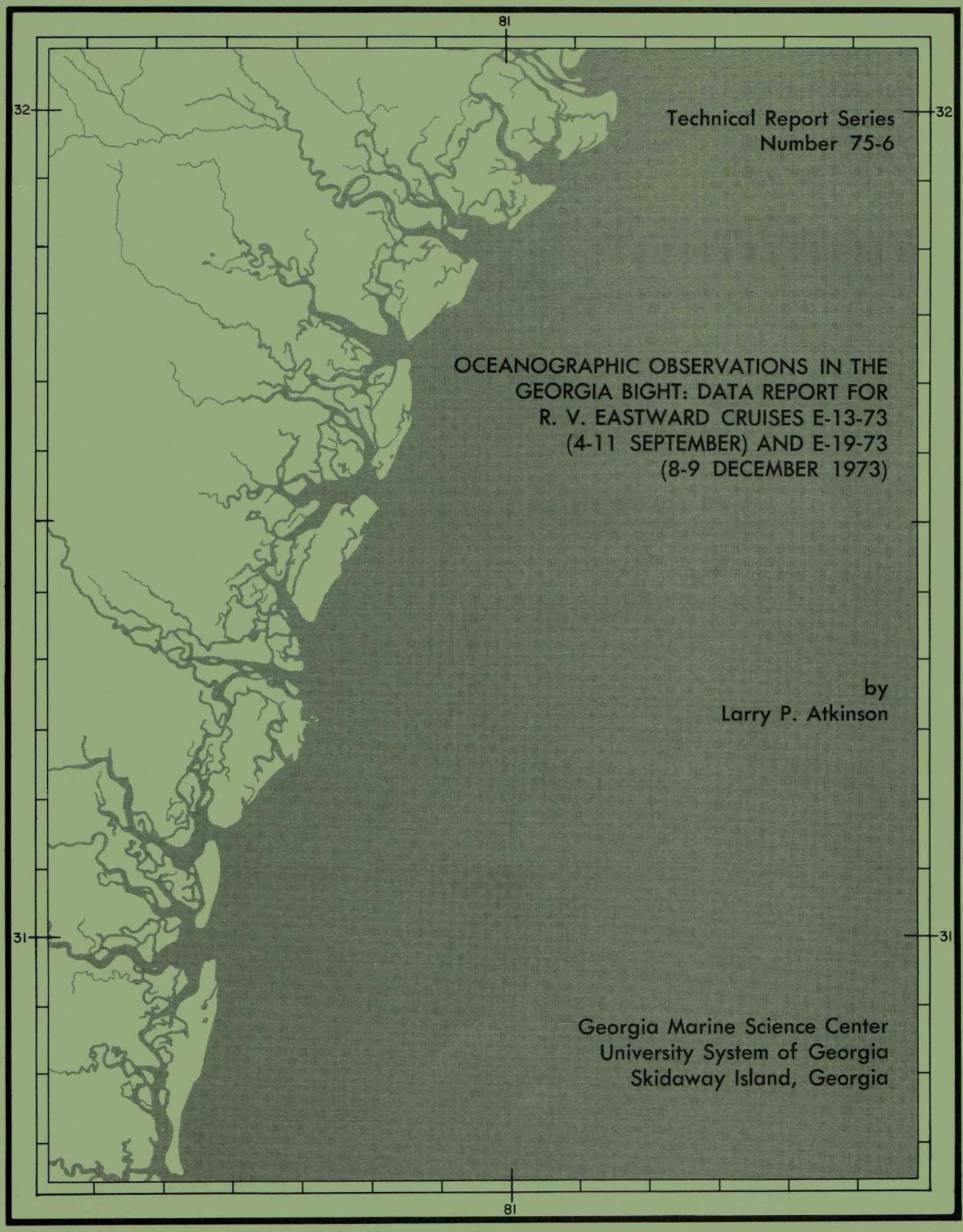

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OCEANOGRAPHIC OBSERVATIONS IN THE GEORGIA BIGHT: DATA REPORT FOR R. V. EASTWARD CRUISES E-13-73 (4-11 SEPTEMBER) AND E-19-73 (8-9 DECEMBER 1973)

by
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Oceanographic Observations in the Georgia Bight: Data Report for R. V. EASTWARD Cruises E-13-73 (4-11 September) and E-19-73 (8-9 December 1973)

by

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ABSTRACT

Data from Cruise E-13-73 (4-11 September 1973) and Cruise E-19-73 (8-9 December 1973) of the R.V. EASTWARD in the Georgia Bight are presented. Included are the NODC station printouts with the following data: depth, temperature, salinity, oxygen, phosphate, nitrate, silicate, dissolved organic carbon, weather, ships' position, station time and depth. Biological data include: chlorophyll, carbon-14 primary productivity, particulate carbon and nitrogen, principal zooplankton species and main benthic macroinvertebrates. Sediment size analysis and mercury analysis are also included.

TABLE OF CONTENTS

ACKNOWLEDGMENTS

These cruises could not have taken place except for the outstanding cooperation of many people. Ship time was provided by the Oceanographic Program of Duke University Marine Laboratory. The Oceanographic Program is supported by the National Science Foundation, Grant GA-27725. George Newton and Teri Lynn Herbert of the Program are especially thanked for the assistance. The ship's crew, headed by Captain Sandoy, were cooperative, as they always are. General support for this research was provided by the Skidaway Institute of Oceanography and specific support was provided by the International Decade of Ocean Exploration (NSF-GX-33615 and NSF-GX-39141) and the Environmental Protection Agency (R-800-372).

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Hydrography	Dr. Larry Atkinson
Phytoplankton	Dr. William Dunstan
Zooplankton	Dr. Lowell Sick
Trace Metals	Dr. Herbert Windom
Benthos	Dr. John Kraeuter
Dissolved Organic Carbon	Dr. Wayne Gardner
Particulate Organic Carbon & Particulate Nitrogen	Dr. Ev Haines
Zooplankton Respiration	Dr. John Hall

Cruise participants are as follows:

E-13-73

Larry Atkinson	Dan Perlmutter
Wayne Gardner	Helen Beaty
Lowell Sick	Gary Baptist
John Hall	Frank Taylor
Evelyn Haines	Elizabeth Waiters
John Kraeuter	Bill Gunter
Bill Dunstan	Roy Smithberg

E-19-73

Larry Atkinson	Helen Beaty
Wayne Gardner	Frank Taylor
Lowell Sick	Bill Gunter
John Hall	Ron Wallace
John Kraeuter	Bruce Drennen
Greg McIntire	Bruce Haines
Evelyn Haines	

In addition, the following people participated in the data processing: Ann Atkinson, Joe Natoli and Ralph Smith. Paula Vopelak is thanked for typing the manuscript.

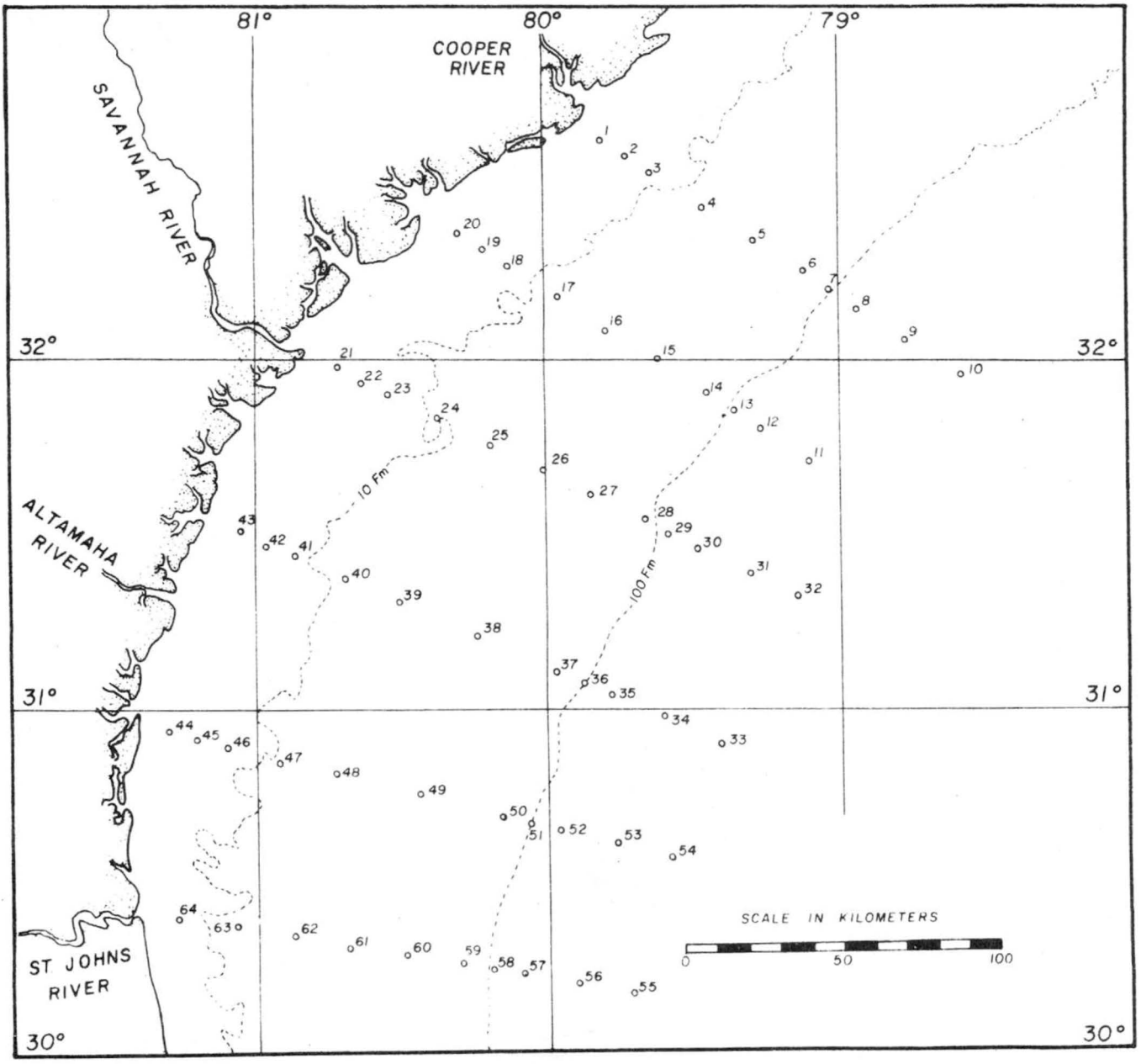
The National Oceanographic Data Center provided data processing, listings and magnetic tape outputs.

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

As part of a study of the biology, chemistry, physics and geology of the Georgia Bight and its waters, a survey of the area was made in September and December 1973, on board the R. V. EASTWARD (Cruises E-13-73 and E-19-73). The stations are shown in Figure 1. All data available from Cruises E-13-73 and E-19-73 are shown in Appendices A and B, respectively.



DISPOSITION OF DATA

The hydrographic data (salinity, temperature, nitrate, phosphate, silicate and oxygen) are on file with the National Oceanographic Data Center in Washington, D. C. and at the Skidaway Institute of Oceanography. The biological, geological and chemical data are available from Skidaway Institute of Oceanography.

METHODS

Hydrographic casts were made with teflon-lined Nansen bottles fitted with reversing thermometers. Sampling depths were determined using normal wire out, wire angle and thermometric depth techniques. A bathythermograph cast was made prior to each station to determine bottle spacing. Drift bottles were released at selected stations. They were made from green wine bottles weighted with sand and corked. They each contained a Day-Glo card requesting return of the card. Samples for chlorophyll, carbon-^{14} primary productivity, particulate organic carbon and particulate nitrogen were obtained by a separate cast using Niskin bottles. Reported weather observations were taken from the bridge log and represent the deck officer's observations. The other analytical methods were as follows:

Table 1. Analytical Methods

Analysis	Methods
Salinity	Portable High Precision Laboratory Salinometer
Oxygen	Standard Winkler Titration (Strickland and Parsons 1965)
Phosphate	Reduced phosphomolybdate (*ibid*)
Silica	Reduced silicomolybdate (*ibid*)
Nitrate	Hydrazine reduction (*ibid*, 1960)
Dissolved Organic Carbon	Persulfate oxidation/IR analysis (Menzel & Vaccaro, 1964)
Particulate Organic Carbon	High temperature combustion (*ibid*)
Particulate Nitrogen	Micro-Dumas/Coleman analyzer
Chlorophyll	*in vitro* fluorimetric (Yentsch & Menzel, 1963)
Primary Productivity	Carbon-^{14} assimilation (Steeman Nielson, 1952)

Methods for the benthic samples are as follows:

Sediments: Sediment samples were taken with a box dredge, and a small subsample was removed, placed in a plastic bag and returned to the laboratory for grain size analysis. All sieve fractions were dried and kept separate after the standard analysis. These fractions were then acidified and reweighed to remove carbonates. Grain size of the samples with large amounts of silts and clays was determined by pipette analysis.

The organic sample was placed in a plastic container and immediately frozen. These samples remained frozen until they were cut into cubes in the laboratory. Four cubes were selected from each sample, dried at 60°C, weighed, ashed at 500°C, weighed and ash-free dry weight was determined.

Benthos: Benthic invertebrates were sampled with a small biological trawl (4mm mesh) on E-13-73 and a modified anchor dredge fitted with a 2m tail encased in stainless 4mm wire on E-19-73. All trawls were for two minutes, and samples were preserved in ethanol. When large amounts of sediment were brought up, the sample was divided into one-third or one-fourth size subsamples and an appropriate amount saved. The remaining subsamples were sorted for larger organisms such as clams, starfish, sand dollars and crabs. These specimens were counted, placed in the sample and their numbers were recorded. All sorting was done in the laboratory. Supplemental data and specimens were obtained from otter trawls.

Mercury: Water samples for mercury analysis were collected from the upper two meters by pumping with a peristaltic pump using polypropylene tubing attached to a 10 meter non-metallic boom. This allowed samples to be collected uncontaminated by the ship. Samples collected in PVC Niskin bottles using the ship's hydro winches were found to be contaminated giving spurious high values. Water samples were collected in Pyrex BOD bottles and acidified with concentrated sulfuric acid to a pH of less than 1.

Prior to analysis samples were further oxidized with nitric acid, potassium permanganate and potassium disulfate. This was followed by reduction of the mercury in the sample to its zero valance state with stannous sulfate. The mercury vapor was then aerated using a peristaltic pump into the mercury analyzer system (Laboratory Data Control). Sample absorption was compared to standards prepared in a similar way. Based on replicate seawater analyses, the analytical precision for mercury is $\pm$10% at a concentration of 35 ng/1.

REFERENCES

Menzel, D. W. and R. F. Vaccaro. 1964. The measurement of dissolved organic and particulate carbon in seawater. *Limnol. Oceanogr., 9:* 138-142.

Steeman-Nielson, E. 1952. The use of radioactive carbon (^{14}C) for measuring organic production in the sea. *J. du Cons. Internat. Explor. Mer., 19:* 117-140.

