UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6210-11
5 October - 18 November 1962

and

CCOFI Cruise 6212
17 - 19 December 1962

SIO Reference 63-25
22 August 1963

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 6210-11
5 October - 18 November 1962

and

CCOFI CRUISE 6212
17 - 19 December 1962

Sponsored by
Marine Research Committee

SIO Reference 63-25
22 August 1963

Approved for distribution:

Roger Revelle

Roger Revelle, Director

CONTENTS

INTRODUCTION

The data presented in this report were collected by the RV Black Douglas of the Bureau of Commercial Fisheries and the RV Alexander Agassiz of the Scripps Institution of Oceanography on Cruises 6210-11 and 6212 of the California Cooperative Oceanic Fisheries Investigations program. The RV Alexander Agassiz participated in both cruises; the RV Black Douglas, in 6210-11 only. The first two figures in this cruise numbering system represent the year of the cruise; the last two figures, the month. In the case of quarterly cruises the last figures are hyphenated. The cruises preceding this one in the series are 6203-4 (Scripps Institution report, SIO Ref. 63-9) and 6207-8 (SIO Ref. 62-23).

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.[1/] Certain approximations have been introduced for the determination of the integrated pressure terms which may result in errors whose maximum values are less than 0.5 dynamic centimeter at 0 over 200 decibars, 1.0 dynamic centimeter at 0 over 500 decibars, and 2.0 dynamic centimeters at 0 over 1000 decibars. The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of ΔD.

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 third decimal place has been offset to emphasize that the accuracy of the observations is not to one unit in that place, but that the values recorded "have a reproducibility of ± 0.004‰ salinity at the 95 percent probability level, and a probable accuracy of ± 0.01‰ salinity or better at the same level of probability."[2/] The values are recorded to two decimal places when obtained by chlorinity titration, or by salinometer where only one determination

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

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

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.

Extrapolated values and values interpolated between remote observations are entered within parentheses. A hyphen is used to indicate a missing observed 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. A line is left blank between the observed data of each cast.

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.

FOOTNOTES

Laboratory personnel, before titrating the salinity samples, 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, three special notations are used without footnotes because their meaning is always the same.

To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip.

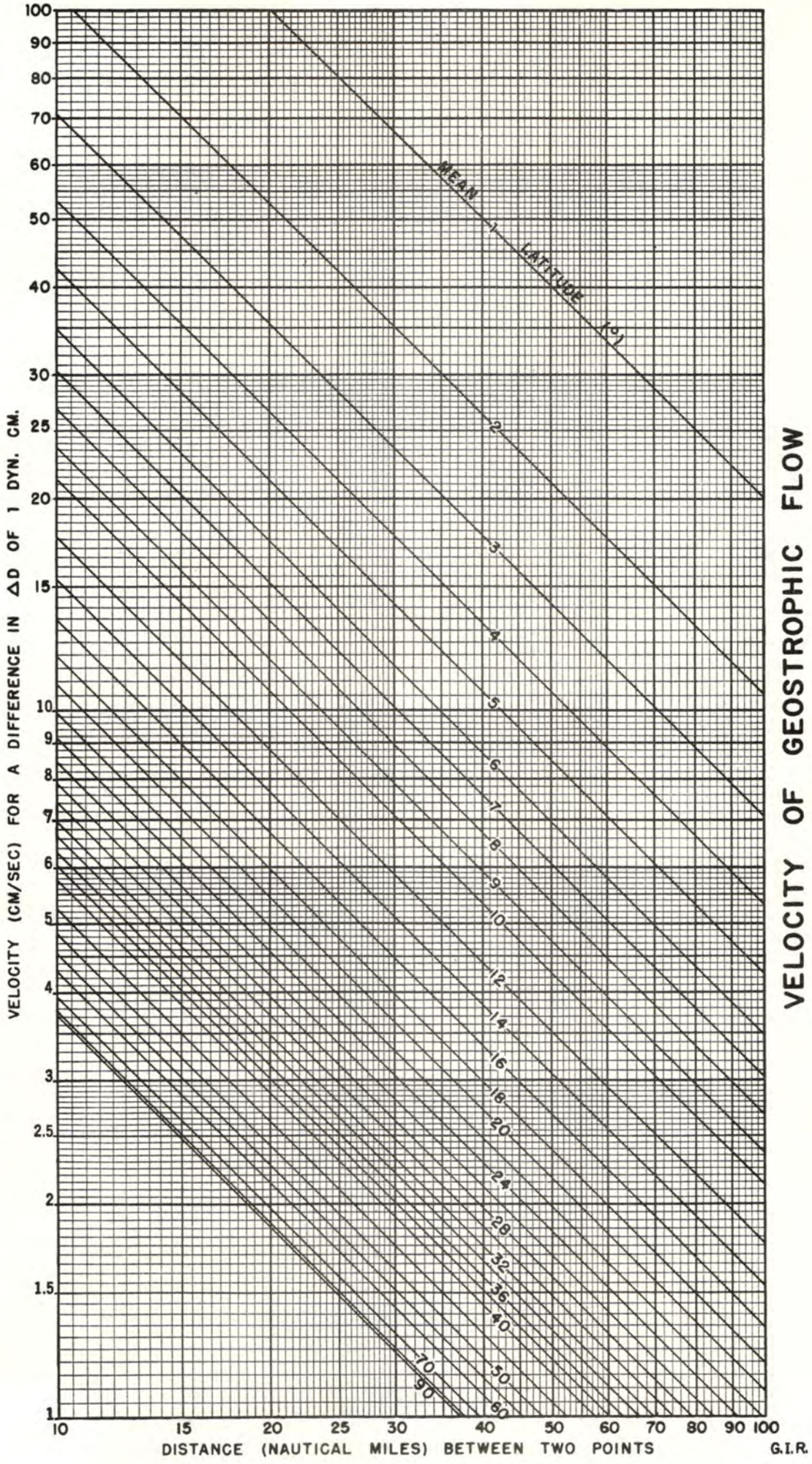
Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

r: rejected value (value seems to be definitely wrong),

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

FORMAT

These data are typed in the format of the University of California Press publication, Oceanic Observations of the Pacific. So that these pages can be used as copy for the 1962 volume, the first page of Cruise 6210-11 data is numbered 143; Cruise 6212, 190.


VELOCITY OF GEOSTROPHIC FLOW
VELOCITY (CM/SEC) FOR A DIFFERENCE IN ΔD OF 1 DYN. CM.
DISTANCE (NAUTICAL MILES) BETWEEN TWO POINTS
MEAN LATITUDE (°)
1
2
3
4
5
6
7
8
9
10
12
14
16
18
20
24
28
32
36
40
50
60
70
90
100
90
80
70
60
50
40
30
25
20
15
10
9
8
7
6
5
4
3
2.5
2
1.5
1
10
15
20
25
30
40
50
60
70
80
90
100
G.I.R.

FIGURES

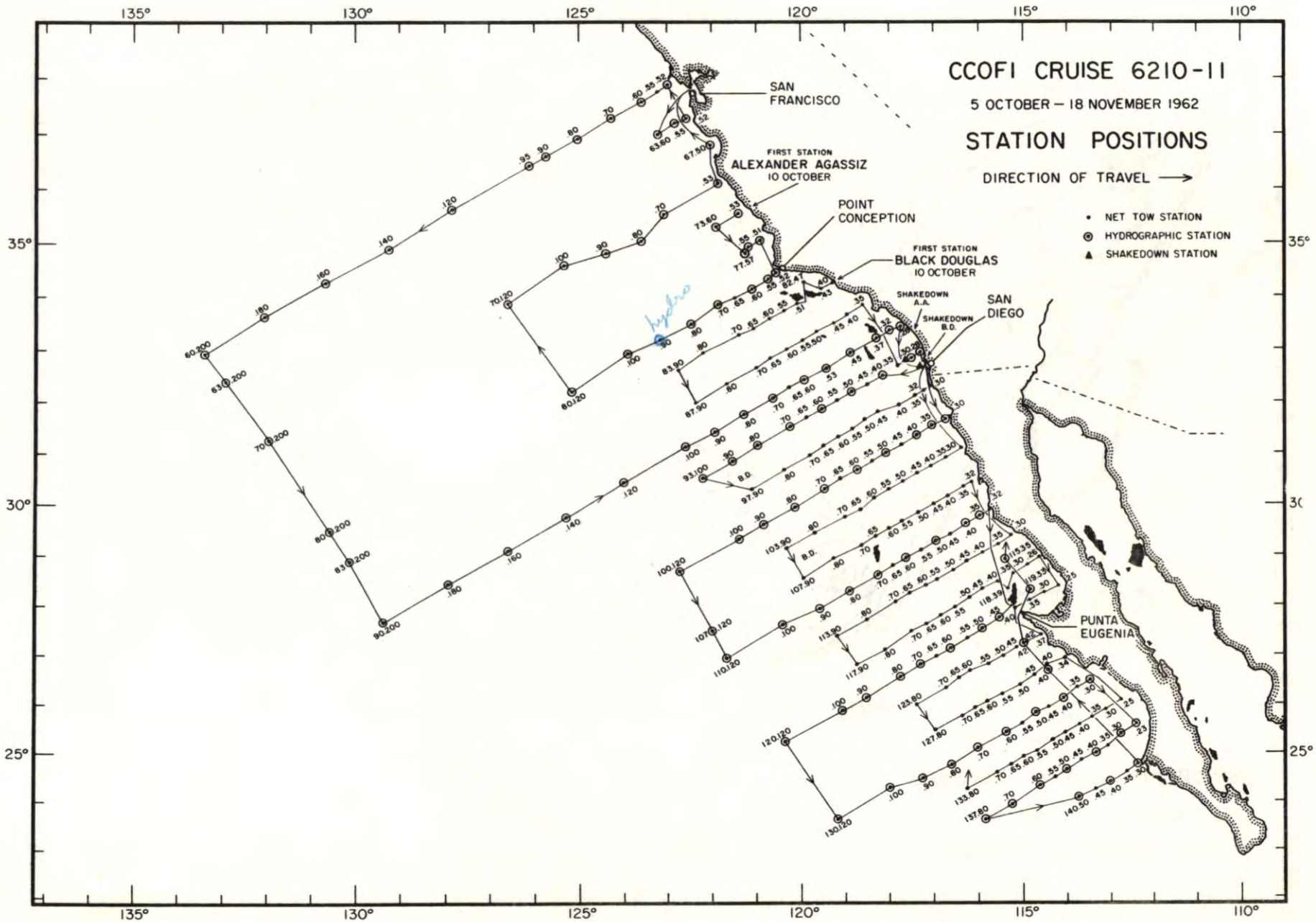

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
STATION POSITIONS
DIRECTION OF TRAVEL →
NET TOW STATION
HYDROGRAPHIC STATION
SHAKEDOWN STATION
SAN FRANCISCO
FIRST STATION
ALEXANDER AGASSIZ
10 OCTOBER
POINT CONCEPTION
FIRST STATION
BLACK DOUGLAS
10 OCTOBER
SHAKEDOWN A.A.
SHAKEDOWN B.D.
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 1

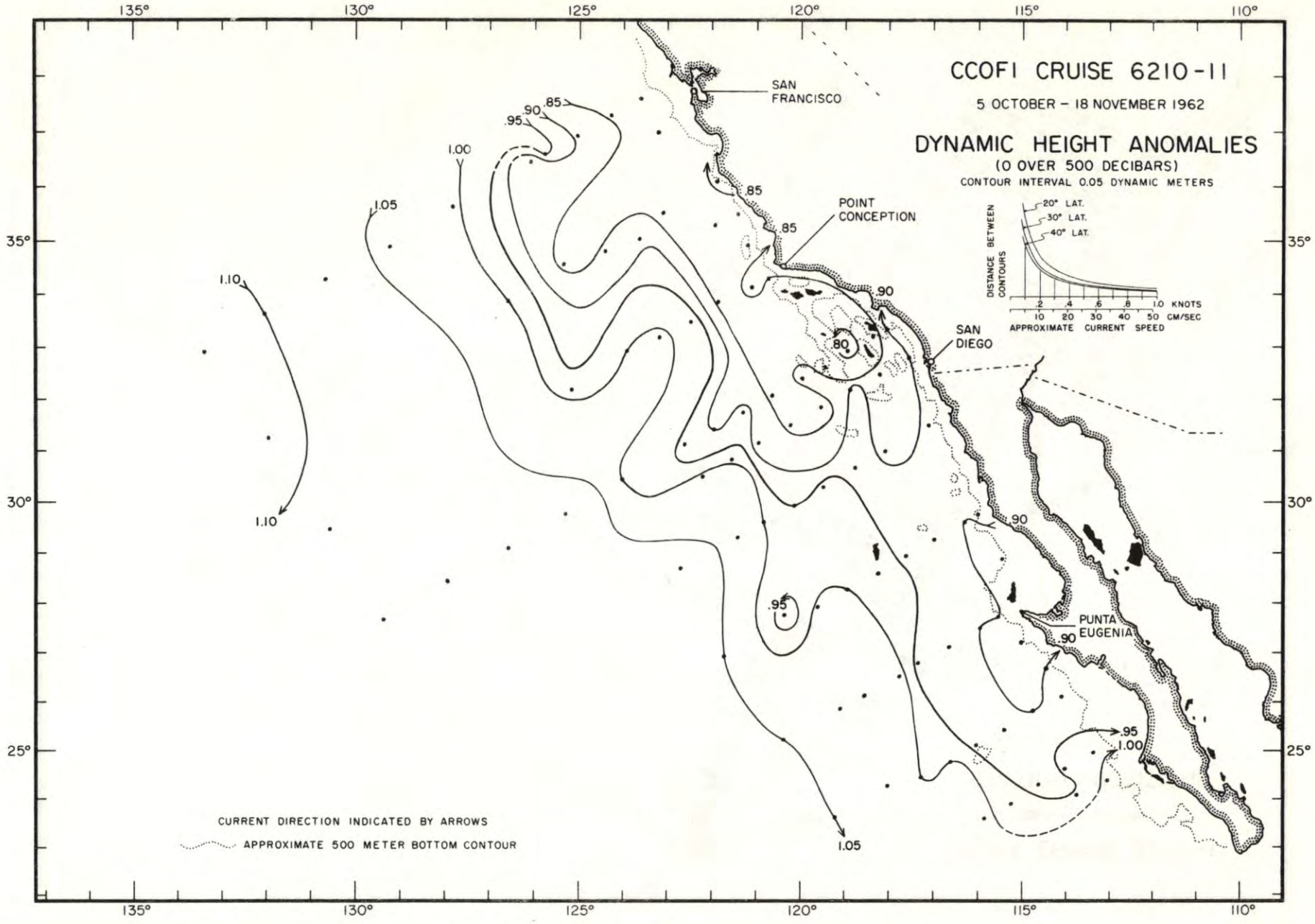

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.05 DYNAMIC METERS
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
2 4 6 8 10 KNOTS
10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135° 130° 125° 120° 115° 110°
35° 30° 25°
.85 .90 .95 1.00 1.05 1.10
.85 .85 .90 .80 .90 .95 .90 .95 1.00 1.05 1.10
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 500 METER BOTTOM CONTOUR

FIGURE 2

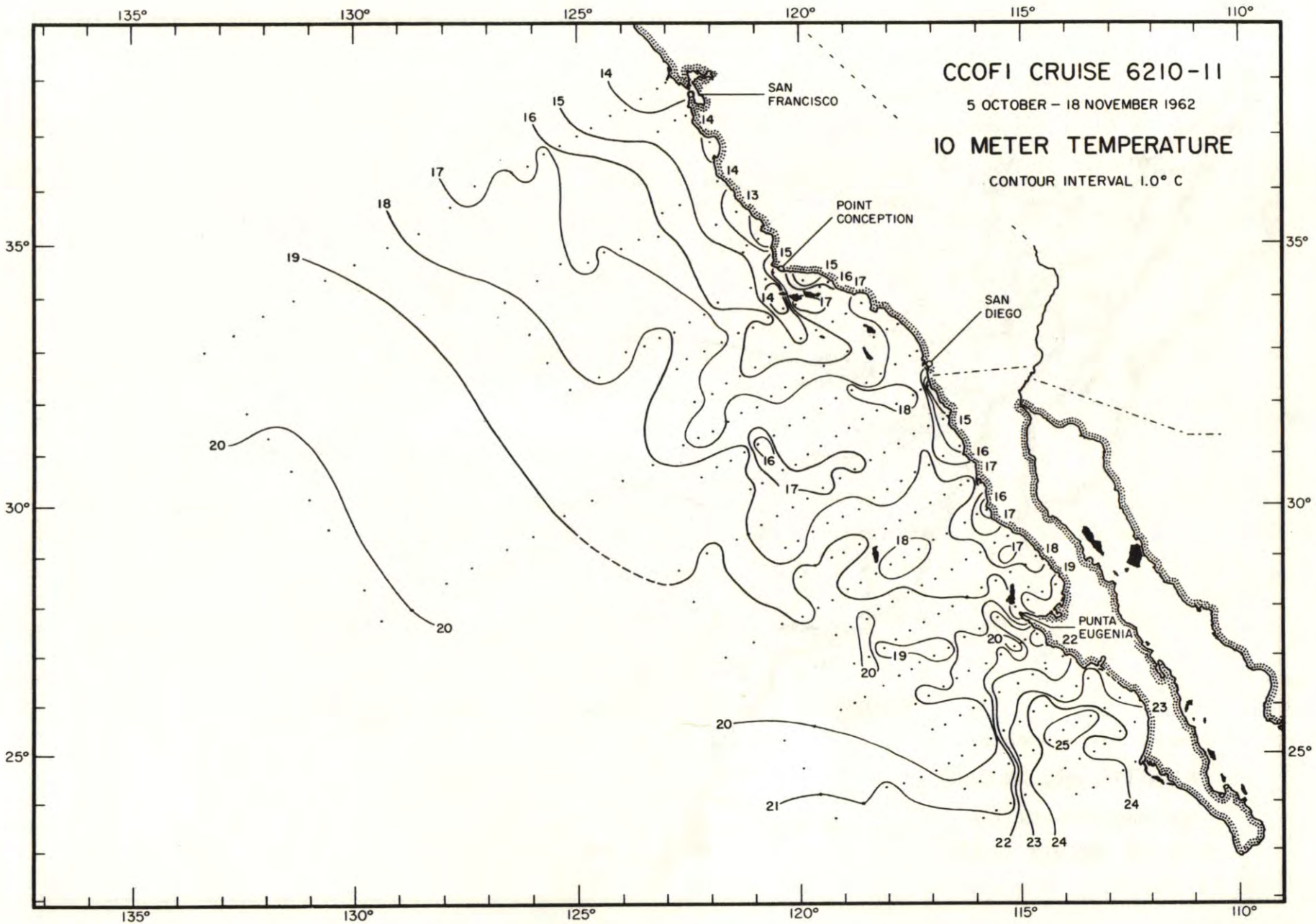

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0° C
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 3

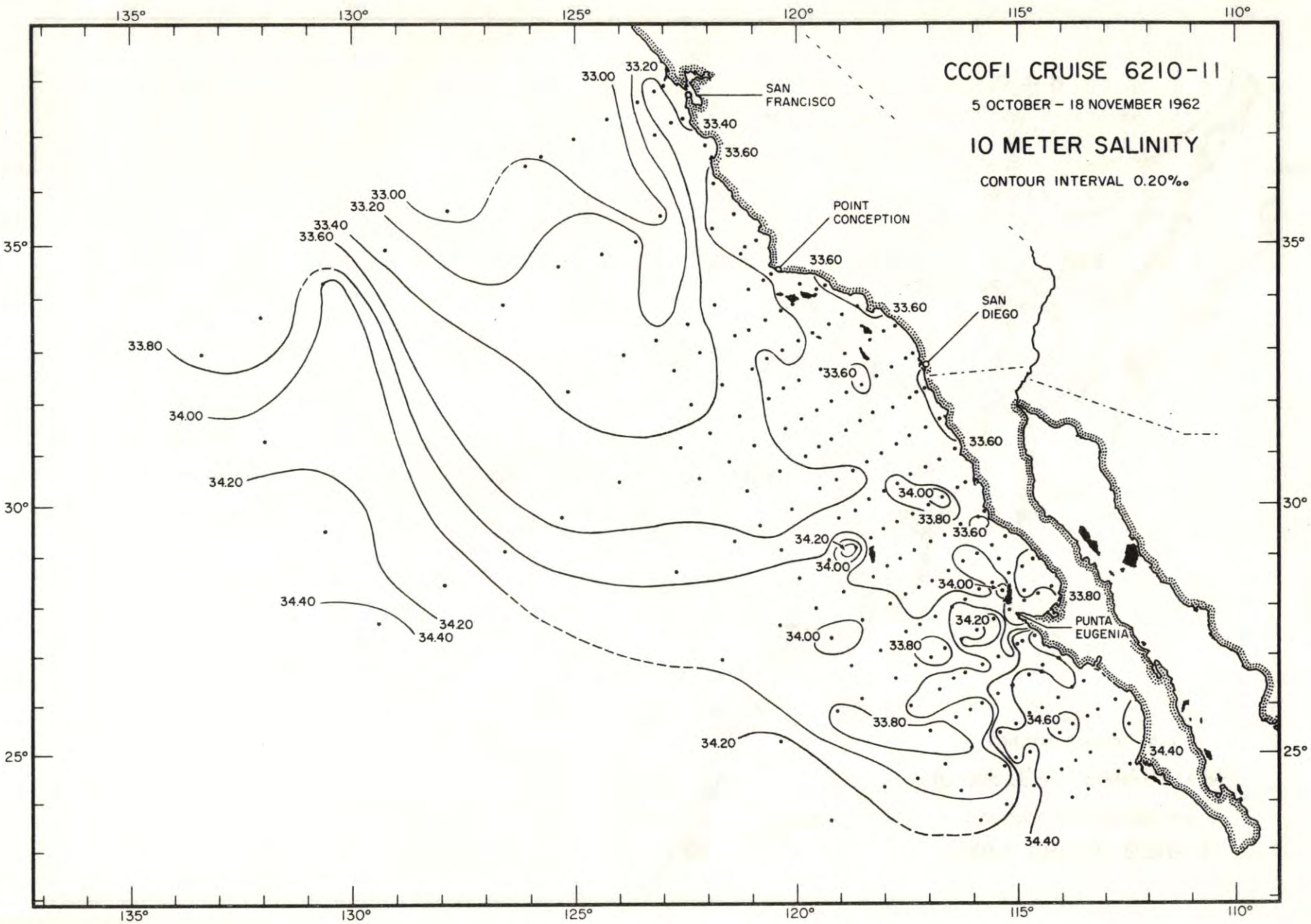

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
33.00
33.20
33.40
33.60
33.80
34.00
34.20
34.40
34.60

FIGURE 4

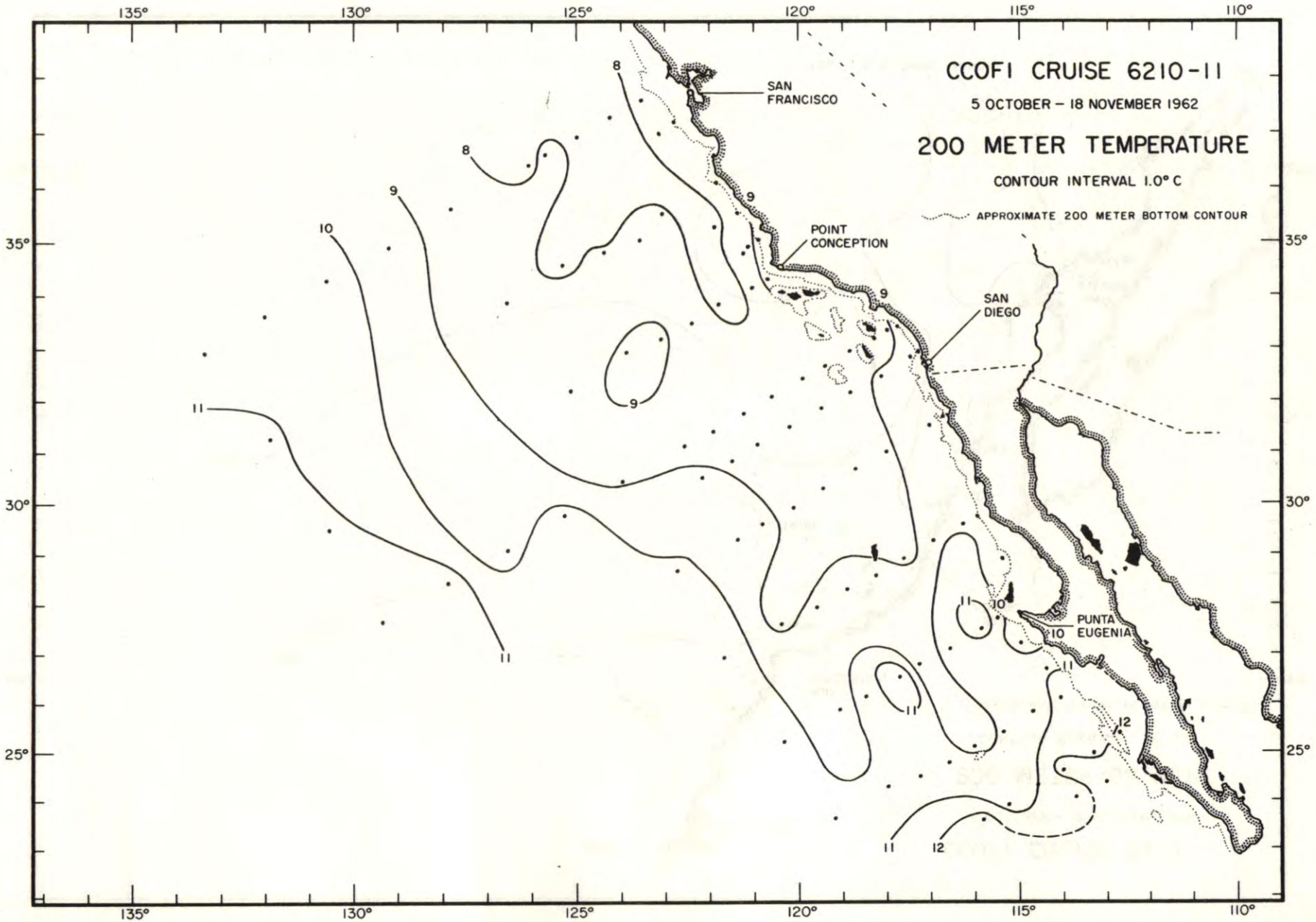

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0° C
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 5

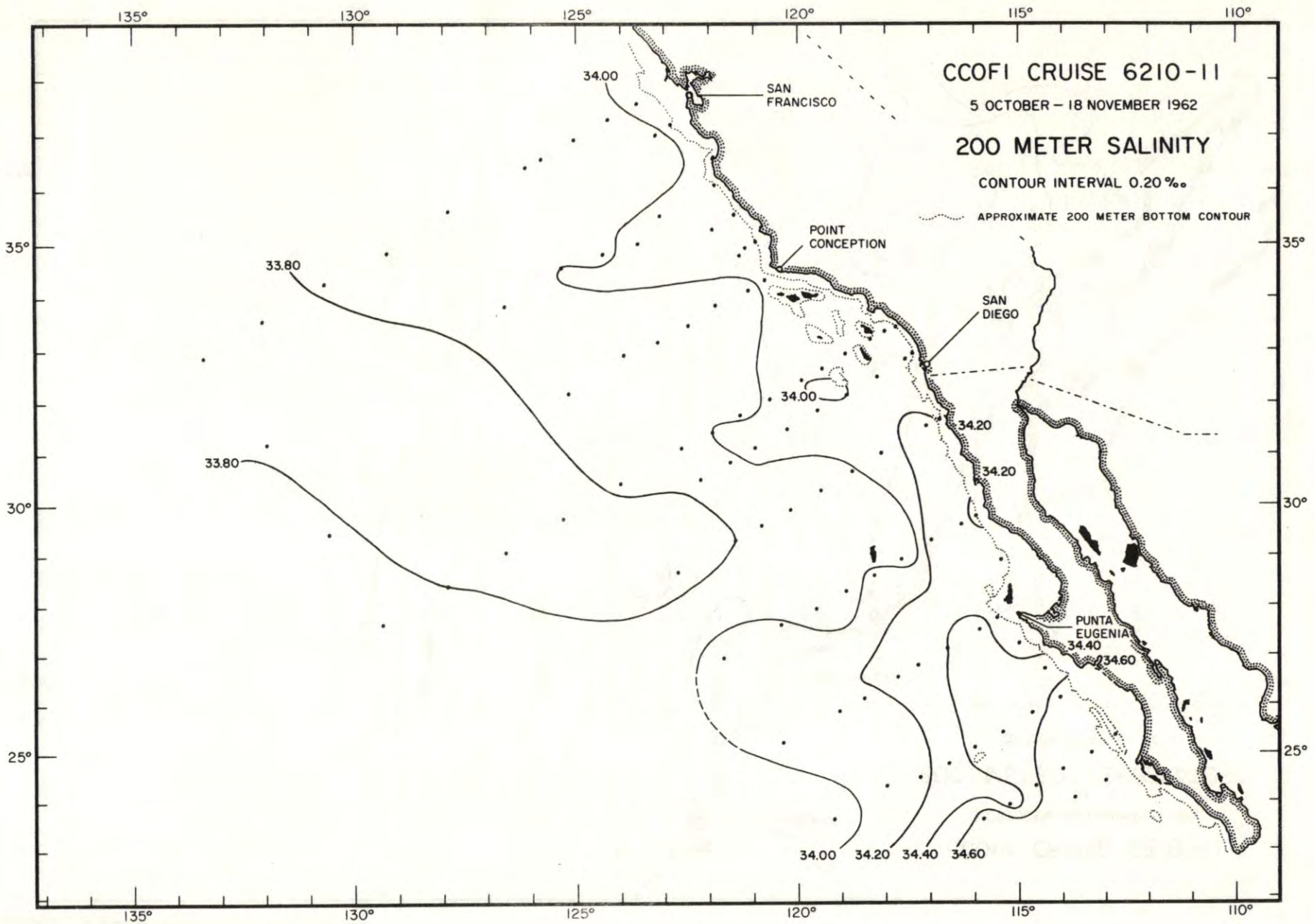

CCOFI CRUISE 6210-11
5 OCTOBER – 18 NOVEMBER 1962
200 METER SALINITY
CONTOUR INTERVAL 0.20 ‰
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
34.00
33.80
34.00
34.20
34.20
33.80
34.40
34.60
34.00 34.20 34.40 34.60
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 6

PERSONNEL
Cruise 6210-11

SHIPS' CAPTAINS

Forster, Charles W., RV Black Douglas
Miller, Frank, RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

Bottom, Kenneth S., Senior Marine Technician
Bryan, Walter R., Marine Technician
*Cobet, Andre, Research Biologist
Crowe, Fred J., Laboratory Assistant
**Grow, Harry S., Marine Technician
*Hebden, Ralph T., Senior Draftsman
Hixson, D. Paul, Marine Technician
Marcy, Deane S., Marine Technician
*Mead, Richard V., Principal Marine Technician
Rosendahl, Donald V., Electronics Technician
Wagner, Vaughn M., Fishery Aid, Bureau of Commercial Fisheries
*Welles, George L., Marine Technician
**Wyllie, John G., Laboratory Technician
Young, Anthony W., Marine Technician

RV Black Douglas

Metoyer, Jack D., Fishery Aid, Bureau of Commercial Fisheries
Brockman, F., Fishery Aid, Bureau of Commercial Fisheries
Kimura, M., Fishery Research Biologist, Bureau of Commercial Fisheries
***Lawson, Jan B., Senior Marine Technician
***Welles, George L., Marine Technician

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*Southern half of cruise
**Northern half of cruise
***Part of cruise only

all pages 6210-11

all pages 6210-11

SIO

CCOFI 6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; October 18, 1962; 1615 GCT; 37°54'N, 123°01.5'W; sounding, 44 fm; wind, 330°, force 2; weather, fog; sea, moderate; wire angle, 00°. 60.52

1	14.19	33.360	5.87	0.7	5	0.17	306	0	(14.19)	(33.36)	(5.87)	(24.90)	(306)	(0.00)
11	13.68	33.396	6.01	0.8	5	0.27	293	10	13.73	33.39	6.00	25.02	295	0.03
31	11.62	33.726	5.64	1.8	25	0.36	231	20	12.95	33.48	5.96	25.25	273	0.06
51	10.52	-	3.20	2.2	34	0.02		30	11.70	33.71	5.67	25.66	233	0.08
								50	10.55					

ALEXANDER AGASSIZ; October 18, 1962; 2152 GCT; 37°38'N, 123°37'W; sounding, 1600 fm; wind, 330°, force 3; weather, cloudy; sea, very rough; wire angle, 26°. 60.60

3	13.74	33.270	5.84	1.0	4	0.12	304	0	(13.74)	(33.27)	(5.84)	(24.93)	(304)	(0.00)
11	13.68	33.285	5.89	0.9	4	0.25	301	10	13.69	33.28	5.88	24.94	302	0.03
30	13.59	33.311	5.92	0.9	4	0.26	298	20	13.62	33.31	5.92	24.98	299	0.06
55	10.62	33.284	5.28	1.4	13	0.17	246	30	13.59	33.31	5.92	24.99	298	0.09
64	10.31	33.426	4.78	1.6	17	0.00	231	50	11.00	33.28	5.43	25.46	253	0.15
76	9.81	33.632	3.91	2.0	25	0.01	208	75	9.91	33.60	4.06	25.90	212	0.20
88	9.64	33.786	3.30	2.1	29	0.00	193	100	9.38	33.83	3.16	26.16	186	0.25
101	9.33	33.832	3.13	2.2	33	0.00	185	125	8.75	33.93	2.72	26.34	169	0.30
120	8.92	33.921	2.69	2.3	35	0.00	172	150	8.21	33.95	2.79	26.44	160	0.34
136	8.40	33.927	2.81	2.4	37	0.01	164	200	8.13	34.09	1.84	26.56	148	0.42
160	8.15	33.970	2.74	2.4	40	0.00	158	250	7.95	34.16	1.19	26.64	141	0.49
185	8.15	34.053	2.32	2.5	44	0.00	151	300	6.72	34.09	1.73	26.76	129	0.56
210	8.11	34.117	1.55	2.5	48	0.00	146	400	6.50	34.23	0.53	26.90	116	0.69
251	7.93	34.162	1.18	2.9	52	0.00	140	500	5.66	34.24	0.42	27.02	105	0.81
299	6.73	34.083	1.73	2.8	60	0.00	130							
375	6.70	34.227	0.55	3.1	74	-	119							
454	5.94	34.213	0.50	3.4	83	0.00	110							
536	5.55	34.268	0.32	3.2	-	0.00	102							

