

SACLANTCEN MEMORANDUM

serial no.: SM-209

**SACLANT UNDERSEA
RESEARCH CENTRE**
MEMORANDUM

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**Atlantic Inflow Experiment,
GIN Sea Cruise '86**

**Data Report
Part I: Hydrography**

(Appendixes B and C)

T.S. Hopkins

June 1988

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(excluding covers)

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NORTH ATLANTIC TREATY ORGANIZATION

Appendix B

CTD data

The downcast data are given as follows:

Leg I: Figs. B1–B16.

Leg II: Figs. B17–B160.

The data are presented in four pannels:

- upper-left, vertical profiles of salinity and potential temperature;
- upper-right, vertically averaged values (to the pressure listed) of potential temperature, salinity, in-situ density, σ_θ , sound velocity, Brunt–Väisälä frequency, and steric height. The station time, position and bottom depth are included in the header;
- lower-left, vertical profiles of in-situ density and sound velocity;
- lower-right, potential temperature *vs* salinity diagram. The points corresponding to the pressures of 300, 600, 900 dB etc. are indicated and the isopleths of σ_t are drawn on the diagram.

Note that the density labelled PDEN is the in-situ density and the label on the *T–S* diagram should read potential temperature instead of temperature.

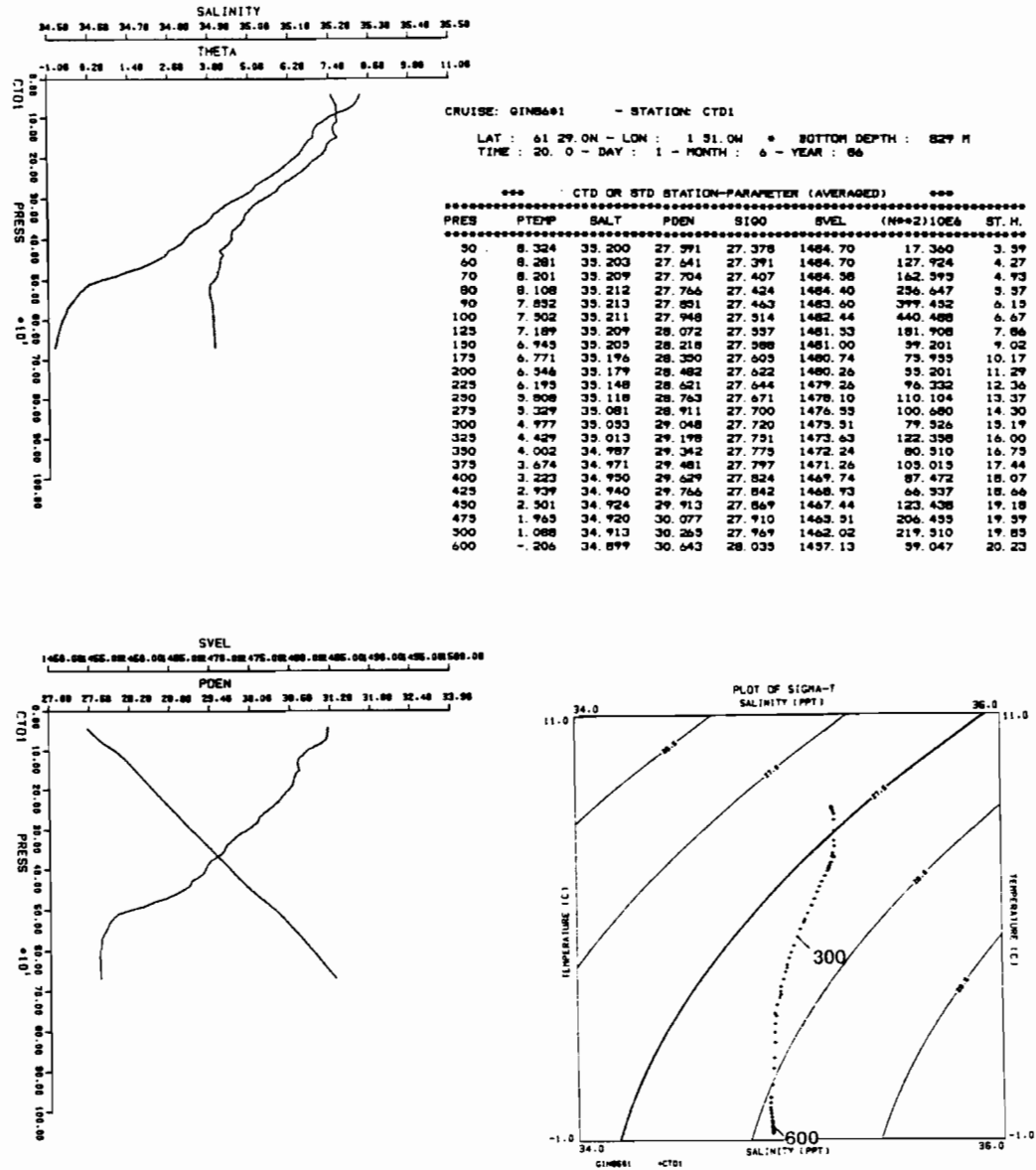


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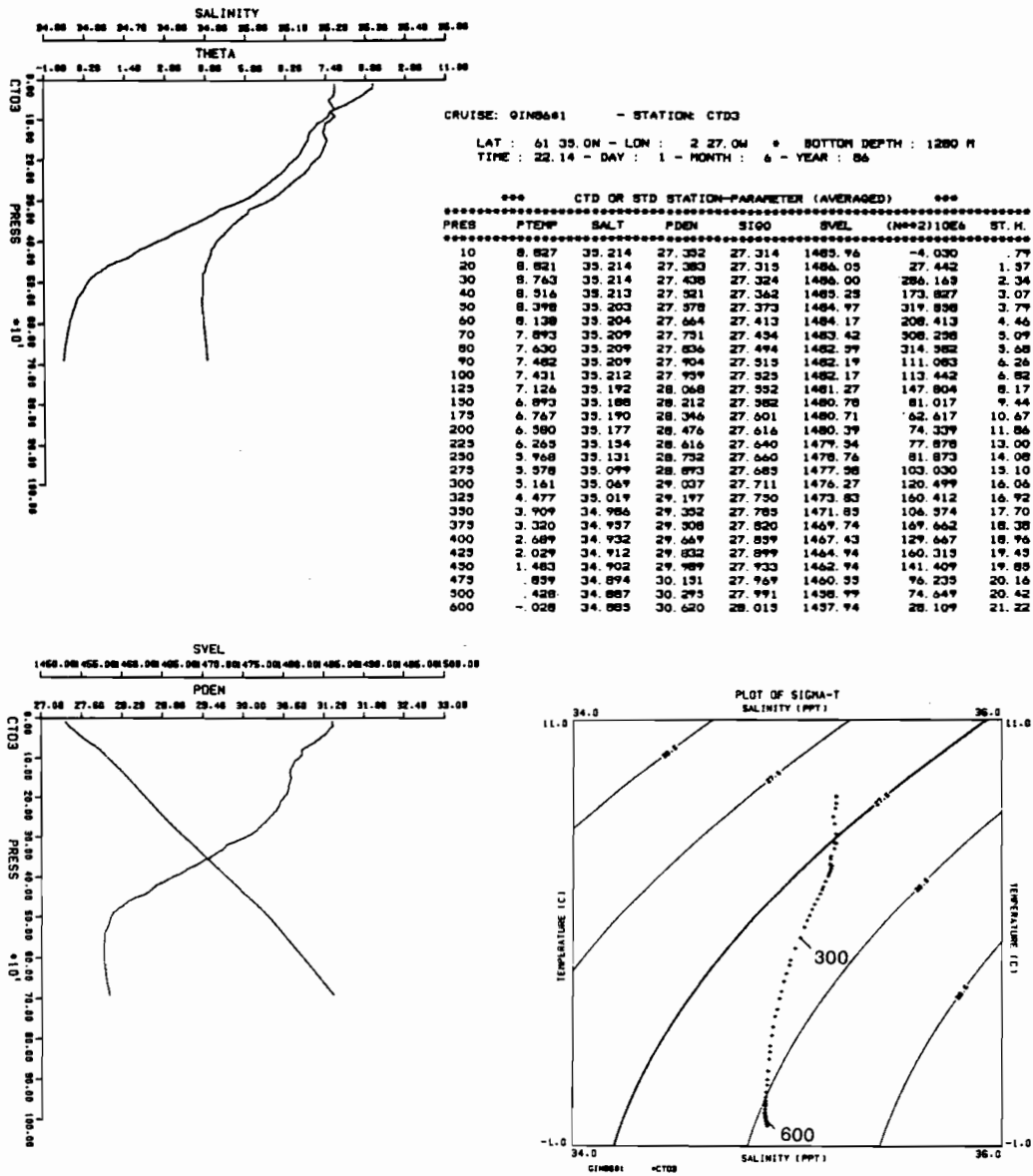


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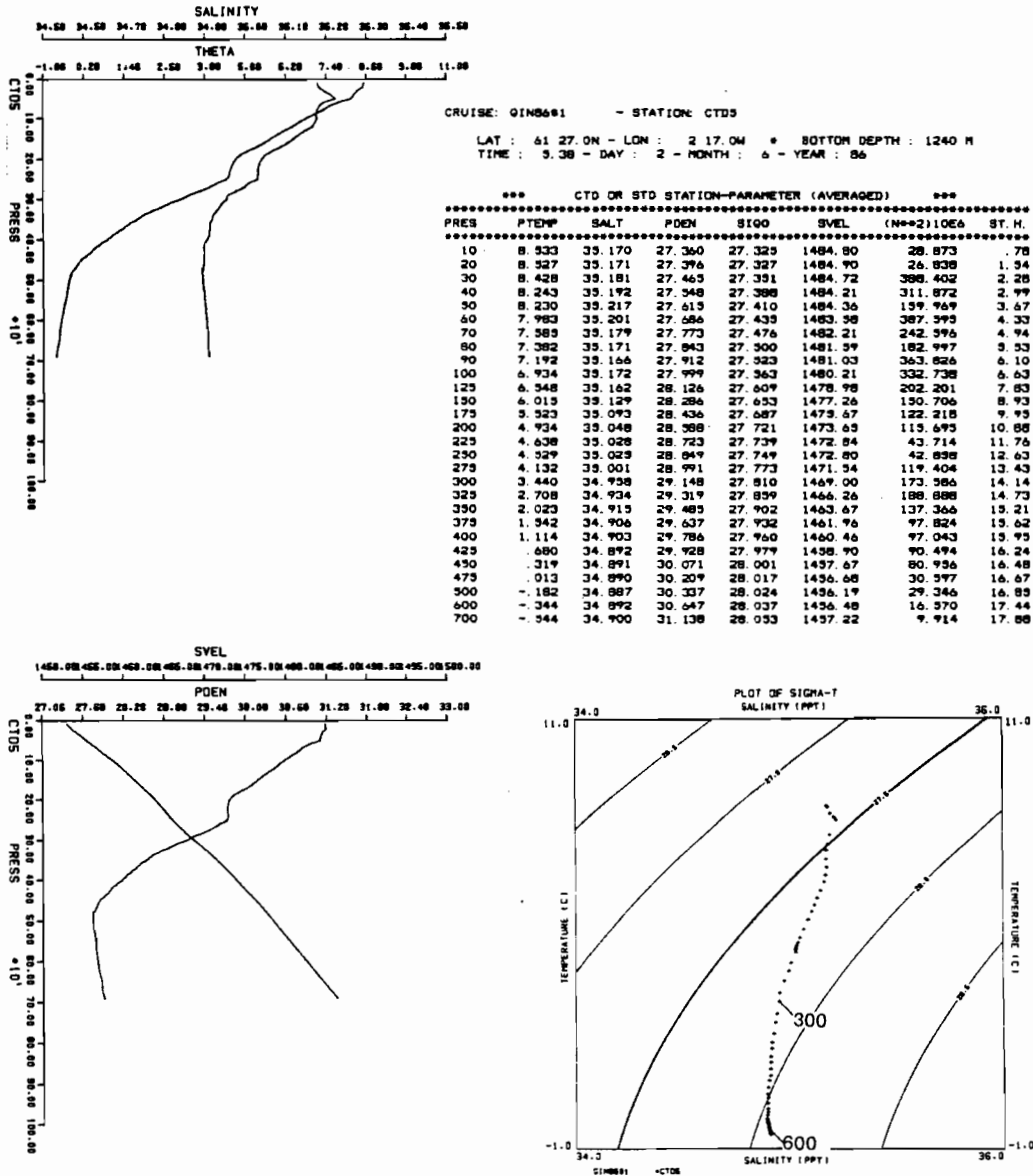


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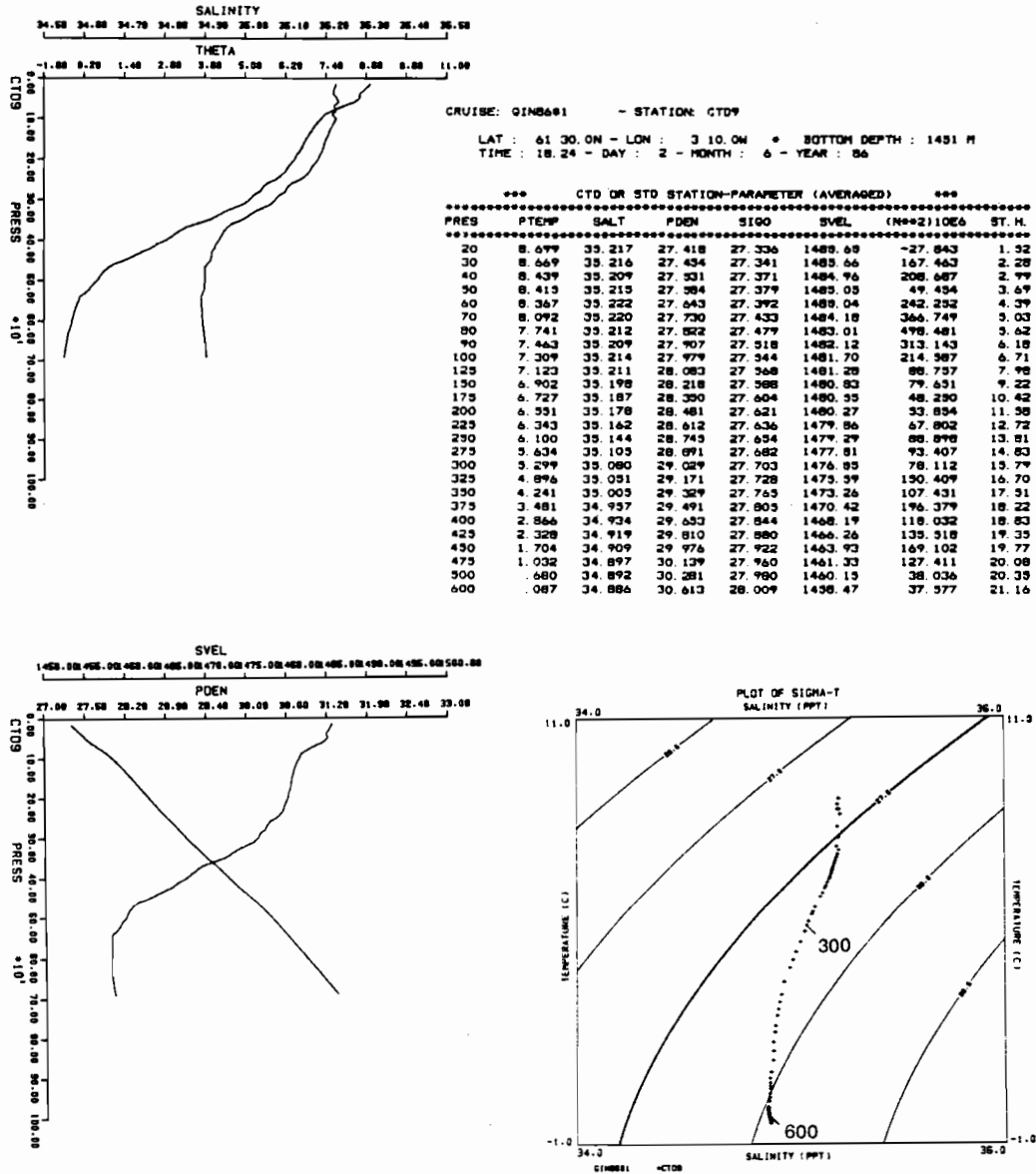


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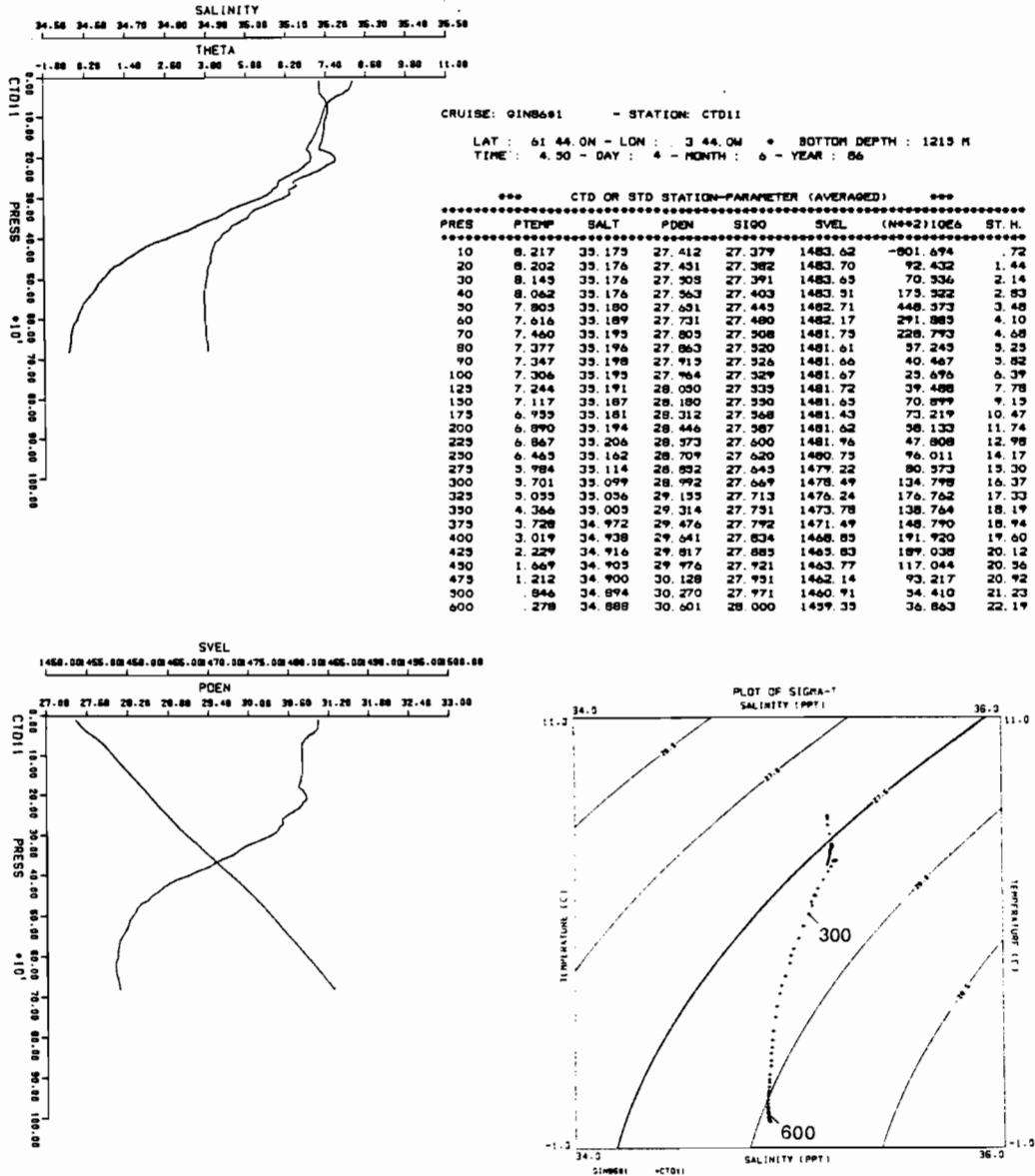


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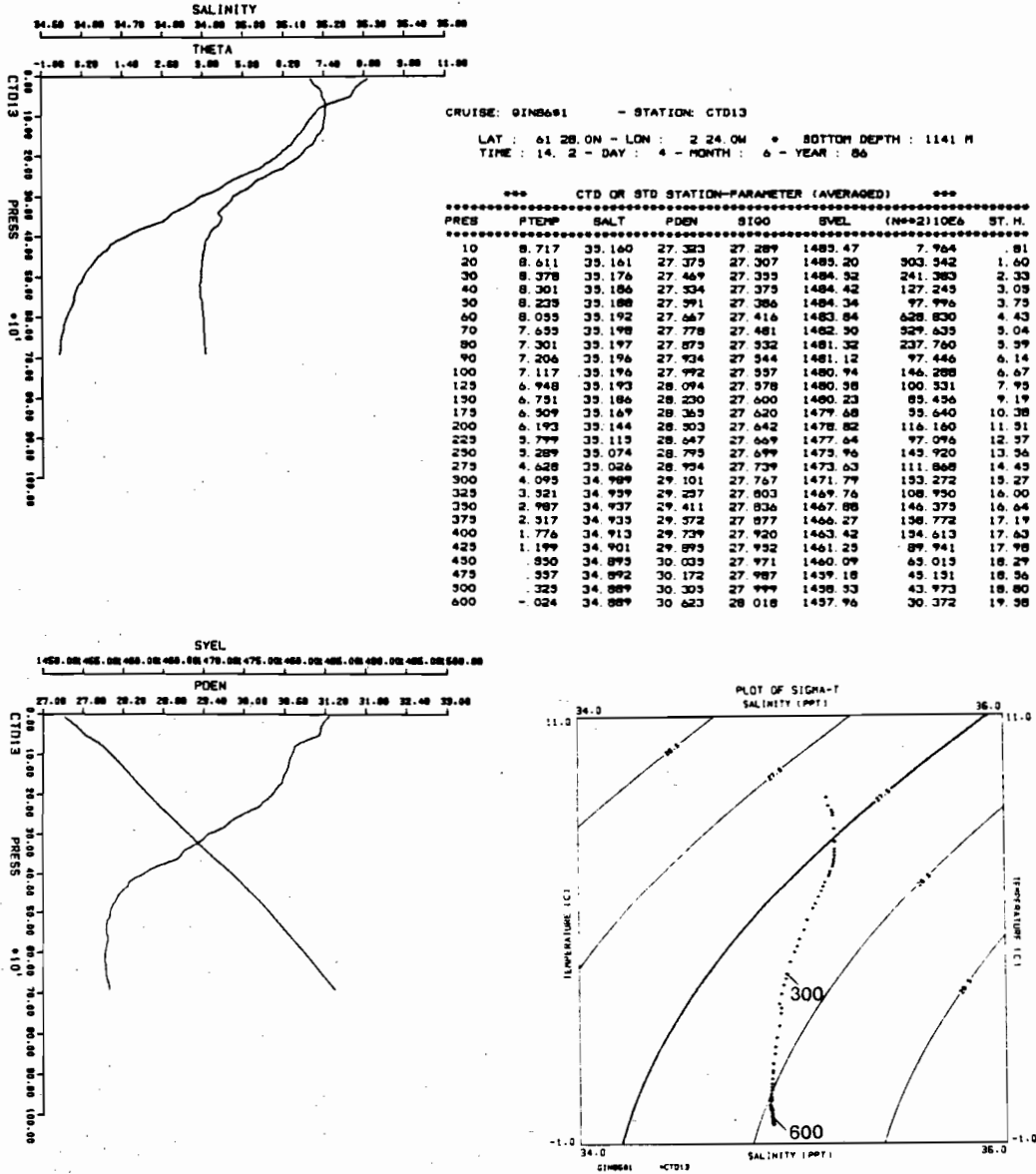


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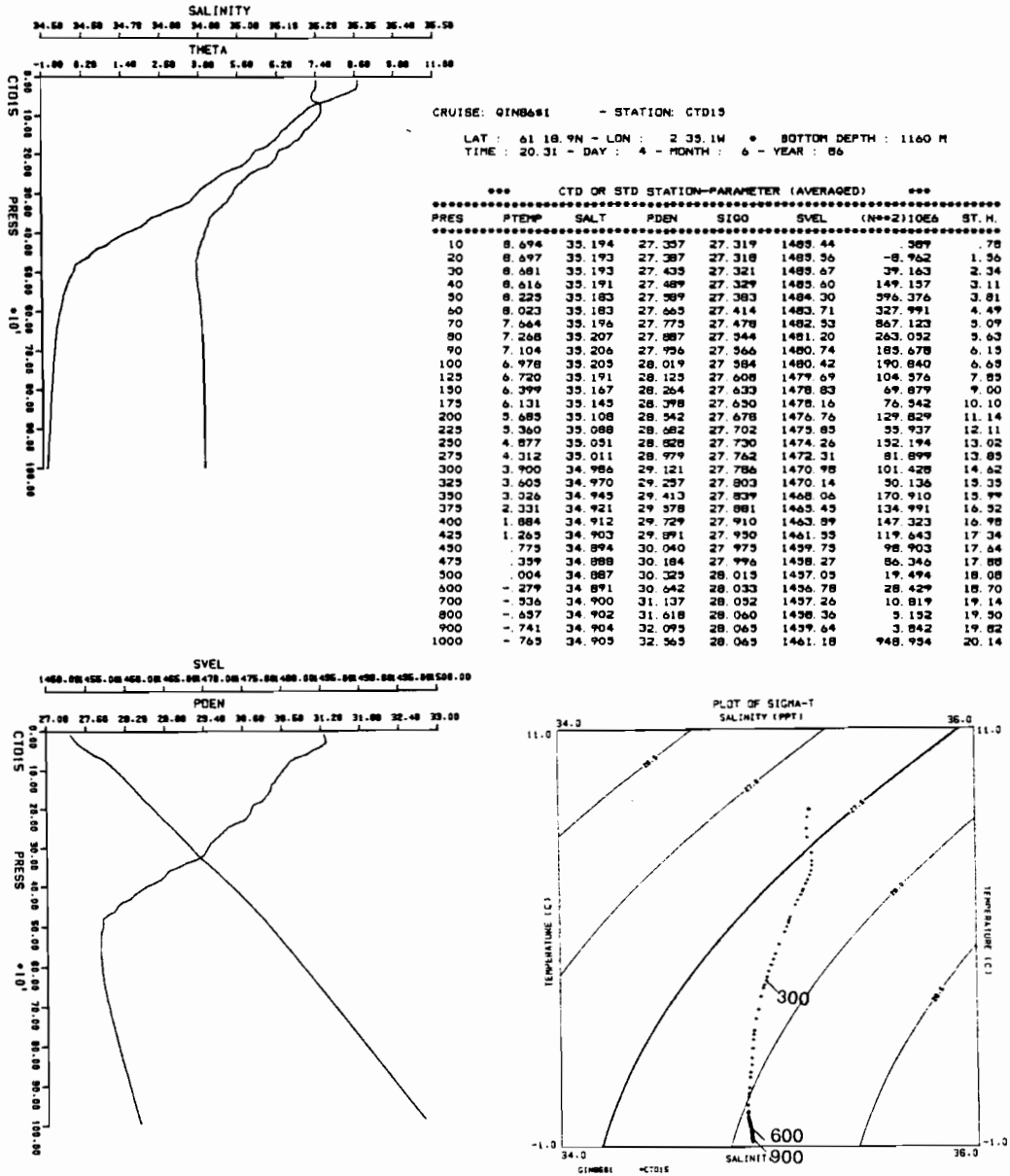


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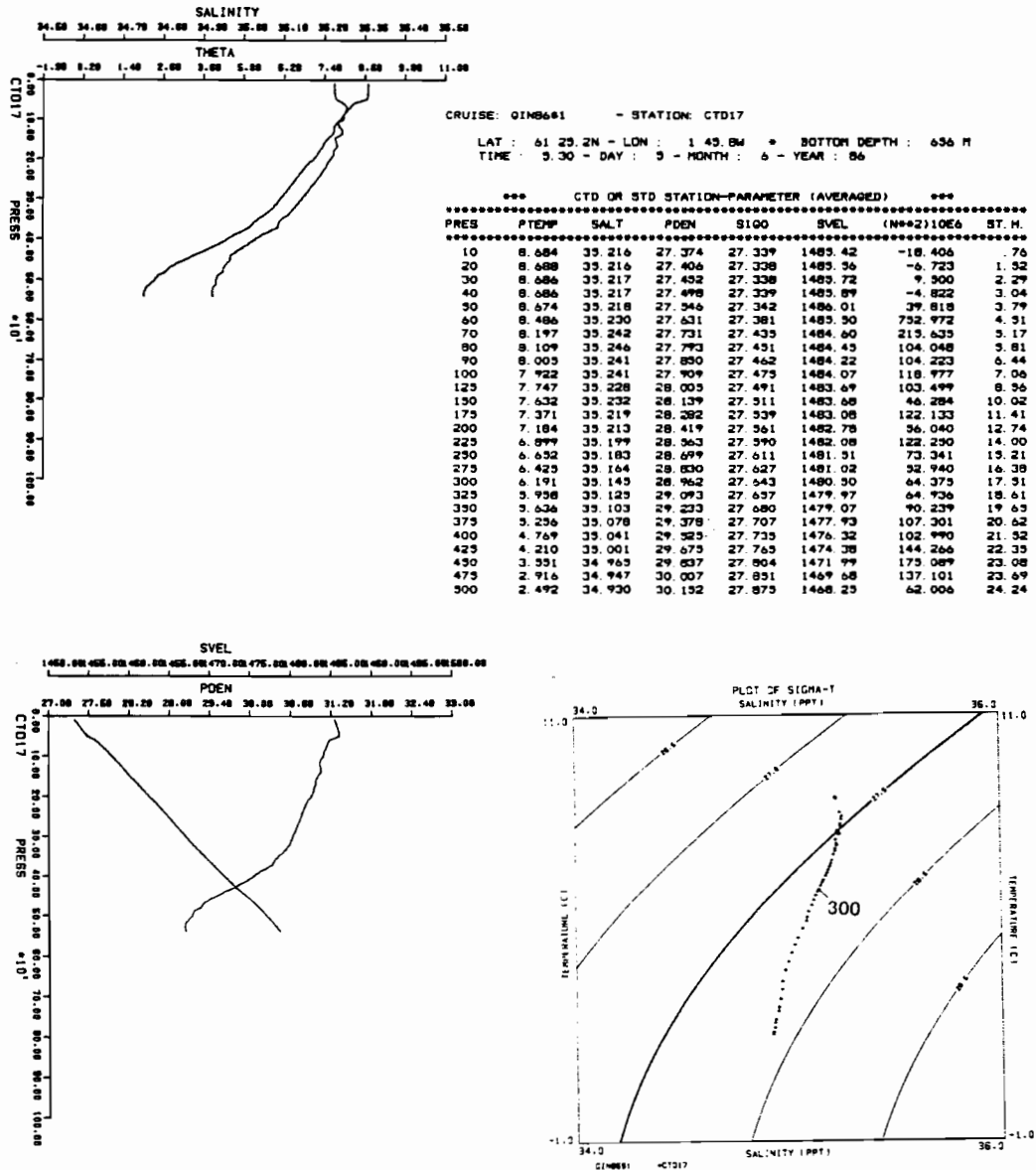


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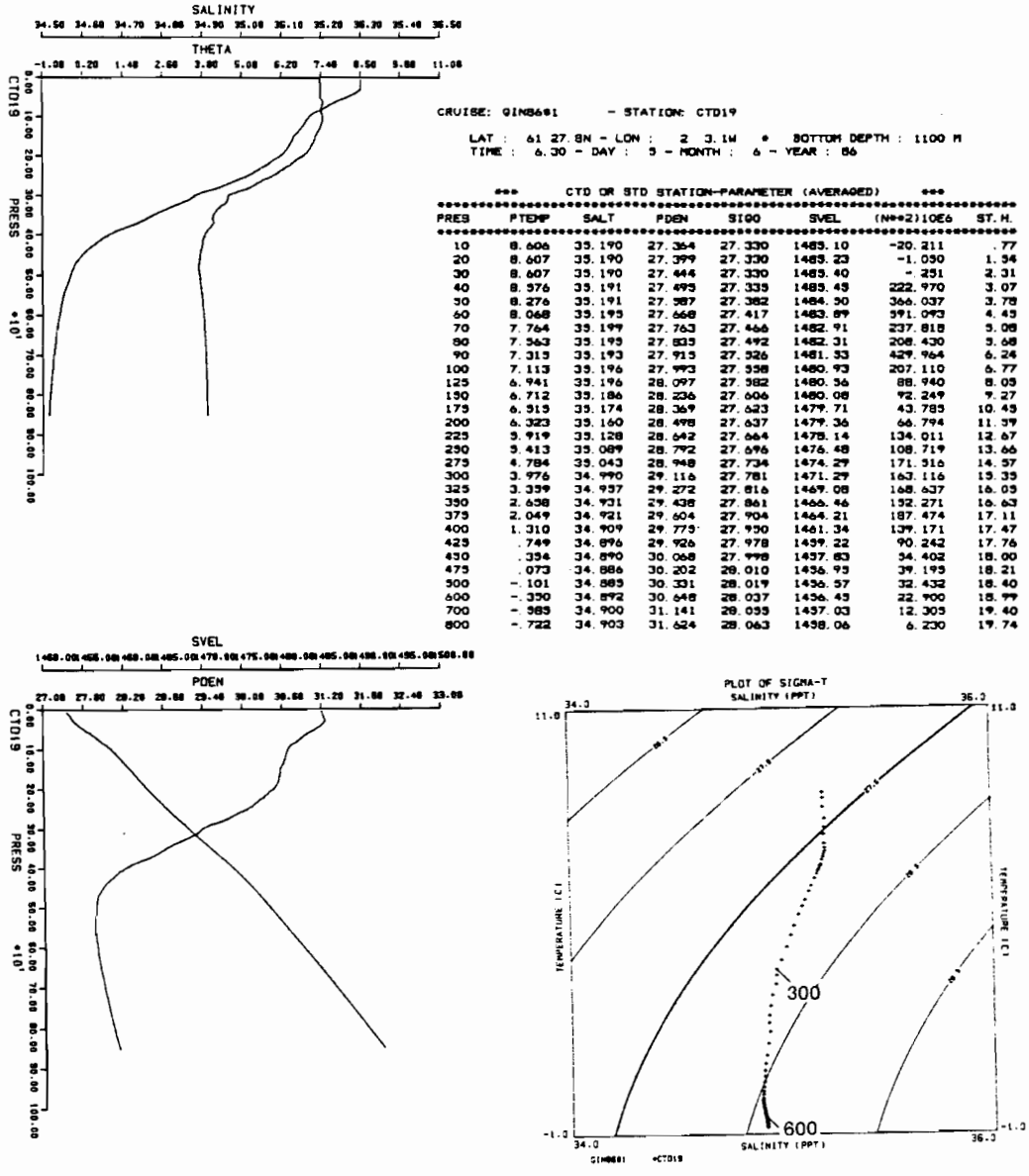


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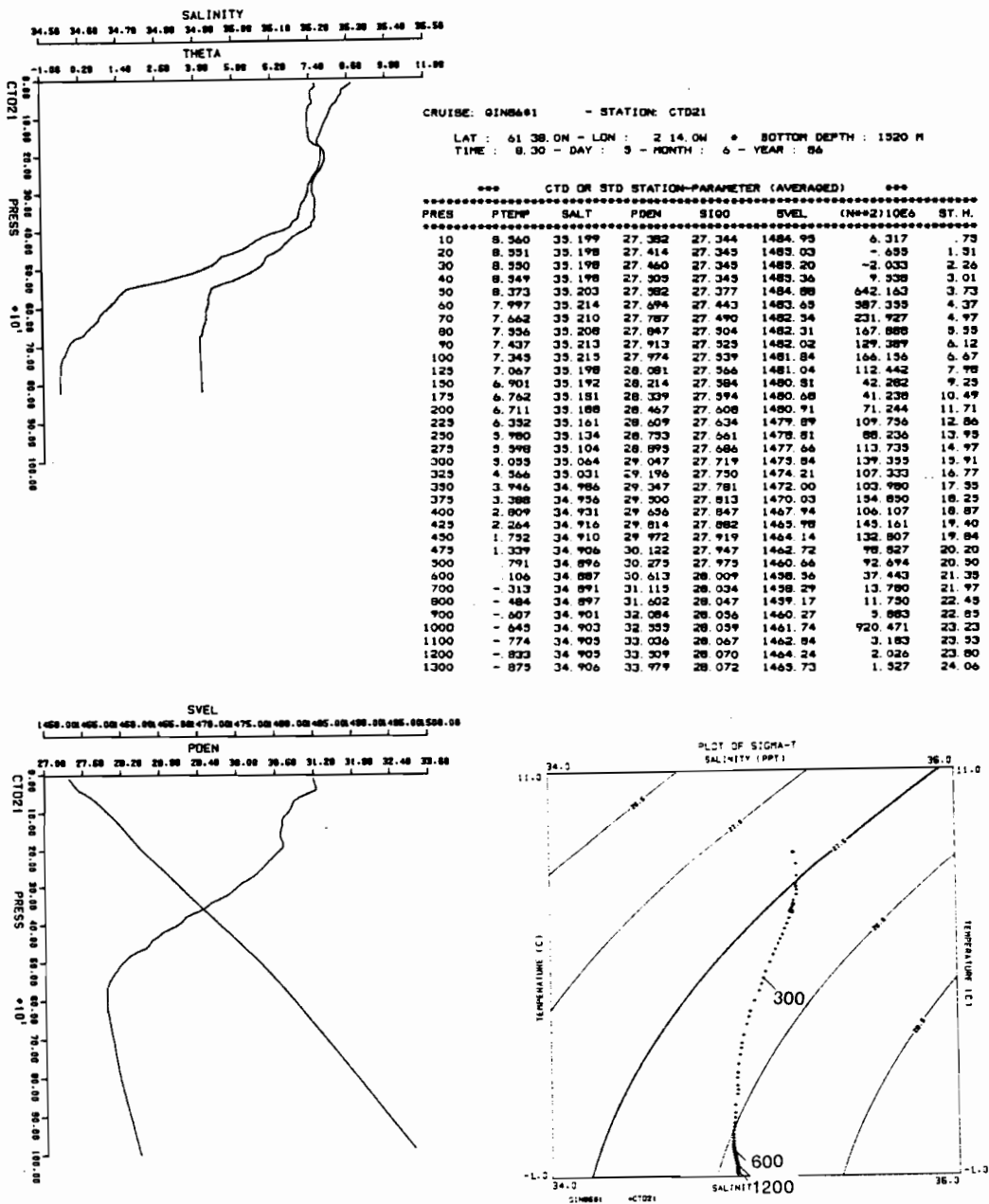


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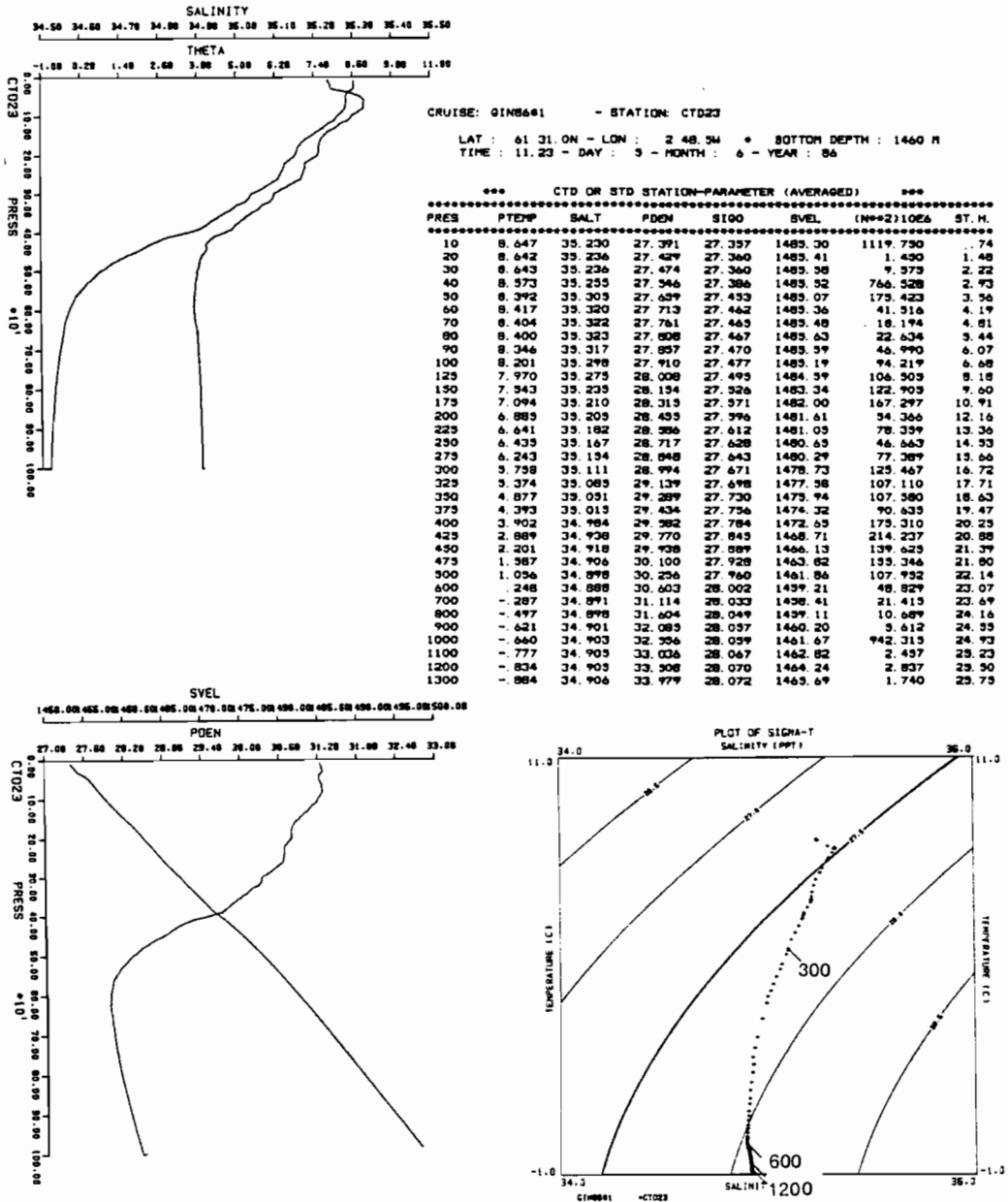


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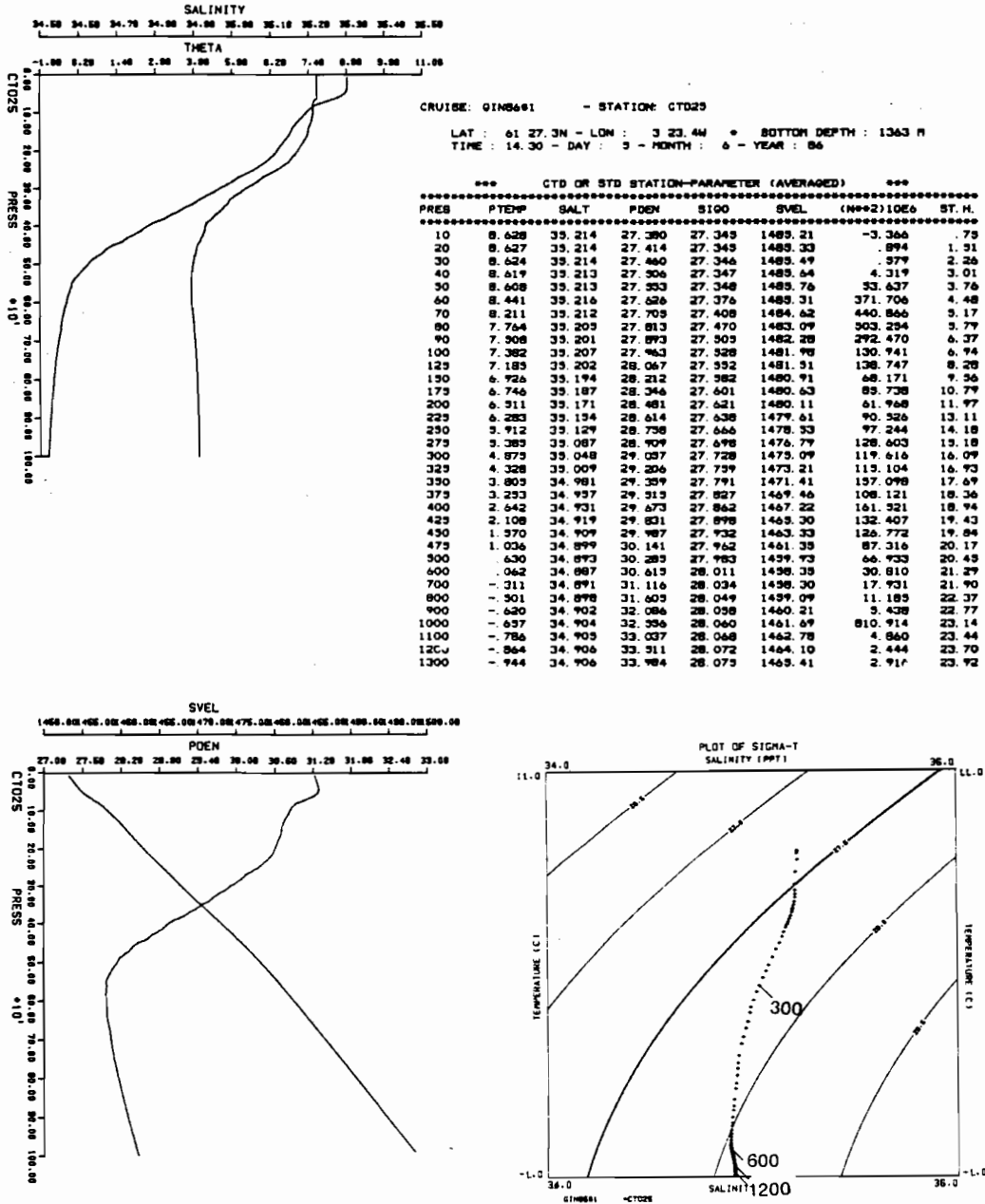


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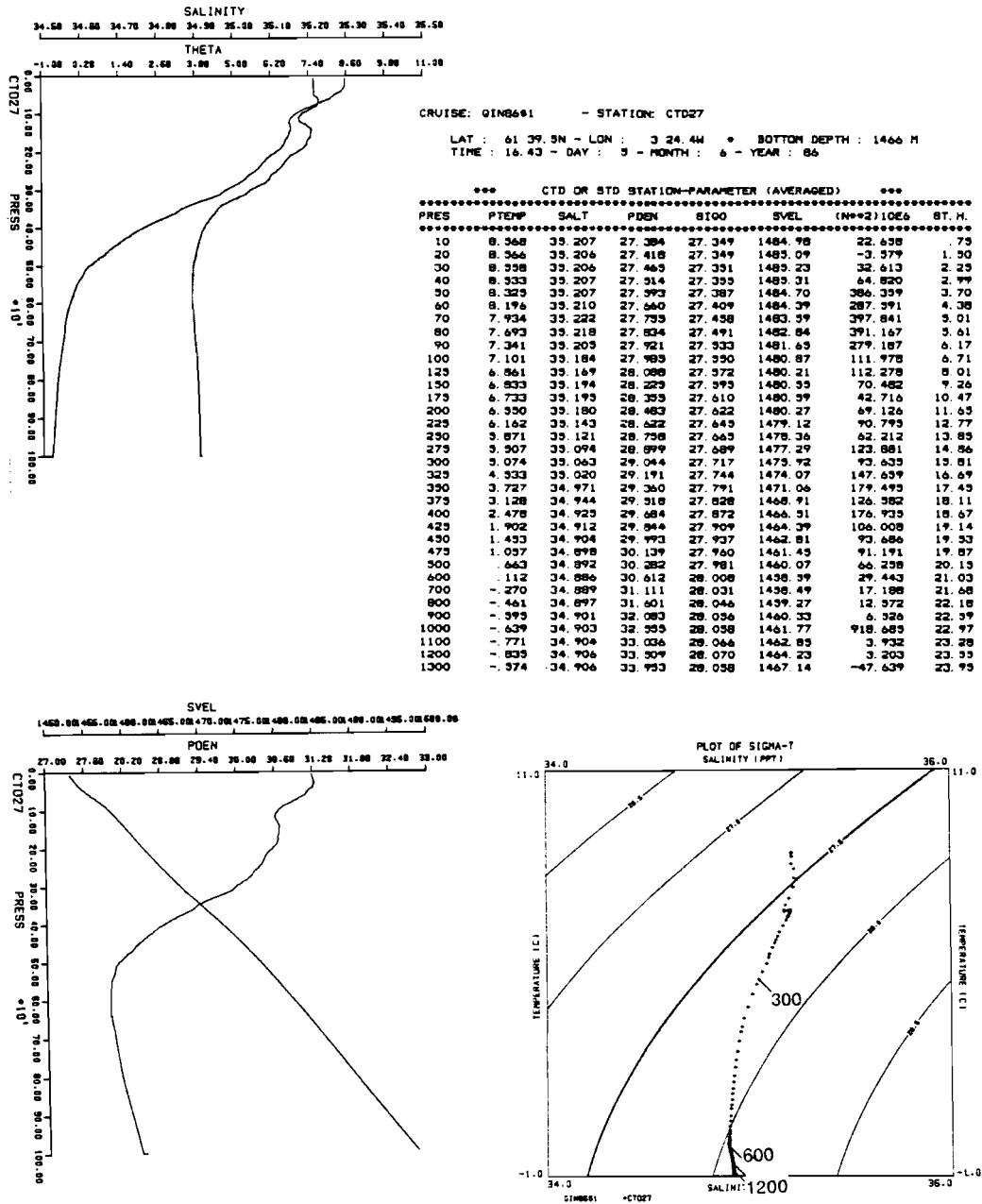


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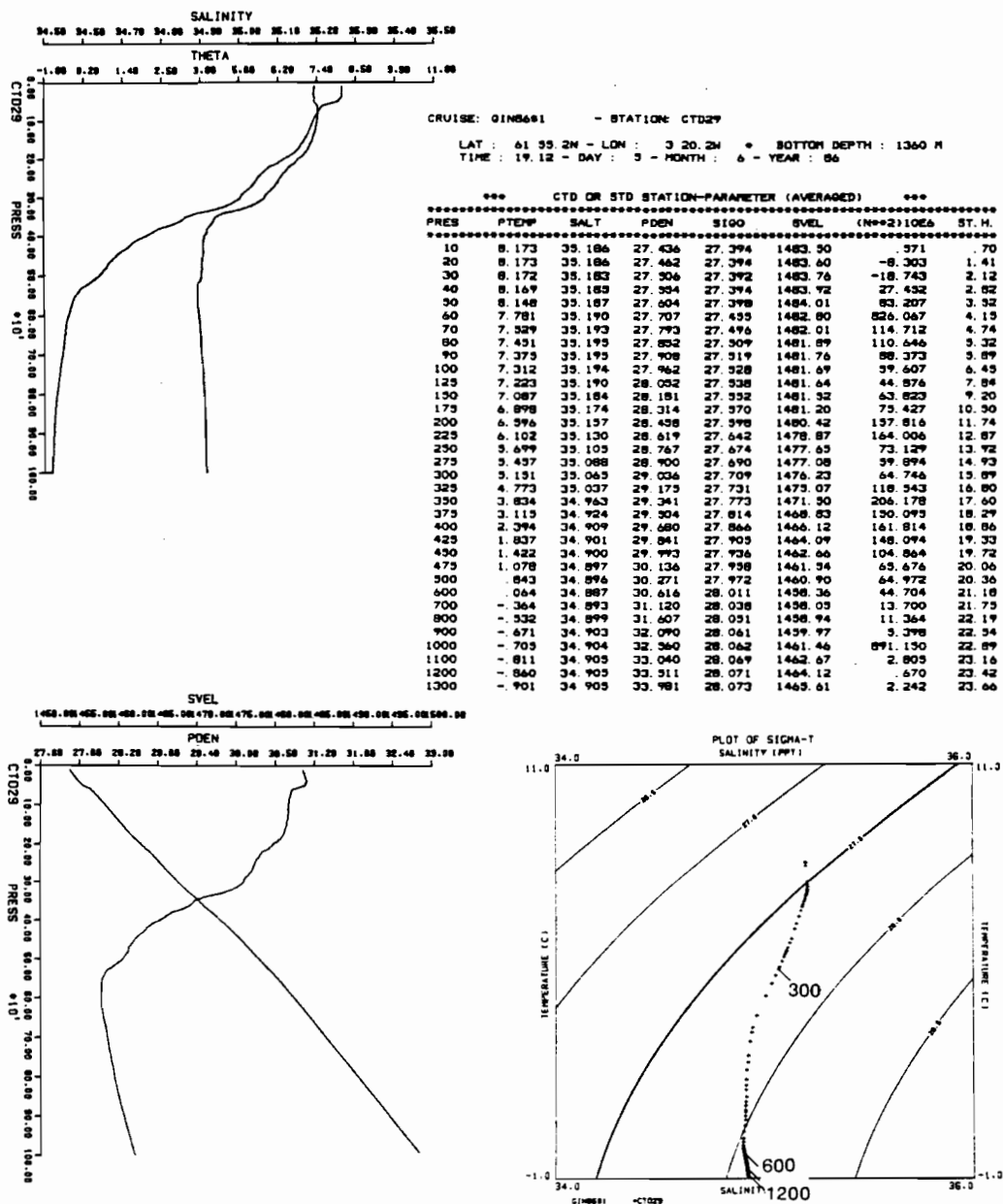


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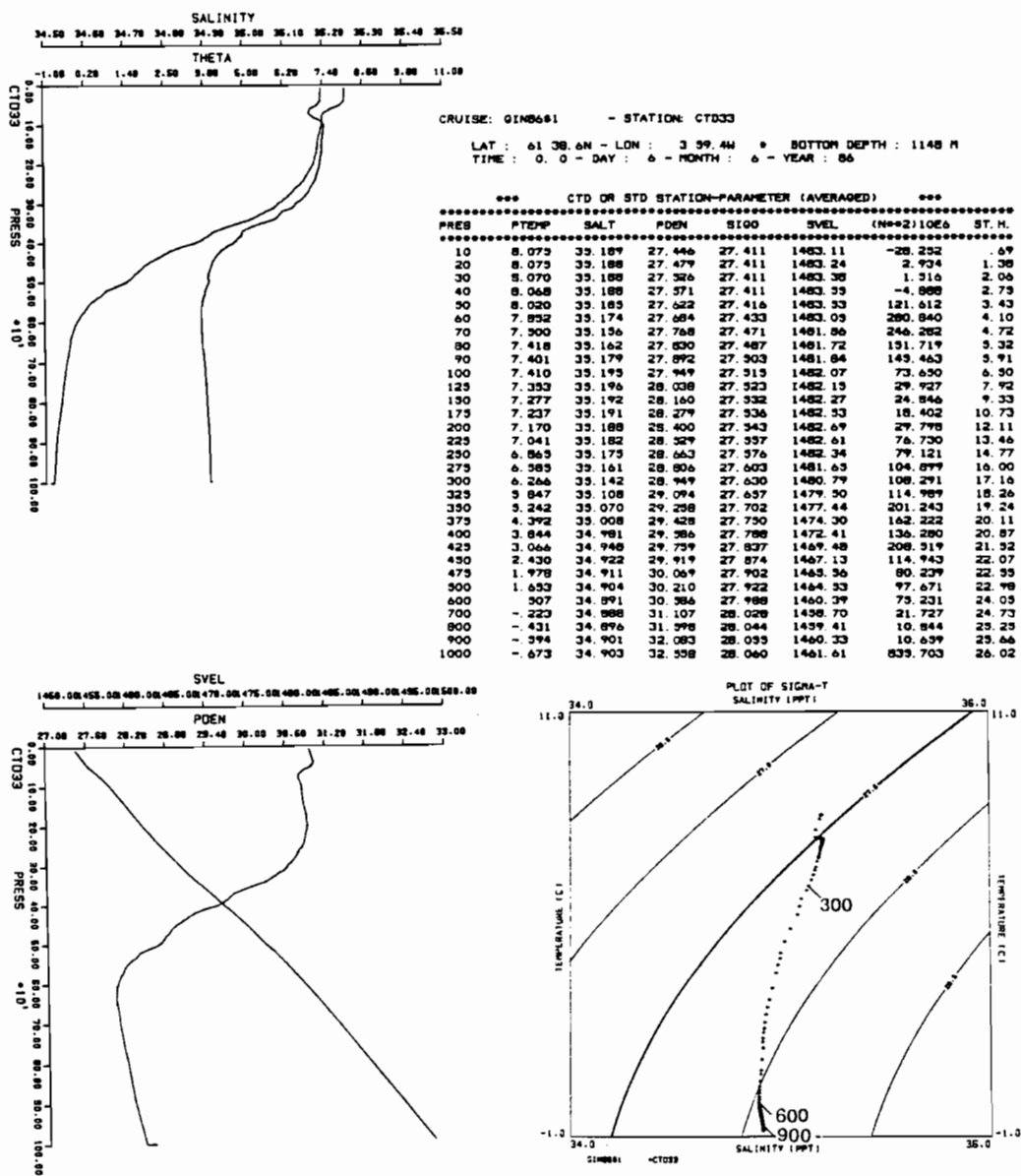


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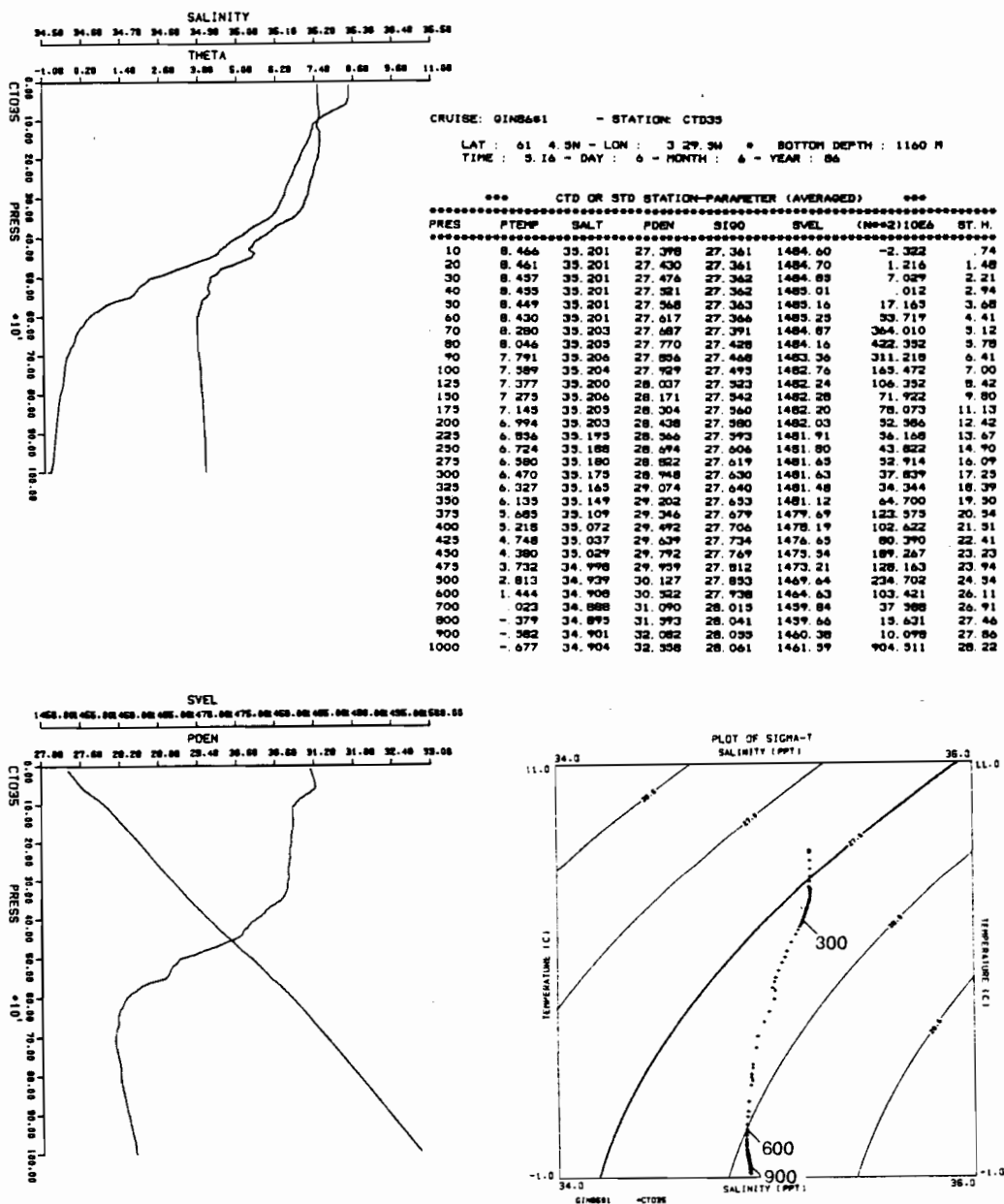


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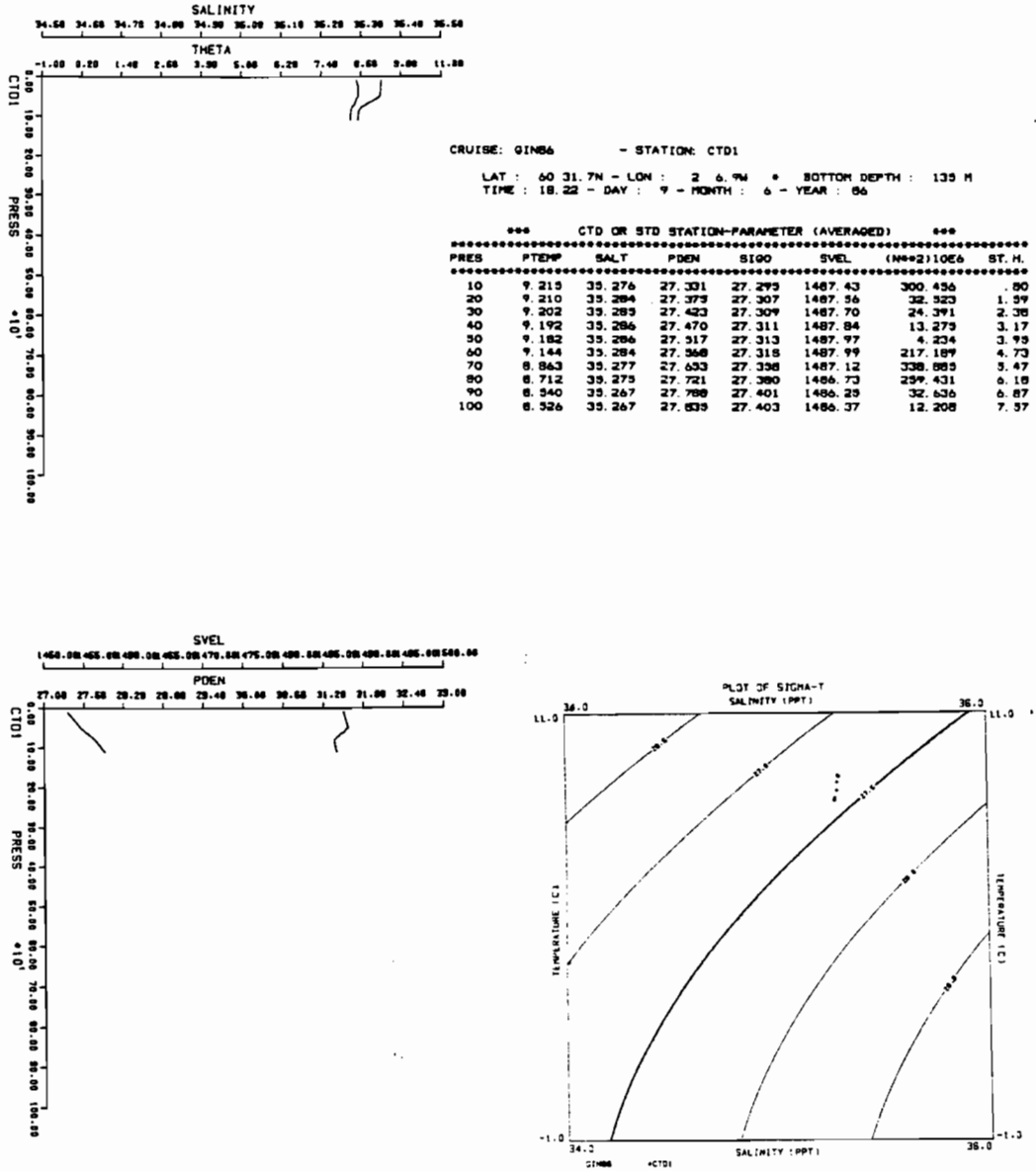


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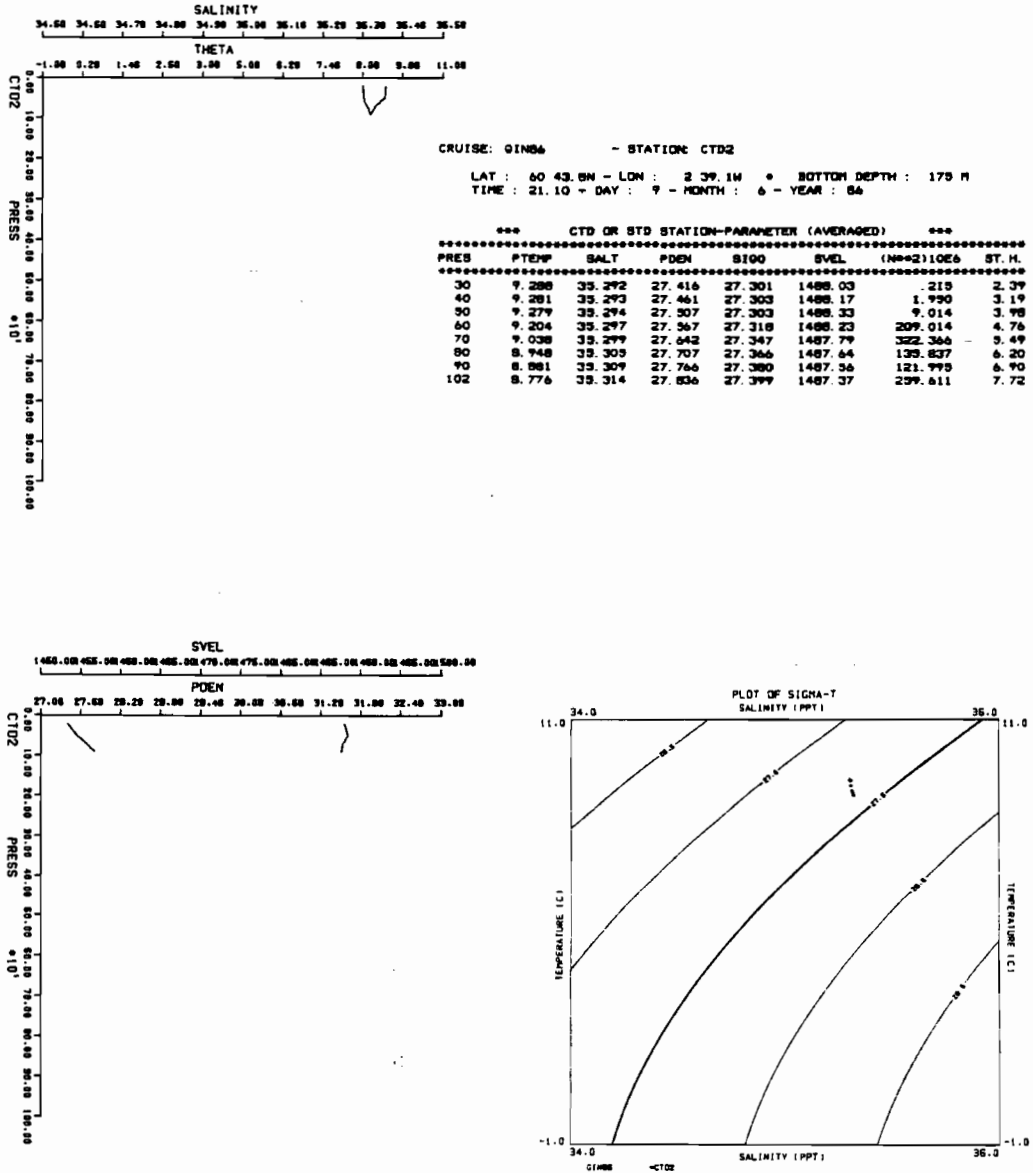


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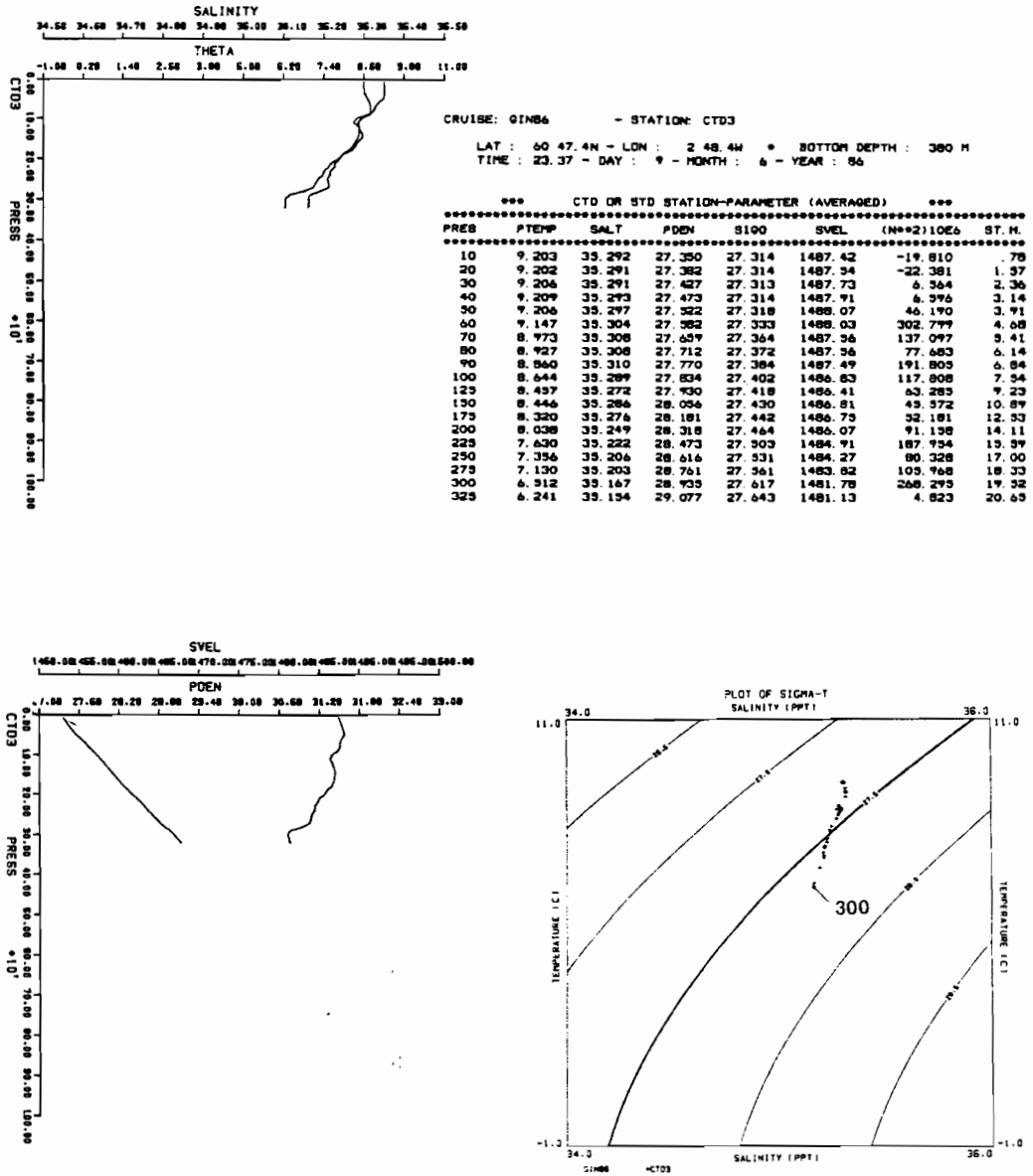


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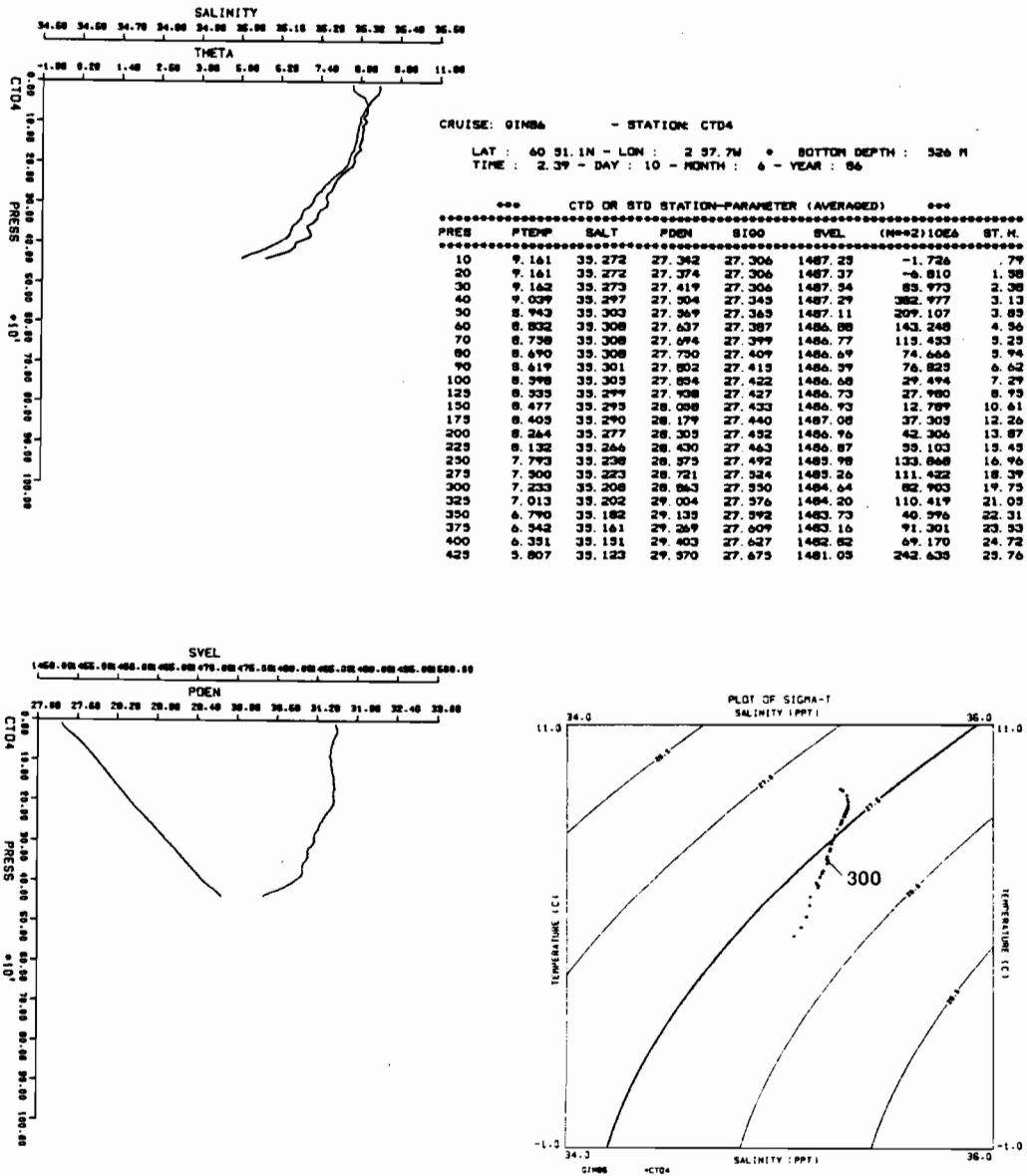


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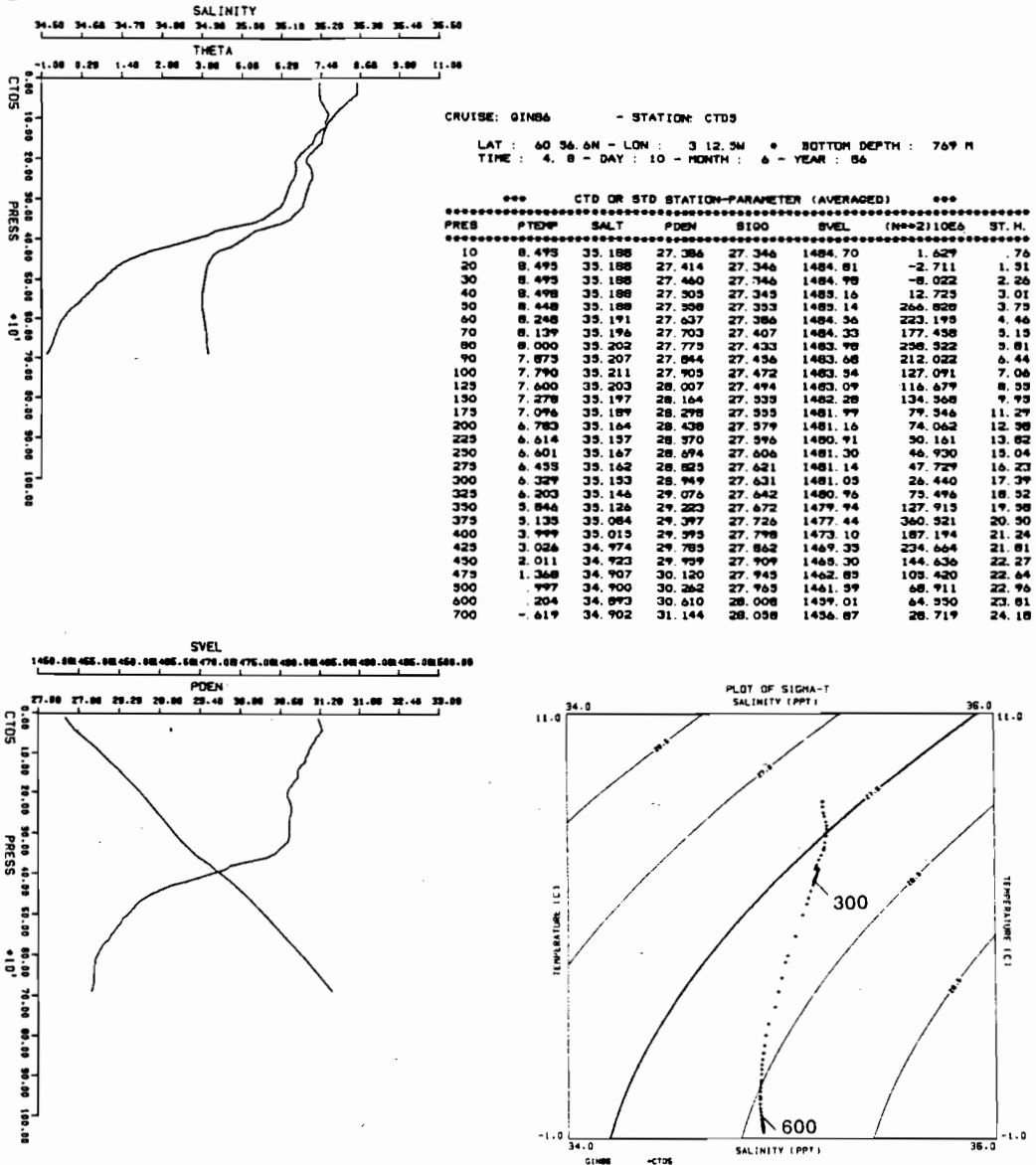


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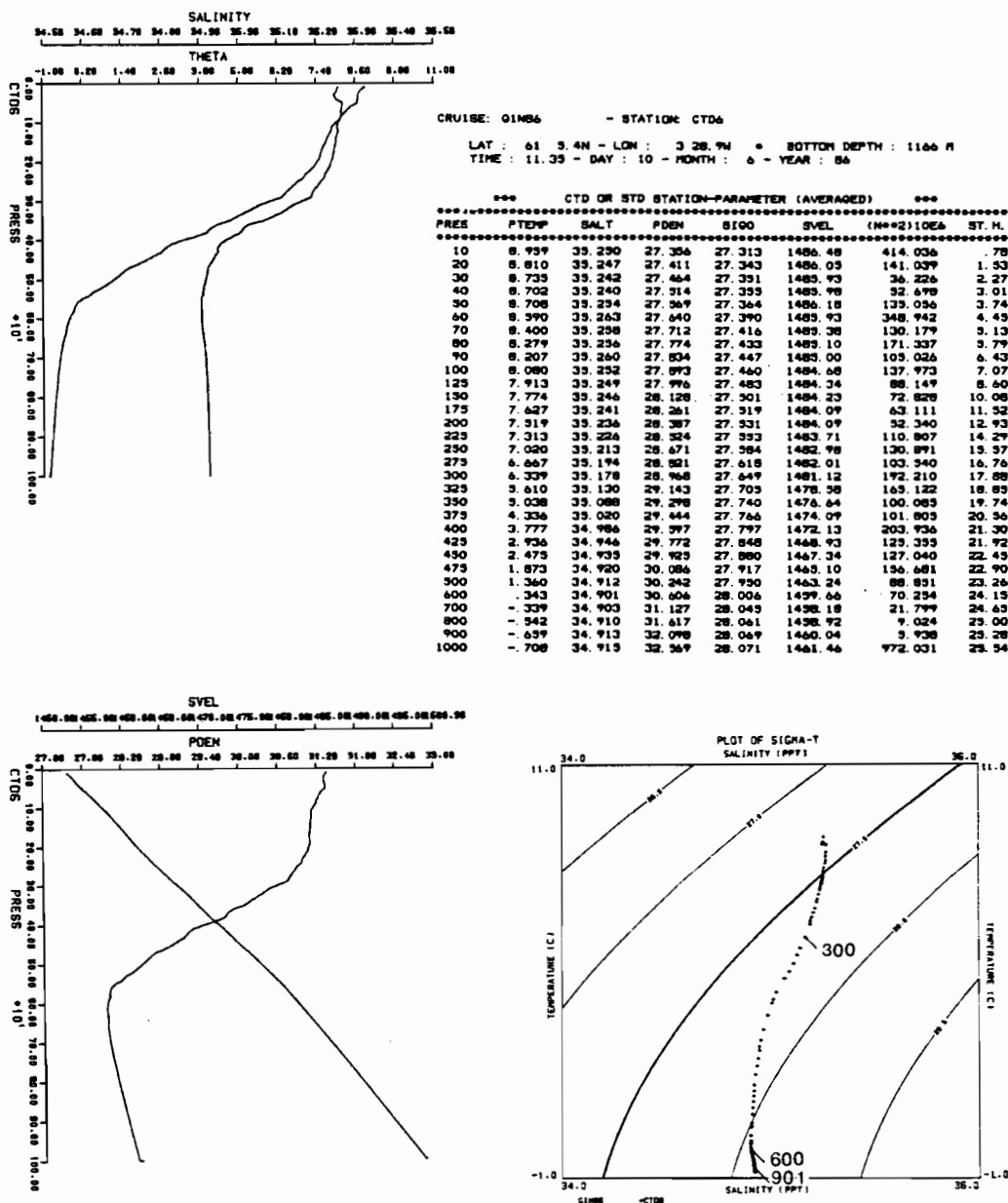


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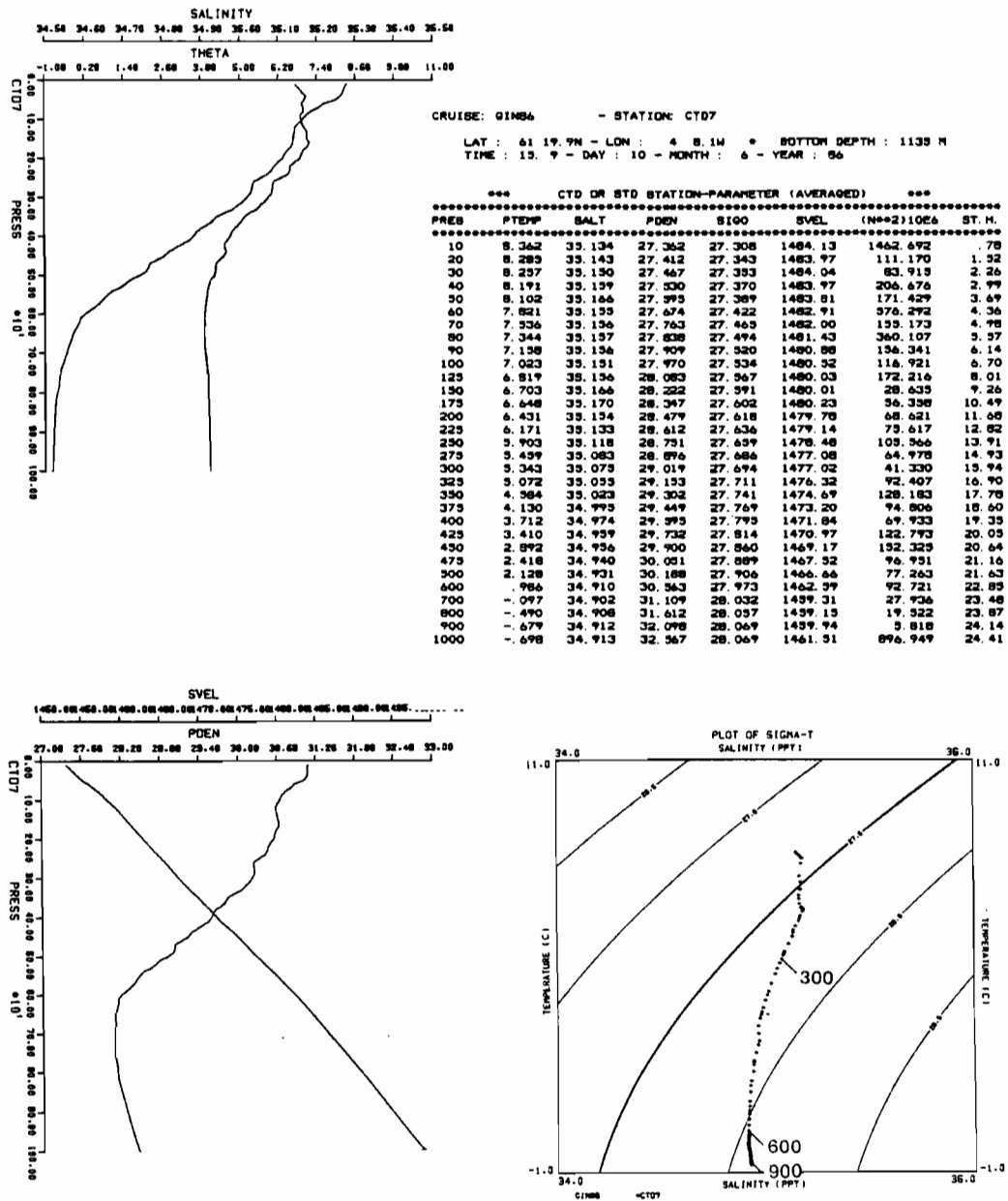


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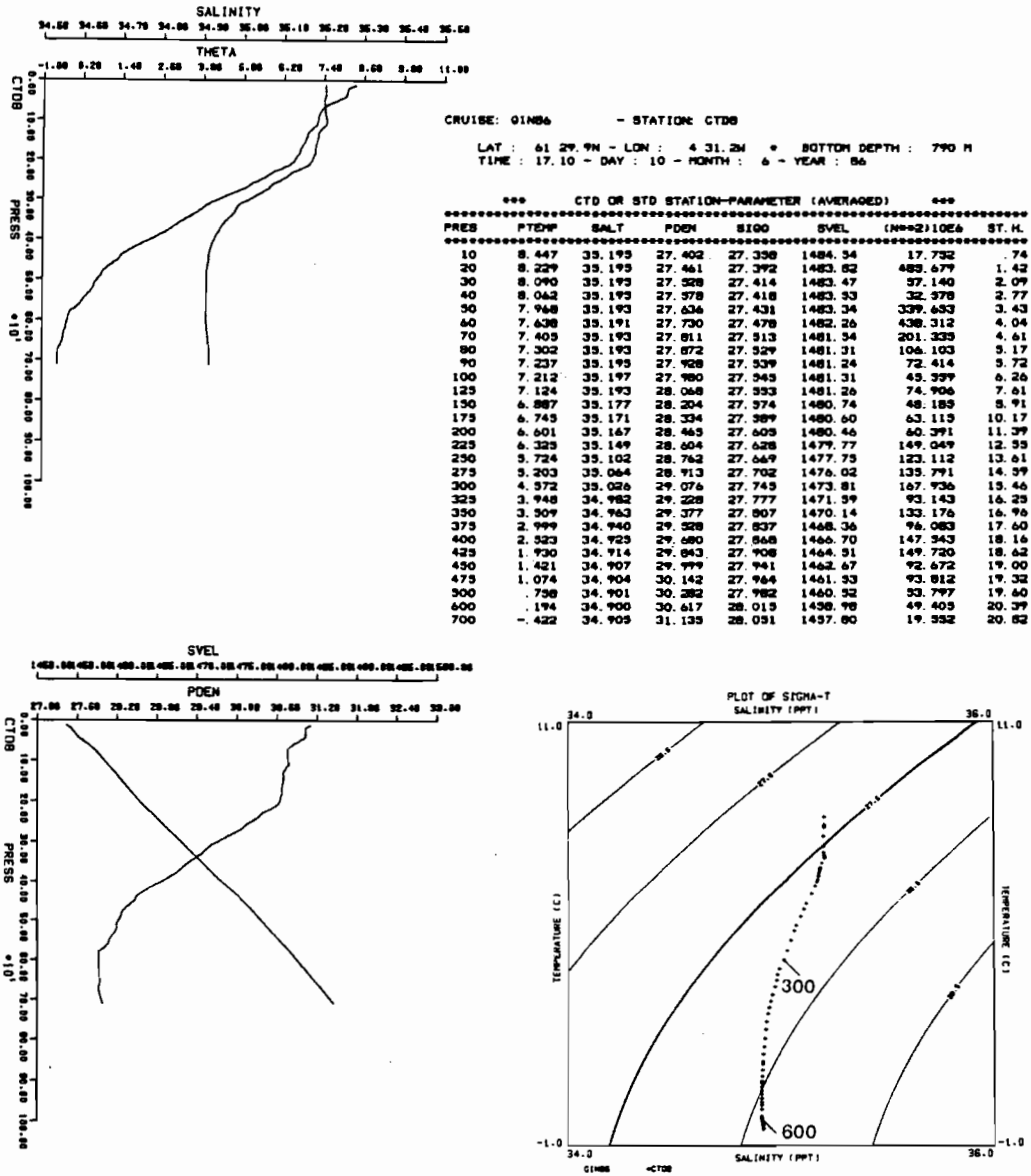


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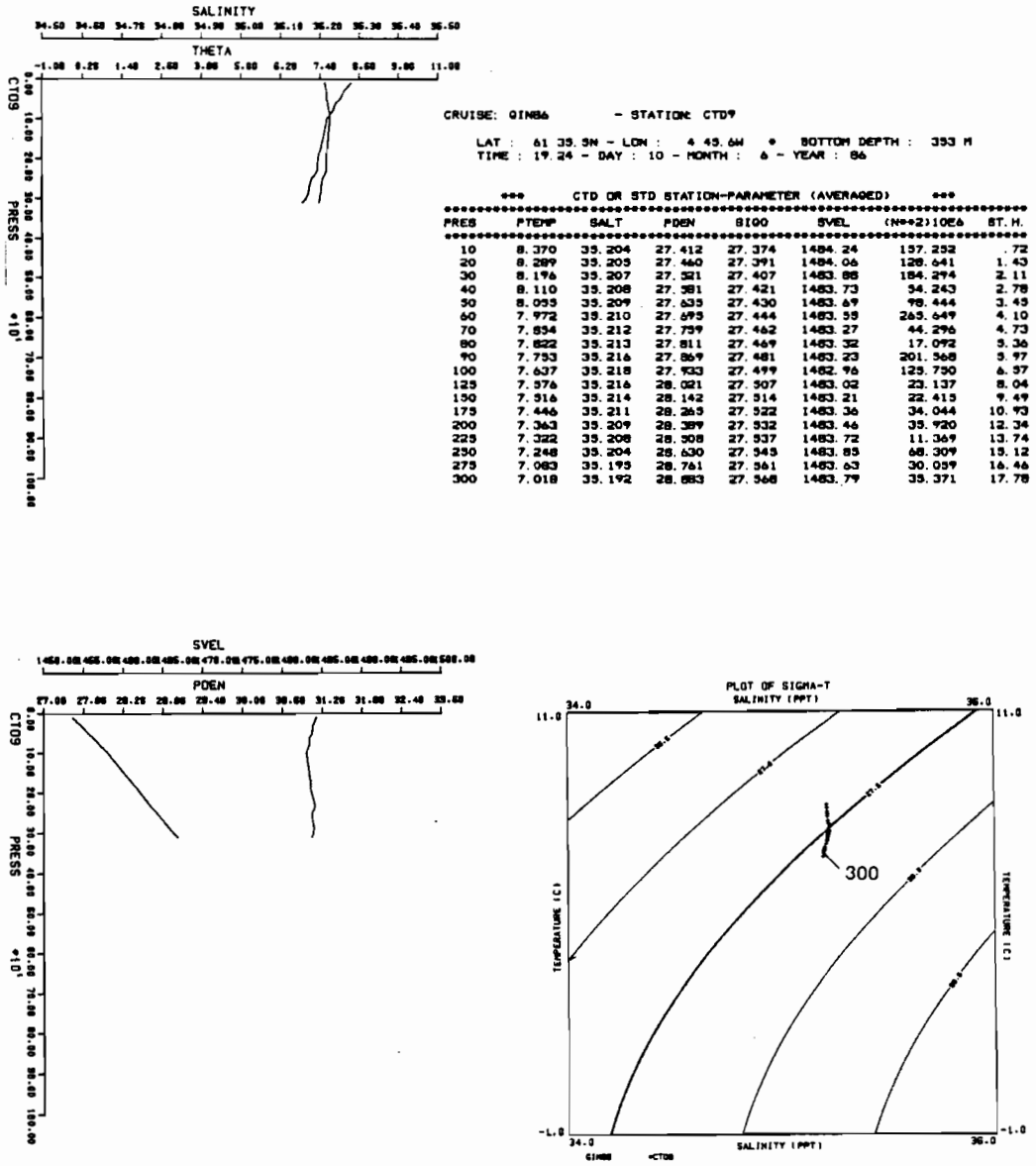


