

Lamont Geological Observatory  
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**PHYSICAL AND CHEMICAL  
OCEANOGRAPHIC OBSERVATIONS  
IN THE SOUTHERN OCEANS**



**USS ELTANIN**  
**Cruises 22-27**  
**1966-1967**

**STANLEY S. JACOBS**

and

**ANTHONY F. AMOS**

**Technical Report No. 1-CU-1-67**

**NSF Grant GA-894**

**November, 1967**




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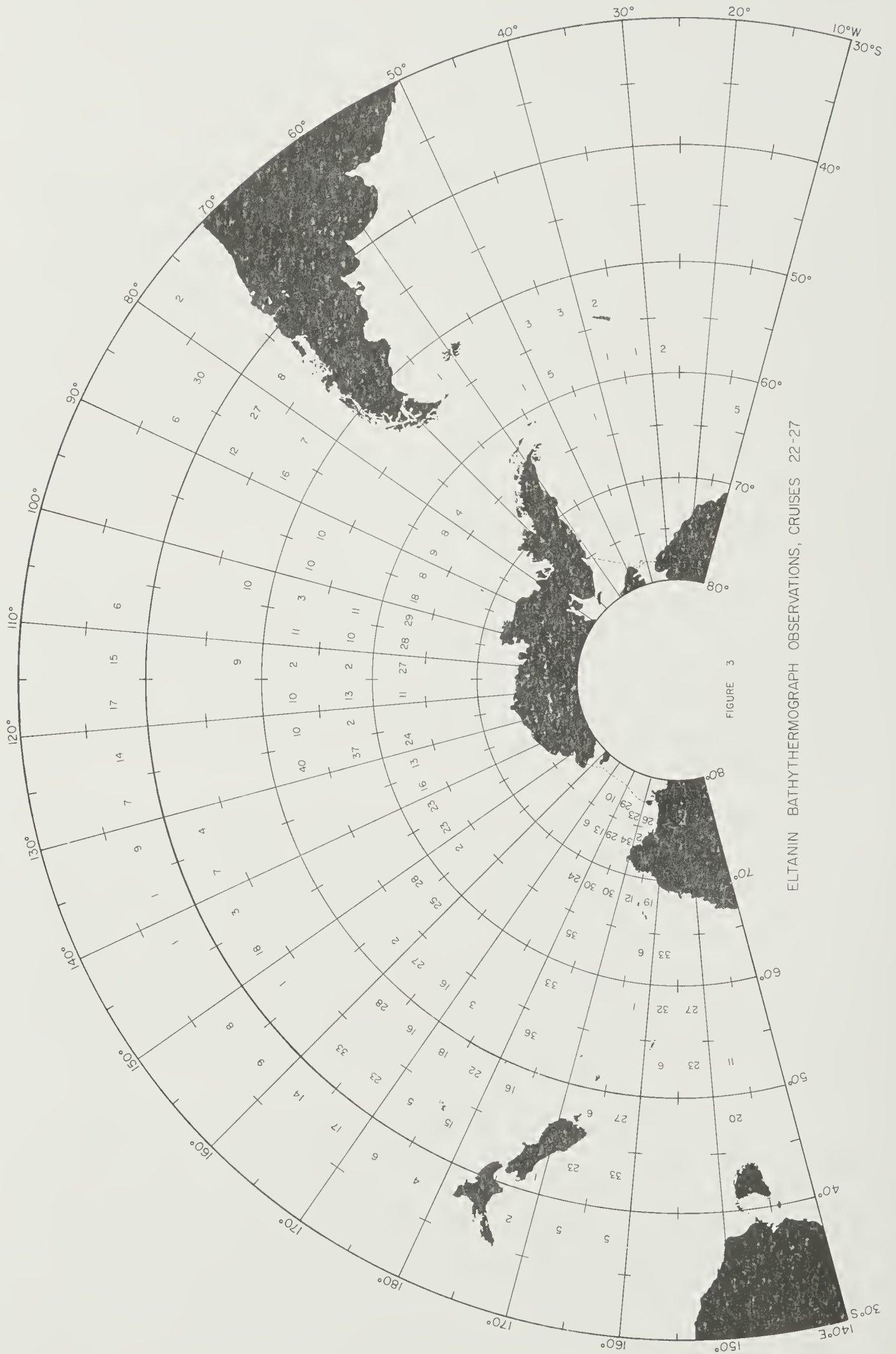
## I. Introduction

This report includes serial hydrographic data, continuously recorded in-situ Salinity/Temperature/Depth (STD) measurements, and chemical observations taken on the USNS ELTANIN on Cruises 22-27, January, 1966, through February, 1967. A station map (Fig. 1) and track chart (Fig. 2) are included. Data from ELTANIN Cruises 4 through 21 have appeared in earlier reports (Friedman, 1964; Jacobs, 1965, 1966) along with discussions of the methods of data collection and reduction. Analyses of these data have appeared in Gordon (1966a, 1966b, 1967a, 1967b). Except for the STD/SAMS system, the methods of data collection and processing remained essentially as described in previous reports and will only be mentioned briefly here.

One thousand five hundred sixty-eight bathythermograph casts were made during these six cruises (Fig. 3). Digitized records and analog prints of the BT slides will be on file at the Lamont Geological Observatory and at the National Oceanographic Data Center. Continuous surface-temperature records were obtained with a towed thermistor and are on file at Lamont.

Standard 1.5-liter teflon-lined Nansen bottles were used on all cruises. Five-liter Niskin bottles (General Oceanics, Inc.) were also utilized on Cruises 24, 26 and 27 for both microbiological (Institute of Marine Science, University of Miami) and hydrographic sampling. Smaller (1.7 liter) Niskin bottles were used with the STD/SAMS system and are shown in Fig. 4. By the end of Cruise 26, the majority of sampling bottles were fitted with frames carrying three reversing thermometers.

Twenty-liter samples of Antarctic Surface Water, Antarctic Bottom Water, Deep Water and Sub-Antarctic Surface Water were collected on Cruise 27 between the Balleny Islands and Melbourne, Australia. Air circulated through the samples was collected in two-liter glass vials. Vials and water samples were returned to Lamont for  $P_{CO_2}$  and trace



ELTANIN BATHYTHERMOGRAPH OBSERVATIONS, CRUISES 22-27

FIGURE 3



metal analyses.

## II. Salinity, Oxygen and Nutrient Data

On sixty stations of Cruises 26 and 27, two salinity samples were drawn from each bottle. "Citrate" bottles (350 ml) with snap tops and rubber gaskets, commonly used by Scripps Institution of Oceanography, were compared with 175 ml screw-top bottles, used by Woods Hole Oceanographic Institution and on all ELTANIN cruises. The time interval between processing of duplicate samples varied from a few hours to fifteen days, but had no apparent effect on the results. On 68% of the station pairs which were drawn into different sample bottles, the samples in the large bottles were processed first. On 82% of the station pairs, both salinity determinations were made with the same instrument (an Auto-Lab Model 601), standardized with Copenhagen water, batches P<sub>40</sub> and P<sub>41</sub>.

Although the individual samples cannot be considered independent, the average difference between all paired observations was .005 o/oo, with an average increase of .001 o/oo between first and second determinations. Treating each station as a separate observation resulted in an average increase of .001 o/oo with  $\sigma = .005$ . Eliminating five stations where  $\Delta S > .009$  o/oo, (-.012, -.014, -.013, -.012, -.013) gives a more nearly normal distribution of salinity differences, with an average  $\Delta S$  of zero and  $\sigma = .003_4$ . These figures are not considered indicative of evaporation from the smaller bottles.

On 83% of the salinity determinations temperature difference between unknowns and standards was  $\leq 1.0^\circ$  C. On three of the five stations noted above, however, the temperature difference exceeded  $1.0^\circ$  C. Poor temperature compensation over small temperature ranges does appear to account for some of the observed differences. In this respect, temperatures of the salinity samples in the smaller bottles are more

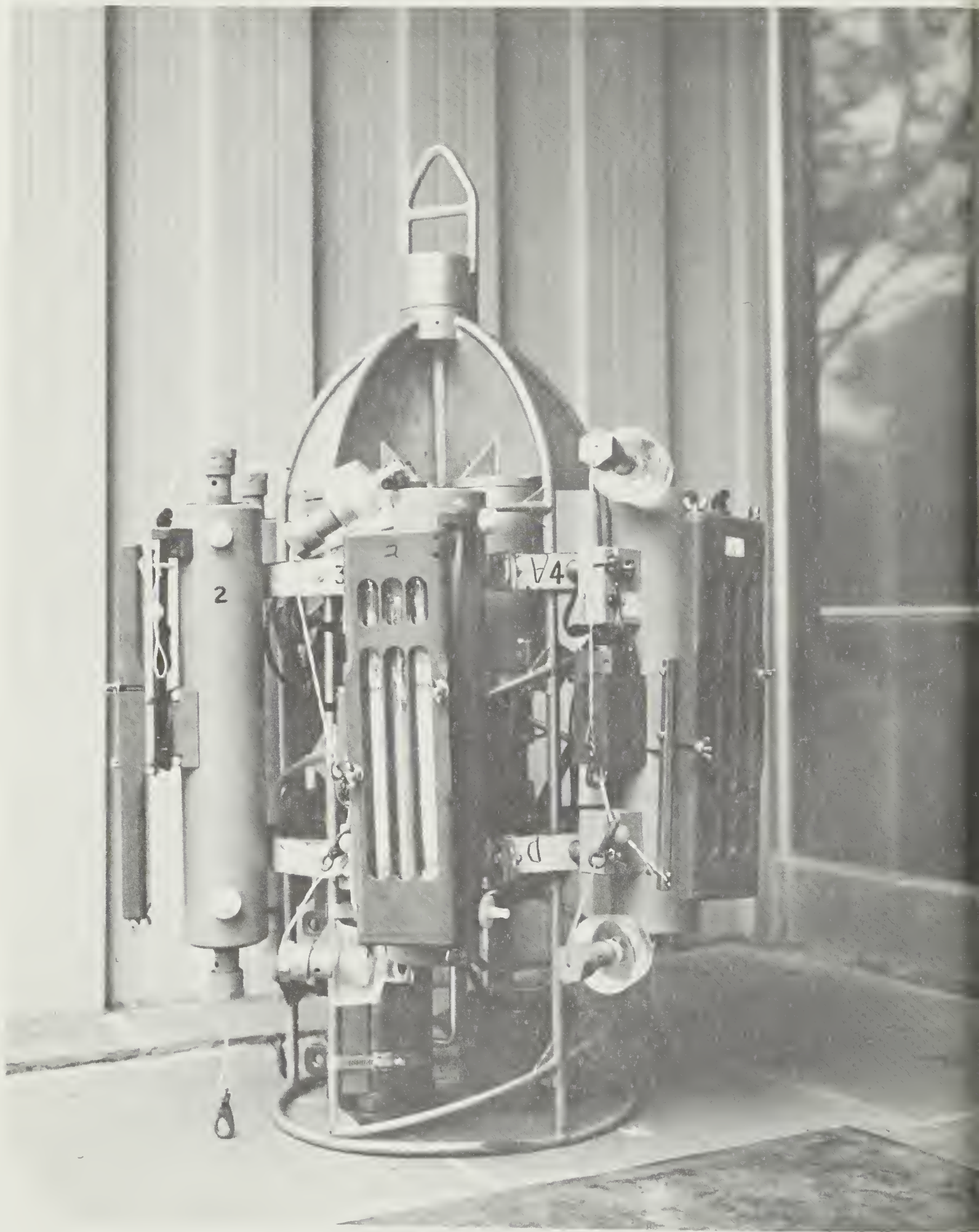
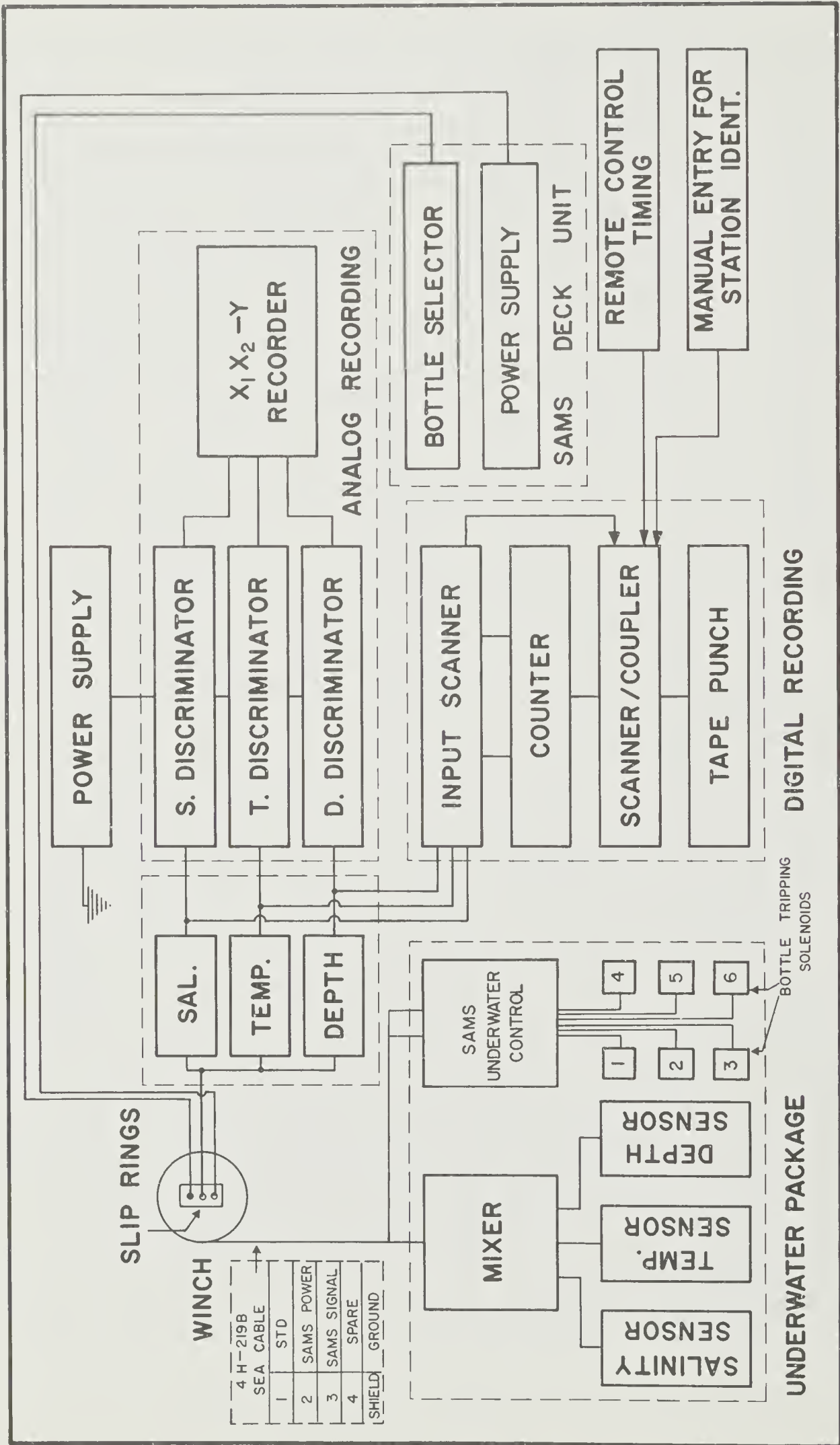


Fig. 4 Salinity/Temperature/Depth Sensor (STD) with Surface-Actuated Multiple Sampler (SAMS)

sensitive to handling and to changes in room temperature. The same is true for the vials of Copenhagen water when the standard is introduced directly from the vial into the conductivity cell. Where duplicate salinity determinations were made, values presented in this report are averages of the two runs.

Dissolved oxygen was determined by the Winkler method, essentially as outlined in Strickland and Parsons (1965). Oxygen measurements were of low quality on Cruises 23 and 24 apparently due to poor operator technique, and numerous values on these cruises have been deleted. Percentage oxygen saturation has been calculated for all ELTANIN data by the equation of Green and Carritt (1967). Saturation values exceeding 100% were found to be common in the surface layers on many ELTANIN stations. According to Green and Carritt surface tension, hydrostatic pressure and biological oxygen production can all contribute to super-saturation. In addition, oxygen may be carried downward by eddy diffusion before gas exchange at the sea surface leads to an equilibrium state. (1967, P. 146).

Reactive phosphate determinations were by the method of Robinson and Thompson (1948) through Cruise 25, after which the ascorbic acid procedure of Murphy and Riley (1962) was used. Reactive silicate was determined after Mullin and Riley (1955a) and nitrate after Mullin and Riley (1955b). All chemical procedures are essentially outlined, and often with useful modifications, in Strickland and Parsons (1965). Nutrient measurements were made with a Beckman DU spectrophotometer. Limited personnel and instrument malfunction curtailed the number of chemical measurements made on some cruises. Determinations of PH were done on several stations on Cruise 25 only and are not included in this report.



BLOCK DIAGRAM OF ELTANIN STD/SAMS SYSTEM

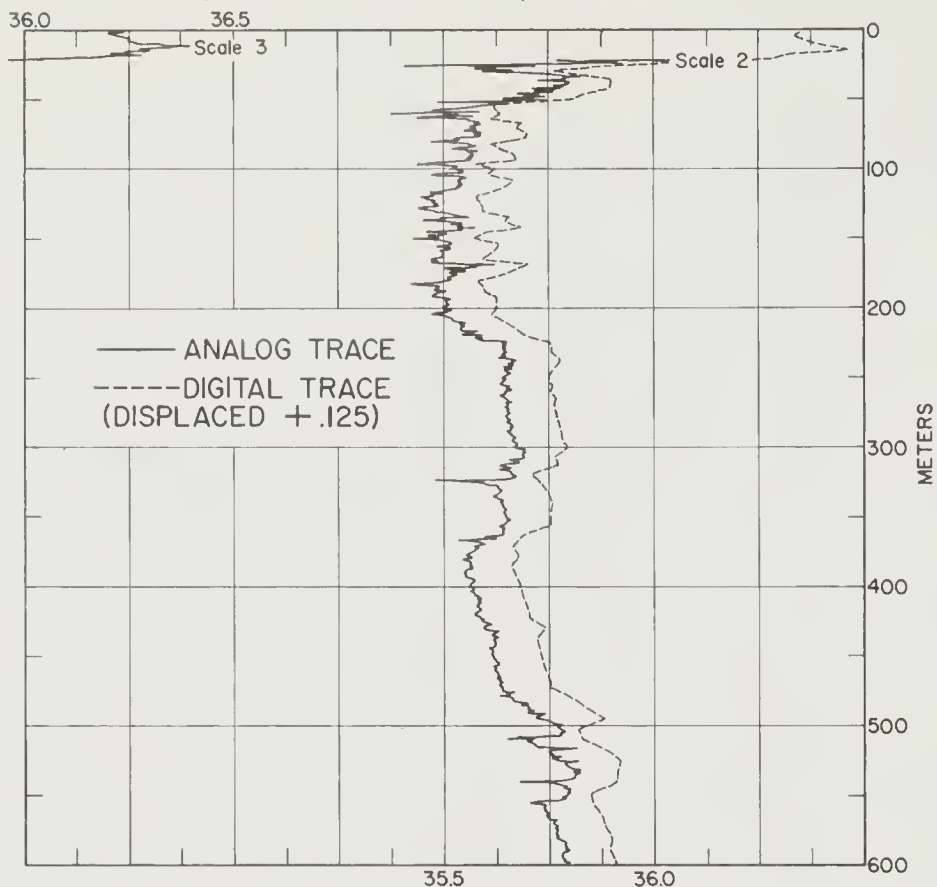
FIGURE 5

### III. The STD System

A continuously recording in-situ Salinity/Temperature/Depth Monitoring System (STD) was used on sixty-five ELTANIN stations during Cruises 25, 26 and 27. A brief history of the development of these instruments has been given by Siedler (1963), and evaluations of their performance have been made by Reid et al (1964), and Howe and Tait (1965). The underwater sensor package (Fig. 4) and deck analog recording system used aboard the ELTANIN is the Hytech (Bissett-Berman Corp.) model #9006. A digital data recording system was added by Lamont to the Hytech equipment, providing computer-compatible output on punched paper tape. In addition, a Surface-Actuated Multiple Sampler (SAMS) (Fig. 4), Gerard and Amos (in press), was added to the system permitting close quality control of STD recordings and water sampling at STD-determined levels.

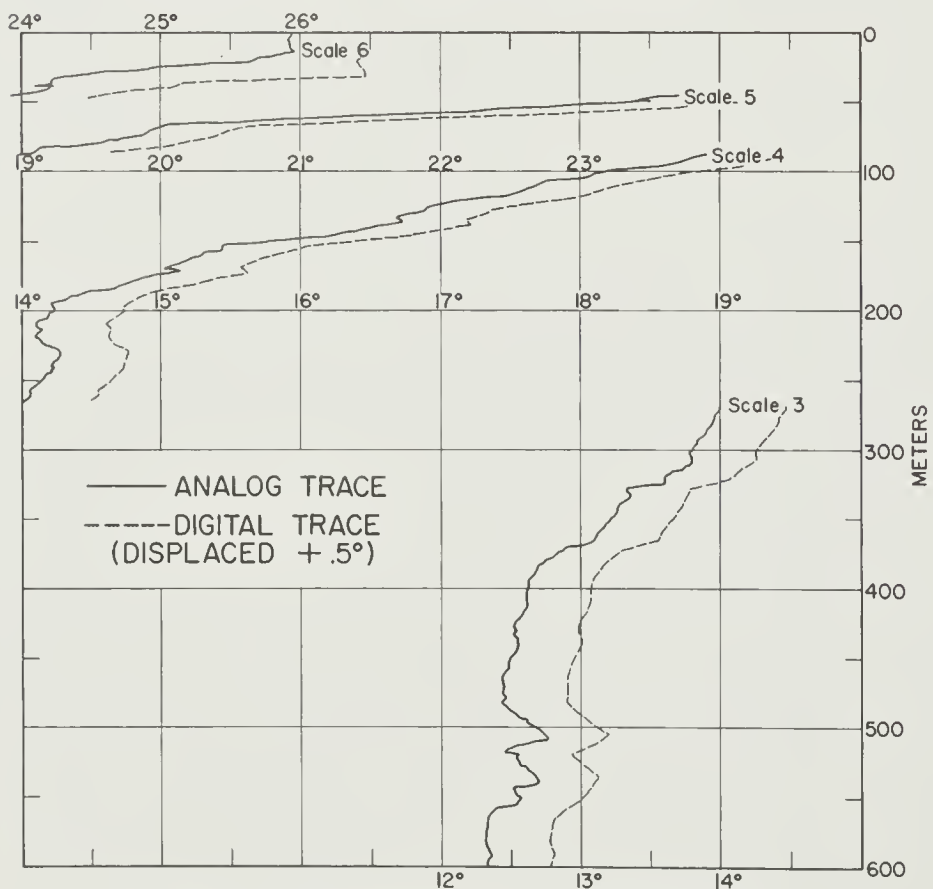
Except for the SAMS operation, a detailed description of this STD system (Fig. 5) has been given in Amos (1966). STD output is in the form of an FM analog of each parameter sensed. The frequencies are averaged over 1,000 cycles, converted to a six digit period (in microseconds) and recorded on tape at two second intervals. This recording method gives a resolution of  $.003^{\circ}$  C from  $-2$  to  $+35^{\circ}$  C; 0.2 meters from 0 to 5,000 m and  $.0001$  ‰ from  $33$  ‰ to  $41$  ‰. The maximum distance travelled by the STD during one sampling interval was 0.78 meters for the temperature signal at a 100 meter/minute lowering rate. The rate of lowering was not held constant on all stations, but attempts were made to move the STD at slower speeds through high temperature gradients to minimize the effect of the relatively large (0.35 sec) time constant in the salinity sensor temperature compensation circuit. Rapid passage of the STD through regions with large temperature gradients results in "spikes" in the salinity recordings. Some filtering of these spikes was accomplished by the discontinuous

R/V CONRAD 9-STD 56  
SALINITY TRACE (0-600M)



ANALOG-DIGITAL OUTPUT COMPARISON  
FIG. 6(a)

R/V CONRAD 9-STD 56  
TEMPERATURE TRACE (0-600M)



ANALOG-DIGITAL OUTPUT COMPARISON  
FIG. 6(b)

method of digital recording and the averaging of output frequency over time intervals of up to 0.5 sec (Fig. 6, after Amos, 1966). Alternatively, the salinity records could not be corrected for time delay in the temperature compensation circuitry, as large gradients were often encountered over intervals of only one or two meters.

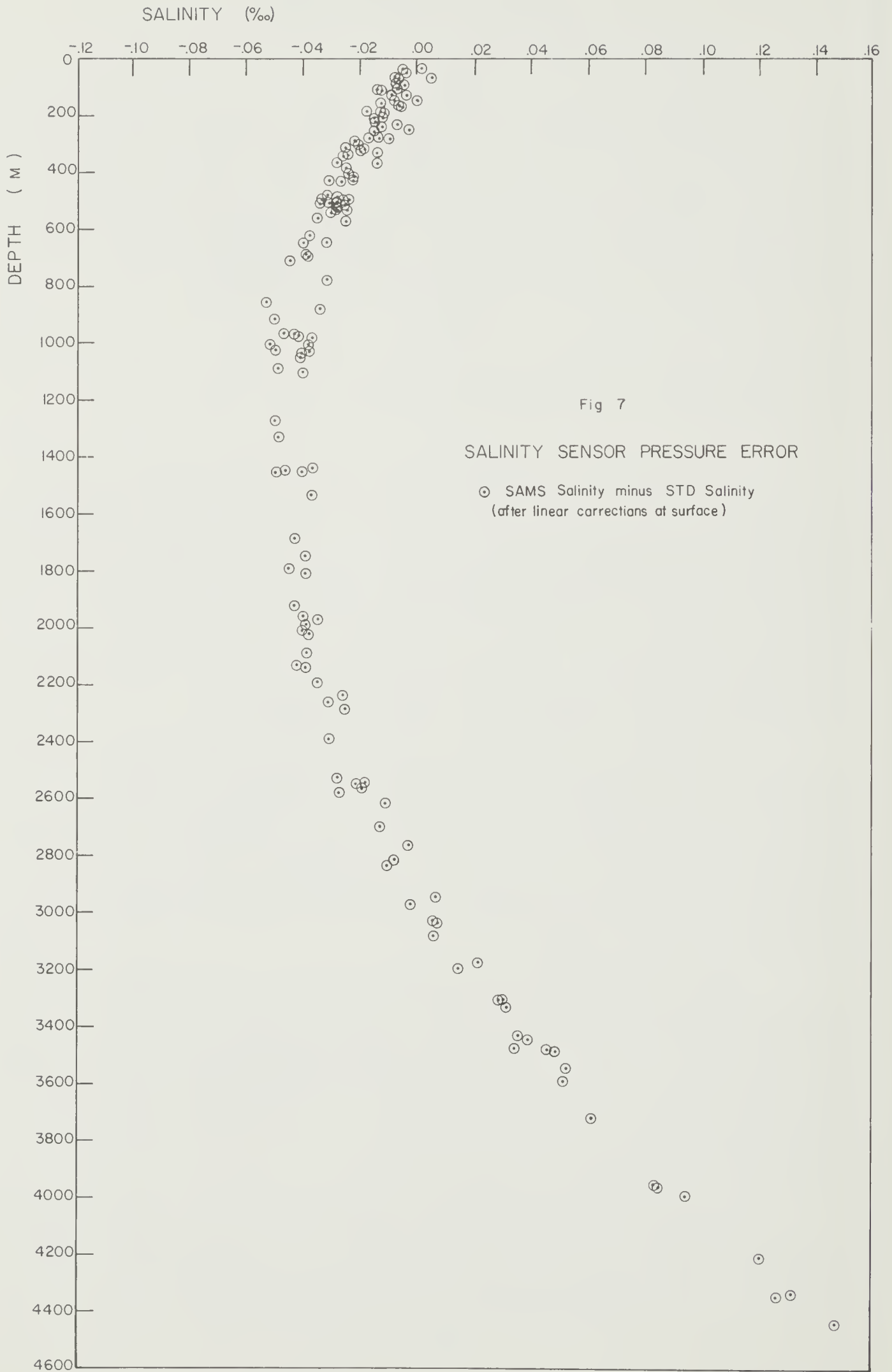
#### IV. SAMS Operation and Sensor Calibration

The surface-actuated multiple sampler consists of an array of six Niskin water sampling bottles, fitted with reversing thermometer frames, that are clamped directly around the STD cage (Fig. 4). Each bottle can be individually commanded by a signal from the surface control unit to collect a sample and reverse the thermometers. STD output was read directly from the deck console (counter) at the time the sample was collected and the thermometers reversed.

On these cruises numerous problems were encountered with the salinity and depth sensors and the SAMS data were utilized mainly for quality control. This necessitated its use in regions of low vertical temperature and salinity gradients. On a number of stations, however, sampling was carried out where the analog record revealed interesting features of the water column.

All sensors were originally calibrated by the manufacturer with a stated absolute accuracy of  $\pm .03$  o/oo,  $\pm .02^\circ$  C and  $\pm .25$  o/o full scale depth range. With the SAMS equipment, three hundred thirty-three comparison points were obtained for the temperature sensor, one hundred eighty-six for the depth sensors, and two hundred sixty-seven for the salinity sensor.

A severe depth-dependent salinity error (Fig. 7) was observed on all stations along with occasional shifts in salinity sensor output frequency. These faults were apparently caused by leakage of sea water





into the salinity sensor pressure housing, but could not be eliminated by thorough cleaning and drying of the affected components at sea. The salinity/pressure error was later reproduced in the laboratory by using a dead weight tester as a pressure source. This particular salinity sensor has subsequently been replaced by the manufacturer. Figure 7 illustrates the salinity/pressure error after linear corrections have been made to the STD output to bring the SAMS surface values and STD surface values into agreement. A second order polynomial was fitted to the points in Fig. 7 and then applied to STD output.

A third order equation relating temperature to sensor frequency was determined from the manufacturer's original thirty-eight calibration points, with  $\sigma = .0074^{\circ} \text{C}$  from  $-3.0$  to  $+35.0^{\circ} \text{C}$ . The STD temperatures calculated with this equation gave excellent agreement with reversing thermometers. An analysis of the results indicated that observed differences were distributed in the same manner as differences between protected thermometer pairs on previous ELTANIN cruises. Below  $0.0^{\circ} \text{C}$  slight systematic differences were observed between STD output and reversing thermometer data, possibly due to a bad calibration point at  $-2.0^{\circ} \text{C}$ . Adjustments were made to these STD data on the basis of a curve fitted to the thermometer points.

Three depth sensors were used during these cruises:

- 1) A 0-3000 meter range sensor used for stations 591 through 597, 608 and 609.
- 2) A 0-5000 meter range sensor used for stations 600 through 607. The oscillator failed after station 607.
- 3) A second 0-5000 meter sensor was made up on board ship using the oscillator from Sensor #1 and the transducer from Sensor #2. This was used on stations 611 through 689.

The manufacturer's original frequency/depth calibration data was used for Sensors 1 and 2, and a second order polynomial derived from STD/SAMS thermometric depth comparisons was used to calibrate Sensor #3.

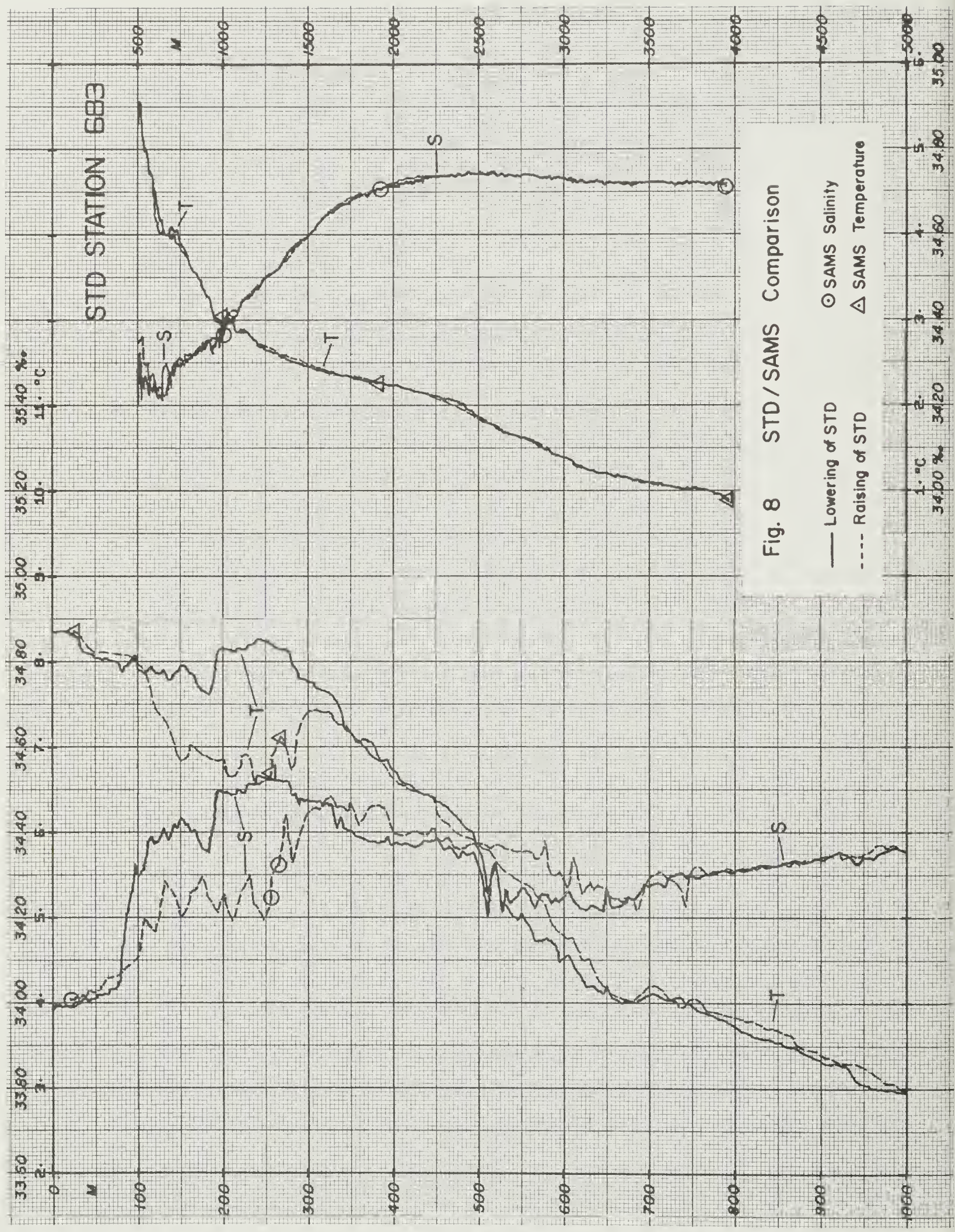


Fig. 8 STD / SAMS Comparison

## V. Processing of STD Stations

The STD data presented in this report have been obtained from digital records only, utilizing an IBM 1800 computer. The sequence of processing was as follows:

a) The data on punched paper tape were converted to salinity, temperature and depth and recorded on magnetic tape. Rough editing was carried out during this step - elimination of parity errors and data points outside the allowable ranges.

b) A tape to tape transfer was effected with application of the SAMS - derived correction curves. Final editing was done to remove large spikes that frequently were recorded in areas of small thermal gradients - particularly of deep stations. These spikes were probably caused by the sea-water leakage noted above.

c) A series of Disk-stored Fortran link programs then selected the appropriate data from tape for each station, utilizing only successively greater depths from which to plot, list or perform dynamic computations.

## VI. Evaluation of the STD/SAMS System

It is apparent from the results of these cruises (Fig. 8, e.g.) that samples taken at the same time and position as the STD underwater package provide significantly better data for control and calibration of the different sensors than serial observations made before or after the STD cast. As the salinity/pressure error could not be righted at sea, stations that would have been relatively useless have now been corrected with SAMS data to an accuracy well within the manufacturer's specifications. To date, the Lamont STD system has proven rather temperamental at sea, particularly on deep stations.

The addition of SAMS equipment permitted its use on a regular hydrographic program with a high degree of dependability. In addition, verification was obtained for a number of STD-observed salinity and temperature maxima and minima (at the bottom of Station 652, for example). Surface-actuated multiple samplers with more than six bottles are now available commercially and would allow more complete sampling throughout the water column.

The punch-tape digital recording system provided an effective back-up for the analog records and permitted quantitative correction and analysis of the data. On future ELTANIN cruises digital data will be recorded directly on magnetic tape. Each parameter can be recorded as often as every 0.10 sec.

It is practical to move the STD faster through deep water than at levels where large thermal gradients may be encountered. Some standardization of lowering and raising speeds is desirable, however, particularly if time studies are to be made and corrections for time delay in the salinity sensor temperature compensation circuit are not applied. Lowering speeds in excess of 85 m/minute were apparently responsible for kiting of the instrument package and the observed pretrip of SAMS thermometers on some Cruise 25 stations.

## VII. Processing of Serial Stations

After preliminary calculations aboard ship, all data were reprocessed with the aid of the IBM 1800 computer at Lamont. Computation and quality control were effected through the use of the following programs:

- A) Separate calculation of all chemical parameters from initial concentration, absorbance and conductivity values. The electrical conductivity/chlorinity relationship in natural sea water as determined by Cox,

Culkin and Riley (1967) (UNESCO, 1966b) was applied to all conductivities obtained by laboratory induction salinometer.

- B) Application of thermometer corrections and calculation of thermometric depth and 'L-Z' values, based on equations and data from Lafond (1951), Sverdrup (1947), and Wüst (1933).
- C) Analysis of paired protected-thermometer temperature results for possible systematic errors or changes in index corrections.
- D) Calculation of density (Knudsen, 1901) and (UNESCO, 1966a, utilizing the relationship  $S=1.80655 C1$ ), sound velocity (Wilson, 1960), interpolation to standard levels (Rattray, 1952), and computation of specific volume anomaly and dynamic height (Bjerknes and Sandström, 1910).
- E) Plotting of observed variables in vertical cross sections, "core" maps and T-S diagrams.

### VIII. Presentation of Data

Station headings are mostly self-explanatory. Serial station numbers are preceded by 'SER' and STD stations by 'STD'. 'GMT', in hours and tenths is shallow cast messenger time or initial lowering time of the STD. Satellite navigation made possible the recording of 'LATITUDE' and 'LONGITUDE' to tenths of minutes, although coordinates were only reported to this precision on Cruises 26 and 27. 'MARS' is Marsden square number. 'DEPTH' is sonic depth in meters, corrected after Matthews (1939), except where a '2' or '3' appear under 'SPEC OBS' in which case depth has been determined with a (Benthos) pinger attached to the hydro wire. A '1' or '3' under 'SPEC OBS' indicates

that one or two phleger cores were taken on the deep hydrographic cast. 'MSD' is maximum sample depth rounded to the nearest hundred meters. 'NOL' is the number of observed levels on serial stations and the number of successively greater depths recorded during descent on STD stations. Air temperature and dew point are in °C. Barometric pressure in millibars was recorded on STD stations only. Wind and sea direction are in degrees rounded to the nearest tens place. Wind force is the Beaufort scale and sea state, 'ST', is WMO Code 3700.

Under 'TYPE', 'OBS' refers to the Nansen or Niskin bottles and 'ISL' to interpolated standard levels. Selected interpolated levels only have been listed on STD stations and are preceded by 'STD'. 'INT', in meters, refers to the depth interval over which interpolation on STD stations has been performed. INT values greater than 15 are the result of the editing-out of large 'spikes' in the record, or of initiation of STD recording well below the surface, generally in rough weather. Doubtful data, 'DD', appears on serial stations only, with the following codes:

- 1 - doubtful temperature
- 2 - doubtful salinity
- 4 - doubtful oxygen
- 9 - temperature = 0.0°

Additional indicators for doubtful chemical data have not been used in this report due to a lack of reliable standards in some of the regions investigated.

Plots of temperature vs. depth and salinity vs. depth have been drawn by computer for each STD station in scales of 0-1000 m and 500-5000 m. On five stations on Cruises 25 and 26, shallow STD and serial stations were originally given the same numbers. On these stations, the serial station observed levels have been listed after the STD data.

All STD data in this report were recorded during descent of the underwater unit, except for stations 611 and 631 where the 'uptrace' data have been used. In general, more recording problems were

encountered during raising of the STD than during its lowering. When more information has been gathered on the hysteresis of the STD system, it is expected that 'down' and 'up' data will routinely be recorded and presented as separate stations. Analyses of STD data, particularly of the microstructure, will likely have to include considerations of the direction of travel of the underwater package. Stations 650, 656 and the original station 611 have been deleted because of missing or erroneous depth data. The station appearing herein with # STD 611 is chronologically out of order as it was originally a test station occupied between SER 612 and STD 613.

#### IX. Acknowledgments

Those primarily responsible for the collection and processing of these data include Alvaro L. Ulloa, Bernard Katz, Steven Gordon and Jorge Duran. Others who have assisted in various phases of the work are Shimon Kaplan, Robert Goldberg, Frederic L. Rosselot, Bruce Weiner, and Dr. Arnold Gordon. Secretarial and drafting work was by Jeanne Stolz, Elaine Mancusi and Patricia Carstens.

Assistance in the shipboard operation of hydrographic stations was provided by Alpine Geophysical Associates, the ELTANIN technical support party, and by Dr. J. Fell, Roy Schrameck, John Walsh, Arthur Weiner, Michael Lehman and James Low of the Institute of Marine Science, University of Miami. Some chemical determinations were made on board ship by Aquiles DeRomedì and Roberto Rubino, Texas A and M University.

The Lamont Submarine Geology and Magnetism Departments have assisted in the determination of sonic depths and navigation data.

Jean Vicariot of the Service Hydrographique Central, Paris, France, participated in the hydrographic program on ELTANIN Cruise 27.

This work has been supported by National Science Foundation Contracts GA-305, GA-894 and GA-1121 and Atomic Energy Commission Contract AT(30-1)2663.



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SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 22	SER 512		21 JAN 1966	16.4	55 57.0S	61 42.0W	486	4082	37	21			
	AIR TEMP		DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
	3.2		1.1			20	5	24	3	0			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.67	34.055	26.87			14725	702	206		12		
ISL	0	5.67	34.055	26.87	119.03	0.000	14725						
ISL	10	5.50	34.057	26.89	116.98	0.012	14720						
ISL	20	5.31	34.060	26.92	114.72	0.023	14714						
ISL	30	5.10	34.064	26.94	112.25	0.035	14707						
ISL	50	4.64	34.074	27.00	106.76	0.057	14691						
OBS	54	4.54	34.076	27.02			14688	690	208		9		
ISL	75	3.87	34.093	27.10	97.71	0.082	14663						
ISL	100	3.15	34.113	27.19	89.69	0.106	14637						
OBS	108	2.94	34.119	27.21			14629	672	213		20		
ISL	125	2.77	34.127	27.23	85.48	0.128	14625						
ISL	150	2.72	34.136	27.24	84.46	0.149	14627						
OBS	162	2.66	34.140	27.25			14626	649	219		22		
ISL	200	2.55	34.157	27.27	81.70	0.190	14628						
OBS	215	2.51	34.163	27.28			14629	616	226		25		
ISL	250	2.36	34.171	27.30	79.33	0.231	14628						
OBS	267	2.30	34.175	27.31			14628	604	237		27		
ISL	300	2.27	34.193	27.33	77.09	0.270	14633						
OBS	320	2.27	34.206	27.34			14636	580			29		
ISL	400	2.27	34.254	27.38	73.02	0.345	14650						
OBS	423	2.28	34.267	27.38			14655	530			38		
ISL	500	2.27	34.298	27.41	70.15	0.416	14667						
OBS	525	2.27	34.308	27.42			14672	498			51		
ISL	600	2.35	34.351	27.45	67.42	0.485	14688						
OBS	627	2.38	34.367	27.46			14694	467			56		
ISL	700	2.37	34.404	27.49	64.22	0.551	14707						
ISL	800	2.32	34.450	27.53	60.76	0.613	14722						
OBS	831	2.30	34.464	27.54			14726	426			67		
ISL	900	2.28	34.497	27.57	57.27	0.672	14737						
ISL	1000	2.24	34.542	27.61	54.05	0.728	14753						
OBS	1034	2.23	34.557	27.62			14758	403			74		
ISL	1100	2.22	34.582	27.64	51.33	0.781	14769						
ISL	1200	2.19	34.615	27.67	49.10	0.831	14785						
ISL	1250	2.18	34.630	27.68	48.15	0.855	14793						
ISL	1300	2.16	34.642	27.69	47.28	0.879	14801						
ISL	1400	2.13	34.663	27.71	45.84	0.926	14817						
OBS	1495	2.10	34.678	27.73			14832	392			91		
ISL	1500	2.10	34.678	27.73	44.80	0.971	14833						
OBS	1713	1.97	34.690	27.75			14863	408			92		
ISL	1750	1.95	34.693	27.75	43.06	1.081	14868						
OBS	1932	1.83	34.708	27.77			14895	417			96		
ISL	2000	1.80	34.710	27.78	41.05	1.186	14905						
OBS	2151	1.72	34.712	27.78			14927	429			101		
ISL	2250	1.66	34.713	27.79	40.05	1.287	14942						
OBS	2364	1.58	34.714	27.80			14958	434			101		
ISL	2500	1.46	34.714	27.81	38.27	1.385	14976						
OBS	2581	1.39	34.714	27.81			14987	447			105		
ISL	2750	1.26	34.713	27.82	36.37	1.479	15010						
ISL	3000	1.09	34.710	27.83	34.98	1.568	15046						
OBS	3009	1.09	34.710	27.83			15048	457			111		
ISL	3250	1.01	34.708	27.83	34.38	1.654	15086						
OBS	3448	0.96	34.706	27.83			15119	468			116		
ISL	3500	0.95	34.705	27.83	34.16	1.740	15127						
OBS	3663	0.91	34.703	27.83			15154	466			118		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 513	22JAN1966	23.7	57 3.0S	60 1.0W	486	3633	36	21				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	6.3	3.2		5	5	7	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.29	34.088	26.94			14710	710					
ISL	0	5.29	34.088	26.94	112.22	0.000	14710						
ISL	10	5.21	34.100	26.96	110.53	0.011	14708						
ISL	20	5.12	34.111	26.98	108.81	0.022	14706						
ISL	30	5.01	34.121	27.00	107.06	0.033	14704						
OBS	47	4.81	34.134	27.03			14699	707					
ISL	50	4.76	34.136	27.04	103.36	0.054	14697						
ISL	75	4.34	34.147	27.09	98.44	0.079	14684						
OBS	94	4.06	34.151	27.13			14675	686					
ISL	100	4.02	34.152	27.13	94.99	0.103	14675						
ISL	125	3.93	34.156	27.15	93.95	0.127	14675						
OBS	138	3.91	34.157	27.15			14676	672					
ISL	150	3.88	34.157	27.15	93.61	0.150	14677						
OBS	183	3.76	34.153	27.16			14677	661					
ISL	200	3.65	34.146	27.17	92.56	0.197	14675						
OBS	228	3.45	34.135	27.18			14671	667					
ISL	250	3.33	34.131	27.18	91.02	0.243	14670						
OBS	273	3.24	34.132	27.19			14670	672					
ISL	300	3.27	34.153	27.21	89.11	0.288	14675						
OBS	363	3.29	34.202	27.24			14688	576					
ISL	400	2.97	34.191	27.27	84.09	0.374	14680						
OBS	452	2.52	34.175	27.29			14669	609					
ISL	500	2.46	34.202	27.32	79.16	0.456	14675						
OBS	540	2.50	34.233	27.34			14683	549					
ISL	600	2.46	34.271	27.37	74.41	0.533	14692						
ISL	700	2.40	34.334	27.43	69.57	0.605	14707						
OBS	726	2.38	34.351	27.44			14711	475					
ISL	800	2.39	34.403	27.48	64.90	0.672	14724						
ISL	900	2.42	34.471	27.54	60.66	0.735	14743						
OBS	924	2.43	34.487	27.55			14748	408					
ISL	1000	2.41	34.523	27.58	57.28	0.794	14760						
ISL	1100	2.38	34.564	27.61	54.44	0.850	14776						
ISL	1200	2.34	34.598	27.64	52.00	0.903	14792						
ISL	1250	2.32	34.612	27.66	50.93	0.929	14799						
ISL	1300	2.29	34.624	27.67	49.95	0.954	14806						
ISL	1400	2.23	34.644	27.69	48.28	1.003	14821						
ISL	1500	2.15	34.657	27.71	46.98	1.051	14835						
OBS	1538	2.12	34.660	27.71			14840	400					
ISL	1750	1.98	34.683	27.74	44.26	1.165	14870						
OBS	1772	1.97	34.685	27.74			14873	402					
ISL	2000	1.81	34.706	27.77	41.54	1.272	14905						
OBS	2002	1.81	34.706	27.77			14906	419					
OBS	2231	1.68	34.717	27.79			14939	430					
ISL	2250	1.67	34.717	27.79	39.86	1.374	14942						
OBS	2460	1.52	34.717	27.80			14972	439					
ISL	2500	1.48	34.717	27.81	38.34	1.471	14977						
OBS	2689	1.30	34.714	27.82			15002	453					
ISL	2750	1.25	34.713	27.82	36.32	1.565	15010						
OBS	2917	1.14	34.709	27.82			15034	453					
ISL	3000	1.10	34.708	27.83	35.21	1.654	15047						
OBS	3146	1.04	34.706	27.83			15069	462					
ISL	3250	0.99											
ISL	3500	0.90											
OBS	3590	0.88						477					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 514	23JAN1966	19.1	57 26.0S	58 57.0W	485	2851	27	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.7	-2.1		15	6	14	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	3.36	33.790	26.91			14625	743					
ISL	0	3.36	33.790	26.91	115.19	0.000	14625						
ISL	10	2.99	33.796	26.95	111.58	0.011	14611						
ISL	20	2.61	33.802	26.99	108.05	0.022	14596						
ISL	30	2.24	33.810	27.02	104.58	0.033	14582						
ISL	50	1.47	33.826	27.09	97.89	0.053	14551						
OBS	55	1.28	33.831	27.11			14544	799					
ISL	75	0.35	33.849	27.18	89.40	0.077	14506						
ISL	100	-0.59	33.880	27.25	82.51	0.098	14467						
OBS	111	-0.93	33.896	27.28			14453	783					
ISL	125	-0.87	33.918	27.29	78.40	0.118	14458						
ISL	150	-0.77	33.974	27.33	74.44	0.137	14468						
OBS	165	-0.71	34.018	27.37			14474	727					
ISL	200	0.32	34.196	27.46	62.81	0.172	14529						
OBS	220	0.97	34.299	27.51			14564	547					
ISL	250	1.58	34.391	27.54	56.54	0.201	14597						
OBS	274	1.89	34.439	27.55			14615	460					
ISL	300	1.94	34.469	27.57	53.62	0.229	14622						
OBS	328	1.87	34.486	27.59			14624	440					
OBS	381	1.81	34.504	27.61			14630	433					
ISL	400	1.82	34.518	27.62	49.39	0.281	14634						
OBS	489	1.94	34.589	27.67			14655	425					
ISL	500	1.95	34.595	27.67	45.08	0.328	14657						
OBS	595	1.98	34.634	27.70			14675	413					
ISL	600	1.98	34.635	27.70	42.76	0.372	14676						
ISL	700	1.97	34.661	27.72	41.24	0.414	14693						
ISL	800	1.94	34.678	27.74	40.09	0.454	14708						
OBS	811	1.93	34.679	27.74			14710	403					
ISL	900	1.90	34.695	27.76	38.87	0.494	14723						
ISL	1000	1.85	34.708	27.77	37.85	0.532	14738						
OBS	1024	1.84	34.711	27.77			14742	424					
ISL	1100	1.80	34.715	27.78	37.28	0.570	14753						
OBS	1113	1.79	34.715	27.78			14755	437					
ISL	1200	1.71	34.718	27.79	36.50	0.607	14765						
OBS	1206	1.70	34.718	27.79			14766	437					
ISL	1250	1.66	34.719	27.79	36.14	0.625	14772						
ISL	1300	1.62	34.721	27.80	35.80	0.643	14779						
ISL	1400	1.54	34.722	27.81	35.19	0.678	14792						
OBS	1442	1.51	34.723	27.81			14798	438					
ISL	1500	1.46	34.723	27.81	34.64	0.713	14805						
OBS	1677	1.32	34.723	27.82			14829	449					
ISL	1750	1.26	34.723	27.83	33.24	0.798	14839						
OBS	1916	1.14	34.721	27.83			14862	455					
ISL	2000	1.08	34.718	27.83	32.19	0.880	14874						
OBS	2157	0.99	34.713	27.84			14896	459					
ISL	2250	0.94	34.711	27.84	31.51	0.959	14910						
OBS	2400	0.86	34.709	27.84			14932	471					
ISL	2500	0.80	34.707	27.84	30.64	1.037	14947						
OBS	2646	0.78	34.707	27.85			14971	482					
OBS	2605	0.77	34.706	27.85			14964	470					
OBS	2744	0.77	34.705	27.84			14988	485					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 515	24 JAN 1966	21.7	57 50.0S	56 52.0W	485	4052	41	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	4.7	-2.2		6	2	0	0	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.01	33.837	26.88			14653	750	209	300	16		
ISL	0	4.01	33.837	26.88	117.69	0.000	14653						
ISL	10	3.16	33.843	26.97	109.52	0.011	14619						
ISL	20	2.41	33.850	27.04	102.82	0.022	14588						
ISL	30	1.74	33.858	27.10	97.34	0.032	14561						
ISL	50	0.70	33.877	27.18	89.25	0.051	14518						
OBS	52	0.62	33.879	27.19			14514	788	231	245	24		
ISL	75	-0.00	33.905	27.24	83.34	0.072	14490						
ISL	100	-0.16	33.944	27.28	79.55	0.093	14487						
OBS	104	-0.23	33.951	27.29			14485	764	210	285	23		
ISL	125	-0.09	34.005	27.33	75.18	0.112	14496						
ISL	150	0.25	34.073	27.37	71.77	0.130	14516						
OBS	156	0.36	34.090	27.37			14523	683	212	293	36		
ISL	200	1.01	34.179	27.41	68.38	0.165	14561						
OBS	208	1.13	34.194	27.41			14567	614	210	313	43		
ISL	250	1.55	34.279	27.45	64.69	0.199	14594						
OBS	259	1.61	34.295	27.46			14598	539	203	322	57		
ISL	300	1.78	34.338	27.48	62.18	0.230	14613						
OBS	310	1.80	34.346	27.49			14616	504	230	331	56		
ISL	400	2.01	34.437	27.54	57.02	0.290	14641						
OBS	411	2.03	34.448	27.55			14644	446	208	326	69		
ISL	500	2.25	34.533	27.60	52.35	0.345	14670						
OBS	512	2.27	34.543	27.61			14673	411	209	329	70		
ISL	600	2.24	34.578	27.64	49.42	0.395	14686						
OBS	614	2.22	34.581	27.64			14688	401	211	295	82		
ISL	700	2.18	34.611	27.67	46.95	0.444	14701						
ISL	800	2.14	34.641	27.70	44.75	0.490	14716						
OBS	815	2.13	34.645	27.70			14719	404	179	315	82		
ISL	900	2.08	34.664	27.72	42.91	0.533	14731						
ISL	1000	2.01	34.683	27.74	41.30	0.575	14745						
OBS	1017	2.00	34.686	27.74			14747	424	223	312	92		
ISL	1100	1.94	34.701	27.76	39.74	0.616	14759						
ISL	1200	1.87	34.715	27.78	38.35	0.655	14773						
OBS	1240	1.84	34.720	27.78			14778	425	211	309	85		
ISL	1250	1.83	34.721	27.78	37.77	0.674	14779						
ISL	1300	1.79	34.723	27.79	37.35	0.693	14786						
ISL	1400	1.70	34.723	27.79	36.83	0.730	14799						
OBS	1495	1.62	34.725	27.80			14812	436	217	306	96		
ISL	1500	1.62	34.725	27.80	36.11	0.766	14812						
OBS	1748	1.41	34.723	27.82			14845	441	219	307	96		
ISL	1750	1.41	34.723	27.82	34.82	0.855	14845						
ISL	2000	1.25	34.723	27.83	33.73	0.941	14881						
OBS	2002	1.25	34.723	27.83			14881	451	197	316	106		
ISL	2250	1.05	34.719	27.84	32.30	1.023	14915						
OBS	2255	1.05	34.719	27.84			14916	464	222	307	110		
ISL	2500	0.95	34.715	27.84	31.84	1.103	14954						
OBS	2506	0.95	34.715	27.84			14955	465	217	320	120		
ISL	2750	0.87	34.710	27.84	31.62	1.183	14993						
OBS	2757	0.87	34.710	27.84			14994	475	205	314	117		
ISL	3000	0.81	34.707	27.84	31.44	1.262	15034						
OBS	3009	0.81	34.707	27.84			15035	476	217	310	127		
ISL	3250	0.64	34.698	27.85	30.10	1.339	15070						
ISL	3500	0.43	34.688	27.85	28.18	1.411	15105						
OBS	3515	0.42	34.687	27.85			15107	500	202	313	117		
ISL	3750	0.26	34.680	27.85	26.46	1.480	15141						
ISL	4000	0.10	34.674	27.86	24.56	1.543	15178						
OBS	4021	0.09	34.671	27.86			15181	536	215	314	123		
OBS	4051	0.07	34.664	27.85			15186	536	212	332	113		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 516	25JAN1966	23.1	58 55.0S	53 56.0W	485	3974	39	11				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.5	-1.5		25	5	26	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10·m/sec	OXYG $10^2$ ml/l	PHOS $10^2$ $\mu$ gatl	NITR $10$ $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
OBS	991	1.68	34.726	27.80			14730	437					
ISL	1000	1.67	34.726	27.80	34.80		14820						
ISL	1100	1.58	34.727	27.81	34.20		14833						
ISL	1200	1.48	34.728	27.81	33.57		14846						
ISL	1250	1.44	34.728	27.82	33.25		14852						
OBS	1258	1.43	34.728	27.82			14764	441					
ISL	1300	1.39	34.729	27.82	32.87		14859						
ISL	1400	1.30	34.730	27.83	32.16		14872						
ISL	1500	1.21	34.730	27.84	31.54		14885						
OBS	1514	1.20	34.730	27.84			14797	451					
ISL	1750	1.04	34.723	27.84	30.87		14920						
OBS	1770	1.03	34.722	27.84			14832	468					
ISL	2000	0.89	34.716	27.85	30.11		14956						
OBS	2025	0.87	34.716	27.85			14869	468					
ISL	2250	0.73	34.713	27.85	28.95		14992						
OBS	2281	0.71	34.713	27.85			14905	479					
ISL	2500	0.58	34.706	27.86	28.02		15029						
OBS	2536	0.56	34.705	27.86			14943						
ISL	2750	0.43	34.698	27.86	26.99		15066						
OBS	2784	0.41	34.697	27.86			14979						
ISL	3000	0.30	34.690	27.86	26.04		15104						
ISL	3250	0.18	34.682	27.86	25.09		15142						
OBS	3308	0.15	34.680	27.86			15059	500					
ISL	3500	0.06	34.677	27.86	23.76		15181						
ISL	3750	-0.07	34.671	27.86	22.46		15220						
OBS	3820	-0.10	34.668	27.86			15138	518					
OBS	3899		34.663					551					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 517	28 JAN 1966	23.7	55 53.0S	51 48.0W	485	3850	39	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	6.5	3.0		28	2	30	2		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	6.03	34.082	26.85			14740	723	134	109	13		
ISL	0	6.03	34.082	26.85	121.26	0.000	14740						
ISL	10	6.00	34.081	26.85	121.06	0.012	14740						
ISL	20	5.96	34.080	26.85	120.83	0.024	14740						
ISL	30	5.93	34.081	26.86	120.52	0.036	14741						
OBS	50	5.86	34.080	26.87			14741	708	137		17		
ISL	50	5.86	34.080	26.87	120.03	0.060	14741						
ISL	75	4.69	34.083	27.01	106.80	0.089	14697						
OBS	99	3.46	34.085	27.14			14650	722	168	236	25		
ISL	100	3.43	34.085	27.14	94.34	0.114	14649						
ISL	125	2.81	34.080	27.19	89.35	0.137	14626						
OBS	149	2.46	34.075	27.22			14615	711	183	254	32		
ISL	150	2.45	34.075	27.22	86.76	0.159	14614						
OBS	199	2.03	34.080	27.26			14604	696	188	268	31		
ISL	200	2.03	34.081	27.26	83.18	0.201	14604						
OBS	249	2.02	34.115	27.28			14612	674	195	284	27		
ISL	250	2.02	34.115	27.28	80.66	0.242	14612						
OBS	299	1.85	34.130	27.31			14613	655	199	284	29		
ISL	300	1.85	34.130	27.31	78.38	0.282	14614						
OBS	398	1.90	34.186	27.35			14633	604	206	288	42		
ISL	400	1.91	34.187	27.35	74.92	0.359	14633						
ISL	500	2.21	34.265	27.39	72.11	0.432	14664						
ISL	600	2.45	34.356	27.44	68.00	0.502	14693						
OBS	608	2.47	34.364	27.45			14695	474	224	321	59		
ISL	700	2.34	34.455	27.53	60.12	0.566	14706						
OBS	707	2.33	34.461	27.54			14707	437	233	328	6		
ISL	800	2.28	34.509	27.58	55.94	0.624	14721						
ISL	900	2.28	34.544	27.61	53.89	0.679	14738						
OBS	997	2.26	34.560	27.62			14753	416	229		77		
ISL	1000	2.26	34.561	27.62	52.87	0.733	14754						
ISL	1100	2.23	34.589	27.65	51.04	0.785	14770						
ISL	1200	2.21	34.614	27.67	49.37	0.835	14786						
OBS	1246	2.19	34.624	27.68			14793	418	233	319	83		
ISL	1250	2.19	34.625	27.68	48.59	0.859	14794						
ISL	1300	2.17	34.636	27.69	47.78	0.883	14801						
ISL	1400	2.12	34.656	27.71	46.27	0.930	14816						
ISL	1500	2.07	34.673	27.73	44.91	0.976	14831						
OBS	1536	2.05	34.678	27.73			14837	411	229	303	91		
ISL	1750	1.96	34.703	27.76	42.53	1.085	14869						
OBS	1790	1.94	34.706	27.76			14875	419	224	293	96		
ISL	2000	1.82	34.717	27.78	40.83	1.189	14906						
ISL	2250	1.64	34.720	27.80	39.31	1.290	14941						
OBS	2296	1.60	34.721	27.80			14947	434	223	302	105		
ISL	2500	1.42	34.721	27.81	37.16	1.385	14974						
OBS	2549	1.37	34.721	27.82			14980	451	216	286	109		
ISL	2750	1.20	34.718	27.83	35.25	1.476	15008						
OBS	2802	1.16	34.717	27.83			15015	458	220	307	117		
ISL	3000	1.06	34.713	27.83	34.31	1.563	15045						
OBS	3057	1.04	34.712	27.83			15054	472	213	311	123		
ISL	3250	0.97	34.709	27.83	33.84	1.648	15085						
OBS	3308	0.95	34.708	27.84			15094	467	222	309	120		
ISL	3500	0.86	34.705	27.84	32.94	1.731	15123						
OBS	3562	0.83	34.704	27.84			15133	486	222	312	122		
ISL	3750	0.75	34.700	27.84	32.04	1.813	15163						
OBS	3812	0.73	34.699	27.84			15173	494	220	307	127		
OBS	3914	0.70	34.696	27.84			15189	497	217	306	122		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 518	30 JAN 1966	6.2	54 28.0S	51 53.0W	485	3344	33	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	6.0	2.0		24	3	0	0	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.97	34.034	26.82			14737	697					
ISL	0	5.97	34.034	26.82	124.13	0.000	14737						
ISL	10	5.93	34.036	26.82	123.56	0.012	14737						
ISL	20	5.85	34.039	26.84	122.57	0.025	14735						
ISL	30	5.73	34.041	26.85	121.18	0.037	14732						
ISL	50	5.40	34.044	26.89	117.36	0.061	14722						
OBS	52	5.36	34.046	26.90			14721	704					
ISL	75	4.67	34.090	27.01	106.09	0.089	14697						
ISL	100	3.94	34.137	27.13	95.25	0.114	14671						
OBS	103	3.85	34.143	27.14			14668	683					
ISL	125	3.60	34.153	27.18	90.92	0.137	14661						
ISL	150	3.43	34.153	27.19	89.59	0.160	14658						
OBS	153	3.42	34.152	27.19			14658	659					
ISL	200	3.04	34.142	27.22	87.19	0.204	14649						
OBS	205	3.00	34.140	27.22			14648	663					
ISL	250	2.57	34.132	27.25	84.03	0.247	14637						
OBS	255	2.52	34.131	27.26			14635	656					
ISL	300	2.04	34.120	27.29	80.68	0.288	14622						
OBS	301	2.03	34.120	27.29			14622	658					
ISL	400	2.23	34.203	27.34	76.48	0.366	14648						
OBS	402	2.24	34.205	27.34			14649	589					
ISL	500	2.38	34.278	27.39	72.67	0.441	14672						
OBS	502	2.38	34.279	27.39			14672	529					
ISL	600	2.43	34.348	27.44	68.36	0.512	14692						
OBS	604	2.43	34.351	27.44			14692	482					
ISL	700	2.42	34.420	27.50	63.42	0.577	14709						
ISL	800	2.37	34.482	27.55	58.85	0.639	14724						
OBS	808	2.37	34.487	27.55			14726	416					
ISL	900	2.33	34.522	27.58	55.91	0.696	14740						
ISL	1000	2.28	34.553	27.61	53.63	0.751	14754						
OBS	1012	2.27	34.556	27.62			14756	401					
ISL	1100	2.23	34.587	27.64	51.18	0.803	14770						
ISL	1200	2.19	34.619	27.67	48.85	0.853	14785						
OBS	1237	0.00	34.630	0.00			0	399					
ISL	1250	2.17	34.633	27.69	47.80	0.877	14793						
ISL	1300	2.15	34.645	27.70	46.93	0.901	14801						
ISL	1400	2.11	34.665	27.72	45.43	0.947	14816						
OBS	1486	2.07	34.679	27.73			14829	394					
ISL	1500	2.06	34.681	27.73	44.23	0.992	14831						
OBS	1734	1.93	34.705	27.76			14865	407					
ISL	1750	1.92	34.706	27.76	41.85	1.100	14868						
OBS	1983	1.81	34.720	27.78			14903	418					
ISL	2000	1.80	34.721	27.79	40.33	1.202	14905						
OBS	2232	1.64	34.725	27.80			14938	429					
ISL	2250	1.63	34.725	27.80	38.75	1.301	14940						
OBS	2481	1.43	34.727	27.82			14971	434					
ISL	2500	1.41	34.727	27.82	36.70	1.395	14974						
OBS	2731	1.19	34.722	27.83			15004	449					
ISL	2750	1.18	34.722	27.83	34.75	1.485	15007						
OBS	2982	1.08	34.718	27.83			15043	457					
ISL	3000	1.07	34.718	27.84	34.10	1.571	15045						
OBS	3233	0.89	34.713	27.84			15078	464					
ISL	3250	0.87	34.713	27.84	32.19	1.654	15080						
OBS	3284	0.84	34.713	27.85			15085	470					
OBS	3334	0.79	34.709	27.85			15091	476					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 519	31 JAN 1966	4.5	54 7.0S	52 15.0W	485	412	4	9				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	7.0	2.5		34	4	1	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	6.46	34.121	26.82			14758						
ISL	0	6.46	34.121	26.82	123.62	0.000	14758						
ISL	10	6.45	34.131	26.83	122.84	0.012	14759						
ISL	20	6.38	34.140	26.85	121.49	0.025	14758						
ISL	30	6.27	34.149	26.87	119.58	0.037	14755						
OBS	40	6.10	34.156	26.90			14750	704	128	248	5		
ISL	50	5.78	34.163	26.94	112.88	0.060	14739						
ISL	75	4.98	34.175	27.05	103.07	0.087	14711						
OBS	90	4.50	34.180	27.10			14693	684	151	276	10		
ISL	100	4.39	34.181	27.12	96.60	0.112	14690						
ISL	125	4.22	34.180	27.13	95.17	0.136	14687						
OBS	140	4.20	34.178	27.13			14689	674	165	191	13		
ISL	150	4.14	34.177	27.14	94.80	0.160	14688						
OBS	190	3.88	34.176	27.17			14684	656	180	194	19		
ISL	200	3.77	34.177	27.18	91.51	0.206	14681						
OBS	240	3.38	34.185	27.22			14671	628	196	287	22		
ISL	250	3.34	34.189	27.23	86.79	0.251	14671						
OBS	290	3.24	34.210	27.26			14673	583	210	233	28		
ISL	300	3.20	34.217	27.26	83.68	0.293	14673						
OBS	340	2.98	34.248	27.31			14671	552	207	308	30		
OBS	390	2.60	34.298	27.38			14664	520	184	276	47		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 520	31JAN1966	14.8	53 36.0S	52 16.0W	485	1295	12	13				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	6.2	1.6		36	5	26	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	7.38	34.117	26.69			14794	707					
ISL	0	7.38	34.117	26.69	135.85	0.000	14794						
ISL	10	7.26	34.118	26.71	134.32	0.014	14791						
ISL	20	7.36	34.119	26.70	135.79	0.027	14796						
ISL	30	7.23	34.120	26.72	134.09	0.041	14793						
OBS	47	6.81	34.121	26.77			14779	707					
ISL	50	6.66	34.123	26.80	126.68	0.067	14774						
ISL	75	5.40	34.139	26.97	110.51	0.096	14727						
OBS	92	4.55	34.149	27.07			14695	696					
ISL	100	4.40	34.150	27.09	98.99	0.122	14690						
ISL	125	4.13	34.150	27.12	96.46	0.147	14683						
OBS	138	4.12	34.149	27.12			14685	694					
ISL	150	4.07	34.151	27.13	96.03	0.171	14685						
OBS	183	4.01	34.158	27.14			14688	677					
ISL	200	4.01	34.164	27.14	94.85	0.219	14691						
OBS	228	4.01	34.173	27.15			14695	672					
ISL	250	3.94	34.170	27.15	94.14	0.266	14696						
ISL	300	3.74	34.160	27.17	93.24	0.313	14696						
OBS	321	3.63	34.154	27.17			14694	655					
ISL	400	3.28	34.158	27.21	89.56	0.404	14693						
OBS	412	3.23	34.160	27.22			14692	649					
ISL	500	2.89	34.177	27.26	84.98	0.491	14692						
OBS	505	2.87	34.178	27.26			14693	607					
ISL	600	2.69	34.216	27.31	80.72	0.574	14701						
OBS	691	2.60	34.262	27.35			14713	574					
ISL	700	2.59	34.267	27.36	76.48	0.653	14714						
ISL	800	2.49	34.324	27.41	71.77	0.727	14727						
OBS	879	2.43	0.000	0.00			0	486					
ISL	900	2.42	34.384	27.47	67.15	0.796	14742						
ISL	1000	2.38	34.446	27.52	62.61	0.861	14757						
OBS	1074	2.35	34.493	27.56			14769	425					
ISL	1100	2.34	34.508	27.57	58.05	0.922	14773						
OBS	1172	2.30	34.551	27.61			14784	416					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 521	1FEB1966	6.3	52 17.0S	52 3.0W	485	2567	25	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	9.5	2.2		27	4	32	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	7.79	34.127	26.64			14810	707	106		4		
ISL	0	7.79	34.127	26.64	140.72	0.000	14810						
ISL	10	7.22	34.124	26.72	133.32	0.014	14789						
ISL	20	6.69	34.126	26.79	126.51	0.027	14770						
ISL	30	6.22	34.125	26.86	120.82	0.039	14753						
ISL	50	5.44	34.123	26.95	111.89	0.062	14725						
OBS	54	5.31	34.123	26.97			14720	706	145		10		
ISL	75	4.82	34.135	27.03	104.34	0.089	14703						
ISL	100	4.44	34.150	27.09	99.39	0.115	14692						
OBS	108	4.36	34.155	27.10			14690	707	153		13		
ISL	125	4.19	34.159	27.12	96.45	0.139	14686						
ISL	150	4.02	34.162	27.14	94.61	0.163	14683						
OBS	162	3.96	34.163	27.15			14682	683	167		16		
ISL	200	3.80	34.166	27.17	92.58	0.210	14682						
OBS	216	3.74	34.166	27.17			14682	669	164		18		
ISL	250	3.59	34.164	27.19	91.04	0.256	14681						
OBS	270	3.50	34.163	27.19			14681	667	176		22		
ISL	300	3.36	34.162	27.21	89.34	0.301	14679						
OBS	324	3.25	34.162	27.22			14679	642	175		25		
OBS	378	3.04	34.170	27.24			14679	630	187		28		
ISL	400	2.94	34.176	27.26	84.96	0.388	14678						
OBS	432	2.80	34.185	27.28			14678	614	186				
ISL	500	2.58	34.203	27.31	80.16	0.471	14680						
OBS	540	2.51	34.219	27.33			14683	571	198		37		
ISL	600	2.51	34.268	27.37	75.15	0.548	14694						
OBS	648	2.53	34.308	27.40			14703	514	212		48		
ISL	700	2.44	34.327	27.42	70.60	0.621	14708						
OBS	733	0.00	34.343	0.00			0	494	216		54		
OBS	756	2.35	34.366	27.46			14714	486	223		57		
ISL	800	2.35	34.400	27.48	64.81	0.689	14722						
OBS	838	2.37	34.422	27.50			14730	449	214		61		
ISL	900	2.37	34.452	27.53	61.52	0.752	14740						
OBS	944	2.36	34.470	27.54			14748	428	215		66		
ISL	1000	2.36	34.490	27.56	59.11	0.812	14757						
ISL	1100	2.35	34.522	27.58	57.17	0.871	14774						
ISL	1200	2.33	34.547	27.60	55.60	0.927	14790						
OBS	1203	2.33	34.548	27.61			14791	403	217		75		
ISL	1250	2.32	34.560	27.62	54.76	0.955	14798						
ISL	1300	2.30	34.572	27.63	53.94	0.982	14806						
ISL	1400	2.26	34.593	27.65	52.44	1.035	14822						
OBS	1465	2.24	34.606	27.66			14832	400	222		83		
ISL	1500	2.23	34.612	27.66	51.23	1.087	14837						
OBS	1728	2.17	34.645	27.70			14874	420	219		81		
ISL	1750	2.16	34.649	27.70	48.80	1.212	14877						
OBS	1993	2.02	34.688	27.74			14913	414	212		88		
ISL	2000	2.02	34.689	27.74	45.29	1.329	14914						
ISL	2250	1.88	34.708	27.77	43.16	1.440	14951						
OBS	2258	1.87	34.708	27.77			14952	415	213		90		
OBS	2415	1.70	34.724	27.80			14972	431	206		96		
OBS	2466	1.66	34.721	27.80			14979	430	193				
ISL	2500	1.61	34.721	27.80	39.70	1.544	14982						
OBS	2519	1.58	34.722	27.80			14984	441	206				

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 522	4FEB1966	21.9	51 4.0S	40 1.0W	484	3828	37	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	9.3	4.4		3	4	33	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.20	33.910	26.81			14704	778					
ISL	0	5.20	33.910	26.81	124.55	0.000	14704						
ISL	10	5.05	33.912	26.83	122.81	0.012	14699						
ISL	20	4.84	33.915	26.86	120.46	0.025	14692						
ISL	30	4.57	33.911	26.88	118.03	0.036	14683						
ISL	50	3.85	33.921	26.97	110.24	0.059	14656						
OBS	51	3.81	33.922	26.97			14654	716					4
ISL	75	2.39	33.949	27.12	95.45	0.085	14598						
ISL	100	1.02	33.984	27.25	83.05	0.107	14542						
OBS	101	0.97	33.986	27.26			14540	775					
ISL	125	0.52	34.013	27.30	77.85	0.127	14524						
OBS	150	0.44	34.053	27.34			14525	746					
ISL	150	0.44	34.053	27.34	74.36	0.146	14525						
OBS	199	0.68	34.204	27.45			14546	650					
ISL	200	0.69	34.207	27.45	64.21	0.181	14546						
OBS	249	1.21	34.322	27.51			14579	538					
ISL	250	1.22	34.324	27.51	58.90	0.212	14580						
OBS	300	1.55	34.421	27.56			14604	496					
ISL	300	1.55	34.421	27.56	54.17	0.240	14604						
ISL	400	1.95	34.537	27.63	48.94	0.292	14640						
OBS	402	1.95	34.539	27.63			14640	445					
ISL	500	1.99	34.594	27.67	45.53	0.339	14659						
OBS	505	1.99	34.596	27.67			14660	414					
ISL	600	2.03	34.636	27.70	43.13	0.383	14678						
OBS	610	2.03	34.640	27.70			14680	414					
ISL	700	2.01	34.669	27.73	41.00	0.425	14694						
ISL	800	1.95	34.693	27.75	39.13	0.465	14709						
OBS	817	1.94	34.696	27.75			14711	427					
ISL	900	1.86	34.707	27.77	37.69	0.504	14722						
ISL	1000	1.76	34.715	27.78	36.48	0.541	14734						
OBS	1030	1.73	34.717	27.79			14738						
ISL	1100	1.66	34.723	27.80	35.31	0.577	14747						
OBS	1139	0.00	34.726	0.00			0	458					
ISL	1200	1.57	34.726	27.81	34.54	0.612	14760						
ISL	1250	1.52	34.726	27.81	34.25	0.629	14766						
ISL	1300	1.48	34.726	27.81	33.96	0.646	14772						
OBS	1398	1.39	34.726	27.82			14785	477					
ISL	1400	1.39	34.726	27.82	33.35	0.680	14785						
ISL	1500	1.30	34.726	27.83	32.70	0.713	14798						
OBS	1654	1.16	34.724	27.83			14818	472					
ISL	1750	1.09	34.721	27.84	31.44	0.793	14831						
OBS	1909	0.97	34.715	27.84			14853	488					
ISL	2000	0.91	34.710	27.84	30.82	0.871	14866						
OBS	2161	0.80	34.702	27.84			14888	488					
ISL	2250	0.73	34.699	27.84	30.06	0.947	14900						
OBS	2412	0.62	34.695	27.85			14923	522					4
ISL	2500	0.57	34.693	27.85	28.82	1.020	14936						
OBS	2664	0.48	34.712	27.87			14961						2
ISL	2750	0.43	34.689	27.85	27.61	1.091	14973						
OBS	2915	0.33	34.687	27.86			14997	515					
ISL	3000	0.29	34.686	27.86	26.19	1.158	15010						
ISL	3250	0.16	34.681	27.86	24.89	1.222	15048						
OBS	3428	0.07	34.678	27.86			15075	529					
ISL	3500	0.09	34.676	27.86	24.31	1.283	15089						
OBS	3687	-0.08	34.672	27.87			15114	544					
OBS	3741	-0.27	34.648	27.86			15115						2

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 523	5FEB1966	20.5	52 1.0S	40 0.0W	484	3696	36	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	8.5	3.5		35	4	28	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.57	33.901	26.76			14719						
ISL	0	5.57	33.901	26.76	129.40	0.000	14719						
ISL	10	5.54	33.903	26.77	129.00	0.013	14719						
ISL	20	5.43	33.906	26.78	127.64	0.026	14716						
ISL	30	5.23	33.908	26.81	125.35	0.038	14710						
ISL	50	4.58	33.910	26.88	118.38	0.063	14686						
OBS	53	4.45	33.913	26.90			14682	750	120	168	11		
ISL	75	2.98	33.949	27.07	100.33	0.090	14623						
ISL	100	1.36	34.003	27.24	83.91	0.113	14557						
OBS	105	1.05	34.015	27.27			14544	726	123	238	34		
ISL	125	0.61	34.064	27.34	74.52	0.133	14528						
ISL	150	0.59	34.130	27.39	69.43	0.151	14533						
OBS	157	0.52	34.149	27.41			14531	735	187	307	53		
ISL	200	1.01	34.274	27.48	61.15	0.184	14562						
OBS	209	1.15	34.299	27.49			14570	589	226	313	59		
ISL	250	1.44	34.379	27.54	56.34	0.213	14590						
OBS	261	1.49	34.396	27.55			14595	561	233	339	68		
ISL	300	1.65	34.448	27.58	52.89	0.240	14609						
OBS	312	1.69	34.462	27.59			14613	494	227	339	80		
ISL	400	1.97	34.557	27.64	47.69	0.291	14641						
OBS	414	2.00	34.569	27.65			14645	432	206	336	90		
ISL	500	1.99	34.615	27.69	44.01	0.336	14660						
OBS	516	1.98	34.620	27.69			14662	427	155	334	95		
ISL	600	1.96	34.642	27.71	42.06	0.379	14675						
OBS	619	1.95	34.646	27.71			14678	427	173	331	96		
ISL	700	1.91	34.666	27.73	40.34	0.421	14690						
ISL	800	1.86	34.687	27.75	38.66	0.460	14705						
OBS	830	1.84	34.693	27.76			14709	419	199	326	100		
ISL	900	1.80	34.704	27.77	37.29	0.498	14719						
ISL	1000	1.74	34.715	27.79	36.25	0.535	14733						
OBS	1031	1.72	34.718	27.79			14738	420	224	313	105		
ISL	1100	1.68	34.723	27.80	35.48	0.571	14747						
OBS	1153	1.64	34.725	27.80			14755	441	119	313	109		
ISL	1200	1.59	34.725	27.80	34.84	0.606	14760						
ISL	1250	1.54	34.724	27.81	34.51	0.623	14766						
ISL	1300	1.48	34.724	27.81	34.14	0.640	14772						
ISL	1400	1.37	34.723	27.82	33.32	0.674	14784						
OBS	1414	1.35	34.723	27.82			14786	465	133	314	111		
ISL	1500	1.27	34.721	27.82	32.83	0.707	14797						
OBS	1676	1.14	34.717	27.83			14821	479	117	303	118		4
ISL	1750	1.10	34.717	27.83	31.87	0.788	14832						
OBS	1985	0.96	34.717	27.84			14865	491	118	315	129		4
ISL	2000	0.95	34.716	27.84	30.79	0.866	14867						
OBS	2199	0.77	34.708	27.85			14893	477	190	319	129		4
ISL	2250	0.73	34.707	27.85	29.43	0.942	14900						
OBS	2408	0.62	34.704	27.85			14923	537	204	318	129		4
ISL	2500	0.58	34.700	27.85	28.37	1.014	14936						
OBS	2719	0.48	34.692	27.85			14970	529	166	316	134		4
ISL	2750	0.46	34.691	27.85	27.89	1.084	14975						
OBS	2975	0.34	34.687	27.86			15008	511	196	321	135		
ISL	3000	0.33	34.686	27.86	26.65	1.152	15012						
OBS	3229	0.21	34.681	27.86			15047	507	199	319	134		4
ISL	3250	0.20	34.681	27.86	25.52	1.218	15050						
OBS	3480	0.08	34.676	27.86			15085	542	204	314	138		
ISL	3500	0.06	34.675	27.86	23.93	1.279	15087						
OBS	3651	-0.16	34.669	27.87			15104	542					



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 524	6FEB1966	19.9	53 8.0S	39 57.0W	483	3897	37	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.1	2.6		25	4	0	2		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.99	33.904	26.83			14695	743					
ISL	0	4.99	33.904	26.83	122.71	0.000	14695						
ISL	10	4.91	33.908	26.84	121.69	0.012	14694						
ISL	20	4.79	33.912	26.86	120.11	0.024	14690						
ISL	30	4.60	33.916	26.88	117.98	0.036	14684						
ISL	50	4.09	33.926	26.95	112.20	0.059	14666						
OBS	53	3.99	33.927	26.96			14662	743					
ISL	75	2.94	33.929	27.06	101.58	0.086	14621						
ISL	100	1.78	33.947	27.17	91.06	0.110	14575						
OBS	107	1.46	33.955	27.20			14562	763					
ISL	125	1.03	34.010	27.27	81.18	0.132	14547						
ISL	150	0.72	34.097	27.36	72.68	0.151	14538						
OBS	160	0.69	34.135	27.39			14539	658					
ISL	200	1.03	34.241	27.46	63.83	0.185	14562						
OBS	212	1.19	34.268	27.47			14572	573					
ISL	250	1.39	34.345	27.51	58.60	0.216	14588						
OBS	265	1.46	34.372	27.53			14594	517					
ISL	300	1.69	34.436	27.57	54.14	0.244	14611						
OBS	317	1.79	34.463	27.58			14618	462					
ISL	400	1.94	34.543	27.63	48.51	0.295	14640						
OBS	422	1.94	34.555	27.64			14644	430					
ISL	500	1.98	34.590	27.67	45.77	0.342	14659						
OBS	527	1.99	34.599	27.67			14664	413					
ISL	600	1.99	34.629	27.70	43.31	0.387	14676						
OBS	631	1.98	34.641	27.71			14681	415					
ISL	700	1.98	34.665	27.73	41.03	0.429	14693						
ISL	800	1.98	34.692	27.75	39.43	0.469	14710						
OBS	841	1.98	34.701	27.76			14717	419					
ISL	900	1.94	34.710	27.77	38.14	0.508	14725						
ISL	1000	1.84	34.720	27.78	36.92	0.545	14738						
OBS	1046	1.79	34.722	27.79			14743	432					
ISL	1100	1.73	34.724	27.79	35.94	0.582	14750						
ISL	1200	1.63	34.724	27.80	35.27	0.617	14762						
ISL	1250	1.58	34.725	27.81	34.87	0.635	14768						
OBS	1299	1.53	34.726	27.81			14774	451					
ISL	1300	1.53	34.726	27.81	34.46	0.652	14775						
ISL	1400	1.43	34.726	27.82	33.83	0.687	14787						
ISL	1500	1.34	34.725	27.82	33.23	0.720	14800						
OBS	1555	1.29	34.724	27.83			14807	460					
ISL	1750	1.11	34.721	27.84	31.73	0.801	14832						
OBS	1812	1.06	34.720	27.84			14840	461					
ISL	2000	0.95	34.716	27.84	30.84	0.879	14867						
OBS	2069	0.91	34.714	27.84			14878	478					
ISL	2250	0.82	34.713	27.85	30.02	0.956	14904						
OBS	2325	0.78	34.712	27.85			14916	483					
ISL	2500	0.69	34.705	27.85	29.38	1.030	14942						
ISL	2750	0.56	34.695	27.85	28.74	1.102	14979						
OBS	2840	0.51	34.692	27.85			14992	497					4
ISL	3000	0.43	34.692	27.85	27.61	1.173	15017						
OBS	3094	0.39	34.692	27.86			15031	509					4
ISL	3250	0.31	34.687	27.86	26.49	1.240	15055						
OBS	3346	0.26	34.683	27.86			15070	530					
ISL	3500	0.18	34.680	27.86	25.20	1.305	15093						
OBS	3599	0.13	34.679	27.86			15108	518					4
OBS	3701	0.10	34.679	27.86			15125	512					4

SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 525	8FEB1966	21.4	55 1.0S	39 56.0W	483	2957	29	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	1.8	-4.2		25	4	24	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ mol/l	NITR 10 $\mu$ mol/l	SILIC $\mu$ mol/l	INT M	DD
OBS	0	3.97	33.866	26.91			14652	782					
ISL	0	3.97	33.866	26.91	115.12	0.000	14652						
ISL	10	3.96	33.865	26.91	115.19	0.012	14653						
ISL	20	3.95	33.864	26.91	115.26	0.023	14655						
ISL	30	3.95	33.864	26.91	115.32	0.035	14656						
ISL	50	3.93	33.862	26.91	115.45	0.058	14659						
OBS	52	3.93	33.862	26.91			14659	769					
ISL	75	2.49	33.899	27.07	99.99	0.085	14601						
ISL	100	0.94	33.953	27.23	84.94	0.108	14538						
OBS	104	0.70	33.963	27.25			14528	780					
ISL	125	0.78	34.010	27.29	79.61	0.128	14535						
ISL	150	0.78	34.067	27.33	75.30	0.148	14540						
OBS	157	0.91	34.083	27.34			14547	712					
ISL	200	1.14	34.168	27.39	70.10	0.184	14566						
OBS	209	1.20	34.185	27.40			14570	640					
ISL	250	1.50	34.268	27.45	65.20	0.218	14592						
OBS	261	1.58	34.289	27.46			14597	619					
ISL	300	1.71	34.346	27.49	61.09	0.249	14611						
OBS	312	1.74	34.361	27.50			14614	525					
ISL	400	1.90	34.456	27.57	54.68	0.307	14637						
OBS	414	1.92	34.469	27.57			14640	473					
ISL	500	2.00	34.539	27.62	49.70	0.359	14659						
OBS	517	2.01	34.551	27.63			14662	441					
ISL	600	2.07	34.598	27.67	46.36	0.407	14679						
OBS	621	2.08	34.608	27.67			14683	435					
ISL	700	2.06	34.639	27.70	43.65	0.452	14696						
ISL	800	2.05	34.669	27.73	41.77	0.495	14713						
OBS	840	2.02	34.678	27.73			14718	437					
ISL	900	1.98	34.692	27.75	39.91	0.536	14727						
OBS	998	1.91	34.705	27.76			14740						
ISL	1000	1.91	34.705	27.76	38.67	0.575	14741						
OBS	1041	1.88	34.705	27.77			14746	450					
OBS	1096	1.84	34.717	27.78			14754	450					
ISL	1100	1.84	34.717	27.78	37.47	0.613	14754						
OBS	1194	1.76	34.715	27.78			14767	461					
ISL	1200	1.76	34.715	27.78	37.19	0.651	14768						
ISL	1250	1.72	34.718	27.79	36.81	0.669	14774						
ISL	1300	1.68	34.721	27.79	36.38	0.688	14781						
OBS	1341	1.65	34.724	27.80			14787	444					
ISL	1400	1.60	34.725	27.80	35.56	0.723	14794						
ISL	1500	1.51	34.725	27.81	34.97	0.759	14807						
OBS	1588	1.43	34.726	27.82			14819	457					
ISL	1750	1.30	34.725	27.83	33.47	0.844	14841						
OBS	1838	1.23	34.724	27.83			14852	483					
ISL	2000	1.09	34.720	27.84	32.05	0.926	14874						
OBS	2090	1.01	34.718	27.84			14886						
ISL	2250	0.91	34.713	27.84	31.01	1.005	14909						
OBS	2344	0.85	34.711	27.84			14922	492					
ISL	2500	0.72	34.708	27.85	29.50	1.081	14943						
OBS	2601	0.65	34.707	27.85			14957	508					
ISL	2750	0.63	34.704	27.85	29.03	1.154	14982						
OBS	2752	0.63	34.704	27.85			14983	533					
OBS	2852	0.60	34.704	27.85			14999						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 526	10FEB1966	23.5	58 55.0S	39 45.0W	483	2864	24	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	2.8	-1.6		27	3	28	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	1.89	33.931	27.15			14563	762	169	235	47		
ISL	0	1.89	33.931	27.15	92.72	0.000	14563						
ISL	10	1.47	33.960	27.20	87.68	0.009	14547						
ISL	20	1.11	33.989	27.25	83.16	0.018	14532						
ISL	30	0.79	34.017	27.29	79.10	0.026	14520						
ISL	50	0.31	34.073	27.36	72.14	0.041	14502						
OBS	51	0.29	34.076	27.37			14502	747	200	259	52		
ISL	75	0.01	34.141	27.43	65.46	0.058	14494						
ISL	100	0.02	34.210	27.49	60.20	0.074	14499						
OBS	103	0.00	34.218	27.50			14499	671	214	309	75		9
ISL	125	0.22	34.288	27.54	55.30	0.088	14514						
ISL	150	0.56	34.365	27.58	51.41	0.101	14535						
OBS	153	0.61	34.374	27.59			14537	562	232	336	77		
ISL	200	1.05	34.481	27.65	45.80	0.126	14566						
OBS	203	1.07	34.486	27.65			14568	498	230	322	83		
ISL	250	1.23	34.541	27.68	42.67	0.148	14584						
OBS	254	1.24	34.544	27.68			14585	475	229	338	83		
ISL	300	1.38	34.595	27.72	39.77	0.169	14599						
OBS	304	1.39	34.599	27.72			14600	454	226	336	95		
ISL	400	1.50	34.654	27.75	36.58	0.207	14622						
OBS	404	1.50	34.655	27.76			14623	449	225	330	93		
ISL	500	1.42	34.668	27.77	35.18	0.243	14635						
OBS	504	1.41	34.668	27.77			14635	451	222	314	97		
ISL	600	1.24	34.677	27.79	33.36	0.277	14644						
OBS	603	1.23	34.677	27.79			14644	474	223	328	98		
ISL	700	1.09	34.680	27.80	32.15	0.310	14654						
ISL	800	0.95	34.681	27.81	31.21	0.341	14665						
OBS	803	0.95	34.681	27.81			14665	484	219	326	109		
ISL	900	0.80	34.681	27.82	30.17	0.372	14675						
ISL	1000	0.67	34.684	27.83	28.96	0.402	14685						
OBS	1001	0.67	34.684	27.83			14686	491	219	318	113		
ISL	1100	0.62	34.700	27.85	27.41	0.430	14700						
OBS	1200	0.00	34.716	0.00			0	474	221	320	119		4
ISL	1200	0.58	34.716	27.87	26.01	0.456	14715						
ISL	1250	0.56	34.714	27.86	26.09	0.469	14723						
ISL	1300	0.55	34.715	27.87	25.94	0.482	14731						
ISL	1400	0.54	34.710	27.86	26.30	0.509	14747						
OBS	1451	0.54	34.706	27.86			14756	483	218	322	123		
ISL	1500	0.51	34.704	27.86	26.55	0.535	14763						
OBS	1702	0.40	34.699	27.86			14792	493	215	322	128		
ISL	1750	0.38	34.698	27.86	25.92	0.601	14799						
OBS	1954	0.29	34.693	27.86			14830	503	218	322	124		
ISL	2000	0.26	34.691	27.86	25.29	0.665	14836						
OBS	2207	0.11	34.683	27.87			14865	506	220	322	121		
ISL	2250	0.08	34.682	27.87	24.04	0.726	14871						
OBS	2361	0.01	34.682	27.87			14887	525	220	322	121		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 527	11FEB1966	23.9	61 4.0S	39 56.0W	519	2328	23	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.8	-1.2		23	3	24	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.45	33.764	27.11			14496	808					
ISL	0	0.45	33.764	27.11	96.45	0.000	14496						
ISL	10	-0.09	33.891	27.24	84.10	0.009	14475						
ISL	20	-0.55	34.004	27.35	73.40	0.017	14457						
ISL	30	-0.93	34.105	27.45	64.24	0.024	14442						
ISL	50	-1.45	34.266	27.59	50.10	0.035	14424						
OBS	51	-1.47	34.273	27.60			14423	754					
ISL	75	-1.38	34.376	27.68	41.78	0.047	14433						
ISL	100	-1.32	34.435	27.73	37.36	0.057	14441						
OBS	103	-1.27	34.439	27.73			14443	666					
ISL	125	-1.03	34.483	27.76	34.61	0.066	14459						
ISL	150	-0.72	34.524	27.78	32.71	0.074	14478						
OBS	153	-0.68	34.528	27.78			14480	595					
ISL	200	-0.22	34.596	27.81	29.50	0.090	14511						
OBS	203	-0.19	34.600	27.81			14512	548					
ISL	250	0.13	34.648	27.84	27.42	0.104	14535						
OBS	254	0.15	34.651	27.84			14537	566					4
ISL	300	0.28	34.670	27.85	26.66	0.117	14551						
OBS	304	0.29	34.671	27.85			14552	494					
ISL	400	0.42	34.685	27.85	26.44	0.144	14574						
OBS	404	0.42	34.685	27.85			14575	460					
ISL	500	0.40	34.693	27.86	25.80	0.170	14590						
OBS	504	0.40	34.693	27.86			14590	471					
ISL	600	0.40	34.695	27.86	25.68	0.196	14606						
OBS	603	0.40	34.695	27.86			14607	467					
ISL	700	0.37	34.695	27.86	25.54	0.221	14622						
ISL	800	0.32	34.693	27.86	25.35	0.247	14636						
OBS	803	0.32	34.693	27.86			14637	485					
ISL	900	0.25	34.688	27.86	25.23	0.272	14650						
ISL	1000	0.19	34.686	27.86	24.92	0.297	14664						
OBS	1001	0.19	34.686	27.86			14664	487					
ISL	1100	0.15	34.693	27.87	24.15	0.322	14679						
OBS	1112	0.15	34.693	27.87			14681	485					
ISL	1200	0.08	34.683	27.87	24.25	0.346	14693						
OBS	1219	0.07	34.681	27.87			14695	519					
ISL	1250	0.05	34.680	27.87	24.24	0.358	14700						
ISL	1300	0.02	34.680	27.87	24.01	0.370	14707						
OBS	1329	0.01	34.679	27.87			14711	512					
ISL	1400	-0.02	34.680	27.87	23.55	0.394	14722						
OBS	1441	-0.04	34.680	27.87			14728	531					
ISL	1500	-0.06	34.679	27.87	23.25	0.417	14737						
OBS	1550	-0.08	34.677	27.87			14744	531					
OBS	1656	-0.15	34.675	27.87			14759	540					
ISL	1750	-0.18	34.677	27.88	22.15	0.474	14774						
OBS	1762	-0.18	34.677	27.88			14776	524					4
OBS	1866	-0.22	34.674	27.87			14792	552					
OBS	1971	-0.27	34.669	27.87			14807	542					
ISL	2000	-0.28	34.668	27.87	21.50	0.529	14812						
OBS	2178	-0.37	34.667	27.88			14838	560					
ISL	2250		34.666										
OBS	2279		34.666					560					

SHIP CRUS	STATION		DATE	GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 22	SER 528		13FEB1966	4.8	63 8.0S		39 43.0W		519	4339	41	23	
		AIR TEMP	DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
		2.8	-1.4			34	5	23	2	1			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-0.26	33.522	26.95			14460	829					
ISL	0	-0.26	33.522	26.95	111.53	0.000	14460						
ISL	10	-0.66	33.727	27.13	94.20	0.010	14446						
ISL	20	-1.00	33.906	27.29	79.27	0.019	14435						
ISL	30	-1.27	34.058	27.42	66.69	0.026	14426						
OBS	44	-1.54	34.227	27.56			14418	793					
ISL	50	-1.54	34.268	27.60	49.74	0.038	14419						
ISL	75	-1.70	34.385	27.70	40.17	0.049	14418						
OBS	90	-1.55	34.415	27.72			14428	665					
ISL	100	-1.27	34.459	27.74	35.68	0.059	14443						
ISL	125	-0.50	34.557	27.79	31.18	0.067	14484						
OBS	135	-0.18	34.591	27.81			14501	523					
ISL	150	0.04	34.619	27.82	29.12	0.075	14514						
OBS	180	0.29	34.651	27.83			14531	478					
ISL	200	0.43	34.666	27.83	27.82	0.089	14541						
OBS	224	0.54	34.677	27.84			14550	459					
ISL	250	0.61	34.686	27.84	27.45	0.103	14558						
OBS	268	0.63	34.690	27.84			14562	448					
ISL	300	0.65	34.693	27.84	27.19	0.116	14568						
OBS	358	0.62	34.694	27.85			14576	448					
ISL	400	0.58	34.694	27.85	26.83	0.143	14582						
OBS	449	0.54	34.694	27.85			14588	448					
ISL	500	0.51	34.693	27.85	26.56	0.170	14595						
OBS	540	0.50	34.692	27.85			14601	447					
ISL	600	0.48	34.692	27.85	26.48	0.196	14610						
ISL	700	0.44	34.692	27.85	26.28	0.223	14625						
OBS	731	0.43	34.692	27.85			14630	447					
ISL	800	0.39	34.691	27.86	26.00	0.249	14639						
ISL	900	0.32	34.689	27.86	25.70	0.275	14653						
OBS	928	0.30	34.688	27.86			14657	457					
ISL	1000	0.27	34.687	27.86	25.46	0.300	14667						
ISL	1100	0.22	34.685	27.86	25.27	0.326	14682						
OBS	1171	0.19	34.683	27.86			14693	480					
ISL	1200	0.17	34.682	27.86	25.09	0.351	14697						
ISL	1250	0.15	34.681	27.86	24.98	0.363	14704						
ISL	1300	0.12	34.679	27.86	24.87	0.376	14711						
ISL	1400	0.07	34.676	27.86	24.63	0.401	14726						
OBS	1405	0.07	34.676	27.86			14727	496					
ISL	1500	0.04	34.675	27.86	24.36	0.425	14741						
ISL	1750	-0.04	34.673	27.87	23.68	0.485	14780						
OBS	1978	-0.10	34.672	27.87			14816	518					
ISL	2000	-0.11	34.672	27.87	23.00	0.544	14820						
ISL	2250	-0.19	34.666	27.87	22.37	0.600	14859						
OBS	2358	-0.22	34.664	27.87			14876	536					
ISL	2500	-0.25	34.662	27.87	21.74	0.655	14899						
OBS	2552	-0.26	34.662	27.87			14908	544					
OBS	2748	-0.29	34.661	27.87			14941	553					
ISL	2750	-0.29	34.661	27.87	21.13	0.709	14941						
OBS	2944	-0.32	34.661	27.87			14973	550					
ISL	3000	-0.32	34.660	27.87	20.49	0.761	14983						
OBS	3141	-0.33	34.659	27.87			15007	556					
ISL	3250	-0.34	34.659	27.87	20.11	0.812	15026						
OBS	3339	-0.35	34.659	27.87			15041	561					
ISL	3500	-0.39	34.658	27.87	19.23	0.861	15068						
ISL	3750	-0.46	34.656	27.87	18.09	0.908	15109						
OBS	3956	-0.53	34.654	27.87			15142	580					
ISL	4000	-0.54	34.654	27.87	16.75	0.951	15150						
OBS	4097	-0.57	34.653	27.87			15166	584					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 529	14FEB1966	12.3	62 3.0S	37 59.0W	519	3745	36	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	2.7	-1.3		28	7	29	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DO
OBS	0	-0.01	33.645	27.04			14474						
ISL	0	-0.01	33.645	27.04	103.25	0.000	14474						
ISL	10	-0.39	33.782	27.16	91.10	0.010	14460						
ISL	20	-0.72	33.905	27.28	80.30	0.018	14448						
ISL	30	-1.00	34.016	27.38	70.80	0.026	14438						
ISL	50	-1.40	34.198	27.54	55.51	0.038	14425						
OBS	52	-1.43	34.213	27.55			14424	781	173	257	88		
ISL	75	-1.42	34.335	27.65	44.78	0.051	14430						
ISL	100	-1.41	34.417	27.72	38.44	0.061	14436						
OBS	105	-1.41	34.427	27.72			14437	659	188	287	91		
ISL	125	-1.16	34.473	27.75	34.92	0.071	14453						
ISL	150	-0.78	34.519	27.77	32.85	0.079	14475						
OBS	157	-0.66	34.529	27.78			14482	613	199	317	108		
ISL	200	-0.07	34.610	27.82	29.16	0.095	14517						
OBS	210	0.04	34.626	27.82			14524	513	212	309	105		
ISL	250	0.28	34.654	27.83	27.85	0.109	14542						
OBS	263	0.32	34.658	27.83			14546	485	221	322	111		
ISL	300	0.39	34.669	27.84	27.39	0.123	14556						
OBS	316	0.40	34.672	27.84			14559	460	236	329	112		
ISL	400	0.39	34.678	27.85	26.80	0.150	14573						
OBS	422	0.38	34.678	27.85			14576	465	238	331	120		
ISL	500	0.38	34.683	27.85	26.45	0.176	14589						
OBS	528	0.39	34.684	27.85			14594	465	230	321	126		
ISL	600	0.42	34.687	27.85	26.41	0.203	14607						
OBS	636	0.43	34.688	27.85			14614	471	224	317	129		
ISL	700	0.42	34.690	27.85	26.30	0.229	14624						
ISL	800	0.39	34.691	27.86	26.00	0.255	14639						
OBS	849	0.36	34.691	27.86			14646	469	215	322	129		
ISL	900	0.33	34.690	27.86	25.74	0.281	14654						
ISL	1000	0.28	34.687	27.86	25.52	0.307	14668						
OBS	1065	0.24	34.686	27.86			14677		216	323	129		
ISL	1100	0.22	34.687	27.86	25.13	0.332	14682						
OBS	1123	0.21	34.687	27.86			14685	491	217	313	132		
ISL	1200	0.17	34.685	27.86	24.83	0.357	14697						
ISL	1250	0.15	34.683	27.86	24.76	0.369	14704						
ISL	1300	0.12	34.681	27.86	24.69	0.382	14711						
OBS	1366	0.09	34.678	27.86			14721	495	206	316	133		
ISL	1400	0.07	34.677	27.86	24.56	0.406	14726						
ISL	1500	0.02	34.675	27.86	24.24	0.431	14740						
ISL	1750	-0.11	34.670	27.87	23.32	0.490	14777						
OBS	1857	-0.16	34.668	27.87			14793	541	199	316	135		
ISL	2000	-0.20	34.667	27.87	22.42	0.547	14815						
ISL	2250	-0.29	34.663	27.87	21.51	0.602	14854						
OBS	2354	-0.33	34.662	27.87			14870	562	214	309	133		
ISL	2500	-0.42	34.658	27.87	20.22	0.655	14892						
OBS	2557	-0.45	34.657	27.87			14900	596	223	315	130		
ISL	2750	-0.51	34.655	27.87	19.04	0.704	14931						
OBS	2960	-0.56	34.654	27.87			14965	592	220	319	129		
ISL	3000	-0.57	34.654	27.88	18.01	0.750	14972						
OBS	3163	-0.61	34.654	27.88			14998	602	225	317	129		
ISL	3250	-0.62	34.654	27.88	17.03	0.794	15013						
OBS	3365	-0.62	34.654	27.88			15033		227	321	124		
ISL	3500	-0.63	34.655	27.88	16.38	0.836	15057						
OBS	3569	-0.64	34.655	27.88			15069	611	225	317	126		
OBS	3621	-0.66	34.655	27.88			15077	607	222	314	118		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 530	15FEB1966	23.6	60 3.0S	35 59.0W	519	2032	20	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	1.1	-2.3		28	4	33	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	0.77	33.765	27.09			14511	786					
ISL	0	0.77	33.765	27.09	98.13	0.000	14511						
ISL	10	0.78	33.766	27.09	98.06	0.010	14513						
ISL	20	0.78	33.768	27.09	97.99	0.020	14515						
OBS	27	0.79	33.769	27.09			14516	792					
ISL	30	0.72	33.787	27.11	96.21	0.029	14514						
ISL	50	0.17	33.932	27.26	82.17	0.047	14494						
OBS	54	0.03	33.966	27.29			14489	765					
ISL	75	-0.56	34.099	27.43	66.00	0.066	14467						
OBS	81	-0.70	34.133	27.46			14462	746					
ISL	100	-0.91	34.225	27.54	54.86	0.081	14457						
OBS	108	-0.92	34.260	27.57			14458	718					
ISL	125	-0.78	34.332	27.62	47.14	0.094	14468						
OBS	132	-0.70	34.357	27.64			14474	686					
ISL	150	-0.53	34.397	27.67	43.25	0.105	14485						
OBS	159	-0.44	34.412	27.67			14491	616					
ISL	200	-0.06	34.502	27.73	37.43	0.125	14516						
OBS	210	0.02	34.522	27.74			14522	569					
ISL	250	0.25	34.565	27.76	34.41	0.143	14539						
OBS	261	0.30	34.573	27.77			14544	557					
ISL	300	0.55	34.611	27.78	32.86	0.160	14562						
OBS	311	0.62	34.620	27.79			14567	512					
ISL	400	0.78	34.659	27.81	30.85	0.192	14590						
OBS	410	0.78	34.661	27.81			14592	519					
ISL	500	0.79	34.677	27.82	29.74	0.222	14607						
OBS	509	0.79	34.678	27.82			14609	500					
OBS	545	0.76	34.683	27.83			14613	491					
ISL	600	0.70	34.683	27.83	28.77	0.251	14620						
OBS	646	0.65	34.680	27.83			14625	507					
ISL	700	0.61	34.680	27.83	28.40	0.280	14632						
OBS	746	0.59	34.682	27.84			14639	505					
ISL	800	0.63	34.690	27.84	27.90	0.308	14650						
OBS	846	0.65	34.696	27.84			14659						
ISL	900	0.59	34.692	27.85	27.51	0.336	14665						
OBS	948	0.51	34.687	27.85			14670	494					
ISL	1000	0.47	34.685	27.85	27.19	0.363	14676						
ISL	1100	0.41	34.684	27.85	26.88	0.390	14691						
OBS	1148	0.40	34.685	27.85			14698	515					
ISL	1200	0.38	34.685	27.85	26.59	0.417	14706						
ISL	1250	0.36	34.686	27.85	26.45	0.430	14714						
ISL	1300	0.35	34.686	27.85	26.30	0.443	14721						
OBS	1348	0.33	34.686	27.86			14729						
ISL	1400	0.30	34.685	27.86	25.97	0.469	14736						
ISL	1500	0.24	34.683	27.86	25.60	0.495	14750						
OBS	1548	0.21	34.682	27.86			14757						
OBS	1748	0.10	34.679	27.86			14786	539					
ISL	1750	0.10	34.679	27.86	24.57	0.558	14786						
OBS	1948	-0.06	34.673	27.87			14813	532					
OBS	1968	-0.07	34.669	27.86			14816	577					

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SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL
EL 22	SER 531		17FEB1966		10.3	60 5.0S		29 53.0W		518	2757	28	23
	AIR TEMP		DEW PT		BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS		
	1.4		-2.7				32	3	32	2	0		
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.86	33.983	27.26			14518	932	159	201	72		
ISL	0	0.86	33.983	27.26	82.07	0.000	14518						
ISL	10	0.71	34.011	27.29	79.08	0.008	14513						
ISL	20	0.55	34.040	27.32	76.01	0.016	14508						
ISL	30	0.39	34.070	27.36	72.86	0.023	14503						
ISL	50	0.05	34.132	27.43	66.33	0.037	14492						
OBS	53	0.00	34.142	27.44			14490	885	174	260	89		9
ISL	75	-0.51	34.218	27.52	57.10	0.053	14471						
ISL	100	-0.93	34.308	27.61	48.49	0.066	14457						
OBS	107	-1.02	34.333	27.63			14454	800	189	297	99		
ISL	125	-0.89	34.400	27.68	41.51	0.077	14464						
ISL	150	-0.57	34.483	27.74	36.49	0.087	14485						
OBS	159	-0.41	34.510	27.75			14494	713	194	318	110		
ISL	200	-0.05	34.576	27.79	31.89	0.104	14518						
OBS	212	0.04	34.589	27.79			14524	663	201	331	101		
ISL	250	0.24	34.635	27.82	29.10	0.119	14540						
OBS	263	0.29	34.646	27.83			14545	591	206	329	107		
ISL	300	0.33	34.654	27.83	28.15	0.133	14553						
OBS	316	0.33	34.654	27.83			14556	533	219	335	122		
ISL	400	0.37	34.672	27.84	27.07	0.161	14571						
OBS	420	0.37	34.676	27.85			14575	472	234	330	128		
ISL	500	0.36	34.681	27.85	26.45	0.188	14588						
OBS	525	0.36	34.681	27.85			14592	484	239	333	131		
ISL	600	0.36	34.681	27.85	26.45	0.214	14605						
OBS	628	0.36	34.681	27.85			14609		236	324	131		
ISL	700	0.33	34.682	27.85	26.18	0.241	14620						
ISL	800	0.28	34.684	27.86	25.69	0.267	14634						
OBS	833	0.26	34.685	27.86			14639		229	342	123		
ISL	900	0.24	34.685	27.86	25.34	0.292	14649						
ISL	1000	0.21	34.685	27.86	25.18	0.317	14665						
OBS	1036	0.21	34.685	27.86			14671		220	343	122		
OBS	1089	0.21	34.696	27.87			14680	497	219	330	120		2
ISL	1100	0.21	34.683	27.86	25.28	0.343	14681						
OBS	1192	0.17	34.680	27.86			14695	532	214	322	120		4
ISL	1200	0.17	34.680	27.86	25.18	0.368	14696						
ISL	1250	0.15	34.680	27.86	25.07	0.380	14704						
ISL	1300	0.14	34.680	27.86	24.95	0.393	14712						
OBS	1397	0.12	34.680	27.86			14727	526	207	316	127		
ISL	1400	0.12	34.680	27.86	24.76	0.418	14728						
ISL	1500	0.10	34.678	27.86	24.68	0.442	14744						
OBS	1606	0.08	34.676	27.86			14761		204	320	125		
ISL	1750	0.05	34.671	27.86	24.65	0.504	14784						
OBS	1817	0.03	34.670	27.86			14795	544	207	324	121		
ISL	2000	-0.03	34.674	27.87	23.57	0.564	14823						
OBS	2030	-0.04	34.675	27.87			14828	569	207	318	123		
OBS	2245	-0.09	34.671	27.87			14863		203	312	135		
ISL	2250	-0.09	34.671	27.87	23.04	0.623	14863						
ISL	2500	-0.08	34.677	27.87	22.57	0.680	14907						
OBS	2513	-0.08	34.677	27.87			14909		190	330	123		
OBS	2621	-0.08	34.677	27.87			14928	579	201	318	120		
OBS	2728	-0.09	34.672	27.87			14946	589	198	316	129		
ISL	2750		34.671										
OBS	2781		34.672					597	197	320	126		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 532	19FEB1966	13.5	61 1.0S	26 12.0W	518	3630	39	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.3	-2.4		1	4	6	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.82	34.042	27.31			14517	789					
ISL	0	0.82	34.042	27.31	77.35	0.000	14517						
ISL	10	0.76	34.046	27.32	76.71	0.008	14516						
ISL	20	0.70	34.050	27.32	76.06	0.015	14515						
ISL	30	0.64	34.054	27.33	75.42	0.023	14514						
ISL	50	0.53	34.059	27.34	74.39	0.038	14512						
OBS	51	0.51	34.062	27.34			14512	823					
ISL	75	-0.38	34.169	27.48	61.44	0.055	14476						
ISL	100	-1.24	34.293	27.61	48.44	0.069	14442						
OBS	102	-1.31	34.304	27.62			14439	735					
ISL	125	-1.38	34.371	27.68	41.92	0.080	14441						
ISL	150	-1.17	34.427	27.72	38.27	0.090	14456						
OBS	152	-1.14	34.431	27.72			14457	742					
OBS	200	-0.60	34.520	27.77			14492	568					
ISL	200	-0.60	34.520	27.77	33.41	0.108	14492						
ISL	250	0.06	34.621	27.82	29.04	0.123	14532						
OBS	251	0.07	34.623	27.82			14532	548					
OBS	299	0.27	34.656	27.83			14550	548					
ISL	300	0.27	34.656	27.84	27.63	0.138	14550						
OBS	399	0.45	34.680	27.84			14575	483					
ISL	400	0.45	34.680	27.84	27.01	0.165	14575						
OBS	497	0.46	34.686	27.85			14592	484					
ISL	500	0.46	34.686	27.85	26.68	0.192	14592						
OBS	595	0.45	34.696	27.86			14608	461					
ISL	600	0.45	34.696	27.86	25.96	0.218	14609						
ISL	700	0.41	34.691	27.85	26.13	0.244	14624						
OBS	795	0.36	34.682	27.85			14637						
ISL	800	0.36	34.682	27.85	26.46	0.270	14638						
ISL	900	0.31	34.682	27.85	26.17	0.297	14652						
OBS	992	0.27	34.683	27.86			14666	526					4
ISL	1000	0.27	34.683	27.86	25.74	0.323	14667						
ISL	1100	0.21	34.683	27.86	25.34	0.348	14681						
ISL	1200	0.16	34.682	27.86	24.95	0.373	14696						
ISL	1250	0.13	34.682	27.86	24.75	0.386	14703						
ISL	1300	0.11	34.683	27.87	24.46	0.398	14711						
ISL	1400	0.06	34.682	27.87	24.13	0.422	14725						
OBS	1450	0.04	34.681	27.87			14733						
ISL	1500	0.03	34.680	27.87	23.94	0.446	14741						
OBS	1700	-0.02	34.673	27.86			14772	556					4
ISL	1750	-0.04	34.671	27.86	23.91	0.506	14780						
OBS	1949	-0.10	34.664	27.86			14811	574					4
ISL	2000	-0.12	34.664	27.86	23.47	0.565	14819						
OBS	2200	-0.18	34.664	27.86			14851	573					4
ISL	2250	-0.19	34.664	27.87	22.56	0.623	14859						
OBS	2450	-0.22	34.662	27.87			14892						
ISL	2500	-0.23	34.662	27.87	21.94	0.679	14900						
OBS	2699	-0.29	34.663	27.87			14932	567					
ISL	2750	-0.30	34.663	27.87	20.88	0.732	14940						
ISL	3000	-0.35	34.660	27.87	20.16	0.784	14981						
OBS	3200	-0.39	34.657	27.87			15015	557					
ISL	3250	-0.40	34.657	27.87	19.51	0.833	15023						
OBS	3450	-0.43	34.656	27.87			15057	577					
ISL	3500	-0.43	34.656	27.87	18.88	0.881	15066						
OBS	3701	-0.43	34.655	27.87			15101						
ISL	3750	-0.45	34.656	27.87	18.19	0.927	15109						
OBS	3852	-0.47	34.656	27.87			15126	574					
OBS	3901	-0.44	34.653	27.87			15136	575					

SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 22	SER 533		20FEB1966		11.0	61 31.0S		23 7.0W		518	4793	47	23	
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	3.5		1.5				4		6	5		3	1	
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD	
OBS	0	0.88	33.941	27.22			14518	765						
ISL	0	0.88	33.941	27.22	85.38	0.000	14518							
ISL	10	0.72	33.946	27.24	84.09	0.008	14513							
ISL	20	0.54	33.962	27.26	81.90	0.017	14507							
ISL	30	0.36	33.989	27.29	78.83	0.025	14500							
OBS	47	0.00	34.060	27.37			14488	753					9	
ISL	50	-0.11	34.082	27.39	69.36	0.040	14484							
ISL	75	-0.83	34.273	27.58	51.59	0.055	14457							
OBS	94	-1.20	34.424	27.71			14445	631						
ISL	100	-1.10	34.456	27.74	36.54	0.066	14451							
ISL	125	-0.56	34.560	27.80	30.71	0.074	14482							
OBS	141	-0.09	34.604	27.81			14507	487						
ISL	150	0.02	34.620	27.82	29.00	0.082	14513							
OBS	188	0.31	34.655	27.83			14533	447						
ISL	200	0.38	34.665	27.84	27.60	0.096	14539							
ISL	250	0.54	34.687	27.84	26.91	0.109	14555							
OBS	282	0.53	34.686	27.84			14559	429						
OBS	235	0.51	34.685	27.84			14551	429						
ISL	300	0.51	34.686	27.85	26.84	0.123	14561							
OBS	376	0.51	34.688	27.85			14574	428						
ISL	400	0.50	34.688	27.85	26.72	0.150	14578							
OBS	470	0.47	34.689	27.85			14588	428						
ISL	500	0.46	34.688	27.85	26.53	0.176	14592							
OBS	564	0.44	34.687	27.85			14602	437						
ISL	600	0.42	34.687	27.85	26.41	0.203	14607							
ISL	700	0.37	34.688	27.86	26.01	0.229	14622							
OBS	752	0.34	34.689	27.86			14629	448						
ISL	800	0.32	34.689	27.86	25.63	0.255	14636							
OBS	890	0.27	34.686	27.86			14649	459						
ISL	900	0.26	34.685	27.86	25.54	0.280	14650							
OBS	940	0.24	34.682	27.86			14656	464						
ISL	1000	0.21	34.680	27.86	25.53	0.306	14665							
ISL	1100	0.16	34.679	27.86	25.18	0.331	14679							
OBS	1165	0.13	34.678	27.86			14689	466						
ISL	1200	0.11	34.678	27.86	24.90	0.356	14694							
ISL	1250	0.09	34.678	27.86	24.72	0.369	14701							
ISL	1300	0.07	34.678	27.86	24.53	0.381	14709							
ISL	1400	0.03	34.678	27.87	24.16	0.405	14724							
OBS	1438	0.02	34.678	27.87			14730	493						
ISL	1500	-0.00	34.677	27.87	23.88	0.429	14739							
OBS	1714	-0.08	34.672	27.87			14772	508						
ISL	1750	-0.09	34.672	27.87	23.32	0.488	14778							
ISL	2000	-0.16	34.670	27.87	22.54	0.546	14817							
ISL	2250	-0.23	34.669	27.87	21.76	0.601	14857							
OBS	2263	-0.23	34.669	27.87			14859	529						
ISL	2500	-0.28	34.665	27.87	21.19	0.655	14898							
ISL	2750	-0.33	34.661	27.87	20.68	0.707	14939							
OBS	2814	-0.34	34.660	27.87			14950	545						
ISL	3000	-0.37	34.658	27.87	20.11	0.758	14981							
ISL	3250	-0.40	34.657	27.87	19.47	0.808	15023							
OBS	3366	-0.42	34.656	27.87			15043	557						
ISL	3500	-0.45	34.656	27.87	18.66	0.855	15065							
ISL	3750	-0.49	34.655	27.87	17.79	0.901	15107							
OBS	3914	-0.51	34.664	27.88			15136	577					2	
ISL	4000	-0.51	34.655	27.87	17.13	0.944	15151							
OBS	4458	-0.51	34.654	27.87			15233	584						
ISL	4500	-0.51	34.654	27.87	16.49	1.028	15241							
OBS	4681	-0.49	34.653	27.87			15274	583						
OBS	4741	-0.49	34.651	27.87			15285	577						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 534	22FEB1966	1.5	62 24.0S	19 4.0W	517	5009	49	16				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.5	-1.5		14	4	12	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	0.34	33.682	27.05			14490	771	160	226	59		
ISL	0	0.34	33.682	27.05	102.13	0.000	14490						
ISL	10	-0.16	33.838	27.20	87.85	0.009	14471						
ISL	20	-0.60	33.975	27.33	75.47	0.018	14455						
ISL	30	-0.97	34.095	27.44	64.91	0.025	14441						
ISL	50	-1.51	34.280	27.61	48.92	0.036	14421						
OBS	56	-1.62	34.321	27.64			14417	747	185	267	64		
ISL	75	-1.60	34.373	27.68	41.38	0.047	14422						
ISL	100	-1.57	34.387	27.70	40.24	0.058	14428						
OBS	110	-1.56	34.402	27.71			14430	688	195	287	70		
ISL	125	-1.17	34.457	27.74	36.07	0.067	14452						
ISL	150	-0.48	34.549	27.79	31.89	0.076	14489						
OBS	165	-0.04	34.603	27.81			14513	513	211	311	99		
ISL	200	0.40	34.657	27.83	28.28	0.091	14539						
OBS	218	0.54	34.674	27.83			14549		219	323	109		
ISL	250	0.53	34.674	27.83	27.82	0.105	14554						
ISL	300	0.51	34.675	27.84	27.69	0.119	14561						
ISL	400	0.47	34.677	27.84	27.42	0.146	14576						
ISL	500	0.44	34.678	27.84	27.14	0.173	14591						
ISL	600	0.40	34.680	27.85	26.84	0.200	14606						
ISL	700	0.37	34.681	27.85	26.52	0.227	14621						
ISL	800	0.45	34.683	27.85	27.10	0.254	14642						
OBS	824	0.32	34.683	27.85			14640	485	216	327	111		
ISL	900	0.28	34.681	27.85	25.96	0.280	14651						
ISL	1000	0.23	34.679	27.86	25.78	0.306	14666						
ISL	1100	0.18	34.676	27.86	25.59	0.332	14680						
OBS	1105	0.18	34.676	27.86			14681	486	217	315	116		
ISL	1200	0.14	34.674	27.86	25.38	0.357	14695						
ISL	1250	0.12	34.673	27.86	25.27	0.370	14702						
ISL	1300	0.10	34.672	27.86	25.14	0.383	14710						
ISL	1400	0.06	34.671	27.86	24.90	0.408	14725						
ISL	1500	0.02	34.669	27.86	24.64	0.432	14740						
OBS	1667	-0.04	34.667	27.86			14766	504	194	319	114		
ISL	1750	-0.07	34.666	27.86	23.94	0.493	14779						
ISL	2000	-0.15	34.663	27.86	23.19	0.552	14818						
OBS	2221	-0.21	34.683	27.88			14853		207	313	107		2
ISL	2250	-0.22	34.661	27.86	22.48	0.609	14858						
ISL	2500	-0.26	34.658	27.86	21.92	0.665	14899						
ISL	2750	-0.30	34.656	27.86	21.40	0.719	14940						
OBS	2778	-0.30	34.656	27.86			14945	543	207	296	113		
ISL	3000	-0.33	34.653	27.86	20.91	0.772	14982						
ISL	3250	-0.37	34.651	27.86	20.35	0.823	15025						
OBS	3336	-0.38	34.650	27.86			15039	556	211	313	116		
ISL	3500	-0.41	34.650	27.86	19.56	0.873	15067						
ISL	3750	-0.45	34.651	27.87	18.65	0.921	15109						
OBS	3895	-0.47	34.651	27.87			15134	595	203	305	114		
ISL	4000	-0.49	34.650	27.87	17.76	0.966	15152						
OBS	4454	-0.55	34.646	27.87			15230	661		305	96		
ISL	4500	-0.55	34.647	27.87	16.34	1.052	15239						
OBS	4735	-0.54	34.650	27.87			15281	645	187	306	101		
OBS	4895	-0.54	34.646	27.87			15310	670	204	307	102		4
OBS	4944	-0.53	34.648	27.87			15320	595	191	307	93		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 535	23FEB1966	8.9	63 5.0S	15 2.0W	517	5124	51	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.1	-2.0		22	2	0	0	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> µg/l	NITR 10 µg/l	SILIC µg/l	INT M	DD
OBS	0	0.29	33.387	26.81			14484	887					
ISL	0	0.29	33.387	26.81	124.36	0.000	14484						
ISL	10	-0.23	33.624	27.03	103.83	0.011	14465						
ISL	20	-0.68	33.831	27.22	86.16	0.021	14449						
ISL	30	-1.07	34.007	27.37	71.26	0.029	14435						
ISL	50	-1.64	34.268	27.60	49.42	0.041	14415						
OBS	53	-1.70	34.297	27.63			14413	780					
ISL	75	-1.76	34.366	27.68	41.48	0.052	14415						
ISL	100	-1.82	34.361	27.68	41.57	0.063	14416						
OBS	104	-1.83	34.366	27.69			14416	721					
ISL	125	-1.21	34.456	27.74	36.01	0.072	14450						
ISL	150	-0.38	34.566	27.80	31.05	0.081	14495						
OBS	156	-0.16	34.593	27.81			14506	534					
ISL	200	0.52	34.678	27.84	27.46	0.095	14545						
OBS	207	0.57	34.684	27.84			14549	448					
ISL	250	0.60	34.696	27.85	26.62	0.109	14557						
OBS	257	0.58	34.695	27.85			14558	427					
ISL	300	0.56	34.688	27.84	27.08	0.122	14564						
OBS	308	0.56	34.686	27.84			14565	439					
ISL	400	0.52	34.691	27.85	26.67	0.149	14579						
OBS	408	0.52	34.692	27.85			14580	524					
ISL	500	0.45	34.693	27.85	26.14	0.176	14592						
OBS	507	0.45	34.693	27.85			14593	478					
ISL	600	0.43	34.691	27.85	26.18	0.202	14608						
OBS	607	0.43	34.691	27.85			14609	440					
ISL	700	0.39	34.689	27.86	26.07	0.228	14623						
ISL	800	0.33	34.688	27.86	25.82	0.254	14637						
OBS	806	0.33	34.688	27.86			14638	511					
ISL	900	0.28	34.687	27.86	25.54	0.279	14651						
ISL	1000	0.23	34.686	27.86	25.24	0.305	14666						
OBS	1004	0.23	34.686	27.86			14666	489					
ISL	1100	0.19	34.686	27.86	24.90	0.330	14680						
ISL	1200	0.14	34.685	27.87	24.56	0.355	14695						
OBS	1247	0.12	34.685	27.87			14702	533					
ISL	1250	0.12	34.685	27.87	24.41	0.367	14703						4
ISL	1300	0.09	34.683	27.87	24.29	0.379	14710						
ISL	1400	0.04	34.680	27.87	24.08	0.403	14725						
OBS	1494	0.00	34.677	27.87			14738						9
ISL	1500	-0.00	34.677	27.87	23.89	0.427	14739						
OBS	1741	-0.07	34.674	27.87			14777	503					
ISL	1750	-0.07	34.674	27.87	23.34	0.486	14779						
OBS	1987	-0.14	34.670	27.87			14816	545					
ISL	2000	-0.14	34.670	27.87	22.76	0.544	14818						
ISL	2250	-0.21	34.669	27.87	21.99	0.600	14858						
OBS	2483	-0.26	34.668	27.87			14896						
ISL	2500	-0.26	34.668	27.87	21.20	0.654	14899						
ISL	2750	-0.31	34.665	27.87	20.64	0.706	14940						
OBS	2981	-0.34	34.662	27.87			14979	580					
ISL	3000	-0.34	34.662	27.87	20.17	0.757	14982						
ISL	3250	-0.37	34.658	27.87	19.81	0.807	15025						
OBS	3481	-0.39	34.655	27.87			15064						
ISL	3500	-0.39	34.655	27.87	19.41	0.856	15068						
ISL	3750	-0.42	34.654	27.87	18.85	0.904	15111						
OBS	3979	-0.44	34.653	27.87			15150	591					
ISL	4000	-0.44	34.653	27.87	18.20	0.950	15154						
OBS	4479	-0.50	34.651	27.87			15237	594					
ISL	4500	-0.50	34.651	27.87	16.78	1.038	15241						
OBS	4982	-0.51	34.651	27.87			15328	646					
ISL	5000	-0.51	34.651	27.87	15.93	1.120	15331						
OBS	5053	-0.50	34.653	27.87			15341	637					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 536	25FEB1966	1.9	60 4.0S	14 53.0W	517	4080	40	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.7	-3.2		27	7	27	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10·m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> μgat/l	NITR 10 μgat/l	SILIC μgat/l	INT M	DD
OBS	0	0.78	33.934	27.23			14514	790	181	201	58		
ISL	0	0.78	33.934	27.23	85.33	0.000	14514						
ISL	10	0.74	33.942	27.23	84.49	0.008	14514						
ISL	20	0.70	33.950	27.24	83.65	0.017	14514						
ISL	30	0.66	33.958	27.25	82.81	0.025	14514						
ISL	50	0.63	33.964	27.26	82.17	0.042	14515						
OBS	53	0.57	33.977	27.27			14513	800	180	265	77		
ISL	75	-0.34	34.144	27.45	63.55	0.060	14478						
ISL	100	-1.21	34.351	27.65	44.20	0.073	14445						
OBS	106	-1.39	34.403	27.70			14438	671	192	263	72		
ISL	125	-1.06	34.498	27.77	33.34	0.083	14458						
ISL	150	-0.39	34.589	27.81	29.27	0.091	14494						
OBS	158	-0.12	34.609	27.82			14508	497	210	300	96		
ISL	200	0.31	34.672	27.85	26.64	0.105	14536						
OBS	210	0.36	34.678	27.85			14540	455	208	323	103		
ISL	250	0.48	34.691	27.85	26.27	0.118	14552						
OBS	262	0.49	34.691	27.85			14554		221	320	110		
ISL	300	0.52	34.694	27.85	26.29	0.131	14562						
OBS	313	0.52	34.695	27.85			14564	432	224	313	120		
ISL	400	0.51	34.698	27.85	26.05	0.157	14578						
OBS	413	0.50	34.680	27.84			14580		224	319	120		2
ISL	500	0.45	34.698	27.86	25.70	0.183	14592						
OBS	511	0.44	34.698	27.86			14594	436	185	320	122		
ISL	600	0.42	34.698	27.86	25.60	0.209	14608						
OBS	615	0.42	34.698	27.86			14610		184	322	119		
ISL	700	0.38	34.696	27.86	25.52	0.235	14622						
ISL	800	0.33	34.693	27.86	25.38	0.260	14637						
OBS	816	0.32	34.693	27.86			14639		225		122		
ISL	900	0.28	34.692	27.86	25.16	0.285	14651						
ISL	1000	0.23	34.690	27.86	24.90	0.310	14666						
OBS	1017	0.22	34.690	27.86			14668	466	216	317	122		
ISL	1100	0.18	34.688	27.87	24.63	0.335	14680						
ISL	1200	0.13	34.687	27.87	24.36	0.360	14695						
ISL	1250	0.10	34.686	27.87	24.22	0.372	14702						
ISL	1300	0.08	34.685	27.87	24.07	0.384	14709						
ISL	1400	0.04	34.684	27.87	23.78	0.408	14724						
ISL	1500	-0.00	34.682	27.87	23.49	0.431	14739						
OBS	1519	-0.01	34.682	27.87			14742		213	299	119		
OBS	1268	0.09	34.685	27.87			14704	485	211	304	120		
ISL	1750	-0.09	34.679	27.87	22.75	0.489	14778						
OBS	1769	-0.10	34.679	27.87			14781	531	213	304	115		
ISL	2000	-0.17	34.676	27.87	22.07	0.545	14817						
ISL	2250	-0.23	34.674	27.88	21.40	0.599	14857						
OBS	2268	-0.23	34.674	27.88			14860	571	208	289	127		
ISL	2500	-0.28	34.674	27.88	20.58	0.652	14898						
ISL	2750	-0.33	34.674	27.88	19.78	0.702	14939						
OBS	2771	-0.33	34.674	27.88			14943		201	307	120		
ISL	3000	-0.36	34.672	27.88	19.19	0.751	14981						
ISL	3250	-0.41	34.668	27.88	18.61	0.798	15023						
OBS	3278	-0.41	34.668	27.88			15028		214	302	113		
ISL	3500	-0.46	34.665	27.88	17.74	0.844	15064						
OBS	3534	-0.47	34.665	27.88			15070	560	214	307	113		
ISL	3750	-0.49	34.662	27.88	17.25	0.888	15107						
OBS	3786	-0.49	34.662	27.88			15114	596	216	310	110		
OBS	3936	-0.49	34.662	27.88			15140		211	288	106		
ISL	4000	-0.50	34.663	27.88	16.74	0.930	15152						
OBS	4037	-0.50	34.664	27.88			15158	608	204	292	106		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 537	1MAR1966	2.1	55 2.0S	14 46.0W	481	3941	38	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	2.1	0.0		24	8	24	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	1.89	33.859	27.09			14562	764					
ISL	0	1.89	33.859	27.09	98.17	0.000	14562						
ISL	10	1.89	33.859	27.09	98.23	0.010	14564						
ISL	20	1.89	33.859	27.09	98.29	0.020	14566						
ISL	30	1.90	33.858	27.09	98.35	0.029	14567						
ISL	50	1.90	33.858	27.09	98.48	0.049	14571						
OBS	53	1.90	33.858	27.09			14571	761					
ISL	75	1.44	33.878	27.14	93.81	0.073	14555						
ISL	100	0.86	33.926	27.21	86.49	0.096	14534						
OBS	106	0.71	33.941	27.23			14528	754					
ISL	125	0.38	34.017	27.31	76.78	0.116	14517						
ISL	150	0.17	34.132	27.42	66.86	0.134	14513						
OBS	158	0.15	34.172	27.45			14514	657					
ISL	200	0.88	34.359	27.56	53.85	0.164	14557						
OBS	210	1.10	34.400	27.58			14569	497					
ISL	250	1.48	34.524	27.65	45.70	0.189	14594						
OBS	261	1.54	34.548	27.67			14599	439					
ISL	300	1.66	34.578	27.68	43.23	0.211	14611						
OBS	313	1.68	34.580	27.68			14614	420					
ISL	400	1.76	34.629	27.72	40.51	0.253	14633						
OBS	420	1.76	34.639	27.72			14637	434					
ISL	500	1.76	34.669	27.75	37.91	0.292	14650						
OBS	525	1.75	34.676	27.75			14654	427					
ISL	600	1.73	34.691	27.77	36.40	0.330	14666						
OBS	631	1.72	34.696	27.77			14671	426					
ISL	700	1.69	34.707	27.78	35.32	0.365	14681						
ISL	800	1.64	34.719	27.80	34.34	0.400	14696						
OBS	843	1.62	34.723	27.80			14702	450					
ISL	900	1.62	34.726	27.80	33.93	0.434	14711						
ISL	1000	1.54	34.726	27.81	33.57	0.468	14725						
OBS	1060	1.46	34.734	27.82			14731	463					
OBS	1090	1.38	34.744	27.84			14733						
ISL	1100	1.36	34.743	27.84	30.92	0.500	14734						
ISL	1200	1.23	34.738	27.84	30.38	0.531	14745						
ISL	1250	1.19	34.735	27.84	30.30	0.546	14751						
ISL	1300	1.16	34.739	27.85	29.91	0.561	14759						
OBS	1345	1.15	34.730	27.84			14765	462					
ISL	1400	1.09	34.729	27.84	30.15	0.591	14772						
ISL	1500	0.99	34.728	27.85	29.44	0.621	14784						
OBS	1598	0.89	34.727	27.85			14797	473					
ISL	1750	0.77	34.719	27.86	28.27	0.693	14817						
ISL	2000	0.59	34.705	27.86	27.76	0.763	14852						
OBS	2106	0.53	34.699	27.85			14867	480					
ISL	2250	0.45	34.696	27.86	27.03	0.832	14888						
OBS	2362	0.39	34.695	27.86			14904	488					
ISL	2500	0.32	34.692	27.86	25.96	0.898	14925						
OBS	2619	0.26	34.690	27.86			14943	498					
ISL	2750	0.20	34.688	27.86	24.93	0.962	14963						
OBS	2876	0.15	34.675	27.86			14982	512					
ISL	3000	0.11	34.685	27.87	24.02	1.023	15002						
ISL	3250	0.03	34.681	27.87	23.18	1.082	15042						
OBS	3398	-0.02	34.679	27.87			15066	527					
ISL	3500	-0.06	34.677	27.87	22.13	1.139	15082						
ISL	3750	-0.16	34.671	27.87	21.16	1.193	15122						
OBS	3764	-0.16	34.671	27.87			15124	537					
OBS	3813	-0.17	34.669	27.87			15133	538					

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SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 538	2MAR1966	11.7	55 25.0S	18 58.0W	481	3982	38	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	2.2	-1.7		8	6	8	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> µgat/l	NITR 10 µgat/l	SILIC µgat/l	INT M	DD
OBS	0	2.25	33.953	27.14			14579	768	160	212	22		
ISL	0	2.25	33.953	27.14	93.71	0.000	14579						
ISL	10	2.24	33.951	27.14	93.82	0.009	14581						
ISL	20	2.25	33.950	27.13	93.98	0.019	14582						
ISL	30	2.24	33.951	27.14	93.91	0.028	14584						
OBS	49	2.22	33.950	27.14			14586	763	163	218	23		
ISL	50	2.22	33.950	27.14	93.89	0.047	14586						
ISL	75	2.28	33.945	27.13	94.82	0.071	14593						
OBS	97	2.11	33.958	27.15			14589	756	168	225	33		
ISL	100	1.99	33.965	27.17	91.21	0.094	14584						
ISL	125	0.98	34.033	27.29	79.12	0.115	14545						
OBS	145	0.22	34.102	27.39			14514	748	198	273	55		
ISL	150	0.18	34.117	27.41	68.09	0.133	14514						
OBS	191	0.44	34.244	27.49			14534	668	204	304	62		
ISL	200	0.60	34.281	27.51	58.04	0.165	14543						
OBS	239	1.30	34.426	27.59			14583	520	214	325	70		
ISL	250	1.39	34.449	27.60	50.65	0.192	14589						
OBS	286	1.54	34.503	27.63			14603	462	218	325	70		
ISL	300	1.59	34.520	27.64	47.01	0.217	14608						
OBS	380	1.78	34.592	27.68			14630	432	226	320	71		
ISL	400	1.79	34.605	27.69	42.63	0.261	14634						
OBS	475	1.80	34.640	27.72			14647		212	310	83		
ISL	500	1.81	34.649	27.73	39.85	0.303	14652						
OBS	570	1.84	34.670	27.74			14665	427	202	310	85		
ISL	600	1.83	34.676	27.75	38.39	0.342	14670						
ISL	700	1.78	34.694	27.77	37.05	0.380	14685						
OBS	761	1.74	34.702	27.77			14693	461	204	306	89		
ISL	800	1.74	34.709	27.78	35.90	0.416	14700						
ISL	900	1.72	34.726	27.80	34.95	0.451	14716						
OBS	955	1.71	34.733	27.80			14725	468	192	286	87		
ISL	1000	1.66	34.732	27.81	34.23	0.486	14730						
ISL	1100	1.53	34.730	27.81	33.50	0.520	14741						
ISL	1200	1.39	34.731	27.82	32.37	0.553	14752						
OBS	1241	1.32	34.728	27.83			14755	457	204	300	86		
ISL	1250	1.31	34.728	27.83	32.01	0.569	14756						
ISL	1300	1.25	34.725	27.83	31.74	0.585	14762						
ISL	1400	1.14	34.721	27.83	31.25	0.616	14774						
OBS	1460	1.08	34.718	27.83			14782	491	196	289	92		
ISL	1500	1.04	34.717	27.84	30.77	0.647	14787						
OBS	1680	0.87	34.710	27.84			14809	501	201	287	101		
ISL	1750	0.81	34.705	27.84	29.69	0.723	14818						
OBS	1900	0.68	34.696	27.84			14838	505	196	290	104		
ISL	2000	0.60	34.693	27.85	28.73	0.796	14852						
OBS	2119	0.52	34.691	27.85			14868	503	204	291	109		
ISL	2250	0.44	34.686	27.85	27.68	0.866	14887						
OBS	2340	0.39	34.683	27.85			14901	524	199	287	117		
ISL	2500	0.31	34.681	27.85	26.67	0.934	14925						
ISL	2750	0.20	34.680	27.86	25.55	1.000	14963						
OBS	2785	0.19	34.680	27.86			14968	534	204	285	120		
ISL	3000	0.11	34.676	27.86	24.70	1.062	15002						
OBS	3233	0.04	34.671	27.86			15040	535	199	286	120		
ISL	3250	0.04	34.670	27.86	24.06	1.123	15043						
OBS	3459	-0.03	34.665	27.86			15076	552	193	283	122		
ISL	3500	-0.05	34.664	27.86	23.25	1.183	15083						
OBS	3693	-0.14	34.664	27.86			15113	567	198	289	128		
ISL	3750	-0.16	34.664	27.86	21.61	1.239	15122						
OBS	3789	-0.17	34.665	27.87			15128	575	212	293	124		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 539	3MAR1966	21.4	55 54.0S	22 16.0W	482	4362	42	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.0	0.0		19	4	16	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
OBS	0	1.48	33.925	27.17			14545	783					
ISL	0	1.48	33.925	27.17	90.35	0.000	14545						
ISL	10	1.47	33.925	27.17	90.31	0.009	14546						
ISL	20	1.46	33.926	27.17	90.19	0.018	14547						
ISL	30	1.48	33.928	27.17	90.16	0.027	14550						
OBS	45	1.44	33.933	27.18			14551	773					
ISL	50	1.43	33.936	27.18	89.30	0.045	14551						
ISL	75	1.32	33.939	27.19	88.37	0.067	14550						
OBS	91	1.18	33.962	27.22			14547	772					
ISL	100	0.90	34.004	27.27	80.81	0.088	14537						
ISL	125	0.30	34.137	27.42	67.16	0.107	14515						
OBS	148	-0.05	34.281	27.55			14505	652					
ISL	150	-0.01	34.292	27.56	53.79	0.122	14508						
OBS	183	0.92	34.445	27.63			14557	516					
ISL	200	1.18	34.496	27.65	45.48	0.147	14572						
OBS	228	1.41	34.553	27.68			14588	447					
ISL	250	1.51	34.580	27.69	41.77	0.169	14597						
OBS	273	1.56	34.597	27.70			14603	444					
ISL	300	1.57	34.613	27.72	39.88	0.189	14608						
OBS	364	1.51	34.636	27.74			14616	446					
ISL	400	1.50	34.649	27.75	36.91	0.227	14622						
OBS	457	1.48	34.666	27.77			14631	453					
ISL	500	1.47	34.674	27.77	35.15	0.263	14638						
OBS	548	1.46	34.681	27.78			14645	450					
ISL	600	1.43	34.687	27.79	34.17	0.298	14652						
ISL	700	1.36	34.696	27.80	33.20	0.332	14666						
ISL	800	1.27	34.702	27.81	32.30	0.365	14679						
ISL	900	1.16	34.702	27.82	31.62	0.397	14691						
OBS	934	1.12	34.704	27.82			14695	470					
ISL	1000	1.05	34.704	27.83	30.69	0.428	14702						
OBS	1099	0.94	34.703	27.83			14714	476					
ISL	1100	0.94	34.703	27.83	30.03	0.458	14714						
ISL	1200	0.87	34.703	27.84	29.56	0.488	14728						
ISL	1250	0.84	34.703	27.84	29.37	0.503	14735						
ISL	1300	0.80	34.702	27.84	29.19	0.517	14742						
OBS	1343	0.78	34.702	27.84			14748	493					
ISL	1400	0.74	34.700	27.84	28.83	0.546	14756						
ISL	1500	0.66	34.697	27.85	28.46	0.575	14769						
OBS	1590	0.59	34.694	27.85			14781	500					
ISL	1750	0.49	34.689	27.85	27.69	0.645	14804						
OBS	1836	0.45	34.687	27.85			14817						
ISL	2000	0.37	34.683	27.85	27.03	0.713	14841						
OBS	2086	0.33	34.681	27.85			14854						
ISL	2250	0.25	34.678	27.85	26.21	0.780	14879						
OBS	2338	0.21	34.676	27.85			14892						
ISL	2500	0.15	34.673	27.85	25.44	0.845	14917						
ISL	2750	0.07	34.668	27.86	24.75	0.907	14957						
OBS	2840	0.04	34.667	27.86			14971	535					
ISL	3000	-0.01	34.665	27.86	24.00	0.968	14997						
ISL	3250	-0.07	34.664	27.86	23.14	1.027	15038						
OBS	3345	-0.10	34.663	27.86			15053	559					
ISL	3500	-0.14	34.662	27.86	22.15	1.084	15078						
OBS	3659	-0.19	34.661	27.86			15104	564					
ISL	3750	-0.22	34.659	27.86	21.16	1.138	15119						
OBS	3913	-0.27	34.655	27.86			15146	574					
ISL	4000	-0.29	34.654	27.86	20.28	1.190	15160						
OBS	4160	-0.31	0.000	0.00			0	583					
OBS	4209	-0.31	34.654	27.86			15197	586					