ALEXANDER AGASSIZ; October 19, 1962; 0359 GCT; 37°17'N, 124°20'W; sounding, 2200 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 18°. 60.70

2	14.18	32.940	5.86	0.7	3	0.07	337	0	(14.18)	(32.94)	(5.86)	(24.58)	(337)	(0.00)
11	14.14	32.940	5.92	0.7	2	0.11	336	10	14.14	32.94	5.92	24.59	336	0.03
35	13.45	33.007	5.84	0.8	4	0.17	317	20	14.13	32.94	5.92	24.59	336	0.07
45	11.91	33.214	5.77	1.1	6	0.17	274	30	14.12	32.94	5.92	24.59	335	0.10
59	10.48	33.159	5.30	1.4	12	0.00	253	50	11.00	33.17	5.49	25.37	261	0.16
73	9.90	33.281	4.88	-	-	0.02	235	75	9.90	33.29	4.87	25.66	234	0.22
97	9.38	33.580	4.28	-	-	0.00	205	100	9.37	33.59	4.24	25.98	204	0.28
116	9.16	33.752	3.56	-	-	0.00	189	125	8.99	33.78	3.43	26.19	184	0.33
135	8.44	33.810	3.35	-	-	0.00	174	150	8.28	33.88	3.46	26.37	166	0.37
164	8.20	33.923	3.51	-	-	0.00	162	200	7.82	33.97	3.42	26.51	153	0.45
192	7.94	33.973	3.44	-	-	0.00	154	250	6.81	33.99	2.92	26.67	138	0.53
230	7.24	33.979	3.25	-	-	0.00	144	300	6.34	34.03	1.88	26.76	129	0.60
258	6.68	33.998	2.74	-	-	-	136	400	5.42	34.07	1.25	26.91	115	0.72
306	6.29	34.033	1.83	-	-	-	128	500	5.08	34.20	0.47	27.05	102	0.84
368	5.63	34.048	1.51	-	-	-	119	600	4.79	34.31	0.33	27.17	90	0.94
465	5.15	34.156	0.66	-	-	-	106							
553	4.96	34.278	0.34	-	-	-	94							
628	4.66	34.316	0.33	-	-	-	88							

	OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
	Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
	m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
60.80	ALEXANDER AGASSIZ; October 19, 1962; 0950 GCT; 36°56.5'N, 125°04'W; sounding, 2340 fm; wind, 330°, force 5; weather, overcast; sea, very rough; wire angle, 40°.														
	1	15.30	32.883	5.61	0.5	3	0.01	364	0	(15.30)	(32.88)	(5.61)	(24.30)	(364)	(0.00)
	9	15.28	32.881	5.70	0.5	3	0.03	363	10	15.29	32.88	5.70	24.30	364	0.04
	29	15.30	32.882	5.70	0.5	3	0.02	364	20	15.30	32.88	5.70	24.30	364	0.07
	35	15.30	32.881	5.70	0.5	2	0.02	364	30	15.30	32.88	5.70	24.30	364	0.11
	45	15.26	32.885	5.64	0.5	3	0.00	363	50	13.80	32.90	5.79	24.63	332	0.18
	57	11.72	32.944	5.83	-	-	0.71	290	75	11.11	33.10	5.58	25.30	268	0.25
	73	11.13a)	33.098	5.58	-	-	0.30	269	100	9.68	33.47	4.63	25.83	218	0.32
	87	9.92	33.271	4.98	-	-	0.01	236	125	9.28	33.58	4.22	25.98	203	0.37
	100	9.68	33.474	4.63	-	-	0.01	217	150	8.58	33.76	3.69	26.23	179	0.42
	120	9.38	33.573	4.27	-	-	0.01	205	200	7.68	33.94	2.78	26.51	153	0.50
	138	8.84	33.663	4.02	-	-	-	190	250	7.03	33.99	2.22	26.64	141	0.58
	162	8.22	33.850	3.29	-	-	-	167	300	6.59	34.02	1.75	26.72	133	0.65
	182	7.96	33.901	3.08	-	-	-	160	400	5.79	34.08	1.00	26.87	119	0.78
	214	7.47	33.967	2.50	-	-	-	148	500	(5.32)	(34.20)		(27.03)	(104)	(0.89)
	258	6.96	33.994	2.18	-	-	-	140							
	332	6.31	34.054	1.41	-	-	-	127							
	406	5.74	34.086	0.96	-	-	-	118							
	472	5.41	34.162	0.65	-	-	-	108							
60.90	ALEXANDER AGASSIZ; October 19, 1962; 1529 GCT; 36°37'N, 125°47'W; sounding, 2430 fm; wind, 010°, force 6; weather, cloudy; sea, very high; wire angle, 38°.														
	3	17.07	32.977	5.50	0.5	1	0.00	395	0	(17.07)	(32.98)	(5.50)	(23.97)	(395)	(0.00)
	11	17.06	32.977	5.52	0.5	1	0.00	395	10	17.06	32.98	5.52	23.97	395	0.04
	31	17.06	32.976	5.58	0.5	1	0.00	395	20	17.06	32.98	5.55	23.97	395	0.08
	52	13.34	33.014	6.09	0.6	2	0.04	315	30	17.06	32.98	5.57	23.97	395	0.12
	60	13.04	33.123	5.98	0.7	2	0.00	301	50	14.00	32.99	5.99	24.66	329	0.19
	74	12.49	33.205	5.76	-	-	0.11	285	75	12.44	33.20	5.76	25.13	284	0.27
	84	11.82	33.180	5.66	-	-	0.06	275	100	11.32	33.40	5.41	25.49	250	0.34
	94	11.88	33.340	5.53	-	-	0.14	264	125	9.47	33.36	4.86	25.78	222	0.40
	113	10.16	33.279	5.13	-	-	0.01	239	150	9.08	33.63	4.35	26.05	196	0.45
	125	9.47	33.362	4.86	-	-	0.02	222	200	8.34	33.93	3.44	26.40	163	0.54
	143	9.19	33.558	4.73	-	-	0.00	203	250	7.69	33.97	3.33	26.53	151	0.62
	163	8.88	33.758	3.62	-	-	0.00	184	300	7.01	33.98	2.92	26.64	141	0.70
	182	8.62	33.865	3.29	-	-	0.01	172	400	5.76	34.01	2.01	26.82	124	0.83
	212	8.15	33.952	3.52	-	-	-	159	500	(5.10)	(34.15)		(27.01)	(106)	(0.95)
	256	7.60	33.972	3.30	-	-	-	150							
	326	6.66	33.990	2.65	-	-	-	136							
	398	5.78	34.004	2.05	-	-	-	124							
	461	5.31	34.079	1.16	-	-	-	113							
60.95	ALEXANDER AGASSIZ; October 25, 1962; 2005 GCT; 36°28'N, 126°09'W; sounding, 2540 fm; wind, 260°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°.														
	1	16.58	32.805	5.43	0.3	0	0.03	397	0	(16.58)	(32.80)	(5.43)	(23.95)	(397)	(0.00)
	11	16.45	33.076	5.54	0.4	1	0.04	374	10	16.46	33.06	5.53	24.17	375	0.04
	31	16.60	33.248	5.43	0.5	0	0.06	365	20	16.52	33.14	5.51	24.22	371	0.08
	56	11.62	33.131	5.65	0.8	6	0.16	275	30	16.59	33.23	5.44	24.27	366	0.11
	66	11.20	33.255	5.46	1.0	10	0.18	258	50	13.00	33.15	5.61	24.98	298	0.18
	76	10.37	33.451	4.93	-	-	0.08	230	75	10.50	33.42	5.04	25.65	234	0.25
	91	9.80	33.625	4.26	-	-	0.03	208	100	9.50	33.67	3.98	26.02	200	0.30
	107	9.31	33.701	3.79	-	-	0.01	195	125	8.89	33.80	3.27	26.22	181	0.35
	131	8.76	33.834	3.11	-	-	-	176	150	8.39	33.90	2.95	26.37	166	0.39
	151	8.38	33.903	2.95	-	-	-	166	200	7.63	33.97	2.79	26.54	150	0.47
	176	7.92	33.926	3.27	-	-	-	158	250	7.04	33.99	2.40	26.64	141	0.55
	206	7.58	33.978	2.65	-	-	-	149	300	6.24	33.98	2.56	26.74	131	0.62
	236	7.26	33.996	2.34	-	-	-	143	400	5.41	34.04	1.49	26.89	117	0.75
	276	6.62	33.979	2.61	-	-	-	136	500	4.78	34.13	0.81	27.03	104	0.86
	336	5.74	33.986	2.25	-	-	-	125							
	411	5.36	34.048	1.40	-	-	-	116							
	486	4.84	34.112	0.89	-	-	-	106							
	566	4.57	34.184	0.51	-	-	-	97							

a) Alternate value, 11.39°C, not used in interpolation.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; October 26, 1962; 0650 GCT; 35°37'N, 127°53.5'W; sounding, 2700 fm; wind, 180°, force 3; weather, partly cloudy; sea, slight; wire angle, 13°.														60.120
2	17.48	32.871	5.52	0.3	0	0.02	412	0	(17.48)	(32.87)	(5.52)	(23.79)	(412)	(0.00)
12	17.11	32.861	5.60	0.3	1	0.02	404	10	17.13	32.86	5.59	23.86	405	0.04
31	17.14	32.936	5.62	0.4	1	0.01	400	20	17.12	32.90	5.61	23.90	402	0.08
55	14.58	33.043	6.30	0.3	1	0.02	337	30	17.14	32.93	5.62	23.92	400	0.12
65	13.47	33.079	6.22	0.5	2	0.07	313	50	17.14	32.94	5.63	23.92	399	0.20
74	12.92	33.106	6.04	-	-	0.39	300	75	12.83	33.11	6.01	24.98	298	0.29
88	12.10	33.172	5.85	-	-	0.04	280	100	11.64	33.20	5.72	25.28	270	0.36
103	11.42	33.212	5.66	-	-	0.04	265	125	10.03	33.26	5.21	25.61	239	0.42
127	9.96	33.264	5.17	-	-	0.03	237	150	9.48	33.45	4.69	25.85	216	0.48
146	9.53	33.416	4.79	-	-	0.03	219	200	8.71	33.85	3.28	26.28	175	0.58
170	9.16	33.641	4.02	-	-	0.02	197	250	8.20	33.98	4.22	26.46	157	0.67
198	8.72	33.836	3.25	-	-	0.02	176	300	7.28	33.97	3.50	26.59	146	0.74
227	8.66	33.977	4.60	-	-	0.01	164	400	5.60	33.96	2.68	26.80	125	0.88
266	7.84	33.979	3.90	-	-	-	152	500	5.04	34.09	1.11	26.97	109	1.01
324	6.84	33.963	3.25	-	-	-	140							
398	5.62	33.959	2.71	-	-	-	126							
473	5.02	34.033	1.54	-	-	-	113							
553	5.08	34.189	0.50	-	-	-	102							
ALEXANDER AGASSIZ; October 26, 1962; 1829 GCT; 34°55'N, 129°16'W; sounding, 2550 fm; wind, 200°, force 3; weather, partly cloudy; sea, moderate; wire angle, 04°.														60.140
0	18.69	33.309	5.51a)	0.4	1	0.00	408	0	18.69	33.31	5.51	23.83	408	0.00
11	18.58	33.309	5.48	0.4	1	0.00	406	10	18.59	33.31	5.48	23.85	406	0.04
32	18.67	33.374	5.50	0.4	1	0.00	403	20	18.62	33.34	5.49	23.87	404	0.08
56	16.31	33.407	6.11	0.4	2	0.00	347	30	18.67	33.37	5.50	23.88	403	0.12
66	14.59	33.397	6.27	0.4	2	0.00	311	50	18.67	33.38	5.51	23.89	403	0.20
76	14.05	33.469	6.19	-	-	0.00	295	75	14.09	33.46	6.20	25.00	297	0.29
92	13.62	33.552	6.04	-	-	0.02	281	100	13.19	33.52	5.86	25.23	275	0.36
105	12.84	33.510	5.73	-	-	0.20	269	125	11.65	33.51	5.49	25.52	247	0.43
130	11.36	33.510	5.47	-	-	0.00	242	150	10.48	33.51	5.41	25.73	227	0.49
156	10.22	33.518	5.38	-	-	0.00	223	200	9.40	33.92	5.00	26.23	180	0.59
176	9.56	33.682	4.99	-	-	-	200	250	8.75	34.00	4.68	26.40	164	0.68
206	9.36	33.950	5.00	-	-	-	177	300	7.93	34.00	4.07	26.52	152	0.76
236	8.94	33.983	4.86	-	-	-	168	400	6.41	33.99	2.66	26.72	133	0.91
276	8.34	34.006	4.30	-	-	-	158	500	5.61	34.10	1.07	26.91	115	1.04
336	7.31	33.981	3.78	-	-	-	145							
411	6.26	33.997	2.39	-	-	-	130							
486	5.67	34.073	1.19	-	-	-	118							
565	5.38	34.189	0.65	-	-	-	106							
ALEXANDER AGASSIZ; October 27, 1962; 0347 GCT; 34°16'N, 130°41.5'W; sounding, 2900 fm; wind, 230°, force 4; weather, cloudy; sea, moderate; wire angle, 13°.														60.160
1	19.64	33.997	5.20	0.2	2	0.01	381	0	(19.64)	(34.00)	(5.20)	(24.11)	(381)	(0.00)
11	19.62	33.999	5.25	0.2	2	0.01	381	10	19.62	34.00	5.24	24.12	381	0.04
30	19.58	34.017	5.23	0.2	3	0.01	378	20	19.60	34.01	5.23	24.13	379	0.08
59	18.97	34.062	5.47	0.2	2	0.01	360	30	19.58	34.02	5.23	24.14	378	0.11
68	17.10	34.122	5.97	0.1	4	0.02	312	50	19.57	34.02	5.23	24.15	378	0.19
82	15.90	34.099	5.81	-	-	0.02	287	75	16.60	34.12	5.90	24.95	301	0.28
97	15.34	34.144	5.69	-	-	0.02	272	100	15.30	34.17	5.63	25.29	269	0.35
111	15.16	34.235	5.47	-	-	0.14	262	125	14.74	34.19	5.33	25.42	256	0.41
136	14.26	34.134	5.25	-	-	0.03	251	150	13.08	34.00	5.22	25.62	237	0.48
154	12.60	33.947	5.21	-	-	0.02	232	200	10.29	33.87	5.01	26.04	198	0.59
183	10.90	33.825	5.17	-	-	0.02	211	250	9.32	33.99	4.69	26.30	173	0.68
212	9.96	33.919	4.89	-	-	-	189	300	8.54	34.03	4.29	26.45	159	0.77
240	9.48	33.972	4.74	-	-	-	177	400	6.73	33.97	3.26	26.67	138	0.92
288	8.74	34.030	4.45	-	-	-	162	500	5.44	34.00	1.85	26.85	121	1.06
341	7.80	33.997	3.76	-	-	-	151	600	(4.87)	(34.08)	(1.01)	(26.98)	(108)	(1.18)
423	6.34	33.965	3.05	-	-	-	134							
508	5.38	34.011	1.72	-	-	-	119							
590	4.90	34.070	1.07	-	-	-	109							

a) All oxygen values appear to be approximately 5 per cent high.

SIO

CCOFI
6210-11

	OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
	Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
	m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
60.180	ALEXANDER AGASSIZ; October 27, 1962; 1229 GCT; 33°37'N, 132°05'W; sounding, 2880 fm; wind, 230°, force 3; weather, cloudy; sea, moderate; wire angle, 14°.														
	0	19.64	33.632	5.22	0.4	1	0.00	408	0	19.64	33.63	5.22	23.83	408	0.00
	10	19.60	33.629	5.19	0.4	0	0.00	407	10	19.60	33.63	5.19	23.84	407	0.04
	29	19.58	33.625	5.27	0.4	1	0.00	407	20	19.59	33.63	5.23	23.85	407	0.08
	58	18.47	33.574	5.55	0.4	1	0.00	384	30	19.58	33.62	5.28	23.84	407	0.12
	68	17.27	33.483	5.78	0.3	1	0.00	363	50	19.58	33.62	5.28	23.84	407	0.20
	82	15.73	33.474	6.03	-	-	0.00	329	75	16.45	33.48	5.92	24.50	345	0.30
	97	14.86	33.576	5.81	-	-	0.00	304	100	14.88	33.64	5.80	24.97	299	0.38
	111	14.97	33.903	5.74	-	-	0.01	282	125	14.71	33.98	5.61	25.27	271	0.45
	136	14.39	33.985	5.48	-	-	0.15	264	150	13.17	33.84	5.30	25.48	251	0.52
	155	12.45	33.747	5.22	-	-	0.03	244	200	10.10	33.73	4.82	25.96	205	0.63
	184	10.48	33.667	4.90	-	-	-	216	250	9.29	33.98	4.43	26.29	174	0.73
	214	9.84	33.805	4.77	-	-	-	195	300	8.36	34.01	3.88	26.46	158	0.82
	242	9.43	33.961	4.51	-	-	-	177	400	6.78	34.04	2.02	26.71	134	0.97
	291	8.51	34.008	4.00	-	-	-	160	500	5.82	34.12	1.01	26.90	116	1.10
	345	7.56	34.001	3.01	-	-	-	147	600	(5.26)	(34.23)	(0.42)	(27.06)	(101)	(1.21)
	427	6.48	34.058	1.70	-	-	-	129							
	510	5.74	34.123	0.93	-	-	-	115							
	593	5.29	34.218	0.45	-	-	-	103							
60.200	ALEXANDER AGASSIZ; October 27, 1962; 2113 GCT; 32°55'N, 133°27'W; sounding, 2480 fm; wind, 180°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°.														
	1	20.32	33.770	5.15		2	0.02	415	0	(20.32)	(33.77)	(5.15)	(23.76)	(415)	(0.00)
	11	19.94	33.775	5.22		3	0.01	405	10	19.96	33.77	5.22	23.86	406	0.04
	30	19.88	33.799	5.22		3	0.02	402	20	19.90	33.79	5.22	23.89	403	0.08
	59	19.82	33.970	5.31		2	0.02	388	30	19.88	33.80	5.22	23.90	402	0.12
	70	17.49	33.966	5.80		2	0.02	332	50	19.82	33.93	5.29	24.01	391	0.20
	85	15.28	33.678	5.90		-	0.02	305	75	17.32	33.95	5.81	24.65	330	0.29
	100	14.80	33.792	5.72		-	0.03	287	100	14.80	33.79	5.72	25.10	287	0.37
	113	14.08	33.714	5.67		-	0.11	278	125	13.71	33.72	5.56	25.28	270	0.44
	138	13.25	33.732	5.39		-	0.03	260	150	12.51	33.68	5.29	25.49	250	0.51
	158	11.96	33.647	5.24		-	0.02	243	200	10.31	33.66	4.88	25.87	214	0.62
	187	10.60	33.627	4.96		-	0.02	221	250	9.30	33.88	4.42	26.21	181	0.72
	217	9.96	33.750	4.73		-	0.02	201	300	8.92	34.01	4.42	26.38	166	0.81
	246	9.34	33.874	4.43		-	-	182	400	6.91	33.99	2.98	26.66	139	0.97
	306	8.84	34.008	4.42		-	-	165	500	5.75	34.03	1.58	26.84	122	1.11
	350	7.77	33.997	3.83		-	-	150	600	5.04	34.12	0.86	27.00	107	1.23
	433	6.46	33.992	2.50		-	-	133							
	517	5.60	34.050	1.38		-	-	119							
	600	5.04	34.115	0.86		-	-	107							
63.52	ALEXANDER AGASSIZ; October 18, 1962; 1028 GCT; 37°18.5'N, 122°37'W; sounding, 48 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 00°.														
	1	14.60	33.294	5.92	0.7	5	0.06	319	0	(14.60)	(33.29)	(5.92)	(24.76)	(319)	(0.00)
	11	14.58	33.295	6.02	0.8	4	0.23	319	10	14.58	33.30	6.02	24.77	318	0.03
	31	14.43	-	5.67	0.8	4	0.24		20	14.52		5.92			
	51	13.98	33.468	5.59	0.9	6	0.10	294	30	14.46		5.69			
									50	14.02		5.59			
63.55	ALEXANDER AGASSIZ; October 18, 1962; 0733 GCT; 37°12.5'N, 122°50'W; sounding, 170 fm; wind, 300°, force 1; weather, clear; sea, moderate; wire angle, 09°.														
	1	14.28	33.454	5.58	0.9	6	0.16	301	0	(14.28)	(33.45)	(5.58)	(24.95)	(301)	(0.00)
	11	14.06	33.458	5.60	1.0	6	0.28	296	10	14.10	33.46	5.60	25.00	297	0.03
	31	13.33	33.509	5.44	1.5	9	0.31	278	20	13.79	33.47	5.58	25.07	290	0.06
	51	11.90	33.669	4.57	-	19	0.28	240	30	13.39	33.50	5.47	25.17	280	0.09
	75	10.38	33.758	3.40	1.9	26	0.00	207	50	11.98	33.66	4.62	25.57	242	0.14
	100	10.28	33.774	3.25	-	-	0.06	205	75	10.38	33.76	3.40	25.94	207	0.20
	124	10.17	33.790	3.11	-	-	0.05	202	100	10.28	33.77	3.25	25.96	205	0.25
	164	9.13	33.991	1.95	-	-	0.08	170	125	10.15	33.79	3.09	26.00	201	0.30
	203	8.60	34.104	1.51	-	-	0.00	154	150	9.57	33.91	2.38	26.19	183	0.35
	253	8.04	34.137	1.49	-	-	0.00	144	200	8.66	34.10	1.53	26.49	155	0.44
									250	8.08	34.13	1.49	26.60	145	0.51

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; October 18, 1962; 0417 GCT; 37°02.5'N, 123°11'W; sounding, 1390 fm; wind, 300°, force 2; weather, clear; sea, moderate; wire angle, 18°. 63.60

2	14.30	33.365	5.90	0.8	2	0.17	308	0	(14.30)	(33.36)	(5.90)	(24.88)	(308)	(0.00)
10	14.24	33.365	5.84	0.7	2	0.22	307	10	14.24	33.36	5.84	24.89	307	0.03
30	14.10	33.385	5.63	0.8	1	0.25	302	20	14.20	33.38	5.75	24.91	305	0.06
39	13.26	33.414	5.54	1.0	4	0.30	284	30	14.10	33.38	5.63	24.94	303	0.09
54	11.30	33.427	4.98	1.3	11	0.18	247	50	11.83	33.42	5.15	25.42	257	0.15
68	10.68	33.509	4.54	-	-	0.08	231	75	10.37	33.54	4.36	25.77	223	0.21
91	9.70	33.623	4.00	-	-	0.02	206	100	9.63	33.68	3.77	26.00	201	0.26
110	9.56	33.741	3.46	-	-	0.00	196	125	9.43	33.86	2.80	26.18	185	0.31
129	9.40	33.895	2.66	-	-	0.00	182	150	8.98	33.95	2.43	26.32	171	0.36
147	9.02	33.948	2.45	-	-	-	172	200	8.18	33.99	2.51	26.48	156	0.44
175	8.48	33.983	2.39	-	-	-	161	250	7.39	34.05	2.00	26.64	141	0.52
208	8.08	33.998	2.52	-	-	-	154	300	6.99	34.06	1.69	26.70	135	0.59
236	7.54	34.041	2.05	-	-	-	144	400	6.51	34.16	0.86	26.84	121	0.72
284	7.08	34.053	1.86	-	-	-	137	500	5.64	34.18	0.62	26.97	109	0.84
336	6.84	34.099	1.32	-	-	-	130	600	(5.50)	(34.29)		(27.08)	(100)	(0.95)
417	6.40	34.173	0.78	-	-	-	119							
500	5.64	34.184	0.62	-	-	-	109							
585	5.50	34.269	0.35	-	-	-	101							

ALEXANDER AGASSIZ; October 28, 1962; 0143 GCT;[a] 32°22'N, 132°58.5'W; sounding, 2500 fm; wind, 150°, force 4; weather, cloudy; sea, moderate; wire angle, 24°. 63.200

805	4.32	34.334	0.29b)	3.3	111	0.02	83
815	4.26	34.346	0.29	3.6	115	0.02	82
824	4.24	34.345	0.28	4.0	114	0.02	82
834	4.20	34.347	0.30	3.6	117	0.02	81
844	4.20	34.351	0.25	3.3	117	-	81
854	4.18	34.353	0.32	3.7	122	-	81
863	4.13	34.363	0.32	3.7	120	-	79
873	4.12	34.369	0.28	3.7	120	-	79
883	4.10	34.373	0.29	3.8	118	-	78
893	4.04	34.382	0.29	4.2u	119	-	77
903	4.02	34.387	0.28	3.7	120	-	76
913	3.99	34.394	0.28	3.5	120	-	76
922	3.95	34.404	0.32	3.5	120	-	75
932	3.92	34.405	0.36	3.6	121	-	74
942	3.91	34.413	0.39	3.6	120	-	73
952	3.88	34.416	0.39	3.5	117	-	73
962	3.82	34.424	0.36	3.8	122	-	72
973	3.79	34.423	0.39	3.6	126	-	72

ALEXANDER AGASSIZ; October 15, 1962; 1504 GCT; 36°49'N, 122°04.5'W; sounding, 57 fm; wind, 070°, force 2; weather, partly cloudy; sea, high; wire angle, 08°. 67.50

2	13.90	33.549	5.57	0.9	9	0.17	286	0	(13.90)	(33.55)	(5.57)	(25.11)	(286)	(0.00)
12	13.92	33.549	5.55	1.0	9	0.26	287	10	13.91	33.55	5.55	25.11	287	0.03
31	13.72	33.560	5.49	1.0	10	0.25	282	20	13.85	33.55	5.53	25.12	285	0.06
51	13.49	33.587	5.44	1.1	11	0.24	276	30	13.74	33.56	5.49	25.15	282	0.09
76	12.86	33.649	5.10	1.3	14	0.28	259	50	13.50	33.59	5.44	25.22	276	0.14
								75	12.90	33.65	5.12	25.39	260	0.21

a) Special cast to collect samples for silicate determination.
b) Alternate value, 0.17 ml/L.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
70.53	ALEXANDER AGASSIZ; October 15, 1962; 0811 GCT; 36°07.5'N, 121°54'W; sounding, 550 fm; wind, 340°, force 6; weather, clear; sea, high; wire angle, 35°.													
2	14.31	33.628	5.70	0.8	4	0.27	289	0	(14.31)	(33.63)	(5.70)	(25.08)	(289)	(0.00)
10	14.32	33.625	5.68	0.8	5	0.24	289	10	14.32	33.62	5.68	25.07	290	0.03
31	14.32	33.625	5.77	0.8	6	0.23	289	20	14.32	33.62	5.72	25.07	290	0.06
60	11.72	33.625	4.27	1.5	15	0.24	240	30	14.32	33.62	5.76	25.07	290	0.09
69	11.04	33.636	4.12	1.7	20	0.08	227	50	14.30	33.62	5.74	25.08	289	0.15
84	10.14	33.743	3.44	-	-	0.05	205	75	10.55	33.68	3.81	25.85	216	0.21
96	9.99	33.814	3.09	-	-	0.01	197	100	9.94	33.82	3.06	26.06	196	0.26
109	9.89	33.832	3.01	-	-	-	194	125	9.61	33.86	2.96	26.15	188	0.31
134	9.48	33.878	2.91	-	-	-	184	150	9.24	33.91	2.75	26.25	178	0.36
152	9.20	33.917	2.72	-	-	-	177	200	8.77	34.04	2.02	26.42	161	0.44
177	8.92	33.966	2.53	-	-	-	169	250	8.49	34.13	1.56	26.54	151	0.52
206	8.75	34.068	1.89	-	-	-	159	300	7.95	34.15	1.39	26.63	141	0.60
232	8.72	34.124	1.57	-	-	-	154	400	7.06	34.18	0.93	26.79	127	0.74
273	8.14	34.126	1.53	-	-	-	146	500	5.78	34.14	0.84	26.92	114	0.86
330	7.76	34.172	1.26	-	-	-	137							
419	6.82	34.184	0.84	-	-	-	124							
502	5.76	34.136	0.84	-	-	-	114							
576	5.74	34.278	0.37	-	-	-	103							
70.70	ALEXANDER AGASSIZ; October 14, 1962; 2210 GCT; 35°32'N, 123°05'W; sounding, 2050 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 36°.													
1	15.86	32.947	5.74	0.6	1	0.03	371	0	(15.86)	(32.95)	(5.74)	(24.22)	(370)	(0.00)
9	15.81	32.942	5.66	0.6	3	0.03	370	10	15.80	32.95	5.66	24.24	369	0.04
25	15.06	33.236	5.89	0.7	2	0.12	333	20	15.70	32.98	5.68	24.28	365	0.07
32	13.62	33.391	5.78	0.8	2	0.14	293	30	13.97	33.38	5.79	24.96	300	0.11
44	11.49	33.171	5.64	1.0	6	0.03	270	50	10.96	33.21	5.39	25.41	258	0.16
55	10.50	33.248	5.11	-	-	0.06	247	75	10.37	33.62	4.22	25.83	217	0.22
73	10.44	33.568	4.42	-	-	0.15	222	100	10.00	33.72	3.72	25.97	204	0.28
89	10.23	33.669	4.01	-	-	-	212	125	8.97	33.83	3.27	26.23	180	0.32
104	9.76	33.767	3.43	-	-	-	197	150	8.59	33.91	3.01	26.35	168	0.37
118	9.14	33.816	3.22	-	-	-	184	200	8.02	34.02	2.77	26.52	152	0.45
140	8.72	33.863	3.47	-	-	-	174	250	7.49	34.07	1.92	26.64	141	0.53
165	8.40	33.962	2.64	-	-	-	162	300	6.90	34.07	1.62	26.72	133	0.60
188	8.10	33.992	2.92	-	-	-	155	400	6.67	34.23	0.58	26.88	118	0.73
226	7.84	34.075	2.03	-	-	-	145	500	(5.77)	(34.26)	(0.36)	(27.02)	(105)	(0.84)
271	7.20	34.066	1.82	-	-	-	137							
337	6.68	34.092	1.38	-	-	-	129							
407	6.66	34.242	0.53	-	-	-	117							
484	5.94	34.258	0.36	-	-	-	107							
70.80	ALEXANDER AGASSIZ; October 14, 1962; 1304 GCT; 35°01'N, 123°39'W; sounding, 2450 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 08°.													
2	16.54	33.264	5.65	0.6	1	0.03	362	0	(16.54)	(33.26)	(5.65)	(24.31)	(363)	(0.00)
12	16.48	33.262	5.64	0.5	1	0.04	361	10	16.47	33.26	5.64	24.32	361	0.04
32	16.46	33.260	5.54	0.5	1	0.03	361	20	16.47	33.26	5.59	24.32	361	0.07
42	15.29	33.234	5.70	0.6	2	0.02	338	30	16.46	33.26	5.54	24.33	361	0.11
57	12.61	33.167	5.69	0.8	4	0.14	290	50	12.90	33.17	5.69	25.02	295	0.17
72	11.61	33.358	5.16	-	-	0.04	258	75	11.48	33.38	5.06	25.45	254	0.24
97	10.58	33.616	4.23	-	-	0.01	221	100	10.51	33.63	4.18	25.82	219	0.30
117	9.92	33.771	3.46	-	-	0.00	199	125	9.68	33.84	3.00	26.12	190	0.35
136	9.36	33.941	2.26	-	-	-	178	150	9.12	34.01	1.87	26.34	169	0.40
156	9.03	34.034	1.75	-	-	-	166	200	8.68	34.15	1.09	26.52	152	0.48
186	8.78	34.124	1.18	-	-	-	155	250	8.41	34.20	0.87	26.60	144	0.56
221	8.56	34.184	0.99	-	-	-	148	300	8.13	34.23	0.77	26.67	138	0.63
252	8.40	34.206	0.84	-	-	-	144	400	7.41	34.26	0.58	26.80	126	0.77
302	8.10	34.238	0.76	-	-	-	137	500	6.53	34.29	0.39	26.94	112	0.89
357	7.72	34.257	0.64	-	-	-	130	600	5.75	34.33	0.29	27.08	99	1.01
444	7.04	34.271	0.50	-	-	-	120							
528	6.29	34.300	0.35	-	-	-	108							
616	5.64	34.331	0.29	-	-	-	98							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; October 14, 1962; 0706 GCT; 34°48.5'N, 124°27'W; sounding, 2370 fm; wind, 280°, force 4; weather, rain; sea, very rough; wire angle, 20°.														70.90
3	17.04	33.346	5.61	0.5	1	0.01	367	0	(17.04)	(33.35)	(5.61)	(24.26)	(367)	(0.00)
12	17.03	33.345	5.63	0.5	2	0.02	367	10	17.03	33.34	5.63	24.26	368	0.04
36	15.02	33.387	5.70	0.8	2	0.09	321	20	17.02	33.34	5.63	24.26	367	0.07
44	14.26	33.516	5.62	1.0	3	0.08	296	30	16.64	33.35	5.66	24.35	358	0.11
59	11.42	33.346	5.10	1.4	10	0.09	255	50	13.68	33.48	5.53	25.10	287	0.17
73	10.30	33.431	4.61	-	-	0.01	230	75	10.20	33.45	4.57	25.73	227	0.24
97	9.31	33.600	4.18	-	-	0.00	202	100	9.26	33.62	4.09	26.02	200	0.29
115	9.12	33.727	3.65	-	-	0.00	190	125	9.04	33.79	3.53	26.19	184	0.34
133	8.98	33.833	3.48	-	-	-	180	150	8.73	33.92	3.43	26.34	170	0.39
161	8.55	33.946	3.41	-	-	-	165	200	8.02	33.99	3.16	26.50	154	0.47
189	8.17	33.978	3.30	-	-	-	157	250	7.31	34.01	2.49	26.62	143	0.55
226	7.66	34.006	2.76	-	-	-	148	300	6.75	34.04	1.79	26.72	133	0.62
255	7.22	34.012	2.44	-	-	-	142	400	5.77	34.12	0.89	26.91	115	0.75
302	6.72	34.045	1.75	-	-	-	133	500	5.16	34.20	0.51	27.04	102	0.86
364	6.08	34.093	1.11	-	-	-	121	600	4.77	34.28	0.28	27.15	92	0.96
461	5.34	34.171	0.63	-	-	-	107							
557	4.93	34.258	0.35	-	-	-	96							
633	4.62	34.302	0.26	-	-	-	89							
ALEXANDER AGASSIZ; October 14, 1962; 0055 GCT; 34°36.5'N, 125°23'W; sounding, 2450 fm; wind, 230°, force 5; weather, partly cloudy; sea, high; wire angle, 13°.														70.100
4	17.20	33.300	5.68		2	0.02	374	0	17.2	(33.30)	(5.68)	(24.18)	(374)	(0.00)
14	17.16	33.294	5.74		2	0.01	374	10	17.18	33.29	5.73	24.18	375	0.04
38	13.30	33.197	6.12		2	0.15	301	20	17.12	33.29	5.78	24.20	373	0.07
48	11.92	33.351	5.49		7	0.19	264	30	17.00	33.28	5.80	24.22	371	0.11
63	10.88	33.518	4.84		15	0.09	233	50	11.75	33.38	5.37	25.40	259	0.18
77	10.22	33.620	4.27		18	0.00	215	75	10.29	33.61	4.32	25.84	217	0.24
102	9.42	33.772	3.59		27	0.00	191	100	9.48	33.76	3.67	26.09	193	0.29
122	9.02	33.895	2.91		31	0.00	176	125	8.97	33.91	2.91	26.29	174	0.33
141	8.72	33.773u	3.65u		25u	0.00		150	8.58	33.96	2.91	26.39	164	0.38
171	8.21	33.986	2.92		37	0.00	157	200	7.69	34.00	2.64	26.56	149	0.46
202	7.68	34.001	2.63		43	0.00	149	250	6.98	34.01	2.20	26.66	139	0.53
242	7.10	34.015	2.22		51	0.00	140	300	6.44	34.05	1.72	26.77	129	0.60
273	6.66	34.015	2.16		54	0.00	134	400	5.59	34.10	0.99	26.91	115	0.72
322	6.28	34.069	1.42		64	0.00	125	500	5.31	34.22	0.43	27.04	103	0.84
387	5.63	34.084	1.09		74	0.00	116	600	4.80	34.30	0.28	27.17	91	0.94
487	5.38	34.210	0.47		88	0.00	104							
576	4.90	34.292	0.30		96	0.00	93							
651	4.67	34.327	0.24		102	0.00	88							
ALEXANDER AGASSIZ; October 13, 1962; 1615 GCT; 33°52'N, 126°37'W; sounding, 2500 fm; wind, 280°, force 3; weather, drizzle; sea, high; wire angle, 22°.														70.120
2	18.08	33.198	5.33	0.4	2		402	0	(18.08)	(33.20)	(5.33)	(23.90)	(402)	(0.00)
10	18.10	33.258	5.42	0.4	2		398	10	18.10	33.26	5.42	23.94	398	0.04
30	18.11	33.261	5.36	0.4	3		398	20	18.11	33.26	5.39	23.93	398	0.08
57	16.86	33.154	5.67	0.5	3		377	30	18.11	33.26	5.36	23.93	398	0.12
66	15.30	33.147	5.95	0.5	3		344	50	17.74	33.23	5.44	24.00	392	0.20
80	13.26	33.098	6.21	-	-		307	75	13.90	33.10	6.15	24.76	319	0.29
93	11.92	33.096	5.86	-	-		283	100	11.13	33.07	5.70	25.27	271	0.36
108	10.62	33.061	5.60	-	-		263	125	10.24	33.25	5.10	25.57	243	0.43
129	10.22	33.322	4.98	-	-		237	150	9.61	33.54	4.83	25.90	211	0.48
148	9.64	33.523	4.85	-	-		213	200	8.79	33.90	4.28	26.31	172	0.58
176	9.18	33.772	4.52	-	-		187	250	7.98	34.01	2.67	26.52	152	0.67
204	8.72	33.914	4.23	-	-		170	300	7.38	34.05	1.79	26.64	141	0.74
231	8.29	33.979	3.29	-	-		159	400	5.86	34.01	1.76	26.81	125	0.88
280	7.58	34.037	1.94	-	-		145	500	5.43	34.16	0.61	26.98	108	1.00
334	7.05	34.064	1.60	-	-		135	600	(4.98)	(34.24)		(27.10)	(97)	(1.11)
416	5.68	34.010	1.80	-	-		123							
498	5.44	34.155	0.63	-	-		109							
583	5.08	34.227	0.36	-	-		100							

	OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
	Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
	m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
70.200	ALEXANDER AGASSIZ; October 28, 1962; 1019 GCT; 31°14.5'N, 131°59'W; sounding, 2550 fm; wind, 100°, force 3; weather, overcast; sea, slight; wire angle, 06°.														
	1	20.55	34.101	5.02	0.2	1	0.00	397	0	(20.55)	(34.10)	(5.02)	(23.95)	(397)	(0.00)
	11	20.54	34.107	5.14	0.2	1	0.00	396	10	20.54	34.10	5.08	23.95	396	0.04
	31	20.70	34.212	5.16	0.2	1	0.00	392	20	20.62	34.16	5.15	23.98	394	0.08
	61	20.24	34.327	5.33	0.2	1	0.00	372	30	20.70	34.21	5.16	23.99	392	0.12
	71	19.71	34.521	5.53	0.2	1	0.00	345	50	20.70	34.24	5.18	24.02	390	0.20
	86	16.98	34.209	5.70	0.2	1	0.00	303	75	19.10	34.46	5.60	24.60	334	0.29
	100	16.04	34.105	5.58	0.3	2	0.00	290	100	16.04	34.10	5.58	25.07	290	0.37
	115	15.58	34.067	5.29u	0.2	2	0.00	283	125	15.40	34.10		25.21	277	0.44
	140	15.12	34.180	5.43	0.3	2	0.12	265	150	14.83	34.15	5.42	25.37	261	0.51
	160	14.27a)	34.073	5.39	0.4	3	0.00	255	200	11.16	33.79	5.12	25.83	218	0.63
	190	11.70	33.784	5.19	0.7	7	0.00	228	250	9.56	33.94	4.52	26.22	181	0.73
	220	10.27	33.801	4.96	1.0	13	0.00	202	300	8.46	33.99	4.04	26.43	160	0.82
	250	9.56	33.937	4.52	1.2	19	0.00	181	400	6.79	34.01	2.45	26.69	136	0.97
	300	8.46	33.986	4.04	1.6	31	0.00	161	500	5.72	34.09	1.15	26.89	117	1.11
	355	7.42	33.989	3.31	1.9	44	0.00	146	600	5.01	34.18	0.59	27.05	102	1.22
	440	6.29	34.037	1.80	2.4	65	0.00	128							
	524	5.50	34.111	0.94	2.7	82	0.00	113							
	609	4.96	34.184	0.56	2.8	99	0.00	101							
73.53	ALEXANDER AGASSIZ; October 10, 1962; 0404 GCT; 35°31.5'N, 121°28.5'W; sounding, 390 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 11°.														
	1	13.56	33.620	5.87	1.0	11		275	0	(13.56)	(33.62)	(5.87)	(25.23)	(275)	(0.00)
	11	13.54	33.618	5.87	1.0	12		274	10	13.55	33.62	5.87	25.23	274	0.03
	30	12.48	33.609	4.94	1.4	15		255	20	13.00	33.61	5.44	25.34	265	0.05
	40	12.30	33.603	4.76	1.3	16		252	30	12.48	33.61	4.94	25.44	255	0.08
	54	11.94	33.625	4.48	1.4	17		244	50	12.06	33.62	4.56	25.53	247	0.13
	70	10.32	33.672	3.79	1.6	25		213	75	10.16	33.70	3.64	25.93	208	0.19
	95	9.67	33.840	3.06	-	-		190	100	9.47	33.87	3.02	26.18	185	0.24
	115	8.84	33.930	2.91	-	-		171	125	8.70	33.96	2.80	26.37	166	0.28
	134	8.64	33.981	2.65	-	-		164	150	8.71	34.05	2.19	26.44	160	0.32
	156	8.74	34.073	2.00	-	-		158	200	8.77	34.14	1.43	26.50	154	0.40
	186	8.80	34.135	1.49	-	-		155	250	8.26	34.16	1.34	26.60	145	0.48
	222	8.62	34.146	1.39	-	-		151	300	7.88	34.17	1.24	26.66	139	0.55
	251	8.25	34.166	1.33	-	-		144	400	7.34	34.21	0.85	26.77	128	0.68
	302	7.88	34.175	1.23	-	-		138	500	6.28	34.30	0.31	26.99	108	0.82
	357	7.48	34.186	1.00	-	-		132	600	5.41	34.35	0.25	27.13	94	0.93
	439	7.14	34.242	0.66	-	-		123							
	518	6.06	34.314	0.29	-	-		104							
	606	5.38	34.356	0.23	-	-		93							
73.60	ALEXANDER AGASSIZ; October 10, 1962; 0741 GCT; 35°18'N, 121°57.5'W; sounding, 1110 fm; wind, 280°, force 4; weather, light fog; sea, slight; wire angle, 08°.														
	1	14.24	33.677	6.44	0.7	9		284	0	(14.24)	(33.68)	(6.44)	(25.14)	(284)	(0.00)
	10	14.21	33.671	6.48	0.8	10		284	10	14.21	33.67	6.48	25.14	284	0.03
	30	13.94	33.676	5.50	0.8	10		278	20	14.09	33.67	6.17	25.16	281	0.06
	40	13.82	33.668	5.48	0.9	11		276	30	13.94	33.68	5.50	25.20	278	0.08
	55	11.19	33.614	4.49	1.5	17		232	50	12.81	33.64	5.09	25.40	259	0.14
	70	10.34	33.636	4.11	1.6	18		216	75	10.11	33.65	4.01	25.90	211	0.20
	95	9.46	33.790	3.30	-	-		190	100	9.35	33.81	3.18	26.15	187	0.25
	115	9.10	33.865	2.97	-	-		179	125	8.93	33.90	2.84	26.29	174	0.29
	135	8.76	33.939	2.71	-	-		169	150	8.38	33.99		26.44	159	0.34
	155	8.29	33.999	0.70u	-	-		157	200	7.81	34.03	2.22	26.56	148	0.41
	184	7.97	34.022	2.30	-	-		151	250	7.77	34.13	1.48	26.65	140	0.49
	219	7.70	34.041	2.06	-	-		146	300	7.65	34.21	0.90	26.73	133	0.56
	248	7.77	34.126	1.51	-	-		141	400	6.93	34.26	0.54	26.87	119	0.69
	299	7.66	34.210	0.91	-	-		133	500	6.16	34.30	0.28	27.00	107	0.81
	354	7.32	34.244	0.69	-	-		126	600	5.59	34.32	0.22	27.09	98	0.92
	439	6.59	34.276	0.41	-	-		114							
	524	6.02	34.302	0.26	-	-		105							
	609	5.53	34.322	0.22	-	-		97							

a) Alternate value, 14.51°C, not used in interpolation.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; October 10, 1962; 2353 GCT; 35°02'N, 120°56'W; sounding, 130 fm; wind, 320°, force 2; weather, fog; sea, very rough; wire angle, 03°.														77.51
1	13.49	33.665	6.19	0.8	12		270	0	(13.49)	(33.66)	(6.19)	(25.28)	(270)	(0.00)
11	12.84	33.664	5.88	0.8	11		258	10	12.95	33.66	5.93	25.39	260	0.03
31	11.10	33.651	4.01	1.4	16		227	20	11.83	33.66	4.77	25.60	239	0.05
51	10.67	33.693	3.73	1.6	20		217	30	11.16	33.65	4.07	25.72	229	0.07
76	10.19	33.710	3.62	1.7	22		208	50	10.69	33.69	3.74	25.83	218	0.12
101	10.17	33.794	3.16	1.8	25		201	75	10.20	33.71	3.63	25.93	208	0.17
126	9.60	33.860	2.91	-	-		187	100	10.17	33.79	3.17	26.00	202	0.22
166	9.30	33.996	2.21	-	-		173	125	9.62	33.86	2.94	26.15	188	0.27
206	9.10	34.099	1.84	-	-		162	150	9.40	33.95	2.41	26.25	178	0.32
								200	9.14	34.08	1.89	26.40	164	0.41
ALEXANDER AGASSIZ; October 10, 1962; 1924 GCT; 34°54'N, 121°13'W; sounding, 305 fm; wind, 320°, force 1; weather, fog; sea, very rough; wire angle, 03°.														77.55
2	14.82	33.614	5.68	0.7	4		300	0	(14.82)	(33.61)	(5.68)	(24.96)	(300)	(0.00)
12	14.53	33.614	5.67	0.8	5		294	10	14.57	33.61	5.67	25.01	295	0.03
32	13.30	33.596	5.56	1.0	9		271	20	14.50	33.61	5.66	25.03	294	0.06
42	11.52	33.456	4.86	1.3	11		249	30	13.55	33.60	5.60	25.22	276	0.09
52	11.12	33.463	4.62	1.4	13		242	50	11.20	33.46	4.64	25.56	243	0.14
62	10.52	33.474	4.55	1.5	14		231	75	9.97	33.61	3.89	25.89	212	0.20
72	10.08	33.557	4.14	-	-		217	100	9.02	33.82	3.46	26.21	181	0.25
87	9.46	33.770	3.44	-	-		192	125	8.93	33.95	3.00	26.33	170	0.29
102	8.98	33.834	3.46	-	-		180	150	9.18	34.08	1.89	26.39	165	0.33
117	8.82	33.879	3.34	-	-		174	200	8.88	34.12	1.67	26.47	157	0.42
142	9.21	34.072	1.99	-	-		166	250	8.46	34.21	1.12	26.60	144	0.49
171	8.95	34.096	1.79	-	-		160	300	8.02	34.23	0.90	26.69	136	0.57
207	8.84	34.133	1.62	-	-		155	400	7.05	34.21	0.73	26.81	125	0.70
256	8.40	34.213	1.07	-	-		143	500	6.27	34.29	0.40	26.98	109	0.82
307	7.96	34.231	0.88	-	-		135							
413	6.92	34.205	0.70	-	-		123							
512	6.20	34.302	0.32	-	-		107							
ALEXANDER AGASSIZ; October 10, 1962; 1520 GCT; 34°49'N, 121°18.5'W; sounding, 245 fm; wind, 080°, force 1; weather, fog; sea, very rough; wire angle, 15°.														77.57
1	14.67	33.662	5.62				294	0	(14.67)	(33.66)	(5.62)	(25.03)	(294)	(0.00)
10	14.63	33.659	5.66				293	10	14.63	33.66	5.66	25.04	293	0.03
29	14.40	33.654	5.52				289	20	14.53	33.66	5.61	25.06	291	0.06
38	12.32	33.528	5.12				258	30	14.36	33.65	5.51	25.09	288	0.09
53	11.50	33.531	4.79				243	50	11.64	33.53	4.84	25.54	246	0.14
67	10.82	33.487	4.65				235	75	10.42	33.50	4.49	25.73	227	0.20
91	9.72	33.645	3.94				205	100	9.74	33.69	3.68	25.99	202	0.25
110	9.75	33.747	3.43				198	125	9.11	33.84	3.33	26.21	181	0.30
128	8.99	33.859	3.29				178	150	8.46	33.96	2.87	26.41	163	0.35
146	8.50	33.947	2.96				164	200	8.17	34.12	1.68	26.58	147	0.43
173	8.18	34.068	2.03				151	250	7.44	34.14	1.36	26.70	135	0.50
204	8.16	34.127	1.67				146							
231	7.44	34.101	1.61				138							
272	7.47	34.183	1.09				132							
313	7.36	34.215	0.86				128							
365	6.96	34.258	0.54				120							
407a)	6.80	34.273	0.47				117							
409a)	6.61	34.293	0.55				113							

a) Owing to an error in reading the fathometer, the last two Nansen bottles of this cast rested on the bottom; the data were rejected.

SIO

CCOFI
6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
77.57	ALEXANDER AGASSIZ; October 10, 1962; 1723 GCT;[a] 34°49'N, 121°18.5'W; sounding, 240 fm; wind, 080°, force 1; weather, fog; sea, very rough; wire angle, 00°.													
2	14.76	33.661	5.54	0.7	6	0.16	295							
7	14.70	33.663	5.62	0.6	6	0.17	294							
12	14.70	33.663	5.59	0.7	7	0.17	294							
17	14.68	33.667	5.58	0.8	7	0.16	293							
22	14.70	33.666	5.56	0.8	6	0.17	294							
27	14.67	33.672	5.54	0.8	6	0.16	293							
32	14.63	33.669	5.52	0.7	6	0.17	292							
37	14.48	33.667	5.46	0.8	6	0.18	289							
42	13.62	33.623	5.17	0.9	9	0.33	276							
47	12.70	33.552	5.11	1.3	10	0.50	263							
52	12.02	33.523	4.94	1.4	10	0.53	253							
57	11.38	33.538	4.71	1.5	13	0.06	241							
62	10.63	33.496	4.63	1.3	15	0.03	231							
67	10.29	33.509	4.59	1.6	16	0.03	224							
72	10.12	33.536	4.30	1.4	17	0.03	220							
77	10.02	33.556	4.19	1.3	18	0.02	217							
82	9.87	33.604	3.98	1.6	19	0.02	211							
87	9.78	33.651	3.80	1.6	22	0.00	206							
80.52	ALEXANDER AGASSIZ; October 11, 1962; 0430 GCT; 34°25'N, 120°36'W; sounding, 105 fm; wind, 330°, force 4; weather, clear; sea, very rough; wire angle, 12°.													
1	16.62	33.629	5.80	0.5	9		337	0	(16.62)	(33.63)	(5.80)	(24.57)	(337)	(0.00)
11	16.62	33.625	5.82	1.1	11		338	10	16.62	33.63	5.82	24.57	337	0.03
30	12.66	33.586	4.77	1.2	20		260	20	15.08	33.60	5.44	24.90	307	0.07
50	11.54	33.605	4.30	1.4	22		238	30	12.66	33.59	4.77	25.39	260	0.09
75	11.08	33.664	3.84	1.7	24		226	50	11.54	33.60	4.30	25.61	239	0.14
99	10.76	33.717	3.50	-	-		217	75	11.08	33.66	3.84	25.74	226	0.20
124	10.33	33.781	3.23	-	-		205	100	10.74	33.72	3.49	25.85	216	0.26
154	9.74	33.883	2.80	-	-		188	125	10.31	33.79	3.22	25.98	204	0.31
								150	9.82	33.87	2.87	26.12	190	0.36
80.55	ALEXANDER AGASSIZ; October 11, 1962; 0706 GCT; 34°18.5'N, 120°48'W; sounding, 425 fm; wind, 360°, force 2; weather, light fog; sea, very rough; wire angle, 01°.													
1	15.05	33.597	5.70	0.8	7		306	0	(15.05)	(33.60)	(5.70)	(24.90)	(306)	(0.00)
11	13.96	33.560	5.76	0.8	5		287	10	14.20	33.56	5.75	25.05	292	0.03
31	13.43	33.548	5.56	1.0	7		277	20	13.72	33.56	5.69	25.15	282	0.06
41	12.37	33.426	5.34	1.1	7		266	30	13.70	33.56	5.68	25.16	282	0.09
56	11.22	33.395	4.93	1.3	10		248	50	11.40	33.40	5.00	25.48	251	0.14
71	10.06	33.531	4.44	-	-		219	75	10.04	33.55	4.38	25.83	217	0.20
96	9.68	33.652	4.02	-	-		204	100	9.57	33.67	3.96	26.01	201	0.25
116	9.33	33.742	3.75	-	-		192	125	9.42	33.82	3.35	26.15	188	0.30
137	9.54	33.908	2.79	-	-		183	150	9.47	33.98	2.43	26.26	176	0.35
157	9.42	34.006	2.31	-	-		174	200	9.12	34.08	1.94	26.40	164	0.43
187	9.26	34.083	1.97	-	-		166	250	8.77	34.15	1.61	26.51	153	0.52
222	8.92	34.085	1.93	-	-		160	300	8.31	34.22	0.90	26.64	141	0.59
252	8.75	34.160	1.56	-	-		152	400	7.05	34.23	0.67	26.83	123	0.73
303	8.28	34.220	0.89	-	-		141	500	6.42	34.30	0.33	26.97	110	0.85
358	7.39	34.215	0.83	-	-		129	600	5.76	34.34	0.16	27.08	99	0.96
443	6.81	34.258	0.48	-	-		118							
528	6.24	34.312	0.29	-	-		107							
614	5.68	34.341	0.15	-	-		98							

a) Special cast to locate the nitrite maximum.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; October 11, 1962; 1120 GCT; 34°09'N, 121°09'W; sounding, 1160 fm; wind, direction missing, force 1; weather, light fog; sea, slight; wire angle, 08°. 80.60

0	15.92	33.491	5.66	0.5	1		332	0	15.92	33.49	5.66	24.63	332	0.00
10	15.33	33.508	5.72	0.5	1		318	10	15.33	33.51	5.72	24.77	318	0.03
31	14.90	33.538	5.62	0.6	2		307	20	15.14	33.52	5.69	24.82	314	0.06
41	14.58	33.520	5.58	0.7	3		302	30	14.93	33.54	5.63	24.88	308	0.10
50	13.09	33.360	5.57	0.8	4		285	50	13.09	33.36	5.57	25.13	285	0.15
65	11.38	33.418	5.09	-	-		249	75	11.23	33.43	4.97	25.53	246	0.22
80	11.16	33.435	4.90	-	-		244	100	10.16	33.56	4.39	25.82	218	0.28
99	10.21	33.549	4.44	-	-		220	125	9.38	33.74	3.79	26.09	193	0.33
124	9.40	33.728	3.82	-	-		194	150	9.03	33.83	3.50	26.22	181	0.38
143	9.12	33.801	3.56	-	-		184	200	8.22	33.97	3.18	26.45	159	0.47
174	8.66	33.930	3.39	-	-		168	250	7.54	34.04	2.17	26.61	144	0.54
203	8.18	33.980	3.12	-	-		157	300	7.11	34.09	1.45	26.71	134	0.61
232	7.74	34.017	2.65	-	-		148	400	6.28	34.15	0.96	26.87	119	0.75
273	7.34	34.069	1.65	-	-		139	500	5.79	34.23	0.58	26.99	107	0.87
333	6.88	34.113	1.28	-	-		130							
408	6.22	34.156	0.91	-	-		118							
484	5.86	34.230	0.65	-	-		108							
562	5.48	34.292	0.25	-	-		99							

ALEXANDER AGASSIZ; October 11, 1962; 1751 GCT; 33°50'N, 121°54'W; sounding, 2000 fm; wind, 170°, force 3; weather, cloudy; sea, high; wire angle, 13°. 80.70

2	16.04	33.605	5.28				327	0	(16.04)	(33.60)	(5.28)	(24.68)	(327)	(0.00)
12	15.75	33.594	5.38				321	10	15.80	33.59	5.37	24.73	322	0.03
36	15.43	33.642	5.38				311	20	15.64	33.60	5.38	24.77	318	0.06
66	10.72	33.347	4.80				243	30	15.54	33.63	5.38	24.82	314	0.10
76	10.48	33.503	4.29				228	50	12.99	33.26a)	5.12	25.07	290	0.16
95	10.28	33.736	3.56				207	75	10.51	33.49	4.33	25.71	229	0.22
110	9.52	33.735	3.42				195	100	10.14	33.74	3.52	25.97	205	0.28
125	8.98	33.811	3.33				181	125	8.98	33.81	3.33	26.21	182	0.33
154	8.50	33.932	3.29				165	150	8.57	33.92	3.29	26.36	167	0.37
174	8.26	33.971	3.08				159	200	7.93	33.99	2.98	26.51	153	0.45
203	7.88	33.990	2.96				152	250	7.34	34.04	2.06	26.64	141	0.53
237	7.40	34.010	2.47				144	300	6.93	34.09	1.43	26.73	132	0.60
268	7.29	34.077	1.60				138	400	6.04	34.16	0.67	26.91	116	0.73
317	6.73	34.093	1.34				129	500	5.56	34.24	0.34	27.03	104	0.84
381	6.19	34.148	0.77				118	600	5.26	34.34	0.27	27.14	93	0.95
479	5.62	34.222	0.39				106							
568	5.36	34.319	0.26				96							
642	5.11	34.378	0.30				89							

ALEXANDER AGASSIZ; October 11, 1962; 1910 GCT;[b] 33°50'N, 121°54'W; sounding, 2000 fm; wind, 170°, force 2; weather, cloudy; sea, high; wire angle, 10°. 80.70

1	16.18	33.594	5.66	0.6	1	0.06	330	0	(16.18)	(33.59)	(5.66)	(24.64)	(331)	(0.00)
6	16.06	33.589	5.62	0.5	1	0.07	328	10	15.78	33.58	5.68	24.73	323	0.03
11	15.74	33.579	5.69	0.5	1	0.06	322	20	15.67	33.59	5.66	24.76	320	0.06
16	15.72	33.578	5.68	0.5	2	0.05	322	30	15.55	33.61	5.63	24.80	316	0.10
21	15.67	33.587	5.66	0.6	2	0.05	320	50	11.95	33.26	5.57	25.27	271	0.16
26	15.64	33.592	5.64	0.6	1	0.07	319	75	10.72	33.46	4.64	25.65	235	0.22
31	15.52	33.613	5.63	0.6	1	0.08	315							
36	15.48	-	5.57	0.6	1	0.09								
41	15.34	33.618	5.54	0.6	2	0.10	311							
46	12.97	33.346	5.62	0.9	5	0.27	283							
50	11.95	33.257	5.57	1.0	6	0.35	271							
55	11.44	33.232	5.40	1.1	8	0.31	264							
60	11.17	33.230	5.23	1.2	9	0.25	260							
65	10.98	33.295	5.10	1.3	11	0.21	252							
70	10.64	33.351	4.87	1.3	13	0.04	242							
75	10.72	33.456	4.64	1.4	14	0.01	235							
80	10.56	33.523	4.42	1.5	14	0.02	228							
85	10.46	33.540	4.37	1.6	16	0.00	225							

a) This salinity value is derived from the property curves drawn for this cast and an additional cast taken one hour later.

b) Special cast to locate the nitrite maximum.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m.
80.80	ALEXANDER AGASSIZ; October 12, 1962; 0042 GCT; 33°29'N, 122°30'W; sounding, 2200 fm; wind, 200°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.													
2	17.51	33.350	5.41				378	0	(17.51)	(33.35)	(5.41)	(24.15)	(378)	(0.00)
11	17.47	33.341	5.42				377	10	17.47	33.34	5.42	24.15	378	0.04
30	17.22	33.349	5.41				371	20	17.32	33.35	5.41	24.19	373	0.08
58	15.37	33.247	5.86				338	30	17.22	33.35	5.41	24.22	371	0.11
67	14.52	33.225	5.92				323	50	17.10	33.35	5.43	24.25	368	0.19
82	13.69	33.250	5.92				304	75	14.05	33.23	5.92	24.83	313	0.27
95	12.72	33.334	5.51				280	100	12.30	33.36	5.27	25.28	270	0.35
109	12.24	33.426	5.12				264	125	11.08	33.46	4.78	25.58	241	0.41
133	10.57	33.476	4.62				231	150	9.97	33.60	4.17	25.89	212	0.47
151	9.92	33.618	4.13				210	200	8.83	33.90	3.56	26.30	173	0.57
179	9.16	33.822	3.75				183	250	7.91	34.00	2.79	26.52	152	0.65
206	8.72	33.923	3.47				169	300	7.24	34.02	2.36	26.64	141	0.72
234	8.18	33.985	2.88				157	400	6.14	34.09	1.21	26.84	122	0.86
281	7.46	34.010	2.65				145	500	5.57	34.22	0.52	27.01	106	0.98
333	6.90	34.045	1.90				135							
412	6.02	34.093	1.14				120							
493	5.60	34.206	0.59				107							
576	5.20	34.273	0.29				97							
80.80	ALEXANDER AGASSIZ; October 12, 1962; 0218 GCT; 33°29'N, 122°30'W; sounding, 2200 fm; wind, 200°, force 4; weather, cloudy; sea, very rough; wire angle, 08°.													
2	17.46	33.342	5.32	0.4	1	0.00	377	0	(17.46)	(33.34)	(5.32)	(24.15)	(377)	(0.00)
7	17.44	33.342	4.94	0.4	2	0.00	377	10	17.44	33.34	5.34	24.16	377	0.04
12	17.44	33.342	5.34	0.4	2	0.00	377	20	17.28	33.34	5.28	24.20	373	0.08
17	17.30	33.342	5.29	0.4	2	0.00	374	30	17.24	33.34	5.31	24.21	372	0.11
22	17.27	33.342	5.28	0.4	2	0.00	373	50	17.09	33.31	5.48	24.22	371	0.19
27	17.27	33.342	5.30	0.5	2	0.00	373	75	13.31	33.25	5.82	25.00	297	0.27
32	17.23	33.339	5.32	0.4	3	0.00	372							
37	17.18	33.338	5.30	0.4	2	0.00	371							
42	17.16	33.338	5.46a)	0.4	2	0.00	371							
47	17.09	33.334	5.45	0.5	2	0.00	369							
52	15.87	33.238	5.67	0.5	3	0.00	350							
57	15.13	33.222	5.97	0.5	3	0.00	335							
62	14.46	33.227	5.70	0.5	3	0.00	321							
67	13.82	33.205	5.76	0.6	4	0.02	310							
72	13.48	33.205	5.68	0.7	4	0.16	304							
76	13.29	33.258	5.83	0.6	4	0.02	296							
81	13.20	33.300	5.69	0.8	4	0.58	291							
86	12.86	33.324	5.54	0.8	5	0.05	283							
80.90	ALEXANDER AGASSIZ; October 12, 1962; 0812 GCT; 33°10.5'N, 123°11.5'W; sounding, 2300 fm; wind, 190°, force 4; weather, cloudy; sea, rough; wire angle, 30°.													
2	18.26	33.231	5.36	0.5	2		404	0	(18.26)	(33.23)	(5.36)	(23.88)	(404)	(0.00)
10	18.22	33.227	-	0.4	2		403	10	18.22	33.23	5.37	23.89	403	0.04
30	17.93	33.191	5.38	0.5	3		399	20	18.08	33.20	5.37	23.90	402	0.08
57	15.57	33.239	5.86	0.5	3		343	30	17.93	33.19	5.38	23.93	399	0.12
66	14.26	33.236	5.91	0.5	3		317	50	17.80	33.21	5.41	23.97	395	0.20
83	13.55	33.377	5.84	-	-		292	75	13.85	33.28	5.90	24.91	305	0.29
94	13.20	33.438	5.77	-	-		281	100	13.04	33.46	5.63	25.21	276	0.36
107	12.80	33.489	5.45	-	-		270	125	11.41	33.49	5.13	25.55	245	0.43
132	10.88	33.494	5.04	-	-		235	150	9.97	33.56	4.82	25.85	215	0.49
148	10.04	33.543	4.86	-	-		218	200	9.01	33.84	4.08	26.23	180	0.59
172	9.48	33.712	4.53	-	-		196	250	8.23	33.96	3.09	26.44	159	0.67
199	9.02	33.838	4.11	-	-		180	300	7.42	34.01	2.50	26.60	144	0.75
226	8.60	33.914	3.46	-	-		168	400	6.23	34.08	1.31	26.82	124	0.89
268	7.94	33.985	2.81	-	-		153	500	5.91	34.22	0.49	26.97	110	1.01
326	6.99	34.027	2.14	-	-		137							
416	6.15	34.101	1.16	-	-		121							
499	5.92	34.218	0.50	-	-		110							
572	5.62	34.280	0.32	-	-		102							

a) Alternate value, 5.32 ml/L, not used in interpolation.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; October 12, 1962; 1440 GCT; 32°54.5'N, 123°56'W; sounding, 2340 fm; wind, 200°, force 5; weather, cloudy; sea, rough; wire angle, 34°.														80.100
1	17.90	33.358	5.42	0.4	2		386	0	(17.90)	(33.36)	(5.42)	(24.06)	(386)	(0.00)
9	17.86	33.356	5.43	0.3	2		385	10	17.85	33.36	5.43	24.07	385	0.04
30	17.72	33.400	5.40	0.4	2		379	20	17.80	33.37	5.41	24.09	383	0.08
38	16.94	33.291	5.72	0.4	2		369	30	17.72	33.40	5.40	24.14	379	0.12
50	15.90	33.259	5.78	0.5	3		349	50	15.90	33.26	5.78	24.45	349	0.19
63	15.44	33.316	5.86	-	-		335	75	14.35	33.30	5.86	24.82	314	0.27
82	13.64	33.285	5.84	-	-		301	100	12.35	33.36	5.37	25.27	271	0.34
98	12.45	33.357	5.41	-	-		273	125	11.43	33.44	4.82	25.50	249	0.41
114	11.78	33.396	5.08	-	-		258	150	10.48	33.57	4.19	25.77	223	0.47
138	11.02	33.509	4.47	-	-		237	200	9.07	33.83	3.53	26.21	181	0.57
162	9.86	33.639	3.96	-	-		208	250	8.34	33.99	2.63	26.45	159	0.66
195	9.14	33.814	3.56	-	-		184	300	7.69	34.06	1.99	26.60	144	0.74
221	8.72	33.930	3.32	-	-		169	400	6.39	34.07	1.35	26.79	127	0.88
263	8.18	34.009	2.40	-	-		155	500	5.63	34.16	0.80	26.96	111	1.00
318	7.48	34.066	1.87	-	-		141							
407	6.30	34.076	1.31	-	-		125							
491	5.66	34.146	0.78	-	-		112							
563	5.52	34.250	0.34	-	-		103							
ALEXANDER AGASSIZ; October 12, 1962; 2342 GCT; 32°11'N, 125°11'W; sounding, 2300 fm; wind, 200°, force 5; weather, overcast; sea, very rough; wire angle, 37°.														80.120
2	18.21	33.371	5.43	0.4	1		392	0	(18.21)	(33.37)	(5.43)	(23.99)	(392)	(0.00)
10	18.18	33.365	5.36	0.4	2		392	10	18.18	33.36	5.36	23.99	392	0.04
30	17.42	33.334	5.48	0.4	1		377	20	17.53	33.34	5.47	24.14	379	0.08
37	17.36	33.328	5.50	0.4	2		376	30	17.42	33.33	5.48	24.16	377	0.12
47	16.74	33.319	5.68	0.4	1		363	50	16.30	33.31	5.72	24.40	354	0.19
61	15.11	33.284	5.82	-	-		330	75	13.64	33.29	5.89	24.96	300	0.27
77	13.38	33.296	5.89	-	-		295	100	12.00	33.42	5.15	25.38	260	0.34
91	12.37	33.378	5.42	-	-		270	125	10.77	33.56	4.30	25.72	229	0.40
107	11.64	33.463	4.89	-	-		251	150	9.98	33.68	3.79	25.95	207	0.46
128	10.66	33.562	4.24	-	-		227	200	8.82	33.91	2.88	26.31	172	0.55
148	10.06	33.663	3.89	-	-		209	250	8.13	34.03	2.20	26.51	153	0.64
177	9.24	33.825	3.07	-	-		184	300	7.39	34.07	1.79	26.65	140	0.71
200	8.82	33.911	2.88	-	-		172	400	6.22	34.12	1.00	26.85	121	0.85
235	8.32	34.004	2.34	-	-		157	500	5.64	34.19	0.46	26.98	109	0.97
283	7.66	34.058	1.94	-	-		144							
361	6.57	34.095	1.37	-	-		127							
436	5.97	34.151	0.69	-	-		115							
507	5.61	34.198	0.45	-	-		108							
ALEXANDER AGASSIZ; October 28, 1962; 2308 GCT; 29°29'N, 130°36'W; sounding, 2600 fm; wind, 270°, force 2; weather, rain; sea, very rough; wire angle, 00°.														80.200
1	20.68	34.186	5.07	0.4	2	0.01	394	0	(20.68)	(34.19)	(5.07)	(23.98)	(393)	(0.00)
11	20.28	34.280	5.13	0.3	2	0.01	377	10	20.28	34.27	5.12	24.15	377	0.04
31	19.80a)	34.443	5.21	0.2	2	0.01	353	20	20.33	34.35	5.14	24.20	373	0.08
61	18.09a)	34.309	5.57	0.2	2	0.01	321	30	20.20	34.43	5.17	24.29	364	0.11
71	16.88	34.066	5.69	0.3	2	0.02	311	50	18.45	34.36	5.49	24.69	326	0.18
87	17.35	34.418	5.45	-	-	0.01	296	75	16.74	34.10	5.64	24.90	306	0.26
102	16.98	34.436	5.41	-	-	0.02	287	100	16.98	34.43	5.42	25.10	287	0.34
117	16.72	34.429	5.37	-	-	0.02	281	125	16.58	34.42	5.31	25.19	279	0.41
142	15.94	34.381	5.15	-	-	0.10	268	150	15.21	34.28	5.09	25.39	260	0.48
162	13.90	34.089	5.03	-	-	0.04	247	200	11.35	33.82	4.98	25.81	219	0.60
192	11.72	33.843	5.01	-	-	0.03	224	250	9.62	33.89	4.60	26.17	185	0.70
222	10.44	33.779	4.77	-	-	0.01	207	300	8.51	34.00	4.09	26.43	160	0.79
252	9.56	33.901	4.58	-	-	-	184	400	6.75	33.99	2.76	26.68	137	0.95
302	8.46	33.999	4.07	-	-	-	160	500	5.60	34.08	1.24	26.90	116	1.08
357	7.38	33.983	3.47	-	-	-	146	600	5.02	34.19	0.51	27.05	102	1.19
442	6.20	34.012	2.06	-	-	-	129							
528	5.40	34.118	0.91	-	-	-	111							
613	4.96	34.206	0.46	-	-	-	100							

a) The bathythermogram for this station indicates temperatures of 17.9°C at 45 meters and 18.7°C at 55 meters.

