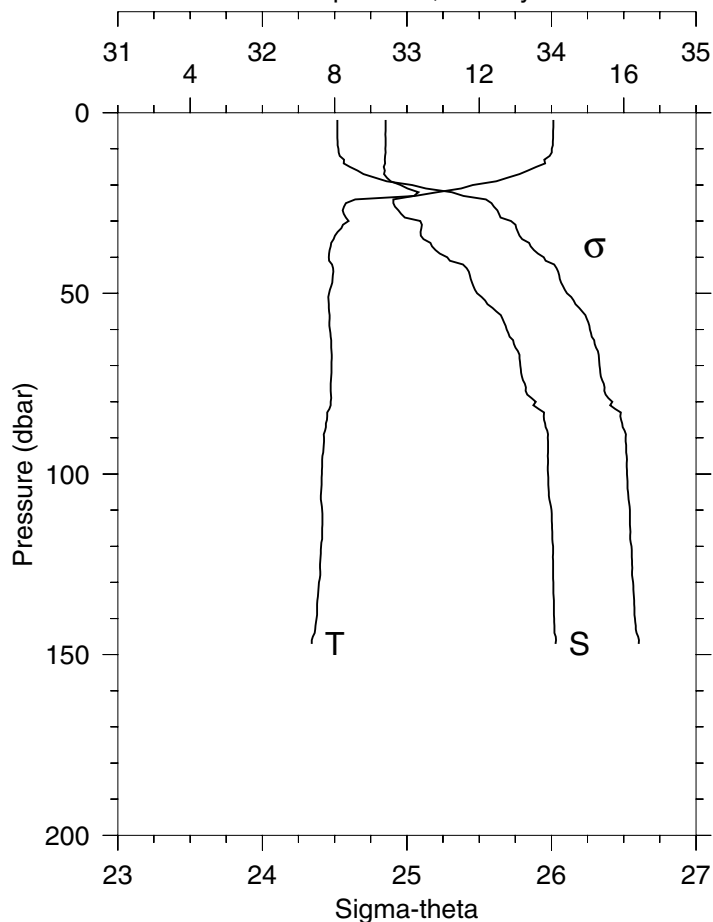


STA: 40 HH-4 LAT: 44 0.1 N LONG: 124 48.0 W
10 SEP 2001 0603 GMT DEPTH 110

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	13.59	32.636	13.59	24.445	0.070	3.45	81.7
10	13.36	32.680	13.36	24.525	0.345	3.57	81.8
20	12.70	32.786	12.69	24.739	0.677	4.10	81.4
30	11.96	32.662	11.95	24.783	0.996	3.54	84.2
40	8.88	32.683	8.88	25.323	1.287	0.71	88.9
50	7.95	33.096	7.95	25.787	1.525	0.21	90.6
60	8.15	33.492	8.15	26.068	1.732	0.18	90.5
70	7.89	33.697	7.89	26.267	1.914	0.17	90.2
80	7.83	33.739	7.83	26.309	2.087	0.17	90.0
90	7.78	33.771	7.77	26.343	2.257	0.18	89.9
100	7.74	33.791	7.74	26.364	2.425	0.19	89.7
105	7.70	33.860	7.69	26.425	2.508	0.20	89.3

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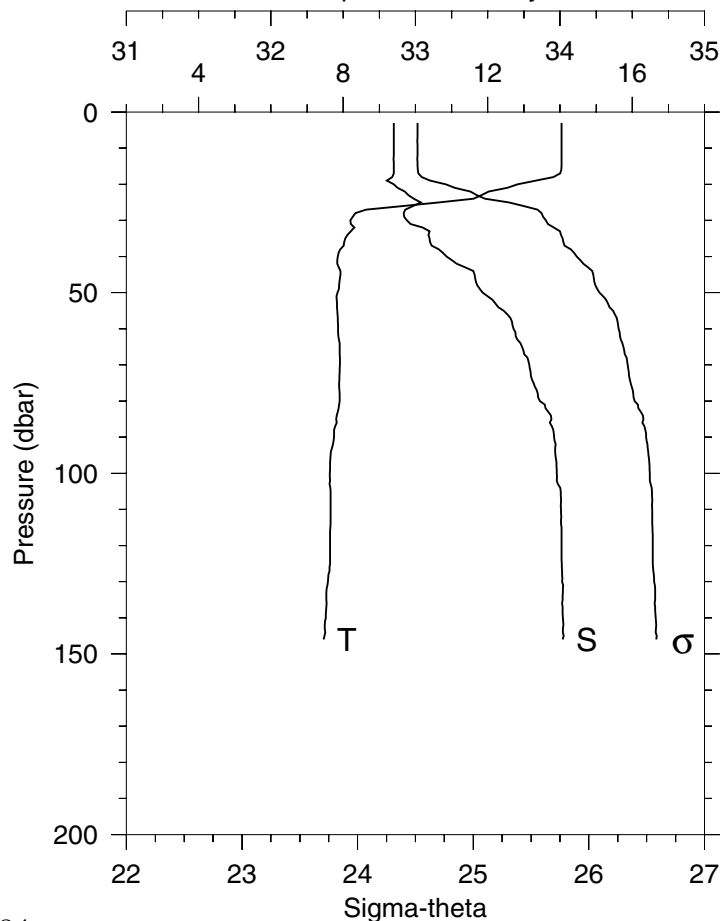
Station 41 HH-3 Temperature, Salinity



STA: 41 HH-3 LAT: 44 0.1 N LONG: 124 36.0 W
10 SEP 2001 0849 GMT DEPTH 154

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	14.05	32.853	14.05	24.518	0.068	2.92	82.7
10	14.01	32.850	14.01	24.526	0.341	3.32	82.6
20	11.82	32.955	11.82	25.035	0.668	1.90	86.6
30	8.39	33.093	8.38	25.720	0.918	0.36	90.1
40	7.84	33.278	7.83	25.946	1.135	0.28	90.4
50	7.84	33.486	7.84	26.108	1.331	0.19	90.4
60	7.86	33.691	7.86	26.266	1.513	0.20	90.1
70	7.91	33.784	7.91	26.333	1.684	0.17	90.2
80	7.89	33.892	7.89	26.421	1.851	0.16	90.4
90	7.71	33.975	7.70	26.514	2.007	0.18	88.2
100	7.65	33.977	7.64	26.523	2.159	0.19	86.0
110	7.66	34.001	7.64	26.542	2.310	0.16	89.0
120	7.62	34.011	7.61	26.554	2.460	0.16	89.6
130	7.57	34.013	7.56	26.564	2.609	0.15	89.8
140	7.50	34.018	7.48	26.578	2.757	0.15	89.8
147	7.36	34.027	7.35	26.604	2.859	0.16	88.1

Station 42 HH-3 Temperature, Salinity

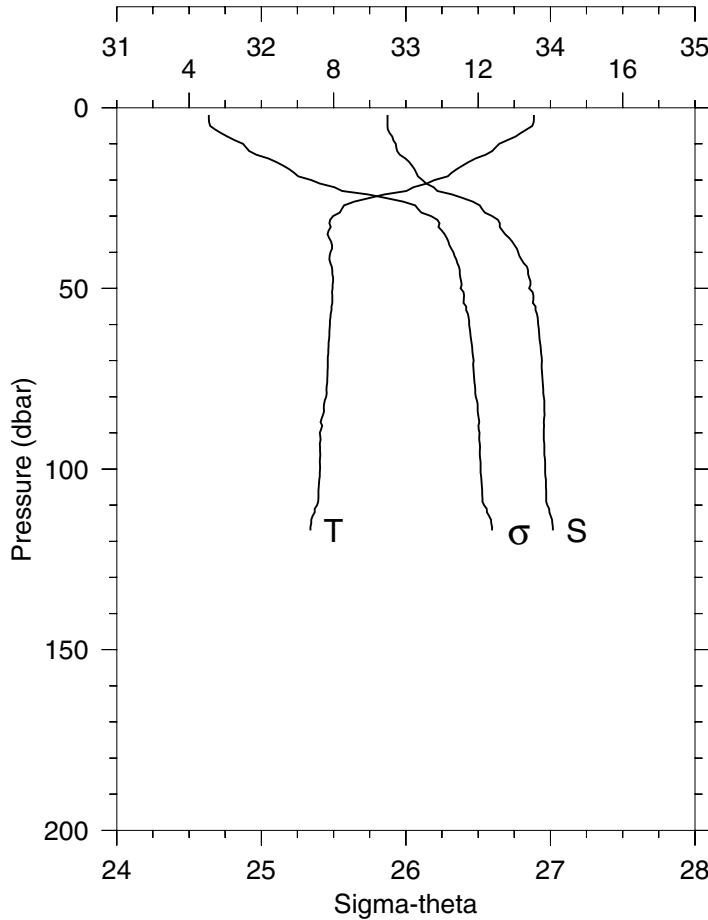


STA: 42 HH-3 LAT: 44 0.1 N LONG: 124 36.0 W
10 SEP 2001 0915 GMT DEPTH 154

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	14.04	32.850	14.04	24.518	0.102	2.81	82.4
10	14.04	32.850	14.04	24.518	0.341	3.08	82.6
20	12.83	32.850	12.83	24.762	0.679	2.89	85.3
30	8.20	32.940	8.19	25.628	0.950	0.73	89.8
40	7.85	33.216	7.84	25.896	1.172	0.25	90.4
50	7.84	33.464	7.84	26.091	1.371	0.19	90.4
60	7.86	33.678	7.86	26.257	1.553	0.18	90.0
70	7.91	33.787	7.90	26.336	1.726	0.17	90.1
80	7.91	33.862	7.90	26.396	1.892	0.16	90.3
90	7.75	33.959	7.74	26.495	2.050	0.17	89.8
100	7.63	33.978	7.62	26.527	2.202	0.19	86.2
110	7.65	34.008	7.64	26.547	2.352	0.16	89.1
120	7.64	34.011	7.62	26.552	2.502	0.16	89.7
130	7.58	34.015	7.57	26.563	2.651	0.15	89.8
140	7.52	34.020	7.50	26.577	2.798	0.16	89.7
146	7.46	34.019	7.45	26.583	2.887	0.16	89.7

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Station 43 HH-2 Temperature, Salinity



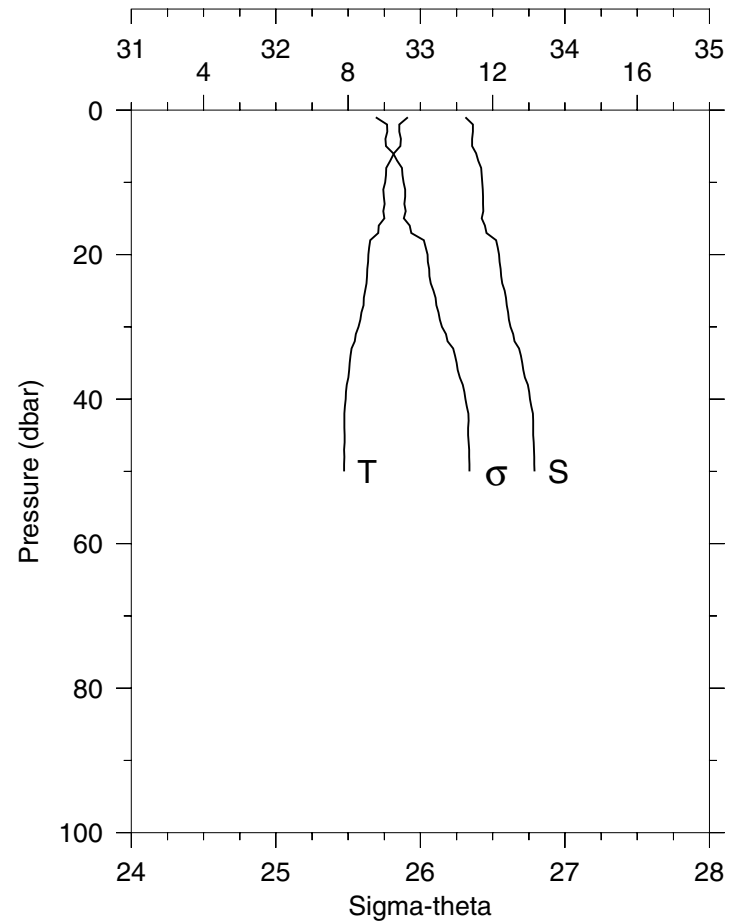
STA: 43 HH-2 LAT: 44 0.1 N LONG: 124 24.1 W
10 SEP 2001 1150 GMT DEPTH 122

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	13.54	32.872	13.54	24.637	0.066	5.00	74.8
10	12.58	32.930	12.58	24.872	0.324	3.74	80.7
20	10.79	33.114	10.79	25.345	0.611	2.85	85.4
30	7.99	33.596	7.99	26.174	0.830	0.36	89.8
40	7.91	33.777	7.91	26.328	1.005	0.18	90.0
50	7.97	33.852	7.96	26.378	1.171	0.17	90.3
60	7.90	33.915	7.89	26.437	1.332	0.17	90.2
70	7.84	33.941	7.83	26.468	1.490	0.16	90.1
80	7.79	33.954	7.78	26.484	1.646	0.16	89.8
90	7.62	33.955	7.61	26.510	1.800	0.18	87.6
100	7.62	33.964	7.61	26.517	1.952	0.21	85.6
110	7.55	33.979	7.53	26.540	2.104	0.20	85.3
117	7.36	34.017	7.35	26.597	2.207	0.18	81.8

STA: 44 HH-1 LAT: 44 0.1 N LONG: 124 11.9 W
10 SEP 2001 1437 GMT DEPTH 54

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	9.65	33.312	9.65	25.692	0.023	0.87	86.0
10	9.02	33.427	9.02	25.884	0.219	1.16	86.4
20	8.56	33.545	8.56	26.049	0.425	0.48	87.6
30	8.29	33.623	8.29	26.150	0.617	0.37	87.9
40	7.93	33.759	7.93	26.311	0.794	0.27	87.9
50	7.89	33.789	7.88	26.340	0.963	0.50	82.4

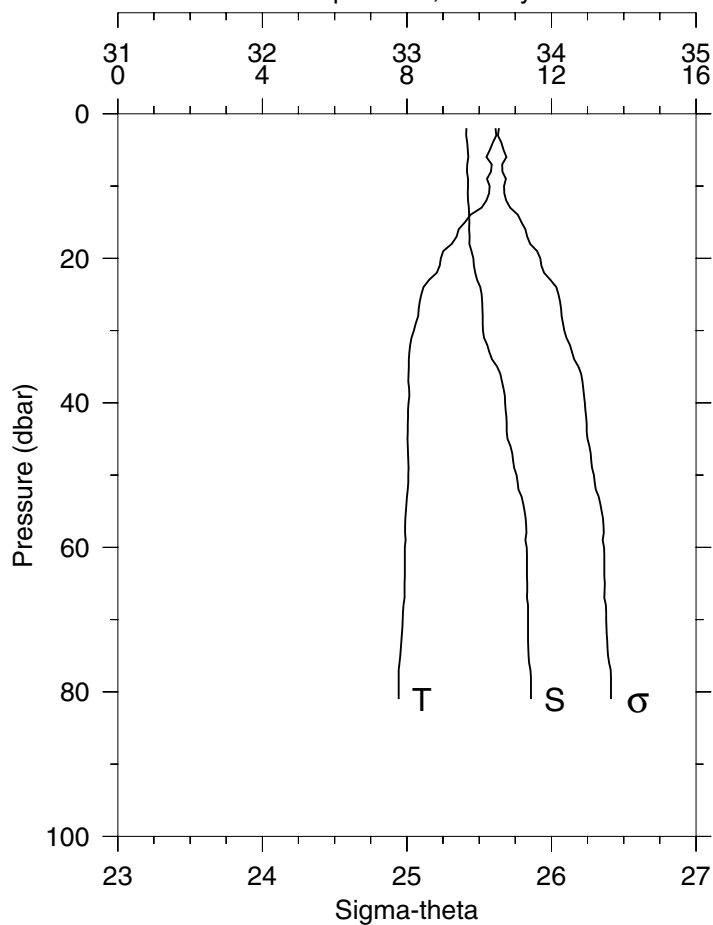
Station 44 HH-1 Temperature, Salinity



Station 1 NH-10SF

Temperature, Salinity

STA: 1 NH-10 LAT: 44 38.5 N LONG: 124 18.4 W
09 OCT 2001 0329 GMT DEPTH 83



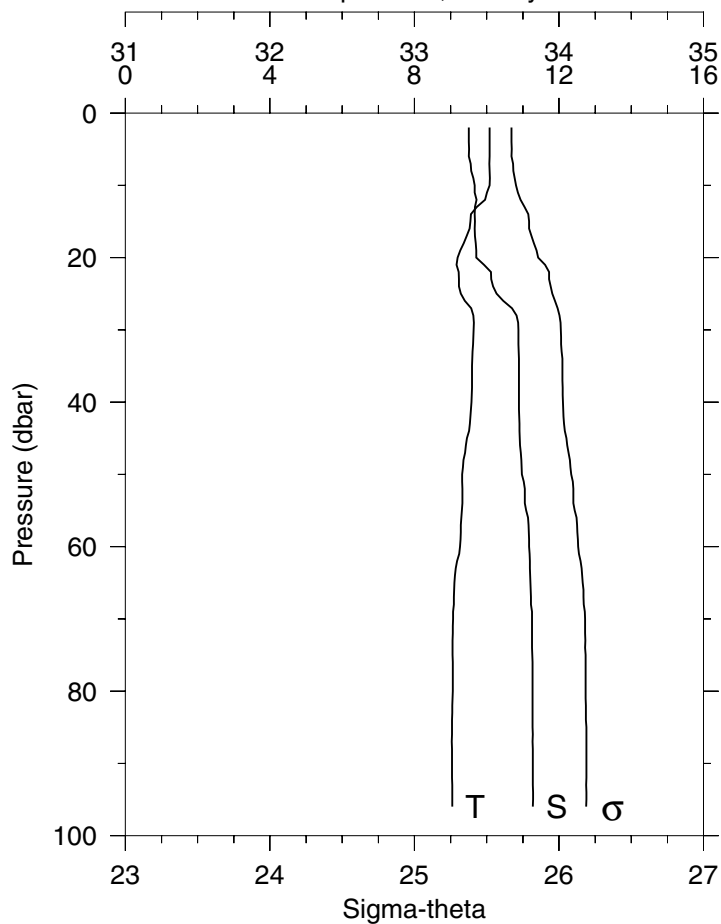
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.45	33.412	10.45	25.636	0.047	0.84	87.1
10	10.29	33.422	10.29	25.671	0.232	0.77	87.4
20	8.94	33.460	8.94	25.923	0.453	1.26	86.6
30	8.19	33.526	8.19	26.089	0.651	0.49	89.5
40	8.05	33.680	8.04	26.231	0.835	0.41	90.1
50	8.04	33.758	8.03	26.294	1.011	0.28	90.2
60	7.95	33.829	7.94	26.363	1.179	0.27	90.1
70	7.89	33.838	7.88	26.379	1.345	0.34	89.5
80	7.77	33.859	7.76	26.412	1.508	2.03	74.7
81	7.77	33.858	7.76	26.412	1.525	2.57	69.6

STA: 2 CPOS LAT: 43 9.2 N LONG: 124 34.5 W
09 OCT 2001 1443 GMT DEPTH 102

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.08	33.377	10.08	25.672	0.046	3.60	82.5
10	10.08	33.416	10.08	25.702	0.230	2.76	82.9
20	9.19	33.427	9.19	25.856	0.451	0.98	88.4
30	9.64	33.719	9.63	26.013	0.655	0.33	89.4
40	9.58	33.724	9.57	26.027	0.853	0.29	89.4
50	9.32	33.743	9.31	26.084	1.049	0.31	89.4
60	9.26	33.794	9.26	26.133	1.239	0.21	89.0
70	9.07	33.814	9.06	26.180	1.425	0.25	83.4
80	9.06	33.817	9.05	26.184	1.609	0.32	81.7
90	9.04	33.819	9.03	26.189	1.792	0.28	79.8
96	9.05	33.819	9.04	26.188	1.903	0.29	69.2

Station 2 CPOS

Temperature, Salinity

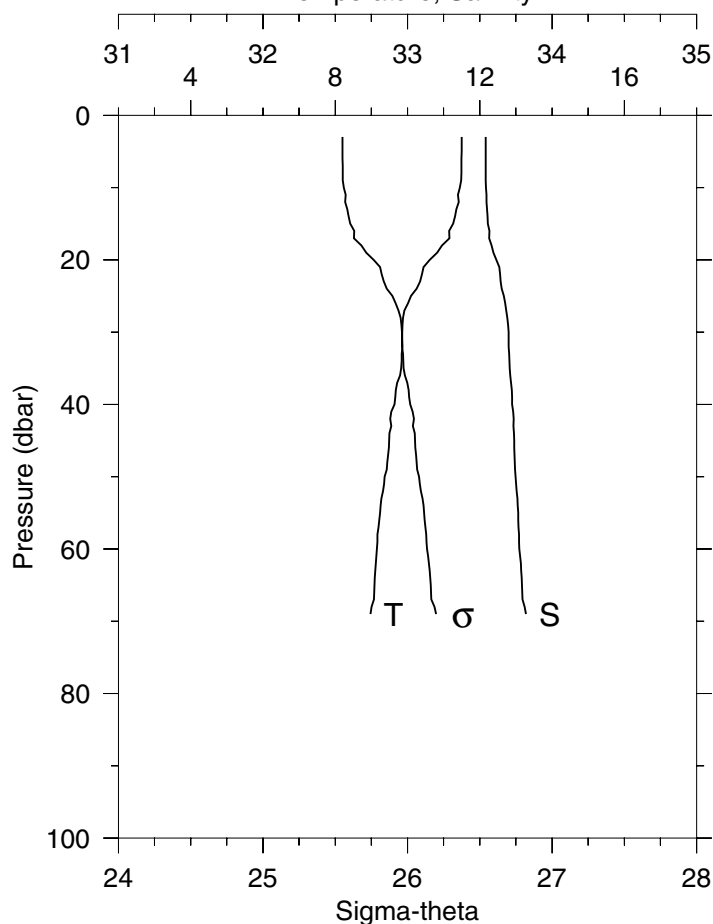


Station 3 RRM

Temperature, Salinity

STA: 3 RRM LAT: 42 26.3 N LONG: 124 34.5 W
09 OCT 2001 2245 GMT DEPTH 76

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	11.50	33.541	11.50	25.550	0.073	4.24	78.1
10	11.45	33.543	11.45	25.560	0.243	4.11	78.4
20	10.61	33.614	10.61	25.766	0.478	1.12	85.0
30	9.85	33.699	9.85	25.961	0.689	0.44	87.9
40	9.64	33.724	9.63	26.018	0.892	0.35	88.4
50	9.37	33.748	9.36	26.080	1.087	0.29	87.4
60	9.15	33.774	9.15	26.135	1.277	0.22	82.6
69	8.98	33.819	8.97	26.198	1.445	0.22	81.3

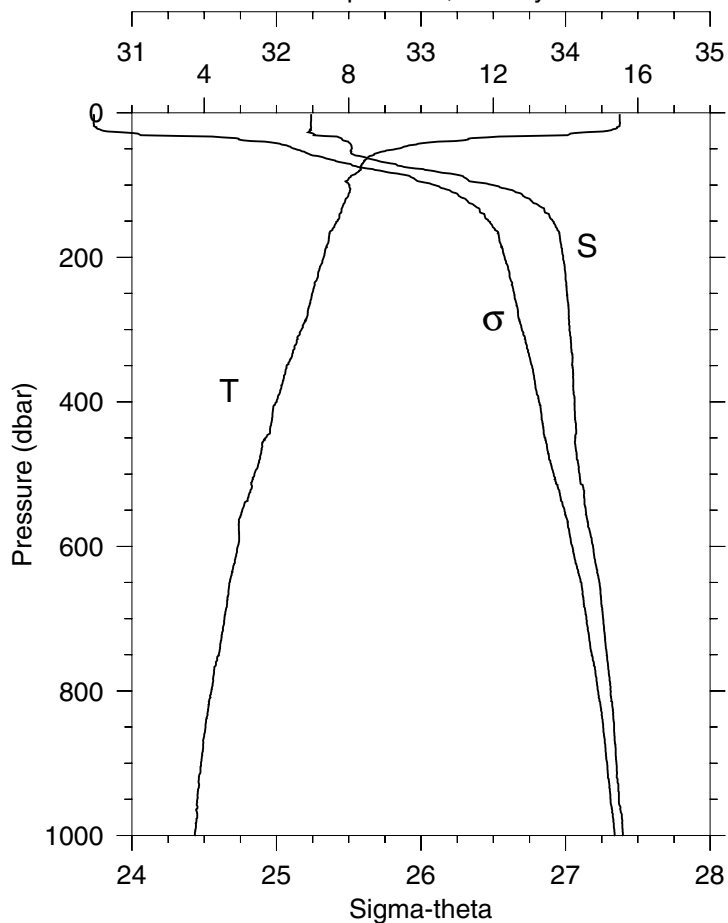


Station 4 NH-85

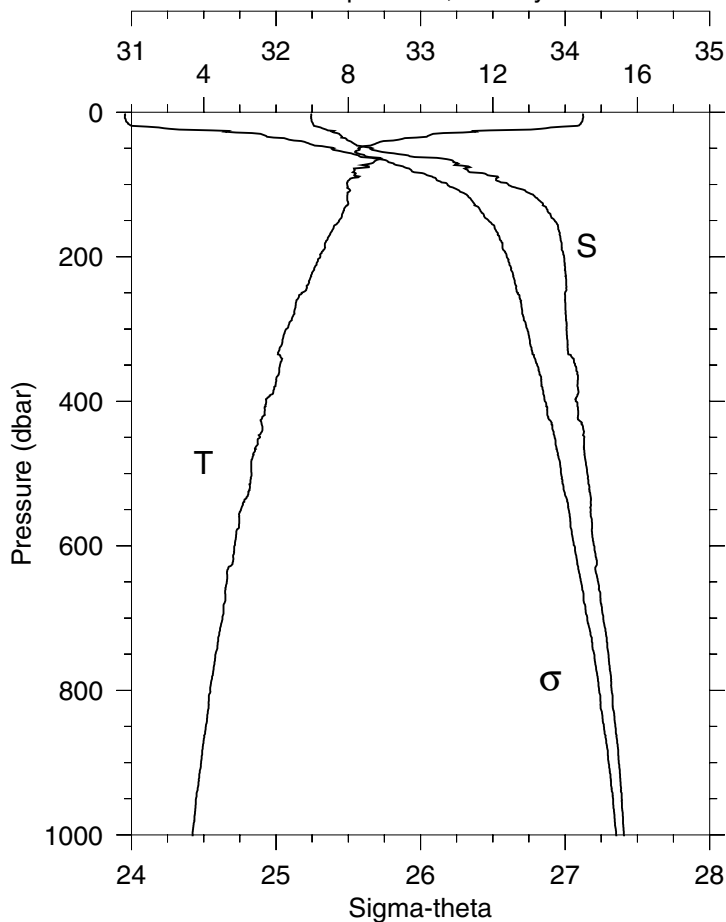
Temperature, Salinity

STA: 4 NH-85 LAT: 44 39.1 N LONG: 126 3.1 W
10 OCT 2001 1621 GMT DEPTH 2884

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	15.50	32.239	15.50	23.737	0.083	0.37	88.9
10	15.50	32.239	15.50	23.737	0.415	0.52	89.2
20	15.42	32.240	15.42	23.754	0.831	0.40	89.0
30	14.10	32.261	14.10	24.052	1.235	0.75	88.6
40	10.48	32.497	10.47	24.919	1.570	0.50	89.5
50	9.32	32.521	9.32	25.128	1.861	0.48	90.1
60	8.58	32.574	8.57	25.284	2.138	0.29	90.6
70	8.39	32.794	8.38	25.486	2.397	0.21	90.7
80	8.29	33.072	8.28	25.719	2.638	0.19	90.7
90	8.01	33.304	8.00	25.942	2.854	0.14	90.8
100	8.02	33.498	8.01	26.093	3.055	0.13	90.9
110	8.03	33.656	8.02	26.217	3.241	0.13	90.9
120	7.91	33.756	7.90	26.312	3.417	0.13	90.9
130	7.83	33.827	7.82	26.379	3.587	0.14	90.9
140	7.75	33.884	7.73	26.437	3.750	0.14	90.8
150	7.69	33.911	7.67	26.466	3.910	0.14	90.8
175	7.45	33.963	7.43	26.542	4.294	0.14	90.7
200	7.30	33.983	7.28	26.579	4.668	0.15	90.8
225	7.15	33.999	7.13	26.613	5.034	0.15	90.8
250	6.99	34.010	6.97	26.644	5.394	0.15	90.6
275	6.86	34.022	6.84	26.671	5.747	0.15	90.7
300	6.70	34.026	6.67	26.697	6.096	0.15	90.8
350	6.28	34.047	6.25	26.768	6.770	0.14	90.8
400	6.01	34.062	5.97	26.815	7.420	0.15	90.8
450	5.70	34.068	5.66	26.859	8.049	0.14	90.9
500	5.39	34.097	5.34	26.919	8.657	0.15	91.0
600	4.93	34.189	4.88	27.046	9.782	0.15	90.9
800	4.20	34.312	4.14	27.225	11.757	0.14	90.9
1000	3.74	34.397	3.66	27.340	13.477	0.14	91.0
1001	3.73	34.398	3.66	27.342	13.485	0.14	91.0

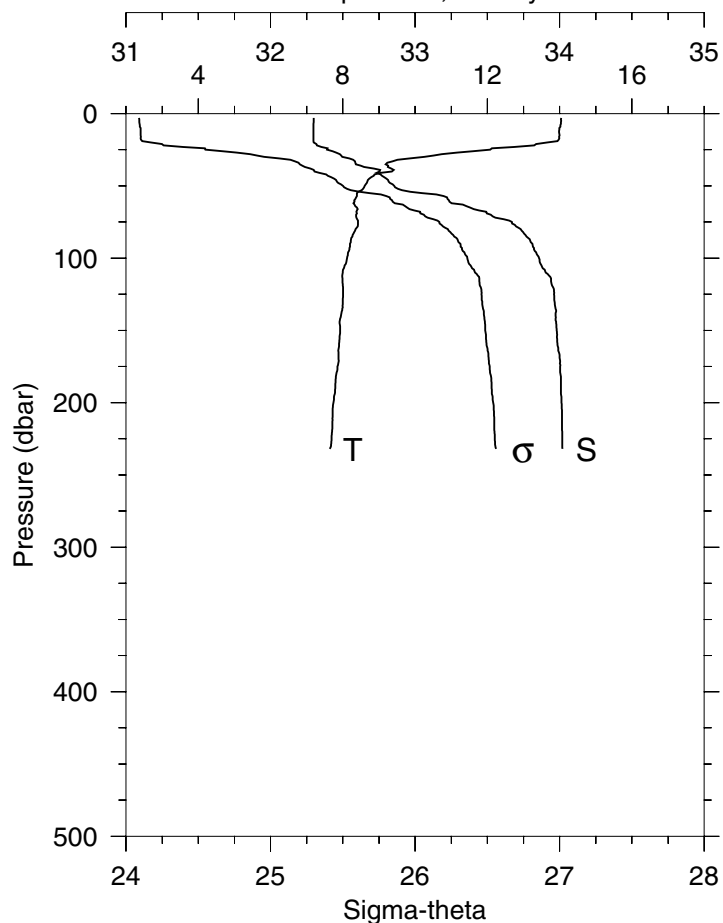


W0110A

Station 5 NH-65
Temperature, Salinity

STA: 5 NH-65 LAT: 44 39.1 N LONG: 125 35.8 W
10 OCT 2001 1911 GMT DEPTH 2836

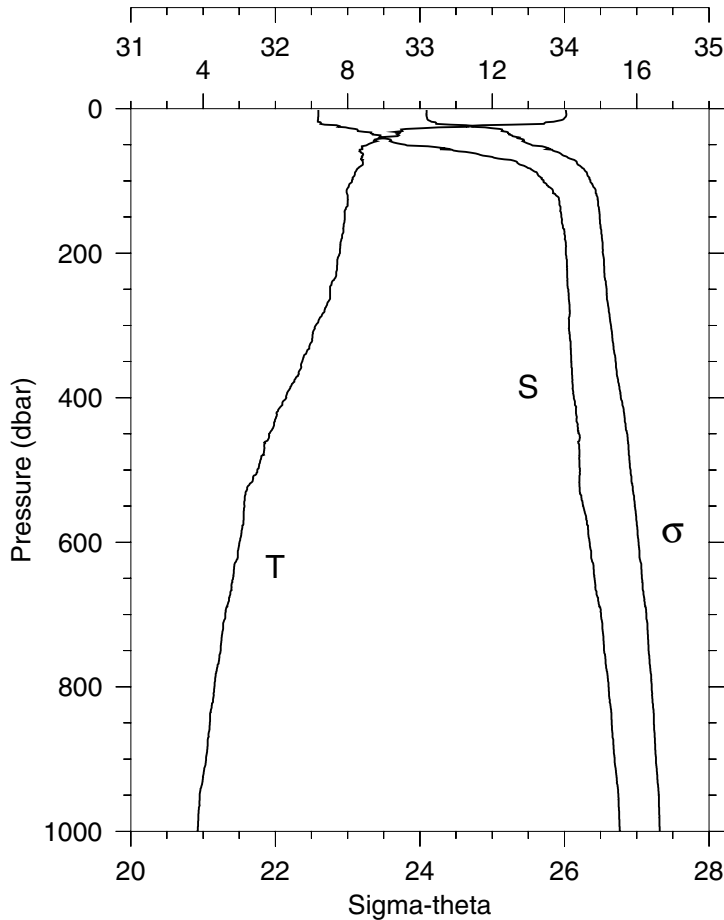
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.50	32.242	14.50	23.953	0.079	0.47	89.0
10	14.49	32.245	14.48	23.959	0.395	0.56	89.1
20	13.93	32.287	13.93	24.107	0.787	0.55	89.2
30	10.35	32.437	10.34	24.894	1.130	0.62	89.3
40	8.98	32.510	8.97	25.173	1.425	0.55	89.7
50	8.28	32.666	8.28	25.401	1.695	0.36	90.3
60	8.45	32.915	8.44	25.572	1.946	0.28	90.4
70	8.68	33.250	8.68	25.799	2.175	0.20	90.6
80	8.18	33.327	8.17	25.935	2.389	0.16	90.7
90	8.27	33.538	8.27	26.087	2.589	0.15	90.7
100	7.97	33.608	7.96	26.187	2.778	0.12	90.9
110	8.02	33.730	8.01	26.274	2.957	0.14	90.8
120	7.97	33.811	7.96	26.347	3.129	0.14	90.8
130	7.93	33.856	7.92	26.388	3.296	0.14	90.7
140	7.84	33.893	7.83	26.430	3.459	0.14	90.6
150	7.74	33.928	7.73	26.471	3.619	0.15	90.6
175	7.43	33.968	7.41	26.548	4.002	0.15	90.7
200	7.23	33.992	7.21	26.596	4.373	0.15	90.8
225	6.98	34.004	6.96	26.641	4.734	0.15	90.8
250	6.71	34.000	6.68	26.674	5.087	0.15	90.9
275	6.51	34.004	6.48	26.703	5.432	0.15	90.9
300	6.28	34.010	6.26	26.738	5.771	0.15	90.9
350	6.11	34.069	6.08	26.807	6.428	0.15	90.7
400	5.72	34.074	5.69	26.860	7.055	0.15	90.9
450	5.56	34.134	5.52	26.928	7.656	0.15	90.6
500	5.32	34.154	5.28	26.973	8.233	0.15	90.6
600	4.85	34.201	4.80	27.064	9.327	0.14	90.8
800	4.18	34.322	4.12	27.235	11.278	0.14	91.0
1000	3.69	34.406	3.62	27.352	12.975	0.14	90.9
1002	3.69	34.408	3.62	27.354	12.991	0.15	90.9

Station 6 NH-55
Temperature, Salinity

STA: 6 NH-55 LAT: 44 39.0 N LONG: 125 21.9 W
10 OCT 2001 2102 GMT DEPTH 2867

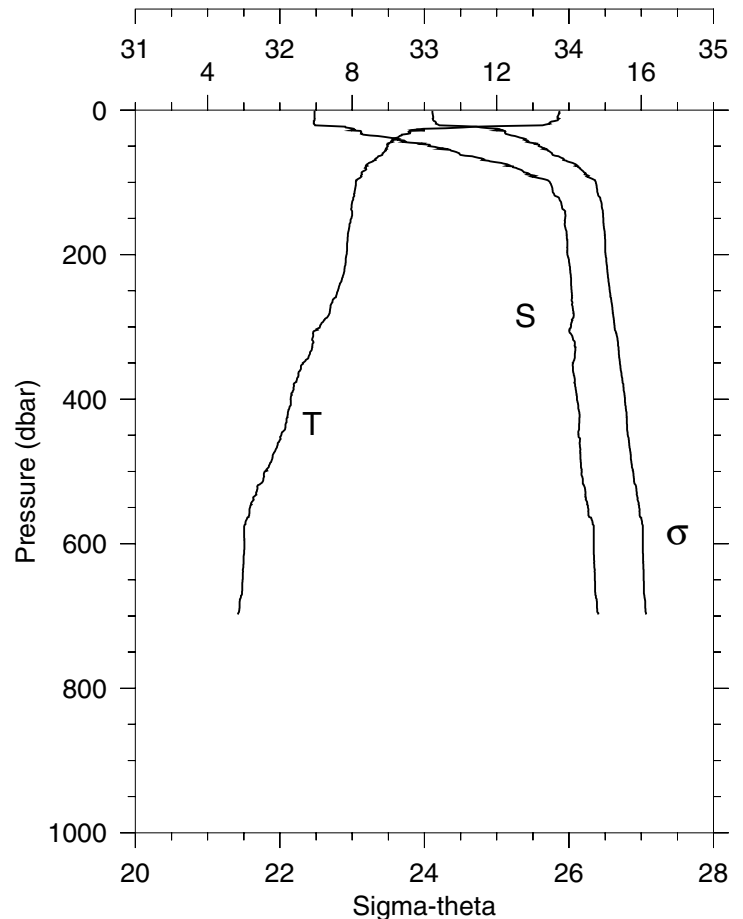
P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	14.04	32.298	14.04	24.091	0.114	0.58	89.2
10	13.99	32.296	13.99	24.101	0.381	0.57	89.2
20	13.66	32.299	13.66	24.171	0.762	0.56	89.2
30	10.26	32.497	10.26	24.956	1.097	0.65	89.0
40	9.36	32.754	9.35	25.304	1.374	0.39	89.6
50	8.60	32.855	8.60	25.501	1.630	0.31	90.3
60	8.32	33.235	8.31	25.841	1.861	0.23	90.0
70	8.37	33.523	8.36	26.060	2.067	0.17	90.6
80	8.35	33.731	8.35	26.226	2.253	0.17	90.4
90	8.20	33.812	8.19	26.313	2.429	0.15	90.4
100	8.12	33.858	8.11	26.362	2.599	0.15	90.3
110	8.00	33.904	7.99	26.415	2.764	0.15	90.2
120	8.01	33.953	7.99	26.453	2.924	0.16	89.4
130	8.00	33.965	7.99	26.464	3.082	0.16	89.0
140	7.95	33.972	7.93	26.477	3.239	0.16	88.7
150	7.93	33.980	7.91	26.486	3.396	0.16	88.7
175	7.85	34.004	7.84	26.516	3.783	0.16	89.1
200	7.74	34.013	7.72	26.540	4.165	0.16	89.3
225	7.69	34.019	7.67	26.552	4.544	0.15	89.4
232	7.64	34.020	7.62	26.561	4.650	0.15	89.4

W0110A

Station 7 NH-55
Temperature, Salinity

STA: 7 NH-55 LAT: 44 39.1 N LONG: 125 21.8 W
10 OCT 2001 2119 GMT DEPTH 2867

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	14.04	32.297	14.04	24.092	0.076	0.62	89.2
10	14.05	32.297	14.05	24.091	0.381	0.54	89.2
20	13.45	32.315	13.44	24.226	0.760	0.59	89.3
30	9.50	32.571	9.49	25.139	1.078	0.58	89.2
40	8.93	32.755	8.92	25.373	1.351	0.44	90.0
50	8.55	32.896	8.55	25.541	1.604	0.31	90.3
60	8.36	33.316	8.36	25.898	1.828	0.22	90.6
70	8.37	33.583	8.37	26.106	2.030	0.16	90.5
80	8.35	33.731	8.34	26.227	2.214	0.17	90.4
90	8.20	33.814	8.19	26.315	2.389	0.16	90.4
100	8.12	33.856	8.11	26.360	2.559	0.15	90.3
110	8.00	33.907	7.99	26.417	2.724	0.15	90.2
120	8.00	33.941	7.99	26.445	2.884	0.15	89.5
130	8.00	33.966	7.98	26.464	3.043	0.16	88.9
140	7.93	33.972	7.92	26.479	3.200	0.16	88.9
150	7.92	33.979	7.91	26.486	3.357	0.16	88.8
175	7.85	34.003	7.83	26.516	3.744	0.16	89.2
200	7.78	34.009	7.76	26.531	4.127	0.16	89.2
225	7.69	34.018	7.67	26.552	4.506	0.15	89.4
250	7.51	34.026	7.49	26.584	4.882	0.15	89.7
275	7.39	34.035	7.37	26.608	5.252	0.16	89.8
300	7.12	34.031	7.09	26.644	5.614	0.15	90.1
350	6.74	34.048	6.71	26.708	6.318	0.15	90.5
400	6.30	34.064	6.26	26.779	6.993	0.15	90.7
450	5.83	34.100	5.79	26.868	7.628	0.15	90.7
500	5.50	34.107	5.46	26.914	8.235	0.14	90.9
600	5.01	34.174	4.96	27.025	9.375	0.15	90.6
800	4.31	34.305	4.25	27.207	11.390	0.15	90.8
1000	3.83	34.387	3.76	27.323	13.150	0.15	90.8

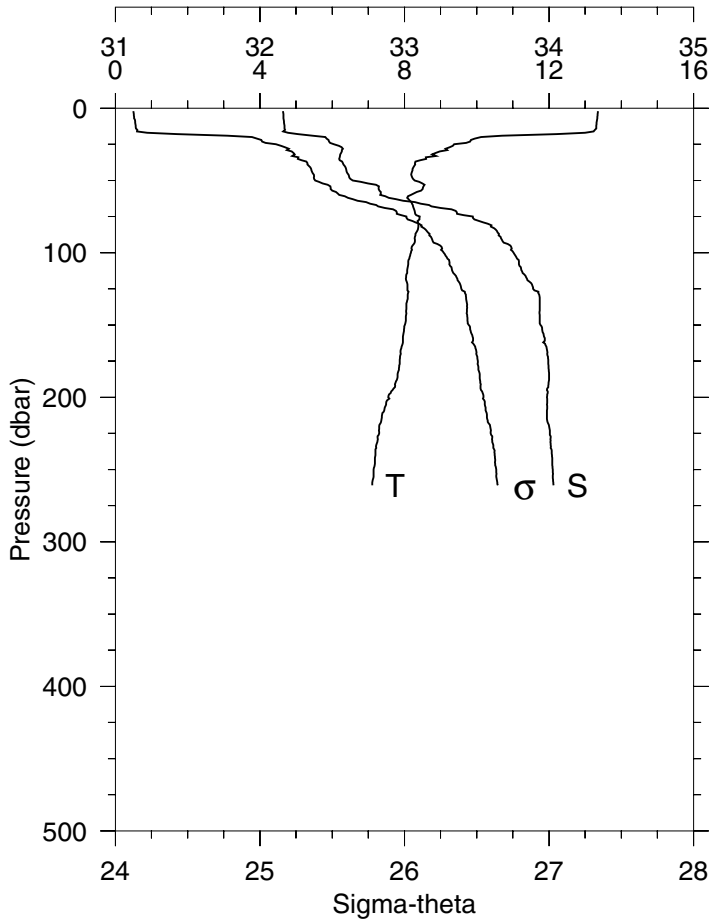
Station 8 NH-45
Temperature, Salinity

STA: 8 NH-45 LAT: 44 39.0 N LONG: 125 7.1 W
10 OCT 2001 2314 GMT DEPTH 702

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	13.73	32.243	13.73	24.114	0.038	0.73	88.0
10	13.68	32.239	13.68	24.120	0.379	0.78	88.1
20	13.35	32.239	13.35	24.186	0.757	0.76	88.2
30	9.56	32.562	9.56	25.121	1.071	0.58	89.6
40	9.12	32.821	9.12	25.395	1.345	0.41	90.1
50	8.99	33.033	8.98	25.582	1.595	0.31	90.4
60	8.84	33.242	8.84	25.768	1.825	0.23	90.5
70	8.58	33.444	8.58	25.966	2.039	0.19	90.6
80	8.36	33.636	8.35	26.151	2.234	0.15	90.6
90	8.25	33.747	8.24	26.254	2.416	0.15	90.5
100	8.11	33.869	8.10	26.371	2.588	0.15	90.2
110	8.08	33.886	8.07	26.390	2.753	0.16	90.0
120	8.04	33.920	8.03	26.422	2.917	0.16	90.0
130	7.99	33.949	7.98	26.452	3.077	0.16	89.8
140	8.00	33.974	7.99	26.470	3.236	0.16	88.7
150	7.97	33.974	7.96	26.474	3.393	0.16	88.7
175	7.88	33.985	7.86	26.497	3.784	0.15	89.4
200	7.84	33.989	7.82	26.506	4.173	0.16	89.2
225	7.77	34.010	7.75	26.534	4.558	0.15	89.4
250	7.61	34.018	7.58	26.564	4.937	0.15	89.6
275	7.39	34.027	7.36	26.602	5.309	0.15	89.7
300	7.11	34.013	7.08	26.631	5.673	0.16	90.4
350	6.64	34.026	6.61	26.705	6.376	0.15	90.6
400	6.30	34.056	6.26	26.774	7.051	0.15	90.6
450	6.04	34.066	6.00	26.815	7.702	0.15	90.6
500	5.58	34.088	5.53	26.889	8.329	0.15	90.8
600	5.01	34.171	4.97	27.022	9.473	0.14	90.7
698	4.83	34.205	4.77	27.071	10.539	0.14	90.7

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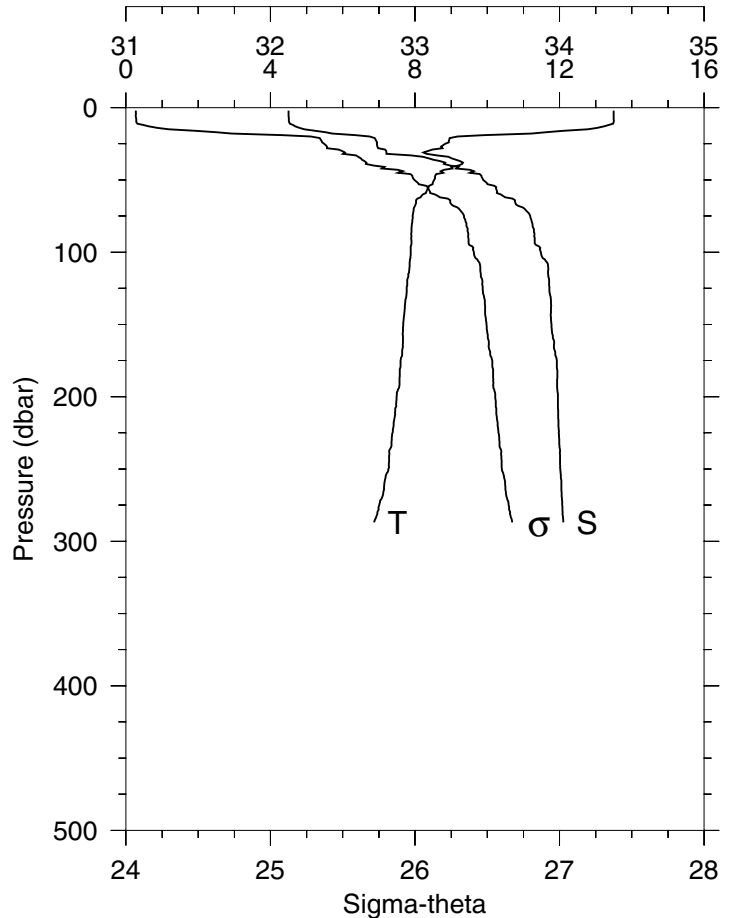
Station 9 NH-35 Temperature, Salinity