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 540	SMAR1966	8.4	56 32.0S	24 30.0W	482	7633	71	29				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	0.0	0.0		23	5	22	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	1.49	34.118	27.33			14548	764	176	252	62		
ISL	0	1.49	34.118	27.33	75.77	0.000	14548						
ISL	10	1.46	34.122	27.33	75.28	0.008	14548						
ISL	20	1.48	34.126	27.33	75.15	0.015	14551						
ISL	30	1.45	34.130	27.34	74.70	0.023	14551						
ISL	50	1.36	34.132	27.35	73.94	0.037	14550						
OBS	58	1.30	34.141	27.36			14549	771	181	257	71		
ISL	75	1.07	34.167	27.39	69.44	0.055	14542						
ISL	100	0.78	34.220	27.46	63.64	0.072	14534						
OBS	115	0.64	34.261	27.50			14531	685	188	269	80		
ISL	125	0.71	34.300	27.52	57.20	0.087	14536						
ISL	150	0.91	34.392	27.58	51.51	0.101	14551						
OBS	171	1.13	34.465	27.63			14565	516	216	315	89		
ISL	200	1.13	34.503	27.66	44.68	0.125	14570						
OBS	226	1.11	34.523	27.68			14574	510	212	308	89		
ISL	250	1.22	34.559	27.70	41.16	0.146	14583						
OBS	280	1.40	34.603	27.72			14597	478	214	315	91		
ISL	300	1.52	34.622	27.73	38.75	0.166	14606						
OBS	334	1.69	34.647	27.73			14619	441	209	307	92		
ISL	400	1.79	34.680	27.75	36.96	0.204	14635						
OBS	440	1.76	34.690	27.76			14641	442	211	301	93		
ISL	500	1.66	34.692	27.77	35.30	0.240	14646						
OBS	546	1.56	34.691	27.78			14649	444	204	304	90		
ISL	600	1.52	34.698	27.79	34.07	0.275	14657						
OBS	652	1.49	34.706	27.80			14664	450	212	301	93		
ISL	700	1.42	34.706	27.80	33.03	0.308	14669						
ISL	800	1.27	34.705	27.81	32.05	0.341	14679						
OBS	860	1.17	34.705	27.82			14685	478	200	301	98		
ISL	900	1.12	34.704	27.82	31.13	0.373	14689						
ISL	1000	1.01	34.701	27.83	30.62	0.403	14701						
OBS	1066	0.95	34.699	27.83			14709	491	209	296	104		
ISL	1100	0.92	34.698	27.83	30.19	0.434	14714						
ISL	1200	0.84	34.697	27.83	29.72	0.464	14727						
ISL	1250	0.80	34.696	27.84	29.49	0.479	14733						
ISL	1300	0.76	34.696	27.84	29.26	0.493	14740						
ISL	1400	0.69	34.695	27.84	28.82	0.522	14754						
ISL	1500	0.62	34.694	27.84	28.39	0.551	14768						
OBS	1589	0.57	34.693	27.85			14780	506	207	302	128		
ISL	1750	0.47	34.691	27.85	27.35	0.621	14803						
OBS	1838	0.42	34.689	27.85			14816	503	203	303	120		
ISL	2000	0.34	34.685	27.85	26.55	0.688	14840						
OBS	2086	0.30	34.683	27.85			14853	509	208	311	119		
ISL	2250	0.21	34.678	27.86	25.77	0.753	14877						
OBS	2328	0.17	34.675	27.86			14889	519	214	300	117		
ISL	2500	0.12	34.671	27.85	25.28	0.817	14916						
OBS	2568	0.11	34.670	27.85			14927	534	216		123		
ISL	2750	0.05	34.668	27.86	24.55	0.879	14956						
OBS	2804	0.03	34.668	27.86			14965	541	215	301	116		
ISL	3000	-0.03	34.665	27.86	23.71	0.940	14996						
ISL	3250	-0.10	34.661	27.86	22.92	0.998	15036						
OBS	3271	-0.11	34.661	27.86			15040	544	208	309	118		
ISL	3500	-0.18	34.658	27.86	21.95	1.054	15077						
OBS	3741	-0.25	34.655	27.86			15116	560	212	307	122		
ISL	3750	-0.25	34.655	27.86	21.01	1.108	15118						
ISL	4000	-0.29	34.653	27.86	20.36	1.160	15160						
OBS	4216	-0.31	34.652	27.86			15198	586	224	310	118		
ISL	4500	-0.34	34.651	27.86	19.25	1.259	15248						
OBS	4696	-0.35	34.650	27.86			15282	589	200	307	121		
ISL	5000	-0.34	34.650	27.86	18.82	1.354	15338						
OBS	5180	-0.31	34.650	27.86			15372	586	190	305	116		
OBS	4965	-0.34	34.650	27.86			15331	590	192	303	113		
OBS	5431	-0.30	34.646	27.86			15418	591	193	304	112		
ISL	5500	-0.30	34.645	27.86	19.29	1.449	15431						
OBS	5901	-0.29	34.646	27.86			15504	601	191	303	114		
ISL	6000	-0.29	34.649	27.86	18.64	1.544	15523						
OBS	6018	-0.29	34.650	27.86			15526	614	192	301	112		
ISL	6500	-0.24	34.652	27.86	19.01	1.638	15617						
OBS	6858	-0.16	34.649	27.85			15687	602	188	296	114		
ISL	7000	-0.12	34.650	27.85	21.02	1.738	15715						
OBS	7056	-0.11	34.650	27.85			15726	586	185	295	112		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 541	13MAR1966	11.0	55 24.0S	52 52.0W	485	3932	37	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	0.0	0.0		35	3	0	0	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.93	34.082	26.86			14736	692					
ISL	0	5.93	34.082	26.86	120.06	0.000	14736						
ISL	10	5.79	34.088	26.88	118.09	0.012	14732						
ISL	20	5.65	34.095	26.90	115.97	0.024	14728						
ISL	30	5.49	34.104	26.93	113.71	0.035	14723						
OBS	48	5.20	34.121	26.98			14715	698					
ISL	50	5.16	34.124	26.99	108.63	0.057	14713						
ISL	75	4.68	34.160	27.07	100.98	0.084	14698						
OBS	96	4.31	34.184	27.13			14686	674					
ISL	100	4.26	34.184	27.13	95.03	0.108	14685						
ISL	125	4.03	34.179	27.15	93.21	0.132	14679						
OBS	143	3.92	34.170	27.16			14678	677					
ISL	150	3.90	34.168	27.16	92.94	0.155	14678						
OBS	190	3.77	34.161	27.17			14679	670					
ISL	200	3.70	34.159	27.17	92.16	0.201	14678						
OBS	237	3.45	34.154	27.19			14673	667					
ISL	250	3.39	34.154	27.20	89.83	0.247	14672						
OBS	284	3.25	34.157	27.21			14672	645					
ISL	300	3.18	34.159	27.22	87.87	0.291	14672						
OBS	376	2.90	34.175	27.26			14673	619					
ISL	400	2.82	34.183	27.27	83.28	0.377	14673						
OBS	469	2.63	34.211	27.31			14677	580					
ISL	500	2.57	34.225	27.33	78.39	0.457	14680						
ISL	600	2.44	34.274	27.38	74.00	0.534	14691						
ISL	700	2.38	34.328	27.43	69.89	0.606	14706						
OBS	703	2.38	34.330	27.43			14706	495					
ISL	800	2.36	34.389	27.48	65.73	0.673	14723						
ISL	900	2.35	34.446	27.52	61.77	0.737	14739						
OBS	939	2.34	34.468	27.54			14746	440					
ISL	1000	2.26	34.492	27.57	57.98	0.797	14753						
ISL	1100	2.14	34.529	27.61	54.48	0.853	14765						
OBS	1178	2.06	34.556	27.63			14775	414					
ISL	1200	2.06	34.567	27.64	51.37	0.906	14779						
ISL	1250	2.08	34.590	27.66	50.05	0.932	14788						
ISL	1300	2.10	34.611	27.67	48.88	0.956	14798						
OBS	1359	2.13	34.635	27.69			14810	398					
ISL	1400	2.13	34.644	27.70	47.20	1.004	14817						
ISL	1500	2.11	34.662	27.71	46.15	1.051	14833						
OBS	1566	2.08	34.669	27.72			14843	404					
ISL	1750	1.97	34.695	27.75	43.21	1.163	14869						
OBS	1776	1.95	34.698	27.76			14873	409					
OBS	1985	1.82	34.715	27.78			14903	418					
ISL	2000	1.81	34.716	27.78	40.81	1.268	14905						
OBS	2196	1.66	34.720	27.80			14932	429					
ISL	2250	1.62	34.722	27.80	38.93	1.367	14940						
OBS	2411	1.50	34.726	27.81			14962	438					
ISL	2500	1.43	34.725	27.82	37.04	1.462	14975						
ISL	2750	1.23	34.720	27.83	35.58	1.553	15009						
OBS	2838	1.17	34.717	27.83			15022	456					
ISL	3000	1.09	34.715	27.83	34.58	1.641	15046						
ISL	3250	0.99	34.712	27.84	33.79	1.726	15085						
OBS	3279	0.83	34.712	27.85			15083	465					
ISL	3500	0.89	34.707	27.84	33.24	1.810	15125						
OBS	3503	0.89	34.707	27.84			15125	468					
OBS	3640	0.82	34.706	27.84			15146	476					
OBS	3731	0.78	34.701	27.84			15161	481					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 542	13MAR1966	18.7	55 16.0S	53 39.0W	485	3559	35	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	5.7	4.0		23	7	24	3		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.94	34.087	26.86			14736	702					
ISL	0	5.94	34.087	26.86	119.81	0.000	14736						
ISL	10	5.87	34.089	26.87	118.90	0.012	14735						
ISL	20	5.93	34.092	26.87	119.57	0.024	14739						
ISL	30	5.86	34.089	26.87	119.04	0.036	14738						
OBS	50	5.58	34.099	26.92			14730						
ISL	50	5.58	34.099	26.92	115.31	0.059	14730						
ISL	75	4.86	34.127	27.02	105.35	0.087	14705						
OBS	100	4.12	34.153	27.12			14679	671					
ISL	100	4.12	34.153	27.12	95.91	0.112	14679						
ISL	125	3.81	34.151	27.15	93.25	0.136	14670						
ISL	150	3.65	34.148	27.17	92.07	0.159	14667						
OBS	151	3.65	34.148	27.17			14667	671					
ISL	200	3.38	34.156	27.20	89.31	0.204	14664						
OBS	201	3.38	34.156	27.20			14664	652					
ISL	250	3.09	34.159	27.23	86.67	0.248	14660						
OBS	252	3.08	34.159	27.23			14660	650					
ISL	300	2.89	34.167	27.25	84.52	0.291	14659						
OBS	302	2.88	34.167	27.25			14659	624					
ISL	400	2.76	34.202	27.29	81.32	0.374	14671						
OBS	402	2.54	34.203	27.31			14662	581					
ISL	500	2.75	34.296	27.37	74.74	0.452	14688						1
OBS	502	2.75	34.298	27.37			14689	509					
ISL	600	2.61	34.352	27.42	69.84	0.524	14700						
OBS	601	2.61	34.352	27.43			14700	468					
ISL	700	2.59	34.380	27.45	68.11	0.593	14716						
ISL	800	2.57	34.413	27.48	65.97	0.660	14732						
OBS	900	2.54	34.451	27.51			14748	422					
ISL	900	2.54	34.451	27.51	63.37	0.725	14748						
ISL	1000	2.38	34.527	27.58	56.59	0.785	14759						
OBS	1004	2.37	34.530	27.59			14759	402					
ISL	1100	2.27	34.575	27.63	52.44	0.839	14771						
ISL	1200	2.20	34.612	27.67	49.40	0.890	14785						
ISL	1250	2.16	34.626	27.68	48.27	0.915	14793						
ISL	1300	2.14	34.637	27.69	47.38	0.939	14800						
OBS	1368	2.11	34.648	27.70			14810	403					
ISL	1400	2.09	34.657	27.71	45.85	0.985	14815						
ISL	1500	2.03	34.681	27.74	43.80	1.030	14829						
OBS	1627	1.95	34.705	27.76			14848	411					
ISL	1750	1.88	34.714	27.77	40.83	1.136	14866						
OBS	1886	1.80	34.717	27.78			14886	431					
ISL	2000	1.71	34.721	27.79	39.19	1.236	14901						
OBS	2144	1.58	34.724	27.80			14920	437					
ISL	2250	1.50	34.724	27.81	37.25	1.331	14935						
OBS	2403	1.37	34.723	27.82			14955	444					
ISL	2500	1.27	34.723	27.83	35.24	1.422	14968						
OBS	2660	1.11	34.721	27.84			14988	456					
ISL	2750	1.03	34.717	27.84	33.09	1.507	15000						
OBS	2917	0.90	34.710	27.84			15023						
ISL	3000	0.87	34.708	27.84	32.07	1.589	15036						
OBS	3176	0.79	0.000	0.00			0	470					
ISL	3250	0.73	34.704	27.85	30.80	1.667	15074						
OBS	3279	0.70	34.704	27.85			15078	476					
OBS	3381	0.62	34.701	27.85			15092	488					
OBS	3483	0.61	34.700	27.85			15109	484					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 22	SER 543	14MAR1966	11.1	54 52.0S	54 34.0W	485	4042	34	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.0	0.0		29	3	25	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
OBS	0	6.14	34.117	26.86			14745	687					
ISL	0	6.14	34.117	26.86	119.97	0.000	14745						
ISL	10	6.11	34.119	26.86	119.61	0.012	14745						
ISL	20	6.08	34.120	26.87	119.25	0.024	14746						
ISL	30	6.05	34.122	26.88	118.88	0.036	14746						
ISL	50	6.02	34.123	26.88	118.78	0.060	14748						
OBS	55	5.97	34.126	26.89			14747	698					
ISL	75	5.59	34.147	26.95	112.09	0.088	14735						
ISL	100	5.08	34.173	27.03	104.61	0.116	14719						
OBS	109	4.89	34.183	27.06			14713	682					
ISL	125	4.72	34.190	27.09	99.65	0.141	14708						
ISL	150	4.52	34.192	27.11	97.61	0.166	14704						
OBS	163	4.45	34.195	27.12			14703	670					
ISL	200	4.25	34.189	27.14	95.49	0.214	14701						
OBS	217	4.17	34.184	27.14			14700	659					
ISL	250	4.00	34.177	27.16	94.17	0.261	14698						
OBS	270	3.90	34.173	27.16			14698	662					
ISL	300	3.80	34.168	27.17	93.31	0.308	14698						
OBS	324	3.73	34.164	27.17			14699	659					
ISL	400	3.44	34.160	27.20	90.99	0.400	14700						
OBS	422	3.35	34.161	27.21			14699	648					
ISL	500	2.99	34.167	27.24	86.68	0.489	14697						
OBS	520	2.90	34.170	27.25			14696	626					
ISL	600	2.65	34.188	27.29	82.42	0.574	14699						
ISL	700	2.44	34.219	27.33	78.59	0.654	14707						
OBS	770	2.36	34.247	27.36			14716	552					
ISL	800	2.36	34.258	27.37	75.39	0.731	14721						
ISL	900	2.38	34.302	27.40	72.80	0.805	14739						
ISL	1000	2.41	34.353	27.44	69.84	0.877	14757						
ISL	1100	2.46	34.411	27.49	66.53	0.945	14777						
OBS	1115	2.47	34.421	27.49			14780	441					
ISL	1200	2.40	34.485	27.55	60.96	1.009	14792						
ISL	1250	2.36	34.521	27.58	58.13	1.038	14800						
OBS	1271	2.34	34.535	27.59			14802	408					
ISL	1300	2.33	34.550	27.61	55.85	1.067	14807						
OBS	1374	2.30	34.582	27.63			14819	406					
ISL	1400	2.29	34.590	27.64	52.95	1.121	14823						
ISL	1500	2.25	34.617	27.67	51.01	1.173	14838						
OBS	1554	2.22	34.627	27.68			14846	394					
OBS	1736	2.13	34.660	27.71			14874	396					
ISL	1750	2.12	34.663	27.71	47.35	1.296	14876						
OBS	1917	2.05	34.697	27.75			14901	404					
ISL	2000	2.00	34.705	27.76	43.86	1.410	14913						
OBS	2097	1.94	34.711	27.77			14928	415					
ISL	2250	1.87	34.717	27.78	42.39	1.518	14951						
OBS	2274	1.86	34.718	27.78			14954	417					
ISL	2500	1.71	34.723	27.79	40.86	1.622	14987						
OBS	2644	1.61	34.725	27.80			15007	434					
ISL	2750	1.53	34.726	27.81	39.08	1.722	15022						
ISL	3000	1.36	34.725	27.82	37.42	1.818	15058						
OBS	3038	1.33	34.725	27.82			15063	453					
OBS	3248	1.22	34.723	27.83			15095	466					
ISL	3250	1.22	34.723	27.83	36.29	1.910	15095						
OBS	3382	1.11	34.718	27.83			15114	467					
OBS	3423	1.08	34.719	27.84			15120	485					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 544	8APR1966	19.5	63 26.0S	94 8.0W	525	4900	48	31				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	3.1	-1.3		32	5	28	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	2.07	33.886	27.10			14570	743			27		
ISL	0	2.07	33.886	27.10	97.43	0.000	14570						
ISL	10	2.08	33.881	27.09	97.89	0.010	14572						
OBS	14	2.08	33.880	27.09			14573	746					
ISL	20	2.08	33.879	27.09	98.12	0.020	14574						
OBS	27	0.00	33.879	0.00			0	744					
ISL	30	2.08	33.880	27.09	98.13	0.029	14576						
OBS	49	2.09	33.884	27.09			14579	748			21		
ISL	50	2.08	33.885	27.10	97.79	0.049	14579						
ISL	75	1.38	33.929	27.18	89.57	0.072	14553						
OBS	78	1.25	33.938	27.20			14548						
ISL	100	-0.20	34.058	27.38	70.66	0.092	14487						
OBS	103	-0.37	34.072	27.40			14480	762			31		
ISL	125	-0.29	34.051	27.38	70.72	0.110	14487						
OBS	127	-0.25	34.047	27.37			14489						
ISL	150	-0.19	34.067	27.38	69.93	0.128	14496						
OBS	151	-0.18	34.069	27.39			14497	703			34		
OBS	176	0.17	34.110	27.40			14517						
OBS	200	0.10	34.125	27.42			14518				38		
ISL	200	0.10	34.125	27.42	66.96	0.162	14518						
OBS	223	0.39	34.161	27.43			14536	674					
OBS	245	0.26	34.166	27.44			14534	676			42		
ISL	250	0.34	34.173	27.44	64.62	0.195	14538						
OBS	270	0.76	34.214	27.45			14561	627					
OBS	294	1.11	34.273	27.48			14582	577			52		
ISL	300	1.20	34.286	27.48	61.79	0.226	14587						
OBS	343	1.70	34.359	27.50			14617						
OBS	392	1.85	34.415	27.54			14633	505			67		
ISL	400	1.89	34.424	27.54	57.00	0.286	14636						
OBS	443	2.08	34.469	27.56			14652	465					
OBS	492	2.08	34.502	27.59			14661				72		
ISL	500	2.08	34.507	27.59	52.81	0.341	14662						
OBS	593	2.10	34.561	27.63			14679	442					
ISL	600	2.11	34.564	27.64	49.24	0.392	14681						
OBS	693	2.21	34.603	27.66			14701	405			77		
ISL	700	2.21	34.606	27.66	47.55	0.440	14702						
ISL	800	2.21	34.640	27.69	45.51	0.487	14719						
ISL	900	2.17	34.668	27.71	43.54	0.531	14735						
ISL	1000	2.11	34.692	27.74	41.66	0.574	14749						
ISL	1100	2.02	34.710	27.76	39.84	0.615	14762						
OBS	1180	1.92	34.720	27.78			14772	409			94		
ISL	1200	1.91	34.722	27.78	38.22	0.654	14774						
ISL	1250	1.87	34.727	27.78	37.73	0.673	14781						
ISL	1300	1.84	34.731	27.79	37.28	0.691	14788						
ISL	1400	1.77	34.736	27.80	36.55	0.728	14802						
OBS	1427	1.75	34.737	27.80			14806	427			98		
ISL	1500	1.70	34.737	27.81	36.10	0.765	14816						
ISL	1750	1.52	34.737	27.82	35.03	0.853	14851						
OBS	1769	1.51	34.737	27.82			14853	426			107		
OBS	1924	1.42	34.737	27.83			14876	441			112		
ISL	2000	1.37	34.735	27.83	34.27	0.940	14887						
OBS	2177	1.27	34.730	27.83			14912	455			118		
ISL	2250	1.23	34.729	27.83	33.65	1.025	14923						
OBS	2415	1.14	34.728	27.84			14948				118		
ISL	2500	1.10	34.727	27.84	32.76	1.108	14960						
ISL	2750	0.97	34.723	27.85	31.94	1.189	14998						
OBS	2914	0.89	34.720	27.85			15023	479			125		
ISL	3000	0.85	34.719	27.85	31.06	1.268	15036						
ISL	3250	0.73	34.715	27.86	30.09	1.344	15074						
OBS	3414	0.00	34.713	0.00			0	499			134		
ISL	3500	0.63	34.712	27.86	29.16	1.418	15114						
ISL	3750	0.54	34.710	27.86	28.27	1.490	15154						
OBS	3914	0.49	34.709	27.86			15181	495			125		
ISL	4000	0.47	34.709	27.87	27.45	1.559	15195						
OBS	4421	0.41	34.710	27.87			15268	489			128		
ISL	4500	0.41	34.709	27.87	26.73	1.695	15282						
OBS	4820	0.41	34.703	27.86			15339	509			131		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 545	9APR1966	22.6	62 24.0S	95 50.0W	525	5014	34	31				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.3	1.0		31	4	28	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	3.92	34.063	27.07			14653						
ISL	0	3.92	34.063	27.07	99.82	0.000	14653						
ISL	10	3.95	34.078	27.08	99.02	0.010	14656						
OBS	14	3.95	34.078	27.08			14656	732					
ISL	20	3.95	34.067	27.07	99.95	0.020	14657						
OBS	28	3.94	34.050	27.06			14658	722					
ISL	30	3.94	34.050	27.06	101.20	0.030	14658						
OBS	49	3.93	34.055	27.06			14661	722		224	9		
ISL	50	3.94	34.055	27.06	101.11	0.050	14662						
ISL	75	3.97	34.052	27.06	101.75	0.076	14667						
OBS	78	3.93	34.053	27.06			14666	707					
ISL	100	2.73	34.087	27.20	87.98	0.099	14619						
OBS	103	2.57	34.092	27.22			14612	721		182	20		
ISL	125	2.40	34.098	27.24	84.48	0.121	14608						
OBS	128	2.41	34.098	27.24			14609						
ISL	150	2.26	34.102	27.25	83.21	0.142	14606						
OBS	153	2.24	34.102	27.26			14606			282	23		
OBS	179	2.19	34.105	27.26			14608	699					
ISL	200	2.16	34.128	27.28	80.64	0.183	14611						
OBS	204	2.15	34.132	27.29			14611	672		278	24		
OBS	229	2.10	34.133	27.29			14613						
ISL	250	2.01	34.149	27.31	78.04	0.222	14613						
OBS	253	1.99	34.151	27.32			14612	671		287	29		
OBS	280	1.71	34.123	27.31			14604						
ISL	300	1.71	34.135	27.32	76.93	0.261	14608						
OBS	305	1.72	34.140	27.33			14609	696		287	29		
OBS	357	1.50	34.151	27.35			14608	669					
ISL	400	1.50	34.182	27.38	72.10	0.336	14615						
OBS	409	1.53	34.191	27.38			14618	626		300	38		
OBS	461	1.95	34.262	27.41			14646	622					
ISL	500	1.99	34.296	27.43	67.87	0.406	14655						
OBS	522	1.97	34.312	27.45			14658	548		318	45		
ISL	600	2.13	34.390	27.50	62.49	0.471	14679						
OBS	616	2.17	34.406	27.50			14684	475		338	58		
ISL	700	2.32	34.475	27.55	58.36	0.531	14705						
OBS	719	2.34	34.489	27.56			14710	474					
ISL	800	2.29	34.544	27.60	53.47	0.587	14722						
OBS	821	2.27	34.556	27.62			14724	432		331	68		
ISL	900	2.25	34.590	27.64	50.19	0.639	14737						
OBS	924	2.25	34.598	27.65			14741			326	75		
ISL	1000	2.22	34.626	27.68	47.62	0.688	14753						
OBS	1025	2.21	34.635	27.68			14757						
ISL	1100	2.17	34.657	27.71	45.26	0.734	14768						
ISL	1200	2.11	34.682	27.73	43.29	0.779	14783						
ISL	1250	2.07	34.691	27.74	42.45	0.800	14790						
OBS	1296	2.04	34.699	27.75			14796			322	84		
ISL	1300	2.04	34.700	27.75	41.70	0.821	14797						
ISL	1400	1.97	34.711	27.76	40.61	0.862	14811						
ISL	1500	1.91	34.719	27.78	39.72	0.902	14825						
OBS	1533	0.00	34.721	0.00			0	436		317	89		
ISL	1750	1.74	34.735	27.80	37.58	0.999	14860						
OBS	1771	1.72	34.736	27.80			14863	458		331	92		
ISL	2000	1.54	34.733	27.82	36.29	1.091	14894						
OBS	2009	1.53	34.733	27.82			14895	465		331	102		
OBS	2248	1.37	34.730	27.82			14929			324	103		
ISL	2250	1.37	34.730	27.82	35.27	1.181	14929						
OBS	2487	1.23	34.725	27.83			14964	496		313	108		
ISL	2500	1.22	34.725	27.83	34.49	1.268	14966						
ISL	2750	1.09	34.721	27.84	33.70	1.353	15003						
OBS	2967	0.99	34.718	27.84			15036	485		309	117		
ISL	3000	0.97	34.718	27.84	32.82	1.436	15041						
ISL	3250	0.86	34.716	27.85	31.79	1.517	15080						
OBS	3448	0.77	34.715	27.85			15111	500		322	121		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 546	11 APR 1966	10.2	61 31.0S	95 56.0W	525	4768	44	33				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	6.6	3.0		35	5	35	3		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.02	33.965	26.98			14656	723		229	9		
ISL	0	4.02	33.965	26.98	108.16	0.000	14656						
ISL	10	4.03	33.968	26.99	108.14	0.011	14658						
OBS	14	4.03	0.000	0.00				0	711				
ISL	20	4.03	33.970	26.99	108.05	0.022	14659						
OBS	30	4.01	0.000	0.00				0	714				
ISL	30	4.01	33.972	26.99	107.78	0.032	14660						
ISL	50	3.83	33.976	27.01	105.95	0.054	14656						
OBS	52	3.81	33.976	27.01			14655	712		230	11		
ISL	75	3.70	33.976	27.02	104.90	0.080	14655						
OBS	81	3.63	33.979	27.03			14653	748					
ISL	100	2.87	34.015	27.13	94.54	0.105	14623						
OBS	109	2.50	34.034	27.18			14609	692		281	23		
ISL	125	2.29	34.052	27.21	87.09	0.128	14603						
OBS	136	2.25	34.062	27.22			14603	691					
ISL	150	2.20	34.076	27.24	84.71	0.149	14604						
OBS	162	2.18	34.086	27.25			14605	663		293	30		
OBS	190	2.11	34.101	27.27			14606	680					
ISL	200	2.09	34.109	27.27	81.51	0.191	14607						
OBS	216	2.06	34.121	27.29			14609	682		280	37		
OBS	242	2.04	34.129	27.29			14612	685					
ISL	250	2.06	34.138	27.30	79.32	0.231	14615						
OBS	267	2.09	34.156	27.31			14619	675		299	41		
OBS	295	1.91	34.152	27.32			14616	639					
ISL	300	1.89	34.154	27.32	76.99	0.270	14616						
OBS	321	1.87	34.165	27.34			14618	652		299	44		
OBS	373	1.99	34.206	27.36			14633	640					
ISL	400	1.74	34.196	27.37	72.99	0.345	14626						
OBS	424	1.56	34.190	27.38			14622	619		304	56		
OBS	478	2.00	34.267	27.41			14652	582					
ISL	500	2.03	34.283	27.42	69.19	0.416	14657						
OBS	529	2.01	34.298	27.43			14661	546		316	58		
ISL	600	2.01	34.347	27.47	64.58	0.483	14673						
OBS	633	2.02	34.372	27.49			14680	484			74		
ISL	700	2.17	34.428	27.52	60.40	0.546	14698						
OBS	738	2.24	34.458	27.54			14708	450					
ISL	800	2.20	34.488	27.57	56.77	0.604	14717						
OBS	818	2.21	34.500	27.58			14721	458		339	77		
OBS	842	2.30	34.529	27.59			14729			332	77		
ISL	900	2.36	34.558	27.61	53.62	0.659	14742						
OBS	946	2.33	34.566	27.62			14748	407					
ISL	1000	2.27	34.590	27.64	50.86	0.712	14755						
OBS	1047	2.21	34.610	27.66			14760	410			71		
ISL	1100	2.18	34.628	27.68	47.55	0.761	14768						
ISL	1200	2.14	34.656	27.71	45.50	0.807	14784						
ISL	1250	2.12	34.667	27.72	44.77	0.830	14792						
OBS	1273	2.12	34.672	27.72			14795	422			84		
ISL	1300	2.11	34.677	27.73	44.07	0.852	14799						
ISL	1400	2.06	34.695	27.74	42.70	0.895	14814						
ISL	1500	2.00	34.708	27.76	41.60	0.938	14829						
OBS	1504	2.00	34.708	27.76			14830	426		318	90		
OBS	1738	1.86	34.724	27.78			14863			312	96		
ISL	1750	1.85	34.725	27.78	39.68	1.039	14865						
OBS	1973	1.67	34.731	27.80			14895	451		309	111		
ISL	2000	1.65	34.731	27.81	37.78	1.136	14899						
ISL	2250	1.48	34.731	27.82	36.56	1.229	14934						
OBS	2451	1.36	34.729	27.82			14963	477		314			
ISL	2500	1.33	34.729	27.83	35.54	1.319	14971						
ISL	2750	1.20	34.730	27.84	34.38	1.406	15008						
OBS	2936	0.00	34.729	0.00				0	482	313			
ISL	3000	1.07	34.727	27.84	33.44	1.491	15046						
ISL	3250	0.95	34.717	27.84	32.87	1.574	15084						
OBS	3432	0.86	34.711	27.84			15112	480		318	130		
ISL	3500	0.82	34.711	27.85	31.97	1.655	15122						
ISL	3750	0.69	34.712	27.86	30.33	1.733	15161						
OBS	3929	0.61	34.714	27.86			15189	507		323			
ISL	4000	0.58	34.714	27.86	28.85	1.807	15200						
OBS	4418	0.47	34.706	27.86			15270	504					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 547	12APR1966	13.1	60 29.0S	94 56.0W	525	5034	50	34				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	6.1	3.2		7	4	3	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-2</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.06	34.002	27.01			14658	776		227	11		
ISL	0	4.06	34.002	27.01	105.77	0.000	14658						
ISL	10	4.08	34.016	27.02	104.99	0.011	14660						
OBS	13	4.08	34.018	27.02			14661	797					
ISL	20	4.08	34.019	27.02	104.91	0.021	14662						
OBS	28	4.08	34.017	27.02			14663	728					
ISL	30	4.08	34.017	27.02	105.08	0.032	14664						
OBS	49	4.05	34.019	27.02			14666			233	3		
ISL	50	4.06	34.019	27.02	104.99	0.053	14666						
ISL	75	4.02	34.027	27.03	104.11	0.079	14669						
OBS	77	3.98	34.029	27.04			14667	787					
ISL	100	2.45	34.088	27.23	85.52	0.102	14606						
OBS	103	2.25	34.096	27.25			14598	745		274	20		
ISL	125	2.06	34.102	27.27	81.52	0.123	14594						
OBS	128	2.08	34.101	27.27			14595	756					
ISL	150	1.94	34.102	27.28	80.74	0.144	14593						
OBS	153	1.93	34.102	27.28			14592	740		276	21		
OBS	180	1.96	34.118	27.29			14598	712					
ISL	200	1.81	34.117	27.30	78.73	0.183	14595						
OBS	204	1.78	34.117	27.30			14594	708		282	25		
OBS	229	1.75	34.126	27.31			14597	703					
ISL	250	1.73	34.139	27.33	76.64	0.222	14600						
OBS	253	1.73	34.141	27.33			14601	654		290	25		
OBS	279	1.71	34.143	27.33			14604	650					
ISL	300	1.64	34.144	27.34	75.79	0.260	14605						
OBS	304	1.63	34.144	27.34			14605	667		291	33		
OBS	354	1.70	34.179	27.36			14617	660					
OBS	385	1.65	34.238	27.41			14620						
ISL	400	1.81	34.226	27.39	71.24	0.334	14630						
OBS	403	1.85	34.223	27.38			14632	603		313	42		
OBS	455	2.07	34.274	27.41			14651	530					
ISL	500	2.06	34.313	27.44	67.24	0.403	14659						
OBS	504	2.06	34.316	27.44			14659	515		325	51		
ISL	600	2.21	34.396	27.49	62.79	0.468	14683						
OBS	604	2.22	34.399	27.50			14684			338	58		
ISL	700	2.34	34.472	27.54	58.76	0.529	14706						
OBS	706	2.34	34.476	27.55			14707						
OBS	769	2.25	34.506	27.58			14714						
OBS	791	2.27	34.525	27.59			14719	456		335	69		
ISL	800	2.27	34.530	27.60	54.31	0.585	14721						
ISL	900	2.26	34.568	27.63	51.85	0.639	14737						
OBS	908	2.25	34.569	27.63			14738	456					
ISL	1000	2.19	34.603	27.66	49.06	0.689	14752						
OBS	1007	2.19	34.606	27.66			14753	408		332	73		
ISL	1100	2.14	34.641	27.69	46.20	0.737	14767						
OBS	1133	2.13	34.653	27.71			14772						
ISL	1200	2.10	34.669	27.72	44.17	0.782	14782						
ISL	1250	2.08	34.680	27.73	43.42	0.804	14790						
ISL	1300	2.06	34.688	27.74	42.77	0.825	14797						
ISL	1400	2.01	34.701	27.75	41.78	0.868	14812						
OBS	1470	1.98	34.706	27.76			14823						
ISL	1500	1.96	34.708	27.76	41.08	0.909	14827						
ISL	1750	1.79	34.720	27.79	39.29	1.009	14862						
OBS	1792	1.76	34.721	27.79			14868						
ISL	2000	1.61	34.721	27.80	38.04	1.106	14897						
OBS	2119	1.53	34.720	27.81			14914						
ISL	2250	1.45	34.719	27.81	37.03	1.200	14933						
ISL	2500	1.30	34.717	27.82	36.06	1.291	14969						
OBS	2712	1.19	34.715	27.83			15001						
ISL	2750	1.17	34.715	27.83	35.11	1.380	15006						
ISL	3000	1.03	34.712	27.83	34.05	1.467	15044						
ISL	3250	0.91	34.708	27.84	32.98	1.551	15082						
OBS	3283	0.89	34.708	27.84			15087						
ISL	3500	0.78	34.705	27.84	31.90	1.632	15120						
ISL	3750	0.68	34.702	27.85	30.83	1.710	15160						
OBS	3813	0.65	34.701	27.85			15170						
ISL	4000	0.58	34.702	27.85	29.65	1.786	15200						
OBS	4421	0.47	34.703	27.86			15270						
ISL	4500	0.46	34.703	27.86	28.03	1.930	15284						
OBS	4966	0.45	34.697	27.86			15367						



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 548	13APR1966	22.4	62 24.0S	101 41.0W	526	4475	50	34				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	3.3	-2.4		16	6	16	4		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-2</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	2.43	33.916	27.09			14587			216	10		
ISL	0	2.43	33.916	27.09	97.90	0.000	14587						
ISL	10	2.44	33.915	27.09	98.05	0.010	14589						
OBS	13	2.44	33.915	27.09			14589						
ISL	20	2.45	33.914	27.09	98.30	0.020	14591						
OBS	27	2.45	33.912	27.09			14592						
ISL	30	2.45	33.912	27.09	98.53	0.029	14592						
OBS	48	2.45	33.911	27.09			14595			221	15		
ISL	50	2.47	33.909	27.08	98.94	0.049	14596						
ISL	75	2.47	33.917	27.09	98.51	0.074	14601						
OBS	76	2.46	33.918	27.09			14600						
ISL	100	1.61	34.021	27.24	84.19	0.097	14568						
OBS	101	1.57	34.026	27.25			14567			263	24		
OBS	125	1.16	34.078	27.32			14553						
ISL	125	1.16	34.078	27.32	76.88	0.117	14553						
OBS	149	0.76	34.098	27.36			14540			277	30		
ISL	150	0.75	34.098	27.36	72.76	0.136	14539						
OBS	175	0.51	34.101	27.38			14533						
OBS	200	0.21	34.109	27.40			14523				30		
ISL	200	0.21	34.109	27.40	68.78	0.171	14523						
OBS	224	0.44	34.131	27.40			14538						
OBS	247	0.18	34.128	27.42			14530			279	38		
ISL	250	0.17	34.129	27.42	67.06	0.205	14530						
OBS	272	0.25	34.143	27.42			14537						
OBS	298	0.48	34.186	27.45			14553			289	41		
ISL	300	0.51	34.189	27.45	64.41	0.238	14554						
OBS	348	1.13	34.274	27.48			14592						
OBS	397	1.56	34.367	27.52			14620			314	56		
ISL	400	1.57	34.370	27.52	58.51	0.299	14621						
OBS	447	1.68	34.401	27.54			14634						
OBS	494	1.82	34.449	27.57			14649			315	67		
ISL	500	1.84	34.455	27.57	54.64	0.356	14651						
OBS	591	2.11	34.539	27.62			14679			318	74		
ISL	600	2.12	34.544	27.62	50.83	0.409	14681						
OBS	689	2.14	34.589	27.65			14697						
ISL	700	2.14	34.596	27.66	47.69	0.458	14699						
OBS	787	2.15	34.642	27.69			14715			309	80		
ISL	800	2.15	34.646	27.70	44.50	0.504	14717						
OBS	887	2.14	34.663	27.71			14731						
ISL	900	2.13	34.665	27.71	43.39	0.548	14733						
OBS	985	2.09	34.678	27.73			14746			298	80		
ISL	1000	2.08	34.681	27.73	42.21	0.591	14748						
ISL	1100	2.04	34.697	27.75	40.97	0.632	14763						
ISL	1200	1.99	34.712	27.76	39.81	0.673	14778						
ISL	1250	1.96	34.718	27.77	39.26	0.692	14785						
ISL	1300	1.93	34.724	27.78	38.72	0.712	14792						
ISL	1400	1.86	34.734	27.79	37.68	0.750	14806						
OBS	1465	1.81	34.739	27.80			14815			287	87		
ISL	1500	1.77	34.740	27.80	36.72	0.787	14819						
OBS	1685	1.59	34.740	27.82			14843			287	95		
ISL	1750	1.55	34.740	27.82	35.16	0.877	14852						
OBS	1916	1.46	34.738	27.82			14876			282	100		
ISL	2000	1.41	34.738	27.83	34.43	0.964	14888						
OBS	2140	1.32	34.737	27.83			14908			284	108		
ISL	2250	1.26	34.733	27.83	33.72	1.049	14924						
OBS	2369	1.19	34.728	27.84			14942			291	108		
ISL	2500	1.11	34.726	27.84	32.99	1.133	14961						
OBS	2598	1.05	34.725	27.84			14975			294	113		
ISL	2750	0.98	34.723	27.85	32.09	1.214	14998						
ISL	3000	0.87	34.718	27.85	31.46	1.294	15037						
OBS	3085	0.84	34.716	27.85			15050			299	122		
ISL	3250	0.76	34.711	27.85	30.75	1.371	15075						
ISL	3500	0.64	34.704	27.85	29.86	1.447	15114						
OBS	3581	0.60	34.702	27.85			15127			300	126		
ISL	3750	0.54	34.701	27.86	28.90	1.521	15154						
ISL	4000	0.47	34.701	27.86	27.97	1.592	15195						
OBS	4077	0.45	34.702	27.86			15208			298	130		
ISL	4500	0.39	34.708	27.87	26.60	1.728	15281						
OBS	4577	0.39	34.709	27.87			15295			299	136		
OBS	4969	0.40	34.701	27.86			15366			300	140		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 549	15APR1966	22.0	63 49.0S	101 50.0W	526	4976	50	34				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	1.9	-2.7		31	4	28	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> µgat/l	NITR 10 <sup>-2</sup> µgat/l	SILIC µgat/l	INT M	DD
OBS	0	2.05	33.910	27.12			14570			226	8		
ISL	0	2.05	33.910	27.12	95.47	0.000	14570						
ISL	10	2.07	33.906	27.11	95.96	0.010	14572						
OBS	13	2.07	33.905	27.11			14573						
ISL	20	2.07	33.905	27.11	96.11	0.019	14574						
OBS	27	2.07	33.905	27.11			14575						
ISL	30	2.07	33.905	27.11	96.11	0.029	14576						
OBS	47	2.06	33.905	27.11			14578			232	10		
ISL	50	2.10	33.901	27.11	96.72	0.048	14580						
OBS	74	2.07	33.912	27.12			14583						
ISL	75	2.02	33.919	27.13	94.81	0.072	14581						
OBS	99	0.74	34.097	27.36			14530			296	28		
ISL	100	0.72	34.099	27.36	72.47	0.093	14530						
OBS	124	0.51	34.114	27.39			14524						
ISL	125	0.50	34.114	27.39	70.06	0.111	14524						
OBS	147	0.29	34.117	27.40			14518			286	31		
ISL	150	0.25	34.116	27.40	68.49	0.128	14517						
OBS	173	-0.02	34.113	27.41			14508						
OBS	198	-0.01	34.135	27.43			14513				34		
ISL	200	0.01	34.138	27.43	65.47	0.162	14514						
OBS	222	0.19	34.171	27.45			14527						
OBS	246	0.19	34.191	27.47			14531			293	41		
ISL	250	0.26	34.199	27.47	62.25	0.193	14535						
OBS	272	0.71	34.245	27.48			14560						
OBS	296	0.96	34.286	27.50			14576			306	49		
ISL	300	1.02	34.294	27.50	59.88	0.224	14579						
OBS	346	1.61	34.379	27.53			14614						
OBS	394	1.84	34.440	27.56			14633			322	61		
ISL	400	1.87	34.447	27.56	55.09	0.281	14635						
OBS	445	2.02	34.493	27.59			14650						
OBS	494	2.08	34.533	27.61			14661			317	68		
ISL	500	2.08	34.537	27.62	50.61	0.334	14663						
OBS	594	2.08	34.584	27.65			14679			317	75		
ISL	600	2.09	34.587	27.66	47.36	0.383	14680						
OBS	693	2.17	34.627	27.68			14700						
ISL	700	2.17	34.630	27.68	45.40	0.430	14701						
OBS	792	2.12	34.660	27.71			14715			317	78		
ISL	800	2.12	34.662	27.71	43.00	0.474	14716						
OBS	892	2.09	34.682	27.73			14730						
ISL	900	2.09	34.684	27.73	41.50	0.516	14731						
OBS	990	2.02	34.707	27.76			14744				81		
ISL	1000	2.01	34.709	27.76	39.43	0.557	14745						
ISL	1100	1.94	34.722	27.78	38.17	0.595	14759						
ISL	1200	1.87	34.730	27.79	37.25	0.633	14773						
ISL	1250	1.83	34.732	27.79	36.91	0.652	14780						
ISL	1300	1.79	34.732	27.79	36.75	0.670	14786						
OBS	1317	1.78	34.733	27.80			14789			299	89		
ISL	1400	1.71	34.736	27.80	35.95	0.706	14800						
ISL	1500	1.62	34.737	27.81	35.30	0.742	14813						
OBS	1561	1.57	34.737	27.82			14821			298	96		
ISL	1750	1.44	34.734	27.82	34.29	0.829	14847						
OBS	1808	1.40	34.733	27.82			14855			296	101		
ISL	2000	1.29	34.728	27.83	33.79	0.914	14883						
OBS	2055	1.26	34.727	27.83			14891			303	105		
ISL	2250	1.16	34.725	27.84	33.07	0.998	14920						
OBS	2304	1.13	34.725	27.84			14928			297	109		
ISL	2500	1.04	34.722	27.84	32.36	1.080	14958						
OBS	2554	1.01	34.721	27.84			14966			303	115		
ISL	2750	0.92	34.717	27.84	31.81	1.160	14996						
ISL	3000	0.81	34.712	27.85	31.11	1.238	15034						
OBS	3056	0.79	34.711	27.85			15043			304	119		
ISL	3250	0.69	34.711	27.85	29.84	1.315	15073						
ISL	3500	0.58	34.712	27.86	28.47	1.387	15112						
OBS	3562	0.55	34.712	27.86			15121			312	124		
ISL	3750	0.49	34.712	27.87	27.40	1.457	15152						
ISL	4000	0.43	34.711	27.87	26.73	1.525	15194						
OBS	4066	0.42	34.711	27.87			15205			309	126		
ISL	4500	0.39	34.709	27.87	26.44	1.658	15281						
OBS	4571	0.39	34.709	27.87			15294				132		
OBS	4966		34.706							311	138		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 550	17APR1966	19.7	61 27.0S	101 33.0W	526	5053	47	34				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	5.7	4.3		36	4	30	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	4.41	33.962	26.94			14672	728		209			
ISL	0	4.41	33.962	26.94	112.27	0.000	14672						
ISL	10	4.43	33.960	26.94	112.64	0.011	14674						
OBS	13	4.43	33.960	26.94			14675	707					
ISL	20	4.44	33.959	26.94	112.97	0.023	14676						
OBS	27	4.44	33.958	26.93			14677	729					
ISL	30	4.44	33.958	26.93	113.17	0.034	14678						
OBS	47	4.41	33.959	26.94			14680	757		214			
ISL	50	4.43	33.957	26.93	113.36	0.056	14681						
OBS	74	4.17	33.963	26.97	109.44	0.084	14674	704					
ISL	75	4.09	33.966	26.98			14671						
OBS	99	2.34	34.051	27.21			14601	687		275			
ISL	100	2.32	34.052	27.21	87.19	0.109	14600						
OBS	123	2.24	34.069	27.23			14601	685					
ISL	125	2.24	34.072	27.23	85.18	0.130	14601						
OBS	147	2.22	34.100	27.26			14604	665		281			
ISL	150	2.21	34.100	27.26	82.92	0.151	14604						
OBS	172	2.11	34.099	27.26			14603	669					
OBS	196	2.04	34.119	27.29			14605	647		304			
ISL	200	2.04	34.122	27.29	80.13	0.192	14605						
OBS	219	2.01	34.134	27.30			14607	656					
OBS	242	1.86	34.141	27.32			14605			288			
ISL	250	1.84	34.141	27.32	77.33	0.232	14605						
OBS	267	1.84	34.145	27.32			14608	664					
OBS	290	1.86	34.166	27.34			14613	612		283			
ISL	300	1.88	34.173	27.34	75.41	0.270	14615						
OBS	338	1.93	34.198	27.36			14624	591					
OBS	383	1.89	34.237	27.39			14631	519		270			
ISL	400	2.11	34.274	27.40	70.11	0.343	14643						
OBS	433	2.47	34.337	27.43			14666	515					
OBS	479	2.14	34.335	27.45			14659	426		312			
ISL	500	2.12	34.344	27.46	65.36	0.410	14662						
OBS	574	2.25	34.474	27.55			14681	444		329			2
ISL	600	2.27	34.408	27.50	62.44	0.474	14686						
OBS	672	2.30	34.472	27.55			14700	451					
ISL	700	2.28	34.492	27.56	56.77	0.534	14704						
OBS	773	2.23	34.539	27.61			14714	414		319			
ISL	800	2.23	34.553	27.62	52.18	0.588	14719						
OBS	876	2.23	34.585	27.64			14732	426					
ISL	900	2.22	34.593	27.65	49.62	0.639	14736						
OBS	976	2.20	34.616	27.67			14748	426		311			
ISL	1000	2.19	34.622	27.68	47.64	0.688	14752						
ISL	1100	2.16	34.647	27.70	45.96	0.735	14768						
ISL	1200	2.12	34.668	27.72	44.44	0.780	14783						
ISL	1250	2.09	34.677	27.73	43.74	0.802	14790						
ISL	1300	2.07	34.685	27.74	43.07	0.824	14798						
ISL	1400	2.01	34.700	27.75	41.84	0.866	14812						
OBS	1451	1.98	34.706	27.76			14820	433		303			
ISL	1500	1.94	34.713	27.77	40.57	0.907	14826						
OBS	1670	1.81	34.730	27.79			14850	434		286			
ISL	1750	1.74	34.732	27.80	37.94	1.005	14860						
OBS	1891	1.63	34.730	27.81			14879	447					
ISL	2000	1.55	34.728	27.81	36.84	1.099	14895						
OBS	2113	1.48	34.727	27.81			14911	454					
ISL	2250	1.39	34.728	27.82	35.66	1.189	14930						
OBS	2335	1.34	34.729	27.83			14943			301			
ISL	2500	1.24	34.724	27.83	34.79	1.278	14967						
OBS	2561	1.21	34.722	27.83			14976	465		300			
ISL	2750	1.11	34.717	27.83	34.14	1.364	15004						
ISL	3000	0.98	34.711	27.84	33.30	1.448	15041						
OBS	3011	0.97	34.711	27.84			15043	469		301			
ISL	3250	0.85	34.707	27.84	32.29	1.530	15079						
OBS	3473	0.74	34.704	27.85			15114	478		312			
ISL	3500	0.73	34.704	27.85	31.13	1.609	15118						
ISL	3750	0.61	34.702	27.85	29.86	1.685	15157						
OBS	3933	0.54	34.702	27.86			15186	489		304			
ISL	4000	0.52	34.702	27.86	28.67	1.759	15197						
OBS	4400	0.43	34.702	27.86			15265	496		293			
ISL	4500	0.42	34.701	27.86	27.56	1.899	15282						
OBS	4680	0.42	34.698	27.86			15314	506		305			

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 551	19APR1966	3.9	59 29.0S	102 22.0W	490	4510	43	32				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	5.7	3.6		28	3	30	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.01	33.924	26.84			14696	739					
ISL	0	5.01	33.924	26.84	121.42	0.000	14696						
ISL	10	5.04	33.920	26.84	122.23	0.012	14699						
OBS	14	5.05	33.919	26.84			14700	704					
ISL	20	5.05	33.920	26.84	122.33	0.024	14701						
OBS	30	5.03	33.923	26.84			14702	704					
ISL	30	5.03	33.923	26.84	122.04	0.037	14702						
OBS	50	5.01	33.923	26.84			14704	708					
ISL	50	5.01	33.923	26.84	122.04	0.061	14704						
ISL	75	4.66	33.990	26.94	113.50	0.090	14695						
OBS	77	4.61	33.996	26.95			14693	698					
ISL	100	3.76	34.034	27.07	101.26	0.117	14662						
OBS	103	3.65	34.037	27.08			14658	688					
ISL	125	3.40	34.037	27.10	97.77	0.142	14651						
OBS	127	3.38	34.038	27.11			14650						
OBS	130	3.33	34.043	27.11			14649	688					
ISL	150	3.29	34.053	27.13	95.79	0.166	14650						
OBS	156	3.32	34.053	27.12			14653	682					
OBS	181	3.31	34.075	27.14			14657	667					
ISL	200	3.28	34.078	27.15	94.18	0.214	14659						
OBS	206	3.26	34.077	27.15			14659	661					
OBS	231	3.07	34.072	27.16			14655	677					
ISL	250	3.06	34.087	27.17	91.75	0.260	14657						
OBS	257	3.06	34.093	27.18			14659	661					
OBS	283	2.98	34.095	27.19			14660	656					
ISL	300	2.95	34.101	27.20	90.00	0.306	14661						
OBS	334	2.87	34.115	27.21			14663						
OBS	385	2.66	34.129	27.24			14663	639					
ISL	400	2.64	34.132	27.25	85.38	0.394	14665						
OBS	438	2.64	34.150	27.26			14671	628					
OBS	489	2.77	34.214	27.30			14686	570					
ISL	500	2.75	34.220	27.31	80.37	0.476	14687						
OBS	590	2.49	34.255	27.36			14691	547					
ISL	600	2.50	34.262	27.36	75.49	0.554	14693						
OBS	693	2.61	34.328	27.41			14715	504					
ISL	700	2.60	34.333	27.41	71.71	0.628	14716						
OBS	793	2.47	34.393	27.47			14726	516					
ISL	800	2.46	34.396	27.47	66.08	0.697	14727						
OBS	900	2.34	34.443	27.52			14739	442					
ISL	900	2.34	34.443	27.52	61.94	0.761	14739						
ISL	1000	2.34	34.496	27.56	58.47	0.821	14757						
OBS	1001	2.34	34.497	27.56			14757	420					
ISL	1100	2.33	34.542	27.60	55.49	0.878	14774						
ISL	1200	2.31	34.582	27.63	52.79	0.932	14790						
ISL	1250	2.30	34.601	27.65	51.55	0.958	14798						
ISL	1300	2.28	34.618	27.66	50.36	0.984	14806						
ISL	1400	2.24	34.648	27.69	48.20	1.033	14822						
ISL	1500	2.19	34.673	27.72	46.29	1.080	14837						
ISL	1750	2.03	34.713	27.76	42.59	1.191	14872						
OBS	1773	2.01	34.715	27.76			14876	454					
OBS	1991	1.81	34.728	27.79			14904	445					
ISL	2000	1.80	34.728	27.79	39.83	1.294	14905						
OBS	2212	1.66	34.724	27.80			14935	460					
ISL	2250	1.63	34.724	27.80	38.90	1.393	14941						
OBS	2433	1.51	34.716	27.80			14967	477					
ISL	2500	1.47	34.728	27.82	37.38	1.488	14977						
OBS	2655	1.39	34.731	27.82			15000						
ISL	2750	1.34	34.731	27.83	36.18	1.580	15014						
OBS	2876	1.27	34.729	27.83			15033	465					
ISL	3000	1.20	34.726	27.83	35.29	1.669	15051						
ISL	3250	1.07	34.719	27.84	34.40	1.757	15089						
OBS	3332	1.02	34.717	27.84			15101	479					
ISL	3500	0.92	34.713	27.84	33.17	1.841	15126						
ISL	3750	0.77	34.710	27.85	31.71	1.922	15164						
OBS	3792	0.75	34.709	27.85			15170	485					
ISL	4000	0.65	34.708	27.85	30.29	2.000	15203						
OBS	4258	0.55	34.708	27.86			15244	490					

SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 23	SER 552		20 APR 1966		17.6	58 48.0S		100 45.0W		490	4791	19	21	
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	3.5		-1.5				22		6	23		3	1	
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD	
OBS	0	5.10	33.933	26.84			14700	749		209				
ISL	0	5.10	33.933	26.84	121.73	0.000	14700							
ISL	10	5.13	33.926	26.83	122.75	0.012	14703							
OBS	13	5.14	33.925	26.83			14704	773						
ISL	20	5.15	33.927	26.83	122.96	0.025	14706							
OBS	29	5.15	33.932	26.83			14707	702						
ISL	30	5.15	33.932	26.83	122.66	0.037	14707							
OBS	50	4.98	33.927	26.85			14703	705		213				
ISL	50	4.98	33.927	26.85	121.41	0.061	14703							
ISL	75	4.70	33.949	26.90	116.93	0.091	14696							
OBS	78	4.64	33.954	26.91			14694							
ISL	100	3.87	34.003	27.03	104.67	0.119	14666							
OBS	105	3.69	34.015	27.06			14659	705		244				
ISL	125	3.31	34.046	27.12	96.34	0.144	14647							
OBS	131	3.24	34.052	27.13			14645	691						
ISL	150	3.10	34.057	27.15	93.79	0.168	14642							
OBS	156	3.07	34.056	27.15			14642			251				
OBS	183	2.82	34.054	27.17			14636	681						
ISL	200	2.79	34.068	27.18	90.47	0.214	14637							
OBS	209	2.79	34.077	27.19			14639	677		262				
OBS	234	2.69	34.088	27.21			14639							
ISL	250	2.43	34.090	27.23	85.95	0.258	14630							
OBS	258	2.30	34.091	27.24			14626			275				
OBS	286	2.21	34.095	27.25			14627	658						
ISL	300	2.19	34.098	27.26	83.52	0.300	14628							
OBS	311	2.19	34.104	27.26			14630	650		283				
OBS	362	2.64	34.186	27.29			14659							
ISL	400	2.67	34.220	27.31	79.12	0.381	14667							
OBS	412	2.62	34.224	27.32			14667			304				
OBS	465	2.02	34.190	27.34			14649							
ISL	500	2.08	34.231	27.37	73.50	0.458	14658							
OBS	516	2.16	34.257	27.39			14665	600		312				
ISL	600	2.16	34.339	27.45	66.63	0.528	14680							
ISL	700	2.17	34.424	27.52	60.74	0.592	14698							
ISL	800	2.17	34.497	27.58	55.83	0.650	14716							
ISL	900	2.18	34.557	27.62	51.89	0.704	14734							
ISL	1000	2.18	34.604	27.66	48.91	0.754	14751							
ISL	1100	2.19	34.638	27.69	46.88	0.802	14769							
ISL	1200	2.19	34.660	27.71	45.81	0.848	14786							
ISL	1250	2.19	34.666	27.71	45.64	0.871	14795							
ISL	1300	2.20	34.640	27.69	47.83	0.895	14803							
OBS	1358	2.20	34.668	27.71			14813	440		321				
ISL	1400	2.18	34.674	27.72	45.59	0.941	14819							
ISL	1500	2.13	34.685	27.73	44.61	0.986	14834							
OBS	1606	2.06	34.694	27.74			14849			313				
ISL	1750	1.96	34.710	27.76	42.04	1.095	14870							
OBS	1851	1.89	34.722	27.78			14884			303				

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 553	23APR1966	18.8	58 17.0S	107 12.0W	490	4640	45	34				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.0	5.3		32	6	34	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	6.72	34.096	26.77			14768			185			
ISL	0	6.72	34.096	26.77	128.76	0.000	14768						
ISL	10	6.74	34.100	26.77	128.93	0.013	14770						
OBS	15	6.75	34.100	26.77			14771						
ISL	20	6.75	34.098	26.76	129.32	0.026	14772						
ISL	30	6.75	34.094	26.76	129.72	0.039	14774						
OBS	31	6.75	34.094	26.76			14774						
ISL	50	6.70	34.096	26.77	129.22	0.065	14775						
OBS	52	6.69	34.096	26.77			14775			184			
ISL	75	6.71	34.088	26.76	130.28	0.097	14779						
OBS	81	6.67	34.094	26.77			14779						
ISL	100	6.10	34.191	26.92	115.27	0.128	14760						
OBS	108	5.85	34.232	26.99			14752			198			
ISL	125	5.71	34.243	27.01	107.07	0.156	14750						
OBS	134	5.70	34.237	27.01			14751						
ISL	150	5.63	34.235	27.02	106.96	0.182	14750						
OBS	158	5.60	34.233	27.02			14750			204			
OBS	185	5.57	34.229	27.02			14754						
ISL	200	5.54	34.233	27.03	106.70	0.236	14755						
OBS	212	5.51	34.235	27.03			14756			199			
OBS	238	5.39	34.221	27.03			14755						
ISL	250	5.29	34.213	27.04	105.80	0.289	14753						
OBS	263	5.19	34.205	27.05			14751			210			
OBS	291	5.09	34.191	27.05			14751						
ISL	300	5.02	34.184	27.05	105.34	0.342	14749						
OBS	318	4.87	34.171	27.06			14746			221			
OBS	372	4.69	34.162	27.07			14747						
ISL	400	4.59	34.166	27.08	102.83	0.446	14748						
OBS	426	4.48	34.169	27.10			14748			243			
OBS	482	4.17	34.158	27.12			14744						
ISL	500	4.19	34.172	27.13	98.78	0.547	14748						
OBS	536	4.25	34.207	27.15			14757			260			
ISL	600	4.09	34.237	27.19	93.78	0.643	14761						
OBS	643	3.90	34.246	27.22			14760			282			
ISL	700	3.62	34.246	27.25	88.74	0.734	14758						
OBS	750	3.40	34.251	27.27			14757						
ISL	800	3.31	34.287	27.31	83.05	0.820	14762						
OBS	857	3.24	34.332	27.35			14769			309			
ISL	900	3.16	34.351	27.38	77.32	0.900	14773						
OBS	962	3.02	34.373	27.41			14778						
ISL	1000	2.92	34.388	27.43	72.58	0.975	14780						
OBS	1065	2.75	34.416	27.46			14784			320			
ISL	1100	2.70	34.434	27.48	67.42	1.045	14788						
ISL	1200	2.59	34.484	27.53	63.02	1.110	14801						
ISL	1250	2.55	34.510	27.56	61.07	1.141	14808						
OBS	1275	2.54	34.522	27.57			14812						
ISL	1300	2.52	34.532	27.58	59.26	1.171	14815						
ISL	1400	2.43	34.569	27.61	56.03	1.229	14828						
ISL	1500	2.35	34.601	27.65	53.28	1.284	14842						
OBS	1523	2.33	34.608	27.65			14846						
ISL	1750	2.23	34.670	27.71	48.12	1.410	14880						
OBS	1774	2.22	34.675	27.72			14884						
ISL	2000	2.10	34.713	27.76	44.46	1.526	14918						
OBS	2025	2.08	34.716	27.76			14921						
ISL	2250	1.92	34.730	27.78	42.10	1.634	14953						
OBS	2278	1.90	34.731	27.79			14957						
ISL	2500	1.69	34.732	27.80	39.87	1.737	14986						
OBS	2531	1.66	34.732	27.81			14990						
ISL	2750	1.52	34.730	27.81	38.63	1.835	15022						
OBS	2783	1.50	34.729	27.81			15027						
ISL	3000	1.38	34.724	27.82	37.85	1.931	15059						
OBS	3036	1.36	34.723	27.82			15064						
ISL	3250	1.23	34.717	27.82	36.94	2.024	15096						
ISL	3500	1.08	34.711	27.83	35.63	2.115	15133						
OBS	3540	1.05	34.710	27.83			15139						
ISL	3750	0.90	34.709	27.84	33.58	2.201	15169						
ISL	4000	0.73	34.710	27.85	31.30	2.282	15206						
OBS	4035	0.71	34.711	27.85			15212						
ISL	4500	0.55	0.000	0.00	0.00	0.000	0						
OBS	4520	0.55	34.718	27.87			15291						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 554	24APR1966	18.6	59 59.0S	108 20.0W	490	5182	45	30				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	5.6	3.6		35	6	33	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.24	33.941	26.94			14664			215			
ISL	0	4.24	33.941	26.94	112.13	0.000	14664						
ISL	10	4.25	33.936	26.94	112.68	0.011	14666						
OBS	16	4.25	33.934	26.94			14667						
ISL	20	4.27	33.933	26.93	113.19	0.023	14669						
ISL	30	4.27	33.933	26.93	113.25	0.034	14670						
OBS	32	4.26	33.934	26.93			14670						
ISL	50	3.86	33.951	26.99	108.15	0.056	14657						
OBS	52	3.81	33.953	27.00			14655			219			
ISL	75	3.43	33.980	27.05	102.04	0.082	14643						
OBS	80	3.38	33.985	27.06			14642						
ISL	100	3.38	33.985	27.06	101.40	0.108	14645						
OBS	106	3.37	33.986	27.07			14646			225			
ISL	125	2.98	34.009	27.12	96.08	0.132	14632						
OBS	130	2.79	34.022	27.15			14625						
OBS	144	1.97	34.085	27.26			14593			271			
ISL	150	1.85	34.095	27.28	80.58	0.154	14588						
OBS	181	1.81	34.098	27.29			14592						
ISL	200	1.65	34.106	27.31	78.32	0.194	14588						
OBS	206	1.60	34.109	27.31			14587			272			
OBS	232	1.58	34.120	27.32			14590						
ISL	250	1.46	34.124	27.33	75.78	0.233	14588						
OBS	257	1.42	34.125	27.34			14587			287			
OBS	284	1.41	34.125	27.34			14591						
ISL	300	1.34	34.129	27.35	74.62	0.270	14591						
OBS	310	1.29	34.132	27.35			14590			291			
OBS	363	1.29	34.154	27.37			14600						
ISL	400	1.33	34.186	27.39	70.44	0.343	14608						
OBS	416	1.36	34.203	27.40			14612			300			
OBS	470	1.58	34.172	27.36			14630						2
ISL	500	1.74	34.308	27.46	64.85	0.410	14644						
OBS	523	1.87	34.338	27.47			14654			321			
ISL	600	2.28	34.421	27.51	61.48	0.474	14686						
OBS	628	2.38	34.446	27.52			14696			328			
ISL	700	2.36	34.483	27.55	58.20	0.534	14707						
OBS	735	2.31	34.496	27.57			14711						
ISL	800	2.29	34.532	27.60	54.32	0.590	14721						
ISL	900	2.25	34.578	27.64	51.03	0.642	14737						
OBS	943	2.24	34.595	27.65			14744						
ISL	1000	2.21	34.604	27.66	49.11	0.693	14752						
OBS	1046	2.18	34.610	27.67			14759			322			
ISL	1100	2.16	34.626	27.68	47.48	0.741	14767						
OBS	1115	2.15	34.710	27.75			14771			326			2
ISL	1200	2.11	34.655	27.71	45.26	0.787	14782						
ISL	1250	2.08	34.669	27.72	44.13	0.810	14790						
ISL	1300	2.05	34.684	27.74	42.98	0.831	14797						
OBS	1383	2.00	34.708	27.76			14809			309			
ISL	1400	1.99	34.710	27.76	40.81	0.873	14811						
ISL	1500	1.92	34.721	27.78	39.69	0.913	14826						
OBS	1649	1.84	34.731	27.79			14847			309			
OBS	1736	1.82	0.000	0.00			0						
ISL	1750	1.81	34.730	27.79	38.84	1.012	14863						
ISL	2000	1.64	34.727	27.80	37.98	1.108	14898						
ISL	2250	1.44	34.724	27.81	36.56	1.201	14932						
OBS	2350	1.35	0.000	0.00			0						
ISL	2500	1.28	34.721	27.82	35.41	1.291	14968						
ISL	2750	1.16	34.718	27.83	34.80	1.379	15006						
ISL	3000	1.07	34.715	27.83	34.26	1.465	15046						
OBS	3088	1.04	0.000	0.00			0						
ISL	3250	0.97	34.729	27.85	32.42	1.548	15085						
ISL	3500	0.87	34.720	27.85	31.95	1.629	15124						
ISL	3750	0.76	34.709	27.85	31.53	1.708	15163						
OBS	3808	0.00	34.706	0.00			0						
ISL	4000	0.65	34.706	27.85	30.41	1.785	15203						
OBS	4491	0.44	34.706	27.87			15281						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 555	25APR1966	21.9	61 23.0S	108 24.0W	526	5161	50	32				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	6.1	4.2		36	6	35	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	4.73	33.990	26.93			14686			202			
ISL	0	4.73	33.990	26.93	113.48	0.000	14686						
ISL	10	4.74	33.991	26.93	113.69	0.011	14688						
OBS	14	4.75	33.990	26.93			14689	716					
ISL	20	4.76	33.988	26.92	114.18	0.023	14690						
OBS	29	4.77	33.984	26.92			14692	734					
ISL	30	4.77	33.984	26.92	114.64	0.034	14692						
OBS	50	4.74	33.986	26.92			14694	751		212			
ISL	50	4.74	33.986	26.92	114.40	0.057	14694						
ISL	75	4.70	33.993	26.93	113.73	0.086	14697						
ISL	100	4.41	34.018	26.99	108.96	0.113	14689						
OBS	105	4.32	34.026	27.00			14686	735		223			
OBS	79	4.76	33.990	26.92			14700	725					
ISL	125	3.66	34.044	27.08	99.76	0.140	14662						
OBS	130	3.55	34.051	27.10			14658						
ISL	150	3.58	34.098	27.13	95.15	0.164	14663						
OBS	155	3.60	34.108	27.14			14665	737		236			
ISL	200	3.36	34.090	27.15	94.04	0.211	14662						
OBS	207	3.25	34.078	27.15			14658			236			
OBS	182	3.61	34.100	27.13			14670	719					
OBS	232	3.17	34.075	27.15			14659						
ISL	250	3.13	34.085	27.17	92.61	0.258	14660						
OBS	256	3.12	34.088	27.17			14661	710		258			
OBS	283	3.00	34.089	27.18			14660	699					
ISL	300	2.87	34.089	27.19	90.22	0.304	14658						
OBS	309	2.81	34.090	27.20			14656			259			
OBS	361	2.89	34.140	27.23			14669	625					
ISL	400	2.80	34.166	27.26	84.34	0.391	14672						
OBS	412	0.00	34.173	0.00			0	601		286			
OBS	464	2.67	34.207	27.30			14678	588					
ISL	500	2.76	34.250	27.33	78.27	0.472	14688						
OBS	514	2.80	34.268	27.34			14692	549		301			
ISL	600	2.72	34.328	27.40	72.69	0.548	14704						
OBS	616	2.69	34.336	27.41			14705			308			
ISL	700	2.68	34.400	27.46	67.44	0.618	14720						
OBS	717	2.67	34.412	27.47			14722						
ISL	800	2.39	34.439	27.51	62.24	0.683	14725						
OBS	818	2.33	34.444	27.52			14725	438		329			
ISL	900	2.35	34.486	27.55	58.81	0.743	14740						
ISL	1000	2.35	34.541	27.60	55.27	0.800	14757						
OBS	1020	2.37	34.552	27.60			14762			283			
ISL	1100	2.35	34.586	27.63	52.38	0.854	14775						
ISL	1200	2.30	34.624	27.67	49.65	0.905	14790						
ISL	1250	2.27	34.640	27.68	48.39	0.929	14798						
ISL	1300	2.24	34.655	27.70	47.19	0.953	14805						
OBS	1342	2.21	34.666	27.71			14811	417					
ISL	1400	2.17	34.677	27.72	45.22	1.000	14819						
ISL	1500	2.10	34.700	27.75	43.18	1.044	14833						
OBS	1577	2.04	34.712	27.76			14844	429					
ISL	1750	1.93	0.000	0.00			0						
OBS	1813	1.89	34.709	27.77			14877	443					2
ISL	2000	1.74	0.000	0.00			0						
OBS	2048	1.71	34.721	27.79			14909						2
ISL	2250	1.57	0.000	0.00			0						
OBS	2282	1.55	34.716	27.80			14943						2
ISL	2500	1.39	0.000	0.00			0						
OBS	2515	1.38	0.000	0.00			0						
ISL	2750	1.24	0.000	0.00			0						
OBS	2982	1.12	0.000	0.00			0						
ISL	3000	1.10	0.000	0.00			0						
ISL	3250	0.96	0.000	0.00			0						
OBS	3446	0.86	0.000	0.00			0						
ISL	3500	0.83	0.000	0.00			0						
ISL	3750	0.70	0.000	0.00			0						
OBS	3913	0.64	34.670	27.82			15187						2
ISL	4000	0.62	0.000	0.00			0						
ISL	4500	0.47	0.000	0.00			0						
OBS	4951	0.44	34.724	27.88			15364						2



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 556	27APR1966	20.9	62 30.0S	109 9.0W	526	5148	50	33				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.9	0.3		3	4	3	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10·m/sec	OXYG 10 <sup>2</sup> ·ml/l	PHOS 10 <sup>2</sup> · $\mu$ got/l	NITR 10· $\mu$ got/l	SILIC $\mu$ got/l	INT M	DD
OBS	0	3.64	33.945	27.01			14639	739					
ISL	0	3.64	33.945	27.01	106.06	0.000	14639						
ISL	10	3.66	33.940	27.00	106.65	0.011	14641						
OBS	14	3.66	33.939	27.00			14642	734					
ISL	20	3.67	33.939	27.00	106.92	0.021	14643						
OBS	29	3.67	33.940	27.00			14645	725					
ISL	30	3.67	33.940	27.00	106.96	0.032	14645						
OBS	49	3.64	33.943	27.00			14647	757					
ISL	50	3.64	33.943	27.01	106.53	0.053	14647						
ISL	75	3.40	33.974	27.05	102.23	0.079	14642						
OBS	78	3.35	33.980	27.06			14640						
ISL	100	2.71	34.053	27.18	90.34	0.104	14617						
OBS	104	2.60	34.067	27.20			14613						
ISL	125	2.42	34.106	27.24	84.09	0.125	14610						
OBS	128	2.40	34.109	27.25			14609						
ISL	150	1.83	34.102	27.29	79.82	0.146	14587						
OBS	153	1.75	34.100	27.29			14584						
OBS	180	1.60	34.101	27.30			14582	738					
ISL	200	1.49	34.110	27.32	76.93	0.185	14581						
OBS	205	1.47	34.112	27.32			14581	704					
OBS	229	1.48	34.117	27.33			14585	709					
ISL	250	1.46	34.133	27.34	75.07	0.223	14588						
OBS	253	1.46	34.136	27.34			14589	680					
OBS	280	1.46	34.150	27.35			14593	681					
ISL	300	1.38	34.160	27.37	72.55	0.260	14593						
OBS	306	1.36	34.164	27.37			14593	687					
OBS	357	1.59	34.217	27.40			14613	645					
ISL	400	1.64	34.260	27.43	67.32	0.330	14623						
OBS	408	0.00	34.267	0.00			0	573					
OBS	459	1.70	34.306	27.46			14636	544					
ISL	500	1.87	34.355	27.49	62.43	0.395	14651						
OBS	509	1.91	34.366	27.49			14654	487					
ISL	600	2.13	34.445	27.54	58.39	0.455	14680						
OBS	611	2.15	34.453	27.54			14683	450					
ISL	700	2.25	34.518	27.59	54.52	0.512	14703						
OBS	712	2.26	34.526	27.59			14705	438					
ISL	800	2.26	34.577	27.63	50.76	0.564	14721						
OBS	813	2.26	34.583	27.64			14723						
ISL	900	2.22	34.614	27.67	48.04	0.614	14736						
ISL	1000	2.17	34.640	27.69	46.07	0.661	14751						
OBS	1015	2.16	34.643	27.69			14753	421					
ISL	1100	2.13	34.662	27.71	44.48	0.706	14766						
OBS	1118	2.12	34.666	27.72			14769						
ISL	1200	2.07	34.685	27.74	42.72	0.750	14781						
ISL	1250	2.04	34.695	27.75	41.87	0.771	14788						
ISL	1300	2.01	34.704	27.76	41.06	0.791	14796						
OBS	1376	1.96	34.717	27.77			14806						
ISL	1400	1.95	34.719	27.77	39.73	0.832	14810						
ISL	1500	1.90	34.727	27.78	39.04	0.871	14825						
OBS	1627	1.82	34.732	27.79			14843						
ISL	1750	1.69	34.739	27.81	36.85	0.966	14858						
OBS	1833	1.61	34.742	27.82			14869						
ISL	2000	1.52	34.739	27.82	35.68	1.057	14893						
OBS	2139	1.46	34.733	27.82			14914						
ISL	2250	1.39	34.730	27.82	35.52	1.146	14930						
OBS	2394	1.30	34.727	27.83			14951						
ISL	2500	1.24	34.725	27.83	34.70	1.234	14967						
ISL	2750	1.11	34.721	27.84	33.87	1.319	15004						
OBS	2910	1.03	34.719	27.84			15028	473					
ISL	3000	0.98	34.718	27.84	32.92	1.403	15042						
ISL	3250	0.86	34.715	27.85	31.82	1.484	15080						
OBS	3427	0.77	34.713	27.85			15107	496					
ISL	3500	0.74	34.712	27.85	30.67	1.562	15119						
ISL	3750	0.64	34.711	27.86	29.60	1.637	15158						
OBS	3937	0.57	34.710	27.86			15188	502					
ISL	4000	0.55	34.710	27.86	28.60	1.710	15199						
OBS	4444	0.44	34.708	27.87			15273	505					
ISL	4500	0.43	34.708	27.87	27.24	1.849	15283						
ISL	5000	0.42	34.706	27.87	27.34	1.986	15372						
OBS	5041	0.42	34.706	27.87			15380	507					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 557	28APR1966	18.0	63 51.0S	108 57.0W	526	5072	51	33				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.8	0.1		1	2	2	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	2.58	33.914	27.08			14593	728					
ISL	0	2.58	33.914	27.08	99.23	0.000	14593						
ISL	10	2.58	33.907	27.07	99.80	0.010	14595						
OBS	14	2.58	33.906	27.07			14595	745					
ISL	20	2.59	33.906	27.07	100.04	0.020	14597						
OBS	29	2.56	33.908	27.08			14597	736					
ISL	30	2.54	33.909	27.08	99.45	0.030	14596						
OBS	50	2.03	33.920	27.13			14577	737					
ISL	50	2.03	33.920	27.13	94.75	0.049	14577						
ISL	75	1.96	33.914	27.13	94.73	0.073	14578						
OBS	79	1.97	33.918	27.13			14580						
ISL	100	1.92	34.023	27.22	86.35	0.096	14582						
OBS	105	1.89	34.050	27.24			14582						
ISL	125	1.59	34.099	27.30	78.21	0.116	14573						
OBS	130	1.47	34.105	27.32			14568						
ISL	150	0.73	34.103	27.36	72.27	0.135	14539						
OBS	154	0.59	34.101	27.37			14533	730					
OBS	181	0.36	34.108	27.39			14527	730					
ISL	200	0.24	34.126	27.41	67.67	0.170	14525						
OBS	206	0.23	34.133	27.42			14525	707					
OBS	231	0.44	34.161	27.43			14540						
ISL	250	0.57	34.194	27.45	64.45	0.203	14549						
OBS	255	0.61	34.203	27.45			14552	662					
OBS	282	0.90	34.234	27.46			14570	630					
ISL	300	0.93	34.255	27.47	62.28	0.235	14575						
OBS	308	0.94	34.264	27.48			14576	620					
OBS	360	1.41	34.337	27.51			14607	557					
ISL	400	1.63	34.390	27.53	57.48	0.295	14624						
OBS	411	0.00	34.403	0.00			0						
OBS	463	1.83	34.449	27.57			14644	497					
ISL	500	1.90	34.485	27.59	52.94	0.350	14654						
OBS	513	1.92	34.497	27.60			14657	475					
ISL	600	2.08	34.562	27.64	49.13	0.401	14679						
OBS	615	2.10	34.571	27.64			14683	432					
ISL	700	2.10	34.600	27.67	46.96	0.449	14697						
OBS	717	2.09	34.605	27.67			14700						
ISL	800	2.08	34.649	27.71	43.61	0.494	14714						
OBS	817	2.08	34.658	27.71			14717						
ISL	900	2.06	34.681	27.73	41.45	0.537	14730						
ISL	1000	2.02	34.697	27.75	40.32	0.578	14745						
OBS	1019	2.01	34.699	27.75			14748	433					
ISL	1100	1.97	34.710	27.76	39.30	0.617	14760						
ISL	1200	1.91	34.721	27.78	38.30	0.656	14775						
ISL	1250	1.87	34.726	27.78	37.85	0.675	14781						
OBS	1284	1.85	34.728	27.79			14786	424					
ISL	1300	1.84	34.729	27.79	37.39	0.694	14788						
ISL	1400	1.75	34.734	27.80	36.48	0.731	14801						
ISL	1500	1.66	34.737	27.81	35.72	0.767	14814						
OBS	1533	1.63	34.737	27.81			14819	444					
ISL	1750	1.49	34.732	27.82	35.07	0.856	14849						
OBS	1785	1.47	34.731	27.82			14854						
ISL	2000	1.32	34.734	27.83	33.79	0.942	14885						
OBS	2036	1.30	34.734	27.83			14890						
ISL	2250	1.16	34.724	27.83	33.24	1.025	14920						
OBS	2289	1.14	34.722	27.83			14926						
ISL	2500	1.02	34.720	27.84	32.34	1.107	14957						
OBS	2542	1.00	34.720	27.84			14963	465					
ISL	2750	0.91	34.717	27.85	31.62	1.187	14995						
ISL	3000	0.82	34.713	27.85	31.08	1.266	15035						
OBS	3050	0.80	34.712	27.85			15043	477					
ISL	3250	0.71	34.706	27.85	30.48	1.343	15074						
ISL	3500	0.60	34.700	27.85	29.67	1.418	15113						
OBS	3558	0.58	34.699	27.85			15122						
ISL	3750	0.50	34.699	27.86	28.48	1.491	15152						
ISL	4000	0.42	34.701	27.86	27.25	1.560	15193						
OBS	4065	0.40	34.702	27.86			15204	506					
ISL	4500	0.39	34.701	27.86	27.00	1.696	15281						
OBS	4572	0.00	34.701	0.00			0	506					
ISL	5000	0.37	34.704	27.87	26.73	1.830	15370						
OBS	5069	0.37	34.705	27.87			15383	502					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 558	30APR1966	19.1	64 2.0S	115 38.0W	527	4976	50	32				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	1.8	0.6		7	3	6	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	2.49	33.927	27.10			14589	731					
ISL	0	2.49	33.927	27.10	97.54	0.000	14589						
ISL	10	2.50	33.920	27.09	98.14	0.010	14591						
OBS	14	2.50	33.919	27.09			14592	737					
ISL	20	2.51	33.918	27.09	98.42	0.020	14593						
OBS	28	2.51	33.919	27.09			14595	727					
ISL	30	2.51	33.919	27.09	98.40	0.029	14595						
OBS	49	2.46	33.924	27.10			14596	730		173			
ISL	50	2.47	33.923	27.10	97.86	0.049	14597						
ISL	75	2.43	33.928	27.10	97.29	0.073	14599						
OBS	78	2.40	33.932	27.11			14598	731					
ISL	100	1.74	34.020	27.23	85.22	0.096	14574						
OBS	103	1.63	34.033	27.25			14570	696		262			
ISL	125	1.07	34.088	27.33	75.59	0.116	14550						
OBS	128	1.02	34.093	27.34			14548	693					
ISL	150	0.94	34.121	27.37	72.22	0.135	14548						
OBS	153	0.95	34.124	27.37			14549	670		270			
OBS	180	0.97	34.147	27.38			14555	669					
ISL	200	0.96	34.170	27.40	68.67	0.170	14558						
OBS	204	0.00	34.175	0.00			0			286			
OBS	229	0.99	34.195	27.42			14565	647					
ISL	250	1.11	34.226	27.44	65.52	0.204	14574						
OBS	253	1.13	34.232	27.44			14575	640		298			
OBS	280	1.47	34.301	27.47			14596	608					
ISL	300	1.46	34.290	27.47	63.31	0.236	14598						
OBS	306	1.44	34.285	27.46			14599	546		305			
OBS	358	1.77	34.379	27.51			14623						
ISL	400	1.96	34.434	27.54	56.85	0.296	14639						
OBS	460	2.07	34.487	27.58			14655	497		314			
ISL	500	1.99	34.508	27.60	51.95	0.350	14658						
OBS	510	1.97	34.513	27.61			14659	453					
ISL	600	2.03	34.563	27.64	48.64	0.401	14677						
OBS	612	2.05	0.000	0.00			0	437		290			
ISL	700	2.11	34.618	27.68	45.75	0.448	14698						
OBS	713	2.12	34.625	27.68			14701						
ISL	800	2.14	34.668	27.72	42.73	0.492	14717						
OBS	813	2.14	34.674	27.72			14719	414		315			
ISL	900	2.10	34.694	27.74	40.95	0.534	14732						
ISL	1000	2.03	34.705	27.75	39.90	0.574	14746						
OBS	1012	2.02	34.705	27.76			14748	404					
ISL	1100	1.97	34.716	27.77	38.88	0.614	14760						
ISL	1200	1.90	34.726	27.78	37.90	0.652	14774						
ISL	1250	1.87	34.730	27.79	37.45	0.671	14781						
ISL	1300	1.83	34.734	27.79	37.01	0.690	14788						
ISL	1400	1.76	34.739	27.80	36.19	0.726	14802						
OBS	1420	1.74	34.740	27.81			14804	417		275			
ISL	1500	1.66	34.742	27.81	35.36	0.762	14815						
OBS	1656	1.51	34.742	27.82			14834	446		266			
ISL	1750	1.45	34.741	27.83	33.90	0.849	14848						
OBS	1902	1.36	34.739	27.83			14870	449		304			
ISL	2000	1.30	34.736	27.83	33.29	0.933	14883						
OBS	2150	1.20	34.731	27.84			14905	456		283			
ISL	2250	1.14	34.728	27.84	32.70	1.015	14919						
OBS	2395	1.07	34.725	27.84			14941	461		297			
ISL	2500	1.02	34.722	27.84	32.12	1.096	14957						
OBS	2642	0.95	34.719	27.84			14978	477					
ISL	2750	0.91	34.717	27.85	31.55	1.176	14995						
ISL	3000	0.81	34.714	27.85	30.86	1.254	15034						
OBS	3145	0.75	34.713	27.85			15057						
ISL	3250	0.69	34.712	27.86	29.81	1.329	15073						
ISL	3500	0.57	34.711	27.86	28.43	1.402	15111						
OBS	3647	0.50	34.710	27.87			15134	490					
ISL	3750	0.47	34.710	27.87	27.23	1.472	15151						
ISL	4000	0.40	34.709	27.87	26.48	1.539	15192						
OBS	4149	0.38	34.709	27.87			15218						
ISL	4500	0.35	34.709	27.87	25.89	1.670	15279						
OBS	4651	0.35	34.709	27.87			15306	508		312			
ISL	5000	0.35	34.707	27.87	26.12	1.800	15369						
OBS	5042	0.35	34.707	27.87			15377	499					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 559	2MAY1966	18.7	62 10.0S	114 37.0W	527	5159	45	32				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.2	-0.5		12	5	11	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	3.51	33.941	27.02			14634	792		225			
ISL	0	3.51	33.941	27.02	105.16	0.000	14634						
ISL	10	3.52	33.937	27.01	105.59	0.011	14636						
OBS	14	3.52	33.936	27.01			14636						
ISL	20	3.52	33.934	27.01	105.92	0.021	14637						
OBS	28	3.52	33.933	27.01			14638	723					
ISL	30	3.52	33.934	27.01	106.03	0.032	14639						
OBS	49	3.52	33.941	27.01			14642	723		228			
ISL	50	3.54	33.940	27.01	105.88	0.053	14643						
ISL	75	3.56	33.935	27.01	106.64	0.079	14648						
OBS	77	3.53	33.937	27.01			14647						
ISL	100	2.02	34.053	27.23	84.79	0.103	14587						
OBS	102	1.89	34.064	27.25			14582	682		270			
ISL	125	1.75	34.093	27.29	79.88	0.124	14580						
OBS	126	1.76	34.093	27.29			14580	685					
OBS	150	1.67	34.115	27.31			14581	678		272			
ISL	150	1.67	34.115	27.31	77.69	0.144	14581						
OBS	176	1.69	34.129	27.32			14586	655					
ISL	200	1.59	34.145	27.34	74.99	0.182	14586						
OBS	201	1.59	34.146	27.34			14586			283			
OBS	225	1.59	34.160	27.35			14590	647					
OBS	249	1.58	34.188	27.38			14594	625		296			
ISL	250	1.58	34.188	27.38	71.79	0.219	14594						
OBS	275	1.66	34.203	27.38			14602	614					
OBS	300	1.94	34.262	27.41			14619	543		310			
ISL	300	1.94	34.262	27.41	69.20	0.254	14619						
OBS	352	2.04	34.311	27.44			14633	521					
ISL	400	2.02	34.327	27.45	65.36	0.321	14640						
OBS	403	0.00	34.328	0.00			0	519		298			
OBS	454	1.99	34.371	27.49			14649	499					
ISL	500	2.06	34.416	27.52	59.49	0.384	14660						
OBS	504	2.07	34.420	27.52			14661	454		325			
ISL	600	2.18	34.499	27.58	54.74	0.441	14683						
OBS	604	2.18	34.502	27.58			14684			318			
ISL	700	2.23	34.552	27.62	51.75	0.494	14702						
OBS	704	2.23	34.554	27.62			14703						
ISL	800	2.20	34.601	27.66	48.36	0.544	14719						
OBS	803	2.20	34.602	27.66			14719	402		325			
ISL	900	2.17	34.637	27.69	45.84	0.591	14734						
ISL	1000	2.13	34.664	27.71	43.92	0.636	14750						
OBS	1004	2.13	34.665	27.71			14750	418					
ISL	1100	2.09	34.687	27.74	42.34	0.679	14765						
ISL	1200	2.05	34.705	27.75	40.98	0.721	14780						
ISL	1250	2.02	34.712	27.76	40.39	0.741	14788						
ISL	1300	1.99	34.718	27.77	39.85	0.761	14795						
OBS	1324	1.98	34.721	27.77			14798			294			
ISL	1400	1.92	34.728	27.78	38.71	0.800	14809						
ISL	1500	1.83	34.735	27.79	37.70	0.839	14822						
OBS	1571	1.77	34.738	27.80			14831	442		290			
ISL	1750	1.65	34.739	27.81	36.36	0.931	14856						
OBS	1817	1.61	34.738	27.81			14866	466		300			
ISL	2000	1.47	34.735	27.82	35.35	1.021	14891						
OBS	2064	1.42	34.734	27.82			14900			296			
ISL	2250	1.32	34.733	27.83	34.44	1.108	14927						
OBS	2311	1.29	34.733	27.83			14936	475		302			
ISL	2500	1.18	34.729	27.84	33.66	1.193	14964						
OBS	2558	1.15	34.728	27.84			14973	488					
ISL	2750	1.05	34.725	27.84	32.86	1.276	15002						
ISL	3000	0.93	34.721	27.85	32.04	1.357	15040						
OBS	3050	0.91	34.720	27.85			15047			304			
ISL	3250	0.83	34.717	27.85	31.28	1.437	15079						
ISL	3500	0.73	34.714	27.85	30.46	1.514	15118						
OBS	3548	0.71	34.713	27.85			15126	496					
ISL	3750	0.62	34.711	27.86	29.37	1.589	15157						
ISL	4000	0.52	34.708	27.86	28.24	1.661	15197						
OBS	4049	0.50	34.708	27.86			15205	512					
ISL	4500	0.41	34.708	27.87	26.95	1.799	15282						
OBS	4553	0.41	34.708	27.87			15291	531		312			

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 560	3MAY1966	19.3	60 14.0S	114 41.0W	527	5170	51	31				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	2.7	-0.7		19	4	19	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	3.57	33.917	26.99			14636	724					
ISL	0	3.57	33.917	26.99	107.52	0.000	14636						
ISL	10	3.59	33.913	26.99	108.12	0.011	14638						
OBS	14	3.60	33.912	26.98			14639	715					
ISL	20	3.61	33.911	26.98	108.42	0.022	14641						
OBS	29	3.61	33.913	26.98			14642	737					
ISL	30	3.61	33.914	26.98	108.35	0.032	14642						
OBS	50	3.61	33.933	27.00			14646	748					
ISL	50	3.61	33.933	27.00	107.06	0.054	14646						
ISL	75	3.40	33.943	27.03	104.55	0.080	14641						
OBS	79	3.34	33.948	27.04			14639	720					
ISL	100	2.74	34.026	27.15	92.64	0.105	14618						
OBS	105	2.60	34.044	27.18			14613	701					
ISL	125	2.35	34.048	27.20	87.88	0.128	14606						
OBS	130	2.31	34.046	27.21			14605	697					
ISL	150	2.07	34.066	27.24	84.40	0.149	14598						
OBS	155	2.02	34.072	27.25			14596	695					
OBS	182	1.96	34.095	27.27			14598	672					
ISL	200	1.85	34.103	27.29	80.05	0.190	14597						
OBS	207	1.80	34.106	27.29			14596						
ISL	250	1.71	34.127	27.32	77.42	0.230	14599						
OBS	257	1.71	34.130	27.32			14600						
OBS	284	1.67	34.138	27.33			14603						
ISL	300	1.84	34.175	27.35	74.96	0.268	14614						
OBS	310	1.96	34.201	27.36			14621	606					
ISL	400	1.69	34.250	27.42	68.42	0.339	14625						
OBS	414	1.64	34.255	27.42			14625	563					
OBS	466	2.30	34.367	27.46			14664	485					
ISL	500	2.21	34.381	27.48	63.48	0.405	14666						
OBS	516	2.12	34.381	27.49			14665						
ISL	600	2.12	34.447	27.54	58.13	0.466	14680						
OBS	618	2.15	34.464	27.55			14684	432					
ISL	700	2.21	34.516	27.59	54.28	0.522	14701						
OBS	719	2.22	34.526	27.60			14705	444					
ISL	800	2.21	34.563	27.63	51.25	0.575	14718						
OBS	820	2.20	34.571	27.63			14721	428					
ISL	900	2.18	34.609	27.67	47.96	0.625	14734						
ISL	1000	2.14	34.652	27.70	44.87	0.671	14750						
OBS	1022	2.13	34.661	27.71			14753	430					
ISL	1100	2.10	34.682	27.73	42.74	0.715	14765						
ISL	1200	2.06	34.702	27.75	41.24	0.757	14781						
ISL	1250	2.03	34.709	27.76	40.68	0.777	14788						
OBS	1285	2.01	34.713	27.76			14793	426					
ISL	1300	2.00	34.715	27.76	40.18	0.798	14795						
ISL	1400	1.92	34.723	27.78	39.16	0.837	14809						
ISL	1500	1.85	34.729	27.79	38.31	0.876	14822						
OBS	1532	1.82	34.730	27.79			14827	429					
ISL	1750	1.67	34.738	27.81	36.67	0.970	14857						
OBS	1780	1.65	34.738	27.81			14861	467					
ISL	2000	1.47	34.734	27.82	35.50	1.060	14891						
OBS	2028	1.45	34.733	27.82			14895						
ISL	2250	1.31	34.733	27.83	34.28	1.147	14927						
OBS	2277	1.29	34.733	27.83			14930						
ISL	2500	1.18	34.726	27.83	33.89	1.232	14964						
OBS	2527	1.17	34.725	27.83			14968	471					
ISL	2750	1.08	34.722	27.84	33.42	1.317	15003						
ISL	3000	0.98	34.720	27.84	32.75	1.399	15042						
OBS	3032	0.97	34.720	27.84			15047	479					
ISL	3250	0.88	34.716	27.85	32.00	1.480	15081						
ISL	3500	0.77	34.713	27.85	31.08	1.559	15120						
OBS	3538	0.75	34.712	27.85			15126	473					
ISL	3750	0.65	34.710	27.86	29.80	1.635	15159						
ISL	4000	0.54	34.709	27.86	28.47	1.708	15198						
OBS	4042	0.52	34.709	27.86			15205	487					
ISL	4500	0.41	34.707	27.87	26.87	1.846	15281						
OBS	4544	0.40	34.707	27.87			15289	501					
ISL	5000	0.40	34.705	27.87	27.12	1.981	15371						
OBS	5132	0.42	34.705	27.87			15396	495					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 561	4MAY1966	20.7	58 57.0S	115 1.0W	491	5038	46	32				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.0	0.5		35	6	1	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	5.20	33.954	26.85			14704						
ISL	0	5.20	33.954	26.85	121.26	0.000	14704						
ISL	10	5.24	33.946	26.84	122.40	0.012	14708						
OBS	15	5.25	33.944	26.83			14709						
ISL	20	5.25	33.944	26.83	122.82	0.024	14710						
ISL	30	5.24	33.945	26.83	122.75	0.037	14711						
OBS	31	5.24	33.945	26.83			14711						
ISL	50	5.22	33.948	26.84	122.58	0.061	14714						
OBS	53	5.22	33.948	26.84			14714						
ISL	75	5.15	33.947	26.85	122.14	0.092	14715						
OBS	82	5.11	33.951	26.85			14714						
ISL	100	4.90	34.001	26.92	115.57	0.122	14709						
OBS	110	4.73	34.031	26.96			14704						
ISL	125	4.34	34.054	27.02	105.78	0.149	14691						
OBS	136	4.05	34.063	27.06			14680						
ISL	150	3.83	34.064	27.08	100.12	0.175	14674						
OBS	160	3.72	34.061	27.09			14670						
OBS	188	3.53	34.049	27.10			14667						
ISL	200	3.37	34.046	27.11	97.40	0.224	14662						
OBS	215	3.18	34.044	27.13			14656						
OBS	242	3.10	34.046	27.14			14657						
ISL	250	3.09	34.055	27.15	94.46	0.272	14658						
OBS	268	3.06	34.076	27.17			14660						
OBS	296	2.86	34.075	27.18			14656						
ISL	300	2.85	34.078	27.19	90.84	0.319	14656						
OBS	323	2.85	34.101	27.20			14661						
OBS	378	3.39	34.199	27.23			14694						
ISL	400	3.31	34.216	27.25	85.50	0.407	14695						
OBS	432	3.07	34.225	27.28			14690						
OBS	488	2.78	34.216	27.30			14686						
ISL	500	2.73	34.222	27.31	80.11	0.490	14686						
OBS	542	2.59	34.250	27.35			14688						
ISL	600	2.55	34.292	27.38	73.63	0.566	14696						
OBS	649	2.56	34.328	27.41			14705						
ISL	700	2.55	34.357	27.43	69.35	0.638	14713						
OBS	756	2.52	34.389	27.46			14722						
ISL	800	2.48	34.422	27.49	64.38	0.705	14728						
OBS	863	2.41	34.468	27.53			14736						
ISL	900	2.40	34.490	27.55	59.07	0.767	14742						
ISL	1000	2.39	34.541	27.59	55.65	0.824	14759						
OBS	1071	2.38	34.569	27.62			14771						
ISL	1100	2.35	34.579	27.63	53.03	0.878	14775						
ISL	1200	2.26	34.608	27.66	50.35	0.930	14788						
ISL	1250	2.21	34.621	27.67	49.15	0.955	14795						
OBS	1275	2.19	34.627	27.68			14798						
ISL	1300	2.18	34.634	27.69	48.05	0.979	14802						
ISL	1400	2.15	34.661	27.71	46.20	1.026	14818						
ISL	1500	2.13	34.686	27.73	44.66	1.072	14834						
OBS	1511	2.13	34.688	27.73			14836						
OBS	1742	2.00	34.720	27.77			14870						
ISL	1750	1.99	34.721	27.77	41.63	1.180	14871						
OBS	1974	1.81	34.731	27.79			14901						
ISL	2000	1.78	34.732	27.80	39.34	1.281	14905						
OBS	2199	1.59	34.733	27.81			14930						
ISL	2250	1.55	34.733	27.81	37.34	1.377	14937						
ISL	2500	1.40	34.729	27.82	36.39	1.469	14973						
OBS	2661	1.32	34.726	27.82			14998						
ISL	2750	1.27	34.725	27.83	35.66	1.559	15011						
ISL	3000	1.13	34.722	27.83	34.57	1.647	15048						
OBS	3142	1.05	34.720	27.84			15069						
ISL	3250	1.00	34.719	27.84	33.53	1.732	15086						
ISL	3500	0.88	34.716	27.85	32.51	1.814	15125						
OBS	3638	0.82	34.714	27.85			15146						
ISL	3750	0.75	34.712	27.85	31.23	1.894	15163						
ISL	4000	0.62	34.709	27.86	29.73	1.970	15202						
OBS	4132	0.56	34.708	27.86			15222						
ISL	4500	0.48	34.707	27.86	28.02	2.115	15284						
OBS	4621	0.47	34.707	27.86			15306						

SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 23	SER 562		6MAY1966	19.1	57 37.0S	115 10.0W	491	4308	44	33			
	AIR TEMP		DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS				
	7.3		5.0		33	6	32	3	1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
OBS	0	5.11	33.944	26.85			14701						
ISL	0	5.11	33.944	26.85	121.02	0.000	14701						
ISL	10	5.14	33.941	26.84	121.62	0.012	14703						
OBS	12	5.14	33.941	26.84			14704						
ISL	20	5.14	33.940	26.84	121.90	0.024	14705						
OBS	26	5.14	33.940	26.84			14706						
ISL	30	5.13	33.940	26.84	121.84	0.036	14706						
OBS	44	5.10	33.942	26.85			14707						
ISL	50	5.11	33.936	26.84	122.20	0.061	14709						
OBS	68	5.14	33.939	26.84			14713						
ISL	75	5.12	33.969	26.87	120.11	0.091	14714						
OBS	92	4.99	34.052	26.95			14712						
ISL	100	4.85	34.079	26.99	109.15	0.120	14708						
OBS	116	4.57	34.114	27.04			14700						
ISL	125	4.47	34.115	27.06	102.64	0.146	14697						
OBS	139	4.35	34.106	27.06			14694						
ISL	150	4.27	34.102	27.07	101.71	0.172	14692						
OBS	163	4.18	34.099	27.07			14691						
OBS	186	4.06	34.107	27.09			14690						
ISL	200	3.95	34.100	27.10	99.06	0.222	14687						
OBS	209	3.88	34.095	27.10			14686						
OBS	233	3.69	34.091	27.12			14682						
ISL	250	3.55	34.092	27.13	96.10	0.271	14679						
OBS	258	3.48	34.092	27.14			14677						
OBS	281	3.23	34.089	27.16			14670						
ISL	300	2.89	34.062	27.17	92.35	0.318	14658						
OBS	329	2.40	34.023	27.18			14641						
OBS	376	2.21	34.044	27.21			14641						
ISL	400	2.44	34.083	27.23	87.30	0.408	14655						
OBS	425	2.70	34.127	27.24			14671						
OBS	475	2.64	34.170	27.28			14678						
ISL	500	2.63	34.192	27.30	81.42	0.492	14682						
OBS	579	2.67	34.264	27.35			14697						
ISL	600	2.72	34.288	27.36	75.69	0.571	14704						
OBS	683	2.86	34.372	27.42			14724						
ISL	700	2.81	34.381	27.43	70.13	0.644	14725						
OBS	787	2.50	34.419	27.49			14727						
ISL	800	2.49	34.426	27.49	64.20	0.711	14729						
OBS	888	2.48	34.477	27.54			14744						
ISL	900	2.48	34.486	27.54	60.11	0.773	14746						
OBS	992	2.45	34.553	27.60			14761						
ISL	1000	2.45	34.556	27.60	55.13	0.831	14762						
ISL	1100	2.38	34.587	27.63	52.68	0.884	14776						
OBS	1148	2.34	34.595	27.64			14783						
ISL	1200	2.31	34.611	27.66	50.68	0.936	14790						
ISL	1250	2.29	34.626	27.67	49.55	0.961	14798						
ISL	1300	2.26	34.641	27.68	48.44	0.986	14805						
ISL	1400	2.21	34.669	27.71	46.36	1.033	14821						
OBS	1409	2.21	34.671	27.71			14822						
ISL	1500	2.17	34.690	27.73	44.73	1.079	14836						
OBS	1671	2.08	34.717	27.76			14861						
ISL	1750	2.03	34.725	27.77	41.68	1.187	14873						
OBS	1932	1.89	34.737	27.79			14898						
ISL	2000	1.82	34.738	27.80	39.32	1.288	14906						
OBS	2191	1.64	34.738	27.81			14931						
ISL	2250	1.60	34.737	27.81	37.51	1.384	14939						
OBS	2451	1.47	34.735	27.82			14968						
ISL	2500	1.44	34.735	27.82	36.54	1.477	14975						
ISL	2750	1.31	34.734	27.83	35.56	1.567	15013						
OBS	2969	1.20	34.733	27.84			15046						
ISL	3000	1.18	34.732	27.84	34.55	1.654	15051						
ISL	3250	1.03	34.726	27.84	33.37	1.739	15087						
OBS	3485	0.88	34.720	27.85			15122						
ISL	3500	0.87	34.720	27.85	32.04	1.821	15124						
ISL	3750	0.73	34.718	27.86	30.52	1.899	15162						
OBS	3995	0.62	34.717	27.86			15201						
ISL	4000	0.62	34.717	27.86	29.13	1.974	15201						
OBS	4397	0.50	34.712	27.87			15267						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 563	12MAY1966	0.7	56 41.0S	131 11.0W	493	4160	40	33				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.3	-2.4		23	7	22	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/Sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> µgatl/l	NITR 10 <sup>-2</sup> µgatl/l	SILIC µgatl/l	INT M	DD
OBS	0	4.06	33.907	26.93			14656						
ISL	0	4.06	33.907	26.93	112.91	0.000	14656						
ISL	10	4.10	33.903	26.93	113.62	0.011	14659						
OBS	17	4.11	33.902	26.93			14661						
ISL	20	4.11	33.902	26.92	113.97	0.023	14662						
ISL	30	4.11	33.902	26.93	114.04	0.034	14664						
OBS	35	4.11	33.903	26.93			14664	716					
ISL	50	4.10	33.902	26.93	114.12	0.057	14666						
OBS	60	4.09	33.902	26.93			14667	712					
ISL	75	4.11	33.895	26.92	114.94	0.086	14671						
OBS	92	3.99	33.909	26.94			14669						
ISL	100	3.73	33.948	27.00	107.46	0.113	14659						
OBS	122	3.03	34.059	27.15			14635	677					
ISL	125	3.01	34.065	27.16	92.19	0.138	14634						
ISL	150	2.99	34.093	27.18	90.10	0.161	14638						
OBS	152	3.00	34.093	27.18			14639						
OBS	181	2.74	34.120	27.23			14633	632					
ISL	200	2.78	34.133	27.24	85.46	0.205	14638						
OBS	212	2.83	34.142	27.24			14642						
OBS	242	2.86	34.177	27.26			14649	619					
ISL	250	2.90	34.188	27.27	82.75	0.247	14652						
OBS	272	2.96	34.211	27.28			14658						
ISL	300	2.75	34.214	27.30	79.71	0.288	14654						
OBS	301	2.74	34.214	27.30			14654	575					
OBS	332	2.65	34.231	27.33			14655	549					
OBS	362	2.61	34.264	27.35			14659	533					
ISL	400	2.51	34.282	27.38	72.97	0.364	14661						
OBS	422	2.43	34.289	27.39			14661	525					
OBS	480	2.20	34.324	27.44			14661	504					
ISL	500	2.28	34.349	27.45	66.49	0.434	14669						
OBS	541	2.49	34.402	27.48			14685						
OBS	599	2.44	34.264	27.37			14691						
ISL	600	2.44	34.436	27.51	61.87	0.498	14693						
OBS	688	2.19	34.469	27.55			14698	475					
ISL	700	2.20	34.479	27.56	56.99	0.557	14700						
ISL	800	2.39	34.555	27.61	53.59	0.613	14726						
OBS	804	2.40	34.558	27.61			14727						
ISL	900	2.35	34.588	27.64	51.26	0.665	14741						
OBS	918	0.00	34.594	0.00			0	424					
OBS	960	2.28	34.622	27.67			14749						
ISL	1000	2.28	34.575	27.63	52.03	0.717	14755						
ISL	1100	2.25	34.512	27.58	56.84	0.771	14770						
OBS	1140	2.23	34.510	27.58			14775						
ISL	1200	2.15	34.675	27.72	44.18	0.822	14784						
OBS	1205	2.14	34.690	27.73			14785						
ISL	1250	2.11	34.694	27.74	42.63	0.843	14791						
ISL	1300	2.09	34.699	27.75	42.21	0.865	14799						
ISL	1400	2.05	34.709	27.76	41.60	0.906	14814						
OBS	1446	2.05	34.714	27.76			14822						
ISL	1500	2.02	34.716	27.76	41.13	0.948	14830						
OBS	1683	1.90	34.723	27.78			14856						
ISL	1750	1.86	34.727	27.79	39.58	1.049	14865						
OBS	1923	1.74	34.737	27.80			14890						
ISL	2000	1.66	34.738	27.81	37.40	1.145	14899						
OBS	2158	1.50	34.738	27.82			14919						
ISL	2250	1.42	34.736	27.83	35.47	1.236	14931						
OBS	2394	1.31	34.731	27.83			14951						
ISL	2500	1.24	34.727	27.83	34.54	1.324	14966						
OBS	2626	1.17	34.723	27.83			14985						
ISL	2750	1.12	34.722	27.84	33.94	1.409	15004						
OBS	2856	1.08	34.721	27.84			15021						
ISL	3000	1.04	34.720	27.84	33.53	1.493	15044						
ISL	3250	0.98	34.717	27.84	33.40	1.577	15085						
OBS	3408	0.96	34.716	27.84			15112						
ISL	3500	0.95	0.000	0.00			0						
ISL	3750	0.92	0.000	0.00			0						
OBS	3951	0.92	34.668	27.81			15205						

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SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 564	19MAY1966	4.8	47 20.0S	167 38.0W	460	5128	36	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	10.9	5.0		7	6	8	3		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	11.01	34.701	26.56			14936	638					
ISL	0	11.01	34.701	26.56	148.37	0.000	14936						
ISL	10	11.01	34.699	26.56	148.75	0.015	14938						
OBS	15	11.02	34.698	26.56			14939	613					
ISL	20	11.04	34.696	26.55	149.66	0.030	14940						
OBS	24	11.05	34.695	26.55			14942	616					
ISL	30	11.05	34.696	26.55	150.02	0.045	14942						
OBS	48	11.03	34.703	26.56			14945						
ISL	50	11.03	34.703	26.56	149.72	0.075	14945						
OBS	71	11.02	34.701	26.56			14948						
ISL	75	11.03	34.701	26.56	150.51	0.112	14949						
OBS	95	11.03	34.704	26.56			14953	612					
ISL	100	10.94	34.708	26.58	149.09	0.150	14950						
ISL	125	10.45	34.723	26.68	140.17	0.186	14937						
OBS	142	10.06	34.730	26.75			14926						
ISL	150	9.96	34.726	26.76	132.32	0.220	14924						
OBS	188	9.64	34.694	26.79			14918						
ISL	200	9.56	34.687	26.80	129.71	0.285	14917						
ISL	250	9.28	34.658	26.82	128.34	0.350	14914						
OBS	282	9.13	34.640	26.84			14913	586					
ISL	300	9.02	34.628	26.84	127.39	0.414	14912						
OBS	373	8.57	34.577	26.88			14907	571					
ISL	400	8.40	34.559	26.89	124.68	0.540	14904						
ISL	500	7.82	34.499	26.93	122.10	0.663	14898						
OBS	556	7.53	34.469	26.95			14896	574					
ISL	600	7.36	34.449	26.96	120.58	0.785	14896						
ISL	700	7.00	34.413	26.98	119.54	0.905	14898						
OBS	737	6.88	34.403	26.99			14899						
ISL	800	6.62	34.395	27.02	116.74	1.023	14899						
ISL	900	6.19	34.392	27.07	112.16	1.137	14899						
OBS	921	6.09	34.393	27.08			14898	527					
ISL	1000	5.68	34.394	27.14	106.17	1.246	14895						
ISL	1100	5.17	34.400	27.20	100.03	1.350	14891						
ISL	1200	4.68	34.409	27.27	93.88	1.447	14888						
ISL	1250	4.44	34.415	27.30	90.81	1.493	14886						
ISL	1300	4.21	34.422	27.33	87.72	1.537	14885						
OBS	1390	3.80	34.437	27.38			14883	442					
ISL	1400	3.77	34.439	27.39	81.66	1.622	14884						
ISL	1500	3.46	34.460	27.43	76.97	1.701	14888						
ISL	1750	2.87	34.521	27.54	66.85	1.881	14906						
OBS	1862	2.70	34.552	27.58			14918	405					
ISL	2000	2.54	34.592	27.62	58.87	2.038	14935						
ISL	2250	2.35	34.658	27.69	52.85	2.178	14970						
OBS	2341	2.31	34.680	27.71			14985	433					
ISL	2500	2.22	34.704	27.74	48.96	2.305	15008						
ISL	2750	2.08	34.728	27.77	46.40	2.424	15046						
OBS	2832	2.04	34.733	27.78			15058	443					
ISL	3000	1.90	34.731	27.79	44.65	2.538	15081						
ISL	3250	1.73	34.728	27.80	43.29	2.648	15117						
ISL	3500	1.51	34.725	27.81	41.03	2.754	15152						
OBS	3637	1.38	34.723	27.82			15170	493					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 565	22MAY1966	11.7	44 19.0S	172 39.0W	461	3968	20	19				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.4	7.3		18	4	15	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	12.23	34.716	26.34			14979	631					
ISL	0	12.23	34.716	26.34	168.96	0.000	14979						
ISL	10	12.22	34.716	26.34	169.11	0.017	14980						
OBS	16	12.23	34.716	26.34			14982						
ISL	20	12.24	34.716	26.34	169.66	0.034	14983						
OBS	25	12.25	34.716	26.34			14984	622					
ISL	30	12.23	34.717	26.34	169.63	0.051	14984						
OBS	50	12.10	34.720	26.37			14983	635					
ISL	50	12.10	34.720	26.37	167.54	0.085	14983						
OBS	74	12.04	34.778	26.43			14985	622					
ISL	75	12.02	34.781	26.43	162.16	0.126	14985						
OBS	98	11.41	34.851	26.60			14968						
ISL	100	11.37	34.854	26.61	145.75	0.164	14967						
ISL	125	10.92	34.871	26.71	137.14	0.200	14956						
OBS	146	10.61	34.854	26.75			14948						
ISL	150	10.55	34.846	26.76	133.18	0.233	14946						
OBS	195	9.89	34.742	26.79			14929	575					
ISL	200	9.83	34.734	26.79	130.60	0.299	14927						
ISL	250	9.34	34.671	26.83	128.28	0.364	14916						
OBS	291	9.02	34.636	26.85			14911	574					
ISL	300	8.94	34.627	26.86	126.26	0.428	14909						
OBS	391	8.26	34.544	26.90			14897	553					
ISL	400	8.21	34.539	26.90	123.29	0.552	14897						
ISL	500	7.74	34.491	26.93	121.40	0.675	14895						
OBS	582	7.44	34.469	26.96			14896	540					
ISL	600	7.37	34.464	26.97	119.62	0.795	14897						
ISL	700	6.98	34.440	27.00	117.22	0.914	14898						
OBS	776	6.66	34.425	27.03			14897	527					
ISL	800	6.55	34.419	27.04	113.97	1.029	14897						
ISL	900	6.02	34.401	27.10	109.25	1.141	14892						
OBS	969	5.60	34.393	27.14			14887	492					
ISL	1000	5.35	34.393	27.18	101.85	1.246	14881						
ISL	1100	4.56	34.397	27.27	92.15	1.343	14866						
OBS	1132	4.31	34.401	27.30			14861						
ISL	1200	4.05	34.410	27.33	85.76	1.432	14862						
ISL	1250	3.88	34.418	27.36	83.41	1.475	14863						
ISL	1300	3.73	34.429	27.38	81.09	1.516	14865						
ISL	1400	3.46	34.456	27.43	76.58	1.595	14871						
OBS	1451	3.35	34.473	27.45			14875	411					
ISL	1500	3.13	34.492	27.49	70.57	1.668	14874						
OBS	1511	3.08	34.496	27.50			14874						
ISL	1750	2.64	34.562	27.59	60.95	1.833	14896						
OBS	1847	2.60	34.584	27.61			14911						
OBS	1947	2.48	34.609	27.64			14924	404					
ISL	2000	2.42	34.622	27.66	55.16	1.978	14930						
OBS	2046	2.38	34.634	27.67			14936						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 566	24MAY1966	0.6	42 55.0S	176 5.0W	461	877	7	17				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	13.4	10.5		11	6	10	2		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ mol/l	NITR 10 $\mu$ mol/l	SILIC $\mu$ mol/l	INT M	DD
OBS	0	13.99	35.061	26.25			15042	598					2
ISL	0	13.99	0.000	0.00	0.00	0.000	0						
OBS	10	14.01	35.008	26.21			15044	591					
ISL	10	14.01	35.008	26.21	181.97	0.009	15044						
ISL	20	14.02	35.009	26.21	182.40	0.027	15046						
OBS	25	14.01	35.008	26.21			15046	580					
ISL	30	13.95	34.998	26.21	182.14	0.046	15045						
ISL	50	13.69	34.970	26.25	179.59	0.082	15040						
OBS	51	13.68	35.027	26.29			15040	570					2
ISL	75	13.57	34.960	26.26	178.49	0.126	15039						
OBS	76	13.56	34.959	26.27			15039						
ISL	100	13.07	35.042	26.43	163.38	0.169	15028						
OBS	102	13.03	35.049	26.44			15027	553					
ISL	125	13.50	35.026	26.33	173.78	0.211	15046						
ISL	150	13.91	34.970	26.20	186.76	0.256	15063						
OBS	154	13.97	34.958	26.18			15065	552					
ISL	200	11.65	34.946	26.63	146.40	0.340	14995						
OBS	206	11.30	34.945	26.70			14983						
ISL	250	10.73	34.875	26.75	136.51	0.410	14969						
OBS	259	10.70	34.860	26.74			14970	519					
OBS	300	10.19	34.842	26.82			14958	539					
ISL	300	10.19	34.842	26.82	130.77	0.477	14958						
OBS	364	9.72	34.746	26.82			14950	519					
ISL	400	9.35	34.711	26.85	128.53	0.607	14942						
OBS	416	9.19	34.698	26.87			14938						
OBS	468	8.86	34.662	26.90			14934						
ISL	500	8.67	34.648	26.92	124.18	0.733	14932						
OBS	520	8.55	34.638	26.93			14931	494					
OBS	571	8.20	34.592	26.94			14925						
ISL	600	8.03	34.582	26.96	120.80	0.856	14923						
OBS	622	0.00	34.575	0.00			0						
OBS	671	7.69	34.538	26.98			14922						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 23	SER 567	26MAY1966	2.3	41 45.0S	178 15.0W	461	2698	20	19				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	12.5	9.9		19	6	16	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 <sup>-2</sup> $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DD
OBS	0	14.32	34.984	26.13			15052	595					
ISL	0	14.32	34.984	26.13	189.69	0.000	15052						
ISL	10	14.34	34.987	26.12	190.14	0.019	15054						
ISL	20	14.35	34.987	26.12	190.60	0.038	15056						
OBS	24	14.35	34.988	26.12			15057						
ISL	30	14.34	34.985	26.12	190.94	0.057	15058						
OBS	47	14.33	34.982	26.12			15060	580					
ISL	50	14.34	34.978	26.12	192.00	0.095	15061						
OBS	70	14.38	35.009	26.13			15066	587					
ISL	75	14.40	35.078	26.18	186.55	0.143	15068						
OBS	93	14.19	35.270	26.37			15067						
ISL	100	13.81	35.206	26.40	166.04	0.187	15055						
OBS	116	12.87	35.009	26.44			15023						
ISL	125	12.57	34.981	26.48	159.06	0.227	15014						
OBS	139	12.25	34.976	26.54			15006						
ISL	150	12.09	34.974	26.57	151.15	0.266	15002						
OBS	185	11.75	34.978	26.64			14996	523					
ISL	200	11.58	34.965	26.66	143.92	0.340	14993						
ISL	250	11.00	34.900	26.72	139.39	0.411	14979						
OBS	275	10.69	34.857	26.74			14972	490					
ISL	300	10.33	34.814	26.77	135.13	0.479	14963						
OBS	367	9.38	34.705	26.85			14938						
ISL	400	9.04	34.668	26.87	126.61	0.610	14930						
ISL	500	8.17	34.586	26.94	120.98	0.734	14913						
OBS	552	7.83	34.561	26.98			14908						
ISL	600	7.50	34.539	27.01	116.03	0.853	14903						
ISL	700	6.86	34.507	27.07	110.53	0.966	14894						
OBS	736	6.64	34.500	27.10			14891						
ISL	800	6.21	34.489	27.14	104.01	1.073	14884						
ISL	900	5.55	34.481	27.22	96.93	1.174	14874						
OBS	918	5.44	34.481	27.23			14873	423					
ISL	1000	4.99	34.484	27.29	90.37	1.267	14868						
ISL	1100	4.48	34.496	27.36	83.89	1.354	14864						
OBS	1104	4.46	34.497	27.36			14864	404					
ISL	1200	3.96	34.520	27.43	76.41	1.435	14859						
ISL	1250	3.72	34.534	27.47	72.89	1.472	14857						
OBS	1287	3.55	34.544	27.49			14857						
ISL	1300	3.50	34.547	27.50	69.73	1.508	14857						
ISL	1400	3.20	34.566	27.54	65.27	1.575	14861						
OBS	1472	3.02	34.579	27.57			14866						
ISL	1500	2.95	34.584	27.58	61.59	1.638	14868						
OBS	1657	2.60	34.612	27.63			14879						
ISL	1750	2.45	34.626	27.66	53.99	1.783	14889						
OBS	1848	2.33	34.637	27.68			14901						
ISL	2000	2.20	34.647	27.69	50.59	1.914	14921						
OBS	2039	2.18	34.648	27.70			14927						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 568	17 JUL 1966	20.6	39 57.0S	150 1.0W	423	5184	50	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	10.9	6.4		19	3	21	3		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	11.89	34.455	26.21			14964						
ISL	0	11.89	34.455	26.21	181.97	0.000	14964						
ISL	10	11.88	34.455	26.21	182.05	0.018	14965						
ISL	20	11.87	34.454	26.21	182.14	0.036	14967						
ISL	30	11.86	34.454	26.21	182.22	0.055	14968						
ISL	50	11.83	34.452	26.21	182.38	0.091	14970						
OBS	53	11.83	34.452	26.22			14971	626					
ISL	75	11.80	34.449	26.22	182.60	0.137	14973						
ISL	100	11.82	34.447	26.21	183.77	0.183	14978						
OBS	105	11.76	34.447	26.22			14977						
ISL	125	10.77	34.448	26.41	165.76	0.226	14945						
ISL	150	9.47	34.451	26.63	144.50	0.265	14902						
OBS	157	9.09	34.453	26.70			14889	630					
OBS	199	8.39	34.471	26.82			14870	595					
ISL	200	8.38	34.471	26.82	127.16	0.333	14869						
ISL	250	7.88	34.478	26.90	120.26	0.395	14859						
OBS	252	7.87	34.478	26.90			14859						
ISL	300	7.78	34.482	26.92	119.33	0.455	14863						
OBS	303	7.78	34.482	26.92			14864						
ISL	400	7.56	34.461	26.94	119.30	0.574	14871						
OBS	406	7.54	34.459	26.94			14871						
ISL	500	7.16	34.418	26.96	118.35	0.693	14871						
OBS	507	7.13	34.415	26.96			14871						
ISL	600	6.88	34.395	26.98	117.58	0.811	14876						
OBS	608	6.86	34.394	26.98			14877						
ISL	700	6.47	34.367	27.01	115.38	0.927	14876						
ISL	800	6.00	34.341	27.05	112.04	1.041	14874						
OBS	811	5.94	34.338	27.06			14873	566					
ISL	900	5.47	34.335	27.12	106.56	1.150	14869						
ISL	1000	4.98	34.332	27.17	101.35	1.254	14865						
OBS	1012	0.00	34.332	0.00			0	510					
ISL	1100	4.51	34.347	27.23	95.29	1.353	14863						
ISL	1200	4.09	34.379	27.31	88.44	1.444	14862						
ISL	1250	3.88	34.401	27.34	84.76	1.488	14863						
OBS	1287	0.00	34.419	0.00			0	428					
ISL	1300	3.69	34.430	27.39	80.62	1.529	14863						
ISL	1400	3.33	34.507	27.48	71.20	1.605	14866						
ISL	1500	3.00	34.578	27.57	62.67	1.672	14870						
OBS	1540	2.88	34.605	27.60			14872	389					
ISL	1750	2.60	34.608	27.63	57.06	1.822	14895						
OBS	1794	2.56	34.602	27.63			14901	377					
ISL	2000	2.38	34.627	27.66	54.28	1.961	14928						
OBS	2047	2.35	34.634	27.67			14935	351					
ISL	2250	2.20	34.645	27.69	51.88	2.093	14964						
OBS	2302	2.17	34.647	27.70			14971	348					
ISL	2500	2.06	34.659	27.72	50.03	2.221	15000						
OBS	2560	2.03	34.663	27.72			15010	348					
ISL	2750	1.95	34.677	27.74	48.28	2.344	15039						
ISL	3000	1.85	34.693	27.76	46.62	2.462	15078						
OBS	3079	1.82	34.698	27.77			15091	407					
ISL	3250	1.75	34.703	27.78	45.26	2.577	15117						
ISL	3500	1.62	34.709	27.79	43.81	2.689	15156						
OBS	3600	1.57	34.737	27.82			15171						
ISL	3750	1.46	34.713	27.80	41.76	2.795	15193						
ISL	4000	1.29	34.715	27.82	39.62	2.897	15229						
OBS	4114	1.22	34.715	27.82			15247	460					
ISL	4500	1.13	34.723	27.84	37.56	3.090	15312						
OBS	4623	1.13	34.724	27.84			15333	458					
ISL	5000	1.15	34.716	27.83	39.16	3.282	15402						
OBS	5026	1.15	34.715	27.83			15406						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 569	20 JUL 1966	10.2	42 38.0S	148 0.0W	458	5371	55	6				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	12.2	10.0		34	8	35	5		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DO
OBS	975	4.84	34.376	27.22			14857	549					
ISL	1000	4.69	34.380	27.24	94.10		14909						
ISL	1100	4.13	34.398	27.32	86.80		14903						
ISL	1200	3.68	34.417	27.38	80.62		14901						
ISL	1250	3.49	34.428	27.40	77.93		14901						
OBS	1259	3.46	0.000	0.00			0						
ISL	1300	3.34	34.439	27.43	75.69		14904						
ISL	1400	3.10	34.462	27.47	71.75		14910						
ISL	1500	2.92	34.487	27.51	68.42		14920						
OBS	1533	2.88	34.496	27.52			14870	402					
ISL	1750	2.59	34.560	27.59	60.49		14949						
OBS	1804	2.54	34.575	27.61			14902	399					
ISL	2000	2.35	34.607	27.65	55.40		14982						
OBS	2346	2.29	0.000	0.00			0						
OBS	2124	2.26	34.616	27.67			14945	384					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 570	22JUL1966	4.4	45 5.0S	145 11.0W	458	5160	48	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.0	9.5		24	5	28	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>2</sup> ·m/sec	OXYG 10 <sup>2</sup> ·ml/l	PHOS 10 <sup>2</sup> · $\mu$ gal/l	NITR 10 <sup>2</sup> · $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
OBS	0	9.39	34.361	26.58			14873						
ISL	0	9.39	34.361	26.58	146.94	0.000	14873						
ISL	10	9.39	34.359	26.57	147.30	0.015	14875						
ISL	20	9.39	34.360	26.57	147.42	0.029	14877						
ISL	30	9.39	34.359	26.57	147.67	0.044	14878						
ISL	50	9.39	34.358	26.57	148.16	0.074	14881						
OBS	52	9.39	34.358	26.57			14882	669			5		
ISL	75	9.27	34.362	26.60	146.53	0.111	14881						
ISL	100	9.03	34.373	26.64	142.40	0.147	14876						
OBS	103	8.99	34.375	26.65			14875	643			0		
ISL	125	8.54	34.398	26.74	133.55	0.181	14862						
ISL	150	8.04	34.426	26.84	124.60	0.214	14848						
OBS	155	7.94	34.432	26.86			14845				5		
ISL	200	7.70	34.458	26.91	118.27	0.274	14843						
OBS	206	7.69	34.459	26.92			14844	644			6		
ISL	250	7.52	34.453	26.94	116.89	0.333	14844						
OBS	257	7.49	34.450	26.94			14845				9		
ISL	300	7.32	34.436	26.95	116.17	0.391	14845						
OBS	308	7.29	34.433	26.95			14845				9		
ISL	400	7.05	34.417	26.97	115.32	0.507	14850						
OBS	409	7.03	34.416	26.98			14851	613			15		
ISL	500	6.81	34.395	26.99	115.11	0.622	14857						
OBS	510	6.78	34.392	26.99			14858				14		
ISL	600	6.52	34.371	27.01	114.30	0.737	14862						
OBS	611	6.48	34.368	27.01			14862				18		
ISL	700	6.12	34.345	27.04	112.14	0.850	14862						
ISL	800	5.66	34.327	27.09	108.46	0.960	14860						
OBS	813	5.59	34.325	27.09			14859				24		
ISL	900	5.12	34.330	27.15	102.40	1.066	14855						
ISL	1000	4.58	34.334	27.22	96.20	1.165	14849						
OBS	1015	4.50	34.336	27.23			14848	515			38		
ISL	1100	4.06	34.354	27.29	89.12	1.258	14845						
ISL	1200	3.61	34.382	27.36	82.31	1.344	14843						
OBS	1249	3.41	34.399	27.39			14843	494					
ISL	1250	3.41	34.399	27.39	79.02	1.384	14843						
ISL	1300	3.25	34.418	27.42	76.19	1.423	14845						
ISL	1400	3.00	34.456	27.47	71.06	1.496	14851						
OBS	1485	2.85	34.490	27.51			14860	478			60		
ISL	1500	2.83	34.496	27.52	66.62	1.565	14861						
OBS	1726	2.57	34.577	27.61			14889	419					
ISL	1750	2.55	34.583	27.61	58.28	1.721	14893						
OBS	1962	2.37	34.624	27.66			14922	400					
ISL	2000	2.33	34.628	27.67	53.54	1.861	14926						
OBS	2199	2.13	34.642	27.70			14952	391			90		
ISL	2250	2.10	34.645	27.70	50.58	1.991	14960						
OBS	2432	2.04	34.631	27.69			14988	391			96		2
ISL	2500	2.01	34.661	27.72	49.22	2.116	14998						
ISL	2750	1.89	34.675	27.74	47.60	2.237	15037						
OBS	2896	1.82	34.640	27.72			15058	437					2
ISL	3000	1.78	34.687	27.76	46.13	2.354	15075						
ISL	3250	1.69	34.697	27.77	44.88	2.468	15115						
OBS	3372	1.64	34.701	27.78			15134				97		
ISL	3500	1.57	34.706	27.79	43.22	2.578	15154						
ISL	3750	1.43	34.714	27.81	41.26	2.684	15192						
OBS	3849	1.38	34.717	27.81			15207	480			102		
ISL	4000	1.31	34.719	27.82	39.62	2.785	15231						
OBS	4323	1.20	34.718	27.83			15283				106		
ISL	4500	1.17	0.000	0.00	0.00	0.000	0						
OBS	4778	1.18	0.000	0.00			0	450			105		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 571	23JUL1966	20.0	42 34.0S	144 57.0W	458	5490	51	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	8.9	3.5		1	4	23	3		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	10.63	34.392	26.39			14919						
ISL	0	10.63	34.392	26.39	164.70	0.000	14919						
ISL	10	10.63	34.387	26.38	165.31	0.017	14921						
ISL	20	10.63	34.389	26.39	165.43	0.033	14922						
ISL	30	10.64	34.387	26.38	165.80	0.050	14924						
ISL	50	10.64	34.384	26.38	166.53	0.083	14927						
OBS	53	10.64	34.384	26.38			14928					5	
ISL	75	10.43	34.394	26.42	162.90	0.124	14924						
ISL	100	10.04	34.413	26.51	155.52	0.164	14914						
OBS	106	9.92	34.419	26.53			14911					4	
ISL	125	9.39	34.446	26.64	143.10	0.201	14895						
ISL	150	8.71	34.480	26.78	130.65	0.235	14874						
OBS	157	8.53	34.489	26.81			14868						
ISL	200	8.13	34.506	26.89	120.98	0.298	14861						
OBS	209	8.10	34.506	26.89			14861	614				8	
ISL	250	7.85	34.494	26.92	118.56	0.358	14858						
OBS	261	7.79	34.489	26.92			14857					7	
ISL	300	7.58	34.468	26.94	117.48	0.417	14855						
OBS	314	7.51	34.460	26.94			14855	618					
ISL	400	7.17	34.429	26.97	116.21	0.534	14855						
OBS	414	7.13	34.425	26.97			14856	610				12	
ISL	500	6.90	34.401	26.98	115.91	0.650	14861						
OBS	516	6.85	34.397	26.99			14861					16	
ISL	600	6.47	34.382	27.03	112.80	0.764	14860						
OBS	618	6.38	34.379	27.03			14859					19	
ISL	700	6.07	34.357	27.06	110.55	0.876	14860						
ISL	800	5.67	34.334	27.09	108.08	0.985	14860						
OBS	821	5.58	34.330	27.10			14860	576					
ISL	900	5.13	34.334	27.15	102.16	1.091	14855						
ISL	1000	4.55	34.334	27.22	95.69	1.189	14848						
OBS	1023	4.41	34.339	27.24			14846	551				40	
OBS	1098	4.05	34.366	27.30			14844	504					
ISL	1100	4.04	34.367	27.30	87.93	1.281	14844						
ISL	1200	3.64	34.402	27.37	81.28	1.366	14844						
ISL	1250	3.47	34.420	27.40	78.32	1.406	14846						
ISL	1300	3.32	34.437	27.43	75.59	1.444	14848						
OBS	1371	3.14	34.461	27.46			14852	481				58	
ISL	1400	3.08	34.471	27.48	70.88	1.517	14855						
ISL	1500	2.92	34.505	27.52	67.01	1.586	14865						
OBS	1644	2.75	34.550	27.57			14883	456				77	
ISL	1750	2.63	34.577	27.60	59.76	1.745	14896						
OBS	1912	2.48	34.610	27.64			14918	417				80	
ISL	2000	2.41	34.617	27.65	55.39	1.889	14930						
ISL	2250	2.23	34.630	27.68	53.33	2.025	14965						
OBS	2462	0.00	34.633	0.00			0	377					
ISL	2500	2.07	34.637	27.70	51.80	2.156	15001						
ISL	2750	1.94	34.665	27.73	48.98	2.282	15039						
ISL	3000	1.83	34.693	27.76	46.35	2.401	15078						
OBS	3006	1.83	34.694	27.76			15078					114	
ISL	3250	1.72	34.710	27.78	44.42	2.515	15116						
ISL	3500	1.60	34.718	27.80	42.85	2.624	15155						
OBS	3547	1.58	34.719	27.80			15162	445				98	
ISL	3750	1.44	34.716	27.81	41.27	2.729	15192						
ISL	4000	1.29	34.711	27.82	39.83	2.830	15229						
OBS	4082	1.24	34.709	27.82			15242	456				102	
ISL	4500	1.14	34.713	27.83	38.30	3.026	15312						
OBS	4609	1.13	34.715	27.83			15331	544				101	
ISL	5000	1.11	34.714	27.83	38.76	3.218	15400						
OBS	5124	1.12	34.712	27.83			15423	546				101	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 572	25 JUL 1966	13.9	40 4.0S	144 49.0W	458	5592	53	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.2	3.7		25	5	23	4		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	12.34	34.514	26.17			14980	662			4		
ISL	0	12.34	34.514	26.17	185.82	0.000	14980						
ISL	10	12.34	34.514	26.17	186.07	0.019	14982						
ISL	20	12.34	34.514	26.17	186.32	0.037	14984						
ISL	30	12.34	34.514	26.17	186.58	0.056	14985						
OBS	48	12.34	34.514	26.17			14988				6		
ISL	50	12.34	34.514	26.17	187.10	0.093	14988						
ISL	75	12.46	34.515	26.14	189.92	0.140	14997						
OBS	93	12.36	34.513	26.16			14996	633			7		
ISL	100	12.11	34.508	26.21	184.49	0.187	14989						
ISL	125	11.11	34.491	26.38	168.45	0.231	14958						
OBS	136	10.62	34.484	26.46			14942	627			8		
ISL	150	10.28	34.487	26.52	155.15	0.272	14932						
OBS	180	9.71	34.501	26.63			14916	647			9		
ISL	200	9.28	34.508	26.71	138.37	0.345	14904						
OBS	226	8.79	34.515	26.79			14890				10		
ISL	250	8.49	34.515	26.84	126.50	0.411	14882						
OBS	271	8.28	34.511	26.87			14878	556					
ISL	300	8.04	34.498	26.89	121.99	0.473	14874						
OBS	362	7.66	34.464	26.92			14869				12		
ISL	400	7.45	34.446	26.94	118.81	0.594	14866						
OBS	450	7.21	34.427	26.96			14865				17		
ISL	500	7.05	34.419	26.98	116.79	0.712	14867						
OBS	548	6.92	34.413	26.99			14870				20		
ISL	600	6.72	34.396	27.00	115.33	0.828	14870						
ISL	700	6.30	34.363	27.03	113.15	0.942	14869						
OBS	755	6.03	34.346	27.05			14868				21		
ISL	800	5.80	34.340	27.08	109.47	1.053	14866						
ISL	900	5.27	34.340	27.14	103.58	1.160	14861						
OBS	969	4.89	34.337	27.18			14857	518			40		
ISL	1000	4.70	34.339	27.21	97.34	1.260	14854						
ISL	1100	4.14	34.354	27.28	90.13	1.354	14848						
OBS	1178	3.74	34.373	27.34			14844	541					
ISL	1200	3.65	34.382	27.35	82.92	1.440	14844						
ISL	1250	3.47	34.402	27.39	79.62	1.481	14845						
ISL	1300	3.31	34.423	27.42	76.49	1.520	14847						
ISL	1400	3.06	34.470	27.48	70.77	1.594	14854						
OBS	1407	3.05	34.473	27.48			14855	432			63		
ISL	1500	2.89	34.511	27.53	66.25	1.662	14864						
OBS	1636	2.72	34.559	27.58			14880	400			77		
ISL	1750	2.65	34.587	27.61	59.21	1.819	14897						
OBS	1866	0.00	34.609	0.00			0				91		
ISL	2000	2.51	34.613	27.64	56.91	1.964	14934						
ISL	2250	2.41	34.622	27.66	56.32	2.106	14972						
OBS	2337	2.39	0.000	0.00			0						
ISL	2500	2.23	34.630	27.68	54.41	2.244	15007						
ISL	2750	1.99	34.638	27.70	51.56	2.377	15040						
OBS	2821	1.92	0.000	0.00			0				121		
ISL	3000	1.83	34.646	27.72	49.65	2.503	15077						
ISL	3250	1.73	34.654	27.74	48.43	2.626	15116						
OBS	3327	1.70	34.657	27.74			15128	414					
ISL	3500	1.61	0.000	0.00	0.00	0.000	0						
ISL	3750	1.49	0.000	0.00	0.00	0.000	0						
OBS	3853	1.45	34.698	27.79			15210	449			104		2
ISL	4000	1.36	0.000	0.00	0.00	0.000	0						
OBS	4482	1.15	34.701	27.82			15309				106		2
ISL	4500	1.14	0.000	0.00	0.00	0.000	0						
OBS	4922	1.11	34.704	27.82			15386	458			116		2
ISL	5000	1.11	0.000	0.00	0.00	0.000	0						
OBS	5338	1.17	34.699	27.81			15463	454					2

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 573	27 JUL 1966	23.2	41 33.0S	142 25.0W	458	5265	33	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.7	4.9		23	6	25	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	10.76	34.376	26.35			14923						
ISL	0	10.76	34.376	26.35	168.07	0.000	14923						
ISL	10	10.76	34.375	26.35	168.43	0.017	14925						
ISL	20	10.76	34.374	26.35	168.77	0.034	14927						
ISL	30	10.77	34.373	26.35	169.09	0.051	14928						
ISL	50	10.77	34.372	26.35	169.65	0.084	14932						
OBS	54	10.77	34.372	26.35			14932					2	
ISL	75	10.77	34.373	26.35	170.14	0.127	14936						
ISL	100	10.77	34.373	26.35	170.74	0.170	14940						
OBS	108	10.77	34.375	26.35			14941					5	
ISL	125	10.19	34.391	26.46	160.18	0.211	14923						
ISL	150	9.28	34.418	26.64	143.90	0.249	14894						
OBS	161	8.85	34.432	26.72			14880	625				6	
ISL	200	8.28	34.471	26.84	125.78	0.316	14866						
OBS	214	8.18	34.481	26.86			14864	594				8	
ISL	250	7.89	34.483	26.91	120.02	0.378	14859						
OBS	266	7.79	34.478	26.92			14858					7	
ISL	300	7.60	34.463	26.93	118.13	0.437	14856						
OBS	318	7.51	34.453	26.94			14855	589				8	
ISL	400	7.17	34.424	26.96	116.53	0.555	14855						
OBS	421	7.10	34.418	26.97			14856					11	
ISL	500	6.84	34.392	26.98	115.83	0.671	14859						
OBS	524	6.77	34.385	26.99			14859					8	
ISL	600	6.51	34.369	27.01	114.39	0.786	14862						
OBS	626	6.42	34.364	27.02			14862					12	
ISL	700	6.14	34.345	27.04	112.30	0.899	14863						
ISL	800	5.69	34.328	27.08	108.89	1.010	14861						
OBS	829	5.55	34.324	27.10			14860	542				23	
ISL	900	5.12	34.328	27.15	102.50	1.116	14855						
ISL	1000	4.53	34.345	27.23	94.78	1.214	14847						
OBS	1030	4.36	34.352	27.26			14845	514				38	
ISL	1100	4.06	34.368	27.30	87.99	1.306	14844						
ISL	1200	3.69	34.398	27.36	82.24	1.391	14846						
ISL	1250	3.55	34.415	27.39	79.57	1.431	14849						
OBS	1296	3.43	34.432	27.41			14852					65	
ISL	1300	3.42	34.434	27.42	77.00	1.470	14852						
ISL	1400	3.23	34.483	27.47	71.77	1.545	14861						
ISL	1500	3.07	34.529	27.53	67.10	1.614	14872						
OBS	1546	3.01	34.550	27.55			14877	421				88	
ISL	1750	2.68	34.593	27.61	59.20	1.772	14898						
OBS	1799	2.61	34.599	27.62			14904	400				107	
ISL	2000	2.41	34.622	27.66	55.04	1.915	14930						
ISL	2250	2.23	34.641	27.69	52.54	2.049	14965						
OBS	2310	2.20	34.644	27.69			14974	386					
ISL	2500	2.08	34.657	27.71	50.43	2.178	15001						
ISL	2750	1.94	34.675	27.74	48.25	2.301	15038						
OBS	2824	1.90	34.679	27.74			15050	422				115	
ISL	3000	1.82	0.000	0.00	0.00	0.000	0						
ISL	3250	1.71	0.000	0.00	0.00	0.000	0						
OBS	3340	1.68	34.695	27.77			15130					115	2

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 574	29 JUL 1966	6.9	43 0.0S	139 59.0W	457	5323	34	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.0	0.6		24	6	22	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	9.26	34.331	26.57			14868						
ISL	0	9.26	34.331	26.57	147.14	0.000	14868						
ISL	10	9.26	34.328	26.57	147.63	0.015	14870						
ISL	20	9.27	34.325	26.57	148.08	0.030	14871						
ISL	30	9.27	34.322	26.57	148.48	0.044	14873						
ISL	50	9.27	34.319	26.56	149.16	0.074	14876						
OBS	52	9.27	34.319	26.56			14877						
ISL	75	9.27	34.320	26.56	149.61	0.111	14881						
ISL	100	9.27	34.321	26.56	150.03	0.149	14885						
OBS	105	9.27	34.321	26.56			14886						
ISL	125	8.79	34.352	26.66	140.88	0.185	14871						
ISL	150	8.17	34.391	26.79	129.06	0.219	14852						
OBS	156	8.01	34.401	26.82			14847						
ISL	200	7.73	34.419	26.88	121.62	0.282	14844						
OBS	207	7.72	34.419	26.88			14845						
ISL	250	7.45	34.417	26.92	118.58	0.342	14841						
OBS	257	7.41	34.390	26.90			14841						2
ISL	300	7.23	34.416	26.95	116.33	0.400	14841						
OBS	308	7.20	34.415	26.95			14841						
ISL	400	6.95	34.415	26.99	114.07	0.516	14846						
OBS	415	6.91	34.414	26.99			14847						
ISL	500	6.66	34.399	27.01	112.67	0.629	14851						
OBS	518	6.60	34.395	27.02			14852						
ISL	600	6.36	34.373	27.03	111.95	0.741	14856						
OBS	622	6.29	34.367	27.04			14856						
ISL	700	6.01	34.339	27.05	111.05	0.853	14858						
ISL	800	5.54	34.313	27.09	107.90	0.962	14855						
OBS	833	5.36	34.308	27.11			14853						
ISL	900	4.90	34.315	27.17	100.62	1.067	14846						
OBS	929	4.73	34.320	27.19			14843						
OBS	990	4.57	34.326	27.21			14847						
ISL	1000	4.54	34.330	27.22	95.94	1.165	14847						
OBS	1042	4.35	34.315	27.23			14846						2
OBS	1095	3.93	34.366	27.31			14838						
ISL	1100	3.90	34.367	27.31	86.27	1.256	14838						
ISL	1200	3.55	34.377	27.36	82.08	1.340	14840						
OBS	1227	3.51	34.378	27.36			14843						
ISL	1250	3.46	34.384	27.37	80.77	1.381	14844						
ISL	1300	3.35	34.396	27.39	78.88	1.421	14848						
ISL	1400	3.15	34.423	27.43	75.27	1.498	14857						
OBS	1433	3.10	0.000	0.00			0						
ISL	1500	2.96	34.452	27.47	71.39	1.571	14866						
ISL	1750	2.50	34.536	27.58	61.18	1.737	14890						
OBS	1764	2.48	34.541	27.59			14892						
ISL	2000	2.26	34.598	27.65	54.86	1.882	14923						
OBS	2095	2.20	34.617	27.67			14937						
ISL	2250	2.09	34.638	27.70	50.97	2.014	14959						
OBS	2427	1.99	34.655	27.72			14985						
ISL	2500	1.95	34.660	27.73	48.53	2.139	14996						
ISL	2750	1.83	34.674	27.75	46.87	2.258	15034						
OBS	2779	1.82	34.675	27.75			15039						
ISL	3000	1.74	34.688	27.76	45.47	2.373	15074						
OBS	3179	1.68	34.698	27.78			15102						
ISL	3250	1.65	34.702	27.78	43.96	2.485	15113						
OBS	3389	1.59	34.710	27.79			15135						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 575	31JUL1966	15.7	40 29.0S	139 59.0W	457	5252	52	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	8.5	3.5		34	3	0	0	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 <sup>-2</sup> $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
OBS	0	10.74	34.389	26.37			14923						
ISL	0	10.74	34.389	26.37	166.77	0.000	14923						
ISL	10	10.74	34.389	26.37	167.01	0.017	14924						
ISL	20	10.74	34.389	26.37	167.25	0.033	14926						
ISL	30	10.74	34.388	26.37	167.49	0.050	14928						
ISL	50	10.74	34.388	26.37	167.96	0.084	14931						
OBS	53	10.74	34.388	26.37			14931						
ISL	75	10.66	34.382	26.38	167.55	0.126	14932						
ISL	100	10.60	34.381	26.38	167.26	0.167	14934						
OBS	106	10.54	34.380	26.39			14933						
ISL	125	10.01	34.391	26.50	157.21	0.208	14917						
ISL	150	9.27	34.411	26.63	144.33	0.246	14894						
OBS	159	8.99	34.420	26.69			14885						
ISL	200	8.43	34.459	26.80	128.89	0.314	14871						
OBS	210	8.35	34.468	26.82			14870						
ISL	250	8.03	34.490	26.89	121.55	0.377	14865						
OBS	261	7.96	34.492	26.90			14864						
ISL	300	7.74	34.481	26.93	118.80	0.437	14862						
OBS	311	7.68	34.475	26.93			14861						
ISL	400	7.22	34.431	26.96	116.68	0.554	14857						
OBS	411	7.17	34.426	26.96			14857						
ISL	500	6.89	34.403	26.99	115.61	0.671	14860						
OBS	507	6.87	34.402	26.99			14861						
ISL	600	6.55	34.375	27.01	114.49	0.786	14863						
OBS	606	6.53	34.373	27.01			14863						
ISL	700	6.15	34.349	27.04	112.31	0.899	14864						
ISL	800	5.69	34.331	27.09	108.52	1.009	14861						
OBS	803	5.67	34.331	27.09			14861						
ISL	900	5.12	34.329	27.15	102.43	1.115	14855						
OBS	929	4.96	34.330	27.17			14853						
ISL	1000	4.65	34.337	27.21	96.81	1.215	14852						
OBS	1002	4.64	34.337	27.21			14852						
ISL	1100	4.14	34.361	27.29	89.51	1.308	14848						
OBS	1185	3.72	34.390	27.35			14845						
ISL	1200	3.67	34.396	27.36	82.02	1.393	14845						
ISL	1250	3.50	34.416	27.39	78.91	1.434	14847						
ISL	1300	3.35	34.436	27.42	75.99	1.472	14849						
ISL	1400	3.12	34.478	27.48	70.79	1.546	14856						
OBS	1436	3.05	34.493	27.50			14860						
ISL	1500	2.94	34.516	27.53	66.48	1.614	14866						
OBS	1689	2.68	34.576	27.60			14888						
ISL	1750	2.61	34.588	27.61	58.65	1.771	14895						
ISL	2000	2.35	34.628	27.67	53.76	1.911	14927						
OBS	2193	2.19	0.000	0.00			0						
ISL	2250	2.15	34.655	27.71	50.46	2.042	14962						
ISL	2500	2.01	34.670	27.73	48.57	2.165	14998						
OBS	2707	1.92	34.673	27.74			15030						
ISL	2750	1.90	34.676	27.74	47.68	2.286	15037						
ISL	3000	1.81	34.694	27.76	46.04	2.403	15077						
OBS	3215	1.73	34.706	27.78			15111						
ISL	3250	1.71	34.708	27.78	44.42	2.516	15116						
ISL	3500	1.56	34.717	27.80	42.35	2.624	15153						
OBS	3723	1.43	34.722	27.81			15187						
ISL	3750	1.41	34.722	27.81	40.43	2.728	15191						
ISL	4000	1.28	34.720	27.82	39.13	2.827	15229						
OBS	4228	1.19	34.717	27.83			15266						
ISL	4500	1.14	34.719	27.83	37.92	3.020	15312						
OBS	4734	1.13	34.720	27.83			15353						
ISL	5000	1.15	34.718	27.83	39.09	3.213	15402						
OBS	5233	1.20	34.715	27.82			15446						

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 576	2AUG1966	3.3	38 2.0S	140 3.0W	422	4909	46	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	11.8	7.6		6	6	6	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	12.60	34.604	26.18			14990	636					
ISL	0	12.60	34.604	26.18	184.03	0.000	14990						
ISL	10	12.59	34.599	26.18	184.41	0.018	14991						
ISL	20	12.57	34.593	26.18	184.73	0.037	14992						
ISL	30	12.54	34.586	26.18	185.01	0.055	14993						
ISL	50	12.47	34.569	26.18	185.44	0.092	14994						
OBS	52	12.46	34.567	26.18			14994	643					
ISL	75	12.38	34.536	26.17	186.89	0.139	14994						
ISL	100	12.17	34.505	26.19	185.95	0.186	14991						
OBS	103	12.14	34.501	26.19			14990						
ISL	125	11.71	34.491	26.27	179.05	0.231	14979						
ISL	150	11.05	34.489	26.39	168.16	0.275	14960						
OBS	154	10.93	34.488	26.41			14956	639					
ISL	200	9.34	34.491	26.69	140.54	0.352	14906						
OBS	203	9.24	34.492	26.70			14903						
ISL	250	8.29	34.512	26.87	123.83	0.418	14875						
OBS	251	8.28	34.512	26.87			14875						
OBS	298	7.78	34.474	26.91			14863	578					
ISL	300	7.77	34.473	26.92	119.77	0.479	14863						
OBS	394	7.27	34.445	26.97			14858						
ISL	400	7.25	34.443	26.97	116.18	0.597	14858						
OBS	490	6.92	34.413	26.99			14860	574					
ISL	500	6.89	34.410	26.99	115.11	0.712	14860						
OBS	586	6.61	34.387	27.01			14863						
ISL	600	6.56	34.381	27.01	114.07	0.827	14863						
ISL	700	6.12	34.348	27.04	111.99	0.940	14862						
OBS	782	5.72	34.333	27.08			14859	552					
ISL	800	5.62	34.335	27.10	107.34	1.050	14858						
OBS	809	0.00	34.336	0.00			0						
ISL	900	5.06	34.336	27.16	101.05	1.154	14852						
OBS	980	4.63	34.338	27.21			14848	546					
ISL	1000	4.55	34.341	27.23	95.20	1.252	14848						
OBS	1050	4.34	34.350	27.26			14848						
ISL	1100	4.09	34.363	27.29	88.86	1.344	14846						
ISL	1200	3.64	34.395	27.36	81.75	1.429	14844						
ISL	1250	3.43	34.414	27.40	78.19	1.469	14844						
OBS	1284	3.29	34.428	27.42			14844						
ISL	1300	3.25	34.435	27.43	74.83	1.508	14845						
ISL	1400	3.03	34.481	27.49	69.55	1.580	14853						
ISL	1500	2.88	34.526	27.54	65.09	1.647	14864						
OBS	1522	2.86	34.536	27.55			14867						
ISL	1750	2.56	34.597	27.63	57.36	1.800	14893						
ISL	2000	2.31	34.635	27.68	52.84	1.938	14925						
OBS	2014	2.30	34.636	27.68			14927	360					
ISL	2250	2.15	34.655	27.71	50.38	2.067	14961						
ISL	2500	2.02	34.666	27.72	49.06	2.191	14999						
OBS	2508	2.02	34.666	27.72			15000						
ISL	2750	1.90	34.675	27.74	47.66	2.312	15037						
ISL	3000	1.78	34.684	27.76	46.30	2.430	15075						
OBS	3003	1.78	34.684	27.76			15075	367					
ISL	3250	1.68	34.696	27.77	44.80	2.543	15114						
ISL	3500	1.58	34.708	27.79	43.29	2.654	15154						
OBS	3506	1.58	34.708	27.79			15155	441					
ISL	3750	1.46	34.713	27.80	41.79	2.760	15193						
ISL	4000	1.35	34.716	27.81	40.41	2.863	15232						
OBS	4014	1.34	34.716	27.82			15234	463					
ISL	4500	1.15	34.715	27.83	38.43	3.060	15312						
OBS	4519	1.15	34.715	27.83			15315	448					
OBS	4619	1.16	34.718	27.83			15334	456					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 577	3AUG1966	18.7	40 24.0S	137 20.0W	457	4831	45	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	10.1	5.6		13	6	12	3		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	10.75	34.341	26.33			14923	649					
ISL	0	10.75	34.341	26.33	170.48	0.000	14923						
ISL	10	10.75	34.341	26.33	170.76	0.017	14924						
ISL	20	10.76	34.341	26.33	171.02	0.034	14926						
ISL	30	10.76	34.341	26.33	171.28	0.051	14928						
OBS	48	10.76	34.341	26.33			14931	662					
ISL	50	10.76	34.341	26.33	171.77	0.086	14931						
ISL	75	10.84	34.341	26.31	173.66	0.129	14938						
OBS	93	10.76	34.342	26.33			14938						
ISL	100	10.60	34.341	26.35	170.19	0.172	14933						
ISL	125	9.92	34.346	26.48	159.01	0.213	14913						
OBS	137	9.53	34.354	26.55			14901						
ISL	150	9.18	34.382	26.63	145.05	0.251	14890						
OBS	181	8.47	34.450	26.79			14870						
ISL	200	8.22	34.467	26.84	125.13	0.318	14863						
OBS	222	8.03	34.475	26.88			14860	662					
ISL	250	7.87	34.476	26.90	120.27	0.380	14858						
OBS	264	7.81	34.473	26.91			14858	627					
ISL	300	7.60	34.462	26.93	118.14	0.439	14856						
OBS	351	7.31	34.442	26.96			14853	588					
ISL	400	7.11	34.425	26.97	115.60	0.556	14853						
OBS	438	6.97	34.412	26.98			14854						
ISL	500	6.71	34.391	27.00	114.05	0.671	14853						
OBS	522	6.62	34.384	27.01			14853						
ISL	600	6.36	34.366	27.03	112.54	0.784	14856						
ISL	700	6.02	34.348	27.06	110.48	0.896	14858						
OBS	711	5.98	34.347	27.06			14858						
ISL	800	5.57	34.333	27.10	106.78	1.005	14856						
ISL	900	5.05	34.326	27.16	101.75	1.109	14852						
OBS	910	5.00	34.326	27.16			14851	566					
ISL	1000	4.49	34.334	27.23	95.03	1.207	14845						
ISL	1100	3.96	34.354	27.30	87.90	1.299	14840						
OBS	1163	3.65	34.373	27.35			14838	5					
ISL	1200	3.51	34.388	27.37	80.70	1.383	14838						
ISL	1250	3.34	34.410	27.41	77.43	1.422	14840						
ISL	1300	3.19	34.433	27.44	74.30	1.460	14842						
ISL	1400	2.95	34.482	27.50	68.49	1.532	14849						
OBS	1404	2.94	34.484	27.50			14850						
ISL	1500	2.78	34.527	27.55	63.73	1.598	14859						
OBS	1647	2.61	34.583	27.61			14878						
ISL	1750	2.52	34.604	27.63	56.46	1.748	14892						
OBS	1892	2.42	34.622	27.66			14912						
ISL	2000	2.32	34.635	27.68	52.92	1.885	14926						
OBS	2138	2.19	34.647	27.70			14944						
ISL	2250	2.12	34.654	27.71	50.14	2.014	14960						
OBS	2386	2.05	34.661	27.72			14981						
ISL	2500	2.00	34.667	27.73	48.66	2.137	14998						
ISL	2750	1.89	34.679	27.75	47.30	2.257	15037						
OBS	2878	1.84	34.685	27.75			15057						
ISL	3000	1.79	34.692	27.76	45.84	2.374	15075						
ISL	3250	1.67	34.703	27.78	44.13	2.486	15114						
OBS	3365	1.61	34.708	27.79			15132						
ISL	3500	1.52	34.711	27.80	42.12	2.594	15151						
ISL	3750	1.37	34.715	27.81	40.19	2.697	15189						
OBS	3850	1.31	34.716	27.82			15204	427					
ISL	4000	1.25	34.716	27.82	38.93	2.796	15228						
OBS	4339	1.19	34.717	27.83			15285	430					
OBS	4486	1.19	34.719	27.83			15312	488					

SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 24	SER 578		5AUG1966	4.4	42 53.0S	134 40.0W	457	5137	49	23			
	AIR TEMP		DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
	6.6		1.2			19	5	20	4	1			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/Sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	9.32	34.307	26.54			14870	683					
ISL	0	9.32	34.307	26.54	149.85	0.000	14870						
ISL	10	9.32	34.306	26.54	150.21	0.015	14872						
ISL	20	9.33	34.304	26.54	150.54	0.030	14874						
ISL	30	9.33	34.304	26.54	150.86	0.045	14875						
ISL	50	9.34	34.303	26.54	151.41	0.075	14879						
OBS	54	9.34	34.303	26.54			14880						
ISL	75	9.34	34.299	26.54	152.19	0.113	14883						
ISL	100	9.20	34.306	26.56	150.03	0.151	14882						
OBS	103	9.17	34.307	26.57			14881	639					
ISL	125	8.66	34.343	26.68	139.48	0.187	14866						
ISL	150	8.05	34.388	26.81	127.59	0.221	14848						
OBS	154	7.95	34.396	26.83			14845	649					
ISL	200	7.56	34.434	26.91	118.14	0.282	14838						
OBS	201	7.56	34.434	26.92			14838						
OBS	250	7.29	34.428	26.95			14835						
ISL	250	7.29	34.428	26.95	115.53	0.340	14835						
OBS	297	7.15	34.423	26.96			14838	608					
ISL	300	7.14	34.422	26.97	114.65	0.398	14838						
OBS	392	6.83	34.399	26.99			14840						
ISL	400	6.81	34.397	26.99	113.44	0.512	14841						
OBS	488	6.55	34.378	27.01			14845						
ISL	500	6.51	34.375	27.01	112.51	0.625	14845						
OBS	587	6.21	34.352	27.04			14847	598					
ISL	600	6.16	34.349	27.04	111.11	0.737	14847						
ISL	700	5.79	34.329	27.07	108.87	0.847	14849						
OBS	789	5.42	34.318	27.11			14848	548					
ISL	800	5.37	34.319	27.11	105.26	0.954	14848						
ISL	900	4.88	34.318	27.17	100.04	1.057	14844						
OBS	995	4.40	34.329	27.23			14841						
ISL	1000	4.37	34.330	27.24	93.86	1.154	14841						
ISL	1100	3.90	34.357	27.31	87.00	1.244	14838						
ISL	1200	3.49	34.388	27.37	80.52	1.328	14838						
ISL	1250	3.30	34.405	27.40	77.41	1.367	14838						
OBS	1292	3.16	34.420	27.43			14839	497					
ISL	1300	3.14	34.422	27.43	74.50	1.405	14840						
ISL	1400	2.91	34.450	27.48	70.40	1.478	14847						
ISL	1500	2.74	34.478	27.51	66.95	1.546	14857						
OBS	1548	2.68	34.491	27.53			14863						
ISL	1750	2.48	34.557	27.60	59.38	1.704	14889						
OBS	1802	2.44	34.572	27.62			14897						
ISL	2000	2.26	34.606	27.66	54.31	1.846	14923						
OBS	2056	2.21	34.614	27.67			14930	391					
ISL	2250	1.98	34.654	27.72	48.31	1.975	14954						
OBS	2306	1.87	34.664	27.73			14959	358					
ISL	2500	1.72	34.678	27.76	44.17	2.090	14986						
OBS	2556	1.67	34.680	27.76			14994	373					
ISL	2750	1.65	34.679	27.76	44.02	2.200	15026						
ISL	3000	1.66	34.674	27.76	45.36	2.312	15070						
OBS	3052	1.67	34.672	27.76			15079	440					
ISL	3250	1.61	34.679	27.77	45.04	2.425	15111						
ISL	3500	1.51	34.688	27.78	43.62	2.536	15151						
OBS	3548	1.49	0.000	0.00			0	433					
ISL	3750	1.39	34.699	27.80	41.76	2.643	15190						
ISL	4000	1.29	34.711	27.81	39.86	2.745	15229						
OBS	4046	1.27	34.713	27.82			15237	456					
ISL	4500	1.19	34.718	27.83	38.81	2.941	15314						
OBS	4545	1.19	34.718	27.83			15322	471					
OBS	4944	1.26	34.705	27.81			15397						

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SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 579	7AUG1966	5.0	40 35.0S	135 16.0W	457	5024	46	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	11.5	7.6		3	4	5	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
OBS	0	10.85	34.340	26.31			14926	680					
ISL	0	10.85	34.340	26.31	172.25	0.000	14926						
ISL	10	10.85	34.339	26.31	172.55	0.017	14928						
ISL	20	10.85	34.338	26.31	172.84	0.035	14929						
ISL	30	10.85	34.337	26.31	173.12	0.052	14931						
ISL	50	10.85	34.336	26.31	173.66	0.086	14934						
OBS	55	10.85	34.336	26.31			14935	657					
ISL	75	10.84	34.336	26.31	174.08	0.130	14938						
ISL	100	10.83	34.335	26.31	174.44	0.174	14941						
OBS	110	10.82	34.335	26.31			14943						
ISL	125	10.49	34.359	26.39	167.59	0.216	14934						
ISL	150	9.85	34.401	26.53	154.32	0.257	14915						
OBS	164	9.43	34.426	26.62			14902	590					
ISL	200	8.56	34.446	26.77	131.76	0.328	14876						
OBS	218	8.20	34.449	26.83			14865	627					
ISL	250	7.86	34.454	26.89	121.62	0.391	14858						
OBS	271	7.72	34.453	26.91			14856	593					
ISL	300	7.54	34.439	26.92	119.10	0.452	14854						
OBS	323	7.43	34.426	26.93			14853						
ISL	400	7.10	34.411	26.96	116.48	0.569	14852						
OBS	426	7.01	34.409	26.97			14853	587					
ISL	500	6.78	34.390	26.99	115.03	0.685	14856						
OBS	529	6.69	34.382	27.00			14857						
ISL	600	6.46	34.364	27.01	113.98	0.800	14859						
OBS	633	6.34	34.356	27.02			14860						
ISL	700	6.06	34.341	27.05	111.60	0.912	14860						
ISL	800	5.60	34.327	27.09	107.66	1.022	14857						
OBS	845	5.37	34.324	27.12			14856	537					
ISL	900	5.07	34.326	27.16	101.94	1.127	14853						
ISL	1000	4.53	34.338	27.23	95.16	1.225	14847						
OBS	1058	4.21	34.349	27.27			14844	513					
ISL	1100	4.00	34.357	27.30	88.15	1.317	14842						
OBS	1187	3.60	34.377	27.35			14840	466					
ISL	1200	3.55	34.382	27.36	81.68	1.402	14840						
ISL	1250	3.38	34.402	27.39	78.56	1.442	14842						
ISL	1300	3.24	34.423	27.43	75.57	1.481	14844						
ISL	1400	2.99	34.468	27.48	70.06	1.553	14851						
OBS	1458	2.89	34.496	27.52			14857	407					
ISL	1500	2.82	34.513	27.54	65.27	1.621	14861						
OBS	1729	2.53	34.591	27.62			14888	407					
ISL	1750	2.51	34.596	27.63	56.82	1.774	14891						
OBS	1987	2.27	34.634	27.68			14922	400					
ISL	2000	2.28	34.635	27.68	52.50	1.910	14924						
OBS	2167	2.22	34.642	27.69			14950						
ISL	2250	2.17	34.647	27.70	51.23	2.040	14962						
ISL	2500	1.99	34.665	27.73	48.76	2.165	14998						
OBS	2533	1.97	34.667	27.73			15002	393					
ISL	2750	1.86	34.678	27.75	46.94	2.285	15035						
ISL	3000	1.75	34.689	27.76	45.49	2.400	15074						
OBS	3067	1.72	34.691	27.77			15084	383					
ISL	3250	1.63	34.697	27.78	44.05	2.512	15112						
ISL	3500	1.52	34.705	27.79	42.60	2.620	15151						
OBS	3596	1.48	34.707	27.80			15166	424					
ISL	3750	1.41	34.708	27.80	41.39	2.725	15191						
ISL	4000	1.32	34.709	27.81	40.44	2.828	15231						
OBS	4125	1.28	34.691	27.80			15251	436					
ISL	4500	1.23	34.712	27.82	39.88	3.028	15316						
OBS	4643	1.23	34.713	27.82			15341	535					



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 580	9AUG1966	5.0	37 59.0S	134 53.0W	421	5001	47	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	10.4	6.1		21	5	21	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	12.71	34.576	26.14			14994	625					
ISL	0	12.71	34.576	26.14	188.14	0.000	14994						
ISL	10	12.71	34.575	26.14	188.54	0.019	14995						
ISL	20	12.71	34.574	26.14	188.92	0.038	14997						
ISL	30	12.72	34.573	26.14	189.28	0.057	14999						
OBS	47	12.72	34.572	26.14			15002						
ISL	50	12.72	34.572	26.14	189.99	0.095	15002						
ISL	75	12.73	34.572	26.14	190.64	0.142	15006						
OBS	100	12.73	34.574	26.14			15011	628					
ISL	100	12.73	34.574	26.14	191.25	0.190	15011						
ISL	125	12.74	34.583	26.14	191.42	0.238	15015						
OBS	150	12.49	34.581	26.19			15011	651					
ISL	150	12.49	34.581	26.19	187.49	0.285	15011						
OBS	200	10.44	34.502	26.51			14946	566					
ISL	200	10.44	34.502	26.51	157.82	0.371	14946						
OBS	250	9.06	34.495	26.73			14904	555					
ISL	250	9.06	34.495	26.73	136.82	0.445	14904						
OBS	296	8.19	34.466	26.85			14878	548					
ISL	300	8.13	34.464	26.85	125.87	0.511	14877						
OBS	391	7.27	34.427	26.95			14858						
ISL	400	7.22	34.424	26.96	117.18	0.632	14857						
OBS	480	6.85	34.397	26.99			14855						
ISL	500	6.77	34.391	26.99	114.91	0.748	14856						
OBS	573	6.50	34.369	27.01			14857						
ISL	600	6.40	34.360	27.02	113.52	0.863	14857						
ISL	700	6.03	34.333	27.04	111.80	0.975	14858						
OBS	772	5.75	34.319	27.07			14859						
ISL	800	5.62	34.326	27.09	108.05	1.085	14858						
ISL	900	5.42	34.325	27.11	106.60	1.192	14867						
OBS	973	4.82	34.329	27.19			14854						
OBS	983	4.66	34.323	27.20			14849	523					
ISL	1000	4.49	34.327	27.22	95.51	1.293	14845						
ISL	1100	3.75	34.350	27.32	85.72	1.384	14831						
ISL	1200	3.67	34.359	27.33	84.81	1.469	14845						
OBS	1234	3.52	34.380	27.36			14844						
ISL	1250	3.47	34.386	27.37	80.74	1.511	14845						
ISL	1300	3.31	34.404	27.40	77.86	1.550	14847						
ISL	1400	3.04	34.443	27.46	72.43	1.626	14852						
OBS	1483	2.86	34.478	27.50			14859	430					
ISL	1500	2.83	34.486	27.51	67.40	1.695	14861						
OBS	1735	2.51	34.585	27.62			14888	422					
ISL	1750	2.49	34.589	27.62	57.13	1.851	14890						
OBS	1989	2.22	34.636	27.68			14920	386					
ISL	2000	2.21	34.637	27.69	51.43	1.987	14921						
OBS	2242	2.06	34.653	27.71			14956	376					
ISL	2250	2.06	34.653	27.71	49.36	2.113	14957						
ISL	2500	1.91	34.667	27.73	47.47	2.234	14994						
ISL	2750	1.78	34.678	27.75	45.87	2.351	15032						
OBS	2751	1.78	34.678	27.75			15032	370					
ISL	3000	1.68	34.687	27.77	44.69	2.464	15071						
ISL	3250	1.59	34.695	27.78	43.65	2.574	15110						
OBS	3260	1.59	34.695	27.78			15112	413					
ISL	3500	1.48	34.701	27.79	42.35	2.682	15149						
ISL	3750	1.38	34.705	27.80	41.12	2.786	15189						
OBS	3774	1.37	34.705	27.80			15193						
ISL	4000	1.29	34.707	27.81	40.10	2.887	15229						
OBS	4286	1.22	34.708	27.82			15277	453					
ISL	4500	1.22	34.709	27.82	39.98	3.088	15315						
OBS	4736	1.27	34.710	27.82			15359	465					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 581	10AUG1966	12.4	36 0.0S	134 25.0W	421	4951	47	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	13.3	8.6		6	3	23	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	14.61	34.898	26.00			15060	650					
ISL	0	14.61	34.898	26.00	201.89	0.000	15060						
ISL	10	14.62	34.898	25.99	202.36	0.020	15062						
ISL	20	14.63	34.898	25.99	202.80	0.040	15064						
ISL	30	14.63	34.898	25.99	203.21	0.061	15066						
ISL	50	14.64	34.898	25.99	203.94	0.101	15069						
OBS	55	14.64	34.898	25.99			15070						
ISL	75	14.64	34.898	25.99	204.60	0.153	15073						
ISL	100	14.63	34.898	25.99	205.23	0.204	15077						
OBS	107	14.63	34.898	25.99			15078	639					
ISL	125	14.59	34.890	25.99	205.70	0.255	15080						
ISL	150	14.38	34.885	26.04	202.51	0.306	15077						
OBS	160	14.25	34.875	26.06			15075						
ISL	200	13.10	34.767	26.21	186.75	0.403	15042						
OBS	210	12.75	34.741	26.26			15031	569					
ISL	250	11.44	34.738	26.51	159.01	0.490	14993						
OBS	261	0.00	34.735	0.00			0						
ISL	300	9.92	34.600	26.67	144.00	0.566	14945						
OBS	309	9.66	34.565	26.69			14936						
ISL	400	7.93	34.470	26.89	124.12	0.700	14885						
OBS	407	7.84	34.470	26.90			14883						
ISL	500	7.11	34.422	26.97	117.39	0.820	14869						
OBS	503	7.10	34.421	26.97			14869	562					
ISL	600	6.65	34.378	27.00	115.69	0.937	14867						
OBS	601	6.65	34.436	27.04			14868						
ISL	700	6.19	34.346	27.03	113.10	1.051	14865						
ISL	800	5.73	34.326	27.08	109.57	1.163	14863						
OBS	801	5.73	34.326	27.08			14863	557					
ISL	900	5.29	34.328	27.13	104.66	1.270	14861						
OBS	998	4.82	34.340	27.20			14859						
ISL	1000	4.81	34.340	27.20	98.60	1.372	14859						
ISL	1100	4.23	34.354	27.27	91.29	1.466	14852						
OBS	1160	3.90	34.366	27.31			14848						
ISL	1200	3.72	34.381	27.34	83.77	1.554	14847						
ISL	1250	3.51	34.401	27.38	80.21	1.595	14847						
ISL	1300	3.33	34.422	27.42	76.80	1.634	14848						
ISL	1400	3.03	34.468	27.48	70.49	1.708	14852						
OBS	1407	3.01	34.471	27.48			14853	451					
ISL	1500	2.82	34.508	27.53	65.62	1.776	14861						
OBS	1653	2.59	34.561	27.59			14878	412					
ISL	1750	2.46	34.586	27.62	56.99	1.929	14889						
OBS	1899	2.30	34.616	27.66			14907						
ISL	2000	2.21	34.630	27.68	51.99	2.065	14921						
OBS	2148	2.11	34.644	27.70			14942	368					
ISL	2250	2.04	34.651	27.71	49.42	2.192	14957						
OBS	2397	1.96	34.658	27.72			14978						
ISL	2500	1.91	34.663	27.73	47.76	2.314	14994						
ISL	2750	1.79	34.672	27.75	46.40	2.431	15032						
OBS	2896	1.73	34.677	27.76			15055	377					
ISL	3000	1.69	34.680	27.76	45.29	2.546	15071						
ISL	3250	1.60	34.688	27.77	44.24	2.658	15111						
OBS	3396	1.55	34.692	27.78			15134	404					
ISL	3500	1.51	34.695	27.79	43.03	2.767	15150						
ISL	3750	1.41	34.702	27.80	41.71	2.873	15190						
OBS	3908	1.35	34.706	27.81			15215	457					
ISL	4000	1.33	34.707	27.81	40.69	2.976	15231						
OBS	4394	1.26	34.710	27.82			15298						
ISL	4500		34.710										
OBS	4698		34.711										

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SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 582	12AUG1966	20.1	39 55.0S	132 36.0W	421	4869	35	21				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	10.3	6.9		9	3	7	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gwt/l	NITR 10 <sup>-2</sup> $\mu$ gwt/l	SILIC $\mu$ gwt/l	INT M	DD
OBS	0	11.71	34.436	26.23			14958	690					
ISL	0	11.71	34.436	26.23	180.14	0.000	14958						
ISL	10	11.71	34.437	26.23	180.33	0.018	14959						
ISL	20	11.71	34.438	26.23	180.51	0.036	14961						
ISL	30	11.71	34.438	26.23	180.70	0.054	14962						
ISL	50	11.71	34.440	26.23	181.07	0.090	14966						
OBS	52	11.71	34.440	26.23			14966	692					
ISL	75	11.56	34.421	26.24	180.38	0.135	14964						
ISL	100	11.34	34.398	26.26	178.78	0.180	14960						
OBS	105	11.29	34.393	26.27			14959	684					
ISL	125	11.14	34.387	26.29	176.70	0.225	14958						
ISL	150	10.88	34.380	26.33	173.19	0.269	14952						
OBS	156	10.80	34.378	26.35			14950	634					
ISL	200	9.81	34.480	26.60	148.93	0.349	14923						
OBS	207	9.62	34.495	26.64			14917	646					
ISL	250	8.39	34.451	26.80	129.76	0.419	14878						
OBS	258	8.19	34.439	26.83			14871						
ISL	300	7.73	34.442	26.90	121.55	0.482	14861						
OBS	308	7.68	34.444	26.91			14860	592					
ISL	400	7.12	34.419	26.97	116.19	0.600	14853						
OBS	408	7.09	34.416	26.97			14853						
ISL	500	6.80	34.394	26.99	115.09	0.716	14857						
OBS	505	6.79	34.393	26.99			14857						
OBS	600	6.41	34.362	27.02			14857				15		
ISL	600	6.41	34.362	27.02	113.47	0.830	14857						
ISL	700	5.97	34.328	27.05	111.40	0.943	14856						
OBS	794	5.65	34.312	27.07			14858				17		
ISL	800	5.64	34.312	27.08	109.29	1.053	14859						
OBS	809	5.62	34.313	27.08			14860	556					
ISL	900	5.20	34.319	27.13	104.18	1.160	14858						
OBS	994	4.64	34.326	27.20			14850	527			32		
ISL	1000	4.61	34.327	27.21	97.09	1.261	14850						
OBS	1049	4.38	34.332	27.24			14849				75		
ISL	1100	4.12	34.344	27.27	90.64	1.354	14847						
ISL	1200	3.66	34.373	27.34	83.62	1.442	14845						
ISL	1250	3.45	34.392	27.38	80.12	1.482	14844						
OBS	1288	3.30	34.407	27.41			14844	478			95		
ISL	1300	3.26	34.412	27.41	76.76	1.522	14845						
ISL	1400	3.01	34.452	27.47	71.34	1.596	14851						
ISL	1500	2.81	34.496	27.52	66.50	1.665	14861						
OBS	1530	2.77	34.509	27.54			14864	393			111		
ISL	1750	2.49	34.607	27.64	55.85	1.818	14890						
OBS	1774	2.47	34.616	27.65			14894				115		
ISL	2000	2.23	34.639	27.69	51.59	1.952	14922						
OBS	2016	2.22	34.639	27.69			14924	399			129		
ISL	2250	2.06	34.654	27.71	49.29	2.078	14957						
ISL	2500	1.92	34.667	27.73	47.63	2.199	14995						
OBS	2502	1.92	34.667	27.73			14995				136		
ISL	2750	1.81	34.679	27.75	46.24	2.316	15033						
OBS	2989	0.00	34.688	0.00			0	393					
ISL	3000	1.67	34.688	27.77	44.48	2.430	15070						
ISL	3250	1.57	34.695	27.78	43.35	2.540	15110						
OBS	3469	1.50	34.699	27.79			15145	425			118		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 583	14AUG1966	13.0	41 58.0S	129 59.0W	456	5055	50	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.8	5.0		5	3	0	0	0	0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	10.06	34.281	26.40			14897	674					
ISL	0	10.06	34.281	26.40	163.49	0.000	14897						
ISL	10	10.06	34.279	26.40	163.90	0.016	14899						
ISL	20	10.07	34.278	26.40	164.26	0.033	14900						
ISL	30	10.07	34.279	26.40	164.41	0.049	14902						
ISL	50	10.07	34.278	26.40	164.92	0.082	14905						
OBS	53	10.07	34.278	26.40			14906						
ISL	75	10.06	34.279	26.40	165.24	0.123	14909						
ISL	100	10.05	34.287	26.41	165.00	0.165	14913						
OBS	105	10.05	34.290	26.41			14914						
ISL	125	9.59	34.312	26.50	156.28	0.205	14901						
ISL	150	8.92	34.342	26.64	144.03	0.242	14880						
OBS	156	8.74	34.349	26.67			14874	625					
ISL	200	7.85	34.372	26.82	126.76	0.310	14848						
OBS	207	7.74	34.375	26.84			14845						
ISL	250	7.40	34.404	26.91	118.89	0.371	14839						
OBS	258	7.37	34.408	26.92			14839						
ISL	300	7.21	34.410	26.95	116.47	0.430	14840						
OBS	309	7.18	34.409	26.95			14840						
ISL	400	6.91	34.397	26.98	114.86	0.546	14845						
OBS	414	6.87	34.394	26.98			14845	619					
ISL	500	6.62	34.374	27.00	114.02	0.660	14849						
OBS	519	6.56	34.369	27.00			14850	599					
ISL	600	6.28	34.344	27.02	113.06	0.774	14852						
OBS	622	6.20	34.337	27.03			14852						
ISL	700	5.88	34.316	27.05	111.02	0.886	14852						
ISL	800	5.43	34.298	27.09	107.60	0.995	14850						
OBS	832	5.28	34.295	27.11			14849	571					
ISL	900	4.97	34.297	27.14	102.81	1.101	14848						
ISL	1000	4.48	34.310	27.21	96.65	1.200	14845						
OBS	1040	4.27	34.318	27.24			14843						
OBS	1098	3.94	34.330	27.28			14839	470					
ISL	1100	3.93	34.331	27.28	89.23	1.293	14839						
ISL	1200	3.49	34.367	27.36	82.00	1.379	14837						
ISL	1250	3.31	34.387	27.39	78.71	1.419	14838						
ISL	1300	3.15	34.409	27.42	75.61	1.458	14840						
OBS	1360	3.00	34.437	27.46			14844	420					
ISL	1400	2.92	34.454	27.48	70.26	1.531	14848						
ISL	1500	2.76	34.494	27.52	66.00	1.599	14858						
OBS	1621	2.63	34.539	27.57			14874	397					
ISL	1750	2.48	34.580	27.62	57.74	1.753	14890						
OBS	1882	2.35	34.613	27.66			14907	392					
ISL	2000	2.24	34.634	27.68	52.03	1.891	14922						
OBS	2142	2.12	34.650	27.70			14942	389					
ISL	2250	2.04	34.657	27.72	48.92	2.017	14957						
OBS	2400	1.94	34.662	27.73			14978	365					
ISL	2500	1.88	34.665	27.73	47.28	2.137	14993						
ISL	2750	1.77	34.672	27.75	46.09	2.254	15031						
OBS	2921	1.70	34.676	27.76			15058						
ISL	3000	1.67	34.678	27.76	45.18	2.368	15070						
ISL	3250	1.59	34.685	27.77	44.27	2.480	15110						
OBS	3441	1.53	34.690	27.78			15141						
ISL	3500	1.51	34.692	27.78	43.36	2.589	15151						
ISL	3750	1.43	34.698	27.79	42.38	2.696	15191						
OBS	3961	1.37	34.703	27.80			15226	445					
ISL	4000	1.36	34.704	27.80	41.44	2.801	15232						
OBS	4480	1.24	34.708	27.82			15313	454					
ISL	4500	1.24	34.708	27.82	40.31	3.005	15316						
OBS	4997	1.29	34.709	27.81			15407	463					

SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 584	16AUG1966	5.0	39 37.0S	130 7.0W	421	4872	49	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.8	8.3		35	4	34	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	11.34	34.332	26.21			14943	651					
ISL	0	11.34	34.332	26.21	181.28	0.000	14943						
ISL	10	11.33	34.330	26.21	181.48	0.018	14945						
ISL	20	11.32	34.329	26.22	181.60	0.036	14946						
ISL	30	11.31	34.330	26.22	181.53	0.054	14947						
ISL	50	11.27	34.329	26.22	181.50	0.091	14949						
OBS	52	11.27	34.329	26.22			14949	638					
ISL	75	11.21	34.331	26.24	180.90	0.136	14951						
ISL	100	11.18	34.338	26.25	180.39	0.181	14954						
OBS	104	11.14	34.340	26.26			14953						
ISL	125	10.42	34.358	26.40	166.50	0.225	14931						
ISL	150	9.49	34.383	26.58	149.97	0.264	14902						
OBS	156	9.26	34.390	26.62			14894						
ISL	200	8.53	34.436	26.77	132.05	0.335	14875						
OBS	209	8.43	34.443	26.79			14873						
ISL	250	7.82	34.437	26.88	122.40	0.398	14856						
OBS	260	7.70	34.433	26.89			14853	598					
ISL	300	7.50	34.432	26.92	119.04	0.459	14852						
OBS	311	7.47	34.431	26.93			14852						
ISL	400	6.94	34.398	26.97	115.26	0.576	14846						
OBS	413	6.87	34.392	26.98			14845	597					
ISL	500	6.67	34.376	26.99	114.65	0.691	14852						
OBS	514	6.65	34.374	27.00			14853	583					
ISL	600	6.33	34.352	27.02	113.13	0.805	14854						
OBS	613	6.28	34.349	27.02			14854	565					
ISL	700	5.96	34.329	27.05	111.14	0.917	14856						
ISL	800	5.55	34.314	27.09	108.09	1.026	14856						
OBS	815	5.49	34.312	27.09			14855	533					
ISL	900	5.06	34.310	27.14	103.02	1.132	14852						
ISL	1000	4.50	34.320	27.21	96.23	1.232	14846						
OBS	1006	4.47	34.321	27.22			14845	517					
ISL	1100	3.91	34.348	27.30	87.68	1.323	14838						
OBS	1161	3.57	34.370	27.35			14834	441					
ISL	1200	3.42	34.384	27.38	79.95	1.407	14834						
ISL	1250	3.25	34.402	27.41	76.90	1.447	14836						
ISL	1300	3.10	34.422	27.44	74.07	1.484	14838						
ISL	1400	2.89	34.465	27.49	69.02	1.556	14847						
OBS	1406	2.88	34.468	27.49			14847	430					
ISL	1500	2.73	34.523	27.55	63.48	1.622	14857						
OBS	1659	2.55	34.604	27.63			14878	386					
ISL	1750	2.45	34.618	27.65	54.55	1.770	14889						
OBS	1909	2.30	34.626	27.67			14909	371					
ISL	2000	2.21	34.635	27.68	51.59	1.902	14921						
OBS	2162	2.07	34.649	27.71			14943	384					
ISL	2250	2.01	34.654	27.72	48.80	2.028	14955						
OBS	2414	1.92	34.660	27.73			14980	363					
ISL	2500	1.87	34.663	27.73	47.27	2.148	14992						
ISL	2750	1.75	34.672	27.75	45.89	2.264	15030						
OBS	2924	1.68	34.678	27.76			15057						
ISL	3000	1.65	34.680	27.76	44.75	2.378	15069						
ISL	3250	1.57	34.687	27.78	43.82	2.488	15109						
OBS	3433	1.51	34.691	27.78			15139	418					
ISL	3500	1.49	34.693	27.79	42.96	2.597	15150						
ISL	3750	1.41	34.698	27.80	42.07	2.703	15190						
OBS	3944	1.36	34.702	27.80			15222	441					
ISL	4000	1.34	34.703	27.80	41.30	2.807	15232						
ISL	4500	1.25	34.706	27.81	40.73	3.012	15317						
OBS	4562	1.25	34.706	27.81			15327	477					
OBS	4851	1.28	34.708	27.81			15380	510					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 585	18AUG1966	6.1	37 2.0S	129 59.0W	420	3217	36	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	12.8	5.8		7	3	0	0	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	14.39	34.771	25.95			15052	610					
ISL	0	14.39	34.771	25.95	206.69	0.000	15052						
ISL	10	14.39	34.771	25.95	207.02	0.021	15053						
ISL	20	14.39	34.771	25.95	207.35	0.041	15055						
ISL	30	14.40	34.771	25.94	207.69	0.062	15057						
ISL	50	14.40	34.770	25.94	208.38	0.104	15060						
OBS	51	14.40	34.770	25.94			15060	632					
ISL	75	14.46	34.768	25.93	210.59	0.156	15066						
ISL	100	14.41	34.767	25.94	210.33	0.209	15069						
OBS	101	14.41	34.767	25.94			15069						
ISL	125	14.03	34.773	26.02	202.86	0.260	15060						
ISL	150	13.48	34.779	26.14	192.00	0.310	15046						
OBS	153	13.40	34.780	26.16			15044	604					
ISL	200	12.13	34.634	26.30	178.04	0.402	15007						
OBS	204	12.01	34.621	26.31			15004	558					
ISL	250	10.63	34.577	26.53	156.59	0.486	14962						
OBS	254	0.00	34.575	0.00			0						
ISL	300	9.26	34.508	26.71	139.95	0.560	14919						
OBS	303	9.18	34.504	26.72			14917						
OBS	400	7.64	34.435	26.90			14874						
ISL	400	7.64	34.435	26.90	122.44	0.691	14874						
OBS	494	6.89	34.394	26.98			14859	585					
ISL	500	6.85	34.391	26.98	116.01	0.810	14859						
OBS	585	6.42	34.358	27.01			14855						
ISL	600	6.36	34.353	27.02	113.40	0.925	14855						
ISL	700	5.94	34.326	27.05	111.11	1.037	14855						
OBS	782	5.62	34.313	27.08			14855	573					
ISL	800	5.54	34.311	27.09	108.13	1.147	14855						
ISL	900	5.08	34.307	27.14	103.55	1.253	14853						
OBS	979	4.69	34.314	27.19			14850	541					
ISL	1000	4.57	34.318	27.21	97.22	1.353	14848						
OBS	1069	4.19	34.335	27.26			14844	503					
ISL	1100	4.03	34.345	27.28	89.45	1.447	14843						
ISL	1200	3.59	34.380	27.36	82.25	1.532	14842						
ISL	1250	3.40	34.399	27.39	78.94	1.573	14842						
ISL	1300	3.23	34.420	27.42	75.78	1.611	14844						
OBS	1320	3.17	34.428	27.44			14845	449					
ISL	1400	2.98	34.460	27.48	70.49	1.685	14850						
ISL	1500	2.80	34.500	27.53	66.03	1.753	14860						
OBS	1566	2.71	34.525	27.55			14868	398					
ISL	1750	2.46	34.586	27.62	57.02	1.907	14889						
OBS	1815	2.39	34.603	27.64			14897	383					
ISL	2000	2.22	34.628	27.68	52.21	2.043	14921						
OBS	2067	2.17	34.633	27.69			14931	362					
ISL	2250	2.03	34.644	27.71	49.66	2.171	14956						
OBS	2317	1.98	34.647	27.71			14965	393					
ISL	2500	1.89	34.654	27.73	48.11	2.293	14993						
OBS	2569	1.86	34.657	27.73			15004	385					
ISL	2750	1.79	34.665	27.74	46.87	2.411	15032						
OBS	2819	1.76	34.668	27.75			15042	369					
ISL	3000	1.70	34.674	27.76	45.80	2.527	15071						
OBS	3070	1.67	34.676	27.76			15082	378					
ISL	3250	1.59	34.679	27.77	44.76	2.641	15110						
OBS	3320	1.56	34.680	27.77			15121	435					
ISL	3500	1.50	34.690	27.78	43.32	2.751	15150						
OBS	3567	1.48	34.695	27.79			15161	475					

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 586	20AUG1966	3.8	39 30.0S	127 24.0W	420	4617	45	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	10.5	4.9		30	3	28	2		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	11.12	34.288	26.22			14935	684					
ISL	0	11.12	34.288	26.22	180.70	0.000	14935						
ISL	10	11.12	34.287	26.22	180.94	0.018	14936						
ISL	20	11.11	34.287	26.22	181.05	0.036	14938						
ISL	30	11.11	34.286	26.22	181.30	0.054	14939						
OBS	45	11.10	34.283	26.22			14942	670					
ISL	50	11.09	34.281	26.22	181.78	0.091	14942						
ISL	75	11.00	34.271	26.23	181.53	0.136	14943						
OBS	89	10.93	34.265	26.24			14942						
ISL	100	10.90	34.255	26.23	181.63	0.181	14943						
ISL	125	10.75	34.248	26.26	180.13	0.227	14942						
OBS	133	10.68	34.251	26.27			14941						
ISL	150	10.41	34.295	26.35	171.38	0.271	14934						
OBS	176	9.83	34.367	26.51			14918	621					
ISL	200	9.09	34.382	26.64	144.61	0.350	14895						
OBS	218	8.56	34.381	26.72			14878	601					
ISL	250	8.12	34.385	26.79	130.60	0.418	14867						
OBS	259	8.04	34.386	26.81			14865	585					
ISL	300	7.61	34.397	26.88	123.16	0.482	14856						
OBS	340	7.29	34.406	26.93			14850	597					
ISL	400	7.00	34.397	26.97	116.13	0.601	14848						
OBS	415	6.95	34.393	26.97			14849	576					
OBS	500	6.68	34.371	26.99			14852						
ISL	500	6.68	34.371	26.99	115.10	0.717	14852						
ISL	600	6.43	34.349	27.00	114.72	0.832	14858						
OBS	677	6.21	34.334	27.02			14862						
ISL	700	6.11	34.327	27.03	113.25	0.946	14861						
ISL	800	5.62	34.305	27.07	109.54	1.057	14858						
OBS	870	5.22	34.295	27.11			14853	542					
ISL	900	5.05	34.297	27.13	103.82	1.164	14851						
ISL	1000	4.48	34.311	27.21	96.55	1.264	14844						
OBS	1019	4.37	34.315	27.22			14843	521					
ISL	1100	3.99	34.335	27.28	89.65	1.357	14841						
ISL	1200	3.57	34.365	27.35	83.18	1.444	14841						
ISL	1250	3.39	34.383	27.38	80.03	1.485	14842						
OBS	1283	3.28	34.396	27.40			14843	430					
ISL	1300	3.23	34.404	27.41	76.98	1.524	14844						
ISL	1400	2.98	34.449	27.47	71.29	1.598	14850						
ISL	1500	2.76	34.496	27.53	65.90	1.667	14858						
OBS	1548	2.39	34.518	27.58			14851	394					
ISL	1750	2.36	34.589	27.64	55.55	1.818	14884						
OBS	1813	0.00	34.606	0.00			0						
ISL	2000	2.15	34.635	27.69	50.84	1.951	14919						
OBS	2077	2.13	34.642	27.70			14931						
ISL	2250	2.00	34.654	27.72	48.60	2.076	14955						
OBS	2342	1.94	34.658	27.72			14968	367					
ISL	2500	1.85	34.664	27.74	46.87	2.195	14991						
OBS	2602	1.80	34.668	27.74			15007	363					
ISL	2750	1.74	34.673	27.75	45.67	2.311	15030						
OBS	2866	1.70	34.677	27.76			15048	377					
ISL	3000	1.66	34.680	27.76	44.80	2.424	15070						
ISL	3250	1.58	34.685	27.77	44.08	2.535	15110						
OBS	3408	1.53	34.688	27.78			15135	432					
ISL	3500	1.50	34.690	27.78	43.31	2.644	15150						
ISL	3750	1.42	34.695	27.79	42.45	2.751	15191						
OBS	3947	1.37	34.699	27.80			15223	459					
ISL	4000	1.36	34.700	27.80	41.82	2.857	15232						
OBS	4465	1.31	34.707	27.81			15313	478					

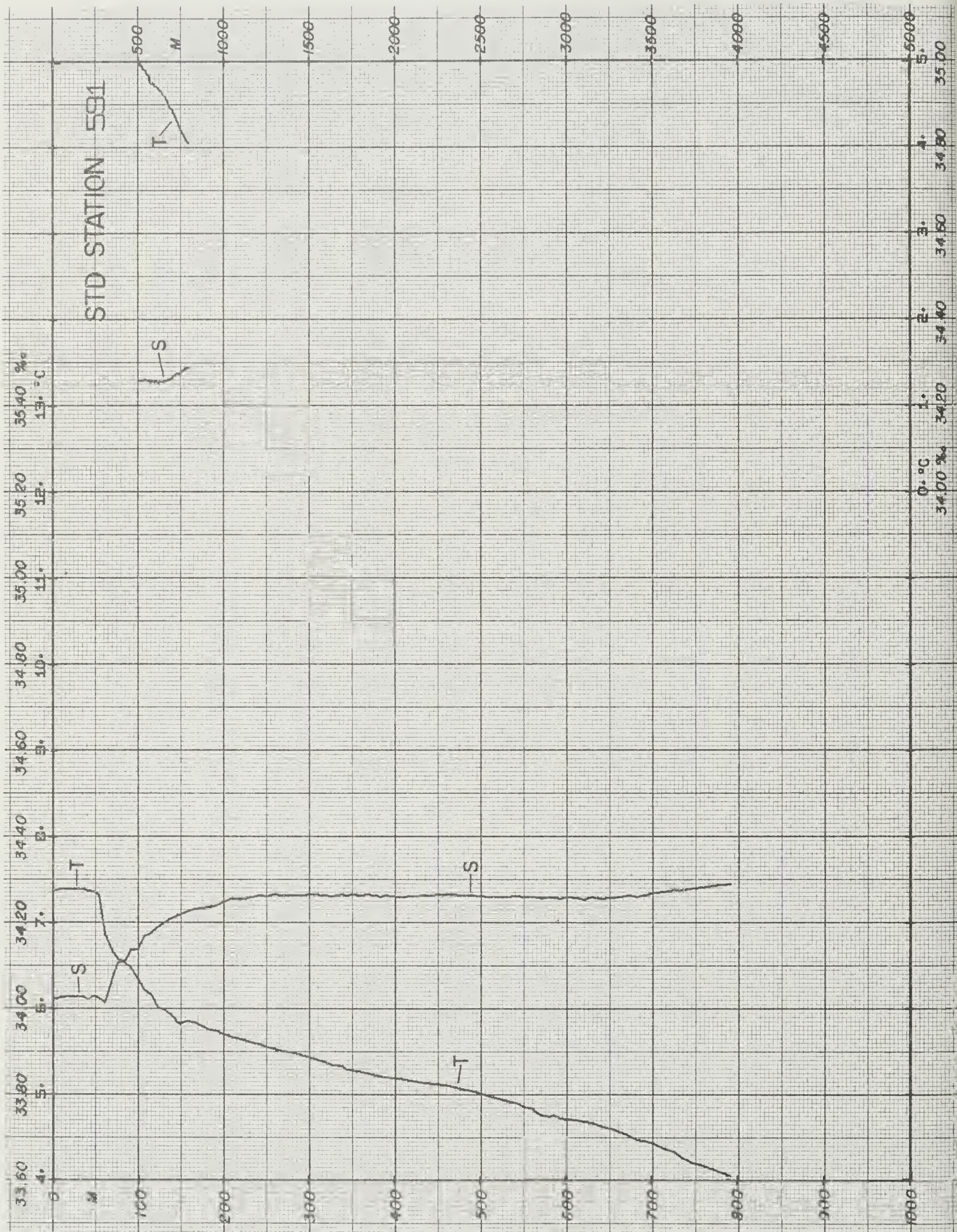
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 587	22AUG1966	0.9	41 58.0S	124 59.0W	456	4285	39	22				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	7.3	9.6		2	6	22	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	9.30	34.217	26.48			14868	687			2		
ISL	0	9.30	34.217	26.48	156.20	0.000	14868						
ISL	10	9.30	34.214	26.48	156.66	0.016	14870						
ISL	20	9.31	34.215	26.48	156.83	0.031	14872						
ISL	30	9.31	34.215	26.47	157.14	0.047	14873						
ISL	50	9.32	34.213	26.47	157.77	0.079	14877						
OBS	52	9.32	34.213	26.47			14877	679			2		
ISL	75	9.14	34.215	26.50	155.35	0.118	14874						
ISL	100	8.89	34.229	26.55	150.98	0.156	14869						
OBS	109	10.34	34.237	26.32			14924	649			2		1
ISL	125	8.59	34.271	26.63	143.77	0.193	14863						
ISL	150	8.23	34.323	26.73	135.00	0.228	14854						
OBS	163	8.02	34.351	26.78			14848	627					
ISL	200	7.48	34.376	26.88	121.27	0.292	14834						
OBS	216	7.28	34.379	26.91			14829				5		
ISL	250	7.10	34.392	26.95	115.63	0.351	14827						
OBS	269	7.05	34.396	26.96			14829				8		
ISL	300	6.92	34.394	26.97	113.78	0.408	14829						
OBS	379	6.65	34.375	27.00			14831				5		
ISL	400	6.61	34.372	27.00	112.62	0.521	14833						
OBS	488	6.46	34.361	27.01			14841	616			5		
ISL	500	6.43	34.359	27.01	112.61	0.634	14842						
OBS	597	6.14	34.342	27.04			14846	607			13		
ISL	600	6.13	34.342	27.04	111.16	0.746	14846						
ISL	700	5.69	34.328	27.08	107.64	0.855	14845						
OBS	704	5.67	34.327	27.08			14844	573			9		
ISL	800	5.32	34.307	27.11	105.55	0.962	14846						
ISL	900	4.81	34.308	27.17	100.00	1.065	14842						
OBS	922	4.68	34.306	27.18			14840				14		
OBS	964	4.33	34.321	27.23			14833	509					
ISL	1000	4.14	34.318	27.25	91.83	1.161	14830						
ISL	1100	3.72	34.319	27.30	87.59	1.250	14830						
OBS	1142	3.60	34.323	27.31			14832	526					
ISL	1200	3.34	34.369	27.37	80.15	1.334	14831						
OBS	1236	3.19	34.400	27.41			14831	448			56		
ISL	1250	3.15	34.408	27.42	75.34	1.373	14832						
ISL	1300	3.03	34.436	27.46	72.15	1.410	14835						
ISL	1400	2.84	34.482	27.51	67.14	1.480	14844						
ISL	1500	2.72	34.516	27.55	63.93	1.545	14857						
OBS	1507	2.72	34.518	27.55			14858	409			72		
ISL	1750	2.40	34.602	27.64	55.17	1.694	14887						
OBS	1781	2.37	34.610	27.65			14891	395					
ISL	2000	2.18	34.643	27.69	50.64	1.826	14920						
OBS	2046	2.15	34.647	27.70			14927	379			95		
ISL	2250	2.00	34.661	27.72	48.05	1.950	14955						
OBS	2316	1.95	34.664	27.73			14964	377			102		
ISL	2500	1.83	34.672	27.74	46.14	2.067	14991						
OBS	2583	1.79	34.674	27.75			15003	389			119		
ISL	2750	1.74	34.676	27.75	45.44	2.182	15030						
OBS	2853	1.71	34.676	27.76			15046	388					
ISL	3000	1.66	34.679	27.76	44.96	2.295	15070						
ISL	3250	1.58	34.686	27.77	44.12	2.406	15110						
OBS	3396	1.54	34.691	27.78			15134	410			121		
ISL	3500	1.51	34.693	27.78	43.28	2.515	15151						
ISL	3750	1.45	34.699	27.79	42.51	2.623	15192						
OBS	3938	1.40	34.703	27.80			15223	429			115		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 588	24AUG1966	5.7	39 28.0S	124 54.0W	420	4543	44	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.0	3.0		34	2	0	0		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	10.81	34.239	26.24			14923	655					
ISL	0	10.81	34.239	26.24	179.02	0.000	14923						
ISL	10	10.78	34.230	26.24	179.34	0.018	14924						
ISL	20	10.74	34.222	26.24	179.60	0.036	14924						
ISL	30	10.71	34.215	26.24	179.82	0.054	14924						
OBS	50	10.66	34.205	26.24			14926	647			0		
ISL	50	10.66	34.205	26.24	180.11	0.090	14926						
ISL	75	10.66	34.193	26.23	181.55	0.135	14930						
OBS	99	10.57	34.201	26.25			14930				0		
ISL	100	10.56	34.203	26.25	179.61	0.180	14930						
ISL	125	10.18	34.267	26.37	169.21	0.224	14922						
OBS	148	9.68	34.327	26.50			14908						
ISL	150	9.62	34.328	26.51	155.99	0.264	14906						
OBS	196	8.26	34.341	26.74			14863	605			3		
ISL	200	8.19	34.346	26.75	133.70	0.337	14861						
OBS	243	7.68	34.395	26.87			14849				8		
ISL	250	7.62	34.397	26.88	122.45	0.401	14848						
OBS	289	0.00	34.398	0.00			0	589			4		
ISL	300	7.25	34.398	26.93	118.02	0.461	14842						
OBS	381	6.91	34.392	26.97			14841	577			15		
ISL	400	6.84	34.388	26.98	114.61	0.577	14842						
OBS	472	6.63	34.372	27.00			14845				7		
ISL	500	6.55	34.366	27.00	113.66	0.691	14846						
OBS	564	6.34	34.351	27.02			14849				11		
ISL	600	6.20	34.340	27.03	112.18	0.804	14849						
ISL	700	5.76	34.315	27.06	109.50	0.915	14847						
OBS	754	5.50	34.304	27.09			14846	566			16		
ISL	800	5.28	34.302	27.11	105.33	1.023	14844						
ISL	900	4.79	34.306	27.17	99.89	1.125	14841						
OBS	950	4.55	34.313	27.20			14839	532					
ISL	1000	4.31	34.324	27.24	93.53	1.222	14838						
ISL	1100	3.86	34.351	27.31	86.93	1.312	14836						
ISL	1200	3.46	34.386	27.37	80.31	1.396	14836						
ISL	1250	3.28	34.406	27.41	76.99	1.435	14837						
OBS	1290	3.14	34.424	27.44			14838	429					
ISL	1300	3.11	34.429	27.44	73.67	1.473	14839						
ISL	1400	2.86	34.478	27.50	67.66	1.543	14845						
ISL	1500	2.66	34.526	27.56	62.42	1.608	14854						
OBS	1525	2.62	34.538	27.57			14857	397					
ISL	1750	2.39	34.602	27.64	55.01	1.755	14886						
OBS	1766	2.38	34.605	27.65			14888	387			96		
ISL	2000	2.18	34.640	27.69	50.85	1.888	14920						
OBS	2055	2.15	34.645	27.70			14928				108		
OBS	2246	2.16	34.662	27.71			14961	367			120		
ISL	2250	2.16	34.662	27.71	50.02	2.014	14962						
OBS	2487	1.85	34.668	27.74			14989	369			124		
ISL	2500	1.84	34.669	27.74	46.45	2.134	14991						
OBS	2729	1.72	34.678	27.76			15025	380			121		
ISL	2750	1.71	34.679	27.76	44.91	2.248	15029						
OBS	2969	1.65	34.683	27.77			15064	408					
ISL	3000	1.64	34.684	27.77	44.36	2.360	15069						
ISL	3250	1.57	34.688	27.78	43.75	2.470	15109						
OBS	3447	1.51	34.692	27.78			15141	412			122		
ISL	3500	1.49	34.694	27.79	42.96	2.579	15150						
ISL	3750	1.42	34.701	27.80	42.01	2.685	15191						
OBS	3923	1.38	34.706	27.80			15220	432			122		
ISL	4000	1.37	34.707	27.81	41.34	2.789	15233						
OBS	4408	1.34	34.711	27.81			15304	446			119		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 24	SER 589	26AUG1966	12.9	35 2.0S	125 2.0W	420	4005	40	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	12.8	6.7		32	3	30	2		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	14.95	34.758	25.82			15069	617			2		
ISL	0	14.95	34.758	25.82	219.15	0.000	15069						
ISL	10	14.96	34.765	25.82	219.21	0.022	15072						
ISL	20	14.98	34.772	25.82	219.27	0.044	15074						
ISL	30	14.98	34.777	25.82	219.32	0.066	15076						
OBS	50	14.99	34.786	25.83			15079	603					
ISL	50	14.99	34.786	25.83	219.40	0.110	15079						
ISL	75	15.03	34.794	25.83	220.33	0.165	15085						
OBS	99	14.95	34.793	25.84			15086	600			1		
ISL	100	14.94	34.793	25.84	219.32	0.220	15086						
ISL	125	14.57	34.775	25.91	213.61	0.274	15078						
OBS	148	14.06	34.747	26.00			15065						
ISL	150	14.01	34.744	26.01	205.21	0.326	15063						
OBS	197	12.59	34.657	26.23			15023	604			4		
ISL	200	12.47	34.649	26.25	183.39	0.423	15019						
OBS	246	10.57	34.535	26.51			14959				3		
ISL	250	10.45	34.531	26.53	156.96	0.508	14955						
OBS	295	0.00	34.504	0.00			0	595			4		
ISL	300	9.12	34.499	26.73	138.36	0.582	14914						
OBS	397	0.00	34.414	0.00			0	587			11		
ISL	400	7.32	34.413	26.93	119.54	0.711	14861						
OBS	499	6.70	34.378	26.99			14852	584			10		
ISL	500	6.69	34.378	26.99	114.81	0.828	14852						
ISL	600	6.27	34.346	27.02	112.71	0.942	14851						
OBS	602	6.26	34.345	27.02			14851	584			13		
ISL	700	5.81	34.316	27.06	110.07	1.053	14849						
ISL	800	5.34	34.298	27.10	106.38	1.162	14846						
OBS	804	5.32	34.298	27.10			14846	571			21		
ISL	900	4.86	34.303	27.16	101.05	1.265	14844						
ISL	1000	4.40	34.320	27.23	94.95	1.363	14841						
OBS	1003	4.39	34.321	27.23			14841	517					
ISL	1100	3.96	34.354	27.30	87.83	1.455	14840						
ISL	1200	3.56	34.392	27.37	81.00	1.539	14840						
ISL	1250	3.38	34.413	27.40	77.70	1.579	14841						
ISL	1300	3.21	34.434	27.44	74.45	1.617	14843						
ISL	1400	2.91	34.480	27.50	68.18	1.688	14847						
OBS	1463	2.74	34.510	27.54			14851	425					
ISL	1500	2.67	34.525	27.56	62.66	1.754	14855						
OBS	1708	2.40	34.597	27.64			14879	394					
ISL	1750	2.36	34.606	27.65	54.33	1.900	14885						
OBS	1953	2.19	34.633	27.68			14912	376			103		
ISL	2000	2.16	34.637	27.69	50.76	2.031	14919						
OBS	2199	2.02	34.648	27.71			14947	381			113		
ISL	2250	1.99	34.651	27.71	48.70	2.155	14954						
OBS	2444	1.87	34.660	27.73			14982	364			117		
ISL	2500	1.83	34.663	27.74	46.78	2.275	14990						
OBS	2689	1.72	34.670	27.75			15018	378			118		
ISL	2750	1.70	34.672	27.75	45.19	2.390	15028						
OBS	2840	1.67	34.674	27.76			15042	378			122		
ISL	3000	1.63	34.677	27.76	44.63	2.502	15068						
OBS	3086	1.61	34.679	27.77			15082	409					
ISL	3250	1.58	34.682	27.77	44.33	2.613	15109						
OBS	3333	1.56	34.683	27.77			15123				117		
ISL	3500	1.52	34.686	27.78	43.95	2.724	15151						
OBS	3579	1.51	34.687	27.78			15164	409					
ISL	3750	1.51	34.688	27.78	44.31	2.834	15194						
OBS	3983	1.56	34.687	27.78			15237	417			116		

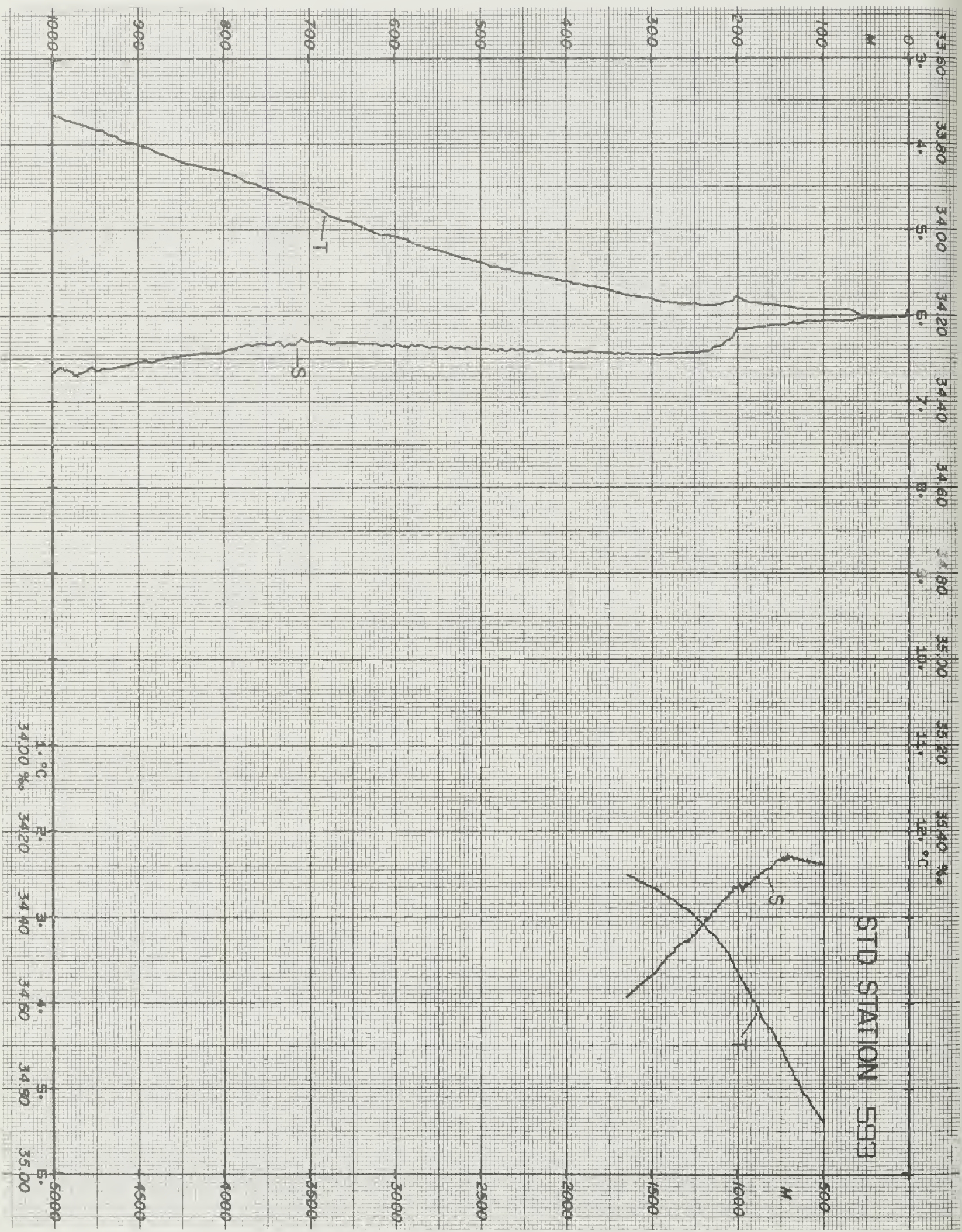
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	SER 590	30CT1966	16.2	42 2.0S	86 5.0W	452	3270	33	21				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.4	5.8		9	2	10	2		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
ISL	0	10.07	33.934	26.13	189.30	0.000	14893						
OBS	1	10.07	33.934	26.13			14893		90	103	1		
ISL	10	9.91	33.932	26.15	187.14	0.019	14889						
ISL	20	9.78	33.930	26.17	185.39	0.037	14886						
OBS	28	9.71	33.929	26.19			14884		86	106	1		
ISL	30	9.71	33.929	26.19	184.51	0.056	14884						
ISL	50	9.68	33.927	26.19	184.56	0.093	14886						
OBS	54	9.67	33.927	26.19			14887		98	104	1		
ISL	75	9.39	33.932	26.24	180.23	0.138	14880						
OBS	82	9.26	33.938	26.27			14876		113	108	1		
ISL	100	8.85	33.982	26.37	168.55	0.182	14864						
OBS	108	8.65	34.006	26.42			14859		119	144	0		
ISL	125	8.30	34.052	26.51	155.65	0.223	14849						
ISL	150	7.83	34.113	26.62	144.79	0.260	14836						
OBS	163	7.61	34.142	26.68			14830		146	192	3		
ISL	200	7.06	34.192	26.80	129.05	0.329	14815						
OBS	222	6.78	34.212	26.85			14808		151	212	5		
ISL	250	6.51	34.238	26.91	119.03	0.391	14802						
ISL	300	6.14	34.273	26.98	112.39	0.448	14796						
OBS	325	6.01	34.284	27.01			14795		151	236	6		
ISL	400	5.73	34.286	27.04	107.50	0.558	14796						
OBS	432	5.64	34.280	27.05			14798		152	236	7		
ISL	500	5.46	34.273	27.07	106.38	0.665	14802						
ISL	600	5.19	34.265	27.09	104.64	0.771	14807						
OBS	643	5.06	34.263	27.11			14809		174	265	13		
ISL	700	4.81	34.265	27.14	101.10	0.874	14808						
ISL	800	4.36	34.278	27.20	95.63	0.972	14806						
OBS	853	4.11	34.290	27.23			14804		202	296	27		
ISL	900	3.93	34.309	27.27	89.20	1.064	14805						
ISL	1000	3.59	34.353	27.34	82.70	1.150	14808						
OBS	1064	3.40	34.386	27.38			14811		217	330	47		
ISL	1100	3.32	34.404	27.40	76.60	1.230	14814						
ISL	1200	3.12	34.450	27.46	71.53	1.304	14823						
ISL	1250	3.03	34.472	27.48	69.27	1.339	14828						
ISL	1300	2.96	34.494	27.51	67.16	1.373	14833						
OBS	1394	2.85	34.531	27.55			14845		246	365	68		
ISL	1400	2.84	34.533	27.55	63.50	1.439	14846						
ISL	1500	2.73	34.563	27.58	60.56	1.501	14858						
OBS	1644	2.58	34.595	27.62			14876		248	367	95		
ISL	1750	2.46	34.610	27.64	55.25	1.646	14889						
OBS	1900	2.30	34.626	27.67			14908		235	349	100		
ISL	2000	2.20	34.637	27.69	51.30	1.779	14921						
OBS	2157	2.06	34.652	27.71			14942		202	345	108		
ISL	2250	1.99	34.659	27.72	48.07	1.903	14955						
OBS	2419	1.89	34.670	27.74			14979		224	347	109		
ISL	2500	1.87	34.673	27.74	46.53	2.021	14993						
OBS	2675	1.85	34.678	27.75			15022		225	337	113		
ISL	2750	1.83	34.680	27.75	46.46	2.137	15034						
OBS	2934	1.79	34.684	27.76			15064		228	330	116		
ISL	3000	1.77	34.685	27.76	46.11	2.253	15075						
OBS	3202	0.00	34.690	0.00			0		221	337	117		
ISL	3250	1.71	34.692	27.77	45.61	2.368	15116						
OBS	3307	1.70	34.694	27.77			15125		225	329	116		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 591	10OCT1966	0.8	46 24.0S	84 11.0W	452	3617	1	114				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	7.0	0.0	1022.0	29	5	30	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	7.38	34.025	26.62	142.69	0.000	14793						0
STD	10	7.39	34.026	26.62	142.97	0.014	14795						5
STD	20	7.39	34.028	26.62	142.96	0.029	14796						0
STD	30	7.39	34.029	26.62	143.03	0.043	14798						6
STD	50	7.35	34.028	26.63	142.81	0.071	14800						6
STD	75	6.59	34.101	26.79	127.86	0.105	14775						6
STD	100	6.34	34.137	26.85	122.24	0.137	14769						0
STD	125	6.00	34.192	26.94	114.37	0.166	14761						9
STD	150	5.83	34.220	26.98	110.46	0.194	14758						9
STD	200	5.70	34.248	27.02	107.50	0.249	14762						0
STD	250	5.55	34.262	27.05	105.27	0.302	14764						9
STD	300	5.43	34.265	27.06	104.16	0.354	14767						20
STD	350	5.28	34.265	27.08	102.97	0.406	14769						4
STD	400	5.18	34.262	27.09	102.57	0.457	14774						10
STD	450	5.12	34.265	27.10	102.14	0.509	14779						22
STD	500	5.01	34.262	27.11	101.68	0.560	14783						21
STD	550	4.87	34.261	27.13	100.48	0.610	14785						11
STD	600	4.71	34.259	27.14	99.39	0.660	14787						10
STD	650	4.61	34.258	27.15	98.66	0.710	14791						12
STD	700	4.44	34.268	27.18	96.42	0.758	14792						13
STD	750	4.20	34.281	27.22	93.14	0.806	14791						11



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	SER 592	12OCT1966	22.6	50 5.0S	90 2.0W	489	4549	46	21				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.0	0.7		25	5	26	4	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>3</sup> ·m/Sec	OXYG 10 <sup>2</sup> ·ml/l	PHOS 10 <sup>2</sup> · $\mu$ gatl	NITR 10 <sup>3</sup> · $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
ISL	0	6.11	34.143	26.88	117.67	0.000	14744						
OBS	2	6.11	34.143	26.88			14744	699	134	179	3		
ISL	10	6.12	34.143	26.88	117.88	0.012	14746						
ISL	20	6.12	34.143	26.88	118.09	0.024	14748						
ISL	30	6.13	34.143	26.88	118.28	0.035	14750						
ISL	50	6.13	34.143	26.88	118.55	0.059	14753						
OBS	58	6.13	34.143	26.88			14754	699	142	175	2		
ISL	75	6.12	34.146	26.89	118.55	0.089	14757						
ISL	100	6.12	34.147	26.89	118.86	0.118	14761						
OBS	114	6.09	34.153	26.89			14762	698	132	174	3		
ISL	125	6.00	34.166	26.92	116.28	0.148	14760						
ISL	150	5.79	34.197	26.97	111.76	0.176	14756						
OBS	169	5.63	34.222	27.01			14753	664	150	193	6		
ISL	200	5.56	34.245	27.03	106.05	0.231	14756						
OBS	230	5.55	34.257	27.04			14761	652	150	205	6		
ISL	250	5.51	34.258	27.05	105.07	0.284	14762						
OBS	289	5.44	34.254	27.05			14766	652	157	206	7		
ISL	300	5.44	34.254	27.06	105.02	0.336	14767						
OBS	347	5.42	34.257	27.06			14775	649	155	209	7		
ISL	400	5.34	34.258	27.07	104.76	0.441	14780						
OBS	457	5.22	34.258	27.08			14785	637	164	222	8		
ISL	500	5.14	34.258	27.09	103.57	0.545	14788						
OBS	565	5.01	34.257	27.11			14794	602	171	281	12		
ISL	600	4.92	34.256	27.12	102.08	0.648	14796						
OBS	677	4.67	34.257	27.15			14798	569	187	264	17		
ISL	700	4.53	34.260	27.16	98.17	0.748	14796						
ISL	800	3.94	34.277	27.24	90.85	0.843	14789						
ISL	900	3.34	34.303	27.32	82.85	0.929	14780						
OBS	905	3.31	34.305	27.32			14780	492	209	303	33		
ISL	1000	3.09	34.340	27.37	78.08	1.010	14787						
ISL	1100	2.95	34.380	27.42	74.14	1.086	14798						
ISL	1200	3.01	34.422	27.45	72.38	1.159	14818						
ISL	1250	2.96	34.443	27.47	70.50	1.195	14824						
ISL	1300	2.90	34.466	27.49	68.57	1.230	14831						
OBS	1314	2.89	34.472	27.50			14832	391	245	336	65		
ISL	1400	2.81	34.506	27.53	65.08	1.297	14844						
ISL	1500	2.72	34.542	27.57	61.93	1.360	14857						
OBS	1592	2.63	34.571	27.60			14869	355	247	338	82		
ISL	1750	2.46	34.602	27.64	55.85	1.507	14889						
OBS	1870	2.34	34.613	27.66			14905	365	228	335	89		
ISL	2000	2.25	0.000	0.00			0						
OBS	2147	2.16	34.637	27.69			14944	376	226	324	95		2
ISL	2250	2.07	0.000	0.00			0						
OBS	2415	1.95	34.655	27.72			14981	385	226	327	95		2
ISL	2500	1.90	0.000	0.00			0						
OBS	2683	1.84	34.659	27.73			15023	392	230	325	103		2
ISL	2750	1.81	0.000	0.00			0						
OBS	2941	1.73	34.660	27.74			15063	404	227	323	102		2
ISL	3000	1.70	0.000	0.00			0						
OBS	3199	1.58	34.695	27.78			15102	415	223	315	106		2
ISL	3250	1.53	0.000	0.00			0						
ISL	3500	1.29	0.000	0.00			0						
OBS	3691	1.11	34.636	27.77			15167	452	207	291	100		2
ISL	3750	1.08											
ISL	4000	0.89											
ISL	4500	0.68											
OBS	4570	0.67						214	305	123			

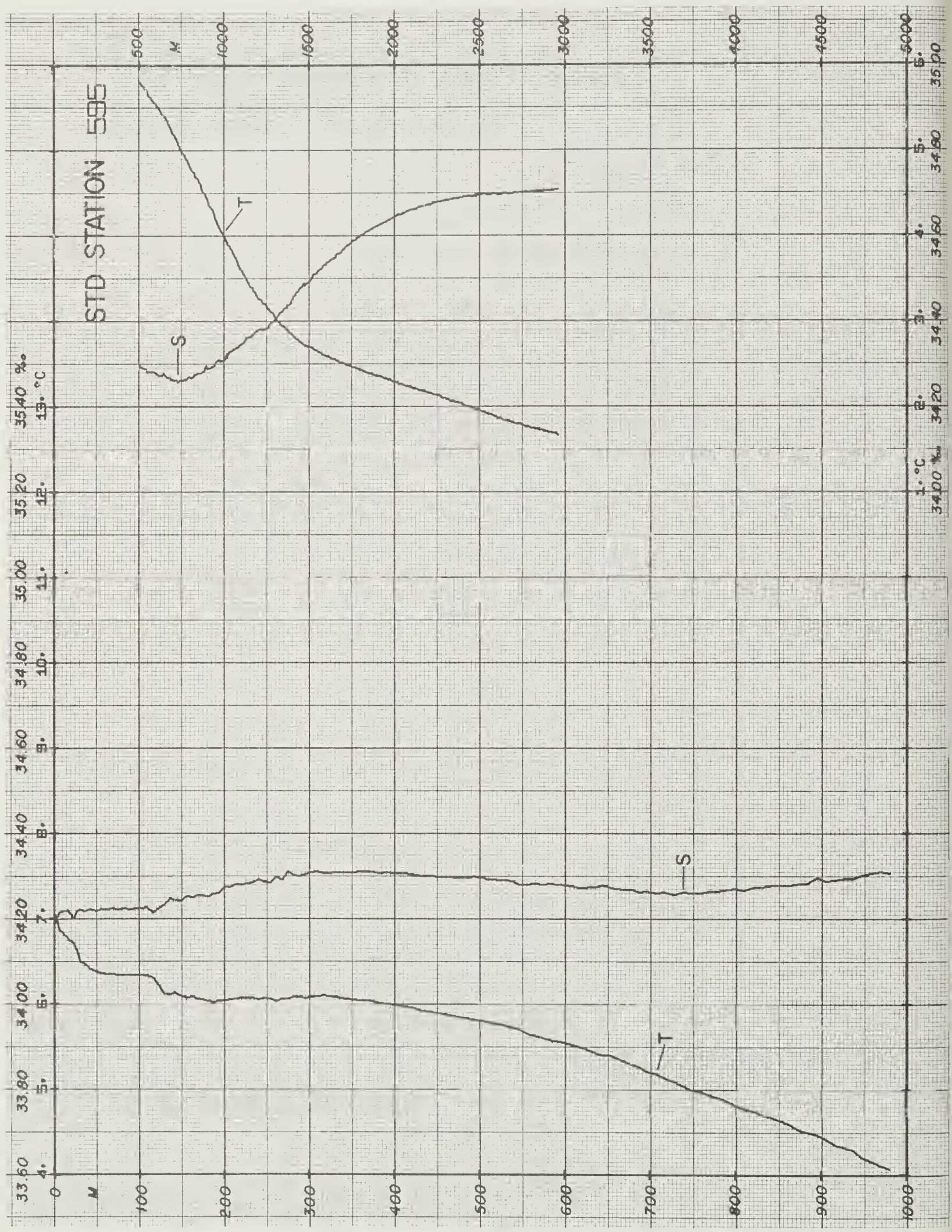




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 593	15OCT1966	9.8	50 25.0S	94 55.0W	489	4700	17	337				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	5.5	3.8	1004.0	26	4	29	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	IWT M	DD
STD	0	6.01	34.190	26.93	112.96	0.000	14741						0
STD	10	6.00	34.203	26.95	111.95	0.011	14742						0
STD	20	6.00	34.204	26.95	112.09	0.022	14744						5
STD	30	6.00	34.204	26.95	112.25	0.034	14745						6
STD	50	6.00	34.205	26.95	112.35	0.056	14748						0
STD	75	5.93	34.213	26.96	111.30	0.084	14750						3
STD	100	5.93	34.212	26.96	111.68	0.112	14754						0
STD	125	5.92	34.216	26.96	111.63	0.140	14758						6
STD	150	5.89	34.222	26.97	111.03	0.168	14761						5
STD	200	5.78	34.232	27.00	109.57	0.223	14765						6
STD	250	5.86	34.286	27.03	107.27	0.277	14777						0
STD	300	5.81	34.290	27.04	106.88	0.331	14783						4
STD	350	5.70	34.286	27.05	106.52	0.384	14787						6
STD	400	5.60	34.285	27.06	105.99	0.437	14791						4
STD	450	5.51	34.280	27.07	105.77	0.490	14795						0
STD	500	5.38	34.278	27.08	104.93	0.543	14798						4
STD	550	5.23	34.275	27.10	103.96	0.595	14801						4
STD	600	5.08	34.269	27.11	103.00	0.647	14802						6
STD	650	4.91	34.264	27.12	101.87	0.698	14804						17
STD	700	4.71	34.264	27.15	99.99	0.748	14804						0
STD	750	4.51	34.267	27.17	97.82	0.798	14804						7
STD	800	4.32	34.284	27.21	94.76	0.846	14805						2
STD	850	4.20	34.295	27.23	93.02	0.893	14808						15
STD	900	4.01	34.307	27.26	90.23	0.939	14808						0
STD	950	3.83	34.328	27.29	86.97	0.983	14809						6
STD	1000	3.65	34.333	27.31	85.00	1.026	14811						4
STD	1100	3.31	34.368	27.37	79.21	1.108	14813						8
STD	1200	3.11	34.417	27.43	73.86	1.185	14822						4
STD	1300	2.91	34.458	27.48	69.24	1.256	14831						7
STD	1400	2.78	34.490	27.52	65.92	1.324	14843						6
STD	1500	2.66	34.536	27.57	61.74	1.388	14855						5
STD	1600	2.56	34.569	27.60	58.66	1.448	14868						8



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	SER 594	16OCT1966	22.5	50 3.0S	100 2.0W	490	4189	41	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.0	5.0		10	4	10	2						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
ISL	0	6.79	34.193	26.83	122.43	0.000	14772						
OBS	2	6.79	34.193	26.83			14772	690	129	160	0		
ISL	10	6.71	34.194	26.85	121.49	0.012	14770						
ISL	20	6.62	34.195	26.86	120.40	0.024	14768						
ISL	30	6.54	34.196	26.87	119.46	0.036	14767						
ISL	50	6.41	34.197	26.89	118.05	0.060	14765						
OBS	54	6.39	34.198	26.89			14765	688	126	163	1		
ISL	75	6.32	34.206	26.91	116.60	0.089	14766						
ISL	100	6.28	34.221	26.92	115.33	0.118	14768						
OBS	104	6.28	34.224	26.93			14769	672	135	171	1		
ISL	125	6.27	34.247	26.95	113.57	0.147	14772						
ISL	150	6.25	34.272	26.97	111.85	0.175	14776						
OBS	158	6.25	34.280	26.97			14777	636	147	194	4		
ISL	200	6.17	34.289	26.99	110.23	0.231	14781						
OBS	209	6.15	34.289	26.99			14782	632	148	198	4		
ISL	250	6.10	34.300	27.01	109.25	0.286	14787						
OBS	261	6.09	34.302	27.01			14788	630	150	199	5		
ISL	300	6.04	34.302	27.02	109.01	0.340	14793						
OBS	312	0.00	34.301	0.00			0	636	153	202	6		
ISL	400	5.90	34.294	27.03	109.00	0.449	14803						
OBS	415	5.87	34.293	27.03			14804	629	155	193	7		
ISL	500	5.70	34.286	27.05	108.39	0.558	14812						
OBS	520	5.65	34.284	27.05			14813	627	158	209	5		
ISL	600	5.35	34.268	27.08	106.41	0.665	14813						
OBS	623	5.25	34.264	27.09			14813	605	172	228	8		
ISL	700	5.00	34.268	27.12	103.20	0.770	14816						
ISL	800	4.68	34.270	27.16	100.17	0.872	14819						
OBS	832	4.58	34.275	27.17			14820	535	190	271	19		
ISL	900	4.37	34.289	27.20	95.96	0.970	14823						
ISL	1000	3.98	34.314	27.27	90.24	1.063	14824						
OBS	1041	3.79	34.326	27.29			14823	476	213	304	32		
OBS	1055	3.71	34.330	27.31			14822	476	217	310	40		
ISL	1100	3.52	34.344	27.33	83.37	1.150	14822						
ISL	1200	3.20	34.378	27.39	77.82	1.230	14825						
ISL	1250	3.09	34.396	27.42	75.50	1.269	14829						
ISL	1300	3.01	34.416	27.44	73.46	1.306	14834						
OBS	1318	2.99	34.423	27.45			14837	430	225	320	58		
ISL	1400	2.84	34.458	27.49	68.96	1.377	14845						
ISL	1500	2.69	34.501	27.54	64.66	1.444	14856						
OBS	1552	2.63	34.523	27.56			14862	403	234	329	73		
ISL	1750	2.45	34.592	27.63	56.46	1.595	14889						
OBS	1785	2.43	34.603	27.64			14894	392	225	296	81		
ISL	2000	2.28	34.654	27.69	51.10	1.730	14925						
OBS	2114	2.21	34.673	27.71			14941	397	221	318	88		
ISL	2250	2.12	34.690	27.74	47.50	1.853	14961						
OBS	2377	2.03	34.701	27.75			14979	403	221	311	97		
ISL	2500	1.93	34.705	27.76	44.96	1.969	14996						
OBS	2643	1.81	34.706	27.77			15015	408	222	321	105		
ISL	2750	1.75	34.709	27.78	43.27	2.079	15031						
OBS	2909	1.68	34.713	27.79			15056	416	218	316	112		
ISL	3000	1.64	34.714	27.79	42.16	2.186	15070						
ISL	3250	1.51	34.714	27.80	41.02	2.290	15108						
OBS	3433	1.39	34.715	27.81			15135	440	213	307	118		
ISL	3500	1.32	34.715	27.82	38.96	2.390	15143						
ISL	3750	1.07	34.714	27.83	35.82	2.483	15177						
OBS	3958	0.86	34.714	27.85			15204	471	218	310	130		
ISL	4000	0.83	34.714	27.85	32.47	2.568	15210						
OBS	4098	0.75	34.715	27.85			15224	477	216	305	134		

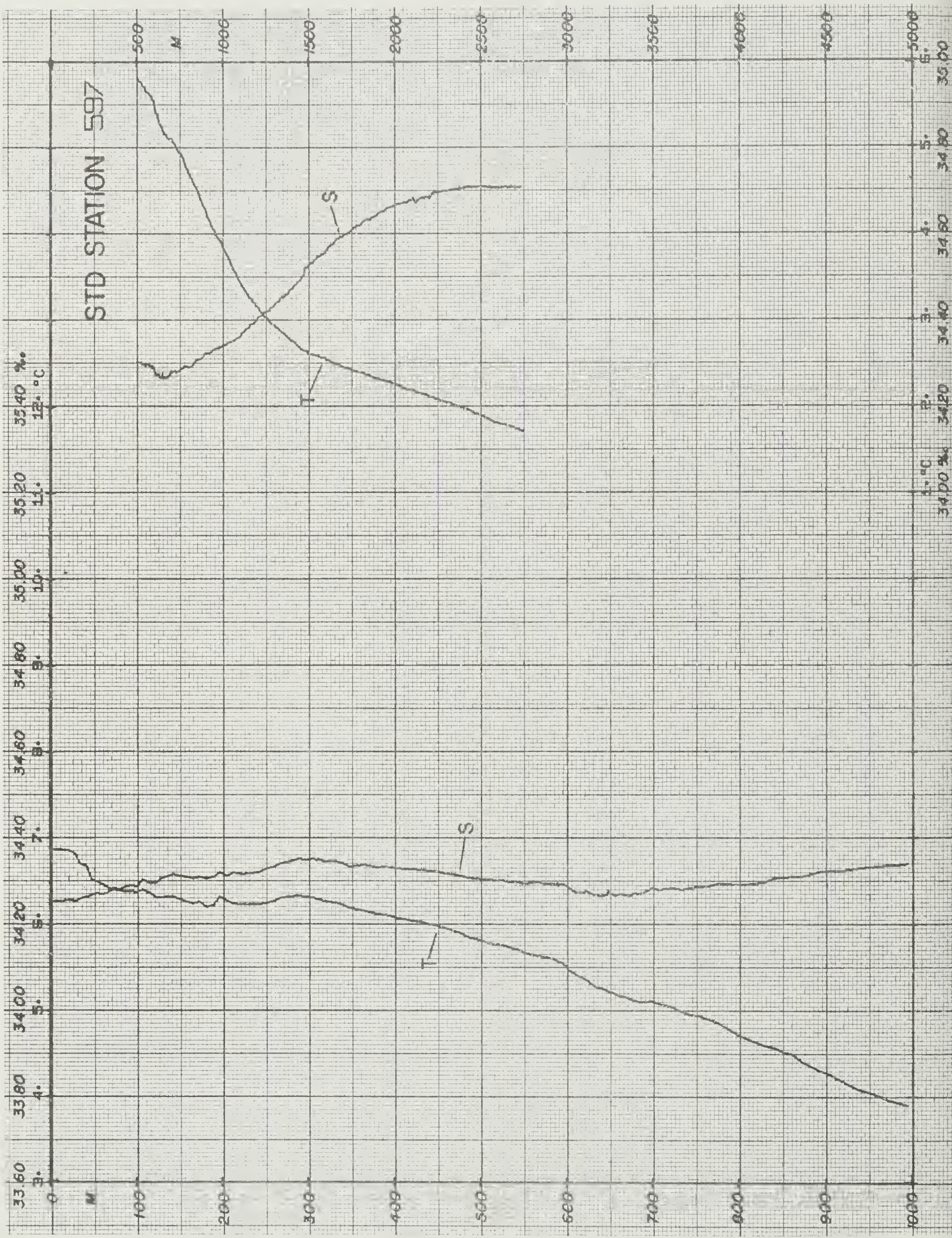


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 595	18OCT1966	21.6	50 4.0S	105 7.0W	490	3906	30	349				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	6.5	4.7	1006.0	0	0	0	0						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	6.94	34.210	26.83	123.16	0.000	14778					0	
STD	10	6.83	34.216	26.85	121.41	0.012	14775					10	
STD	20	6.73	34.210	26.86	120.70	0.024	14773					4	
STD	30	6.52	34.220	26.89	117.48	0.036	14766					4	
STD	50	6.37	34.219	26.91	115.91	0.060	14764					6	
STD	75	6.34	34.223	26.92	115.62	0.089	14767					0	
STD	100	6.34	34.224	26.92	115.83	0.117	14770					6	
STD	125	6.19	34.227	26.94	114.00	0.146	14769					6	
STD	150	6.08	34.244	26.97	111.87	0.174	14769					7	
STD	200	6.04	34.272	26.99	109.85	0.230	14776					7	
STD	250	6.06	34.286	27.00	109.78	0.285	14785					7	
STD	300	6.08	34.305	27.02	109.16	0.339	14794					6	
STD	350	6.05	34.308	27.02	109.39	0.394	14801					8	
STD	400	5.99	34.306	27.03	109.39	0.449	14807					9	
STD	450	5.90	34.299	27.03	109.34	0.504	14811					11	
STD	500	5.81	34.297	27.04	108.97	0.558	14816					0	
STD	550	5.69	34.280	27.04	109.30	0.613	14819					9	
STD	600	5.55	34.279	27.06	108.15	0.667	14822					6	
STD	650	5.40	34.276	27.08	107.09	0.721	14824					7	
STD	700	5.20	34.263	27.09	106.12	0.774	14824					12	
STD	750	4.99	34.261	27.11	104.16	0.827	14824					0	
STD	800	4.82	34.269	27.14	101.94	0.878	14825					9	
STD	850	4.64	34.278	27.17	99.61	0.929	14826					11	
STD	900	4.45	34.293	27.20	96.62	0.978	14827					10	
STD	950	4.19	34.302	27.23	93.25	1.025	14824					10	
STD	1000	4.01	34.308	27.26	91.00	1.071	14825					22	
STD	1100	3.61	34.345	27.33	84.27	1.159	14825					10	
STD	1200	3.29	34.377	27.38	78.95	1.240	14829					10	
STD	1300	3.08	34.401	27.42	75.32	1.318	14837					10	
STD	1400	2.85	34.447	27.48	69.97	1.390	14845					9	
STD	1500	2.70	34.492	27.53	65.48	1.458	14856					9	
STD	1600	2.60	34.533	27.57	61.78	1.522	14869					0	
STD	1700	2.51	34.565	27.60	58.89	1.582	14883					6	
STD	1800	2.44	34.597	27.64	56.17	1.639	14897					9	
STD	1900	2.37	34.622	27.66	53.94	1.695	14911					9	
STD	2000	2.29	34.644	27.68	51.99	1.747	14925					9	
STD	2100	2.23	34.661	27.70	50.36	1.799	14940					11	
STD	2200	2.17	34.673	27.72	49.18	1.848	14954					10	
STD	2300	2.10	34.683	27.73	47.98	1.897	14969					12	
STD	2400	2.03	34.690	27.74	47.05	1.945	14983					10	
STD	2500	1.96	34.695	27.75	46.16	1.991	14997					9	
STD	2600	1.89	34.698	27.76	45.32	2.037	15011					11	
STD	2700	1.81	34.699	27.77	44.59	2.082	15025					12	
STD	2800	1.76	34.701	27.77	44.05	2.126	15040					12	
STD	2900	1.71	34.706	27.78	43.38	2.170	15056					12	



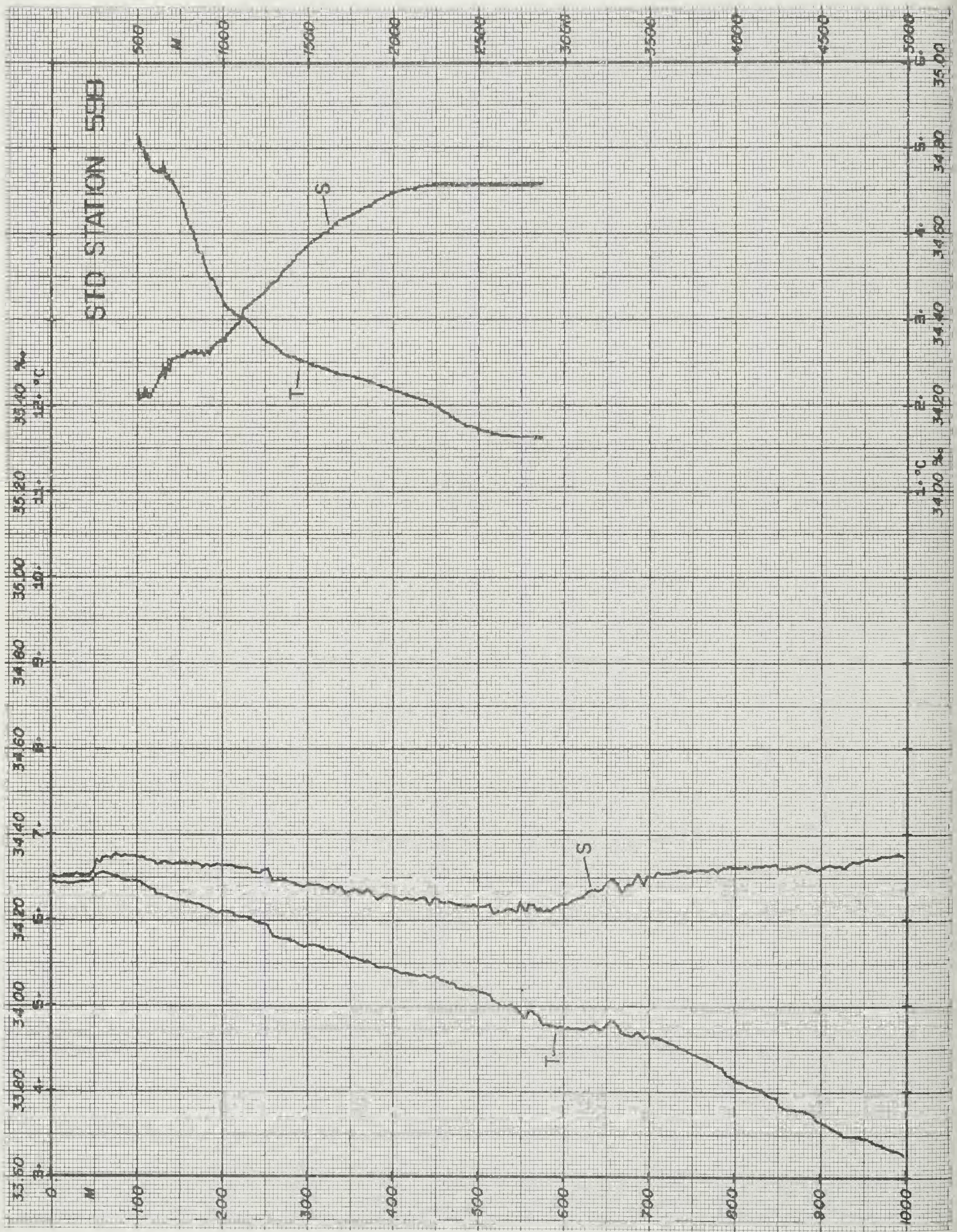
SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 25	SER 596		21OCT1966	3.4	49 36.0S	110 23.0W	455	3343	32	21			
	AIR TEMP		DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
	6.7		5.4			5	5	9	4	1			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
ISL	0	6.82	34.253	26.88	118.34	0.000	14774						
GBS	1	6.82	34.253	26.88			14774	688	124	157	3		
ISL	10	6.82	34.251	26.87	118.71	0.012	14775						
ISL	20	6.83	34.249	26.87	119.04	0.024	14777						
ISL	30	6.83	34.250	26.87	119.20	0.036	14779						
OBS	41	6.84	34.249	26.87			14781	689	120	156	2		
ISL	50	6.79	34.251	26.88	118.86	0.059	14781						
ISL	75	6.64	34.259	26.91	116.72	0.089	14779						
OBS	93	6.52	34.266	26.93			14777	692	131	163	3		
ISL	100	6.50	34.268	26.93	114.56	0.118	14777						
ISL	125	6.44	34.275	26.95	113.57	0.146	14779						
OBS	146	6.40	34.281	26.96			14781	688	135	164	2		
ISL	150	6.39	34.282	26.96	112.82	0.175	14782						
ISL	200	6.28	34.295	26.98	111.13	0.231	14785						
OBS	204	6.27	34.296	26.98			14786	681	138	172	6		
ISL	250	6.24	34.297	26.99	111.23	0.286	14792						
OBS	258	6.24	34.297	26.99			14793	675	134	176	5		
ISL	300	6.21	34.301	27.00	111.14	0.342	14799						
OBS	310	6.20	34.303	27.00			14801	675	139	180	6		
ISL	400	6.25	34.332	27.02	110.78	0.453	14818						
OBS	413	6.25	34.335	27.02			14820	635	145	203	8		
ISL	500	6.05	34.318	27.03	110.54	0.563	14826						
OBS	512	6.01	34.314	27.03			14826	631	156	209	10		
ISL	600	5.70	34.289	27.05	109.36	0.673	14828						
OBS	612	5.65	34.286	27.05			14828	615	158	230	12		
ISL	700	5.33	34.289	27.10	105.82	0.781	14830						
ISL	800	4.94	34.289	27.14	101.94	0.885	14830						
OBS	824	4.84	34.293	27.16			14830	534	189	271	23		
ISL	900	4.47	34.302	27.20	96.20	0.984	14828						
ISL	1000	4.00	34.321	27.27	89.94	1.077	14825						
OBS	1050	3.77	34.334	27.30			14824	488	210	303	37		
ISL	1100	3.58	34.350	27.33	83.59	1.164	14824						
OBS	1154	3.39	34.369	27.37			14826	464	225	314	45		
ISL	1200	3.26	34.388	27.40	77.76	1.244	14828						
ISL	1250	3.13	34.409	27.42	75.06	1.283	14831						
ISL	1300	3.02	34.430	27.45	72.48	1.320	14835						
ISL	1400	2.84	34.474	27.50	67.74	1.390	14845						
OBS	1404	2.83	34.476	27.50			14845	420	235	313	65		
ISL	1500	2.69	34.515	27.55	63.62	1.455	14856						
OBS	1657	2.53	34.574	27.61			14876	398	232	325	76		
ISL	1750	2.46	34.604	27.64	55.69	1.604	14889						
OBS	1909	2.36	34.647	27.68			14913	393	226	302	85		
ISL	2000	2.29	34.666	27.70	50.35	1.737	14925						
OBS	2164	2.17	34.691	27.73			14948	396	234	324	91		
ISL	2250	2.12	34.701	27.74	46.71	1.858	14961						
OBS	2420	2.01	34.714	27.76			14986	402	226	319	95		
ISL	2500	1.93	34.714	27.77	44.35	1.972	14996						
OBS	2675	1.76	34.710	27.78			15019	399	233	329	108		
ISL	2750	1.72	34.711	27.78	42.69	2.081	15030						
OBS	2931	1.67	34.716	27.79			15059	407	227	322	111		
ISL	3000	1.66	34.718	27.79	42.12	2.187	15071						
OBS	3188	1.64	34.723	27.80			15103	420	234	313	112		

STD STATION 597





SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 25	STD 597		21OCT1966	9.8	49 30.0S	110 34.0W	455	3226	27	331			
	AIR TEMP		DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS				
	7.4		6.1	986.0	8	3	7	4					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ mol/l	NITR 10 $\mu$ mol/l	SILIC $\mu$ mol/l	INT M	DD
STD	0	6.87	34.251	26.87	119.13	0.000	14776						0
STD	10	6.87	34.254	26.87	119.04	0.012	14777						4
STD	20	6.86	34.256	26.87	118.85	0.024	14778						5
STD	30	6.81	34.253	26.88	118.71	0.036	14778						0
STD	50	6.52	34.269	26.93	114.01	0.059	14770						6
STD	75	6.40	34.283	26.96	111.81	0.087	14770						8
STD	100	6.37	34.289	26.96	111.41	0.115	14773						7
STD	125	6.31	34.299	26.98	110.16	0.143	14774						5
STD	150	6.29	34.312	26.99	109.42	0.170	14778						8
STD	200	6.30	34.317	27.00	109.82	0.225	14787						9
STD	250	6.24	34.327	27.01	108.99	0.280	14793						9
STD	300	6.32	34.351	27.02	108.93	0.334	14804						9
STD	350	6.19	34.335	27.03	109.08	0.389	14807						9
STD	400	6.08	34.331	27.04	108.68	0.443	14811						9
STD	450	5.98	34.323	27.04	108.68	0.498	14815						10
STD	500	5.82	34.305	27.05	108.46	0.552	14816						9
STD	550	5.67	34.295	27.06	107.98	0.606	14819						9
STD	600	5.52	34.290	27.07	106.96	0.660	14821						0
STD	650	5.22	34.274	27.10	104.95	0.713	14817						0
STD	700	5.11	34.284	27.12	103.38	0.765	14820						9
STD	750	4.94	34.285	27.14	101.73	0.816	14822						10
STD	800	4.72	34.293	27.17	98.96	0.866	14821						10
STD	850	4.53	34.307	27.20	96.04	0.915	14822						11
STD	900	4.28	34.323	27.24	92.28	0.962	14820						11
STD	950	4.05	34.331	27.27	89.38	1.007	14819						0
STD	1000	3.87	34.341	27.30	86.91	1.051	14820						11
STD	1100	3.45	34.362	27.36	81.22	1.136	14819						11
STD	1200	3.17	34.401	27.41	75.77	1.214	14824						12
STD	1300	2.94	34.434	27.46	71.33	1.288	14832						13
STD	1400	2.77	34.472	27.51	67.16	1.357	14842						13
STD	1500	2.62	34.526	27.56	62.04	1.421	14853						8
STD	1600	2.56	34.557	27.59	59.57	1.482	14868						7
STD	1700	2.47	34.594	27.63	56.20	1.540	14881						11
STD	1800	2.40	34.621	27.66	53.97	1.595	14895						0
STD	1900	2.33	34.644	27.68	51.91	1.648	14910						12
STD	2000	2.27	34.665	27.70	50.16	1.699	14925						11
STD	2100	2.20	34.680	27.72	48.57	1.749	14938						11
STD	2200	2.13	34.686	27.73	47.75	1.797	14953						11
STD	2300	2.06	34.699	27.75	46.29	1.844	14967						6
STD	2400	1.99	34.705	27.76	45.43	1.890	14981						7
STD	2500	1.91	34.709	27.77	44.40	1.934	14995						7
STD	2600	1.82	34.708	27.77	43.66	1.979	15008						6
STD	2700	1.76	34.708	27.78	43.23	2.022	15023						9

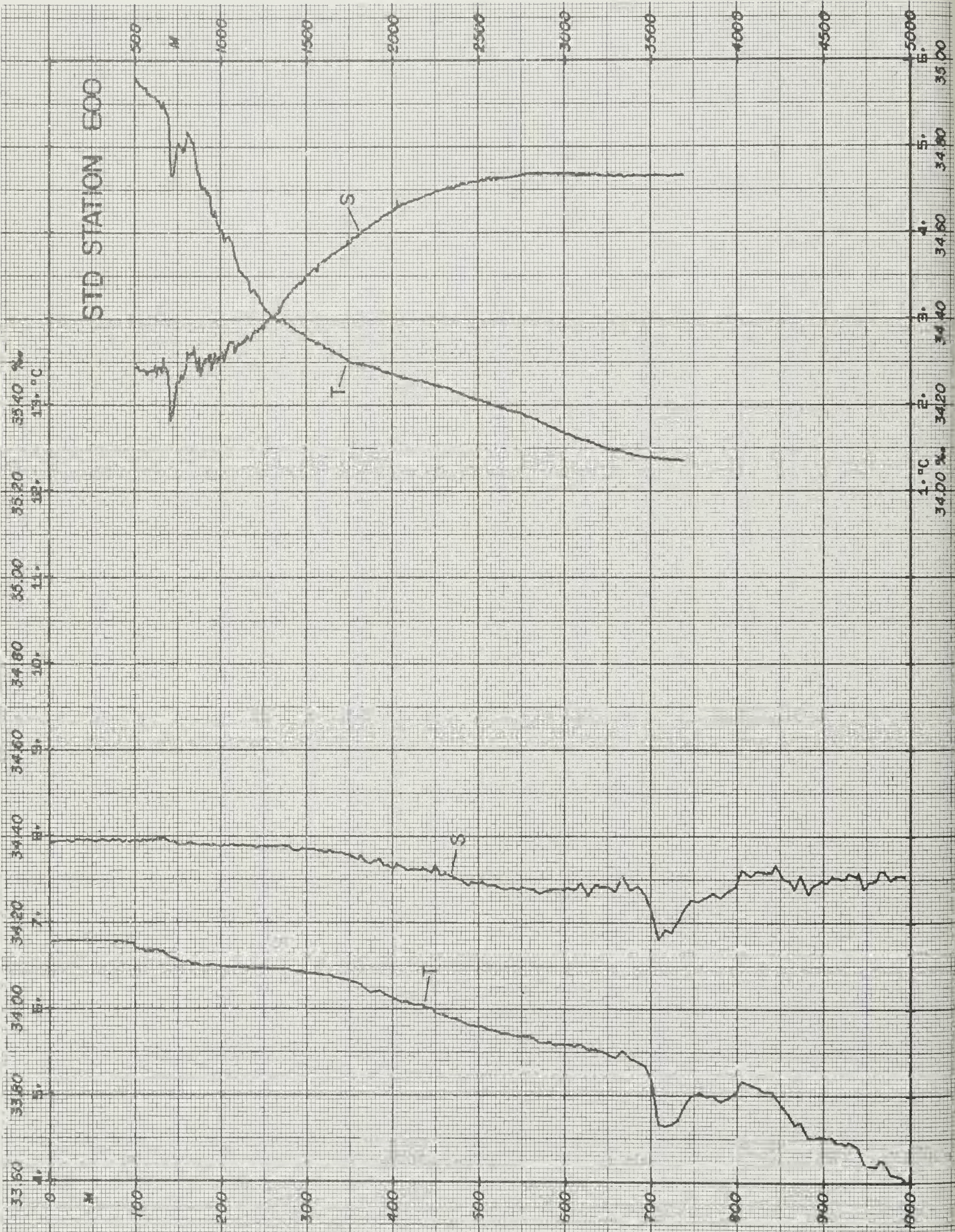


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 598	22OCT1966	10.4	50 4.0S	115 0.0W	491	3020	29	588				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	6.6	-0.5	1006.0	25	4	23	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	6.46	34.301	26.96	110.18	0.000	14760						0
STD	10	6.43	34.299	26.97	110.03	0.011	14760						4
STD	20	6.42	34.302	26.97	109.98	0.022	14762						0
STD	30	6.43	34.306	26.97	109.86	0.033	14764						4
STD	50	6.46	34.313	26.97	110.00	0.055	14768						5
STD	75	6.51	34.351	27.00	108.23	0.082	14775						4
STD	100	6.44	34.347	27.00	107.95	0.109	14776						7
STD	125	6.29	34.327	27.01	107.90	0.136	14774						0
STD	150	6.22	34.331	27.02	107.11	0.163	14776						5
STD	200	6.09	34.327	27.03	106.37	0.217	14778						5
STD	250	5.94	34.314	27.04	106.22	0.270	14781						6
STD	300	5.69	34.278	27.04	106.36	0.323	14778						6
STD	350	5.56	34.263	27.05	106.52	0.376	14781						6
STD	400	5.42	34.254	27.06	106.07	0.429	14783						6
STD	450	5.34	34.249	27.06	105.96	0.482	14788						6
STD	500	5.17	34.232	27.07	105.81	0.535	14789						4
STD	550	4.92	34.241	27.11	102.63	0.587	14787						0
STD	600	4.74	34.237	27.12	101.32	0.638	14788						3
STD	650	4.76	34.280	27.15	98.87	0.688	14798						7
STD	700	4.64	34.301	27.18	96.35	0.737	14801						8
STD	750	4.44	34.314	27.22	93.55	0.785	14802						5
STD	800	4.13	34.322	27.26	89.74	0.830	14797						3
STD	850	3.90	34.327	27.28	87.08	0.875	14796						4
STD	900	3.65	34.319	27.30	85.17	0.918	14793						5
STD	950	3.46	34.339	27.34	81.95	0.959	14794						0
STD	1000	3.26	34.351	27.37	79.10	1.000	14794						5
STD	1100	3.03	34.392	27.42	74.15	1.076	14801						7
STD	1200	2.90	34.449	27.48	69.19	1.148	14814						6
STD	1300	2.72	34.486	27.52	64.92	1.215	14823						7
STD	1400	2.57	34.525	27.57	60.96	1.278	14834						0
STD	1500	2.51	34.569	27.61	57.52	1.337	14849						0
STD	1600	2.43	34.601	27.64	54.79	1.393	14863						5
STD	1700	2.36	34.632	27.67	52.23	1.447	14877						7
STD	1800	2.32	34.650	27.69	50.87	1.498	14893						6
STD	1900	2.26	34.674	27.71	48.83	1.548	14907						0
STD	2000	2.18	34.695	27.73	46.86	1.596	14921						8
STD	2100	2.12	34.702	27.75	45.99	1.643	14935						0
STD	2200	2.06	34.714	27.76	44.79	1.688	14950						5
STD	2300	1.94	34.716	27.77	43.57	1.732	14962						3
STD	2400	1.81	34.715	27.78	42.36	1.775	14974						6
STD	2500	1.73	34.716	27.79	41.62	1.817	14988						7
STD	2600	1.67	34.716	27.79	41.18	1.858	15002						6
STD	2700	1.64	34.715	27.79	41.17	1.900	15018						0
STD	2800	1.64	34.716	27.79	41.37	1.941	15035						6

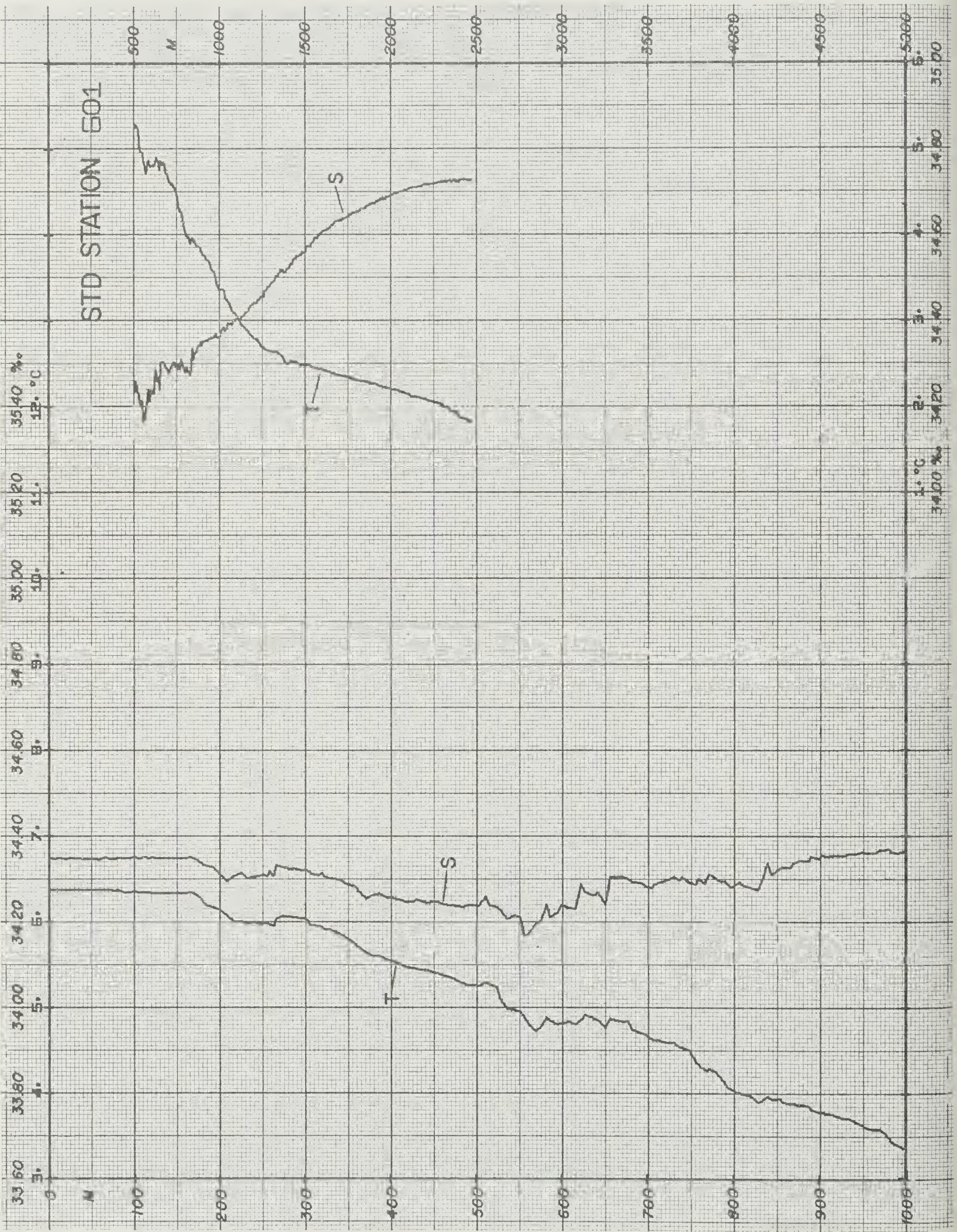


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	SER 599	25OCT1966	11.2	50 1.0S	127 30.0W	492	4100	41	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.8	5.9		35	5	34	3		2				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DJ
ISL	0	7.34	34.397	26.92	114.47	0.000	14796						
OBS	1	7.34	34.397	26.92			14796	692	117	152	1		
ISL	10	7.33	34.396	26.92	114.57	0.011	14797						
ISL	20	7.31	34.395	26.92	114.59	0.023	14798						
ISL	30	7.29	34.394	26.92	114.52	0.034	14799						
OBS	50	7.24	34.394	26.93			14800	691	122	156	1		
ISL	50	7.24	34.394	26.93	114.16	0.057	14800						
ISL	75	7.14	34.396	26.95	113.08	0.086	14800						
OBS	98	7.05	34.399	26.96			14801	672	125	167	1		
ISL	100	7.04	34.399	26.96	111.95	0.114	14801						
ISL	125	6.99	34.401	26.97	111.42	0.142	14803						
ISL	150	6.95	34.403	26.98	111.12	0.170	14805						
OBS	198	6.90	34.404	26.98			14811	657	125	167	0		
ISL	200	6.90	34.404	26.98	111.18	0.225	14812						
ISL	250	6.86	34.400	26.99	111.77	0.281	14818						
OBS	296	6.84	34.395	26.99			14825	658	125	173	6		
ISL	300	6.84	34.395	26.99	112.54	0.337	14825						
OBS	395	6.78	34.392	26.99			14839	658	128	178	6		
ISL	400	6.78	34.392	26.99	113.45	0.450	14840						
OBS	495	6.76	34.391	26.99			14854	655	128	182	6		
ISL	500	6.75	34.390	26.99	114.73	0.564	14855						
OBS	596	6.51	34.356	27.00			14861	634	140	198	7		
ISL	600	6.50	34.355	27.00	115.19	0.679	14861						
OBS	698	6.08	34.324	27.03			14860	581	138	238	9		
ISL	700	6.07	34.323	27.03	113.03	0.793	14860						
OBS	800	5.58	34.307	27.08			14857	552	149	255	14		
ISL	800	5.58	34.307	27.08	108.92	0.904	14857						
ISL	900	5.17	34.323	27.14	103.50	1.010	14857						
OBS	903	5.16	34.324	27.14			14857	517	183	280	21		
ISL	1000	4.66	34.332	27.21	97.29	1.111	14852						
OBS	1005	4.63	34.332	27.21			14852	494	199	303	26		
ISL	1100	4.14	34.342	27.27	91.04	1.205	14848						
ISL	1200	3.69	34.358	27.33	85.12	1.293	14846						
OBS	1213	3.64	34.361	27.34			14846	468	213	316	33		
ISL	1250	3.52	34.372	27.36	82.37	1.335	14847						
ISL	1300	3.37	34.387	27.38	79.77	1.375	14849						
ISL	1400	3.12	34.422	27.44	74.92	1.453	14856						
OBS	1473	2.98	34.450	27.47			14863	428	228	338	51		
ISL	1500	2.93	34.460	27.48	70.55	1.525	14865						
OBS	1730	2.64	34.543	27.57			14893	405	229	345	63		
ISL	1750	2.62	34.550	27.58	61.58	1.691	14896						
OBS	2000	2.42	34.628	27.66			14930	395	229	333	72		
ISL	2000	2.42	34.628	27.66	54.70	1.836	14930						
ISL	2250	2.25	34.674	27.71	50.37	1.967	14966						
OBS	2261	2.24	34.675	27.71			14968	395	223	344	87		
ISL	2500	2.11	34.699	27.74	47.84	2.090	15004						
OBS	2517	2.10	34.700	27.75			15006	404	220	338	89		
ISL	2750	1.93	34.716	27.77	45.13	2.206	15039						
OBS	2772	1.91	34.717	27.77			15042	415	218	329	95		
ISL	3000	1.75	34.717	27.79	43.44	2.317	15075						
OBS	3027	1.73	34.717	27.79			15079	416	215	330	100		
ISL	3250	1.60	34.717	27.80	42.11	2.424	15112						
ISL	3500	1.48	34.718	27.81	41.04	2.528	15150						
OBS	3524	1.47	34.718	27.81			15154	440	217	321	106		
ISL	3750	1.38	34.724	27.82	39.70	2.629	15190						
ISL	4000	1.34	34.723	27.82	39.84	2.728	15232						
OBS	4022	1.34	34.722	27.82			15236	446	220	335	112		
OBS	4074	1.35	34.718	27.82			15246	448	215	329	113		

STD STATION 800



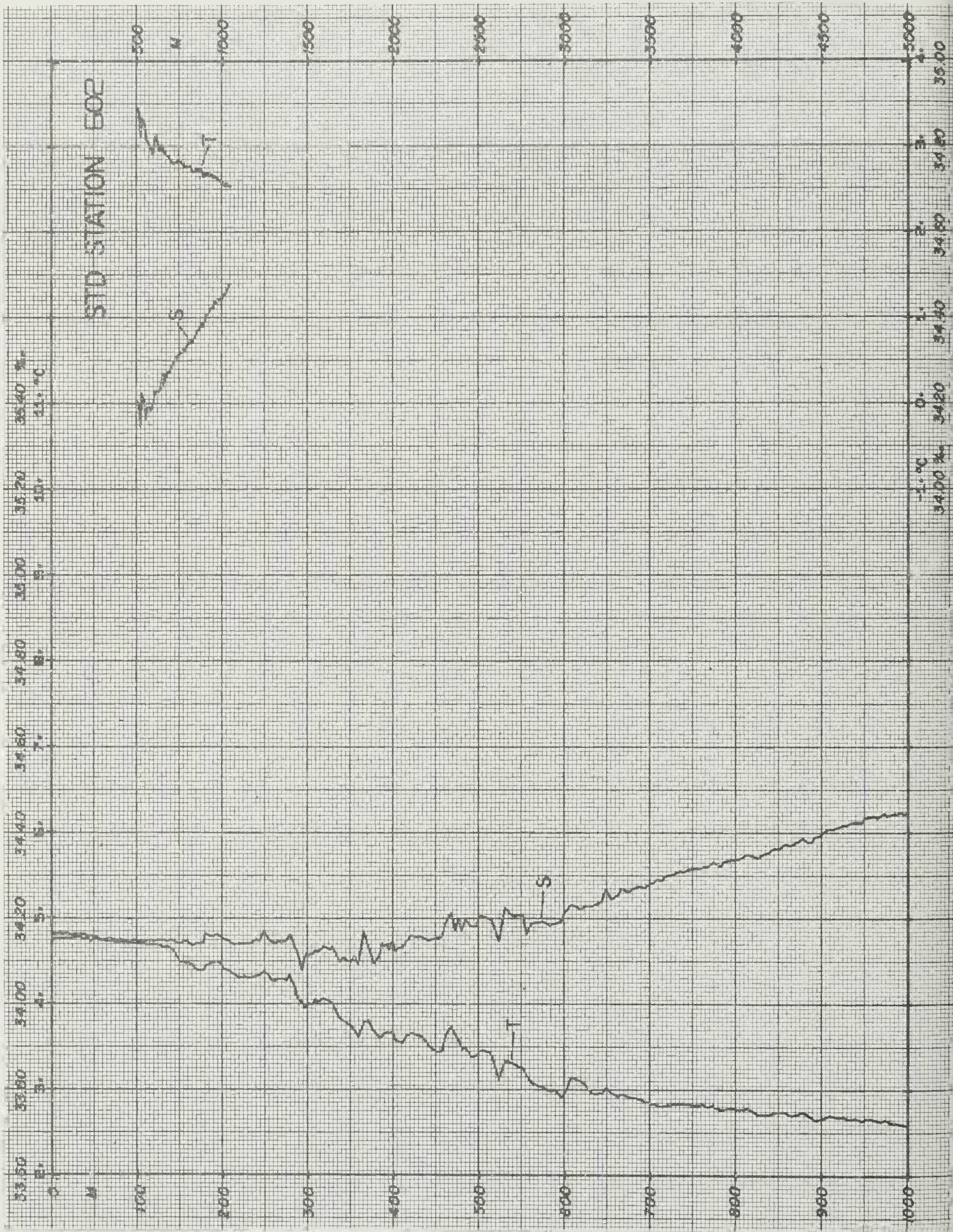
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NCL				
EL 25	STD 600	27OCT1966	12.7	52 30.0S	127 26.0W	492	3794	37	665				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	2.5	-2.8	1021.0	24	6	22	6						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/Sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 <sup>-6</sup> g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	6.77	34.387	26.99	107.73	0.000	14774					0	
STD	10	6.78	34.388	26.99	107.96	0.011	14776					8	
STD	20	6.79	34.390	26.99	108.05	0.022	14777					5	
STD	30	6.79	34.390	26.99	108.19	0.032	14779					4	
STD	50	6.79	34.390	26.99	108.55	0.054	14783					6	
STD	75	6.78	34.391	26.99	108.77	0.081	14786					5	
STD	100	6.70	34.390	27.00	108.13	0.108	14787					0	
STD	125	6.68	34.395	27.01	107.85	0.135	14790					5	
STD	150	6.56	34.381	27.01	107.63	0.162	14790					7	
STD	200	6.49	34.377	27.02	107.76	0.216	14795					0	
STD	250	6.47	34.378	27.02	108.21	0.270	14802					0	
STD	300	6.42	34.370	27.02	108.75	0.324	14808					6	
STD	350	6.33	34.357	27.02	109.25	0.379	14813					5	
STD	400	6.13	34.325	27.02	109.78	0.434	14813					6	
STD	450	5.96	34.334	27.05	107.53	0.488	14814					0	
STD	500	5.80	34.291	27.04	109.26	0.542	14816					10	
STD	550	5.68	34.282	27.05	109.06	0.597	14819					10	
STD	600	5.59	34.276	27.05	108.90	0.651	14823					0	
STD	650	5.47	34.282	27.07	107.62	0.705	14827					7	
STD	700	5.21	34.232	27.06	108.55	0.759	14824					7	
STD	750	5.01	34.251	27.10	105.11	0.813	14824					9	
STD	800	5.06	34.290	27.13	103.40	0.865	14835					7	
STD	850	4.92	34.318	27.17	100.12	0.916	14838					10	
STD	900	4.52	34.295	27.19	97.36	0.965	14830					7	
STD	950	4.21	34.286	27.22	94.59	1.013	14825					7	
STD	1000	4.01	34.306	27.26	91.22	1.060	14825					7	
STD	1100	3.63	34.337	27.32	85.11	1.148	14826					5	
STD	1200	3.32	34.370	27.37	79.84	1.230	14830					3	
STD	1300	3.02	34.403	27.43	74.59	1.307	14835					7	
STD	1400	2.93	34.457	27.48	70.06	1.380	14848					7	
STD	1500	2.79	34.498	27.53	66.06	1.448	14860					8	
STD	1600	2.69	34.535	27.56	62.72	1.512	14873					0	
STD	1700	2.57	34.561	27.60	59.90	1.574	14885					9	
STD	1800	2.47	34.592	27.63	56.97	1.632	14898					9	
STD	1900	2.43	34.623	27.66	54.66	1.688	14914					9	
STD	2000	2.36	34.651	27.68	52.29	1.741	14928					0	
STD	2100	2.30	34.672	27.71	50.48	1.793	14943					6	
STD	2200	2.26	34.685	27.72	49.44	1.843	14958					0	
STD	2300	2.20	34.700	27.74	48.06	1.891	14973					8	
STD	2400	2.12	34.713	27.75	46.57	1.939	14987					0	
STD	2500	2.06	34.719	27.76	45.71	1.985	15002					9	
STD	2600	1.99	34.723	27.77	44.89	2.030	15016					10	
STD	2700	1.92	34.729	27.78	43.88	2.075	15030					9	
STD	2800	1.86	34.736	27.79	42.88	2.118	15045					10	
STD	2900	1.76	34.738	27.80	41.82	2.160	15058					4	
STD	3000	1.67	34.737	27.81	41.00	2.202	15072					3	
STD	3100	1.59	34.734	27.81	40.34	2.242	15086					3	
STD	3200	1.53	34.733	27.82	39.82	2.282	15100					4	
STD	3300	1.47	34.732	27.82	39.38	2.322	15115					2	
STD	3400	1.42	34.732	27.82	38.82	2.361	15130					4	
STD	3500	1.39	34.733	27.83	38.62	2.400	15147					6	
STD	3600	1.37	34.731	27.83	38.70	2.438	15163					11	





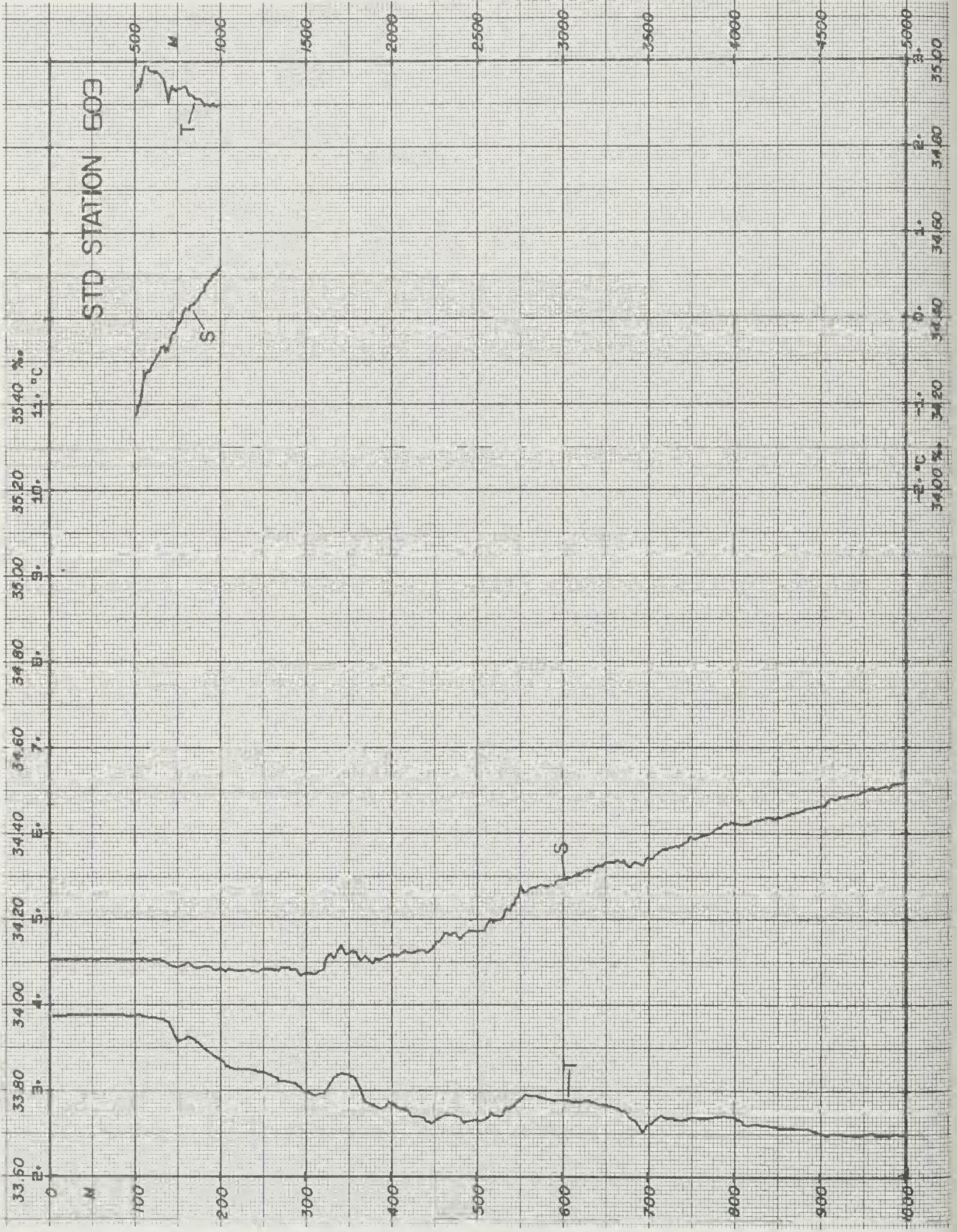
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 601	28OCT1966	14.8	55 0.0S	127 32.0W	492	1373	25	414				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	6.6	5.1	1002.1	27	7	27	6						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
STD	0	6.37	34.346	27.01	105.70	0.000	14757					0	
STD	10	6.37	34.348	27.01	105.67	0.011	14759					0	
STD	20	6.37	34.347	27.01	105.91	0.021	14760					0	
STD	30	6.37	34.347	27.01	106.03	0.032	14762					4	
STD	50	6.37	34.347	27.01	106.38	0.053	14765					3	
STD	75	6.37	34.347	27.01	106.67	0.080	14769					4	
STD	100	6.34	34.349	27.02	106.58	0.106	14772					7	
STD	125	6.33	34.348	27.02	106.90	0.133	14776					0	
STD	150	6.33	34.348	27.02	107.25	0.160	14780					6	
STD	200	6.14	34.312	27.01	108.13	0.214	14780					0	
STD	250	5.97	34.307	27.03	107.09	0.267	14782					0	
STD	300	6.03	34.321	27.03	107.41	0.321	14792					5	
STD	350	5.80	34.287	27.04	107.77	0.375	14791					6	
STD	400	5.55	34.256	27.04	107.45	0.429	14788					6	
STD	450	5.41	34.246	27.05	107.16	0.482	14791					8	
STD	500	5.26	34.237	27.06	106.51	0.536	14793					5	
STD	550	4.96	34.213	27.08	105.19	0.589	14789					8	
STD	600	4.81	34.238	27.11	102.15	0.640	14791					0	
STD	650	4.78	34.247	27.13	101.57	0.691	14798					9	
STD	700	4.67	34.282	27.17	98.16	0.741	14802					7	
STD	750	4.50	34.291	27.19	95.89	0.790	14804					0	
STD	800	4.04	34.282	27.23	91.63	0.837	14793					7	
STD	850	3.94	34.318	27.27	88.15	0.882	14797					9	
STD	900	3.78	34.345	27.31	84.78	0.925	14800					0	
STD	950	3.64	34.362	27.34	82.26	0.967	14802					8	
STD	1000	3.36	34.364	27.37	79.33	1.007	14799					8	
STD	1100	3.07	34.403	27.42	73.82	1.084	14803					6	
STD	1200	2.80	34.442	27.48	68.49	1.155	14809					10	
STD	1300	2.65	34.484	27.53	64.31	1.221	14820					10	
STD	1400	2.50	34.522	27.57	60.36	1.283	14831					11	
STD	1500	2.49	34.561	27.60	57.85	1.343	14848					7	
STD	1600	2.44	34.606	27.64	54.50	1.399	14863					9	
STD	1700	2.37	34.633	27.67	52.24	1.452	14878					7	
STD	1800	2.32	34.654	27.69	50.53	1.504	14893					6	
STD	1900	2.27	34.675	27.71	48.93	1.553	14908					0	
STD	2000	2.21	34.693	27.73	47.38	1.601	14922					10	
STD	2100	2.15	34.707	27.75	46.10	1.648	14937					12	
STD	2200	2.09	34.718	27.76	44.91	1.694	14952					10	
STD	2300	2.03	34.725	27.77	44.08	1.738	14966					8	
STD	2400	1.90	34.725	27.78	42.78	1.782	14978					6	

STD STATION 502

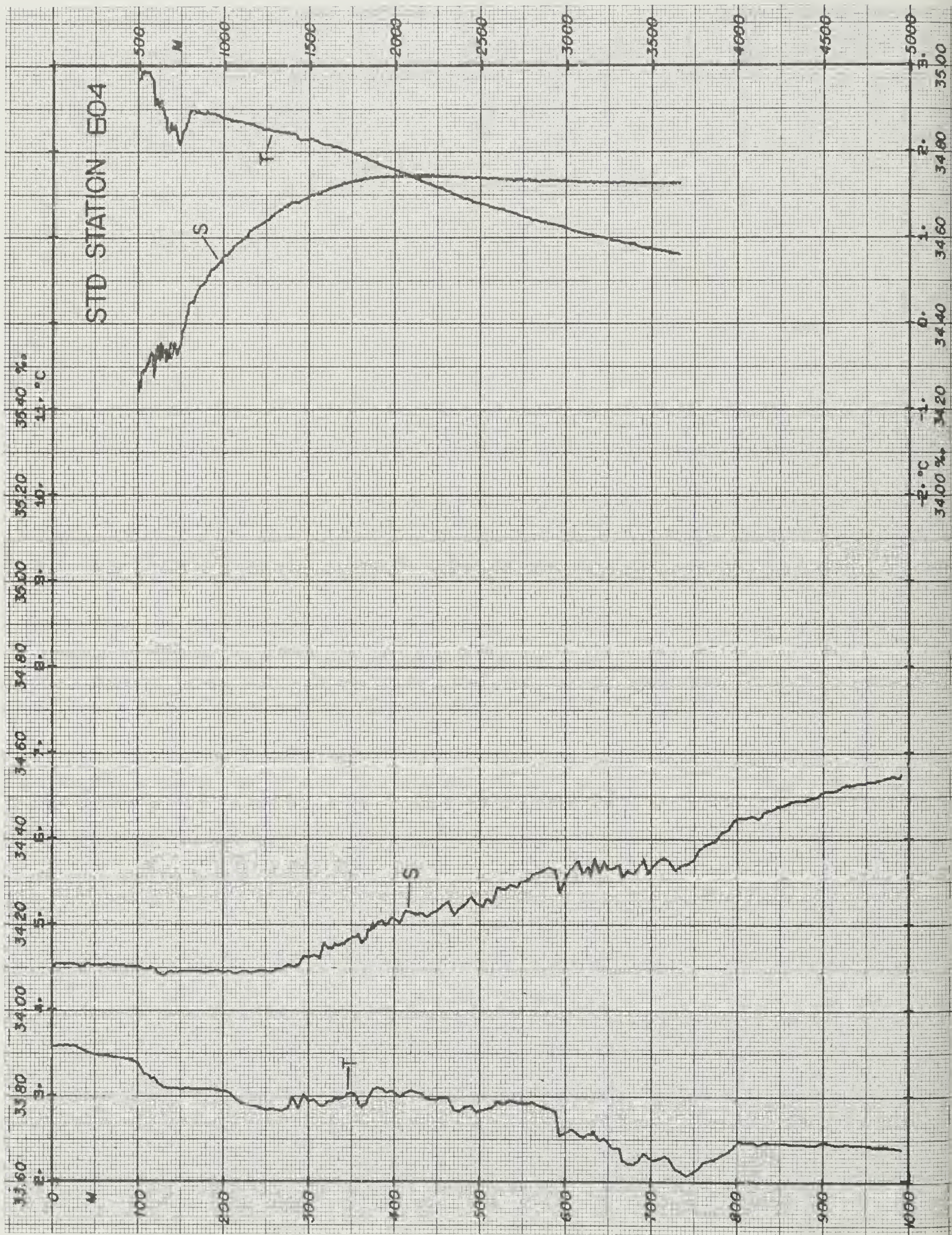


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 602	30OCT1966	1.0	55 55.0S	126 25.0W	492	4537	11	256				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	5.3	0.7	1009.3	31	6	26	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	4.83	34.145	27.04	102.89	0.000	14692						0
STD	10	4.82	34.152	27.05	102.31	0.010	14693						4
STD	20	4.82	34.152	27.05	102.45	0.020	14695						4
STD	30	4.81	34.155	27.05	102.30	0.031	14696						0
STD	50	4.79	34.153	27.05	102.42	0.051	14699						0
STD	75	4.72	34.149	27.06	102.23	0.077	14700						8
STD	100	4.70	34.147	27.06	102.41	0.102	14703						8
STD	125	4.69	34.148	27.06	102.47	0.128	14706						0
STD	150	4.51	34.141	27.07	101.33	0.153	14703						4
STD	200	4.44	34.153	27.09	100.16	0.204	14708						4
STD	250	4.37	34.167	27.11	98.88	0.254	14714						6
STD	300	3.98	34.116	27.11	99.08	0.303	14705						0
STD	350	3.75	34.095	27.11	98.63	0.352	14704						0
STD	400	3.67	34.144	27.16	94.53	0.401	14709						0
STD	450	3.44	34.152	27.19	92.02	0.447	14708						0
STD	500	3.42	34.192	27.22	89.09	0.493	14715						6
STD	550	3.26	34.207	27.25	86.73	0.537	14717						7
STD	600	2.94	34.209	27.28	83.70	0.579	14712						5
STD	650	3.01	34.264	27.32	80.63	0.620	14724						6
STD	700	2.84	34.279	27.35	78.05	0.660	14725						0
STD	750	2.82	34.314	27.38	75.55	0.698	14733						2
STD	800	2.78	34.337	27.40	73.72	0.736	14740						8
STD	850	2.74	34.362	27.42	71.75	0.772	14747						6
STD	900	2.66	34.395	27.45	68.81	0.807	14752						0
STD	950	2.66	34.431	27.48	66.30	0.841	14761						3
STD	1000	2.58	34.446	27.50	64.72	0.874	14766						0
OBS	0	4.72	34.156	27.06			14687	707	137			10	
OBS	40	0.00	0.000	0.00			0	715					
OBS	100	0.00	0.000	0.00			0	657					
OBS	250	0.00	34.136	0.00			0	687					
OBS	300	4.13	34.162	27.13			14712	654	165	240		15	
OBS	605	0.00	34.240	0.00			0	568					
OBS	707	2.84	34.291	27.36			14726	515	202	314		40	
OBS	758	0.00	34.333	0.00			0	523					
OBS	919	2.67	34.411	27.47			14756	451	209	329		58	
OBS	1012	0.00	34.465	0.00			0						
OBS	1028	2.54	34.475	27.53			14770	429	221	336		64	

STD STATION 509



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 603	30OCT1966	12.1	57 1.0S	127 20.0W	492	4272	10	256				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.6	4.0	1004.8	32	6	28	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	3.88	34.097	27.10	96.88	0.000	14651						0
STD	10	3.87	34.106	27.11	96.24	0.010	14653						4
STD	20	3.87	34.105	27.11	96.34	0.019	14654						0
STD	30	3.88	34.107	27.11	96.38	0.029	14656						3
STD	50	3.88	34.107	27.11	96.55	0.048	14660						5
STD	75	3.88	34.107	27.11	96.75	0.072	14664						7
STD	100	3.87	34.106	27.11	96.99	0.097	14668						6
STD	125	3.84	34.105	27.11	96.94	0.121	14671						6
STD	150	3.57	34.088	27.13	95.77	0.145	14663						0
STD	200	3.37	34.085	27.14	94.49	0.192	14662						6
STD	250	3.22	34.083	27.16	93.56	0.240	14664						6
STD	300	2.99	34.074	27.17	92.41	0.286	14662						4
STD	350	3.19	34.120	27.19	91.14	0.332	14680						6
STD	400	2.85	34.115	27.22	88.63	0.377	14673						4
STD	450	2.64	34.136	27.25	85.40	0.420	14673						5
STD	500	2.66	34.172	27.28	83.17	0.462	14683						6
STD	550	2.88	34.259	27.33	79.10	0.503	14702						3
STD	600	2.89	34.290	27.35	77.09	0.542	14711						4
STD	650	2.84	34.330	27.39	73.96	0.580	14717						3
STD	700	2.60	34.342	27.42	71.04	0.616	14716						0
STD	750	2.69	34.392	27.45	68.49	0.651	14729						0
STD	800	2.70	34.424	27.47	66.47	0.685	14738						0
STD	850	2.58	34.436	27.49	64.63	0.718	14741						8
STD	900	2.51	34.461	27.52	62.30	0.749	14747						0
STD	950	2.49	34.497	27.55	59.72	0.780	14755						4
STD	1000	2.49	34.520	27.57	58.34	0.809	14763						0
OBS	0	3.83	34.110	27.12			14649	718	152	225		9	
OBS	45	0.00	34.097	0.00			0	716					
OBS	90	0.00	34.094	0.00			0	719					
OBS	224	0.00	34.087	0.00			0	725					
OBS	269	3.17	34.092	27.17			14665	706	170	243		12	
OBS	451	0.00	34.169	0.00			0	606					
OBS	571	2.72	34.249	27.33			14698	540	205	308		36	
OBS	689	0.00	34.342	0.00			0	522					
OBS	834	2.58	34.443	27.50			14738	435	224	331		57	
OBS	923	2.47	34.493	27.55			14749	422	225	336		64	

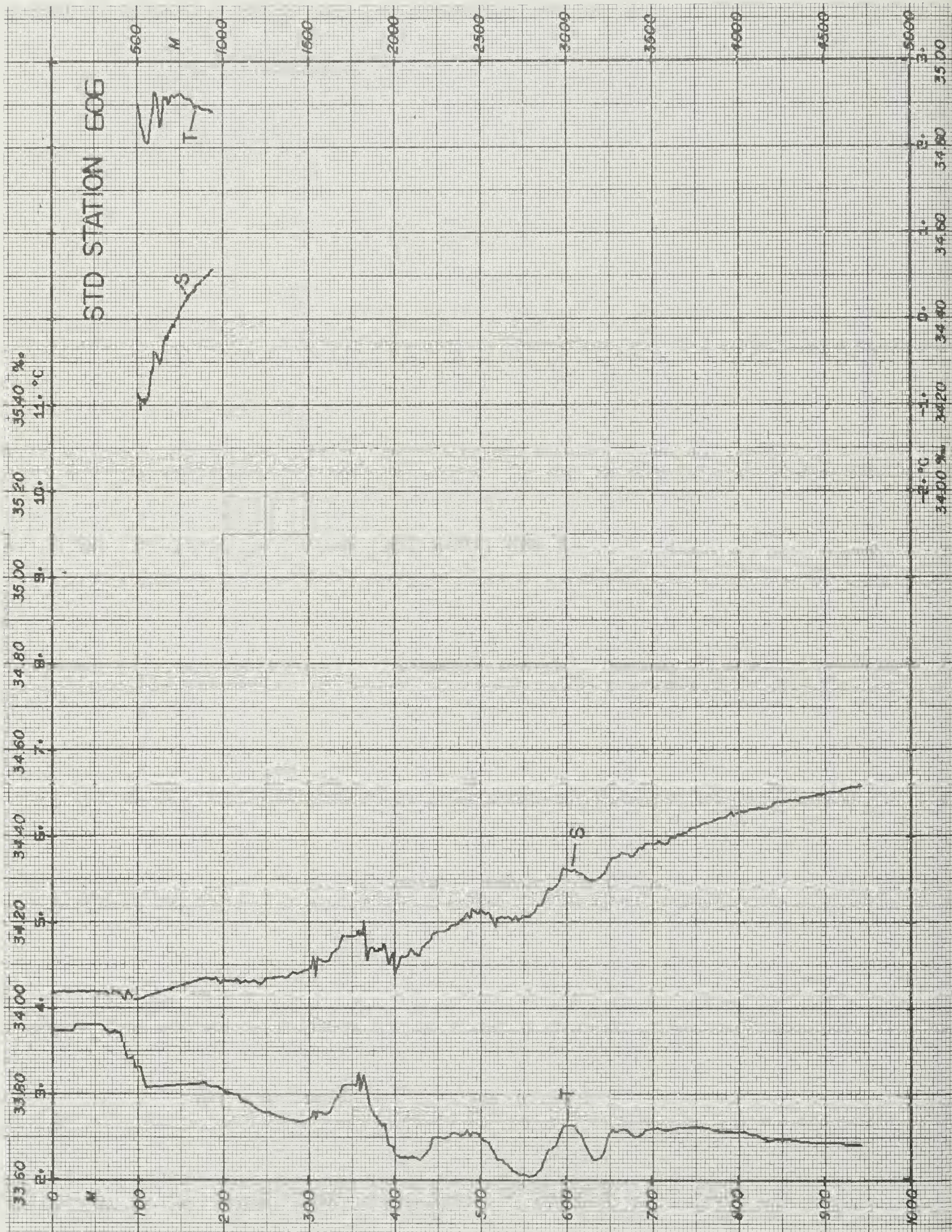


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 604	31OCT1966	4.2	58 5.0S	127 38.0W	492	3770	37	596				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.4	3.1	994.4	33	6	26	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gwt/l	NITR 10 $\mu$ gwt/l	SILIC $\mu$ gwt/l	INT M	DD
STD	0	3.57	34.098	27.13	93.91	0.000	14638					3	
STD	10	3.58	34.106	27.14	93.45	0.009	14640					3	
STD	20	3.58	34.105	27.14	93.54	0.019	14642					3	
STD	30	3.56	34.103	27.14	93.64	0.028	14643					7	
STD	50	3.47	34.102	27.15	93.09	0.047	14642					9	
STD	75	3.44	34.103	27.15	92.93	0.070	14645					8	
STD	100	3.37	34.101	27.16	92.62	0.093	14646					6	
STD	125	3.14	34.084	27.16	91.89	0.116	14640					0	
STD	150	3.07	34.088	27.17	91.18	0.139	14642					5	
STD	200	3.05	34.088	27.18	91.32	0.185	14649					8	
STD	250	2.83	34.090	27.20	89.53	0.230	14648					0	
STD	300	2.95	34.123	27.21	88.36	0.274	14661					6	
STD	350	3.03	34.165	27.24	86.27	0.318	14674					4	
STD	400	3.04	34.212	27.28	83.16	0.360	14683					9	
STD	450	2.95	34.230	27.30	81.27	0.402	14688					5	
STD	500	2.82	34.244	27.32	79.31	0.442	14690					8	
STD	550	2.91	34.299	27.36	76.33	0.481	14703					9	
STD	600	2.57	34.300	27.39	73.28	0.518	14697					11	
STD	650	2.46	34.328	27.42	70.48	0.554	14701					0	
STD	700	2.27	34.325	27.43	69.12	0.589	14701					6	
STD	750	2.12	34.349	27.46	66.13	0.623	14703					0	
STD	800	2.44	34.443	27.51	62.43	0.655	14727					6	
STD	850	2.45	34.473	27.54	60.56	0.686	14736					10	
STD	900	2.46	34.505	27.56	58.54	0.715	14745					6	
STD	950	2.42	34.527	27.58	56.82	0.744	14752					5	
STD	1000	2.38	34.549	27.60	55.02	0.772	14759					10	
STD	1100	2.34	34.588	27.64	52.16	0.826	14775					4	
STD	1200	2.28	34.624	27.67	49.37	0.877	14789					7	
STD	1300	2.23	34.655	27.70	47.09	0.925	14804					12	
STD	1400	2.20	34.679	27.72	45.44	0.971	14820					0	
STD	1500	2.14	34.694	27.74	44.09	1.016	14835					7	
STD	1600	2.07	34.708	27.75	42.80	1.059	14849					7	
STD	1700	2.02	34.724	27.77	41.51	1.101	14864					0	
STD	1800	1.94	34.732	27.78	40.34	1.142	14877					5	
STD	1900	1.86	34.740	27.80	39.20	1.182	14891					8	
STD	2000	1.78	34.740	27.80	38.63	1.221	14904					0	
STD	2100	1.70	34.741	27.81	37.97	1.259	14918					0	
STD	2200	1.62	34.743	27.82	37.19	1.297	14932					0	
STD	2300	1.54	34.740	27.82	36.76	1.334	14945					9	
STD	2400	1.45	34.738	27.83	36.05	1.370	14958					6	
STD	2500	1.39	34.738	27.83	35.61	1.406	14973					6	
STD	2600	1.33	34.736	27.83	35.26	1.442	14988					7	
STD	2700	1.27	34.731	27.83	35.13	1.477	15002					0	
STD	2800	1.20	34.730	27.84	34.48	1.512	15016					12	
STD	2900	1.15	34.730	27.84	34.12	1.546	15032					8	
STD	3000	1.10	34.730	27.84	33.71	1.580	15047					9	
STD	3100	1.04	34.727	27.84	33.18	1.613	15062					7	
STD	3200	0.99	34.725	27.85	32.94	1.646	15077					7	
STD	3300	0.95	34.724	27.85	32.48	1.679	15093					0	
STD	3400	0.91	34.724	27.85	32.09	1.711	15108					11	
STD	3500	0.86	34.724	27.85	31.55	1.743	15124					0	
STD	3600	0.82	34.723	27.86	31.14	1.774	15139					5	

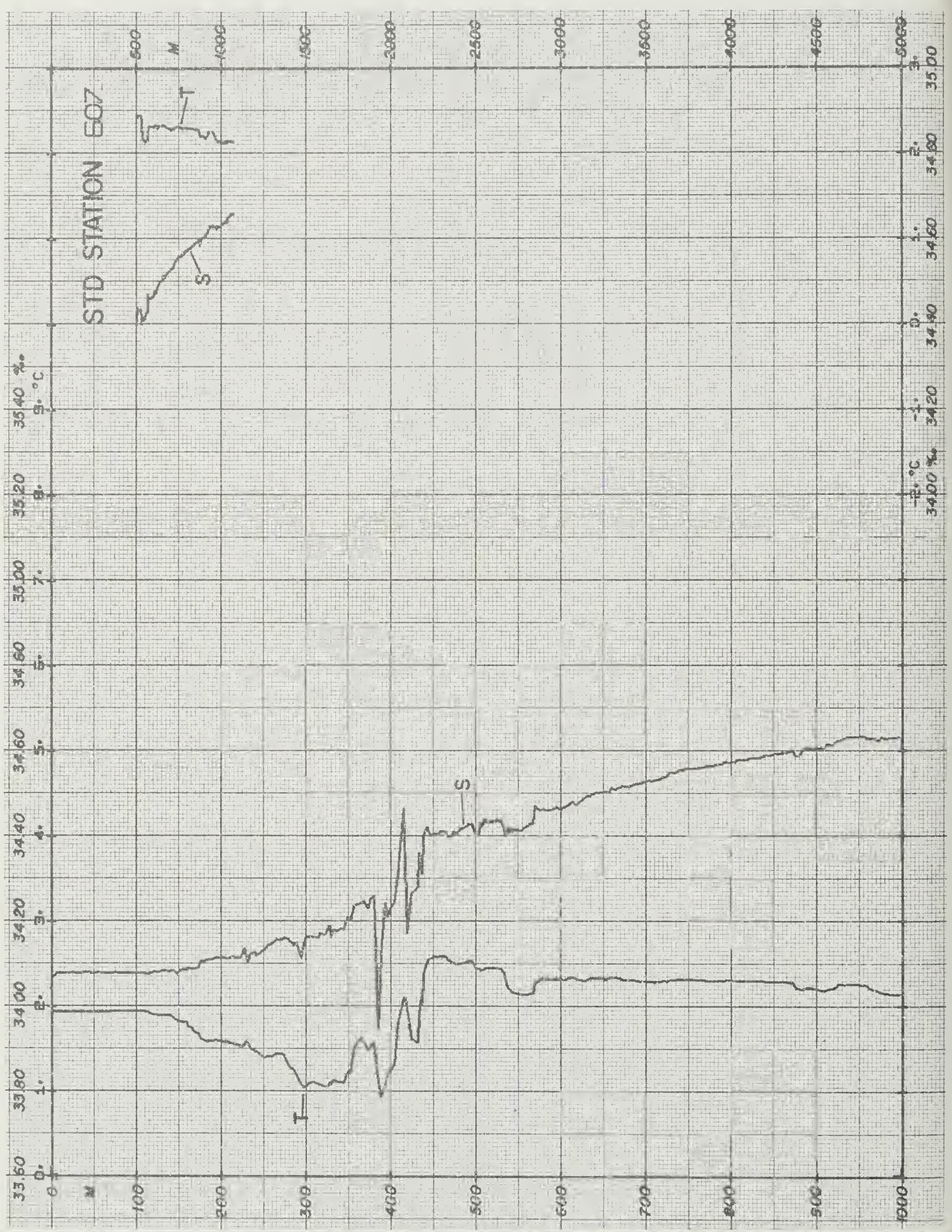




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	SER 605	31OCT1966	9.6	58 7.0S	127 31.0W	492	3777	35	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.7	3.0		33	6	34	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
ISL	0	3.72	34.100	27.12	95.13	0.000	14645						
OBS	2	3.72	34.100	27.12			14645	730	158	225	10		
ISL	10	3.72	34.099	27.12	95.21	0.010	14646						
ISL	20	3.71	34.099	27.12	95.29	0.019	14647						
ISL	30	3.70	34.098	27.12	95.38	0.029	14649						
ISL	50	3.69	34.096	27.12	95.56	0.048	14652						
ISL	75	3.70	34.093	27.12	96.06	0.072	14656						
OBS	86	3.67	34.092	27.12			14657	728	163	226	11		
ISL	100	3.60	34.089	27.12	95.63	0.096	14656						
ISL	125	3.47	34.085	27.13	94.88	0.119	14654						
ISL	150	3.32	34.081	27.15	93.93	0.143	14652						
OBS	181	3.10	34.077	27.16			14648	715	175	240	13		
ISL	200	2.98	34.076	27.17	91.50	0.189	14645						
OBS	229	2.81	34.078	27.19			14643	696	170	265	16		
ISL	250	2.74	34.083	27.20	89.24	0.235	14644						
ISL	300	2.65	34.100	27.22	87.35	0.279	14648						
OBS	325	2.63	34.112	27.23			14652	649	186	283	19		
ISL	400	2.59	34.156	27.27	83.12	0.364	14663						
OBS	421	2.57	34.169	27.28			14666	606	202	291	26		
ISL	500	2.22	34.176	27.32	78.87	0.445	14664						
OBS	565	2.12	34.215	27.36			14671	585	214	308	34		
ISL	600	2.37	34.285	27.39	72.53	0.521	14688						
OBS	613	2.44	34.307	27.40			14694	510	225	317	42		
OBS	661	2.27	34.311	27.42			14694	522	214	327	45		
ISL	700	2.48	34.372	27.45	67.60	0.591	14711						
OBS	709	2.54	34.388	27.46			14715	463	220	336	52		
OBS	757	2.58	34.432	27.49			14725	441	225	336	55		
ISL	800	2.56	34.461	27.52	62.25	0.656	14732						
ISL	900	2.47	34.516	27.57	57.85	0.716	14746						
OBS	953	2.40	34.537	27.59			14752	411	229	337	64		
ISL	1000	2.38	34.557	27.61	54.33	0.772	14759						
ISL	1100	2.33	34.596	27.64	51.54	0.825	14774						
OBS	1164	2.31	34.617	27.66			14784	403	221	328	71		
ISL	1200	2.29	34.628	27.67	49.19	0.875	14790						
ISL	1250	2.26	34.643	27.69	48.07	0.899	14797						
ISL	1300	2.24	34.657	27.70	47.02	0.923	14805						
ISL	1400	2.18	34.680	27.72	45.14	0.969	14819						
OBS	1415	2.17	34.683	27.73			14821	414	203	320	77		
ISL	1500	2.12	34.698	27.74	43.63	1.014	14834						
OBS	1665	2.02	34.720	27.77			14858	429	209	313	78		
ISL	1750	1.95	34.727	27.78	40.62	1.119	14869						
OBS	1918	1.80	34.736	27.80			14891	441	209	308	85		
ISL	2000	1.74	34.740	27.81	38.21	1.217	14903						
OBS	2171	1.62	34.744	27.82			14927	448		306	88		
ISL	2250	1.55	34.742	27.82	36.64	1.311	14937						
OBS	2425	1.42	34.735	27.82			14962	459		310	95		
ISL	2500	1.40	34.734	27.83	36.08	1.402	14974						
OBS	2679	1.35	34.732	27.83			15002	463	206	313	100		
ISL	2750	1.28	34.731	27.83	35.43	1.491	15012						
OBS	2934	1.10	34.727	27.84			15035	467	204	311	104		
ISL	3000	1.06	34.725	27.84	33.46	1.577	15045						
OBS	3188	0.97	34.719	27.84			15074	472	216	309	107		
ISL	3250	0.94	34.718	27.84	32.68	1.660	15083						
OBS	3444	0.84	34.718	27.85			15113	476	215	310	112		
ISL	3500	0.82	34.718	27.85	31.41	1.740	15122						
OBS	3546	0.80	34.718	27.85			15129	479	222	318	114		

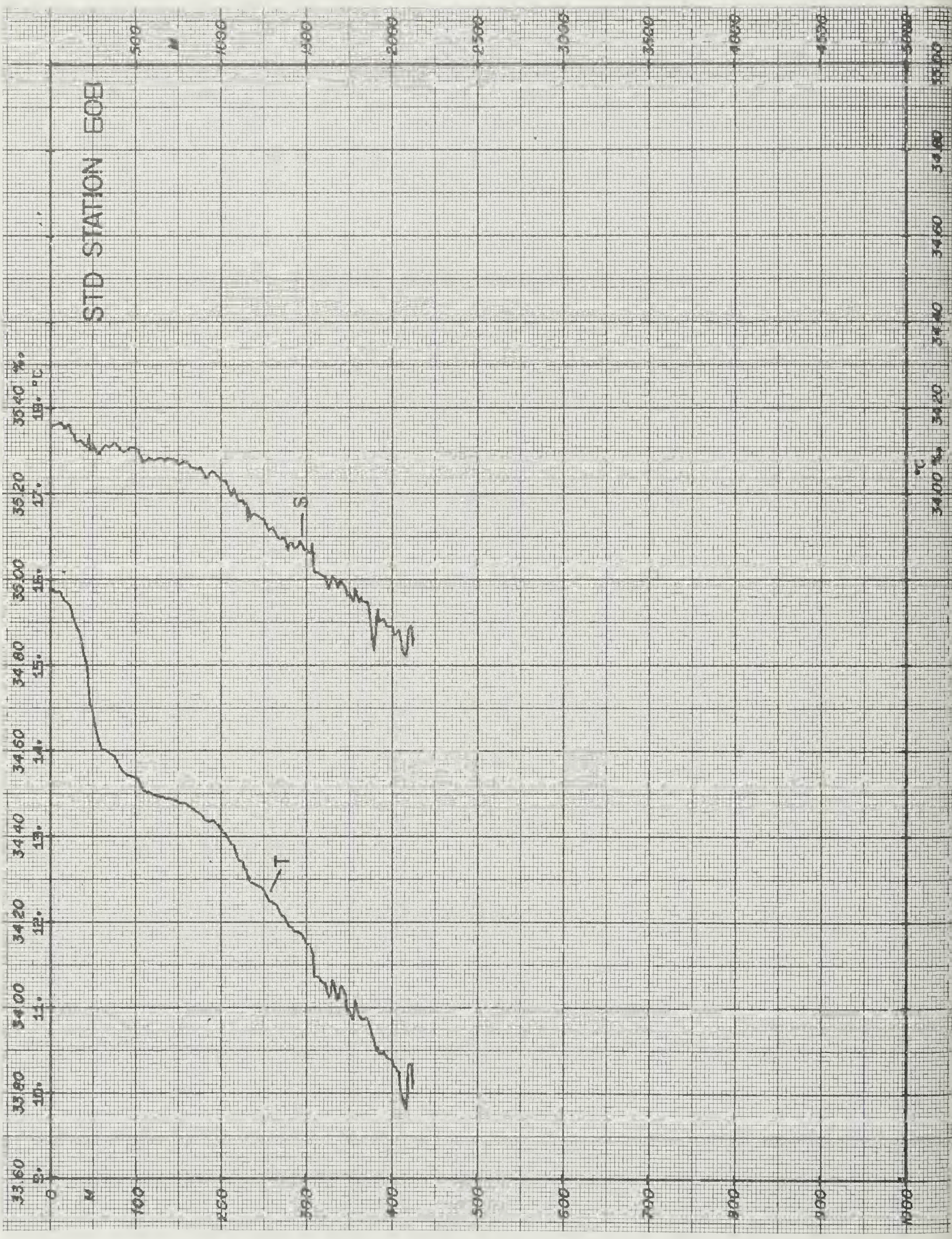


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 606	31OCT1966	8.6	58 5.0S	127 33.0W	492	4052	9	256				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.6	2.6	998.2	33	5	26	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	3.81	34.047	27.07	99.96	0.000	14648					0	
STD	10	3.74	34.039	27.07	100.05	0.010	14646					0	
STD	20	3.74	34.039	27.07	100.12	0.020	14648					5	
STD	30	3.81	34.039	27.06	100.78	0.030	14653					6	
STD	50	3.81	34.040	27.06	100.94	0.050	14656					5	
STD	75	3.73	34.038	27.07	100.45	0.075	14656					7	
STD	100	3.31	34.022	27.10	98.02	0.100	14643					6	
STD	125	3.09	34.038	27.13	94.99	0.124	14638					71	
STD	150	3.94	34.109	27.11	97.85	0.148	14679					1	
STD	200	3.04	34.068	27.16	92.75	0.196	14648					0	
STD	250	2.79	34.071	27.19	90.54	0.242	14646					0	
STD	300	2.71	34.091	27.21	88.59	0.287	14651					5	
STD	350	3.11	34.168	27.23	86.80	0.331	14677					5	
STD	400	2.35	34.103	27.25	84.97	0.373	14652					2	
STD	450	2.50	34.177	27.30	81.00	0.415	14667					0	
STD	500	2.51	34.228	27.33	77.62	0.455	14677					0	
STD	550	2.07	34.216	27.36	74.77	0.493	14666					0	
STD	600	2.64	34.325	27.40	72.11	0.529	14700					4	
STD	650	2.52	34.333	27.42	70.62	0.565	14704					0	
STD	700	2.60	34.381	27.45	68.09	0.600	14716					0	
STD	750	2.62	34.420	27.48	65.68	0.633	14726					2	
STD	800	2.56	34.454	27.51	62.84	0.665	14732					3	
STD	850	2.48	34.480	27.54	60.28	0.696	14737					3	
STD	900	2.44	34.498	27.56	58.89	0.726	14744					5	

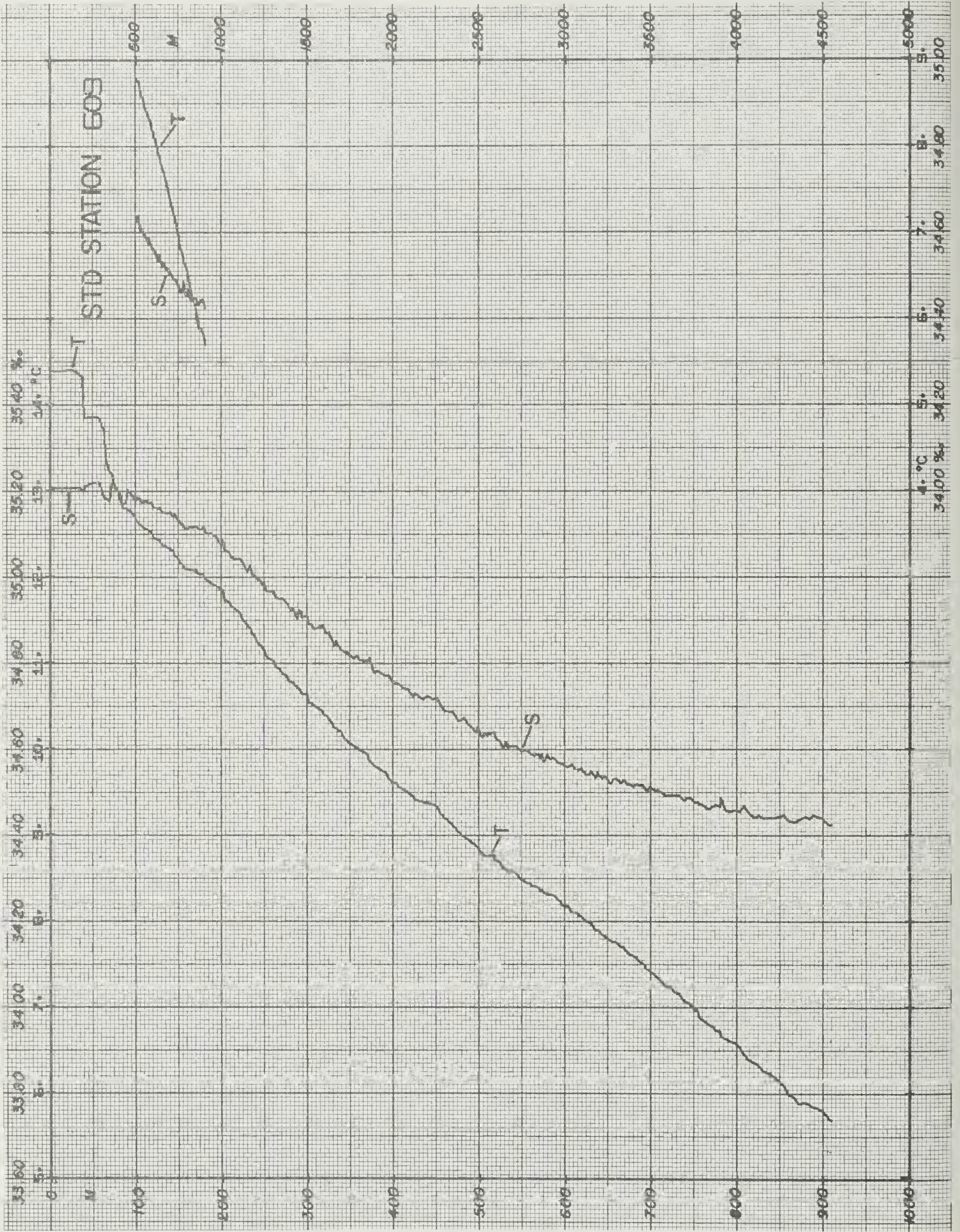


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 25	STD 607	31OCT1966	15.7	59 10.0S	127 30.0W	492	4123	11	335				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.0	2.5	988.9	33	5	33	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	1.94	34.071	27.26	82.45	0.000	14567					0	
STD	10	1.93	34.078	27.26	81.91	0.008	14568					0	
STD	20	1.93	34.079	27.26	81.90	0.016	14570					0	
STD	30	1.93	34.078	27.26	81.97	0.025	14572					4	
STD	50	1.93	34.078	27.26	82.06	0.041	14575					3	
STD	75	1.94	34.080	27.26	82.02	0.062	14580					0	
STD	100	1.94	34.078	27.26	82.30	0.082	14584					5	
STD	125	1.90	34.080	27.27	81.93	0.103	14586					4	
STD	150	1.82	34.079	27.27	81.53	0.123	14587					2	
STD	200	1.59	34.115	27.32	77.24	0.163	14585					3	
STD	250	1.41	34.131	27.34	74.82	0.201	14586					4	
STD	300	1.06	34.159	27.39	70.38	0.237	14579					3	
STD	350	1.23	34.211	27.42	67.74	0.272	14595					0	
STD	400	1.24	34.227	27.43	66.69	0.305	14604					4	
STD	450	2.57	34.403	27.47	64.77	0.338	14674					4	
STD	500	2.46	34.405	27.48	63.87	0.370	14677					4	
STD	550	2.15	34.413	27.51	60.68	0.401	14672					0	
STD	600	2.32	34.464	27.54	58.65	0.431	14688					0	
STD	650	2.33	34.502	27.57	56.19	0.460	14698					0	
STD	700	2.29	34.526	27.59	54.26	0.487	14705					5	
STD	750	2.32	34.558	27.61	52.47	0.514	14715					3	
STD	800	2.31	34.573	27.63	51.48	0.540	14723					0	
STD	850	2.29	34.590	27.64	50.27	0.566	14731					4	
STD	900	2.20	34.604	27.66	48.63	0.590	14735					5	
STD	950	2.26	34.631	27.68	47.40	0.614	14746					4	
STD	1000	2.14	34.630	27.69	46.55	0.638	14750					5	
OBS	2	1.89	34.084	27.27			14566	751	96			24	
OBS	5	0.00	34.085	0.00			0	746					
OBS	51	0.00	34.079	0.00			0	741					
OBS	104	1.91	34.082	27.27			14583	744	205			26	
OBS	207	1.45	34.111	27.32			14580	720	179			29	
OBS	257	0.00	34.156	0.00			0	683					
OBS	311	1.18	34.175	27.39			14586	681	85			38	
OBS	417	1.93	34.311	27.45			14639	538	202			44	
OBS	522	2.28	34.437	27.52			14673	442	191			49	
OBS	629	2.29	34.487	27.56			14692	426	103			59	
OBS	736	2.31	34.543	27.60			14712	412	119			60	
OBS	841	2.28	34.591	27.64			14729	406	232			64	
OBS	944	2.25	34.634	27.68			14745	407	199				
OBS	1046	2.15	34.656	27.71			14758	413	112			71	

STD STATION EOE



SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 608	30NDV1966	3.9	38 44.0S	172 36.0E	426	450	4	138				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	15.5	11.5	1023.5	20	4	24	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	15.90	35.359	26.06	195.51	0.000	15106						0
STD	10	15.86	35.363	26.08	194.58	0.020	15107						3
STD	20	15.72	35.360	26.11	192.01	0.039	15104						0
STD	30	15.46	35.319	26.13	189.82	0.058	15097						0
STD	50	14.42	35.313	26.36	169.10	0.094	15067						3
STD	75	13.93	35.319	26.47	159.39	0.135	15056						0
STD	100	13.68	35.305	26.51	156.20	0.174	15051						5
STD	125	13.47	35.281	26.53	154.53	0.213	15048						6
STD	150	13.40	35.270	26.54	154.59	0.252	15050						4
STD	200	13.09	35.235	26.57	152.46	0.329	15047						5
STD	250	12.38	35.140	26.64	147.10	0.403	15030						5
STD	300	11.77	35.070	26.71	142.04	0.476	15017						0
STD	350	10.97	34.965	26.77	136.39	0.545	14996						2
STD	400	10.39	34.890	26.82	132.89	0.613	14982						6
DBS	0	15.70	35.356	26.11			15100	582		01			
DBS	16	15.88	35.355	26.07			15108	573		07		3	
DBS	35	0.00	35.353	0.00			0	574				3	
DBS	53	0.00	35.338	0.00			0	573				3	
OBS	62	15.18	35.334	26.21			15094	570		16		2	
DBS	71	0.00	35.332	0.00			0	567		21		2	
OBS	80	14.51	35.326	26.35			15075	567		44		2	
DBS	89	0.00	35.328	0.00			0	549		48		3	
DBS	108	0.00	35.312	0.00			0	545		56		1	
DBS	137	0.00	35.295	0.00			0	536		92		5	
OBS	187	0.00	35.276	0.00			0	537		139		6	
DBS	437	0.00	34.948	0.00			0	468		150		9	



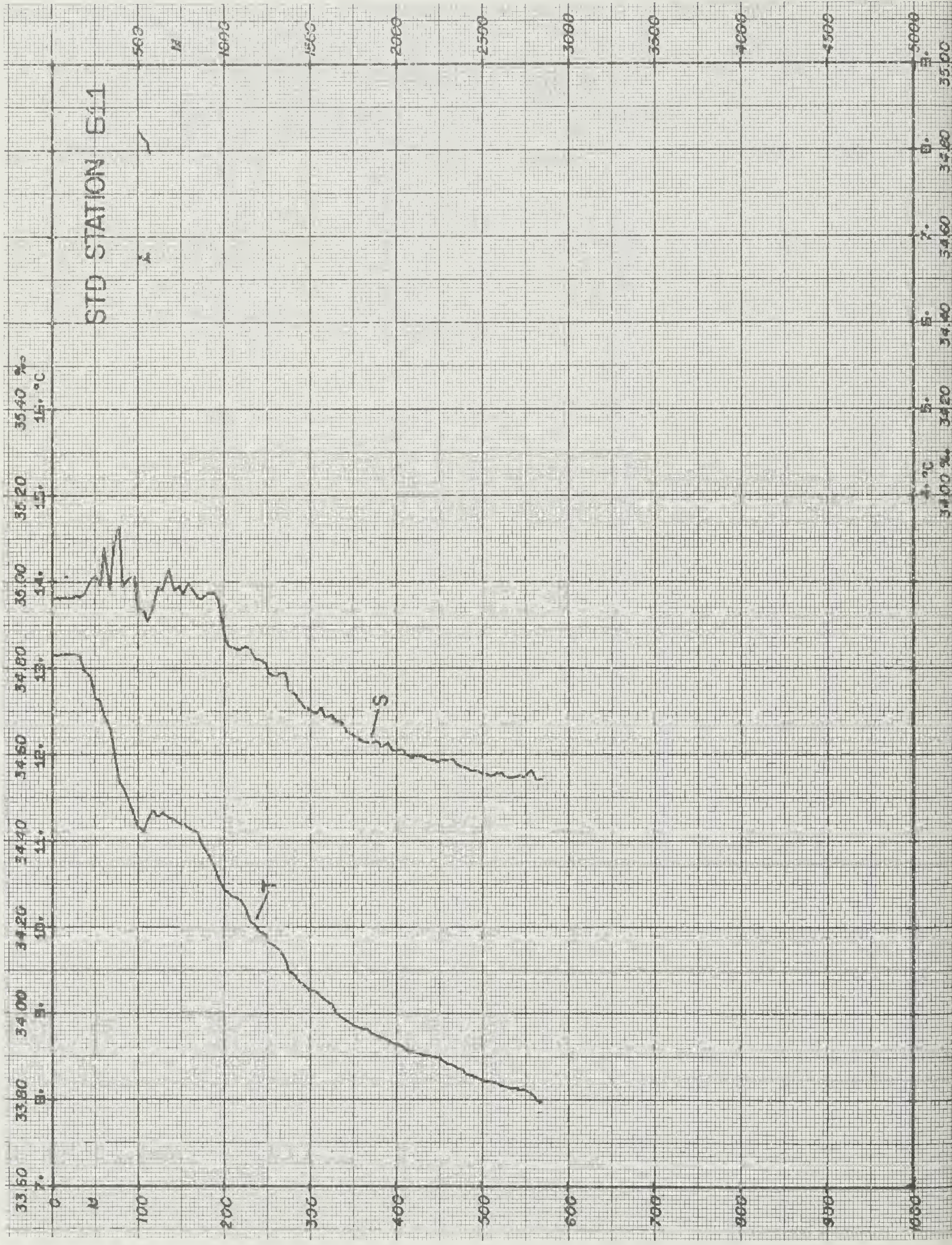


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 609	1DEC1966	18.6	40 16.0S	168 12.0E	463	926	9	260				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	12.9	6.2	1017.5	19	6	26	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	14.41	35.203	26.28	175.41	0.000	15057					0	
STD	10	14.39	35.206	26.28	175.14	0.018	15059					5	
STD	20	14.40	35.207	26.28	175.56	0.035	15060					4	
STD	30	14.38	35.206	26.28	175.59	0.053	15062					5	
STD	50	13.85	35.217	26.40	164.68	0.087	15048					4	
STD	75	13.10	35.219	26.56	150.38	0.126	15027					0	
STD	100	12.68	35.176	26.61	146.13	0.163	15016					0	
STD	125	12.44	35.159	26.64	143.61	0.199	15012					0	
STD	150	12.20	35.132	26.67	141.59	0.235	15008					0	
STD	200	11.85	35.075	26.70	140.60	0.306	15003					6	
STD	250	11.15	34.986	26.76	135.77	0.375	14986					0	
STD	300	10.63	34.907	26.79	133.46	0.442	14974					3	
STD	350	10.06	34.817	26.82	131.54	0.508	14961					3	
STD	400	9.61	34.757	26.85	129.45	0.573	14952					6	
STD	450	9.34	34.718	26.86	128.84	0.638	14950					4	
STD	500	8.83	34.641	26.88	127.21	0.702	14938					6	
STD	550	8.48	34.594	26.90	126.05	0.765	14933					3	
STD	600	8.18	34.560	26.92	124.65	0.828	14929					7	
STD	650	7.79	34.528	26.96	121.90	0.890	14922					5	
STD	700	7.41	34.511	27.00	118.30	0.950	14915					6	
STD	750	6.99	34.478	27.03	115.28	1.008	14907					5	
STD	800	6.57	34.457	27.07	111.51	1.065	14898					6	
STD	850	6.14	34.443	27.12	107.12	1.119	14889					0	
STD	900	5.79	34.437	27.16	103.41	1.172	14883					7	
OBS	0	14.38	35.207	26.28			15057	596	03	03		1	
OBS	19	14.37	35.201	26.28			15059	599	19	03		1	
OBS	39	14.19	35.196	26.32			15057	596	07	04		1	
OBS	49	13.85	35.190	26.38			15047	593	08	06		1	
OBS	59	13.80	35.197	26.40			15047	595	27	06		2	
OBS	68	13.71	35.197	26.42			15046	582	50	10		2	
OBS	78	13.36	35.237	26.52			15036	566	33	41		3	
OBS	98	12.89	35.214	26.60			15024	552	39	54		3	
OBS	117	12.70	35.194	26.62			15020	551	26	60		1	
OBS	148	12.48	35.166	26.64			15017	545	21	68		3	
OBS	198	11.93	35.099	26.70			15006	499	67	105		3	
OBS	248	11.41	35.015	26.73			14995	504	66	115		0	
OBS	511	8.97	34.670	26.88			14946	505	97	184		0	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	SER 610	5DEC1966	19.6	39 54.0S	160 43.1E	427	4777	22	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	13.4	7.6		16	4	16	3	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	15.15	35.345	26.22			15083	593	07	02	2		
ISL	0	15.15	35.345	26.22	180.47	0.000	15083						
ISL	10	15.15	35.345	26.22	180.77	0.018	15085						
OBS	16	15.15	35.345	26.22			15086	593	14	01	2		
ISL	20	15.16	35.345	26.22	181.25	0.036	15086						
OBS	25	15.15	35.345	26.22			15087	589	07	01	1		
ISL	30	15.11	35.346	26.23	180.35	0.054	15086						
OBS	35	15.00	35.346	26.26			15084	591	18	05	2		
OBS	45	14.52	35.334	26.35			15070	582	05	10	1		
ISL	50	14.42	35.333	26.37	167.74	0.089	15068						
OBS	55	0.00	35.334	0.00			0	579	13	15	1		
OBS	75	14.13	35.340	26.44			15062	574	11	19	1		
ISL	75	14.13	35.340	26.44	161.97	0.130	15062						
OBS	95	13.49	35.302	26.54			15044	554	05	44	1		
ISL	100	13.36	35.291	26.56	150.83	0.169	15041						
OBS	114	13.05	35.262	26.60			15032	547	50	34	1		
ISL	125	12.93	35.251	26.62	146.23	0.206	15030						
OBS	143	12.81	35.236	26.63			15029	542	73	62	3		
ISL	150	12.73	35.224	26.64	144.92	0.243	15027						
OBS	188	12.24	35.148	26.68			15016	506	64	57	2		
ISL	200	12.09	35.124	26.69	141.49	0.314	15012						
ISL	250	11.47	35.028	26.73	138.50	0.384	14998						
ISL	300	10.89	34.940	26.77	135.70	0.453	14984						
ISL	400	9.80	34.786	26.84	130.49	0.586	14960						
OBS	482	9.00	34.684	26.89			14942	504	85	174	3		
ISL	500	8.83	34.670	26.91	125.14	0.714	14939						
ISL	600	8.01	34.604	26.98	118.83	0.836	14923						
OBS	672	7.51	34.568	27.03			14915	455	155	232	12		
ISL	700	7.36	34.549	27.03	114.72	0.953	14914						
OBS	740	7.14	34.523	27.04			14911	446	133	236	13		
ISL	800	6.70	34.508	27.09	109.61	1.065	14904						
ISL	900	5.98	34.491	27.17	102.02	1.171	14891						
ISL	1000	5.27	34.484	27.26	94.13	1.269	14880						
OBS	1002	5.26	34.484	27.26			14879	431	183	260	20		
OBS	1100	4.81	34.452	27.28			14877	422		281	30		
ISL	1100	4.81	34.452	27.28	91.42	1.362	14877						
ISL	1200	4.21	34.475	27.37	83.04	1.449	14869						
OBS	1245	3.95	34.493	27.41			14866	393	174	296	50		
ISL	1250	3.92	34.495	27.41	78.34	1.489	14866						
ISL	1300	3.69	34.512	27.45	74.62	1.527	14865						
ISL	1400	3.33	34.541	27.51	68.75	1.599	14866						
OBS	1494	3.12	34.564	27.55			14874	370	256	280	55		
ISL	1500	3.11	34.565	27.55	65.02	1.666	14874						
OBS	1525	3.08	34.568	27.56			14877	368	229	324	66		
OBS	1701	2.69	34.615	27.63			14891	370	253	316	69		
OBS	1741	2.65	34.624	27.64			14896	373		328	84		
ISL	1750	2.64	34.626	27.64	56.26	1.818	14897						
OBS	1993	2.35	34.672	27.70			14926	396	246	312			
ISL	2000	2.34	34.673	27.70	50.45	1.951	14927						
OBS	2240	2.17	34.703	27.74			14961	411	223				

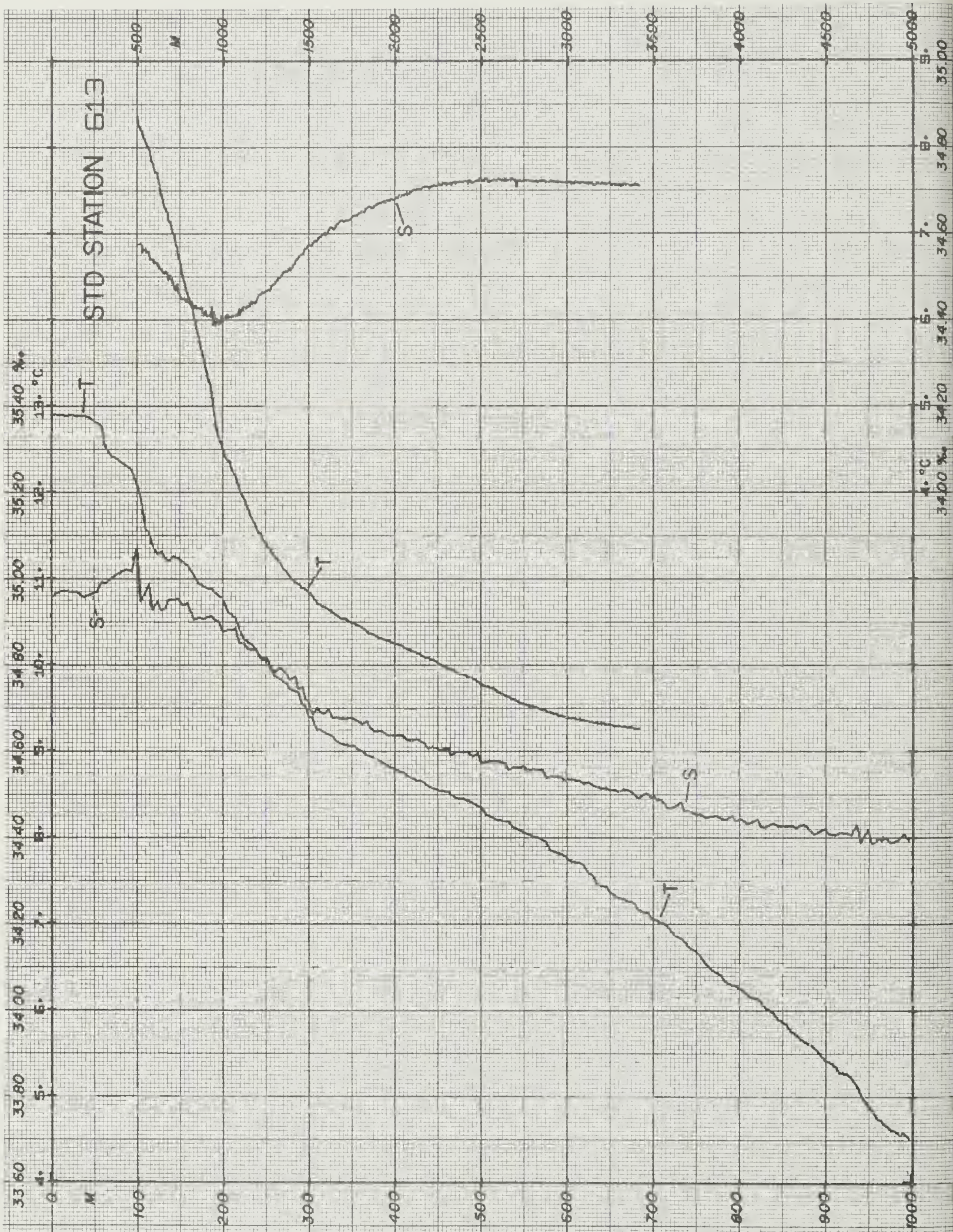
STD STATION 511



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 611	8DEC1966	16.8	42 22.2S	160 7.0E	427	0	6	109				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	8.4	3.5	1016.4	23	6	24	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-1</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	13.15	34.960	26.35	168.36	0.000	15013						0
STD	10	13.16	34.961	26.35	168.66	0.017	15015						2
STD	20	13.16	34.961	26.35	168.93	0.034	15017						3
STD	30	13.15	34.965	26.35	168.73	0.051	15018						3
STD	50	12.65	35.015	26.49	156.22	0.083	15005						0
STD	75	11.86	35.108	26.72	135.31	0.120	14984						6
STD	100	11.17	34.940	26.72	135.89	0.153	14961						8
STD	125	11.30	34.985	26.73	135.54	0.187	14971						5
STD	150	11.20	34.981	26.74	134.68	0.221	14971						4
STD	200	10.44	34.888	26.81	129.41	0.287	14951						0
STD	250	9.91	34.810	26.84	127.29	0.351	14939						0
STD	300	9.27	34.705	26.86	125.67	0.415	14922						0
STD	350	8.87	34.646	26.88	124.63	0.477	14915						0
STD	400	8.65	34.611	26.89	124.73	0.540	14915						6
STD	450	8.49	34.583	26.89	125.12	0.602	14916						0
STD	500	8.23	34.556	26.91	124.02	0.664	14914						0
STD	550	8.11	34.548	26.92	123.72	0.726	14918						2



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	SER 612	7DEC1966	10.0	41 56.6S	160 7.0E	463	4969	45	25				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	12.7	3.1		0	0	0	0	0	0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	13.78	34.965	26.22			15034	629	08	04	1		
ISL	0	13.78	34.965	26.22	180.26	0.000	15034						
ISL	10	13.44	34.957	26.29	174.51	0.018	15025						
OBS	17	13.30	34.955	26.32			15021	630	08	05	3		
ISL	20	13.28	34.957	26.32	171.56	0.035	15021						
OBS	27	13.23	34.958	26.33			15020	630	10	04	2		
ISL	30	13.16	34.948	26.34	170.26	0.052	15018						
OBS	38	12.96	34.920	26.36			15013	633	10	12	1		
OBS	49	12.79	34.922	26.39			15009	623	07	12	1		
ISL	50	12.77	34.928	26.40	164.72	0.086	15008						
OBS	59	12.55	34.985	26.49			15003	608	38	16	1		
ISL	75	12.22	34.996	26.56	150.07	0.125	14994						
OBS	82	12.06	34.982	26.58			14990	593	38	38	2		
ISL	100	11.49	34.951	26.67	140.78	0.161	14973						
OBS	104	11.37	34.942	26.68			14969	591	52	58	1		
OBS	125	11.00	34.884	26.70			14959	600	25	64	2		
ISL	125	11.00	34.884	26.70	137.65	0.196	14959						
ISL	150	10.97	34.896	26.72	136.80	0.230	14962						
OBS	158	11.00	34.907	26.72			14964	589	14	69	1		
ISL	200	10.81	34.893	26.75	135.44	0.299	14964						
OBS	211	0.00	34.885	0.00			0	540	28	112	2		
ISL	250	10.55	34.850	26.76	135.14	0.366	14963						
ISL	300	10.24	34.804	26.78	134.38	0.434	14959						
ISL	400	9.50	34.709	26.83	131.20	0.566	14948						
ISL	500	8.60	34.608	26.89	126.02	0.695	14929						
OBS	526	8.34	34.581	26.91			14923	541	89	184	6		
ISL	600	7.88	34.542	26.95	121.45	0.819	14917						
ISL	700	7.25	34.501	27.01	116.63	0.938	14909						
OBS	788	6.68	34.475	27.07			14901	459	100	230	16		
ISL	800	6.58	34.470	27.08	110.72	1.051	14899						
ISL	900	5.79	34.436	27.16	103.38	1.158	14883						
ISL	1000	5.02	34.416	27.23	95.80	1.258	14868						
OBS	1054	4.62	34.410	27.27			14861	441	193	292	33		
ISL	1100	4.35	34.417	27.31	88.10	1.350	14857						
ISL	1200	3.85	34.442	27.38	80.85	1.434	14853						
ISL	1250	3.64	34.460	27.42	77.38	1.474	14853						
ISL	1300	3.45	34.480	27.45	73.98	1.512	14854						
OBS	1309	3.42	34.484	27.46			14854	402	212	314	53		
ISL	1400	3.15	34.523	27.51	67.94	1.583	14859						
ISL	1500	2.93	34.564	27.57	62.86	1.648	14866						
OBS	1551	2.84	34.584	27.59			14872	375		288	70		
ISL	1750	2.59	34.629	27.65	55.45	1.796	14895						
OBS	1792	2.55	34.636	27.66			14901	379	206	312	77		
ISL	2000	2.31	34.678	27.71	49.72	1.928	14926						
OBS	2040	2.27	34.685	27.72			14931	403	225	307	80		
ISL	2250	2.08	34.712	27.76	45.43	2.046	14959						
OBS	2285	2.05	34.715	27.76			14964	421	107	300	80		
ISL	2500	1.87	34.723	27.78	43.00	2.157	14993						
OBS	2532	1.85	34.723	27.78			14998	429		295	78		
ISL	2750	1.68	34.727	27.80	40.97	2.262	15028						
ISL	3000	1.50	34.728	27.81	39.22	2.362	15064						
OBS	3031	1.48	34.728	27.82			15068	447	219	310	89		
ISL	3250	1.35	34.725	27.82	38.02	2.459	15101						
ISL	3500	1.24	34.722	27.83	37.27	2.553	15139						
OBS	3530	1.23	34.721	27.83			15144	454	226	301	96		
ISL	3750	1.18	34.719	27.83	37.02	2.646	15181						
ISL	4000	1.14	34.718	27.83	37.07	2.738	15223						
OBS	4031	1.14	34.718	27.83			15229	459	233	300	99		
ISL	4500	1.09	34.715	27.83	37.40	2.925	15310						
OBS	4533	1.09	34.715	27.83			15316	467	191	291	103		
OBS	4930	0.00	34.715	0.00			0	472	206	270	104		

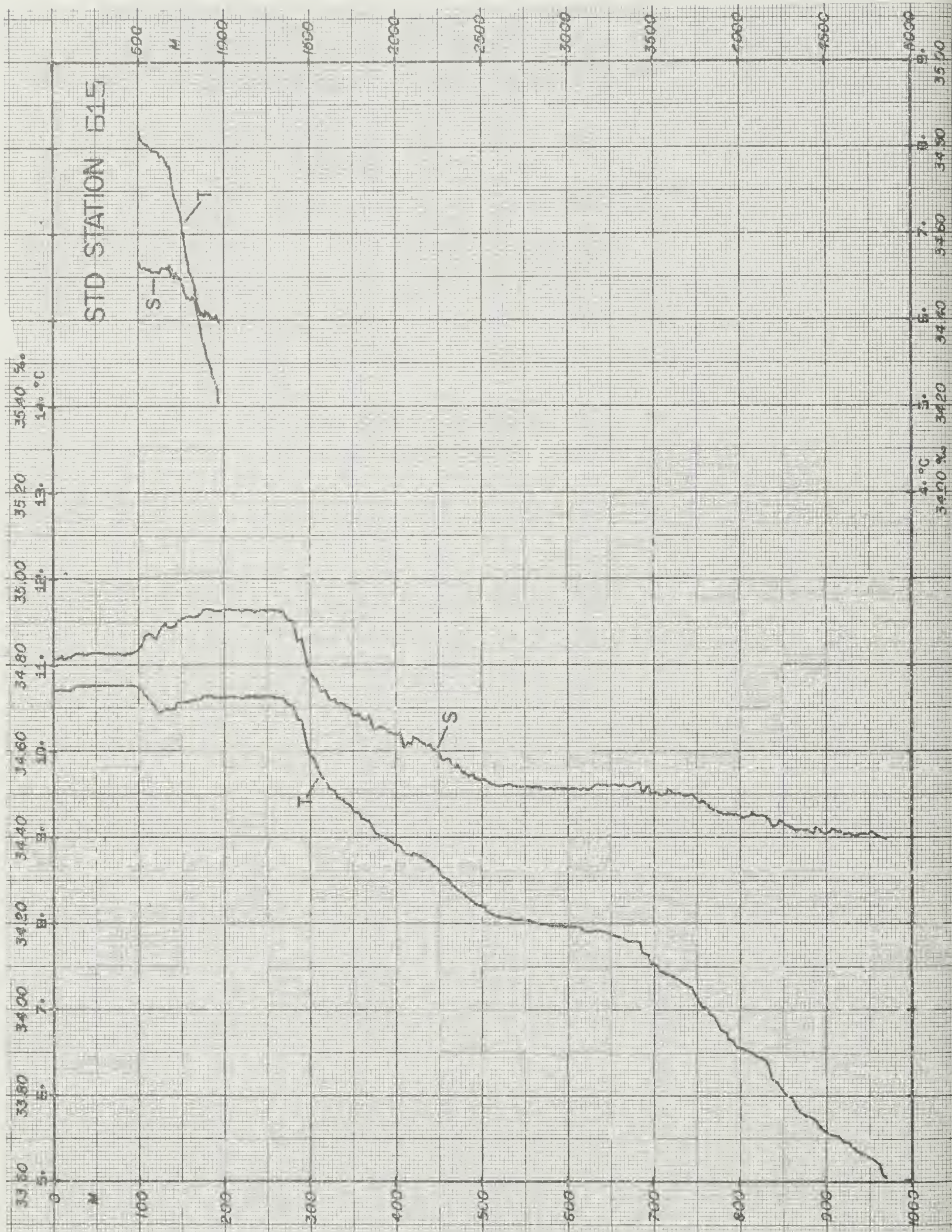




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 613	9DEC1966	3.2	43 28.5S	160 7.0E	463	5000	34	560				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	10.0	3.7	0.0	23	6	24	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	12.89	34.961	26.40	163.29	0.000	15005						0
STD	10	12.89	34.968	26.41	162.99	0.016	15006						5
STD	20	12.89	34.968	26.41	163.20	0.033	15008						7
STD	30	12.88	34.967	26.41	163.48	0.049	15009						0
STD	50	12.82	34.966	26.42	162.91	0.082	15010						3
STD	75	12.39	35.008	26.54	152.38	0.121	15000						7
STD	100	12.09	35.076	26.65	142.47	0.158	14995						0
STD	125	11.28	34.941	26.70	138.42	0.193	14969						4
STD	150	11.21	34.946	26.71	137.38	0.227	14971						5
STD	200	10.76	34.877	26.74	135.69	0.296	14962						0
STD	250	10.04	34.813	26.82	129.19	0.362	14944						6
STD	300	9.41	34.714	26.85	127.19	0.426	14928						0
STD	350	9.06	34.675	26.87	125.52	0.489	14923						4
STD	400	8.79	34.635	26.89	125.18	0.552	14920						5
STD	450	8.56	34.605	26.90	124.66	0.614	14919						4
STD	500	8.36	34.575	26.91	124.70	0.677	14920						0
STD	550	8.06	34.563	26.94	121.80	0.738	14916						0
STD	600	7.76	34.533	26.96	120.29	0.799	14912						5
STD	650	7.37	34.510	27.00	117.05	0.858	14905						6
STD	700	7.05	34.495	27.04	114.20	0.916	14901						3
STD	750	6.68	34.453	27.05	112.68	0.973	14894						0
STD	800	6.26	34.441	27.10	108.30	1.028	14886						8
STD	850	5.87	34.426	27.14	104.67	1.081	14878						9
STD	900	5.42	34.420	27.19	99.71	1.132	14868						0
STD	950	4.90	34.418	27.25	93.54	1.181	14855						0
STD	1000	4.50	34.397	27.28	90.55	1.227	14847						6
STD	1100	4.03	34.413	27.34	84.37	1.314	14844						5
STD	1200	3.56	34.447	27.41	77.00	1.395	14842						9
STD	1300	3.25	34.483	27.47	71.42	1.469	14846						7
STD	1400	3.00	34.517	27.52	66.58	1.538	14852						8
STD	1500	2.84	34.569	27.58	61.44	1.602	14863						7
STD	1600	2.66	34.596	27.62	57.90	1.662	14872						0
STD	1700	2.53	34.629	27.65	54.45	1.718	14884						7
STD	1800	2.44	34.648	27.68	52.54	1.771	14898						7
STD	1900	2.33	34.669	27.70	50.08	1.823	14910						9
STD	2000	2.25	34.679	27.72	48.79	1.872	14923						7
STD	2100	2.16	34.698	27.74	46.81	1.920	14937						7
STD	2200	2.07	34.705	27.75	45.62	1.966	14950						0
STD	2300	1.97	34.711	27.76	44.26	2.011	14963						0
STD	2400	1.88	34.721	27.78	42.88	2.055	14977						0
STD	2500	1.78	34.723	27.79	41.69	2.097	14989						7
STD	2600	1.68	34.725	27.80	40.68	2.138	15002						9
STD	2700	1.59	34.724	27.80	39.87	2.178	15016						3
STD	2800	1.52	34.722	27.81	39.29	2.218	15030						8
STD	2900	1.45	34.719	27.81	38.89	2.257	15044						8
STD	3000	1.39	34.716	27.81	38.55	2.296	15059						0
STD	3100	1.35	34.717	27.82	38.24	2.334	15075						7
STD	3200	1.32	34.715	27.82	38.14	2.372	15090						0
STD	3300	1.29	34.712	27.82	38.14	2.410	15106						0
STD	3400	1.26	34.712	27.82	38.00	2.449	15123						9



