

Irene Reid

UNIVERSITY OF CALIFORNIA      SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6404  
10 April - 1 May 1964

and

CCOFI Cruise 6407  
15 June - 4 August 1964

SIO Reference 66-20  
September 1, 1966

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Sponsored by

Marine Research Committee

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Approved for distribution:

*W. A. Nierenberg*  
W. A. Nierenberg, Director

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## INTRODUCTION

The data presented in this report were collected by the RV Black Douglas of the Bureau of Commercial Fisheries and by the RV Alexander Agassiz of the Scripps Institution of Oceanography on Cruises 6404 and 6407 of the California Cooperative Oceanic Fisheries Investigations program.

On Cruise 6404 the RV Alexander Agassiz made three-bottle casts in the mixed layer for temperature, salinity, and inorganic phosphate-phosphorus at each net haul station. These data are reported with the net haul information.

The close grid stations near Point Arguello on Cruise 6407 were occupied as part of an environmental study which was supported in part by AEC Contract AT (11-1)-34, Project 111. The first two figures in this cruise numbering system represent the year of the cruise; the last two figures, the month. The cruises preceding these in the series are 6401 (Scripps Institution report, SIO Ref. 65-7) and 6410 (SIO Ref. 65-18).

The data are tabulated at observed depths; the interpolated and computed values are tabulated at standard depths and are accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

## STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.<sup>1/</sup> The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of  $\Delta D$ .

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers are recorded in hundredths of a degree. The salinity values obtained by salinometer are recorded to three decimal places, provided they meet accepted standards. The values recorded "have a reproducibility of  $\pm 0.04\%$  salinity at the 95 per cent probability level, and a probable

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<sup>1/</sup>Klein, Hans T. A new technique for processing physical oceanographic data. MS.

accuracy of  $\pm 0.01\%$  salinity or better at the same level of probability." <sup>2/</sup> The values are recorded to two decimal places when obtained by chlorinity titration, or by salinometer where only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

#### Tabulated Data

The data tabulated are of the same type as have previously appeared in these reports; the column headings from the computer are explained as follows:

Z	Depth in meters	
T	Temperature $^{\circ}\text{C}$	
S	Salinity $\text{\%}$	
OXY	Oxygen	ml/L
PHO	Phosphate	$\mu\text{g at/L}$
SIL	Silicate	$\mu\text{g at/L}$
NIT	Nitrite	$\mu\text{g at/L}$
D*T	$\delta_T$	cl/ton
SIG*T	$\sigma_t$	g/L
DD	$\Delta D$	dyn m

Extrapolated values and values between remote observations are not indicated but can be determined from the tabulation of observed depths. A hyphen is used to indicate a missing observed or interpolated value. The time is the time of messenger release. When more than one cast was made on a station messenger times and wire angles are given in the order of increasing depth and a significant change in position during a multiple cast is listed similarly. Multiple casts are indicated by a footnote letter following all observed depths of each cast except the cast originating at the surface.

On stations where more than one cast is lowered, the various property curves may not agree perfectly. This discrepancy may be caused by changes in geographical position, real property changes with time, slight error in measurement, or a combination of these factors. Stations with overlapping casts have the following footnote: Overlapping casts; reconciliation of property curves when necessary.

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<sup>2/</sup> Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

## FOOTNOTES

Laboratory personnel note any possible imperfections in the sealing of the bottles as follows:

- Loose bottle cap: The cap is definitely loose so that it could be moved with very little applied pressure. The salinity values obtained from these samples may be usable depending on time and/or conditions of storage.
- Possible evaporation: Either the cap was sealed with less than usual pressure, the bottle edge chipped, the rubber washer cracked, or the bale broke on opening, etc.

Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve," depending upon whether the property curve was drawn through the value or not.

In addition to footnotes, a special notation is used without a footnote because its meaning is always the same.

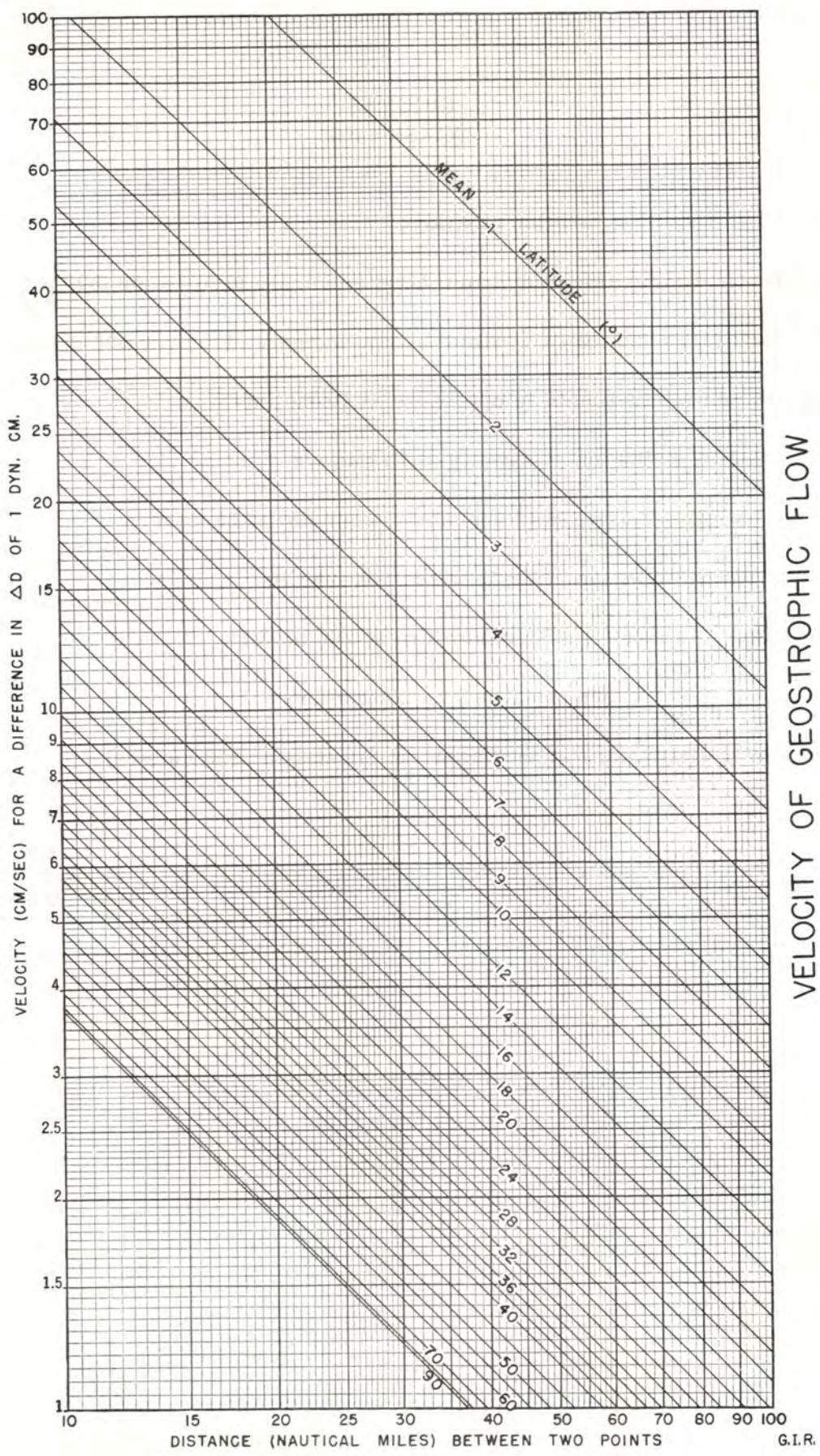
Values which are not drawn through because they seem to be in error without apparent reason are indicated by the following notation.

- u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

## FORMAT

These data were collected in part by personnel of and processed completely by the Data Collection and Processing Group (DCPG, MLR), Scripps Institution of Oceanography.

VELOCITY OF GEOSTROPHIC FLOW



FIGURES  
CRUISE 6407

1. CCOFI Cruise 6407, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of phosphate-phosphorus at 10 meters
8. Horizontal distribution of silicate-silicon at 10 meters
9. Horizontal distribution of temperature at 200 meters
10. Horizontal distribution of salinity at 200 meters
11. Horizontal distribution of thermosteric anomaly at 200 meters

FIGURES FOR CLOSE GRID AREA

- 1a. CCOFI Cruise 6407, station positions
- 2a. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
- 3a. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
- 4a. Horizontal distribution of temperature at 10 meters
- 5a. Horizontal distribution of salinity at 10 meters
- 6a. Horizontal distribution of thermosteric anomaly at 10 meters
- 7a. Horizontal distribution of phosphate-phosphorus at 10 meters
- 8a. Horizontal distribution of silicate-silicon at 10 meters
- 9a. Horizontal distribution of temperature at 200 meters
- 10a. Horizontal distribution of salinity at 200 meters
- 11a. Horizontal distribution of thermosteric anomaly at 200 meters

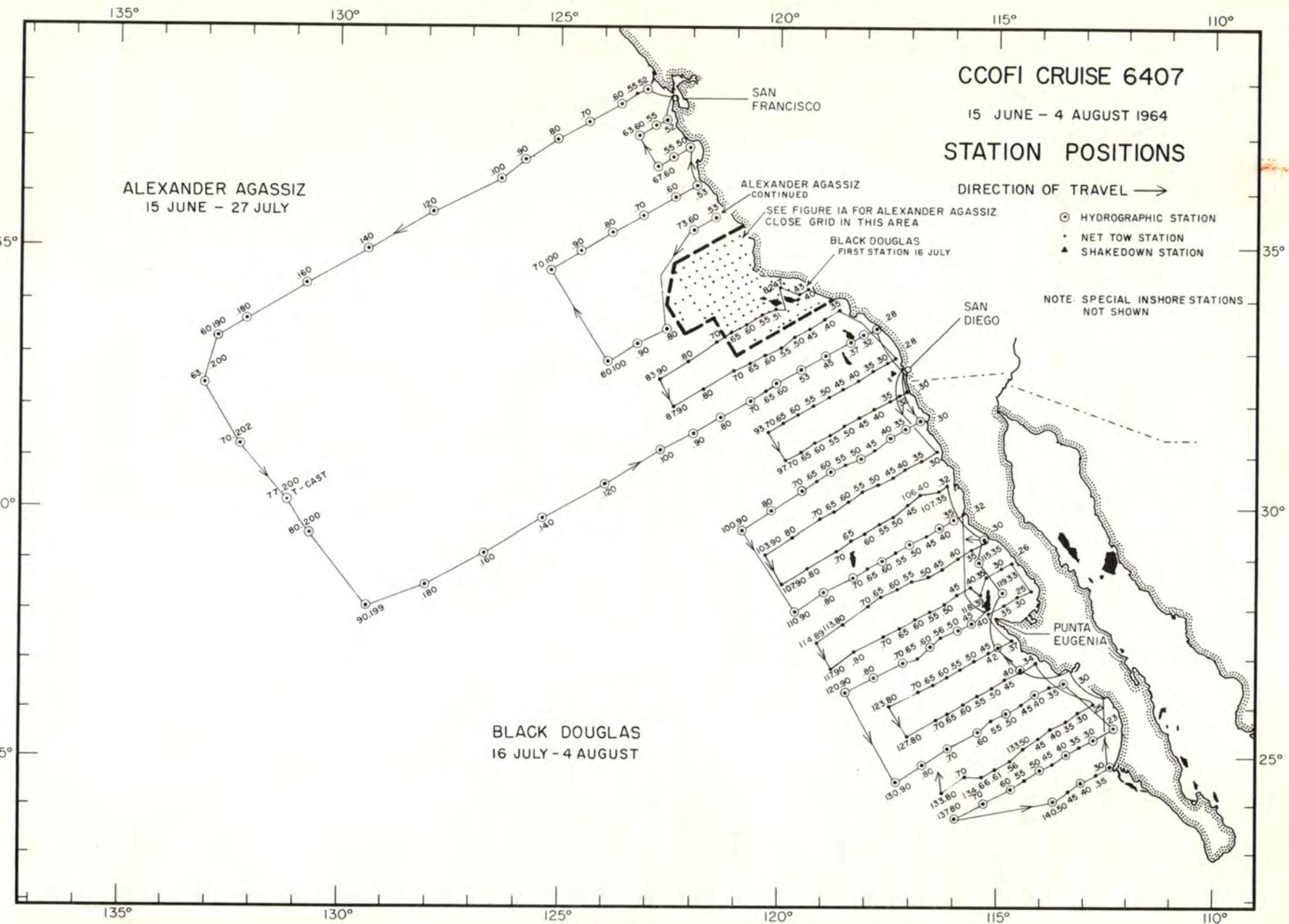


FIGURE I

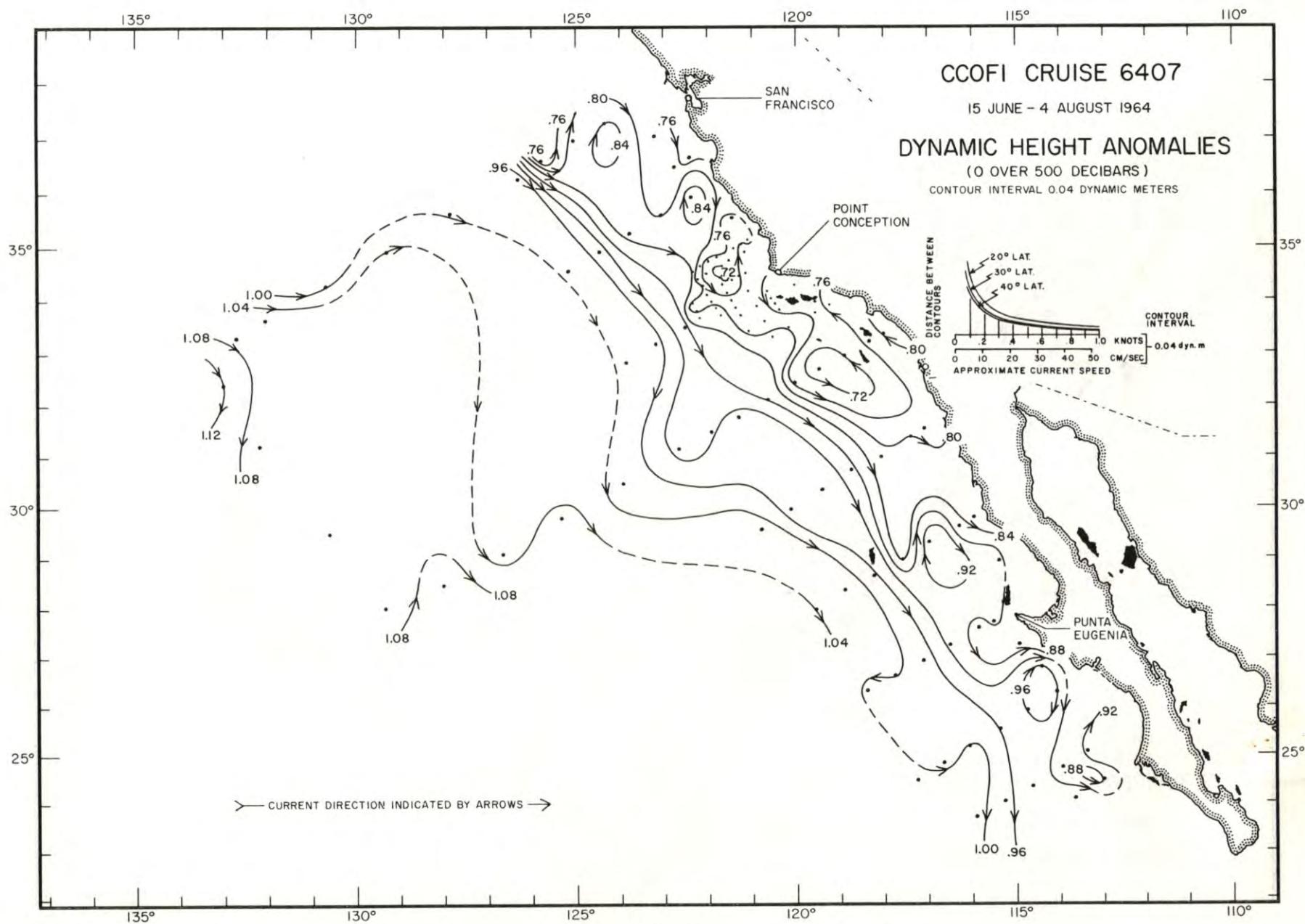


FIGURE 2

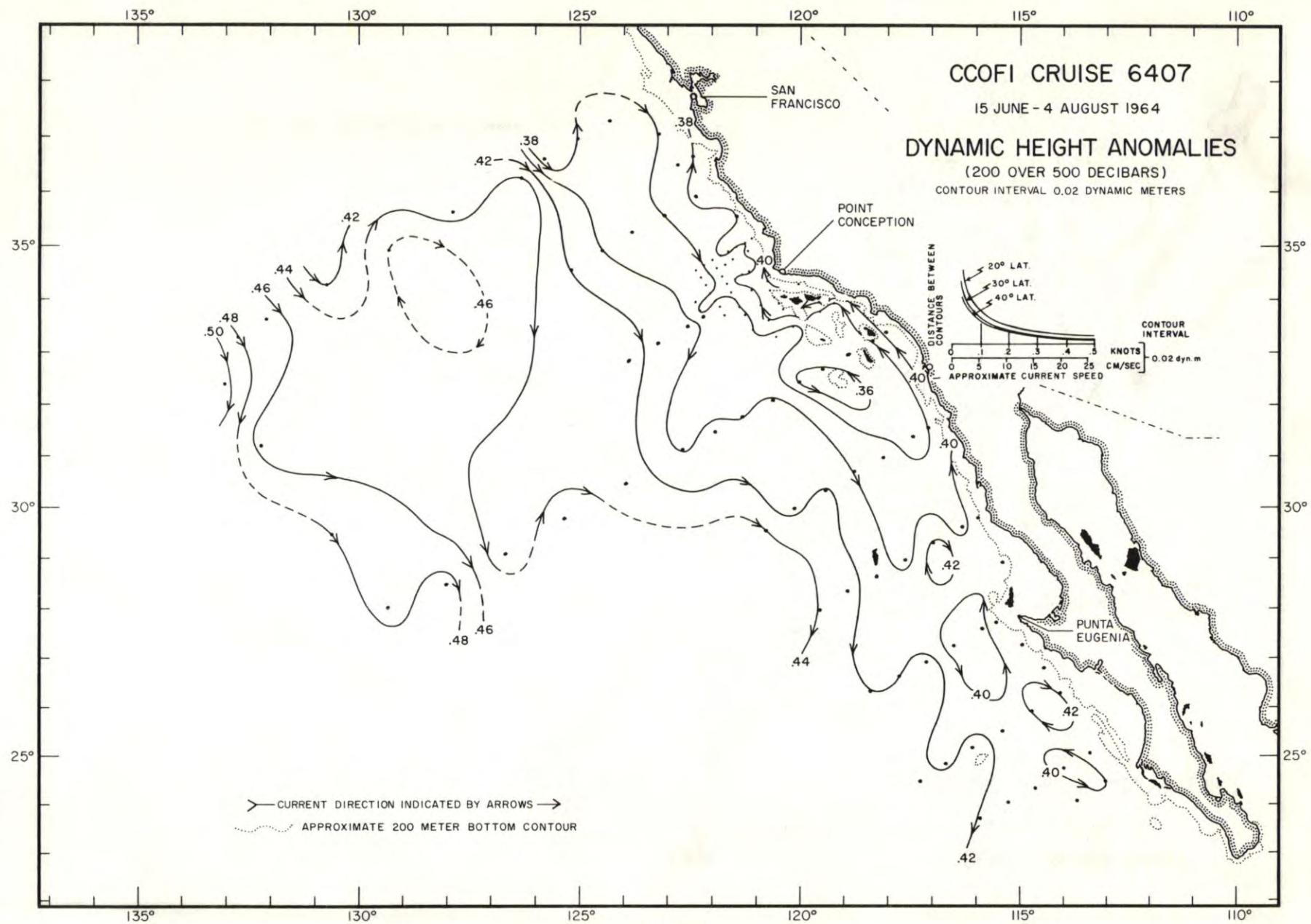


FIGURE 3

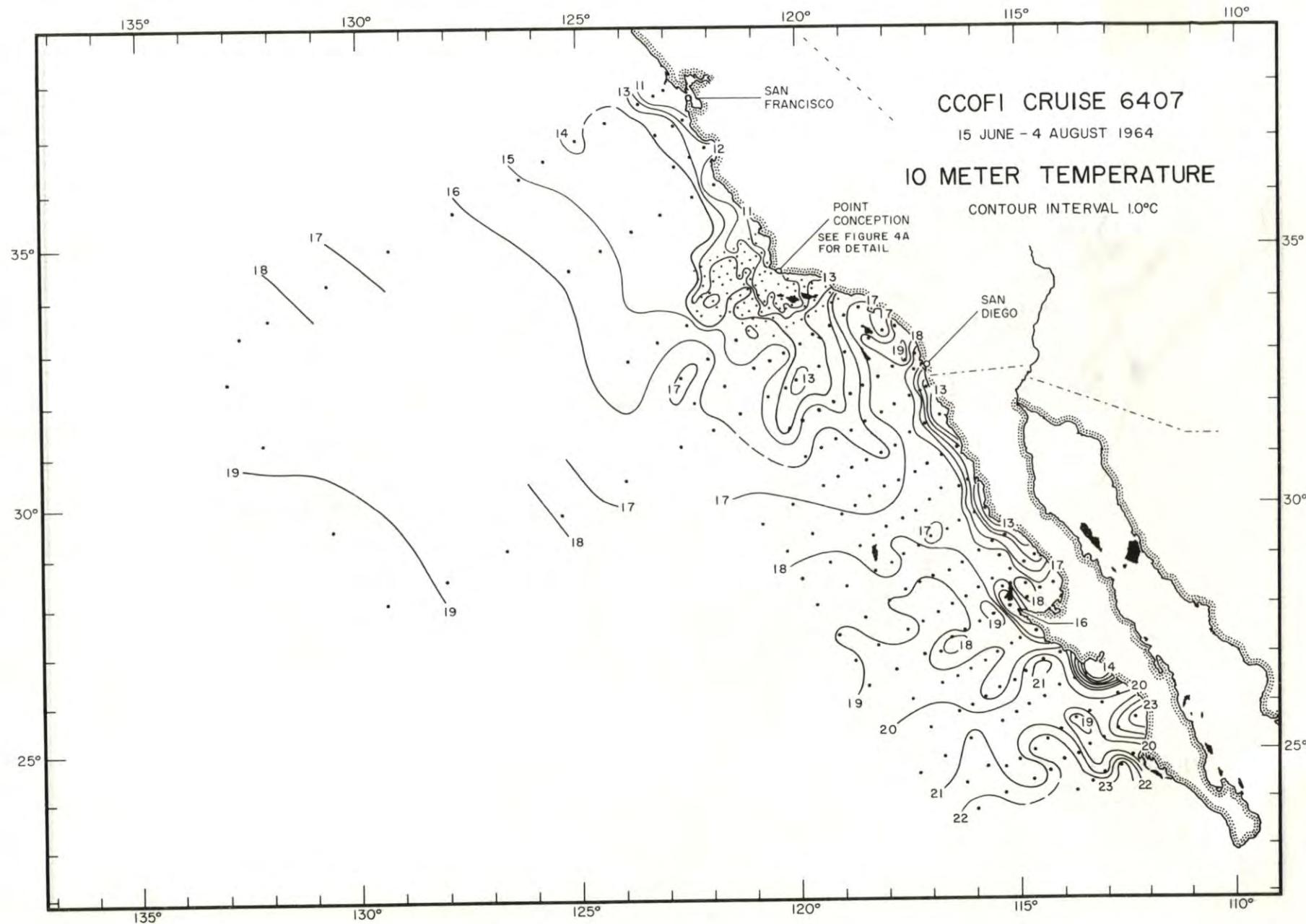


FIGURE 4

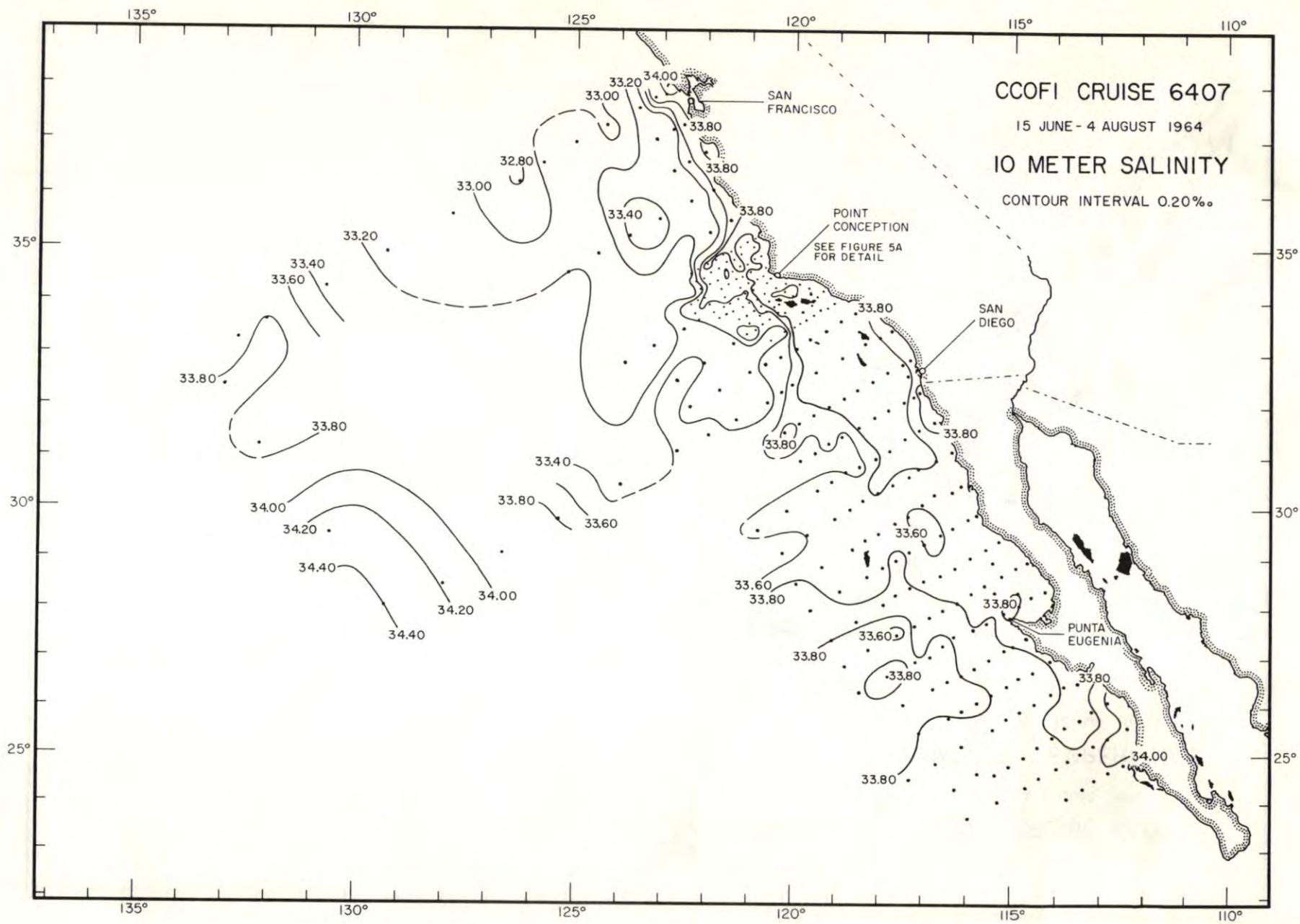


FIGURE 5

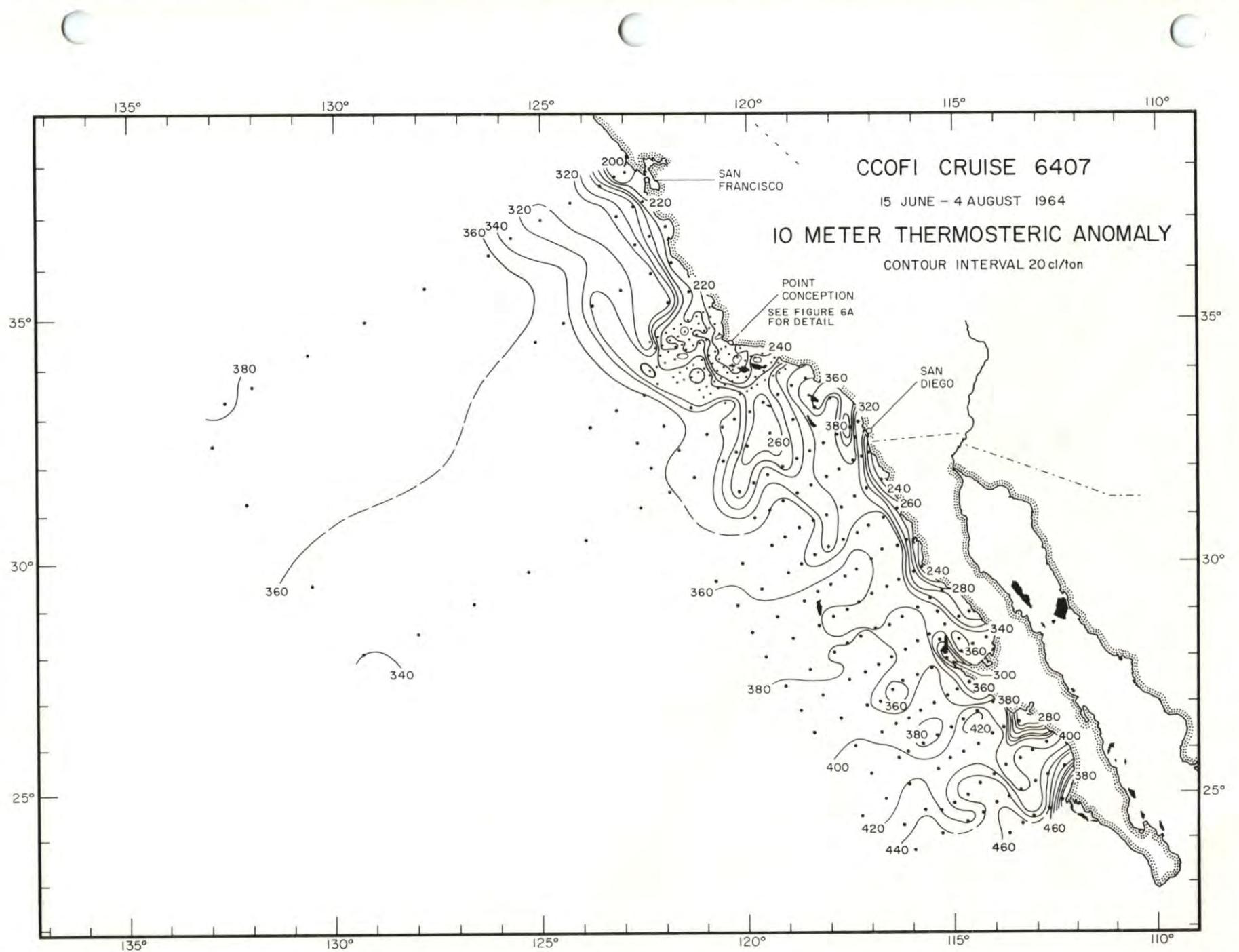


FIGURE 6

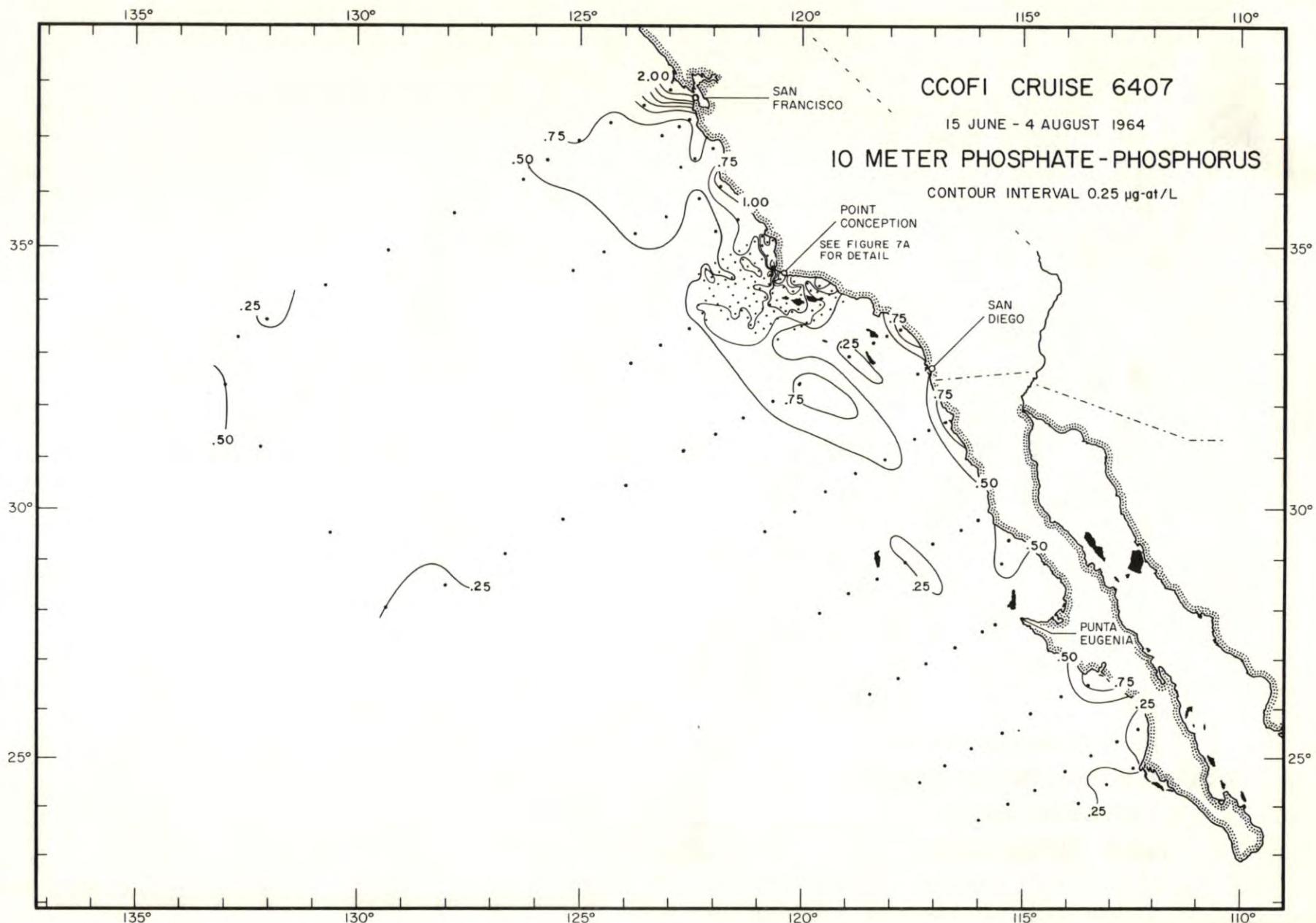


FIGURE 7

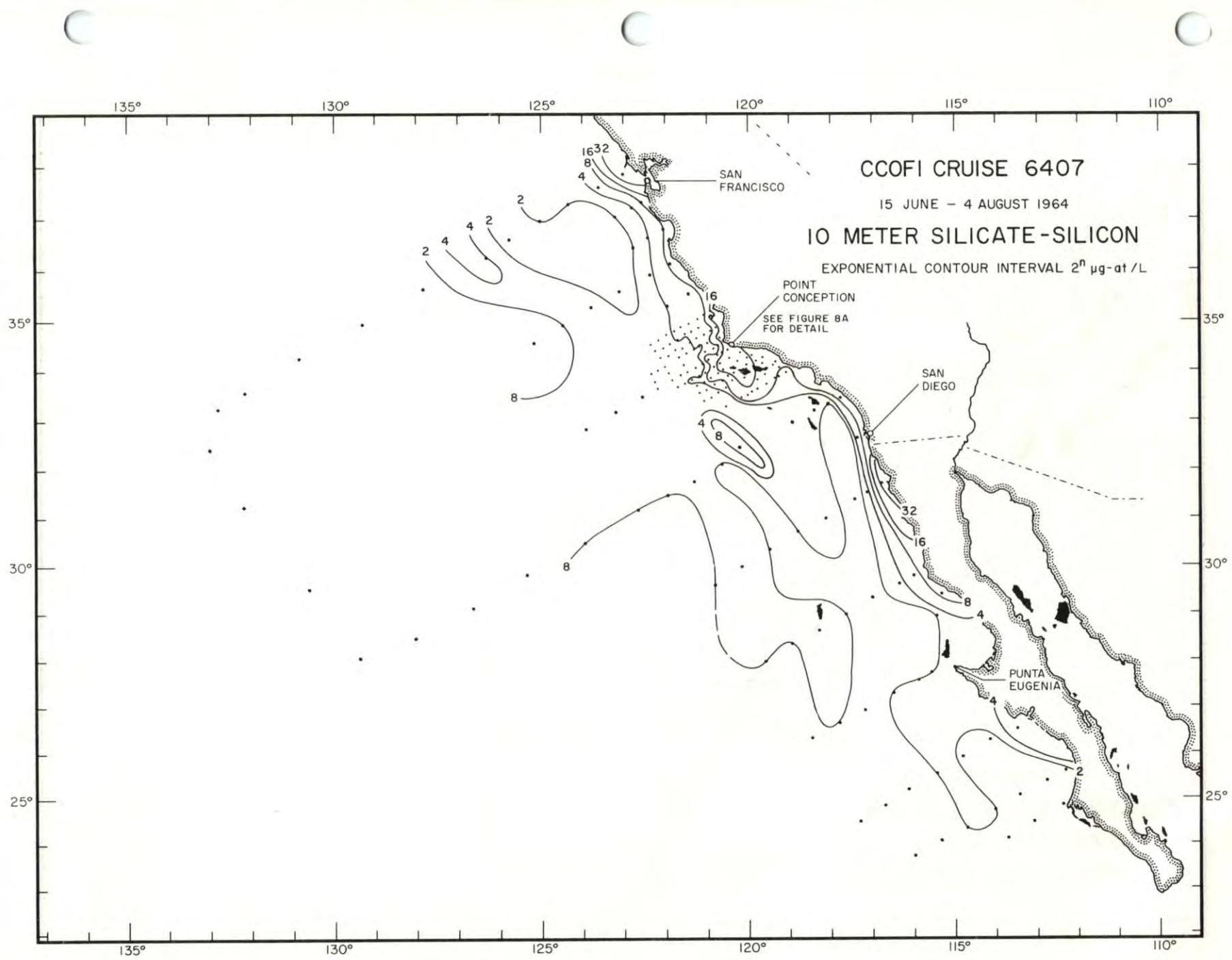
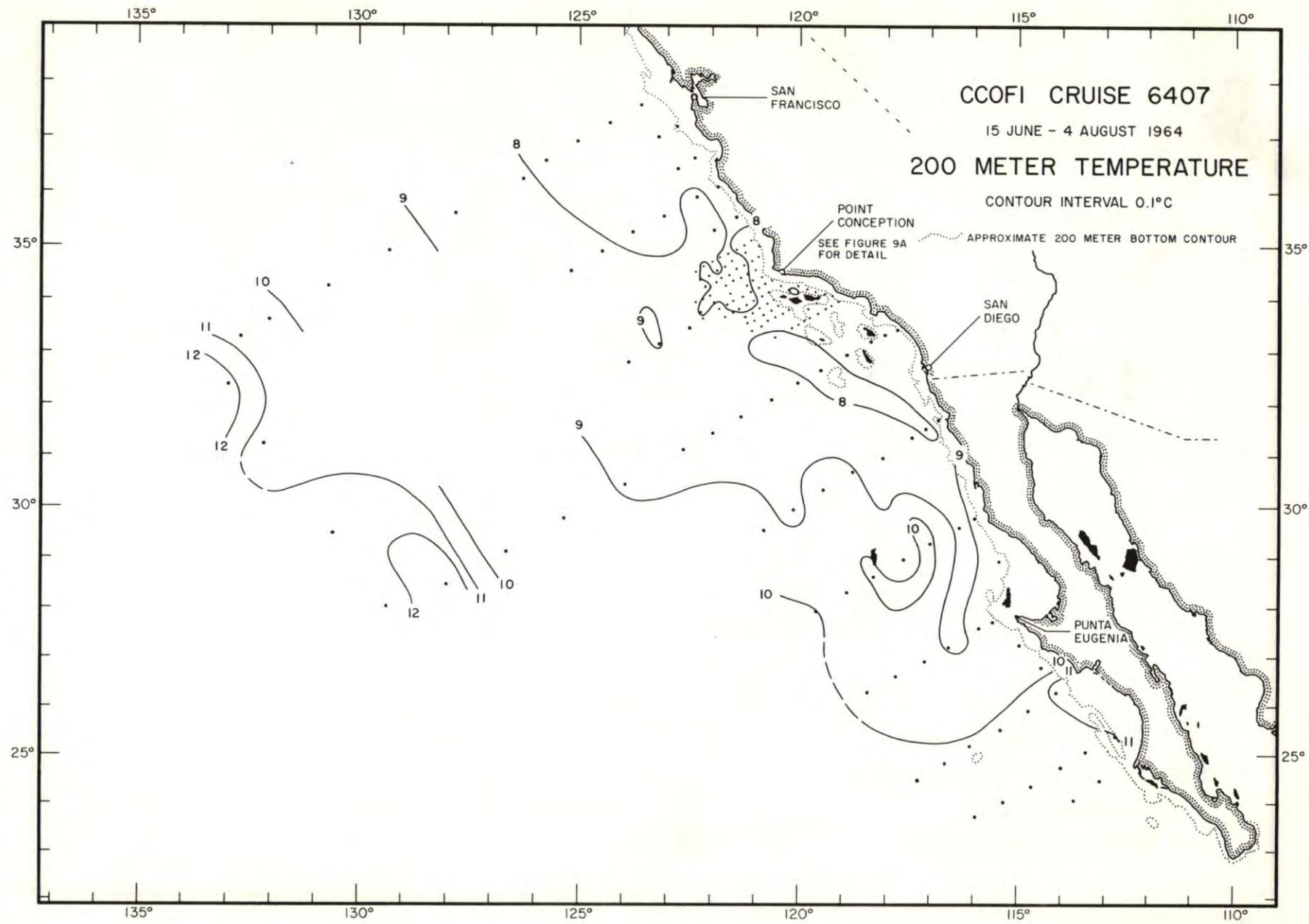