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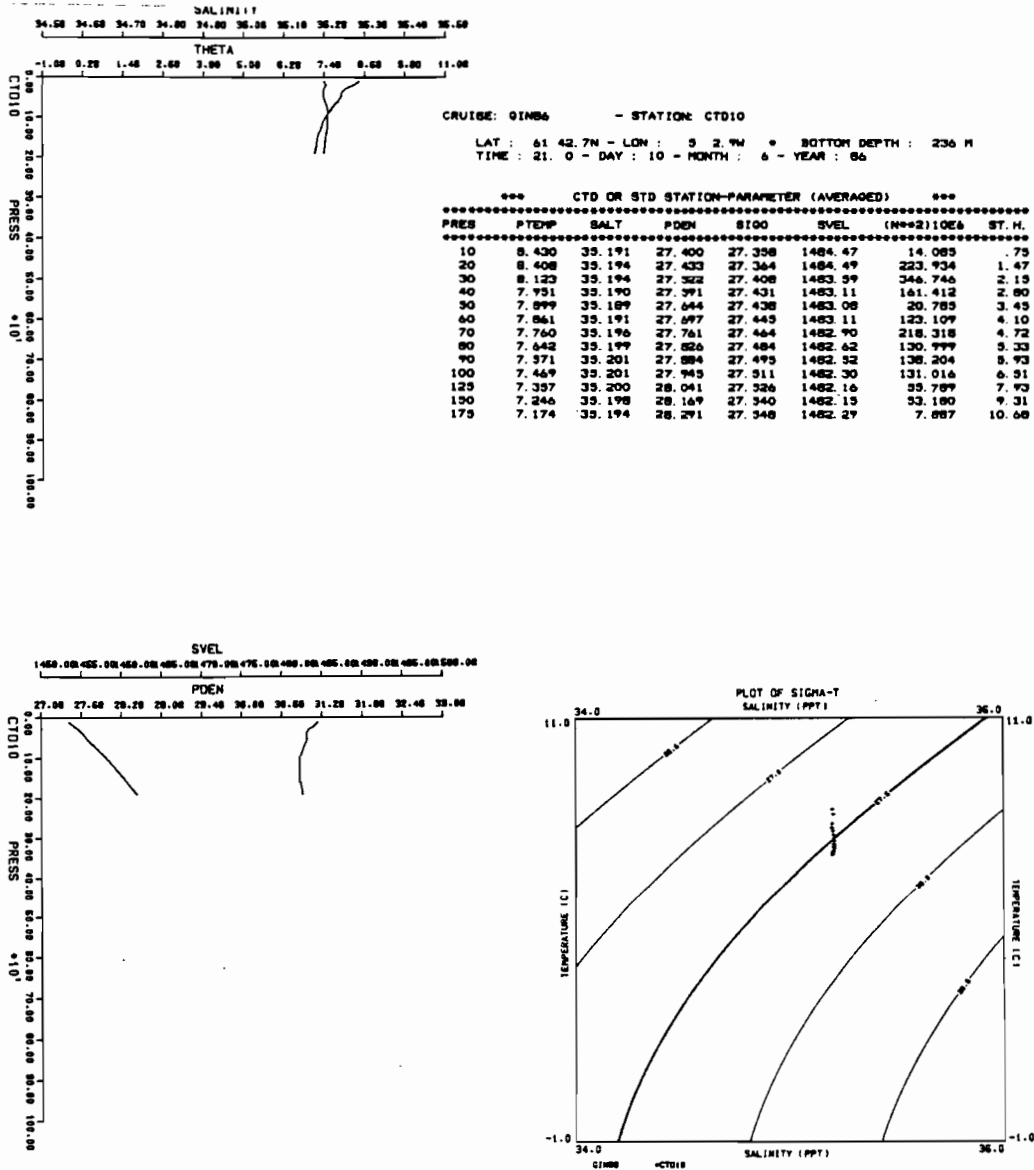


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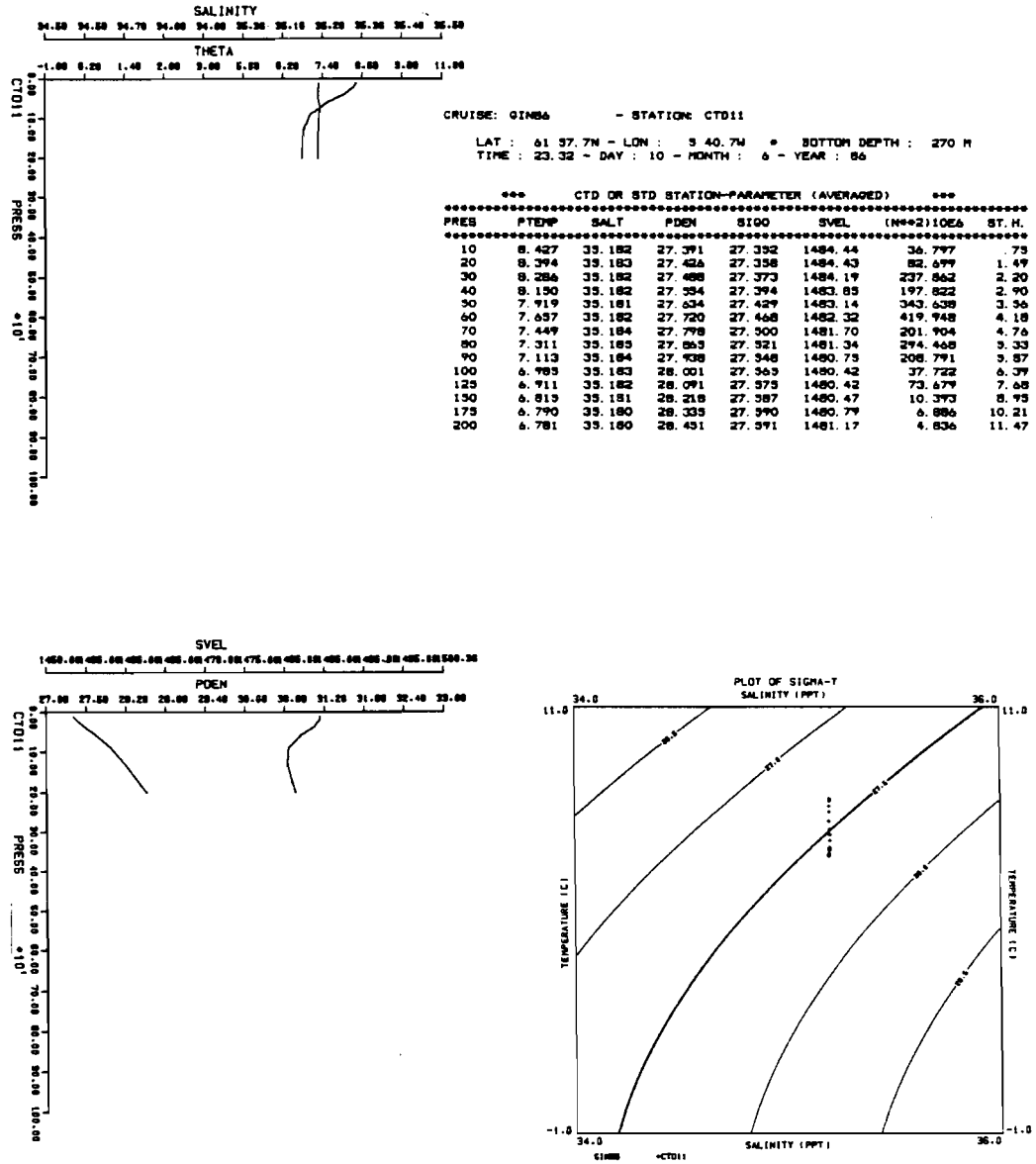


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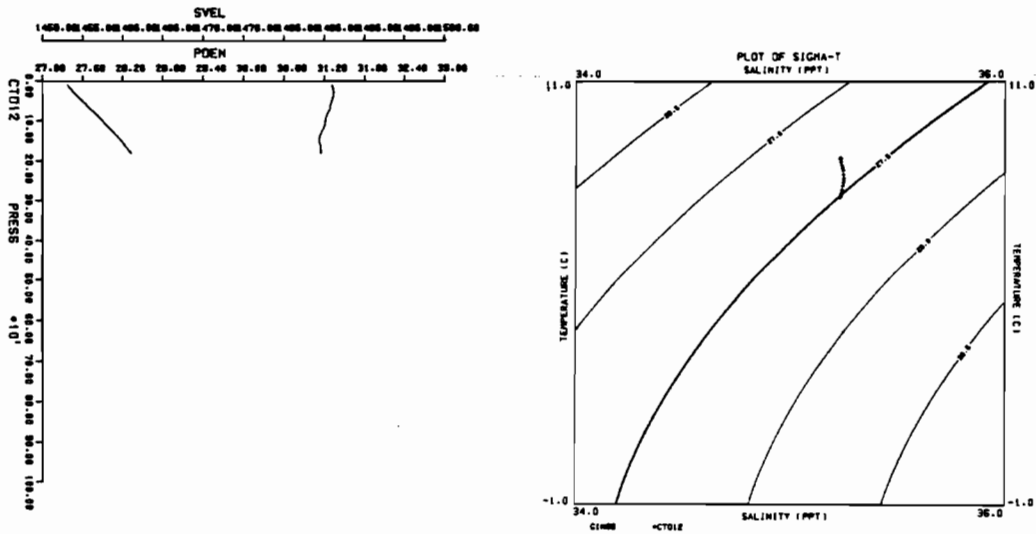
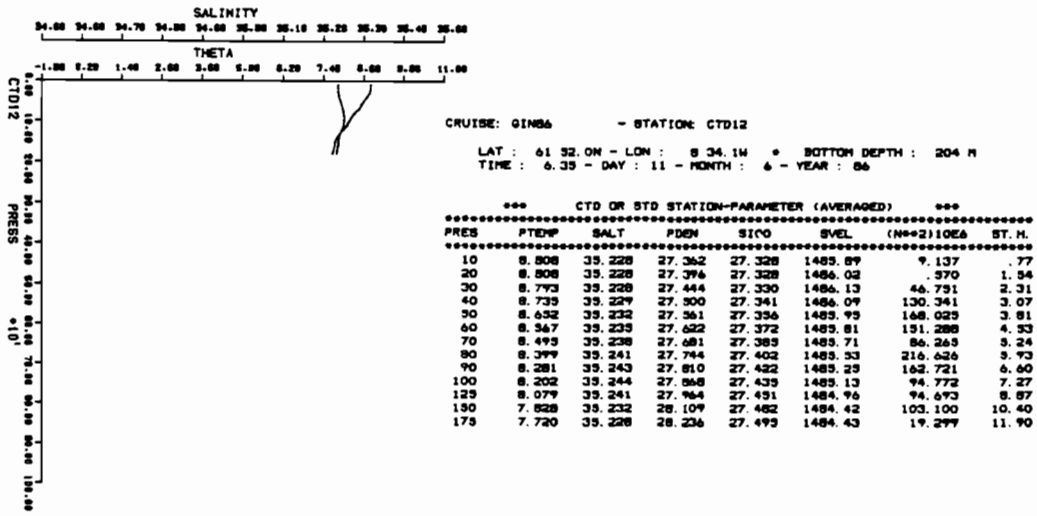


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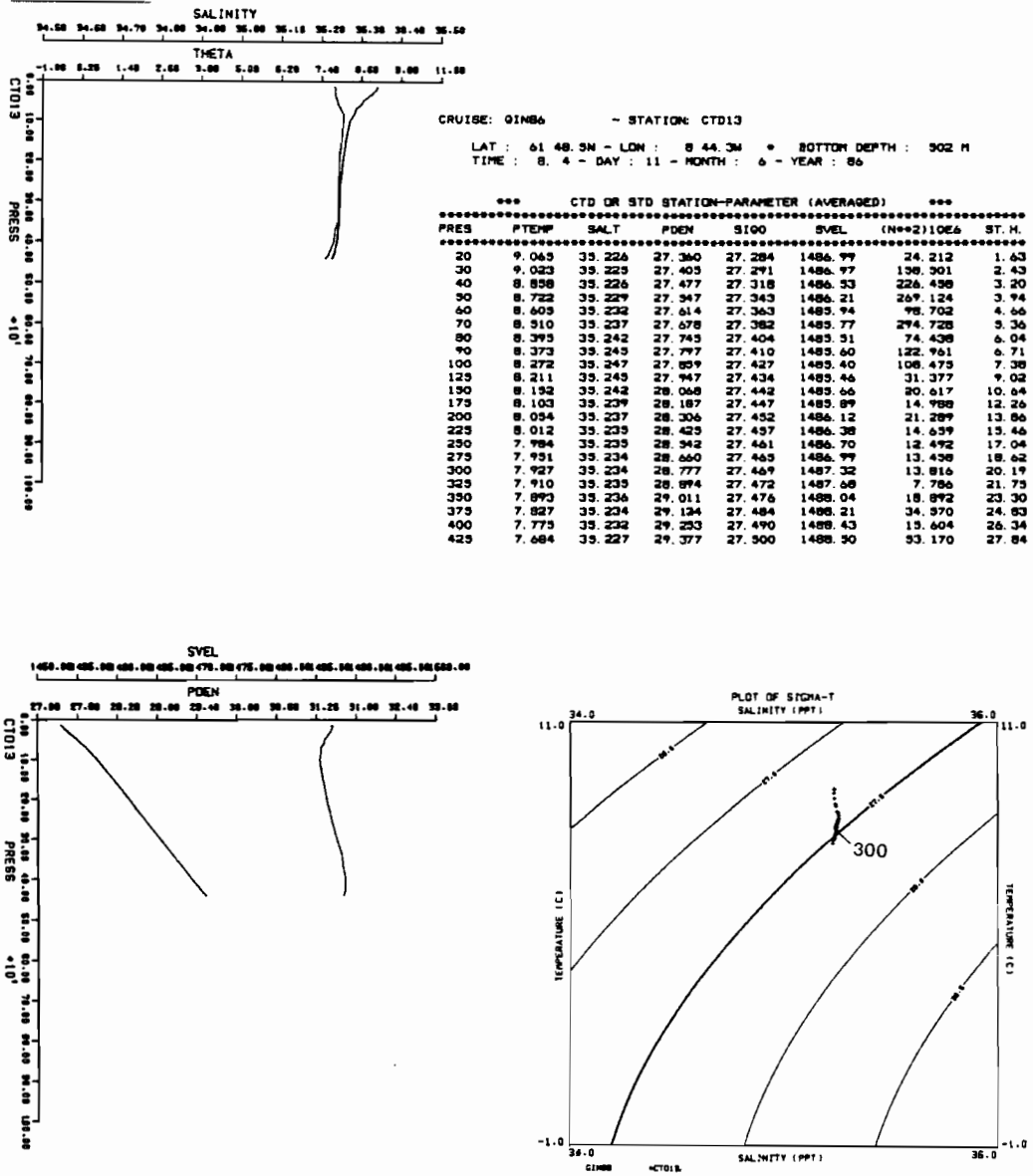


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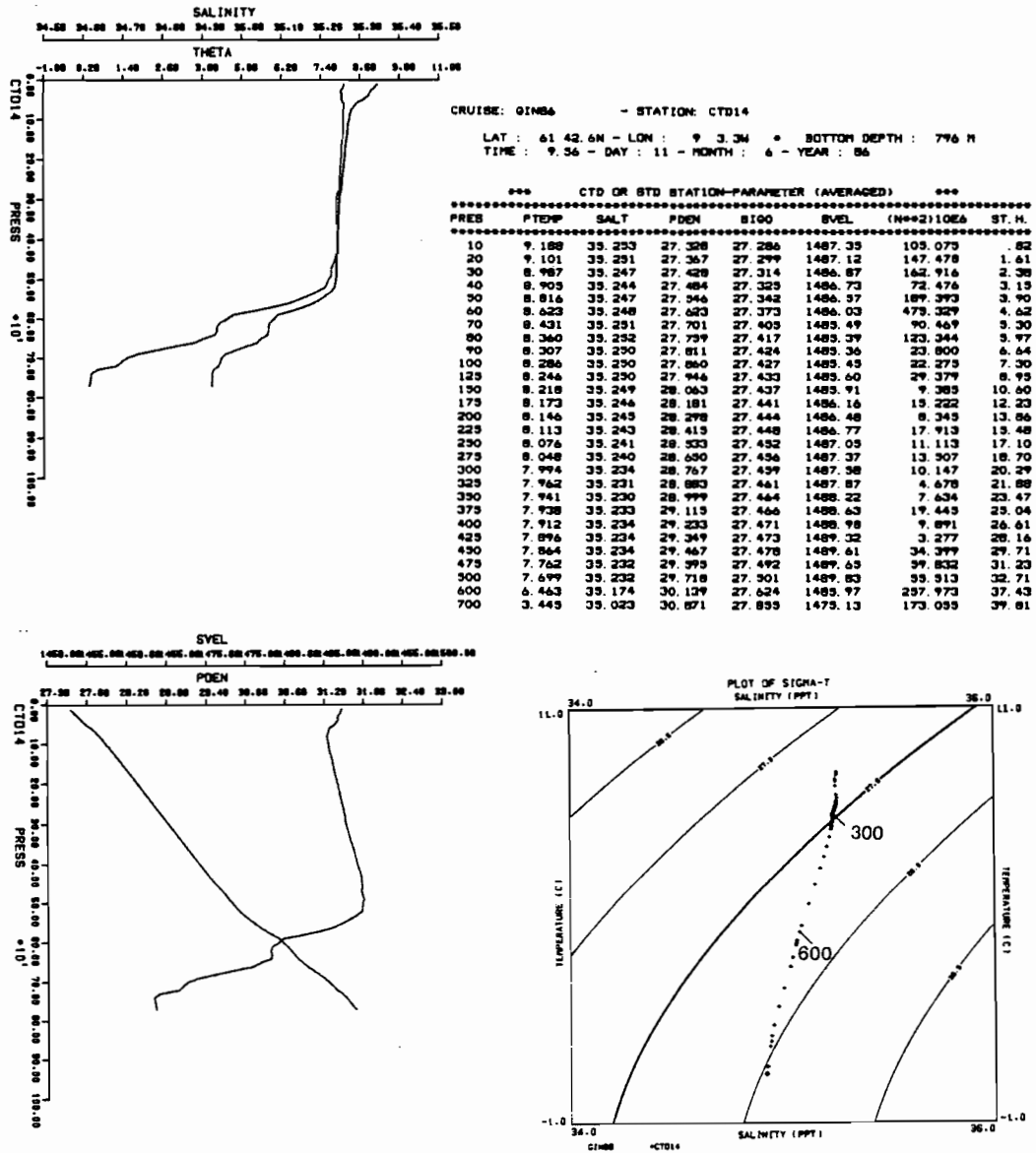


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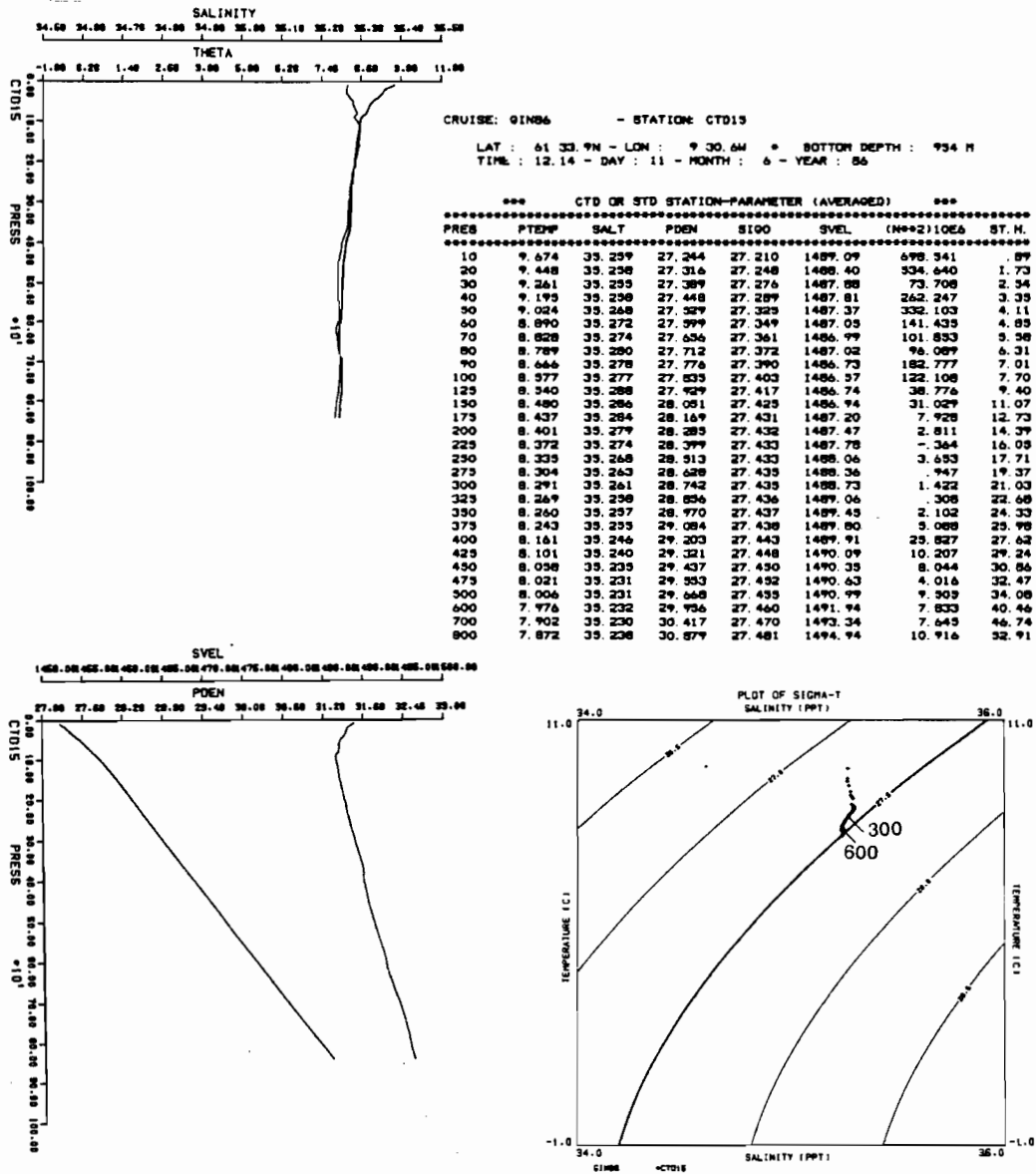


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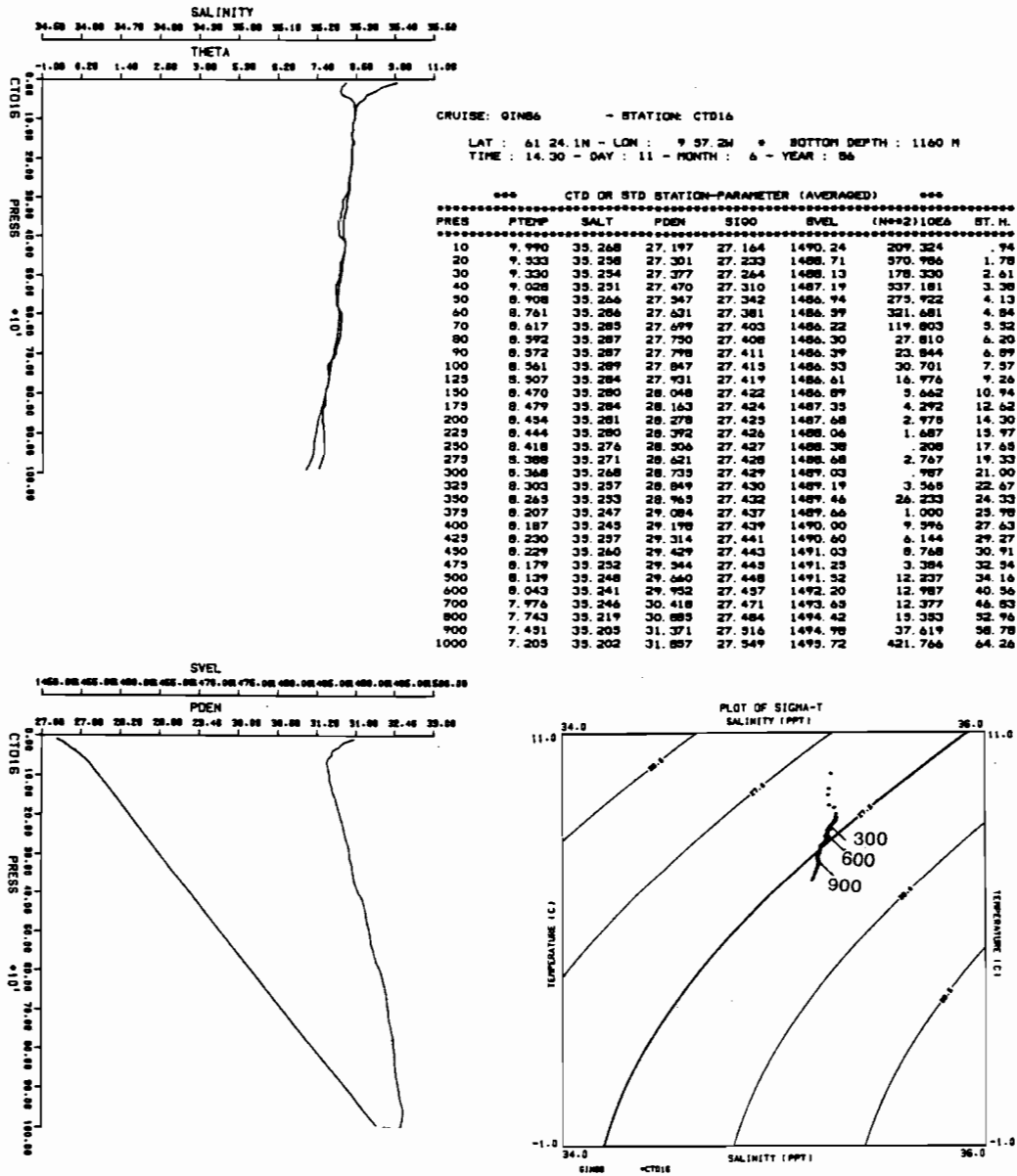


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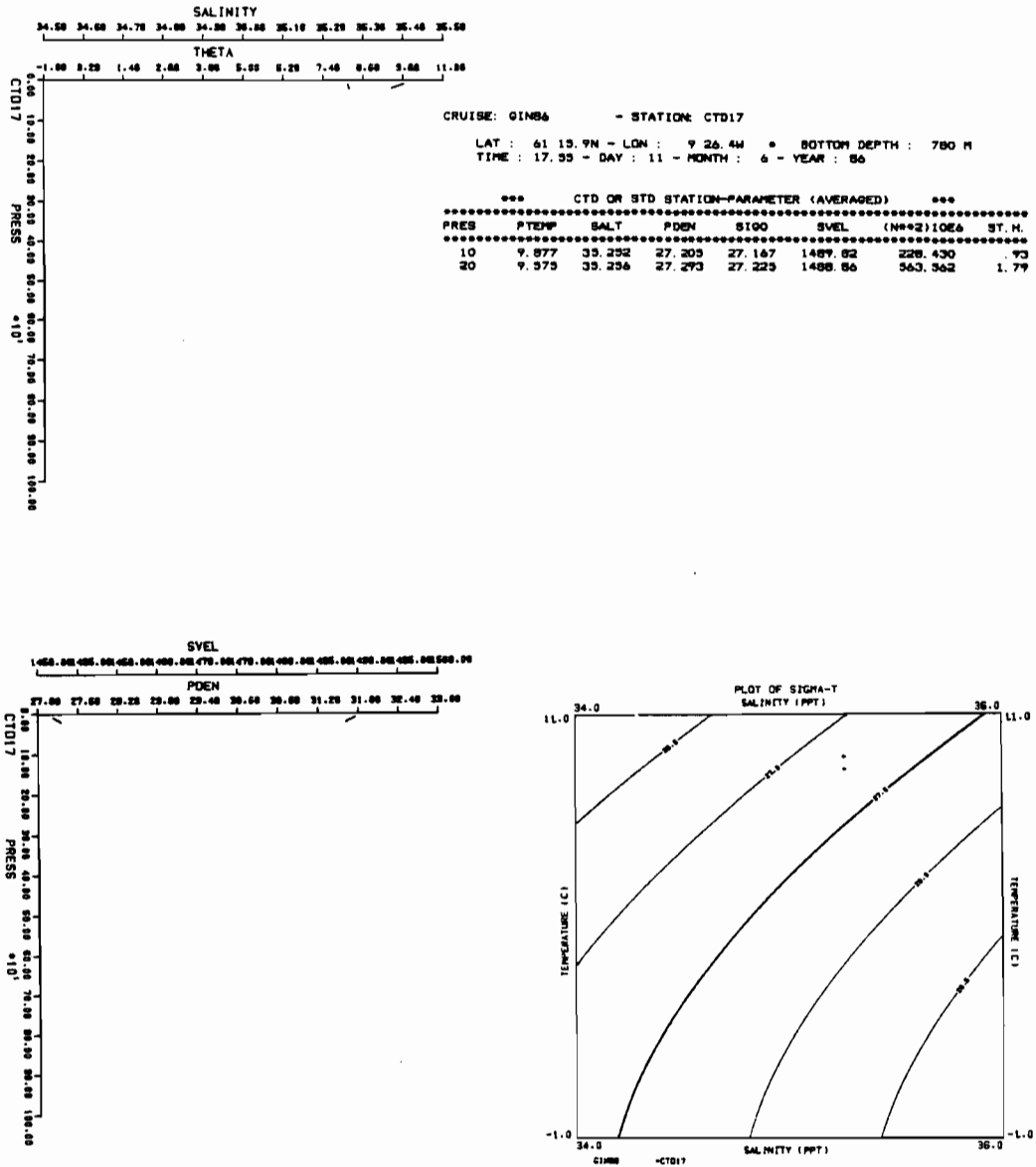


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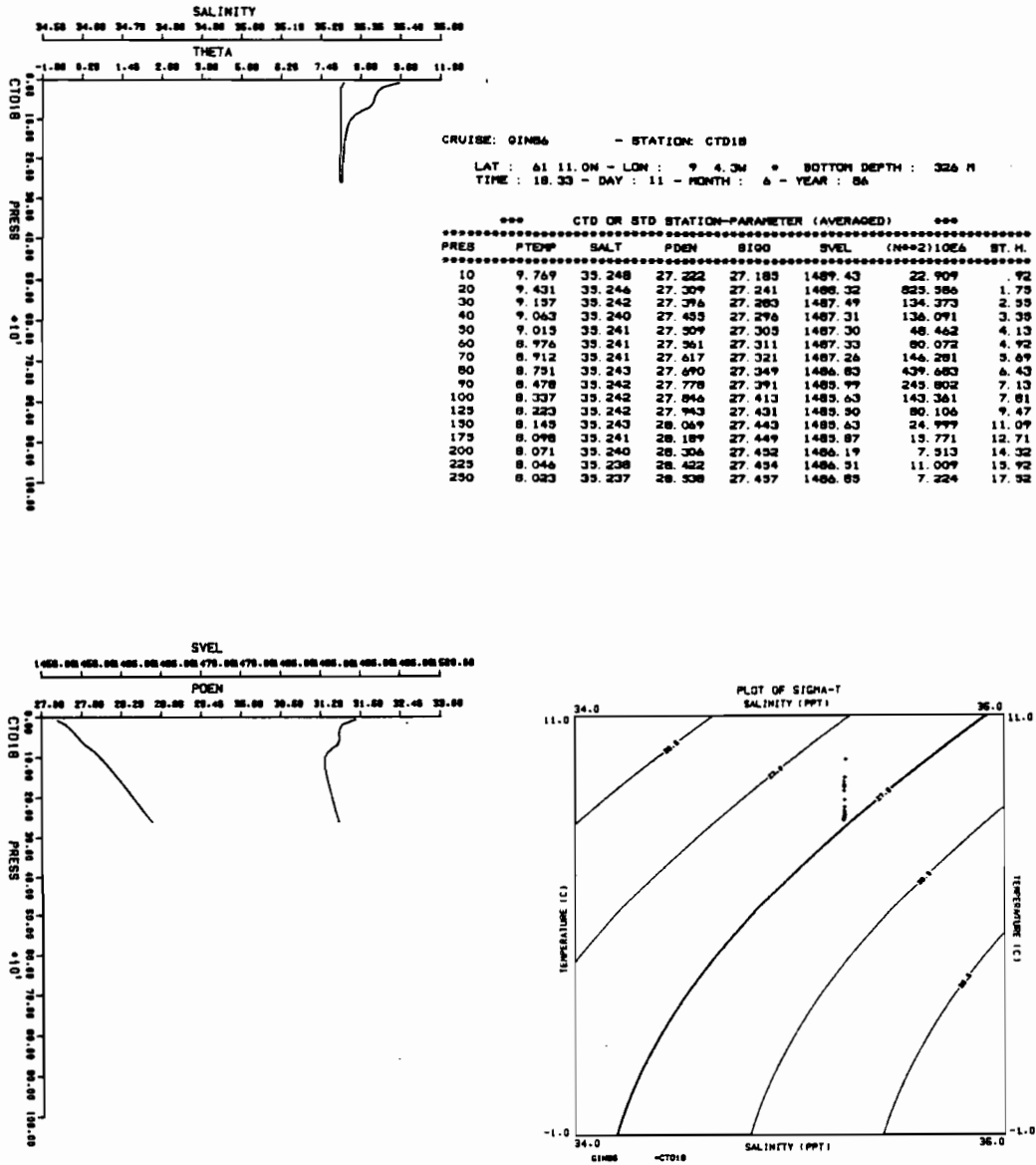


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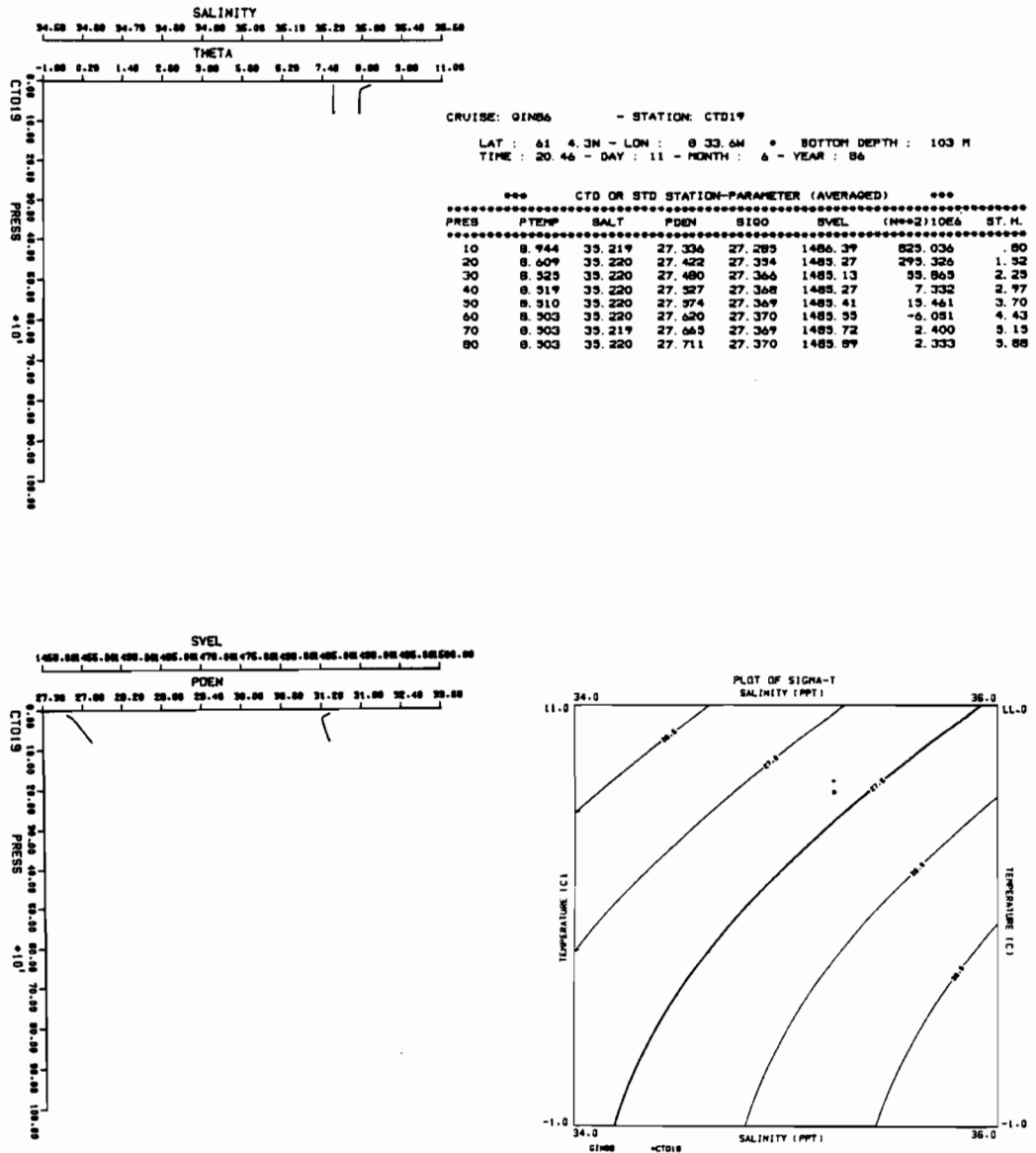


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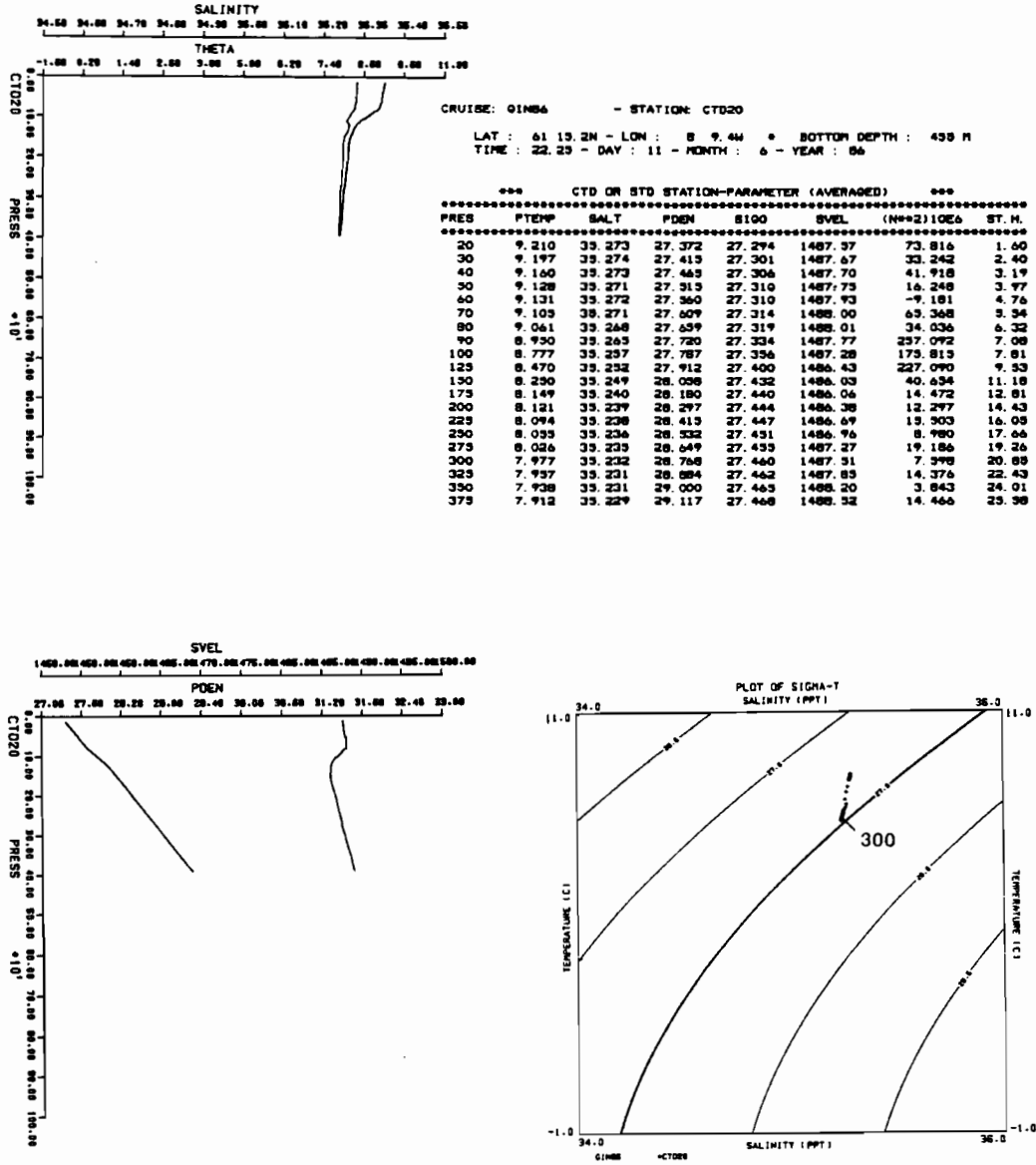


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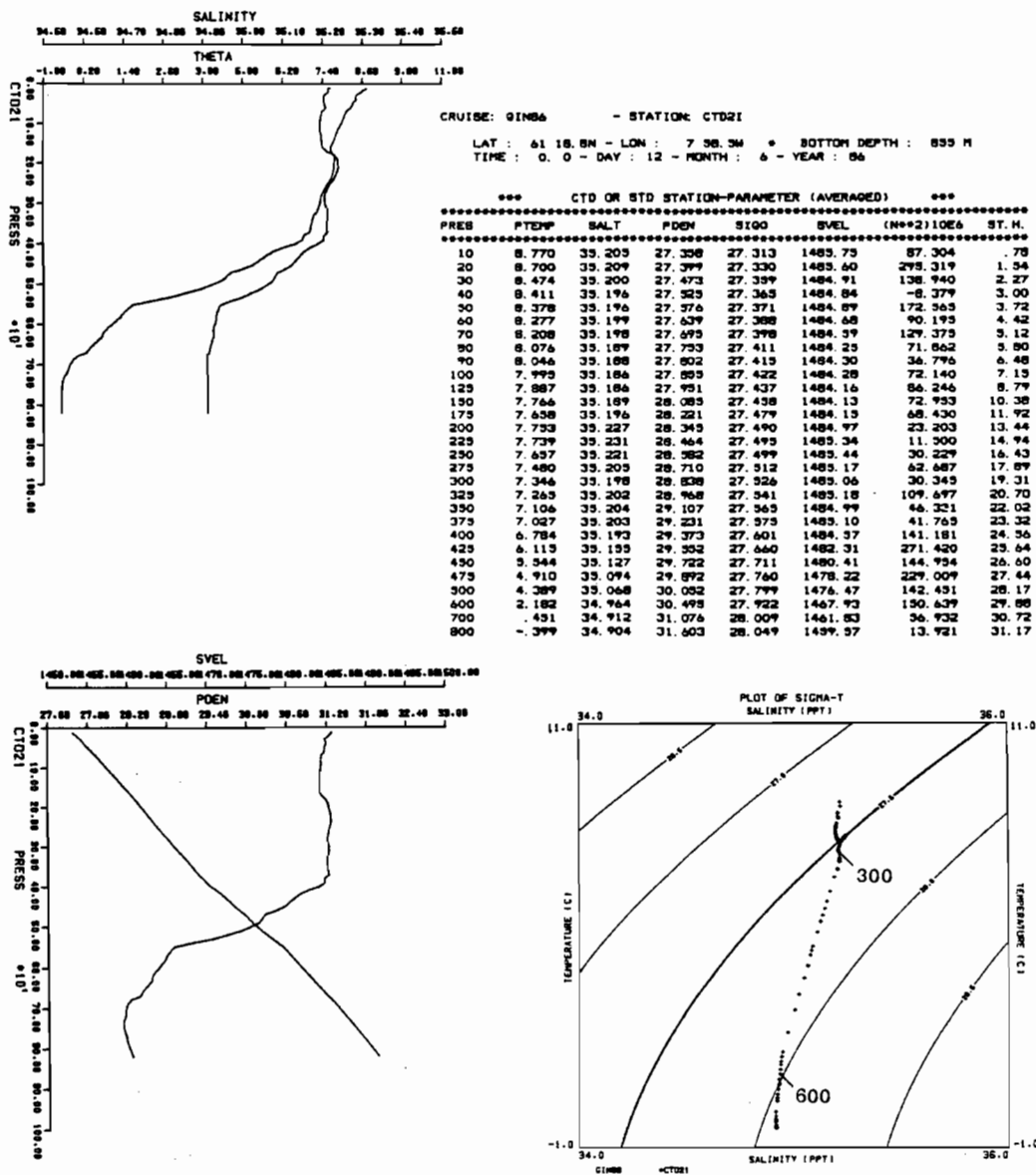


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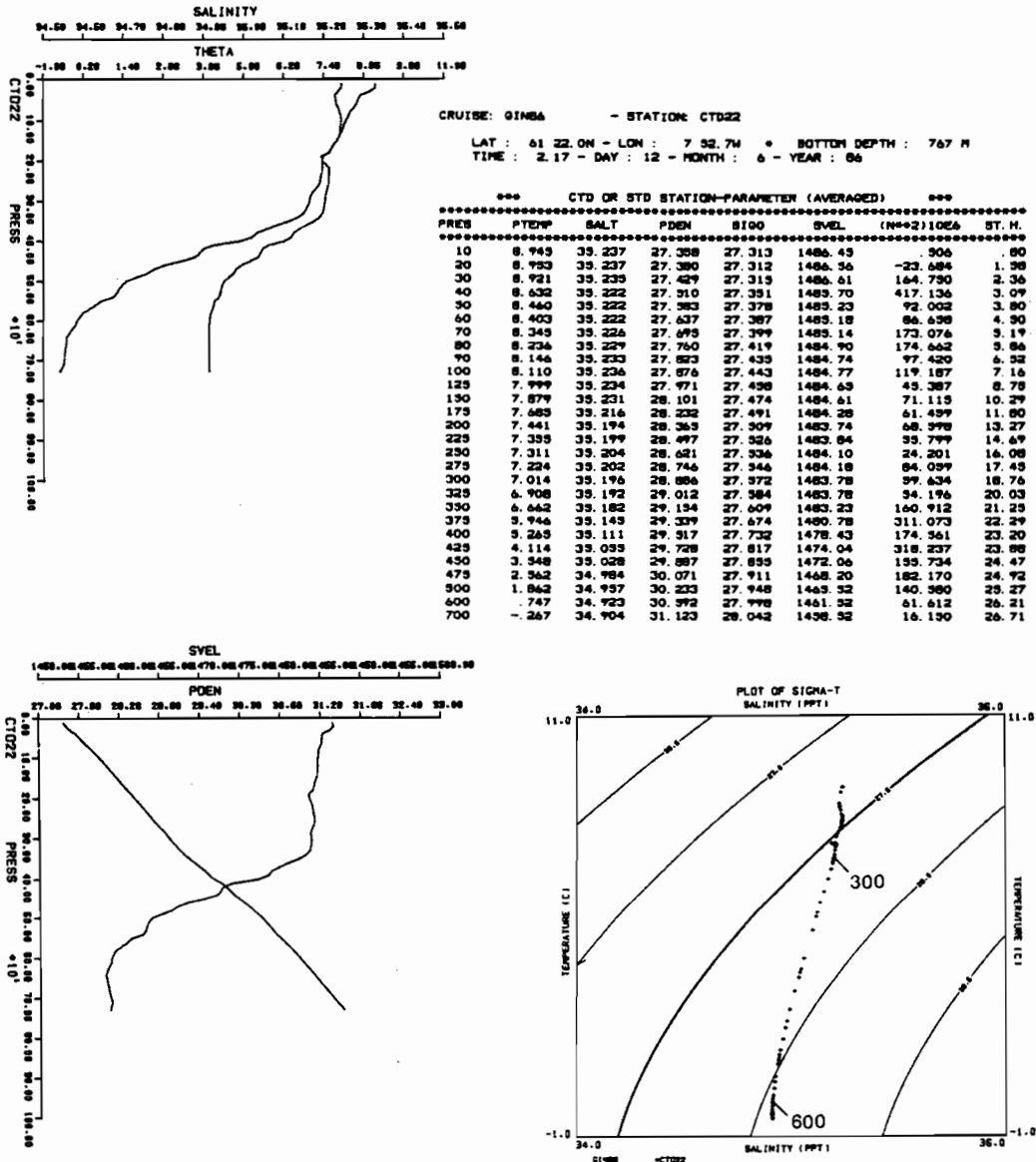


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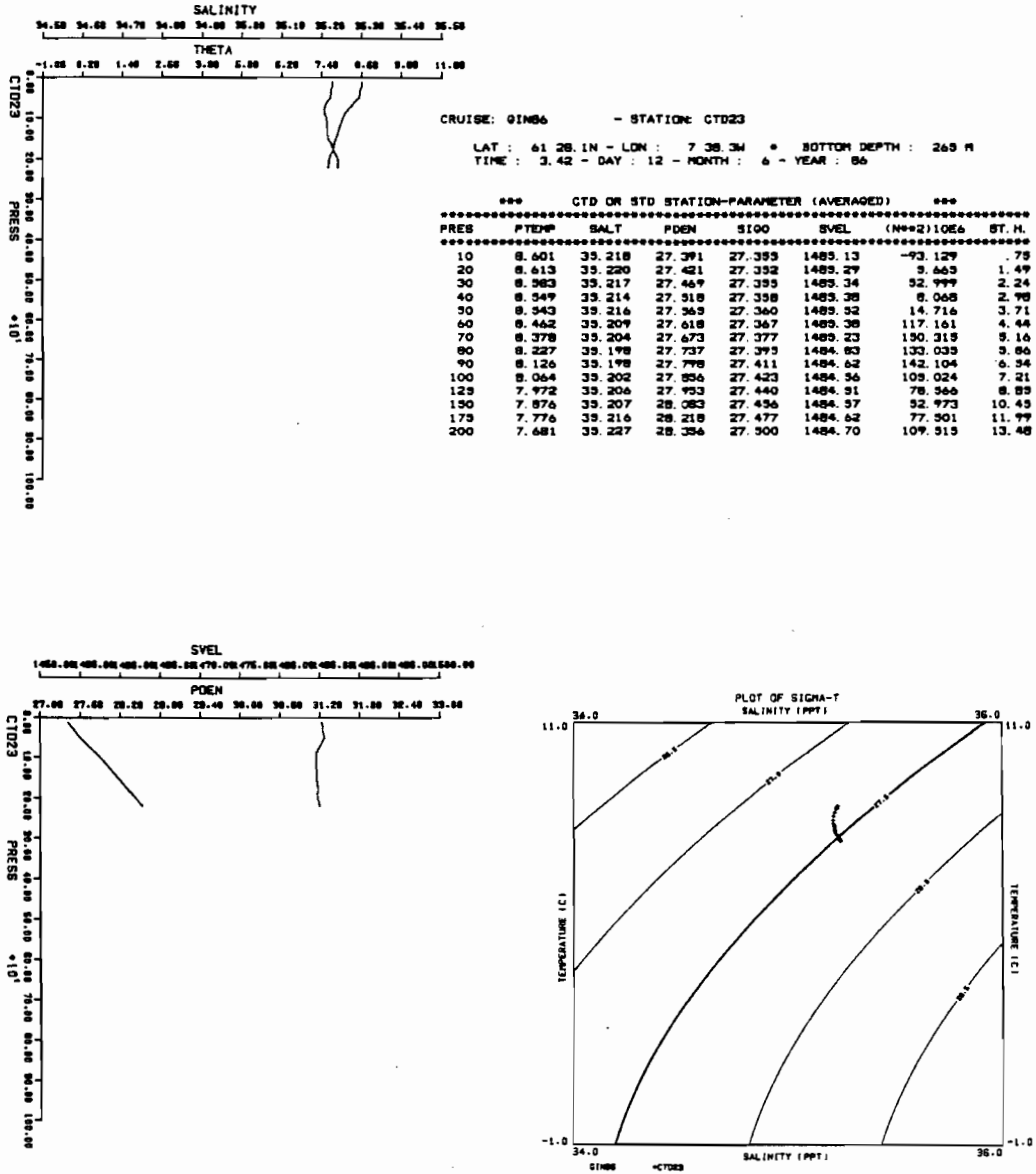


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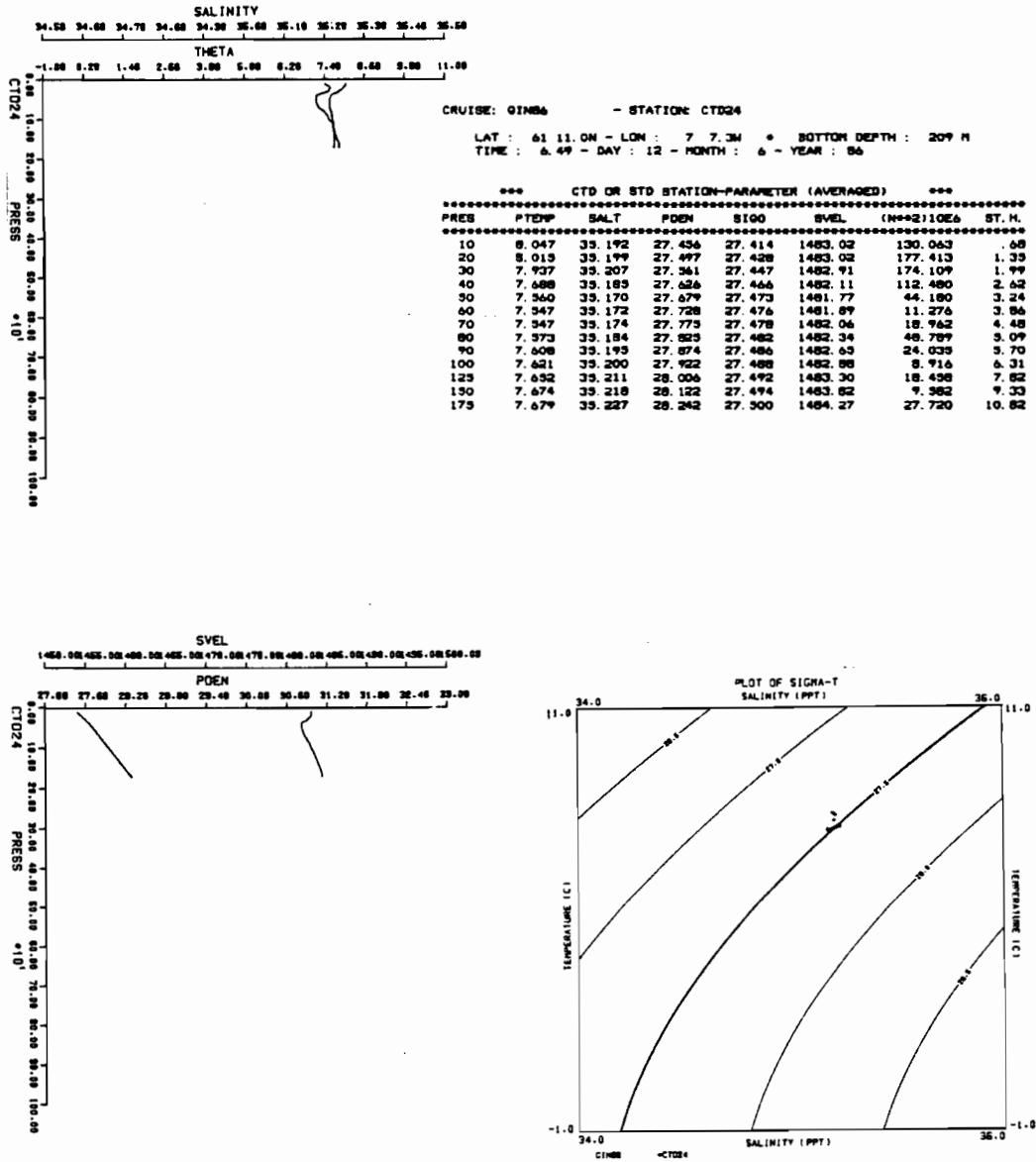


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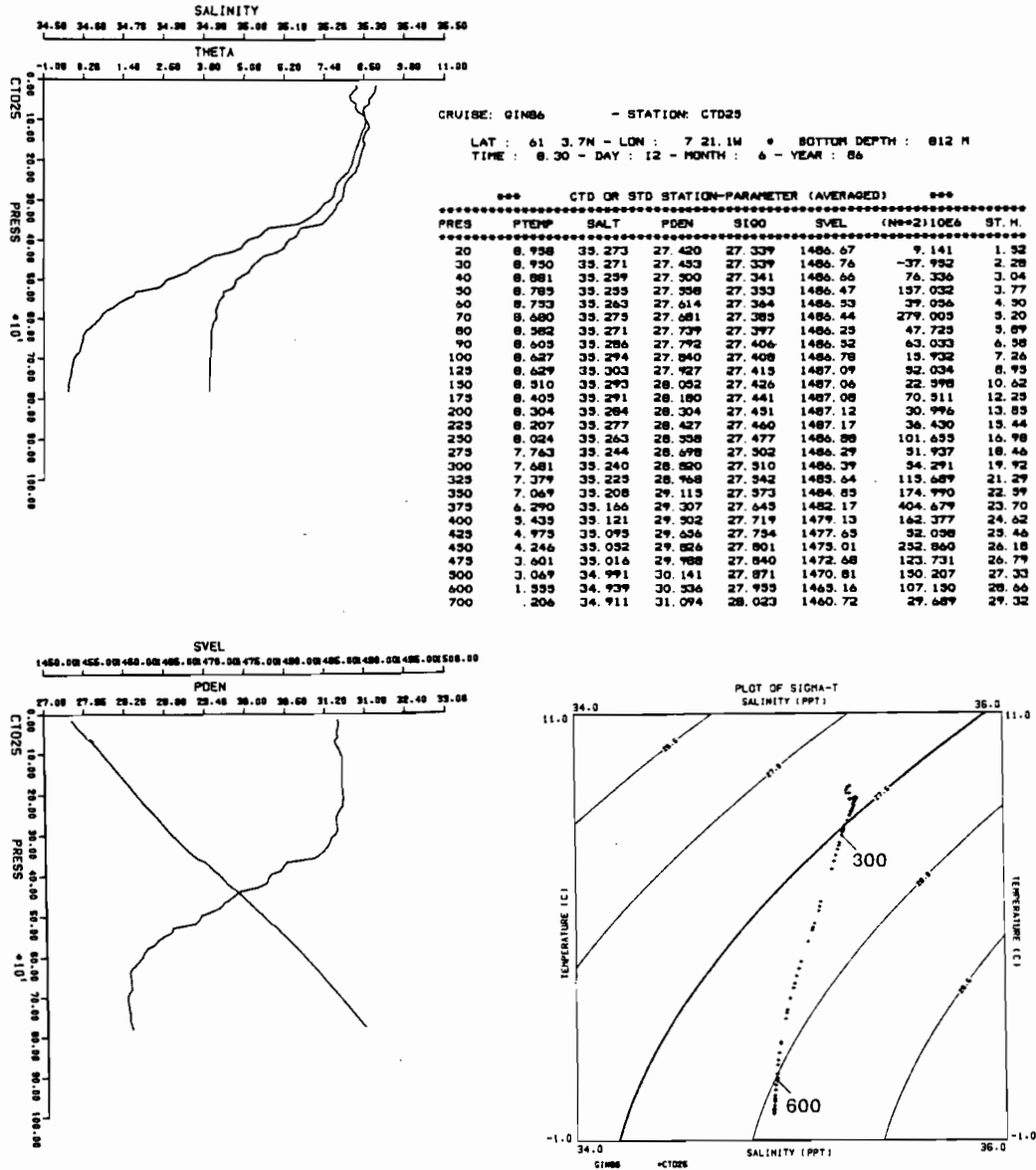


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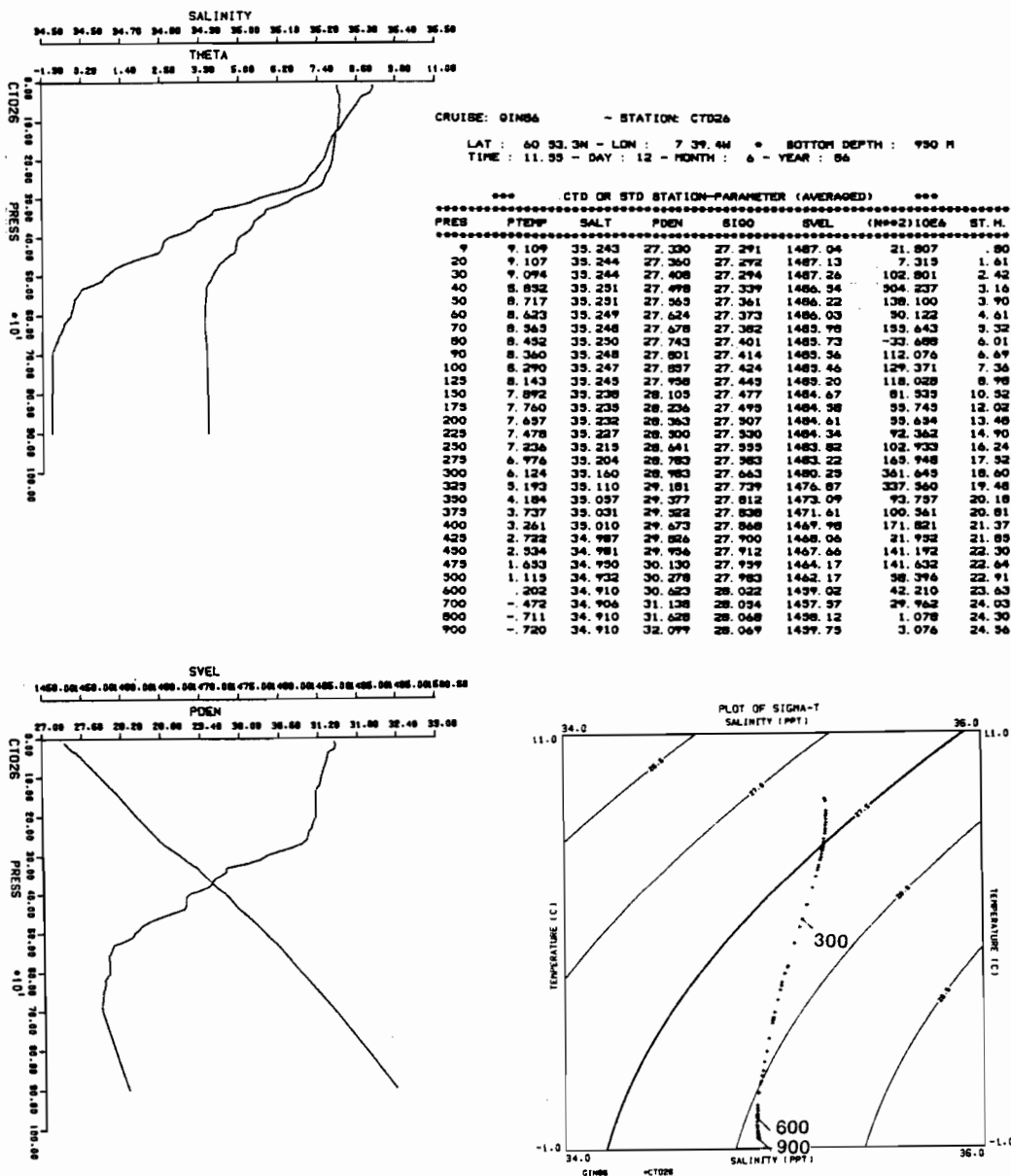


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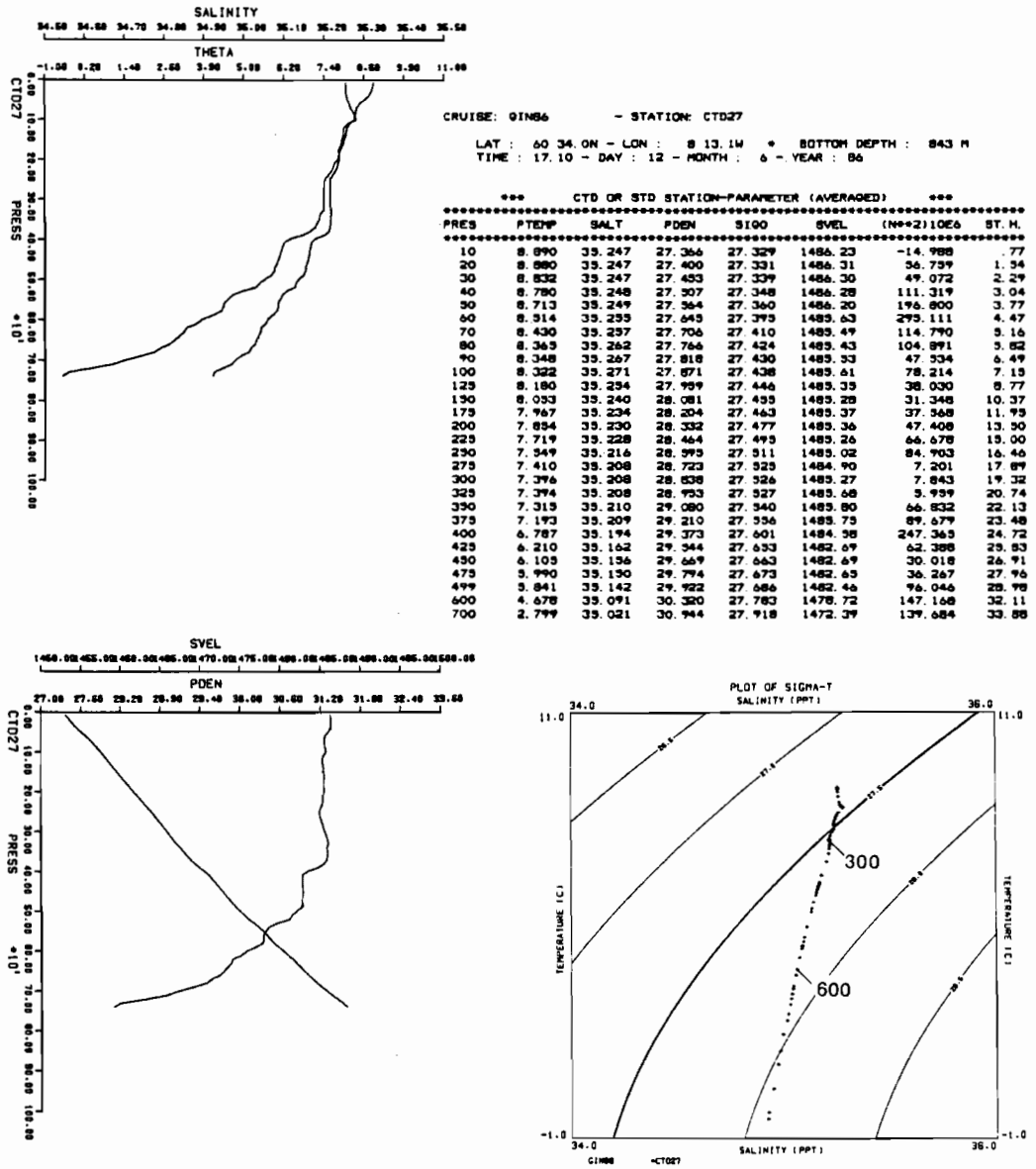


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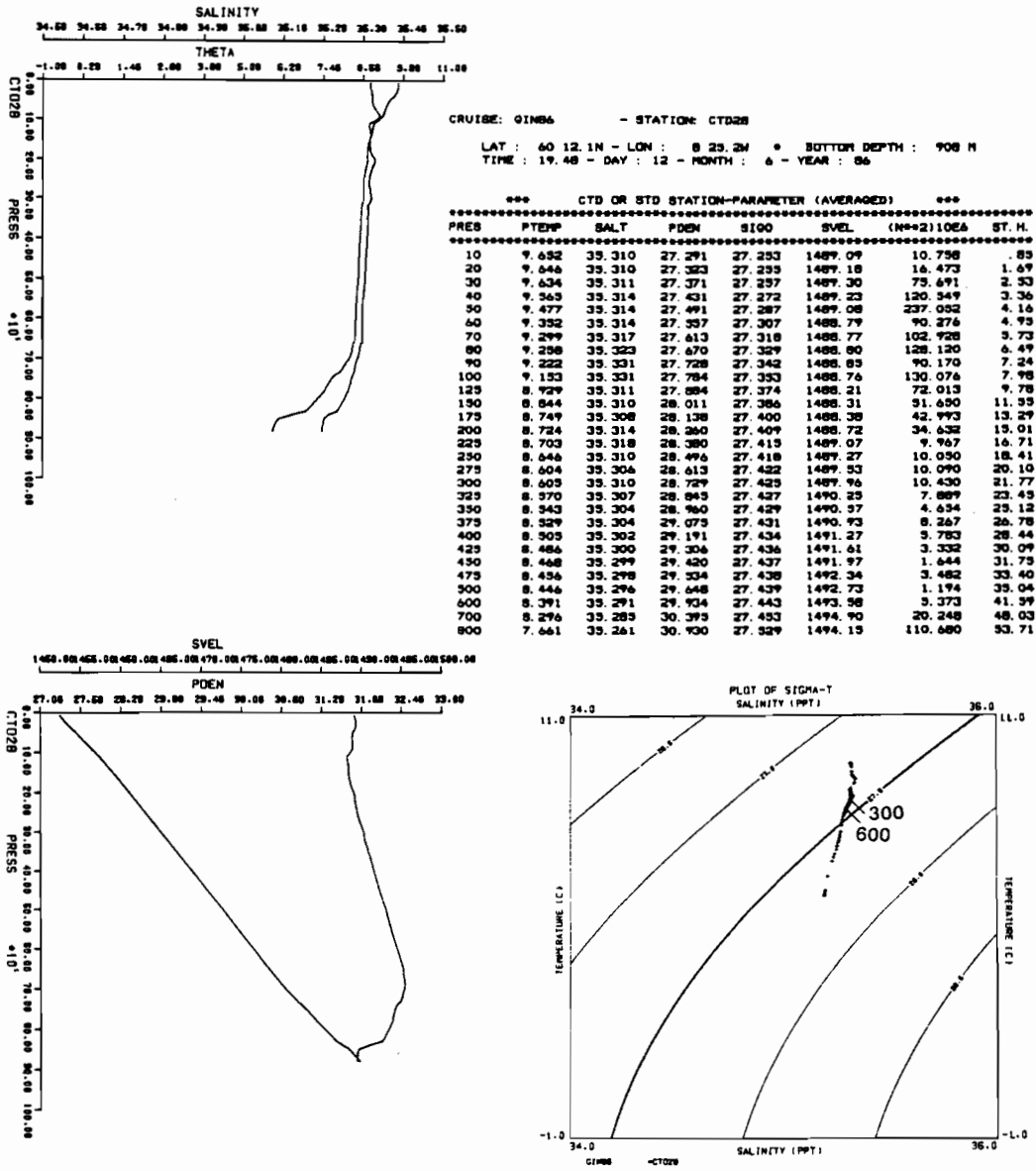


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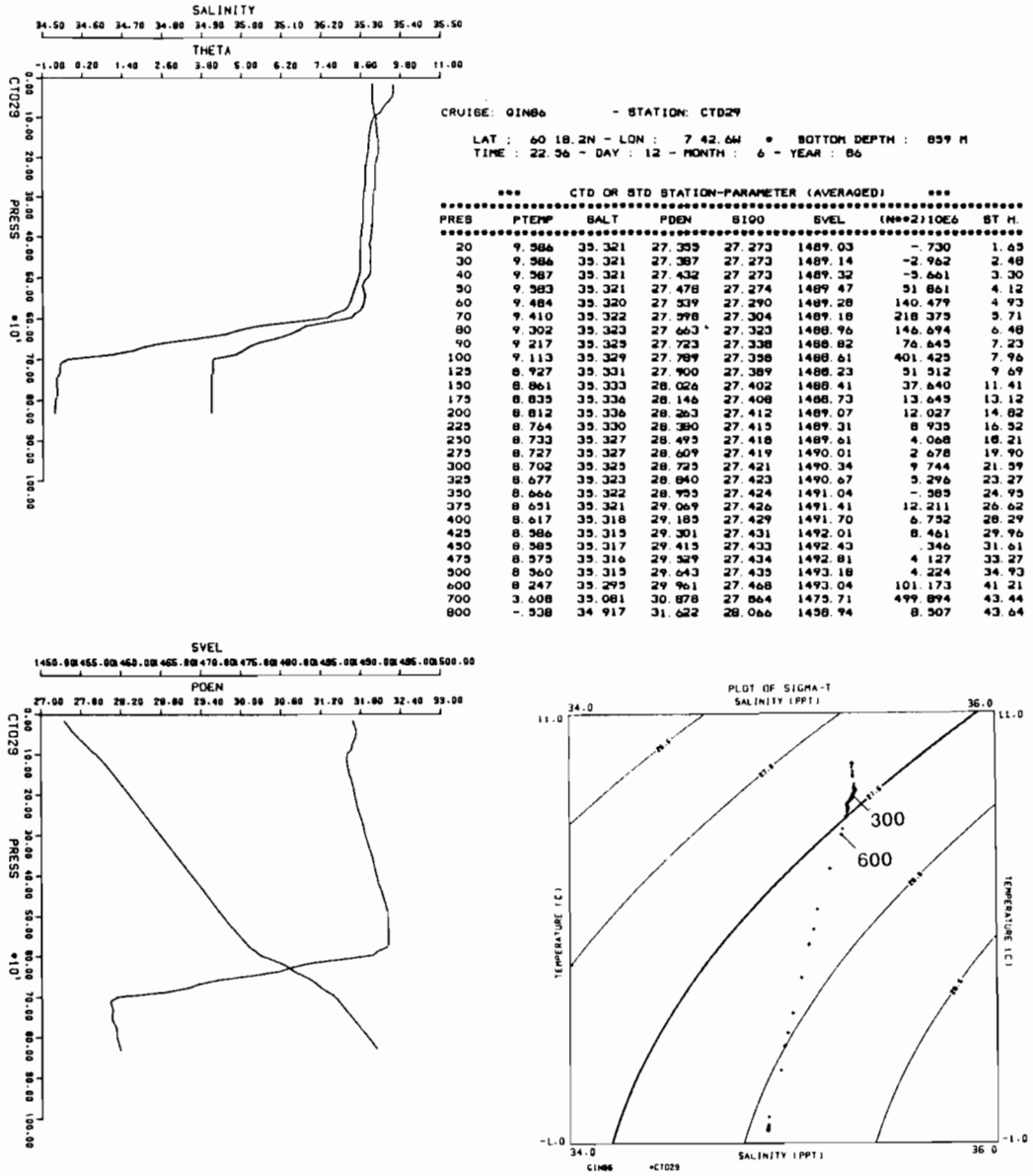


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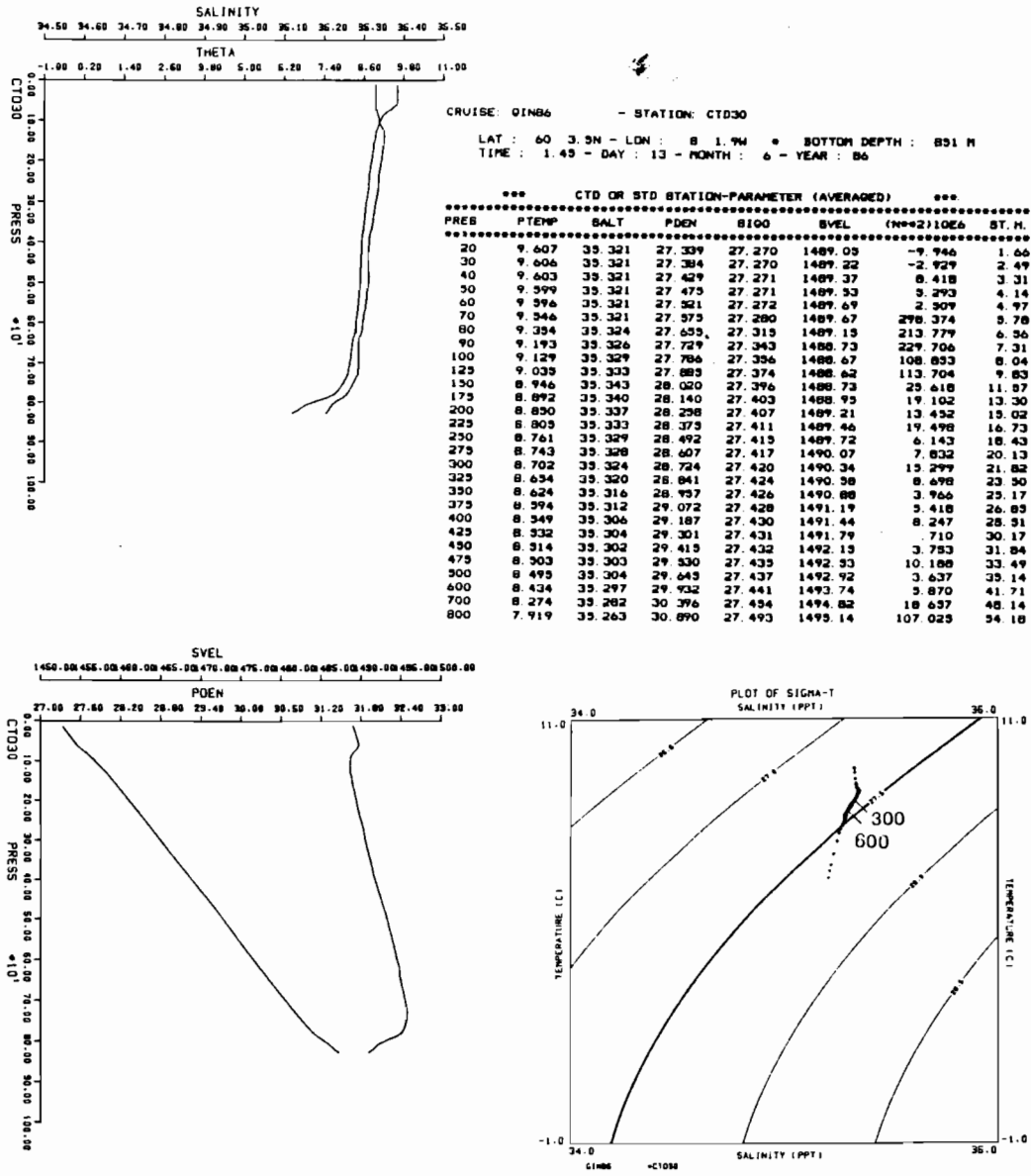


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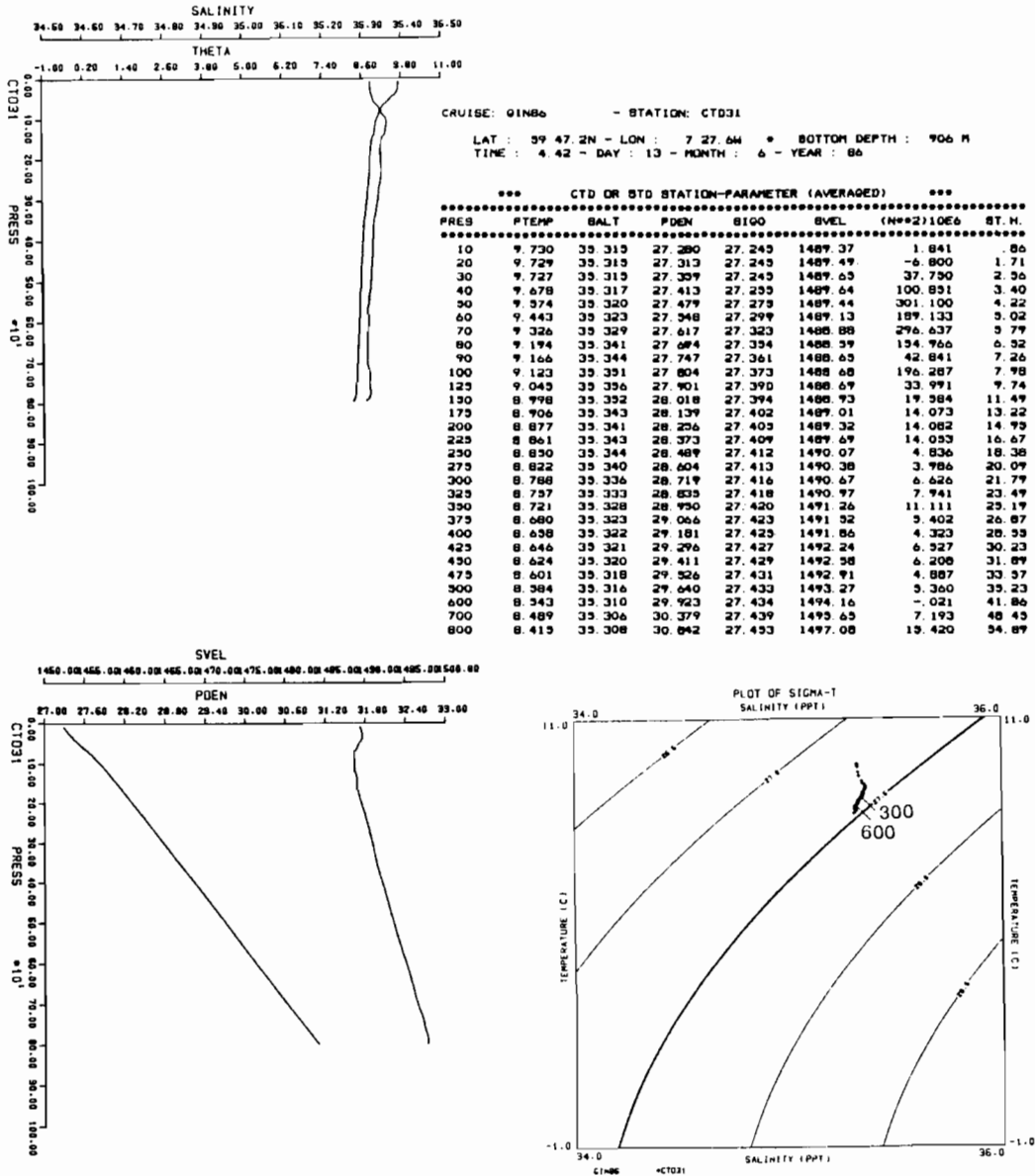


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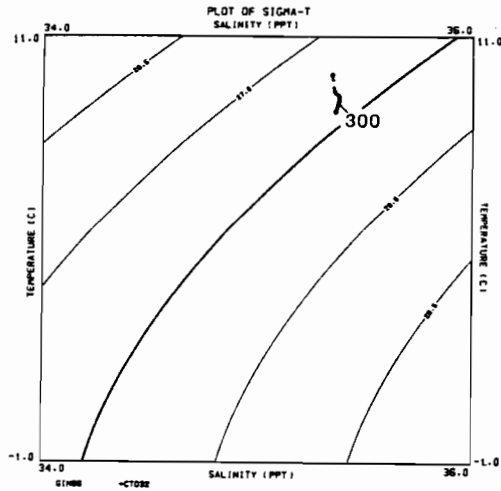
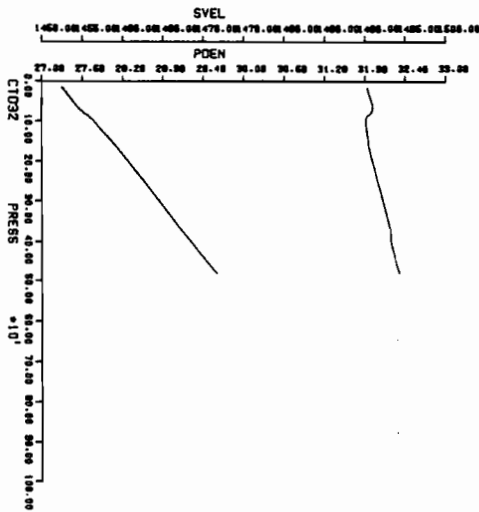
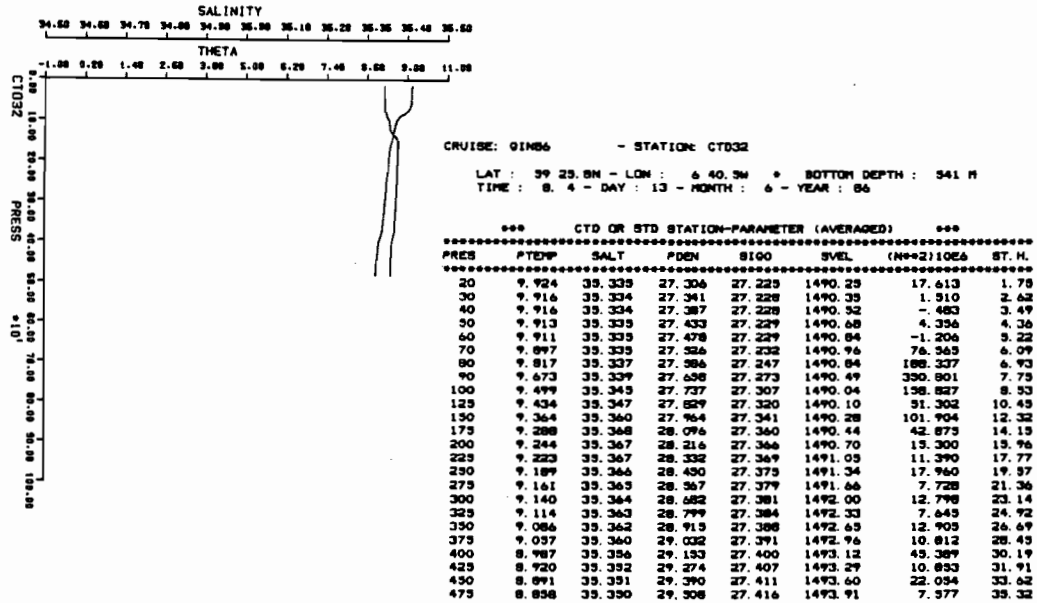


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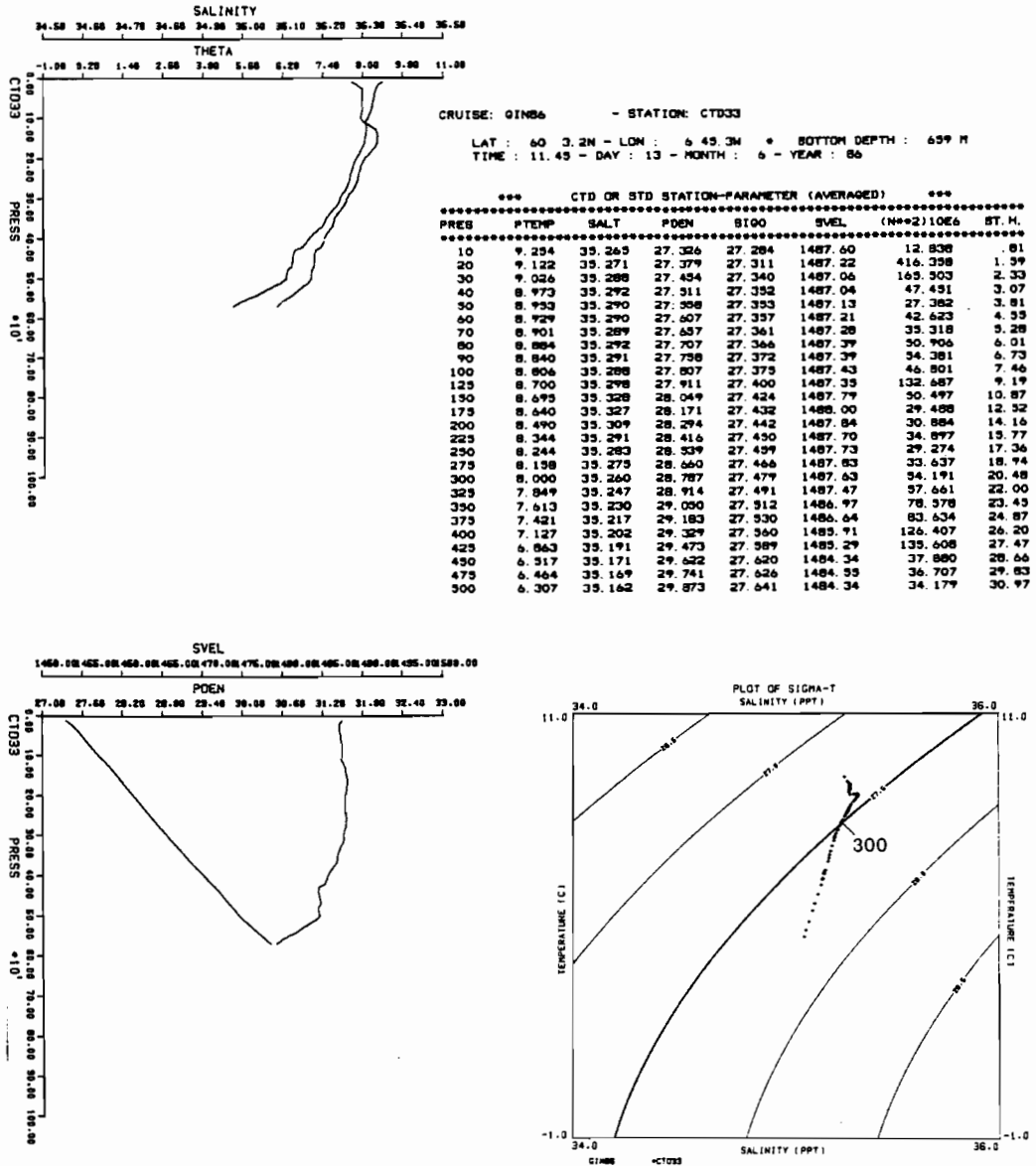