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	SER 614	11DEC1966	9.8	45 45.3S	160 9.1E	463	4951	34	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	11.9	8.3		29	5	28	4		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	11.02	34.750	26.60			14937	640	39	41	4		
ISL	0	11.02	34.750	26.60	144.93	0.000	14937						
ISL	10	11.04	34.749	26.59	145.51	0.015	14940						
OBS	16	11.04	34.749	26.59			14941	635	40	41	4		
ISL	20	11.04	34.748	26.59	145.79	0.029	14941						
OBS	26	11.03	34.748	26.59			14942	634	40	40	2		
ISL	30	11.03	34.748	26.59	145.98	0.044	14943						
OBS	35	11.04	34.749	26.59			14944	640	39	41	2		
OBS	46	11.05	34.748	26.59			14946	647	35	40	1		
ISL	50	11.04	34.748	26.59	146.58	0.073	14946						
OBS	57	11.02	34.749	26.60			14947	637	35	41	1		
ISL	75	11.01	34.748	26.60	146.67	0.110	14949						
OBS	79	11.01	34.748	26.60			14950	633		37	1		
ISL	100	10.94	34.746	26.61	146.14	0.146	14951						
OBS	101	10.93	34.746	26.61			14951	633	40	45	1		
OBS	120	10.57	34.742	26.67			14941		57	61	2		
ISL	125	10.50	34.745	26.69	139.26	0.182	14939						
ISL	150	10.18	34.755	26.75	133.76	0.216	14932						
OBS	153	10.15	34.756	26.76			14931	609	57	78	3		
ISL	200	9.63	34.703	26.80	129.62	0.282	14919						
OBS	205	9.58	34.696	26.81			14918	611	73	95	4		
OBS	238	0.00	34.692	0.00			0	581	98	80	6		
ISL	250	9.28	34.685	26.85	126.23	0.346	14914						
ISL	300	8.97	34.656	26.87	124.57	0.409	14911						
ISL	400	8.47	34.595	26.90	123.09	0.532	14908						
OBS	493	0.00	34.537	0.00			0	568	118	176	7		
ISL	500	8.11	34.536	26.91	123.76	0.656	14910						
OBS	519	8.06	34.532	26.92			14911	564		178	5		
ISL	600	7.57	34.528	26.99	117.78	0.777	14905						
ISL	700	6.94	34.496	27.05	112.47	0.892	14897						
OBS	741	0.00	34.475	0.00			0	479	148	242	16		
OBS	778	6.44	34.440	27.08			14889	472	134	254	17		
ISL	800	6.36	34.431	27.08	110.43	1.003	14890						
ISL	900	5.86	34.407	27.12	106.47	1.112	14886						
OBS	990	5.19	34.407	27.21			14874	454	178	297	29		
ISL	1000	5.07	34.404	27.22	97.30	1.213	14870						
OBS	1038	4.59	34.391	27.26			14857	456	200	306	36		
ISL	1100	4.11	34.395	27.32	86.77	1.305	14847						
ISL	1200	3.51	34.411	27.39	79.06	1.388	14839						
ISL	1250	3.29	34.424	27.42	75.80	1.427	14838						
ISL	1300	3.11	34.439	27.45	72.90	1.464	14839						
ISL	1400	2.91	34.481	27.50	68.18	1.535	14848						
OBS	1489	2.91	34.528	27.54			14863	395	208	301	63		
ISL	1500	2.89	34.532	27.54	64.75	1.601	14864						
ISL	1750	2.51	34.608	27.64	56.05	1.752	14892						
OBS	1985	2.34	34.669	27.70			14925	400	231	327	66		
ISL	2000	2.33	34.672	27.70	50.35	1.885	14927						
ISL	2250	2.13	34.708	27.75	46.34	2.006	14961						
OBS	2481	1.96	34.726	27.78			14994	430	218	318	91		
ISL	2500	1.94	34.727	27.78	43.57	2.119	14996						
ISL	2750	1.70	34.731	27.80	40.99	2.224	15029						
OBS	2976	1.52	34.728	27.81			15060	445	214	314	94		
ISL	3000	1.51	34.728	27.81	39.34	2.325	15064						
ISL	3250	1.43	34.725	27.82	39.18	2.423	15104						
OBS	3371	1.43	34.723	27.81			15125	450	229	316	104		

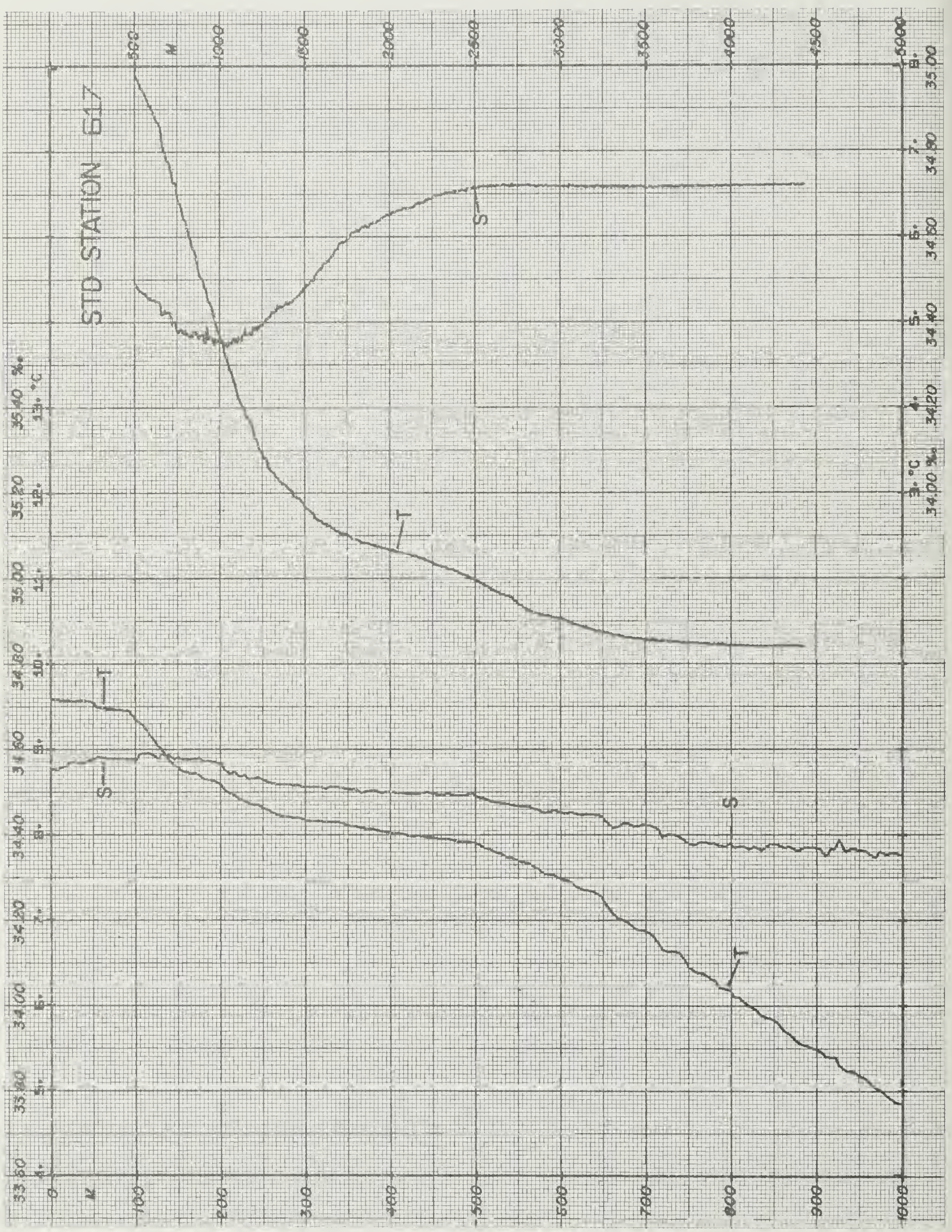


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 615	11DEC1966	19.7	46 23.5S	161 0.0E	463	4929	10	213				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	10.4	5.4	1009.2	25	6	26	6						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	10.70	34.813	26.70	134.86	0.000	14927						0
STD	10	10.70	34.823	26.71	134.37	0.013	14929						0
STD	20	10.70	34.817	26.71	135.04	0.027	14930						0
STD	30	10.75	34.826	26.70	135.42	0.040	14934						4
STD	50	10.76	34.827	26.70	135.88	0.068	14937						6
STD	75	10.76	34.826	26.70	136.59	0.102	14941						3
STD	100	10.73	34.836	26.72	135.89	0.136	14944						5
STD	125	10.45	34.879	26.80	128.59	0.169	14939						8
STD	150	10.56	34.906	26.80	129.02	0.201	14947						7
STD	200	10.62	34.928	26.81	129.65	0.266	14958						0
STD	250	10.63	34.927	26.80	130.89	0.331	14967						6
STD	300	9.99	34.794	26.81	130.98	0.396	14950						4
STD	350	9.34	34.694	26.84	128.67	0.461	14933						3
STD	400	8.91	34.638	26.87	126.84	0.525	14925						7
STD	450	8.64	34.601	26.88	126.18	0.588	14922						0
STD	500	8.20	34.534	26.90	125.26	0.651	14913						8
STD	550	8.04	34.519	26.91	124.71	0.714	14915						4
STD	600	7.96	34.513	26.92	124.86	0.776	14920						2
STD	650	7.88	34.520	26.94	123.98	0.838	14925						0
STD	700	7.53	34.500	26.97	120.85	0.899	14920						8
STD	750	7.16	34.492	27.02	116.82	0.959	14914						7
STD	800	6.56	34.451	27.07	111.80	1.016	14898						7
STD	850	6.07	34.435	27.12	106.73	1.071	14886						5
STD	900	5.58	34.409	27.16	102.63	1.123	14875						6
STD	950	5.28	34.408	27.20	99.25	1.173	14871						0



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	SER 616	13DEC1966	4.3	47 39.2S	161 49.1E	463	4538	41	25				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.5	10.0		31	5	1	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> µg/l	NITR 10 µg/l	SILIC µg/l	INT M	DD
OBS	0	9.60	34.609	26.73			14884	661	45	97	4		
ISL	0	9.60	34.609	26.73	131.88	0.000	14884						
ISL	10	9.60	34.608	26.73	132.18	0.013	14886						
ISL	20	9.60	34.607	26.73	132.44	0.026	14888						
OBS	22	9.60	34.607	26.73			14888	660	68	97	4		
ISL	30	9.59	34.607	26.73	132.52	0.040	14889						
OBS	31	9.59	34.607	26.73			14889	658	66	95	3		
OBS	41	9.56	34.607	26.74			14889	655	67	95	3		
ISL	50	9.52	34.609	26.75	131.66	0.066	14889						
OBS	52	9.51	34.609	26.75			14889	653	69	98	5		
OBS	61	9.48	34.608	26.75			14890	652	66	98	7		
ISL	75	9.48	34.608	26.75	131.58	0.099	14892						
OBS	82	9.48	34.608	26.75			14893	649	66	99	4		
ISL	100	9.47	34.613	26.76	131.58	0.132	14896						
OBS	102	9.46	34.613	26.76			14896	646	68	102	4		
OBS	121	9.24	34.607	26.79			14891	637	76	108	5		
ISL	125	9.19	34.606	26.80	128.22	0.164	14890						
ISL	150	8.94	34.605	26.84	124.84	0.196	14884						
OBS	153	8.91	34.605	26.84			14884	629	74	117	6		
ISL	200	8.70	34.602	26.88	122.33	0.258	14883						
OBS	203	8.69	34.602	26.88			14884	606	82	137	4		
ISL	250	8.59	34.594	26.89	122.19	0.319	14887						
ISL	300	8.47	34.583	26.90	122.16	0.380	14891						
ISL	400	8.23	34.555	26.91	122.36	0.502	14898						
ISL	500	7.97	34.518	26.92	122.88	0.625	14904						
OBS	506	7.95	34.515	26.92			14904	589	104	163	7		
ISL	600	7.40	34.473	26.97	119.27	0.746	14898						
ISL	700	6.73	34.432	27.03	114.19	0.863	14888						
OBS	758	6.31	34.410	27.07			14880	508	133	247	17		
ISL	800	6.03	34.400	27.10	108.13	0.974	14876						
OBS	872	5.55	34.386	27.15			14868	477	183	277	23		
ISL	900	5.37	34.381	27.16	101.85	1.079	14866						
ISL	1000	4.76	34.373	27.23	95.55	1.178	14857						
OBS	1010	4.70	34.373	27.23			14856	472	168	252	32		
ISL	1100	4.17	34.381	27.30	88.50	1.270	14849						
OBS	1116	4.08	34.383	27.31			14848	460	176	312	36		
ISL	1200	3.68	34.401	27.37	81.77	1.355	14846						
ISL	1250	3.47	34.415	27.40	78.62	1.395	14846						
ISL	1300	3.29	34.431	27.43	75.59	1.433	14846						
OBS	1362	3.09	34.454	27.46			14849	427	199	330	42		
ISL	1400	2.99	34.471	27.49	69.78	1.506	14851						
ISL	1500	2.78	34.517	27.54	64.50	1.573	14859						
OBS	1607	2.62	34.565	27.59			14871	406	201		62		
ISL	1750	2.50	34.608	27.64	55.86	1.724	14891						
OBS	1855	2.44	34.634	27.66			14907	405	206	323	72		
ISL	2000	2.33	34.671	27.70	50.47	1.857	14927						
OBS	2103	2.25	34.693	27.73			14941	416	223	319	77		
ISL	2250	2.12	34.713	27.75	45.85	1.977	14961						
ISL	2500	1.89	34.731	27.79	42.54	2.087	14994						
OBS	2603	1.79	34.733	27.80			15008	440	213	315	89		
ISL	2750	1.66	34.733	27.81	40.27	2.191	15027						
ISL	3000	1.47	34.728	27.82	38.74	2.290	15062						
OBS	3104	1.40	34.725	27.82			15078	447	226	321	74		
ISL	3250	1.34	34.724	27.82	37.99	2.386	15100						
ISL	3500	1.28	34.722	27.82	37.77	2.480	15141						
OBS	3611	1.26	34.721	27.83			15160	453	194	318	104		
ISL	3750	1.23	34.720	27.83	37.83	2.575	15183						
ISL	4000	1.21	34.719	27.83	38.10	2.670	15227						
OBS	4129	1.21	34.718	27.83			15249	455		321	105		
ISL	4500	1.27	34.717	27.82	40.18	2.865	15318						
OBS	4508	1.27	34.717	27.82			15319	456	232	319	96		

STD STATION 617

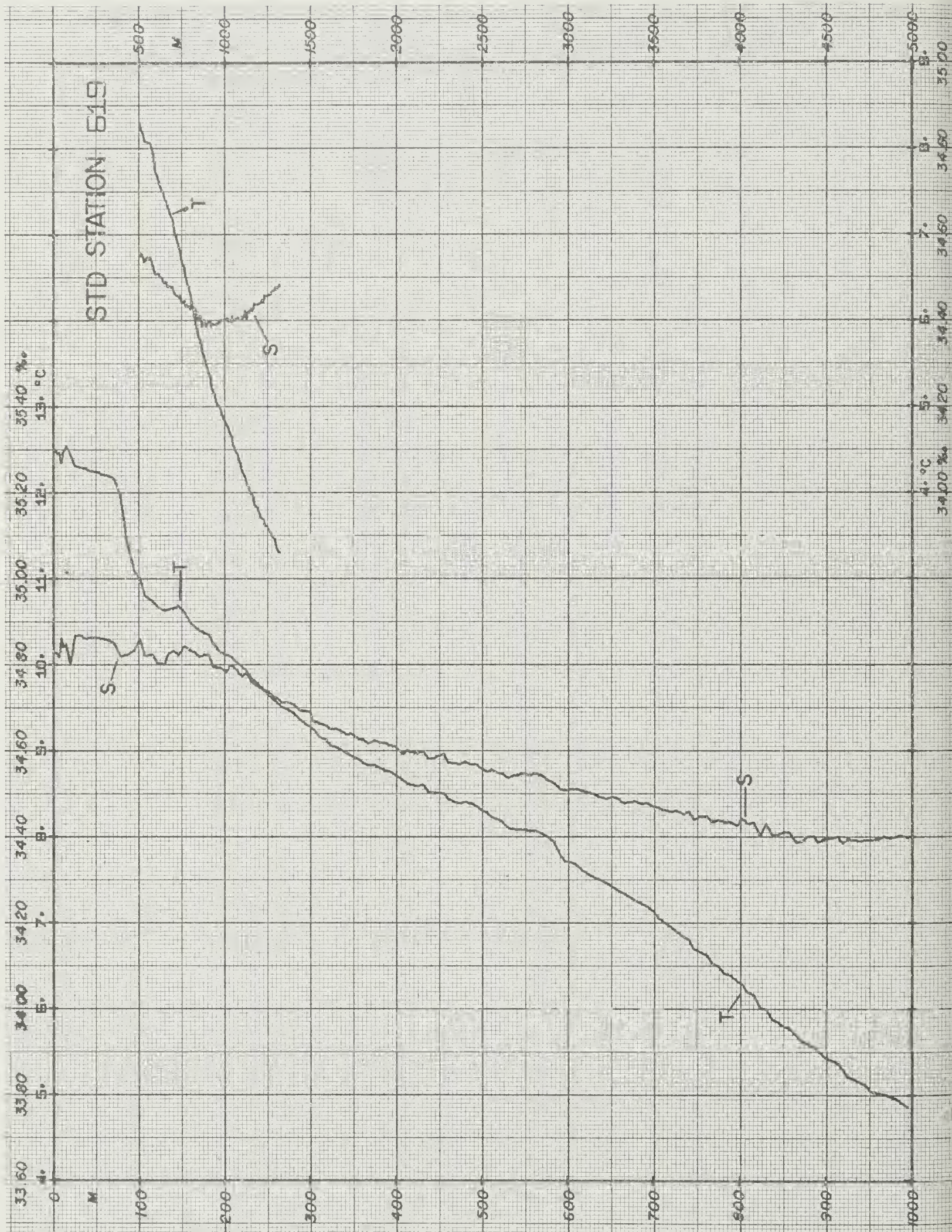




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 617	13DEC1966	9.5	47 41.0S	161 47.5E	463	4480	44	720				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.3	9.3	1012.2	31	4	33	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	9.58	34.554	26.70	135.59	0.000	14883						0
STD	10	9.57	34.555	26.70	135.68	0.014	14884						6
STD	20	9.57	34.561	26.70	135.36	0.027	14886						0
STD	30	9.57	34.570	26.71	134.85	0.041	14887						3
STD	50	9.54	34.576	26.72	134.47	0.068	14890						4
STD	75	9.47	34.579	26.73	133.56	0.101	14891						2
STD	100	9.36	34.574	26.75	132.70	0.134	14891						5
STD	125	9.07	34.580	26.80	128.17	0.167	14885						6
STD	150	8.80	34.582	26.84	124.35	0.199	14879						0
STD	200	8.59	34.567	26.86	123.34	0.260	14879						4
STD	250	8.31	34.529	26.88	122.78	0.322	14876						0
STD	300	8.17	34.511	26.89	122.95	0.383	14879						8
STD	350	8.11	34.507	26.89	123.25	0.445	14885						6
STD	400	8.03	34.500	26.90	123.37	0.507	14889						6
STD	450	7.97	34.496	26.90	123.68	0.568	14895						0
STD	500	7.90	34.491	26.91	123.83	0.630	14901						5
STD	550	7.70	34.468	26.92	123.37	0.692	14901						0
STD	600	7.48	34.451	26.94	122.19	0.753	14901						0
STD	650	7.23	34.440	26.97	120.18	0.814	14899						6
STD	700	6.87	34.424	27.00	116.76	0.873	14893						8
STD	750	6.47	34.380	27.02	115.08	0.931	14885						6
STD	800	6.16	34.379	27.06	111.55	0.988	14881						5
STD	850	5.82	34.378	27.11	107.55	1.043	14876						7
STD	900	5.49	34.368	27.14	104.32	1.096	14870						7
STD	950	5.18	34.363	27.17	101.17	1.147	14866						9
STD	1000	4.84	34.354	27.20	97.98	1.197	14860						5
STD	1100	4.21	34.359	27.28	90.58	1.291	14851						0
STD	1200	3.74	34.388	27.35	83.52	1.378	14848						5
STD	1300	3.26	34.413	27.42	76.60	1.458	14845						0
STD	1400	3.07	34.442	27.46	72.93	1.533	14854						7
STD	1500	2.86	34.478	27.50	68.33	1.604	14862						6
STD	1600	2.68	34.522	27.55	63.50	1.669	14872						0
STD	1700	2.55	34.578	27.61	58.34	1.730	14884						0
STD	1800	2.46	34.613	27.65	55.30	1.787	14898						7
STD	1900	2.40	34.631	27.67	53.71	1.842	14913						6
STD	2000	2.34	34.652	27.69	51.95	1.895	14927						9
STD	2100	2.30	34.666	27.70	50.86	1.946	14943						4
STD	2200	2.23	34.681	27.72	49.39	1.996	14957						6
STD	2300	2.15	34.699	27.74	47.48	2.045	14971						6
STD	2400	2.08	34.707	27.75	46.40	2.091	14985						8
STD	2500	1.99	34.716	27.77	44.96	2.137	14998						0
STD	2600	1.87	34.719	27.78	43.56	2.181	15011						7
STD	2700	1.79	34.719	27.78	42.83	2.225	15024						9
STD	2800	1.65	34.722	27.80	41.08	2.267	15036						0
STD	2900	1.58	34.718	27.80	40.67	2.307	15050						6
STD	3000	1.53	34.718	27.80	40.40	2.348	15065						7
STD	3100	1.46	34.717	27.81	39.69	2.388	15079						0
STD	3200	1.40	34.717	27.81	39.11	2.427	15094						8
STD	3300	1.35	34.716	27.81	38.78	2.466	15109						8
STD	3400	1.31	34.719	27.82	38.25	2.505	15125						0
STD	3500	1.29	34.716	27.82	38.32	2.543	15142						3
STD	3600	1.27	34.716	27.82	38.33	2.581	15159						8
STD	3700	1.26	34.716	27.82	38.30	2.620	15176						0
STD	3800	1.25	34.718	27.82	38.22	2.658	15193						6
STD	3900	1.23	34.718	27.82	38.25	2.696	15210					10	
STD	4000	1.22	34.719	27.83	38.23	2.735	15227						0
STD	4100	1.22	34.720	27.83	38.25	2.773	15244						6
STD	4200	1.21	34.720	27.83	38.43	2.811	15262						7
STD	4300	1.21	34.720	27.83	38.56	2.850	15280						7
STD	4400	1.21	34.721	27.83	38.68	2.888	15297						0



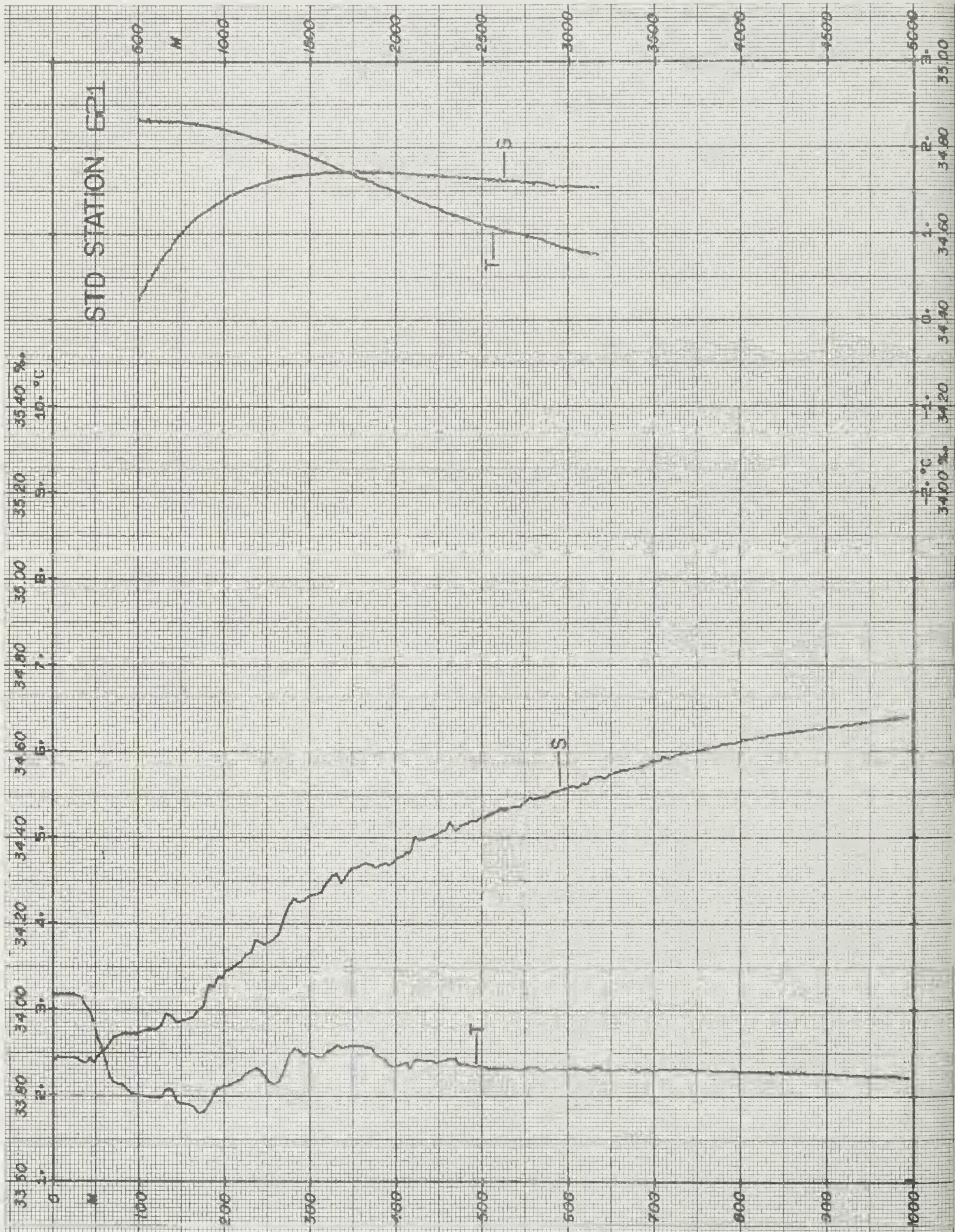
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	SER 618	16DEC1966	0.7	45 20.4S	165 58.2E	463	4311	22	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.3	12.7		29	3	29	3		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	12.50	34.894	26.43			14991	622	27	12	4		
ISL	0	12.50	34.894	26.43	160.87	0.000	14991						
ISL	10	12.46	34.895	26.44	160.40	0.016	14991						
ISL	20	12.43	34.895	26.44	160.01	0.032	14991						
OBS	23	12.42	34.895	26.45			14992	621	23	11	3		
ISL	30	12.40	34.895	26.45	159.69	0.048	14992						
OBS	33	12.39	34.895	26.45			14992	618	38	12	1		
OBS	43	12.38	34.900	26.46			14994	616	28	13	2		
ISL	50	12.42	34.903	26.45	159.98	0.080	14996						
OBS	55	0.00	34.904	0.00			0	622	23	12	3		
OBS	65	12.35	34.906	26.47			14996	620	26	12	2		
ISL	75	11.99	34.882	26.52	154.31	0.119	14985						
OBS	87	11.48	34.851	26.59			14969	602	54	46	1		
ISL	100	11.07	34.856	26.67	140.29	0.156	14957						
OBS	108	10.87	34.862	26.71			14951	593	62	69	3		
ISL	125	10.67	34.846	26.73	134.72	0.191	14947						
OBS	128	10.65	34.843	26.74			14946	587	61	75	3		
ISL	150	10.52	34.846	26.76	132.74	0.224	14945						
OBS	160	10.47	34.849	26.77			14945	561	75	95	4		
ISL	200	10.08	34.809	26.81	129.13	0.289	14937						
OBS	210	9.97	34.796	26.82			14935	532	89	132	4		
ISL	250	9.66	34.757	26.84	127.14	0.353	14929						
ISL	300	9.29	34.711	26.87	125.48	0.417	14923						
ISL	400	8.59	34.631	26.91	122.29	0.541	14913						
ISL	500	7.96	34.566	26.96	119.21	0.661	14904						
ISL	600	7.40	34.516	27.00	116.15	0.779	14898						
ISL	700	6.90	34.482	27.05	113.02	0.894	14895						
OBS	791	6.51	34.463	27.08			14894	452	187	258	17		
OBS	527	8.06	34.553	26.93			14912	525		193	7		
ISL	800	6.29	34.453	27.10	107.89	1.004	14887						
ISL	900	5.66	34.434	27.17	101.80	1.109	14878						
ISL	1000	5.03	34.426	27.24	95.23	1.207	14869						
OBS	1060	4.66	34.425	27.28			14864	429	213	300	38		
ISL	1100	4.46	34.434	27.31	88.22	1.299	14862						
ISL	1200	4.00	34.460	27.38	81.40	1.384	14860						
ISL	1250	3.79	34.475	27.41	78.13	1.424	14860						
ISL	1300	3.60	34.491	27.44	74.94	1.462	14860						
ISL	1400	3.25	34.527	27.51	68.79	1.534	14863						
OBS	1458	3.08	34.551	27.54			14866	377		338	66		
ISL	1500	2.98	34.563	27.56	63.53	1.600	14869						
OBS	1710	2.62	34.619	27.64			14890	377	248	338	77		
ISL	1750	2.57	34.628	27.65	55.32	1.749	14894						
OBS	1960	2.38	34.666	27.70			14922	389	212	329	80		
ISL	2000	2.34	34.672	27.70	50.57	1.881	14928						
OBS	2210	2.17	34.693	27.73			14956	403	239	329	82		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 26	STD 619	16DEC1966	5.6	45 21.7S	165 58.0E	463	4401	13	208				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	12.4	8.1	0.0	19	3	2	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	12.47	34.829	26.38	165.07	0.000	14989						0
STD	10	12.35	34.861	26.43	160.80	0.016	14987						0
STD	20	12.44	34.800	26.37	167.16	0.033	14991						0
STD	30	12.30	34.867	26.45	159.84	0.049	14988						6
STD	50	12.24	34.862	26.45	159.71	0.081	14989						0
STD	75	12.05	34.833	26.47	159.00	0.121	14987						7
STD	100	11.02	34.856	26.68	139.42	0.158	14955						6
STD	125	10.65	34.802	26.70	137.61	0.193	14945						8
STD	150	10.64	34.834	26.73	135.77	0.227	14949						7
STD	200	10.12	34.785	26.78	131.57	0.294	14938						6
STD	250	9.67	34.740	26.82	128.60	0.359	14929						6
STD	300	9.28	34.691	26.85	126.91	0.423	14923						6
STD	350	8.93	34.637	26.87	126.23	0.486	14917						9
STD	400	8.71	34.608	26.88	125.89	0.549	14917						9
STD	450	8.51	34.587	26.89	125.18	0.612	14917						7
STD	500	8.31	34.558	26.90	125.23	0.674	14918						0
STD	550	8.08	34.545	26.93	123.40	0.737	14917						9
STD	600	7.71	34.508	26.95	121.36	0.798	14910						7
STD	650	7.44	34.490	26.98	119.41	0.858	14908						6
STD	700	7.14	34.471	27.00	117.20	0.917	14904						8
STD	750	6.68	34.442	27.04	113.46	0.975	14894						7
STD	800	6.31	34.431	27.09	109.72	1.031	14888						6
STD	850	5.80	34.409	27.13	104.88	1.084	14875						0
STD	900	5.44	34.395	27.17	101.74	1.136	14869						8
STD	950	5.07	34.391	27.21	97.76	1.186	14862						6
STD	1000	4.85	34.402	27.24	94.58	1.234	14861						6
STD	1100	4.29	34.410	27.31	87.87	1.325	14855						8
STD	1200	3.79	34.440	27.39	80.21	1.409	14851						5
STD	1300	3.41	34.476	27.45	73.76	1.486	14852						0

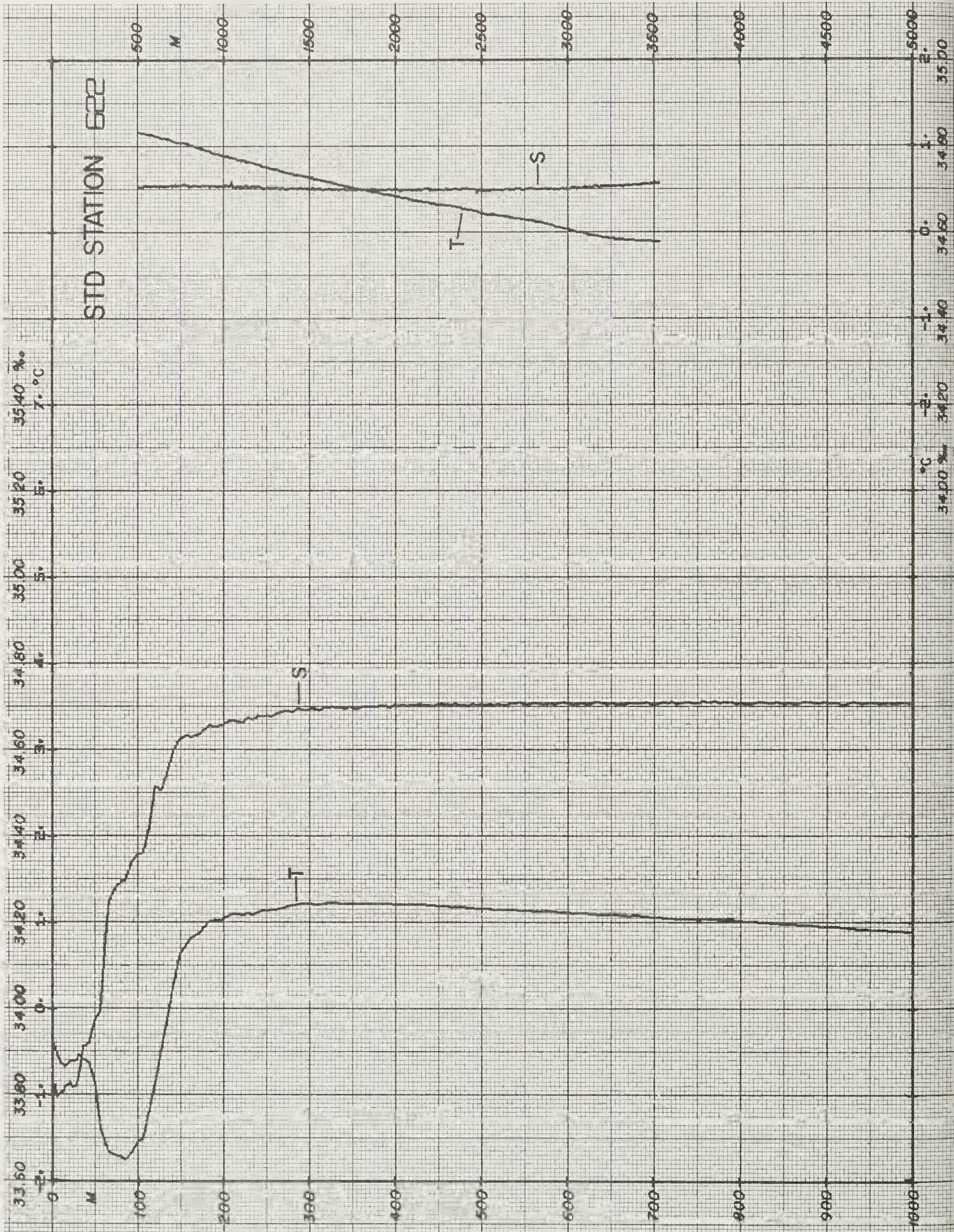


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 620	7JAN1967	9.0	63 3.1S	177 36.2E	534	3040	31	20				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	4.4	3.5		33	4	35	2		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	3.27	33.886	26.99			14623	770		225	5		
ISL	0	3.27	33.886	26.99	107.15	0.000	14623						
ISL	10	3.24	33.884	27.00	107.11	0.011	14623						
ISL	20	3.22	33.884	27.00	106.97	0.021	14624						
OBS	21	3.21	33.884	27.00			14623	772		222	4		
ISL	30	3.10	33.884	27.01	106.06	0.032	14620						
OBS	39	2.96	33.888	27.02			14616	770		237	4		
ISL	50	2.72	33.908	27.06	101.04	0.053	14607						
OBS	61	2.47	33.931	27.10			14599	733		253	16		
ISL	75	2.25	33.940	27.13	94.97	0.077	14591						
ISL	100	1.99	33.947	27.15	92.61	0.101	14584						
OBS	102	1.98	33.947	27.15			14584	733		257	16		
ISL	125	1.91	33.962	27.17	90.96	0.124	14585						
OBS	141	1.91	33.976	27.18			14588	707		276	17		
ISL	150	1.88	33.984	27.19	89.15	0.146	14588						
OBS	173	1.86	34.012	27.21			14591	688		280	20		
ISL	200	2.02	34.064	27.24	84.38	0.190	14604						
OBS	222	2.19	34.111	27.27			14615	616		257	30		
ISL	250	2.27	34.161	27.30	79.27	0.230	14624						
ISL	300	2.33	34.240	27.36	74.04	0.269	14636						
OBS	322	2.32	34.271	27.38			14640	513		320	41		
ISL	400	2.30	34.353	27.45	65.80	0.339	14653						
ISL	500	2.28	34.433	27.52	60.19	0.402	14670						
OBS	523	2.27	34.447	27.53			14673	433		340	56		
ISL	600	2.28	34.503	27.57	55.43	0.460	14688						
ISL	700	2.30	34.566	27.62	51.41	0.513	14706						
OBS	773	2.31	34.604	27.65			14719	407		331	65		
ISL	800	2.30	34.615	27.66	48.25	0.563	14723						
ISL	900	2.27	34.652	27.69	45.73	0.610	14739						
ISL	1000	2.22	34.679	27.72	43.73	0.655	14754						
OBS	1023	2.21	34.684	27.72			14757	418		331	72		
ISL	1100	2.17	34.699	27.74	42.13	0.697	14769						
ISL	1200	2.10	34.715	27.76	40.80	0.739	14783						
ISL	1250	2.07	34.721	27.76	40.25	0.759	14790						
ISL	1300	2.04	34.726	27.77	39.75	0.779	14797						
OBS	1326	2.02	34.728	27.77			14801	431		279	72		
ISL	1400	1.97	34.734	27.78	38.92	0.819	14811						
ISL	1500	1.90	34.739	27.79	38.20	0.857	14825						
OBS	1573	1.85	34.741	27.80			14835	443		298	82		
ISL	1750	1.71	34.743	27.81	36.71	0.951	14859						
OBS	1823	1.65	34.743	27.81			14869	454		296	86		
ISL	2000	1.48	34.739	27.82	35.29	1.041	14892						
OBS	2072	1.42	34.736	27.83			14901	460		300	91		
ISL	2250	1.30	34.730	27.83	34.42	1.128	14926						
OBS	2322	1.25	34.727	27.83			14936	466		269	94		
ISL	2500	1.13	34.722	27.83	33.51	1.213	14962						
OBS	2572	1.08	34.720	27.84			14972	473		305	95		
ISL	2750	0.98	34.716	27.84	32.56	1.295	14998						
OBS	2822	0.94	34.714	27.84			15009	479		308	106		
ISL	3000		34.709										
OBS	3072		34.708					486		320	114		





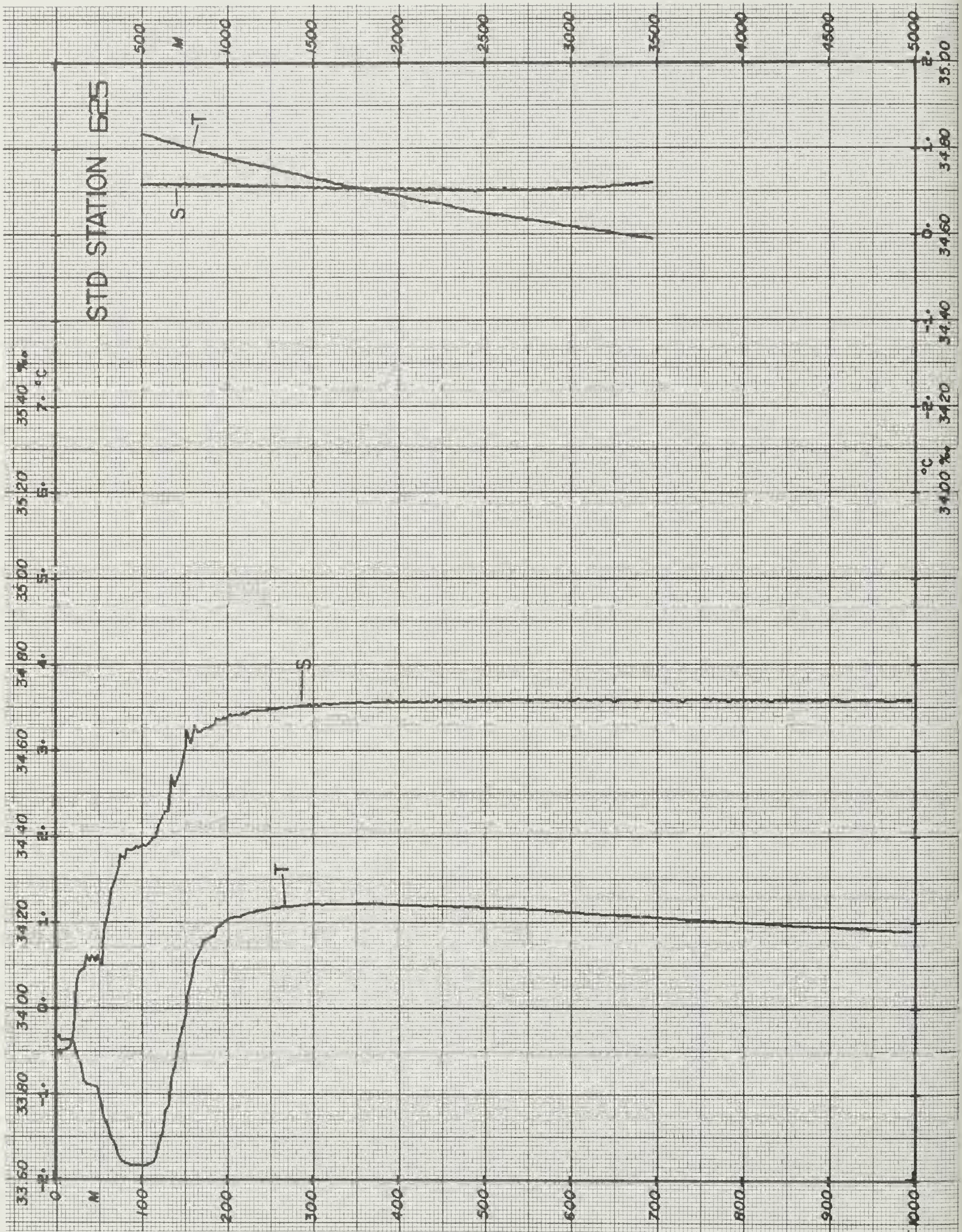
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 621	7 JAN 1967	13.6	63 5.0S	177 34.5E	533	3326	32	635				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.1	3.2	1007.6	33	3	30	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-2</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	3.20	33.882	27.00	106.82	0.000	14619						0
STD	10	3.17	33.888	27.01	106.17	0.011	14620						0
STD	20	3.17	33.888	27.01	106.28	0.021	14622						5
STD	30	3.15	33.885	27.01	106.38	0.032	14622						5
STD	50	2.77	33.883	27.04	103.46	0.053	14609						5
STD	75	2.14	33.937	27.13	94.34	0.078	14586						5
STD	100	2.01	33.946	27.15	92.77	0.101	14585						5
STD	125	1.98	33.960	27.16	91.63	0.124	14588						6
STD	150	1.92	33.973	27.18	90.22	0.147	14590						12
STD	200	2.11	34.081	27.25	83.74	0.190	14608						5
STD	250	2.20	34.153	27.30	79.31	0.231	14621						4
STD	300	2.49	34.264	27.37	73.67	0.269	14643						5
STD	350	2.58	34.328	27.41	69.97	0.305	14657						6
STD	400	2.35	34.348	27.44	66.60	0.339	14655						5
STD	450	2.39	34.410	27.49	62.60	0.372	14666						6
STD	500	2.35	34.445	27.52	59.83	0.402	14673						6
STD	550	2.32	34.482	27.55	57.07	0.431	14680						0
STD	600	2.31	34.517	27.58	54.69	0.459	14689						5
STD	650	2.30	34.548	27.61	52.48	0.486	14697						5
STD	700	2.29	34.575	27.63	50.63	0.512	14706						0
STD	750	2.30	34.600	27.65	49.15	0.537	14715						0
STD	800	2.28	34.622	27.67	47.56	0.561	14722						0
STD	850	2.27	34.641	27.68	46.32	0.585	14731						5
STD	900	2.26	34.655	27.70	45.39	0.607	14738						4
STD	950	2.23	34.667	27.71	44.44	0.630	14746						0
STD	1000	2.22	34.679	27.72	43.66	0.652	14754						6
STD	1100	2.17	34.700	27.74	42.10	0.695	14769						4
STD	1200	2.10	34.715	27.76	40.79	0.736	14783						3
STD	1300	2.03	34.728	27.77	39.58	0.776	14797						0
STD	1400	1.97	34.735	27.78	38.88	0.816	14811						3
STD	1500	1.91	34.739	27.79	38.25	0.854	14825						4
STD	1600	1.82	34.743	27.80	37.40	0.892	14839						5
STD	1700	1.73	34.743	27.81	36.77	0.929	14851						0
STD	1800	1.65	34.743	27.81	36.20	0.966	14865						5
STD	1900	1.57	34.743	27.82	35.58	1.002	14878						8
STD	2000	1.49	34.740	27.82	35.24	1.037	14892						7
STD	2100	1.40	34.739	27.83	34.59	1.072	14905						7
STD	2200	1.32	34.736	27.83	34.11	1.106	14919						6
STD	2300	1.24	34.733	27.84	33.64	1.140	14932						7
STD	2400	1.18	34.731	27.84	33.27	1.174	14947						7
STD	2500	1.11	34.728	27.84	32.89	1.207	14961						0
STD	2600	1.05	34.724	27.84	32.57	1.239	14976						7
STD	2700	1.00	34.722	27.84	32.32	1.272	14991						5
STD	2800	0.95	34.713	27.84	32.52	1.304	15006						6
STD	2900	0.89	34.712	27.84	31.94	1.336	15020						7
STD	3000	0.83	34.711	27.85	31.38	1.368	15035						5
STD	3100	0.78	34.709	27.85	31.00	1.399	15050						5



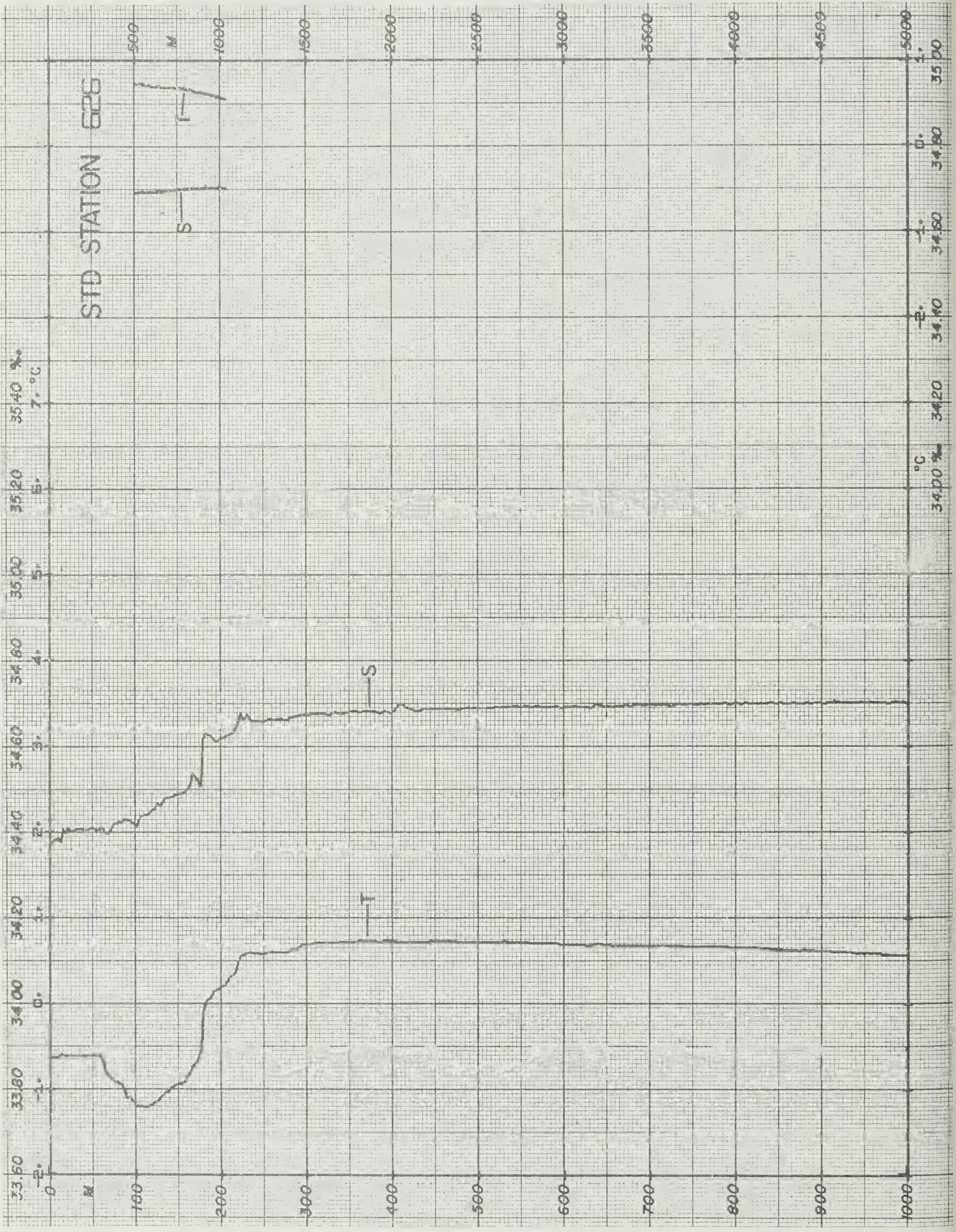
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 622	9 JAN 1967	0.6	65 58.5S	176 19.6E	534	3553	35	662				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-2.0	-0.9	994.8	24	2	25	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-0.35	33.724	27.12	95.68	0.000	14459						0
STD	10	-0.63	33.805	27.19	88.35	0.009	14449						0
STD	20	-0.62	33.825	27.21	86.87	0.018	14452						0
STD	30	-0.55	33.837	27.22	86.14	0.027	14456						3
STD	50	-0.86	33.976	27.34	74.26	0.043	14447						0
STD	75	-1.70	34.283	27.61	47.97	0.058	14416						7
STD	100	-1.54	34.358	27.67	42.53	0.069	14429						0
STD	125	-0.60	34.510	27.76	34.40	0.079	14479						7
STD	150	0.65	34.625	27.79	32.18	0.087	14542						8
JTD	200	1.04	34.658	27.79	32.35	0.103	14569						6
STD	250	1.14	34.679	27.80	31.54	0.119	14581						5
STD	300	1.22	34.694	27.81	31.12	0.135	14593						6
STD	350	1.22	34.698	27.81	30.95	0.150	14602						5
STD	400	1.21	34.703	27.81	30.67	0.166	14610						6
STD	450	1.19	34.705	27.82	30.52	0.181	14617						6
STD	500	1.16	34.707	27.82	30.24	0.196	14624						0
STD	550	1.14	34.707	27.82	30.21	0.211	14631						0
STD	600	1.12	34.708	27.82	30.05	0.227	14639						6
STD	650	1.09	34.707	27.83	30.01	0.242	14646						4
STD	700	1.06	34.706	27.83	29.95	0.257	14653						5
STD	750	1.03	34.708	27.83	29.75	0.271	14660						5
STD	800	1.02	34.707	27.83	29.79	0.286	14668						5
STD	850	0.98	34.708	27.83	29.54	0.301	14675						4
STD	900	0.95	34.708	27.84	29.37	0.316	14682						5
STD	950	0.91	34.708	27.84	29.14	0.331	14688						5
STD	1000	0.89	34.707	27.84	29.08	0.345	14696						5
STD	1100	0.84	34.705	27.84	28.95	0.374	14710						5
STD	1200	0.79	34.707	27.84	28.58	0.403	14725						6
STD	1300	0.73	34.703	27.85	28.46	0.431	14739						4
STD	1400	0.68	34.702	27.85	28.19	0.460	14754						7
STD	1500	0.64	34.701	27.85	28.07	0.488	14769						4
STD	1600	0.59	34.700	27.85	27.77	0.516	14784						7
STD	1700	0.54	34.699	27.85	27.39	0.543	14798						0
STD	1800	0.50	34.700	27.86	27.02	0.571	14814						4
STD	1900	0.46	34.697	27.86	26.88	0.598	14829						5
STD	2000	0.42	34.699	27.86	26.33	0.624	14844						8
STD	2100	0.38	34.696	27.86	26.23	0.650	14859						0
STD	2200	0.34	34.699	27.87	25.63	0.676	14875						0
STD	2300	0.31	34.702	27.87	25.15	0.702	14891						6
STD	2400	0.27	34.700	27.87	24.84	0.727	14906						6
STD	2500	0.22	34.696	27.87	24.58	0.751	14921						7
STD	2600	0.20	34.698	27.87	24.15	0.776	14937						8
STD	2700	0.16	34.699	27.88	23.60	0.800	14953						7
STD	2800	0.14	34.701	27.88	23.23	0.823	14969						6
STD	2900	0.09	34.701	27.88	22.71	0.846	14985						7
STD	3000	0.04	34.702	27.88	21.96	0.868	15000						8
STD	3100	-0.01	34.703	27.89	21.22	0.890	15015						8
STD	3200	-0.05	34.707	27.89	20.33	0.911	15031						5
STD	3300	-0.08	34.707	27.89	19.89	0.931	15047						6
STD	3400	-0.09	34.710	27.90	19.47	0.951	15064						7
STD	3500	-0.11	34.712	27.90	19.09	0.970	15081						0

SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 623	9JAN1967	16.6	66 1.6S	176 27.3E	534	3565	35	25				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.5	-1.5		29	4	26	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-6</sup> $\mu$ g/l	NITR 10 <sup>-6</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-0.13	33.890	27.24			14472	818	182	264	67		
ISL	0	-0.13	33.890	27.24	84.01	0.000	14472						
ISL	10	-0.13	33.895	27.24	83.60	0.008	14473						
OBS	20	-0.14	33.943	27.28			14475	826	186	260	65		
ISL	20	-0.14	33.943	27.28	79.88	0.017	14475						
ISL	30	-0.15	34.056	27.37	71.23	0.024	14478						
OBS	40	-0.19	34.167	27.47			14479	816	185	235	64		
ISL	50	-0.30	34.197	27.49	59.72	0.037	14476						
OBS	60	-0.49	34.208	27.51			14469	823		238	70		
ISL	75	-1.06	34.257	27.57	51.97	0.051	14446						
OBS	80	-1.24	34.276	27.60			14439	790	199	285	69		
OBS	100	-1.36	34.358	27.67			14438	746	207	293	74		
ISL	100	-1.36	34.358	27.67	43.12	0.063	14438						
OBS	124	-0.89	34.420	27.70			14464	694	218	268	74		
ISL	125	-0.86	34.424	27.70	39.83	0.073	14466						
OBS	149	-0.05	34.520	27.74			14509	607	214	308	77		
ISL	150	-0.01	34.524	27.74	36.08	0.083	14511						
OBS	173	0.74	34.608	27.77			14550	522	203	314	77		
OBS	197	1.15	34.655	27.78			14573	488	212	273	80		
ISL	200	1.19	34.660	27.78	33.20	0.100	14575						
OBS	245	1.53	34.711	27.80			14598	456	225	300	80		
ISL	250	1.54	34.713	27.80	31.92	0.117	14600						
OBS	293	1.56	34.720	27.80			14608	450	226	314	83		
ISL	300	1.56	34.721	27.80	31.62	0.132	14609						
ISL	400	1.48	34.730	27.82	30.68	0.164	14622						
OBS	490	1.35	34.732	27.83			14631	463	210	311	85		
ISL	500	1.34	34.732	27.83	29.76	0.194	14633						
ISL	600	1.24	34.731	27.83	29.32	0.223	14645						
ISL	700	1.15	34.728	27.84	29.06	0.252	14657						
OBS	740	1.11	34.726	27.84			14662	473	206	305	88		
ISL	800	1.06	34.724	27.84	28.88	0.281	14670						
ISL	900	0.99	34.721	27.84	28.69	0.310	14684						
OBS	990	0.93	34.719	27.85			14696	480	204	307			
ISL	1000	0.92	34.719	27.85	28.52	0.339	14697						
ISL	1100	0.86	34.717	27.85	28.29	0.367	14711						
ISL	1200	0.80	34.715	27.85	28.06	0.395	14725						
ISL	1250	0.77	34.714	27.85	27.95	0.409	14732						
ISL	1300	0.74	34.713	27.85	27.82	0.423	14740						
OBS	1334	0.72	34.712	27.85			14744	476	229	308			
ISL	1400	0.68	34.711	27.85	27.60	0.451	14754						
ISL	1500	0.63	34.709	27.86	27.39	0.479	14769						
OBS	1527	0.62	34.708	27.86			14773	481	214	305	99		
ISL	1750	0.52	34.704	27.86	26.83	0.546	14806						
OBS	1770	0.51	34.704	27.86			14809	485	211	324	108		
ISL	2000	0.42	34.702	27.86	26.11	0.613	14844						
OBS	2014	0.41	34.702	27.86			14846	488	238	297	105		
ISL	2250	0.31	34.701	27.87	25.21	0.677	14882						
OBS	2260	0.31	34.701	27.87			14884	502	230	289	117		
ISL	2500	0.22	34.708	27.88	23.73	0.738	14921						
OBS	2507	0.22	34.708	27.88			14922	510	243	314	114		
ISL	2750	0.15	34.704	27.88	23.18	0.797	14961						
OBS	2755	0.15	34.704	27.88			14962	509	233	308	114		
ISL	3000	0.08	34.705	27.88	22.23	0.853	15002						
OBS	3003	0.08	34.705	27.88			15002	521	236	313	106		
ISL	3250	-0.01	34.712	27.89	20.56	0.907	15042						
OBS	3403	-0.07	34.714	27.90			15066	538	224	319	105		
ISL	3500		34.712										
OBS	3503		34.712					536	234	289	96		

SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 27	SER 624		11 JAN 1967		5.1	68 3.0S		174 32.7E		534	3492	33	24	
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	0.7		-1.1				35		2	3		3	1	
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD	
OBS	0	-0.40	33.924	27.28			14460	798	167	249	59			
ISL	0	-0.40	33.924	27.28	80.24	0.009	14460							
ISL	10	-0.34	34.018	27.35	73.29	0.008	14465							
OBS	20	-0.41	34.081	27.41			14465	798	183	255	62			
ISL	20	-0.41	34.081	27.41	68.15	0.015	14465							
ISL	30	-0.64	34.101	27.43	65.70	0.021	14456							
OBS	40	-0.93	34.115	27.45			14444	787	180	250	63			
ISL	50	-1.22	34.166	27.51	58.46	0.034	14433							
OBS	60	-1.48	34.231	27.57			14423	738	186	267	66			
ISL	75	-1.69	34.337	27.66	43.88	0.047	14418							
OBS	79	-1.69	34.364	27.68			14419	696	203	272	67			
OBS	99	-1.22	34.452	27.74			14445	653	180	285	68			
ISL	100	-1.20	34.455	27.74	36.25	0.057	14447							
OBS	123	-0.60	34.519	27.77			14479	596	198	292	71			
ISL	125	-0.54	34.525	27.77	33.50	0.065	14482							
OBS	148	0.15	34.589	27.79			14519	537	208	294	80			
ISL	150	0.21	34.595	27.79	31.92	0.074	14522							
OBS	173	0.75	34.649	27.80			14551	485	216	300	75			
OBS	197	0.98	34.675	27.81			14565	477	223	298	78			
ISL	200	1.00	34.677	27.81	30.61	0.089	14567							
OBS	245	1.15	34.696	27.81			14581	452	221	301	81			
ISL	250	1.16	34.698	27.81	30.28	0.104	14583							
OBS	293	1.22	34.711	27.82			14593	446	211	302	87			
ISL	300	1.22	34.712	27.82	29.74	0.119	14594							
ISL	400	1.23	34.724	27.83	29.27	0.149	14611							
OBS	491	1.18	34.724	27.83			14624	445	207	300	88			
ISL	500	1.18	34.724	27.83	29.08	0.178	14625							
ISL	600	1.13	34.723	27.84	29.07	0.207	14640							
ISL	700	1.08	34.722	27.84	28.90	0.236	14654							
OBS	741	1.05	34.721	27.84			14660	459	203	301	94			
ISL	800	1.01	34.720	27.84	28.80	0.265	14668							
ISL	900	0.95	34.718	27.84	28.63	0.294	14682							
OBS	991	0.90	34.717	27.85			14695	463	216	282	100			
ISL	1000	0.89	34.717	27.85	28.40	0.322	14696							
ISL	1100	0.84	34.717	27.85	28.08	0.350	14710							
ISL	1200	0.78	34.717	27.85	27.77	0.378	14725							
OBS	1229	0.77	34.717	27.85			14729	469	214	297	105			
ISL	1250	0.76	34.717	27.85	27.67	0.392	14732							
ISL	1300	0.74	34.715	27.85	27.64	0.406	14740							
ISL	1400	0.70	34.713	27.86	27.60	0.434	14755							
OBS	1430	0.69	34.712	27.86			14759	472	222	315	104			
ISL	1500	0.66	34.711	27.86	27.44	0.461	14770							
OBS	1681	0.58	34.710	27.86			14797	480	214	297	110			
ISL	1750	0.55	34.709	27.86	26.81	0.529	14807							
OBS	1932	0.48	34.708	27.86			14835	489	212	315	108			
ISL	2000	0.45	34.709	27.87	25.96	0.595	14846							
OBS	2184	0.38	34.712	27.87			14874	491	225	315	112			
ISL	2250	0.35	34.710	27.87	25.02	0.659	14884							
OBS	2435	0.28	34.702	27.87			14913	502	213	315	109			
ISL	2500	0.25	34.702	27.87	24.54	0.721	14923							
OBS	2687	0.00	34.703	0.00			0	508	206		106			
ISL	2750	0.16	34.704	27.88	23.26	0.780	14962							
OBS	2939	0.09	34.707	27.89			14992	515	212	311	99			
ISL	3000	0.07	34.708	27.89	21.89	0.837	15002							
ISL	3250	0.01	34.712	27.89	20.72	0.890	15043							
OBS	3342	-0.01	34.714	27.90			15058	527	219	278	99			



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 625	11 JAN 1967	12.8	68 3.0S	174 13.0E	534	3490	35	673				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.4	-1.2	988.8	6	3	2	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-0.36	33.908	27.26	81.65	0.000	14461					0	
STD	10	-0.37	33.902	27.26	82.02	0.008	14462					4	
STD	20	-0.37	33.923	27.28	80.35	0.016	14464					0	
STD	30	-0.65	34.087	27.42	66.71	0.024	14456					3	
STD	50	-0.93	34.124	27.46	62.71	0.037	14446					0	
STD	75	-1.73	34.330	27.65	44.34	0.050	14416					0	
STD	100	-1.83	34.375	27.69	40.42	0.061	14415					4	
STD	125	-1.47	34.440	27.74	36.39	0.070	14438					5	
STD	150	-0.19	34.583	27.80	30.69	0.079	14503					6	
STD	200	1.02	34.674	27.80	30.97	0.094	14568					0	
STD	250	1.15	34.695	27.81	30.41	0.109	14582					2	
STD	300	1.21	34.705	27.82	30.19	0.124	14593					5	
STD	350	1.21	34.710	27.82	29.97	0.140	14602					5	
STD	400	1.20	34.714	27.82	29.80	0.154	14610					6	
STD	450	1.19	34.715	27.82	29.75	0.169	14617					4	
STD	500	1.17	34.716	27.83	29.67	0.184	14625					5	
STD	550	1.15	34.717	27.83	29.57	0.199	14632					4	
STD	600	1.12	34.718	27.83	29.40	0.214	14639					6	
STD	650	1.09	34.716	27.83	29.35	0.228	14646					5	
STD	700	1.06	34.716	27.83	29.24	0.243	14653					5	
STD	750	1.03	34.718	27.84	28.93	0.258	14660					0	
STD	800	1.00	34.717	27.84	28.90	0.272	14667					5	
STD	850	0.97	34.717	27.84	28.76	0.287	14674					6	
STD	900	0.95	34.718	27.84	28.65	0.301	14682					5	
STD	950	0.92	34.717	27.84	28.56	0.315	14689					5	
STD	1000	0.89	34.716	27.85	28.46	0.329	14696					4	
STD	1100	0.85	34.714	27.85	28.36	0.358	14711					5	
STD	1200	0.80	34.714	27.85	28.16	0.386	14726					4	
STD	1300	0.76	34.712	27.85	28.04	0.414	14740					0	
STD	1400	0.71	34.711	27.85	27.84	0.442	14755					5	
STD	1500	0.66	34.709	27.85	27.58	0.470	14770					6	
STD	1600	0.62	34.707	27.86	27.46	0.497	14785					6	
STD	1700	0.57	34.709	27.86	26.95	0.525	14800					0	
STD	1800	0.54	34.707	27.86	26.88	0.551	14815					0	
STD	1900	0.50	34.707	27.86	26.50	0.578	14831					7	
STD	2000	0.46	34.706	27.86	26.24	0.605	14846					4	
STD	2100	0.41	34.705	27.87	25.86	0.631	14861					7	
STD	2200	0.37	34.705	27.87	25.52	0.656	14876					7	
STD	2300	0.34	34.705	27.87	25.20	0.682	14892					5	
STD	2400	0.29	34.702	27.87	24.90	0.707	14907					7	
STD	2500	0.26	34.703	27.87	24.48	0.731	14923					6	
STD	2600	0.23	34.703	27.87	24.17	0.756	14939					7	
STD	2700	0.19	34.705	27.88	23.61	0.780	14955					8	
STD	2800	0.16	34.703	27.88	23.38	0.803	14971					0	
STD	2900	0.13	34.704	27.88	22.88	0.826	14987					5	
STD	3000	0.10	34.707	27.89	22.26	0.849	15003					4	
STD	3100	0.07	34.708	27.89	21.80	0.871	15019					7	
STD	3200	0.04	34.711	27.89	21.24	0.892	15035					5	
STD	3300	0.00	34.714	27.90	20.48	0.913	15051					6	
STD	3400	-0.02	34.717	27.90	19.87	0.933	15068					7	

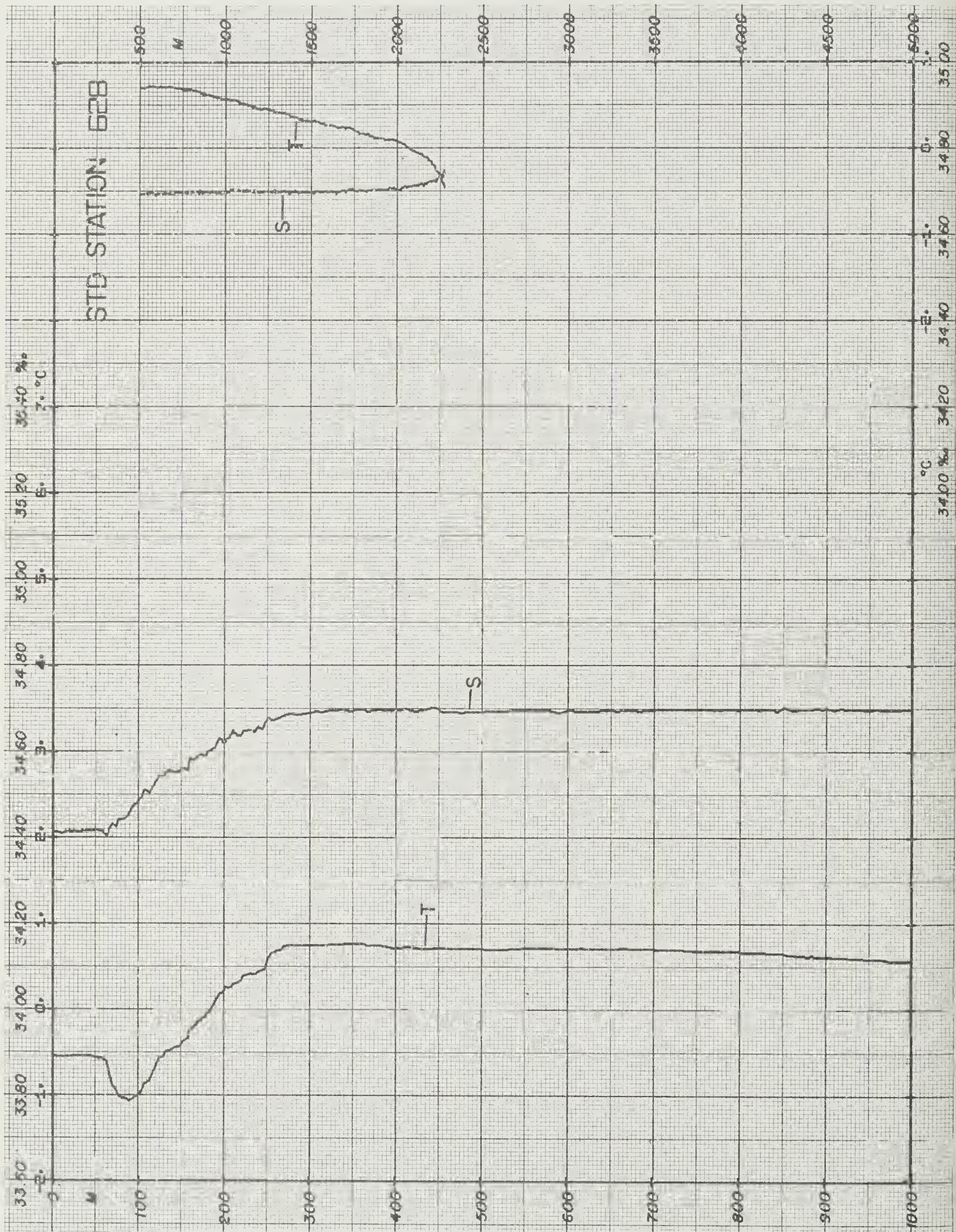




SHIP / CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 626	12JAN1967	19.2	70 50.5S	171 45.6E	534	2284	10	277				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.2	-2.2	996.6	16	6	16	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-0.63	34.373	27.65	45.02	0.000	14455						0
STD	10	-0.63	34.387	27.66	43.90	0.004	14457						0
STD	20	-0.61	34.399	27.67	43.05	0.009	14460						0
STD	30	-0.61	34.404	27.68	42.60	0.013	14462						3
STD	50	-0.61	34.409	27.68	42.17	0.022	14465						0
STD	75	-0.91	34.419	27.70	40.16	0.032	14455						0
STD	100	-1.18	34.417	27.71	39.25	0.042	14447						3
STD	125	-1.14	34.463	27.74	35.71	0.051	14453						4
STD	150	-0.94	34.488	27.76	34.52	0.060	14467						5
STD	200	0.19	34.619	27.81	29.99	0.076	14529						0
STD	250	0.58	34.657	27.82	29.44	0.091	14556						0
STD	300	0.69	34.673	27.82	29.02	0.106	14570						7
STD	350	0.72	34.680	27.83	28.78	0.120	14579						7
STD	400	0.73	34.679	27.83	28.99	0.134	14588						0
STD	450	0.73	34.688	27.83	28.35	0.149	14596						7
STD	500	0.72	34.689	27.83	28.29	0.163	14604						0
STD	550	0.72	34.692	27.84	28.15	0.177	14613						0
STD	600	0.69	34.692	27.84	28.03	0.191	14620						5
STD	650	0.69	34.694	27.84	27.89	0.205	14628						6
STD	700	0.68	34.698	27.84	27.64	0.219	14636						0
STD	750	0.67	34.699	27.85	27.52	0.233	14644						4
STD	800	0.66	34.701	27.85	27.32	0.246	14652						0
STD	850	0.64	34.700	27.85	27.30	0.260	14659						4
STD	900	0.62	34.702	27.85	27.13	0.274	14667						4
STD	950	0.59	34.702	27.85	26.90	0.287	14674						6
STD	1000	0.57	34.699	27.85	26.97	0.301	14681						0



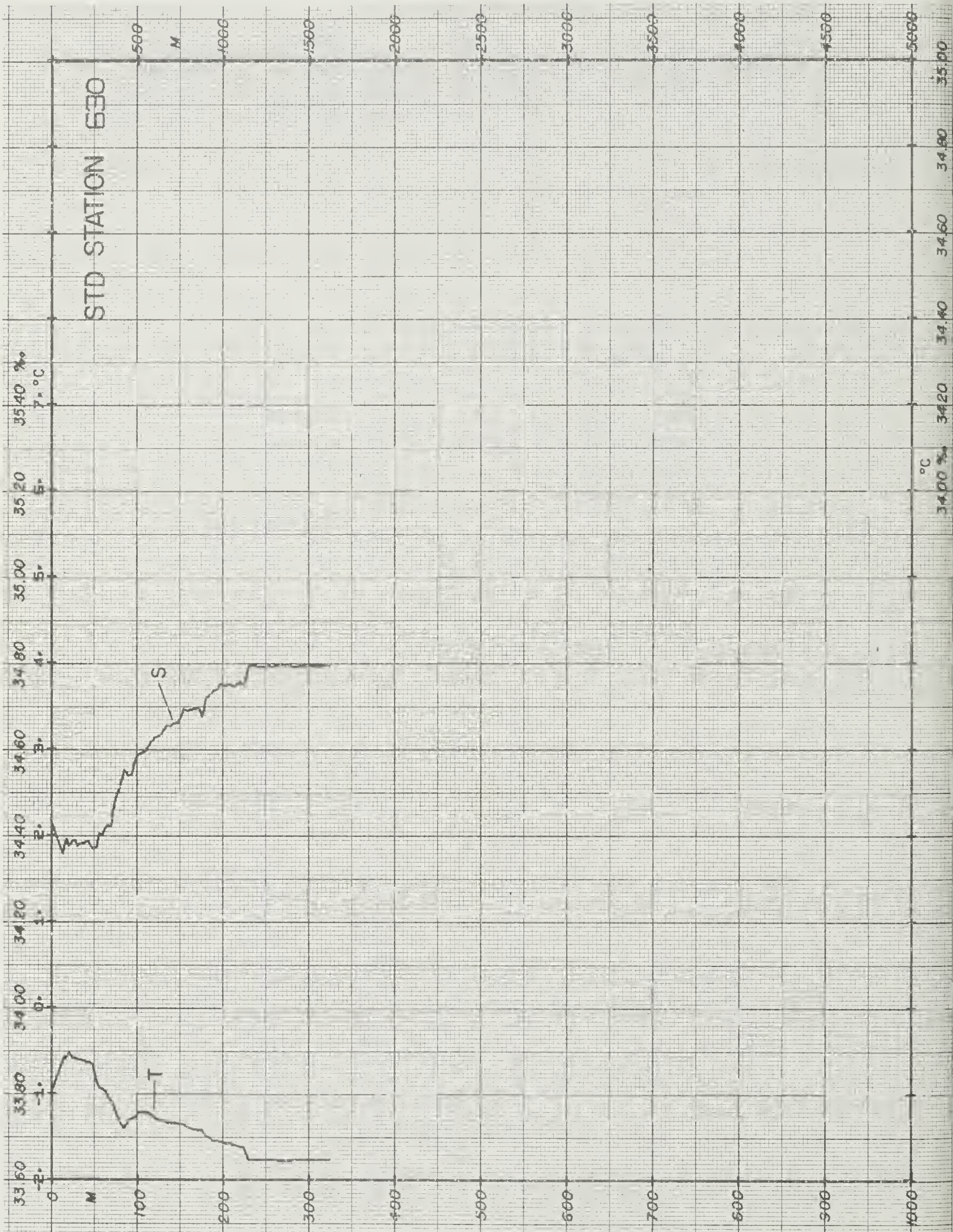
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 627	12JAN1967	20.2	70 54.6S	171 47.0E	570	2258	22	20				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.2	-2.5		16	5	15	3	2					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-0.57	34.420	27.69			14459	783	165	287	69		
ISL	0	-0.57	34.420	27.69	41.65	0.000	14459						
ISL	10	-0.57	34.419	27.68	41.75	0.004	14460						
OBS	20	-0.57	34.418	27.68			14462	785	154	284	69		
ISL	20	-0.57	34.418	27.68	41.75	0.008	14462						
ISL	30	-0.59	34.419	27.69	41.59	0.013	14463						
OBS	40	-0.59	34.420	27.69			14464	785	194	278	69		
OBS	50	-0.56	34.420	27.69			14467	783	195	289	77		
ISL	50	-0.56	34.420	27.69	41.57	0.021	14467						
ISL	75	-0.55	34.422	27.69	41.39	0.031	14472						
OBS	80	-0.59	34.424	27.69			14471	782	190	295	68		
OBS	100	-1.03	34.445	27.72			14454	731	213	288	71		
ISL	100	-1.03	34.445	27.72	37.63	0.041	14454						
OBS	125	-1.01	34.483	27.75			14460	687	209	311	74		
ISL	125	-1.01	34.483	27.75	34.71	0.050	14460						
OBS	150	-0.49	34.546	27.78			14489	616	208	307	82		
ISL	150	-0.49	34.546	27.78	32.05	0.058	14489						
OBS	175	-0.16	34.588	27.80			14509	574		322	81		
OBS	199	0.41	34.647	27.82			14540	514	211	316	83		
ISL	200	0.42	34.648	27.82	29.11	0.074	14541						
OBS	247	0.73	34.684	27.83			14563	481	206	320	87		
ISL	250	0.74	34.685	27.83	28.36	0.088	14563						
OBS	297	0.75	34.692	27.84			14572	479	207	327	92		
ISL	300	0.75	34.692	27.84	27.96	0.102	14572						
ISL	400	0.74	34.699	27.84	27.53	0.130	14589						
OBS	497	0.71	34.701	27.85			14603	478	200	336	92		
ISL	500	0.71	34.701	27.85	27.32	0.157	14604						
ISL	600	0.70	34.703	27.85	27.23	0.185	14620						
ISL	700	0.68	34.704	27.85	27.16	0.212	14636						
OBS	748	0.67	34.704	27.85			14644	479	221	315	98		
ISL	800	0.65	34.704	27.85	27.04	0.239	14651						
ISL	900	0.61	34.704	27.85	26.82	0.266	14666						
OBS	997	0.56	34.704	27.86			14680	483		324	102		
ISL	1000	0.56	34.704	27.86	26.54	0.293	14681						
ISL	1100	0.52	34.702	27.86	26.45	0.319	14696						
OBS	1199	0.48	34.700	27.86			14711	484		315	103		
ISL	1200	0.48	34.700	27.86	26.34	0.345	14711						
ISL	1250	0.45	34.699	27.86	26.20	0.359	14718						
ISL	1300	0.43	34.699	27.86	26.04	0.372	14725						
ISL	1400	0.38	34.698	27.86	25.69	0.397	14740						
OBS	1451	0.35	34.698	27.86			14747	491	197	309	104		
ISL	1500	0.33	34.697	27.86	25.35	0.423	14755						
OBS	1701	0.23	34.696	27.87			14784	498	204	304	102		
ISL	1750	0.21	34.697	27.87	24.30	0.485	14792						
OBS	1952	0.09	34.705	27.88			14821	509	232	316	99		
ISL	2000	0.05	34.708	27.89	21.95	0.543	14828						
OBS	2202	-0.14	34.723	27.91			14854	509	236	316	90		



SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 628	12 JAN 1967	21.7	70 53.60	171 47.9E	534	90	23	464				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.0	-2.0	999.1	17	5	16	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-0.54	34.416	27.68	42.08	0.000	14460						0
STD	10	-0.55	34.411	27.68	42.42	0.004	14461						4
STD	20	-0.54	34.414	27.68	42.14	0.008	14463						0
STD	30	-0.54	34.414	27.68	42.11	0.013	14465						4
STD	50	-0.56	34.418	27.68	41.76	0.021	14467						4
STD	75	-0.96	34.430	27.71	39.14	0.031	14453						3
STD	100	-0.99	34.485	27.76	34.74	0.040	14457						4
STD	125	-0.57	34.541	27.78	32.12	0.049	14481						5
STD	150	-0.40	34.558	27.79	31.54	0.057	14493						4
STD	200	0.21	34.621	27.81	29.99	0.072	14531						0
STD	250	0.51	34.670	27.83	28.09	0.087	14553						4
STD	300	0.75	34.690	27.83	28.18	0.101	14572						8
STD	350	0.77	34.695	27.84	28.01	0.115	14582						0
STD	400	0.72	34.696	27.84	27.69	0.129	14588						7
STD	450	0.72	34.699	27.84	27.46	0.142	14596						7
STD	500	0.71	34.692	27.84	27.99	0.156	14604						6
STD	550	0.71	34.696	27.84	27.85	0.170	14612						7
STD	600	0.71	34.694	27.84	27.95	0.184	14620						4
STD	650	0.71	34.696	27.84	27.98	0.198	14629						7
STD	700	0.71	34.696	27.84	27.93	0.212	14637						4
STD	750	0.68	34.699	27.84	27.65	0.226	14645						0
STD	800	0.68	34.697	27.84	27.80	0.240	14652						6
STD	850	0.66	34.700	27.85	27.46	0.254	14660						3
STD	900	0.62	34.699	27.85	27.30	0.267	14667						4
STD	950	0.59	34.696	27.85	27.36	0.281	14674						7
STD	1000	0.57	34.697	27.85	27.14	0.295	14681						5
STD	1100	0.52	34.702	27.86	26.46	0.322	14696						4
STD	1200	0.46	34.699	27.86	26.24	0.348	14710						4
STD	1300	0.42	34.699	27.86	25.95	0.374	14725						4
STD	1400	0.36	34.698	27.86	25.61	0.400	14739						6
STD	1500	0.31	34.698	27.87	25.16	0.425	14754						6
STD	1600	0.27	34.698	27.87	24.82	0.450	14769						4
STD	1700	0.24	34.701	27.87	24.26	0.475	14785						0
STD	1800	0.17	34.701	27.88	23.66	0.499	14799						6
STD	1900	0.11	34.703	27.88	22.88	0.522	14813						0
STD	2000	0.09	34.707	27.89	22.37	0.545	14829						0
STD	2100	-0.03	34.714	27.90	20.61	0.566	14841						7
STD	2200	-0.15	34.723	27.91	18.62	0.586	14853						5

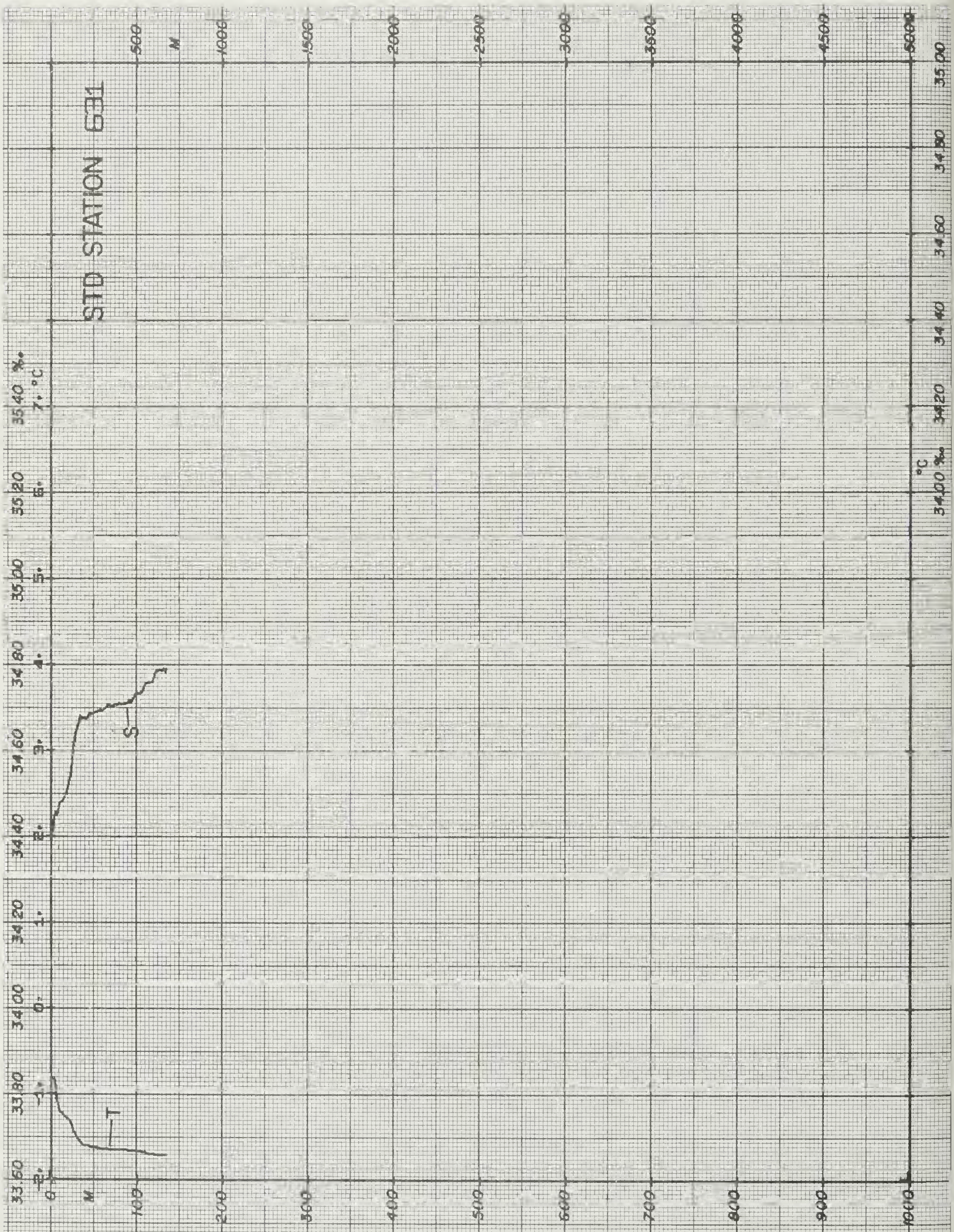


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 629	14JAN1967	12.2	72 28.4S	171 26.5E	570	313	3	15				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.1	-2.2		17	1	16	2	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DD
OBS	0	-0.71	34.379	27.66			14452	800	183	247	74		
ISL	0	-0.71	34.379	27.66	44.22	0.000	14452						
ISL	10	-0.73	34.379	27.66	44.13	0.004	14452						
OBS	11	-0.73	34.379	27.66			14453	801	139	235	72		
ISL	20	-0.70	34.381	27.66	44.01	0.009	14455						
OBS	21	-0.70	34.382	27.66			14456	795	169	255	73		
ISL	30	-0.84	34.391	27.67	42.76	0.013	14451						
OBS	32	-0.87	34.393	27.68			14450	782	147	255	75		
OBS	42	-0.91	34.406	27.69			14450	770	192	260	73		
ISL	50	-1.17	34.458	27.74	36.36	0.021	14439						
OBS	53	-1.27	34.477	27.76			14436	715	198	278	76		
OBS	64	-1.30	34.491	27.77			14436	705	194	288	77		
ISL	75	-1.37	34.522	27.80	30.63	0.029	14435						
OBS	84	-1.41	34.554	27.83			14435	677	179	284	81		
ISL	100	-1.33	34.608	27.87	24.09	0.036	14442						
OBS	105	-1.30	34.624	27.88			14445	644	173	301	83		
ISL	125	-1.33	34.668	27.92	19.39	0.042	14447						
OBS	131	-1.36	34.679	27.93			14447	640	224	305	82		
ISL	150	-1.51	34.713	27.96	15.27	0.046	14444						
OBS	157	-1.56	34.723	27.97			14443	643	200	283	85		
OBS	182	-1.56	34.743	27.98			14447	638	214	284	83		
ISL	200	-1.60	34.754	27.99	11.61	0.053	14448						
OBS	208	-1.63	34.758	28.00			14448	641	218	289	84		
ISL	250	-1.76	34.789	28.03	8.11	0.058	14450						
OBS	259	-1.78	34.795	28.03			14450	652	200	299	83		
ISL	300	-1.80	34.798	28.03	7.09	0.062	14456						
OBS	309	-1.79	34.795	28.03			14458	653	110	288	80		

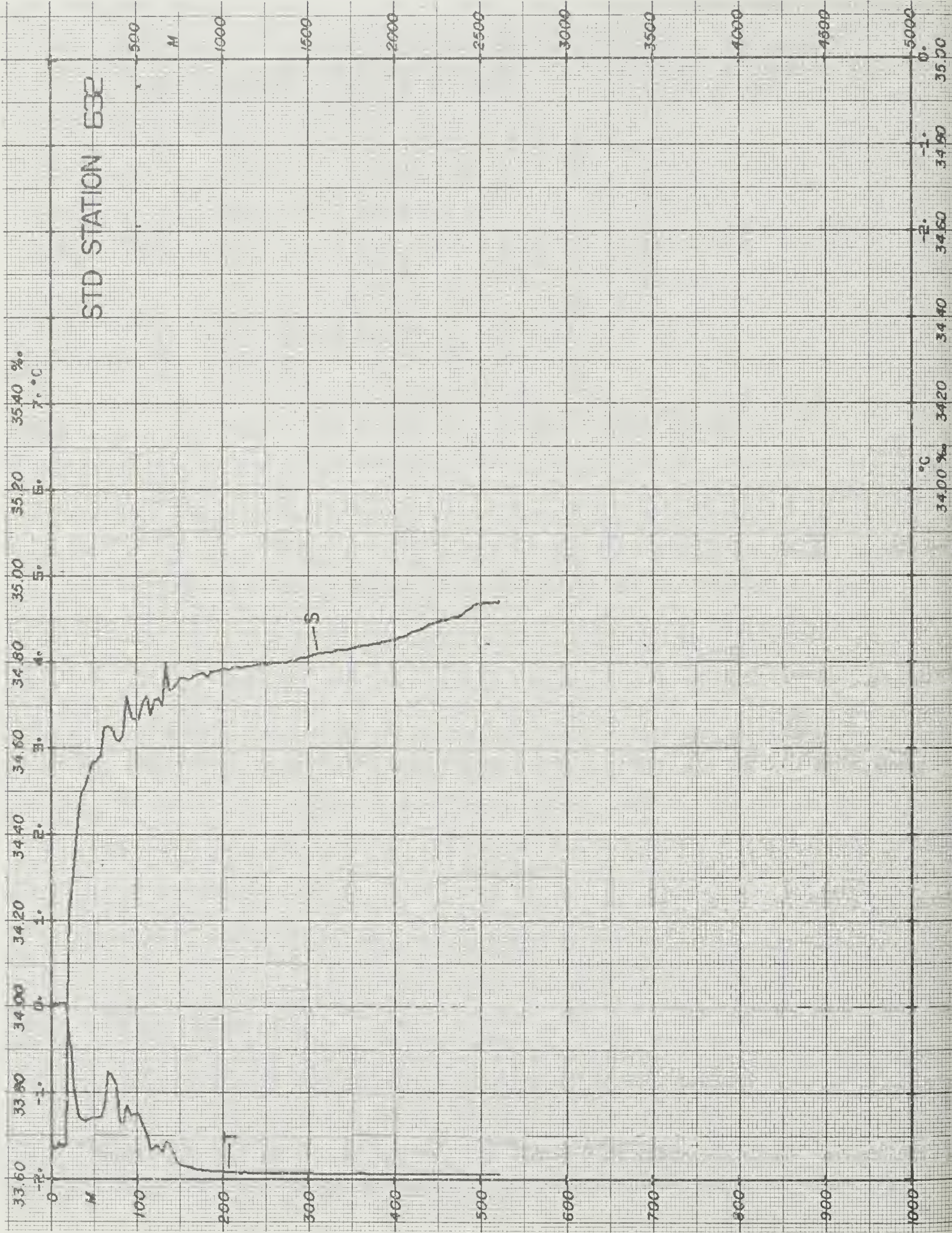




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 630	14 JAN 1967	13.0	72 29.2S	171 23.9E	570	310	3	86				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.4	-2.0	0.0	18	1	11	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ mol/l	NITR 10 $\mu$ mol/l	SILIC $\mu$ mol/l	INT M	DD
STD	0	-1.00	34.434	27.71	38.97	0.000	14439					0	
STD	10	-0.72	34.379	27.66	44.18	0.004	14453					14	
STD	20	-0.54	34.380	27.65	44.78	0.009	14463					3	
STD	30	-0.60	34.379	27.65	44.58	0.013	14462					3	
STD	50	-0.72	34.368	27.65	44.86	0.022	14459					4	
STD	75	-1.20	34.482	27.76	34.32	0.032	14443					4	
STD	100	-1.25	34.582	27.84	26.38	0.040	14446					3	
STD	125	-1.31	34.629	27.88	22.48	0.046	14448					5	
STD	150	-1.36	34.670	27.92	19.10	0.051	14450					4	
STD	200	-1.57	34.747	27.99	12.26	0.059	14450					6	
STD	250	-1.77	34.791	28.03	7.98	0.064	14449					0	
STD	300	-1.77	34.792	28.03	7.63	0.068	14458					4	



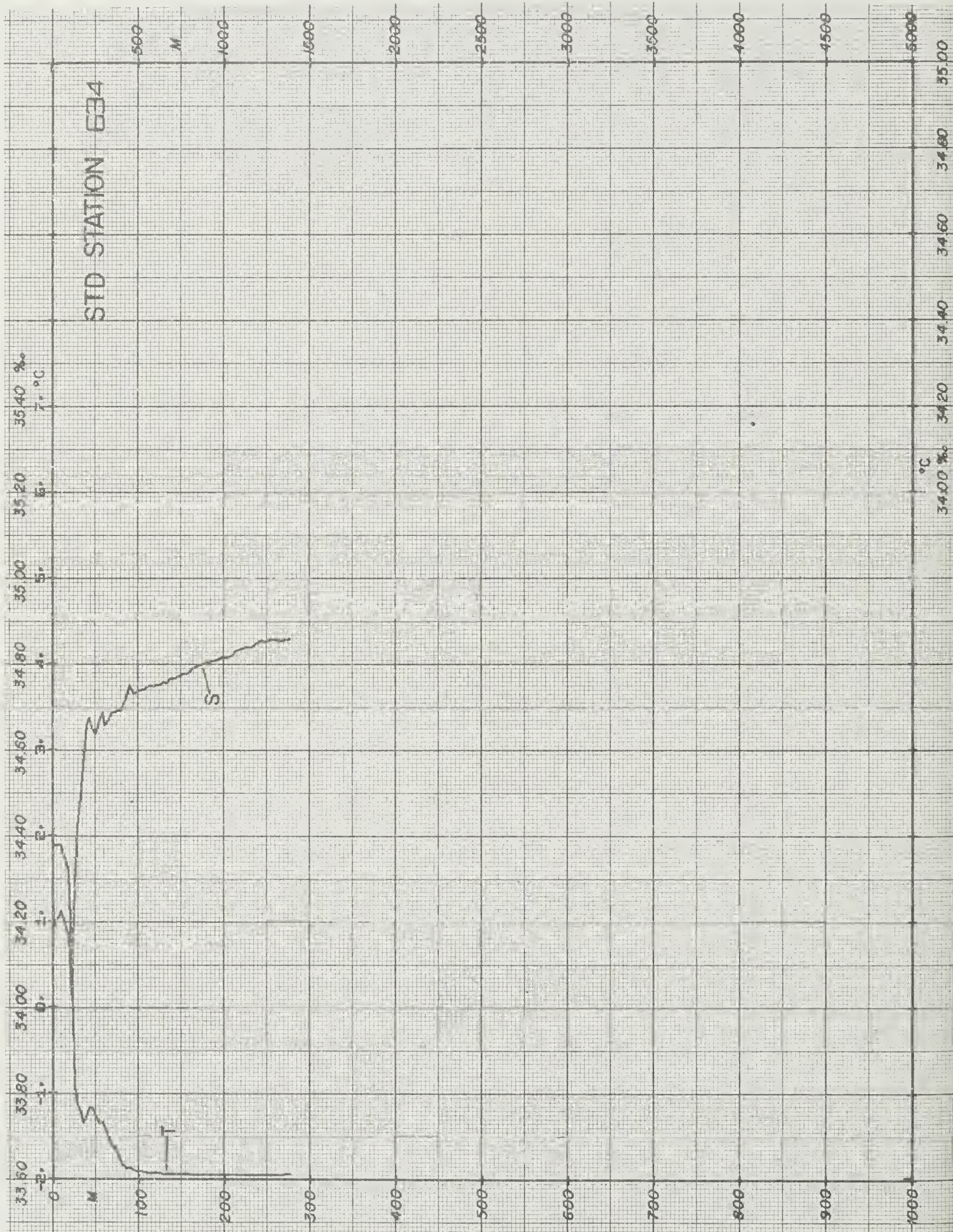
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 631	15JAN1967	1.8	72 24.6S	170 24.6E	570	160	1	69				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.2	-1.5	1003.9	15	2	22	2						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	-0.82	34.406	27.69	41.75	0.000	14447						0
STD	10	-1.20	34.476	27.76	35.01	0.004	14432						0
STD	20	-1.29	34.515	27.79	31.73	0.007	14430						3
STD	30	-1.50	34.647	27.90	20.92	0.010	14423						3
STD	50	-1.62	34.688	27.94	17.34	0.014	14422						0
STD	75	-1.65	34.704	27.95	15.88	0.018	14425						0
STD	100	-1.67	34.734	27.98	13.43	0.021	14428						2
STD	125	-1.71	34.783	28.02	9.39	0.024	14431						0



SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 27	STD 632		15JAN1967		14.9	73 29.3S		171 17.8E		570	524	5	127	
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	-0.9		-3.5		997.0		24		5	20		3		
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10·m/sec	OXYG $10^2$ ml/l	PHOS $10^2$ $\mu$ g/l	NITR $10$ $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD	
STD	0	0.03	33.667	27.05	101.75	0.000	14476						0	
STD	10	0.03	33.675	27.06	101.14	0.010	14478						0	
STD	20	-0.23	34.111	27.42	66.69	0.019	14474						2	
STD	30	-1.16	34.402	27.69	40.71	0.024	14436						6	
STD	50	-1.29	34.566	27.83	27.64	0.031	14435						5	
STD	75	-0.89	34.625	27.86	24.56	0.037	14459						5	
STD	100	-1.25	34.666	27.91	19.95	0.043	14447						4	
STD	125	-1.63	34.714	27.96	14.89	0.047	14434						5	
STD	150	-1.83	34.758	28.00	10.82	0.050	14429						4	
STD	200	-1.91	34.783	28.03	8.41	0.055	14434						0	
STD	250	-1.93	34.795	28.04	7.15	0.059	14442						3	
STD	300	-1.93	34.811	28.05	5.62	0.062	14450						4	
STD	350	-1.94	34.830	28.06	3.90	0.065	14459						0	
STD	400	-1.94	34.850	28.08	2.06	0.066	14467						4	
STD	450	-1.94	34.892	28.11	-1.36	0.066	14476						4	
STD	500	-1.94	34.935	28.15	-4.90	0.065	14485						5	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 633	16 JAN 1967	14.6	74 37.4S	170 27.7E	570	289	3	14				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	-1.5	-4.6		16	0	0	0	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	1.90	34.216	27.37			14568	850	77	130	58		
ISL	0	1.90	34.216	27.37	71.21	0.000	14568						
OBS	10	1.92	34.217	27.37			14570	849	57	128	60		
ISL	10	1.92	34.217	27.37	71.31	0.007	14570						
OBS	20	-0.13	34.339	27.60			14481	897	88	170	60		
ISL	20	-0.13	34.339	27.60	49.73	0.013	14481						
OBS	30	-1.24	34.512	27.79			14434	745	141	246	72		
ISL	30	-1.24	34.512	27.79	32.05	0.017	14434						
OBS	40	-1.09	34.676	27.91			14445	601	164	296	78		
OBS	50	-1.28	34.677	27.92			14438	606	191	304	81		
ISL	50	-1.28	34.677	27.92	19.21	0.022	14438						
OBS	61	-1.28	34.694	27.93			14440	615	154	279	78		
ISL	75	-1.54	34.711	27.96	15.64	0.027	14430						
OBS	81	-1.67	34.719	27.97			14425	648	171	295	74		
ISL	100	-1.85	34.751	28.00	11.60	0.030	14420						
OBS	102	-1.86	34.754	28.00			14420	671	163	291	69		
ISL	125	-1.89	34.773	28.02	9.61	0.033	14422						
OBS	128	-1.89	34.775	28.02			14423	668	163	279	71		
ISL	150	-1.90	34.785	28.03	8.56	0.035	14426						
OBS	154	-1.90	34.787	28.03			14427	665	134	296	69		
OBS	180	-1.93	34.807	28.05			14430	658	162	295	72		
ISL	200	-1.92	34.820	28.06	5.58	0.039	14434						
OBS	207	-1.91	34.824	28.06			14436	653	160	289	71		
ISL	250	-1.91	34.855	28.08	2.62	0.041	14443						
OBS	259	-1.92	34.862	28.09			14445	652		290	68		



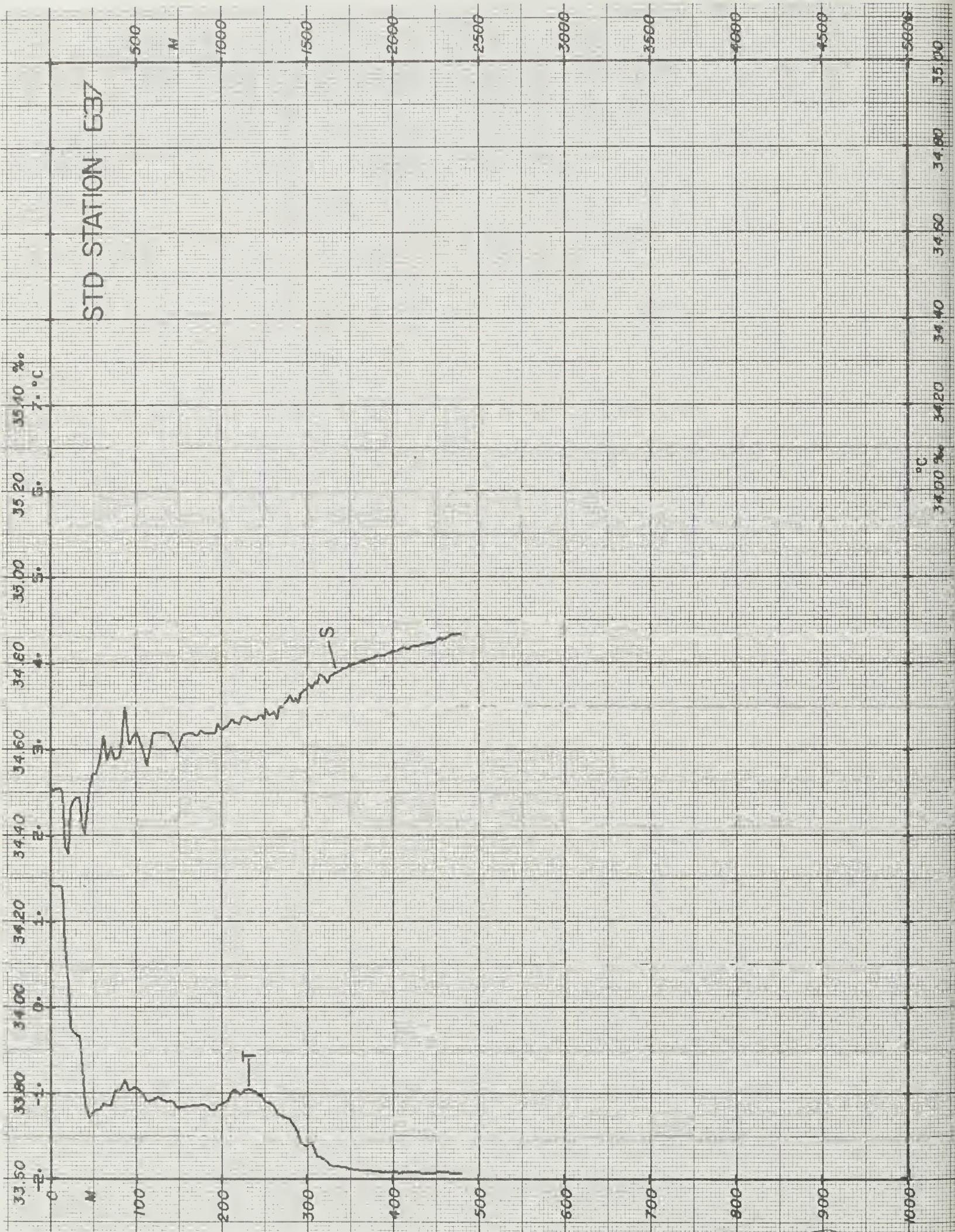


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 634	16 JAN 1967	15.9	74 37.0S	170 24.0E	570	280	3	82				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-1.5	-7.6	986.4	0	0	0	0						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	1.95	34.246	27.39	69.28	0.000	14570					0	
STD	10	1.89	34.224	27.38	70.54	0.007	14569					0	
STD	20	1.28	34.122	27.34	74.15	0.014	14542					3	
STD	30	-1.16	34.437	27.72	38.04	0.020	14436					4	
STD	50	-1.25	34.639	27.89	22.18	0.026	14438					4	
STD	75	-1.69	34.689	27.94	16.91	0.031	14423					4	
STD	100	-1.91	34.736	27.99	12.59	0.034	14417					5	
STD	125	-1.93	34.751	28.00	11.23	0.037	14420					6	
STD	150	-1.94	34.773	28.02	9.40	0.040	14424					4	
STD	200	-1.95	34.814	28.05	5.89	0.044	14433					3	
STD	250	-1.95	34.853	28.08	2.65	0.046	14442					5	

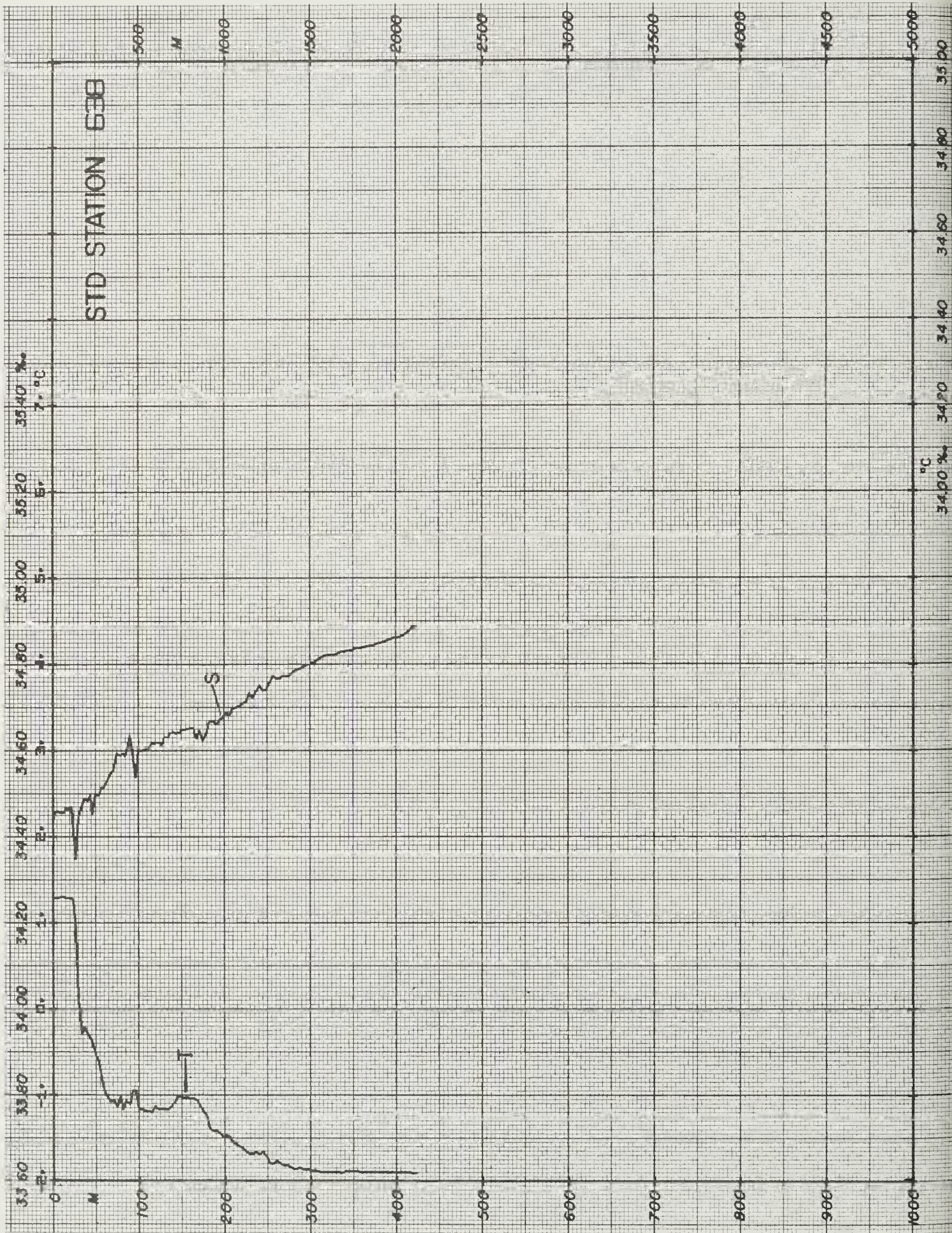
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 635	17JAN1967	12.0	75 27.0S	168 51.0E	571	350	3	15				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.2	-3.2		13	2	0	0	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	0.51	33.040	26.52			14489	870	87	148	54		
ISL	0	0.51	33.040	26.52	151.91	0.000	14489						
OBS	10	0.32	33.156	26.63			14484	856	61	163	57		
ISL	10	0.32	33.156	26.63	142.10	0.015	14484						
ISL	20	-0.69	34.150	27.47	61.76	0.025	14453						
OBS	21	-0.80	34.251	27.56			14449	882	126	198	57		
ISL	30	-1.30	34.438	27.73	37.51	0.030	14430						
OBS	31	-1.33	34.438	27.73			14429	824	134	212	63		
OBS	41	-1.49	34.549	27.82			14424	770	151	241	61		
ISL	50	-1.57	34.627	27.89	22.15	0.036	14423						
OBS	52	-1.58	34.641	27.90			14423	722	176	244	63		
OBS	62	-1.66	34.690	27.94			14422	714	146	240	64		
ISL	75	-1.74	34.729	27.98	13.70	0.040	14421						
OBS	83	-1.78	34.744	27.99			14420	697	177	198	66		
ISL	100	-1.85	34.764	28.01	10.60	0.043	14420						
OBS	104	-1.86	34.767	28.01			14420	685	167	234	63		
ISL	125	-1.88	34.785	28.03	8.76	0.046	14423						
OBS	130	-1.88	34.789	28.03			14424	683	171	243	66		
ISL	150	-1.88	34.808	28.04	6.90	0.048	14428						
OBS	156	-1.88	34.813	28.05			14429	672	158	263	65		
OBS	182	-1.92	34.834	28.07			14431	655	175	279	68		
ISL	200	-1.92	34.842	28.07	3.86	0.050	14434						
OBS	208	-1.92	34.845	28.08			14436	654	182	261	65		
ISL	250	-1.94	34.869	28.10	1.49	0.052	14443						
OBS	261	-1.94	34.875	28.10			14444	648	124		71		
ISL	300	-1.94	34.889	28.11	-0.30	0.052	14451						
OBS	314	-1.93	34.892	28.11			14454	661	93	249	71		

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 636	19 JAN 1967	9.6	76 1.5S	178 18.3E	570	494	5	17				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-2.1	-5.8		19	1	15	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/Sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	1.45	34.469	27.61			14551	869	83	148	40		
ISL	0	1.45	34.469	27.61	48.89	0.000	14551						
OBS	10	1.45	34.464	27.61			14553	868	80	169	39		
ISL	10	1.45	34.464	27.61	49.30	0.005	14553						
OBS	19	0.22	34.453	27.67			14499	880	105	191	42		
ISL	20	0.14	34.453	27.68	42.35	0.009	14495						
OBS	29	-0.42	34.459	27.71			14471	777	112	223	63		
ISL	30	-0.50	34.460	27.71	38.87	0.014	14468						
OBS	39	-1.06	34.470	27.75			14443	731	158	226	68		
OBS	49	-1.21	34.499	27.77			14438	625	167	249	669		
ISL	50	-1.21	34.503	27.78	32.75	0.021	14438						
OBS	59	0.00	34.538	0.00			0	607	126	266	69		
ISL	75	-1.00	34.565	27.82	28.67	0.028	14453						
OBS	78	-0.95	34.568	27.82			14456	564	163	287	73		
OBS	98	-0.79	34.607	27.85			14467	549	160	295	72		
ISL	100	-0.80	34.608	27.85	26.10	0.035	14467						
OBS	123	-1.02	34.604	27.85			14461	561	189	282	72		
ISL	125	-1.02	34.604	27.85	25.40	0.042	14461						
OBS	148	-1.01	34.612	27.86			14465	563	188	268			
ISL	150	-1.00	34.613	27.86	24.70	0.048	14466						
OBS	172	-0.98	34.625	27.87			14471	560	166	299			
OBS	197	-1.14	34.619	27.87			14468	573	142	289			
ISL	200	-1.13	34.620	27.87	23.49	0.060	14469						
OBS	247	-1.02	34.666	27.90			14482	567	109	280	77		
ISL	250	-1.05	34.670	27.91	19.88	0.071	14481						
OBS	296	-1.58	34.731	27.97			14465	599	112	295	60		
ISL	300	-1.61	34.736	27.98	12.46	0.079	14464						
OBS	396	-1.92	34.830	28.06			14467	631	142	275			
ISL	400	-1.93	34.833	28.07	3.44	0.087	14467						
OBS	470	-1.92	34.866	28.09			14480	628	112	281	69		

STD STATION 6337

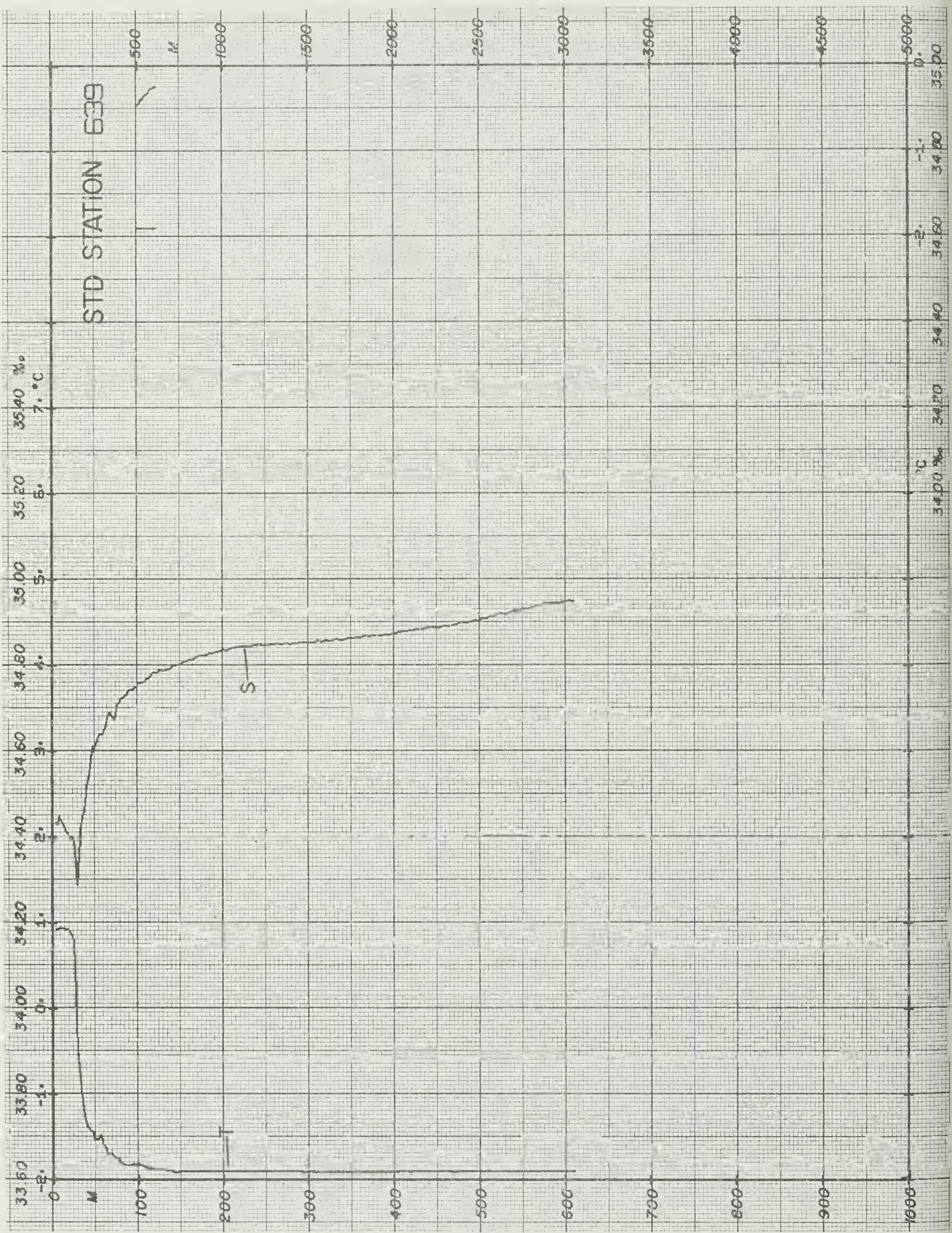


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 637	19 JAN 1967	11.1	76 1.5S	178 19.5E	570	490	5	143				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-2.4	-5.4	996.1	19	1	13	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	1.42	34.505	27.64	45.97	0.000	14550						0
STD	10	1.41	34.509	27.65	45.56	0.005	14551						0
STD	20	0.39	34.362	27.59	50.63	0.009	14505						4
STD	30	-0.32	34.489	27.73	37.42	0.014	14476						0
STD	50	-1.22	34.543	27.81	29.63	0.020	14438						4
STD	75	-0.97	34.577	27.83	27.83	0.028	14455						0
STD	100	-0.94	34.638	27.88	23.26	0.034	14461						4
STD	125	-1.04	34.640	27.88	22.59	0.040	14460						0
STD	150	-1.17	34.603	27.86	24.85	0.046	14458						6
STD	200	-1.13	34.647	27.89	21.48	0.057	14469						0
STD	250	-1.07	34.673	27.91	19.60	0.068	14481						3
STD	300	-1.62	34.740	27.98	12.09	0.076	14464						0
STD	350	-1.88	34.796	28.03	6.69	0.080	14461						0
STD	400	-1.92	34.826	28.06	3.95	0.083	14467						3
STD	450	-1.92	34.850	28.08	1.88	0.084	14476						3



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 638	19JAN1967	22.7	76 29.9S	174 48.5E	570	452	4	117				
AIR TEMP		DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
-3.6		-4.2	997.5	18	3	20	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-1</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-1</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	1.29	34.450	27.61	49.24	0.000	14544					0	
STD	10	1.30	34.456	27.61	48.89	0.005	14546					0	
STD	20	1.28	34.467	27.62	47.96	0.010	14547					4	
STD	30	0.11	34.445	27.67	42.76	0.014	14495					0	
STD	50	-0.52	34.498	27.75	35.79	0.022	14470					0	
STD	75	-1.14	34.593	27.85	26.00	0.030	14447					0	
STD	100	-1.16	34.601	27.86	25.20	0.036	14450					0	
STD	125	-1.16	34.616	27.87	23.98	0.042	14455					4	
STD	150	-1.03	34.646	27.89	22.15	0.048	14465					4	
STD	200	-1.48	34.682	27.93	17.46	0.058	14453					4	
STD	250	-1.74	34.745	27.99	11.55	0.065	14450					4	
STD	300	-1.87	34.804	28.04	6.39	0.070	14453					5	
STD	350	-1.89	34.835	28.07	3.65	0.072	14461					5	
STD	400	-1.90	34.863	28.09	1.24	0.074	14469					3	

STD STATION 639

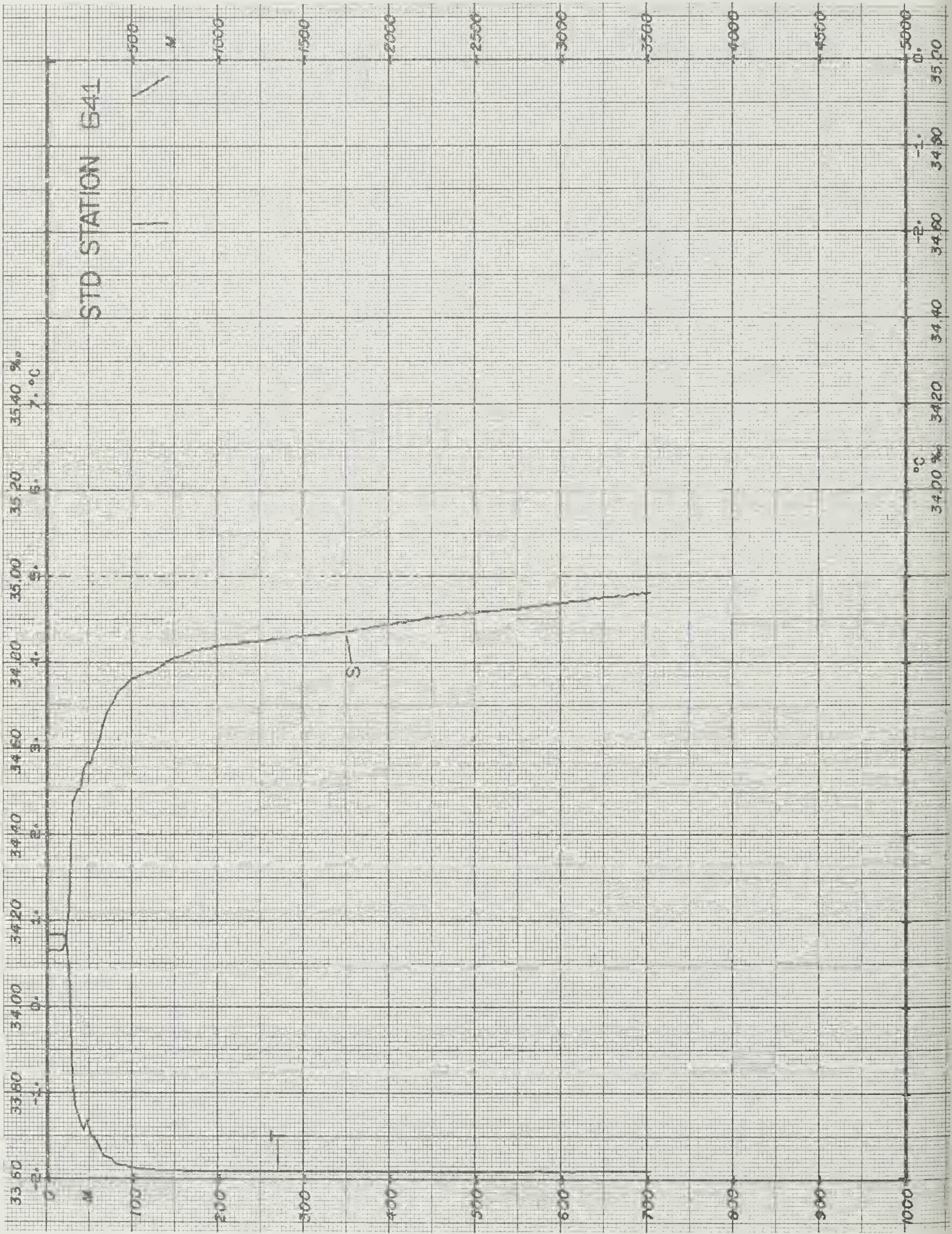




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 639	20 JAN 1967	11.3	76 30.0S	170 42.0E	570	646	6	180				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-5.7	-6.3	998.8	16	6	18	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	0.93	34.435	27.62	48.14	0.000	14527					4	
STD	10	0.94	34.441	27.62	47.74	0.005	14530					11	
STD	20	0.91	34.402	27.59	50.56	0.010	14529					6	
STD	30	-0.58	34.323	27.61	48.94	0.015	14462					4	
STD	50	-1.52	34.612	27.88	23.43	0.022	14425					6	
STD	75	-1.75	34.698	27.95	16.07	0.027	14420					3	
STD	100	-1.82	34.760	28.00	10.99	0.030	14421					0	
STD	125	-1.88	34.787	28.03	8.59	0.033	14423					3	
STD	150	-1.90	34.804	28.04	7.11	0.035	14427					0	
STD	200	-1.90	34.836	28.07	4.36	0.038	14435					4	
STD	250	-1.90	34.848	28.08	3.19	0.039	14444					4	
STD	300	-1.91	34.853	28.08	2.49	0.041	14452					4	
STD	350	-1.91	34.864	28.09	1.42	0.042	14460					5	
STD	400	-1.91	34.874	28.10	0.35	0.042	14469					0	
STD	450	-1.90	34.889	28.11	-1.01	0.042	14478					3	
STD	500	-1.90	34.905	28.12	-2.55	0.041	14486					3	
STD	550	-1.90	34.931	28.15	-4.78	0.039	14495					0	
STD	600	-1.90	34.948	28.16	-6.30	0.037	14504					4	



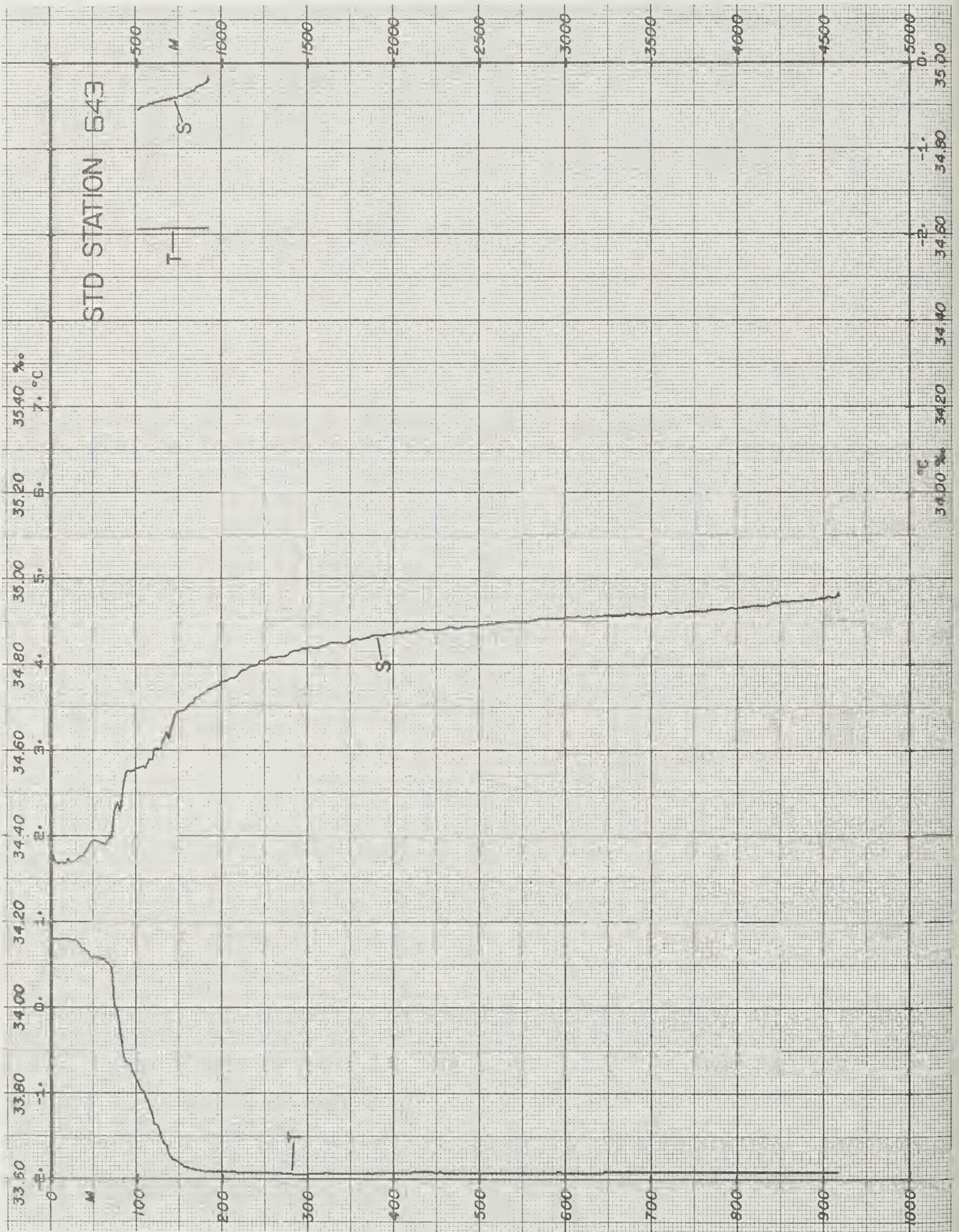
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 640	21 JAN 1967	5.0	76 30.0S	168 35.0E	571	730	7	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	1.0	-5.7		19	3	20	2		1				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.88	34.164	27.40			14521	854	117	137	79		
ISL	0	0.88	34.164	27.40	68.43	0.000	14521						
OBS	10	0.87	34.162	27.40			14523	853	100	141	73		
ISL	10	0.87	34.162	27.40	68.53	0.007	14523						
ISL	20	0.92	34.181	27.41	67.42	0.014	14527						
OBS	21	0.88	34.190	27.42			14525	855	106	132	76		
ISL	30	-0.77	34.433	27.71	39.77	0.019	14455						
OBS	31	-0.96	34.461	27.74			14446	818	144	175	81		
OBS	41	-1.35	34.532	27.81			14431	734	146	218	69		
ISL	50	-1.42	34.560	27.83	27.71	0.026	14429						
OBS	51	-1.42	34.562	27.83			14429	716	166	226	75		
OBS	61	-1.53	34.584	27.85			14426	706	174	235	81		
ISL	75	-1.68	34.648	27.91	20.10	0.032	14422						
OBS	81	-1.74	34.677	27.94			14421	665	173	263	87		
ISL	100	-1.83	34.731	27.98	13.18	0.036	14421						
OBS	101	-1.83	34.733	27.98			14421	652	187	274	84		
ISL	125	-1.88	34.759	28.01	10.72	0.039	14423						
OBS	126	-1.88	34.760	28.01			14423	658	199	281	79		
ISL	150	-1.90	34.782	28.02	8.78	0.041	14426						
OBS	152	-1.90	34.784	28.03			14427	653	205		82		
OBS	177	-1.91	34.806	28.04			14431	651	190	289	85		
ISL	200	-1.91	34.819	28.05	5.65	0.045	14435						
OBS	202	-1.91	34.820	28.06			14435	647	176	288	87		
ISL	250	-1.92	34.834	28.07	4.23	0.047	14443						
OBS	252	-1.92	34.834	28.07			14443	644		289	88		
ISL	300	-1.93	34.847	28.08	2.86	0.049	14451						
OBS	302	-1.93	34.848	28.08			14451	645	200	290	89		
ISL	400	-1.92	34.873	28.10	0.35	0.051	14468						
OBS	402	-1.92	34.874	28.10			14469	652	197	282	89		
ISL	500	-1.91	34.903	28.12	-2.42	0.050	14486						
OBS	502	-1.91	34.904	28.12			14486	648	171	282	84		
ISL	600	-1.91	34.927	28.14	-4.73	0.046	14503						
OBS	677	-1.92	34.940	28.15			14516	646	172	296	89		



SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL
EL 27	STD 641		21 JAN 1967		6.2	76 30.0S		168 35.0E		571	764	7	195
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR	ST		SPEC OBS
	-0.8		-1.7		997.7		14		6	13	4		
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-1</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
STD	0	0.84	34.134	27.38	70.49	0.000	14519						0
STD	10	0.84	34.132	27.38	70.64	0.007	14521						0
STD	20	0.83	34.144	27.39	69.73	0.014	14522						4
STD	30	-0.95	34.480	27.75	35.49	0.019	14447						3
STD	50	-1.46	34.567	27.84	27.05	0.026	14427						5
STD	75	-1.77	34.701	27.96	15.76	0.031	14419						4
STD	100	-1.87	34.762	28.01	10.72	0.034	14419						4
STD	125	-1.89	34.781	28.02	9.04	0.037	14423						4
STD	150	-1.90	34.811	28.05	6.55	0.039	14427						4
STD	200	-1.91	34.838	28.07	4.21	0.041	14435						4
STD	250	-1.91	34.850	28.08	2.99	0.043	14443						5
STD	300	-1.91	34.862	28.09	1.79	0.044	14452						4
STD	350	-1.91	34.872	28.10	0.76	0.045	14460						0
STD	400	-1.91	34.889	28.11	-0.75	0.045	14469						4
STD	450	-1.91	34.905	28.12	-2.23	0.044	14478						0
STD	500	-1.91	34.916	28.13	-3.37	0.043	14486						4
STD	550	-1.91	34.925	28.14	-4.31	0.041	14495						0
STD	600	-1.90	34.939	28.15	-5.61	0.038	14503						0
STD	650	-1.90	34.952	28.16	-6.87	0.035	14512						0
STD	700	-1.90	34.962	28.17	-7.86	0.032	14521						3



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 642	23JAN1967	12.9	77 13.8S	168 3.7E	571	929	9	18				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.1	-2.0		14	3	12	3	1					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 <sup>-2</sup> $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
OBS	0	0.83	34.337	27.55			14521	887	95	68	76		
ISL	0	0.83	34.337	27.55	54.98	0.000	14521						
OBS	10	0.83	34.334	27.54			14523	889	79	33	78		
ISL	10	0.83	34.334	27.54	55.22	0.006	14523						
OBS	20	0.69	34.368	27.58			14519	891	88	77	79		
ISL	20	0.69	34.368	27.58	51.83	0.011	14519						
ISL	30	0.65	34.378	27.59	50.86	0.016	14519						
OBS	31	0.65	34.378	27.59			14519	896	88	29	76		
OBS	41	0.63	34.381	27.59			14520	897	89	80	77		
ISL	50	0.58	34.386	27.60	49.86	0.026	14519						
OBS	52	0.57	34.388	27.60			14519	893	99	79	75		
OBS	62	0.46	34.402	27.62			14516	893	87	85	78		
ISL	75	-0.11	34.486	27.72	38.51	0.037	14493						
OBS	83	-0.54	34.544	27.79			14476	826	121	139	84		
ISL	100	-1.17	34.587	27.84	26.29	0.045	14450						
OBS	104	-1.29	34.592	27.85			14445	700	181	206	82		
ISL	125	-1.62	34.638	27.90	20.79	0.051	14433						
OBS	129	-1.65	34.646	27.91			14433	645	169	252	83		
ISL	150	-1.77	34.688	27.94	16.37	0.056	14431						
OBS	155	-1.78	34.698	27.95			14432	638	179	266	80		
OBS	181	-1.81	34.758	28.00			14435	648	173	279	84		
ISL	200	-1.84	34.775	28.02	9.23	0.062	14437						
OBS	206	-1.85	34.778	28.02			14438	648	179	284	79		
ISL	250	-1.90	34.812	28.05	5.92	0.066	14443						
OBS	256	-1.91	34.816	28.05			14444	653	169	289	85		
ISL	300	-1.92	34.832	28.07	4.05	0.068	14451						
OBS	307	-1.92	34.834	28.07			14452	662	193	286	79		
ISL	400	-1.92	34.858	28.09	1.53	0.071	14468						
ISL	500	-1.92	34.877	28.10	-0.43	0.072	14485						
OBS	509	-1.92	34.878	28.10			14487	645	181	287	81		
ISL	600	-1.91	34.890	28.11	-1.96	0.071	14502						
ISL	700	-1.90	34.903	28.12	-3.39	0.068	14520						
OBS	712	-1.90	34.904	28.12			14522	650	171	284	84		
ISL	800	-1.90	34.918	28.13	-5.05	0.064	14537						
OBS	890	-1.91	34.933	28.15			14552	643	196	291	84		

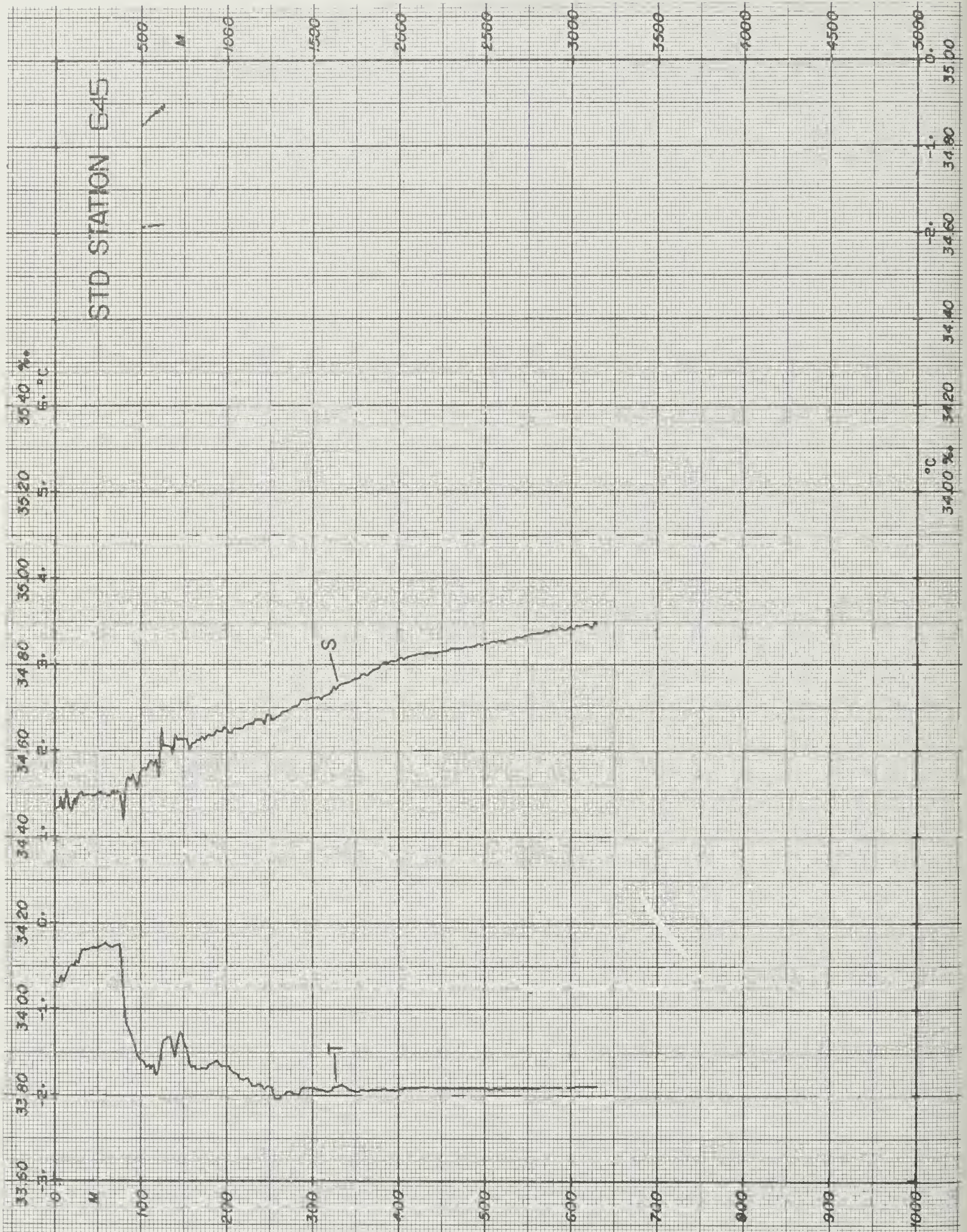




SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 643	23JAN1967	14.2	77 14.1S	169 4.5E	571	920	9	230				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.2	-2.6	997.9	11	1	12	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	0.83	34.353	27.56	53.79	0.000	14522						0
STD	10	0.80	34.337	27.55	54.80	0.005	14522						4
STD	20	0.80	34.346	27.55	54.16	0.011	14523						0
STD	30	0.77	34.347	27.56	53.87	0.016	14524						3
STD	50	0.58	34.390	27.60	49.51	0.027	14519						0
STD	75	-0.01	34.468	27.70	40.40	0.038	14498						4
STD	100	-0.85	34.558	27.81	29.72	0.047	14464						0
STD	125	-1.39	34.605	27.87	24.02	0.053	14444						0
STD	150	-1.82	34.691	27.95	15.98	0.058	14429						4
STD	200	-1.92	34.761	28.01	10.09	0.065	14433						2
STD	250	-1.93	34.808	28.05	6.13	0.069	14442						0
STD	300	-1.94	34.837	28.07	3.58	0.071	14450						4
STD	350	-1.94	34.853	28.08	2.09	0.073	14459						4
STD	400	-1.93	34.870	28.10	0.57	0.073	14468						4
STD	450	-1.93	34.880	28.10	-0.43	0.073	14477						0
STD	500	-1.93	34.890	28.11	-1.48	0.073	14485						5
STD	550	-1.93	34.900	28.12	-2.54	0.072	14493						4
STD	600	-1.93	34.908	28.13	-3.37	0.070	14502						4
STD	650	-1.92	34.914	28.13	-4.08	0.069	14510						4
STD	700	-1.92	34.917	28.13	-4.57	0.066	14519						4
STD	750	-1.92	34.924	28.14	-5.37	0.064	14528						5
STD	800	-1.92	34.930	28.15	-6.10	0.061	14536						5
STD	850	-1.92	34.945	28.16	-7.47	0.058	14545						4
STD	900	-1.92	34.954	28.16	-8.37	0.054	14553						3

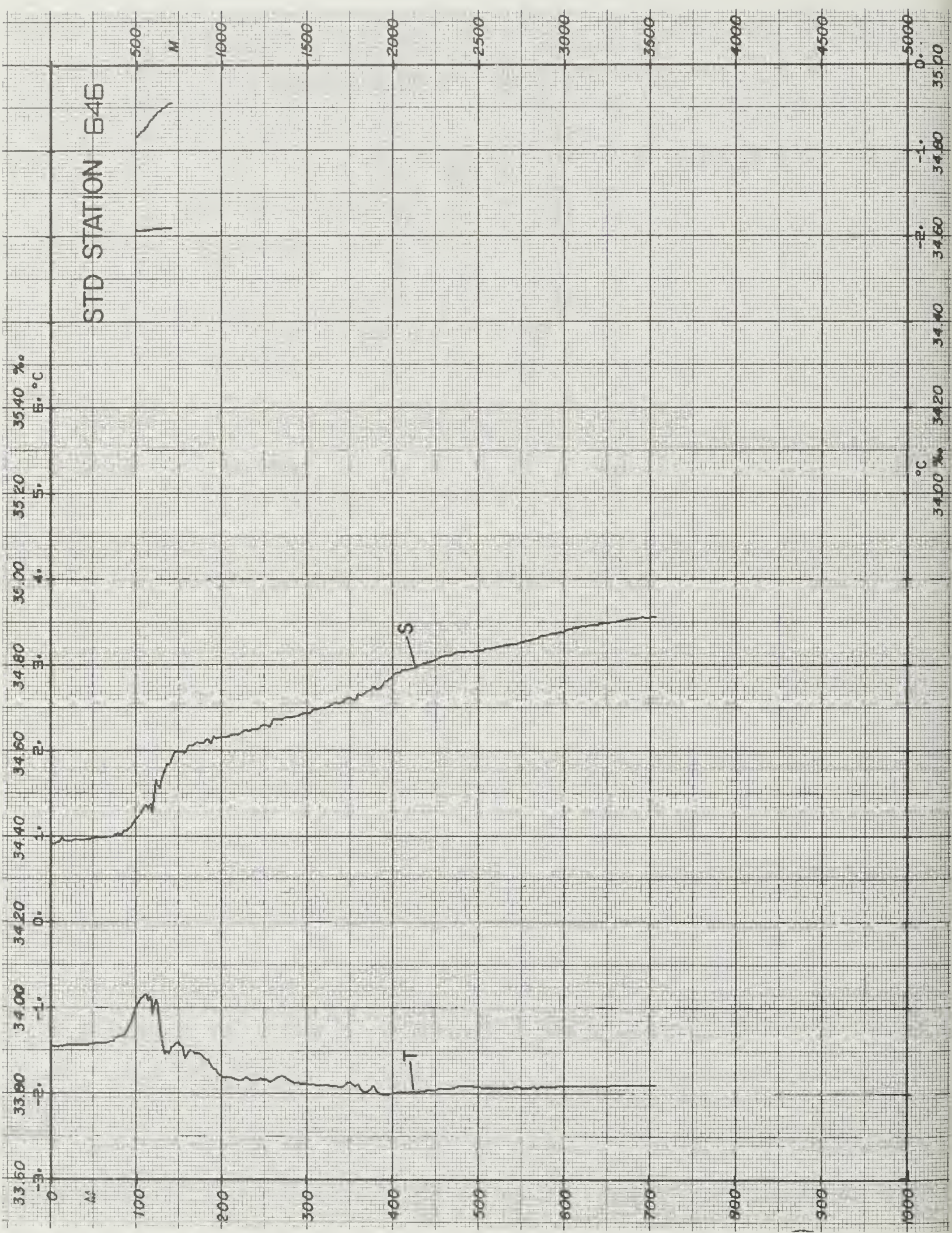


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 644	24 JAN 1967	2.6	77 20.2S	172 34.4E	570	668	6	17				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-2.0	-3.1		21	6	19	4	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-0.82	34.455	27.72			14448	855	126	199	72		
ISL	0	-0.82	34.455	27.72	37.99	0.000	14448						
OBS	10	-0.79	34.459	27.73			14451	862	145	191	74		
ISL	10	-0.79	34.459	27.73	37.77	0.004	14451						
ISL	20	-0.68	34.465	27.73	37.68	0.008	14457						
OBS	21	-0.67	34.466	27.73			14458	862	102	190	71		
ISL	30	-0.50	34.476	27.73	37.63	0.011	14468						
OBS	32	-0.46	34.478	27.73			14470	864	102	189	73		
OBS	42	-0.41	34.484	27.73			14474	861	102	185	68		
ISL	50	-0.35	34.494	27.74	36.89	0.019	14478						
OBS	53	-0.33	34.497	27.74			14480	863	112	168	68		
OBS	63	-0.36	34.500	27.74			14480	864	110	172	70		
ISL	75	-0.51	34.514	27.76	34.55	0.028	14475						
OBS	83	-0.67	34.526	27.78			14469	792	110	184	78		
ISL	100	-1.11	34.549	27.81	29.37	0.036	14452						
OBS	103	-1.19	34.553	27.82			14449	635	168	271	87		
ISL	125	-1.74	34.563	27.84	26.13	0.043	14427						
OBS	128	-1.79	34.565	27.85			14425	625	178	298	81		
ISL	150	-1.79	34.603	27.88	22.84	0.049	14429						
OBS	153	-1.77	34.608	27.88			14431	617	211	316	79		
OBS	178	-1.77	34.629	27.90			14435	627	185	309	82		
ISL	200	-2.01	34.633	27.91	19.56	0.059	14427						
OBS	204	-2.06	34.634	27.91			14426	639	191	315	81		
ISL	250	-1.92	34.679	27.94	16.02	0.068	14441						
OBS	254	-1.89	34.684	27.94			14443	632	169	310	83		
ISL	300	-1.90	34.716	27.97	12.97	0.075	14450						
OBS	305	-1.91	34.719	27.97			14451	633	198	313	81		
ISL	400	-1.94	34.779	28.02	7.43	0.086	14466						
ISL	500	-1.95	34.835	28.07	2.63	0.091	14483						
OBS	510	-1.95	34.840	28.07			14485	646	200	313	777		
ISL	600	-1.92	34.881	28.10	-1.27	0.091	14502						
OBS	613	-1.91	34.886	28.11			14505	646	191	311	81		



SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 645	24JAN1967	3.9	77 20.4S	172 35.8E	570	654	6	226				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-2.1	-2.4	994.7	19	6	19	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 <sup>-2</sup> $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
STD	0	-0.68	34.462	27.72	38.01	0.000	14454					0	
STD	10	-0.68	34.465	27.73	37.71	0.004	14456					2	
STD	20	-0.49	34.458	27.71	39.02	0.008	14466					0	
STD	30	-0.38	34.502	27.74	36.10	0.011	14473					3	
STD	50	-0.29	34.499	27.74	36.70	0.019	14481					0	
STD	75	-0.26	34.504	27.74	36.48	0.028	14487					3	
STD	100	-1.59	34.552	27.83	27.56	0.036	14429					3	
STD	125	-1.43	34.632	27.89	21.80	0.042	14442					2	
STD	150	-1.37	34.626	27.88	22.38	0.048	14449					3	
STD	200	-1.67	34.647	27.91	19.52	0.058	14444					0	
STD	250	-1.90	34.682	27.94	15.88	0.067	14442					0	
STD	300	-1.92	34.722	27.98	12.44	0.074	14449					3	
STD	350	-1.96	34.766	28.01	8.69	0.079	14457					0	
STD	400	-1.94	34.813	28.05	4.89	0.083	14467					4	
STD	450	-1.92	34.829	28.06	3.43	0.085	14476					2	
STD	500	-1.92	34.847	28.08	1.83	0.086	14485					3	
STD	550	-1.92	34.867	28.09	0.03	0.086	14493					3	
STD	600	-1.91	34.884	28.11	-1.45	0.086	14503					0	

STD STATION 646

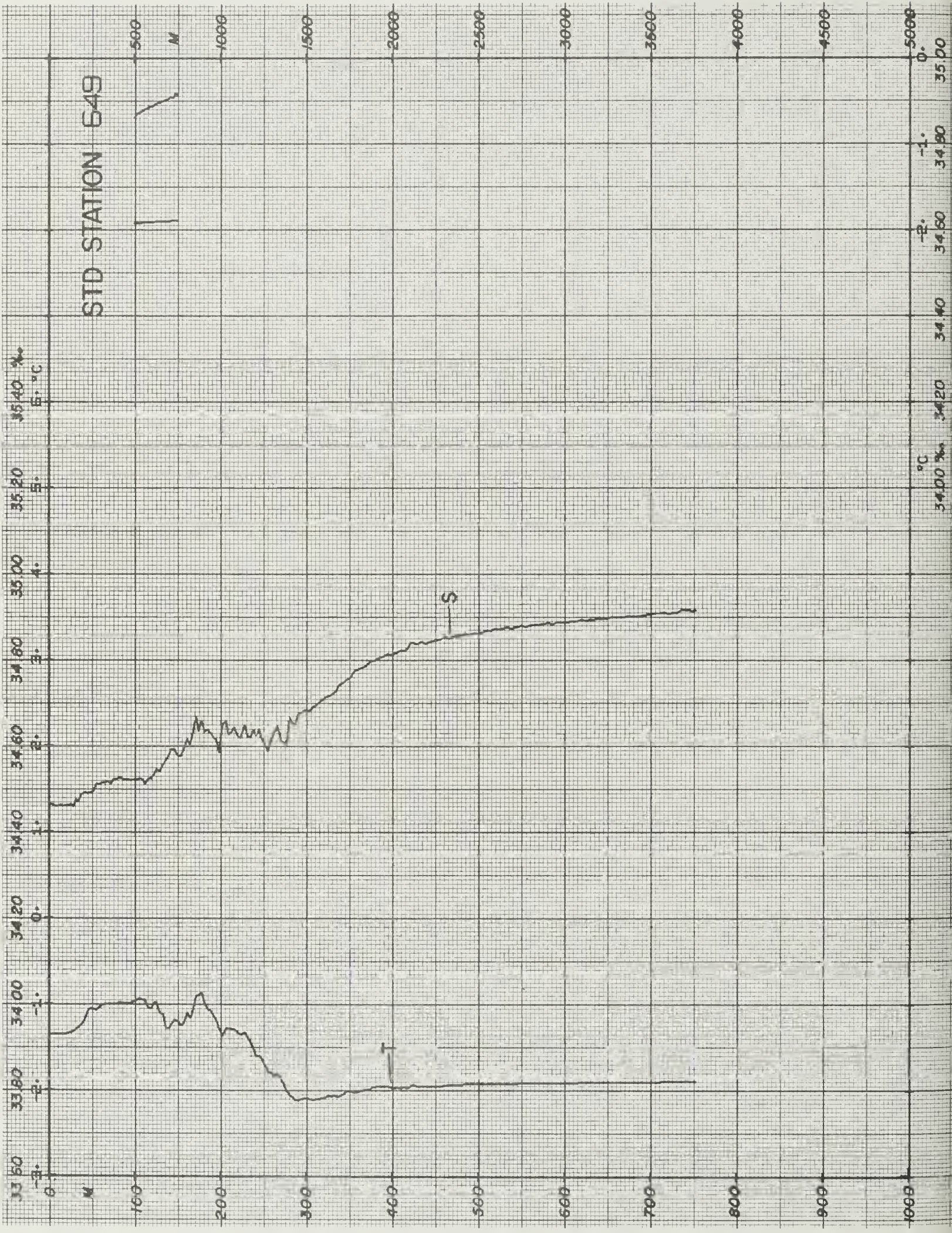


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 646	24 JAN 1967	12.9	77 28.0S	174 47.0E	570	752	7	203				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-4.9	-4.9	992.2	20	5	17	2						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-1.45	34.386	27.69	41.18	0.000	14417					0	
STD	10	-1.45	34.387	27.69	41.11	0.004	14419					0	
STD	20	-1.43	34.391	27.69	40.78	0.008	14421					3	
STD	30	-1.43	34.393	27.70	40.56	0.012	14423					3	
STD	50	-1.42	34.396	27.70	40.29	0.020	14427					0	
STD	75	-1.36	34.405	27.70	39.66	0.030	14434					0	
STD	100	-0.99	34.443	27.72	37.93	0.040	14456					0	
STD	125	-0.93	34.519	27.78	32.26	0.049	14464					0	
STD	150	-1.40	34.598	27.86	24.42	0.056	14447					0	
STD	200	-1.79	34.631	27.90	20.34	0.067	14438					0	
STD	250	-1.83	34.659	27.92	17.80	0.077	14444					4	
STD	300	-1.88	34.688	27.95	15.16	0.085	14451					0	
STD	350	-1.87	34.723	27.98	12.27	0.092	14460					4	
STD	400	-2.00	34.772	28.02	7.85	0.097	14463					0	
STD	450	-1.96	34.811	28.05	4.72	0.100	14474					4	
STD	500	-1.92	34.833	28.07	2.91	0.102	14484					5	
STD	550	-1.92	34.853	28.08	1.07	0.103	14493					3	
STD	600	-1.91	34.877	28.10	-0.95	0.103	14502					0	
STD	650	-1.91	34.898	28.12	-2.81	0.102	14511					4	
STD	700	-1.90	34.910	28.13	-3.91	0.100	14520					0	

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 647	24 JAN 1967	21.7	77 38.3S	175 28.3E	570	707	7	17				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-5.4	-5.9		19	5	18	3	3					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-1.36	34.414	27.71			14422	781	61	252	73		
ISL	0	-1.36	34.414	27.71	39.31	0.000	14422						
ISL	10	-1.35	34.414	27.71	39.28	0.004	14424						
OBS	11	-1.35	34.414	27.71			14424	778	88	254	75		
ISL	20	-1.36	34.411	27.71	39.43	0.008	14425						
OBS	21	-1.36	34.411	27.71			14425	779	165	253	75		
ISL	30	-1.34	34.412	27.71	39.34	0.012	14428						
OBS	32	-1.34	34.413	27.71			14428	776	90	254	72		
OBS	42	-1.39	34.414	27.71			14427	776	134	261	75		
ISL	50	-1.36	34.424	27.72	38.32	0.020	14430						
OBS	52	-1.33	34.428	27.72			14432	779	200	254	67		
OBS	63	-1.00	34.462	27.74			14450	813	50	228	70		
ISL	75	-0.86	34.495	27.76	34.51	0.029	14459						
OBS	83	-0.86	34.514	27.77			14460	791	109	226	69		
ISL	100	-1.02	34.538	27.80	30.59	0.037	14456						
OBS	104	-1.07	34.542	27.80			14454	727	179	248	79		
ISL	125	-1.25	34.567	27.83	27.38	0.044	14450						
OBS	130	-1.31	34.572	27.84			14448	616	125	196	76		
ISL	150	-1.70	34.579	27.85	24.87	0.051	14433						
OBS	155	-1.79	34.581	27.86			14430	634	149	311	76		
OBS	180	-1.92	34.602	27.88			14428	637	195	310	75		
ISL	200	-1.90	34.622	27.89	20.76	0.062	14433						
OBS	206	-1.88	34.628	27.90			14434	633	81	301	79		
ISL	250	-1.91	34.665	27.93	17.10	0.071	14441						
OBS	256	-1.92	34.670	27.93			14441	647	214	314	73		
ISL	300	-1.92	34.700	27.96	14.11	0.079	14449						
OBS	307	-1.92	34.705	27.96			14450	635	206	314	81		
ISL	400	-1.94	34.774	28.02	7.87	0.090	14466						
ISL	500	-1.95	34.839	28.07	2.30	0.095	14483						
OBS	508	-1.95	34.844	28.08			14485	648	153	319	81		
ISL	600	-1.93	34.882	28.11	-1.41	0.096	14501						
OBS	683	-1.90	34.902	28.12			14517	647	73	213	84		