FIGURE 8



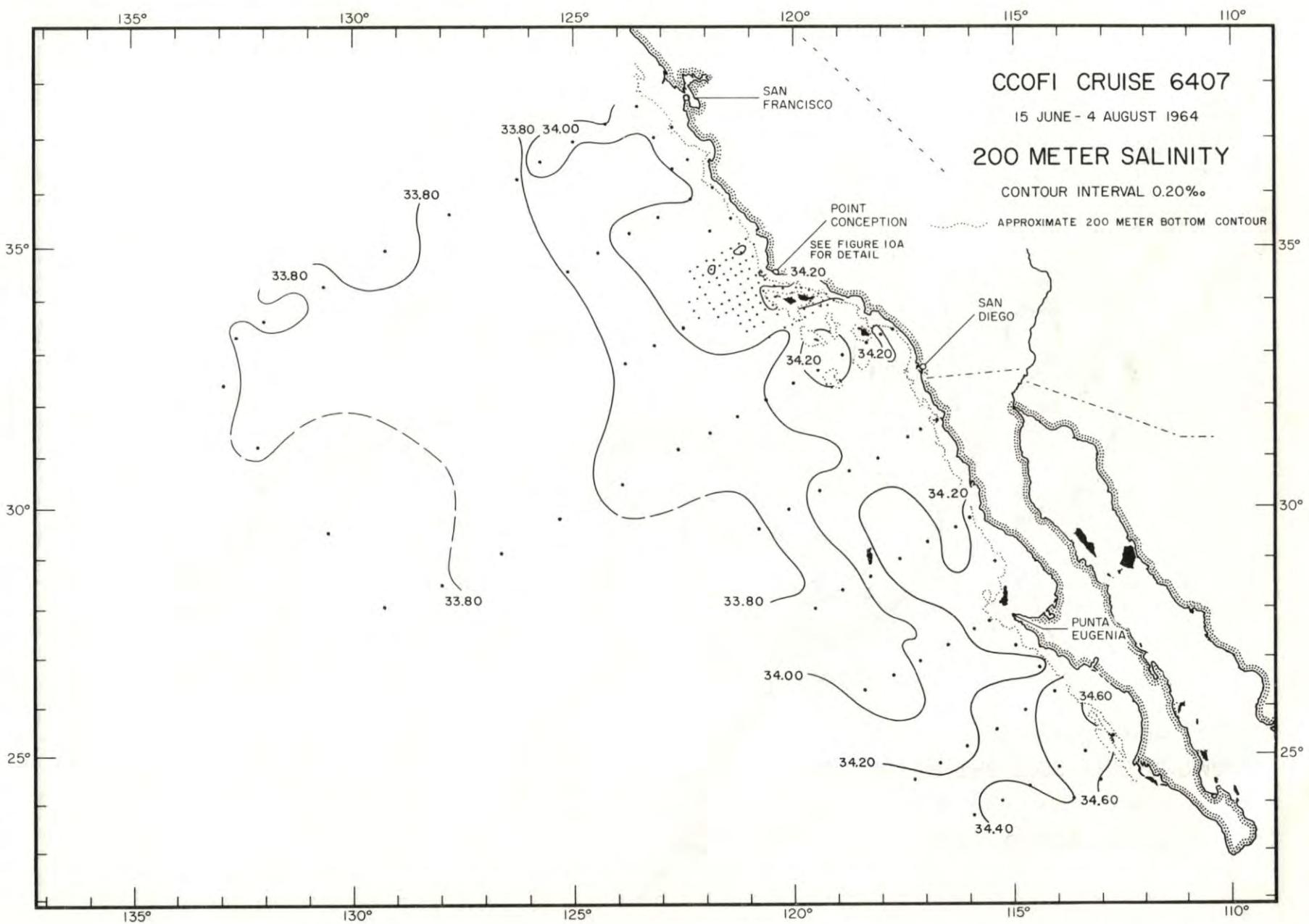


FIGURE 10

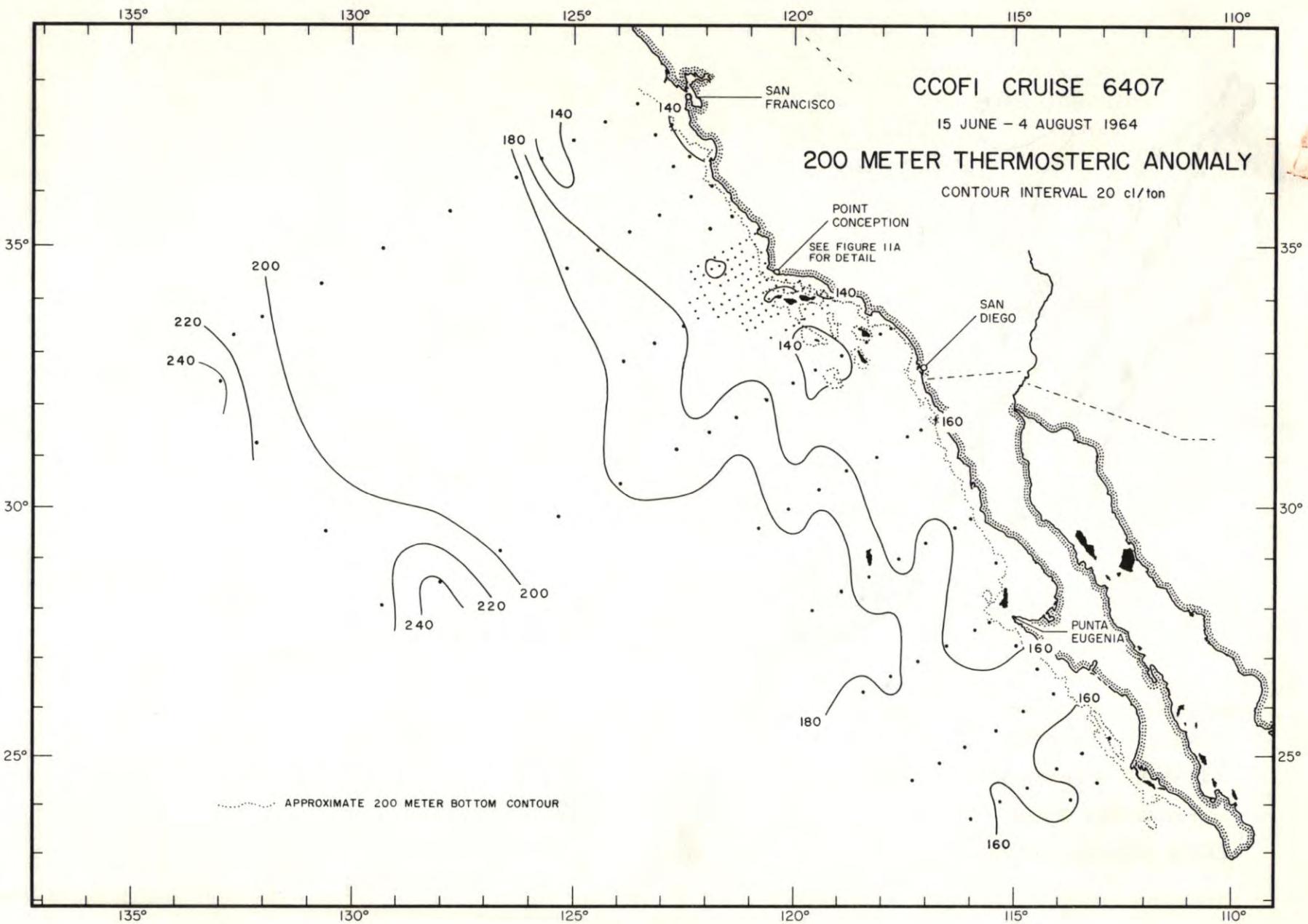


FIGURE II

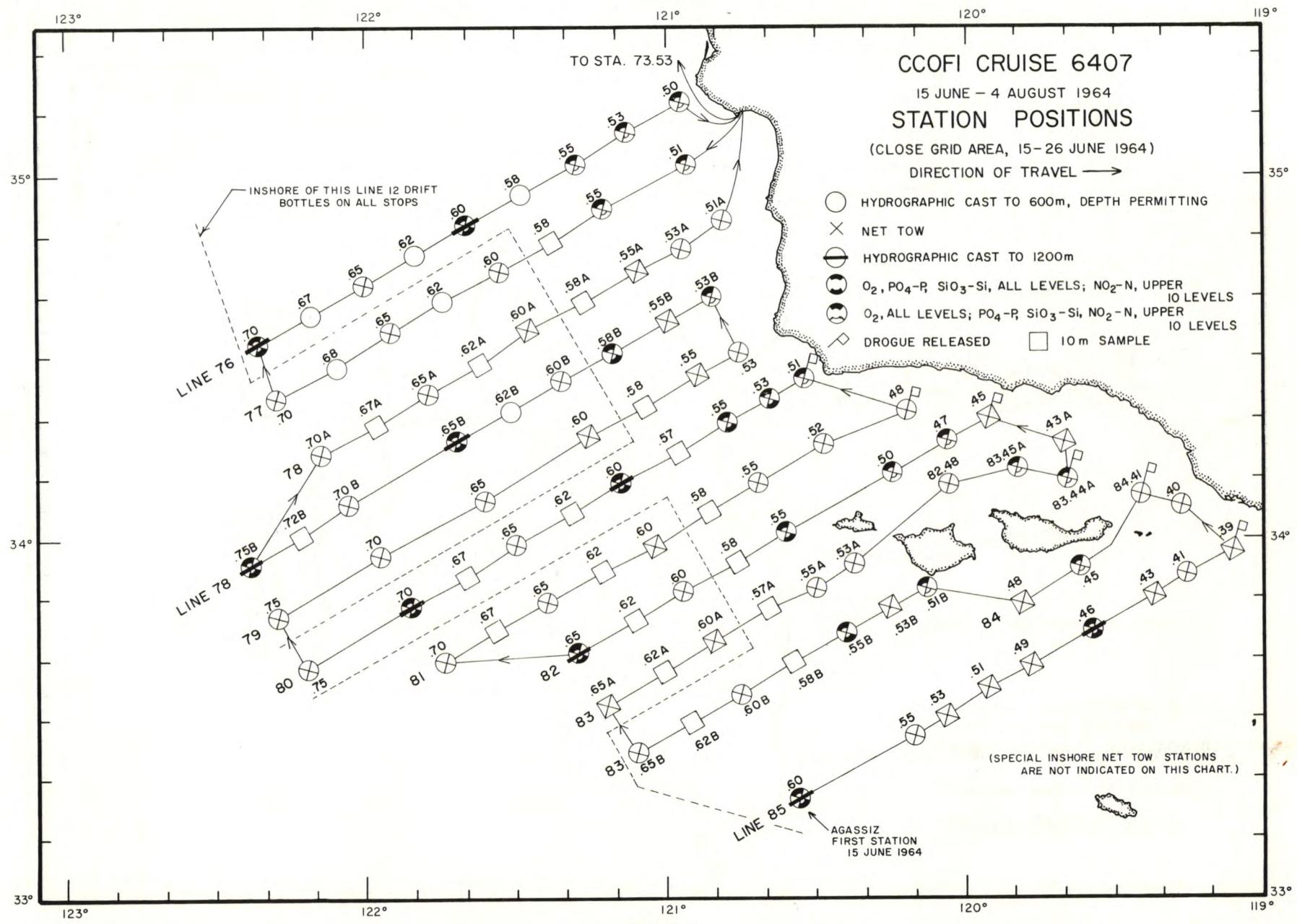


FIGURE 1A

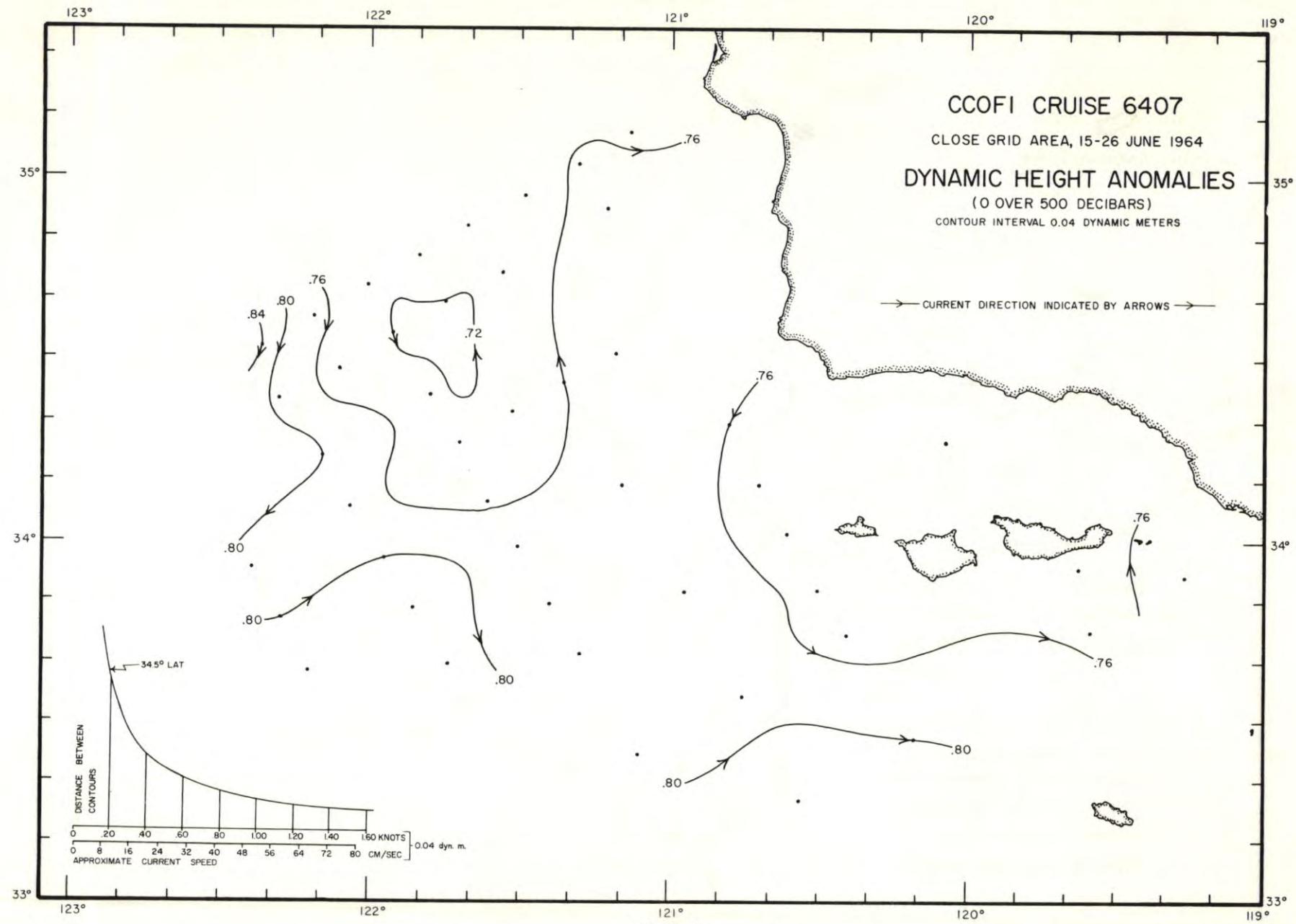


FIGURE 2A

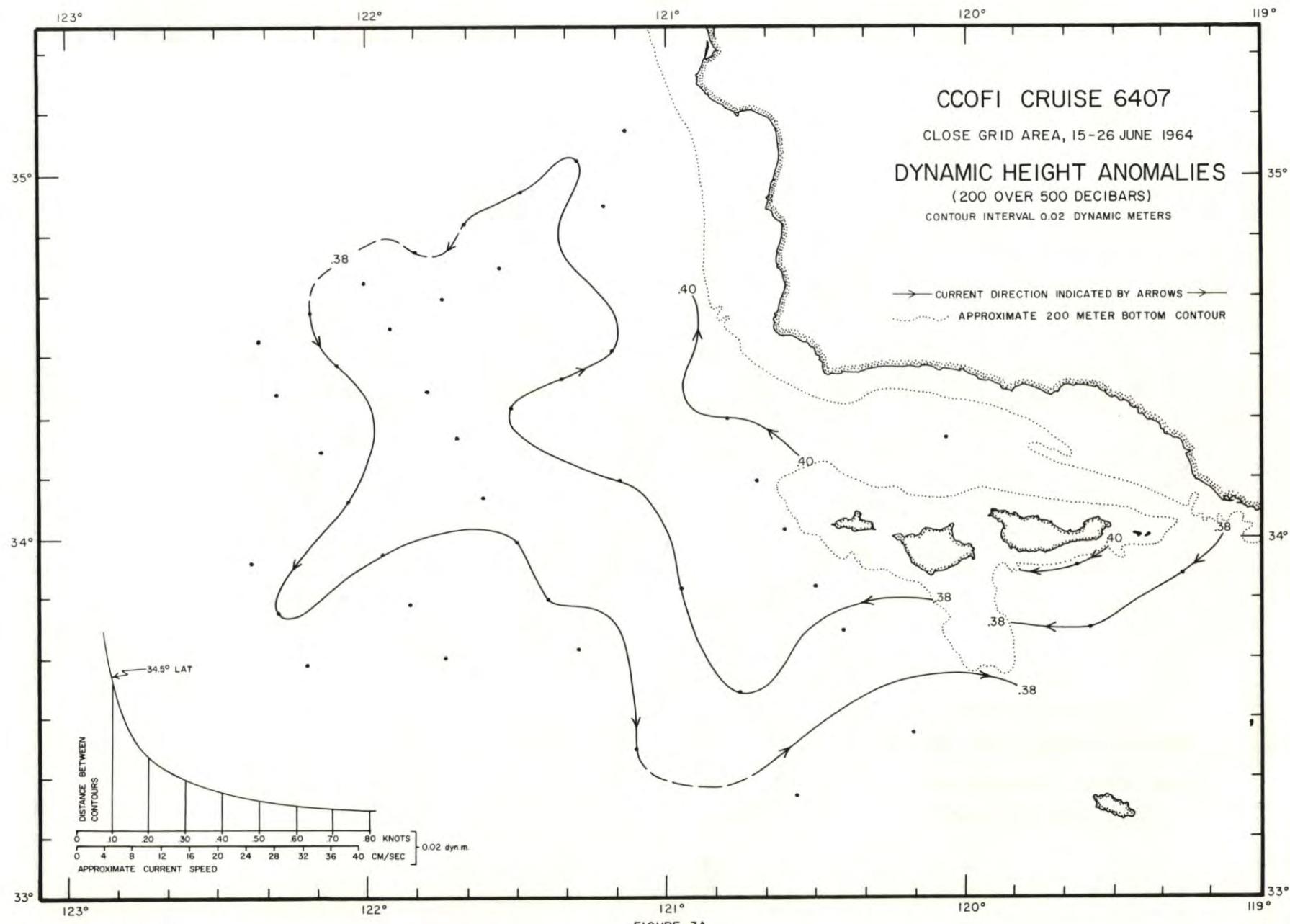


FIGURE 3A

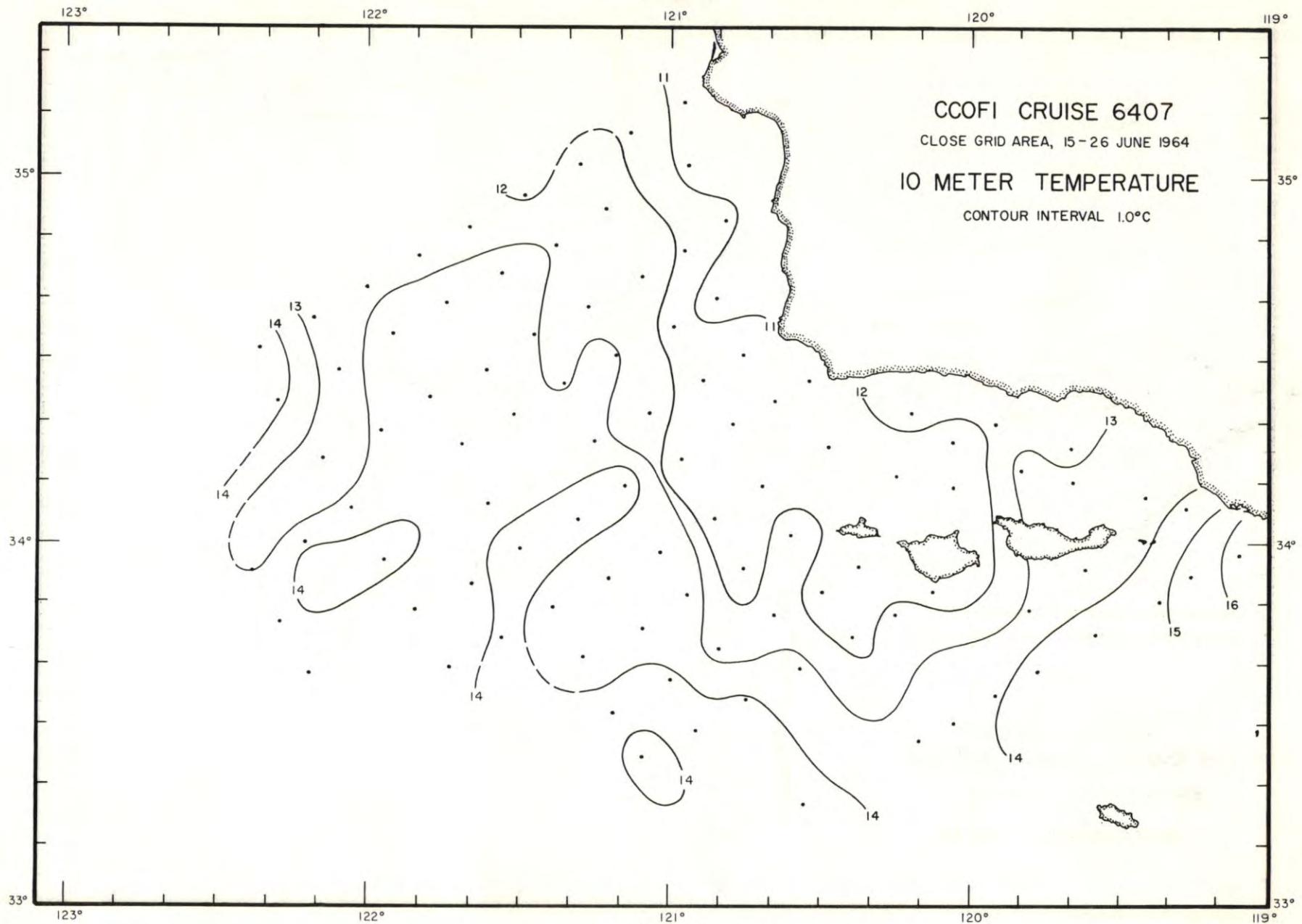


FIGURE 4A

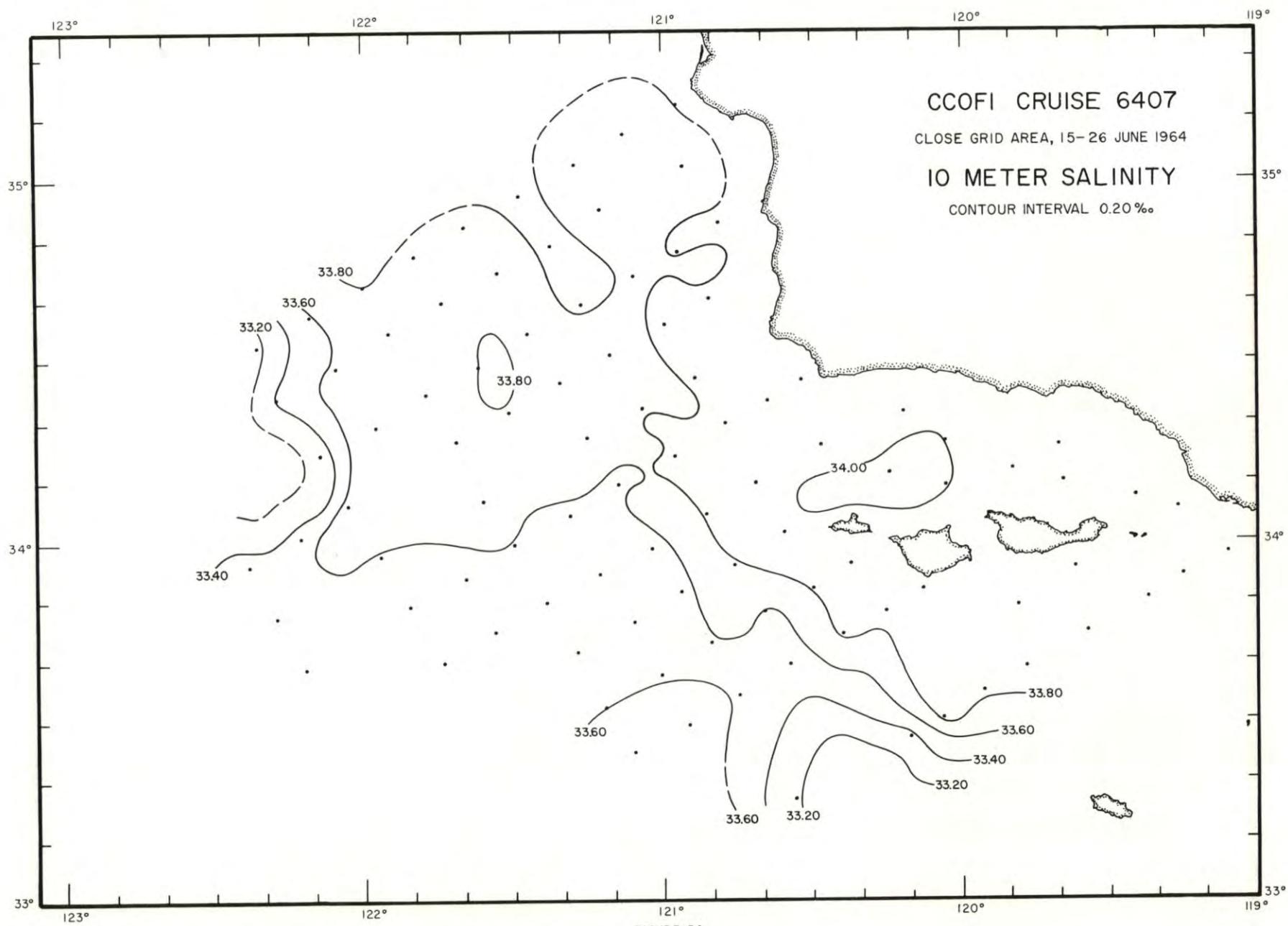


FIGURE 5A

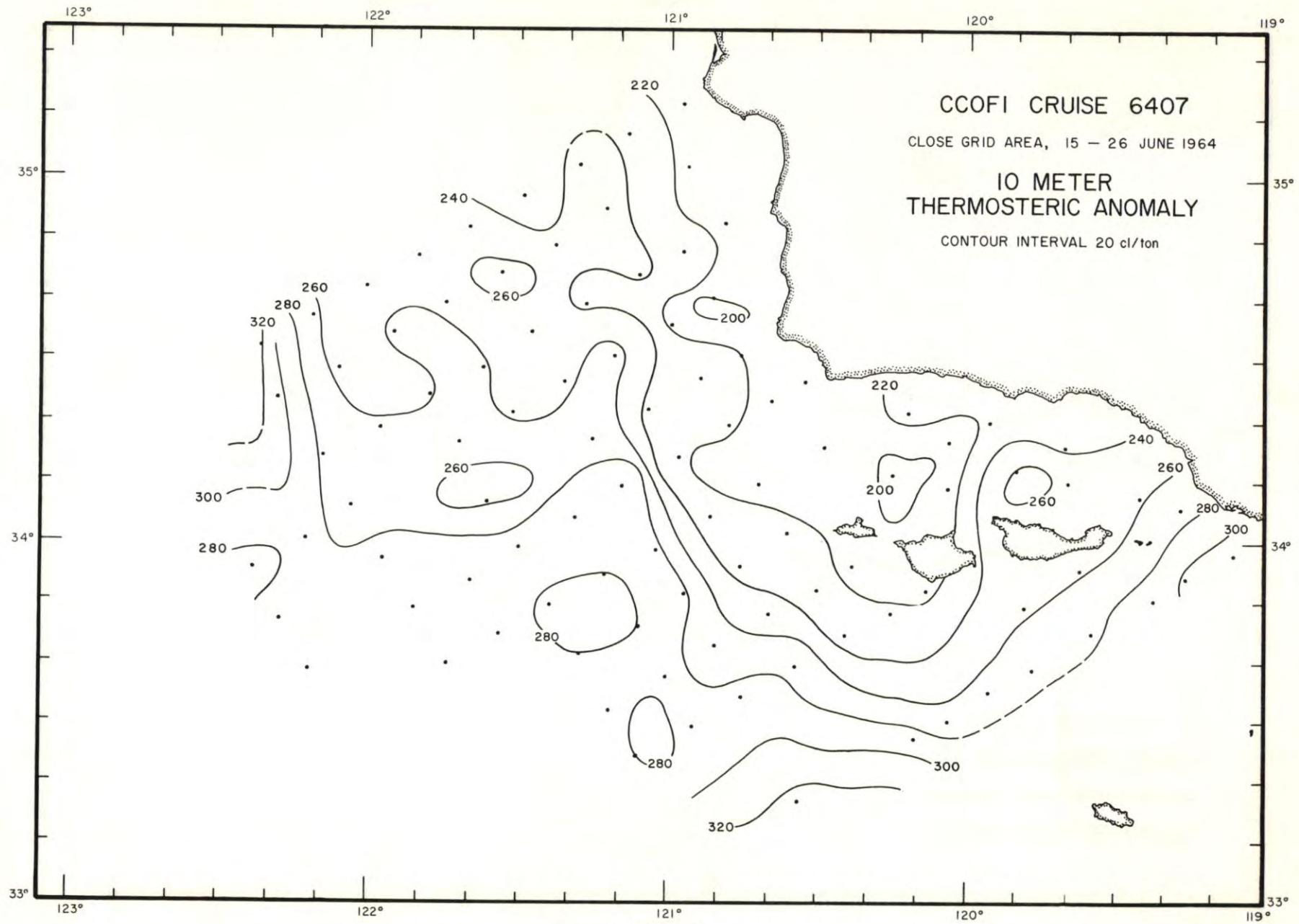
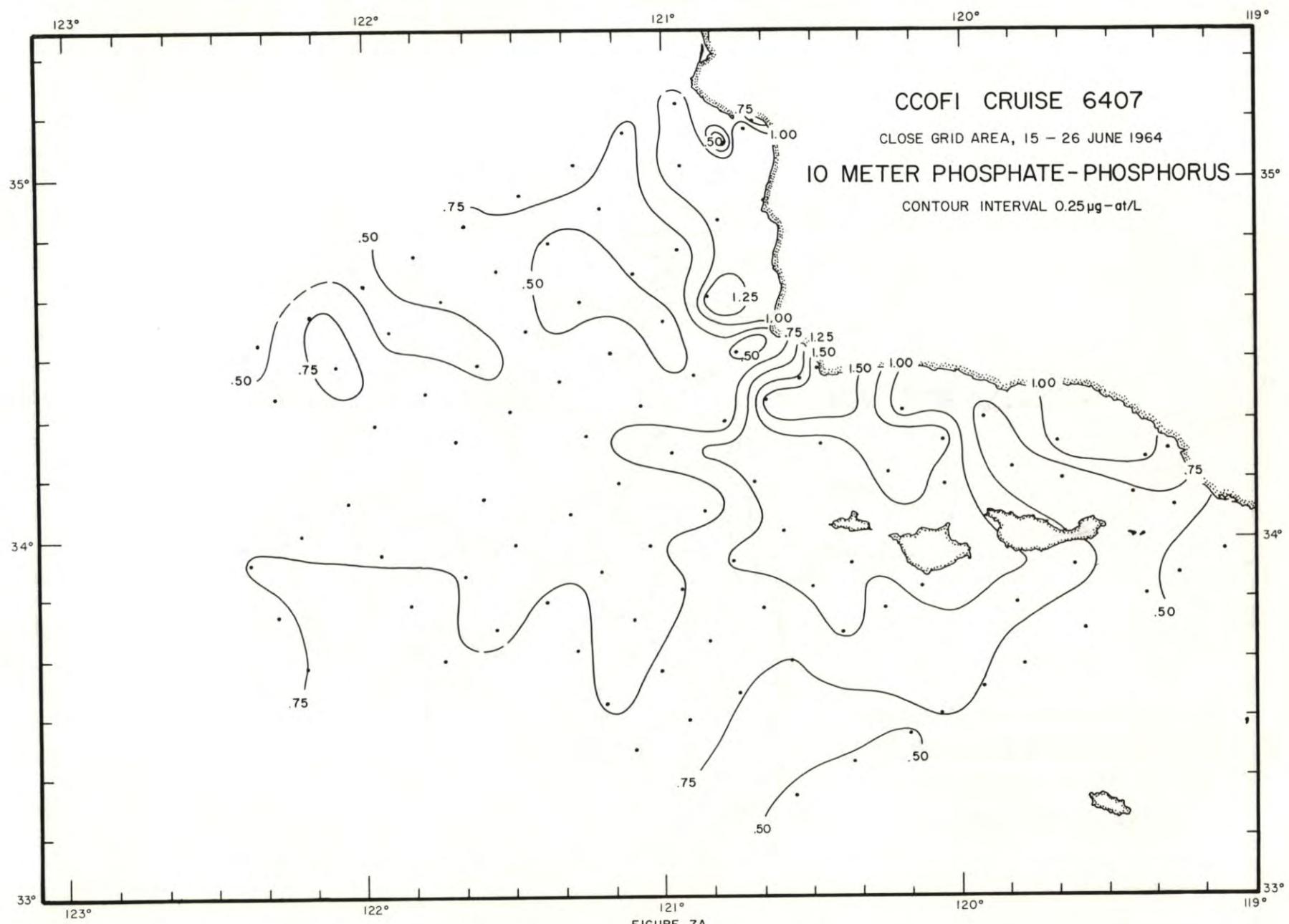
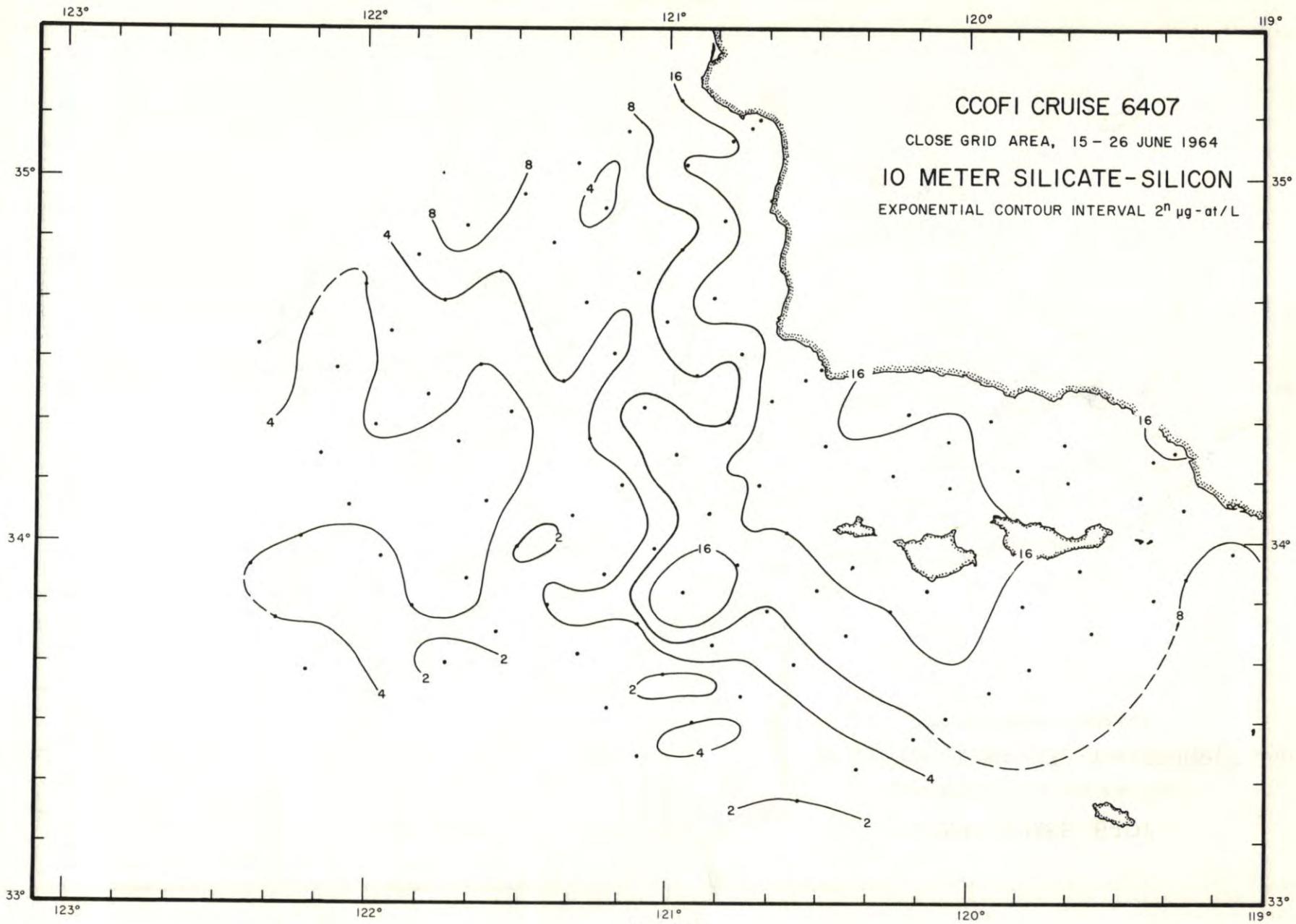


FIGURE 6A





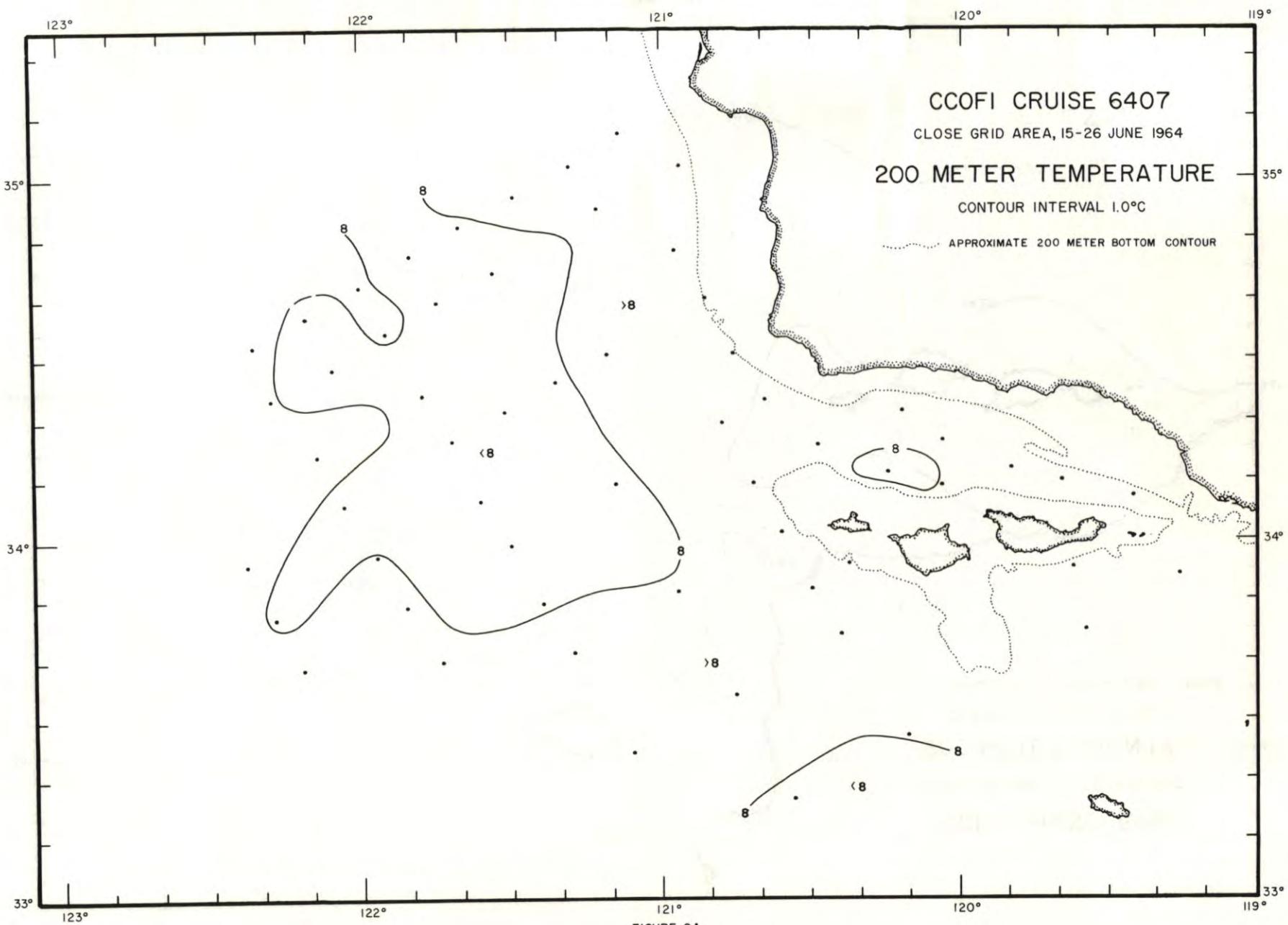


FIGURE 9A

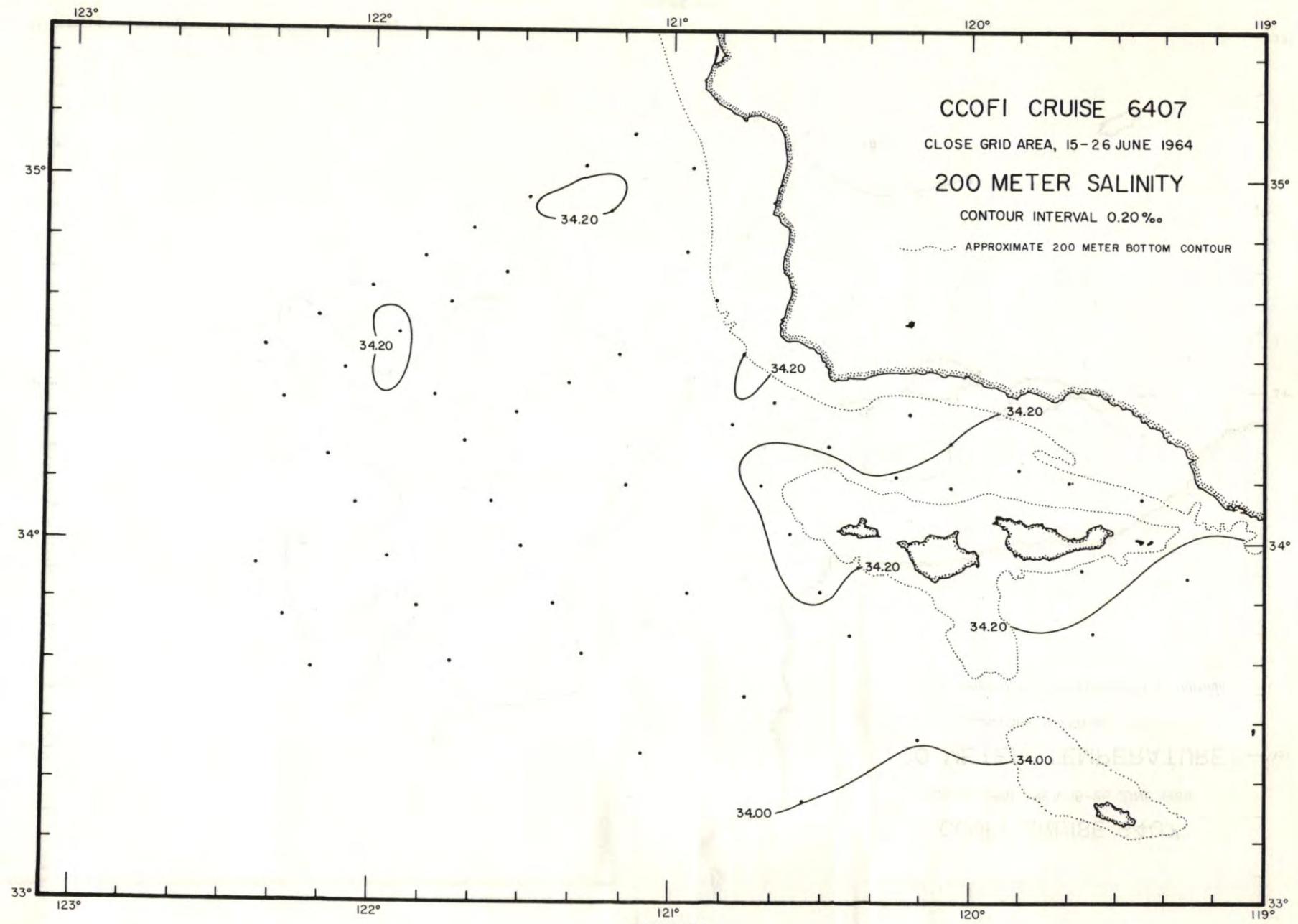


FIGURE 10A

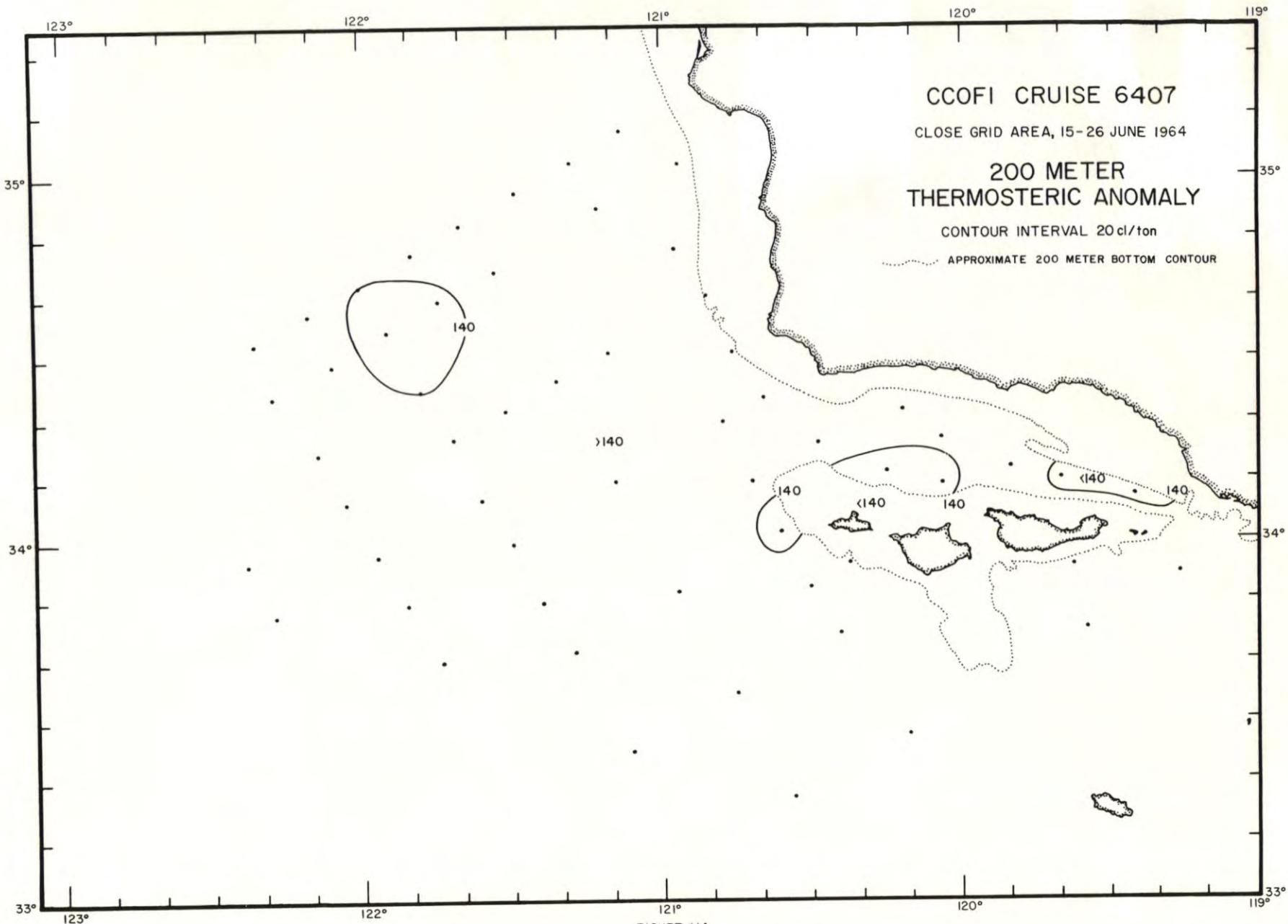


FIGURE II A

PERSONNEL  
CRUISE 6407

SHIPS' CAPTAINS

Leed, Bjarne, RV Black Douglas  
Miller, Frank, RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

\*Mantyla, Arnold W., Senior Marine Technician (in charge of northern half)  
\*\*#Mead, Richard V., Principal Marine Technician (in charge of southern half)  
\*Alquist, C. Norman, Research Assistant  
Born, Barbara M., Senior Engineering Aid  
\*\*Bryan, Walter R., Senior Marine Technician  
Crowe, Fred J., Laboratory Assistant  
Daniel, Dick A., Laboratory Helper  
\*\*Davoll, Peter J., Marine Technician  
\*Ferreira, Simon M., Marine Technician  
\*Kimura, Makoto, Fishery Biologist (General), Bureau of Commercial Fisheries  
Muus, David A., Marine Technician  
Netzley, Ronald L., Marine Technician  
\*##Rosendahl, Donald V., Electronics Technician  
Snideman, R. Lawrence II, Marine Technician  
  
\*\*Wagner, Vaughn M., Biological Technician (Fisheries), Bureau of Commercial  
Fisheries  
Wilson, Warren E., Marine Technician  
\*Wirth, David, Marine Technician

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\*Northern half of cruise.

\*\*Southern half of cruise.

#From San Francisco to San Diego.

##From San Diego to San Francisco.