Strickland, J. D. H. and T. R. Parsons. 1960. *A manual of seawater analysis.* Bulletin No. 125. Fisheries Research Board of Canada. 185 p.

Strickland, J. D. H. and T. R. Parsons. 1964. *A manual of seawater analysis.* Bulletin No. 125, second edition, revised. Fisheries Research Board of Canada. 203 p.

U. S. Geological Survey. 1973. *Water Resources Data for South Carolina.* 210 pp.

U. S. Geological Survey. 1973a. *Water Resources Data for Georgia.* 231 pp.

Yentsch, C. S. and D. W. Menzel. 1963. A method for the determination of phytoplankton chlorophyll and phaeophytin by fluorescence. *Deep-Sea Res., 10:* 221-31.

APPENDICES

APPENDIX A

Cruise E-13-73 Data

RUNOFF AND WEATHER

The observed weather at each station is listed with the hydrographic data. Prior to the cruise the southeast coast was under the influence of a large stationary high centered over the Carolinas. Winds were generally northerly and light. During the cruise the high weakened and moved southeasterly. Winds remained northerly and light.

River flows from the principal rivers (Altamaha, Savannah and Cooper) are summarized in the following table:

Table 1. Runoff data for principal rivers. Average daily flow rates (m^3/day) are shown.

Date	Altamaha/Savannah/Cooper m^3/sec			Total km^3/day
August 22	246	279	281	.069
23	232	270	281	.067
24	228	268	345	.073
25	229	271	337	.072
26	217	272	532	.088
27	196	268	203	.057
28	179	259	357	.069
29	167	252	385	.069
30	162	246	365	.067
31	156	245	379	.067
Sept. 1	159	251	379	.068
2	167	253	419	.072
3	166	248	365	.067
4	161	239	334	.063
5	164	233	279	.058
6	159	227	314	.060
7	145	228	422	.067
8	134	234	300	.058
9	130	236	408	.067
10	130	238	348	.062
11	128	238	212	.050
				total 1.39 km^3

HYDROGRAPHIC DATA

The following data are directly from the NODC listing. The headings indicate the following:

1. NODC: NODC identification code
2. SH: ship (EZ=EASTWARD)
3. LAT: Latitude of station
4. LONG: Longitude of station
5. MSQ: Marsden Square
6. ID: Drift indicator (29=no drift)
7. MO: month (GMT)
8. DY: day (GMT)
9. HR: hour (GMT) to tenths (xx.x)
10. YEAR: year (GMT)
11. CRNO: cruise number
12. STANO: station number
13. DEPTH BOT: depth to bottom (meters) (xxxx)
14. DNP: maximum depth of samples in hundreds of meters
15. WAVE DIR: wave direction tens of degrees
16. WAVE HT: wave height in sea state units
17. WAVE P: wave period, not reported
18. WAVE S: sea amount, not reported
19. WC: weather code (WMO Code 4501)
20. CLOUD TY: cloud type (WMO Code 0500)
21. CLOUD AMT: cloud amount (WMO Code 2700)
22. NODC STANO: NODC station number
23. CASTMSG: cast messenger time (GMT) in tenths (xx.x)
24. CTYPE: OBS=observed data, STD=interpolated standard depth
25. DEPTH: depth in meters (xxxx). "T" indicates thermometric depth data
26. TEMP: temperature in ^{o}C to hundredths (xx.xx)
27. SAL: salinity in parts per thousand (xx.xx)
28. SIGMAT: sigma-t (density) to hundredths (xx.xx)
29. SPVOLAN: specific volume anomaly x 107
30. SYNDPH: $\Sigma\Delta D$, dynamic meters $x10^3$
31. SVF: sound velocity
32. OXY: oxygen (ml/L) (x.xx)
33. PO4: phosphate (µg-at/L) (x.xx)
34. TOTP: total phosphate (not reported)
35. NO2: nitrite (not given)
36. NO3: nitrate (µg-at/L) (xx.x)
37. SIO4: silicate (µg-at/L) (xx.x)
38. DOC: dissolved organic carbon (mgC/L) (x.xx)

Refer to NODC manual M-2 ("Processing physical and chemical data from oceanographic stations") for further information and explanation of the codes.

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSO	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	DEPTH STAND	BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312229	EZ	32377N		079474W	116	29	09	05	115	1973	013	001		0011	1	14	1		X1	8	5	0001
									14	F02	159	267			01							
			STD	0000	2726	3465	2239	0054552	0000	15396	497											
	115		OBS	0000	2726	3465	2239			15396	497	013				005	028	118				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
					WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO V OBS										
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**						
312229	EZ	32350N	079423W	116	29	09	05	125	1973	013	**2**		0012	1	14	1		X1	8	6		0002
								14	502	159	267		01									
		STD	0000	2714	3498	2268	0051815	0000	15397	501												
	125	OBS	0000	2714	3498	2268			15397	501	010			000		128						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSG ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
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			14 F02	169	272			02							
	STD	0000	2732	3504	2267	0051934	0000	15402	500						
138	OBS	0000	2732	3504	2267			15402	500	000			003	020	132
	STD	0010	2726	3505	2269	0051720	0052	15402	496						
138	OBS	0010	2726	3505	2269			15402	496	000			003	021	108

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	FZ	32272N	079278W	116	29	09	05	154	1973	013	**4**	0021	1	16	1			X1	8	3	0004

	WATER CLR	WATER TP	WIND DR	WIND F/S	PAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	16	F02	176	278					02

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2792	3525	2263	0052281	0000	15417	510						
	154	OBS	0000	2792	3525	2263			15417	510	008			000	000	176
		STD	0010	2608	3540	2333	0045623	0049	15379	484						
		STD	0020	2424	3555	2401	0039218	0091	15340	458						
	154	OBS	0020	2424	3555	2401			15340	458	018			000	001	142

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
312229	EZ	32217N	079178W	116	29	09	05	175	1973	013	5	0031	1	16	1			X1	8	3	0005

	WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS
	16	F02	173	283		04			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2864	3553	2260	0052545	0000	15435	516						
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	STD	0010	2849	3552	2265	0052177	0052	15434	508						
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	STD	0020	2830	3561	2278	0050970	0104	15432	504						
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	STD	0030	2203	3591	2492	0030549	0145	15291	475						
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NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND E/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
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									16	F03	163	289		05								
			STD	0000	2845	3539	2256	0052946	0000	15430	508											
	191		OBS	0000	2845	3539	2256			15430	508	003				000	003	156				
			STD	0010	2700	3576	2331	0045815	0049	15404	498											
	191		OBS	0010	2700	3576	2331			15404	498	003				000	002	140				
			STD	0020	2425	3625	2453	0034202	0089	15348	537											
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	191		OBS	0030	2386	3628	2467			15340	521	006				000		166				
			STD	0050	2237	3635	2516	0028369	0184	15308	473											
	191		OBS	0050	2237	3635	2516			15308	473	009				007	015	132				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
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	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	16	F03	163	294		06			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
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	STD	0010	2858	3584	2286	0050162	0051	15439	489						
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	STD	0020	2732	3598	2337	0045257	0098	15415	500						
203	OBS	0020	2732	3598	2337			15415	500	009			000		148
	STD	0030	2510	3619	2423	0037179	0140	15369	496						
	STD	0050	2189	3640	2533	0026716	0204	15296	489						
203	OBS	0050	2189	3640	2533			15296	489	005			017	020	152
	STD	0075	2015	3630	2573	0023000	0266	15253	436						
203	OBS	0075	2015	3630	2573			15253	436	030			029	020	134
203	OBS	0090	1946	3634	2594			15237	409	040			056	030	128

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
							WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS							
312229	EZ		32101N	078585W	116	28	09	05	228	1973	013	**8**		0180	1	16	3			X1	8	4
									20	16	F03	159	278		07							

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	STD	0000	2804	3532	2264	0052153	0000	15420	502						
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	STD	0010	2833	3570	2283	0050381	0051	15432	496						
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228	OBS	T0048	2162	3632	2535			15288	487	007			003		118
	STD	0050	2138	3632	2542	0025915	0193	15282	483						
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228	OBS	T0097	1736	3639	2651			15179		048			005		138
	STD	0100	1731	3637	2651	0015654	0293	15178	403						
	STD	0125	1692	3626	2652	0015659	0332	15169	378						
228	OBS	T0145	1664	3620	2654			15163	366	061			105	054	106
	STD	0150	1658	3619	2654	0015491	0371	15162	364						
228	OBS	T0174	1630	3616	2659			15157	360	065			100		108

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	DEPTH STAND	BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
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						STD	0010	2813	3547	2273	0051401	0051	15426	500								
					010	OBS	0010	2813	3547	2273			15426	500	005			000		168		
						STD	0020	2576	3606	2393	0039967	0097	15381	516								
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						STD	0030	2379	3617	2461	0033514	0134	15337	497								
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						STD	0050	2084	3632	2556	0024516	0192	15267	454								
						STD	0075	1953	3633	2592	0021210	0249	15236	373								
					010	OBS	T0097	1848	3634	2619			15211	333	057			098	043	108		
						STD	0100	1834	3633	2622	0018399	0299	15207	335								
						STD	0125	1728	3625	2642	0016578	0342	15179	345								
					010	OBS	T0146	1648	3617	2655			15158	346	071			126	048	144		
						STD	0150	1636	3615	2657	0015260	0382	15155	343								
					010	OBS	T0192	1504	3597	2673			15119	325	081			126	042	160		
						STD	0200	1483	3594	2675	0013659	0454	15113	328								
						STD	0250	1322	3572	2692	0012083	0519	15066	338								
					010	OBS	T0284	1184	3556	2707			15023	339	126			198	114	190		
						STD	0300	1111	3548	2715	0010000	0574	14999	338								
					010	OBS	T0357	0807	3517	2742			14893	323	167			294	167	194		

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANC

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
312229	EZ	32048N	078458W	116	28	09	06	039	1973	013	10	0418	1	16	3	X1	8	2	0010
							20	16	F03	176	267	09							
		STD	0000	2798	3540	2272	0051396	0000	15420	520						
	039	OBS	0000	2798	3540	2272			15420	520	008			000	006	210
	039	OBS	T0008	2801	3541	2272			15422	501	003			002	008	200
		STD	0010	2741	3555	2302	0048594	0050	15411	553						
	039	OBS	T0014	2625	3579	2357			15388	631	007			001	012	190
		STD	0020	2451	3595	2423	0037110	0093	15350	584						
		STD	0030	2198	3614	2511	0028725	0126	15292	515						
	039	OBS	T0035	2089	3621	2546			15265	486	015			022	026	134
		STD	0050	1850	3616	2605	0019827	0174	15201	426						
	039	OBS	T0069	1664	3611	2647			15149	375	071			120	055	110
		STD	0075	1662	3610	2647	0015968	0219	15150	370						
		STD	0100	1655	3608	2646	0016076	0259	15151	356						
	039	OBS	T0102	1654	3613P	2651Q				355						122
		STD	0125	1599	3605	2657	0015126	0298	15138	354						
		STD	0150	1493	3602	2679	0013113	0333	15109	352						
	039	OBS	T0150	1493	3602	2679			15109	352	092			145	060	134
	039	OBS	T0173	1353	3578	2691			15064	350	097			152	074	118
		STD	0200	1213	3567	2711	0010203	0392	15020	347						
		STD	0250	1022	3548	2730	0008361	0438	14959	340						
		STD	0300	0921	3528	2732	0008251	0480	14928	331						
	039	OBS	T0320	0906	3520	2728			14924	327	295			289	150	078

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	EZ	31442N	079060W		116	19	09	06	135	1973	013	II	0525	1	99	0			X2	5	8	0011

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	26	99	F01	169	261				10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2845	3507	2232	0055245	0000	15426	514						
135	OBS	0000	2845	3507	2232			15426	514	009			001	010	112
135	OBS	T0009	2859	3586	2287			15439	552	012			000	011	100
	STD	0010	2859	3586	2287	0050016	0053	15440	545						
135	OBS	T0016	2854	3590	2291			15440	509	005			000	011	100
	STD	0020	2843	3595	2299	0048929	0102	15439	509						
	STD	0030	2810	3606	2318	0047167	0150	15435	510						
135	OBS	T0042	2764	3616	2341			15428	511	004			000	007	164
	STD	0050	2732	3618	2353	0043945	0241	15422	509						
	STD	0075	2597	3623	2399	0039631	0346	15397	501						
135	OBS	T0084	2537	3624	2418			15385	498	008			000	010	144
	STD	0100	2409	3625	2458	0034068	0438	15357	521						
	STD	0125	2180	3627	2526	0027709	0515	15304	557						
135	OBS	T0127	2160	3627	2531			15300	560	016			014	017	148
	STD	0150	1911	3629	2600	0020695	0576	15236	390						
135	OBS	T0155	1860	3630	2613			15223	362	054			088	039	190
	STD	0200	1469	3583	2670	0014114	0663	15107	340						
135	OBS	T0230	1258	3558	2694			15039	330	092			193	093	168
	STD	0250	1138	3543	2706	0010703	0725	14999	327						
	STD	0300	0922	3517	2724	0009051	0774	14926	323						
135	OBS	T0315	0880	3512	2726			14913	322	157			219	169	128
	STD	0400	0875	3511	2727	0008947	0864	14925	322						
135	OBS	T0413	0874	3511	2727			14926	322	151			287	158	174

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	STANO	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAN
						WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY.	PO4	TOTP	NO2	NO3	SI04	DOC						
312229	EZ	31385N	079108W	116	19	09	06	176	1973	013	12		0280	1	99	0		X1	8	6		0012
						06	99	FC0		166	289			09								
		STD	0000	2808	3514	2249	0053576	0000	15419	514												
176		OBS	0000	2808	3514	2249			15419	514	002			000	007	194						
		STD	0010	2750	3555	2299	0048867	0051	15413	500												
176		OBS	0010	2750	3555	2299			15413	500	010			002	009	208						
176		OBS	T0019	2733	3566	2313			15412	514	004			000	009	154						
		STD	0020	2716	3568	2320	0046922	0099	15408	516												
		STD	0030	2559	3587	2384	0040871	0143	15377	531												
176		OBS	T0048	2320	3612	2474			15325	537	001			000	011	240						
		STD	0050	2300	3612	2481	0031719	0216	15321	531												
		STD	0075	2083	3616	2544	0025751	0287	15269	463												
176		OBS	T0096	1956	3620	2581			15239	416	032			053	032	204						
		STD	0100	1955	3621	2582	0022233	0347	15240	404												
		STD	0125	1920	3628	2596	0020951	0401	15235	352												
176		OBS	T0144	1857	3633	2616			15221	342	054			100	039	158						
		STD	0150	1812	3629	2624	0018379	0451	15208	363												
176		OBS	T0192	1560	3602	2664			15137	429	085			133	069	114						
		STD	0200	1542	3601	2667	0014436	0533	15132	404												
176		OBS	T0240	1400	3582	2684			15091	325	098			164	076	138						
		STD	0250	1350	3574	2688	0012474	0600	15076	317												
176		OBS	T0269	1240	3557	2697			15040	316	121			173	107	170						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANC
31	2229	EZ	31511N	079216W	116	19	09	06	197	1973	013	13	0105	1	99	0				X1	8 4	0013