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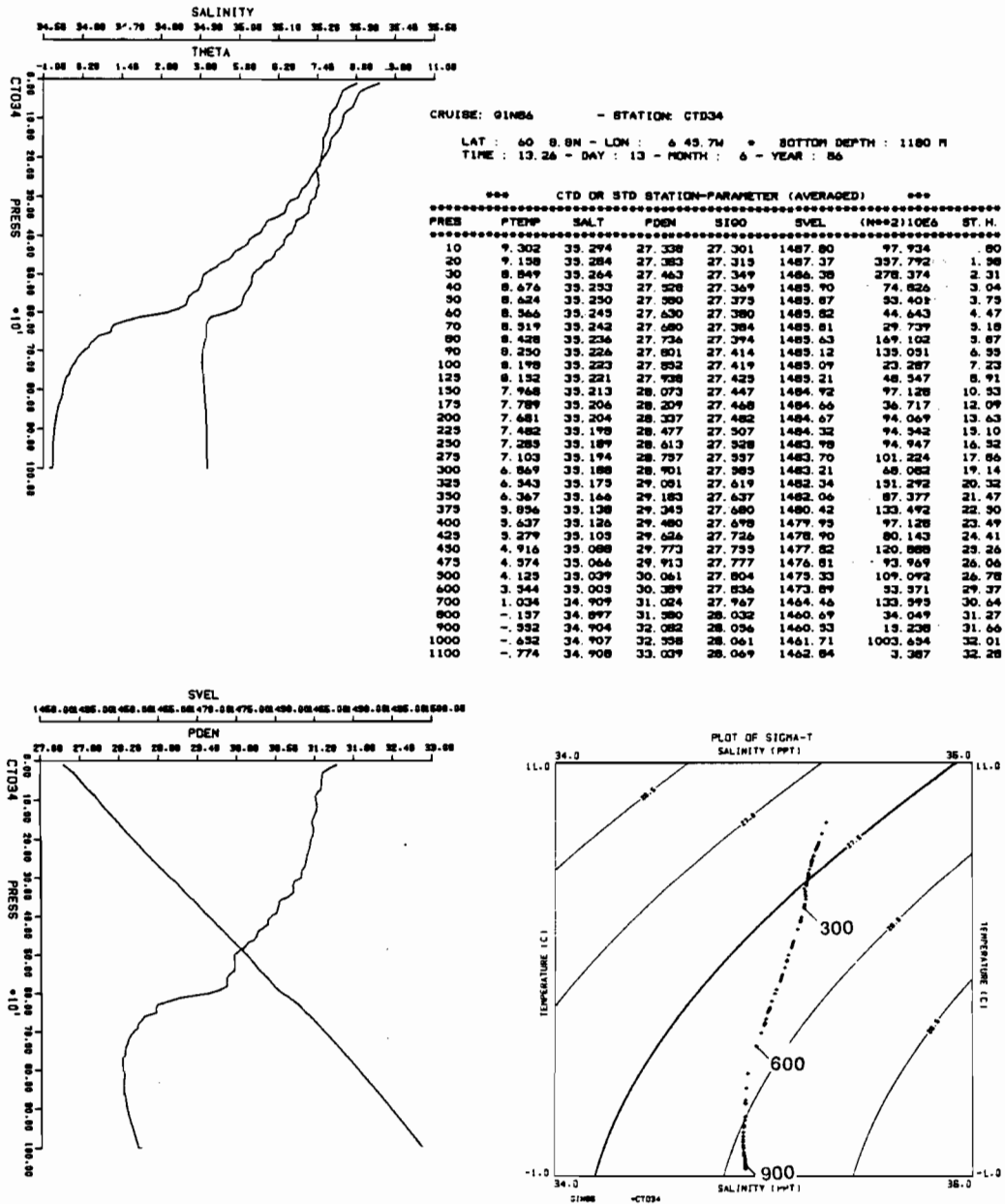


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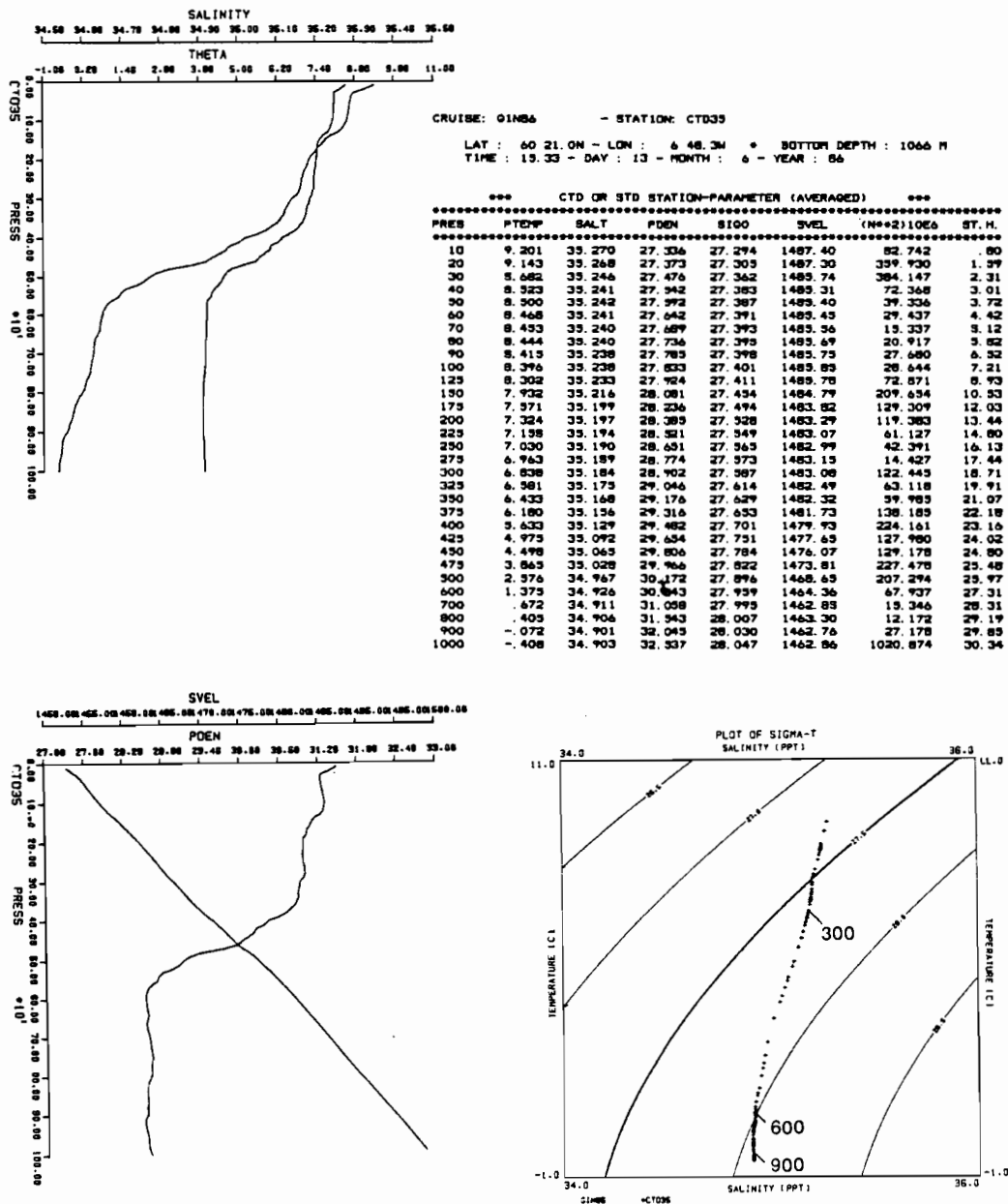


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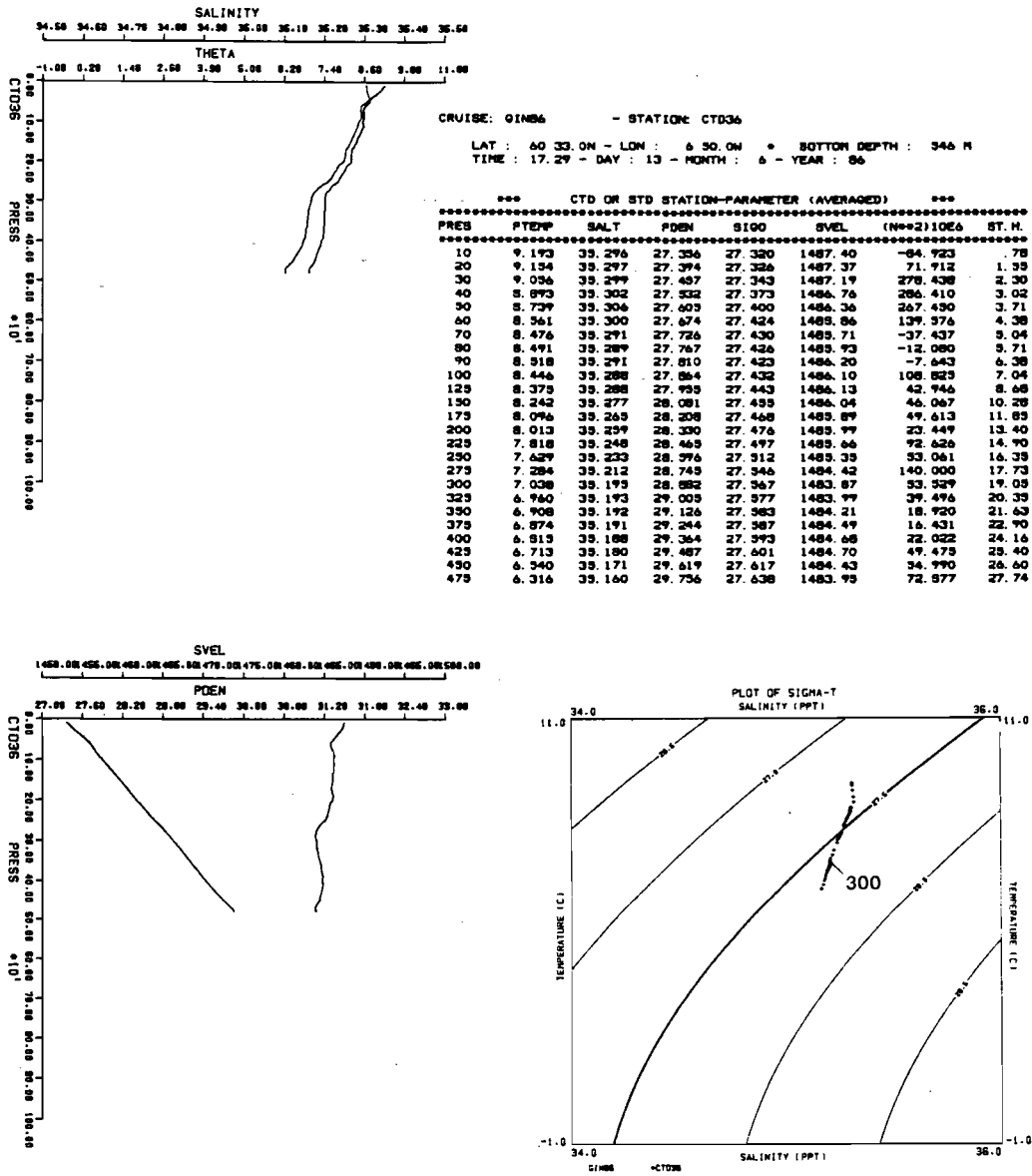


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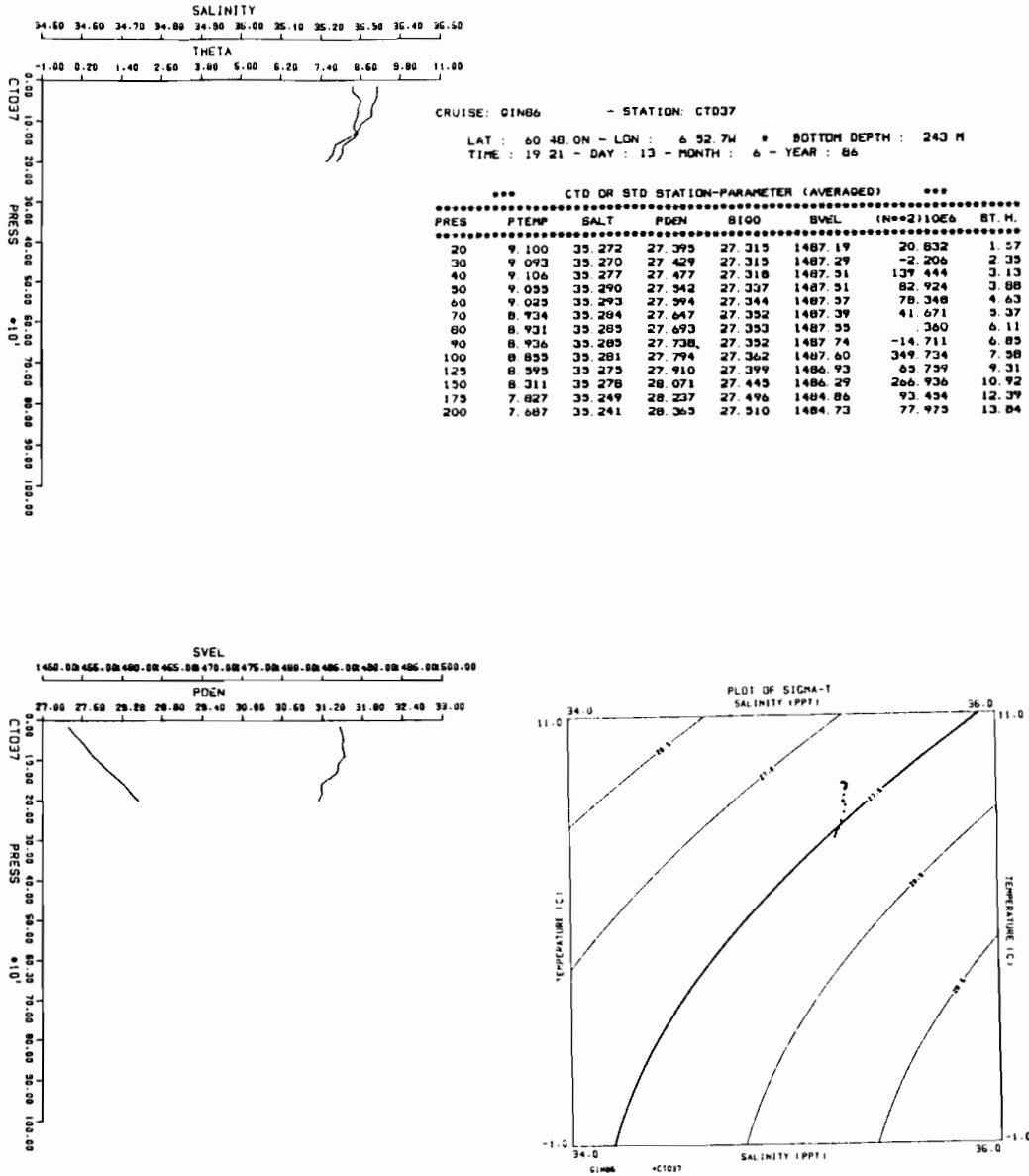


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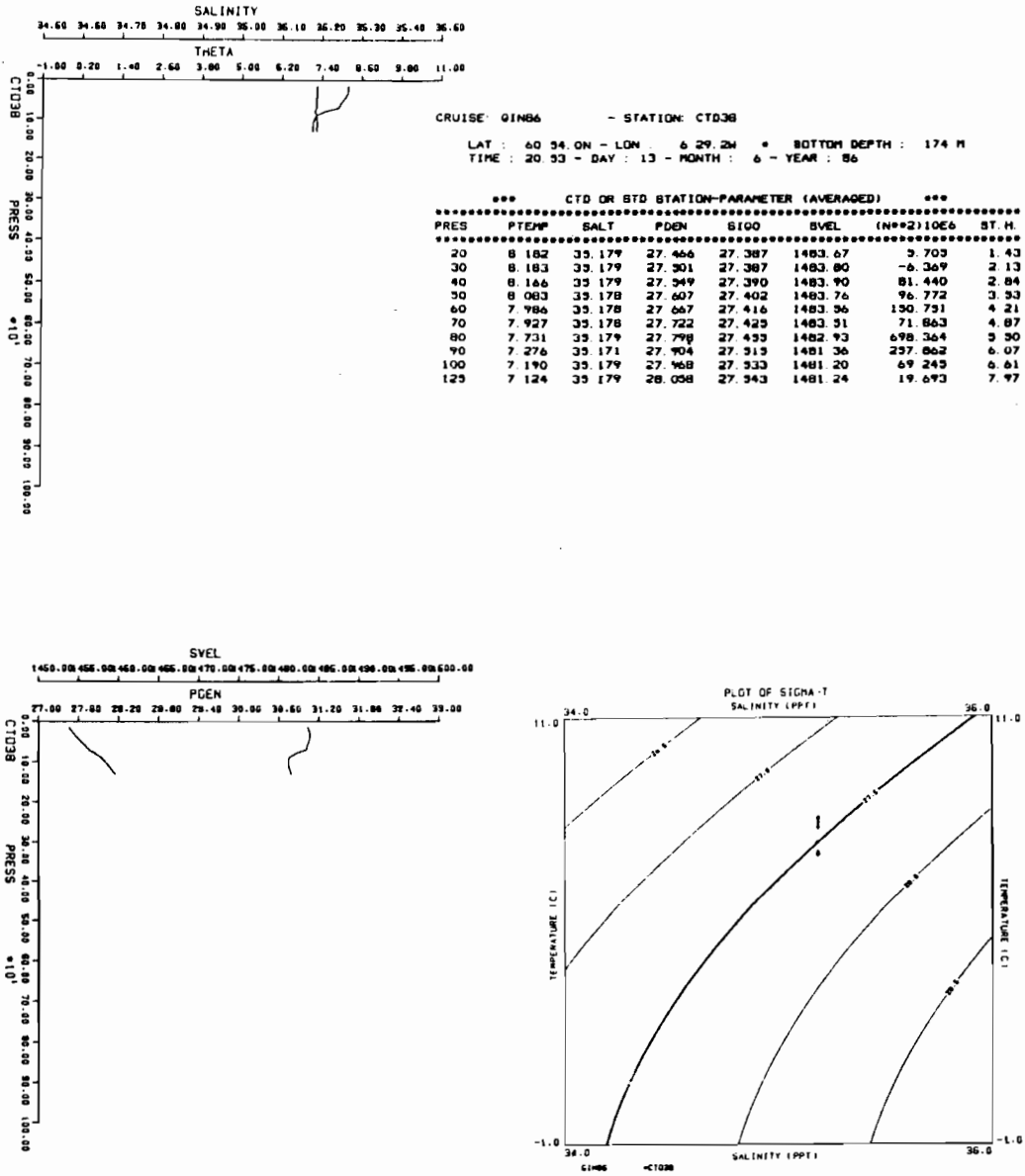


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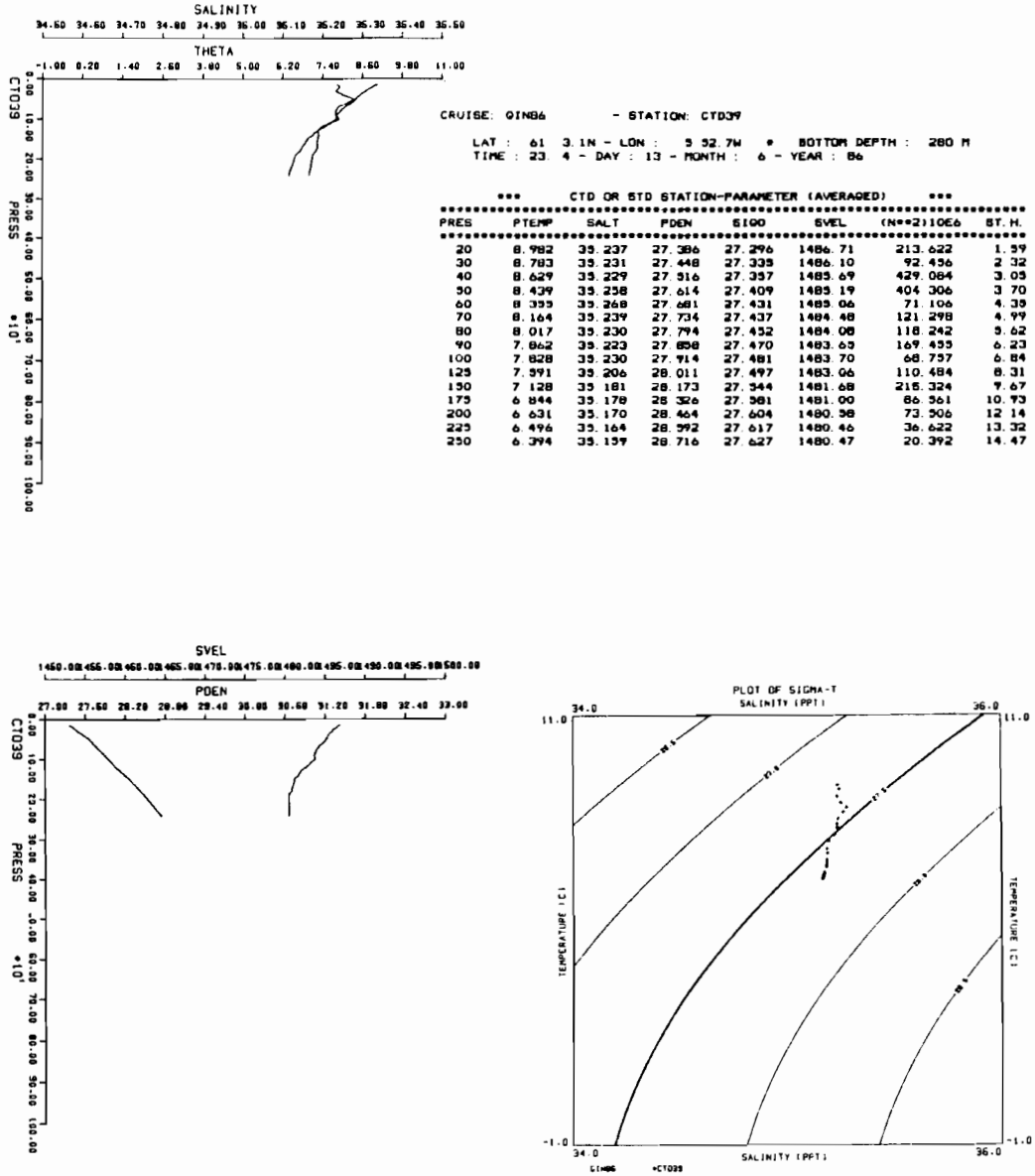


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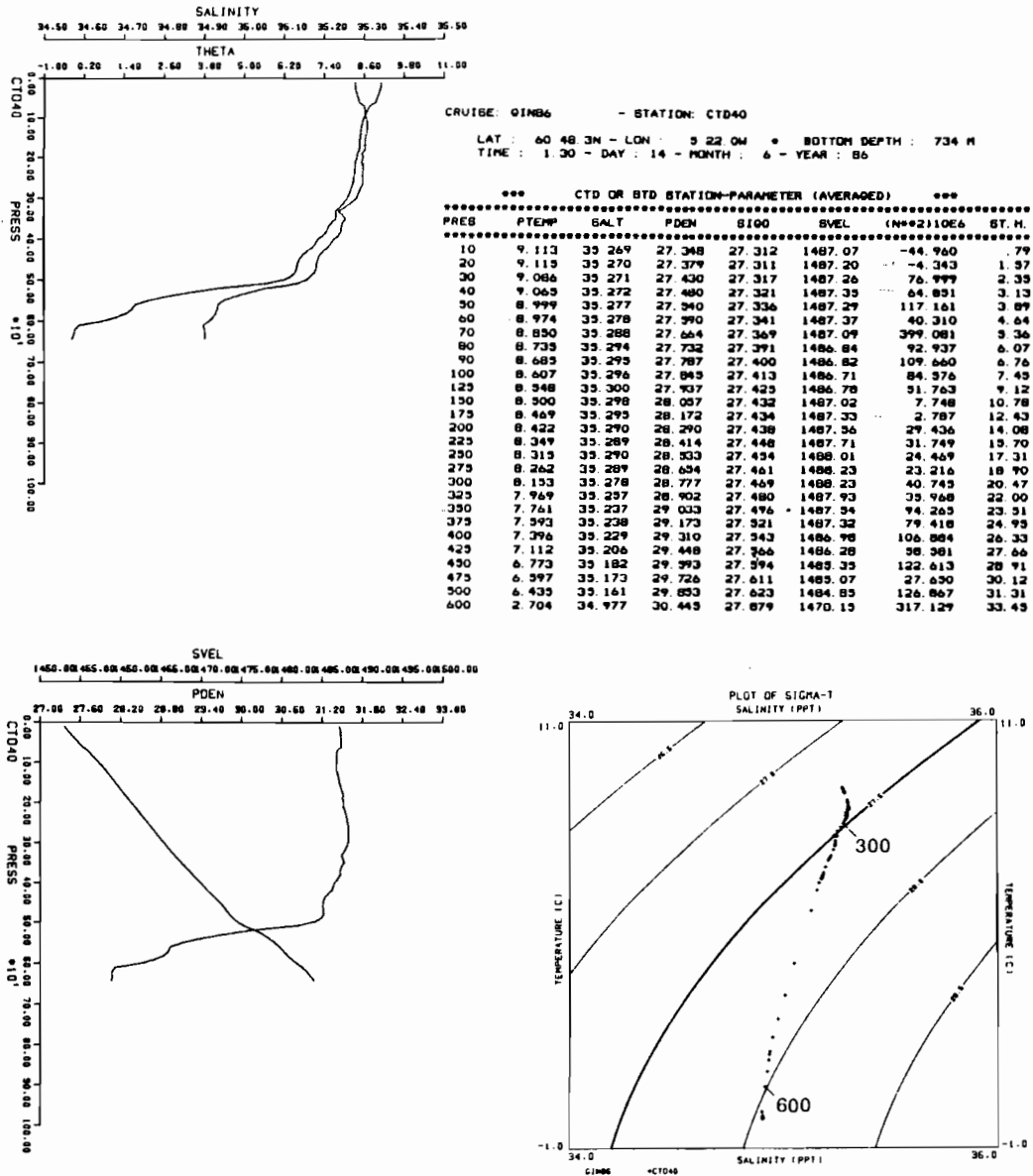


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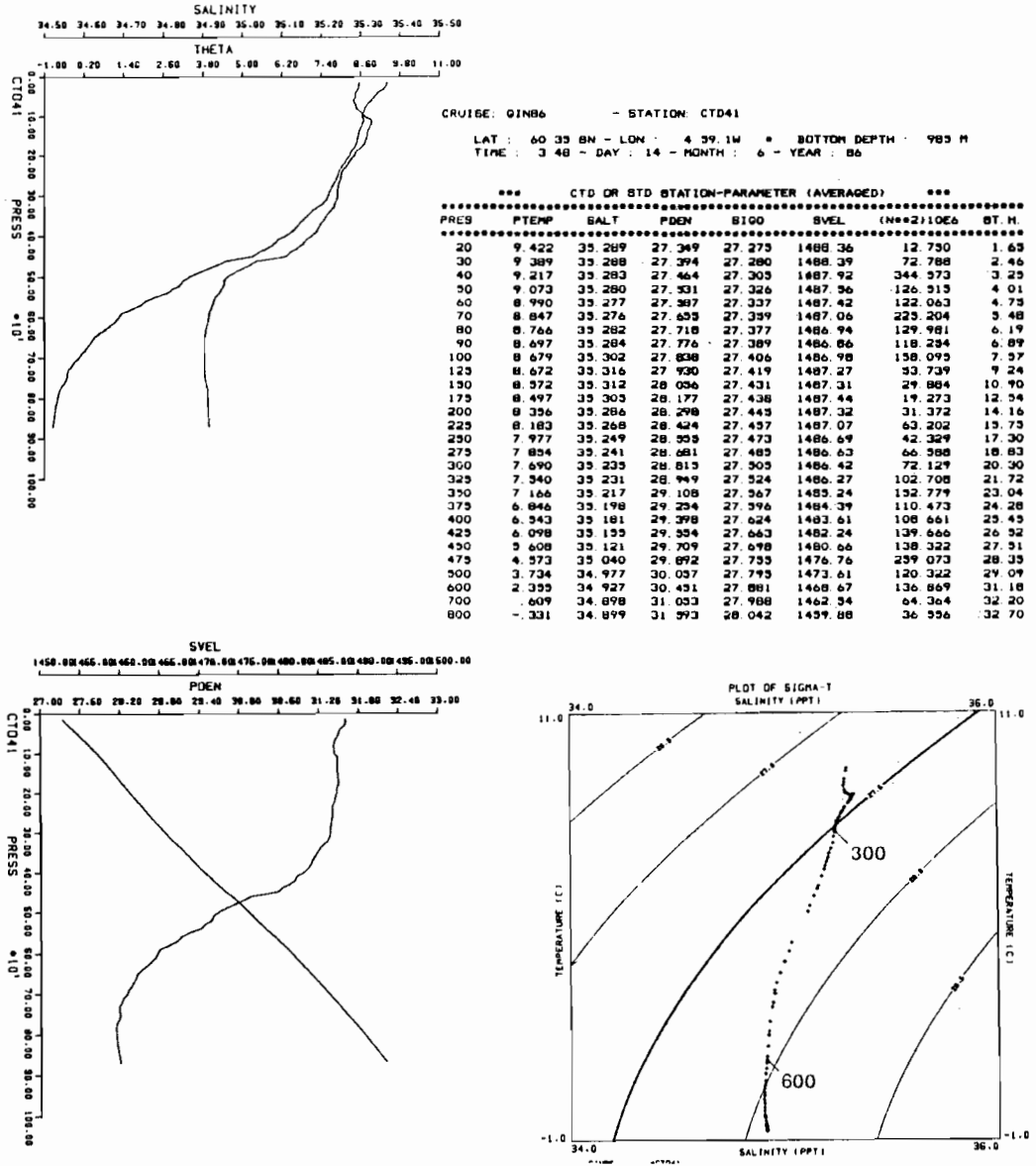


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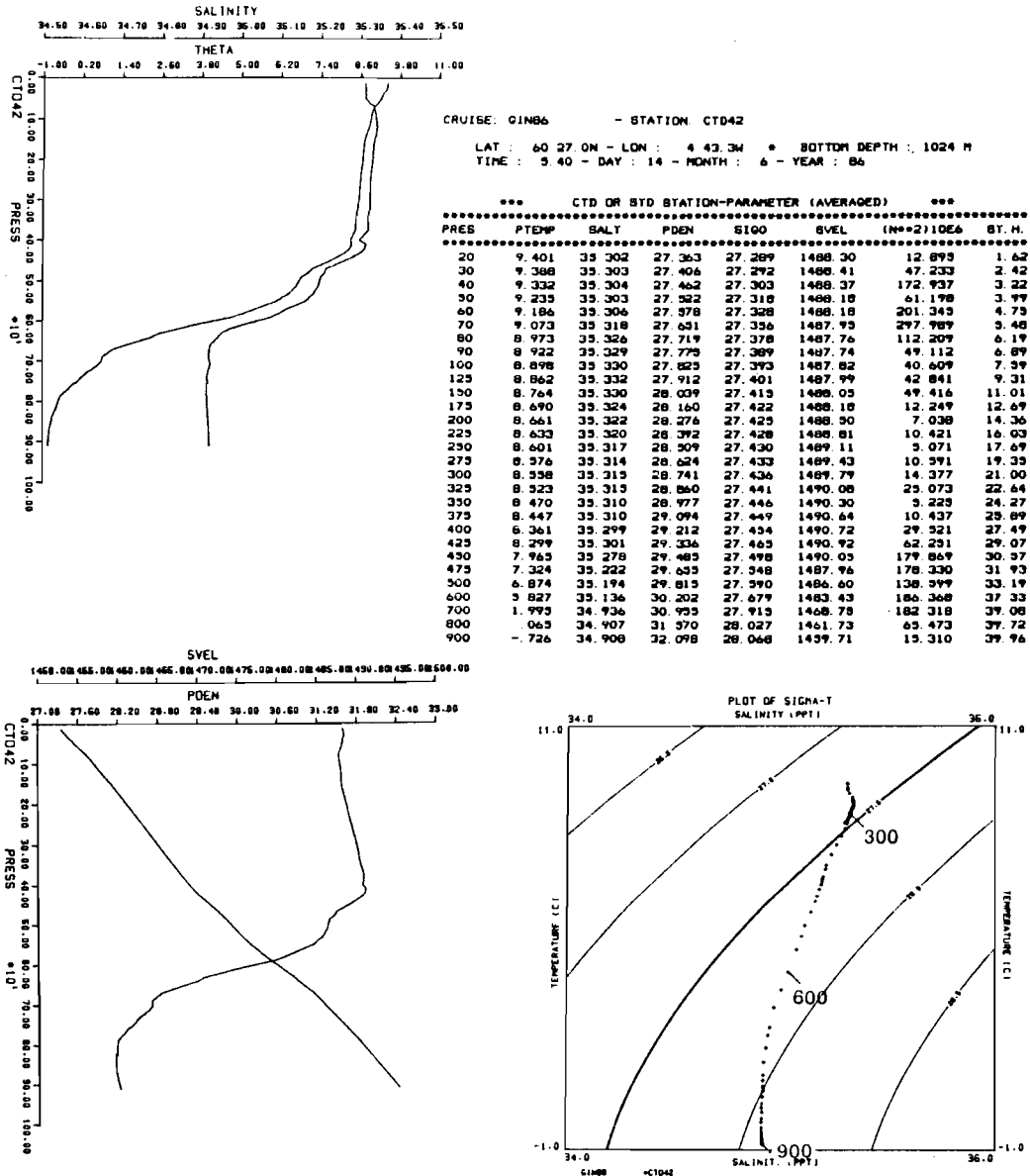


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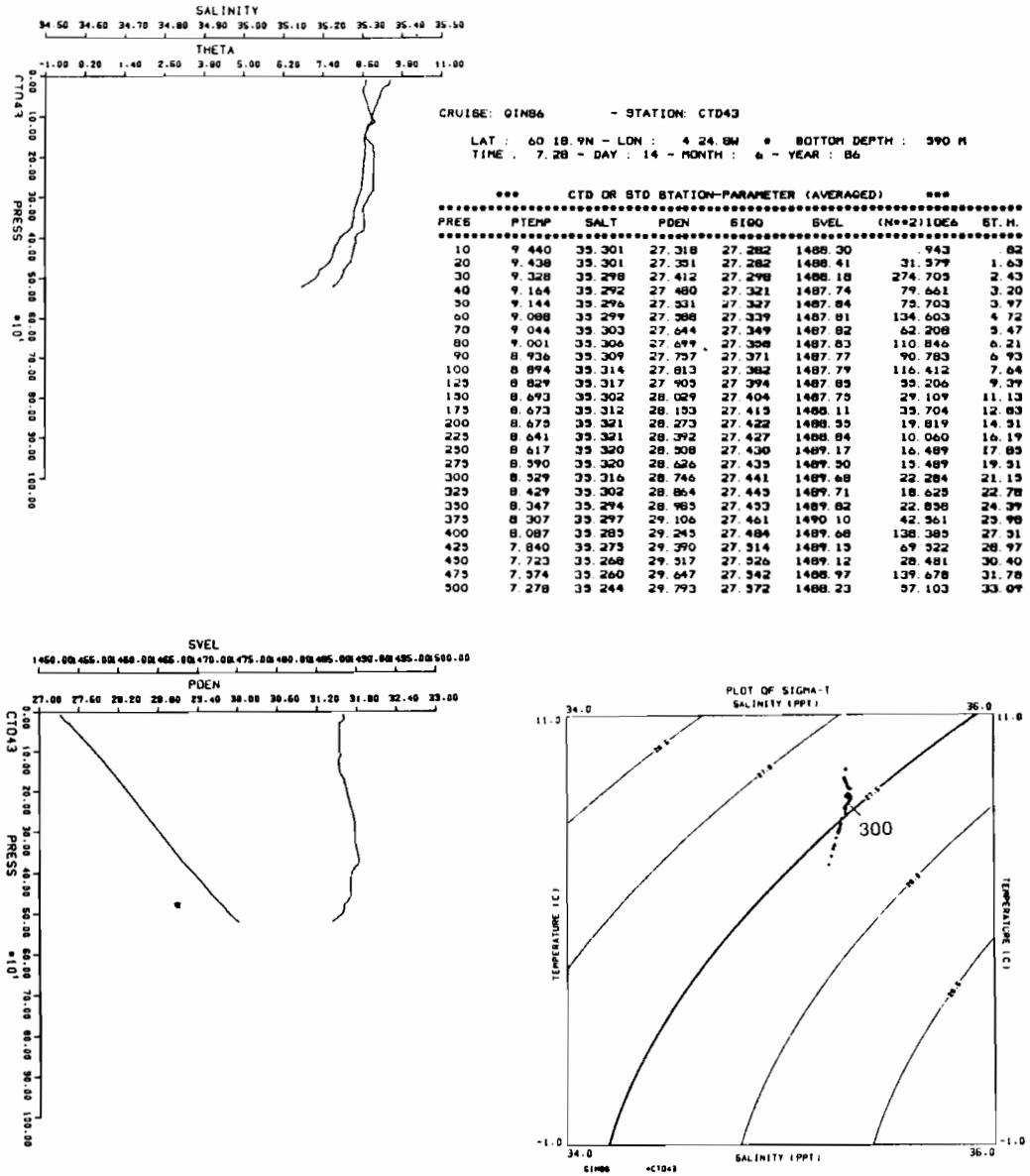


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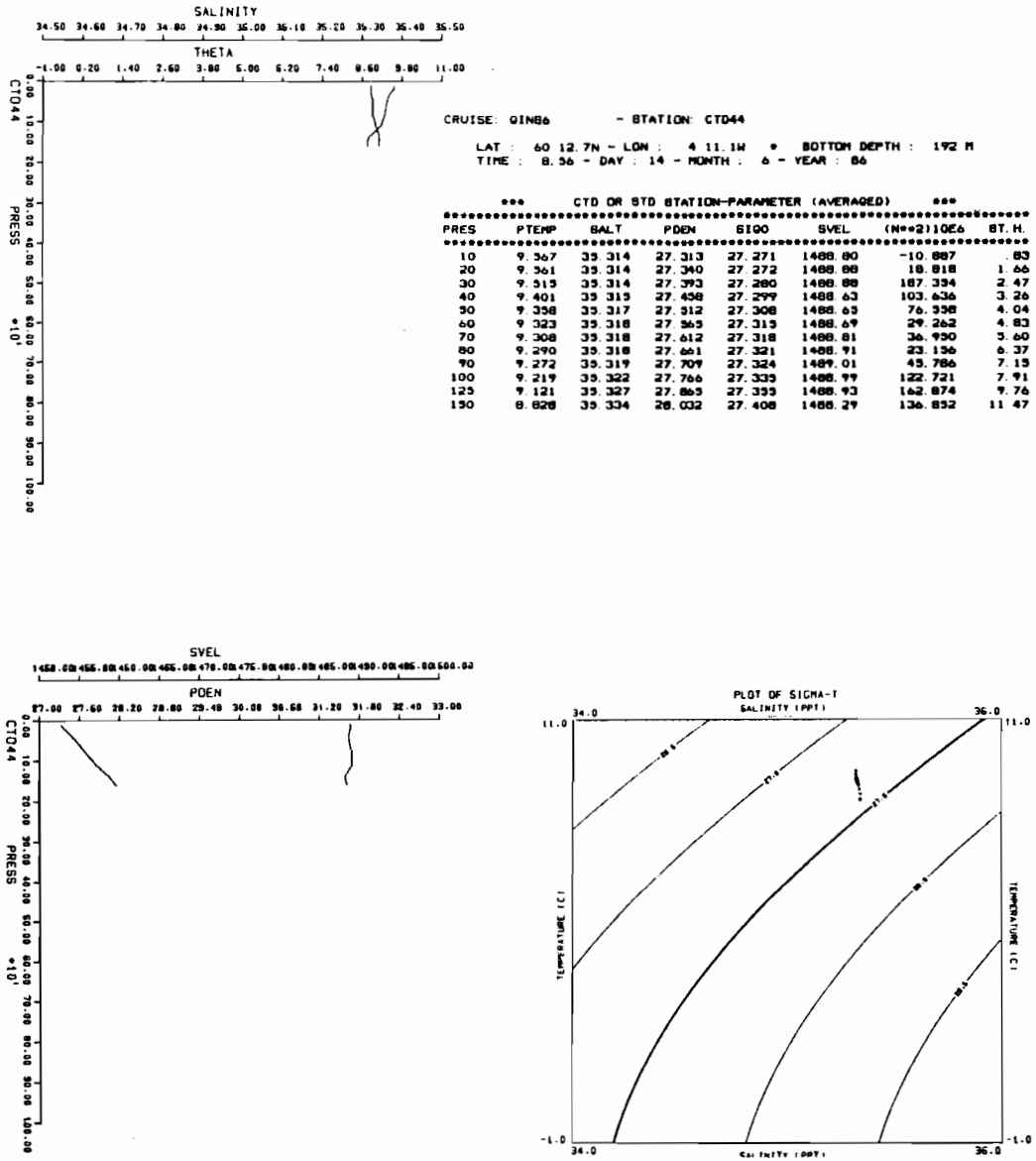


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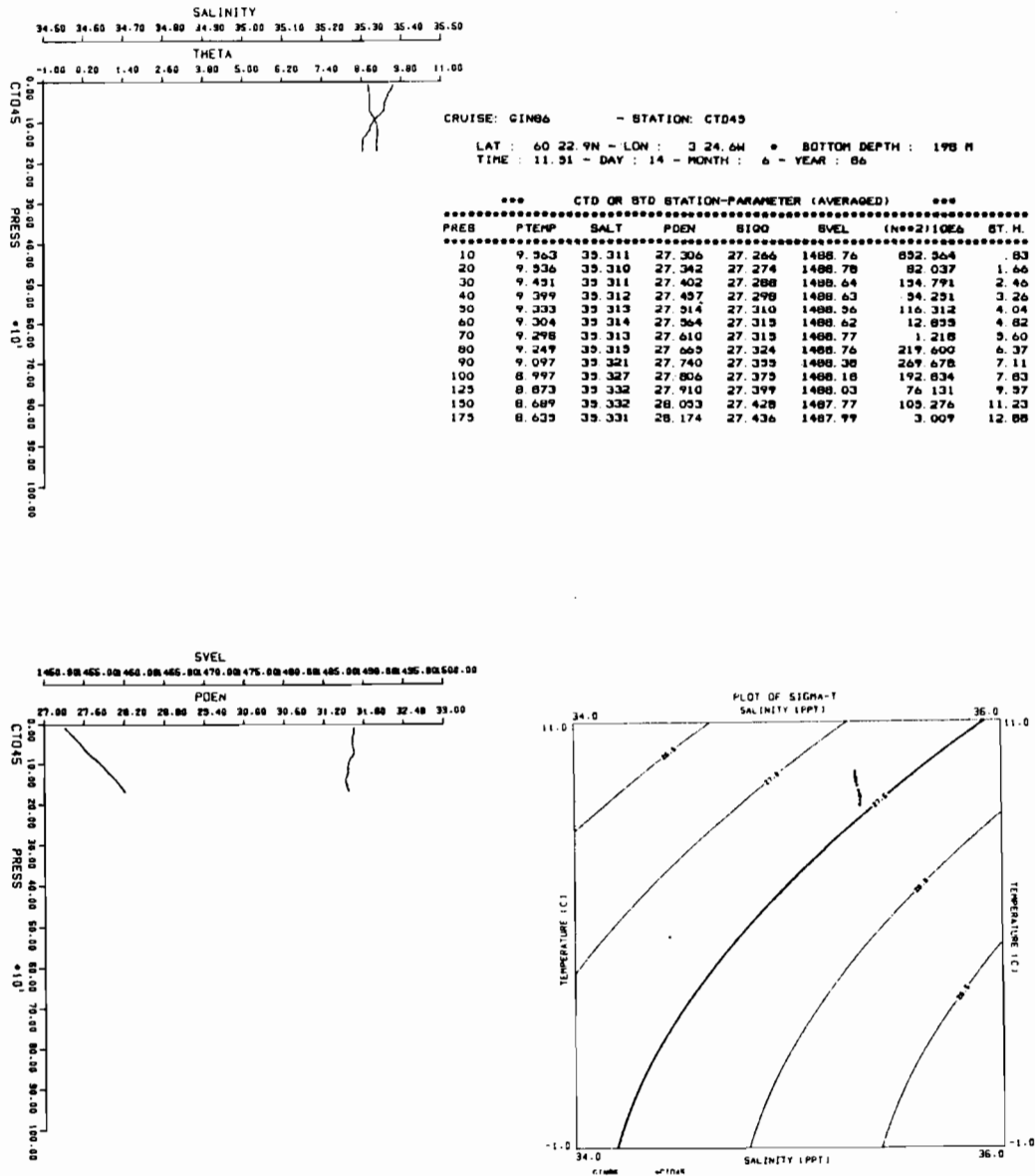


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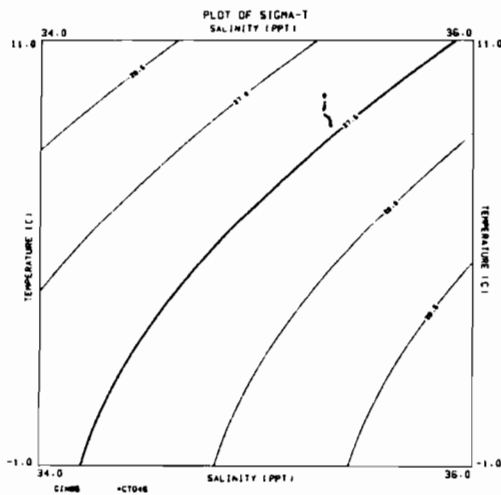
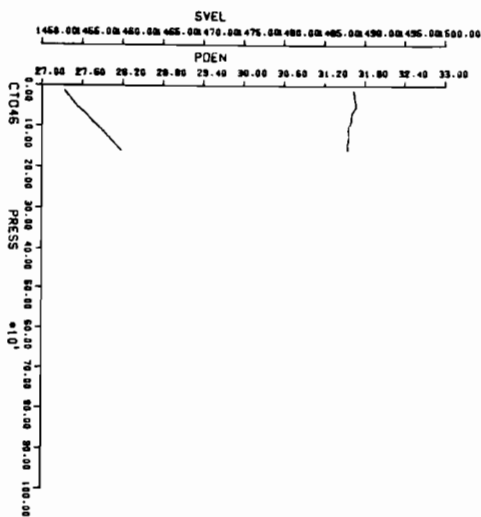
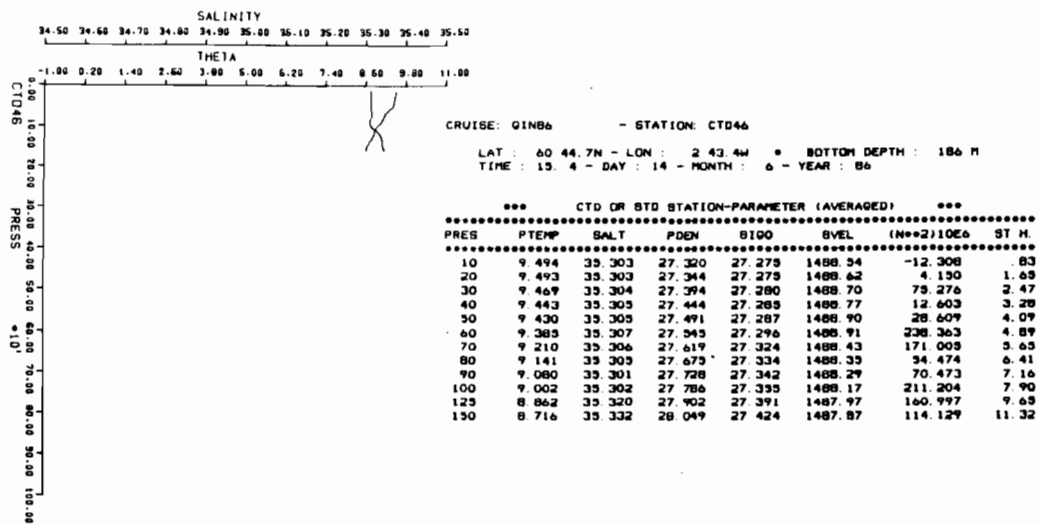


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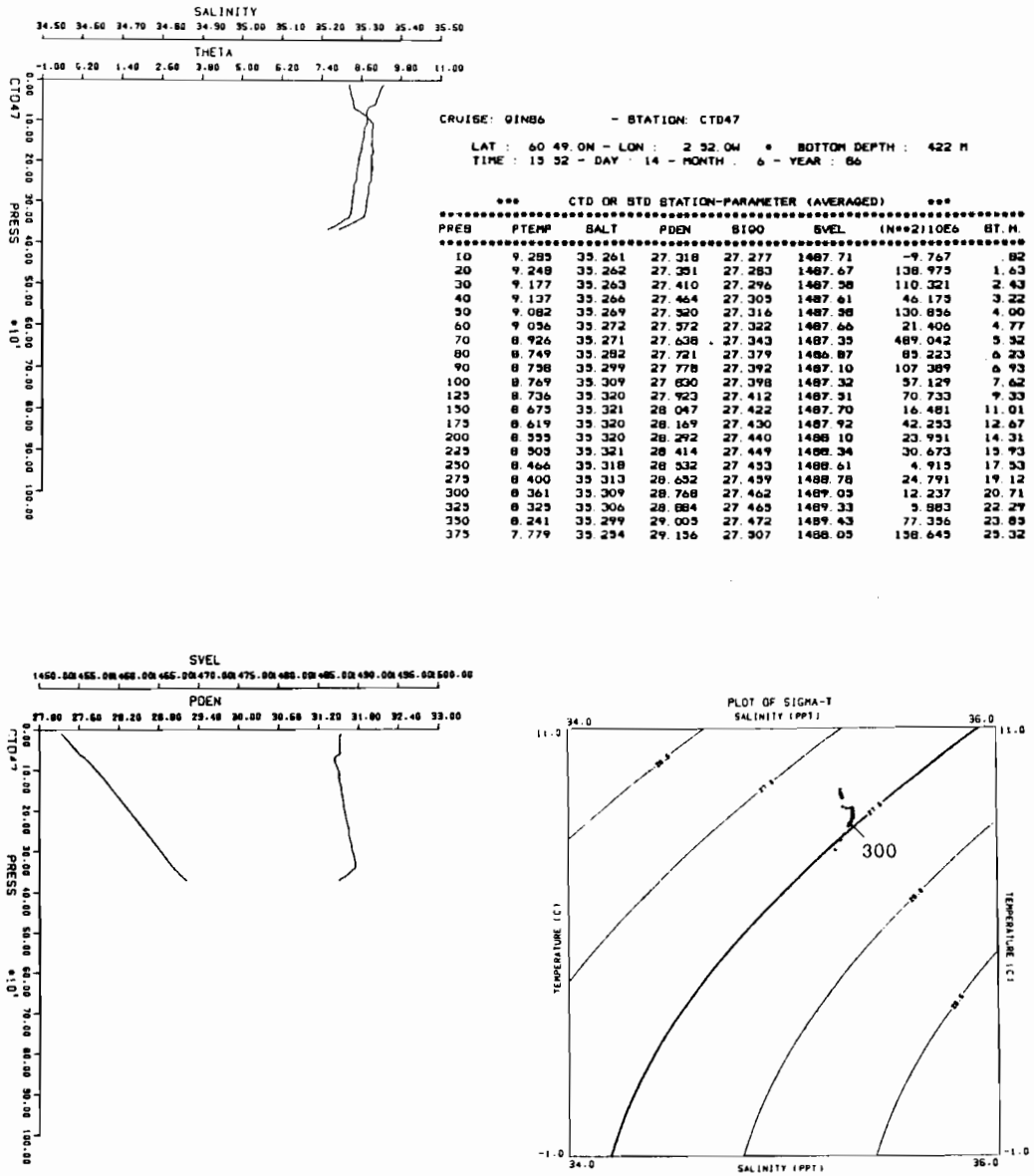


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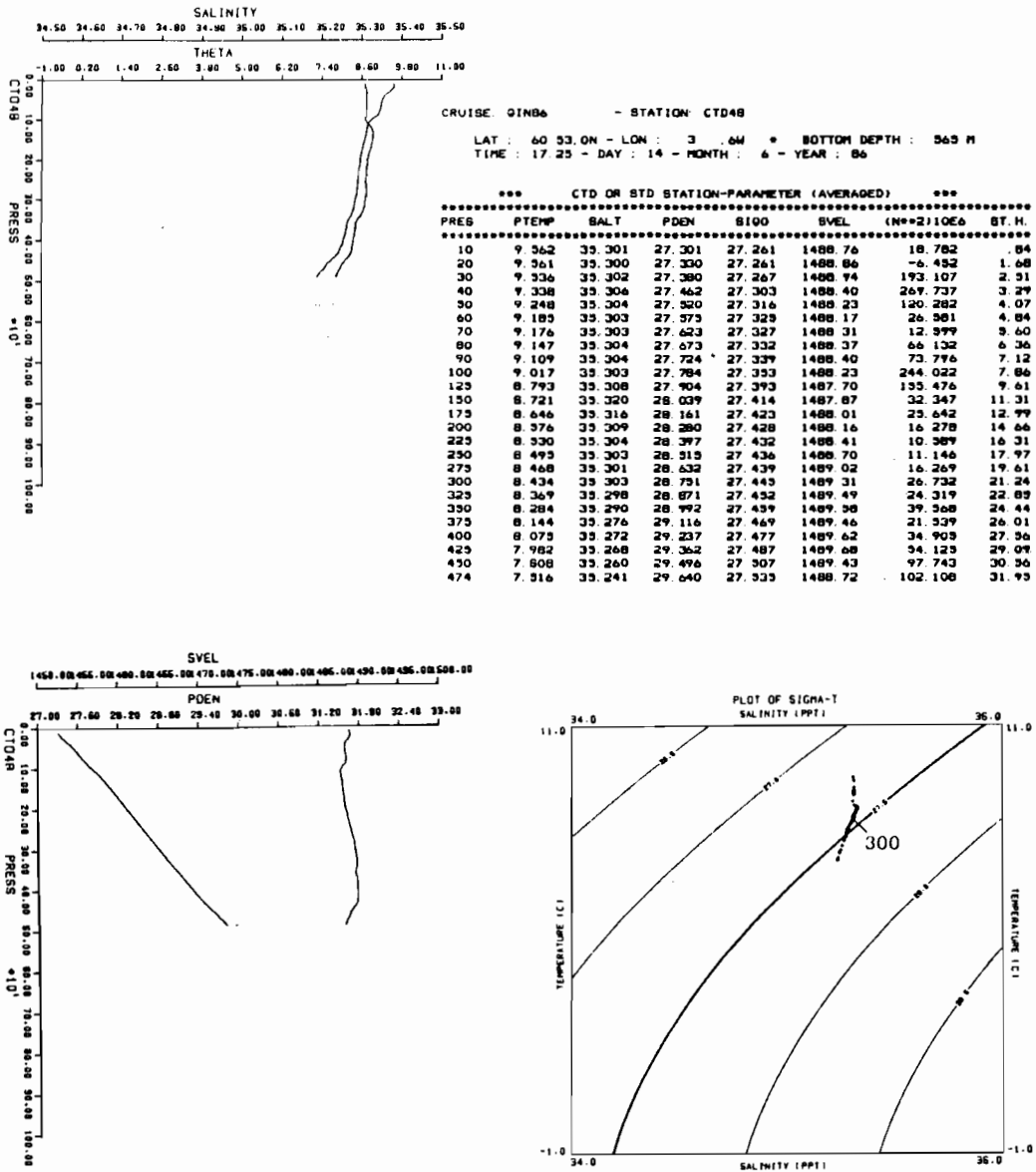


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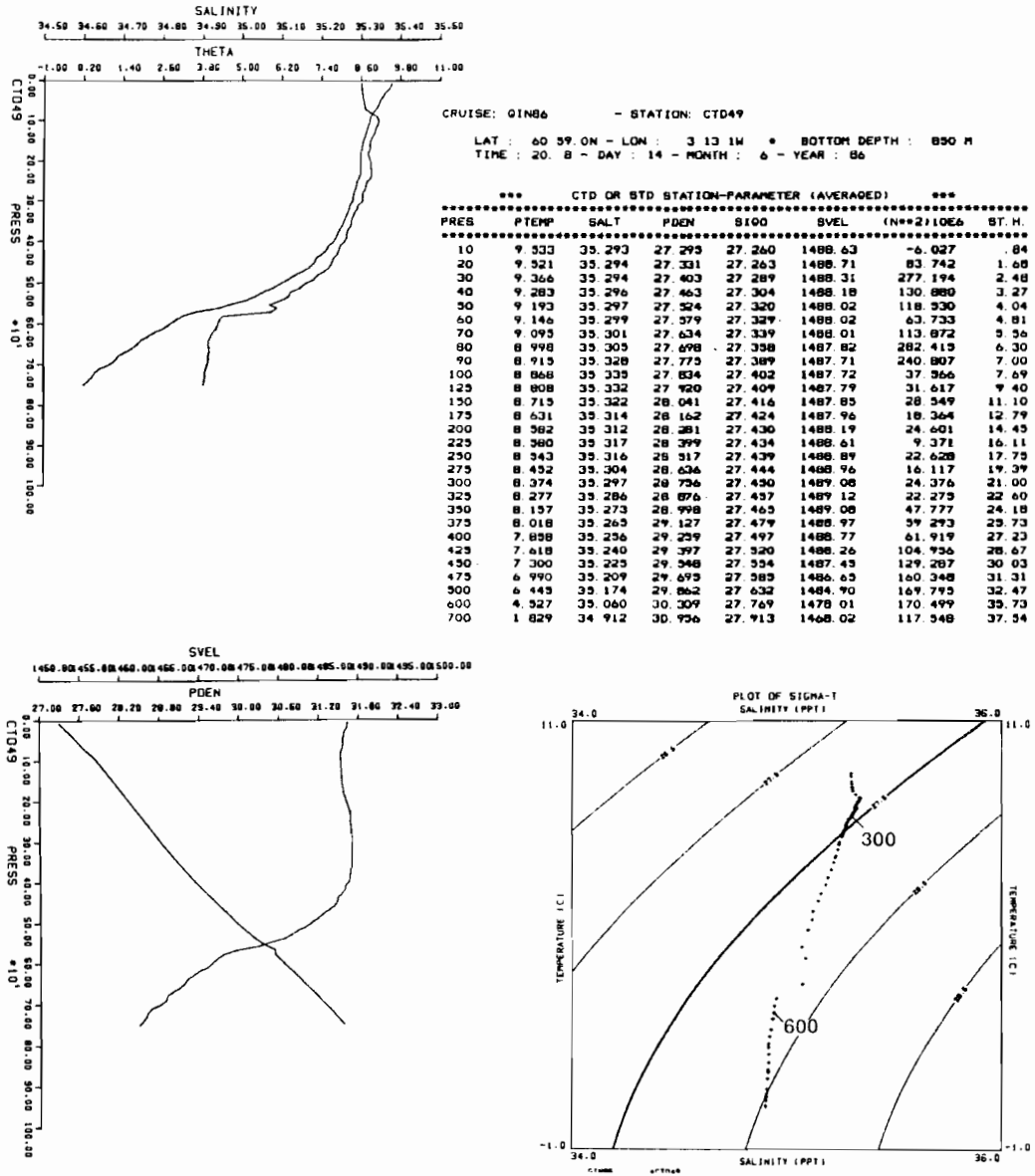


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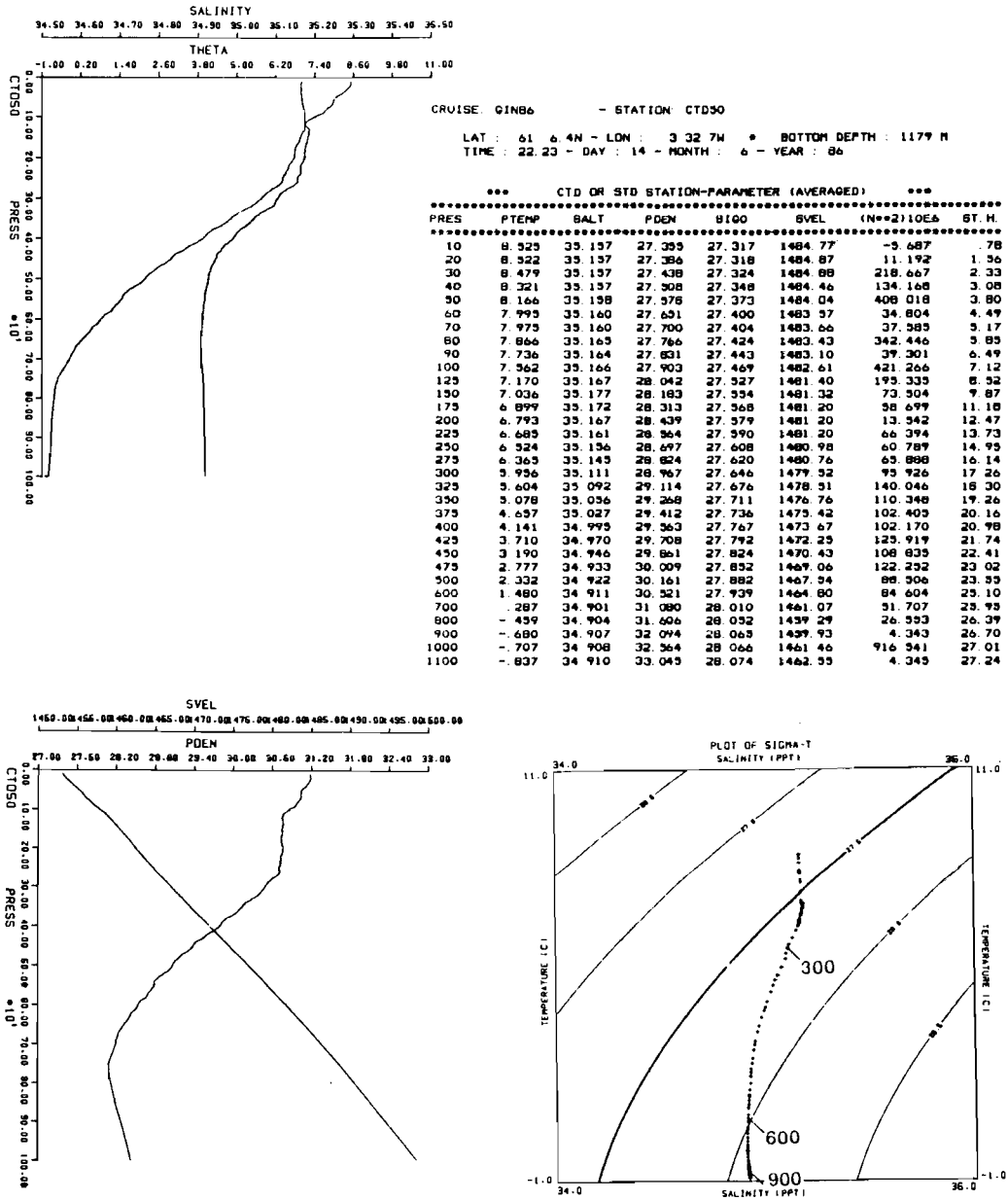


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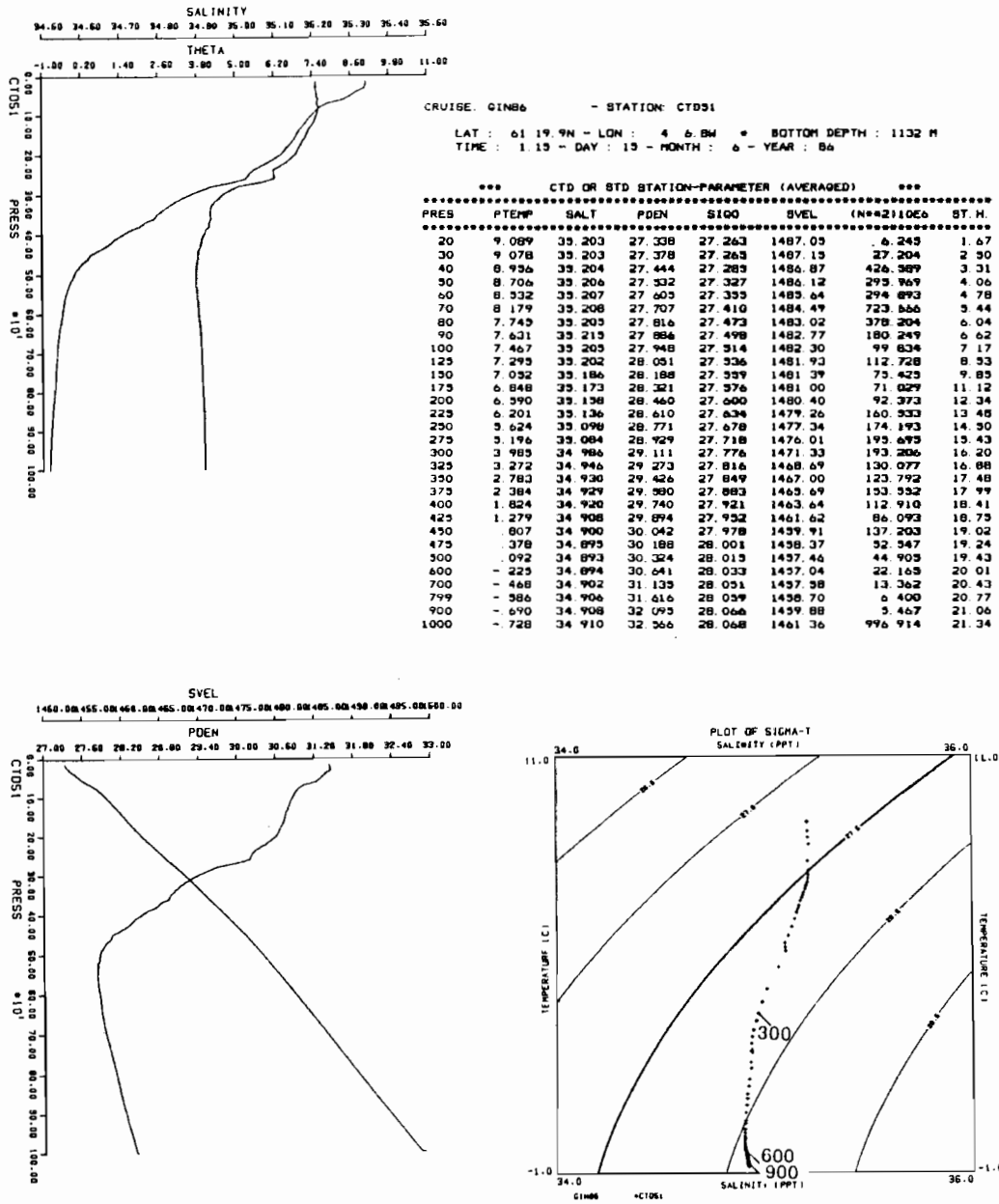


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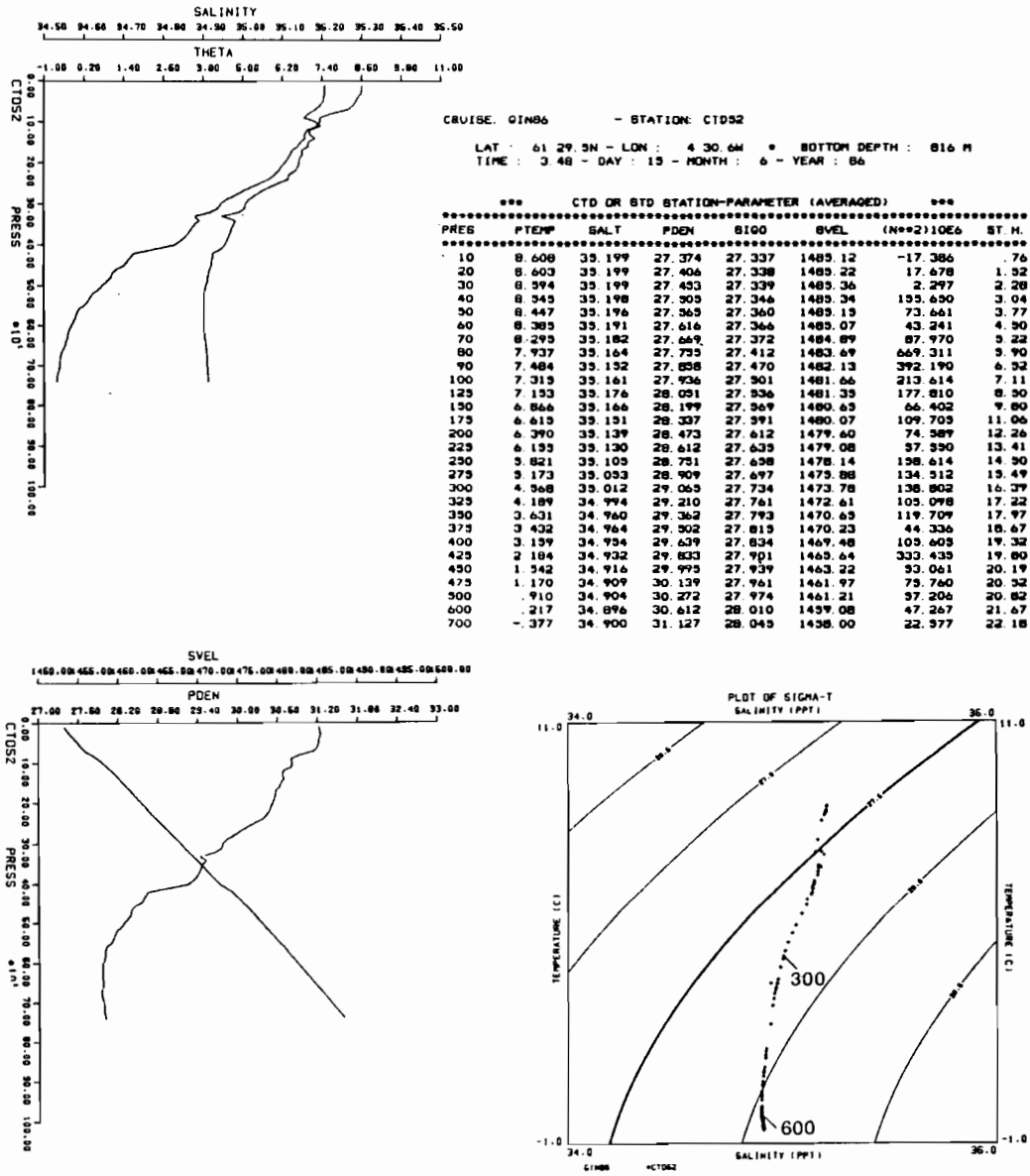


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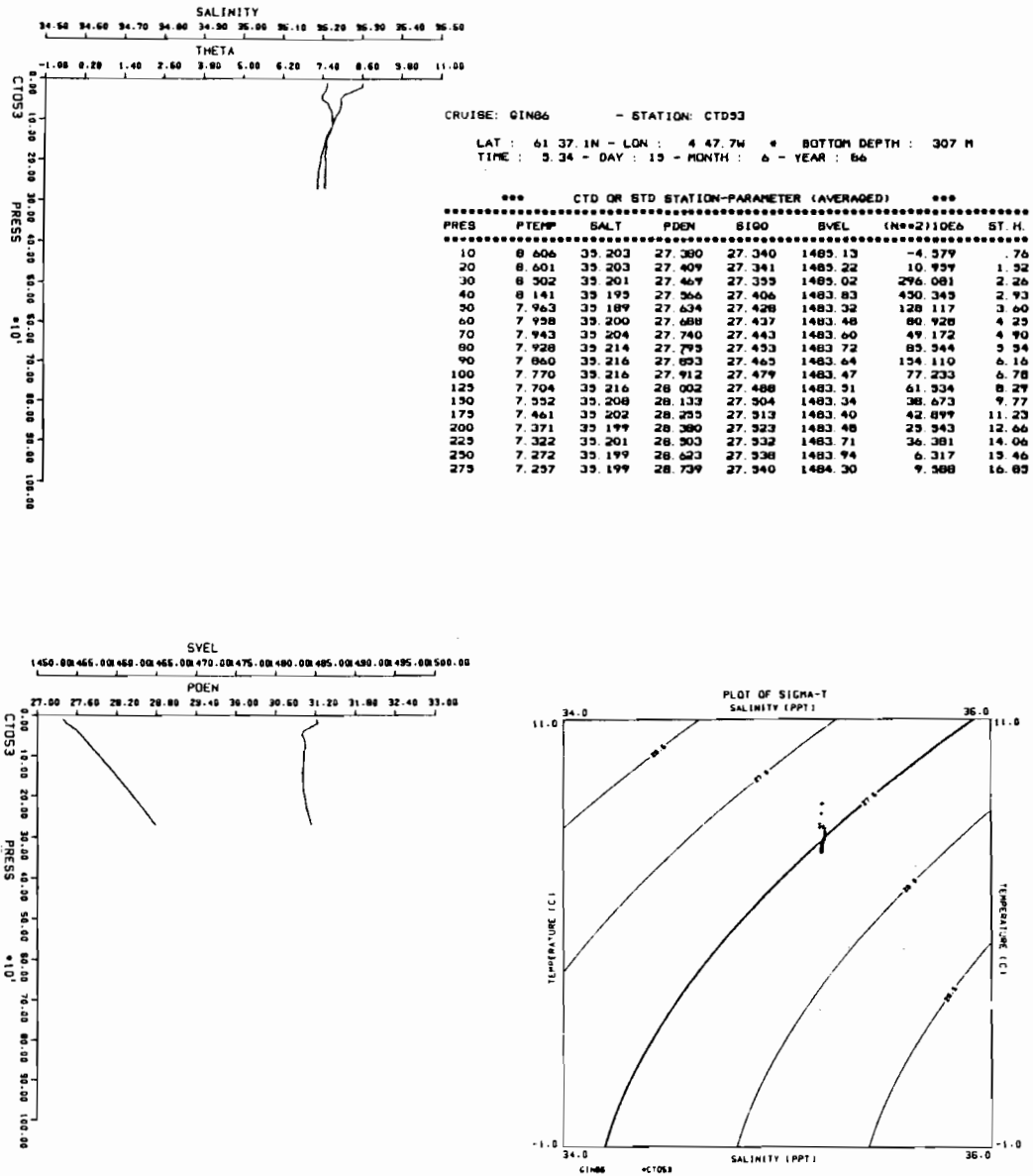


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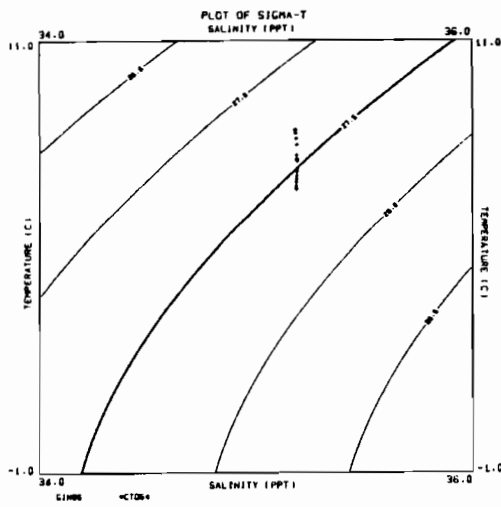
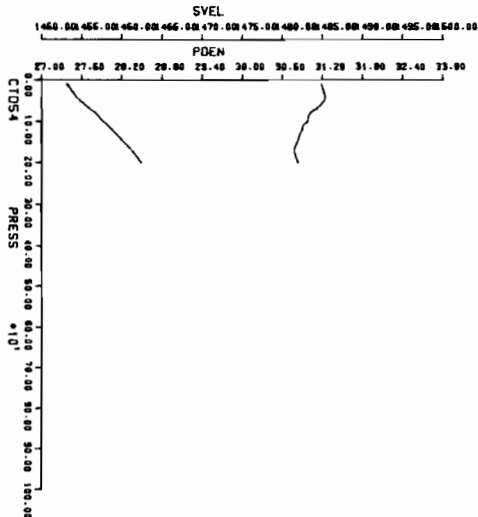
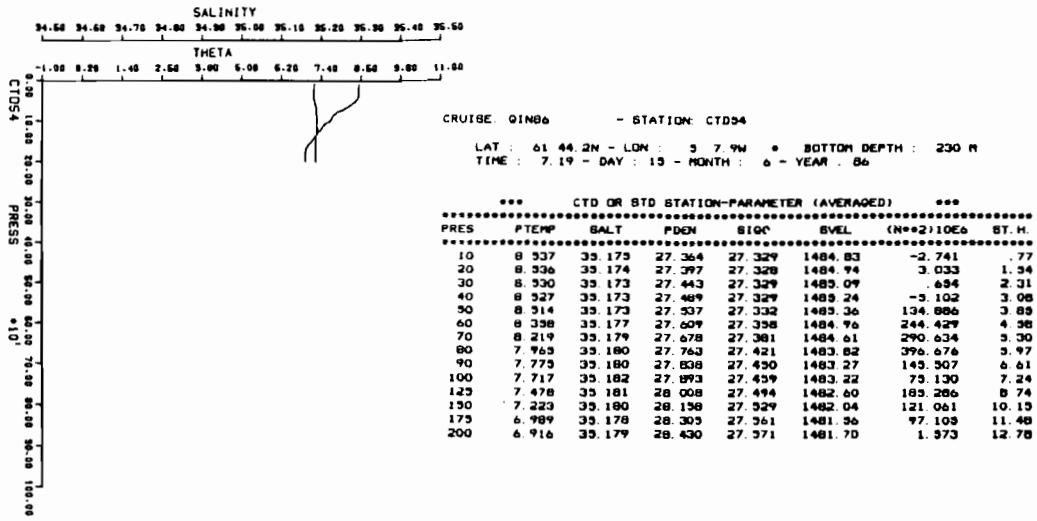


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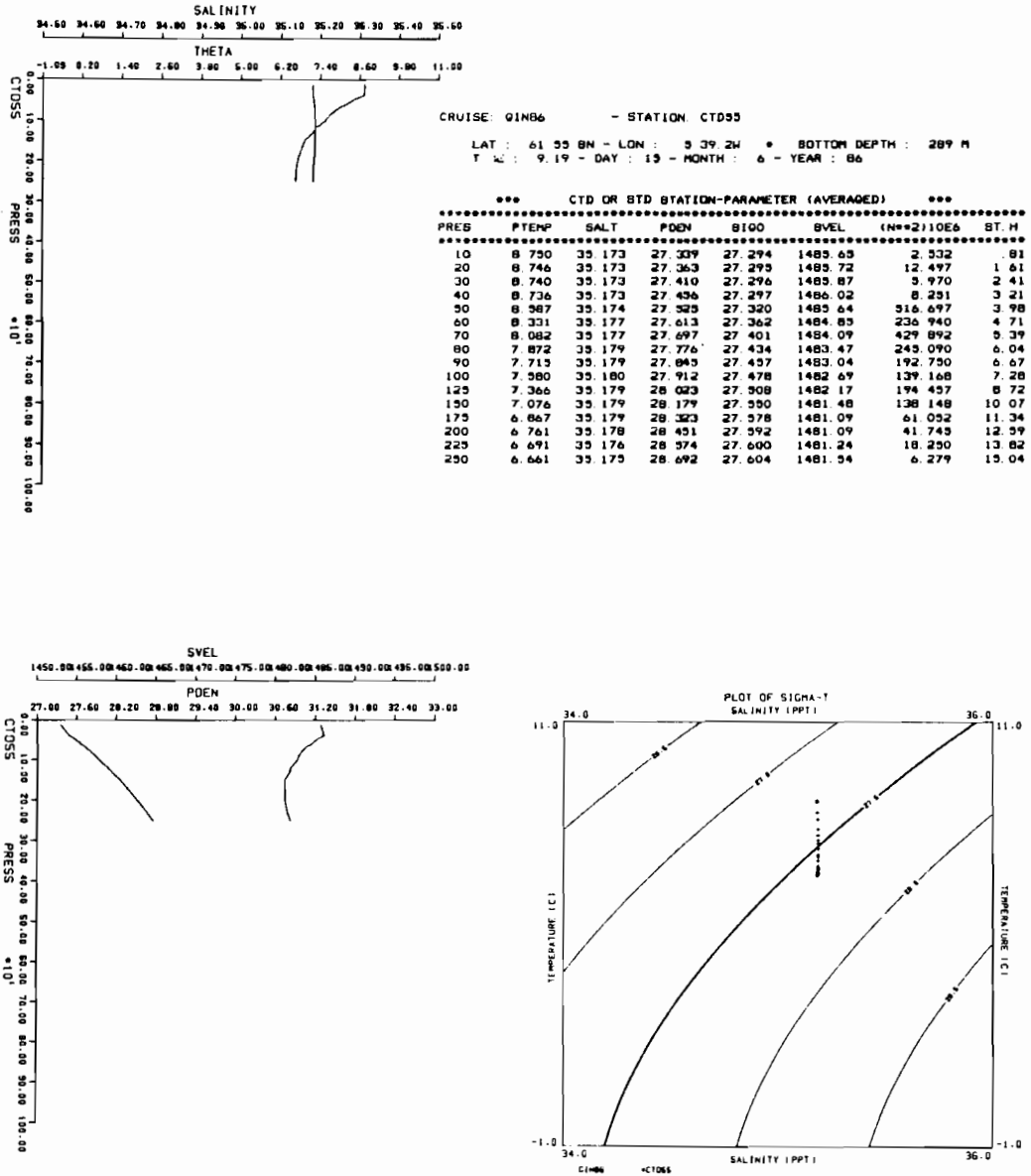


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SACLANTCEN SM-209

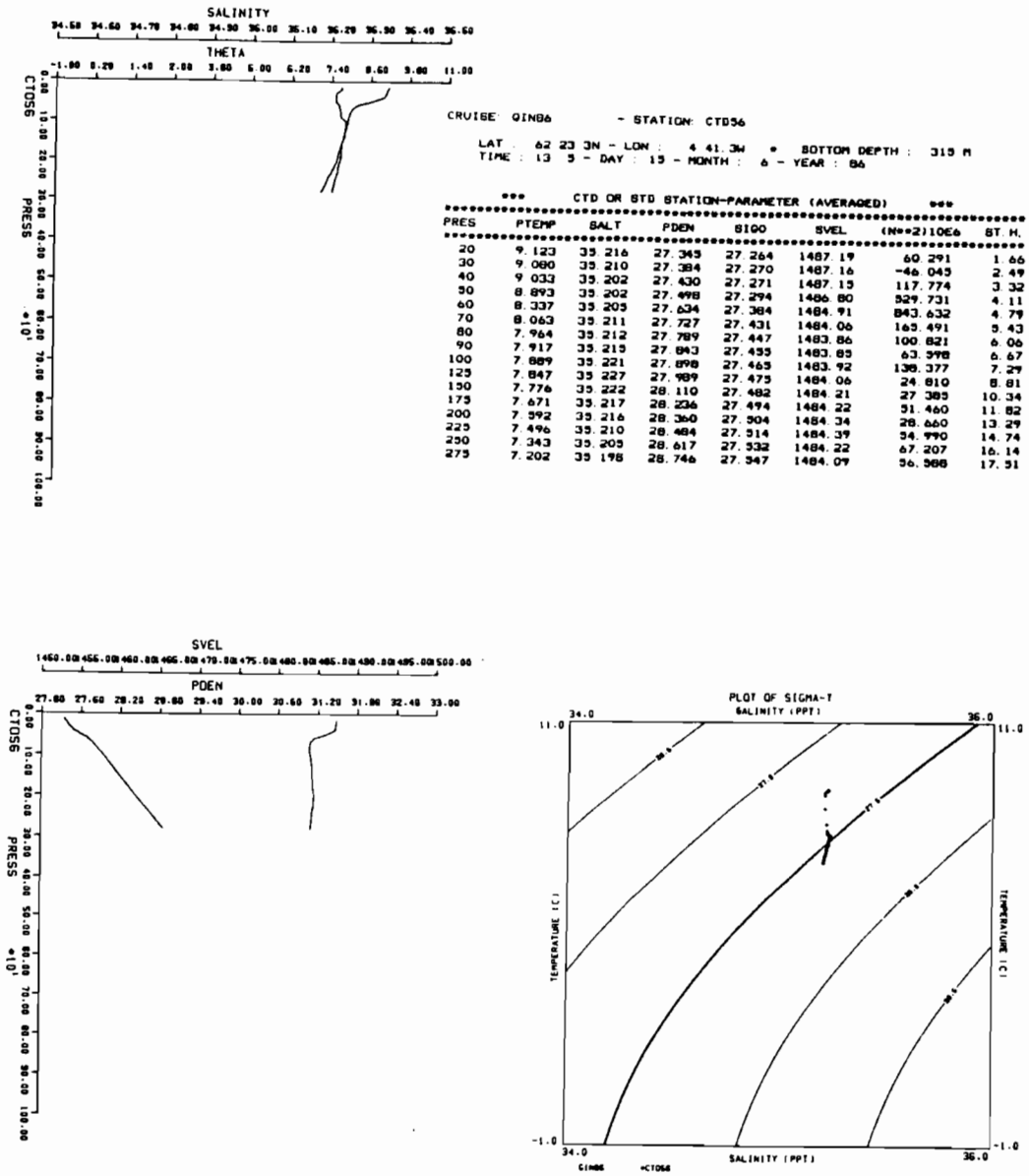


Fig. B72.

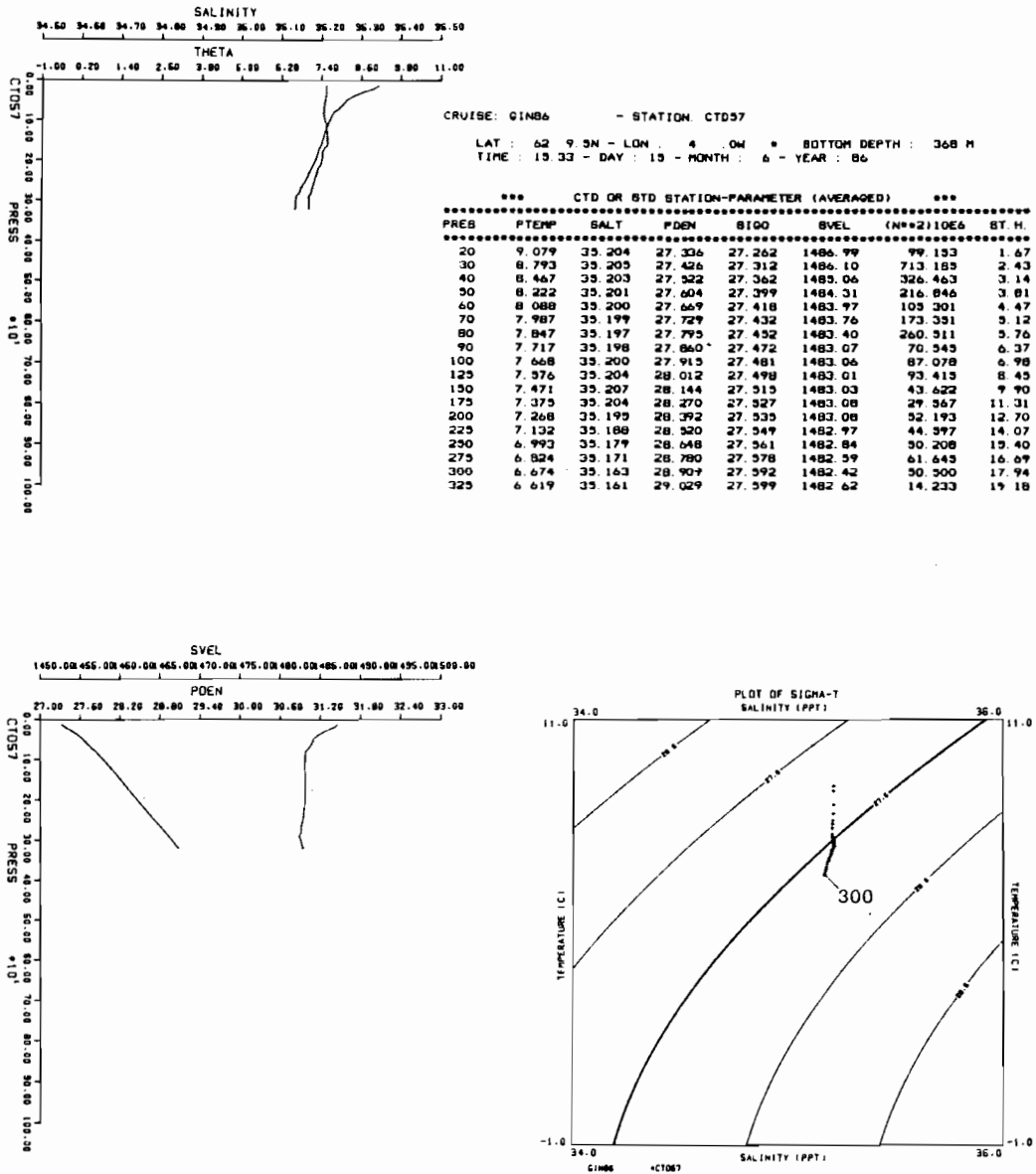


Fig. B73.

SACLANTCEN SM-209

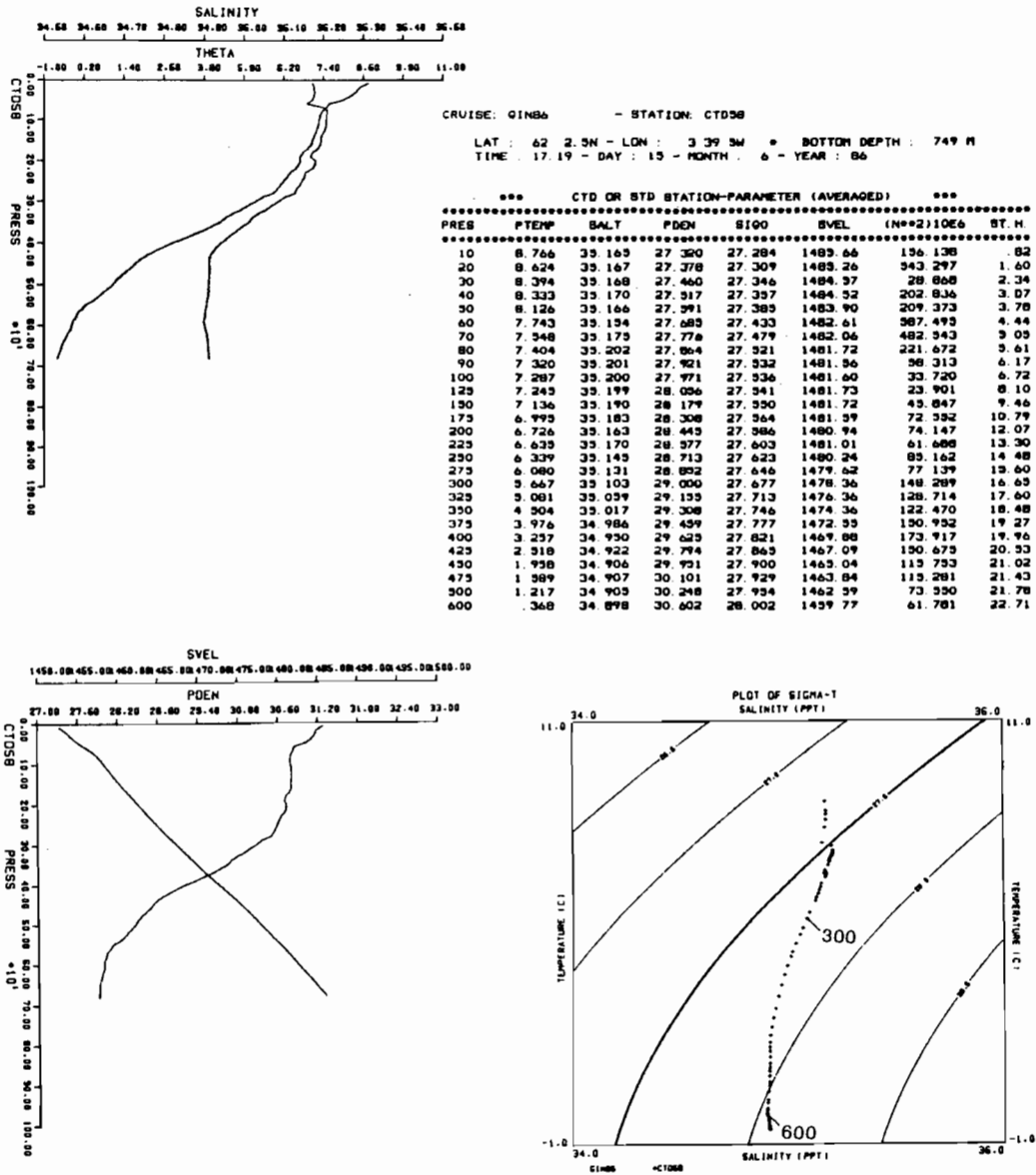


Fig. B74.