RV Black Douglas

Farrar, Lloyd J., Biological Technician (Fisheries), Bureau of Commercial Fisheries

Perkins, Herbert C., Biological Technician (Fisheries), Bureau of Commercial Fisheries

O B S E R V E D    L E V E L S    O F    D E P T H								S T A N D A R D    L E V E L S    O F    D E P T H							
I N P U T				C O M P U T E D				I N P U T				C O M P U T E D			
Z	T	S	O X Y	P H O	S I L	N I T	D * T	Z	T	S	O X Y	S I G T	D * T	D D	
60.52								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 3 1964, 2347 GCT, 37 53.5N 123 01.5W, SOUNDING 43 FM, WIND 280 FORCE 4, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 10.															
0	10.84	33.995	6.27	2.11	39	0.61	197.6	0	10.84	34.00	6.27	26.05	197.2	0	
10	10.70	33.996	6.31	2.18	39	0.61	195.2	10	10.70	34.00	6.31	26.07	194.9	.020	
20	10.62	33.997	6.01	2.19	38	0.62	193.7	20	10.62	34.00	6.01	26.08	193.5	.039	
30	10.54	33.992	5.97	2.22	38	0.65	192.8	30	10.54	33.99	5.97	26.09	192.9	.058	
49	8.50	33.977	3.36	2.75	45	0.59	162.0	50	8.49	33.98	3.32	26.42	161.7	.094	
74	8.14	34.037	1.70	2.98	53	0.22	152.4	75	8.12	34.04	1.68	26.52	151.9	.134	
60.60								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 4 1964, 0410 GCT, 37 37.5N 123 37W, SOUNDING 1740 FM, WIND 320 FORCE 6, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 55.															
1	12.84	33.320	6.52	1.00	5	0.19	282.9	0	12.84	33.32	6.52	25.14	282.9	0	
8	12.82	33.316	6.70	1.03	5	0.17	282.8	10	12.80	33.31	6.69	25.14	282.9	.028	
22	11.78	33.369	6.44	1.24	9	0.23	260.0	20	12.05	33.35	6.58	25.32	266.2	.056	
27	11.38	33.391	5.98	1.24	10	0.27	251.4	30	11.40	33.43	6.10	25.50	248.9	.082	
36	11.51	33.510	6.41	1.36	11	0.26	244.9	50	10.15	33.48	5.75	25.76	224.2	.129	
45	10.72	33.480	6.08	1.45	13	0.33	233.6	75	9.46	33.80	4.18	26.13	189.6	.181	
60	9.46	33.552	5.03	1.79	22	0.39	208.0	100	8.86	33.87	3.42	26.28	175.3	.227	
71	9.46	33.762	4.30	1.96	25	0.21	192.4	125	8.37	33.94	3.23	26.41	162.9	.270	
82	9.44	33.856	3.97	2.11	27	0.30	185.2	150	8.12	34.00	2.96	26.49	154.9	.310	
98	8.92	33.874	3.43	2.13	31	0.16	175.9	200	7.49	34.04	2.45	26.62	143.1	.386	
113	8.52	33.882	3.40	-	-	-	169.4	250	7.13	34.09	1.96	26.71	134.6	.457	
134	8.28	33.972	3.09	-	-	-	159.2	300	6.60	34.10	1.68	26.79	127.0	.525	
148	8.14	33.957	2.97	-	-	-	155.4								
173	7.82	34.026	2.77	-	-	-	148.7								
205	7.42	34.046	2.39	-	-	-	141.7								
263	7.04	34.095	1.88	-	-	-	133.0								
320	6.40	34.057	1.58	-	-	-	124.7								
374	6.21	34.167	1.06	-	-	-	117.1								
60.70								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 4 1964, 0945 GCT, 37 17N 124 21W, SOUNDING 2140 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 38.															
1	14.34	32.984	6.44	0.56	2	0.06	336.6	0	14.34	32.98	6.44	24.58	336.9	0	
9	14.32	32.982	6.55	0.63	2	0.05	336.3	10	14.32	32.98	6.55	24.58	336.5	.034	
29	14.22	33.334	6.47	0.70	2	0.06	330.5	20	14.28	33.00	6.53	24.61	334.2	.067	
37	13.07	33.089	6.17	0.80	5	0.13	304.2	30	14.21	33.04	6.47	24.65	329.9	.101	
48	10.85	33.051	6.22	0.93	7	0.25	267.5	50	10.76	33.05	6.21	25.32	266.0	.160	
61	9.92	33.039	5.94	1.15	11	0.21	253.2	75	9.78	33.30	5.70	25.68	231.7	.223	
80	9.94	33.420	5.59	1.63	18	0.28	225.3	100	9.07	33.50	4.74	25.95	205.9	.278	
95	9.20	33.471	4.84	1.79	23	0.29	210.0	125	8.74	33.72	4.12	26.18	184.6	.327	
110	8.92	33.600	4.59	1.91	26	0.12	196.2	150	8.45	33.88	3.60	26.35	168.5	.372	
132	8.66	33.771	3.95	2.08	31	0.00	179.7	200	7.90	34.00	2.90	26.52	151.8	.454	
155	8.38	33.903	3.50	-	-	-	165.8	250	7.14	34.04	2.47	26.66	138.4	.528	
185	8.12	33.977	-	-	-	-	156.6	300	6.55	34.06	2.00	26.76	129.4	.597	
206	7.79	34.015	2.82	-	-	-	149.1	400	5.80	34.14	1.05	26.92	114.2	.723	
242	7.26	34.038	2.54	-	-	-	140.2	500	5.32	34.21	.81	27.03	103.5	.838	
290	6.64	34.055	2.13	-	-	-	130.9								
367	6.02	34.114	1.25	-	-	-	118.8								
440	5.58	34.173	.92	-	-	-	109.2								
506	5.30	34.215	.80	-	-	-	102.9								
60.80								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 4 1964, 1507 GCT, 36 58N 125 04W, SOUNDING 2290 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 08.															
1	13.94	33.182	6.41	0.75	3	0.15	314.1	0	13.94	33.18	6.41	24.81	314.3	0	
11	13.94	33.181	6.57	0.75	2	0.13	314.2	10	13.94	33.18	6.56	24.81	314.3	.031	
36	12.16	33.058	6.63	0.84	2	0.29	286.8	20	13.94	33.18	6.57	24.81	314.3	.063	
46	11.25	33.179	6.08	1.06	6	0.25	264.8	30	13.50	33.16	6.59	24.89	307.2	.094	
61	10.25	33.330	5.59	1.40	15	0.22	237.0	50	11.15	33.21	5.98	25.38	260.8	.151	
76	9.22	33.356	4.76	1.60	21	0.10	218.9	75	9.21	33.35	4.77	25.82	219.1	.211	
100	9.40	33.750	4.90	2.01	30	0.55	192.4	100	9.40	33.75	4.90	26.10	192.4	.263	
120	8.87	33.888	4.43	2.12	33	0.03	174.1	125	8.72	33.90	4.18	26.32	171.0	.309	
139	8.41	33.918	3.66	2.31	38	0.02	165.1	150	8.22	33.93	3.73	26.42	161.5	.351	
169	7.94	33.968	4.02	1.92	36	0.03	154.7	200	7.58	34.01	2.5	26.58	146.6	.430	
197	7.62	34.012	2.5	-	-	-	147.0	250	6.80	34.02	2.24	26.70	135.5	.502	
236	7.01	34.016	2.37	-	-	-	138.5	300	6.58	34.11	1.50	26.80	126.0	.569	
265	6.62	34.034	2.03	-	-	-	132.2	400	5.80	34.16	.96	26.94	112.7	.693	
314	6.56	34.141	1.30	-	-	-	123.4	500	5.28	34.23	.56	27.05	101.5	.806	
377	5.94	34.153	1.04	-	-	-	114.9	600	4.68	34.28	-	27.16	91.2	.908	
477	5.44	34.215	.60	-	-	-	104.5								
566	4.82	34.253	.55	-	-	-	94.8								
64C	4.58	34.31k	-	-	-	-	87.3								

O B S E R V E D   L E V E L S   O F   D E P T H							S T A N D A R D   L E V E L S   O F   D E P T H							
I N P U T				C O M P U T E D			I N P U T				C O M P U T E D			
Z	T	S	O X Y	P H O	S I L	N I T	D * T	Z	T	S	O X Y	S I G T	D * T	D D
60.90							CCOFI CRUISE 6407						60.90	
ALEXANDER AGASSIZ, JULY 4 1964, 1951 GCT, 36 37N 125 47W, SOUNDING 2450 FM, WIND 320 FORCE 4, WEATHER CLOUDY, SEA VERY RUGGED, WIRE ANGLE 26.														
2	14.48	33.101	6.49	0.63	2	0.13	330.8	0	14.48	33.10	6.49	24.64	330.9	0
11	14.42	33.096	6.80	0.64	1	0.11	330.0	10	14.43	33.10	6.78	24.65	329.9	.033
34	10.55	33.563	6.17	1.50	16	0.27	224.6	20	14.40	33.10	6.80	24.66	329.3	.066
62	8.95	33.855	4.25	2.08	32	0.36	177.8	30	12.20	33.32	6.62	25.27	271.2	.096
70	8.76	33.887	4.17	2.16	36	0.02	172.5	50	9.43	33.77	4.77	26.11	191.4	.143
89	8.41	33.940	3.24	2.22	37	0.02	163.5	75	8.64	33.91	3.97	26.34	169.1	.188
102	8.29	33.948	2.91	2.25	39	0.02	161.2	100	8.31	33.95	2.92	26.42	161.3	.230
117	8.02	33.975	2.89	2.29	41	0.01	155.3	125	7.93	33.99	2.76	26.51	152.9	.269
144	7.74	34.006	2.52	2.37	45	0.01	149.1	150	7.67	34.01	2.50	26.57	147.8	.308
162	7.54	34.017	2.48	2.43	46	0.01	145.5	200	7.33	34.07	1.90	26.66	138.7	.381
189	7.44	34.057	2.06	-	-	-	141.2	250	6.88	34.10	1.62	26.75	130.6	.450
221	7.12	34.082	1.76	-	-	-	135.1	300	6.50	34.13	1.29	26.82	123.5	.515
248	6.90	34.095	1.63	-	-	-	131.2	300	5.77	34.19	.74	26.96	110.1	.637
293	6.57	34.128	1.32	-	-	-	124.5	500	5.28	34.25	.56	27.07	100.0	.747
353	6.11	34.166	1.00	-	-	-	116.0	600	4.87	34.31	.46	27.17	91.0	.849
445	5.52	34.213	.60	-	-	-	105.5							
531	5.16	34.271	.54	-	-	-	97.1							
603	4.86	34.311	.45	-	-	-	90.8							

60.100	CCOFI CRUISE 6407	60.100												
ALEXANDER AGASSIZ, JULY 5 1964, 0029 GCT, 36 15N 126 29W, SOUNDING 2478 FM, WIND 320 FORCE 4, WEATHER CLOUDY SEA RUGGED, WIRE ANGLE 27.														
C	15.10	32.795	6.37	0.41	3	0.00	365.9	0	15.10	32.80	6.37	24.28	365.5	0
9	15.04	32.800	6.39	0.46	4	0.00	364.3	10	15.03	32.80	6.39	24.29	364.1	.036
32	14.86	32.857	6.29	0.43	3	-	356.4	20	14.80	32.82	6.30	24.36	357.9	.073
60	11.02	32.992	6.09	0.79	OU	0.73	274.7	30	14.84	32.85	6.29	24.37	356.5	.108
68	10.98	33.016	6.16	0.86	7	0.68	272.2	50	11.40	32.95	6.09	25.13	284.3	.173
86	10.57	33.063	6.14	1.01	9	0.04	261.9	75	10.94	33.03	6.16	25.27	270.5	.242
98	10.35	33.143	5.96	1.16	11	0.04	252.4	100	10.30	33.16	5.89	25.49	250.3	.308
111	10.10	33.221	5.65	1.31	14	0.01	242.6	125	9.93	33.28	5.79	25.64	235.5	.369
137	9.82	33.334	5.90	1.50	18	0.01	229.8	150	9.69	33.41	5.44	25.78	222.1	.427
153	9.66	33.431	5.32	1.59	20	0.01	220.1	200	8.84	33.69	4.50	26.14	188.4	.531
178	9.29	33.592	4.88	-	-	-	202.4	250	8.24	33.91	3.48	26.40	163.3	.621
208	8.72	33.731	4.33	-	-	-	183.5	300	7.58	34.00	2.85	26.57	147.3	.701
233	8.42	33.851	3.79	-	-	-	170.2	400	6.32	34.07	1.58	26.80	125.7	.843
276	7.96	33.978	3.05	-	-	-	154.2	500	5.64	34.14	1.00	26.94	112.4	.968
332	7.08	34.015	2.53	-	-	-	139.5							
419	6.17	34.082	1.42	-	-	-	123.0							
499	5.65	34.137	1.01	-	-	-	112.7							
603	5.16	34.180	-	-	-	-	103.9							

60.120	CCOFI CRUISE 6407	60.120												
ALEXANDER AGASSIZ, JULY 5 1964, 0839 GCT, 35 37N 127 51W, SOUNDING 2470 FM, WIND 320 FORCE 5, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 20.														
C	16.15	33.114	6.06	0.35	2	0.00	364.7	0	16.15	33.11	6.06	24.28	365.0	0
9	16.16	33.121	6.20	0.40	1	0.00	364.5	10	16.16	33.12	6.20	24.29	364.5	.036
32	15.49	33.136	6.16	0.37	2	0.00	349.1	20	16.10	33.13	6.20	24.31	362.5	.073
61	12.78	33.146	6.16	0.38	3	0.00	294.6	30	15.52	33.14	6.16	24.45	349.4	.109
71	12.43	33.119	6.53	0.38	3	0.00	290.1	50	13.40	33.15	6.16	24.90	306.0	.174
90	12.84	33.301	6.37	0.37	2	0.00	284.3	75	12.45	33.14	6.52	25.08	288.9	.249
104	12.76	33.309	6.25	0.35	2	0.07	282.2	100	12.80	33.31	6.30	25.14	282.9	.321
117	12.39	33.282	6.15	0.44	3	0.24	277.4	125	12.00	33.30	5.94	25.29	269.0	.391
145	10.86	33.405	5.28	0.99	10	0.01	241.5	150	10.56	33.44	5.11	25.66	233.9	.454
163	9.81	33.504	4.82	1.38	16	0.00	217.0	200	8.81	33.75	4.34	26.19	183.5	.560
191	8.96	33.686	4.65	-	-	-	190.4	250	8.21	33.97	3.09	26.46	158.4	.648
223	8.53	33.885	3.37	-	-	-	169.3	300	7.49	34.03	2.44	26.61	143.9	.726
250	8.21	33.972	3.09	-	-	-	158.2	400	6.37	34.10	1.42	26.82	124.1	.865
296	7.56	34.033	2.48	-	-	-	144.6	500	5.59	34.17	.83	26.97	109.5	.987
356	6.78	34.064	1.86	-	-	-	132.0	600	5.19	34.27	.57	27.10	97.5	1.098
451	5.97	34.138	1.00	-	-	-	116.4							
536	5.34	34.189	.73	-	-	-	105.3							
603	5.18	34.283	.53	-	-	-	96.4							

O B S E R V E D    L E V E L S    O F    D E P T H								S T A N D A R D    L E V E L S    O F    D E P T H							
I N P U T				C O M P U T E D				I N P U T				C O M P U T E D			
Z	T	S	CXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
60.140								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 5 1964, 1712 GCT, 34 56N 129 19W, SOUNDING 2590 FM, WIND 350 FORCE 4, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 22.															
1	16.96	33.187	6.00	0.35	1	0.00	377.2	0	16.96	33.19	6.00	24.16	377.0	0	
10	16.95	33.187	6.16	0.37	1	0.00	377.0	10	16.95	33.19	6.16	24.16	376.8	.038	
33	15.94	33.165	6.19	0.35	1	0.00	356.5	20	16.10	33.17	6.19	24.34	359.6	.075	
62	13.32	33.145	6.09	0.41	1	0.00	304.8	30	16.00	33.17	6.19	24.36	357.4	.110	
71	13.03	33.134	6.47	0.35	1	0.00	300.2	50	13.94	33.15	6.10	24.79	316.5	.178	
89	12.58	33.114	6.44	0.38	2	0.00	293.2	75	12.94	33.13	6.47	24.98	298.8	.255	
103	12.29	33.084	6.30	0.41	2	0.05	290.2	100	12.36	33.09	6.32	25.06	291.0	.330	
117	12.02	33.068	6.34	0.48	2	0.42	286.5	125	11.84	33.08	6.27	25.15	282.4	.402	
144	11.29	33.159	5.74	0.82	7	0.02	267.0	150	10.93	33.24	5.36	25.44	254.9	.470	
162	10.16	33.516	4.31	1.63	17	0.00	221.7	200	9.48	33.90	2.65	26.20	182.5	.581	
189	9.67	33.856	3.01	-	-	-	188.8	250	8.93	34.03	1.99	26.39	164.5	.670	
22C	9.19	33.961	2.23	-	-	-	173.5	300	8.53	34.09	1.87	26.50	154.1	.752	
247	8.96	34.019	2.00	-	-	-	165.7	400	7.59	34.13	1.49	26.67	137.8	.904	
293	8.59	34.084	1.90	-	-	-	155.4	500	6.84	34.19	.98	26.82	123.3	1.041	
353	8.08	34.113	1.67	-	-	-	145.9	600	5.87	34.23	.69	26.98	108.3	1.165	
446	7.17	34.145	1.29	-	-	-	131.0								
528	6.67	34.209	.87	-	-	-	119.7								
599	5.88	34.227	.69	-	-	-	108.7								
60.160								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 6 1964, 0051 GCT, 34 16N 130 42W, SOUNDING 2700 FM, WIND 360 FORCE 3, WEATHER PARTLY CLOUDY, SEA RCLGH, WIRE ANGLE 13.															
C	18.54	33.420	5.82	C.28	2	0.00	396.6	0	18.54	33.42	5.82	23.95	396.6	0	
10	17.06	33.347	6.11	0.32	2	0.00	367.8	10	17.06	33.35	6.11	24.26	367.6	.038	
29	16.53	33.358	6.05	0.29	1	0.00	355.2	20	16.77	33.35	6.08	24.32	361.1	.075	
59	15.23	33.710	5.85	0.22	2	0.00	301.6	30	16.50	33.36	6.04	24.39	354.4	.111	
68	14.84	33.657	6.27	0.22	2	0.00	297.4	50	14.91	33.56	5.86	24.90	306.0	.177	
83	14.43	33.605	6.25	C.25	-	-	292.9	75	14.50	33.62	6.26	25.04	293.2	.252	
98	14.00	33.545	6.17	0.26	2	0.00	288.7	100	13.90	33.53	6.17	25.09	287.8	.325	
112	13.49	33.465	6.19	0.32	2	-	284.6	125	13.30	33.55	6.00	25.23	274.7	.396	
136	12.64	33.629	5.61	C.60	5	0.08	256.5	150	11.23	33.61	5.40	25.67	232.7	.461	
156	10.83	33.608	5.35	0.92	9	0.02	226.0	200	9.05	33.78	4.84	26.18	184.8	.567	
186	9.58	33.725	5.16	-	-	-	197.1	250	8.09	33.96	3.63	26.47	157.4	.654	
214	8.61	33.851	4.32	-	-	-	173.0	300	7.27	33.99	3.46	26.61	143.9	.732	
242	8.21	33.952	3.66	-	-	-	159.7	400	6.08	34.06	1.9	26.82	123.6	.871	
291	7.40	33.990	3.55	-	-	-	145.6	500	5.21	34.14	1.04	26.99	107.5	.992	
344	6.69	34.012	2.47	-	-	-	134.7	600	4.82	34.21	.67	27.09	98.0	1.100	
426	5.82	34.083	1.6	-	-	-	118.7								
511	5.12	34.146	.98	-	-	-	106.0								
594	4.84	34.208	.68	-	-	-	98.3								
60.180								CCOFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 6 1964, 0854 GCT, 33 36N 132 04W, SOUNDING 2710 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 05.															
C	18.83	33.799	5.80	C.22	3	0.00	376.0	0	18.83	33.80	5.80	24.17	375.9	0	
1C	18.82	33.801	5.97	C.24	2	0.00	375.6	10	18.82	33.80	5.97	24.17	375.7	.038	
3C	17.78	33.807	5.91	C.22	2	0.00	350.7	20	18.80	33.80	5.97	24.18	375.2	.075	
61	15.72	33.794	5.78	C.22	2	0.00	305.8	30	17.78	33.81	5.91	24.44	350.5	.112	
71	15.82	33.928	6.13	C.20	2	0.00	298.2	50	16.40	33.76	5.83	24.72	323.0	.179	
85	15.90	34.024	6.06	C.17	2	0.00	292.9	75	15.86	33.94	6.13	24.98	298.2	.257	
10C	15.82	34.068	5.98	0.16	2	0.00	288.0	100	15.82	34.07	5.98	25.09	287.8	.331	
116	15.75	34.112	6.00	0.17	3	0.00	283.3	125	15.68	34.11	5.97	25.16	281.9	.403	
141	14.90	34.115	5.64	C.30	4	C.13	265.2	150	14.06	34.02	5.53	25.44	255.1	.471	
160	13.09	33.893	5.45	C.58	6	0.02	245.5	200	10.44	33.82	5.26	25.98	203.8	.588	
19C	10.86	33.790	5.25	-	-	-	213.1	250	9.58	34.00	5.27	26.26	176.7	.686	
220	9.88	33.933	5.27	-	-	-	186.4	300	8.76	34.03	4.73	26.42	161.9	.773	
25C	9.58	34.001	5.27	-	-	-	176.6	400	6.84	33.99	3.33	26.67	138.3	.929	
300	8.76	34.027	4.73	-	-	-	162.2	500	5.45	34.02	2.06	26.87	119.2	1.063	
355	7.66	34.008	3.93	-	-	-	147.8	600	4.86	34.13	.98	27.02	104.4	1.181	
439	6.20	33.983	2.84	-	-	-	130.8								
523	5.24	34.044	1.76	-	-	-	115.0								
609	4.82	34.137	.89	-	-	-	103.5								

C B S E R V E D    L E V E L S    O F    D E P T H								S T A N D A R D    L E V E L S    O F    D E P T H							
I N P L T				C O M P U T E D				I N P U T				C O M P U T E D			
Z	T	S	CXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
60.190 CCCOFI CRUISE 6407															
ALEXANDER AGASSIZ, JULY 6 1964, 1335 1530 GCT, 33 17N 132 42.5W, SOUNDING 2670 FM, WIND 010 FORCE 3, WEATHER OVERCAST, SEA MILD, WIRE ANGLE 07 13.															
C	18.80	33.695	5.75	0.34	2	0.00	382.8	0	18.80	33.70	5.75	24.10	382.4	0	
10	18.78	33.689	5.88	0.30	2	0.00	382.8	10	18.78	33.69	5.88	24.10	382.7	.038	
3C	17.34	33.698	5.90	0.30	2	0.00	348.5	20	17.73	33.70	5.90	24.36	357.3	.075	
6C	15.06	33.658	5.75	0.27	2	0.00	301.9	30	17.34	33.70	5.90	24.46	348.4	.111	
8C	14.98	33.725	6.09	0.21	2	0.00	295.3	50	15.65	33.67	5.80	24.82	313.4	.177	
94	15.32	33.892	6.02	0.23	2	0.00	290.2	75	14.98	33.70	6.04	24.99	297.2	.254	
108	15.66	34.075	5.92	0.20	2	0.00	284.0	100	15.50	33.98	5.98	25.10	287.6	.328	
132	16.04	34.317	5.85	0.17	2	0.00	274.5	125	15.83	34.22	5.88	25.21	277.1	.399	
152	16.27	34.426	5.70	0.18	3	0.07	271.6	150	16.27	34.43	5.72	25.27	271.3	.469	
176	12.47	33.803	5.45	0.65	6	0.02	240.5	200	10.84	33.79	5.32	25.88	212.7	.592	
205	10.61	33.794	5.29	1.00	11	-	208.6	250	9.34	33.93	5.02	26.25	178.1	.692	
268	8.98	33.966	4.88	1.44	21	-	170.0	300	8.50	33.99	4.50	26.43	161.1	.779	
34C	7.96	33.992	4.07	1.79	32	-	153.2	400	6.92	33.99	3.37	26.66	139.3	.935	
436	6.38	33.986	2.93	2.45	51	-	132.8	500	5.76	34.03	2.00	26.84	122.0	1.072	
532	5.44	34.066	1.57	2.94	72	-	115.6	600	4.80	34.12	1.19	27.02	104.5	1.191	
628	4.58	34.137	1.05	3.17	90	-	100.9	700	4.30	34.21	.66	27.15	92.6	1.296	
748	4.19	34.259	.55	3.39	104	-	87.8	800	4.09	34.31	.56	27.25	83.0	1.391	
871	3.98	34.363	.56	3.43	113	-	77.9	1000	3.64	34.43	.58	27.39	69.6	1.559	
1018	3.60	34.439	.58	3.46	122	-	68.5	1200	3.20	34.50	.96	27.49	60.3	1.705	
1161A	3.28	34.490	.90	3.33	127	-	61.7	1500	2.65	34.56	1.30	27.59	51.0	1.898	
1167	3.29	34.492	.85	3.37	130	-	61.7	2000	1.99	34.62	2.00	27.69	41.3	2.173	
1369A	2.88	34.535	1.14	3.24	132	-	54.8	2500	1.71	34.65	2.52	27.74	37.0	2.413	
161CA	2.46	34.579	1.45	3.05	146	-	48.1	3000	1.59	34.67	2.97	27.76	34.6	2.640	
1859A	2.13	34.577U	1.47U	3.19U	147U	-	45.6	4000	1.51	34.69	3.49	27.78	32.6	3.088	
2106A	1.89	34.633	2.12	3.00	157	-	39.6								
2353A	1.79	34.651	2.41	2.95	157	-	37.5								
2599A	1.68	34.649	2.58	2.88	159	-	36.9								
2797A	1.64	34.666	2.73	2.73	160	-	35.3								
2994A	1.59	34.673	2.96	2.80	159	-	34.4								
3191A	1.55	34.687	3.18	2.80	159	-	33.1								
3388A	1.52	34.680	3.27	2.75	156	-	33.4								
3586A	1.49	34.680	3.36	2.76	153	-	33.2								
3782A	1.50	34.684	3.42	2.74	150	-	32.9								
3929A	1.52	34.684	3.46	2.73	152	-	33.1								
4076A	1.51	34.687	3.52	2.72	149	-	32.8								
4272A	1.52	34.687	3.60	2.70	147	-	32.9								
4469A	1.53	34.690	3.66	2.68	144	-	32.7								
4665A	1.56	34.691	3.66	2.71	142	-	32.8								
4864A	1.58	34.690	3.71	2.70	143	-	33.0								
4963A	1.60	34.689	3.75	2.67	144	-	33.3								

63.52 CCCOFI CRUISE 6407								63.52							
ALEXANDER AGASSIZ, JUNE 30 1964, 2150 GCT, 37 18.5N 122 36.5W, SOUNDING 48 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MILD, WIRE ANGLE 13.															
C	11.58	33.769	6.72	0.84	7	0.26	227.0	0	11.58	33.77	6.72	25.73	226.9	0	
1C	11.48	33.775	6.92	0.81	8	0.25	224.8	10	11.48	33.78	6.92	25.76	224.5	.023	
20	11.21	33.874	7.02	0.73	9	0.20	212.8	20	11.21	33.87	7.02	25.88	213.1	.044	
29	10.60	33.897	5.46	1.33	15	0.21	200.8	30	10.54	33.90	5.29	26.02	199.6	.065	
49	8.90	33.992	1.77	2.97	37	0.28	166.8	50	8.86	33.99	1.67	26.37	166.4	.102	
73	8.37	34.012	.60	3.54	58	0.59	157.5	75	8.35	34.01	.58	26.47	157.4	.143	

63.55 CCCOFI CRUISE 6407															
ALEXANDER AGASSIZ, JUNE 30 1964, 2131 GCT, 37 12.5N 122 49.5W, SOUNDING 145 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA MILD, WIRE ANGLE 23.															
1	13.97	33.362	6.41	0.56	2	0.07	301.5	0	13.97	33.36	6.41	24.95	301.7	0	
1C	13.71	33.359	6.63	0.57	3	0.08	296.7	10	13.71	33.36	6.63	25.00	296.6	.030	
28	11.02	33.474	6.35	1.06	9	0.26	239.1	20	13.00	33.42	6.60	25.19	278.6	.059	
42	9.64	33.509	4.74	1.49	17	0.37	214.0	30	11.00	33.48	6.32	25.61	238.3	.085	
50	9.45	33.602	4.56	1.67	21	0.06	204.1	50	9.45	33.60	4.56	25.97	204.3	.129	
64	9.86	33.763	4.72	1.88	23	0.36	198.7	75	9.59	33.80	4.40	26.10	191.7	.179	
77	9.54	33.810	4.34	1.94	26	0.35	190.1	100	9.03	33.90	3.70	26.27	175.6	.225	
96	9.15	33.888	3.80	2.14	29	0.39	178.3	125	8.27	33.96	2.93	26.44	160.0	.268	
118	8.41	33.936	3.10	2.20	33	0.02	163.8	150	7.90	34.04	2.49	26.56	148.8	.307	
138	8.06	34.015	2.66	2.31	39	0.02	152.9	200	7.43	34.07	2.10	26.65	140.1	.380	
169	7.70	34.053	2.32	-	-	-	145.0								
197	7.44	34.065	2.14	-	-	-	140.6								
238	7.40	34.113	1.56	-	-	-	136.5								

A) OVERLAPPING CASTS, RECONCILIATION OF PROPERTY CURVES WHEN NECESSARY.



C B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
67.55							CCOFI CRUISE 6407						67.55	
ALEXANDER AGASSIZ, JUNE 30 1964, 1032 GCT, 36 39N 122 26W, SOUNDING 1110 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA RUGGED, WIRE ANGLE 35.														
1 13.06 33.578 6.83 0.75	3 0.15 268.1	0 13.06 33.58 6.83 25.30 267.9 0												
9 13.04 33.569 6.96 0.76	4 0.15 268.4	10 13.04 33.57 6.96 25.30 268.3 .027												
30 10.71 33.549 6.36 1.31	3 0.47 228.3	20 12.50 33.56 6.89 25.40 259.0 .053												
37 10.10 33.594 5.26 1.59	5 0.65 215.0	30 10.71 33.55 6.36 25.72 228.3 .078												
49 9.70 33.689 4.88 1.77	7 0.04 201.6	50 9.69 33.69 4.87 26.00 201.4 .121												
61 9.12 33.696 4.46 1.89	8 0.03 192.1	75 9.00 33.75 4.08 26.16 186.3 .170												
80 9.14 33.813 3.91 1.97	9 0.17 183.7	100 9.00 33.94 3.22 26.31 172.2 .215												
94 9.08 33.914 3.41 2.17	10 0.46 175.3	125 8.49 34.01 2.37 26.44 159.4 .257												
110 8.81 33.966 2.90 2.30	11 0.08 167.4	150 8.25 34.06 1.93 26.52 152.3 .296												
132 8.39 34.037 2.15 2.44	13 0.02 156.0	200 7.78 34.11 1.60 26.63 141.9 .371												
153 8.23 34.064 1.91 -	- - 151.7	250 7.33 34.15 1.35 26.72 132.8 .442												
183 8.00 34.097 1.84 -	- - 145.9	300 7.12 34.18 1.16 26.78 127.7 .509												
206 7.71 34.119 1.57 -	- - 140.3	400 6.49 34.22 .77 26.89 116.7 .636												
245 7.37 34.151 1.37 -	- - 133.2	500 5.80 34.26 .57 27.01 105.3 .753												
297 7.14 34.182 1.18 -	- - 127.9													
379 6.64 34.215 .84 -	- - 118.9													
456 6.10 34.250 .67 -	- - 109.6													
522 5.68 34.264 .53 -	- - 103.6													

67.60	CCOFI CRUISE 6407	67.60
ALEXANDER AGASSIZ, JUNE 30 1964, 1323 GCT, 36 29N 122 47.5W, SOUNDING 1560 FM, WIND 330 FORCE 5, WEATHER CLOUDY, SEA RUGGED, WIRE ANGLE 14.		
1 14.63 33.326 6.31 0.51	2 0.05 317.4	0 14.63 33.33 6.31 24.79 317.1 0
10 14.63 33.330 6.52 0.51	2 0.05 317.1	10 14.63 33.33 6.52 24.79 317.1 .032
36 11.54 33.500 6.75 1.02	6 0.23 246.2	20 14.63 33.33 6.52 24.79 317.1 .063
45 11.10 33.683 6.10 1.25	5 0.28 225.0	30 14.63 33.33 6.52 24.79 317.1 .095
60 9.90 33.725 5.42 1.74	16 0.67 202.1	50 10.20 33.72 5.64 25.94 207.3 .148
75 9.12 33.745 4.43 1.85	25 0.02 188.5	75 9.12 33.74 4.43 26.13 188.9 .198
99 8.54 33.816 3.90 1.90	30 0.02 174.6	100 8.52 33.82 3.86 26.29 174.0 .243
118 8.35 33.900 3.63 1.98	32 0.00 165.6	125 8.31 33.93 3.34 26.41 162.8 .286
137 8.26 33.967 2.91 2.19	37 0.01 159.3	150 8.18 34.00 2.72 26.48 155.7 .326
167 8.06 34.033 2.66 2.30	42 0.01 151.6	200 7.34 34.01 2.79 26.61 143.3 .403
197 7.40 34.012 2.81 -	- - 144.0	250 6.71 34.03 2.16 26.72 133.6 .474
236 6.85 34.024 2.39 -	- - 135.9	300 6.30 34.06 1.76 26.79 126.2 .541
265 6.57 34.044 1.97 -	- - 130.8	400 5.51 34.15 .98 26.96 110.1 .663
314 6.18 34.073 1.64 -	- - 123.8	500 5.28 34.25 .55 27.07 100.0 .774
378 5.60 34.124 1.11 -	- - 113.1	600 4.89 34.35 .46 27.19 88.2 .874
477 5.38 34.216 .62 -	- - 103.7	
565 5.00 34.329 .47 -	- - 91.0	
639 4.82 34.365 .46 -	- - 86.3	

70.53	CCOFI CRUISE 6407	70.53
ALEXANDER AGASSIZ, JUNE 29 1964, 2101 GCT, 36 06.5N 121 54W, SOUNDING 566 FM, WIND 310 FORCE 5, WEATHER PARTLY CLOUDY, SEA MEDIUM, WIRE ANGLE 42.		
1 11.44 33.619 6.43 1.07	10 0.30 235.6	0 11.44 33.62 6.43 25.64 235.6 0
9 11.30 33.600 6.32 1.06	11 0.29 234.6	10 11.29 33.60 6.31 25.65 234.4 .024
26 11.09 33.593 6.24 1.11	11 0.27 231.5	20 11.18 33.59 6.28 25.67 233.3 .047
33 10.60 33.593 5.79 1.29	12 0.34 223.3	30 10.89 33.59 6.07 25.72 228.3 .070
42 10.26 33.667 5.51 1.52	16 0.32 212.2	50 10.24 33.70 5.40 25.92 209.4 .114
53 10.21 33.711 5.28 1.56	19 0.28 208.1	75 9.40 33.79 4.21 26.13 189.4 .164
69 9.55 33.713 4.67 1.74	22 0.21 197.5	100 8.85 33.96 2.67 26.35 168.5 .209
82 9.24 33.921 3.61 2.14	31 0.27 177.3	125 8.47 34.00 2.61 26.44 159.9 .251
95 8.98 33.959 2.63 2.32	35 0.29 170.5	150 8.28 34.03 2.44 26.49 154.9 .291
114 8.58 33.957 2.91 2.18	33 0.03 164.7	200 7.74 34.07 2.14 26.60 144.3 .367
128 8.44 34.012 2.56 -	- - 158.6	250 7.26 34.10 1.84 26.70 135.6 .439
150 8.28 34.026 2.44 -	- - 155.2	300 7.04 34.15 1.28 26.77 128.9 .507
167 8.09 34.046 2.32 -	- - 151.0	400 6.52 34.22 .80 26.89 117.0 .635
192 7.86 34.070 2.16 -	- - 146.0	
228 7.39 34.067 2.07 -	- - 139.8	
266 7.12 34.145 1.34 -	- - 130.4	
348 6.74 34.173 1.08 -	- - 123.3	
405 6.50 34.220 .78 -	- - 116.8	

## O B S E R V E D   L E V E L S   O F   D E P T H

## S T A N D A R D   L E V E L S   O F   D E P T H

## INPUT

## COMPUTED

## INPUT

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CCDFI CRUISE 6407

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70.60

ALEXANDER AGASSIZ, JUNE 29 1964, 1737 GCT, 35 53.5N 122 22.5W, SOUNDING 1600 FM, WIND 320 FORCE 4, WEATHER OVERCAST,  
SEA RUGGED, WIRE ANGLE 17.

1	15.00	33.332	6.25	0.38	2	0.01	324.5	0	15.00	33.33	6.25	24.71	324.7	0
10	14.98	33.326	6.22	0.39	3	0.01	324.5	10	14.98	33.33	6.22	24.71	324.2	.032
34	14.92	33.321	6.20	0.42	2	0.01	323.7	20	14.95	33.32	6.21	24.71	324.4	.065
44	12.26	33.131	6.45	0.55	4	0.16	286.2	30	14.93	33.32	6.20	24.71	323.9	.097
57	11.43	33.295	5.96	0.89	7	0.19	259.4	50	11.47	33.22	6.09	25.33	265.6	.157
72	10.93	33.392	5.56	1.10	11	0.03	243.6	75	10.92	33.41	5.53	25.57	242.1	.220
96	10.42	33.567	4.94	1.44	14	0.15	222.2	100	10.34	33.59	4.96	25.81	219.2	.279
114	9.70	33.644	5.14	1.70	19	0.01	204.9	125	9.27	33.70	4.54	26.08	194.1	.331
132	9.05	33.736	4.19	1.90	25	0.00	188.1	150	8.75	33.87	3.32	26.29	173.7	.377
159	8.64	33.902	3.16	2.09	33	0.00	169.7	200	8.13	34.00	2.91	26.49	155.0	.461
187	8.33	33.981	3.03	-	-	-	159.3	250	7.33	34.04	2.33	26.64	141.0	.537
223	7.72	34.021	2.61	-	-	-	147.7	300	6.80	34.06	2.01	26.73	132.5	.607
251	7.32	34.037	2.32	-	-	-	141.1	400	5.92	34.12	1.30	26.89	117.2	.737
297	6.84	34.058	2.03	-	-	-	133.2	500	5.47	34.21	.68	27.02	105.2	.854
358	6.15	34.067	1.77	-	-	-	123.9	600	4.89	34.29	.46	27.15	92.7	.959
451	5.74	34.179	.80	-	-	-	110.6							
537	5.22	34.237	.61	-	-	-	100.3							
609	4.86	34.291	.45	-	-	-	92.3							

70.70

## CCDFI CRUISE 6407

70.70

ALEXANDER AGASSIZ, JUNE 29 1964, 1302 GCT, 35 33.5N 123 05.5W, SOUNDING 2040 FM, WIND 330 FORCE 5, WEATHER OVERCAST,  
SEA VERY RUGGED, WIRE ANGLE 30.

1	14.54	33.458	6.44	0.69	-	-	305.9	0	14.54	33.46	6.44	24.90	305.7	0
9	14.52	33.451	6.30	0.71	1	0.11	306.0	10	14.52	33.45	6.31	24.90	306.1	.031
31	14.52	33.440	6.39	0.72	2	0.12	306.8	20	14.52	33.45	6.34	24.90	306.1	.061
4C	12.32	33.358	6.55	0.96	6	0.18	270.5	30	14.52	33.44	6.38	24.89	306.8	.092
52	10.70	33.461	6.28	1.31	9	0.32	234.7	50	10.73	33.45	6.29	25.64	236.0	.146
66	9.94	33.562	5.64	1.45	12	0.48	214.8	75	9.79	33.67	5.23	25.97	204.4	.202
86	9.65	33.765	4.88	1.82	19	0.29	195.2	100	9.42	33.81	4.61	26.14	188.3	.251
103	9.38	33.818	4.51	1.92	21	0.01	187.1	125	8.93	33.87	3.65	26.27	176.3	.297
119	9.04	33.849	3.86	2.04	27	0.00	179.6	150	8.51	33.93	3.07	26.38	165.7	.341
144	8.58	33.919	3.17	2.20	31	0.00	167.5	200	7.86	34.02	2.59	26.55	149.7	.421
168	8.30	34.001	2.51	-	-	-	157.4	250	7.03	34.03	2.39	26.67	137.7	.495
200	7.86	34.018	2.59	-	-	-	149.9	300	6.56	34.07	1.72	26.77	128.7	.563
225	7.42	34.012	2.64	-	-	-	144.3	400	5.79	34.14	.98	26.92	114.1	.690
265	6.83	34.044	2.16	-	-	-	134.1	500	5.29	34.24	.59	27.06	100.9	.803
321	6.40	34.082	1.59	-	-	-	125.8							
409	5.72	34.146	.93	-	-	-	112.9							
489	5.32	34.233	.60	-	-	-	101.7							
558	5.04	34.275	.55	-	-	-	95.5							

70.80

## CCDFI CRUISE 6407

70.80

ALEXANDER AGASSIZ, JUNE 29 1964, C742 GCT, 35 13.5N 123 47.5W, SOUNDING 2175 FM, WIND 340 FORCE 5, WEATHER PARTLY CLUDGY, SEA VERY RUGGED, WIRE ANGLE 36.

C	14.19	33.454	6.34	0.72	2	0.14	299.1	0	14.19	33.45	6.34	24.97	299.4	0
1C	14.14	33.445	6.39	0.71	3	0.11	298.8	10	14.14	33.44	6.39	24.97	299.2	.030
3C	12.85	33.314	6.46	0.85	4	0.17	283.5	20	14.08	33.44	6.40	24.99	298.0	.060
37	11.90	33.230	6.40	0.90	6	0.26	272.4	30	12.85	33.31	6.46	25.13	283.8	.089
49	10.74	33.143	5.99	0.97	8	0.14	258.8	50	10.73	33.15	5.99	25.40	258.2	.143
62	11.06	33.418	6.42	1.18	8	0.26	243.9	75	9.73	33.52	5.12	25.86	214.6	.203
81	9.52	33.547	4.93	1.70	19	0.26	209.3	100	9.14	33.73	4.46	26.12	189.9	.254
96	9.16	33.701	4.54	1.89	23	0.03	192.4	125	9.10	33.87	-	26.24	178.9	.300
111	9.1C	33.792	4.24	2.00	26	0.01	184.7	150	8.56	33.93	3.28	26.37	166.4	.344
133	8.84	33.892	4.82U	2.09	29	0.00	173.4	200	7.88	34.03	2.45	26.55	149.2	.425
152	8.52	33.934	3.24	-	-	-	165.5	250	7.20	34.04	2.30	26.66	139.2	.499
181	8.10	34.009	2.58	-	-	-	153.9	300	6.80	34.09	1.59	26.75	130.3	.568
202	7.85	34.030	2.44	-	-	-	148.8	400	6.10	34.16	.98	26.90	116.3	.696
239	7.30	34.034	2.38	-	-	-	141.0	500	5.45	34.25	.47	27.05	101.9	.811
288	6.89	34.084	1.67	-	-	-	131.9							
365	6.28	34.126	1.17	-	-	-	121.1							
439	5.92	34.204	.76	-	-	-	110.9							
502	5.43	34.249	.47	-	-	-	101.8							

C O S E R V E D   L E V E L S   O F   D E P T H						S T A N D A R D   L E V E L S   O F   D E P T H								
INPUT			COMPUTED			INPUT			COMPUTED					
Z	T	S	CXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
70.90							CCOFI CRUISE 6407						70.90	
ALEXANDER AGASSIZ, JUNE 29 1964, 0153 GCT, 34 53.5N 124 29W, SOUNDING 2313 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 34.														
2 15.68 33.114 6.13 0.35 3 0.00 354.7 0 15.68 33.11 6.13 24.39 355.0 0														
1C 15.66 33.107 6.10 0.36 2 0.00 354.8 10 15.66 33.11 6.10 24.39 354.6 .035														
31 15.61 33.103 6.10 0.35 2 0.00 354.0 20 15.64 33.11 6.10 24.40 354.1 .071														
55 13.06 33.058 6.68 0.37 3 0.00 306.3 30 15.62 33.11 6.10 24.40 353.7 .106														
64 12.88 33.073 6.70 0.37 5 0.00 301.8 50 13.20 33.06 6.66 24.87 308.8 .173														
80 11.98 33.020 6.56 0.45 2 0.01 289.3 75 12.17 33.03 6.62 25.05 292.0 .248														
93 11.48 33.020 6.26 0.59 4 0.38 280.5 100 11.45 33.07 6.13 25.21 276.3 .320														
104 11.44 33.110 6.08 0.74 5 0.11 273.2 125 10.85 33.41 5.46 25.59 241.0 .385														
128 10.43 33.444 5.24 1.33 12 0.01 231.5 150 9.13 33.59 4.50 26.02 200.1 .441														
142 9.42 33.536 4.64 1.52 18 0.00 208.6 200 8.29 33.93 3.54 26.41 162.5 .533														
167 8.74 33.723 4.25 - - 184.4 250 7.49 34.00 2.87 26.58 146.1 .612														
194 8.36 33.903 3.67 - - 165.5 300 6.97 34.04 2.13 26.69 136.2 .685														
217 8.06 33.983 3.21 - - 155.3 400 6.01 34.11 1.24 26.87 119.0 .817														
257 7.40 34.006 2.78 - - 144.4 500 5.34 34.19 .83 27.02 105.2 .935														
312 6.84 34.055 1.99 - - 133.4 - - - - - - - -														
395 6.06 34.102 1.26 - - 120.2 - - - - - - - -														
472 5.46 34.155 .96 - - 109.2 - - - - - - - -														
540 5.27 34.231 .61 - - 101.3 - - - - - - - -														

70.100	CCCFI CRUISE 6407	70.100
ALEXANDER AGASSIZ, JUNE 28 1964, 2048 GCT, 34 33.5N 125 10W, SOUNDING 2420 FM, WIND 340 FORCE 4, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 25.		
1 15.98 33.211 6.11 0.35 2 0.00 354.0 0 15.98 33.21 6.11 24.40 354.1 0		
1C 15.94 33.202 5.98 0.35 1 0.00 353.8 10 15.94 33.20 5.98 24.40 353.9 .035		
33 15.82 33.192 6.01 0.35 1 0.00 352.0 20 15.90 33.20 5.99 24.41 353.1 .071		
61 14.12 33.217 6.30 0.33 2 0.00 315.1 30 15.85 33.20 6.00 24.42 352.0 .106		
69 13.98 33.256 6.41 0.35 2 0.00 309.5 50 15.40 33.19 6.11 24.51 343.2 .176		
86 13.24 33.194 6.44 0.38 2 0.00 299.7 75 14.20 33.34 6.43 24.88 307.7 .258		
101 13.20 33.286 6.20 0.44 2 0.07 292.2 100 13.19 33.28 6.22 25.04 292.4 .333		
114 12.47 33.280 6.05 0.60 4 0.20 279.0 125 11.98 33.36 5.76 25.34 264.3 .404		
140 11.16 33.473 5.25 1.05 11 0.02 241.6 150 10.60 33.50 5.02 25.70 230.1 .466		
158 10.18 33.525 4.83 1.33 14 0.00 221.4 200 8.74 33.81 4.19 26.25 178.0 .570		
184 9.08 33.714 4.34 - - 190.2 250 8.02 33.99 3.00 26.50 154.2 .655		
215 8.48 33.908 4.06 - - 166.9 300 7.25 34.03 2.33 26.64 140.7 .731		
242 8.13 33.979 3.18 - - 156.6 400 6.07 34.08 1.60 26.84 121.9 .867		
287 7.44 34.028 2.39 - - 143.3 500 5.48 34.18 .84 26.99 107.5 .987		
344 6.60 34.039 2.23 - - 131.6 600 4.80 34.21 - 27.09 97.8 1.096		
435 5.82 34.117 1.16 - - 116.2 - - - - - - - -		
518 5.40 34.195 .79 - - 105.5 - - - - - - - -		
589 4.90 34.204 .72 - - 99.3 - - - - - - - -		

70.202	CCOFI CRUISE 6407	70.202
ALEXANDER AGASSIZ, JULY 7 1964, 1557 GCT, 31 11N 132 11.5W, SOUNDING 2495 FM, WIND 330 FORCE 2, WEATHER CLOUDY, SEA KLLG, WIRE ANGLE 02.		
C 18.98 33.763 5.78 0.36 2 0.00 382.2 0 18.98 33.76 5.78 24.10 382.4 0		
10 18.80 33.756 5.92 0.37 2 0.00 378.4 10 18.80 33.76 5.92 24.15 378.1 .038		
3C 17.68 33.727 5.96 0.33 2 0.00 354.2 20 18.17 33.74 5.95 24.29 364.6 .075		
4C 16.48 33.742 5.74 0.29 3 0.01 326.1 30 17.68 33.73 5.96 24.40 354.0 .111		
55 15.92 33.781 6.13 0.31 2 0.00 311.1 50 16.03 33.77 6.06 24.82 314.2 .178		
71 15.71 33.821 6.13 0.28 2 0.00 303.7 75 15.71 33.85 6.10 24.95 301.5 .256		
96 15.78 33.937 6.01 0.23 3 0.00 296.7 100 15.82 33.98 5.98 25.02 294.4 .331		
116 15.96 34.127 5.94 0.23 3 0.00 286.7 125 16.04 34.20 5.86 25.14 283.1 .404		
136 16.14 34.262 5.80 0.21 3 0.03 280.7 150 14.86 34.08 5.65 25.31 266.9 .474		
155 14.22 33.983 5.58 0.47 5 0.07 261.0 200 10.88 33.76 5.09 25.85 215.6 .596		
185 11.76 33.754 5.18 - - 231.3 250 9.02 33.92 4.13 26.29 174.0 .696		
220 9.88 33.791 4.93 - - 196.9 300 8.18 34.01 3.31 26.49 155.0 .781		
249 9.04 33.910 4.14 - - 175.0 400 6.39 34.04 2.12 26.77 128.9 .928		
299 8.20 34.006 3.32 - - 155.6 500 5.63 34.14 1.08 26.94 112.3 1.054		
354 7.09 34.021 2.68 - - 139.2 600 5.28 34.26 .59 27.08 99.3 1.167		
439 5.98 34.062 1.67 - - 122.2 - - - - - - - -		
523 5.56 34.166 .93 - - 109.5 - - - - - - - -		
609 5.24 34.266 .58 - - 98.4 - - - - - - - -		