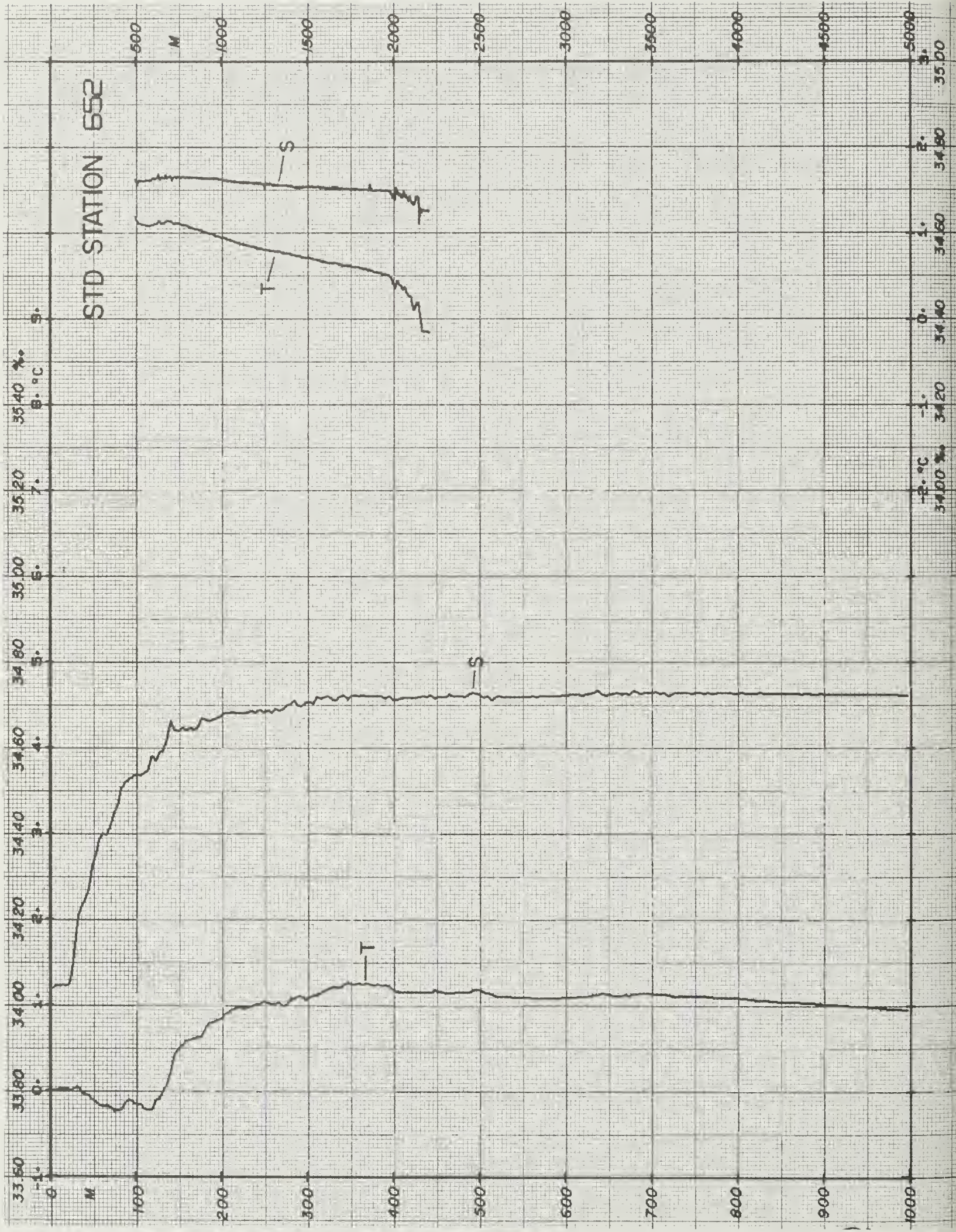
SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 648	25JAN1967	5.5	77 48.2S	177 23.7E	570	759	7	17				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-3.5	-3.8		20	3	19	3	3					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-1.39	34.424	27.72			14421	779		199	73		
ISL	0	-1.39	34.424	27.72	38.45	0.000	14421						
ISL	10	-1.38	34.420	27.72	38.73	0.004	14423						
OBS	11	-1.38	34.420	27.72			14423	781		204	70		
ISL	20	-1.37	34.420	27.72	38.74	0.008	14425						
OBS	21	-1.37	34.420	27.72			14425	775		199	73		
ISL	30	-1.37	34.428	27.72	38.06	0.012	14427						
OBS	32	-1.37	34.430	27.72			14427	750		225	72		
OBS	42	-1.40	34.432	27.73			14427	737		207	72		
ISL	50	-1.16	34.448	27.73	37.13	0.019	14440						
OBS	52	-1.10	34.452	27.73			14443	806		183	67		
OBS	63	-1.02	34.458	27.73			14449	825		171	67		
ISL	75	-1.00	34.459	27.73	36.80	0.028	14452						
OBS	83	-1.00	34.458	27.73			14453	831		171	67		
ISL	100	-0.97	34.462	27.74	36.59	0.038	14457						
OBS	104	-0.96	34.463	27.74			14458	835		149	69		
ISL	125	-0.92	34.471	27.74	35.98	0.047	14464						
OBS	129	-0.93	34.474	27.74			14464	824		185	70		
ISL	150	-1.19	34.511	27.78	31.78	0.055	14456						
OBS	154	-1.23	34.520	27.79			14455	655		175	76		
OBS	179	-0.91	34.574	27.82			14475	557		201	81		4
ISL	200	-1.23	34.573	27.84	26.67	0.070	14463						
OBS	205	-1.34	34.571	27.84			14459	593		236	82		
ISL	250	-1.65	34.596	27.87	23.18	0.082	14452						
OBS	254	-1.67	34.600	27.87			14452	614		252	79		
ISL	300	-2.04	34.642	27.91	18.20	0.092	14443						
OBS	304	-2.07	34.646	27.92			14442	642		266	74		
ISL	400	-2.18	34.748	28.00	9.07	0.106	14454						
ISL	500	-1.96	34.839	28.07	2.23	0.112	14483						
OBS	503	-1.95	34.842	28.07			14484	643		285	75		
ISL	600	-1.92	34.887	28.11	-1.78	0.112	14502						
ISL	700	-1.90	34.900	28.12	-3.19	0.109	14520						
OBS	701	-1.90	34.900	28.12			14520	649		289	80		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 649	25JAN1967	6.5	77 49.0S	177 27.0E	570	761	8	193				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-4.5	-5.4	992.6	17	3	12	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-1.35	34.445	27.74	36.93	0.000	14423					0	
STD	10	-1.35	34.461	27.75	35.69	0.004	14424					2	
STD	20	-1.35	34.463	27.75	35.53	0.007	14426					0	
STD	30	-1.31	34.463	27.75	35.57	0.011	14430					3	
STD	50	-1.05	34.492	27.76	34.10	0.018	14445					4	
STD	75	-1.00	34.519	27.78	32.16	0.026	14452					3	
STD	100	-0.97	34.522	27.78	31.97	0.034	14458					0	
STD	125	-0.98	34.541	27.80	30.41	0.042	14462					2	
STD	150	-1.20	34.581	27.84	26.41	0.049	14457					4	
STD	200	-1.31	34.601	27.86	24.32	0.062	14460					4	
STD	250	-1.65	34.612	27.88	21.99	0.073	14452					7	
STD	300	-2.09	34.681	27.95	15.10	0.082	14441					0	
STD	350	-2.01	34.756	28.01	9.28	0.089	14454					0	
STD	400	-1.96	34.813	28.05	4.78	0.092	14466					4	
STD	450	-1.95	34.845	28.08	2.15	0.094	14475					4	
STD	500	-1.92	34.861	28.09	0.73	0.095	14485					0	
STD	550	-1.91	34.879	28.10	-0.87	0.094	14494					0	
STD	600	-1.91	34.888	28.11	-1.79	0.094	14503					5	
STD	650	-1.90	34.896	28.12	-2.64	0.093	14511					6	
STD	700	-1.90	34.906	28.12	-3.63	0.091	14520					5	
STD	750	-1.89	34.915	28.13	-4.55	0.089	14529					3	

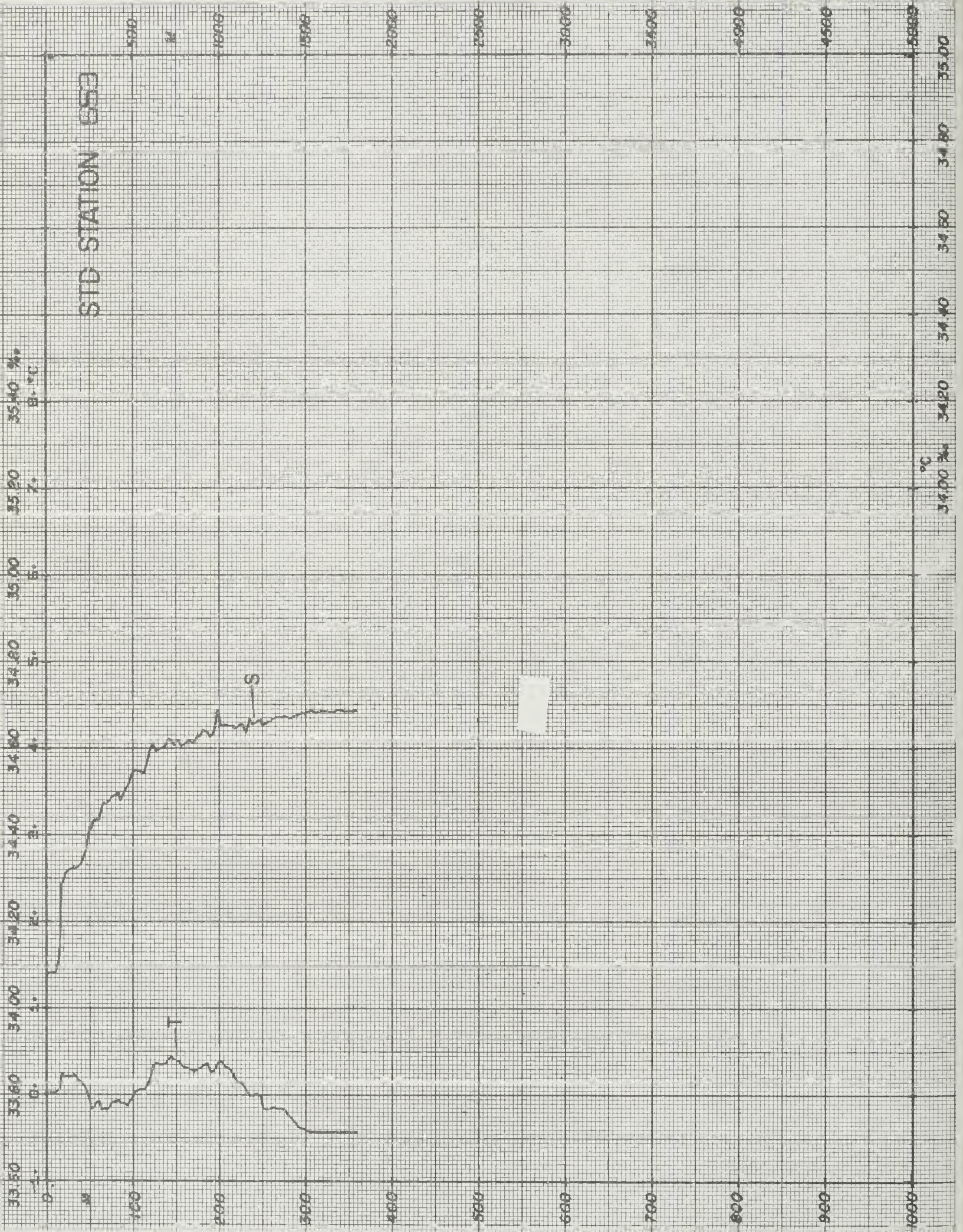


SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 27	SER 651		27JAN1967	3.8	74 50.5S	174 32.0W	569	2240	22	23			
	AIR TEMP		DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
	-0.8		-3.8			18	2	16	2	0			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.08	34.042	27.35			14483	793	174	240	67		
ISL	0	0.08	34.042	27.35	73.40	0.000	14483						
OBS	10	0.09	34.036	27.35			14485	792	114	246	62		
ISL	10	0.09	34.036	27.35	73.89	0.007	14485						
OBS	20	0.08	34.036	27.35			14487	794	152	255	62		
ISL	20	0.08	34.036	27.35	73.83	0.015	14487						
OBS	30	0.10	34.042	27.35			14489	794	162	228	62		
ISL	30	0.10	34.042	27.35	73.46	0.022	14489						
OBS	41	0.01	34.082	27.39			14487	780	170	249	67		
ISL	50	-0.28	34.252	27.54	55.61	0.035	14478						
OBS	51	-0.31	34.272	27.56			14477	699	181	280	68		
OBS	61	-0.31	34.360	27.63			14480	641	139	282	73		
ISL	75	-0.48	34.417	27.68	42.07	0.047	14475						
OBS	81	-0.54	34.430	27.69			14474	602	180	263	73		
ISL	100	-0.27	34.486	27.73	37.76	0.057	14490						
OBS	102	-0.23	34.491	27.73			14492	565	184	277	85		
ISL	125	0.05	34.539	27.75	35.33	0.066	14510						
ISL	150	0.31	34.577	27.77	33.84	0.075	14526						
OBS	154	0.35	34.582	27.77			14529	506	168	312	85		
ISL	200	0.77	34.634	27.79	32.34	0.092	14556						
OBS	206	0.82	34.640	27.79			14559	475	169	297	92		
ISL	250	1.10	34.680	27.80	31.20	0.107	14580						
OBS	258	1.14	34.686	27.81			14583	455	178	290	93		
ISL	300	1.21	34.699	27.81	30.67	0.123	14593						
OBS	308	1.21	34.700	27.81			14594	448	183	282	99		
ISL	400	1.20	34.710	27.82	30.10	0.153	14610						
OBS	408	1.20	34.710	27.82			14611	455	153	298	91		
ISL	500	1.18	34.717	27.83	29.61	0.183	14625						
OBS	508	1.18	34.718	27.83			14627	448		283	100		
ISL	600	1.14	34.721	27.83	29.25	0.213	14640						
ISL	700	1.09	34.721	27.84	29.12	0.242	14655						
OBS	768	1.05	34.722	27.84			14664	457	189	296	109		
ISL	800	1.03	34.722	27.84	28.84	0.271	14669						
ISL	900	0.98	34.719	27.84	28.78	0.300	14683						
ISL	1000	0.93	34.717	27.84	28.74	0.328	14698						
OBS	1020	0.92	34.716	27.84			14701	465	170	301	119		
ISL	1100	0.87	34.714	27.85	28.64	0.357	14712						
ISL	1200	0.82	34.711	27.85	28.48	0.386	14726						
ISL	1250	0.79	34.710	27.85	28.40	0.400	14733						
OBS	1270	0.78	34.710	27.85			14736	476	209	301	117		
ISL	1300	0.77	34.710	27.85	28.31	0.414	14741						
ISL	1400	0.72	34.709	27.85	28.11	0.442	14756						
ISL	1500	0.68	34.708	27.85	27.86	0.470	14771						
OBS	1520	0.67	34.708	27.85			14774	481	182	295	119		
ISL	1750	0.60	34.707	27.86	27.47	0.539	14810						
OBS	1771	0.00	34.706	0.00			0	486	186	296	122		
ISL	2000	0.34	34.683	27.85	26.71	0.607	14841						
OBS	2023	0.31	34.680	27.85			14843	503	220	286	119		
OBS	2123	0.08	34.662	27.85			14849	522		295	109		
OBS	2198	-0.15	34.648	27.85			14852	540	184	304	104		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 652	27 JAN 1967	19.7	74 50.3S	174 52.0W	569	2242	22	581				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-1.0	-2.7	983.2	20	4	18	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	0.00	34.034	27.35	73.62	0.000	14480						0
STD	10	0.00	34.042	27.35	73.02	0.007	14482						0
STD	20	0.01	34.042	27.35	73.02	0.015	14483						0
STD	30	0.03	34.135	27.43	65.97	0.022	14487						4
STD	50	-0.11	34.318	27.58	51.37	0.033	14487						0
STD	75	-0.24	34.437	27.68	41.71	0.045	14487						2
STD	100	-0.15	34.532	27.76	34.83	0.055	14496						4
STD	125	-0.11	34.567	27.78	32.38	0.063	14503						0
STD	150	0.47	34.636	27.81	30.27	0.071	14534						6
STD	200	0.83	34.670	27.81	29.98	0.086	14559						5
STD	250	1.03	34.679	27.81	30.76	0.101	14576						0
STD	300	1.06	34.703	27.82	29.28	0.116	14586						4
STD	350	1.24	34.714	27.82	29.90	0.131	14603						4
STD	400	1.17	34.709	27.82	29.84	0.146	14608						0
STD	450	1.16	34.714	27.83	29.58	0.161	14616						4
STD	500	1.17	34.722	27.83	29.22	0.175	14625						5
STD	550	1.08	34.716	27.83	29.08	0.190	14629						5
STD	600	1.08	34.719	27.84	28.91	0.204	14637						4
STD	650	1.12	34.721	27.83	29.24	0.219	14647						4
STD	700	1.13	34.727	27.84	28.98	0.233	14656						5
STD	750	1.10	34.726	27.84	29.01	0.248	14664						5
STD	800	1.08	34.725	27.84	28.94	0.262	14671						5
STD	850	1.03	34.724	27.84	28.76	0.277	14677						5
STD	900	1.00	34.722	27.84	28.79	0.291	14684						4
STD	950	0.98	34.723	27.85	28.58	0.306	14691						0
STD	1000	0.94	34.720	27.85	28.56	0.320	14698						4
STD	1100	0.87	34.714	27.85	28.60	0.348	14712						3
STD	1200	0.82	34.711	27.85	28.58	0.377	14726						3
STD	1300	0.78	34.708	27.85	28.55	0.406	14741						4
STD	1400	0.75	34.705	27.85	28.60	0.434	14757						4
STD	1500	0.70	34.703	27.85	28.44	0.463	14772						4
STD	1600	0.66	34.702	27.85	28.23	0.491	14787						4
STD	1700	0.62	34.700	27.85	28.10	0.519	14802						4
STD	1800	0.59	34.696	27.85	28.13	0.547	14817						4
STD	1900	0.53	34.696	27.85	27.66	0.575	14832						0
STD	2000	0.42	34.682	27.85	27.63	0.603	14844						4
STD	2100	0.24	34.679	27.86	26.00	0.630	14853						0
STD	2200	-0.16	34.647	27.85	24.09	0.655	14852						2

STD STATION 653



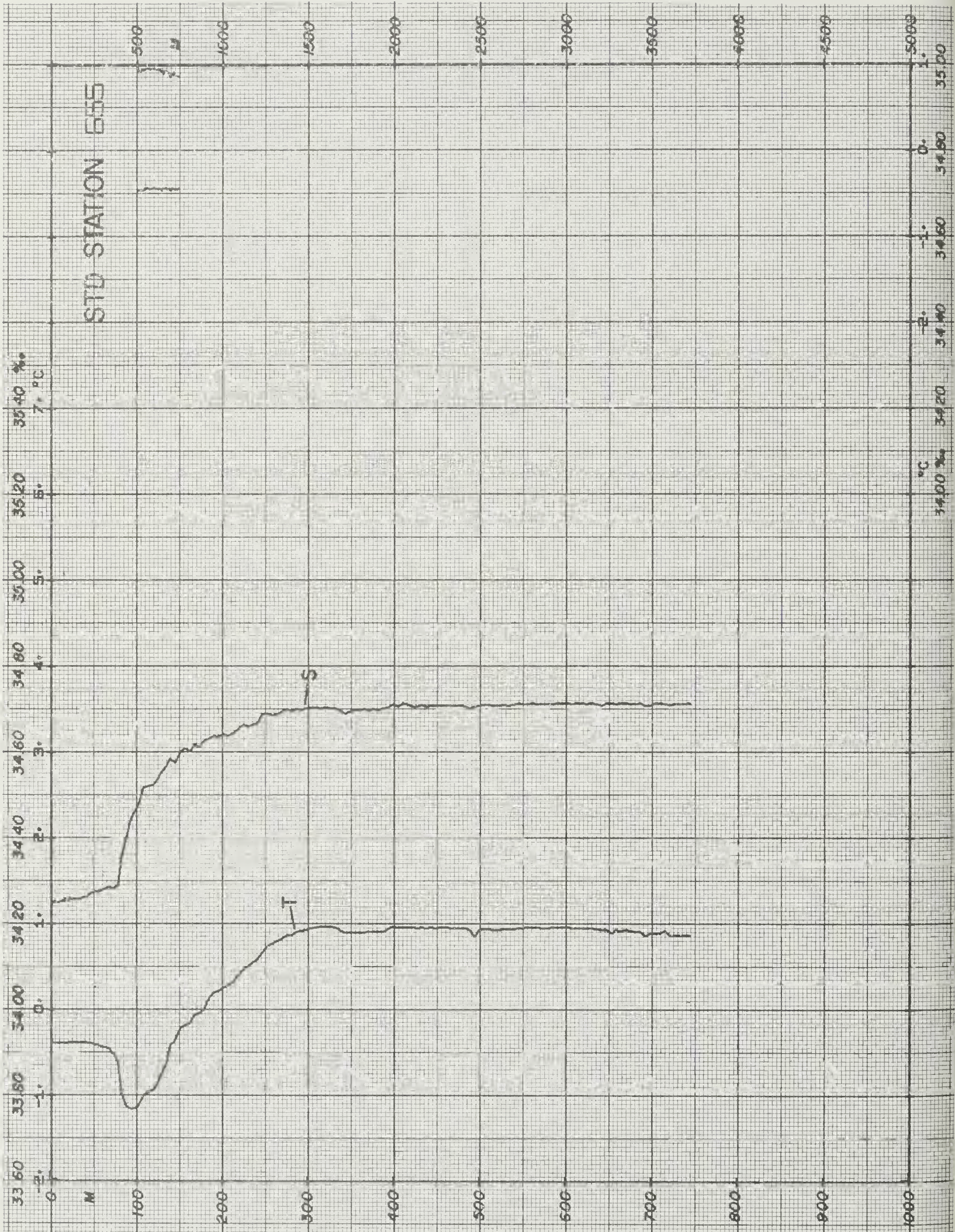


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 653	28 JAN 1967	16.8	73 55.2S	178 56.0W	569	399	4	105				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.4	-1.2	986.5	20	3	21	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	0.02	34.076	27.38	70.54	0.000	14481					0	
STD	10	0.02	34.083	27.39	70.00	0.007	14483					0	
STD	20	0.22	34.294	27.55	54.85	0.013	14496					3	
STD	30	0.21	34.322	27.57	52.69	0.019	14498					5	
STD	50	-0.05	34.411	27.65	44.65	0.028	14491					0	
STD	75	-0.11	34.481	27.71	38.97	0.039	14493					0	
STD	100	-0.04	34.542	27.76	34.60	0.048	14501					0	
STD	125	0.34	34.608	27.79	31.69	0.056	14524					4	
STD	150	0.39	34.611	27.79	31.76	0.064	14530					4	
STD	200	0.37	34.681	27.85	26.34	0.079	14539					4	
STD	250	-0.09	34.660	27.86	25.28	0.092	14526					2	
STD	300	-0.40	34.681	27.89	21.98	0.103	14520					0	
STD	350	-0.43	34.686	27.89	21.34	0.114	14527					4	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 654	30 JAN 1967	13.1	71 59.4S	178 31.2E	570	2154	21	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.1	-3.8		15	3	17	2	0					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	-0.35	34.250	27.54			14466	788	174	263	60		
ISL	0	-0.35	34.250	27.54	55.56	0.000	14466						
OBS	10	-0.34	34.257	27.54			14469	788	172	262	54		
ISL	10	-0.34	34.257	27.54	55.04	0.006	14469						
OBS	20	-0.36	34.263	27.55			14470	787	164	267	57		
ISL	20	-0.36	34.263	27.55	54.48	0.011	14470						
OBS	30	-0.40	34.268	27.56			14469	784	167	271	59		
ISL	30	-0.40	34.268	27.56	53.90	0.016	14469						
OBS	40	-0.41	34.270	27.56			14471	784	189	272	58		
OBS	50	-0.44	34.290	27.58			14471	776	171	264	54		
ISL	50	-0.44	34.290	27.58	52.00	0.027	14471						
OBS	60	-0.44	34.312	27.59			14473	775	150	221	57		
ISL	75	-0.94	34.376	27.67	43.38	0.039	14453						
OBS	80	-1.11	34.400	27.69			14447	682	135	231	59		
OBS	100	-1.01	34.482	27.75			14456	614	186	283	73		
ISL	100	-1.01	34.482	27.75	34.88	0.049	14456						
ISL	125	-0.72	34.535	27.79	31.96	0.057	14474						
ISL	150	-0.36	34.563	27.79	31.37	0.065	14495						
OBS	151	-0.34	34.564	27.79			14496	548	181	307	79		
ISL	200	0.25	34.624	27.81	29.93	0.080	14532						
OBS	201	0.26	34.625	27.81			14533	505	195	310	81		
ISL	250	0.41	34.638	27.81	29.84	0.095	14548						
OBS	251	0.41	34.638	27.81			14548	494	203	315	78		
ISL	300	0.60	34.661	27.82	29.36	0.110	14565						
OBS	301	0.60	34.661	27.82			14565	480	198	312	87		
ISL	400	0.85	34.690	27.83	29.00	0.139	14593						
OBS	401	0.85	34.690	27.83			14594	462	200	312			
OBS	500	0.96	34.708	27.83			14615	454	218	315	84		
ISL	500	0.96	34.708	27.83	28.63	0.168	14615						
ISL	600	0.95	34.710	27.84	28.68	0.197	14632						
ISL	700	0.91	34.711	27.84	28.41	0.225	14646						
OBS	764	0.86	34.712	27.84			14655	460		314	107		
ISL	800	0.85	34.712	27.85	28.06	0.253	14661						
ISL	900	0.82	34.711	27.85	28.04	0.282	14676						
ISL	1000	0.79	34.710	27.85	28.03	0.310	14691						
OBS	1005	0.79	34.710	27.85			14692	465	197	308	105		
ISL	1100	0.75	34.709	27.85	27.96	0.338	14706						
ISL	1200	0.70	34.708	27.85	27.72	0.365	14721						
OBS	1246	0.67	34.707	27.85			14727	474	177	301	112		
ISL	1250	0.67	34.707	27.85	27.52	0.379	14728						
ISL	1300	0.62	34.707	27.86	27.18	0.393	14734						
ISL	1400	0.51	34.706	27.86	26.35	0.420	14746						
OBS	1439	0.47	34.706	27.86			14751	485	224	316	115		
ISL	1500	0.41	34.707	27.87	25.42	0.446	14759						
OBS	1733	0.19	34.710	27.88			14788	496	214	319	113		
ISL	1750	0.19	34.710	27.88	23.21	0.506	14791						
OBS	1980	0.00	34.714	27.90			14822	506	205	309	105		9
ISL	2000	-0.16	34.706	27.90	19.90	0.560	14818						
OBS	2080	-0.33	34.729	27.92			14824	536	208		99		
OBS	2082	-0.31	34.732	27.93			14826	536	210	310	99		

STU STATION 655

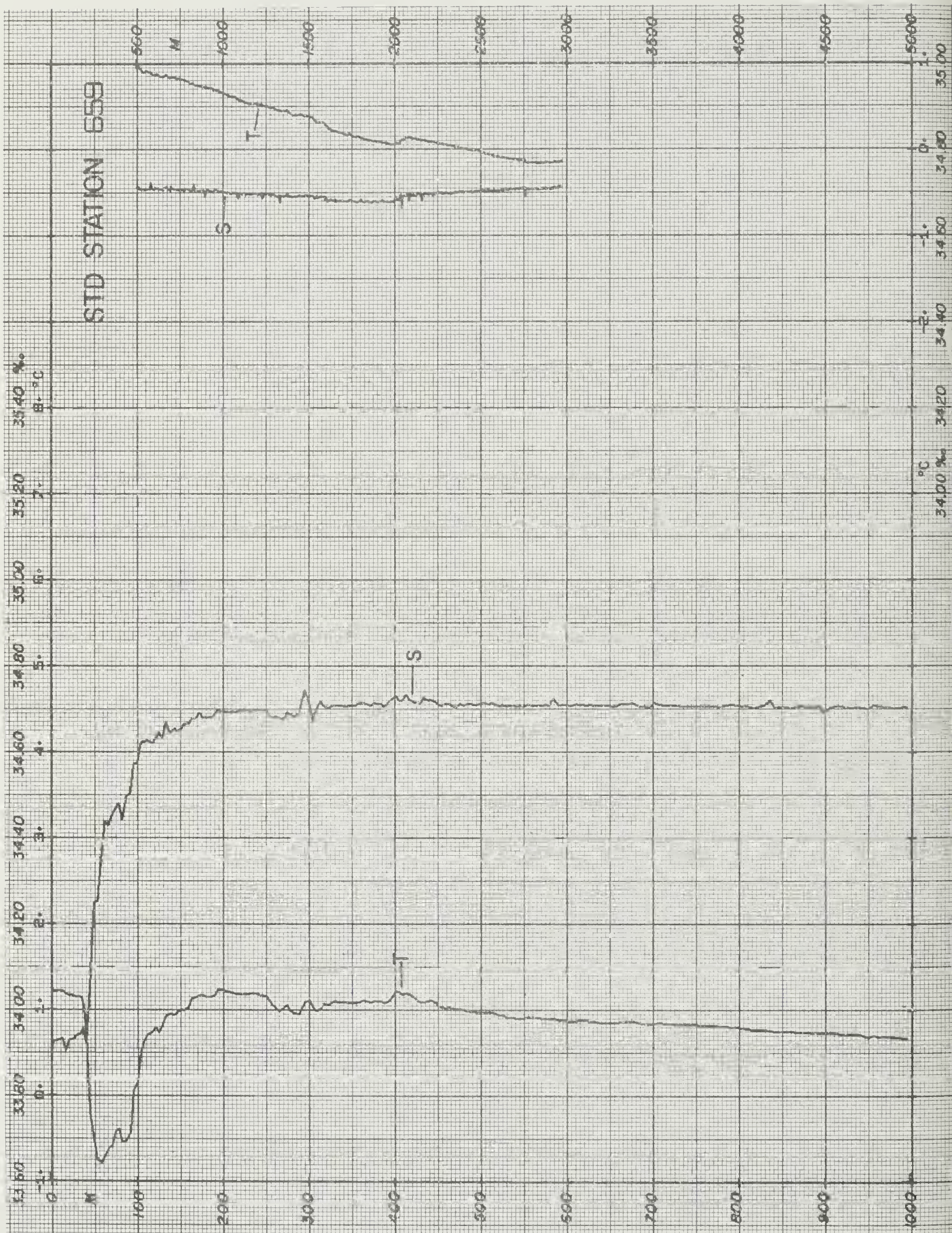


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 655	30 JAN 1967	16.5	71 57.0S	178 36.1E	570	2139	7	149				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	-0.4	-4.2	0.0	6	4	18	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> m/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	-0.29	34.221	27.51	58.00	0.000	14469					0	
STD	10	-0.39	34.251	27.54	55.26	0.006	14466					3	
STD	20	-0.39	34.255	27.55	54.94	0.011	14468					0	
STD	30	-0.38	34.258	27.55	54.72	0.017	14470					3	
STD	50	-0.40	34.274	27.56	53.37	0.027	14473					3	
STD	75	-0.56	34.286	27.58	51.72	0.041	14470					5	
STD	100	-1.14	34.470	27.75	35.31	0.051	14450					5	
STD	125	-0.85	34.540	27.79	31.01	0.060	14468					5	
STD	150	-0.24	34.597	27.81	29.40	0.067	14501					6	
STD	200	0.25	34.640	27.82	28.72	0.082	14532					6	
STD	250	0.70	34.689	27.84	27.79	0.096	14562					6	
STD	300	0.93	34.703	27.83	28.43	0.110	14581					5	
STD	350	0.90	34.695	27.83	28.89	0.124	14588					6	
STD	400	0.97	34.713	27.84	28.12	0.139	14599					0	
STD	450	0.95	34.708	27.84	28.48	0.153	14607					0	
STD	500	0.93	34.708	27.84	28.47	0.167	14614					0	
STD	550	0.95	34.711	27.84	28.43	0.181	14623					0	
STD	600	0.96	34.714	27.84	28.39	0.195	14632					6	
STD	650	0.92	34.713	27.84	28.25	0.210	14639					6	
STD	700	0.89	34.708	27.84	28.52	0.224	14646					0	

SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 657	1FEB1967	3.9	69 2.4S	179 47.6W	533	3576	35	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	0.2	-1.0		20	4	22	3	3					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	0.01	34.086	27.39			14481	791		255	62		
ISL	0	0.01	34.086	27.39	69.71	0.000	14481						
OBS	10	0.00	34.084	27.39			14482	789		212	60		9
ISL	10	0.00	34.084	0.00	0.00	0.000	0						
ISL	20	0.00	34.084	27.39	69.81	0.014	14484						
ISL	30	0.01	34.084	27.39	69.82	0.021	14486						
OBS	31	0.01	34.084	27.39			14486	791		245	59		
ISL	50	-0.32	34.100	27.42	67.00	0.035	14474						
OBS	51	-0.38	34.108	27.43			14472	772		251	63		
OBS	61	-1.65	34.318	27.64			14417	659		280	64		
ISL	75	-1.83	34.380	27.70	40.19	0.048	14411						
OBS	82	-1.56	34.369	27.68			14425	620		290	72		
ISL	100	-0.98	34.429	27.71	39.04	0.058	14457						
OBS	102	-0.89	34.437	27.71			14461	582		270	78		
ISL	125	0.21	34.549	27.75	35.41	0.067	14517						
OBS	127	0.30	34.558	27.75			14522	506		313	85		
ISL	150	0.66	34.597	27.76	34.40	0.076	14542						
OBS	153	0.68	34.600	27.77			14544	487		316	88		
OBS	178	0.97	34.650	27.79			14562	462		314	90		
ISL	200	1.19	34.677	27.80	31.88	0.093	14575						
OBS	203	1.21	34.680	27.80			14577	444		301	93		
ISL	250	1.31	34.700	27.80	31.24	0.108	14589						
OBS	254	1.31	34.700	27.80			14590	443		313	92		
ISL	300	1.35	34.711	27.81	30.82	0.124	14600						
OBS	355	1.36	34.718	27.82			14609	435		319	94		
ISL	400	1.34	34.721	27.82	30.32	0.154	14616						
ISL	500	1.28	34.722	27.82	30.01	0.185	14630						
OBS	510	1.27	34.722	27.83			14631	438		320	103		
ISL	600	1.23	34.722	27.83	29.90	0.215	14644						
ISL	700	1.19	34.723	27.83	29.78	0.244	14659						
OBS	782	1.15	34.723	27.83			14671	447		324	97		
ISL	800	1.14	34.723	27.83	29.62	0.274	14673						
ISL	900	1.07	34.721	27.84	29.42	0.304	14687						
ISL	1000	1.00	34.719	27.84	29.22	0.333	14701						
OBS	1035	0.98	34.718	27.84			14706	458		314	110		
ISL	1100	0.95	34.716	27.84	29.09	0.362	14715						
ISL	1200	0.89	34.714	27.84	28.98	0.391	14730						
ISL	1250	0.87	34.713	27.84	28.93	0.406	14737						
OBS	1288	0.85	34.712	27.85			14742	463		320	112		
ISL	1300	0.84	34.712	27.85	28.85	0.420	14744						
ISL	1400	0.78	34.710	27.85	28.55	0.449	14758						
ISL	1500	0.72	34.709	27.85	28.25	0.477	14773						
OBS	1541	0.70	34.708	27.85			14779	469		316	122		
ISL	1750	0.63	34.706	27.85	27.84	0.547	14811						
OBS	1794	0.62	34.706	27.85			14818	478		321	121		
ISL	2000	0.51	34.705	27.86	26.93	0.616	14848						
OBS	2047	0.49	34.705	27.86			14855	481			127		
ISL	2250	0.42	34.704	27.87	26.17	0.682	14887						
ISL	2500	0.36	34.704	27.87	25.60	0.747	14928						
OBS	2549	0.35	34.704	27.87			14936	493		322	130		
ISL	2750	0.29	34.704	27.87	24.90	0.810	14968						
ISL	3000	0.22	34.705	27.88	24.02	0.871	15008						
OBS	3049	0.21	34.692	27.87			15016	495		307	116		2
ISL	3250	0.15	34.707	27.88	22.96	0.930	15049						
ISL	3500	0.08	34.708	27.89	21.85	0.986	15090						
OBS	3549	0.06	34.708	27.89			15097	523		315	114		

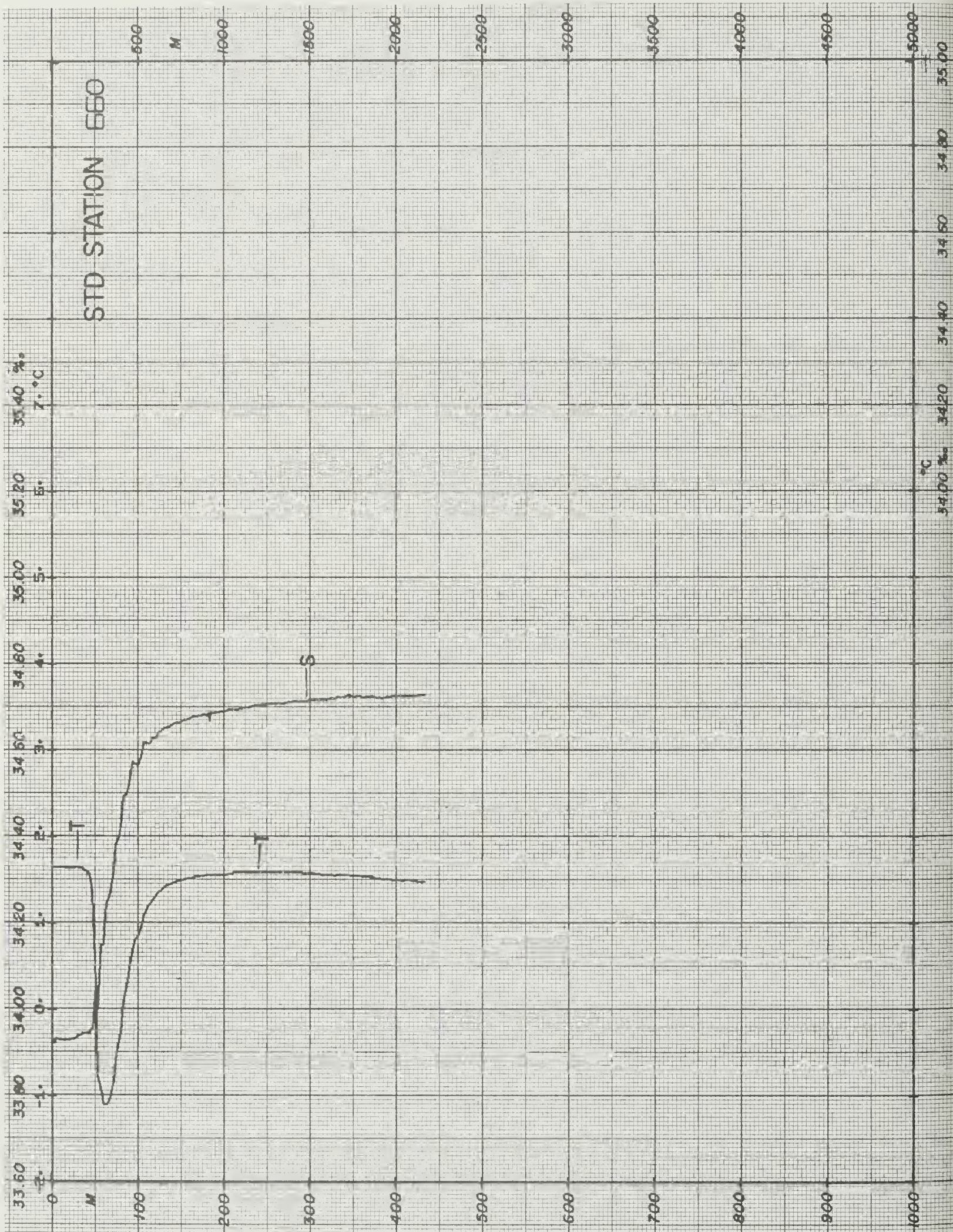
SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL
EL 27	SER 658		6FEB1967		9.1	64 59.0S		160 41.9E		535	2962	29	23
	AIR TEMP		DEW PT	BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	1.4		0.2			0		0	8		2	3	
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DD
OBS	0	1.23	33.934	27.20			14534	765	158		55		
ISL	0	1.23	33.934	27.20	88.04	0.000	14534						
OBS	10	1.16	33.938	27.20			14532	776	168	234	57		
ISL	10	1.16	33.938	27.20	87.32	0.009	14532						
ISL	20	1.15	33.939	27.21	87.17	0.017	14533						
ISL	30	1.15	33.940	27.21	87.15	0.026	14535						
OBS	31	1.13	33.940	27.21			14535	773	158	239	55		
ISL	50	-0.61	34.257	27.56	53.77	0.040	14463						
OBS	52	-0.80	34.293	27.59			14455	700	206		72		
OBS	62	-1.12	34.372	27.67			14443	641	204	286	80		
ISL	75	-1.11	34.432	27.72	38.47	0.052	14446						
OBS	83	-0.92	34.457	27.73			14457	690	183	296	85		
ISL	100	-0.23	34.520	27.75	35.40	0.061	14492						
OBS	103	-0.09	34.530	27.75			14499	571	197	307	86		
ISL	125	0.56	34.602	27.77	33.37	0.070	14534						
OBS	129	0.63	34.612	27.78			14538	508	207		89		
ISL	150	0.56	34.622	27.79	31.88	0.078	14538						
OBS	155	0.52	34.622	27.79			14537	513	216		89		
OBS	180	0.70	34.646	27.80			14550	506	186	306	93		
ISL	200	0.94	34.673	27.81	30.56	0.093	14564						
OBS	205	1.00	34.679	27.81			14568	489	213		95		
ISL	250	0.99	34.689	27.82	29.73	0.109	14575						
OBS	256	0.96	34.688	27.82			14574	475	232	306	95		
ISL	300	0.97	34.696	27.82	29.16	0.123	14582						
OBS	358	0.99	34.705	27.83			14593	470	217	304	102		
ISL	400	0.97	34.706	27.83	28.63	0.152	14599						
ISL	500	0.91	34.705	27.84	28.44	0.181	14613						
OBS	511	0.90	34.705	27.84			14614	476	211	303	109		
ISL	600	0.86	34.707	27.84	28.17	0.209	14628						
ISL	700	0.82	34.709	27.84	27.89	0.237	14642						
OBS	799	0.78	34.710	27.85			14657	479	216		113		
ISL	800	0.78	34.710	27.85	27.63	0.265	14657						
ISL	900	0.71	34.707	27.85	27.43	0.292	14671						
ISL	1000	0.64	34.703	27.85	27.24	0.320	14684						
OBS	1051	0.60	34.701	27.85			14691	486	226	305	121		
ISL	1100	0.56	34.698	27.85	27.09	0.347	14698						
ISL	1200	0.49	34.693	27.85	26.91	0.374	14711						
ISL	1250	0.45	34.691	27.85	26.81	0.387	14718						
ISL	1300	0.41	34.688	27.85	26.70	0.401	14724						
OBS	1303	0.41	34.688	27.85			14725	495	211		120		
ISL	1400	0.34	34.685	27.85	26.33	0.427	14738						
ISL	1500	0.27	34.683	27.86	25.93	0.453	14752						
OBS	1556	0.24	34.682	27.86			14760	507	233		125		
ISL	1750	0.19	34.684	27.86	25.05	0.517	14791						
OBS	1808	0.18	34.686	27.86			14800	505	209	299	127		
ISL	2000	0.15	34.696	27.87	23.83	0.578	14832						
OBS	2031	0.15	34.698	27.88			14837	521	223	306	127		
ISL	2250	0.07	34.703	27.88	22.43	0.636	14871						
OBS	2284	0.06	34.704	27.88			14877	527	216	307	122		
ISL	2500	-0.04	34.708	27.89	20.77	0.690	14910						
OBS	2535	-0.05	34.709	27.89			14915	526	218	304	115		
ISL	2750	-0.10	34.713	27.90	19.61	0.740	14950						
OBS	2887	-0.10	34.716	27.90			14974	547	218	286	112		

# STD STATION 659





SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 659	6FEB1967	14.9	64 58.2S	160 37.0E	535	2969	30	616				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	1.1	0.0	980.1	0	0	32	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	1.26	33.901	27.17	90.76	0.000	14535						0
STD	10	1.22	33.930	27.19	88.34	0.009	14535						0
STD	20	1.17	33.924	27.19	88.47	0.018	14534						4
STD	30	1.15	33.940	27.21	87.16	0.027	14535						3
STD	50	-0.52	34.249	27.55	54.80	0.041	14467						0
STD	75	-0.43	34.468	27.72	38.42	0.052	14478						0
STD	100	0.13	34.574	27.78	33.09	0.061	14510						5
STD	125	0.75	34.642	27.80	31.49	0.069	14543						4
STD	150	0.99	34.652	27.79	32.32	0.077	14558						5
STD	200	1.23	34.694	27.81	30.89	0.093	14577						0
STD	250	1.17	34.698	27.81	30.28	0.109	14583						6
STD	300	1.10	34.720	27.83	28.34	0.123	14589						6
STD	350	1.08	34.708	27.83	29.21	0.138	14596						4
STD	400	1.19	34.727	27.83	28.67	0.152	14609						5
STD	450	1.06	34.713	27.83	28.89	0.166	14612						3
STD	500	0.97	34.712	27.84	28.44	0.181	14616						0
STD	550	0.90	34.706	27.84	28.44	0.195	14621						0
STD	600	0.88	34.708	27.84	28.18	0.209	14628						5
STD	650	0.85	34.707	27.84	28.16	0.223	14635						5
STD	700	0.84	34.710	27.84	27.88	0.237	14643						6
STD	750	0.83	34.706	27.84	28.21	0.251	14651						38
STD	800	0.80	34.707	27.84	27.97	0.265	14658						6
STD	850	0.75	34.704	27.84	27.93	0.279	14664						6
STD	900	0.73	34.690	27.84	28.88	0.293	14672						0
STD	950	0.69	34.701	27.85	27.76	0.308	14678						6
STD	1000	0.67	34.702	27.85	27.55	0.321	14686						5
STD	1100	0.58	34.696	27.85	27.35	0.349	14698						6
STD	1200	0.54	34.698	27.85	27.03	0.376	14713						4
STD	1300	0.48	34.696	27.85	26.74	0.403	14728						6
STD	1400	0.42	34.693	27.86	26.50	0.430	14742						5
STD	1500	0.39	34.692	27.86	26.30	0.456	14757						0
STD	1600	0.29	34.684	27.86	25.95	0.482	14770						5
STD	1700	0.19	34.681	27.86	25.30	0.508	14782						5
STD	1800	0.15	34.681	27.86	24.90	0.533	14797						5
STD	1900	0.10	34.678	27.86	24.56	0.558	14812						7
STD	2000	0.06	34.679	27.86	24.11	0.582	14827						7
STD	2100	0.14	34.695	27.87	23.76	0.606	14849						0
STD	2200	0.09	34.696	27.88	23.16	0.629	14864						6
STD	2300	0.06	34.698	27.88	22.64	0.652	14879						5
STD	2400	0.01	34.703	27.89	21.77	0.674	14895						4
STD	2500	-0.02	34.704	27.89	21.25	0.696	14910						0
STD	2600	-0.08	34.704	27.89	20.53	0.717	14925						6
STD	2700	-0.12	34.709	27.90	19.73	0.737	14941						5
STD	2800	-0.15	34.708	27.90	19.31	0.756	14957						4
STD	2900	-0.15	34.710	27.90	19.13	0.776	14974						5

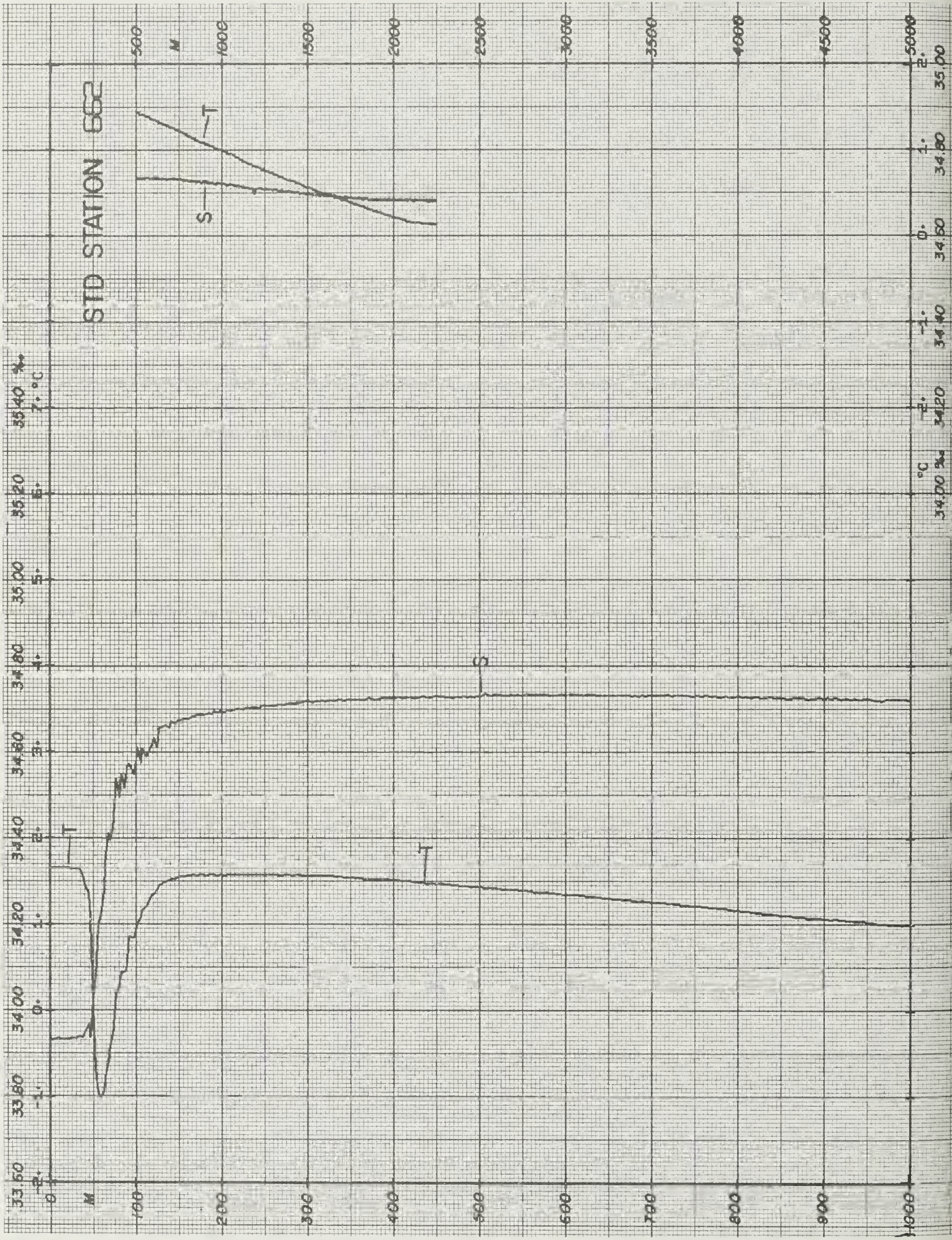


SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 660	7FEB1967	21.9	62 40.1W	158 5.0E	536	2328	4	145				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	1.0	-4.6	990.1	19	3	19	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	1.65	33.929	27.16	91.15	0.000	14552					0	
STD	10	1.65	33.930	27.16	91.11	0.009	14554					3	
STD	20	1.64	33.931	27.17	91.07	0.018	14556					0	
STD	30	1.64	33.939	27.17	90.46	0.027	14557					3	
STD	50	0.56	34.030	27.32	76.78	0.044	14513					4	
STD	75	-0.54	34.385	27.66	44.26	0.059	14472					4	
STD	100	0.85	34.566	27.73	37.84	0.069	14542					4	
STD	125	1.37	34.641	27.75	35.68	0.079	14570					5	
STD	150	1.49	34.665	27.76	34.84	0.087	14580					4	
STD	200	1.56	34.689	27.78	33.69	0.105	14592					3	
STD	250	1.59	34.705	27.79	32.88	0.121	14602					0	
STD	300	1.58	34.716	27.80	32.14	0.137	14610					3	
STD	350	1.55	34.726	27.81	31.36	0.153	14617					0	
STD	400	1.50	34.726	27.81	31.16	0.169	14623					4	



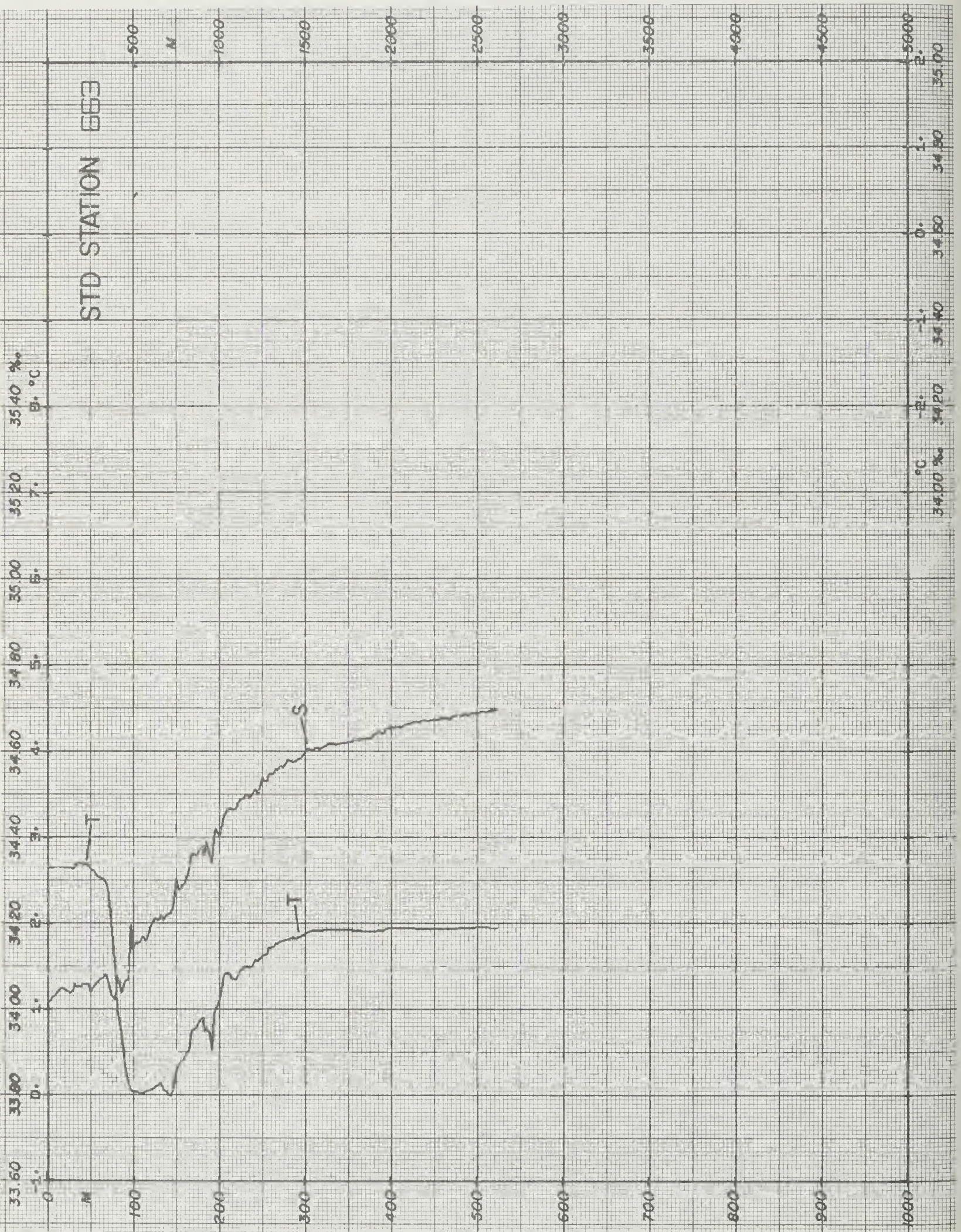
SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL	
EL 27	SER 661		7FEB1967		22.7	62 39.4S		158 5.0E		536	2252	22	21	
	AIR TEMP		DEW PT		BAROM		WIND DIR		FORCE	SEA DIR		ST	SPEC OBS	
	0.9		-4.5				18		3	17		3	2	
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD	
OBS	0	1.63	33.954	27.18			14552	788	149	238	48			
ISL	0	1.63	33.954	27.18	89.16	0.000	14552							
OBS	10	1.63	33.952	27.18			14554	784	162		49			
ISL	10	1.63	33.952	27.18	89.34	0.009	14554							
ISL	20	1.75	33.943	27.17	90.89	0.018	14560							
OBS	30	1.62	33.954	27.19			14556	780	155		48			
ISL	30	1.62	33.954	27.19	89.17	0.027	14556							
OBS	50	-0.37	34.110	27.43			14472	769	192	267	59			
ISL	50	-0.37	34.110	27.43	66.04	0.042	14472							
OBS	60	-1.06	34.215	27.54			14443	726	195	286	68			
ISL	75	-0.57	34.366	27.64	45.61	0.056	14470							
OBS	80	-0.21	34.412	27.66			14488	585	214	295	71			
OBS	100	0.80	34.564	27.73			14540	489	207	324	78			
ISL	100	0.80	34.564	27.73	37.70	0.067	14540							
OBS	125	1.32	34.634	27.75			14568	451	234	312	82			
ISL	125	1.32	34.634	27.75	35.87	0.076	14568							
OBS	150	1.48	34.664	27.76			14580	446	222	306	81			
ISL	150	1.48	34.664	27.76	34.82	0.085	14580							
OBS	175	1.53	34.682	27.77			14586	440	222	303	80			
OBS	200	1.55	34.691	27.78			14592	441	226	302	83			
ISL	200	1.55	34.691	27.78	33.47	0.102	14592							
OBS	250	1.59	34.708	27.79			14602	452	212	302				
ISL	250	1.59	34.708	27.79	32.67	0.118	14602							
ISL	300	1.57	34.717	27.80	32.03	0.135	14609							
OBS	350	1.52	34.721	27.81			14615	454	213	294	84			
ISL	400	1.49	34.726	27.81	31.08	0.166	14623							
OBS	500	1.43	34.733	27.82			14637	470	198	299	89			
ISL	500	1.43	34.733	27.82	30.40	0.197	14637							
ISL	600	1.34	34.735	27.83	29.88	0.227	14649							
OBS	680	1.27	34.734	27.83			14659	474		295	95			
ISL	700	1.25	34.733	27.84	29.52	0.257	14662							
ISL	800	1.16	34.730	27.84	29.29	0.286	14675							
ISL	900	1.07	34.725	27.84	29.12	0.315	14687							
OBS	927	1.05	34.724	27.84			14691	473	162	295	103			
ISL	1000	0.99	34.721	27.84	28.93	0.344	14700							
ISL	1100	0.90	34.716	27.85	28.68	0.373	14713							
OBS	1178	0.83	34.713	27.85			14723	480		312	108			
ISL	1200	0.81	34.713	27.85	28.32	0.402	14726							
ISL	1250	0.76	34.712	27.85	28.06	0.416	14732							
ISL	1300	0.72	34.711	27.85	27.79	0.430	14739							
ISL	1400	0.64	34.709	27.86	27.28	0.457	14752							
OBS	1431	0.61	34.708	27.86			14756	485	192	300	109			
ISL	1500	0.56	34.704	27.86	27.04	0.484	14765							
OBS	1686	0.44	34.693	27.85			14791	499	195	290				
ISL	1750	0.39	34.690	27.86	26.57	0.552	14800							
OBS	1940	0.25	34.685	27.86			14826	515	214	258	103			
ISL	2000	0.21	34.684	27.86	25.33	0.616	14834							
OBS	2196	0.12	34.683	27.86			14864	527	207	299	103			

STD STATION 662



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 662	8FEB1967	23.7	62 39.6W	158 5.3E	536	2205	23	576				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	0.8	-2.8	989.0	19	5	19	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	1.66	33.937	27.17	90.67	0.000	14553					0	
STD	10	1.66	33.935	27.17	90.82	0.009	14555					0	
STD	20	1.66	33.935	27.17	90.88	0.018	14556					4	
STD	30	1.65	33.936	27.17	90.72	0.027	14558					4	
STD	50	0.40	33.996	27.30	78.51	0.044	14506					3	
STD	75	-0.17	34.449	27.69	41.06	0.059	14490					4	
STD	100	0.89	34.564	27.72	38.29	0.069	14544					4	
STD	125	1.39	34.615	27.73	37.76	0.079	14571					4	
STD	150	1.55	34.673	27.77	34.63	0.088	14583					0	
STD	200	1.58	34.695	27.78	33.38	0.105	14593					5	
STD	250	1.58	34.707	27.79	32.67	0.121	14601					6	
STD	300	1.57	34.719	27.80	31.90	0.137	14609					2	
STD	350	1.55	34.722	27.81	31.63	0.153	14617					4	
STD	400	1.52	34.725	27.81	31.37	0.169	14624					3	
STD	450	1.48	34.729	27.82	30.92	0.184	14630					6	
STD	500	1.44	34.729	27.82	30.75	0.200	14637					4	
STD	550	1.40	34.732	27.82	30.38	0.215	14643					6	
STD	600	1.35	34.733	27.83	30.06	0.230	14650					6	
STD	650	1.31	34.732	27.83	29.94	0.245	14656					4	
STD	700	1.26	34.731	27.83	29.77	0.260	14662					0	
STD	750	1.22	34.729	27.83	29.69	0.275	14669					6	
STD	800	1.17	34.729	27.84	29.41	0.290	14675					6	
STD	850	1.11	34.726	27.84	29.31	0.304	14681					0	
STD	900	1.07	34.724	27.84	29.20	0.319	14687					6	
STD	950	1.03	34.724	27.84	28.99	0.334	14694					4	
STD	1000	1.00	34.720	27.84	29.09	0.348	14701					0	
STD	1100	0.90	34.716	27.85	28.70	0.377	14713					9	
STD	1200	0.80	34.706	27.84	28.72	0.406	14725					5	
STD	1300	0.72	34.704	27.85	28.30	0.434	14738					6	
STD	1400	0.64	34.703	27.85	27.82	0.462	14752					6	
STD	1500	0.56	34.696	27.85	27.64	0.490	14765					8	
STD	1600	0.49	34.693	27.85	27.24	0.518	14779					0	
STD	1700	0.41	34.688	27.85	26.97	0.545	14792					6	
STD	1800	0.36	34.687	27.86	26.47	0.571	14807					4	
STD	1900	0.28	34.683	27.86	26.05	0.598	14820					6	
STD	2000	0.21	34.683	27.86	25.43	0.623	14834					2	
STD	2100	0.16	34.683	27.86	24.83	0.648	14849					3	
STD	2200	0.14	34.681	27.86	24.77	0.673	14865					2	

STD STATION 663

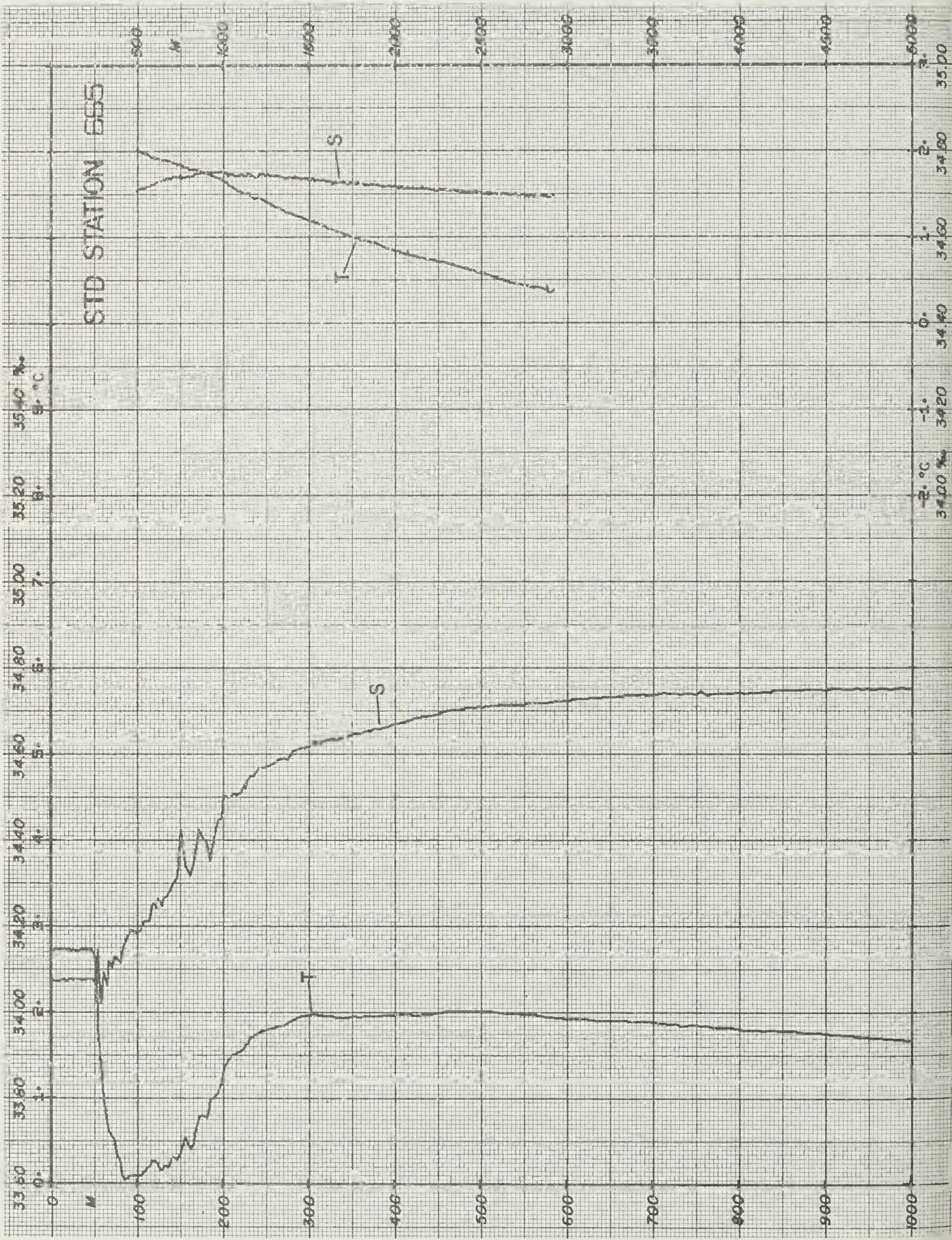




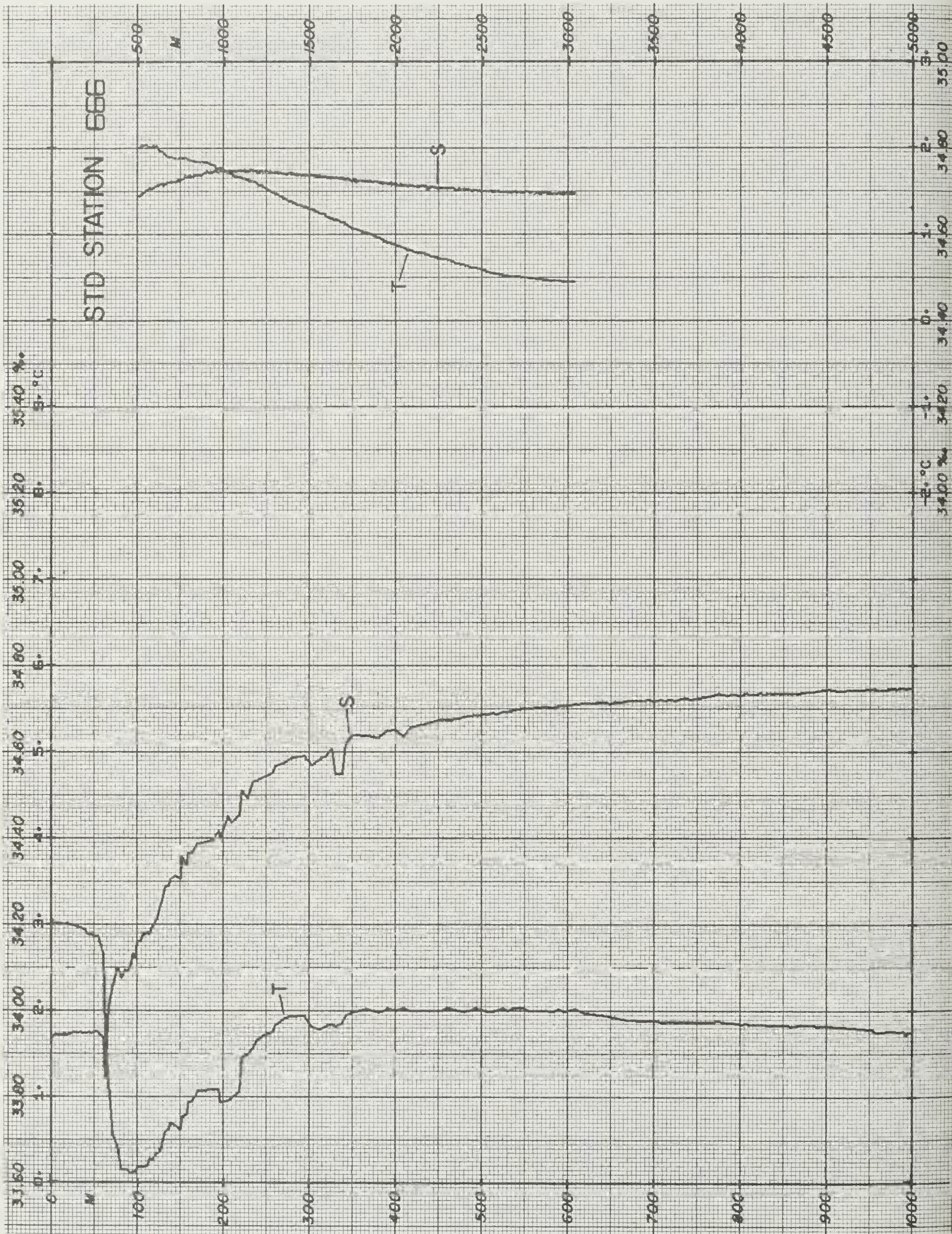
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 663	9FEB1967	9.9	60 0.6S	155 33.5E	536	3147	5	176				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.4	2.4	983.2	3	8	5	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-1</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	2.65	34.015	27.15	92.20	0.000	14598					0	
STD	10	2.66	34.036	27.17	90.66	0.009	14600					16	
STD	20	2.65	34.046	27.18	89.91	0.018	14601					5	
STD	30	2.64	34.047	27.18	89.89	0.027	14603					0	
STD	50	2.64	34.040	27.17	90.51	0.045	14606					0	
STD	75	1.91	34.031	27.23	85.52	0.067	14578					5	
STD	100	0.04	34.145	27.44	65.24	0.086	14499					4	
STD	125	0.09	34.211	27.49	60.41	0.102	14507					0	
STD	150	0.27	34.303	27.55	54.42	0.116	14520					0	
STD	200	1.09	34.406	27.58	51.69	0.143	14567					5	
STD	250	1.61	34.533	27.65	46.06	0.167	14600					5	
STD	300	1.87	34.594	27.68	43.64	0.189	14621					0	
STD	350	1.93	34.622	27.70	42.28	0.211	14632					7	
STD	400	1.94	34.655	27.72	40.13	0.232	14642					6	
STD	450	1.94	34.673	27.74	38.92	0.251	14650					5	
STD	500	1.96	34.687	27.75	38.27	0.271	14659					0	



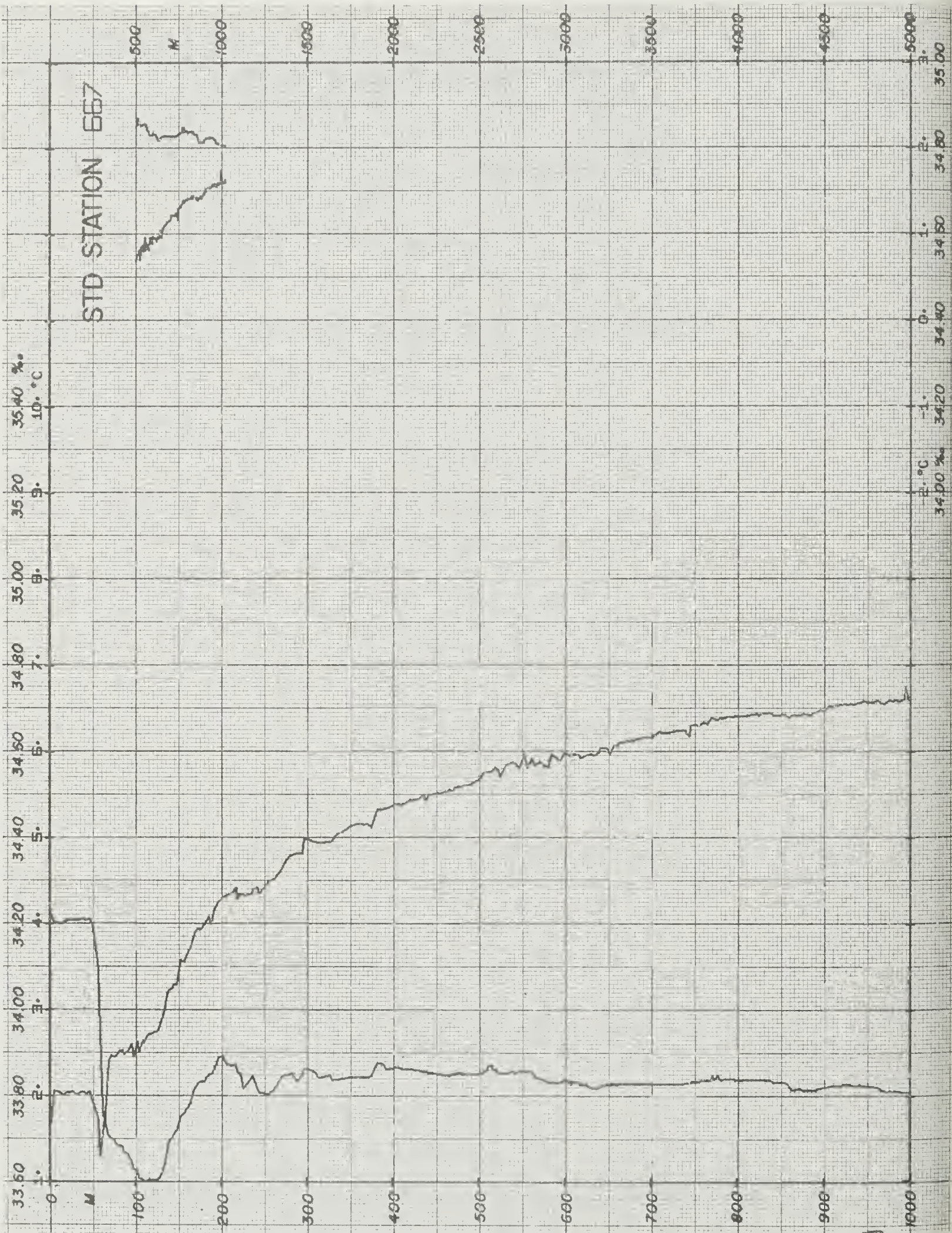
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 664	9FEB1967	11.0	60 0.0S	155 33.2E	536	2932	29	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.0	2.6		2	7	5	5	2					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM c/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	2.74	34.076	27.19			14602	753	175	265	32		
ISL	0	2.74	34.076	27.19	88.29	0.000	14602						
OBS	9	2.75	34.080	27.20			14604	750	185	265	34		
ISL	10	2.75	34.080	27.20	88.13	0.009	14604						
ISL	20	2.75	34.080	27.20	88.18	0.018	14606						
OBS	28	2.74	34.078	27.20			14607	750	169	272	32		
ISL	30	2.76	34.076	27.19	88.66	0.026	14608						
OBS	46	2.75	34.078	27.19			14610	751	181	263	36		
ISL	50	2.64	34.091	27.22	86.56	0.044	14606						
OBS	56	2.37	34.113	27.25			14596	761	181	295	31		
OBS	75	0.68	34.140	27.40			14524	780	199	292	42		
ISL	75	0.68	34.140	27.40	69.13	0.063	14524						
OBS	93	0.07	34.169	27.45			14500	763	196	295	46		
ISL	100	0.05	34.183	27.47	62.40	0.080	14500						
OBS	117	0.18	34.222	27.49			14510	714	197	305	51		
ISL	125	0.20	34.244	27.51	58.47	0.095	14512						
OBS	140	0.23	34.284	27.54			14517	685	216	314	54		
ISL	150	0.27	34.299	27.55	54.73	0.109	14520						
OBS	164	0.37	34.322	27.56			14528	651	213	314	56		
OBS	187	0.75	34.402	27.60			14550	573	230	330	64		
ISL	200	1.01	34.446	27.62	48.19	0.135	14564						
OBS	235	1.66	34.546	27.66			14600	436	243	330	72		
ISL	250	1.78	34.568	27.66	44.67	0.158	14608						
ISL	300	1.97	34.614	27.69	42.95	0.180	14625						
OBS	331	1.93	34.621	27.70			14629	409	223	325	60		
ISL	400	1.99	34.660	27.72	40.09	0.222	14644						
OBS	479	1.98	34.692	27.75			14657	424	223	309	73		
ISL	500	1.97	34.697	27.75	37.62	0.260	14660						
ISL	600	1.92	34.716	27.77	36.23	0.297	14675						
OBS	642	1.89	34.720	27.78			14680	435	213	314	73		
ISL	700	1.86	34.727	27.79	35.30	0.333	14689						
ISL	800	1.81	34.737	27.80	34.53	0.368	14703						
OBS	887	1.76	34.742	27.81			14716	449	212	302	81		
ISL	900	1.75	34.742	27.81	33.95	0.402	14717						
ISL	1000	1.67	34.743	27.81	33.54	0.436	14731						
ISL	1100	1.58	34.744	27.82	32.99	0.469	14744						
OBS	1134	1.55	34.744	27.82			14748	461	209	299	82		
ISL	1200	1.49	34.743	27.83	32.43	0.502	14756						
ISL	1250	1.44	34.744	27.83	32.10	0.518	14763						
ISL	1300	1.39	34.743	27.83	31.82	0.534	14769						
OBS	1380	1.32	34.742	27.84			14779	469	202	292	92		
ISL	1400	1.30	34.741	27.84	31.36	0.566	14782						
ISL	1500	1.22	34.737	27.84	31.12	0.597	14795						
OBS	1626	1.12	34.730	27.84			14812	469	207	299	92		
ISL	1750	1.02	34.725	27.84	30.51	0.674	14828						
OBS	1870	0.93	34.720	27.85			14845	478		307	102		
ISL	2000	0.86	34.717	27.85	29.80	0.749	14864						
ISL	2250	0.73	34.711	27.85	29.14	0.823	14901						
OBS	2366	0.67	34.708	27.85			14918	490	225	308	113		
ISL	2500	0.58	34.704	27.86	28.17	0.895	14937						
OBS	2666	0.47	34.698	27.86			14961	500	204		117		
ISL	2750	0.43	34.695	27.86	27.19	0.964	14974						
OBS	2866	0.39	34.692	27.86			14992	500	239	307	112		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 665	9FEB1967	12.1	59 59.05	155 33.0E	500	2966	29	545				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.6	3.6	978.5	8	8	7	6						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	2.71	34.075	27.19	88.19	0.000	14601					0	
STD	10	2.72	34.072	27.19	88.44	0.009	14603					9	
STD	20	2.72	34.075	27.20	88.30	0.018	14605					0	
STD	30	2.71	34.076	27.20	88.26	0.026	14606					3	
STD	50	2.68	34.073	27.20	88.37	0.044	14608					4	
STD	75	0.47	34.127	27.40	68.90	0.064	14515					4	
STD	100	0.09	34.184	27.47	62.50	0.080	14502					0	
STD	125	0.23	34.263	27.52	57.21	0.095	14514					0	
STD	150	0.32	34.371	27.60	49.56	0.109	14524					4	
STD	200	1.18	34.452	27.61	48.86	0.133	14572					0	
STD	250	1.78	34.569	27.67	44.61	0.157	14608					6	
STD	300	1.96	34.616	27.69	42.72	0.178	14625					6	
STD	350	1.94	34.643	27.71	40.75	0.199	14633					7	
STD	400	1.96	34.668	27.73	39.26	0.219	14643					4	
STD	450	1.98	34.691	27.75	38.00	0.239	14652					5	
STD	500	2.01	34.709	27.76	37.09	0.257	14662					4	
STD	550	1.97	34.713	27.77	36.65	0.276	14668					8	
STD	600	1.93	34.723	27.78	35.73	0.294	14675					8	
STD	650	1.90	34.732	27.79	35.08	0.312	14682					8	
STD	700	1.88	34.737	27.79	34.74	0.329	14690					7	
STD	750	1.85	34.738	27.80	34.57	0.347	14697					8	
STD	800	1.81	34.742	27.80	34.09	0.364	14703					4	
STD	850	1.78	34.748	27.81	33.65	0.381	14711					9	
STD	900	1.75	34.749	27.81	33.51	0.397	14718					10	
STD	950	1.71	34.752	27.82	33.04	0.414	14724					8	
STD	1000	1.67	34.751	27.82	32.89	0.431	14731					0	
STD	1100	1.54	34.744	27.82	32.54	0.463	14742					9	
STD	1200	1.45	34.740	27.83	32.35	0.496	14755					8	
STD	1300	1.37	34.741	27.83	31.69	0.528	14768					5	
STD	1400	1.28	34.739	27.84	31.26	0.559	14781					11	
STD	1500	1.20	34.737	27.84	30.92	0.590	14794					5	
STD	1600	1.13	34.733	27.84	30.69	0.621	14808					0	
STD	1700	1.05	34.728	27.85	30.42	0.652	14821					7	
STD	1800	0.98	34.726	27.85	30.12	0.682	14835					11	
STD	1900	0.93	34.721	27.85	30.02	0.712	14850					9	
STD	2000	0.85	34.719	27.85	29.48	0.742	14863					3	
STD	2100	0.79	34.714	27.85	29.37	0.771	14878					6	
STD	2200	0.74	34.712	27.85	29.09	0.800	14893					13	
STD	2300	0.71	34.711	27.85	28.91	0.829	14908					5	
STD	2400	0.65	34.705	27.85	28.77	0.858	14923					8	
STD	2500	0.58	34.704	27.86	28.23	0.887	14937					0	
STD	2600	0.53	34.701	27.86	27.82	0.915	14952					3	
STD	2700	0.46	34.701	27.86	27.10	0.942	14966					9	
STD	2800	0.42	34.697	27.86	26.93	0.969	14982					11	
STD	2900	0.36	34.693	27.86	26.64	0.996	14997					0	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 666	11FEB1967	2.5	59 1.8S	157 1.2E	500	2949	30	662				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	4.5	2.6	976.6	32	4	32	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ mol/l	NITR 10 <sup>-2</sup> $\mu$ mol/l	SILIC $\mu$ mol/l	INT M	DD
STD	0	3.05	33.936	27.06	101.45	0.000	14614					2	
STD	10	3.01	33.943	27.06	100.61	0.010	14614					4	
STD	20	3.01	33.944	27.06	100.65	0.020	14616					0	
STD	30	2.97	33.947	27.07	100.07	0.030	14615					0	
STD	50	2.87	33.951	27.08	99.08	0.050	14614					4	
STD	75	0.48	34.083	27.36	72.31	0.072	14514					5	
STD	100	0.17	34.160	27.44	64.80	0.089	14506					0	
STD	125	0.34	34.227	27.49	60.59	0.104	14518					4	
STD	150	0.62	34.306	27.53	56.21	0.119	14536					2	
STD	200	0.93	34.416	27.60	49.88	0.145	14560					9	
STD	250	1.72	34.542	27.65	46.19	0.169	14605					9	
STD	300	1.87	34.577	27.67	44.91	0.192	14621					9	
STD	350	1.98	34.635	27.70	41.65	0.214	14634					8	
STD	400	2.01	34.649	27.71	41.07	0.235	14644					10	
STD	450	2.00	34.672	27.73	39.52	0.255	14653					10	
STD	500	2.01	34.685	27.74	38.86	0.274	14661					15	
STD	550	2.02	34.700	27.75	38.05	0.294	14670					7	
STD	600	1.99	34.707	27.76	37.55	0.312	14678					13	
STD	650	1.93	34.710	27.77	36.97	0.331	14683					6	
STD	700	1.88	34.718	27.78	36.16	0.349	14689					7	
STD	750	1.87	34.723	27.78	35.87	0.367	14697					26	
STD	800	1.85	34.731	27.79	35.32	0.385	14705					13	
STD	850	1.83	34.733	27.79	35.20	0.403	14713					16	
STD	900	1.82	34.743	27.80	34.59	0.420	14721					7	
STD	950	1.78	34.743	27.80	34.41	0.438	14727					12	
STD	1000	1.73	34.744	27.81	34.04	0.455	14733					3	
STD	1100	1.65	34.746	27.82	33.49	0.488	14747					4	
STD	1200	1.57	34.742	27.82	33.32	0.522	14760					7	
STD	1300	1.46	34.741	27.83	32.66	0.555	14772					0	
STD	1400	1.37	34.739	27.83	32.18	0.587	14785					4	
STD	1500	1.28	34.732	27.83	32.12	0.619	14798					3	
STD	1600	1.20	34.730	27.84	31.59	0.651	14811					0	
STD	1700	1.13	34.726	27.84	31.39	0.683	14825					0	
STD	1800	1.03	34.722	27.84	30.88	0.714	14837					5	
STD	1900	0.95	34.720	27.85	30.36	0.744	14851					0	
STD	2000	0.87	34.714	27.85	30.10	0.775	14864					33	
STD	2100	0.79	34.710	27.85	29.75	0.805	14878					3	
STD	2200	0.74	34.709	27.85	29.28	0.834	14892					0	
STD	2300	0.70	34.703	27.85	29.38	0.863	14908					0	
STD	2400	0.63	34.701	27.85	28.91	0.893	14922					8	
STD	2500	0.58	34.698	27.85	28.63	0.921	14937					10	
STD	2600	0.52	34.697	27.85	28.05	0.950	14952					3	
STD	2700	0.50	34.695	27.85	28.02	0.978	14968					4	
STD	2800	0.48	34.694	27.85	27.91	1.006	14984					7	
STD	2900	0.45	34.691	27.85	27.83	1.034	15001					5	
STD	3000	0.44	34.692	27.85	27.68	1.061	15017					3	

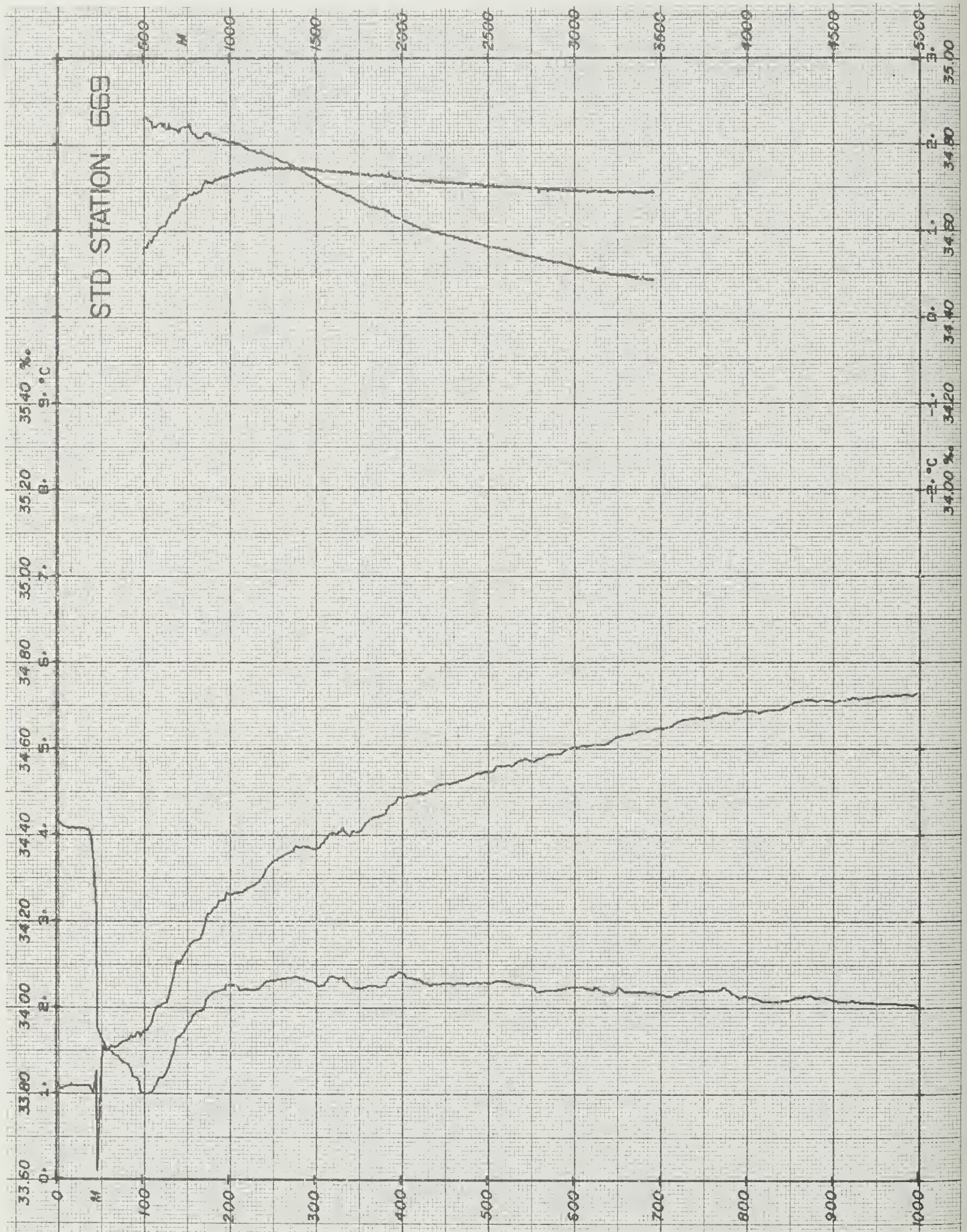




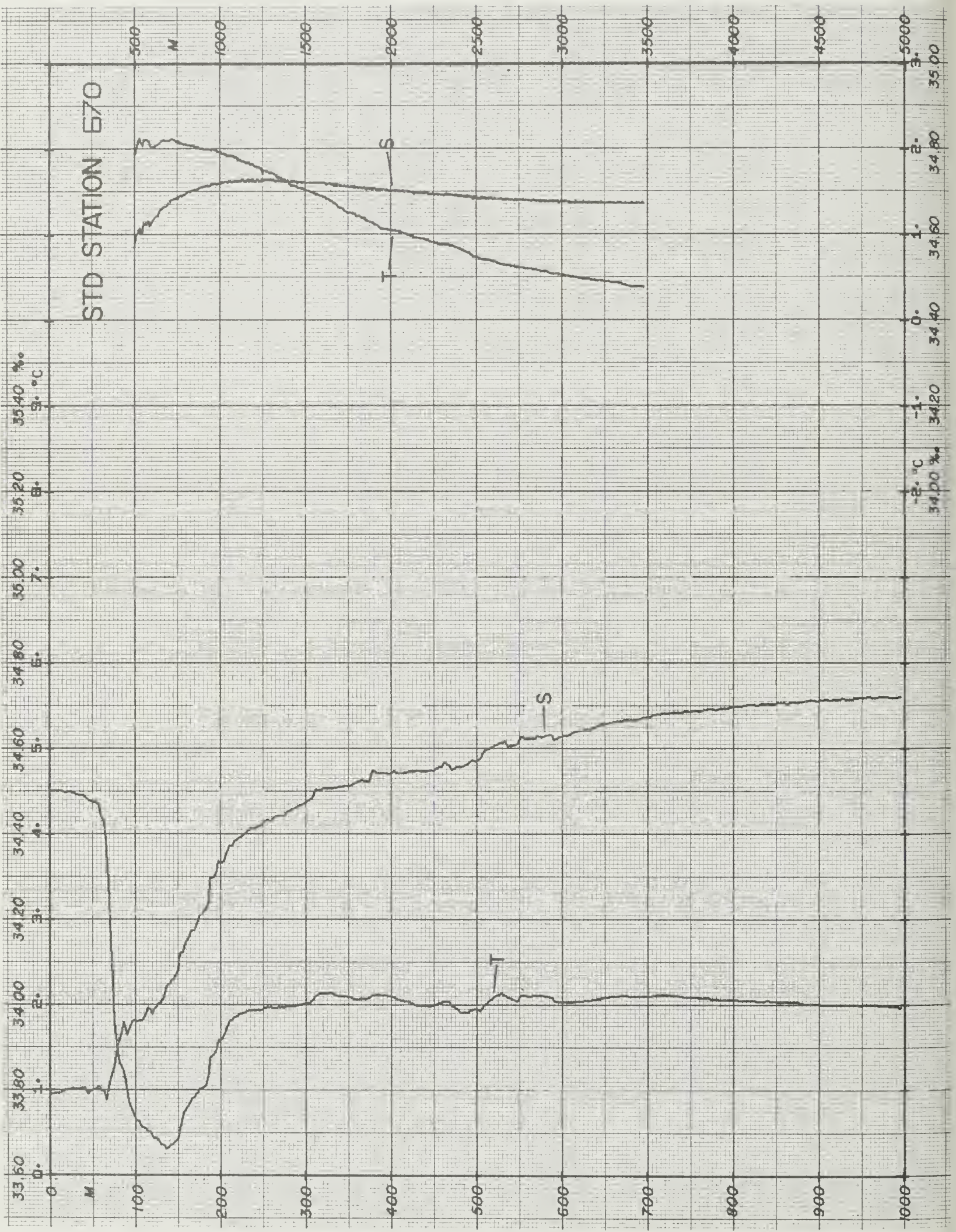
SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 667	11FEB1967	22.3	57 56.5S	153 56.0E	500	3438	10	310				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.7	2.5	974.4	26	2	21	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gal/l	NITR 10 <sup>-2</sup> $\mu$ gal/l	SILIC $\mu$ gal/l	INT M	DD
STD	0	4.10	33.736	26.79	126.16	0.000	14656					2	
STD	10	4.01	33.808	26.86	119.94	0.012	14654					3	
STD	20	4.04	33.807	26.86	120.43	0.024	14658					0	
STD	30	4.04	33.805	26.85	120.69	0.036	14659					0	
STD	50	4.00	33.785	26.84	121.91	0.061	14661					0	
STD	75	1.49	33.889	27.14	93.29	0.088	14557					0	
STD	100	1.13	33.905	27.18	89.78	0.110	14546					5	
STD	125	1.03	33.951	27.22	85.65	0.132	14546					3	
STD	150	1.66	34.081	27.28	80.13	0.153	14580					5	
STD	200	2.46	34.255	27.36	73.52	0.191	14625					5	
STD	250	2.02	34.283	27.42	68.06	0.227	14615					11	
STD	300	2.31	34.397	27.49	62.12	0.259	14637					6	
STD	350	2.22	34.425	27.52	59.47	0.290	14642					0	
STD	400	2.32	34.474	27.55	56.97	0.319	14656					10	
STD	450	2.26	34.502	27.57	54.59	0.347	14662					8	
STD	500	2.25	34.535	27.60	52.29	0.374	14670					3	
STD	550	2.28	34.576	27.63	49.65	0.399	14680					6	
STD	600	2.18	34.596	27.66	47.51	0.423	14684					0	
STD	650	2.13	34.599	27.66	47.07	0.447	14690					4	
STD	700	2.14	34.633	27.69	44.93	0.470	14700					5	
STD	750	2.17	34.661	27.71	43.27	0.492	14710					3	
STD	800	2.18	34.682	27.72	42.13	0.513	14719					4	
STD	850	2.16	34.685	27.73	41.95	0.534	14726					5	
STD	900	2.10	34.694	27.74	40.86	0.555	14732					6	
STD	950	2.12	34.716	27.76	39.66	0.575	14741					0	
STD	1000	2.04	34.718	27.76	38.97	0.595	14746					4	



SHIP CRUS	STATION		DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL			
EL 27	SER 668		11FEB1967	23.4	57 56.55	153 55.0E	500	3480	34	24			
	AIR TEMP		DEW PT	BAROM		WIND DIR	FORCE	SEA DIR	ST	SPEC OBS			
	3.8		2.5			30	2	26	2	2			
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-1</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	4.09	33.835	26.87			14657	726	160	262	7		
ISL	0	4.09	33.835	26.87	118.62	0.000	14657						
OBS	10	4.11	33.829	26.87			14659	726	152	257	9		
ISL	10	4.11	33.829	26.87	119.35	0.012	14659						
ISL	20	4.10	33.828	26.87	119.37	0.024	14660						
OBS	29	4.06	33.830	26.87			14660	725	157	260	12		
ISL	30	4.12	33.828	26.87	119.71	0.036	14663						
OBS	49	3.90	33.836	26.89			14657	731	161	270	13		
ISL	50	3.69	33.843	26.92	114.56	0.059	14648						
OBS	58	1.95	33.899	27.12			14575	750	232	286	16		
ISL	75	1.28	33.928	27.19	88.97	0.085	14548						
OBS	78	1.37	33.927	27.18			14553	743	189	290	27		
OBS	98	1.11	33.947	27.21			14545	737	177	321	30		
ISL	100	1.10	33.949	27.22	86.22	0.107	14545						
OBS	122	1.11	33.981	27.24			14549	717	188	237	31		
ISL	125	1.15	33.989	27.25	83.57	0.128	14552						
OBS	146	1.55	34.063	27.28			14574	652	200	301	34		
ISL	150	1.64	34.083	27.29	79.87	0.148	14579						
OBS	171	2.10	34.189	27.34			14604	558	213	320	45		
OBS	195	2.44	34.265	27.37			14624	506	222	340	46		
ISL	200	2.42	34.271	27.38	72.03	0.186	14624						
OBS	244	1.98	34.288	27.43			14612	492	226	348	65		
ISL	250	1.97	34.295	27.43	66.81	0.221	14613						
ISL	300	2.03	34.356	27.48	62.82	0.253	14624						
OBS	342	2.21	34.415	27.51			14640	445	262	368	66		
ISL	400	2.27	34.472	27.55	56.61	0.313	14653						
OBS	489	2.29	34.542	27.60			14670	411	221	354	69		
ISL	500	2.29	34.550	27.61	51.48	0.367	14672						
ISL	600	2.28	34.610	27.66	47.45	0.417	14689						
ISL	700	2.25	34.656	27.70	44.21	0.462	14705						
OBS	783	2.20	34.683	27.72			14717	422	222	308	83		
ISL	800	2.19	34.687	27.73	41.78	0.505	14719						
ISL	900	2.11	34.708	27.75	40.01	0.546	14733						
ISL	1000	2.03	34.721	27.77	38.72	0.586	14746						
OBS	1027	2.01	34.723	27.77			14750	434	229	258	85		
ISL	1100	1.97	34.732	27.78	37.75	0.624	14761						
ISL	1200	1.91	34.741	27.79	36.93	0.661	14775						
ISL	1250	1.88	34.744	27.80	36.60	0.680	14782						
OBS	1272	1.87	34.745	27.80			14785	449	222	317	85		
ISL	1300	1.84	34.745	27.80	36.30	0.698	14789						
ISL	1400	1.74	34.744	27.81	35.66	0.734	14801						
ISL	1500	1.63	34.745	27.82	34.83	0.769	14813						
OBS	1517	1.61	34.744	27.82			14815	462	204	315	98		
OBS	1744	1.36	34.736	27.83			14842	466	216	347	105		
ISL	1750	1.35	34.736	27.83	33.29	0.854	14843						
ISL	2000	1.12	34.724	27.84	32.20	0.936	14875						
OBS	2011	1.11	34.723	27.84			14877	473	209	326	110		
ISL	2250	0.92	34.715	27.84	31.08	1.015	14909						
OBS	2257	0.92	34.715	27.84			14910	476	211	339	112		
ISL	2500	0.79	34.708	27.85	30.41	1.092	14946						
OBS	2505	0.79	34.708	27.85			14947	485	202	342	114		
ISL	2750	0.67	34.701	27.85	29.76	1.167	14984						
ISL	3000	0.56	34.694	27.85	29.09	1.241	15023						
OBS	3002	0.56	34.694	27.85			15023	499	222	326	122		
ISL	3250	0.47	34.690	27.85	28.43	1.313	15062						
OBS	3397	0.43	34.688	27.85			15086	507	191	324	139		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 669	12FEB1967	0.8	57 56.5S	153 53.5E	500	3524	35	787				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	3.6	1.9	976.9	26	1	28	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	4.17	33.815	26.85	120.86	0.000	14660					0	
STD	10	4.09	33.815	26.86	120.23	0.012	14658					5	
STD	20	4.08	33.818	26.86	119.99	0.024	14659					4	
STD	30	4.07	33.818	26.86	119.96	0.036	14660					0	
STD	50	1.72	33.716	26.99	107.95	0.059	14561					6	
STD	75	1.39	33.916	27.17	90.65	0.084	14553					5	
STD	100	1.01	33.937	27.21	86.58	0.106	14540					3	
STD	125	1.18	34.008	27.26	82.34	0.127	14553					0	
STD	150	1.73	34.121	27.31	77.62	0.147	14583					3	
STD	200	2.26	34.264	27.38	71.18	0.184	14617					6	
STD	250	2.31	34.332	27.43	66.77	0.219	14628					8	
STD	300	2.29	34.367	27.46	64.21	0.251	14636					0	
STD	350	2.22	34.406	27.50	60.87	0.283	14642					0	
STD	400	2.40	34.487	27.55	56.67	0.312	14659					5	
STD	450	2.28	34.518	27.59	53.50	0.340	14663					0	
STD	500	2.29	34.547	27.61	51.69	0.366	14672					5	
STD	550	2.26	34.573	27.63	49.72	0.391	14679					6	
STD	600	2.24	34.603	27.66	47.56	0.416	14687					0	
STD	650	2.19	34.626	27.68	45.59	0.439	14693					4	
STD	700	2.16	34.648	27.70	43.96	0.461	14701					0	
STD	750	2.20	34.671	27.71	42.81	0.483	14711					6	
STD	800	2.12	34.688	27.73	41.13	0.504	14716					6	
STD	850	2.09	34.701	27.75	40.07	0.524	14723					6	
STD	900	2.09	34.710	27.75	39.65	0.544	14732					6	
STD	950	2.06	34.721	27.77	38.72	0.564	14739					4	
STD	1000	2.02	34.728	27.77	38.08	0.583	14746					4	
STD	1100	1.95	34.737	27.79	37.15	0.621	14760					5	
STD	1200	1.90	34.743	27.80	36.58	0.657	14774					3	
STD	1300	1.81	34.743	27.80	36.06	0.694	14787					5	
STD	1400	1.72	34.743	27.81	35.49	0.730	14800					0	
STD	1500	1.61	34.740	27.82	34.96	0.765	14812					0	
STD	1600	1.49	34.737	27.82	34.23	0.799	14824					3	
STD	1700	1.40	34.734	27.83	33.79	0.833	14837					5	
STD	1800	1.30	34.728	27.83	33.41	0.867	14849					6	
STD	1900	1.24	34.726	27.83	33.15	0.900	14864					4	
STD	2000	1.14	34.721	27.83	32.54	0.933	14876					6	
STD	2100	1.04	34.717	27.84	32.00	0.965	14889					4	
STD	2200	0.98	34.713	27.84	31.82	0.997	14903					8	
STD	2300	0.93	34.712	27.84	31.50	1.029	14918					13	
STD	2400	0.88	34.708	27.84	31.31	1.060	14933					6	
STD	2500	0.82	34.704	27.84	31.04	1.091	14948					5	
STD	2600	0.78	34.702	27.84	30.89	1.122	14963					5	
STD	2700	0.73	34.700	27.84	30.47	1.153	14978					6	
STD	2800	0.68	34.696	27.84	30.22	1.183	14993					0	
STD	2900	0.63	34.694	27.84	29.88	1.214	15008					6	
STD	3000	0.59	34.692	27.85	29.60	1.243	15024					6	
STD	3100	0.53	34.691	27.85	29.02	1.273	15039					0	
STD	3200	0.51	34.689	27.85	28.85	1.301	15055					4	
STD	3300	0.48	34.689	27.85	28.57	1.330	15071					4	
STD	3400	0.44	34.688	27.85	28.19	1.359	15087					0	

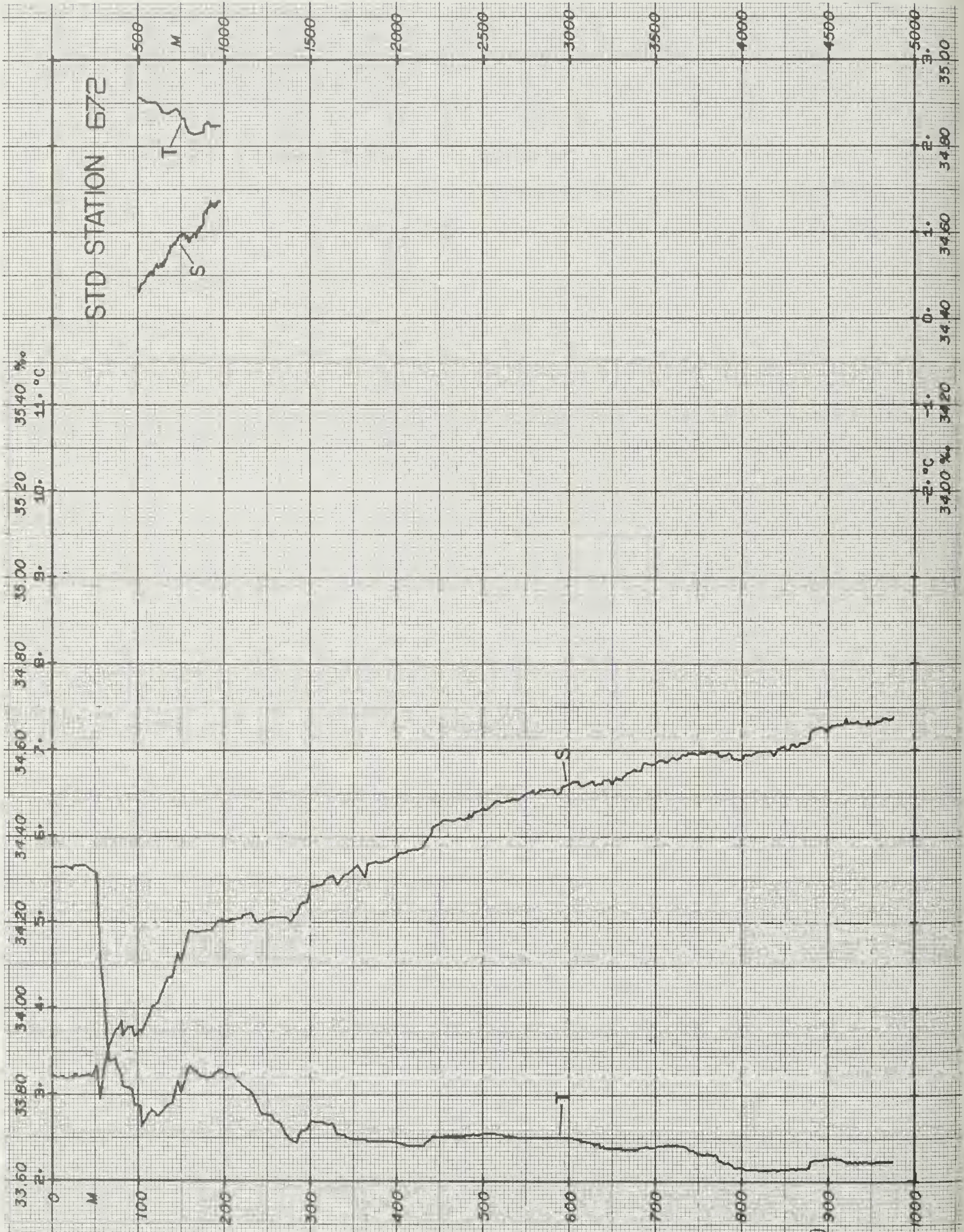


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 670	13FEB1967	10.5	57 0.0S	153 15.0E	500	3467	35	826				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	5.7	5.7	984.6	6	5	34	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	4.53	33.780	26.78	127.18	0.000	14674					0	
STD	10	4.50	33.791	26.80	126.08	0.013	14675					4	
STD	20	4.49	33.800	26.80	125.44	0.025	14676					3	
STD	30	4.47	33.801	26.81	125.25	0.038	14677					0	
STD	50	4.37	33.798	26.81	124.68	0.063	14676					4	
STD	75	2.04	33.848	27.07	100.35	0.091	14581					6	
STD	100	0.68	33.965	27.26	82.48	0.114	14526					0	
STD	125	0.42	33.995	27.30	78.66	0.134	14519					5	
STD	150	0.42	34.078	27.36	72.34	0.153	14524					5	
STD	200	1.58	34.334	27.49	60.62	0.186	14588					4	
STD	250	1.94	34.422	27.54	56.93	0.215	14613					3	
STD	300	2.01	34.473	27.57	53.92	0.243	14625					0	
STD	350	2.10	34.513	27.60	51.85	0.270	14638					4	
STD	400	2.10	34.540	27.62	50.05	0.295	14647					0	
STD	450	1.99	34.547	27.63	48.78	0.320	14650					6	
STD	500	1.95	34.571	27.65	46.89	0.344	14657					6	
STD	550	2.06	34.614	27.68	44.87	0.367	14671					4	
STD	600	2.03	34.627	27.69	43.82	0.389	14678					5	
STD	650	2.08	34.656	27.71	42.38	0.410	14689					6	
STD	700	2.10	34.673	27.72	41.50	0.431	14698					7	
STD	750	2.09	34.685	27.73	40.74	0.452	14706					0	
STD	800	2.06	34.697	27.75	39.85	0.472	14714					5	
STD	850	2.04	34.705	27.75	39.28	0.492	14721					6	
STD	900	2.01	34.709	27.76	38.88	0.511	14728					0	
STD	950	1.99	34.717	27.77	38.37	0.531	14736					5	
STD	1000	1.97	34.722	27.77	38.06	0.550	14744					4	
STD	1100	1.90	34.727	27.78	37.36	0.587	14757					0	
STD	1200	1.82	34.727	27.79	36.97	0.625	14771					3	
STD	1300	1.73	34.729	27.80	36.29	0.661	14783					5	
STD	1400	1.63	34.725	27.80	35.87	0.697	14796					4	
STD	1500	1.53	34.724	27.81	35.31	0.733	14809					4	
STD	1600	1.46	34.722	27.81	34.98	0.768	14822				114		
STD	1700	1.33	34.717	27.82	34.28	0.803	14834					6	
STD	1800	1.23	34.711	27.82	33.94	0.837	14846					0	
STD	1900	1.14	34.707	27.82	33.39	0.870	14859					0	
STD	2000	1.06	34.704	27.82	32.98	0.904	14872					4	
STD	2100	1.01	34.701	27.83	32.76	0.937	14887					4	
STD	2200	0.95	34.698	27.83	32.53	0.969	14902					4	
STD	2300	0.89	34.694	27.83	32.33	1.002	14916					5	
STD	2400	0.85	34.692	27.83	32.13	1.034	14932					3	
STD	2500	0.75	34.687	27.83	31.42	1.066	14944					0	
STD	2600	0.70	34.686	27.83	31.02	1.097	14959					3	
STD	2700	0.65	34.682	27.83	30.76	1.128	14974					5	
STD	2800	0.61	34.682	27.84	30.44	1.158	14990					6	
STD	2900	0.58	34.679	27.84	30.29	1.189	15006					6	
STD	3000	0.54	34.677	27.84	29.97	1.219	15021					6	
STD	3100	0.50	34.676	27.84	29.71	1.249	15037					12	
STD	3200	0.48	34.677	27.84	29.39	1.278	15054					6	
STD	3300	0.45	34.675	27.84	29.24	1.307	15070					13	
STD	3400	0.41	34.674	27.84	28.78	1.337	15086					0	





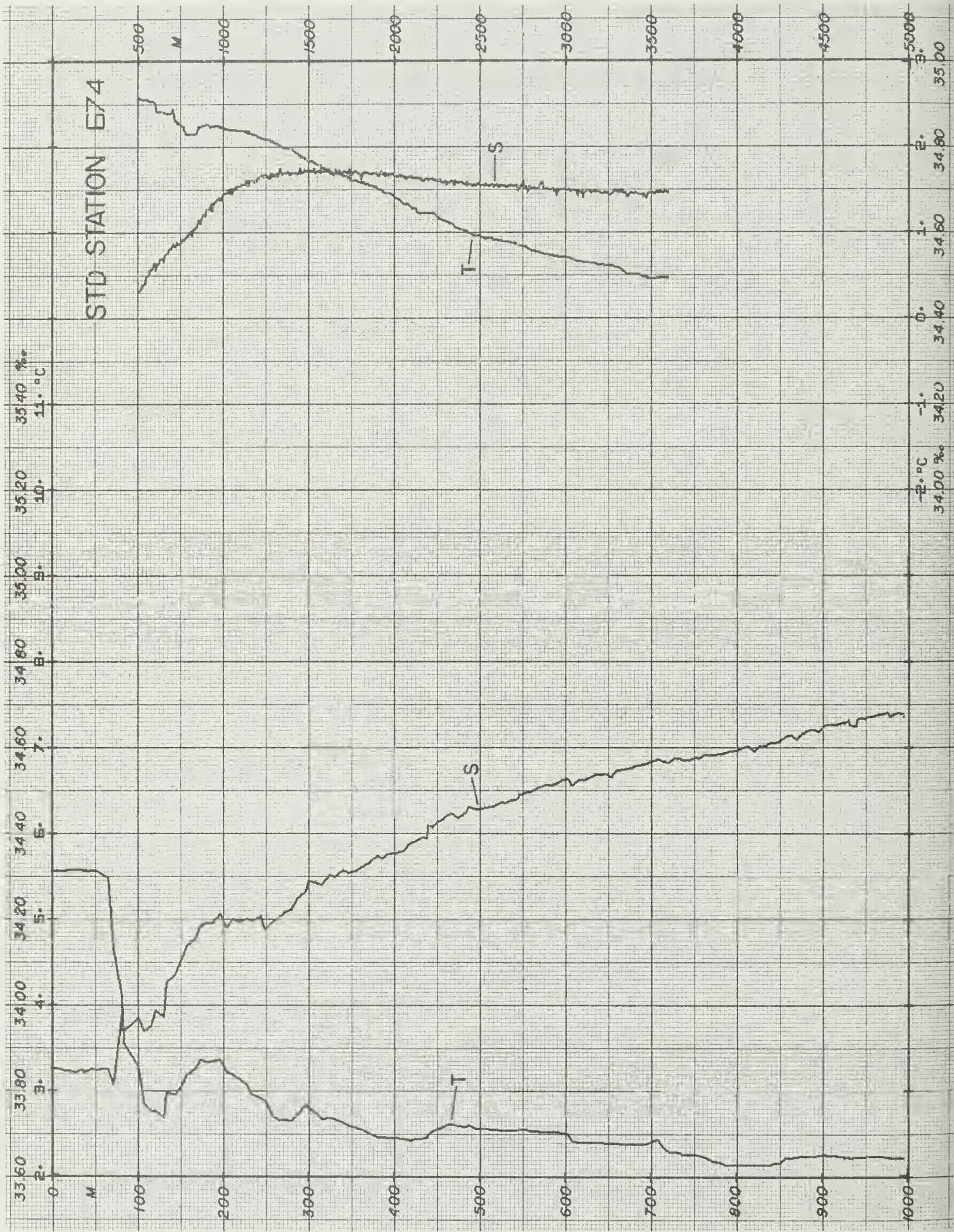
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 671	13FEB1967	11.9	57 0.6S	153 14.9E	500	3482	9	15				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	5.8	5.2		5	4	4	3		0				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
ISL	0	4.57	33.822	26.81	124.42	0.000	14677						
OBS	2	4.57	33.822	26.81			14677	727					
ISL	10	4.59	33.822	26.81	124.71	0.012	14679						
OBS	12	4.59	33.822	26.81			14679	726					
ISL	20	4.58	33.822	26.81	124.74	0.025	14680						
OBS	21	4.58	33.822	26.81			14681	730					
ISL	30	4.55	33.824	26.82	124.32	0.037	14681						
OBS	31	4.54	33.824	26.82			14681	730					
OBS	40	4.48	33.824	26.82			14679	731					
OBS	50	4.41	33.824	26.83			14678	731					
ISL	50	4.41	33.824	26.83	123.10	0.062	14678						
OBS	59	4.39	33.822	26.83			14679	731					
ISL	75	3.26	33.861	26.98	109.45	0.091	14634						
OBS	78	2.96	33.872	27.01			14622	765					
OBS	97	1.16	33.938	27.20			14547	782					
ISL	100	1.01	33.944	27.22	85.98	0.116	14540						
ISL	125	0.26	33.999	27.31	77.42	0.136	14511						
OBS	144	0.33	34.043	27.34			14519	750					
ISL	150	0.39	34.068	27.36	72.95	0.155	14523						
OBS	190	1.10	34.244	27.45			14564	560					
ISL	200	1.23	34.276	27.47	62.50	0.189	14571						
ISL	250	1.74	34.408	27.54	56.40	0.218	14604						
ISL	300	2.04	34.495	27.59	52.51	0.246	14627						
OBS	328	2.12	34.523	27.60			14635	411					
ISL	400	2.09	34.572	27.64	47.52	0.296	14647						
OBS	466	1.94	34.592	27.67			14651	423					
ISL	500	1.96	34.610	27.68	44.03	0.341	14658						
ISL	600	2.02	34.657	27.72	41.50	0.384	14678						
OBS	698	2.11	34.696	27.74			14699	428					
ISL	700	2.11	34.696	27.74	39.87	0.425	14699						
ISL	800	2.09	34.720	27.76	38.47	0.464	14715						
ISL	900	2.02	34.730	27.78	37.52	0.502	14729						
OBS	932	1.99	34.730	27.78			14733	443					



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 672	17FEB1967	18.6	56 10.4S	152 8.4E	500	3370	10	256				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.1	3.1	991.8	23	7	25	6						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 <sup>-2</sup> $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DD
STD	0	5.63	33.844	26.71	134.33	0.000	14720					0	
STD	10	5.63	33.838	26.70	134.92	0.013	14722					6	
STD	20	5.62	33.838	26.70	134.98	0.027	14723					7	
STD	30	5.64	33.839	26.70	135.22	0.040	14726					0	
STD	50	5.57	33.857	26.73	133.31	0.067	14726					6	
STD	75	3.36	33.949	27.04	103.72	0.097	14640					2	
STD	100	2.86	33.944	27.08	99.87	0.122	14622					7	
STD	125	2.77	34.023	27.15	93.24	0.147	14623					5	
STD	150	3.02	34.106	27.19	89.38	0.169	14640					0	
STD	200	3.26	34.203	27.25	84.59	0.213	14659					6	
STD	250	2.77	34.207	27.30	80.11	0.254	14646					8	
STD	300	2.66	34.271	27.36	74.64	0.293	14651					4	
STD	350	2.49	34.322	27.41	69.51	0.329	14652					9	
STD	400	2.45	34.351	27.44	67.31	0.363	14659					0	
STD	450	2.51	34.424	27.49	62.34	0.395	14671					0	
STD	500	2.55	34.463	27.52	60.75	0.426	14682					0	
STD	550	2.50	34.497	27.55	57.64	0.456	14689					4	
STD	600	2.50	34.518	27.57	57.39	0.484	14697					2	
STD	650	2.38	34.521	27.58	55.22	0.512	14700					0	
STD	700	2.40	34.567	27.61	52.25	0.539	14710					5	
STD	750	2.32	34.590	27.64	50.05	0.564	14715					3	
STD	800	2.16	34.577	27.64	49.69	0.589	14716					3	
STD	850	2.14	34.604	27.67	47.74	0.614	14724					0	
STD	900	2.26	34.646	27.69	46.11	0.637	14738					3	
STD	950	2.22	34.659	27.70	44.96	0.660	14755					4	

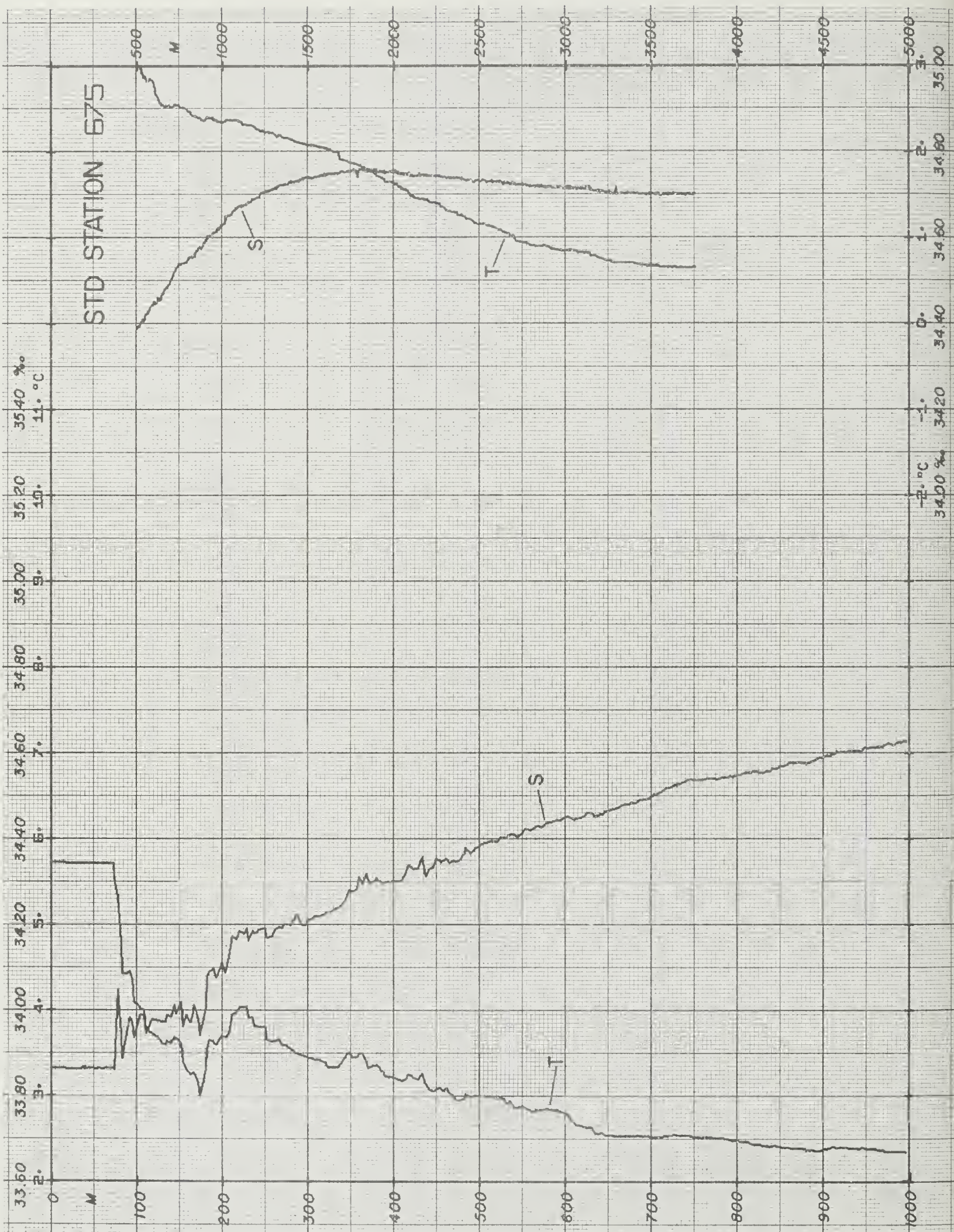


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 673	17FEB1967	19.5	56 10.9S	152 8.8E	500	3073	30	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.2	3.0		24	6	24	4	2					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
OBS	0	5.61	33.872	26.73			14720	704	136	173	10		
ISL	0	5.61	33.872	26.73	132.03	0.000	14720						
OBS	10	5.62	33.866	26.73			14722	701	137	231	14		
ISL	10	5.62	33.866	26.73	132.71	0.013	14722						
ISL	20	5.62	33.864	26.73	132.95	0.027	14724						
OBS	30	5.61	33.865	26.73			14725	698	128	256	16		
ISL	30	5.61	33.865	26.73	132.91	0.040	14725						
OBS	50	5.56	33.866	26.73			14726	702	143	242	13		
ISL	50	5.56	33.866	26.73	132.50	0.066	14726						
OBS	59	5.30	33.876	26.77			14717	707	146	260	9		
ISL	75	3.74	33.957	27.01	106.74	0.096	14656						
OBS	78	3.44	33.972	27.05			14644	705	168	282	19		
OBS	97	3.07	33.974	27.08			14631	707	178	206	23		
ISL	100	3.04	33.980	27.09	98.69	0.122	14630						
OBS	121	3.01	34.044	27.14			14633	668	177	278	28		
ISL	125	3.04	34.058	27.15	92.98	0.146	14636						
OBS	144	3.24	34.129	27.19			14648	610	177	288	30		
ISL	150	3.30	34.154	27.21	88.23	0.169	14652						
OBS	166	3.40	34.208	27.24			14660	560	184	329	36		
OBS	187	3.36	34.214	27.25			14662	556	199	324	36		
ISL	200	3.23	34.214	27.26	83.47	0.211	14658						
OBS	233	2.85	34.218	27.30			14647	548	207	328	45		
ISL	250	2.77	34.231	27.32	78.30	0.252	14647						
ISL	300	2.64	34.280	27.37	73.78	0.290	14650						
OBS	327	2.65	34.314	27.39			14656	485	221	323	53		
ISL	400	2.59	34.389	27.46	65.74	0.360	14666						
OBS	472	2.57	34.458	27.51			14678	430	202	340	73		
ISL	500	2.55	34.479	27.53	59.16	0.422	14682						
ISL	600	2.46	34.545	27.59	54.03	0.479	14696						
ISL	700	2.39	34.598	27.64	49.86	0.531	14710						
ISL	800	2.31	34.638	27.68	46.66	0.579	14724						
ISL	900	2.24	34.665	27.71	44.41	0.624	14738						
OBS	925	2.22	34.670	27.71			14741	418	224	336	88		
ISL	1000	2.20	34.688	27.73	42.81	0.668	14753						
ISL	1100	2.16	34.707	27.75	41.56	0.710	14769						
OBS	1141	2.15	34.713	27.75			14775	431	208	316	90		
ISL	1200	2.12	34.723	27.76	40.40	0.751	14784						
ISL	1250	2.09	34.730	27.77	39.77	0.771	14791						
OBS	1264	2.08	34.732	27.77			14793	440	205	337	86		
ISL	1300	2.04	34.737	27.78	39.02	0.791	14797						
ISL	1400	1.93	34.745	27.79	37.61	0.829	14809						
OBS	1467	1.85	34.748	27.80			14817	450	207	297	89		
ISL	1500	1.82	34.746	27.80	36.74	0.867	14821						
OBS	1669	1.67	34.736	27.81			14843	458	186		86		
ISL	1750	1.60	34.739	27.82	35.77	0.957	14854						
OBS	1865	1.50	34.744	27.83			14869	470	211	321	101		
ISL	2000	1.37	34.738	27.83	33.97	1.044	14886						
OBS	2073	1.30	34.734	27.83			14896	470	206	318	105		
ISL	2250	1.15	34.728	27.84	32.77	1.128	14919						
OBS	2263	1.14	34.728	27.84			14921	477	213	339	118		
ISL	2500	1.00	34.720	27.84	32.02	1.209	14956						
ISL	2750	0.82	34.712	27.85	30.76	1.287	14991						
OBS	2990	0.70	34.704	27.85			15027	496	222	303	125		



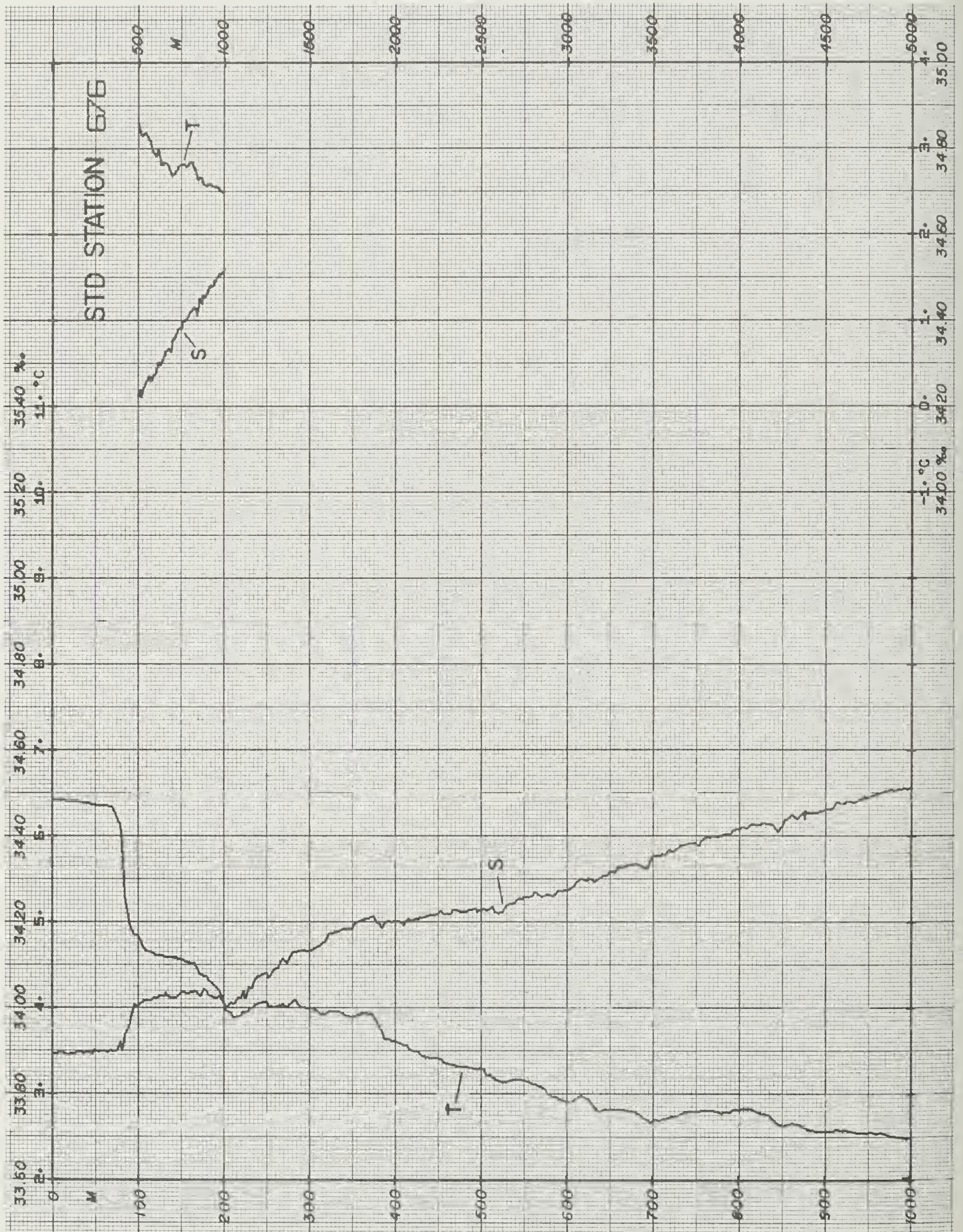
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 674	17FEB1967	20.9	56 11.4S	152 9.4E	500	3450	36	707				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	4.7	7.8	0.0	24	6	25	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	5.56	33.852	26.72	133.01	0.000	14718					0	
STD	10	5.56	33.840	26.72	133.32	0.013	14720					9	
STD	20	5.57	33.845	26.72	133.70	0.027	14721					0	
STD	30	5.57	33.844	26.72	133.99	0.040	14723					^	
STD	50	5.56	33.848	26.72	133.80	0.067	14726					5	
STD	75	4.49	33.865	26.85	121.16	0.094	14686					10	
STD	100	3.71	33.967	27.06	102.05	0.127	14642					7	
STD	125	2.73	33.980	27.12	96.17	0.151	14621					10	
STD	150	3.03	34.099	27.19	90.02	0.175	14640					0	
STD	200	3.31	34.200	27.24	85.31	0.218	14661					8	
STD	250	2.88	34.176	27.26	83.45	0.261	14651					0	
STD	300	2.81	34.282	27.35	75.16	0.300	14657					3	
STD	350	2.58	34.309	27.30	71.41	0.337	14656					8	
STD	400	2.45	34.354	27.44	67.08	0.372	14659					8	
STD	450	2.55	34.424	27.49	63.04	0.404	14673					7	
STD	500	2.56	34.456	27.51	61.02	0.435	14682					9	
STD	550	2.55	34.491	27.54	58.53	0.465	14691					8	
STD	600	2.51	34.524	27.57	55.94	0.494	14697					7	
STD	650	2.39	34.536	27.59	54.26	0.521	14701					6	
STD	700	2.40	34.565	27.61	52.43	0.548	14710					6	
STD	750	2.26	34.574	27.63	50.60	0.574	14712					8	
STD	800	2.14	34.591	27.66	48.42	0.598	14716					9	
STD	850	2.16	34.614	27.67	47.22	0.622	14725					6	
STD	900	2.25	34.643	27.69	46.22	0.646	14738					7	
STD	950	2.23	34.664	27.71	44.64	0.668	14746					0	
STD	1000	2.22	34.681	27.72	43.58	0.690	14754					6	
STD	1100	2.18	34.707	27.74	41.72	0.733	14769					4	
STD	1200	2.12	34.719	27.76	40.60	0.774	14783					7	
STD	1300	2.05	34.734	27.78	39.22	0.814	14797					0	
STD	1400	1.97	34.736	27.78	38.75	0.853	14811					12	
STD	1500	1.83	34.742	27.80	37.19	0.891	14822					5	
STD	1600	1.74	34.743	27.81	36.49	0.928	14835					0	
STD	1700	1.66	34.736	27.81	36.48	0.964	14848					0	
STD	1800	1.58	34.736	27.81	35.95	1.001	14862					8	
STD	1900	1.52	34.737	27.82	35.47	1.036	14876					5	
STD	2000	1.43	34.734	27.82	34.90	1.072	14889					7	
STD	2100	1.30	34.726	27.83	34.26	1.106	14900					4	
STD	2200	1.22	34.722	27.83	33.98	1.140	14914					8	
STD	2300	1.13	34.719	27.83	33.29	1.174	14927					0	
STD	2400	1.03	34.714	27.83	32.73	1.207	14940					0	
STD	2500	0.96	34.711	27.84	32.26	1.239	14954					9	
STD	2600	0.91	34.710	27.84	31.83	1.271	14969					3	
STD	2700	0.87	34.708	27.84	31.72	1.303	14985					8	
STD	2800	0.79	34.700	27.84	31.32	1.335	14998					7	
STD	2900	0.74	34.700	27.84	30.86	1.366	15013					3	
STD	3000	0.71	34.698	27.84	30.68	1.397	15029					9	
STD	3100	0.66	34.694	27.84	30.47	1.427	15044					6	
STD	3200	0.62	34.693	27.84	30.10	1.457	15060					0	
STD	3300	0.59	34.697	27.85	29.58	1.487	15077					6	
STD	3400	0.51	34.690	27.85	29.01	1.517	15090					0	
STD	3500	0.46	34.690	27.85	28.33	1.545	15106					6	
STD	3600	0.47	34.692	27.85	28.41	1.574	15124					6	

STD STATION 675





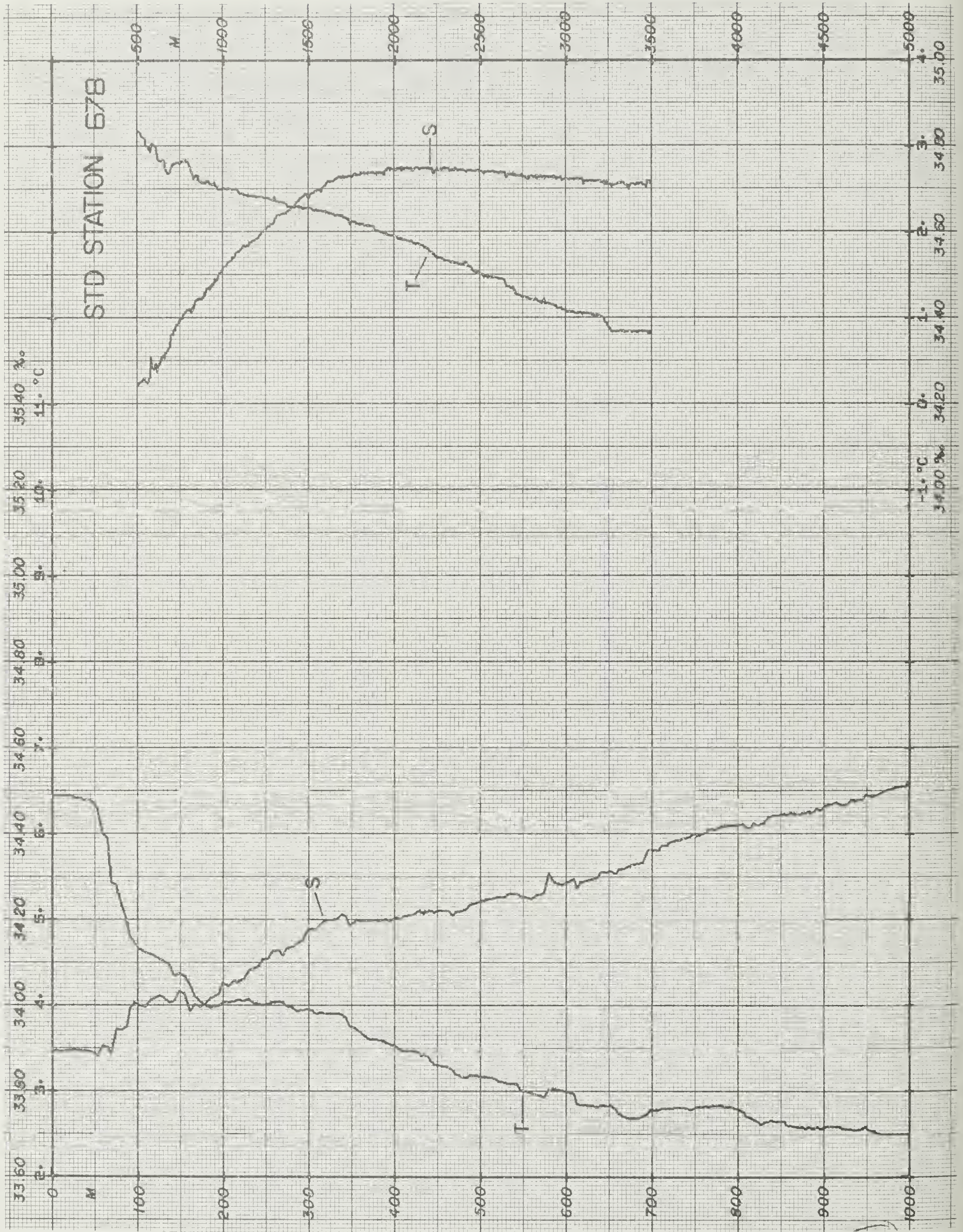
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 675	18FEB1967	9.8	55 0.0S	152 1.0E	500	3854	38	973				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	4.8	0.5	1008.1	23	3	20	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	5.72	33.865	26.71	133.84	0.000	14725						0
STD	10	5.72	33.864	26.71	133.99	0.013	14726						35
STD	20	5.73	33.830	26.69	136.75	0.027	14728						2
STD	30	5.70	33.884	26.73	132.54	0.040	14729						1
STD	50	5.71	33.863	26.71	134.44	0.067	14732						0
STD	75	5.49	33.907	26.77	128.89	0.100	14728						4
STD	100	4.07	33.958	26.97	110.00	0.130	14674						5
STD	125	3.67	33.975	27.03	105.07	0.157	14661						0
STD	150	3.63	34.009	27.06	102.25	0.183	14664						6
STD	200	3.70	34.110	27.13	95.79	0.232	14677						0
STD	250	3.80	34.190	27.18	91.24	0.279	14690						6
STD	300	3.45	34.205	27.23	86.98	0.323	14684						4
STD	350	3.49	34.280	27.29	82.19	0.366	14695						4
STD	400	3.22	34.301	27.33	78.23	0.406	14692						0
STD	450	3.08	34.355	27.39	73.22	0.444	14695						0
STD	500	3.00	34.382	27.41	70.71	0.480	14700						7
STD	550	2.88	34.411	27.45	67.67	0.514	14704						6
STD	600	2.80	34.448	27.49	64.44	0.547	14709						0
STD	650	2.54	34.464	27.52	61.06	0.579	14707						4
STD	700	2.52	34.497	27.55	58.74	0.609	14714						7
STD	750	2.52	34.537	27.58	55.99	0.637	14723						0
STD	800	2.48	34.547	27.59	55.05	0.665	14730						6
STD	850	2.41	34.569	27.61	53.06	0.692	14736						6
STD	900	2.37	34.590	27.64	51.35	0.718	14742						5
STD	950	2.38	34.611	27.65	50.16	0.744	14752						0
STD	1000	2.34	34.627	27.67	48.81	0.768	14758						5
STD	1100	2.35	34.672	27.70	46.10	0.816	14776						0
STD	1200	2.27	34.691	27.72	44.35	0.861	14790						6
STD	1300	2.22	34.713	27.75	42.65	0.905	14805						8
STD	1400	2.15	34.730	27.77	41.12	0.946	14819						7
STD	1500	2.08	34.740	27.78	40.12	0.987	14833						5
STD	1600	2.04	34.748	27.79	39.48	1.027	14848						0
STD	1700	1.91	34.753	27.80	38.05	1.066	14859						9
STD	1800	1.84	34.756	27.81	37.52	1.103	14873						6
STD	1900	1.74	34.756	27.82	36.60	1.140	14886						6
STD	2000	1.65	34.756	27.82	35.95	1.177	14899						0
STD	2100	1.51	34.746	27.83	35.35	1.212	14910						0
STD	2200	1.44	34.744	27.83	34.99	1.248	14924						0
STD	2300	1.34	34.741	27.84	34.25	1.282	14937						4
STD	2400	1.26	34.738	27.84	33.80	1.316	14950						4
STD	2500	1.16	34.732	27.84	33.22	1.350	14963						8
STD	2600	1.10	34.730	27.84	32.83	1.383	14978						6
STD	2700	1.03	34.726	27.85	32.32	1.415	14991						0
STD	2800	0.91	34.721	27.85	31.45	1.447	15004						6
STD	2900	0.90	34.719	27.85	31.54	1.479	15020						4
STD	3000	0.85	34.716	27.85	31.28	1.510	15036						3
STD	3100	0.83	34.715	27.85	31.25	1.541	15052						6
STD	3200	0.77	34.709	27.85	31.01	1.572	15067						0
STD	3300	0.71	34.714	27.86	29.88	1.603	15082						5
STD	3400	0.71	34.705	27.85	30.65	1.633	15099						23
STD	3500	0.68	34.701	27.85	30.61	1.664	15115						4
STD	3600	0.66	34.701	27.85	30.43	1.694	15132						2
STD	3700	0.65	34.702	27.85	30.43	1.725	15149						6



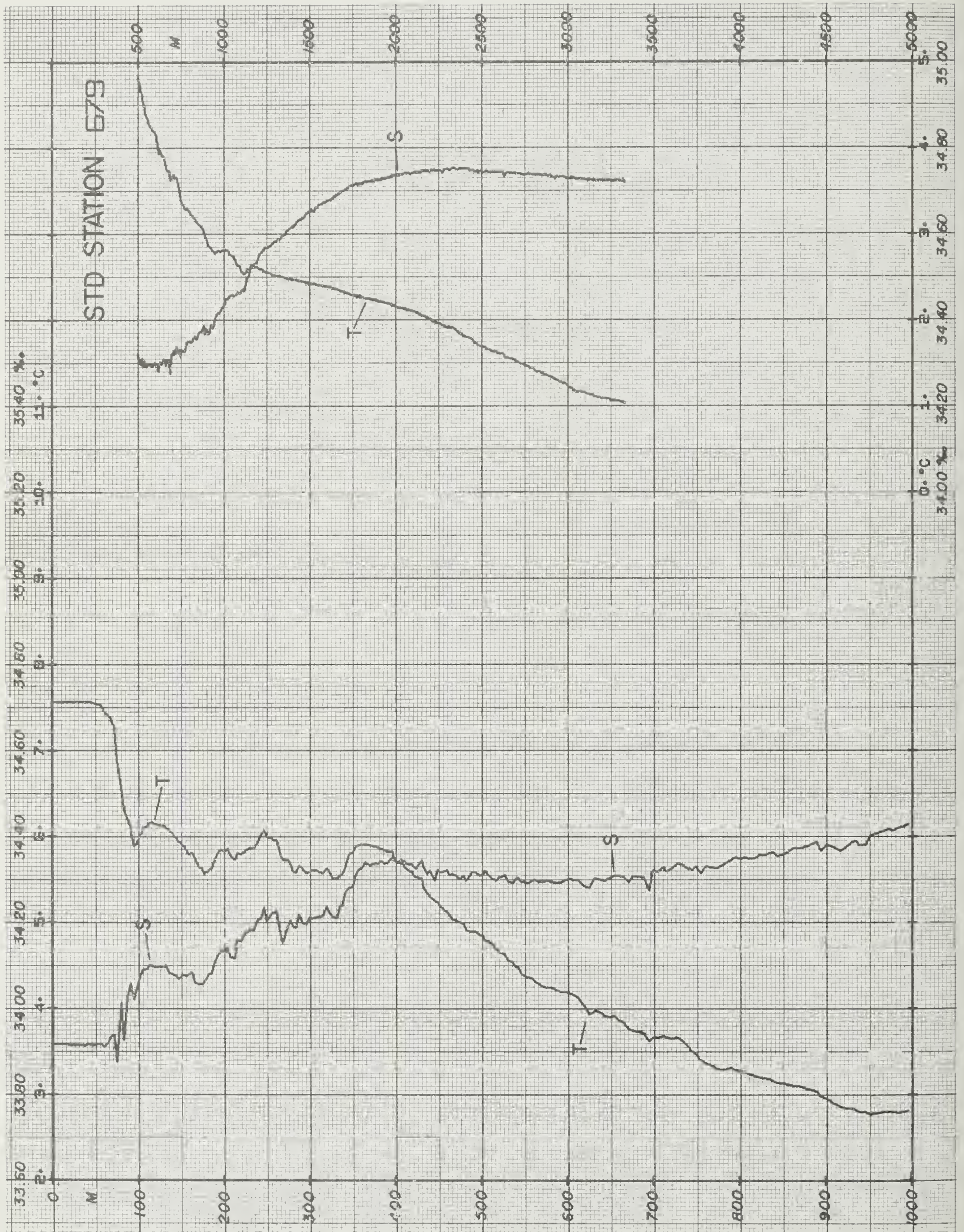
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 676	19FEB1967	8.4	54 2.9S	151 8.4E	500	3834	10	285				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	7.5	6.6	994.4	31	4	35	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	6.41	33.893	26.65	140.05	0.000	14753						3
STD	10	6.41	33.898	26.65	139.72	0.014	14754						0
STD	20	6.40	33.892	26.65	140.21	0.028	14755						5
STD	30	6.40	33.897	26.65	139.96	0.042	14757						2
STD	50	6.36	33.902	26.66	139.35	0.070	14759						5
STD	75	6.24	33.901	26.68	138.28	0.105	14758						5
STD	100	4.84	34.005	26.93	114.59	0.136	14707						0
STD	125	4.61	34.027	26.97	110.63	0.164	14701						0
STD	150	4.57	34.033	26.98	110.00	0.192	14704						4
STD	200	4.10	34.016	27.02	106.91	0.246	14692						5
STD	250	4.07	34.079	27.07	102.27	0.298	14700						4
STD	300	4.00	34.133	27.12	97.96	0.349	14706						0
STD	350	3.90	34.184	27.17	93.49	0.396	14711						6
STD	400	3.61	34.201	27.21	89.67	0.442	14707						3
STD	450	3.42	34.217	27.24	86.86	0.486	14707						0
STD	500	3.30	34.226	27.26	85.32	0.529	14711						2
STD	550	3.17	34.256	27.30	82.11	0.571	14714						2
STD	600	2.92	34.274	27.34	78.60	0.611	14712						0
STD	650	2.82	34.314	27.38	75.01	0.650	14716						0
STD	700	2.68	34.347	27.41	71.43	0.686	14719						3
STD	750	2.80	34.383	27.43	70.18	0.722	14733						0
STD	800	2.82	34.415	27.46	68.38	0.756	14743						4
STD	850	2.64	34.420	27.48	66.38	0.790	14743						6
STD	900	2.57	34.461	27.52	62.97	0.822	14749						5
STD	950	2.55	34.487	27.54	61.11	0.854	14757						0
STD	1000	2.49	34.513	27.56	58.78	0.883	14763						0



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 677	19FEB1967	9.3	54 3.2S	151 7.9E	500	4317	42	25				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	7.4	6.4		31	4	31	4	2					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ gat/l	NITR 10 <sup>2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	6.44	33.904	26.65			14754	693	149	210			
ISL	0	6.44	33.904	26.65	139.56	0.000	14754						
OBS	10	6.44	33.898	26.65			14756	691	152	231			
ISL	10	6.44	33.898	26.65	140.15	0.014	14756						
ISL	20	6.43	33.897	26.65	140.26	0.028	14757						
OBS	30	6.42	33.899	26.65			14758	690	138	167			
ISL	30	6.42	33.899	26.65	140.10	0.042	14758						
OBS	50	6.38	33.904	26.66			14760	691	144	161			
ISL	50	6.38	33.904	26.66	139.51	0.070	14760						
ISL	75	5.70	33.941	26.78	128.81	0.104	14737						
OBS	81	5.48	33.954	26.81			14729	693	171	258			
ISL	100	4.89	34.006	26.92	115.05	0.134	14709						
OBS	101	4.86	34.008	26.93			14708	690	165	247			
ISL	125	4.61	34.026	26.97	110.73	0.162	14701						
OBS	127	4.60	34.026	26.97			14701	688	165	234			
ISL	150	4.56	34.032	26.98	110.08	0.190	14704						
OBS	152	4.56	34.032	26.98			14704	683	164	243			
OBS	177	4.40	34.043	27.01			14702	678	186	262			
ISL	200	4.19	34.019	27.01	107.53	0.244	14696						
OBS	203	4.16	34.016	27.01			14695	683		262			
ISL	250	4.07	34.078	27.07	102.35	0.297	14700						
OBS	253	4.07	34.084	27.07			14701	643	178	290			
ISL	300	4.01	34.141	27.13	97.39	0.347	14707						
OBS	355	3.90	34.193	27.18			14712	570	197	303			
ISL	400	3.71	34.207	27.21	90.18	0.440	14711						
ISL	500	3.25	34.224	27.27	85.03	0.528	14709						
OBS	506	3.22	34.224	27.27			14708	543	219	309			
ISL	600	3.01	34.286	27.34	78.64	0.610	14716						
ISL	700	2.87	34.360	27.41	72.33	0.685	14727						
OBS	758	2.82	34.406	27.45			14736	445	240	372			
ISL	800	2.75	34.428	27.47	66.73	0.755	14740						
ISL	900	2.62	34.475	27.52	62.39	0.819	14751						
ISL	1000	2.50	34.515	27.56	58.76	0.880	14764						
OBS	1009	2.49	34.518	27.57			14765	412	267	346			
ISL	1100	2.44	34.554	27.60	55.71	0.937	14778						
ISL	1200	2.40	34.592	27.63	53.03	0.992	14794						
ISL	1250	2.38	34.609	27.65	51.84	1.018	14802						
OBS	1258	2.38	34.612	27.65			14803	409	241	342			
ISL	1300	2.36	34.627	27.67	50.55	1.043	14809						
ISL	1400	2.31	34.659	27.69	48.17	1.093	14825						
ISL	1500	2.26	34.686	27.72	46.12	1.140	14840						
OBS	1508	2.26	34.688	27.72			14841	421	233	320			
ISL	1750	2.17	34.727	27.76	43.26	1.252	14879						
OBS	1759	2.17	34.728	27.76			14880	438		338			
ISL	2000	1.96	34.744	27.79	40.55	1.356	14912						
OBS	2009	1.95	34.744	27.79			14913	446	225	345			
ISL	2250	1.77	34.736	27.80	39.72	1.457	14947						
OBS	2261	1.76	34.736	27.80			14948	455	243	323			
ISL	2500	1.51	34.742	27.82	36.83	1.552	14978						
OBS	2514	1.49	34.742	27.83			14980	459	231	345			
ISL	2750	1.27	34.730	27.83	35.36	1.643	15011						
OBS	2766	1.26	34.729	27.83			15013	472	237	320			
ISL	3000	1.10	34.721	27.84	34.35	1.730	15047						
ISL	3250	0.98	34.714	27.84	33.54	1.815	15085						
OBS	3269	0.97	34.714	27.84			15088	481	241	337			
ISL	3500	0.86	34.709	27.84	32.70	1.898	15124						
ISL	3750	0.79	34.705	27.84	32.18	1.979	15164						
OBS	3775	0.78	34.705	27.84			15168	492	245	312			
ISL	4000	0.77	34.705	27.84	32.33	2.059	15208						
OBS	4179	0.80	34.706	27.84			15241	493	255	336			

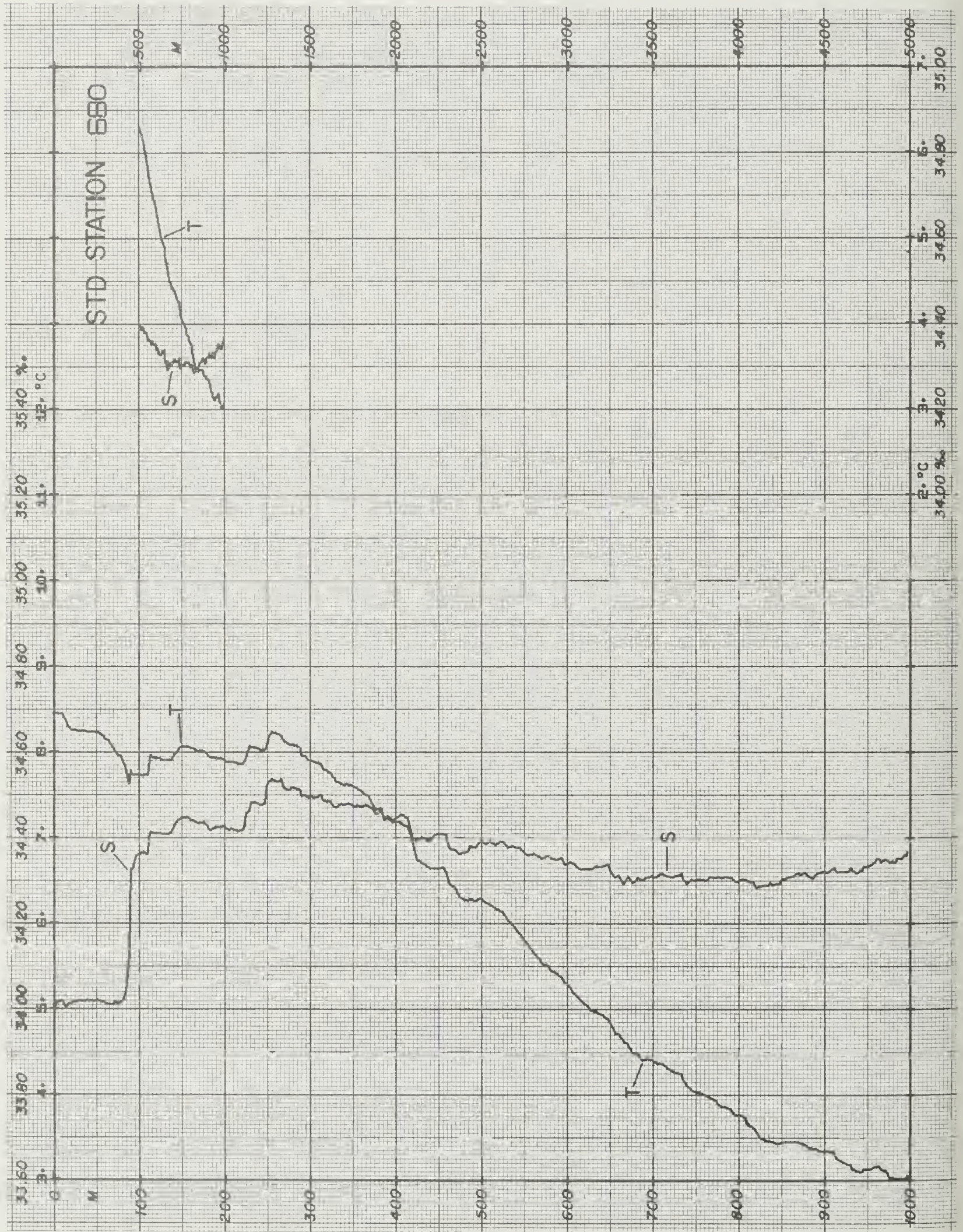


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 678	19FEB1967	10.5	54 3.5S	151 7.8E	500	4315	35	657				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	7.1	7.1	994.4	32	5	35	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-2</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ g/l	NITR 10 $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	6.44	33.892	26.64	140.47	0.000	14754						0
STD	10	6.44	33.893	26.64	140.55	0.014	14755						0
STD	20	6.44	33.893	26.64	140.68	0.028	14757						0
STD	30	6.41	33.894	26.65	140.39	0.042	14758						0
STD	50	6.33	33.886	26.65	140.24	0.070	14758						6
STD	75	5.40	33.943	26.81	125.15	0.103	14725						0
STD	100	4.68	34.002	26.94	113.06	0.133	14700						5
STD	125	4.54	34.021	26.97	110.35	0.161	14698						0
STD	150	4.36	34.030	27.00	108.05	0.188	14695						7
STD	200	4.03	34.050	27.05	103.56	0.241	14690						7
STD	250	4.00	34.107	27.10	99.46	0.292	14698						6
STD	300	3.95	34.175	27.16	94.26	0.340	14705						5
STD	350	3.75	34.188	27.19	91.62	0.387	14705						7
STD	400	3.53	34.202	27.22	88.75	0.432	14704						7
STD	450	3.30	34.220	27.26	85.52	0.476	14703						5
STD	500	3.17	34.242	27.29	82.88	0.518	14706						0
STD	550	3.01	34.253	27.31	80.79	0.559	14707						6
STD	600	3.00	34.284	27.34	78.66	0.599	14715						7
STD	650	2.83	34.310	27.37	75.33	0.637	14717						6
STD	700	2.78	34.362	27.42	71.35	0.674	14724						4
STD	750	2.80	34.400	27.45	68.99	0.709	14734						0
STD	800	2.79	34.419	27.46	67.71	0.743	14741						5
STD	850	2.65	34.444	27.50	64.71	0.776	14744						7
STD	900	2.58	34.462	27.52	62.95	0.808	14750						5
STD	950	2.57	34.489	27.54	61.10	0.839	14758						3
STD	1000	2.51	34.518	27.57	58.59	0.869	14764						5
STD	1100	2.45	34.558	27.60	55.63	0.926	14779						8
STD	1200	2.41	34.585	27.63	53.65	0.981	14794						7
STD	1300	2.41	34.627	27.66	51.04	1.033	14812						7
STD	1400	2.29	34.655	27.69	48.21	1.083	14824						6
STD	1500	2.28	34.680	27.71	46.75	1.130	14840						6
STD	1600	2.23	34.710	27.74	44.44	1.176	14856						6
STD	1700	2.18	34.729	27.76	43.03	1.219	14871						0
STD	1800	2.09	34.735	27.77	41.96	1.262	14884						9
STD	1900	2.02	34.737	27.78	41.38	1.304	14898						6
STD	2000	1.96	34.747	27.79	40.35	1.344	14912						6
STD	2100	1.90	34.748	27.80	39.92	1.385	14927						0
STD	2200	1.81	34.750	27.81	39.01	1.424	14940						0
STD	2300	1.67	34.747	27.82	37.89	1.462	14951						7
STD	2400	1.63	34.745	27.82	37.83	1.500	14966						0
STD	2500	1.53	34.741	27.82	37.17	1.538	14979						7
STD	2600	1.47	34.740	27.83	36.74	1.575	14994						5
STD	2700	1.34	34.735	27.83	35.83	1.611	15006						0
STD	2800	1.22	34.729	27.83	34.88	1.646	15017						7
STD	2900	1.17	34.727	27.84	34.54	1.681	15032						0
STD	3000	1.09	34.724	27.84	33.93	1.715	15046						7
STD	3100	1.06	34.723	27.84	33.75	1.749	15062						5
STD	3200	1.03	34.718	27.84	33.89	1.783	15078						8
STD	3300	0.85	34.711	27.84	32.03	1.816	15088						5
STD	3400	0.85	34.711	27.85	32.13	1.848	15105						6
STD	3500	0.82	34.713	27.85	31.81	1.880	15122						5





SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 679	20FEB1967	12.7	53 0.0S	150 36.5E	500	3300	33	661				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	8.8	7.9	1005.3	6	3	30	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> µgat/l	NITR 10 <sup>-2</sup> µgat/l	SILIC µgat/l	INT M	DD
STD	0	7.56	33.916	26.51	153.23	0.000	14798						0
STD	10	7.56	33.916	26.51	153.42	0.015	14800						37
STD	20	7.53	33.968	26.55	149.36	0.030	14801						1
STD	30	7.55	33.892	26.49	155.44	0.046	14802						1
STD	50	7.54	33.914	26.51	153.93	0.077	14805						0
STD	75	7.02	33.894	26.57	148.73	0.114	14789						3
STD	100	5.94	34.052	26.83	123.66	0.149	14752						6
STD	125	6.13	34.096	26.84	123.04	0.179	14764						5
STD	150	5.92	34.072	26.85	122.62	0.210	14760						5
STD	200	5.83	34.133	26.91	117.64	0.270	14765						4
STD	250	6.02	34.213	26.95	114.63	0.328	14782						3
STD	300	5.58	34.205	27.00	110.44	0.384	14773						5
STD	350	5.80	34.281	27.03	108.15	0.439	14791						5
STD	400	5.74	34.343	27.09	103.44	0.492	14797						0
STD	450	5.23	34.323	27.13	99.20	0.543	14785						0
STD	500	4.85	34.309	27.17	96.20	0.592	14777						4
STD	550	4.38	34.294	27.21	92.38	0.639	14766						0
STD	600	4.18	34.299	27.23	90.22	0.684	14766						6
STD	650	3.90	34.303	27.26	87.20	0.729	14762						7
STD	700	3.66	34.320	27.30	83.68	0.771	14761						0
STD	750	3.47	34.330	27.33	81.27	0.813	14761						0
STD	800	3.28	34.349	27.36	78.10	0.852	14761						6
STD	850	3.13	34.357	27.38	76.23	0.891	14763						0
STD	900	2.96	34.375	27.41	73.36	0.928	14765						7
STD	950	2.78	34.391	27.44	70.67	0.964	14766						6
STD	1000	2.81	34.430	27.47	68.31	0.999	14776						6
STD	1100	2.61	34.464	27.51	64.19	1.065	14784						5
STD	1200	2.62	34.536	27.57	59.62	1.127	14803						4
STD	1300	2.52	34.581	27.62	55.69	1.185	14816						7
STD	1400	2.47	34.615	27.65	53.25	1.239	14831						6
STD	1500	2.42	34.651	27.68	50.49	1.291	14846						0
STD	1600	2.39	34.674	27.70	48.95	1.341	14862						6
STD	1700	2.33	34.701	27.73	46.85	1.389	14877						6
STD	1800	2.28	34.716	27.74	45.55	1.435	14892						0
STD	1900	2.23	34.725	27.75	44.77	1.480	14907						6
STD	2000	2.17	34.736	27.77	43.72	1.525	14921						4
STD	2100	2.11	34.740	27.78	43.10	1.568	14936						6
STD	2200	2.02	34.745	27.79	42.06	1.611	14949						7
STD	2300	1.92	34.749	27.80	40.87	1.652	14962						5
STD	2400	1.82	34.752	27.81	39.77	1.692	14975						6
STD	2500	1.69	34.745	27.81	39.04	1.732	14986						9
STD	2600	1.62	34.744	27.82	38.50	1.771	15001						0
STD	2700	1.53	34.742	27.82	37.79	1.809	15014						6
STD	2800	1.44	34.738	27.83	37.14	1.846	15027						9
STD	2900	1.34	34.736	27.83	36.25	1.883	15040						0
STD	3000	1.24	34.729	27.83	35.62	1.919	15053						10
STD	3100	1.16	34.727	27.84	34.84	1.954	15067						8
STD	3200	1.09	34.725	27.84	34.28	1.989	15081						7
STD	3300	1.06	34.724	27.84	34.09	2.023	15097						5