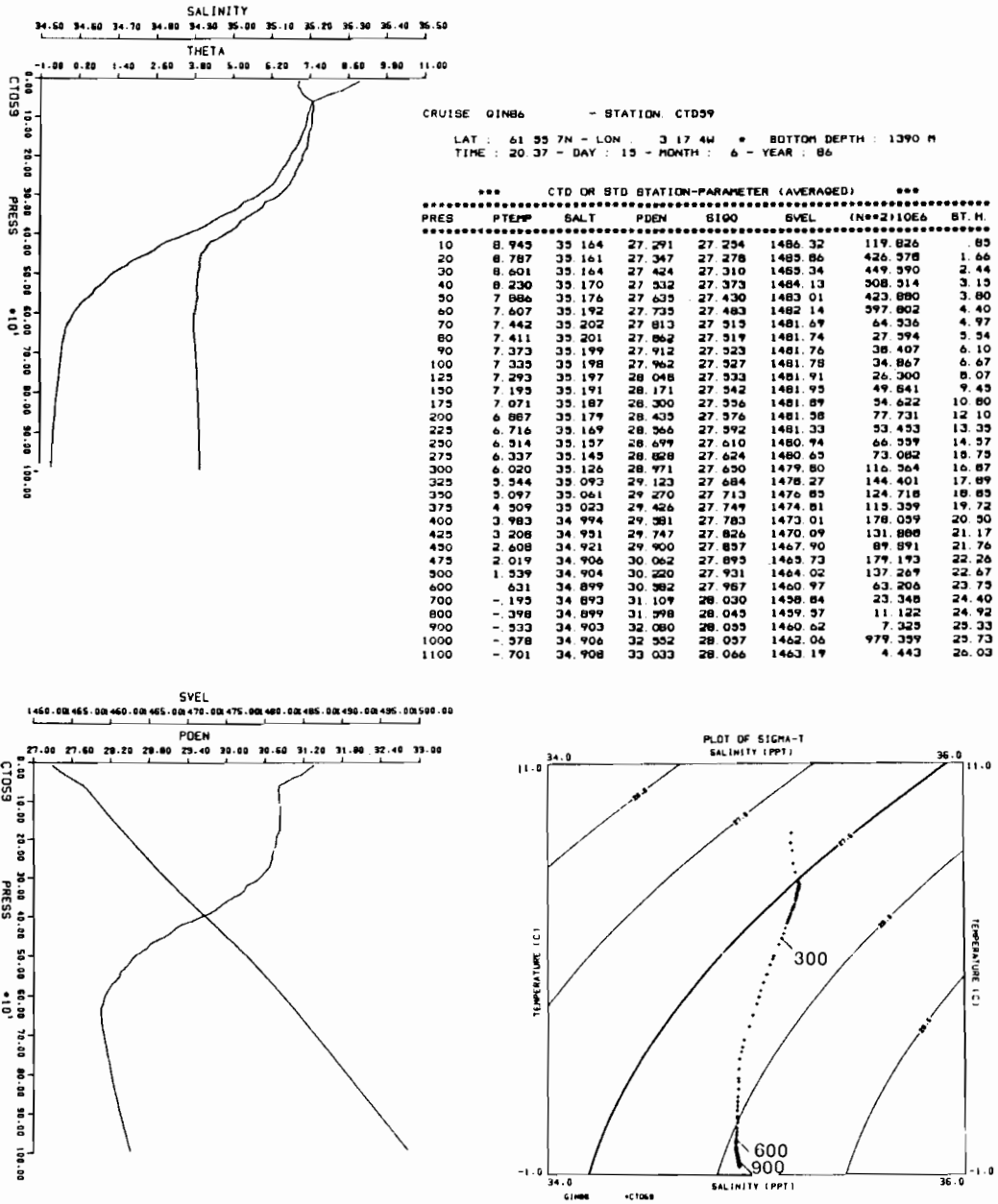


Fig. B75.

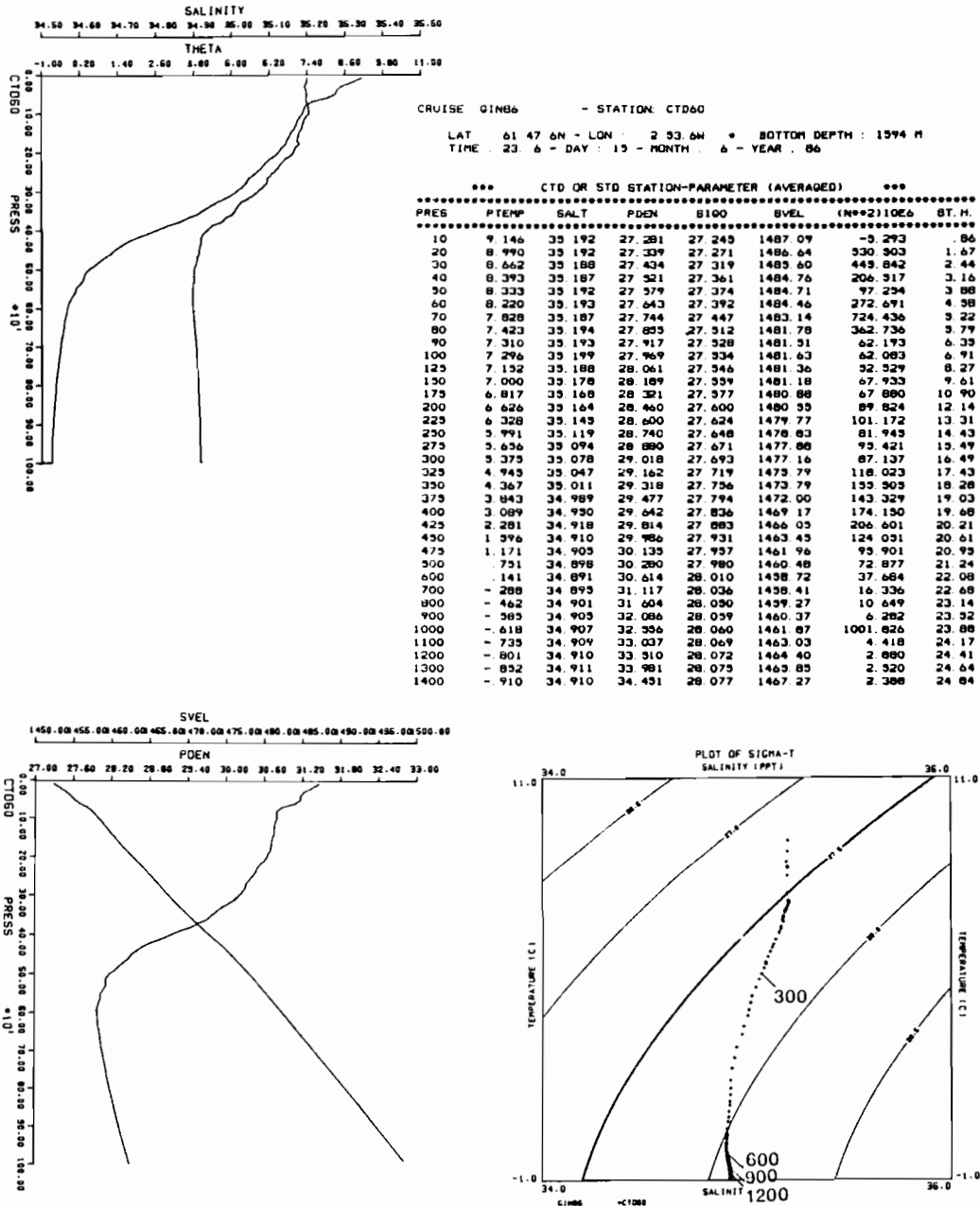


Fig. B76.

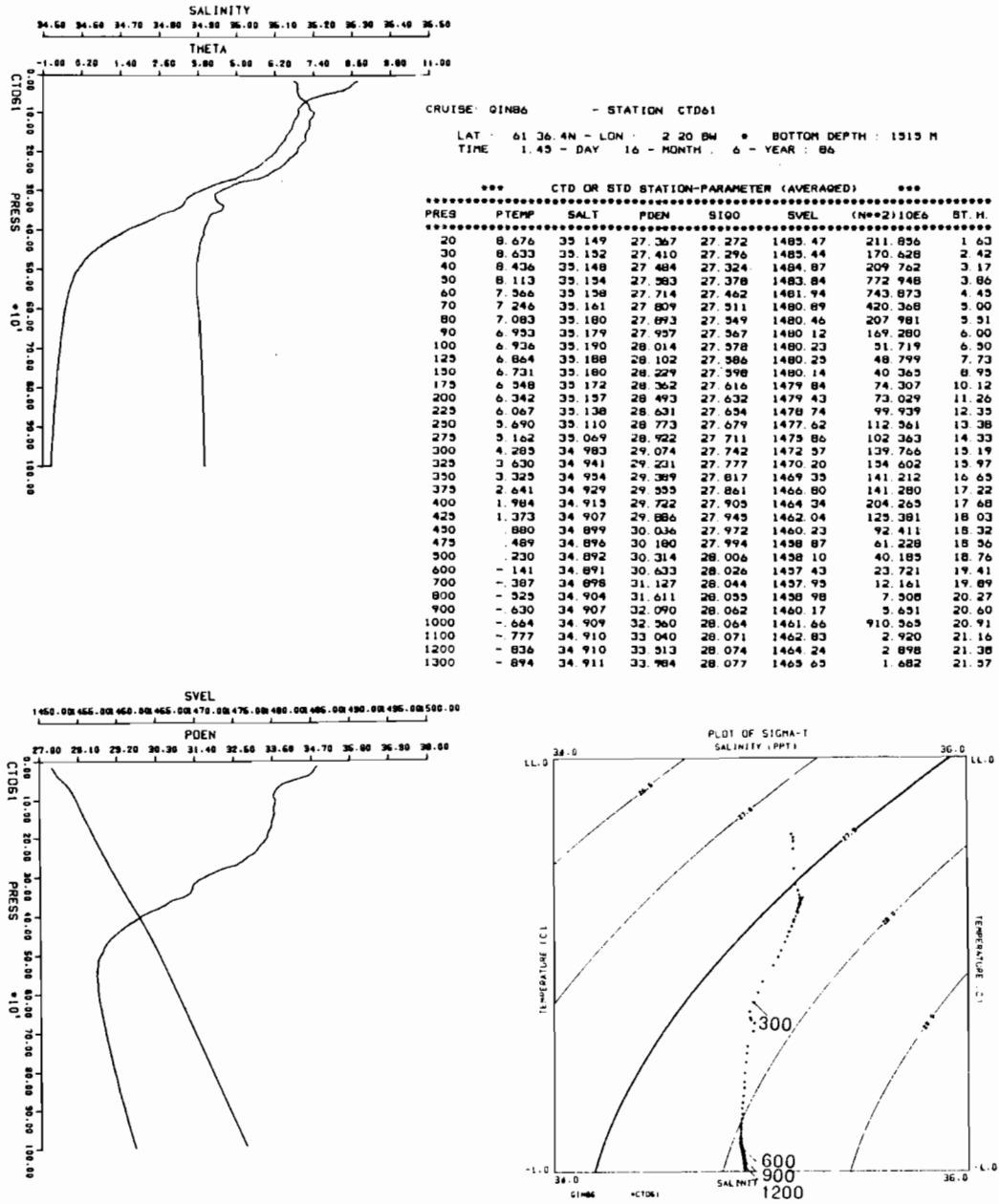
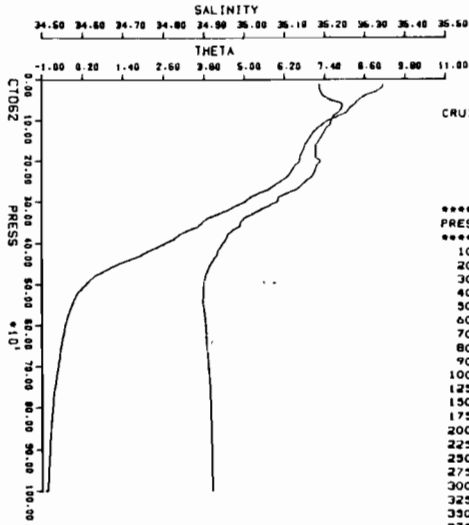


Fig. B77.



CRUISE: QINB6 - STATION: CTD62
 LAT : 61 30 4N - LON : 2 4 4W * BOTTOM DEPTH : 1214 M
 TIME : 3.41 - DAY 16 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SAL.T	PDEN	SIG0	SVEL	(N#*2)10E6	ST. M.
10	9.146	35.178	27.276	27.235	1487.10	-26.309	0.87
20	9.140	35.179	27.304	27.236	1487.18	-26.267	1.73
30	9.034	35.180	27.364	27.251	1487.03	-249.270	2.57
40	8.743	35.184	27.463	27.304	1486.06	-637.129	3.35
50	8.513	35.192	27.551	27.346	1485.39	-404.441	4.09
60	8.339	35.224	27.646	27.395	1485.02	-387.513	4.77
70	8.207	35.238	27.726	27.429	1484.64	-194.704	5.42
80	8.108	35.231	27.781	27.439	1484.42	-63.600	6.07
90	7.934	35.219	27.841	27.453	1484.00	-333.481	6.70
100	7.597	35.209	27.933	27.498	1482.80	-377.474	7.29
120	7.281	35.201	28.053	27.538	1481.87	-144.974	8.65
150	6.991	35.185	28.196	27.566	1481.16	-63.348	9.96
175	6.810	35.171	28.329	27.580	1480.86	-55.479	11.24
200	6.683	35.171	28.438	27.598	1480.78	-89.391	12.47
225	6.519	35.174	28.597	27.622	1480.86	-75.742	13.65
250	6.284	35.159	28.732	27.642	1480.04	-87.834	14.77
275	5.871	35.131	28.880	27.673	1478.79	-127.959	15.82
300	5.274	35.086	29.037	27.711	1476.75	-156.652	16.78
325	4.723	35.030	29.192	27.747	1474.89	-129.091	17.64
350	4.017	35.000	29.350	27.784	1472.32	-131.036	18.41
375	3.522	34.974	29.500	27.814	1470.62	-132.238	19.11
400	2.933	34.948	29.537	27.830	1468.90	-137.803	19.71
425	2.384	34.933	29.619	27.889	1466.36	-163.216	20.22
450	1.683	34.919	29.986	27.931	1463.85	-170.491	20.62
475	.973	34.903	30.131	27.971	1461.07	-113.126	20.93
500	.466	34.895	30.299	27.995	1459.18	-73.930	21.17
600	-.070	34.893	30.630	28.023	1457.75	-33.842	21.87
700	-.412	34.900	31.130	28.047	1457.84	-13.718	22.34
800	-.603	34.907	31.618	28.061	1458.62	-10.931	22.69
900	-.729	34.909	32.099	28.069	1459.70	-5.272	22.96
1000	-.754	34.911	32.569	28.069	1461.23	-989.037	23.23

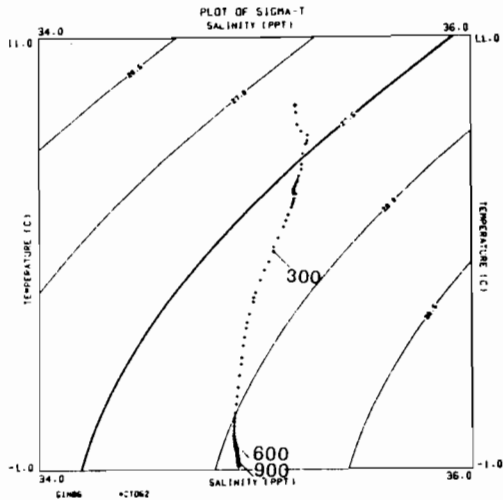
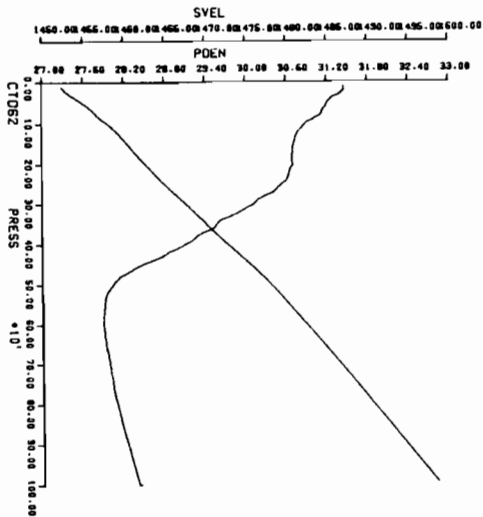


Fig. B78.

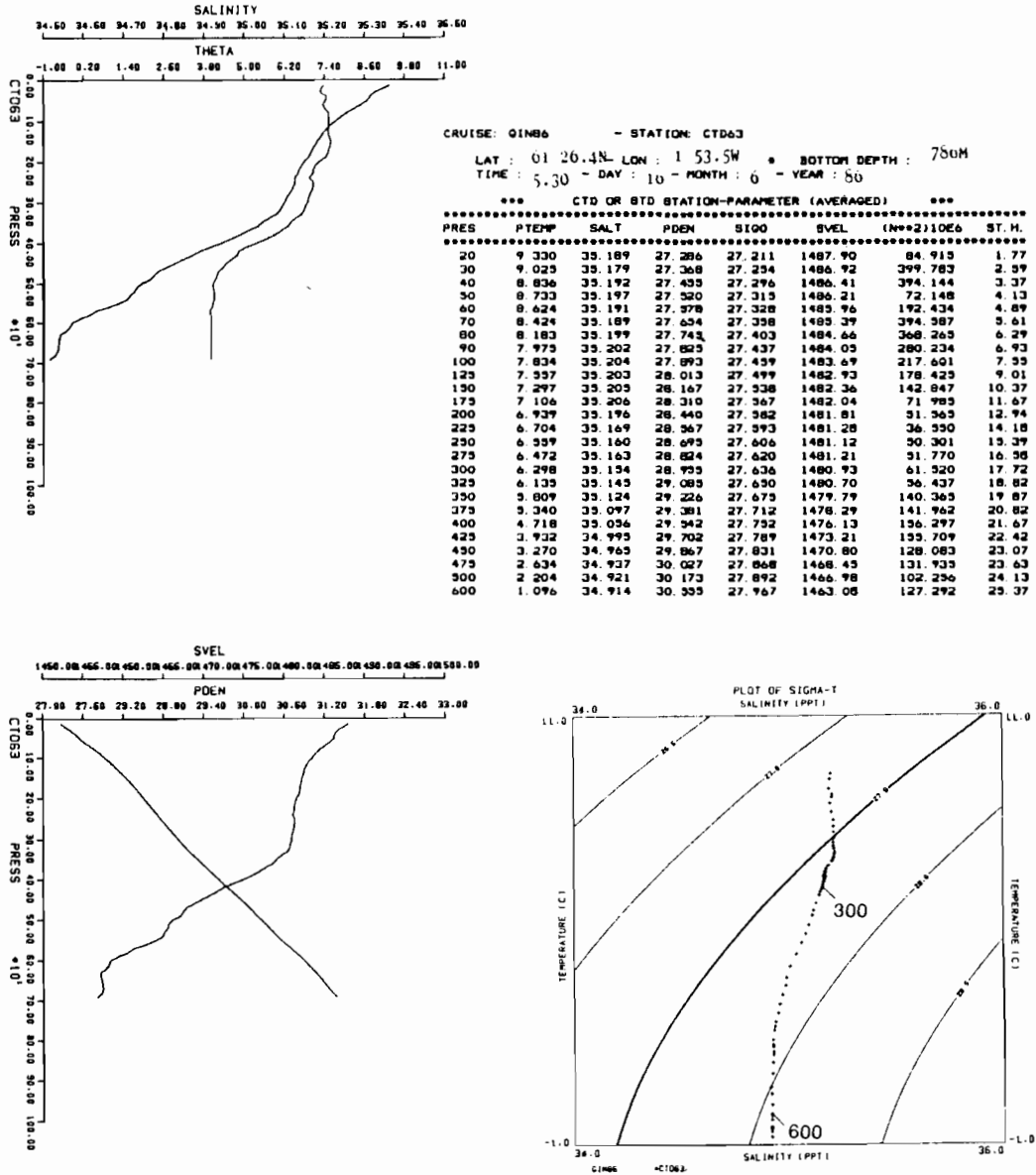
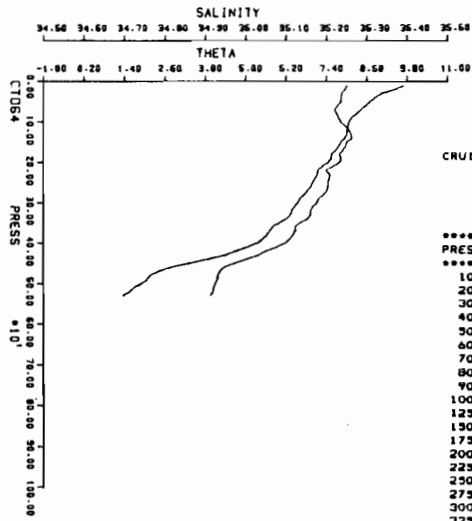


Fig. B79.

SACLANTCEN SM-209



CRUISE 01NB6 - STATION: CTD04
 LAT : 01 23.9N - LON : 1 15.4W * BOTTOM DEPTH : 6454
 TIME : 0.15 - DAY : 16 MONTH : 6 YEAR : 80

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	S100	SVEL	(N*2)10E6	ST. M.
10	9.703	35.243	27.231	27.192	1489.20	9.762	.91
20	9.673	35.243	27.266	27.198	1489.20	366.437	1.81
30	9.137	35.230	27.390	27.276	1487.40	987.861	2.60
40	8.970	35.233	27.463	27.306	1486.96	350.073	3.38
50	8.739	35.227	27.343	27.338	1486.27	137.153	4.13
60	8.637	35.224	27.602	27.352	1486.03	125.440	4.86
70	8.478	35.213	27.663	27.370	1485.62	189.367	5.58
80	8.393	35.217	27.726	27.384	1485.47	221.978	6.29
90	8.193	35.219	27.804	27.416	1484.90	256.302	6.96
100	8.103	35.223	27.868	27.433	1484.74	139.090	7.62
123	8.028	35.239	27.971	27.458	1484.76	107.336	9.20
130	7.943	35.232	28.107	27.480	1484.89	79.829	10.73
173	7.730	35.237	28.242	27.500	1484.47	77.403	12.21
200	7.535	35.227	28.377	27.521	1484.14	73.897	13.64
223	7.236	35.203	28.313	27.544	1483.46	87.360	15.02
250	7.073	35.199	28.631	27.568	1483.18	74.685	16.34
273	6.906	35.193	28.787	27.586	1482.94	87.274	17.61
300	6.690	35.177	28.923	27.607	1482.34	62.371	18.83
323	6.431	35.157	29.033	27.621	1481.88	34.206	20.01
350	6.234	35.146	29.186	27.638	1481.51	77.584	21.16
373	5.908	35.117	29.333	27.670	1480.20	130.366	22.23
400	5.348	35.103	29.474	27.692	1479.56	77.302	23.23
423	4.974	35.062	29.630	27.727	1477.60	166.289	24.13
430	4.000	35.234	29.999	27.973	1474.22	607.418	24.43
473	2.696	34.937	30.020	27.862	1468.72	261.363	25.03
500	2.080	34.922	30.183	27.902	1466.44	79.536	25.90

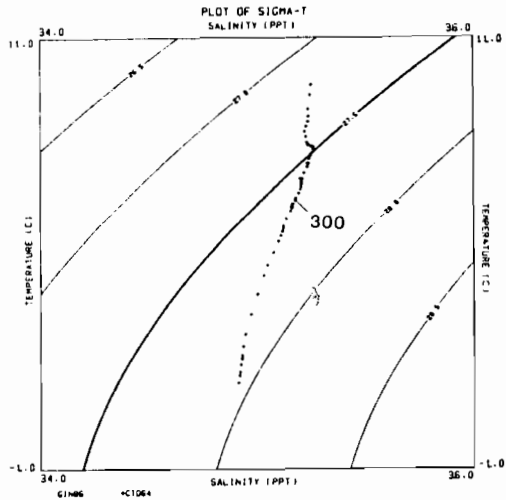
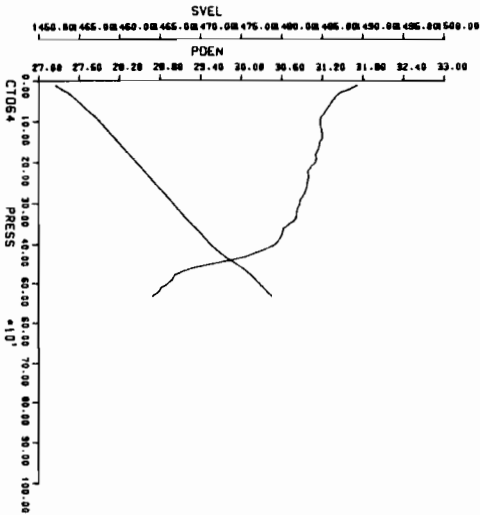


Fig. B80.

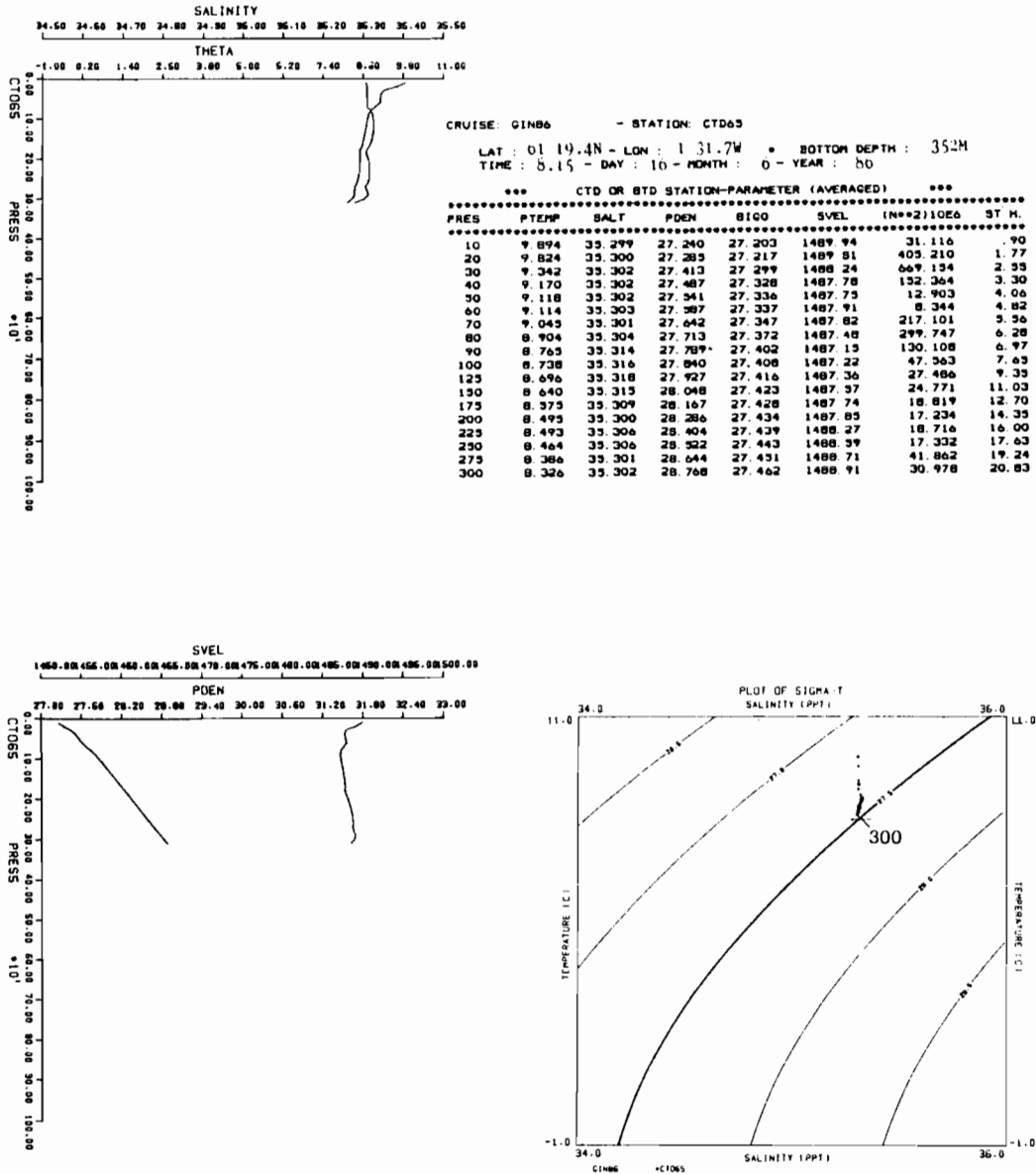


Fig. B81.

SACLANTCEN SM-209

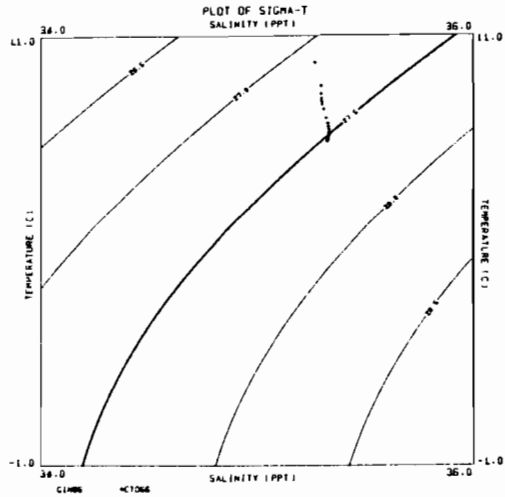
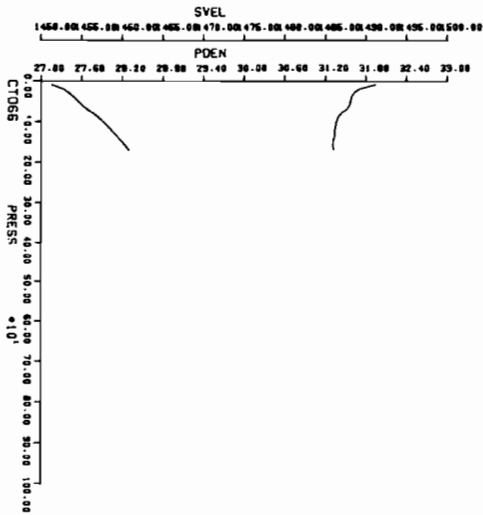
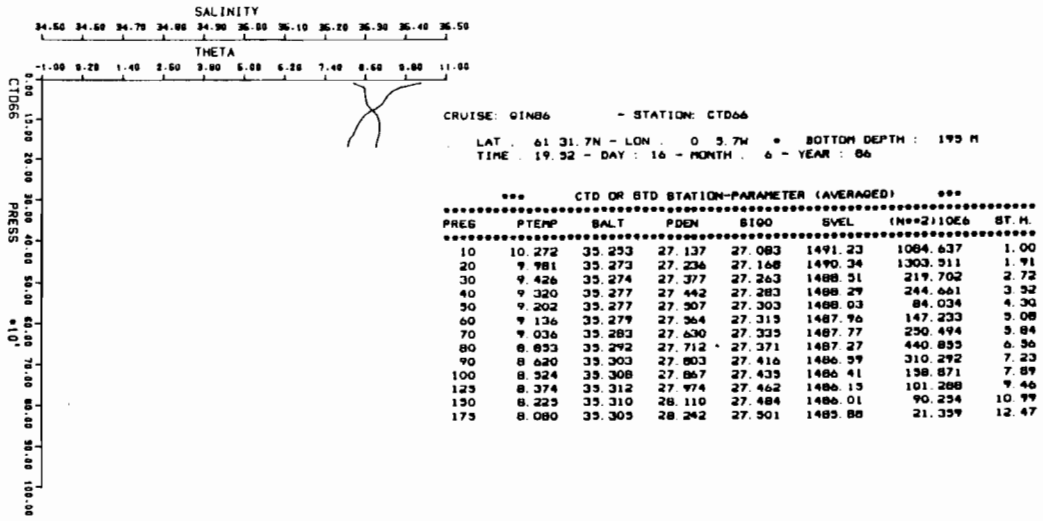


Fig. B82.

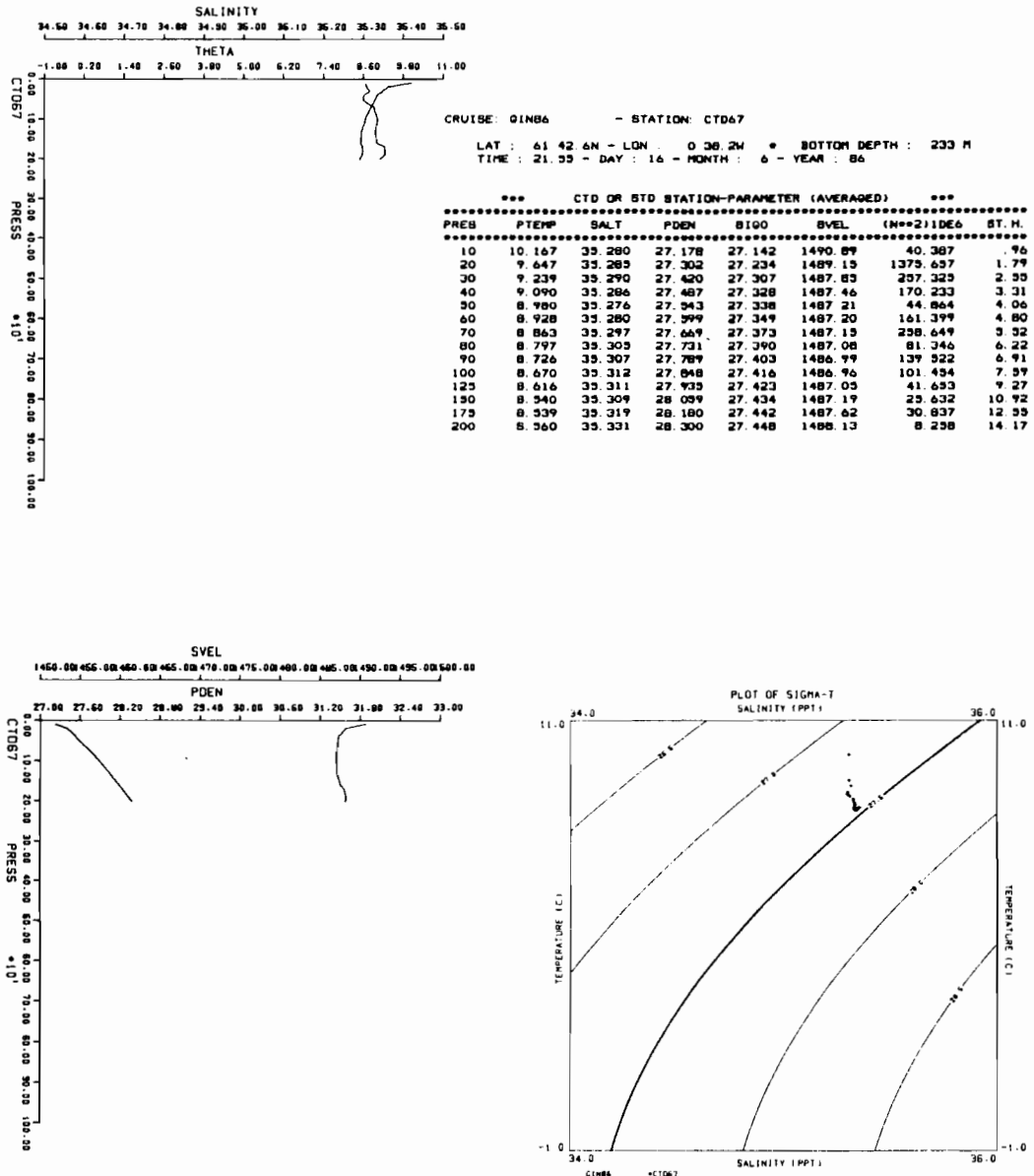


Fig. B83.

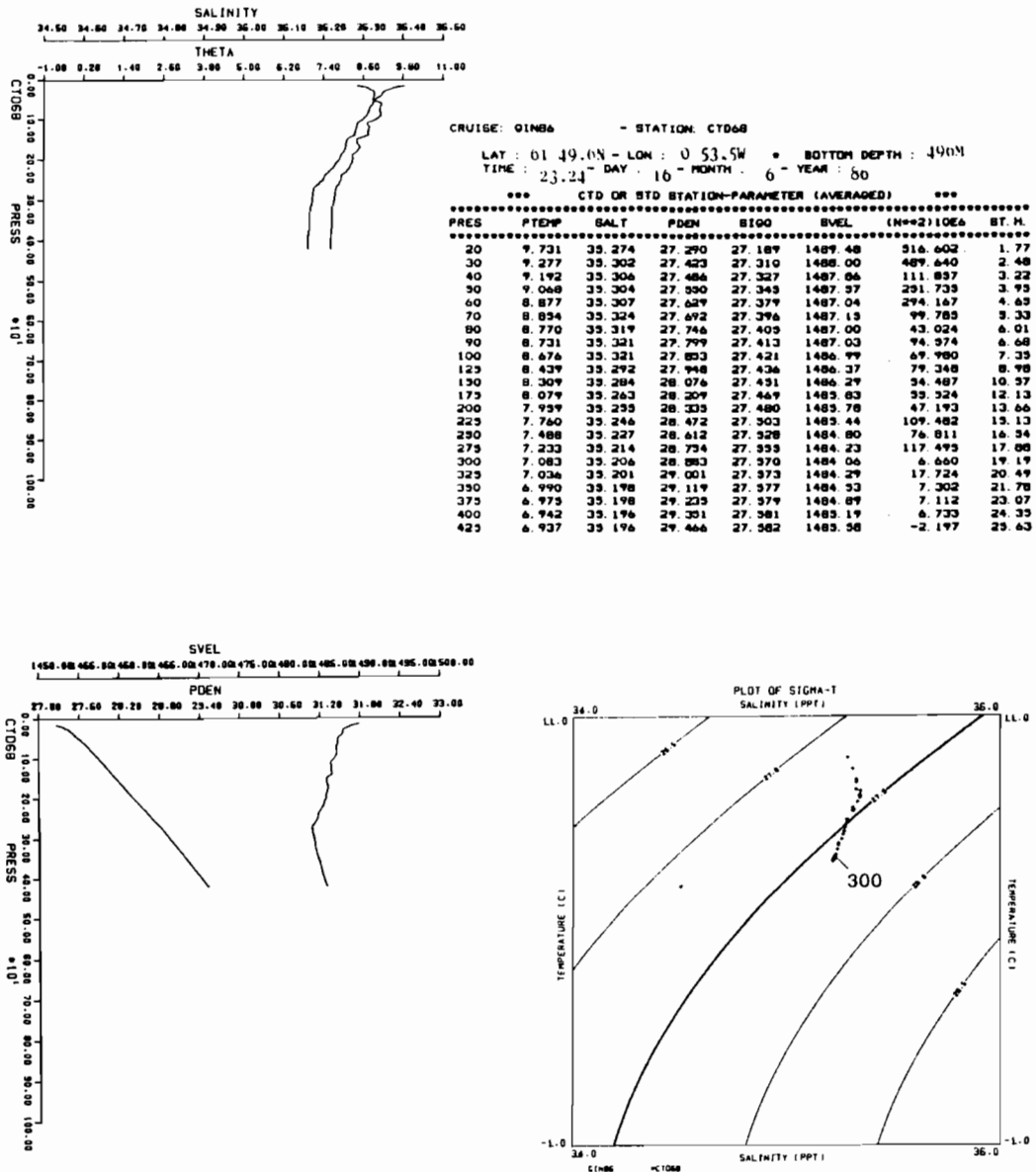


Fig. B84.

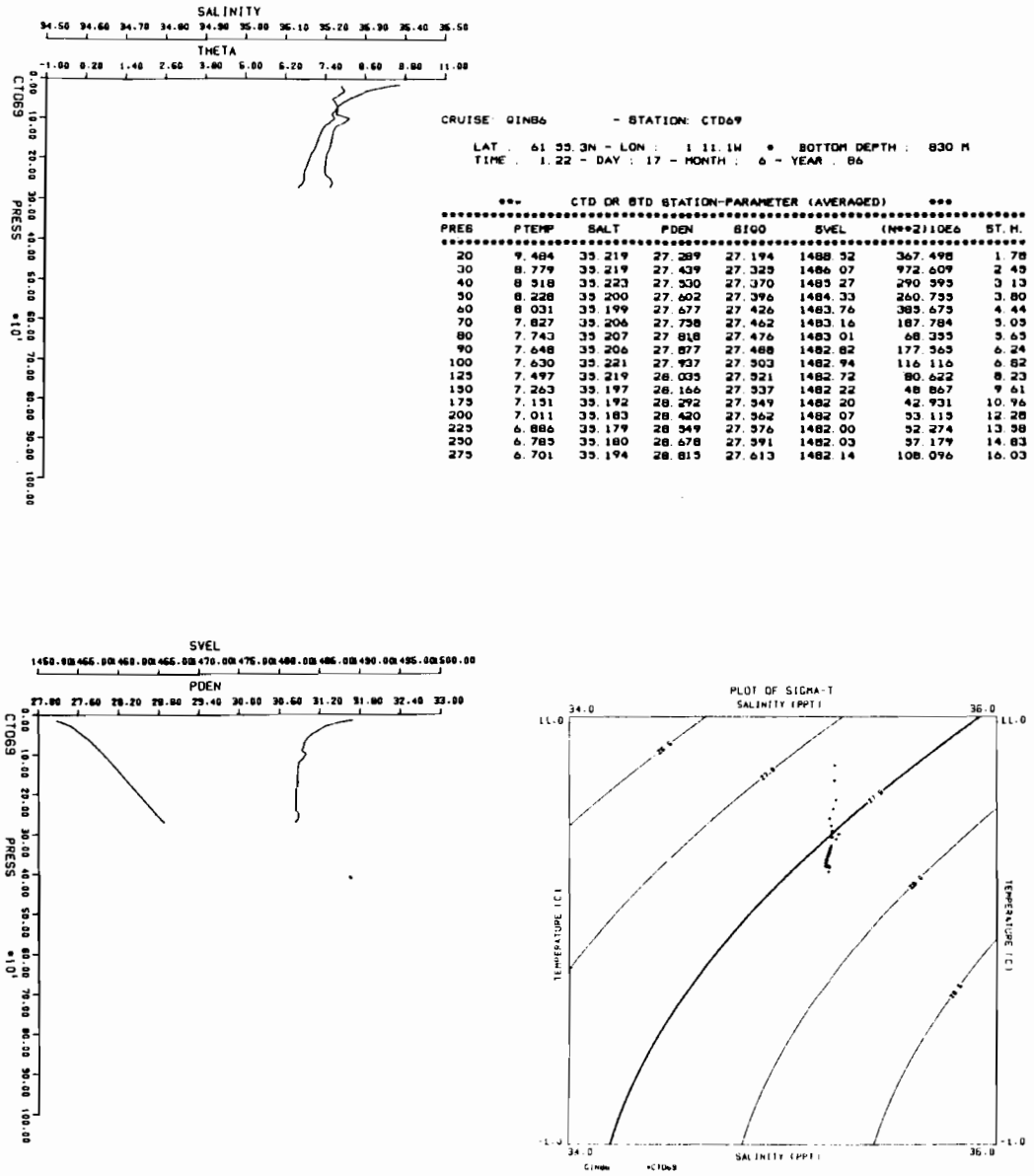


Fig. B85.

SACLANTCEN SM-209

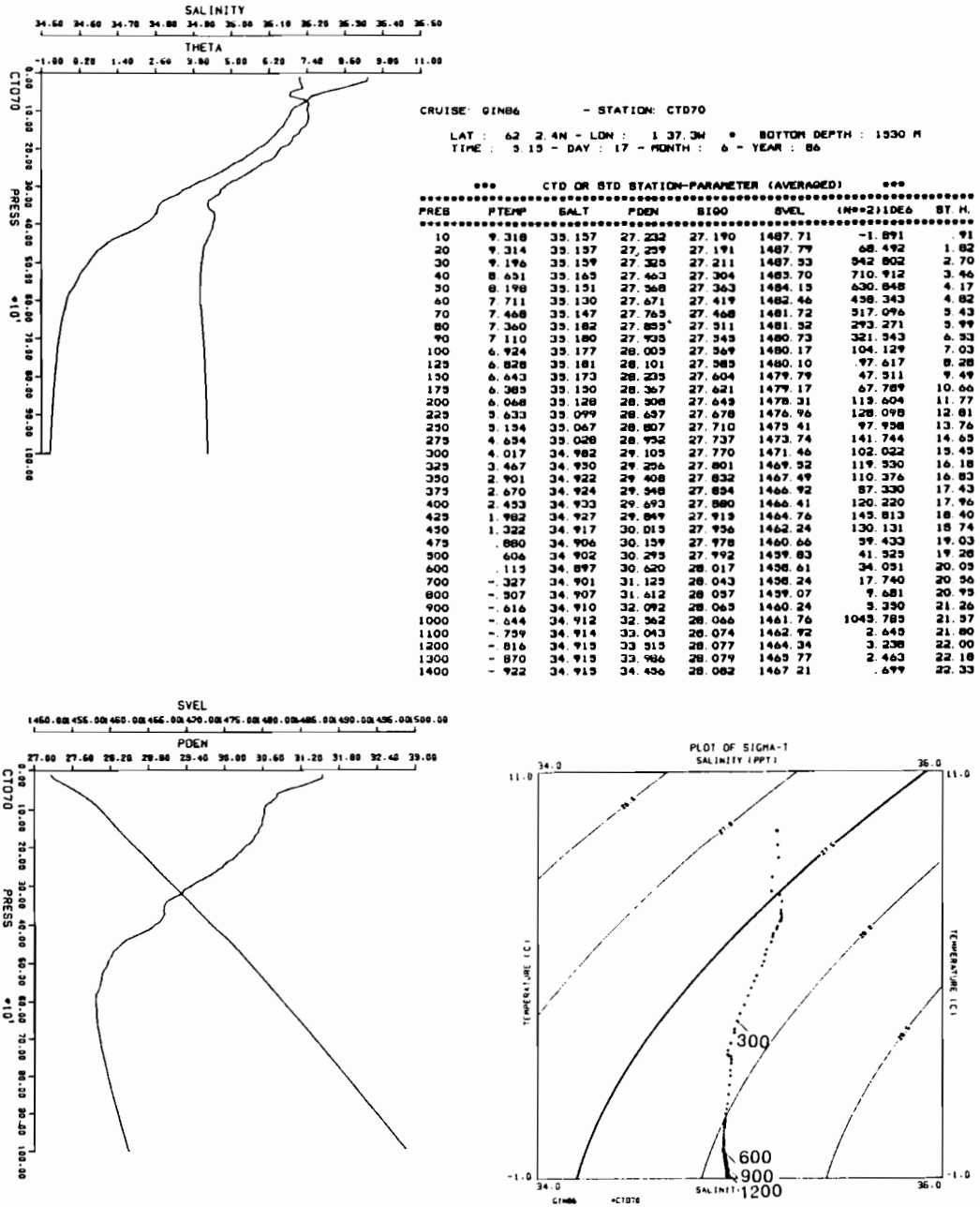


Fig. B86.

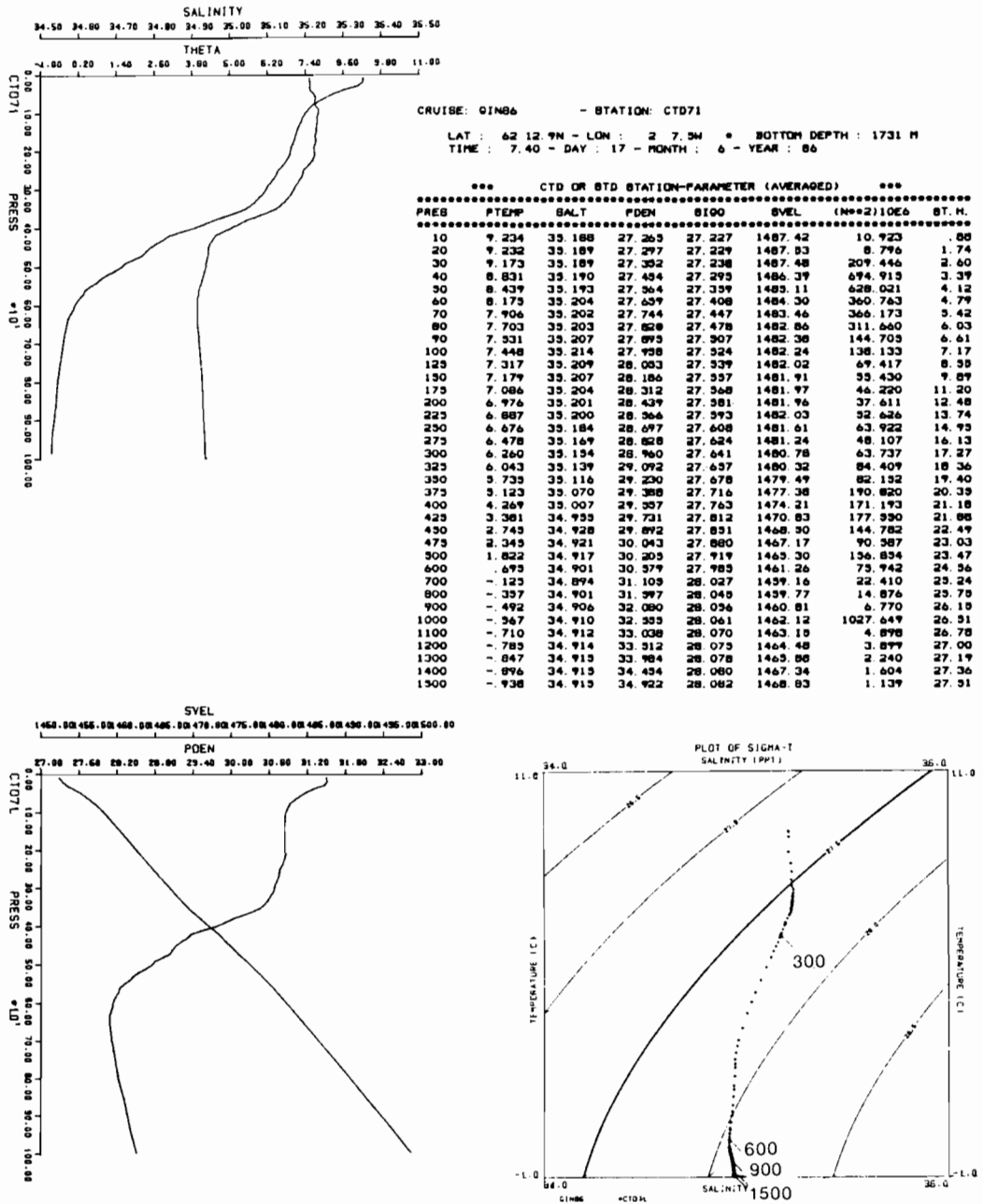


Fig. B87.

SACLANTCEN SM-209

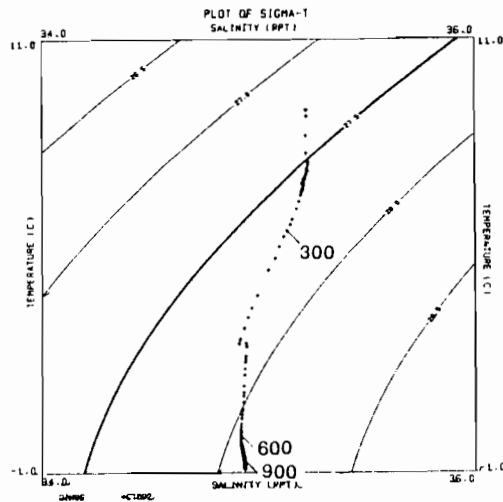
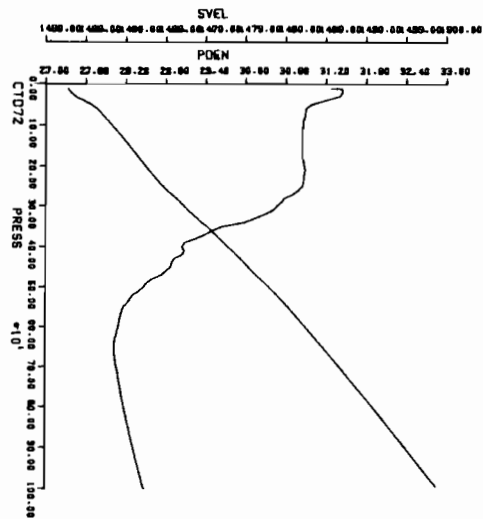
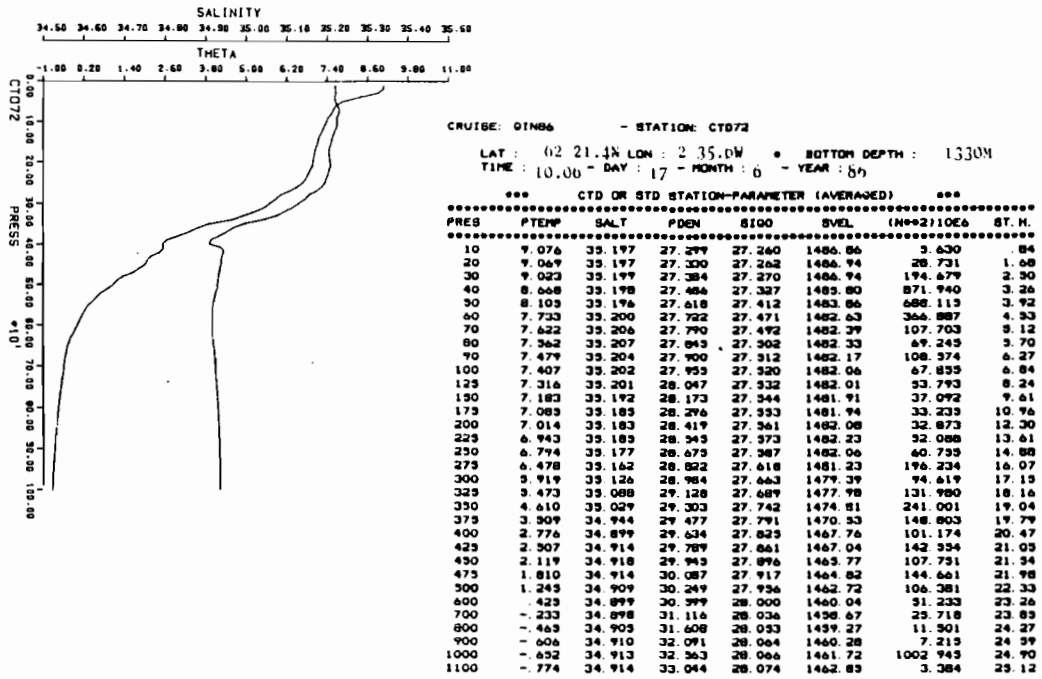


Fig. B88.

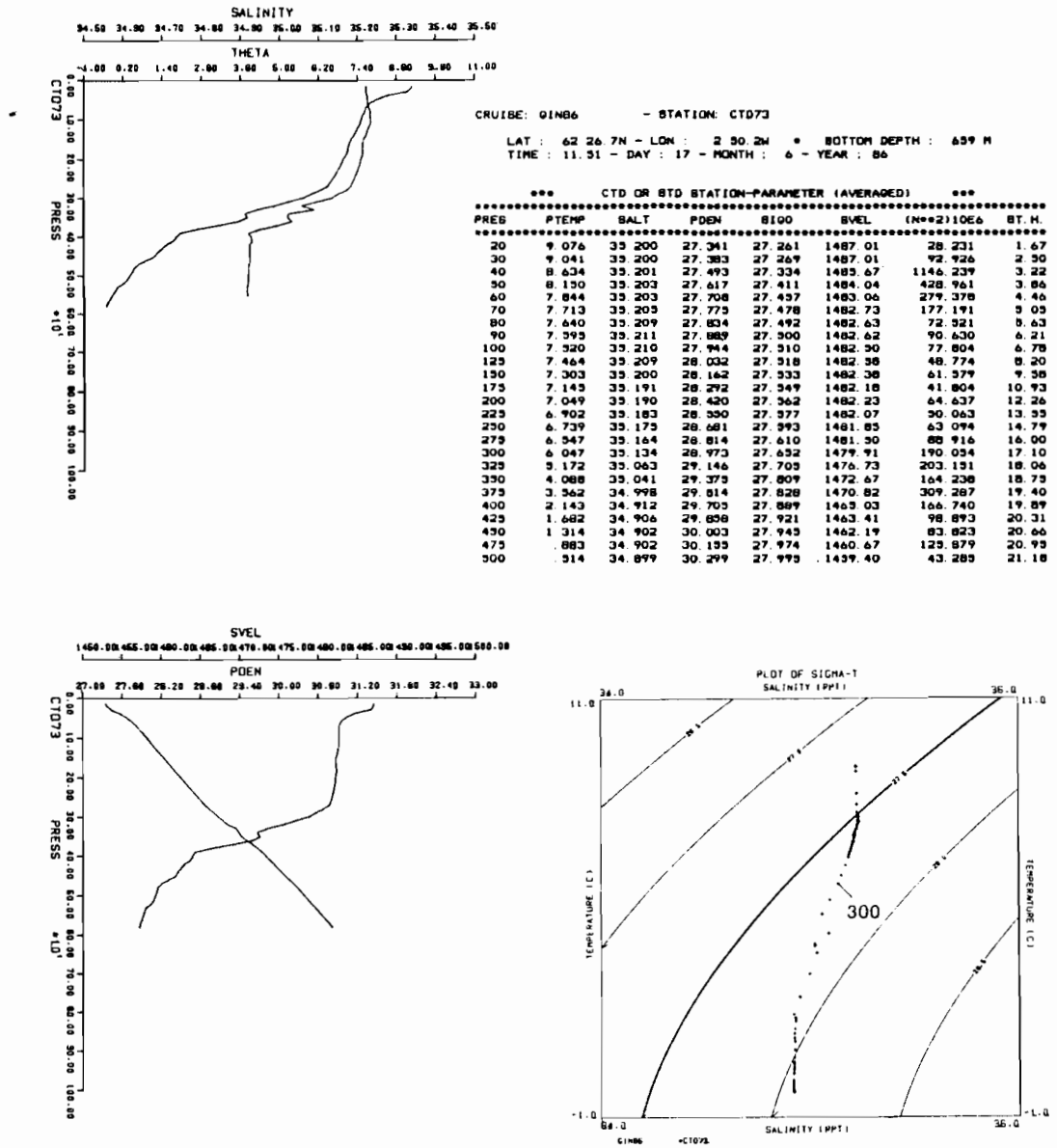
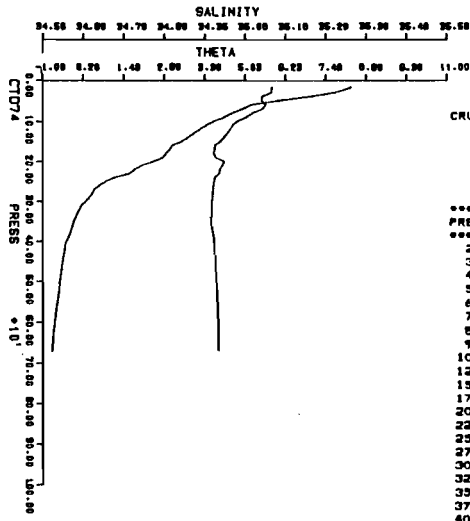


Fig. B89.

SACLANTCEN SM-209



CRUISE: 01N86 - STATION: CTD74
 LAT : 62 36.1N - LON : 3 18.3W * BOTTOM DEPTH : 769 M
 TIME : 14.32 - DAY : 17 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	BVEL	(M**2)10E6	ST. H.
20	8.081	35.044	27.381	27.287	1483.14	120.191	1.61
30	7.937	35.044	27.430	27.319	1482.78	397.794	2.36
40	7.227	35.030	27.371	27.410	1480.13	780.101	2.98
50	6.374	35.018	27.698	27.491	1477.77	1096.747	3.81
60	5.410	35.020	27.897	27.643	1473.33	1132.391	3.87
70	5.042	35.028	27.994	27.692	1472.02	177.280	4.20
80	4.782	35.009	28.056	27.708	1471.11	197.444	4.53
90	4.476	34.987	28.119	27.729	1469.99	83.175	4.86
100	4.229	34.969	28.179	27.737	1469.11	133.612	5.18
125	3.794	34.945	28.288	27.764	1467.56	124.027	5.99
150	3.341	34.926	28.436	27.794	1466.04	104.090	6.69
175	2.843	34.904	28.583	27.823	1464.31	98.191	7.30
200	2.549	34.906	28.729	27.891	1463.46	229.199	7.87
225	1.889	34.919	28.915	27.916	1461.02	139.042	8.29
250	1.233	34.906	29.073	27.932	1458.50	178.698	8.61
275	.644	34.899	29.230	27.987	1456.26	77.094	8.89
300	.393	34.896	29.362	28.000	1459.84	46.351	9.06
325	-.144	34.894	29.493	28.013	1454.81	39.591	9.29
350	-.022	34.892	29.623	28.020	1454.48	26.878	9.41
375	-.130	34.894	29.749	28.027	1454.37	25.038	9.87
400	-.234	34.898	29.878	28.036	1454.31	34.632	9.70
425	-.341	34.900	30.004	28.043	1454.23	17.326	9.82
450	-.394	34.902	30.127	28.047	1454.40	13.794	9.92
475	-.437	34.904	30.249	28.051	1454.61	8.688	10.03
500	-.478	34.903	30.371	28.054	1454.84	12.646	10.12
600	-.372	34.907	30.674	28.060	1459.44	9.320	10.46

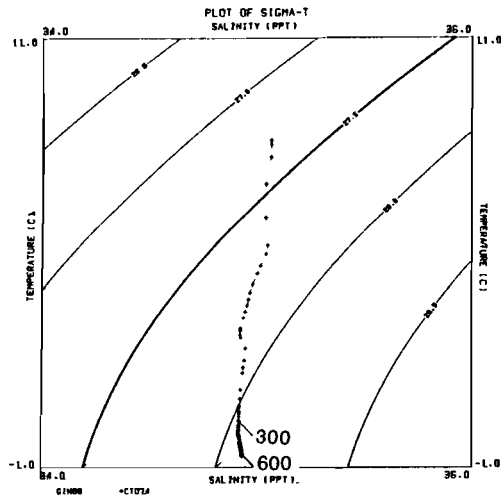
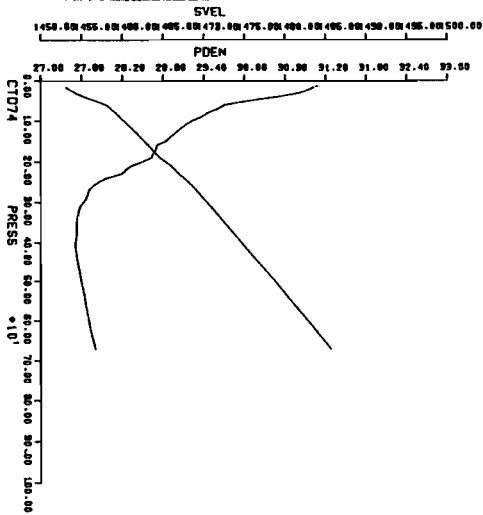


Fig. B90.

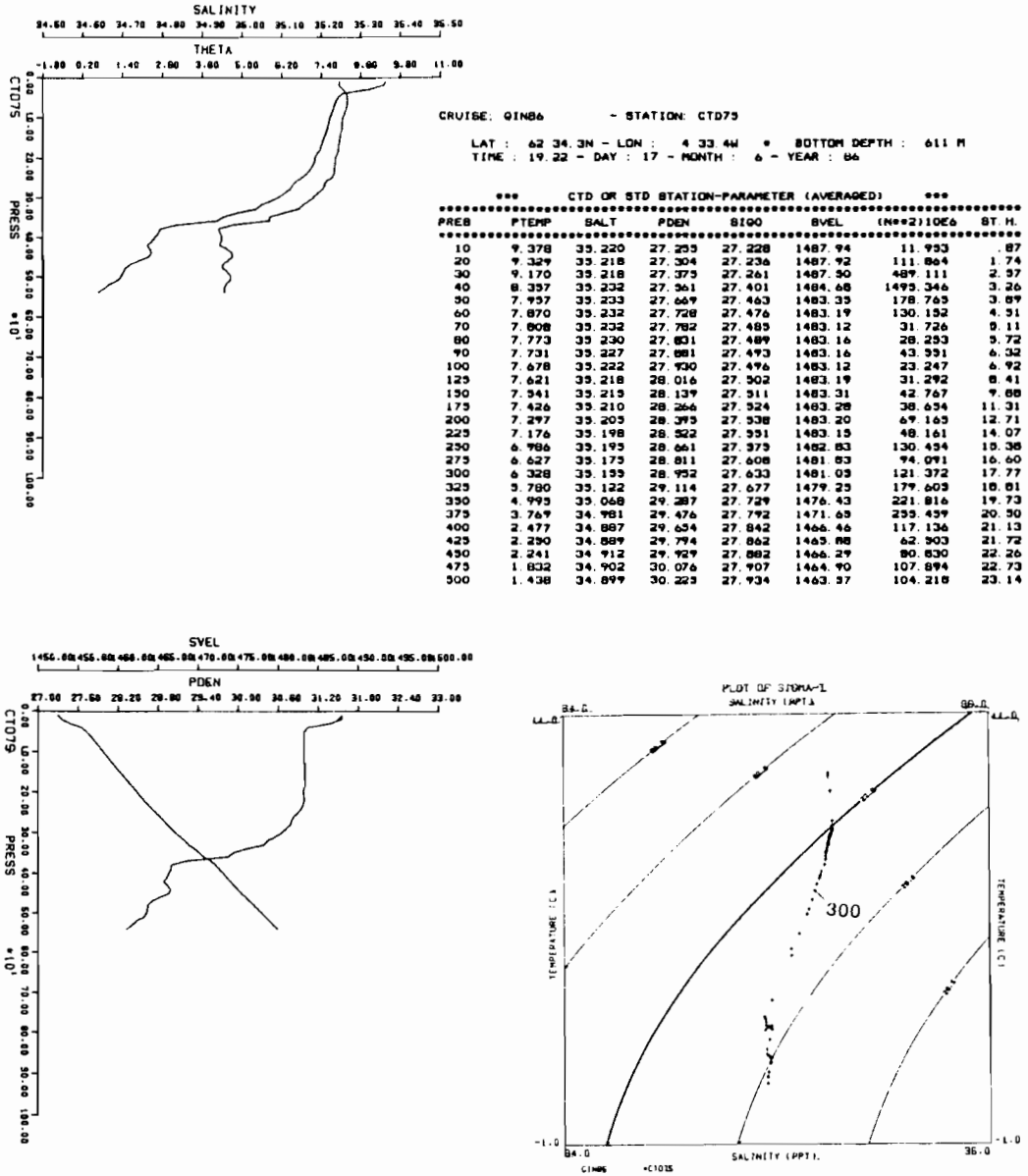


Fig. B91.

SACLANTCEN SM-209

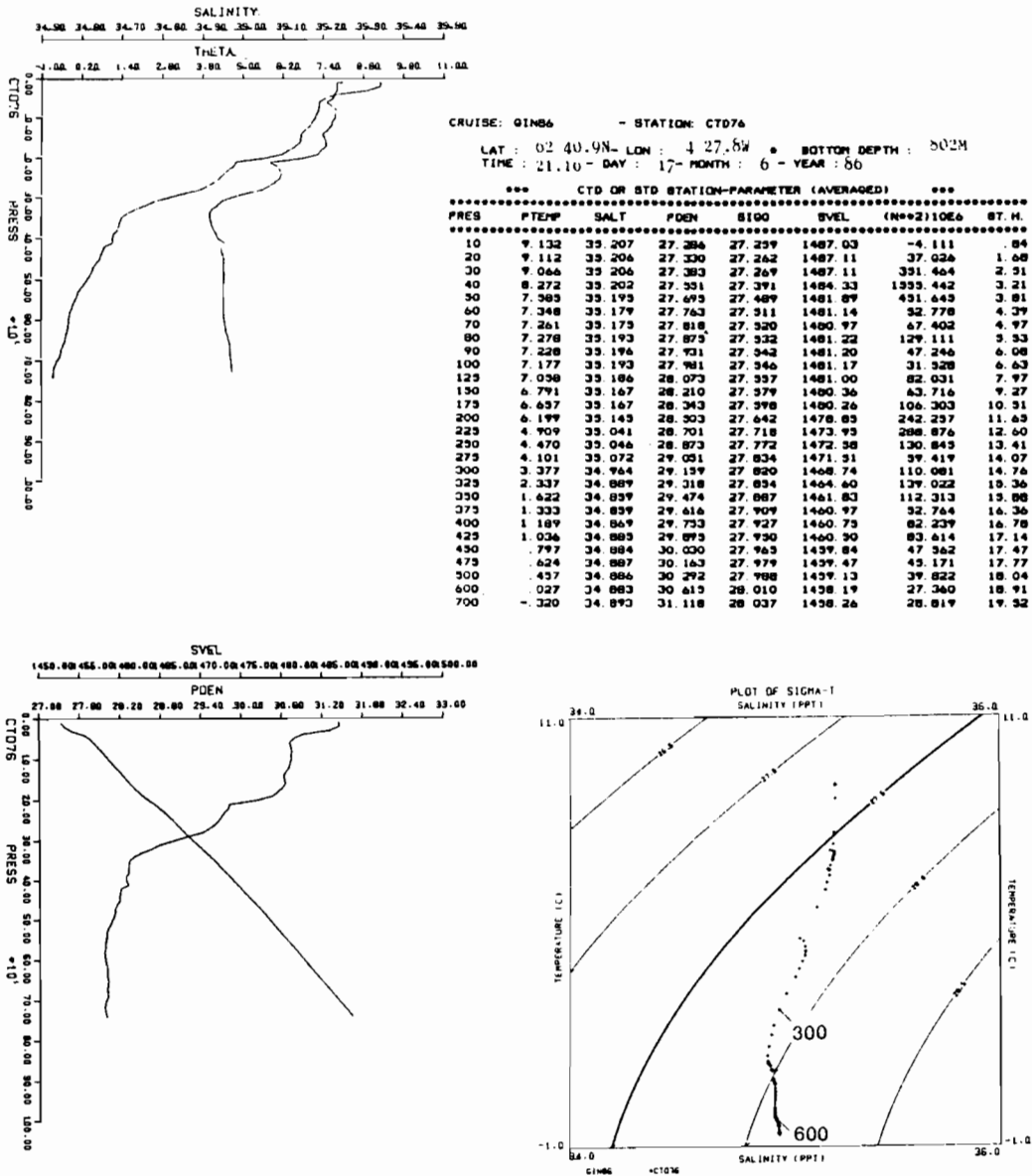


Fig. B92.

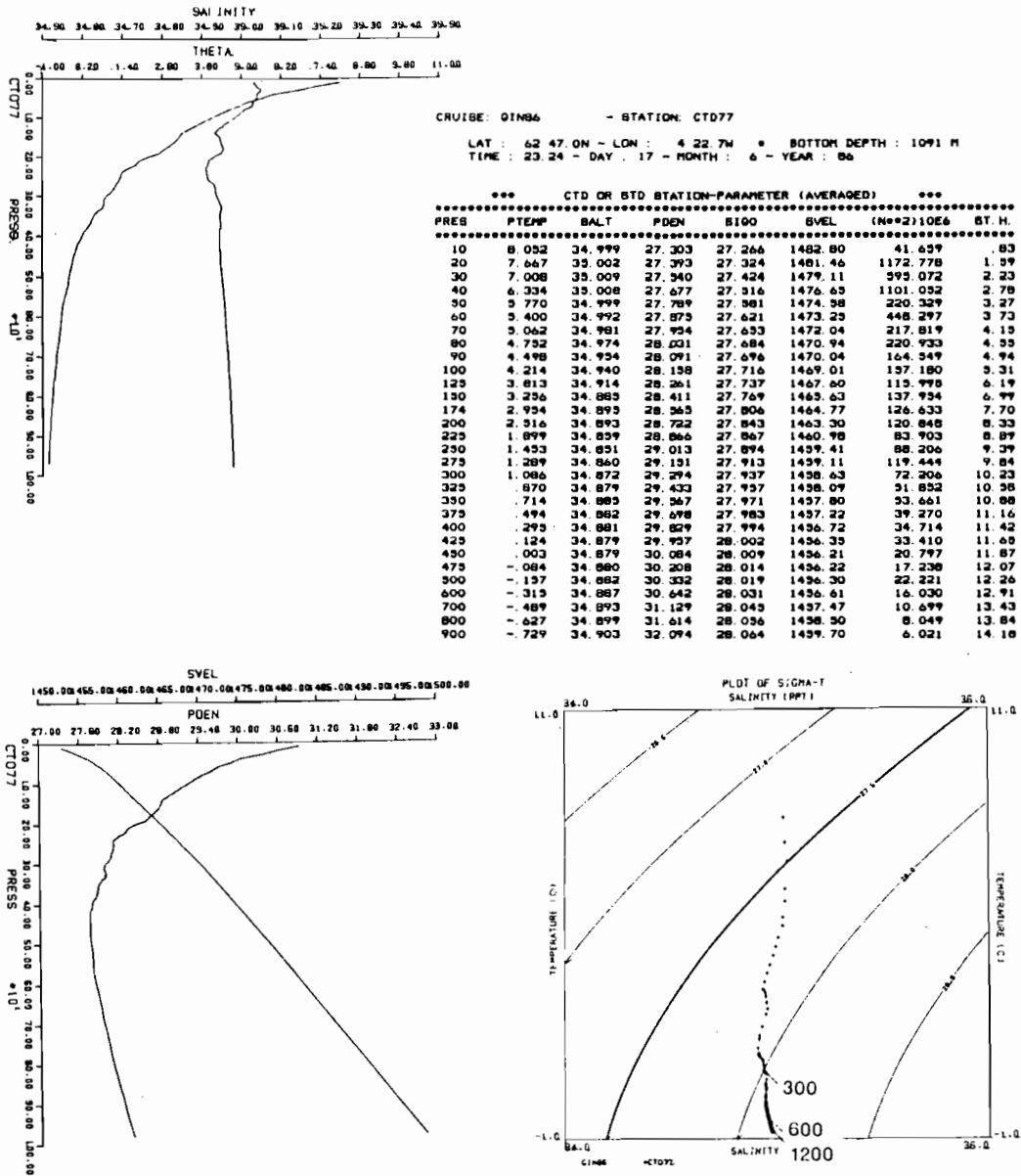
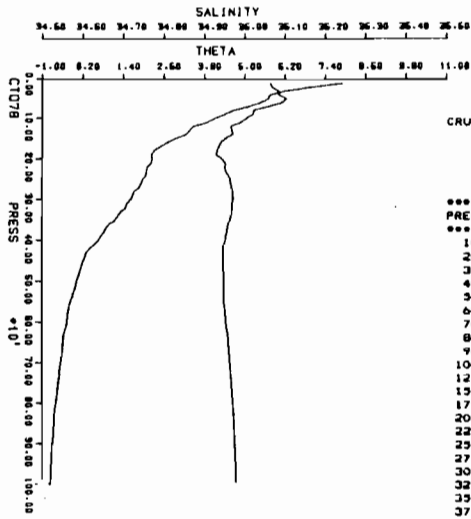


Fig. B93.

SACLANTCEN SM-209



CRUISE: 01N86 - STATION: CTD78
 LAT : 0° 55.0N - LON : 4 17.4W * BOTTOM DEPTH : 1962M
 TIME : 1.10 - DAY : 15 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	S100	SVEL	(#*2)10E6	ST. H.
10	8.042	35.028	27.315	27.290	1482.76	209.363	.81
20	7.485	35.032	27.444	27.378	1480.80	1363.249	1.53
30	6.491	35.040	27.633	27.520	1477.14	909.736	2.10
40	5.956	35.046	27.736	27.593	1473.21	714.847	2.60
50	5.679	35.043	27.837	27.629	1474.27	60.118	3.06
60	5.600	35.039	27.904	27.650	1474.14	193.460	3.51
70	5.322	35.036	27.966	27.663	1473.16	170.339	3.94
80	4.821	34.989	28.033	27.687	1471.24	241.723	4.34
90	4.538	34.976	28.104	27.709	1470.23	236.203	4.73
100	4.221	34.964	28.173	27.734	1469.07	192.991	5.10
125	3.734	34.932	28.283	27.759	1467.29	135.340	5.94
150	3.242	34.913	28.433	27.793	1463.61	109.060	6.70
175	2.641	34.884	28.586	27.823	1463.41	116.661	7.38
200	2.259	34.874	28.730	27.850	1462.16	67.303	8.00
225	2.183	34.893	28.868	27.871	1462.27	83.036	8.56
250	2.031	34.898	29.001	27.886	1462.11	71.661	9.09
275	1.904	34.906	29.138	27.904	1461.90	37.891	9.59
300	1.687	34.910	29.276	27.924	1461.36	68.119	10.01
325	1.304	34.908	29.407	27.936	1460.96	48.009	10.41
350	1.259	34.904	29.540	27.950	1460.28	40.764	10.78
375	.973	34.893	29.674	27.963	1459.41	32.338	11.11
400	.764	34.890	29.803	27.973	1458.87	30.672	11.43
425	.510	34.883	29.933	27.983	1458.12	34.967	11.71
450	.266	34.880	30.066	27.993	1457.42	31.443	11.97
475	.156	34.880	30.192	28.001	1457.33	20.997	12.21
500	.060	34.880	30.316	28.007	1457.30	22.412	12.44
600	-.152	34.881	30.626	28.019	1457.36	13.910	13.23
700	-.362	34.890	31.119	28.037	1457.97	13.920	13.64
800	-.534	34.897	31.606	28.050	1458.93	11.074	14.33
900	-.662	34.902	32.089	28.060	1460.01	8.038	14.71
1000	-.694	34.903	32.561	28.063	1461.38	788.615	15.06
1100	-.789	34.908	33.041	28.071	1462.77	4.749	15.34
1200	-.853	34.911	33.513	28.073	1464.13	4.063	15.56
1300	-.900	34.913	33.986	28.079	1463.62	2.662	15.76
1400	-.949	34.914	34.437	28.082	1467.08	1.626	15.92
1500	-.972	34.913	34.924	28.083	1468.67	1.834	16.07
1600	-1.005	34.913	35.391	28.083	1470.22	1.360	16.20
1700	-1.037	34.914	35.856	28.082	1471.76	-1.247	16.33

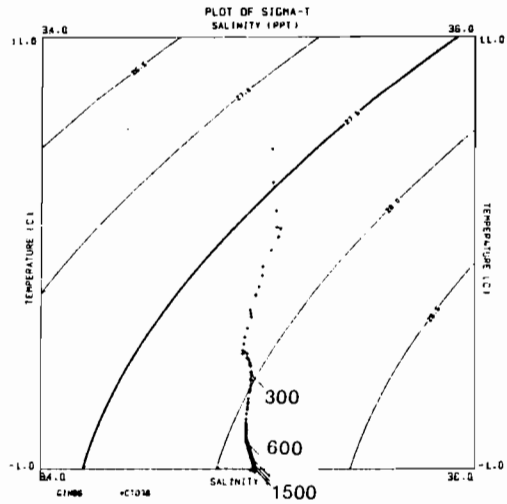
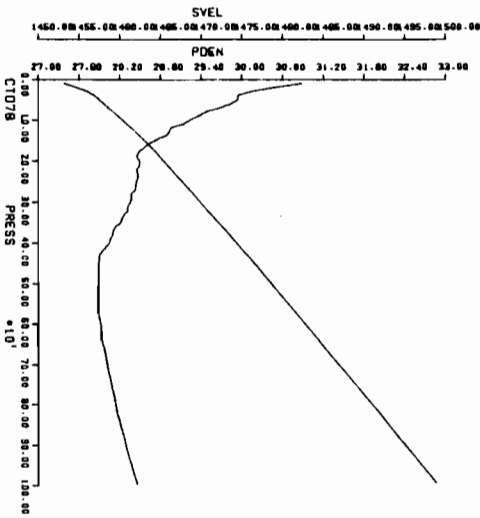


Fig. B94.

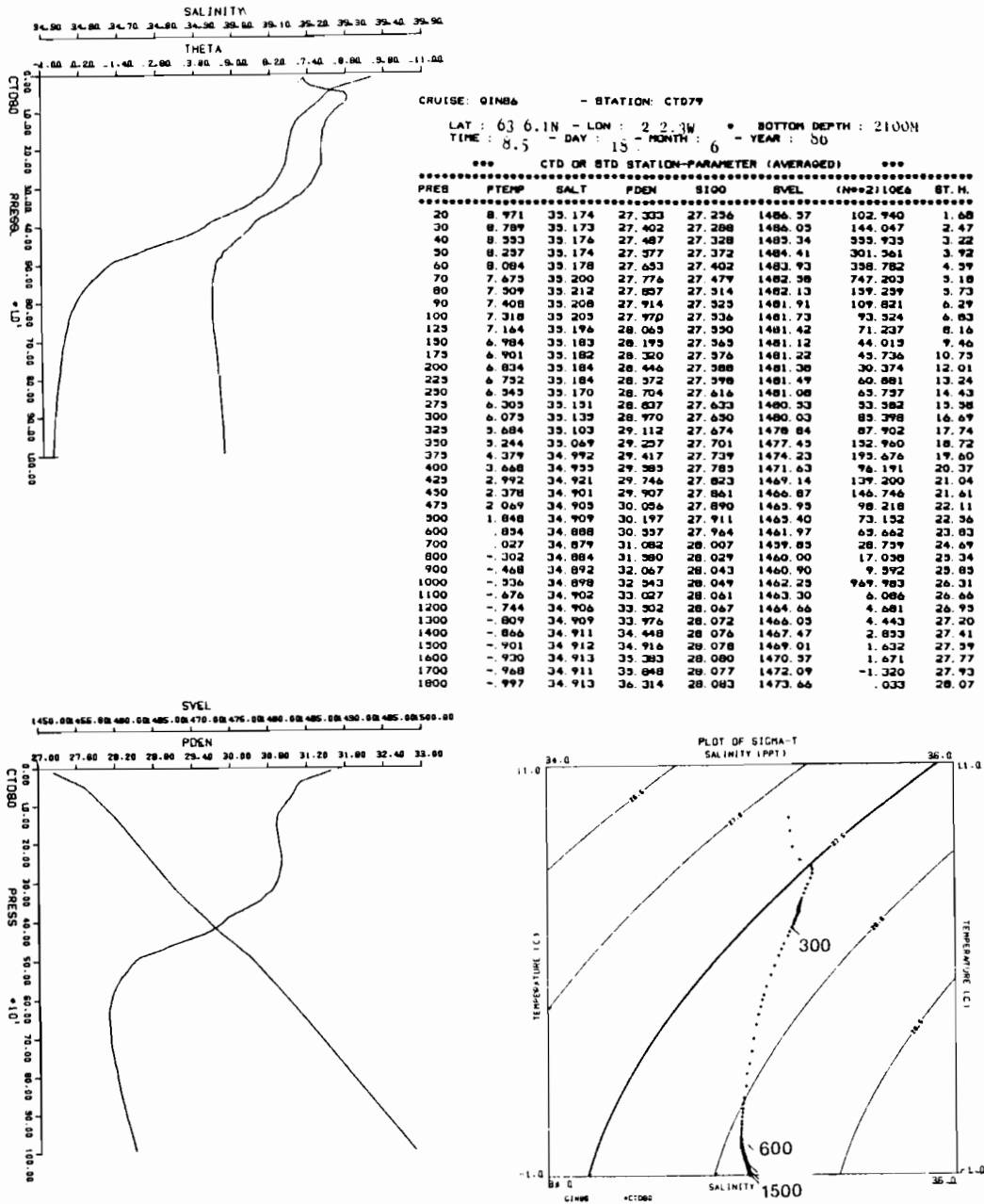
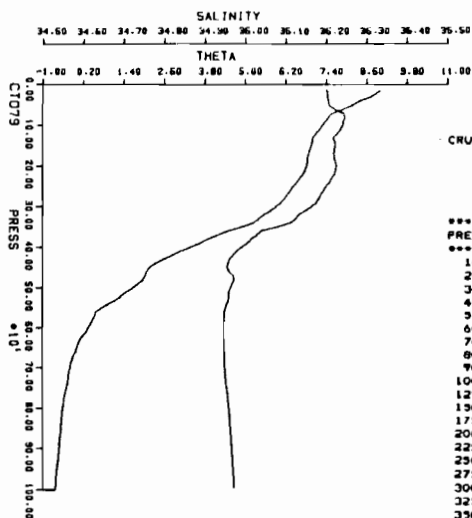


Fig. B95.

SACLANTCEN SM-209



CRUISE: GINDB - STATION: CT000
 LAT: 02 49.4N - LON: 1 17.7W * BOTTOM DEPTH: 1705M
 TIME: 11.47 DAY: 15 - MONTH: 6 - YEAR: 80

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDDN	B100	BVEL	(M=211026)	ST. H.
10	7.468	35.160	27.204	27.166	1488.23	104.733	9.3
20	7.276	35.163	27.271	27.203	1487.66	617.336	1.81
30	8.794	35.170	27.399	27.285	1486.06	775.164	2.60
40	8.323	35.186	27.330	27.370	1484.31	802.594	3.31
50	8.103	35.243	27.635	27.449	1483.92	734.798	3.93
60	7.944	35.269	27.743	27.494	1483.32	171.117	4.32
70	7.853	35.271	27.806	27.309	1483.34	163.722	5.09
80	7.721	35.263	27.867	27.324	1483.00	111.871	5.63
90	7.583	35.234	27.924	27.336	1482.64	117.097	6.20
100	7.426	35.239	27.981	27.347	1482.18	102.728	6.73
125	7.192	35.223	28.082	27.367	1481.36	108.137	8.06
150	6.938	35.207	28.218	27.388	1481.06	42.373	9.32
173	6.896	35.200	28.341	27.397	1481.07	24.381	10.56
200	6.793	35.197	28.462	27.603	1481.23	22.333	11.79
223	6.740	35.196	28.384	27.610	1481.43	28.932	13.00
230	6.678	35.196	28.706	27.618	1481.63	33.354	14.20
275	6.334	35.183	28.831	27.628	1481.47	39.767	13.37
300	6.334	35.169	28.939	27.640	1481.17	48.234	16.50
323	6.089	35.147	29.092	27.637	1480.31	82.786	17.60
350	5.631	35.108	29.233	27.683	1479.14	104.668	18.64
373	5.077	35.065	29.389	27.717	1477.19	146.908	19.38
400	4.379	35.016	29.331	27.738	1474.68	143.010	20.42
423	3.890	35.066	29.764	27.831	1473.13	240.361	21.03
450	3.124	34.939	29.878	27.840	1470.16	236.474	21.67
473	2.223	34.926	30.058	27.894	1466.63	136.238	22.17
500	1.402	34.902	30.230	27.939	1463.41	133.441	22.56
600	323	34.882	30.378	27.981	1460.46	48.874	23.70
700	-140	34.879	31.094	28.016	1439.08	23.600	24.49
800	-392	34.868	31.389	28.036	1439.39	14.899	23.09
900	-346	34.893	32.073	28.049	1460.34	10.143	23.37
1000	-397	34.900	32.349	28.034	1461.96	1021.712	26.00
1100	-731	34.904	33.033	28.063	1463.04	3.706	26.32
1200	-806	34.908	33.308	28.071	1464.37	4.960	26.38
1300	-868	34.910	33.981	28.073	1463.77	3.236	26.81
1400	-919	34.911	34.432	28.078	1467.22	2.142	27.00
1500	-937	34.912	34.921	28.080	1468.74	2.119	27.17

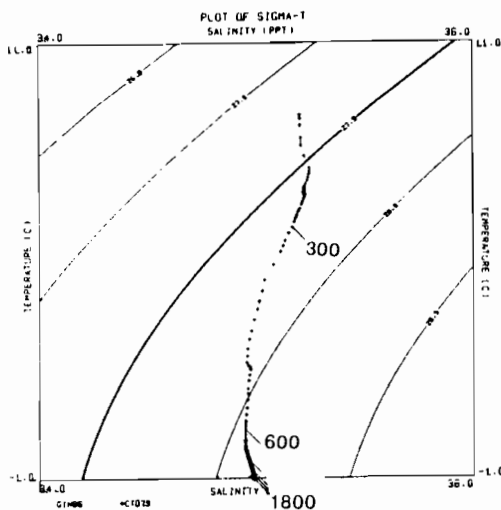
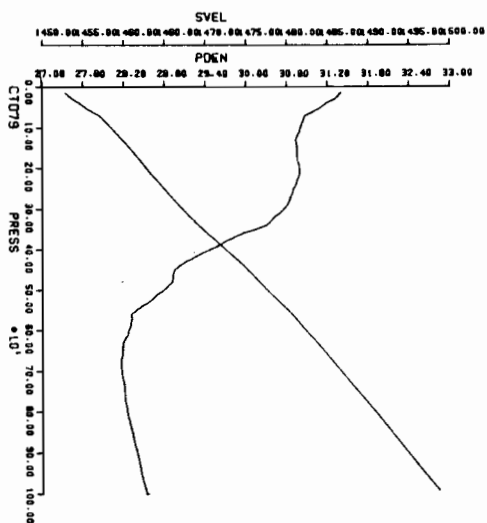


Fig. B96.

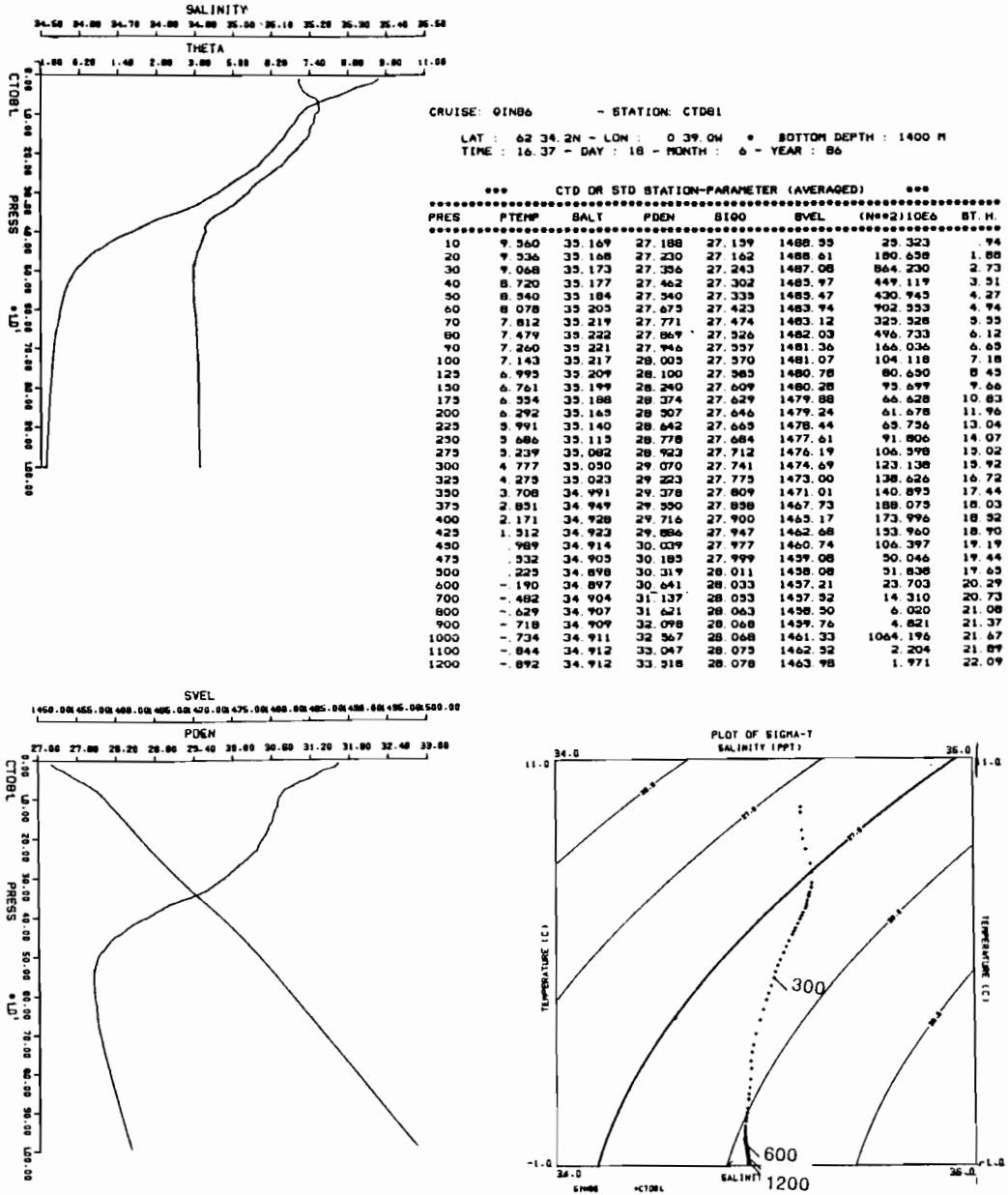
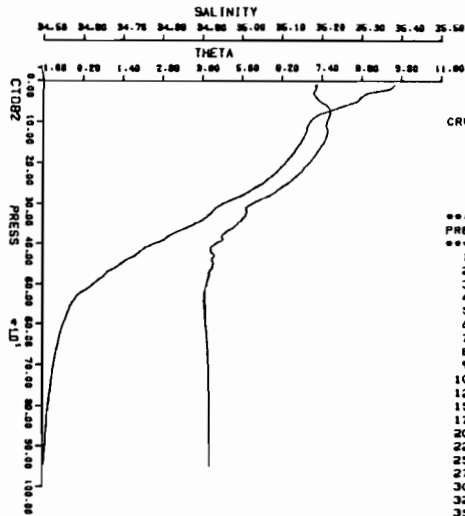


Fig. B97.