STA: 9 NH-35 LAT: 44 39.0 N LONG: 125 53.0 W
11 OCT 2001 0058 GMT DEPTH 446

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	13.35	32.159	13.35	24.124	0.076	0.90	87.9
10	13.32	32.167	13.32	24.137	0.378	0.74	88.0
20	10.12	32.453	10.12	24.945	0.741	0.62	88.9
30	8.97	32.567	8.97	25.219	1.028	0.50	89.3
40	8.27	32.586	8.26	25.340	1.297	0.42	89.8
50	8.28	32.642	8.27	25.383	1.558	0.40	89.9
60	8.18	32.833	8.17	25.548	1.808	0.31	90.1
70	8.27	33.325	8.26	25.920	2.035	0.19	90.5
80	8.39	33.576	8.38	26.100	2.236	0.16	90.6
90	8.28	33.669	8.27	26.188	2.423	0.15	90.6
100	8.18	33.754	8.16	26.271	2.602	0.15	90.6
110	8.09	33.805	8.07	26.325	2.775	0.14	90.6
120	8.06	33.864	8.05	26.375	2.944	0.15	90.5
130	8.09	33.934	8.08	26.425	3.108	0.16	89.6
140	8.05	33.935	8.03	26.432	3.269	0.15	89.7
150	8.01	33.942	7.99	26.444	3.430	0.16	90.0
175	7.87	33.995	7.85	26.507	3.823	0.15	89.5
200	7.55	33.986	7.53	26.546	4.206	0.16	90.1
225	7.30	34.005	7.28	26.596	4.578	0.15	90.4
250	7.15	34.026	7.12	26.635	4.940	0.15	90.2
261	7.11	34.032	7.08	26.646	5.098	0.15	90.2

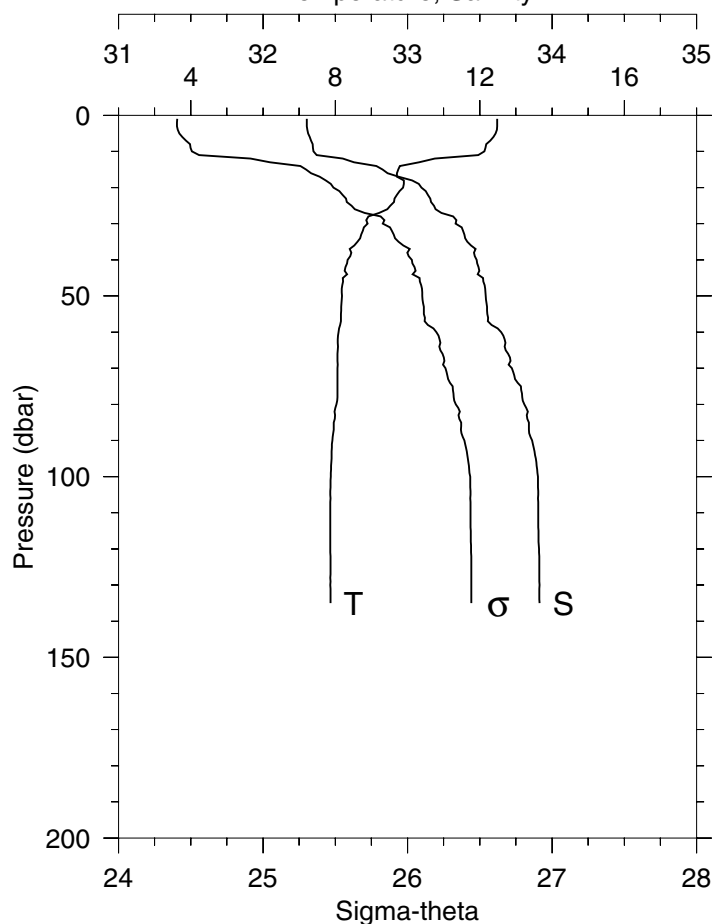
Station 10 NH-25 Temperature, Salinity



STA: 10 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
11 OCT 2001 0236 GMT DEPTH 295

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	13.50	32.125	13.50	24.069	0.077	1.52	83.8
10	13.50	32.129	13.50	24.071	0.384	1.55	83.8
20	9.18	32.686	9.18	25.278	0.731	0.68	88.3
30	8.36	32.801	8.36	25.494	0.990	0.51	89.0
40	9.20	33.244	9.19	25.713	1.228	0.44	89.2
50	8.53	33.473	8.53	25.996	1.438	0.36	89.7
60	8.22	33.592	8.22	26.136	1.632	0.25	90.0
70	7.96	33.758	7.96	26.305	1.811	0.20	90.1
80	7.91	33.812	7.91	26.355	1.980	0.24	90.1
90	7.90	33.828	7.89	26.369	2.147	0.19	90.1
100	7.88	33.871	7.87	26.407	2.312	0.17	90.1
110	7.85	33.921	7.84	26.451	2.473	0.17	90.0
120	7.78	33.928	7.77	26.466	2.631	0.17	89.9
130	7.76	33.935	7.75	26.475	2.788	0.17	89.9
140	7.71	33.940	7.70	26.486	2.945	0.17	89.8
150	7.67	33.944	7.66	26.495	3.100	0.17	89.8
175	7.60	33.981	7.59	26.534	3.485	0.16	89.8
200	7.49	33.988	7.47	26.556	3.864	0.16	89.8
225	7.38	33.995	7.36	26.578	4.238	0.16	89.8
250	7.26	34.005	7.24	26.602	4.606	0.16	89.6
275	7.01	34.019	6.99	26.648	4.968	0.15	89.1
287	6.87	34.025	6.85	26.672	5.138	0.15	88.9

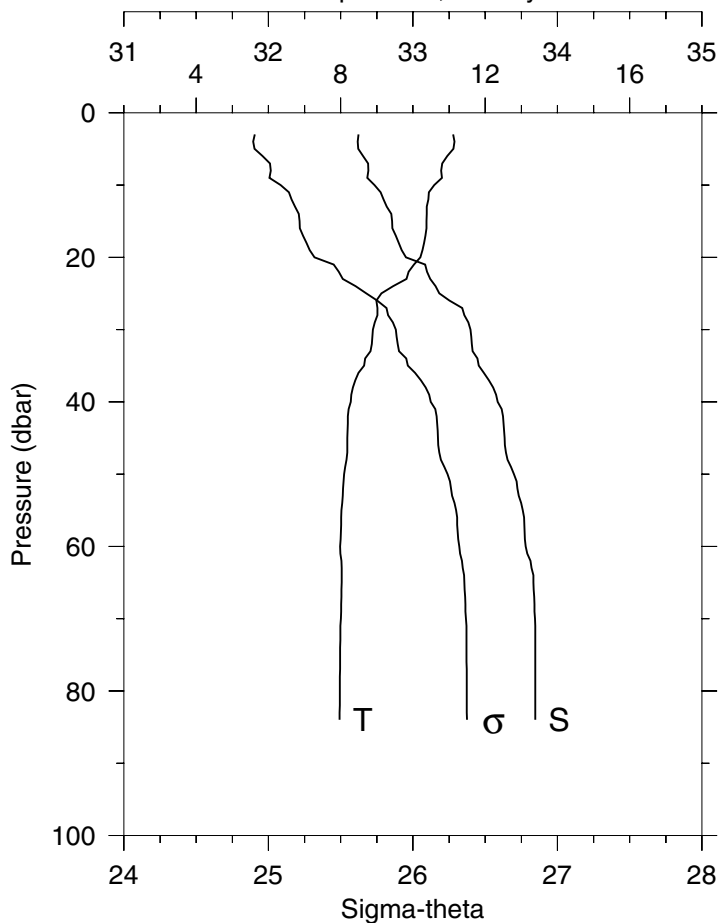
Station 11 NH-20 Temperature, Salinity



STA: 11 NH-20 LAT: 44 39.1 N LONG: 124 31.8 W
11 OCT 2001 0334 GMT DEPTH 143

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
1	12.48	32.303	12.48	24.406	0.035	1.00	86.5
10	12.13	32.349	12.13	24.508	0.348	0.88	87.1
20	9.88	33.097	9.87	25.488	0.627	0.72	87.7
30	8.90	33.332	8.89	25.829	0.861	0.50	89.2
40	8.34	33.479	8.34	26.030	1.066	0.37	89.9
50	8.19	33.540	8.18	26.101	1.260	0.27	90.0
60	8.09	33.647	8.08	26.199	1.449	0.19	90.1
70	8.06	33.722	8.05	26.263	1.627	0.19	90.1
80	8.03	33.809	8.02	26.335	1.800	0.17	90.2
90	7.92	33.861	7.91	26.393	1.966	0.18	89.8
100	7.87	33.903	7.86	26.433	2.128	0.19	89.4
110	7.86	33.904	7.85	26.435	2.289	0.22	89.0
120	7.86	33.910	7.85	26.440	2.449	0.27	87.5
130	7.86	33.913	7.85	26.442	2.609	0.39	86.0
135	7.86	33.913	7.85	26.442	2.689	0.44	85.7

Station 12 NH-15 Temperature, Salinity



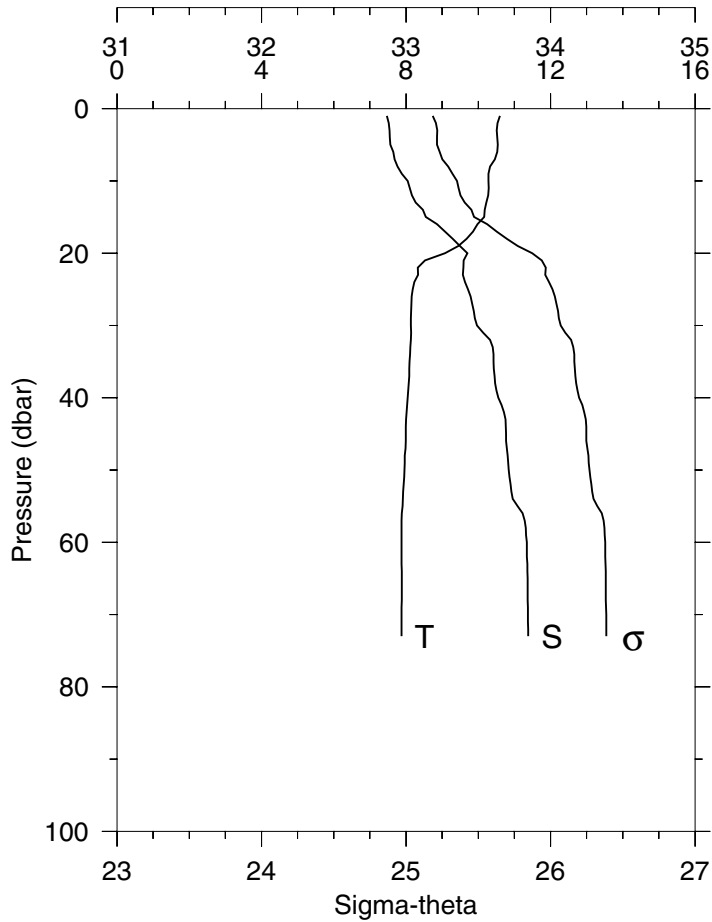
STA: 12 NH-15 LAT: 44 39.0 N LONG: 124 24.8 E
11 OCT 1 0424 GMT DEPTH 93

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	11.11	32.624	11.11	24.906	0.091	3.22	82.4
10	10.59	32.735	10.59	25.084	0.300	3.83	82.0
20	10.20	32.951	10.20	25.319	0.575	1.96	84.1
30	8.89	33.398	8.89	25.882	0.807	0.61	89.0
40	8.28	33.587	8.28	26.123	1.009	0.31	89.9
50	8.10	33.700	8.09	26.240	1.192	0.22	90.2
60	7.99	33.781	7.98	26.320	1.365	0.39	90.1
70	8.00	33.845	8.00	26.367	1.533	0.31	89.4
80	7.98	33.846	7.97	26.372	1.699	0.35	88.0
84	7.97	33.847	7.97	26.374	1.765	0.42	87.0

W0110A

Station 13 NH-10 Temperature, Salinity

STA: 13 NH-10 LAT: 44 39.1 N LONG: 124 17.8 W
11 OCT 2001 0510 GMT DEPTH 82

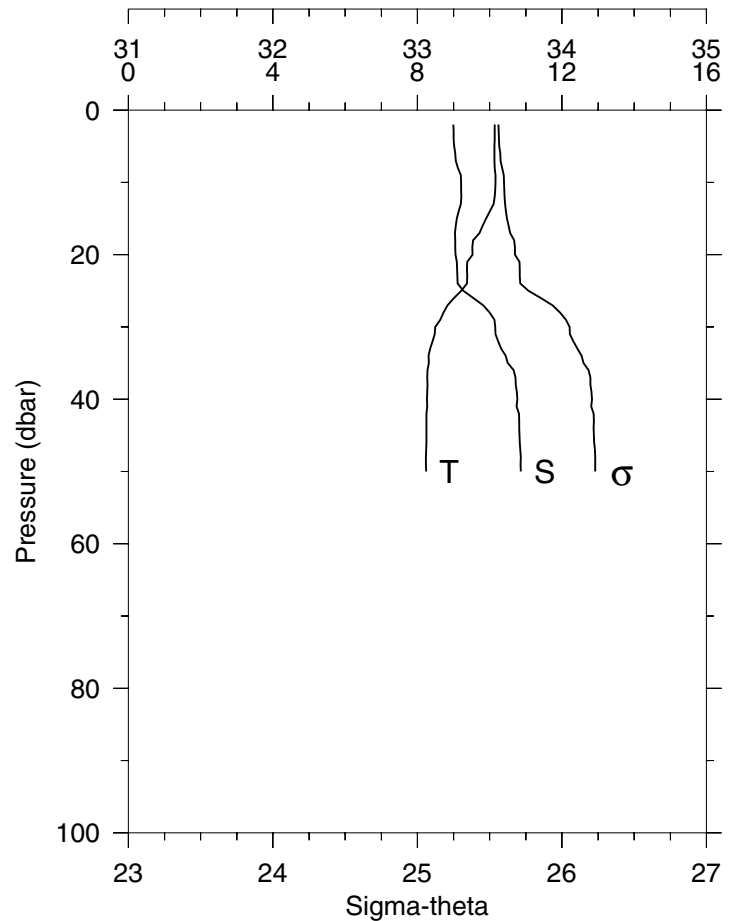


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
1	10.60	32.867	10.60	25.185	0.028	5.36	78.9
10	10.28	33.011	10.28	25.352	0.272	4.91	79.8
20	9.08	33.424	9.07	25.873	0.516	2.15	86.7
30	8.13	33.491	8.13	26.070	0.716	0.32	89.9
40	8.05	33.638	8.04	26.198	0.902	0.26	90.2
50	7.95	33.710	7.95	26.269	1.079	0.24	90.1
60	7.88	33.836	7.87	26.379	1.248	0.56	88.0
70	7.88	33.843	7.87	26.385	1.413	0.79	84.2
73	7.88	33.845	7.87	26.386	1.462	1.34	82.1

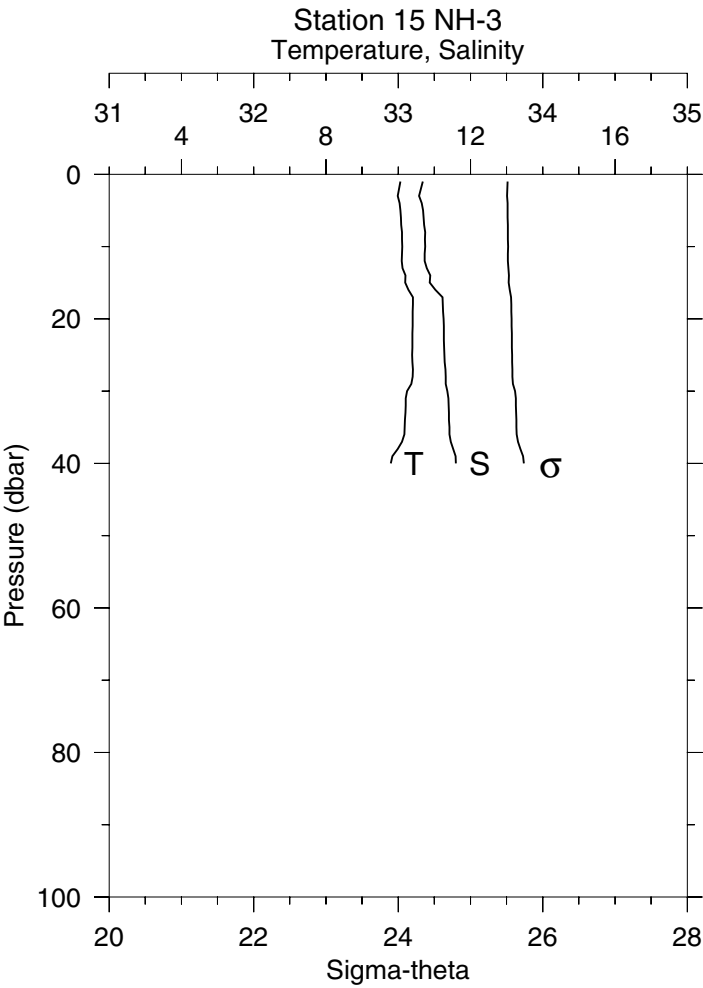
STA: 14 NH-5 LAT: 44 39.1 N LONG: 124 10.7 W
11 OCT 2001 0600 GMT DEPTH 59

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.14	33.249	10.14	25.561	0.048	2.37	84.1
10	10.16	33.303	10.16	25.600	0.240	1.79	84.8
20	9.52	33.263	9.52	25.675	0.476	1.40	85.0
30	8.50	33.538	8.49	26.053	0.692	0.88	88.2
40	8.27	33.692	8.26	26.208	0.879	0.68	85.0
50	8.24	33.715	8.23	26.230	1.058	1.40	79.0

Station 14 NH-5 Temperature, Salinity



W0110A

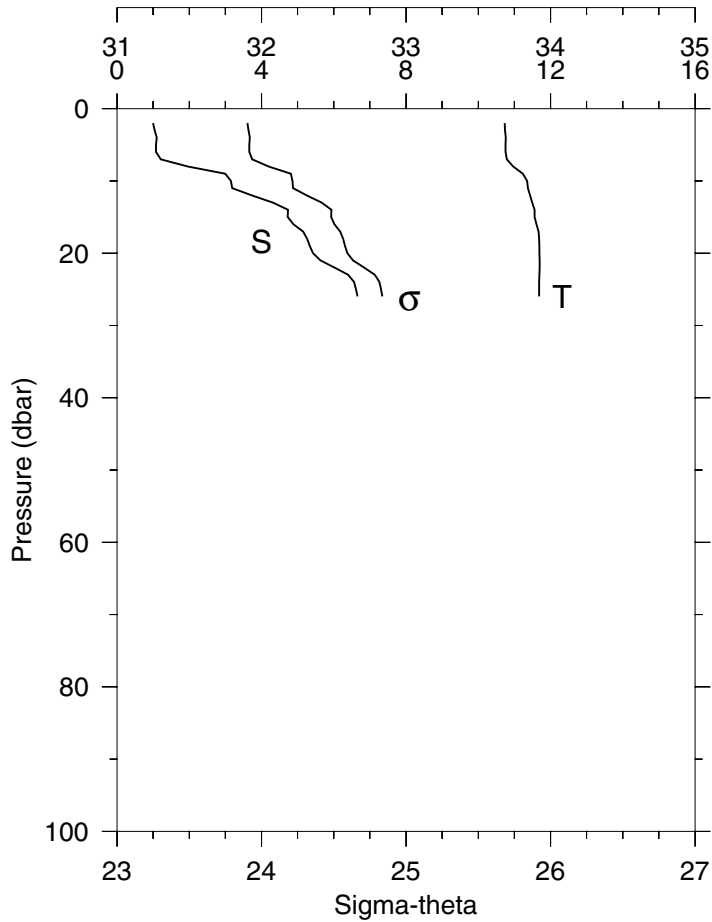


STA: 15 NH-3 LAT: 44 39.1 N LONG: 124 7.8 W
11 OCT 2001 0638 GMT DEPTH 47

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(V)
1	10.06	33.170	10.06	25.514	0.025	2.38	83.30
10	10.11	33.186	10.11	25.519	0.246	2.38	83.70
20	10.40	33.314	10.40	25.568	0.490	2.30	84.50
30	10.24	33.339	10.24	25.615	0.730	2.90	83.00
40	9.79	33.399	9.79	25.738	0.963	1.17	79.50

W0111B

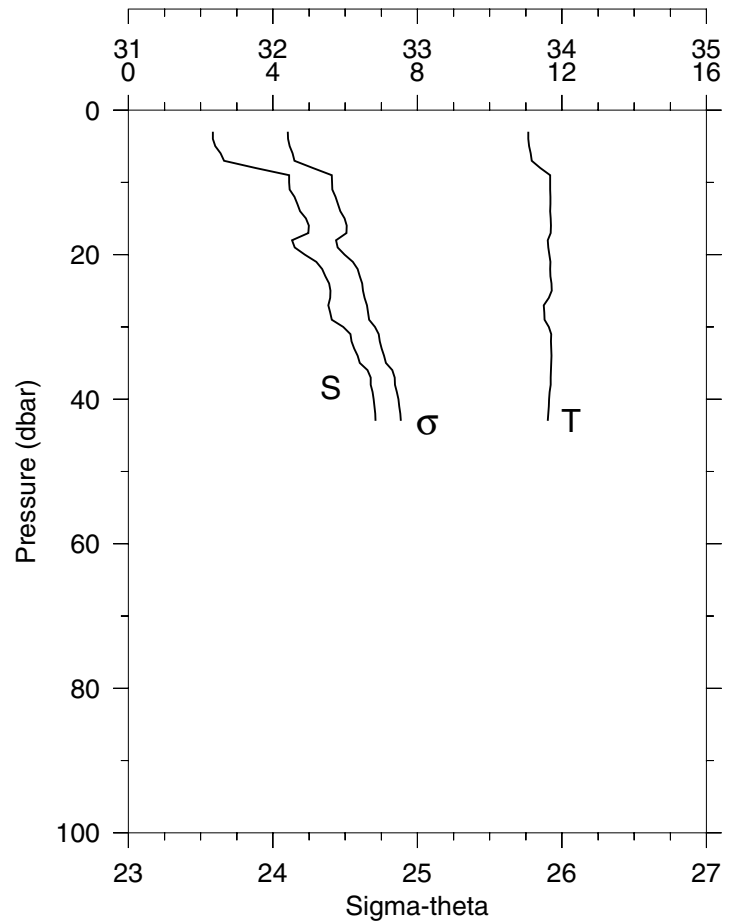
Station 1 NH-1
Temperature, Salinity



STA: 1 NH-1 LAT: 44 39.1 N LONG: 124 6.1 W
27 NOV 2001 1924 GMT DEPTH 29

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.73	31.249	10.73	23.903	0.080	0.81	78.8
10	11.35	31.788	11.35	24.214	0.393	0.71	81.7
20	11.69	32.357	11.69	24.595	0.740	0.41	81.0
26	11.68	32.665	11.68	24.836	0.932	0.52	62.0

Station 2 NH-3
Temperature, Salinity

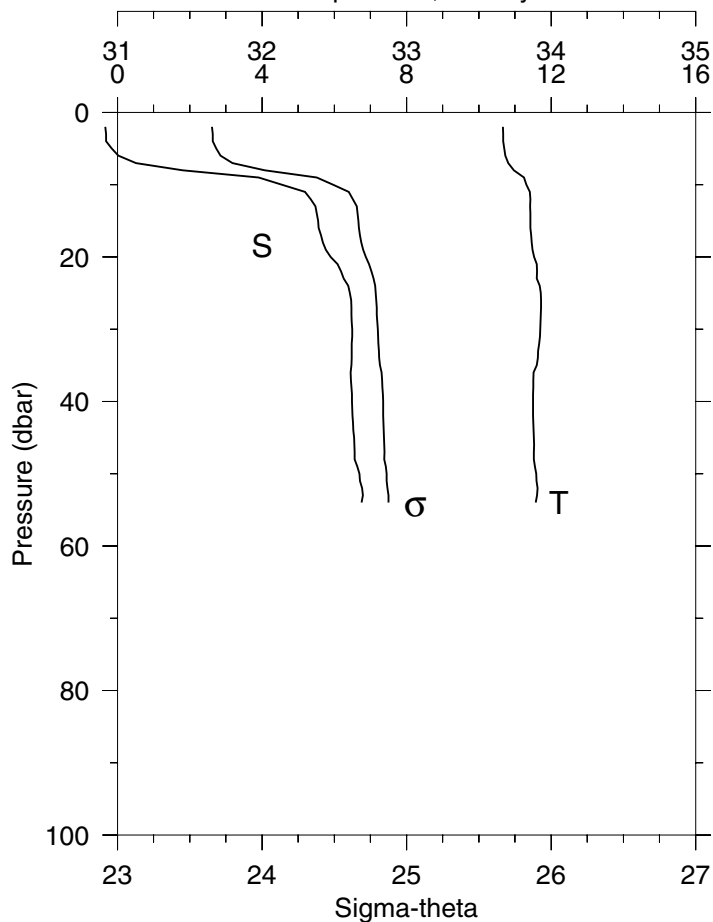


STA: 2 NH-3 LAT: 44 39.2 N LONG: 124 7.9 W
27 NOV 2001 2009 GMT DEPTH 48

P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	11.07	31.584	11.07	24.104	0.114	0.69	78.0
10	11.67	32.113	11.67	24.409	0.373	0.55	82.2
20	11.66	32.221	11.65	24.496	0.720	0.46	83.0
30	11.64	32.487	11.63	24.706	1.051	0.33	87.8
40	11.64	32.697	11.64	24.869	1.367	0.34	88.3
43	11.61	32.711	11.61	24.885	1.459	0.31	88.7

Station 3 NH-5 Temperature, Salinity

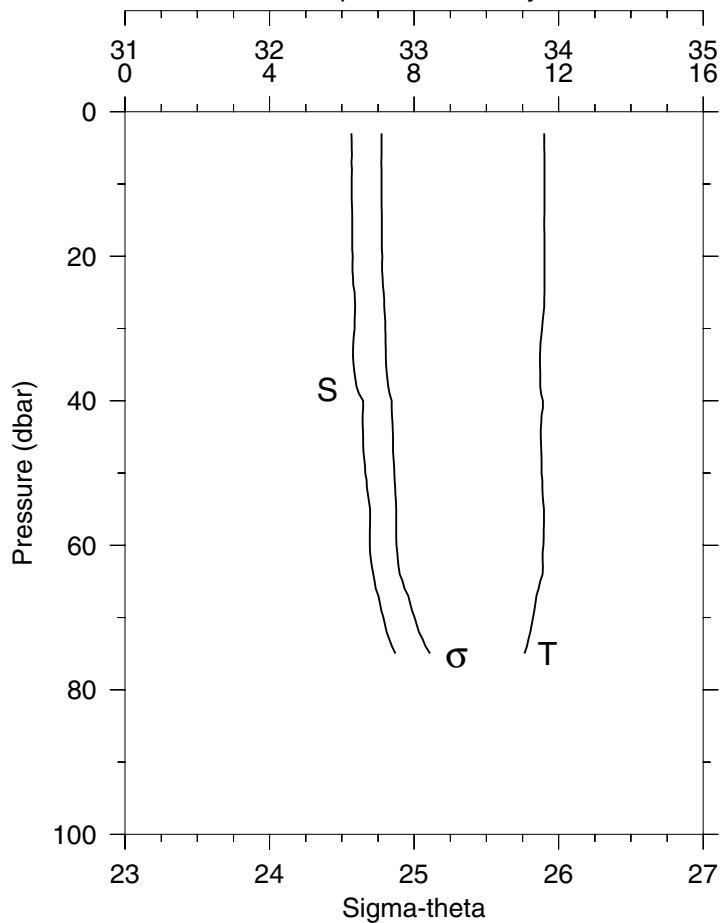
STA: 3 NH-5 LAT: 44 39.2 N LONG: 124 10.6 W
27 NOV 2001 2058 GMT DEPTH 58



P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
2	10.67	30.915	10.66	23.654	0.085	0.72	78.5
10	11.32	32.136	11.32	24.491	0.407	0.67	86.7
20	11.53	32.475	11.53	24.717	0.735	0.41	89.1
30	11.70	32.623	11.69	24.800	1.051	0.37	88.5
40	11.50	32.622	11.49	24.837	1.364	0.37	89.8
50	11.59	32.674	11.58	24.861	1.675	0.37	89.9
54	11.57	32.689	11.57	24.875	1.798	0.29	89.8

Station 4 NH-10 Temperature, Salinity

STA: 4 NH-10 LAT: 44 39.0 N LONG: 124 17.6 W
27 NOV 2001 2241 GMT DEPTH 81

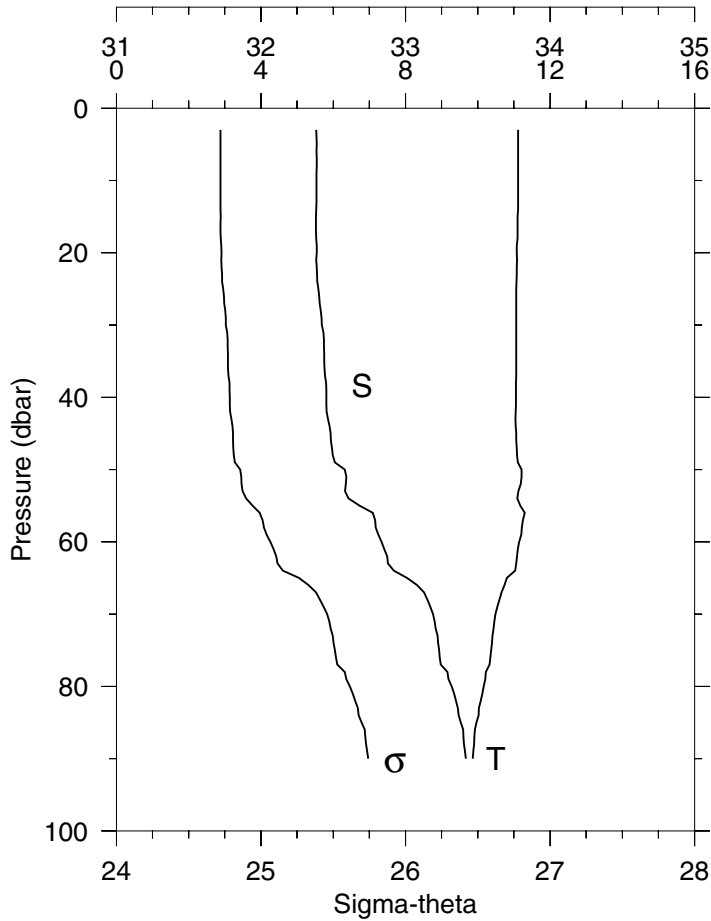


P	T	S	POT T	SIGMA	DYN HT	FL	TRN
(DB)	(C)		(C)	THETA	(J/KG)	(V)	(%)
3	11.60	32.567	11.60	24.775	0.095	0.51	89.1
10	11.61	32.568	11.60	24.774	0.316	0.51	89.1
20	11.60	32.575	11.60	24.780	0.633	0.52	89.0
30	11.55	32.588	11.54	24.801	0.948	0.51	88.8
40	11.56	32.647	11.56	24.844	1.262	0.47	89.3
50	11.53	32.663	11.52	24.863	1.572	0.44	89.7
60	11.58	32.693	11.57	24.878	1.880	0.34	89.8
70	11.29	32.787	11.28	25.003	2.183	0.31	89.1
75	11.06	32.871	11.05	25.110	2.329	0.28	88.0

Station 5 NH-15

Temperature, Salinity

STA: 5 NH-15 LAT: 44 39.1 N LONG: 124 24.6 W
27 NOV 2001 2349 GMT DEPTH 95



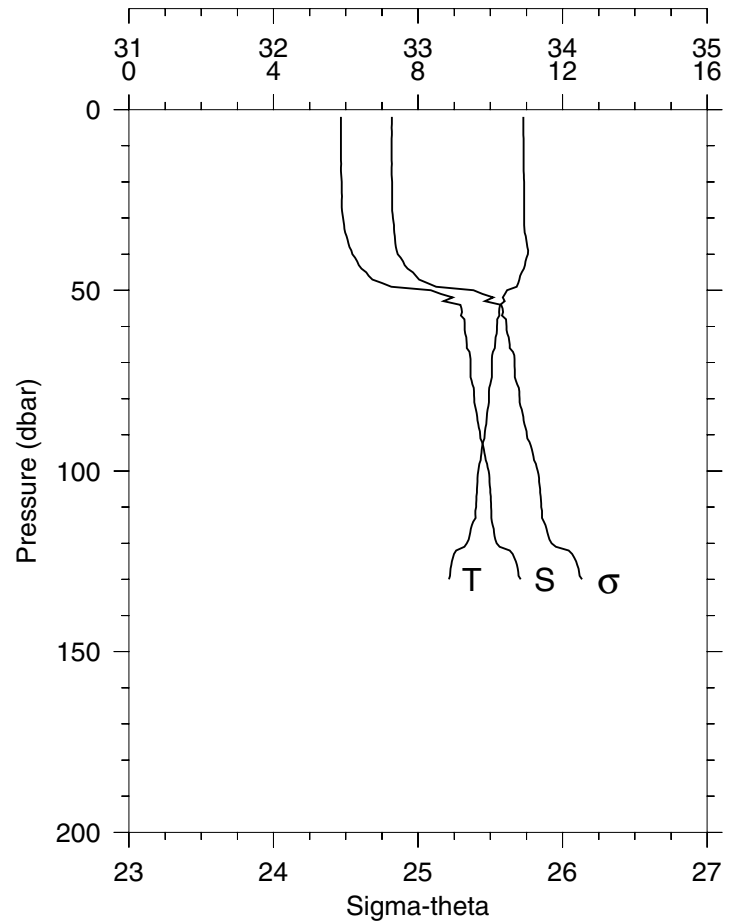
P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	11.11	32.383	11.11	24.719	0.096	0.83	87.9
10	11.12	32.384	11.11	24.719	0.322	0.81	88.0
20	11.08	32.385	11.08	24.727	0.643	0.77	88.0
30	11.06	32.421	11.06	24.757	0.964	0.78	88.3
40	11.05	32.452	11.05	24.784	1.281	0.81	88.4
50	11.21	32.580	11.20	24.856	1.595	0.58	89.3
60	11.15	32.835	11.14	25.065	1.896	0.28	88.2
70	10.49	33.190	10.48	25.457	2.168	0.26	83.6
80	10.16	33.319	10.15	25.614	2.415	0.22	82.6
90	9.86	33.417	9.85	25.741	2.646	0.21	82.8

STA: 6 NH-20 LAT: 44 39.1 N LONG: 124 31.8 W
28 NOV 2001 0132 GMT DEPTH 142

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.91	32.467	10.91	24.819	0.062	0.97	87.7
10	10.92	32.467	10.92	24.818	0.312	0.97	87.7
20	10.93	32.472	10.93	24.820	0.625	1.01	87.8
30	10.94	32.481	10.93	24.827	0.937	1.03	88.1
40	11.04	32.546	11.04	24.859	1.248	0.60	89.7
50	10.46	33.089	10.45	25.383	1.545	0.34	89.8
60	10.19	33.322	10.18	25.612	1.788	0.23	84.5
70	10.04	33.363	10.04	25.668	2.024	0.23	83.3
80	9.96	33.389	9.95	25.702	2.255	0.22	83.1
90	9.84	33.429	9.83	25.753	2.483	0.21	83.7
100	9.67	33.488	9.66	25.829	2.704	0.20	84.6
110	9.60	33.505	9.59	25.853	2.921	0.20	85.1
120	9.35	33.544	9.34	25.925	3.134	0.19	85.8
130	8.85	33.710	8.84	26.134	3.330	0.16	85.9

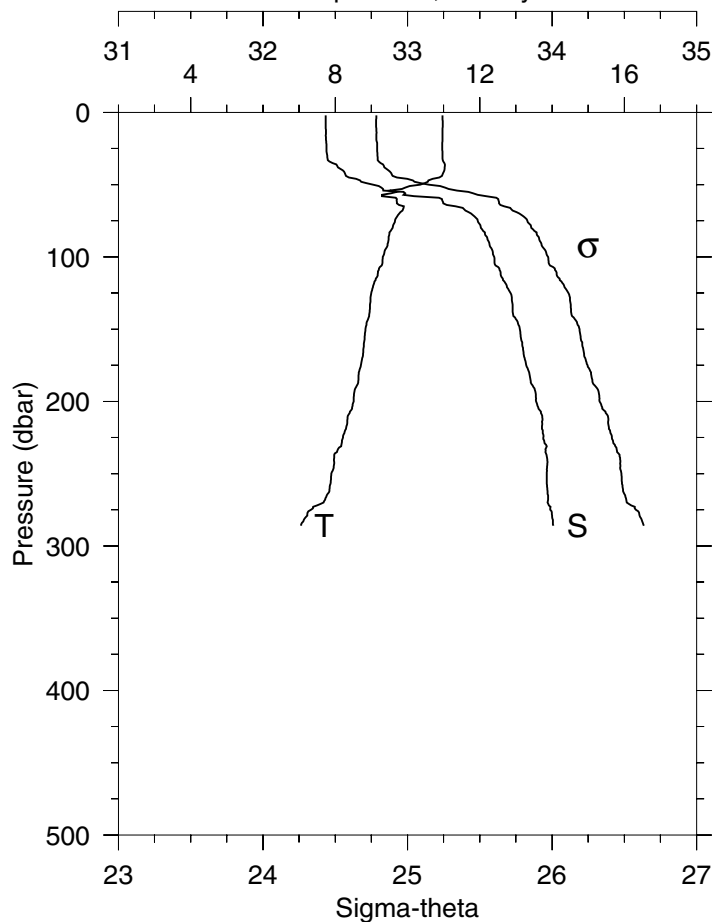
Station 6 NH-20

Temperature, Salinity



Station 7 NH-25 Temperature, Salinity

STA: 7 NH-25 LAT: 44 39.1 N LONG: 124 39.0 W
28 NOV 2001 0248 GMT DEPTH 294

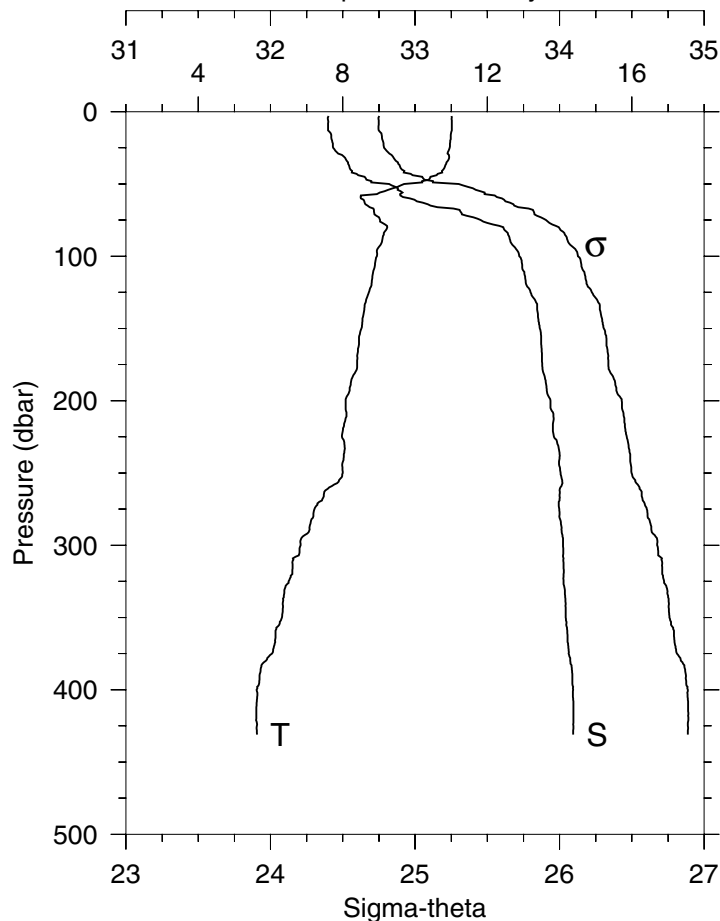


P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
2	10.97	32.433	10.97	24.784	0.063	0.73	88.7
10	10.98	32.434	10.97	24.783	0.316	0.73	88.8
20	10.97	32.437	10.96	24.787	0.631	0.80	88.9
30	10.97	32.444	10.97	24.792	0.946	0.77	89.0
40	11.02	32.552	11.01	24.868	1.259	0.52	89.9
50	10.35	32.762	10.35	25.147	1.558	0.30	90.2
60	9.70	33.239	9.70	25.628	1.816	0.20	89.8
70	9.77	33.439	9.77	25.773	2.047	0.20	87.9
80	9.59	33.508	9.58	25.857	2.265	0.20	85.9
90	9.46	33.564	9.45	25.922	2.476	0.19	88.2
100	9.32	33.600	9.31	25.973	2.683	0.18	88.4
110	9.18	33.643	9.17	26.028	2.886	0.17	88.3
120	9.05	33.686	9.04	26.084	3.083	0.16	88.2
130	8.97	33.722	8.96	26.124	3.274	0.15	88.3
140	8.94	33.730	8.93	26.135	3.464	0.15	88.3
150	8.83	33.777	8.82	26.190	3.651	0.14	88.7
175	8.71	33.822	8.69	26.245	4.108	0.14	88.9
200	8.51	33.889	8.49	26.329	4.546	0.13	89.3
225	8.22	33.940	8.19	26.413	4.965	0.12	89.3
250	7.89	33.964	7.87	26.480	5.367	0.12	89.8
275	7.33	33.988	7.31	26.580	5.758	0.14	88.8
286	7.05	34.010	7.03	26.635	5.918	0.13	87.0

STA: 8 NH-35 LAT: 44 39.2 N LONG: 124 53.0 W
28 NOV 2001 0614 GMT DEPTH 441

P (DB)	T (C)	S	POT T (C)	SIGMA THETA	DYN HT (J/KG)	FL (V)	TRN (%)
3	11.01	32.402	11.01	24.752	0.096	0.00	88.6
10	11.02	32.398	11.02	24.747	0.319	0.00	88.7
20	10.98	32.426	10.98	24.776	0.637	0.00	88.6
30	10.94	32.494	10.93	24.837	0.951	0.00	89.1
40	10.78	32.554	10.78	24.910	1.259	0.00	90.3
50	9.70	32.821	9.69	25.302	1.551	0.00	90.8
60	8.50	32.964	8.49	25.602	1.804	0.00	91.1
70	8.87	33.321	8.86	25.825	2.033	0.00	90.9
80	9.23	33.610	9.22	25.995	2.243	0.00	88.4
90	9.08	33.661	9.07	26.059	2.441	0.00	88.4
100	8.95	33.722	8.94	26.128	2.633	0.00	89.1
110	8.85	33.749	8.83	26.165	2.821	0.00	88.6
120	8.79	33.771	8.78	26.191	3.006	0.00	88.8
130	8.65	33.829	8.63	26.259	3.187	0.00	89.2
140	8.58	33.850	8.56	26.286	3.363	0.00	89.4
150	8.52	33.863	8.50	26.306	3.537	0.00	89.5
175	8.40	33.880	8.38	26.338	3.966	0.00	89.5
200	8.08	33.937	8.06	26.430	4.384	0.00	89.7
225	7.98	33.961	7.96	26.464	4.787	0.00	89.9
250	8.00	34.007	7.97	26.498	5.182	0.00	90.5
275	7.22	33.998	7.19	26.603	5.561	0.00	90.9
300	6.83	34.023	6.80	26.676	5.920	0.00	90.9
350	6.32	34.043	6.29	26.760	6.598	0.00	90.6
400	5.62	34.094	5.59	26.888	7.230	0.00	89.6
431	5.63	34.094	5.59	26.888	7.604	0.00	89.5