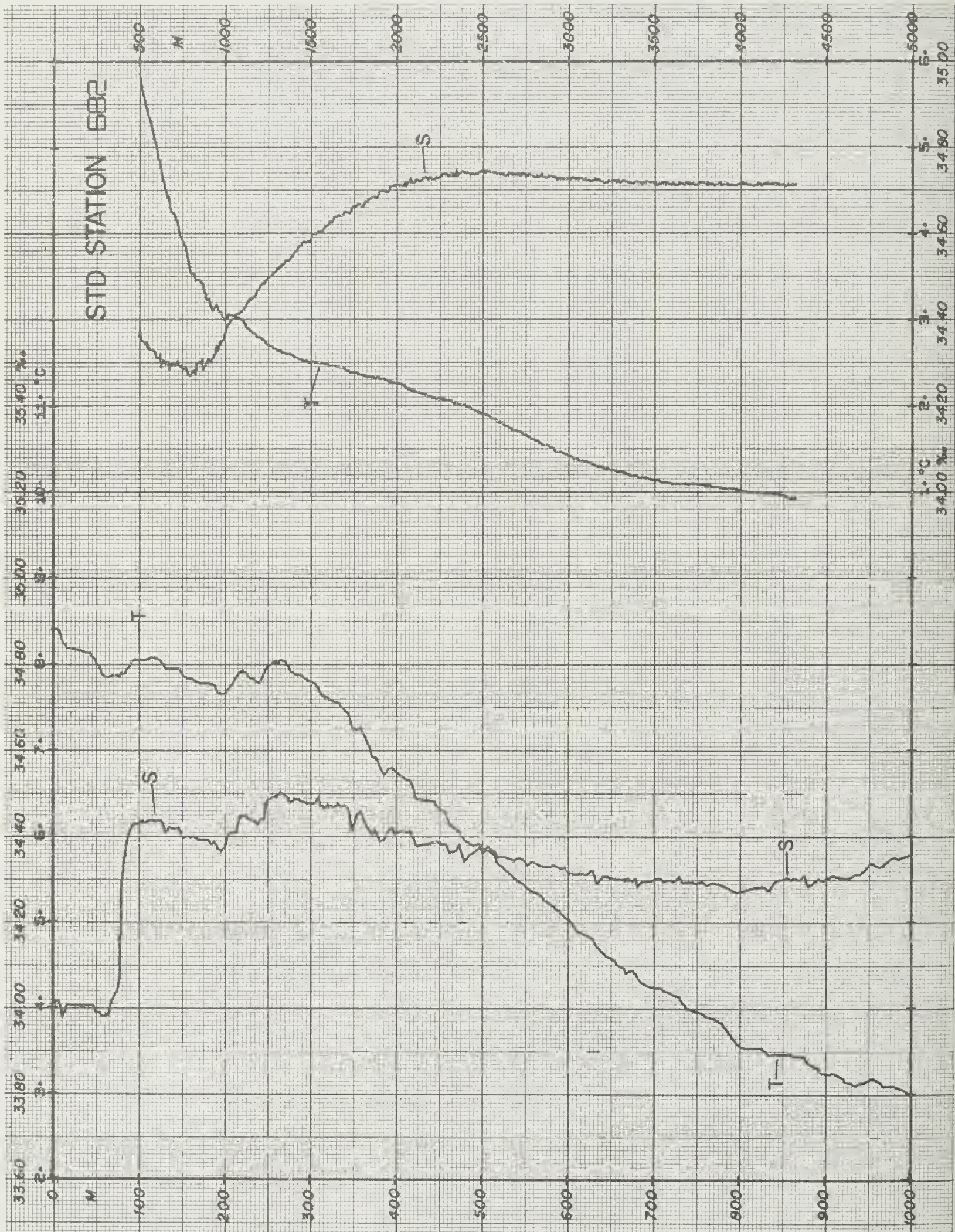


SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 680	21FEB1967	6.5	51 52.9S	150 21.0E	500	4326	10	283				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	9.2	8.3	1006.9	1	3	34	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>2</sup> ml/l	PHOS 10 <sup>2</sup> $\mu$ gat/l	NITR 10 <sup>-6</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	8.45	34.011	26.45	158.69	0.000	14833					0	
STD	10	8.44	34.017	26.46	158.24	0.016	14835					0	
STD	20	8.26	34.013	26.48	156.18	0.032	14830					4	
STD	30	8.24	34.018	26.49	155.74	0.047	14831					5	
STD	50	8.22	34.019	26.49	155.68	0.078	14833					4	
STD	75	7.96	34.013	26.53	152.84	0.117	14827					4	
STD	100	7.73	34.361	26.83	124.17	0.151	14827					0	
STD	125	7.91	34.409	26.84	123.65	0.182	14839					3	
STD	150	8.06	34.446	26.85	123.39	0.213	14849					0	
STD	200	7.90	34.424	26.86	123.67	0.275	14851					3	
STD	250	8.09	34.523	26.91	120.02	0.336	14868					3	
STD	300	7.91	34.496	26.91	120.18	0.396	14868					3	
STD	350	7.60	34.475	26.94	118.07	0.456	14864					5	
STD	400	7.18	34.445	26.98	115.12	0.514	14856					7	
STD	450	6.64	34.409	27.02	111.09	0.571	14843					7	
STD	500	6.28	34.392	27.06	108.14	0.625	14836					3	
STD	550	5.82	34.366	27.10	104.55	0.678	14826					6	
STD	600	5.29	34.338	27.14	100.56	0.730	14812					5	
STD	650	4.85	34.328	27.18	96.43	0.779	14802					4	
STD	700	4.40	34.309	27.22	92.92	0.826	14792					3	
STD	750	4.04	34.300	27.25	89.77	0.872	14785					4	
STD	800	3.76	34.299	27.28	87.14	0.916	14781					5	
STD	850	3.44	34.303	27.31	83.68	0.959	14776					0	
STD	900	3.34	34.319	27.33	81.71	1.000	14780					0	
STD	950	3.13	34.331	27.36	78.83	1.040	14780					0	



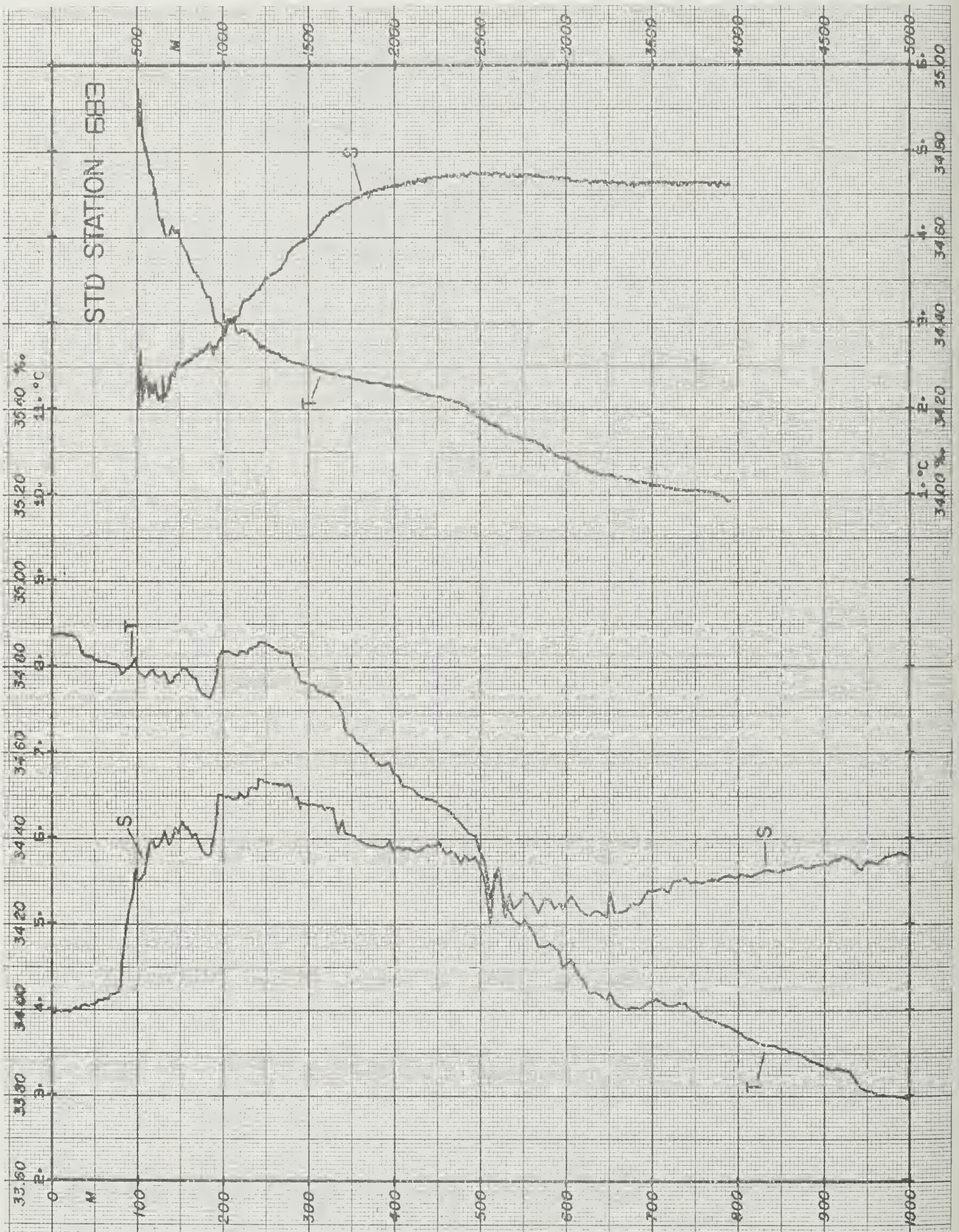
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 681	21FEB1967	7.4	51 52.3S	150 22.4E	500	4323	42	25				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	9.1	8.1		2	2	34	2	2					
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
OBS	0	8.40	34.020	26.47			14832	668	115	185	7		
ISL	0	8.40	34.020	26.47	157.33	0.000	14832						
OBS	10	8.38	34.018	26.47			14833	666	115	128	9		
ISL	10	8.38	34.018	26.47	157.36	0.016	14833						
ISL	20	8.30	34.017	26.48	156.44	0.031	14831						
OBS	29	8.23	34.018	26.49			14830	666	120	179	8		
ISL	30	8.23	34.018	26.49	155.53	0.047	14830						
OBS	49	8.23	34.022	26.49			14833	665	116	179	9		
ISL	50	8.22	34.017	26.49	155.92	0.078	14833						
ISL	75	8.02	33.995	26.50	155.04	0.117	14829						
OBS	79	7.98	34.012	26.52			14829	661	123	174	7		
OBS	99	7.85	34.372	26.82			14832	638	111	183	11		
ISL	100	7.85	34.379	26.83	124.60	0.152	14832						
OBS	124	8.02	34.434	26.85			14843	636	110		12		
ISL	125	8.03	34.435	26.85	123.31	0.183	14843						
OBS	149	8.10	34.452	26.85			14850	634	115	173	12		
ISL	150	8.10	34.452	26.85	123.59	0.214	14850						
OBS	174	8.01	34.440	26.85			14851	632	110	182	10		
OBS	199	7.93	34.429	26.86			14852	634	11	18	1		
ISL	200	7.93	34.430	26.86	123.68	0.276	14852						
OBS	249	8.02	34.479	26.88			14864	607	120	174	12		
ISL	250	8.02	34.479	26.88	122.15	0.337	14864						
ISL	300	7.88	34.487	26.91	120.50	0.398	14867						
OBS	348	7.61	34.472	26.94			14864	555	132	207	17		
ISL	400	7.16	34.444	26.98	114.98	0.516	14855						
OBS	495	6.20	34.382	27.06			14832	518	147	264	20		
ISL	500	6.15	34.379	27.07	107.28	0.627	14831						
ISL	600	5.13	34.335	27.16	98.81	0.730	14806						
ISL	700	4.24	34.310	27.23	91.00	0.825	14785						
OBS	727	4.02	34.306	27.25			14780	511	204	303	33		
ISL	800	3.63	34.311	27.30	84.82	0.913	14776						
ISL	900	3.25	34.333	27.35	79.67	0.995	14777						
OBS	976	3.07	34.361	27.39			14782	465	220	355	51		
ISL	1000	3.02	34.372	27.40	74.93	1.072	14784						
ISL	1100	2.87	34.422	27.46	70.19	1.145	14795						
ISL	1200	2.77	34.475	27.51	65.81	1.213	14808						
OBS	1224	2.76	34.488	27.52			14812	416	237	348	64		
ISL	1250	2.73	34.499	27.53	63.84	1.245	14815						
ISL	1300	2.68	34.520	27.55	62.01	1.276	14822						
ISL	1400	2.59	34.558	27.59	58.69	1.337	14835						
OBS	1473	2.53	34.584	27.62			14845	409	236	353	69		
ISL	1500	2.51	34.593	27.63	55.75	1.394	14849						
OBS	1724	2.38	34.662	27.69			14882	412	230	306	74		
ISL	1750	2.37	34.669	27.70	49.86	1.526	14886						
OBS	1972	2.29	34.716	27.74			14921	431	224	323	78		
ISL	2000	2.27	34.719	27.75	46.21	1.646	14925						
OBS	2220	2.09	34.732	27.77			14955	438	210	352	85		
ISL	2250	2.07	34.735	27.78	43.68	1.759	14960						
OBS	2468	1.94	34.752	27.80			14992	454	222	300	86		
ISL	2500	1.91	34.752	27.80	41.32	1.865	14996						
ISL	2750	1.67	34.749	27.82	39.23	1.965	15028						
OBS	2966	1.45	34.738	27.83			15056	460	223	300	104		
ISL	3000	1.42	34.737	27.83	37.55	2.061	15061						
ISL	3250	1.26	34.728	27.83	36.54	2.154	15097						
OBS	3465	1.16	34.722	27.83			15130	474	227	319	113		
ISL	3500	1.15	34.721	27.83	35.88	2.245	15136						
ISL	3750	1.06	34.718	27.84	35.39	2.334	15176						
OBS	3964	1.02	34.716	27.84			15212	482	229	326	117		
ISL	4000	1.02	34.716	27.84	35.28	2.422	15218						
OBS	4240	1.01	34.714	27.84			15261	488	229	180	116		

STD STATION 582



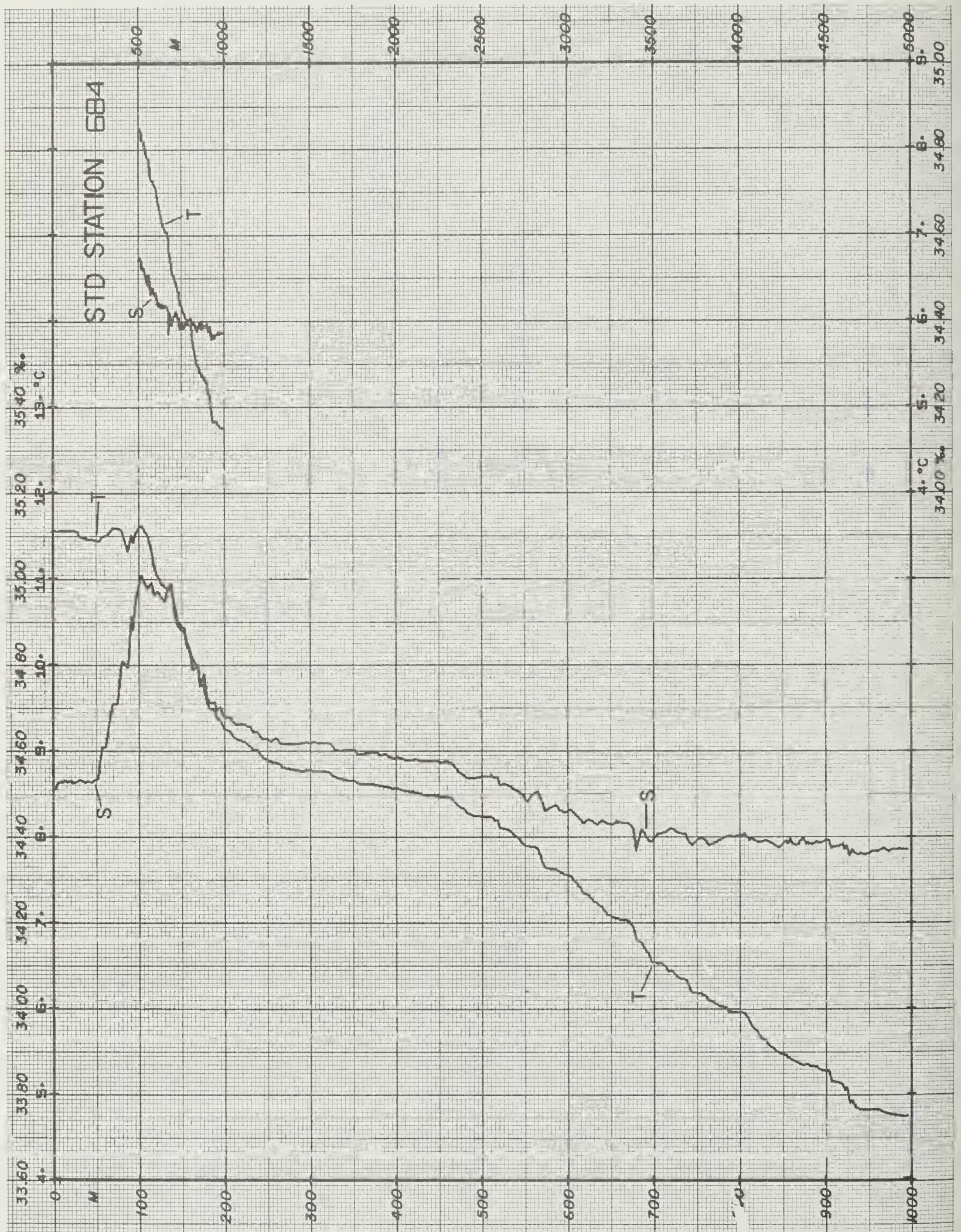
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 682	21FEB1967	8.4	51 51.7S	150 23.8E	500	4282	43	868				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	8.6	8.2	1007.2	3	2	34	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
STD	0	8.40	34.008	26.46	158.29	0.000	14832						0
STD	10	8.34	34.002	26.46	158.02	0.016	14831						3
STD	20	8.17	34.005	26.49	155.55	0.031	14826						5
STD	30	8.16	34.004	26.49	155.57	0.047	14827						0
STD	50	8.05	33.998	26.50	154.78	0.078	14826						0
STD	75	7.86	34.035	26.56	149.77	0.116	14824						4
STD	100	8.04	34.426	26.84	123.80	0.150	14840						0
STD	125	8.04	34.435	26.84	123.61	0.181	14844						5
STD	150	7.91	34.409	26.84	124.02	0.212	14843						5
STD	200	7.65	34.370	26.85	124.14	0.274	14840						5
STD	250	7.94	34.469	26.89	121.76	0.336	14861						4
STD	300	7.80	34.474	26.91	120.19	0.396	14864						5
STD	350	7.27	34.422	26.95	117.36	0.456	14851						5
STD	400	6.76	34.408	27.01	111.97	0.513	14839						4
STD	450	6.34	34.385	27.05	108.71	0.568	14830						0
STD	500	5.89	34.371	27.09	104.49	0.621	14820						4
STD	550	5.44	34.345	27.13	101.34	0.673	14810						0
STD	600	5.05	34.323	27.16	98.63	0.723	14802						5
STD	650	4.58	34.304	27.19	94.97	0.771	14791						7
STD	700	4.24	34.295	27.22	92.07	0.818	14785						6
STD	750	3.96	34.290	27.25	89.72	0.863	14781						6
STD	800	3.57	34.269	27.27	87.23	0.908	14773						6
STD	850	3.46	34.297	27.30	84.28	0.951	14777						4
STD	900	3.23	34.297	27.32	82.18	0.992	14775						8
STD	950	3.15	34.326	27.36	79.42	1.033	14781						6
STD	1000	3.00	34.357	27.39	75.78	1.071	14783						5
STD	1100	3.00	34.418	27.44	71.94	1.145	14801						6
STD	1200	2.79	34.469	27.50	66.46	1.214	14809						7
STD	1300	2.66	34.510	27.55	62.47	1.279	14821						7
STD	1400	2.58	34.548	27.58	59.36	1.340	14835						6
STD	1500	2.50	34.581	27.62	56.61	1.398	14849						11
STD	1600	2.48	34.617	27.65	54.24	1.453	14865						7
STD	1700	2.43	34.646	27.67	52.04	1.506	14880						9
STD	1800	2.36	34.664	27.69	50.38	1.558	14894						7
STD	1900	2.32	34.687	27.72	48.75	1.607	14910						6
STD	2000	2.27	34.712	27.74	46.69	1.655	14925						6
STD	2100	2.17	34.720	27.76	45.37	1.701	14938						4
STD	2200	2.11	34.730	27.77	44.33	1.746	14953						5
STD	2300	2.07	34.736	27.78	43.73	1.790	14968						0
STD	2400	2.01	34.740	27.78	43.08	1.833	14983						7
STD	2500	1.91	34.744	27.80	41.92	1.876	14996						0
STD	2600	1.81	34.739	27.80	41.35	1.917	15008						0
STD	2700	1.71	34.735	27.80	40.57	1.958	15021						5
STD	2800	1.61	34.732	27.81	39.84	1.998	15034						8
STD	2900	1.53	34.732	27.81	38.99	2.038	15048						5
STD	3000	1.43	34.727	27.82	38.29	2.077	15061						8
STD	3100	1.35	34.725	27.82	37.68	2.115	15075						7
STD	3200	1.29	34.721	27.82	37.24	2.152	15089						7
STD	3300	1.23	34.723	27.83	36.55	2.189	15105						0
STD	3400	1.18	34.719	27.83	36.29	2.225	15120						6
STD	3500	1.13	34.717	27.83	36.01	2.261	15135						0
STD	3600	1.10	34.714	27.83	35.89	2.297	15151						6
STD	3700	1.09	34.716	27.83	35.82	2.333	15168						5
STD	3800	1.07	34.716	27.83	35.80	2.369	15186						5
STD	3900	1.04	34.713	27.83	35.72	2.405	15202						4
STD	4000	1.01	34.715	27.84	35.34	2.440	15218						6
STD	4100	0.99	34.712	27.84	35.29	2.476	15235						4
STD	4200	0.97	34.715	27.84	35.01	2.511	15252						5
STD	4300	0.91	34.711	27.84	34.50	2.546	15267						5

STD STATION 683





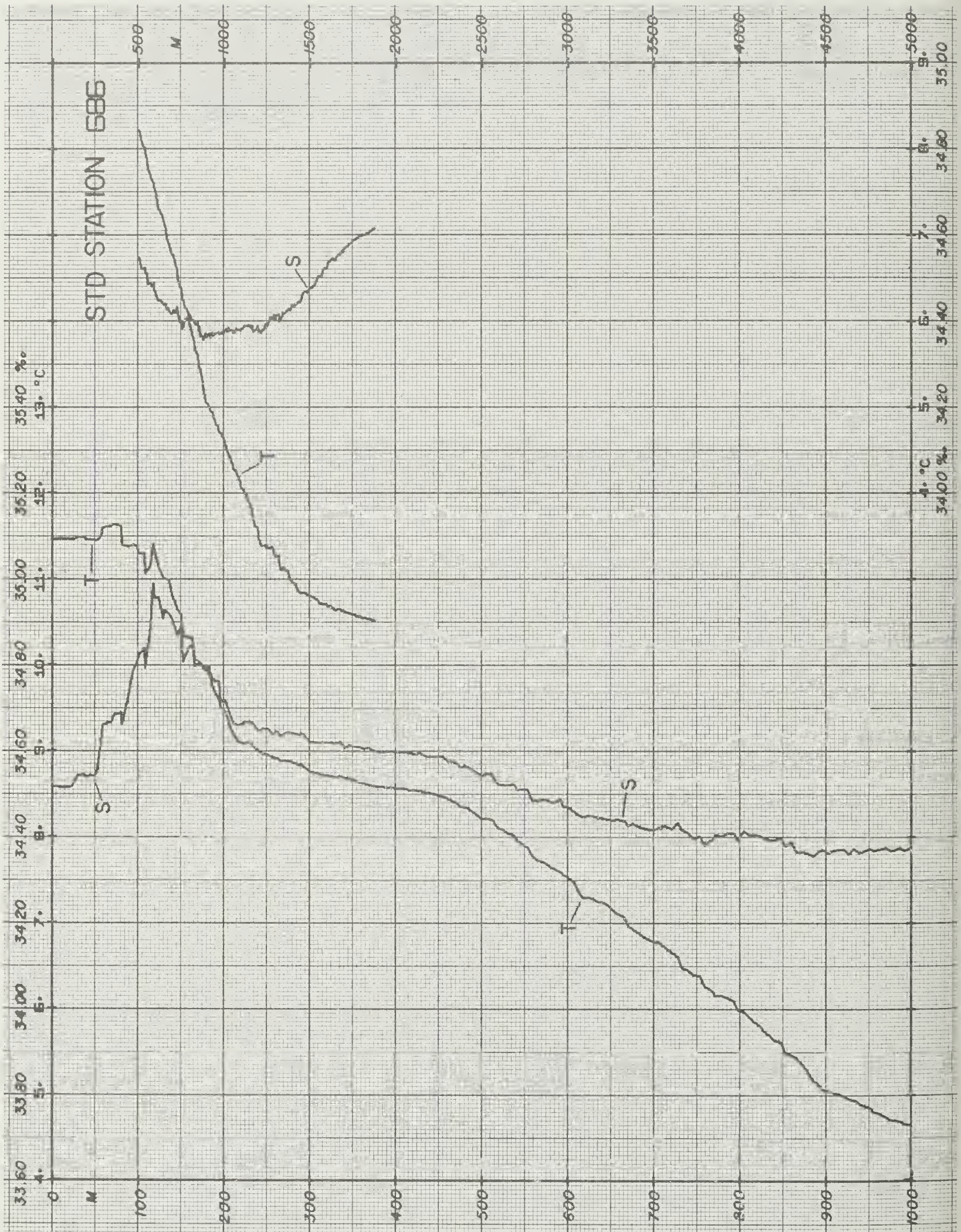
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 683	22FEB1967	10.8	50 1.3S	149 7.0E	501	3936	40	797				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	9.5	7.2	1008.4	31	4	1	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
STD	0	8.36	33.985	26.45	159.30	0.000	14830						0
STD	10	8.36	33.993	26.45	158.93	0.016	14831						3
STD	20	8.34	33.994	26.45	158.82	0.032	14833						5
STD	30	8.29	34.001	26.47	157.73	0.048	14832						4
STD	50	8.06	34.011	26.51	154.04	0.079	14827						0
STD	75	8.01	34.036	26.54	151.86	0.117	14829						3
STD	100	7.98	34.305	26.75	131.87	0.153	14836						3
STD	125	7.87	34.381	26.83	125.11	0.185	14837						5
STD	150	7.93	34.424	26.85	123.21	0.216	14844						4
STD	200	8.16	34.495	26.87	122.14	0.277	14861						5
STD	250	8.26	34.529	26.89	122.00	0.338	14874						5
STD	300	7.78	34.477	26.92	119.78	0.398	14863						0
STD	350	7.18	34.405	26.95	117.30	0.458	14847						5
STD	400	6.74	34.372	26.98	114.47	0.516	14838						7
STD	450	6.41	34.381	27.03	109.92	0.572	14833						7
STD	500	5.84	34.330	27.07	106.97	0.626	14818						7
STD	550	5.02	34.264	27.11	102.12	0.678	14792						5
STD	600	4.52	34.245	27.15	98.04	0.728	14779						9
STD	650	4.17	34.255	27.20	93.81	0.776	14773						3
STD	700	4.09	34.275	27.22	91.86	0.823	14778						0
STD	750	3.98	34.298	27.25	89.31	0.868	14782						6
STD	800	3.74	34.309	27.29	86.18	0.912	14780						6
STD	850	3.54	34.321	27.31	83.43	0.954	14780						7
STD	900	3.34	34.339	27.35	80.22	0.995	14780						0
STD	950	3.05	34.341	27.38	77.14	1.035	14776						0
STD	1000	2.96	34.357	27.40	75.38	1.073	14781						0
STD	1100	2.87	34.428	27.46	69.76	1.145	14795						2
STD	1200	2.77	34.476	27.51	65.64	1.213	14808						6
STD	1300	2.64	34.514	27.55	62.06	1.277	14820						6
STD	1400	2.53	34.570	27.61	57.22	1.336	14833						8
STD	1500	2.48	34.598	27.63	55.00	1.393	14848						6
STD	1600	2.41	34.644	27.67	51.41	1.446	14862						6
STD	1700	2.37	34.671	27.70	49.46	1.496	14878						8
STD	1800	2.33	34.692	27.72	47.85	1.545	14893						0
STD	1900	2.29	34.706	27.73	46.93	1.592	14909						6
STD	2000	2.25	34.717	27.75	46.04	1.639	14924						3
STD	2100	2.20	34.723	27.76	45.44	1.684	14939						7
STD	2200	2.15	34.736	27.77	44.40	1.729	14954						6
STD	2300	2.09	34.740	27.78	43.77	1.773	14969						6
STD	2400	2.04	34.744	27.79	43.19	1.817	14984						6
STD	2500	1.89	34.745	27.80	41.61	1.859	14995						6
STD	2600	1.79	34.747	27.81	40.47	1.900	15008						6
STD	2700	1.67	34.741	27.81	39.75	1.940	15020						0
STD	2800	1.61	34.741	27.82	39.23	1.980	15034						7
STD	2900	1.49	34.738	27.82	38.07	2.019	15046						9
STD	3000	1.41	34.736	27.83	37.37	2.056	15060						5
STD	3100	1.29	34.727	27.83	36.72	2.093	15072						6
STD	3200	1.23	34.728	27.83	35.90	2.130	15087						9
STD	3300	1.19	34.725	27.83	35.82	2.166	15103						3
STD	3400	1.14	34.716	27.83	36.04	2.201	15118						6
STD	3500	1.11	34.725	27.84	35.08	2.237	15134						9
STD	3600	1.07	34.723	27.84	34.81	2.272	15150						6
STD	3700	1.03	34.721	27.84	34.59	2.307	15166						7
STD	3800	1.03	34.724	27.84	34.53	2.341	15183						7
STD	3900	0.98	34.723	27.85	33.98	2.375	15199						0



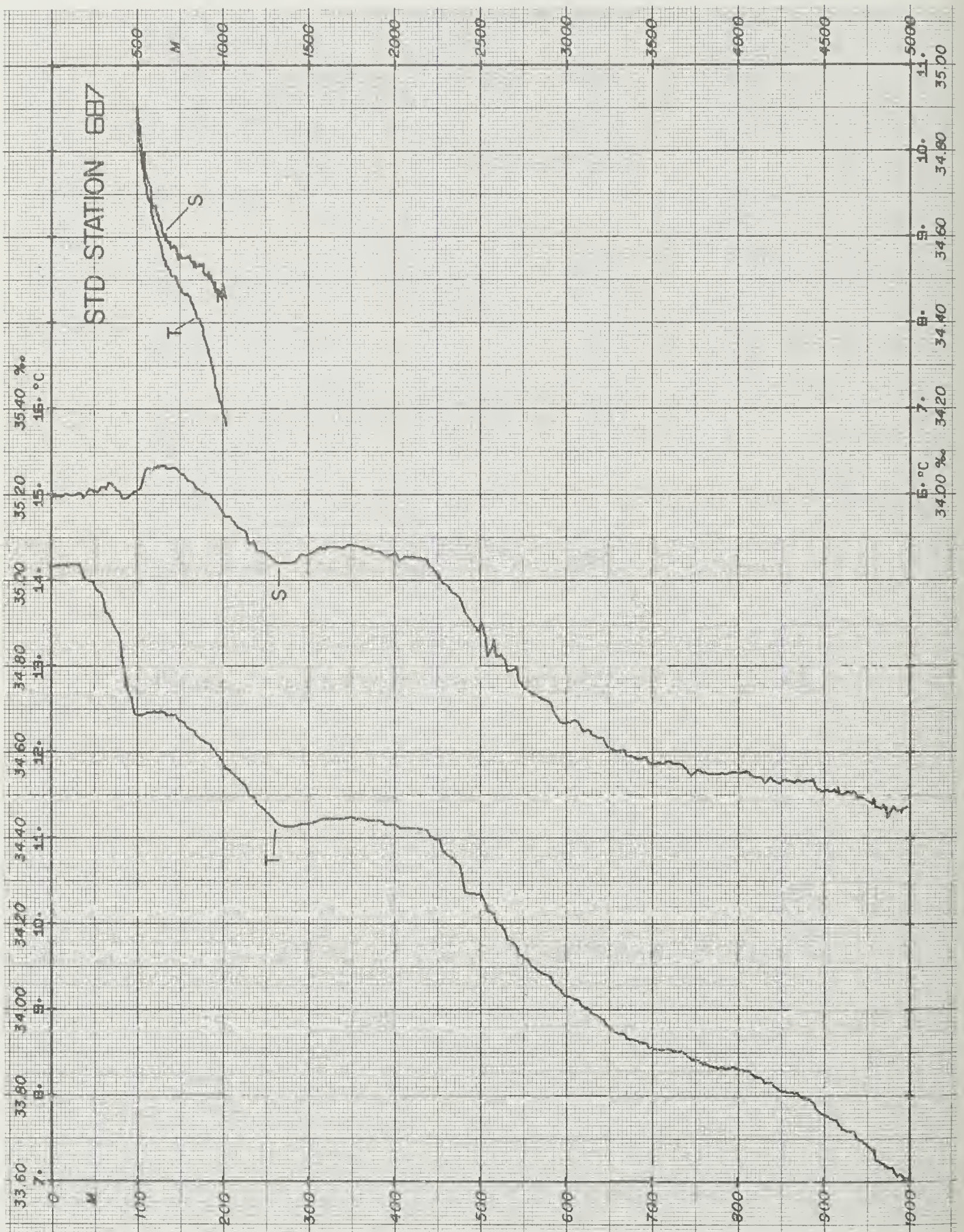
SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 684	23FEB1967	8.0	48 10.0S	148 15.0E	465	1849	10	247				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	10.4	7.1	1017.0	28	3	29	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
STD	0	11.55	34.509	26.31	171.87	0.000	14953					0	
STD	10	11.55	34.527	26.33	170.87	0.017	14955					3	
STD	20	11.55	34.528	26.33	171.05	0.034	14957					5	
STD	30	11.52	34.530	26.33	170.62	0.051	14957					3	
STD	50	11.44	34.532	26.35	169.45	0.085	14957					0	
STD	75	11.58	34.710	26.46	159.47	0.126	14969					3	
STD	100	11.57	34.974	26.67	140.57	0.164	14976					4	
STD	125	10.98	34.964	26.77	131.51	0.198	14959					4	
STD	150	10.45	34.882	26.80	128.98	0.231	14943					0	
STD	200	9.27	34.681	26.84	125.44	0.294	14906					5	
STD	250	8.89	34.628	26.86	124.42	0.357	14899					0	
STD	300	8.77	34.618	26.88	124.26	0.419	14903					5	
STD	350	8.65	34.602	26.88	124.38	0.481	14906					6	
STD	400	8.56	34.582	26.88	125.34	0.543	14911					5	
STD	450	8.47	34.575	26.89	125.43	0.606	14915					6	
STD	500	8.24	34.539	26.90	125.39	0.669	14914					6	
STD	550	7.91	34.496	26.91	124.51	0.731	14910					0	
STD	600	7.56	34.458	26.93	122.77	0.793	14904					7	
STD	650	7.08	34.430	26.98	118.66	0.853	14893					7	
STD	700	6.54	34.390	27.02	114.55	0.912	14880					7	
STD	750	6.18	34.389	27.07	110.39	0.968	14874					5	
STD	800	5.95	34.402	27.11	106.81	1.022	14873					8	
STD	850	5.47	34.380	27.15	102.67	1.075	14861					8	
STD	900	5.28	34.390	27.18	99.93	1.125	14862					8	
STD	950	4.82	34.361	27.21	96.70	1.174	14851					6	



SHIP CRUS	STATION		DATE		GMT	LATITUDE		LONGITUDE		MARS	DEPTH	MSD	NOL
EL 27	SER 685		23FEB1967		9.3	48 10.7S		148 10.1E		465	1970	18	18
	AIR TEMP		DEW PT	BAROM		WIND DIR		FORCE	SEA DIR	ST	SPEC OBS		
	10.5		7.0			29		2	30	3	2		
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl/l	NITR 10 <sup>-2</sup> $\mu$ gatl/l	SILIC $\mu$ gatl/l	INT M	DD
OBS	0	11.47	34.522	26.34			14950	638	64	83	4		
ISL	0	11.47	34.522	26.34	169.56	0.000	14950						
OBS	10	11.47	34.515	26.33			14952	639	79	80	4		
ISL	10	11.47	34.515	26.33	170.32	0.017	14952						
ISL	20	11.45	34.516	26.34	170.03	0.034	14953						
OBS	30	11.43	34.532	26.35			14954	632	58	76	4		
ISL	30	11.43	34.532	26.35	168.84	0.051	14954						
OBS	50	11.51	34.623	26.41			14961	613	55	87	3		
ISL	50	11.51	34.623	26.41	164.04	0.084	14961						
ISL	75	11.25	34.725	26.53	152.59	0.124	14957						
OBS	80	11.19	34.746	26.56			14956	595	69	98	2		
OBS	100	11.12	34.846	26.65			14958	581	77	105	2		
ISL	100	11.12	34.846	26.65	141.96	0.161	14958						
OBS	125	11.03	34.939	26.74			14961	567	67	116	4		
ISL	125	11.03	34.939	26.74	134.13	0.195	14961						
OBS	150	10.46	34.888	26.80			14944	568	97	129	4		
ISL	150	10.46	34.888	26.80	128.65	0.228	14944						
OBS	175	9.58	34.730	26.83			14914	589	87		4		
OBS	200	9.11	34.664	26.86			14900	596	107	153	3		
ISL	200	9.11	34.664	26.86	124.16	0.291	14900						
OBS	250	8.84	34.631	26.88			14897	597	99	159	3		
ISL	250	8.84	34.631	26.88	123.35	0.353	14897						
ISL	300	8.72	34.618	26.88	123.37	0.415	14901						
OBS	350	8.64	34.610	26.89			14906	603	108	158	4		
ISL	400	8.54	34.594	26.89	124.20	0.539	14910						
OBS	500	8.23	34.556	26.91			14914	590	120	183	5		
ISL	500	8.23	34.556	26.91	124.06	0.663	14914						
ISL	600	7.59	34.501	26.96	120.12	0.785	14906						
ISL	700	6.82	34.451	27.03	114.17	0.902	14892						
OBS	749	6.40	34.427	27.07			14883	489	164	282	17		
ISL	800	5.95	34.414	27.12	106.03	1.012	14873						
ISL	900	5.13	34.397	27.20	97.48	1.114	14856						
OBS	991	4.44	34.392	27.28			14843	453	202	315	36		
ISL	1000	4.40	34.393	27.28	89.51	1.207	14842						
ISL	1100	3.96	34.395	27.33	84.90	1.294	14841						
ISL	1200	3.63	34.406	27.37	80.88	1.377	14844						
OBS	1236	3.54	34.412	27.39			14846	437	205	355	51		
ISL	1250	3.49	34.415	27.39	78.90	1.417	14846						
ISL	1300	3.32	34.425	27.42	76.45	1.456	14848						
ISL	1400	3.03	34.452	27.47	71.62	1.530	14852						
OBS	1484	2.82	34.480	27.51			14858	416	241		61		
ISL	1500	2.80	34.487	27.52	67.01	1.599	14860						
OBS	1734	2.58	34.590	27.62			14892	403	226	348	74		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 686	23FEB1967	10.1	48 11.4S	148 13.2E	465	1900	19	377				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	10.4	7.9	1017.6	28	2	29	3						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gatl	NITR 10 <sup>-2</sup> $\mu$ gatl	SILIC $\mu$ gatl	INT M	DD
STD	0	11.46	34.516	26.33	169.84	0.000	14950					0	
STD	10	11.46	34.515	26.33	170.20	0.017	14952					15	
STD	20	11.46	34.513	26.33	170.54	0.034	14953					4	
STD	30	11.48	34.543	26.35	168.88	0.051	14956					0	
STD	50	11.44	34.542	26.36	168.86	0.085	14958					3	
STD	75	11.62	34.684	26.43	162.21	0.126	14970					3	
STD	100	11.35	34.811	26.58	148.53	0.165	14966					3	
STD	125	11.13	34.954	26.74	134.68	0.200	14964					0	
STD	150	10.59	34.884	26.78	131.19	0.234	14948					4	
STD	200	9.48	34.714	26.84	126.36	0.298	14914					6	
STD	250	8.95	34.650	26.87	123.74	0.361	14902					6	
STD	300	8.76	34.624	26.88	123.59	0.422	14902					0	
STD	350	8.66	34.612	26.89	123.87	0.484	14907					6	
STD	400	8.56	34.596	26.89	124.46	0.546	14911					5	
STD	450	8.48	34.585	26.90	124.90	0.609	14916					7	
STD	500	8.22	34.543	26.90	124.81	0.671	14914					8	
STD	550	7.90	34.510	26.92	123.29	0.733	14909					6	
STD	600	7.54	34.470	26.95	121.64	0.794	14903					5	
STD	650	7.18	34.439	26.97	119.48	0.855	14897					8	
STD	700	6.78	34.416	27.01	116.07	0.914	14889					6	
STD	750	6.39	34.398	27.05	112.62	0.971	14882					8	
STD	800	5.98	34.396	27.10	107.71	1.026	14874					7	
STD	850	5.58	34.392	27.15	103.29	1.079	14866					5	
STD	900	5.05	34.366	27.19	98.77	1.129	14852					6	
STD	950	4.86	34.370	27.21	96.54	1.178	14853					10	
STD	1000	4.65	34.373	27.24	94.19	1.226	14853					0	
STD	1100	4.11	34.379	27.30	87.88	1.317	14847					3	
STD	1200	3.57	34.385	27.36	81.70	1.401	14841					5	
STD	1300	3.28	34.403	27.41	77.55	1.481	14846					7	
STD	1400	2.97	34.434	27.46	72.26	1.556	14850					4	
STD	1500	2.80	34.470	27.50	68.23	1.626	14860					4	
STD	1600	2.70	34.521	27.55	63.82	1.692	14873					7	
STD	1700	2.62	34.559	27.59	60.64	1.754	14887					8	
STD	1800	2.55	34.596	27.62	57.62	1.814	14902					4	

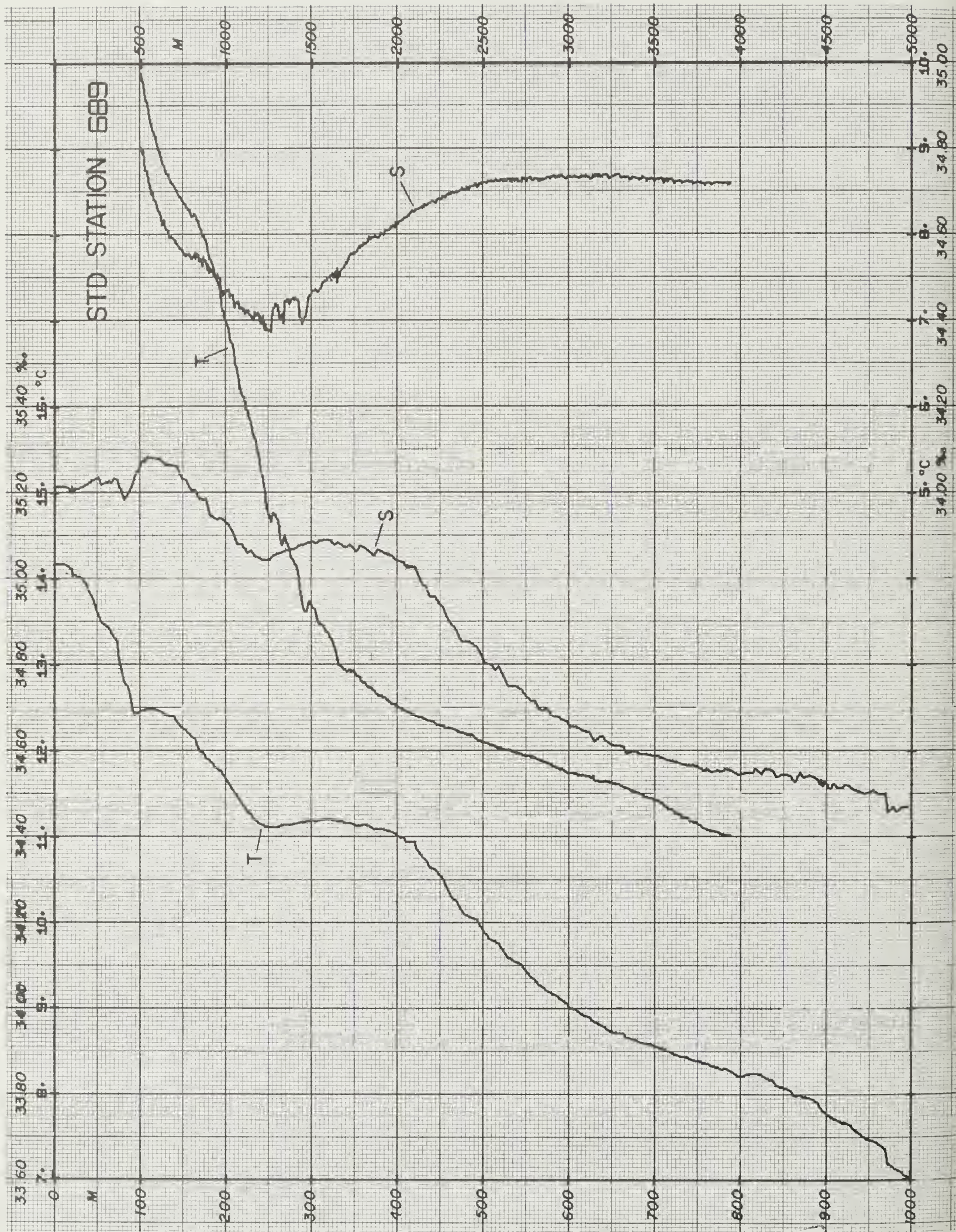




SHIP /CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOI				
EL 27	STD 687	25FEB1967	10.5	45 10.7S	147 22.4E	465	3933	10	258				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.7	9.2	1018.5	21	3	18	5						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	14.14	35.196	26.33	170.53	0.000	15049					0	
STD	10	14.16	35.194	26.32	171.38	0.017	15051					0	
STD	20	14.17	35.197	26.32	171.58	0.034	15053					3	
STD	30	14.17	35.199	26.32	171.79	0.051	15055					5	
STD	50	13.97	35.205	26.37	167.96	0.085	15052					0	
STD	75	13.44	35.214	26.49	157.51	0.126	15038					3	
STD	100	12.43	35.205	26.68	139.24	0.163	15008					5	
STD	125	12.45	35.262	26.72	136.22	0.198	15014					4	
STD	150	12.36	35.249	26.73	136.10	0.232	15015					4	
STD	200	11.89	35.158	26.75	135.32	0.299	15006					5	
STD	250	11.32	35.063	26.79	133.05	0.367	14993					5	
STD	300	11.16	35.058	26.81	131.88	0.433	14995					6	
STD	350	11.23	35.080	26.81	132.74	0.499	15006					4	
STD	400	11.15	35.059	26.81	133.88	0.566	15011					6	
STD	450	10.98	35.018	26.81	135.05	0.633	15013					5	
STD	500	10.34	34.878	26.82	134.96	0.700	14997					0	
STD	550	9.62	34.754	26.84	132.91	0.767	14977					7	
STD	600	9.16	34.665	26.85	132.64	0.834	14967					0	
STD	650	8.82	34.613	26.86	131.92	0.900	14962					5	
STD	700	8.55	34.571	26.87	131.55	0.966	14960					6	
STD	750	8.42	34.550	26.88	131.89	1.032	14963					8	
STD	800	8.31	34.552	26.90	130.94	1.097	14967					5	
STD	850	8.06	34.525	26.91	129.63	1.162	14965					0	
STD	900	7.78	34.509	26.94	127.34	1.227	14963					6	
STD	950	7.43	34.489	26.98	124.21	1.290	14957					7	
STD	1000	7.02	34.466	27.02	120.42	1.351	14949					3	



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	SER 688	25FEB1967	11.4	45 11.3S	147 22.2E	465	3550	35	23				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC	OBS				
	12.3	9.1		22	4	23	3		2				
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ g/l	NITR 10 <sup>-2</sup> $\mu$ g/l	SILIC $\mu$ g/l	INT M	DD
OBS	0	14.11	35.194	26.33			15048	597	17	06	1		
ISL	0	14.11	35.194	26.33	170.09	0.000	15048						
OBS	9	14.12	35.192	26.33			15050	597	22	04	1		
ISL	10	14.12	35.192	26.33	170.69	0.017	15050						
ISL	20	14.10	35.192	26.33	170.69	0.034	15051						
OBS	30	14.09	35.192	26.33			15052	598	16	06	1		
ISL	30	14.09	35.192	26.33	170.69	0.051	15052						
OBS	48	13.92	35.204	26.38			15050	587	28	16	1		
ISL	50	13.91	35.206	26.38	166.60	0.085	15050						
ISL	75	13.53	35.215	26.47	159.07	0.126	15041						
OBS	77	13.48	35.215	26.48			15040	584	26	23	0		
OBS	96	12.68	35.195	26.63			15016	565	42	57	0		
ISL	100	12.61	35.205	26.65	142.66	0.163	15014						
OBS	120	12.45	35.260	26.72			15013	558	51	67	1		
ISL	125	12.43	35.260	26.73	135.97	0.198	15013						
OBS	144	12.36	35.242	26.73			15014	561	47	78	2		
ISL	150	12.31	35.235	26.73	136.24	0.232	15013						
OBS	169	12.14	35.209	26.74			15010	564	56	71	0		
OBS	194	11.98	35.178	26.75			15008	564	59	78	0		
ISL	200	11.91	35.165	26.75	135.18	0.300	15007						
OBS	243	11.42	35.078	26.78			14995	561	80	89	1		
ISL	250	11.39	35.075	26.78	133.50	0.367	14995						
ISL	300	11.23	35.065	26.80	132.60	0.434	14998						
OBS	342	11.19	35.074	26.82			15003	586	63	89	1		
ISL	400	10.89	35.019	26.83	132.16	0.566	15002						
OBS	491	10.30	34.902	26.84			14994	572		124	4		
ISL	500	10.24	34.889	26.84	132.41	0.698	14993						
ISL	600	9.52	34.756	26.86	131.98	0.831	14982						
ISL	700	8.80	34.637	26.89	130.79	0.962	14970						
OBS	740	8.52	34.594	26.90			14965	588	107		5		
ISL	800	8.20	34.558	26.92	128.68	1.092	14963						
ISL	900	7.66	34.514	26.96	125.05	1.219	14958						
OBS	989	7.16	34.490	27.02			14953	483	155		13		
ISL	1000	7.08	34.486	27.02	119.74	1.341	14952						
ISL	1100	6.30	34.450	27.10	112.13	1.457	14937						
ISL	1200	5.50	34.425	27.18	103.90	1.565	14922						
OBS	1240	5.18	34.417	27.21			14915	447	206	285	33		
ISL	1250	5.11	34.418	27.22	99.49	1.616	14914						
ISL	1300	4.75	34.420	27.27	94.94	1.664	14907						
ISL	1400	4.11	34.425	27.34	87.00	1.755	14898						
OBS	1489	3.62	34.430	27.39			14892	432	228	325	52		
ISL	1500	3.58	34.436	27.40	80.24	1.839	14892						
OBS	1739	2.92	34.576	27.58			14907	373	236	362	77		
ISL	1750	2.90	34.580	27.58	62.86	2.018	14908						
OBS	1990	2.52	34.636	27.66			14933	399	227	330	75		
ISL	2000	2.51	34.639	27.66	55.07	2.165	14934						
OBS	2240	2.31	34.694	27.72			14967	407	221	300	83		
ISL	2250	2.30	34.696	27.73	49.47	2.296	14969						
OBS	2491	2.09	34.726	27.77			15001	421	226	278	88		
ISL	2500	2.08	34.727	27.77	45.47	2.415	15003						
ISL	2750	1.90	34.739	27.79	43.14	2.525	15038						
OBS	2991	1.74	34.740	27.81			15073	446	224	326	99		
ISL	3000	1.73	34.740	27.81	41.63	2.631	15074						
ISL	3250	1.56	34.739	27.82	40.06	2.733	15110						
OBS	3494	1.40	34.733	27.82			15146	462	221	339	104		



SHIP CRUS	STATION	DATE	GMT	LATITUDE	LONGITUDE	MARS	DEPTH	MSD	NOL				
EL 27	STD 689	25FEB1967	12.6	45 11.9S	147 22.5E	465	3942	39	800				
	AIR TEMP	DEW PT	BAROM	WIND DIR	FORCE	SEA DIR	ST	SPEC OBS					
	11.9	8.5	1020.2	22	3	19	4						
TYPE	DEPTH M	TEMP °C	SALIN ‰	DENS ( $\sigma_t$ )	ANOM cl/T	DYN HT DYN M	VELOC 10 <sup>-3</sup> m/sec	OXYG 10 <sup>-2</sup> ml/l	PHOS 10 <sup>-2</sup> $\mu$ gat/l	NITR 10 <sup>-2</sup> $\mu$ gat/l	SILIC $\mu$ gat/l	INT M	DD
STD	0	14.16	35.213	26.33	169.80	0.000	15050						0
STD	10	14.17	35.214	26.33	170.06	0.017	15051						5
STD	20	14.11	35.202	26.34	170.11	0.034	15051						0
STD	30	14.02	35.211	26.36	167.99	0.051	15050						0
STD	50	13.62	35.231	26.46	158.98	0.084	15040						0
STD	75	13.12	35.222	26.56	150.61	0.122	15028						0
STD	100	12.45	35.259	26.72	135.72	0.158	15010						4
STD	125	12.44	35.274	26.73	135.24	0.192	15014						3
STD	150	12.26	35.233	26.74	135.48	0.226	15011						5
STD	200	11.68	35.132	26.77	133.43	0.293	14998						5
STD	250	11.11	35.044	26.81	130.81	0.359	14985						7
STD	300	11.19	35.085	26.83	130.29	0.424	14997						7
STD	350	11.14	35.070	26.82	131.82	0.490	15003						7
STD	400	11.02	35.044	26.82	132.71	0.556	15007						6
STD	450	10.56	34.942	26.83	133.13	0.622	14997						0
STD	500	9.93	34.819	26.84	132.30	0.689	14981						5
STD	550	9.46	34.730	26.85	131.87	0.755	14971						6
STD	600	9.04	34.665	26.87	130.83	0.821	14963						4
STD	650	8.73	34.615	26.88	130.36	0.886	14959						5
STD	700	8.57	34.588	26.88	130.60	0.951	14961						0
STD	750	8.40	34.564	26.89	130.50	1.016	14962						6
STD	800	8.21	34.545	26.91	129.79	1.081	14963						5
STD	850	8.08	34.543	26.92	128.71	1.146	14966						6
STD	900	7.78	34.524	26.95	126.23	1.210	14963						6
STD	950	7.47	34.502	26.98	123.77	1.272	14959						0
STD	1000	7.01	34.466	27.02	120.27	1.333	14949						4
STD	1100	6.12	34.425	27.10	111.45	1.449	14930						0
STD	1200	5.38	34.406	27.18	103.53	1.557	14916						4
STD	1300	4.70	34.435	27.28	93.18	1.655	14905						5
STD	1400	4.21	34.451	27.35	86.47	1.745	14902						7
STD	1500	3.70	34.461	27.41	80.02	1.828	14898						4
STD	1600	3.37	34.500	27.47	73.66	1.905	14901						6
STD	1700	2.94	34.531	27.54	66.64	1.975	14900						5
STD	1800	2.80	34.576	27.59	62.19	2.040	14912						6
STD	1900	2.64	34.597	27.62	59.17	2.100	14922						5
STD	2000	2.52	34.626	27.65	56.05	2.158	14934						7
STD	2100	2.42	34.655	27.68	53.25	2.212	14948						7
STD	2200	2.34	34.676	27.71	51.20	2.265	14962						7
STD	2300	2.26	34.695	27.73	49.24	2.315	14976						7
STD	2400	2.20	34.706	27.74	48.16	2.364	14990						6
STD	2500	2.10	34.722	27.76	46.04	2.411	15003						0
STD	2600	2.03	34.726	27.77	45.26	2.456	15018						7
STD	2700	1.97	34.730	27.78	44.59	2.501	15032						0
STD	2800	1.92	34.731	27.78	44.19	2.546	15047						5
STD	2900	1.84	34.736	27.79	43.05	2.589	15061						0
STD	3000	1.74	34.735	27.80	42.09	2.632	15074						0
STD	3100	1.70	34.735	27.80	41.91	2.674	15090						3
STD	3200	1.64	34.734	27.81	41.38	2.716	15105						0
STD	3300	1.61	34.738	27.81	40.89	2.757	15121						9
STD	3400	1.52	34.730	27.81	40.44	2.797	15134					10	
STD	3500	1.42	34.727	27.82	39.54	2.837	15148						7
STD	3600	1.32	34.728	27.83	38.17	2.876	15161						6
STD	3700	1.21	34.724	27.83	37.08	2.914	15173						7
STD	3800	1.09	34.716	27.83	36.05	2.950	15186						0
STD	3900	1.03	34.718	27.84	35.22	2.986	15201						7



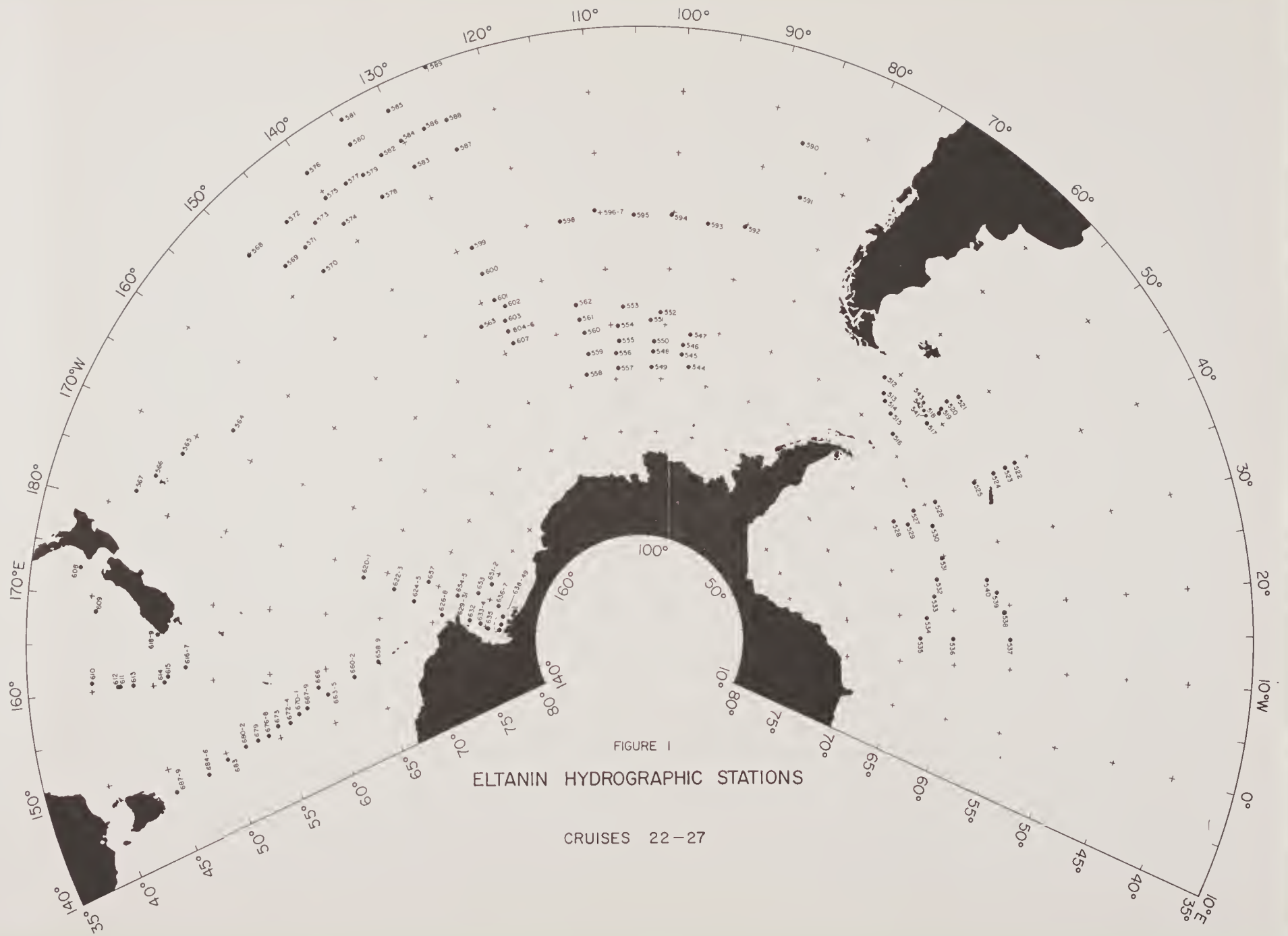


FIGURE I  
ELTANIN HYDROGRAPHIC STATIONS

CRUISES 22-27





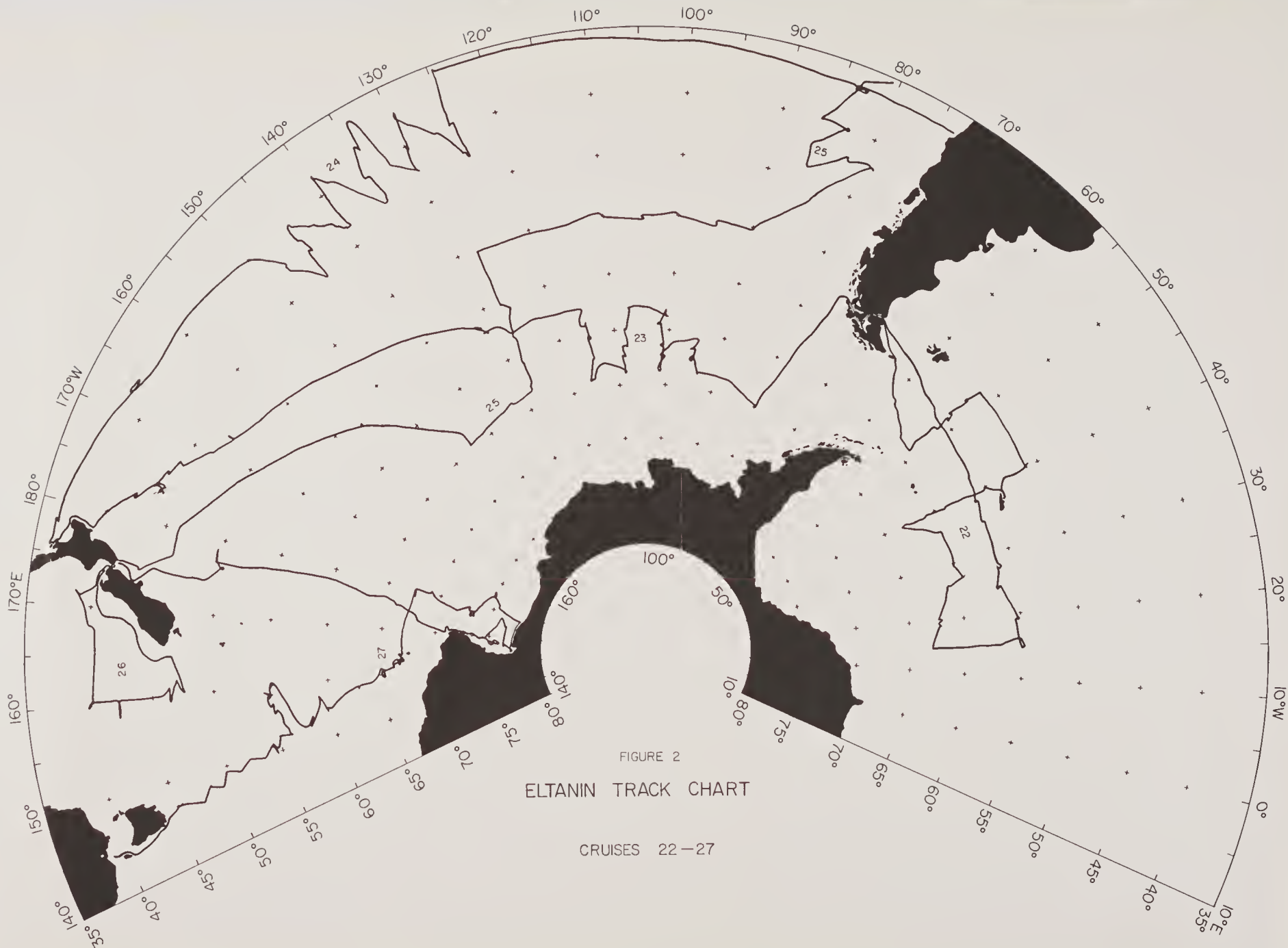


FIGURE 2  
ELTANIN TRACK CHART

CRUISES 22-27



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**PHYSICAL AND CHEMICAL  
OCEANOGRAPHIC OBSERVATIONS  
IN THE SOUTHERN OCEANS**



**USNS ELTANIN  
Cruises 16-21  
1965**

**Stanley S. Jacobs**

**Technical Report No. 1-CU-1-66  
NSF Grant GA-305  
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## I. Outline of Hydrographic Program

This report includes hydrographic and chemical measurements at oceanographic stations occupied by the USNS ELTANIN on Cruises 16 through 21 (January, 1965 to January, 1966). A station map (Fig. 1) is included. Data from ELTANIN Cruises 4 through 15 has appeared in previous technical reports (Friedman, 1964, and Jacobs, 1965).

There were 2465 bathythermograph observations made during these six cruises. Figure 2 is a tabulation of BT casts within each 5-degree square. Determination of BT reference temperatures, disposition of slides, etc., was described in Jacobs, 1965. All BT measurements are in meters and °C. The majority of instruments used were manufactured by Wallace and Tiernan, Belleville, New Jersey. A few expanded temperature-scale (-2 to +10°C) bathythermographs made by Dittmore-Friemuth Corp., Milwaukee, Wisconsin, were also utilized on these cruises. The breakdown of BT observations for each cruise is as follows:

<u>Cruise</u>	<u>Observations</u>
16.....	401
17.....	786
18.....	301
19.....	545
20.....	267
21.....	165



As on previous cruises, salinity and chemical determinations were carried out aboard ship. Methods of data collection and processing were essentially as outlined in the preceding technical report. Only the differences in techniques or instruments used will be mentioned here.

A decrease in the number of variables sampled on many stations on these cruises was a direct result of fewer personnel in the hydrographic department aboard the ELTANIN during 1965. BT observations were also significantly fewer than on previous cruises.

Additional Richter and Wiese reversing thermometers were in use on these cruises, as well as a number of instruments made by Yoshino-Keiki. Thermometer calibration data were determined by the Naval Oceanographic Office, Instrumentation Division, and by G. Whitney, Woods Hole Oceanographic Institution.

On cruises 16 and 17 approximately 200 special water samples were collected at the request of Dr. Eric Olausson, Oceanografiska Institutionen, Göteborg, Sweden, for calcium determinations and oxygen-isotope studies. Calcium measurements were made aboard ship after the method described by Patton and Reeder, 1956.

Ten large-volume water samples were collected on Cruise 17 and returned to Lamont for analysis for  $C^{14}$ ,  $Cs^{137}$ , and  $Sr^{90}$  content. Locations and depths of samples are indicated below.

<u>Barrel #</u>	<u>Date</u>	<u>Latitude(S)</u>	<u>Longitude(W)</u>	<u>Depth(m)</u>
1	27 MAR 65	56° 58'	135° 04'	500
2	"	56° 59'	135° 03'	100
3	"	56° 59'	135° 03'	10
4	30 MAR 65	61° 00'	134° 22'	500
5	"	61° 01'	134° 22'	200
6	"	61° 01'	134° 22'	10
7	06 APR 65	68° 02'	135° 33'	4500
8	"	68° 02'	135° 35'	500
9	"	68° 03'	135° 36'	115
10	"	68° 03'	135° 37'	10

The ELTANIN began using a satellite navigation system at the start of Cruise 20.

## II. Explanation of Data Listings

On each station listing, GMT is the messenger release time of the shallow cast. Geographic location is recorded at GMT. Sonic depth has been corrected for variations in sound velocity from Matthews' (1939) tables. If more than one cast was made, sonic depth is given at messenger release time of the deep cast, or, in regions of rough topography, at the estimated trip-time of the bottom bottle. Wind direction (degrees) and force (Beaufort), sea direction

(degrees) and state (WMO Code 3700), air temperature (°C) and dewpoint (°C) have been taken from ELTANIN deck logs. NO. OBS. is the number of sampling levels. Data codes appear in the DD column as follows:

- 1 - doubtful temperature
- 2 - doubtful salinity
- 3 - doubtful temperature and salinity
- 4 - doubtful oxygen
- 5 - doubtful nitrate
- 6 - doubtful phosphate
- 7 - doubtful silicate
- 9 - temperature = 0.0°C

On Cruises 16 and 17 the thermograd was used in the manner described in the previous report. Bottom temperatures that have been obtained from thermograd records are preceded by an asterisk in the station lists.

The Nansen bottle modified to trip when the cast weights hit bottom was used through Cruise 19. Observation depths for these sampling levels were determined from wire out at bottom contact, corrected with the deep-cast L-Z curve. These depths are preceded by an asterisk in the report.

## Sound Velocity

The pressure terms in Wilson's equations for sound velocity are expressed in units of  $\text{kg}/\text{cm}^2$ . Wilson (1960a) and Morey (1962) indicate that the pressure may be approximated by summation over a number of discrete layers, i.e. in the form:

$$P_n = \sum_{i=1}^n \bar{g}_{\phi i} \bar{\rho}_i t_i$$

Where  $\bar{\rho}_i$  is the average density between each layer,  $t_i$  is the layer thickness,  $\bar{g}_{\phi i}$  is the acceleration due to gravity at the latitude  $\phi$  and at the mean layer depth, and  $P_n$  is the pressure at the bottom of the  $n^{\text{th}}$  layer. This is the proper hydrostatic equation, with the units of pressure in  $\text{dynes}/\text{cm}^2$ . In order to convert to  $\text{kg (weight)}/\text{cm}^2$ , the result must be divided by the standard value of gravity,  $g_s = 980.665, (\times 10^3)$  as defined by the International Committee on Weights and Measures. This is the same value of  $g$  that appears with Wilson's (1959) tables. Thus the correct expression for  $g$  in the above equation would be the ratio  $\bar{g}_{\phi i} / g_s$ .

In the previous ELTANIN data report, incorrect units were used for pressure, resulting in sound velocities that were approximately  $0.35 \left( \frac{\text{depth}}{1000} \right) \text{m/sec}$ . too low. This discrepancy is smaller (even in large depths) than the difference ( $\approx 3\text{m/sec}$ ) between sound velocities based on Wilson's tables and those of Kuwahara (1939), both of which have been used to generate the sound velocity data presently archived. Sound velocities in this report, as in



Tech. Rept. No. 1-CU-1-65, are based on Wilson's (1960b) equation.

### III. Notes on Quality Control

Methods of quality control of these oceanographic data were outlined in the previous report. As the data from these cruises were being processed, additional control was available in the form of core maps, T-S diagrams, etc., prepared at Lamont (Gordon, 1966).

Table 1 includes a comparison of temperature differences between paired protected thermometers on Cruises 16-21. Tabulation was accomplished by computer, along with an intercomparison of all protected thermometers for systematic differences between final corrected readings. By interchanging protected thermometers and using the most reliable instruments as standards, new index corrections are obtained by computer without the necessity of periodic shipment and recalibration of all instruments.

A number of the hydrographic stations in this report were occupied at approximately the same locations as previous ELTANIN stations. A comparison of temperature, salinity, and oxygen on these station pairs is presented in Table 2. SAL # refers to the particular instrument used for salinity determinations on each station. There are three Auto-Lab Model 601 salinometers aboard the ELTANIN. "C" refers to the Copenhagen standard sea-water batch

I - PAIRED PROTECTED READINGS

<u>Difference</u>	<u>E16</u>	<u>E17</u>	<u>E18</u>	<u>E19</u>	<u>E20</u>	<u>E21</u>	<u>TOTALS</u>	<u>Cum. °/°</u>
.00	11	68	7	60	90	43	279	25.9
.01	25	92	15	103	147	68	450	67.8
.02	24	47	10	48	72	25	226	88.7
.03	11	19	3	15	24	12	84	96.6
.04	0	15	0	4	8	1	28	99.2
.05	0	1	0	0	1	0	2	99.3
.06	0	1	0	0	1	0	2	99.5
.07	0	1	0	0	1	0	2	99.7
.08	0	0	0	0	1	0	1	99.8
.09	0	0	0	1	1	0	2	100.0
	71	244	35	231	346	149	1076	

II - ALL THERMOMETERS

Observations	306	1356	164	1144	1310	550	4830
Malfunctions	1	7	5	14	39	9	75 = 01.6 °/°

number.  $T_s - T_x$  is the difference in temperatures between the standard water and unknown samples. Distance between stations is in nautical miles. Relative position is the direction of Station 1 relative to Station 2. The tabulations of temperature ( $\Delta T^\circ\text{C}$ ), salinity ( $\Delta S^\circ/\text{oo}$ ) and oxygen ( $\Delta O \text{ ml/l}$ ) are averages at standard levels  $\geq 2000\text{m}$ . Interpolated oxygen values were obtained from hand-drawn curves, and temperature and salinity were interpolated by computer, utilizing the average of two Lagrange polynomials.

In Table 2 the temperature differences are large because of the relatively large horizontal temperature gradients that are involved. Assuming no detectable changes in the water masses below 2000m. with time, salinity and oxygen variations should be much smaller, and should not show the regular differences that appear in the table. These differences would appear to be the result of systematic errors in the determinations, and various reasons that might account for these discrepancies are discussed below.

#### Salinity.

a) Corrections for temperature of measurement were not made on any of the salinity determinations, as they should be insignificant ( $<.001^\circ/\text{oo}$ ) in the range of salinities ( $\approx 34.70$ ) encountered in the deep water.

b) There is only a three-month difference between the dates of Copenhagen standard sea-water batches P36 (Sep. 62) and P 37

TABLE 2 - TEMPERATURE, SALINITY, AND OXYGEN COMPARISONS ON REOCCUPIED ELTANIN STATIONS

STN <sub>1</sub>	CRS <sub>1</sub>	DATE <sub>1</sub>	SAL # <sub>1</sub>	C <sub>1</sub>	Ts-Tx	STN <sub>2</sub>	CRS <sub>2</sub>	DATE <sub>2</sub>	SAL # <sub>2</sub>	C <sub>2</sub>	Ts-Tx	LOCATION (1)	SEP. (1-2)	REL. POS. (1-2)	Δ T (1-2)	Δ S (1-2)	Δ O (1-2)
406	17	26MAR65	II	P37	2.1	383	15	09NOV64	III	P37	0.1	5555S 13512W	26	NW	+ .18	+ .007	- .07
407	17	27MAR65	II	P37	0.2	384	15	10NOV64	III	P37	2.1	5653S 13502W	14	NW	+ .07	+ .004	- .05
424	17	18APR65	II	P37	1.2	309	13	06JUN64	I	?	0.3	6605S 9420W	19	NW	- .04	+ .008	-----
429	17	24APR65	II	P36	1.2	361	15	11OCT64	I	P37	1.5	6105S 9510W	9	SW	- .08	+ .013	- .07
430	17	25APR65	II	P36	2.7	363	15	12OCT64	I	P37	2.4	6002S 9517W	8	NW	+ .20	+ .030	-----
431	17	26APR65	II	P36	1.6	365	15	13OCT64	I	P37	3.2	5902S 9518W	8	SW	- .10	+ .015	- .07
439	18	10JUN65	II	P36	---	368	15	17OCT64	I	P37	2.6	5803S 9936W	17	SE	- .11	+ .042	- .01
440	19	14JUL65	II	P36	0.4	366	15	16OCT64	I	P37	2.1	5857S 9959W	6	NW	+ .01	+ .011	- .12
441	19	15JUL65	II	P36	1.0	370	15	19OCT64	I	P37	1.2	6039S 10016W	24	NW	- .02	+ .012	- .09
448	19	24JUL65	II	P36	0.4	376	15	26OCT64	I	P37	1.0	5953S 11010W	12	NW	+ .05	+ .005	- .22
450	19	27JUL65	II	P36	0.1	379	15	28OCT64	I	P37	0.6	5803S 10949W	39	SW	- .09	+ .008	- .05
456	19	10AUG65	II	P36	1.0	388	15	14NOV64	III	P37	0.3	5601S 14013W	14	SW	+ .33	+ .010	- .14
457	19	11AUG65	II	P36	2.1	387	15	13NOV64	III	P37	0.4	5701S 14008W	18	SW	+ .15	+ .018	- .18
477	20	03OCT64	II	P36	- .1	348	14	22AUG64	I	P37	3.5	5948S 14445W	20	NE	+ .13	+ .017	- .22
485	20	16OCT65	II	P36	0.0	375	15	24OCT64	I	P37	1.3	5911S 10449W	7	SE	- .06	+ .010	- .10
506	21	23DEC65	II	P36	0.0	382	15	03NOV64	III	P37	0.0	5633S 11941W	32	SE	+ .21	+ .001	+ .10
Averages:											0.9	1.4			+ .05	+ .013	- .09
516	22	25JAN66	II	P36	?	154	8	06JUN63	I	P37	0.9	5855S 5356W	20	NE	- .09	- .003	- .08
527	22	11FEB66	II	P40	?	270	12	25MAR64	I	P37	?	6104S 3956W	8	NE	- .17	- .001	+ .09
528	22	13FEB66	II	P40	?	267	12	22MAR64	I	P37	1.2	6308S 3943W	35	SE	- .01	- .001	- .02
532	22	19FEB66	II	P40	?	137	8	10MAY63	I	P36	0.7	6101S 2612W	7	NW	+ .03	+ .008	- .05
540	22	05MAR66	II	P40	?	132	8	01MAY63	I	P36	0.0	5632S 2430W	25	NW	- .01	+ .003	+ .09

(Dec. 62). Although the salinity of seawater sealed in glass ampoules tends to increase with time up to  $.003^{\circ}/\text{oo}$  in three years (Cox, 1959), this increase is not systematic (Park, 1964).

c) The same operator processed both stations on only three of the South Pacific station pairs.

d) A more obvious correlation with the differences appears to be the particular instrument that was in use. Salinometer number II was repaired and recalibrated by Auto-Lab Industries shortly before the beginning of Cruise 16 and has not been altered since that time. Alterations (new thermister and toroid) were made to instrument number I aboard ship previous to Cruise 13 and new calibration data were determined at that time according to salinometer instruction manual directions. The salinities measured on instrument number III were processed at a temperature compensation setting that was probably incorrect by 3 units ( $\Delta R = 1.5$  ohms). The average temperature difference between standards and samples was  $0.6^{\circ}\text{C}$  on these five stations. According to Brown and Hamon (1961) these differences could result in a salinity error,  $\Delta S = 3 \times 10^{-3} \Delta R$  ( $T_s - T_x$ ) =  $.003^{\circ}/\text{oo}$ .

e) There is additional evidence for slight variations between individual instruments in a report by Bertholf and Beller (1964). Fifteen different organizations analyzed 816 replica seawater samples on 30 separate salinity bridges, 5 of which were Model 601 Auto-Lab

salinometers. Deviations of averages obtained on the Auto-Lab instruments from the I.A.P.O. (Copenhagen) primary standard were +.006, -.004, -.009, -.007, and .000<sup>o</sup>/oo in the medium salinity range (34.497<sup>o</sup>/oo).

### Oxygen

a) The method of oxygen determination was the same on all cruises (Winkler, after Strickland and Parsons, 1960). One possibly significant change was the replacement of an automatic burette at some time during Cruise 16 or 17.

b) Slight variations in operator technique might produce systematic differences in final results, but the same technician processed both stations on 13 of these South Pacific pairs.

c) Chemicals are replaced as required, and the method includes internal checks on the quality of the reagents used. The precision ( $2\sigma$ ) of the oxygen determination is  $\approx .05$  ml/l (Strickland and Parsons).

Five South Atlantic stations from the most recent ELTANIN Cruise have been added at the end of Table 2. The same instruments and techniques were in use on Cruises 8, 12 and 22, while different technicians processed the stations.

IV. Acknowledgments

The principal persons who assisted in the collection and processing of these data were Frederic Rosselot, Alvaro Ulloa, and Roberto Duran. Significant contributions were also made by Arnold L. Gordon, Bernard Katz, Guy Mathieu, Andres Lusquinos, Juan Quintana, Anthony Amos, Stephen Gordon, and Jorge Duran. R. Duran and A. Lusquinos were on leave from the Argentine Hydrographic Office. Drafting was by Fletcher Staples and secretarial work by Mrs. Jeanne Stolz and Mrs. Lynn Amos.

This work has been supported by National Science Foundation contracts GA-194 and GA-305.

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SHIP / CRS		STATION	DATE		GMT	LATITUDE	LONGITUDE	SONIC DEPTH M		MARSDEN		NO. OBS	
EL 16		398	3 FEB 1965		2042	4421S	16202E	4890		10°	1°	22	
			WIND DIR	FORCE	AIR TEMP		DEW POINT	SEA DIR		ST			
			325	05	16.8		15.9	330		4			
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ Δ D DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS µg-at/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC µg-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	15.11	34.951	25.93			15077	587	28	8	0	824	
STD	0	15.11	34.951	25.93	208.39	0.000	15077						
STD	10	15.08	34.951	25.93	208.04	.021	15078						
STD	20	15.05	34.952	25.94	207.70	.042	15078						
STD	30	15.02	34.952	25.95	207.35	.062	15079						
OBS	48	14.97	34.953	25.96			15080	584	29	4	1	824	
STD	50	14.86	34.959	25.99	203.96	.103	15077						
STD	75	13.38	35.028	26.36	169.89	.150	15034						
OBS	98	11.96	35.081	26.68			14990	555	68	78	3	813	
STD	100	11.91	35.079	26.69	138.85	.189	14989						
OBS	145	11.25	35.000	26.75			14972	568	71	86	3	814	
STD	150	11.21	34.995	26.75	133.78	.257	14972						
OBS	194	10.89	34.951	26.78			14967	560	82	100	4	814	
STD	200	10.82	34.942	26.78	131.99	.323	14965						
OBS	243	10.33	34.880	26.82			14954	541	92	127	4	812	
STD	250	10.27	34.872	26.82	128.85	.389	14953						
OBS	293	9.94	34.824	26.84			14947	528	105	139	8	810	
STD	300	9.87	34.814	26.85	127.54	.453	14946						
OBS	390	9.04	34.684	26.88			14928	531	126	169	5	807	
STD	400	8.98	34.675	26.89	125.22	.579	14928						
STD	500	8.41	34.599	26.92	123.78	.704	14922						
OBS	586	7.99	34.558	26.95			14919	503		214	9	803	
STD	600	7.89	34.549	26.96	121.06	.826	14918						
STD	700	7.14	34.493	27.02	115.56	.944	14904						
OBS	784	6.48	34.455	27.08			14892	460	186	264	17	796	
STD	800	6.36	34.457	27.10	108.56	1.056	14890						
STD	900	5.65	34.468	27.20	99.25	1.160	14878						
STD	1000	5.01	34.479	27.28	91.05	1.255	14869						
STD	1250	3.71	34.477	27.42	77.00	1.466	14856						
OBS	1380	3.20	34.521	27.51			14857	388	224	345	65	794	
STD	1500	2.93	34.554	27.56	63.59	1.641	14866						
OBS	1673	2.67	34.603	27.62			14885	376	226	335	78	787	
STD	1750	2.58	34.621	27.64	55.82	1.791	14894						
OBS	1926	2.40	34.659	27.69			14917	391	220	331	82	787	
OBS	1968	2.36	34.667	27.70			14923	398	221	330	83	787	
STD	2000	2.33	34.672	27.70	50.36	1.923	14927						
STD	2250	2.12	34.706	27.75	46.38	2.044	14961						
OBS	2261	2.11	34.707	27.75			14963	413	223	321	86	787	
STD	2500	1.94	34.729	27.78	43.43	2.156	14996						
OBS	2556	1.90	34.732	27.79			15005	431	220	319	91	787	
STD	2750	1.74	34.736	27.80	41.10	2.262	15031						
OBS	2949	1.57	34.734	27.81			15058	441	217	300	101	787	
STD	3000	1.53	34.733	27.82	39.30	2.363	15065						
STD	3250	1.37	34.727	27.82	38.11	2.459	15102						
OBS	3340	1.32	34.725	27.82			15116	446	218	315	106	786	
STD	3500	1.25	34.723	27.83	37.36	2.554	15140						
OBS	3735	1.19	34.721	27.83			15179	451	209	319	109	784	
STD	3750	1.19	34.721	27.83	37.07	2.647	15181						
STD	4000	1.16	34.719	27.83	37.36	2.740	15224						
OBS	4128	1.16	34.718	27.83			15248	456	219	319	111	785	
STD	4500	1.13	34.716	27.83	37.99	2.928	15312						
OBS	4520	1.13	34.716	27.83			15316	461	215	321	110	784	
OBS	4810	0.00	34.711	0.00			0		229	324	114		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	399	5FEB1965	0410	4705S	16210E	4594	463	72	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		260	07	14.6	12.2	260	6						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ Δ D DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgat/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	12.87	34.540	26.08			14999	613	50	36	1	809	
STD	0	12.87	34.540	26.08	193.83	0.000	14999						
STD	10	12.77	34.541	26.10	192.06	.019	14997						
STD	20	12.67	34.543	26.12	190.32	.038	14995						
STD	30	12.81	34.544	26.10	193.28	.058	15002						
OBS	48	12.38	34.546	26.18			14990	611	59	42	1	818	
STD	50	12.27	34.549	26.21	183.17	.095	14986						
STD	75	10.88	34.594	26.50	155.79	.138	14943						
OBS	96	9.75	34.638	26.73			14906	605	99	124	1	813	
STD	100	9.69	34.645	26.75	132.72	.174	14904						
OBS	144	9.55	34.698	26.81			14907	600	98	123	1	813	
STD	150	9.53	34.701	26.82	127.11	.239	14907						
OBS	192	9.43	34.710	26.84			14911	600	97	122	1	812	
STD	200	9.42	34.712	26.84	125.65	.302	14912						
OBS	241	9.36	34.709	26.85			14916	594	102	134	3	812	
STD	250	9.31	34.703	26.86	125.46	.365	14916						
OBS	289	9.07	34.673	26.87			14913	585	107	148	7	815	
STD	300	9.02	34.666	26.87	124.50	.427	14913						
OBS	385	8.65	34.618	26.89			14912	567	122	179	5	811	
STD	400	8.58	34.608	26.90	123.90	.551	14912						
OBS	482	8.21	34.558	26.92			14911	566	128	193	4	809	
STD	500	8.13	34.551	26.92	122.94	.675	14911						
OBS	578	7.78	34.528	26.96			14910	536	142	207	7	806	
STD	600	7.65	34.517	26.97	119.89	.796	14908						
STD	700	7.03	34.475	27.02	115.38	.914	14900						
OBS	771	6.53	34.450	27.07			14892	471	183	277	16	798	
STD	800	6.31	34.451	27.10	108.30	1.026	14888						
STD	900	5.57	34.456	27.20	99.04	1.129	14875						
OBS	964	5.11	34.461	27.26			14867	484	190	270	22	799	
STD	1000	4.89	34.450	27.27	91.56	1.225	14864						
OBS	1152	4.08	34.412	27.33			14855	437	215	328	38	793	
STD	1250	3.65	34.427	27.39	80.01	1.439	14853						
OBS	1338	3.33	34.453	27.44			14855	418	226	341	51	792	
STD	1500	2.88	34.512	27.53	66.14	1.622	14864						
OBS	1614	2.67	34.558	27.58			14875	400	235	333	64	788	
STD	1750	2.52	34.606	27.64	56.26	1.775	14892						
OBS	1887	2.42	34.647	27.68			14912	407	229	336	71	786	
STD	2000	2.35	34.672	27.70	50.58	1.908	14928						
OBS	2171	2.23	34.700	27.73			14953	418	219	332	76	787	
STD	2250	2.16	34.711	27.75	46.56	2.030	14963						
OBS	2451	1.96	34.729	27.78			14989	433	214	318	83	789	
STD	2500	1.91	34.731	27.78	42.85	2.141	14995						
STD	2750	1.65	34.733	27.81	40.22	2.245	15027						
OBS	2828	1.58	34.731	27.81			15038	440	212	341	95	789	
STD	3000	1.46	34.730	27.82	38.58	2.344	15062						
OBS	3206	1.36	34.727	27.82			15094	441	222	336	101	787	
STD	3250	1.34	34.726	27.82	37.83	2.439	15100						
STD	3500	1.26	34.719	27.82	37.72	2.534	15140						
OBS	3589	1.24	34.717	27.82			15156	453	214	305	90	797	
STD	3750	1.23	34.718	27.82	37.88	2.628	15183						
OBS	3979	1.23	34.722	27.83			15225	447	225	345	104	790	
STD	4000	1.23	34.722	27.83	38.14	2.723	15227						
OBS	4375	1.20	34.721	27.83			15294	450	219	337	107	789	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	400	6FEB1965	1219	4900S	16200E	4309	463	92	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		265	06	13.0	10.5	260	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	11.50	34.462	26.28			14951	627	53	74	0	823	
STD	0	11.50	34.462	26.28	174.54	0.000	14951						
STD	10	11.49	34.454	26.28	175.20	.017	14952						
STD	20	11.48	34.449	26.28	175.71	.035	14953						
STD	30	11.48	34.452	26.28	175.53	.053	14954						
OBS	50	11.46	34.446	26.28			14957	626	80	72	0	830	
STD	50	11.46	34.446	26.28	176.19	.088	14957						
STD	75	10.38	34.464	26.49	156.92	.129	14923						
OBS	100	9.22	34.487	26.70			14885	617	111	128	4	823	
STD	100	9.22	34.487	26.70	136.99	.166	14885						
OBS	150	8.53	34.515	26.83			14868	620	96	142	2	823	
STD	150	8.53	34.515	26.83	125.33	.232	14868						
OBS	199	8.45	34.544	26.87			14873	617	57	143	5	823	
STD	200	8.45	34.544	26.87	122.86	.294	14873						
OBS	250	8.43	34.554	26.88			14881	610	108	151	4	824	
STD	250	8.43	34.554	26.88	122.77	.355	14881						
OBS	300	8.40	34.558	26.89			14888	604	121	155	5	822	
STD	300	8.40	34.558	26.89	122.94	.417	14888						
OBS	399	8.15	34.527	26.90			14894	597	128	167	2	818	
STD	400	8.15	34.527	26.90	123.21	.540	14894						
OBS	497	7.76	34.491	26.93			14895	582	117	181	7	823	
STD	500	7.75	34.490	26.93	121.67	.662	14895						
OBS	596	7.44	34.474	26.96			14899	544	153	213	11	815	
STD	600	7.42	34.473	26.97	119.70	.783	14899						
STD	700	6.85	34.438	27.02	115.46	.900	14892						
OBS	792	6.20	34.403	27.08			14882	498	157	242	19	809	
STD	800	6.15	34.400	27.08	109.78	1.013	14881						
STD	900	5.46	34.374	27.15	103.61	1.120	14869						
OBS	990	4.73	0.000	0.00			0	482	207	293	29	805	
STD	1000	4.63	34.357	27.23	95.13	1.219	14852						
OBS	1022	4.42	34.355	27.25			14847	486	207	300	32	805	
OBS	1221	3.36	34.371	27.37			14836	458	232	309	46	800	
STD	1250	3.26	34.387	27.39	78.18	1.436	14836						
STD	1500	2.69	34.546	27.57	61.33	1.610	14856						
OBS	1518	2.67	34.559	27.58			14859	415	233	310	64	796	
STD	1750	2.45	34.628	27.66	53.85	1.754	14889						
OBS	1817	2.42	34.642	27.67			14900	409	232	320	72	797	
STD	2000	2.29	34.691	27.72	48.50	1.882	14926						
OBS	2114	2.21	34.716	27.75			14942	425	221	310	79	799	
STD	2250	2.09	34.730	27.77	44.26	1.998	14960						
OBS	2411	1.94	34.737	27.79			14982	435	216	293	87	799	
STD	2500	1.84	34.737	27.80	41.54	2.105	14993						
STD	2750	1.59	34.733	27.81	39.39	2.206	15025						
OBS	2808	1.54	34.731	27.81			15033	441	228	310	102	799	
STD	3000	1.42	34.727	27.82	38.13	2.303	15060						
OBS	3206	1.33	34.724	27.82			15093	448	228	313	105	798	
STD	3250	1.32	34.724	27.82	37.65	2.398	15100						
STD	3500	1.28	34.724	27.83	37.74	2.492	15142						
OBS	3605	1.28	34.724	27.83			15161	450	230	305	109	799	
STD	3750	1.27	34.723	27.83	38.22	2.587	15185						
STD	4000	1.27	34.721	27.82	38.86	2.684	15229						
OBS	4005	1.27	34.721	27.82			15231	454	232	317	108	798	
OBS	*4300	*1.26	34.719	27.82			15283						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	401	8FEB1965	0921	5159S	16201E	3831	499	12	20				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		245	04	9.8	4.2	200	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	9.21	34.245	26.51			14865	662	111	125	1		
STD	0	9.21	34.245	26.51	152.78	0.000	14865						
STD	10	9.17	34.237	26.51	152.98	.015	14865						
STD	20	9.13	34.229	26.51	153.12	.031	14865						
STD	30	9.19	34.223	26.50	154.68	.046	14869						
OBS	50	9.01	34.212	26.52			14865	663	117	137	1	836	
STD	50	9.01	34.212	26.52	153.13	.077	14865						
STD	75	8.54	34.198	26.58	147.58	.114	14852						
OBS	99	8.03	34.201	26.66			14836	658	125	158	1	826	
STD	100	8.01	34.202	26.67	139.96	.150	14836						
OBS	148	7.33	34.300	26.84			14819	641	135	175	4	825	
STD	150	7.36	34.310	26.85	123.71	.216	14820						
OBS	198	8.09	34.493	26.88			14859	616				825	
STD	200	8.06	34.489	26.88	121.22	.277	14858						
OBS	247	7.10	34.332	26.90			14826	630	136	162	5	825	
STD	250	7.06	34.327	26.90	119.92	.338	14825						
OBS	296	6.67	34.284	26.92			14817	627	148	204	5	824	
STD	300	6.64	34.282	26.92	118.35	.397	14816						
OBS	396	6.22	34.281	26.98			14815	594	153	226	8	819	
STD	400	6.21	34.284	26.98	113.92	.513	14816						
OBS	494	5.97	34.349	27.06			14822	521	185	258	15	816	
STD	500	5.93	34.350	27.07	106.70	.624	14822						
OBS	591	5.28	34.347	27.15			14810	499	194	282	20	809	
STD	600	5.21	34.345	27.15	99.01	.727	14809						
STD	700	4.45	34.333	27.23	91.76	.822	14794						
OBS	785	3.86	34.331	27.29			14783	483	215	311	32	809	
STD	800	3.78	34.336	27.30	84.60	.910	14782						
STD	900	3.30	34.375	27.38	77.09	.991	14779						
OBS	983	3.02	34.417	27.44			14782	451	229	321	47	807	
STD	1000	2.99	34.423	27.45	70.80	1.065	14783						
OBS	1200	2.79	34.499	27.53			14809	416	235	348	59	805	
STD	1250	2.73	34.524	27.55	62.02	1.231	14816						
OBS	1483	2.47	34.629	27.66			14845	402	230	336	72	805	
STD	1500	2.45	34.634	27.66	52.15	1.374	14847						
STD	1750	2.26	34.682	27.72	47.57	1.498	14882						
OBS	1766	2.25	34.684	27.72			14884	416	232	334	75	805	
STD	2000	2.14	34.710	27.75	45.30	1.614	14920						
OBS	2053	2.12	34.714	27.75			14928	429	228	316	84	804	
STD	2250	2.00	34.731	27.78	43.05	1.725	14956						
OBS	2341	1.94	34.736	27.79			14970	435	223	320	91	806	
STD	2500	1.86	34.739	27.80	41.59	1.831	14993						
OBS	2628	1.79	34.739	27.80			15013	442	224	303	94	806	
STD	2750	1.71	34.738	27.81	40.61	1.933	15030						
OBS	2917	1.60	34.737	27.81			15055	450	223	318	93	805	
STD	3000	1.54	34.737	27.82	39.22	2.033	15066						
OBS	3211	1.40	34.736	27.83			15097	460	223	303	96	804	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	402	9FEB1965	2153	5400S	15954E	4587	500	49	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
				2	9.9	7.4	310	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC µg-at/l	pH -10 <sup>2</sup>	DD
OBS	0	6.54	33.858	26.60			14757	693		227	1		
STD	0	6.54	33.858	26.60	144.31	0.000	14757						
STD	10	6.44	33.858	26.62	143.17	.014	14755						
STD	20	6.54	33.859	26.60	144.49	.029	14760						
STD	30	6.44	33.859	26.62	143.34	.043	14758						
OBS	50	6.04	33.860	26.67			14746	699	148	211	1	827	
STD	50	6.04	33.860	26.67	138.68	.071	14746						
STD	75	4.97	33.900	26.83	123.64	.104	14706						
OBS	99	3.96	33.941	26.97			14669	698	167	244	6	818	
STD	100	3.94	33.941	26.97	110.06	.133	14668						
OBS	149	3.64	33.967	27.02			14664	686	173	254	8	817	
STD	150	3.65	33.969	27.02	105.55	.187	14665						
OBS	198	4.20	34.080	27.06			14697	635	178	258	9	813	
STD	200	4.19	34.080	27.06	103.01	.239	14697						
OBS	248	3.72	34.072	27.10			14685	628	185	274	14	811	
STD	250	3.72	34.075	27.10	99.06	.290	14685						
OBS	297	3.80	34.156	27.16			14698	584	195	298	19	809	
STD	300	3.79	34.158	27.16	93.93	.338	14698						
OBS	396	3.29	34.192	27.24			14693	561	211	305	25	808	
STD	400	3.28	34.194	27.24	86.82	.429	14693						
OBS	495	2.99	34.260	27.32			14697	518	222	304	34	803	
STD	500	2.98	34.263	27.32	79.41	.512	14698						
OBS	593	2.76	34.321	27.39			14704	486	221	341	44	801	
STD	600	2.75	34.325	27.39	73.15	.588	14705						
STD	700	2.60	34.385	27.45	67.79	.658	14716						
OBS	791	2.51	34.438	27.50			14728	433	231	349	58	799	
STD	800	2.50	34.444	27.51	63.04	.724	14729						
STD	900	2.46	34.504	27.56	58.64	.785	14745						
OBS	989	2.44	34.553	27.60			14760	407	236	370	67	796	
STD	1000	2.44	34.558	27.60	54.92	.841	14762						
OBS	1194	2.38	34.628	27.66			14793	406	226	346	70	799	
STD	1250	2.36	34.640	27.68	49.30	.972	14801						
OBS	1393	2.30	34.666	27.70			14823	408	225	332	76	800	
STD	1500	2.25	34.689	27.72	45.79	1.091	14839						
OBS	1691	2.15	34.724	27.76			14868	431	218	338	81	798	
STD	1750	2.11	34.730	27.77	42.30	1.201	14876						
OBS	1990	1.93	34.745	27.79			14910	440	211	331	87	799	
STD	2000	1.92	34.745	27.80	39.99	1.304	14911						
STD	2250	1.66	34.746	27.82	37.68	1.401	14942						
OBS	2287	1.62	34.745	27.82			14947	452	214	300	95	797	
STD	2500	1.44	34.740	27.83	36.18	1.493	14975						
OBS	2586	1.38	34.737	27.83			14988	459	217	314	102	799	
STD	2750	1.27	34.732	27.83	35.19	1.582	15011						
OBS	2885	1.20	34.729	27.84			15032	466	218	325	108	798	
STD	3000	1.15	34.727	27.84	34.56	1.669	15049						
OBS	3188	1.08	34.723	27.84			15079	467	213	321	112	799	
STD	3250	1.05	34.722	27.84	34.02	1.755	15088						
OBS	3479	.95	34.717	27.84			15124	481	222	323	115	797	
STD	3500	.94	34.717	27.84	33.33	1.839	15127						
STD	3750	.89	34.712	27.84	33.28	1.923	15169						
OBS	3779	.89	34.712	27.84			15175	485	221	344	117	796	
STD	4000	.85	34.710	27.84	33.18	2.006	15211						
OBS	4184	.83	34.709	27.84			15244	487	223	334	118	795	
STD	4500	.81	34.706	27.84	33.48	2.172	15299						
OBS	*4550	*.81	34.705	27.84			15308	485	218	364	120		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	403	10FEB1965	2111	5531S	16003E	3613	499	50	20				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			345	04	8.6	6.0	330	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	5.64	33.829	26.69			14721	711	144	225	0		
STD	0	5.64	33.829	26.69	135.66	0.000	14721						
STD	10	5.61	33.815	26.69	136.53	.014	14721						
STD	20	5.59	33.819	26.69	136.04	.027	14722						
STD	30	5.56	33.814	26.69	136.22	.041	14722						
OBS	39	5.54	33.810	26.69			14723	714	146	220	0	830	
STD	50	4.57	33.828	26.82	124.53	.067	14685						
STD	75	2.39	33.881	27.07	100.68	.095	14597						
OBS	79	2.05	33.891	27.10			14583	749	189	257	6	822	
STD	100	1.89	33.926	27.14	93.50	.119	14579						
OBS	118	2.14	33.956	27.15			14594	695	202	300	15	815	
STD	150	2.17	34.023	27.20	88.50	.165	14601						
OBS	159	2.17	34.043	27.21			14603	647	205	304	20	811	
OBS	199	2.17	34.135	27.29			14611	596	218	323	28	810	
STD	200	2.17	34.137	27.29	80.11	.207	14611						
OBS	240	2.31	34.213	27.34			14625	548	224	365	35	807	
STD	250	2.32	34.226	27.35	74.86	.246	14627						
STD	300	2.31	34.277	27.39	71.17	.282	14636						
OBS	322	2.27	34.292	27.41			14638	500	236	341	45	801	
STD	400	2.12	34.349	27.46	64.57	.350	14645						
OBS	404	2.12	34.354	27.47			14646	470	234	362	52	804	
OBS	441	2.33	34.434	27.51			14662	435	237	372	59	799	
OBS	485	2.31	34.461	27.54			14669	429	233	356	60	798	
STD	500	2.31	34.474	27.55	57.32	.411	14671						
STD	600	2.28	34.559	27.62	51.30	.465	14688						
OBS	650	2.28	34.599	27.65			14697	407	213	355	69	799	
STD	700	2.27	34.611	27.66	47.81	.515	14705						
OBS	787	2.27	34.648	27.69			14720	410	226	338	72	798	
STD	800	2.27	34.662	27.70	44.49	.561	14722						
OBS	816	2.27	34.679	27.71			14725	411	223	331	74	800	
STD	900	2.24	34.718	27.75	40.52	.604	14739						
STD	1000	2.19	34.704	27.74	41.59	.645	14753						
OBS	1145	2.09	34.724	27.77			14773	441	215	324	78	801	
STD	1250	2.02	34.734	27.78	38.72	.745	14788						
STD	1500	1.81	34.747	27.81	36.63	.839	14821						
OBS	1503	1.81	34.747	27.81			14822	447	214	349	86	805	
STD	1750	1.58	34.745	27.82	35.09	.929	14853						
OBS	1830	1.50	34.742	27.82			14863	455	212	342	93	802	
STD	2000	1.37	34.738	27.83	34.02	1.015	14886						
OBS	2153	1.26	34.733	27.83			14908	468	215	328	102	802	
STD	2250	1.19	34.730	27.84	33.12	1.099	14921						
OBS	2478	1.04	34.723	27.84			14954	470	215	329	108	803	
STD	2500	1.03	34.722	27.84	32.25	1.181	14957						
STD	2750	.91	34.716	27.84	31.68	1.261	14995						
OBS	2808	.89	34.715	27.84			15004	476	215	342	109	797	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 16	404	13FEB1965	0308	5902S	16156E	4738	499	91	24				
		WIND DIR		FORCE	AIR TEMP	DEW POINT		SEA DIR	ST				
		025		01	9.2	2.4		200	4				
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	5.67	33.858	26.71			14722	713	144	226	2		
STD	0	5.67	33.858	26.71	133.83	0.000	14722						
STD	10	5.64	33.844	26.71	134.62	.013	14722						
STD	20	5.52	33.834	26.71	134.10	.027	14719						
STD	30	5.32	33.843	26.74	131.28	.040	14713						
OBS	50	4.66	33.833	26.81			14689	723	148	216	2	830	
STD	50	4.66	33.833	26.81	125.09	.066	14689						
STD	75	3.07	33.872	27.00	106.98	.095	14626						
OBS	100	1.54	33.921	27.16			14564	737	198		16	816	
STD	100	1.54	33.921	27.16	91.36	.120	14564						
OBS	150	1.04	33.976	27.24			14551	723	203	284	23	815	
STD	150	1.04	33.976	27.24	83.92	.163	14551						
OBS	200	1.22	34.096	27.33			14569	647	211	321	33	810	
STD	200	1.22	34.096	27.33	76.11	.203	14569						
OBS	250	1.60	34.211	27.39			14595	570	220	323	42	803	
STD	250	1.60	34.211	27.39	70.26	.240	14595						
OBS	300	1.95	34.319	27.45			14621	501	222	347	50	804	
STD	300	1.95	34.319	27.45	65.02	.274	14621						
STD	400	2.28	34.470	27.55	56.89	.335	14654						
OBS	401	2.28	34.471	27.55			14654	432	233	348	63	798	
STD	500	2.26	34.534	27.60	52.46	.389	14670						
OBS	501	2.26	34.534	27.60			14670	413	231	331	69	798	
STD	600	2.27	34.592	27.65	48.64	.440	14688						
OBS	601	2.27	34.593	27.65			14688	409	236	372	71	798	
STD	700	2.23	34.635	27.68	45.59	.487	14703						
STD	800	2.17	34.666	27.71	43.18	.531	14718						
OBS	802	2.17	34.667	27.71			14718	412	228	341	76	800	
STD	900	2.15	34.694	27.74	41.43	.574	14734						
STD	1000	2.13	34.717	27.76	40.00	.615	14750						
OBS	1001	2.13	34.717	27.76			14751	428	213	325	79	806	
OBS	1195	2.00	34.750	27.79			14778	437	214	304	82	801	
STD	1250	1.96	34.752	27.80	36.75	.710	14785						
OBS	1497	1.76	34.749	27.81			14818	449	213	299	88	801	
STD	1500	1.76	34.749	27.81	35.88	.801	14819						
STD	1750	1.52	34.743	27.82	34.62	.889	14851						
OBS	1799	1.48	34.742	27.83			14857	460	214	321	96	802	
STD	2000	1.34	34.740	27.83	33.55	.975	14885						
OBS	2004	1.34	34.740	27.83			14886	465	212	321	99	801	
STD	2250	1.17	34.730	27.84	32.90	1.058	14920						
OBS	2309	1.13	34.727	27.84			14929	474	214	328	106	801	
STD	2500	1.01	34.722	27.84	32.12	1.139	14956						
OBS	2613	.95	34.719	27.84			14973	480		324	110	799	
STD	2750	.89	34.717	27.85	31.39	1.218	14994						
STD	3000	.80	34.713	27.85	30.90	1.296	15034						
OBS	3017	.80	34.713	27.85			15037	485	222	320	115	798	
STD	3250	.74	34.710	27.85	30.64	1.373	15075						
OBS	3419	.71	34.707	27.85			15103	493	220	328	118	799	
STD	3500	.70	34.705	27.85	30.61	1.450	15117						
STD	3750	.67	34.701	27.85	30.73	1.526	15159						
OBS	3822	.66	34.700	27.85			15172	500	218	305	121	802	
STD	4000	.65	34.699	27.85	30.85	1.603	15203						
OBS	4233	.64	34.698	27.85			15245	495	220	328	122	799	
STD	4500	.66	34.697	27.84	31.69	1.760	15292						
OBS	4637	.66	34.696	27.84			15318	500	220	314	123	794	
OBS	*4687	*.65	0.000	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	405	25MAR1965	1540	5500S	13502W	2935	493	55	19				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			280	02	3.5	0.0	190	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgal/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC µg-at/l	pH ·10 <sup>2</sup>	DD
STD	0	4.85	34.029	26.94	111.89	0.000	14691						
OBS	1	4.85	34.029	26.94			14691	710	160	339	5	820	5
STD	10	4.85	34.026	26.94	112.20	.011	14693						
STD	20	4.85	34.023	26.94	112.52	.022	14694						
STD	30	4.84	34.020	26.94	112.78	.034	14696						
STD	50	4.84	34.017	26.94	113.19	.056	14699						
OBS	51	4.84	34.017	26.94			14699	712	160	219	6	821	
STD	75	4.92	34.016	26.93	114.44	.085	14706						
OBS	100	4.84	34.020	26.94			14707	712	162	239	6	821	
STD	100	4.84	34.020	26.94	113.50	.113	14707						
STD	150	3.44	34.054	27.11	97.23	.166	14657						
OBS	155	3.28	34.058	27.13			14651	722	191	269	9	819	
OBS	199	2.43	34.091	27.23			14622	714	201	301	13	818	
STD	200	2.41	34.091	27.23	85.56	.212	14621						
OBS	249	2.00	34.113	27.28			14612	678	209	273	22	813	
STD	250	2.00	34.115	27.28	80.67	.253	14612						
OBS	299	2.33	34.195	27.32			14635	602	206	322	29	810	
STD	300	2.33	34.196	27.32	77.45	.293	14636						
OBS	398	2.05	34.238	27.38			14640	589	216	343	37	809	
STD	400	2.04	34.238	27.38	72.27	.368	14640						
OBS	498	1.65	34.253	27.42			14639	592	215	322	41	809	4
STD	500	1.67	34.257	27.42	68.13	.438	14640						
OBS	597	2.64	34.449	27.50			14702	440	230	353	49	801	
STD	600	2.65	34.452	27.50	62.73	.503	14702						
STD	700	2.66	34.510	27.55	59.11	.564	14720						
OBS	796	2.34	34.516	27.58			14723	420	227	353	59	801	
STD	800	2.34	34.518	27.58	55.88	.622	14723						
STD	900	2.31	34.563	27.62	52.76	.676	14740						
OBS	995	2.32	34.606	27.65			14756	405	230	241	69	806	
STD	1000	2.32	34.608	27.65	50.01	.727	14757						
OBS	1193	2.27	34.668	27.71			14788	407	226	321	72	801	
STD	1250	2.24	34.679	27.72	45.12	.846	14797						
OBS	1386	2.15	34.700	27.74			14816	417	221	322	80	797	
STD	1500	2.09	34.717	27.76	41.89	.955	14833						
OBS	1678	1.98	34.737	27.78			14859	433	211	342	85	804	
STD	1750	1.92	34.741	27.79	39.24	1.056	14868						
OBS	1971	1.70	34.745	27.81			14896	445	211	305	94	803	
STD	2000	1.67	34.745	27.81	37.03	1.152	14900						
STD	2250	1.43	34.740	27.83	35.28	1.242	14932						
OBS	2268	1.41	34.739	27.83			14934	457	209	306	103	803	
STD	2500	1.26	34.736	27.84	34.16	1.329	14967						
OBS	2560	1.23	34.735	27.84			14977	463	213	323	105	804	
STD	2750	1.16	34.734	27.84	33.64	1.414	15006						
OBS	*2925	*1.14	34.735	27.84			15036	469		321	111	803	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	406	26MAR1965	0815	5555S	13512W	3343	493	55	21				
			WIND DIR 360	FORCE 06	AIR TEMP 5.9	DEW POINT 0.0	SEA DIR 310	ST 3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH 10 <sup>2</sup>	DD
STD	0	5.19	34.109	26.97	109.59	0.000	14706						
OBS	1	5.19	34.109	26.97			14706	694	145	225	0		
STD	10	5.19	34.109	26.97	109.73	.011	14708						
STD	20	5.20	34.109	26.97	109.88	.022	14710						
STD	30	5.20	34.109	26.97	109.99	.033	14711						
OBS	45	5.20	34.110	26.97			14714	695	152	225	0	822	
STD	50	5.20	34.110	26.97	110.15	.055	14715						
STD	75	5.25	34.112	26.97	110.84	.083	14721						
OBS	89	5.19	34.113	26.97			14721	695	148	200	1	822	
STD	100	4.97	34.114	27.00	107.87	.110	14713						
OBS	134	4.18	34.112	27.08			14686	675	148	255	6	818	
STD	150	3.96	34.106	27.10	98.31	.161	14679						
OBS	178	3.69	34.096	27.12			14673	671	169	249	10	818	
STD	200	3.58	34.099	27.13	95.47	.210	14671						
OBS	223	3.49	34.105	27.15			14672	659	184	254	11	817	
STD	250	3.35	34.111	27.17	92.74	.257	14670						
OBS	269	3.25	34.116	27.18			14669	635	181	261	15	814	
STD	300	3.14	34.133	27.20	89.50	.303	14670						
OBS	358	2.99	34.169	27.25			14673	601	202	304	22	811	
STD	400	2.85	34.187	27.27	83.26	.389	14675						
OBS	449	2.72	34.211	27.30			14677	574	204	292	30	810	
STD	500	2.70	34.249	27.33	77.87	.469	14686						
OBS	544	2.71	34.284	27.36			14694	529	221		38	807	
STD	600	2.63	34.323	27.40	72.15	.544	14700						
STD	700	2.48	34.390	27.47	66.27	.614	14711						
OBS	729	2.43	34.408	27.48			14714	463	222	323	51	803	
STD	800	2.42	34.456	27.52	61.35	.678	14726						
STD	900	2.44	34.518	27.57	57.44	.737	14744						
OBS	923	2.45	34.531	27.58			14749	408	222	340	64	799	
STD	1000	2.42	34.567	27.61	54.11	.793	14761						
OBS	1195	2.32	34.637	27.68			14790	401	218	328	74	798	
STD	1250	2.29	34.653	27.69	47.66	.920	14799						
OBS	1396	2.22	34.688	27.73			14821	405	217	312	75	800	
STD	1500	2.16	34.706	27.75	43.46	1.034	14836						
OBS	1696	2.03	34.730	27.77			14864	432	212	311	78	799	
STD	1750	1.99	34.734	27.78	40.53	1.139	14871						
OBS	1997	1.77	34.744	27.81			14904	440	219	292	85	799	
STD	2000	1.77	34.744	27.81	38.24	1.237	14904						
STD	2250	1.56	34.742	27.82	36.71	1.331	14938						
OBS	2298	1.52	34.741	27.82			14944	453	209	275	91	802	
STD	2500	1.36	34.736	27.83	35.39	1.421	14972						
OBS	2599	1.28	34.733	27.83			14986	460	213	300	99	800	
STD	2750	1.15	34.728	27.84	33.89	1.508	15006						
OBS	2899	1.03	34.723	27.84			15027	470	207	280	106	799	
STD	3000	.97	34.721	27.84	32.55	1.591	15041						
OBS	3200	.90	34.719	27.85			15073	474	222		117	797	
STD	3250	.89	34.718	27.85	32.04	1.671	15081						
OBS	*3383	*.88	34.717	27.85			15105	472	217	328	114	797	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	407	27MAR1965	0650	5653S	13502W	3390	493	65	21				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			275	04	5.8	0.0	350	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	5.19	34.096	26.96	110.56	0.000	14706						
OBS	1	5.19	34.096	26.96			14706	678	153	229	2	818	
STD	10	5.19	34.095	26.96	110.67	.011	14707						
STD	20	5.18	34.095	26.96	110.79	.022	14709						
STD	30	5.18	34.094	26.96	110.90	.033	14710						
STD	50	5.17	34.093	26.96	111.13	.055	14713						
OBS	51	5.17	34.093	26.96			14713	693	154	206	2	821	
STD	75	5.14	34.082	26.95	111.88	.083	14716						
OBS	100	5.00	34.071	26.96			14714	698	154	228	1	820	
STD	100	5.00	34.071	26.96	111.44	.111	14714						
OBS	150	4.12	34.070	27.06			14686	692	181	258	6	819	
STD	150	4.12	34.070	27.06	102.64	.165	14686						
OBS	200	3.52	34.102	27.14			14669	657	185	259	11	818	
STD	200	3.52	34.102	27.14	94.69	.214	14669						
OBS	250	3.09	34.091	27.17			14659	659	195	296	15	817	
STD	250	3.09	34.091	27.17	91.80	.261	14659						
OBS	300	2.93	34.132	27.22			14661	628	202	309	18	812	
STD	300	2.93	34.132	27.22	87.56	.306	14661						
OBS	400	2.82	34.196	27.28			14673	584	189	320	26	810	
STD	400	2.82	34.196	27.28	82.34	.390	14673						
OBS	500	2.64	34.261	27.35			14683	536	213	324	35	808	
STD	500	2.64	34.261	27.35	76.36	.470	14683						
OBS	600	2.29	34.309	27.42			14685	526	227	336	43	803	
STD	600	2.29	34.309	27.42	70.03	.543	14685						
STD	700	2.36	34.392	27.48	65.03	.611	14706						
OBS	800	2.54	34.477	27.53			14732	425	229	337	57	800	
STD	800	2.54	34.477	27.53	60.92	.674	14732						
STD	900	2.46	34.529	27.58	56.78	.732	14746						
OBS	999	2.34	34.569	27.62			14757	406	228	338	64	798	
STD	1000	2.34	34.569	27.62	53.07	.787	14757						
OBS	1217	2.22	34.643	27.69			14790	407	223	340	71	798	
STD	1250	2.21	34.654	27.70	46.70	.912	14795						
OBS	1412	2.17	34.700	27.74			14821	418	221	318	76	800	
STD	1500	2.11	34.714	27.76	42.38	1.023	14834						
OBS	1612	2.03	34.726	27.77			14849	429		319	77	802	
STD	1750	1.92	34.736	27.79	39.64	1.126	14868						
OBS	1912	1.79	34.742	27.80			14890	444	214	311	83	801	
STD	2000	1.72	34.743	27.81	37.78	1.223	14902						
OBS	2206	1.56	34.740	27.82			14930	450	208	327	79	801	
STD	2250	1.53	34.739	27.82	36.55	1.316	14936						
STD	2500	1.35	34.734	27.83	35.46	1.406	14972						
OBS	2505	1.35	34.734	27.83			14973	462	215	310	98	801	
STD	2750	1.15	34.726	27.84	34.01	1.492	15005						
OBS	2804	1.10	34.724	27.84			15013	466	219	333	105	800	
STD	3000	.94	34.718	27.84	32.31	1.575	15040						
OBS	3102	.87	34.716	27.85			15055	479	222	324	106	800	
STD	3250	.81	34.714	27.85	31.27	1.655	15078						
OBS	*3345	*.79	34.713	27.85			15094	484	219	328	117	798	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	408	28MAR1965	1155	5857S	13527W	3714	493	85	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR		ST					
		340	05	1.5	1.0	320		4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	2.28	34.125	27.27	80.98	0.000	14583						
OBS	1	2.28	34.125	27.27			14583	748	173	267	23	812	
STD	10	2.27	34.128	27.27	80.77	.008	14584						
STD	20	2.25	34.131	27.28	80.42	.016	14585						
STD	30	2.22	34.135	27.28	79.96	.024	14586						
OBS	48	2.15	34.143	27.30			14585	737	173	247	20	820	
STD	50	2.15	34.143	27.30	78.78	.040	14586						
STD	75	2.02	34.155	27.32	77.03	.060	14584						
OBS	96	1.80	34.174	27.35			14578	739	178	249	26	817	
STD	100	1.68	34.181	27.36	72.66	.078	14574						
OBS	144	.62	34.280	27.51			14535	632	216	319	50	808	
STD	150	.65	34.294	27.52	57.37	.111	14537						
OBS	193	1.28	34.390	27.56			14574	533	215	320	59	801	
STD	200	1.42	34.408	27.56	53.86	.139	14582						
OBS	241	1.96	34.488	27.59			14614	446	230	318	62	798	4
STD	250	1.86	34.485	27.59	51.62	.165	14611						
OBS	290	1.31	34.459	27.61			14593	506	214	327	63	800	
STD	300	1.36	34.470	27.62	49.04	.190	14597						
OBS	388	2.23	34.606	27.66			14651	409	217	322	73	801	
STD	400	2.25	34.614	27.66	45.80	.238	14654						
OBS	486	2.17	34.646	27.70			14666	404	188	321	76	800	
STD	500	2.15	34.649	27.70	42.82	.282	14667						
OBS	584	2.01	34.660	27.72			14675	422	221	318	73	800	
STD	600	2.00	34.664	27.72	40.84	.324	14677						
STD	700	1.99	34.691	27.75	39.13	.364	14694						
OBS	783	2.01	34.714	27.76			14709	419	210	293	75	798	
STD	800	2.01	34.717	27.77	37.86	.402	14712						
STD	900	1.97	34.728	27.78	37.05	.440	14727						
OBS	980	1.92	34.734	27.79			14738	430	207	292	82	799	
STD	1000	1.91	34.735	27.79	36.39	.476	14741						
OBS	1185	1.75	34.745	27.81			14765	368	201	285	89	800	4
STD	1250	1.69	34.747	27.81	34.33	.565	14774						
OBS	1381	1.56	34.749	27.83			14790	447	211	307	88	799	
STD	1500	1.45	34.747	27.83	32.78	.649	14805						
OBS	1579	1.39	34.745	27.83			14816	457	202	299	93	799	
STD	1750	1.27	34.739	27.84	32.09	.730	14839						
OBS	1772	1.25	34.738	27.84			14843	451	211	291	99	799	
STD	2000	1.09	34.731	27.84	31.34	.809	14874						
OBS	2063	1.05	34.729	27.85			14883	465	219	293	106	798	
STD	2250	.97	34.726	27.85	30.90	.887	14912						
OBS	2349	.94	34.724	27.85			14928	469	208	292	108	798	
STD	2500	.87	34.720	27.85	30.53	.964	14950						
OBS	2635	.81	34.717	27.85			14971	473	216	300	112	797	
STD	2750	.75	34.716	27.85	29.72	1.039	14988						
OBS	2925	.67	34.715	27.86			15015	483	211	307	118	796	
STD	3000	.63	34.714	27.86	28.59	1.112	15026						
OBS	3224	.54	34.711	27.86			15062	487	220	334	118	796	
STD	3250	.53	34.710	27.86	27.73	1.182	15065						
STD	3500	.46	34.702	27.86	27.53	1.251	15106						
OBS	*3626	*.44	34.697	27.86			15128	494	220	349	118	795	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	409	30MAR1965	0103	6054S	13425W	4367	529	04	18				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			165	05	1.7	0.0	155	5					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgal/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	1.88	34.131	27.31	77.55	0.000	14565						
OBS	1	1.88	34.131	27.31			14566	753		268	26	815	
STD	10	1.88	34.131	27.31	77.60	.008	14567						
STD	20	1.88	34.131	27.31	77.65	.016	14569						
STD	30	1.89	34.131	27.31	77.70	.023	14571						
OBS	48	1.89	34.131	27.31			14574	753		254	28	817	
STD	50	1.89	34.131	27.31	77.78	.039	14574						
STD	75	2.00	34.137	27.30	78.21	.058	14583						
OBS	96	1.90	34.147	27.32			14582	753	173	255	24	818	
STD	100	2.79	34.095	27.20	87.91	.079	14621						
OBS	144	.25	34.188	27.46			14517	764	213	279	49	814	
OBS	92	-.32	34.273	27.56			14483	725	202	270	60		
STD	150	-.33	34.315	27.59	50.42	.114	14493						
STD	200	-.33	34.352	27.62	47.50	.138	14502						
OBS	240	-.34	34.381	27.64			14508	666	201	304	70	805	
STD	250	-.05	34.436	27.67	42.49	.161	14524						
OBS	289	1.07	34.645	27.78			14584	472	214	305	86	800	
STD	300	1.20	34.670	27.79	32.82	.179	14592						
OBS	386	1.42	34.717	27.81			14617	441		311	90	800	
STD	400	1.43	34.721	27.81	30.99	.211	14620						
OBS	484	1.39	34.728	27.82			14632	444	210	300	98	802	
STD	500	1.38	34.729	27.82	30.37	.242	14634						
OBS	583	1.35	34.730	27.83			14647	438	214	320	99	801	
STD	600	1.34	34.731	27.83	30.18	.272	14649						
STD	700	1.28	34.733	27.83	29.81	.302	14663						
OBS	780	1.23	34.734	27.84			14674	450	212	320	104	797	
STD	800	1.22	34.734	27.84	29.51	.332	14677						
STD	900	1.17	34.731	27.84	29.50	.362	14691						
OBS	979	1.12	34.728	27.84			14703	457	231	325	110	798	
STD	1000	1.11	34.727	27.84	29.48	.391	14705						
OBS	1135	1.01	34.724	27.84			14724	458	225	316	110	799	
STD	1250	.95	34.721	27.85	29.07	.464	14740						
OBS	1397	.88	34.717	27.85			14762	469	210	300	116	800	
STD	1500	.84	34.716	27.85	28.88	.537	14778						
OBS	1669	.78	34.714	27.85			14804	475	266	306	119	798	6
STD	1750	.75	34.713	27.85	28.53	.608	14816						
OBS	1950	.67	34.710	27.85			14847	477	213	307	123	798	
STD	2000	.65	34.710	27.86	28.09	.679	14854						
OBS	2248	.58	34.708	27.86			14894	486	226	319	125	796	
STD	2250		34.707										
STD	2500		34.706										
STD	2750		34.704										
STD	3000		34.702										
STD	3250		34.701										
STD	3500		34.699										
STD	3750		34.697										
STD	4000		34.696										
OBS	*4215		34.707					499	230	332	127	795	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	410	31MAR1965	0238	6158S	13516W	4546	529	15	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			300	06	1.6	0.0	250	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	1.42	34.136	27.34	73.99	0.000	14545						
OBS	1	1.42	34.136	27.34			14545	761	165	246	28	805	
STD	10	1.42	34.135	27.34	74.10	.007	14547						
STD	20	1.42	34.134	27.34	74.21	.015	14548						
STD	30	1.42	34.133	27.34	74.30	.022	14550						
OBS	45	1.42	34.132	27.34			14552	763	173	247	30	808	
STD	50	1.42	34.132	27.34	74.40	.037	14553						
STD	75	1.50	34.123	27.33	75.71	.056	14561						
OBS	89	1.40	34.132	27.34			14559	764	172	264	29	808	
STD	100	.98	34.169	27.40	68.78	.074	14542						
OBS	133	-.26	34.299	27.57			14493	719	210	291	62	811	
STD	150	-.35	34.337	27.61	48.68	.103	14492						
OBS	177	-.08	34.393	27.64			14510	656	216	311	67	804	
STD	200	.45	34.468	27.67	42.91	.126	14539						
OBS	221	.99	34.538	27.70			14568	515	219	321	74	802	
STD	250	1.50	34.609	27.72	39.51	.147	14597						
OBS	266	1.71	34.639	27.73			14609	436	226	324	78	800	
STD	300	1.86	34.674	27.74	37.56	.166	14621						
OBS	354	1.81	34.696	27.76			14629	424	223	320	83	800	
STD	400	1.81	34.715	27.78	34.56	.202	14637						
OBS	444	1.80	34.726	27.79			14644	430	215	325	83	801	
STD	500	1.77	34.731	27.80	33.38	.236	14652						
OBS	535	1.75	34.732	27.80			14657	434	209	300	87	800	
STD	600	1.67	34.735	27.81	32.67	.269	14664						
STD	700	1.55	34.738	27.82	31.75	.301	14675						
OBS	722	1.52	34.738	27.82			14678	444	217	289	92	801	
STD	800	1.46	34.741	27.83	31.09	.333	14688						
STD	900	1.40	34.743	27.83	30.70	.364	14702						
OBS	918	1.39	34.743	27.83			14705	453	209	306	97	801	
STD	1000	1.34	34.742	27.84	30.51	.394	14716						
OBS	1151	1.25	34.739	27.84			14738	462	209	300	102		
STD	1250	1.18	34.736	27.84	30.12	.470	14751						
OBS	1447	1.04	34.731	27.85			14778	475	212	317	110	800	
STD	1500	1.00	34.730	27.85	29.46	.544	14785						
OBS	1746	.85	34.724	27.85			14820	473	217	315	114	800	
STD	1750	.85	34.724	27.85	28.75	.617	14821						
STD	2000	.75	34.720	27.86	28.35	.689	14859						
OBS	2046	.73	34.719	27.86			14866	475	218	298	118	799	
STD	2250	.66	34.715	27.86	28.05	.759	14898						
OBS	2350	.63	34.714	27.86			14914	482	217	307	126	799	
STD	2500	.58	34.713	27.86	27.49	.829	14937						
OBS	2652	.52	34.712	27.87			14961	487	218	320	127	799	
STD	2750	.49	34.711	27.87	26.76	.896	14976						
OBS	2960	.42	34.710	27.87			15010	495	216	305	126	799	
STD	3000	.41	34.710	27.87	25.94	.962	15016						
STD	3250	.32	34.712	27.88	24.85	1.026	15056						
OBS	3260	.32	34.712	27.88			15058	496	218	324	127	797	
STD	3500	.27	34.711	27.88	24.30	1.087	15098						
OBS	3568	.26	34.710	27.88			15110	502	217	289	128	797	
STD	3750	.25	34.710	27.88	24.06	1.148	15141						
OBS	3976	.24	34.710	27.88			15182	514	219	314	127	796	
STD	4000	.24	34.710	27.88	23.99	1.208	15185						
OBS	4343	.24	34.711	27.88			15247	510	247	310	127	798	
STD	4500	.24	34.711	27.88	23.95	1.328	15274						
OBS	*4626	*.23	34.710	27.88			15298	515	218	314	127	801	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	411	1 APR 1965	0230	6301S	13504W	4821	529	35	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			260	05	.6	0.0	250	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS µg-at/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC µg-at/l	pH · 10 <sup>2</sup>	DD
STD	0	1.47	34.136	27.34	74.33	0.000	14547						
OBS	1	1.47	34.136	27.34			14548	757	166	255	20	812	
STD	10	1.42	34.133	27.34	74.24	.007	14547						
STD	20	1.37	34.130	27.34	74.18	.015	14546						
STD	30	1.35	34.128	27.34	74.15	.022	14547						
OBS	44	1.33	34.127	27.34			14548	761	168		22	819	
STD	50	1.38	34.128	27.34	74.47	.037	14552						
STD	75	1.48	34.123	27.33	75.63	.056	14560						
OBS	88	1.47	34.133	27.34			14562	761	168	239	27	820	
STD	100	1.12	34.171	27.39	69.64	.074	14549						
OBS	132	.26	34.288	27.54			14517	661	214	317	62	817	
STD	150	.36	34.335	27.57	52.53	.105	14525						
OBS	176	.73	34.390	27.59			14547	576	217	330	71	804	
STD	200	.94	34.431	27.61	48.84	.130	14561						
OBS	221	1.08	34.461	27.63			14571	525	224	321	75	800	
STD	250	1.12	34.492	27.65	45.55	.154	14578						
OBS	266	1.13	34.508	27.66			14581	513	222	322	75	801	
STD	300	1.36	34.559	27.69	42.36	.176	14598						
OBS	355	1.77	34.637	27.72			14626	431	220	360	84	799	
STD	400	1.92	34.673	27.74	38.52	.216	14641						
OBS	446	1.98	34.696	27.75			14651	417	222	332	92	799	
STD	500	1.98	34.711	27.76	36.74	.254	14661						
OBS	537	1.96	34.716	27.77			14666	423	183	313	90	799	6
STD	600	1.91	34.725	27.78	35.39	.290	14674						
STD	700	1.80	34.735	27.80	34.13	.324	14686						
OBS	725	1.77	34.737	27.80			14689	438	217	310	97	798	
STD	800	1.70	34.740	27.81	33.25	.358	14698						
STD	900	1.61	34.742	27.82	32.65	.391	14711						
OBS	919	1.59	34.742	27.82			14714	448	210	311	98	800	
STD	1000	1.52	34.744	27.82	32.07	.423	14724						
OBS	1090	1.45	34.745	27.83			14736	451	211	308	98	800	
STD	1250	1.34	34.743	27.84	31.17	.502	14758						
OBS	1376	1.25	34.739	27.84			14776	458	230	299	109	800	
STD	1500	1.16	34.736	27.84	30.54	.580	14792						
OBS	1671	1.03	34.731	27.85			14816	475	217		122	801	
STD	1750	.98	34.729	27.85	29.75	.655	14827						
OBS	1966	.86	34.724	27.85			14858	475	216	316	124	800	
STD	2000	.84	34.723	27.85	29.17	.729	14863						
STD	2250	.75	34.718	27.86	28.79	.801	14902						
OBS	2267	.74	34.718	27.86			14905	477	221	324	132	799	
STD	2500	.67	34.713	27.86	28.60	.873	14941						
OBS	2574	.65	34.712	27.86			14953	482	222	320	134	799	
STD	2750	.58	34.711	27.86	27.91	.943	14980						
OBS	2980	.48	34.710	27.87			15017	491	224	316	134	797	
STD	3000	.47	34.710	27.87	26.81	1.012	15019						
STD	3250	.38	34.710	27.87	25.80	1.078	15059						
OBS	3395	.34	34.710	27.87			15083	496	229	330	138	797	
STD	3500	.31	34.710	27.88	24.96	1.141	15100						
STD	3750	.27	34.709	27.88	24.41	1.203	15142						
OBS	3802	.26	34.709	27.88			15151	504	222	314	136	798	
STD	4000	.25	34.709	27.88	24.21	1.264	15186						
OBS	4218	.25	34.709	27.88			15225	508	221	316	136	796	
STD	4500	.26	34.710	27.88	24.35	1.385	15275						
OBS	4581	.26	34.710	27.88			15291	508	221	321	136	795	
STD	5000	.26	34.708	27.88	24.58	1.507	15365						
OBS	*5040	*.26	34.708	27.88			15374	508	220	327	131	797	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	412	2APR1965	0250	6401S	13507W	4563	529	45	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			300	05	.5	-1.1	265	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgal/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	1.34	34.133	27.35	73.70	0.000	14542						
OBS	1	1.34	34.133	27.35			14542	766	176				
STD	10	1.35	34.134	27.35	73.68	.007	14544						
STD	20	1.36	34.135	27.35	73.68	.015	14546						
STD	30	1.36	34.136	27.35	73.68	.022	14548						
OBS	45	1.37	34.137	27.35			14550	762	179				822
STD	50	1.37	34.137	27.35	73.70	.037	14551						
STD	75	1.45	34.131	27.34	74.73	.055	14559						
OBS	89	1.37	34.137	27.35			14558	761	175				821
STD	100	.99	34.159	27.39	69.63	.073	14543						
OBS	134	-.11	34.250	27.53			14500	711	214				812
STD	150	-.07	34.292	27.56	53.50	.104	14505						
OBS	180	.38	34.370	27.60			14531	616	222				810
STD	200	.70	34.422	27.62	48.02	.130	14550						
OBS	226	1.11	34.484	27.64			14573	517	229				803
STD	250	1.34	34.530	27.67	44.27	.153	14588						
OBS	269	1.47	34.560	27.68			14598	484	229				802
STD	300	1.65	34.599	27.70	41.57	.174	14611						
OBS	362	1.88	34.653	27.72			14632	425	225				801
STD	400	1.94	34.677	27.74	38.42	.214	14642						
OBS	454	1.95	34.700	27.76			14651	416	225				804
STD	500	1.92	34.711	27.77	36.17	.251	14658						
OBS	546	1.87	34.717	27.78			14663	423	224				801
STD	600	1.83	34.725	27.79	34.70	.287	14671						
STD	700	1.75	34.737	27.80	33.52	.321	14684						
OBS	733	1.72	34.740	27.81			14688	438	200				805
STD	800	1.66	34.743	27.81	32.66	.354	14697						
STD	900	1.56	34.745	27.82	32.03	.386	14709						
OBS	926	1.54	34.745	27.82			14713	444	217				805
STD	1000	1.48	34.745	27.83	31.59	.418	14722						
OBS	1230	1.30	34.744	27.84			14753	455		298			804
STD	1250	1.29	34.743	27.84	30.62	.496	14756						
STD	1500	1.12	34.734	27.84	30.34	.572	14791						
OBS	1517	1.11	34.733	27.84			14793	462	221	303			805
STD	1750	.96	34.726	27.85	29.74	.647	14826						
OBS	1798	.93	34.725	27.85			14833	471	220	301			803
STD	2000	.84	34.722	27.85	29.22	.721	14863						
OBS	2077	.81	34.721	27.85			14875	475	225	296			801
STD	2250	.74	34.718	27.86	28.74	.793	14901						
OBS	2371	.69	34.716	27.86			14920	477	220	304			802
STD	2500	.64	34.715	27.86	28.12	.864	14940						
STD	2750	.55	34.714	27.87	27.34	.934	14979						
OBS	2754	.55	34.714	27.87			14980	484	219	284			802
STD	3000	.46	34.714	27.87	26.38	1.001	15019						
OBS	3150	.41	34.714	27.87			15043	491	226	299			799
STD	3250	.38	34.714	27.87	25.47	1.066	15059						
STD	3500	.31	34.713	27.88	24.70	1.128	15100						
OBS	3554	.30	34.713	27.88			15109	499	225	315			801
STD	3750	.26	34.713	27.88	24.09	1.189	15142						
OBS	3970	.23	34.712	27.88			15180	507	221	308			802
STD	4000	0.00	34.711	0.00	0.00	0.000	0						
STD	4500	0.00	34.711	0.00	0.00	0.000	0						
OBS	*4825	0.00	34.711	0.00			0	505	215	310			800

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	413	2APR1965	2211	6500S	13500W	4566	529	55	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			310	06	1.1	.2	310	6					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	.77	34.031	27.30	77.95	0.000	14515						
OBS	2	.77	34.031	27.30			14515	775	173	279	15		
STD	10	.78	34.033	27.30	77.88	.008	14517						
STD	20	.79	34.035	27.30	77.81	.016	14519						
STD	30	.78	34.037	27.31	77.57	.023	14520						
OBS	49	.83	34.041	27.31			14525	775	173	267	15	813	
STD	50	.84	34.041	27.31	77.63	.039	14526						
STD	75	1.06	34.062	27.31	77.43	.058	14540						
OBS	95	1.10	34.099	27.34			14546	763	182	274	18	813	
STD	100	.94	34.118	27.36	72.45	.077	14540						
OBS	142	-.18	34.305	27.58			14499	696	227	329	47	804	
STD	150	-.06	34.336	27.59	50.16	.108	14506						
OBS	188	.87	34.465	27.65			14556	547	231	339	55	800	
STD	200	1.03	34.497	27.66	44.49	.131	14566						
OBS	235	1.37	34.572	27.70			14588	470	226	348	63	796	
STD	250	1.50	34.598	27.71	40.29	.152	14596						
OBS	282	1.73	34.644	27.73			14612	436	228	332	66	792	
STD	300	1.80	34.662	27.74	38.02	.172	14619						
OBS	375	1.91	34.707	27.77			14637	421	227	342	69	797	
STD	400	1.89	34.716	27.77	35.08	.209	14640						
OBS	468	1.78	34.729	27.79			14647	431	222	321	67	796	
STD	500	1.76	34.733	27.80	33.14	.243	14651						
OBS	562	1.73	34.738	27.80			14660	436	215	339	67	793	
STD	600	1.70	34.741	27.81	32.38	.275	14665						
STD	700	1.61	34.748	27.82	31.49	.307	14678						
OBS	750	1.56	34.750	27.83			14684	446	226	323	71	799	
STD	800	1.52	34.750	27.83	30.92	.339	14691						
STD	900	1.45	34.749	27.83	30.68	.369	14704						
OBS	941	1.42	34.748	27.84			14710	450	219	320	78	798	
STD	1000	1.37	34.748	27.84	30.39	.400	14718						
OBS	1163	1.25	34.748	27.85			14740	456	221	327	82		
STD	1250	1.19	34.748	27.85	29.40	.475	14752						
OBS	1453	1.05	34.745	27.86			14780	463	225	309	87	795	
STD	1500	.99	34.742	27.86	28.41	.547	14785						
OBS	1745	.74	34.730	27.87			14815	475	226	324	94	795	
STD	1750	.74	34.730	27.87	27.18	.616	14816						
STD	2000	.74	34.730	27.87	27.59	.685	14859						
OBS	2039	.75	34.730	27.87			14866	480	230	317	93	794	
STD	2250	.68	34.727	27.87	27.46	.754	14899						
OBS	2327	.65	34.725	27.87			14911	480	235	313	95	794	
STD	2500	.58	34.720	27.87	27.03	.822	14937						
OBS	2620	.53	34.717	27.87			14956	485	234	331	98	794	
STD	2750	.48	34.718	27.87	26.18	.888	14976						
OBS	2915	.42	34.720	27.88			15003	496	236	323	99	793	
STD	3000	.39	34.721	27.88	25.04	.952	15016						
OBS	3207	.34	34.722	27.88			15050	499	232	332	101	793	
STD	3250	.33	34.722	27.88	24.23	1.014	15057						
STD	3500	.28	34.721	27.89	23.71	1.074	15099						
OBS	3507	.28	34.721	27.89			15100	512	227	324	95	792	
STD	3750	.25	34.720	27.89	23.33	1.133	15141						
OBS	3800	.24	34.720	27.89			15151	507	226	317	91	792	
STD	4000	.21	34.718	27.89	23.00	1.191	15184						
OBS	4100	.20	34.717	27.89			15202	520		328	93	791	
STD	4500	.19	0.000	0.00	0.00	0.000	0						
OBS	*4571	*.20	0.000	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	414	3 APR 1965	2156	6600S	13456W	4696	529	64	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			270	03	.1	-4.0	250	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔΔ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS μg/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH .10 <sup>2</sup>	DD
STD	0	.19	33.897	27.23	85.06	0.000	14486						
OBS	1	.19	33.897	27.23			14487	789	182		19		
STD	10	.19	33.898	27.23	85.00	.009	14488						
STD	20	.20	33.899	27.23	84.96	.017	14490						
STD	30	.20	33.899	27.23	84.90	.025	14492						
STD	50	.21	33.899	27.23	84.95	.042	14496						
OBS	51	.21	33.901	27.23			14496	780	188		22	824	
STD	75	-.21	33.994	27.33	75.60	.063	14482						
STD	100	-.58	34.109	27.44	65.14	.080	14471						
OBS	101	-.59	34.114	27.44			14470	768	209		49	817	
OBS	150	-.06	34.258	27.53			14505	679	216		59	811	
STD	150	-.06	34.258	27.53	56.11	.110	14505						
OBS	200	1.14	34.482	27.64			14570	499	239		72	802	
STD	200	1.14	34.482	27.64	46.34	.136	14570						
OBS	249	1.71	34.607	27.70			14606	433	239		80	801	
STD	250	1.71	34.608	27.70	41.14	.158	14606						
OBS	298	1.78	34.654	27.73			14617	423	237		79	800	
STD	300	1.78	34.655	27.73	38.32	.178	14618						
OBS	397	1.74	34.698	27.77			14633	430	229		85	802	
STD	400	1.74	34.699	27.77	35.11	.215	14633						
OBS	496	1.69	34.720	27.79			14647	433	230		86	802	
STD	500	1.69	34.720	27.79	33.47	.249	14648						
OBS	596	1.62	34.726	27.80			14661	439	224		86	801	
STD	600	1.62	34.726	27.80	32.81	.282	14661						
STD	700	1.55	34.733	27.81	32.10	.314	14675						
OBS	794	1.49	34.738	27.82			14688	444	221		93	801	
STD	800	1.49	34.738	27.82	31.50	.346	14689						
STD	900	1.42	34.738	27.83	31.26	.378	14703						
OBS	995	1.36	34.738	27.83			14716	449	222		99	801	
STD	1000	1.36	34.738	27.83	30.97	.409	14717						
OBS	1214	1.20	34.736	27.84			14746	452	226		104	800	
STD	1250	1.18	34.735	27.84	30.18	.485	14751						
OBS	1494	1.03	34.728	27.85			14786	470	231		107	801	
STD	1500	1.03	34.728	27.85	29.82	.560	14786						
STD	1750	.89	34.722	27.85	29.31	.634	14822						
OBS	1779	.87	34.721	27.85			14827	472	232		114	801	
STD	2000	.77	34.717	27.85	28.79	.707	14860						
OBS	2068	.74	34.716	27.86			14870	476	233		120	801	
STD	2250	.68	34.714	27.86	28.34	.778	14899						
OBS	2353	.65	34.714	27.86			14915	476	236		123	799	
STD	2500	.59	34.713	27.86	27.67	.848	14938						
OBS	2642	.54	34.713	27.86			14960	481	239		123	800	
STD	2750	.50	34.713	27.87	26.83	.916	14977						
OBS	2938	.44	34.712	27.87			15008	487	234		129	798	
STD	3000	.42	34.712	27.87	25.98	.982	15017						
OBS	3230	.35	34.712	27.88			15055	492	234		129	799	
STD	3250	.35	34.712	27.88	25.16	1.046	15058						
STD	3500	.30	34.711	27.88	24.73	1.109	15100						
OBS	3528	.30	34.711	27.88			15105	498	235		129	797	
STD	3750	.26	34.710	27.88	24.24	1.170	15142						
OBS	3933	.23	34.709	27.88			15174	504	239		123	796	
STD	4000	.22	34.709	27.88	23.77	1.230	15184						
OBS	4352	0.00	34.708	0.00			0	513	231		118	795	
STD	4500	.22	34.708	27.88	23.83	1.349	15274						
OBS	*4635	*.23	34.709	27.88			15297	510	233		119	794	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	415	4 APR 1965	2251	6701S	13456W	4622	529	74	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			295	05	0.0	-1.4	300	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	-0.79	33.782	27.18	89.65	0.000	14440						
OBS	2	-0.79	33.782	27.18			14440	807	164	250	24	810	
STD	10	-0.77	33.783	27.18	89.64	.009	14442						
STD	20	-0.78	33.784	27.18	89.49	.018	14443						
STD	30	-0.77	33.785	27.18	89.40	.027	14445						
OBS	46	-0.76	33.786	27.18			14449	808	171	248	25	818	
STD	50	-0.79	33.800	27.19	88.03	.045	14448						
STD	75	-0.93	33.909	27.29	79.08	.065	14447						
OBS	90	-0.98	33.990	27.35			14448	778	165	276	39	815	
STD	100	-0.95	34.032	27.39	69.55	.084	14452						
OBS	134	-0.49	34.191	27.50			14481	722	205	309	51	812	
STD	150	.11	34.304	27.56	53.50	.115	14513						
OBS	179	1.19	34.493	27.65			14569	489	239	349	68	799	
STD	200	1.49	34.558	27.68	43.10	.139	14587						
OBS	223	1.62	34.596	27.70			14597	434	231	356	77	797	
STD	250	1.68	34.624	27.72	39.71	.160	14605						
OBS	268	1.68	34.635	27.73			14608	441	226	341	76	797	
STD	300	1.69	34.655	27.74	37.64	.179	14614						
OBS	358	1.69	34.683	27.76			14624	440	218	343	81	798	
STD	400	1.69	34.701	27.78	34.60	.215	14631						
OBS	448	1.69	34.716	27.79			14639	440	218	336	85	799	
STD	500	1.67	34.723	27.80	33.16	.249	14647						
OBS	541	1.65	34.725	27.80			14653	436	206	333	86	800	
STD	600	1.62	34.730	27.81	32.52	.282	14662						
STD	700	1.56	34.738	27.82	31.82	.314	14676						
OBS	733	1.54	34.740	27.82			14680	444	214	338	93	800	
STD	800	1.49	34.742	27.83	31.26	.346	14690						
STD	900	1.42	34.744	27.83	30.83	.377	14703						
OBS	932	1.40	34.744	27.83			14708	447	213	333	96	798	
STD	1000	1.35	34.746	27.84	30.39	.407	14717						
OBS	1181	1.25	34.748	27.85			14743	455	200	318	100	799	
STD	1250	1.23	34.747	27.85	29.78	.482	14753						
OBS	1455	1.15	34.742	27.85			14785	467	221	331	106	798	
STD	1500	1.11	34.740	27.85	29.75	.557	14790						
OBS	1732	.91	34.732	27.86			14821	469	210	333	108	799	
STD	1750	.90	34.731	27.86	28.74	.630	14823						
STD	2000	.78	34.724	27.86	28.44	.701	14861						
OBS	2011	.78	34.724	27.86			14863	473	215	323	115	798	
STD	2250	.69	34.722	27.86	27.91	.772	14899						
OBS	2290	.68	34.722	27.86			14906	474	220	336	120	797	
STD	2500	.61	34.718	27.86	27.55	.841	14939						
OBS	2576	.59	34.717	27.87			14951	480	219	318	120	795	
STD	2750	.53	34.715	27.87	26.93	.909	14978						
OBS	2852	.49	34.715	27.87			14995	487	216	330	121	795	
STD	3000	.44	34.715	27.87	26.02	.975	15018						
OBS	3141	.40	34.716	27.88			15041	487	221	355	124	796	
STD	3250	.37	34.716	27.88	25.24	1.040	15059						
OBS	3427	.34	34.716	27.88			15089	494	217	322	127	795	
STD	3500	.33	34.716	27.88	24.69	1.102	15101						
STD	3750	.29	34.716	27.88	24.22	1.163	15143						
OBS	3819	.28	34.716	27.88			15156	500	222	341	126	794	
STD	4000	.26	34.715	27.88	23.98	1.223	15186						
OBS	4214	.25	34.714	27.88			15225	505	223	345	124	793	
STD	4500	.23	34.713	27.88	23.75	1.343	15274						
OBS	*4597	*.23	34.713	27.88			15293	511	257	331	114	793	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	416	5APR1965	2149	6802S	13502W	4488	529	85	24				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		315	06	.2	-1.2	300	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	-.84	33.816	27.21	86.87	0.000	14438						
OBS	2	-.84	33.816	27.21			14438	797	174	238	32		
STD	10	-.83	33.814	27.21	87.04	.009	14440						
STD	20	-.83	33.811	27.20	87.20	.017	14442						
STD	30	-.82	33.810	27.20	87.29	.026	14443						
OBS	40	-.82	33.809	27.20			14445	802	172	238	31	818	
STD	50	-.81	33.798	27.19	88.14	.044	14447						
STD	75	-.83	33.811	27.20	87.02	.066	14451						
OBS	77	-.83	33.814	27.21			14451	796	174	232	32	817	
STD	100	-1.04	33.960	27.33	74.71	.086	14447						
OBS	116	-1.11	34.076	27.43			14448	763	199	291	53	815	
STD	150	-.49	34.202	27.51	58.28	.119	14484						
OBS	154	-.38	34.216	27.51			14490	680	209	287	62	811	
OBS	193	1.00	34.447	27.62			14563	458	237	331	66	801	
STD	200	1.11	34.471	27.63	47.03	.145	14569						
OBS	233	1.39	34.545	27.67			14588	509	225	336	84	800	4
STD	250	1.46	34.571	27.69	42.02	.168	14594						
STD	300	1.55	34.625	27.73	38.87	.188	14607						
OBS	312	1.55	34.632	27.73			14609	436	218	343	90	799	
OBS	395	1.64	34.681	27.77			14628	428	218	340	92	800	
STD	400	1.64	34.683	27.77	35.53	.225	14629						
OBS	485	1.68	34.710	27.79			14645	431	217	248	96	800	5
STD	500	1.68	34.713	27.79	33.95	.260	14647						
STD	600	1.66	34.730	27.80	32.96	.293	14663						
OBS	667	1.63	34.735	27.81			14673	428	213	315	100	800	
STD	700	1.61	34.737	27.81	32.36	.326	14678						
STD	800	1.55	34.740	27.82	31.92	.358	14692						
OBS	860	1.51	34.741	27.82			14700	444	210	315	103	800	
STD	900	1.48	34.742	27.83	31.47	.390	14706						
OBS	977	1.42	34.744	27.83			14716	441	216	299	105	799	
STD	1000	1.40	34.744	27.83	30.97	.421	14719						
OBS	1249	1.22	34.740	27.84			14753	444	222	320	114	798	
STD	1250	1.22	34.740	27.84	30.23	.497	14753						
STD	1500	1.07	34.734	27.85	29.78	.572	14788						
OBS	1527	1.05	34.733	27.85			14792	458	213	320	120	798	
STD	1750	.93	34.727	27.85	29.41	.646	14825						
OBS	1801	.91	34.726	27.85			14833	460	217	310	122	799	
STD	2000	.82	34.723	27.86	28.97	.719	14863						
OBS	2085	.79	34.722	27.86			14876	470	215	331	130	798	
STD	2250	.72	34.719	27.86	28.39	.791	14901						
OBS	2364	.67	34.718	27.86			14918	471	221	315	132	798	
STD	2500	.62	34.718	27.86	27.67	.861	14939						
OBS	2744	.54	34.718	27.87			14978	483	229	312	132	798	
STD	2750	.54	34.718	27.87	26.88	.929	14979						
STD	3000	.45	34.717	27.87	26.03	.996	15019						
OBS	3129	.41	34.716	27.87			15040	486	222	333	136	796	
STD	3250	.39	34.715	27.88	25.47	1.060	15059						
STD	3500	.35	34.714	27.88	25.18	1.123	15102						
OBS	3518	.35	34.714	27.88			15105	493	221	332	140	795	
STD	3750	.32	34.715	27.88	24.74	1.186	15144						
OBS	3915	.30	34.715	27.88			15174	499	222	336	142	795	
STD	4000	.30	34.715	27.88	24.47	1.247	15188						
OBS	4304	.30	34.714	27.88			15243	498	217	336	142	794	
OBS	*4471		34.710	27.88			15273					793	4

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	P°					
EL 17	417	8APR1965	0140	6802S	12656W	4094	528	86	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		340	04	-0.6	-2.8	315	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ξΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	-1.81	33.638	27.09	97.78	0.000	14390						
OBS	1	-1.81	33.638	27.09			14390	796	161	247	36		
STD	10	-1.80	33.638	27.09	97.71	.010	14392						
STD	20	-1.79	33.638	27.09	97.65	.020	14394						
STD	30	-1.78	33.639	27.09	97.59	.029	14396						
OBS	49	-1.76	33.639	27.09			14400	801	158	258	37	822	
STD	50	-1.76	33.649	27.10	96.68	.049	14400						
STD	75	-1.87	33.920	27.32	75.47	.070	14403						
OBS	97	-1.74	34.187	27.54			14417	683	207	305	62	812	
STD	100	-1.63	34.209	27.55	53.75	.086	14423						
OBS	146	.32	34.451	27.67			14524	522	223	334	74	801	
STD	150	.44	34.468	27.67	42.88	.111	14530						
OBS	194	1.31	34.607	27.73			14579	440	225	330	85	800	
STD	200	1.37	34.617	27.73	37.71	.131	14582						
OBS	243	1.58	34.663	27.76			14600	421	230	336	86	799	
STD	250	1.61	34.670	27.76	35.71	.149	14602						
OBS	292	1.74	34.703	27.78			14615	416	221	326	90	799	
STD	300	1.75	34.706	27.78	34.21	.167	14617						
OBS	391	1.71	34.724	27.79			14631		222	347	94	799	
STD	400	1.70	34.725	27.80	32.86	.200	14632						
OBS	491	1.64	34.733	27.81			14644	427	217	315	96	800	
STD	500	1.63	34.734	27.81	32.04	.233	14646						
OBS	591	1.58	34.737	27.81			14658	434	221	330	96	801	
STD	600	1.57	34.737	27.82	31.63	.264	14660						
STD	700	1.50	34.739	27.82	31.23	.296	14673						
OBS	790	1.43	34.739	27.83			14685	443	213	330	101	801	
STD	800	1.42	34.739	27.83	30.87	.327	14686						
STD	900	1.35	34.738	27.83	30.56	.358	14700						
OBS	988	1.28	34.737	27.84			14712	459	182	314	106	801	6
STD	1000	1.27	34.737	27.84	30.27	.388	14713						
OBS	1205	1.14	34.736	27.85			14742	458	181	313	108	800	6
STD	1250	1.11	34.735	27.85	29.57	.463	14748						
OBS	1490	.97	34.728	27.85			14782	465	226	325	113	799	
STD	1500	.96	34.728	27.85	29.22	.536	14784						
STD	1750	.84	34.722	27.85	28.86	.609	14821						
OBS	1776	.83	34.721	27.85			14825	471	224	326	117	799	
STD	2000	.74	34.717	27.86	28.46	.680	14859						
OBS	2066	.71	34.716	27.86			14869	474	231	306	123	798	
STD	2250	.62	34.714	27.86	27.69	.751	14896						
OBS	2356	.57	34.713	27.86			14912	480	230	312	126	798	
STD	2500	.52	34.713	27.87	26.78	.819	14935						
OBS	2645	.47	34.713	27.87			14958	484	232	315	129	798	
STD	2750	.44	34.713	27.87	26.09	.885	14975						
OBS	2934	.41	34.713	27.87			15006	487	226	325	129	797	
STD	3000	.40	34.713	27.87	25.70	.950	15016						
STD	3250	.38	34.712	27.87	25.53	1.014	15059						
OBS	3335	.37	34.712	27.87			15074	487	228	333	133	796	
STD	3500	.35	34.711	27.87	25.38	1.077	15102						
OBS	3731	.33	34.710	27.87			15142	499	227	304	136	796	
STD	3750	.33	34.710	27.87	25.24	1.141	15145						
STD	4000	.31	34.708	27.87	25.24	1.204	15189						
OBS	*4045	*.31	34.707	27.87			15197	541	237	326	146	795	4

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 17	418	10APR1965	0403	6656S	12008W	4592	528	60	24

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
350	06	1.5	-0.2	340	4

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	-0.03	33.907	27.25	83.24	0.000	14476						
OBS	2	-0.03	33.907	27.25			14477	786	176	241	16		
STD	10	-0.02	33.907	27.25	83.26	.008	14478						
STD	20	-0.02	33.907	27.25	83.30	.017	14480						
STD	30	-0.01	33.906	27.25	83.34	.025	14482						
OBS	40	0.00	33.906	27.24			14484	794	176	257	17	823	9
STD	50	-0.19	33.945	27.29	79.53	.041	14478						
STD	75	-0.64	34.050	27.39	69.48	.060	14463						
OBS	81	-0.74	34.077	27.42			14459	778	217	288	44	815	
STD	100	-0.75	34.103	27.44	64.83	.077	14462						
OBS	123	-0.52	34.136	27.45			14477	757	217	322	50	815	
STD	150	.12	34.246	27.51	57.93	.107	14513						
OBS	165	.55	34.318	27.55			14536	621	233	331	61	809	
STD	200	1.49	34.469	27.61	49.83	.134	14586						
OBS	209	1.69	34.501	27.62			14597	461	242	343	71	802	
STD	250	1.94	34.559	27.65	46.63	.158	14615						
OBS	253	1.94	34.561	27.65			14616	425	244	326	73	799	
STD	300	2.00	34.604	27.68	43.98	.181	14627						
OBS	340	1.97	34.629	27.70			14632	411	238	343	81	799	
STD	400	1.88	34.652	27.72	39.86	.223	14639						
OBS	428	1.84	34.659	27.73			14642	426	234	327	82	799	
STD	500	1.84	34.683	27.75	37.54	.262	14654						
OBS	517	1.84	34.688	27.76			14657	429	240	332	87	800	
STD	600	1.83	34.708	27.77	36.01	.298	14670						
OBS	700	1.79	34.724	27.79			14686	429	230	310	91	802	
STD	700	1.79	34.724	27.79	34.89	.334	14686						
STD	800	1.74	34.733	27.80	34.16	.368	14700						
OBS	888	1.67	34.738	27.81			14712	447	227	319	94	801	
STD	900	1.65	34.739	27.81	33.31	.402	14713						
STD	1000	1.49	34.743	27.83	31.86	.435	14723						
OBS	1050	1.41	34.744	27.83			14728	453	226	300	102	803	
STD	1250	1.33	34.744	27.84	31.05	.513	14758						
OBS	1342	1.33	34.742	27.84			14773	459	222	292	105	802	
STD	1500	1.24	34.739	27.84	31.15	.591	14796						
OBS	1632	1.15	34.735	27.84			14814	460	224	319	108	800	
STD	1750	1.09	34.731	27.84	30.73	.669	14832						
OBS	1920	1.00	34.726	27.85			14857	465	229	315	113	800	
STD	2000	.96	34.724	27.85	30.34	.745	14868						
OBS	2219	.85	34.721	27.85			14901	469	228	319	119	800	
STD	2250	.84	34.721	27.85	29.68	.820	14906						
STD	2500	.74	34.717	27.86	29.18	.893	14945						
OBS	2512	.74	34.717	27.86			14947	473	229	315	125	798	
STD	2750	.67	34.714	27.86	28.74	.966	14985						
OBS	2801	.65	34.714	27.86			14993	481	226	315	127	799	
STD	3000	.57	34.715	27.86	27.75	1.036	15024						
OBS	3100	.53	34.715	27.87			15040	490	226	332	127	798	
STD	3250	.48	34.715	27.87	26.68	1.105	15063						
OBS	3498	.40	34.714	27.87			15104	497	226	342	133	797	
STD	3500	.40	34.714	27.87	25.84	1.170	15104						
STD	3750	.35	34.714	27.88	25.22	1.234	15146						
OBS	3896	.33	34.714	27.88			15172	497	230	310	134	795	
STD	4000	.32	34.715	27.88	24.93	1.297	15189						
OBS	4296	.34	34.715	27.88			15243	506	227	357	140	794	
STD	4500	0.00	34.712	0.00	0.00	0.000	0						
OBS	*4550	0.00	34.712	0.00			0	512	219	319	147	796	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	419	12APR1965	0304	6754S	11049W	4061	527	70	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			060	06	-0.6	0.0	050	6					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	-1.80	33.451	26.94	112.18	0.000	14387						
OBS	1	-1.80	33.451	26.94			14388	793	166	232	37		
STD	10	-1.79	33.451	26.94	112.12	.011	14389						
STD	20	-1.78	33.451	26.94	112.06	.022	14391						
STD	30	-1.78	33.451	26.94	112.00	.034	14393						
OBS	47	-1.77	33.451	26.94			14397	803	166	243	37	823	
STD	50	-1.77	33.489	26.97	108.93	.056	14398						
STD	75	-1.86	33.827	27.25	82.59	.080	14402						
OBS	93	-1.77	34.092	27.46			14413	675	219	309	59	811	
STD	100	-1.57	34.142	27.50	59.03	.097	14425						
OBS	139	-.18	34.328	27.59			14498	563	224	311	67	804	
STD	150	.15	34.381	27.62	47.88	.124	14516						
OBS	186	1.02	34.525	27.68			14563	481	232	319	76	800	
STD	200	1.23	34.561	27.70	41.03	.146	14576						
OBS	232	1.55	34.617	27.72			14596	431	232	364	80	799	
STD	250	1.66	34.640	27.73	38.36	.166	14604						
OBS	278	1.76	34.665	27.74			14613	422	225	343	84	798	
STD	300	1.81	34.679	27.75	36.78	.185	14619						
OBS	372	1.84	34.704	27.77			14633	414	214	365	87	799	
STD	400	1.83	34.711	27.78	34.92	.221	14637						
OBS	467	1.78	34.724	27.79			14646	417	216	333	89	800	
STD	500	1.77	34.729	27.79	33.50	.255	14651						
OBS	563	1.74	34.736	27.80			14661	426	215	327	91	800	
STD	600	1.72	34.739	27.81	32.72	.288	14666						
STD	700	1.64	34.744	27.82	32.07	.321	14679						
OBS	757	1.59	34.745	27.82			14687	439	209	338	97	801	
STD	800	1.55	34.746	27.82	31.54	.352	14692						
STD	900	1.47	34.746	27.83	31.10	.384	14705						
OBS	951	1.43	34.746	27.83			14712	446	211	311	99	801	
STD	1000	1.40	34.747	27.84	30.65	.415	14719						
OBS	1225	1.25	34.749	27.85			14750	452	216	318	106	802	
STD	1250	1.23	34.748	27.85	29.78	.490	14754						
STD	1500	1.07	34.734	27.85	29.81	.565	14789						
OBS	1503	1.07	34.734	27.85			14789	467	210	311	111	802	
STD	1750	.94	34.730	27.85	29.29	.638	14825						
OBS	1779	.93	34.730	27.85			14830	480	221	298	115	801	
STD	2000	.82	34.724	27.86	28.82	.711	14862						
OBS	2064	.79	34.723	27.86			14872	474	210	322	121	800	
STD	2250	.71	34.721	27.86	28.11	.782	14900						
OBS	2354	.66	34.721	27.86			14916	476	211	316	125	799	
STD	2500	.60	34.720	27.87	27.18	.851	14938						
OBS	2634	.54	34.720	27.87			14959	481	229	349	124	798	
STD	2750	.50	34.720	27.87	26.25	.918	14977						
OBS	2927	.44	34.719	27.88			15006	488	228	318	128	798	
STD	3000	.42	34.719	27.88	25.57	.983	15017						
OBS	3224	.39	34.718	27.88			15056	500	233	329	132	797	
STD	3250	.39	34.718	27.88	25.26	1.046	15060						
STD	3500	.37	34.719	27.88	25.08	1.109	15103						
OBS	3516	.37	34.719	27.88			15106	495	228	302	134	797	
STD	3750	0.00	34.717	0.00	0.00	0.000	0						
OBS	*3931	0.00	34.714	0.00			0						