CRUISE 01N86 - STATION CTD02
 LAT : 62 20.1N - LON : 0 2 9W * BOTTOM DEPTH : 1062 M
 TIME : 19 40 - DAY : 15 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	SVEL	(N#2)10E6	ST.M
10	9.590	35.184	27.197	27.166	1488.68	-8.211	1.94
20	9.584	35.184	27.233	27.167	1488.80	61.176	1.87
30	9.099	35.178	27.356	27.242	1487.19	1174.501	2.71
40	8.637	35.178	27.475	27.316	1485.66	336.420	3.48
50	8.335	35.187	27.544	27.339	1485.46	189.383	4.23
60	8.297	35.203	27.639	27.389	1484.76	810.645	4.93
70	7.894	35.215	27.736	27.439	1483.43	903.211	5.37
80	7.521	35.219	27.860	27.517	1482.18	351.311	6.14
90	7.213	35.215	27.947	27.538	1481.18	186.772	6.67
100	7.093	35.212	28.008	27.573	1480.88	132.944	7.18
125	6.970	35.209	28.104	27.588	1480.69	60.440	8.44
150	6.856	35.208	28.233	27.603	1480.66	32.530	9.67
175	6.637	35.193	28.364	27.619	1480.29	65.821	10.86
200	6.428	35.175	28.496	27.635	1479.79	62.400	12.01
225	6.149	35.153	28.631	27.653	1479.08	80.386	13.11
250	5.809	35.127	28.771	27.678	1478.12	91.007	14.16
275	5.561	35.093	28.917	27.706	1476.70	108.607	15.13
300	4.761	35.050	29.072	27.742	1474.62	167.929	16.01
325	4.197	35.011	29.223	27.774	1472.66	104.249	16.82
350	3.861	35.000	29.368	27.801	1471.67	102.069	17.56
375	3.240	34.969	29.526	27.838	1469.42	143.870	18.20
400	2.868	34.946	29.682	27.872	1467.36	139.222	18.76
425	2.056	34.920	29.836	27.903	1465.08	137.420	19.24
450	1.623	34.926	29.996	27.941	1463.39	139.919	19.63
475	1.131	34.921	30.131	27.973	1461.81	91.566	19.93
500	.724	34.912	30.294	27.993	1460.38	69.189	20.19
600	-.052	34.904	30.637	28.031	1457.85	44.809	20.84
700	-.328	34.910	31.146	28.060	1457.31	18.137	21.20
800	-.741	34.914	31.634	28.073	1457.98	8.373	21.43
900	-.873	34.916	32.114	28.080	1459.03	3.912	21.61

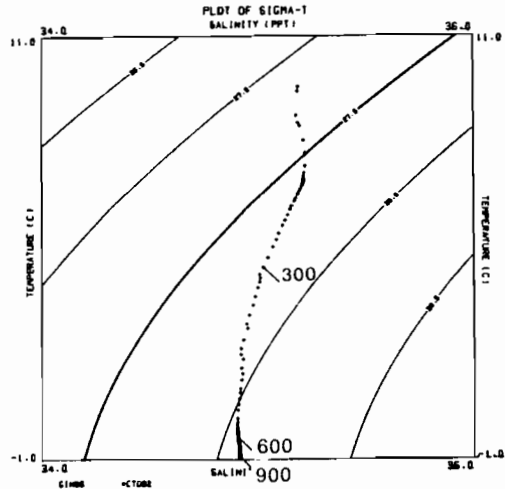
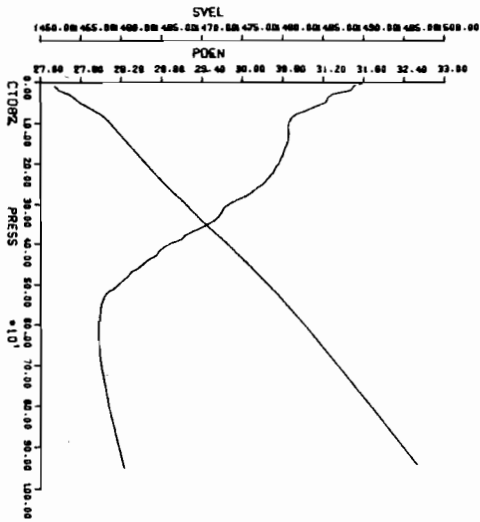


Fig. B98.

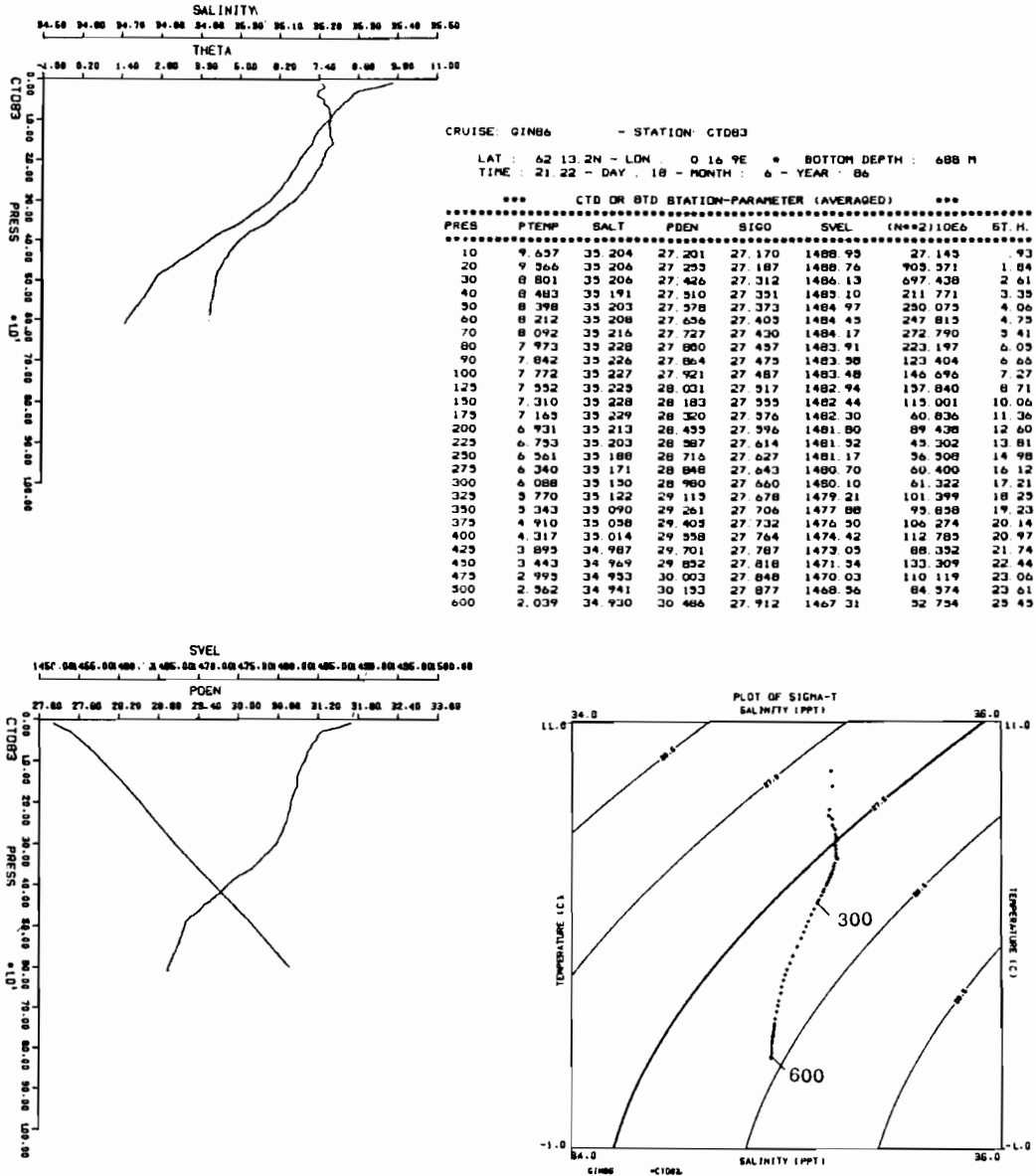


Fig. B99.

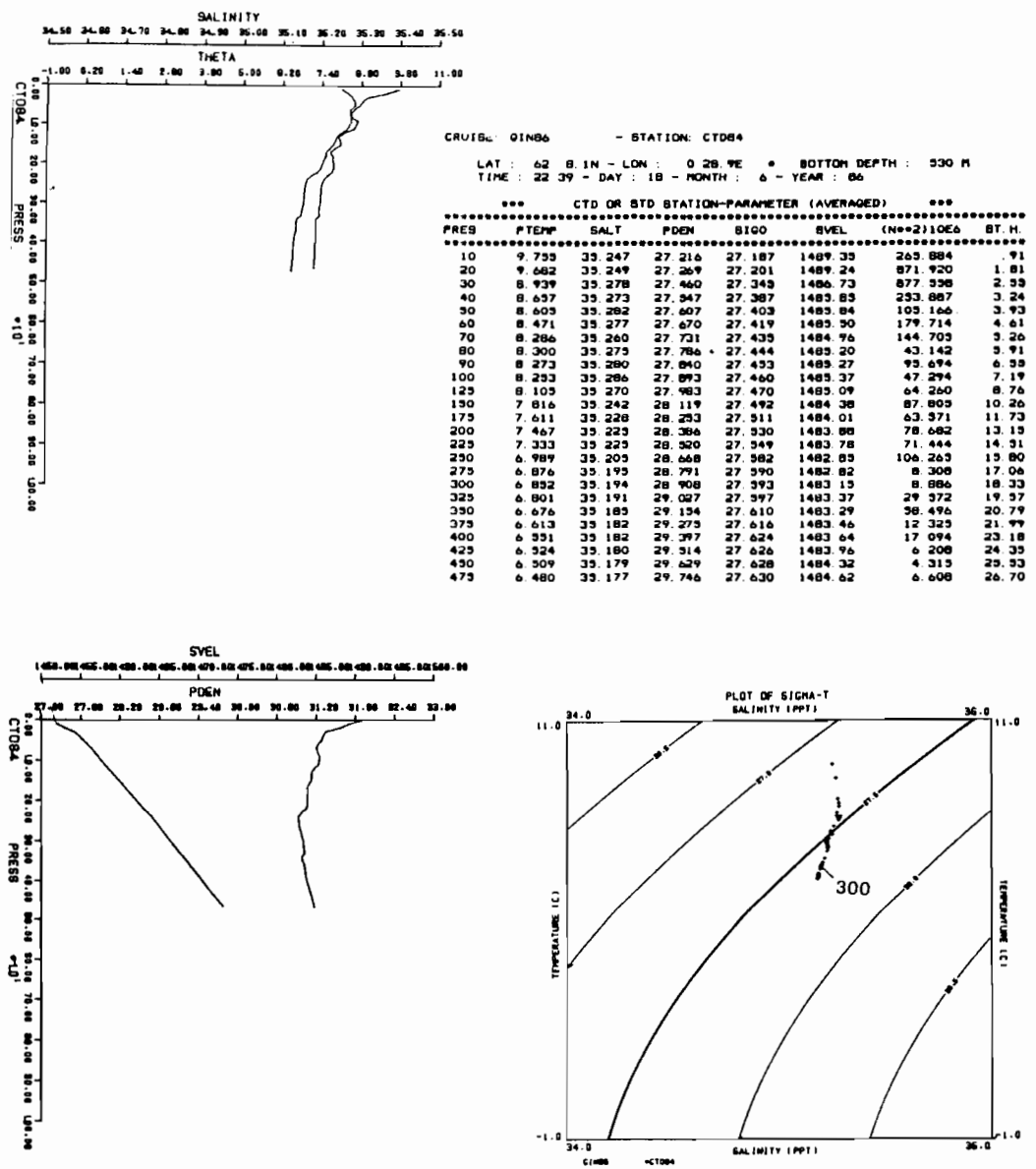


Fig. B100.

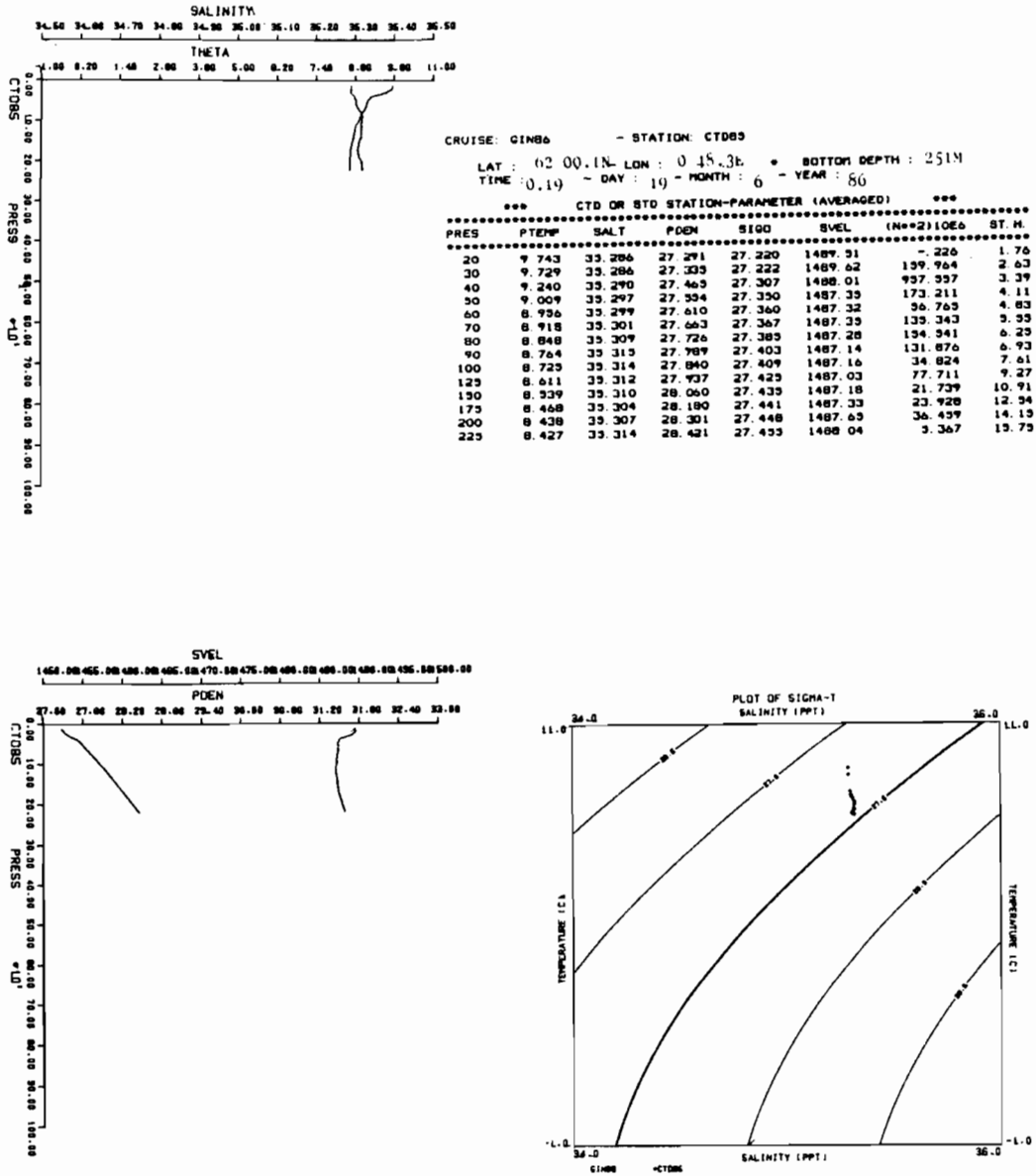


Fig. B101.

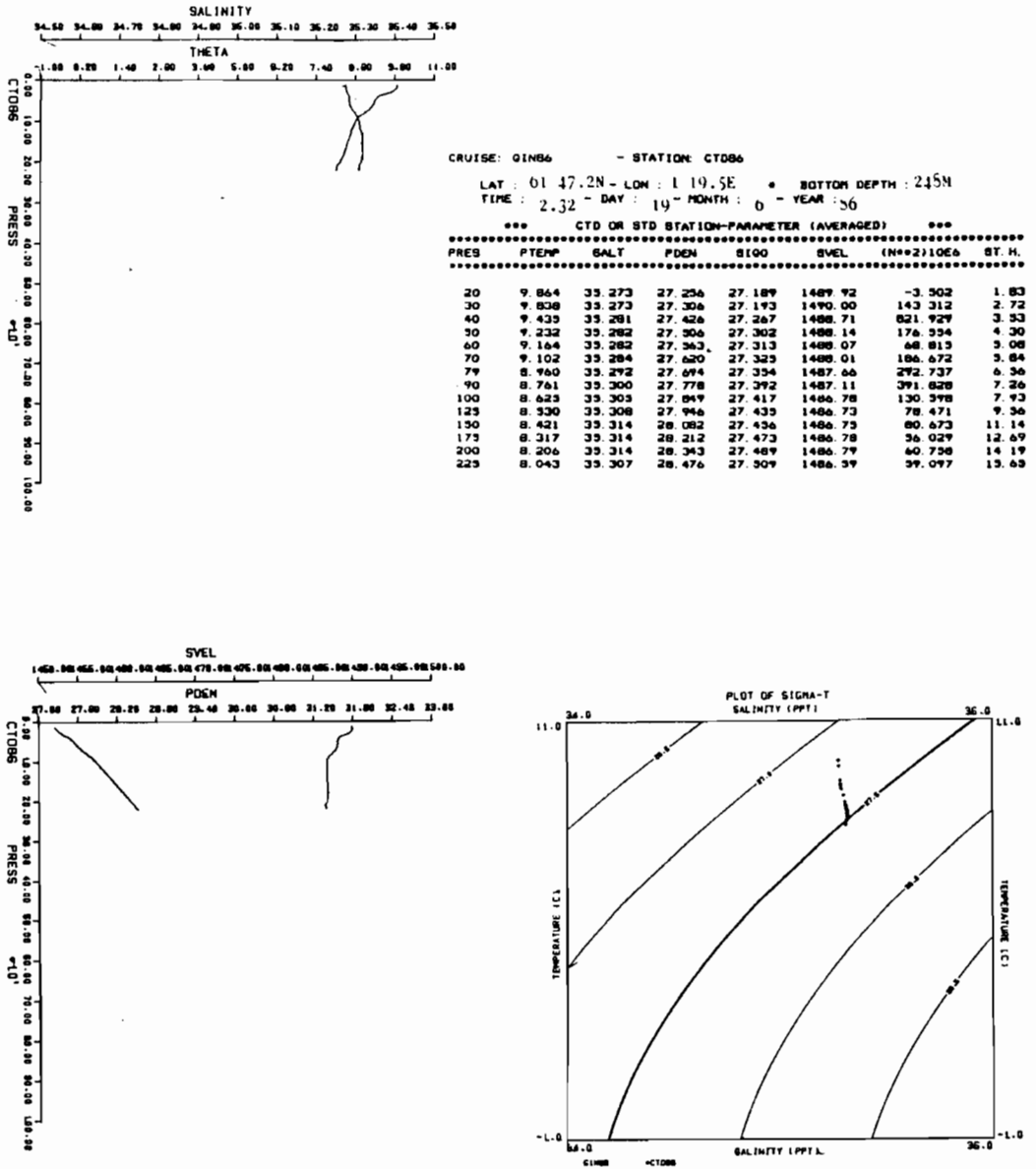


Fig. B102.

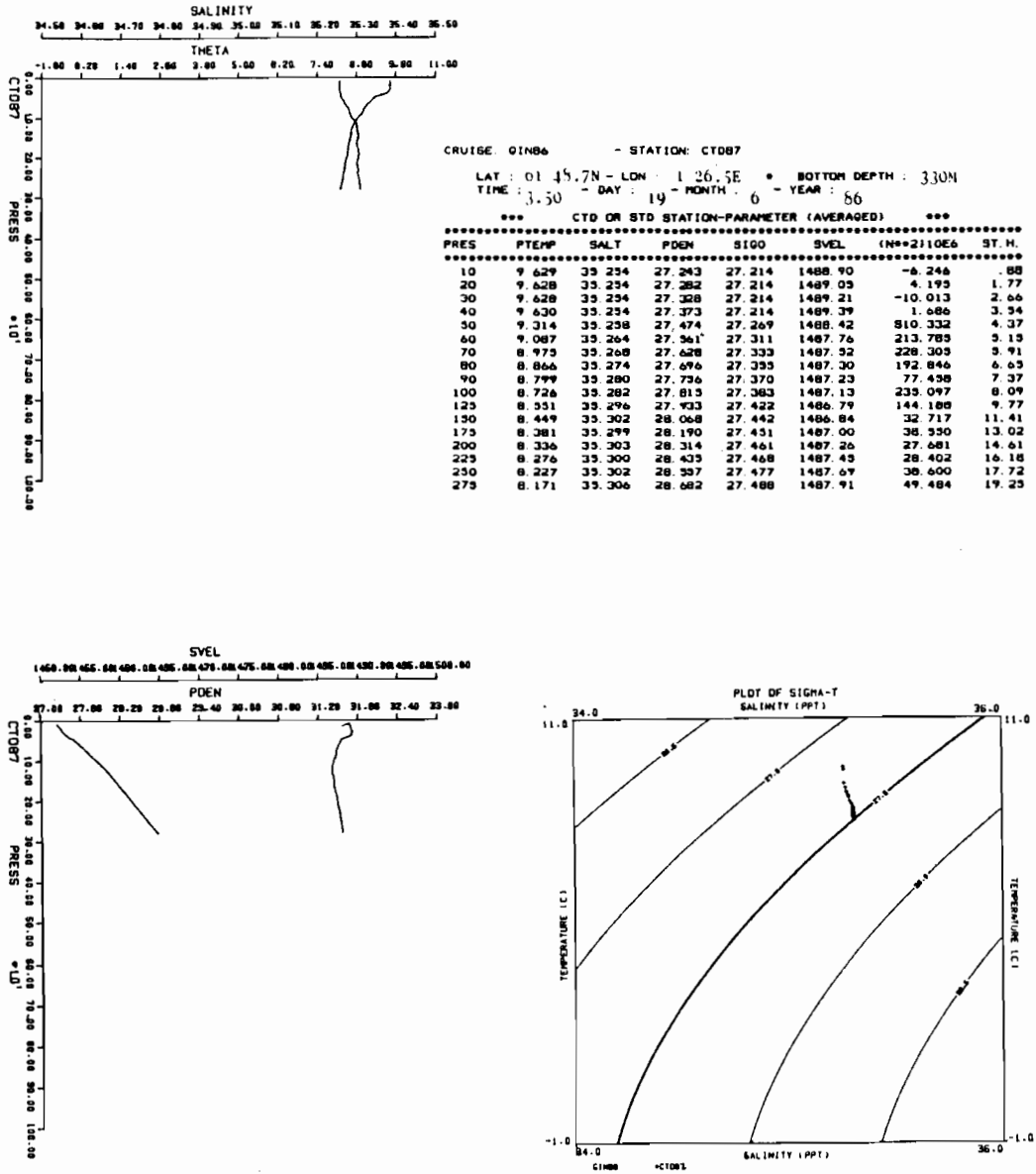


Fig. B103.

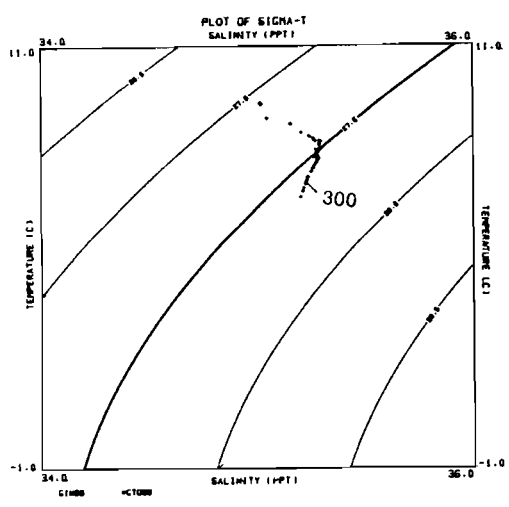
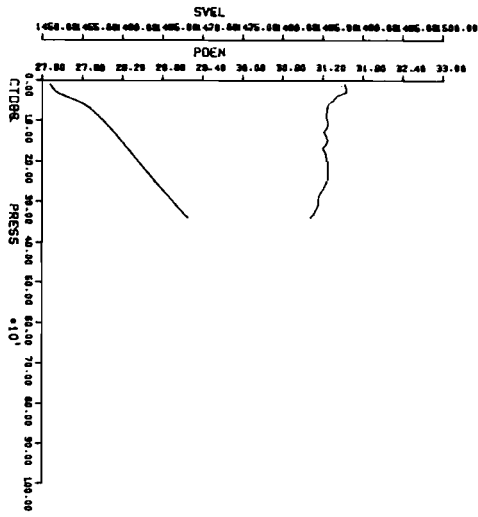
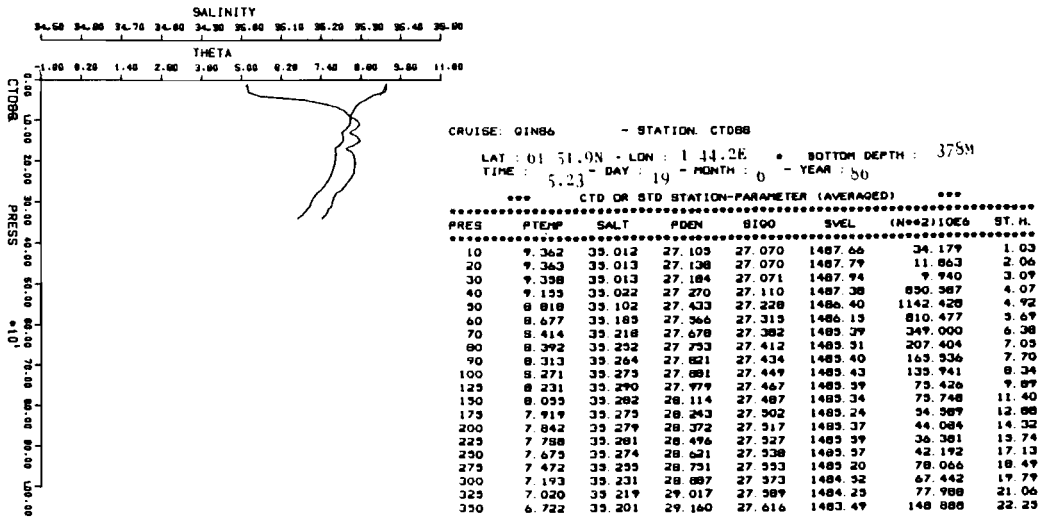


Fig. B104.

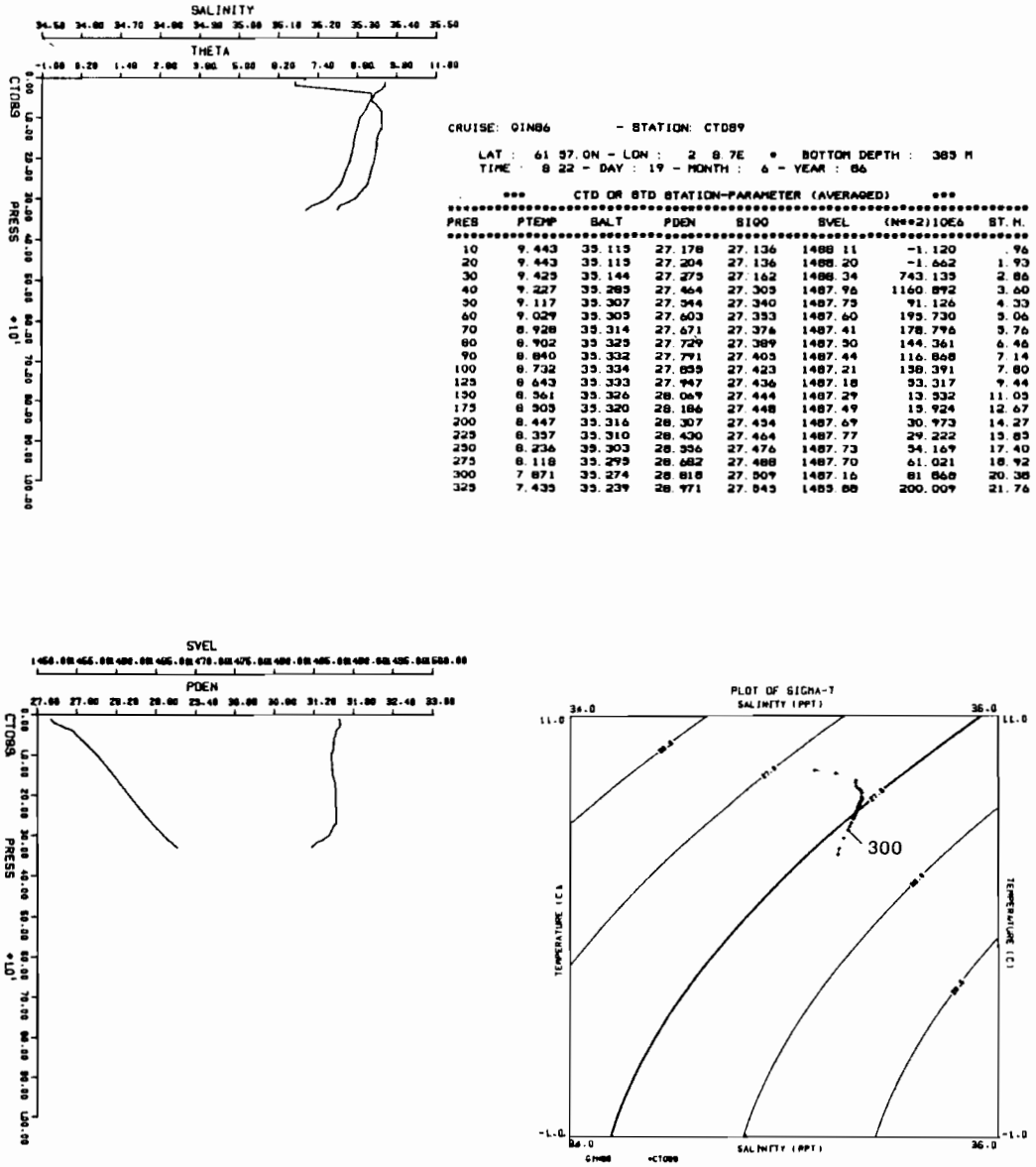


Fig. B105.

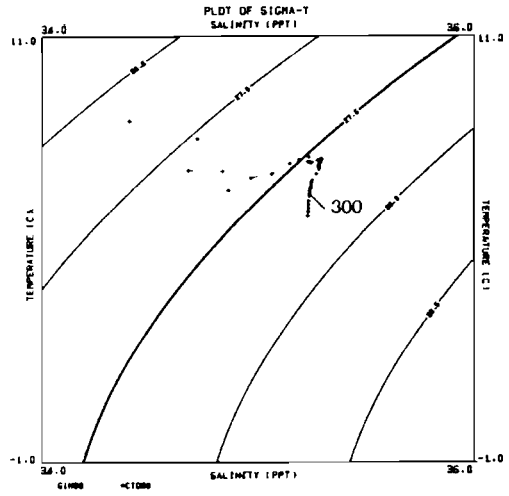
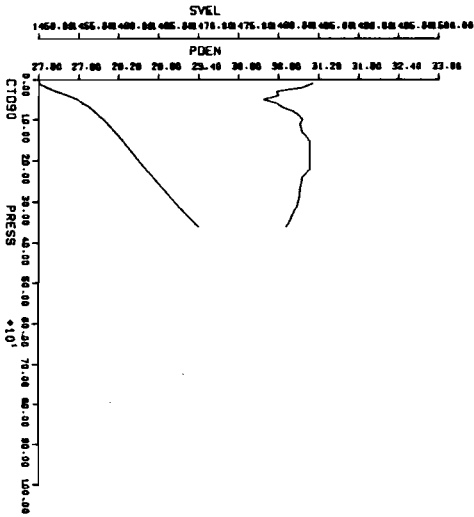
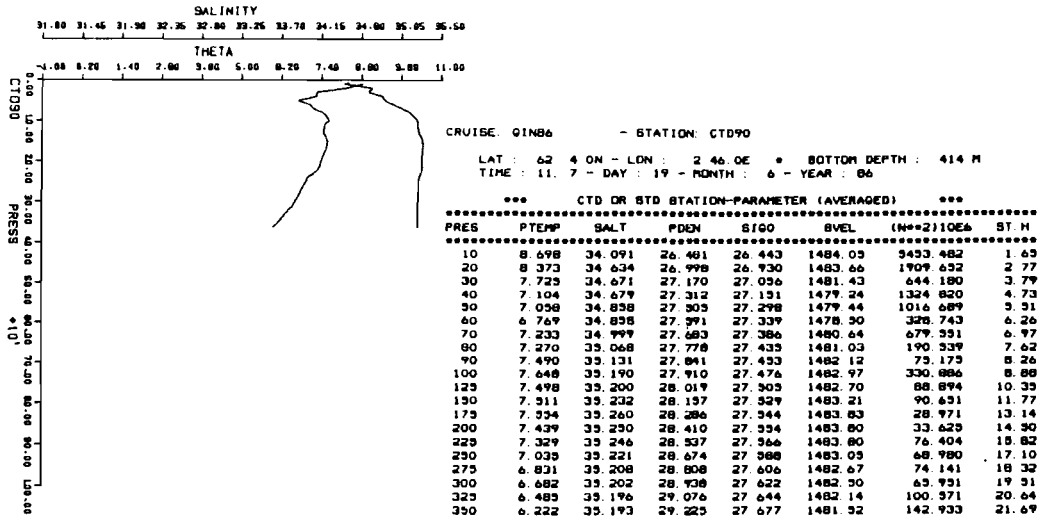


Fig. B106.

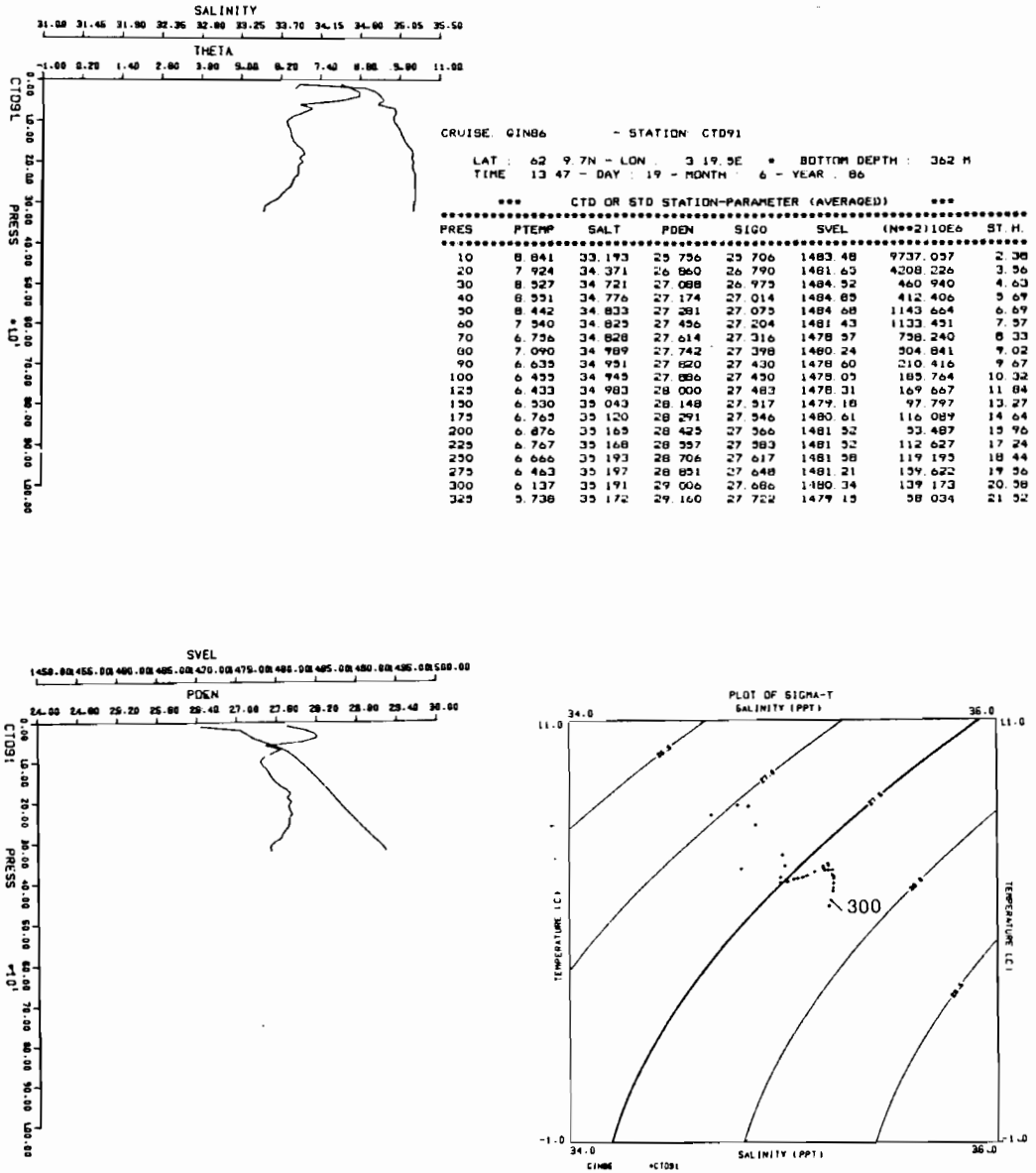
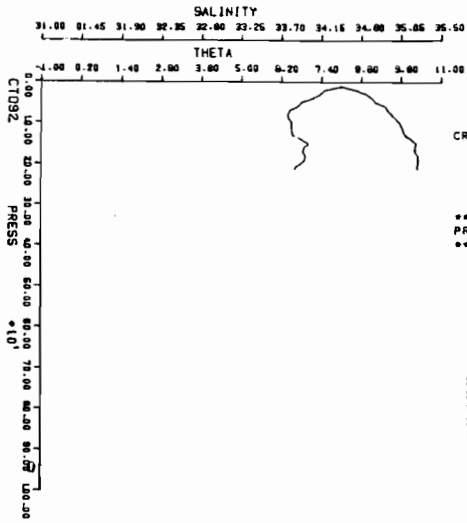


Fig. B107.

SACLANTCEN SM-209



CRUISE: GIN86 - STATION: CTD92
 LAT : 62 12.7 - LON : 3 36.0E * BOTTOM DEPTH : 212M
 TIME : 15.32 - DAY : 19 - MONTH : 6 - YEAR : 80

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	SVEL	(N*2)10E6	ST. M.
10	7.913	34.210	26.705	26.651	1481.31	860.168	1.44
20	7.994	34.472	26.929	26.860	1482.04	2460.701	2.38
30	7.290	34.333	27.125	27.010	1479.60	821.938	3.61
40	7.237	34.667	27.384	27.123	1479.74	879.299	4.33
50	6.982	34.693	27.386	27.180	1478.93	983.913	5.43
60	6.744	34.780	27.534	27.281	1478.30	1033.468	6.21
70	6.549	34.846	27.638	27.359	1477.80	412.019	6.92
80	6.402	34.881	27.752	27.407	1477.43	301.843	7.38
90	6.388	34.923	27.833	27.442	1477.60	279.917	8.22
100	6.466	34.971	27.906	27.469	1478.13	149.100	10.28
123	6.308	35.020	28.019	27.502	1478.63	218.358	8.22
130	6.719	35.106	28.172	27.541	1480.00	137.711	11.64
175	6.890	35.171	28.313	27.569	1481.17	69.891	12.94
199	6.887	35.202	28.432	27.594	1481.51	100.695	14.17

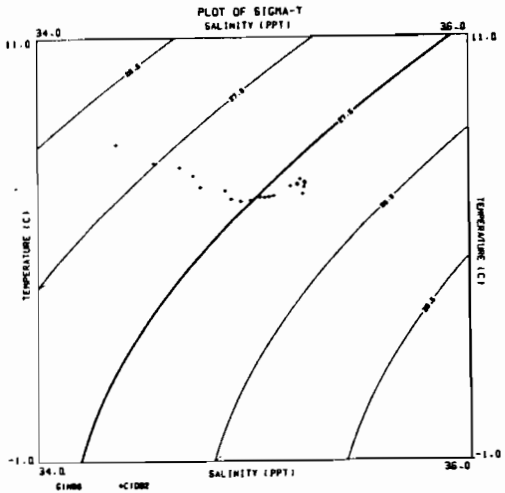
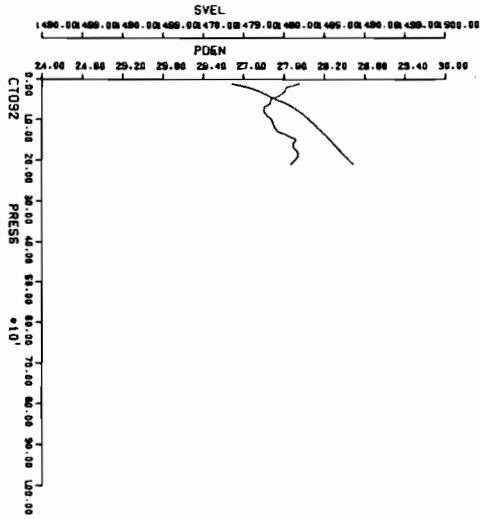


Fig. B108.

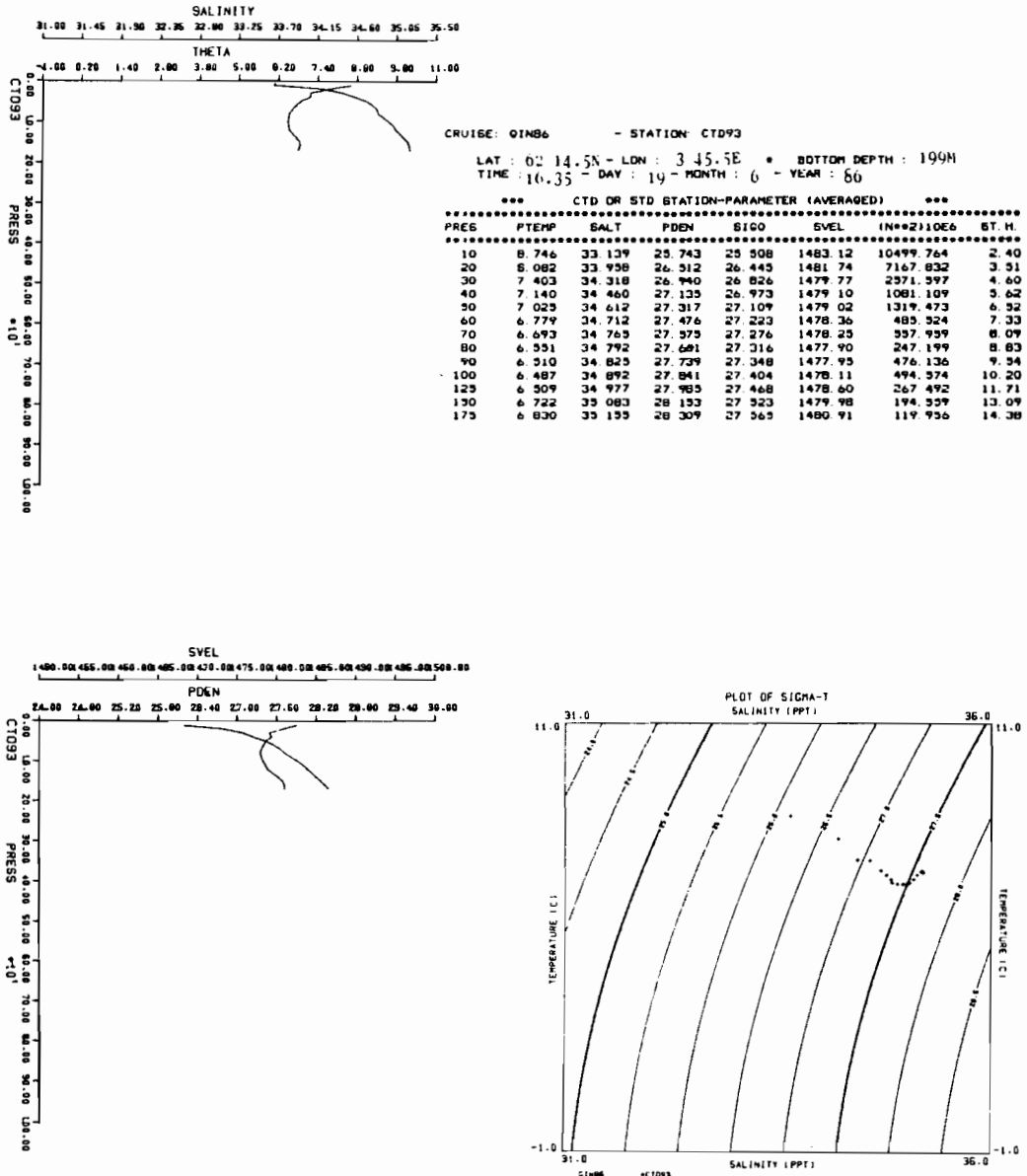
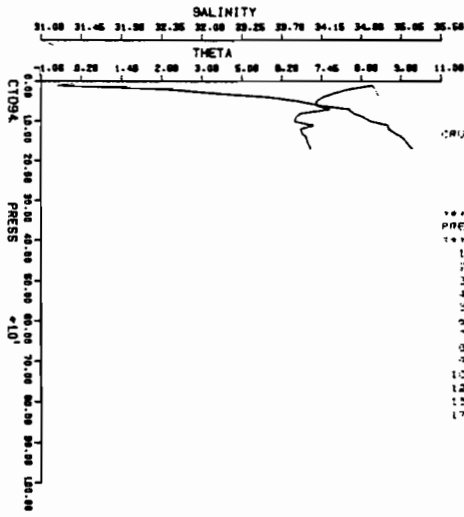


Fig. B109.

SACLANTCEN SM-209



CRUISE: GIN86 - STATION: CTD94
 LAT : 62 20.9 - LON 4 21.3E * BOTTOM DEPTH 1904
 TIME : 19.44 DAY 19 - MONTH 6 - YEAR 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	TEMP	SALT	PDEN	SIG0	SVEL	(N=2)1026	ST.H
10	8.947	31.183	24.190	24.141	1481.45	3.684	3.98
20	8.531	31.569	24.633	24.165	1401.03	10956.796	7.27
30	8.026	32.711	25.587	23.473	1490.13	3300.361	9.50
40	7.536	33.297	26.164	26.703	1479.18	5640.133	11.43
50	7.223	33.735	26.603	26.294	1479.19	2531.339	12.97
60	7.156	34.010	26.870	26.213	1478.74	1379.007	14.20
70	7.406	34.321	27.095	26.793	1481.22	1815.426	13.49
80	7.128	34.489	27.342	26.998	1479.75	1729.893	16.48
90	6.637	34.572	27.522	27.121	1478.13	1002.842	17.36
100	6.372	34.533	27.579	27.202	1478.14	938.738	18.18
125	6.885	34.870	27.858	27.712	1479.43	242.072	19.93
150	6.888	35.021	28.090	27.159	1481.31	775.187	21.41
175	7.015	35.144	28.274	27.730	1481.62	212.033	22.74

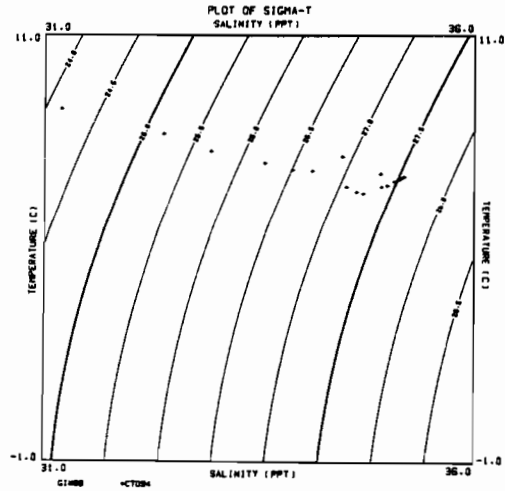
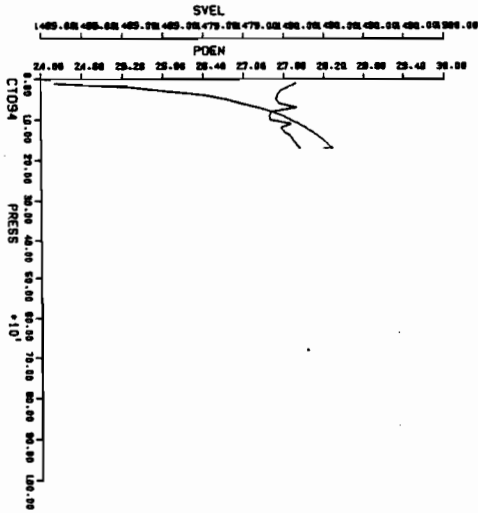


Fig. B110.

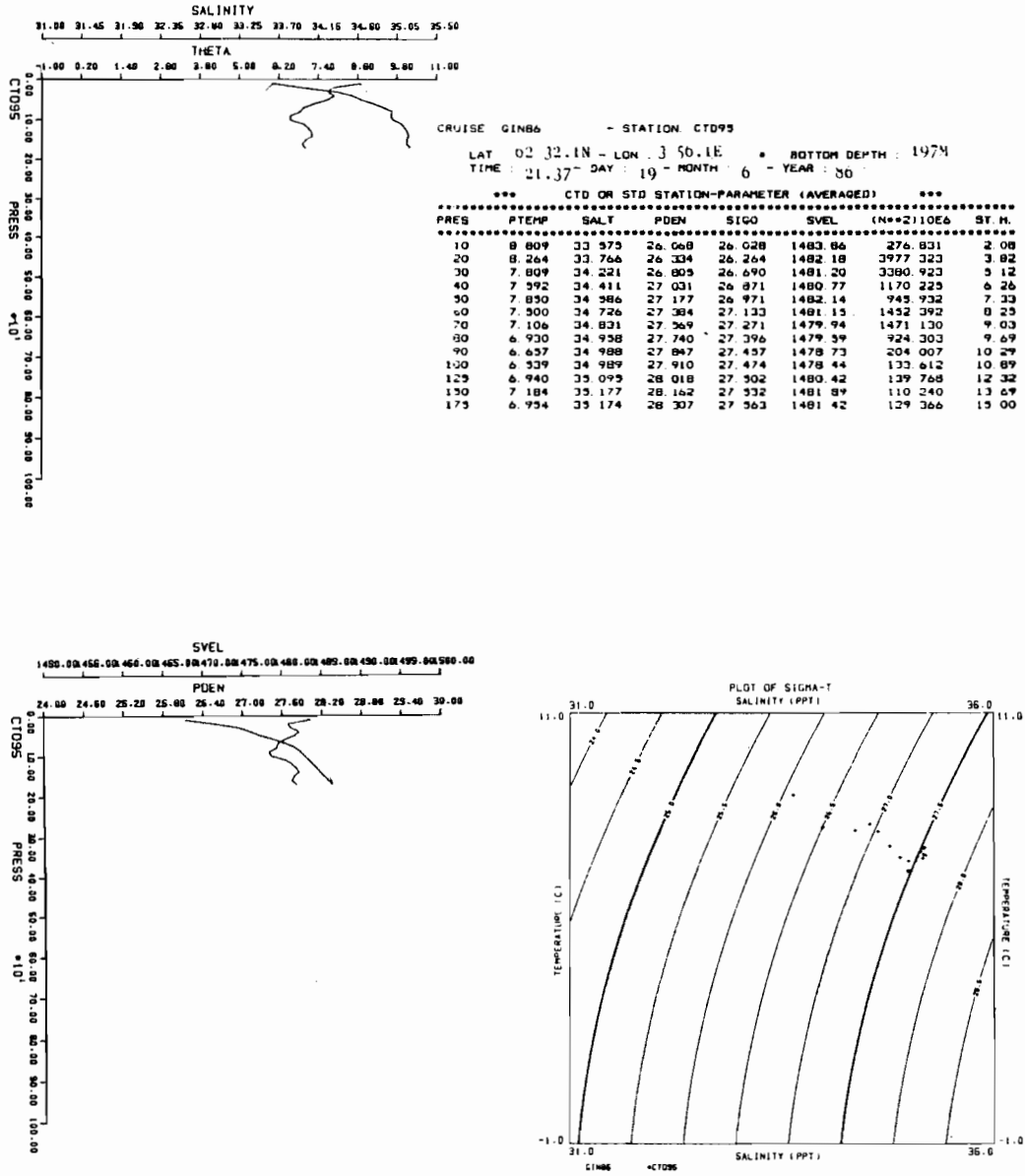


Fig. B111.

SACLANTCEN SM-209

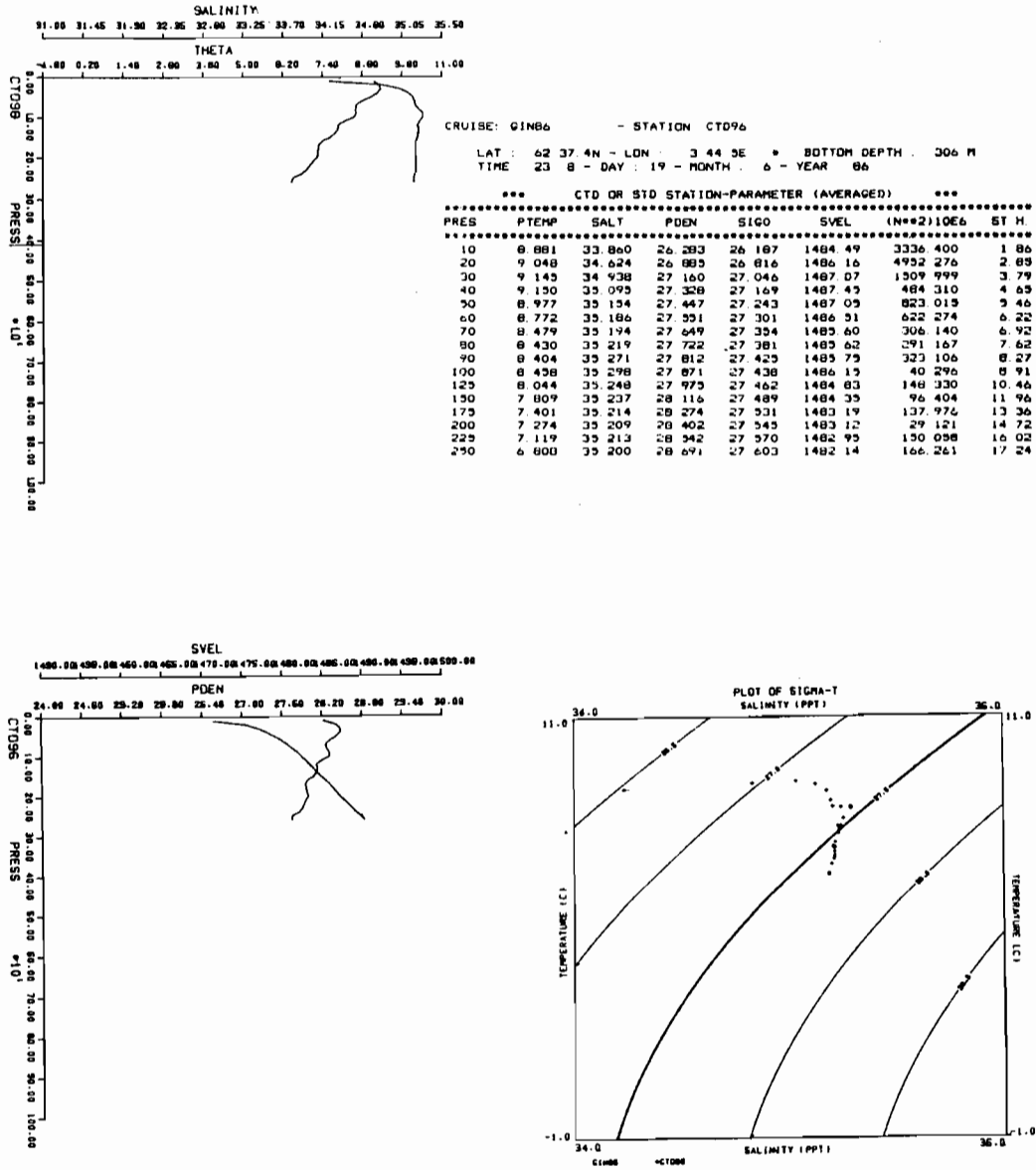


Fig. B112.

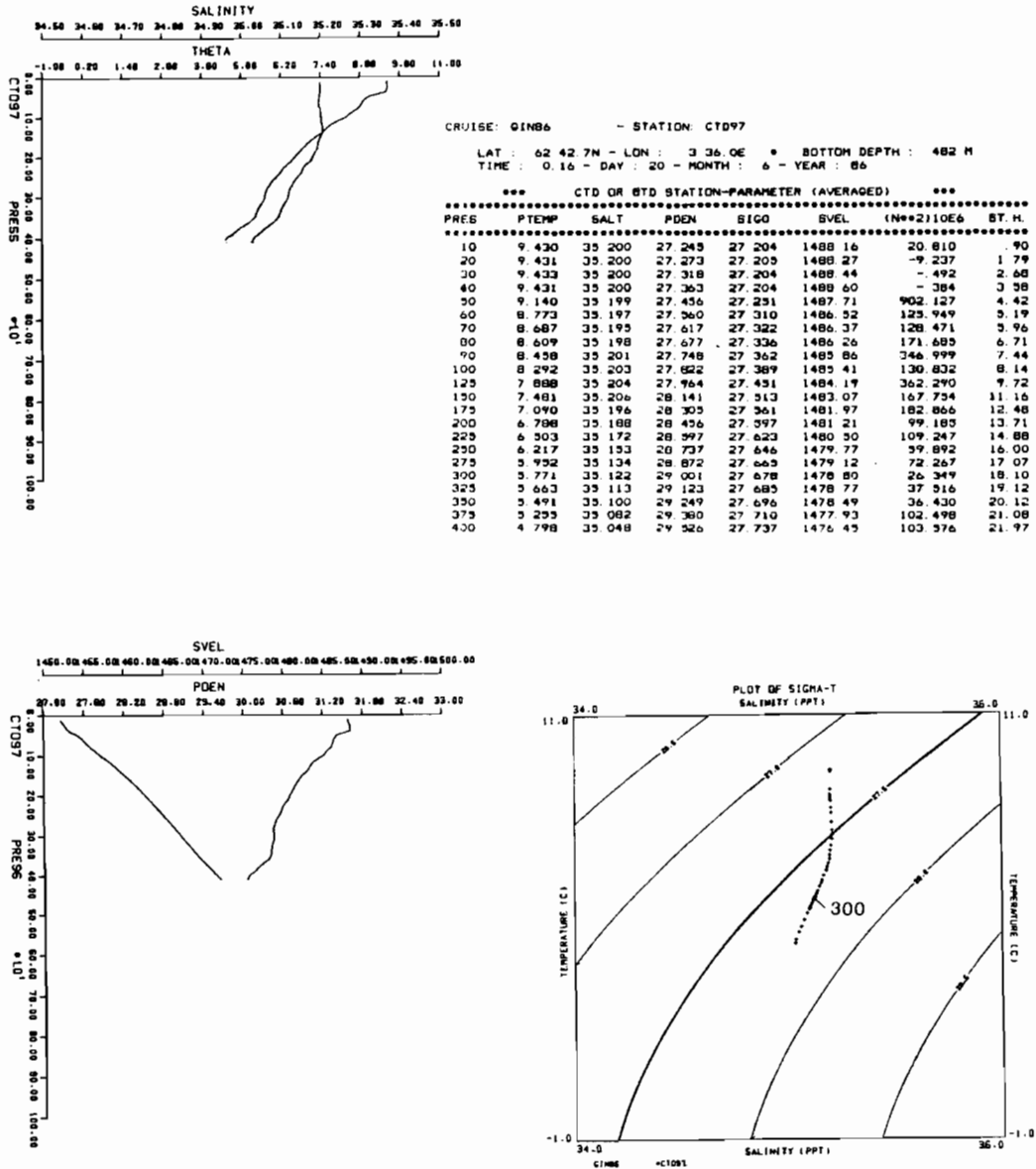
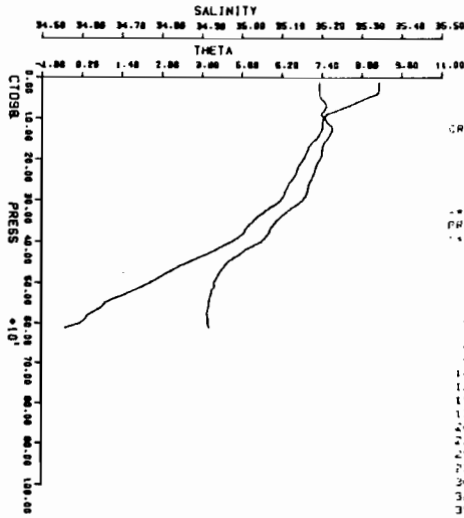


Fig. B113.

SACLANTCEN SM-209



CRUISE 01986 STATION C1098
 LAT 62 33 2N - LON 3 11 2E * BOTTOM DEPTH 693 M
 TIME 2 26 - DAY 20 - MONTH 6 - YEAR 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	SYEL	(M=2)10E5	ST H
10	9 112	35 193	27 291	27 251	1486 94	- 148	83
20	9 112	35 193	27 320	27 252	1487 04	- 1 198	1 70
30	9 112	35 193	27 365	27 252	1487 26	1 283	2 34
40	9 098	35 193	27 413	27 254	1487 38	46 934	3 38
50	8 962	35 193	27 481	27 277	1487 55	561 872	4 20
60	8 962	35 200	27 596	27 315	1489 74	130 003	4 94
70	8 315	35 210	27 625	27 307	1485 12	499 386	5 64
80	8 098	35 207	27 770	27 428	1484 20	420 683	6 29
90	7 688	35 200	27 866	27 478	1482 96	434 109	6 90
100	7 462	35 203	27 948	27 513	1482 27	134 057	7 47
125	7 422	35 216	28 044	27 530	1482 43	67 178	8 86
150	7 333	35 223	28 174	27 545	1482 52	34 352	10 23
175	7 082	35 204	28 312	27 568	1481 75	76 818	11 53
200	6 923	35 198	28 445	27 586	1481 75	70 065	12 80
225	6 747	35 187	28 575	27 601	1481 47	35 677	14 03
250	6 605	35 178	28 702	27 614	1481 35	48 983	15 23
275	6 409	35 167	28 835	27 631	1480 95	69 799	16 38
300	6 266	35 160	28 964	27 645	1480 61	37 560	17 51
325	5 978	35 135	29 098	27 652	1480 04	115 621	18 59
350	5 529	35 100	29 245	27 671	1478 51	36 116	19 60
375	5 192	35 075	29 384	27 712	1477 67	53 709	20 55
400	4 939	35 060	29 518	27 730	1477 64	74 912	21 46
425	4 396	35 023	29 671	27 752	1475 18	132 110	22 29
450	3 764	34 984	29 828	27 807	1472 91	124 849	23 03
475	3 086	34 954	29 994	27 840	1470 41	189 811	23 67
500	2 301	34 952	30 156	27 879	1468 39	127 174	24 21
600	1 053	34 919	30 363	27 974	1462 89	127 722	25 40

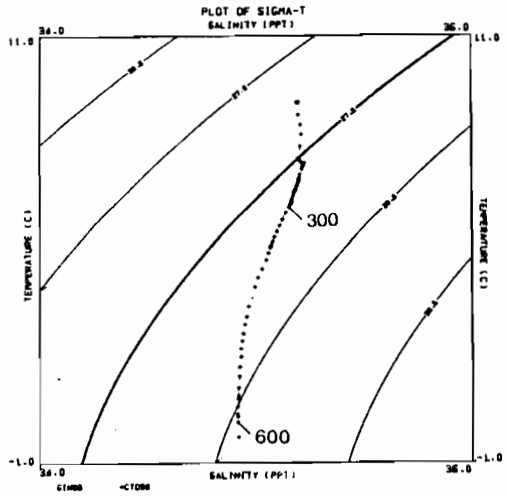
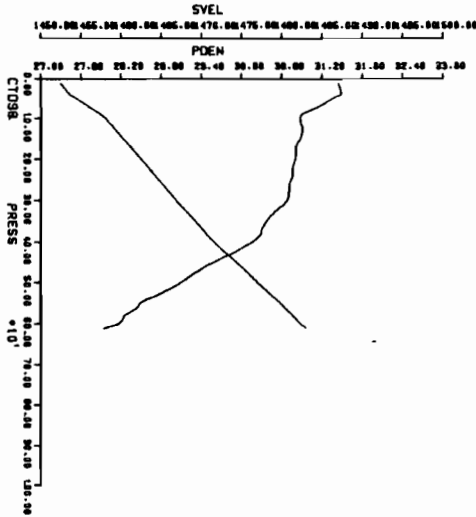


Fig. B114.

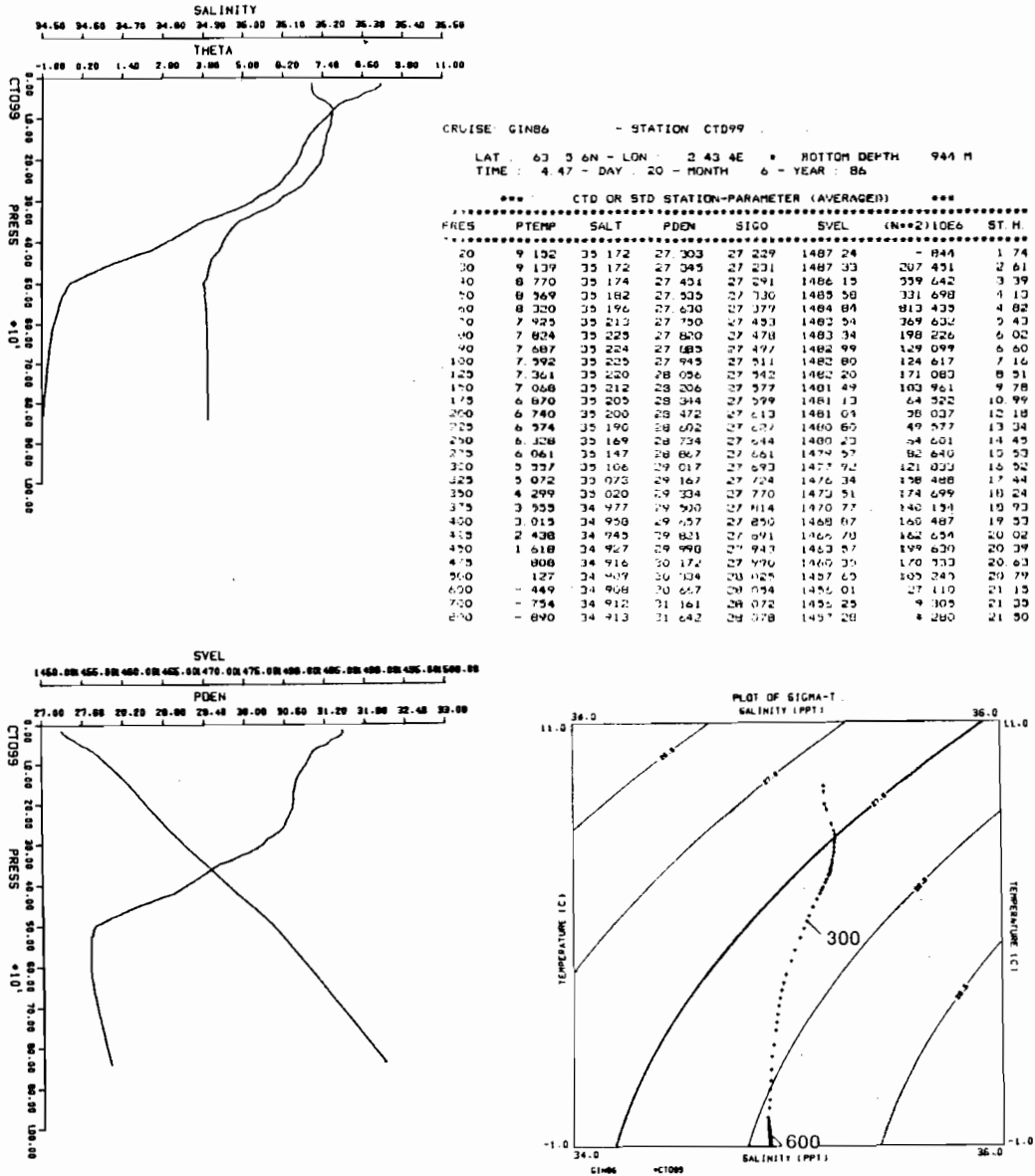


Fig. B115.

SACLANTCEN SM-209

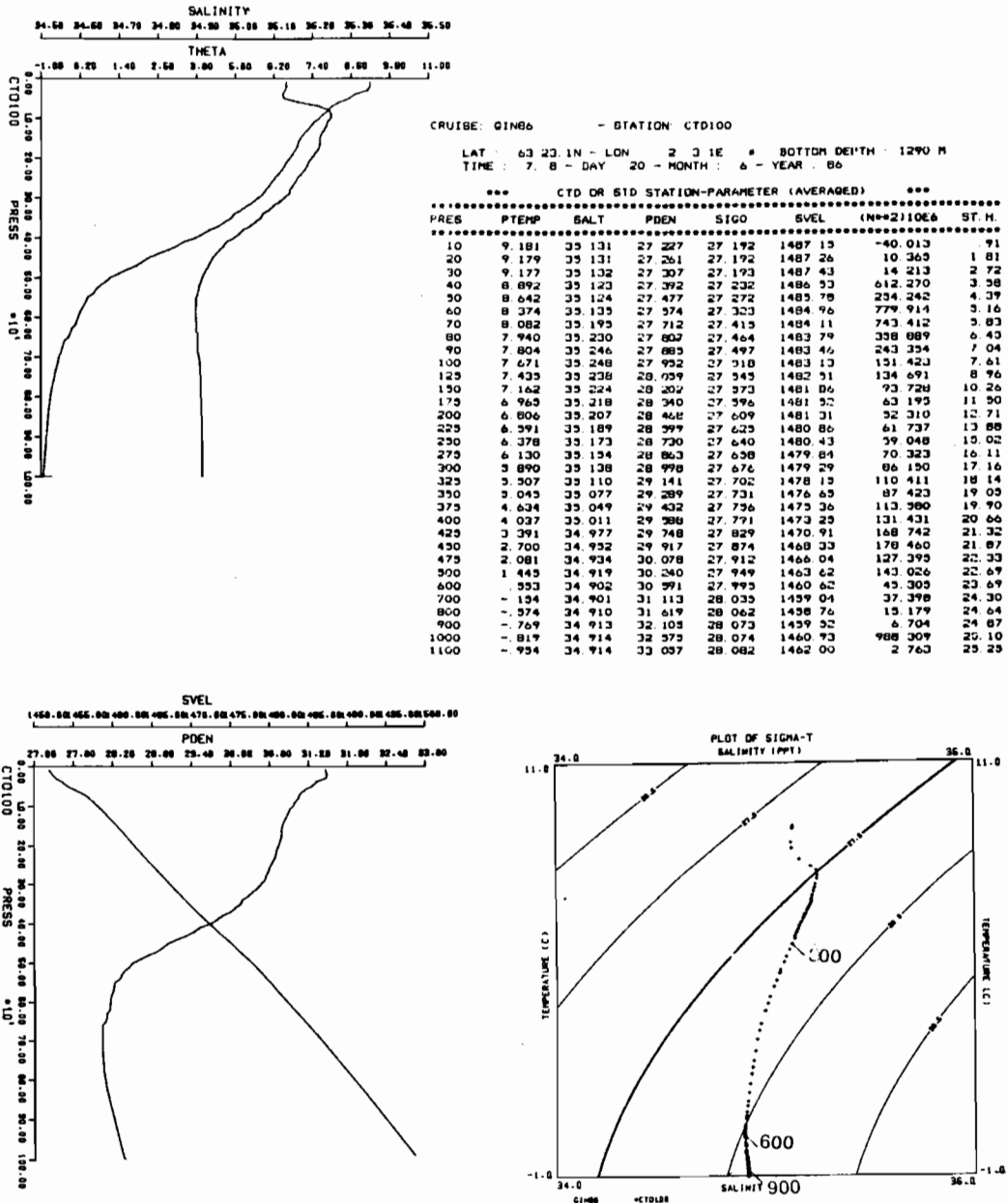


Fig. B116.

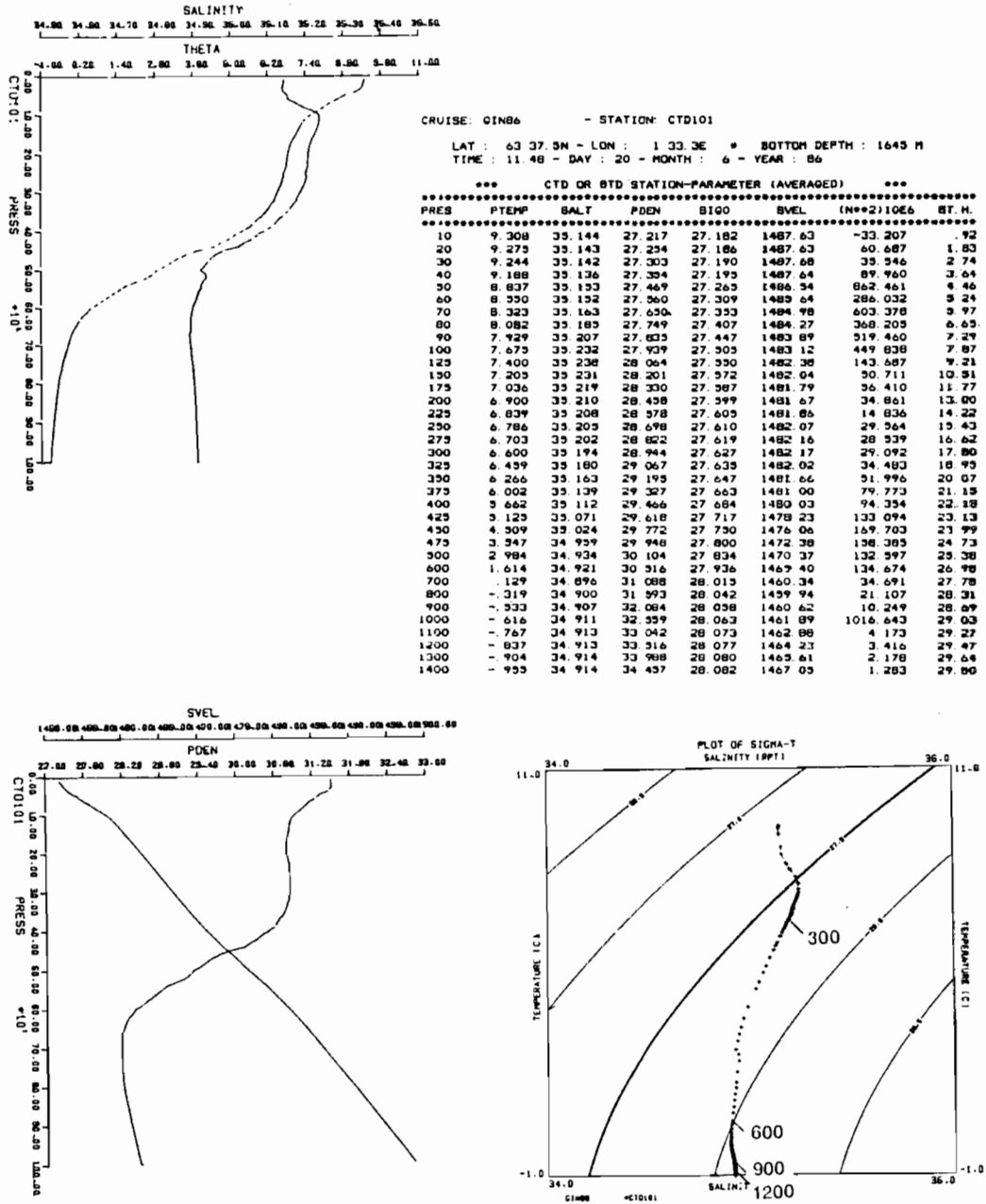


Fig. B117.

SACLANTCEN SM-209

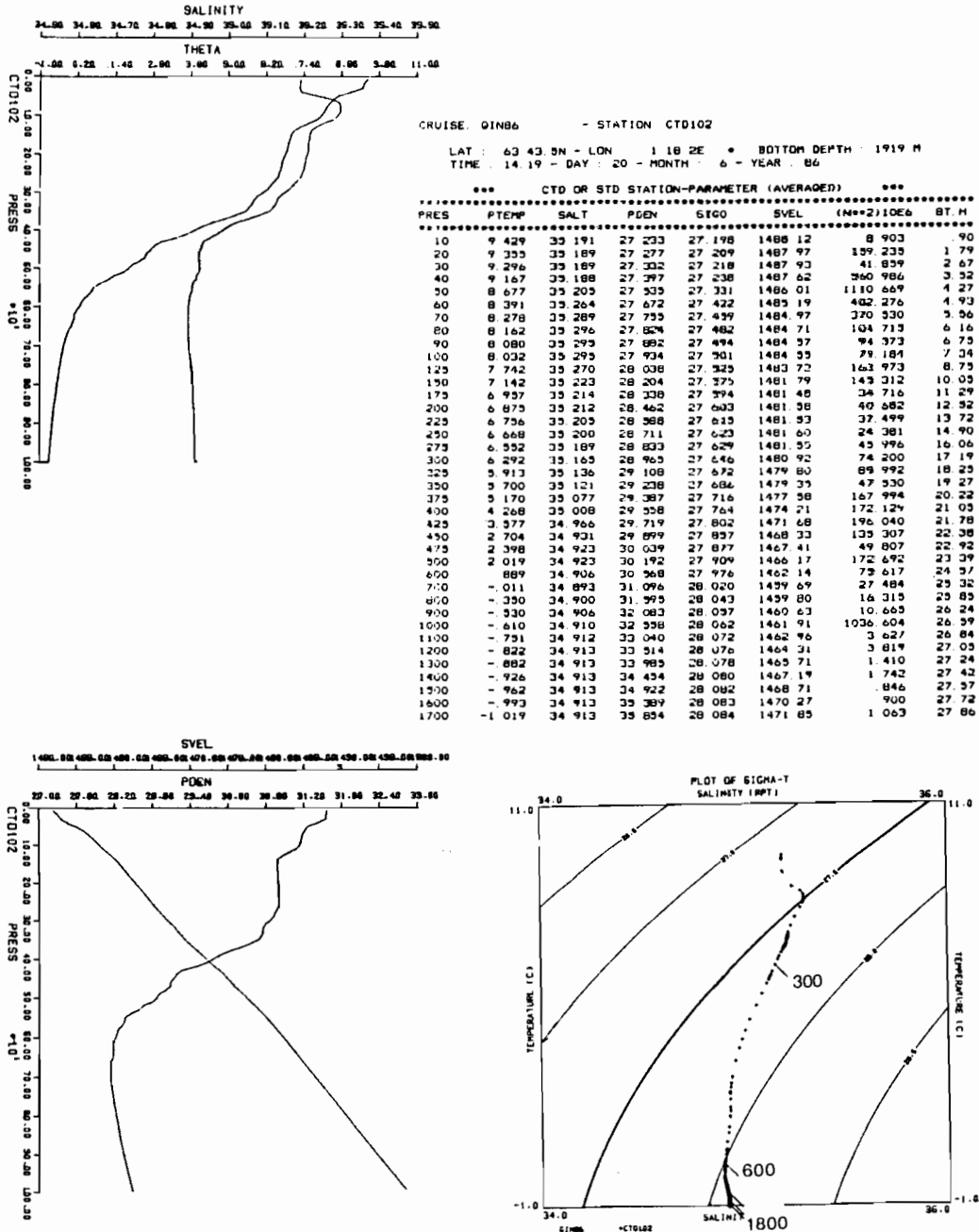


Fig. B118.

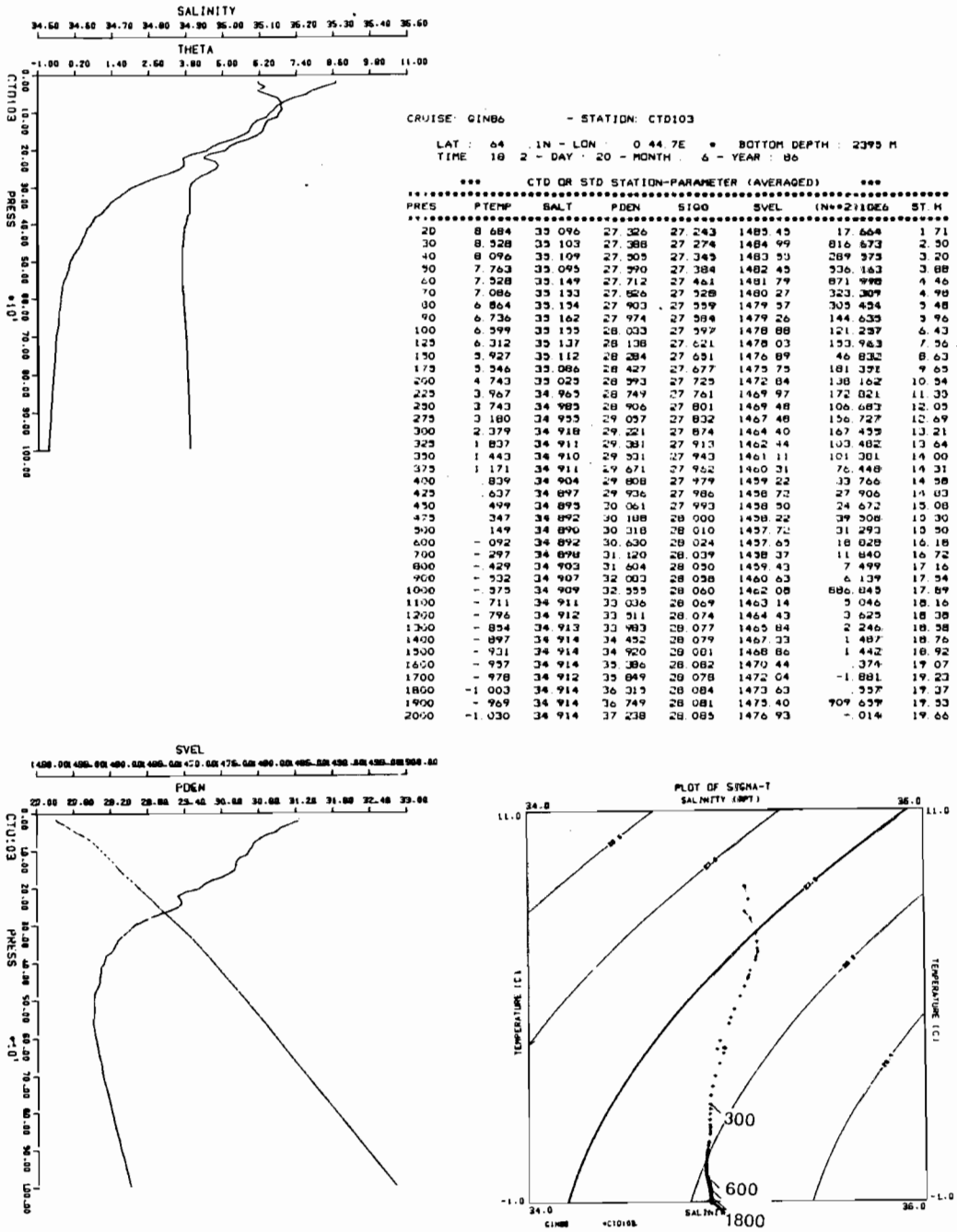


Fig. B119.

SACLANTCEN SM-209

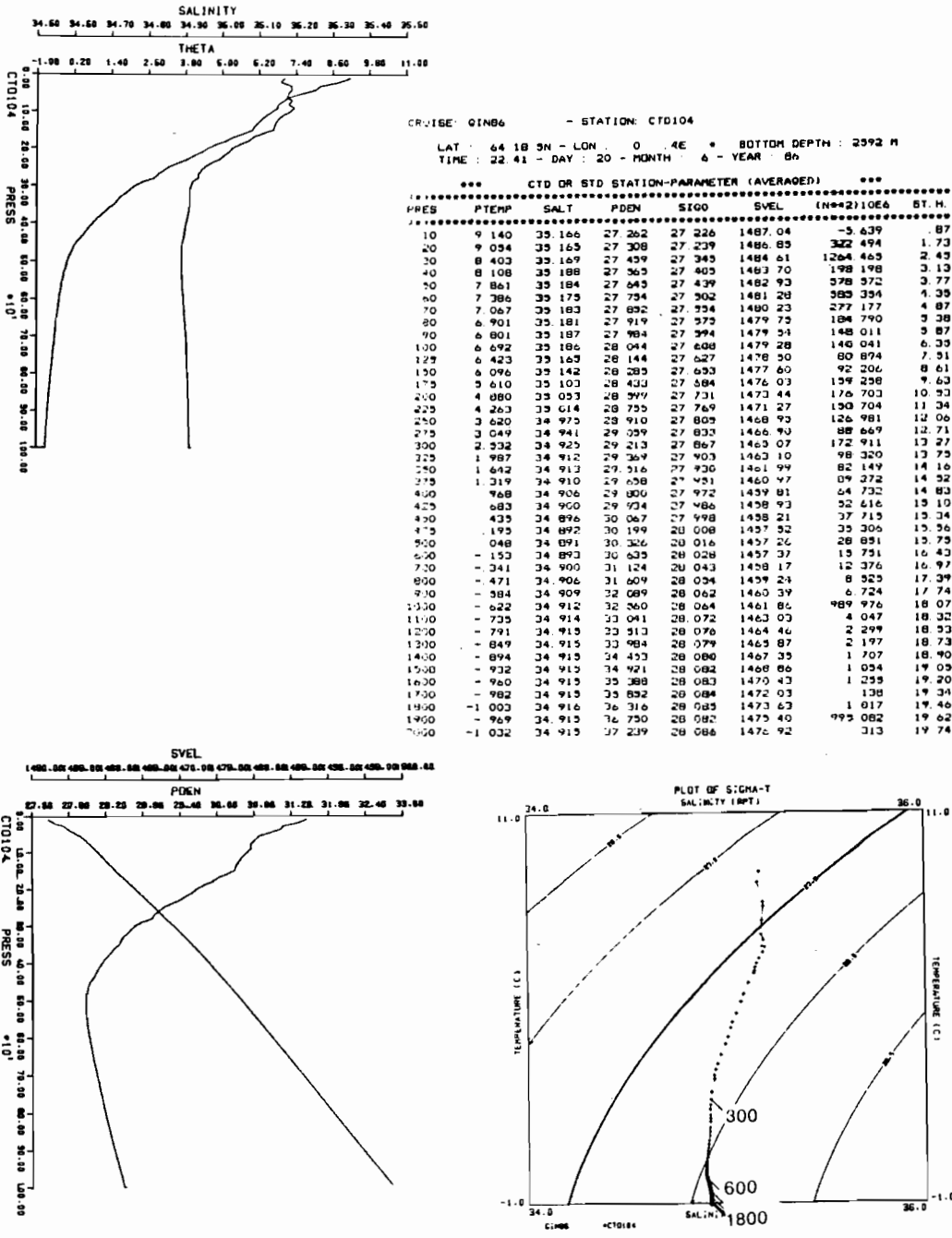


Fig. B120.

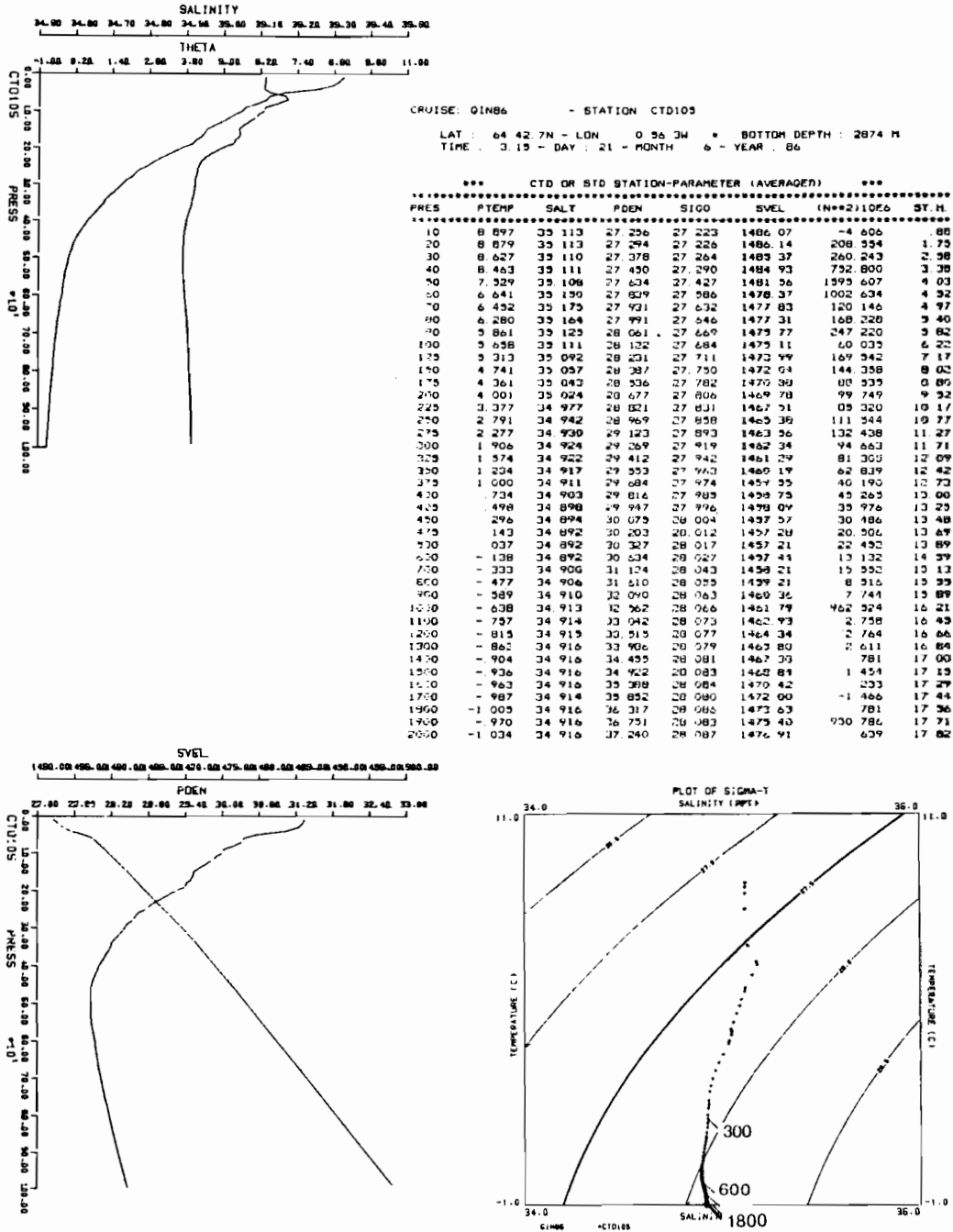


Fig. B121.

SACLANTCEN SM-209

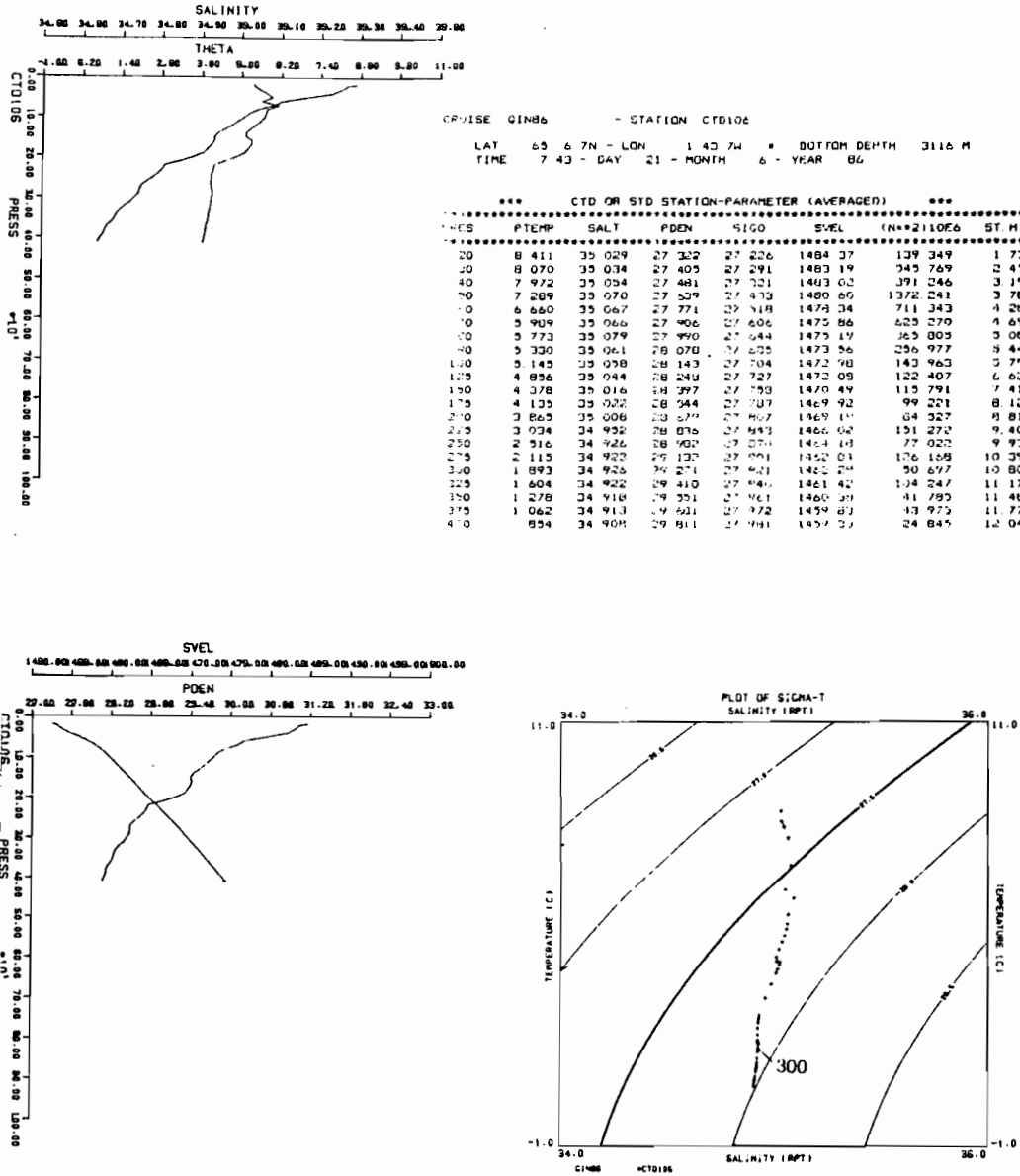


Fig. B122.