90.28 ALEXANDER AGASSIZ; November 2, 1962; 1020 GCT; 33°28.5'N, 117°47'W; sounding, 200 fm; wind, 100°, force 3; weather, rain; sea, slight; wire angle, 10°.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
1	17.80	33.632	5.86	0.5	3	0.01	364	0	(17.80)	(33.63)	(5.86)	(24.29)	(364)	(0.00)
11	17.36	33.634	5.68	0.4	2	0.01	354	10	17.39	33.63	5.68	24.39	355	0.04
31	14.34	33.510	5.86	0.5	4	0.06	298	20	16.70	33.61	5.70	24.54	341	0.07
50	12.62	33.596	4.50	1.1	11	0.05	259	30	14.80	33.51	5.84	24.89	307	0.10
75	11.48	33.652	3.90	1.4	15	0.01	234	50	12.62	33.60	4.50	25.40	258	0.16
99	10.62	33.758	3.26	-	-	0.01	211	75	11.48	33.65	3.90	25.66	234	0.22
124	10.30	33.874	2.63	-	-	-	198	100	10.60	33.77	3.19	25.91	210	0.28
164	9.85	34.000	2.24	-	-	-	181	125	10.29	33.88	2.62	26.05	197	0.33
203	9.46	34.131	1.80	-	-	-	165	150	10.01	33.95	2.38	26.15	187	0.38
252	9.21	34.170	1.51	-	-	-	158	200	9.47	34.12	1.83	26.37	166	0.47
								250	9.22	34.17	1.53	26.45	159	0.55

90.32 ALEXANDER AGASSIZ; November 2, 1962; 0731 GCT; 33°21'N, 118°01.5'W; sounding, 460 fm; wind, 160°, force 1; weather, missing; sea, slight; wire angle, 00°.

1	17.34	33.658	5.46	0.4	1	0.00	351	0	(17.34)	(33.66)	(5.46)	(24.43)	(351)	(0.00)
11	17.24	33.654	5.53	0.5	1	0.00	349	10	17.25	33.65	5.52	24.44	350	0.04
31	16.45	33.617	5.68	0.5	2	0.00	335	20	17.09	33.65	5.59	24.48	346	0.07
41	15.09	33.538	5.89	0.6	3	0.01	311	30	16.46	33.62	5.67	24.60	335	0.10
51	13.52	33.480	5.51	0.9	5	0.01	284	50	13.59	33.48	5.55	25.12	285	0.17
66	12.92	33.523	5.12	-	-	0.27	269	75	12.40	33.52	4.98	25.38	260	0.23
81	11.68	33.528	4.72	-	-	0.05	247	100	10.61	33.60	4.19	25.78	223	0.30
102	10.57	33.616	4.13	-	-	0.01	221	125	10.33	33.76	3.40	25.95	206	0.35
127	10.30	33.763	3.37	-	-	-	206	150	9.51	33.82	3.06	26.13	189	0.40
147	9.60	33.816	3.10	-	-	-	191	200	8.55	34.03	2.35	26.45	159	0.49
177	8.93	33.957	2.70	-	-	-	170	250	8.45	34.20	1.40	26.60	145	0.57
207	8.45	34.053	2.24	-	-	-	156	300	7.95	34.23	1.02	26.70	135	0.64
237	8.56	34.184	1.55	-	-	-	148	400	7.21	34.28	0.40	26.84	121	0.77
277	8.18	34.212	1.17	-	-	-	140	500	6.60	34.33	0.47	26.97	110	0.90
338	7.63	34.254	0.82	-	-	-	129							
413	7.12	34.286	0.36	-	-	-	120							
488	6.68	34.325	0.49	-	-	-	111							
568	6.08	34.347	0.29	-	-	-	102							

90.37 ALEXANDER AGASSIZ; November 2, 1962; 0333 GCT; 33°11'N, 118°22.5'W; sounding, 660 fm; wind, 330°, force 3; weather, overcast; sea, very rough; wire angle, 00°.

2	16.85	33.678	5.63	0.3	1	0.00	339	0	(16.85)	(33.68)	(5.63)	(24.56)	(339)	(0.00)
12	16.67	33.668	5.73	0.4	2	0.00	336	10	16.72	33.67	5.71	24.58	337	0.03
32	12.60	33.537	5.02	1.0	9	0.38	262	20	14.30	33.58	5.38	25.05	292	0.07
42	11.64	33.552	4.65	1.2	10	0.11	244	30	13.00	33.54	5.12	25.28	270	0.09
52	11.06	33.569	4.68	1.3	14	0.01	233	50	11.17	33.57	4.68	25.65	235	0.14
67	10.38	33.615	4.05	-	-	-	218	75	10.22	33.66	3.84	25.89	212	0.20
82	10.08	33.718	3.64	-	-	-	206	100	9.62	33.83	2.99	26.12	190	0.25
102	9.58	33.840	2.92	-	-	-	189	125	9.22	33.97	2.59	26.30	173	0.30
127	9.20	33.979	2.57	-	-	-	172	150	9.11	34.06	2.30	26.39	165	0.34
147	9.13	34.050	2.32	-	-	-	166	200	8.80	34.16	1.69	26.51	153	0.42
177	8.80	34.092	2.05	-	-	-	158	250	8.22	34.19	1.34	26.63	142	0.50
207	8.80	34.183	1.61	-	-	-	151	300	7.97	34.25	0.92	26.71	134	0.57
238	8.30	34.183	1.46	-	-	-	144	400	7.29	34.30	0.51	26.85	121	0.70
278	8.08	34.229	1.07	-	-	-	137	500	6.39	34.33	0.26	26.99	107	0.82
338	7.74	34.276	0.71	-	-	-	129							
413	7.18	34.305	0.48	-	-	-	119							
488	6.48	34.325	0.28	-	-	-	109							
568	5.98	34.353	0.24	-	-	-	100							

SIO

CCOFI 6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m

90.45

ALEXANDER AGASSIZ; November 1, 1962; 2226 GCT;[a] 32°55'N, 118°55.5'W; sounding, 900 fm; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 00°.

1	16.03	33.738		0.4	3	0.04	317							
6	16.01	33.736		0.6	2	0.04	316							
11	15.80	33.732		0.5	3	0.06	312							
16	15.18	33.707		0.5	4	0.09	301							
21	14.04	33.669		0.7	7	0.15	280							
26	12.49	33.645		1.0	12	0.26	253							
31	11.57	33.647		1.2	17	0.34	236							
36	11.14	33.654		1.4	17	0.36	228							
41	10.64	33.658		1.4	19	0.16	219							
46	10.51	33.692		1.4	21	0.16	214							
51	10.44	33.697		1.5	23	0.12	213							
56	10.08	33.727		1.6	24	0.04	205							
61	9.97	33.745		1.7	25	0.02	202							
66	9.82	33.765		1.8	27	0.03	198							
71	9.74	33.781		1.8	26	0.03	195							
76	9.70	33.796		1.8	28	0.02	194							
81	9.59	33.812		1.8	29	0.02	191							
86	9.50	33.832		1.8	29	0.01	188							

90.45

ALEXANDER AGASSIZ; November 1, 1962; 2337 GCT; 32°55'N, 118°55.5'W; sounding, 900 fm; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 02°.

1	15.94	33.736	5.48	0.4	6	0.05	315	0	(15.94)	(33.74)	(5.48)	(24.81)	(314)	(0.00)
11	15.81	33.734	6.10	0.5	5	0.05	312	10	15.83	33.73	6.08	24.83	313	0.03
31	11.54	33.632	4.49	1.3	17	0.34	236	20	15.00	33.72	5.87	25.01	296	0.06
41	10.64	33.656	3.98	1.5	23	0.05	219	30	11.67	33.63	4.54	25.61	239	0.09
56	10.13	33.724	3.46	1.6	25	0.01	206	50	10.30	33.70	3.62	25.91	210	0.13
71	9.76	33.783	3.24	1.7	29	0.02	196	75	9.68	33.80	3.19	26.09	193	0.18
96	9.24	33.899	2.81	1.9	34	0.07	179	100	9.16	33.91	2.75	26.26	177	0.23
116	8.85	33.979	2.50	2.0	37	0.00	167	125	8.74	34.03	2.32	26.42	162	0.27
137	8.64	34.060	2.17	2.2	42	0.00	158	150	8.55	34.07	2.10	26.48	156	0.31
157	8.50	34.082	2.03	2.2	43	0.00	154	200	8.33	34.18	1.34	26.60	144	0.39
187	8.32	34.146	1.59	2.4	50	0.01	147	250	8.04	34.23	1.03	26.68	137	0.46
222	8.34	34.225	1.10	2.4	54	0.00	141	300	7.64	34.28	0.60	26.78	127	0.53
252	8.02	34.229	1.02	2.3	58	0.00	136	400	6.93	34.31	0.44	26.91	116	0.66
302	7.62	34.279	0.58	2.5	60	0.00	127	500	6.33	34.34	0.28	27.01	106	0.78
356	7.13	34.283	0.52	2.5	69	0.00	120	600	5.64	34.36	0.23	27.11	96	0.88
442	6.71	34.327	0.35	2.8	75	0.00	111							
527	6.12	34.344	0.25	2.8	90	0.00	103							
612	5.59	34.358	0.23	2.6	93	0.00	95							

90.53

ALEXANDER AGASSIZ; November 1, 1962; 1510 GCT;[a] 32°39'N, 119°29'W; sounding, 500 fm; wind, 300°, force 2; weather, overcast; sea, rough; wire angle, 03°.

2	16.33	33.669	0.4	1	0.01	328	
7	16.32	33.667	0.4	1	0.01	328	
12	16.33	33.674	0.4	1	0.01	328	
17	16.29	33.665	0.4	1	0.02	328	
22	16.12	33.658	0.4	1	0.03	324	
27	15.86	33.646	0.5	2	0.03	320	
32	14.25	33.556	0.7	4	0.14	293	
37	13.13	33.527	0.9	6	0.25	273	
42	12.21	33.538	1.2	10	0.13	255	
47	11.98	33.543	1.3	10	0.09	251	
52	11.80	33.557	1.3	11	0.07	247	
57	11.70	33.552	1.3	12	0.06	245	
62	11.24	33.589	1.4	14	0.03	234	
67	10.90	33.602	1.5	17	0.03	228	
72	10.54	33.637	1.6	18	0.02	219	
77	10.40	33.661	1.7	20	0.01	215	
82	10.11	33.707	1.9	23	0.01	207	
87	10.02	33.723	1.9	25	0.01	204	

a) Special cast to locate the nitrite maximum.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
90.53	ALEXANDER AGASSIZ; November 1, 1962; 1648 GCT; 32°39'N, 119°29'W; sounding, 500 fm; wind, 300°, force 2; weather, overcast; sea, rough; wire angle, 09°.													
2	16.17	33.668	5.56				325	0	(16.17)	(33.67)	(5.56)	(24.71)	(325)	(0.00)
12	16.12	33.664	5.61				324	10	16.13	33.67	5.60	24.72	324	0.03
32	15.84	33.643	5.65				319	20	16.06	33.66	5.63	24.72	323	0.06
61	11.28	33.585	4.44				235	30	15.89	33.65	5.65	24.75	320	0.10
71	10.83	33.624	4.08				225	50	11.95	33.58	4.67	25.52	248	0.15
86	9.94	33.767	3.33				200	75	10.51	33.67	3.80	25.85	216	0.21
100	9.78	33.805	3.15				194	100	9.78	33.80	3.15	26.07	195	0.26
115	9.55	33.892	2.79				184	125	9.42	33.91	2.76	26.22	181	0.31
141	9.30	33.929	2.70				178	150	9.24	33.96	2.58	26.29	174	0.36
160	9.17	34.012	2.33				169	200	8.65	34.16	1.50	26.54	151	0.44
190	8.78	34.137	1.67				154	250	8.21	34.24	0.98	26.67	138	0.51
219	8.45	34.196	1.28				145	300	7.77	34.28	0.65	26.76	129	0.58
249	8.22	34.241	0.99				138	400	6.92	34.29	0.41	26.89	117	0.71
298	7.78	34.283	0.65				129	500	6.43	34.32	0.31	26.98	108	0.83
352	7.24	34.287	0.47				121	600	5.79	34.34	0.29	27.08	99	0.94
436	6.72	34.300	0.38				114							
520	6.34	34.321	0.29				107							
605	5.74	34.336	0.29				99							
90.60	ALEXANDER AGASSIZ; November 1, 1962; 0804 GCT; 32°26'N, 119°58'W; sounding, 590 fm; wind, 280°, force 3; weather, fog; sea, very rough; wire angle, 06°.													
2	16.82	33.658	5.43				340	0	(16.82)	(33.66)	(5.43)	(24.55)	(340)	(0.00)
12	16.82	33.655	5.49				340	10	16.82	33.66	5.48	24.55	340	0.03
32	15.76	33.603	5.97				321	20	16.81	33.65	5.49	24.54	340	0.07
42	15.36	33.588	5.89				313	30	16.00	33.61	5.90	24.70	325	0.10
57	13.12	33.500	5.25				275	50	14.45	33.55	5.62	24.99	297	0.16
73	11.53	33.524	4.65				244	75	11.40	33.53	4.58	25.58	241	0.23
98	10.34	33.681	3.72				212	100	10.29	33.69	3.68	25.90	211	0.29
117	9.89	33.770	3.39				199	125	9.68	33.79	3.31	26.08	194	0.34
137	9.46	33.836	3.21				187	150	9.32	33.89	2.96	26.22	181	0.39
157	9.20	33.923	2.75				177	200	8.36	34.01	2.28	26.46	158	0.47
187	8.58	33.997	2.37				162	250	7.73	34.10	1.58	26.63	142	0.55
222	8.02	34.055	2.10				149	300	7.13	34.14	1.17	26.74	131	0.62
251	7.72	34.106	1.55				141	400	6.54	34.23	0.60	26.90	117	0.75
301	7.12	34.142	1.18				131	500	5.83	34.31	0.30	27.05	102	0.86
356	6.76	34.194	0.83				122	600	5.39	34.34	0.30	27.13	95	0.97
442	6.28	34.271	0.40				110							
527	5.66	34.325	0.29				99							
611	5.35	34.344	0.31				94							

90.60 ALEXANDER AGASSIZ; November 1, 1962; 0924 GCT;[a] 32°26'N, 119°58'W; sounding, 800 fm; wind, 330°, force 2; weather, fog; sea, very rough; wire angle, 05°.

2	16.86	33.661	0.4	2	0.00	340
7	16.85	33.661	0.4	2	0.00	340
12	16.85	33.661	0.4	2	0.01	340
17	16.86	33.658	0.4	2	0.01	341
22	16.86	33.658	0.4	2	0.01	341
27	16.82	33.654	0.4	2	0.01	340
32	15.56	33.594	0.5	3	0.02	317
37	14.78	33.558	0.6	4	0.29	303
42	14.26	33.535	0.8	5	0.64	295
47	14.01	33.538	0.9	5	0.66	289
52	12.94	33.499	1.1	8	0.23	272
57	11.98	33.536	1.3	11	0.23	251
62	11.19	33.537	1.4	13	0.03	237
67	11.04	33.545	1.4	14	0.03	234
72	10.73	33.569	1.5	16	0.03	227
77	10.64	33.586	1.6	17	0.03	224
82	10.56	33.628	1.7	18	0.02	220
87	10.37	33.667	1.8	20	0.02	214

a) Special cast to locate the nitrite maximum.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

90.70

ALEXANDER AGASSIZ; November 1, 1962; 0138 GCT; 32°05'N, 120°39'W; sounding, 2200 fm; wind, 320°, force 3; weather, missing; sea, very rough; wire angle, 12°.

1	16.96	33.672	5.49	0.3	1	0.01	342	0	(16.96)	(33.67)	(5.49)	(24.52)	(342)	(0.00)
11	16.94	33.673	5.47	0.3	1	0.01	341	10	16.94	33.67	5.47	24.53	342	0.03
30	16.92	33.669	5.38	0.5	1	0.00	341	20	16.93	33.67	5.42	24.53	341	0.07
39	14.26	33.540	5.61	0.7	5	0.23	294	30	16.92	33.67	5.38	24.53	341	0.10
54	12.50	33.528	5.27	0.9	8	0.11	261	50	12.87	33.53	5.40	25.30	268	0.16
69	11.73	33.610	4.64	1.3	13	0.23	241	75	11.40	33.62	4.43	25.65	235	0.23
94	10.48	33.645	3.91	1.5	21	0.02	217	100	10.20	33.70	3.64	25.92	209	0.28
113	9.62	33.848	3.06	2.2	31	0.01	189	125	9.35	33.88	2.87	26.21	182	0.33
132	9.20	33.892	2.78	1.9	33	0.00	179	150	8.82	33.96	2.40	26.35	168	0.38
152	8.78	33.966	2.38	2.0	38	0.00	167	200	8.15	34.05	2.19	26.53	152	0.46
181	8.38	34.010	2.45	2.1	43	-	158	250	7.50	34.11	1.53	26.67	138	0.53
214	7.95	34.073	1.94	2.2	53	-	147	300	7.15	34.16	1.13	26.76	130	0.60
244	7.54	34.101	1.58	2.4	60	-	139	400	6.47	34.24	0.51	26.91	115	0.73
292	7.21	34.155	1.21	2.4	66	-	131	500	5.98	34.32	0.30	27.04	103	0.84
345	6.80	34.198	0.84	2.5	76	-	122	600	5.24	34.34	0.21	27.15	93	0.95
434	6.30	34.268	0.40	2.7	88	-	111							
518	5.88	34.330	0.29	2.8	98	-	101							
601	5.22	34.345	0.21	2.8	109	-	92							

90.80

ALEXANDER AGASSIZ; October 31, 1962; 2039 GCT; 31°44'N, 121°20'W; sounding, 2250 fm; wind, 230°, force 3; weather, cloudy; sea, very rough; wire angle, 14°.

2	17.29	33.447	5.96	0.4	0	0.03	366	0	(17.29)	(33.45)	(5.96)	(24.28)	(365)	(0.00)
12	17.24	33.448	5.30	0.4	0	0.04	364	10	17.25	33.45	5.40	24.29	365	0.04
31	16.22	33.425	5.55	0.4	0	0.04	344	20	17.23	33.45	5.31	24.29	364	0.07
40	14.86	33.374	5.96	0.4	0	0.04	319	30	16.50	33.43	5.47	24.45	349	0.11
50	14.24	33.448	5.84	0.6	0	0.03	301	50	14.24	33.45	5.84	24.96	300	0.17
65	12.67	33.295	5.61	-	-	0.36	282	75	12.29	33.25	5.39	25.20	278	0.25
80	12.27	33.251	5.37	-	-	0.07	278	100	11.24	33.44	5.10	25.54	245	0.31
99	11.25	33.436	5.10	-	-	0.03	246	125	10.37	33.63	4.53	25.84	217	0.37
123	10.46	33.607	4.64	-	-	-	220	150	9.55	33.75	3.86	26.07	195	0.42
142	9.69	33.721	3.93	-	-	-	199	200	8.48	33.95	3.46	26.40	164	0.51
172	9.22	33.824	3.72	-	-	-	184	250	7.60	33.99	2.96	26.56	148	0.59
200	8.48	33.946	3.46	-	-	-	164	300	6.97	34.04	1.95	26.69	136	0.67
229	8.03	33.975	3.24	-	-	-	155	400	6.42	34.19	0.71	26.88	118	0.80
268	7.26	34.001	2.66	-	-	-	143	500	5.94	34.29	0.36	27.02	105	0.92
326	6.77	34.082	1.45	-	-	-	131							
398	6.43	34.184	0.72	-	-	-	119							
471	6.10	34.264	0.41	-	-	-	109							
548	5.64	34.315	0.31	-	-	-	99							

90.90

ALEXANDER AGASSIZ; October 31, 1962; 1612 GCT; 31°26'N, 121°58'W; sounding, 2300 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 03°.

3	16.85	33.458	5.45	0.4	1	0.01	355	0	(16.85)	(33.46)	(5.45)	(24.39)	(355)	(0.00)
13	16.82	33.455	5.52	0.5	1	0.02	355	10	16.83	33.46	5.51	24.39	354	0.04
38	16.61	33.441	5.52	0.5	2	0.02	351	20	16.82	33.45	5.52	24.39	355	0.07
48	15.86	33.427	5.76	0.5	1	0.03	336	30	16.81	33.45	5.52	24.39	355	0.11
63	14.18	33.411	5.73	0.8	3	0.27	302	50	15.73	33.42	5.76	24.61	333	0.18
78	12.20	33.267	5.50	-	-	0.44	275	75	12.60	33.29	5.58	25.17	281	0.25
103	10.87	33.495	4.59	-	-	0.02	235	100	10.98	33.47	4.67	25.61	239	0.32
123	10.00	33.649	4.04	-	-	0.02	209	125	9.97	33.66	4.01	25.93	208	0.37
142	9.27	33.815	3.52	-	-	0.02	186	150	9.09	33.85	3.43	26.22	180	0.42
173	8.67	33.923	3.19	-	-	0.02	169	200	8.25	34.00	2.88	26.47	157	0.51
203	8.20	34.006	2.86	-	-	0.02	156	250	7.37	34.02	2.70	26.62	143	0.59
242	7.48	34.012	2.81	-	-	-	145	300	6.73	34.04	1.96	26.72	133	0.66
272	7.08	34.021	2.29	-	-	-	139	400	6.04	34.13	0.97	26.88	118	0.79
324	6.47	34.055	1.68	-	-	-	129	500	5.59	34.24	0.50	27.02	104	0.90
389	6.08	34.124	1.01	-	-	-	119	600	5.10	34.34	0.32	27.16	91	1.01
488	5.64	34.223	0.53	-	-	-	106							
578	5.20	34.316	0.31	-	-	-	94							
653	4.94	34.374	0.32	-	-	-	87							

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OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
90.100 ALEXANDER AGASSIZ; October 31, 1962; 1110 GCT; 31°06'N, 122°39'W; sounding, 2300 fm; wind, 340°, force 3; weather, cloudy; sea, very rough; wire angle, 09°.														
2	17.41	33.449	5.43	0.4	2	0.01	368	0	(17.41)	(33.45)	(5.43)	(24.25)	(368)	(0.00)
12	17.40	33.445	5.36	0.4	2	0.03	368	10	17.40	33.45	5.37	24.25	368	0.04
36	16.16	33.445	5.71	0.6	2	0.04	341	20	17.30	33.44	5.37	24.27	366	0.07
46	15.30	33.495	5.71	0.6	2	0.07	319	30	16.50	33.44	5.62	24.45	349	0.11
60	13.89	33.309	5.82	0.6	3	0.09	304	50	14.96	33.45	5.73	24.81	315	0.18
75	12.39	33.305	5.39	-	-	0.23	276	75	12.39	33.30	5.39	25.22	276	0.25
100	11.26	33.297	4.87	-	-	0.03	256	100	11.26	33.30	4.87	25.43	256	0.32
120	10.34	33.480	4.57	-	-	0.03	227	125	10.13	33.52	4.49	25.80	221	0.38
139	9.64	33.598	4.18	-	-	0.03	207	150	9.40	33.68	3.91	26.04	198	0.43
169	9.06	33.821	3.49	-	-	0.04	182	200	8.60	33.95	3.06	26.38	166	0.52
198	8.62	33.941	3.08	-	-	0.03	166	250	7.85	34.01	2.54	26.54	150	0.60
237	7.98	33.999	2.71	-	-	0.04	153	300	7.22	34.05	2.01	26.66	139	0.68
267	7.67	34.026	2.31	-	-	-	147	400	6.20	34.13	0.96	26.86	120	0.81
315	7.00	34.058	1.85	-	-	-	135	500	5.57	34.22	0.45	27.01	106	0.93
379	6.36	34.104	1.15	-	-	-	124	600	5.16	34.30	0.30	27.12	95	1.04
477	5.66	34.200	0.52	-	-	-	108							
565	5.30	34.276	0.35	-	-	-	98							
638	4.99	34.334	0.29	-	-	-	91							
90.120 ALEXANDER AGASSIZ; October 31, 1962; 0206 GCT; 30°27'N, 124°01'W; sounding, 2400 fm; wind, 340°, force 4; weather, cloudy; sea, very high; wire angle, 26°.														
2	18.41	33.436	5.27	0.4	1	0.01	392	0	(18.41)	(33.44)	(5.27)	(24.00)	(392)	(0.00)
11	18.40	33.435	5.28	0.4	0	0.01	392	10	18.40	33.44	5.28	24.00	392	0.04
35	18.38	33.435	5.31	0.4	1	0.01	392	20	18.39	33.44	5.29	24.00	392	0.08
62	15.96	33.285	5.75	0.5	1	0.02	348	30	18.38	33.44	5.31	24.01	391	0.12
72	15.18	33.291	5.98	0.3	2	0.03	331	50	16.95	33.34	5.55	24.27	366	0.19
91	13.65	33.460	5.71	-	-	0.05	288	75	14.87	33.30	5.96	24.71	324	0.28
105	13.25	33.543	5.54	-	-	0.19	274	100	13.40	33.52	5.61	25.19	279	0.36
118	12.39	33.549	5.31	-	-	0.09	258	125	11.97	33.55	5.20	25.49	250	0.42
147	10.77	33.560	4.80	-	-	0.04	229	150	10.61	33.57	4.74	25.75	225	0.48
166	9.86	33.672	4.31	-	-	0.02	205	200	8.97	33.89	3.90	26.27	175	0.59
194	9.06	33.865	3.91	-	-	0.00	179	250	8.00	33.98	3.47	26.49	155	0.67
227	8.55	33.971	3.81	-	-	0.00	163	300	7.00	34.00	2.69	26.65	140	0.75
255	7.86	33.983	3.38	-	-	-	152	400	6.03	34.08	1.27	26.84	121	0.88
302	6.94	34.004	2.61	-	-	-	139	500	5.47	34.19	0.55	27.00	107	1.00
363	6.30	34.044	1.72	-	-	-	127	600	5.11	34.28	0.33	27.11	96	1.11
458	5.66	34.142	0.75	-	-	-	112							
545	5.32	34.238	0.42	-	-	-	101							
618	5.02	34.298	0.30	-	-	-	94							
90.140 ALEXANDER AGASSIZ; October 30, 1962; 1656 GCT; 29°44.5'N, 125°20.5'W; sounding, 2450 fm; wind, 020°, force 4; weather, cloudy; sea, rough; wire angle, 30°.														
2	18.98	33.585	5.11	0.4	2	0.00	395	0	(18.98)	(33.58)	(5.11)	(23.96)	(395)	(0.00)
10	18.98	33.579	5.03	0.4	0	0.00	396	10	18.98	33.58	5.03	23.96	395	0.04
27	18.99	33.585	5.07	0.4	1	0.00	395	20	18.98	33.58	5.06	23.96	395	0.08
53	19.32	33.961	5.27	0.3	1	0.00	376	30	19.02	33.63	5.10	23.99	393	0.12
61	18.64	33.955	5.40	0.3	1	0.00	360	50	19.32	33.94	5.24	24.15	378	0.20
74	17.31	34.033	5.47	-	-	0.00	323	75	17.28	34.03	5.48	24.72	323	0.28
85	16.88	34.021	5.60	-	-	0.00	315	100	16.22	34.02	5.41	24.96	300	0.36
98	16.28	34.021	5.45	-	-	0.01	301	125	15.43	34.01	5.08	25.13	284	0.44
119	15.67	34.012	5.02	-	-	0.05	289	150	13.57	33.89	5.13	25.44	255	0.50
135	14.97	34.030	5.27	-	-	0.12	273	200	10.52	33.77	4.60	25.92	209	0.62
161	12.55	33.791	4.98	-	-	-	243	250	8.71	33.95	3.77	26.36	167	0.72
185	11.08	33.750	4.66	-	-	-	220	300	7.84	33.98	3.30	26.52	152	0.80
211	10.09	33.804	4.54	-	-	-	199	400	6.36	34.05	1.70	26.78	128	0.95
252	8.66	33.950	3.76	-	-	-	166	500	5.82	34.18	0.65	26.95	111	1.07
299	7.86	33.986	3.31	-	-	-	152							
370	6.64	34.026	2.12	-	-	-	133							
442	6.04	34.088	1.17	-	-	-	121							
515	5.76	34.214	0.50	-	-	-	108							

SIO
CCOFI
6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m

90.160

ALEXANDER AGASSIZ; October 30, 1962; 0820 GCT; 29°03'N, 126°38'W; sounding, 2200 fm; wind, 040°, force 3; weather, partly cloudy; sea, rough; wire angle, 13°.

1	19.27	33.807	5.13	0.4	1	0.01	386	0	(19.27)	(33.81)	(5.13)	(24.06)	(386)	(0.00)
11	19.23	33.810	5.27	0.4	2	0.00	385	10	19.23	33.81	5.26	24.07	385	0.04
30	19.16	33.805	5.21	0.4	1	0.01	383	20	19.20	33.81	5.22	24.08	384	0.08
55	18.78	33.809	5.37	0.4	2	0.01	374	30	19.16	33.80	5.21	24.08	384	0.12
64	18.22	33.804	5.44	0.4	2	0.01	361	50	19.00	33.81	5.27	24.13	379	0.19
74	16.88	33.850	5.67	-	-	0.01	327	75	16.85	33.85	5.66	24.69	326	0.28
89	16.63	33.844	5.61	-	-	0.01	322	100	15.92	33.81	5.60	24.87	309	0.36
103	15.68	33.801	5.58	-	-	0.00	304	125	15.00	33.83	5.37	25.09	288	0.44
127	14.94	33.836	5.33	-	-	0.14	286	150	13.69	33.73	4.96	25.29	269	0.51
146	13.94	33.754	5.00	-	-	0.10	272	200	9.91	33.72	4.13	25.99	203	0.63
171	11.86	33.638	4.83	-	-	0.01	242	250	8.77	33.92	3.49	26.33	170	0.72
199	9.92	33.723	4.14	-	-	0.01	203	300	7.89	34.01	2.91	26.53	151	0.80
228	9.20	33.833	3.74	-	-	-	183	400	6.82	34.14	1.18	26.79	127	0.95
267	8.42	33.965	-	-	-	-	162	500	6.03	34.23	0.55	26.96	110	1.07
326	7.52	34.041	2.44	-	-	-	143							
400	6.82	34.140	1.18	-	-	-	127							
474	6.20	34.206	0.66	-	-	-	114							
553	5.78	34.285	0.39	-	-	-	103							

90.180

ALEXANDER AGASSIZ; October 30, 1962; 0007 GCT; 28°26.5'N, 127°58.5'W; sounding, 2540 fm; wind, 010°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°.