C O S E R V E D    L E V E L S    O F    D E P T H						S T A N D A R D    L E V E L S    O F    D E P T H								
I N P U T			C O M P U T E D			I N P U T			C O M P U T E D					
Z	T	S	O X Y	P H O	S I L	N I T	D O T	Z	T	S	O X Y	S I G T	D O T	D D
73.53								CCOFI CRUISE 6407						73.53
ALEXANDER AGASSIZ, JUNE 26 1964, 0113 GCT, 35° 31.5N 121 28.5W, SOUNDING 395 FM, WIND 080 FORCE 6, WEATHER CLEAR, SEA VERY RUGGED, WIRE ANGLE 40.														
1 12.34 33.696 7.51 C.76 7 0.28 246.0 0 12.34 33.70 7.51 25.54 245.7 0 8 12.32 33.692 7.48 C.76 8 0.26 246.0 10 12.30 33.69 7.47 25.54 245.7 .025 28 10.44 33.731 5.68 1.43 19 0.23 210.4 20 11.20 33.71 6.50 25.76 224.8 .048 35 10.08 33.716 5.14 1.59 21 0.21 205.7 30 10.35 33.73 5.53 25.92 209.0 .070 46 9.58 33.707 4.49 1.77 25 0.14 198.4 50 9.53 33.74 4.42 26.07 195.2 .110 59 9.46 33.830 4.30 1.93 29 0.20 187.4 75 9.13 33.87 3.64 26.23 179.4 .158 77 9.08 33.869 3.60 2.05 32 0.15 178.7 100 8.76 33.90 3.25 26.32 171.6 .202 92 8.82 33.890 3.35 2.11 32 0.11 173.2 125 8.65 33.96 2.83 26.38 165.5 .245 106 8.73 33.910 3.15 2.13 33 0.08 170.4 150 8.31 34.01 2.61 26.47 156.8 .285 129 8.60 33.976 2.74 2.24 37 0.02 163.6 200 7.83 34.07 2.11 26.59 145.6 .363 149 8.32 34.012 2.61 - - 156.8 250 7.28 34.11 1.87 26.70 135.1 .435 177 7.98 34.038 2.41 - - 150.1 300 6.89 34.12 1.54 26.76 129.2 .503 199 7.84 34.069 2.12 - - 145.8 400 6.22 34.23 .84 26.94 112.6 .629 233 7.42 34.102 1.93 - - 137.6 500 5.71 34.28 .64 27.04 102.7 .742 280 7.06 34.111 1.70 - - 132.1 357 6.44 34.181 1.06 - - 118.9 431 6.08 34.249 .72 - - 109.4 494 5.74 34.277 .64 - - 103.3														
73.60								CCOFI CRUISE 6407						73.60
ALEXANDER AGASSIZ, JUNE 27 1964, 0511 GCT, 35 18N 121 57.5W, SOUNDING 1520 FM, WIND 080 FORCE 6, WEATHER CLEAR, SEA VERY RUGGED, WIRE ANGLE 55.														
1 14.50 33.226 6.55 0.51 4 0.05 322.1 0 14.50 33.23 6.55 24.74 321.8 0 8 14.48 33.224 6.31 C.48 4 0.04 321.8 10 14.48 33.22 6.31 24.73 322.1 .032 22 14.34 33.211 6.35 0.50 4 0.05 320.0 20 14.40 33.22 6.33 24.75 320.5 .064 27 13.99 33.180 6.29 0.53 4 0.06 315.3 30 13.80 33.17 6.36 24.84 312.3 .096 37 13.52 33.149 6.47 0.56 4 0.07 308.4 50 12.26 33.09 6.43 25.08 289.2 .156 45 12.42 33.095 6.44 0.56 4 0.10 291.7 75 11.03 33.38 5.87 25.53 246.2 .224 60 11.52 33.063 6.35 C.67 6 0.34 278.0 100 9.85 33.53 4.36 25.85 215.7 .282 71 11.15 33.231 6.09 1.01 7 0.25 259.3 125 9.57 33.76 4.63 26.08 194.3 .334 82 11.15 33.547 5.68 1.24 8 0.31 235.9 150 9.19 33.85 3.73 26.21 181.8 .381 100 9.85 33.526 4.36 1.61 18 0.03 216.0 200 8.15 34.01 2.61 26.50 154.5 .467 113 9.42 33.585 4.73 - - 204.9 250 7.81 34.10 1.85 26.62 143.1 .543 132 9.64 33.848 4.41 - - 188.9 300 7.19 34.13 1.65 26.73 132.4 .614 146 9.28 33.841 3.82 - - 183.8 166 8.69 33.929 3.16 - - 168.4 199 8.16 34.011 2.62 - - 154.6 249 7.82 34.059 1.86 - - 143.3 305 7.12 34.131 1.62 - - 131.4 358 6.75 34.180 1.09 - - 122.9														
76.50								CCOFI CRUISE 6407						76.50
ALEXANDER AGASSIZ, JUNE 26 1964, 0314 GCT, 35 12N 120 57.5W, SOUNDING 97 FM, WIND 240 FORCE 1, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 06.														
C 11.32 33.801 7.44 0.80 13 - 220.1 0 11.32 33.80 7.44 25.80 220.2 0 1C 10.90 33.806 6.36 1.17 16 0.29 212.6 10 10.90 33.81 6.36 25.89 212.3 .022 3C 10.50 33.840 5.32 1.50 18 0.33 203.3 20 10.69 33.82 5.80 25.93 208.0 .043 4C 10.30 33.854 4.86 1.64 21 0.34 199.0 30 10.50 33.84 5.32 25.98 203.3 .063 55 10.18 33.868 4.55 1.76 22 0.35 196.0 50 10.22 33.86 4.65 26.05 197.3 .104 7C 9.84 33.899 3.79 2.04 25 0.39 188.3 75 9.75 33.92 3.48 26.17 185.3 .152 85 9.65 33.961 3.19 2.25 28 0.35 180.7 100 9.57 33.98 2.98 26.25 178.0 .198 105 9.53 33.985 2.90 2.41 31 0.32 177.0 125 9.33 34.00 2.62 26.30 172.8 .242 129 9.28 34.006 2.59 2.48 34 0.29 171.6 150 8.92 34.05 2.15 26.41 162.8 .285														
76.53								CCOFI CRUISE 6407						76.53
ALEXANDER AGASSIZ, JUNE 26 1964, 0120 GCT, 35 07N 121 08W, SOUNDING 300 FM, WIND 240 FORCE 2, WEATHER OVERCAST, SEA RUGGED, WIRE ANGLE 04.														
C 12.80 33.674 8.30 0.54 6 0.20 256.1 0 12.80 33.67 8.30 25.42 256.4 0 1C 11.66 33.668 7.75 0.69 6 0.19 235.9 10 11.66 33.67 7.75 25.64 235.7 .025 30 10.57 33.774 5.76 1.30 15 0.24 209.4 20 11.05 33.73 6.71 25.80 220.7 .047 45 9.44 33.704 3.94 1.85 21 0.07 196.4 30 10.57 33.77 5.76 25.91 209.7 .069 55 9.34 33.761 3.80 1.93 25 0.04 190.7 50 9.38 33.73 3.87 26.08 193.6 .110 7C 9.28 33.843 3.53 2.07 26 0.17 183.7 75 9.28 33.88 3.29 26.22 180.9 .157 85 9.28 33.948 2.87 2.28 30 0.28 175.9 100 9.16 33.99 2.55 26.32 170.9 .201 100 9.16 33.990 2.55 2.45 34 0.00 170.9 125 8.68 34.04 2.37 26.44 160.0 .243 125 8.68 34.035 2.37 2.41 37 0.00 160.4 150 8.64 34.10 1.85 26.49 155.0 .283 145 8.65 34.086 1.95 2.57 38 0.00 156.1 200 8.45 34.17 1.48 26.58 147.0 .360 175 8.52 34.142 1.62 - - 150.1 250 8.05 34.20 1.27 26.66 139.0 .434 204 8.44 34.171 1.47 - - 146.8 300 7.65 34.22 1.18 26.73 131.9 .504 234 8.23 34.190 1.28 - - 142.3 400 6.62 34.23 .85 26.89 117.5 .634 274 7.80 34.210 1.27 - - 134.7 500 5.95 34.26 .82 27.00 107.0 .752 335 7.45 34.244 1.02 - - 127.4 385 6.72 34.227 .87 - - 119.0 448 6.25 34.240 .79 - - 112.2 507 5.92 34.261 .83 - - 106.6														

## C B S E R V E D L E V E L S O F D E P T H                    S T A N D A R D L E V E L S O F D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z	T	S	OXY	PFC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
76.55															76.55
CCOFI CRUISE 6407															

ALEXANDER AGASSIZ, JUNE 25 1964, 2254 GCT, 35° 02'N 121° 18'W, SOUNDING 318 FM, WIND 250 FORCE 2, WEATHER OVERCAST,  
SEA RUGGH, WIRE ANGLE 12.

1	14.04	33.638	7.19	0.65	3	0.18	282.7	0	14.04	33.64	7.19	25.15	282.5	0
11	12.42	33.629	6.58	0.92	6	0.17	252.4	10	12.65	33.63	6.68	25.42	256.6	.027
31	11.52	33.649	6.03	1.24	10	0.24	234.8	20	11.67	33.64	6.12	25.62	238.1	.052
4C	11.83	33.781	5.97	1.11	8	0.26	230.6	30	11.52	33.65	6.03	25.65	234.7	.075
5C	11.42	33.787	5.58	1.31	11	0.28	222.9	50	11.42	33.79	5.58	25.78	222.7	.121
65	10.28	33.781	4.31	1.77	19	0.17	204.1	75	9.88	33.87	3.82	26.11	191.1	.173
79	9.76	33.883	3.67	2.02	25	0.24	188.2	100	9.17	33.89	3.10	26.24	178.5	.220
99	9.20	33.885	3.12	2.11	28	0.00	179.3	125	8.88	33.96	2.90	26.34	168.9	.264
123	8.88	33.946	2.93	2.14	30	0.01	170.0	150	8.90	34.09	2.31	26.44	159.6	.306
142	8.93	34.060	2.48	2.36	34	0.00	162.2	200	8.61	34.17	1.55	26.55	149.3	.385
173	8.77	34.138	1.96	-	-	-	154.1	250	7.97	34.19	1.50	26.66	138.6	.459
201	8.60	34.174	1.54	-	-	-	148.9	300	7.41	34.21	1.29	26.76	129.4	.528
23C	8.33	34.215	1.31	-	-	-	141.9	400	6.62	34.26	.72	26.91	115.3	.655
27C	7.61	34.160	1.65	-	-	-	135.8	500	5.69	34.29	.51	27.05	101.7	.770
329	7.26	34.264	.97	-	-	-	123.3							
402	6.60	34.256	.70	-	-	-	119.4							
477	5.82	34.278	.54	-	-	-	104.2							
556	5.52	34.319	.49	-	-	-	97.6							

Z	T	S	OXY	PFC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
76.58															76.58
CCOFI CRUISE 6407															

ALEXANDER AGASSIZ, JUNE 25 1964, 2107 GCT, 34° 56.5'N 121° 28.5'W, SUONDING 400 FM, WIND 060 FORCE 3, WEATHER OVERCAST,  
SEA VERY RUGGH, WIRE ANGLE 13.

C	13.54	33.845	-	-	-	-	257.7	0	13.54	33.84	-	25.41	258.1	0
1C	11.86	33.830	-	-	-	-	221.5	10	11.86	33.83	-	25.73	227.5	.024
29	10.01	33.736	-	-	-	-	203.1	20	10.58	33.76	-	25.91	210.6	.046
39	9.81	33.763	-	-	-	-	197.9	30	10.00	33.74	-	25.99	202.6	.067
48	9.48	33.807	-	-	-	-	189.4	50	9.47	33.82	-	26.14	188.3	.106
63	9.24	33.858	-	-	-	-	181.9	75	9.24	33.92	-	26.26	177.3	.152
78	9.24	33.938	-	-	-	-	176.0	100	9.35	34.06	-	26.35	168.7	.196
98	9.36	34.053	-	-	-	-	169.3	125	8.91	34.13	-	26.47	156.8	.237
121	8.93	34.121	-	-	-	-	157.7	150	8.69	34.15	-	26.52	152.0	.276
141	8.77	34.142	-	-	-	-	153.8	200	8.50	34.19	-	26.58	146.2	.352
17C	8.57	34.175	-	-	-	-	146.4	250	7.89	34.17	-	26.66	139.0	.426
199	8.50	34.187	-	-	-	-	146.4	300	7.16	34.20	-	26.79	126.8	.494
228	8.36	34.198	-	-	-	-	143.6	400	6.34	34.26	-	26.95	111.8	.619
269	7.51	34.140	-	-	-	-	130.0	500	5.87	34.28	-	27.02	104.6	.733
326	6.90	34.240	-	-	-	-	120.4							
40C	6.34	34.258	-	-	-	-	111.9							
474	6.00	34.275	-	-	-	-	106.5							
555	5.57	34.298	-	-	-	-	99.7							

Z	T	S	OXY	PFC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
76.60															76.60
CCOFI CRUISE 6407															

ALEXANDER AGASSIZ, JUNE 25 1964, 1907 GCT, 34° 52'N 121° 40'W, SOLNDING 760 FM, WIND 030 FORCE 3, WEATHER FOG,  
SEA VERY RUGGH, WIRE ANGLE 13.

C	13.70	33.723	7.22	0.46	7	0.24	269.8	0	13.70	33.72	7.22	25.28	270.0	0
9	12.75	33.751	6.82	0.65	12	0.27	249.6	10	12.65	33.76	6.80	25.52	247.0	.026
29	11.98	33.845	6.62	0.86	5	0.27	228.5	20	12.10	33.83	6.70	25.68	231.8	.050
53	10.72	33.853	4.60	1.62	18	0.27	206.1	30	11.97	33.85	6.60	25.72	228.0	.073
68	9.75	33.790	3.99	1.79	23	0.17	194.9	50	10.85	33.85	4.80	25.93	208.5	.117
83	9.40	33.803	3.84	1.81	24	0.07	188.5	75	9.53	33.79	3.92	26.11	191.5	.167
98	9.24	33.859	3.49	1.93	27	0.04	181.9	100	9.22	33.86	3.47	26.21	181.5	.214
127	8.88	33.950	3.19	2.04	31	0.03	169.7	125	8.91	33.94	3.20	26.32	170.9	.259
151	8.46	34.014	3.05	2.08	35	0.02	158.7	150	8.48	34.01	3.06	26.45	159.3	.301
176	8.08	34.016	3.01	2.21	38	0.01	153.1	200	7.64	34.02	2.88	26.58	146.7	.379
21C	7.44	34.030	2.78	2.33	45	-	143.2	250	6.80	34.03	2.43	26.70	134.8	.451
273	6.55	34.035	2.27	2.64	56	-	131.2	300	6.41	34.08	1.91	26.80	126.1	.518
37C	6.26	34.204	.87	3.09	69	-	115.0	400	6.21	34.24	.76	26.95	111.7	.642
466	6.02	34.289	.65	3.26	77	-	105.7	500	5.87	34.30	.62	27.04	103.1	.755
598	5.34	34.348	.56	3.41	90	-	93.4	600	5.33	34.35	.55	27.14	93.1	.860
749	4.76	34.394	.46	3.43	102	-	83.5	700	4.93	34.38	.48	27.21	86.4	.957
897	4.30	34.442	.57	3.48	112	-	75.1	800	4.61	34.41	.49	27.27	80.7	1.049
1106	3.75	34.489	.81	3.40	124	-	66.2	1000	4.01	34.46	.66	27.38	70.9	1.217

C B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
76.62							CCCFI CRUISE 6407							76.62
ALEXANDER AGASSIZ, JUNE 25 1964, 1657 GCT, 34 47N 121 50W, SOUNDING 1040 FM, WIND 320 FORCE 2, WEATHER FOG, SEA MCCRATE, WIRE ANGLE 07.														
1	13.68	33.730	-	-	-	-	268.8	0	13.68	33.73	-	25.29	268.8	0
11	12.71	33.714	-	-	-	-	251.5	10	12.80	33.72	-	25.46	252.8	.026
31	10.89	33.694	-	-	-	-	220.7	20	12.10	33.70	-	25.58	241.4	.051
41	10.47	33.730	-	-	-	-	211.0	30	11.10	33.69	-	25.76	224.5	.074
50	10.28	33.745	-	-	-	-	206.8	50	10.28	33.74	-	25.94	207.1	.118
65	9.93	33.787	-	-	-	-	198.0	75	9.72	33.82	-	26.10	192.2	.168
81	9.61	33.860	-	-	-	-	187.5	100	9.44	33.94	-	26.24	178.9	.215
101	9.43	33.948	-	-	-	-	178.2	125	9.02	33.98	-	26.34	169.5	.259
125	9.02	33.985	-	-	-	-	169.2	150	8.47	34.01	-	26.45	159.1	.300
145	8.57	34.005	-	-	-	-	161.0	200	7.37	34.02	-	26.62	143.0	.377
175	7.99	34.019	-	-	-	-	151.6	250	6.97	34.03	-	26.68	137.0	.449
204	7.31	34.020	-	-	-	-	142.2	300	6.53	34.11	-	26.80	125.4	.517
235	7.12	34.021	-	-	-	-	139.6	400	6.23	34.25	-	26.95	111.2	.640
275	6.68	34.077	-	-	-	-	129.7	500	5.74	34.30	-	27.05	101.6	.752
335	6.41	34.151	-	-	-	-	120.8							
409	6.20	34.256	-	-	-	-	110.4							
484	5.82	34.289	-	-	-	-	103.3							
563	5.44	34.340	-	-	-	-	95.1							
76.65							CCCFI CRUISE 6407							76.65
ALEXANDER AGASSIZ, JUNE 25 1964, 1457 GCT, 34 42N 122 00W, SOUNDING 2145 FM, WIND 210 FORCE 2, WEATHER MISSING, SEA RELGH, WIRE ANGLE 14.														
C	14.62	33.722	-	-	-	-	288.2	0	14.62	33.72	-	25.09	288.3	0
5	12.84	33.796	-	-	-	-	247.9	10	12.81	33.80	-	25.52	247.1	.027
25	10.90	33.793	-	-	-	-	213.5	20	12.00	33.80	-	25.68	232.2	.051
39	10.09	33.737	-	-	-	-	204.3	30	10.89	33.79	-	25.87	213.6	.073
53	9.88	33.834	-	-	-	-	193.7	50	9.96	33.79	-	26.03	198.3	.114
68	9.80	33.950	-	-	-	-	183.9	75	9.73	33.96	-	26.21	182.0	.162
91	8.95	33.971	-	-	-	-	169.2	100	8.83	33.98	-	26.37	166.7	.206
111	8.62	34.001	-	-	-	-	162.0	125	8.30	34.01	-	26.47	156.7	.247
130	8.26	34.012	-	-	-	-	156.0	150	8.34	34.09	-	26.53	151.3	.286
149	8.34	34.080	-	-	-	-	152.1	200	8.04	34.19	-	26.65	139.6	.361
177	8.34	34.193	-	-	-	-	143.7	250	7.61	34.23	-	26.75	130.6	.430
210	7.90	34.198	-	-	-	-	137.0	300	6.99	34.22	-	26.83	123.1	.496
238	7.75	34.234	-	-	-	-	132.3	400	6.30	34.26	-	26.95	111.3	.618
286	7.09	34.215	-	-	-	-	124.7	500	5.81	34.32	-	27.05	100.9	.730
338	6.76	34.245	-	-	-	-	118.2	600	5.02	34.33	-	27.16	91.1	.833
420	6.16	34.262	-	-	-	-	109.4							
501	5.80	34.320	-	-	-	-	100.8							
585	5.15	34.325	-	-	-	-	93.0							
76.67							CCCFI CRUISE 6407							76.67
ALEXANDER AGASSIZ, JUNE 25 1964, 1255 GCT, 34 37N 122 11W, SOUNDING 2090 FM, WIND 300 FORCE 2, WEATHER MISSING, SEA MCCRATE, WIRE ANGLE 25.														
C	14.22	33.688	-	-	-	-	282.6	0	14.22	33.69	-	25.15	282.4	0
1C	12.84	33.588	-	-	-	-	263.2	10	12.84	33.59	-	25.35	263.1	.027
29	12.30	33.727	-	-	-	-	243.0	20	12.25	33.60	-	25.48	251.4	.053
38	11.72	33.701	-	-	-	-	234.5	30	12.30	33.73	-	25.57	242.8	.078
53	10.57	33.823	-	-	-	-	205.8	50	11.00	33.79	-	25.85	215.4	.124
67	10.17	33.836	-	-	-	-	198.2	75	10.08	33.83	-	26.05	197.2	.176
92	9.14	33.802	-	-	-	-	184.6	100	9.04	33.82	-	26.21	181.7	.224
111	8.92	33.875	-	-	-	-	175.8	125	8.70	33.93	-	26.35	168.5	.268
130	8.62	33.950	-	-	-	-	165.8	150	8.38	33.99	-	26.44	159.3	.309
150	8.38	33.988	-	-	-	-	159.5	200	7.93	34.07	-	26.58	147.0	.388
176	8.12	34.033	-	-	-	-	152.4	250	7.46	34.10	-	26.67	138.3	.461
212	7.83	34.084	-	-	-	-	144.5	300	7.04	34.14	-	26.76	129.7	.530
241	7.54	34.098	-	-	-	-	139.5	400	5.93	34.16	-	26.92	114.3	.657
289	7.17	34.136	-	-	-	-	131.7	500	5.48	34.24	-	27.04	103.0	.771
342	6.52	34.157	-	-	-	-	121.7	600	4.95	34.32	-	27.16	91.1	.874
425	5.77	34.174	-	-	-	-	111.3							
508	5.44	34.250	-	-	-	-	101.8							
591	5.00	34.311	-	-	-	-	92.3							



















O B S E R V E D   L E V E L S   O F   D E P T H							S T A N D A R D   L E V E L S   O F   D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
80.80							CCOFI CRUISE 6407						80.80	
ALEXANDER AGASSIZ, JUNE 27 1964, 1551 GCT, 33 28.5N 122 31.5W, SOUNDING 2135 FM, WIND 340 FORCE 5, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 38.														
1 15.49 33.242 6.18 0.38 2 0.01 341.3 0 15.49 33.24 6.18 24.53 341.5 0 9 15.46 33.239 6.13 C.37 3 0.00 340.9 10 15.45 33.24 6.13 24.54 340.6 .034 29 14.36 33.168 6.41 0.44 3 0.02 323.5 20 15.42 33.24 6.13 24.55 340.0 .068 36 13.03 33.059 6.50 C.37 3 0.00 305.7 30 14.17 33.15 6.43 24.74 321.0 .101 47 12.62 33.093 6.45 C.41 3 0.01 295.5 50 12.30 33.11 6.33 25.09 288.4 .162 58 12.06 33.129 6.24 C.62 4 0.27 282.7 75 11.44 33.24 6.34 25.35 263.6 .232 73 11.46 33.227 6.36 C.89 6 0.32 264.9 100 10.04 33.39 5.33 25.71 229.1 .294 86 11.05 33.400 5.44 1.14 10 0.06 245.1 125 9.52 33.65 4.38 26.00 201.7 .348 100 10.04 33.389 5.33 1.42 17 0.02 229.2 150 9.02 33.79 3.90 26.19 183.6 .397 118 9.70 33.603 4.42 1.68 20 0.02 208.0 200 8.63 34.02 2.54 26.43 160.8 .485 137 9.20 33.714 4.36 - - 192.0 250 8.08 34.09 2.03 26.57 147.6 .564 162 8.95 33.871 3.35 - - 176.6 300 7.36 34.12 1.58 26.70 135.4 .637 181 8.92 33.990 2.55 - - 167.3 400 6.54 34.23 .86 26.90 116.5 .768 212 8.46 34.036 2.53 - - 157.1 500 6.28 34.30 .49 26.99 108.1 .887 253 8.04 34.09 A 2.01 - - 147.0 321 7.08 34.137 1.42 - - 130.4 387 6.60 34.215 .94 - - 118.4 451 6.39 34.273 .68 - - 111.4														
80.90							CCOFI CRUISE 6407						80.90	
ALEXANDER AGASSIZ, JUNE 27 1964, 2049 GCT, 33 09N 123 12W, SOUNDING 2245 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 28.														
1 15.76 33.145 6.14 0.36 4 0.02 354.1 0 15.76 33.14 6.14 24.39 354.5 0 1C 15.75 33.138 6.C3 0.36 3 0.02 354.4 10 15.75 33.14 6.03 24.40 354.3 .035 33 15.51 33.131 6.11 C.34 5 0.00 349.8 20 15.74 33.14 6.03 24.40 354.1 .071 42 14.02 33.181 6.47 C.34 3 0.01 315.8 30 15.70 33.13 6.04 24.40 353.9 .106 55 13.31 33.141 6.59 0.36 2 0.02 304.9 50 13.57 33.15 6.55 24.87 309.3 .173 67 12.87 33.138 6.50 0.39 2 0.04 296.9 75 12.73 33.14 6.42 25.03 294.1 .249 85 12.34 33.143 6.20 0.59 3 0.07 286.7 100 12.20 33.19 6.10 25.17 280.7 .321 105 12.10 33.208 6.06 0.72 3 0.04 277.6 125 11.44 33.30 5.83 25.39 259.2 .389 122 11.53 33.285 5.85 0.94 6 0.07 261.8 150 10.57 33.44 5.30 25.66 234.1 .452 148 10.64 33.425 5.38 1.26 11 0.04 236.3 200 9.01 33.86 3.32 26.25 178.3 .596 174 9.57 33.598 4.53 - - 206.3 250 8.23 34.03 2.66 26.50 154.2 .642 209 8.84 33.919 3.08 - - 171.4 300 7.37 34.04 2.40 26.63 141.5 .718 234 8.46 34.000 2.89 - - 159.7 400 6.02 34.07 1.59 26.84 122.1 .855 279 7.80 34.C58 2.37 - - 146.0 500 5.31 34.16 .88 27.00 107.1 .975 337 6.62 34.012 2.50 - - 133.8 600 4.76 34.26 - 27.14 93.6 1.081 427 5.80 34.1C3 1.25 - - 117.0 511 5.24 34.164 .84 - - 106.0 582 4.86 34.235 .51 - - 96.5														
80.100							CCOFI CRUISE 6407						80.100	
ALEXANDER AGASSIZ, JUNE 28 1964, 0211 GCT, 32 49N 123 53W, SOUNDING 2400 FM, WIND 080 FORCE 4, WEATHER PARTLY CLOUDY, SEA HIGH, WIRE ANGLE 35.														
1 15.42 33.069 6.32 C.38 3 0.00 352.5 0 15.42 33.07 6.32 24.41 352.4 0 9 15.42 33.067 6.30 0.42 3 0.00 352.6 10 15.42 33.07 6.29 24.41 352.4 .035 3C 15.40 33.065 6.12 C.38 2 0.00 352.4 20 15.41 33.07 6.20 24.42 352.2 .071 37 14.50 33.171 6.38 0.36 2 0.00 326.1 30 15.40 33.06 6.12 24.41 352.7 .106 5C 13.82 33.205 6.40 C.35 3 0.00 310.1 50 13.82 33.20 6.40 24.86 310.5 .172 62 13.42 33.191 6.44 0.42 3 - 303.4 75 12.86 33.13 6.43 24.99 297.3 .249 83 12.4C 33.089 6.42 0.46 3 0.03 291.8 100 12.04 33.18 6.20 25.19 278.6 .321 100 12.04 33.180 6.20 0.71 3 0.09 278.6 125 11.30 33.32 5.97 25.44 255.3 .389 117 11.40 33.291 6.05 C.97 7 0.00 259.1 150 10.01 33.46 4.91 25.77 223.5 .449 142 10.40 33.411 5.23 1.29 12 0.00 233.4 200 8.89 33.86 3.78 26.26 176.5 .551 167 9.44 33.606 4.30 - - 203.7 250 8.29 33.97 3.24 26.44 159.5 .637 202 8.85 33.869 3.73 - - 175.2 300 7.69 34.05 2.64 26.59 145.1 .715 227 8.56 33.920 3.41 - - 167.1 400 6.45 34.10 1.55 26.81 125.1 .856 27C 8.03 34.012 3.06 - - 152.7 500 5.86 34.21 1.05 26.97 109.7 .979 327 7.34 34.C73 2.25 - - 138.6 414 6.34 34.113 1.41 - - 122.8 495 5.89 34.201 1.07 - - 110.7 563 5.42 34.235 .71 - - 102.7														

A) ALTERNATE VALUE, 34.05, NOT USED IN INTERPLATION.

C B S E R V E D   L E V E L S   O F   D E P T H							S T A N D A R D   L E V E L S   O F   D E P T H							
INPUT			COMPUTED				INPUT			COMPUTED				
Z	T	S	CXY	PFC	SIL	NIT	DST	Z	T	S	CXY	SIG*T	DST	DD
80.200			CCOFI CRUISE 6407											80.200
ALEXANDER AGASSIZ, JULY 8 1964, 0534 GCT, 29 29N 130 36W, SOUNDING 2342 FM, WIND 020 FORCE 4, WEATHER MISSING, SEA RCLGH, WIRE ANGLE 19.														
1 19.59 34.381 5.62 C.38 2 0.00 352.2 0 19.59 34.38 5.62 24.42 352.3 0 1C 19.59 34.383 5.75 C.35 2 0.00 352.1 10 19.59 34.38 5.75 24.42 352.3 .035 29 19.42 34.487 5.67 C.37 2 0.00 340.3 20 19.45 34.47 5.70 24.52 342.3 .070 38 19.00 34.508 5.40 C.33 2 0.03 328.6 30 19.42 34.49 5.66 24.54 340.1 .104 53 16.68 34.017 6.09 C.37 3 0.00 310.5 50 16.65 34.04 6.02 24.83 312.6 .170 66 17.44 34.407 5.93 C.32 2 0.00 299.2 75 17.50 34.44 5.93 24.98 298.2 .247 9C 17.00 34.425 5.83 C.33 2 0.00 287.9 100 17.00 34.48 5.81 25.13 283.9 .320 109 17.23 34.457 5.80 C.30 3 0.00 282.2 125 17.18 34.59 5.72 25.18 279.9 .391 128 17.16 34.593 5.69 C.30 3 0.02 279.3 150 15.64 34.31 5.60 25.32 266.4 .461 147 15.98 34.363 5.62 C.43 4 0.13 269.9 200 11.48 33.91 5.27 25.86 214.9 .583 175 13.14 33.977 5.41 - 2 0.00 240.3 250 9.52 33.97 5.06 26.25 178.0 .684 207 11.08 33.907 5.26 - 2 0.00 208.2 300 8.63 34.03 4.53 26.44 160.0 .771 235 9.84 33.927 5.18 - 2 0.00 186.2 400 6.80 34.00 3.08 26.68 137.0 .925 281 8.93 34.026 4.71 - 2 0.00 164.8 500 5.70 34.10 1.44 26.90 116.1 1.058 333 8.03 34.015 4.14 - 2 0.00 152.5 - - - - - - - - - - 412 6.62 33.999 2.89 - 2 0.00 134.8 - - - - - - - - - - 492 5.78 34.087 1.52 - 2 0.00 118.0 - - - - - - - - - - 574 5.16 34.166 .92 - 2 0.00 105.0 - - - - - - - - - -														
81.48			CCOFI CRUISE 6407											81.48
ALEXANDER AGASSIZ, JUNE 20 1964, 131G GCT, 34 21.5N 120 12W, SOUNDING 220 FM, WIND 140 FORCE 3, WEATHER PARTLY CLOUDY, SEA MEDIUM, WIRE ANGLE CO.														
C 13.52 33.928 - - - 251.2 C 13.52 33.93 - 25.48 251.1 0 1C 12.62 33.885 - - - 237.3 1C 12.62 33.88 - 25.62 237.6 .024 3C 10.44 33.967 - - - 193.0 20 10.85 33.92 - 25.98 203.3 .047 45 9.65 34.016 - - - 176.6 30 10.44 33.97 - 26.09 192.8 .066 6C 9.46 34.025 - - - 173.0 50 9.57 34.02 - 26.28 175.0 .103 75 9.18 34.070 - - - 165.3 75 9.18 34.07 - 26.38 165.3 .146 9C 9.09 - - - - - 100 8.96 34.11 - 26.45 159.0 .187 109 8.86 34.126 - - - 156.3 125 8.80 34.14 - 26.50 154.4 .227 134 8.78 34.142 - - - 153.9 150 8.72 34.15 - 26.52 152.4 .266 164 8.68 34.160 - - - 151.1 200 8.40 34.18 - 26.59 145.5 .342 200 8.40 34.183 - - - 145.3 250 7.82 34.21 - 26.70 135.0 .416 235 7.93 34.205 - - - 136.9 300 7.55 34.21 - 26.74 131.3 .483 274 7.68 34.211 - - - 133.0 - - - - - - - - - - 319 7.46 34.215 - - - 129.7 - - - - - - - - - - 359 7.25 34.221 - - - 126.4 - - - - - - - - - -														
81.52			CCCFI CRUISE 6407											81.52
ALEXANDER AGASSIZ, JUNE 20 1964, 1040 GCT, 34 16N 120 28.5W, SOUNDING 242 FM, WIND 360 FORCE 6, WEATHER MISSING, SEA RCLGH, WIRE ANGLE 25.														
1 11.70 33.950 - - - 215.8 C 11.70 33.95 - 25.85 215.8 0 1C 11.69 33.950 - - - 215.6 10 11.69 33.95 - 25.85 215.6 .022 2E 11.56 33.955 - - - 213.0 20 11.67 33.95 - 25.86 215.3 .043 42 10.06 33.997 - - - 184.5 30 11.53 33.96 - 25.89 212.1 .065 51 9.52 34.021 - - - 174.2 50 9.55 34.02 - 26.28 174.7 .103 66 9.28 34.050 - - - 168.3 75 9.23 34.06 - 26.37 166.8 .146 7E 9.21 34.059 - - - 166.6 100 9.02 34.10 - 26.43 160.6 .188 91 9.08 34.089 - - - 162.4 125 8.83 34.12 - 26.48 156.3 .228 11C 8.98 34.104 - - - 159.7 150 8.67 34.15 - 26.53 151.7 .267 129 8.79 34.132 - - - 154.8 200 8.48 34.19 - 26.59 145.9 .343 154 8.65 34.154 - - - 151.1 250 8.04 34.21 - 26.67 138.1 .416 181 8.56 34.180 - - - 147.8 300 7.54 34.21 - 26.74 131.2 .486 211 8.42 34.195 - - - 144.7 400 6.87 34.24 - 26.86 120.0 .617 253 8.00 34.211 - - - 137.5 - - - - - - - - - - 293 7.61 34.206 - - - 132.4 - - - - - - - - - - 337 7.20 34.224 - - - 125.5 - - - - - - - - - - 394 6.88 34.235 - - - 120.5 - - - - - - - - - -														
81.55			CCCFI CRUISE 6407											81.55
ALEXANDER AGASSIZ, JUNE 20 1964, 0930 GCT, 34 09N 120 42W, SOUNDING 390 FM, WIND 330 FORCE 6, WEATHER CLOUDY, SEA VERY RCLGH, WIRE ANGLE 1H.														
1 11.85 33.952 - - - 218.3 0 11.85 33.95 - 25.82 218.5 0 1C 11.82 33.952 - - - 217.8 1C 11.82 33.95 - 25.83 217.9 .022 35 10.3C 33.966 - - - 190.7 20 11.47 33.95 - 25.89 211.7 .043 45 10.07 33.983 - - - 185.7 30 10.52 33.96 - 26.07 194.8 .064 6C 9.77 33.999 - - - 179.8 50 9.99 33.99 - 26.19 183.9 .102 73 9.48 34.027 - - - 173.1 75 9.46 34.03 - 26.31 172.6 .147 9E 9.18 34.053 - - - 166.6 100 9.17 34.06 - 26.38 165.9 .189 118 9.13 34.076 - - - 164.1 125 9.02 34.10 - 26.43 160.6 .231 137 8.81 34.128 - - - 155.4 150 8.65 34.15 - 26.53 151.4 .270 167 8.5C 34.177 - - - 147.2 200 8.26 34.22 - 26.64 140.5 .345 196 8.28 34.218 - - - 140.9 250 7.99 34.25 - 26.71 134.4 .416 236 8.08 34.235 - - - 136.8 300 7.69 34.26 - 26.76 129.5 .484 266 7.86 34.251 - - - 132.5 400 7.21 34.28 - 26.84 121.5 .615 315 7.61 34.264 - - - 128.1 500 6.06 34.29 - 27.01 106.1 .735 38C 7.39 34.269 - - - 124.7 600 5.47 34.33 - 27.11 96.2 .844 479 6.24 34.287 - - - 108.5 - - - - - - - - - - 568 5.61 34.320 - - - 98.5 - - - - - - - - - - 643 5.28 34.356 - - - 92.1 - - - - - - - - - -														

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
81.65							CCDFI CRUISE 6407							81.65
ALEXANDER AGASSIZ, JUNE 20 1964, 0031 GCT, 33 48.5N 121 23.5W SOUNDING 1846 FM, WIND 320 FORCE 6, WEATHER CLOUDY, SEA ROLLING, WIRE ANGLE 40.														
C 13.40 33.562 - - - - 275.8 0 13.40 33.56 - 25.22 275.9 0 8 13.36 33.556 - - - - 275.4 10 13.35 33.55 - 25.22 275.7 .028 27 13.27 33.553 - - - - 273.9 20 13.33 33.55 - 25.22 275.3 .055 35 13.03 33.558 - - - - 269.0 30 13.23 33.55 - 25.24 273.4 .083 46 11.44 33.662 - - - - 232.5 50 11.29 33.67 - 25.71 229.3 .133 58 11.04 33.687 - - - - 223.7 75 9.98 33.78 - 26.02 199.3 .187 77 9.91 33.787 - - - - 197.7 100 9.39 33.87 - 26.19 183.4 .235 92 9.56 33.843 - - - - 188.0 125 8.92 33.94 - 26.32 171.0 .280 106 9.28 33.883 - - - - 180.7 150 8.66 34.04 - 26.44 159.7 .322 129 8.86 33.952 - - - - 169.2 200 7.97 34.08 - 26.58 146.8 .400 150 8.66 34.044 - - - - 159.4 250 7.13 34.06 - 26.68 136.8 .473 180 8.38 34.095 - - - - 151.5 300 6.85 34.11 - 26.76 129.4 .542 203 7.88 34.082 - - - - 145.4 400 5.67 34.15 - 26.94 112.0 .667 239 7.19 34.047 - - - - 138.6 500 5.60 34.30 - 27.07 99.9 .779 287 7.03 34.115 - - - - 131.4 364 5.76 34.104 - - - - 116.5 439 5.64 34.209 - - - - 107.2 507 5.60 34.304 - - - - 99.6														
81.70							CCDFI CRUISE 6407							81.70
ALEXANDER AGASSIZ, JUNE 19 1964, 2051 GCT, 33 39.5N 121 44.5W, SOUNDING 1940 FM, WIND 100 FORCE 4, WEATHER CLOUDY, SEA ROLLING, WIRE ANGLE 22.														
1 13.84 33.54 - - - - 285.9 0 13.84 33.54 - 25.11 285.9 0 1C 13.75 33.55 - - - - 283.4 10 13.75 33.55 - 25.14 283.4 .028 33 12.96 33.54 - - - - 269.0 20 13.67 33.55 - 25.16 281.9 .057 43 11.65 33.54 - - - - 245.1 30 13.33 33.54 - 25.22 276.0 .085 56 10.98 33.54 - - - - 233.6 50 11.31 33.54 - 25.60 239.2 .136 71 10.13 33.56 - - - - 218.0 75 10.10 33.58 - 25.85 216.0 .194 94 10.02 33.72 - - - - 204.4 100 9.92 33.74 - 26.00 201.3 .246 112 9.35 33.80 - - - - 187.9 125 8.98 33.86 - 26.25 177.8 .294 130 8.90 33.89 - - - - 174.4 150 8.73 33.96 - 26.37 166.7 .338 157 8.68 33.98 - - - - 164.5 200 8.15 34.01 - 26.50 154.5 .420 183 8.37 34.01 - - - - 157.7 250 7.44 34.01 - 26.60 144.7 .496 219 7.88 34.01 - - - - 150.7 300 7.35 34.15 - 26.72 133.0 .568 246 7.47 34.01 - - - - 145.1 400 6.52 34.22 - 26.89 117.0 .698 285 7.37 34.12 - - - - 135.6 500 5.63 34.27 - 27.04 102.5 .814 346 7.25 34.23 - - - - 125.7 600 5.30 34.36 - 27.15 92.0 .918 438 6.02 34.22 - - - - 110.9 520 5.54 34.28 - - - - 100.7 594 5.32 34.35 - - - - 93.0														
82.47							CCDFI CRUISE 6407							82.47
ALEXANDER AGASSIZ, JUNE 19 1964, 0250 GCT, 34 16.5N 120 04W, SOUNDING 310 FM, WIND 290 FORCE 6, WEATHER CLEAR, SEA MILD, WIRE ANGLE 13.														
C 11.84 33.988 6.73 1.12 17 0.23 215.5 0 11.84 33.99 6.73 25.86 215.3 0 1C 11.18 33.995 5.62 1.35 19 0.22 203.4 10 11.18 34.00 5.62 25.98 203.0 .021 29 10.56 33.988 4.32 1.78 23 0.26 193.4 20 10.83 33.99 4.93 26.04 197.8 .041 44 9.64 34.010 2.94 2.26 30 0.31 176.9 30 10.51 33.99 4.22 26.10 192.4 .061 54 9.55 34.033 2.82 2.33 34 0.30 173.8 50 9.60 34.02 2.88 26.27 175.5 .098 68 9.28 34.064 2.45 2.48 35 0.30 167.3 75 9.07 34.09 2.06 26.42 162.1 .140 83 8.88 34.119 1.73 2.60 38 0.23 157.1 100 8.77 34.14 1.80 26.50 153.9 .180 98 8.78 34.137 1.81 2.64 39 0.17 154.3 125 8.61 34.17 1.41 26.55 149.3 .218 123 8.62 34.167 1.44 2.73 41 0.02 149.7 150 8.41 34.18 1.33 26.59 145.6 .256 141 8.49 34.177 1.37 2.78 43 0.00 147.0 200 8.20 34.20 1.09 26.64 141.1 .329 171 8.26 34.193 1.18 - - - 142.5 250 7.95 34.21 1.16 26.68 136.8 .401 200 8.20 34.205 1.09 - - - 140.8 300 7.51 34.21 1.03 26.75 130.7 .470 229 8.08 34.209 1.03 - - - 138.7 400 6.72 34.25 .52 26.89 117.3 .599 268 7.82 34.209 1.24 - - - 135.1 500 6.40 34.27 .56 26.95 111.8 .720 328 7.24 34.222 .81 - - - 126.2 382 6.82 34.244 .57 - - - 119.1 441 6.56 34.257 .51 - - - 114.8 500 6.40 34.271 .56 - - - 111.7														