Station 8 NH-35 Temperature, Salinity

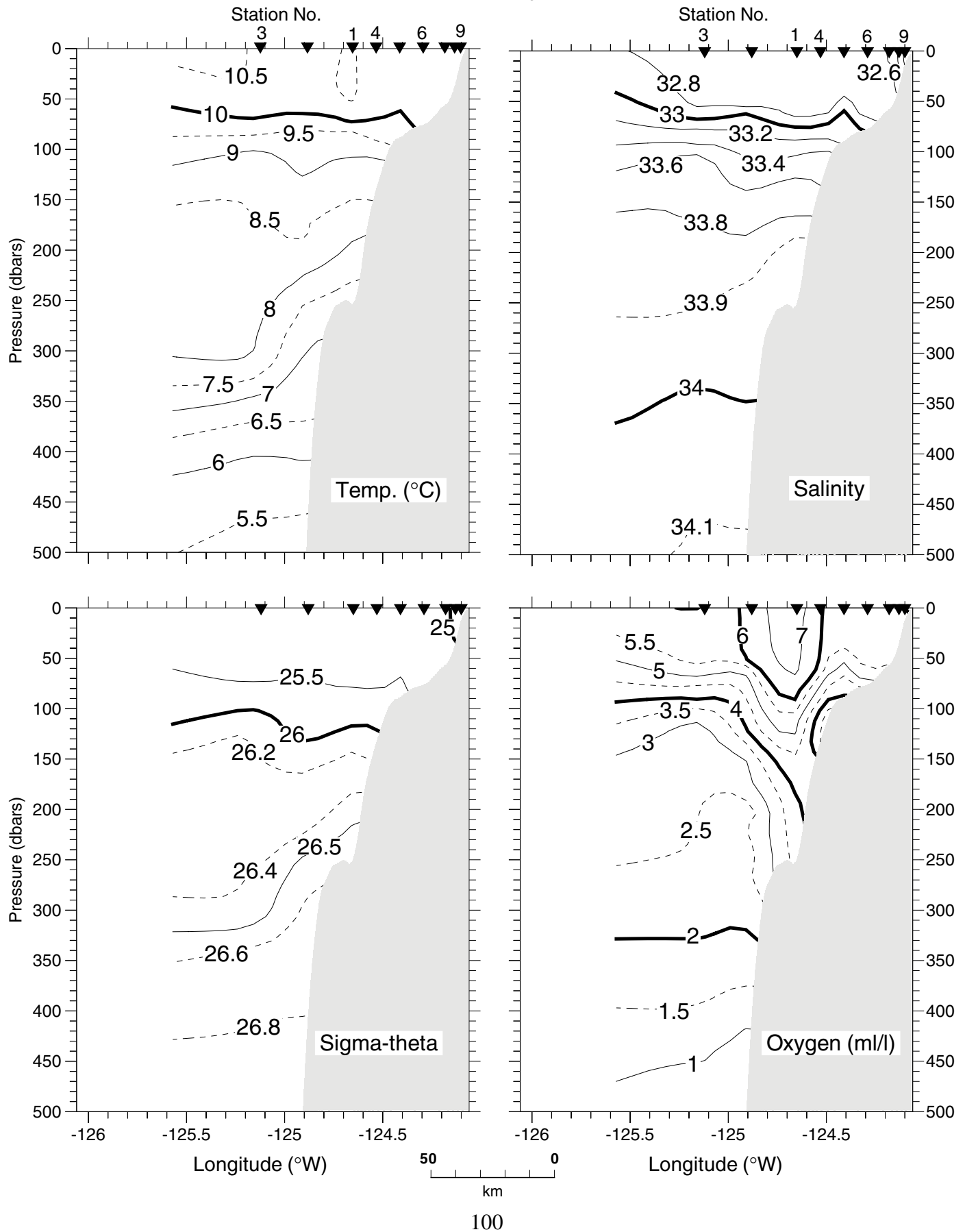


Vertical Sections

Vertical Distributions of Temperature, Salinity, Sigma-t, and Dissolved Oxygen

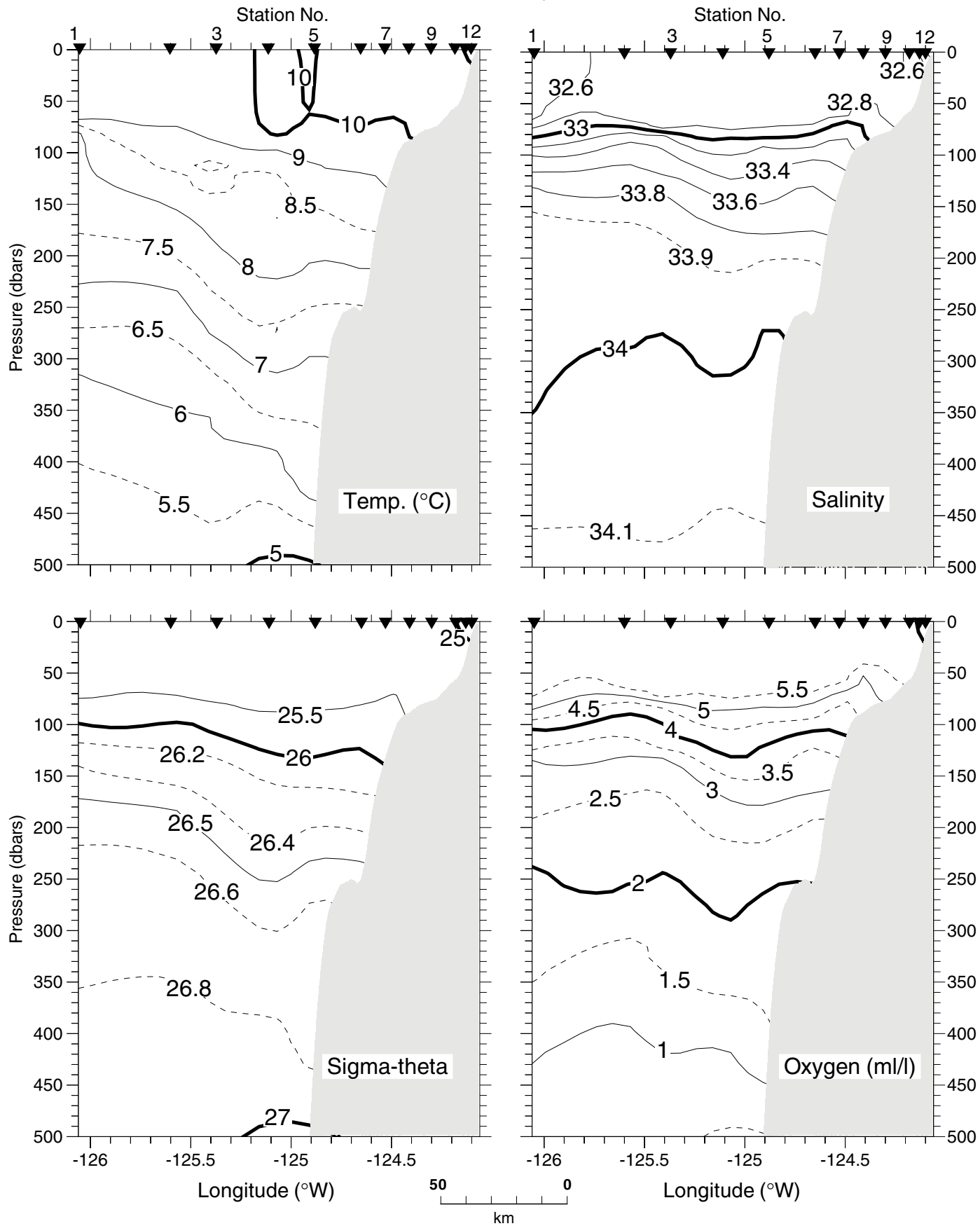
Newport Hydrographic Line 44°39'N

24-25 January 2001



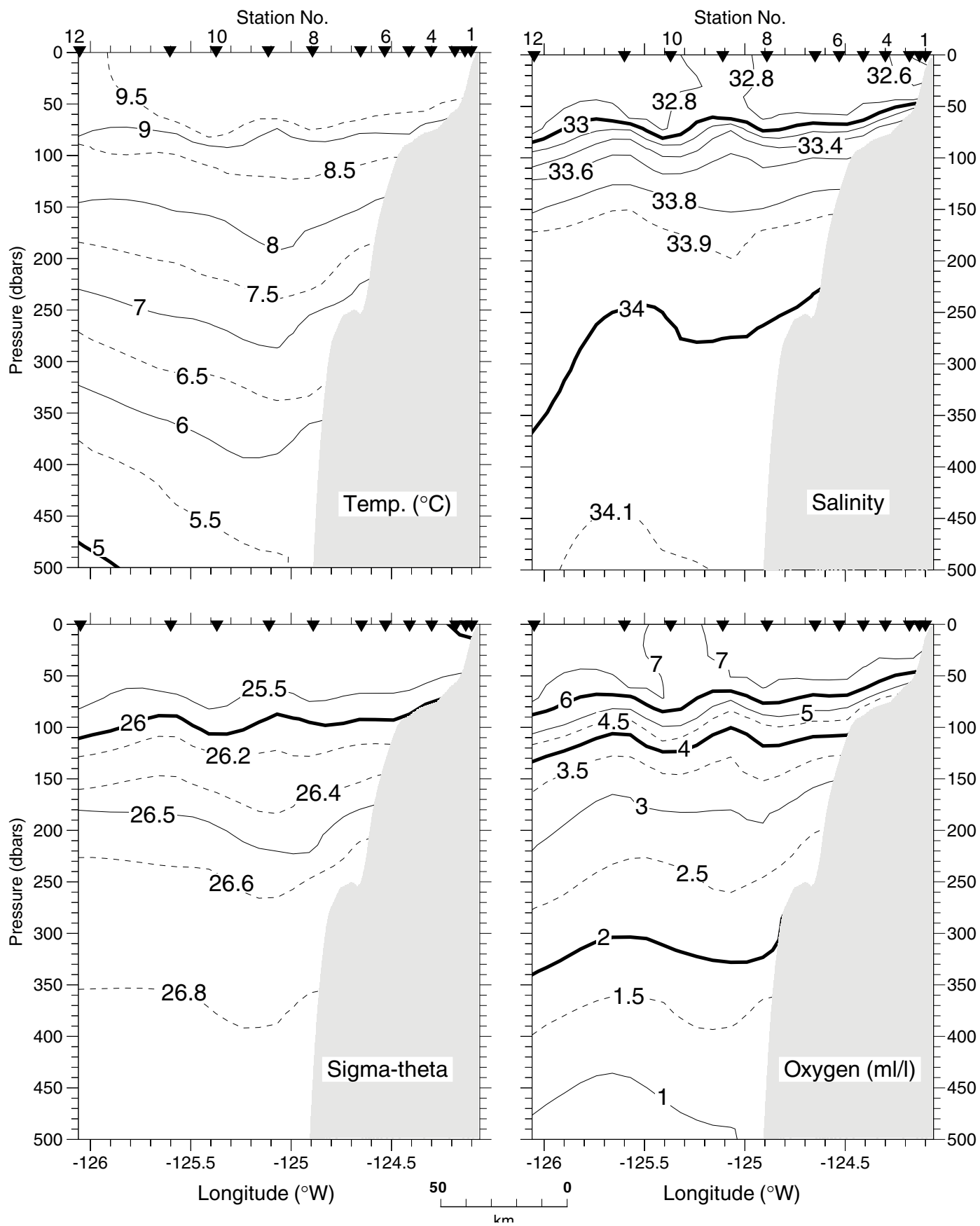
Newport Hydrographic Line 44°39'N

27-28 January 2001



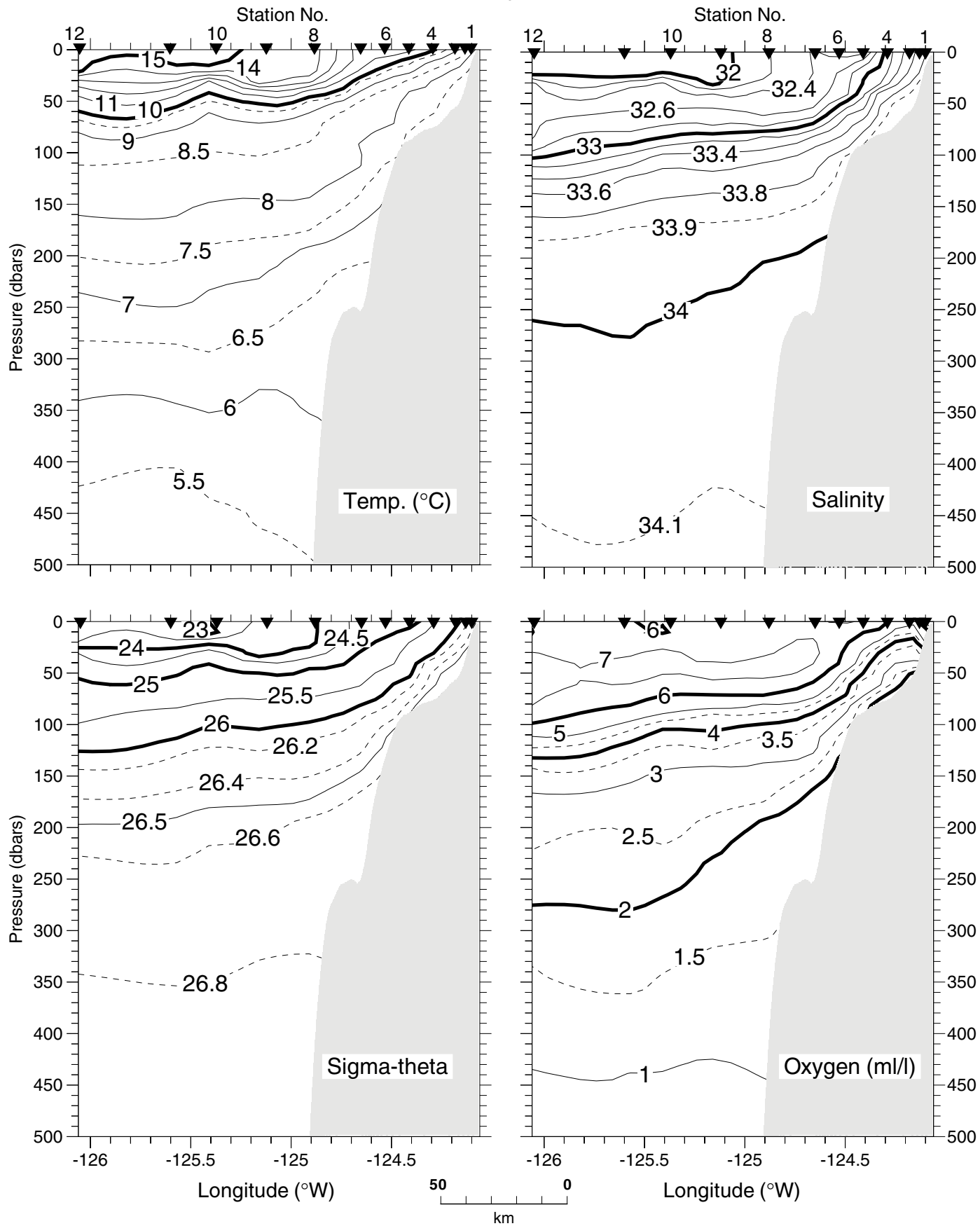
Newport Hydrographic Line 44°39'N

20-21 March 2001



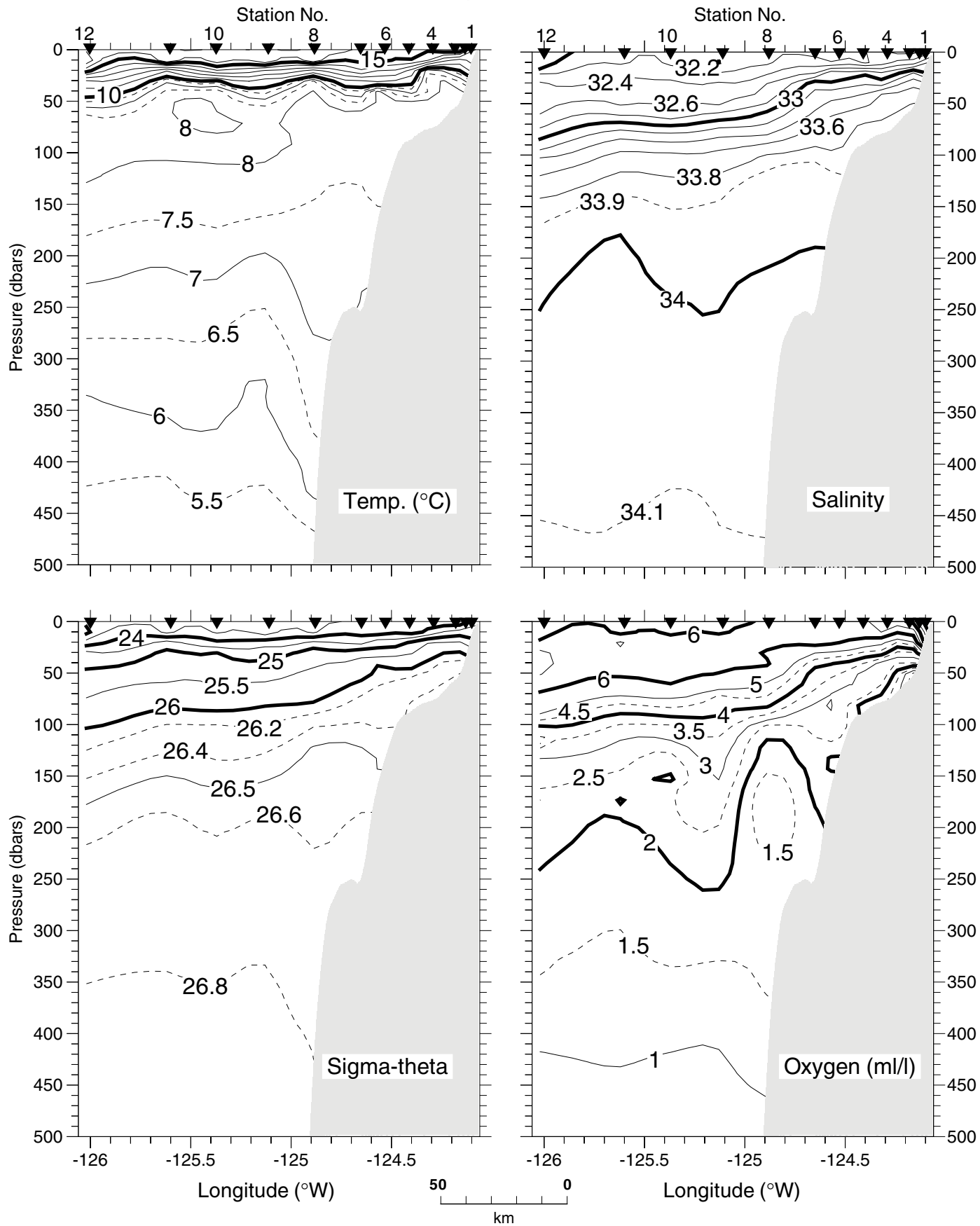
Newport Hydrographic Line 44°39'N

6-7 July 2001



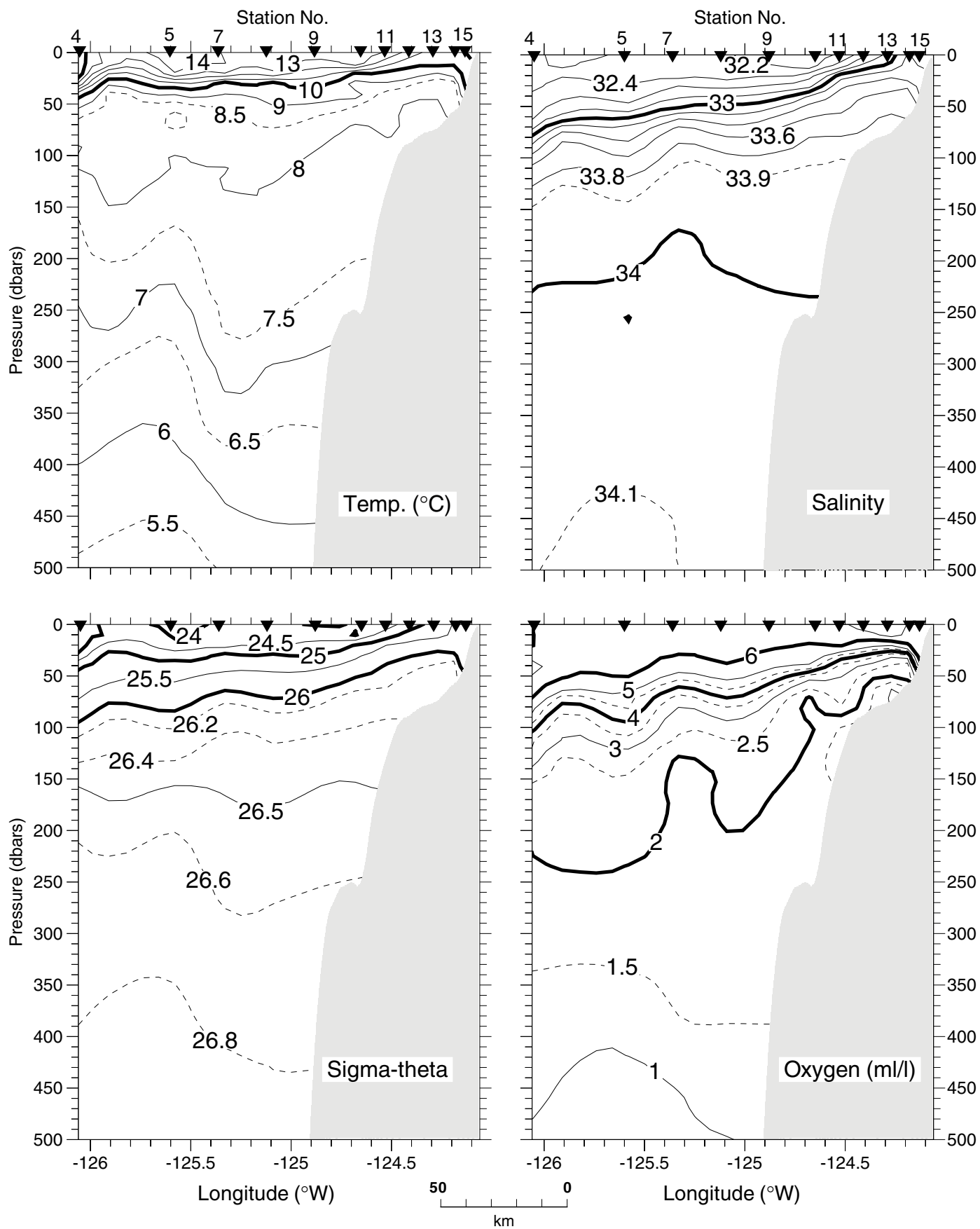
Newport Hydrographic Line 44°39'N

4-6 September 2001



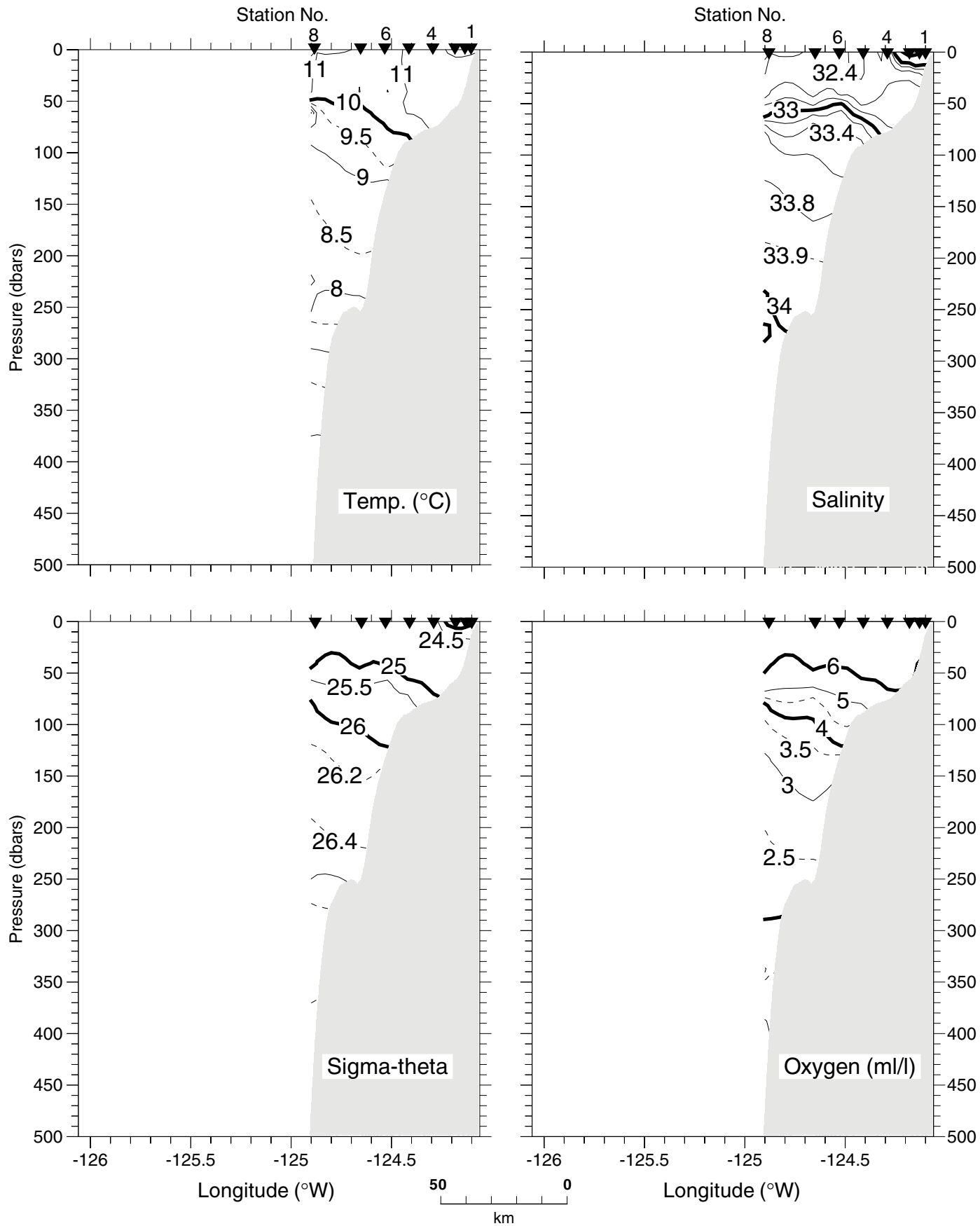
Newport Hydrographic Line 44°39'N

10-11 October 2001



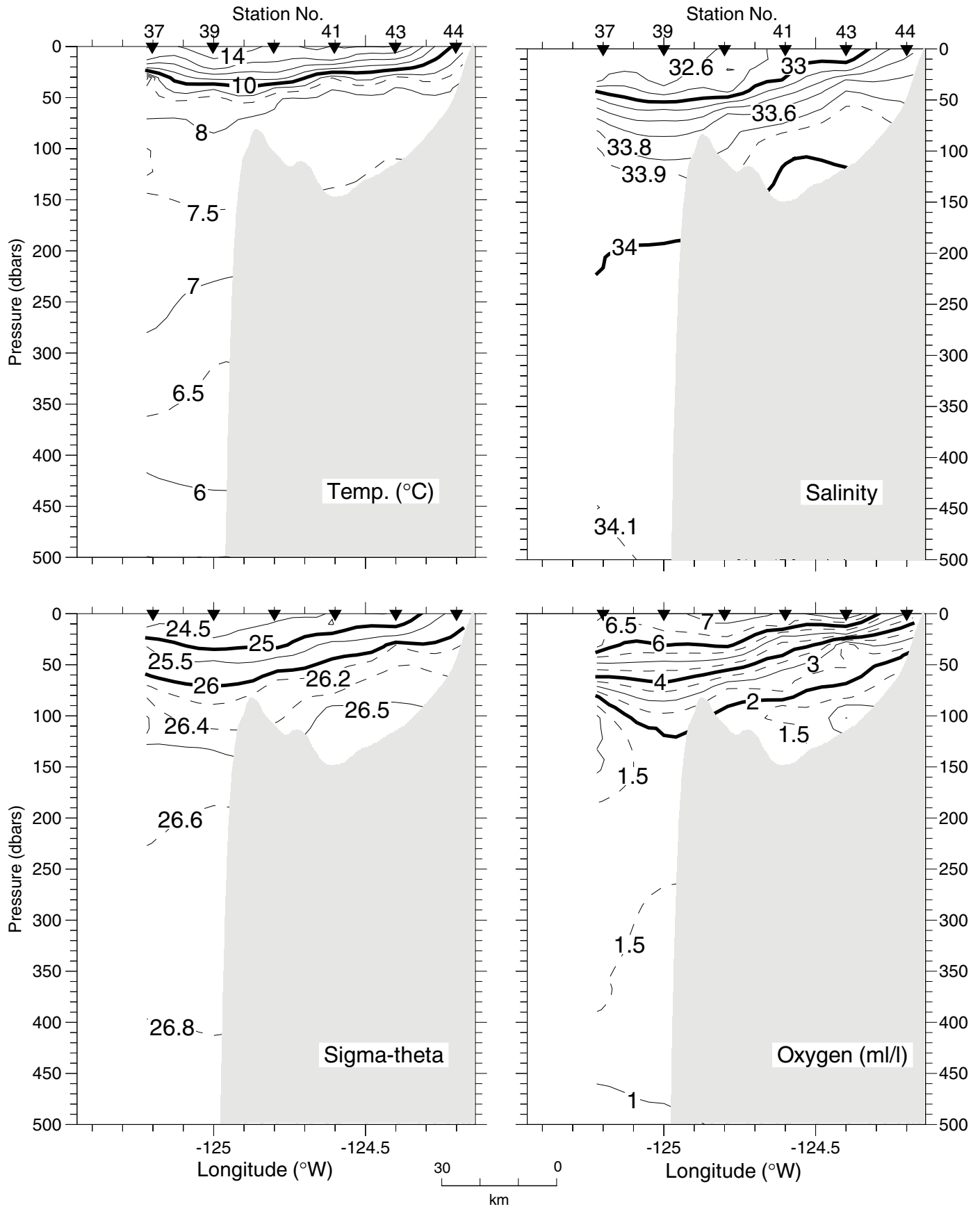
Newport Hydrographic Line 44°39'N

27-28 November 2001



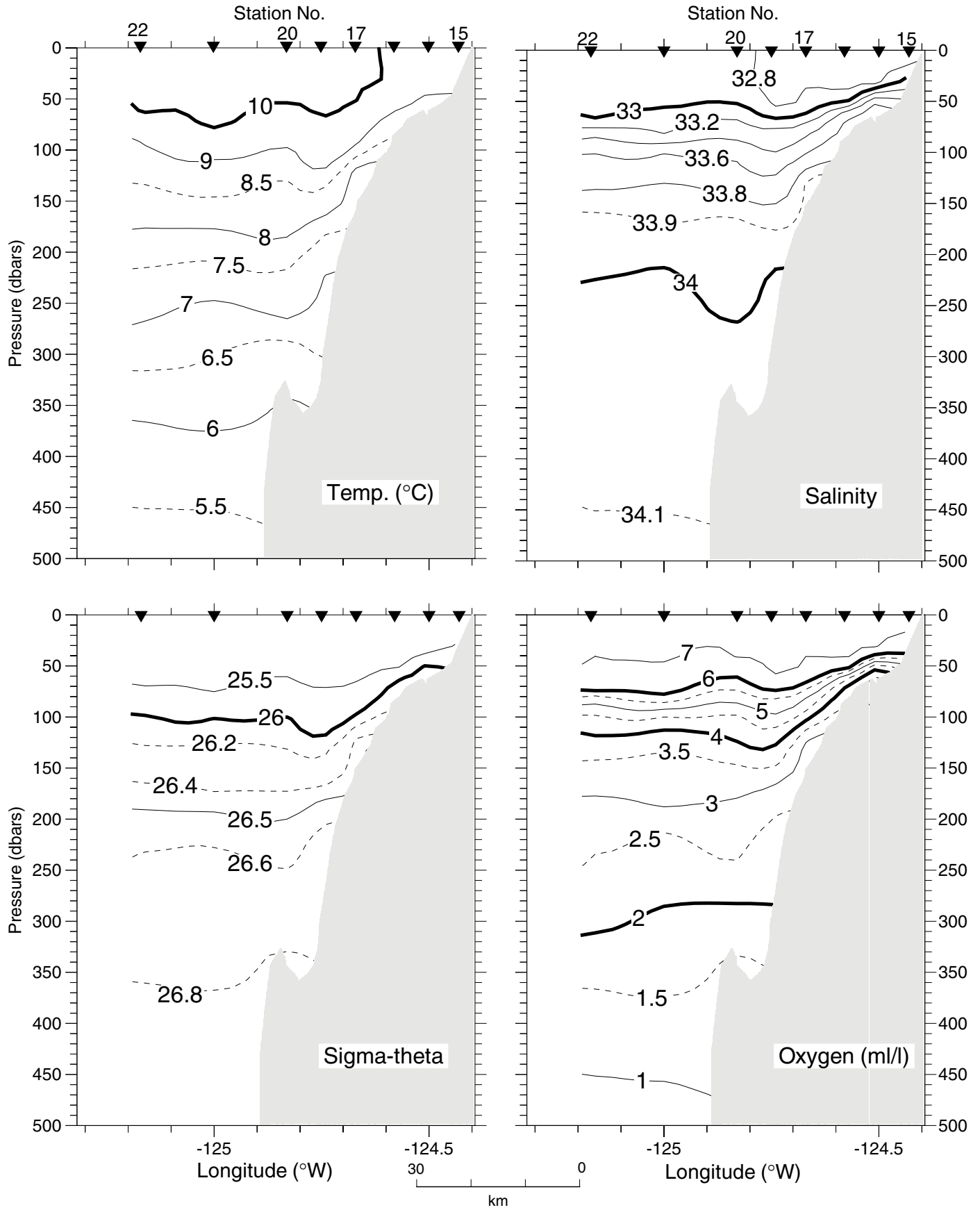
Heceta Head Hydrographic Line 44°00'N

9-10 September 2001



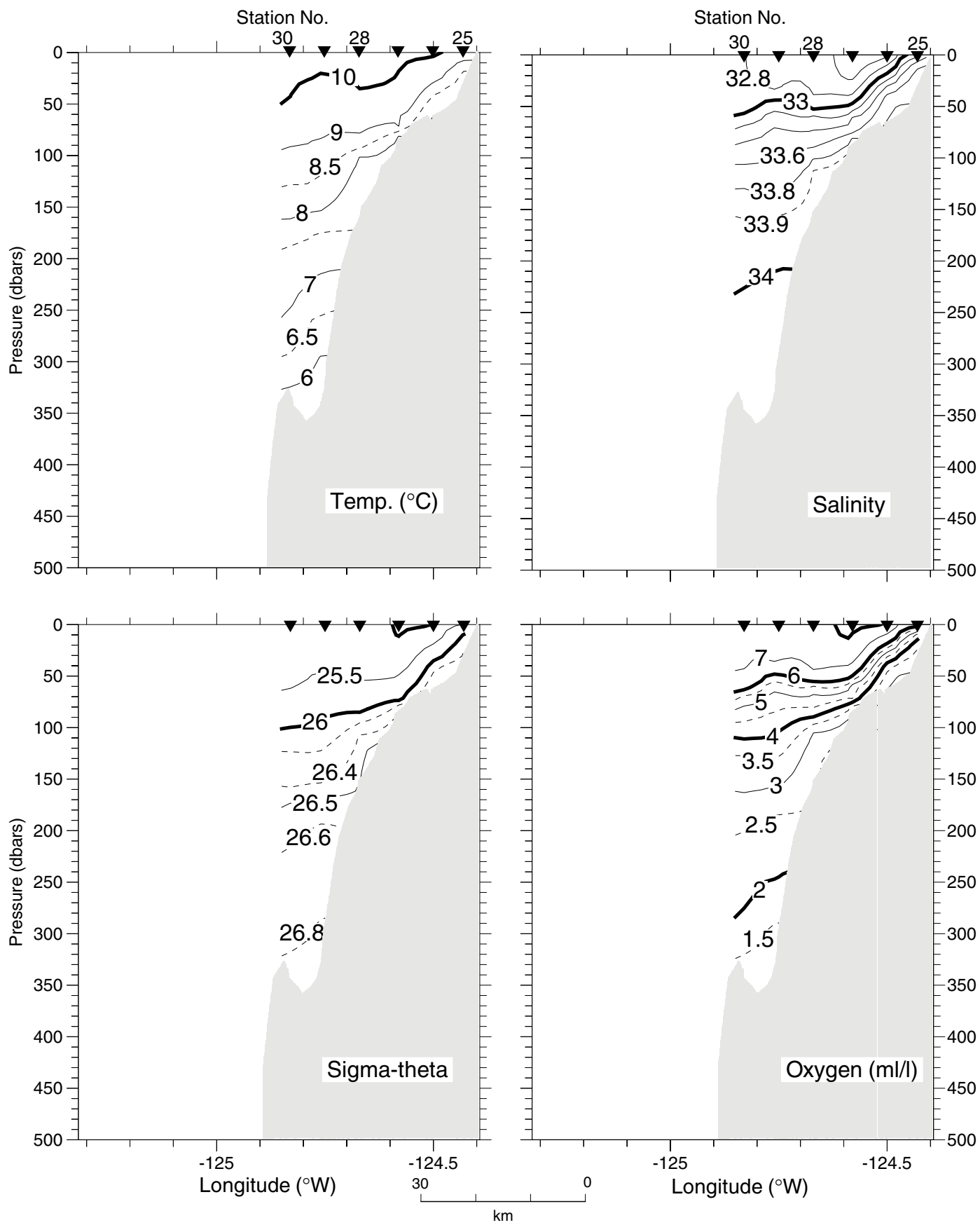
Five Mile Hydrographic Line 43°13'N

18 March 2001



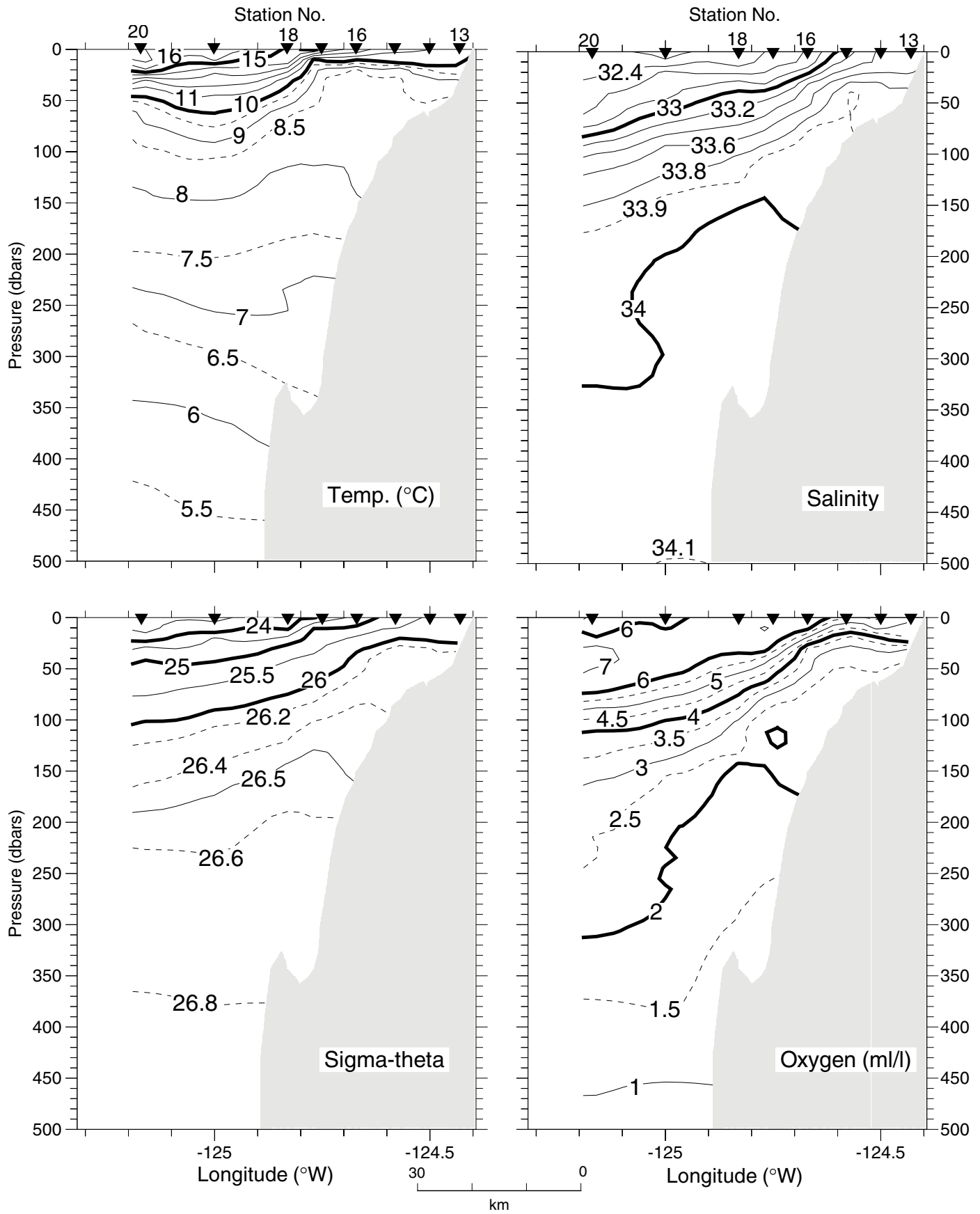
Five Mile Hydrographic Line 43°13'N

23-24 March 2001



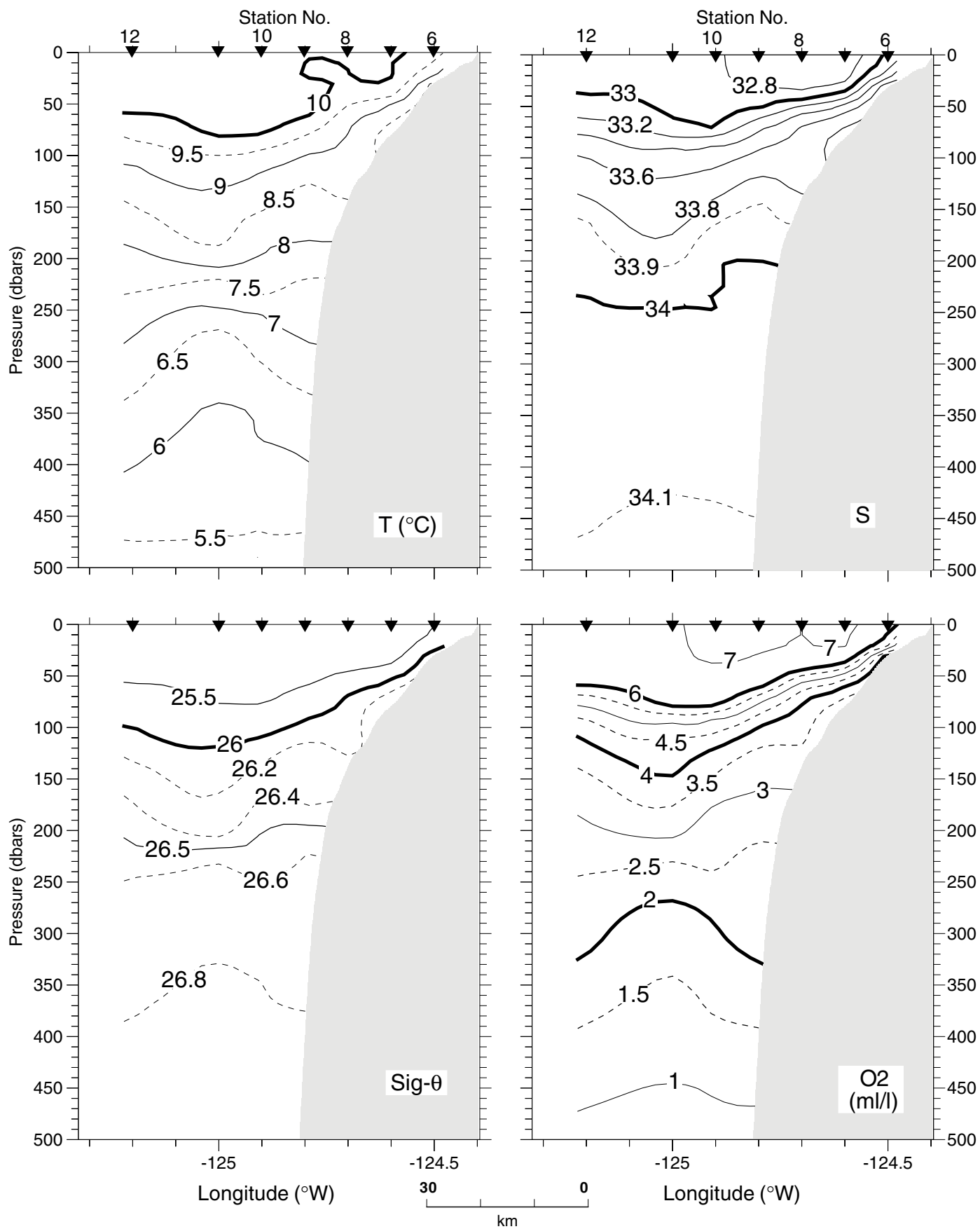
Five Mile Hydrographic Line 43°13'N

6-7 September 2001



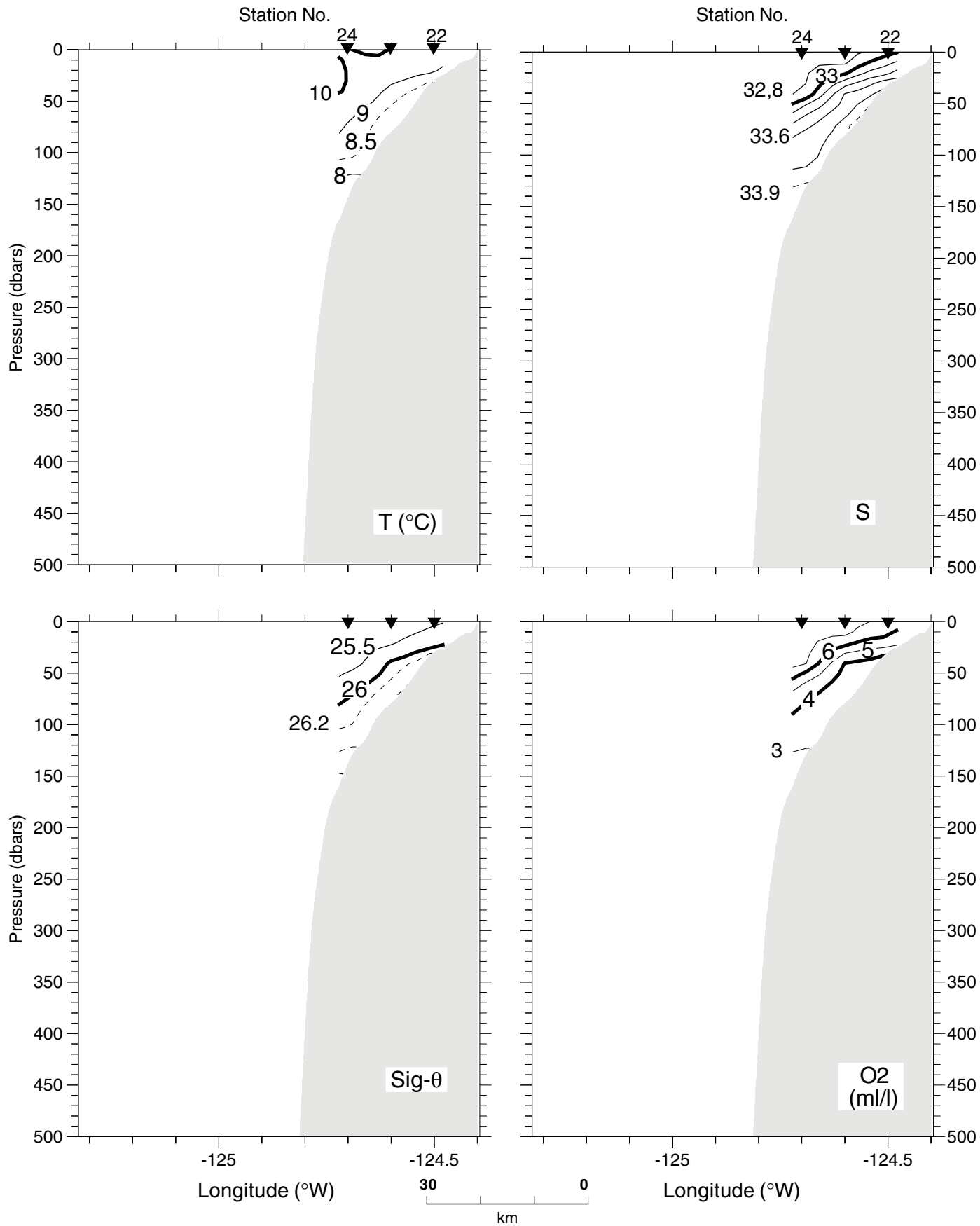