1	20.10	34.124	5.01	0.4	2	0.01	384	0	(20.10)	(34.12)	(5.01)	(24.09)	(384)	(0.00)
11	19.68	34.126	5.12	0.4	2	0.01	373	10	19.70	34.12	5.12	24.19	374	0.04
32	19.72	34.173	5.12	0.4	3	0.01	371	20	19.69	34.14	5.12	24.21	372	0.08
57	18.72	34.186	5.48	0.4	3	0.01	345	30	19.71	34.17	5.12	24.23	370	0.11
65	18.02	34.177	5.50	0.3	3	0.01	329	50	19.90	34.25	5.15	24.24	369	0.19
75	17.86	34.240	5.55	-	-	0.01	321	75	17.86	34.24	5.55	24.74	321	0.27
90	17.18	34.191	5.46	-	-	0.01	309	100	16.77	34.16	5.47	24.94	302	0.35
105	16.61	34.148	5.47	-	-	0.01	299	125	16.10	34.17	5.31	25.11	287	0.43
130	15.94	34.175	5.27	-	-	0.14	283	150	14.68	34.03	5.05	25.31	267	0.50
150	14.68	34.026	5.05	-	-	0.04	267	200	11.52	33.80	4.70	25.77	224	0.62
175	12.88	33.859	4.87	-	-	0.01	244	250	9.48	33.90	4.02	26.20	183	0.73
205	11.24	33.803	4.64	-	-	0.01	219	300	8.40	33.98	3.73	26.43	160	0.81
235	9.78	33.854	4.16	-	-	-	191	400	6.51	34.03	2.08	26.74	131	0.96
274	8.98	33.966	3.87	-	-	-	170	500	5.71	34.15	0.83	26.94	112	1.09
334	7.62	33.992	3.42	-	-	-	148							
408	6.42	34.036	1.94	-	-	-	130							
482	5.82	34.133	0.98	-	-	-	115							
561	5.25	34.218	0.50	-	-	-	102							

SIO

CCOFI
6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
90.200	ALEXANDER AGASSIZ; October 29, 1962; 1434, 1239 GCT; 27°40.5'N, 129°24.5'W; sounding, 2570 fm; wind, 250°, force 2; weather, overcast; sea, very rough; wire angle, 02°, 03°.													
1	20.18	34.50	5.07	0.3	8u	0.04	358	0	(20.18)	(34.50)	(5.07)	(24.35)	(358)	(0.00)
11	20.18	34.510	5.08	0.2	3	0.04	358	10	20.18	34.51	5.08	24.36	358	0.04
31	20.20	34.516	5.15	0.2	3	0.04	358	20	20.19	34.51	5.12	24.36	358	0.07
56	19.56	34.526	5.33	0.2	9	0.04	341	30	20.20	34.52	5.15	24.36	357	0.11
66	18.53	34.447	5.50	0.2	7	0.07	322	50	20.20	34.52	5.16	24.36	357	0.18
79	17.98	34.394	5.50	0.3	6	0.04	313	75	18.15	34.41	5.50	24.80	315	0.26
95	17.30	34.388	5.38	0.5	6	0.04	297	100	17.15	34.38	5.36	25.02	295	0.34
107	16.90	34.378	5.34	0.4	5	0.04	289	125	16.39	34.37	5.26	25.19	278	0.41
135	16.05	34.356	5.18	0.4	6	0.14	272	150	15.49	34.27	5.09	25.32	266	0.48
155	15.26	34.234	5.06	0.4	6	0.09	264	200	11.74	33.82	4.84	25.74	226	0.61
176	13.38	33.977	5.05	0.7	15	0.06	245	250	9.65	33.92	4.40	26.19	184	0.71
207	11.36	33.807	4.77	1.0	15	0.04	220	300	8.51	33.99	3.87	26.43	161	0.80
235	10.04	33.868	4.50	1.2	25	0.04	194	400	6.72	34.02	2.27	26.71	134	0.95
275	9.04	33.973	4.16	1.5	29	0.04	170	500	5.75	34.14	0.81	26.93	114	1.08
337	7.84	33.995	3.52	2.0	44	0.04	151	600	5.29	34.23	0.39	27.05	102	1.20
411	6.59	34.026	2.11	2.7	63	0.04	132	700	4.78	34.34	0.28	27.20	88	1.30
486	5.82	34.122	0.95	3.1	83	0.04	116	800	4.39	34.39	0.35	27.28	80	1.39
566	5.42	34.209	0.56	3.2	96	0.04	105	1000	3.84	34.48	0.61	27.41	68	1.56
276a)	9.08	33.970	4.12	1.5	24	-	171							
336	7.70	33.994	3.39	2.0	39	-	149							
412	6.52	34.028	2.03	2.3	63	-	131							
451	6.04	34.077	1.31	2.6	75	-	122							
486	5.82	34.115	0.99	2.7	79	-	116							
522	5.63	34.162	0.66	2.8	86	-	111							
567	5.41	34.209	0.45	2.9	95	-	105							
617	5.22	34.251	0.37	3.0	102	-	99							
667	4.94	34.305	0.29	3.0	99	-	92							
718	4.73	34.346	0.28	3.0	109	-	87							
773	4.52	34.376	0.29	3.0	117	-	82							
823	4.30	34.405	0.41	3.0	118	-	78							
873	4.18	34.426	0.42	3.0	130	-	75							
924	4.08	34.445	0.47	3.1	131	-	73							
974	3.93	34.463	0.49	3.1	131	-	70							
1028	3.76	34.483	0.69	3.1	111u	-	67							
1078	3.66	34.499	0.68	3.1	125u	-	65							
1129	3.52	34.512	0.91	2.9	142	-	62							
93.28	BLACK DOUGLAS; October 13, 1962; 1252 GCT;[b] 32°54.5'N, 117°22'W; sounding, 300 fm; wind, 320°, force 1; weather, cloudy; sea, moderate; wire angle, 03°.													
0	17.84	33.66	5.46				363	0	17.84	33.66	5.46	24.31	363	0.00
10	17.72	33.66	5.57				360	10	17.72	33.66	5.57	24.34	360	0.04
30	13.55	33.56	5.37				279	20	14.55	33.57	5.45	24.99	298	0.07
49	12.48	33.62	4.49				254	30	13.55	33.56	5.37	25.19	279	0.10
74	11.42	33.68	3.50				231	50	12.43	33.63	4.45	25.46	253	0.15
97	10.61	33.73	3.36				213	75	11.41	33.69	3.49	25.70	230	0.21
123	10.16	33.84	2.98				198	100	10.53	33.74	3.33	25.90	211	0.27
162	10.12	34.06	2.00				181	125	10.15	33.86	2.90	26.06	196	0.32
201	9.87	34.10	1.74				174	150	10.14	34.00	2.25	26.17	186	0.37
249	9.44	34.18	1.54				161	200	9.87	34.10	1.74	26.29	174	0.46
297	8.46	34.19	1.37				146	250	9.43	34.19	1.53	26.44	160	0.55
401	7.58	34.25	0.76				129	300	8.42	34.20	1.35	26.60	144	0.62
								400	7.58	34.25	0.76	26.77	129	0.77

a) Overlapping casts; reconciliation of property curves when necessary.

b) Time of departure from this station was given as 1245 GCT; no explanation for this disagreement can be determined.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

93.30

BLACK DOUGLAS; October 13, 1962; 1020 GCT; 32°50.5'N, 117°31'W; sounding, 400 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 09°.

1	-	33.66	5.17			0	17.8	(33.66)	(5.17)	(24.32)	(362)	(0.00)
11	17.82	33.65	5.44		363	10	17.80	33.65	5.44	24.31	363	0.04
31	15.22	33.57	5.76		312	20	16.80	33.62	5.60	24.52	342	0.07
40	13.60	33.54	5.52		281	30	15.30	33.57	5.75	24.82	313	0.10
55	12.22	33.59	4.72		252	50	12.60	33.56	5.02	25.38	261	0.16
69	11.62	33.66	3.75		236	75	11.43	33.68	3.55	25.69	231	0.22
95	10.84	33.75	3.08a)		216	100	10.72	33.78	2.97	25.90	211	0.28
114	10.48	33.86	2.62b)		202	125	10.42	33.90	2.47	26.04	198	0.33
133	10.38	33.92	2.34		195	150	10.16	33.98	2.27	26.15	187	0.38
153	10.11	33.99	2.26		186	200	9.59	34.12	1.73	26.35	168	0.47
182	9.84	34.09	1.85		174	250	9.21	34.23	1.15	26.50	154	0.55
216	9.35	34.16	1.66		161	300	8.43	34.21	1.26	26.61	144	0.63
244	9.28	34.23	1.15		155	400	7.45	34.23		26.77	128	0.77
294	8.51	34.21	1.27		145	500	6.62	34.30		26.94	112	0.90
348	7.84	34.19	1.15		137	600	(6.09)	(34.34)		(27.04)	(103)	(1.01)
429	7.24	-	0.61u									
512	6.53	34.31	0.74		110							
595	6.12	34.34	0.29		103							

93.40

BLACK DOUGLAS; October 13, 1962; 2129 GCT; 32°30'N, 118°11.5'W; sounding, 950 fm; wind, 010°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°.

1	17.10	33.67	5.54		345	0	(17.10)	(33.67)	(5.54)	(24.49)	(345)	(0.00)
11	16.66	33.66	5.49		336	10	16.69	33.66	5.49	24.58	337	0.03
30	15.42	33.59	5.50		314	20	16.05	33.62	5.49	24.70	326	0.07
39	14.54	33.52	5.42		301	30	15.42	33.59	5.50	24.81	314	0.10
55	12.76	33.53	5.05		266	50	13.10	33.54	5.11	25.26	272	0.16
69	11.38	33.50	4.77		243	75	11.24	33.53	4.59	25.61	239	0.22
94	10.72	33.70	3.47		217	100	10.51	33.76	3.18	25.92	209	0.28
113	10.10	33.84	2.79		197	125	9.84	33.89	2.57	26.13	189	0.33
132	9.78	33.92	2.47		186	150	9.82	34.07	1.82	26.28	175	0.38
151	9.82	34.08	1.81		175	200	9.09	34.19	1.55	26.49	155	0.46
179	9.34	34.15	1.70		162	250	8.67	34.23	1.06	26.59	146	0.54
214	8.96	34.21	1.40		152	300	8.12	34.24	1.02	26.68	137	0.61
243	8.76	34.23	1.08		147	400	7.32	34.30	0.51	26.84	121	0.75
292	8.19	34.23	1.04		139	500	6.50	34.33	0.28	26.98	109	0.87
345	7.79	34.27	0.72		130	600	(6.00)	(34.36)	(0.22)	(27.07)	(100)	(0.98)
426	7.10	34.30	0.43		119							
509	6.45	34.33	0.27		108							
592	6.02	34.36	0.22		100							

93.50

BLACK DOUGLAS; October 14, 1962; 0345 GCT; 32°10'N, 118°53.5'W; sounding, 800 fm; wind, 210°, force 2; weather, cloudy; sea, rough; wire angle, 08°.

0	18.01	33.66	5.33		367	0	18.01	33.66	5.33	24.26	367	0.00
10	18.01	33.66	5.32		367	10	18.01	33.66	5.32	24.26	367	0.04
30	17.36	33.64	5.41		353	20	17.53	33.65	5.38	24.37	356	0.07
39	16.65	33.58	5.59		342	30	17.36	33.64	5.41	24.41	353	0.11
49	14.38	33.44	5.86		304	50	14.31	33.45	5.85	24.95	302	0.17
64	13.55	33.50	5.50		283	75	12.72	33.52	4.93	25.32	266	0.25
78	12.44	33.53	4.77		260	100	10.66	33.57	4.29	25.74	226	0.31
98	10.74	33.56	4.33		228	125	9.91	33.70	3.75	25.97	204	0.36
122	10.03	33.67	3.84		208	150	9.13	33.85	3.25	26.22	181	0.41
143	9.30	33.81	3.43		186	200	8.37	34.00	2.56	26.45	158	0.50
171	8.79	33.93	2.77		170	250	7.82	34.06	2.01	26.58	146	0.58
201	8.36	34.00	2.55		158	300	7.61	34.16	1.40	26.69	136	0.65
230	8.01	34.04	2.21		150	400	7.26	34.34	0.41	26.88	118	0.78
269	7.69	34.09	1.80		142	500	6.38	34.34	0.31	27.00	106	0.90
327	7.55	34.22	1.02		131							
401	7.25	34.34	0.41		118							
475	6.67	34.34	0.31		110							
554	5.76	34.31	0.31		101							

a) Mean value of 3.02 and 3.13 ml/L.
b) Mean value of 2.58 and 2.67 ml/L.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
93.60	BLACK DOUGLAS; October 14, 1962; 0945 GCT; 31°50'N, 119°34'W; sounding, 1300 fm; wind, 250°, force 2; weather, overcast; sea, moderate; wire angle, 03°.													
0	17.72	33.67	4.95				359	0	17.72	33.67	4.95	24.34	359	0.00
10	17.71	33.69	5.28				358	10	17.71	33.69	5.28	24.36	358	0.04
30	17.48	33.74	5.07				349	20	17.60	33.71	5.20	24.40	354	0.07
39	14.22	33.54	5.63				293	30	17.48	33.74	5.07	24.45	349	0.11
49	12.68	33.62	5.02				258	50	12.60	33.62	4.98	25.42	256	0.17
64	11.46	33.64	4.33				234	75	10.85	33.68	3.91	25.80	221	0.23
79	10.62	33.70	3.77				216	100	9.84	33.70	3.37	25.99	203	0.28
99	9.84	33.69	3.39				204	125	9.59	33.87	2.55	26.16	186	0.33
124	9.61	33.87	2.55				187	150	8.92	33.98	2.51	26.35	168	0.38
144	9.08	33.98	2.54				170	200	8.21	34.08	1.90	26.54	150	0.46
173	8.41	34.01	2.39				158	250	7.48	34.11	1.41	26.67	138	0.53
204	8.16	34.08	1.85				149	300	7.11	34.16	1.04	26.76	129	0.60
232	7.73	34.10	1.54				142	400	6.08	34.22	0.55	26.95	112	0.72
272	7.24	34.12	1.28				134	500	5.88	34.34	0.29	27.07	100	0.84
331	6.88	34.26a)	0.74				119							
405	6.04	34.22	0.52				111							
480	5.94	34.33	0.30				102							
559	5.65	34.37	0.27				95							
93.70	BLACK DOUGLAS; October 14, 1962; 1533 GCT; 31°30'N, 120°15'W; sounding, 2050 fm; wind, 240°, force 2; weather, overcast; sea, moderate; wire angle, 05°.													
0	17.54	33.69	5.21				354	0	17.54	33.69	5.21	24.40	354	0.00
10	17.56	33.70	5.30				353	10	17.56	33.70	5.30	24.40	353	0.04
30	17.14	33.70	5.55				344	20	17.53	33.70	5.32	24.41	353	0.07
39	13.14	33.60	5.55				268	30	17.14	33.70	5.55	24.50	344	0.11
48	11.98	33.59	4.88				247	50	11.94	33.59	4.85	25.53	247	0.16
64	11.11	33.63	4.80				229	75	10.46	33.69	4.00	25.87	214	0.22
79	10.25	33.71	3.69				209	100	9.46	33.79	3.25	26.12	190	0.27
98	9.50	33.78	3.32				192	125	9.10	33.92	2.61	26.28	175	0.32
122	9.16	33.91	2.64				177	150	8.72	33.98	2.49	26.38	165	0.36
142	8.82	33.95	2.55				169	200	8.02	34.06	1.98	26.55	149	0.44
170	8.48	34.04	2.29				157	250	7.39	34.10	1.48	26.68	137	0.52
200	8.02	34.06	1.98				149	300	6.97	34.15	1.12	26.77	128	0.59
229	7.68	34.09	1.74				142	400	6.26	34.20	0.66	26.91	115	0.71
269	7.18	34.12	1.28				133	500	5.89	34.32	0.31	27.05	102	0.83
327	6.79	34.17	1.01				124							
400	6.26	34.20	0.66				115							
473	6.10	34.31	0.34				105							
552	5.45	34.34	0.30				95							
93.80	BLACK DOUGLAS; October 14, 1962; 2049 GCT; 31°10'N, 120°59'W; sounding, 2100 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 15°.													
1	15.99	33.54	5.62				330	0	(15.99)	(33.54)	(5.62)	(24.65)	(330)	(0.00)
11	15.80	33.52	5.61				328	10	15.81	33.52	5.61	24.67	328	0.03
30	15.12	33.60	5.68				307	20	15.23	33.58	5.67	24.85	311	0.06
38	15.04	33.60	5.64				306	30	15.12	33.60	5.68	24.89	307	0.10
53	14.57	33.54	5.50				300	50	14.93	33.58	5.61	24.91	305	0.16
68	13.44	33.50	5.20				281	75	12.91	33.49	5.10	25.26	272	0.23
92	11.56	33.47	4.86				249	100	11.00	33.51	4.65	25.64	236	0.29
111	10.44	33.60	4.35				220	125	9.92	33.66	3.99	25.94	207	0.35
130	9.75	33.70	3.86				202	150	9.26	33.82	3.27	26.17	185	0.40
148	9.29	33.81	3.32				186	200	8.41	34.03	2.09	26.47	157	0.49
175	8.90	33.94	2.52				171	250	7.83	34.12	1.58	26.63	142	0.56
208	8.28	34.06	1.96				153	300	7.29	34.17	1.20	26.75	131	0.63
234	8.04	34.10	1.66				146	400	6.20	34.21	0.65	26.92	114	0.76
282	7.42	34.13	1.43				135	500	5.72	34.28	0.44	27.04	103	0.88
332	7.04	34.22	0.78				124							
411	6.10	34.21	0.64				113							
492	5.76	34.28	0.48				103							
575	5.33	34.32	0.33				95							

a) Loose bottle cap; value does not fall on property curve.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

BLACK DOUGLAS; October 15, 1962; 0155 GCT; 30°50'N, 121°34.5'W; sounding, 2000 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°. 93.90

1	18.16	33.49	5.31			383	0	(18.16)	(33.49)	(5.31)	(24.10)	(383)	(0.00)
9	18.16	33.49	5.39			383	10	18.16	33.49	5.39	24.10	383	0.04
31	17.90	33.50	5.38			376	20	18.11	33.49	5.39	24.11	381	0.08
40	17.81	33.50	5.42			374	30	17.91	33.50	5.38	24.17	376	0.11
54	17.38	33.47	5.46			366	50	17.59	33.49	5.45	24.24	369	0.19
67	15.34	33.34	5.91			331	75	14.33	33.34	5.91	24.86	310	0.27
88	13.60	33.34	5.90			296	100	13.29	33.48	5.62	25.18	280	0.35
106	13.04	33.54	5.42			271	125	11.74	33.51	5.04	25.50	249	0.42
122	11.92	33.50	5.12			253	150	10.40	33.62	4.42	25.83	218	0.47
147	10.56	33.59	4.52			223	200	8.81	33.89	3.55	26.30	173	0.57
172	9.46	33.77	3.72			192	250	8.30	34.02	2.72	26.48	156	0.66
206	8.73	33.92	3.53			170	300	7.32	34.03	2.20	26.63	142	0.74
231	8.50	33.98	2.99			162	400	6.44	34.14	1.13	26.84	122	0.87
272	7.95	34.04	2.49			149	500	5.94	34.28	0.33	27.01	105	0.99
328	6.84	34.04	1.92			135							
417	6.37	34.16	0.94			120							
498	5.97	34.28	0.33			106							
569	5.43	34.31	0.30			97							

BLACK DOUGLAS; October 15, 1962; 0617 GCT; 30°30.5'N, 122°14'W; sounding, 2200 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°. 93.100

1	18.49	33.51	5.20			389	0	(18.49)	(33.51)	(5.20)	(24.03)	(389)	(0.00)
10	18.53	33.53	5.22			388	10	18.53	33.53	5.22	24.04	388	0.04
33	18.52	33.48	5.36			392	20	18.53	33.51	5.27	24.02	390	0.08
43	18.51	33.49	5.22			391	30	18.52	33.50	5.32	24.02	390	0.12
58	17.52	33.55	5.68			363	50	18.50	33.49	5.23	24.01	391	0.20
73	16.11	33.50	5.90			336	75	15.93	33.49	5.90	24.62	333	0.29
95	13.14	33.36	5.59			286	100	12.94	33.37	5.52	25.16	281	0.36
116	12.56	33.50	5.29			264	125	12.49	33.62	5.22	25.44	254	0.43
136	12.36	33.73	5.16			244	150	11.52	33.72	5.07	25.71	230	0.49
164	10.62	33.70	4.88			216	200	9.32	33.84	4.04	26.18	184	0.60
193	9.42	33.81	4.17			188	250	8.38	33.98	3.68	26.44	160	0.69
233	8.72	33.95	3.72			167	300	7.46	34.02	2.90	26.60	144	0.76
262	8.13	33.99	3.59			156	400	6.38	34.08	1.52	26.80	126	0.90
310	7.32	34.03	2.68			142	500	5.66	34.21	0.56	26.99	107	1.03
374	6.64	34.06	1.81			130	600	5.23	34.31	0.31	27.12	95	1.13
472	5.80	34.18	0.70			111							
560	5.42	34.27	0.39			100							
634	5.08	34.33	0.28			92							

ALEXANDER AGASSIZ; October 5, 1962; 2345 GCT; 32°50.5'N, 117°38.5'W; sounding, 500 fm; wind, 220°, force 3; weather, clear; sea, moderate; wire angle, 14°. [a] 93[3].31

1	18.12	33.663	5.48	0.4	10	369
11	17.90	33.653	5.28	0.4	7	365
20	17.42	33.625	5.30	0.8	6	356
30	16.60	33.596	5.60	0.4	7	339
40	15.23	33.536	5.64	0.5	5	314
49	14.08	33.514	5.56	0.7	9	293
59	13.26	33.528	5.17	0.7	10	276
69	12.28	33.572	4.44	1.1	13	254
79	11.88	33.609	4.05	1.2	15	244
88	11.24	33.641	3.79	1.1	18	231
99	10.87	33.707	3.39	1.2	24	219
108	10.41	33.755	3.30	1.3	25	208
117	10.24	33.812	3.00	1.7	27	201
127	9.92	33.865	2.84	1.8	30	192
137	9.90	33.917	2.65	2.3	28	188
147	9.92	33.972	2.19	2.4	33	184
158	9.67	33.980	2.43	2.3	32	180
168	9.56	33.999	2.29	2.2	35	176

a) Shakedown station.

SIO

CCOFI
6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
100.30	ALEXANDER AGASSIZ; November 4, 1962; 0333 GCT; 31°40.5'N, 116°46.5'W; sounding, 230 fm; wind, 340°, force 4; weather, missing; sea, moderate; wire angle, 12°.													
1	15.94	33.576	5.94	0.3	6	0.00	326	0	(15.94)	(33.58)	(5.94)	(24.69)	(326)	(0.00)
11	15.40	33.579	5.91	0.4	7	0.02	315	10	15.50	33.58	5.92	24.79	317	0.03
30	12.86	33.574	4.62	0.9	10	0.22	265	20	13.70	33.57	5.20	25.16	281	0.06
50	12.44	33.645	3.73	1.2	16	0.00	252	30	12.86	33.57	4.62	25.33	265	0.09
75	11.94	33.692	3.36	1.3	20	0.00	239	50	12.44	33.64	3.73	25.47	252	0.14
99	11.52	33.760	3.02	-	-	0.04	227	75	11.94	33.69	3.36	25.60	239	0.20
124	11.10	33.835	2.55	-	-	-	214	100	11.51	33.76	3.01	25.74	226	0.26
163	10.28	34.074	1.72	-	-	-	182	125	11.09	33.84	2.54	25.88	213	0.32
202	9.98	34.206	1.40	-	-	-	168	150	10.52	33.98	1.99	26.09	193	0.37
252	9.48	34.272	1.15	-	-	-	155	200	9.99	34.20	1.41	26.35	168	0.46
301	9.00	34.314	0.87	-	-	-	144	250	9.50	34.27	1.16	26.49	155	0.54
406	8.00	34.329	0.61	-	-	-	129	300	9.02	34.31	0.87	26.60	145	0.62
								400	8.07	34.33	0.63	26.76	130	0.77
100.35	ALEXANDER AGASSIZ; November 4, 1962; 0720 GCT; 31°30.5'N, 117°07'W; sounding, 650 fm; wind, 340°, force 5; weather, missing; sea, moderate; wire angle, 15°.													
1	17.90	33.674	5.51	0.3	1	0.00	363	0	(17.90)	(33.67)	(5.51)	(24.30)	(363)	(0.00)
11	17.88	33.671	5.45	0.3	0	0.00	363	10	17.88	33.67	5.46	24.30	363	0.04
31	17.66	33.654	5.45	0.3	1	0.00	359	20	17.85	33.67	5.45	24.31	362	0.07
39	15.96	33.557	5.70	0.4	3	0.00	328	30	17.73	33.66	5.45	24.33	360	0.11
50	14.91	33.548	5.23	0.5	4	0.03	307	50	14.91	33.55	5.23	24.89	307	0.18
65	13.74	33.560	4.75	-	-	-	282	75	12.83	33.58	4.46	25.35	264	0.25
79	12.48	33.596	4.38	-	-	-	256	100	11.10	33.66	4.06	25.74	227	0.31
98	11.16	33.652	4.10	-	-	-	228	125	10.30	33.80	3.35	25.98	203	0.36
122	10.38	33.785	3.41	-	-	-	205	150	10.00	33.96	2.64	26.16	186	0.41
142	10.02	33.890	2.97	-	-	-	192	200	9.70	34.23	1.42	26.42	162	0.50
171	9.94	34.177	1.57	-	-	-	169	250	9.37	34.36	0.91	26.58	147	0.58
200	9.70	34.231	1.42	-	-	-	161	300	8.83	34.38	0.68	26.68	137	0.65
229	9.44	34.325	1.12	-	-	-	150	400	7.86	34.40	0.46	26.84	121	0.79
267	9.28	34.375	0.81	-	-	-	144	500	6.54	34.34	0.43	26.98	108	0.91
326	8.47	34.385	0.58	-	-	-	131							
398	7.88	34.401	0.46	-	-	-	122							
472	6.77	34.343	0.43	-	-	-	111							
550	6.20	34.349	0.42	-	-	-	103							
100.40	ALEXANDER AGASSIZ; November 4, 1962; 1050 GCT; 31°21.5'N, 117°27'W; sounding, 1050 fm; wind, 300°, force 3; weather, missing; sea, rough; wire angle, 09°.													
1	17.76	33.681	5.45	0.3	3	0.00	359	0	(17.76)	(33.68)	(5.45)	(24.34)	(359)	(0.00)
11	17.75	33.681	5.47	0.3	4	0.01	359	10	17.75	33.68	5.47	24.34	359	0.04
30	17.70	33.674	5.44	0.3	4	0.02	359	20	17.73	33.68	5.47	24.35	359	0.07
39	15.44	33.540	5.60	0.5	5	0.02	318	30	17.70	33.67	5.44	24.35	359	0.11
55	13.54	33.558	5.34	0.6	6	0.24	279	50	13.95	33.56	5.44	25.11	287	0.17
70	12.59	33.511	5.10	-	-	0.10	264	75	12.22	33.53	4.89	25.43	256	0.24
94	10.98	33.645	4.00	-	-	0.04	226	100	10.76	33.67	3.81	25.80	220	0.30
113	10.28	33.727	3.50	-	-	0.03	208	125	9.67	33.78	3.26	26.08	194	0.35
132	9.41	33.813	3.15	-	-	-	188							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; November 4, 1962; 1657 GCT; 31°00'N, 118°07'W; sounding, 1000 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 05°. 100.50

2	17.83	33.691	7.54u	0.3	4	0.01	360	0	(17.83)	(33.69)		(24.33)	(360)	(0.00)
12	17.81	33.685	5.59	0.3	3	0.01	360	10	17.81	33.69	5.60	24.34	360	0.04
32	17.67	33.678	5.54	0.3	4	0.01	358	20	17.78	33.68	5.57	24.34	360	0.07
42	14.83	33.536	5.56	0.5	6	0.03	306	30	17.71	33.68	5.54	24.35	358	0.11
58	13.23	33.570	5.08a)	1.0	9	0.03	272	50	13.90	33.56		25.12	286	0.17
73	11.94	33.582	4.75	-	-	0.04	247	75	11.83	33.59	4.66	25.55	245	0.24
98	10.70	33.653	3.15	-	-	0.02	220	100	10.63	33.66	3.11	25.82	219	0.30
118	10.16	33.745	3.05	-	-	0.02	205	125	10.02	33.78	3.08	26.02	200	0.35
137	9.77	33.845	3.12	-	-	0.01	191	150	9.49	33.92	3.02	26.21	181	0.40
157	9.35	33.976	2.90	-	-	0.01	175	200	8.88	34.11	2.01	26.46	158	0.49
186	9.12	34.097	2.19	-	-	0.00	162	250	8.34	34.18	1.43	26.60	145	0.56
221	8.54	34.124	1.77	-	-	-	152	300	8.14	34.26	0.92	26.69	136	0.64
251	8.34	34.180	1.42	-	-	-	145	400	7.12	34.29	0.51	26.86	120	0.77
301	8.14	34.260	0.91	-	-	-	136	500	6.26	34.32	0.36	27.00	106	0.89
356	7.48	34.269	0.66	-	-	-	126	600	5.64	34.37	0.22	27.12	95	1.00
441	6.78	34.305	0.43	-	-	-	114							
526	6.05	34.329	0.32	-	-	-	103							
601	5.64	34.376	0.22	-	-	-	95							

ALEXANDER AGASSIZ; November 4, 1962; 2235 GCT; 30°40'N, 118°47.5'W; sounding, 1700 fm; wind, 310°, force 4; weather, overcast; sea, very rough; wire angle, 17°. 100.60

1	17.16	33.565	5.60	0.3	1	0.00	354	0	(17.16)	(33.56)	(5.60)	(24.39)	(355)	(0.00)
10	16.98	33.563	5.58	0.5	0	0.00	350	10	16.98	33.56	5.58	24.44	350	0.04
29	16.08	33.534	5.88	0.4	1	0.00	333	20	16.91	33.56	5.61	24.45	349	0.07
38	15.67	33.538	5.99	0.4	3	0.00	323	30	16.04	33.53	5.89	24.63	332	0.10
47	14.62	33.446	4.54u	0.6	3	0.05	308	50	14.40	33.44		24.92	304	0.17
61	13.80	33.431	5.86	-	-	-	293	75	12.71	33.40	5.54	25.23	275	0.24
75	12.71	33.405	5.54	-	-	-	274	100	11.33	33.44	4.99	25.52	247	0.31
93	11.59	33.430	5.10	-	-	-	252	125	10.51	33.56	4.50	25.76	224	0.37
116	10.76	33.484	4.74	-	-	-	234	150	9.66	33.75	3.98	26.05	196	0.42
136	10.17	33.669	4.16	-	-	-	211	200	8.60	33.99	2.90	26.41	163	0.51
163	9.24	33.821	3.82	-	-	-	185	250	7.92	34.08	2.00	26.58	146	0.59
191	8.74	33.968	3.05	-	-	-	166	300	7.16	34.12	1.69	26.73	133	0.66
220	8.29	34.030	2.62	-	-	-	155	400	6.64	34.23	0.80	26.88	118	0.79
256	7.83	34.086	1.95	-	-	-	144	500	6.14	34.29	0.45	27.00	107	0.91
312	7.00	34.131	1.60	-	-	-	130							
381	6.70	34.219	0.90	-	-	-	119							
451	6.42	34.258	0.57	-	-	-	113							
526	5.92	34.316	0.38	-	-	-	102							

ALEXANDER AGASSIZ; November 5, 1962; 0402 GCT; 30°18'N, 119°29.5'W; sounding, 2150 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 18°. 100.70