O B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H										
I N P L T				C O M P U T E D			I N P U T				C O M P U T E D						
Z	T	S	O X Y	P H C	S I L	N I T	D * T	Z	T	S	O X Y	S I G T	D * T	D D			
82.48							CCCFI CRUISE 6407						82.48				
ALEXANDER AGASSIZ, JUNE 18 1964, 1631 GCT, 34 09N 120 04.5W, SOUNDING 255 FM, WIND 260 FORCE 3, WEATHER CLEAR, SEA RCLGH, WIRE ANGLE 25.																	
2 11.51 34.022 - - - - 207.1 0 11.51 34.02 - 25.94 207.3 0	1C 11.40 34.020 - - - - 205.4 10 11.40 34.02 - 25.96 205.4 .021	29 9.98 33.988 - - - - 183.9 20 10.69 34.00 - 26.07 194.7 .041	42 9.62 34.012 - - - - 176.4 30 9.93 33.99 - 26.20 183.0 .060	51 9.57 34.026 - - - - 174.6 50 9.57 34.02 - 26.28 175.0 .096	65 9.43 34.044 - - - - 171.1 75 9.18 34.08 - 26.39 164.6 .138	77 9.16 34.084 - - - - 164.0 100 8.90 34.13 - 26.47 156.6 .179	91 9.03 34.103 - - - - 160.6 125 8.61 34.16 - 26.54 150.1 .218	114 8.68 34.162 - - - - 150.9 150 8.49 34.18 - 26.58 146.8 .256	132 8.58 34.166 - - - - 149.2 200 8.08 34.21 - 26.66 138.7 .328	158 8.44 34.191 - - - - 145.3 250 7.83 34.21 - 26.70 135.2 .399	185 8.19 34.202 - - - - 140.8 300 7.47 34.22 - 26.76 129.5 .467	217 7.99 34.210 - - - - 137.4 400 7.09 34.23 - 26.82 123.6 .599	268 7.73 34.215 - - - - 133.4 - - - - - - -	32C 7.32 34.223 - - - - 127.2 - - - - - - -	379 7.14 34.230 - - - - 124.3 - - - - - - -		
82.50							CCCFI CRUISE 6407						82.50				
ALEXANDER AGASSIZ, JUNE 19 1964, 0520 GCT, 34 11N 120 15W, SOUNDING 260 FM, WIND 300 FORCE 6, WEATHER CLEAR, SEA MISSING, WIRE ANGLE 32.																	
2 11.19 34.066 5.66 1.30 22 0.25 198.3 0 11.19 34.07 5.66 26.04 198.0 0	1C 11.12 34.068 5.60 1.34 22 0.23 197.0 10 11.12 34.07 5.60 26.05 196.8 .020	27 8.85 34.135 2.11 2.52 37 0.10 155.5 20 9.60 34.11 3.43 26.34 168.9 .038	4C 8.76 34.136 1.61 2.63 40 0.06 154.1 30 8.82 34.14 2.00 26.49 154.7 .054	48 8.68 34.135 1.65 2.69 40 0.04 153.0 50 8.67 34.14 1.65 26.52 152.4 .085	6C 8.63 34.138 1.64 2.65 39 0.06 152.0 75 8.64 34.17 - 26.55 149.8 .123	72 8.65 34.164 1.53 2.69 41 0.08 150.4 100 8.38 34.19 - 26.60 144.5 .160	84 8.58 34.184 - 2.73 42 0.07 147.8 125 8.20 34.20 - 26.64 141.1 .197	104 8.34 34.191 1.09U 2.87 47 0.05 143.8 150 8.03 34.21 1.09 26.67 138.0 .232	118 8.26 34.195 2.80 2.90 49 0.04 142.4 200 7.81 34.21 .84 26.70 134.9 .302	142 8.08 34.203 1.14 - - - 139.2 250 7.58 34.21 .84 26.74 131.7 .370	165 7.99 34.206 1.03 - - - 137.7 300 7.24 34.23 .83 26.80 125.6 .437	191 7.86 34.213 .86 - - - 135.4 - - - - - - -	235 7.69 34.206 .82 - - - 133.5 - - - - - - -	281 7.34 34.222 .84 - - - 127.5 - - - - - - -	333 7.12 34.231 .78 - - - 123.9 - - - - - - -		
82.55							CCCFI CRUISE 6407						82.55				
ALEXANDER AGASSIZ, JUNE 19 1964, 0926 GCT, 34 01N 120 36.5W, SOUNDING 500 FM, WIND 330 FORCE 5, WEATHER CLEAR, SEA RCLGH, WIRE ANGLE 28.																	
2 12.24 33.93 6.46 1.01 17 0.26 227.0 0 12.24 33.93 6.46 25.73 227.0 0	11 12.20 33.93 6.47 1.08 16 0.23 226.3 10 12.21 33.93 6.47 25.74 226.4 .023	33 11.54 33.91 5.68 1.31 17 0.27 215.9 20 12.07 33.93 6.30 25.77 223.9 .045	59 9.86 33.82 3.80 1.94 24 0.25 194.4 30 11.72 33.92 5.90 25.82 218.4 .067	68 9.80 33.93 3.39 2.07 26 0.25 185.3 50 10.17 33.83 4.12 26.03 198.7 .109	87 9.22 34.06 2.33 2.56 37 0.08 166.7 75 9.61 33.93 3.00 26.25 177.9 .157	99 9.05 34.1C 2.02 2.47 37 0.04 161.1 100 9.04 34.10 2.00 26.43 160.9 .199	112 8.75 34.15 1.90 2.61 40 0.04 152.9 125 8.70 34.16 1.80 26.53 151.4 .239	139 8.68 34.17 1.52 2.66 38 0.06 150.4 150 8.61 34.18 1.56 26.56 148.6 .277	157 8.56 34.18 1.61 2.67 41 0.08 147.8 200 8.24 34.23 1.32 26.65 139.5 .351	181 8.37 34.21 1.41 2.78 44 0.04 142.8 250 7.98 34.25 1.02 26.71 134.3 .421	212 8.18 34.24 1.25 2.91 47 0.02 137.9 300 7.71 34.26 .99 26.76 129.8 .490	238 8.04 34.24 1.04 3.01 51 0.01 135.9 400 7.08 34.29 .88 26.87 119.0 .620	281 7.80 34.26 1.00 3.00 52 0.01 131.0 500 6.15 34.30 .59 27.00 106.5 .739	338 7.52 34.27 .96 3.03 54 0.02 126.4 600 5.43 34.35 - 27.13 94.2 .846	429 6.82 34.29 .80 3.17 68 0.01 115.6 - - - - - - -	512 6.04 34.31 .57 3.27 78 0.02 104.4 583 5.52 34.34 .60 3.40 85 - 96.0 - - - - - - -	
82.60							CCCFI CRUISE 6407						82.60				
ALEXANDER AGASSIZ, JUNE 19 1964, 1305 GCT, 33 51N 120 57W, SOUNDING 1220 FM, WIND 310 FORCE 5, WEATHER PARTLY CLCLDY, SEA VERY RCLGH, WIRE ANGLE 42.																	
1 13.57 33.52 - - - - 282.1 0 13.57 33.52 - 25.15 282.1 0	9 13.56 33.51 - - - - 282.7 10 13.55 33.51 - 25.15 282.5 .028	27 13.20 33.52 - - - - 275.0 20 13.46 33.52 - 25.18 280.0 .056	34 12.16 33.49 - - - - 257.9 30 12.85 33.52 - 25.30 268.4 .084	44 11.76 33.55 - - - - 246.3 50 11.70 33.59 - 25.57 242.3 .135	55 11.56 33.69 - - - - 232.5 75 10.51 33.76 - 25.92 209.4 .192	72 10.62 33.76 - - - - 211.3 100 9.49 33.88 - 26.18 184.2 .242	85 10.20 33.76 - - - - 204.3 125 9.21 33.91 - 26.25 177.6 .287	99 9.50 33.88 - - - - 184.3 150 8.75 33.95 - 26.36 167.7 .331	122 9.25 33.91 - - - - 178.2 200 8.18 34.04 - 26.51 152.7 .413	140 8.94 33.93 - - - - 172.0 250 7.28 34.05 - 26.65 139.6 .488	163 8.51 33.98 - - - - 162.0 300 6.44 34.06 - 26.78 128.0 .557	180 8.28 34.01 - - - - 156.4 400 5.63 34.12 - 26.93 113.8 .682	210 8.12 34.06 - - - - 150.4 500 4.95 34.20 - 27.07 100.1 .794	25C 7.28 34.05 - - - - 139.6 - - - - - - -	315 6.29 34.07 - - - - 125.4 - - - - - - -	384 5.74 34.1C - - - - 116.5 - - - - - - -	448 5.30 34.16 - - - - 107.0 - - - - - - -

O B S E R V E D    L E V E L S    O F    D E P T H								S T A N D A R D    L E V E L S    O F    D E P T H								
I N P U T				C O M P U T E D				I N P U T				C O M P U T E D				
Z	T	S	O X Y	P H C	S I L	N I T	D T	Z	T	S	O X Y	S I G T	D T	D D		
82.65				C C C F I    C R U I S E    6 4 0 7												82.65
ALEXANDER AGASSIZ, JUNE 19 1964, 1637 GCT, 33 41N 121 17.5W, SOUNDING 1870 FM, WIND 030 FORCE 6, WEATHER OVERCAST, SEA RCLGF, WIRE ANGLE 32.																
2 13.58 33.55 6.55 0.74 3 0.17 280.1 0 13.58 33.55 6.55 25.17 280.1 0 1C 13.55 33.55 6.47 0.76 3 0.16 279.5 10 13.55 33.55 6.47 25.18 279.5 .028 31 11.60 33.50 6.18 1.16 8 0.33 247.2 20 13.40 33.55 6.42 25.21 276.6 .056 57 10.12 33.57 4.81 1.55 15 0.21 217.1 30 11.80 33.50 6.23 25.48 250.7 .082 79 10.24 33.78 4.66 1.75 17 0.43 203.5 50 10.31 33.54 4.96 25.78 222.4 .130 91 10.06 33.80 4.32 1.87 20 0.29 199.1 75 10.19 33.75 4.69 25.96 204.9 .184 103 9.56 33.86 3.56 2.04 25 0.02 186.7 100 9.65 33.84 3.72 26.13 189.6 .233 128 9.13 33.93 2.99 2.32 30 0.01 174.9 125 9.18 33.92 3.04 26.26 176.4 .280 145 8.92 33.98 2.75 2.30 32 0.02 168.0 150 8.87 33.99 2.74 26.37 166.5 .323 166 8.68 34.02 2.70 2.33 36 0.01 161.5 200 8.31 34.07 2.25 26.52 152.4 .404 195 8.36 34.07 2.28 2.47 38 - 153.1 250 7.77 34.11 1.97 26.63 141.8 .480 243 7.84 34.10 2.01 2.68 44 - 143.5 300 7.13 34.13 1.66 26.74 131.6 .550 292 7.26 34.13 1.70 2.84 52 - 133.3 400 5.89 34.13 1.32 26.90 116.1 .679 366 6.08 34.09 1.58 2.97 64 - 121.3 500 5.57 34.28 .57 27.06 101.1 .793 474 5.62 34.24 .71 3.29 76 - 104.7 600 5.18 34.35 .47 27.16 91.4 .896 569 5.38 34.34 .44 3.38 85 - 94.4 700 4.59 34.37 .62 27.24 83.5 .991 71C 4.54 34.37 .62 3.44 102 - 83.0 800 4.30 34.42 .68 27.32 76.8 1.078 863 4.12 34.45 .72 3.43 112 - 72.7 1000 3.76 34.50 .82 27.44 65.4 1.237 1058 3.60 34.51 .88 3.38 125 - 63.2 1133 3.44 34.52 1.10 3.33 130 - 60.9																
83.44A				C C O F I    C R U I S E    6 4 0 7												83.44A
ALEXANDER AGASSIZ, JUNE 18 1964, 2104 GCT, 34 10N 119 40W, SOUNDING 156 FM, WIND 100 FORCE 2, WEATHER CLEAR, SEA CCERATE, WIRE ANGLE 12.																
C 14.92 33.867 7.34 0.40 9 0.06 283.7 0 14.92 33.87 7.34 25.14 283.5 0 1C 13.68 33.879 7.19 0.56 10 0.10 257.9 10 13.68 33.88 7.19 25.41 257.8 .027 3C 10.87 33.842 3.56 1.84 20 0.51 209.4 20 11.74 33.85 4.62 25.77 223.9 .051 39 10.68 33.871 3.48 1.94 21 0.50 204.1 30 10.87 33.84 3.56 25.92 209.5 .073 54 10.26 33.888 3.14 2.02 23 0.34 195.9 50 10.36 33.88 3.21 26.04 198.1 .114 7C 9.96 33.917 2.95 2.09 26 0.18 188.9 75 9.83 33.93 2.86 26.17 185.8 .162 83 9.61 33.969 2.59 2.17 28 0.07 179.4 100 9.33 34.04 2.32 26.33 169.8 .207 103 9.26 34.055 2.25 2.38 33 0.14 167.6 125 8.62 34.16 1.58 26.54 150.2 .248 122 8.67 34.155 1.64 2.64 38 0.08 151.3 150 8.44 34.20 1.29 26.60 144.6 .285 142 8.48 34.195 1.37 2.75 43 0.09 145.6 200 8.11 34.22 .96 26.67 138.4 .357 176 8.33 34.214 1.09 - - 142.0 250 7.61 34.22 .91 26.74 131.4 .427 206 8.04 34.223 .94 - - 137.1 246 7.64 34.215 .91 - - 132.1 275 7.44 34.215 .86 - - 129.4																
83.45A				C C O F I    C R U I S E    6 4 0 7												83.45A
ALEXANDER AGASSIZ, JUNE 18 1964, 1908 GCT, 34 12N 119 50W, SOUNDING 230 FM, WIND 080 FORCE 4, WEATHER CLEAR, SEA CCERATE, WIRE ANGLE 13.																
1 14.09 33.851 7.13 0.43 10 0.08 268.1 0 14.09 33.85 7.13 25.30 268.1 0 11 13.70 33.854 7.05 0.51 9 0.09 260.1 10 13.76 33.85 7.07 25.37 261.6 .027 3C 10.70 33.832 3.50 1.79 20 0.23 207.3 20 12.50 33.84 5.60 25.61 238.4 .052 45 9.96 33.914 2.81 2.06 27 0.33 189.1 30 10.70 33.83 3.50 25.94 207.4 .074 55 9.82 33.957 2.85 2.12 28 0.15 183.7 50 9.90 33.93 2.83 26.15 186.9 .113 65 9.46 33.990 2.62 2.75 31 0.05 175.5 75 9.40 34.02 2.40 26.31 172.4 .159 84 9.36 34.038 2.25 2.32 33 0.03 170.4 100 9.22 34.06 2.45 26.37 166.7 .202 98 9.23 34.062 2.45 2.33 35 0.02 166.7 125 8.90 34.12 1.85 26.47 157.3 .243 123 8.91 34.116 1.85 2.48 38 0.09 157.8 150 8.80 34.14 1.72 26.50 154.4 .282 142 8.84 34.137 1.78 2.58 39 0.04 155.2 200 8.42 34.21 1.36 26.61 143.6 .358 171 8.66 34.164 1.58 - - 150.5 250 8.12 34.22 .94 26.66 138.5 .431 201 8.41 34.213 1.34 - - 143.2 300 7.35 34.22 .74 26.78 127.8 .500 235 8.22 34.222 1.07 - - 139.8 400 6.68 34.25 .40 26.89 116.8 .627 29C 7.46 34.222 .74 - - 129.2 344 7.08 34.233 .72 - - 123.3 404 6.66 34.253 .37 - - 116.3																
83.53A				C C C F I    C R U I S E    6 4 0 7												83.53A
ALEXANDER AGASSIZ, JUNE 18 1964, 1309 GCT, 33 55.5N 120 23W, SOUNDING 250 FM, WIND 320 FORCE 7, WEATHER CLOUDY, SEA VERY RCLGF, WIRE ANGLE 40.																
C 11.78 33.933 - - - 218.5 0 11.78 33.93 - - 25.82 218.7 0 8 11.78 33.937 - - - 218.2 10 11.77 33.94 - 25.83 217.8 .022 24 11.46 33.924 - - - 213.5 20 11.54 33.93 - 25.86 214.5 .043 35 11.32 33.919 - - - 211.4 30 11.39 33.92 - 25.88 212.6 .065 42 11.14 33.926 - - - 207.6 50 11.08 33.93 - 25.95 206.5 .107 54 11.05 33.937 - - - 205.4 75 9.40 34.05 - 26.33 170.2 .154 66 9.74 34.CC7 - - - 178.7 100 8.93 34.12 - 26.46 157.8 .196 77 9.26 34.060 - - - 167.3 125 8.74 34.16 - 26.52 152.0 .235 97 8.95 34.117 - - - 158.3 150 8.64 34.17 - 26.55 149.8 .273 112 8.86 34.137 - - - 155.5 200 8.45 34.20 - 26.60 144.7 .349 135 8.68 34.166 - - - 150.7 250 8.13 34.23 - 26.67 137.9 .421 158 8.62 34.171 - - - 149.4 300 7.78 34.25 - 26.74 131.5 .491 185 8.53 34.186 - - - 147.0 23C 8.23 34.218 - - - 140.2 277 7.98 34.237 - - - 135.3 331 7.48 34.267 - - - 126.1																

## C B S E R V E D L E V E L S O F D E P T H

## S T A N D A R D L E V E L S O F D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

83.55A

CCCFI CRUISE 6407

83.55A

ALEXANDER AGASSIZ, JUNE 18 1964, 1038 GCT, 33 52N 120 30W, SOUNDING 772 FM, WIND 320 FORCE 7, WEATHER CLEAR,  
SEA HIGH, WIRE ANGLE 47.

1	11.55	33.821	-	-	-	-	222.7	0	11.55	33.82	-	25.78	222.7	0
8	11.52	33.820	-	-	-	-	222.2	10	11.52	33.82	-	25.78	222.2	.022
24	11.55	33.832	-	-	-	-	221.9	20	11.54	33.83	-	25.79	221.8	.044
31	11.54	33.834	-	-	-	-	221.5	30	11.54	33.83	-	25.79	221.8	.067
42	11.52	33.840	-	-	-	-	220.7	50	11.17	33.82	-	25.85	216.1	.111
51	11.04	33.807	-	-	-	-	214.9	75	10.28	33.96	-	26.11	190.9	.162
68	10.34	33.953	-	-	-	-	192.4	100	9.62	34.02	-	26.27	175.8	.208
81	10.22	33.962	-	-	-	-	189.7	125	8.98	34.09	-	26.43	160.8	.251
94	9.90	34.001	-	-	-	-	181.7	150	8.64	34.16	-	26.54	150.5	.290
112	9.16	34.055	-	-	-	-	166.1	200	8.35	34.21	-	26.62	142.5	.365
130	8.83	34.124	-	-	-	-	156.0	250	8.12	34.24	-	26.68	137.0	.437
152	8.62	34.166	-	-	-	-	149.8	300	7.69	34.26	-	26.76	129.5	.506
170	8.50	34.193	-	-	-	-	146.0	400	6.99	34.30	-	26.89	117.1	.635
198	8.36	34.210	-	-	-	-	142.7	500	6.14	34.32	-	27.02	104.9	.752
235	8.22	34.233	-	-	-	-	139.0							
301	7.68	34.262	-	-	-	-	129.2							
370	7.20	34.287	-	-	-	-	120.8							
433	6.71	34.302	-	-	-	-	113.3							

83.518 CCCFI CRUISE 6407 83.518

ALEXANDER AGASSIZ, JUNE 17 1964, 1314 GCT, 33 52N 120 08.5W, SOUNDING 86 FM, WIND 320 FORCE 7, WEATHER PARTLY CLOUDY,  
SEA MCCRATE, WIRE ANGLE 33.

1	11.19	33.879	4.80	1.16	19	0.20	212.1	0	11.19	33.88	4.80	25.89	212.1	0
9	11.14	33.883	4.50	1.18	21	0.21	211.0	10	11.13	33.88	4.40	25.90	211.0	.021
26	11.02	33.880	4.20	1.23	21	0.20	209.1	20	11.08	33.88	4.30	25.91	210.2	.042
35	10.80	33.877	3.80	1.30	20	0.19	205.6	30	10.97	33.88	4.00	25.93	208.3	.063
48	10.26	33.900	3.30	1.45	23	0.16	195.0	50	10.23	33.91	3.30	26.08	193.7	.104
60	9.98	33.952	3.20	1.58	27	0.12	186.6	75	9.49	34.02	2.70	26.29	173.8	.150
72	9.52	34.016	2.70	1.67	31	0.10	174.6	100	9.25	34.08	2.50	26.38	165.6	.193
89	9.35	34.055	2.70	1.73	32	0.11	169.0	125	9.12	34.09	2.20	26.41	162.9	.234
110	9.18	34.088	2.20	1.80	35	0.11	164.0							
132	9.12	34.088	2.20	1.81	35	0.10	163.0							

83.55B CCCFI CRUISE 6407 83.55B

ALEXANDER AGASSIZ, JUNE 17 1964, 1640 GCT, 33 44N 120 24.5W, SOUNDING 475 FM, WIND 340 FORCE 5, WEATHER  
PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 36.

1	12.02	33.851	6.39	0.97	12	C.28	228.8	0	12.02	33.85	6.39	25.71	228.9	0
9	11.95	33.843	6.38	1.01	12	0.27	228.1	10	11.94	33.84	6.38	25.72	228.2	.023
30	11.88	33.834	6.30	1.05	12	0.27	227.5	20	11.90	33.83	6.34	25.72	228.2	.046
54	11.01	33.836	5.41	1.41	14	0.32	212.2	30	11.88	33.83	6.30	25.72	227.8	.069
62	9.50	33.794	4.18	1.77	21	0.09	190.7	50	11.55	33.83	5.93	25.79	222.0	.114
78	9.37	33.814	3.92	1.87	23	0.05	187.2	75	9.39	33.80	4.00	26.14	188.5	.165
90	9.28	33.850	3.59	1.94	25	0.03	183.1	100	9.35	33.97	2.95	26.28	175.3	.211
102	9.36	33.987	2.84	2.18	29	0.04	174.2	125	9.17	34.06	2.20	26.38	165.9	.255
127	9.16	34.068	2.19	2.41	33	0.02	165.1	150	8.99	34.12	2.09	26.45	158.7	.296
145	9.02	34.108	2.17	2.43	35	0.03	160.0	200	8.21	34.17	2.15	26.61	143.5	.373
168	8.80	34.142	1.89	2.58	38	-	154.2	250	7.15	34.10	2.00	26.71	134.1	.444
196	8.29	34.171	2.16	2.71	43	-	144.6	300	6.37	34.12	1.71	26.83	122.6	.510
221	7.75	34.142	1.80	2.75	46	-	139.1	400	5.92	34.22	1.01	26.97	109.7	.631
260	6.94	34.090	2.06	2.77	52	-	132.1	500	5.80	34.30	.73	27.05	102.3	.743
314	6.26	34.123	1.62	3.04	62	-	121.0							
397	5.92	34.213	1.03	3.20	71	-	110.2							
475	5.84	34.276	.70	3.30	74	-	104.5							
549	5.66	34.334	.79	3.42	81	-	98.1							

83.60B CCCFI CRUISE 6407 83.60B

ALEXANDER AGASSIZ, JUNE 17 1964, 2047 GCT, 33 33.5N 120 45W, SOUNDING 812 FM, WIND 320 FORCE 5, WEATHER CLOUDY,  
SEA RUGH, WIRE ANGLE 35.

1	14.08	33.588	-	-	-	-	287.1	0	14.08	33.59	-	25.10	287.0	0
9	14.02	33.589	-	-	-	-	285.9	10	14.02	33.59	-	25.11	285.8	.029
30	13.72	33.607	-	-	-	-	278.7	20	14.01	33.59	-	25.12	285.6	.057
54	10.06	33.538	-	-	-	-	218.5	30	13.72	33.61	-	25.19	278.4	.086
62	10.10	33.681	-	-	-	-	208.6	50	10.32	33.54	-	25.78	222.6	.136
78	9.96	33.801	-	-	-	-	197.4	75	10.10	33.80	-	26.02	199.8	.189
91	9.42	33.742	-	-	-	-	193.3	100	9.30	33.77	-	26.13	189.4	.238
103	9.28	33.793	-	-	-	-	187.4	125	9.07	33.88	-	26.25	177.7	.284
126	9.07	33.879	-	-	-	-	177.8	150	8.88	33.98	-	26.36	167.4	.328
141	8.99	33.941	-	-	-	-	172.0	200	8.23	34.07	-	26.53	151.2	.409
163	8.70	34.019	-	-	-	-	161.9	250	7.34	34.10	-	26.68	136.6	.483
188	8.44	34.048	-	-	-	-	155.9	300	6.86	34.13	-	26.77	128.1	.552
211	8.00	34.079	-	-	-	-	147.3	400	5.61	34.13	-	26.94	112.8	.677
248	7.38	34.099	-	-	-	-	137.3	500	5.14	34.24	-	27.08	99.2	.788
301	6.85	34.135	-	-	-	-	127.6							
385	5.78	34.127	-	-	-	-	115.0							
464	5.12	34.172	-	-	-	-	104.1							
534	5.18	34.296	-	-	-	-	95.5							

C B S E R V E D L E V E L S O F D E P T H							S T A N D A R D L E V E L S O F D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
83.658							CCDFI CRUISE 6407						83.658	
ALEXANDER AGASSIZ, JUNE 18 1964, 0037 GCT, 33 24N 121 06W, SOUNDING 1905 FM, WIND 100 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 35.														
0 14.02 33.665	-	-	-	-	-	-	280.3	0 14.02 33.66	-	25.17	280.7	0		
8 14.00 33.663	-	-	-	-	-	-	280.1	10 13.98 33.66	-	25.18	279.9	.028		
30 12.10 33.588	-	-	-	-	-	-	249.6	20 13.66 33.65	-	25.23	274.3	.056		
38 11.33 33.559	-	-	-	-	-	-	238.1	30 12.10 33.59	-	25.50	249.5	.082		
50 11.30 33.687	-	-	-	-	-	-	228.2	50 11.30 33.69	-	25.72	228.0	.130		
62 10.96 33.715	-	-	-	-	-	-	220.3	75 10.53 33.80	-	25.94	206.8	.185		
81 10.12 33.822	-	-	-	-	-	-	198.5	100 9.52 33.88	-	26.18	184.6	.234		
97 9.60 33.874	-	-	-	-	-	-	186.3	125 9.03 33.94	-	26.30	172.7	.279		
113 9.26 33.916	-	-	-	-	-	-	177.9	150 8.62 33.99	-	26.41	162.8	.322		
138 8.81 33.963	-	-	-	-	-	-	167.6	200 8.30 34.08	-	26.53	151.5	.402		
160 8.50 34.008	-	-	-	-	-	-	159.7	250 7.54 34.12	-	26.67	137.9	.476		
190 8.32 34.057	-	-	-	-	-	-	153.5	300 6.67 34.09	-	26.77	128.6	.545		
213 8.27 34.116	-	-	-	-	-	-	148.4	400 6.03 34.16	-	26.91	115.5	.672		
250 7.54 34.119	-	-	-	-	-	-	137.9	500 5.61 34.25	-	27.03	103.8	.787		
301 6.66 34.090	-	-	-	-	-	-	128.5							
381 6.16 34.148	-	-	-	-	-	-	118.0							
459 5.71 34.200	-	-	-	-	-	-	108.7							
529 5.58 34.301	-	-	-	-	-	-	99.6							
84.40							CCDFI CRUISE 6407						84.40	
ALEXANDER AGASSIZ, JUNE 17 1964, 0144 GCT, 34 05.5N 119 17W, SOUNDING 106 FM, WIND 100 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 23.														
0 14.34 33.814	-	-	-	-	-	-	275.8	0 14.34 33.81	-	25.22	276.1	0		
9 14.18 33.816	-	-	-	-	-	-	272.4	10 14.16 33.82	-	25.26	271.7	.027		
28 11.36 33.787	-	-	-	-	-	-	221.9	20 13.00 33.80	-	25.48	250.6	.054		
37 10.50 33.815	-	-	-	-	-	-	209.2	30 11.08 33.79	-	25.84	216.8	.077		
52 10.00 33.858	-	-	-	-	-	-	193.9	50 10.04 33.85	-	26.07	195.1	.118		
65 9.76 33.859	-	-	-	-	-	-	187.0	75 9.58 33.93	-	26.21	181.9	.166		
79 9.52 33.948	-	-	-	-	-	-	179.6	100 9.35 34.05	-	26.34	169.4	.210		
98 9.36 34.044	-	-	-	-	-	-	170.0	125 9.14 34.10	-	26.41	162.5	.252		
116 9.28 34.063	-	-	-	-	-	-	167.4	150 8.77 34.16	-	26.52	152.4	.292		
134 8.95 34.128	-	-	-	-	-	-	157.5							
153 8.74 34.167	-	-	-	-	-	-	151.5							
176 8.60 34.192	-	-	-	-	-	-	147.5							
P4.41							CCDFI CRUISE 6407						84.41	
ALEXANDER AGASSIZ, JUNE 17 1964, 0547 GCT, 34 07N 119 25W, SOUNDING 125 FM, WIND 140 FORCE 5, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 33.														
1 13.56 33.839	-	-	-	-	-	-	258.5	0 13.56 33.84	-	25.40	258.4	0		
9 13.52 33.843	-	-	-	-	-	-	257.4	10 13.52 33.84	-	25.41	257.7	.026		
26 13.12 33.839	-	-	-	-	-	-	250.1	20 13.23 33.84	-	25.47	252.1	.051		
34 12.90 33.846	-	-	-	-	-	-	245.2	30 13.04 33.84	-	25.51	248.5	.076		
47 10.85 33.880	-	-	-	-	-	-	206.2	50 10.60 33.88	-	25.99	202.1	.122		
60 10.16 33.868	-	-	-	-	-	-	195.7	75 9.77 33.89	-	26.14	187.8	.171		
72 9.90 33.878	-	-	-	-	-	-	190.8	100 9.50 33.99	-	26.27	176.2	.217		
85 9.51 33.972	-	-	-	-	-	-	177.7	125 9.17 34.08	-	26.39	164.4	.260		
106 9.32 34.028	-	-	-	-	-	-	170.6	150 8.60 34.18	-	26.56	148.4	.300		
123 9.20 34.073	-	-	-	-	-	-	165.4	200 8.13 34.23	-	26.67	137.9	.373		
148 8.64 34.164	-	-	-	-	-	-	150.2							
165 8.36 34.214	-	-	-	-	-	-	142.4							
195 8.16 34.230	-	-	-	-	-	-	138.3							
84.45							CCDFI CRUISE 6407						84.45	
ALEXANDER AGASSIZ, JUNE 17 1964, 0827 GCT, 33 55.5N 119 37.5W, SOUNDING 400 FM, WIND 100 FORCE 4, WEATHER MISSING, SEA MISSING, WIRE ANGLE 24.														
1 13.76 33.849	5.87	0.94	12	0.21	261.7	0 13.76 33.85	5.87	25.37	261.6	0				
10 13.64 33.848	5.83	0.93	13	0.21	259.4	10 13.64 33.85	5.83	25.39	259.3	.026				
29 10.60 33.861	3.42	1.87	23	0.26	203.5	20 11.43 33.85	4.23	25.82	218.4	.050				
38 10.28 33.871	3.05	1.97	25	0.20	197.4	30 10.56 33.86	3.35	25.99	202.9	.071				
51 9.97 33.890	3.17	2.04	27	0.12	191.0	50 9.99 33.89	3.17	26.11	191.3	.111				
65 9.50 33.966	2.70	2.16	29	0.04	178.0	75 9.28 34.03	2.39	26.33	169.8	.156				
87 9.12 34.068	2.22	2.36	35	0.02	164.5	100 9.03 34.08	2.16	26.41	162.3	.198				
105 8.98 34.095	2.10	2.45	35	0.01	160.4	125 8.75 34.14	1.85	26.51	153.6	.238				
123 8.77 34.141	1.85	2.53	40	0.04	153.8	150 8.67 34.16	1.84	26.53	150.9	.277				
141 8.70 34.154	1.87	2.46	42	0.04	151.8	200 8.32 34.22	1.48	26.63	141.4	.351				
168 8.60 34.171	1.71	-	-	-	149.1	250 8.14 34.24	1.22	26.68	137.3	.423				
200 8.32 34.216	1.48	-	-	-	141.7	300 7.90 34.27	1.03	26.74	131.7	.493				
227 8.23 34.225	1.37	-	-	-	139.7	400 7.47 34.29	.77	26.81	124.2	.627				
272 8.04 34.251	1.11	-	-	-	135.1	500 6.87 34.31	.64	26.91	114.8	.753				
323 7.78 34.277	.98	-	-	-	129.5									
402 7.46 34.296	.77	-	-	-	123.7									
484 7.00 34.305	.67	-	-	-	116.8									
568 6.16 34.345	.46	-	-	-	103.2									



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z

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CXY

PHC

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DD

85.60

CCCFI CRUISE 6407

85.60

ALEXANDER AGASSIZ, JUNE 15 1964, 1956 GCT, 33 17N 120 33.5W, SOUNDING 640 FM, WIND 340 FORCE 4, WEATHER OVERCAST, SEA RCLGH, WIRE ANGLE 16.

2	14.63	33.202	6.12	C.46	2	0.02	326.5	0	14.63	33.20	6.12	24.69	326.6	0
11	14.58	33.208	6.11	C.42	2	0.01	329.0	10	14.58	33.21	6.11	24.70	324.9	.033
31	12.66	33.325	6.26	0.69	3	0.14	279.2	20	13.80	33.26	6.18	24.91	305.7	.064
60	11.60	33.558	5.18	0.90	9	0.10	242.9	30	12.85	33.32	6.26	25.14	283.1	.094
79	10.12	33.527	5.05	1.50	16	0.02	220.3	50	11.01	33.38	5.23	25.53	245.9	.147
94	9.74	33.598	4.21	1.67	20	0.02	209.0	75	10.42	33.53	5.11	25.75	224.9	.206
108	9.34	33.751	3.96	1.79	23	0.02	191.4	100	9.56	33.66	4.03	26.00	201.6	.260
132	9.00	33.901	3.92	1.78	25	0.01	175.1	125	9.07	33.88	3.92	26.25	177.7	.308
152	8.80	33.948	4.22	1.72	26	0.03	168.6	150	8.82	33.95	4.22	26.35	168.8	.352
175	8.48	33.979	4.01	1.73	30	0.01	161.6	200	7.94	34.00	3.80	26.52	152.3	.433
205	7.86	33.959	3.76	2.21	37	-	151.3	250	7.36	34.05	2.68	26.64	140.6	.508
253	7.32	34.055	2.64	2.55	46	-	139.7	300	6.48	34.04	2.32	26.75	130.0	.578
309	6.38	34.037	2.25	2.75	57	-	129.0	400	5.75	34.11	1.39	26.90	115.9	.706
396	5.78	34.101	1.42	2.97	69	-	116.9	500	5.33	34.23	.74	27.05	102.1	.820
502	5.32	34.233	.72	3.26	83	-	101.6	600	5.08	34.37	.91	27.19	88.8	.922
607	5.06	34.369	.92	3.34	91	-	88.7	700	4.77	34.40	1.11	27.25	83.2	1.015
759	4.58	34.416	i.18	3.37	100	-	80.0	800	4.43	34.43	1.15	27.31	77.4	1.103
921	4.04	34.470	1.01	3.40	113	-	70.4	1000	3.79	34.50	1.08	27.43	65.7	1.263
1076	3.58	34.511	1.22	3.43	126	-	62.9							
1158	3.43	34.517	1.49	3.31	128	-	61.1							

90.28

CCCFI CRUISE 6407

90.28

ALEXANDER AGASSIZ, JULY 12 1964, C728 0649 GCT, 33 28.5N 117 47W, SOUNDING 200 FM, WIND 300 FORCE 4, WEATHER PARTLY CLUDY, SEA MCDERATE, WIRE ANGLE 01 01.

C	19.10	33.830	6.94	0.38	5	0.03	380.2	0	19.10	33.83	6.94	24.12	380.2	0
10	18.72	33.733	5.67	0.91	10	0.16	378.1	10	18.72	33.73	5.67	24.14	378.4	.038
3C	11.20	33.741	4.28	1.18	13	0.14	222.5	20	13.20	33.74	4.64	25.40	258.9	.070
45	10.40	33.812	3.24	1.90	29	0.10	203.8	30	11.20	33.74	4.28	25.78	222.6	.094
60	10.01	33.887	2.75	2.13	26	0.03	191.9	50	10.26	33.85	2.98	26.03	198.7	.136
75	9.56	33.910	2.95	2.07	27	0.01	183.0	75	9.56	33.91	2.95	26.20	183.0	.184
9C	9.58	33.975	2.41	2.30	31	0.03	178.5	100	9.53	33.98	2.33	26.25	177.4	.230
11CA	9.48	33.986	2.32	2.28	31	0.03	176.2	125	9.37	34.01	2.39	26.30	172.7	.274
135A	9.28	34.027	2.41	-	-	-	170.0	150	9.09	34.09	2.25	26.41	162.4	.317
166A	8.90	34.128	2.00	-	-	-	156.8	200	8.72	34.16	1.66	26.53	151.7	.397
20CA	8.72	34.157	1.66	-	-	-	151.9	250	8.46	34.22	1.44	26.61	143.4	.473
235A	8.55	34.215	1.45	-	-	-	145.1	300	8.27	34.25	1.23	26.67	138.4	.546
275A	8.34	34.224	1.39	-	-	-	141.4							
32CA	8.20	34.269	1.12	-	-	-	136.0							
36CA	7.88	34.278	.93	-	-	-	130.8							

90.32

CCCFI CRUISE 6407

90.32

ALEXANDER AGASSIZ, JULY 12 1964, C400 0444 GCT, 33 21N 118 01.5W, SOUNDING 385 FM, WIND 300 FORCE 4, WEATHER PARTLY CLUDY, SEA MCDERATE, WIRE ANGLE 06 09.

C	18.90	33.841	6.08	0.32	2	0.01	374.6	0	18.90	33.84	6.08	24.18	374.7	0
1C	16.60	33.759	7.05	C.35	2	0.02	324.6	10	16.60	33.80	7.05	24.71	324.5	.035
35	11.36	33.703	5.03	1.33.	13	0.26	228.0	20	14.35	33.75	6.56	25.17	280.7	.065
54	10.26	33.807	3.28	1.84	22	0.09	201.8	30	12.25	33.71	5.61	25.56	243.4	.092
74	9.47	33.971	2.72	2.17	29	0.02	177.1	50	10.32	33.79	3.39	25.97	204.1	.136
93	9.34	34.025	2.37	2.32	32	0.01	171.1	75	9.46	33.97	2.71	26.26	177.0	.184
126	9.13	34.104	2.01	2.52	37	0.01	162.0	100	9.30	34.04	2.28	26.34	169.4	.228
15C	8.97	34.136	1.88	2.53	35	0.01	157.2	125	9.14	34.10	2.02	26.41	162.5	.270
172A	8.78	34.173	1.61	-	-	-	151.6	150	8.97	34.14	1.88	26.47	156.9	.311
219A	8.75	34.235	1.28	-	-	-	146.6	200	8.75	34.22	1.37	26.57	147.7	.389
247A	8.70	34.249	1.15	-	-	-	144.8	250	8.69	34.25	1.14	26.60	144.6	.464
285A	8.54	34.264	1.04	-	-	-	141.3	300	8.47	34.26	1.04	26.64	140.6	.538
333A	8.28	34.264	1.07	-	-	-	137.5	400	7.68	34.29	.80	26.78	127.1	.677
38CA	7.87	34.283	.87	-	-	-	130.3	500	6.60	34.31	.47	26.95	111.3	.804
43EA	7.30	34.293	.68	-	-	-	121.7							
501A	6.59	34.316	.47	-	-	-	110.7							

A) CAST II.

C B S E R V E D L E V E L S O F D E P T H									S T A N D A R D L E V E L S O F D E P T H								
I N P U T				C O M P U T E D					I N P U T				C O M P U T E D				
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
90.37								CCOFI CRUISE 6407									90.37
ALEXANDER AGASSIZ, JULY 12 1964, C101 0141 GCT, 33 11N 118 22.5W, SOUNDING 630 FM, WIND 300 FORCE 4, WEATHER CLEAR, SEA MCCRATER, WIRE ANGLE 21 39.																	
C 18.82	33.863	5.86	0.41	3	0.00	371.1		0	18.82	33.86	5.86	24.22	371.3		0		
S 18.51	33.862	6.28	0.43	3	0.00	363.8		10	18.42	33.86	6.28	24.32	361.8	.037			
33 10.95	33.743	4.15	1.64	17	0.19	218.1		20	13.00	33.77	4.83	25.46	252.9	.067			
51 10.14	33.794	3.37	1.82	22	0.05	200.9		30	11.50	33.75	4.35	25.73	227.0	.091			
7C 9.71	33.914	2.88	2.11	28	0.03	185.1		50	10.19	33.78	3.42	25.99	202.7	.135			
85 9.26	33.972	2.82	2.19	30	0.01	173.8		75	9.59	33.93	2.87	26.21	182.0	.183			
123 8.86	34.026	2.60	2.32	33	0.01	163.7		100	9.12	33.99	2.75	26.33	170.3	.228			
147 8.62	34.073	2.35	2.44	36	0.00	156.7		125	8.83	34.03	2.55	26.41	163.0	.270			
156A 8.53	34.073	2.34	-	-	-	155.3		150	8.59	34.07	2.35	26.48	156.4	.310			
201A 8.11	34.124	2.00	-	-	-	145.5		200	8.12	34.12	2.01	26.59	145.9	.387			
228A 7.66	34.124	1.82	-	-	-	139.2		250	7.52	34.14	1.74	26.69	136.1	.460			
264A 7.49	34.162	1.68	-	-	-	134.0		300	7.45	34.23	1.12	26.77	128.4	.528			
311A 7.42	34.248	.98	-	-	-	126.7		400	6.76	34.31	.56	26.93	113.4	.654			
358A 7.00	34.252	.81	-	-	-	120.8		500	6.20	34.34	-	27.03	104.1	.770			
414A 6.68	34.318	.52	-	-	-	111.7											
475A 6.32	34.333	.36	-	-	-	106.1											

90.45																	
ALEXANDER AGASSIZ, JULY 11 1964, 2111 2147 GCT, 32 54.5N 118 55.5W, SOUNDING 918 FM, WIND 290 FORCE 3, WEATHER CLEAR, SEA MCCRATER, WIRE ANGLE 09 27.																	
C 17.30	33.893	6.91	0.09	2	0.02	333.4		0	17.30	33.89	6.91	24.61	333.6	0			
11 14.76	33.872	7.39	0.19	3	0.07	280.1		10	15.20	33.87	7.33	25.08	289.3	.031			
35 10.06	33.905	3.31	1.92	25	0.06	191.4		20	11.33	33.89	4.52	25.87	213.7	.056			
55 9.45	33.963	2.53	2.15	31	0.02	177.4		30	10.34	33.90	3.54	26.06	196.3	.077			
74 9.21	34.056	2.29	2.21	34	0.02	166.8		50	9.55	33.95	2.62	26.23	179.9	.115			
94 8.92	34.093	2.10	2.41	37	0.01	159.7		75	9.19	34.06	2.26	26.37	166.2	.158			
128 8.69	34.174	1.59	2.58	40	0.03	150.2		100	8.86	34.11	2.00	26.46	157.5	.199			
154 8.50	34.204	1.41	2.64	44	0.04	145.2		125	8.71	34.16	1.62	26.53	151.5	.238			
160A 8.48	34.202	1.50	-	-	-	145.0		150	8.54	34.20	1.47	26.58	146.1	.276			
205A 8.09	34.238	1.12	-	-	-	136.7		200	8.13	34.24	1.17	26.68	137.2	.349			
232A 7.83	34.242	1.04	-	-	-	132.8		250	7.67	34.25	1.04	26.75	130.0	.417			
267A 7.53	34.252	1.04	-	-	-	127.9		300	7.26	34.27	.83	26.83	122.9	.483			
313A 7.17	34.280	.72	-	-	-	121.0		400	6.54	34.31	.50	26.96	110.6	.605			
357A 6.85	34.300	.55	-	-	-	115.3		500	5.89	34.35	-	27.07	99.6	.716			
411A 6.48	34.318	.49	-	-	-	109.2											
469A 6.10	34.339	.44	-	-	-	97.7											

90.53																	
ALEXANDER AGASSIZ, JULY 11 1964, 1715 1801 GCT, 32 39.5N 119 28.5W, SOUNDING 680 FM, WIND 310 FORCE 3, WEATHER CLEAR, SEA VERY RUGGED, WIRE ANGLE 03 12.																	
0 14.49	33.919	6.25	-	-	0.14	271.1		0	14.49	33.92	6.25	25.27	271.0	0			
20 13.20	33.910	6.16	-	-	0.19	246.4		10	13.70	33.92	6.23	25.43	255.3	.026			
35 12.95	33.903	5.76	-	-	0.23	242.1		20	13.20	33.91	6.16	25.53	246.4	.051			
55 9.80	33.950	2.86	-	-	0.04	183.9		30	13.00	33.91	5.83	25.57	242.6	.076			
75 9.08	34.037	2.48	-	-	0.02	166.2		50	10.30	33.93	3.18	26.09	193.4	.120			
94 8.86	34.095	2.2	-	-	0.02	158.6		75	9.08	34.04	2.48	26.37	166.0	.165			
129 8.46	34.146	1.61	-	-	0.03	148.9		100	8.80	34.11	2.1	26.47	156.6	.206			
154 8.35	34.195	1.48	-	-	0.03	143.7		125	8.50	34.14	1.67	26.54	149.9	.245			
171A 8.05	34.233	1.15	-	-	-	136.5		150	8.37	34.19	1.50	26.60	144.3	.282			
219A 7.73	34.264	.89	-	-	-	129.7		200	7.86	34.26	.98	26.73	131.9	.353			
248A 7.52	34.260	.82	-	-	-	127.2		250	7.50	34.26	.80	26.79	126.9	.419			
287A 7.03	34.262	.75	-	-	-	120.4		300	6.91	34.27	.72	26.88	118.3	.483			
334A 6.64	34.295	.62	-	-	-	112.9		400	6.30	34.33	.43	27.01	106.1	.600			
382A 6.39	34.319	.43	-	-	-	108.0		500	5.80	34.35	.38	27.09	98.5	.708			
440A 6.08	34.336	.43	-	-	-	102.9											
504A 5.77	34.356	.38	-	-	-	97.7											

A) CAST II.

C B S E R V E D   L E V E L S   C F   D E P T H								S T A N D A R D   L E V E L S   O F   D E P T H								
INPUT				COMPUTED				INPUT				COMPUTED				
Z	T	S	OXY	PHD	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD		
90.60								2 CCCFI CRUISE 6407								90.60
ALEXANDER AGASSIZ, JULY 11 1964, 1212 GCT, 34°25'N 120°02.5W, SOUNDING 750 FM, WIND 270 FORCE 3, WEATHER CLOUDY, SEA VERY RUGGED, WIRE ANGLE CS.																
C 13.31 33.683 - 0.75 10 0.20 265.1 0 13.31 33.68 - 25.33 265.4 0 1C 12.40 33.753 - 0.77 11 0.21 242.9 10 12.40 33.75 - 25.56 243.1 .025 3C 11.92 33.721 - 0.97 11 0.23 236.6 20 12.17 33.74 - 25.60 239.7 .050 55 10.81 33.656 - 1.18 15 0.15 222.1 30 11.92 33.72 - 25.63 236.7 .073 65 11.06 33.732 - 1.30 16 0.17 220.7 50 10.92 33.66 - 25.77 223.7 .120 75 10.80 33.806 - 1.54 20 0.22 210.9 75 10.80 33.81 - 25.91 210.6 .174 85 10.07 33.861 - 1.85 25 0.22 194.8 100 9.75 33.92 - 26.17 185.3 .224 104 9.65 33.934 - 2.04 29 0.07 182.7 125 9.17 34.02 - 26.34 168.9 .269 128 9.12 34.028 - 2.31 35 0.04 167.5 150 8.79 34.10 - 26.47 157.2 .311 147 8.82 34.095 - 2.41 39 0.07 158.0 200 8.20 34.17 - 26.61 143.4 .387 171 8.62 34.133 - - - 152.2 250 7.38 34.17 - 26.73 132.0 .458 200 8.20 34.172 - - - 143.2 300 6.98 34.23 - 26.84 122.2 .524 23C 7.52 34.128 - - - 137.0 400 6.37 34.32 - 26.99 107.7 .644 265 7.24 34.216 - - - 126.7 500 5.78 34.36 - 27.10 97.5 .752 325 6.75 34.253 - - - 117.5 403 6.36 34.321 - - - 107.5 47E 5.86 34.354 - - - 98.9 558 5.67 34.368 - - - 95.7																
90.70								CCCFCI CRUISE 6407								90.70
ALEXANDER AGASSIZ, JULY 11 1964, C647 GCT, 32°04.5N 120°38W, SOUNDING 2038 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA RUGGED, WIRE ANGLE C7.																
C 15.27 33.320 6.11 C.48 0 0.03 331.0 0 15.27 33.32 6.11 24.64 331.0 0 1C 14.40 33.324 6.48 C.57 2 0.08 312.9 10 14.40 33.32 6.48 24.83 313.2 .032 3C 14.24 33.478 6.37 C.70 0 0.13 298.4 20 14.05 33.37 6.44 24.94 302.5 .063 4C 14.20 33.510 5.88 C.73 1 0.13 295.2 30 14.24 33.48 6.37 24.98 298.2 .093 55 12.90 33.309 6.22 C.74 1 0.17 284.8 50 13.25 33.36 6.13 25.09 287.7 .152 7C 11.78 33.284 6.05 0.87 4 0.14 266.3 75 11.77 33.29 6.04 25.33 265.7 .222 94 11.32 33.525 5.18 1.19 10 0.05 240.5 100 11.15 33.54 5.09 25.63 236.5 .285 114 10.63 33.590 4.91 1.33 11 0.02 224.0 125 9.99 33.62 4.36 25.90 211.3 .341 134 9.79 33.658 4.19 1.69 19 0.02 205.3 150 9.47 33.77 4.27 26.10 192.0 .392 153 9.39 33.805 4.27 1.66 22 0.02 188.2 200 8.67 34.00 2.80 26.41 162.8 .483 181 8.91 33.930 3.56 - - - 171.6 250 7.99 34.07 2.31 26.57 147.8 .562 215 8.50 34.041 2.43 - - - 157.3 300 7.34 34.11 1.94 26.69 135.9 .636 244 8.08 34.067 2.34 - - - 149.3 400 6.43 34.19 .85 26.88 118.1 .768 292 7.42 34.097 2.07 - - - 137.9 500 5.84 34.31 .52 27.05 102.0 .884 345 6.93 34.146 1.36 - - - 127.8 600 5.39 34.37 .32 27.15 92.3 .988 428 6.22 34.214 .70 - - - 113.8 511 5.80 34.318 .50 - - - 100.9 595 5.41 34.364 .33 - - - 93.0																
90.80								CCCFCI CRUISE 6407								90.80
ALEXANDER AGASSIZ, JULY 11 1964, C150 GCT, 31°45N 121°19.5W, SOUNDING 2040 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA VERY RUGGED, WIRE ANGLE C22.																
C 15.60 33.354 6.04 C.34 3 0.01 335.4 0 15.60 33.35 6.04 24.59 335.7 0 9 15.56 33.358 6.29 C.38 3 0.00 334.3 10 15.55 33.36 6.29 24.61 333.9 .033 28 15.46 33.359 6.19 C.36 2 0.01 332.1 20 15.50 33.36 6.25 24.62 332.9 .067 37 14.76 33.370 5.88 C.45 2 0.04 316.8 30 15.44 33.36 6.17 24.63 331.6 .100 51 14.42 33.427 6.23 0.55 3 0.07 305.7 50 14.43 33.43 6.21 24.90 305.7 .164 65 13.84 33.403 6.36 C.60 3 0.10 296.0 75 13.30 33.42 6.15 25.13 284.3 .238 85 13.58 33.547 6.09 C.80 4 0.19 280.3 100 13.15 33.51 6.08 25.23 274.8 .309 108 12.50 33.456 6.08 C.91 4 0.28 266.6 125 11.10 33.52 5.29 25.63 237.1 .373 127 10.98 33.538 5.15 1.13 11 0.06 233.7 150 9.97 33.70 4.05 25.96 205.1 .429 146 10.08 33.675 4.17 1.60 19 0.02 208.7 200 8.96 33.92 3.92 26.30 173.1 .526 174 9.42 33.816 3.71 - - - 187.8 250 7.98 34.05 2.63 26.55 149.2 .608 207 8.80 33.943 3.96 - - - 169.0 300 7.46 34.09 2.20 26.66 139.0 .682 236 8.12 34.033 2.80 - - - 152.4 400 6.32 34.17 .93 26.88 118.3 .816 283 7.68 34.080 2.39 - - - 142.7 500 5.74 34.24 .60 27.01 106.1 .934 337 6.92 34.104 1.65 - - - 130.8 600 5.33 34.32 - 27.12 95.3 1.042 418 6.18 34.186 .81 - - - 115.4 500 5.74 34.244 .60 - - - 105.8 582 5.40 34.311 .48 - - - 96.8																

## C B S E R V E D L E V E L S O F D E P T H S T A N D A R D L E V E L S O F D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z	T	S	CXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.90														90.90

ALEXANDER AGASSIZ, JULY 10 1964, 2106 GCT, 31 26N 121 58.5W, SOUNDING 2020 FM, WIND 340 FORCE 4, WEATHER OVERCAST,  
SEA VERY RUGGY, WIRE ANGLE 19.