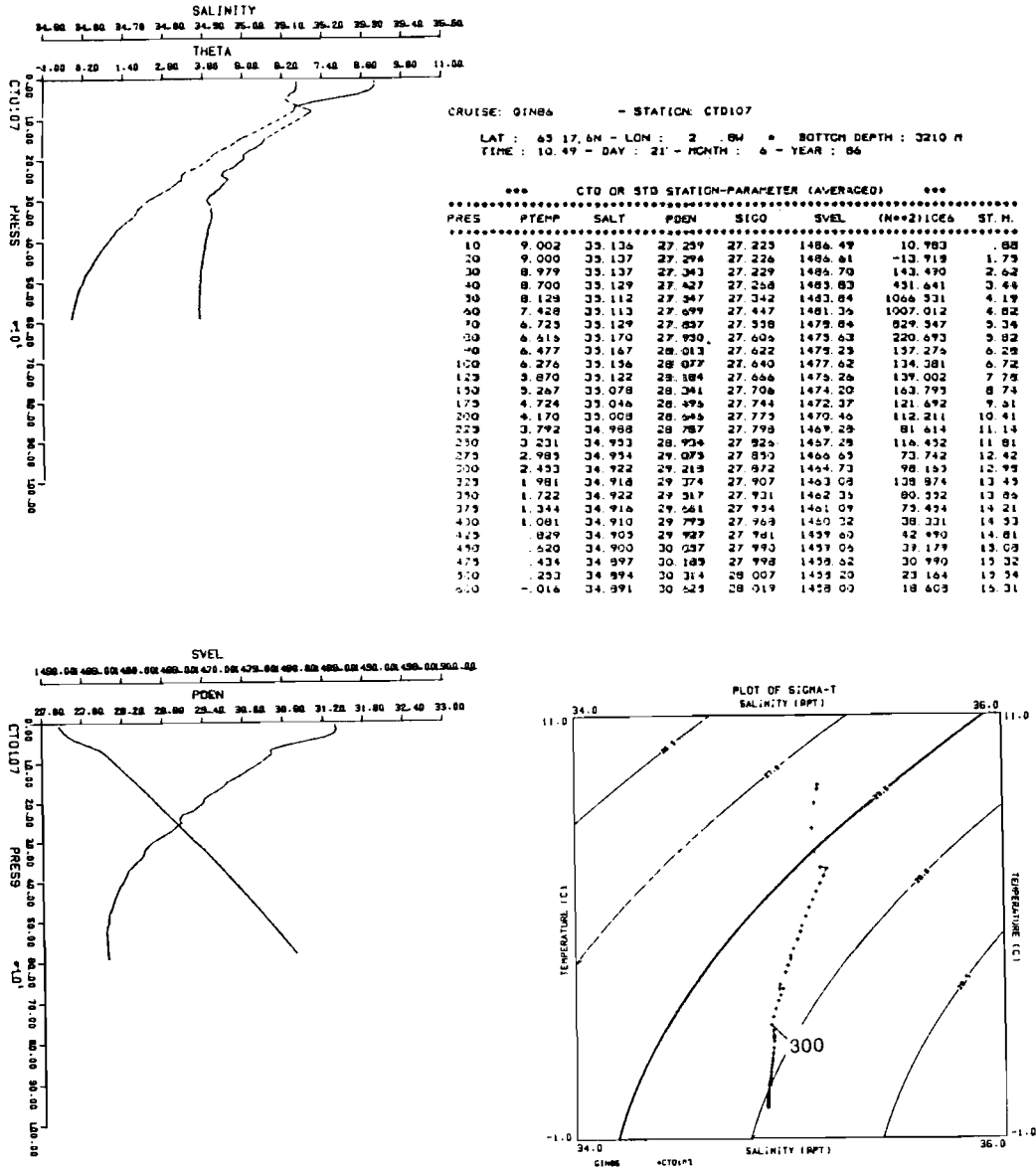


Fig. B123.

SACLANTCEN SM-209

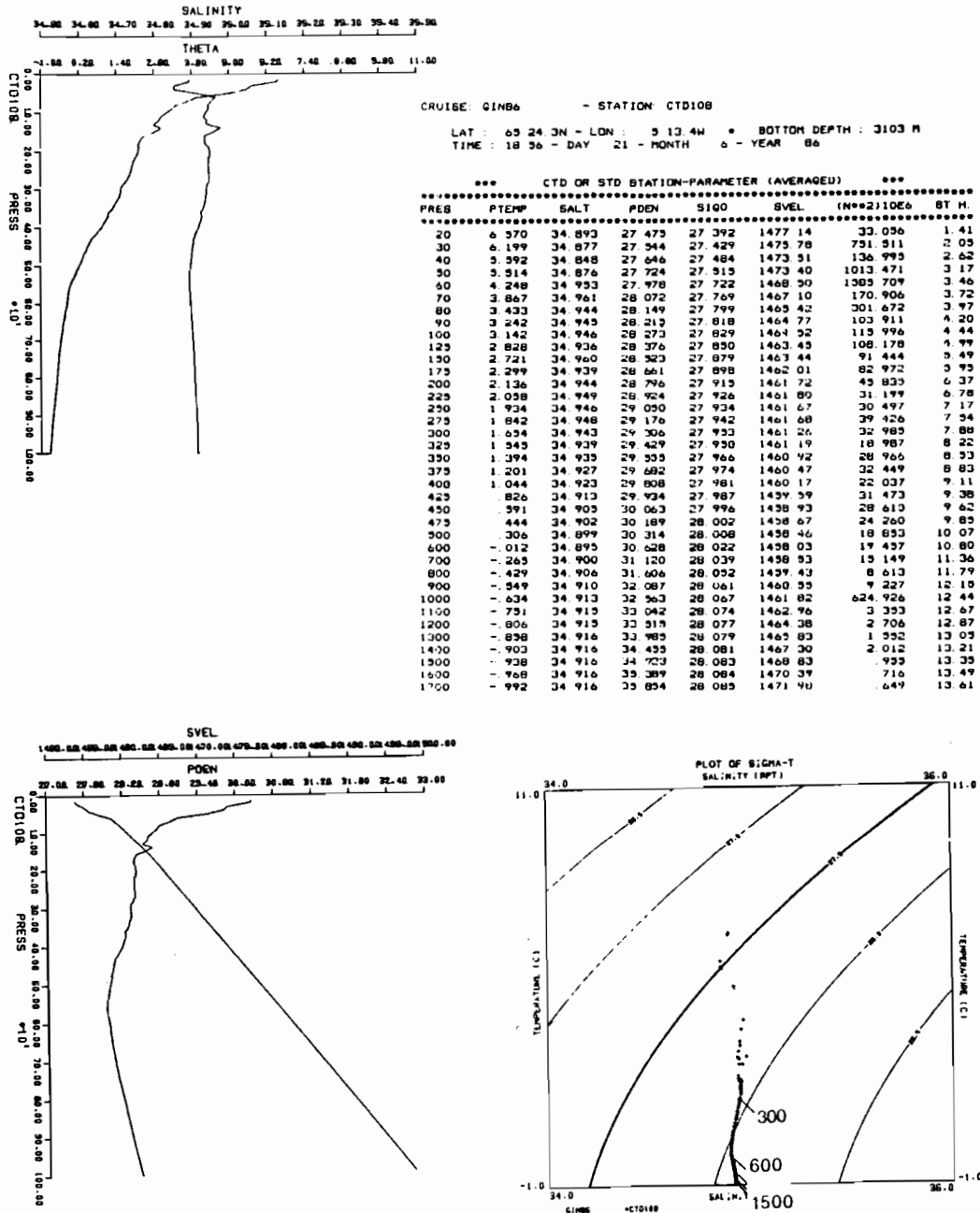


Fig. B124.

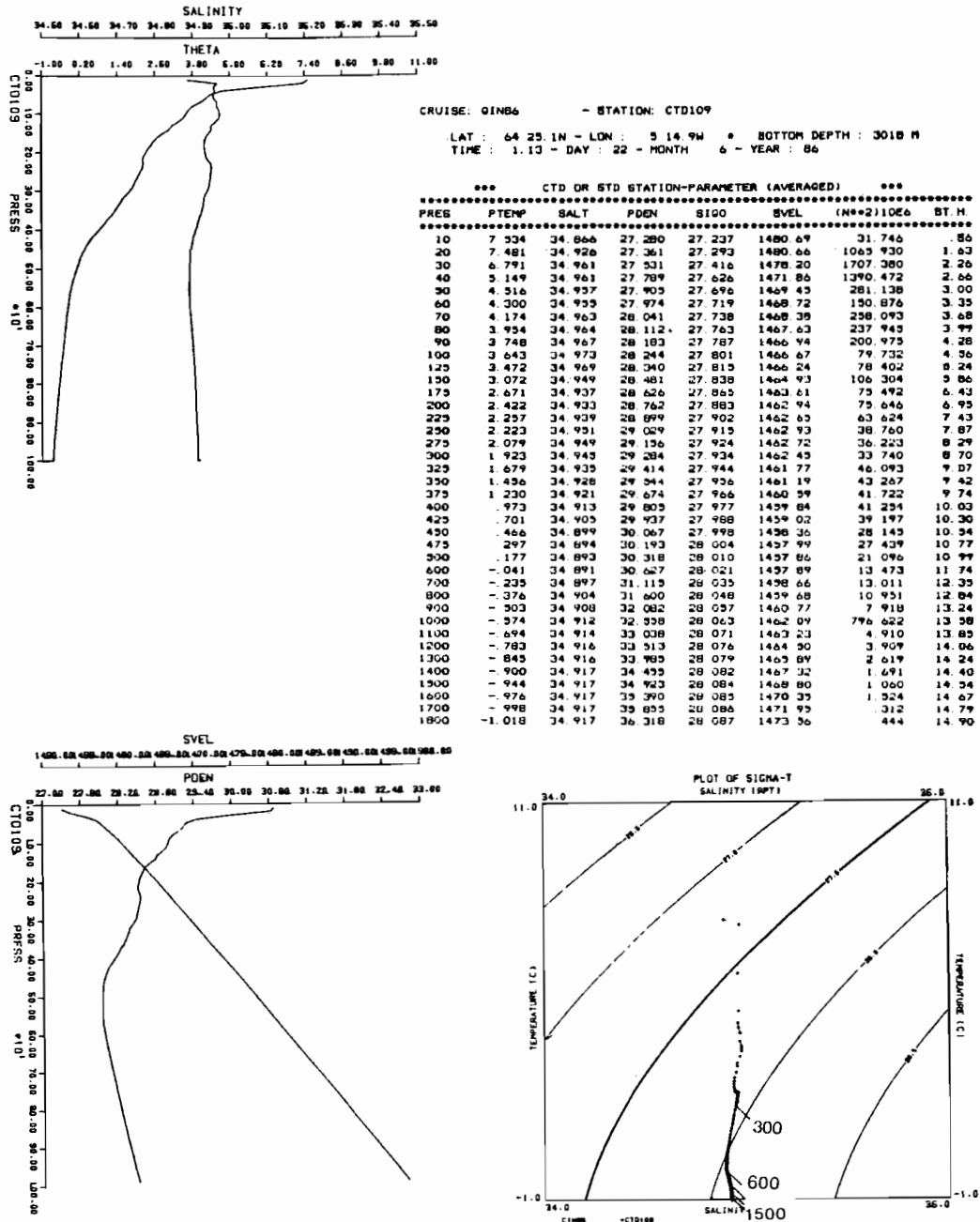
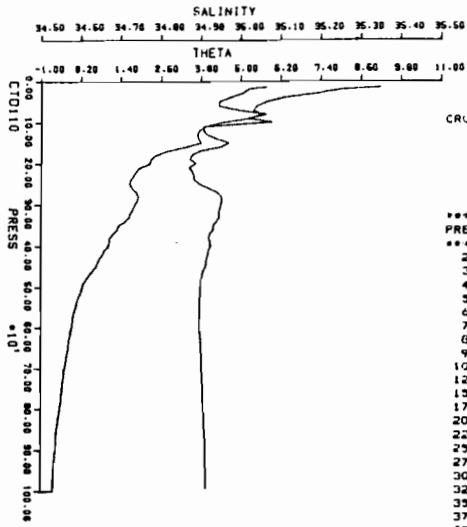


Fig. B125.

SACLANTCEN SM-209



CRUISE QIN66 - STATION CTD110
 LAT : 63 57.6N - LGN : 5 13.9W * BOTTOM DEPTH : 3437 M
 TIME : 4.48 - DAY : 22 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	SVEL	(N*2)10E6	BT.M.
20	8.384	35.030	27.318	27.154	1484.23	1043.078	1.72
30	7.638	35.008	27.448	27.334	1481.53	713.285	2.39
40	6.741	34.987	27.605	27.444	1478.21	1142.147	2.96
50	5.938	34.958	27.733	27.525	1475.27	337.707	3.46
60	5.381	34.938	27.810	27.556	1473.91	320.958	3.96
70	5.372	34.937	27.898	27.597	1473.26	481.004	4.41
80	5.348	35.041	27.988	27.642	1474.23	260.499	4.83
90	5.315	35.052	28.047	27.655	1474.29	110.601	5.24
100	4.760	34.972	28.121	27.681	1471.30	339.087	5.63
125	3.914	34.964	28.290	27.766	1468.09	143.536	6.38
130	3.749	34.934	28.400	27.760	1467.78	130.908	7.18
175	3.156	34.929	28.572	27.813	1465.67	214.971	7.89
200	2.341	34.875	28.723	27.844	1462.52	92.232	8.45
225	1.970	34.876	28.873	27.875	1461.32	122.265	8.97
250	1.721	34.884	29.018	27.900	1460.65	85.497	9.43
275	1.784	34.921	29.160	27.925	1461.39	86.582	9.83
300	1.899	34.950	29.290	27.940	1462.35	33.509	10.20
325	1.743	34.943	29.416	27.948	1462.08	33.393	10.56
350	1.550	34.939	29.543	27.958	1461.62	49.248	10.89
375	1.249	34.926	29.677	27.969	1460.68	30.266	11.19
400	1.059	34.920	29.805	27.978	1460.24	29.734	11.47
425	.913	34.918	29.932	27.986	1459.99	24.023	11.74
450	.726	34.913	30.059	27.993	1459.56	27.986	11.99
475	.534	34.905	30.184	27.999	1459.09	27.626	12.22
500	.309	34.899	30.314	28.008	1458.47	32.832	12.43
600	.059	34.896	30.623	28.019	1458.36	13.892	13.18
700	-.182	34.899	31.113	28.034	1458.91	14.753	13.79
800	-.356	34.903	31.598	28.046	1459.77	9.527	14.28
900	-.508	34.907	32.082	28.057	1460.74	8.666	14.67
1000	-.554	34.910	32.553	28.060	1462.18	974.153	15.04
1100	-.692	34.912	33.036	28.069	1463.23	4.823	15.31
1200	-.749	34.914	33.509	28.073	1464.65	3.785	15.54
1300	-.823	34.915	33.982	28.077	1465.99	3.211	15.74
1400	-.877	34.915	34.452	28.080	1467.43	1.434	15.91
1500	-.904	34.916	34.919	28.081	1468.99	1.006	16.07
1600	-.921	34.916	35.385	28.083	1470.57	.672	16.22
1762	-.950	34.905	35.846	28.077	1472.18	-1.335	16.46

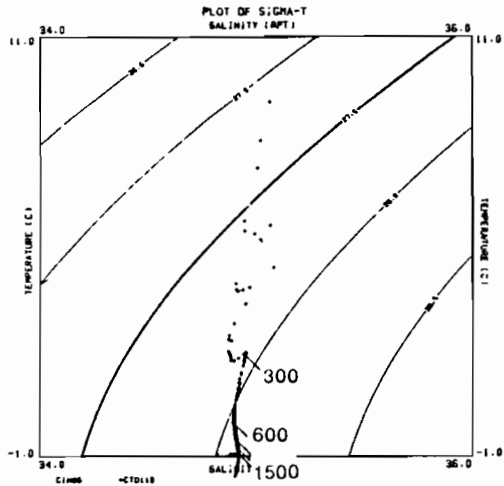
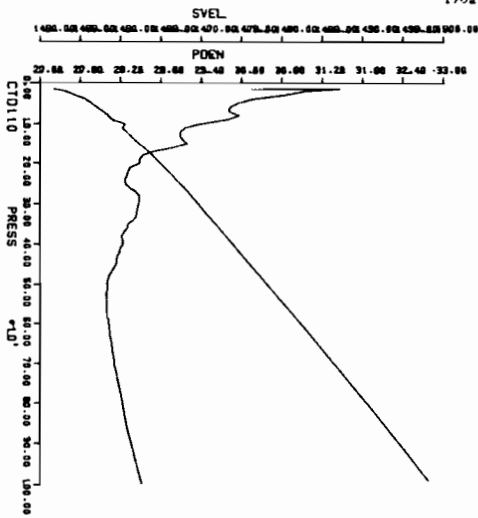


Fig. B126.

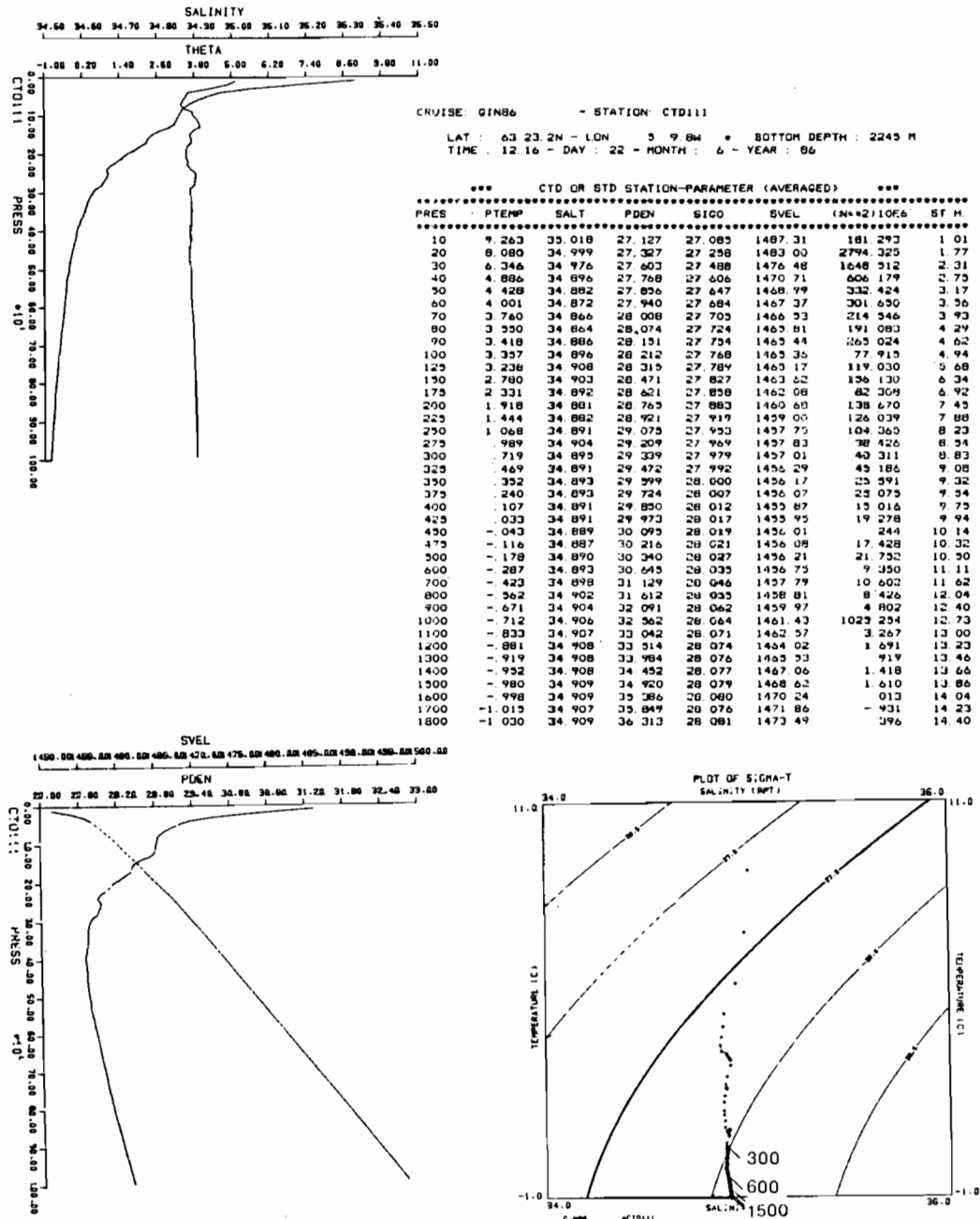


Fig. B127.

SACLANTCEN SM-209

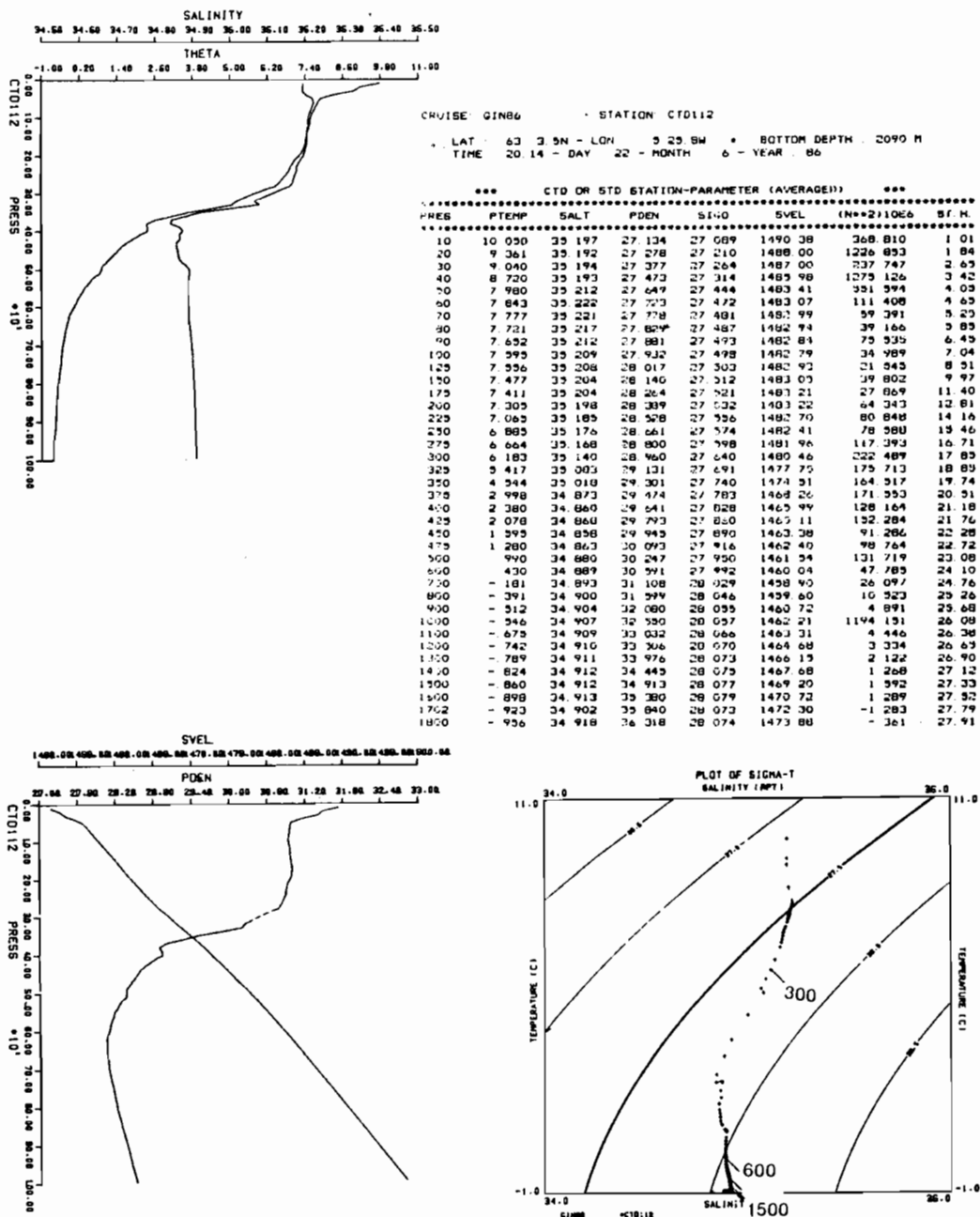


Fig. B128.

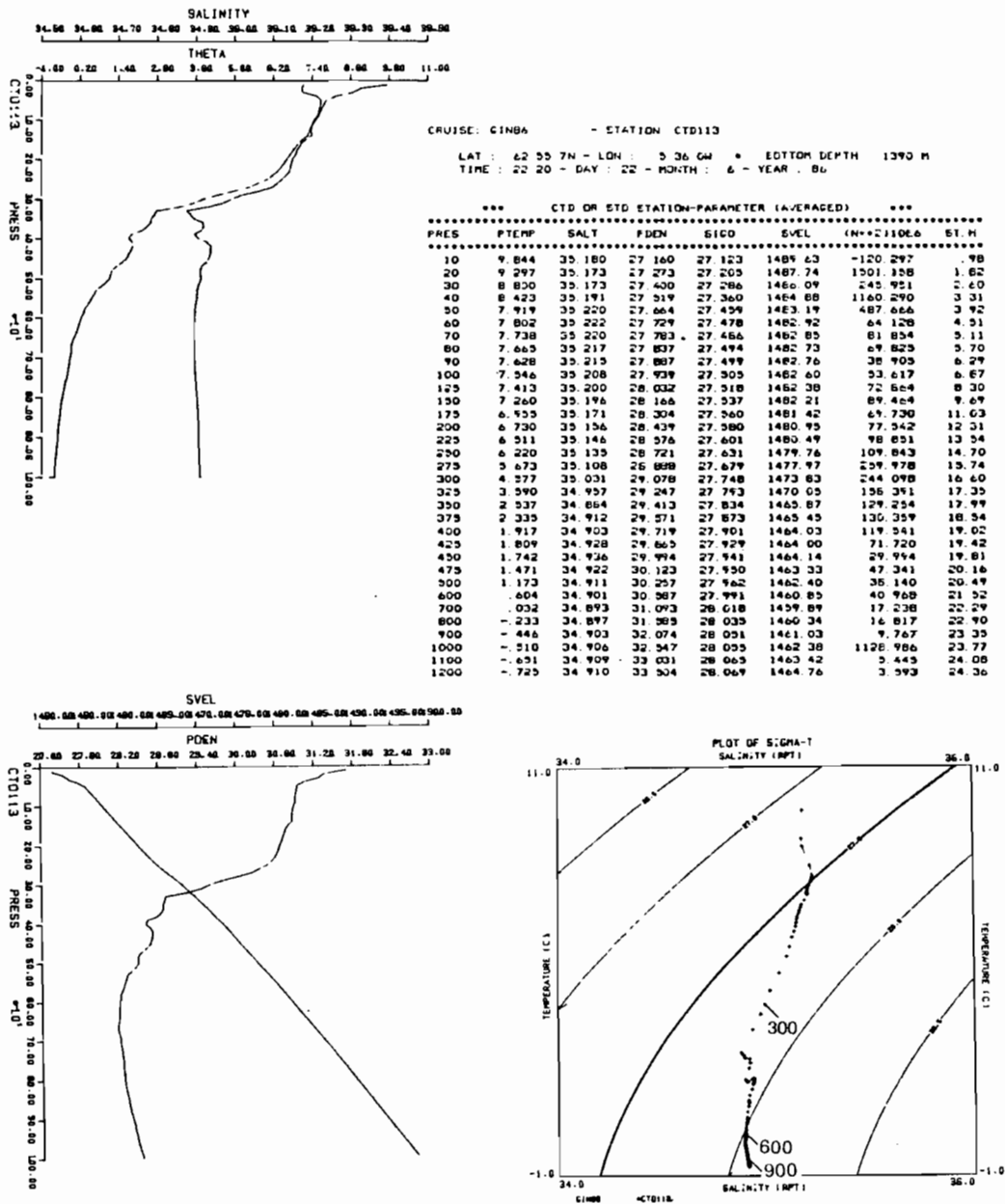


Fig. B129.

SACLANTCEN SM-209

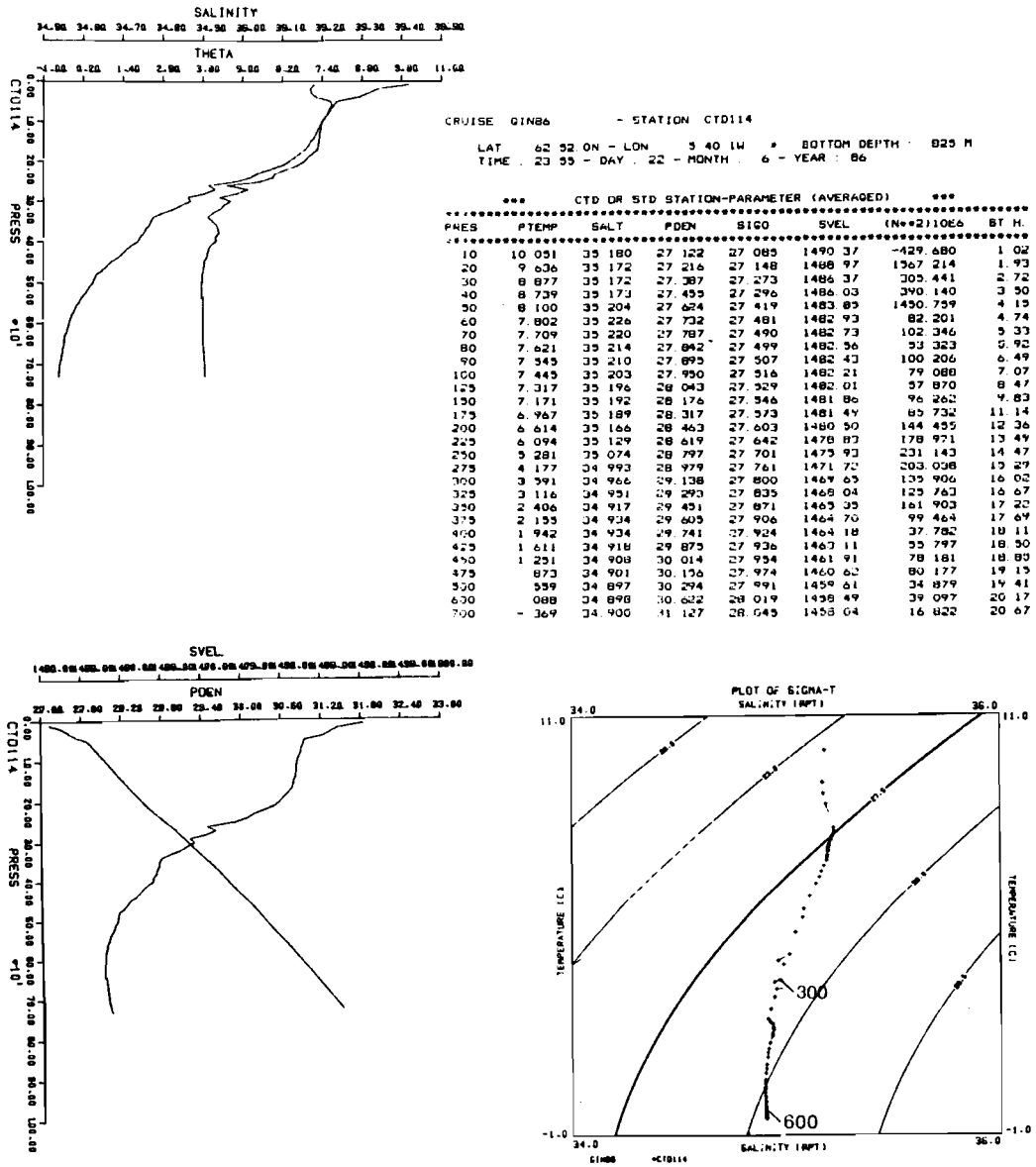


Fig. B130.

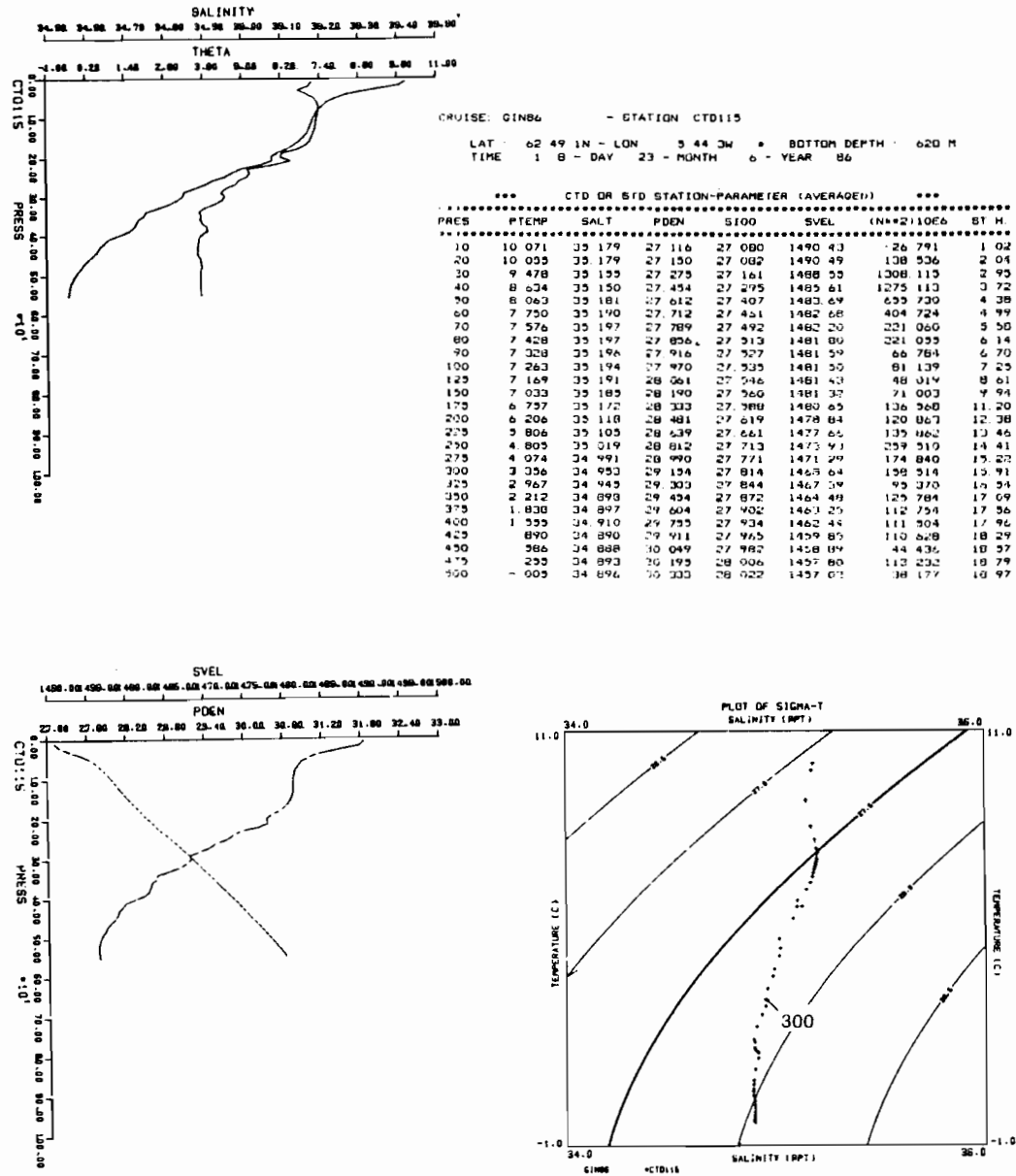


Fig. B131.

SACLANTCEN SM-209

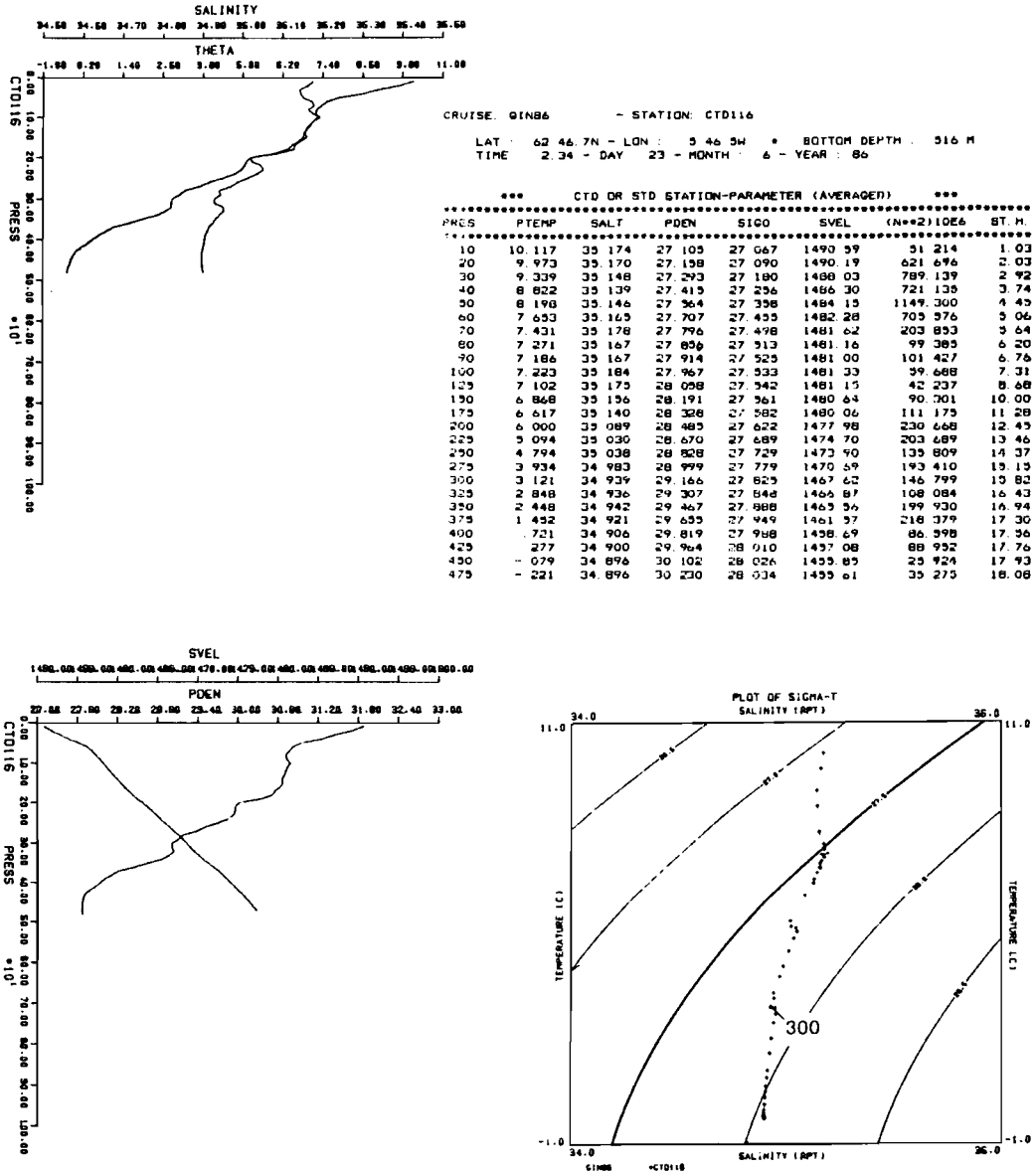


Fig. B132.

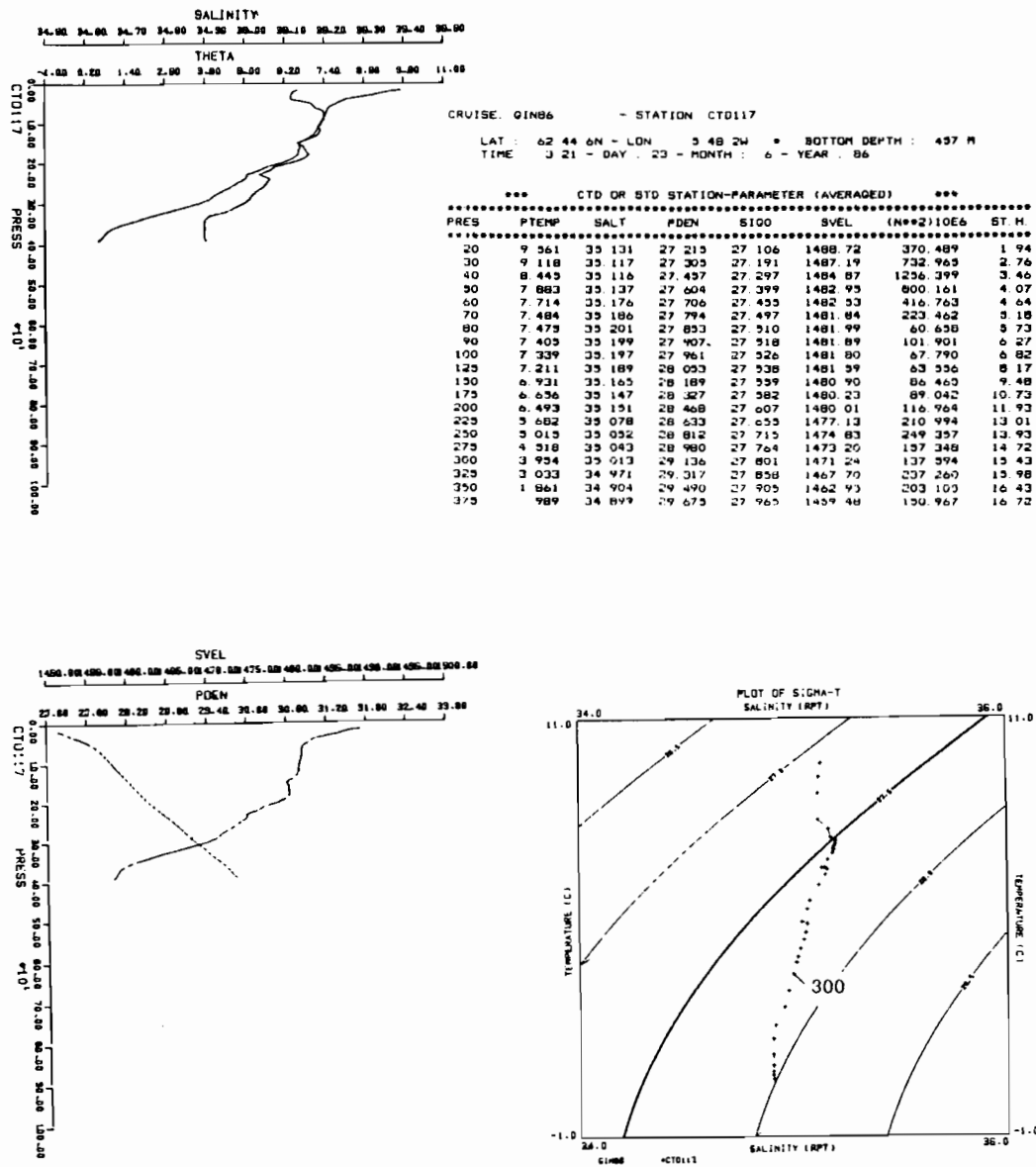


Fig. B133.

SACLANTCEN SM-209

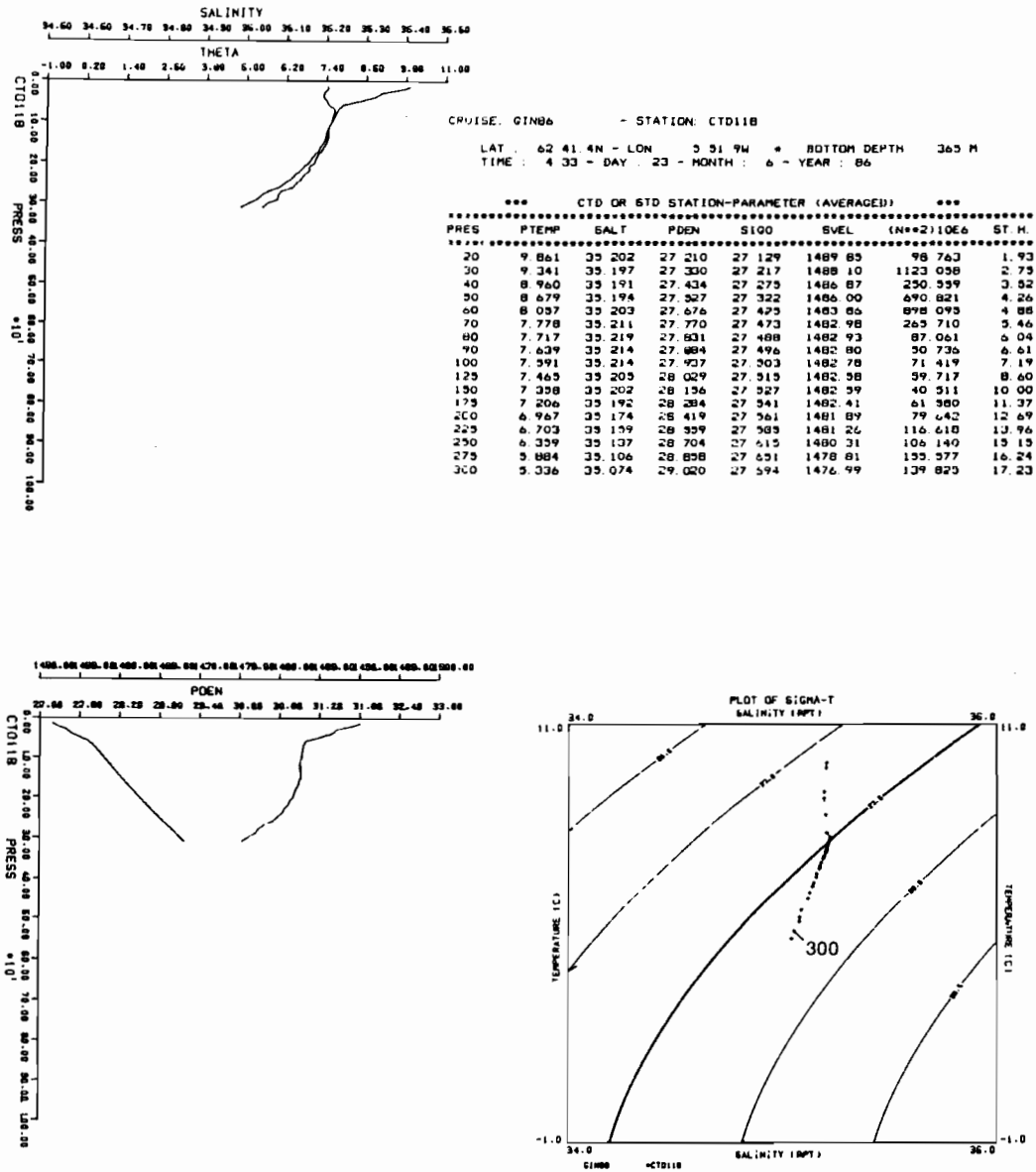


Fig. B134.

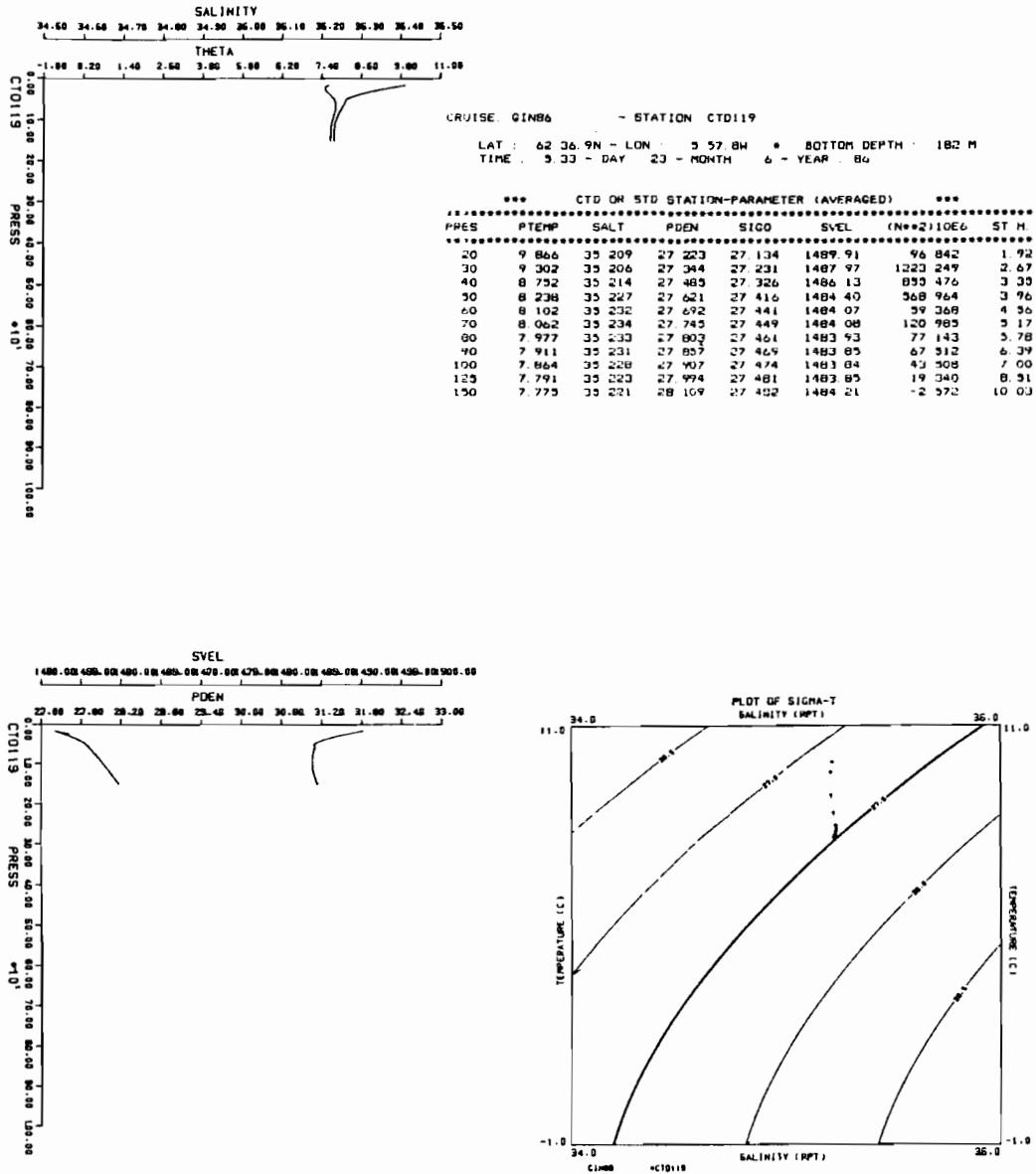


Fig. B135.

SACLANTCEN SM-209

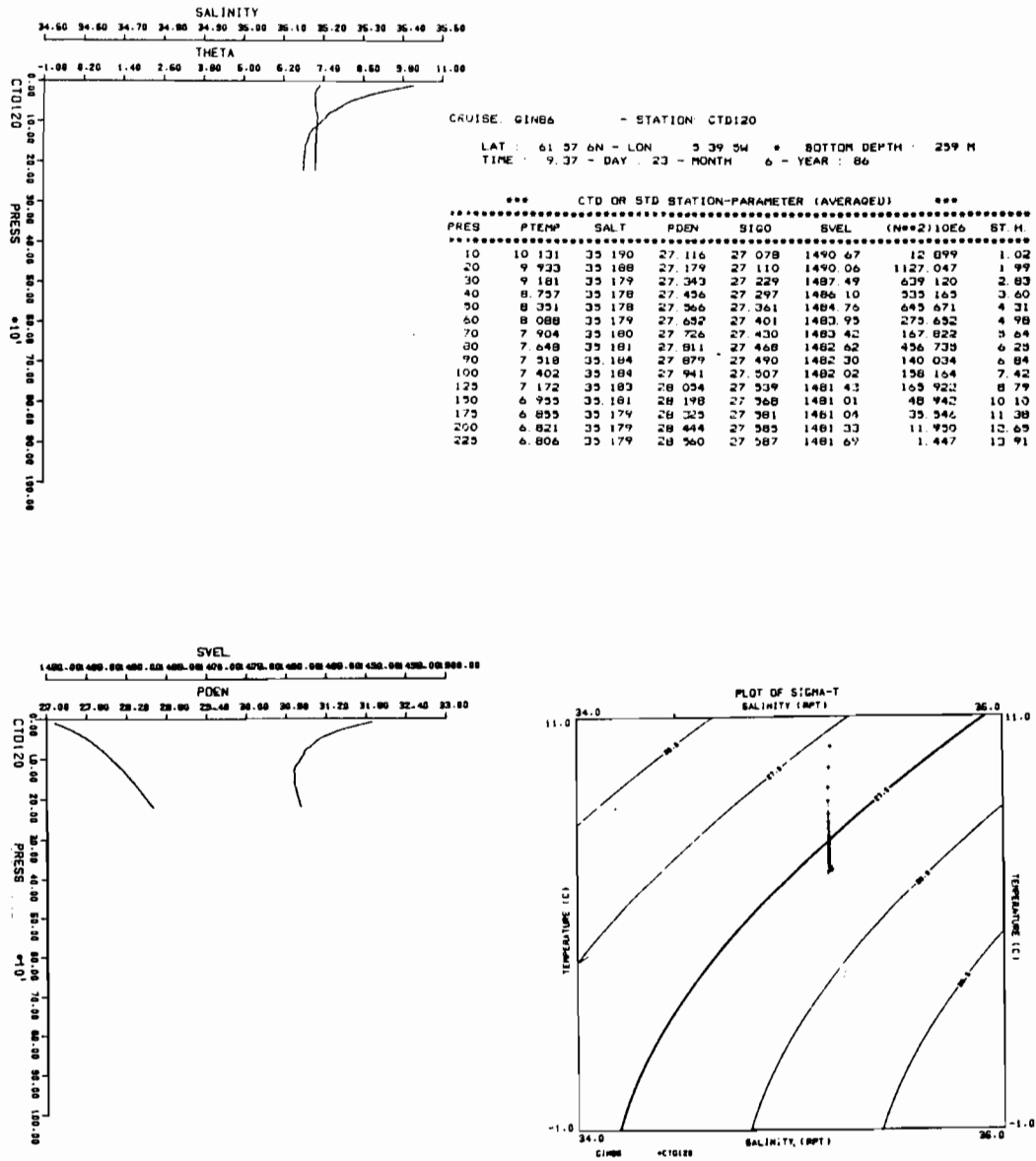


Fig. B136.

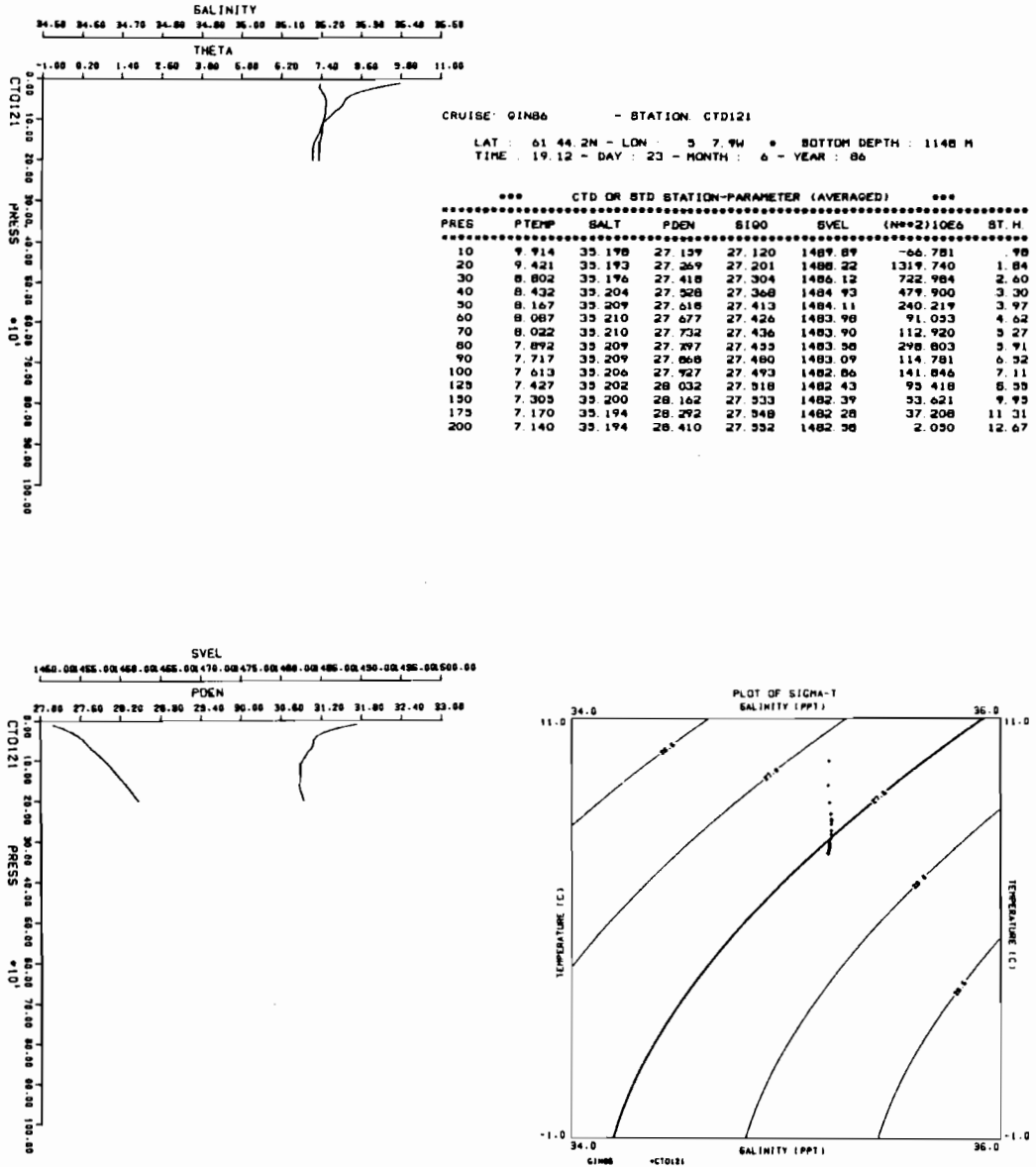


Fig. B137.

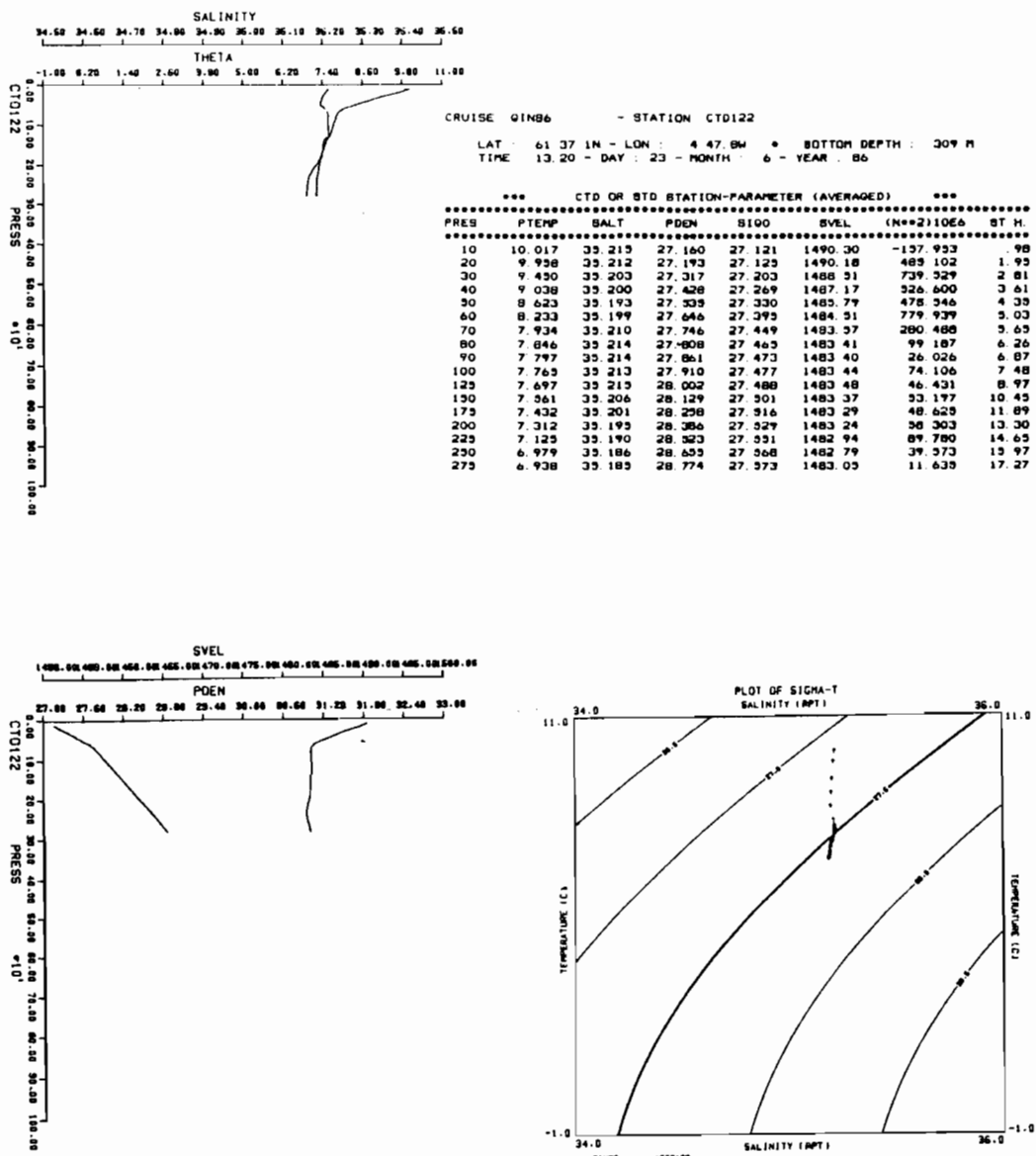


Fig. B138.

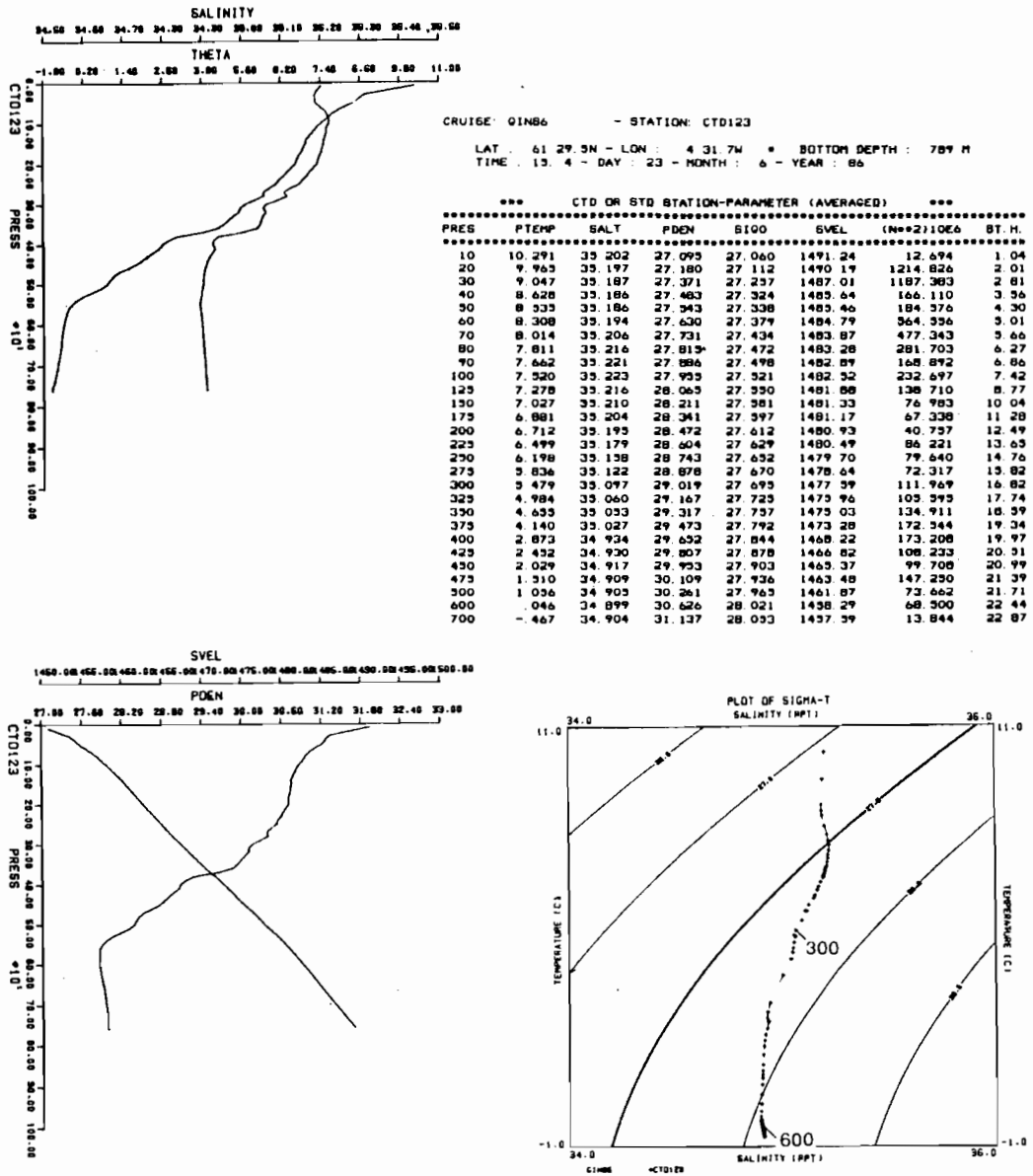
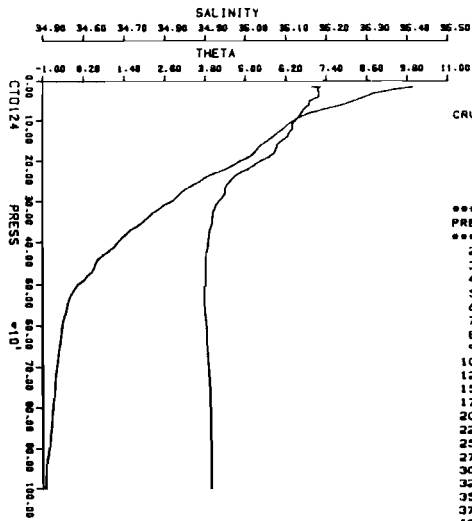


Fig. B139.

SACLANTCEN SM-209



*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	FTEMP	SALT	PDEN	SIG0	SVEL	(N=2)10E6	ST M
20	9.708	33.179	27.219	27.113	1489.28	441.237	1.92
30	9.090	33.179	27.364	27.290	1487.02	993.437	2.67
40	8.669	33.183	27.474	27.313	1489.79	433.384	3.39
50	8.310	33.169	27.362	27.397	1484.99	284.793	4.09
60	8.078	33.159	27.638	27.387	1483.89	413.014	4.77
70	7.976	33.148	27.731	27.434	1482.14	632.967	5.37
80	7.108	33.140	27.858	27.314	1480.50	374.985	5.91
90	6.749	33.134	27.949	27.599	1479.27	337.600	6.42
100	6.495	33.126	28.024	27.987	1478.44	194.863	6.89
125	6.211	33.116	28.134	27.617	1477.60	137.399	8.03
150	5.843	33.102	28.287	27.654	1476.55	131.261	9.09
175	5.452	33.078	28.433	27.683	1475.37	118.066	10.08
200	5.125	33.059	28.574	27.708	1474.44	99.495	11.02
225	4.365	33.017	28.723	27.738	1472.52	100.969	11.87
250	3.887	34.974	28.881	27.777	1470.07	159.394	12.66
275	3.371	34.951	29.034	27.811	1468.29	158.391	13.34
300	2.983	34.943	29.184	27.842	1467.04	91.090	13.96
325	2.548	34.923	29.328	27.866	1465.56	136.867	14.51
350	2.138	34.917	29.477	27.894	1464.18	89.404	14.99
375	1.743	34.913	29.629	27.922	1462.86	112.959	18.41
400	1.372	34.908	29.769	27.943	1461.62	72.462	15.77
425	1.075	34.905	29.908	27.964	1460.70	79.697	16.08
450	0.894	34.901	30.052	27.986	1459.40	65.620	16.34
475	0.512	34.900	30.183	27.997	1458.98	35.326	16.57
500	0.229	34.900	30.320	28.013	1458.11	77.347	16.76
600	-0.232	34.899	30.643	28.037	1457.01	29.060	17.31
700	-0.484	34.905	31.138	28.054	1457.51	10.772	17.70
800	-0.628	34.910	31.623	28.063	1456.51	8.162	17.99
900	-0.743	34.913	32.103	28.072	1459.64	3.378	18.22
1000	-0.820	34.914	32.575	28.074	1460.93	1115.419	18.43
1100	-0.913	34.914	33.054	28.080	1462.20	038	18.59

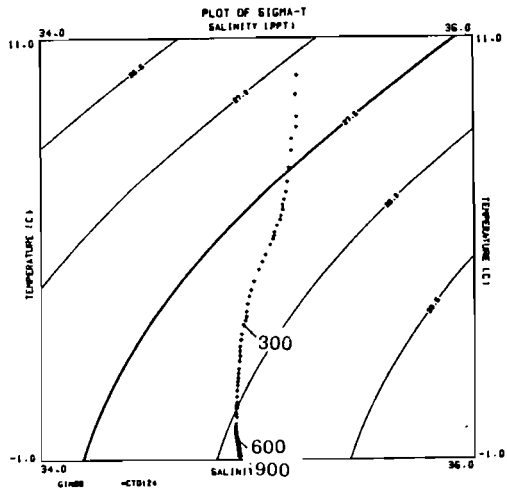
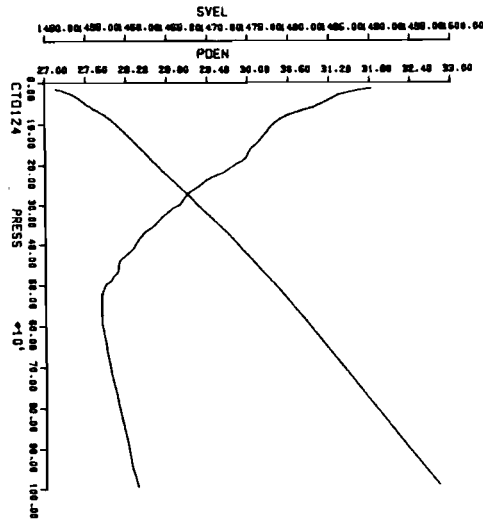


Fig. B140.

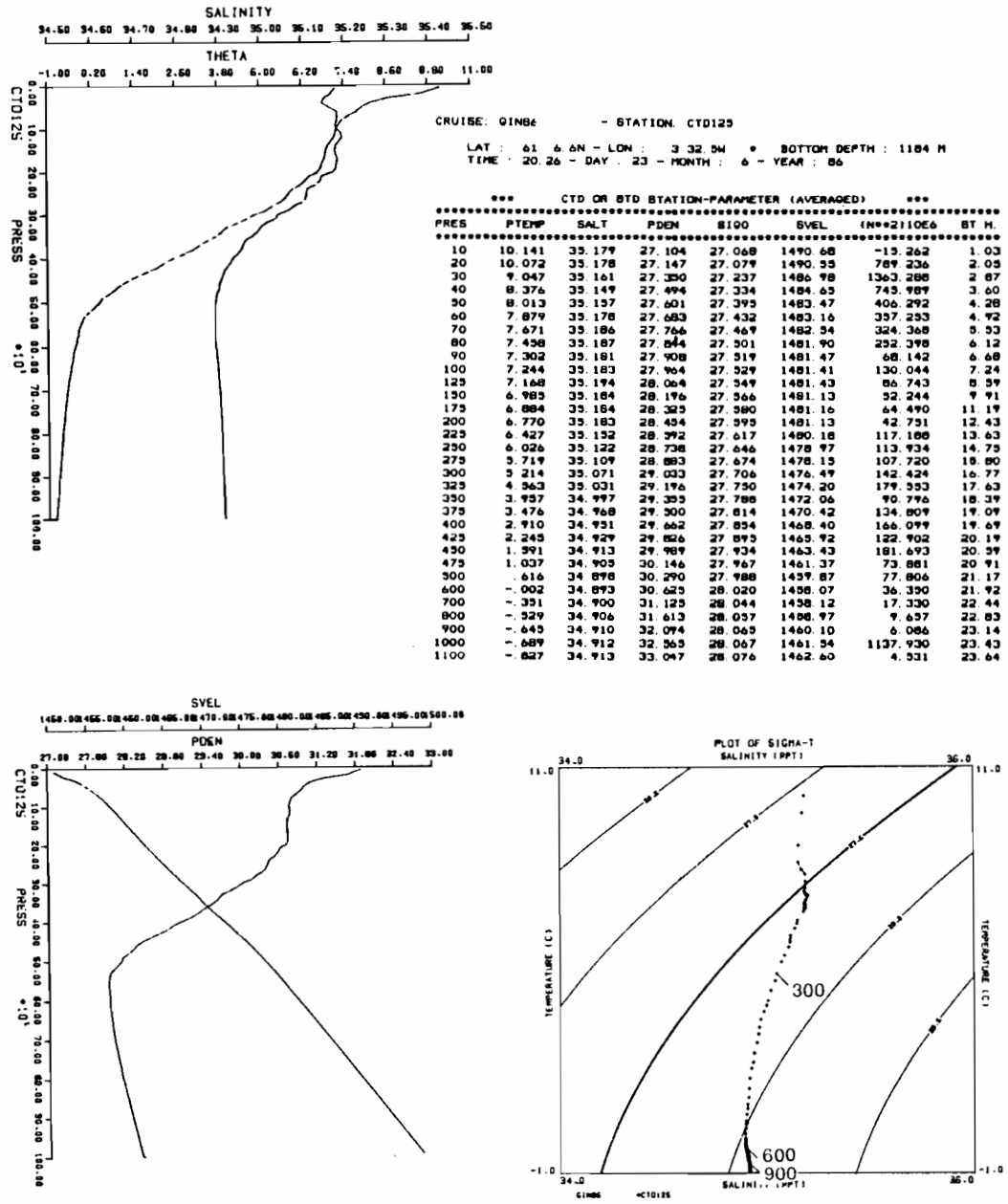


Fig. B141.

SACLANTCEN SM-209

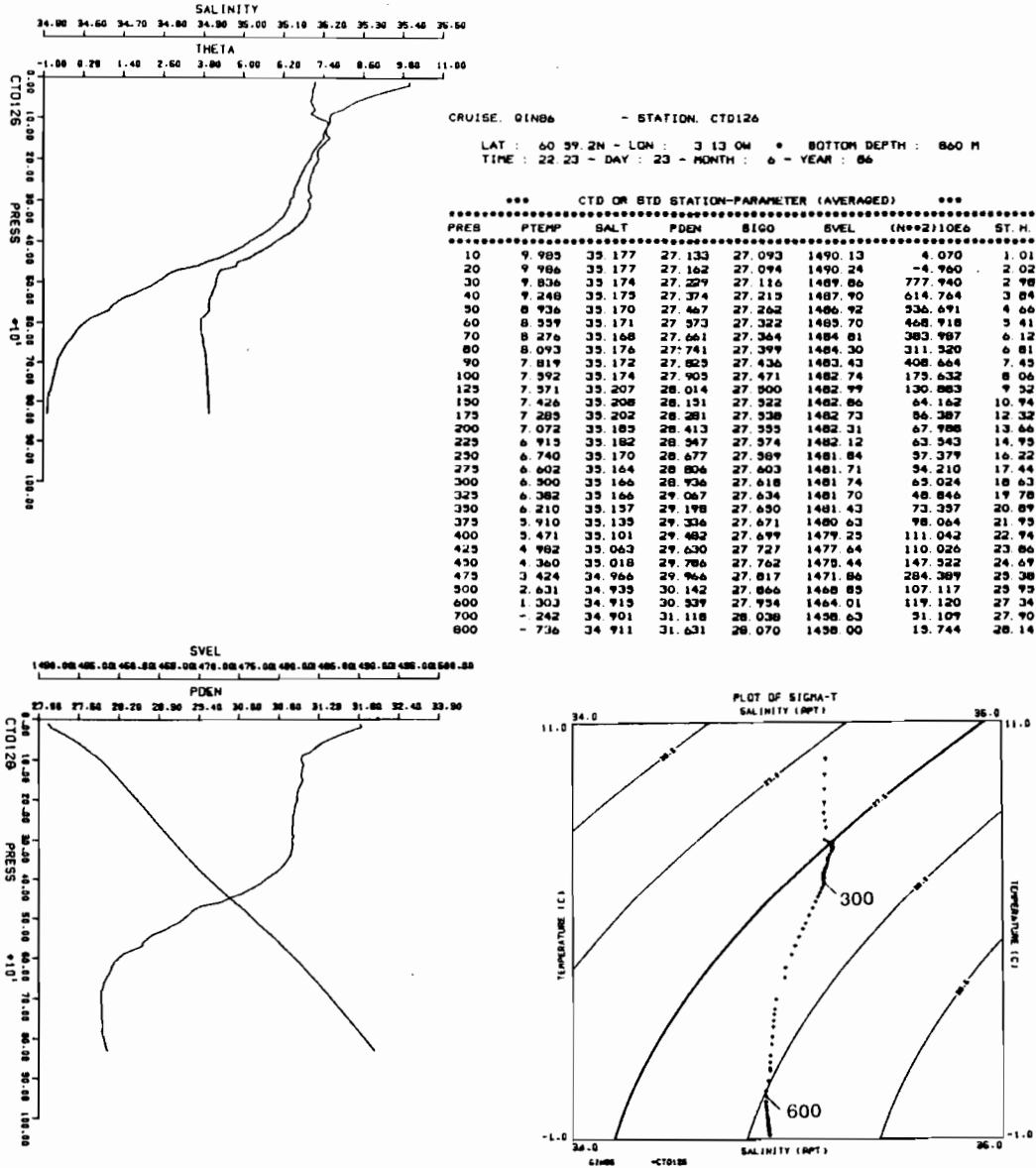


Fig. B142.

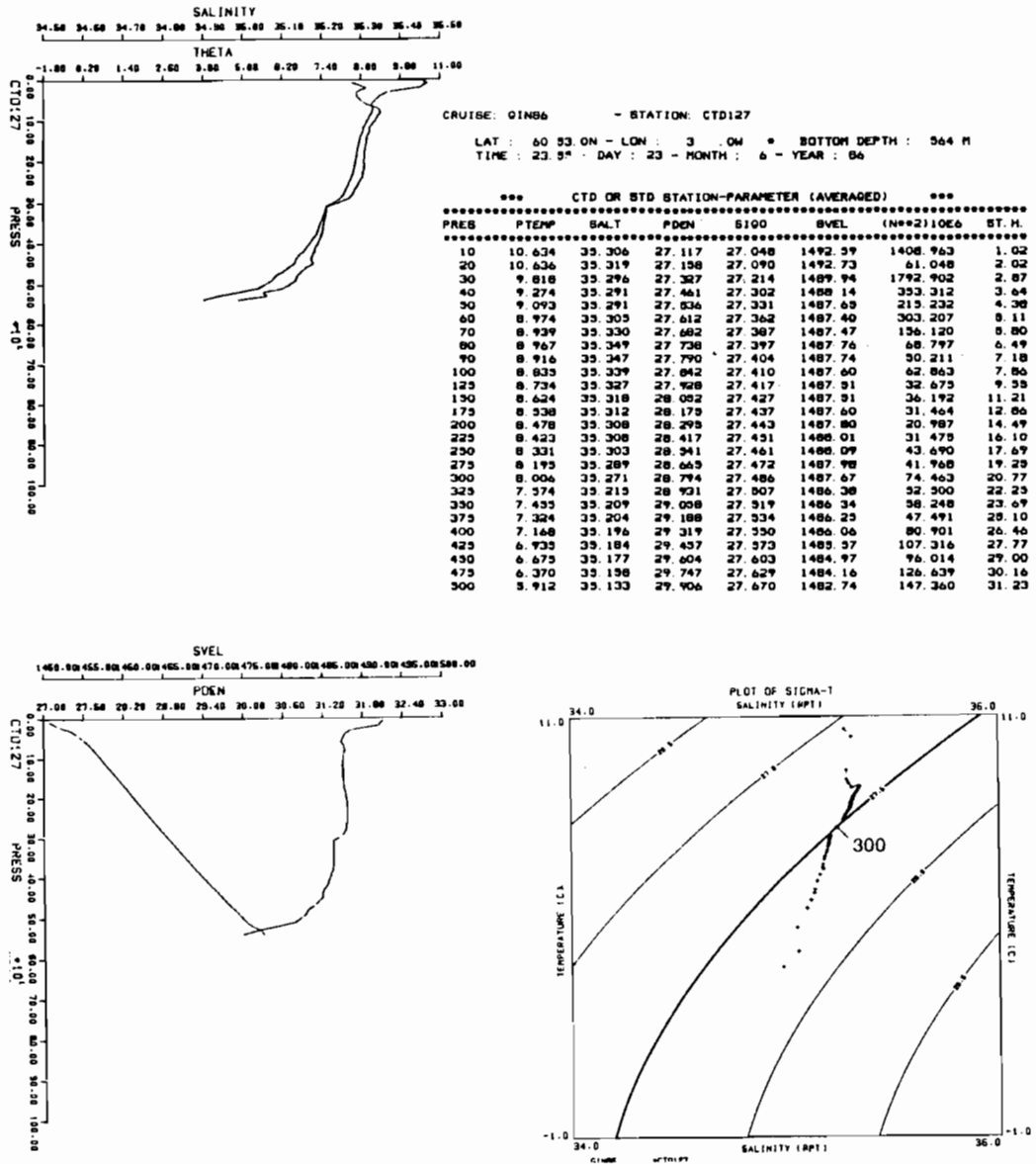


Fig. B143.

SACLANTCEN SM-209

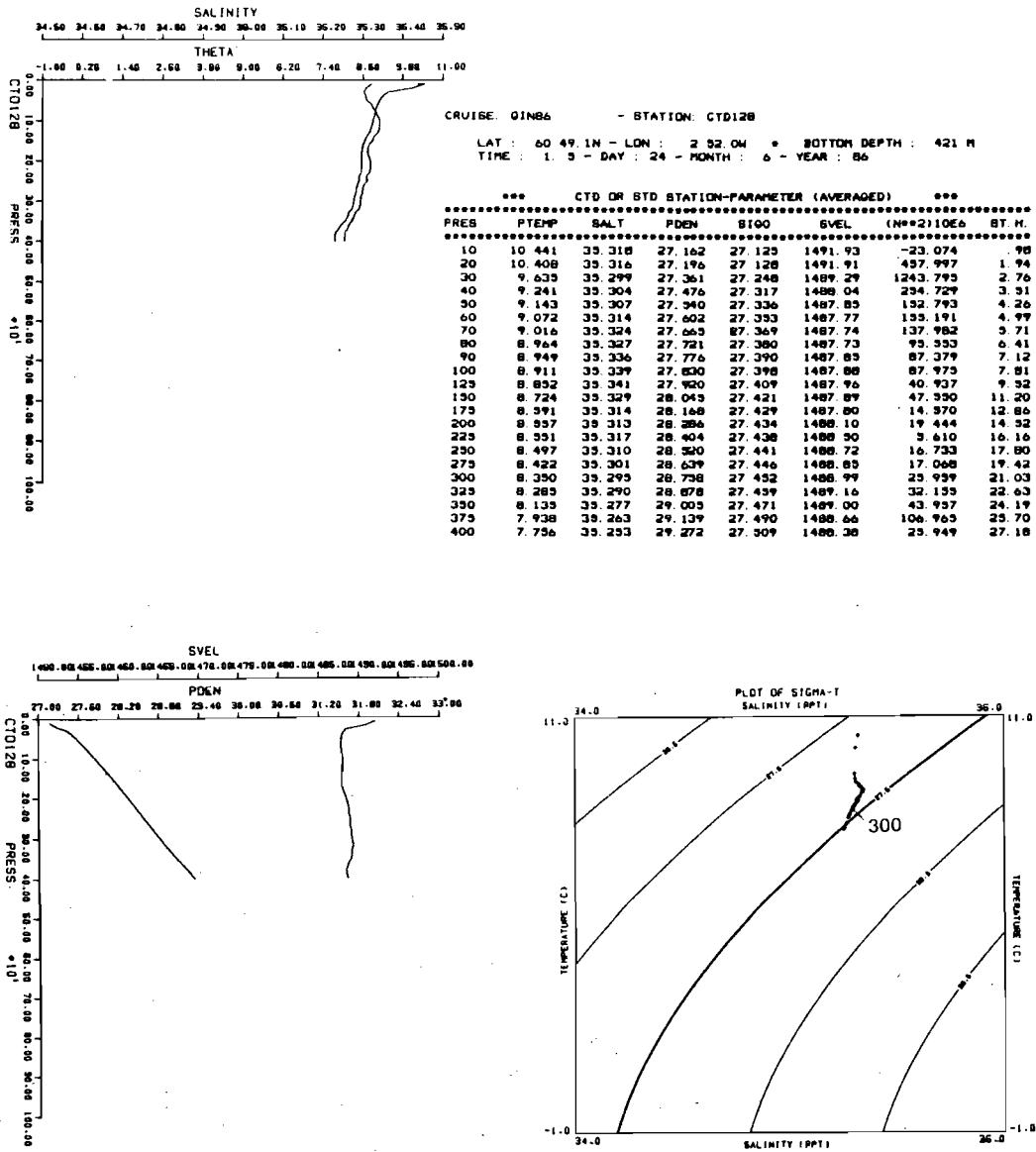


Fig. B144.

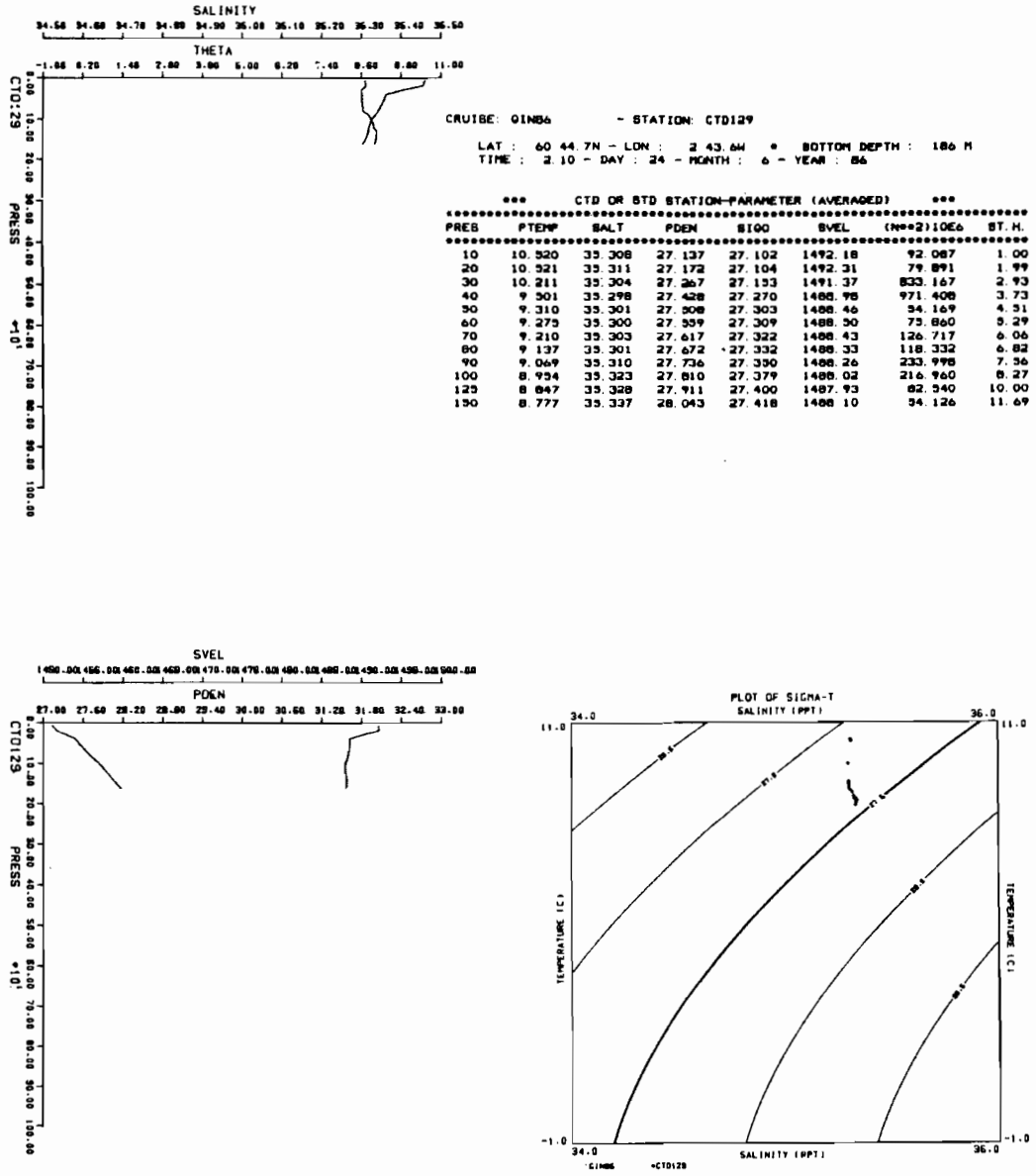


Fig. B145.

SACLANTCEN SM-209

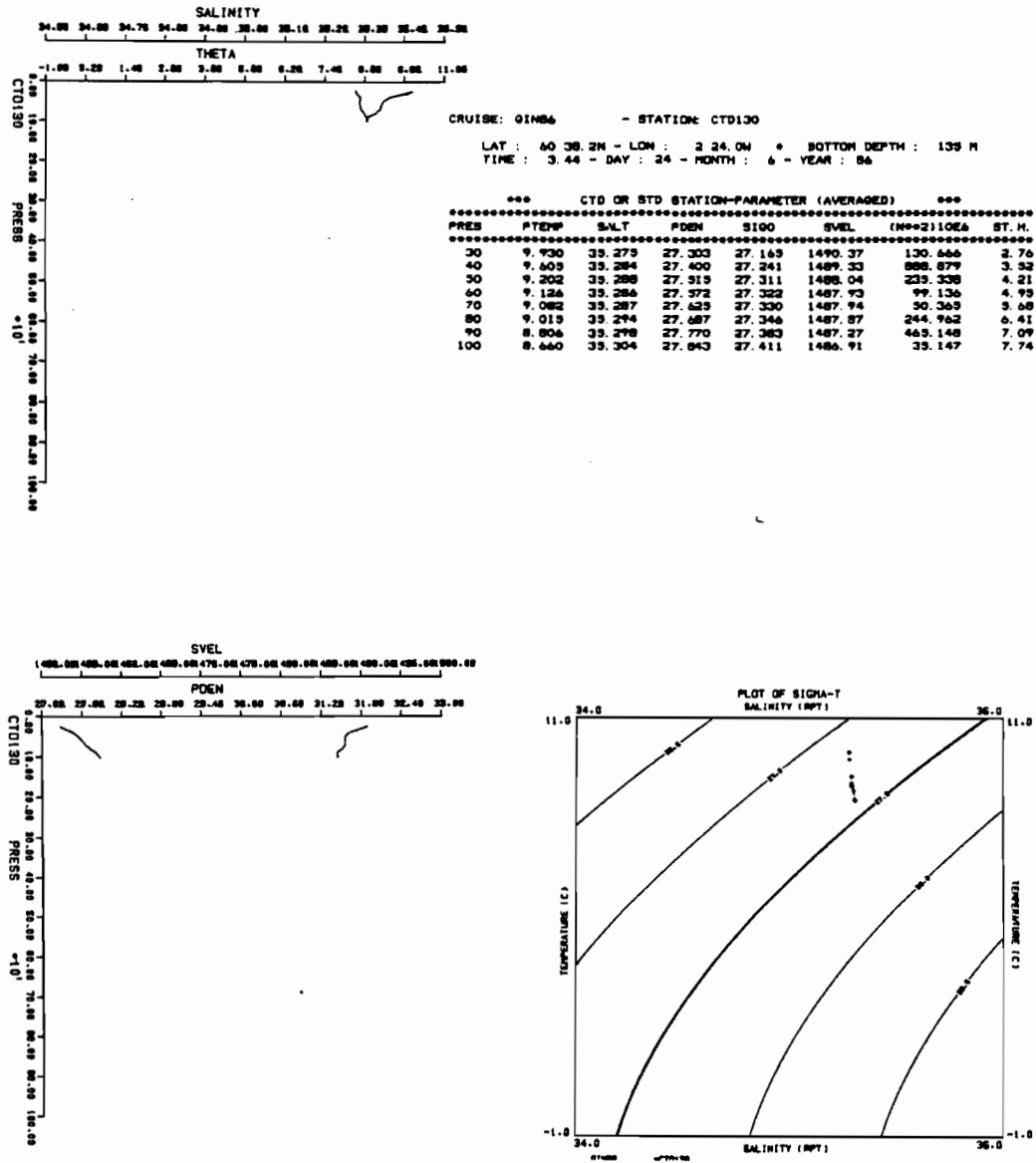
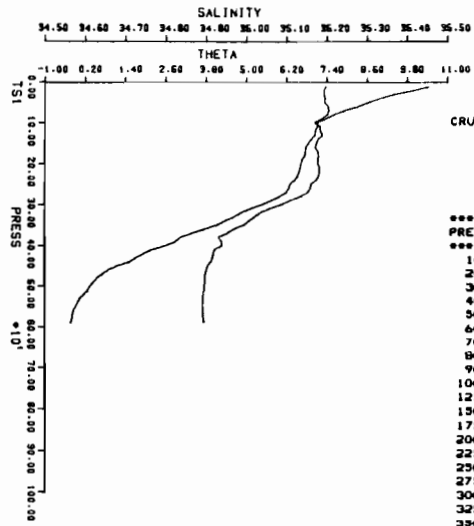


Fig. B146.