CASTMSG	CTYPE	DEPTH	WATER TEMP	WIND CLR	WIND TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
				99	F00		152						06							
	STD	0000	2800											504						
197	OBS	0000	2800											504	004			000	008	148
	STD	0010	2742	3555	2302		0048612						15411	517						
197	OBS	0010	2742	3555	2302								15411	517	005			000	003	128
	STD	0020	2726	3565	2314		0047442						15410	510						
197	OBS	0020	2726	3565	2314								15410	510	010			000	007	118
	STD	0030	2472	3597	2418		0037578						15357	507						
	STD	0050	2126	3634	2546		0025479						15279	485						
197	OBS	0050	2126	3634	2546								15279	485	011			009	022	118
197	OBS	0074	1996	3628	2577								15247	431	020			030	027	158
	STD	0075	1991	3628	2578		0022545						15246	429						
	STD	0100	1891	3626	2603		0020270						15222	397						
197	OBS	0102	1884	3626	2604								15221	396	045			060	043	108

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	DEPTH STAND	BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAN
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312229	EZ	31545N	079280W	116	19	09	06	218	1973	013	14		0065	1	14	1		X1	8	2		0014
											14	F02	156	278		07						
			STD	0000	2809	3531	2262	0052381	0000	15421												
	218		OBS	0000	2809	3531	2262			15421		006				000	007	190				
			STD	0010	2749	3545	2292	0049551	0051	15411												
	218		OBS	0010	2749	3545	2292			15411		002				000	008	164				
			STD	0020	2442	3620	2444	0035047	0093	15351												
	218		OBS	0020	2442	3620	2444			15351		006				000	009	122				
			STD	0030	2291	3622	2490	0030706	0126	15316												
	218		OBS	0030	2291	3622	2490			15316		005				000	003	144				
	218		OBS	0040	2206	3630	2521			15297		005				000	012	168				
			STD	0050	2169	3629	2530	0026977	0184	15289												
	218		OBS	T0050	2169	3629	2530			15289		004				001	012					
	218		OBS	T0060	2123	3629	2543			15279		010				005	011	154				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ		32000N	079380W	116	29	09	07	000	1973	013	15	0042	1	99	0			X1	8	5	0015

CASTMSG	CTYPE	DEPTH	WATER TEMP	WIND CLR	WIND TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS	SVF	DXY	PO4	TOTP	NO2	NO3	SIO4	DOC
				99	F	00	159						05							
	STD	0000	2820	3521	2251			0053448	0000				15423	418						
000	OBS	0000	2820	3521	2251								15423	418	005			000	003	164
	STD	0010	2783	3546	2282			0050535	0052				15419	500						
000	OBS	0010	2783	3546	2282								15419	500	010			000	004	144
	STD	0020	2685	3591	2347			0044300	0099				15404	516						
000	OBS	0020	2685											516	007			000	009	164
	STD	0030	2362	3616	2465			0033114	0138				15333	524						
000	OBS	0030	2362	3616	2465								15333	524	010			000	004	168
000	OBS	0040	2323	3620	2480								15326	514	010			000	003	204

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS				
	CASTMSG		CTYPE	DEPTH		TEMP		SAL		SIGMAT	SPVOLAN	DYNDPH	SVF		OXY	PO4	TOTP	NO2	NO3	SI04	**DOC**	
312229	EZ	32055N	079475W	116	29	09	07	017	1973	013	**16**		0027	1	14	0		X1	8	2		0016
											14	F02	169	267		04						
			STD	0000		2814		3563		2284	0050238	0000	15426	484								
	017		OBS	0000		2814		3563		2284			15426	484	003				000	007	174	
			STD	0010		2795		3563		2291	0049688	0050	15423	497								
	017		OBS	0010		2795		3563		2291			15423	497	002				003	008	190	
	017		OBS	0017		2560		3558		2362			15372	483	007				000	004	164	
			STD	0020		2497		3562		2384	0040820	0095	15358	484								
	017		OBS	0027		2436		3584		2419			15347	501	028				000	006	174	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	32110N	079576W	116	29	09	07	1973	013	17	0020	1	14	1		X1	8	2			0017	
							14	F02	169	267			03									
		STD	0000	2773	3553	2290	0049682	0000	15416	496												
	020	OBS	0000	2773	3553	2290			15416	496	007			000	012	194						
		STD	0010	2744	3557	2303	0048530	0049	15412	501												
	020	OBS	0010	2744	3557	2303			15412	501	001			000	004							
	020	OBS	0019	2649	3564	2328			15393	508	012			000	015							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ		32160N	080072W		117	20	09	07	1973	013	**18**	0020	1	16	2			X1	8	2	0018

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	16	F03	166	267					03

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2775	3499	2249	0053621	0000	15410	494						
050	OBS	0000	2775	3499	2249			15410	494	014			000	005	
	STD	0010	2765	3511	2261	0052486	0053	15411	488						
050	OBS	0010	2765	3511	2261			15411	488	015			000	022	
	STD	0020	2761	3514	2265	0052190	0105	15412	476						
050	OBS	0020	2761	3514	2265			15412	476	013			000	024	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	32197N	080122W	117	20	09	07	064	1973	013	19		0016	1	16	2		X1	8	2		0019
										16	F03	159	267			03						
		STD	0000	2787	3485	2235	0054999	0000	15412	501												
	064	OBS	0000	2787	3485	2235			15412	501	013				001	005	118					
		STD	0010	2784	3484	2235	0055022	0055	15412	499												
	064	OBS	0010	2784	3484	2235			15412	499	007				000	000	172					
	064	OBS	0015	2780	3482	2235			15412	495	010				000	000	142					

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ	32212N	080164W	117	20	09	07	074	1973	013	**20**	0012	1	16	1			X1	8	2	0020

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
			16	F03	152	267			02

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2814	3323	2104	0067497	0000	15400	483						
	074	OBS	0000	2814	3323	2104			15400	483	014			000	031	192
		STD	0010	2795	3466	2218	0056655	0062	15413	477						
	074	OBS	0010	2795	3466	2218			15413	477	018			000	020	152

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	31578N	080445W	117	10	09	07	121	1973	013	**21**			0010	1	99	0		X1	8	3	0021
							13	04	F01	163	278			02								

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2796	3247	2053	0072403	0000	15388	514						
	121	OBS	0000	2796	3247	2053			15388	514	025			000	051	178
		STD	0010	2796	3439	2197	0058627	0066	15410	467						
	121	OBS	0010	2796	3439	2197			15410	467	024			000	040	101

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	WIND BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	31555N	080393W	117	10	09	07	133	1973	013	22		0012	1	99	0		X1	8	3		0022
						11	04	F01	166	283			01									
		STD	0000	2774	3459	2219	0056468	0000	15406	473												
	133	OBS	0000	2774	3459	2219			15406	473	021					000	036	174				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	WIND BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	31535N	080341W	117	10	09	07	148	1973	013	23	0009	1	99	0		X1	8	3			0023
							04	F01	169	283		02										
		STD	0000	2800	3477	2224	0055984	0000	15414	484												
	148	OBS	0000	2800	3477	2224			15414	434	018			000	035	168						
	148	OBS	0009	2778	3478	2232			15410	486	024			000	036	226						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ	31491N	080235W	117	10	09	07	173	1973	013	24		0018	1	99	0				X1	8 4	0024
					11	99	F00	173		239			03									

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2779	3515	2260	0052600	0000	15413	486						
173	OBS	0000	2779	3515	2260			15413	486	021			000	019	164
	STD	0010	2752	3530	2280	0050726	0052	15410	486						
173	OBS	0010	2752	3530	2280			15410	486	011			000	018	158
173	OBS	0018	2713	3558	2313			15406	474	012			000	020	204

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
312229	EZ	31445N	080130W		117	10	09	07	195	1973	013	**25**	0029	1	14	1			X1	8	5	0025
											14	F01	159	300		04						

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2890	3578	2270	0051578	0000	15444	492						
195	OBS	0000	2890	3578	2270			15444	492	003			001	002	194
	STD	0010	2774	3575	2306	0048175	0050	15420	510						
195	OBS	0010	2774	3575	2306			15420	510	022			011	003	144
	STD	0020	2474	3598	2418	0037556	0093	15356	536						
195	OBS	0020	2474	3598	2418			15356	536	006			000	012	122
195	OBS	0029	2446	3603	2430			15352	542	005			000	013	168

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	EZ	31405N	080030W		117	10	09	07	210	1973	013	**26**	0032	1	14	1			X1	8	4	0026

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	14	F01	152	317					04

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2848	3563	2273	0051314	0000	15433	503						
	210	OBS	0000	2848	3563	2273			15433	503	003			000	007	122
		STD	0010	2762	3561	2300	0048804	0050	15416	510						
	210	OBS	0010	2762	3561	2300			15416	510	019			000	005	138
		STD	0020	2494	3602	2415	0037847	0093	15362	540						
	210	OBS	0020	2494	3602	2415			15362	540	008			012	006	108
		STD	0030	2326	3622	2481	0031633	0128	15325	536						
	210	OBS	0032	2304	3624	2488			15320	531	007			000	010	134

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
					WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312229	EZ	31337N	079470W	116	19	09	08	001	1973	013	**27**		0050	1	99	0		X1	8	2	0027
								14	501	156	311		06								
		STD	0000	2912	3488	2195	0058741	0000	15439	453											
	001	OBS	0000	2912	3488	2195			15439	463	002			000	011	168					
		STD	0010	2874	3546	2252	0053408	0056	15439	485											
	001	OBS	0010	2874	3546	2252			15439	485	004			001	014	118					
		STD	0020	2830	3592	2301	0048746	0107	15436	520											
	001	OBS	0020	2830	3592	2301			15436	520	030			009	012	112					
		STD	0030	2785	3605	2325	0046447	0155	15429	498											
	001	OBS	0030	2785	3605	2325			15429	498	002			000	009	134					
	001	OBS	0040	2350	3622	2473			15333	520	006			000	012	100					
		STD	0050	2291	3630	2496	0030204	0231	15321	510											
	001	OBS	0050	2291	3630	2496			15321	510	000			000	018	128					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	FZ		31303N	079385W	116	19	09	08	019	1973	013	28	0135	1	99	0			X1	8	2	0028
									14	F01	169	306		07								

CAST	MSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
		STD	0000	2868	3474	2200	0058340	0000	15428	483						
	019	OBS	0000	2868	3474	2200			15428	483	004			001	011	138
		STD	0010	2848	3564	2274	0051283	0055	15435	505						
	019	OBS	0010	2848	3564	2274			15435	505	006			000	010	124
		STD	0020	2848	3604	2304	0048455	0105	15441	495						
	019	OBS	0020	2848	3604	2304			15441	495	001			000	032	144
		STD	0030	2793	3605	2323	0046666	0152	15431	511						
		STD	0050	2619	3613	2385	0040865	0240	15397	512						
	019	OBS	0050	2619	3613	2385			15397	512	001			000	012	096
	019	OBS	T0074	2299	3631	2495			15327	457	014			020	019	096
		STD	0075	2288	3631	2498	0030148	0329	15324	461						
	019	OBS	T0098	2046	3627	2563			15265	506	021			029	029	100
		STD	0100	2027	3626	2567	0023646	0396	15260	506						
		STD	0125	1804	3613	2614	0019231	0449	15200	443						
	019	OBS	T0130	1764	3609	2621			15183	418	056			092	056	138

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STANC	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS				
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312229	EZ	31284N	079338W	116	19	09	08	032	1973	013	29		0250	1	99	0		X1	8	2		0029
										14	F01	166	306					01				
		STD	0000	2852	3542	2256	0052946	0000	15432	485												
	032	OBS	0000	2852	3542	2256			15432	485	001			000	007	168						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	DEPTH STAND	BOT	DNP	WAVE OBS DP	HT	P	S	WC	CLOUD TY	AMT	NODC STANC
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP		SAL		SIGMAT		SPVOLAN	DYNDPH	SVF		OXY	PO4		TOTP	NO2		NO3	SIO4	DOC
312229	EZ		31260N	079282W	116	19	09	08	056	1973	013	30	0510	1	99	0		XI	8	2		0030	
									14	F01	166	267		10									
			STD	0000	2860		3608		2303		0048461	0000	15441	477									
	056		OBS	0000	2860		3608		2303				15441	477	008						000	014	174
	056		OBS	0008	2844		3610		2310				15439	472	007						000	021	168
			STD	0010	2844		3610		2310		0047875	0048	15439	472									
			STD	0020	2845		3609		2309		0048000	0096	15441	474									
	056		OBS	T0028	2845		3608		2308				15442	476	004						000	007	158
			STD	0030	2834		3610		2313		0047660	0144	15440	479									
	056		OBS	T0045	2740		3620		2351				15423	495	005						000	003	174
			STD	0050	2693		3622		2368		0042451	0234	15414	492									
			STD	0075	2457		3631		2448		0034916	0331	15365	475									
	056		OBS	T0092	2292		3633		2498				15328	464	010						014	018	174
			STD	0100	2203		3632		2523		0027870	0409	15307	444									
			STD	0125	1957		3629		2587		0021826	0471	15245	394									
	056		OBS	T0130	1914		3628		2598				15234	396	039						066	036	149
			STD	0150	1779		3615		2622		0018589	0522	15197	370									
	056		OBS	T0174	1617		3598		2648				15151	353	069						104	061	158
			STD	0200	1411		3574		2675		0013617	0602	15087	337									
			STD	0250	1094		3537		2709		0010403	0662	14983	321									
	056		OBS	T0260	1043		3531		2714				14966	320	131						257	032	108
			STD	0300	0888		3514		2727		0008734	0710	14914	335									
	056		OBS	T0346	0777		3502		2734				14877	348	168						261	177	128
			STD	0400	0768		3501		2735		0008076	0794	14882	357									
	056		OBS	T0432	0762		3500		2735				14885	360	170						236	154	144