1	16.50	33.476	5.94	C.35	2	0.01	345.9	0	16.50	33.48	5.94	24.49	345.7	0
11	16.42	33.478	6.33	C.34	2	0.01	344.0	10	16.43	33.48	6.32	24.50	344.1	.035
25	16.10	33.469	6.24	C.36	2	0.01	337.7	20	16.35	33.48	6.33	24.52	342.4	.069
38	15.50	33.437	5.92	C.35	3	0.02	327.3	30	16.05	33.47	6.21	24.58	336.6	.103
52	13.93	33.455	6.38	C.44	3	0.06	293.9	50	14.06	33.45	6.36	25.00	296.9	.166
67	12.98	33.478	6.14	C.67	5	0.20	273.9	75	12.57	33.48	6.00	25.32	266.1	.237
90	12.02	33.514	5.40	C.89	7	0.05	253.6	100	11.39	33.53	5.05	25.58	241.3	.301
107	10.84	33.545	4.81	1.25	13	0.03	230.8	125	10.15	33.58	4.50	25.84	216.8	.359
125	10.15	33.582	4.50	1.41	17	0.02	216.7	150	9.38	33.79	3.79	26.13	189.1	.410
142	9.59	33.716	4.03	1.67	22	0.01	197.9	200	8.61	33.97	3.19	26.39	164.2	.500
169	9.07	33.870	3.49	-	-	-	178.5	250	7.92	34.06	2.39	26.57	147.6	.580
199	8.62	33.966	3.20	-	-	-	164.6	300	7.23	34.08	1.85	26.68	136.7	.654
226	8.34	34.027	2.51	-	-	-	156.0	400	6.43	34.14	1.09	26.84	121.9	.788
270	7.56	34.066	2.23	-	-	-	142.1	500	5.80	34.22	.66	26.98	108.3	.909
320	7.05	34.086	1.64	-	-	-	133.8							
397	6.45	34.137	1.11	-	-	-	122.4							
475	5.92	34.202	.71	-	-	-	111.0							
555	5.52	34.251	.56	-	-	-	102.7							

90.100

CCCFI CRUISE 6407

90.100

ALEXANDER AGASSIZ, JULY 10 1964, 1619 GCT, 31 06N 122 40W, SOUNDING 2145 FM, WIND 340 FORCE 5, WEATHER OVERCAST,  
SEA VERY RUGGY, WIRE ANGLE 19.

1	16.78	33.44	5.99	C.38	2	0.01	354.8	0	16.78	33.44	5.99	24.39	354.8	0
10	16.77	33.44	6.25	C.41	2	0.00	354.5	10	16.77	33.44	6.25	24.39	354.5	.035
34	16.79	33.44	6.18	C.36	2	0.00	355.0	20	16.78	33.44	6.22	24.39	354.8	.071
44	14.53	33.39	6.23	C.35	3	0.01	310.7	30	16.79	33.44	6.19	24.39	355.0	.107
58	13.94	33.43	6.54	0.36	3	0.02	296.0	50	14.10	33.41	6.46	24.96	300.6	.172
72	13.02	33.55	6.36	0.67	5	0.34	269.4	75	13.02	33.57	6.33	25.30	267.9	.244
97	11.72	33.594	5.59	1.62	9	0.02	242.4	100	11.55	33.60	5.47	25.61	239.0	.308
116	10.59	33.645	4.81	1.34	15	0.02	219.3	125	10.16	33.68	4.67	25.92	209.6	.364
135	9.78	33.734	4.55	1.44	20	0.02	199.5	150	9.48	33.81	4.36	26.13	189.2	.415
163	9.24	33.870	4.13	1.64	25	0.01	181.0	200	8.62	33.93	3.74	26.36	167.3	.506
191	8.79	33.912	3.81	-	-	-	171.1	250	7.77	33.99	3.27	26.54	150.7	.587
229	8.05	33.986	3.47	-	-	-	154.9	300	7.02	34.04	2.45	26.68	136.9	.661
258	7.66	33.996	3.20	-	-	-	148.7	400	6.52	34.18	1.11	26.86	120.0	.795
305	6.98	34.050	2.32	-	-	-	135.6	500	5.79	34.25	.65	27.01	105.9	.914
367	6.72	34.144	1.36	-	-	-	125.2	600	5.23	34.30	.60	27.12	95.7	1.021
462	6.06	34.234	.80	-	-	-	110.3							
548	5.48	34.269	.56	-	-	-	100.9							
622	5.14	34.331	.64	-	-	-	92.4							

90.120

CCCFI CRUISE 6407

90.120

ALEXANDER AGASSIZ, JULY 10 1964, 0545 GCT, 30 25.5N 123 57.5W, SOUNDING 2250 FM, WIND 010 FORCE 6, WEATHER MISSING  
SEA RUGGY, WIRE ANGLE 30.

C	16.71	33.37	5.93	C.27	3	C.01	358.3	0	16.71	33.37	5.93	24.35	358.3	0
9	16.72	33.37	6.17	C.32	2	0.00	358.5	10	16.72	33.37	6.16	24.35	358.5	.036
31	16.71	33.37	6.08	0.33	3	0.01	358.3	20	16.71	33.37	6.13	24.35	358.3	.072
58	14.22	33.33	6.02	C.40	3	0.06	308.8	30	16.71	33.37	6.09	24.35	358.3	.108
67	13.65	33.34	6.19	C.46	4	0.09	296.9	50	14.80	33.33	6.03	24.75	320.5	.176
83	13.00	33.43	6.21	C.70	4	0.24	277.8	75	13.10	33.40	6.21	25.15	281.9	.251
96	12.33	33.43	5.73	0.82	7	0.26	265.4	100	12.10	33.45	5.51	25.39	259.8	.320
109	11.60	33.50	5.20	0.98	10	0.02	247.2	125	11.00	33.53	5.00	25.65	234.6	.382
134	10.66	33.55	4.89	1.17	14	0.02	227.4	150	9.78	33.64	4.34	25.95	206.5	.438
151	9.76	33.65	4.33	1.49	20	0.01	205.4	200	8.92	33.87	3.84	26.27	176.2	.535
176	9.20	33.75	4.49	-	-	-	189.3	250	8.18	33.97	2.63	26.46	157.9	.621
205	8.83	33.89	3.70	-	-	-	173.4	300	7.59	34.00	2.18	26.57	147.5	.700
231	8.41	33.95	2.83	-	-	-	162.7	400	6.39	34.06	1.35	26.78	127.4	.842
274	7.90	33.99	2.43	-	-	-	152.5	500	5.65	34.16	.60	26.95	111.0	.967
331	7.21	34.02	1.90	-	-	-	140.9							
420	6.20	34.08	1.18	-	-	-	123.5							
504	5.62	34.16	.59	-	-	-	110.6							
577	5.22	34.22	.55	-	-	-	101.6							

C B S E R V E C L E V E L S O F D E P T H							S T A N D A R D L E V E L S O F D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	CXY	PHD	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.140							CCCFI CRUISE 6407							90.140
ALEXANDER AGASSIZ, JULY 9 1964, 2029 GCT, 29 46N 125 22.5W, SOUNDING 2340 FM, WIND 350 FORCE 6, WEATHER CLOUDY, SEA VERY RUGGED, WIRE ANGLE 35.														
1	17.98	33.794	5.71	0.30	3	0.01	356.3	0	17.98	33.79	5.71	24.37	356.5	0
10	17.96	33.794	5.96	0.28	3	0.01	355.8	10	17.96	33.79	5.96	24.38	356.1	.036
26	18.12	33.883	5.85	0.27	2	0.01	353.0	20	18.03	33.85	5.89	24.40	353.3	.071
50	16.48	33.683	5.74	0.27	2	0.01	330.4	30	18.19	33.91	5.84	24.41	352.7	.107
58	16.44	33.714	6.08	0.27	2	0.01	327.3	50	18.48	33.68	5.74	24.64	330.6	.175
70	16.08	33.714	6.19	0.27	3	0.01	319.4	75	16.10	33.72	6.19	24.76	319.4	.257
82	15.82	33.689	6.04	0.25	3	0.00	315.6	100	15.60	33.73	6.07	24.88	308.0	.336
93	15.62	33.706	6.09	0.25	2	0.00	310.1	125	15.41	33.85	5.83	25.02	295.2	.412
111	15.54	33.784	5.99	0.24	2	0.00	302.7	150	12.25	33.54	5.23	25.43	255.9	.482
126	15.40	33.856	5.82	0.33	3	0.10	294.5	200	9.60	33.71	4.41	26.03	198.5	.597
149	12.34	33.538	5.25	-	-	-	257.6	250	8.70	33.92	4.24	26.34	169.2	.691
170	10.80	33.580	4.95	-	-	-	227.6	300	7.97	33.97	3.36	26.49	155.0	.775
194	9.77	33.676	4.42	-	-	-	203.7	400	6.96	34.11	1.47	26.74	130.9	.923
233	8.97	33.885	4.38	-	-	-	175.8	500	5.88	34.15	.93	26.92	114.4	1.052
276	8.31	33.948	3.80	-	-	-	161.4							
346	7.36	34.021	2.47	-	-	-	142.8							
417	6.82	34.123	1.29	-	-	-	128.1							
490	5.99	34.148	.94	-	-	-	115.9							
90.160							CCCFI CRUISE 6407							90.160
ALEXANDER AGASSIZ, JULY 9 1964, 1132 CCT, 29 04N 126 39.5W, SOUNDING 2325 FM, WIND 360 FORCE 5, WEATHER CLOUDY, SEA RUGGED, WIRE ANGLE 15.														
1	18.42	33.904	5.69	0.29	3	0.01	356.6	0	18.42	33.90	5.69	24.35	358.9	0
10	18.42	33.897	5.89	0.31	2	0.00	359.1	10	18.42	33.90	5.89	24.35	358.9	.036
35	18.36	33.882	5.82	0.30	2	0.02	358.8	20	18.42	33.90	5.89	24.35	358.9	.072
45	16.18	33.580	5.79	0.35	2	0.01	331.4	30	18.38	33.89	5.84	24.35	358.7	.108
59	15.67	33.555	6.18	0.30	2	0.00	322.2	50	16.00	33.57	5.87	24.67	328.2	.177
74	15.48	33.565	6.27	0.29	2	0.00	317.5	75	15.46	33.57	6.27	24.79	316.7	.258
98	15.27	33.605	6.04	0.29	2	0.00	310.1	100	15.24	33.61	6.03	24.87	309.2	.337
117	14.98	33.708	5.87	0.33	3	0.12	296.6	125	14.65	33.74	5.74	25.10	287.5	.412
136	14.03	33.754	5.57	0.49	4	0.16	274.0	150	13.03	33.74	5.35	25.43	255.6	.481
165	11.86	33.721	5.17	0.87	-	0.01	235.5	200	9.76	33.77	4.38	26.05	196.5	.596
192	10.06	33.732	4.59	-	-	-	204.2	250	8.68	33.98	3.61	26.39	164.5	.688
229	9.06	33.934	3.71	-	-	-	173.6	300	7.54	34.01	3.16	26.58	146.0	.768
257	8.55	33.988	3.60	-	-	-	162.0	400	6.62	34.13	1.50	26.81	125.0	.909
305	7.46	34.020	3.02	-	-	-	144.2	500	5.75	34.21	.73	26.98	108.4	1.032
366	6.98	34.104	1.78	-	-	-	131.6	600	5.43	34.31	.5	27.10	97.2	1.141
461	5.88	34.151	1.06	-	-	-	114.4							
547	5.72	34.281	.44	-	-	-	102.8							
620	5.26	34.320	.5	-	-	-	94.6							
90.180							CCCFI CRUISE 6407							90.180
ALEXANDER AGASSIZ, JULY 9 1964, 015H CCT, 28 26N 128 00W, SOUNDING 2455 FM, WIND 010 FORCE 4, WEATHER CLOUDY, SEA RUGGED, WIRE ANGLE 16.														
C	18.94	34.186	5.59	0.26	2	0.01	350.5	0	18.94	34.19	5.59	24.44	350.2	0
9	18.92	34.184	5.84	0.23	2	0.01	350.2	10	18.92	34.19	5.84	24.44	349.7	.035
27	18.78	34.204	5.76	0.24	1	0.01	345.4	20	18.86	34.19	5.82	24.46	348.3	.070
36	18.30	34.215	5.52	0.26	2	0.01	333.1	30	18.70	34.21	5.70	24.51	343.0	.105
50	18.30	34.429	5.71	0.21	2	0.00	317.6	50	18.30	34.43	5.71	24.78	317.5	.171
63	18.24	34.483	5.97	0.22	2	0.00	312.2	75	17.80	34.42	5.83	24.90	306.5	.249
85	17.67	34.401	5.79	0.21	2	0.00	304.9	100	17.64	34.44	5.81	24.95	301.4	.326
103	17.64	34.442	5.81	0.19	2	0.00	301.2	125	17.43	34.46	5.76	25.02	295.1	.402
122	17.44	34.447	5.76	0.22	2	0.00	296.3	150	17.26	34.50	5.71	25.09	288.3	.476
139	17.39	34.510	5.75	0.20	2	0.01	290.5	200	12.80	33.88	5.17	25.59	241.0	.610
165	16.77	34.425	5.59	-	-	0.19	282.7	250	9.73	33.85	4.42	26.12	190.2	.721
196	13.58	33.958	5.22	-	-	0.01	250.2	300	8.71	34.00	3.47	26.40	163.4	.812
222	10.68	33.765	5.00	-	-	-	211.9	400	6.87	34.05	2.36	26.71	134.2	.966
265	9.39	33.913	4.08	-	-	-	180.2	500	5.80	34.10	1.28	26.89	117.2	1.098
314	8.45	34.019	3.27	-	-	-	158.2							
391	7.00	34.044	2.45	-	-	-	136.3							
471	6.06	34.072	1.56	-	-	-	122.4							
554	5.34	34.162	.94	-	-	-	107.3							

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PFO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
90.199							CCCFI CRUISE 6407						90.199	
ALEXANDER AGASSIZ, JULY 8 1964, 1703 GCT, 28 CON 129 20W, SOUNDING 2362 FM, WIND 050 FORCE 4, WEATHER OVERCAST, SEA RELGH, WIRE ANGLE 12.														
C	19.20	34.395	5.69	0.22	2	0.00	341.6	0	19.20	34.40	5.69	24.53	341.3	0
1C	19.16	34.395	5.84	0.25	2	0.00	340.7	10	19.16	34.40	5.84	24.54	340.3	.034
29	19.18	34.398	5.74	0.20	2	0.00	340.9	20	19.17	34.40	5.80	24.54	340.5	.068
39	19.12	34.441	5.36	0.22	2	0.00	336.3	30	19.18	34.40	5.73	24.54	340.8	.102
53	18.06	34.418	5.90	0.21	2	0.00	312.7	50	18.40	34.43	5.77	24.76	319.9	.169
68	17.85	34.440	5.92	C.17	2	0.00	306.2	75	17.78	34.45	5.89	24.92	303.9	.247
92	17.66	34.475	5.81	C.16	2	0.00	299.3	100	17.60	34.51	5.74	25.01	295.4	.323
112	17.53	34.552	5.68	C.17	2	0.03	290.7	125	17.28	34.52	5.64	25.10	287.3	.397
131	16.82	34.447	5.61	0.22	3	0.17	282.2	150	15.54	34.27	5.57	25.31	267.2	.467
15C	15.54	34.267	5.57	C.33	4	0.08	267.5	200	11.05	33.83	5.20	25.88	213.3	.589
178	12.82	33.920	5.40	-	-	0.01	238.4	250	9.45	33.92	4.95	26.22	180.6	.690
212	10.36	33.818	5.12	-	-	0.00	202.7	300	8.51	34.00	4.12	26.43	160.5	.778
24C	9.63	33.898	5.03	-	-	-	185.0	400	6.62	34.03	1.82	26.73	132.5	.930
288	8.76	33.988	4.35	-	-	-	165.0	500	5.67	34.12	-	26.92	114.2	1.059
342	7.66	34.012	3.34	-	-	-	147.5	600	5.07	34.23	-	27.08	99.2	1.172
424	6.30	34.043	1.34	-	-	-	127.5							
508	5.64	34.127	2.03U	-	-	-	113.3							
594	5.11	34.220	.73	-	-	-	100.4							

95.30 CCCFI CRUISE 6407 95.30

ALEXANDER AGASSIZ, JUNE 15 1964, C305 GCT, 32 37N 117 22W, SOUNDING 125 FM, WIND 160 FORCE 2, WEATHER CLOUDY,  
SEA MEDIUM, WIRE ANGLE C2. A)

0	16.62	33.818	6.40	C.38	4	C.04	323.6
5	16.59	33.818	6.54	C.38	4	0.00	323.0
10	16.50	33.812	6.40	C.42	4	0.00	321.4
15	16.08	33.806	6.51	C.41	4	0.00	312.7
2C	13.00	33.783	6.33	C.74	11	0.07	251.9
25	11.58	33.761	4.71	1.28	20	0.23	227.6
3C	11.05	33.754	4.15	1.54	16	0.26	218.9
35	10.76	33.790	3.71	1.71	18	0.18	211.4
4C	10.48	33.816	3.46	1.80	20	0.13	204.8
45	10.28	33.885	2.96	1.88	22	0.04	196.4
5C	10.02	33.928	2.94	2.03	-	-	189.0
55	9.81	33.957	2.97	2.21	-	-	183.5
60	9.70	33.982	2.52	2.21	-	-	179.9
65	9.62	33.991	2.65	2.11	-	-	178.0
7C	9.53	33.959	2.91	2.18	-	-	176.0
75	9.46	34.CCO	2.73	2.19	-	-	174.8
8C	9.33	34.C16	2.80	2.22	-	-	171.6
85	9.33	34.C28	2.78	2.27	-	-	170.7

100.30 CCCFI CRUISE 6407 100.30

ALEXANDER AGASSIZ, JULY 14 1964, 0609 GCT, 31 40.5N 116 46.5W, SOUNDING 213 FM, WIND CALM, WEATHER FOG,  
SEA SMOOTH, WIRE ANGLE C3.

C	13.37	33.839	7.53	C.62	17	0.17	254.8	0	13.37	33.84	7.53	25.44	254.8	0
1C	12.25	33.854	6.00	0.81	33	0.19	232.8	10	12.25	33.85	6.00	25.67	233.0	.024
3C	10.58	33.841	3.74	C.87	51	0.25	204.6	20	10.84	33.84	4.15	25.92	209.0	.047
45	10.19	33.883	2.87	1.11	57	0.29	195.1	30	10.58	33.84	3.74	25.97	204.7	.067
6C	10.02	33.901	3.36	1.09	55	0.25	191.0	50	10.12	33.89	3.00	26.09	193.4	.107
75	9.85	33.904	2.91	1.11	58	0.17	188.1	75	9.85	33.90	2.91	26.14	188.4	.155
9C	9.81	33.918	2.66	1.15	61	0.17	186.4	100	9.71	33.93	2.60	26.19	183.9	.202
11C	9.63	33.934	2.54	1.16	59	0.07	182.4	125	9.60	33.94	2.46	26.21	181.4	.249
13C	9.58	33.950	2.42	1.22	59	0.06	180.4	150	9.47	33.96	2.47	26.25	177.9	.294
165	9.34	33.988	2.58	1.17	59	0.03	173.8	200	9.05	34.11	2.20	26.43	160.4	.380
2CC	9.C5	34.112	2.20	-	-	-	160.2	250	8.77	34.22	1.54	26.56	148.0	.460
235	8.86	34.189	1.65	-	-	-	151.6	300	8.41	34.27	1.25	26.66	139.0	.534
275	8.60	34.251	1.40	-	-	-	143.2							
32C	8.22	34.288	1.11	-	-	-	134.9							
36C	7.78	34.307	.86	-	-	-	127.2							

A) SHAKEDOWN STATION.

C B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H										
INPUT			COMPUTED				INPUT			COMPUTED							
Z	T	S	OXY	PFO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
100.35							CCCFI CRUISE 6407						100.35				
ALEXANDER AGASSIZ, JULY 14 1964, C953 GCT, 31 31N 117 07W, SCOUNDING 600 FM, WIND 070 FORCE 2, WEATHER OVERCAST, SEA MEDIUM, WIRE ANGLE 08.																	
C 16.17 33.771 7.76 0.33 2 0.00 317.2 0 16.17 33.77 7.76 24.78 317.3 0	1C 15.80 33.771 8.64 0.36 3 0.01 309.2 10 15.80 33.77 8.64 24.87 309.3 .031	3C 11.66 33.793 5.15 1.55 20 0.16 226.7 20 13.00 33.78 6.60 25.47 252.1 .059	4C 10.88 33.805 3.67 1.87 21 0.22 212.3 30 11.66 33.79 5.15 25.73 226.9 .083	51 10.40 33.809 3.33 1.91 22 0.08 204.0 50 10.44 33.81 3.34 25.97 204.6 .127	65 10.19 33.805 3.32 1.93 23 0.08 200.9 75 9.91 33.81 3.37 26.06 196.0 .177	80 9.73 33.823 3.41 1.96 25 0.07 192.2 100 9.41 33.94 2.78 26.24 178.5 .224	101 9.40 33.952 2.72 2.17 29 0.02 177.4 125 9.08 34.01 2.63 26.35 168.2 .268	125 9.08 34.008 2.63 2.22 31 0.01 168.4 150 8.66 34.06 2.53 26.46 158.2 .310	145 8.76 34.059 2.51 2.37 34 0.02 159.8 200 7.72 34.07 2.35 26.61 144.0 .387	175 8.16 34.048 2.74 - - 151.9 250 8.22 34.29 - 26.70 134.7 .458	205 7.68 34.075 2.30 - - 143.1 300 7.81 34.32 .80 26.79 126.7 .526	235 8.26 - - - - - 400 6.88 34.34 .53 26.94 112.7 .651	274 8.04 34.305 .96 - - 131.0 500 6.42 34.35 .51 27.01 106.1 .767	333 7.50 34.331 .69 - - 121.6	408 6.81 34.336 .52 - - 112.1	484 6.48 34.347 .50 - - 107.0	564 6.14 34.356 .51 - - 102.2
100.40							CCCFI CRUISE 6407						100.40				
ALEXANDER AGASSIZ, JULY 14 1964, 1244 GCT 31 21N 117 27W, SCOUNDING 1060 FM, WIND 340 FORCE 3, WEATHER OVERCAST, SEA MEDIUM, WIRE ANGLE 20.																	
1 17.08 33.840 5.83 0.32 1 0.00 332.3 0 17.08 33.84 5.83 24.63 332.3 0	1C 17.08 33.839 6.11 0.32 1 0.00 332.4 10 17.08 33.84 6.11 24.63 332.3 .033	29 15.33 33.812 6.46 0.43 1 0.01 298.3 20 16.20 33.83 6.34 24.82 313.6 .066	38 12.34 33.714 5.32 1.16 6 0.62 244.7 30 15.33 33.81 6.46 25.00 296.4 .096	49 11.67 33.683 5.24 1.33 8 0.59 234.9 50 11.58 33.68 5.18 25.66 233.6 .149	62 10.98 33.674 4.64 1.45 13 0.13 223.7 75 10.67 33.70 4.32 25.84 216.5 .206	76 10.64 33.700 4.30 1.57 17 0.04 216.0 100 9.49 33.81 3.43 26.13 189.4 .257	94 9.67 33.784 3.52 1.82 22 0.02 194.1 125 9.12 33.91 3.07 26.27 176.2 .303	117 9.21 33.868 3.26 1.95 26 0.02 180.7 150 8.95 34.02 2.53 26.38 165.5 .347	135 9.02 33.968 2.82 2.14 31 0.01 170.4 200 8.40 34.15 1.86 26.57 147.7 .427	162 8.88 34.044 2.36 - - 162.7 250 7.99 34.22 1.27 26.68 136.7 .500	185 8.48 34.128 2.02 - - 150.5 300 7.15 34.20 1.11 26.79 126.7 .568	216 8.30 34.175 1.66 - - 144.4 400 6.53 34.31 .6 26.96 110.4 .692	252 7.96 34.225 1.25 - - 135.9 500 6.04 34.36 .47 27.06 100.6 .803	307 7.07 34.202 1.09 - - 125.4	376 6.62 34.283 .61 - - 113.6	445 6.36 34.349 .5 - - 105.4	521 5.92 34.367 .43 - - 98.7
100.50							CCCFI CRUISE 6407						100.50				
ALEXANDER AGASSIZ, JULY 14 1964, 1816 GCT, 30 57.5N 118 07W, SCOUNDING 920 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA RUGGED, WIRE ANGLE 24.																	
1 15.85 33.761 6.04 0.50 1 0.10 311.0 0 15.85 33.76 6.04 24.85 311.1 0	1C 15.68 33.748 6.34 0.53 3 0.09 308.3 10 15.68 33.75 6.34 24.88 308.2 .031	28 12.72 33.572 6.00 0.87 7 0.20 262.2 20 14.33 33.67 6.26 25.11 286.1 .061	37 12.41 33.538 5.42 0.95 8 0.23 258.9 30 12.65 33.56 5.96 25.37 261.7 .088	51 11.77 33.533 5.51 1.14 10 0.27 247.8 50 11.78 33.53 5.51 25.51 248.2 .139	65 11.29 33.579 4.86 1.28 11 0.16 236.0 75 10.72 33.67 4.35 25.81 219.6 .198	87 10.29 33.731 4.15 1.68 20 0.03 208.0 100 10.00 33.84 3.93 26.07 195.2 .250	106 9.99 33.859 3.88 1.95 24 0.02 193.6 125 9.45 33.89 3.05 26.20 182.8 .298	124 9.48 33.888 3.05 2.07 29 0.02 183.4 150 8.90 34.00 2.87 26.37 166.2 .343	143 8.89 33.953 3.03 2.14 32 0.01 169.6 200 8.51 34.15 1.88 26.55 149.3 .423	165 8.92 34.116 2.20 - - 157.9 250 8.00 34.19 1.49 26.66 139.0 .497	201 8.50 34.153 1.87 - - 149.0 300 7.46 34.23 1.13 26.77 128.6 .566	228 8.34 34.177 1.71 - - 144.9 400 6.68 34.28 .68 26.92 114.6 .693	274 7.68 34.209 1.31 - - 133.1 500 5.98 34.30 .56 27.02 104.4 .809	324 7.28 34.244 .98 - - 125.1	404 6.66 34.282 .67 - - 114.2	485 6.08 34.286 .58 - - 106.7	568 5.64 34.358 .45 - - 96.1

C B S E R V E D   L E V E L S   O F   D E P T H						S T A N D A R D   L E V E L S   O F   D E P T H								
I N P U T			C O M P U T E D			I N P U T			C O M P U T E D					
Z	T	S	CXY	P H G	S I L	N I T	D * T	Z	T	S	O X Y	S I G * T	D * T	D D
100.60								CCOFI CRUISE 6407						100.60
ALEXANDER AGASSIZ, JULY 14 1964, 2344 GCT, 30° 41'N 118° 47'W, SOUNDING 1660 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA RELGH, WIRE ANGLE 30.														
1 16.97 33.599 5.84 C.41 1 0.00 347.4 0 16.97 33.60 5.84 24.47 347.3 0 9 16.96 33.600 6.10 C.42 2 0.00 347.1 10 16.95 33.60 6.10 24.47 346.9 .035 26 16.86 33.598 6.02 C.43 2 0.00 345.0 20 16.91 33.60 6.08 24.48 346.0 .069 36 16.48 33.587 5.68 C.41 2 0.00 337.4 30 16.78 33.60 5.94 24.51 343.1 .104 48 15.48 33.526 6.35 C.35 2 0.00 320.3 50 15.17 33.51 6.41 24.81 315.0 .170 61 - 33.496 6.46 C.47 3 0.01 - 75 13.11 33.50 5.97 25.23 274.8 .244 81 12.83 33.498 5.85 C.74 6 0.19 269.6 100 11.83 33.54 5.31 25.51 248.3 .310 98 11.91 33.527 5.34 1.02 9 0.08 250.7 125 10.55 33.68 4.23 25.85 216.0 .369 113 10.50 33.596 4.68 1.31 13 0.02 221.4 150 9.77 33.88 3.27 26.14 188.6 .420 129 10.41 33.707 4.04 1.65 19 0.01 211.7 200 9.04 34.07 2.42 26.40 163.2 .510 151 9.74 33.881 3.26 - - 188.0 250 8.45 34.13 2.06 26.54 149.9 .590 178 9.14 33.970 3.12 - - 172.1 300 7.20 34.09 1.99 26.70 135.5 .664 202 9.03 34.076 2.39 - - 162.6 400 6.33 34.20 .88 26.90 116.2 .795 243 8.60 34.133 2.05 - - 151.9 500 5.91 34.30 .57 27.03 103.6 .910 287 7.43 34.084 2.12 - - 139.0 360 6.59 34.156 1.20 - - 122.7 433 6.18 34.235 .74 - - 111.7 513 5.84 34.316 .54 - - 101.5														
100.70								CCOFI CRUISE 6407						100.70
ALEXANDER AGASSIZ, JULY 15 1964, 0503 GCT, 30° 19'N 119° 28'W, SOUNDING 2100 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA RELGH, WIRE ANGLE 26.														
1 16.97 33.604 5.54 C.36 2 0.00 347.0 0 16.97 33.60 5.54 24.47 347.3 0 10 16.97 33.614 5.86 C.38 2 0.00 346.3 10 16.97 33.61 5.86 24.48 346.6 .035 32 16.40 33.579 5.86 C.40 1 0.00 336.2 20 16.97 33.61 5.86 24.48 346.6 .069 42 16.16 33.568 5.50 C.40 2 0.00 331.8 30 16.43 33.58 5.86 24.58 336.8 .104 54 15.18 33.531 6.12 C.40 2 0.00 313.7 50 15.64 33.55 5.81 24.73 322.0 .170 65 - 33.489 6.14 C.45 2 0.00 - 75 13.11 33.51 5.75 25.24 274.0 .245 82 12.76 33.523 5.40 C.80 6 0.30 266.5 100 12.00 33.55 4.89 25.48 250.6 .311 109 11.75 33.580 4.71 1.15 10 0.06 243.9 125 10.88 33.69 3.97 25.80 220.8 .370 126 10.84 33.696 3.94 1.57 17 0.01 219.7 150 10.13 33.87 3.04 26.07 195.1 .423 154 10.06 33.891 2.99 1.96 25 0.01 192.4 200 9.74 34.06 2.42 26.28 174.8 .517 181 9.94 34.000 2.77 - - 182.4 250 9.13 34.12 2.05 26.43 160.8 .603 217 9.54 34.095 2.19 - - 169.0 300 8.34 34.20 1.50 26.62 143.1 .682 245 9.20 34.117 2.11 - - 162.1 400 7.16 34.25 .86 26.83 123.1 .821 289 8.49 34.189 1.60 - - 146.1 500 6.33 34.31 .53 26.99 107.9 .943 349 7.78 34.244 1.15 - - 131.9 600 5.61 34.36 .45 27.12 95.6 1.052 441 6.76 34.264 .68 - - 116.8 528 6.16 34.334 .50 - - 104.1 602 5.59 34.364 .45 - - 95.0														
100.80								CCOFI CRUISE 6407						100.80
ALEXANDER AGASSIZ, JULY 15 1964, 0946 GCT, 29° 56'N 120° 09'W, SOUNDING 2020 FM, WIND 350 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 25.														
1 17.11 33.616 5.51 C.36 2 0.00 349.3 0 17.11 33.62 5.51 24.45 349.0 0 9 17.11 33.612 5.85 C.36 3 0.01 349.6 10 17.11 33.61 5.85 24.44 349.7 .035 32 16.44 33.567 5.84 C.36 2 0.00 338.0 20 17.11 33.61 5.85 24.44 349.7 .070 41 16.24 33.558 5.50 C.38 2 0.01 334.3 30 16.48 33.57 5.84 24.56 338.6 .104 54 14.76 33.395 6.21 C.38 3 0.00 315.0 50 15.27 33.45 6.02 24.74 321.5 .171 68 13.94 33.418 6.13 C.45 3 0.06 296.8 75 13.64 33.44 6.06 25.08 289.3 .247 90 13.06 33.474 5.74 C.66 5 0.23 275.7 100 12.63 33.49 5.49 25.32 266.5 .318 108 12.22 33.501 5.30 0.89 7 0.16 258.2 125 11.26 33.56 4.86 25.63 236.9 .381 125 11.26 33.565 4.86 1.20 10 0.03 236.5 150 9.74 33.68 4.13 25.99 202.9 .437 150 9.74 33.677 4.13 1.62 19 0.02 203.1 200 8.67 33.93 3.85 26.35 168.0 .531 175 9.05 33.854 3.86 - - 179.3 250 8.01 34.03 - 26.53 191.1 .613 209 8.54 33.957 3.85 - - 164.1 300 7.56 34.10 1.98 26.65 139.6 .688 235 8.18 - - - - - 400 6.57 34.19 .97 26.86 119.9 .823 277 7.74 34.066 2.37 - - 144.6 500 5.82 34.25 .58 27.00 106.2 .942 334 7.28 34.136 1.59 - - 133.2 600 5.28 34.32 - 27.13 94.8 1.049 424 6.32 34.202 .81 - - 115.9 509 5.78 34.256 .57 - - 105.3 583 5.39 34.309 .48 - - 96.8														

C B S E R V E D L E V E L S O F D E P T H							S T A N D A R D L E V E L S O F D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
100.90							CCOFI CRUISE 6407						100.90	
ALEXANDER AGASSIZ, JULY 15 1964, 1448 GCT, 29 33N 120 49W, SOUNDING 2070 FM, WIND 360 FORCE 4, WEATHER CLOUDY, SEA RCLGH, WIRE ANGLE 15.														
C 17.50 33.616 5.62 C.31 3 0.01 358.1 0 17.50 33.62 5.62 24.36 357.9 0														
10 17.49 33.614 5.92 C.31 2 0.00 358.1 10 17.49 33.61 5.92 24.35 358.4 .036														
34 17.39 33.594 5.60 C.28 2 0.00 357.2 20 17.48 33.61 5.80 24.35 358.1 .072														
64 15.66 33.483 5.77 C.31 3 0.00 327.3 30 17.44 33.60 5.65 24.36 357.9 .108														
73 15.60 33.563 6.17 C.31 3 0.00 320.2 50 17.00 33.56 5.61 24.43 350.9 .179														
91 15.34 33.649 6.02 C.31 3 0.00 308.4 75 15.68 33.59 6.17 24.76 319.9 .263														
106 14.77 33.606 5.96 C.36 3 0.03 299.7 100 15.10 33.66 5.96 24.94 302.6 .341														
119 14.30 33.633 5.88 C.44 4 0.20 288.2 125 14.10 33.63 5.84 25.13 284.5 .416														
146 12.07 33.629 5.30 C.91 10 0.04 246.1 150 11.78 33.63 5.11 25.59 240.8 .482														
164 11.10 33.628 4.75 1.17 14 0.01 229.1 200 9.72 33.77 4.22 26.06 195.9 .593														
192 9.90 33.718 4.37 - - 202.6 250 8.56 33.99 3.37 26.42 161.9 .685														
223 9.25 33.910 3.81 - - 178.2 300 7.90 34.06 2.57 26.57 147.3 .764														
250 8.56 33.590 3.37 - - 161.9 400 6.88 34.16 1.32 26.80 126.1 .907														
296 7.95 34.055 2.61 - - 148.4 500 5.99 34.24 .69 26.98 109.0 1.030														
356 7.30 34.105 1.88 - - 135.7 600 5.37 34.31 .53 27.11 96.5 1.140														
454 6.38 34.211 .87 - - 116.0 - - - - - - - -														
540 5.70 34.262 .61 - - 103.9 - - - - - - - -														
615 5.31 34.321 .50 - - 95.0 - - - - - - - -														
110.35							CCOFI CRUISE 6407						110.35	
ALEXANDER AGASSIZ, JULY 17 1964, 0749 GCT, 29 46N 116 00W, SOUNDING 625 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MCCRATE, WIRE ANGLE 25.														
C 16.00 33.752 7.02 C.26 3 0.00 314.9 0 16.00 33.75 7.02 24.81 315.1 0														
9 15.16 33.763 8.07 0.30 5 C.01 296.3 10 15.05 33.76 8.06 25.03 294.2 .030														
27 12.66 33.632 5.66 0.99 10 0.21 256.6 20 13.80 33.71 6.50 25.25 272.7 .059														
36 12.08 33.560 4.66 1.05 9 0.16 251.3 30 12.45 33.61 4.94 25.44 254.4 .085														
5C 11.28 33.570 4.60 1.23 12 0.08 236.5 50 11.28 33.57 4.60 25.63 236.5 .135														
63 10.86 33.687 3.99 1.52 16 0.04 220.7 75 10.44 33.74 3.90 25.91 209.7 .191														
85 9.98 33.785 3.82 1.62 20 0.02 198.9 100 9.76 33.91 3.01 26.16 186.2 .241														
101 9.75 33.916 3.00 2.03 26 0.10 185.6 125 9.57 34.04 2.49 26.29 173.6 .286														
119 9.56 33.957 2.72 2.08 28 0.05 176.6 150 9.33 34.07 2.63 26.36 167.6 .329														
136 9.64 34.093 2.26 2.26 31 0.04 170.7 200 9.25 34.28 1.35 26.53 150.8 .411														
161 9.06 34.048 2.83 - - 165.1 250 8.82 34.28 1.27 26.60 144.3 .487														
191 9.30 34.247 1.56 - - 154.0 300 8.57 34.33 .93 26.68 136.9 .560														
218 9.08 34.302 1.23 - - 146.6 400 7.02 34.24 .84 26.84 122.0 .695														
261 8.74 34.276 1.28 - - 143.4 500 6.49 34.34 .45 26.99 107.7 .816														
311 8.49 34.336 .87 - - 135.2 - - - - - - - -														
391 7.09 34.238 .87 - - 123.0 - - - - - - - -														
474 6.69 34.326 .50 - - 111.3 - - - - - - - -														
558 5.92 34.363 .42 - - 99.0 - - - - - - - -														
110.40							CCOFI CRUISE 6407						110.40	
ALEXANDER AGASSIZ, JULY 17 1964, 0450 GCT, 29 36N 116 20W, SOUNDING 1356 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA MCCRATE, WIRE ANGLE 30.														
C 17.60 33.702 5.79 C.35 3 0.00 354.2 0 17.60 33.70 5.79 24.39 354.3 0														
9 17.62 33.710 5.96 C.38 3 0.00 354.1 10 17.62 33.71 5.96 24.40 354.1 .035														
26 16.42 33.741 6.21 0.39 3 0.00 324.9 20 16.60 33.74 6.20 24.66 328.9 .070														
35 15.90 33.718 5.78 0.43 2 0.01 315.2 30 16.33 33.74 6.15 24.72 323.0 .102														
47 14.65 33.614 - C.58 3 0.06 296.7 50 14.33 33.61 - 25.06 290.5 .164														
60 13.55 33.603 6.10 C.70 4 0.15 275.6 75 12.31 33.60 5.05 25.46 252.5 .232														
80 11.93 33.603 4.76 1.16 10 0.06 245.5 100 10.68 33.62 4.37 25.78 222.6 .292														
96 10.94 33.607 4.44 1.39 13 0.03 227.9 125 9.71 33.79 4.06 26.08 194.3 .345														
112 9.99 33.693 4.17 1.58 17 0.01 205.9 150 9.18 33.89 3.48 26.24 178.6 .392														
125 9.64 33.809 4.02 1.63 20 0.01 191.8 200 8.80 34.11 2.18 26.47 156.6 .477														
153 9.16 33.907 3.37 - - 177.1 250 7.67 34.09 2.25 26.63 141.9 .554														
182 9.08 34.087 2.22 - - 162.5 300 7.49 34.19 1.35 26.73 132.0 .625														
206 8.65 34.115 2.18 - - 154.0 400 6.78 34.28 .66 26.90 115.9 .754														
247 7.68 34.082 2.32 - - 142.6 500 6.31 34.35 .46 27.02 104.7 .871														
293 7.53 34.175 1.49 - - 133.6 - - - - - - - -														
366 6.99 34.248 .80 - - 121.0 - - - - - - - -														
441 6.56 34.314 .56 - - 110.5 - - - - - - - -														
520 6.22 34.367 .42 - - 102.3 - - - - - - - -														

O B S E R V E D   L E V E L S   O F   D E P T H							S T A N D A R D   L E V E L S   O F   D E P T H										
INPUT				COMPUTED			INPUT				COMPUTED						
Z	T	S	CXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
110.50				CCOFI CRUISE 6407									110.50				
ALEXANDER AGASSIZ, JULY 16 1964, 2320 GCT, 29 16N 116 59.5W, SOUNDING 1660 FM, WIND 080 FORCE 4, WEATHER OVERCAST, SEA MEDIUM, WIRE ANGLE 13.																	
C 17.06 33.587 6.00 0.36 1 0.00 350.3 0 17.06 33.59 6.00 24.44 350.1 0	10 16.97 33.597 6.33 0.48 1 0.00 347.5 10 16.97 33.60 6.33 24.47 347.3 .035	28 16.60 33.576 6.32 0.37 1 0.00 340.9 20 16.84 33.59 6.33 24.49 345.2 .070	39 15.67 33.503 5.86 0.36 2 0.00 326.0 30 16.20 33.54 6.14 24.60 334.7 .104	53 15.04 33.484 6.28 0.37 2 0.00 314.2 50 15.18 33.49 6.23 24.79 316.7 .169	68 14.36 33.513 6.12 0.43 2 0.00 298.2 75 14.12 33.51 6.06 25.03 293.6 .246	92 12.66 33.496 5.50 0.79 5 0.11 266.6 100 12.40 33.53 5.25 25.39 259.3 .315	113 12.06 33.741 4.33 1.41 14 0.37 237.6 125 11.50 33.75 4.03 25.73 227.0 .377	132 11.10 33.758 3.81 1.68 17 0.14 219.5 150 10.37 33.94 2.87 26.08 193.8 .430	151 10.35 33.949 2.84 2.04 24 0.04 192.8 200 10.03 34.25 1.59 26.38 165.3 .522	180 9.98 34.112 2.19 - - - 174.7 250 9.41 34.34 1.15 26.56 148.8 .603	214 10.08 34.338 1.25 - - - 159.6 300 9.07 34.38 .97 26.64 140.6 .678	244 9.48 34.335 1.17 - - - 150.3 400 7.72 34.38 .55 26.85 121.0 .815	293 9.15 34.378 .99 - - - 142.0 500 6.73 34.38 .53 26.99 107.8 .936	348 8.22 34.345 .85 - - - 130.6 600 5.87 34.40 .46 27.12 95.6 1.046	433 7.42 34.391 .45 - - - 116.0	518 6.55 34.373 .54 - - - 106.0	602 5.86 34.401 .46 - - - 95.4

110.60	CCOFI CRUISE 6407												110.60				
ALEXANDER AGASSIZ, JULY 16 1964, 1753 GCT, 28 56.5N 117 38.5W, SOUNDING 1910 FM, WIND 350 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 20.																	
C 18.10 33.8C2 5.84 0.28 1 0.01 358.5 0 18.10 33.80 5.84 24.35 358.6 0	9 18.08 33.819 5.93 0.25 2 0.00 356.8 10 18.08 33.82 5.93 24.37 356.7 .036	33 14.86 33.736 6.38 0.46 4 0.04 292.1 20 18.00 33.82 5.98 24.39 354.8 .071	42 13.84 33.701 5.24 0.72 8 0.33 274.1 30 15.40 33.75 6.37 24.94 302.3 .104	56 12.58 33.712 4.53 1.20 12 0.51 249.3 50 13.07 33.70 4.81 25.39 259.3 .161	70 11.50 33.765 3.88 2.06U 18 0.36 225.9 75 10.80 33.82 3.41 25.91 209.8 .220	95 10.38 33.884 3.03 1.85U 24 0.06 198.1 100 10.34 33.92 2.90 26.07 194.8 .271	113 10.25 34.024 2.53 2.16 27 0.06 185.6 125 10.19 34.06 2.32 26.21 182.0 .318	131 10.16 34.082 2.23 2.22 30 0.03 179.9 150 9.81 34.15 2.11 26.34 169.2 .363	158 9.68 34.183 2.04 2.42 35 0.02 164.7 200 9.33 34.28 - 26.52 152.0 .445	186 9.49 34.247 3.67U - - - 157.0 250 8.85 34.33 1.10 26.64 141.0 .521	223 9.08 34.318 1.16 - - - 145.4 300 8.43 34.36 .79 26.73 132.6 .592	250 8.85 34.331 1.10 - - - 140.9 400 7.45 34.37 .53 26.88 118.0 .723	296 8.46 34.356 .81 - - - 133.3 500 6.41 34.36 .46 27.02 105.2 .841	357 8.07 34.392 .57 - - - 129.0 600 5.78 34.41 .37 27.14 93.8 .948	451 6.69 34.329 .52 - - - 111.0	537 6.22 34.389 .41 - - - 100.7	610 5.70 34.412 .36 - - - 92.7