CRUISE: 086 - STATION: T81
 LAT : 61 6.3N - LON : 3 32.7W * BOTTOM DEPTH : 1180 M
 TIME : 14.34 - DAY : 24 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PREB	PTEMP	SALT	PDEN	SI00	SVEL	(N#*2)10E6	ST. H.
10	10.325	35.177	27.053	27.013	1492.08	43.420	1.09
20	10.274	35.194	27.124	27.056	1491.30	832.462	2.11
30	9.626	35.189	27.277	27.164	1489.13	777.158	3.00
40	9.191	35.193	27.399	27.240	1487.72	740.413	3.83
50	8.805	35.192	27.505	27.300	1486.47	405.263	4.60
60	8.509	35.199	27.602	27.352	1485.35	434.744	5.33
70	8.135	35.202	27.709	27.413	1484.32	638.376	6.99
80	7.771	35.202	27.810	27.467	1483.11	423.297	6.60
90	7.542	35.200	27.888	27.499	1482.41	213.237	7.18
100	7.203	35.170	27.959	27.524	1481.24	245.168	7.74
125	7.087	35.180	28.064	27.549	1481.10	89.601	9.08
150	6.970	35.181	28.196	27.566	1481.07	61.142	10.38
175	6.773	35.173	28.332	27.587	1480.71	68.345	11.64
200	6.688	35.177	28.461	27.602	1480.81	56.169	12.87
225	6.589	35.179	28.591	27.617	1480.84	51.369	14.06
250	6.455	35.172	28.719	27.628	1480.73	61.457	15.22
275	6.246	35.156	28.849	27.644	1480.31	45.546	16.34
300	5.823	35.116	28.989	27.647	1479.00	128.635	17.41
325	5.081	35.053	29.150	27.708	1476.35	152.572	18.37
350	4.442	35.010	29.309	27.746	1474.09	153.237	19.24
375	3.657	34.963	29.478	27.793	1471.18	213.723	19.99
400	2.902	34.935	29.650	27.842	1468.35	205.149	20.62
425	2.121	34.922	29.831	27.899	1465.36	186.988	21.11
450	1.843	34.912	29.992	27.936	1463.22	131.796	21.50
475	.865	34.899	30.155	27.974	1460.58	113.329	21.80
500	.473	34.896	30.300	27.996	1459.21	56.337	22.04

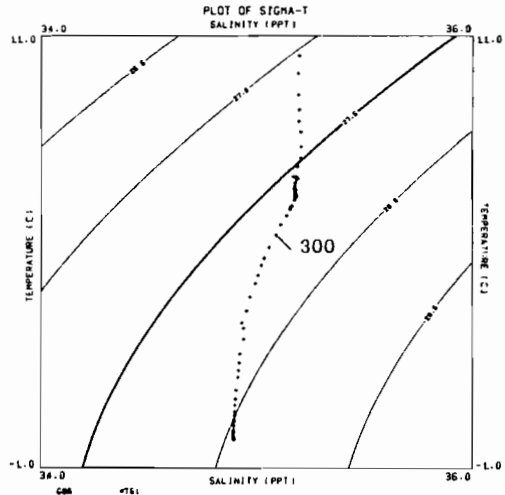
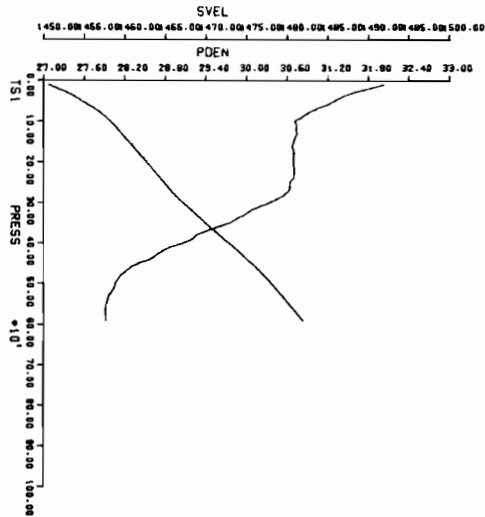


Fig. B147.

SACLANTCEN SM-209

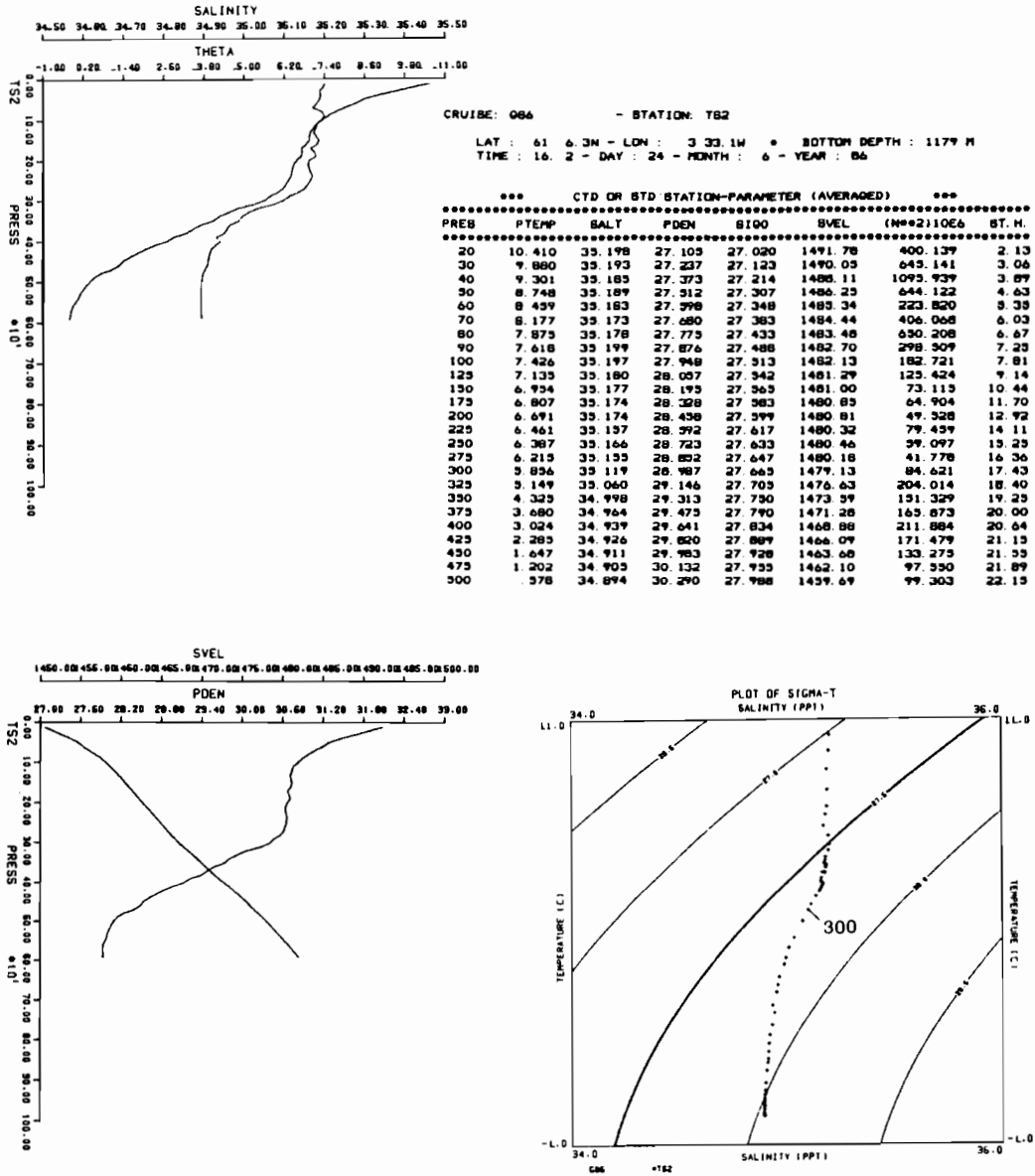


Fig. B148.

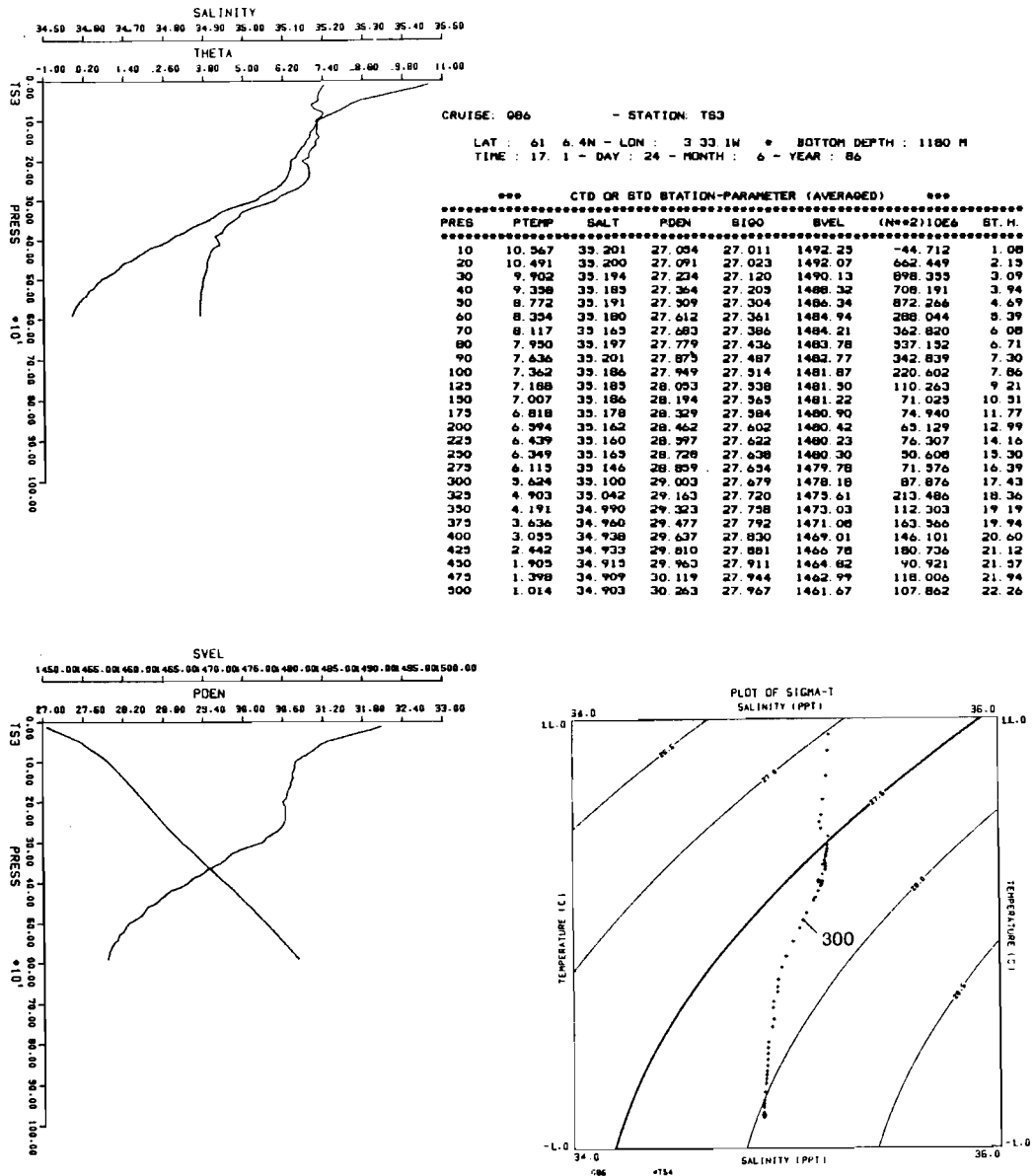


Fig. B149.

SACLANTCEN SM-209

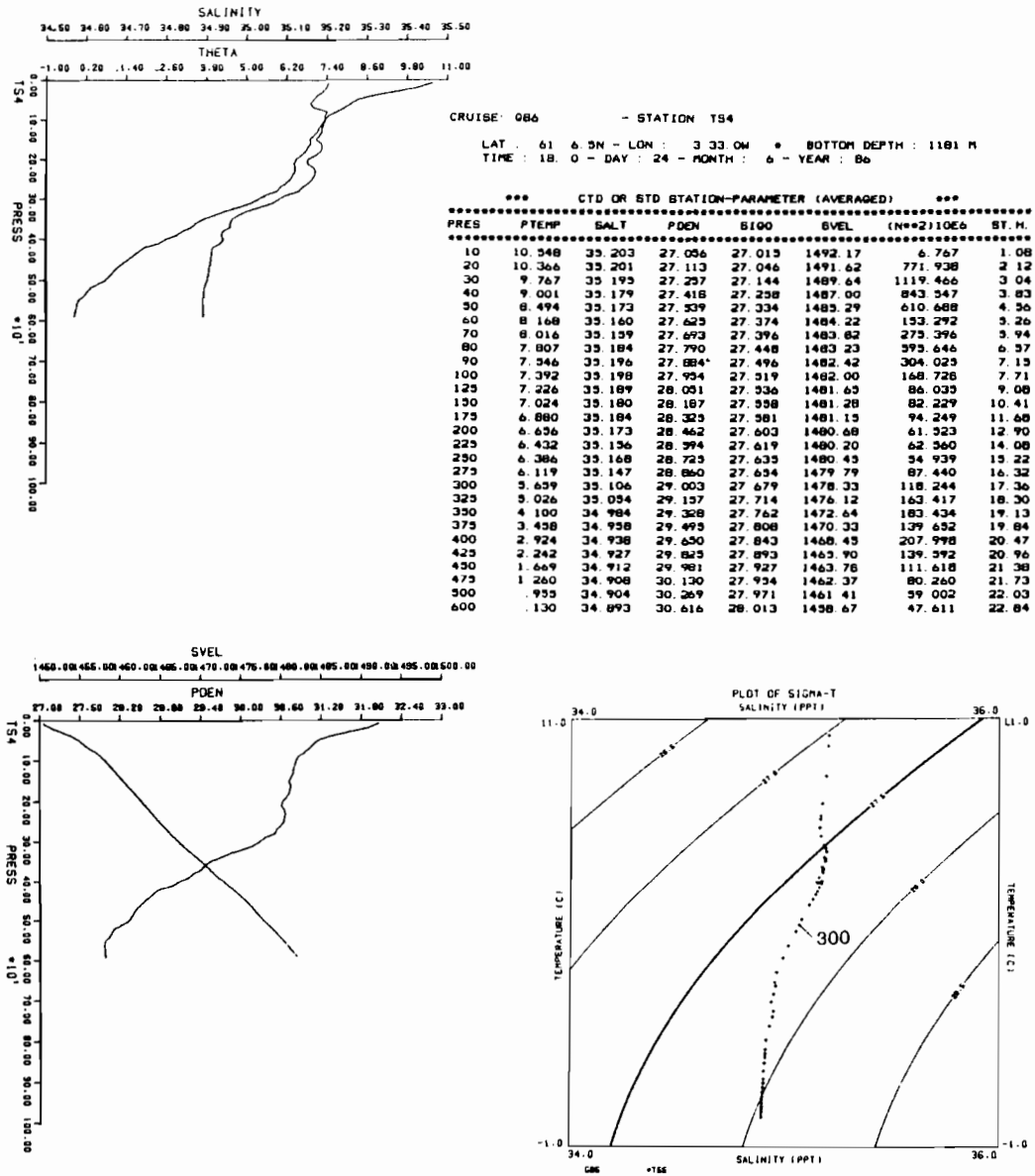


Fig. B150.

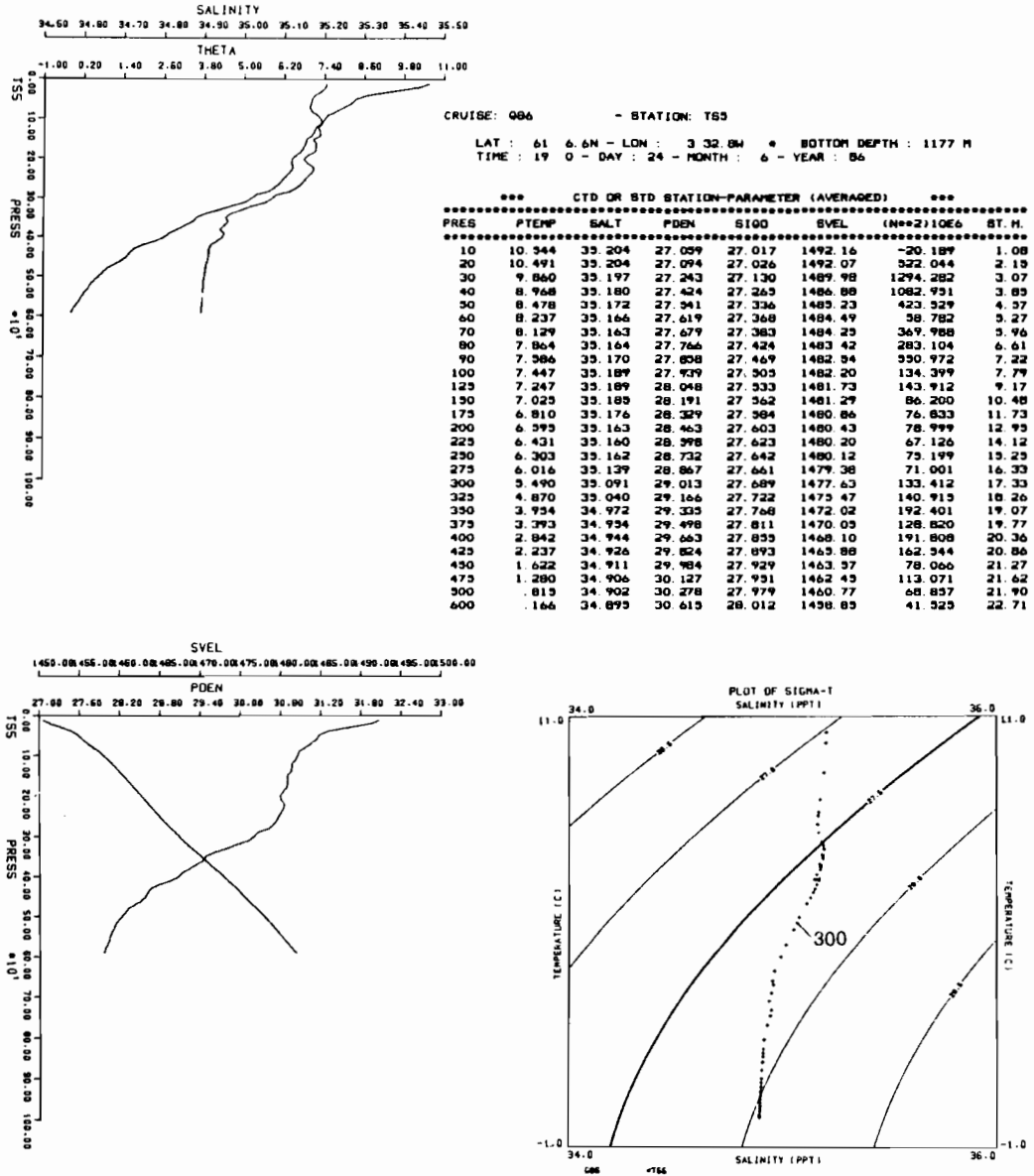


Fig. B151.

SACLANTCEN SM-209

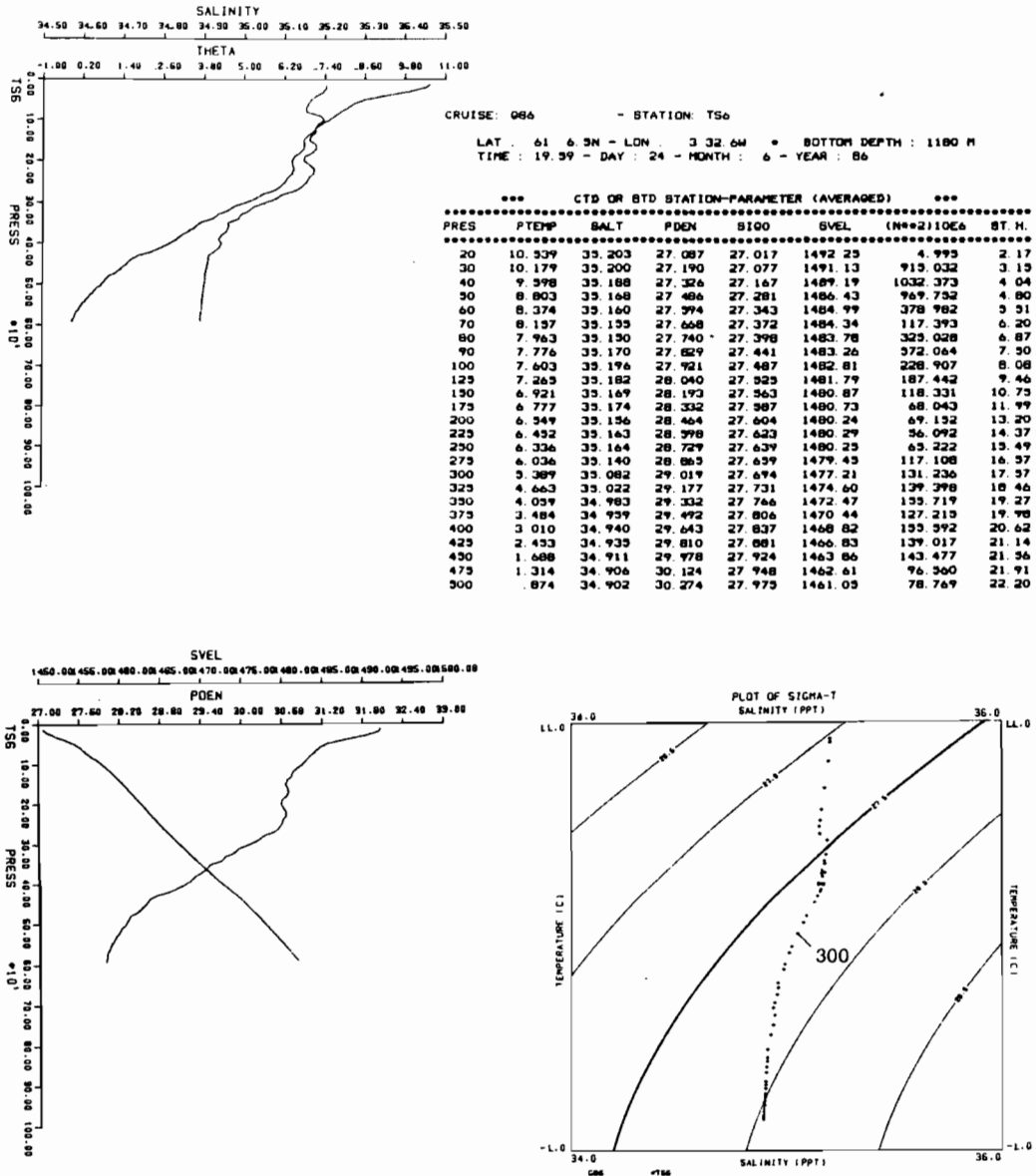


Fig. B152.

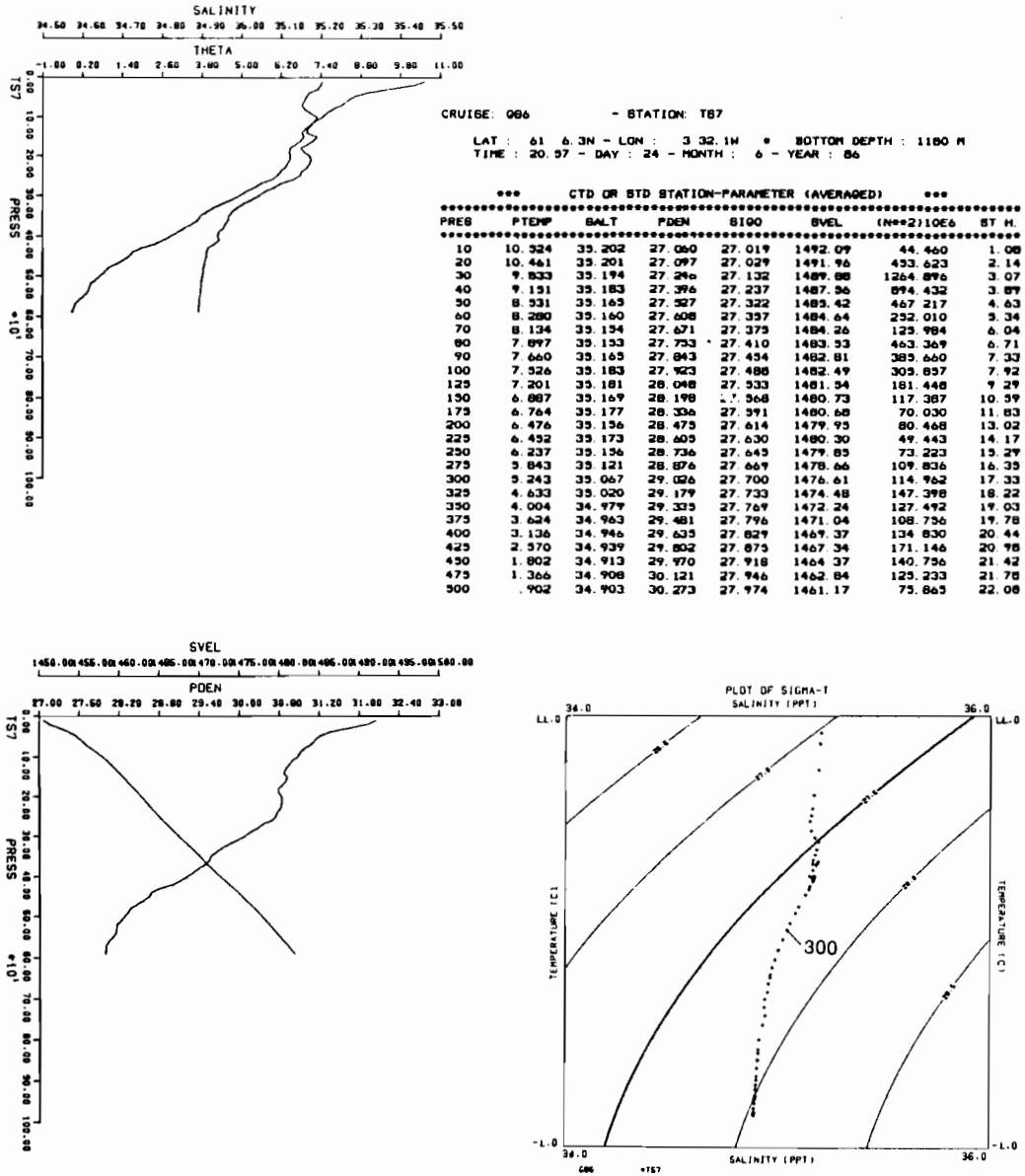


Fig. B153.

SACLANTCEN SM-209

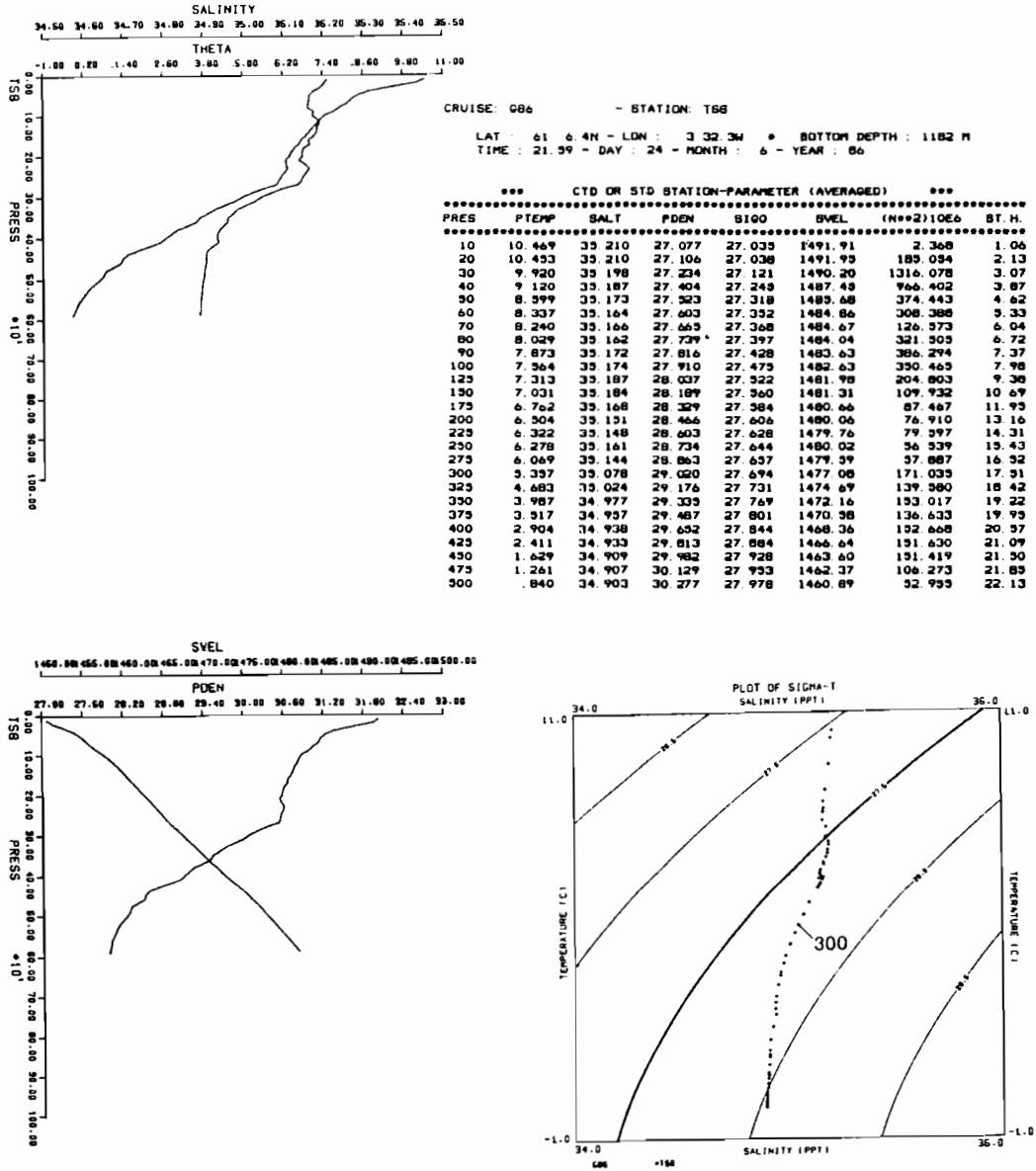


Fig. B154.

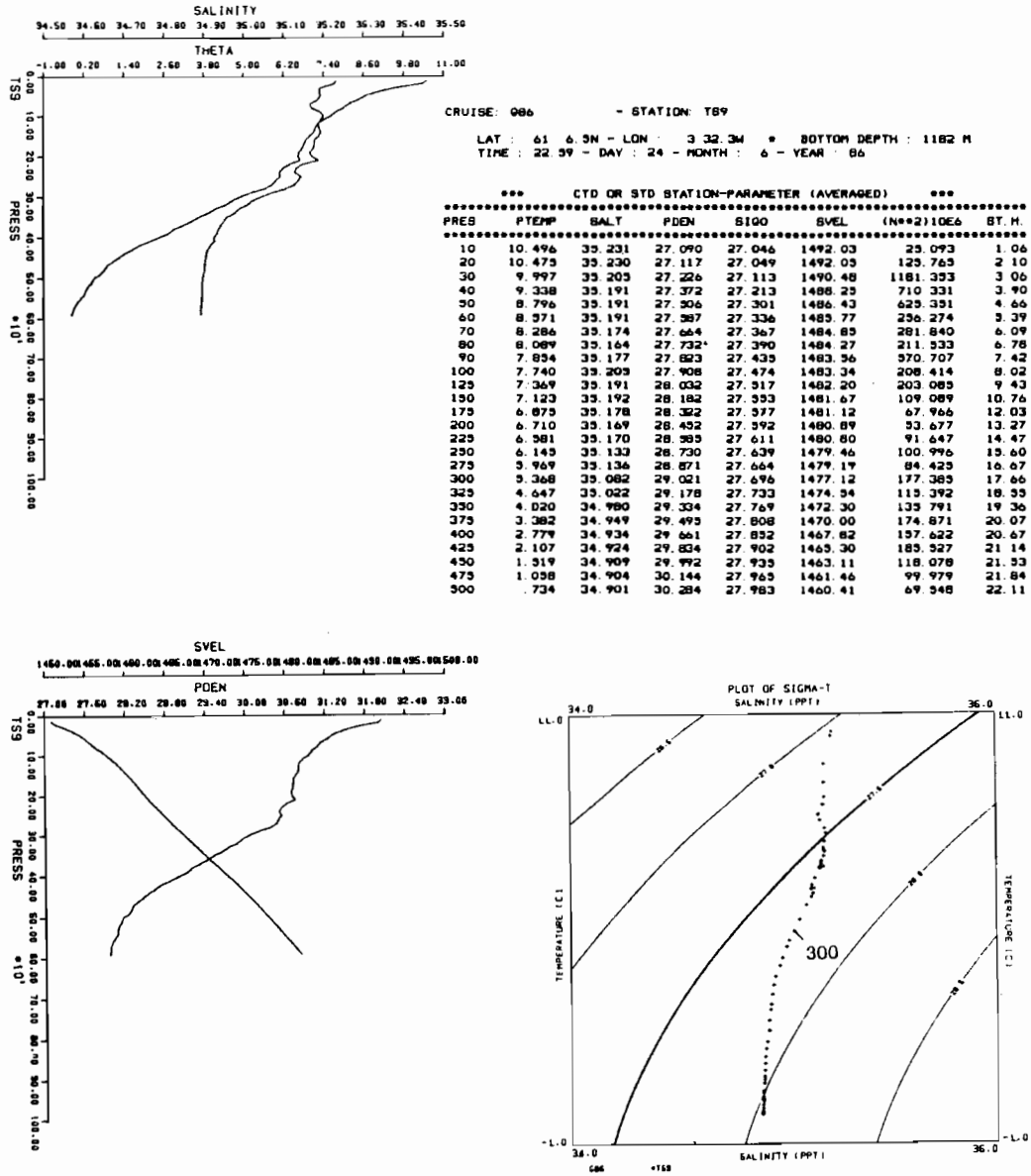


Fig. B155.

SACLANTCEN SM-209

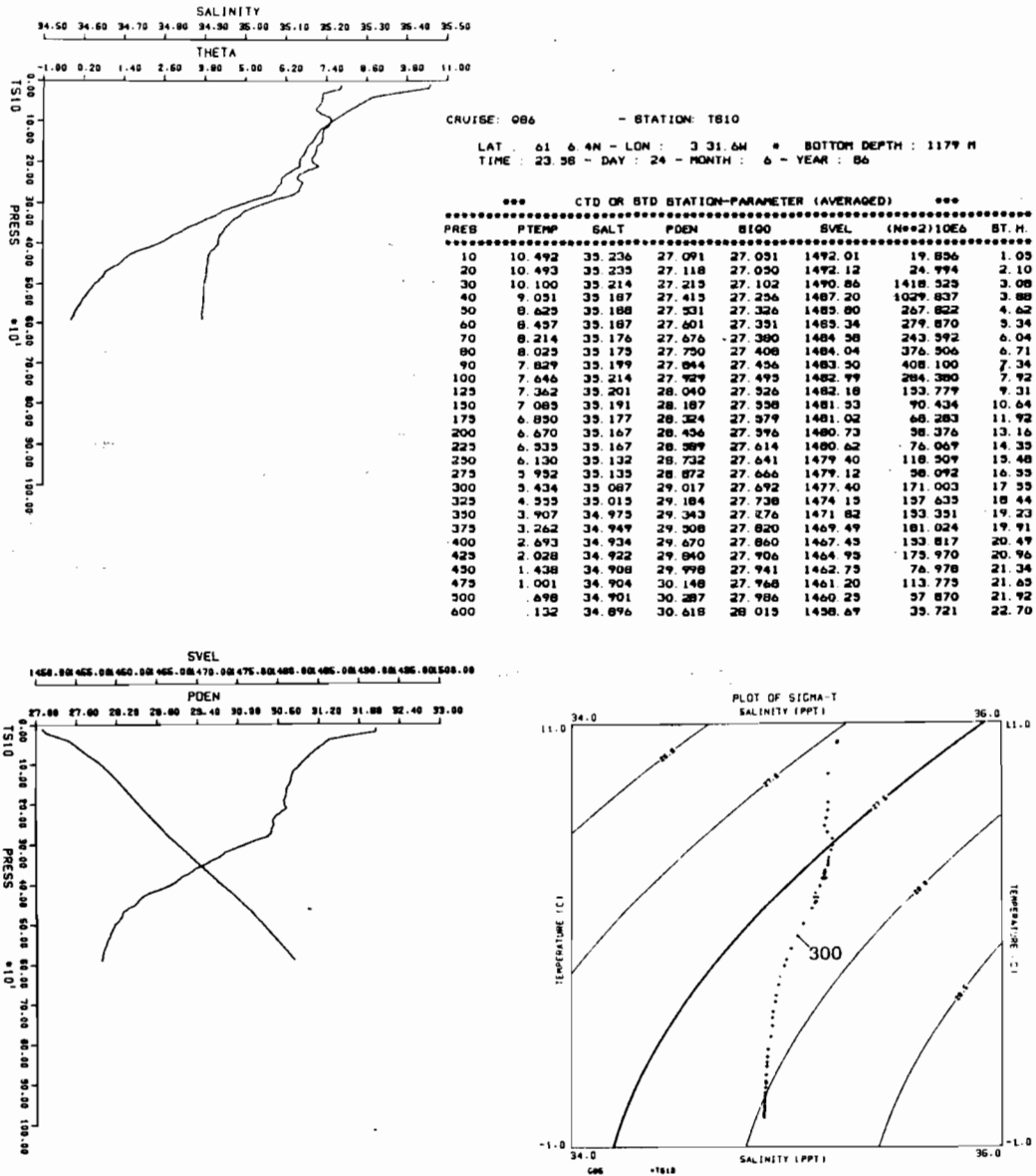
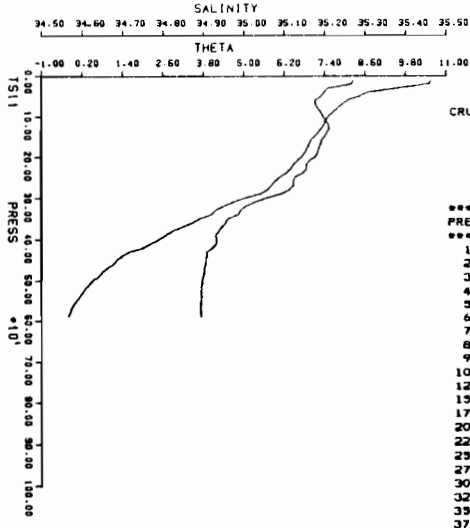


Fig. B156.



CRUISE 086 - STATION: TS11
 LAT : 61 6.7N - LON : 3 31.9W * BOTTOM DEPTH : 1183 M
 TIME : 0.59 - DAY : 25 - MONTH : 6 - YEAR : 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIG0	SVEL	(M*2)10E6	ST. H.
10	10.941	35.269	27.110	27.068	1492.23	82.306	1.03
20	10.938	35.269	27.137	27.069	1492.32	31.064	2.06
30	10.196	35.242	27.220	27.107	1491.24	1204.627	3.04
40	8.971	35.192	27.433	27.273	1486.91	1191.492	3.81
50	8.999	35.198	27.343	27.338	1485.71	231.987	4.53
60	8.234	35.180	27.631	27.380	1484.49	518.983	5.22
70	7.986	35.175	27.711	27.414	1483.72	174.082	5.88
80	7.836	35.179	27.782	27.439	1483.33	289.349	6.51
90	7.714	35.184	27.890	27.462	1483.04	222.771	7.13
100	7.568	35.193	27.954	27.490	1482.67	220.775	7.72
125	7.423	35.203	28.033	27.519	1482.42	135.953	9.13
150	7.234	35.206	28.177	27.548	1482.12	93.470	10.48
175	6.989	35.192	28.316	27.572	1481.58	73.934	11.78
200	6.836	35.183	28.443	27.586	1481.39	63.931	13.04
225	6.970	35.161	28.380	27.609	1480.75	76.285	14.26
250	6.306	35.148	28.720	27.630	1480.11	90.383	15.41
275	5.912	35.122	28.867	27.660	1478.94	130.950	16.49
300	5.952	35.097	29.010	27.686	1477.89	140.230	17.51
325	4.635	35.023	29.181	27.735	1474.49	179.267	18.40
350	4.049	34.984	29.334	27.769	1472.43	105.071	19.21
375	3.394	34.952	29.496	27.809	1470.09	183.603	19.92
400	2.795	34.935	29.665	27.856	1467.72	152.272	20.51
425	2.207	34.929	29.829	27.898	1465.75	185.202	20.99
450	1.469	34.909	29.996	27.939	1462.89	129.731	21.37
475	1.062	34.905	30.142	27.964	1461.57	89.475	21.69
500	.729	34.902	30.285	27.984	1460.39	62.842	21.96
600	.080	34.896	30.621	28.018	1458.43	37.269	22.72

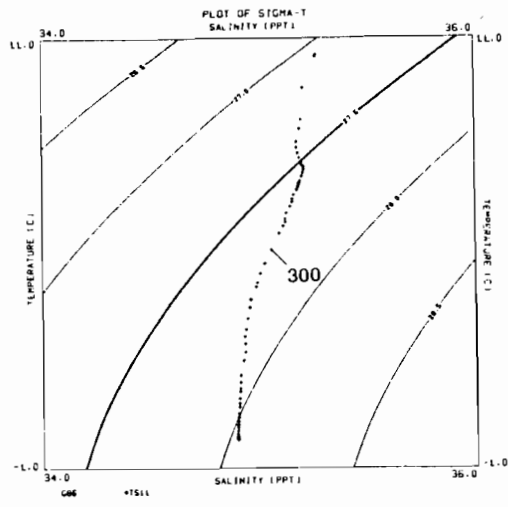
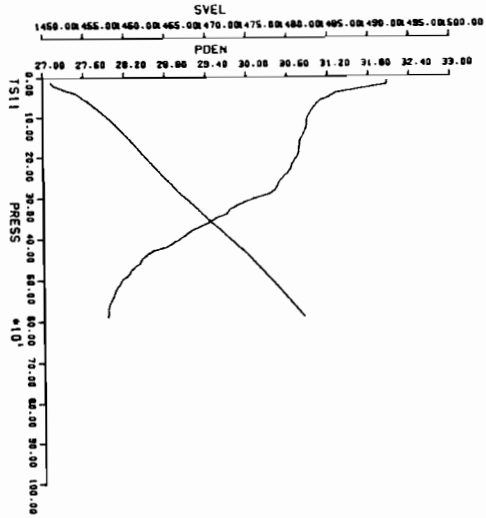
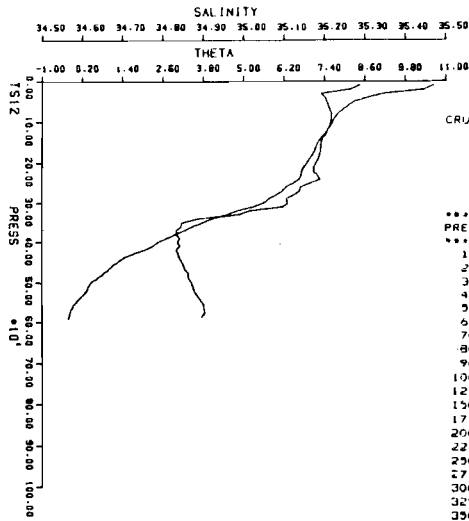


Fig. B157.

SACLANTCEN SM-209



CRUISE GB6 - STATION TS12
 LAT 61 6 7N - LON 3 32 3W * BOTTOM DEPTH 1182 M
 TIME 2 0 - DAY 23 - MONTH 6 - YEAR 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PDEN	SIGD	SVEL	IN=210E6	ST H
10	10.638	35.287	27.104	27.064	1492.39	-1.731	1.03
20	10.603	35.284	27.136	27.069	1492.37	208.273	2.06
30	9.724	35.215	27.279	27.166	1489.30	1433.222	2.96
40	8.931	35.201	27.443	27.284	1486.85	874.235	3.74
50	8.446	35.203	27.370	27.363	1485.15	624.236	4.43
60	8.173	35.208	27.662	27.411	1484.30	240.341	5.09
70	8.023	35.211	27.733	27.436	1483.91	298.941	5.74
80	7.847	35.215	27.808	27.466	1483.42	235.694	6.35
90	7.744	35.217	27.871	27.483	1483.20	109.193	6.95
100	7.654	35.215	27.929	27.493	1483.02	67.062	7.24
125	7.544	35.210	28.021	27.507	1482.89	72.112	8.99
150	7.317	35.197	28.158	27.529	1482.43	92.492	10.39
175	7.144	35.190	28.292	27.549	1482.17	54.610	11.75
200	6.976	35.184	28.426	27.567	1481.94	76.353	13.06
225	6.773	35.173	28.360	27.587	1481.56	82.393	14.33
250	6.660	35.183	28.699	27.610	1481.55	75.417	15.53
275	6.238	35.141	28.638	27.633	1480.26	111.284	16.69
300	5.828	35.112	28.985	27.663	1479.01	168.227	17.76
325	5.162	35.066	29.149	27.708	1476.69	71.187	18.72
350	4.218	34.913	29.260	27.696	1473.04	27.786	19.72
375	3.439	34.834	29.398	27.711	1470.09	91.355	20.68
400	2.791	34.835	29.562	27.772	1467.74	285.403	21.49
425	2.232	34.836	29.753	27.822	1465.74	126.622	22.17
450	1.520	34.829	29.935	27.879	1463.02	328.648	22.70
475	1.071	34.849	30.098	27.919	1461.44	807	23.14
500	0.684	34.863	30.257	27.936	1460.13	220.997	23.48
600	0.064	34.888	30.617	28.012	1458.37	52.436	24.29

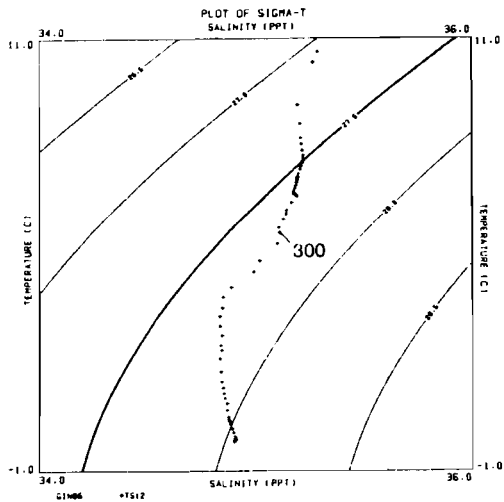
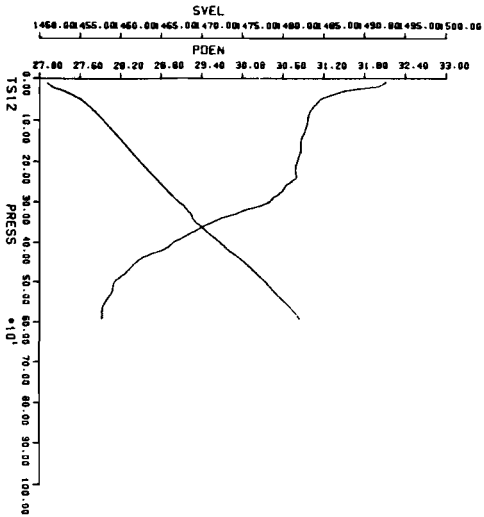


Fig. B158.

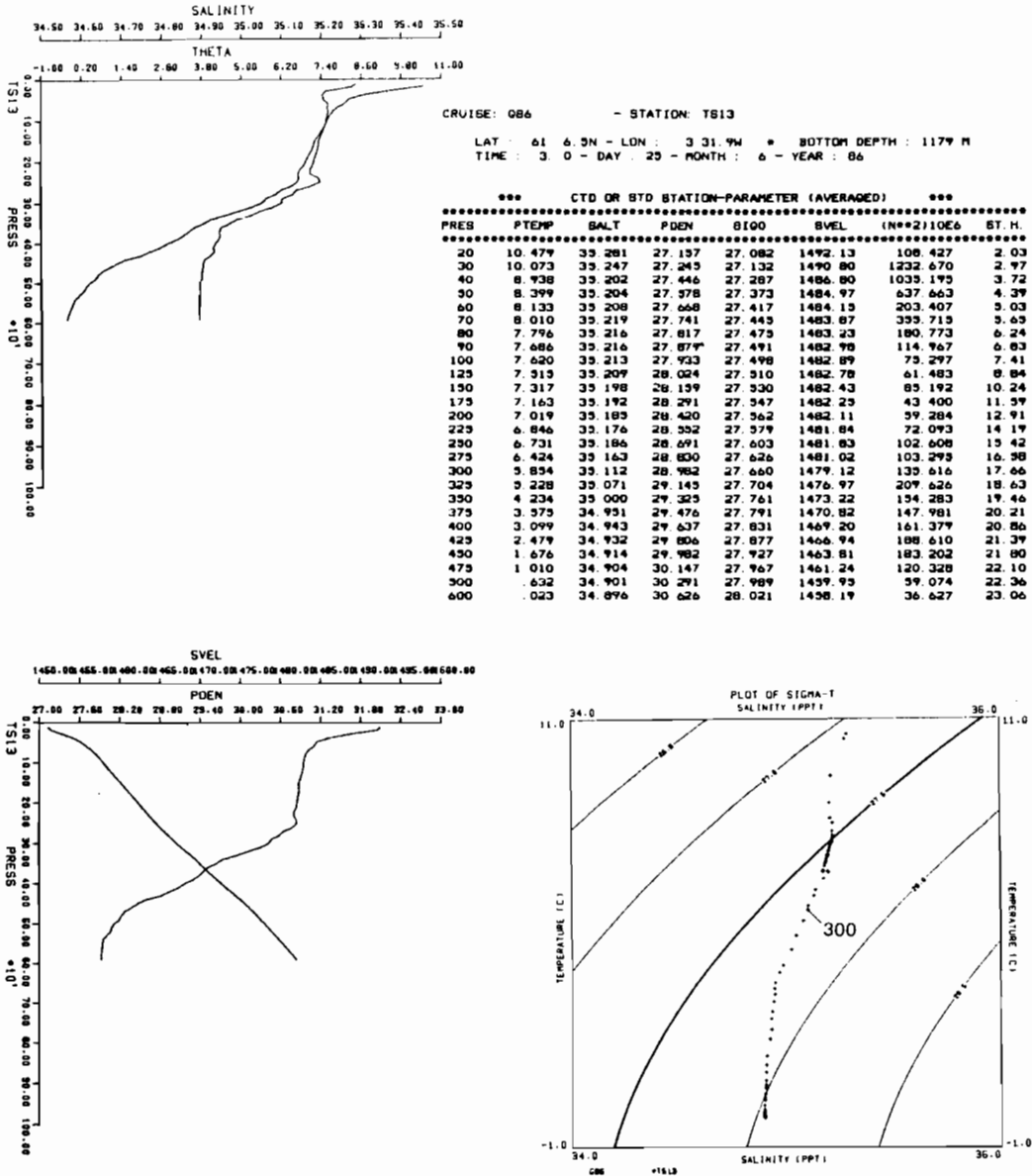
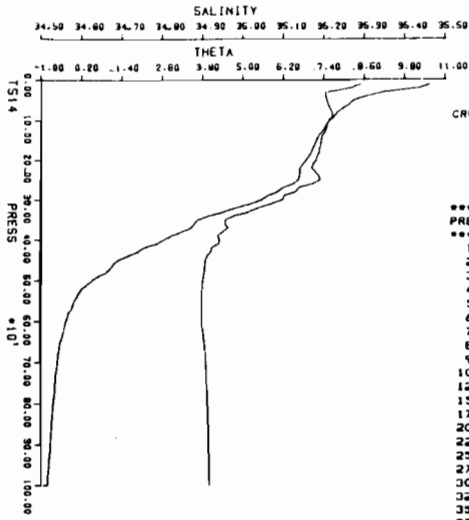


Fig. B159.

SACLANTCEN SM-209



CRUISE: 086 - STATION: TS14
 LAT: 61 44N - LON: 3 31.3W * BOTTOM DEPTH: 1178 M
 TIME: 03.09 - DAY: 23 - MONTH: 6 - YEAR: 86

*** CTD OR STD STATION-PARAMETER (AVERAGED) ***

PRES	PTEMP	SALT	PODN	SIG0	SVEL	(N**2)10E6	BT.H
10	10.532	35.288	27.128	27.084	1492.23	-0.016	1.02
20	10.529	35.288	27.133	27.083	1492.31	48.386	2.03
30	9.670	35.227	27.275	27.182	1489.40	1539.241	2.91
40	8.926	35.202	27.448	27.289	1486.76	738.253	3.67
50	8.424	35.207	27.377	27.372	1483.07	610.353	4.35
60	8.235	35.208	27.633	27.402	1484.53	161.874	5.01
70	8.045	35.213	27.734	27.434	1483.99	326.777	5.69
80	7.870	35.217	27.607	27.464	1483.51	320.520	6.26
90	7.731	35.221	27.674	27.483	1483.23	79.638	6.86
100	7.627	35.215	27.933	27.499	1482.92	134.076	7.44
123	7.463	35.207	28.031	27.516	1482.38	78.264	8.86
150	7.263	35.197	28.166	27.537	1482.22	77.512	10.24
178	7.113	35.190	28.297	27.553	1482.03	44.414	11.38
200	6.974	35.184	28.426	27.568	1481.93	71.158	12.89
223	6.798	35.172	28.562	27.588	1481.50	74.697	14.13
250	6.681	35.185	28.697	27.609	1481.63	76.665	15.36
273	6.369	35.161	28.833	27.629	1480.88	101.950	16.32
300	5.816	35.111	28.986	27.664	1478.96	164.366	17.59
323	5.063	35.060	29.137	27.713	1476.28	234.110	18.34
350	4.059	34.986	29.334	27.768	1472.47	149.943	19.35
373	3.317	34.937	29.487	27.801	1470.58	113.801	20.07
400	2.933	34.942	29.650	27.843	1468.38	198.478	20.69
423	2.328	34.933	29.821	27.890	1466.28	132.838	21.20
450	1.679	34.913	29.981	27.927	1463.82	146.325	21.61
473	1.161	34.904	30.135	27.958	1461.92	39.702	21.94
500	.788	34.902	30.280	27.980	1460.63	117.249	22.22
600	.039	34.897	30.624	28.019	1458.33	39.070	22.93
700	-.380	34.902	31.129	28.047	1457.99	19.297	23.42
800	-.562	34.908	31.617	28.060	1458.82	8.607	23.76
900	-.674	34.911	32.097	28.068	1459.96	3.354	24.04
1000	-.703	34.913	32.366	28.069	1461.46	1238.217	24.31
1100	-.846	34.914	33.049	28.077	1462.31	3.169	24.50

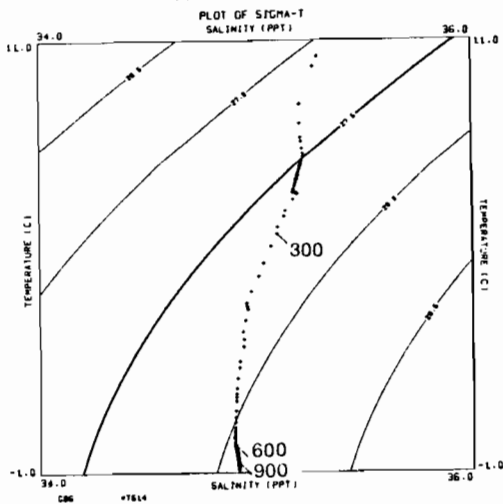
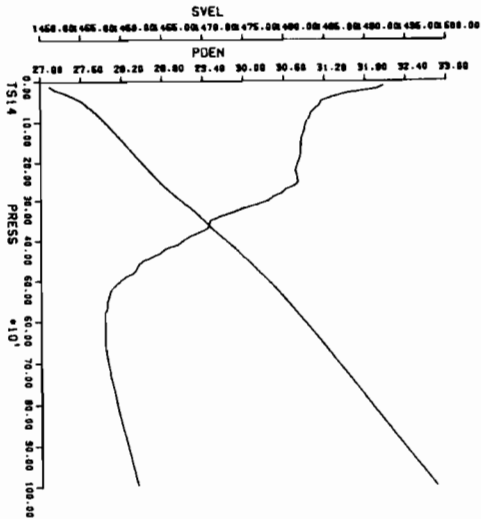


Fig. B160.

Appendix C

Bottle data

The bottle data for Stations 1 to 144 from Leg II (Figs. C1–C47) are presented in the following pages. The header information corresponds to the matching CTD cast but also includes wind speed and direction. The depths, temperature, salinity, and σ_t values are those taken from the end of the 1-min time-averaged data acquisition of the CTD just prior to the bottle closure. The depths are nominal corresponding to the nearest integer 5-m value. Note, the data will not correspond to the depth-averaged data of the downcasts. Space was left for entry of the tritium values when they become available.

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SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 1 date : 06.09.1986 Lat. : 60 31.99 N Wind spd : 30 KTS
bottom : 135 m time (GMT) : 18:22 Long. : 02 06.99 W Wind dir : 290 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.226	35.246	27.274	31	3.2			143.4	0.47	0.07
14.00	9.219	35.243	27.273	31	3.6	6.58			0.54	0.02
30.00	9.198	35.286	27.310	29						
52.00	9.130	35.285	27.321	27						
74.00	8.737	35.275	27.376	24	3.6			162.2	0.12	0.03
99.00	8.537	35.266	27.401	24	4.0	6.37		172.6		
115.00	8.502	35.266	27.406	24	4.0	6.34				

station : 2 date : 06.09.1986 Lat. : 60 44.00 N Wind spd : 30 KTS
bottom : 175 m time (GMT) : 21:10 Long. : 02 39.00 W Wind dir : 250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.285	35.291	27.300	34	2.8				0.70	0.12
15.00	9.285	35.291	27.300	34	2.8				0.68	0.12
29.00	9.289	35.289	27.298	34	2.8	6.65			0.68	0.12
50.00	9.282	35.292	27.301	32	3.0				0.68	0.14
74.00	8.980	35.303	27.359	23	3.7				0.14	0.03
105.00	8.699	35.317	27.415	23	4.6	6.27				
147.00	8.458	35.329	27.462	24	6.0	6.28				

station : 3 date : 06.09.1986 Lat. : 60 46.99 N Wind spd : 26 KTS
bottom : 380 m time (GMT) : 23:37 Long. : 02 47.99 W Wind dir : 250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.015	35.245	27.308	34				167.5	0.94	0.10
14.00	9.009	35.243	27.307	34					1.00	0.11
29.00	9.116	35.280	27.319	31		6.64			0.92	0.10
48.00	9.148	35.305	27.333	26					0.46	0.10
72.00	8.951	35.292	27.355	25					0.31	0.07
100.00	8.516	35.241	27.384	27		6.59	0.13	150.1		
148.00	8.332	35.272	27.437	23						
201.00	7.636	35.217	27.499	23		6.44				
298.00	6.429	35.164	27.626	23						
320.00	6.310	35.159	27.638	23		6.66				

Fig. C1.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 4 date : 06.10.1986 Lat. : 60 50 99 N Wind spd : 21 KTS
 bottom : 526 m time (GMT) : 02:39 Long. : 02 58.00 W Wind dir : 255 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.174	35.275	27.306	33	2.4				0.77	0.18
15.00	9.174	35.274	27.305	33	2.8				0.95	0.07
29.00	9.161	35.282	27.313	31	2.4	6.72			0.77	0.28
49.00	8.898	35.309	27.377	22	3.5				0.17	0.00
73.00	8.729	35.315	27.409	22	5.1				0.09	0.00
101.00	8.653	35.311	27.418	22	5.1	6.16				
149.00	8.522	35.301	27.430	21	6.3					
200.00	8.310	35.279	27.446	22	6.3					
293.00	7.260	35.206	27.545	22	5.5	6.48				
397.00	6.186	35.157	27.653	22	6.3					
448.00	4.801	35.042	27.732	22	6.3					

station : 5 date : 06.10.1986 Lat. : 60 57.00 N Wind spd : 14 KTS
 bottom : 769 m time (GMT) : 04:08 Long. : 03 12.00 W Wind dir : 230 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.502	35.184	27.342	35	5.9			146.7	1.20	0.11
14.00	8.503	35.180	27.338	35	5.9				1.34	0.14
29.00	8.504	35.185	27.342	35	5.9	6.73		143.2	1.16	0.11
48.00	8.351	35.189	27.369	31					0.32	0.14
74.00	8.008	35.191	27.423	25	6.5					
99.00	7.729	35.196	27.469	24	6.7	6.57	0.18	92.2		
198.00	6.684	35.154	27.584	22	7.3					
298.00	6.325	35.149	27.628	22	7.1					
500.00	0.757	34.887	27.971	21	8.1					
590.00	-0.256	34.894	28.034	21		6.83	0.17	48.2		
692.00	-0.822	34.906	28.070	24						

station : 6 date : 06.10.1986 Lat. : 61 04.99 N Wind spd : 05 KTS
 bottom : 1166 m time (GMT) : 11:35 Long. : 03 29.00 W Wind dir : 130 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.086	35.263	27.311	30	3.2				0.56	0.00
15.00	9.021	35.263	27.321	31	3.4				0.53	0.00
30.00	8.869	35.259	27.342	29	2.6	6.76			0.70	0.00
49.00	8.683	35.265	27.377	26	3.0				0.53	0.05
98.00	8.105	35.265	27.466	22	5.9	6.33				
197.00	7.412	35.227	27.539	22	5.9					
295.00	6.267	35.167	27.650	22	5.9					
494.00	1.070	34.905	27.964	21	6.9					
594.00	-0.138	34.893	28.027	21	7.9	6.85				
696.00	-0.449	34.904	28.052	21	9.1					
887.00	-0.668	34.911	28.067	21	10.2		0.07			
1036.00	-0.815	34.917	28.079	22	11.8	6.85				

Fig. C2.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 7 date : 06.10.1986 Lat. : 61 19.99 N Wind spd : 09 KTS
bottom : 1135 m time (GMT) : 15:09 Long. : 04 07.99 W Wind dir : 60 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.724	35.153	27.283	41	5.3			163.3	1.15	0.00
14.00	8.367	35.153	27.338	40	4.9				1.52	0.00
30.00	8.278	35.152	27.351	42	5.1				2.03	0.27
50.00	7.996	35.155	27.397	32	5.3			122.7	0.92	0.25
100.00	6.931	35.156	27.552	23	5.5	6.66		81.5		
199.00	6.296	35.143	27.627	22	6.9					
297.00	5.232	35.063	27.698	22	6.9			53.6		
497.00	1.667	34.920	27.934	22	7.5					
594.00	-0.155	35.252	28.318	22	8.5	6.96		67.6		
691.00	-0.359	34.899	28.043	22	9.4					
891.00	-0.681	34.911	28.068	23	11.4		-0.06			
1010.00	-0.759	34.914	28.074	23	11.4	6.84		57.8		

station : 8 date : 06.10.1986 Lat. : 61 30.00 N Wind spd : 17 KTS
bottom : 790 m time (GMT) : 17:10 Long. : 04 31.00 W Wind dir : 40 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.349	35.203	27.380	29	2.9				0.58	0.03
15.00	8.354	35.202	27.379	29	3.1				0.79	0.03
30.00	8.110	35.200	27.415	30	3.3				0.75	0.16
49.00	7.901	35.194	27.441	27	4.9				0.94	0.16
75.00	7.344	35.197	27.526	21	6.5				0.29	0.24
100.00	7.129	35.188	27.549	20	6.5	6.54	0.03			
200.00	6.590	35.159	27.601	19	6.5					
297.00	4.456	35.015	27.749	19	6.5					
394.00	2.324	34.919	27.880	19	6.5	7.04				
501.00	0.640	34.898	27.987	19	7.7					
599.00	-0.232	34.901	28.038	19	8.5		-0.16			
708.00	-0.527	34.189	27.477	20	10.2	6.84				

station : 9 date : 06.10.1986 Lat. : 61 34.99 N Wind spd : 23 KTS
bottom : 353 m time (GMT) : 19:24 Long. : 04 46.00 W Wind dir : 35 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.296	35.207	27.392	34	3.3				1.22	0.03
14.00	8.298	35.208	27.392	34	3.1				0.90	0.00
29.00	8.139	35.208	27.417	31	3.3				0.83	0.00
49.00	8.040	35.208	27.432	27	3.7			133.5	0.93	0.17
74.00	7.785	35.215	27.475	22	4.1				0.77	0.16
100.00	7.616	35.216	27.501	20	4.3	6.44		71.8		
150.00	7.454	35.211	27.521	19	5.7					
199.00	7.375	35.206	27.528	19	6.5					
247.00	7.148	35.195	27.552	19	6.9	6.47				
297.00	6.821	35.177	27.583	19	6.9			47.0		
316.00	6.721	35.163	27.586	19	7.1	6.56				

Fig. C3.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	10	date :	06.10.1986	Lat. :	61 43.00 N	Wind spd :	20 KTS
bottom :	236 m	time (GMT) :	21:00	Long. :	05 03.00 W	Wind dir :	30 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.445	35.198	27.362	34	3.6				0.82	0.00
14.00	8.445	35.198	27.362	34	3.6				0.88	0.00
30.00	8.185	35.195	27.399	31	3.6				0.96	0.08
50.00	7.850	35.191	27.447	24	5.0				0.48	0.24
73.00	7.599	35.199	27.490	21	5.5				0.17	0.08
99.00	7.448	35.201	27.514	20	5.5	6.65	0.13			
149.00	7.230	35.194	27.539	19	6.1					
198.00	7.126	35.191	27.552	20	6.1					

station :	11	date :	06.10.1986	Lat. :	61 58.00 N	Wind spd :	18 KTS
bottom :	270 m	time (GMT) :	23:32	Long. :	05 41.00 W	Wind dir :	10 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	8.351	35.184	27.365	33	4.3			133.5	0.88	0.00
14.00	8.346	35.184	27.366	33	4.3				0.95	0.00
30.00	8.307	35.179	27.368	33	4.3				1.18	0.00
50.00	7.944	35.181	27.425	27	4.8			83.9	0.84	0.11
75.00	7.081	35.182	27.551	21	5.2				0.13	0.02
99.00	7.037	35.181	27.557	20	5.4	6.55		44.6		
152.00	6.805	35.178	27.586	20	5.6					
208.00	6.682	35.179	27.604	21	5.8	6.61		40.8		

station :	12	date :	06.11.1986	Lat. :	61 51.99 N	Wind spd :	15 KTS
bottom :	204 m	time (GMT) :	06:35	Long. :	08 33.99 W	Wind dir :	350 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	8.888	35.226	27.314	30	1.0			97.3	0.53	0.00
9.00	8.898	35.226	27.312	29	1.0				0.53	0.00
25.00	8.824	35.211	27.312	30	1.4				0.61	0.00
49.00	8.601	35.230	27.362	27	2.2			82.8	0.51	0.00
75.00	8.413	35.240	27.400	24	3.3				0.39	0.04
99.00	8.236	35.242	27.428	22	4.7	6.52				
149.00	7.797	35.228	27.484	21	6.3					
186.00	7.684	35.224	27.497	21	6.5	6.37		63.0		

Fig. C4.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	13	date :	06.11.1986	Lat. :	61 47.99 N	Wind spd :	09 KTS
bottom :	502 m	time (GMT) :	08:04	Long. :	08 44.00 W	Wind dir :	330 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.100	35.228	27.281	32	2.0				0.64	0.16
14.00	9.108	35.229	27.280	32	2.8				0.77	0.00
29.00	9.070	35.230	27.287	32	3.0				0.48	0.00
49.00	9.060	35.223	27.284	32	3.0				0.57	0.00
74.00	9.017	35.220	27.288	33	3.0				0.71	0.00
99.00	8.673	35.229	27.350	25	3.2	6.85				
148.00	8.234	35.243	27.430	20	6.1					
198.00	8.113	35.236	27.442	20	7.1					
246.00	8.012	35.233	27.455	20	7.3	6.30				
298.00	7.939	35.233	27.466	19	7.5					
396.00	7.789	35.228	27.485	20	7.7					
445.00	6.963	35.192	27.576	21	8.1	6.44	0.04			

station :	14	date :	06.11.1986	Lat. :	61 43.00 N	Wind spd :	05 KTS
bottom :	796 m	time (GMT) :	09:56	Long. :	09 03.00 W	Wind dir :	300 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.316	35.251	27.264	31	2.0				0.43	0.00
10.00	9.239	35.254	27.279	32	1.8				0.51	0.00
25.00	8.893	35.240	27.324	34	1.8				0.83	0.05
49.00	8.601	35.248	27.376	23	3.3				0.43	0.08
74.00	8.412	35.263	27.418	20	4.9				0.16	0.00
98.00	8.287	35.256	27.432	19	6.5	6.45				
198.00	8.123	35.239	27.443	18	6.3					
296.00	7.981	35.225	27.454	18	6.5					
545.00	6.792	35.188	27.596	19	6.5	6.43				
642.00	4.147	35.054	27.814	20	7.3		0.03			
741.00	0.448	34.916	28.013	20	9.0		-0.16			
771.00	0.416	34.914	28.013	20	9.2	6.88	0.02			

station :	15	date :	06.11.1986	Lat. :	61 33.99 N	Wind spd :	09 KTS
bottom :	954 m	time (GMT) :	12:14	Long. :	09 30.99 W	Wind dir :	260 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.873	35.263	27.180	35	2.1			140.7	0.59	0.00
11.00	9.841	35.259	27.182	36	2.1				0.48	0.00
24.00	9.411	35.258	27.253	38	2.3				0.75	0.00
49.00	9.138	35.262	27.301	31	2.8			136.7	0.88	0.11
73.00	8.914	35.266	27.341	25	3.4				0.60	0.07
99.00	8.515	35.259	27.399	21	5.1	6.63				
197.00	8.450	35.291	27.434	19	5.5					
296.00	8.265	35.253	27.433	19	5.9					
493.00	8.088	35.238	27.448	19	6.4					
594.00	8.024	35.234	27.454	19	6.8	6.54		70.7		
739.00	7.970	35.238	27.466	19	7.6					
840.00	7.820	35.232	27.483	19	9.3	6.22		51.4		

Fig. C5.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	16	date :	06.11.1986	Lat. :	61 24.00 N	Wind spd :	08 KTS
bottom :	780 m	time (GMT) :	14:30	Long. :	09 56.99 W	Wind dir :	240 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	-	-	-	-	1.3			114.6	0.32	0.00
15.00	-	-	-	-	1.3				0.43	0.00
30.00	-	-	-	-	1.3				0.80	0.00
49.00	9.013	35.251	27.313	26	1.5			89.6	0.60	0.01
100.00	8.574	35.294	27.417	20	4.2	6.46	-	48.4		
196.00	8.474	35.286	27.426	19	5.7					
295.00	8.333	35.262	27.429	19	5.9			30.3		
492.00	8.115	35.240	27.445	18	6.6					
591.00	8.093	35.250	27.457	19	6.4	6.28		36.5		
693.00	7.906	35.231	27.470	18	6.6					
889.00	7.403	35.205	27.523	19	8.3					
1039.00	6.786	35.171	27.584	19	8.9	5.78		32.5		

station :	17	date :	06.11.1986	Lat. :	61 15.91 N	Wind spd :	11 KTS
bottom :	780 m	time (GMT) :	17:30	Long. :	09 26.44 W	Wind dir :	230 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.833	35.255	27.180	30	1.9				0.35	0.00
16.00	9.504	35.250	27.232	30	1.7				0.37	0.00
29.00	9.250	35.246	27.271	33	1.5				0.56	0.00
49.00	9.079	35.255	27.306	31	1.9	6.89			0.80	0.02
72.00	8.698	35.262	27.372	24	3.4				0.37	0.01
98.00	8.462	35.265	27.412	20	4.9					
198.00	8.234	35.248	27.433	19	6.5					
296.00	8.170	35.244	27.440	19	6.8	6.29				
388.00	8.086	35.240	27.450	19	7.2					
494.00	7.989	35.231	27.457	19	7.2					
600.00	-	-	-	-	8.5					
710.00	-	-	-	-	8.5	6.04				

station :	18	date :	06.11.1986	Lat. :	61 11.00 N	Wind spd :	13 KTS
bottom :	326 m	time (GMT) :	18:33	Long. :	09 03.99 W	Wind dir :	215 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.726	35.245	27.190	34	1.5				0.37	0.00
15.00	9.699	35.245	27.195	34	1.5				0.32	0.00
30.00	9.362	35.241	27.248	38	1.5				0.48	0.00
50.00	9.067	35.241	27.296	39	1.3	7.04			0.75	0.02
75.00	8.983	35.241	27.310	32	1.5				0.75	0.03
99.00	8.819	35.240	27.336	25	1.7					
150.00	8.180	35.242	27.437	20	5.9					
198.00	8.085	35.239	27.449	19	6.4					
265.00	8.030	35.240	27.458	20	6.8	6.36				

Fig. C6.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 19 date : 06.11.1986 Lat. : 61 03.99 N Wind spd : 10 KTS
bottom : 103 m time (GMT) : 20:46 Long. : 08 33.99 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.190	35.224	27.263	34	0.8			153.8	1.31	0.02
13.00	9.135	35.225	27.273	34	1.0				1.04	0.13
30.00	8.547	35.219	27.362	33	1.2				1.76	0.49
58.00	8.511	35.218	27.367	33	1.2				1.80	0.63
70.00	8.510	35.219	27.368	32	1.2	6.86			2.08	0.60
93.00	8.514	35.219	27.367	32	1.2	6.84		134.9		

station : 20 date : 06.11.1986 Lat. : 61 15.00 N Wind spd : 12 KTS
bottom : 455 m time (GMT) : 22:55 Long. : 08 08.99 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.495	35.277	27.254	33	2.0				0.92	0.00
15.00	9.496	35.277	27.254	33	1.8				0.68	0.00
29.00	9.380	35.274	27.271	35					0.79	0.00
48.00	9.254	35.272	27.290	36	1.6	6.98			0.57	0.07
73.00	8.685	35.253	27.367	24	2.4					
95.00	8.412	35.256	27.412	20	4.7					
146.00	8.220	35.243	27.432	19	6.1					
198.00	8.125	35.239	27.443	19	6.5	6.39				
248.00	8.060	35.233	27.448	19	6.5					
297.00	7.991	35.229	27.455	19	6.5					
345.00	7.982	35.231	27.458	19	6.5					
396.00	7.890	35.226	27.468	19	6.7	6.26				

station : 21 date : 06.12.1986 Lat. : 61 18.99 N Wind spd : 15 KTS
bottom : 855 m time (GMT) : 00:00 Long. : 07 58.00 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.986	35.236	27.306	39	1.8			187.0		
15.00	9.020	35.246	27.308	37	1.8					
30.00	8.733	35.250	27.357	30	2.6					
50.00	8.141	35.192	27.404	38	1.8	7.11				
72.00	8.102	35.198	27.414	34	2.4					
99.00	7.937	35.187	27.431	34	3.1		0.16			
199.00	7.844	35.235	27.482	20	6.6	6.49				
298.00	7.313	35.199	27.532	20	6.3			56.1		
444.00	5.389	35.120	27.724	20	7.0	6.67	-0.07			
541.00	1.696	34.934	27.943	19	7.9		0.05			
643.00	0.664	34.915	27.999	19	8.5		0.04			
826.00	-0.426	34.905	28.051	21	10.0	6.89	0.04	76.7		

Fig. C7.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 22 date : 06.12.1986 Lat. : 61 21.99 N Wind spd : 13 KTS
bottom : 767 m time (GMT) : 02:17 Long. : 07 52.99 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.971	35.239	27.310	32	1.3					
15.00	8.924	35.238	27.317	32	1.3					
30.00	8.497	35.222	27.372	31	1.1					
49.00	8.291	35.224	27.406	30	3.0	6.76				
73.00	8.036	35.232	27.451	23	5.1					
98.00	7.846	35.221	27.471	21	5.5		0.10			
200.00	7.393	35.202	27.522	20	5.9	6.68				
294.00	6.958	35.193	27.577	20	6.1					
444.00	3.591	35.026	27.849	20	7.2			0.03		
543.00	1.160	34.929	27.978	19	8.0			-0.05		
640.00	-0.284	34.901	28.041	19	9.9					
735.00	-0.499	34.906	28.056	20		6.93	0.04			

station : 23 date : 06.12.1986 Lat. : 61 28.00 N Wind spd : 19 KTS
bottom : 250 m time (GMT) : 04:14 Long. : 07 39.00 W Wind dir : 170 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.673	35.227	27.349	34	2.1			126.0	1.55	0.00
15.00	8.663	35.229	27.352	34	2.1				1.83	0.00
29.00	8.572	35.221	27.360	35	1.7				2.04	0.00
50.00	8.485	35.215	27.369	38	1.5	7.02		157.9	2.78	0.21
73.00	8.182	35.198	27.402	40	1.7				3.95	0.32
99.00	7.954	35.204	27.441	32	3.3	6.81		122.8		
149.00	7.790	35.206	27.467	25	4.8					
224.00	7.593	35.230	27.515	20	6.6	6.47		48.7		

station : 24 date : 06.12.1986 Lat. : 61 11.00 N Wind spd : 22 KTS
bottom : 209 m time (GMT) : 06:49 Long. : 07 07.00 W Wind dir : 180 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.069	35.188	27.411	44	2.3			195.4	3.38	1.05
15.00	8.062	35.189	27.413	43						
31.00	7.942	35.205	27.444	30		6.88			2.25	0.42
50.00	7.566	35.166	27.469	24	2.5			149.8	0.84	0.04
74.00	7.550	35.171	27.475	24	2.9	6.56			0.63	0.21
99.00	7.602	35.188	27.481	23	3.1			87.0		
150.00	7.690	35.218	27.492	21	3.3	6.35				
183.00	7.645	35.226	27.505	21	3.8			74.0		

Fig. C8.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	25	date :	06.12.1986	Lat. :	61 03.99 N	Wind spd :	21 KTS			
bottom :	812 m	time (GMT) :	08:30	Long. :	07 20.99 W	Wind dir :	160 deg			
depth	temp	sal	sigma-t	opac	SiO2	O2	d 180	PC	Chl a	Phaeoph a
m	deg C	‰	Kg/mc	‰	µM	ml/L	SNOW	µg/L	µg/L	µg/L
8.00	8.963	35.275	27.340	29	2.5			108.2	1.20	0.00
13.00	8.957	35.273	27.339	30	2.3			102.4	2.75	0.00
30.00	8.963	35.285	27.348	28						
49.00	8.814	35.289	27.375	24						
99.00	8.667	35.290	27.399	25	3.6	6.55		95.8		
196.00	8.420	35.287	27.435	19						
284.00	7.863	35.247	27.489	19						
399.00	5.608	35.123	27.700	20	6.5			31.5		
499.00	2.532	34.965	27.899	20	7.2	6.87				
589.00	0.840	34.919	27.991	20	8.0					
690.00	-0.003	34.908	28.032	20						
779.00	-0.253	34.906	28.044	21	9.3	6.93		41.5		
station :	26	date :	06.12.1986	Lat. :	60 53.00 N	Wind spd :	33 KTS			
bottom :	950 m	time (GMT) :	11:55	Long. :	07 39.00 W	Wind dir :	170 deg			
depth	temp	sal	sigma-t	opac	SiO2	O2	d 180	PC	Chl a	Phaeoph a
m	deg C	‰	Kg/mc	‰	µM	ml/L	SNOW	µg/L	µg/L	µg/L
7.00	9.069	35.247	27.301	36	2.5				1.27	0.07
14.00	9.070	35.247	27.301	36	2.5				1.34	0.00
29.00	9.040	35.247	27.306	36	2.5				0.56	0.07
50.00	8.616	35.246	27.372	25	2.3	6.68			0.49	0.00
99.00	8.234	35.240	27.427	22	2.9					
198.00	7.647	35.225	27.504	20	4.2					
293.00	5.709	35.134	27.696	20	6.3					
396.00	3.447	35.016	27.855	20	6.7					
494.00	1.075	34.929	27.983	19	7.5	6.87				
590.00	-0.103	34.900	28.031	19	8.6		-0.07			
690.00	-0.660	34.906	28.063	20	10.2					
903.00	-0.684	34.909	28.066	21	10.4	6.77	0.02			
station :	27	date :	06.12.1986	Lat. :	60 33.99 N	Wind spd :	20 KTS			
bottom :	843 m	time (GMT) :	17:10	Long. :	08 12.99 W	Wind dir :	210 deg			
depth	temp	sal	sigma-t	opac	SiO2	O2	d 180	PC	Chl a	Phaeoph a
m	deg C	‰	Kg/mc	‰	µM	ml/L	SNOW	µg/L	µg/L	µg/L
7.00	8.918	35.247	27.325	33	2.6				0.85	0.00
15.00	8.905	35.245	27.326	33	2.6				0.45	0.00
32.00	8.890	35.246	27.329	33	2.6				0.99	0.00
51.00	8.607	35.249	27.376	26	3.2	6.79			0.70	0.14
73.00	8.354	35.261	27.425	21						
96.00	8.166	35.246	27.442	21	5.1					
196.00	7.797	35.226	27.482	20	6.0	6.31				
297.00	7.393	35.206	27.526	20	6.8					
398.00	6.234	35.158	27.647	20	6.6					
499.00	5.329	35.118	27.730	20	6.8					
593.00	3.795	35.054	27.851	20	7.2					
738.00	-0.461	34.915	28.061	21	7.9	6.89				

Fig. C9.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	28	date :	06.12.1986	Lat. :	60 12.00 N	Wind spd :	18 KTS
bottom :	908 m	time (GMT) :	19:48	Long. :	08 25.00 W	Wind dir :	250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.688	35.311	27.249	33	1.1			150.5	0.36	0.57
14.00	9.689	35.311	27.248	33	0.8				0.71	0.00
29.00	9.677	35.313	27.252	32	0.8				0.69	0.00
49.00	9.440	35.314	27.292	29	1.5	6.63		125.5	0.61	0.00
99.00	8.995	35.305	27.358	21	2.7			109.9		
198.00	8.721	35.311	27.407	19	4.6					
297.00	8.601	35.305	27.421	19	5.5					
399.00	8.533	35.298	27.426	19	5.7	6.36				
545.00	8.460	35.291	27.432	19	6.3			55.2		
645.00	8.405	35.288	27.438	19	6.3					
746.00	7.677	35.259	27.526	20	7.2					
881.00	5.913	35.185	27.710	21	7.6	6.41		69.7		

station :	29	date :	06.12.1986	Lat. :	60 17.99 N	Wind spd :	14 KTS
bottom :	859 m	time (GMT) :	22:56	Long. :	07 43.00 W	Wind dir :	250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.592	35.323	27.274	36	0.9				1.06	0.07
15.00	9.586	35.320	27.273	36	0.9				0.49	0.00
30.00	9.586	35.318	27.271	36	0.9				0.99	0.00
51.00	9.438	35.319	27.297	30	2.1				0.56	0.04
74.00	9.246	35.324	27.332	23	3.0	6.56				
98.00	9.097	35.325	27.357	20	3.4					
197.00	8.805	35.330	27.408	19	6.0					
295.00	8.722	35.324	27.417	19	6.2					
395.00	8.645	35.317	27.424	19	6.2	6.21				
493.00	8.598	35.311	27.426	19	6.4					
584.00	7.786	35.271	27.519	19	6.6					
819.00	-0.604	34.915	28.068	22		6.82				

station :	30	date :	06.13.1986	Lat. :	60 02.99 N	Wind spd :	17 KTS
bottom :	851 m	time (GMT) :	01:45	Long. :	08 02.00 W	Wind dir :	240 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.618	35.322	27.269	34	0.4			148.8	0.96	0.10
15.00	9.623	35.321	27.267	34	0.4				0.91	0.02
30.00	9.616	35.319	27.267	34	0.4				0.53	0.10
48.00	9.613	35.320	27.268	34	0.2			90.4	0.40	0.00
98.00	9.074	35.334	27.368	20	3.1			35.3		
202.00	8.833	35.334	27.407	19	5.0	6.36				
297.00	8.674	35.315	27.417	19	5.4			75.0		
395.00	8.576	35.303	27.423	19	5.4					
494.00	8.532	35.300	27.428	19	6.0					
597.00	8.415	35.287	27.436	19	6.2	6.22		44.1		
691.00	8.255	35.277	27.453	20	7.7					
825.00	6.515	35.198	27.642	21	7.9	6.26		62.0		

Fig. C10.