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	DEPTH STAND	DEPT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312229	EZ	31230N		079154W	116	19	09	08	102	1973	013	31	0455	1	99	0		X1	8	2		0031
											32	F01	166	267		10						
			STD	0000	2852	3602	2301	0048643	0000	15438	482											
	102		OBS	0000	2852	3602	2301			15438	482	000			002	017	160					
			STD	0010	2848	3601	2302	0048631	0049	15439	479											
	102		OBS	0010	2848	3601	2302			15439	479	002			001	012	126					
	102		OBS	T0019	2848	3601	2302			15440	457	002			000	012	106					
			STD	0020	2847	3601	2302	0048628	0097	15441	459											
			STD	0030	2842	3605	2307	0048206	0146	15441	473											
	102		OBS	T0049	2832	3613	2316			15443	486	001			000	008	134					
			STD	0050	2826	3613	2318	0047235	0241	15442	485											
			STD	0075	2673	3620	2373	0042100	0353	15414	456											
	102		OBS	T0097	2526	3631	2427			15385	430	012			011	019	154					
			STD	0100	2502	3635	2438	0036020	0450	15380	423											
			STD	0125	2309	3661	2515	0028761	0531	15341	382											
	102		OBS	T0146	2154	3670	2566			15306	370	029			037	018	090					
			STD	0150	2123	3668	2573	0023324	0597	15299	375											
	102		OBS	T0195	1817	3645	2636			15219	418	042			079	028	102					
			STD	0200	1801	3642	2637	0017294	0698	15215	417											
			STD	0250	1605	3610	2660	0015292	0730	15161	403											
	102		OBS	T0290	1410	3582	2682			15103	391	103			162	071	090					
			STD	0300	1312	3570	2693	0012189	0848	15071	385											
	102		OBS	T0385	0805	3507	2734			14895	362	173			227	154	076					
			STD	0400	0776	3503	2736	0008011	0949	14886	362											
	102		OBS	T0432	0775	3503	2735			14891	368	167			233	190	074					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
312229	EZ	31170N	079070W	116 19 09 08	124	1973	013	**32**	0535	1	99	0		X1	8 4	0032
				36	F01	176	267		10							
		STD	0000	2872	3616	2305	0048270	0000	15444	524						
124		OBS	0000	2872	3616	2305			15444	524	006			000	010	134
		STD	0010	2868	3620	2309	0047903	0048	15445	568						
124		OBS	0010	2868	3620	2309			15445	568	010			006	012	106
		STD	0020	2870	3615	2305	0048365	0096	15447	531						
124		OBS	0020	2870	3615	2305			15447	531	011			000	009	114
		STD	0030	2853	3611	2308	0048134	0144	15444	536						
		STD	0050	2804	3610	2323	0046769	0239	15437	540						
124		OBS	T0050	2804	3610	2323			15437	540	011			000	014	128
		STD	0075	2706	3625	2366	0042757	0351	15422	526						
		STD	0100	2589	3640	2414	0038235	0453	15401	509						
124		OBS	T0100	2589	3640	2414			15401	509	013			006	008	122
		STD	0125	2446	3660	2474	0032677	0541	15374	490						
124		OBS	T0149	2304	3670	2523			15345	469	021			028	016	122
		STD	0150	2297	3670	2525	0027898	0617	15343							
124		OBS	T0197	2008	3660	2598			15275		036			051	024	106
		STD	0200	2000	3660	2600	0020925	0739	15273							
		STD	0250	1852	3651	2631	0018080	0836	15239							
124		OBS	T0294	1698	3634	2656			15199		037			051	018	160
		STD	0300	1672	3630	2659	0015526	0920	15192							
124		OBS	T0388	1292	3570	2697			15078		109			191	082	148
		STD	0400	1241	3562	2701	0011601	1056	15062							
124		OBS	T0488	0866	3512	2729			14936		170			250	161	148

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	EZ		30534N	079260W	116	09	09	08	174	1973	013	**33**		0750	1	99	0			X1	8 4	0033
											29	F01	186	311								10

CAST	MSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2892	3608	2292	0049482	0000	15447							
174		OBS	0000	2892	3608	2292			15447		007			000	010	154
		STD	0010	2862	3608	2302	0048568	0049	15443							
174		OBS	0010	2862	3608	2302			15443		005			000	009	154
		STD	0020	2864	3610	2303	0048538	0098	15445							
174		OBS	0020	2864	3610	2303			15445		005			000	013	144
		STD	0030	2858	3610	2305	0048425	0146	15445							
		STD	0050	2812	3609	2320	0047088	0242	15439							
174		OBS	0050	2812	3609	2320			15439		007			000	009	180
		STD	0075	2657	3634	2388	0040654	0351	15412							
		STD	0100	2491	3652	2454	0034486	0445	15380							
174		OBS	T0100	2491	3652	2454			15380		012			011	010	154
		STD	0125	2285	3665	2525	0027816	0523	15335							
		STD	0150	2123	3670	2574	0023188	0587	15299							
174		OBS	T0150	2123	3670	2574			15299		023			045	016	124
		STD	0200	1928	3655	2615	0019460	0693	15253							
174		OBS	T0200	1928	3655	2615			15253		043			058	023	102
		STD	0250	1826	3644	2633	0017908	0787	15231							
		STD	0300	1717	3630	2649	0016537	0873	15205	410						
174		OBS	T0300	1717	3630	2649			15205	410	051			088	030	138
		STD	0400	1481	3591	2673	0014409	1028	15145	380						
174		OBS	T0400	1481	3591	2673			15145	380	081			147	056	138
		STD	0500	1198	3548	2698	0012100	1160	15062	330						
174		OBS	T0500	1198	3548	2698			15062	330	133			184	105	124

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	EZ		30581N	079368W	116	09	09	08	196	1973	013	**34**	0530	1	99	0			X1	8	6	0034

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	99	F00	166	306					10

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
		STD	0000	2937	3612	2280	0050648	0000	15457	539						
	196	OBS	0000	2937	3612	2280			15457	539	008			000	008	098
		STD	0010	2872	3610	2300	0048750	0050	15445	526						
	196	OBS	0010	2872	3610	2300			15445	526	005			000	014	102
		STD	0020	2864	3611	2304	0048465	0098	15445	534						
	196	OBS	0020	2864	3611	2304			15445	534	001			002	046	148
		STD	0030	2851	3612	2309	0048024	0147	15444	534						
		STD	0050	2798	3614	2328	0046287	0241	15436	533						
	196	OBS	T0050	2798	3614	2328			15436	533	002			000	010	144
		STD	0075	2662	3625	2381	0041372	0350	15412	510						
		STD	0100	2505	3639	2440	0035830	0447	15381	488						
	196	OBS	T0100	2505	3639	2440			15381	488	031			020	009	098
		STD	0125	2296	3662	2519	0028343	0527	15338	468						
		STD	0150	2128	3672	2574	0023171	0592	15300	448						
	196	OBS	T0150	2128	3672	2574			15300	448	028			039	021	100
		STD	0200	1911	3652	2617	0019257	0698	15247	409						
	196	OBS	T0200	1911	3652	2617			15247	409	041			068	020	102
		STD	0250	1712	3613	2637	0017505	0790	15194	391						
		STD	0300	1494	3578	2660	0015333	0872	15131	373						
	196	OBS	T0300	1494	3578	2660			15131	373	095			160	077	088
		STD	0400	0999	3521	2714	0010260	1000	14972	333						
	196	OBS	T0400	0999	3521	2714			14972	333	160			267	150	088
		STD	0500	0858	3507	2726	0009177	1097	14934	331						
	196	OBS	T0500	0858	3507	2726			14934	331	182			200	180	070

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ	31042N	079470W		116	19	09	08	239	1973	013	**35**	0243	1	99	0			X1	8	2	0035

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	21	99	F00	166	289				08

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2910	3529	2227	0055738	0000	15443	515						
239	OBS	0000	2910	3529	2227			15443	515	006			000	012	148
	STD	0010	2866	3571	2273	0051356	0054	15440	504						
239	OBS	0010	2866	3571	2273			15440	504	009			002	010	128
239	OBS	T0019	2854	3571	2277			15438	529	003			000	014	138
	STD	0020	2850	3573	2280	0050706	0105	15438	529						
	STD	0030	2800	3595	2313	0047659	0154	15431	531						
239	OBS	T0047	2694	3622	2368			15414	534	007			000	008	132
	STD	0050	2665	3623	2378	0041513	0243	15408	530						
	STD	0075	2428	3633	2459	0033915	0337	15359	496						
239	OBS	T0094	2260	3641	2514			15321	471	019			030	021	082
	STD	0100	2213	3628	2518	0028388	0415	15309	463						
	STD	0125	2015	3585	2539	0026423	0484	15256	432						
239	OBS	T0141	1886	3565	2557			15220	412	045			070	041	118
	STD	0150	1800	3561	2575	0023013	0545	15197	400						
239	OBS	T0188	1498	3540	2630			15109	358	113			191	099	118
	STD	0200	1423	3533	2641	0016841	0645	15086	347						
239	OBS	T0226	1296	3517	2655			15046	328	097			141	077	106

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS				
312229	EZ	31048N	079535W	116	19	09	09	015	1973	013	36		0113	1	99	0			X0	0		0036
											99	F00	166	289					06			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2922	3465	2175	0060714	0000	15438	518						
015	OBS	0000	2922	3465	2175			15438	518	003			000	030	128
015	OBS	T0009	2883	3253P	2029Q				527	002			003	008	174
	STD	0010	2888	3492	2207	0057687	0059	15436	526						
015	OBS	T0018	2896						523	004			002	012	128
	STD	0020	2869	3516	2230	0055484	0116	15436	523						
	STD	0030	2740	3535	2287	0050116	0169	15412	522						
015	OBS	T0045	2560	3555	2359			15376	521	005			003	016	114
	STD	0050	2506	3555	2376	0041686	0260	15364	519						
	STD	0075	2250	3563	2458	0033972	0355	15307	491						
015	OBS	T0079	2211	3566	2471			15298	484	019			026	028	114
015	OBS	T0098	2036	3583	2532			15257	441	023			039	027	118

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	31068N	079590W	116	19	09	09	046	1973	013	37		0041	1	20	1		X1	8	2		0037
										20	F02	179	278		04						

	STD	0000	2828	3450	2195	0058805	0000	15417	498							
046	OBS	0000	2828	3450	2195			15417	498	003			000	008	158	
	STD	0010	2821	3491	2228	0055679	0057	15421	509							
046	OBS	0010	2821	3491	2228			15421	509	003			000	009	188	
	STD	0020	2536	3589	2392	0040012	0105	15370	518							
046	OBS	0020	2536	3589	2392			15370	518	002			000	067	106	
	STD	0030	2349	3588	2448	0034721	0142	15327	515							
046	OBS	0040	2259	3588	2474			15306	501	010			015	020	168	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANC
312229		EZ	31130N	080156W	117	10	09	09	075	1973	013	**38**	0039	1	20	2				X1	8 5	0038

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	20	F04	173	261					05

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2770	3578	2310	0047787	0000	15418	511						
075	OBS	0000	2770	3578	2310			15418	511	005			003	005	178
	STD	0010	2760	3581	2316	0047309	0048	15418	513						
075	OBS	0010	2760	3581	2316			15418	513	007			000	003	128
	STD	0020	2510	3596	2406	0038747	0091	15365	505						
075	OBS	0020	2510	3596	2406			15365	505	011			003	012	138
	STD	0030	2403	3606	2445	0034986	0127	15342	503						
075	OBS	0030	2403	3606	2445			15342	503	012			000	020	158
075	OBS	0039	2262	3614	2493			15310	507	018			004	019	124

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STANO	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP		SAL		SIGMAT		SPVOLAN		DYNDPH		SVF		OXY		PO4		TOTP	NO2	NO3	SIO4	DOC
312229	EZ	31185N		080304W	117	10	09	09	105	1973	013	39	0030	1	27	2				X1	8	2			0039
									27	F03	163		267				04								
			STD	0000	2760		3562		2301		0048625	0000	15414		515										
	105		OBS	0000	2760		3562		2301				15414		515		009					001	008	184	
			STD	0010	2745		3564		2308		0048065	0048	15413		515										
	105		OBS	0010	2745		3564		2308				15413		515		021					003	010	144	
			STD	0020	2460		3591		2417		0037655	0091	15352		499										
	105		OBS	0020	2460		3591		2417				15352		499		009					001	018	158	
	105		OBS	0025	2429		3598		2432				15347		516		008					002	012	106	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO OBS V									
312229	EZ	31224N	080412W		117	10	09	09	120	1973	013	**40**	0021	1	32	2			X1	8	2	0040
							08	32	F03	163	272		03									

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2764	3558	2297	0049044	0000	15415	482						
120	OBS	0000	2764	3558	2297			15415	482	014			002	020	148
	STD	0010	2749	3571	2312	0047683	0048	15414	447						
120	OBS	0010	2749	3571	2312			15414	447	019			000	011	148
	STD	0020	2730	3558	2308	0048070	0096	15410	475						
120	OBS	0020	2730	3558	2308			15410	475	022			001	016	154

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	31263N	080523W	117	10	09	09	142	1973	013	41		0017	1	32	2			X1	8	2	0041
								32	F03	183	272		02									

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2817	3392	2155	0062624	0000	15408	523						
142	OBS	0000	2817	3392	2155			15408	523	027			000	010	168
	STD	0010	2783	3479	2231	0055359	0059	15412	487						
142	OBS	0017	2760	3540	2285			15414	462	027			000	026	124

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312229	EZ	31280N	080575W	117	10	09	09	156	1973	013	42		0011	1	32	3		X1	8	2		0042
						05	32	F10	183	272			02									
		STD	0000	2869	3206	1998	0077643	0000	15399													
	156	OBS	0000	2869	3206	1998			15399		045				000	021	220					
	156	OBS	0008	2789	3500	2245			15415		030				000	023	148					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	31295N	081028W	117	11	09	09	169	1973	013	43		0007	1	99	0			X1	8	3	0043
							99	F00		173	333		01									
		STD	0000	2920	3176	1959	0081431	0000	15407	500												
	169	OBS	0000	2920	3176	1959			15407	500	059			000	066	210						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIP TEMP DRY	AIP TEMP WET	AIP TEMP V	NO OBS				
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**						
312229	EZ	30555N	081183W	117	01	09	09	214	1973	013	**44**		0009	1	18	1			X1	5	6	0044
								18	F02	146	278		02									
		STD	0000	2902	3395	2129	0065101	0000	15427	498												
	214	OBS	0000	2902	3395	2129			15427	498	040			002	030	234						
	214	OBS	0009	2811	3475	2219			15417	398	047			002	055	174						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS				
312229	EZ	30544N	081135W		117	01	09	09	229	1973	013	**45**	0012	1	18	2			X1	5	7	0045
									18	F02	146	272			02							

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2900	3392	2128	0065256	0000	15426	519						
229	OBS	0000	2900	3392	2128			15426	519	022			002	072	254
	STD	0010	2813	3499	2237	0054821	0060	15421	481						
229	OBS	0012	2796	3521	2259			15419	473	022			000	006	164

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	30534N	081070W	117	01	09	10	000	1973	013	**46**		0014	1	18	1			X1	5	7	0046
								18	F02	146	272		02									
		STD	0000	2906	3448	2167	0061427	0000	15433	510												
	000	OBS	0000	2906	3448	2167			15433	510	032				000	004	180					
		STD	0010	2826	3519	2248	0053791	0058	15425	482												
	000	OBS	0014	2794	3548	2280			15422	471	037				000	004	154					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312229	EZ	30512N	080552W	117	00	09	10	020	1973	013	47		0018	1	18	1			X1	8	3	0047