2	16.88	33.495	5.71		0	0.01	353	0	(16.88)	(33.50)	(5.71)	(24.41)	(353)	(0.00)
11	16.82	33.498	5.81		0	0.01	351	10	16.82	33.50	5.79	24.43	351	0.04
30	16.63	33.467	5.76		0	0.01	349	20	16.77	33.48	5.78	24.42	352	0.07
40	16.28	33.455	5.92		1	0.01	343	30	16.63	33.47	5.76	24.45	349	0.11
54	15.82	33.558	5.77		0	0.01	325	50	15.84	33.54	5.78	24.68	327	0.17
68	15.06	33.503	5.98		-	0.12	313	75	14.48	33.48	5.90	24.93	303	0.25
92	13.05	33.468	5.55		-	-	276	100	12.94	33.51	5.47	25.27	271	0.32
111	13.14	33.796	5.30		-	-	254	125	12.15	33.69	5.23	25.56	243	0.39
129	11.41	33.646	5.22		-	-	233	150	10.14	33.67	4.67	25.91	210	0.45
149	10.16	33.669	4.69		-	-	210	200	8.83	33.90	3.94	26.30	173	0.54
178	9.24	33.812	4.04		-	-	185	250	8.07	34.01	3.09	26.51	153	0.63
211	8.64	33.926	3.88		-	-	168	300	7.61	34.11	1.75	26.65	140	0.70
239	8.16	33.980	3.38		-	-	157	400	6.73	34.22	0.76	26.86	120	0.84
286	7.73	34.082	2.03		-	-	143	500	6.09	34.29	0.44	27.00	106	0.96
338	7.27	34.164	1.17		-	-	131	600	(5.50)	(34.34)		(27.11)	(96)	(1.07)
419	6.57	34.233	0.66		-	-	117							
501	6.08	34.291	0.43		-	-	106							
583	5.59	34.335	0.42		-	-	97							

a) Alternate value, 4.50 ml/L; both values are uncertain.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
100.80	ALEXANDER AGASSIZ; November 5, 1962; 0919 GCT; 29°56.5'N, 120°10'W; sounding, 2125 fm; wind, 350°, force 4; weather, missing; sea, rough; wire angle, 16°.													
2	17.59	33.529	5.44	0.4	2	0.01	367	0	(17.59)	(33.53)	(5.44)	(24.27)	(366)	(0.00)
11	17.58	33.527	5.48	0.4	2	0.00	366	10	17.58	33.53	5.47	24.27	366	0.04
30	17.52	33.519	5.56	0.4	2	0.01	366	20	17.56	33.52	5.49	24.27	367	0.07
57	14.84	33.398	5.92	0.5	3	0.07	316	30	17.52	33.52	5.56	24.28	366	0.11
66	14.24	33.400	5.89	0.5	4	0.09	304	50	15.52	33.42	5.86	24.66	329	0.18
81	14.17	33.643	5.75	-	-	0.12	285	75	14.18	33.54	5.82	25.04	293	0.26
95	13.98	33.834	5.43	-	-	0.19	267	100	13.80	33.82	5.38	25.34	265	0.33
109	12.35	33.596	5.22	-	-	0.09	254	125	11.20	33.54	4.84	25.62	237	0.39
132	10.80	33.534	4.68	-	-	0.05	231	150	10.07	33.67	4.24	25.92	209	0.45
150	10.07	33.669	4.24	-	-	0.03	209	200	8.80	33.91	3.20	26.32	171	0.54
179	9.08	33.840	3.59	-	-	0.02	181	250	7.96	34.04	2.19	26.55	150	0.63
205	8.74	33.926	3.12	-	-	-	169	300	7.42	34.14	1.29	26.70	135	0.70
234	8.26	34.010	2.53	-	-	-	156	400	6.86	34.27	0.45	26.88	118	0.83
280	7.52	34.087	1.71	-	-	-	140	500	6.30	34.32	0.28	27.00	107	0.95
331	7.29	34.211	0.78	-	-	-	128							
410	6.78	34.276	0.41	-	-	-	116							
491	6.34	34.315	0.28	-	-	-	108							
571	5.96	34.338	0.23	-	-	-	101							
100.90	ALEXANDER AGASSIZ; November 5, 1962; 1431 GCT; 29°34'N, 120°52'W; sounding, 2250 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 20°.													
1	17.58	33.489	5.41	0.4	1	0.00	369	0	(17.58)	(33.49)	(5.41)	(24.24)	(369)	(0.00)
10	17.58	33.489	5.59	0.4	2	0.00	369	10	17.58	33.49	5.59	24.24	369	0.04
29	17.56	33.489	5.54	0.4	2	0.00	369	20	17.57	33.49	5.59	24.24	369	0.07
57	17.40	33.467	5.47	0.4	2	0.00	367	30	17.56	33.49	5.53	24.24	369	0.11
66	16.94	33.457	5.65	0.4	2	0.00	357	50	17.47	33.48	5.51	24.26	367	0.18
80	15.64	33.471	6.25a)	-	-	0.00	328	75	16.20	33.46	6.01	24.54	341	0.27
94	14.35	33.607	5.81	-	-	0.14	291	100	13.50	33.51	5.56	25.16	281	0.35
108	12.60	33.416	5.29	-	-	0.02	271	125	11.83	33.45	5.10	25.44	255	0.42
131	11.56	33.465	5.02	-	-	-	249	150	10.50	33.52	4.69	25.73	227	0.48
151	10.48	33.521	4.68	-	-	0.01	227	200	9.16	33.85	3.68	26.21	181	0.58
177	9.66	33.747	3.72	-	-	-	197	250	8.38	34.04	3.11	26.48	156	0.67
206	9.02	33.873	3.65	-	-	-	177	300	7.96	34.13	2.42	26.62	143	0.75
234	8.46	33.977	3.20	-	-	-	161	400	6.93	34.25	0.78	26.86	120	0.88
281	8.28	33.990u	2.94	-	-	-		500	6.01	34.28	0.50	27.00	106	1.00
333	7.34	34.138	1.39	-	-	-	134							
412	6.86	34.261	0.74	-	-	-	118							
493	6.06	34.273	0.50	-	-	-	107							
574	5.62	34.334	0.50	-	-	-	98							
100.100	ALEXANDER AGASSIZ; November 5, 1962; 1920 GCT; 29°18'N, 121°27'W; sounding, 2300 fm; wind, 320°, force 4; weather, cloudy; sea, very high; wire angle, 26°.													
1	18.44	33.637	5.45	0.5	3	0.00	378	0	(18.44)	(33.64)	(5.45)	(24.14)	(378)	(0.00)
10	18.42	33.636	5.46	0.5	3	0.01	378	10	18.42	33.64	5.46	24.15	378	0.04
32	18.40	33.634	5.63	0.5	3	0.00	378	20	18.42	33.63	5.53	24.14	379	0.08
58	17.30	33.580	5.78	0.4	3	0.00	356	30	18.40	33.63	5.60	24.15	378	0.11
67	16.26	33.730	6.01	0.4	2	0.01	322	50	18.27	33.63	5.63	24.18	375	0.19
86	15.20	33.794	5.75	-	-	0.01	295	75	15.71	33.76	5.92	24.88	308	0.27
98	15.02	33.815	5.63	-	-	0.02	290	100	14.94	33.82	5.60	25.10	288	0.35
112	14.27	33.810	5.54	-	-	0.13	275	125	13.64	33.79	5.53	25.35	264	0.42
138	12.86	33.744	5.51	-	-	-	252	150	11.75	33.66	5.21	25.62	238	0.48
156	11.24	33.643	5.06	-	-	-	230	200	9.50	33.80	3.79	26.12	190	0.59
182	9.88	33.722	4.32	-	-	-	202	250	8.68	33.99	2.85	26.40	164	0.68
213	9.26	33.855	3.45	-	-	-	182	300	7.96	34.10	2.15	26.59	145	0.76
239	8.84	33.952	3.00	-	-	-	169	400	6.80	34.16	1.31	26.81	125	0.90
283	8.16	34.064	2.47	-	-	-	151	500	5.89	34.23	0.83	26.98	109	1.03
341	7.47	34.144	1.66	-	-	-	135	600	(5.27)	(34.31)		(27.12)	(95)	(1.13)
431	6.49	34.173	1.17	-	-	-	120							
513	5.78	34.247	0.76	-	-	-	106							
583	5.36	34.299	0.74	-	-	-	97							

a) Alternate value, 5.93 ml/L, not used in interpolation.

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; November 6, 1962; 0351 GCT; 28°40'N, 122°46'W; sounding, 2350 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 21°.														100.120
1	18.98	33.790	5.28	0.3	1	0.04	380	0	(18.98)	(33.79)	(5.28)	(24.12)	(380)	(0.00)
10	18.95	33.789	5.30	0.3	0	0.03	380	10	18.95	33.79	5.30	24.13	380	0.04
29	18.96	33.790	5.37	0.3	1	0.02	380	20	18.95	33.79	5.34	24.13	380	0.08
56	19.18	33.960	5.39	0.3	1	0.02	373	30	18.97	33.79	5.37	24.13	380	0.11
65	18.64	33.914	5.45	0.4	0	0.02	363	50	19.14	33.92	5.38	24.18	375	0.19
80	17.20	33.859	5.79	-	-	0.01	334	75	17.42	33.83	5.73	24.54	341	0.28
93	16.66	33.913	5.66	-	-	0.00	318	100	16.40	33.88	5.64	24.82	314	0.36
107	16.10	33.856	5.62	-	-	0.00	309	125	15.25	33.84	5.46	25.04	293	0.44
130	14.86	33.830	5.38	-	-	-	285	150	13.07	33.69	5.16	25.38	260	0.51
148	13.22	33.705	5.20	-	-	-	262	200	10.19	33.69	4.13	25.92	209	0.63
177	11.50	33.636	4.49	-	-	-	235	250	8.85	33.90	3.27	26.30	173	0.73
204	9.99	33.705	4.04	-	-	-	205	300	8.07	34.05	2.38	26.54	150	0.81
232	9.24	33.831	3.60	-	-	-	184	400	6.85	34.13	1.33	26.78	128	0.95
279	8.34	33.999	2.69	-	-	-	158	500	5.95	34.22	0.86	26.96	110	1.08
330	7.68	34.082	1.98	-	-	-	143							
411	6.72	34.137	1.21	-	-	-	126							
492	6.00	34.215	0.89	-	-	-	111							
574	5.43	34.275	0.45	-	-	-	100							
ALEXANDER AGASSIZ; November 6, 1962; 1200 GCT;[a] 27°27.5'N, 122°02'W; sounding, 2300 fm; wind, 360°, force 4; weather, missing; sea, very rough; wire angle, 20°.														107.120
796	4.59	34.405		3.2	106		81							
807	4.52	34.416		3.3	120		79							
817	4.52	34.418		3.4	117		79							
827	4.46	34.421		3.3	117		78							
836	4.46	34.424		3.2	117		78							
846	4.44	34.427		3.4	120		78							
856	4.39	34.431		3.4	121		77							
865	4.36	34.431		3.4	121		77							
875	4.31	34.440		3.3	125		75							
884	4.29	34.446		3.4	124		75							
894	4.27	34.453		3.4	121		74							
904	4.23	34.452		3.4	122		74							
913	4.18	34.460		3.3	122		73							
923	4.12	34.463		3.2	129		72							
933	4.12	34.468		3.2	123		71							
943	4.10	34.469		3.3	126		71							
953	4.06	34.472		3.4	123		70							
964	4.05	34.482		3.2	130		70							
ALEXANDER AGASSIZ; November 8, 1962; 1541 GCT; 29°46'N, 116°00'W; sounding, 690 fm; wind, 320°, force 2; weather, light fog; sea, moderate; wire angle, 18°.														110.35
1	16.33	33.598	5.76	0.5	4	0.00	333	0	(16.33)	(33.60)	(5.76)	(24.62)	(333)	(0.00)
10	16.32	33.595	5.76	0.5	4	0.00	333	10	16.32	33.60	5.76	24.62	333	0.03
29	15.88	33.576	5.65	0.6	5	0.00	325	20	16.17	33.59	5.70	24.65	330	0.07
39	15.26	33.552	5.77	0.7	5	0.00	314	30	15.82	33.58	5.67	24.72	324	0.10
48	14.74	33.546	5.59	0.8	4	0.02	304	50	14.61	33.56	5.42	24.97	300	0.16
62	13.79	33.663	4.06	-	-	0.00	276	75	12.90	33.64	4.14	25.38	261	0.23
75	12.90	33.643	4.14	-	-	-	260	100	11.75	33.73	3.61	25.67	233	0.29
95	11.84	33.698	3.87	-	-	-	237	125	11.18	33.87	2.50	25.88	213	0.35
118	11.50	33.878	2.22	-	-	-	218	150	10.11	33.91	2.80	26.10	192	0.40
137	10.34	33.831	2.95	-	-	-	201	200	9.45	34.10	2.15	26.36	167	0.49
166	9.86	33.978	2.61	-	-	-	183	250	9.46	34.29	1.24	26.51	153	0.58
194	9.43	34.066	2.30	-	-	-	169	300	9.08	34.36	0.93	26.62	142	0.65
222	9.58	34.235	1.62	-	-	-	159	400	7.82	34.36	0.57	26.82	124	0.79
260	9.40	34.306	1.14	-	-	-	151	500	6.50	34.34	0.43	26.99	108	0.91
317	8.90	34.377	0.84	-	-	-	138							
391	7.98	34.364	0.58	-	-	-	126							
464	6.79	34.327	0.51	-	-	-	112							
544	6.30	34.385	0.33	-	-	-	102							

a) Special cast to collect samples for silicate determination.

SIO

CCOFI
6210-11

	OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
	Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
	m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
110.40	ALEXANDER AGASSIZ; November 8, 1962; 1231 GCT; 29°36.5'N, 116°19.5'W; sounding, 1400 fm; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 17°.														
	2	17.28	33.659	5.21	0.3	4	0.01	350	0	(17.28)	(33.66)	(5.21)	(24.44)	(350)	(0.00)
	11	17.22	33.661	5.43	0.3	3	0.02	349	10	17.23	33.66	5.41	24.45	349	0.03
	30	15.94	33.558	5.52	0.4	4	0.02	328	20	17.13	33.65	5.46	24.47	347	0.07
	39	14.28	33.514	5.48	0.5	3	0.11	297	30	15.94	33.56	5.52	24.67	328	0.10
	53	13.32	33.594	4.46	0.9	9	0.04	272	50	13.42	33.59	4.57	25.24	274	0.16
	67	13.04	33.627	4.13	-	-	0.06	264	75	12.82	33.65	3.97	25.40	258	0.23
	90	11.93	33.727	3.39	-	-	-	236	100	11.25	33.73	3.52	25.76	224	0.29
	109	10.70	33.730	3.61	-	-	-	215	125	10.54	33.88	2.85	26.01	201	0.35
	127	10.52	33.899	2.78	-	-	-	199	150	10.36	34.05	2.18	26.17	186	0.39
	146	10.40	34.038	2.25	-	-	-	187	200	9.98	34.29	1.12	26.42	162	0.48
	174	10.06	34.126	1.84	-	-	-	175	250	9.29	34.36	0.87	26.59	145	0.56
	206	9.93	34.316	1.02	-	-	-	159	300	9.02	34.38	0.64	26.65	140	0.64
	235	9.35	34.348	0.90	-	-	-	147	400	8.02	34.37	0.51	26.80	126	0.78
	281	9.16	34.372	0.73	-	-	-	143	500	6.83	34.37	0.36	26.97	110	0.90
	332	8.76	34.383	0.55	-	-	-	136							
	412	7.89	34.363	0.50	-	-	-	125							
	493	6.90	34.374	0.38	-	-	-	110							
	575	6.21	34.375	0.26	-	-	-	102							
110.50	ALEXANDER AGASSIZ; November 8, 1962; 0630 GCT; 29°16.5'N, 116°58'W; sounding, 1670 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 16°.														
	2	18.02	33.692	5.43	0.3	2	0.01	365	0	(18.02)	(33.69)	(5.43)	(24.29)	(365)	(0.00)
	11	18.03	33.687	5.42	0.4	1	0.01	365	10	18.03	33.69	5.42	24.28	365	0.04
	30	18.00	33.687	5.49	0.4	1	0.01	365	20	18.01	33.69	5.45	24.29	365	0.07
	59	14.84	33.483	6.04	0.4	2	0.00	310	30	18.00	33.69	5.49	24.29	364	0.11
	68	14.19	33.552	5.85	0.4	2	0.03	292	50	16.10	33.55	5.88	24.63	332	0.18
	82	13.24	33.627	5.25	0.7	5	0.11	268	75	13.75	33.60	5.59	25.18	280	0.26
	96	12.04	33.595	4.03	1.1	11	0.03	248	100	11.95	33.63	3.97	25.56	244	0.32
	111	11.70	33.743	3.76	1.6	16	0.00	231	125	11.55	33.86	3.48	25.81	220	0.38
	135	11.02	33.904	3.03	1.9	23	0.00	207	150	11.06	34.08	2.32	26.07	195	0.43
	154	11.08	34.130	2.09	2.4	30	0.00	192	200	9.77	34.27	1.59	26.44	160	0.52
	183	10.88	34.431	0.94	2.8	40	0.00	166	250	8.68	34.23	1.43	26.59	146	0.60
	211	9.10	34.179	1.74	2.5	45	0.00	156	300	8.14	34.27	1.05	26.70	135	0.68
	239	8.83	34.224	1.48	2.1	46	0.00	149	400	7.46	34.35	0.53	26.86	120	0.81
	287	8.16	34.235	1.25	2.3	54	0.00	138	500	6.77	34.41	0.26	27.01	106	0.93
	340	8.13	34.359	0.66	2.5	60	0.00	128	600	(5.94)	(34.40)		(27.11)	(96)	(1.04)
	421	7.26	34.343	0.47	2.6	71	0.00	117							
	504	6.73	34.407	0.25	2.9	82	0.01	106							
	587	6.05	34.403	0.21	2.9	90	0.03	98							
110.60	ALEXANDER AGASSIZ; November 8, 1962; 0107 GCT; 28°56.5'N, 117°38.5'W; sounding, 2000 fm; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 13°.														
	2	17.60	33.646	4.54	0.3	1	0.02	358	0	(17.60)	(33.65)	(4.54)	(24.36)	(358)	(0.00)
	12	17.61	33.647	5.49	0.4	0	0.01	358	10	17.60	33.65	5.30	24.36	358	0.04
	31	17.45	33.645	5.49	0.4	1	0.01	355	20	17.57	33.65	5.49	24.36	357	0.07
	60	15.06	33.510	5.99	0.3	1	0.01	313	30	17.47	33.65	5.49	24.39	355	0.11
	70	14.50	33.604	5.83	0.3	3	0.02	294	50	16.54	33.59	5.71	24.56	339	0.18
	84	13.12	33.506	5.39	-	-	0.10	275	75	14.05	33.57	5.68	25.09	288	0.26
	98	12.30	33.527	5.67	-	-	0.03	258	100	12.18	33.54	5.53	25.44	255	0.32
	113	11.37	33.637	4.14	-	-	0.02	233	125	10.70	33.70	3.86	25.84	217	0.38
	138	10.17	33.747	3.64	-	-	0.02	205	150	9.94	33.82	3.28	26.06	196	0.44
	157	9.78	33.848	3.10	-	-	-	191	200	8.72	33.96	2.69	26.37	167	0.53
	186	8.92	33.914	2.80	-	-	-	173	250	8.08	34.08	1.91	26.56	148	0.61
	215	8.52	34.007	2.53	-	-	-	160	300	7.51	34.13	1.58	26.68	137	0.68
	244	8.16	34.069	1.98	-	-	-	150	400	6.81	34.24	0.78	26.87	119	0.82
	292	7.58	34.119	1.57	-	-	-	138	500	6.28	34.32	0.41	27.00	107	0.94
	346	7.16	34.190	1.60	-	-	-	128	600	(5.66)	(34.37)	(0.29)	(27.12)	(95)	(1.04)
	429	6.64	34.271	0.48	-	-	-	115							
	511	6.22	34.329	0.39	-	-	-	105							
	596	5.68	34.365	0.29	-	-	-	96							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; November 7, 1962; 1917 GCT; 28°36.5'N, 118°17.5'W; sounding, 1880 fm; wind, 360°, force 2; weather, cloudy; sea, high; wire angle, 11°. 110.70

2	18.14	33.666	5.40		1	0.01	369	0	(18.14)	(33.67)	(5.40)	(24.24)	(369)	(0.00)
12	17.99	33.665	5.42		1	0.00	366	10	18.02	33.67	5.42	24.27	366	0.04
31	17.88	33.662	5.49		1	0.00	364	20	17.94	33.66	5.46	24.28	365	0.07
61	16.24	33.558	6.06		0	0.00	334	30	17.89	33.66	5.49	24.29	364	0.11
70	15.08	33.570	5.73		3	0.00	309	50	17.33	33.63	5.74	24.41	353	0.18
85	14.03	33.608	5.26		-	0.01	285	75	14.71	33.59	5.57	24.97	300	0.26
100	12.90	33.569	5.01		-	0.01	266	100	12.90	33.57	5.01	25.33	266	0.34
115	11.90	33.618	4.93		-	0.01	244	125	11.15	33.69	4.40	25.75	225	0.40
139	10.36	33.807	3.55		-	0.00	203	150	10.08	33.87	3.23	26.08	194	0.45
159	9.90	33.918	2.98		-	0.03	188	200	9.34	34.06	2.42	26.35	169	0.54
189	9.48	34.037	2.44		-	-	172	250	8.77	34.19	1.62	26.54	150	0.62
219	9.07	34.093	2.37		-	-	162	300	8.22	34.22	1.46	26.65	140	0.70
248	8.78	34.185	1.64		-	-	151	400	7.58	34.33	0.70	26.83	123	0.84
297	8.26	34.224	1.47		-	-	140	500	6.98	34.41	0.26	26.98	109	0.96
351	7.55	34.225	1.19		-	-	130	600	5.93	34.39	0.40	27.10	97	1.07
435	7.62	34.408	0.44		-	-	118							
519	6.74	34.401	0.25		-	-	106							
602	5.92	34.394	0.41		-	-	97							

ALEXANDER AGASSIZ; November 7, 1962; 1252 GCT; 28°17'N, 118°58'W; sounding, 2200 fm; wind, 330°, force 3; weather, missing; sea, rough; wire angle, 12°. 110.80

1	18.89	33.813	5.23	0.3	1	0.01	376	0	(18.89)	(33.81)	(5.23)	(24.16)	(377)	(0.00)
11	18.89	33.814	5.11	0.3	0	0.01	376	10	18.89	33.81	5.11	24.16	377	0.04
30	18.90	33.812	5.09	0.3	0	0.01	377	20	18.90	33.81	5.10	24.16	377	0.08
59	16.12	33.607	5.66	0.3	1	0.02	328	30	18.90	33.81	5.09	24.16	377	0.11
69	15.68	33.622	5.44	0.3	2	0.02	318	50	17.34	33.69	5.45	24.45	349	0.19
84	14.77	33.632	5.31	-	-	0.05	298	75	15.32	33.63	5.39	24.87	309	0.27
98	14.04	33.618	5.08	-	-	0.22	284	100	13.95	33.61	5.04	25.14	283	0.34
113	12.82	33.584	4.82	-	-	0.06	263	125	12.19	33.59	4.57	25.48	251	0.41
137	11.58	33.599	4.30	-	-	0.03	240	150	10.93	33.67	3.90	25.77	223	0.47
156	10.69	33.696	3.77	-	-	0.01	217	200	9.40	33.87	3.47	26.19	184	0.57
186	9.82	33.832	3.48	-	-	-	193	250	8.49	34.08	1.81	26.50	154	0.66
215	9.02	33.912	3.45	-	-	-	175	300	8.07	34.20	1.29	26.66	139	0.74
244	8.56	34.053	1.91	-	-	-	157	400	7.23	34.27	0.66	26.83	122	0.87
292	8.12	34.191	1.38	-	-	-	141	500	6.25	34.30	0.48	26.99	108	1.00
346	7.74	34.253	0.94	-	-	-	131	600	(5.48)	(34.33)	(0.29)	(27.11)	(96)	(1.10)
429	6.92	34.278	0.57	-	-	-	118							
512	6.13	34.300	0.47	-	-	-	106							
596	5.50	34.327	0.29	-	-	-	97							

ALEXANDER AGASSIZ; November 7, 1962; 0734 GCT; 27°56.5'N, 119°37'W; sounding, 2250 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 02°. 110.90

1	19.04	33.879	5.15	0.0u	1	0.03	375	0	(19.04)	(33.88)	(5.15)	(24.18)	(375)	(0.00)
11	19.04	33.872	5.15	0.4	0	0.02	376	10	19.04	33.87	5.15	24.17	376	0.04
31	19.04	33.872	5.19	0.4	1	0.01	376	20	19.04	33.87	5.17	24.17	376	0.08
61	18.04	33.721	5.57	0.3	0	0.01	363	30	19.04	33.87	5.19	24.17	376	0.11
70	16.82	33.725	5.78	0.3	1	0.01	335	50	19.00	33.86	5.20	24.17	376	0.19
85	15.62	33.638	5.58	0.3	-	0.02	315	75	16.70	33.72	5.76	24.62	333	0.28
101	14.64	33.598	5.64	-	-	0.03	298	100	14.67	33.60	5.63	24.98	298	0.36
116	13.56	33.576	5.27	-	-	0.20	278	125	13.09	33.59	5.07	25.30	268	0.43
140	12.24	33.615	4.72	-	-	0.03	250	150	11.53	33.62	4.41	25.63	237	0.49
160	10.86	33.634	4.11	-	-	0.01	225	200	9.59	33.90	3.03	26.18	184	0.60
190	9.84	33.825	3.32	-	-	-	194	250	8.45	34.04	2.52	26.47	157	0.69
220	9.09	33.990	2.65	-	-	-	170	300	8.13	34.18	1.51	26.63	142	0.76
249	8.46	34.044	2.53	-	-	-	156	400	6.76	34.19	0.92	26.84	122	0.90
299	8.14	34.173	1.52	-	-	-	142	500	5.90	34.27	0.48	27.01	106	1.02
353	7.41	34.184	1.17	-	-	-	131	600	5.45	34.34	0.28	27.12	95	1.13
439	6.31	34.209	0.73	-	-	-	115							
524	5.78	34.293	0.39	-	-	-	103							
608	5.42	34.345	0.27	-	-	-	94							

SIO

CCOFI 6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m
110.100	ALEXANDER AGASSIZ; November 7, 1962; 0054 GCT; 27°35.5'N, 120°25'W; sounding, 2225 fm; wind, 340°, force 3; weather, cloudy; sea, very rough; wire angle, 09°.													
1	19.23	33.818	5.24	0.5	2	0.01	384	0	(19.23)	(33.82)	(5.24)	(24.08)	(384)	(0.00)
11	19.22	33.816	5.44	0.5	2	0.02	384	10	19.22	33.82	5.43	24.08	384	0.04
31	19.09	33.812	5.21	0.6	2	0.00	381	20	19.17	33.81	5.38	24.09	383	0.08
60	17.56	33.636	5.80	0.5	2	0.00	358	30	19.09	33.81	5.22	24.11	381	0.12
70	14.94	33.578	5.46	0.6	4	0.02	305	50	18.90	33.79	5.27	24.14	378	0.19
85	12.98	33.606	4.63	-	-	0.06	265	75	14.20	33.59	5.18	25.08	289	0.28
100	11.38	33.627	4.29	-	-	0.02	234	100	11.38	33.63	4.29	25.66	234	0.34
114	10.83	33.672	4.02	-	-	0.03	221	125	10.43	33.76	3.68	25.93	208	0.40
139	9.92	33.854	3.24	-	-	0.01	193	150	9.57	33.88	3.14	26.17	185	0.45
159	9.34	33.902	3.09	-	-	0.03	180	200	8.74	34.04	2.75	26.43	161	0.54
190	8.92	34.017	2.85	-	-	-	165	250	7.98	34.12	1.95	26.61	144	0.61
219	8.40	34.064	2.52	-	-	-	154	300	7.77	34.25	1.02	26.74	131	0.68
249	7.98	34.122	1.95	-	-	-	144	400	6.72	34.29	0.65	26.92	114	0.81
298	7.78	34.244	1.03	-	-	-	132	500	6.04	34.33	0.41	27.04	103	0.93
352	7.18	34.269	0.75	-	-	-	122	600	5.45	34.38	0.33	27.15	92	1.03
436	6.44	34.314	0.56	-	-	-	109							
522	5.90	34.334	0.37	-	-	-	101							
605	5.42	34.386	0.32	-	-	-	91							
110.120	ALEXANDER AGASSIZ; November 6, 1962; 1638 GCT; 26°54'N, 121°42.5'W; sounding, 2140 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 13°.													
1	19.11	33.950	5.24	0.7	2	0.01	372	0	(19.11)	(33.95)	(5.24)	(24.21)	(372)	(0.00)
11	19.10	33.948	5.24	0.5	3	0.00	372	10	19.10	33.95	5.24	24.21	372	0.04
30	19.10	33.948	5.20	0.4	0	0.00	372	20	19.10	33.95	5.22	24.21	372	0.07
59	18.29	33.943	5.59	0.3	1	0.00	353	30	19.10	33.95	5.20	24.21	372	0.11
69	17.08	33.869	5.81	0.4	3	0.01	330	50	19.10	33.95	5.20	24.21	372	0.19
84	16.35	33.879	5.66	-	-	0.01	313	75	16.76	33.87	5.74	24.72	323	0.27
98	15.84	33.900	5.54	-	-	0.01	301	100	15.79	33.91	5.51	24.98	299	0.35
114	15.28	34.005	5.21	-	-	0.12	281	125	14.07	33.87	5.02	25.32	266	0.42
138	12.46	33.695	4.86	-	-	0.02	248	150	11.57	33.70	3.61	25.68	232	0.49
157	11.20	33.727	3.12	-	-	0.01	224	200	10.74	34.07	1.72	26.12	190	0.59
186	10.78	34.004	1.85	-	-	-	196	250	10.33	34.26	1.23	26.34	170	0.69
216	10.70	34.153	1.52	-	-	-	184	300	9.35	34.26	1.20	26.50	154	0.77
245	10.42	34.262	1.23	-	-	-	171	400	7.91	34.27	0.80	26.73	132	0.92
293	9.49	34.258	1.23	-	-	-	156	500	6.66	34.31	0.37	26.94	112	1.05
348	8.58	34.289	1.00	-	-	-	140	600	(5.83)	(34.36)	(0.28)	(27.09)	(98)	(1.16)
430	7.52	34.287	0.69	-	-	-	125							
513	6.50	34.320	0.40	-	-	-	109							
597	5.84	34.360	0.28	-	-	-	98							
115.35	ALEXANDER AGASSIZ; November 18, 1962; 0135 GCT; 28°54'N, 115°27'W; sounding, 492 fm; wind, 300°, force 4; weather, cloudy; sea, very rough; wire angle, 15°.													
2	16.91	33.663	5.79		4	0.00	341	0	(16.91)	(33.66)	(5.79)	(24.53)	(342)	(0.00)
11	16.94	33.668	5.72		4	0.00	342	10	16.93	33.67	5.73	24.53	341	0.03
35	15.76	33.577	5.83		5	0.11	323	20	16.94	33.67	5.73	24.53	342	0.07
45	14.55	33.524	5.72		6	0.23	301	30	16.91	33.67	5.73	24.54	341	0.10
59	13.50	33.553	5.22		8	0.12	278	50	14.22	33.53	5.61	25.03	294	0.17
73	12.48	33.627	4.38		-	-	254	75	12.39	33.64	4.24	25.48	251	0.23
97	11.70	33.842	2.57		-	-	224	100	11.63	33.87	2.44	25.80	220	0.29
116	11.35	34.026	1.81		-	-	204	125	11.14	34.07	1.78	26.05	197	0.35
136	10.90	34.104	1.81		-	-	191	150	10.39	34.12	1.91	26.22	181	0.40
164	9.95	34.141	1.96		-	-	172	200	9.56	34.28	1.41	26.48	156	0.48
193	9.54	34.245	1.54		-	-	158	250	9.40	34.42	0.72	26.62	143	0.56
231	9.63	34.405	0.80		-	-	147	300	8.68	34.39	0.67	26.71	134	0.63
260	9.26	34.422	0.70		-	-	140	400	7.70	34.38	0.52	26.85	121	0.76
308	8.58	34.384	0.66		-	-	133	500	6.57	34.38	0.35	27.01	106	0.88
371	8.04	34.384	0.58		-	-	125	600	5.85	34.40	0.31	27.12	95	0.99
468	6.86	34.381	0.36		-	-	109							
557	6.14	34.398	0.35		-	-	99							
631	5.62	34.401	0.24		-	-	93							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; November 17, 1962; 2047 GCT; 28°19'N, 114°53'W; sounding, 60 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 12°. 119.33

2	18.52	33.822	5.18		4	0.00	367	0	(18.52)	(33.82)	(5.18)	(24.26)	(367)	(0.00)
12	18.52	33.814	5.22		3	0.00	367	10	18.52	33.81	5.22	24.25	368	0.04
32	18.48	33.814	5.15		3	0.01	367	20	18.51	33.81	5.20	24.26	368	0.07
51	18.48	33.819	5.20		3	0.01	366	30	18.49	33.81	5.17	24.26	367	0.11
75	15.84	33.676	4.51		5	0.28	317	50	18.48	33.82	5.20	24.27	366	0.18
								75	15.84	33.68	4.51	24.79	317	0.27

ALEXANDER AGASSIZ; November 10, 1962; 0835 GCT; 27°43'N, 115°33.5'W; sounding, 1450 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 17°. 120.45

2	21.36	34.372	4.84	0.3	2	0.00	398	0	(21.36)	(34.37)	(4.84)	(23.94)	(398)	(0.00)
11	21.34	34.369	4.85	0.4	3	0.01	397	10	21.35	34.37	4.85	23.94	398	0.04
30	19.88	34.163	5.03	0.4	3	0.01	375	20	20.66	34.27	4.94	24.05	387	0.08
40	15.28	33.609	5.38	0.5	4	0.07	310	30	19.88	34.16	5.03	24.17	375	0.12
55	15.27	34.124	2.32	1.5	19	0.01	272	50	15.27	33.96	3.25	25.13	284	0.18
69	14.55	34.209	1.75	-	-	-	251	75	14.35	34.24	1.58	25.55	245	0.25
93	13.72	34.358	1.12	-	-	-	224	100	13.32	34.33	1.22	25.83	218	0.31
112	12.42	34.222	1.61	-	-	-	209	125	10.90	34.01	2.38	26.04	197	0.36
130	10.38	33.969	2.62	-	-	-	192	150	10.36	34.15	1.87	26.25	178	0.41
149	10.36	34.143	1.88	-	-	-	179	200	10.14	34.37	0.86	26.46	158	0.49
178	10.08	34.256	1.43	-	-	-	166	250	9.60	34.43	0.61	26.59	145	0.57
211	10.19	34.423	0.75	-	-	-	155	300	9.07	34.45	0.46	26.70	135	0.65
239	9.74	34.429	0.66	-	-	-	147	400	8.03	34.44	0.31	26.85	121	0.78
288	9.20	34.444	0.48	-	-	-	138	500	6.88	34.41	0.23	26.99	107	0.90
340	8.66	34.452	0.37	-	-	-	129	600	(6.08)	(34.41)		(27.10)	(97)	(1.01)
422	7.77	34.430	0.28	-	-	-	118							
504	6.84	34.407	0.23	-	-	-	107							
587	6.14	34.407	0.20	-	-	-	98							

ALEXANDER AGASSIZ; November 10, 1962; 1136 GCT; 27°31.5'N, 115°55.5'W; sounding, 2200 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 12°. 120.50

2	19.33	34.099	5.05	0.4	3	0.00	366	0	(19.33)	(34.10)	(5.05)	(24.27)	(366)	(0.00)
12	19.34	34.098	5.17	0.4	3	0.00	367	10	19.34	34.10	5.16	24.27	366	0.04
31	15.32	33.763	4.50	0.8	7	0.19	300	20	19.34	34.10	5.16	24.27	366	0.07
41	14.96	34.088	2.44	1.6	17	0.01	268	30	15.45	33.77	4.55	24.95	302	0.11
55	14.52	34.251	1.35	2.0	25	0.01	247	50	14.66	34.20	1.67	25.45	254	0.16
70	14.22	34.330	0.96	-	-	-	236	75	14.04	34.34	0.96	25.69	231	0.22
95	13.32	34.322	0.96	-	-	-	218	100	13.25	34.35	0.85	25.86	215	0.28
113	13.17	34.465	0.52	-	-	-	205	125	13.13	34.49	0.49	25.99	202	0.33
138	13.01	34.510	0.46	-	-	-	199	150	12.66	34.57	0.37	26.15	188	0.38
153	12.51	34.570	0.35	-	-	-	185	200	11.29	34.54	0.42	26.38	165	0.47
182	11.71	34.566	0.35	-	-	-	171	250	10.49	34.50	0.51	26.50	154	0.56
216	10.98	34.519	0.48	-	-	-	161	300	9.30	34.42	0.57	26.64	141	0.63
245	10.59	34.501	0.51	-	-	-	156	400	8.22	34.41	0.31	26.80	126	0.77
293	9.40	34.418	0.58	-	-	-	143	500	7.14	34.42	0.16	26.96	110	0.90
347	8.76	34.418	0.43	-	-	-	133	600	(6.38)	(34.43)	(0.13)	(27.07)	(100)	(1.01)
430	7.90	34.412	0.25	-	-	-	121							
514	7.00	34.425	0.13a)	-	-	-	108							
599	6.38	34.427	0.13a)	-	-	-	100							

a) Estimated burette reading.