110.70	CCOFI CRUISE 6407												110.70				
ALEXANDER AGASSIZ, JULY 16 1964, 1155 GCT, 28 36.5N 118 18W, SOUNDING 2050 FM, WIND 340 FORCE 2, WEATHER CLEAR, SEA MEDIUM, WIRE ANGLE 20.																	
1 17.92 33.712 5.67 0.31 2 0.00 360.8 0 17.92 33.71 5.67 24.32 361.0 0	10 17.93 33.712 5.90 0.33 3 0.00 361.1 10 17.93 33.71 5.90 24.32 361.2 .036	43 17.73 33.745 5.80 0.33 2 0.01 354.0 20 17.92 33.72 5.90 24.33 360.2 .072	71 16.51 33.732 5.53 0.35 2 0.01 327.5 30 17.89 33.73 5.89 24.35 358.8 .108	89 15.20 33.534 6.10 0.34 3 0.00 313.9 50 17.50 33.75 5.72 24.46 348.4 .179	102 14.69 33.534 6.01 0.38 3 0.01 303.4 75 16.41 33.72 5.56 24.69 326.2 .264	117 13.1C 33.556 5.34 0.74 6 0.00 270.5 100 14.71 33.53 6.02 24.92 304.1 .343	134 12.13 33.636 4.93 0.97 9 0.05 246.6 125 12.63 33.59 5.13 25.39 259.2 .415	152 10.94 33.683 4.65 1.17 13 0.02 222.3 150 11.10 33.68 4.72 25.75 225.3 .476	179 9.90 33.892 3.25 1.84 25 0.00 189.7 200 10.18 34.12 2.16 26.25 177.4 .578	201 10.18 34.131 2.11 - - - 176.6 250 8.30 34.15 - 26.58 146.3 .662	223 9.64 34.223 1.92 - - - 161.1 300 7.77 34.15 1.71 26.66 138.8 .735	253 8.21 - - - - - 400 6.89 34.25 .81 26.86 119.5 .870	288 7.86 34.146 1.83 - - - 140.3 500 6.20 34.30 .60 27.00 107.1 .990	334 7.50 34.175 1.44 - - - 133.2	396 6.91 34.250 .83 - - - 119.8	474 6.42 34.293 .65 - - - 110.3	555 5.62 34.308 .55 - - - 99.6

C B S E R V E D   L E V E L S   O F   D E P T H							S T A N D A R D   L E V E L S   O F   D E P T H										
INPUT			COMPUTED				INPUT			COMPUTED							
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
110.80								CCDFI-CRUISE 6407						110.80			
ALEXANDER AGASSIZ, JULY 16 1964, C700 GCT, 28 19N 118 57W, SOUNDING 2050 FM, WIND 080 FORCE 4, WEATHER PARTLY CLYC, SEA MDERATE, WIRE ANGLE 17.																	
1 18.33 33.761 5.54 0.35 2 0.00 366.9 0 18.33 33.76 5.54 24.26 366.9 0	1C 18.34 33.761 5.80 0.37 2 0.00 367.1 10 18.34 33.76 5.80 24.26 367.2 .037	29 18.08 33.758 5.74 0.33 2 0.00 361.2 20 18.10 33.76 5.76 24.32 361.5 .073	39 17.86 33.760 5.36 0.32 2 0.00 359.9 30 18.08 33.76 5.73 24.32 361.1 .109	53 16.71 33.730 6.01 0.35 2 0.00 332.1 50 17.70 33.76 5.44 24.42 352.2 .181	68 15.90 33.623 6.04 0.34 1 0.00 322.2 75 15.42 33.58 6.03 24.81 315.1 .265	92 15.07 33.556 6.01 0.35 2 0.00 309.6 100 15.00 33.55 6.01 24.88 308.6 .343	11C 14.56 33.537 6.01 0.38 2 0.00 300.5 125 13.85 33.53 5.76 25.10 286.8 .419	128 13.54 33.525 5.60 0.61 4 0.11 281.2 150 11.68 33.65 4.57 25.62 237.6 .485	146 11.95 33.634 4.68 1.07 10 0.02 243.5 200 9.53 33.89 3.60 26.18 184.0 .592	174 10.39 33.734 4.08 - - 209.4 250 8.49 34.01 3.36 26.44 159.4 .680	206 9.40 33.914 3.55 - - 180.2 300 7.79 34.08 2.42 26.60 144.3 .759	234 8.88 33.986 3.46 - - 167.0 400 7.13 34.26 .82 26.84 121.9 .887	278 7.91 34.041 2.96 - - 148.8 500 6.51 34.32 .56 26.97 109.4 1.020	329 7.66 34.131 1.86 - - 138.7 - - - - - - - -	408 7.08 34.268 .77 - - 120.7 - - - - - - - -	489 6.59 34.316 .58 - - 110.7 - - - - - - - -	573 5.89 34.368 .47 - - 98.2 - - - - - - - -
110.90								CCDFI CRUISE 6407						110.90			
ALEXANDER AGASSIZ, JULY 16 1964, C213 GCT, 27 57N 119 36W, SOUNDING 2090 FM, WIND 090 FORCE 3, WEATHER OVERCAST, SEA RELG, WIRE ANGLE 17.																	
C 18.69 33.844 5.59 0.37 2 0.00 369.4 0 18.69 33.84 5.59 24.23 369.6 0	1C 18.67 33.851 5.84 0.37 2 0.00 368.4 10 18.67 33.85 5.84 24.25 368.4 .037	29 18.17 - - - - - 20 18.40 33.84 - - 24.31 362.8 .074	38 18.04 33.815 5.52 0.38 2 0.00 356.1 30 18.16 33.82 - - 24.35 358.6 .110	53 17.53 33.878 5.99 0.32 2 0.00 339.8 50 17.56 33.88 5.98 24.54 340.3 .180	67 16.91 33.881 5.95 0.33 2 0.00 325.5 75 16.40 33.88 5.86 24.82 314.3 .262	92 16.44 33.908 5.85 0.32 2 0.00 313.1 100 16.24 33.93 5.84 24.89 307.1 .340	11C 16.08 33.930 5.83 0.35 2 0.00 303.6 125 16.00 33.93 5.82 24.94 301.9 .417	129 14.92 33.850 5.54 0.48 3 0.17 285.0 150 12.76 33.79 4.94 25.52 246.9 .487	148 12.94 33.796 4.99 0.82 8 0.02 249.8 200 10.00 33.88 3.90 26.10 192.2 .599	176 10.93 33.767 4.32 - - 215.9 250 8.93 34.01 3.39 26.38 166.0 .690	209 9.74 33.912 3.84 - - 185.7 300 8.34 34.11 2.31 26.54 149.8 .772	236 9.05 33.961 3.76 - - 171.4 400 6.91 34.16 - 26.79 126.5 .916	281 8.70 34.057 2.51 - - 156.1 500 5.99 .34.23 .80 26.97 109.8 1.040	333 7.70 34.123 2.02 - - 139.8 - - - - - - - -	413 6.78 34.173 - - - - 123.8 - - - - - - - -	493 6.03 34.220 .82 - - 111.0 - - - - - - - -	577 5.45 34.291 .76 - - 98.9 - - - - - - - -
113.30								CCDFI CRUISE 6407						113.30			
ALEXANDER AGASSIZ, JULY 27 1964, 0810 GCT, 29 22N 115 18W, SOUNDING 33 FM, WIND 320 FORCE 3, WEATHER CLEAR, SEA SLIGHT, WIRE ANGLE 05.																	
C 15.31 33.747 7.45 0.44 15 0.07 300.6 0 15.31 33.75 7.45 24.96 300.4 0	1C 13.84 33.666 6.43 0.62 9 0.11 276.7 10 13.84 33.67 6.43 25.21 276.4 .029	2C 12.07 33.697 4.50 1.38 15 0.29 241.0 20 12.07 33.70 4.50 25.59 240.8 .055	3C 11.65 33.746 3.65 1.65 18 0.38 229.9 30 11.65 33.75 3.65 25.70 229.7 .078	5C 10.65 33.818 2.85 2.07 25 0.15 207.5 50 10.65 33.82 2.85 25.94 207.3 .122													
115.35								CCDFI CRUISE 6407						115.35			
ALEXANDER AGASSIZ, JULY 27 1964, 0429 GCT, 28 54N 115 26.5W, SUONDING 512 FM, WIND 330 FORCE 4, WEATHER PARTLY CLOUDY, SEA RCLG, WIRE ANGLE 22.																	
1 17.84 33.734 5.73 0.31 2 - 357.4 0 17.84 33.73 5.73 24.36 357.7 0	1C 17.75 33.734 5.67 0.58 2 0.00 355.3 10 17.75 33.73 5.67 24.38 355.6 .036	29 16.74 33.689 5.84 0.35 1 0.00 335.7 20 17.23 33.72 5.70 24.50 344.4 .071	38 16.04 33.644 6.03 0.30 2 0.00 323.7 30 16.65 33.68 5.86 24.60 334.4 .105	52 14.63 33.587 5.99 0.42 2 0.04 298.3 50 14.72 33.59 5.99 24.97 299.9 .168	66 13.88 33.572 5.86 0.57 3 0.11 284.4 75 12.78 33.56 5.36 25.34 264.2 .239	89 11.66 33.556 4.81 1.08 9 0.15 244.1 100 10.50 33.60 4.37 25.79 221.1 .300	107 10.30 33.645 4.16 1.35 15 0.04 214.5 125 10.42 33.94 2.57 26.07 194.6 .353	125 10.42 33.943 2.57 2.02 25 0.02 194.4 150 10.13 34.08 2.22 26.23 179.5 .401	143 10.21 34.041 2.31 2.11 27 0.03 183.7 200 9.45 34.21 1.73 26.45 159.1 .487	165 9.89 34.147 2.00 - - 170.7 250 9.43 34.36 .96 26.57 147.7 .566	201 9.45 34.213 1.72 - - 158.9 300 8.95 34.39 .68 26.67 138.1 .640	226 9.50 34.324 1.11 - - 151.4 400 8.19 34.42 .43 26.81 124.6 .778	273 9.26 34.383 .83 - - 143.3 500 7.05 34.40 .35 26.96 110.4 .903	324 8.68 34.396 .59 - - 133.6 - - - - - - - -	402 8.17 34.423 .42 - - 124.1 - - - - - - - -	483 7.26 34.405 .35 - - 112.8 - - - - - - - -	566 6.29 34.372 .36 - - 102.8 - - - - - - - -

## C B S E R V E D L E V E L S O F D E P T H

## S T A N D A R D L E V E L S O F D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z	T	S	CXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
119.33															119.33

## CCOFI CRUISE 6407

ALEXANDER AGASSIZ, JULY 26 1964, 2300 GCT, 28 19N 114 53.5W, SOUNDING 55 FM, WIND 320 FORCE 3, WEATHER CLEAR,  
SEA MODERATE, WIRE ANGLE 13.

C	19.04	33.801	5.88	-	-	-	380.9	0	19.04	33.80	5.88	24.12	381.0	0
1C	18.46	33.800	6.03	-	-	-	367.1	10	18.46	33.80	6.03	24.26	367.1	.037
19	18.04	33.776	6.14	-	-	-	359.0	20	18.00	33.77	6.15	24.35	358.5	.074
29	17.56	33.753	6.22	-	-	-	349.5	30	17.49	33.75	6.22	24.46	348.2	.109
48	15.68	33.747	5.50	-	-	-	308.4	50	15.15	33.75	5.25	25.00	297.0	.174
73	10.96	33.787	3.11	-	-	-	215.0	75	10.82	33.79	3.05	25.89	212.4	.238

120.45

## CCOFI CRUISE 6407

120.45

ALEXANDER AGASSIZ, JULY 18 1964, 1525 GCT, 27 42.5N 115 33W, SOUNDING 1265 FM, WIND 310 FORCE 4, WEATHER OVERCAST,  
SEA RCLGH, WIRE ANGLE 18.

C	19.30	33.854	5.47	0.40	2	0.01	383.3	0	19.30	33.85	5.47	24.09	383.6	0
1C	19.32	33.859	5.69	0.43	2	0.00	383.5	10	19.32	33.86	5.69	24.09	383.4	.038
29	15.66	33.647	6.20	0.42	2	0.00	315.3	20	18.00	33.77	5.91	24.35	358.5	.076
38	15.25	33.720	5.76	0.52	3	0.01	301.3	30	15.60	33.65	6.17	24.82	313.8	.109
48	14.10	33.643	5.85	0.63	3	0.15	283.5	50	13.90	33.62	5.83	25.16	281.2	.169
67	12.76	33.592	5.27	1.01	7	0.38	261.4	75	12.30	33.60	5.00	25.47	252.4	.236
91	11.20	33.770	4.00	1.55	14	0.02	220.3	100	11.36	33.89	3.69	25.87	214.3	.295
11C	10.94	33.941	3.09	1.90	19	0.02	203.3	125	10.54	34.02	2.60	26.11	190.7	.346
13C	10.46	34.050	2.51	2.14	24	0.01	187.2	150	10.27	34.14	2.24	26.25	177.4	.393
148	10.28	34.124	2.27	2.21	27	0.01	178.7	200	9.85	34.31	1.39	26.46	158.0	.479
177	10.08	34.262	1.73	-	-	-	165.3	250	9.48	34.37	1.06	26.57	147.7	.557
21C	9.77	34.333	1.25	-	-	-	155.0	300	8.75	34.36	.88	26.68	137.3	.631
239	9.60	34.369	1.09	-	-	-	149.7	400	7.75	34.37	.66	26.84	122.1	.767
286	8.96	34.358	.93	-	-	-	140.6	500	6.83	34.39	.40	26.98	108.3	.889
339	8.30	34.360	.74	-	-	-	130.7	600	6.15	34.42	-	27.10	97.5	1.000
421	7.57	34.381	.62	-	-	-	118.8							
502	6.81	34.395	.40	-	-	-	107.7							
588	6.20	34.416	.39	-	-	-	98.4							

120.50

## CCOFI CRUISE 6407

120.50

ALEXANDER AGASSIZ, JULY 18 1964, 1818 GCT, 27 33N 115 54W, SOUNDING 2380 FM, WIND 040 FORCE 4, WEATHER OVERCAST,  
SEA RCLGF, WIRE ANGLE 05.

C	18.95	33.846	5.81	0.40	1	0.00	375.4	0	18.95	33.85	5.81	24.18	375.2	0
1C	18.91	33.848	5.72	0.35	2	0.01	374.3	10	18.91	33.85	5.72	24.19	374.2	.037
35	15.76	33.734	6.32	0.44	2	0.01	311.1	20	18.80	33.85	5.73	24.21	371.6	.075
45	14.66	33.687	6.28	0.66	4	0.04	291.6	30	17.22	33.79	6.07	24.55	339.1	.110
6C	12.76	33.617	5.40	0.95	7	0.03	259.6	50	14.50	33.68	6.25	25.08	288.8	.173
75	11.72	33.689	4.27	1.43	13	0.04	235.4	75	11.72	33.69	4.27	25.64	235.3	.239
100	10.21	33.763	3.90	1.67	19	0.03	204.3	100	10.21	33.76	3.90	25.97	204.5	.295
12C	9.57	33.875	3.76	1.80	23	0.03	185.8	125	9.61	33.94	3.38	26.21	181.6	.344
14C	10.04	34.148	2.18	2.32	29	0.02	173.1	150	9.93	34.17	2.17	26.34	169.7	.388
17C	9.50	34.186	2.15	2.41	33	0.01	161.7	200	9.49	34.32	1.22	26.53	151.6	.470
20C	9.49	34.322	1.22	-	-	-	151.4	250	8.84	34.36	.96	26.66	138.6	.545
24C	8.92	34.356	1.00	-	-	-	140.1	300	8.49	34.39	.80	26.74	131.2	.615
27C	8.70	34.363	.89	-	-	-	136.3	400	7.29	34.36	.64	26.90	116.6	.745
320	8.29	34.396	.74	-	-	-	127.9	500	6.51	34.38	.49	27.02	105.0	.863
384	7.45	34.364	.66	-	-	-	118.5	600	5.87	34.43	.48	27.14	93.4	.969
484	6.62	34.372	.52	-	-	-	106.9							
573	6.06	34.432	.42	-	-	-	95.5							
648	5.56	34.431	.60	-	-	-	89.7							

120.60

## CCOFI CRUISE 6407

120.60

ALEXANDER AGASSIZ, JULY 18 1964, 2335 GCT, 27 13N 116 30.5W, SOUNDING 1980 FM, WIND 060 FORCE 4, WEATHER  
PARTLY CLUDGY, SEA RCLGF, WIRE ANGLE 24.

C	18.38	33.751	5.74	0.38	-	-	368.8	C	18.38	33.75	5.74	24.24	368.8	0
9	17.94	33.737	5.78	0.40	2	0.00	359.5	10	17.88	33.73	5.79	24.35	358.6	.036
28	16.79	33.599	5.93	0.40	1	-	343.4	20	17.00	33.61	5.90	24.47	347.3	.072
.37	16.27	33.685	5.99	0.37	1	0.00	325.7	30	16.72	33.60	5.95	24.53	341.8	.106
5C	14.93	33.509	6.16	0.41	2	0.00	310.1	50	14.93	33.51	6.16	24.86	310.0	.172
64	14.19	33.605	5.72	0.54	3	0.15	288.1	75	13.40	33.64	5.55	25.28	270.0	.245
85	13.50	33.705	5.54	0.87	6	0.40	267.2	100	12.00	33.63	5.54	25.55	244.7	.309
103	11.74	33.625	5.54	1.18	10	0.06	240.5	125	10.60	33.73	4.26	25.88	213.1	.367
119	10.91	33.7C3	4.42	1.34	13	0.02	220.3	150	9.54	33.88	3.69	26.18	184.9	.418
136	10.00	33.783	4.02	1.63	18	0.02	199.4	200	8.68	34.06	2.93	26.45	158.5	.505
162	9.28	33.942	3.45	-	-	-	176.3	250	8.11	34.15	1.96	26.61	143.6	.583
191	8.80	34.041	3.01	-	-	-	161.7	300	7.75	34.22	1.23	26.72	133.3	.654
216	8.42	34.077	2.70	-	-	-	153.4	400	6.93	34.33	.67	26.92	114.1	.784
258	8.05	34.161	1.83	-	-	-	141.9	500	6.30	34.37	.46	27.04	103.1	.899
306	7.70	34.222	1.19	-	-	-	132.5							
381	7.04	34.316	.76	-	-	-	116.6							
469	6.50	34.354	.49	-	-	-	106.8							
549	5.96	34.403	.42	-	-	-	95.8							

O B S E R V E D    L E V E L S    O F    D E P T H								S T A N D A R D    L E V E L S    O F    D E P T H							
INPUT				COMPUTED				INPUT				COMPUTED			
Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD	
120.70								CCCFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 19 1964, 0431 GCT, 26 52N 117 10W, SOUNDING 2025 FM, WIND 320 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 17.															
C	19.24	33.763	5.52	C.31	3	0.00	388.5	0	19.24	33.76	5.52	24.03	388.7	0	
9	19.23	33.761	5.54	C.34	1	0.00	388.4	10	19.23	33.76	5.54	24.04	388.5	.039	
29	17.90	33.644	5.72	C.37	5	0.00	365.3	20	18.60	33.70	5.65	24.15	377.7	.077	
38	17.24	33.672	5.88	0.38	1	0.00	348.2	30	17.83	33.65	5.74	24.30	363.3	.114	
52	16.41	33.656	5.82	C.36	1	0.00	330.8	50	16.50	33.65	5.83	24.62	333.3	.184	
67	16.10	33.714	6.12	0.36	1	0.00	319.9	75	15.90	33.71	6.17	24.80	315.8	.266	
91	14.34	33.564	6.26	0.42	1	0.04	294.1	100	13.50	33.56	5.52	25.20	277.8	.341	
11C	13.24	33.574	5.30	C.70	5	0.19	271.8	125	11.80	33.59	4.78	25.55	244.1	.407	
129	11.54	33.598	4.71	1.18	10	0.02	238.9	150	10.75	33.70	4.30	25.83	217.9	.465	
148	10.82	33.683	4.34	1.48	14	0.01	220.3	200	9.63	34.07	2.63	26.31	172.3	.564	
177	9.80	33.863	3.61	-	-	-	190.3	250	9.50	34.30	1.35	26.51	153.2	.648	
21C	9.62	34.144	2.26	-	-	-	166.6	300	8.90	34.35	.99	26.65	140.3	.724	
239	9.60	34.287	1.46	-	-	-	155.7	400	8.01	34.38	.58	26.81	125.0	.863	
286	9.00	34.329	1.09	-	-	-	143.4	500	6.91	34.36	.51	26.95	111.6	.989	
338	8.64	34.378	.73	-	-	-	134.3	600	6.01	34.40	-	27.10	97.3	1.101	
418	7.80	34.376	.56	-	-	-	122.4								
500	6.91	34.365	.51	-	-	-	111.2								
582	6.12	34.386	.39	-	-	-	99.7								
120.80								CCCFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 19 1964, 0920 GCT, 26 35N 117 48.5W, SOUNDING 2085 FM, WIND 310 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 12.															
C	19.66	33.892	5.47	C.27	1	0.02	389.4	0	19.66	33.89	5.47	24.02	389.6	0	
11	19.65	33.885	5.43	C.31	2	0.01	389.7	10	19.65	33.89	5.44	24.03	389.3	.039	
30	18.66	33.816	5.53	0.30	1	0.00	369.2	20	19.64	33.88	5.43	24.02	389.8	.078	
40	17.16	33.661	5.78	0.31	1	0.00	347.2	30	18.60	33.82	5.53	24.24	369.0	.116	
55	16.71	33.723	5.79	C.31	1	0.01	332.6	50	16.85	33.71	5.79	24.58	336.6	.187	
69	16.18	33.723	5.93	C.30	1	0.00	320.9	75	15.97	33.72	5.93	24.79	316.6	.269	
94	15.08	33.676	5.82	0.38	1	0.01	301.0	100	14.55	33.68	5.63	25.07	289.8	.345	
115	13.95	33.848	5.12	0.56	3	0.07	265.5	125	13.35	33.83	5.03	25.44	255.1	.414	
134	12.38	33.791	4.90	0.79	9	0.03	239.8	150	11.10	33.75	4.58	25.81	220.1	.474	
153	10.96	33.745	4.52	1.16	14	0.00	218.1	200	9.55	33.90	3.87	26.19	183.6	.577	
182	10.16	33.850	4.07	-	-	-	197.0	250	9.74	34.32	1.28	26.49	155.5	.664	
216	9.14	33.953	3.64	-	-	-	173.4	300	9.27	34.40	.76	26.63	142.2	.741	
244	9.76	34.291	1.47	-	-	-	158.0	400	7.81	34.36	.60	26.82	123.7	.881	
294	9.34	34.402	.79	-	-	-	143.2	500	6.74	34.36	.46	26.97	109.4	1.004	
348	8.52	34.392	.64	-	-	-	131.5	600	6.02	34.40	.35	27.10	97.4	1.116	
450	7.23	34.347	.56	-	-	-	116.8								
535	6.47	34.368	.41	-	-	-	105.3								
622	5.88	34.402	.34	-	-	-	95.6								
120.90								CCCFI CRUISE 6407							
ALEXANDER AGASSIZ, JULY 19 1964, 1403 GCT, 26 18.5N 118 26.5W, SOUNDING 2050 FM, WIND 060 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 19.															
C	19.20	33.770	5.62	C.33	1	0.00	387.0	0	19.20	33.77	5.62	24.05	387.0	0	
9	19.18	33.770	5.85	C.34	1	0.00	386.5	10	19.17	33.77	5.85	24.06	386.3	.039	
33	17.90	33.678	5.74	0.32	1	0.00	362.8	20	18.40	33.71	5.78	24.21	372.2	.077	
42	17.28	33.691	5.94	0.32	1	0.00	347.7	30	17.93	33.68	5.74	24.30	363.4	.114	
57	16.36	33.673	6.01	C.33	2	0.00	328.5	50	16.72	33.69	5.97	24.60	335.2	.184	
71	15.70	33.638	6.07	C.34	2	0.00	316.8	75	15.60	33.64	6.06	24.81	314.5	.265	
94	14.81	33.629	5.90	0.41	2	0.07	298.9	100	14.60	33.63	5.80	25.02	294.5	.342	
112	13.34	33.641	5.10	0.77	5	0.03	268.8	125	12.39	33.64	4.82	25.48	251.1	.411	
131	11.98	33.649	4.69	1.11	10	0.01	243.0	150	10.85	33.70	4.38	25.81	219.5	.471	
158	10.44	33.761	4.22	1.46	16	0.00	208.2	200	9.18	33.93	3.83	26.27	175.7	.571	
185	9.60	33.892	3.94	-	-	-	185.0	250	8.75	34.14	2.41	26.51	153.6	.656	
221	8.72	33.990	3.49	-	-	-	164.3	300	7.88	34.13	1.98	26.63	141.8	.732	
246	8.76	34.136	2.42	-	-	-	154.1	400	7.20	34.27	.96	26.84	122.1	.870	
295	7.92	34.126	2.03	-	-	-	142.7	500	6.54	34.36	.54	27.00	106.8	.991	
355	7.64	34.243	1.21	-	-	-	130.1	600	5.90	34.40	.41	27.11	96.0	1.100	
449	6.72	34.296	.73	-	-	-	113.9								
535	6.41	34.398	.45	-	-	-	102.4								
609	5.83	34.395	.41	-	-	-	95.5								

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z T S

CXY

PHC

SIL

NIT

D\*T

Z

T

S

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SIG\*T

D\*T

DD

123.42

CCOFI CRUISE 6407

123.42

ALEXANDER AGASSIZ, JULY 26 1964, 1627 GCT, 27 14N 114 59.5W, SOUNDING 930 FM, WIND 280 FORCE 2, WEATHER OVERCAST,  
SEA RUGGED, WIRE ANGLE 00.

C	18.37	33.795	6.10	-	-	365.3	0	18.37	33.80	6.10	24.28	365.0	0
1C	18.30	33.795	6.07	-	-	363.7	10	18.30	33.80	6.07	24.30	363.3	.036
3C	14.69	33.755	5.40	-	-	287.2	20	17.00	33.78	5.83	24.60	334.9	.071
4C	13.68	33.730	4.91	-	-	268.8	30	14.69	33.76	5.40	25.10	286.8	.103
55	12.22	33.714	4.01	-	-	242.5	50	13.00	33.72	4.48	25.42	256.5	.157
7C	11.70	33.747	3.76	-	-	230.8	75	11.50	33.76	3.70	25.74	226.3	.218
95	10.59	33.852	3.39	-	-	204.0	100	10.54	33.86	3.37	25.99	202.5	.272
115	10.29	33.972	3.02	-	-	190.1	125	10.23	34.02	2.80	26.17	185.6	.321
135	10.18	34.070	2.52	-	-	181.1	150	10.01	34.16	2.21	26.31	171.7	.366
155	9.96	34.180	2.11	-	-	169.4	200	9.55	34.31	1.37	26.51	153.3	.449
185	9.56	34.247	1.68	-	-	158.1	250	9.36	34.39	.87	26.60	144.4	.526
22C	9.54	34.367	1.01	-	-	148.9	300	8.91	34.38	.86	26.67	138.2	.599
25C	9.36	34.386	.87	-	-	144.7	400	8.25	34.42	.46	26.80	125.5	.738
301	8.90	34.384	.86	-	-	137.8	500	7.26	34.47	.44	26.99	108.0	.862
356	8.53	34.412	.61	-	-	130.2	600	6.24	34.44	.38	27.10	97.1	.973
441	7.95	34.436	.39	-	-	120.0							
526	6.94	34.472	.45	-	-	103.6							
611	6.17	34.430	.37	-	-	97.0							

127.40

CCCFI CRUISE 6407

127.40

ALEXANDER AGASSIZ, JULY 26 1964, 1147 GCT, 26 44.5N 114 28W, SOUNDING 1465 FM, WIND 320 FORCE 3, WEATHER  
PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 05.

C	20.54	33.908	5.46	-	-	410.3	0	20.54	33.91	5.46	23.81	410.1	0
1C	20.53	33.910	5.35	-	-	409.9	10	20.53	33.91	5.35	23.81	409.9	.041
3C	18.79	33.917	5.65	-	-	366.4	20	20.50	33.91	5.35	23.82	409.1	.082
4C	17.95	33.937	5.86	-	-	345.2	30	18.79	33.92	5.65	24.27	366.2	.121
55	16.55	33.793	5.89	-	-	323.9	50	16.80	33.81	5.88	24.67	328.2	.191
69	15.82	33.754	5.93	-	-	310.9	75	15.33	33.75	5.77	24.96	300.8	.270
93	13.37	33.723	4.74	-	-	263.4	100	12.89	33.73	4.45	25.45	253.7	.340
112	12.22	33.772	4.05	-	-	238.2	125	11.58	33.86	3.59	25.80	220.3	.399
132	11.26	33.894	3.38	-	-	212.2	150	10.64	33.98	2.94	26.07	195.3	.452
152	10.60	33.986	2.90	-	-	194.2	200	9.73	34.13	2.28	26.34	169.4	.545
181	10.16	34.102	2.41	-	-	178.4	250	9.44	34.32	1.25	26.53	150.8	.628
216	9.48	34.173	2.16	-	-	162.3	300	9.06	34.40	.77	26.66	139.0	.703
245	9.46	34.305	1.35	-	-	152.2	400	7.99	34.40	.55	26.82	123.3	.840
293	9.12	34.398	.80	-	-	140.1	500	6.83	34.39	.44	26.98	108.3	.963
347	8.60	34.418	.61	-	-	130.8	600	6.20	34.43	.33	27.10	97.4	1.074
431	7.60	34.382	.51	-	-	119.2							
515	6.68	34.397	.41	-	-	105.8							
600	6.20	34.426	.33	-	-	97.7							

130.30

CCOFI CRUISE 6407

130.30

ALEXANDER AGASSIZ, JULY 21 1964, C943 GCT, 26 29N 113 29W, SOUNDING 35 FM, WIND 200 FORCE 2, WEATHER CLOUDY,  
SEA MODERATE, WIRE ANGLE 02.

C	17.80	33.918	6.09	0.43	4	0.02	343.1	0	17.80	33.92	6.09	24.51	342.9	0
9	14.42	33.756	5.22	0.79	7	0.22	281.6	10	13.80	33.78	4.58	25.31	267.5	.031
20	12.17	33.868	2.89	1.87	17	0.73	230.3	20	12.17	33.87	2.89	25.70	230.1	.055
3C	11.60	33.863	2.83	2.00	20	0.89	220.4	30	11.60	33.86	2.83	25.80	220.7	.078
5C	12.08	34.191	.50	3.06	40	0.18	204.9	50	12.08	34.19	.50	25.96	204.9	.121

130.40

CCOFI CRUISE 6407

130.40

ALEXANDER AGASSIZ, JULY 21 1964, C506 GCT, 26 14.5N 114 06W, SOUNDING 980 FM, WIND 270 FORCE 3, WEATHER OVERCAST,  
SEA MODERATE, WIRE ANGLE 11.

C	20.48	33.852	5.52	C.32	0	0.00	412.8	0	20.48	33.85	5.52	23.78	413.0	0
1C	20.20	33.852	5.42	C.32	1	C.01	405.8	10	20.20	33.85	5.42	23.85	405.9	.041
3C	18.14	33.800	5.72	C.31	1	0.01	359.6	20	20.00	33.85	5.43	23.91	400.9	.081
4C	17.12	33.796	6.00	C.33	1	0.00	336.4	30	18.14	33.80	5.72	24.34	359.6	.119
54	16.12	33.769	5.89	C.33	1	0.00	316.3	50	16.37	33.78	5.92	24.75	320.9	.188
69	15.46	33.737	5.87	C.41	1	0.03	304.5	75	15.09	33.73	5.73	24.99	297.3	.265
93	13.40	33.714	4.72	0.90	6	0.00	264.6	100	13.02	33.72	4.53	25.42	256.9	.335
113	12.36	33.741	4.18	1.18	11	0.00	243.1	125	10.93	33.77	3.86	25.85	215.7	.395
132	10.78	33.796	3.74	1.53	17	0.01	211.3	150	11.03	34.03	2.50	26.04	198.2	.448
151	11.05	34.054	2.39	2.06	24	0.00	196.8	200	11.12	34.52	.58	26.40	163.6	.540
180	11.16	34.402	1.06	-	-	-	173.0	250	10.46	34.56	.39	26.55	149.5	.621
215	11.04	34.568	.43	-	-	-	158.7	300	9.97	34.59	.29	26.66	139.2	.696
244	10.54	34.555	.41	-	-	-	151.2	400	8.64	34.51	.29	26.81	124.5	.835
293	10.02	34.597	.30	-	-	-	139.5	500	7.38	34.45	.31	26.95	111.1	.960
346	9.56	34.570	.27	-	-	-	134.2	600	6.26	34.40	.33	27.07	100.3	1.074
429	8.16	34.481	.31	-	-	-	119.7							
511	7.28	34.452	.32	-	-	-	109.6							
596	6.32	34.405	.33	-	-	-	100.7							

C B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
130.50							CCOFI CRUISE 6407						130.50	
ALEXANDER AGASSIZ, JULY 20 1964, 2318 GCT, 25 52N 114 47W, SOUNDING 1920 FM, WIND 060 FORCE 2, WEATHER OVERCAST, SEA RCLGH, WIRE ANGLE 08.														
C 20.70	33.848	5.49	C.34	1	0.00	418.7		0 20.70	33.85	5.49	23.72	418.6	0	
1C 20.18	33.867	5.48	C.33	1	0.00	404.2		10 20.18	33.87	5.48	23.87	404.0	.041	
3C 17.78	33.774	5.94	C.33	1	0.00	353.1		20 19.00	33.83	5.65	24.15	377.8	.080	
4C 17.26	33.755	6.14	C.33	1	0.00	342.6		30 17.78	33.77	5.94	24.40	353.4	.117	
5C 16.74	33.743	6.15	C.33	1	0.00	331.8		50 16.74	33.74	6.15	24.63	332.0	.186	
65 15.92	33.717	6.07	C.33	1	0.00	315.7		75 15.25	33.67	6.03	24.91	305.0	.266	
8C 15.20	33.665	6.02	C.38	1	0.00	304.3		100 13.20	33.63	4.97	25.31	266.9	.338	
99 13.31	33.627	5.08	C.82	5	0.13	269.3		125 11.80	33.89	3.20	25.79	222.0	.400	
124 11.83	33.879	3.25	1.70	16	0.05	223.3		150 11.11	34.07	2.37	26.05	196.7	.453	
144 11.22	34.024	2.54	2.04	22	0.01	201.9		200 10.47	34.39	1.29	26.41	162.2	.544	
174 10.74	34.231	1.80	-	-	-	178.5		250 10.27	34.54	.58	26.57	147.8	.624	
203 10.44	34.403	1.25	-	-	-	160.8		300 9.75	34.56	.37	26.67	137.9	.699	
233 10.31	34.492	.86	-	-	-	152.0		400 8.19	34.46	.39	26.84	121.7	.835	
272 10.17	34.582	.37	-	-	-	143.1		500 6.97	34.44	.39	27.00	106.4	.957	
332 9.22	34.526	.37	-	-	-	132.1								
406 8.10	34.459	.39	-	-	-	120.4								
481 7.16	34.440	.41	-	-	-	108.9								
561 6.43	34.443	.35	-	-	-	99.2								
130.60							CCOFI CRUISE 6407						130.60	
ALEXANDER AGASSIZ, JULY 20 1964, 1746 GCT, 25 29.5N 115 23.5W, SOUNDING 2050 FM, WIND 030 FORCE 3, WEATHER OVERCAST, SEA RCLGH, WIRE ANGLE 07.														
C 20.76	33.852	-	C.29	2	0.00	419.9		0 20.76	33.85	-	23.70	420.1	0	
1C 20.67	33.852	-	C.30	2	0.00	417.7		10 20.67	33.85	-	23.73	417.8	.042	
3C 18.07	33.765	-	C.30	1	0.00	360.5		20 19.00	33.79	-	24.12	380.7	.082	
4C 17.11	33.726	-	C.32	4	0.00	341.3		30 18.07	33.76	-	24.33	360.8	.119	
54 16.28	33.747	-	C.32	2	0.00	321.4		50 16.60	33.74	-	24.66	328.9	.188	
69 15.60	33.718	-	C.37	1	0.00	308.8		75 15.27	33.72	-	24.95	301.7	.268	
94 13.92	33.712	-	C.74	5	0.04	274.9		100 13.48	33.72	-	25.33	265.7	.339	
114 12.33	33.774	-	1.33	11	0.02	240.1		125 11.69	33.87	-	25.79	221.5	.401	
134 11.26	33.937	-	1.75	18	0.00	209.1		150 10.65	34.01	-	26.09	193.3	.453	
153 10.60	34.027	-	2.01	24	0.01	191.2		200 10.61	34.35	-	26.36	167.5	.545	
183 10.66	34.262	-	-	-	-	174.8		250 10.02	34.48	-	26.56	148.2	.627	
218 10.50	34.427	-	-	-	-	160.0		300 9.46	34.49	-	26.66	138.5	.701	
248 10.04	34.479	-	-	-	-	148.6		400 8.20	34.47	-	26.85	121.1	.838	
298 9.48	34.489	-	-	-	-	138.9		500 7.18	34.45	-	26.98	108.4	.960	
353 8.90	34.494	-	-	-	-	129.6		600 6.25	34.44	-	27.10	97.2	1.071	
437 7.68	34.446	-	-	-	-	115.5								
521 7.01	34.445	-	-	-	-	106.5								
606 6.20	34.436	-	-	-	-	96.9								
130.70							CCOFI CRUISE 6407						130.70	
ALEXANDER AGASSIZ, JULY 20 1964, 1218 GCT, 25 07.5N 116 05W, SOUNDING 2056 FM, WIND 030 FORCE 3, WEATHER MISSING, SEA RCLGH, WIRE ANGLE 14.														
C 21.02	33.910	5.36	C.29	1	0.00	422.4		0 21.02	33.91	5.36	23.68	422.4	0	
5 21.02	33.912	5.32	C.30	1	0.00	422.3		10 21.02	33.91	5.32	23.68	422.4	.042	
29 18.94	33.814	5.58	C.32	1	0.00	377.5		20 19.50	33.84	5.48	24.03	389.3	.083	
39 18.03	33.774	5.75	C.32	1	0.01	358.9		30 18.93	33.81	5.59	24.15	377.6	.121	
53 17.16	33.805	5.95	C.29	1	0.00	336.7		50 17.32	33.80	5.93	24.54	340.6	.193	
67 16.45	33.789	5.95	C.29	1	0.00	322.0		75 16.02	33.75	5.94	24.80	315.5	.276	
93 14.88	33.657	5.88	C.40	2	0.01	298.3		100 14.30	33.66	5.54	25.11	286.2	.352	
112 13.44	33.721	4.72	C.87	6	0.02	264.9		125 12.42	33.73	4.35	25.54	245.0	.419	
131 12.06	33.736	4.21	1.19	11	0.00	238.0		150 11.02	33.88	3.36	25.92	209.1	.476	
149 11.06	33.870	3.40	1.65	17	0.00	210.6		200 10.02	34.16	2.17	26.31	171.8	.574	
179 10.29	34.029	2.73	-	-	-	185.9		250 9.45	34.25	1.73	26.48	156.1	.658	
211 9.90	34.199	1.99	-	-	-	167.0		300 8.81	34.31	1.20	26.63	141.9	.735	
241 9.58	34.237	1.79	-	-	-	159.1		400 7.95	34.40	.51	26.83	122.7	.874	
289 8.84	34.289	1.34	-	-	-	143.9		500 7.12	34.44	.36	26.98	108.4	.997	
342 8.72	34.415	.60	-	-	-	132.8		600 6.24	34.45	.31	27.11	96.4	1.107	
425 7.62	34.398	.48	-	-	-	118.3								
511 7.04	34.443	.35	-	-	-	107.1								
593 6.29	34.445	.31	-	-	-	97.4								

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
130.80								CCCFI CRUISE 6407						130.80

ALEXANDER AGASSIZ, JULY 19 1964, 2317 GCT, 24 48.5N 116 40.5W, SOUNDING 2145 FM, WIND 360 FORCE 3, WEATHER CLOUDY, SEA RUGGH, WIRE ANGLE 15.

C	20.28	33.828	5.43	0.34	1	0.00	409.5	0	20.28	33.83	5.43	23.82	409.4	0
1C	20.28	33.821	5.43	0.43	1	0.00	410.0	10	20.28	33.82	5.43	23.81	410.1	.041
29	19.08	34.006	5.55	0.33	1	0.00	367.0	20	19.45	33.88	5.49	24.07	385.1	.081
39	18.80	34.092	5.66	0.32	1	0.00	354.0	30	19.09	34.02	5.56	24.27	366.2	.118
53	17.64	33.934	5.66	0.32	2	0.00	338.2	50	17.83	33.96	5.66	24.54	340.7	.189
67	17.14	33.923	5.84	C.31	1	0.00	327.6	75	17.00	33.92	5.84	24.71	324.7	.273
91	15.14	33.819	5.42	0.64	3	0.08	291.8	100	14.22	33.78	5.13	25.22	275.9	.349
110	13.32	33.763	4.81	0.90	6	0.10	259.5	125	12.27	33.79	4.37	25.62	237.8	.414
129	11.99	33.802	4.22	1.20	11	0.07	231.9	150	10.98	33.91	3.29	25.95	206.2	.470
148	11.02	33.901	3.37	1.67	19	0.06	207.6	200	10.22	34.15	2.20	26.27	175.8	.567
176	10.41	34.057	2.59	-	-	-	185.8	250	9.57	34.33	1.32	26.52	152.1	.652
209	10.13	34.184	2.05	-	-	-	171.8	300	9.13	34.43	.70	26.67	137.8	.727
238	9.69	34.296	1.55	-	-	-	156.5	400	7.97	34.43	.44	26.85	120.8	.863
284	9.28	34.411	.85	-	-	-	141.6	500	6.80	34.41	.36	27.00	106.4	.983
336	8.72	34.449	.51	-	-	-	130.2	600	6.20	34.45	-	27.11	95.9	1.093
417	7.77	34.421	.43	-	-	-	118.6							
498	6.82	34.405	.37	-	-	-	107.0							
581	6.28	34.443	.31	-	-	-	97.4							

Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
130.90								CCCFI CRUISE 6407						130.90

ALEXANDER AGASSIZ, JULY 20 1964, 0204 GCT, 24 27N 117 19.5W, SOUNDING 2100 FM, WIND 080 FORCE 3, WEATHER CLOUDY, SEA RUGGH, WIRE ANGLE 23.

C	20.40	33.833	5.49	0.35	1	0.00	412.2	0	20.40	33.83	5.49	23.79	412.4	0
9	20.40	33.830	5.58	0.32	1	0.00	412.4	10	20.40	33.83	5.58	23.79	412.4	.041
28	19.32	33.986	5.64	0.32	1	0.00	374.2	20	19.80	33.88	5.63	23.98	393.7	.082
36	19.10	34.124	5.72	C.33	1	0.00	358.9	30	19.29	34.02	5.66	24.22	371.0	.120
50	18.70	34.103	5.78	0.28	1	0.00	350.8	50	18.70	34.10	5.78	24.43	351.0	.192
63	17.88	34.017	5.92	C.31	1	0.00	337.7	75	17.39	34.00	5.92	24.67	327.7	.278
86	17.02	33.992	5.90	0.35	1	0.00	319.9	100	15.62	33.89	5.48	25.00	296.7	.356
105	15.02	33.851	5.29	0.61	4	0.12	287.0	125	12.68	33.77	4.44	25.52	246.8	.425
123	12.84	33.767	4.49	1.08	9	0.01	250.1	150	11.33	33.89	3.50	25.87	213.7	.484
141	11.54	33.819	3.97	1.42	13	0.00	222.6	200	10.74	34.27	1.64	26.27	175.6	.583
167	11.08	34.037	2.64	-	-	-	198.6	250	10.27	34.45	.93	26.50	154.5	.668
199	10.75	34.263	1.65	-	-	-	176.3	300	9.64	34.46	.77	26.61	143.6	.745
226	10.50	34.385	1.18	-	-	-	163.1	400	8.44	34.46	.47	26.80	125.3	.886
272	10.02	34.471	.81	-	-	-	148.8	500	7.19	34.45	.39	26.98	108.6	1.011
322	9.35	34.452	.73	-	-	-	139.6							
401	8.42	34.456	.47	-	-	-	125.3							
481	7.41	34.449	.40	-	-	-	111.6							
563	6.52	34.443	.34	-	-	-	100.4							

Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
137.23								CCCFI CRUISE 6407						137.23

ALEXANDER AGASSIZ, JULY 22 1964, 1316 GCT, 25 34N 112 19.5W, SOUNDING 40 FM, WIND 330 FORCE 2, WEATHER PARTLY CLCLUCY, SEA MODERATE, WIRE ANGLE 02.

C	24.46	34.193	6.14	0.12	2	C.01	495.4	0	24.46	34.19	6.14	22.91	495.6	0
1C	23.37	34.119	6.34	0.14	2	C.01	470.1	10	23.37	34.12	6.34	23.18	470.1	.048
2C	16.56	33.840	7.39	0.08	1	0.00	320.7	20	16.56	33.84	7.39	24.75	320.7	.088
3C	13.80	33.874	3.70	C.63	7	0.15	260.6	30	13.80	33.87	3.70	25.38	260.9	.117
40	12.87	33.972	2.45	1.84	16	0.32	235.6	50	12.61	34.09	1.76	25.78	222.0	.166
55	12.54	34.165	1.33	2.40	25	0.03	215.2							

Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
137.30								CCCFI CRUISE 6407						137.30

ALEXANDER AGASSIZ, JULY 22 1964, 1625 GCT, 25 19.5N 112 47W, SOUNDING 184 FM, WIND 030 FORCE 3, WEATHER CLOUDY, SEA RCLGH, WIRE ANGLE 03.