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	08	18	F02	152	272				03

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
		STD	0000	2847	3576	2283	0050348	0000	15434	493						
	020	OBS	0000	2847	3576	2283			15434	493	026			000	005	164
		STD	0010	2788	3588	2312	0047674	0049	15425	510						
	020	OBS	0010	2788	3588	2312			15425	510	018			002	006	138
	020	OBS	0018	2788	3585	2309			15426	505	023			000	004	154

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO OBS V									
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312229	EZ	30492N	080451W	117	00	09	10	035	1973	013	48		0029	1	18	1			X1	8	3	0048
									18	F02	159	272			03							
		STD	0000	2790	3583	2307	0048051	0000	15423	518												
	035	OBS	0000	2790	3583	2307			15423	518	016			002	017	178						
		STD	0010	2768	3582	2314	0047473	0048	15420	499												
	035	OBS	0015	2737	3582	2324			15414	489	013			001	042	158						
		STD	0020	2692	3585	2341	0044946	0094	15405	478												
	035	OBS	0028	2591	3594	2379			15384	458	021			004	026	188						

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANC
312229	EZ	30459N	080282W	117	00	09	10	053	1973	013	**49**	0038	1	22	2			X2	8	8	0049

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	22	F03	146	283					04

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2890	3523	2229	0055528	0000	15438	487						
053	OBS	0000	2890	3523	2229			15438	487	001			001	014	204
	STD	0010	2809	3535	2265	0052140	0054	15423	504						
053	OBS	0010	2809	3535	2265			15423	504	001			006	011	154
	STD	0020	2699	3609	2356	0043454	0102	15409	505						
053	OBS	0020	2699	3609	2356			15409	505	041			015	017	128
	STD	0030	2552	3615	2407	0038689	0143	15378	501						
053	OBS	0036	2447	3618	2441			15355	496	006			011	018	168

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	30426N	080110W	117	00	09	10	088	1973	013	50		0043	1	29	2			X1	8	5	0050
											29	F04	132	278		05						

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2784	3481	2233	0055200	0000	15410	490						
088	OBS	0000	2784	3481	2233			15410	490	005			000	009	150
	STD	0010	2581	3543	2344	0044603	0050	15374	511						
088	OBS	0010	2581	3543	2344			15374	511	003			000	016	174
	STD	0020	2220	3610	2502	0029603	0087	15295	469						
088	OBS	0020	2220	3610	2502			15295	469	025			036	026	174
	STD	0030	1972	3613	2572	0022977	0113	15232	430						
088	OBS	0030	1972	3613	2572			15232	430	036			045	037	132
088	OBS	0043	1836	3612	2606			15196	404	040			080	050	092

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	30415N	080056W	117	00	09	10	113	1973	013	51		0092	1	32	3			X1	8	6	0051
										32	F04	125	278		06							

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2754	3490	2249	0053621	0000	15405	493						
113	OBS	0000	2754	3490	2249			15405	493	011			000	002	118
	STD	0010	2696	3516	2287	0050006	0052	15397	504						
113	OBS	0010	2696	3516	2287			15397	504	007			002	013	106
	STD	0020	2036	3599	2544	0025571	0090	15246	420						
113	OBS	0020	2036	3599	2544			15246	420	061			059	045	088
	STD	0030	1928	3603	2575	0022640	0114	15219	399						
	STD	0050	1742	3605	2624	0019090	0154	15169	365						
113	OBS	0050	1742	3605	2624			15169	365	057			142	044	088
	STD	0075	1564	3598	2660	0014700	0195	15118	340						
113	OBS	0075	1564	3598	2660			15118	340	088			129	068	066
113	OBS	0092	1549	3593	2660			15116	342	090			147	087	076

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312229	EZ		30403N	079595W	116	09	09	10	127	1973	013	52	0245	1	32	2			X1	8	6	0052

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	32	F04	125	278					08

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2806	3515	2251	0053439	0000	15419	483						
127	OBS	0000	2806	3515	2251			15419	483	000			000	011	168
	STD	0010	2805	3530	2262	0052377	0053	15422	490						
127	OBS	0010	2805	3530	2262			15422	490	011			000	007	168
127	OBS	0019	2752	3585	2321			15418	492	005			060		158
	STD	0020	2724	3586	2331	0045875	0102	15412	491						
	STD	0030	2463	3595	2419	0037477	0144	15355	483						
127	OBS	0048	2082	3607	2538			15264	459	033			046	042	142
	STD	0050	2062	3607	2543	0025765	0207	15259	452						
	STD	0075	1824	3609	2606	0019830	0264	15197	383						
127	OBS	0097	1631	3610	2654			15144	341	074			138	056	104
	STD	0100	1606	3607	2657	0015066	0308	15136	339						
	STD	0125	1408	3579	2680	0012938	0343	15075	322						
127	OBS	0146	1260	3559	2695			15026	312	120			204	121	096
	STD	0150	1233	3555	2697	0011350	0373	15017	311						
127	OBS	0196	0970	3520	2718			14928	307	157			238	157	064
	STD	0200	0951	3518	2719	0009273	0424	14921	308						
127	OBS	0241	0797	3503	2732			14868	322	179			255	193	184

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	30382N	079485W	116	09	09	10	164	1973	013	53		0550	1	32	2			X1	8	4	0053
											32	F04	119	300								10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2836	3616	2317	0047131	0000	15436	471						
164	OBS	0000	2836	3616	2317			15436	471	004			000	008	188
164	OBS	0009	2838	3615	2316			15438	475	011			000	010	174
	STD	0010	2839	3615	2315	0047328	0047	15438	474						
164	OBS	0018	2841	3615	2315			15440	469	087			019	008	138
	STD	0020	2838	3615	2315	0047362	0095	15440	474						
	STD	0030	2823	3614	2320	0046976	0142	15438	493						
164	OBS	0045	2800	3613	2327			15436	507	002			003	015	154
	STD	0050	2732	3616	2351	0044072	0233	15422	502						
	STD	0075	2421	3630	2458	0033969	0330	15356	472						
164	OBS	0090	2257	3635	2510			15319	448	014			019	020	164
	STD	0100	2153	3636	2540	0026260	0406	15294	418						
	STD	0125	1935	3637	2600	0020647	0464	15240	362						
164	OBS	0136	1859	3638	2620			15221	345	049			087	036	148
	STD	0150	1814	3635	2629	0017982	0513	15210	338						
164	OBS	0182	1669	3619	2652			15170	327	059			092	044	102
	STD	0200	1532	3600	2669	0014234	0593	15129	325						
164	OBS	0238	1274	3565	2697			15047	323	127			172	101	106
	STD	0250	1193	3554	2704	0010926	0656	15020	324						
	STD	0300	0927	3518	2724	0009054	0706	14928	327						
164	OBS	0331	0821	3504	2729			14892	328	160			200		138
	STD	0400	0786	3499	2731	0008432	0793	14889	328						
164	OBS	0423	0774	3498	2732			14888	327	164			297	182	108

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
312229	EZ	30361N	079375W	116	09	09	10	210	1973	013	54		0730	1	29	3			X6	5	8	0054
									29	F03	098	272							10			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	CXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2872	3608	2299	0048844	0000	15443	466						
210	OBS	0000	2872	3608	2299			15443	466	005			000	009	148
	STD	0010	2875	3612	2301	0048695	0049	15446	480						
210	OBS	0010	2875	3612	2301			15446	480	017			025	023	102
	STD	0020	2884	3614	2299	0048884	0099	15450	476						
210	OBS	0020	2884	3614	2299			15450	476	001			002	015	
	STD	0030	2875	3613	2302	0048681	0146	15449	476						
	STD	0050	2856	3612	2307	0048265	0243	15448	477						
210	OBS	0050	2856	3612	2307			15448	477	000			006	014	
	STD	0075	2707	3626	2366	0042739	0357	15422	455						
	STD	0100	2541	3640	2429	0036814	0456	15390	431						
210	OBS	0100	2541	3640	2429			15390	431	005			014	016	
	STD	0125	2331	3661	2508	0029408	0539	15346	397						
	STD	0150	2155	3670	2565	0024035	0606	15307	375						
210	OBS	0150	2155	3670	2565			15307	375	029			035	022	090
	STD	0200	1901	3654	2621	0018866	0713	15245	363						
210	OBS	0200	1901	3654	2621			15245	363	030			060	023	064
	STD	0250	1705	3625	2648	0016457	0802	15193	363						
	STD	0300	1543	3601	2667	0014718	0880	15149	363						
210	OBS	0300	1543	3601	2667			15149	363	078			184	048	072
	STD	0400	1320	3568	2690	0012754	1017	15089	332						
210	OBS	0400	1320	3568	2690			15089	332	112			180	090	072
	STD	0500	1103	3534	2705	0011356	1137	15027	301						
210	OBS	0500	1103	3534	2705			15027	301	146			256	130	076

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312229	EZ	30100N	080446W	117	00	09	11	029	1973	013	**55**		0820	1	29	2			X1	8	6	0055
									29	F03	105	272		10								

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	**DOC**
	STD	0000	2837	3611	2313	0047523	0000	15436	473						
029	OBS	0000	2837	3611	2313			15436	473	006			000	009	142
	STD	0010	2841	3611	2312	0047693	0048	15439	469						
029	OBS	0010	2841	3611	2312			15439	469	000			000	012	158
029	OBS	0019	2852	3610	2307			15442	490	003			000	008	138
	STD	0020	2852	3610	2307	0048137	0096	15442	490						
	STD	0030	2848	3611	2309	0048006	0144	15443	488						
029	OBS	0048	2842	3614	2313			15445	480						148
	STD	0050	2835	3614	2316	0047435	0239	15444	478						
	STD	0075	2727	3622	2357	0043640	0353	15426	452						
029	OBS	0097	2593	3631	2406			15400	429	013			004	005	154
	STD	0100	2565	3635	2418	0037924	0455	15395	426						
	STD	0125	2344	3656	2501	0030071	0540	15349	402						
029	OBS	0145	2176	3662	2553			15311	380	028			044	020	108
	STD	0150	2133	3659	2563	0024239	0608	15300	372						
029	OBS	0193	1808	3633	2629			15215	321	054			082	029	112
	STD	0200	1767	3627	2634	0017618	0712	15203	321						
	STD	0250	1507	3587	2664	0014828	0793	15128	319						
029	OBS	0290	1338	3562	2681			15077	318	123			172	090	108
	STD	0300	1306	3558	2685	0012950	0863	15067	313						
029	OBS	0387	1070	3528	2707			14996	288	131			209	119	082
	STD	0400	1042	3525	2709	0010724	0981	14988	291						
029	OBS	0485	0902	3509	2720			14948	309						070

CRUISE AND PROJECT NO.	INSTITUTE	NAME OF PLATFORM
E-13-73	Skidaway	Eastward

DRIFT BOTTLE CODING FORM

(Provisional)

NATIONAL OCEANOGRAPHIC DATA CENTER
WASHINGTON, D. C. 20390

NODC Reference Number	NODC Consec. Number	C.C.	Inst. Code	M.R.	Code	Release Year	Release Month	Release Day	Release Time	Release Latitude (N)	Release Longitude (W)	Sta.	Dist. from Shore	No. Rel'd	Type	Bottle Number	Recovery Year	Recovery Month	Recovery Day	Recovery Latitude (N)	Recovery Longitude (W)	AFBE	Bearing	Nautical Miles Drifted	Days Adrift	Speed	CT	Deck No.
						73	09	05	09	32325	079375	3	16			29	73	10	15	30580	081240		230	135	40	3.3		10
						73	09	06	21	32055	079475	16	30			8	73	10	09	30260	081240		220	132	33	4.0		10
						73	09	07	00	32160	080072	18	10			60	73	10	08	30260	081250		210	132	31	4.2		10
						73	09	07	01	32160	080072	18	10			3	73	10	07	30440	081280		200	115	30	3.8		10
						73	09	07	03	32212	080164	20	02			13	73	10	18	31300	081120		200	70	41	1.7		10
						73	09	07	08	31578	080445	21	02			12	73	09	18	30390	081250		200	87	11	7.9		10
						73	09	07	08	31578	080445	21	02			16	73	10	14	30390	081250		200	87	37	2.3		10
						73	09	07	11	31535	080341	23	10			46	73	10	07	30440	081250		200	82	30	2.7		10
						73	09	07	15	31445	080130	25	30			45	73	10	14	30430	081280		200	87	37	2.3		10
						73	09	05	13	32217	079178	5	30			28	74	02	21	30540	081250		200	140	169	.		10
						73	09	07	15	31445	080130	25	30			44	73	10	11	30390	081250		200	140	34	4.1		10
						73	09	09	06	31185	080304	39	30			36	73	09	28	29550	081180		200	92	19	4.8		10
						73	09	09	06	31185	080304	39	30			41	73	09	28	29550	081180		200	92	19	4.8		10
						73	09	09	10	31263	080523	41	10			33	73	09	29	30140	081220		200	75	20	3.8		10
						73	09	09	10	31263	080523	41	10			38	73	09	27	30140	081220		200	79	18	4.4		10
						73	09	09	13	31295	081028	43	02			35	73	10	06	30170	081220		200	75	27	2.8		10
						73	09	09	17	30555	081183	44	02			49	73	09	27	30390	081260		200	18	18	1.0		10
						73	09	09	17	30555	081183	44	02			51	73	09	24	30310	081270		200	27	15	1.8		10
						73	09	09	20	30534	081070	46	41			4	73	09	27	29160	081020		200	94	18	5.2		10
						73	09	09	20	30534	081070	46	41			58	73	09	27	29230	081050		200	88	18	4.9		10
						73	09	09	20	30534	081070	46	41			55	73	09	26	29160	081020		200	88	17	5.1		10
						73	09	09	23	30492	080451	48	30			1	73	09	27	29150	081020		200	92	18	5.1		10

DRIFT BOTTLE CODING FORM

(Provisional)

NATIONAL OCEANOGRAPHIC DATA CENTER
WASHINGTON, D. C. 20390

CRUISE AND PROJECT NO.	INSTITUTE	NAME OF PLATFORM
E-13-73	Skidaway	Eastward

NODC Reference Number	NODC Consec. Number	C.C.	Inst. Code	M.R.	Ship Code	Release Year	Release Month	Release Day	Release Time	Release Latitude (S = X27, N)	Release Longitude (E = X32, W)	STA.	Dist. from Shore	No. Rel'd	Type	Bottle Number	Recovery Year	Recovery Month	Recovery Day	Recovery Latitude (S = X56, N)	Recovery Longitude (E = X61)	E/W	AFBE	Bearing	Nautical Miles Drifted	Days Adrift	Speed	CT		Deck No.
						73	09	09	23	30492	080451	48	30			2	73	09	25	29460	81150			200	68	16	4.2			10
						73	09	05	09	32325	079375	3	16			26	73	09	18	30490	81260			200	145	13	11.1			10
						73	09	09	06	31185	080304	39	30			40	73	11	24	29550	81180			200	94	76	1.2			10
						73	09	09	10	31263	080523	41	10			37	73	11	22	30140	81220			200	75	74	1.0			10
						73	09	06	21	32055	079475	16	30			10	73	11	28	30230	81240			200	132	83	1.6			10
						73	09	07	01	32160	080072	18	10			57	73	11	29	29240	81240			200	132	83	1.6			10
						73	09	05	13	32217	079178	5	30			24	73	12	02	30480	81280			220	140	88	1.6			10
						73	09	05		32217	079178	5	30			28	74	02	21	30550	81240			220	143	169	0.8			10
						73	09	09		31295	081028	43	02			32	74	06	28	30320	81260			200	061					10
																														10
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SURFACE DRIFTER DATA

Four drift bottles were released at each of the following stations: 1, 3, 5, 16, 18, 20, 21, 23, 25, 39, 41, 43, 44, 46, 48.