SIO

CCOFI 6210-11

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m
120.60	ALEXANDER AGASSIZ; November 10, 1962; 1653 GCT; 27°08.5'N, 116°39.5'W; sounding, 2100 fm; wind, 340°, force 3; weather, overcast; sea, moderate; wire angle, 14°.													
2	18.65	33.790	5.34		2	0.00	372	0	(18.65)	(33.79)	(5.34)	(24.21)	(372)	(0.00)
12	18.64	33.780	5.37		2	0.00	373	10	18.64	33.78	5.36	24.20	373	0.04
31	18.44	33.732	5.49		1	0.01	372	20	18.60	33.77	5.39	24.20	373	0.07
40	16.86	33.589	6.02		2	0.02	346	30	18.48	33.73	5.48	24.20	373	0.11
55	15.40	33.572	5.94		3	0.02	315	50	15.70	33.57	5.98	24.74	322	0.18
69	13.84	33.586	5.19		-	-	283	75	13.48	33.59	5.10	25.23	275	0.26
93	11.36	33.658	4.76		-	-	231	100	11.00	33.71	3.98	25.79	221	0.32
113	10.74	33.832	3.02		-	-	208	125	10.60	33.95	2.50	26.05	197	0.37
132	10.50	33.997	2.31		-	-	192	150	10.17	34.07	2.06	26.22	181	0.42
151	10.14	34.073	2.05		-	-	180	200	10.28	34.40	0.99	26.46	158	0.51
181	10.02	34.245	1.55		-	-	166	250	9.40	34.38	0.75	26.59	146	0.59
214	10.41	34.474	0.72		-	-	155	300	8.90	34.40	0.55	26.68	137	0.66
243	9.50	34.373	0.88		-	-	148	400	7.50	34.36	0.39	26.87	119	0.79
292	9.00	34.399	0.57		-	-	138	500	6.76	34.40	0.26	27.00	107	0.91
344	8.21	34.381	0.47		-	-	128	600	(5.90)	(34.39)	(0.22)	(27.10)	(97)	(1.02)
426	7.22	34.347	0.37		-	-	117							
509	6.69	34.401	0.24		-	-	106							
591	5.97	34.397	0.22		-	-	97							
120.70	ALEXANDER AGASSIZ; November 10, 1962; 2208, 2229 GCT; 26°47.5'N, 117°20'W; sounding, 2180 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 16°, 25°.													
2	19.71	33.894	5.12	0.2	0		391	0	(19.71)	(33.89)	(5.12)	(24.01)	(391)	(0.00)
11	19.72	33.892	5.20	0.2	1		391	10	19.72	33.89	5.20	24.01	391	0.04
30	19.70	33.893	5.25	0.3	1		390	20	19.71	33.89	5.22	24.01	391	0.08
59	14.70	33.696	5.51	0.8	3		292	30	19.70	33.89	5.25	24.01	391	0.12
69	13.30	33.718	3.86	1.2	3		262	50	19.70	33.89	5.25	24.01	391	0.20
84	11.68	33.761	3.21	-	-		229	75	12.60	33.73	3.50	25.51	248	0.28
98	11.03	33.839	2.97	-	-		212	100	10.99	33.84	2.92	25.89	212	0.33
112	10.72	33.899	2.73	-	-		203	125	10.41	33.94	2.67	26.07	194	0.39
136	10.14	33.983	2.65	-	-		187	150	9.92	34.04	2.47	26.24	179	0.43
155	9.86	34.068	2.37	-	-		176	200	9.75	34.30	1.28	26.47	157	0.52
183	9.84	34.211	1.73	-	-		165	250	8.73	34.25	1.38	26.59	145	0.60
212	9.54	34.310	1.16	-	-		153	300	8.49	34.35	0.83	26.71	134	0.67
241	8.80	34.232	1.48	-	-		148	400	7.92	34.42	0.38	26.85	121	0.80
289	8.57	34.345	0.87	-	-		136	500	6.74	34.37	0.28	26.98	109	0.92
								600	(6.21)	(34.42)		(27.09)	(98)	(1.04)
339	8.19	34.356	0.73	-	-		129							
420	7.80	34.427	0.30	-	-		119							
502	6.72	34.369	0.28	-	-		108							
584	6.28	34.408	0.22	-	-		100							
120.80	ALEXANDER AGASSIZ; November 11, 1962; 0205 GCT; 26°31.5'N, 117°48'W; sounding, 2100 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 04°.													
1	19.34	33.865	4.95	0.3	2	0.01	384	0	(19.34)	(33.86)	(4.95)	(24.08)	(384)	(0.00)
11	19.35	33.865	5.09	0.3	0	0.00	384	10	19.35	33.86	5.08	24.08	384	0.04
31	19.35	33.877	5.10	0.3	0	0.00	383	20	19.35	33.87	5.09	24.09	383	0.08
56	16.96	33.780	5.77	0.3	2	0.00	334	30	19.35	33.88	5.10	24.10	383	0.12
66	16.28	33.747	5.90	0.3	2	0.00	321	50	17.60	33.81	5.60	24.48	346	0.19
76	15.18	33.681	5.65	-	-	-	303	75	15.37	33.69	5.70	24.90	306	0.27
91	13.24	33.626	4.95	-	-	-	268	100	12.38	33.64	4.52	25.48	251	0.34
106	12.12	33.665	4.23	-	-	-	244	125	12.24	34.02	1.92	25.80	220	0.40
131	12.25	34.092	1.55	-	-	-	215	150	12.09	34.22	1.18	25.99	203	0.45
151	12.08	34.231	1.17	-	-	-	202	200	11.49	34.37	0.83	26.22	181	0.55
175	11.99	34.370	0.84	-	-	-	190	250	11.02	34.47	0.58	26.38	166	0.64
205	11.40	34.374	0.83	-	-	-	179	300	10.39	34.49	0.40	26.51	153	0.72
235	11.23	34.475	0.64	-	-	-	169	400	9.34	34.46	0.37	26.66	139	0.88
276	10.57	34.462	0.48	-	-	-	159	500	7.87	34.40	0.19	26.84	122	1.02
336	10.10	34.514	0.35	-	-	-	147							
410	9.21	34.454	0.37	-	-	-	137							
485	8.06	34.401	0.19	-	-	-	124							
565	7.15	34.411	0.18	-	-	-	111							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; November 11, 1962; 0719 GCT; 26°08.5'N, 118°32'W; sounding, 2250 fm; wind, 060°, force 1; weather, cloudy; sea, moderate; wire angle, 02°. 120.90

1	19.34	33.828	5.21	0.2	1	0.00	386	0	(19.34)	(33.83)	(5.21)	(24.06)	(386)	(0.00)
11	19.35	33.832	5.21	0.3	0	0.00	386	10	19.35	33.83	5.21	24.06	386	0.04
21	19.36	33.832	5.23	0.2	1	0.00	386	20	19.36	33.83	5.21	24.06	387	0.08
41	19.19	33.804	5.27	0.3	1	0.00	384	30	19.30	33.82	5.22	24.06	386	0.12
51	18.52	33.741	5.23	0.2	1	0.03	373	50	18.80	33.77	5.23	24.15	377	0.19
61	17.06	33.669	5.85	-	-	-	344	75	15.55	33.64	5.62	24.82	313	0.28
76	15.44	33.634	5.60	-	-	-	312	100	13.60	33.64	4.64	25.24	274	0.35
91	14.26	33.609	5.06	-	-	-	289	125	12.18	33.71	3.80	25.57	242	0.42
136	11.66	33.738	3.60	-	-	-	231	150	11.00	33.78	3.52	25.85	216	0.48
156	10.75	33.794	3.46	-	-	-	211	200	10.37	34.11	2.00	26.21	181	0.58
187	10.44	33.986	2.50	-	-	-	192	250	10.17	34.38	0.81	26.46	158	0.67
216	10.29	34.228	1.54	-	-	-	171	300	9.82	34.46	0.44	26.58	146	0.74
246	10.18	34.373	0.90	-	-	-	159	400	8.37	34.42	0.31	26.78	127	0.89
287	9.98	34.460	0.46	-	-	-	149	500	7.08	34.38	0.24	26.94	112	1.02
346	9.12	34.437	0.40	-	-	-	137							
421	8.10	34.411	0.29	-	-	-	124							
496	7.12	34.379	0.25	-	-	-	113							
576	6.40	34.398	0.21	-	-	-	103							

ALEXANDER AGASSIZ; November 11, 1962; 1139 GCT; 25°52'N, 119°05'W; sounding, 2330 fm; wind, 020°, force 2; weather, cloudy; sea, moderate; wire angle, 09°. 120.100

2	19.19	33.795	5.28	0.2	0	0.00	385	0	(19.19)	(33.80)	(5.28)	(24.08)	(385)	(0.00)
12	19.20	33.794	5.25	0.3	1	0.00	385	10	19.20	33.79	5.26	24.07	386	0.04
31	19.20	33.790	5.20	0.3	1	0.00	386	20	19.20	33.79	5.22	24.07	386	0.08
56	18.67	33.743	5.68	0.3	2	0.00	376	30	19.20	33.79	5.20	24.07	386	0.12
65	16.68	33.665	5.78	0.3	1	0.01	336	50	19.20	33.79	5.20	24.07	386	0.19
75	15.86	33.698	5.70	-	-	0.02	316	75	15.86	33.70	5.70	24.80	316	0.28
90	14.84	33.665	5.49	-	-	0.03	297	100	13.80	33.64	5.07	25.20	278	0.36
104	13.34	33.631	4.82	-	-	0.13	270	125	12.08	33.72	3.90	25.60	240	0.42
129	11.86	33.732	3.76	-	-	0.03	235	150	11.04	33.80	3.40	25.85	215	0.48
149	11.06	33.796	3.43	-	-	-	216	200	9.87	34.06	2.29	26.26	177	0.58
173	10.75	34.002	2.45	-	-	-	196	250	9.73	34.35	0.99	26.51	153	0.66
202	9.80	34.066	2.27	-	-	-	175	300	9.53	34.45	0.52	26.62	143	0.74
231	9.54	34.209	1.64	-	-	-	161	400	8.12	34.41	0.33	26.81	124	0.88
270	9.81	34.456	0.54	-	-	-	147	500	7.08	34.41	0.20	26.96	110	1.01
329	9.10	34.441	0.50	-	-	-	137							
403	8.08	34.414	0.32	-	-	-	124							
477	7.32	34.410	0.21	-	-	-	113							
556	6.44	34.391	0.18	-	-	-	103							

ALEXANDER AGASSIZ; November 11, 1962; 1944 GCT; 25°12.5'N, 120°22.5'W; sounding, 2200 fm; wind, 060°, force 3; weather, overcast; sea, moderate; wire angle, 11°. 120.120

1	20.29	34.209	5.21		1	0.01	382	0	(20.29)	(34.21)	(5.21)	(24.10)	(382)	(0.00)
11	20.20	34.206	5.31		0	0.00	380	10	20.21	34.21	5.31	24.12	380	0.04
30	20.20	34.205	5.30		0	0.00	380	20	20.20	34.20	5.31	24.12	381	0.08
59	19.08	34.077	5.94		0	0.01	362	30	20.20	34.20	5.30	24.12	381	0.11
69	18.20	34.021	5.75		3	0.01	345	50	20.20	34.20	5.30	24.12	381	0.19
83	17.15	33.917	5.93		-	0.01	328	75	17.81	33.98	5.81	24.56	339	0.28
97	16.04	33.812	5.36		-	0.07	311	100	15.89	33.80	5.30	24.87	309	0.36
113	15.20	33.735	5.18		-	0.08	299	125	14.27	33.70	4.96	25.15	283	0.44
137	13.14	33.696	4.62		-	0.02	261	150	12.19	33.71	4.18	25.57	242	0.50
156	11.78	33.741	3.90		-	0.02	233	200	10.67	34.09	2.29	26.15	188	0.61
186	10.82	33.931	2.98		-	-	202	250	10.27	34.36	1.26	26.43	161	0.70
214	10.55	34.211	1.81		-	-	177	300	9.40	34.38	0.98	26.59	146	0.78
243	10.37	34.348	1.34		-	-	164	400	8.08	34.39	0.56	26.80	125	0.92
293	9.52	34.378	0.99		-	-	148	500	7.08	34.40	0.23	26.96	111	1.05
345	8.64	34.360	0.89		-	-	136	600	(6.25)	(34.41)	(0.22)	(27.08)	(99)	(1.16)
429	7.81	34.404	0.39		-	-	120							
513	6.94	34.405	0.22		-	-	109							
596	6.28	34.414	0.22		-	-	100							

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OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
123.42	ALEXANDER AGASSIZ; November 17, 1962; 1340 GCT; 27°14'N, 114°60'W; sounding, 1700 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 31°.													
2	20.60	34.351	5.02		3	0.01	380	0	(20.60)	(34.35)	(5.02)	(24.13)	(380)	(0.00)
10	20.62	34.346	5.07		3	0.02	381	10	20.62	34.35	5.07	24.12	380	0.04
31	20.56	34.336	5.17		3	0.01	380	20	20.59	34.34	5.10	24.12	380	0.08
40	16.48	33.821	5.02		6	0.11	320	30	20.56	34.34	5.15	24.13	379	0.11
53	14.07	33.612	4.72		6	0.01	285	50	14.45	33.63	4.81	25.05	291	0.18
65	12.81	33.776	4.03		11	0.06	249	75	12.28	33.78	3.69	25.61	239	0.25
86	11.94	33.786	3.41		17	0.01	232	100	11.80	33.94	2.56	25.82	218	0.31
103	11.50	33.997	2.50		-	-	209	125	10.18	33.91	2.86	26.09	193	0.36
121	10.26	33.897	2.93		26	0.02	195	150	9.84	34.04	2.39	26.25	178	0.40
146	9.86	34.017	2.46		33	0.03	180	200	9.52	34.25	1.50	26.47	157	0.49
172	9.74	34.166	1.96		38	0.01	167	250	9.12	34.36	0.93	26.62	143	0.57
206	9.46	34.262	1.42		42	0.00	155	300	8.66	34.42	0.68	26.74	132	0.64
231	9.27	34.312	1.19		46	0.00	149	400	7.73	34.42	0.43	26.88	118	0.77
274	8.98	34.405	0.74		50	0.01	137	500	6.87	34.42	0.33	27.00	107	0.89
330	8.27	34.423	0.59		56	0.01	126							
420	7.58	34.416	0.37		66	0.02	116							
503	6.84	34.422	0.33		76	0.02	106							
572	6.21	34.450	0.25		86	0.00	96							
127.40	ALEXANDER AGASSIZ; November 17, 1962; 0836 GCT; 26°43.5'N, 114°28.5'W; sounding, 1525 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 26°.													
3	21.50	34.394	4.96		2	0.00	400	0	(21.50)	(34.39)	(4.96)	(23.91)	(400)	(0.00)
11	21.50	34.399	4.93		2	0.00	400	10	21.50	34.40	4.94	23.92	399	0.04
34	17.91	33.947	5.08		3	0.01	343	20	21.48	34.39	4.94	23.92	400	0.08
43	15.56	33.893	4.17		7	0.44	295	30	21.30	34.37	4.95	23.95	396	0.12
57	14.56	34.007	3.09		11	0.01	266	50	14.92	33.94	3.57	25.19	278	0.19
70	13.92	34.122	2.39		-	0.00	245	75	13.59	34.12	2.27	25.61	238	0.25
92	12.52	34.096	1.98		-	-	220	100	12.16	34.10	1.86	25.88	213	0.31
110	11.88	34.126	1.73		-	-	206	125	11.51	34.26	1.40	26.13	190	0.36
127	11.48	34.269	1.37		-	-	188	150	11.00	34.32	1.13	26.27	176	0.41
154	10.92	34.334	1.08		-	-	174	200	10.72	34.54	0.43	26.49	155	0.49
181	10.65	34.454	0.69		-	-	160	250	10.35	34.61	0.17	26.61	144	0.57
217	10.82	34.622	0.23		-	-	151	300	9.48	34.53	0.24	26.69	136	0.64
244	10.46	34.621	0.16		-	-	145	400	8.01	34.44	0.24	26.85	121	0.78
288	9.68	34.549	0.23		-	-	138	500	7.01	34.43	0.13	26.99	108	0.90
347	8.78	34.481	0.29		-	-	129	600	(6.05)	(34.43)	(0.08)	(27.12)	(96)	1.01)
438	7.58	34.420	0.19		-	-	116							
521	6.82	34.439	0.11		-	-	105							
592	6.12	34.426	0.08		-	-	97							
130.30	ALEXANDER AGASSIZ; November 14, 1962; 0430 GCT; 26°30'N, 113°30'W; sounding, 44 fm; wind, 300°, force 5; weather, cloudy; sea, rough; wire angle, 11°.													
1	23.04	34.464	4.80	0.3	1	0.00	436	0	(23.04)	(34.46)	(4.80)	(23.53)	(436)	(0.00)
21	23.05	34.465	4.91	0.4	2	0.00	436	10	23.04	34.46	4.85	23.53	436	0.04
41	20.66	34.213	4.78	0.5	4	0.11	391	20	23.05	34.46	4.90	23.53	437	0.09
65	17.76	34.144	3.19	1.3	14	0.08	326	30	22.96	34.45	4.90	23.55	435	0.13
								50	19.35	34.18	4.07	24.33	361	0.21

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; November 13, 1962; 2300 GCT; 26°09'N, 114°07'W; sounding, 1400 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 32°.														130.40
1	22.54	34.425	4.84	0.3	1	0.00	425	0	(22.54)	(34.42)	(4.84)	(23.65)	(426)	(0.00)
9	22.52	34.423	4.88	0.4	2	0.00	425	10	22.52	34.42	4.88	23.65	425	0.04
26	21.58	34.287	5.03	0.4	2	0.00	410	20	22.27	34.40	4.92	23.71	420	0.08
34	17.20	33.823	5.53	0.4	3	0.00	336	30	19.30	34.05	5.38	24.24	369	0.12
46	14.97	33.820	4.43	0.8	6	0.05	288	50	14.77	33.94	3.75	25.22	275	0.19
60	14.42	34.153	2.52	-	-	0.12	253	75	13.98	34.36	1.46	25.72	229	0.25
80	13.84	34.410	1.22	-	-	0.04	222	100	13.40	34.54	0.63	25.97	204	0.31
97	13.48	34.519	0.71	-	-	-	207	125	12.79	34.64	0.28	26.17	185	0.36
114	13.07	34.618	0.37	-	-	-	192	150	12.31	34.69	0.15	26.31	172	0.40
130	12.66	34.654	0.24	-	-	-	182	200	11.58	34.68	0.14	26.44	160	0.49
153	12.26	34.699	0.14	-	-	-	171	250	10.80	34.62	0.17	26.54	151	0.57
184	11.88	34.700	0.15	-	-	-	164	300	10.03	34.57	0.21	26.63	142	0.64
208	11.42	34.672	0.14	-	-	-	158	400	8.64	34.50	0.18	26.80	125	0.78
250	10.80	34.625	0.17	-	-	-	150	500	7.21	34.44	0.16	26.97	110	0.91
298	10.06	34.574	0.21	-	-	-	142							
370	9.04	34.521	0.18	-	-	-	130							
444	7.99	34.459	0.17	-	-	-	119							
520	6.96	34.436	0.16	-	-	-	107							
ALEXANDER AGASSIZ; November 13, 1962; 1724 GCT; 25°50.5'N, 114°46.5'W; sounding, 1990 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 15°.														130.50
1	24.50	34.580	4.76	0.5	3	0.01	469	0	(24.50)	(34.58)	(4.76)	(23.20)	(469)	(0.00)
11	24.51	34.573	4.97	0.5	1	0.00	469	10	24.51	34.58	4.90	23.19	469	0.05
30	21.11	34.111	5.33	0.5	2	0.00	410	20	24.48	34.57	4.97	23.19	469	0.09
40	16.50	33.842	5.64	0.6	6u	0.00	319	30	21.11	34.11	5.33	23.81	410	0.14
55	13.97	33.825	3.89	1.3	2u	0.03	268	50	14.38	33.83	4.29	25.22	275	0.21
69	13.60	34.090	2.46	-	-	0.06	241	75	13.40	34.09	2.41	25.63	237	0.27
94	11.60	34.082	2.11	-	-	0.00	204	100	11.50	34.11	1.97	26.01	200	0.33
113	11.32	34.229	1.47	-	-	-	189	125	11.15	34.31	1.28	26.23	180	0.37
132	11.06	34.351	1.17	-	-	-	175	150	10.97	34.43	0.84	26.36	168	0.42
151	10.96	34.434	0.83	-	-	-	167	200	10.50	34.54	0.43	26.53	152	0.50
181	10.62	34.468	0.66	-	-	-	159	250	10.01	34.55	0.40	26.62	143	0.58
214	10.40	34.551	0.36	-	-	-	149	300	9.50	34.56	0.85	26.71	134	0.65
243	10.08	34.537	0.36	-	-	-	145	400	8.09	34.49	1.34	26.88	118	0.78
293	9.61	34.570	0.80	-	-	-	135	500	7.03	34.46	1.56	27.01	106	0.90
346	8.80	34.517	1.15	-	-	-	126							
429	7.73	34.473	1.43	-	-	-	114							
512	6.94	34.462	1.59	-	-	-	104							
ALEXANDER AGASSIZ; November 13, 1962; 1141 GCT; 25°28'N, 115°26.5'W; sounding, 2190 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 20°.														130.60
2	22.90	34.528	4.93	0.6	2	0.02	428	0	(22.90)	(34.53)	(4.93)	(23.63)	(428)	(0.00)
11	22.90	34.523	5.04	0.4	0	0.02	428	10	22.90	34.52	5.04	23.62	428	0.04
30	21.71	34.369	4.99	0.4	0	0.00	407	20	22.81	34.51	5.04	23.64	427	0.09
39	19.54	33.988	5.36	0.3	2	0.00	379	30	21.71	34.37	4.99	23.84	407	0.13
52	15.80	33.750	5.59	0.4	4	0.02	311	50	16.40	33.77	5.59	24.73	322	0.20
66	13.75	33.747	4.34	-	-	0.18	269	75	13.00	33.74	4.07	25.44	255	0.27
87	11.80	33.730	3.69	-	-	0.02	234	100	11.33	33.79	3.30	25.79	221	0.33
106	11.21	33.812	3.24	-	-	-	217	125	9.97	33.84	3.22	26.07	195	0.39
123	10.04	33.828	3.28	-	-	-	197	150	9.94	34.07	2.15	26.26	177	0.43
141	9.71	33.959	2.75	-	-	-	182	200	10.67	34.52	0.61	26.48	156	0.52
168	10.88	34.393	1.00	-	-	-	169	250	10.05	34.55	0.32	26.61	143	0.60
200	10.67	34.521	0.61	-	-	-	156	300	9.39	34.54	0.22	26.71	134	0.67
227	10.32	34.535	0.47	-	-	-	149	400	8.07	34.48	0.22	26.88	118	0.80
272	9.78	34.546	0.22	-	-	-	139	500	6.97	34.44	0.21	27.00	106	0.92
322	9.10	34.535	0.22	-	-	-	130							
401	8.05	34.473	0.22	-	-	-	119							
482	7.16	34.445	0.22	-	-	-	109							
565	6.32	34.450	0.18	-	-	-	97							

S10

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OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m

130.70 ALEXANDER AGASSIZ; November 13, 1962; 0650 GCT; 25°08'N, 116°03.5'W; sounding, 2300 fm; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 15°.

2	19.58	33.799	5.10	0.2	1	0.00	394	0	(19.58)	(33.80)	(5.10)	(23.98)	(394)	(0.00)
8	19.58	33.801	5.17	0.2	1	0.00	394	10	19.58	33.80	5.17	23.98	394	0.04
26	19.57	33.801	5.14	0.2	2	0.00	394	20	19.58	33.80	5.17	23.98	394	0.08
55	15.56	33.544	5.81	0.3	3	0.00	321	30	19.57	33.80	5.14	23.98	394	0.12
65	14.54	33.572	5.54	0.4	3	0.01	298	50	16.65	33.60	5.70	24.54	340	0.19
80	13.38	33.633	4.86	-	-	0.05	270	75	13.74	33.62	5.05	25.20	278	0.27
95	12.44	33.652	4.53	-	-	0.03	251	100	12.18	33.66	4.32	25.54	246	0.34
110	11.61	33.718	3.71	-	-	-	231	125	10.69	33.87	2.85	25.97	204	0.39
134	10.54	33.955	2.44	-	-	-	196	150	10.95	34.23	1.49	26.20	182	0.44
154	10.99	34.281	1.30	-	-	-	179	200	9.88	34.29	1.11	26.44	160	0.53
185	9.95	34.250	1.28	-	-	-	164	250	9.47	34.41	0.67	26.60	145	0.61
215	9.82	34.343	0.95	-	-	-	155	300	8.64	34.37	0.62	26.70	135	0.68
244	9.58	34.414	0.67	-	-	-	146	400	8.02	34.46	0.20	26.87	119	0.81
293	8.63	34.358	0.67	-	-	-	136	500	6.92	34.43	0.18	27.00	106	0.93
348	8.70	34.497	0.21	-	-	-	126	600	6.01	34.45	0.18	27.14	94	1.04
431	7.60	34.439	0.20	-	-	-	115							
517	6.76	34.434	0.18	-	-	-	104							
601	6.00	34.450	0.18	-	-	-	93							

130.80 ALEXANDER AGASSIZ; November 13, 1962; 0157 GCT; 24°47'N, 116°38'W; sounding, 2225 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 17°.

2	19.82	33.874	5.17	0.2	1	0.02	395	0	(19.82)	(33.87)	(5.17)	(23.97)	(395)	(0.00)
11	19.84	33.879	5.21	0.3	1	0.01	395	10	19.84	33.88	5.21	23.97	395	0.04
35	19.88	33.946	5.21	0.3	1	0.00	391	20	19.85	33.89	5.21	23.98	394	0.08
63	18.06	33.790	5.69	0.3	1	0.01	358	30	19.87	33.93	5.21	24.00	392	0.12
72	16.72	33.673	5.88	0.3	2	0.01	336	50	19.88	33.95	5.22	24.01	391	0.20
91	14.46	33.524	5.66	-	-	0.02	299	75	16.33	33.64	5.88	24.65	330	0.29
106	13.28	33.569	4.96	-	-	0.07	273	100	13.75	33.54	5.24	25.13	284	0.36
120	12.64	33.645	4.47	-	-	-	255	125	12.35	33.68	4.24	25.52	247	0.43
149	10.78	33.881	2.92	-	-	-	205	150	10.78	33.89	2.90	25.97	204	0.49
167	10.62	34.106	1.97	-	-	-	186	200	10.40	34.32	1.19	26.37	166	0.58
195	10.44	34.296	1.29	-	-	-	169	250	9.79	34.41	0.71	26.55	150	0.67
229	10.12	34.404	0.75	-	-	-	155	300	9.21	34.44	0.47	26.67	138	0.74
256	9.68	34.411	0.70	-	-	-	148	400	8.07	34.46	0.21	26.86	120	0.88
304	9.18	34.441	0.46	-	-	-	138	500	6.86	34.41	0.17	26.99	107	1.00
365	8.48	34.473	0.23	-	-	-	125	600	5.98	34.42	0.15	27.12	95	1.11
459	7.36	34.431	0.19	-	-	-	112							
544	6.36	34.404	0.17	-	-	-	101							
616	5.88	34.425	0.15	-	-	-	94							

130.90 ALEXANDER AGASSIZ; November 12, 1962; 2028 GCT; 24°29.5'N, 117°17'W; sounding, 2100 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 23°.