Rogue River Hydrographic Line 42°30'N

17 March 2001



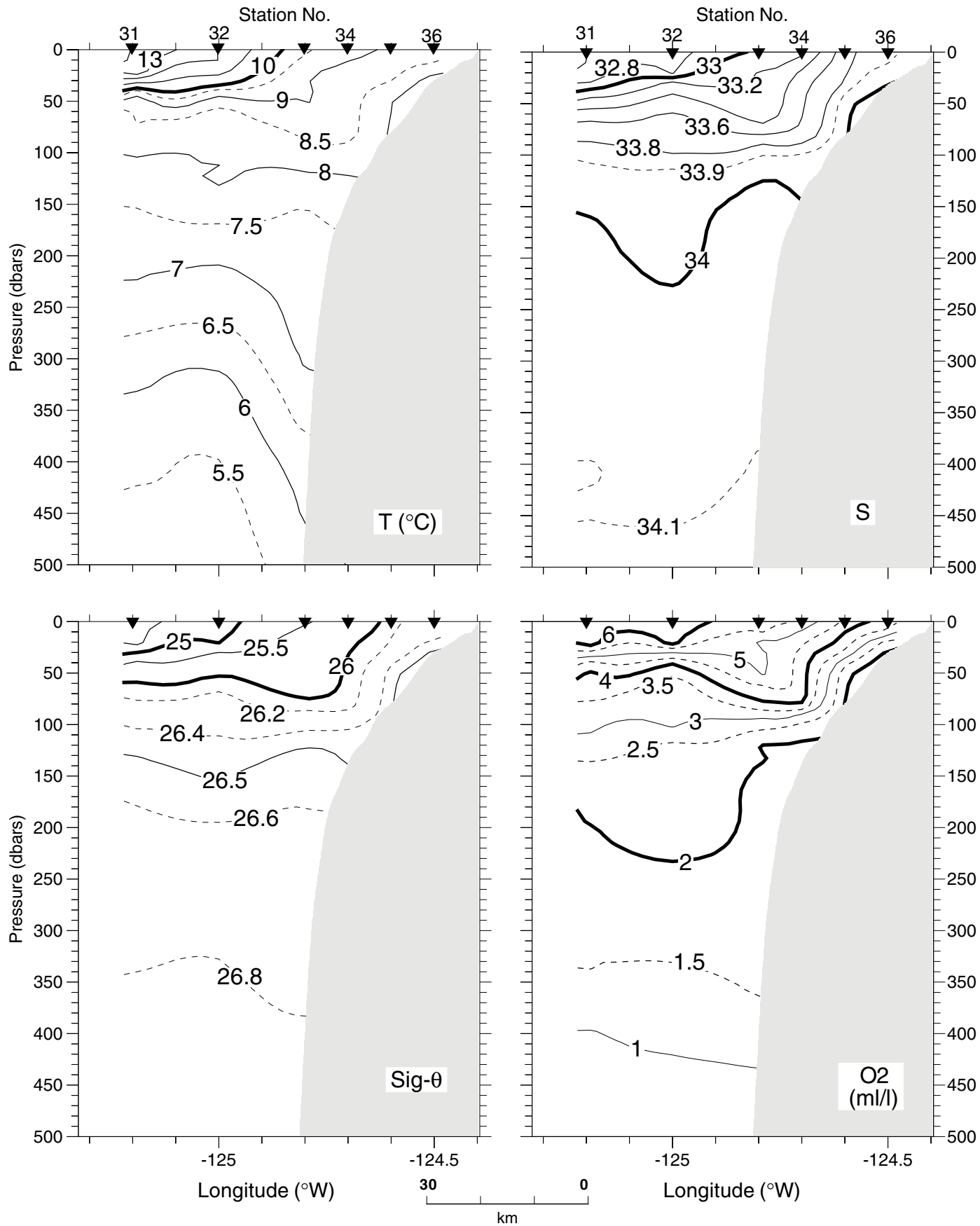
Rogue River Hydrographic Line 42°30'N

23 March 2001



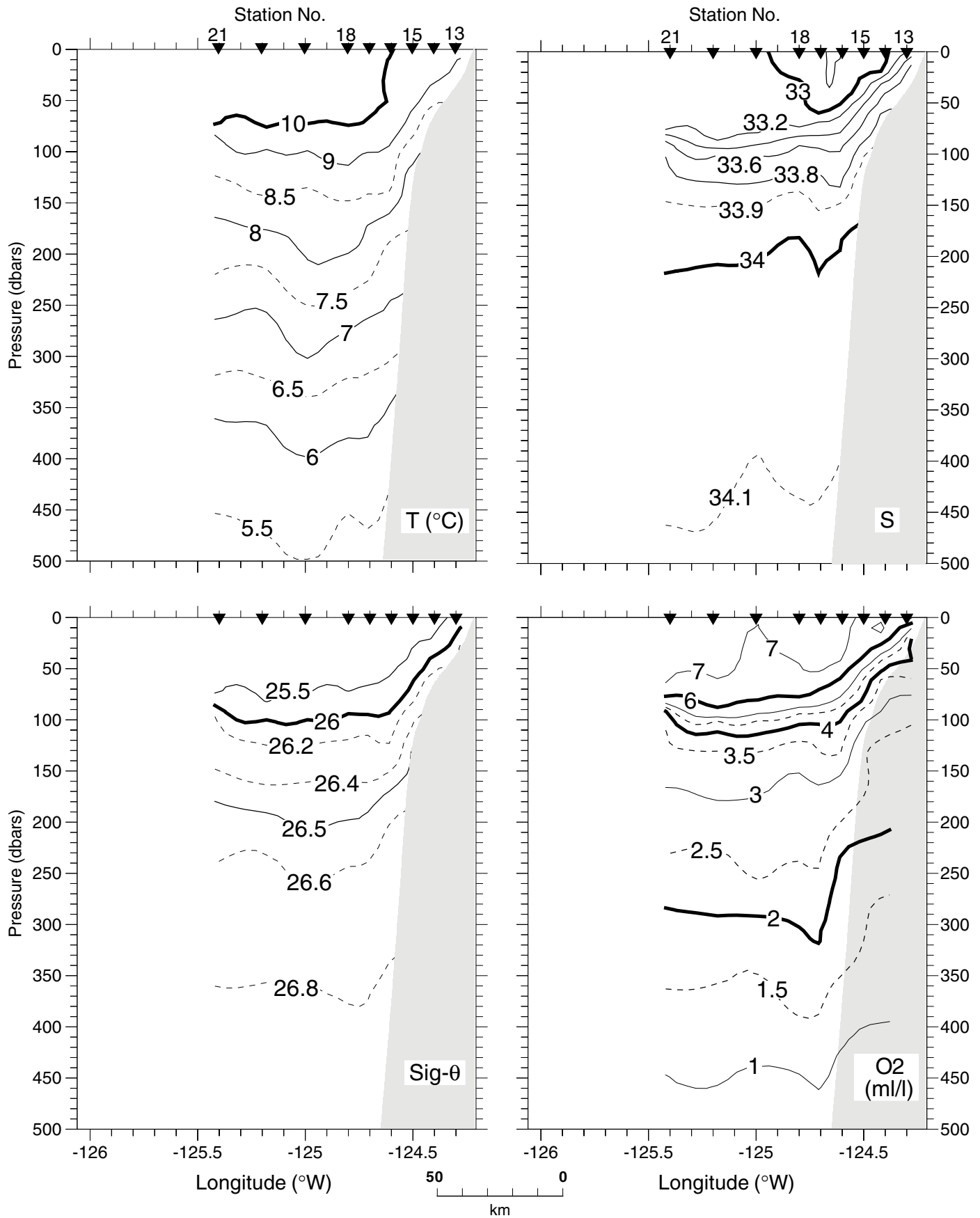
Rogue River Hydrographic Line 42°30'N

9 September 2001



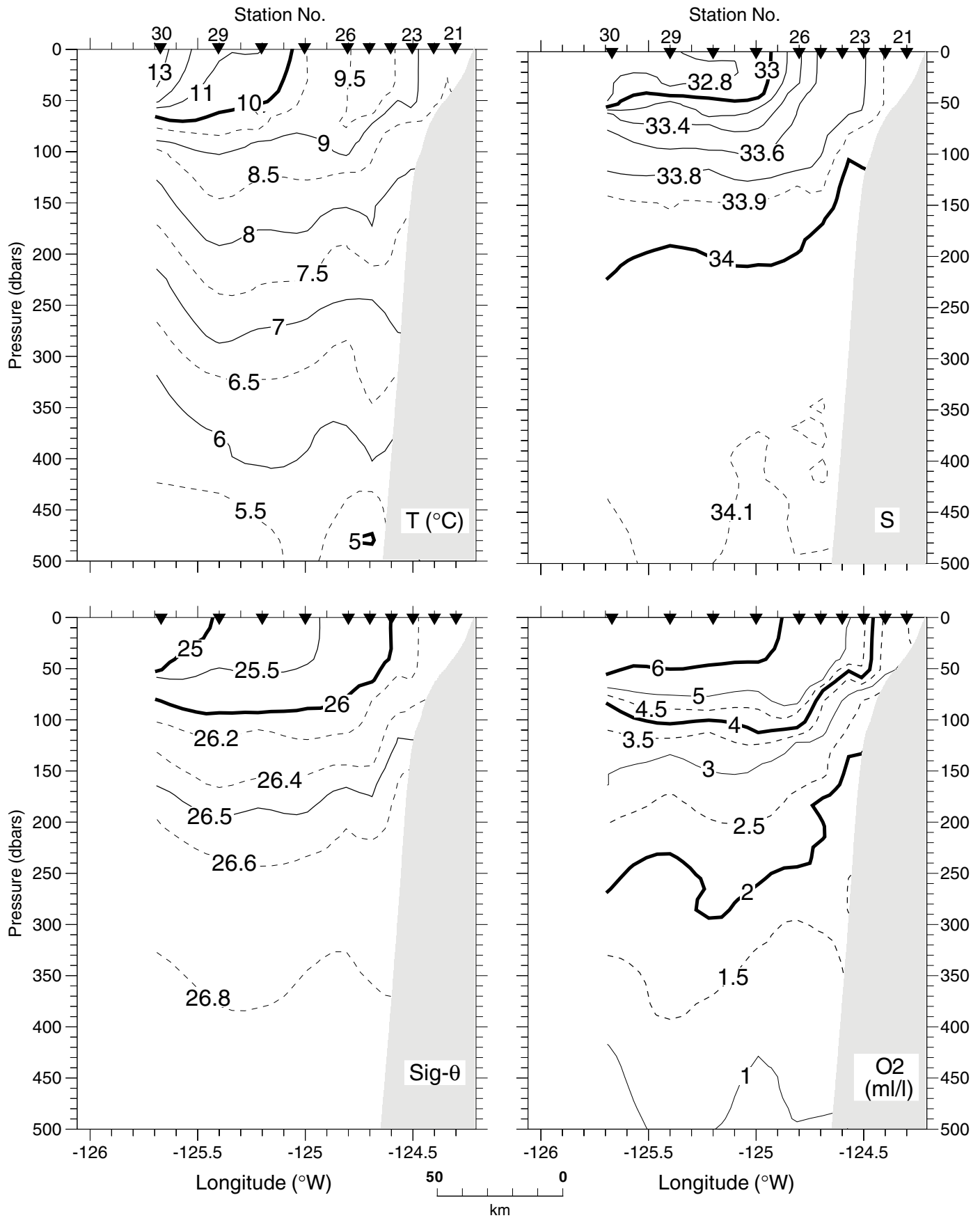
Crescent City Hydrographic Line 41°54'N

22-23 March 2001



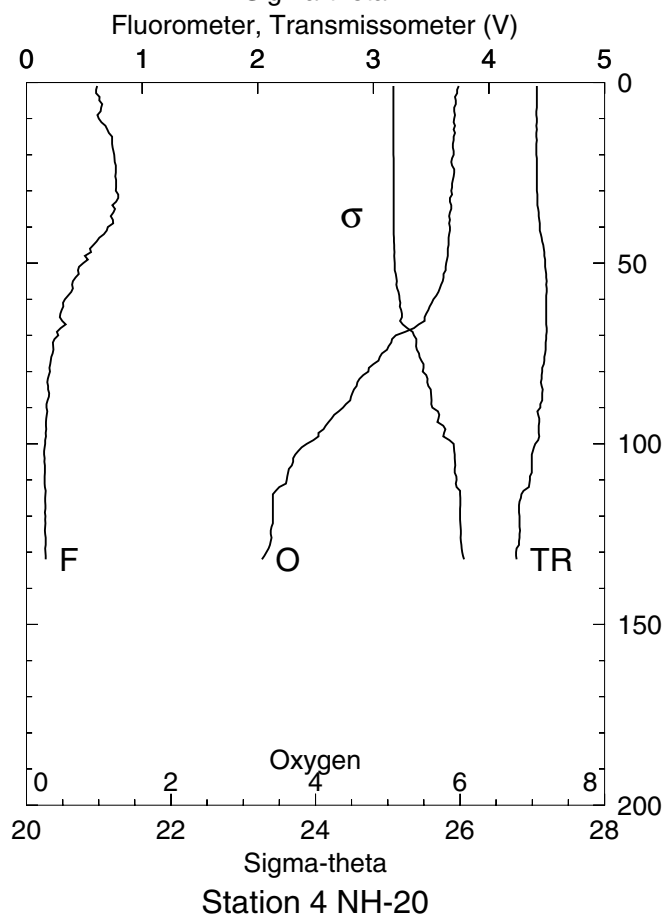
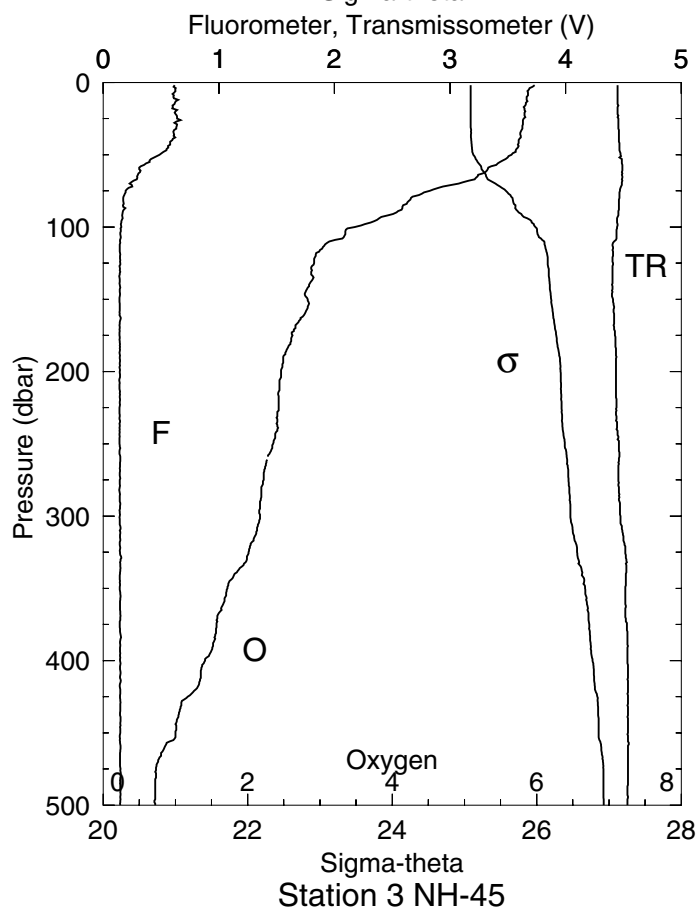
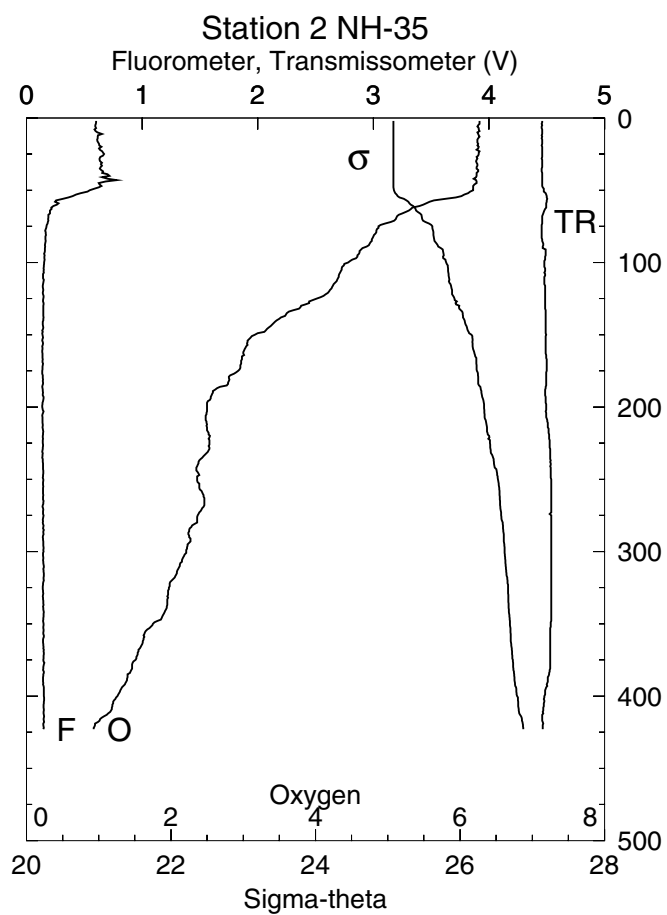
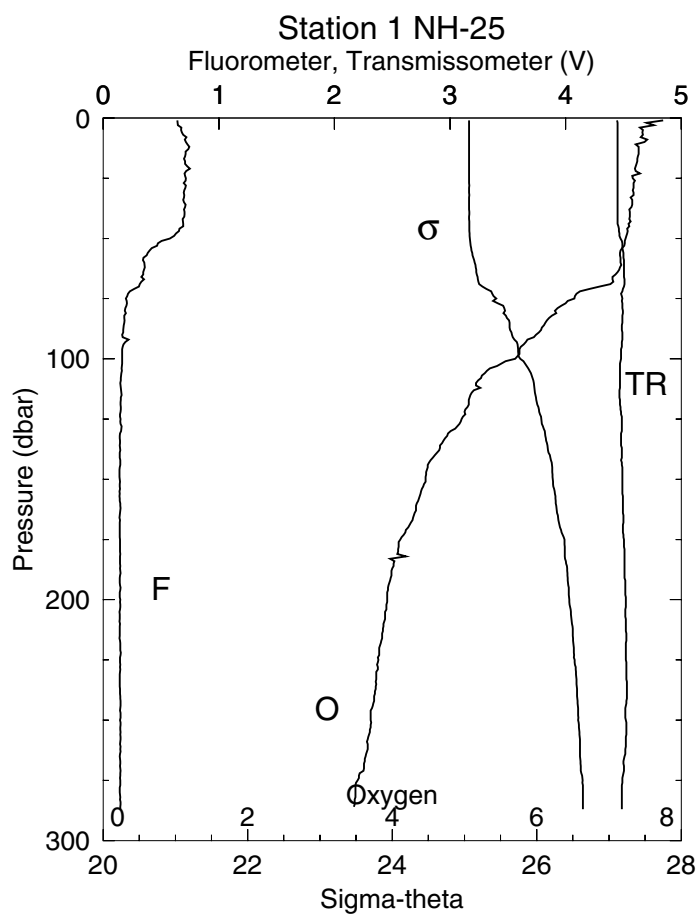
Crescent City Hydrographic Line 41°54'N

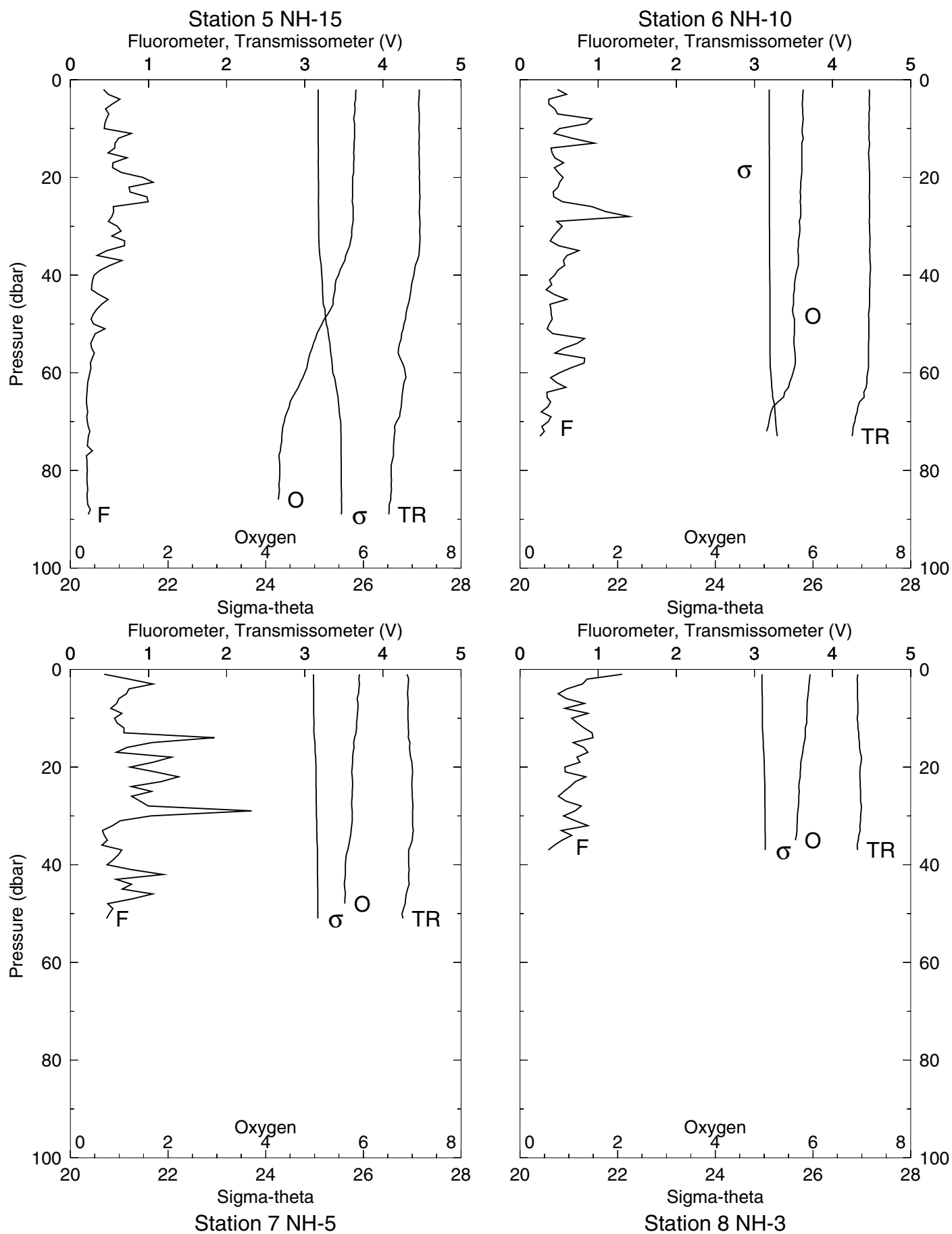
7-9 September 2001



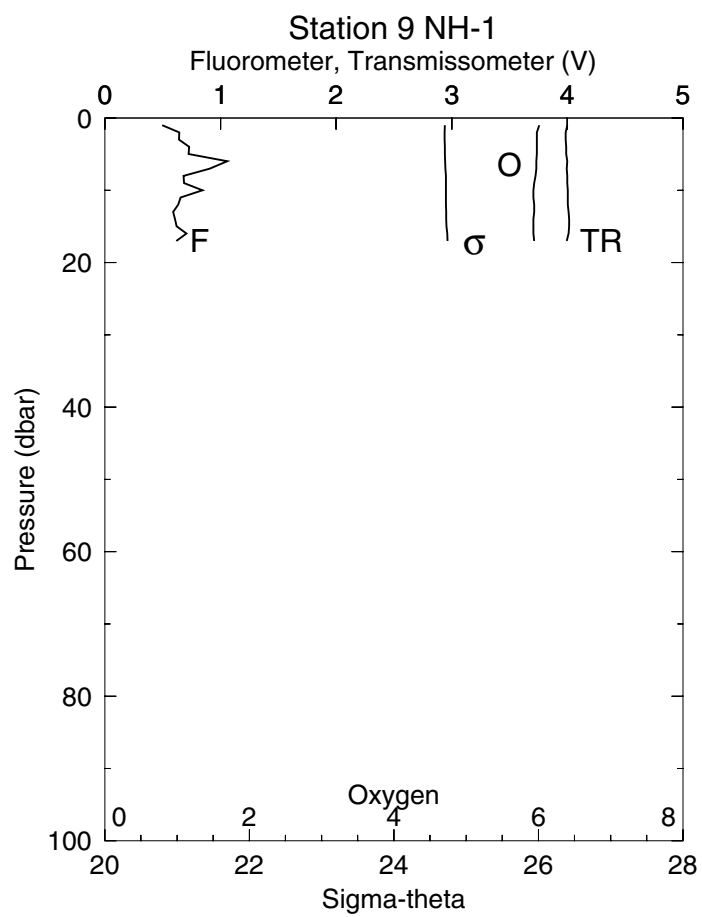
Appendix A

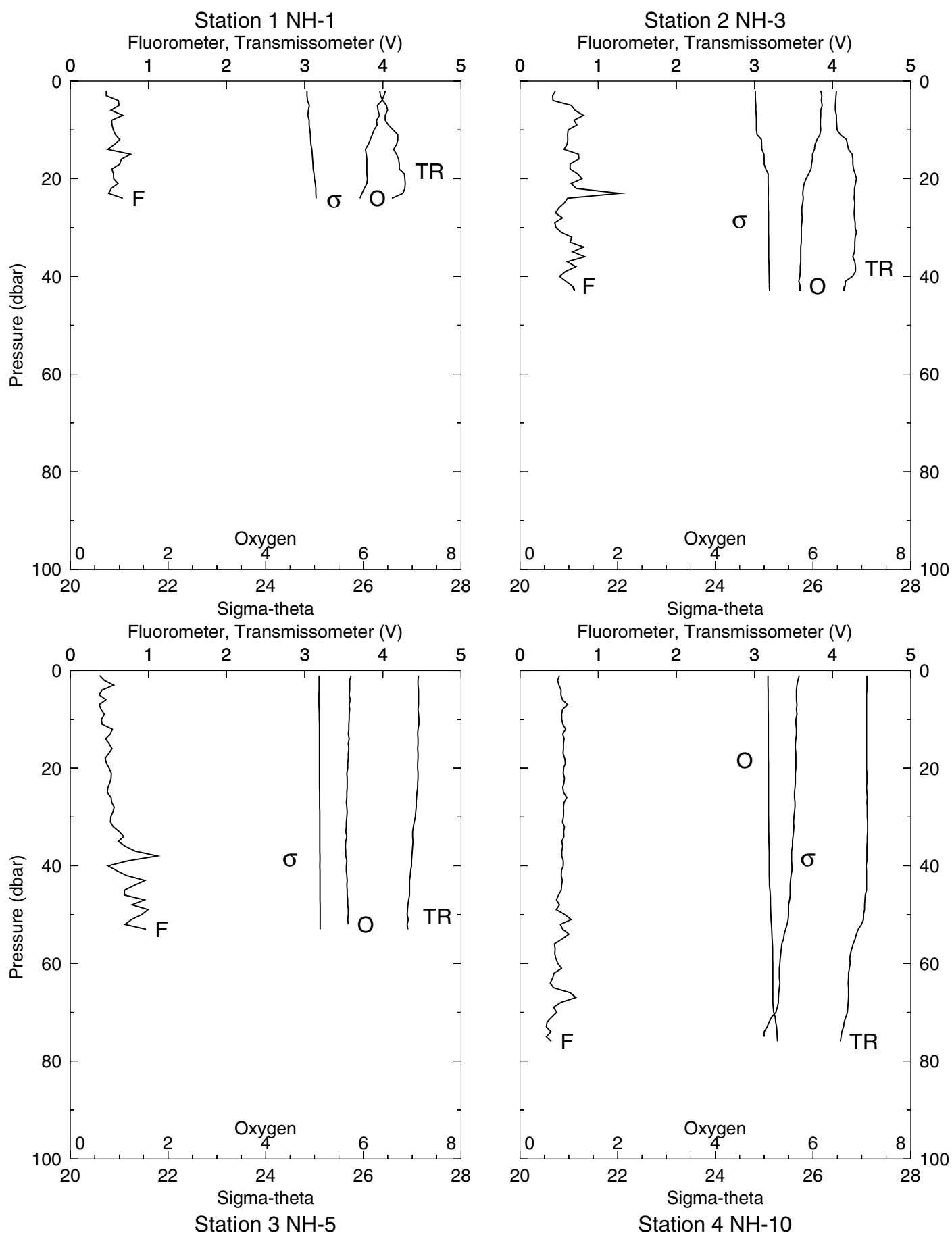
Vertical Profiles of Fluorometer Voltage (F),
Transmissometer Voltage (TR),
and Dissolved Oxygen (O)
with the Density Anomaly (σ) for reference

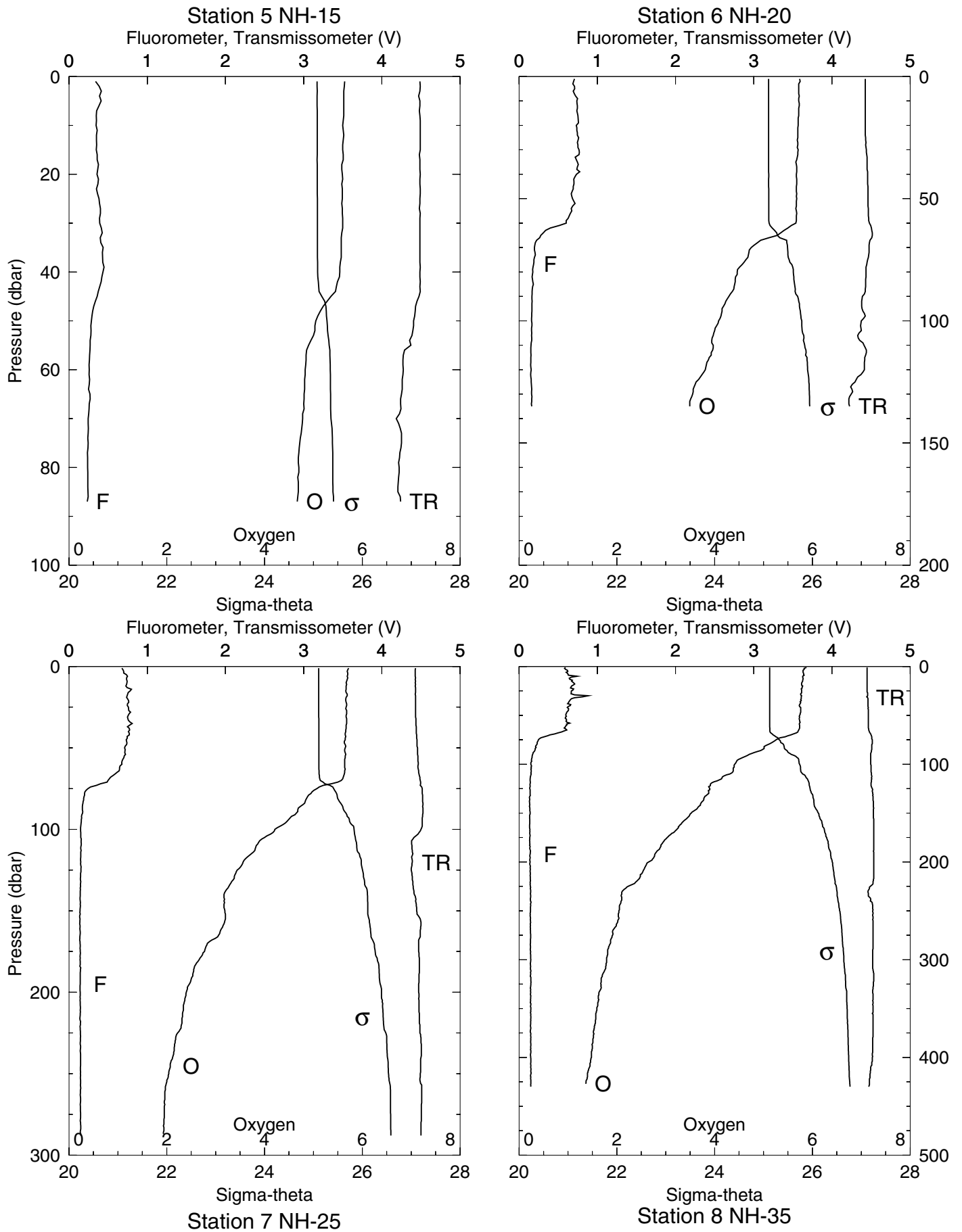


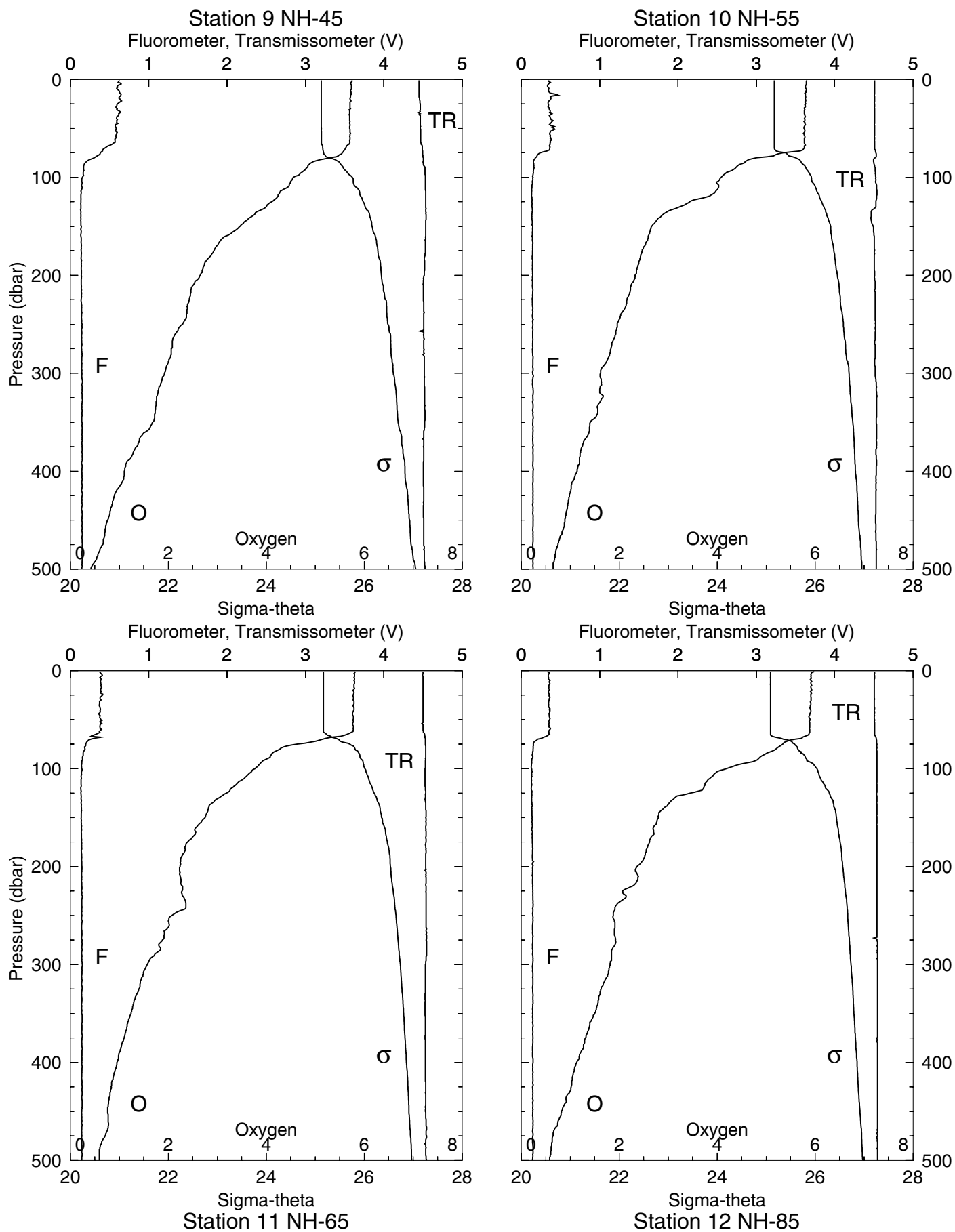


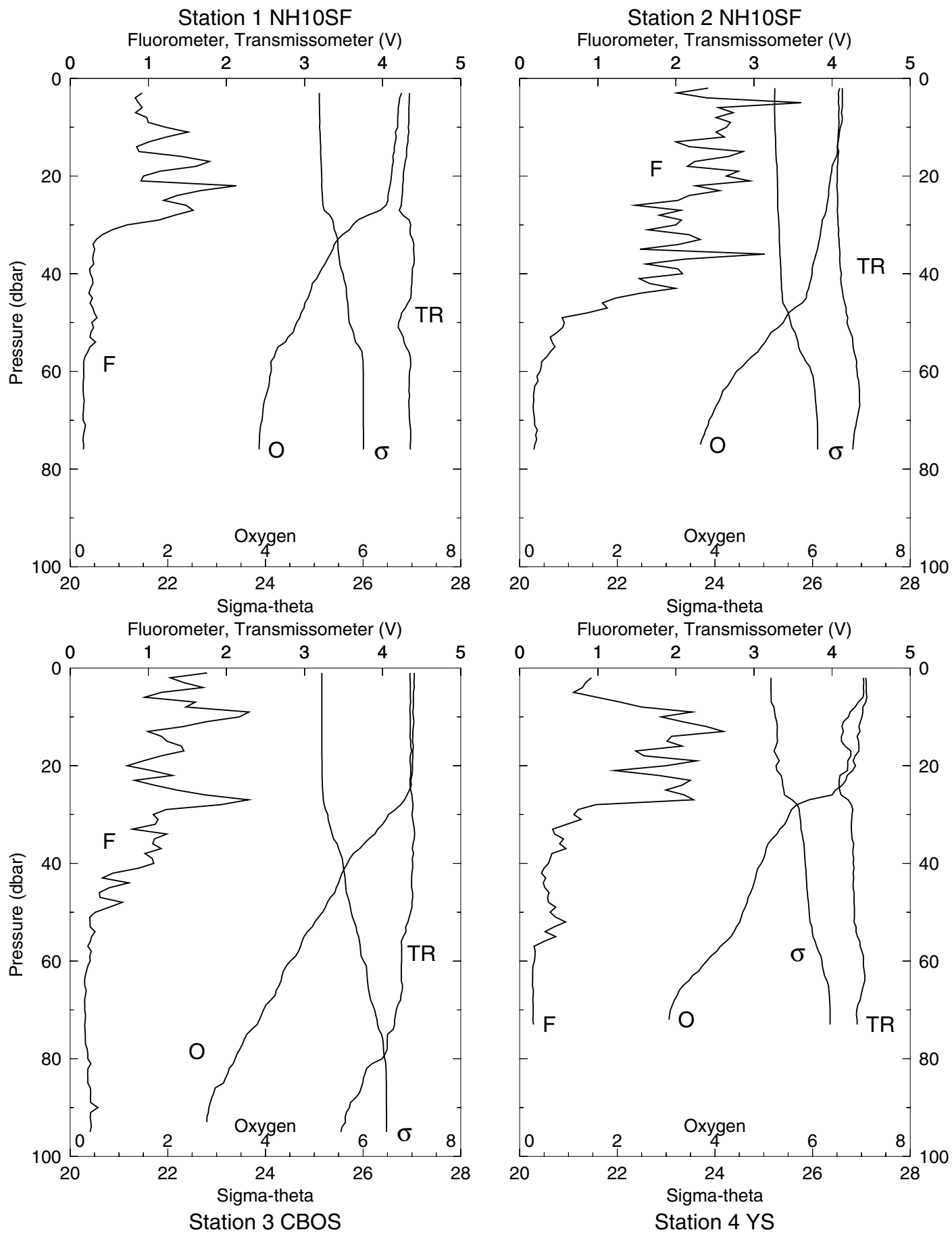
W0101B

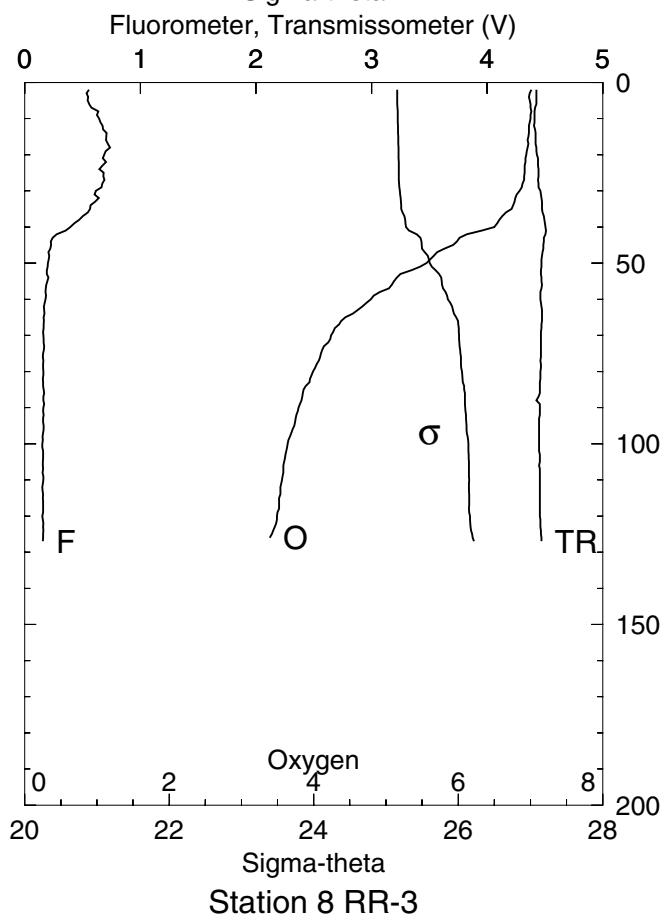
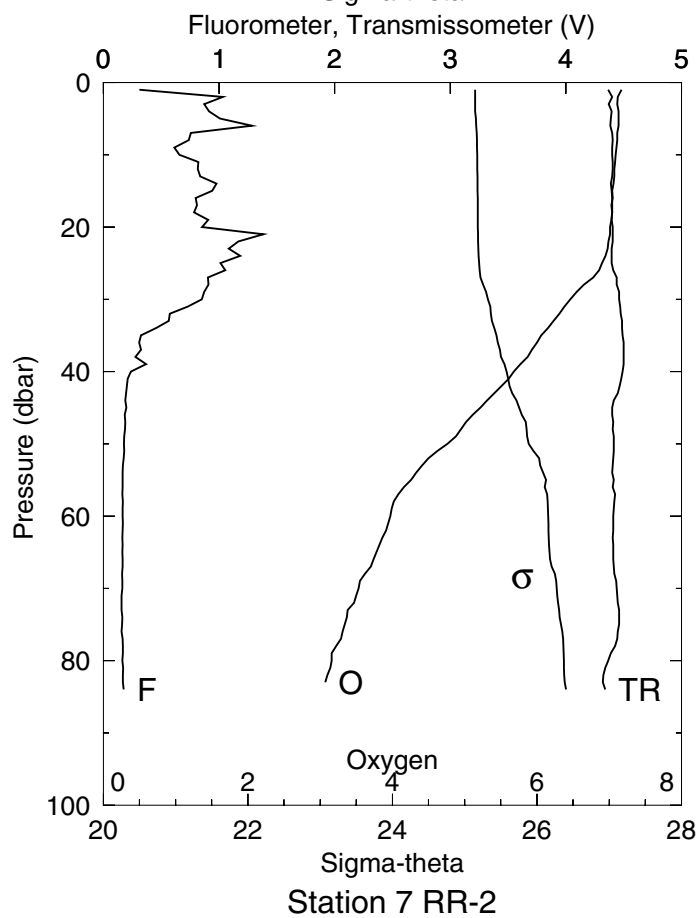
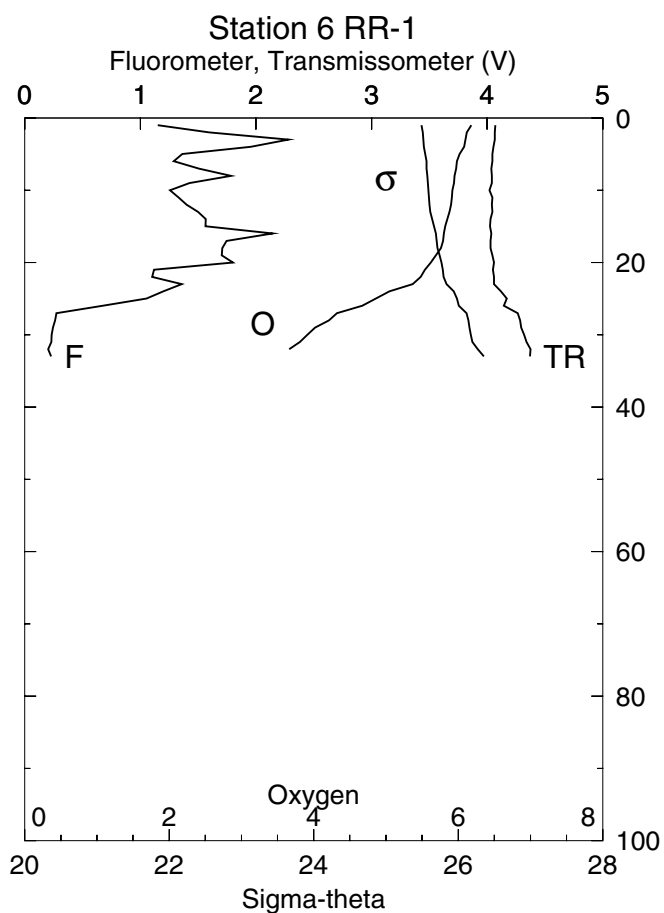
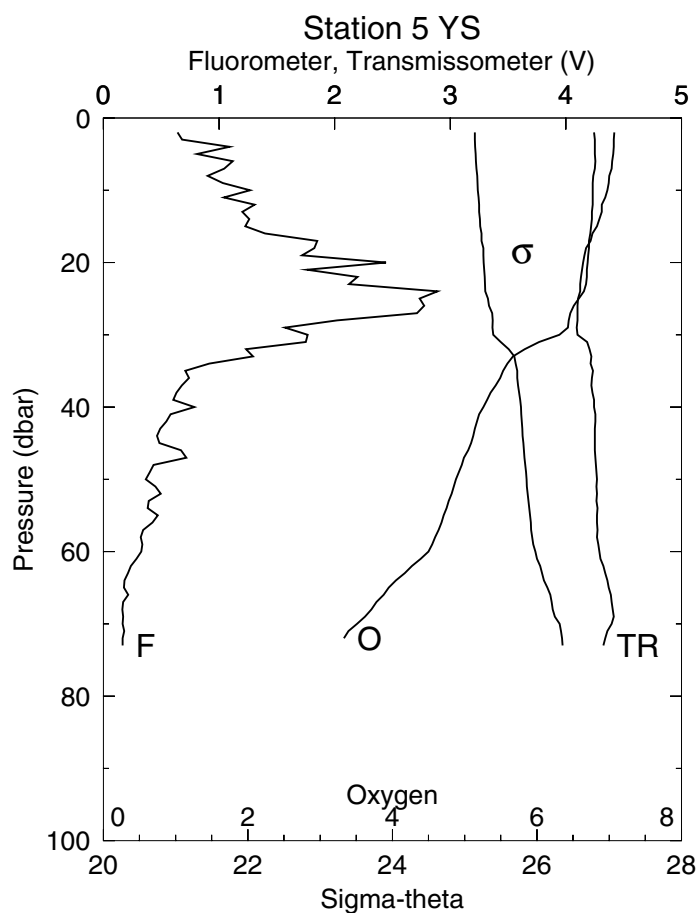


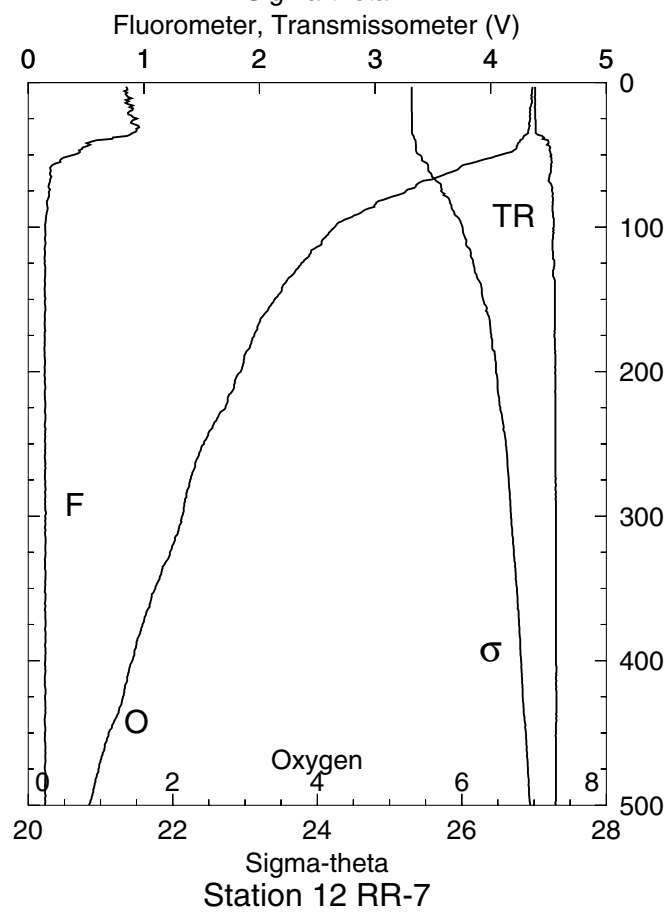
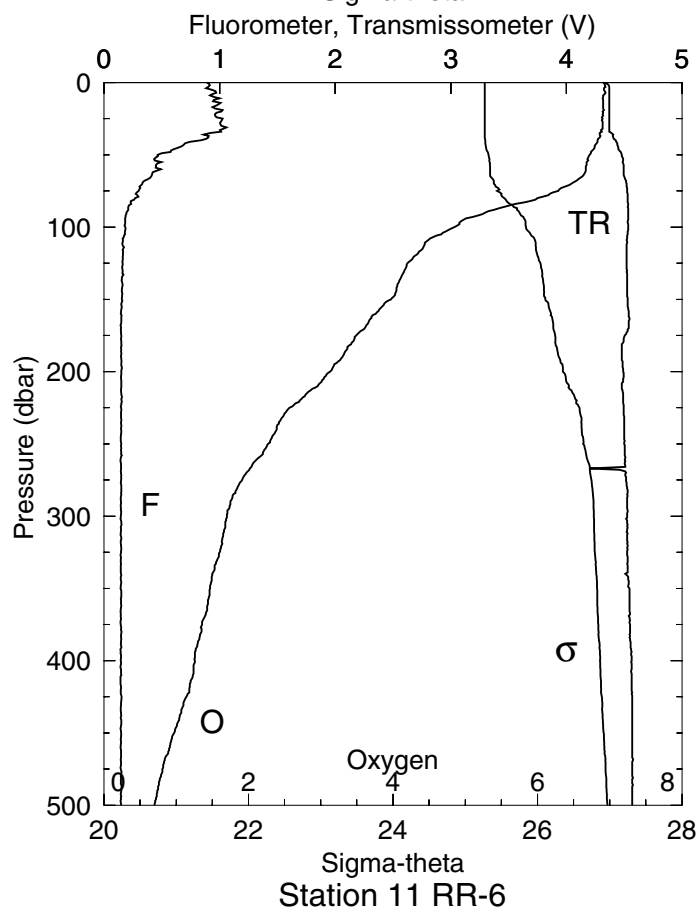
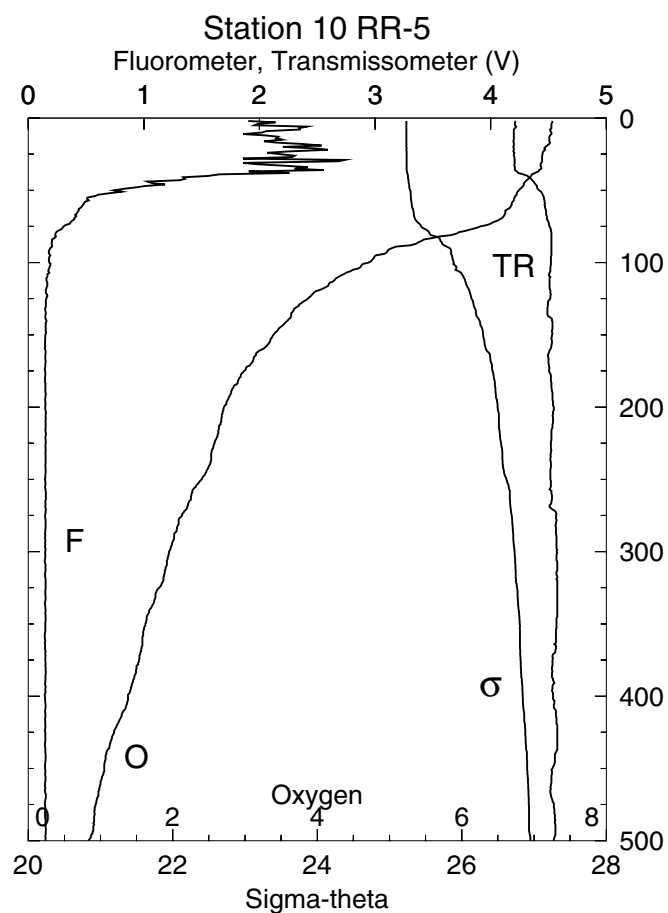
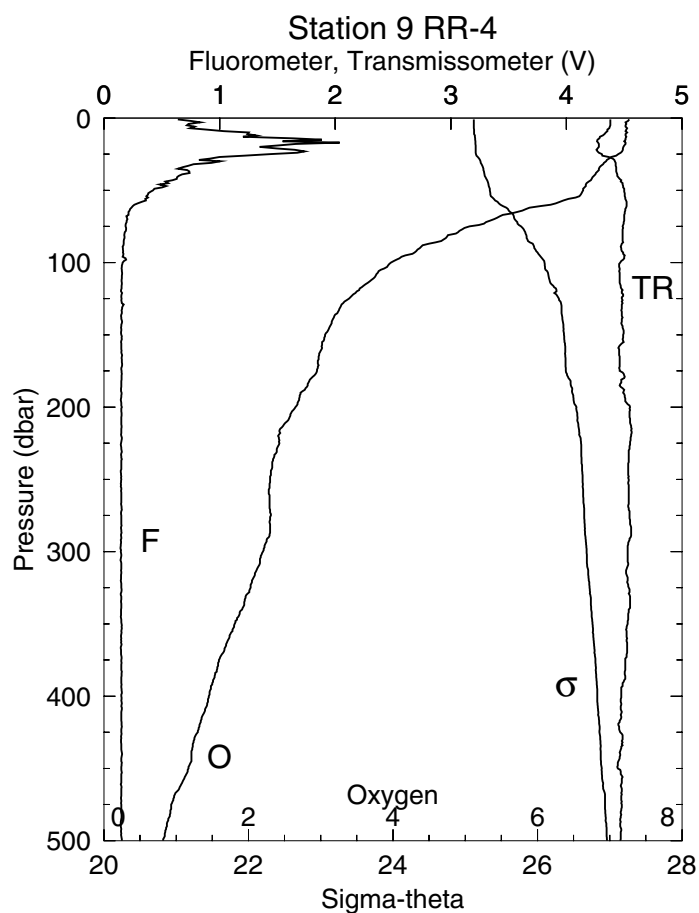