To date the return represents 52% of the bottles released. The general drift was toward the southwest at speeds from 1 to 11 miles per day.

Table 2. Chlorophyll *a* and C^{14} uptake with respect to depth.

Station	Depth (m)	Chlorophyll *a* (mg/m^3)	C^{14} uptake ($mgC/m^3/day$)
2	0	.245	18.7
	2.5	.322	12.9
	5.0	.189	49.8
	8.0	.216	3.6
4	0	.109	3.5
	5.5	.121	5.5
	10.5	.131	0.1
	17.5	.649	84.7
8	0	.071	3.9
	8	.051	1.5
	16.5	.073	1.8
	27.0	.461	7.0
	54.0	.255	0.9
10	0	.057	0.3
	8	.061	5.3
	16.5	.081	1.4
	27	.100	4.4
	54	.239	3.2
11	0	.071	3.4
	10.5	.063	21.8
	21	.047	2.9
	35	.050	0.9
	70.5	.121	2.0
15	0	.075	1.7
	5.5	.079	2.1
	10.5	.068	6.6
	17.5	.075	5.0
17	0	.102	1.7
	5.5	.076	6.9
	10.5	.088	11.2
	17.5	.116	17.3
19	0	.391	45.9
	2.5	.391	41.6
	5	.553	220.9
	8	.503	122.9

*The chlorophyll and carbon-^{14} productivity data are only considered accurate to 2 significant figures, at best, even though more are reported.

Table 2. (continued)

Station	Depth (m)	Chlorophyll *a* (mg/m^3)	C^{14} uptake (mgC/m^3/day)
22	0	.166	31.3
	4.5	.186	136.7
	9	.183	313.0
24	0	.107	30.1
	4.5	.186	21.6
	9	.299	149.1
	15		100.9
27	0	.064	7.4
	6	.052	19.3
	12	.041	10.0
	20.5	.054	7.6
30	0	.018	1.5
	8	.025	9.4
	16.5	.093	5.2
	27	.120	4.3
35	0	.053	2.0
	8.5	.042	7.1
	17	.037	0.6
	28.5	.051	0.6
	57	.097	3.9
38	0	.068	3.5
	6	.081	1.7
	12	.024	3.7
	20.5	.026	60.0
40	0	.143	7.4
	3	.098	21.9
	6.5	.167	18.3
	11	.352	43.5
42	0	.436	70.3
	2	.442	42.3
	4	.458	30.6
	7	.588	118.8
45	0	.419	39.8
	3	.422	37.9
	6.5	.408	20.5
	11	.607	52.9
47	0	.303	27.4
	3	.357	42.5
	6.5	.339	27.7
	11.0	.334	45.8

Table 2. (continued)

Station	Depth (m)	Chlorophyll *a* (mg/m^3)	C^{14} uptake ($mgC/m^3/day$)
49	0	.032	1.7
	6	.032	0.6
	12	.031	3.6
	20.5	.035	3.9
52	0	.080	2.6
	5	.083	2.6
	9.5	.096	4.3
	16.0	.138	9.0
	32.5	.050	23.1

Table 3. Surface chlorophyll *a*, depth integrated chlorophyll *a* and C^{14} values.

Station	Surface Chlorophyll mg/m^3	Depth Integrated Chlorophyll *a* mg/m^2	Depth Integrated C^{14} mgC/m^2/day
1	.352		
2	.290	1.9	206
3	.266		
4	.120	3.9	333
5	.105		
6	.099		
7	.073		
8	.093	13.6	189
9	.160		
10	.057	6.6	184
11	.031	4.9	339
12	.117		
13	.054		
14	.069		
15	.049	1.3	72
16	.058		
17	.102	1.6	167
18	.357		
19	.391	3.8	997
20	.211		
21	.435		
22	.166	1.6	1460
23	.232		
24	.107	2.7	1280
25	.146		
26	.069		
27	.064	1.0	239
28	.113		
29	.040		
30	.018	1.8	155
31	.026		
32	.122		
33	.087		
34	.280		
35	.053	3.4	138
36	.070		
37	.051		
38	.068	1.0	287
39	.099		
40	.143	2.1	259
41	.135		
42	.436	3.3	410
43	1.316 & 2.048		
44	.927		
45	.419	5.0	388
46	.472		
47	.303	3.7	394

Table 3. (continued)

Station	Surface Chlorophyll mg/m^3	Depth Integrated Chlorophyll *a* mg/m^2	Depth Integrated C^{14} $mgC/m^2/day$
48	.117		
49	.032	0.6	50
50	.058		
51	.080		
52	.080	3.1	330
53	.040		
54	.030		
55	.044		
56	.035		

Table 4. Particulate Organic Carbon (POC) and Nitrogen (PN)

Station	Depth (m)	POC (μgC/L)	PN (μgN/L)	C:N (atomic)
1	0	178	21	10:1
3	0	84	13	7:1
5	0	41	14	3:1
8	0	70	10	8.5:1
8	27	100	4	28:1
11	0	50	-	-
13	0	76	13	7:1
16	0	74	-	-
18	0	192	-	-
19	0	185	17	13:1
21	0	234	40	7:1
22	4.5	63	13	6:1
23	0	135	23	7:1
24	0	486	76	8:1
27	0	55	-	-
36	0	131	30	5:1
39	0	130	-	-
41	0	108	9	14:1
43	0	240	34	8:1
44	0	379	36	12:1
45	0	150	-	-
45	6.5	174	-	-
46	0	232	28	9:1
48	0	259	22	16:1
51	0	74	13	7:1
52	0	47	-	-
52	32.5	97	16	7:1

ZOOPLANKTON

Sampling method: Plankton samples were collected with a half meter No. 20 mesh net towed obliquely through the entire water column. Although an impeller flow meter was mounted on the net, these measurements are only qualitative.

Data: The following data are the five dominant genera at each station in order of abundance. The average Cephalothorax length is also given.

Table 5. Generic Composition (five dominant genera at each station listed in order of abundance) and respective size ranges (Cephalothorax length in mm).

Station	Genus	Size (mm)
1	*Calanus* sp.	.62
	Temora turbinata	.65
	Corycella carinata	.50
	Labidocera nerii	.52
	Ave:	.57
21	*Calanus* sp.	.61
	Temora turbinata	.69
	Corycaeus sp.	.35
	Centropages sp.	1.10
	Oithona sp.	.77
	Ave:	.70
44	*Calanus* sp.	.64
	Eucalanus sp.	.83
	Centropages sp.	.90
	Oithana sp.	.64
	Corycella sp.	.40
	Ave:	.68
7	*Calanus* sp.	.63
	Oncaea sp.	.59
	Corycella carinata	.67
	Temora turbinata	.64
	Centropages typicus	1.11
	Ave:	.73
27	*Calanus* sp.	.73
	Temora turbinata	.70
	Calocalanus pavo	.50
	Oithana sp.	.60
	Ave:	.63
30	*Calanus* sp.	.77
	Corycella sp.	.50
	Temora turbinata	.70
	Oithana sp.	.60
	Calocalanus pavo	.50
	Ave:	.61

Table 5. (continued)

Station	Genus	Size (mm)
50	*Calanus* sp.	.80
	Oithana sp.	.69
	Oncaea sp.	.59
	Corycella sp.	.65
	Centropages typicus	1.10
	Ave:	.77
53	*Corycella carinata*	.80
	Calocalanus pavo	.63
	Calanus sp.	1.20
	Sapphirina sp.	1.10
	Ave:	.93

Table 6. Mean grain size, sorting, skewness and kurtosis (Folk and Ward values) for sediments from E-13-73. All values in phi (ϕ)where applicable.

Station #	M_z	I	S_k	Kg
1	0.91	1.03	0.12	0.90
7	0.98	1.54	-0.27	0.82
9	hard bottom			
10	hard bottom			
13	2.95	0.92	0.23	1.29
14	1.09	0.71	-0.03	0.94
17	0.92	0.90	0.02	0.88
18	0.82	0.97	-0.60	0.61
21	2.26	0.82	-0.41	2.45
23	1.11	0.83	-0.11	1.07
29	3.42	1.24	-0.05	0.92
36	1.27	0.51	-0.12	1.05
38	0.54	1.03	-0.08	0.96
41	2.43	0.44	-0.15	1.49
42	1.88	0.68	-0.35	1.08
44	1.38	1.59	-0.55	0.81
46	1.85	0.49	-0.18	1.05
50	0.81	0.67	-0.03	1.21

Table 7. Mean grain size, sorting, skewness and kurtosis (Folk and Ward values) for sediments from E-13-73 with carbonate removed. All values are in phi (ϕ) when applicable.

Station #	M_z	I	SK_I	Kg
1	1.07	0.98	0.17	0.84
7	1.84	0.98	-0.41	1.31
9	hard bottom			
10	hard bottom			
13	1.72	0.40	-0.12	1.07
14	1.12	0.62	0.00	0.96
17	1.00	0.85	-0.02	0.88
18	0.99	1.11	-0.17	0.70
21	2.41	0.46	-0.12	1.41
23	1.16	0.74	-0.15	0.99
29	2.76	0.52	-0.33	1.04
36	1.27	0.50	-0.10	1.03
38	0.51	1.02	-0.09	0.87
41	2.43	0.38	-0.11	1.36
42	1.89	0.62	-0.29	1.09
44	2.23	0.72	-0.22	1.38
46	1.83	0.45	-0.22	1.12
50	0.95	0.76	0.18	0.98
52	1.70	0.57	0.02	1.07

Table 8. Numbers of species tentatively identified by major phyla and stations for E-13-73.

Station #	Mollusca	Arthropoda (Crustacea)	Echinodermata*
1	2	5	1
7	5	6	
9	no sample		
10	no sample		
13	20	15	
14	2	5	
17	10	7	1
18	15	18	1
21	8	9	1
23	13	6	3
29	4	5	
36		19	1
38	10	17	
41			2
42	13	12	
44		15	4
46	10	7	
50			
52		6	

*Includes only Asteroida and Echinoida several species of Holothuroida and Ophiuroids are present, but have not yet been identified.

Table 9. Dissolved mercury data.

Station #	Mercury Concentrations (ng/1) September 1973
2	27
4	33
6	62
7	18
8	26
10	8
11	36
13	29
15	8
17	5
19	26
22	26
24	34
26	31
28	42
30	13
32	31
34	34
36	26
38	21
40	26
42	57
45	24
47	9
49	10
51	5
53	9
56	5
58	14
60	9
Average	23
Minimum	5
Maximum	62

APPENDIX B

Cruise E-19-73 Data

WEATHER AND RUNOFF

On 5 and 6 December a cold front passed through the area. On 7 and 8 December a low formed offshore and moved northeast along the front. On 9 and 12 December the area was influenced by a weak high moving east from Texas to Florida. On 13, 14, and 15 December a large low moved across the north central U. S. and an associated cold front moved through the study area on 14 December. On 15 December an intense low formed in Alabama and traversed the area 15, 16, and 17 December.

River flows from the three principal rivers (Altamaha, Savannah and Cooper) are summarized in the following table:

Table 1. River flow data for principal rivers. Average daily flow rates (m^3/day) are shown.

Date	Altamaha	Savannah (km^3/day)	Cooper	Total (km^3/day)
8 November	.0091	.0194	.0277	.0562
9	.0087	.0183	.0259	.0529
10	.0087	.0196	.0320	.0603
11	.0089	.0196	.0165	.0450
12	.0092	.0208	.0186	.0486
13	.0094	.0208	.0121	.0423
14	.0093	.0196	.0096	.0512
15	.0093	.0198	.0223	.0514
16	.0094	.0204	.0207	.0505
17	.0097	.0208	.0197	.0502
18	.0099	.0208	.0216	.0523
19	.0099	.0208	.0187	.0494
20	.0099	.0208	.0211	.0518
21	.0098	.203	.0177	.0478
22	.0096	.0200	.0138	.0434
23	.0093	.0201	.0158	.0452
24	.0093	.0208	.0142	.0443
25	.0098	.0210	.0067	.0375
26	.0099	.0196	.0211	.0506
27	.0095	.0203	.0229	.0527
28	.0094	.0208	.0238	.0540
29	.0097	.0203	.0273	.0573
30	.0100	.0196	.0290	.0586
1 December	.0106	.0208	.0217	.0531
2	.0114	.0208	.0264	.0586
3	.0122	.0208	.0308	.0638
4	.0128	.0209	.0290	.0627
5	.0130	.0208	.0397	.0735
6	.0126	.0203	.0375	.0704
7	.0118	.0196	.0279	.0593
8	.0118	.0209	.0338	.0665
9	.0127	.0220	.0219	.0566
10	.0136	.0245	.0407	.0788
11	.0145	.0257	.0547	.0949
12	.0152	.0270	.0481	.0903
13	.0154	.0279	.0433	.0866
14	.0153	.0304	.0409	.0866
15	.0157	.0321	.0383	.0861
16	.0164	.0338	.0360	.0862
17	.0167	.0350	.0514	.1031
18	.0172	.0360	.0606	.1138
19	.0176	.0355	.0547	.1078

HYDROGRAPHIC DATA

The following data are directly from the NODC listing. The headings indicate the following:

1. NODC: NODC identification code
2. SH: ship (EZ=EASTWARD)
3. LAT: Latitude of station
4. LON: Longitude of station
5. MSQ: Marsden Square
6. ID: Drift indicator (29=no drift)
7. MO: month (GMT)
8. DY: day (GMT)
9. HR: hour (GMT) to tenths (xx.x)
10. YEAR: year (GMT)
11. CRNO: cruise number
12. STANO: station number
13. DEPTH BOT: depth to bottom (meters) (xxxx)
14. DNP: maximum depth of samples in hundreds of meters
15. WAVE DIR: wave direction tens of degrees
16. WAVE HT: wave height in sea state units
17. WAVE P: wave period, not reported
18. WAVE S: sea amount, not reported
19. WC: weather code (WMO Code 4501)
20. CLOUD TY: cloud type (WMO Code 0500)
21. CLOUD AMT: cloud amount (WMO Code 2700)
22. NODC STANO: NODC station number
23. CASTMSG: cast messenger time (GMT) in tenths (xx.x)
24. CTYPE: OBS=observed data, STD=interpolated standard depth
25. DEPTH: depth in meters (xxxx). "T" indicates thermometric depth data
26. TEMP: temperature in ^{o}C to hundredths (xx.xx)
27. SAL: salinity in parts per thousand (xx.xx)
28. SIGMAT: sigma-t (density) to hundredths (xx.xx)
29. SPVOLAN: specific volume anomaly x 107
30. DYNDPH: $\Sigma\Delta D$, dynamic meters x 10^3
31. SVF: sound velocity
32. OXY: oxygen (ml/L) (x.xx)
33. PO4: phosphate (μg-at/L) (x.xx)
34. TOTP: total phosphate (not reported)
35. NO2: nitrite (not given)
36. NO3: nitrate (μg-at/L) (xx.x)
37. SIO4: silicate (μg-at/L) (xx.x)
38. DOC: dissolved organic carbon (mgC/L (x.xx)

Refer to NODC manual M-2 ("Processing physical and chemical data from oceanographic stations") for further information and explanation of the codes.