2	20.18	33.897	5.38	0.3	1	0.00	402	0	(20.18)	(33.90)	(5.38)	(23.90)	(402)	(0.00)
10	20.18	33.937	5.44	0.3	0	0.00	399	10	20.18	33.94	5.44	23.93	399	0.04
29	20.38	34.056	5.61	0.2	1	0.00	396	20	20.37	34.03	5.56	23.95	397	0.08
56	17.60	33.899	6.03	0.2	1	0.00	340	30	20.38	34.06	5.61	23.97	395	0.12
65	17.03	33.872	5.99	0.2	1	0.02	329	50	18.06	33.93	6.02	24.46	348	0.19
78	16.54	33.879	6.02	-	-	0.00	317	75	16.68	33.88	6.02	24.75	320	0.28
92	15.78	33.812	5.89	-	-	0.00	306	100	14.98	33.74	5.60	25.03	294	0.36
105	14.32	33.689	5.34	-	-	0.01	285	125	13.00	33.67	4.83	25.38	260	0.43
128	12.72	33.667	4.71	-	-	-	255	150	11.22	33.75	4.02	25.78	222	0.49
145	11.52	33.725	4.14	-	-	-	229	200	10.01	34.17	1.97	26.32	171	0.59
172	10.25	33.868	3.54	-	-	-	197	250	9.46	34.32	1.36	26.53	151	0.67
199	10.02	34.164	1.98	-	-	-	172	300	9.20	34.41	0.64	26.64	140	0.75
226	9.46	34.215	1.87	-	-	-	159	400	7.85	34.39	0.56	26.84	122	0.88
271	9.46	34.389	0.94	-	-	-	146	500	6.78	34.40	0.39	27.00	107	1.00
322	8.92	34.412	0.56	-	-	-	136							
399	7.86	34.386	0.56	-	-	-	122							
478	6.98	34.396	0.42	-	-	-	110							
557	6.35	34.418	0.30	-	-	-	100							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	NO_2-N µg at/L	σ_t g/L	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; November 12, 1962; 1524 GCT; 24°17'N, 118°03'W; sounding, 2210 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°.														130.100
2	21.08	34.115	5.25		1	0.02	409	0	(21.08)	(34.12)	(5.25)	(23.82)	(409)	(0.00)
12	21.10	34.114	5.23		0	0.03	410	10	21.10	34.12	5.23	23.82	409	0.04
32	21.10	34.115	5.32		0	0.00	410	20	21.10	34.12	5.25	23.82	409	0.08
61	17.24	33.673	6.07		1	0.01	348	30	21.10	34.12	5.30	23.82	409	0.12
72	16.68	33.654	6.06		1	0.02	337	50	21.00	34.10	5.35	23.83	408	0.20
86	15.70	33.647	5.89		-	0.01	316	75	16.44	33.65	6.03	24.63	332	0.30
102	15.01	33.625	5.67		-	0.04	303	100	15.10	33.63	5.69	24.91	305	0.38
115	13.64	33.576	5.30		-	0.05	279	125	12.82	33.60	4.82	25.36	262	0.45
141	11.74	33.694	4.06		-	-	235	150	11.29	33.76	3.77	25.78	223	0.51
161	10.82	33.830	3.44		-	-	209	200	10.08	34.09	2.41	26.25	178	0.61
191	10.08	34.001	2.78		-	-	185	250	9.18	34.24	1.64	26.51	153	0.70
220	10.02	34.254	1.69		-	-	165	300	8.62	34.32	0.98	26.67	138	0.77
250	9.18	34.243	1.64		-	-	152	400	7.45	34.36	0.50	26.87	119	0.91
299	8.62	34.320	0.99		-	-	138	500	6.50	34.38	0.36	27.02	105	1.03
354	7.95	34.354	0.64		-	-	126	600	5.92	34.44	0.26	27.14	93	1.13
437	7.11	34.360	0.41		-	-	114							
522	6.31	34.388	0.34		-	-	102							
607	5.89	34.441	0.26		-	-	93							
ALEXANDER AGASSIZ; November 12, 1962; 0716 GCT; 23°37'N, 119°12'W; sounding, 2330 fm; wind, 070°, force 4; weather, overcast; sea, rough; wire angle, 11°.														130.120
2	21.23	34.359	5.04	0.2	2	0.02	395	0	(21.23)	(34.36)	(5.04)	(23.96)	(395)	(0.00)
12	21.25	34.351	5.12	0.3	0	0.02	396	10	21.24	34.35	5.12	23.95	396	0.04
32	21.35	34.405	5.12	0.2	1	0.00	395	20	21.30	34.36	5.12	23.95	397	0.08
61	21.18	34.455	5.21	0.2	1	0.01	387	30	21.34	34.40	5.12	23.97	395	0.12
70	19.70	34.253	5.59	0.2	2	0.01	364	50	21.35	34.42	5.13	23.98	394	0.20
84	18.16	34.066	5.71	0.3	11	0.00	341	75	18.90	34.34	5.69	24.56	338	0.29
100	17.47	34.088	5.53	0.3	10	0.00	323	100	17.47	34.09	5.53	24.72	323	0.37
114	16.05	33.995	5.02	0.5	12	0.12	298	125	14.95	33.93	4.84	25.18	280	0.45
137	13.76	33.874	4.61	0.9	17	0.03	260	150	12.80	33.86	4.30	25.57	242	0.52
157	12.33	33.854	4.15	1.2	21	0.02	234	200	10.22	33.92	3.39	26.09	193	0.63
187	10.54	33.872	3.68	1.7	29	0.00	202	250	9.12	34.08	2.60	26.40	164	0.72
216	9.90	34.010	2.93	2.0	36	0.00	181	300	8.05	34.16	1.96	26.63	142	0.80
245	9.22	34.073	2.62	2.2	41	0.00	166	400	7.12	34.29	0.71	26.86	120	0.93
294	8.12	34.142	2.02	2.6	53	0.00	144	500	6.18	34.34	0.38	27.03	104	1.05
349	7.52	34.234	1.17	2.9	64	0.00	129	600	5.75	34.41	0.25	27.14	93	1.16
433	6.82	34.301	0.58	3.2	74	0.00	115							
517	6.04	34.351	0.34	3.4	86	0.00	101							
601	5.74	34.414	0.24	3.4	95	0.00	93							
ALEXANDER AGASSIZ; November 14, 1962; 1230 GCT; 25°36.5'N, 112°27'W; sounding, 45 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°.														137.23
1	23.47	34.249	4.85		2	0.00	464	0	(23.47)	(34.25)	(4.85)	(23.25)	(463)	(0.00)
11	23.50	34.238	4.98		1	0.00	465	10	23.49	34.24	4.97	23.24	465	0.05
31	23.28	34.439	4.89		1	0.00	445	20	23.49	34.24	4.98	23.24	465	0.09
50	17.99	34.470	3.41		7	0.05	307	30	23.35	34.44	4.90	23.43	446	0.14
60	17.18	34.473	3.15		10	0.04	288	50	17.99	34.47	3.41	24.89	307	0.21
ALEXANDER AGASSIZ; November 14, 1962; 1517 GCT; 25°24.5'N, 112°48.5'W; sounding, 178 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 06°.														137.30
1	24.08	34.523	4.99		0	0.01	461	0	(24.08)	(34.52)	(4.99)	(23.28)	(461)	(0.00)
11	24.10	34.521	4.88		1	0.01	462	10	24.10	34.52	4.89	23.27	462	0.05
31	24.06	34.519	4.85		0	0.01	461	20	24.10	34.52	4.86	23.27	462	0.09
51	18.89	34.044	5.03		2	0.09	360	30	24.07	34.52	4.85	23.28	461	0.14
76	15.62	34.160	2.86		4	0.00	277	50	19.25	34.06	5.03	24.26	367	0.22
100	14.49	34.479	0.84		5	0.00	230	75	15.64	34.16	2.88	25.20	277	0.30
125	13.66	34.587	0.29		17	0.00	206	100	14.49	34.48	0.84	25.70	230	0.37
165	12.74	34.679	0.15		26u	0.00	181	125	13.66	34.59	0.29	25.96	205	0.42
204	11.94	34.673	0.19		20u	0.00	167	150	13.07	34.66	0.19	26.13	189	0.47
253	11.03	34.651	0.10		25u	0.02	152	200	12.03	34.67	0.19	26.35	169	0.56
302	10.73	34.633	0.11		18u	0.00	149	250	11.07	34.65	0.10	26.51	153	0.65
								300	10.75	34.63	0.11	26.55	149	0.73

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OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
137.40	ALEXANDER AGASSIZ; November 14, 1962; 2051 GCT; 25°00'N, 113°22'W; sounding, 1760 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°.													
2	23.50	34.539	4.82		1	0.00	443	0	(23.50)	(34.54)	(4.82)	(23.46)	(443)	(0.00)
11	23.44	34.531	4.81		1	0.00	442	10	23.45	34.53	4.81	23.47	443	0.04
30	23.02	34.492	4.80		2	0.00	434	20	23.42	34.53	4.81	23.48	442	0.09
38	22.06	34.403	4.89		2	0.00	414	30	23.02	34.49	4.80	23.56	434	0.13
52	16.66	33.903	4.60		5	0.17	318	50	16.76	33.91	4.62	24.75	320	0.21
66	16.38	34.325	2.71		-	-	281	75	15.94	34.29	2.47	25.23	274	0.28
89	14.84	34.192	2.10		-	-	258	100	14.18	34.37	1.36	25.68	232	0.35
107	13.80	34.454	0.91		-	-	218	125	13.18	34.49	0.58	25.98	203	0.40
125	13.18	34.494	0.58		-	-	203	150	12.89	34.60	0.29	26.12	190	0.45
145	12.95	34.580	0.32		-	-	192	200	11.94	34.66	0.24	26.36	168	0.54
170	12.65	34.682	0.15		-	-	179	250	11.18	34.65	0.23	26.49	155	0.63
202	11.89	34.660	0.24		-	-	167	300	10.21	34.57	0.30	26.60	145	0.71
230	11.54	34.671	0.19		-	-	160	400	8.83	34.51	0.25	26.78	127	0.85
274	10.70	34.615	0.29		-	-	149	500	7.40	34.44	0.20	26.94	112	0.98
325	9.76	34.544	0.32		-	-	139							
404	8.78	34.513	0.24		-	-	126							
484	7.62	34.456	0.21		-	-	114							
560	6.39	34.415	0.19		-	-	101							
137.50	ALEXANDER AGASSIZ; November 15, 1962; 0153 GCT; 24°40'N, 114°02'W; sounding, 2190 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 18°.													
2	24.40	34.551	4.68		2	0.00	468	0	(24.40)	(34.55)	(4.68)	(23.20)	(468)	(0.00)
11	24.40	34.541	4.72		2	0.00	469	10	24.40	34.54	4.72	23.20	469	0.05
35	24.36	34.552	4.72		2	0.00	467	20	24.38	34.55	4.72	23.21	467	0.09
64	18.82	34.366	3.66		7	0.08	335	30	24.37	34.55	4.72	23.21	467	0.14
73	16.32	34.218	2.86		10	0.00	288	50	19.90	34.40	3.84	24.35	359	0.22
92	15.03	34.388	1.41		-	-	248	75	16.17	34.22	2.75	25.13	284	0.30
107	14.44	34.512	0.72		-	-	227	100	14.70	34.47	0.96	25.65	235	0.37
122	13.74	34.526	0.69		-	-	212	125	13.65	34.54	0.62	25.92	209	0.43
151	13.04	34.678	0.21		-	-	187	150	13.06	34.67	0.22	26.14	188	0.48
169	12.68	34.747	0.25		-	-	175	200	12.05	34.75	0.11	26.40	163	0.57
198	12.08	34.754	0.11		-	-	163	250	11.26	34.71	0.14	26.52	152	0.65
231	11.54	34.711	0.16		-	-	157	300	10.61	34.68	0.15	26.62	143	0.73
260	11.12	34.704	0.14		-	-	150	400	9.04	34.59	0.16	26.81	125	0.87
308	10.51	34.679	0.16		-	-	142	500	7.43	34.50	0.17	26.99	108	0.99
370	9.54	34.622	0.14		-	-	130	600	6.53	34.48	0.21	27.09	98	1.10
467	7.88	34.508	0.17		-	-	114							
555	6.88	34.488	0.17		-	-	102							
628	6.31	34.474	0.22		-	-	95							
137.60	ALEXANDER AGASSIZ; November 15, 1962; 0649 GCT; 24°20'N, 114°40'W; sounding, 2100 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 20°.													
2	24.08	34.336	4.84		0	0.02	474	0	(24.08)	(34.34)	(4.84)	(23.14)	(474)	(0.00)
11	24.10	34.335	4.95		1	0.00	475	10	24.09	34.34	4.94	23.14	474	0.05
35	21.22	33.979	5.31		1	0.00	423	20	24.10	34.34	4.95	23.13	475	0.09
45	16.08	33.792	5.54		3	0.01	314	30	23.60	34.27	5.01	23.23	466	0.14
58	13.11	33.775	3.76		11	0.05	255	50	14.60	33.78	4.68	25.14	284	0.22
73	12.47	33.947	2.59		-	-	230	75	12.41	33.96	2.52	25.72	228	0.28
96	11.81	34.066	2.05		-	-	209	100	11.69	34.09	2.02	25.96	205	0.34
114	11.27	34.177	1.84		-	-	192	125	11.30	34.29	1.27	26.19	184	0.39
134	11.34	34.387	0.97		-	-	177	150	11.36	34.49	0.86	26.33	170	0.43
163	11.32	34.550	0.72		-	-	165	200	11.00	34.59	0.31	26.48	156	0.51
190	11.18	34.606	0.29		-	-	158	250	10.10	34.55	0.36	26.60	144	0.59
227	10.40	34.552	0.37		-	-	149	300	9.23	34.50	0.39	26.71	134	0.66
256	10.00	34.546	0.35		-	-	143	400	7.85	34.44	0.30	26.88	118	0.80
303	9.16	34.494	0.38		-	-	134	500	6.89	34.44	0.28	27.01	105	0.92
365	8.30	34.459	0.31		-	-	123	600	6.19	34.45	0.25	27.12	96	1.02
464	7.15	34.427	0.28		-	-	110							
550	6.54	34.451	0.26		-	-	100							
625	5.98	34.453	0.24		-	-	93							

OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; November 15, 1962; 1124 GCT; 23°58'N, 115°17'W; sounding, 2100 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 27°.														137.70
2	20.92	34.126	5.16	1	0.00		404	0	(20.92)	(34.13)	(5.16)	(23.87)	(404)	(0.00)
10	20.94	34.135	5.37	1	0.01		404	10	20.94	34.14	5.37	23.88	404	0.04
32	20.94	34.128	5.29	2	0.01		405	20	20.94	34.13	5.33	23.87	404	0.08
59	16.84	33.746	5.98	2	0.00		334	30	20.94	34.13	5.30	23.87	404	0.12
67	15.95	33.684	5.52	3	0.00		319	50	18.65	33.91	5.70	24.30	364	0.20
84	14.46	33.669	5.33	-	-		289	75	15.27	33.68	5.43	24.92	305	0.28
97	13.33	33.644	4.80	-	-		268	100	13.14	33.65	4.71	25.34	264	0.35
110	12.44	33.674	4.37	-	-		249	125	11.54	33.78	3.62	25.75	226	0.42
136	11.04	33.861	3.21	-	-		211	150	10.80	33.94	2.97	26.01	201	0.47
153	10.74	33.967	2.88	-	-		198	200	10.49	34.33	1.30	26.36	167	0.56
179	10.55	34.186	1.92	-	-		179	250	10.00	34.42	1.03	26.52	152	0.65
209	10.46	34.362	1.17	-	-		164	300	9.37	34.44	0.73	26.64	141	0.72
234	10.25	34.421	1.07	-	-		156	400	8.26	34.48	0.28	26.85	121	0.86
278	9.54	34.403	0.87	-	-		146	500	7.15	34.46	0.22	26.99	107	0.98
335	9.14	34.508	0.47	-	-		132							
424	7.92	34.465	0.22	-	-		117							
507	7.08	34.464	0.22	-	-		106							
578	6.36	34.459	0.21	-	-		97							
ALEXANDER AGASSIZ; November 15, 1962; 1539 GCT; 23°37'N, 115°52.5'W; sounding, 2190 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 31°.														137.80
2	21.67	34.156	5.04	1	0.00		422	0	(21.67)	(34.16)	(5.04)	(23.69)	(421)	(0.00)
10	21.70	34.162	5.06	1	0.00		422	10	21.70	34.16	5.06	23.68	422	0.04
31	21.70	34.159	5.07	1	0.00		422	20	21.70	34.16	5.07	23.68	422	0.08
53	18.36	33.783	5.90	2	0.00		366	30	21.70	34.16	5.07	23.68	422	0.13
64	17.05	33.730	5.76	2	0.00		340	50	19.10	33.85	5.81	24.14	379	0.21
81	16.44	33.860	5.47	-	-		317	75	16.66	33.81	5.59	24.70	325	0.30
85	16.22	33.843	5.39	-	-		313	100	14.77	33.77	5.01	25.09	288	0.37
106	13.92	33.745	4.71	-	-		272	125	11.90	33.79	3.69	25.69	231	0.44
131	11.52	33.814	3.40	-	-		223	150	11.36	34.03	2.50	25.98	204	0.49
148	11.32	34.019	2.55	-	-		204	200	12.04	34.66	0.27	26.34	170	0.59
173	11.86	34.498	0.78	-	-		178	250	10.69	34.58	0.34	26.52	152	0.67
203	12.05	34.678	0.23	-	-		168	300	9.95	34.57	0.21	26.64	140	0.75
227	11.24	34.605	0.35	-	-		159	400	8.51	34.53	0.12	26.85	121	0.89
269	10.32	34.566	0.30	-	-		147	500	7.12	34.46	0.15	27.00	107	1.01
326	9.64	34.575	0.15	-	-		135							
412	8.34	34.520	0.11	-	-		119							
492	7.21	34.463	0.14	-	-		108							
560	6.60	34.459	0.17	-	-		100							
ALEXANDER AGASSIZ; November 16, 1962; 1552 GCT; 24°45'N, 112°24'W; sounding, 60 fm; wind, 340°, force 4; weather, overcast; sea, rough; wire angle, 15°.														140.30
2	23.58	34.481	4.89	2	0.00		450	0	(23.58)	(34.48)	(4.89)	(23.39)	(450)	(0.00)
21	23.60	34.475	4.79	2	0.01		451	10	23.59	34.48	4.88	23.39	450	0.05
40	22.96	34.358	4.92	2	0.02		442	20	23.60	34.48	4.79	23.39	450	0.09
60	17.18	34.039	4.07	5	0.21		320	30	23.60	34.47	4.80	23.38	451	0.14
89	15.20	34.351	1.85	18	0.03		254	50	20.92	34.20	4.78	23.93	399	0.22
								75	15.98	34.22	2.79	25.17	280	0.31

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OBSERVED							COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	NO_2-N	σ_t	Z	T	S	O_2	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	µg at/L	g/L	m	°C	‰	ml/L	g/L	cl/ton	dyn m
140.40	ALEXANDER AGASSIZ; November 16, 1962; 0944 GCT; 24°24'N, 113°04.5'W; sounding, 1990 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 25°.													
2	24.60	34.547	4.89		1		474	0	(24.60)	(34.55)	(4.89)	(23.14)	(474)	(0.00)
11	24.60	34.546	4.86		0		474	10	24.60	34.54	4.87	23.14	474	0.05
30	24.58	34.541	4.86		2		474	20	24.59	34.54	4.87	23.14	474	0.09
57	18.24	34.193	4.16		6		333	30	24.58	34.54	4.86	23.14	474	0.14
66	16.96	34.221	3.30		9		302	50	22.50	34.42	4.63	23.66	425	0.23
79	15.23	34.227	2.35		-		264	75	15.85	34.22	2.74	25.20	278	0.32
92	14.96	34.341	1.86		-		250	100	14.56	34.38	1.61	25.61	239	0.39
105	14.26	34.396	1.40		-		232	125	13.60	34.49	0.89	25.90	212	0.44
128	13.52	34.511	0.78		-		208	150	13.10	34.69	0.31	26.15	187	0.49
146	13.16	34.669	0.32		-		190	200	12.01	34.72	0.20	26.39	165	0.58
172	12.72	34.747	0.23		-		176	250	11.33	34.72	0.20	26.52	153	0.67
198	12.02	34.720	0.20		-		165	300	10.57	34.65	0.21	26.60	145	0.74
225	11.67	34.727	0.21		-		158	400	8.80	34.52	0.17	26.79	126	0.89
270	11.01	34.693	0.19		-		149	500	7.47	34.47	0.15	26.96	111	1.01
320	10.22	34.626	0.22		-		141							
397	8.85	34.527	0.17		-		126							
476	7.76	34.485	0.15		-		114							
554	6.83	34.434	0.15		-		105							
140.50	ALEXANDER AGASSIZ; November 16, 1962; 0402 GCT; 24°05'N, 113°46'W; sounding, 1840 fm; wind, 020°, force 4; weather, missing; sea, very rough; wire angle, 10°.													
1	24.20	34.564	4.71		3		461	0	(24.20)	(34.56)	(4.71)	(23.27)	(462)	(0.00)
11	24.21	34.567	4.74		3		461	10	24.21	34.57	4.72	23.28	461	0.05
30	24.20	34.563	4.73		2		461	20	24.21	34.56	4.72	23.27	462	0.09
60	16.26	34.242	2.82		13		285	30	24.20	34.56	4.73	23.27	462	0.14
70	15.47	34.277	1.73		16		265	50	18.15	34.28	3.27	24.70	325	0.22
84	14.86	34.456	1.36		-		239	75	15.26	34.33	1.60	25.42	257	0.29
99	14.13	34.597	0.56		-		214	100	14.10	34.60	0.56	25.88	213	0.35
115	13.30	34.625	0.62		-		196	125	13.16	34.66	0.50	26.12	191	0.40
140	12.95	34.713	0.33		-		183	150	12.71	34.74	0.35	26.27	176	0.45
159	12.52	34.752	0.35		-		172	200	11.94	34.74	0.23	26.42	162	0.53
189	12.04	34.735	0.26		-		164	250	11.20	34.71	0.36	26.53	151	0.62
219	11.73	34.736	0.23		-		158	300	10.58	34.69	0.23	26.63	142	0.69
248	11.23	34.710	0.38		-		152	400	9.31	34.60	0.26	26.77	128	0.83
298	10.60	34.691	0.23		-		142	500	8.08	34.54	0.27	26.92	114	0.96
352	9.93	34.640	0.30		-		135	600	6.73	34.49	0.21	27.08	100	1.08
436	8.85	34.577	0.23		-		123							
520	7.82	34.525	0.29		-		112							
604	6.66	34.490	0.20		-		99							

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
60.55-G	X-18	1825	37°47.5'	123°15.0'	62	280°	3	fog	very rough	13.10	33.543
80.65-G	11	1445	33°59.0'	121°28.5'	1875	220°	2	fog	high	-	-
82.47-B	10	1725	34°15.0'	119°58.0'	310	290°	2	overcast	slight	14.48	33.641
83.40-B	10	1330	34°14.0'	119°22.0'	12	-	1	fog	slight	15.42	33.583
83.43-B	10	1510	34°08.0'	119°34.0'	135	-	-	overcast	slight	16.72	33.623
83.51-B	10	2120	33°52.0'	120°08.5'	65	290°	5	cloudy	slight	17.18	33.654
83.55-B	10	2320	33°44.0'	120°24.5'	550	300°	3	fog	moderate	13.95	33.552
83.60-B	11	0205	33°34.0'	120°45.0'	800	270°	3	cloudy	slight	16.28	33.464
83.65-B	11	0435	33°24.0'	121°06.0'	1900	270°	1	partly cloudy	moderate	15.84	33.470
83.70-B	11	0705	33°16.0'	121°27.0'	2100	270°	2	cloudy	moderate	16.30	33.497
83.80-B	11	1205	32°56.5'	122°14.0'	2200	240°	3	partly cloudy	moderate	17.32	33.335
83.90-B	11	1615	32°34.0'	122°48.0'	2100	180°	4	cloudy	moderate	17.88	33.293
87.35-B	12	2235	33°50.0'	118°37.5'	300	250°	1	cloudy	slight	17.46	33.604
87.40-B	12	2010	33°40.0'	118°58.5'	450	calm		cloudy	slight	16.68	33.713
87.45-B	12	1750	33°30.0'	119°19.0'	900	090°	3	fog	slight	16.70	33.640
87.50-B	12	1515	33°20.0'	119°39.5'	38	var.	1	fog	moderate	15.38	33.619
87.55-B	12	1255	33°10.0'	120°00.0'	660	var.	2	overcast	moderate	14.64	33.574
87.60-B	12	1035	33°00.0'	120°21.5'	360	180°	3	fog	moderate	15.82	33.498
87.65-B	12	0835	32°49.5'	120°41.5'	2000	150°	3	partly cloudy	moderate	15.93	33.668

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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
87.70-B	X-12	0600	32°37.5'	121°02.0'	2180	140°	2	partly cloudy	rough	15.84	33.448
87.80-B	12	0110	32°19.5'	121°43.0'	2100	260°	2	partly cloudy	very rough	16.92	33.449
87.90-B	11	2040	31°59.0'	122°24.0'	2300	180°	3	partly cloudy	rough	17.26	33.345
90.65-G	XI-1	0445	32°16.0'	120°19.0'	2250	330°	4	fog	very rough	16.80	33.657
93.35-B	X-13	0710	32°40.5'	117°51.5'	370	270°	3	partly cloudy	moderate	17.92	33.713
93.45-B	14	0031	32°20.0'	118°33.0'	800	280°	3	partly cloudy	very rough	16.61	33.590
93.55-B	14	0630	32°00.0'	119°13.5'	1000+	280°	2	cloudy	rough	17.53	33.614
93.65-B	14	1240	31°40.0'	119°53.5'	2000	230°	2	overcast	moderate	17.55	33.756
97.30-B	16	2125	32°15.5'	117°08.5'	33	150°	3	partly cloudy	rough	14.34	33.559
97.32-B	16	2030	32°11.5'	117°16.5'	700	150°	3	partly cloudy	rough	17.68	33.664
97.35-B	16	1825	32°05.5'	117°29.0'	720	270°	2	partly cloudy	rough	18.38	33.701
97.40-B	16	1540	31°55.0'	117°50.0'	780	290°	4	partly cloudy	rough	18.16	33.683
97.45-B	16	1240	31°48.0'	118°17.0'	800	290°	2	cloudy	very rough	17.52	33.758
97.50-B	16	1000	31°38.0'	118°35.5'	1300	280°	4	cloudy	very rough	17.11	33.705
97.55-B	16	0735	31°28.0'	118°54.0'	600	320°	5	cloudy	rough	-	33.703
97.60-B	16	0500	31°18.0'	119°12.5'	2000	320°	6	cloudy	high	17.54	33.686
97.65-B	16	0230	31°08.0'	119°32.0'	2000	330°	6	cloudy	high	17.30	33.748
97.70-B	15	2350	30°57.5'	119°50.5'	2000	320°	6	cloudy	high	17.44	33.780
97.80-B	15	1900	30°38.0'	120°26.0'	2000	320°	6	partly cloudy	high	16.69	33.516

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
97.90-B	X-15	1410	30°15.5'	121°10.5'	2000	360°	5	partly cloudy	very rough	18.18	33.520
100.45-G	XI-4	1415	31°10.0'	117°47.0'	995	310°	4	overcast	rough	17.70	33.672
100.55-G	4	1945	30°50.5'	118°27.5'	1500	240°	2	cloudy	rough	17.41	33.718
100.65-G	5	0104	30°30.0'	119°08.0'	2150	330°	3	cloudy	very rough	17.72	33.507
103.30-B	X-19	0930	31°05.0'	116°25.0'	32	090°	2	clear	moderate	15.50	33.614
103.35-B	19	1155	30°55.0'	116°45.0'	740	230°	2	partly cloudy	moderate	16.79	33.620
103.40-B	19	1410	30°45.0'	117°05.5'	1000	300°	1	partly cloudy	moderate	-	33.689
103.45-B	19	1630	30°36.5'	117°25.0'	1100	270°	3	partly cloudy	moderate	17.02	33.696
103.50-B	19	1845	30°26.0'	117°44.5'	1580	270°	3	partly cloudy	moderate	17.94	33.818
103.55-B	19	2100	30°17.0'	118°01.0'	1500	320°	3	partly cloudy	moderate	17.90	33.792
103.60-B	19	2330	30°07.5'	118°22.0'	1800	320°	4	partly cloudy	rough	17.84	33.668
103.65-B	20	0210	29°54.0'	118°41.0'	2000	300°	3	partly cloudy	rough	18.18	33.645
103.70-B	20	0435	29°44.5'	119°03.0'	1800	300°	3	partly cloudy	rough	18.72	33.734
103.80-B	20	0855	29°26.5'	119°44.0'	2000	360°	4	partly cloudy	rough	-	-
103.90-B	20	1315	29°07.0'	120°23.5'	2100	360°	4	partly cloudy	moderate	17.58	33.709
107.32-B	21	2045	30°26.0'	116°11.0'	275	300°	2	partly cloudy	moderate	18.31	33.663
107.35-B	21	1925	30°20.0'	116°22.5'	900	300°	2	cloudy	moderate	18.15	33.661
107.40-B	21	1700	30°10.0'	116°43.0'	1500	320°	3	overcast	rough	18.29	34.123
107.45-B	21	1430	30°00.0'	117°03.0'	750	360°	3	partly cloudy	rough	18.02	33.824

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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
107.50-B	X-21	1215	29°49.5'	117°23.5'	1600	310°	5	partly cloudy	rough	18.39	33.744
107.55-B	21	0950	29°39.5'	117°43.5'	1200	330°	5	clear	rough	18.26	33.705
107.60-B	21	0720	29°31.0'	118°01.5'	1900	330°	4	clear	rough	18.30	33.696
107.65-B	21	0450	29°21.0'	118°21.0'	2000	340°	3	clear	rough	18.32	33.758
107.70-B	21	0225	29°11.0'	118°41.0'	2000	020°	4	partly cloudy	rough	19.34	34.195
107.80-B	20	2200	28°55.0'	119°18.0'	2000	360°	5	partly cloudy	rough	19.17	33.812
107.90-B	20	1730	28°32.0'	119°59.0'	2000	360°	4	cloudy	rough	19.24	33.915
110.32-G	XI-8	1800	29°52.0'	115°48.5'	92	300°	2	fog	rough	15.18	33.638
110.45-G	8	1010	29°26.5'	116°39.5'	450	320°	3	cloudy	rough	18.02	33.687
110.55-G	8	0349	29°06.5'	117°19.0'	1860	360°	3	overcast	rough	17.70	33.658
110.65-G	7	2204	28°47.0'	117°58.0'	2000	350°	3	overcast	moderate	17.98	33.665
113.30-B	X-22	0450	29°22.0'	115°18.0'	24	320°	3	partly cloudy	moderate	17.98	33.734
113.35-B	22	0710	29°11.5'	115°38.0'	530	300°	4	partly cloudy	rough	17.74	33.690
113.40-B	22	0910	29°02.0'	115°57.0'	1000	290°	4	clear	moderate	18.30	33.811
113.45-B	22	1140	28°52.0'	116°18.0'	1100	280°	4	clear	moderate	18.74	33.916
113.50-B	22	1355	28°40.0'	116°36.0'	2000	320°	4	overcast	moderate	18.86	33.752
113.55-B	22	1630	28°31.0'	116°59.0'	1800	300°	3	overcast	moderate	18.76	33.717
113.60-B	22	1820	28°22.0'	117°16.5'	2000	320°	3	overcast	moderate	18.79	33.728
113.65-B	22	2040	28°12.0'	117°36.0'	1900	330°	3	cloudy	moderate	19.02	33.743

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
113.70-B	X-22	2240	28°02.0'	117°55.0'	1800	320°	4	cloudy	moderate	19.41	33.923
113.80-B	23	0310	27°42.0'	118°33.5'	2000	330°	3	partly cloudy	moderate	20.01	33.988
113.90-B	23	0725	27°22.0'	119°12.0'	2000	320°	3	partly cloudy	moderate	-	34.024
117.26-B	24	2000	28°56.0'	114°41.5'	40	300°	1	overcast	moderate	-	33.889
117.30-B	24	1820	28°48.0'	114°56.5'	55	300°	3	overcast	rough	17.98	33.846
117.35-B	24	1556	28°38.0'	115°16.0'	130	320°	4	overcast	rough	18.29	33.760
117.40-B	24	1130	28°28.0'	115°35.5'	500	300°	5	missing	rough	19.09	33.811
117.45-B	24	0850	28°18.0'	115°56.0'	2000	300°	6	missing	rough	18.44	33.747
117.50-B	24	0550	28°08.0'	116°15.0'	2500	320°	6	missing	rough	19.00	33.978
117.55-B	24	0330	27°57.0'	116°34.5'	2000	340°	5	missing	rough	19.40	34.00
117.60-B	24	0110	27°48.5'	116°54.0'	2000	340°	4	cloudy	rough	19.60	33.880
117.65-B	23	2250	27°37.5'	117°13.5'	2000	350°	5	cloudy	rough	-	33.850
117.70-B	23	2025	27°28.0'	117°32.5'	1000	350°	5	cloudy	rough	19.89	33.890
117.80-B	23	1545	27°05.0'	118°08.5'	2000	330°	4	partly cloudy	moderate	18.90	33.840
117.90-B	23	1140	26°47.5'	118°47.5'	2100	340°	3	partly cloudy	moderate	-	33.834
118.39-B	24	1325	28°18.5'	115°23.5'	130	340°	3	missing	rough	-	34.180
120.25-B	25	0025	28°22.5'	114°15.0'	31	290°	4	overcast	rough	19.30	33.808
120.30-B	25	0245	28°13.0'	114°34.0'	51	300°	5	partly cloudy	rough	18.62	33.734
120.35-B	25	0515	28°03.0'	114°54.0'	47	320°	4	missing	rough	19.30	33.779

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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
120.40-B	X-25	0715	27°56.5'	115°14.0'	20	290°	5	missing	rough	18.81	33.743
120.55-G	XI-10	1430	27°19.5'	116°18.0'	2200	310°	4	cloudy	moderate	20.03	34.202
120.65-G	10	1920	26°58.0'	116°59.0'	2180	360°	2	overcast	rough	18.96	33.790
123.37-B	X-25	1235	27°24.0'	114°40.0'	40	-	1	missing	moderate	22.14	34.537
123.42-B	25	1505	27°14.0'	114°59.0'	800	320°	5	missing	rough	21.32	34.377
123.45-B	25	1655	27°09.0'	115°11.0'	2200	320°	6	cloudy	rough	19.96	33.843
123.50-B	25	1920	26°58.0'	115°30.5'	2000	330°	6	cloudy	rough	21.10	34.147
123.55-B	25	2150	26°47.5'	115°50.0'	2000	340°	5	cloudy	rough	20.36	33.959
123.60-B	26	0020	26°40.0'	116°14.0'	2000	340°	5	cloudy	rough	20.56	34.014
123.65-B	26	0215	26°30.0'	116°29.0'	2000	340°	5	cloudy	rough	20.50	34.110
123.70-B	26	0430	26°19.0'	116°47.0'	2000	330°	5	cloudy	rough	19.66	34.142
123.80-B	26	0845	25°59.0'	117°26.0'	2000	340°	5	partly cloudy	rough	19.98	34.010
127.34-B	27	1055	26°55.5'	114°06.0'	40	360°	6	missing	moderate	21.21	34.403
127.40-B	27	0815	26°45.5'	114°27.0'	1600	310°	2	missing	rough	21.24	34.278
127.45-B	27	0555	26°33.0'	114°48.5'	2000	310°	5	missing	rough	22.56	34.434
127.50-B	27	0315	26°23.0'	115°08.0'	2000	320°	5	missing	rough	22.24	34.397
127.55-B	27	0030	26°12.5'	115°30.0'	2000	340°	5	cloudy	rough	22.36	34.321
127.60-B	26	2145	26°02.0'	115°50.0'	2000	340°	5	cloudy	rough	20.50	33.986
127.65-B	26	1915	25°53.0'	116°06.0'	2000	340°	5	cloudy	rough	19.30	33.950
127.70-B	26	1650	25°44.0'	116°24.5'	2100	340°	5	cloudy	rough	19.20	33.809

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
127.80-B	X-26	1250	25°26.0'	117°01.0'	2000	340°	5	missing	rough	19.48	33.787
130.35-G	XI-14	0215	26°20.5'	113°49.0'	550	300°	5	cloudy	rough	22.02	34.405
130.45-G	13	2016	25°57.5'	114°26.0'	1950	310°	4	partly cloudy	very rough	24.48	34.529
130.55-G	13	1435	25°37.0'	115°03.5'	2050	330°	4	cloudy	very rough	23.02	34.382
133.25-B	X-27	2335	26°04.5'	112°48.5'	45	290°	4	partly cloudy	moderate	22.91	34.418
133.30-B	28	0215	25°54.5'	113°07.5'	100	270°	3	partly cloudy	moderate	23.93	34.434
133.35-B	28	0430	25°44.5'	113°26.5'	450	270°	3	missing	moderate	25.06	34.583
133.40-B	28	0645	25°34.5'	113°45.5'	1500	290°	3	missing	moderate	25.42	34.693
133.45-B	28	0900	25°24.5'	114°05.0'	2000	290°	3	missing	moderate	25.54	34.746
133.50-B	28	1120	25°14.5'	114°24.0'	2000	290°	3	missing	moderate	25.06	34.483
133.55-B	28	1350	25°02.0'	114°45.0'	2000	310°	3	cloudy	moderate	23.15	34.345
133.60-B	28	1605	24°54.0'	115°02.0'	2100	320°	3	cloudy	moderate	23.24	34.465
133.65-B	28	1840	24°44.5'	115°20.5'	2100	320°	2	cloudy	moderate	20.40	33.979
133.70-B	28	2048	24°34.5'	115°39.0'	2000	300°	3	cloudy	moderate	20.74	33.929
133.80-B	29	0115	24°14.5'	116°17.0'	2000	340°	3	overcast	moderate	20.06	33.992
137.35-G	XI-14	1730	25°09.0'	113°06.0'	625	320°	3	partly cloudy	rough	23.31	-
137.45-G	14	2340	24°51.0'	113°43.0'	1950	320°	4	cloudy	rough	24.64	34.558
137.55-G	15	0410	24°30.0'	114°20.5'	1890	340°	5	cloudy	high	24.52	34.594
140.35-G	16	1240	24°35.5'	112°42.5'	630	330°	3	cloudy	very rough	24.32	34.552
140.45-G	15	0715	24°13.5'	113°24.5'	1850	010°	5	partly cloudy	very rough	24.58	34.561

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