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	420	13APR1965	2323	6755S	10256W	4506	526	72	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		040	04	0.0	0.0	040	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	.02	33.851	27.20	87.75	0.000	14478						
OBS	1	.02	33.851	27.20			14478	780	160	237	14		
STD	10	.03	33.853	27.20	87.64	.009	14480						
STD	20	.05	33.855	27.20	87.54	.018	14483						
STD	30	.06	33.857	27.20	87.43	.026	14485						
OBS	48	.09	33.861	27.20			14489	781	169	237	14	821	
STD	50	.05	33.868	27.21	86.49	.044	14488						
STD	75	-.44	33.963	27.31	76.95	.064	14471						
OBS	96	-.85	34.047	27.40			14456	775	196	288	40	814	
STD	100	-.88	34.052	27.40	68.24	.082	14456						
OBS	144	-.82	34.095	27.43			14466	761	196	291	43	813	
STD	150	-.76	34.104	27.44	64.59	.115	14470						
OBS	192	-.01	34.212	27.49			14513	668	212	332	53	809	
STD	200	.27	34.256	27.51	58.00	.146	14528						
OBS	240	1.47	34.460	27.60			14591	473	229	346	70	798	
STD	250	1.52	34.478	27.61	49.50	.173	14596						
OBS	288	1.46	34.510	27.64			14600	468	222	354	74	798	
STD	300	1.51	34.525	27.65	45.99	.197	14604						
OBS	384	1.87	34.623	27.70			14635	425	222	345	78	797	
STD	400	1.89	34.635	27.71	41.18	.240	14639						
OBS	481	1.92	34.677	27.74			14654	417	217	328	80	797	
STD	500	1.92	34.682	27.75	38.30	.280	14657						
OBS	577	1.88	34.694	27.76			14669	419	212	337	82	796	
STD	600	1.87	34.698	27.76	37.11	.318	14672						
STD	700	1.83	34.716	27.78	35.89	.354	14687						
OBS	775	1.80	34.727	27.79			14699	430	213	336	88	797	
STD	800	1.79	34.729	27.79	34.86	.390	14702						
STD	900	1.72	34.737	27.80	34.10	.424	14716						
OBS	974	1.67	34.741	27.81			14726	441	210	332	91	797	
STD	1000	1.64	34.743	27.81	33.32	.458	14730						
OBS	1237	1.41	34.751	27.84			14759	455	213	331	99	799	
STD	1250	1.40	34.751	27.84	31.21	.539	14761						
STD	1500	1.30	34.746	27.84	31.25	.617	14799						
OBS	1527	1.29	34.745	27.84			14803	461	215	326	101	798	
STD	1750	1.16	34.739	27.85	30.97	.694	14835						
OBS	1821	1.12	34.737	27.85			14845	466	217	321	107	798	
STD	2000	1.03	34.734	27.85	30.50	.771	14872						
OBS	2116	.98	34.732	27.85			14890	471	217	321	114	797	
STD	2250	.91	34.729	27.85	29.87	.847	14909						
OBS	2413	.82	34.725	27.86			14934	473	223	327	122	796	
STD	2500	.79	34.724	27.86	29.24	.921	14947						
OBS	2705	.72	34.721	27.86			14980	478	219	328	123	795	
STD	2750	.70	34.721	27.86	28.75	.993	14986						
STD	3000	.61	34.719	27.87	27.96	1.064	15026						
OBS	3005	.61	34.719	27.87			15027	484	218	322	127	795	
STD	3250	.52	34.718	27.87	27.02	1.133	15065						
OBS	3302	.50	34.718	27.87			15074	493	226	320	128	794	
STD	3500	.44	34.718	27.88	26.08	1.199	15106						
OBS	3601	.41	34.718	27.88			15123	496	217	341	130	794	
STD	3750	.37	34.717	27.88	25.38	1.263	15147						
OBS	3901	.35	34.716	27.88			15173	502	216	320	130	793	
STD	4000	.34	34.716	27.88	25.13	1.327	15190						
OBS	4200	.35	34.715	27.88			15227	500	221	346	133	793	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	421	16APR1965	0440	6838S	9535W	4422	525	85	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		265	03	-1.5	0.0	340	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µg-at/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	-1.61	33.440	26.93	113.45	0.000	14396						
OBS	2	-1.61	33.440	26.93			14397	796	165	215	20		
STD	10	-1.60	33.454	26.94	112.33	.011	14398						
STD	20	-1.60	33.471	26.95	110.98	.022	14401						
STD	30	-1.61	33.488	26.97	109.57	.033	14402						
OBS	43	-1.58	33.510	26.98			14406	797	172	225	21	821	
STD	50	-1.56	33.598	27.06	101.08	.055	14409						
STD	75	-1.46	33.912	27.31	77.16	.077	14423						
OBS	83	-1.41	34.012	27.39			14427	767	202	277	40	815	
STD	100	-1.28	34.064	27.42	65.93	.095	14437						
OBS	124	-1.06	34.075	27.43			14452	739	200	296	43	813	
STD	150	-.88	34.125	27.46	62.53	.127	14465						
OBS	164	-.64	34.169	27.49			14479	671	215	278	51	810	
STD	200	1.08	34.405	27.58	51.76	.155	14567						
OBS	205	1.32	34.438	27.59			14579	493	228	347	64	801	
OBS	246	1.59	34.523	27.64			14599	455	231	321	71	797	
STD	250	1.61	34.531	27.65	46.17	.180	14600						
STD	300	1.78	34.613	27.70	41.51	.202	14617						
OBS	327	1.82	34.643	27.72			14624	425	232	343	74	799	
STD	400	1.84	34.651	27.73	39.57	.242	14637						
OBS	412	1.84	34.649	27.72			14639	420	254	323	77	799	
OBS	498	1.86	34.680	27.75			14655	422	214	335	78	799	
STD	500	1.86	34.681	27.75	37.92	.281	14655						
STD	600	1.84	34.705	27.77	36.34	.318	14671						
OBS	683	1.81	34.719	27.78			14684	428	187	319	82	799	
STD	700	1.81	34.721	27.79	35.23	.354	14686						
STD	800	1.77	34.732	27.80	34.50	.389	14702						
OBS	880	1.73	34.737	27.80			14713	435	209	314	86	803	
STD	900	1.72	34.738	27.81	33.97	.423	14716						
OBS	962	1.67	34.740	27.81			14724	438	213	315	87	799	
STD	1000	1.64	34.741	27.81	33.41	.457	14730						
OBS	1155	1.53	34.744	27.82			14751	447	222	304	92	800	
STD	1250	1.48	34.745	27.83	32.38	.539	14764						
OBS	1351	1.42	34.745	27.83			14779	453	222	305	94	800	
STD	1500	1.31	34.742	27.84	31.63	.619	14799						
OBS	1550	1.27	34.741	27.84			14806	455	222	298	99	800	
STD	1750	1.14	34.736	27.85	30.91	.697	14834						
OBS	1796	1.11	34.735	27.85			14841	456	219	311	104	799	
STD	2000	1.00	34.730	27.85	30.42	.774	14871						
OBS	2122	.95	34.728	27.85			14889	468	218	318	110	798	
STD	2250	.90	34.726	27.85	29.97	.849	14909						
OBS	2467	.81	34.723	27.86			14942	472	216	307	115	798	
STD	2500	.80	34.723	27.86	29.43	.924	14947						
OBS	2724	.71	34.720	27.86			14982	476	222	321	118	798	
STD	2750	.70	34.720	27.86	28.75	.996	14986						
STD	3000	.59	34.717	27.87	27.80	1.067	15025						
OBS	3072	.56	34.717	27.87			15036	486	221	315	122	798	
STD	3250	.49	34.717	27.87	26.72	1.135	15064						
OBS	3432	.44	34.718	27.87			15094	488	215	326	124	797	
STD	3500	.43	34.718	27.88	25.94	1.201	15105						
STD	3750	.41	34.717	27.88	25.86	1.266	15149						
OBS	3801	.41	34.717	27.88			15158	497	222	324	127	796	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	422	17APR1965	0537	6759S	9459W	4473	525	74	24				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		295	04	-0.9	-5.0	300	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Δ D DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	0.00	33.595	26.99	107.20	0.000	14473						
OBS	1	-1.89	33.595	27.06			14385						1
STD	10	0.00	33.612	27.01	105.89	.011	14475						
STD	20	0.00	33.637	27.03	103.95	.021	14477						
STD	30	0.00	33.669	27.05	101.46	.031	14479						
OBS	48	-1.25	33.745	27.17			14425						
STD	50	-1.28	33.758	27.18	89.61	.051	14425						
STD	75	-1.47	33.921	27.31	76.45	.071	14422						
OBS	94	-1.40	34.042	27.41			14430						
STD	100	-1.32	34.061	27.42	66.00	.089	14435						
OBS	141	-0.46	34.169	27.48			14484						
STD	150	-0.18	34.207	27.50	59.37	.120	14499						
OBS	188	.95	34.369	27.56			14558						
STD	200	1.16	34.407	27.58	52.20	.148	14570						
OBS	235	1.55	34.492	27.62			14595						
STD	250	1.62	34.518	27.64	47.29	.173	14601						
OBS	282	1.69	34.558	27.66			14609						
STD	300	1.72	34.573	27.67	44.09	.196	14614						
OBS	375	1.80	34.612	27.70			14631						
STD	400	1.82	34.626	27.71	41.23	.239	14636						
OBS	470	1.85	34.661	27.73			14649						
STD	500	1.86	34.671	27.74	38.64	.279	14655						
OBS	566	1.87	34.688	27.75			14666						
STD	600	1.87	34.696	27.76	37.21	.317	14672						
STD	700	1.84	34.717	27.78	35.83	.353	14688						
OBS	761	1.81	34.727	27.79			14697						
STD	800	1.79	34.732	27.79	34.77	.388	14703						
STD	900	1.74	34.740	27.80	34.07	.423	14717						
OBS	958	1.71	34.743	27.81			14726						
STD	1000	1.68	34.745	27.81	33.49	.457	14731						
OBS	1097	1.60	34.747	27.82			14744						
STD	1250	1.48	34.747	27.83	32.27	.539	14765						
OBS	1270	1.47	34.747	27.83			14768						
OBS	1447	0.00	34.737	0.00			0						
STD	1500	1.32	34.737	27.83	32.14	.619	14800						
OBS	1721	1.19	34.739	27.84			14831						
STD	1750	1.17	34.739	27.85	31.11	.698	14836						
OBS	1993	1.04	34.734	27.85			14871						
STD	2000	1.04	34.734	27.85	30.52	.775	14872						
STD	2250	.92	34.729	27.85	29.95	.851	14909						
OBS	2262	.91	34.729	27.85			14911						
STD	2500	.82	34.724	27.86	29.66	.926	14948						
OBS	2539	.81	34.723	27.86			14954						
STD	2750	.71	34.721	27.86	28.88	.999	14987						
OBS	2821	.68	34.720	27.86			14998						
STD	3000	.60	34.719	27.87	27.84	1.070	15025						
OBS	3201	.53	34.719	27.87			15057						
STD	3250	.51	34.719	27.87	26.91	1.138	15065						
STD	3500	.45	34.718	27.87	26.22	1.204	15106						
OBS	3588	.43	34.718	27.88			15121						
STD	3750	.40	34.718	27.88	25.71	1.269	15148						
OBS	3977	.38	34.718	27.88			15188						
STD	4000	0.00	34.717	0.00	0.00	0.000	0						
OBS	*4335	0.00	34.715	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	423	18APR1965	0250	6656S	9435W	4566	525	64	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			020	04	- .4	-5.5	050	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	- .40	33.745	27.13	93.99	0.000	14457						
OBS	1	- .40	33.745	27.13			14457	785	171	229	18		
STD	10	- .39	33.744	27.13	94.03	.009	14459						
STD	20	- .38	33.744	27.13	94.08	.019	14461						
STD	30	- .38	33.743	27.13	94.13	.028	14463						
OBS	49	- .36	33.742	27.13			14467	786	175	229	19	821	
STD	50	- .39	33.747	27.13	93.73	.047	14466						
STD	75	-1.05	33.879	27.27	80.96	.069	14441						
OBS	97	-1.60	34.004	27.39			14421	772	201	271	43	815	
STD	100	-1.61	34.010	27.39	69.05	.088	14421						
OBS	146	-1.16	34.080	27.43			14451	743	203	281	47	813	
STD	150	-1.07	34.092	27.44	64.26	.121	14456						
OBS	194	.04	34.251	27.52			14516	621	221	324	59	806	
STD	200	.20	34.276	27.53	56.07	.151	14525						
OBS	243	1.15	34.439	27.61			14577	508	221	357	71	799	
STD	250	1.24	34.457	27.61	49.05	.177	14583						
OBS	292	1.59	34.538	27.65			14606	452	223	341	75	798	
STD	300	1.63	34.548	27.66	45.19	.201	14610						
OBS	389	1.81	34.619	27.70			14633	431	222	356	82	799	
STD	400	1.81	34.625	27.71	41.31	.244	14635						
OBS	486	1.81	34.658	27.73			14650	423	217	328	82	798	
STD	500	1.82	34.663	27.74	38.89	.284	14653						
OBS	584	1.86	34.688	27.75			14669	421	216	339	85	799	
STD	600	1.86	34.692	27.76	37.47	.322	14672						
STD	700	1.83	34.714	27.78	36.06	.359	14687						
OBS	781	1.79	34.726	27.79			14699	431	211	309	89	799	
STD	800	1.78	34.728	27.79	34.94	.395	14702						
STD	900	1.73	34.735	27.80	34.36	.429	14717						
OBS	980	1.69	34.738	27.81			14728	440	202	316	91	799	
STD	1000	1.68	34.739	27.81	33.89	.463	14731						
OBS	1185	1.56	34.749	27.83			14757	446	203	311	96	799	
STD	1250	1.51	34.750	27.83	32.37	.546	14766						
OBS	1410	1.39	34.748	27.84			14788	457	210	307	101	799	
STD	1500	1.33	34.746	27.84	31.59	.626	14800						
OBS	1690	1.22	34.741	27.84			14828	464	205	308	102	800	
STD	1750	1.18	34.739	27.84	31.17	.705	14836						
OBS	1974	1.06	34.734	27.85			14869	465	207	320	108	798	
STD	2000	1.05	34.733	27.85	30.68	.782	14872						
STD	2250	.93	34.728	27.85	30.24	.858	14910						
OBS	2257	.93	34.728	27.85			14912	469	217	308	115	800	
STD	2500	.83	34.724	27.86	29.74	.933	14949						
OBS	2538	.82	34.724	27.86			14955	475	213	309	115	797	
STD	2750	.74	34.722	27.86	29.14	1.007	14988						
OBS	2914	.68	34.720	27.86			15014	481	208	319	120	797	
STD	3000	.64	34.718	27.86	28.42	1.079	15027						
STD	3250	.54	34.715	27.87	27.55	1.149	15066						
OBS	3297	.52	34.714	27.87			15074	489	213	319	124	796	
STD	3500	.45	34.716	27.87	26.40	1.216	15106						
OBS	3678	.40	34.718	27.88			15136	494	192	309	126	795	
STD	3750	.39	34.718	27.88	25.46	1.281	15148						
OBS	3971	.36	34.718	27.88			15186	498	214	315	128	794	
STD	4000	.36	34.718	27.88	25.19	1.344	15191						
OBS	4270	.36	34.714	27.88			15240	500	221	318	131	794	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 17	424	18APR1965	2359	6605S	9420W	4687	525	64	24

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
265	00	0.0	-0.7	110	4

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	.27	33.769	27.12	95.22	0.000	14488						
OBS	1	.27	33.769	27.12			14488						
STD	10	.59	33.795	27.12	94.89	.010	14505						
STD	20	.87	33.824	27.13	94.25	.019	14519						
STD	30	1.06	33.854	27.14	93.21	.028	14530						
OBS	50	1.21	33.912	27.18			14541						
STD	50	1.21	33.912	27.18	89.73	.047	14541						
STD	75	.75	33.992	27.27	80.83	.068	14525						
OBS	100	.16	34.059	27.36			14504						
STD	100	.16	34.059	27.36	72.45	.087	14504						
OBS	149	.12	34.101	27.40			14511						
STD	150	.12	34.102	27.40	68.95	.122	14511						
OBS	199	.53	34.165	27.42			14538						
STD	200	.55	34.167	27.43	66.36	.156	14539						
OBS	249	1.38	34.288	27.47			14587						
STD	250	1.39	34.290	27.47	62.75	.189	14587						
OBS	298	1.75	34.375	27.51			14612						
STD	300	1.76	34.378	27.51	59.06	.219	14613						
OBS	398	1.92	34.485	27.59			14638						
STD	400	1.92	34.487	27.59	52.57	.275	14638						
OBS	498	1.95	34.558	27.64			14657						
STD	500	1.95	34.559	27.64	47.81	.325	14657						
OBS	598	1.94	34.600	27.68			14674						
STD	600	1.94	34.601	27.68	45.02	.371	14674						
STD	700	1.95	34.642	27.71	42.47	.415	14692						
OBS	798	1.96	34.677	27.74			14709						
STD	800	1.96	34.678	27.74	40.34	.457	14709						
STD	900	1.94	34.701	27.76	38.85	.496	14725						
OBS	998	1.90	34.717	27.77			14740						
STD	1000	1.90	34.717	27.77	37.67	.534	14740						
OBS	1193	1.79	34.741	27.80			14769						
STD	1250	1.75	34.744	27.81	35.18	.626	14776						
OBS	1493	1.56	34.748	27.83			14809						
STD	1500	1.55	34.748	27.83	33.78	.712	14810						
STD	1750	1.37	34.745	27.84	32.76	.795	14844						
OBS	1789	1.34	34.744	27.84			14850						
STD	2000	1.21	34.739	27.84	32.10	.876	14880						
OBS	2090	1.16	34.737	27.84			14893						
STD	2250	1.06	34.732	27.85	31.47	.955	14916						
OBS	2396	.98	34.728	27.85			14938						
STD	2500	.93	34.726	27.85	30.77	1.033	14953						
OBS	2694	.84	34.723	27.85			14983						
STD	2750	.82	34.722	27.86	30.04	1.109	14991						
STD	3000	.71	34.719	27.86	29.23	1.183	15030						
OBS	3098	.67	34.718	27.86			15046						
STD	3250	.61	34.717	27.86	28.34	1.255	15069						
OBS	3500	.52	34.716	27.87			15110						
STD	3500	.52	34.716	27.87	27.37	1.325	15109						
STD	3750	.43	34.716	27.87	26.30	1.392	15150						
OBS	3911	.39	34.716	27.88			15177						
STD	4000	.38	34.715	27.88	25.64	1.457	15191						
OBS	4217	.36	34.714	27.88			15230						
STD	4500	.36	34.716	27.88	25.53	1.585	15280						
OBS	4533	.36	34.716	27.88			15287						
OBS	*4696	0.00	34.716	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	425	19APR1965	2012	6452S	9504W	4779	525	45	20				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			345	01	.8	-.5	330	5					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	.75	33.809	27.13	94.74	0.000	14511						
OBS	1	.75	33.809	27.13			14511	767	172	258	12		
STD	10	.96	33.814	27.12	95.52	.010	14522						
STD	20	.85	33.820	27.13	94.42	.019	14518						
STD	30	.90	33.814	27.12	95.23	.028	14522						
STD	50	1.00	33.837	27.13	94.05	.047	14530						
OBS	51	1.00	33.839	27.13			14531	763	178	251	14	814	
STD	75	.04	33.898	27.24	84.16	.070	14492						
OBS	100	-.87	33.969	27.33			14455	772	206	294	33	813	
STD	100	-.87	33.969	27.33	74.64	.090	14455						
OBS	150	.13	34.084	27.38			14511	723	210	309	33	810	
STD	150	.13	34.084	27.38	70.34	.126	14511						
OBS	199	.27	34.128	27.41			14526	705		305	36	810	
STD	200	.28	34.129	27.41	67.67	.160	14527						
OBS	249	.78	34.203	27.44			14558	639	219	346	42	804	
STD	250	.79	34.205	27.44	65.07	.193	14559						
OBS	299	1.45	34.311	27.48			14598	548	224	351		799	
STD	300	1.46	34.313	27.48	61.67	.225	14599						
OBS	398	1.86	34.442	27.56			14635	471	232	359	63	792	
STD	400	1.86	34.444	27.56	55.32	.284	14635						
OBS	498	1.96	34.522	27.61			14657	434	229	345	68	792	
STD	500	1.96	34.523	27.61	50.59	.337	14657						
OBS	597	2.02	34.581	27.66			14677	421	230	338	71	790	
STD	600	2.02	34.582	27.66	47.11	.385	14677						
STD	700	2.01	34.625	27.69	44.27	.431	14694						
OBS	798	2.00	34.657	27.72			14710	415	218	351	76	789	
STD	800	2.00	34.658	27.72	42.20	.474	14711						
STD	900	1.99	34.686	27.74	40.46	.516	14727						
OBS	998	1.97	34.707	27.76			14743	421	224	332	79	793	
STD	1000	1.97	34.707	27.76	39.10	.556	14743						
OBS	1233	1.85	34.734	27.79			14778	426	209	336	82	794	
STD	1250	1.84	34.735	27.79	36.75	.650	14780						
OBS	1481	1.66	34.745	27.82			14811	447	214	332	89	795	
STD	1500	1.65	34.745	27.82	34.97	.740	14814						
OBS	1731	1.47	34.740	27.83			14845	453	214	333	94	796	
STD	1750	1.46	34.740	27.83	34.13	.826	14848						
OBS	1981	1.31	34.736	27.83			14881	457	218	322	98	796	
STD	2000	1.30	34.736	27.83	33.37	.911	14884						
STD	2250	1.16	34.730	27.84	32.75	.993	14920						
OBS	2281	1.14	34.729	27.84			14925	465	220	339	105	793	
STD	2500	1.04	34.725	27.84	32.16	1.074	14958						
OBS	2583	1.00	34.724	27.84			14971	466	218	318	108	793	
STD	2750	.92	34.721	27.85	31.45	1.154	14996						
OBS	2983	.81	34.718	27.85			15032	477	215	341	112	792	
STD	3000		34.717										
STD	3250		34.713										
STD	3500		34.710										
STD	3750		34.706										
STD	4000		34.702										
STD	4500		34.695										
OBS	*4800		34.713					503	224	341	127	789	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 17	426	20APR1965	1632	6410S	9500W	4837	525	45	23

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
020	03	1.5	-1.3	020	3

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µgal/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC µg-at/l	pH -10 <sup>2</sup>	DD
STD	0	.97	33.830	27.13	94.42	0.000	14521						
OBS	2	.97	33.830	27.13			14521						
STD	10	1.09	33.833	27.12	94.91	.009	14528						
STD	20	1.20	33.841	27.12	95.06	.019	14535						
STD	30	1.28	33.852	27.13	94.66	.028	14540						
STD	50	1.29	33.888	27.15	92.10	.047	14544						
OBS	51	1.30	33.890	27.16			14545						
STD	75	1.00	33.968	27.24	84.15	.069	14536						
STD	100	.65	34.048	27.32	75.99	.089	14526						
OBS	101	.63	34.051	27.33			14525						
OBS	150	.63	34.094	27.36			14534						
STD	150	.63	34.094	27.36	72.42	.126	14534						
OBS	199	.48	34.123	27.39			14536						
STD	200	.48	34.124	27.39	69.27	.162	14536						
OBS	249	.67	34.173	27.42			14553						
STD	250	.69	34.175	27.42	66.63	.196	14554						
OBS	298	1.49	34.293	27.47			14600						
STD	300	1.51	34.297	27.47	63.25	.228	14601						
OBS	397	2.05	34.442	27.54			14643						
STD	400	2.05	34.445	27.54	56.83	.288	14643						
OBS	496	1.95	34.508	27.60			14656						
STD	500	1.95	34.511	27.61	51.47	.342	14657						
OBS	596	2.09	34.574	27.65			14679						
STD	600	2.09	34.576	27.65	48.23	.392	14680						
STD	700	2.08	34.620	27.68	45.33	.439	14697						
OBS	795	2.02	34.650	27.71			14711						
STD	800	2.02	34.652	27.71	42.83	.483	14711						
STD	900	2.00	34.681	27.74	40.89	.525	14727						
OBS	996	1.97	34.702	27.76			14743						
STD	1000	1.97	34.703	27.76	39.44	.565	14743						
OBS	1172	1.89	34.722	27.78			14769						
STD	1250	1.84	34.729	27.79	37.27	.661	14780						
OBS	1466	1.70	34.742	27.81			14811						
STD	1500	1.67	34.743	27.81	35.46	.752	14815						
STD	1750	1.49	34.742	27.83	34.35	.839	14850						
OBS	1766	1.34	34.742	27.84			14846						
STD	2000	1.32	34.739	27.83	33.38	.924	14884						
OBS	2070	1.27	34.737	27.84			14894						
STD	2250	1.17	34.732	27.84	32.66	1.006	14920						
OBS	2369	1.10	34.729	27.84			14938						
STD	2500	1.03	34.725	27.84	32.04	1.087	14957						
OBS	2667	.94	34.721	27.85			14983						
STD	2750	.91	34.720	27.85	31.33	1.166	14995						
OBS	2969	.82	34.719	27.85			15030						
STD	3000	.81	34.719	27.85	30.51	1.244	15034						
STD	3250	.70	34.717	27.86	29.50	1.319	15073						
OBS	3270	0.00	34.717	0.00			0						
STD	3500	.60	34.714	27.86	28.58	1.391	15112						
OBS	3671	.53	34.712	27.86			15139						
STD	3750	.50	34.712	27.87	27.57	1.462	15152						
STD	4000	.43	34.713	27.87	26.63	1.529	15194						
OBS	4071	.42	34.714	27.87			15205						
OBS	4471	.40	34.713	27.87			15276						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	427	21APR1965	2303	6301S	9521W	4971	525	35	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR ST						
			310	04	1.0	-0.5	270 4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	2.39	33.981	27.15	92.73	0.000	14586						
OBS	2	2.39	33.981	27.15			14586	730	176	253	8		
STD	10	2.39	33.981	27.15	92.81	.009	14587						
STD	20	2.39	33.980	27.15	92.91	.019	14589						
STD	30	2.39	33.979	27.15	93.00	.028	14591						
OBS	50	2.39	33.978	27.14			14594	732	170	249	9	819	
STD	50	2.39	33.978	27.14	93.19	.046	14594						
STD	75	1.97	34.037	27.22	85.64	.069	14581						
OBS	98	1.56	34.093	27.30			14567	697	201	299	29	811	
STD	100	1.54	34.095	27.30	78.23	.089	14566						
OBS	146	1.31	34.106	27.33			14564	705	199	297	29	813	
STD	150	1.30	34.106	27.33	75.74	.128	14564						
OBS	195	1.25	34.122	27.35			14570	694	200	298	32	812	
STD	200	1.26	34.126	27.35	74.10	.165	14571						
OBS	243	1.47	34.177	27.37			14588	634	215	313	39	810	
STD	250	1.52	34.187	27.38	71.47	.202	14591						
OBS	291	1.80	34.247	27.41			14612	574	221	327	44	807	
STD	300	1.85	34.260	27.41	68.69	.237	14616						
OBS	387	2.19	34.369	27.47			14646	486	224	340	57	799	
STD	400	2.20	34.381	27.48	62.92	.303	14649						
OBS	483	2.19	34.444	27.53			14663	446	236	329	63	799	
STD	500	2.19	34.457	27.54	57.59	.363	14666						
OBS	581	2.20	34.514	27.59			14681	424	235	337	70	798	
STD	600	2.20	34.525	27.60	53.00	.418	14684						
STD	700	2.16	34.576	27.64	49.39	.469	14700						
OBS	778	2.13	34.607	27.67			14712	415	228	355	78	797	
STD	800	2.13	34.615	27.68	46.56	.517	14716						
STD	900	2.11	34.649	27.70	44.33	.563	14732						
OBS	978	2.09	34.671	27.72			14745	414	223	328	82	798	
STD	1000	2.08	34.677	27.73	42.47	.606	14748						
OBS	1238	1.93	34.720	27.77			14782	426	212	323	86	799	
STD	1250	1.92	34.721	27.78	38.69	.708	14784						
OBS	1480	1.81	34.736	27.80			14818	436	211	311	91	800	
STD	1500	1.79	34.737	27.80	37.18	.802	14820						
OBS	1725	1.60	34.741	27.82			14850	451	213	312	97	799	
STD	1750	1.58	34.741	27.82	35.42	.893	14854						
OBS	1970	1.45	34.742	27.83			14885	451	210	322	102	799	
STD	2000	1.43	34.741	27.83	34.47	.980	14889						
STD	2250	1.28	34.735	27.84	33.77	1.066	14925						
OBS	2260	1.27	34.735	27.84			14927	458	217	321	108	798	
STD	2500	1.14	34.731	27.84	33.05	1.149	14963						
OBS	2654	1.07	34.729	27.84			14986	468	212	319	113	798	
STD	2750	1.02	34.727	27.85	32.33	1.231	15000						
STD	3000	.90	34.722	27.85	31.55	1.311	15038						
OBS	3046	.88	34.721	27.85			15046	476	215	323	122	797	
STD	3250	.79	34.718	27.85	30.70	1.389	15077						
OBS	3341	.75	34.717	27.86			15092	479	221	325	124	796	
STD	3500	.67	34.716	27.86	29.49	1.464	15116						
OBS	3735	.56	34.715	27.87			15153	491	225	320	127	796	
STD	3750	.55	34.715	27.87	28.12	1.536	15155						
STD	4000	.47	34.715	27.87	27.09	1.605	15195						
OBS	4137	.44	34.715	27.87			15219	496	219	326	130	795	
STD	4500	.41	34.717	27.88	26.25	1.738	15282						
OBS	4537	.41	34.717	27.88			15290	501	220	328	134	794	
OBS	*4960	0.00	34.716	0.00			0	500	223	326	141	794	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	428	22APR1965	2252	6205S	9438W	4892	525	24	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR		ST					
		335	04	3.2	1.4	350		4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	3.52	34.002	27.06	100.72	0.000	14635						
OBS	1	3.52	34.002	27.06			14635						
STD	10	3.52	34.002	27.06	100.77	.010	14636						
STD	20	3.52	34.002	27.06	100.83	.020	14638						
STD	30	3.51	34.002	27.06	100.88	.030	14640						
OBS	50	3.51	34.002	27.06			14643						
STD	50	3.51	34.002	27.06	100.99	.050	14643						
STD	75	2.99	34.051	27.15	92.77	.075	14625						
OBS	98	2.47	34.099	27.23			14607						
STD	100	2.45	34.101	27.24	84.63	.097	14606						
OBS	147	2.12	34.120	27.28			14600						
STD	150	2.09	34.120	27.28	80.54	.138	14599						
OBS	196	1.74	34.124	27.31			14591						
STD	200	1.73	34.125	27.31	77.56	.178	14592						
OBS	245	1.68	34.143	27.33			14597						
STD	250	1.67	34.145	27.33	75.77	.216	14598						
OBS	293	1.65	34.171	27.36			14604						
STD	300	1.65	34.176	27.36	73.44	.253	14605						
OBS	391	1.79	34.258	27.42			14628						
STD	400	1.82	34.268	27.42	68.24	.324	14631						
OBS	489	2.14	34.365	27.47			14661						
STD	500	2.16	34.377	27.48	63.31	.390	14664						
OBS	588	2.23	34.460	27.54			14683						
STD	600	2.24	34.469	27.55	57.59	.450	14685						
STD	700	2.28	34.532	27.60	53.76	.506	14704						
OBS	785	2.28	34.570	27.63			14719						
STD	800	2.27	34.576	27.63	50.91	.558	14721						
STD	900	2.22	34.611	27.66	48.30	.608	14736						
OBS	982	2.17	34.634	27.69			14748						
STD	1000	2.16	34.639	27.69	46.12	.655	14751						
OBS	1233	2.06	34.689	27.74			14786						
STD	1250	2.05	34.692	27.74	42.19	.766	14789						
STD	1500	1.92	34.725	27.78	39.44	.868	14826						
OBS	1521	1.91	34.727	27.78			14829						
STD	1750	1.75	34.739	27.80	37.47	.964	14861						
OBS	1815	1.70	34.740	27.81			14870						
STD	2000	1.56	34.740	27.82	36.06	1.056	14895						
OBS	2109	1.48	34.739	27.82			14910						
STD	2250	1.38	34.737	27.83	34.93	1.144	14930						
OBS	2402	1.29	34.735	27.83			14952						
STD	2500	1.23	34.733	27.84	34.06	1.231	14966						
OBS	2692	1.13	34.728	27.84			14995						
STD	2750	1.10	34.727	27.84	33.33	1.315	15004						
STD	3000	.97	34.722	27.85	32.42	1.397	15041						
OBS	3086	.92	34.720	27.85			15055						
STD	3250	.83	34.717	27.85	31.37	1.477	15079						
OBS	3482	.71	34.713	27.85			15115						
STD	3500	.70	34.713	27.86	30.11	1.554	15117						
STD	3750	.57	34.712	27.86	28.54	1.627	15155						
OBS	3881	.51	34.712	27.87			15177						
STD	4000	.48	34.712	27.87	27.37	1.697	15195						
OBS	4277	.43	34.711	27.87			15244						
STD	4500	.42	34.710	27.87	26.91	1.833	15282						
OBS	4678	.43	34.709	27.87			15316						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	429	24APR1965	0237	6105S	9510W	5029	525	15	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		302	04	3.7	0.0	280	6						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	± ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgatl·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	3.49	34.000	27.06	100.59	0.000	14634						
OBS	2	3.49	34.000	27.06			14634	708	161	234	4		
STD	10	3.49	34.000	27.06	100.63	.010	14635						
STD	20	3.49	34.000	27.06	100.68	.020	14637						
STD	30	3.48	34.001	27.07	100.72	.030	14638						
STD	50	3.49	34.000	27.06	100.91	.050	14642						
OBS	51	3.48	34.001	27.07			14641	711	160	236	4	818	
STD	75	3.09	34.030	27.12	95.33	.075	14629						
OBS	100	2.68	34.063	27.19			14616	681	111	276	16	812	6
STD	100	2.68	34.063	27.19	89.39	.098	14616						
OBS	149	2.57	34.092	27.22			14620	664	187	283	20	810	
STD	150	2.57	34.093	27.22	86.49	.142	14620						
OBS	199	2.40	34.114	27.25			14621	650	193	296	24	808	
STD	200	2.39	34.114	27.25	83.64	.184	14621						
OBS	248	2.08	34.130	27.29			14615	646	211	308	27	808	
STD	250	2.08	34.132	27.29	79.97	.225	14615						
OBS	297	2.13	34.178	27.33			14626	616	218	301	31	806	
STD	300	2.13	34.179	27.33	76.97	.265	14626						
OBS	396	2.04	34.226	27.37			14639	586	207	319	37	801	
STD	400	2.05	34.230	27.37	72.94	.340	14640						
OBS	495	2.29	34.335	27.44			14668	499		330	49	798	
STD	500	2.29	34.340	27.44	67.30	.410	14669						
OBS	594	2.31	34.416	27.50			14686	453	213	331	58	797	
STD	600	2.31	34.420	27.50	61.89	.474	14687						
STD	700	2.27	34.482	27.56	57.43	.534	14703						
OBS	793	2.23	34.529	27.60			14718		226	348	68	796	
STD	800	2.23	34.532	27.60	53.72	.590	14719						
STD	900	2.21	34.578	27.64	50.65	.642	14735						
OBS	992	2.20	34.614	27.67			14751		207	337	76	796	
STD	1000	2.20	34.617	27.67	48.12	.691	14752						
OBS	1215	2.13	34.678	27.73			14786	409	218	337	80	795	
STD	1250	2.11	34.685	27.73	43.33	.805	14791						
OBS	1453	2.00	34.717	27.77			14821	421	200	320	84	795	
STD	1500	1.97	34.722	27.77	40.26	.910	14828						
OBS	1684	1.86	34.734	27.79			14854	434	214	319	88	795	
STD	1750	1.81	34.736	27.80	38.30	1.008	14863						
OBS	1919	1.66	34.739	27.81			14886	438	213	304	91	796	
STD	2000	1.60	34.739	27.82	36.57	1.102	14897						
OBS	2199	1.46	34.738	27.82			14925	449	205	315	97	797	
STD	2250	1.43	34.737	27.83	35.52	1.192	14932						
STD	2500	1.31	34.733	27.83	34.97	1.280	14970						
ORS	2579	1.27	34.731	27.83			14982	457	216	308	103	795	
STD	2750	1.17	34.728	27.84	34.25	1.366	15007						
OBS	2961	1.06	34.724	27.84			15039	467	210	316	109	795	
STD	3000	1.04	34.724	27.84	33.30	1.451	15044						
OBS	3245	.93	34.721	27.85			15083	471	222	315	114	794	
STD	3250	.93	34.721	27.85	32.38	1.533	15083						
STD	3500	.80	34.718	27.85	31.23	1.612	15121						
OBS	3625	.74	34.716	27.86			15141	478	221	324	119	793	
STD	3750	.68	34.715	27.86	29.97	1.689	15160						
STD	4000	.58	34.714	27.86	28.84	1.762	15200						
OBS	4015	.58	34.714	27.86			15203	486		309	123	794	
OBS	4402	.51	34.713	27.87			15269	494	211	322	127	792	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	430	25APR1965	0534	6002S	9517W	5008	525	05	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			310	06	5.6	5.0	300	6					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	5.18	34.090	26.96	110.90	0.000	14705						
OBS	2	5.18	34.090	26.96			14706						
STD	10	5.18	34.090	26.96	111.03	.011	14707						
STD	20	5.18	34.089	26.96	111.16	.022	14709						
STD	30	5.18	34.089	26.96	111.23	.033	14710						
OBS	48	5.17	34.089	26.96			14713						
STD	50	5.17	34.089	26.96	111.41	.056	14713						
STD	75	5.20	34.087	26.95	112.21	.084	14719						
OBS	94	5.15	34.092	26.96			14720						
STD	100	5.06	34.100	26.98	109.96	.111	14717						
OBS	141	4.38	34.151	27.09			14696						
STD	150	4.28	34.150	27.10	98.33	.163	14694						
OBS	188	3.98	34.132	27.12			14687						
STD	200	3.92	34.131	27.13	96.47	.212	14687						
OBS	235	3.77	34.131	27.14			14686						
STD	250	3.66	34.127	27.15	94.57	.260	14684						
OBS	282	3.45	34.122	27.16			14680						
STD	300	3.44	34.132	27.17	92.41	.307	14683						
OBS	377	3.54	34.192	27.21			14700						
STD	400	3.51	34.203	27.22	88.49	.397	14703						
OBS	473	3.35	34.234	27.26			14709						
STD	500	3.31	34.249	27.28	83.79	.483	14712						
OBS	569	3.20	34.287	27.32			14719						
STD	600	3.14	34.301	27.34	78.86	.565	14722						
STD	700	2.93	34.344	27.39	74.20	.641	14730						
OBS	763	2.80	34.370	27.42			14735						
STD	800	2.73	34.388	27.44	69.43	.713	14738						
STD	900	2.55	34.437	27.50	64.58	.780	14748						
OBS	957	2.47	34.465	27.53			14755						
STD	1000	2.43	34.485	27.55	60.32	.842	14760						
STD	1250	2.30	34.586	27.64	52.68	.984	14798						
OBS	1271	2.30	34.594	27.64			14802						
STD	1500	2.20	34.662	27.71	47.15	1.108	14837						
OBS	1536	2.18	34.671	27.72			14842						
STD	1750	2.01	34.719	27.77	41.93	1.220	14872						
OBS	1802	1.97	34.727	27.78			14879						
STD	2000	1.92	34.736	27.79	40.70	1.323	14911						
OBS	2070	1.90	34.735	27.79			14922						
STD	2250	1.72	34.733	27.80	39.34	1.423	14945						
OBS	2325	1.64	34.732	27.81			14954						
STD	2500	1.57	34.735	27.81	38.10	1.520	14981						
OBS	2593	1.54	34.737	27.82			14996						
STD	2750	1.45	34.734	27.82	37.40	1.614	15019						
OBS	2956	1.32	34.729	27.83			15049						
STD	3000	1.29	34.729	27.83	36.34	1.706	15056						
STD	3250	1.15	34.728	27.84	34.97	1.796	15093						
OBS	3321	1.11	34.728	27.84			15104						
STD	3500	1.01	34.725	27.85	33.66	1.881	15130						
OBS	3695	.89	34.721	27.85			15160						
STD	3750	.85	34.720	27.85	32.04	1.963	15167						
STD	4000	.67	34.718	27.86	29.84	2.041	15204						
OBS	4080	.62	34.718	27.86			15217						
OBS	4482	.52	34.721	27.87			15284						
STD	4500	0.00	34.721	0.00	0.00	0.000	0						
OBS	*4965	0.00	34.719	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	431	26APR1965	0109	5902S	9518W	4738	489	95	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			270	06	4.9	2.9	300	6					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µgal/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	5.16	34.061	26.93	112.85	0.000	14704						
OBS	2	5.16	34.061	26.93			14705	691	161	208	4		
STD	10	5.16	34.062	26.94	112.89	.011	14706						
STD	20	5.16	34.062	26.94	112.93	.023	14707						
STD	30	5.15	34.063	26.94	112.98	.034	14709						
STD	50	5.15	34.063	26.94	113.16	.056	14712						
OBS	51	5.15	34.063	26.94			14712	689	157	209	4	820	
STD	75	5.24	34.059	26.92	114.76	.085	14720						
OBS	100	5.15	34.060	26.94			14720	688	164	209	5	821	
STD	100	5.15	34.060	26.94	113.94	.114	14720						
OBS	148	3.73	34.102	27.12			14669	669	197	254	12	818	
STD	150	3.71	34.102	27.12	96.10	.166	14669						
OBS	195	3.43	34.094	27.14			14664	669	195	251	13	817	
STD	200	3.40	34.093	27.15	94.20	.214	14664						
OBS	243	3.20	34.097	27.17			14662	659	192	260	16	816	
STD	250	3.20	34.104	27.17	91.87	.260	14664						
OBS	290	3.23	34.146	27.20			14672	618	203	275	21	812	
STD	300	3.21	34.151	27.21	88.80	.305	14673						
OBS	383	3.00	34.174	27.25			14678	601	209	299	26	810	
STD	400	2.97	34.182	27.26	84.75	.392	14679						
OBS	476	2.78	34.217	27.30			14685	571	218	309	33	807	
STD	500	2.67	34.221	27.31	79.68	.474	14684						
OBS	569	2.39	34.235	27.35			14683	567	218	312	38	808	
STD	600	2.37	34.257	27.37	74.60	.551	14688						
STD	700	2.38	34.338	27.43	69.19	.623	14706						
OBS	758	2.45	34.391	27.47			14719	463	233	331	57	801	
STD	800	2.43	34.414	27.49	64.54	.690	14726						
STD	900	2.38	34.463	27.53	60.93	.753	14741						
OBS	953	2.35	34.485	27.55			14749	421	243	335	66	798	
STD	1000	2.33	34.509	27.57	57.49	.812	14756						
OBS	1156	2.29	34.584	27.64			14782	412	232	339	76	763	
STD	1250	2.26	34.619	27.67	49.82	.946	14797						
OBS	1438	2.19	34.671	27.71			14826	409	230	323	83	791	
STD	1500	2.16	34.682	27.73	45.21	1.065	14835						
OBS	1716	0.00	34.709	0.00			0	421	230	323	86	795	
STD	1750	2.00	34.712	27.76	42.33	1.175	14871						
OBS	1850	1.93	34.721	27.78			14885	424	230	315	91	794	
STD	2000	1.81	34.728	27.79	39.94	1.277	14906						
OBS	2121	1.71	34.730	27.80			14922	431	229	325	99	794	
STD	2250	1.62	34.732	27.81	38.21	1.375	14940						
OBS	2482	0.00	34.734	0.00			0	445	222	321	102	796	
STD	2500	1.47	34.734	27.82	36.91	1.469	14977						
STD	2750	1.32	34.731	27.83	35.97	1.560	15013						
OBS	2852	1.27	34.729	27.83			15028	456	225	321	111	794	
STD	3000	1.18	34.727	27.84	34.95	1.649	15051						
OBS	3232	1.05	34.724	27.84			15084	466	226	321	117	793	
STD	3250	1.04	34.724	27.84	33.74	1.735	15088						
STD	3500	.90	34.720	27.85	32.48	1.817	15126						
OBS	3524	.89	34.720	27.85			15128	474	226	316	121	791	
STD	3750	.75	34.717	27.86	30.79	1.896	15163						
OBS	3920	.63	34.715	27.86			15187	482	229	312	129	791	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	432	27APR1965	0816	5759S	9500W	3625	489	75	19				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		335	05	5.3	3.8	340	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
STD	0	5.11	34.048	26.93	113.28	0.000	14702						
OBS	3	5.11	34.048	26.93			14703						
STD	10	5.11	34.048	26.93	113.38	.011	14704						
STD	20	5.11	34.048	26.93	113.50	.023	14705						
STD	30	5.10	34.047	26.93	113.60	.034	14707						
OBS	50	5.10	34.047	26.93			14710						
STD	50	5.10	34.047	26.93	113.79	.057	14710						
STD	75	5.22	34.044	26.91	115.68	.085	14719						
OBS	97	5.09	34.047	26.93			14717						
STD	100	4.96	34.049	26.95	112.58	.114	14712						
OBS	144	2.99	34.090	27.18			14637						
STD	150	2.93	34.093	27.19	89.53	.165	14635						
OBS	192	2.93	34.111	27.20			14643						
STD	200	2.91	34.115	27.21	88.10	.209	14643						
OBS	239	2.83	34.132	27.23			14646						
STD	250	2.82	34.137	27.23	85.90	.252	14648						
OBS	286	2.77	34.150	27.25			14652						
STD	300	2.73	34.154	27.26	84.06	.295	14652						
OBS	381	2.41	34.172	27.30			14652						
STD	400	2.33	34.175	27.31	79.52	.377	14652						
OBS	477	2.10	34.196	27.34			14655						
STD	500	2.10	34.211	27.35	75.21	.454	14659						
OBS	571	2.18	34.269	27.39			14675						
STD	600	2.21	34.296	27.41	70.29	.527	14682						
STD	700	2.33	34.386	27.48	65.12	.595	14704						
OBS	768	2.40	34.443	27.52			14720						
STD	800	2.39	34.461	27.53	60.62	.657	14725						
STD	900	2.36	34.509	27.57	57.25	.716	14741						
OBS	967	2.29	34.534	27.60			14749						
STD	1000	2.33	34.548	27.61	54.52	.772	14757						
STD	1250	2.29	34.639	27.68	48.69	.901	14798						
OBS	1335	2.22	34.663	27.71			14810						
STD	1500	2.12	34.695	27.74	43.83	1.017	14834						
OBS	1629	2.03	34.711	27.76			14852						
STD	1750	1.95	34.721	27.77	41.11	1.123	14869						
OBS	1922	1.84	34.729	27.79			14894						
STD	2000	1.78	34.731	27.79	39.40	1.224	14904						
OBS	2215	1.63	34.732	27.81			14935						
STD	2250	1.61	34.732	27.81	38.05	1.320	14940						
STD	2500	1.48	34.735	27.82	37.05	1.414	14977						
OBS	2508	1.48	34.735	27.82			14979						
STD	2750	1.36	34.733	27.83	36.21	1.506	15015						
OBS	2900	1.27	34.731	27.83			15037						
STD	3000	1.20	34.729	27.84	35.07	1.595	15052						
STD	3250	1.02	34.724	27.84	33.38	1.681	15087						
OBS	3294	.98	34.723	27.85			15093						

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SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	433	28APR1965	0840	5659S	9510W	4277	489	65	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		235	06	2.0	-2.8	220	6						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg/l-1-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	6.12	34.164	26.90	116.27	0.000	14745						
OBS	1	6.12	34.164	26.90			14745	677	138	187	4		
STD	10	6.12	34.164	26.90	116.40	.012	14746						
STD	20	6.12	34.164	26.90	116.54	.023	14748						
STD	30	6.12	34.164	26.90	116.67	.035	14750						
OBS	49	6.12	34.164	26.90			14753	673	151	196	4	829	
STD	50	6.12	34.164	26.90	116.94	.058	14753						
STD	75	6.13	34.162	26.90	117.60	.088	14757						
OBS	96	6.12	34.164	26.90			14760	677	112	185	5	825	6
STD	100	6.11	34.166	26.90	117.34	.117	14761						
OBS	144	5.93	34.205	26.96			14761	666	147	210	7	823	
STD	150	5.89	34.216	26.97	111.64	.174	14761						
OBS	192	5.60	34.273	27.05			14757	648	153	217	9	820	
STD	200	5.54	34.270	27.06	103.91	.228	14755						
OBS	240	5.23	34.235	27.06			14749	643	161	228	12	818	
STD	250	5.17	34.230	27.07	103.18	.280	14748						
OBS	288	4.98	34.216	27.08			14746	645	165	234	12	819	
STD	300	4.89	34.209	27.08	102.09	.331	14745						
OBS	383	4.36	34.172	27.11			14736	631	176	252	13	818	
STD	400	4.31	34.171	27.12	99.35	.432	14736						
OBS	479	4.17	34.189	27.15			14744	601	185	268	19	815	
STD	500	4.15	34.203	27.16	96.17	.530	14747						
OBS	575	4.08	34.258	27.21			14757	534	202	292	29	809	
STD	600	3.99	34.267	27.23	90.52	.623	14757						
STD	700	3.61	34.296	27.29	84.95	.711	14758						
OBS	770	3.30	34.309	27.33			14757	495		317	39	807	
STD	800	3.21	34.321	27.35	79.45	.793	14758						
STD	900	2.96	34.365	27.40	74.15	.870	14765						
OBS	964	2.83	34.395	27.44			14770	450		330	54	803	
STD	1000	2.77	34.410	27.46	69.41	.942	14774						
OBS	1246	2.51	34.513	27.56			14805	413	218	341	72	798	
STD	1250	2.51	34.515	27.56	60.20	1.104	14806						
OBS	1468	2.39	34.603	27.64			14839	398	233	338	78	799	
STD	1500	2.37	34.613	27.65	52.76	1.245	14844						
OBS	1744	2.24	34.670	27.71			14880	402	225	334	83	797	
STD	1750	2.24	34.671	27.71	48.11	1.371	14881						
STD	2000	2.09	34.705	27.75	45.06	1.487	14918						
OBS	2023	2.08	34.707	27.75			14921	416	236	323	93	798	
STD	2250	1.91	34.723	27.78	42.47	1.597	14953						
OBS	2284	1.88	34.724	27.78			14957	419	220	324	96	802	
STD	2500	1.71	34.725	27.80	40.66	1.701	14987						
OBS	2556	1.67	34.725	27.80			14995	429	225	327	103	802	
STD	2750	1.57	34.726	27.81	39.52	1.801	15024						
OBS	2812	1.54	34.727	27.81			15034	438	219	320	108	802	
STD	3000	1.46	34.729	27.82	38.59	1.898	15063						
OBS	3084	1.42	34.730	27.82			15076	447	219	332	409	802	
STD	3250	1.29	34.727	27.83	36.97	1.993	15099						
OBS	3352	1.20	34.725	27.83			15113	458	217	313	110	801	
STD	3500	1.08	34.721	27.84	34.98	2.083	15133						
OBS	3616	.99	34.719	27.84			15150	468	218	316	118	802	
STD	3750	.88	34.717	27.85	32.69	2.167	15169						
OBS	3888	.76	34.717	27.85			15188	480	213	336	120	802	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	434	29APR1965	0914	5558S	9500W	4338	489	55	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		250	07	2.8	-4.2	230	6						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg/l-1-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	6.34	34.196	26.90	116.57	0.000	14754						
OBS	1	6.34	34.196	26.90			14754						
STD	10	6.34	34.196	26.89	116.78	.012	14756						
STD	20	6.35	34.195	26.89	116.99	.023	14757						
STD	30	6.35	34.195	26.89	117.18	.035	14759						
OBS	47	6.35	34.194	26.89			14762						
STD	50	6.35	34.194	26.89	117.55	.059	14762						
STD	75	6.37	34.187	26.88	118.69	.088	14767						
OBS	93	6.35	34.193	26.89			14769						
STD	100	6.30	34.209	26.91	116.51	.117	14769						
ORS	138	6.00	34.294	27.02			14764						
STD	150	5.93	34.293	27.03	106.28	.173	14763						
OBS	185	5.75	34.268	27.03			14761						
STD	200	5.69	34.265	27.03	106.21	.226	14762						
OBS	231	5.60	34.260	27.04			14763						
STD	250	5.55	34.257	27.04	105.68	.279	14764						
OBS	276	5.48	34.251	27.05			14765						
STD	300	5.38	34.242	27.05	105.34	.332	14765						
OBS	369	5.06	34.213	27.07			14763						
STD	400	4.92	34.201	27.07	104.06	.437	14762						
OBS	462	4.69	34.189	27.09			14763						
STD	500	4.62	34.198	27.10	101.82	.540	14766						
OBS	554	4.53	34.217	27.13			14772						
STD	600	4.37	34.224	27.15	97.89	.640	14772						
STD	700	3.97	34.242	27.21	92.97	.735	14773						
OBS	742	3.79	34.250	27.23			14772						
STD	800	3.60	34.272	27.27	87.37	.825	14774						
STD	900	3.31	34.315	27.33	81.68	.910	14779						
OBS	935	3.22	34.332	27.35			14781						
STD	1000	3.05	34.359	27.39	76.28	.989	14785						
OBS	1221	2.63	34.451	27.50			14806						
STD	1250	2.61	34.465	27.51	64.99	1.165	14809						
STD	1500	2.47	34.572	27.61	56.91	1.318	14847						
OBS	1515	2.47	34.578	27.62			14850						
STD	1750	2.31	34.643	27.68	51.09	1.453	14884						
OBS	1810	2.27	34.655	27.70			14892						
STD	2000	2.16	34.690	27.73	46.92	1.575	14920						
OBS	2111	2.09	34.705	27.75			14937						
STD	2250	1.98	34.715	27.77	43.93	1.689	14956						
OBS	2403	1.86	34.721	27.78			14977						
STD	2500	1.79	34.723	27.79	41.96	1.796	14991						
OBS	2704	1.67	34.724	27.80			15021						
STD	2750	1.65	34.725	27.80	40.67	1.899	15027						
STD	3000	1.51	34.729	27.81	39.36	1.999	15065						
OBS	3009	1.51	34.729	27.81			15067						
STD	3250	1.36	34.727	27.82	38.03	2.096	15102						
OBS	3311	1.32	34.726	27.82			15111						
STD	3500	1.18	34.724	27.83	36.20	2.189	15138						
OBS	3619	1.09	34.723	27.84			15155						
STD	3750	1.00	34.721	27.84	34.16	2.277	15174						
STD	4000	.82	34.717	27.85	32.17	2.360	15210						
OBS	4014	.81	34.717	27.85			15213						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 17	435	30APR1965	0823	5459S	9457W	4773	489	44	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			170	04	4.4	2.0	230	5					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
STD	0	6.60	34.195	26.86	119.90	0.000	14764						
OBS	1	6.60	34.195	26.86			14764	670	130	183	4		
STD	10	6.60	34.195	26.86	120.04	.012	14766						
STD	20	6.60	34.195	26.86	120.19	.024	14767						
STD	30	6.60	34.195	26.86	120.33	.036	14769						
STD	50	6.60	34.195	26.86	120.62	.060	14772						
OBS	51	6.60	34.195	26.86			14773	671	137	183	3	815	
STD	75	6.66	34.191	26.85	121.99	.090	14779						
OBS	100	6.61	34.196	26.86			14781	670	134	182	4	816	
STD	100	6.61	34.196	26.86	121.40	.121	14781						
OBS	149	5.80	34.267	27.02			14758	654	145	207	7	811	
STD	150	5.79	34.267	27.02	106.59	.178	14757						
OBS	198	5.71	34.264	27.03			14762	655	145	210	7	809	
STD	200	5.70	34.264	27.03	106.39	.231	14762						
OBS	247	0.00	34.254	0.00			0	666	146	211	7	816	
STD	250	5.56	34.253	27.04	106.10	.284	14764						
OBS	295	5.42	34.238	27.04			14766	658	150	217	8	810	
STD	300	5.41	34.237	27.04	106.02	.337	14766						
OBS	392	5.14	34.218	27.06			14770	646	155	228	9	809	
STD	400	5.11	34.216	27.06	105.23	.443	14770						
OBS	489	4.83	34.201	27.08			14773	636	161	243	11	808	
STD	500	4.81	34.202	27.09	103.70	.547	14774						
OBS	587	4.63	34.220	27.12			14781	594		262	16	805	
STD	600	4.59	34.223	27.13	100.67	.650	14782						
STD	700	4.29	34.247	27.18	96.24	.748	14786						
OBS	783	3.99	34.270	27.23			14788	527	197	299	26	799	
STD	800	3.92	34.276	27.24	90.77	.842	14788						
STD	900	3.55	34.311	27.31	84.66	.929	14789						
OBS	980	3.26	34.341	27.36			14791	475	217	316	40	794	
STD	1000	3.20	34.349	27.37	78.72	1.011	14792						
STD	1250	2.69	34.448	27.49	67.15	1.193	14813						
OBS	1257	2.68	34.451	27.50			14814	432	226	331	56	791	
OBS	1495	2.43	34.556	27.60			14845	403	229	332	67	789	
STD	1500	2.43	34.558	27.60	57.42	1.349	14845						
OBS	1738	2.33	34.634	27.67			14882	400	226	334	72	787	
STD	1750	2.32	34.637	27.68	51.65	1.485	14884						
OBS	1988	2.19	34.683	27.72			14920	405	223	288	80	787	5
STD	2000	2.18	34.685	27.73	47.61	1.609	14921						
STD	2250	2.01	34.713	27.76	44.53	1.725	14957						
OBS	2282	1.99	34.715	27.77			14962	411	217	323	85	791	
STD	2500	1.83	34.721	27.78	42.53	1.833	14992						
OBS	2675	1.70	34.720	27.79			15017	420	222	291	93	790	
STD	2750	1.65	34.721	27.80	41.08	1.938	15028						
STD	3000	1.51	34.723	27.81	39.69	2.039	15065						
OBS	3073	1.47	34.724	27.81			15076	442	208	315	97	790	
STD	3250	1.37	34.724	27.82	38.31	2.136	15102						
OBS	3371	1.29	34.724	27.83			15120	450	215	321	102	791	
STD	3500	1.17	34.722	27.83	36.20	2.229	15137						
STD	3750	.94	34.718	27.84	33.53	2.317	15171						
OBS	3771	.92	34.718	27.85			15175	469	213	248	111	790	5
STD	4000	.77	34.716	27.85	31.52	2.398	15208						
OBS	4172	.69	34.715	27.86			15236	478	215	295	115	789	
STD	4500	0.00	34.713	0.00	0.00	0.000	0						
OBS	*4767	0.00	34.714	0.00			0	490	217	284	120	789	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 18	436	5JUN1965	2200	5458S	9916W	4029	489	49	21				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		020	06	6.8	4.3	340	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgal/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH .10 <sup>2</sup>	DD
OBS	0	5.81	34.238	27.00			14733	666	133	177	6	818	
STD	0	5.81	34.238	27.00	107.02	0.000	14733						
STD	10	5.82	34.239	27.00	107.20	.011	14735						
STD	20	5.83	34.239	27.00	107.39	.021	14737						
STD	30	5.83	34.239	26.99	107.56	.032	14739						
OBS	47	5.84	34.240	26.99			14742	676					
STD	50	5.84	34.240	26.99	107.88	.054	14743						
STD	75	5.85	34.241	26.99	108.25	.081	14747						
ORS	95	5.85	34.241	26.99			14750	677	128	177	6	817	
STD	100	5.85	34.241	26.99	108.56	.108	14751						
OBS	143	5.84	34.242	27.00			14758	676	139	178	7	816	
STD	150	5.84	34.241	26.99	109.10	.162	14759						
OBS	192	5.84	34.246	27.00			14766	677	122	162	6	816	
STD	200	5.83	34.253	27.01	108.76	.217	14767						
OBS	240	5.79	34.290	27.04			14772	642	143	189	7	816	
STD	250	5.77	34.292	27.04	105.79	.270	14773						
STD	300	5.67	34.288	27.05	105.43	.323	14778						
OBS	338	5.57	34.272	27.05			14779	640	137	198	8	813	
STD	400	5.35	34.253	27.06	105.34	.429	14780						
OBS	436	5.20	34.241	27.07			14780	629	153	211	11	813	
STD	500	4.87	34.218	27.09	103.21	.533	14777						
OBS	535	4.70	34.213	27.11			14775	610	168	230	14	809	
STD	600	4.54	34.240	27.15	98.79	.634	14780						
OBS	632	4.48	34.258	27.17			14783	542	182	253	22	806	
STD	700	4.25	34.278	27.21	93.51	.730	14785						
STD	800	3.88	34.302	27.27	88.29	.821	14786						
OBS	821	3.80	34.307	27.28			14787	495	204	279	34	799	
STD	900	3.53	34.335	27.33	82.62	.906	14789						
STD	1000	3.22	34.373	27.39	77.09	.986	14793						
OBS	1221	2.69	34.464	27.51			14808	425	229	323	62	795	
STD	1250	2.65	34.476	27.52	64.64	1.163	14811						
OBS	1416	2.48	34.540	27.59			14833	413	225	319	72	793	
STD	1500	2.42	34.563	27.61	56.94	1.315	14845						
OBS	1710	2.31	34.614	27.66			14877	410	217	306	72	797	
STD	1750	2.29	34.627	27.67	51.99	1.451	14883						
STD	2000	2.17	34.691	27.73	47.03	1.575	14921						
OBS	2005	2.17	34.692	27.73			14922	412	151	295	88	793	
STD	2250	1.99	34.689	27.75	45.93	1.691	14955						
OBS	2299	0.00	34.686	0.00			0	425	156	289	85	797	
STD	2500	1.79	34.707	27.78	43.02	1.803	14990						
OBS	2592	1.72	34.718	27.79			15003	422	199	291	100	794	
STD	2750	1.63	34.722	27.80	40.77	1.907	15027						
OBS	2890	1.56	34.721	27.80			15047	437	195	289	104	795	
STD	3000	1.49	34.722	27.81	39.54	2.008	15064						
OBS	3187	1.36	0.000	0.00			0	450	195	290	101	797	
STD	3250	1.31	34.722	27.82	37.68	2.104	15099						
OBS	3487	1.10	34.722	27.84			15130	455	195	294	114	794	
STD	3500	1.09	34.722	27.84	35.02	2.195	15134						
STD	3750	.84	34.719	27.85	32.03	2.279	15167						
OBS	3888	.69	34.716	27.86			15183	480	200	289	127	795	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 18	437	6 JUN 1965	2215	5558S	9921W	4660	489	59	11				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			340	04	5.6	0.0	340	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS µg-at/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	5.91	34.239	26.98			14737	675	137		4	820	
STD	0	5.91	34.239	26.98	108.13	0.000	14737						
STD	10	5.91	34.239	26.98	108.27	.011	14739						
STD	20	5.91	34.239	26.98	108.42	.022	14741						
STD	30	5.92	34.240	26.98	108.55	.033	14742						
OBS	49	5.92	34.240	26.98			14746	681	135		4	822	
STD	50	5.92	34.240	26.98	108.84	.054	14746						
STD	75	5.93	34.240	26.98	109.23	.081	14750						
STD	100	5.93	34.241	26.98	109.57	.109	14754						
OBS	120	5.93	34.241	26.98			14758	682	138		4	821	
STD	150	5.93	34.240	26.98	110.20	.164	14762						
OBS	198	5.90	34.247	26.99			14769	680	135		4	821	
STD	200	5.90	34.248	26.99	109.91	.219	14770						
STD	250	5.83	34.280	27.03	107.38	.273	14776						
OBS	269	5.80	34.292	27.04			14778	649	148		6	819	
STD	300	5.74	34.286	27.04	106.47	.327	14780						
STD	400	5.48	34.270	27.06	105.69	.433	14786						
OBS	420	5.42	34.261	27.06			14787	636	152		8	817	
STD	500	5.10	34.242	27.09	104.17	.538	14786						
OBS	564	4.82	34.231	27.11			14785	596	179		12	815	
STD	600	4.67	34.234	27.13	100.67	.640	14785						
STD	700	4.26	34.249	27.18	95.82	.738	14785						
STD	800	3.90	34.272	27.24	90.71	.832	14787						
STD	900	3.56	34.303	27.30	85.37	.920	14790						
STD	1000	3.26	34.343	27.36	79.76	1.002	14794						
OBS	1129	2.92	34.406	27.44			14802	460	213		50	805	
STD	1250	2.70	34.452	27.50	66.96	1.186	14813						
OBS	1320	2.60	34.479	27.53			14821	427	221		61	798	
STD	1500	2.45	34.543	27.59	58.74	1.343	14846						
OBS	1608	2.39	34.579	27.62			14862	399	236		71	798	
STD	1750	2.31	34.625	27.67	52.42	1.482	14883						
OBS	1900	2.25	34.670	27.71			14907	406	225		78	797	

Note: Temperatures to 564 meters probably measured at non-equilibrium conditions.

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 18	438	8JUN1965	0631	5705S	9921W	4607	489	79	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		165	05	4.6	0.0	150	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DI
OBS	0	4.96	34.133	27.01			14697	694	122		5	819	
STD	0	4.96	34.133	27.01	105.26	0.000	14697						
STD	10	4.96	34.133	27.01	105.41	.011	14699						
STD	20	4.97	34.133	27.01	105.55	.021	14701						
STD	30	4.97	34.133	27.01	105.69	.032	14702						
OBS	47	0.00	34.133	0.00			0	692	128		6	822	
STD	50	4.97	34.133	27.01	105.95	.053	14706						
STD	75	4.98	34.132	27.01	106.34	.079	14710						
OBS	94	4.98	34.135	27.01			14713	691	146		6	825	
STD	100	4.99	34.140	27.02	106.23	.106	14715						
OBS	141	4.98	34.168	27.04			14721	694	144		6	827	
STD	150	4.88	34.165	27.05	103.66	.158	14719						
OBS	188	4.46	34.147	27.08			14707	676	154		8	820	
STD	200	4.44	34.150	27.09	100.45	.209	14708						
OBS	236	4.42	34.160	27.10			14714	664	156		10	819	
STD	250	4.34	34.156	27.10	99.38	.259	14712						
OBS	283	4.11	34.144	27.12			14708	648	177		12	818	
STD	300	4.04	34.144	27.12	97.58	.309	14708						
OBS	378	3.84	34.167	27.16			14713	609	190		17	816	
STD	400	3.82	34.183	27.18	93.25	.404	14716						
OBS	472	3.76	34.236	27.23			14726	546	198		25	810	
STD	500	3.68	34.246	27.24	87.86	.495	14727						
OBS	567	3.46	34.265	27.28			14729	523	209		31	808	
STD	600	3.36	34.279	27.30	82.73	.580	14731						
STD	700	3.06	34.325	27.36	76.94	.660	14735						
OBS	756	2.91	34.353	27.40			14739	471	228		44	805	
STD	800	2.83	34.373	27.42	71.64	.734	14743						
STD	900	2.69	34.419	27.47	67.30	.803	14754						
STD	1000	2.56	34.463	27.52	63.31	.869	14766						
OBS	1155	0.00	34.530	0.00			0	411	229		66	802	
STD	1250	2.39	34.571	27.62	54.75	1.016	14802						
OBS	1350	2.37	34.610	27.65			14818	392	226		78	799	
STD	1500	2.27	34.650	27.69	48.93	1.146	14840						
OBS	1647	2.19	34.677	27.72			14862	404	224		82	801	
STD	1750	2.14	34.695	27.74	45.24	1.264	14877						
OBS	1939	2.04	34.719	27.77			14905	416	216		86	800	
STD	2000	1.99	34.724	27.77	42.42	1.373	14914						
OBS	2232	1.80	34.734	27.80			14945	424	212		92	802	
STD	2250	1.79	34.734	27.80	40.12	1.476	14947						
STD	2500	1.62	34.733	27.81	38.95	1.575	14983						
OBS	2529	1.60	34.732	27.81			14988	433	220		101	802	
STD	2750	1.48	34.730	27.82	38.12	1.672	15020						
OBS	2823	0.00	34.730	0.00			0	445	198		105	801	
STD	3000	1.35	34.730	27.83	37.09	1.766	15058						
OBS	3119	1.29	34.729	27.83			15075	459	204		108	800	
STD	3250	1.19	34.727	27.83	35.66	1.857	15095						
STD	3500	1.01	34.723	27.84	33.86	1.943	15130						
OBS	3614	.93	34.721	27.85			15146	469	219		116	799	
STD	3750	.84	34.719	27.85	32.05	2.026	15167						
STD	4000	.71	34.717	27.86	30.53	2.104	15205						
OBS	4113	.66	34.716	27.86			15223	481	225		125	799	
STD	4500	.57	34.716	27.87	28.87	2.253	15288						
OBS	4613	.56	34.716	27.87			15308	486	211		128	798	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 18	439	10JUN1965	0156	5803S	9936W	4956	489	89	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			130	04	2.8	0.0	160	5					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgal/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	4.27	34.130	27.09			14668	710	140		7		
STD	0	4.27	34.130	27.09	98.28	0.000	14668						
STD	10	4.29	34.130	27.09	98.55	.010	14671						
STD	20	4.28	34.130	27.09	98.55	.020	14672						
STD	30	4.28	34.130	27.09	98.68	.030	14674						
OBS	49	4.29	34.130	27.09			14677	690	160		8		
STD	50	4.29	34.130	27.09	98.93	.049	14677						
STD	75	4.22	34.127	27.09	98.68	.074	14678						
OBS	96	4.15	34.124	27.10			14679	691	164		14		
STD	100	4.14	34.123	27.10	98.40	.099	14679						
OBS	145	4.05	34.116	27.10			14683	696	164		16		
STD	150	4.04	34.116	27.10	98.43	.148	14683						
OBS	195	3.94	34.109	27.11			14686	696	159		16		
STD	200	3.91	34.107	27.11	98.24	.197	14686						
OBS	242	3.71	34.088	27.11			14684	695	153		16		
STD	250	3.69	34.087	27.11	97.85	.246	14684						
OBS	292	3.63	34.092	27.12			14689	684	169		13		
STD	300	3.64	34.097	27.13	96.99	.295	14691						
OBS	390	3.77	34.173	27.17			14712	596	172		16		
STD	400	3.77	34.182	27.18	92.80	.390	14714						
OBS	488	3.67	34.246	27.24			14725	528	190		22		
STD	500	3.63	34.251	27.25	87.01	.480	14725						
OBS	586	3.32	34.275	27.30			14727	507	199		30		
STD	600	3.27	34.280	27.31	81.77	.564	14727						
STD	700	2.92	34.316	27.37	76.16	.643	14729						
OBS	783	2.67	34.350	27.42			14733	469	206		41		
STD	800	2.66	34.358	27.43	70.95	.716	14735						
STD	900	2.58	34.354	27.43	71.05	.787	14748						
STD	1000	2.50	34.379	27.45	68.95	.857	14762						
STD	1250	2.32	34.529	27.59	57.09	1.015	14798						
OBS	1333	2.26	34.607	27.66			14811	405	225		70		
OBS	500	2.10	34.666	27.72			14665	405	225		73		
STD	1500	1.90	34.699	27.76	41.12	1.138	14824						
STD	1750	2.04	34.701	27.75	43.64	1.244	14873						
OBS	1791	2.15	34.709	27.75			14885	422	213		73		1
STD	2000	1.86	34.726	27.79	40.62	1.349	14908						
OBS	2072	1.79	34.731	27.79			14917	443	210		77		
STD	2250	1.61	34.736	27.81	37.80	1.447	14940						
OBS	2350	1.52	34.737	27.82			14953	445	216		87		
STD	2500	1.44	34.736	27.82	36.41	1.540	14975						
OBS	2636	1.39	34.733	27.83			14997	450	212		97		
STD	2750	1.37	34.730	27.82	36.58	1.631	15015						
OBS	2917	1.34	34.727	27.82			15043	451	211		101		
STD	3000	1.31	34.726	27.83	36.76	1.723	15056						
STD	3250	1.21	34.725	27.83	35.98	1.814	15095						
OBS	3397	1.13	34.725	27.84			15118	466	216		102		
STD	3500	1.07	34.724	27.84	34.57	1.902	15133						
STD	3750	.90	34.720	27.85	32.89	1.986	15170						
OBS	3876	.82	34.718	27.85			15189	478	216		108		
STD	4000	.74	34.716	27.86	31.04	2.066	15207						
OBS	4358	.56	34.713	27.86			15264	488	212		121		
STD	4500	.52	34.712	27.87	28.32	2.215	15286						
OBS	4844	.48	34.711	27.87			15347	494	205		127		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	440	14 JUL 1965	0025	5857S	9959W	4735	489	89	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			310	04	3.9	3.4	320	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	± ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	3.93	34.137	27.13			14654	691	174	251	12	817	
STD	0	3.93	34.137	27.13	94.40	0.000	14654						
STD	10	3.93	34.137	27.13	94.51	.009	14656						
STD	20	3.93	34.136	27.13	94.62	.019	14657						
STD	30	3.93	34.136	27.13	94.72	.028	14659						
OBS	46	3.93	34.136	27.13			14662	685	172	257	12	826	
STD	50	3.93	34.136	27.13	94.89	.047	14662						
STD	75	3.92	34.137	27.13	95.03	.071	14666						
OBS	93	3.92	34.137	27.13			14669	691	175	255	10	826	
STD	100	3.92	34.137	27.13	95.13	.095	14670						
OBS	142	3.90	34.137	27.13			14676	692	170	260	11	823	
STD	150	3.90	34.137	27.13	95.37	.142	14677						
OBS	190	3.87	34.135	27.13			14683	691	174	255	12	820	
STD	200	3.87	34.135	27.13	95.58	.190	14684						
OBS	238	3.85	34.136	27.14			14690	690	170	258	11	822	
STD	250	3.85	34.135	27.14	95.86	.238	14692						
OBS	286	3.83	34.129	27.13			14697	689	173	258	11	822	
STD	300	3.82	34.124	27.13	96.77	.286	14698						
OBS	384	3.74	34.120	27.14			14709	688	172	261	12	821	
STD	400	3.75	34.137	27.15	95.98	.383	14712						
OBS	481	3.77	34.230	27.22			14728	548	213	314	26	816	
STD	500	3.72	34.239	27.23	88.74	.475	14729						
OBS	581	3.42	34.263	27.28			14730	518	216	329	34	814	
STD	600	3.36	34.271	27.29	83.41	.561	14731						
STD	700	3.10	34.317	27.35	77.93	.642	14737						
OBS	778	2.93	34.357	27.40			14743	468	229	359	48	805	
STD	800	2.88	34.369	27.41	72.44	.717	14745						
STD	900	2.67	34.420	27.47	67.11	.787	14753						
STD	1000	2.51	34.468	27.53	62.33	.851	14763						
OBS	1086	2.39	34.507	27.57			14773	418	248	330	72	803	
STD	1250	2.30	34.561	27.62	54.51	.997	14798						
OBS	1367	2.27	34.593	27.65			14817	417	225	298	77	804	
STD	1500	2.21	34.628	27.68	49.73	1.128	14837						
OBS	1649	2.13	34.663	27.71			14859	417	233	336	81	801	
STD	1750	2.08	34.685	27.73	45.27	1.246	14874						
OBS	1932	1.98	34.716	27.77			14902	421	223	336	91	803	
STD	2000	1.93	34.723	27.78	41.71	1.355	14911						
OBS	2220	1.75	34.736	27.80			14941	434	232	337	92	803	
STD	2250	1.73	34.737	27.80	39.18	1.456	14945						
STD	2500	1.55	34.739	27.82	37.65	1.552	14980						
OBS	2506	1.55	34.739	27.82			14982	441	215	340	101	803	
STD	2750	1.39	34.732	27.82	36.76	1.645	15016						
OBS	2794	1.36	34.730	27.83			15023	448	232	324	103	803	
STD	3000	1.25	34.728	27.83	35.79	1.736	15054						
OBS	3083	1.21	34.728	27.83			15067	454	231	348	107	803	
STD	3250	1.12	34.726	27.84	34.70	1.824	15091						
STD	3500	.99	34.722	27.84	33.60	1.910	15129						
OBS	3571	.95	34.720	27.84			15141	470	231	334	114	802	
STD	3750	.85	0.000	0.00	0.00	0.000	0						
STD	4000	.74	0.000	0.00	0.00	0.000	0						
OBS	4069	.71	34.691	27.84			15218	485	223	349	113	801	2
STD	4500	.55	0.000	0.00	0.00	0.000	0						
OBS	4569	.53	34.687	27.84			15300	487	256	354	120	800	2

HIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	441	15JUL1965	0545	6039S	10016W	4960	526	00	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			060	05	4.5	3.0	040	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	3.21	34.078	27.15			14623	711	176	259	12	821	
STD	0	3.21	34.078	27.15	92.20	0.000	14623						
STD	10	3.21	34.076	27.15	92.44	.009	14624						
STD	20	3.22	34.075	27.15	92.65	.018	14626						
STD	30	3.22	34.074	27.15	92.80	.028	14628						
OBS	50	3.22	34.073	27.15			14631	712	180	256	13	820	
STD	50	3.22	34.073	27.15	93.00	.046	14631						
STD	75	3.23	34.076	27.15	93.00	.070	14636						
OBS	100	3.21	34.079	27.15			14639	708	183	259	10	820	
STD	100	3.21	34.079	27.15	92.81	.093	14639						
OBS	149	3.04	34.071	27.16			14640	715	184	258	12	820	
STD	150	3.04	34.071	27.16	92.20	.139	14640						
OBS	199	3.00	34.083	27.18			14646	704	197	260	11	820	
STD	200	3.00	34.084	27.18	91.19	.185	14647						
OBS	249	2.98	34.130	27.22			14654	630	210	260	23	818	
STD	250	2.98	34.131	27.22	87.79	.230	14655						
OBS	298	2.98	34.172	27.25			14663	590	205	265	26	818	
STD	300	2.98	34.173	27.25	84.89	.273	14663						
OBS	398	2.71	34.226	27.32			14669	556	216	264	36	817	
STD	400	2.71	34.228	27.32	78.93	.355	14669						
OBS	498	2.72	34.322	27.39			14687	495	225	310	46	816	
STD	500	2.72	34.323	27.39	72.42	.430	14687						
OBS	597	2.54	34.376	27.45			14696	460	234	327	56	815	
STD	600	2.54	34.378	27.45	67.20	.500	14697						
STD	700	2.43	34.434	27.50	62.56	.565	14710						
OBS	797	2.38	34.488	27.55			14724	418	238	342	65	818	
STD	800	2.38	34.490	27.55	58.36	.626	14725						
STD	900	2.35	34.547	27.60	54.36	.682	14741						
OBS	997	2.33	34.594	27.64			14757	399	229	348	77	813	
STD	1000	2.33	34.595	27.64	51.06	.735	14757						
OBS	1087	2.27	34.619	27.67			14770	399	235	349	78	811	
STD	1250	2.17	34.660	27.71	45.77	.856	14793						
OBS	1388	0.00	34.689	0.00			0	410	237	341	86	807	
STD	1500	2.00	34.707	27.76	41.65	.965	14829						
OBS	1689	1.88	34.729	27.79			14856	430	214	334	89	807	
STD	1750	1.84	34.732	27.79	38.93	1.066	14864						
OBS	1990	1.66	34.738	27.81			14897	436	210	334	98	803	
STD	2000	1.65	34.738	27.81	37.30	1.161	14899						
STD	2250	1.46	34.737	27.82	35.83	1.252	14933						
OBS	2291	1.43	34.737	27.83			14939	446	216	335	105	803	
STD	2500	1.32	34.735	27.83	35.00	1.341	14970						
OBS	2593	1.28	34.734	27.83			14984	455	208	336	111	802	
STD	2750	1.19	34.731	27.84	34.18	1.427	15008						
OBS	2895	1.10	34.728	27.84			15029	461	210	336	112	800	
STD	3000	1.04	34.727	27.84	33.07	1.511	15045						
STD	3250	.91	34.725	27.85	31.89	1.593	15082						
OBS	3398	.84	34.724	27.86			15105	473	216	332	122	799	
STD	3500	.78	34.722	27.86	30.68	1.671	15121						
STD	3750	.66	34.717	27.86	29.51	1.746	15159						
OBS	3903	.59	34.714	27.86			15184	483	222	332	129	798	
STD	4000	.55	34.713	27.86	28.43	1.819	15199						
OBS	4410	.45	34.713	27.87			15268	492	220	337	135	797	
STD	4500	.44	34.713	27.87	26.97	1.957	15283						
OBS	4923	.42	34.712	27.87			15359	496	223	347	135	798	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	442	16 JUL 1965	0640	6136S	9944W	4550	525	19	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		330	06	2.3	1.8	340	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μg-at/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	1.48	34.043	27.27			14547	0	205	265	18	813	
STD	0	1.48	34.043	27.27	81.45	0.000	14547						
STD	10	1.48	34.044	27.27	81.40	.008	14548						
STD	20	1.48	34.045	27.27	81.35	.016	14550						
STD	30	1.48	34.046	27.27	81.30	.024	14552						
OBS	48	1.48	34.048	27.27			14555	0	205	264	17	816	
STD	50	1.48	34.048	27.27	81.15	.041	14555						
STD	75	1.42	34.051	27.28	80.65	.061	14557						
OBS	96	1.38	34.054	27.28			14558	0	205	270	18	811	
STD	100	1.37	34.054	27.28	80.13	.081	14558						
OBS	145	1.37	34.066	27.29			14566	0	203	267	21	812	
STD	150	1.42	34.073	27.29	79.10	.121	14569						
OBS	193	1.76	34.135	27.32			14592	0	215	269	29	812	
STD	200	1.73	34.139	27.32	76.51	.160	14592						
OBS	241	1.52	34.152	27.35			14590	0	222	282	33	811	
STD	250	1.56	34.154	27.35	74.22	.197	14593						
OBS	289	1.79	34.171	27.35			14610	0	218	284	41	808	
STD	300	1.83	34.185	27.35	74.15	.234	14613						
OBS	387	2.02	34.317	27.45			14638	0	233	297	52	803	
STD	400	2.05	34.333	27.46	65.21	.304	14642						
OBS	485	2.17	34.417	27.51			14662	0	245	332	65	797	
STD	500	2.18	34.429	27.52	59.60	.367	14665						
OBS	584	2.21	34.485	27.56			14681	0	247	340	70	797	
STD	600	2.21	34.495	27.57	55.39	.424	14684						
STD	700	2.20	34.549	27.62	51.81	.478	14701						
OBS	784	2.18	34.582	27.64			14715	0	242	356	81	797	
STD	800	2.17	34.583	27.65	49.39	.528	14717						
STD	900	2.14	34.596	27.66	48.53	.577	14732						
OBS	984	2.10	34.612	27.67			14745	0	233	358	83	796	
STD	1000	2.10	34.621	27.68	46.77	.625	14748						
OBS	1081	2.07	34.669	27.72			14761	0	235	343	88	796	
STD	1250	1.95	34.723	27.77	38.88	.732	14785						
OBS	1371	1.86	34.737	27.79			14801	0	225	341	96	795	
STD	1500	1.82	34.738	27.80	37.35	.827	14821						
OBS	1662	1.76	34.730	27.80			14846	0	225	336	102	794	
STD	1750	1.70	34.732	27.80	37.40	.921	14858						
OBS	1954	1.54	34.736	27.82			14886	0	225	331	106	800	
STD	2000	1.51	34.735	27.82	35.85	1.012	14893						
OBS	2246	1.36	34.729	27.82			14928	0	222	338	111	801	
STD	2250	1.36	34.729	27.82	35.21	1.101	14929						
STD	2500	1.22	34.731	27.84	34.06	1.188	14966						
OBS	2541	1.20	34.731	27.84			14972	0	227	342	118	801	
STD	2750	1.09	34.731	27.84	32.96	1.271	15003						
OBS	2835	1.05	34.730	27.85			15017	0	224	336	124	801	
STD	3000	.97	34.726	27.85	32.22	1.353	15042						
OBS	3228	.87	34.719	27.85			15077	0	223	332	131	800	
STD	3250	.86	34.718	27.85	31.62	1.433	15080						
STD	3500	.75	34.714	27.85	30.70	1.511	15119						
OBS	3721	.65	34.711	27.86			15154	0	224	334	136	800	
STD	3750	.64	34.711	27.86	29.64	1.586	15158						
STD	4000	.54	34.710	27.86	28.53	1.659	15198						
OBS	4212	.47	34.710	27.87			15234	0	230	341	142	799	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	443	17JUL1965	2253	6158S	10246W	5108	526	12	24				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		080	04	3.1	2.2	100	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	2.02	34.041	27.22			14570	723	188	281	15	817	
STD	0	2.02	34.041	27.22	85.39	0.000	14570						
STD	10	1.99	34.038	27.22	85.42	.009	14571						
STD	20	1.97	34.040	27.23	85.17	.017	14571						
STD	30	1.94	34.039	27.23	85.07	.026	14572						
OBS	48	1.90	34.038	27.23			14573	729	193	288	13	819	
STD	50	1.90	34.039	27.23	84.83	.043	14573						
STD	75	1.84	34.049	27.24	83.78	.064	14575						
OBS	96	1.80	34.058	27.25			14577	726	180	290	17	820	
STD	100	1.79	34.059	27.26	82.72	.084	14577						
OBS	145	1.67	34.062	27.27			14579	725	189	285	18	818	
STD	150	1.65	34.061	27.27	81.73	.126	14579						
OBS	194	1.58	34.066	27.28			14583	716	180	269	21	819	
STD	200	1.60	34.076	27.28	80.39	.166	14585						
OBS	242	1.79	34.145	27.33			14602	637	209	324	32	818	
STD	250	1.79	34.149	27.33	76.38	.205	14603						
OBS	290	1.76	34.161	27.34			14608	615	216	341	37	814	
STD	300	1.76	34.168	27.35	74.96	.243	14610						
OBS	388	1.89	34.247	27.40			14632	551	226	352	48	808	
STD	400	1.92	34.260	27.41	69.63	.315	14635						
OBS	486	2.15	34.356	27.47			14661	481	232	360	59	806	
STD	500	2.16	34.370	27.48	63.84	.382	14664						
OBS	584	2.19	34.446	27.53			14680	444	232	360	69	803	
STD	600	2.19	34.458	27.54	58.04	.443	14683						
STD	700	2.21	34.521	27.59	53.94	.499	14701						
OBS	782	2.21	34.561	27.63			14715	413	218	359	78	801	
STD	800	2.21	34.570	27.63	50.71	.551	14718						
STD	900	2.19	34.615	27.67	47.70	.601	14735						
OBS	978	2.17	34.643	27.69			14748	401	221	367	84	805	
STD	1000	2.17	34.650	27.70	45.36	.647	14751						
OBS	1034	2.16	34.659	27.71			14757	401	219	360	84	807	
STD	1250	2.04	34.703	27.75	41.28	.755	14788						
OBS	1324	1.99	34.713	27.76			14799	419	210	344	88	805	
STD	1500	1.89	34.731	27.79	38.67	.855	14824						
OBS	1613	1.82	34.737	27.80			14841	428	216	349	92	803	
STD	1750	1.72	34.741	27.81	37.02	.950	14860						
OBS	1906	1.61	34.742	27.82			14881	439	206	319	102	801	
STD	2000	1.54	34.742	27.82	35.74	1.041	14894						
OBS	2197	1.41	34.740	27.83			14922	448	195	344	109	801	
STD	2250	1.38	34.739	27.83	34.72	1.129	14930						
OBS	2489	1.25	34.736	27.84			14966	456	201	344	113	800	
STD	2500	1.24	34.736	27.84	33.96	1.215	14967						
STD	2750	1.12	34.732	27.84	33.13	1.299	15004						
OBS	2879	1.05	34.730	27.85			15024	463	216	347	119	799	
STD	3000	.98	34.725	27.85	32.38	1.381	15042						
STD	3250	.85	34.716	27.85	31.68	1.461	15080						
OBS	3367	0.00	34.711	0.00			0	470	211	348	132	798	
STD	3500	.73	34.709	27.85	30.78	1.539	15118						
STD	3750	.61	34.706	27.85	29.64	1.614	15157						
OBS	3856	.57	34.705	27.86			15172	485	222	338	139	798	
STD	4000	.52	34.702	27.86	28.76	1.687	15197						
OBS	4344	.44	34.697	27.86			15253	490	221	332	141	798	
STD	4500	.42	34.699	27.86	27.74	1.829	15282						
OBS	4839	.43	34.707	27.87			15342	495	225	349	147	797	
STD	5000	0.00	34.711	0.00	0.00	0.000	0						
OBS	*5086	0.00	34.714	0.00			0	494	219	341	146	798	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 9	444	19JUL1965	0712	6204S	10457W	5072	526	24	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			320	03	.4	.4	320	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ε ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	.70	34.018	27.30			14511	750	194	280	18		
STD	0	.70	34.018	27.30	78.54	0.000	14511						
STD	10	.70	34.012	27.29	78.95	.008	14513						
STD	20	.70	34.008	27.29	79.26	.016	14514						
STD	30	.69	34.006	27.29	79.46	.024	14516						
OBS	46	.69	34.004	27.29			14518	751	200	257	20		
STD	50	.67	34.005	27.29	79.38	.040	14518						
STD	75	.53	34.012	27.30	78.05	.059	14516						
OBS	92	.43	34.019	27.31			14514	754	198	251	19		
STD	100	.40	34.021	27.32	76.68	.079	14514						
OBS	138	.35	34.030	27.33			14518	748	198	267	20		
STD	150	.32	34.031	27.33	75.40	.117	14519						
OBS	185	.41	34.051	27.34			14529	724	201	290	24		
STD	200	.71	34.083	27.35	73.73	.154	14546						
OBS	232	1.27	34.152	27.37			14577	657	216	313	40		
STD	250	1.15	34.161	27.38	70.76	.190	14574						
OBS	280	.83	34.171	27.41			14565	635	222	330	42		
STD	300	.96	34.207	27.43	66.11	.224	14575						
OBS	375	1.83	34.360	27.49			14628	487	239	333	58		
STD	400	1.94	34.387	27.51	60.21	.287	14638						
OBS	471	.80	34.444	27.63			14600	437	235	363	65	1	
STD	500	2.17	34.468	27.55	56.51	.346	14665						
OBS	567	2.12	34.520	27.60			14675	418	237	361	73		
STD	600	2.13	34.540	27.61	51.33	.400	14681						
STD	700	2.13	34.588	27.65	48.17	.449	14699						
OBS	760	2.11	34.610	27.67			14708	407	221	360	80		
STD	800	2.09	34.624	27.68	45.61	.496	14714						
STD	900	2.05	34.654	27.71	43.46	.541	14730						
OBS	954	2.03	34.667	27.72			14738	411	213	344	83		
STD	1000	2.02	34.678	27.73	41.82	.584	14745						
OBS	1094	2.00	34.696	27.75			14760	416	208	321	85		
STD	1250	1.91	34.713	27.77	39.14	.685	14783						
OBS	1380	1.81	34.720	27.78			14801	431	204	325	91		
STD	1500	1.73	34.727	27.80	37.18	.780	14817						
OBS	1664	1.62	34.732	27.81			14841	442	208	334	98		
STD	1750	1.57	34.730	27.81	36.10	.872	14853						
OBS	1951	1.44	34.722	27.81			14881	448	196	321	104		
STD	2000	1.40	34.722	27.82	35.52	.961	14888						
OBS	2238	1.22	34.723	27.83			14921	453	208	331	112		
STD	2250	1.21	34.722	27.83	33.96	1.048	14922						
STD	2500	1.08	34.711	27.83	33.73	1.133	14959						
OBS	2522	1.07	34.710	27.83			14963	462	209	321	118		
STD	2750	.96	34.717	27.84	32.26	1.215	14997						
OBS	2812	.93	34.719	27.85			15007	466	210	322	121		
STD	3000	.86	34.716	27.85	31.37	1.295	15036						
STD	3250	.77	34.710	27.85	30.97	1.373	15076						
OBS	3295	.75	34.708	27.85			15084	479	209	323	128		
STD	3500	.65	34.704	27.85	30.10	1.449	15115						
STD	3750	.54	34.700	27.85	29.01	1.523	15154						
OBS	3784	.53	34.700	27.86			15160	484	221	300	131		
STD	4000	.47	34.700	27.86	28.10	1.594	15195						
OBS	4274	.42	34.701	27.86			15242	491	217	311	136		
STD	4500	.40	34.701	27.86	27.22	1.733	15281						
OBS	4772	.40	34.700	27.86			15331	491	215	342	142		
STD	5000	0.00	34.698	0.00	0.00	0.000	0						
OBS	*5081	0.00	34.698	0.00			0	494	219	328	145		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	445	20JUL1965	0755	6156S	10755W	5172	526	67	24				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			120	03	.7	.1	000	0					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-al/l·10	SILIC ug-al/l	pH ·10 <sup>2</sup>	DD
OBS	0	2.05	34.050	27.23			14572	720	183	0	11		
STD	0	2.05	34.050	27.23	84.93	0.000	14572						
STD	10	2.01	34.049	27.23	84.78	.008	14572						
STD	20	1.98	34.048	27.23	84.66	.017	14572						
STD	30	1.95	34.047	27.23	84.53	.025	14572						
OBS	50	1.91	34.047	27.24			14574	730	186	266	11		
STD	50	1.91	34.047	27.24	84.31	.042	14574						
STD	75	1.90	34.049	27.24	84.13	.063	14578						
OBS	100	1.90	34.054	27.24			14582	726	186	269	16		
STD	100	1.90	34.054	27.24	83.89	.084	14582						
OBS	150	1.86	34.068	27.26			14588	730	187	270	16		
STD	150	1.86	34.068	27.26	82.71	.126	14588						
STD	200	1.73	34.114	27.30	78.43	.166	14592						
OBS	201	1.73	34.115	27.31			14592	708	198	258	16		
STD	250	1.93	34.157	27.32	76.83	.205	14609						
OBS	251	1.93	34.158	27.33			14609	624	203	271	29		
STD	300	1.82	34.174	27.35	74.95	.243	14613						
OBS	301	1.82	34.174	27.35			14613	597	219	303	42		
STD	400	1.97	34.251	27.40	70.65	.316	14637						
OBS	402	1.97	34.253	27.40			14637	536	228	309	52		5
STD	500	2.04	34.327	27.45	66.00	.384	14658						
OBS	503	2.04	34.329	27.45			14658	486	232	236	58		
STD	600	2.17	34.408	27.51	61.55	.448	14681						
OBS	605	2.18	34.412	27.51			14683	441	232	338	62		
STD	700	2.17	34.472	27.56	57.23	.507	14699						
STD	800	2.17	34.523	27.60	53.80	.563	14716						
OBS	810	2.16	34.528	27.60			14717	411	187	330	80		6
STD	900	2.07	34.569	27.64	49.97	.615	14729						
STD	1000	2.03	34.610	27.68	46.94	.663	14745						
OBS	1015	2.03	34.616	27.68			14747	405	232	343	85		
OBS	1088	2.13	34.646	27.70			14764	411	223	342	83		
STD	1250	2.09	34.680	27.73	43.46	.776	14790						
OBS	1388	1.94	34.693	27.75			14807	427	211	328	89		
STD	1500	1.87	34.707	27.77	40.20	.881	14823						
OBS	1688	1.75	34.725	27.79			14850	436	211	323	98		
STD	1750	1.70	34.728	27.80	37.73	.978	14859						
OBS	1988	1.52	34.735	27.82			14891	447	211	321	108		
STD	2000	1.51	34.735	27.82	35.84	1.070	14893						
STD	2250	1.32	34.737	27.83	34.11	1.158	14927						
OBS	2287	1.29	34.737	27.84			14933	454	215	319	109		
STD	2500	1.19	34.733	27.84	33.55	1.242	14965						
OBS	2588	1.16	34.730	27.84			14979	461	211	301	112		
STD	2750	1.08	34.721	27.84	33.46	1.326	15003						
OBS	2988	.95	34.709	27.84			15039	468	219	334	125		
STD	3000	.94	34.709	27.84	33.05	1.409	15040						
STD	3250	.84	34.712	27.85	31.79	1.490	15079						
OBS	3487	.74	34.717	27.86			15117	479	216	326	128		
STD	3500	.73	34.717	27.86	30.31	1.568	15118						
STD	3750	.62	34.716	27.86	29.04	1.642	15158						
OBS	3990	.53	34.714	27.87			15197	486	223	334	132		
STD	4000	.53	34.714	27.87	27.98	1.713	15198						
OBS	4497	.42	34.708	27.87			15283	497	224	325	137		
STD	4500	.42	34.708	27.87	27.04	1.851	15282						
STD	5000	.40	34.709	27.87	26.87	1.986	15371						
OBS	5012	.40	34.709	27.87			15375	499	227	332	144		
OBS * 5230	0.00		34.727	0.00			0	500	222	0	147		2

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	446	21JUL1965	1810	6205S	10937W	5170	526	29	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		250	04	.9	-3.5	000	0						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µg/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	2.11	34.054	27.23			14575	724	186	263	12		
STD	0	2.11	34.054	27.23	85.07	0.000	14575						
STD	10	2.11	34.052	27.23	85.29	.009	14576						
STD	20	2.11	34.050	27.22	85.47	.017	14578						
STD	30	2.11	34.051	27.23	85.44	.026	14579						
OBS	46	2.11	34.049	27.22			14582	725	189	266	13		
STD	50	2.11	34.050	27.22	85.55	.043	14583						
STD	75	2.08	34.056	27.23	84.97	.064	14586						
OBS	93	2.05	34.061	27.24			14587	724	158	269	14		
STD	100	2.03	34.060	27.24	84.40	.085	14587						
OBS	140	1.92	34.056	27.24			14589	711	191	275	17		
STD	150	1.94	34.062	27.25	83.71	.127	14592						
OBS	186	2.03	34.039	27.22			14601	659	205	303	22		2
STD	200	2.06	34.108	27.27	81.42	.168	14606						
OBS	234	2.08	34.152	27.31			14613	615	210	309	29		
STD	250	2.03	34.171	27.33	76.56	.208	14614						
OBS	281	1.91	34.208	27.37			14614	610	214	315	34		
STD	300	1.91	34.226	27.38	71.73	.245	14618						
OBS	375	2.02	34.288	27.42			14636	546	226	327	45		
STD	400	2.04	34.311	27.44	66.75	.314	14641						
OBS	469	2.10	34.375	27.49			14656	497	224	335	51		
STD	500	2.14	34.400	27.50	61.38	.378	14663						
OBS	564	2.22	34.449	27.53			14678	451	223	334	60		
STD	600	2.23	34.475	27.55	57.08	.438	14685						
STD	700	2.24	34.539	27.61	52.82	.493	14703						
OBS	756	2.22	34.570	27.63			14712	407	233	355	71		
STD	800	2.21	34.584	27.64	49.69	.544	14719						
STD	900	2.19	34.619	27.67	47.39	.592	14735						
OBS	955	2.19	34.641	27.69			14745	400	230	344	78		
STD	1000	2.20	34.670	27.71	44.14	.638	14753						
OBS	1007	2.20	34.675	27.72			14754	400	217	335	87		
STD	1250	2.05	34.721	27.77	40.04	.743	14789						
OBS	1273	2.03	34.720	27.77			14792	417	214	311	84		
STD	1500	1.90	34.730	27.78	38.87	.842	14825						
OBS	1538	1.88	34.730	27.79			14830	426	204	313	88		
STD	1750	1.73	34.735	27.80	37.59	.938	14860						
OBS	1805	1.69	34.735	27.81			14868	437	202	301	103		
STD	2000	1.53	34.732	27.81	36.29	1.030	14894						
OBS	2073	1.47	34.730	27.82			14904	443	208	316	99		
STD	2250	1.37	34.726	27.82	35.54	1.120	14929						
OBS	2341	1.32	34.724	27.82			14943	450	208	330	103		
STD	2500	1.23	34.721	27.83	34.83	1.208	14966						
OBS	2701	1.11	34.717	27.83			14996	462	205	330	110		
STD	2750	1.08	34.716	27.83	33.90	1.294	15003						
STD	3000	.96	34.713	27.84	32.98	1.377	15041						
OBS	3148	.89	34.711	27.84			15064	467	213	334	117		
STD	3250	.85	34.710	27.84	32.03	1.458	15079						
STD	3500	.74	34.709	27.85	31.01	1.537	15119						
OBS	3611	.70	34.709	27.85			15137	475	175	330	124		6
STD	3750	.63	34.708	27.86	29.68	1.613	15158						
STD	4000	.52	34.707	27.86	28.28	1.686	15197						
OBS	4089	.48	34.707	27.86			15212	485	174	326	129		6
STD	4500	.42	34.708	27.87	27.05	1.824	15282						
OBS	4575	.42	34.708	27.87			15297	493	213	330	134		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	447	23 JUL 1965	0147	6103S	10940W	5150	526	19	18				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		180	06	.3	-2.2	230	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μg-at/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	2.41	34.062	27.21			14588	719	170	270	9		
STD	0	2.41	34.062	27.21	86.76	0.000	14588						
STD	10	2.42	34.060	27.21	87.02	.009	14590						
STD	20	2.43	34.061	27.21	87.10	.017	14592						
STD	30	2.44	34.060	27.21	87.25	.026	14594						
OBS	35	2.44	34.060	27.21			14595	720	161	272	9		
STD	50	2.44	34.065	27.21	87.04	.044	14597						
OBS	75	2.44	34.072	27.22			14602	721	176	279	10		
STD	75	2.44	34.072	27.22	86.61	.065	14602						
STD	100	2.43	34.063	27.21	87.33	.087	14605						
OBS	116	2.43	34.061	27.21			14608	720	176	274	10		
STD	150	2.44	34.098	27.24	85.04	.130	14614						
OBS	160	2.43	34.110	27.25			14616	701	191	270	12		
OBS	200	2.24	34.125	27.27			14614	676	194	292	17		
STD	200	2.24	34.125	27.27	81.57	.172	14614						
OBS	243	2.26	34.126	27.27			14622	633	200	308	25		
STD	250	2.27	34.133	27.28	81.41	.212	14624						
STD	300	2.31	34.188	27.32	77.85	.252	14634						
OBS	326	2.32	34.219	27.34			14640	579	218	321	39		
OBS	400	2.25	34.232	27.36			14649	549	204	289	33		
STD	400	2.25	34.232	27.36	74.51	.328	14649						
STD	500	2.21	34.279	27.40	71.09	.401	14665						
STD	600	2.17	34.326	27.44	67.73	.471	14680						
STD	700	2.14	34.371	27.48	64.43	.537	14696						
STD	800	2.11	34.417	27.52	61.19	.600	14712						
STD	900	2.08	34.461	27.56	58.03	.659	14728						
STD	1000	2.05	34.505	27.59	54.93	.716	14744						
STD	1250	2.00	34.613	27.68	47.49	.844	14785						
STD	1500	1.96	34.716	27.77	40.53	.954	14827						
OBS	1519	1.96	34.724	27.78			14831	419	193	325	91		
STD	1750	1.80	34.736	27.80	38.29	1.052	14863						
OBS	1807	1.76	34.736	27.80			14871	442	222	324	100		
STD	2000	1.62	34.735	27.81	37.12	1.147	14898						
STD	2250	1.44	34.732	27.82	35.95	1.238	14932						
OBS	2390	1.34	34.730	27.83			14952	456	220	326	109		
STD	2500	1.26	34.732	27.83	34.46	1.326	14968						
OBS	2682	1.15	34.734	27.84			14995	456	218	329	112		
STD	2750	1.12	34.731	27.84	33.28	1.411	15005						
OBS	2973	1.03	34.720	27.84			15040	466	216	337	118		
STD	3000	1.02	34.719	27.84	33.28	1.494	15043						
STD	3250	.90	34.715	27.84	32.39	1.576	15082						
OBS	3364	.84	34.714	27.85			15100	472	205	342	123		
STD	3500	.78	34.713	27.85	31.21	1.655	15120						
STD	3750	.67	34.712	27.86	30.02	1.732	15160						
OBS	3851	.63	34.712	27.86			15176	484	223	334	130		
STD	4000	.57	34.711	27.86	28.80	1.805	15199						
OBS	4341	.46	34.711	27.87			15256	487	216	341	133		
STD	4500	.43	34.712	27.87	26.97	1.945	15283						
OBS	4837	.41	34.714	27.87			15343	498	217	343	139		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	448	24JUL1965	1304	5953S	11010W	5154	491	90	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		310	05	-0.2	-2.3	290	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgat/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	3.01	34.058	27.15			14614	702	178	268	9		
STD	0	3.01	34.058	27.15	91.98	0.000	14614						
STD	10	3.01	34.058	27.15	92.05	.009	14615						
STD	20	3.01	34.058	27.15	92.13	.018	14617						
STD	30	3.02	34.058	27.15	92.22	.028	14619						
OBS	42	3.02	34.058	27.15			14621	696	176	271	10		
STD	50	3.02	34.059	27.15	92.38	.046	14623						
STD	75	3.04	34.060	27.15	92.55	.069	14627						
OBS	85	3.04	34.060	27.15			14629	693	178	268	9		
STD	100	3.04	34.059	27.15	92.81	.092	14631						
OBS	127	3.02	34.056	27.15			14635	694	177	246	8		
STD	150	3.03	34.057	27.15	93.15	.139	14639						
OBS	170	2.95	34.057	27.16			14639	693	173	269	7		
STD	200	2.42	34.047	27.20	88.91	.184	14621						
OBS	213	2.19	34.043	27.21			14613	711	188	281	11		
STD	250	2.18	34.049	27.22	86.99	.228	14619						
OBS	256	2.20	34.051	27.22			14621	711	186	277	10		
STD	300	2.09	34.051	27.23	86.34	.272	14623						
OBS	342	2.02	34.063	27.24			14627	707	190	280	13		
STD	400	2.30	34.143	27.28	81.68	.356	14650						
OBS	430	2.48	34.188	27.30			14664	574	209	335	29		
STD	500	2.40	34.239	27.35	75.86	.434	14673						
OBS	518	0.00	34.249	0.00			0	548	228	348	40		
STD	600	2.41	34.318	27.41	70.44	.508	14690						
OBS	700	2.19	34.406	27.50			14699	453	233	367	57		
STD	700	2.19	34.406	27.50	62.32	.574	14699						
STD	800	2.31	34.493	27.56	57.50	.634	14722						
OBS	897	2.42	34.561	27.61			14744	388	230	341	70		
STD	900	2.42	34.562	27.61	53.90	.690	14744						
STD	1000	2.33	34.591	27.64	51.33	.742	14757						
OBS	1089	2.21	34.606	27.66			14767	395	231	359	72		
STD	1250	2.12	34.651	27.70	45.95	.864	14791						
OBS	1367	2.07	34.681	27.73			14809	405	220	342	81		
STD	1500	2.00	34.706	27.76	41.71	.973	14829						
OBS	1644	1.92	34.725	27.78			14850	420	217	336	85		
STD	1750	1.84	34.731	27.79	39.13	1.074	14865						
OBS	1922	1.70	34.733	27.80			14888	431	216	333	91		
STD	2000	1.63	34.734	27.81	37.34	1.170	14898						
OBS	2206	1.45	34.734	27.82			14926	433	220	335	99		
STD	2250	1.42	34.734	27.82	35.63	1.261	14932						
OBS	2488	1.28	34.731	27.83			14967	449	217	340	104		
STD	2500	1.27	34.731	27.83	34.69	1.349	14968						
STD	2750	1.13	34.726	27.84	33.78	1.435	15005						
OBS	2867	1.07	34.724	27.84			15023	450	219	342	111		
STD	3000	1.01	34.721	27.84	33.07	1.518	15043						
STD	3250	.90	34.716	27.84	32.44	1.600	15082						
OBS	3335	.87	34.714	27.85			15096	465	224	341	118		
STD	3500	.79	34.712	27.85	31.51	1.680	15121						
STD	3750	.68	34.709	27.85	30.32	1.757	15160						
OBS	3813	.65	34.709	27.86			15170	469	223	341	121		
STD	4000	.57	34.708	27.86	29.06	1.832	15199						
OBS	4301	.47	34.707	27.86			15249	475	226	350	128		
STD	4500	.43	34.707	27.87	27.35	1.973	15283						
OBS	4796	.42	34.707	27.87			15336	480	225	342	130		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	449	25 JUL 1965	1520	5853S	11009W	4625	491	80	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			250	02	1.0	-1.0	260	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgal/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC μg-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	3.06	34.067	27.16			14616	714	181	259	8		
STD	0	3.06	34.067	27.16	91.73	0.000	14616						
STD	10	3.07	34.068	27.16	91.80	.009	14618						
STD	20	3.07	34.068	27.16	91.88	.018	14620						
STD	30	3.08	34.069	27.16	91.94	.028	14622						
OBS	39	3.08	34.069	27.16			14623	713	180	262	11		
STD	50	3.09	34.069	27.16	92.09	.046	14625						
STD	75	3.08	34.070	27.16	92.17	.069	14629						
OBS	77	3.08	34.070	27.16			14630	713	181	255	9		
STD	100	3.03	34.071	27.16	91.80	.092	14631						
OBS	116	2.98	34.071	27.17			14632	713	180	328	14		
STD	150	2.87	34.068	27.18	90.98	.138	14633						
OBS	155	2.86	34.068	27.18			14633	715	185	263	9		
STD	200	2.77	34.089	27.20	88.79	.183	14637						
OBS	231	2.73	34.111	27.22			14640	645	195	304	20		
STD	250	2.71	34.125	27.24	85.78	.226	14643						
STD	300	2.66	34.163	27.27	82.84	.268	14650						
OBS	302	2.66	34.164	27.27			14650	604	206	304	31		
OBS	369	2.55	34.197	27.31			14657	579	213	289	31		
STD	400	2.48	34.211	27.32	78.15	.349	14659						
OBS	427	2.43	34.224	27.34			14661	567	213	320			
STD	500	2.43	34.281	27.38	72.94	.424	14674						
OBS	557	2.46	34.328	27.42			14686	498	238	348	48		
STD	600	2.43	34.353	27.44	68.03	.495	14692						
STD	700	2.33	34.404	27.49	63.85	.561	14705						
OBS	730	2.30	34.417	27.50			14709	459	238	340	59		
STD	800	2.28	34.457	27.54	59.84	.623	14720						
STD	900	2.25	34.510	27.58	56.10	.681	14736						
STD	1000	2.22	34.558	27.62	52.72	.735	14752						
STD	1250	2.18	34.662	27.71	45.83	.858	14794						
OBS	1288	2.18	34.675	27.72			14800	406	235	333	78		
STD	1500	2.05	34.714	27.76	41.64	.968	14831						
OBS	1564	2.00	34.721	27.77			14840	423	220	328	84		
STD	1750	1.86	34.736	27.79	38.95	1.068	14866						
OBS	1839	1.79	34.740	27.80			14878	434	222	330	93		
STD	2000	1.64	34.742	27.81	36.87	1.163	14898						
OBS	2108	1.54	34.741	27.82			14913	445	230	318	96		
STD	2250	1.43	34.741	27.83	35.29	1.253	14932						
OBS	2366	1.37	34.740	27.83			14950	449	210	315	92		
STD	2500	1.34	34.738	27.83	35.05	1.341	14971						
OBS	2594	1.33	34.737	27.83			14987	453	228	322	92		
STD	2750	1.26	34.736	27.84	34.72	1.428	15011						
OBS	2827	1.21	34.735	27.84			15022	456	221	324	95		
STD	3000	1.10	34.731	27.84	33.58	1.514	15047						
OBS	3064	1.06	34.729	27.84			15057	470	230	260	98		5
STD	3250	.96	34.726	27.85	32.43	1.596	15084						
OBS	3299	.93	34.725	27.85			15092	470	226	311	99		
STD	3500	.83	34.722	27.85	31.23	1.676	15122						
OBS	3689	.73	34.720	27.86			15152	483	228	334	101		
STD	3750	.70	34.719	27.86	29.92	1.752	15161						
STD	4000	.57	34.717	27.87	28.47	1.825	15200						
OBS	4086	.53	34.716	27.87			15214	491	235	332	108		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	450	27JUL1965	0012	5803S	10949W	4787	490	89	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			285	04	.9	-1.8	265	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	3.95	34.105	27.10			14654	696	185	255	4	820	
STD	0	3.95	34.105	27.10	97.00	0.000	14654						
STD	10	3.96	34.105	27.10	97.21	.010	14656						
STD	20	3.97	34.104	27.10	97.40	.019	14658						
STD	30	3.97	34.105	27.10	97.49	.029	14660						
OBS	46	3.98	34.103	27.10			14663	697	179	252	4	818	
STD	50	3.98	34.102	27.10	97.98	.049	14664						
STD	75	3.98	34.094	27.09	98.79	.073	14668						
OBS	93	3.98	34.090	27.09			14671	694	188	245	3	817	
STD	100	3.98	34.092	27.09	99.19	.098	14672						
OBS	140	3.98	34.105	27.10			14679	699	186	256	3	817	
STD	150	3.99	34.109	27.10	98.42	.147	14681						
OBS	187	3.92	34.114	27.11			14684	656	191	268	7	815	
STD	200	3.77	34.106	27.12	96.84	.196	14680						
OBS	234	3.40	34.091	27.15			14669	685	194	266	9	814	
STD	250	3.39	34.102	27.15	93.79	.244	14672						
OBS	281	3.42	34.130	27.17			14679	629	208	301	14	809	
STD	300	3.35	34.139	27.19	90.97	.290	14679						
OBS	367	3.01	34.159	27.24			14676	615	228	313	20	808	
STD	400	2.90	34.166	27.25	85.28	.378	14676						
OBS	423	2.84	34.175	27.26			14678	576	230	330	25	802	
OBS	477	2.82	34.226	27.31			14687	552	234	341	31	799	
STD	500	2.80	34.242	27.32	79.27	.461	14690						
STD	600	2.68	34.303	27.38	74.14	.537	14702						
OBS	647	2.62	34.328	27.40			14708	480	248	365	45	796	
STD	700	2.58	34.366	27.44	69.06	.609	14715						
STD	800	2.53	34.437	27.50	63.82	.675	14731						
OBS	843	2.51	34.466	27.52			14737	424	264	365	57	795	
STD	900	2.47	34.496	27.55	59.35	.737	14745						
STD	1000	2.40	34.542	27.59	55.75	.794	14760						
OBS	1159	2.30	34.599	27.65			14783	402	262	330	72	795	
STD	1250	2.27	34.628	27.67	49.20	.926	14797						
OBS	1425	2.20	34.673	27.72			14824	407	248	355	76	796	
STD	1500	2.16	34.688	27.73	44.80	1.043	14835						
OBS	1693	2.03	34.716	27.76			14863	421	236	332	80	796	
STD	1750	1.98	34.722	27.77	41.44	1.151	14871						
OBS	1967	1.80	34.734	27.80			14900	435	236	336	87	794	
STD	2000	1.77	34.735	27.80	38.99	1.251	14904						
OBS	2243	1.59	34.735	27.81			14938	443	183	336	72	794	7
STD	2250	1.59	34.735	27.81	37.56	1.347	14939						
STD	2500	1.44	34.734	27.82	36.55	1.440	14975						
OBS	2517	1.43	34.734	27.82			14978	449	187	339	92	794	
STD	2750	1.30	34.733	27.83	35.53	1.530	15013						
OBS	2775	1.29	34.733	27.83			15017	459	225	336	81	793	
STD	3000	1.18	34.728	27.84	34.84	1.618	15051						
OBS	3024	1.17	34.728	27.84			15055	465	221	336	74	794	
STD	3250	1.03	34.729	27.85	33.30	1.703	15088						
OBS	3290	1.01	34.729	27.85			15094	467	228	342	78	793	
STD	3500	.90	34.725	27.85	32.08	1.785	15126						
STD	3750	.77	34.718	27.85	31.08	1.864	15164						
OBS	3756	.77	34.718	27.85			15166	480	244	347	79	792	
STD	4000	.65	34.714	27.86	29.84	1.940	15203						
OBS	4235	.54	34.711	27.86			15241	491	243	340	83	791	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	451	28JUL1965	0335	5708S	11003W	4308	491	70	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			180	06	1.0	-7.7	180	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	4.80	34.194	27.08			14691	692	149	0	6		
STD	0	4.80	34.194	27.08	98.97	0.000	14691						
STD	10	4.81	34.194	27.08	99.23	.010	14693						
STD	20	4.83	34.194	27.08	99.49	.020	14696						
STD	30	4.84	34.193	27.08	99.73	.030	14698						
OBS	47	4.85	34.193	27.07			14701	682	150	0	6		
STD	50	4.85	34.193	27.07	100.11	.050	14701						
STD	75	4.85	34.192	27.07	100.46	.075	14706						
OBS	93	4.85	34.191	27.07			14708	682	152	0	6		
STD	100	4.85	34.190	27.07	100.95	.100	14710						
OBS	140	4.88	34.184	27.06			14717	683	150	0	7		
STD	150	4.88	34.185	27.06	102.15	.151	14719						
OBS	187	4.89	34.192	27.07			14726	681	150	0	7		
STD	200	4.89	34.194	27.07	102.06	.202	14728						
OBS	234	4.89	34.199	27.08			14733	683	146	0	9		
STD	250	4.90	34.199	27.07	102.35	.253	14736						
OBS	280	4.89	34.196	27.07			14741	685	150	0	10		
STD	300	4.83	34.190	27.08	102.70	.304	14742						
OBS	372	4.48	34.171	27.10			14739	651	169	0	22		
STD	400	4.33	34.169	27.11	99.79	.405	14737						
OBS	464	4.02	34.174	27.15			14735	618	172	0	26		
STD	500	3.90	34.186	27.17	94.72	.503	14736						
OBS	560	3.75	34.212	27.21			14740	571	190	0	31		
STD	600	3.68	34.234	27.23	89.51	.595	14744						
STD	700	3.51	34.291	27.29	84.29	.682	14754						
OBS	760	3.42	34.325	27.33			14761	490	208	0	41		
STD	800	3.32	34.340	27.35	79.23	.764	14763						
STD	900	3.05	34.378	27.41	74.17	.840	14769						
OBS	957	2.89	34.401	27.44			14772	457	214	0	48		
STD	1000	2.79	34.428	27.47	68.24	.911	14775						
OBS	1102	2.57	34.493	27.54			14784	423	198	0	60		
STD	1250	2.41	34.548	27.60	56.68	1.068	14802						
OBS	1484	2.31	34.604	27.65			14838	408	188	0	70		
STD	1500	2.30	34.609	27.66	52.27	1.204	14841						
STD	1750	2.20	34.672	27.71	47.59	1.329	14879						
OBS	1773	2.19	34.677	27.72			14883	420	200	0	79		
STD	2000	2.05	34.706	27.75	44.41	1.444	14916						
OBS	2067	2.00	34.712	27.76			14925	428	211	0	82		
STD	2250	1.84	34.732	27.79	41.01	1.550	14950						
OBS	2361	1.75	34.738	27.80			14965	440	206	0	89		
STD	2500	1.66	34.727	27.80	39.96	1.652	14985						
OBS	2658	1.57	34.712	27.80			15008	451	203	0	91		
STD	2750	1.50	34.715	27.80	39.51	1.751	15021						
OBS	2956	1.36	34.725	27.82			15051	452	212	0	88		
STD	3000	1.34	34.726	27.82	37.19	1.847	15057						
STD	3250	1.22	34.726	27.83	36.12	1.938	15096						
OBS	3254	1.22	34.726	27.83			15097	458	208	0	89		
STD	3500	1.04	34.725	27.84	34.09	2.026	15132						
OBS	3553	.99	34.724	27.85			15139	478	212	0	90		
STD	3750	.77	34.714	27.85	31.27	2.108	15164						
OBS	3852	.63	34.707	27.85			15176	493	208	0	93		



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 10	452	29JUL1965	0735	5608S	10937W	3948	490	69	18

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
240	08	1.6	-2.8	240	6

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ε ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	4.75	34.193	27.09			14689	685	148	0	5		
STD	0	4.75	34.193	27.09	98.51	0.000	14689						
STD	10	4.76	34.192	27.08	98.82	.010	14691						
STD	20	4.77	34.191	27.08	99.10	.020	14693						
STD	30	4.78	34.190	27.08	99.33	.030	14695						
OBS	45	4.78	34.189	27.08			14698	684	152	0	4		
STD	50	4.78	34.189	27.08	99.64	.050	14698						
STD	75	4.77	34.189	27.08	99.83	.075	14702						
OBS	91	4.76	34.189	27.08			14704	684	149	0	5		
STD	100	4.76	34.190	27.08	99.91	.099	14706						
OBS	136	4.76	34.192	27.08			14712	685	152	0	5		
STD	150	4.76	34.191	27.08	100.33	.150	14714						
OBS	182	4.75	34.188	27.08			14719	684	128	0	8		
STD	200	4.76	34.187	27.08	101.10	.200	14722						
OBS	229	4.71	34.184	27.08			14725	672	152	0	7		
STD	250	4.55	34.175	27.09	100.28	.250	14722						
OBS	276	4.33	34.164	27.11			14717	640	165	0	16		
STD	300	4.20	34.159	27.12	98.13	.300	14715						
OBS	374	3.90	34.155	27.15			14715	627	178	0	19		
STD	400	3.82	34.162	27.16	94.80	.396	14716						
STD	500	3.54	34.192	27.21	90.39	.489	14721						
STD	600	3.30	34.229	27.26	85.88	.577	14727						
STD	700	3.10	34.272	27.32	81.26	.661	14736						
STD	800	2.94	34.322	27.37	76.54	.740	14747						
STD	900	2.82	34.379	27.43	71.73	.814	14759						
STD	1000	2.75	34.442	27.48	66.84	.883	14774						
OBS	1025	2.74	34.459	27.50			14778	425	150	0	32		
STD	1250	2.48	34.549	27.59	57.38	1.038	14805						
OBS	1281	2.45	34.560	27.60			14809	403	151	0	35		
STD	1500	2.32	34.630	27.67	50.89	1.174	14841						
OBS	1541	2.30	34.641	27.68			14848	397	148	0	67		
STD	1750	2.18	34.686	27.73	46.36	1.295	14879						
OBS	1805	2.15	34.695	27.74			14887	404	149	0	77		
STD	2000	2.02	34.716	27.76	43.31	1.407	14914						
OBS	2062	1.97	34.720	27.77			14923	418	228	0	77		
STD	2250	1.80	34.728	27.79	40.76	1.512	14948						
OBS	2332	1.73	34.729	27.80			14959	424	225	0	79		
STD	2500	1.61	34.724	27.80	39.37	1.612	14982						
OBS	2609	1.54	34.721	27.80			14999	433	223	0	84		
STD	2750	1.49	34.723	27.81	38.76	1.710	15021						
OBS	2889	1.45	34.726	27.82			15043	448	217	0	90		
STD	3000	1.40	34.727	27.82	37.94	1.806	15060						
OBS	3172	1.30	34.727	27.83			15086	452	203	0	95		
STD	3250	1.24	34.726	27.83	36.33	1.899	15096						
OBS	3445	1.03	34.720	27.84			15122	461	199	0	97		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	453	30JUL1965	1320	5508S	11019W	3886	491	50	21				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			230	07	3.9	1.7	240	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgat/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	5.11	34.206	27.06			14704	673	151	0	4		
STD	0	5.11	34.206	27.06	101.43	0.000	14704						
STD	10	5.12	34.205	27.05	101.65	.010	14706						
STD	20	5.12	34.205	27.05	101.87	.020	14708						
STD	30	5.12	34.204	27.05	102.06	.031	14710						
OBS	49	5.13	34.204	27.05			14713	674	158	0	3		
STD	50	5.13	34.204	27.05	102.36	.051	14713						
STD	75	5.13	34.205	27.05	102.59	.077	14717						
OBS	97	5.13	34.206	27.05			14721	673	151	0	3		
STD	100	5.13	34.206	27.05	102.79	.102	14721						
OBS	146	5.14	34.206	27.05			14729	674	152	0	3		
STD	150	5.14	34.206	27.05	103.48	.154	14730						
OBS	195	5.13	34.205	27.05			14737	674	152	0	8		
STD	200	5.13	34.206	27.05	103.98	.206	14738						
OBS	244	5.09	34.208	27.06			14743	657	154	0	8		
STD	250	5.05	34.207	27.06	103.57	.258	14743						
OBS	294	4.74	34.191	27.09			14737	629	174	0			
STD	300	4.70	34.188	27.09	101.48	.309	14736						
OBS	394	4.20	34.154	27.11			14730	632	182	0	14		
STD	400	4.18	34.156	27.12	99.13	.409	14731						
OBS	495	3.96	34.196	27.17			14738	596	207	0	21		
STD	500	3.94	34.197	27.18	94.31	.506	14738						
OBS	596	3.64	34.220	27.22			14741	563	226	0			
STD	600	3.63	34.222	27.23	89.92	.598	14741						
STD	700	3.40	34.265	27.28	84.97	.685	14749						
OBS	800	3.21	34.316	27.34			14758	489	182	0	29		
STD	800	3.21	34.316	27.34	79.84	.768	14758						
STD	900	3.02	34.366	27.40	74.70	.845	14767						
STD	1000	2.85	34.416	27.45	69.84	.917	14777						
OBS	1193	2.58	34.507	27.55			14799	409	215	0	45		
STD	1250	2.53	34.535	27.58	58.92	1.078	14807						
OBS	1432	2.39	0.000	0.00			U						
STD	1500	2.35	34.656	27.69	49.30	1.214	14843						
OBS	1673	2.26	34.600	27.65			14868	416	218	0	78		2
STD	1750	2.23	34.778	27.80	40.20	1.325	14882						
OBS	1914	2.15	34.667	27.71			14905	415	235	0	79		2
STD	2000	2.09	34.899	27.91	30.81	1.414	14920						
OBS	2157	1.96	34.681	27.74			14938	418	222	0	90		2
STD	2250	1.88	35.021	28.02	20.55	1.478	14956						
OBS	2448	1.73	34.642	27.73			14978	419	215	0	94		2
STD	2500	1.69	35.142	28.13	10.28	1.517	14992						
OBS	2742	1.53	34.665	27.76			15020	422	218	0	95		2
STD	2750	1.53	35.264	28.24	.28	1.530	15030						
STD	3000	1.41	35.385	28.35	-9.18	1.519	15069						
OBS	3034	1.39	34.668	27.77			15065	424	178	0	95		2
STD	3250	1.29	35.507	28.45	-18.70	1.484	15110						
OBS	3330	0.00	34.721	0.00			U	458	0	0	101		
STD	3500	1.16	0.000	0.00	0.00	0.000	0						
OBS	3627	.91	34.683	27.82			15147	450	0	0	103		2

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	454	5AUG1965	1837	4706S	13248W	4607	457	72	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		360	03	7.5	5.1		0						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg-at/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	7.77	34.346	26.82			14812	650	90	144	1		
STD	0	7.77	34.346	26.82	124.20	0.000	14812						
STD	10	7.77	34.347	26.82	124.28	.012	14814						
STD	20	7.77	34.349	26.82	124.35	.025	14815						
STD	30	7.77	34.350	26.82	124.38	.037	14817						
OBS	49	7.77	34.355	26.82			14820	650	91	138	3		
STD	50	7.77	34.355	26.82	124.33	.062	14820						
STD	75	7.73	34.363	26.84	123.58	.093	14823						
OBS	99	7.68	34.374	26.85			14825	649	96	145	2		
STD	100	7.68	34.375	26.85	122.49	.124	14825						
OBS	149	7.62	34.407	26.88			14831	634	110	161	4		
STD	150	7.62	34.408	26.89	120.02	.185	14831						
OBS	199	7.52	34.442	26.93			14836	613	112	185	5		
STD	200	7.51	34.442	26.93	116.86	.244	14836						
OBS	248	7.22	34.416	26.95			14832	609	123	184	7		
STD	250	7.21	34.416	26.95	115.38	.302	14832						
OBS	298	7.04	34.409	26.97			14833	616	124	189	5		
STD	300	7.04	34.409	26.97	114.24	.359	14833						
OBS	399	6.84	34.397	26.99			14842	613	127	200	5		
STD	400	6.84	34.397	26.99	113.93	.473	14842						
OBS	499	6.56	34.370	27.00			14847	604	131	212	12		
STD	500	6.56	34.370	27.00	113.54	.587	14847						
OBS	599	6.29	34.347	27.02			14852	598	127	220	22		
STD	600	6.29	34.347	27.02	112.95	.700	14852						
STD	700	5.91	34.323	27.05	110.95	.812	14854						
STD	800	5.47	34.307	27.09	107.55	.921	14852						
OBS	801	5.47	34.307	27.09			14852	551	156	263	25		
STD	900	5.02	34.311	27.15	102.55	1.027	14851						
STD	1000	4.55	34.324	27.21	96.56	1.126	14848						
OBS	1003	4.54	34.325	27.21			14848	486	184	296	37		
OBS	1197	3.60	34.366	27.34			14842	453	154	322	44		
STD	1250	3.42	34.385	27.38	80.29	1.347	14843						
OBS	1497	2.86	34.486	27.51			14862	408	202	336	61		
STD	1500	2.86	34.487	27.51	67.63	1.532	14862						
STD	1750	2.55	34.579	27.61	58.62	1.690	14893						
OBS	1799	2.51	34.594	27.63			14900	381	207	343	77		
STD	2000	2.36	34.634	27.67	53.49	1.830	14928						
OBS	2101	2.29	34.647	27.69			14942	371	202	341	95		
STD	2250	2.17	34.660	27.71	50.33	1.960	14963						
OBS	2402	2.05	34.669	27.72			14984	359	207	341	98		
STD	2500	1.99	34.675	27.73	48.00	2.083	14998						
OBS	2702	1.89	34.685	27.75			15029	363	208	344	99		
STD	2750	1.87	34.687	27.75	46.43	2.201	15036						
STD	3000	1.78	34.699	27.77	45.24	2.315	15076						
OBS	3004	1.78	34.699	27.77			15077	386	202	334	108		
STD	3250	1.70	34.712	27.79	44.00	2.427	15116						
OBS	3305	1.68	34.714	27.79			15125	409	193	331	98		
STD	3500	1.58	34.718	27.80	42.53	2.535	15154						
OBS	3607	1.52	34.719	27.80			15171	422	182	328	104		
STD	3750	1.44	34.719	27.81	41.04	2.639	15192						
STD	4000	1.33	34.719	27.82	39.86	2.741	15232						
OBS	4013	1.32	34.719	27.82			15234	439	176	330	99		
STD	4500	1.22	34.719	27.83	39.27	2.938	15316						
OBS	4526	1.22	34.719	27.83			15322	452	192	330	99		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	455	9AUG1965	1634	5458S	14006W	3027	494	40	18				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		220	05	-0.5	-6.0	240	5						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µgal/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	3.10	33.862	26.99			14615	717	159	235	7		
STD	0	3.10	33.862	26.99	107.55	0.000	14615						
STD	10	3.12	33.863	26.99	107.71	.011	14617						
STD	20	3.14	33.864	26.99	107.86	.022	14620						
STD	30	3.15	33.864	26.99	107.98	.032	14622						
OBS	48	3.16	33.865	26.99			14625	723	160	230	5		
STD	50	3.16	33.865	26.99	108.15	.054	14626						
STD	75	3.22	33.871	26.99	108.42	.081	14633						
OBS	96	3.13	33.865	26.99			14632	722	136	237	7		
STD	100	2.99	33.852	26.99	108.02	.108	14627						
OBS	144	1.91	33.771	27.02			14586	742	127	254	11		
STD	150	2.09	33.802	27.03	104.59	.161	14595						
OBS	192	3.63	34.050	27.09			14672	658	145	261	12		
STD	200	3.68	34.066	27.10	98.96	.212	14676						
OBS	241	3.54	34.093	27.13			14677	636	163	280	16		
STD	250	3.51	34.098	27.14	95.28	.261	14677						
OBS	289	3.34	34.111	27.17			14676	626	160	283	23		
STD	300	3.27	34.110	27.17	92.35	.308	14675						
OBS	385	2.79	34.117	27.22			14668	626	154	291	21		
STD	400	2.77	34.129	27.23	86.93	.397	14670						
OBS	462	2.78	34.189	27.28			14682	583	194	302	42		
STD	500	2.81	34.224	27.30	80.78	.481	14690						
STD	600	2.85	34.304	27.37	75.77	.559	14709						
OBS	648	2.85	34.337	27.39			14718	477	163	327	46		6
STD	700	2.71	34.360	27.42	70.84	.633	14721						
STD	800	2.44	34.399	27.48	65.72	.701	14726						
OBS	834	2.34	34.411	27.49			14728	456	222	327	54		
STD	900	2.36	34.455	27.53	61.30	.764	14740						
STD	1000	2.34	34.519	27.58	56.81	.824	14757						
OBS	1110	2.42	34.589	27.63			14780	400	222	338	75		
STD	1250	2.36	34.636	27.67	49.71	.957	14801						
OBS	1388	2.28	34.665	27.70			14821	404	163	329	75		6
STD	1500	2.22	34.686	27.72	45.61	1.076	14838						
OBS	1668	2.12	34.711	27.75			14863	421	213	321	78		
STD	1750	2.07	34.722	27.77	42.38	1.186	14874						
OBS	1948	1.93	34.741	27.79			14902	431	209	310	79		
STD	2000	1.89	34.744	27.80	39.77	1.288	14909						
OBS	2232	1.73	34.749	27.81			14942	445	208	316	85		
STD	2250	1.72	34.749	27.81	38.18	1.386	14945						
STD	2500	1.54	34.745	27.82	37.09	1.480	14980						
OBS	2521	0.00	34.744	0.00			0	454	207	310	84		
STD	2750	1.37	34.739	27.83	35.89	1.571	15015						
OBS	2817	1.38	34.738	27.83			15027	458	199	315	95		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	456	10AUG1965	1403	5601S	14013W	2963	494	60	18				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		290	06	2.3	-4.8	290	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	5.93	34.247	26.99			14738	656	119	186	4		
STD	0	5.93	34.247	26.99	107.77	0.000	14738						
STD	10	5.94	34.247	26.99	108.04	.011	14740						
STD	20	5.96	34.248	26.99	108.30	.022	14742						
STD	30	5.97	34.248	26.98	108.54	.032	14744						
OBS	46	5.98	34.248	26.98			14748	659	138	193	2		
STD	50	5.98	34.248	26.98	108.99	.054	14748						
STD	75	5.99	34.247	26.98	109.44	.082	14753						
OBS	92	5.99	34.246	26.98			14756	659	115	188	2		
STD	100	5.99	34.244	26.98	110.06	.109	14757						
OBS	138	6.56	34.235	26.90			14786	680	138	190	2		1
STD	150	6.06	34.236	26.96	112.14	.164	14768						
OBS	185	5.99	34.241	26.98			14771	663	144	193	4		
STD	200	5.83	34.245	27.00	109.37	.220	14767						
OBS	231	5.59	34.247	27.03			14762	656	128	197	4		
STD	250	5.74	34.238	27.01	109.34	.275	14771						
OBS	278	5.96	34.220	26.96			14785	636	153	225	6		
STD	300	5.73	34.211	26.98	111.97	.330	14779						
OBS	354	5.03	34.193	27.05			14759	635	139	238			
OBS	373	4.96	34.188	27.06			14759	625	159	238	9		
STD	400	4.87	34.192	27.07	104.19	.438	14760						
STD	500	4.56	34.222	27.13	99.39	.540	14764						
STD	600	4.26	34.274	27.20	92.97	.636	14769						
OBS	632	4.16	34.295	27.23			14770	504	240	282	33		
STD	700	3.87	34.315	27.28	86.44	.726	14770						
STD	800	3.47	34.344	27.34	80.54	.809	14770						
STD	900	3.09	34.375	27.40	74.86	.887	14771						
OBS	918	3.03	34.381	27.41			14771	455	216	315	50		
STD	1000	2.86	34.420	27.46	69.70	.959	14778						
OBS	1206	2.61	34.519	27.56			14803	404	234	327	61		
STD	1250	2.57	34.536	27.57	59.33	1.120	14809						
OBS	1498	2.39	34.618	27.66			14844	393	220	325	72		
STD	1500	2.39	34.619	27.66	52.51	1.260	14844						
STD	1750	2.22	34.688	27.73	46.64	1.384	14880						
OBS	1793	2.19	34.698	27.74			14887	415	216	303	73		
STD	2000	2.06	34.731	27.77	42.69	1.496	14916						
OBS	2089	2.00	34.740	27.79			14929	434	200	308	89		
STD	2250	1.89	34.746	27.80	40.54	1.600	14952						
OBS	2388	1.78	34.746	27.81			14971	445	203	304	85		
STD	2500	1.66	34.744	27.81	38.70	1.699	14985						
OBS	2688	1.43	34.737	27.83			15008	469	214	298	91		
STD	2750	0.00	34.733	0.00	0.00	0.000	0						
OBS	*2839	0.00	34.727	0.00			0	464	214	305	88		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	457	11AUG1965	1613	57015	14008W	3266	494	70	18				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		010	03	-4.3	-10.1	030	1						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	2.61	33.854	27.03			14594	725	163	244	7		
STD	0	2.61	33.854	27.03	104.08	0.000	14594						
STD	10	2.65	33.856	27.03	104.27	.010	14597						
STD	20	2.68	33.858	27.02	104.47	.021	14600						
STD	30	2.71	33.859	27.02	104.64	.031	14603						
OBS	50	2.74	33.860	27.02			14608	725	164	241	9		
STD	50	2.74	33.860	27.02	104.94	.052	14608						
STD	75	2.70	33.846	27.01	105.82	.079	14610						
OBS	100	2.71	33.854	27.02			14614	725	158	243	7		
STD	100	2.71	33.854	27.02	105.41	.105	14614						
OBS	150	3.21	34.036	27.12			14647	663	188	269	12		
STD	150	3.21	34.036	27.12	96.39	.155	14647						
OBS	200	3.24	34.090	27.16			14657	632	185	275	18		
STD	200	3.24	34.090	27.16	92.93	.203	14657						
OBS	250	2.82	34.103	27.21			14647	636	181	285	23		
STD	250	2.82	34.103	27.21	88.44	.248	14647						
OBS	299	2.48	34.100	27.23			14641	639	193	278	25		
STD	300	2.48	34.101	27.24	85.88	.292	14641						
OBS	398	2.59	34.205	27.31			14663	572	205	292	29		
STD	400	2.58	34.207	27.31	79.36	.374	14663						
OBS	487	2.14	34.266	27.39			14659	535	210	324	41		
STD	500	2.13	34.276	27.40	70.63	.449	14661						
STD	600	2.16	34.351	27.46	65.71	.518	14680						
OBS	666	2.30	34.403	27.49			14698	457	225	328	56		
STD	700	2.32	34.433	27.51	61.56	.581	14705						
STD	800	2.36	34.514	27.58	56.37	.640	14724						
STD	900	2.35	34.586	27.63	51.44	.694	14742						
OBS	936	2.36	34.610	27.65			14748	397	223	327	68		
STD	1000	2.32	34.636	27.68	47.99	.744	14758						
OBS	1207	2.18	34.687	27.73			14787	397	209	315	75		
STD	1250	2.17	34.695	27.74	43.19	.858	14794						
OBS	1480	2.09	34.727	27.77			14830	413	201	310	77		
STD	1500	2.08	34.730	27.77	40.81	.963	14832						
STD	1750	1.87	34.754	27.81	37.72	1.061	14866						
OBS	1756	1.86	34.754	27.81			14867	432	201	315	82		
STD	2000	1.60	34.750	27.82	35.83	1.153	14897						
OBS	2031	1.57	34.749	27.83			14901	450	195	313	86		
STD	2250	1.42	34.753	27.84	34.23	1.240	14932						
OBS	2311	1.39	34.755	27.84			14941	450	197	305	90		
STD	2500	0.00	0.000	0.00	0.00	0.000	0						
OBS	2596	0.00	34.748	0.00			0	459	197	306	97		2
STD	2750	0.00	0.000	0.00	0.00	0.000	0						
OBS	2882	1.26	34.748	27.85			15033	469	202	303	91		3

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	458	13AUG1965	0800	5810S	13958W	3919	493	89	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		060	07	.4	-4.8	060	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.14	33.928	27.27			14472	775	202	273	39	808	
STD	0	-.14	33.928	27.27	81.13	0.000	14472						
STD	10	-.14	33.928	27.27	81.11	.008	14473						
STD	20	-.14	33.928	27.27	81.11	.016	14475						
STD	30	-.14	33.928	27.27	81.06	.024	14477						
OBS	42	-.13	33.928	27.27			14479	773	201	279	41	812	
STD	50	-.12	33.940	27.28	80.16	.040	14481						
STD	75	-.08	33.986	27.31	76.86	.060	14488						
OBS	84	-.05	34.005	27.33			14491	771	197	267	43	813	
STD	100	.01	34.019	27.34	74.73	.079	14497						
OBS	128	.17	34.066	27.37			14509	725	207	315	46	811	
STD	150	.32	34.169	27.44	64.88	.114	14521						
OBS	171	.51	34.277	27.52			14534	598	234	337	61	801	
STD	200	.97	34.376	27.57	53.22	.143	14561						
OBS	215	1.19	34.415	27.58			14574	500	244	352	77	798	
STD	250	1.33	34.479	27.63	48.05	.169	14587						
OBS	259	1.35	34.492	27.63			14590	461	249	338	75	791	
STD	300	1.67	34.555	27.66	44.97	.192	14611						
OBS	349	2.01	34.614	27.68			14635	407	244	305	81	792	
STD	400	2.03	34.646	27.71	41.47	.235	14645						
OBS	441	1.96	34.661	27.73			14649	414	228	323	80	794	
STD	500	1.94	34.679	27.74	38.74	.275	14658						
OBS	538	1.94	34.688	27.75			14665	420	231	328	84	795	
STD	600	1.97	34.704	27.76	37.60	.314	14677						
OBS	639	1.99	34.712	27.76			14684	424	226	337	88	797	
STD	700	1.95	34.717	27.77	36.90	.351	14693						
STD	800	1.87	34.722	27.78	36.18	.387	14706						
OBS	897	1.75	34.722	27.79			14717	436	227	324	90	798	
STD	900	1.75	34.722	27.79	35.43	.423	14717						
STD	1000	1.69	34.734	27.80	34.41	.458	14731						
OBS	1160	1.60	34.750	27.82			14755	443	219	294	97	797	
STD	1250	1.53	34.750	27.83	32.49	.542	14767						
OBS	1424	1.38	34.745	27.84			14789	455	223	304	99	795	
STD	1500	1.31	34.742	27.84	31.68	.622	14799						
OBS	1687	1.15	34.734	27.84			14824	459	226	313	104	797	
STD	1750	1.11	34.733	27.84	30.85	.700	14832						
OBS	1951	1.00	34.731	27.85			14862	470	228	334	100	796	
STD	2000	.97	34.730	27.85	30.06	.776	14869						
OBS	2219	.86	34.727	27.86			14902	468	222	315	112	796	
STD	2250	.85	34.726	27.86	29.38	.850	14906						
OBS	2493	.76	34.720	27.86			14944	496	229	327	103	795	4
STD	2500	.76	34.720	27.86	29.16	.924	14945						
STD	2750	.70	34.718	27.86	28.94	.996	14986						
OBS	2762	.70	34.718	27.86			14988	478	239	317	104	796	
STD	3000	.51	34.713	27.87	27.12	1.066	15021						
OBS	3038	.47	34.712	27.87			15026	483	235	322	110	794	
STD	3250		34.713										
OBS	3320		34.714				486	231	334	114	793		
STD	3500		34.712										
OBS	*3588		34.711				489	232	319	109	792		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	459	14AUG1965	1334	5903S	13949W	3479	493	99	20				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
				00	- .3	-1.7		0					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgal/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.15	34.014	27.34			14472	771	199	265	36		
STD	0	-.15	34.014	27.34	74.51	0.000	14472						
STD	10	-.15	34.015	27.34	74.44	.007	14474						
STD	20	-.15	34.016	27.34	74.34	.015	14476						
STD	30	-.16	34.017	27.34	74.19	.022	14477						
OBS	49	-.17	34.021	27.35			14480	771	205	272	39		
STD	50	-.17	34.021	27.35	73.74	.037	14480						
STD	75	-.24	34.018	27.35	73.59	.056	14481						
OBS	98	-.24	34.038	27.36			14485	769	190	263	42		
STD	100	-.23	34.044	27.37	71.66	.074	14486						
OBS	148	.34	34.236	27.49			14522	625	221	318	51		
STD	150	.37	34.245	27.50	59.47	.106	14524						
OBS	198	1.17	34.432	27.60			14571	497	226	334	66		
STD	200	1.20	34.438	27.60	50.10	.134	14572						
OBS	247	1.71	34.540	27.65			14604	436	230	328	71		
STD	250	1.72	34.544	27.65	46.06	.158	14606						
OBS	297	1.83	34.595	27.68			14619	420	235	331	77		
STD	300	1.85	34.599	27.68	43.07	.180	14620						
OBS	397	1.86	34.666	27.74			14638	414	229	324	79		
STD	400	1.83	34.664	27.74	38.48	.221	14636						
OBS	435	1.40	34.631	27.74			14623	455	223	277	80		
STD	500	1.30	34.641	27.76	36.30	.258	14629						
STD	600	1.60	34.699	27.78	34.73	.294	14660						
OBS	632	1.81	34.728	27.79			14675	427	217	289	82		
STD	700	1.81	34.740	27.80	33.85	.328	14687						
STD	800	1.75	34.738	27.80	33.87	.362	14701						
STD	900	1.64	34.744	27.82	32.75	.395	14712						
OBS	930	1.59	34.746	27.82			14716	441	217	313	101		
STD	1000	1.53	34.746	27.83	32.02	.428	14725						
OBS	1228	1.33	34.744	27.84			14754	453	216	292	102		
STD	1250	1.31	34.743	27.84	30.88	.506	14757						
STD	1500	1.12	34.734	27.85	30.29	.583	14790						
OBS	1527	1.10	34.733	27.85			14794	459	217	299	107		
STD	1750	.96	34.727	27.85	29.66	.658	14826						
OBS	1828	.91	34.725	27.85			14837	467	222	319	103		
STD	2000	.81	34.721	27.85	28.95	.731	14862						
OBS	2128	.75	34.719	27.86			14881	471	219	327	110		
STD	2250	.71	34.716	27.86	28.55	.803	14900						
OBS	2428	.66	34.713	27.86			14929	478	219	313	106		
STD	2500	.63	34.712	27.86	28.17	.874	14939						
OBS	2727	.53	34.711	27.86			14975	480	219	313	107		
STD	2750	.52	34.711	27.86	27.20	.943	14978						
STD	3000	.43	34.709	27.87	26.32	1.010	15017						
OBS	3025	.42	34.709	27.87			15022	485	221	305	116		
STD	3250	.33	34.709	27.87	25.16	1.074	15056						
OBS	3322	.30	34.709	27.88			15068	491	239	327	110		
STD	3500	0.00	34.708	0.00	0.00	0.000	0						
OBS	*3591	0.00	34.708	0.00			0	497	228	313	107		



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
FL 19	460	15AUG1965	0855	5955S	13924W	4060	493	99	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			180	05	-1.2	-2.7	180	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	.29	33.979	27.29			14492	767	157	214	29		
STD	0	.29	33.979	27.29	79.31	0.000	14492						
STD	10	.31	33.979	27.29	79.35	.008	14494						
STD	20	.32	33.981	27.29	79.32	.016	14497						
STD	30	.33	33.983	27.29	79.20	.024	14499						
OBS	48	.33	33.988	27.29			14502	768	156	221	33		
STD	50	.33	33.989	27.29	78.68	.040	14502						
STD	75	.28	33.992	27.30	78.24	.059	14504						
OBS	97	.26	34.015	27.32			14507	767	161	249	35		
STD	100	.26	34.024	27.33	75.66	.078	14508						
OBS	146	.44	34.204	27.46			14526	673	176	257	51		
STD	150	.48	34.223	27.47	61.78	.113	14529						
OBS	195	1.10	34.417	27.59			14567	513	233	287	63		
STD	200	1.18	34.432	27.60	50.39	.141	14571						
OBS	244	1.76	34.531	27.64			14606	442	229	304	69		
STD	250	1.79	34.541	27.64	46.85	.165	14609						
OBS	293	1.91	34.596	27.68			14622	421	226	294	72		
STD	300	1.92	34.601	27.68	43.54	.188	14623						
OBS	392	1.93	34.636	27.71			14639	417	225	283	77		
STD	400	1.92	34.639	27.71	41.12	.230	14640						
OBS	491	1.78	34.664	27.74			14650	431	217	274	75		
STD	500	1.78	34.666	27.74	38.37	.270	14651						
OBS	591	1.82	34.680	27.75			14668	430	206	299	80		
STD	600	1.82	34.683	27.75	37.87	.308	14670						
STD	700	1.83	34.712	27.78	36.16	.345	14687						
OBS	792	1.84	34.737	27.80			14703	435	209	304	84		
STD	800	1.83	34.738	27.80	34.66	.380	14704						
STD	900	1.74	34.745	27.81	33.67	.415	14717						
OBS	991	1.63	34.745	27.82			14728	445	206	306	86		
STD	1000	1.62	34.745	27.82	32.93	.448	14729						
STD	1250	1.38	34.742	27.83	31.58	.528	14760						
OBS	1290	1.34	34.741	27.84			14765	453	202	263	94		
STD	1500	1.16	34.732	27.84	30.85	.607	14792						
OBS	1589	1.09	34.728	27.84			14804	465	209	275	105		
STD	1750	.99	34.724	27.85	30.18	.683	14827						
OBS	1889	.91	34.722	27.85			14847	477	209	290	99		
STD	2000	.86	34.720	27.85	29.55	.757	14864						
OBS	2188	0.00	34.718	0.00			0	483	209	272	105		
STD	2250	.75	34.717	27.86	28.98	.831	14902						
OBS	2489	.66	34.713	27.86			14938	482	207	292	103		
STD	2500	.66	34.713	27.86	28.43	.902	14941						
STD	2750	.54	34.711	27.86	27.38	.972	14979						
OBS	2789	.52	34.711	27.86			14984	489	209	275	102		
STD	3000	.41	34.710	27.87	26.06	1.039	15016						
OBS	3091	.37	34.709	27.87			15030	501	208	276	102		
STD	3250	.32	34.707	27.87	25.17	1.103	15056						
OBS	3392	.29	34.705	27.87			15079	497	213	291	103		
STD	3500	.28	34.704	27.87	24.87	1.166	15098						
OBS	3693	.27	34.703	27.87			15132	508	208	275	101		
STD	3750	.27	34.704	27.87	24.81	1.228	15142						
OBS	3997	.29	34.704	27.87			15186	501	197	272	105		
STD	4000	0.00	34.703	0.00	0.00	0.000	0						
OBS	*4050	0.00	34.701	0.00			0	498	196	0	103		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	461	16AUG1965	1212	6105S	14034W	3935	530	10	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			320	05	-1.0	-1.0	315	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.59	34.117	27.44			14454	785		294	38		
STD	0	-.59	34.117	27.44	64.77	0.000	14454						
STD	10	-.59	34.108	27.43	65.45	.007	14455						
STD	20	-.59	34.100	27.43	66.03	.013	14457						
STD	30	-.59	34.093	27.42	66.50	.020	14458						
OBS	49	-.58	34.085	27.42			14462	786		295	39		
STD	50	-.58	34.085	27.42	67.10	.033	14462						
STD	75	-.58	34.076	27.41	67.75	.050	14466						
OBS	98	-.56	34.087	27.42			14471	787		301	43		
STD	100	-.55	34.091	27.42	66.59	.067	14471						
OBS	147	-.37	34.224	27.52			14489	784		282	54		
STD	150	-.37	34.231	27.52	56.65	.098	14490						
OBS	197	-.11	34.221	27.50			14510	594		339	77		2
STD	200	-.06	34.360	27.61	48.29	.124	14515						
OBS	246	.86	34.496	27.67			14566	485		346	85		
STD	250	.92	34.513	27.68	42.58	.146	14569						
OBS	296	1.44	34.693	27.79			14603	441		350	83		
STD	300	1.46	34.699	27.79	32.52	.165	14604						
OBS	395	1.44	34.716	27.81			14619	440		372	85		
STD	400	1.44	34.717	27.81	31.37	.197	14620						
OBS	494	0.00	34.723	0.00			0	441		368	93		
STD	500	1.37	34.723	27.82	30.73	.228	14634						
OBS	594	1.29	34.717	27.82			14646	447		368	97		
STD	600	1.29	34.717	27.82	30.76	.259	14647						
STD	700	1.20	34.714	27.82	30.56	.290	14660						
OBS	793	1.13	34.715	27.83			14672	453		359	98		
STD	800	1.12	34.715	27.83	30.08	.320	14673						
STD	900	1.05	34.719	27.84	29.41	.350	14686						
OBS	937	1.03	34.721	27.84			14692	454		358	100		
STD	1000	.99	34.721	27.84	28.94	.379	14700						
OBS	1222	.85	34.720	27.85			14731	467		357	107		
STD	1250	.84	34.719	27.85	28.18	.450	14735						
STD	1500	.72	34.709	27.85	28.21	.521	14773						
OBS	1509	.72	34.709	27.85			14774	471		362	105		
STD	1750	.62	34.709	27.86	27.51	.590	14810						
OBS	1797	.60	34.709	27.86			14818	482		359	112		
STD	2000	.50	34.704	27.86	26.87	.658	14848						
OBS	2086	.46	34.702	27.86			14861	481		368	106		
STD	2250	.40	34.702	27.86	26.08	.725	14886						
OBS	2377	.36	34.703	27.87			14906	487		367	67		7
STD	2500	.32	34.702	27.87	25.28	.789	14926						
OBS	2672	.27	34.701	27.87			14953	494		358	105		
STD	2750	.25	34.701	27.87	24.58	.851	14965						
OBS	2968	.19	34.700	27.87			15001	500		369	102		
STD	3000	.19	34.700	27.87	23.87	.912	15006						
STD	3250	.16	34.702	27.88	23.44	.971	15049						
OBS	3265	.16	34.702	27.88			15052	504		364	101		
STD	3500	.15	34.700	27.88	23.38	1.029	15092						
OBS	3564	.15	34.700	27.88			15104	506		368	100		
STD	3750	.16	34.700	27.88	23.60	1.088	15137						
OBS	3861	.18	34.701	27.88			15158	510		358	104		
OBS	*3956	0.00	34.703	0.00			0	514		369	102		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	462	17AUG1965	1437	6200S	13959W	4391	529	29	19				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR		ST					
		350	07	-5.0	-6.7	270		4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	-.58	34.113	27.44			14454	784	152	295	43		
STD	0	-.58	34.113	27.44	65.12	0.000	14454						
STD	10	-.57	34.114	27.44	65.09	.007	14456						
STD	20	-.56	34.114	27.44	65.08	.013	14458						
STD	30	-.55	34.114	27.44	65.10	.020	14460						
OBS	42	-.54	34.114	27.44			14463	786	140	287	42		
STD	50	-.54	34.113	27.44	65.11	.033	14464						
STD	75	-.53	34.112	27.44	65.16	.049	14469						
OBS	84	-.53	34.112	27.44			14470	784	146	288	43		
STD	100	-.53	34.110	27.43	65.27	.065	14473						
OBS	127	-.52	34.118	27.44			14478	783	152	289	45		
STD	150	-.53	34.142	27.46	62.71	.097	14482						
OBS	170	-.50	34.187	27.49			14487	757	151	298	51		
STD	200	-.37	34.339	27.61	48.29	.125	14500						
OBS	222	-.12	34.465	27.70			14517	610	199	338	70		
STD	250	.54	34.582	27.76	34.89	.146	14553						
OBS	256	.68	34.603	27.77			14561	496	195	351	82		
STD	300	1.06	34.685	27.81	30.67	.162	14586						
OBS	341	1.12	34.709	27.82			14596	438	213	328	86		
STD	400	1.31	34.726	27.83	29.65	.192	14614						
OBS	417	1.34	34.726	27.82			14619	437	226	351	83		
OBS	487	1.31	34.723	27.82			14629	440	226	358	95		
STD	500	1.30	34.723	27.82	30.14	.222	14631						
STD	600	1.24	34.723	27.83	29.87	.252	14644						
STD	700	1.17	34.724	27.83	29.52	.282	14658						
STD	800	1.10	34.725	27.84	29.08	.311	14672						
STD	900	1.02	34.727	27.85	28.56	.340	14685						
OBS	955	.98	34.728	27.85			14692	456	222	351	84		
STD	1000	.95	34.727	27.85	28.21	.368	14699						
OBS	1231	.83	34.718	27.85			14732	464	229	346	96		
STD	1250	.82	34.717	27.85	28.15	.439	14735						
STD	1500	.71	34.710	27.85	28.04	.509	14772						
OBS	1508	.71	34.710	27.85			14773	471	215	349	96		
STD	1750	.63	34.703	27.85	28.09	.579	14811						
OBS	1789	.62	34.702	27.85			14817	476	207	352	99		
STD	2000	.51	34.700	27.86	27.27	.648	14848						
OBS	2075	.47	34.700	27.86			14859	484	197	351	98		
STD	2250	.42	34.705	27.86	26.17	.715	14887						
OBS	2360	.40	34.708	27.87			14905	500	198	364	99		
STD	2500	.35	34.712	27.88	24.88	.779	14927						
OBS	2649	.29	34.661	27.84			14950	492	198	353	102		2
STD	2750	.26	34.719	27.89	23.43	.839	14966						
STD	3000	.20	34.726	27.89	22.24	.896	15007						
OBS	3227	.17	34.706	27.88			15046	501	202	353	100		
STD	3250	.16	0.000	0.00	0.00	0.000	0						
STD	3500	.15	0.000	0.00	0.00	0.000	0						
OBS	3613	.15	0.000	0.00			0	509	197	352	98		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 19	463	19AUG1965	0157	6105S	14235W	3652	530	12	20

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
280	07	.3	-1.9	270	4

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	-.74	34.120	27.45			14447	802	182	291	46		
STD	0	-.74	34.120	27.45	63.96	0.000	14447						
STD	10	-.74	34.118	27.45	64.04	.006	14448						
STD	20	-.75	34.117	27.45	64.12	.013	14450						
STD	30	-.75	34.116	27.45	64.17	.019	14451						
OBS	48	-.75	34.114	27.45			14454	803	185	279	46		
STD	50	-.75	34.114	27.45	64.21	.032	14454						
STD	75	-.72	34.097	27.43	65.52	.048	14460						
OBS	96	-.75	34.114	27.45			14462	808	174	289	48		
STD	100	-.81	34.133	27.46	62.33	.064	14460						
OBS	144	-1.26	34.380	27.68			14450	720	211	308	71		
STD	150	-1.17	34.404	27.70	40.10	.090	14455						
OBS	193	-.18	34.542	27.77			14510	580	212	314	77		
STD	200	.01	34.565	27.77	33.12	.108	14521						
OBS	242	.99	34.675	27.81			14573	460	220	319	87		
STD	250	1.06	34.685	27.81	30.52	.124	14578						
OBS	291	1.18	34.713	27.82			14590	436	211	335	91		
STD	300	1.20	34.716	27.83	29.27	.139	14593						
OBS	390	1.25	34.728	27.83			14610	423	224	340	90		
STD	400	1.25	34.728	27.83	29.05	.168	14612						
OBS	490	1.19	34.724	27.83			14624	435	216	334	97		
STD	500	1.18	34.724	27.83	29.17	.197	14625						
OBS	590	1.12	34.720	27.83			14638	454	215	340	97		
STD	600	1.11	34.720	27.83	29.13	.226	14639						
STD	700	1.04	34.723	27.84	28.62	.255	14653						
STD	800	.98	34.726	27.85	28.03	.284	14666						
OBS	815	.97	34.727	27.85			14669	456	211	328	95		
STD	900	.92	34.726	27.85	27.80	.312	14680						
STD	1000	.87	34.723	27.85	27.71	.339	14695						
OBS	1090	.82	34.720	27.85			14708	467	201	332	97		
STD	1250	.74	34.717	27.86	27.47	.408	14731						
OBS	1366	.69	34.715	27.86			14748	472	207	311	102		
STD	1500	.62	34.712	27.86	27.08	.476	14768						
OBS	1645	.56	34.709	27.86			14790	475	221	335	106		
STD	1750	.53	34.709	27.86	26.57	.544	14806						
OBS	1927	.47	34.709	27.87			14834	479	219	308	105		
STD	2000	.44	34.709	27.87	25.91	.609	14845						
OBS	2212	.36	34.707	27.87			14878	494	211	334	105		
STD	2250	.35	34.706	27.87	25.19	.673	14884						
STD	2500	.27	34.703	27.87	24.64	.735	14923						
OBS	2502	.27	34.703	27.87			14924	502	207	327	105		
STD	2750	.20	34.703	27.88	23.86	.796	14963						
OBS	2793	.19	34.703	27.88			14971	502	215	319	106		
STD	3000	.16	34.703	27.88	23.33	.855	15005						
OBS	3088	.15	34.703	27.88			15021	502	216	318	103		
STD	3250	.14	34.703	27.88	23.15	.913	15048						
OBS	3388	.15	34.703	27.88			15073	502	213	332	103		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	464	21AUG1965	0602	5902S	14749W	2820	494	97	20				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		070	06	-3.3	-5.2	070	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	-1.06	34.233	27.55			14433	785	213	261	55		
STD	0	-1.06	34.233	27.55	54.17	0.000	14433						
STD	10	-1.05	34.233	27.55	54.14	.005	14435						
STD	20	-1.05	34.233	27.55	54.12	.011	14437						
STD	30	-1.04	34.233	27.55	54.10	.016	14439						
OBS	49	-1.03	34.233	27.55			14443	785	211	290	54		
STD	50	-1.03	34.233	27.55	54.07	.027	14443						
STD	75	-1.09	34.216	27.54	55.09	.041	14444						
OBS	99	-.99	34.233	27.55			14453	781	211	277	55		
STD	100	-.97	34.238	27.55	53.72	.054	14454						
OBS	148	.29	34.505	27.71			14524	551	237	311	69		
STD	150	.34	34.513	27.72	38.87	.077	14526						
OBS	198	1.17	34.648	27.77			14574	461	224	329	77		
STD	200	1.18	34.651	27.77	33.90	.096	14575						
OBS	248	1.33	34.680	27.79			14590	450	224	316	78		
STD	250	1.33	34.681	27.79	32.83	.112	14590						
OBS	298	1.38	34.692	27.79			14600	446	224	325	81		
STD	300	1.38	34.693	27.79	32.41	.129	14601						
OBS	333	1.44	34.710	27.80			14609	444	246	333	96		
OBS	398	1.45	34.719	27.81			14620	442	229	317	83		
STD	400	1.45	34.719	27.81	31.29	.160	14621						
OBS	421	1.49	34.723	27.81			14626	444	224	318	79		
STD	500	1.43	34.726	27.82	30.93	.192	14636						
OBS	506	1.42	34.726	27.82			14637	445	296	321	75		
STD	600	1.38	34.731	27.82	30.47	.222	14651						
OBS	681	1.35	34.735	27.83			14663	452	225	307	83		
STD	700	1.34	34.735	27.83	30.09	.253	14666						
STD	800	1.25	34.735	27.84	29.67	.282	14679						
OBS	855	1.20	34.734	27.84			14686	457	230	317	87		
STD	900	1.16	34.733	27.84	29.36	.312	14691						
STD	1000	1.09	34.730	27.84	29.17	.341	14705						
OBS	1125	1.00	34.725	27.85			14722	467	224	308	90		
STD	1250	.92	34.721	27.85	28.77	.414	14739						
OBS	1399	.83	34.717	27.85			14760	468	224	319	91		
STD	1500	.78	34.715	27.85	28.32	.485	14775						
OBS	1681	.71	34.713	27.85			14803	473	232	316	96		
STD	1750	.69	34.711	27.85	28.04	.555	14813						
OBS	1957	.63	34.707	27.85			14846	477	224	323	97		
STD	2000	.62	34.707	27.86	27.91	.625	14853						
OBS	2244	.51	34.705	27.86			14890	483	232	340	99		
STD	2250	.51	34.705	27.86	27.06	.694	14891						
STD	2500	.34	34.703	27.87	25.44	.760	14926						
OBS	2539	.31	34.703	27.87			14932	492	225	327	97		
OBS	*2728	0.00	34.702	0.00			0	497	234	333	99		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	P	
EL 19	465	22AUG1965	1434	5737S	14955W	2979	494	79	20