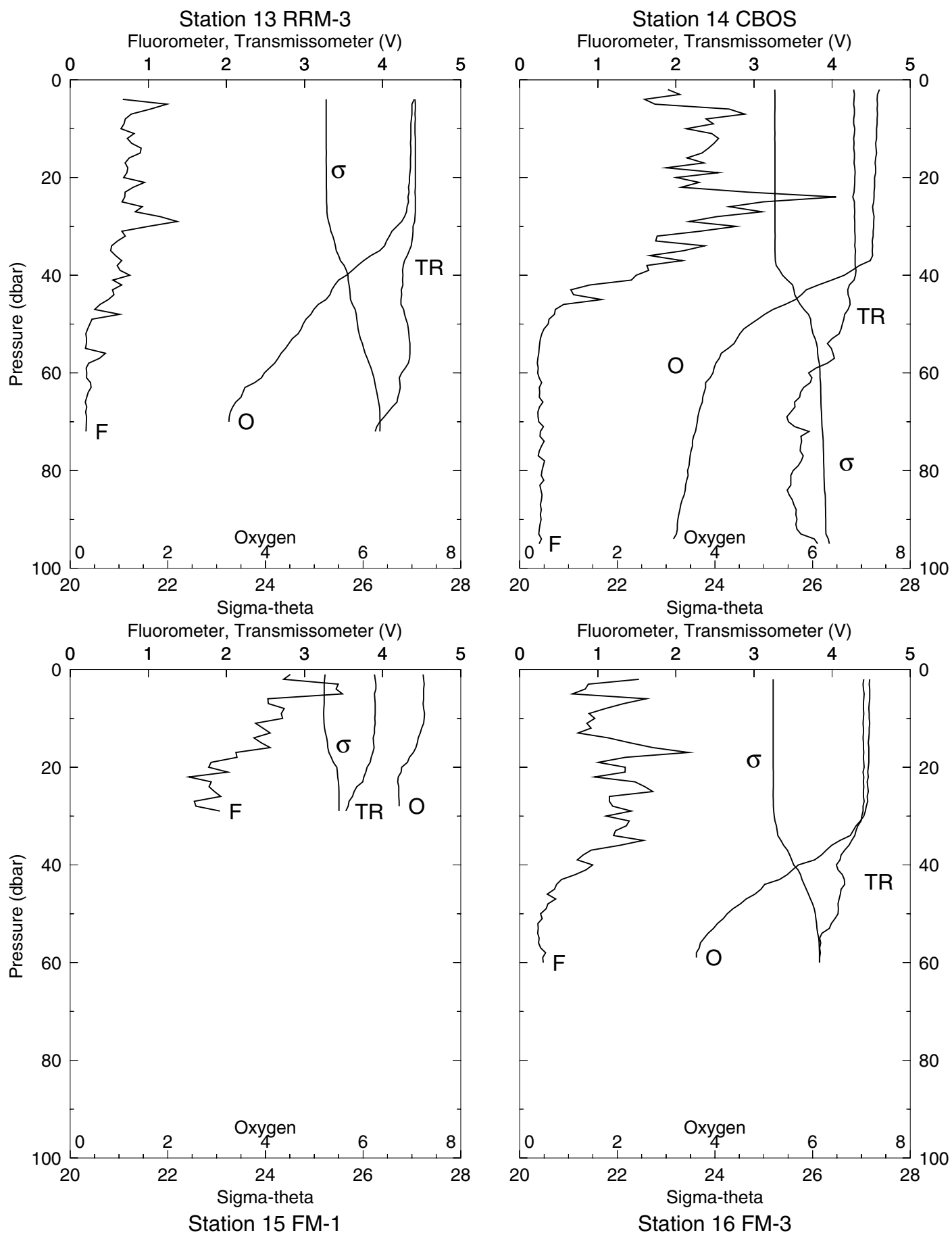


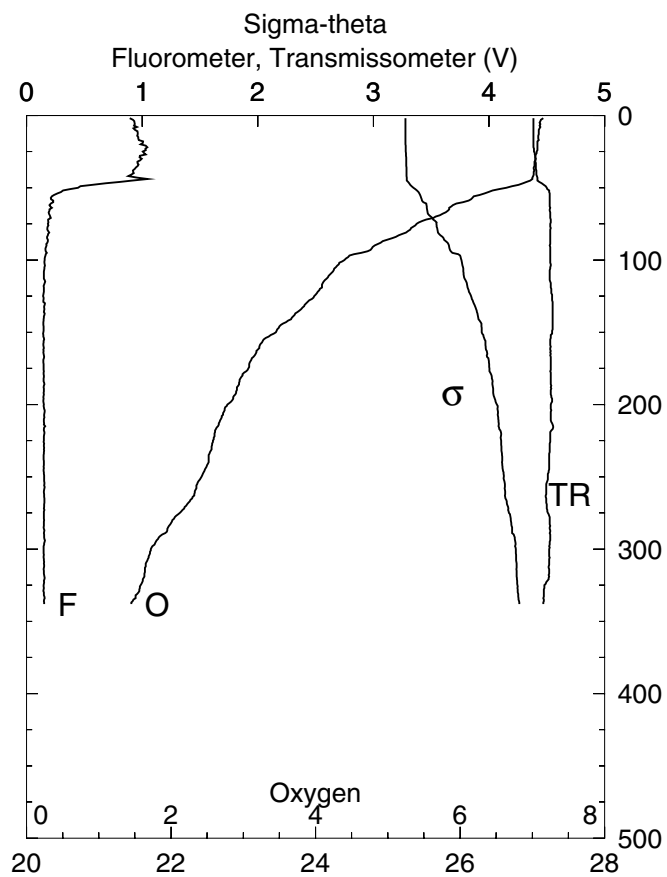
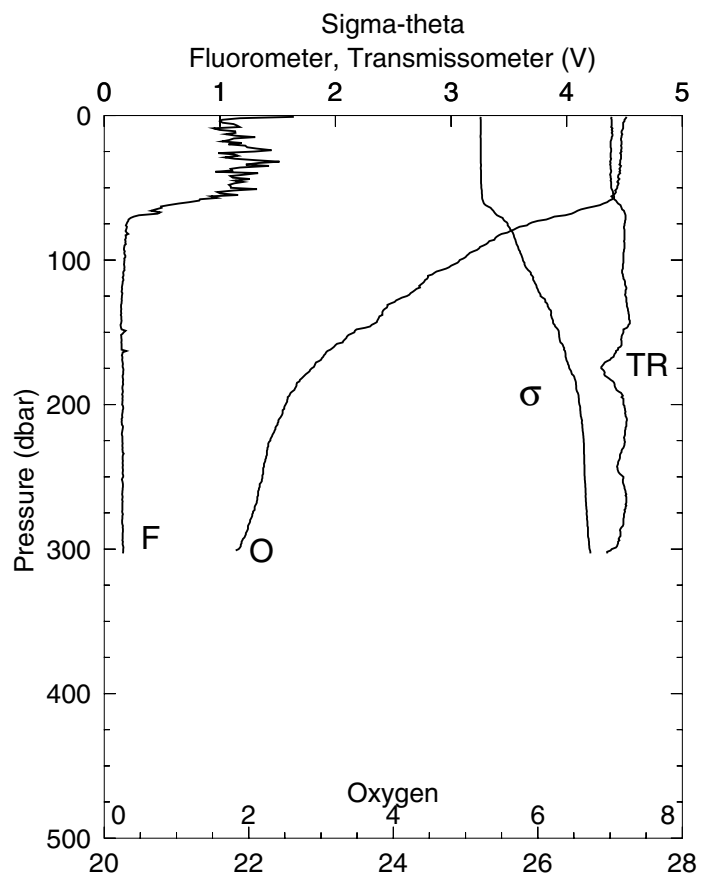
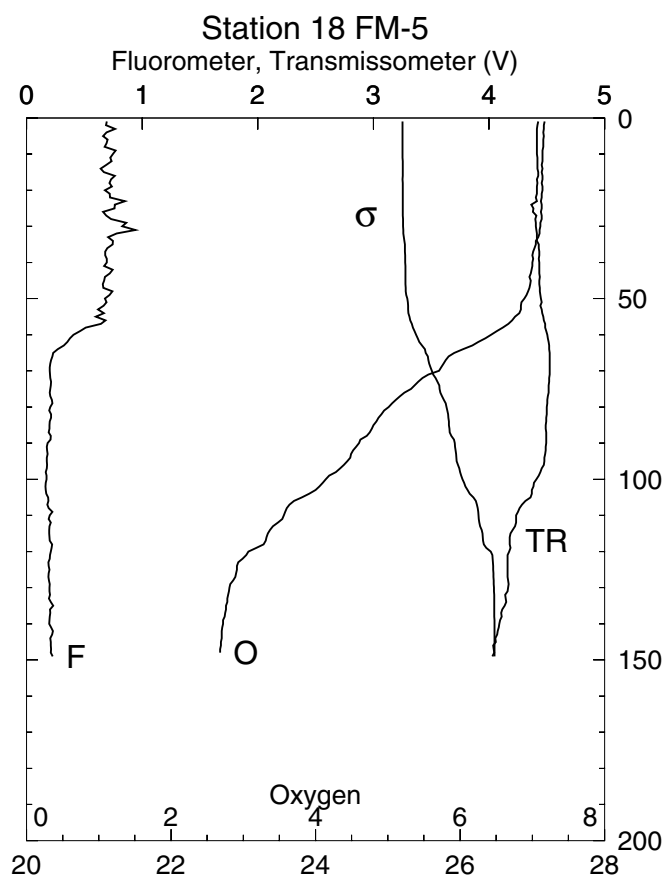
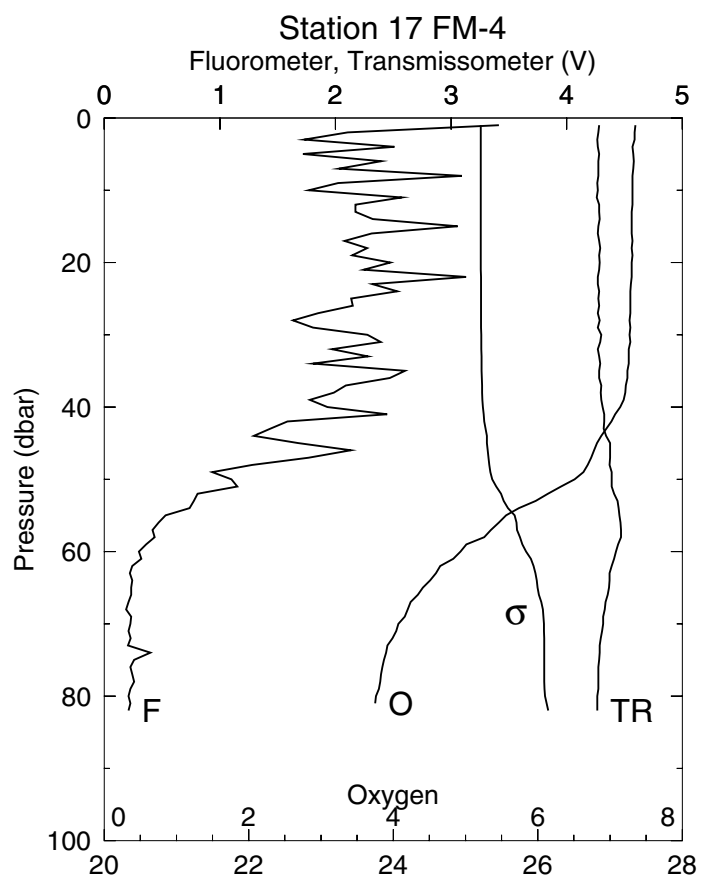


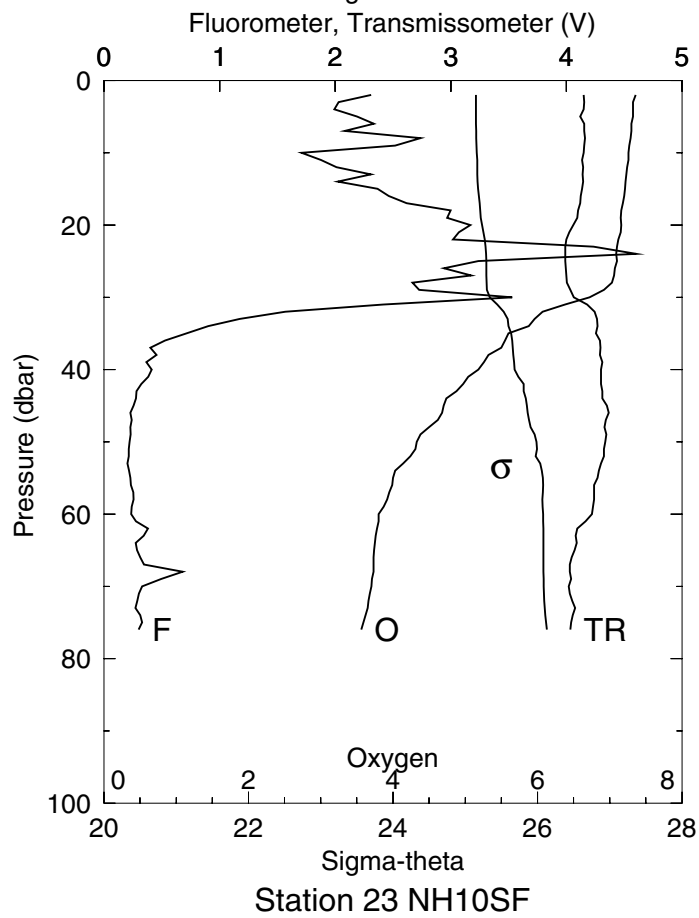
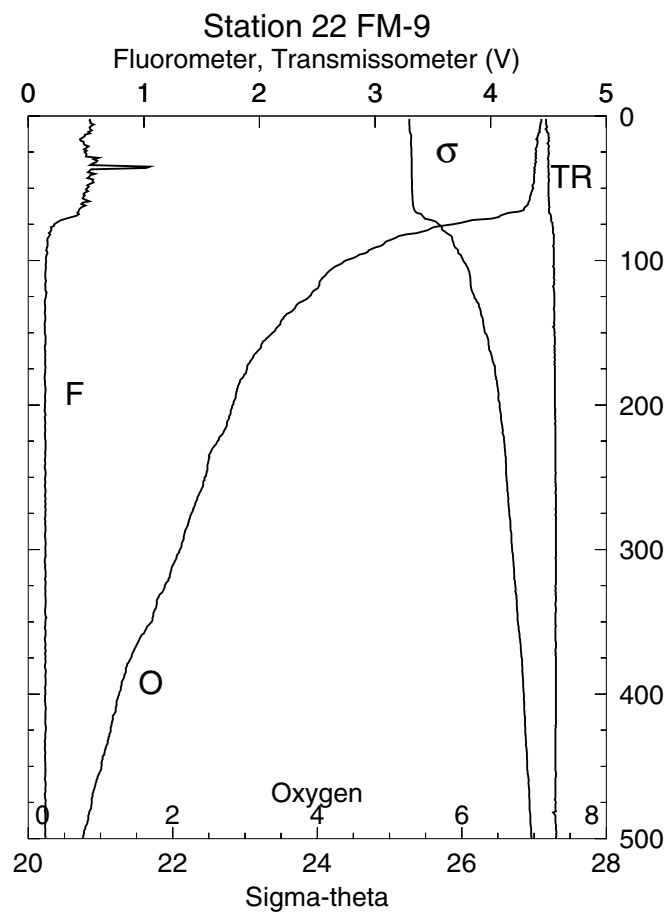
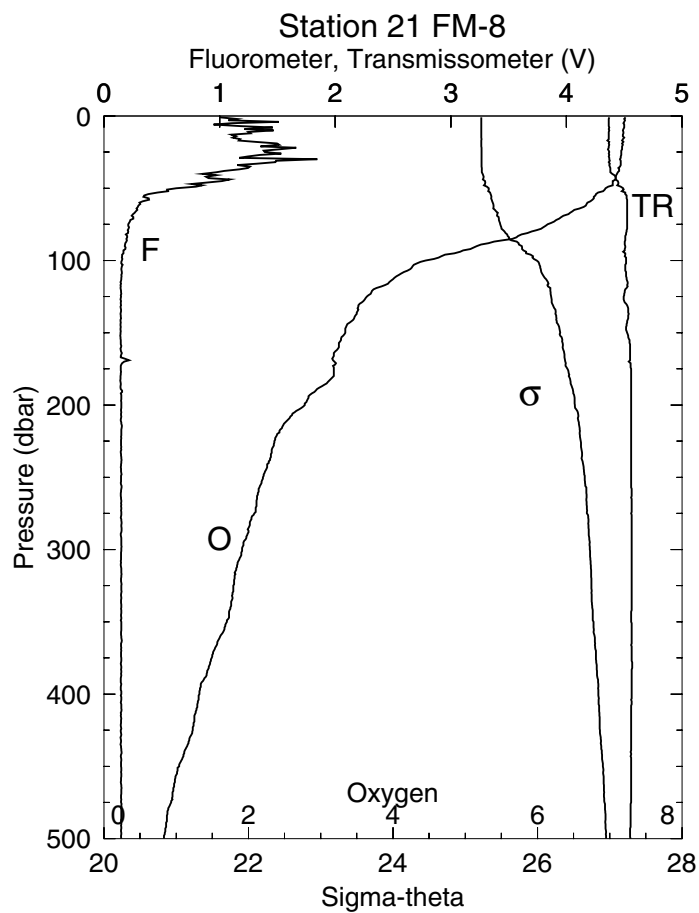


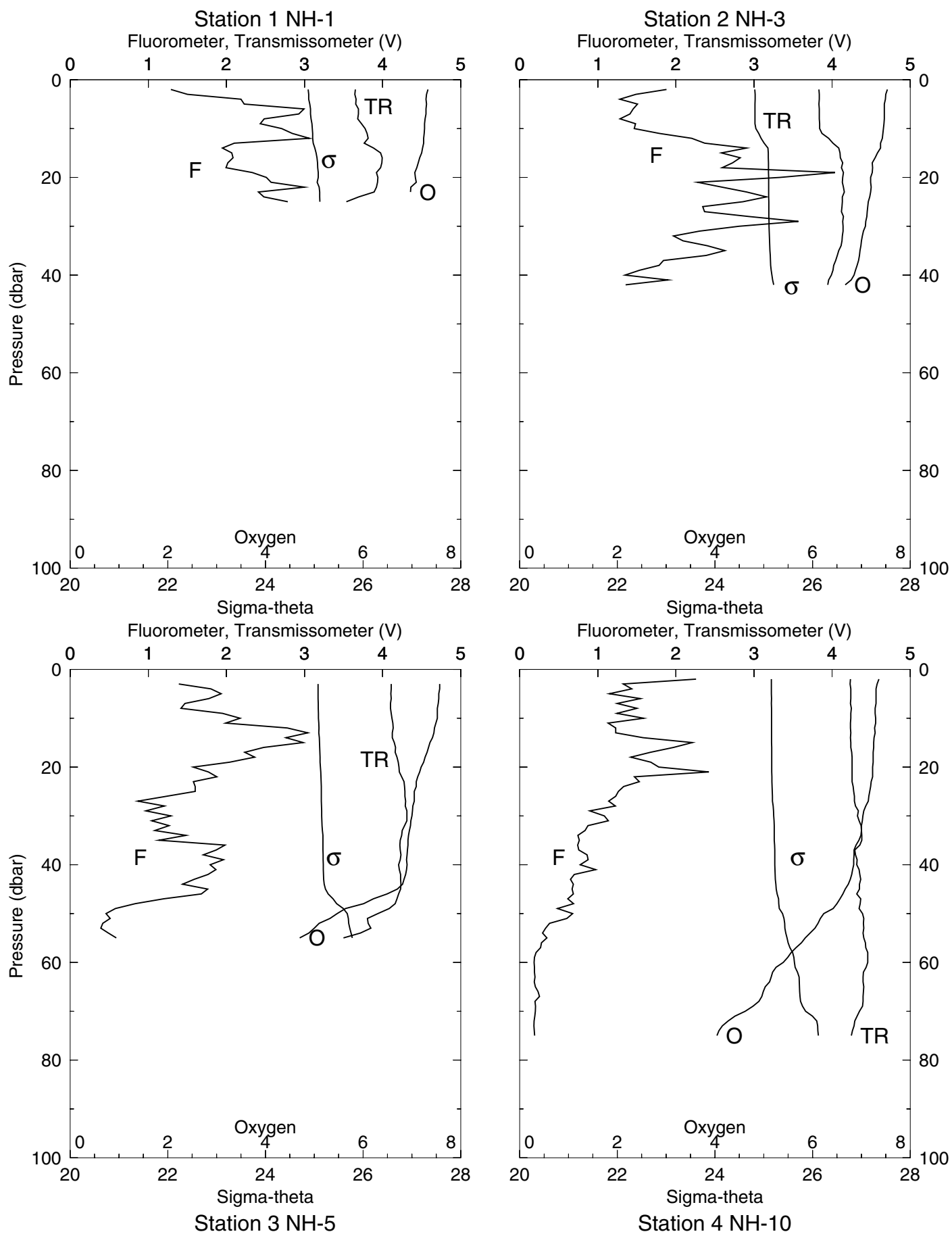


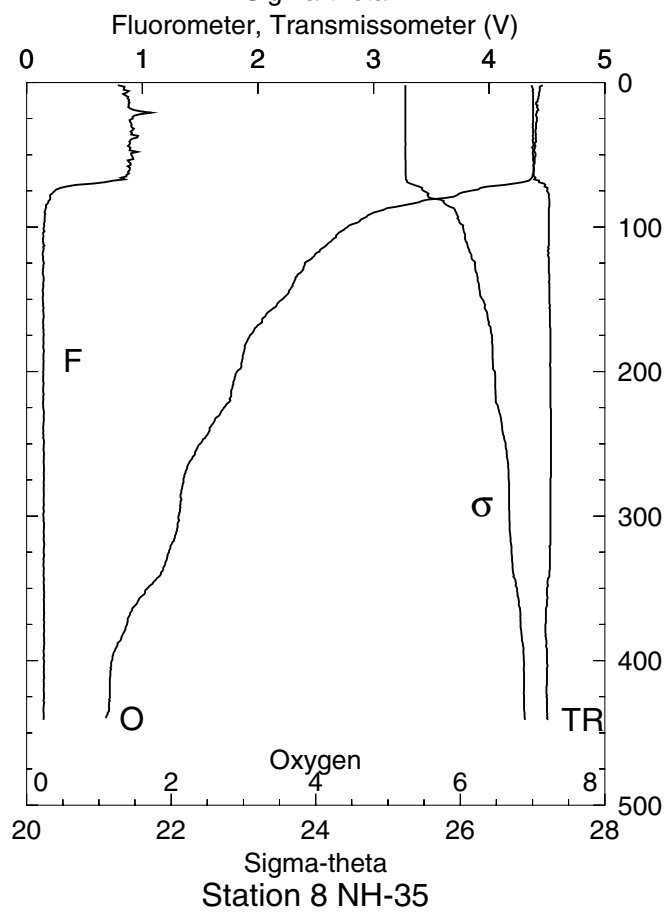
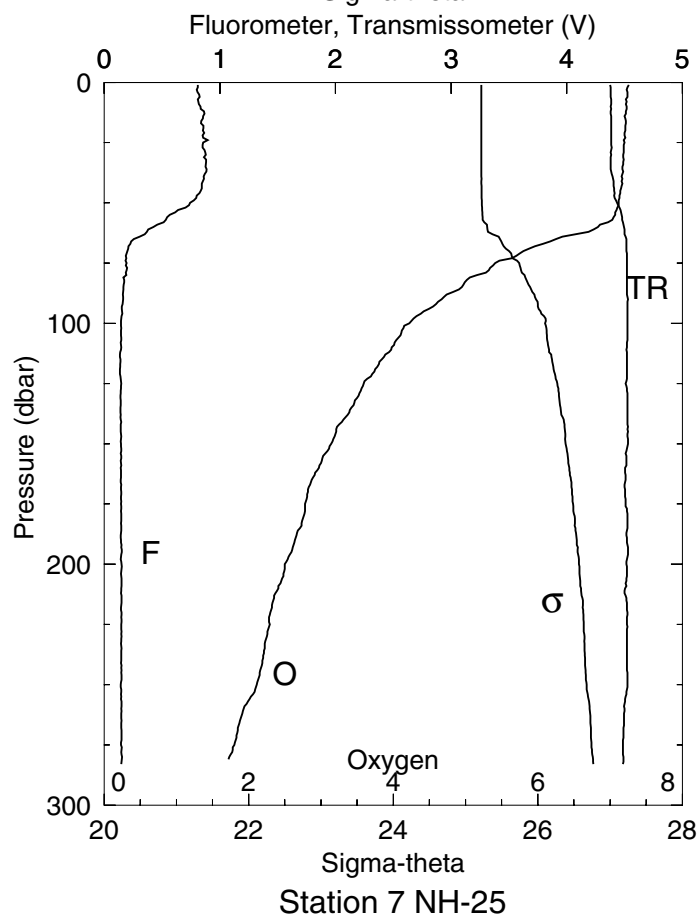
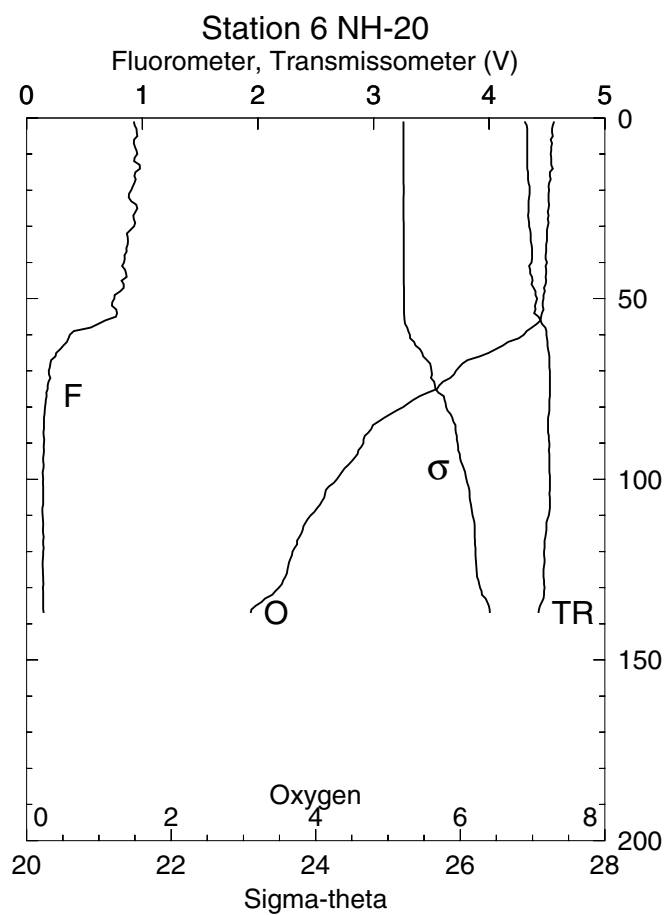
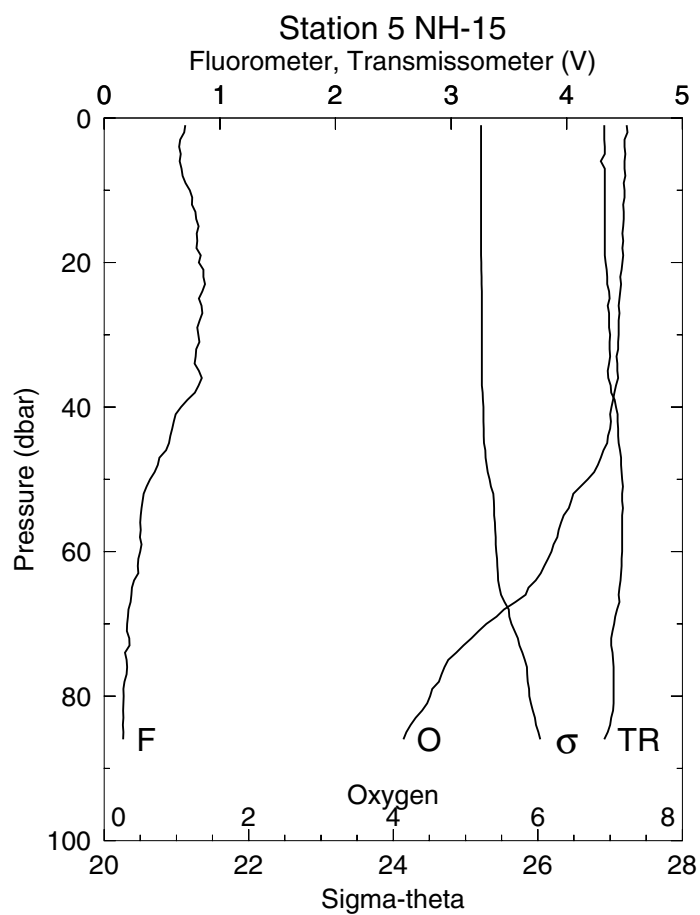


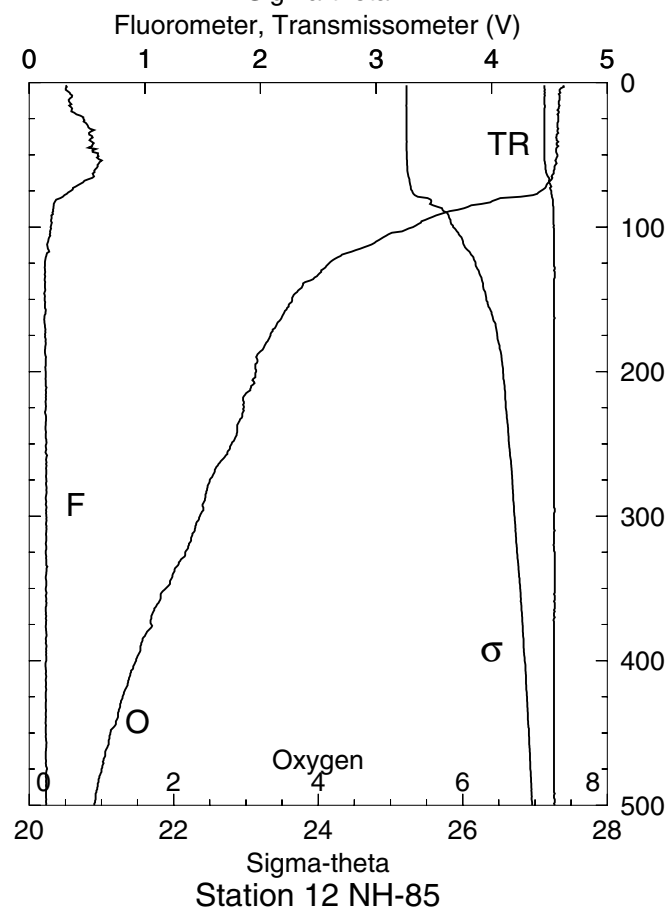
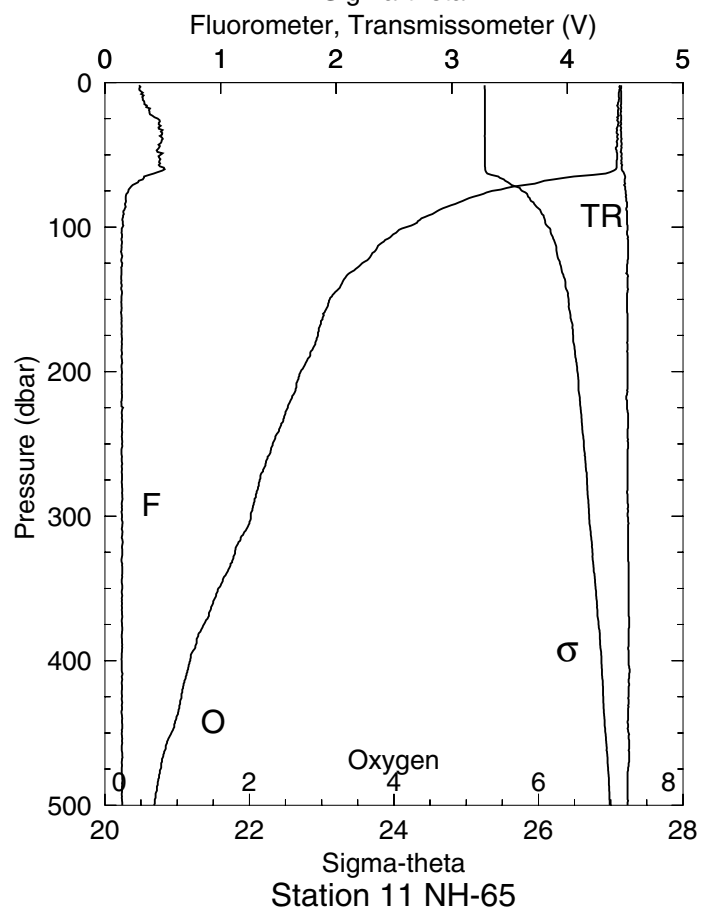
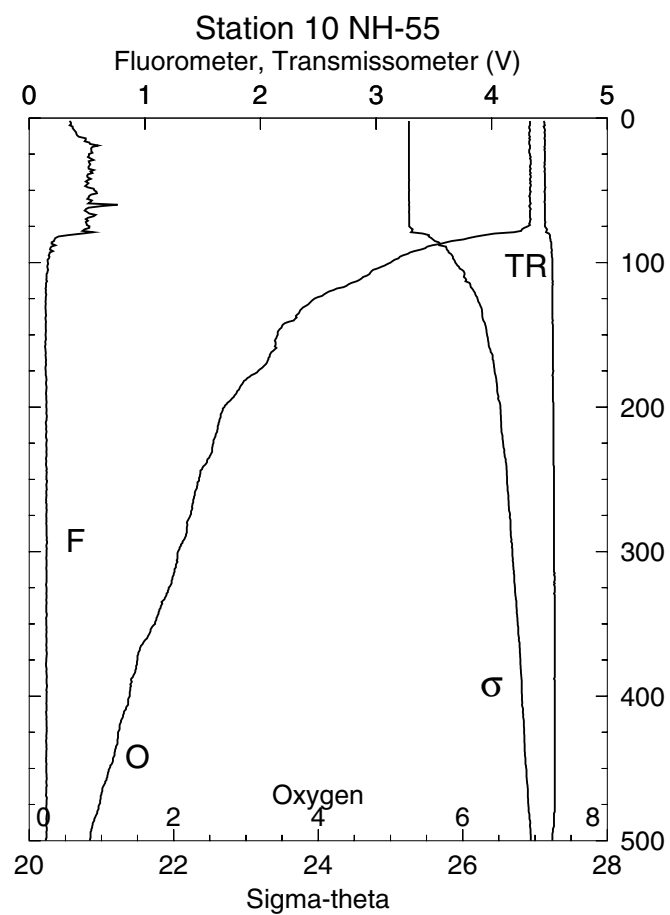
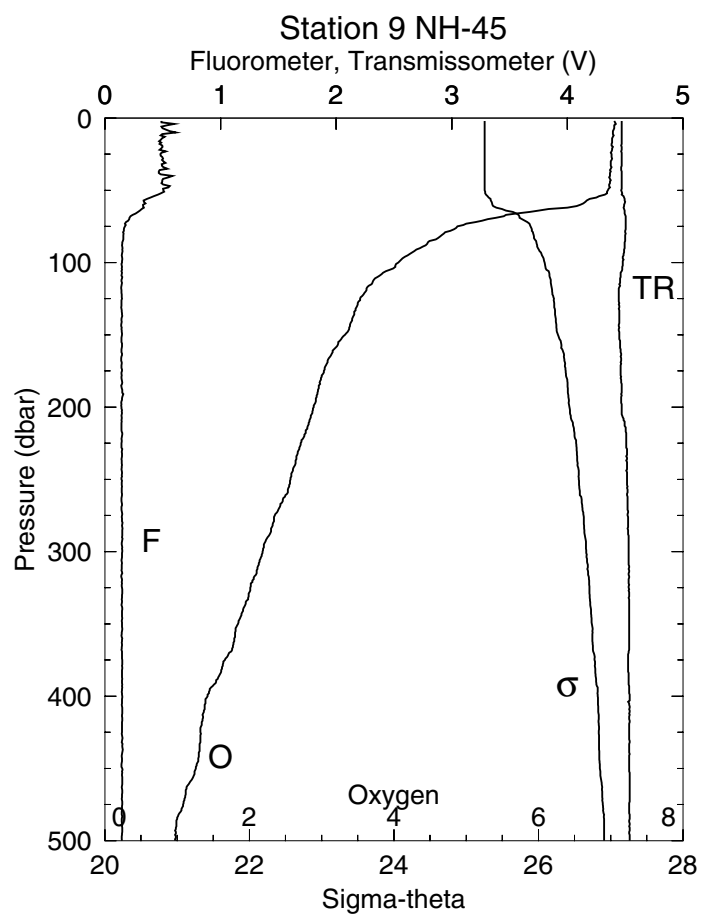


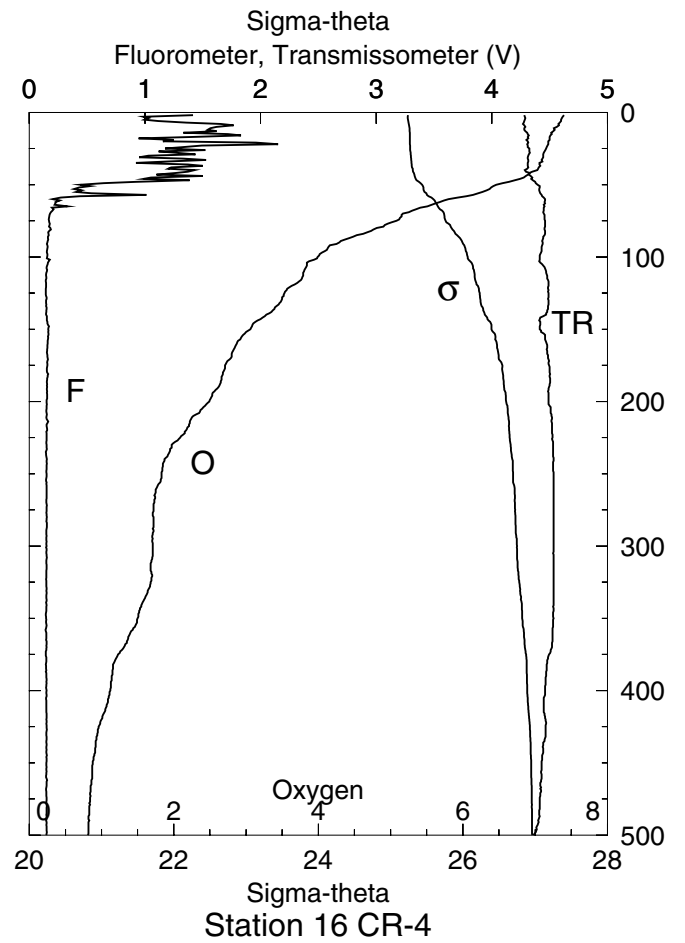
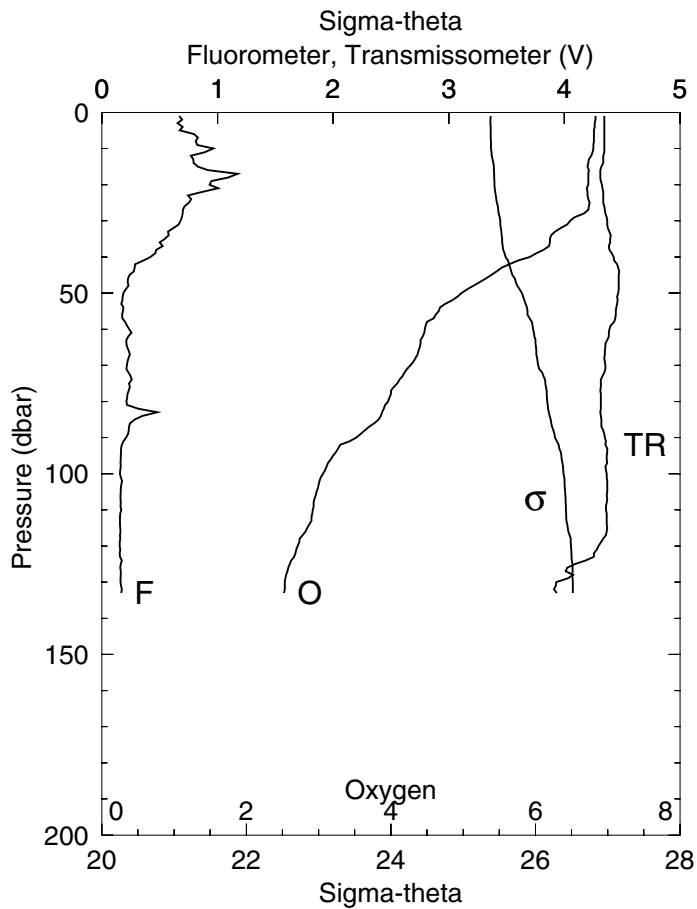
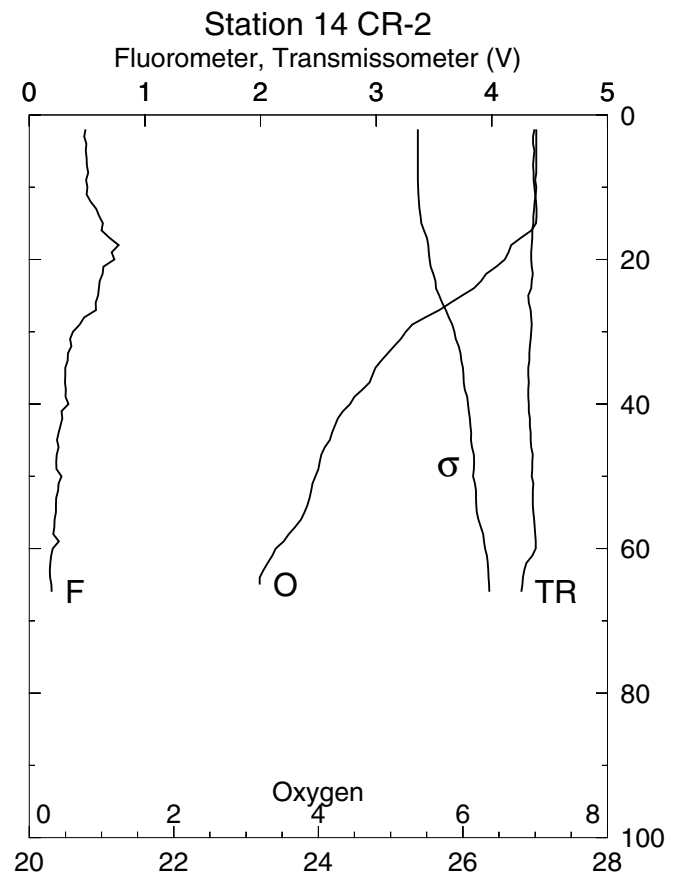
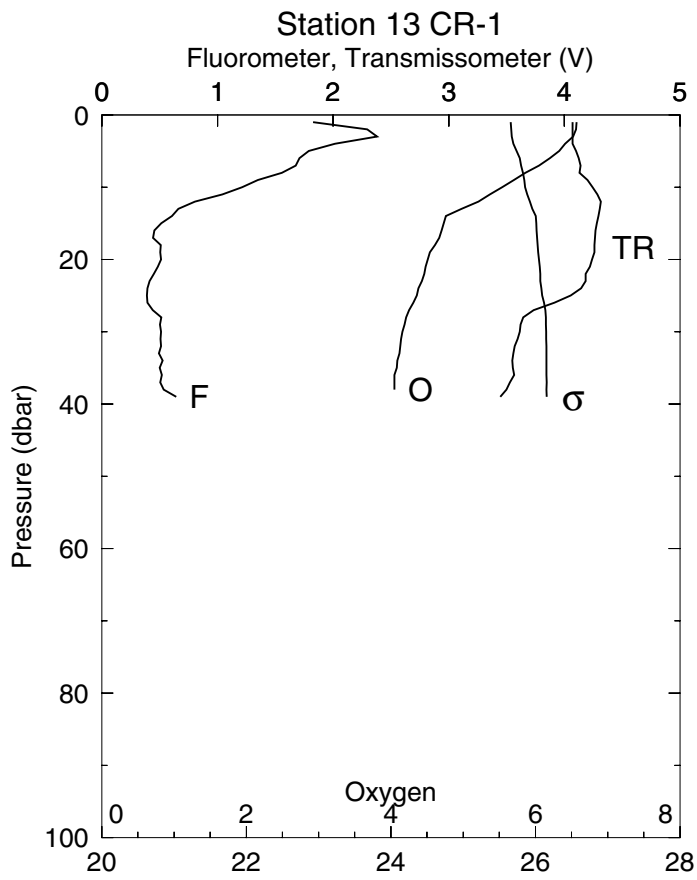