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302		EZ	32373N	079475W	116	29	12	10	221	1973	019	001	0011	3	25		3	X1	8	2		0001

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	25	F05	159	133	128				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	P04	TOTP	N02	N03	SI04	DOC
	STD	0000	1582	3478	2564	0023603	0000	15097	594						
221	OBS	0000	1582	3478	2564			15097	594	004			000	021	100
	STD	0010	1603	3500	2576	0022482	0023	15108	612						
221	OBS	0010	1603	3500	2576			15108	612	002			000	025	104

NODC STATION DATA

DDC C	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
12302	FZ		32351N	079425W	116	29	12	10	236	1973	019	002	0014	3	25		3	X1	8	2		0002

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	25	F05	163	100	100				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1662	3552	2602	0019996	0000	15130	589						
236	OBS	0000	1662	35516	2602			15130	589	002			000	025	088
	STD	0010	1665	3553	2602	0019965	0020	15133							
236	OBS	0014	1666	3554	2603			15134							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	32325N	079384W	116	29	12	11	013	1973	019	003		0016	3	25		3	X1	8	2		0003
						25	F05	163	100	100			03									
		STD	0000	1703	3570	2607	0019543	0000	15145	449												
	013	OBS	0000	1703	35705	2607			15145	449	000			000	009	072						
		STD	0010	1706	3569	2605	0019748	0020	15147													
	013	OBS	0010	1706	3569	2605			15147													
	013	OBS	0014	1706	3569	2605			15148													

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302		FZ	32270N	079280W	116	29	12	11	030	1973	019	004	0020	3	27		3		XO	0		0004

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	27	F05	179	100	100				03

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1972	3617	2574	0022605	0000	15227	477						
030	OBS	0000	1972	36166	2574			15227	477	000			000	005	076
	STD	0010	1975	3617	2574	0022687	0023	15230							
030	OBS	0010	1975	3617	2574			15230							
	STD	0020	1977	3617	2573	0022778	0045	15232							
030	OBS	0020	1977	3617	2573			15232							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302		EZ	32220N	079178W	116	29	12	11	053	1973	019	005	0025	3	32		3		X0	0		0005

	WATER CLR	WIND TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	32	F08	190	100	100				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2072	3618	2549	0025044	0000	15255	557						
053	OBS	0000	2072	36180	2549			15255	557	000			000	007	084
	STD	0010	2072	3618	2549	0025082	0025	15256							
	STD	0020	2072	3618	2549	0025119	0050	15258							
053	OBS	0025	2072	3618	2549			15259							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ		32167N	079094W	116	29	12	11	074	1973	019	006	0052	3	25		3		X1	8	3	0006

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	25	F04	166	144	139		05		

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2188	3619	2518	0027983	0000	15285	544						
074	OBS	0000	2188	36194	2518			15285	544	000			000	009	096
	STD	0010	2197	3600	2500	0029664	0029	15287							
074	OBS	0010	2197	3600	2500			15287							
	STD	0020	2197	3598	2499	0029848	0059	15288							
074	OBS	0020	2197	3598	2499			15288							
	STD	0030	2199	3600	2500	0029795	0088	15291							
074	OBS	0030	2199	3600	2500			15291							
074	OBS	0040	2201	3601	2500			15293							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
											WATER CLP	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	32143N	079043W	116	29	12	11	084	1973	019	C07		0082	3	29		5	X2	8	6		0007
					29	F07	186	089	089		08											
		STD	0000	2235	3623	2507	0028963	0000	15297	532												
	084	OBS	0000	2235	36233	2507			15297	532	000			000	036	060						
		STD	0010	2243	3622	2504	0029320	0029	15301													
	084	OBS	0010	2243	3622	2504			15301													
		STD	0020	2242	3622	2504	0029332	0058	15302													
	084	OBS	0020	2242	3622	2504			15302													
		STD	0030	2240	3623	2506	0029243	0088	15304													
	084	OBS	0030	2240	3623	2506			15304													
	084	OBS	0040	2235	3626	2509			15304													
		STD	0050	2216	3625	2514	0028521	0146	15301													
	084	OBS	0050	2216	3625	2514			15301													
	084	OBS	0060	2168	3611	2517			15289													
		STD	0075	2092	3622	2546	0025570	0213	15273													
	084	OBS	0080	2066	3634	2562			15268													

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
31	2302	FZ	32214N	080165W	117	20	12	11	190	1973	019	020	0007	3	29		1		X0	0		0008

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F06	224	061	061				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1338	3364	2528	0027003	0000	15004	632						
190	OBS	0000	1338	33636	2528			15004	632	034			000	047	
190	OBS	0007	1453	3521	2625			15063							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ	32185N	080120W	117	20	12	11	208	1973	019	019		0009	3	29		1	X1	0	3		0009

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	29	F06	220	067	061				02

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
		STD	0000	1585	3575	2638	0016581	0000	15110	579						
	208	OBS	0000	1585	35752	2638			15110	579	002			000	003	088
	208	OBS	0009	1585	3575	2638			15111							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ	32165N	080073W		117	20	12	11	215	1973	019	018	0016	3	29		3		X1	8	2	0010

	WATER CLR	WIND TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F05	220	083	078				02

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
		STD	0000	1640	3603	2646	0015785	0000	15130	564						
	215	OBS	0000	1640	36026	2646			15130	564	000			000	002	084
		STD	0010	1640	3603	2646	0015790	0016	15132							
	215	OBS	0010	1640	3603	2646			15132							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302		EZ	32106N	079575W	116	29	12	11	230	1973	019	017	0021	3	29		3		X1	8	2	0011

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F05	220	074	067				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1813	3619	2617	0018574	0000	15183	553						
230	OBS	0000	1813	36189	2617			15183	553	000			000	004	096
	STD	0010	1813	3619	2617	0018608	0019	15185							
	STD	0020	1813	3619	2617	0018634	0037	15186							
230	OBS	0020	1813	3619	2617			15186							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ	32053N	079475W		116	29	12	12	014	1973	019	016	0027	3	29		3		X1	8	3	0012

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F05	230	078	067				02

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2085	3617	2544	0025443	0000	15258	543						
014	OBS	0000	2085	36171	2544			15258	543	000			000	008	076
	STD	0010	2087	3614	2542	0025762	0026	15260							
	STD	0020	2089	3611	2539	0026071	0052	15262							
014	OBS	0027	2091	3609	2537			15263							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS								
312302	EZ	31598N	079380W	116	19	12	12	028	1973	019	015			0042	3	29		3	X1	8	3	0013
										29	F04	237	078	067		05						

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2180	3620	2520	0027747	0000	15283	522						
028	OBS	0000	2180	36198	2520			15283	522	000			000	009	066
	STD	0010	2180	3623	2523	0027550	0028	15285							
028	OBS	0010	2180	3623	2523			15285							
	STD	0020	2176	3625	2525	0027334	0055	15286							
028	OBS	0020	2176	3625	2525			15286							
	STD	0030	2175	3626	2526	0027282	0082	15287							
028	OBS	0030	2175	3626	2526			15287							
028	OBS	0040	2175	3627	2527			15289							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	31545N	079282W	116	19	12	12	044	1973	019	014		0064	3	29		4	X1	8	3		0014
						29	F04	237		078	067		07									
		STD	0000	2206	3610	2505	0029154	0000	15289	507												
	044	OBS	0000	2206	36099	2505			15289	507	000			007	032	034						
		STD	0010	2209	3610	2505	0029265	0029	15291													
	044	OBS	0010	2209	3610	2505			15291													
		STD	0020	2210	3610	2504	0029331	0059	15293													
	044	OBS	0020	2210	3610	2504			15293													
		STD	0030	2210	3612	2506	0029224	0088	15295													
	044	OBS	0030	2210	3612	2506			15295													
	044	OBS	0040	2209	3612	2506			15296													
		STD	0050	2208	3614	2508	0029101	0146	15298													
	044	OBS	0050	2208	3614	2508			15298													
	044	OBS	0060	2186	3621	2519			15295					007								

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	FZ	31514N	079232W		116	19	12	12	064	1973	019	013	0094	3	32		3	X1	8	2		0015

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	32	F04	234	089		089			10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2190	3615	2514	0028346	0000	15285	474						
064	OBS	0000	2190	36152	2514			15285	474	000			004	010	060
	STD	0010	2192	3616	2514	0028412	0028	15287	470						
064	OBS	0010													
	STD	0020	2194	3616	2513	0028478	0057	15289	469						
064	OBS	0020	2194	36159	2513			15289	469	012			000	019	084
	STD	0030	2195	3616	2513	0028516	0085	15291	473						
064	OBS	0030													
064	OBS	0040													
	STD	0050	2196	3617	2514	0028584	0142	15295	478						
064	OBS	0050	2196	36168	2514			15295	478	010			002	018	112
064	OBS	0060	2196												
064	OBS	0070	2196												
	STD	0075	2197	3617	2513	0028707	0214	15299	476						
064	OBS	0080	2198												
064	OBS	0094	1929	36167	2586			15231	468	000			003	009	046

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO OBS V									
312302	FZ	31488N	079184W		116	19	12	12	078	1973	019	012		02C8	3	32		3	X1	8	2	0016
									32	F04	237	100	094	06								

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2230	3602	2493	0030334	0000	15294	484						
078	OBS	0000	2230	36025	2493			15294	484	009			000	018	
	STD	0010	2232	3602	2492	0030454	0030	15296	491						
	STD	0020	2234	3602	2492	0030547	0061	15298	495						
078	OBS	0020	2234	36021	2492			15298	495	010			000	018	
	STD	0030	2235	3602	2491	0030595	0091	15300	495						
078	OBS	T0049	2236	36024	2491			15303	496						
	STD	0050	2229	3603	2494	0030445	0153	15302	493						
	STD	0075	2058	3620	2554	0024806	0222	15263	420						
078	OBS	T0098	1898	36255	2600			15224	377	034			086	039	
	STD	0100	1879	3625	2604	0020097	0278	15219	377						
	STD	0125	1676	3614	2646	0016207	0323	15163	371						
078	OBS	T0147	1553	36052	2668			15127	363	077			132	065	
	STD	0150	1540	3604	2670	0013973	0361	15124	362						
078	OBS	T0196	1464	35903	2676			15106	336	081			161	074	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANC
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312302	FZ		31444N	079044W	116	19	12	12	117	1973	019	011	0540	3	32		3		X1	8	3	0017
									36	F04	234	083	076	09								

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2292	3612	2483	0031333	0000	15311	555						
117	OBS	0000	2292	36120	2483			15311	555	011			000	028	114
	STD	0010	2290	3612	2483	0031317	0031	15312	559						
	STD	0020	2285	3612	2484	0031248	0063	15312	561						
117	OBS	0020	2285	36116	2484			15312	561	008			000	017	060
	STD	0030	2275	3611	2486	0031078	0094	15311	556						
117	OBS	T0049	2260	36101	2490			15310	550	009			007	016	100
	STD	0050	2260	3610	2490	0030783	0156	15310	550						
	STD	0075	2248	3610	2494	0030534	0232	15311	554						
117	OBS	T0099	2236	36105	2497			15313	557						084
	STD	0100	2219	3610	2502	0029856	0308	15308	552						
	STD	0125	1831	3603	2600	0020592	0371	15207	443						
117	OBS	T0148	1556	35967	2661			15128	382	059			160	066	126
	STD	0150	1539	3594	2663	0014668	0415	15122	381						
117	OBS	T0185	1275	35560	2689			15038	362	109			195	104	070
	STD	0200	1178	3544	2699	0011271	0480	15005	364						
	STD	0250	0927	3513	2719	0009356	0531	14920	369						
117	OBS	T0269	0861	35047	2724			14897	371	135			236	188	116
	STD	0300	0827	3500	2725	0008830	0577	14889	361						
117	OBS	T0354	0767	34952	2731			14874	350	173			270	212	072
	STD	0400	0714	3495	2738	0007733	0660	14861	351						
117	OBS	T0438	0669	34947	2744			14849	351	173			215	221	080

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANC
312302	EZ	31190N	07911OW	116	19	12	12	189 1973	019	032	0500	3	36		3	X1	8	2		0018

	WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS
	36	F03	213	133	133				10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2610	3608	2384	0040767	0000	15386							
189	OBS	0000	2610	36078	2384			15386		007			000	019	108
	STD	0010	2612	3608	2383	0040845	0041	15388							
	STD	0020	2613	3608	2383	0040914	0082	15390							
189	OBS	0020	2613	36082	2383			15390		013			000	018	198
	STD	0030	2612	3608	2383	0040946	0123	15391							
189	OBS	T0049	2611	36078	2383			15394		003			000	015	100
	STD	0050	2611	3608	2384	0040974	0205	15394							
189	OBS	T0074	2609	36175	2391			15399							092
	STD	0075	2605	3620	2394	0040077	0306	15398							
189	OBS	T0099	2482	36563	2460			15378		017			012	020	096
	STD	0100	2473	3656	2462	0033658	0398	15376							
	STD	0125	2267	3659	2526	0027722	0475	15330							
189	OBS	T0148	2096	36623	2576			15290		014			030	011	080
	STD	0150	2081	3662	2579	0022683	0538	15287							
189	OBS	T0185	1857	36506	2630			15230					050		080
	STD	0200	1815	3644	2635	0017542	0638	15219							
	STD	0250	1675	3621	2652	0016067	0722	15183							
189	OBS	T0269	1621	36126	2658			15169		063			123	047	072
	STD	0300	1562	3605	2666	0014853	0800	15155							
189	OBS	T0354	1377	35784	2686			15102		070			167	070	088
	STD	0400	1138	3543	2706	0011104	0929	15024							
189	OBS	T0438	0885	35050	2720			14934		125			272	179	092