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
240	06	-3.8	-9.2	220	3

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.72	33.958	27.32			14445	788	205	256	41		
STD	0	-.72	33.958	27.32	76.44	0.000	14445						
STD	10	-.72	33.959	27.32	76.30	.008	14447						
STD	20	-.72	33.961	27.32	76.15	.015	14449						
STD	30	-.71	33.963	27.32	75.96	.023	14451						
OBS	46	-.71	33.967	27.33			14453	786	187	282	50		
STD	50	-.71	33.968	27.33	75.50	.038	14454						
STD	75	-.78	33.963	27.33	75.58	.057	14455						
OBS	93	-.69	33.984	27.34			14462	780	182	282	40		
STD	100	-.50	34.019	27.36	72.31	.075	14473						
OBS	140	.73	34.246	27.48			14539	575	229	298	61		
STD	150	.92	34.280	27.49	60.10	.108	14549						
OBS	187	1.41	34.376	27.54			14579	492	233	320	62		
STD	200	1.56	34.413	27.56	54.56	.137	14588						
OBS	234	1.85	34.496	27.60			14608	430	246	322	72		
STD	250	1.91	34.520	27.62	49.34	.163	14613						
OBS	282	1.95	34.550	27.64			14621	414	237	322	79		
STD	300	1.95	34.557	27.64	47.04	.187	14624						
OBS	324	1.92	34.563	27.65			14627	420	229	319	72		
OBS	378	1.81	34.582	27.67			14631	419	241	323	78		
STD	400	1.86	34.595	27.68	43.93	.233	14637						
OBS	412	1.89	34.602	27.68			14640	414	216	325	78		
OBS	492	2.02	34.650	27.71			14660	408	228	322	80		
STD	500	2.02	34.654	27.71	41.36	.275	14662						
STD	600	2.03	34.690	27.74	39.18	.316	14679						
OBS	665	1.99	34.705	27.76			14688	417	231	318	88		
STD	700	1.97	34.712	27.77	37.41	.354	14693						
STD	800	1.89	34.727	27.78	36.02	.391	14707						
STD	900	1.80	34.736	27.80	34.94	.426	14720						
OBS	923	1.78	34.737	27.80			14723	438	214	318	100		7
STD	1000	1.71	34.741	27.81	34.14	.461	14733						
OBS	1191	1.55	34.743	27.82			14758	441	220	306	78		7
STD	1250	1.50	34.742	27.83	32.77	.544	14765						
OBS	1464	1.31	34.737	27.83			14793	458	198	318	99		
STD	1500	1.28	34.736	27.84	31.82	.625	14798						
OBS	1736	1.10	34.727	27.84			14830	468	216	323	116		7
STD	1750	1.09	34.727	27.84	31.11	.704	14831						
STD	2000	.94	34.719	27.85	30.47	.781	14867						
OBS	2010	.93	34.719	27.85			14869	471	193	312	104		
STD	2250	.81	34.715	27.85	29.69	.856	14904						
OBS	2291	.79	34.715	27.85			14911	480	195	317	111		
STD	2500	.75	34.712	27.85	29.62	.930	14945						
OBS	2581	.75	34.711	27.85			14959	480	217	327	122		
OBS	*2741	0.00	34.708	0.00			0	484	189	330	113		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 19	466	24AUG1965	1240	5613S	15411W	3603	495	64	21				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR		ST					
		290	07	2.0	-3.0	270		4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgal/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	1.77	33.817	27.06			14556	763	163	233	8		
STD	0	1.77	33.817	27.06	100.58	0.000	14556						
STD	10	1.78	33.817	27.06	100.64	.010	14558						
STD	20	1.78	33.817	27.06	100.71	.020	14560						
STD	30	1.79	33.817	27.06	100.77	.030	14562						
OBS	43	1.79	33.817	27.06			14564	756	174	232	9		
STD	50	1.79	33.817	27.06	100.87	.050	14565						
STD	75	1.80	33.817	27.06	101.03	.076	14570						
OBS	87	1.80	33.817	27.06			14572	757	169	255	11		
STD	100	1.79	33.809	27.06	101.64	.101	14574						
OBS	131	1.83	33.827	27.07			14581	754	178	237	10		
STD	150	2.00	33.918	27.13	95.07	.150	14592						
OBS	175	2.19	34.041	27.21			14607	697	188	277	16		
STD	200	2.11	34.067	27.24	84.85	.195	14608						
OBS	219	2.04	34.072	27.25			14608	674	201	281	22		
STD	250	2.25	34.120	27.27	82.23	.237	14623						
OBS	264	2.37	34.144	27.28			14631	617	206	286	27		
STD	300	2.49	34.185	27.30	79.61	.277	14642						
OBS	356	2.54	34.236	27.34			14655	544	215	300	35		
STD	400	2.52	34.273	27.37	73.83	.354	14662						
OBS	449	2.47	34.311	27.40			14668	502	217	307	44		
STD	500	2.42	34.347	27.44	67.94	.425	14675						
OBS	545	2.39	34.379	27.46			14681	472	215	307	47		
STD	600	2.38	34.430	27.51	61.86	.490	14691						
OBS	664	2.39	34.486	27.55			14703	427	232	319	61		
STD	700	2.39	34.503	27.56	56.90	.549	14709						
STD	800	2.37	34.541	27.60	54.45	.605	14725						
OBS	859	2.35	34.555	27.61			14734	415	229	310	68		
STD	900	2.34	34.573	27.62	52.26	.658	14741						
STD	1000	2.30	34.615	27.66	49.30	.709	14757						
OBS	1148	2.24	34.672	27.71			14779	416	217	311	82		
STD	1250	2.19	34.694	27.73	43.50	.825	14794						
OBS	1436	2.07	34.718	27.76			14821	434	213	311	85		
STD	1500	2.02	34.725	27.77	40.54	.930	14830						
OBS	1728	1.85	34.742	27.80			14861	454	205	310	88		
STD	1750	1.84	34.742	27.80	38.19	1.028	14864						
STD	2000	1.67	34.743	27.81	37.15	1.123	14900						
OBS	2023	1.65	34.742	27.81			14903	460	209	312	94		
STD	2250	1.46	34.739	27.83	35.67	1.214	14933						
OBS	2318	1.40	34.738	27.83			14943	470	201	316	95		
STD	2500	1.28	34.732	27.83	34.67	1.302	14968						
OBS	2614	1.21	34.728	27.83			14985	481	205	311	104		
STD	2750	1.12	34.725	27.84	33.75	1.387	15004						
OBS	2912	1.03	34.721	27.84			15029	476	211	309	106		
STD	3000	1.00	34.717	27.84	33.17	1.471	15042						
OBS	3210	.94	34.708	27.84			15077	482	220	318	109		
STD	3250	.93	34.707	27.84	33.42	1.554	15083						
STD	3500	.91	34.709	27.84	33.40	1.638	15126						
OBS	3512	.91	34.709	27.84			15128	486	205	312	109		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	467	23SEP1965	0440	4459S	14505W	5167	458	45	20				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			310	03	9.5	7.8	310	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS µgat/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	8.20	34.378	26.78			14829	654	087	127	2	816	
STD	0	8.20	34.378	26.78	127.90	0.000	14829						
STD	10	8.19	34.378	26.78	127.92	.013	14830						
STD	20	8.18	34.378	26.78	127.95	.026	14831						
STD	30	8.17	34.378	26.78	127.97	.038	14833						
OBS	47	8.15	34.378	26.78			14835	654	098	129	3	822	
STD	50	8.15	34.378	26.78	128.05	.064	14835						
STD	75	8.12	34.377	26.79	128.24	.096	14838						
OBS	93	8.10	34.377	26.79			14840	648	101	136	3	826	
STD	100	8.09	34.376	26.79	128.21	.128	14841						
OBS	137	7.99	34.389	26.82			14843	623	110	157	3	826	
STD	150	7.91	34.412	26.85	123.80	.191	14843						
OBS	184	7.67	34.468	26.93			14840	590	129	191	3	820	
STD	200	7.58	34.467	26.94	115.94	.251	14839						
OBS	230	7.43	34.449	26.95			14838	591	134	199	5	818	
STD	250	7.34	34.442	26.95	115.19	.309	14837						
OBS	275	7.23	34.433	26.96			14837	586	140	200	6	817	
STD	300	7.16	34.426	26.97	114.59	.366	14838						
OBS	369	6.98	34.409	26.98			14843	588	144	228	8	817	
STD	400	6.88	34.398	26.98	114.41	.481	14844						
OBS	461	6.68	34.378	26.99			14845	579	155	227	8	817	
STD	500	6.56	34.369	27.00	113.73	.595	14847						
OBS	555	6.39	34.357	27.02			14849	583	153	269	10	815	
STD	600	6.20	34.345	27.03	111.90	.708	14849						
STD	700	5.73	34.323	27.07	108.50	.818	14846						
OBS	744	5.50	34.316	27.10			14844	528	177	340	16	808	
STD	800	5.21	34.320	27.13	103.12	.924	14842						
STD	900	4.70	34.320	27.19	97.69	1.024	14837						
OBS	985	4.27	34.335	27.25			14834	461	205	363	34	808	
STD	1000	4.20	34.339	27.26	91.05	1.118	14833						
OBS	1222	3.26	34.412	27.41			14832	427	216	373	55	807	
STD	1250	3.18	34.423	27.43	74.67	1.326	14834						
OBS	1460	2.79	34.507	27.53			14853	386	231	375	74	807	
STD	1500	2.74	34.523	27.55	63.63	1.498	14858						
OBS	1698	2.54	34.590	27.62			14884	374	236	378	87	806	
STD	1750	2.49	34.602	27.63	56.25	1.648	14891						
OBS	1936	2.33	34.631	27.67			14916	361	234	374	104	804	
STD	2000	2.28	34.638	27.68	52.18	1.784	14924						
OBS	2174	2.14	34.652	27.70			14948	351	241	394	118	801	
STD	2250	2.09	34.657	27.71	49.59	1.911	14959						
OBS	2413	2.00	34.666	27.73			14984	349	241	380	125	799	
STD	2500	1.95	34.671	27.73	47.81	2.033	14996						
STD	2750	1.83	34.684	27.75	46.17	2.150	15034						
OBS	2894	1.77	34.691	27.76			15057	364	233	345	128	799	
STD	3000	1.72	34.696	27.77	44.61	2.264	15073						
STD	3250	1.63	34.709	27.79	43.08	2.373	15113						
OBS	3378	1.58	34.716	27.80			15134	416	226	282	124	799	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	468	24SEP1965	1657	4704S	14458W	4998	458	74	21				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		270	04	8.1	5.6	265	2						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	7.88	34.402	26.84			14817	671	100	122	1	826	
STD	0	7.88	34.402	26.84	121.57	0.000	14817						
STD	10	7.87	34.402	26.84	121.62	.012	14818						
STD	20	7.87	34.403	26.85	121.68	.024	14820						
STD	30	7.86	34.403	26.85	121.73	.036	14821						
STD	50	7.85	34.404	26.85	121.82	.061	14824						
OBS	58	7.84	34.404	26.85			14825	670	101	123	2	826	
STD	75	7.83	34.405	26.85	121.95	.091	14827						
OBS	100	7.81	34.406	26.86			14831	665	103	122	2	828	
STD	100	7.81	34.406	26.86	122.01	.122	14831						
STD	150	7.74	34.411	26.87	121.54	.183	14836						
OBS	163	7.73	34.414	26.87			14838	660	110	126	3	826	
STD	200	7.76	34.433	26.88	121.02	.243	14846						
OBS	212	7.76	34.440	26.89			14848	643	114	142	3	826	
STD	250	7.57	34.455	26.93	117.45	.303	14847						
OBS	253	7.55	34.456	26.93			14846	601	114	172	4	825	
STD	300	7.39	34.450	26.95	116.22	.361	14848						
OBS	328	7.32	34.440	26.95			14850	606	149	181	4	823	
STD	400	7.10	34.423	26.97	115.63	.477	14853						
OBS	426	7.02	34.416	26.98			14854	592	145	195	4	822	
STD	500	6.77	34.386	26.99	115.28	.593	14856						
OBS	524	6.69	34.377	26.99			14856	591	161	204	5	818	
STD	600	6.42	34.358	27.01	113.86	.707	14858						
OBS	613	6.37	34.356	27.02			14858	588	161	217	8	818	
STD	700	6.18	34.337	27.03	113.56	.821	14865						
STD	800	5.80	34.325	27.07	110.51	.933	14866						
OBS	861	5.47	34.322	27.10			14862	531	183	264	17	815	
STD	900	5.08	34.325	27.15	102.19	1.039	14853						
OBS	967	4.40	34.332	27.23			14836	469	213	292	28	810	
STD	1000	4.23	34.335	27.26	91.72	1.136	14835						
STD	1250	3.60	34.379	27.35	82.86	1.355	14851						
OBS	1257	3.60	34.381	27.36			14852	445	230	318	40	806	
STD	1500	2.95	34.465	27.48	70.45	1.546	14866						
OBS	1501	2.95	34.465	27.48			14866	405	242	341	58	806	
OBS	1747	2.63	34.562	27.59			14896	379	250	335		801	
STD	1750	2.63	34.562	27.59	60.77	1.710	14896						
OBS	1997	2.41	34.583	27.63			14929	363	257	336	91	801	
STD	2000	2.41	34.584	27.63	57.78	1.858	14929						
OBS	2250	2.21	34.650	27.70			14965	356	250	349	102	799	
STD	2250	2.21	34.650	27.70	51.61	1.995	14964						
STD	2500	2.10	34.672	27.72	49.68	2.122	15003						
OBS	2503	2.10	34.672	27.72			15004	368	246	330	107	800	
STD	2750	1.97	34.692	27.75	47.46	2.243	15040						
STD	3000	1.83	34.709	27.77	45.26	2.359	15078						
OBS	3005	1.83	34.709	27.77			15079	402	235	327	105	801	
STD	3250	1.72	34.722	27.79	43.52	2.470	15117						
OBS	3495	1.60	34.729	27.81			15155	438	229	305	102	803	
STD	3500	1.60	34.729	27.81	42.00	2.577	15155						
STD	3750	1.48	34.728	27.82	41.00	2.681	15194						
OBS	4000	1.29	34.720	27.82			15231	449	229	322	110	802	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 20	469	25SEP1965	1540	4900S	14454W	4603	458	94	12

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
310	03	9.0	6.7	280	2

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	7.87	34.454	26.89			14817	664	121	136	2	810	
STD	0	7.87	34.454	26.89	117.56	0.000	14817						
STD	10	7.85	34.451	26.89	117.69	.012	14818						
STD	20	7.84	34.450	26.89	117.82	.024	14819						
STD	30	7.83	34.451	26.89	117.74	.035	14821						
OBS	50	7.82	34.449	26.89			14823	660	105	137	3	821	
STD	50	7.82	34.449	26.89	118.09	.059	14823						
STD	75	7.83	34.456	26.89	118.22	.088	14828						
OBS	100	7.85	34.464	26.90			14833	660	102	131	7	823	
STD	100	7.85	34.464	26.90	118.27	.118	14833						
STD	150	7.81	34.469	26.91	118.21	.177	14840						
OBS	151	7.81	34.469	26.91			14840	653	106	142	4	826	
STD	200	7.78	34.474	26.91	118.24	.236	14847						
OBS	205	7.78	34.475	26.91			14848	653	106	144	4	824	
STD	250	7.78	34.483	26.92	118.39	.295	14855						
OBS	259	7.77	34.484	26.92			14856	630	110	156	004	825	
STD	300	7.61	34.476	26.94	117.41	.354	14857						
OBS	305	7.59	34.474	26.94			14857	605	127	182	005	824	
STD	400	7.27	34.437	26.96	117.00	.472	14859						
OBS	407	7.25	34.434	26.96			14860	594	139	199	005	820	
STD	500	7.06	34.414	26.97	117.29	.589	14867						
OBS	507	7.05	34.413	26.97			14868	606	139	199	5	817	
STD	600	6.83	34.391	26.98	117.22	.706	14875						
STD	700	6.51	34.366	27.01	116.04	.823	14878						
OBS	706	6.49	34.364	27.01			14878	585	158	232	8	815	
STD	800	6.07	34.340	27.04	113.05	.937	14877						
OBS	816	5.99	34.337	27.05			14876		165	261	13	817	
STD	900	5.61	34.316	27.08	109.82	1.049	14874						
STD	1000	5.15	34.292	27.12	106.70	1.157	14872						
OBS	1024	5.05	34.330	27.16			14873	503	192	291	21	814	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	470	26SEP1965	1947	5102S	14457W	4341	494	14	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR		ST					
		045	06	8.7	6.0	340		3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	7.83	34.494	26.92			14816	642	114	151	2	812	
STD	0	7.83	34.494	26.92	114.02	0.000	14816						
STD	10	7.83	34.493	26.92	114.24	.011	14818						
STD	20	7.83	34.492	26.92	114.46	.023	14819						
STD	30	7.82	34.492	26.92	114.64	.034	14821						
OBS	45	7.82	34.491	26.92			14823	639	111	149	3	823	
STD	50	7.82	34.491	26.92	114.93	.057	14824						
STD	75	7.81	34.492	26.92	115.17	.086	14828						
OBS	99	7.80	34.493	26.93			14831	635	115	150	4	822	
STD	100	7.80	34.493	26.93	115.41	.115	14831						
STD	150	7.80	34.493	26.93	116.26	.173	14840						
OBS	155	7.80	34.493	26.93			14840	635	109	154	2	818	
STD	200	7.80	34.492	26.93	117.18	.231	14848						
OBS	211	7.80	34.492	26.93			14850	636	111	153	1	821	
STD	250	7.79	34.492	26.93	117.97	.290	14856						
OBS	273	7.79	34.492	26.93			14859	625	109	153	2	820	
STD	300	7.79	34.493	26.93	118.70	.349	14864						
OBS	323	7.78	34.492	26.93			14867	621	115	133	2	816	
STD	400	7.56	34.463	26.94	119.25	.468	14871						
OBS	421	7.48	34.453	26.94			14871	596	140	193	6	814	
STD	500	7.17	34.423	26.96	118.15	.587	14872						
OBS	520	7.09	34.416	26.97			14872	592	144	215	6	813	
STD	600	6.83	34.390	26.98	117.26	.704	14875						
OBS	619	6.77	34.385	26.99			14875	589	150	221	6	813	
STD	700	6.45	34.366	27.02	115.07	.821	14876						
STD	800	6.02	34.350	27.06	111.79	.934	14875						
STD	900	5.58	34.341	27.11	107.64	1.044	14874						
STD	1000	5.11	34.343	27.16	102.41	1.149	14871						
OBS	1023	5.00	34.340	27.17			14871	487	112	291	21	800	
STD	1250	3.95	34.366	27.31	88.09	1.387	14865						
OBS	1371	3.46	34.393	27.38			14865	488	191	339	50	796	
STD	1500	3.12	34.430	27.44	74.99	1.591	14873						
OBS	1635	2.86	34.473	27.50			14885	410	228	348	67	794	
STD	1750	2.72	34.509	27.54	65.79	1.767	14899						
OBS	1907	2.59	34.559	27.59			14921	401	226	344	82	793	
STD	2000	2.52	34.589	27.62	58.77	1.922	14934						
OBS	2170	2.40	34.640	27.67			14959	399	240	347	83	793	
STD	2250	2.36	34.660	27.69	52.76	2.062	14971						
OBS	2428	2.25	34.696	27.73			14998	430	227	333	82	793	
STD	2500	2.19	34.705	27.74	48.48	2.188	15007						
OBS	2680	2.04	34.721	27.77			15032	415	217	333	96	791	
STD	2750	1.99	34.725	27.77	45.33	2.306	15042						
STD	3000	1.80	34.732	27.79	43.14	2.416	15077						
OBS	3173	1.68	34.732	27.80			15103	450	216	333	104	793	
STD	3250	1.62	34.731	27.81	41.37	2.522	15113						
STD	3500	1.43	34.728	27.82	39.68	2.623	15148						
OBS	3748	1.29	34.722	27.82			15186	475	211	332	116	794	
STD	3750	1.29	34.722	27.82	38.53	2.721	15186						
OBS	3894	1.25	34.720	27.82			15211	451	216	328	124	793	
STD	4000	1.22	34.720	27.83	38.22	2.817	15227						
OBS	4113	1.20	34.720	27.83			15247	459	218	326	121	794	
OBS	4308	1.24	34.718	27.82			15284	467	220	329	124	796	1

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	471	28SEP1965	1030	5258S	14505W	3782	494	25	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			030	04	6.9	4.6	350	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgat/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	6.09	34.272	26.99			14745	684	147	197	4	818	
STD	0	6.09	34.272	26.99	107.83	0.000	14745						
STD	10	6.04	34.265	26.99	107.88	.011	14744						
STD	20	5.99	34.259	26.99	107.93	.022	14744						
STD	30	5.95	34.253	26.99	107.95	.032	14744						
STD	50	5.88	34.245	26.99	107.96	.054	14744						
OBS	52	5.87	34.244	26.99			14744	684	145	199	4	816	
STD	75	5.82	34.241	27.00	107.82	.081	14746						
STD	100	5.76	34.238	27.00	107.69	.108	14747						
OBS	105	5.75	34.238	27.00			14748	672	150	209	4	817	
STD	150	5.59	34.218	27.01	107.84	.162	14749						
OBS	157	5.57	34.215	27.01			14749	670	158	216	4	816	
STD	200	5.48	34.206	27.01	107.96	.216	14752						
OBS	213	5.46	34.205	27.01			14753	668	154	216	4	816	
STD	250	5.42	34.201	27.01	108.24	.270	14758						
OBS	264	5.41	34.200	27.02			14760	673	159	216	4	817	
STD	300	5.39	34.193	27.01	109.02	.324	14765						
OBS	315	5.37	34.191	27.01			14766	673	151	215	4	815	
STD	400	5.01	34.191	27.06	105.85	.432	14765						
OBS	417	4.93	34.194	27.07			14765	623	174	256	8	810	
STD	500	4.89	34.243	27.11	101.60	.535	14778						
OBS	519	4.88	34.255	27.12			14781	554	184	279	15	807	
STD	600	4.61	34.273	27.17	97.12	.635	14783						
OBS	622	4.52	34.276	27.18			14783	528	191	303	22	803	
STD	700	4.19	34.292	27.23	91.79	.729	14783						
STD	800	3.81	34.317	27.29	86.34	.818	14783						
OBS	829	0.00	34.325	0.00			0	484	208	334	39	806	
STD	900	3.45	34.348	27.35	80.77	.902	14785						
STD	1000	3.12	34.386	27.41	75.05	.980	14789						
OBS	1038	3.01	34.402	27.43			14791	451	222	355	52	799	
OBS	1198	2.75	34.476	27.51			14807	419	239	365	62	799	
STD	1250	2.69	34.498	27.53	63.51	1.153	14814						
OBS	1423	2.54	34.562	27.60			14837	396	236	367	73	797	
STD	1500	2.48	34.588	27.62	55.82	1.302	14848						
OBS	1653	2.38	34.633	27.67			14870	393	230	354	79	796	
STD	1750	2.33	34.656	27.69	50.35	1.435	14885						
OBS	1884	2.27	34.682	27.72			14905	403	233	355	83	795	
STD	2000	2.22	34.701	27.74	46.80	1.556	14923						
OBS	2125	2.15	34.718	27.76			14942	418	221	339	85	796	
STD	2250	2.07	34.729	27.77	44.08	1.670	14959						
OBS	2361	1.99	34.735	27.78			14976	424	218	333	89	795	
STD	2500	1.89	34.741	27.79	41.89	1.777	14995						
OBS	2603	1.82	34.744	27.80			15010	447	217	334	94	796	
STD	2750	1.73	34.745	27.81	40.33	1.880	15031						
OBS	2861	1.65	34.743	27.81			15047	457	215	333	99	795	
STD	3000	1.54	34.739	27.82	38.94	1.979	15066						
OBS	3102	1.45	34.735	27.82			15080	472	219	334	104	795	
STD	3250	1.31	34.725	27.82	37.45	2.075	15100						
OBS	3360	1.23	34.720	27.83			15116	474	224	335	110	796	
STD	3500	1.19	34.722	27.83	36.55	2.167	15138						
OBS	3598	1.20	34.727	27.83			15156	486	218	337	116	794	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 20	472	29SEP1965	0855	5521S	14433W	3343	494	54	17

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
045	04	6.2	3.0	030	2

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	4.12	34.449	27.36			14666	710	158	244	6	813	
STD	0	4.12	34.449	27.36	72.79	0.000	14666						
STD	10	4.11	34.448	27.36	72.83	.007	14667						
STD	20	4.10	34.447	27.36	72.89	.015	14669						
STD	30	4.08	34.446	27.36	72.94	.022	14670						
STD	50	4.07	34.445	27.36	73.05	.036	14672						
OBS	51	4.06	34.444	27.36			14672	710	158	248	6	814	
STD	75	3.62	34.398	27.37	72.49	.055	14657						
STD	100	3.20	34.355	27.37	71.93	.073	14642						
OBS	101	3.18	34.353	27.37			14642	714	155	257	6	812	
STD	150	3.33	34.391	27.39	70.76	.108	14657						
OBS	153	3.35	34.395	27.39			14658	713	171	246	9	817	
STD	200	3.28	34.396	27.40	70.33	.144	14663						
OBS	204	3.27	34.395	27.40			14663	709	163	256	6	817	
STD	250	3.10	34.377	27.40	70.44	.179	14663						
OBS	261	3.06	34.372	27.40			14663	714	173	256	7		
STD	300	2.98	34.379	27.41	69.44	.214	14666						
STD	400	2.80	34.398	27.45	66.98	.282	14675						
STD	500	2.66	34.417	27.47	64.87	.348	14686						
STD	600	2.56	34.373	27.45	67.78	.414	14698						
STD	700	2.70	34.399	27.45	67.79	.482	14721						
STD	800	2.62	34.436	27.49	64.74	.548	14734						
STD	900	2.53	34.485	27.54	60.82	.611	14748						
OBS	918	2.52	34.495	27.55			14751	418	229	369	62		
STD	1000	2.45	34.534	27.58	56.86	.670	14762						
OBS	1111	2.38	34.586	27.63			14778	402	231	372	71		
STD	1250	2.34	34.627	27.67	50.09	.804	14800						
OBS	1285	2.33	34.635	27.67			14806	403	214	365	74		
OBS	1460	2.24	34.677	27.72			14832	412	206	353	79		
STD	1500	2.21	34.685	27.72	45.61	.923	14838						
OBS	1625	2.13	34.708	27.75			14856	432	218	354	82		
STD	1750	2.05	34.723	27.77	42.08	1.033	14873						
OBS	1799	2.01	34.727	27.77			14880	441	213	343	86		
OBS	1962	1.86	34.739	27.80			14902	441	223		88		
STD	2000	1.84	34.740	27.80	39.45	1.135	14907						
OBS	2161	1.76	34.740	27.80			14931	447	214	340	92		
STD	2250	1.67	34.741	27.81	38.15	1.232	14942						
OBS	2314	1.61	34.742	27.82			14951	458	211	342	95		
OBS	2479	1.56	34.741	27.82			14977	457	210	347	99		
STD	2500	1.53	34.740	27.82	37.33	1.326	14979						
OBS	2516	1.51	34.739	27.82			14981	455	288	343	98		6

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 20	473	30SEP1965	0417	5618S	14424W	2658	494	64	23

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
030	03	2.3	.1		0

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH .10 <sup>2</sup>	DD
OBS	0	-.30	34.098	27.41			14467	770	218	301	54	827	
STD	0	-.30	34.098	27.41	67.43	0.000	14467						
STD	10	-.38	34.111	27.43	66.04	.007	14465						
STD	20	-.45	34.123	27.44	64.79	.013	14463						
STD	30	-.52	34.134	27.45	63.64	.020	14462						
STD	50	-.61	34.154	27.47	61.71	.032	14461						
OBS	54	-.63	34.157	27.48			14461	767	196	294	60	825	
STD	75	-.65	34.161	27.48	60.90	.047	14464						
STD	100	-.68	34.178	27.50	59.43	.063	14467						
OBS	108	-.69	34.186	27.50			14468	765	206	296	65	826	
STD	150	.10	34.317	27.57	52.48	.091	14513						
OBS	161	.37	34.358	27.59			14528	611	218	303	75	825	
STD	200	1.23	34.481	27.63	47.05	.115	14575						
OBS	213	1.47	34.516	27.65			14588	457	227	322	86	822	
STD	250	1.68	34.571	27.67	43.68	.138	14604						
OBS	265	1.69	34.585	27.68			14607	434	227	332	84	822	
STD	300	1.71	34.610	27.70	41.21	.159	14614						
OBS	318	1.71	34.619	27.71			14617	424	224	330	91	820	
OBS	370	1.75	34.645	27.73			14628	424	231	322	88	818	
STD	400	1.83	34.667	27.74	38.23	.199	14637						
OBS	423	1.89	34.684	27.75			14643	423	235	322	89	814	
STD	500	1.87	34.704	27.77	36.23	.236	14656						
OBS	527	1.83	34.706	27.77			14658	428	220	307	93	812	
STD	600	1.75	34.716	27.79	34.71	.272	14667						
OBS	629	1.72	34.720	27.79			14671	435	218	309	101	813	
STD	700	1.70	34.733	27.80	33.35	.306	14682						
OBS	729	1.69	34.738	27.81			14686	437	216	301	99	810	
STD	800	1.67	34.737	27.81	33.20	.339	14697						
STD	900	1.61	34.732	27.81	33.42	.372	14711						
OBS	916	1.60	34.731	27.81			14713	443	216	313	100	806	
STD	1000	1.51	34.737	27.82	32.51	.405	14724						
OBS	1020	1.49	34.738	27.82			14726	449	214	302	102	804	
OBS	1124	1.41	34.735	27.83			14740	458	218	302	107	801	
STD	1250	1.32	34.731	27.83	31.90	.486	14757						
OBS	1333	1.26	34.728	27.83			14768	459	216		113	800	
STD	1500	1.12	34.726	27.84	30.95	.564	14790						
OBS	1540	1.09	34.725	27.84			14796	474	213	305	115	800	
OBS	1747	.97	34.720	27.84			14826	474	214	309	121	799	
STD	1750	.97	34.720	27.84	30.29	.641	14826						
OBS	1953	.82	34.717	27.85			14854	477	219	319	133	798	
STD	2000	.81	34.714	27.85	29.49	.716	14862						
OBS	2056	.81	34.711	27.85			14871	464	216	307	136	799	
STD	2250	.77	34.707	27.85	29.86	.790	14902						
OBS	2312	.75	34.707	27.85			14912	471	225	309	135	797	
STD	2500	.66	34.702	27.85	29.31	.864	14941						
OBS	2567	.63	34.684	27.84			14951	469	211	315	135	798	2
OBS	2617	.61	34.698	27.85			14959	471	228	316	139	798	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 20	474	30SEP1965	2336	5719S	14508W	2952	494	75	22

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
355	05	2.5	-1.0	010	2

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.46	34.179	27.49			14460	773					
STD	0	-.46	34.179	27.49	60.56	0.000	14460						
STD	10	-.62	34.193	27.50	58.82	.006	14455						
STD	20	-.74	34.206	27.52	57.35	.012	14451						
STD	30	-.60	34.218	27.52	56.94	.017	14459						
STD	50	-.70	34.238	27.54	54.89	.029	14458						
OBS	63	-.76	34.250	27.56			14458	768					
STD	75	-.55	34.252	27.55	54.43	.042	14470						
STD	100	-.06	34.265	27.54	55.65	.056	14497						
OBS	116	.29	34.280	27.53			14515	756					
STD	150	.61	34.386	27.60	50.16	.083	14537						
OBS	170	.79	34.459	27.65			14549	521					
STD	200	1.35	34.550	27.68	42.66	.106	14581						
OBS	222	1.73	34.604	27.70			14602	425					
STD	250	1.87	34.635	27.71	40.33	.127	14613						
OBS	276	1.88	34.650	27.72			14618	408					
STD	300	1.90	34.666	27.73	38.44	.146	14623						
OBS	327	1.90	0.000	0.00			0	411					
STD	400	1.89	34.712	27.77	35.35	.183	14640						
OBS	430	1.87	34.719	27.78			14644	419					
STD	500	1.79	34.723	27.79	34.11	.218	14652						
OBS	533	1.74	34.722	27.79			14656	429					
STD	600	1.64	34.721	27.80	33.46	.252	14662						
OBS	635	1.60	34.721	27.80			14666	434					
STD	700	1.55	34.729	27.81	32.40	.285	14675						
OBS	738	1.55	34.735	27.82			14682	442					
STD	800	1.61	34.741	27.82	32.38	.317	14695						
OBS	809	1.62	34.742	27.82			14697	443					
STD	900	1.52	34.746	27.83	31.60	.349	14708						
OBS	909	1.51	34.746	27.83			14709	443					
STD	1000	1.42	34.742	27.83	31.25	.380	14720						
OBS	1161	1.27	34.730	27.83			14740	451					
STD	1250	1.20	34.727	27.83	30.96	.458	14752						
OBS	1411	1.08	34.724	27.84			14774	461					
STD	1500	1.02	34.721	27.84	30.24	.535	14786						
OBS	1659	.92	34.717	27.84			14808	469					
STD	1750	.86	34.715	27.85	29.50	.609	14821						
OBS	1908	.77	34.713	27.85			14844	472					
STD	2000	.75	34.713	27.85	28.88	.682	14859						
OBS	2162	.72	34.712	27.85			14885	475					
STD	2250	.71	34.711	27.85	28.89	.754	14900						
OBS	2414	.66	34.708	27.85			14926	487					
STD	2500	.60	34.706	27.86	28.28	.826	14938						
OBS	2668	.49	34.704	27.86			14962	484					
STD	2750	.47	34.706	27.86	26.90	.895	14975						
OBS	2823	.46	34.707	27.86			14988	488					
OBS	2924	.45	34.702	27.86			15005	488					

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	475	10CT1965	0947	5801S	14504W	3102	494	85	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			090	05	1.9	-.6	360	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.37	34.022	27.36			14462	788	181	287	50		
STD	0	-.37	34.022	27.36	72.94	0.000	14462						
STD	10	-.44	34.025	27.36	72.37	.007	14461						
STD	20	-.50	34.029	27.37	71.85	.014	14460						
STD	30	-.54	34.024	27.36	71.98	.022	14459						
OBS	45	-.60	34.037	27.38			14459	786	195	277	50		
STD	50	-.62	34.044	27.38	70.10	.036	14459						
STD	75	-.66	34.089	27.42	66.39	.053	14462						
OBS	92	-.64	34.131	27.46			14467	777	199	294	57		
STD	100	-.64	34.152	27.47	61.62	.069	14468						
OBS	138	-.26	34.280	27.56			14494	685	199	305	67		
STD	150	.20	34.345	27.59	50.90	.097	14518						
OBS	183	1.45	34.512	27.64			14582	464	200	316	76		
STD	200	1.64	34.556	27.67	44.32	.121	14594						
OBS	229	1.70	34.597	27.69			14602	453	218	335	82		
STD	250	1.75	34.609	27.70	41.39	.142	14607						
OBS	272	1.78	34.615	27.70			14613	434	207	325	88		
STD	300	1.84	34.639	27.72	40.02	.163	14620						
OBS	352	1.91	34.684	27.75			14632	418	215	309	91		
STD	400	1.89	34.705	27.77	35.90	.201	14640						
OBS	431	1.85	34.711	27.77			14643	420	215	308	91		
OBS	493	1.78	34.711	27.78			14651	440	215	308	92		
STD	500	1.78	34.712	27.78	34.84	.236	14651						
OBS	556	1.73	34.719	27.79			14659	438	204	312	94		
STD	600	1.66	34.717	27.79	33.85	.270	14663						
OBS	617	1.63	34.715	27.79			14665	443	215	305	99		
STD	700	1.57											
STD	800	1.51											
STD	900	1.47											
OBS	973	1.45						446	197	301	105		
STD	1000	1.41											
OBS	1072	1.33						460	219	306	107		
STD	1250	1.20											
OBS	1269	1.19						477	207	307	112		
OBS	1468	1.03						461	219	315	116		
STD	1500	1.00											
OBS	1665	.89						483	221	313	123		
STD	1750	.83											
OBS	1862	.78						471	221	310	129		
STD	2000	.74											
OBS	2062	.73						477	217	317	135		
STD	2250	.66											
OBS	2312	.64						478	223	311	134		
STD	2500	.54											
OBS	2560	.52						493	215	320	135		
STD	2750	.44											
OBS	2809	.42						487	221	318	137		
STD	3000	.35											
OBS	3058	.34						515	232	315	138		



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	476	20OCT1965	1125	5908S	14516W	3360	494	95	23				
			WIND DIR 300	FORCE 02	AIR TEMP -0.9	DEW POINT -1.4	SEA DIR	ST 0					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-1.27	34.072	27.43			14421	823	190	295	56		
STD	0	-1.27	34.072	27.43	65.84	0.000	14421						
STD	10	-1.35	34.097	27.45	63.67	.006	14419						
STD	20	-1.30	34.119	27.47	62.02	.013	14424						
STD	30	-1.32	34.140	27.49	60.33	.019	14425						
OBS	50	-1.35	34.176	27.52			14427	814	187	290	59		
STD	50	-1.35	34.176	27.52	57.37	.031	14427						
STD	75	-.99	34.201	27.53	56.56	.045	14449						
STD	100	-.63	34.233	27.54	55.46	.059	14470						
OBS	101	-.62	34.234	27.54			14470	814	185	289	60		
STD	150	-.75	34.387	27.67	43.04	.084	14475						
OBS	151	-.75	34.391	27.67			14475	725	204	295	71		
STD	200	.46	34.602	27.78	32.86	.102	14542						
OBS	202	.52	34.610	27.78			14545	551	216	307	85		
STD	250	1.26	34.697	27.81	31.04	.118	14587						
OBS	252	1.28	34.699	27.81			14588	458	195	322	95		
STD	300	1.52	34.733	27.82	30.39	.134	14607						
OBS	302	1.52	34.734	27.82			14608	458	214	331	100		
STD	400	1.42	34.735	27.83	29.79	.164	14619						
OBS	402	1.41	34.735	27.83			14619	437	219	322	106		
STD	500	1.34	34.731	27.83	29.84	.194	14633						
OBS	502	1.34	34.731	27.83			14633	471					
STD	600	1.23	34.731	27.83	29.28	.223	14644						
OBS	603	1.23	34.731	27.83			14645	463	215	319	97		
STD	700	1.14	34.731	27.84	28.81	.252	14657						
OBS	705	1.14	34.731	27.84			14658	464	216	312	94		
STD	800	1.08	34.726	27.84	28.89	.281	14671						
OBS	808	1.07	34.725	27.84			14672	480	216	307	101		
STD	900	1.01	34.722	27.84	28.86	.310	14685						
STD	1000	.95	34.720	27.85	28.65	.339	14698						
OBS	1010	.94	0.000	0.00			0	464	220	307	111		
OBS	1116	.85	34.719	27.85			14713	482	224	316	116		
STD	1250	.78	34.718	27.85	27.74	.409	14733						
OBS	1370	.74	34.717	27.86			14751	483	222	311	123		
STD	1500	.70	34.713	27.86	27.67	.479	14771						
OBS	1624	.66	34.710	27.86			14791	522	217	307	125		
STD	1750	.62	34.709	27.86	27.43	.547	14810						
OBS	1893	.56	34.709	27.86			14832	504	222	309	126		
STD	2000	.51	34.706	27.86	26.80	.615	14848						
OBS	2153	.44	34.704	27.86			14871	509	194	312	128		
STD	2250	.40	34.707	27.87	25.73	.681	14886						
OBS	2423	.34	34.712	27.88			14913	486	195	311	140		
STD	2500	.32	34.710	27.87	24.77	.744	14926						
STD	2750	.28	34.702	27.87	24.89	.806	14967						
OBS	2795	.27	34.700	27.87			14975	495	215	319	132		
OBS	2967	.22	34.701	27.87			15002	515	210	314	128		
STD	3000	.22	34.702	27.87	24.20	.867	15008						
OBS	3233	.22	34.726	27.89			15049	501	217	317	133		2
STD	3250	.22	34.709	27.88	23.69	.927	15052						
OBS	3335	.21	34.713	27.88			15067	516	222	318	134		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	P	
EL 20	477	30OCT1965	1250	5948S	14445W	2860	494	94	23

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
120	04	-1.6	-2.6		0

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-1.55	34.044	27.42			14408	793	198		63		
STD	0	-1.55	34.044	27.42	67.20	0.000	14408						
STD	10	-1.57	34.055	27.43	66.27	.007	14408						
STD	20	-1.59	34.065	27.43	65.35	.013	14409						
STD	30	-1.61	34.047	27.42	66.59	.020	14410						
STD	50	-1.66	34.093	27.46	62.89	.033	14412						
OBS	52	-1.66	34.099	27.46			14412	782	197		68		
STD	75	-1.24	34.199	27.53	55.81	.048	14437						
OBS	77	-1.20	34.208	27.54			14439	779	197		61		
STD	100	-1.03	34.246	27.56	52.86	.061	14452						
OBS	104	-.99	34.253	27.57			14454	776	199		68		
STD	150	.43	34.506	27.71	39.89	.084	14530						
OBS	155	.59	34.536	27.72			14539	537	230		82		
STD	200	1.04	34.639	27.77	33.79	.103	14568						
OBS	207	1.06	34.646	27.78			14570	477	216		91		
STD	250	1.21	34.675	27.79	32.39	.119	14585						
OBS	258	1.23	34.677	27.79			14587	455	217		97		
STD	300	1.39	34.699	27.80	32.00	.135	14601						
OBS	308	1.42	34.703	27.80			14604	449	223		97		
STD	400	1.46	34.719	27.81	31.31	.167	14621						
OBS	408	1.45	34.720	27.81			14622	444	223		96		
STD	500	1.45	34.737	27.82	30.31	.198	14638						
OBS	509	1.45	34.738	27.83			14639	438	223		99		
STD	600	1.33	34.737	27.83	29.68	.228	14649						
OBS	610	1.32	34.736	27.83			14650	434	223		103		
STD	700	1.26	34.739	27.84	29.12	.257	14662						
STD	800	1.20	34.741	27.85	28.78	.286	14676						
OBS	816	1.19	34.741	27.85			14679	449	218		110		
STD	900	1.12	34.734	27.84	28.91	.315	14689						
OBS	922	1.10	34.732	27.84			14692	455	219		116		
STD	1000	1.02	34.735	27.85	28.17	.344	14702						
OBS	1027	.99	34.736	27.86			14705	458	216		117		
OBS	1236	.86	34.726	27.86			14734	477	235		121		
STD	1250	.85	34.725	27.86	27.87	.414	14736						
OBS	1443	.75	34.714	27.85			14764	477	212		126		
STD	1500	.73	34.714	27.85	27.94	.483	14773						
OBS	1648	.68	34.714	27.86			14796	469	218		126		
STD	1750	.64	34.712	27.86	27.52	.553	14811						
OBS	1853	.60	34.709	27.86			14827	475	218		131		
STD	2000	.55	34.707	27.86	27.17	.621	14850						
OBS	2058	.53	34.707	27.86			14859	479	225		132		
STD	2250	.45	34.709	27.87	26.10	.688	14888						
OBS	2263	.44	34.709	27.87			14890	480	229		131		
OBS	2465	.33	34.708	27.87			14920	490	225		130		
STD	2500	.31	34.708	27.87	24.75	.751	14925						
OBS	2668	.26	34.709	27.88			14952	491	226		126		
STD	2750	.25	34.707	27.88	24.19	.813	14966						
OBS	2820	.26	34.705	27.87			14979	496	235		124		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	478	40C11965	0707	6020S	14455W	3391	530	04	13				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		100	05	-1.0	0.0		0						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-1.85	34.069	27.44			14394	806	158		57		
STD	0	-1.85	34.069	27.44	64.56	0.000	14394						
STD	10	-1.85	34.066	27.44	64.70	.006	14395						
STD	20	-1.86	34.063	27.44	64.86	.013	14397						
OBS	27	-1.86	34.061	27.44			14398	815	158		50		
STD	30	-1.86	34.065	27.44	64.61	.019	14398						
STD	50	-1.86	34.097	27.47	62.05	.032	14402						
OBS	53	-1.86	34.102	27.47			14403	810	180		52		
STD	75	-1.85	34.110	27.48	60.93	.047	14407						
OBS	79	-1.85	34.110	27.48			14407	811	171		49		
STD	100	-1.86	34.118	27.48	60.15	.063	14411						
OBS	106	-1.85	34.122	27.49			14412	810	164		48		
OBS	132	-1.71	34.169	27.52			14424	801	188		51		
STD	150	-1.03	34.356	27.65	44.31	.089	14461						
OBS	157	-.73	34.433	27.70			14477	675	193		74		
OBS	183	-.13	34.552	27.77			14511	594	195		80		
STD	200	.42	34.612	27.79	31.89	.108	14540						
OBS	209	.70	34.637	27.79			14554	514	225		86		
OBS	235	1.19	34.686	27.80			14581	466	220		89		
STD	250	1.35	34.707	27.81	30.95	.123	14591						
OBS	261	1.42	34.718	27.81			14596	460	160		92		6
OBS	286	1.43	34.721	27.81			14601	472	217		93		
STD	300	1.44	34.722	27.81	30.60	.139	14603						
OBS	308	1.44	34.723	27.81			14605	453	211		93		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	479	50C11965	1034	6010S	14230W	3627	530	02	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		025	05	-1.0	-4.9	040	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgal/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	-1.20	34.129	27.47			14425	818	197		62		
STD	0	-1.20	34.129	27.47	61.69	0.000	14425						
STD	10	-1.36	34.134	27.48	60.73	.006	14419						
STD	20	-1.49	34.141	27.49	59.81	.012	14415						
STD	30	-1.58	34.149	27.50	58.88	.018	14412						
OBS	50	-1.66	34.169	27.52			14412	792	198		59		
STD	50	-1.66	34.169	27.52	57.02	.030	14412						
STD	75	-1.55	34.200	27.54	54.83	.044	14422						
STD	100	-1.22	34.243	27.57	52.43	.057	14443						
OBS	101	-1.20	34.245	27.57			14444	745	202		64		
STD	150	.18	34.385	27.62	47.69	.082	14517						
OBS	152	.24	34.393	27.62			14521	628	200		71		
STD	200	1.05	34.642	27.78	33.58	.102	14568						
OBS	202	0.00	34.651	0.00			0	416	198		85		4
STD	250	1.46	34.642	27.75	36.67	.120	14595						
OBS	253	1.47	34.638	27.74			14596	441	198		85		
STD	300	1.55	34.666	27.76	35.77	.138	14608						
OBS	306	1.55	34.670	27.76			14609	441	197		87		
STD	400	1.45	34.694	27.79	33.21	.173	14620						
OBS	409	1.44	34.695	27.79			14621	453	214		90		
STD	500	1.62	34.729	27.81	32.22	.205	14645						
OBS	511	1.64	34.733	27.81			14648	439	224		95		
STD	600	1.53	34.736	27.82	31.39	.237	14658						
OBS	612	1.51	34.735	27.82			14659	446	226		99		
STD	700	1.45	34.734	27.82	31.13	.268	14671						
OBS	714	1.44	34.734	27.82			14673	442	223		98		
STD	800	1.37	34.737	27.83	30.60	.299	14684						
OBS	815	1.36	34.756	27.85			14686	452	220		99		2
STD	900	1.29	34.739	27.84	29.99	.330	14697						
STD	1000	1.20	34.741	27.84	29.37	.359	14710						
OBS	1026	1.18	34.741	27.85			14713	499	0		107		4
STD	1250	.98	34.727	27.85	28.94	.432	14742						
OBS	1276	.96	34.725	27.85			14746	463	220		121		
STD	1500	.83	34.721	27.85	28.41	.504	14777						
OBS	1541	.81	34.720	27.85			14784	474	219		124		
STD	1750	.72	34.712	27.85	28.30	.575	14815						
OBS	1800	.70	34.710	27.85			14823	487	223		121		
STD	2000	.65	34.707	27.85	28.18	.645	14854						
OBS	2056	.63	34.707	27.85			14863	487	221		126		
STD	2250	.55	34.706	27.86	27.45	.715	14893						
OBS	2309	.52	34.706	27.86			14902	509	218		128		
STD	2500	.42	34.706	27.87	26.16	.782	14930						
OBS	2561	.39	34.706	27.87			14940	510	221		132		
STD	2750	.33	34.707	27.87	25.19	.846	14969						
OBS	2812	.32	34.707	27.87			14980	497	222		127		
STD	3000	.27	34.703	27.87	24.65	.908	15010						
OBS	3060	.25	34.702	27.87			15020	516	222		124		
STD	3250	.22	34.699	27.87	24.47	.970	15052						
OBS	3305	.22	34.699	27.87			15062	533	223		124		
STD	3500	.22	34.705	27.88	24.01	1.030	15095						
OBS	3547	.22	34.707	27.88			15104	570	224		127		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	480	6OCT1965	1642	6020S	13746W	4058	529	07	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			015	07	.6	-1.7	030	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	-.67	34.138	27.46			14450	847					
STD	0	-.67	34.138	27.46	62.85	0.000	14450						
STD	10	-.81	34.140	27.47	62.12	.006	14445						
STD	20	-.94	34.142	27.48	61.46	.012	14441						
STD	30	-1.05	34.144	27.48	60.86	.019	14438						
OBS	50	-1.21	34.150	27.49			14433	814					
STD	50	-1.21	34.150	27.49	59.80	.031	14433						
STD	75	-1.24	34.155	27.50	59.23	.045	14436						
STD	100	-1.26	34.167	27.51	58.09	.060	14439						
OBS	106	-1.27	34.171	27.51			14440	792					
STD	150	-.87	34.224	27.54	54.95	.088	14467						
OBS	159	-.82	34.251	27.56			14471	788					
STD	200	-1.51	34.557	27.83	26.98	.109	14450						
OBS	212	-1.56	34.643	27.90			14451	487					
STD	250	.66	34.683	27.83	27.99	.123	14560						
OBS	264	1.51	34.673	27.77			14600	509					
STD	300	1.60	34.683	27.77	34.80	.138	14610						
OBS	314	1.43	34.686	27.78			14605	460					
STD	400	1.51	34.716	27.80	32.01	.172	14623						
OBS	414	1.53	34.720	27.80			14627	472					
STD	500	1.55	34.733	27.81	31.40	.203	14642						
OBS	514	1.55	34.734	27.81			14644	435					
STD	600	1.49	34.734	27.82	31.15	.235	14656						
OBS	614	1.48	34.734	27.82			14658	462					
STD	700	1.41	34.734	27.82	30.82	.266	14669						
STD	800	1.32	34.733	27.83	30.44	.296	14682						
OBS	816	1.31	34.733	27.83			14684	468					
STD	900	1.26	34.733	27.83	30.15	.327	14696						
STD	1000	1.20	34.733	27.84	29.91	.357	14710						
OBS	1016	1.19	34.733	27.84			14712	457					
OBS	1204	1.05	34.729	27.85			14737	472					
STD	1250	1.02	34.729	27.85	29.17	.431	14744						
OBS	1465	.90	34.726	27.85			14775	460					
STD	1500	.89	34.725	27.85	28.64	.503	14780						
OBS	1723	.81	34.719	27.85			14814	497					
STD	1750	.80	34.718	27.85	28.62	.574	14818						
OBS	1979	.69	34.716	27.86			14853	504					
STD	2000	.68	34.716	27.86	27.93	.645	14856						
OBS	2235	.61	34.718	27.86			14893	495					
STD	2250	.60	34.718	27.86	27.24	.714	14895						
OBS	2485	.51	34.710	27.86			14932	481					
STD	2500	.50	34.710	27.86	26.87	.782	14934						
OBS	2737	.43	34.710	27.87			14972	506					
STD	2750	.43	34.710	27.87	26.09	.848	14974						
OBS	2983	.35	34.706	27.87			15011	524					
STD	3000	.35	34.706	27.87	25.47	.912	15013						
STD	3250	.28	34.706	27.87	24.71	.975	15054						
OBS	3477	.24	34.707	27.88			15093	523					
STD	3500	.24	34.707	27.88	24.11	1.036	15096						
OBS	3724	.21	34.704	27.88			15135	506					
STD	3750	.21	34.704	27.88	23.98	1.096	15139						
OBS	3972	.24	34.705	27.88			15181	528					

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	481	9OCT1965	1532	6012S	12704W	4590	528	07	21				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			320	05	1.1	- .9	305	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	± ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	.42	33.942	27.25			14497	774	197		56		
STD	0	.42	33.942	27.25	82.80	0.000	14497						
STD	10	.42	33.942	27.25	82.77	.008	14499						
STD	20	.41	33.942	27.25	82.75	.017	14500						
STD	30	.41	33.942	27.25	82.72	.025	14502						
OBS	48	.40	33.942	27.25			14504	768	191		50		
STD	50	.41	33.944	27.25	82.61	.041	14505						
STD	75	.55	33.965	27.26	81.73	.062	14516						
OBS	96	.70	33.988	27.27			14527	736	151		48		
STD	100	.73	33.990	27.27	80.83	.082	14529						
OBS	144	.92	34.028	27.29			14545	705	163		53		
STD	150	.91	34.039	27.30	78.29	.122	14546						
OBS	192	.78	34.120	27.37			14548	665	207		57		
STD	200	.74	34.127	27.38	70.60	.159	14548						
OBS	240	.72	34.168	27.42			14554	647	207		59		
STD	250	.83	34.190	27.43	66.49	.193	14561						
OBS	288	1.34	34.278	27.46			14591	552	207		69		
STD	300	1.41	34.296	27.47	62.54	.226	14596						
OBS	382	1.63	34.391	27.53			14621	491	245		74		
STD	400	1.71	34.414	27.55	56.30	.285	14628						
OBS	477	2.00	34.502	27.59			14655	433	173		91		6
STD	500	2.04	34.520	27.61	51.46	.339	14660						
OBS	573	2.09	34.568	27.64			14675	411	219		91		
STD	600	2.08	34.582	27.65	47.65	.389	14679						
STD	700	2.02	34.629	27.69	44.11	.434	14694						
STD	800	1.97	34.669	27.73	41.08	.477	14709						
STD	900	1.91	34.701	27.76	38.57	.517	14724						
STD	1000	2.06	34.727	27.77	38.58	.555	14748						
STD	1250	1.93	34.710	27.77	39.60	.653	14784						
OBS	1458	0.00	34.753	0.00			0	439	219		110		
STD	1500	1.71	34.752	27.82	35.11	.747	14817						
OBS	1684	1.49	34.744	27.83			14838	451	194		113		
STD	1750	1.44	34.741	27.83	33.86	.833	14847						
OBS	1894	1.33	34.735	27.83			14867	456	0		0		
STD	2000	1.25	34.733	27.84	32.98	.916	14881						
OBS	2114	1.16	34.731	27.84			14897	463			120		
STD	2250	1.07	34.729	27.84	31.77	.997	14916						
OBS	2325	1.02	34.727	27.85			14927	463			127		
STD	2500	.93	34.721	27.85	31.10	1.076	14953						
OBS	2532	.91	34.720	27.85			14957	468			132		
OBS	2743	.81	34.716	27.85			14989	471			134		
STD	2750	.81	34.716	27.85	30.40	1.153	14991						
OBS	2950	.73	34.712	27.85			15022	470			135		
STD	3000	.71	34.711	27.85	29.83	1.228	15030						
STD	3250	.62	34.707	27.86	29.14	1.302	15069						
OBS	3385	.57	34.706	27.86			15091	487			139		
STD	3500	.52	34.706	27.86	28.05	1.373	15109						
STD	3750	.43	34.707	27.87	26.81	1.442	15149						
OBS	3870	.39	34.708	27.87			15169	488			143		
STD	4000	.37	34.707	27.87	26.15	1.508	15191						
OBS	4159	.37	34.706	27.87			15219	493			139		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	482	10OCT1965	1742	6007S	12238W	4539	528	02	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		220	06	-.8	-2.9	220	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μg/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	.78	34.015	27.29			14515	761	195		36		
STD	0	.78	34.015	27.29	79.23	0.000	14515						
STD	10	.78	34.014	27.29	79.25	.008	14516						
STD	20	.77	34.014	27.29	79.28	.016	14518						
STD	30	.77	34.013	27.29	79.31	.024	14519						
STD	50	.76	34.012	27.29	79.38	.040	14522						
ORS	53	.76	34.012	27.29			14523	808	200		32		
STD	75	.71	34.040	27.31	76.95	.059	14524						
STD	100	.65	34.073	27.34	74.10	.078	14526						
OBS	103	.64	34.077	27.35			14526	731	209		33		
STD	150	.64	34.091	27.36	72.71	.115	14534						
ORS	151	.64	34.091	27.36			14534	722	209		34		
ORS	197	.84	34.132	27.38			14552	698	214		34		
STD	200	.88	34.138	27.38	70.65	.151	14554						
OBS	242	1.44	34.230	27.42			14587	595	227		51		
STD	250	1.48	34.242	27.43	67.03	.185	14590						
OBS	287	1.57	34.289	27.46			14601	560	235		52		
STD	300	1.62	34.307	27.47	63.38	.218	14606						
OBS	377	1.94	34.405	27.52			14634	472	238		62		
STD	400	2.01	34.432	27.54	57.49	.278	14642						
ORS	470	2.16	34.499	27.58			14660	432	152		67		6
STD	500	2.16	34.517	27.59	52.84	.333	14666						
ORS	566	2.12	34.546	27.62			14675	415	244		79		
STD	600	2.10	34.561	27.63	49.46	.384	14680						
STD	700	2.07	34.603	27.67	46.49	.432	14696						
OBS	760	2.05	34.625	27.69			14706	430	231		79		
STD	800	2.05	34.639	27.70	44.04	.478	14712						
STD	900	2.05	34.672	27.73	42.09	.521	14730						
ORS	947	2.05	34.685	27.74			14738	433	230		85		
STD	1000	2.04	34.699	27.75	40.48	.562	14746						
STD	1250	1.94	34.742	27.79	37.37	.659	14785						
OBS	1272	1.93	34.744	27.79			14788	439	223		89		
STD	1500	1.72	34.749	27.81	35.46	.750	14817						
OBS	1521	1.70	34.749	27.82			14820	436	222		102		
STD	1750	1.51	34.745	27.83	34.34	.838	14850						
OBS	1768	1.50	34.745	27.83			14853	460	207		101		
STD	2000	1.30	34.741	27.84	32.98	.922	14884						
OBS	2015	1.29	34.741	27.84			14886	466	225		111		
STD	2250	1.17	34.732	27.84	32.66	1.004	14920						
OBS	2263	1.16	34.732	27.84			14923	468	229		111		
STD	2500	1.04	34.731	27.85	31.72	1.084	14958						
OBS	2510	1.03	34.731	27.85			14959	462	232		122		
OBS	2748	.92	34.730	27.85			14996	467	223		125		
STD	2750	.92	34.730	27.85	30.80	1.162	14996						
OBS	2990	.79	34.722	27.86			15032	478	226		126		
STD	3000	.78	34.722	27.86	30.01	1.238	15033						
STD	3250	.67	34.721	27.86	28.80	1.312	15072						
OBS	3483	.57	34.722	27.87			15109	479	227		127		
STD	3500	.56	34.722	27.87	27.56	1.382	15111						
STD	3750	.47	34.718	27.87	26.68	1.450	15151						
OBS	3971	.41	34.715	27.87			15188	498	224		138		
STD	4000	.41	34.715	27.87	26.10	1.516	15192						
ORS	4341	.39	34.716	27.88			15253	495	239		141		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	483	12OCT1965	0303	6119S	11717W	4975	527	17	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		265	05	.6	-1.3	280	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Δ Δ DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgal/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	1.15	33.938	27.20			14530	778	200		23		
STD	0	1.15	33.938	27.20	87.30	0.000	14530						
STD	10	1.15	33.938	27.20	87.34	.009	14532						
STD	20	1.15	33.938	27.20	87.39	.017	14534						
STD	30	1.16	33.937	27.20	87.43	.026	14536						
OBS	46	1.16	33.937	27.20			14538	772	184		27		
STD	50	1.17	33.938	27.20	87.51	.044	14539						
STD	75	1.17	33.947	27.21	86.85	.065	14544						
OBS	97	1.24	33.965	27.22			14551	790	193		23		
STD	100	1.29	33.971	27.22	85.84	.087	14553						
OBS	149	1.82	34.057	27.25			14586	748	193		21		
STD	150	1.80	34.056	27.25	83.15	.129	14586						
OBS	200	.89	34.028	27.29			14553	747	205		25		
STD	200	.89	34.028	27.29	79.06	.170	14553						
OBS	250	2.03	34.181	27.34			14614	614	219		44		
STD	250	2.03	34.181	27.34	75.87	.209	14614						
STD	300	1.90	34.199	27.36	73.60	.246	14617						
OBS	302	1.88	34.199	27.36			14616	625	220		37		
STD	400	2.32	34.322	27.43	68.33	.317	14653						
OBS	402	2.33	34.325	27.43			14654	531	233		51		
STD	500	2.33	34.381	27.47	64.50	.383	14671						
OBS	505	2.32	34.383	27.47			14672	478	233		54		
STD	600	2.25	34.454	27.54	58.78	.445	14685						
OBS	609	2.24	34.461	27.54			14687	443	238		69		
STD	700	2.25	34.520	27.59	54.35	.502	14703						
STD	800	2.27	34.570	27.63	51.32	.554	14721						
OBS	816	2.27	34.576	27.63			14724	417	238		74		
STD	900	2.24	34.594	27.65	49.68	.605	14737						
STD	1000	2.18	34.609	27.67	48.53	.654	14751						
OBS	1014	2.17	34.610	27.67			14753	399	229		71		
STD	1250	2.07	34.683	27.73	43.05	.768	14789						
OBS	1473	1.95	34.742	27.79			14823	430	226		86		
STD	1500	1.93	34.744	27.79	38.10	.870	14826						
OBS	1725	1.73	34.748	27.81			14856	437	228		99		
STD	1750	1.71	34.748	27.81	36.38	.963	14859						
OBS	1972	1.54	34.742	27.82			14890	453	221		100		
STD	2000	1.52	34.741	27.82	35.47	1.053	14893						
OBS	2215	1.35	34.737	27.83			14923	467	221		104		
STD	2250	1.33	34.737	27.83	34.31	1.140	14928						
OBS	2444	1.22	34.734	27.84			14956	465	234		106		
STD	2500	1.19	34.733	27.84	33.50	1.225	14964						
OBS	2667	1.10	34.729	27.84			14990	482	226		114		
STD	2750	1.06	34.729	27.84	32.63	1.308	15002						
STD	3000	.93	34.728	27.85	31.50	1.388	15040						
OBS	3122	.87	34.727	27.86			15059	480	234		122		
STD	3250	.82	34.723	27.86	30.75	1.465	15078						
STD	3500	.73	34.716	27.86	30.28	1.542	15118						
OBS	3577	.70	34.714	27.86			15131	482	227		124		
STD	3750	.62	34.712	27.86	29.32	1.616	15158						
OBS	3779	.61	34.712	27.86			15163	489	227		125		
STD	4000	.51	34.712	27.87	27.92	1.688	15197						
OBS	4255	.43	34.712	27.87			15240	495	0		0		
STD	4500	.41	34.712	27.87	26.62	1.824	15282						
OBS	4739	.44	34.712	27.87			15327	507	256		138		



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	484	13OCT1965	0635	6207S	11234W	5184	527	22	25				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			260	06	.5	-3.1	265	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	1.07	34.095	27.34			14529	770	209		20		
STD	0	1.07	34.095	27.34	74.87	0.000	14529						
STD	10	1.07	34.094	27.33	75.00	.007	14531						
STD	20	1.08	34.093	27.33	75.11	.015	14533						
STD	30	1.08	34.092	27.33	75.19	.023	14534						
OBS	50	1.08	34.091	27.33			14538	777	218		20		
STD	50	1.08	34.091	27.33	75.31	.038	14538						
STD	75	1.07	34.086	27.33	75.66	.056	14541						
OBS	100	1.06	34.091	27.33			14545	760	219		19		
STD	100	1.06	34.091	27.33	75.26	.075	14545						
OBS	149	1.02	34.159	27.39			14552	731	227		21		
STD	150	1.02	34.158	27.39	69.95	.112	14552						
OBS	199	.81	34.105	27.36			14550	759	224		27		
STD	200	.80	34.104	27.36	72.72	.147	14550						
OBS	249	.82	34.124	27.37			14559	737	227		27		
STD	250	.84	34.127	27.38	71.31	.183	14560						
OBS	299	1.87	34.269	27.42			14616	568	249		50		
STD	300	1.88	34.270	27.42	68.09	.218	14617						
OBS	399	1.92	34.359	27.49			14636	519	286		62		
STD	400	1.92	34.361	27.49	62.08	.283	14637						
OBS	431	2.03	34.405	27.51			14647	0	247		62		
OBS	499	2.11	34.438	27.53			14662	491	263		65		
STD	500	2.11	34.439	27.54	58.24	.343	14662						
OBS	599	2.16	34.516	27.59			14682	438	259		78		
STD	600	2.16	34.517	27.59	53.31	.399	14682						
STD	700	2.16	34.571	27.64	49.75	.451	14700						
STD	800	2.16	34.610	27.67	47.30	.499	14717						
OBS	801	2.16	34.610	27.67			14717	414	253		79		
STD	900	2.15	34.642	27.69	45.27	.545	14734						
OBS	999	2.13	34.668	27.72			14750	414	243		74		
STD	1000	2.13	34.668	27.72	43.60	.590	14750						
STD	1250	1.99	34.713	27.76	39.99	.694	14786						
OBS	1303	1.95	34.719	27.77			14794	444	243		85		
OBS	1436	1.86	0.000	0.00			0	0	249		0		
STD	1500	1.79	34.739	27.80	37.03	.791	14820						
OBS	1532	1.76	34.741	27.80			14824	454	241		100		
STD	1750	1.63	34.751	27.82	35.29	.881	14856						
OBS	1760	1.63	34.751	27.82			14857	452	242		102		
OBS	1993	1.42	34.733	27.82			14888	474	237		107		
STD	2000	1.42	34.733	27.82	34.92	.969	14889						
OBS	2236	1.28	0.000	0.00			0	475	247		0		
STD	2250	1.27	34.726	27.83	34.37	1.055	14925						
OBS	2463	1.15	34.725	27.84			14956	487	249		108		
STD	2500	1.13	34.724	27.84	33.40	1.140	14962						
STD	2750	1.01	34.719	27.84	32.80	1.223	15000						
OBS	2946	.93	34.715	27.84			15030	515	247		127		
STD	3000	.91	34.714	27.84	32.18	1.304	15039						
STD	3250	.81	34.712	27.85	31.38	1.384	15078						
OBS	3432	.74	34.711	27.85			15106	0	264		130		
STD	3500	.71	34.710	27.85	30.45	1.461	15117						
STD	3750	.60	34.707	27.86	29.38	1.536	15157						
STD	4000	.51	34.705	27.86	28.31	1.608	15197						
OBS	4084	.48	34.705	27.86			15210	497	0		127		
STD	4500	.40	34.709	27.87	26.73	1.745	15281						
OBS	4685	.39	34.712	27.87			15314	519	0		130		
STD	5000	0.00	0.000	0.00	0.00	0.000	0						
OBS	5188	.31	0.000	0.00			0						

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
FL 20	485	16OCT1965	0315	5911S	10449W	4747	490	94	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			315	08	3.0	.6	285	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	± ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	3.88	34.199	27.18			14653	699	164		16		
STD	0	3.88	34.199	27.18	89.25	0.000	14653						
STD	10	3.89	34.195	27.18	89.70	.009	14655						
STD	20	3.88	34.192	27.18	90.01	.018	14656						
STD	30	3.89	34.188	27.17	90.40	.027	14658						
OBS	45	3.89	34.182	27.17			14660	699	165		15		
STD	50	3.88	34.179	27.17	91.17	.045	14661						
STD	75	3.84	34.168	27.16	91.83	.068	14663						
OBS	91	3.81	34.162	27.16			14664	706	165		15		
STD	100	3.81	34.161	27.16	92.26	.091	14666						
OBS	134	3.81	34.164	27.16			14671	699	172		18		
STD	150	3.81	34.172	27.17	91.87	.137	14674						
OBS	179	3.80	34.182	27.18			14679	705	186		18		
STD	200	3.81	34.174	27.17	92.14	.183	14682						
OBS	224	3.79	34.163	27.16			14685	695	176		18		
STD	250	3.68	34.169	27.18	91.68	.229	14685						
OBS	268	3.59	34.174	27.19			14684	691	182		20		
STD	300	3.39	34.164	27.20	89.53	.274	14681						
OBS	357	3.11	34.143	27.21			14678	690	186		16		
STD	400	3.10	34.146	27.22	88.74	.363	14685						
OBS	447	3.15	34.161	27.22			14695	625	196		23		
STD	500	3.15	34.193	27.25	86.43	.451	14704						
OBS	536	3.15	34.219	27.27			14710	572	207		31		
STD	600	3.14	34.269	27.31	81.29	.535	14721						
STD	700	3.07	34.343	27.38	75.72	.613	14736						
OBS	722	3.05	34.359	27.39			14739	473	234		51		
STD	800	2.89	34.399	27.44	70.36	.686	14746						
STD	900	2.68	34.445	27.49	65.28	.754	14754						
OBS	918	2.64	34.453	27.50			14755	423	237		58		
STD	1000	2.55	34.509	27.56	59.68	.817	14766						
STD	1250	2.38	34.656	27.69	48.38	.952	14802						
OBS	1277	2.37	34.669	27.70			14807	396	210		79		
STD	1500	2.24	34.693	27.73	45.40	1.069	14839						
OBS	1509	2.24	34.693	27.73			14841	397	222		88		
OBS	1733	2.19	34.720	27.75			14877	404	169		79		
STD	1750	2.17	34.721	27.76	43.68	1.180	14879						
OBS	1955	1.93	34.727	27.78			14903	414	213		102		
STD	2000	1.89	34.726	27.78	41.04	1.286	14909						
OBS	2174	1.76	34.726	27.79			14933	416	209		109		
STD	2250	1.70	34.733	27.80	39.11	1.386	14944						
OBS	2387	1.60	34.748	27.82			14963	432	210		117		
STD	2500	1.54	34.745	27.82	37.14	1.482	14980						
STD	2750	1.44	34.746	27.83	36.36	1.574	15019						
OBS	2820	1.41	34.611	27.73			15028	455	209		117		2
STD	3000	1.31	34.737	27.83	35.96	1.664	15056						
STD	3250	1.16	34.722	27.83	35.52	1.753	15093						
OBS	3262	1.15	34.721	27.83			15095	461	205		129		
STD	3500	.99	34.719	27.84	33.82	1.840	15130						
OBS	3695	.86	34.721	27.85			15159	473	230		133		
STD	3750	.82	34.722	27.86	31.49	1.922	15166						
OBS	3923	.71	34.728	27.87			15193	479	218		120		
STD	4000	.67	0.000	0.00	0.00	0.000	0						
OBS	4238	.63	0.000	0.00			0	461	192		110		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	486	17OCT1965	0335	5758S	10445W	4711	490	74	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		220	08	- .7	-4.7	220	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	4.06	34.173	27.14			14660	684	157		14		
STD	0	4.06	34.173	27.14	92.96	0.000	14660						
STD	10	4.06	34.173	27.14	93.04	.009	14662						
STD	20	4.06	34.173	27.14	93.12	.019	14663						
STD	30	4.06	34.173	27.14	93.19	.028	14665						
OBS	44	4.06	34.174	27.15			14667	686	138		14		
STD	50	4.06	34.174	27.15	93.31	.047	14668						
STD	75	4.07	34.176	27.15	93.46	.070	14673						
OBS	87	4.07	34.177	27.15			14675	696	159		14		
STD	100	4.09	34.178	27.15	93.72	.093	14678						
ORS	130	4.07	34.177	27.15			14682	684	152		21		
STD	150	3.94	34.168	27.15	93.45	.140	14680						
OBS	173	3.78	34.157	27.16			14676	677	161		14		
STD	200	3.73	34.152	27.16	92.97	.187	14679						
OBS	219	3.72	34.150	27.16			14681	671	167		16		
STD	250	3.70	34.147	27.16	93.47	.233	14686						
ORS	263	3.69	34.146	27.16			14687	620	167		11		
STD	300	3.60	34.141	27.17	93.26	.280	14689						
OBS	356	3.38	34.131	27.18			14689	616	173		18		
STD	400	3.12	34.114	27.19	91.30	.372	14685						
OBS	452	2.91	34.108	27.20			14685	562	174		16		
STD	500	3.10	34.145	27.22	89.44	.463	14701						
OBS	546	3.35	34.193	27.23			14720	484	187		36		
STD	600	3.37	34.239	27.27	85.88	.550	14731						
STD	700	3.24	34.310	27.33	79.96	.633	14743						
OBS	741	3.13	34.334	27.36			14745	449	197		45		
STD	800	3.04	34.351	27.39	75.38	.711	14751						
STD	900	2.88	34.377	27.42	72.49	.785	14762						
OBS	965	2.78	34.390	27.44			14768	414	198		60		
STD	1000	2.73	34.408	27.46	69.15	.856	14772						
STD	1250	2.46	34.543	27.59	57.57	1.014	14804						
OBS	1251	2.46	34.544	27.59			14805	414	201		73		
OBS	1479	2.33	34.618	27.66			14838	397	208		89		
STD	1500	2.32	34.623	27.67	51.43	1.150	14842						
ORS	1707	2.24	34.665	27.71			14874	409	169		87		6
STD	1750	2.22	34.674	27.71	47.67	1.274	14880						
OBS	1936	2.09	34.705	27.75			14907	432	181		92		6
STD	2000	2.04	34.713	27.76	43.86	1.389	14916						
OBS	2172	1.91	34.725	27.78			14940	443	186		93		6
STD	2250	1.84	34.725	27.79	41.50	1.495	14950						
OBS	2407	1.71	34.720	27.79			14971	449	186		98		6
STD	2500	1.65	34.719	27.80	40.37	1.598	14984						
STD	2750	1.52	34.717	27.80	39.56	1.698	15022						
OBS	2887	1.46	34.716	27.81			15043	457	184		100		6
STD	3000	1.40	34.712	27.81	38.95	1.796	15060						
STD	3250	1.27	34.706	27.81	38.18	1.892	15098						
OBS	3359	1.21	34.704	27.81			15115	438	179		109		4
STD	3500	1.15	34.706	27.82	37.07	1.986	15136						
STD	3750	1.03	34.712	27.83	35.33	2.077	15175						
ORS	3855	.97	34.715	27.84			15192	479	184		129		6
STD	4000	.84	34.716	27.85	32.49	2.161	15211						
OBS	4160	.70	34.717	27.86			15234	485	183		134		6
OBS	4465	.60	0.000	0.00			0	0					

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	487	18OCT1965	0945	5713S	10430W	4634	493	74	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			235	05	2.2	.2	220	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgal/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	4.36	34.199	27.13			14673	710	149		15		
STD	0	4.36	34.199	27.13	94.00	0.000	14673						
STD	10	4.36	34.202	27.14	93.84	.009	14674						
STD	20	4.35	34.204	27.14	93.74	.019	14676						
STD	30	4.35	34.205	27.14	93.69	.028	14677						
STD	50	4.34	34.205	27.14	93.80	.047	14680						
OBS	54	4.34	34.206	27.14			14681	731	135		14		
STD	75	4.34	34.202	27.14	94.29	.070	14684						
STD	100	4.33	34.196	27.13	94.94	.094	14688						
OBS	109	4.33	34.193	27.13			14690	694	145		10		
STD	150	4.32	34.191	27.13	95.63	.142	14696						
OBS	163	4.29	34.189	27.13			14697	729	149		15		
STD	200	4.02	34.168	27.15	94.68	.189	14691						
OBS	218	3.87	34.157	27.15			14688	723	171		14		
STD	250	3.71	34.145	27.16	93.76	.236	14686						
OBS	273	3.63	34.142	27.16			14686	702	169		18		
STD	300	3.57	34.155	27.18	91.98	.283	14688						
OBS	327	3.53	34.171	27.20			14691	722	164		17		
STD	400	3.42	34.178	27.21	89.44	.374	14699						
OBS	436	3.36	34.179	27.22			14702	682	173		23		
STD	500	3.19	34.195	27.25	86.61	.462	14706						
OBS	547	3.10	34.217	27.27			14710	687	184		31		
STD	600	3.20	34.268	27.30	81.93	.546	14724						
OBS	657	3.32	34.326	27.34			14739	602	216		41		
STD	700	3.25	34.349	27.36	77.13	.625	14744						
STD	800	3.01	34.390	27.42	72.24	.700	14751						
OBS	879	2.75	34.410	27.46			14753	486	238		55		
STD	900	2.72	34.419	27.47	67.62	.770	14755						
STD	1000	2.58	34.459	27.51	63.72	.836	14766						
OBS	1105	2.48	34.502	27.56			14780	461	217		66		
STD	1250	2.38	34.557	27.61	55.66	.985	14801						
OBS	1296	2.35	34.573	27.62			14808	413	204		83		
STD	1500	2.26	34.640	27.68	49.43	1.116	14839						
OBS	1546	2.24	34.653	27.70			14846	408	206		86		
STD	1750	2.14	34.689	27.73	45.70	1.235	14877						
OBS	1794	2.12	34.694	27.74			14884	415	210		82		
STD	2000	1.99	34.715	27.77	43.03	1.346	14913						
OBS	2041	1.96	34.717	27.77			14919	420	212		85		
STD	2250	1.81	34.710	27.78	42.19	1.453	14948						
OBS	2290	1.78	34.707	27.78			14954	486	214		73		4
STD	2500	1.62	34.708	27.79	40.76	1.556	14983						
OBS	2540	1.59	0.000	0.00			0	443	213		89		
STD	2750	1.46	34.709	27.80	39.37	1.656	15019						
STD	3000	1.32	34.709	27.81	38.12	1.753	15056						
OBS	3041	1.30	34.710	27.81			15062	461	212		96		
STD	3250	1.18	34.711	27.82	36.53	1.847	15094						
STD	3500	1.03	34.712	27.83	34.79	1.936	15131						
OBS	3542	1.00	34.684	27.81			15136	0	210		106		2
STD	3750	.87	34.714	27.85	32.77	2.020	15168						
STD	4000	.73	34.716	27.86	30.89	2.100	15206						
OBS	4056	.70	34.716	27.86			15214	461	190		125		
OBS	4323	.62	34.718	27.86			15259	462	212		126		
STD	4500	.60	0.000	0.00	0.00	0.000	0						
OBS	4630	.62	34.736	27.88			15314	494	218		131		2

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	488	19OCT1965	0950	5604S	10439W	4659	490	64	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		290	04	4.0	-3.7	265	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ε ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	5.06	34.256	27.10			14703	688	146		12		
STD	0	5.06	34.256	27.10	97.13	0.000	14703						
STD	10	5.06	34.254	27.10	97.35	.010	14704						
STD	20	5.05	34.253	27.10	97.56	.019	14706						
STD	30	5.05	34.251	27.10	97.74	.029	14707						
OBS	50	5.05	34.250	27.10			14710	686	143		13		
STD	50	5.05	34.250	27.10	98.03	.049	14710						
STD	75	5.05	34.251	27.10	98.20	.073	14715						
OBS	99	5.05	34.253	27.10			14719	686	133		13		
STD	100	5.05	34.253	27.10	98.38	.098	14719						
OBS	150	5.06	34.251	27.10			14727	689	145		14		
STD	150	5.06	34.251	27.10	99.20	.147	14727						
OBS	197	5.05	34.250	27.10			14735	689	153		13		
STD	200	5.04	34.249	27.10	99.70	.197	14735						
OBS	243	4.94	34.240	27.10			14738	686	153		15		
STD	250	4.92	34.239	27.10	99.60	.247	14738						
OBS	288	4.81	34.234	27.11			14739	688	159		18		
STD	300	4.76	34.228	27.11	99.14	.297	14739						
OBS	379	4.45	34.188	27.12			14739	685	163		18		
STD	400	4.38	34.181	27.12	99.44	.396	14740						
OBS	470	4.24	34.172	27.12			14745	681	163		26		
STD	500	4.25	34.178	27.13	99.09	.495	14750						
OBS	559	4.28	34.199	27.14			14762	604	185		38		
STD	600	4.23	34.221	27.16	96.59	.593	14767						
STD	700	4.00	34.273	27.23	90.94	.687	14774						
OBS	739	3.87	34.294	27.26			14776	478	206		57		
STD	800	3.64	34.309	27.30	85.05	.775	14776						
STD	900	3.26	34.331	27.35	79.94	.857	14777						
OBS	912	3.21	34.333	27.36			14777	503	216		67		
STD	1000	2.99	34.373	27.41	74.50	.934	14783						
STD	1250	2.56	34.493	27.54	62.38	1.106	14808						
OBS	1385	2.46	34.562	27.61			14827	400	240		80		
STD	1500	2.39	34.599	27.64	53.93	1.251	14844						
OBS	1620	2.33	34.633	27.67			14862	393	218		88		
STD	1750	2.26	34.671	27.71	48.35	1.379	14882						
OBS	1854	2.20	34.696	27.73			14897	399	227		95		
STD	2000	2.11	34.709	27.75	44.97	1.495	14918						
OBS	2083	2.05	34.711	27.76			14930	410	213		99		
STD	2250	1.91	34.719	27.78	42.72	1.605	14952						
OBS	2313	1.85	34.721	27.78			14961	415	205		107		
STD	2500	1.70	34.720	27.79	40.91	1.710	14986						
OBS	2544	1.67	34.720	27.79			14993	417	209		114		
STD	2750	1.57	34.725	27.81	39.62	1.810	15024						
STD	3000	1.46	34.733	27.82	38.37	1.908	15063						
OBS	3008	1.46	34.733	27.82			15064	440	208		120		
STD	3250	1.31	34.734	27.83	36.83	2.002	15100						
OBS	3485	1.15	34.731	27.84			15134	462	218		126		
STD	3500	1.14	34.731	27.84	35.14	2.092	15136						
STD	3750	.96	34.724	27.85	33.40	2.177	15172						
OBS	3971	.81	34.719	27.85			15205	474	177		128		6
STD	4000	.79	34.719	27.85	31.63	2.259	15209						
OBS	4170	.70	34.717	27.86			15236	481	228		130		
OBS	4369	.69	34.717	27.86			15271	478	220		131		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	489	20OCT1965	1638	5500S	10521W	4410	490	55	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		145	04	4.6	3.5	100	2						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	4.68	34.205	27.10			14686	699	150		12		
STD	0	4.68	34.205	27.10	96.87	0.000	14686						
STD	10	4.67	34.208	27.11	96.65	.010	14688						
STD	20	4.66	34.210	27.11	96.48	.019	14689						
STD	30	4.65	34.212	27.11	96.34	.029	14690						
STD	50	4.64	34.215	27.12	96.14	.048	14693						
OBS	57	4.63	34.216	27.12			14694	692	162		13		
STD	75	4.61	34.216	27.12	96.15	.072	14696						
STD	100	4.60	34.216	27.12	96.20	.096	14699						
OBS	111	4.59	34.215	27.12			14701	692	156		12		
STD	150	4.59	34.213	27.12	96.85	.145	14707						
OBS	164	4.58	34.211	27.12			14709	688	157		12		
STD	200	4.47	34.197	27.12	97.22	.193	14710						
OBS	215	4.41	34.191	27.12			14710	688	165		12		
STD	250	4.26	34.180	27.13	96.78	.242	14710						
OBS	264	4.21	34.177	27.13			14710	673	178		14		
STD	300	4.13	34.172	27.14	96.46	.290	14712						
OBS	313	4.11	34.171	27.14			14714	664	179		12		
STD	400	3.97	34.176	27.16	95.25	.386	14722						
OBS	409	3.95	34.178	27.16			14723	616	194		15		
STD	500	3.73	34.205	27.20	91.42	.479	14729						
OBS	503	3.72	34.206	27.21			14729	571	200		18		
OBS	596	3.73	34.283	27.27			14746	507	216		26		
STD	600	3.72	34.285	27.27	86.13	.568	14746						
STD	700	3.34	34.322	27.33	80.10	.651	14747						
OBS	780	2.99	34.339	27.38			14746	476	226		39		
STD	800	2.95	34.345	27.39	74.95	.728	14748						
STD	900	2.82	34.378	27.43	71.69	.802	14759						
OBS	967	2.77	34.402	27.45			14768	440	238		56		
STD	1000	2.73	34.418	27.47	68.41	.872	14772						
STD	1250	2.50	34.540	27.58	58.21	1.030	14806						
OBS	1363	2.41	34.594	27.63			14822	392	218		69		
STD	1500	2.32	34.636	27.68	50.46	1.166	14842						
OBS	1612	2.26	34.663	27.70			14858	399	224		79		
STD	1750	2.18	34.687	27.73	46.26	1.287	14878						
OBS	1859	2.11	34.700	27.74			14894	405	237		87		
STD	2000	2.02	34.713	27.76	43.51	1.399	14914						
OBS	2106	1.94	34.719	27.77			14929	407	234		96		
STD	2250	1.83	34.722	27.78	41.55	1.505	14949						
OBS	2353	1.75	34.722	27.79			14964	416	230		95		
STD	2500	1.64	34.724	27.80	39.89	1.607	14984						
OBS	2599	1.58	34.725	27.81			14999	421	226		99		
STD	2750	1.54	34.729	27.81	38.99	1.706	15023						
OBS	2844	1.52	34.731	27.81			15039	436	222		115		
STD	3000	1.44	34.732	27.82	38.09	1.802	15062						
OBS	3089	1.38	34.731	27.82			15075	448	222		124		
STD	3250	1.28	34.729	27.83	36.69	1.896	15098						
STD	3500	1.10	34.724	27.84	35.10	1.985	15134						
OBS	3589	1.04	34.722	27.84			15148	462	222		127		
STD	3750	.93	34.720	27.85	33.28	2.071	15171						
STD	4000	.76	34.717	27.85	31.28	2.152	15208						
OBS	4090	.69	34.716	27.86			15221	475	231		129		
OBS	4290	0.00	34.713	0.00			0	474	232		130		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	490	21OCT1965	2328	5340S	10226W	4334	490	32	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		265	06	5.8	2.2	265	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l·10 <sup>2</sup>	PHOS µgat/l·10 <sup>2</sup>	NITR µg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	5.84	34.308	27.05			14735	677	150		11		
STD	0	5.84	34.308	27.05	102.14	0.000	14735						
STD	10	5.81	34.303	27.05	102.31	.010	14736						
STD	20	5.79	34.299	27.05	102.47	.020	14736						
STD	30	5.76	34.295	27.05	102.60	.031	14737						
OBS	49	5.72	34.289	27.05			14738	678	152		11		
STD	50	5.72	34.289	27.05	102.76	.051	14738						
STD	75	5.67	34.290	27.05	102.47	.077	14740						
OBS	96	5.64	34.321	27.08			14743	676	156		12		2
STD	100	5.64	34.290	27.06	102.36	.103	14743						
OBS	144	5.62	34.291	27.06			14750	664	154		14		
STD	150	5.62	34.290	27.06	102.79	.154	14751						
OBS	191	5.60	34.285	27.06			14757	662	160		13		
STD	200	5.60	34.289	27.06	103.15	.205	14758						
OBS	237	5.58	34.306	27.08			14764	656	168		13		
STD	250	5.58	34.303	27.08	102.56	.257	14766						
OBS	285	5.57	34.289	27.07			14771	655	177		15		
STD	300	5.55	34.286	27.07	104.12	.308	14773						
OBS	379	5.42	34.276	27.07			14780	652	190		16		
STD	400	5.38	34.272	27.08	104.29	.413	14782						
OBS	476	5.23	34.258	27.08			14788	632	204		17		
STD	500	5.17	34.254	27.09	104.26	.517	14790						
OBS	571	4.99	34.245	27.10			14794	600	220		17		
STD	600	4.91	34.248	27.11	102.65	.620	14796						
STD	700	4.63	34.265	27.16	98.99	.721	14801						
OBS	769	4.41	34.283	27.19			14803	535	227		28		
STD	800	4.29	34.289	27.21	94.03	.818	14803						
STD	900	3.89	34.309	27.27	88.68	.909	14803						
OBS	972	3.60	34.326	27.31			14804	486	234		43		
STD	1000	3.51	34.333	27.33	83.36	.995	14804						
STD	1250	2.88	34.423	27.46	71.17	1.188	14821						
OBS	1279	2.83	34.437	27.47			14824	414	239		54		
STD	1500	2.54	34.588	27.62	56.42	1.348	14850						
OBS	1517	2.52	34.599	27.63			14853	389	230		59		
STD	1750	2.36	34.628	27.67	52.72	1.484	14885						
OBS	1768	2.35	34.628	27.67			14888	375	232		70		
STD	2000	2.21	34.676	27.72	48.60	1.611	14922						
OBS	2019	2.20	34.680	27.72			14925	375	227		82		
STD	2250	2.07	34.704	27.75	45.82	1.729	14959						
OBS	2274	2.05	34.706	27.75			14963	383	225		95		
STD	2500	1.88	34.730	27.79	42.50	1.839	14994						
OBS	2531	1.85	34.732	27.79			14999	385	218		100		
STD	2750	1.69	34.727	27.80	41.15	1.944	15029						
OBS	2782	1.67	34.725	27.80			15034	400	214		120		
STD	3000	1.59	34.725	27.80	40.72	2.046	15068						
OBS	3036	1.58	34.725	27.81			15074	428	216		124		
STD	3250	1.44	34.724	27.81	39.38	2.146	15105						
STD	3500	1.24	34.721	27.83	37.30	2.242	15140						
OBS	3537	1.21	34.721	27.83			15146	450	223		129		
STD	3750	1.05	34.718	27.84	35.27	2.333	15176						
STD	4000	.87	34.715	27.85	33.05	2.418	15212						
OBS	4045	.80	34.715	27.85			15218	465	212		127		
OBS	4249	0.00	34.717	0.00			0	462	227		0		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 20	491	23OCT1965	0521	5158S	9946W	4380	489	19	23

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
205	05	3.3	.7	230	3

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μg-at/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	5.82	34.216	26.98			14733	684	145		17		
STD	0	5.82	34.216	26.98	108.79	0.000	14733						
STD	10	5.82	34.216	26.98	108.89	.011	14735						
STD	20	5.82	34.216	26.98	109.00	.022	14736						
STD	30	5.81	34.216	26.98	109.11	.033	14738						
STD	50	5.82	34.216	26.98	109.39	.055	14741						
OBS	58	5.81	34.216	26.98			14742	690	145		12		
STD	75	5.78	34.220	26.98	109.06	.082	14744						
STD	100	5.74	34.225	26.99	108.48	.109	14747						
OBS	113	5.72	34.228	27.00			14748	684	146		13		
STD	150	5.69	34.231	27.01	108.02	.163	14753						
OBS	166	5.68	34.232	27.01			14755	671	151		15		
STD	200	5.70	34.243	27.01	107.89	.217	14761						
OBS	218	5.71	34.248	27.02			14765	670	153		13		
STD	250	5.71	34.250	27.02	108.19	.271	14770						
OBS	269	5.71	34.251	27.02			14773	690	153		16		
STD	300	5.69	34.264	27.03	107.48	.325	14778						
OBS	320	5.68	34.273	27.04			14781	662	159		18		
STD	400	5.69	34.286	27.05	107.04	.432	14795						
OBS	420	5.69	34.286	27.05			14798	663	165		22		
STD	500	5.61	34.275	27.05	108.09	.540	14808						
OBS	518	5.58	34.271	27.05			14809	619	176		25		
STD	600	5.43	34.260	27.06	108.15	.648	14817						
OBS	615	5.40	34.259	27.06			14818	600	175		28		
STD	700	5.08	34.255	27.10	105.20	.755	14819						
STD	800	4.64	34.259	27.15	100.47	.858	14817						
OBS	810	4.59	34.260	27.16			14817	552	202		33		
STD	900	4.24	34.274	27.21	95.49	.956	14818						
STD	1000	3.88	34.298	27.26	90.24	1.048	14820						
OBS	1006	3.86	34.300	27.27			14820	485	205		47		
STD	1250	3.12	34.392	27.41	76.16	1.256	14830						
OBS	1322	2.95	34.424	27.45			14836	437	205		73		
STD	1500	2.69	34.497	27.53	64.94	1.433	14855						
OBS	1545	2.64	34.515	27.55			14861	409	217		78		
STD	1750	2.46	34.596	27.63	56.25	1.584	14889						
OBS	1759	2.45	34.599	27.64			14891	393	228		82		
OBS	1974	2.29	34.649	27.69			14921	392	237		89		
STD	2000	2.27	34.654	27.69	50.99	1.718	14925						
OBS	2198	2.15	34.684	27.73			14954	408	240		97		
STD	2250	2.11	34.689	27.74	47.52	1.841	14961						
OBS	2424	1.99	34.703	27.76			14986	414	243		110		
STD	2500	1.94	34.708	27.76	44.86	1.957	14996						
STD	2750	1.77	34.721	27.79	42.59	2.066	15032						
OBS	2871	1.69	34.725	27.80			15050	424	239		120		
STD	3000	1.63	34.727	27.80	41.09	2.171	15070						
STD	3250	1.49	34.726	27.81	39.95	2.272	15107						
OBS	3320	1.45	34.725	27.81			15118	438	232		128		
STD	3500	1.29	34.722	27.82	37.98	2.370	15142						
STD	3750	1.05	34.718	27.84	35.23	2.461	15176						
OBS	3779	1.02	34.717	27.84			15180	449	233		130		
STD	4000	.82	34.715	27.85	32.28	2.545	15210						
OBS	4036	.79	34.739	27.87			15216	468	218		134		2
OBS	4186	.72	34.715	27.86			15239	470	222		138		



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	492	24OCT1965	0815	5132S	10236W	3937	490	12	20				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		230	06	6.2	2.5	230	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	6.15	34.269	26.98			14747	684	142		12		
STD	0	6.15	34.269	26.98	108.78	0.000	14747						
STD	10	6.14	34.269	26.98	108.84	.011	14749						
STD	20	6.14	34.269	26.98	108.90	.022	14750						
STD	30	6.13	34.268	26.98	108.95	.033	14751						
STD	50	6.11	34.268	26.98	109.02	.054	14754						
OBS	59	6.10	34.268	26.98			14755	681	140		12		
STD	75	6.08	34.273	26.99	108.63	.082	14757						
STD	100	6.05	34.280	27.00	108.06	.109	14760						
OBS	118	6.03	34.285	27.01			14762	675	146		12		
STD	150	6.03	34.281	27.00	108.48	.163	14767						
OBS	178	6.04	34.277	27.00			14772	676	154		12		
STD	200	6.04	34.281	27.00	109.17	.217	14776						
OBS	236	6.02	34.290	27.01			14781	652	153		13		
STD	250	6.01	34.293	27.01	108.66	.272	14783						
OBS	290	5.98	34.298	27.02			14788	645	155		13		
STD	300	5.98	34.299	27.02	108.42	.326	14790						
OBS	345	5.96	34.301	27.03			14797	635	159		20		
STD	400	5.90	34.297	27.03	108.98	.435	14803						
OBS	446	5.83	34.291	27.04			14808	618	169		20		
STD	500	5.71	34.288	27.05	108.41	.543	14812						
OBS	547	5.59	34.285	27.06			14815	600	168		25		
STD	600	5.44	34.275	27.07	107.18	.651	14817						
OBS	649	5.28	34.266	27.08			14819	575	176		29		
STD	700	5.07	34.266	27.11	104.33	.757	14819						
OBS	751	4.86	34.270	27.13			14819	540	196		44		
STD	800	4.70	34.276	27.16	99.94	.859	14820						
OBS	855	4.50	34.286	27.19			14821	508	212		45		
STD	900	4.28	34.296	27.22	94.36	.956	14820						
OBS	919	4.19	34.301	27.23			14819	499	206		55		
STD	1000	3.83	34.320	27.28	88.04	1.047	14818						
OBS	1118	3.39	34.351	27.35			14819	453	212		72		
STD	1250	3.06	34.397	27.42	75.16	1.251	14828						
OBS	1316	2.94	34.424	27.45			14834	426	225		83		
STD	1500	2.62	34.508	27.55	63.31	1.425	14853						
OBS	1508	2.61	34.512	27.55			14854	400	239		98		
OBS	1711	2.45	34.588	27.63			14882	388	241		111		
STD	1750	2.42	34.600	27.64	55.50	1.573	14888						
OBS	1910	2.32	34.645	27.68			14911	383	233		116		
STD	2000	2.28	34.667	27.70	50.06	1.705	14925						
OBS	2116	2.22	34.690	27.73			14943	394	231		120		
STD	2250	2.13	34.704	27.75	46.68	1.826	14962						
OBS	2321	2.08	34.707	27.75			14972	401	229		121		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	493	25OCT1965	1051	5051S	10453W	3995	490	04	21				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			255	05	6.4	4.7	270	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	6.39	34.265	26.94			14757	685	138		12		
STD	0	6.39	34.265	26.94	112.04	0.000	14757						
STD	10	6.39	34.265	26.94	112.15	.011	14758						
STD	20	6.39	34.265	26.94	112.28	.022	14760						
STD	30	6.39	34.265	26.94	112.40	.034	14761						
STD	50	6.38	34.265	26.94	112.64	.056	14765						
OBS	60	6.38	34.265	26.94			14766	686	137		14		
STD	75	6.35	34.268	26.95	112.32	.084	14767						
STD	100	6.29	34.275	26.96	111.46	.112	14769						
OBS	118	6.25	34.281	26.97			14771	662	157		12		
STD	150	6.22	34.291	26.99	110.15	.168	14775						
OBS	172	6.21	34.296	26.99			14778	662	149		11		
STD	200	6.17	34.298	27.00	109.62	.223	14781						
OBS	227	6.14	34.300	27.00			14784	654	156		14		
STD	250	6.12	34.304	27.01	109.24	.277	14788						
OBS	281	6.10	34.308	27.01			14792	645	150		15		
STD	300	6.09	34.309	27.02	109.09	.332	14794						
OBS	335	6.06	34.309	27.02			14799	640	155		19		
STD	400	5.98	34.307	27.03	109.15	.441	14806						
OBS	438	5.91	34.304	27.04			14810	639	136		26		
STD	500	5.77	34.297	27.05	108.53	.550	14815						
OBS	541	5.67	34.292	27.06			14817	597	156		35		
STD	600	5.52	34.285	27.07	107.40	.658	14821						
OBS	642	5.40	34.281	27.08			14823	574	183		39		
STD	700	5.19	34.281	27.11	104.70	.764	14824						
STD	800	4.80	34.281	27.15	100.84	.867	14824						
OBS	847	4.60	34.281	27.17			14824	520	200		48		
STD	900	4.39	34.289	27.20	96.22	.965	14824						
STD	1000	4.00	34.310	27.26	90.71	1.059	14825						
OBS	1053	3.78	34.325	27.29			14825	483	221		49		
OBS	1122	3.49	34.345	27.34			14824	463	226		68		
STD	1250	3.15	34.386	27.40	76.95	1.268	14831						
OBS	1369	2.94	34.429	27.46			14843	430	232		72		
STD	1500	2.72	34.485	27.52	66.23	1.447	14857						
OBS	1613	2.58	34.534	27.57			14871	403	245		75		
STD	1750	2.47	34.586	27.62	57.09	1.601	14889						
OBS	1854	2.40	34.620	27.66			14905	386	249		83		
STD	2000	2.30	34.655	27.69	51.16	1.737	14926						
OBS	2096	2.23	34.673	27.71			14939	389	238		93		
STD	2250	2.13	34.693	27.74	47.42	1.860	14961						
OBS	2337	2.07	34.701	27.75			14974	400	233		107		
STD	2500	1.94	34.708	27.76	44.94	1.975	14997						
OBS	2579	1.88	34.710	27.77			15008	402	226		119		
STD	2750	1.77	34.715	27.78	43.01	2.085	15032						
OBS	2822	1.72	34.717	27.79			15043	405	232		139		
STD	3000	1.60	34.722	27.80	41.07	2.190	15068						
STD	3250	1.44	34.729	27.82	38.96	2.290	15105						
STD	3500	1.27	34.737	27.84	36.69	2.385	15142						
OBS	3748	1.02	34.719	27.84			15175	460	230		123		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	494	4 NOV 1965	2214	4447S	9955W	4002	453	49	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		260	04	9.5	5.8	280	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS µg-at/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	9.17	34.066	26.38			14861	650	113		7		
STD	0	9.17	34.066	26.38	165.44	0.000	14861						
STD	10	9.09	34.065	26.39	164.47	.016	14860						
STD	20	9.01	34.064	26.41	163.47	.033	14858						
STD	30	8.92	34.063	26.42	162.41	.049	14857						
STD	50	8.74	34.063	26.45	160.14	.081	14854						
OBS	56	8.69	34.063	26.45			14852	653	108		7		
STD	75	8.51	34.063	26.48	157.12	.121	14849						
STD	100	8.27	34.066	26.52	153.82	.160	14844						
OBS	105	8.22	34.067	26.53			14843	659	115		7		
STD	150	7.83	34.087	26.60	146.73	.235	14835						
OBS	153	7.80	34.090	26.61			14835	659	115		8		
STD	200	7.40	34.176	26.73	135.01	.306	14828						
OBS	202	7.38	34.180	26.74			14828	603	142		8		
OBS	249	6.49	34.233	26.91			14801	601	142		12		
STD	250	6.48	34.234	26.91	119.06	.369	14801						
OBS	297	6.26	34.265	26.96			14800	593	147		13		
STD	300	6.25	34.267	26.96	114.33	.427	14800						
OBS	392	6.06	34.297	27.01			14808	608	150		14		
STD	400	6.04	34.297	27.01	110.73	.540	14809						
OBS	486	5.82	34.285	27.03			14814	598	155		13		
STD	500	5.77	34.282	27.04	109.62	.650	14814						
OBS	581	5.47	34.266	27.06			14815	595	157		16		
STD	600	5.41	34.263	27.07	107.58	.759	14816						
STD	700	5.06	34.255	27.10	105.00	.865	14818						
OBS	772	4.81	34.256	27.13			14820	549	184		19		
STD	800	4.69	34.258	27.14	101.21	.968	14820						
STD	900	4.29	34.275	27.20	96.00	1.067	14820						
OBS	967	4.03	34.294	27.24			14820	473	211		36		
STD	1000	3.92	34.306	27.26	90.19	1.160	14821						
OBS	1053	3.76	34.327	27.30			14824	446	220		42		
STD	1250	3.22	34.425	27.43	74.97	1.366	14835						
OBS	1286	3.14	34.443	27.45			14838	365	232		70		
STD	1500	2.85	34.528	27.54	64.53	1.541	14863						
OBS	1506	2.84	34.530	27.55			14863	318	252		90		
OBS	1729	2.55	34.581	27.61			14889	328	237		101		
STD	1750	2.52	34.585	27.62	57.88	1.694	14892						
OBS	1965	2.30	34.620	27.66			14919	338	241		114		
STD	2000	2.27	34.626	27.67	53.05	1.832	14924						
OBS	2204	2.14	34.655	27.71			14954	355	234		116		
STD	2250	2.11	34.660	27.71	49.58	1.961	14960						
STD	2500	1.95	34.682	27.74	46.92	2.081	14996						
OBS	2689	1.84	34.693	27.76			15025	376	232		130		
STD	2750	1.82	34.696	27.76	45.12	2.196	15034						
STD	3000	1.72	34.705	27.78	43.95	2.308	15073						
OBS	3179	1.63	34.708	27.79			15101	402	221		126		
STD	3250	1.56	34.709	27.79	42.19	2.415	15110						
STD	3500	1.31	34.711	27.81	38.98	2.517	15142						
OBS	3666	1.12	34.711	27.83			15164	439	220		136		
STD	3750	1.04	34.711	27.83	35.60	2.610	15175						
OBS	3762	1.03	34.711	27.83			15177	448	220		138		
OBS	3811	.98	34.716	27.84			15184	452	213		142		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	495	6NOV1965	0355	4453S	9452W	4416	453	44	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			285	02	9.0	7.1	250	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	9.00	34.034	26.38			14855	662	96		9		
STD	0	9.00	34.034	26.38	165.23	0.000	14855						
STD	10	8.89	34.036	26.40	163.64	.016	14852						
STD	20	8.78	34.039	26.42	161.90	.033	14850						
STD	30	8.65	34.042	26.44	159.99	.049	14847						
STD	50	8.38	34.051	26.49	155.70	.080	14840						
OBS	53	8.34	34.053	26.50			14839	648	93		7		
STD	75	8.00	34.062	26.56	149.78	.119	14829						
STD	100	7.56	34.084	26.64	142.46	.155	14817						
OBS	105	7.47	34.090	26.66			14814	660	99		7		
STD	150	6.53	34.198	26.87	120.95	.221	14786						
OBS	156	6.42	34.212	26.90			14783	600	115		10		
STD	200	6.17	34.249	26.96	113.20	.279	14780						
OBS	207	6.16	34.252	26.96			14781	601	130		10		
STD	250	6.06	34.279	27.00	110.33	.335	14785						
OBS	257	6.05	34.282	27.00			14785	601	136		9		
STD	300	5.90	34.283	27.02	108.71	.390	14787						
OBS	307	5.88	34.282	27.02			14787	608	139		11		
STD	400	5.64	34.278	27.05	107.01	.498	14792						
OBS	407	5.62	34.277	27.05			14793	614	143		13		
STD	500	5.40	34.263	27.07	106.31	.605	14799						
OBS	507	5.38	34.262	27.07			14799	601	146		14		
STD	600	5.11	34.254	27.09	104.57	.710	14804						
OBS	607	5.09	34.254	27.10			14804	580	154		16		
STD	700	4.78	34.258	27.13	101.34	.813	14807						
STD	800	4.44	34.261	27.17	97.85	.913	14809						
OBS	810	4.40	34.263	27.18			14809	518	159		24		
STD	900	4.07	34.290	27.24	92.19	1.008	14810						
STD	1000	3.71	34.327	27.30	86.09	1.097	14813						
OBS	1018	3.65	34.335	27.31			14813	443	165		46		
STD	1250	3.12	34.425	27.44	73.82	1.297	14831						
STD	1500	2.76	34.511	27.54	64.81	1.470	14859						
OBS	1584	2.69	34.537	27.57			14870	332	172		86		
STD	1750	2.54	34.572	27.61	59.06	1.625	14892						
OBS	1836	2.47	34.588	27.63			14904	324	180		101		
STD	2000	2.27	34.626	27.67	52.93	1.765	14924						
OBS	2088	2.16	34.644	27.70			14934	359	194		109		
STD	2250	2.04	34.663	27.72	48.47	1.892	14957						
OBS	2340	1.99	34.670	27.73			14971	365	207		117		
STD	2500	1.90	34.679	27.74	46.52	2.010	14994						
OBS	2591	1.86	34.682	27.75			15008	378	225		118		
STD	2750	1.80	34.682	27.75	45.89	2.126	15033						
OBS	2837	1.77	34.683	27.76			15047	390	230		123		
STD	3000	1.70	34.703	27.78	43.83	2.238	15072						
OBS	3085	1.66	34.713	27.79			15086	397	228		122		
STD	3250	1.56	34.712	27.80	41.86	2.345	15109						
OBS	3335	1.49	34.709	27.80			15122	411	208		125		
STD	3500	1.30	34.706	27.81	39.21	2.446	15142						
STD	3750	1.02	34.707	27.83	35.60	2.540	15174						
OBS	3836	.93	34.706	27.84			15186	450	217		136		
STD	4000	.75	34.705	27.85	31.92	2.624	15206						
OBS	4337	.78	34.727	27.86			15269	471	218		144		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 20	496	7NOV1965	0910	4458S	8958W	4165	452	49	21				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		290	02	9.1	6.6		0						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	9.05	34.030	26.37			14856	650	124		6		
STD	0	9.05	34.030	26.37	166.28	0.000	14856						
STD	10	8.50	34.045	26.47	157.09	.016	14837						
STD	20	7.99	34.068	26.57	148.26	.031	14820						
OBS	21	7.94	34.071	26.57			14818	661	121		7		
STD	30	7.51	34.105	26.66	139.06	.046	14804						
OBS	43	6.99	34.151	26.77			14786		124		7		
STD	50	6.87	34.149	26.79	127.57	.072	14782						
STD	75	6.83	34.141	26.79	127.96	.104	14785						
OBS	96	6.72	34.134	26.80			14784	627	138		6		
STD	100	6.71	34.135	26.80	127.19	.136	14784						
STD	150	6.50	34.145	26.83	124.51	.199	14784						
OBS	155	6.48	34.149	26.84			14784	601	149		7		
STD	200	6.13	34.223	26.94	114.66	.259	14778						
OBS	218	5.99	34.253	26.99			14776	562	158		8		
STD	250	5.87	34.270	27.01	108.66	.315	14777						
OBS	286	5.79	34.274	27.03			14780	585	158		10		
STD	300	5.75	34.276	27.03	107.28	.369	14780						
OBS	354	5.59	34.278	27.05			14783	589	162		11		
STD	400	5.47	34.273	27.07	105.33	.475	14786						
OBS	495	5.22	34.259	27.08			14791	613	163		11		
STD	500	5.20	34.258	27.09	104.26	.580	14791						
STD	600	4.84	34.251	27.12	101.49	.683	14792						
OBS	636	4.70	34.250	27.14			14793	574	178		15		
STD	700	4.47	34.262	27.17	97.32	.782	14794						
STD	800	4.15	34.286	27.23	92.61	.877	14797						
STD	900	3.85	34.315	27.28	87.77	.967	14802						
STD	1000	3.58	34.352	27.33	82.79	1.053	14808						
OBS	1212	3.12	34.449	27.46			14825	361	240		68		
STD	1250	3.06	34.465	27.47	70.17	1.244	14829						
OBS	1453	2.81	34.543	27.56			14853	306	251		91		
STD	1500	2.75	34.556	27.58	61.30	1.408	14859						
OBS	1693	2.51	34.598	27.63			14882	306	246		105		
STD	1750	2.45	34.608	27.64	55.29	1.554	14889						
OBS	1935	2.27	34.633	27.68			14913	323	246		114		
STD	2000	2.21	34.640	27.69	51.23	1.687	14921						
OBS	2178	2.07	34.657	27.71			14946	339	238		122		
STD	2250	2.02	34.664	27.72	48.21	1.811	14956						
OBS	2421	1.93	34.678	27.74			14982	347	235		126		
STD	2500	1.91	34.682	27.75	46.36	1.930	14994						
STD	2750	1.82	34.691	27.76	45.52	2.044	15034						
OBS	2910	1.77	34.695	27.77			15060	357	236		129		
STD	3000	1.72	34.699	27.77	44.31	2.157	15073						
STD	3250	1.54	34.710	27.80	41.82	2.264	15109						
OBS	3404	1.41	34.715	27.81			15131	407	219		130		
STD	3500	1.30	34.715	27.82	38.63	2.365	15142						
STD	3750	1.04	34.715	27.83	35.32	2.457	15175						
OBS	3906	.90	34.715	27.84			15197	448	228		139		
STD	4000	.85	34.715	27.85	32.74	2.542	15211						
OBS	4056	.83	34.715	27.85			15221	460	222		141		
OBS	4106	.83	34.714	27.85			15229	463	225		140		

Note: Temperatures to 636 meters probably measured at non-equilibrium conditions.

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	497	23NOV1965	1303	3302S	7147W	153	415	31	6				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		200	06	17.8	12.1	200	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	13.90	34.216	25.62			15029		114		10		
STD	0	13.90	34.216	25.62	237.53	0.000	15029						
STD	10	12.84	34.273	25.88	213.09	.023	14996						
STD	20	12.08	34.337	26.08	194.55	.043	14972						
OBS	25	11.81	34.372	26.16			14964		209		12		
STD	30	11.69	34.416	26.21	181.99	.062	14961						
OBS	50	11.60	34.573	26.35			14964		241		21		
STD	50	11.60	34.573	26.35	169.33	.097	14964						
OBS	74	11.50	34.637	26.42			14965		254		21		
STD	75		34.639										
OBS	99		34.684						275		24		
STD	100		34.685										
OBS	124		34.702						255		26		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	498	24NOV1965	1428	3315S	7520W	4452	415	35	9				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		180	04	14.9	10.5	175	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	15.33	33.850	25.03			15070		48		3		
STD	0	15.33	33.850	25.03	293.49	0.000	15070						
STD	10	15.01	33.875	25.12	285.23	.029	15062						
STD	20	14.68	33.900	25.21	277.00	.057	15054						
STD	30	14.35	33.865	25.26	273.13	.085	15044						
STD	50	13.69	33.958	25.47	253.58	.137	15027						
OBS	54	13.55	33.984	25.51			15023		65		4		
STD	75	12.72	34.219	25.86	216.39	.196	15002						
STD	100	11.91	34.501	26.24	181.32	.246	14981						
OBS	106	11.74	34.569	26.32			14978		265		22		
STD	150	11.71	34.712	26.44	163.48	.332	14986						
OBS	161	11.79	34.718	26.43			14990		281		27		
STD	200	11.68	34.752	26.48	161.25	.413	14993						
OBS	214	11.61	34.753	26.49			14993		288		29		
STD	250	11.24	34.745	26.55	155.01	.492	14986						
OBS	267	0.00	34.733	0.00			0		287		29		
STD	300	10.63	34.695	26.62	149.08	.568	14972						
OBS	318	0.00	34.671	0.00			0		274		27		
STD	400	9.09	34.567	26.78	134.93	.710	14930						
OBS	421	8.71	34.541	26.83			14920		269		26		
STD	500	7.55	34.462	26.94	120.78	.838	14887						
OBS	522	7.22	34.443	26.97			14878		261		23		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	499	26NOV1965	1933	3345S	8041W	159	416	30	5				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		330	05	18.8	16.0	330	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	16.16	34.163	25.09			15100		40		2		
STD	0	16.16	34.163	25.09	288.38	0.000	15100						
STD	10	16.10	34.205	25.13	284.37	.029	15100						
STD	20	16.10	34.232	25.15	282.63	.057	15102						
OBS	25	16.02	34.240	25.18			15101		47		1		
STD	30	15.85	34.236	25.21	277.25	.085	15096						
OBS	50	0.00	34.221	0.00			0		40		2		
STD	50	15.05	34.221	25.38	261.97	.139	15074						
OBS	75	13.77	34.182	25.62			15036		53		2		
STD	75	13.77	34.182	25.62	239.47	.202	15036						
OBS	100	12.69	34.124	25.80			15004		68		3		

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	P					
EL 21	500	7DEC1965	2124	3954S	9655W	3795	417	96	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			200	05	11.3	5.5	200	4					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG mL/l-10 <sup>2</sup>	PHOS μg/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH .10 <sup>2</sup>	DD
OBS	0	12.07	33.941	25.77			14964	616					
STD	0	12.07	33.941	25.77	223.08	0.000	14964						
STD	10	11.94	33.942	25.80	220.86	.022	14961						
STD	20	11.76	33.944	25.83	217.80	.044	14956						
STD	30	11.55	33.949	25.88	213.91	.066	14951						
STD	50	11.00	33.964	25.99	203.73	.107	14935						
OBS	51	10.97	33.965	26.00			14934	637	95	107	2	824	
STD	75	9.99	33.993	26.19	185.34	.156	14903						
OBS	100	8.93	34.036	26.40			14868	618	118	122	2	824	
STD	100	8.93	34.036	26.40	165.91	.200	14868						
OBS	147	7.53	34.165	26.71			14824	579	146	188	3	816	
STD	150	7.47	34.171	26.72	135.57	.275	14823						
OBS	195	6.90	34.246	26.86			14809	566	156	209	5	816	
STD	200	6.86	34.252	26.87	121.93	.340	14808						
OBS	243	6.58	34.292	26.94			14804	569	159	210	7	816	
STD	250	6.54	34.296	26.95	115.22	.399	14804						
OBS	290	6.35	34.311	26.98			14803	573	159	219	7	816	
STD	300	6.32	34.313	26.99	111.74	.456	14804						
OBS	386	6.06	34.312	27.02			14807	575	166	232	8	815	
STD	400	6.01	34.309	27.03	109.38	.566	14808						
OBS	482	5.69	34.289	27.05			14808	580	169	232	6	817	
STD	500	5.63	34.287	27.06	107.46	.675	14809						
OBS	579	5.36	34.280	27.08			14811	575	178	238	9	817	
STD	600	5.28	34.277	27.09	104.95	.781	14811						
STD	700	4.89	34.269	27.13	101.76	.884	14811						
OBS	775	4.59	34.270	27.16			14811	519	202	338	16	809	
STD	800	4.49	34.276	27.18	97.40	.984	14811						
STD	900	4.12	34.307	27.25	91.57	1.078	14813						
STD	1000	3.78	34.347	27.31	85.53	1.167	14816						
OBS	1130	3.41	34.411	27.40			14823	372	245	361	49	797	
STD	1250	3.19	34.466	27.46	71.63	1.363	14834						
OBS	1389	3.00	34.523	27.53			14850	293	267	375	77	796	
STD	1500	2.84	34.553	27.56	62.62	1.531	14863						
OBS	1639	2.65	34.581	27.60			14878	301	265	352	92	795	
STD	1750	2.49	34.599	27.63	56.44	1.680	14890						
OBS	1878	2.33	34.617	27.66			14906	329	257	294	98	797	5
STD	2000	2.21	34.632	27.68	51.85	1.815	14921						
OBS	2130	2.11	34.647	27.70			14939	357	246	337	101	797	
STD	2250	2.02	34.664	27.72	48.17	1.940	14956						
OBS	2370	1.94	34.678	27.74			14974	368	246	338	109	800	
STD	2500	1.87	34.685	27.75	45.69	2.058	14993						
OBS	2611	1.83	34.689	27.76			15010	380	241	330	113	797	
STD	2750	1.79	34.693	27.76	44.91	2.171	15032						
OBS	2852	1.76	34.696	27.77			15049	387	238	330	114	799	
STD	3000	1.67	34.699	27.78	43.62	2.282	15070						
STD	3250	1.48	34.704	27.80	41.42	2.388	15106						
OBS	3326	1.42	34.705	27.80			15117	414	235	325	119	800	
STD	3500	1.29	34.710	27.81	38.80	2.488	15141						
OBS	3615	1.21	34.709	27.82			15159	433	234	324	122	800	
OBS	3633	1.20	34.708	27.82			15161	435	231	325	123	801	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	501	10DEC1965	1940	3956S	10724W	3416	418	97	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			010	04	13.9	13.9	050	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\pm \Delta D$ DYN M	Vm m/sec x10	OXYG ml/l · 10 <sup>2</sup>	PHOS µgat/l · 10 <sup>2</sup>	NITR µg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	12.43	34.019	25.76			14977	610					
STD	0	12.43	34.019	25.76	223.91	0.000	14977						
STD	10	12.10	34.032	25.84	217.23	.022	14968						
STD	20	11.78	34.044	25.91	210.83	.043	14958						
STD	30	11.47	34.055	25.97	204.69	.064	14949						
OBS	50	10.86	34.074	26.10			14931	635	84	97	1	825	
STD	50	10.86	34.074	26.10	193.20	.104	14931						
STD	75	10.12	34.091	26.24	180.04	.151	14909						
OBS	99	9.48	34.106	26.36			14890	627	103	118	2	824	
STD	100	9.46	34.107	26.37	168.88	.194	14889						
OBS	148	8.59	34.145	26.53			14865	605	121	146	2	824	
STD	150	8.55	34.148	26.54	152.88	.275	14864						
OBS	198	7.76	34.220	26.72			14842	575	138	185	2	818	
STD	200	7.73	34.223	26.72	136.16	.347	14842						
OBS	249	7.13	34.286	26.86			14827	565	152	194	6	816	
STD	250	7.12	34.287	26.86	123.66	.412	14827						
OBS	298	6.77	34.332	26.95			14822	562	157	214	7	816	
STD	300	6.76	34.332	26.95	116.17	.472	14821						
OBS	400	6.29	34.325	27.00			14819	583	160	221	7	816	
STD	400	6.29	34.325	27.00	111.88	.586	14819						
STD	500	5.94	34.311	27.04	109.69	.697	14822						
OBS	501	5.94	34.311	27.04			14822	591	163	225	8	817	
STD	600	5.65	34.292	27.06	108.59	.806	14826						
OBS	601	5.65	34.292	27.06			14826	583	169	240	10	816	
OBS	700	5.26	34.275	27.09			14826	564	184	255	14	813	
STD	700	5.26	34.275	27.09	106.01	.913	14826						
OBS	799	4.85	34.272	27.14			14826	534	197	252	15	810	
STD	800	4.85	34.272	27.14	102.08	1.017	14826						
STD	900	4.43	34.288	27.20	96.73	1.117	14826						
STD	1000	4.05	34.316	27.26	90.93	1.210	14827						
OBS	1106	3.68	34.358	27.33			14830	421	240	325	39	803	
STD	1250	3.31	34.430	27.42	75.61	1.419	14839						
OBS	1365	3.07	34.487	27.49			14849	333	264	357	69	796	
STD	1500	2.84	34.532	27.55	64.17	1.593	14862						
OBS	1622	2.67	34.564	27.59			14876	324	260	357	89	796	
STD	1750	2.49	34.591	27.63	57.04	1.745	14890						
OBS	1877	2.34	34.614	27.66			14906	351	249	349	92	796	
STD	2000	2.22	34.637	27.68	51.61	1.881	14922						
OBS	2131	2.12	34.659	27.71			14940	371	248	337	97	797	
STD	2250	2.03	34.675	27.73	47.46	2.005	14957						
OBS	2383	1.94	34.689	27.75			14976	387	241	324	105	798	
STD	2500	1.86	34.695	27.76	44.88	2.120	14992						
OBS	2635	1.79	34.697	27.77			15013	391	240	333	113	799	
STD	2750	1.76	34.697	27.77	44.24	2.231	15031						
OBS	2886	1.73	34.696	27.77			15054	398	137	331	113	797	
STD	3000	1.69	34.698	27.78	43.99	2.342	15071						
OBS	3137	1.63	34.701	27.78			15093	401	140	325	113	796	
STD	3250	1.58	34.703	27.79	42.87	2.450	15110						
OBS	3287	1.56	34.703	27.79			15116	409	141	330	116	796	
OBS	3336	1.53	34.702	27.79			15124	411	144	336	118	796	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	502	14DEC1965	1724	4003S	11943W	4336	455	09	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		305	02	13.9	11.5	280	2						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgal/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	13.01	34.120	25.73			14998	603	69	69	5	827	
STD	0	13.01	34.120	25.73	227.32	0.000	14998						
STD	10	12.50	34.136	25.84	216.88	.022	14983						
STD	20	12.03	34.151	25.94	207.41	.043	14968						
STD	30	11.60	34.165	26.04	198.86	.064	14955						
STD	50	10.84	34.189	26.19	184.35	.102	14932						
OBS	52	10.77	34.191	26.21			14930	653	79	85	4	825	
STD	75	10.13	34.209	26.33	171.57	.147	14911						
STD	100	9.58	34.228	26.44	161.91	.188	14895						
OBS	103	9.53	34.230	26.45			14894	632	94	104	3	824	
STD	150	8.70	34.282	26.62	145.19	.265	14871						
OBS	154	8.64	34.287	26.64			14870	587	114	139	4	823	
STD	200	7.78	34.337	26.81	128.36	.333	14845						
OBS	204	7.71	34.341	26.82			14843	576	136	172	3	817	
STD	250	7.21	34.369	26.91	118.80	.395	14831						
OBS	254	7.18	34.371	26.92			14831	566	141	192	3	817	
STD	300	6.95	34.389	26.97	114.57	.454	14830						
OBS	304	6.94	34.390	26.97			14830	564	151	205	4	816	
STD	400	6.66	34.373	26.99	113.22	.567	14834						
OBS	403	6.65	34.372	26.99			14835	571	155	212	5	816	
STD	500	6.31	34.345	27.02	112.05	.680	14837						
OBS	501	6.31	34.345	27.02			14837	590	154	217	10	816	
OBS	599	6.01	34.323	27.04			14841	587	162	230	13	816	
STD	600	6.01	34.323	27.04	110.96	.792	14841						
STD	700	5.63	34.302	27.07	108.80	.901	14842						
OBS	796	5.22	34.291	27.11			14841	536	193	266	19	811	
STD	800	5.20	34.291	27.11	105.18	1.008	14841						
STD	900	4.73	34.299	27.17	99.59	1.111	14838						
OBS	994	4.26	34.318	27.24			14835	470	214	302	35	808	
STD	1000	4.23	34.319	27.24	92.89	1.207	14834						
OBS	1116	3.67	34.352	27.33			14831	442	228	323	44	805	
STD	1250	3.22	34.409	27.41	76.14	1.418	14835						
OBS	1373	2.92	34.465	27.49			14843	407	242	336	64	803	
STD	1500	2.69	34.516	27.55	63.58	1.593	14855						
STD	1750	2.36	34.596	27.64	55.06	1.741	14885						
OBS	1877	2.26	34.628	27.67			14902		241	334	95	799	
STD	2000	2.15	34.643	27.70	50.25	1.873	14919						
STD	2250	1.97	34.661	27.72	47.71	1.995	14954						
OBS	2438	1.86	34.662	27.73			14982	358	246	341	119	799	
STD	2500	1.82	34.664	27.74	46.58	2.113	14990						
OBS	2629	1.76	34.668	27.75			15010	365	250	336	120	797	
STD	2750	1.72	34.671	27.75	45.51	2.228	15029						
OBS	2875	1.68	34.675	27.76			15049	373	247	341	120	798	
STD	3000	1.63	34.681	27.77	44.48	2.341	15069						
OBS	3121	1.59	34.685	27.77			15088	392	237	334	120	797	
STD	3250	1.55	34.685	27.78	43.73	2.451	15109						
OBS	3368	1.52	34.685	27.78			15128	399	235	336	123	793	
STD	3500	1.48	34.688	27.78	43.16	2.560	15149						
STD	3750	1.41	34.694	27.79	42.40	2.667	15190						
OBS	3819	1.40	34.696	27.79			15203	421	234	331	125	796	
STD	4000	1.37	34.694	27.80	42.37	2.773	15233						
OBS	4260	1.39	34.697	27.80			15281	428	234	331	123	794	
OBS	4290	1.40	34.699	27.80			15286	435	224	331	121	796	

Note: Temperatures below 3500 meters probably measured at non-equilibrium conditions.

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	503	17DEC1965	0313	4359S	12012W	3742	456	30	17				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		325	05	13.3	0.0	340	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔΔ DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS μgat/l-10 <sup>2</sup>	NITR μg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	0.00	34.161	0.00			0						
STD	0	0.00	34.161	27.45	63.99	0.000	14481						
STD	10	0.00	34.173	27.46	63.05	.006	14483						
STD	20	0.00	34.185	27.47	62.14	.013	14485						
STD	30	0.00	34.196	27.48	61.26	.019	14487						
STD	50	0.00	34.218	27.50	59.58	.031	14490						
STD	75	0.00	34.243	27.52	57.65	.046	14495						
STD	100	0.00	34.266	27.53	55.90	.060	14499						
STD	150	0.00	34.304	27.57	52.94	.087	14508						
STD	200	0.00	34.333	27.59	50.68	.113	14517						
STD	250	0.00	34.352	27.60	49.14	.138	14525						
OBS	277	6.83	34.359	26.96			14821	601					
STD	300	8.45	34.362	26.73	138.20	.185	14887						
OBS	356	11.80	34.363	26.15			15018						
STD	400	11.19	34.357	26.26	185.93	.347	15004						
STD	500	9.79	34.340	26.49	165.07	.522	14970						
OBS	600	0.00	34.316	0.00			0	593					
STD	600	8.39	34.316	26.70	145.99	.678	14934						
STD	700	10.08	34.299	26.41	177.01	.839	15013						
STD	800	6.87	34.290	26.90	128.13	.992	14908						
OBS	847	4.94	34.288	27.14			14838	581					
STD	900	4.63	34.293	27.18	98.84	1.105	14834						
STD	1000	4.15	34.309	27.24	92.75	1.201	14831						
OBS	1094	3.85	34.333	27.29			14835						
STD	1250	3.31	34.386	27.39	78.87	1.416	14838						
OBS	1340	3.06	34.422	27.44			14844						
STD	1500	2.76	34.489	27.52	66.40	1.597	14858						
ORS	1584	2.65	34.524	27.56			14869						
STD	1750	2.45	34.586	27.62	56.93	1.751	14889						
OBS	1831	2.37	34.611	27.65			14900						
STD	2000	2.23	34.645	27.69	51.07	1.886	14922						
OBS	2218	2.05	34.665	27.72			14953	375					
STD	2250	2.02	34.666	27.72	47.97	2.010	14956						
OBS	2325	1.95	34.669	27.73			14967						
STD	2500	1.83	34.673	27.74	46.01	2.128	14991						
OBS	2706	1.73	34.675	27.75			15023	375					
STD	2750	1.71	34.676	27.76	45.13	2.242	15029						
OBS	2822	1.69	34.677	27.76			15041						
STD	3000	1.63	34.679	27.76	44.57	2.354	15069						
STD	3250	1.57	34.684	27.77	44.11	2.465	15110						
OBS	3320	1.56	34.686	27.78			15123						
OBS	3381	1.55	34.688	27.78			15133						
STD	3500	1.52	34.691	27.78	43.60	2.574	15151						
OBS	3542	1.52	34.692	27.78			15160	398					
OBS	3599	1.53	34.692	27.78			15170	406					

Note: Surface temperature from thermograph.

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	504	19DEC1965	0037	4904S	12010W	3407	456	90	23				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		320	05	0.0	0.0	300	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l-10 <sup>2</sup>	PHOS µgat/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	10.19	34.352	26.43			14902	659	107	135	1	825	
STD	0	10.19	34.352	26.43	160.40	0.000	14902						
STD	10	9.52	34.344	26.54	150.50	.016	14880						
STD	20	8.93	34.338	26.63	142.03	.030	14859						
STD	30	8.42	34.334	26.71	134.86	.044	14841						
STD	50	7.61	34.333	26.83	123.84	.070	14814						
OBS	55	7.46	34.331	26.85			14809	654	122	153	1	828	
STD	75	7.14	34.340	26.90	117.31	.100	14800						
STD	100	7.06	34.355	26.92	115.51	.129	14801						
OBS	108	6.99	34.360	26.94			14799	661	134	160	2	830	
STD	150	6.79	34.371	26.97	111.49	.186	14799						
OBS	160	6.76	34.372	26.98			14799	649	140	184	4	826	
STD	200	6.59	34.360	26.99	110.34	.241	14799						
OBS	213	6.54	34.355	26.99			14799	649	141	189	5	823	
STD	250	6.49	34.353	27.00	110.29	.296	14803						
OBS	264	6.48	34.353	27.00			14805	657	144	191	4	817	
STD	300	6.45	34.348	27.00	110.85	.352	14809						
OBS	314	6.43	34.345	27.00			14811	654	145	189	6	816	
STD	400	6.20	34.320	27.01	111.07	.463	14816						
OBS	415	6.15	34.315	27.01			14816	641	154	199	6	814	
STD	500	5.89	34.293	27.03	110.32	.573	14819						
OBS	515	5.84	34.289	27.03			14820	641	157	209	7	812	
STD	600	5.51	34.249	27.04	109.88	.684	14820						
OBS	616	5.44	34.243	27.05			14820	635	168	224	9	811	
STD	700	5.07	34.254	27.10	105.10	.791	14818						
STD	800	4.64	34.288	27.17	98.41	.893	14818						
OBS	817	0.00	34.296	0.00			0	519	200	274	22	808	
STD	900	4.25	34.310	27.23	92.89	.988	14818						
STD	1000	3.87	34.330	27.29	87.83	1.079	14820						
OBS	1015	3.38	34.333	27.34			14801	474	221	308	33	804	1
OBS	1184	3.25	34.394	27.40			14825	437	235	324	45	800	
STD	1250	3.10	34.419	27.43	73.97	1.281	14830						
OBS	1398	0.00	34.477	0.00			0	397	235	333	57	798	
STD	1500	2.68	34.516	27.55	63.49	1.453	14855						
OBS	1611	2.57	34.556	27.59			14870	396	247	334	70	797	
STD	1750	2.46	34.601	27.64	55.90	1.602	14889						
OBS	1823	2.41	34.621	27.66			14900	392	246	338	77	798	
STD	2000	2.28	34.655	27.69	51.01	1.736	14925						
OBS	2047	2.25	34.662	27.70			14932	385	238	333	84	800	
STD	2250	2.10	34.684	27.73	47.79	1.859	14960						
OBS	2268	2.09	34.685	27.73			14963	382	238	333	92	796	
OBS	2498	1.93	34.694	27.75			14996	386	238	334	102	795	
STD	2500	1.93	34.694	27.75	45.79	1.976	14996						
OBS	2729	1.77	34.691	27.76			15029	386	240	339	108	795	
STD	2750	1.75	34.691	27.77	44.54	2.089	15031						
OBS	2954	1.62	34.694	27.78			15061	390	239	336	106	796	
STD	3000	1.61	34.694	27.78	43.19	2.199	15068						
OBS	3001	1.61	34.694	27.78			15069	392	238	339	107	795	
OBS	3047	1.60	34.695	27.78			15076	388	238	337	108	795	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1'					
EL 21	505	21DEC1965	0310	5404S	11956W	2885	491	49	23				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			300	04	0.0	6.0	290	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μg-at/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	8.81	34.260	26.59			14850	723	118	191	1	816	
STD	0	8.81	34.260	26.59	145.61	0.000	14850						
STD	10	8.13	34.257	26.69	136.04	.014	14826						
STD	20	7.54	34.255	26.78	128.07	.027	14805						
STD	30	7.03	34.253	26.85	121.52	.040	14787						
OBS	50	6.26	34.250	26.95			14760	737	131	191	2	820	
STD	50	6.26	34.250	26.95	112.24	.063	14760						
STD	75	5.87	34.247	27.00	108.07	.091	14748						
OBS	99	5.81	34.247	27.00			14749	672	146	193	4	819	
STD	100	5.81	34.247	27.00	107.61	.118	14750						
OBS	149	5.85	34.260	27.01			14759	675	145	194	5	818	
STD	150	5.85	34.260	27.01	107.81	.171	14760						
OBS	198	5.93	34.274	27.01			14771	693	155	197	5	819	
STD	200	5.93	34.274	27.01	108.34	.226	14771						
OBS	247	5.83	34.272	27.02			14775	713	145	204	5	815	
STD	250	5.83	34.272	27.02	107.93	.280	14775						
OBS	295	5.81	34.271	27.02			14782	687	148	207	7	811	
STD	300	5.79	34.269	27.02	108.35	.334	14782						
OBS	394	5.35	34.225	27.04			14779	698	161	214	9	812	
STD	400	5.31	34.222	27.04	107.19	.441	14778						
OBS	492	4.82	34.192	27.08			14773	611	176	220	12	810	
STD	500	4.81	34.195	27.08	104.27	.547	14774						
OBS	594	4.72	34.244	27.13			14786	597	189	278	16	808	
STD	600	4.70	34.247	27.13	100.17	.649	14787						
OBS	694	4.33	34.279	27.20			14787	522	208	295	26	807	
STD	700	4.30	34.279	27.20	93.97	.746	14787						
OBS	794	3.81	34.285	27.26			14782	519	217	319	33	804	
STD	800	3.79	34.287	27.26	88.33	.838	14782						
STD	900	3.44	34.335	27.34	81.66	.923	14785						
OBS	906	3.42	34.338	27.34			14785	505	230	323	41	801	
STD	1000	3.10	34.375	27.40	75.66	1.001	14788						
OBS	1143	2.72	34.429	27.48			14796	455	236	328	63	798	
STD	1250	2.59	34.478	27.53	63.76	1.176	14809						
OBS	1379	2.50	34.538	27.58			14828	429	241	342	81	799	
STD	1500	2.42	34.589	27.63	54.99	1.324	14845						
OBS	1611	2.35	34.629	27.67			14862	400	236	340	112	797	
STD	1750	2.27	34.660	27.70	49.35	1.454	14882						
OBS	1860	2.21	34.677	27.72			14899	422	232	337	92	797	
STD	2000	2.11	34.696	27.74	45.89	1.573	14918						
OBS	2106	2.03	34.707	27.76			14933		226	342	85	796	
STD	2250	1.91	34.714	27.77	43.15	1.685	14953						
OBS	2348	1.83	34.716	27.78			14966	456	226	336	112	796	
STD	2500	1.71	34.716	27.79	41.33	1.790	14987						
OBS	2593	1.62	34.714	27.79			14999	443	226	338	73	797	
OBS	2691	1.50	34.712	27.80			15011	425	228	342	105	796	
OBS	2739	1.47	34.712	27.80			15018	428	228	344	98	795	
STD	2750	1.47	34.712	27.80	39.24	1.891	15019						
OBS	2765	1.47	34.712	27.80			15022	430	230	338	111	796	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	506	23DEC1965	0520	5633S	11941W	4659	491	69	22				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			275	05	8.0	5.8	285	3					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	ΣΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	8.35	34.165	26.59			14832	770	110	209	2	815	
STD	0	8.35	34.165	26.59	145.89	0.000	14832						
STD	10	7.71	34.179	26.69	135.98	.014	14809						
STD	20	7.16	34.191	26.78	127.67	.027	14789						
STD	30	6.68	34.202	26.86	120.81	.040	14772						
STD	50	5.98	34.220	26.96	111.03	.063	14748						
OBS	53	5.90	34.222	26.97			14745	744	131	215	2	816	
STD	75	5.83	34.234	26.99	108.52	.090	14746						
STD	100	5.75	34.236	27.00	107.73	.117	14747						
OBS	105	5.73	34.237	27.01			14747	739	140	235	6	818	
STD	150	5.49	34.209	27.01	107.34	.171	14744						
OBS	156	5.46	34.204	27.01			14744	714	148	235	5	819	
STD	200	5.32	34.186	27.02	107.52	.225	14745						
OBS	208	5.31	34.187	27.02			14746	747	145	244	7	817	
STD	250	5.53	34.236	27.03	106.91	.278	14763						
OBS	258	5.57	34.246	27.03			14766	751	144	252	6	813	
STD	300	5.55	34.249	27.04	106.81	.332	14772						
OBS	308	5.53	34.247	27.04			14772	712	144	259	6	812	
STD	400	5.51	34.231	27.03	108.90	.440	14787						
OBS	409	5.49	34.204	27.01			14787	667	165	286	11	808	2
STD	500	4.71	34.229	27.12	100.54	.544	14770						
OBS	508	4.64	34.230	27.13			14769	610	178	295	15	807	
STD	600	4.48	34.278	27.18	95.21	.642	14778						
OBS	608	4.48	34.283	27.19			14779	591	192	304	24	805	
STD	700	4.11	34.300	27.24	90.26	.735	14780						
STD	800	3.71	34.312	27.29	85.63	.823	14779						
OBS	808	0.00	34.313	0.00			0	537	210	313	37	804	
STD	900	3.31	34.343	27.35	79.58	.906	14779						
STD	1000	2.90	34.384	27.42	72.72	.982	14779						
OBS	1009	2.86	34.388	27.43			14779	479	223	324	53	802	
STD	1250	2.59	34.511	27.55	61.31	1.149	14809						
OBS	1261	2.58	34.517	27.56			14811	426	230	332	64	798	
STD	1500	2.40	34.604	27.64	53.67	1.293	14845						
OBS	1515	2.39	34.609	27.65			14847	430	225	335	74	799	
STD	1750	2.26	34.670	27.71	48.44	1.421	14882						
OBS	1768	2.25	34.674	27.71			14885	486	215	328	77	797	4
STD	2000	2.10	34.714	27.76	44.53	1.537	14918						
OBS	2020	2.09	34.716	27.76			14921	441	209	318	82	796	
STD	2250	1.95	34.731	27.78	42.42	1.646	14955						
OBS	2271	1.94	34.732	27.78			14958	440	218	308	87	795	
STD	2500	1.75	34.739	27.80	40.20	1.749	14989						
OBS	2522	1.73	34.739	27.81			14992	487	209	314	93	795	
STD	2750	1.55	34.737	27.82	38.58	1.847	15023						
STD	3000	1.37	34.731	27.82	37.30	1.942	15059						
OBS	3022	1.36	34.730	27.83			15063	485	210	314	104	794	
STD	3250	1.21	34.725	27.83	36.05	2.034	15095						
STD	3500	1.06	34.720	27.84	34.76	2.122	15133						
OBS	3521	1.05	34.720	27.84			15136	472	210	314	115	795	
STD	3750	.91	34.716	27.84	33.31	2.208	15170						
STD	4000	.77	34.713	27.85	31.72	2.289	15208						
OBS	4020	.76	34.713	27.85			15212	513	210	311	120	791	
STD	4500	0.00	34.711	0.00	0.00	0.000	0						
OBS	4519	.71	34.712	27.85			15299	515	218	312	124	792	1

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	507	26DEC1965	2122	6017S	12000W	5014	528	00	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		285	06	0.0	0.0	290	4						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	Σ ΔD DYN M	Vm m/sec x 10	OXYG ml/l · 10 <sup>2</sup>	PHOS μgal/l · 10 <sup>2</sup>	NITR μg-at/l · 10	SILIC ug-at/l	pH · 10 <sup>2</sup>	DD
OBS	0	3.30	33.970	27.06			14625	789	149	216	7	811	
STD	0	3.30	33.970	27.06	101.15	0.000	14625						
STD	10	3.30	33.970	27.06	101.20	.010	14626						
STD	20	3.29	33.969	27.06	101.27	.020	14628						
STD	30	3.29	33.969	27.06	101.33	.030	14629						
OBS	47	3.28	33.968	27.06			14632	747	157	213	8	813	
STD	50	3.15	33.969	27.07	100.20	.051	14627						
STD	75	2.04	33.979	27.17	90.48	.074	14583						
OBS	92	1.30	33.990	27.24			14553	749	204	258	25	813	
STD	100	1.26	33.996	27.24	83.76	.096	14553						
OBS	138	1.41	34.027	27.26			14566	747	214	253	27	814	
STD	150	1.27	34.030	27.27	81.34	.137	14562						
OBS	187	.88	34.052	27.31			14551	717	229	279	35	814	
STD	200	.97	34.080	27.33	75.65	.177	14557						
OBS	249	1.44	34.191	27.39			14588	615	235	300	43	812	
STD	250	1.44	34.192	27.39	70.50	.213	14588						
OBS	299	1.29	34.231	27.43			14590	613	235	299	46	811	
STD	300	1.30	34.233	27.43	66.53	.247	14590						
OBS	400	2.10	34.396	27.50			14645	470	251	324	64	809	
STD	400	2.10	34.396	27.50	60.90	.311	14645						
STD	500	2.15	34.476	27.56	55.77	.370	14665						
OBS	501	2.15	34.477	27.56			14665	454	252	324	67	806	
STD	600	2.08	34.522	27.60	52.18	.423	14679						
OBS	602	2.08	34.523	27.61			14679	440	249	322	71	805	
STD	700	2.07	34.579	27.65	48.23	.474	14696						
STD	800	2.07	34.632	27.69	44.81	.520	14713						
OBS	807	0.00	34.635	0.00			0	399	242	311	81	802	
STD	900	2.07	34.658	27.71	43.25	.564	14730						
STD	1000	2.06	34.676	27.73	42.30	.607	14747						
OBS	1011	2.06	34.678	27.73			14749	413	238	299	83	798	
OBS	1221	1.96	34.734	27.78			14780	453	236	301	90	797	
STD	1250	1.94	34.735	27.79	37.81	.707	14784						
OBS	1483	1.77	34.731	27.80			14816	468	263	289	96	797	
STD	1500	1.76	34.731	27.80	37.17	.801	14819						
OBS	1742	1.57	34.737	27.82			14852	459	229	300	101	797	
STD	1750	1.56	34.737	27.82	35.52	.892	14853						
OBS	1998	1.39	34.735	27.83			14887	456	230	299	110	796	
STD	2000	1.39	34.735	27.83	34.45	.979	14887						
STD	2250	1.21	34.730	27.84	33.40	1.064	14922						
STD	2500	1.06	34.725	27.84	32.41	1.146	14959						
OBS	2512	1.05	34.725	27.84			14961	475	232	293	114	796	
STD	2750	.93	34.722	27.85	31.58	1.226	14996						
STD	3000	.83	34.719	27.85	30.78	1.304	15035						
OBS	3022	.82	34.719	27.85			15039	475	232	300	124	794	
STD	3250	.70	34.717	27.86	29.64	1.380	15073						
STD	3500	.60	34.714	27.86	28.54	1.452	15112						
STD	3750	.50	34.713	27.87	27.56	1.523	15152						
STD	4000	.43	34.711	27.87	26.72	1.590	15193						
OBS	4038	.42	34.711	27.87			15200	501	236	311	138	793	
STD	4500	.41	34.710	27.87	26.71	1.724	15282						
OBS	4541	.41	34.710	27.87			15290	502	239	311	134	792	
OBS	4942	.43	34.708	27.87			15363	500	238	320	137	792	
OBS	4994	.43	34.710	27.87			15373	528	235	304	139	792	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	508	28DEC1965	0226	6115S	12024W	5101	528	10	21				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		230	06	3.0	-1.7	240	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x 10	OXYG ml/l·10 <sup>2</sup>	PHOS μg/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	3.77	33.993	27.03			14645	748	150	212	9	809	
STD	0	3.77	33.993	27.03	103.72	0.000	14645						
STD	10	3.74	33.993	27.03	103.52	.010	14646						
STD	20	3.71	33.993	27.04	103.34	.021	14646						
STD	30	3.68	33.992	27.04	103.14	.031	14646						
OBS	46	3.63	33.992	27.04			14647	736	157	209	4	807	
STD	50	3.54	33.993	27.05	101.91	.052	14644						
STD	75	2.95	34.000	27.11	96.28	.076	14623						
OBS	91	2.57	34.005	27.15			14609	729	185	220	18	808	
STD	100	2.49	34.006	27.16	92.13	.100	14607						
OBS	134	2.38	34.008	27.17			14608	719	187	234	20	809	
STD	150	2.36	34.010	27.17	91.00	.146	14609						
OBS	178	2.34	34.012	27.18			14613	721	189	236	17	807	
STD	200	2.32	34.012	27.18	90.79	.191	14616						
OBS	221	2.30	34.011	27.18			14619	727	192	234	19	806	
STD	250	2.25	34.011	27.18	90.49	.236	14621						
OBS	264	2.23	34.013	27.19			14623	720	182	234	18	805	
STD	300	2.19	34.034	27.20	88.51	.281	14627						
OBS	353	2.22	34.087	27.25			14638	661	208	259	34	802	
STD	400	2.39	34.157	27.29	81.40	.366	14654						
OBS	442	2.55	34.219	27.32			14669	560	226	283	45	798	
STD	500	2.56	34.266	27.36	75.26	.444	14680						
OBS	534	2.54	34.288	27.38			14685	513	237	289	51	797	
STD	600	2.54	34.342	27.42	69.92	.517	14697						
STD	700	2.53	34.421	27.49	64.50	.584	14714						
OBS	721	2.53	34.437	27.50			14717	438	246	311	67	796	
STD	800	2.48	34.489	27.55	59.43	.646	14729						
STD	900	2.41	34.545	27.60	55.07	.703	14743						
OBS	910	2.40	34.550	27.60			14745	405	243	309	81	797	
STD	1000	2.36	34.583	27.63	52.28	.757	14759						
OBS	1245	0.00	34.644	0.00			0	408	232	301	90	797	
STD	1250	2.25	34.645	27.69	47.80	.882	14797						
OBS	1496	2.14	34.696	27.74			14834	413	229	284	92	797	
STD	1500	2.14	34.697	27.74	43.92	.997	14835						
OBS	1748	1.94	34.729	27.78			14868	426	234	284	94	795	
STD	1750	1.94	34.729	27.78	40.35	1.102	14869						
OBS	1999	1.72	34.740	27.81			14902	436	220	279	104	797	
STD	2000	1.72	34.740	27.81	37.96	1.200	14902						
STD	2250	1.48	34.738	27.82	36.05	1.293	14934						
STD	2500	1.26	34.730	27.83	34.60	1.381	14968						
OBS	2502	1.26	34.730	27.83			14968	459	187	289	111	795	6
STD	2750	1.12	34.725	27.84	33.75	1.466	15005						
STD	3000	1.01	34.720	27.84	33.15	1.550	15043						
OBS	3006	1.01	34.720	27.84			15044	465	187	273	124	795	6
STD	3250	.90	34.716	27.84	32.43	1.632	15082						
STD	3500	.80	34.712	27.85	31.64	1.712	15121						
OBS	3508	.80	34.712	27.85			15123	478	234	293	125	793	
STD	3750	.70	34.710	27.85	30.57	1.790	15161						
STD	4000	.59	34.709	27.86	29.34	1.865	15201						
OBS	4009	0.00	34.709	0.00			0	495	234	273	142	792	
STD	4500	.39	34.709	27.87	26.42	2.004	15281						
OBS	4509	.44	34.709	27.87			15282	489	238	298	136	792	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	509	3 JAN 1966	0329	5659S	8508W	4966	488	65	21				
			WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST					
			320	05	0.0	3.7	320	2					
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	6.15	34.218	26.94			14747	702					
STD	0	6.15	34.218	26.94	112.60	0.000	14747						
STD	10	6.14	34.215	26.94	112.88	.011	14748						
STD	20	6.12	34.213	26.94	112.86	.023	14748						
STD	30	6.07	34.214	26.94	112.30	.034	14748						
STD	50	5.92	34.212	26.96	110.91	.056	14745						
OBS	51	5.91	34.212	26.96			14745	703	143	134	2	804	
STD	75	5.54	34.221	27.02	106.13	.083	14734						
STD	100	5.18	34.231	27.07	101.52	.109	14724						
OBS	103	5.14	34.232	27.07			14723	701	155	131	6	807	
STD	150	5.07	34.234	27.08	100.56	.160	14727						
OBS	154	5.07	34.233	27.08			14728	681	159	140	6	807	
STD	200	4.92	34.217	27.09	100.69	.210	14729						
OBS	204	4.90	34.215	27.09			14729	679	160	146	7	802	
STD	250	4.71	34.204	27.10	99.84	.260	14729						
OBS	253	4.70	34.204	27.10			14729	680	164	153	7	802	
STD	300	4.64	34.209	27.11	99.20	.310	14734						
OBS	303	4.64	34.210	27.11			14735	672	155	158		801	
STD	400	4.43	34.193	27.12	99.04	.409	14742						
OBS	443	4.32	34.188	27.13			14744	659	166	162	10	797	
STD	500	4.19	34.207	27.16	96.23	.507	14748						
OBS	536	4.11	34.220	27.18			14751	626	180	163	17	797	
STD	600	4.01	34.221	27.19	94.17	.602	14758						
OBS	629	3.98	34.225	27.19			14761	561	194	197	24	796	
OBS	675	3.94	34.257	27.22			14768	546	200	203	25	796	
STD	700	3.88	34.270	27.24	89.83	.694	14769						
STD	800	3.60	34.314	27.30	84.30	.781	14775						
STD	900	3.28	34.343	27.36	79.34	.863	14778						
OBS	938	3.15	34.350	27.37			14779	467	222	208	42	795	
STD	1000	3.01	34.364	27.40	75.42	.940	14784						
OBS	1006	3.00	34.366	27.40			14784	455	227	211	51	795	
OBS	1188	2.64	34.451	27.50			14800	427	235	203	57	794	
STD	1250	2.57	34.476	27.53	63.79	1.114	14808						
OBS	1464	2.42	34.555	27.60			14839	402	231	168	72	792	5
STD	1500	2.39	34.569	27.62	56.20	1.264	14844						
OBS	1692	2.27	34.639	27.68			14872	395	268	196	78	790	
STD	1750	2.24	34.653	27.70	49.45	1.396	14881						
STD	2000	2.09	34.695	27.74	45.72	1.515	14917						
OBS	2191	1.98	34.710	27.76			14946	418	220	187	86	790	
STD	2250	1.94	34.714	27.77	43.53	1.627	14954						
STD	2500	1.77	34.724	27.79	41.56	1.733	14990						
OBS	2701	1.64	34.726	27.80			15019	438	218	188	96	789	
STD	2750	1.61	34.726	27.80	40.13	1.835	15026						
STD	3000	1.46	34.724	27.81	39.01	1.934	15063						
OBS	3191	1.36	34.721	27.82			15092	513		188	104	789	4
STD	3250	1.33	34.720	27.82	38.05	2.030	15100						
STD	3500	1.20	34.718	27.83	36.95	2.124	15139						
OBS	3692	1.10	34.716	27.83			15169	478	136	193	110	788	6
STD	3750	1.07	34.715	27.83	35.68	2.215	15177						
STD	4000	.94	34.713	27.84	34.32	2.303	15215						
OBS	4194	.77	34.708	27.85			15243	473	219	199	125	791	



SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS				
							10°	1°					
EL 21	510	4JAN1966	1301	5500S	8026W	4416	488	50	22				
		WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST						
		205	05	0.0	1.5	240	3						
CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	±ΔD DYN M	Vm m/sec x10	OXYG ml/l·10 <sup>2</sup>	PHOS μgat/l·10 <sup>2</sup>	NITR μg-at/l·10	SILIC ug-at/l	pH ·10 <sup>2</sup>	DD
OBS	0	6.76	34.139	26.79			14770	688	126	133	1	804	
STD	0	6.76	34.139	26.79	126.12	0.000	14770						
STD	10	6.74	34.139	26.80	126.01	.013	14771						
STD	20	6.72	34.139	26.80	125.92	.025	14771						
STD	30	6.70	34.138	26.80	125.82	.038	14772						
OBS	49	6.66	34.138	26.81			14774	688	134	137	4	802	
STD	50	6.63	34.138	26.81	125.33	.063	14773						
STD	75	5.96	34.129	26.89	117.96	.093	14750						
OBS	98	5.33	34.126	26.97			14728	671	150	137	8	802	
STD	100	5.31	34.127	26.97	110.70	.122	14728						
OBS	146	5.09	34.163	27.02			14727	668	153	135	9	802	
STD	150	5.09	34.166	27.03	105.84	.176	14727						
OBS	195	5.10	34.198	27.05			14736	638	163	135	4	804	
STD	200	5.10	34.201	27.05	103.97	.228	14736						
OBS	243	5.08	34.216	27.07			14743	637	169	133	5	807	
STD	250	5.07	34.217	27.07	103.01	.280	14744						
OBS	291	5.03	34.219	27.07			14749	631	165	138	6	808	
STD	300	5.02	34.219	27.08	102.79	.332	14750						
OBS	389	4.93	34.222	27.09			14761	629	166	145	7	807	
STD	400	4.92	34.222	27.09	102.42	.434	14762						
OBS	490	4.78	34.226	27.11			14771	620	171	146	8	805	
STD	500	4.76	34.226	27.11	101.38	.536	14772						
STD	600	4.52	34.224	27.14	99.64	.637	14779						
OBS	689	4.26	34.227	27.17			14783	586	187	144	15	802	
STD	700	4.23	34.228	27.17	96.92	.735	14783						
STD	800	3.92	34.245	27.22	92.93	.830	14787						
OBS	893	3.63	34.273	27.27			14791	507	212	162	30	801	
STD	900	3.61	34.276	27.27	87.93	.920	14791						
STD	1000	3.34	34.325	27.34	81.94	1.005	14797						
OBS	1082	3.14	34.370	27.39			14803	441	252	170	46	799	
STD	1250	2.87	34.453	27.48	68.81	1.194	14821						
OBS	1329	2.78	34.489	27.52			14831	374	248	189	68	797	
STD	1500	2.60	34.549	27.58	60.07	1.355	14852						
OBS	1575	2.53	34.570	27.61			14863	356	207	197	84	793	
STD	1750	2.37	34.608	27.65	54.31	1.498	14886						
OBS	1824	2.31	34.621	27.66			14896	347	228	200	97	790	
STD	2000	2.18	34.647	27.70	50.34	1.629	14921						
OBS	2069	2.14	34.656	27.71			14931	359	243	202	97	791	
STD	2250	2.05	34.675	27.73	47.72	1.751	14958						
OBS	2316	2.02	34.681	27.74			14968	367	237	197	102	792	
STD	2500	1.95	34.696	27.75	45.92	1.868	14997						
STD	2750	1.85	34.710	27.77	44.46	1.981	15036						
OBS	2815	1.82	34.713	27.78			15046	392	227	199	105	793	
STD	3000	1.73	34.718	27.79	43.16	2.091	15074						
STD	3250	1.58	34.722	27.80	41.60	2.197	15111						
OBS	3316	1.54	34.722	27.81			15122	436	219	197	106	791	
STD	3500	1.37	34.721	27.82	39.17	2.298	15146						
STD	3750	1.12	34.720	27.83	36.18	2.392	15179						
OBS	3825	1.05	34.719	27.84			15190	459	267	196	115	793	
STD	4000	.90	34.712	27.84	33.83	2.479	15214						
OBS	4237	.75	34.711	27.85			15250	474	264	185	125	791	
OBS	4288	.73	34.715	27.85			15258	477	217	192	126	790	

SHIP CRS	STATION	DATE	GMT	LATITUDE	LONGITUDE	SONIC DEPTH M	MARSDEN		NO. OBS
							10°	1°	
EL 21	511	5 JAN 1966	1800	5302S	7543W	1479	487	35	14

WIND DIR	FORCE	AIR TEMP	DEW POINT	SEA DIR	ST
265	04	6.4	1.4	250	3

CARD TYPE	DEPTH M	TEMP °C	SALIN ‰	SIGMA-T	SPEC VOL ANOMALY	$\Sigma \Delta D$ DYN M	Vm m/sec x 10	OXYG ml/l-10 <sup>2</sup>	PHOS µg-at/l-10 <sup>2</sup>	NITR µg-at/l-10	SILIC ug-at/l	pH -10 <sup>2</sup>	DD
OBS	0	7.29	34.026	26.63			14789						
STD	0	7.29	34.026	26.63	141.48	0.000	14789						
STD	10	7.25	34.029	26.64	140.89	.014	14789						
STD	20	7.21	34.033	26.65	140.25	.028	14789						
STD	30	7.27	34.037	26.64	140.89	.042	14794						
OBS	49	7.10	34.048	26.68			14790						
STD	50	7.08	34.049	26.68	137.78	.070	14789						
STD	75	6.59	34.068	26.76	130.26	.104	14774						
OBS	96	6.12	34.086	26.84			14759						
STD	100	6.05	34.089	26.85	122.35	.135	14757						
OBS	143	5.47	34.121	26.95			14741						
STD	150	5.42	34.126	26.96	112.66	.194	14740						
OBS	190	5.23	34.151	27.00			14740						
STD	200	5.19	34.156	27.01	108.40	.249	14740						
OBS	237	5.09	34.169	27.03			14742						
STD	250	5.06	34.171	27.03	106.31	.303	14743						
OBS	285	5.02	34.177	27.04			14747						
STD	300	5.02	34.183	27.05	105.52	.356	14749						
OBS	380	5.03	34.211	27.07			14763						
STD	400	5.00	34.212	27.07	104.12	.461	14765						
OBS	475	4.84	34.211	27.09			14771						
STD	500	4.81	34.212	27.10	102.94	.564	14774						
OBS	568	4.71	34.217	27.11			14781						
STD	600	4.64	34.217	27.12	101.56	.666	14784						
STD	700	4.36	34.222	27.15	98.92	.767	14789						
OBS	752	4.19	34.227	27.17			14790						
STD	800	4.03	34.237	27.20	94.81	.864	14792						
STD	900	3.69	34.266	27.26	89.61	.956	14794						
OBS	939	3.56	34.280	27.28			14796						
STD	1000	3.39	34.305	27.32	84.06	1.043	14799						
OBS	1128	3.09	34.369	27.40			14809						
STD	1250	2.86	34.444	27.48	69.42	1.234	14820						
OBS	1285	2.81	34.468	27.50			14824						

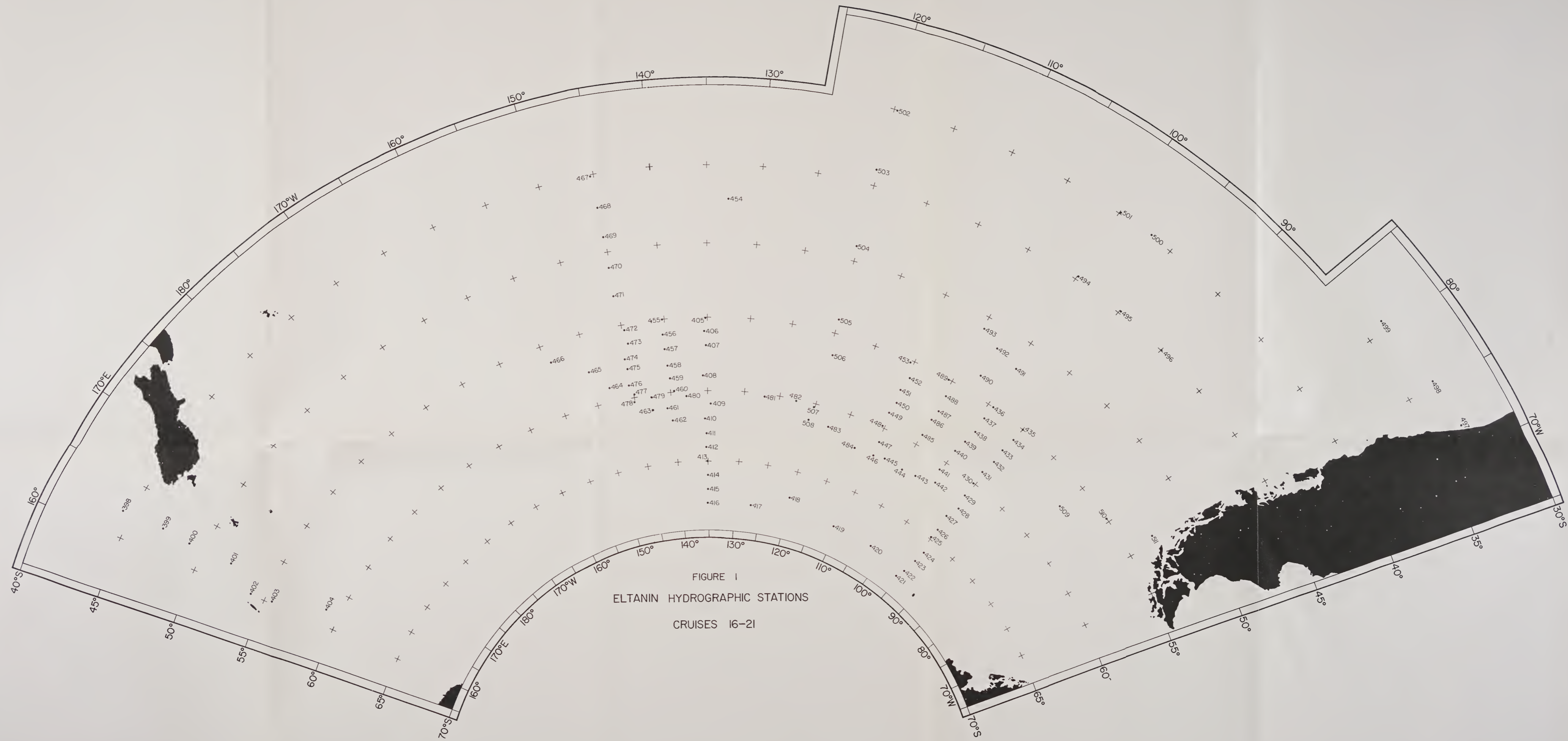


FIGURE I  
ELTANIN HYDROGRAPHIC STATIONS  
CRUISES 16-21



COLUMBIA LIBRARIES OFFSITE



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