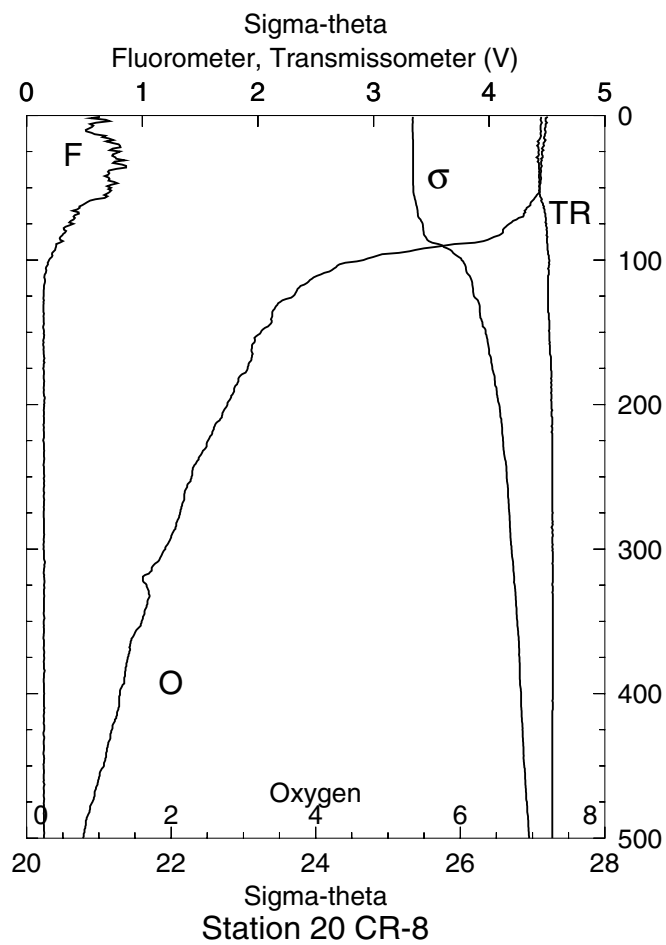
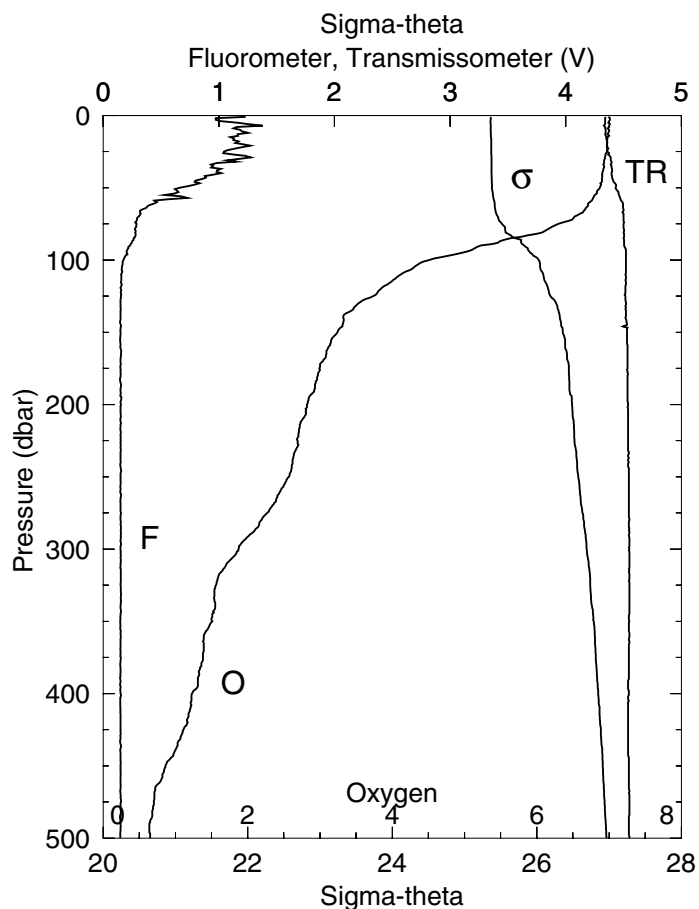
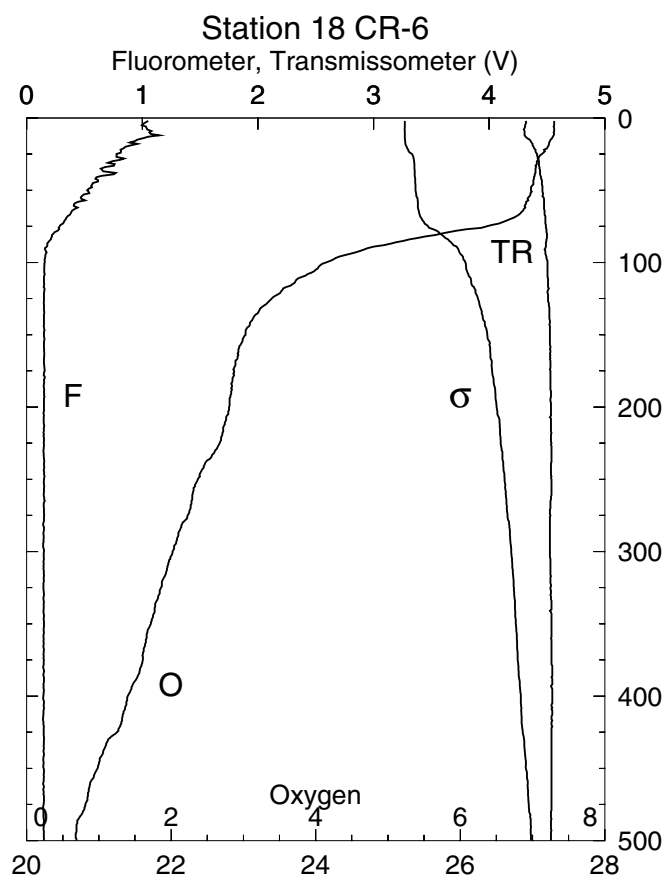
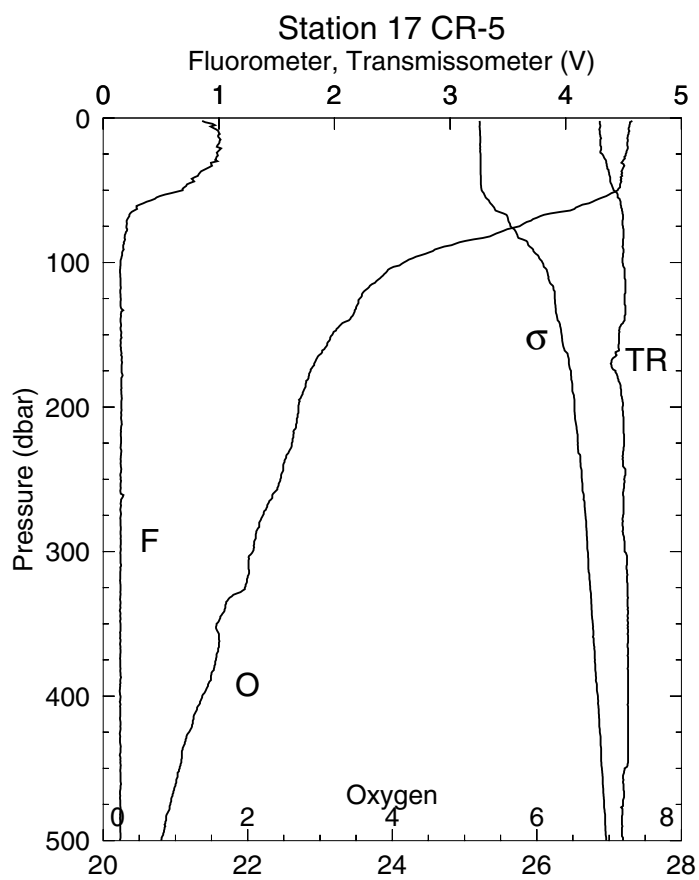


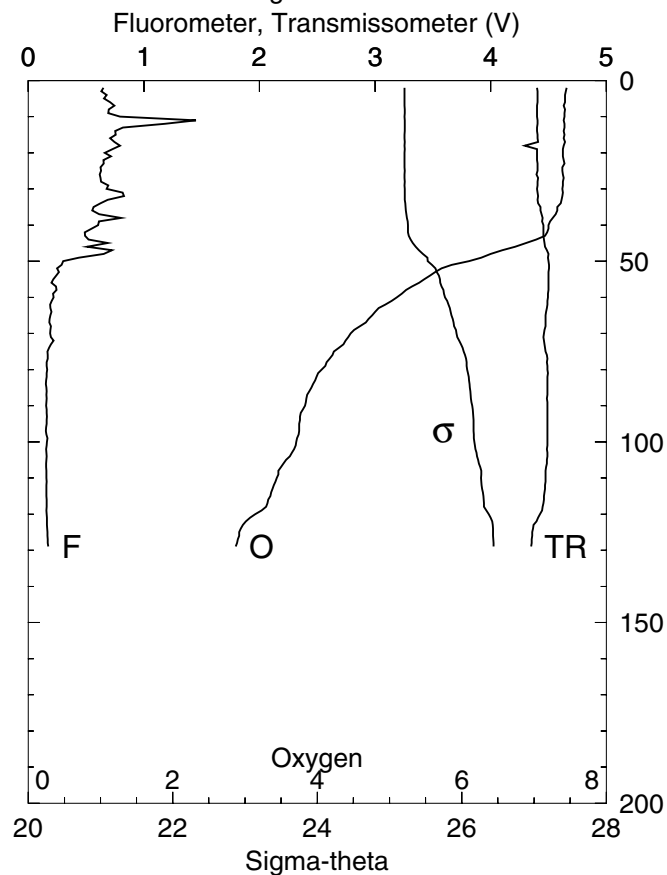
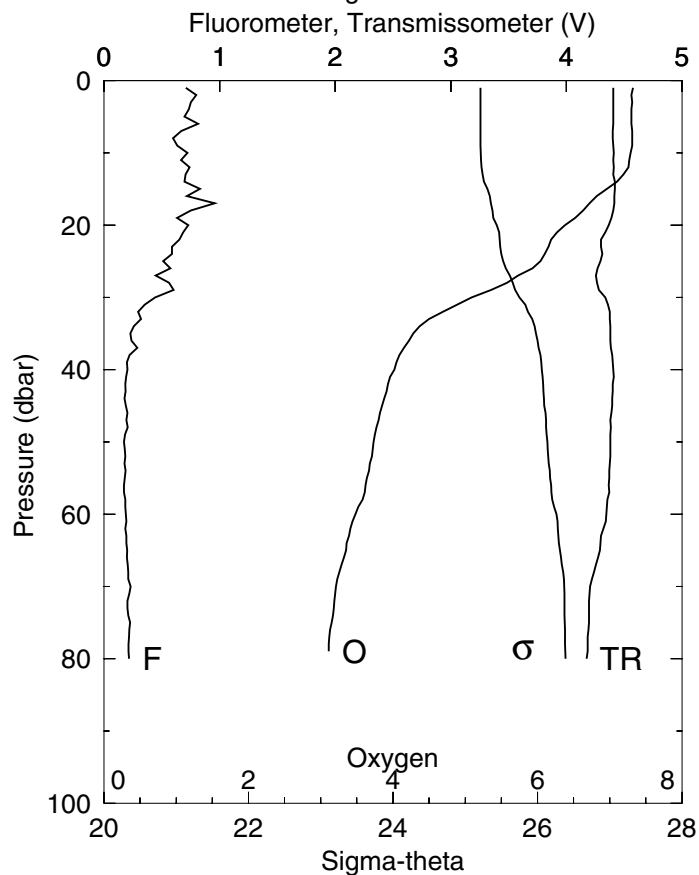
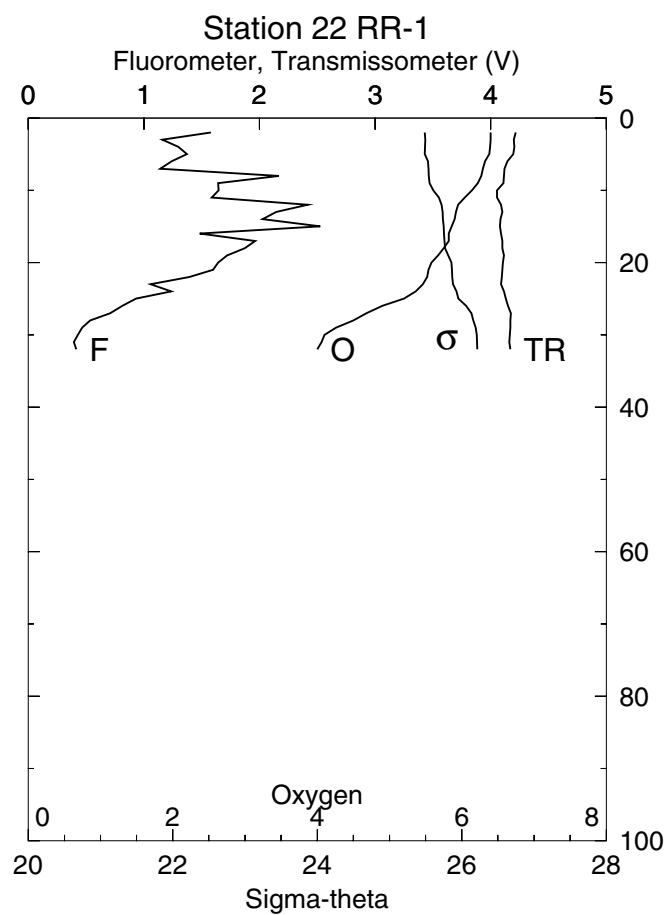
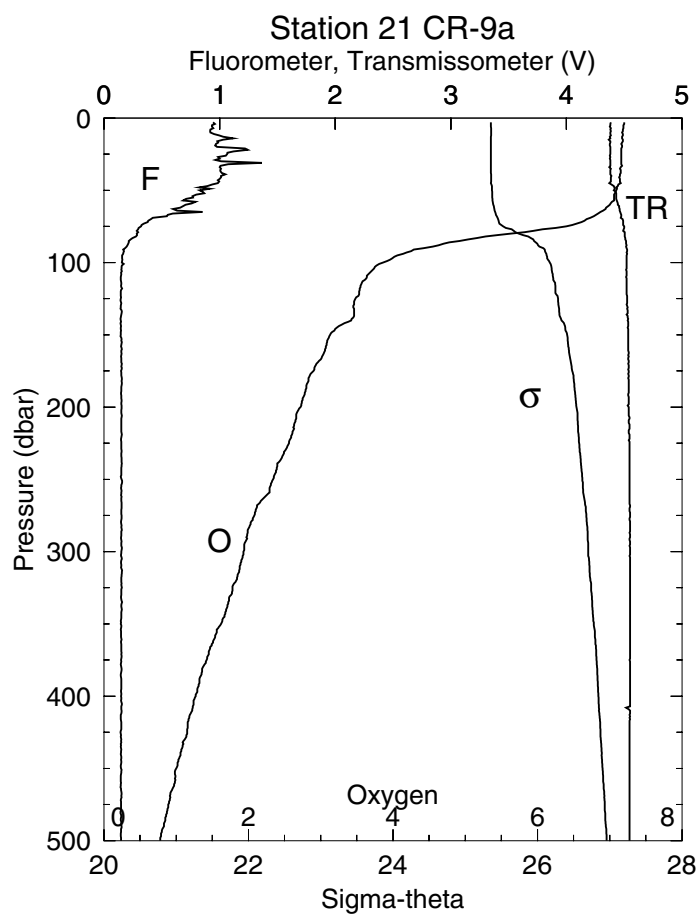


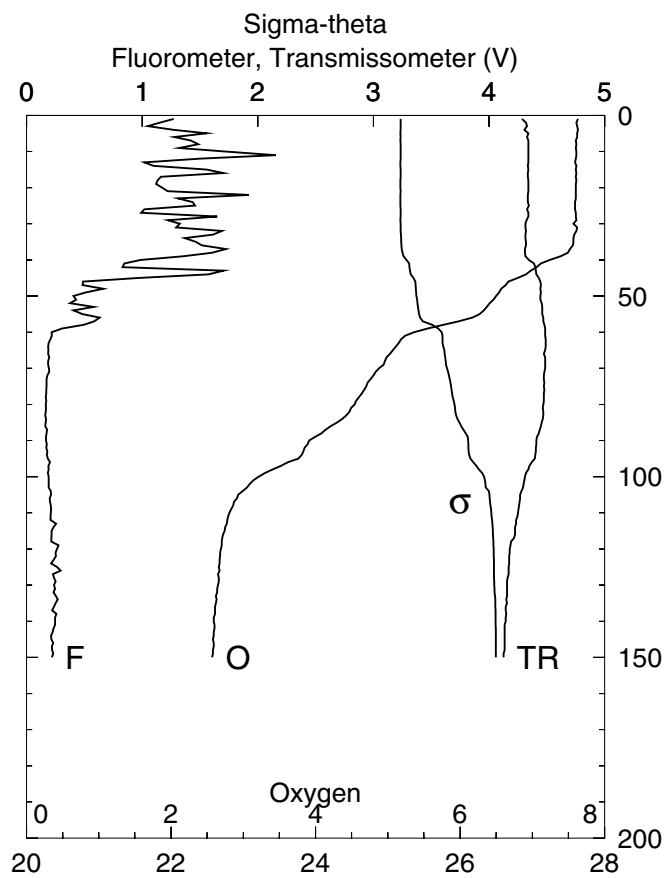
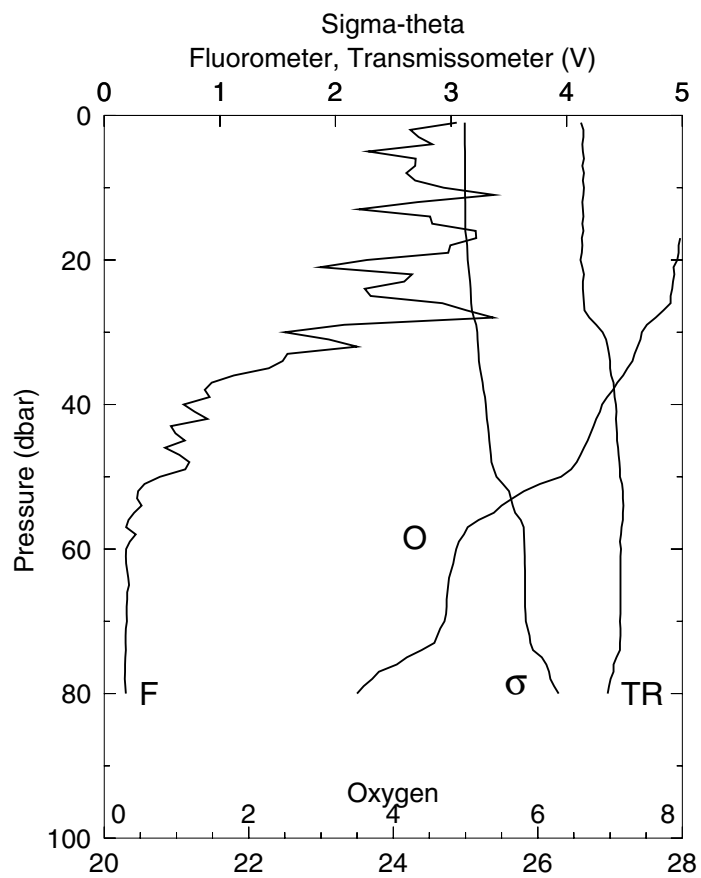
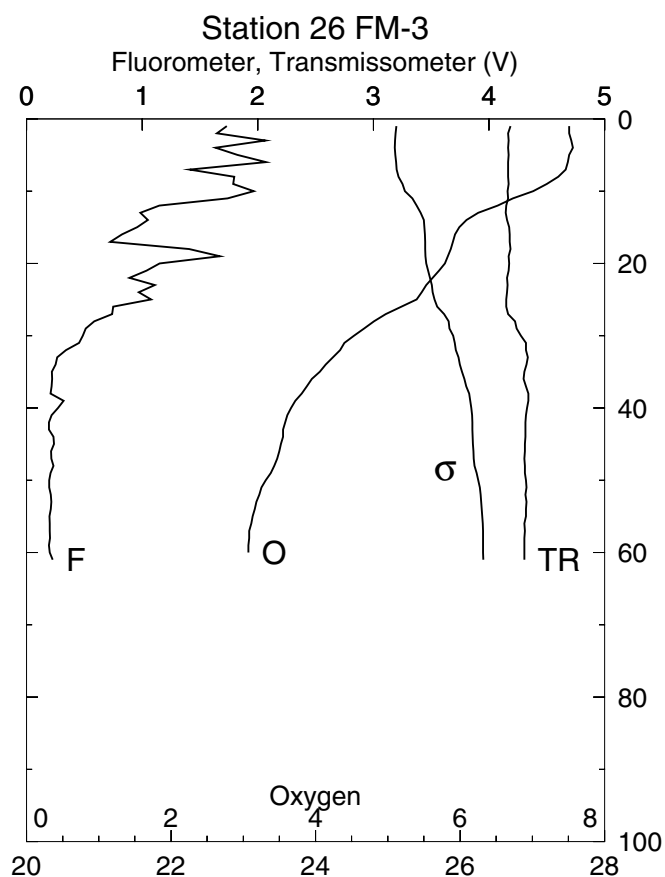
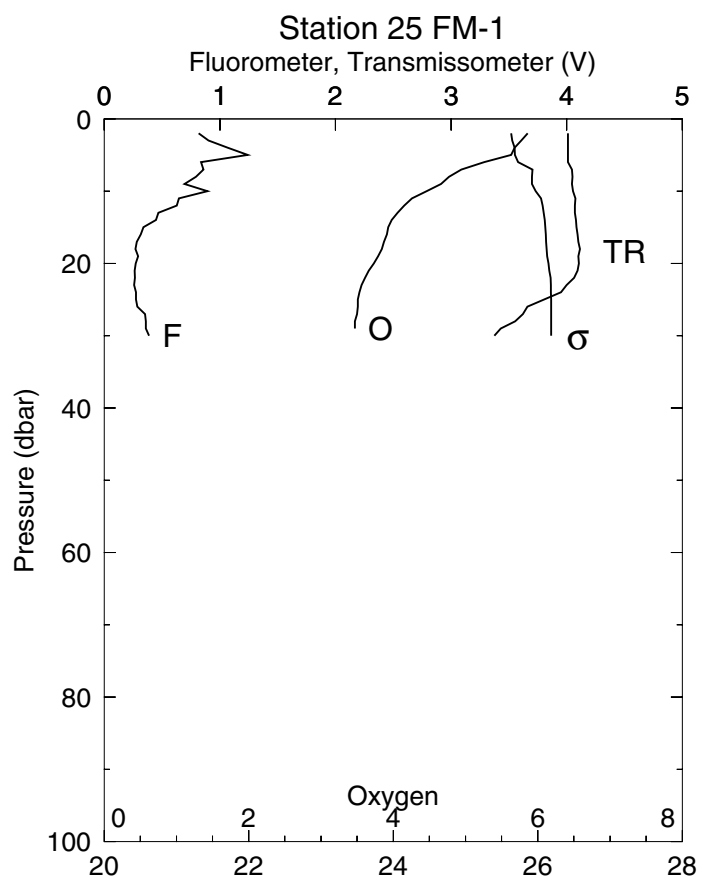


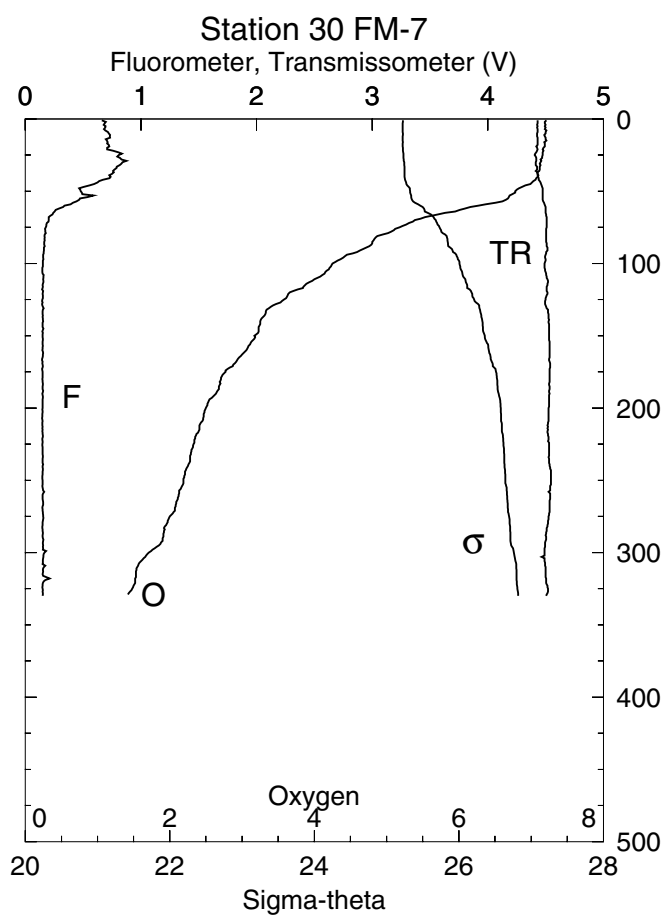
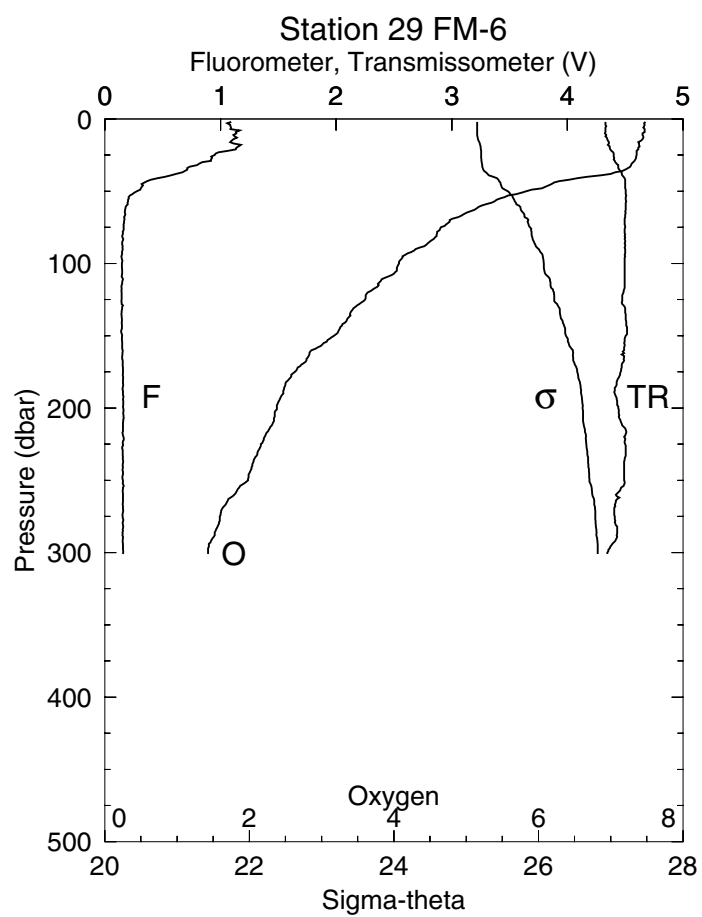


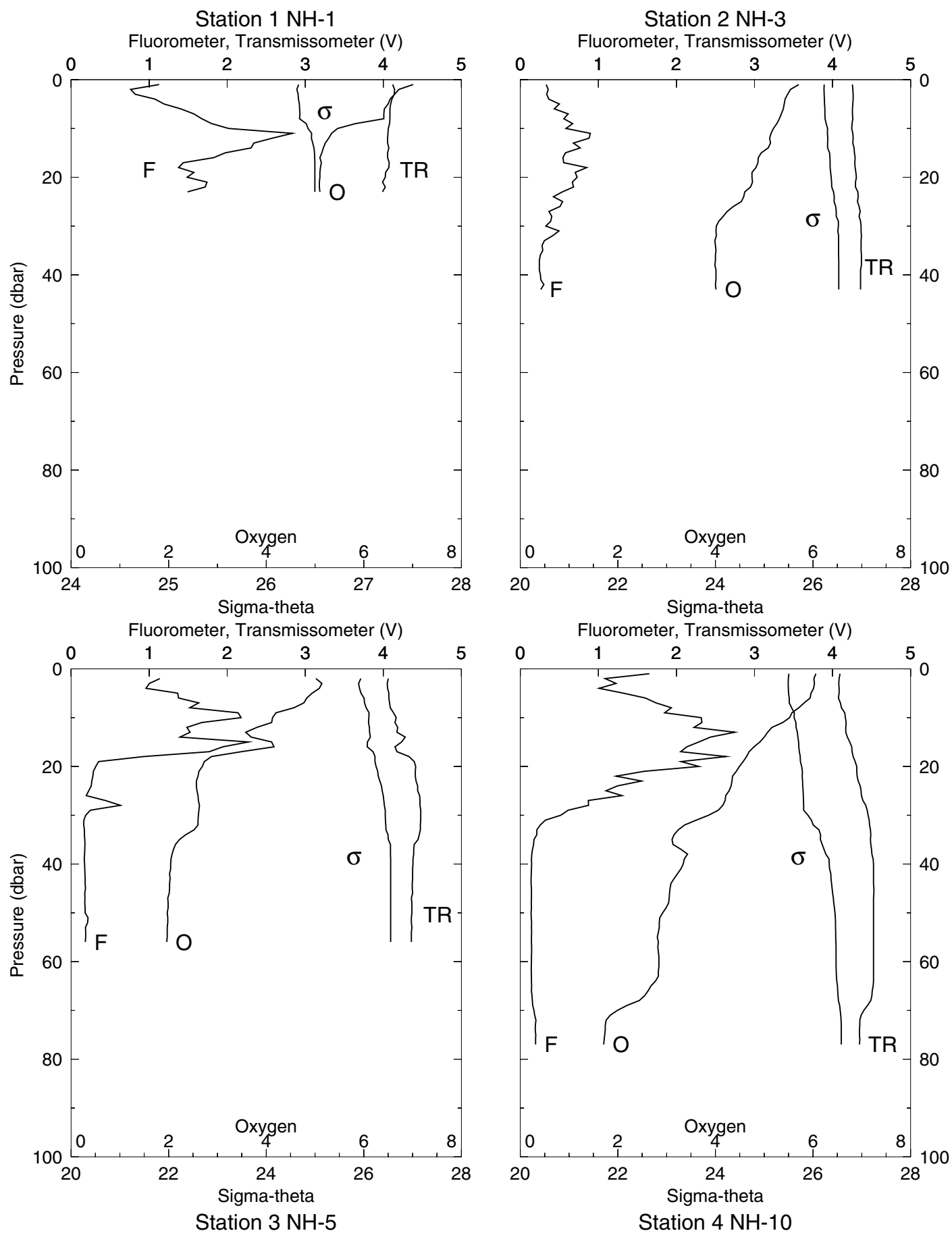


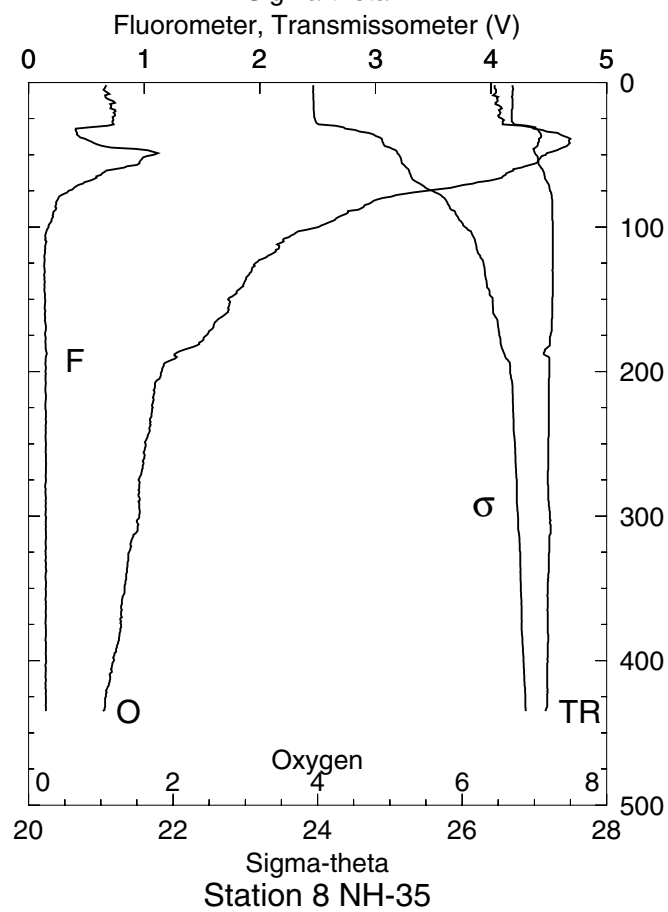
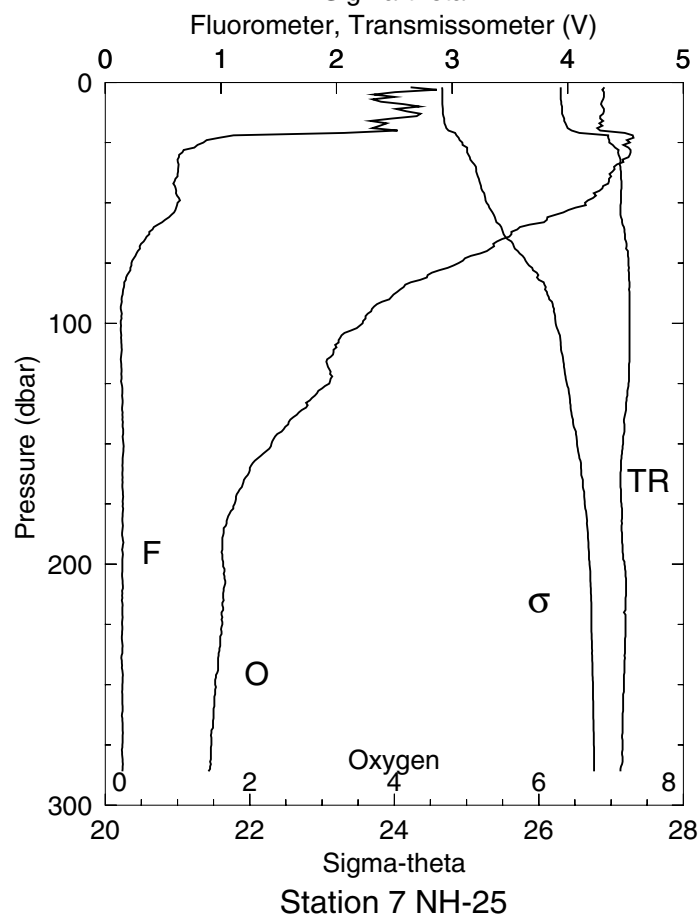
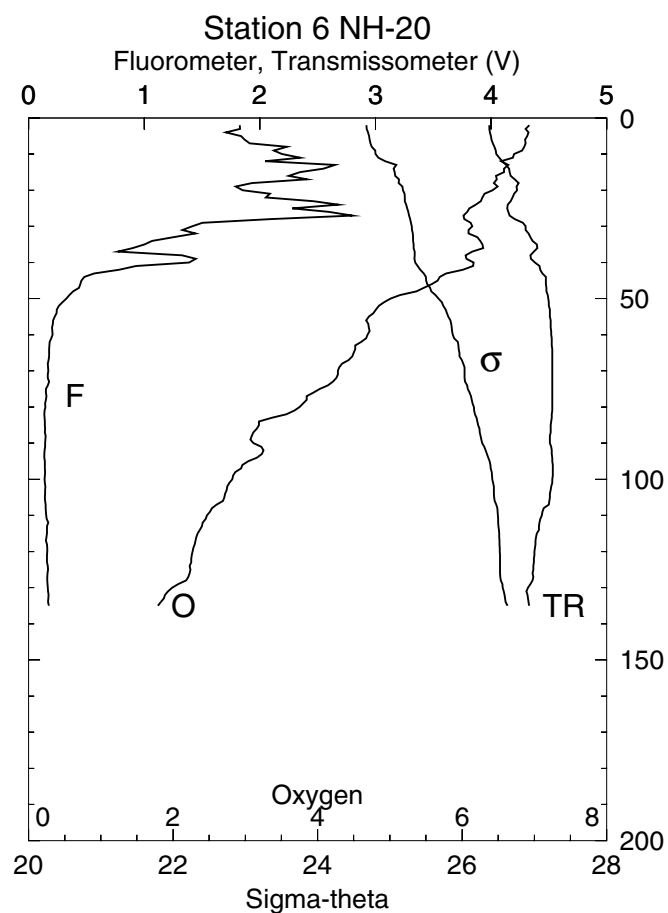
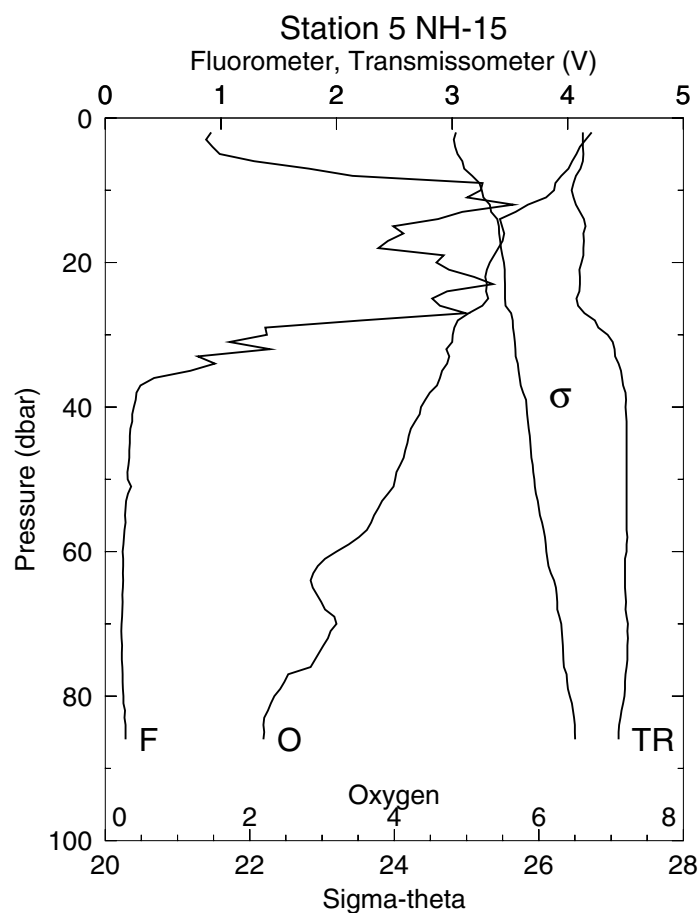


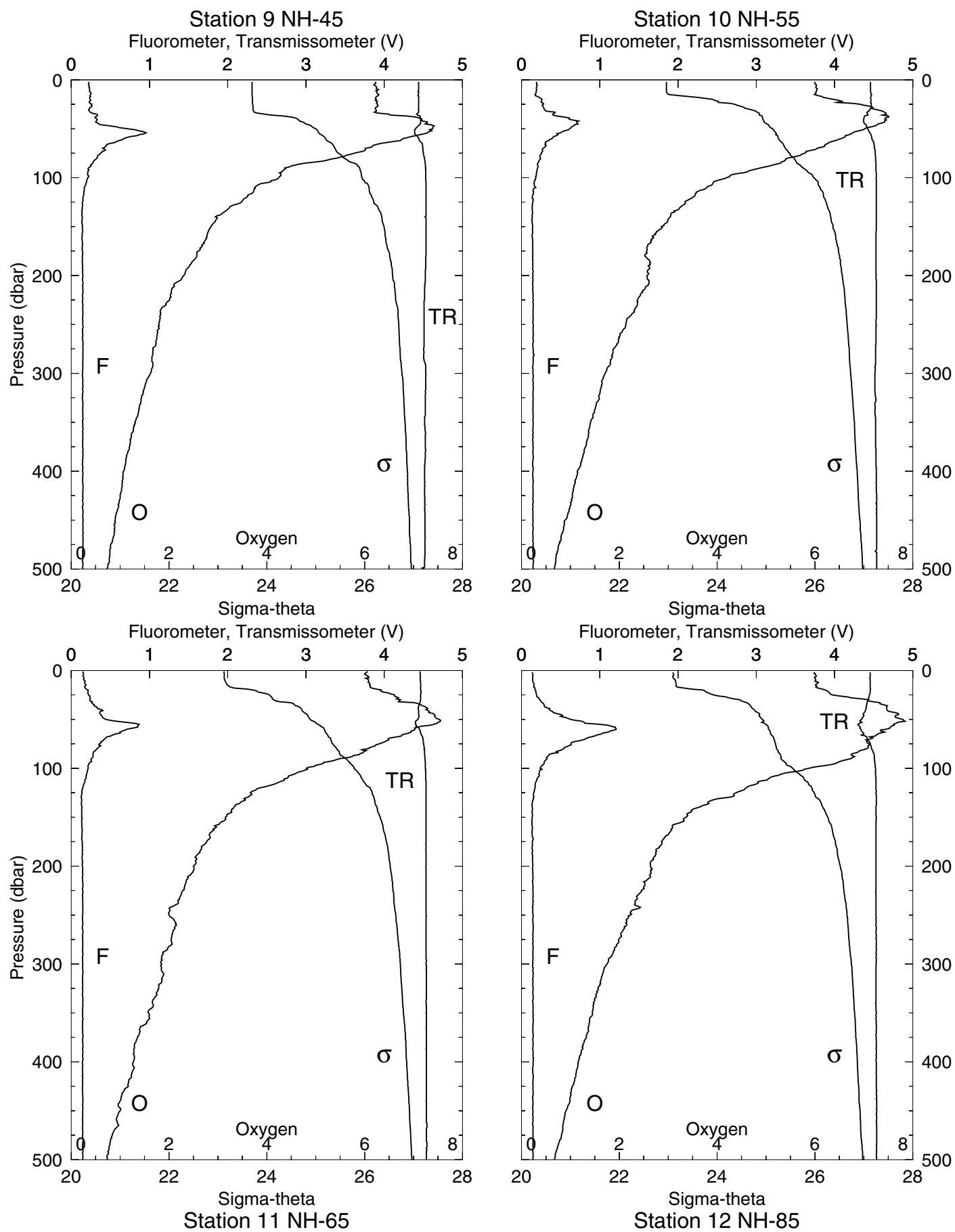


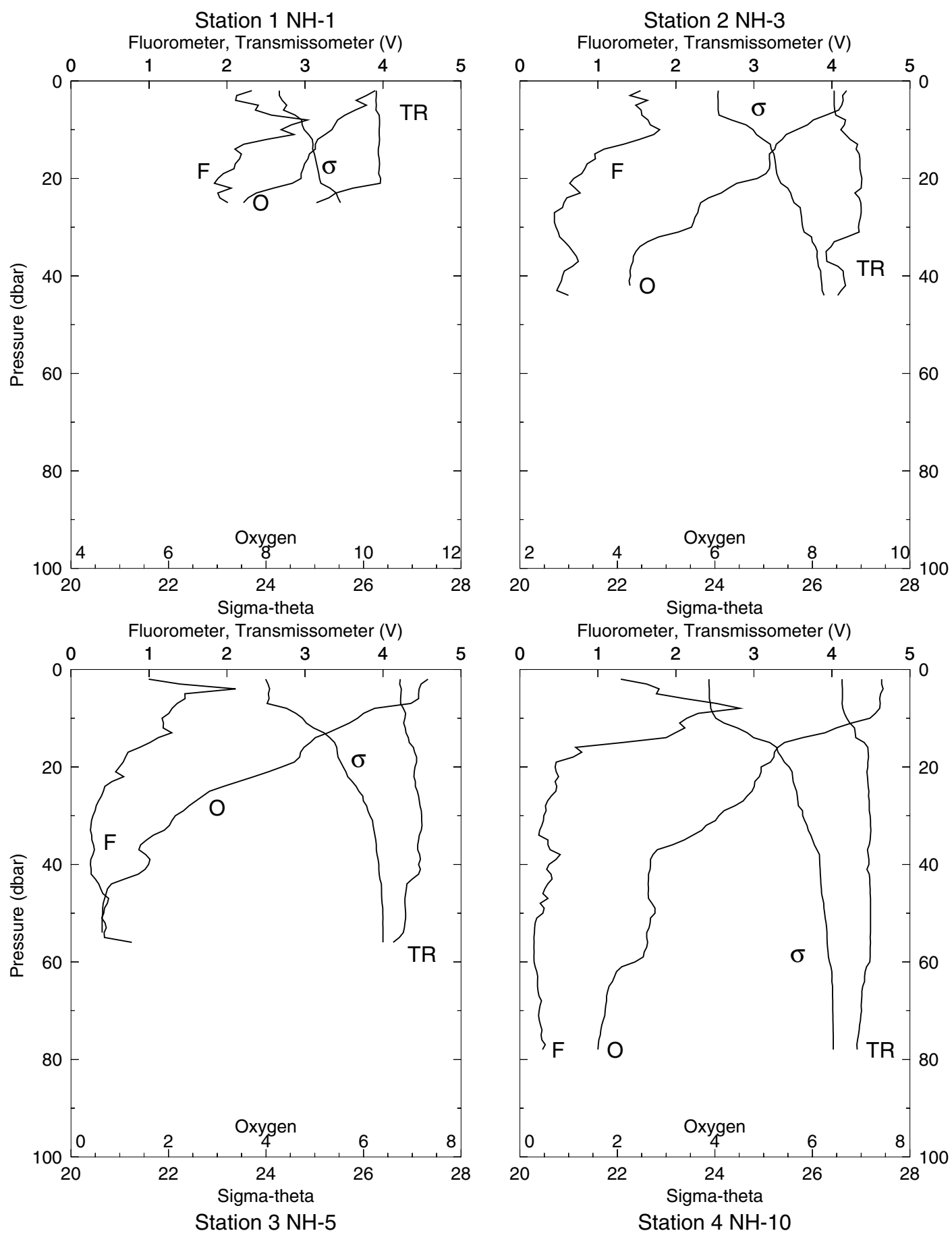


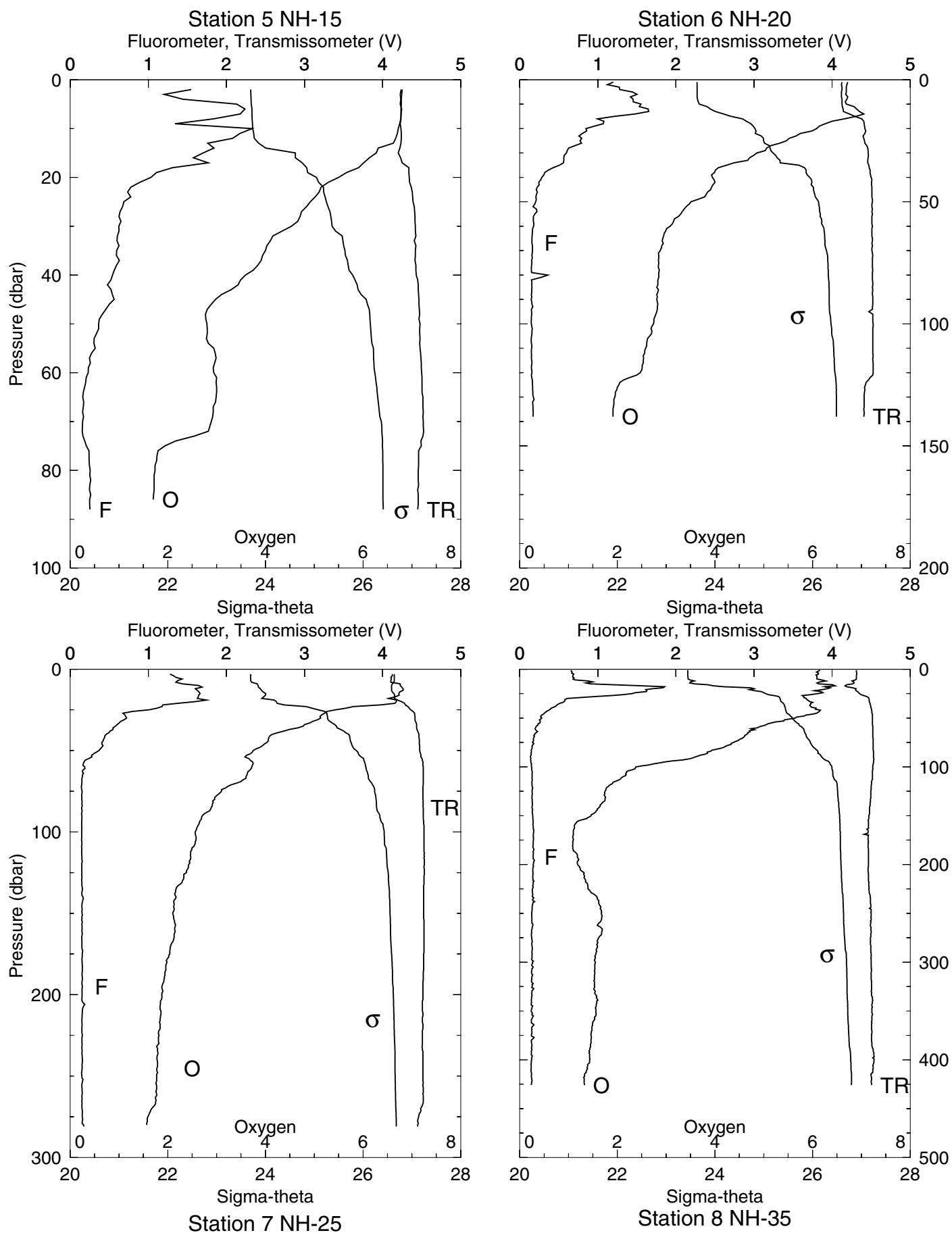


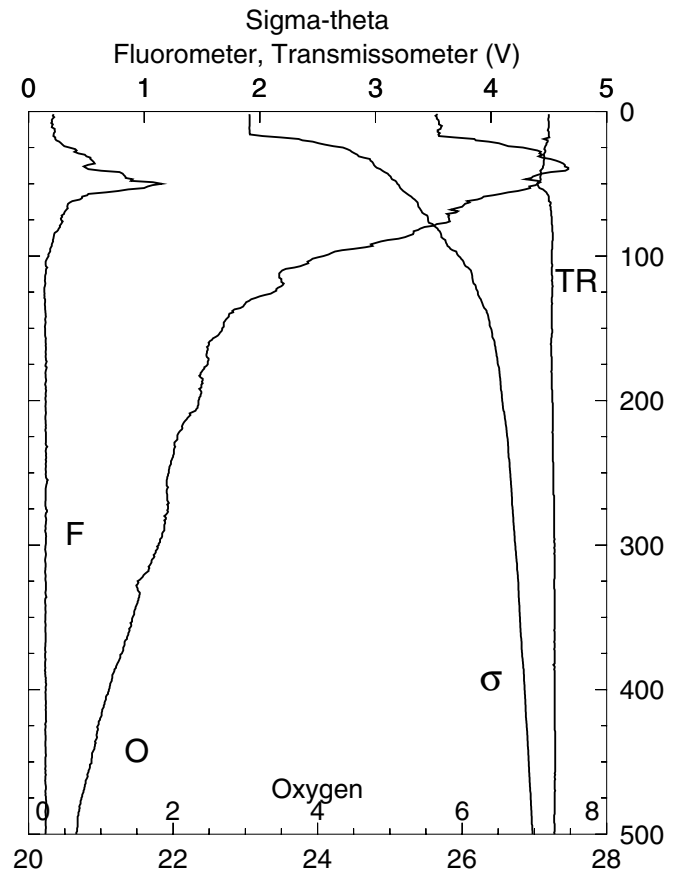
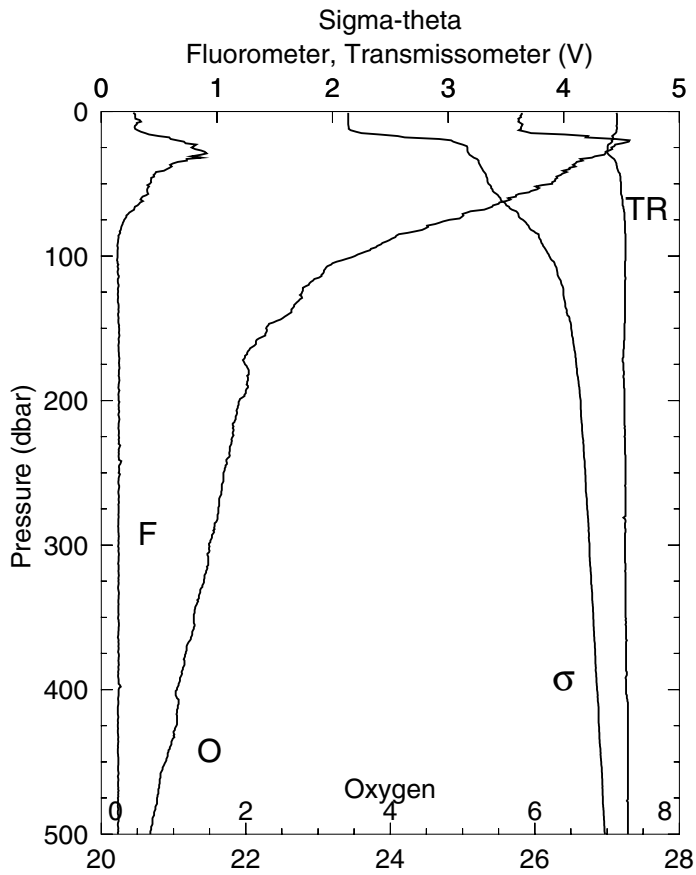
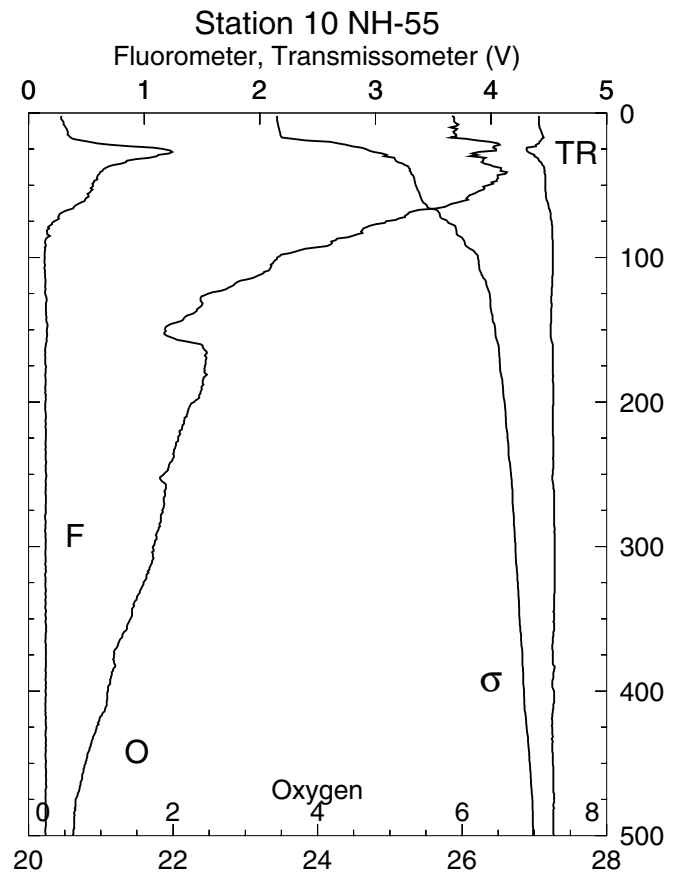
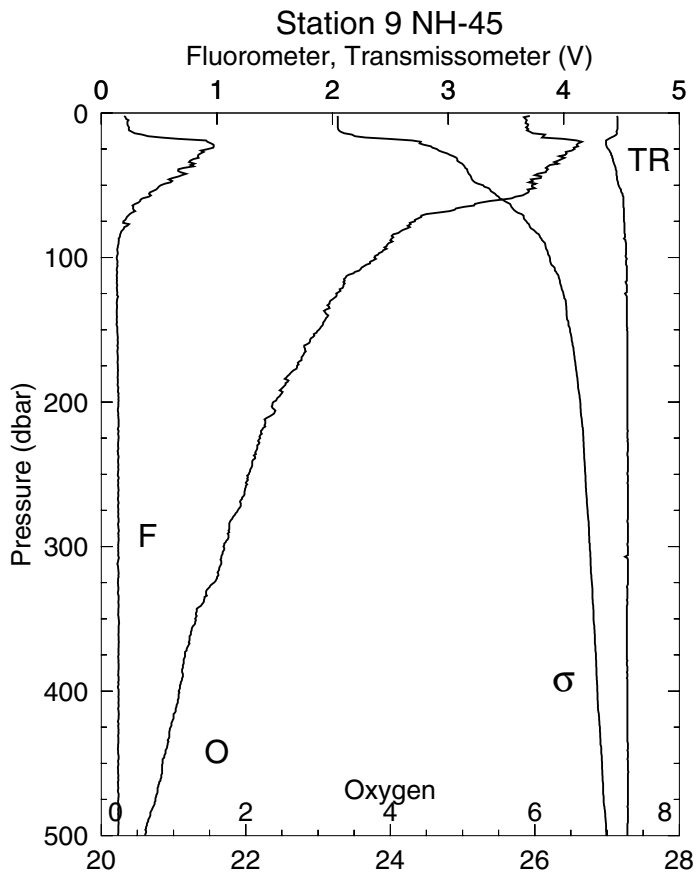