0	22.82	34.026	5.67	C.47	1	0.00	461.8	0	22.82	34.03	5.67	23.27	461.5	0
1C	21.90	33.996	5.92	0.30	1	0.00	439.2	10	21.90	34.00	5.92	23.51	438.9	.045
3C	14.08	33.871	4.95	0.72	5	0.23	266.4	20	16.40	33.88	5.44	24.82	314.3	.083
45	12.57	33.881	3.21	1.58	14	0.26	236.6	30	14.08	33.87	4.95	25.32	266.5	.112
6C	12.52	34.088	1.41	2.30	19	C.19	220.5	50	12.54	33.97	2.40	25.71	229.5	.162
75	12.36	34.234	.93	2.53	25	0.10	206.8	75	12.36	34.23	.93	25.94	207.1	.217
9C	12.08	34.349	.78	2.58	28	0.04	193.2	100	11.91	34.39	.74	26.15	187.1	.266
11C	11.78	34.423	.68	2.76	30	0.02	182.4	125	11.67	34.48	.55	26.27	176.2	.313
135	11.60	34.531	.46	2.89	32	0.03	171.2	150	11.45	34.58	.33	26.39	165.0	.356
155	11.40	34.590	.32	2.94	34	0.02	163.4	200	10.99	34.61	.46	26.49	154.8	.438
200	10.99	34.608	.46	-	-	-	154.9	250	10.57	34.60	.21	26.56	148.4	.516
234	10.71	34.602	.24	-	-	-	150.6	300	10.23	34.58	.27	26.60	144.2	.593
269	10.42	34.584	.20	-	-	-	147.1							
309	10.20	34.582	.27	-	-	-	143.6							

OBSERVED LEVELS OF DEPTH							STANDARD LEVELS OF DEPTH										
INPUT				COMPUTED			INPUT				COMPUTED						
Z	T	S	OXY	PHT	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD			
137.40							CCCFI CRUISE 6407						137.40				
ALEXANDER AGASSIZ, JULY 22 1964, 2135 GCT, 25 01N 113 24W, SOUNDING 1500 FM, WIND 270 FORCE 3, WEATHER PARTLY CLOUDY, SEA RUGGED, WIRE ANGLE 22.																	
C 23.54 33.953 5.22 0.33 1 0.00 486.8 0 23.54 33.95 5.22 23.00 487.0 0	9 21.56 33.879 5.33 0.32 1 0.00 438.7 10 19.80 33.82 5.56 23.94 398.1 .044	28 17.56 33.764 5.95 0.33 2 0.01 348.7 20 18.25 33.78 5.84 24.30 363.6 .082	38 16.80 33.752 6.09 0.37 2 0.01 332.5 30 17.37 33.76 6.00 24.50 344.7 .118	51 16.15 33.777 5.97 0.38 2 0.01 316.3 50 16.20 33.78 5.98 24.78 317.2 .184	65 15.42 33.761 5.80 0.46 2 0.04 301.9 75 14.90 33.77 5.53 25.07 290.4 .261	88 13.86 33.776 4.82 1.03 7 0.10 269.0 100 12.80 33.82 3.84 25.54 245.4 .328	105 12.48 33.860 3.36 1.53 14 0.03 236.5 125 12.32 34.23 1.58 25.95 206.4 .385	123 12.37 34.219 1.63 2.28 23 0.01 208.1 150 11.41 34.34 1.27 26.21 182.0 .435	141 11.70 34.298 1.38 2.47 26 0.01 190.2 200 10.76 34.53 .61 26.47 156.7 .522	169 11.04 34.418 1.06 - - - 169.8 250 10.19 34.54 .43 26.58 146.5 .600	200 10.76 34.526 .61 - - - 157.0 300 9.62 34.55 .32 26.68 136.6 .673	229 10.40 34.532 .50 - - - 150.6 400 8.26 34.49 .59 26.85 120.4 .809	273 9.98 34.556 .37 - - - 141.9 500 7.33 34.49 .36 26.99 107.4 .930	325 9.26 34.527 .29 - - - 132.7	402 8.24 34.485 .60 - - - 120.5	485 7.50 34.491 .35 - - - 109.7	567 6.60 34.461 .48 - - - 100.0
137.50							CCCFI CRUISE 6407						137.50				
ALEXANDER AGASSIZ, JULY 23 1964, 0310 GCT, 24 41N 114 00.5W, SOUNDING 1930 FM, WIND 270 FORCE 4, WEATHER PARTLY CLOUDY, SEA VERY RUGGED, WIRE ANGLE 21.																	
1 22.70 33.901 5.30 0.31 0 0.01 467.5 0 22.70 33.90 5.30 23.21 467.6 0	10 22.25 33.877 5.39 0.29 2 0.02 457.1 10 22.25 33.88 5.39 23.32 456.9 .046	34 16.38 33.730 6.29 0.31 1 0.02 324.8 20 18.80 33.77 6.04 24.15 377.4 .088	43 15.67 33.722 6.26 0.35 1 0.00 310.0 30 16.70 33.73 6.28 24.63 331.8 .124	57 13.96 33.678 5.24 0.76 5 0.40 278.2 50 14.78 33.70 5.78 25.04 293.1 .186	71 12.98 33.703 4.64 1.11 8 0.46 257.4 75 12.60 33.71 4.49 25.49 249.8 .255	95 11.50 33.752 3.85 1.47 14 0.06 226.9 100 11.47 33.84 3.37 25.81 219.9 .314	113 11.42 34.063 2.13 2.16 25 0.02 202.5 125 11.03 34.14 1.93 26.12 190.1 .366	132 10.97 34.175 1.85 2.32 28 0.02 186.5 150 10.79 34.28 1.47 26.27 175.7 .412	160 10.71 34.329 1.26 2.57 32 0.02 170.7 200 10.38 34.44 .76 26.47 157.0 .497	187 10.52 34.418 .91 - - - 161.0 250 9.77 34.49 .45 26.61 143.4 .575	224 10.06 34.474 .54 - - - 149.3 300 9.12 34.47 .47 26.70 134.7 .647	251 9.76 34.494 .45 - - - 143.0 400 7.99 34.46 .39 26.87 118.8 .780	298 9.14 34.474 .47 - - - 134.7 500 6.92 34.44 .31 27.01 105.7 .900	358 8.42 34.460 .43 - - - 125.0 600 5.89 34.44 .34 27.15 92.9 1.007	452 7.44 34.446 .36 - - - 112.2	537 6.52 34.432 .29 - - - 101.2	610 5.80 34.443 .35 - - - 91.6
137.60							CCCFI CRUISE 6407						137.60				
ALEXANDER AGASSIZ, JULY 23 1964, 0900 GCT, 24 18.5N 114 40W, SOUNDING 2060 FM, WIND 060 FORCE 3, WEATHER PARTLY CLOUDY, SEA RUGGED, WIRE ANGLE 27.																	
1 20.75 33.841 5.46 0.27 1 0.01 420.5 0 20.75 33.84 5.46 23.70 420.6 0	1C 20.56 33.840 5.49 0.27 2 0.01 415.7 10 20.56 33.84 5.49 23.75 415.7 .042	28 18.02 33.822 5.80 0.28 1 0.01 355.2 20 18.55 33.83 5.72 24.26 367.0 .081	36 17.45 33.772 5.94 0.30 1 0.01 345.6 30 17.92 33.82 5.82 24.41 353.0 .117	50 16.36 33.733 6.15 0.29 1 0.00 324.1 50 16.36 33.73 6.15 24.71 324.3 .185	63 16.01 33.727 6.22 0.30 1 0.00 317.0 75 15.10 33.71 5.84 24.98 298.9 .263	84 14.04 33.696 5.22 0.68 5 0.17 278.4 100 12.80 33.72 4.46 25.46 252.8 .333	102 12.58 33.727 4.31 1.17 10 0.02 248.2 125 11.02 33.90 3.14 25.94 207.7 .391	117 11.22 33.823 3.55 1.60 17 0.01 216.8 150 10.72 34.14 2.10 26.18 184.9 .441	135 10.83 34.051 2.44 2.04 24 0.00 193.3 200 10.42 34.40 1.19 26.43 160.6 .529	158 10.68 34.179 1.94 - - - 181.3 250 9.80 34.47 .45 26.59 145.4 .608	187 10.53 34.360 1.22 - - - 165.4 300 9.20 34.48 .46 26.70 135.2 .681	212 10.28 34.423 1.16 - - - 156.6 400 8.00 34.44 .38 26.85 120.4 .815	254 9.76 34.471 .40 - - - 144.7 500 6.83 34.43 .36 27.01 105.3 .936	303 9.16 34.478 .47 - - - 134.8	377 8.30 34.454 .40 - - - 123.7	465 7.18 34.423 .37 - - - 110.4	536 6.56 34.436 .36 - - - 101.4

C B S E R V E D    L E V E L S    O F    D E P T H						S T A N D A R D    L E V E L S    O F    D E P T H								
INPUT			COMPUTED			INPUT			COMPUTED					
Z	T	S	OXY	PHC	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
137.70							CCCFI CRUISE 6407						137.70	
ALEXANDER AGASSIZ, JULY 23 1964, 1413 GCT, 24 00N 115 18W, SOUNDING 2042 FM, WIND 320 FORCE 4, WEATHER PARTLY CLOUDY, SEA RUGGED, WIRE ANGLE 26.														
1 21.81 33.852 5.35 C.30 0 0.00 447.2 0 21.81 33.85 5.35 23.42 447.4 0 10 21.76 33.851 5.33 0.30 1 0.00 446.0 10 21.76 33.85 5.33 23.43 446.1 .045 32 18.52 33.905 5.78 0.29 1 0.00 360.9 20 21.00 33.86 5.42 23.65 425.5 .088 41 17.70 33.849 5.91 0.32 1 0.00 345.8 30 18.70 33.91 5.75 24.28 364.8 .128 54 17.10 33.834 5.95 0.33 1 0.00 333.2 50 17.24 33.84 5.94 24.59 335.9 .198 68 16.63 33.828 6.01 0.34 1 0.00 323.1 75 16.28 33.83 5.92 24.80 315.3 .280 89 15.12 33.815 5.41 0.57 3 0.08 291.7 100 13.72 33.75 4.75 25.30 268.2 .354 107 12.94 33.733 4.35 1.12 9 0.03 254.4 125 12.07 33.92 3.22 25.76 224.6 .416 124 12.10 33.905 3.25 1.65 15 0.01 226.3 150 11.20 34.44 2.11 26.09 193.0 .469 150 11.20 34.136 2.11 2.21 25 0.00 193.3 200 10.58 34.46 .87 26.45 158.9 .559 176 10.92 34.363 1.26 - - - 171.8 250 9.85 34.46 .72 26.58 146.9 .638 210 10.42 34.463 .81 - - - 156.0 300 9.31 34.47 .55 26.67 137.7 .712 237 10.00 34.447 .76 - - - 150.3 400 8.08 34.45 .46 26.85 120.8 .848 280 9.55 34.478 .59 - - - 140.8 500 6.98 34.43 .41 26.99 107.3 .969 337 8.84 34.462 .51 - - - 131.1 600 6.26 34.45 - 27.11 96.6 1.079 428 7.74 34.441 .43 - - - 116.7 513 6.84 34.425 .40 - - - 105.8 584 6.36 34.445 .37 - - - 98.2														

137.80							CCCFI CRUISE 6407						137.80	
ALEXANDER AGASSIZ, JULY 23 1964, 1900 GCT, 23 39.5N 115 59.5W, SOUNDING 2040 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA RUGGED, WIRE ANGLE 30.														
1 22.45 33.962 5.22 C.31 1 0.00 456.4 0 22.45 33.96 5.22 23.32 456.5 0 9 22.43 33.966 5.21 0.34 1 0.00 455.5 10 22.43 33.97 5.21 23.34 455.2 .046 31 18.87 33.991 5.69 0.32 1 0.00 363.0 20 20.00 33.99 5.54 24.01 390.7 .088 39 18.54 33.990 5.73 0.30 1 0.01 355.2 30 18.92 33.99 5.68 24.29 364.3 .126 57 18.32 34.024 5.73 C.33 1 0.01 347.5 50 18.40 34.02 5.73 24.44 349.7 .197 66 17.66 33.961 5.86 0.34 1 0.00 336.7 75 17.20 33.92 5.84 24.66 329.2 .283 88 16.28 33.859 5.73 C.43 1 0.01 313.2 100 15.16 33.81 5.26 25.04 292.9 .361 104 14.56 33.792 4.90 0.74 4 0.07 281.8 125 12.49 33.77 3.86 25.56 243.3 .429 121 12.78 33.771 3.98 1.29 10 0.03 248.6 150 11.08 33.77 3.44 25.82 218.3 .487 146 11.26 33.754 3.50 1.58 17 0.02 222.6 200 10.84 34.33 1.36 26.30 172.9 .587 17C 10.58 33.957 3.04 - - - 196.0 250 10.30 34.46 .70 26.50 154.2 .671 203 10.86 34.349 1.23 - - - 171.8 300 9.36 34.45 .68 26.65 139.9 .748 227 10.82 34.465 .78 - - - 162.6 400 8.03 34.44 .49 26.85 120.9 .885 268 9.83 34.445 .69 - - - 147.7 500 6.93 34.39 .69 26.97 109.6 1.007 323 9.02 34.446 .67 - - - 135.0 408 7.94 34.437 .48 - - - 119.8 485 7.04 34.389 .69 - - - 111.1 558 6.36 34.405 .57 - - - 101.2														

140.30							CCCFI CRUISE 6407						140.30	
ALEXANDER AGASSIZ, JULY 24 1964, 2202 GCT, 24 45N 112 24.5W, SOUNDING 58 FM, WIND 290 FORCE 3, WEATHER PARTLY CLOUDY, SEA MILD, WIRE ANGLE 05.														
C 21.24 34.057 5.96 0.37 2 0.02 417.5 0 21.24 34.06 5.96 23.73 417.3 0 1C 19.16 33.908 6.21 0.28 1 0.01 376.0 10 19.16 33.91 6.21 24.17 375.9 .040 2C 16.06 33.825 5.67 C.40 2 0.05 310.9 20 16.06 33.82 5.67 24.85 311.2 .074 3C 13.76 33.792 3.82 1.07 7 0.43 265.9 30 13.76 33.79 3.82 25.32 266.0 .103 5C 12.10 33.939 2.89 1.73 17 0.08 223.8 50 12.10 33.94 2.89 25.77 223.7 .152 76 12.12 34.338 .89 2.64 29 0.16 194.8 75 12.11 34.33 .90 26.07 195.2 .205														

140.40							CCCFI CRUISE 6407						140.40	
ALEXANDER AGASSIZ, JULY 24 1964, 1641 GCT, 24 25.5N 113 02W, SOUNDING 1793 FM, WIND 310 FORCE 3, WEATHER PARTLY CLOUDY, SEA MILD, WIRE ANGLE 19.														
C 21.16 33.848 5.53 C.23 0 0.00 430.5 0 21.16 33.85 5.53 23.60 430.4 0 9 20.88 33.845 5.60 C.21 0 0.00 423.5 10 20.80 33.84 5.62 23.69 421.8 .043 28 16.65 33.734 6.16 C.42 1 0.00 330.4 20 17.55 33.75 6.04 24.44 349.5 .081 38 15.67 33.725 6.26 C.36 1 C.00 309.8 30 16.47 33.73 6.18 24.68 326.8 .115 52 14.74 33.708 5.73 0.55 2 0.14 291.6 50 14.91 33.71 5.90 25.02 295.0 .178 66 13.38 33.723 4.00 1.31 9 0.45 263.5 75 13.10 33.77 3.65 25.44 294.7 .247 88 12.34 34.015 2.42 1.93 18 0.12 222.6 100 12.17 34.13 1.84 25.90 211.0 .305 106 11.97 34.218 1.41 2.34 24 0.04 200.9 125 11.69 34.36 1.01 26.17 185.4 .356 124 11.70 34.347 1.04 2.55 27 0.04 186.6 150 11.43 34.54 .59 26.36 167.6 .401 142 11.52 34.503 .67 2.75 31 0.03 171.9 200 10.87 34.61 .38 26.51 152.7 .483 17C 11.20 34.585 .44 - - - 160.2 250 10.33 34.62 .26 26.62 142.9 .559 202 10.86 34.606 .38 - - - 152.8 300 9.56 34.56 .36 26.70 134.9 .632 229 10.57 34.624 .26 - - - 146.6 400 8.05 34.48 .34 26.88 118.2 .765 274 10.00 34.593 .30 - - - 139.5 500 7.02 34.46 .47 27.01 105.6 .884 325 9.12 34.532 .40 - - - 130.1 404 7.99 34.470 .34 - - - 118.1 485 7.14 34.451 .48 - - - 107.8 569 6.58 34.481 .28 - - - 98.3														

C B S E R V E D    L E V E L S    O F    D E P T H							S T A N D A R D    L E V E L S    O F    D E P T H							
INPUT				COMPUTED			INPUT				COMPUTED			
Z	T	S	OXY	PHO	SIL	NIT	D*T	Z	T	S	OXY	SIG*T	D*T	DD
140.50				CCOFI CRUISE 6407										140.50
ALEXANDER AGASSIZ, JULY 24 1964, 1047 GCT, 24 02N 113 41.5W, SOUNDING 1845 FM, WIND 360 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 22.														
1	22.92	33.950	5.25	0.27	0	0.00	470.0	0	22.92	33.95	5.25	23.18	470.0	0
1C	22.88	33.948	5.28	0.29	0	0.00	469.0	10	22.88	33.95	5.28	23.19	468.9	.047
33	18.05	33.872	5.88	0.30	1	0.00	352.2	20	19.25	33.89	5.72	24.13	379.5	.089
42	17.28	33.830	5.96	0.30	2	0.01	337.6	30	18.27	33.87	5.85	24.36	357.5	.126
56	16.12	33.787	5.84	0.43	2	0.01	315.0	50	16.57	33.80	5.90	24.71	323.9	.195
70	15.39	33.761	5.77	0.52	1	0.05	301.3	75	15.00	33.78	5.51	25.05	291.7	.272
93	13.79	33.888	4.06	1.20	10	0.08	259.4	100	13.00	33.89	3.60	25.55	244.0	.340
112	12.12	33.904	3.12	1.72	16	0.03	226.7	125	11.74	34.03	2.50	25.90	210.6	.397
130	11.62	34.070	2.33	2.05	22	0.02	205.5	150	11.28	34.16	2.00	26.09	193.0	.448
158	11.13	34.204	1.83	2.31	26	0.01	187.1	200	10.43	34.40	1.07	26.43	160.8	.539
187	10.68	34.372	1.20	-	-	-	167.1	250	9.93	34.48	.64	26.58	146.7	.618
224	10.03	34.430	.87	-	-	-	152.0	300	9.34	34.48	.63	26.68	137.4	.692
251	9.92	34.482	.64	-	-	-	146.4	400	8.53	34.52	.25	26.84	122.2	.829
298	9.36	34.481	.64	-	-	-	137.6	500	7.32	34.50	.26	27.00	106.6	.951
359	9.00	34.521	.28	-	-	-	129.1	600	6.14	34.45	.37	27.12	95.1	1.060
453	7.86	34.521	.24	-	-	-	112.4							
540	6.86	34.474	.30	-	-	-	102.4							
613	5.59	34.444	.39	-	-	-	93.8							

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
60.49-G	VII-3	2131	37°59.0'	122°50.5'	18	300°	4	overcast	moderate	10	8.80	34.021				163
60.50-G	3	2210	37°57.5'	122°53.0'	27	280°	4	overcast	moderate	10	9.83	33.994				181
60.51-G	3	2255	37°55.0'	122°57.5'	36	270°	4	overcast	moderate	10	9.84	33.995				181
60.55-G	4	0131	37°47.5'	123°15.0'	62	300°	5	overcast	very rough	10	10.10	33.865				195
63.50-G	1	0148	37°23.5'	122°28.0'	17	320°	2	overcast	moderate	10	11.36	33.880				215
63.51-G	1	0055	37°21.5'	122°32.5'	35	320°	3	overcast	moderate	10	12.71	33.839				242
67.47-G	VI-30	0530	36°54.5'	121°52.5'	10	080°	3	missing	slight	10	12.48	33.830				239
67.48-G	30	0613	36°53.0'	121°56.0'	18	080°	3	missing	slight	10	11.58	33.803				225
67.49-G	30	0702	36°50.5'	122°00.5'	44	040°	3	missing	slight	10	11.48	33.859				219
70.50-G	29	2348	36°11.5'	121°44.0'	110	300°	4	partly cloudy	slight	10	9.80	33.885				189
70.51-G	29	2307	36°10.5'	121°45.5'	200	300°	5	partly cloudy	moderate	10	10.23	33.853				198
70.52-G	29	2217	36°08.5'	121°50.0'	348	310°	5	partly cloudy	moderate	10	9.87	33.814				195
73.50-G	26	2220	35°38.0'	121°14.0'	10	300°	6	clear	moderate	10	10.24	33.790				203
73.50-G	26	2300	35°37.0'	121°17.0'	65	290°	4	clear	moderate	10	11.80	33.607				243
73.51-G	26	2350	35°35.0'	121°21.0'	206	360°	5	clear	rough	10	13.56	33.602				276
77.48-G	23	2335	35°09.0'	120°42.0'	6	230°	1	overcast	slight	10	10.80	33.930				202
77.48-G	24	0020	35°08.5'	120°43.5'	15	260°	1	overcast	slight	10	10.24	33.943				192
77.49-G	24	1300	35°06.5'	120°48.0'	35	170°	1	missing	slight	10	11.00	33.845				211
77.58-G	24	2040	34°48.5'	121°23.0'	280	-	3	fog	very rough	10	12.91	33.834				246

DATA AT NET TOW STATIONS																	
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O <sub>2</sub> ml/L	PO <sub>4</sub> -P µg at/L	SiO <sub>3</sub> -Si µg at/L	NO <sub>2</sub> -N µg at/L	δT cl/ton
78.55A-G	VI-23	1710	34°44.0'	121°06.5'	290	190°	1	fog	slight	10	12.75	33.794					246
78.58A-G		23	1515	34°39.0'	121°17.0'	372	-	2	fog	moderate	10	12.44	33.836				238
78.60A-G		23	1325	34°34.5'	121°27.5'	884	-	2	fog	moderate	10	13.06	33.733				257
78.62A-G		23	1150	34°28.0'	121°37.5'	2000	-	2	missing	missing	10	13.56	33.795				261
78.67A-G		23	0735	34°19.0'	121°58.0'	2030	290°	1	cloudy	moderate	10	13.43	33.770				261
78.55B-G		22	1030	34°35.5'	121°00.5'	320	220°	1	drizzle	slight	10	11.48	33.856				219
78.72B-G		22	2340	34°00.5'	122°12.5'	2112	320°	2	cloudy	rough	10	13.93	33.516				290
79.55-G		22	0430	34°27.0'	120°54.0'	392	120°	3	overcast	moderate	10	11.96	33.870				226
79.58-G		22	0245	34°22.0'	121°04.5'	760	-	3	overcast	rough	10	12.10	33.786				235
79.60-G		22	0100	34°17.0'	121°15.5'	1160	-	4	overcast	rough	10	13.26	33.619				269
80.50-G		20	1550	34°28.0'	120°29.0'	14	-	3	partly cloudy	rough	10	11.01	33.932				205
80.57-G		20	2318	34°14.0'	120°58.5'	512	300°	4	clear	rough	10	11.82	33.908				221
80.62-G		21	0400	34°04.0'	121°19.0'	1575	320°	4	overcast	rough	10	14.28	33.562				293
80.67-G		21	0750	33°53.5'	121°40.0'	1950	330°	4	overcast	moderate	10	13.71	33.552				283
81.58-G		20	0630	34°04.5'	120°52.0'	700	310°	4	cloudy	rough	10	11.80	33.880				223
81.60-G		20	0415	33°59.0'	121°02.5'	1420	330°	5	cloudy	rough	10	13.55	33.511				282
81.62-G		20	0255	33°54.0'	121°12.5'	1400	300°	7	cloudy	rough	10	13.51	33.550				278
81.67-G		19	2305	33°44.5'	121°33.5'	1890	310°	5	cloudy	rough	10	14.04	33.547				289
82.45-G		19	0030	34°20.0'	119°56.0'	242	260°	2	clear	moderate	10	12.44	33.966				228

DATA AT NET TOW STATIONS																	
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT	
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton	
82.47-B	VII-16	1805	34°15.0'	119°58.0'	300	250°	3	missing	moderate	10	12.64	33.931				235	
82.58-G	VI-19	1135	33°56.0'	120°46.0'	1440	330°	4	clear	rough	10	11.80	33.790				229	
82.62-G	19	1500	33°46.0'	121°06.5'	1650	310°	6	overcast	very rough	10	13.51	33.527				280	
83.43A-G	18	2255	34°16.0'	119°41.0'	102	360°	2	clear	moderate	10	12.40	33.863				235	
83.57A-G	18	0900	33°47.0'	120°40.0'	888	320°	6	partly cloudy	missing	10	12.57	33.605				257	
83.60A-G	18	0700	33°42.5'	120°51.0'	660	320°	7	partly cloudy	missing	10	12.86	33.594				264	
83.62A-G	18	0520	33°37.0'	121°01.0'	1700	320°	7	partly cloudy	missing	10	14.05	33.589				286	
83.65A-G	18	0325	33°32.0'	121°12.0'	1905	360°	7	cloudy	very rough	10	14.32	33.598				291	
83.39-B	VII-16	1300	34°15.5'	119°17.5'	9	260°	1	light fog	slight	10	13.54	33.835				258	
83.39B-G	VI-17	0330	34°15.5'	119°17.5'	9	300°	2	partly cloudy	moderate	10	13.14a)	33.854				250	
83.40-B	VII-16	1350	34°14.0'	119°22.0'	12	260°	1	fog	slight	10	13.45	33.838				257	
83.40B-G	VI-17	0420	34°14.0'	119°22.0'	13	300°	3	missing	missing	10	12.94	-					
83.43-B	VII-16	1525	34°08.0'	119°34.0'	135	260°	3	missing	slight	10	15.38	33.850				295	
83.51-B	16	2140	33°52.0'	120°07.5'	70	250°	6	partly cloudy	rough	10	16.22	33.915				308	
83.53B-G	VI-17	1500	33°48.0'	120°16.0'	400	300°	6	partly cloudy	rough	10	12.12	33.870				229	
83.55-B	VII-16	2355	33°44.0'	120°24.5'	600	320°	5	missing	rough	10	13.52b)	33.876				255	
83.58B-G	VI-17	1905	33°39.0'	120°34.5'	625	320°	4	partly cloudy	rough	10	13.32	33.535				276	

a) Mean value of 13.08 and 13.20 °C.

b) Alternate values: temperature, 13.30 °C; delta-T, 251 cl/ton.

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
83.60-B	VII-17	0220	33°34.0'	120°45.0'	1850	320°	5	clear	very rough	10	13.52	33.649				272
83.62B-G	VI-17	2305	33°29.0'	120°55.0'	1910	-	5	clear	rough	10	14.21	33.618				287
83.65-B	VII-17	0445	33°24.0'	121°05.5'	1900	300°	5	cloudy	very rough	10	12.84	33.693				256
83.70-B	17	0705	33°14.0'	121°26.0'	2000	300°	5	cloudy	very rough	10	14.44	33.367				310
83.80-B	17	1135	32°51.0'	122°06.0'	2200	300°	5	cloudy	very rough	10	16.58	33.391				354
83.90-B	17	1615	32°31.0'	122°42.5'	2000+	330°	5	overcast	very rough	10	17.12	33.498				358
84.48-G	VI-17	1045	33°49.0'	119°49.0'	380	360°	4	clear	missing	10	13.40	33.814				257
85.39-G	16	2335	33°58.0'	119°07.0'	410	300°	4	cloudy	moderate	10	16.28	33.840				315
85.43-G	16	1835	33°50.5'	119°22.5'	520	280°	2	cloudy	slight	10	14.91	33.810				287
85.49-G	16	1130	33°38.0'	119°47.5'	252	320°	2	missing	missing	10	14.18	33.823				272
85.51-G	16	0945	33°35.0'	119°55.5'	328	320°	5	missing	missing	10	13.94	33.843				265
85.53-G	16	0755	33°30.5'	120°04.0'	547	330°	6	missing	missing	10	13.81	33.850				263
87.32-B	VII-19	0150	33°55.0'	118°27.0'	8	270°	3	overcast	moderate	10	13.80	33.777				268
87.33-B	19	0105	33°54.0'	118°29.5'	27	270°	3	overcast	moderate	10	15.46	33.785				301
87.34-B	19	0025	33°52.0'	118°33.5'	37	280°	3	overcast	rough	10	15.48	33.787				302
87.35-B	18	2335	33°50.0'	118°37.5'	300	280°	3	overcast	rough	10	17.20	33.869				333
87.40-B	18	2130	33°40.0'	118°58.0'	480	280°	2	overcast	moderate	10	16.82	33.831				327
87.45-B	18	1855	33°30.0'	119°19.0'	915	300°	1	overcast	moderate	10	14.89	33.902				281
87.50-B	18	1620	33°20.0'	119°39.5'	38	300°	3	overcast	rough	10	13.46	33.918				251

DATA AT NET TOW STATIONS																	
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT	
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton	
87.55-B	VII-18	1405	33°07.5'	119°58.5'	650	320°	4	overcast	rough	10	13.84	33.877				262	
87.60-B		18	1110	32°58.0'	120°20.5'	450	320°	4	drizzle	rough	10	15.10	33.564			310	
87.65-B		18	0830	32°49.0'	120°40.5'	2000	320°	5	overcast	rough	10	15.50	33.551			319	
87.70-B		18	0550	32°39.5'	121°02.0'	2100	340°	4	overcast	rough	10	15.06	33.278			330	
87.80-B		18	0050	32°19.5'	121°43.0'	2000	340°	5	overcast	very rough	10	15.21	33.238			336	
87.90-B		17	2015	31°59.5'	122°23.5'	2200	340°	5	overcast	very rough	10	16.04	33.206			356	
90.28-G		12	0814	33°29.5'	117°44.5'	16	020°	2	partly cloudy	moderate	10	11.19a)	-				
90.65-G		11	0920	32°15.0'	120°18.0'	1825	300°	3	missing	rough	10	13.84	33.448			292	
93.26-B		19	1105	32°57.0'	117°16.5'	20	-	1	overcast	moderate	10	14.18	33.732			279	
93.27-B		19	1140	32°56.0'	117°19.0'	60	-	1	overcast	moderate	10	13.53	33.722			266	
93.28-B		19	1220	32°54.5'	117°22.0'	300	-	1	overcast	moderate	10	16.26	33.773			319	
93.30-B		19	1350	32°50.5'	117°31.0'	450	-	1	overcast	moderate	10	19.24	33.845			382	
93.35-B		19	1605	32°40.5'	117°51.5'	250	-	1	overcast	moderate	10	17.45	33.834			341	
93.40-B		19	1850	32°30.0'	118°11.5'	950	280°	3	cloudy	rough	10	17.18	33.846			334	
93.45-B		19	2125	32°20.0'	118°32.0'	900	300°	6	cloudy	very rough	10	16.30	33.893			311	
93.50-B		19	2350	32°10.0'	118°52.5'	900	320°	5	cloudy	very rough	10	15.36	33.914			290	
93.55-B		20	0225	32°00.0'	119°13.5'	900	320°	5	overcast	very rough	10	14.12	33.854			268	

a) Alternate value, 13.36°C.

Station	Date	Time GCT	Latitude		Longitude West	Sounding (fm)	Wind		Weather	Sea	Z m	T °C	S ‰	O <sub>2</sub> ml/L	PO <sub>4</sub> -P µg at/L	SiO <sub>3</sub> -Si µg at/L	NO <sub>2</sub> -N µg at/L	δT cl/ton
			North	South			Dir	Force										
93.60-B	VII-20	0510	31°50.0'	31°34.0'	119°	2000+	330°	6	overcast	very rough	10	15.46	33.642					312
93.65-B		20	0725	31°40.0'	119°53.5'	2000+	330°	7	overcast	high	10	15.17	33.722					299
93.70-B		20	1000	31°30.0'	120°14.0'	2000+	330°	7	overcast	high	10	13.90	33.823					266
97.29-B		21	1210	32°17.5'	117°04.5'	27	-	1	overcast	moderate	10	14.58	33.814					281
97.29-B		21	1245	32°19.5'	117°04.0'	10	-	1	overcast	moderate	10	14.00	33.824					268
97.30-B		21	1115	32°15.5'	117°08.5'	38	-	1	overcast	moderate	10	13.80	33.924a)					257
97.32-B		21	1005	32°11.5'	117°16.5'	600	300°	2	overcast	moderate	10	15.62	33.768					305
97.35-B		21	0830	32°05.5'	117°28.5'	700	300°	3	overcast	moderate	10	17.50	33.843					342
97.40-B		21	0550	31°56.0'	117°51.0'	450	300°	3	cloudy	moderate	10	17.33	33.870					336
97.45-B		21	0310	31°46.0'	118°10.0'	700	320°	6	cloudy	very rough	10	17.38	33.871					337
97.50-B		21	0025	31°36.0'	118°31.0'	1300	330°	6	cloudy	very rough	10	16.11	33.855					310
97.55-B		20	2200	31°25.5'	118°50.5'	280	330°	6	cloudy	very rough	10	15.12	33.505					314
97.60-B		20	1920	31°15.5'	119°11.0'	1300	330°	6	cloudy	very rough	10	16.82	33.629					342
97.65-B		20	1650	31°05.0'	119°30.5'	1930	330°	6	cloudy	very rough	10	16.54	33.566					340
97.70-B		20	1425	30°55.5'	119°52.0'	1950	330°	5	overcast	very rough	10	15.78	33.506					328
100.29-G		14	0500	31°42.0'	116°43.5'	60	-	1	light fog	moderate	10	11.36	33.863					216
100.45-G		14	1530	31°08.5'	117°47.5'	850	320°	3	overcast	rough	10	16.84	33.845					327

a) Possible evaporation.

DATA AT NET TOW STATIONS																	
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT	
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton	
100.55-G	VII-14	2100	30°50.0'	118°28.0'	1400	320°	4	overcast	rough	10	16.82	33.563				347	
100.65-G	15	0220	30°30.0'	119°07.5'	2085	360°	5	overcast	rough	10	16.92	33.620				345	
103.28-B	24	0540	31°08.0'	116°19.0'	9	270°	2	cloudy	moderate	10	12.52	33.763				244	
103.29-B	24	0620	31°07.5'	116°21.0'	18	270°	2	cloudy	moderate	10	12.42	33.773				242	
103.30-B	24	0700	31°05.5'	116°24.5'	37	290°	2	cloudy	moderate	10	14.08	33.744				276	
103.35-B	24	0925	30°55.5'	116°45.0'	1000	300°	3	cloudy	rough	10	17.39	33.798				343	
103.40-B	24	1150	30°45.5'	117°05.5'	900	300°	3	cloudy	rough	10	17.44	33.791				344	
103.45-B	24	1425	30°37.0'	117°24.0'	1200	320°	3	cloudy	rough	10	17.76	33.770				353	
103.50-B	24	1650	30°27.5'	117°45.0'	1310	320°	4	overcast	rough	10	16.91	33.730				336	
103.55-B	24	1920	30°19.0'	118°05.0'	1100	320°	3	overcast	rough	10	16.34	33.795				319	
103.60-B	24	2150	30°08.0'	118°25.5'	1800	320°	4	overcast	rough	10	16.54	33.759				326	
103.65-B	25	0025	29°56.0'	118°45.0'	1900	320°	3	cloudy	rough	10	16.80	33.617				343	
103.70-B	25	0320	29°46.0'	119°03.5'	1900	320	3	cloudy	rough	10	17.06	33.653				345	
103.80-B	25	0755	29°25.0'	119°42.0'	2100	320°	3	cloudy	rough	10	17.05	33.602				349	
103.90-B	25	1225	29°04.0'	120°19.0'	2000	300°	3	overcast	rough	10	17.34	33.483				364	
106.40-B	26	1650	30°17.0'	116°46.5'	1500	330°	2	cloudy	moderate	10	17.40	33.716				349	
107.30-B	26	2320	30°30.0'	116°03.5'	8	350°	3	partly cloudy	moderate	10	12.98	33.774				252	

DATA AT NET TOW STATIONS																	
Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	Z m	T °C	S ‰	O <sub>2</sub> ml/L	PO <sub>4</sub> -P µg at/L	SiO <sub>3</sub> -Si µg at/L	NO <sub>2</sub> -N µg at/L	δT cl/ton
107.31-B	VII-26	2225	30°28.0'	116°07.0'	25	280°	2	partly cloudy	moderate	10	13.24a)	33.739					260
107.32-B		26	2140	30°26.0'	116°11.0'	260	300°	3	partly cloudy	moderate	10	14.90	33.750				292
107.35-B		26	1950	30°20.5'	116°23.0'	800	280°	3	cloudy	moderate	10	17.97	33.748				359
107.45-B		26	1425	30°02.5'	117°04.0'	900	340°	2	cloudy	moderate	10	17.69	33.650				360
107.50-B		26	1150	29°50.5'	117°23.5'	1200	340°	2	overcast	moderate	10	17.60	33.600				361
107.55-B		26	0920	29°41.0'	117°42.0'	1700	340°	2	overcast	moderate	10	17.68	33.608				363
107.60-B		26	0650	29°31.0'	118°01.5'	1900	340°	2	overcast	moderate	10	17.79	33.614				365
107.65-B		26	0425	29°21.5'	118°21.0'	1500	330°	2	cloudy	moderate	10	17.86	33.634				365
107.70-B		26	0155	29°10.5'	118°40.0'	1700	340°	2	cloudy	moderate	10	17.65	33.547				367
107.80-B		25	2105	28°49.0'	119°20.5'	2000	350°	3	overcast	rough	10	18.50	33.737				373
107.90-B		25	1645	28°30.0'	119°55.5'	2100	320°	3	overcast	rough	10	18.90	33.826				376
110.32-G		17	1000	29°52.0'	115°47.5'	-	-	-	missing	missing	10	12.18	33.785				236
110.45-G		17	0206	29°26.5'	116°39.0'	524	080°	3	overcast	moderate	10	17.38	33.578				358
110.55-G		16	2033	29°07.0'	117°19.0'	1804	350°	3	fog	rough	10	18.02	33.758				360
110.65-G		16	1450	28°46.5'	117°58.0'	1900	020°	4	overcast	rough	10	17.52	33.741				349
113.28-B		27	0845	29°25.0'	115°11.5'	9	280°	2	clear	moderate	10	12.25	33.763				240
113.29-B		27	0915	29°24.0'	115°13.0'	13	280°	3	clear	moderate	10	12.20	33.754				239

a) Alternate values: temperature, 13.46°C; delta-T, 264 cl/ton.

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
113.30-B	VII-27	1000	29°22.0'	115°18.0'	34	280°	4	clear	moderate	10	15.30	33.752				300
113.35-B	27	1220	29°12.0'	115°38.0'	650	290°	3	clear	rough	10	16.38	33.741				324
113.40-B	27	1450	29°02.0'	115°55.0'	900	300°	4	cloudy	rough	10	17.74	33.694				358
113.45-B	27	1730	28°48.5'	116°18.0'	1300	320°	5	cloudy	rough	10	18.04	33.607				371
113.50-B	27	1940	28°39.0'	116°36.0'	2300	320°	4	partly cloudy	moderate	10	18.15	33.611				373
113.55-B	27	2210	28°33.0'	116°59.5'	1800	340°	4	partly cloudy	rough	10	17.71	33.664				359
113.60-B	28	0015	28°24.0'	117°19.0'	2000	340°	4	cloudy	rough	10	19.24	33.861				381
113.65-B	28	0210	28°16.0'	117°36.0'	2050	320°	3	cloudy	rough	10	18.93	33.841				375
113.70-B	28	0440	28°04.5'	117°56.5'	1700	320°	3	cloudy	rough	10	19.24	33.863				381
113.80-B	28	0905	27°41.5'	118°31.5'	2000	350°	3	partly cloudy	moderate	10	18.77	33.844				371
114.89-B	28	1325	27°19.0'	119°07.0'	2000	350°	3	cloudy	moderate	10	19.08	33.795				383
117.25-B	30	0505	28°58.0'	114°37.0'	31	270°	4	fog	moderate	10	15.76	33.751				310
117.25-B	30	0550	28°58.5'	114°36.5'	10	270°	4	fog	moderate	10	15.06	33.751				295
117.26-B	30	0420	28°56.0'	114°41.5'	42	270°	3	missing	moderate	10	14.66	33.747				287
117.30-B	30	0225	28°48.0'	114°56.5'	60	320°	4	overcast	moderate	10	15.57	33.685				311
117.35-B	29	2350	28°38.0'	115°16.0'	100	320°	4	overcast	rough	10	17.66	33.753				352
117.40-B	29	1915	28°28.0'	115°35.5'	500	330°	3	missing	rough	10	17.76	33.724				356
117.45-B	29	1605	28°18.0'	115°56.0'	1700	340°	5	cloudy	rough	10	18.60	33.774				372
117.50-B	29	1320	28°07.0'	116°14.5'	2000	340°	5	cloudy	rough	10	18.76	33.801				374

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	µg at/L	µg at/L	µg at/L	cl/ton
117.55-B	VII-29	1030	27°57.5'	116°34.5'	2100	340°	5	overcast	rough	10	19.58	33.875				389
117.60-B	29	0750	27°48.0'	116°53.0'	1700	340°	5	overcast	rough	10	19.48	33.851				388
117.65-B	29	0510	27°37.5'	117°13.5'	1900	320°	5	missing	rough	10	19.34	33.852				384
117.70-B	29	0230	27°26.5'	117°35.0'	2050	340°	5	cloudy	rough	10	18.48	33.593				383
117.80-B	28	2125	27°08.0'	118°15.0'	2300	340°	4	cloudy	rough	10	19.02	33.744				384
117.90-B	28	1705	26°48.0'	118°48.0'	2050	340°	4	cloudy	rough	10	18.64	33.644				383
118.39-B	29	2110	28°18.5'	115°23.5'	150	320°	3	overcast	moderate	10	16.18	33.708				322
120.22-B	30	1025	28°28.0'	114°04.0'	9	270°	4	partly cloudy	moderate	10	17.58	33.767				349
120.23-B	30	1110	28°26.0'	114°06.5'	15	270°	4	partly cloudy	moderate	10	18.04	33.773				360
120.24-B	30	1155	28°24.0'	114°10.5'	20	270°	3	cloudy	moderate	10	17.94	33.759				358
120.25-B	30	1230	28°22.5'	114°15.0'	28	270°	3	cloudy	moderate	10	17.83	33.765				355
120.30-B	30	1450	28°13.0'	114°34.0'	48	310	3	missing	moderate	10	17.28	33.762				343
120.35-B	30	1710	28°03.0'	114°54.0'	47	340°	4	partly cloudy	rough	10	18.38	33.796				365
120.40-B	30	1915	27°56.5'	115°14.0'	25	var	1	partly cloudy	moderate	10	15.10	33.800				293
120.55-G	18	2120	27°24.0'	116°18.0'	2046	320°	4	partly cloudy	rough	10	19.05	33.870				376
120.65-G	19	0205	26°58.5'	116°50.0'	2170	060°	4	partly cloudy	rough	10	18.34	33.658				373
123.36-B	31	0205	27°26.0'	114°36.0'	25	270°	2	partly cloudy	moderate	10	17.32	33.695				348
123.37-B	31	0245	27°24.0'	114°40.0'	36	270°	2	partly cloudy	moderate	10	16.22	33.658				326
123.42-B	31	0535	27°14.0'	114°59.0'	800	320°	4	partly cloudy	rough	10	18.58	33.797				370

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
123.45-B	VII-31	0710	27°08.0'	115°11.5'	2200	320°	4	cloudy	rough	10	18.92	33.814				397
123.50-B	31	0935	26°58.0'	115°30.5'	2000	320°	4	cloudy	rough	10	19.35	33.813				388
123.55-B	31	1200	26°47.5'	115°49.5'	2000	320°	4	cloudy	rough	10	19.42	33.835				388
123.60-B	31	1420	26°38.5'	116°09.0'	2050	320°	4	cloudy	rough	10	19.38	33.803				389
123.65-B	31	1640	26°30.0'	116°28.5'	2050	320°	4	overcast	rough	10	19.46	33.765				394
123.70-B	31	1855	26°20.0'	116°48.0'	1950	320°	4	cloudy	rough	10	19.44	33.752				394
123.80-B	31	2320	26°01.5'	117°26.0'	2000	330°	3	cloudy	rough	10	19.67	33.714				402
124.36-B	31	0120	27°24.0'	114°32.0'	10	270°	2	partly cloudy	moderate	10	17.88	33.720				360
127.33-B	VIII-2	0335	26°57.5'	114°02.0'	35	-	1	missing	moderate	10	18.68	33.921				364
127.33-B	2	0410	26°58.5'	114°00.5'	10	-	1	missing	moderate	10	18.78	33.901				367
127.34-B	2	0245	26°55.5'	114°06.5'	42	270°	2	missing	moderate	10	19.19	33.793				385
127.40-B	1	2330	26°42.5'	114°29.0'	1800	270°	3	cloudy	moderate	10	21.02	33.911				422
127.45-B	1	2100	26°34.5'	114°50.0'	1900	300°	2	cloudy	moderate	10	20.73	33.887				416
127.50-B	1	1830	26°24.5'	115°08.0'	2100	340°	3	cloudy	moderate	10	19.51	33.812				391
127.55-B	1	1610	26°13.5'	115°27.0'	1950	340°	2	cloudy	moderate	10	18.75	33.797				375
127.60-B	1	1350	26°03.5'	115°46.5'	2000	340°	2	drizzle	moderate	10	18.88	33.770				379
127.65-B	1	1120	25°54.0'	116°05.5'	2000	330°	3	cloudy	moderate	10	19.45	33.733				396
127.70-B	1	0840	25°44.0'	116°24.5'	2000	330°	3	overcast	rough	10	20.18	33.808				408
127.80-B	1	0350	25°24.0'	117°02.5'	2100	330°	2	cloudy	rough	10	20.42	33.803				415

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
130.25-G	VII-21	1155	26°38.5'	113°11.5'	10	210°	2	cloudy	moderate	10	14.22	34.115				251
130.28-G	21	1107	26°33.0'	113°21.0'	-	-	-	missing	missing	10	19.98	34.122				380
130.35-G	21	0727	26°24.0'	113°48.5'	120	270°	2	missing	moderate	10	19.23	33.794				386
130.45-G	21	0220	26°03.0'	114°26.5'	1878	360°	3	overcast	rough	10	20.27	33.874				406
130.55-G	20	2015	25°42.0'	115°07.0'	2180	050°	2	overcast	rough	10	20.43	33.856				411
133.20-B	VIII-2	1510	26°13.5'	112°26.0'	9	-	1	cloudy	slight	10	21.72	34.029				432
133.21-B	2	1605	26°13.0'	112°32.5'	26	290°	3	cloudy	moderate	10	21.23	34.038				419
133.23-B	2	1710	26°08.5'	112°40.0'	40	300°	3	cloudy	moderate	10	19.38	33.992				375
133.25-B	2	1810	26°05.0'	112°48.5'	45	300°	3	cloudy	moderate	10	19.86	34.062				382
133.30-B	2	2100	25°54.5'	113°07.5'	100	300°	3	cloudy	moderate	10	20.10	33.782				409
133.35-B	3	0410	25°44.5'	113°26.5'	400	270°	4	cloudy	rough	10	20.14	33.764				410
133.40-B	3	0640	25°34.5'	113°45.5'	900	270°	3	cloudy	rough	10	18.58	33.652				381
133.45-B	3	0915	25°22.0'	114°04.5'	2000	300°	4	cloudy	rough	10	20.84	33.836				423
133.50-B	3	1140	25°09.5'	114°23.5'	2000	320°	4	cloudy	rough	10	22.18	33.875				455
133.70-B	3	2155	24°35.0'	115°43.5'	2000	320°	4	cloudy	rough	10	21.46	33.907				434
133.80-B	4	0155	24°14.5'	116°17.0'	2100	330°	3	cloudy	rough	10	21.54	33.971				431
134.56-B	3	1405	24°56.5'	114°43.0'	2000	320°	4	cloudy	rough	10	22.44	33.956				457
134.61-B	3	1640	24°44.0'	115°02.0'	2150	320°	4	cloudy	rough	10	20.96	33.858				425
134.66-B	3	1900	24°33.5'	115°20.0'	2200	340°	4	cloudy	rough	10	20.62	33.831				418

DATA AT NET TOW STATIONS																
Station	Date	Time	Latitude	Longitude	Sounding	Wind	Weather	Sea	Z	T	S	O <sub>2</sub>	PO <sub>4</sub> -P	SiO <sub>3</sub> -Si	NO <sub>2</sub> -N	δT
		GCT	North	West	(fm)	Dir	Force		m	°C	%	ml/L	μg at/L	μg at/L	μg at/L	cl/ton
137.20-G	VII-22	1045	25°40.0'	112°07.0'	4	290°	2	partly cloudy	slight	10	25.31	34.327				510
137.21-G		22	1130	25°38.5'	112°11.0'	13	300°	4	cloudy	slight	10	25.20	34.251			513
137.22-G		22	1211	25°36.0'	112°14.5'	25	300°	3	partly cloudy	slight	10	20.61a)	33.948			409
137.35-G		22	1903	25°10.0'	113°05.0'	768	100°	3	partly cloudy	rough	10	20.12	33.836			405
137.45-G		23	0004	24°50.5'	113°42.0'	1885	270°	4	partly cloudy	very rough	10	21.80	33.872			446
137.55-G		23	0612	24°29.5'	114°21.0'	2040	320°	4	cloudy	very rough	10	21.26	33.855			433
140.29-G		24	2245	24°47.5'	112°20.5'	34	290°	2	partly cloudy	moderate	10	17.80	33.885			345
140.35-G		24	1930	24°35.0'	112°43.0'	560	350°	3	partly cloudy	rough	10	23.33	33.982			479
140.45-G		24	1400	24°15.5'	113°21.0'	1830	330°	3	cloudy	moderate	10	22.84	33.943			468

a) Mean value of 20.53 and 20.69°C.

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