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SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 31 date : 06.13.1986 Lat. : 59 46.99 N Wind spd : 12 KTS
bottom : 906 m time (GMT) : 04:42 Long. : 07 28.00 W Wind dir : 235 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.723	35.312	27.243	37					1.12	0.00
14.00	9.721	35.311	27.243	37					0.88	0.25
29.00	9.723	35.314	27.245	37	1.2				0.99	0.00
48.00	9.645	35.315	27.259	33	1.4	6.73				
73.00	9.189	35.331	27.347	19	1.4					
99.00	9.085	35.340	27.371	19	3.1					
197.00	8.912	35.342	27.401	19	4.1	6.32				
299.00	8.778	35.328	27.411	19	5.2					
399.00	8.681	35.316	27.417	19	5.6					
495.00	8.629	35.311	27.421	19	5.8					
591.00	8.601	35.309	27.424	19	5.8					
805.00	8.364	35.298	27.453	20		6.28				

station : 32 date : 06.13.1986 Lat. : 59 26.00 N Wind spd : 12 KTS
bottom : 541 m time (GMT) : 08:04 Long. : 06 39.99 W Wind dir : 210 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.967	35.333	27.218	35	0.6			153.1	1.02	0.00
15.00	9.932	35.333	27.224	36	0.4				0.56	0.13
30.00	9.921	35.333	27.226	35	0.2				0.96	0.00
48.00	9.904	35.332	27.228	34	0.2	6.65		125.9	0.17	0.04
74.00	9.561	35.335	27.289	21	0.8				0.99	0.00
99.00	9.479	35.341	27.307	20	1.4			41.8		
149.00	9.315	35.360	27.349	20	3.9					
248.00	9.205	35.364	27.370	20	5.6	6.05				
348.00	9.114	35.360	27.382	21	5.6			33.0		
487.00	8.899	35.350	27.409	23	5.6	6.02		64.1		

station : 33 date : 06.13.1986 Lat. : 60 02.99 N Wind spd : 18 KTS
bottom : 659 m time (GMT) : 11:45 Long. : 06 45.00 W Wind dir : 200 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.252	35.262	27.283	31	2.6				0.77	0.00
15.00	9.093	35.261	27.308	31	2.6				0.40	0.02
30.00	9.070	35.261	27.312	29	2.6				0.83	0.00
48.00	8.937	35.289	27.355	25	3.4	6.50			0.40	0.01
75.00	8.759	35.291	27.385	21	4.2					
99.00	8.168	35.282	27.470	20	4.5					
200.00	8.494	35.302	27.436	19	6.0					
302.00	7.953	35.255	27.482	20	6.4	6.31				
395.00	6.905	35.189	27.581	20	6.4					
495.00	6.289	35.157	27.639	20	6.8					
575.00	4.525	35.070	27.785	20	7.2	6.68				

Fig. C11.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	34	date :	06.13.1986	Lat. :	60 09.00 N	Wind spd :	18 KTS
bottom :	1180 m	time (GMT) :	13:26	Long. :	06 46.00 W	Wind dir :	190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.972	35.250	27.319	28	2.9			87.1	0.83	0.00
15.00	8.650	35.240	27.362	28	2.9				0.80	0.00
30.00	8.564	35.245	27.380	27	2.9				0.83	0.00
50.00	8.446	35.236	27.391	26	3.3	6.69		96.9	0.53	0.70
98.00	8.052	35.210	27.431	25	4.0			96.0		
300.00	6.528	35.172	27.619	18	6.2	6.47				
399.00	5.523	35.115	27.704	18	6.2					
491.00	4.265	35.047	27.795	18	6.6					
598.00	1.637	34.924	27.939	18	6.6	6.92		93.3		
788.00	-0.384	34.897	28.043	18	8.4					
985.00	-0.690	34.904	28.063	19	9.9					
1123.00	-0.759	34.908	28.069	20	10.3	6.87		28.2		

station :	35	date :	06.13.1986	Lat. :	60 20.99 N	Wind spd :	19 KTS
bottom :	1066 m	time (GMT) :	15:33	Long. :	06 48.00 W	Wind dir :	180 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.974	35.251	27.319	28	3.0				0.67	0.05
13.00	8.975	35.250	27.318	28	2.9				0.72	0.00
29.00	8.475	35.234	27.385	28	3.2				0.64	0.05
50.00	8.460	35.236	27.389	27	3.2	6.69			0.92	0.07
100.00	8.413	35.236	27.396	25	3.2					
194.00	7.279	35.195	27.533	20	5.3	6.56				
296.00	6.626	35.172	27.606	18	6.1					
397.00	5.100	35.096	27.740	18	6.3	6.61				
494.00	2.158	34.946	27.916	18	6.9					
596.00	0.859	34.906	27.979	18	7.2					
789.00	-	-	-	18	8.4					
1020.00	-0.490	34.904	28.054	19	9.9					

station :	36	date :	06.13.1986	Lat. :	60 32.99 N	Wind spd :	20 KTS
bottom :	546 m	time (GMT) :	17:29	Long. :	06 50.00 W	Wind dir :	175 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.212	35.291	27.312	27	2.3			76.2	0.53	0.00
15.00	9.189	35.289	27.314	27	2.3				0.40	0.00
31.00	8.991	35.292	27.349	23	2.6	6.51		50.8	0.53	0.00
50.00	8.635	35.290	27.404	19						
74.00	8.533	35.290	27.420	18						
100.00	8.354	35.283	27.442	18						
198.00	7.957	35.255	27.481	18	5.9	6.27		29.4		
297.00	7.067	35.197	27.565	19	6.0			64.7		
396.00	6.848	35.185	27.586	19	6.0					
480.00	6.254	35.154	27.642	19	6.2	6.53		63.2		

Fig. C12.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 37 date : 06.13.1986 Lat. : 60 47.99 N Wind spd : 21 KTS
bottom : 243 m time (GMT) : 19:21 Long. : 06 52.99 W Wind dir : 185 deg

depth m	temp deg C	sal Z.	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.176	35.281	27.310	27	2.5				0.61	0.00
15.00	9.090	35.285	27.327	27						
28.00	9.059	35.286	27.333	27						
45.00	9.007	35.276	27.334	28						
74.00	8.653	35.275	27.389	23	3.8	6.46			0.41	0.05
99.00	8.456	35.273	27.419	21	4.0					
149.00	8.161	35.264	27.457	18	5.6					
210.00	7.516	35.224	27.522	18	6.0	6.33				

station : 38 date : 06.13.1986 Lat. : 60 54.00 N Wind spd : 21 KTS
bottom : 174 m time (GMT) : 20:53 Long. : 06 28.99 W Wind dir : 180 deg

depth m	temp deg C	sal Z.	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	8.221	35.178	27.380	34	3.6			133.8	1.34	0.07
13.00	8.223	35.177	27.379	35	3.6				2.46	0.07
29.00	8.196	35.176	27.383	34	3.6				2.46	0.00
49.00	8.032	35.175	27.407	29	3.8	6.89		121.6	2.18	0.14
72.00	7.390	35.171	27.498	22	5.2					
100.00	7.130	35.178	27.541	19	6.0			55.2		
141.00	7.128	35.179	27.542	19	6.0	6.52		39.9		

station : 39 date : 06.13.1986 Lat. : 61 02.99 N Wind spd : 21 KTS
bottom : 280 m time (GMT) : 23:04 Long. : 05 52.99 W Wind dir : 190 deg

depth m	temp deg C	sal Z.	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.061	35.228	27.287	40	2.7			98.7	1.97	0.21
14.00	9.053	35.232	27.292	39	2.7				1.90	0.00
29.00	8.862	35.253	27.339	27	2.7	6.69			1.48	0.14
48.00	8.347	35.242	27.411	22	3.8			56.8	1.13	0.35
74.00	8.007	35.231	27.455	21	5.0					
98.00	7.857	35.217	27.466	20	5.0			35.9		
149.00	7.118	35.177	27.542	19	5.4					
248.00	6.399	35.159	27.626	19	6.5	6.48		36.8		

Fig. C13.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	40	date :	06.14.1986	Lat. :	60 47.99 N	Wind spd :	27 KTS
bottom :	734 m	time (GMT) :	01:30	Long. :	05 22.00 W	Wind dir :	190 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.152	35.273	27.308	32	3.2				1.20	0.07
14.00	9.133	35.271	27.309	32	3.2				1.20	0.14
29.00	9.141	35.276	27.312	32	2.6				1.22	0.07
47.00	9.045	35.289	27.338	25	2.4	6.61			0.80	0.00
74.00	8.889	35.315	27.383	18	3.2					
98.00	8.712	35.317	27.413	18	5.2					
151.00	8.583	35.308	27.426	18	6.0					
251.00	8.367	35.294	27.449	18	6.0					
349.00	7.757	35.244	27.502	18	6.4	6.25				
642.00	-0.173	34.896	28.031	19	8.4	6.88				

station :	41	date :	06.14.1986	Lat. :	60 35.99 N	Wind spd :	23 KTS
bottom :	985 m	time (GMT) :	03:48	Long. :	04 59.00 W	Wind dir :	210 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.429	35.287	27.273	34	2.7			105.4	0.77	0.00
14.00	9.435	35.285	27.271	34	2.7				1.39	0.00
30.00	9.270	35.275	27.290	31					1.36	0.00
50.00	9.038	35.277	27.329	27					0.79	0.06
98.00	8.485	35.265	27.408	20						
198.00	8.213	35.263	27.448	18		6.28				
298.00	7.556	35.230	27.521	18						
403.00	6.154	35.158	27.658	18						
495.00	3.385	34.949	27.808	18		6.92				
592.00	1.289	34.904	27.948	18		6.91				
791.00	-0.562	34.902	28.055	19	9.2					
870.00	-0.743	34.907	28.067	20	10.0					

station :	42	date :	06.14.1986	Lat. :	60 27.00 N	Wind spd :	22 KTS
bottom :	1024 m	time (GMT) :	05:40	Long. :	04 43.00 W	Wind dir :	230 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.424	35.303	27.286	29	2.3			120.3	0.91	0.00
15.00	9.423	35.303	27.287	29	2.7				0.58	0.00
28.00	9.400	35.302	27.290	29	2.7				0.61	0.00
50.00	9.225	35.305	27.321	27	2.7			95.9	0.75	0.00
99.00	8.972	35.323	27.376	18	4.0			30.7		
198.00	8.656	35.317	27.422	18	6.1	6.18				
296.00	8.569	35.314	27.433	18	6.5			33.9		
397.00	8.274	35.282	27.454	18	6.7					
495.00	6.694	35.185	27.607	18	6.9	6.19				
593.00	4.801	35.073	27.756	18	7.2			41.9		
793.00	-0.524	34.904	28.055	18	9.5					
907.00	-0.808	34.910	28.073	21	11.0	6.81		43.3		

Fig. C14.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 43 date : 06.14.1986 Lat. : 60 18.99 N Wind spd : 16 KTS
bottom : 590 m time (GMT) : 07:28 Long. : 04 24.99 W Wind dir : 220 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.456	35.296	27.276	30	2.2				0.93	0.00
13.00	9.440	35.297	27.279	30	2.2				1.04	0.00
29.00	9.199	35.298	27.320	28	2.6				0.91	0.00
50.00	9.250	35.326	27.333	21		6.46			0.35	0.06
74.00	9.204	35.329	27.343	20	3.0				0.21	0.08
98.00	8.973	35.311	27.367	19	3.7					
148.00	8.838	35.320	27.395	18	4.8					
249.00	8.594	35.310	27.426	18	5.9	6.19				
342.00	8.368	35.294	27.449	18	6.3					
530.00	6.629	35.206	27.633	21	7.0					

station : 44 date : 06.14.1986 Lat. : 60 13.00 N Wind spd : 14 KTS
bottom : 192 m time (GMT) : 08:56 Long. : 04 11.00 W Wind dir : 220 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.580	35.311	27.267	32	1.5			72.8	1.18	0.00
13.00	9.570	35.312	27.269	32	1.2				1.10	0.00
29.00	9.485	35.311	27.283	33						
50.00	9.344	35.317	27.311	28	1.0	6.59		90.4	1.02	0.18
71.00	9.298	35.318	27.319	23	1.2				0.60	0.11
98.00	9.201	35.324	27.340	21	1.7			61.4		
145.00	8.769	35.332	27.416	20	4.7					
170.00	8.764	35.334	27.418	20	4.9	6.17		56.4		

station : 45 date : 06.14.1986 Lat. : 60 23.00 N Wind spd : 15 KTS
bottom : 198 m time (GMT) : 11:51 Long. : 03 25.00 W Wind dir : 210 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.602	35.310	27.262	32	1.3				0.67	0.00
14.00	9.536	35.306	27.270	32	1.3				0.64	0.00
29.00	9.374	35.311	27.301	29	1.3				0.69	0.00
49.00	9.310	35.311	27.312	27	1.3	6.57			0.56	0.00
73.00	9.049	35.323	27.364	20	2.0					
97.00	8.857	35.331	27.401	19	3.1					
150.00	8.650	35.328	27.431	20	4.6					
181.00	8.653	35.331	27.433	20	5.1	6.07				

Fig. C15.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 46 date : 06.14.1986 Lat. : 60 45.00 N Wind spd : 15 KTS
 bottom : 186 m time (GMT) : 15:04 Long. : 02 43.00 W Wind dir : 230 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.525	35.303	27.270	32				95.2	0.84	0.00
15.00	9.512	35.301	27.270	32					0.80	0.00
30.00	9.485	35.302	27.276	32				118.4	0.77	0.00
50.00	9.424	35.305	27.288	32		6.62			0.84	0.00
75.00	9.124	35.302	27.335	27						
100.00	9.025	35.298	27.348	21				46.0		
150.00	8.658	35.329	27.431	19						
169.00	8.623	35.340	27.445	21		6.12		47.2		

station : 47 date : 06.14.1986 Lat. : 60 48.99 N Wind spd : 15 KTS
 bottom : 422 m time (GMT) : 15:52 Long. : 02 52.00 W Wind dir : 230 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.305	35.260	27.272	34				111.7	1.20	0.00
14.00	9.314	35.261	27.272	34					1.20	0.00
28.00	9.163	35.261	27.297	34					1.20	0.00
49.00	9.074	35.263	27.313	31		6.67		124.7	1.23	0.00
73.00	8.777	35.268	27.364	22						
100.00	8.781	35.319	27.404	19				61.4		
148.00	8.657	35.317	27.422	18						
196.00	8.530	35.320	27.444	19		6.13				
298.00	8.373	35.306	27.458	20				51.8		
378.00	7.465	35.225	27.530	19		6.36		52.7		

station : 48 date : 06.14.1986 Lat. : 60 53.00 N Wind spd : 14 KTS
 bottom : 565 m time (GMT) : 17:25 Long. : 03 00.99 W Wind dir : 230 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.568	35.298	27.259	42					1.55	0.00
15.00	9.563	35.300	27.261	41					1.55	0.00
29.00	9.386	35.298	27.289	39					1.69	0.00
50.00	9.196	35.301	27.322	28					1.44	0.04
73.00	9.149	35.302	27.331	22					0.63	0.04
100.00	8.953	35.299	27.360	19						
151.00	8.703	35.319	27.416	18						
197.00	8.558	35.305	27.428	18						
299.00	8.416	35.298	27.445	18						
396.00	8.061	35.269	27.476	18						
492.00	7.189	35.221	27.567	18						

Fig. C16.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 49 date : 06.14.1986 Lat. : 60 59.00 N Wind spd : 14 KTS
bottom : 850 m time (GMT) : 20:08 Long. : 03 13.00 W Wind dir : 205 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.535	35.292	27.259	39				129.2	1.13	0.07
13.00	9.535	35.293	27.260	40					1.27	0.00
29.00	9.328	35.295	27.296	36				125.5	1.13	0.14
50.00	9.182	35.296	27.321	28		6.66			1.58	0.11
71.00	9.126	35.299	27.332	23						
99.00	8.899	35.335	27.397	18				46.6		
196.00	8.602	35.310	27.425	18		6.18				
300.00	8.384	35.291	27.444	18				120.6		
396.00	7.858	35.252	27.493	18						
496.00	6.361	35.165	27.636	18				57.7		
589.00	2.909	34.930	27.838	18						
748.00	0.192	34.899	28.014	18		6.90		48.9		

station : 50 date : 06.14.1986 Lat. : 61 05.99 N Wind spd : 15 KTS
bottom : 1179 m time (GMT) : 22:23 Long. : 03 32.99 W Wind dir : 215 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.646	35.145	27.289	36					1.80	0.00
15.00	8.646	35.146	27.289	36						
29.00	8.398	35.152	27.333	32					1.63	0.06
48.00	8.297	35.151	27.348	33		6.93			2.37	0.11
98.00	7.318	35.177	27.514	22			0.02			
201.00	6.551	35.147	27.597	18		6.62				
301.00	5.649	35.088	27.667	18						
497.00	2.261	34.917	27.884	18			0.02			
592.00	0.865	34.907	27.980	18		6.95	0.09			
691.00	-0.129	34.898	28.031	19			-0.11			
866.00	-0.688	34.904	28.063	20						
1135.00	-0.856	34.910	28.075	23		6.84	0.02			

station : 51 date : 06.15.1986 Lat. : 61 19.99 N Wind spd : 15 KTS
bottom : 1132 m time (GMT) : 01:15 Long. : 04 07.00 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.058	35.200	27.266	37				152.4	1.27	0.00
14.00	9.059	35.201	27.266	37					1.65	0.00
29.00	9.052	35.201	27.268	37				127.6	1.76	0.00
48.00	8.625	35.205	27.339	30		6.77			1.44	0.14
98.00	7.433	35.199	27.514	19						
197.00	6.388	35.138	27.611	18						
296.00	3.790	34.966	27.781	18				45.6		
496.00	0.065	34.902	28.024	-						
596.00	-0.315	34.892	28.035	18		6.90		72.9		
690.00	-0.513	34.900	28.051	18						
891.00	-0.707	34.907	28.066	18						
1005.00	-0.791	34.911	28.073	18		6.84		57.7		

Fig. C17.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 52 date : 06.15.1986 Lat. : 61 30.00 N Wind spd : 10 KTS
bottom : 816 m time (GMT) : 03:48 Long. : 04 30.00 W Wind dir : 185 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.603	35.197	27.336	30					0.82	0.00
14.00	8.599	35.194	27.334	30					0.79	0.13
29.00	8.582	35.194	27.337	30					0.75	0.00
49.00	8.533	35.193	27.344	30		6.81			0.84	0.11
74.00	8.161	35.194	27.402	24						
99.00	7.490	35.195	27.503	20		6.56				
195.00	6.556	35.155	27.602	18						
297.00	4.606	35.008	27.727	18						
495.00	0.928	34.896	27.967	19						
595.00	-0.179	34.888	28.025	18		7.13	na			
691.00	-0.497	34.902	28.052	18						
744.00	-0.596	34.906	28.060	20		6.80				

station : 53 date : 06.15.1986 Lat. : 61 36.99 N Wind spd : 14 KTS
bottom : 307 m time (GMT) : 05:34 Long. : 04 48.00 W Wind dir : 180 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.614	35.203	27.339	33				102.0	0.93	0.07
15.00	8.615	35.202	27.338	33					0.96	0.00
30.00	8.223	35.192	27.391	27				78.0	0.75	0.05
50.00	8.111	35.197	27.412	27		6.67			0.63	0.07
75.00	7.946	35.209	27.447	22						
99.00	7.820	35.212	27.468	20				47.3		
151.00	7.506	35.200	27.504	20						
200.00	7.373	35.202	27.525	19		6.37				
248.00	7.284	35.198	27.535	19						
277.00	7.246	35.198	27.540	19		6.38		49.5		

station : 54 date : 06.15.1986 Lat. : 61 44.00 N Wind spd : 20 KTS
bottom : 230 m time (GMT) : 07:19 Long. : 05 07.99 W Wind dir : 180 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.531	35.173	27.329	28					1.72	0.14
13.00	8.532	35.175	27.330	29					2.11	0.00
30.00	8.522	35.176	27.332	28					1.99	0.00
50.00	8.275	35.179	27.373	26						
74.00	7.762	35.181	27.452	21		6.62				
99.00	7.546	35.181	27.484	20						
148.00	7.175	35.180	27.536	19						
211.00	6.935	35.181	27.571	19		6.44				

Fig. C18.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 55 date : 06.15.1986 Lat. : 61 56.00 N Wind spd : 20 KTS
bottom : 289 m time (GMT) : 09:19 Long. : 05 39.00 W Wind dir : 200 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.765	35.171	27.290	36				148.6	1.63	0.00
14.00	8.745	35.171	27.293	36					1.87	0.28
30.00	8.715	35.174	27.300	36				149.7	1.96	0.00
47.00	8.267	35.177	27.373	27		6.80			1.27	0.25
75.00	7.706	35.176	27.456	22					0.69	0.22
99.00	7.382	35.177	27.504	20				72.8		
148.00	6.898	35.178	27.574	19						
259.00	6.677	35.175	27.602	20		6.50		40.6		

station : 56 date : 06.15.1986 Lat. : 62 23.00 N Wind spd : 22 KTS
bottom : 315 m time (GMT) : 13:05 Long. : 04 41.00 W Wind dir : 190 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.165	35.214	27.259	36	1.8			168.5	0.86	0.00
16.00	9.174	35.214	27.258	36	1.8				0.99	0.00
29.00	9.043	35.215	27.280	36	1.8			211.9	1.13	0.00
50.00	8.130	35.204	27.415	23	2.8	6.77		82.6	0.39	0.14
73.00	7.967	35.222	27.454	20	6.0				0.18	0.16
98.00	7.857	35.223	27.471	19	6.5			86.5		
147.00	7.735	35.218	27.485	18	6.8					
198.00	7.568	35.212	27.505	18	6.3	6.35				
245.00	7.320	35.202	27.533	18	6.3					
284.00	7.092	35.193	27.558	18	6.3	6.36		69.9		

station : 57 date : 06.15.1986 Lat. : 62 09.00 N Wind spd : 13 KTS
bottom : 368 m time (GMT) : 15:33 Long. : 04 00.00 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.147	35.204	27.255	33	1.7				0.92	0.00
15.00	9.122	35.203	27.258	33	1.7				0.84	0.00
30.00	8.845	35.203	27.302	30	1.7				0.86	0.00
50.00	8.306	35.200	27.385	25	1.4	7.02			0.56	0.07
76.00	8.106	35.200	27.415	25	1.9				0.62	0.03
100.00	7.738	35.199	27.470	20	5.0	6.52				
200.00	7.248	35.193	27.536	19	6.2	6.42				
327.00	6.595	35.159	27.600	20	6.3	6.44				

Fig. C19.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 58 date : 06.15.1986 Lat. : 62 01.99 N Wind spd : 14 KTS
bottom : 749 m time (GMT) : 17:19 Long. : 03 39.00 W Wind dir : 170 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.696	35.177	27.306	28	3.3			176.6	0.92	0.00
14.00	8.681	35.177	27.308	28	3.6				0.74	0.07
30.00	8.491	35.189	27.347	25	3.6			134.6	0.40	0.23
51.00	8.022	35.167	27.402	25	4.1	6.87		60.4	0.68	0.03
75.00	7.547	35.177	27.400	21	5.4				0.34	0.34
102.00	7.346	35.196	27.524	18	6.7	6.51		81.7		
199.00	6.869	35.175	27.575	18	6.7	6.52				
297.00	5.666	35.104	27.677	18	7.2			60.5		
396.00	2.900	34.921	27.831	17	6.7	6.93				
496.00	1.024	34.905	27.968	18	7.2			45.7		
682.00	-0.602	34.908	28.062	18		6.84		49.9		

station : 59 date : 06.15.1986 Lat. : 61 55.66 N Wind spd : 14 KTS
bottom : 1390 m time (GMT) : 20:37 Long. : 03 17.40 W Wind dir : 140 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.895	35.155	27.257	36	4.1				1.27	0.00
15.00	8.869	35.153	27.259	35	4.1				1.30	0.00
29.00	8.521	35.162	27.321	34	4.1				1.80	0.00
51.00	7.842	35.178	27.438	21	5.2	6.65			0.45	0.01
100.00	7.357	35.199	27.525	18	6.9					
200.00	6.921	35.178	27.570	17	7.2	6.85				
297.00	5.645	35.098	27.675	18	7.2					
493.00	1.281	34.900	27.946	17	7.2	7.00				
592.00	0.180	34.897	28.013	17	8.3	6.97				
690.00	-0.296	34.893	28.035	17	8.3					
888.00	-0.556	34.901	28.054	17	9.4	6.83				
1238.00	-0.773	34.910	28.071	17	11.0	6.82				

station : 60 date : 06.15.1986 Lat. : 61 47.62 N Wind spd : 14 KTS
bottom : 1594 m time (GMT) : 23:06 Long. : 02 53.64 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.120	35.192	27.250	37	4.9			111.7	1.41	0.00
12.00	9.123	35.190	27.247	37	4.9				1.69	0.00
27.00	8.763	35.190	27.305	36	4.9			238.8	2.36	0.00
47.00	8.337	35.192	27.374	28	4.9			126.0	1.30	0.11
97.00	7.459	35.213	27.522	19	6.3			55.6		
196.00	6.520	35.158	27.609	17	6.8					
296.00	5.155	35.056	27.702	18	6.8			102.8		
494.00	0.792	34.899	27.978	17	7.4	6.69				
592.00	-0.080	34.884	28.017	17	7.6	6.93		61.4		
687.00	-0.336	34.893	28.037	17	8.4					
889.00	-0.593	34.904	28.058	17	10.1	6.87		121.7		
1425.00	-0.901	34.910	28.077	17	12.0	6.87		30.5		

Fig. C20.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 61 date : 06.16.1986 Lat. : 61 36.34 N Wind spd : 17 KTS
bottom : 1515 m time (GMT) : 01:45 Long. : 02 20.83 W Wind dir : 170 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.926	35.145	27.244	36	4.8				1.55	0.00
15.00	8.915	35.146	27.247	36	4.8				1.69	0.00
29.00	8.420	35.145	27.324	35	4.8				2.36	0.14
47.00	7.855	35.133	27.400	26	4.8	6.91			1.30	0.48
100.00	6.769	35.171	27.586	18	7.0		0.37			
299.00	4.202	34.994	27.760	18	7.0	6.80				
445.00	0.790	34.897	27.977	17	7.6	6.98	-0.21			
594.00	-0.258	34.888	28.029	17	8.4		0.00			
789.00	-0.547	34.901	28.054	17	9.8	6.83	0.05			
984.00	-0.702	34.907	28.066	17	10.7	6.85	0.07			
1180.00	-0.815	34.907	28.070	17	11.5	6.84	-0.05			
1333.00	-0.883	34.910	28.076	17			-0.18			

station : 62 date : 06.16.1986 Lat. : 61 30.00 N Wind spd : 14 KTS
bottom : 1214 m time (GMT) : 03:41 Long. : 02 03.99 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.140	35.183	27.239	37	5.0			157.6	1.44	0.00
14.00	9.140	35.184	27.240	37	5.0				1.48	0.00
30.00	8.600	35.181	27.324	33	5.3				1.62	0.04
49.00	8.271	35.191	27.383	22	5.3	6.65		248.6	0.34	0.17
99.00	7.489	35.207	27.512	18	6.6			76.5	0.05	0.07
198.00	6.596	35.164	27.604	18	7.1	6.54				
297.00	5.252	35.082	27.711	18	6.9			77.7		
398.00	2.639	34.939	27.869	17	7.4	6.85				
497.00	0.354	34.893	28.000	17	7.7	6.93				
596.00	-0.274	34.893	28.034	17	8.5			65.7		
789.00	-0.637	34.904	28.060	17	9.8	6.84		51.6		
1088.00	-0.869	34.911	28.076	17	11.9	6.86		68.6		

station : 63 date : 06.16.1986 Lat. : 61 26.00 N Wind spd : 14 KTS
bottom : 786 m time (GMT) : 05:30 Long. : 01 53.00 W Wind dir : 140 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.278	35.178	27.213	37	5.3				3.03	0.00
14.00	9.262	35.178	27.215	37	5.3	6.76			1.27	0.00
29.00	8.991	35.184	27.264	34	5.0				0.92	0.00
49.00	8.698	35.192	27.317	29	5.0	6.68			0.90	0.00
73.00	8.161	35.199	27.406	21	6.1				0.22	0.05
99.00	7.831	35.204	27.460	19	6.1					
199.00	6.819	35.175	27.582	18	6.9	6.44				
300.00	6.271	35.151	27.637	18	6.9	6.55				
495.00	2.127	34.913	27.892	17	6.9	7.05				
594.00	-0.034	34.910	28.035	19	10.3					
692.00	-0.808	34.911	28.073	20	11.6	6.82				

Fig. C21.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 64 date : 06.16.1986 Lat. : 61 24.00 N Wind spd : 18 KTS
bottom : 645 m time (GMT) : 06:45 Long. : 01 45.00 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.707	35.236	27.187	37	2.6			111.2	1.20	0.00
13.00	9.684	35.236	27.191	37	2.6	6.84			1.27	0.00
28.00	9.281	35.249	27.268	37	2.6			129.9	0.92	0.00
49.00	8.957	35.260	27.329	25	2.6	6.58		105.1	0.90	0.00
74.00	8.445	35.237	27.392	21	4.5				0.22	0.05
99.00	8.413	35.275	27.427	19	5.3			73.7		
145.00	8.027	35.254	27.470	18	6.1					
200.00	7.327	35.199	27.530	18	6.6	6.40				
298.00	6.558	35.159	27.605	18	6.9	6.53		32.4		
396.00	5.443	35.086	27.691	18	6.9	6.62				
493.00	1.966	34.922	27.912	18	7.1			51.2		
531.00	1.190	34.907	27.958	18	7.9	6.90		43.2		

station : 65 date : 06.16.1986 Lat. : 61 18.99 N Wind spd : 17 KTS
bottom : 352 m time (GMT) : 08:15 Long. : 01 32.00 W Wind dir : 145 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.906	35.297	27.201	43	2.1				1.62	0.00
15.00	9.879	35.300	27.207	44	2.1	6.87			1.72	0.00
30.00	9.376	35.302	27.294	34						
49.00	9.152	35.300	27.329	26	2.6	6.67			0.56	0.11
75.00	9.045	35.306	27.351	19	2.9				0.99	0.11
96.00	8.734	35.317	27.409	17						
149.00	8.618	35.312	27.424	17	6.1					
197.00	8.488	35.296	27.432	18	6.1	6.18				
247.00	8.467	35.303	27.441	18	6.1	6.18				
315.00	7.999	35.588	27.736	18						

station : 66 date : 06.16.1986 Lat. : 61 31.99 N Wind spd : 17 KTS
bottom : 195 m time (GMT) : 19:52 Long. : 00 06.00 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	10.296	35.279	27.119	27					0.31	0.00
15.00	10.233	35.280	27.131	27					0.35	0.00
28.00	9.475	35.275	27.256	27					0.49	0.00
49.00	9.243	35.277	27.296	27		6.63			0.73	0.03
75.00	9.037	35.282	27.333	21					0.34	0.14
100.00	8.546	35.306	27.431	19						
148.00	8.169	35.307	27.490	20						
176.00	8.084	35.304	27.500	21		6.07				

Fig. C22.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 67 date : 06.16.1986 Lat. : 61 43.00 N Wind spd : 18 KTS
bottom : 233 m time (GMT) : 21:55 Long. : 00 38.00 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	10.149	35.277	27.143	44					1.27	0.00
14.00	10.166	35.278	27.141	44					1.30	0.00
29.00	9.405	35.281	27.272	37					1.34	0.04
49.00	9.091	35.282	27.325	25		6.61			0.92	0.07
74.00	8.920	35.298	27.365	19					0.20	0.00
100.00	8.695	35.305	27.406	18		6.41				
150.00	8.603	35.323	27.435	18						
209.00	8.431	35.312	27.453	19		6.12				

station : 68 date : 06.16.1986 Lat. : 61 49.99 N Wind spd : 18 KTS
bottom : 496 m time (GMT) : 23:24 Long. : 00 53.00 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.877	35.256	27.173	44					1.30	0.00
13.00	9.852	35.254	27.176	45					1.23	0.00
29.00	9.166	35.297	27.324	27					0.81	0.07
49.00	9.070	35.298	27.341	22		6.56			0.59	0.00
74.00	8.790	35.315	27.399	19					0.14	0.00
101.00	8.740	35.315	27.407	18						
200.00	7.832	35.248	27.494	18		6.43				
298.00	7.057	35.201	27.569	18						
426.00	6.987	35.196	27.575	19		6.44				

station : 69 date : 06.17.1986 Lat. : 61 55.30 N Wind spd : 19 KTS
bottom : 830 m time (GMT) : 01:22 Long. : 01 11.09 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.575	35.209	27.188	40					1.40	0.00
15.00	9.585	35.210	27.187	40					1.49	0.00
29.00	8.907	35.216	27.303	35					1.38	0.04
49.00	8.129	35.195	27.408	31		6.85			2.07	0.01
74.00	7.721	35.197	27.471	21					0.30	0.21
101.00	7.474	35.204	27.512	18						
199.00	6.944	35.182	27.570	18		6.51				
307.00	6.255	35.155	27.642	18						
500.00	2.499	34.934	27.877	18		6.89				
588.00	0.851	34.908	27.981	17						
672.00	-0.212	34.905	28.041	17						
695.00	-0.394	34.911	28.055	17		6.77				

Fig. C23.

GIN Sea Cruise 1986
HNLMS TYDEMAN

Station : 70 date : 06.17.1986 Lat. : 62 02.41 N Wind spd : 17 KTS
 bottom : 1530 m time (GMT) : 05:15 Long. : 01 37.25 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.253	35.157	27.200	42	5.2				1.87	0.00
16.00	9.221	35.157	27.206	41	5.2				1.97	0.00
30.00	8.597	35.137	27.290	43	4.9				2.36	0.00
49.00	8.285	35.153	27.351	26	5.5	7.06			1.18	0.17
95.00	6.960	35.171	27.559	18	7.1					
198.00	6.040	35.134	27.654	18	7.1	6.62				
395.00	2.082	34.925	27.905	17	7.4					
494.00	0.490	34.904	28.001	17	7.7	6.98				
593.00	-0.154	34.893	28.028	17	8.5					
793.00	-0.531	34.903	28.055	17	9.9	6.85				
1086.00	-0.741	34.912	28.071	17	11.3					
1381.00	-0.894	34.915	28.080	17	12.4	6.90				

Station : 71 date : 06.17.1986 Lat. : 62 12.88 N Wind spd : 15 KTS
 bottom : 1731 m time (GMT) : 07:40 Long. : 02 07.47 W Wind dir : 160 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.248	35.191	27.228	44	5.3				2.43	0.00
15.00	9.229	35.189	27.229	43	5.3				2.36	0.00
24.00	9.215	35.186	27.229	42	5.6				2.46	0.00
49.00	8.481	35.202	27.359	25	5.8	6.66			1.10	0.14
97.00	7.371	35.206	27.529	18	7.2					
198.00	6.815	35.186	27.591	17						
299.00	6.157	35.145	27.647	17	7.2					
497.00	1.702	34.915	27.927	17	9.5	6.42				
593.00	0.192	34.892	28.009	17	8.0					
790.00	-0.379	34.900	28.045	17	9.3	6.86				
1183.00	-0.771	34.913	28.073	17	11.7					
1539.00	-0.913	34.915	28.081	17		6.90				

Station : 72 date : 06.17.1986 Lat. : 62 21.35 N Wind spd : 09 KTS
 bottom : 1330 m time (GMT) : 10:06 Long. : 02 35.57 W Wind dir : 180 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	9.163	35.198	27.247	33	1.5				0.87	0.00
15.00	9.116	35.199	27.256	33	1.5				1.02	0.00
30.00	9.017	35.197	27.270	31	1.5				0.84	0.00
50.00	7.878	35.199	27.449	26	2.3	6.83			1.13	0.00
100.00	7.410	35.203	27.521	18	6.8					
200.00	6.994	35.180	27.562	18	7.1	6.44				
300.00	5.791	35.109	27.666	18	7.4					
400.00	2.642	34.887	27.827	18	6.6					
500.00	1.130	34.910	27.964	17	7.4	6.99				
600.00	0.062	34.897	28.020	17	7.4					
800.00	-0.511	34.904	28.054	17	9.6	6.85				
1172.00	-0.567	34.915	28.066	18	11.7	6.88				

Fig. C24.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 73 date : 06.17.1986 Lat. : 62 26.71 N Wind spd : 14 KTS
bottom : 659 m time (GMT) : 11:51 Long. : 02 50.21 W Wind dir : 200 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	9.207	35.198	27.240	34	1.5				0.92	0.00
15.00	9.149	35.195	27.247	35	1.5				0.87	0.00
30.00	8.703	35.195	27.319	31	1.5				1.00	0.00
50.00	7.869	35.203	27.453	21	3.3	6.72			0.43	0.05
75.00	7.672	35.209	27.487	19	5.3				0.17	0.12
100.00	7.498	35.210	27.514	18	5.8					
200.00	7.022	35.184	27.561	18	6.0	6.43				
300.00	5.744	35.108	27.671	18	6.5					
400.00	1.921	34.902	27.900	18	6.0					
500.00	0.409	34.898	28.001	18	6.8	6.92				
593.00	-0.293	34.901	28.042	18	7.8	6.97				

station : 74 date : 06.17.1986 Lat. : 62 36.05 N Wind spd : 16 KTS
bottom : 768 m time (GMT) : 14:32 Long. : 03 18.31 W Wind dir : 210 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	8.332	35.047	27.261	43	2.0				4.24	0.00
14.00	8.311	35.048	27.265	44	2.3				3.36	0.42
29.00	7.989	35.044	27.310	45	2.5				4.74	0.03
49.00	6.811	35.023	27.463	27	2.5	7.13			1.77	0.03
74.00	5.011	35.031	27.699	19	4.8				0.28	0.09
99.00	4.154	34.967	27.744	18	6.0					
197.00	2.382	34.931	27.885	18	6.5	7.02				
294.00	0.304	34.901	28.009	17	7.0					
394.00	-0.279	34.897	28.038	17	7.8					
495.00	-0.485	34.903	28.052	17	8.3	6.89				
675.00	-0.708	34.910	28.068	19	10.3	6.86				

station : 75 date : 06.17.1986 Lat. : 62 34.33 N Wind spd : 19 KTS
bottom : 611 m time (GMT) : 19:22 Long. : 04 33.43 W Wind dir : 290 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.378	35.214	27.225		1.4				0.86	0.00
13.00	9.294	35.216	27.240		1.4				0.77	0.00
30.00	8.035	35.227	27.448		6.4				0.46	0.04
46.00	7.873	35.228	27.472		6.6	6.30	0.07		0.14	0.17
74.00	7.741	35.224	27.489		6.9				0.11	0.13
101.00	7.661	35.222	27.499		6.9				0.06	
203.00	7.215	35.199	27.545		6.9	6.36				
299.00	6.031	35.131	27.652		7.5		-0.06			
488.00	1.454	34.909	27.941		6.9	7.09				
545.00	0.558	34.894	27.989		7.8	6.99	-0.02			

Fig. C25.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 76 date : 06.17.1986 Lat. : 62 40.94 N Wind spd : 19 KTS
bottom : 802 m time (GMT) : 21:16 Long. : 04 27.81 W Wind dir : 285 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.054	35.194	27.262		2.0				0.67	0.00
15.00	9.047	35.197	27.265		2.0				0.87	0.00
28.00	8.939	35.196	27.282		2.0				1.20	0.00
50.00	7.457	35.197	27.509		6.0	7.07	0.07		1.13	0.00
99.00	7.021	35.182	27.559		6.5				0.06	0.03
198.00	4.947	35.054	27.724		5.5	7.23	0.06			
301.00	2.237	34.872	27.850		5.8					
402.00	0.956	34.881	27.953		6.3		0.21			
497.00	0.244	34.882	27.998		7.5	6.93				
594.00	-0.152	34.887	28.023		8.3		-0.04			
682.00	-0.449	34.898	28.047		8.8					
728.00	-0.625	34.902	28.058		9.3		0.09			

station : 77 date : 06.17.1986 Lat. : 62 47.01 N Wind spd : 16 KTS
bottom : 1091 m time (GMT) : 23:24 Long. : 04 22.65 W Wind dir : 285 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	8.058	34.995	27.262		3.8				2.22	0.00
14.00	8.009	34.994	27.268		3.8				2.25	0.00
29.00	6.555	34.991	27.473		5.2				2.18	0.32
50.00	5.596	34.974	27.583		6.1	7.11			5.63	2.01
100.00	3.967	34.929	27.734		6.9				0.09	0.11
199.00	2.207	34.873	27.853		6.6	7.12				
300.00	0.947	34.873	27.947		6.9					
399.00	0.189	34.878	27.997		7.2	7.04				
495.00	-0.149	34.879	28.017		7.5					
592.00	-0.399	34.888	28.036		8.7					
789.00	-0.654	34.900	28.058		10.1					
972.00	-0.794	34.909	28.071		11.6	6.86				

station : 78 date : 06.18.1986 Lat. : 62 58.01 N Wind spd : 20 KTS
bottom : 1962 m time (GMT) : 01:40 Long. : 04 17.43 W Wind dir : 280 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	8.253	35.071	27.292		1.3				3.45	0.00
15.00	7.835	35.067	27.352		1.8				3.65	0.03
29.00	6.416	35.011	27.507		4.9				1.76	0.42
48.00	5.437	35.006	27.628		6.2	6.88			0.44	0.10
96.00	4.230	34.961	27.731		5.9					
302.00	1.498	34.910	27.938		5.7					
483.00	0.105	34.878	28.002		6.7					
588.00	-0.271	34.881	28.024		7.2					
785.00	-0.573	34.894	28.050		8.2	7.04				
1082.00	-0.771	34.908	28.069		9.5					
1483.00	-0.933	34.914	28.081		10.3					
1725.00	-0.988	34.916	28.085		10.8	6.93				

Fig. C26.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 79 date : 06.18.1986 Lat. : 63 06.04 N Wind spd : 14 KTS
bottom : 2100 m time (GMT) : 08:05 Long. : 02 02.26 W Wind dir : 320 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.018	35.169	27.248		6.3				1.44	0.00
14.00	8.957	35.172	27.261		6.3				2.08	0.00
25.00	8.816	35.167	27.279		6.6				1.69	0.00
46.00	8.242	35.170	27.371		6.6				0.48	0.17
100.00	7.201	35.184	27.535		6.9	6.49				
199.00	6.729	35.180	27.598		8.1	6.50				
397.00	3.213	34.924	27.805		8.1	6.95				
593.00	0.414	34.878	27.984		8.2					
792.00	-0.370	34.887	28.035		8.7	6.95				
987.00	-0.584	34.895	28.051		10.4	6.86				
1478.00	-0.858	34.910	28.075		11.5					
1882.00	-0.949	34.914	28.082		12.4	6.96	0.11			

station : 80 date : 06.18.1986 Lat. : 62 49.43 N Wind spd : 14 KTS
bottom : 1708 m time (GMT) : 11:47 Long. : 01 17.70 W Wind dir : 340 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
2.00	9.523	35.167	27.163		4.1				1.94	0.07
16.00	9.467	35.162	27.169		4.1				2.22	0.04
24.00	9.174	35.160	27.216		3.8				1.69	0.04
48.00	8.216	35.199	27.398		4.1	6.59			0.40	0.14
100.00	7.261	35.227	27.561		6.3					
199.00	6.803	35.200	27.604		6.0	6.59				
394.00	4.097	34.994	27.771		6.8	6.80				
595.00	0.083	34.875	28.001		7.6					
788.00	-0.430	34.888	28.038		9.0	6.89				
986.00	-0.650	34.900	28.058		10.3	6.91				
1184.00	-0.784	34.909	28.070		11.1					
1517.00	-0.929	34.912	28.079		12.2	6.92				

station : 81 date : 06.18.1986 Lat. : 62 34.22 N Wind spd : 17 KTS
bottom : 1400 m time (GMT) : 16:37 Long. : 00 38.98 W Wind dir : 350 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.577	35.169	27.156	43	4.3				1.83	0.00
14.00	9.573	35.166	27.154	43	4.6				1.90	0.00
30.00	8.990	35.171	27.254	30	4.8				1.44	0.00
50.00	8.192	35.210	27.410	20	4.8	6.52			0.27	0.06
100.00	7.020	35.215	27.586	18	5.7					
199.00	6.243	35.157	27.645	17	6.0	6.62				
296.00	4.572	35.035	27.752	17	6.3					
398.00	1.835	34.926	27.926	17	7.4	6.94				
595.00	-0.343	34.900	28.043	17	8.3					
790.00	-0.649	34.908	28.064	17	9.7	6.87				
986.00	-0.772	34.191	27.489	17	10.5					
1245.00	-0.894	34.913	28.079	17	11.4					

Fig. C27.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 82 date : 06.18.1986 Lat. : 60 20.04 N Wind spd : 22 KTS
 bottom : 1062 m time (GMT) : 19:40 Long. : 00 02.88 W Wind dir : 25 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
0.00	9.539	35.183	27.173	44	4.6				1.48	0.00
14.00	9.544	35.176	27.167	43	4.6				1.87	0.00
28.00	8.669	35.177	27.310	31	5.2				1.51	0.00
49.00	8.270	35.173	27.369	23	5.8				0.56	0.16
102.00	7.134	35.208	27.564	18	6.9					
201.00	6.274	35.161	27.645	18	7.2	6.62				
299.00	4.556	35.033	27.752	18	7.5					
396.00	2.535	34.948	27.885	18	8.1	6.87				
495.00	0.668	34.917	28.000	17	8.9	6.88				
595.00	-0.362	34.907	28.050	17	10.4					
791.00	-0.811	34.914	28.076	17	10.4					
951.00	-0.939	34.915	28.082	18	11.8	6.86				

station : 83 date : 06.18.1986 Lat. : 62 13.21 N Wind spd : 24 KTS
 bottom : 688 m time (GMT) : 21:22 Long. : 00 16.93 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.627	35.203	27.174	44	4.6				1.87	0.00
15.00	9.629	35.204	27.175	44	4.8				2.08	0.00
29.00	8.778	35.207	27.316	31	4.8				0.99	0.04
49.00	8.402	35.203	27.372	24	5.7	6.61			0.66	0.05
75.00	7.998	35.234	27.458	19	6.3				0.12	0.08
100.00	7.666	35.223	27.499	19	6.8					
197.00	6.833	35.203	27.602	18	6.8	6.50				
296.00	5.992	35.139	27.664	18	6.8					
395.00	4.007	34.994	27.781	18	6.8	6.84				
492.00	2.449	34.938	27.885	18	7.1					
614.00	1.478	34.923	27.950	18	7.7	6.88				

station : 84 date : 06.18.1986 Lat. : 62 08.07 N Wind spd : 28 KTS
 bottom : 530 m time (GMT) : 22:39 Long. : 00 28.89 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.755	35.245	27.186	43	3.8				1.76	0.00
14.00	9.757	35.246	27.186	43	3.8				1.72	0.00
28.00	8.935	35.275	27.344	27	3.8				1.06	0.00
50.00	8.534	35.283	27.414	18	3.8	6.36			0.12	0.16
75.00	8.165	35.252	27.447	19	4.9					
99.00	8.213	35.283	27.464	18	5.8					
199.00	7.425	35.226	27.537	18	5.8	6.39				
295.00	6.871	35.191	27.588	18	6.3					
395.00	6.570	35.179	27.619	18	6.3					
478.00	6.507	35.176	27.625	18	6.3	6.51				

Fig. C28.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 85 date : 06.19.1986 Lat. : 62 00.11 N Wind spd : 26 KTS
bottom : 251 m time (GMT) : 00:19 Long. : 00 48.28 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.745	35.286	27.219	35	3.5				0.63	0.00
14.00	9.748	35.285	27.218	34	3.5				0.73	0.00
30.00	9.515	35.291	27.262	31	3.5				0.61	0.00
48.00	9.055	35.294	27.340	21	3.5				0.42	0.03
73.00	8.934	35.300	27.364	20	4.0				0.18	0.04
98.00	8.735	35.313	27.406	18	5.5	6.24				
149.00	8.533	35.307	27.433	18	6.3					
223.00	8.446	35.315	27.453	19	6.9	6.12				

station : 86 date : 06.19.1986 Lat. : 61 47.14 N Wind spd : 33 KTS
bottom : 248 m time (GMT) : 02:32 Long. : 01 19.47 E Wind dir : 10 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.836	35.273	27.194	34	2.3				1.23	0.00
14.00	9.834	35.275	27.196	34	2.3				1.09	0.00
29.00	9.771	35.273	27.205	33	2.6	6.68			1.16	0.00
48.00	9.198	35.283	27.308	24	2.9				0.54	0.05
76.00	8.767	35.299	27.390	20	2.9				0.18	0.05
99.00	8.620	35.305	27.418	19	5.8	6.26				
148.00	8.379	35.313	27.462	18	6.3					
224.00	8.032	35.308	27.511	21	7.2	6.16				

station : 87 date : 06.19.1986 Lat. : 61 48.64 N Wind spd : 26 KTS
bottom : 330 m time (GMT) : 03:50 Long. : 01 26.54 E Wind dir : 10 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.638	35.255	27.213	33	2.8				1.41	0.00
15.00	9.64	35.254	27.212	34	2.5				1.37	0.00
29.00	9.642	35.253	27.211	33	3.1				1.34	0.00
49.00	9.057	35.259	27.312	24	3.4	6.57			0.82	0.00
74.00	8.91	35.272	27.346	20	3.7				0.26	0.00
98.00	8.67	35.287	27.396	19	5.1					
146.00	8.411	35.295	27.443	18	6.2	6.20				
197.00	8.319	35.300	27.461	18	7.3					
290.00	8.094	35.305	27.500	19	7.6	6.21				

Fig. C29.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 88 date : 06.19.1986 Lat. : 61 51.88 N Wind spd : 27 KTS
bottom : 378 m time (GMT) : 05:23 Long. : 01 44.17 E Wind dir : 15 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.372	35.014	27.069	32	3.1				1.34	0.00
14.00	9.372	35.014	27.069	32	2.8				1.16	0.00
29.00	9.372	35.011	27.067	32	3.1				0.92	0.00
50.00	8.759	35.155	27.279	24	3.4	6.65			0.49	0.00
72.00	8.407	35.248	27.407	20	5.1				0.39	0.26
100.00	8.285	35.278	27.449	19	6.0					
149.00	8.053	35.291	27.495	18	5.7					
200.00	7.846	35.283	27.520	18	5.7	6.34				
297.00	7.150	35.220	27.571	18	5.7					
347.00	6.427	35.186	27.644	19	6.3	6.50				

station : 89 date : 06.19.1986 Lat. : 61 56.85 N Wind spd : 29 KTS
bottom : 385 m time (GMT) : 08:22 Long. : 02 08.74 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
1.0	9.470	35.136	27.148		2.8				1.76	0.00
13.00	9.358	35.227	27.238		3.1				0.27	0.00
29.00	9.133	35.306	27.337		3.1				0.43	0.00
51.00	9.039	35.303	27.349		3.4	6.49			0.32	0.00
74.00	8.925	35.328	27.388		4.3				0.13	0.00
101.00	8.687	35.332	27.429		5.7					
148.00	8.562	35.326	27.443		6.3					
196.00	8.413	35.313	27.457		6.3	6.16				
247.00	8.223	35.301	27.477		6.5					
336.00	6.884	35.204	27.596		6.8	6.51				

station : 90 date : 06.19.1986 Lat. : 62 03.96 N Wind spd : 29 KTS
bottom : 414 m time (GMT) : 11:07 Long. : 02 46.00 E Wind dir : 360 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
2.00	8.698	33.900	26.305		2.3				2.29	0.00
14.00	8.625	34.614	26.875		2.5				2.08	0.00
23.00	7.838	34.635	27.012		3.1				0.74	0.04
49.00	6.650	34.795	27.306		3.9	6.46			0.10	0.05
70.00	7.380	35.060	27.413		4.5				0.07	0.12
98.00	7.505	35.163	27.476		5.1	6.30				
149.00	7.579	35.253	27.536		5.3					
198.00	7.391	35.246	27.557		5.6	6.36				
245.00	6.912	35.204	27.592		5.6					
297.00	6.616	35.198	27.628		5.6					
375.00	5.863	35.192	27.722		6.2	6.47				

Fig. C30.

Report no. changed (Mar 2006): SM-209-2-UU

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 91 date : 06.19.1986 Lat. : 62 09.70 N Wind spd : 26 KTS
bottom : 362 m time (GMT) : 13:47 Long. : 03 19.46 E Wind dir : 10 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	8.939	33.032	25.587		1.4				1.55	0.14
16.00	8.208	34.592	26.922		2.8				0.67	0.21
31.00	8.637	34.765	26.992		2.8				0.74	0.14
50.00	8.396	34.861	27.105		3.1	6.56			0.54	0.14
74.00	7.340	34.992	27.365		3.9				0.00	0.00
100.00	6.275	34.909	27.445		4.5					
147.00	6.626	35.074	27.529		5.2					
199.00	7.008	35.197	27.573		5.3					
323.00	5.741	35.170	27.720		5.9	6.47				

station : 92 date : 06.19.1986 Lat. : 62 12.72 N Wind spd : 30 KTS
bottom : 212 m time (GMT) : 15:32 Long. : 03 36.05 E Wind dir : 360 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
2.00	8.428	33.495	26.028		1.7				1.58	0.00
15.00	8.168	34.506	26.861		2.5				0.49	0.11
30.00	7.391	34.643	27.082		2.8				0.16	0.10
49.00	6.679	34.712	27.236		4.2	6.31			0.07	0.08
72.00	6.395	34.890	27.415		4.4				0.02	0.07
98.00	6.461	34.981	27.478		4.7					
149.00	6.984	35.183	27.565		5.0					
219.00	6.278	35.173	27.653		5.6	6.43				

station : 93 date : 06.19.1986 Lat. : 62 14.53 N Wind spd : 28 KTS
bottom : 199 m time (GMT) : 16:35 Long. : 03 45.47 E Wind dir : 10 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac ‰	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
3.00	9.278	32.014	24.738		1.4				2.01	0.07
13.00	8.340	33.801	26.281		2.5				1.13	0.14
29.00	7.430	34.316	26.820		3.1				0.46	0.14
48.00	7.139	34.588	27.075		3.3	6.40			0.19	0.08
73.00	6.584	34.770	27.295		4.4				0.04	0.04
102.00	6.493	34.901	27.410		5.0	6.17				
147.00	6.871	35.131	27.540		6.1					
182.00	6.755	35.167	27.584		6.4	6.49				

Fig. C31.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 94 date : 06.19.1986 Lat. : 62 20.88 N Wind spd : 26 KTS
 bottom : 196 m time (GMT) : 19:44 Long. : 04 21.24 E Wind dir : 15 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	8.936	31.202	24.156	36	1.8				2.15	0.25
14.00	8.934	31.207	24.160	36	1.8				2.29	0.18
28.00	7.574	33.068	25.818	22	1.8				0.32	0.22
49.00	7.285	33.819	26.449	22	2.5	6.64			0.42	0.00
73.00	7.119	34.503	27.011	20	3.9				0.16	0.14
100.00	6.599	34.718	27.252	19	3.9	6.31				
177.00	7.041	35.185	27.559	19	6.8	6.25				

station : 95 date : 06.19.1986 Lat. : 62 32.14 N Wind spd : 24 KTS
 bottom : 197 m time (GMT) : 21:37 Long. : 03 56.07 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	8.802	33.585	26.042	42	3.2				3.03	0.00
14.00	8.028	33.929	26.429	30						
30.00	7.865	34.390	26.815	24	3.9				1.07	0.18
49.00	7.434	34.719	27.136	21	5.0	6.46			0.25	0.11
73.00	6.965	34.966	27.397	20	5.7				0.08	0.10
101.00	6.846	35.066	27.492	19	5.7	6.23				
148.00	7.012	35.161	27.544	19	6.4					
176.00	6.884	35.188	27.583	19	6.4	6.33				

station : 96 date : 06.19.1986 Lat. : 62 37.41 N Wind spd : 18 KTS
 bottom : 306 m time (GMT) : 23:08 Long. : 03 44.50 E Wind dir : 35 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	8.878	33.840	26.229	34	2.8				1.72	0.07
15.00	9.021	34.554	26.766	36	3.4				1.80	0.00
29.00	9.241	35.149	27.196	35	5.0				1.48	0.00
47.00	8.601	35.194	27.334	25	5.0	6.63			1.09	0.05
76.00	8.565	35.310	27.431	18	7.2				0.04	0.03
98.00	8.388	35.298	27.449	18	7.2					
147.00	7.644	35.225	27.504	19	7.5	6.51				
201.00	7.287	35.212	27.546	18	8.1					
260.00	6.515	35.187	27.633	19	8.1	6.38				

Fig. C32.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 97 date : 06.20.1986 Lat. : 62 42.66 N Wind spd : 20 KTS
bottom : 482 m time (GMT) : 00:16 Long. : 03 36.04 E Wind dir : 15 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.431	35.198	27.203	38	4.0				1.55	0.00
15.00	9.433	35.198	27.203	38	3.7				1.72	0.00
30.00	9.436	35.198	27.202	38	4.0				1.51	0.00
49.00	8.859	35.192	27.292	29	4.5	6.74			1.09	0.12
74.00	8.587	35.200	27.341	23	4.8				0.46	0.14
99.00	7.954	35.204	27.441	20	6.0					
197.00	6.643	35.180	27.610	18	6.5	6.55				
298.00	5.730	35.115	27.678	18	6.8					
394.00	4.594	35.027	27.743	18	7.1	6.76				
420.00	4.442	35.030	27.763	19	7.1	6.74				

station : 98 date : 06.20.1986 Lat. : 62 53.24 N Wind spd : 16 KTS
bottom : 693 m time (GMT) : 02:26 Long. : 03 11.20 E Wind dir : 25 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	9.101	35.197	27.257	36	5.1				1.62	0.00
15.00	9.101	35.198	27.257	36	5.1				1.62	0.00
29.00	9.103	35.199	27.258	36	5.1				1.62	0.00
50.00	8.827	35.190	27.295	31	4.8	6.73			1.39	0.00
75.00	8.077	35.219	27.435	20	6.0				0.16	0.09
98.00	7.490	35.205	27.511	19	6.5					
198.00	6.899	35.198	27.589	18	6.5	6.51				
297.00	6.252	35.159	27.646	18	6.5					
396.00	4.769	35.054	27.745	18	6.5	6.68				
496.00	2.267	34.924	27.889	18	7.1					
593.00	0.182	34.911	28.024	18	8.5	6.88				
619.00	-0.550	34.910	28.061	19		6.82				

station : 99 date : 06.20.1986 Lat. : 63 05.56 N Wind spd : 14 KTS
bottom : 944 m time (GMT) : 04:47 Long. : 02 43.42 E Wind dir : 350 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.183	35.174	27.225	40	4.4				1.55	0.00
15.00	9.174	35.171	27.224	40	4.9				1.76	0.00
29.00	9.177	35.173	27.225	40	4.6				1.37	0.00
48.00	8.694	35.168	27.299	24	5.2	6.70			0.54	0.02
99.00	7.626	35.220	27.503	19	6.7	6.44				
197.00	6.603	35.186	27.620	18						
298.00	5.420	35.094	27.700	18	7.0					
395.00	2.849	34.954	27.862	18	7.0	6.81				
494.00	-0.063	34.896	28.026	18						
591.00	-0.605	34.910	28.064	18		6.80				
742.00	-0.870	34.912	28.077	18						
842.00	-0.956	34.913	28.081	18		6.87				

Fig. C33.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 100 date : 06.20.1986 Lat. : 63 23.10 N Wind spd : 10 KTS
 bottom : 1290 m time (GMT) : 07:08 Long. : 02 03.10 E Wind dir : 20 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.290	35.144	27.184	41	3.3				1.06	0.92
13.00	9.292	35.146	27.185	41	3.3				1.30	0.18
29.00	9.251	35.143	27.190	38	3.3				1.13	0.56
45.00	8.671	35.118	27.263	25	3.6	6.61			0.40	0.41
100.00	7.628	35.242	27.520	19	5.2					
200.00	6.790	35.200	27.606	18	5.5	6.52				
300.00	5.835	35.125	27.673	18	5.8					
399.00	3.824	34.994	27.800	18	5.8	6.77				
499.00	1.302	34.921	27.961	18	6.3					
692.00	-0.367	34.902	28.046	18	8.3					
983.00	-0.877	34.911	28.076	18	11.3	6.87				
1182.00	-0.967	34.911	28.080	19	12.9	6.88				

station : 101 date : 06.20.1986 Lat. : 63 37.44 N Wind spd : 10 KTS
 bottom : 1645 m time (GMT) : 11:48 Long. : 01 33.34 E Wind dir : 310 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.369	35.142	27.170	45	3.9				1.48	0.14
14.00	9.364	35.145	27.173	45	3.9				1.55	0.00
30.00	9.243	35.141	27.190	43	3.9				1.34	4.00
49.00	8.790	35.159	27.277	26	4.4	6.71			0.68	0.24
97.00	7.683	35.235	27.506	20	5.3					
197.00	6.908	35.208	27.596	19	6.1	6.53				
296.00	6.563	35.182	27.623	18	6.4					
395.00	5.465	35.090	27.691	19	6.9	6.67				
493.00	3.034	34.932	27.828	18	6.9					
691.00	-0.079	34.891	28.023	18	8.3	6.88				
1086.00	-0.763	34.911	28.072	18	11.6					
1465.00	-0.955	34.913	28.081	19		6.86				

station : 102 date : 06.20.1986 Lat. : 63 43.00 N Wind spd : 06 KTS
 bottom : 1919 m time (GMT) : 14:14 Long. : 01 18.00 E Wind dir : 340 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.497	35.190	27.186	47	3.6				1.76	0.32
14.00	9.390	35.184	27.199	47	3.0				1.65	0.00
29.00	9.266	35.185	27.220	44	3.0	6.84			3.24	0.00
49.00	8.393	35.224	27.390	22	4.1				0.29	0.02
99.00	8.031	35.292	27.499	19	4.4					
199.00	6.930	35.212	27.596	19	4.4	6.51				
297.00	6.450	35.172	27.630	19	5.8					
396.00	4.760	35.036	27.732	19	6.6					
496.00	2.140	35.022	27.978	18	7.1	6.88				
790.00	-0.394	34.899	28.045	18	8.8					
1480.00	-0.981	34.912	28.081	18	11.5					
1710.00	-0.961	34.912	28.081	18	12.4	6.94				

Fig. C34.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 103 date : 06.20.1986 Lat. : 64 00.00 N Wind spd : 05 KTS
bottom : 2395 m time (GMT) : 18:02 Long. : 00 45.00 E Wind dir : 240 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.033	35.106	27.196	44	4.3				1.80	0.00
14.00	8.867	35.108	27.224	45	4.3				2.04	0.00
31.00	8.788	35.129	27.254	42	4.8				1.88	0.02
49.00	8.171	35.122	27.344	26	5.5	6.79			0.67	0.14
94.00	7.004	35.197	27.574	19	6.7					
199.00	4.377	34.991	27.739	19	6.9	6.88				
391.00	1.088	34.910	27.967	18	6.7					
592.00	-0.143	34.890	28.025	18	7.6					
789.00	-0.436	34.903	28.050	18	8.8	6.90				
986.00	-0.623	34.903	28.059	18	10.0					
1478.00	-0.878	34.909	28.075	18	11.7					
2037.00	-0.946	34.913	28.081	18	12.6	6.94				

station : 104 date : 06.20.1986 Lat. : 64 18.00 N Wind spd : 13 KTS
bottom : 2592 m time (GMT) : 22:41 Long. : 00 00.00 E Wind dir : 250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.997	35.164	27.247	41	4.5				1.27	0.00
14.00	8.991	35.162	27.247	41	4.2				1.62	0.00
29.00	8.879	35.158	27.262	44	4.2				0.81	0.11
47.00	8.193	35.186	27.391	25	5.3	6.70			0.03	0.03
98.00	6.964	35.211	27.590	18	5.8					
197.00	5.230	35.063	27.698	18	6.6	6.70				
394.00	0.891	34.897	27.970	18	6.6	7.00				
592.00	-0.217	34.889	28.028	18	7.4					
792.00	-0.504	34.906	28.056	18	8.9	6.89				
988.00	-0.658	34.909	28.065	18	9.7	6.99				
1479.00	-0.886	34.912	28.078	18	11.0					
2004.00	-0.951	34.913	28.081	18	11.8	6.94				

station : 105 date : 06.21.1986 Lat. : 64 43.00 N Wind spd : 16 KTS
bottom : 2874 m time (GMT) : 03:15 Long. : 00 56.00 W Wind dir : 245 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
11.00	8.891	35.102	27.216	50	4.3				1.94	0.00
15.00	8.892	35.101	27.215	50	4.1				1.87	0.00
27.00	8.793	35.115	27.242	51	4.1				0.76	0.00
47.00	8.107	35.107	27.342	25	4.6	6.75			0.78	0.04
100.00	5.382	35.080	27.693	19	6.3					
198.00	3.806	35.004	27.810	18	5.7	6.91				
391.00	0.682	34.904	27.989	18	6.5					
591.00	-0.202	34.892	28.030	18	7.6	6.93				
788.00	-0.488	34.903	28.053	18	8.7					
985.00	-0.678	34.913	28.069	18	9.8	6.85				
1480.00	-0.881	34.915	28.080	17	11.4					
2035.00	-0.952	34.915	28.083	18	12.5	6.92				

Fig. C35.

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GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 106 date : 06.21.1986 Lat. : 65 07.00 N Wind spd : 16 KTS
bottom : 3116 m time (GMT) : 07:43 Long. : 01 44.00 W Wind dir : 260 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	8.561	35.038	27.218	44	4.1			283.6	1.37	0.00
14.00	8.567	35.038	27.217	44	4.1				1.41	0.00
29.00	8.121	35.045	27.291	43	4.4			289.2	1.90	0.04
48.00	7.911	35.058	27.333	28	4.7	6.90			0.83	0.04
99.00	5.518	35.084	27.680	20	6.3			183.9	0.03	0.01
196.00	3.853	34.991	27.794	19	5.8	6.96		163.2		
396.00	0.783	34.902	27.981	18	6.6					
597.00	-0.181	34.889	28.026	18	7.4	7.00				
795.00	-0.450	34.904	28.052	18	7.4					
988.00	-0.633	34.910	28.065	18	8.8	6.81				
1477.00	-0.872	34.917	28.081	18	11.3					
2007.00	-0.951	34.916	28.083	18	12.4	6.94				

station : 107 date : 06.21.1986 Lat. : 65 17.63 N Wind spd : 24 KTS
bottom : 3210 m time (GMT) : 10:49 Long. : 02 00.76 W Wind dir : 220 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	8.984	35.135	27.227	48	3.8			292.1	2.04	0.00
14.00	8.988	35.136	27.227	48	3.8				1.83	0.00
29.00	8.939	35.136	27.235	46	3.8			242.5	1.62	0.00
49.00	8.554	35.123	27.286	29	4.3	6.80			0.83	0.02
72.00	6.731	35.132	27.560	20	5.4			105.2	0.10	0.03
101.00	6.032	35.133	27.654	19	5.7				0.03	0.00
145.00	4.995	35.061	27.724	19	6.0					
203.00	3.914	34.994	27.791	18	5.7	7.08		64.7		
296.00	2.301	34.917	27.881	18	6.0					
394.00	1.108	34.907	27.963	18	6.3	6.96				
493.00	0.225	34.890	28.005	18	6.5					
596.00	-0.141	34.893	28.027	18	7.3	6.97				

station : 108 date : 06.21.1986 Lat. : 65 24.30 N Wind spd : 06 KTS
bottom : 3103 m time (GMT) : 18:56 Long. : 05 13.41 W Wind dir : 240 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	6.627	34.883	27.378	43				290.3	1.16	0.00
14.00	6.585	34.883	27.384	43					1.13	0.00
29.00	6.713	34.946	27.416	40				230.6	1.17	0.28
50.00	5.225	34.902	27.571	29		7.28			0.09	0.03
101.00	3.550	34.988	27.823	19				111.1		
200.00	2.151	34.944	27.915	18						
398.00	0.957	34.924	27.987	18						
589.00	-0.129	34.895	28.028	18		6.96		49.2		
793.00	-0.448	34.901	28.049	18						
988.00	-0.668	34.910	28.067	18		6.82				
1178.00	-0.785	34.915	28.076	18						
1639.00	-0.919	34.912	28.079	18		6.90				

Fig. C36.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 109 date : 06.22.1986 Lat. : 64 25.10 N Wind spd : 13 KTS
bottom : 3018 m time (GMT) : 01:13 Long. : 05 14.92 W Wind dir : 250 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	7.821	34.914	27.233	46	1.9			288.1	1.41	0.00
14.00	7.821	34.913	27.233	46	1.9				1.41	0.00
30.00	6.730	34.887	27.367	45	2.7			280.2	1.48	0.00
50.00	5.130	34.962	27.630	23	6.0	6.53			0.48	0.25
100.00	4.344	35.038	27.780	19	6.5			120.9	0.00	0.11
199.00	2.469	34.911	27.862	19	6.5	6.92		54.5		
397.00	1.085	34.913	27.970	18	6.5					
593.00	-0.083	34.889	28.021	18	7.9					
790.00	-0.365	34.898	28.043	18	8.7	6.80				
988.00	-0.611	34.909	28.063	18	10.1					
1377.00	-0.857	34.913	28.077	18	10.9					
1780.00	-0.950	34.195	27.499	18	12.2	7.04				

station : 110 date : 06.22.1986 Lat. : 63 58.00 N Wind spd : 10 KTS
bottom : 3437 m time (GMT) : 04:48 Long. : 05 13.99 W Wind dir : 225 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.282	35.066	27.124	30	4.1				0.67	0.00
12.00	9.277	35.065	27.124	30	4.1				0.53	0.19
29.00	7.911	35.049	27.326	34	4.1				1.46	0.62
48.00	5.863	34.972	27.546	27	4.1	7.06			2.57	0.46
100.00	4.144	34.925	27.711	20	5.7				0.05	0.33
197.00	2.595	34.905	27.846	19	6.0					
391.00	0.974	34.910	27.975	18	6.3					
591.00	-	-	-	18	7.1	6.96				
789.00	-0.375	34.901	28.046	18	8.7					
986.00	-0.598	34.908	28.062	18	10.1	6.87				
1379.00	-0.783	34.915	28.076	18	10.1					
1779.00	-0.911	34.917	28.083	18	10.9	6.81				

station : 111 date : 06.22.1986 Lat. : 63 23.00 N Wind spd : 04 KTS
bottom : 2245 m time (GMT) : 12:16 Long. : 05 09.99 W Wind dir : 200 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.299	35.010	27.078	38	1.0				1.16	0.00
14.00	9.092	35.004	27.107	38	0.8				1.09	0.00
31.00	7.514	34.977	27.328	47	1.3				4.54	0.00
49.00	5.931	34.965	27.534	30	4.7	7.15			2.42	0.26
99.00	3.285	34.868	27.753	19	4.7					
197.00	2.078	34.879	27.869	18	6.5	7.01				
393.00	0.085	34.894	28.016	18	7.0					
594.00	-0.334	34.898	28.041	18	7.5	6.89				
790.00	-0.591	34.902	28.057	18	8.7					
987.00	-0.773	34.906	28.068	18	9.7	6.86				
1382.00	-0.912	34.909	28.076	18	10.7					
1780.00	-0.959	34.913	28.081	18	13.0	6.90				

Fig. C37.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 112 date : 06.22.1986 Lat. : 63 02.99 N Wind spd : 08 KTS
 bottom : 2090 m time (GMT) : 20:14 Long. : 05 26.00 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.195	35.203	27.077	32	1.3				0.44	0.00
16.00	10.196	35.204	27.078	32	1.3				0.35	0.00
29.00	9.074	35.191	27.256	35	1.7				0.50	0.13
51.00	7.902	35.219	27.461	22	5.2	6.28			0.32	0.07
100.00	7.606	35.207	27.495	19	6.5					
198.00	7.260	35.192	27.534	18	6.7	6.29				
395.00	2.458	34.876	27.834	19	6.7					
593.00	0.148	34.873	27.996	18	7.0	7.03				
789.00	-0.419	34.898	28.045	18	8.2					
987.00	-0.581	34.903	28.057	18	8.7	6.82				
1380.00	-0.793	34.910	28.072	18	10.5					
1780.00	-0.886	34.913	28.078	18	11.0	6.83				

station : 113 date : 06.22.1986 Lat. : 62 56.00 N Wind spd : 10 KTS
 bottom : 1390 m time (GMT) : 22:20 Long. : 05 35.99 W Wind dir : 150 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	9.910	35.180	27.108	29	1.5				0.40	0.00
15.00	9.910	35.177	27.106	28	1.3		-0.21		0.35	0.00
31.00	8.834	35.171	27.279	31	1.3			134.8	0.50	0.00
50.00	7.886	35.208	27.455	24	4.1	6.49	0.04	121.7	0.33	0.01
102.00	7.552	35.205	27.502	18	6.7			83.4		
201.00	6.686	35.151	27.581	19	7.0	6.43	-0.10			
298.00	4.009	34.986	27.774	19	7.2			76.1		
395.00	1.754	34.897	27.909	18	6.7	6.98	-0.41			
493.00	1.210	34.906	27.956	18	6.4					
594.00	0.313	34.899	28.007	18	7.2	6.98	0.00	91.2		
794.00	-0.313	34.897	28.039	18	9.0					
1186.00	-0.717	34.911	28.069	18	11.6	6.78	-0.08			

station : 114 date : 06.22.1986 Lat. : 62 51.99 N Wind spd : 13 KTS
 bottom : 825 m time (GMT) : 23:55 Long. : 05 39.99 W Wind dir : 130 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.025	35.179	27.088	32	1.3				0.55	0.00
14.00	10.028	35.178	27.087	32	1.2				0.54	0.00
29.00	8.811	35.167	27.280	31	1.3		0.20		0.61	0.00
49.00	7.857	35.227	27.474	23	5.9	6.31			0.51	0.00
100.00	7.496	35.202	27.508	18	7.0		0.34			
195.00	6.604	35.158	27.598	18	7.0	6.42	0.02			
299.00	3.707	34.979	27.800	18	5.9					
397.00	1.934	34.934	27.924	18	5.9	7.14	-0.07			
499.00	0.505	34.897	27.994	18	7.0					
595.00	-0.167	34.897	28.032	18	8.2	6.78	-0.01			
687.00	-0.461	34.903	28.051	18	9.0					
729.00	-0.501	34.906	28.056	18	10.0	6.80	-0.06			

Fig. C38.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 115 date : 06.23.1986 Lat. : 62 48.99 N Wind spd : 10 KTS
bottom : 620 m time (GMT) : 01:08 Long. : 05 44.00 W Wind dir : 140 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.111	35.169	27.065	34	1.2			133.8	0.76	0.00
15.00	10.111	35.170	27.066	33	1.1				0.69	0.00
28.00	8.893	35.146	27.250	37	0.7		0.08	157.3	1.15	0.00
51.00	7.735	35.207	27.476	22	5.4	6.36		98.9	0.44	0.05
74.00	7.493	35.197	27.504	19	6.3				0.08	0.05
99.00	7.302	35.194	27.529	19	6.3		0.14	64.6		
149.00	6.911	35.178	27.572	18	6.8					
199.00	5.974	35.096	27.632	20	6.8		-0.12			
248.00	4.665	35.006	27.719	19	6.1					
298.00	3.202	34.949	27.826	18	5.9		0.03			
347.00	2.043	34.893	27.883	19	5.9			72.8		
589.00	-0.450	34.906	28.053	19	10.0	6.80	-0.14	86.6		

station : 116 date : 06.23.1986 Lat. : 62 46.72 N Wind spd : 18 KTS
bottom : 516 m time (GMT) : 02:34 Long. : 05 46.49 W Wind dir : 135 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.120	35.171	27.065	33	1.1				0.54	0.00
15.00	10.115	35.171	27.066	33	1.1		-0.05		0.61	0.00
29.00	8.855	35.145	27.255	40	0.8				1.40	0.00
49.00	7.865	35.164	27.423	34	2.5	6.97	0.21		1.97	0.47
73.00	7.418	35.196	27.514	21	6.5				0.47	0.21
98.00	7.287	35.193	27.531	19	6.8		-0.10			
148.00	6.886	35.167	27.567	20	7.1					
199.00	6.039	35.099	27.626	20	6.8	6.47	0.09			
297.00	2.898	34.928	27.837	19	6.3		-0.28			
395.00	0.470	34.903	28.001	19	8.1		0.15			
489.00	-0.330	34.906	28.047	19	9.6	6.70	-0.17			

station : 117 date : 06.23.1986 Lat. : 62 44.62 N Wind spd : 11 KTS
bottom : 457 m time (GMT) : 03:21 Long. : 05 48.20 W Wind dir : 140 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.990	35.141	27.064	39	1.0			190.7	1.16	0.00
15.00	9.994	35.144	27.066	39	1.0			190.8	0.99	0.00
28.00	9.460	35.136	27.150	38	1.0		0.11		1.06	0.00
49.00	7.816	35.134	27.407	31	1.2	7.45		144.1	0.99	0.19
74.00	7.452	35.202	27.514	22	6.1				0.28	0.07
99.00	7.298	35.195	27.531	22	6.3	6.32	0.10	66.8		
148.00	6.795	35.156	27.570	22	6.6					
198.00	6.036	35.100	27.627	23	6.8	6.70	0.14			
297.00	3.589	35.008	27.835	21	7.1	6.66		73.2		
398.00	0.586	34.905	27.996	21	7.3		-0.12	63.8		

Fig. C39.

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SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 118 date : 06.23.1986 Lat. : 62 41.36 N Wind spd : 14 KTS
bottom : 365 m time (GMT) : 04:33 Long. : 05 51.91 W Wind dir : 130 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	10.047	35.203	27.103	33	1.0					
14.00	9.972	35.202	27.115	32	1.0				0.28	0.00
29.00	8.974	35.197	27.277	34	1.4		0.05		0.41	0.00
49.00	8.733	35.199	27.317	32	1.5	6.79			0.74	0.00
72.00	7.879	35.224	27.468	23	6.4				0.04	0.06
99.00	7.583	35.210	27.501	21	5.9	6.29	0.09			
149.00	7.267	35.194	27.534	21	6.6					
199.00	6.868	35.170	27.571	21	7.6					
316.00	4.793	35.051	27.740	22	7.6	6.59	0.21			

station : 119 date : 06.23.1986 Lat. : 62 36.87 N Wind spd : 16 KTS
bottom : 182 m time (GMT) : 05:33 Long. : 05 57.81 W Wind dir : 130 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.946	35.213	27.128	40	1.5			156.7	0.53	0.00
14.00	9.948	35.211	27.126	40	1.8				0.57	0.00
30.00	8.798	35.220	27.323	36	2.6			143.1	0.52	0.16
50.00	8.107	35.236	27.443	21	5.7	6.27		78.4	0.82	0.05
72.00	7.947	35.234	27.466	19	6.4				0.15	0.01
99.00	7.827	35.227	27.478	20	6.7	6.22		80.9		
160.00	7.790	35.224	27.482	20	6.7	6.24		85.5		

station : 120 date : 06.23.1986 Lat. : 61 57.59 N Wind spd : 12 KTS
bottom : 259 m time (GMT) : 09:37 Long. : 05 39.46 W Wind dir : 120 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SHOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
6.00	10.161	35.161	27.050	41	0.7			132.2	0.78	0.00
14.00	10.100	35.192	27.085	38	0.9				0.90	0.00
28.00	9.639	35.183	27.157	41	0.7			195.1	1.52	0.00
51.00	8.807	35.181	27.291	33	1.8	6.57		152.5	1.83	0.00
74.00	8.226	35.177	27.379	24	3.7				0.81	0.00
100.00	7.801	35.182	27.447	21	4.8	6.55		80.5		
151.00	6.923	35.181	27.572	20	5.7					
230.00	6.820	35.180	27.586	20	5.9	6.96		71.3		

Fig. C40.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station :	121	date :	06.23.1986	Lat. :	61 44.21 N	Wind spd :	18 KTS
bottom :	233 m	time (GMT) :	11:50	Long. :	05 07.88 W	Wind dir :	85 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.723	35.198	27.154	38	2.6				0.86	0.00
15.00	9.249	35.196	27.232	35	2.6				0.83	0.00
30.00	8.524	35.205	27.355	31	2.4				0.73	0.04
49.00	8.114	35.210	27.422	24	3.1	6.57			0.27	0.00
74.00	7.897	35.211	27.455	22	4.1				0.42	0.04
99.00	7.569	35.203	27.498	20	5.2	6.42				
149.00	7.246	35.195	27.538	19	5.7					
210.00	7.153	35.193	27.550	21	6.0	6.37				

station :	122	date :	06.23.1986	Lat. :	61 37.08 N	Wind spd :	17 KTS
bottom :	309 m	time (GMT) :	13:20	Long. :	04 47.79 W	Wind dir :	80 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	9.926	35.210	27.129	33	0.5			161.1	0.37	0.00
15.00	9.886	35.210	27.136	34	0.5			153.6	0.43	0.00
30.00	9.804	35.207	27.140	36	0.5			113.9	0.44	0.00
49.00	8.825	35.193	27.298	37	1.2	7.04		152.3	0.67	0.00
74.00	7.944	35.189	27.431	24	2.8				0.41	0.06
99.00	7.800	35.205	27.465	21	4.4	6.39		142.0		
148.00	7.494	35.201	27.507	19	5.4					
198.00	7.186	35.190	27.543	19	5.8	6.35				
247.00	6.989	35.186	27.567	19	5.8					
289.00	6.925	35.182	27.573	20	5.8	6.32				

station :	123	date :	06.23.1986	Lat. :	61 29.53 N	Wind spd :	12 KTS
bottom :	789 m	time (GMT) :	15:04	Long. :	04 31.68 W	Wind dir :	100 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	10.310	35.201	27.056	45	2.6				0.60	0.00
13.00	10.316	35.201	27.055	46	2.6			198.6	0.89	0.00
26.00	10.217	35.187	27.061	43	2.6				0.80	0.00
49.00	8.681	35.189	27.318	33	3.3	6.78			1.17	0.05
78.00	8.131	35.199	27.411	23	4.5				0.23	0.02
98.00	7.696	35.225	27.496	21	5.0					
197.00	6.692	35.191	27.612	20	5.2	6.46				
298.00	5.267	35.078	27.706	20	5.7					
401.00	2.546	34.931	27.871	20	5.7					
500.00	0.860	34.900	27.974	20	6.1					
591.00	-0.313	34.900	28.042	20	7.3	6.82				
752.00	-0.693	34.911	28.068	21	9.7	6.78				

Fig. C41.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 124 date : 06.23.1986 Lat. : 61 20.08 N Wind spd : 11 KTS
 bottom : 1138 m time (GMT) : 17:25 Long. : 04 07.74 W Wind dir : 85 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.333	35.189	27.042	54	3.8			144.9	1.06	0.00
12.00	10.322	35.190	27.045	53	3.8			211.4	1.02	0.00
26.00	9.932	35.186	27.109	53	3.8			245.4	1.17	0.00
47.00	8.363	35.165	27.348	34	4.7	6.76		183.9	1.28	0.00
98.00	6.713	35.160	27.585	24	6.1		0.19	70.3		
199.00	4.857	35.034	27.719	24	6.1	6.67				
298.00	2.703	34.925	27.852	23	5.9		-0.01	48.8		
396.00	1.316	34.906	27.948	23	6.1	6.93	-0.10			
495.00	0.050	34.905	28.027	23	7.3		-0.16			
592.00	-0.357	34.896	28.041	23	7.8		-0.12	52.1		
789.00	-0.641	34.908	28.064	23	9.2		-0.06			
1087.00	-0.871	34.914	28.079	24	9.7	6.81	-0.01	59.0		

station : 125 date : 06.23.1986 Lat. : 61 06.63 N Wind spd : 07 KTS
 bottom : 1184 m time (GMT) : 20:26 Long. : 03 32.46 W Wind dir : 85 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.224	35.178	27.053	55	4.3			234.4	1.13	0.00
14.00	10.227	35.180	27.054	55	3.8			171.0	1.18	0.00
31.00	9.388	35.173	27.191	50	3.8			210.9	1.52	0.00
51.00	8.370	35.152	27.337	42	4.5			156.7	1.84	0.07
100.00	7.346	35.189	27.519	25	5.7		0.03	65.5		
195.00	6.760	35.176	27.591	24	5.7	6.45				
298.00	4.967	35.054	27.722	24	6.2		0.02	79.1		
396.00	2.508	34.934	27.877	24	6.2	6.84	-0.07			
496.00	0.490	34.898	27.996	23						
595.00	-0.237	34.894	28.033	24	7.1		0.15			
793.00	-0.571	34.906	28.059	23	8.6		0.11			
1140.00	-0.900	34.914	28.080	25	11.2	6.80	0.00	78.4		

station : 126 date : 06.23.1986 Lat. : 60 59.18 N Wind spd : 06 KTS
 bottom : 860 m time (GMT) : 22:23 Long. : 03 13.02 W Wind dir : 70 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	9.986	35.183	27.098	49	2.9				0.82	0.00
14.00	9.988	35.183	27.097	49	2.9				0.78	0.00
29.00	9.337	35.171	27.198	48	2.9				1.02	0.00
50.00	-	-	-	-	1.7	6.96			1.06	0.04
72.00	8.140	35.173	27.389	31	3.6				0.02	0.15
100.00	7.600	35.171	27.468	27	4.8					
197.00	7.106	35.189	27.553	24	6.2	6.40				
297.00	6.675	35.184	27.609	25	5.7					
396.00	5.625	35.110	27.687	24	6.0	6.56				
496.00	2.465	34.932	27.879	24	6.2					
594.00	0.126	34.898	28.017	24	6.9					
829.00	-0.861	34.914	28.078	25	10.7	6.80				

Fig. C42.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 127 date : 06.23.1986 Lat. : 60 52.97 N Wind spd : 09 KTS
bottom : 564 m time (GMT) : 23:55 Long. : 03 00.00 W Wind dir : 80 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
7.00	10.628	35.322	27.094	40	1.5			176.5	0.56	0.00
16.00	10.628	35.321	27.093	40	1.2			129.4	0.57	0.00
29.00	9.474	35.299	27.275	32	1.7			111.1	0.42	0.00
50.00	9.084	35.300	27.340	26	2.2	6.42		53.2	0.25	0.00
74.00	9.005	35.344	27.387	24	3.5		0.07		0.04	0.00
99.00	8.888	35.338	27.401	24	4.2			39.4		
199.00	8.497	35.303	27.436	24	4.9	6.13	-0.02			
295.00	7.969	35.266	27.488	24	7.4			76.8		
395.00	7.115	35.191	27.553	24	7.4	6.35	0.13			
494.00	5.705	35.117	27.683	24	7.4					
544.00	3.859	34.993	27.795	25	6.6	6.78	-0.07	118.9		

station : 128 date : 06.24.1986 Lat. : 60 49.12 N Wind spd : 05 KTS
bottom : 421 m time (GMT) : 01:05 Long. : 02 51.90 W Wind dir : 170 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	10.457	35.316	27.120	32	1.5				0.29	0.00
15.00	10.467	35.316	27.118	32	1.5				0.42	0.00
30.00	9.319	35.301	27.302	28	1.7				0.40	0.00
50.00	9.087	35.309	27.346	23	2.2	6.40			0.30	0.00
75.00	9.008	35.327	27.373	21	3.2				0.06	0.00
100.00	8.894	35.338	27.400	21	4.1					
150.00	8.698	35.324	27.421	21	5.1					
200.00	8.538	35.307	27.433	21	5.4	6.00				
300.00	8.325	35.290	27.452	21	5.6					
410.00	7.786	35.252	27.504	21	6.1	6.23				

station : 129 date : 06.24.1986 Lat. : 60 44.73 N Wind spd : 07 KTS
bottom : 186 m time (GMT) : 02:10 Long. : 02 43.64 W Wind dir : 90 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	10.544	35.311	27.100	36	1.9			112.1	0.64	0.00
15.00	10.550	35.312	27.100	36	1.4			101.4	0.70	0.00
30.00	9.710	35.301	27.237	28	1.7			102.3	0.42	0.00
50.00	9.240	35.298	27.313	25	1.7	6.53		73.3	0.49	0.00
75.00	9.181	35.303	27.326	22	1.7				0.36	0.00
100.00	8.895	35.323	27.388	19	3.1	6.24				
150.00	8.754	35.335	27.420	20	4.6					
175.00	8.653	35.332	27.434	21	5.5	5.97		89.6		

Fig. C43.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 130 date : 06.24.1986 Lat. : 60 38.16 N Wind spd : 10 KTS
 bottom : 135 m time (GMT) : 03:44 Long. : 02 23.99 W Wind dir : 110 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
5.00	10.219	35.280	27.133	32	0.5				0.81	0.00
15.00	10.211	35.278	27.133	31	0.5				0.82	0.00
30.00	9.911	35.273	27.181	26	0.5				0.79	0.00
50.00	9.125	35.284	27.321	21	2.4	6.79			0.35	0.00
75.00	8.962	35.300	27.360	20	2.9	6.37			0.14	0.00
115.00	8.661	35.306	27.412	21	3.8	6.16				

station : 131 time series date : 06.24.1986 Lat. : 61 06.26 N Wind spd : 06 KTS
 bottom : 1180 m time (GMT) : 15:00 Long. : 03 32.71 W Wind dir : 95 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	10.523	35.202	27.019	43	3.0	6.90		144.4	0.57	0.00
13.00	10.484	35.205	27.028	43	3.0	6.89		145.6	0.44	0.00
29.00	9.901	35.197	27.123	43	3.4	7.07			0.86	0.00
49.00	8.785	35.190	27.302	32	4.7	6.74			1.05	0.00
395.00	2.884	34.937	27.846	19	7.0	6.86				
603.00	-0.230	34.890	28.029	18	8.6	6.85				

station : 132 time series date : 06.24.1986 Lat. : 61 06.25 N Wind spd : 09 KTS
 bottom : 1174 m time (GMT) : 16:00 Long. : 03 33.11 W Wind dir : 98 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.578	35.223	27.026	41	3.0	6.84		121.6	0.56	0.00
15.00	10.493	35.238	27.052	41	2.5	6.83		124.4	0.30	0.00
30.00	9.508	35.185	27.180	42	3.7	7.14		131.0	0.61	0.01
50.00	8.666	35.196	27.325	32	4.9	6.71		114.5	0.99	0.00
395.00	2.822	34.926	27.842	19	7.2	6.99				
598.00	-0.203	34.891	28.029	19	8.8	6.93				

Fig. C44.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 133 time series date : 06.24.1986 Lat. : 61 06.34 N Wind spd : 09 KTS
 bottom : 1180 m time (GMT) : 17:00 Long. : 03 37.07 W Wind dir : 90 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
11.00	10.682	35.247	27.026	38	2.4	6.75		116.2	0.38	0.00
15.00	10.691	35.247	27.024	38	2.4	6.76		133.5	0.45	0.00
28.00	9.814	35.196	27.137	44	3.7	7.13		133.6	0.53	0.06
49.00	8.629	35.184	27.322	32	5.1	6.66		94.4	0.96	0.00
395.00	2.831	34.929	27.844	19	7.2	6.92				
592.00	-0.180	34.893	28.029	18	8.8	6.86				

station : 134 time series date : 06.24.1986 Lat. : 61 06.52 N Wind spd : 09 KTS
 bottom : 1181 m time (GMT) : 18:00 Long. : 03 32.94 W Wind dir : 80 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.652	35.243	27.028	39	2.5	6.79		116.5	0.33	0.00
15.00	10.649	35.245	27.030	33	2.4	6.75		127.7	0.41	0.00
29.00	9.764	35.191	27.142	44	4.0	7.19		123.5	0.75	0.00
50.00	8.604	35.191	27.331	31	5.2	6.67		95.0	1.36	0.00
394.00	2.902	34.935	27.842	19	7.5	6.90				
599.00	-0.182	34.890	28.027	18	9.0	6.96				

station : 135 time series date : 06.24.1986 Lat. : 61 06.58 N Wind spd : 10 KTS
 bottom : 1183 m time (GMT) : 19:00 Long. : 03 32.77 W Wind dir : 81 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
8.00	10.509	35.223	27.038	42	2.6	6.85		132.4	0.49	0.00
14.00	10.555	35.224	27.030	42	3.1	6.82		127.0	0.42	0.00
28.00	10.004	35.200	27.108	45	3.5	6.90		146.7	0.50	0.00
48.00	8.501	35.172	27.332	32	5.2	6.86		107.8	1.27	0.00
394.00	2.882	34.934	27.843	19	7.3	6.90				
605.00	-0.182	34.893	28.029	18	9.0	6.87				

station : 136 time series date : 06.24.1986 Lat. : 61 06.52 N Wind spd : 10 KTS
 bottom : 1180 m time (GMT) : 20:00 Long. : 03 32.61 W Wind dir : 89 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SNOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.498	35.203	27.024	43	3.5	6.94		155.5	0.60	0.00
29.00	9.919	35.199	27.122	43	3.3	7.07			0.70	0.00
48.00	8.435	35.157	27.331	33	5.4	6.68			1.32	0.08
70.00	8.068	35.148	27.380	24	6.0	6.87		71.0	0.40	0.02
394.00	2.799	34.939	27.855	19	7.3	6.90				
598.00	-0.164	34.895	28.030	18	8.7	6.98				

Fig. C45.

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 137 time series date : 06.24.1986 Lat. : 61 06.31 N Wind spd : 09 KTS
 bottom : 1180 m time (GMT) : 21:00 Long. : 03 32.11 W Wind dir : 94 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.470	35.207	27.032	42	3.6	6.89		122.2	0.51	0.00
29.00	9.704	35.199	27.158	41	3.2	7.07		129.3	0.77	0.00
48.00	8.451	35.162	27.332	33	5.6	6.88		111.8	1.14	0.01
69.00	8.092	35.154	27.381	24	6.2	6.64		65.5	0.39	0.02
396.00	2.790	34.927	27.846	18	7.1	6.93				
591.00	-0.066	34.892	28.024	18	8.6	6.88				

station : 138 time series date : 06.24.1986 Lat. : 61 06.39 N Wind spd : 07 KTS
 bottom : 1182 m time (GMT) : 22:00 Long. : 03 32.27 W Wind dir : 94 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.487	35.230	27.047	40	2.6	6.81		130.0	0.43	0.00
28.00	9.561	35.197	27.181	42	3.5	7.16		169.1	0.73	0.00
48.00	8.846	35.194	27.295	35	4.3	6.89		137.5	0.87	0.00
69.00	8.192	35.160	27.371	27	5.8	6.64		86.5	0.73	0.00
394.00	2.668	34.929	27.859	18	7.0	6.93				
597.00	-0.167	34.895	28.030	18	7.9	6.84				

station : 139 time series date : 06.24.1986 Lat. : 61 06.48 N Wind spd : 09 KTS
 bottom : 1182 m time (GMT) : 23:00 Long. : 03 32.27 W Wind dir : 133 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.486	35.231	27.048	40	2.5	6.77		126.6	0.50	0.00
29.00	9.547	35.191	27.178	41	3.8	7.16		137.7	0.81	0.00
50.00	8.573	35.192	27.337	32	4.9	6.72		107.8	1.21	0.02
70.00	8.061	35.167	27.396	23	6.0	6.58		55.7	0.33	0.01
396.00	2.422	34.932	27.882	19	7.2	6.87				
594.00	-0.153	34.894	28.029	18	8.5	6.85				

station : 140 time series date : 06.25.1986 Lat. : 61 06.40 N Wind spd : 08 KTS
 bottom : 1180 m time (GMT) : 00:00 Long. : 03 31.63 W Wind dir : 123 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac %	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.505	35.257	27.065	36						
30.00	9.485	35.187	27.186	40	4.3	7.23		165.1	0.45	0.00
49.00	8.641	35.197	27.330	30	5.5	6.72		88.9	1.08	0.01
69.00	8.138	35.174	27.390	23	5.5	6.63		63.7	0.48	0.01
394.00	2.595	34.924	27.861	18	7.3	6.92				
594.00	-0.164	34.895	28.030	18	8.5	6.87				

Fig. C46.

Report no. changed (Mar 2006): SM-209-2-UU

SACLANTCEN SM-209

GIN Sea Cruise 1986
HNLMS TYDEMAN

station : 141 time series date : 06.25.1986 Lat. : 61 06.73 N Wind spd : 09 KTS
bottom : 1184 m time (GMT) : 01:00 Long. : 03 31.82 W Wind dir : 135 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.595	35.285	27.071	36	2.4	6.72		132.1	0.40	0.00
30.00	9.090	35.192	27.254	35	4.5	7.00		107.3	0.79	0.00
50.00	8.225	35.174	27.377	29	4.8	6.76		85.7	0.96	0.00
70.00	7.934	35.202	27.443	23	5.0	6.38		46.7	0.30	0.00
395.00	2.610	34.931	27.865	19	7.2	6.94				
594.00	-0.213	34.895	28.033	18	7.7	6.87				

station : 142 time series date : 06.25.1986 Lat. : 61 06.73 N Wind spd : 09 KTS
bottom : 1181 m time (GMT) : 02:00 Long. : 03 32.30 W Wind dir : 138 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.587	35.286	27.073	33	2.5	6.98		99.9	0.38	0.00
29.00	9.279	35.209	27.237	38	2.2	6.95		104.9	0.53	0.00
50.00	8.359	35.205	27.380	28	2.9	6.75		105.3	0.51	0.03
68.00	7.954	35.213	27.448	22	5.2	6.40		45.7	0.23	0.01
394.00	2.759	34.932	27.853	19	7.1					
601.00	-0.233	34.896	28.034	18	8.8	6.84				

station : 143 time series date : 06.25.1986 Lat. : 61 06.46 N Wind spd : 10 KTS
bottom : 1178 m time (GMT) : 03:00 Long. : 03 31.92 W Wind dir : 142 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.544	35.284	27.079	33	2.5	6.69		95.1	0.31	0.00
30.00	9.924	35.238	27.151	34	2.2	6.87		111.1	0.41	0.00
49.00	8.517	35.203	27.354	32	2.7	6.78		96.9	0.48	0.00
68.00	8.079	35.204	27.423	24	3.9	6.50		88.1	0.28	0.01
394.00	2.787	34.933	27.851	19	7.1	7.00				
597.00	-0.151	34.896	28.030	18	8.3	6.86				

station : 144 time series date : 06.25.1986 Lat. : 61 06.30 N Wind spd : 10 KTS
bottom : 1178 m time (GMT) : 04:00 Long. : 03 31.42 W Wind dir : 164 deg

depth m	temp deg C	sal ‰	sigma-t Kg/mc	opac Z	SiO2 µM	O2 ml/L	d 180 SMOW	PC µg/L	Chl a µg/L	Phaeoph a µg/L
9.00	10.517	35.285	27.085	32	2.7	6.69		174.4	0.33	0.00
29.00	9.299	35.206	27.231	38	2.4	6.97		121.8	0.43	0.01
46.00	8.547	35.199	27.346	32	3.2	6.90		88.4	0.71	0.01
394.00	2.938	34.941	27.844	19	7.3	6.92				
585.00	-0.166	34.892	28.028	18	8.7	6.87				
1091.00	-0.884	34.914	28.079	19		6.82				

Fig. C47.