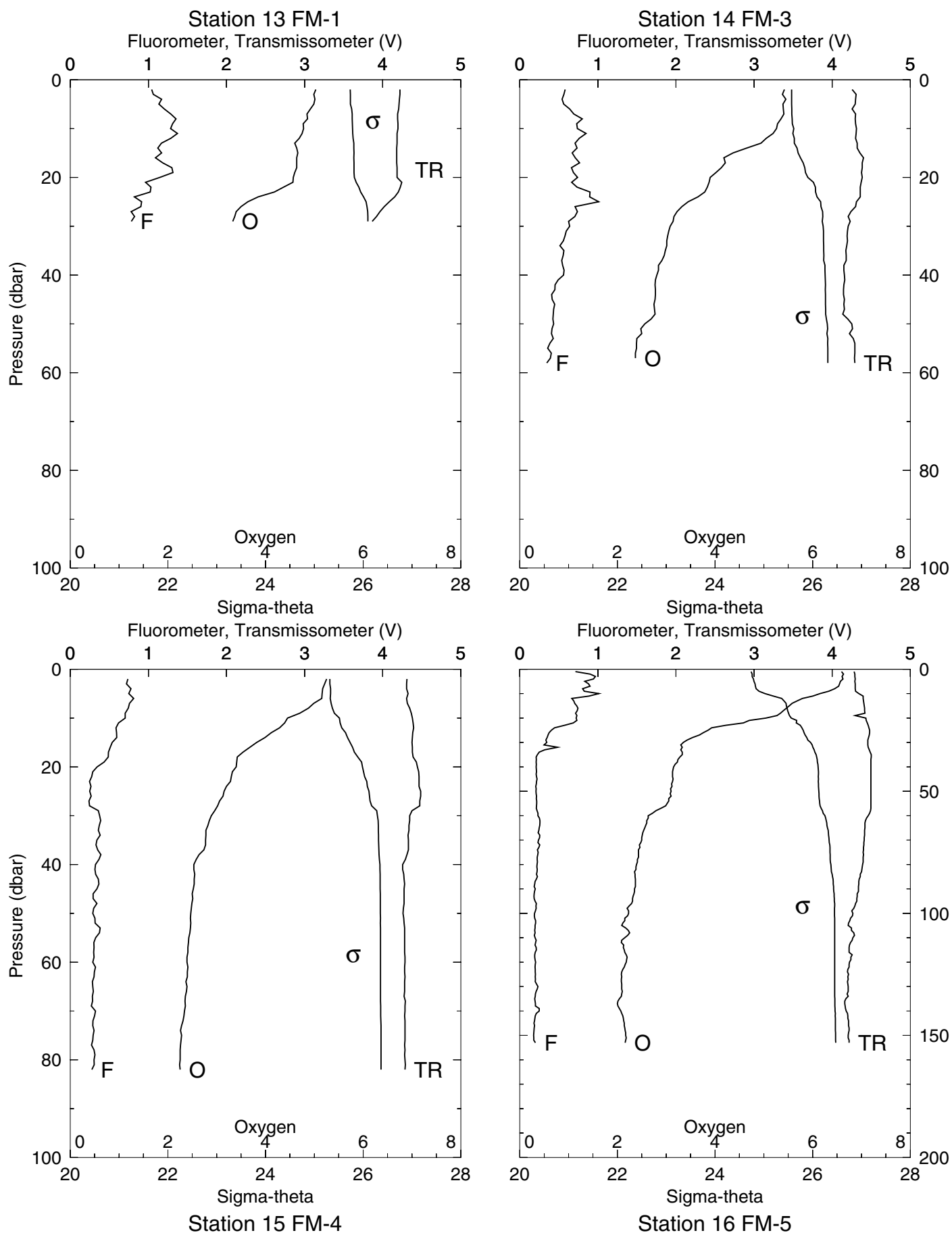


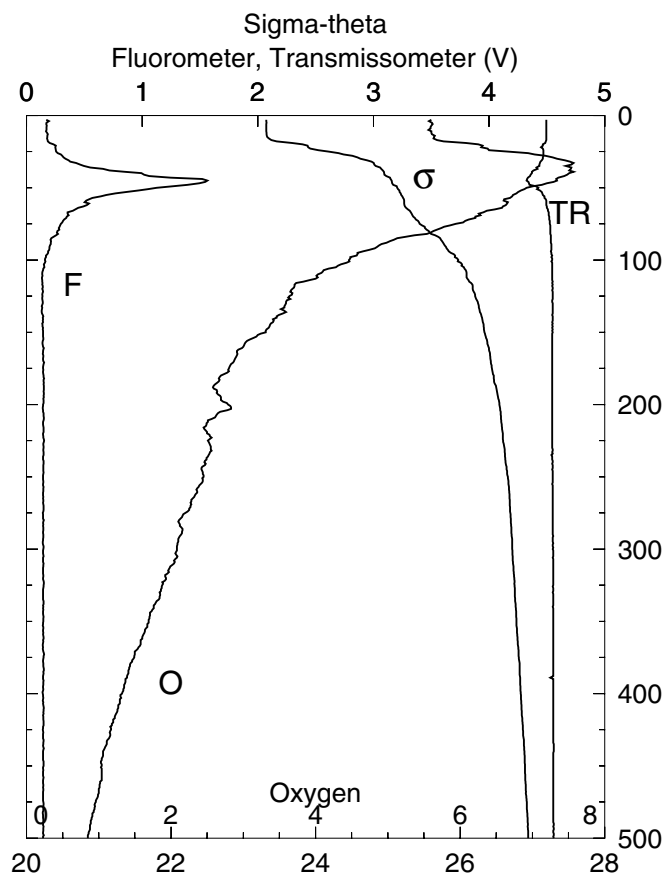
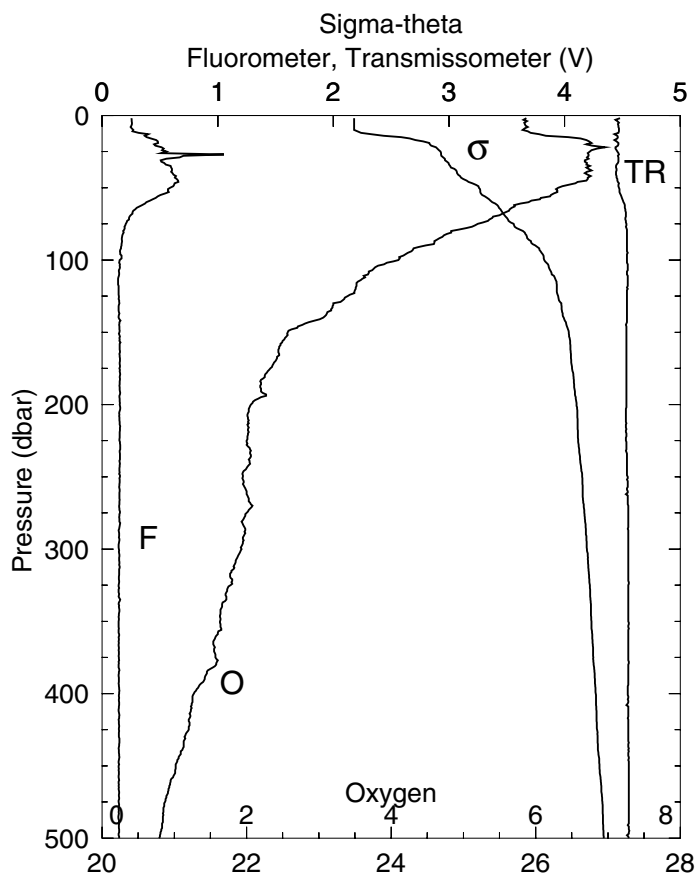
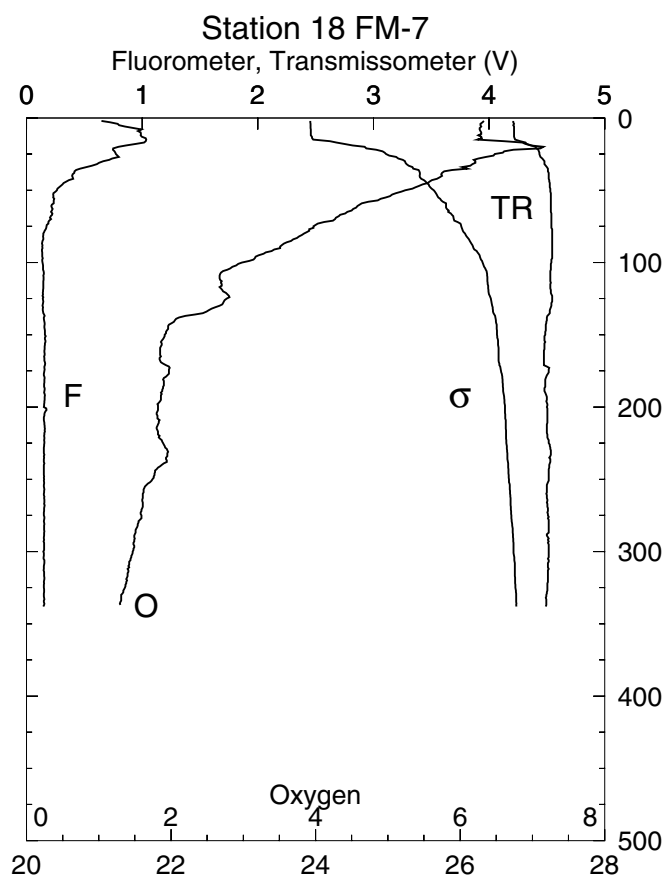
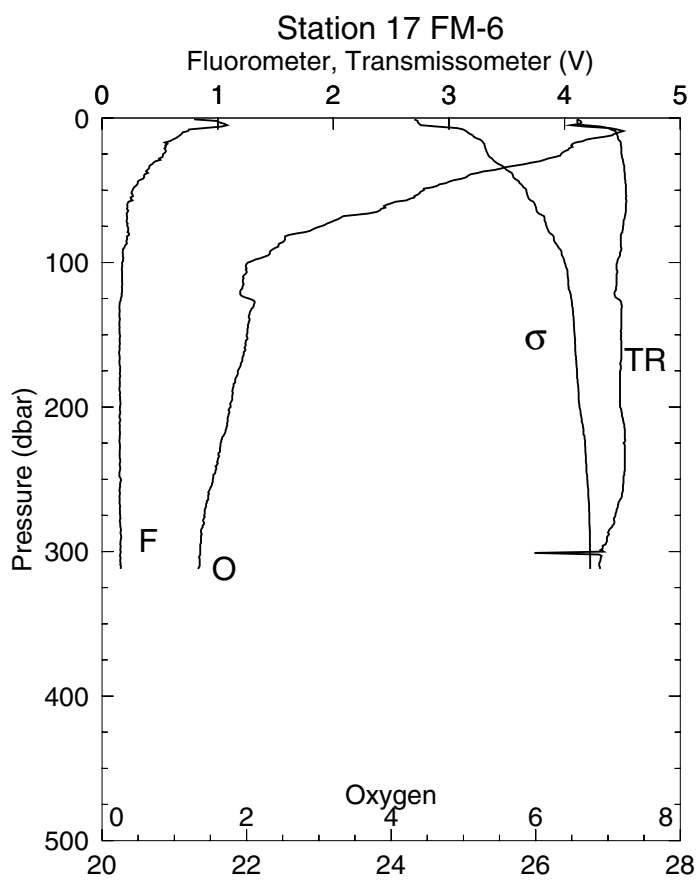


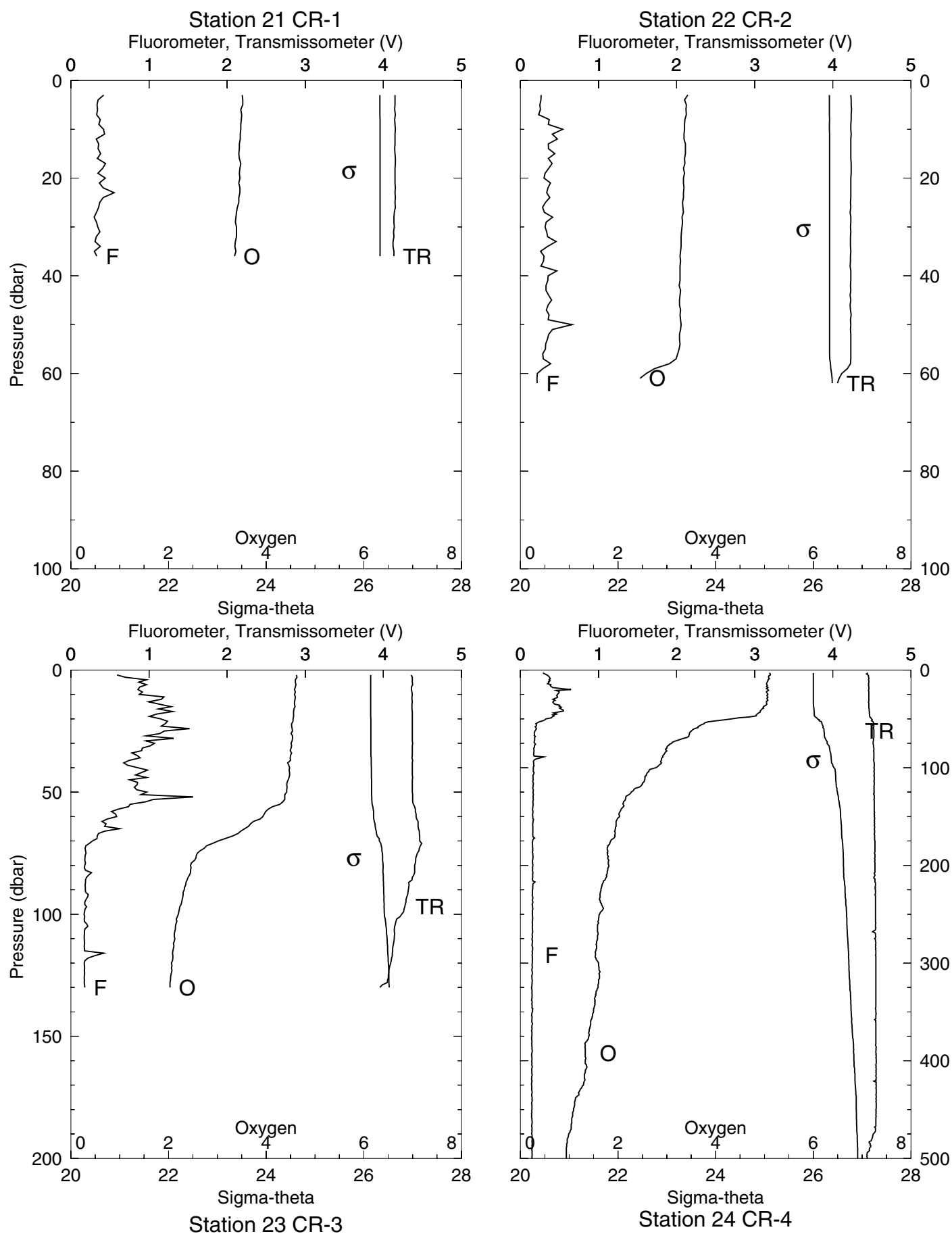


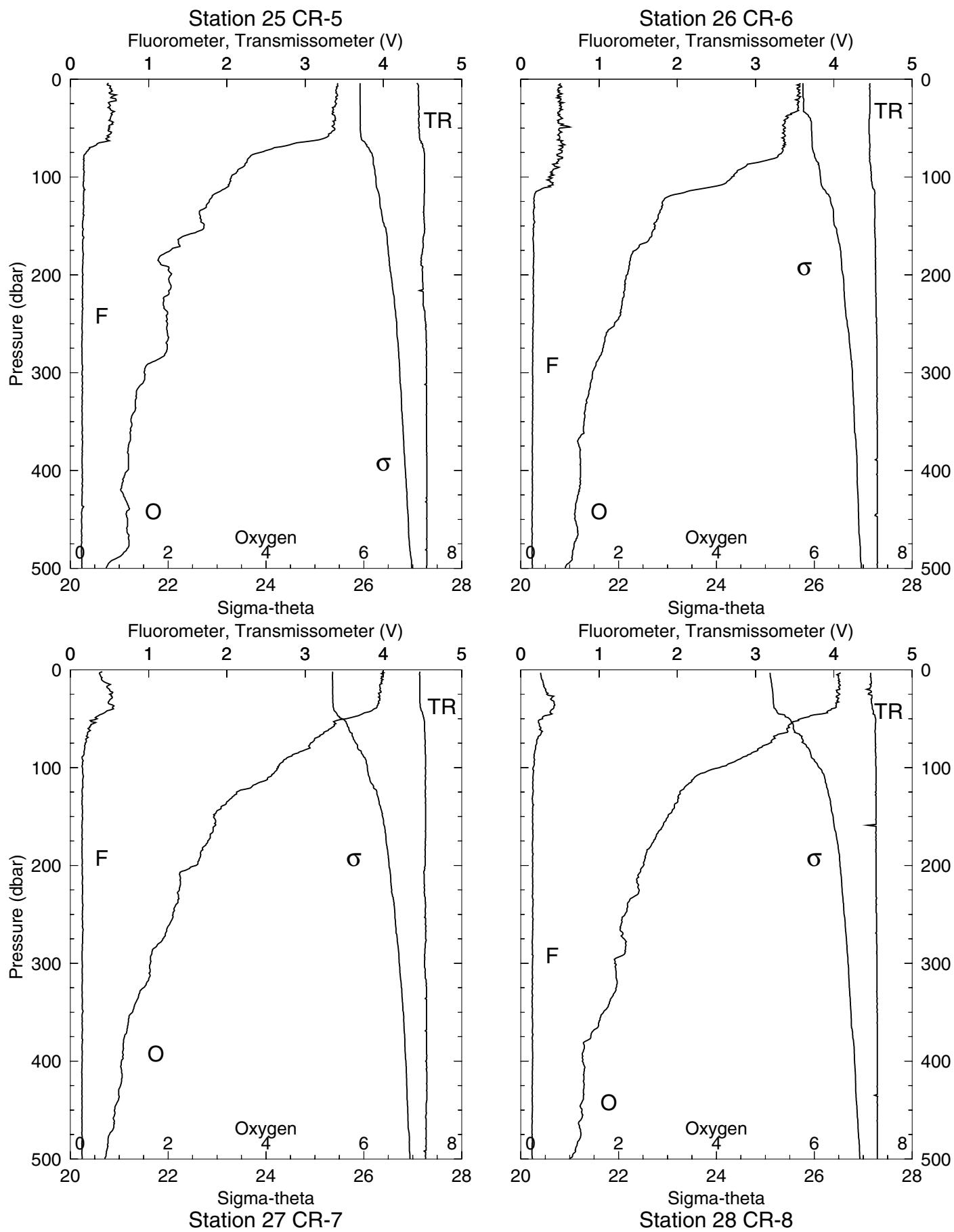


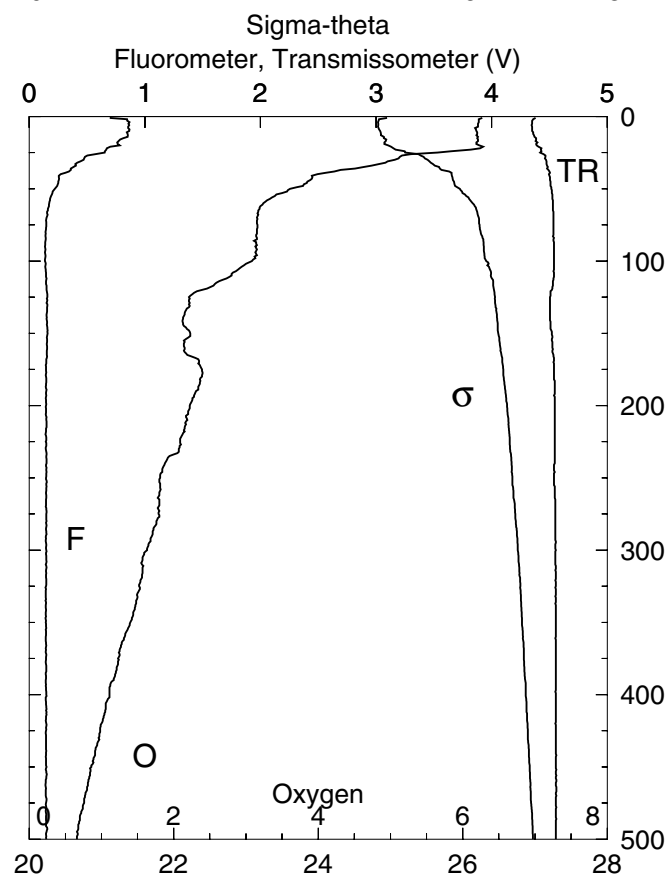
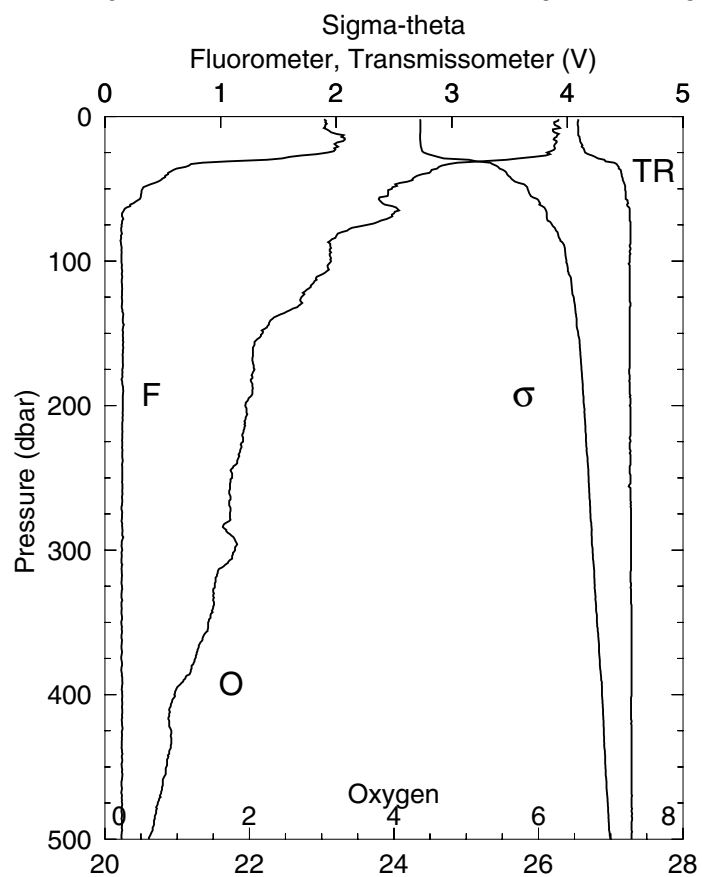
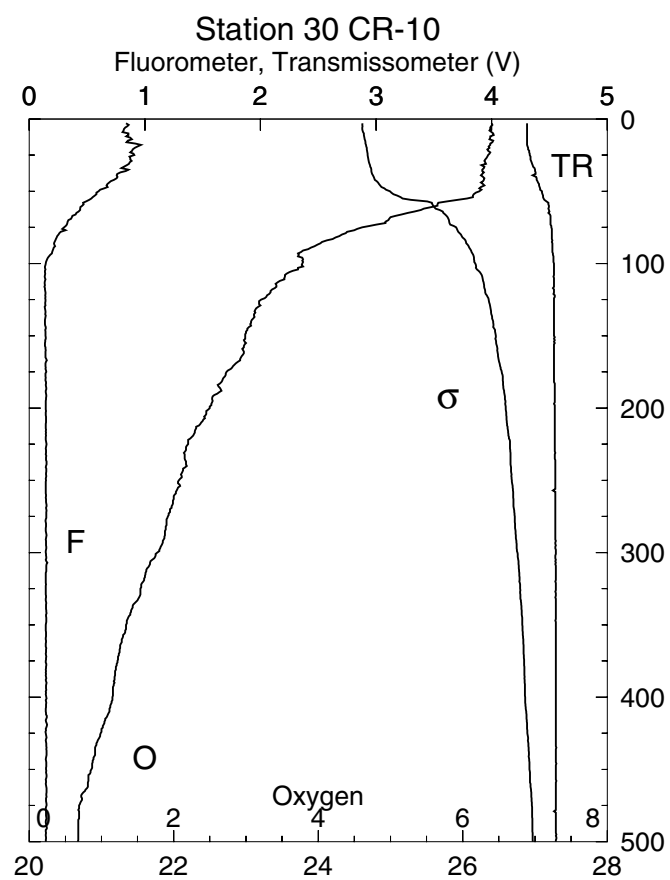
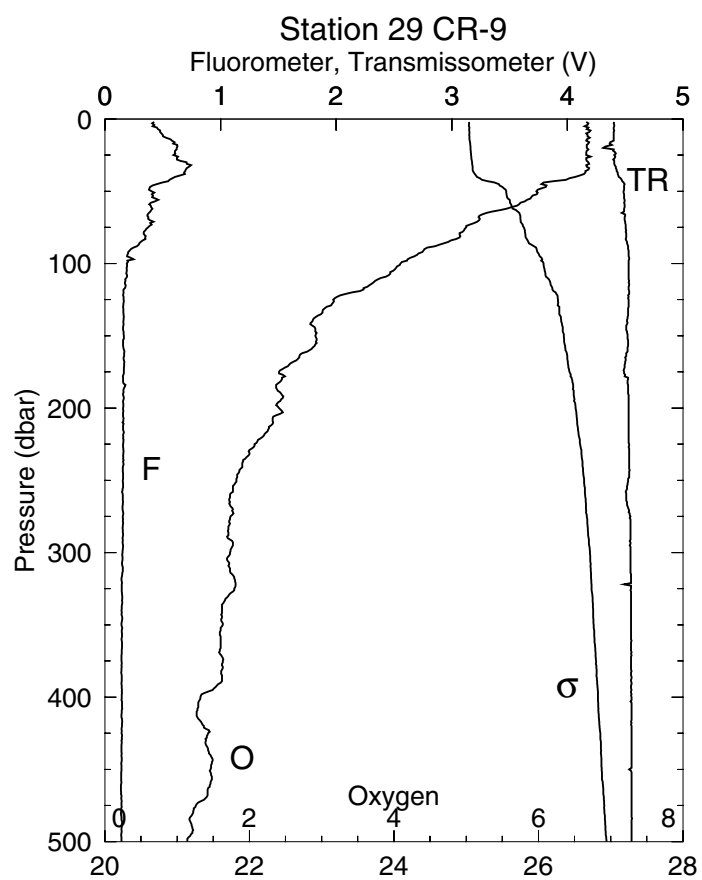


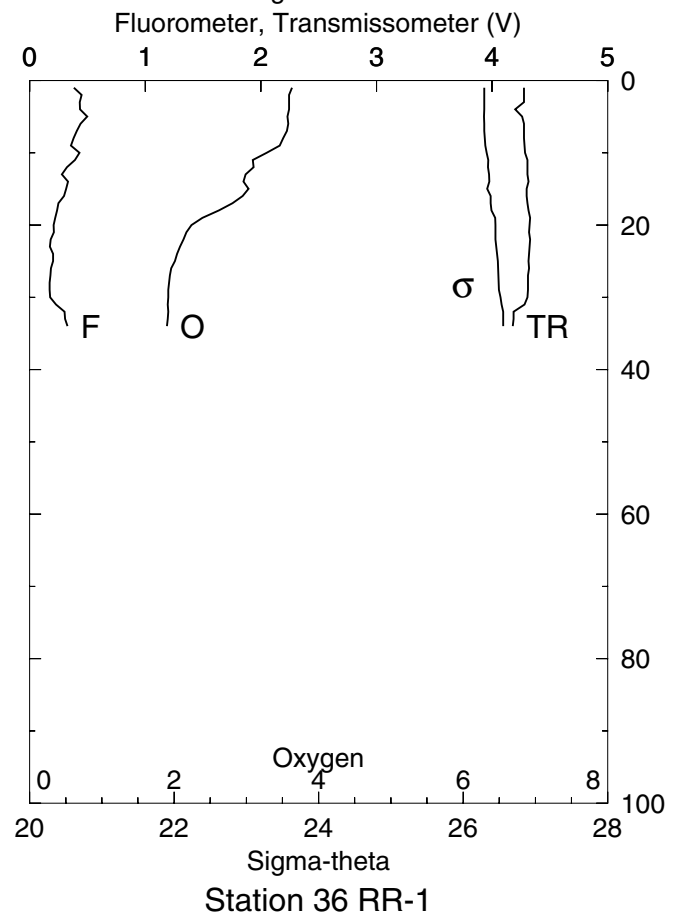
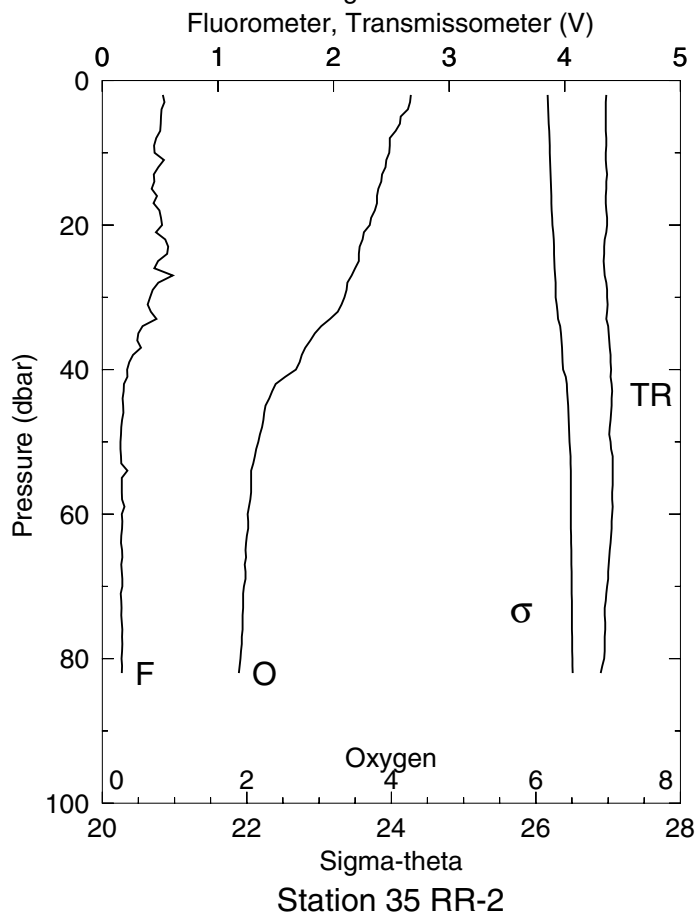
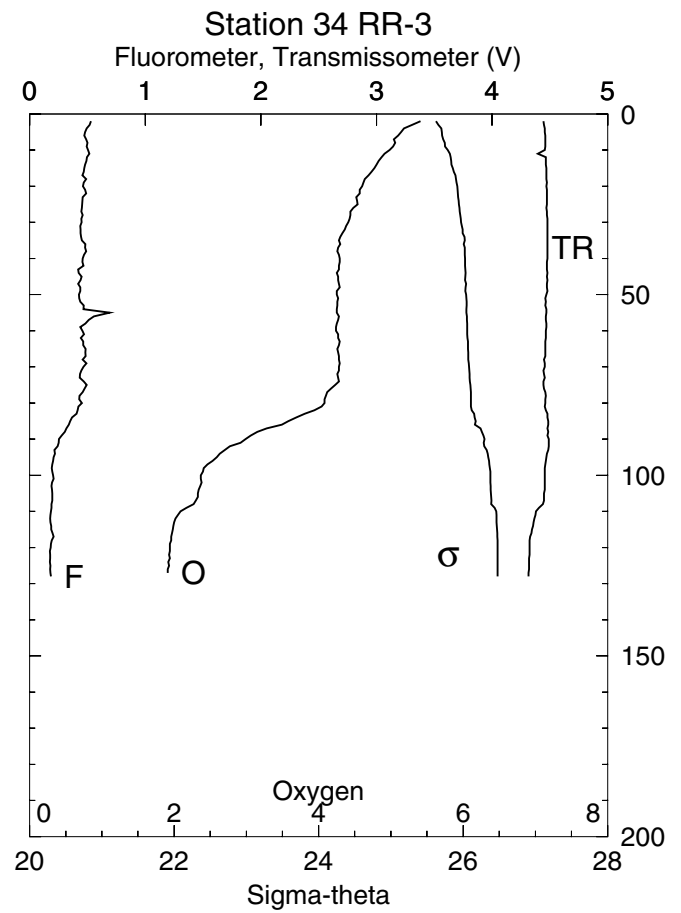
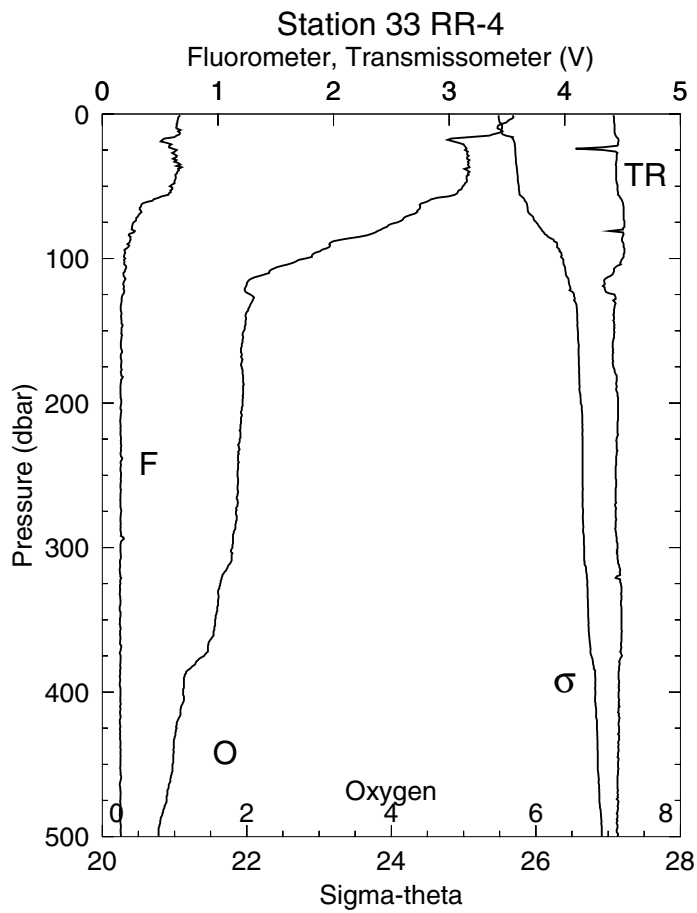


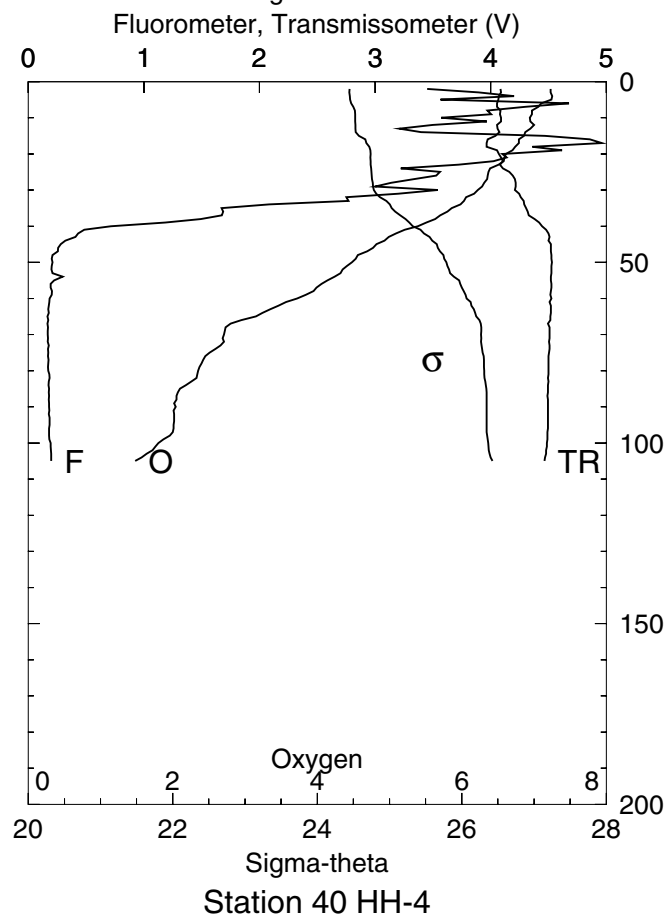
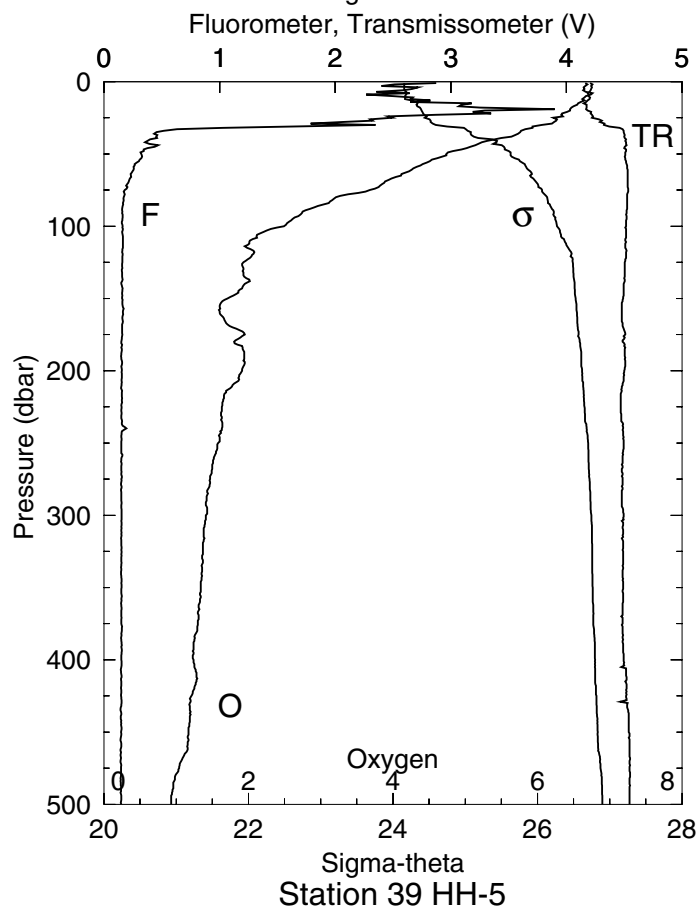
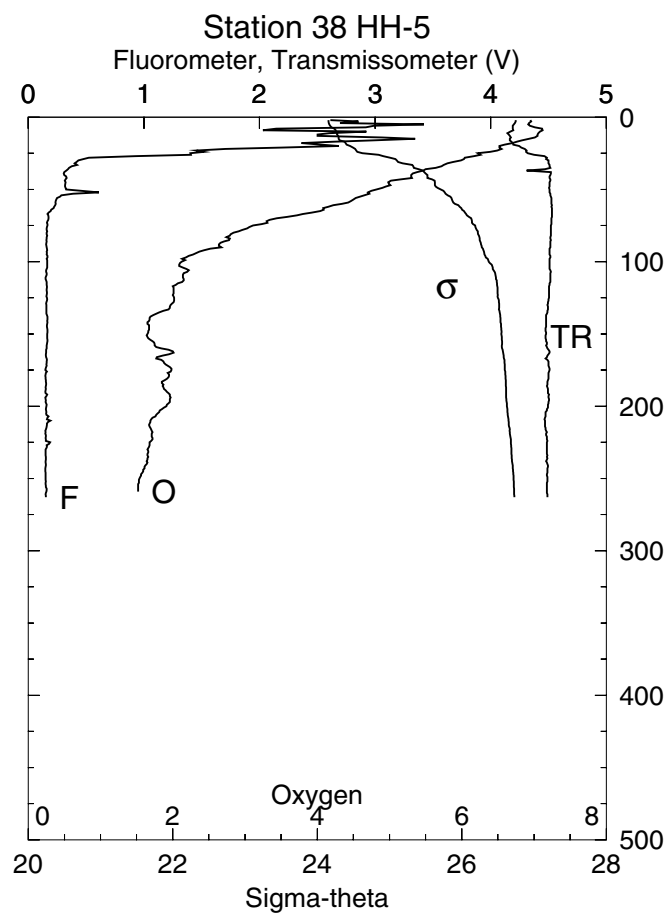
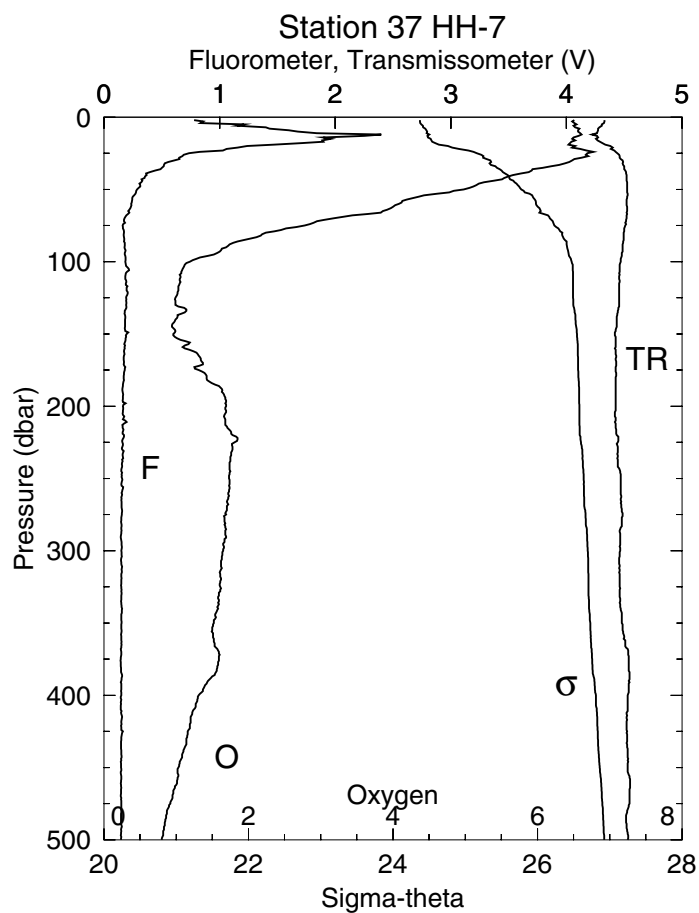


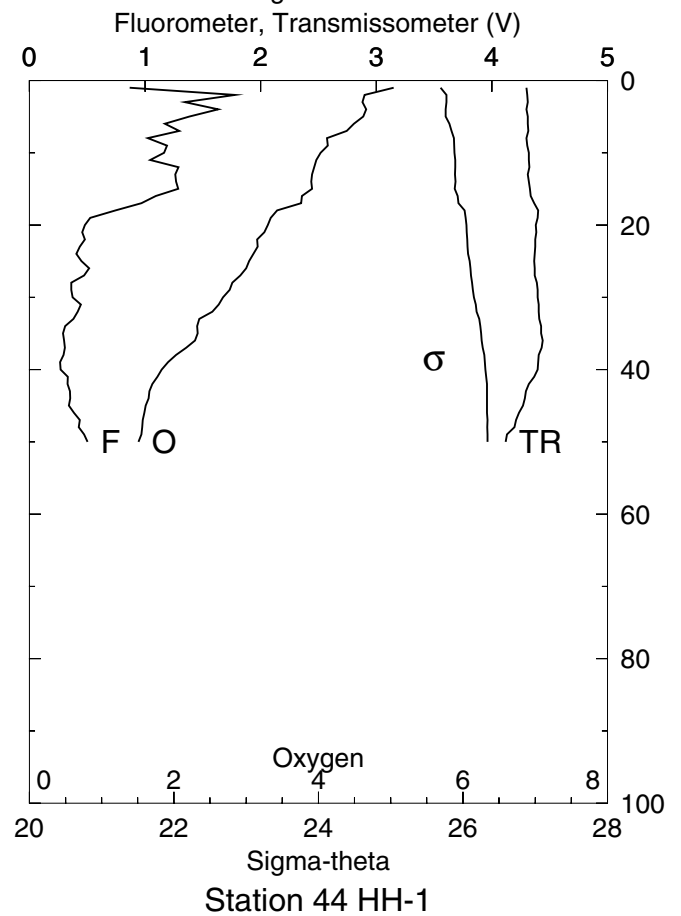
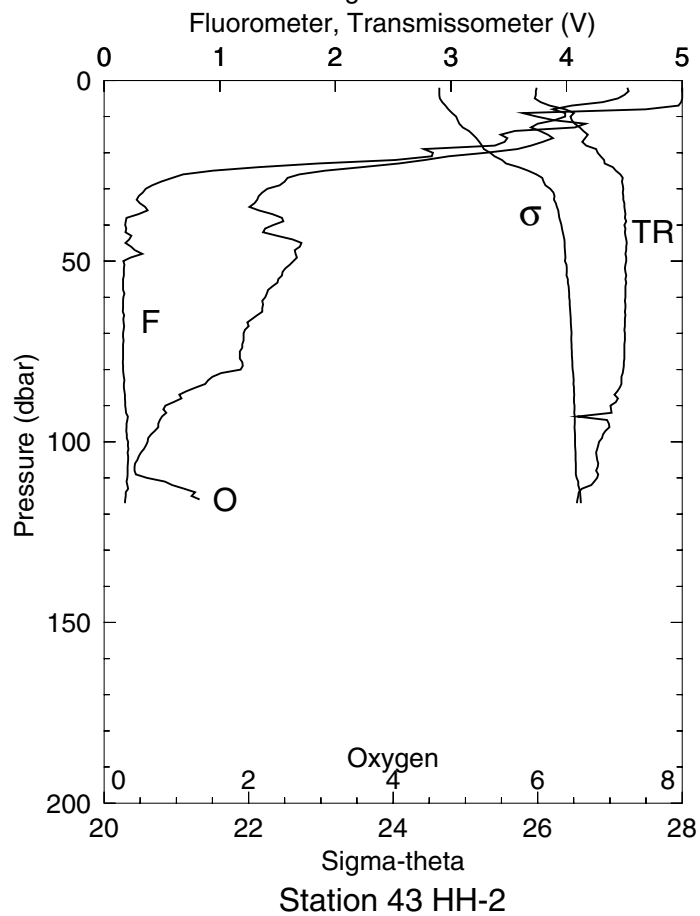
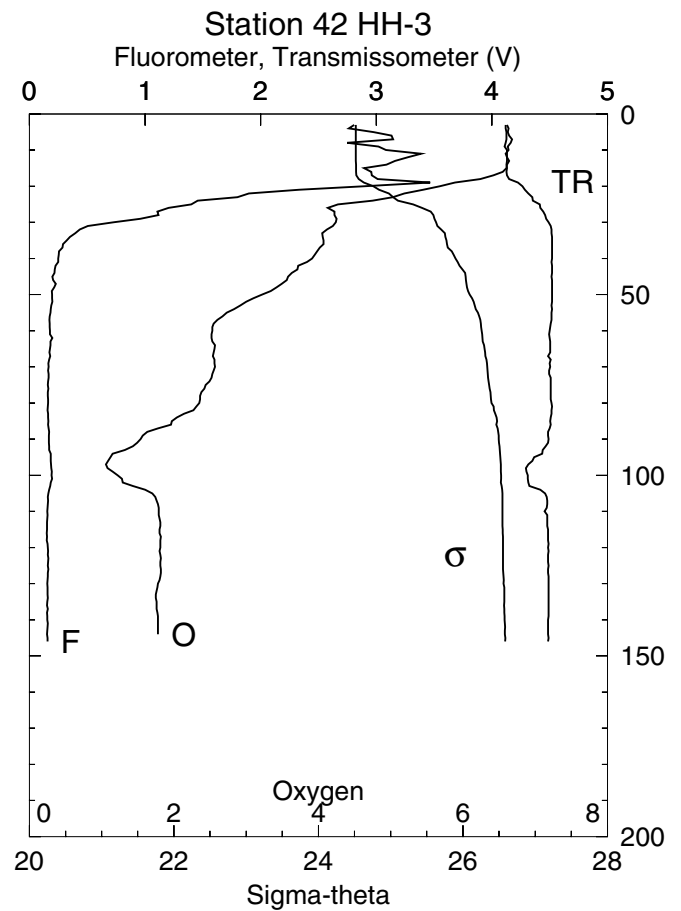
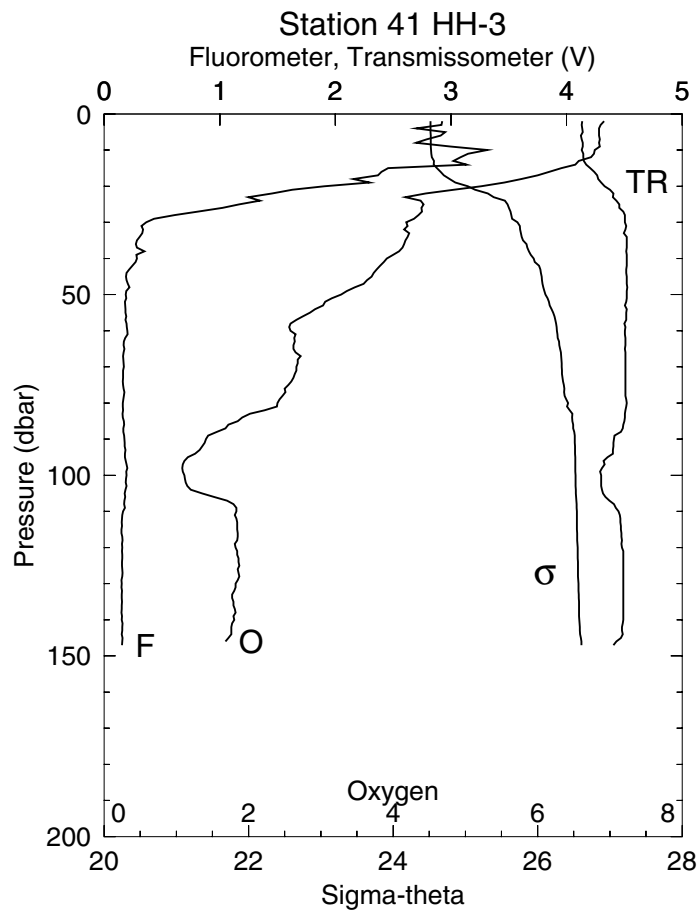


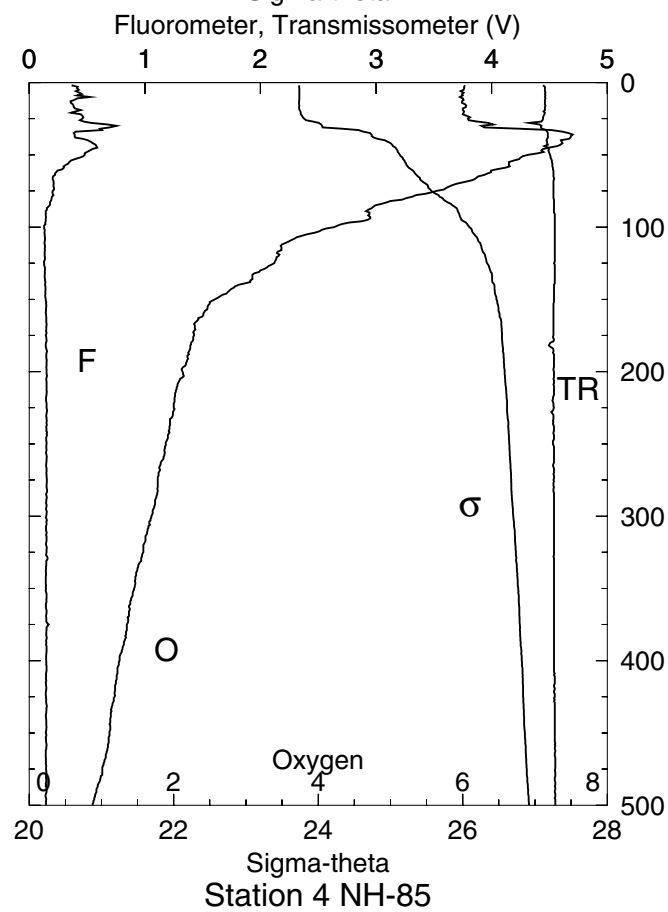
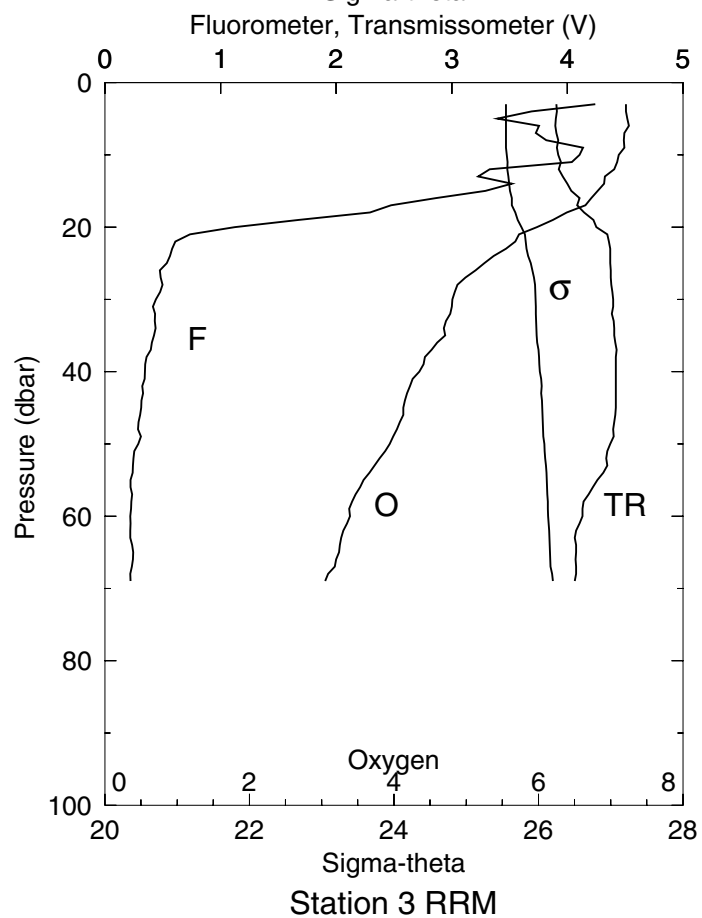
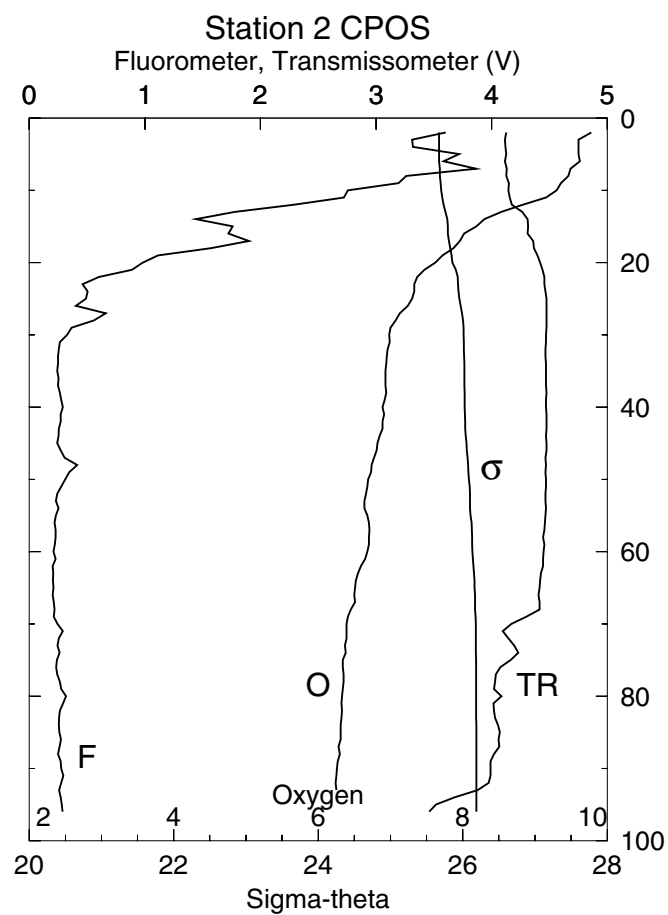
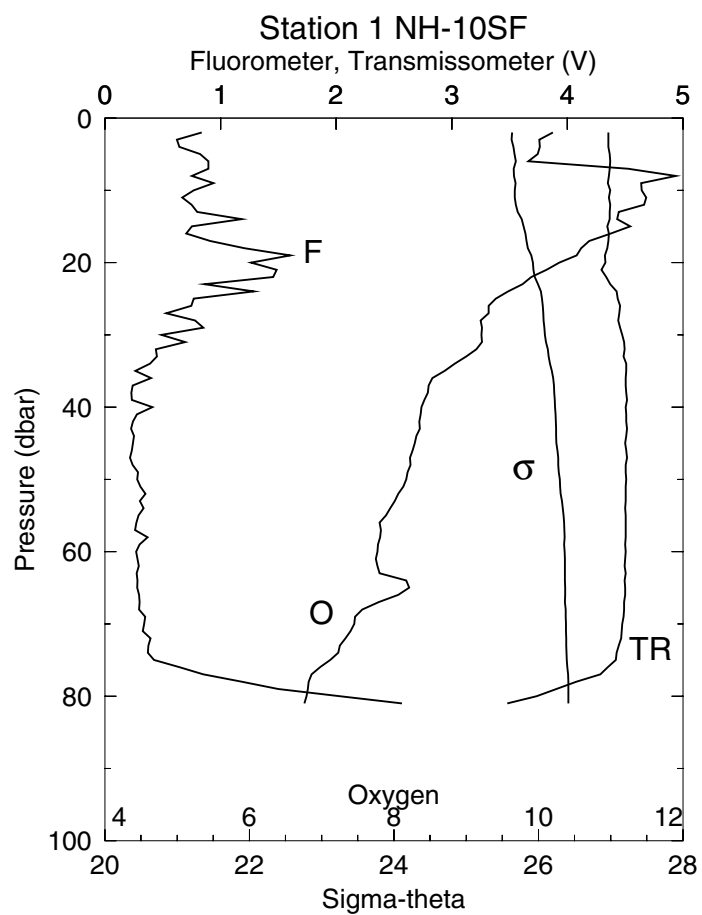


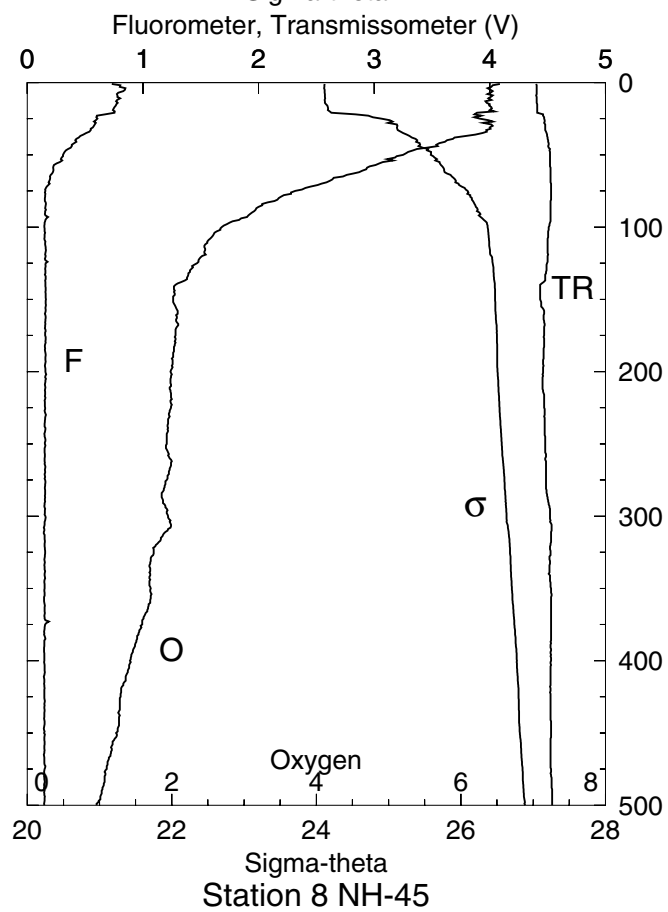
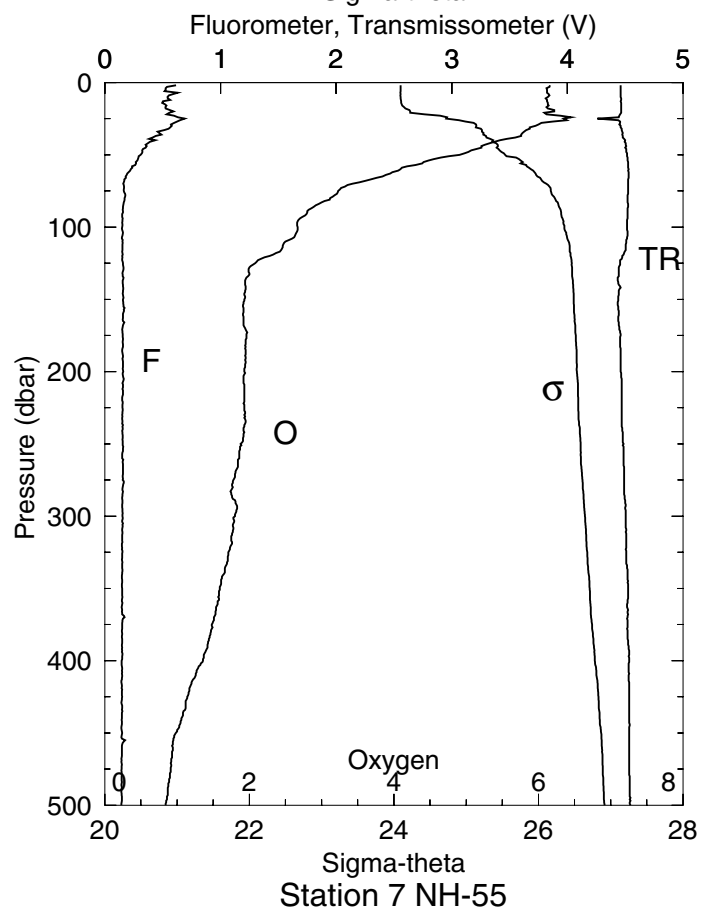
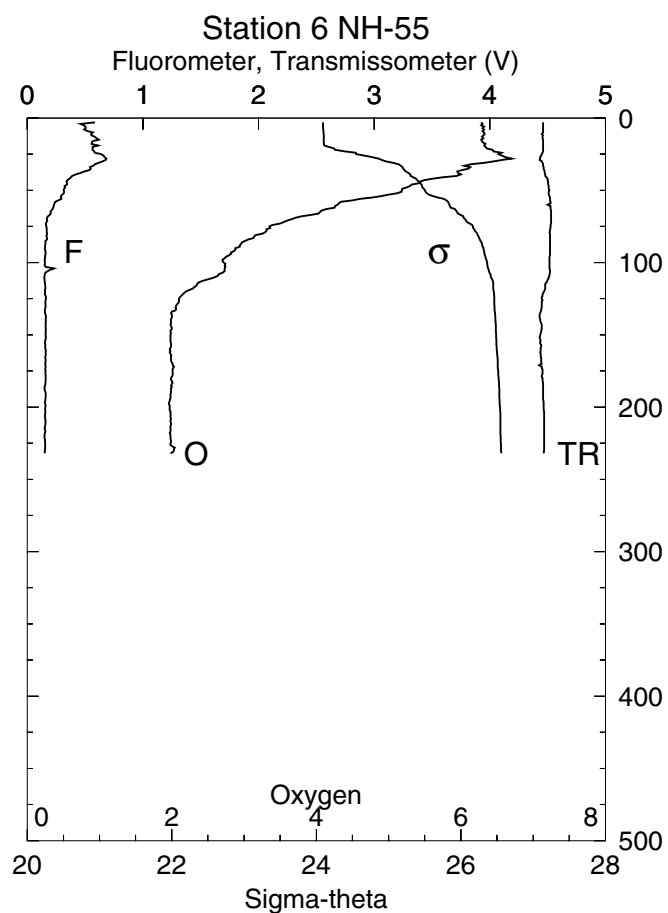
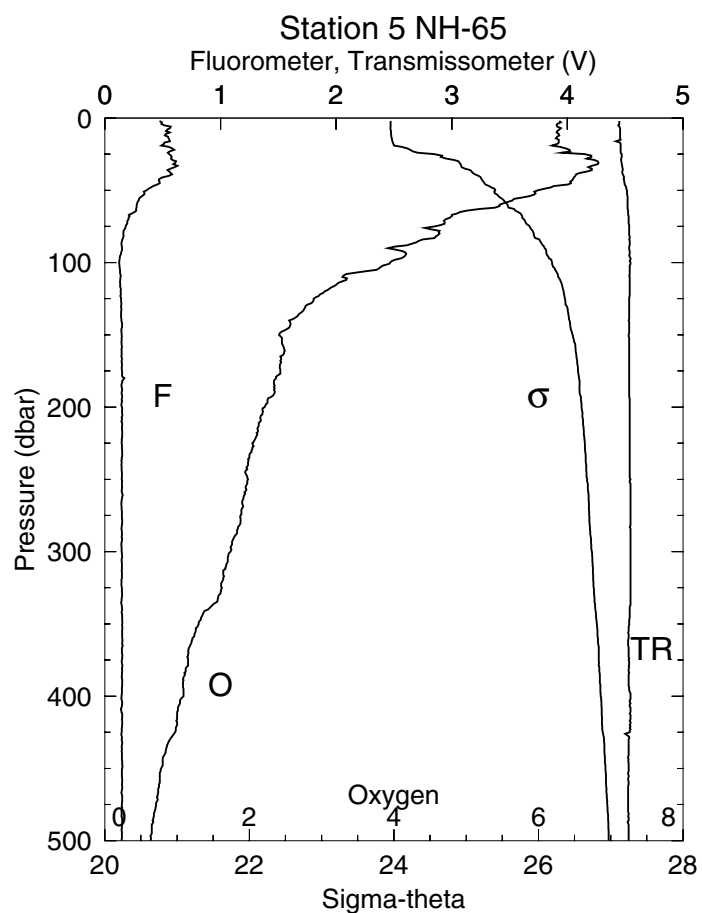


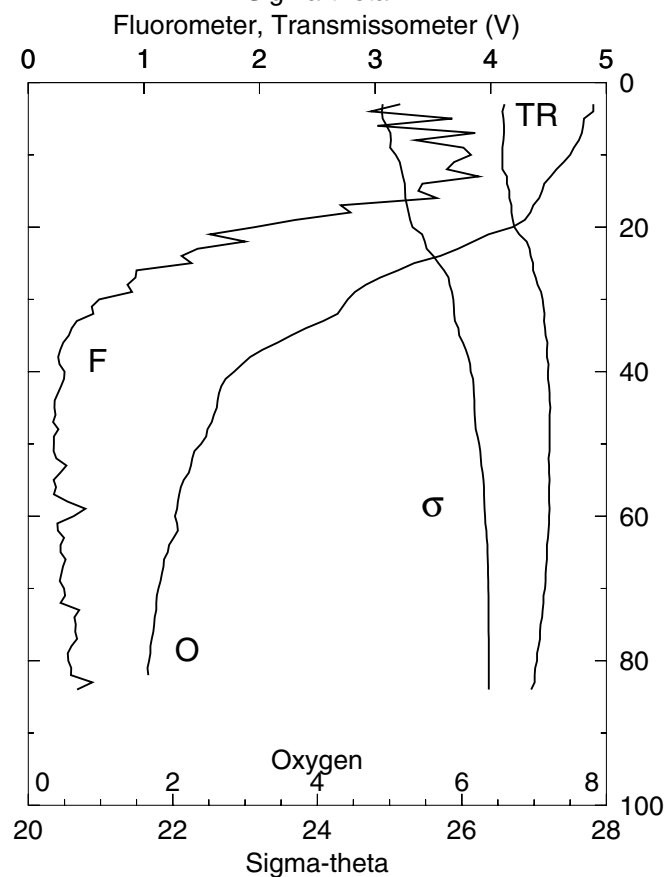
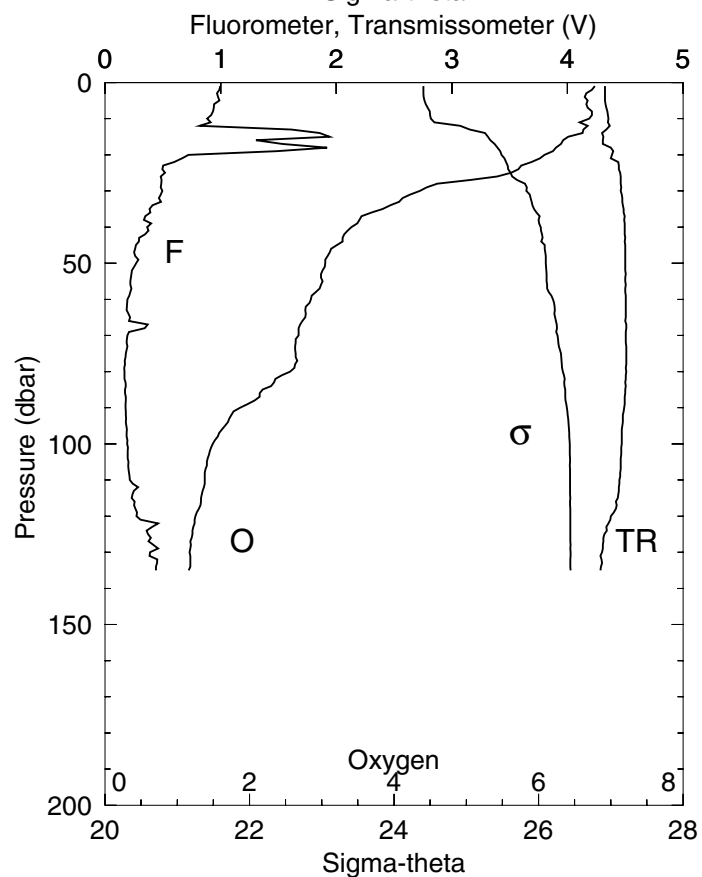
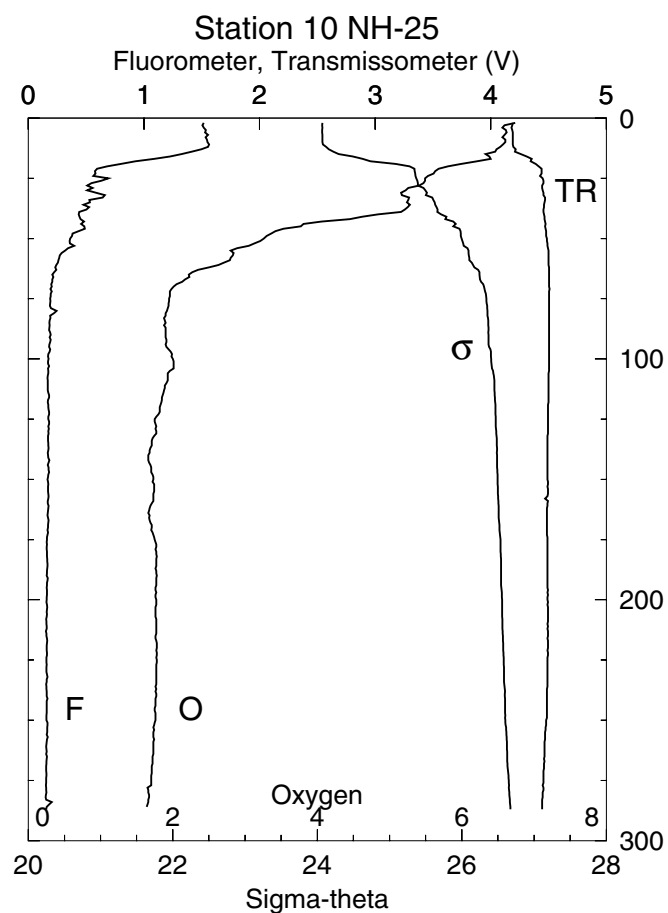
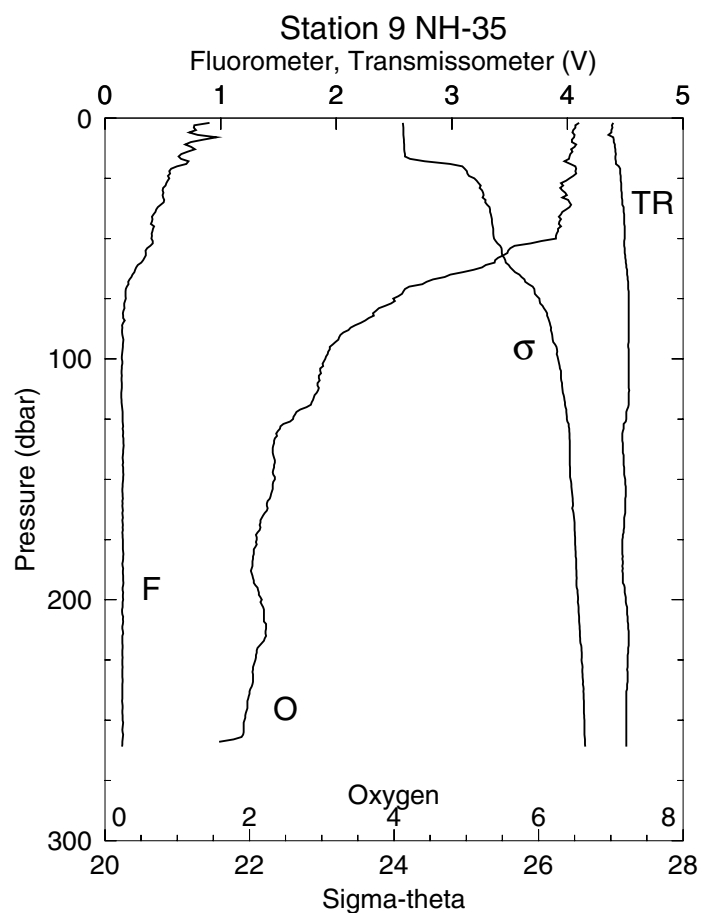


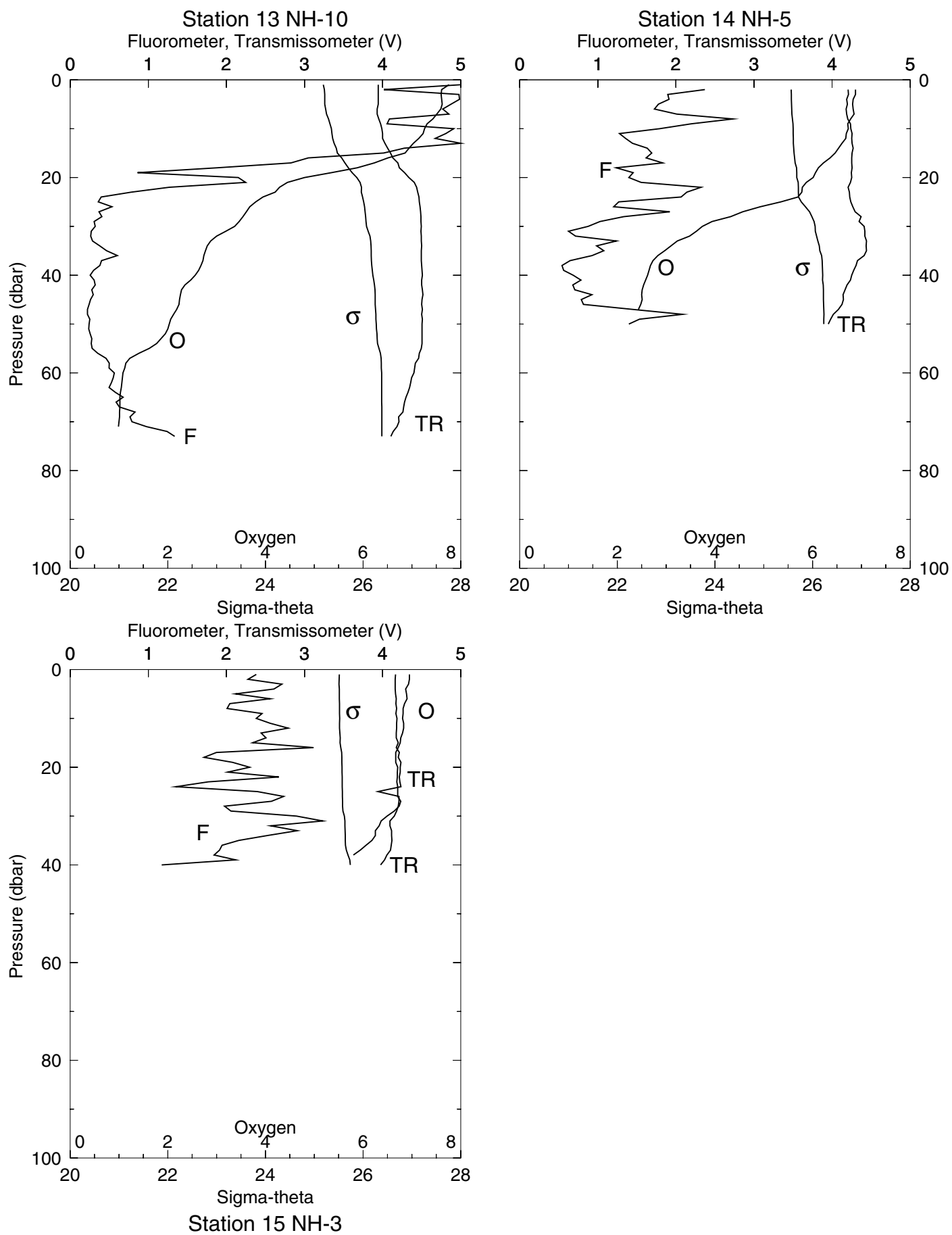


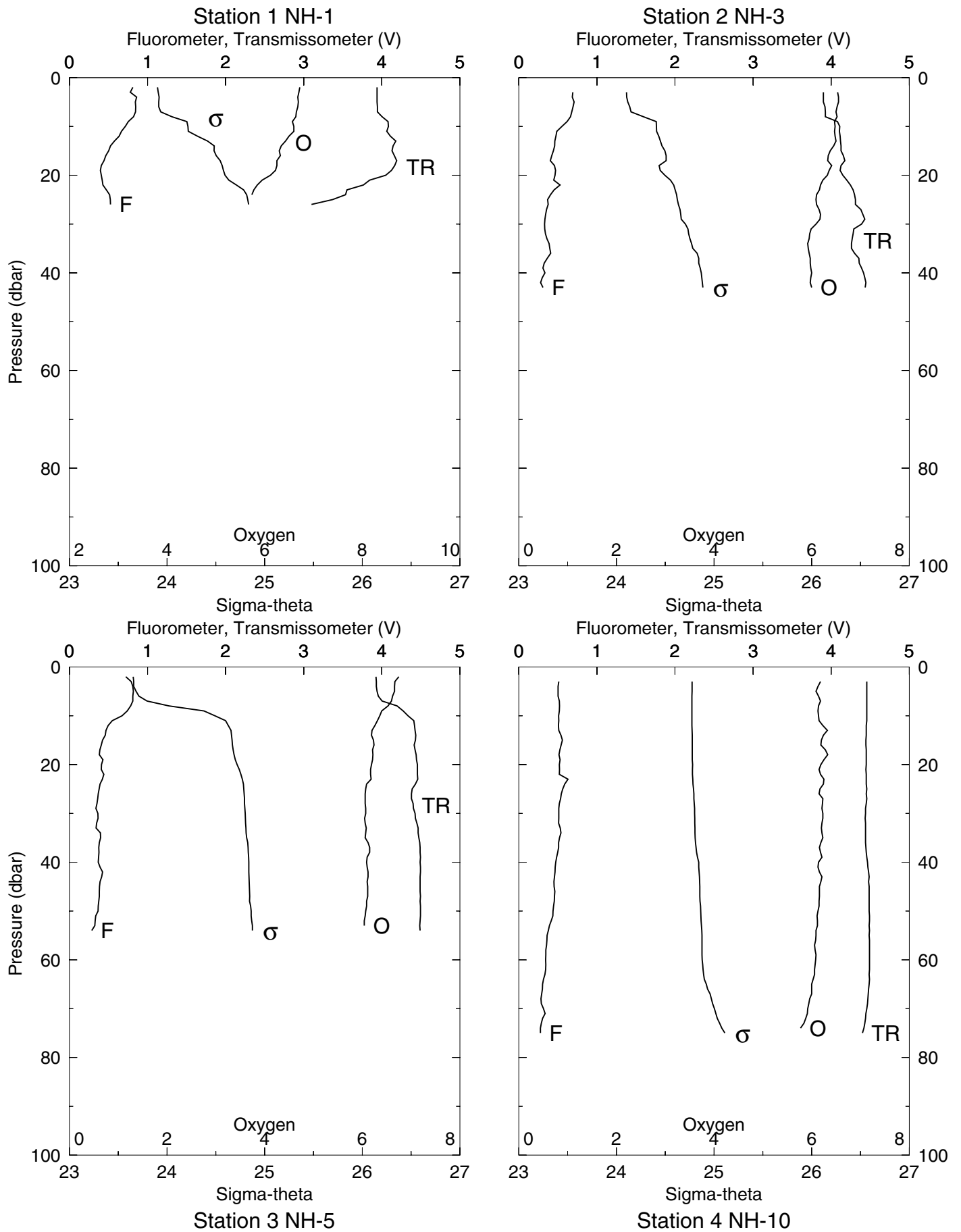


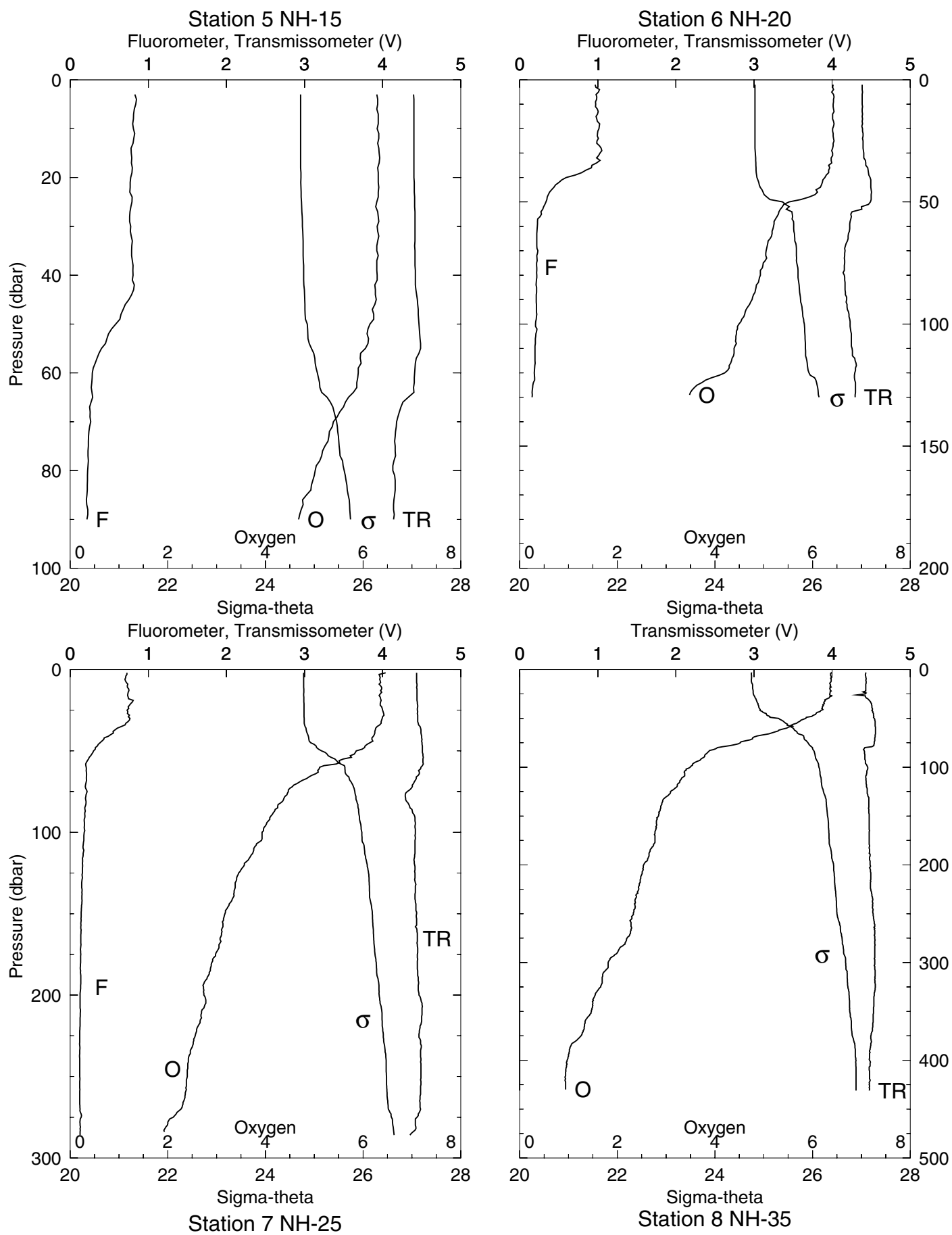












APPENDIX B. CALIBRATION OF DISSOLVED OXYGEN DATA

Dissolved oxygen concentrations reported throughout this data report were those measured by the Beckman oxygen probe mounted on the SBE 9/11*plus* CTD, and were calculated from the recent SBE calibration data (see Table 12 for calibration dates). To check the calibration of the oxygen probe, oxygen concentration was also determined by standard Winkler titrations of water samples collected at a few stations on four of the cruises. The sample titration values (collected during ascent) were compared with CTD values at the same depths (measured during ascent). Results are summarized in a set of scatter diagrams (one for each of the four cruises), and in 10 profile plots (one for each station).

There are some systematic differences between Winkler and CTD values, which tend to increase with time since calibration, as might be expected from aging of the sensor. We have therefore calculated simple linear regression equations, one for each cruise, and these are provided in Table B1. We have not applied these equations to our reported values, as our interest is in the vertical and offshore structure. However, we recommend applying these corrections to anyone who is seriously interested in comparing absolute values between cruises.

The full set of sample values of the dissolved oxygen concentration measured by Winkler titration is given in Table B2.

Table B1. Results of simple linear regression of Winkler titration values on CTD values of dissolved oxygen concentration, by cruise.

	Number of Samples	Intercept	Slope	Rms deviation from regression line
W0101C	21	0.06	1.144	0.03
W0103B	36	0.06	0.930	0.05
W0107A	12	0.14	0.984	0.19
W0109A	57	0.06	0.984	0.14

Table B2. Oxygen calibration data for January to November 2001.

Cruise	Station Number	Station Name	Date	Latitude	Longitude	Pressure (dbar)	O ₂ -titration (ml/l)	O ₂ -probe (ml/l)
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	10.6	6.338	5.49526
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	20.3	6.351	5.47682
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	24.9	6.343	5.46701
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	30.0	6.354	5.46703
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	40.0	6.308	5.45102
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	50.2	6.316	5.41891
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	69.6	6.245	5.36165
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	150.5	3.63	3.14151
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	499.7	0.539	0.40228
W0101C	9	NH-45	28-Jan-02	44°39.1'N	125°06.9'W	624.3	0.363	0.22725
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	1.5	6.38	5.54486
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	19.3	6.366	5.52629
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	51.2	6.365	5.51286
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	100.0	4.279	3.73561
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	160.0	3.775	2.41055
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	199.5	2.485	2.15741
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	299.5	1.729	1.49923
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	398.9	1.244	1.04276
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	498.7	0.728	0.58701
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	600.0	0.43	0.3194
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	800.1	0.228	0.12394
W0101C	10	NH-55	28-Jan-02	44°39.1'N	125°22.0'W	1005.6	0.339	0.20184
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	1.7	6.497	6.80986
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	10.2	6.464	6.79712
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	60.4	6.486	6.78586
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	200.1	2.312	2.45413
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	300.0	1.834	1.91528
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	399.2	1.255	1.28832
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	500.5	0.81	0.78829
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	598.5	0.541	0.48654
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	700.2	0.398	0.3253
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	836.1	0.257	0.17047
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	900.0	0.291	0.20749
W0103B	10	NH-55	20-Mar-02	44°39.1'N	125°22.0'W	1005.3	0.408	0.27346
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	1.8	6.485	6.85777
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	25.2	6.428	6.82542
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	50.2	6.428	6.78205
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	75.0	5.869	6.25081
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	99.9	3.619	3.86417
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	125.2	3.001	3.19392
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	149.4	2.718	2.882
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	200.8	2.43	2.53529
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	300.5	1.619	1.69461
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	400.4	1.169	1.17214

Table B2. Oxygen calibration data for January to November 2001.

Cruise	Station Number	Station Name	Date	Latitude	Longitude	Pressure (dbar)	O ₂ -titration (ml/l)	O ₂ -probe (ml/l)
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	500.9	0.729	0.70843
W0103B	20	CR-8	23-Mar-02	41°54.0'N	124°12.0'W	1005.8	0.352	0.2461
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	2.0	6.697	7.17447
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	19.8	6.638	7.08912
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	29.6	6.598	7.04556
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	39.9	6.344	6.73804
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	50.1	5.377	5.82327
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	59.3	4.706	5.05718
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	79.7	4.027	4.32307
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	100.1	3.576	3.83623
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	149.9	2.66	2.86654
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	199.2	2.063	2.19427
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	250.4	1.637	1.72646
W0103B	29	FM-6	24-Mar-02	43°13.0'N	124°45.0'W	303.4	1.334	1.37306
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	1.6	5.898	5.84581
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	10.0	5.357	5.83377
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	20.3	6.229	5.90925
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	30.4	7.008	6.83691
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	39.6	7.564	7.49561
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	49.6	7.472	7.40464
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	58.4	6.942	6.87497
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	69.8	6.427	6.54927
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	100.9	4.833	4.6225
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	149.8	2.796	2.77853
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	365.9	1.343	1.21883
W0107A	12	NH-85	6-Jul-02	44°39.1'N	126°03.0'W	1003.8	0.415	0.22583
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	5.7	5.864	5.79047
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	40.1	6.045	6.23328
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	119.8	2.65	2.6488
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	140.0	2.102	2.17074
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	150.4	1.784	1.70745
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	150.4	1.784	1.70745
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	160.0	2.09	2.25803
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	169.9	2.246	2.24611
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	169.9	2.278	2.24611
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	180.1	2.246	2.17672
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	200.4	1.969	1.96712
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	344.4	1.393	1.2463
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	490.1	0.623	0.56212
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	815.0	0.266	0.17815
W0109A	10	NH-55	5-Sep-02	44°39.1'N	125°22.0'W	815.0	0.312	0.17815
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	2.8	6.314	6.37977
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	15.0	6.669	6.79155
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	30.3	5.659	5.97705

Table B2. Oxygen calibration data for January to November 2001.

Cruise	Station Number	Station Name	Date	Latitude	Longitude	Pressure (dbar)	O ₂ -titration (ml/l)	O ₂ -probe (ml/l)
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	30.3	5.661	5.97705
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	50.7	4.043	4.12966
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	80.6	2.325	2.33893
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	110.4	1.818	1.80805
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	110.4	1.832	1.80805
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	130.7	1.966	1.96437
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	159.2	1.918	1.85889
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	210.1	1.64	1.67102
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	250.3	1.433	1.46318
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	280.2	1.311	1.34024
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	312.4	1.284	1.322
W0109A	17	FM-6	6-Sep-02	43°13.0'N	124°45.1'W	312.4	1.301	1.322
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	3.3	5.588	6.00472
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	10.4	5.868	5.98321
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	19.9	5.861	5.93005
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	29.6	5.848	5.91552
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	29.6	5.855	5.91552
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	37.3	5.808	5.88142
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	40.5	5.657	5.77483
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	50.6	4.961	4.99042
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	100.5	3.869	3.87739
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	151.1	2.616	2.6811
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	151.1	2.723	2.6811
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	837.5	0.342	0.19627
W0109A	27	CR-7	8-Sep-02	41°54.0'N	125°00.0'W	837.5	0.5	0.19627
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	1.9	6.94	6.72279
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	10.1	7.074	6.77842
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	16.3	6.901	6.56441
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	19.1	6.686	6.44415
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	19.1	6.704	6.44415
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	30.5	6.107	6.18917
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	38.7	5.055	5.09415
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	50.3	4.359	4.38218
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	70.6	3.554	3.42404
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	98.9	2.143	1.94839
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	150.5	1.589	1.5017
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	319.7	1.347	1.30751
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	319.7	1.35	1.30751
W0109A	39	HH-5	10-Sep-02	44°00.0'N	125°00.0'W	499.5	0.878	0.81964