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
										WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC				
312302	FZ	31255N	079197W	116	19	12	12	223	1973	019	031	0454	3	36		3	X1	8	3		0019
					36	F03	207	128	128	09											
			STD	0000	2614	3605	2380	0041086	0000	15386	492										
	223		OBS	0000	2614	36050	2380			15386	492	005				000	017	064			
	223		OBS	0009	2613	36051	2381			15388	500	007				000	018	092			
			STD	0010	2613	3605	2381	0041100	0041	15388	499										
	223		OBS	0018	2613	36046	2380			15389	492	006				000	020	090			
			STD	0020	2613	3605	2380	0041168	0082	15389	493										
			STD	0030	2613	3605	2380	0041210	0123	15391	499										
	223		OBS	T0041	2613	36045	2380			15393	502	004				000	017	094			
			STD	0050	2613	3621	2393	0040101	0205	15396	498										
			STD	0075	2614	3650	2415	0038125	0303	15404	486										
	223		OBS	T0087	2614	36555	2418			15406	480	005				000	016	212			
			STD	0100	2463	3646	2458	0034065	0393	15372	449										
			STD	0125	2208	3628	2518	0028401	0471	15312	402										
	223		OBS	T0133	2136	36211	2533			15294	391	032				047	027	208			
			STD	0150	2056	3607	2544	0025997	0539	15273	390										
			STD	0200	1800	3559	2574	0023289	0662	15205	386										
	223		OBS	T0226	1656	35311	2587			15163	384	064				098	046	064			
			STD	0250	1477						359										
			STD	0300	1170						323										
	223		OBS	T0320	1072						314	141				222	138	104			
			STD	0400	0823						315										
	223		OBS	T0417	0800						315	176				283	205	108			

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
					WATER CLR	WATER TP	WIND DR	WIND F/S	BAR		AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	31290N	079312W	116	19	12	13	025	1973	019	030		0340	3	04		2	X1	8	2		0020
								04	F02	196	133	128	10									
		STD	0000	2579	3604	2390	0040149	0000	15378	505												
	025	OBS	0000	2579	36036	2390			15378	505	007			000	018	100						
		STD	0010	2578	3603	2390	0040162	0040	15380	496												
	025	OBS	0019	2577	36034	2391			15381	490	009			000	018	108						
		STD	0020	2576	3603	2391	0040149	0080	15381	489												
		STD	0030	2561	3604	2396	0039717	0120	15379	481												
	025	OBS	T0048	2520	36054	2410			15373	480	007			000	018	136						
		STD	0050	2514	3606	2412	0038269	0198	15371	484												
	025	OBS	T0071	2440	36086	2436			15358	505	007			000	047	104						
		STD	0075	2430	3609	2440	0035721	0291	15356	497												
	025	OBS	T0095	2344	36100	2466			15339	473	009			003	019	126						
		STD	0100	2300	3612	2480	0031978	0375	15329	479												
		STD	0125	2076	3619	2549	0025519	0447	15276	509												
	025	OBS	T0143	1912	36250	2596			15235	530	048				055	064						
		STD	0150	1847	3621	2610	0019769	0504	15218	508												
	025	OBS	T0190	1471	35870	2672			15106	397	095			160	085	096						
		STD	0200	1341	3569	2686	0012556	0585	15064	367												
	025	OBS	T0238	1006	35227	2714			14948	295						080						
		STD	0250	0994	3521	2714	0009849	0641	14945	296												
	025	OBS	T0284	0938	35142	2719			14929	297	175			257	206	056						
		STD	0300	0900	3510	2722	0009227	0688	14918	300												
	025	OBS	T0332	0804	35006	2729			14885	310	167			222	177	104						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
						WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	31297N	079356W	116	19	12	13	046	1973	019	029		0183	3	04		2	X0		0		0021
								22	F01	183	133	128		07								
		STD	0000	2372	3612	2459	0033585	0000	15330	493												
	046	OBS	0000	2372	36117	2459			15330	493	000			000	024	064						
		STD	0010	2372	3614	2461	0033434	0034	15332	475												
		STD	0020	2372	3616	2462	0033374	0067	15334	465												
	046	OBS	0020	2372	36157	2462			15334	465	002			000	009	060						
		STD	0030	2362	3615	2464	0033187	0100	15333	482												
		STD	0050	2342	3613	2468	0032884	0166	15331	487												
	046	OBS	T0050	2342	36125	2468			15331	487	004			007	010	046						
		STD	0075	2188	3608	2509	0029096	0244	15296	440												
	046	OBS	T0075	2188	36080	2509			15296	440	023			023	040	084						
		STD	0100	2101	3597	2525	0027676	0315	15276	451												
	046	OBS	T0100	2101	35972	2525			15276	451	026			028	035	108						
		STD	0125	1800	3605	2609	0019700	0374	15198	391												
		STD	0150	1608	3606	2656	0015335	0418	15145	319												
	046	OBS	T0150	1608	36058	2656			15145	319	081			121	072	060						
	046	OBS	T0180	1522	35975	2669			15122	217												

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	wC	CLOUD TY	CLOUD AMT	NODC STAND
312302	EZ		31318N	079412W	116	19	12	13	058	1973	019	028	0082	3	18		3	X1	8	2		0022

CASTMSG	CTYPE	DEPTH	WATER TEMP	WIND CLR	WIND TP	WIND DR	WIND F/S	WIND BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
			18	F04	166	167	167		04			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2322	3610	2472	0032332	0000	15318	500						
058	OBS	0000	2322	36097	2472			15318	500	000			000	018	056
	STD	0010	2325	3610	2471	0032453	0032	15320	500						
	STD	0020	2329	3610	2470	0032574	0065	15323	500						
058	OBS	0020	2329	36101	2470			15323	500	006			000	018	092
	STD	0030	2273	3605	2482	0031459	0097	15310	459						
	STD	0050	2185	3596	2501	0029762	0158	15290	402						
058	OBS	0050	2185	35964	2501			15290	402	017			017	021	050
	STD	0075	2119	3590	2515	0028545	0231	15276	383						
058	OBS	0080	2112	35899	2516			15275	379	042			018	039	064

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	31363N	079530W	116	19	12	13	081	1973	019	027		0039	3	10		3	X2	8	8		0023
												22	F03	173	167	167		03				
		STD	0000	1936	3566	2545	0025371	0000	15211	525												
	081	OBS	0000	1936	35662	2545			15211	525												068
		STD	0010	1936	3566	2545	0025406	0025	15213	526												
		STD	0020	1937	3566	2545	0025451	0051	15215	528												
	081	OBS	0020	1937	35664	2545			15215	528	013								000	028		112
		STD	0030	1935	3566	2546	0025441	0076	15216	531												
	081	OBS	0039	1932	35662	2546			15217	534	007								000	009		120

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312302	E7	31404N	080027W		117	10	12	13	107	1973	019	026		0037	3	22		2	X1	8	2	0024
									22	F03	149	172	167	03								

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1846	3580	2579	0022170	0000	15188	544						
107	OBS	0000	1846	35802	2579			15188	544	007			000	009	092
	STD	0010	1850	3581	2579	0022223	0022	15191	542						
	STD	0020	1850	3582	2579	0022185	0044	15192	540						
107	OBS	0020	1850	35823	2579			15192	540	007			000	008	116
	STD	0030	1846	3590	2586	0021577	0066	15194	537						
107	OBS	0037	1841	35978	2594			15194	535	007			000	009	104

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312302	FZ	31446N		080128W	117	10	12	13	122	1973	019	025	0027	3	22		3		X1	8	3	0025

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	22	F04	146	172	167				03

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	1812	3620	2618	0018474	0000	15183	543						
122	OBS	0000	1812	36200	2618			15183	543	004			000	008	072
	STD	0010	1816	3620	2617	0018581	0019	15186	549						
122	OBS	0010	1816	36203	2617			15186	549	004			000	008	064
	STD	0020	1815	3620	2617	0018598	0037	15187	545						
122	OBS	0025	1815	36203	2617			15188	540	005			000	008	076

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STANJ	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	FZ	31490N	080225W	117	10	12	13	140	1973	019	024		0019	3	22		3	X1	8	5		0026
								22	F04	139	178	172		01								
		STD	0000	1696	3580	2616	0018673	0000	15144	550												
	140	OBS	0000	1696	35803	2616			15144	550	008			000	010	104						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	FZ	31535N	080340W	117	10	12	13	164	1973	019	023		0016	3	22		3	X1	8	5		0027
								22	F05	125	178	183	01									
		STD	0000	1586	3496	2577	0022352	0000	15100	561												
	164	OBS	0000	1586	34963	2577			15100	561	020			000	008	088						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	31557N	080409W	117	10	12	13	173	1973	019	022		0015	3	22		3	X1	8	5		0028
						22	F05	108		189	183		01									
		STD	0000	1508											580							
	173	OBS	0000	1508											580	014				000	026	104

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
					WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS								
	CASTMSQ	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312302	EZ	31567N	080415W	117	10	12	13	185	1973	019	021		0014	3	22		4	X1	8	6	0029
							22	F05		183	183		01								
		STD	0000	1484	3372	2504	0029299	0000		15053	589										
	185	OBS	0000	1484	33719	2504				15053	589	016						000	019	140	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	FZ		31295N	081029W	117	11	12	14	009	1973	019	043	0009	3	20		3	X1	8	6		0030

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	20	F05	061	172	167				01

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	1470	3358	2496	0030016	0000	15047	587						
009	OBS	0000	1470	33581	2496			15047	587	023			000	020	126

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ		31117N	081058W	117	11	12	14	048	1973	019	436	0012	3	20		3		X1	8	6	0031

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	20	F04	058	172	167				01

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
		STD	0000	1626	3452	2534	0026459	0000	15107	569						
	048	OBS	0000	1626	34520	2534			15107	569	018			000	000	146

NODC STATION DATA

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NODC                                                    ORIGINATOR  DEPTH       WAVE OBS      CLOUD            NODC
CC ID  SH   LAT      LON      MSQ ID MO DY  HR YEAR CRNO STANO   BOT  DNP  DR HT P S  WC TY AMT            STAN

                                   WATER    WIND        AIR TEMP     NO
                                  CLR  TP DR F/S  BAR  DRY  WET V  OBS

      CASTMSG   CTYPE  DEPTH    TEMP    SAL   SIGMAT  SPVOLAN DYNDPH  SVF    OXY  PO4  TOTP NO2  NO3  SIO4 DOC

312302 EZ  30550N  081110W   117 01 12 14 076 1973 019 045       0009  3   20        3  X1   8 5            0032

                                        20 F04  075  172  172    01

             STD   0000     1626  3444   2527   0027067  0000  15106
     076     OBS   0000     1626  34437  2527                  15106        020              000  068  130
```

114

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAN	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
					WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS									
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	E7	30387N	081137W	117	01	12	14	104	1973	019	458		0016	3	20		3	X1	8	5		0033
					20	E04	085	172	167		01											
		STD	0000	1768	3495	2533	0026550	0000	15155	544												
	104	OBS	0000	1768	34947	2533			15155	544	015				000	000	108					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	CLOUD WC	TY	AMT	NODC STAN
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	VO2	NO3	SIO4	DOC					
312302	FZ	30238N	081154W	117	01	12	14	125	1973	019	064		0016	3	20		3	X1	8	3		0034
								22	F03	119	172	167	01									
			STD	0000	1803	3533	2553	0024609	0000	15170	550											
	125		OBS	0000	1803	35326	2553			15170	550	018				000	009	140				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	30214N	081036W	117	01	12	14	147	1973	019	063		0025	3	20		3	X1	8	3		0035
								29	F03	129	172	167		01								
		STD	0000	2028	3631	2571	0022941	0000	15244	522												
	147	OBS	0000	2028	36315	2571			15244	522	009			000	009	160						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	DEPTH STAND	BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312302	EZ		30200N	080522W	117	00	12	14	162	1973	019	062		0026	3	20		3	X1	8	3	0036
									29	F03	125	172	167		02							
			STD	0000	2135	3620	2533	0026559	0000	15271	590											
	162		OBS	0000	2135	36197	2533			15271	590	002			000	009	126					
			STD	0010	2135	3621	2533	0026552	0027	15273	568											
			STD	0020	2136	3621	2534	0026544	0053	15275	545											
	162		OBS	0026	2136	36218	2534			15276	532	004			000	001	120					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312302	EZ		30181N	080410W	117	00	12	14	176	1973	019	061	0035	3	20		3	X1	8	2		0037

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
	29	F03	115	189	189				02

•	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
		STD	0000	2168	3618	2522	0027539	0000	15280	520						
	176	OBS	0000	2168	36182	2522			15280	520	005			000	025	108
		STD	0010	2170	3613	2522	0027631	0028	15282	519						
		STD	0020	2171	3618	2521	0027715	0055	15284	519						
		STD	0030	2173	3618	2521	0027808	0083	15286	518						
	176	OBS	0035	2174	36180	2521			15287	518	010			000	024	100

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
312302	FZ	30165N	080300W		117	00	12	14	191	1973	019	060	0036	3	20		3	X1	8	2		0038

	CASTMSG	CTYPE	DEPTH	WATER TEMP CLR	WATER TEMP TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO OBS V	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
							29	F03	112	211	200	02									
		STD	0000	2376	3610	2456						0033840	0000	15331	497						
	191	OBS	0000	2376	36097	2456								15331	497	004			000	017	096
		STD	0010	2377	3609	2456						0033907	0034	15333	501						
		STD	0020	2377	3609	2456						0033983	0068	15334	506						
		STD	0030	2378	3609	2455						0034059	0102	15336	510						
	191	OBS	0035	2378	36089	2455								15337	512	013			000	014	076

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STAND
										WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC					
312302	FZ	30150N	080187W	117	00	12	14	212	1973	019	C59	0043	3	20		3	X0	0			0039
								29	F03	112	189	189		02							
		STD	0000	2401	3608	2448	0034666	0000	15337	480											
	212	OBS	0000	2401	36080	2448			15337	480	009			000	052	092					
		STD	0010	2366	3609	2459	0033625	0034	15330	473											
		STD	0020	2331	3610	2470	0032601	0067	15323	466											
		STD	0030	2296	3612	2481	0031577	0099	15316	459											
	212	OBS	0041	2257	36130	2493			15309	451	022			024	040	092					

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	F7	30145N	080130W	117 00	12	14	224	1973	019	058	0110	3	20		3	X0		0		0040

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F03	119	189	189		06		

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2454	3606	2431	0036284	0000	15349	505						
224	OBS	0000	2454	36065	2431			15349	505	003			000	016	116
	STD	0010	2445	3606	2433	0036061	0036	15349	501						
	STD	0020	2435	3606	2436	0035819	0072	15348	497						
224	OBS	0020	2435	36065	2436			15348	497	005			000	027	080
	STD	0030	2424	3607	2440	0035486	0108	15347	488						
224	OBS	0040	2413	36080	2444			15346	487	005			000	018	088
	STD	0050	2403	3609	2448	0034866	0178	15346	507						
	STD	0075	2377	3610	2457	0034110	0264	15344	556						
224	OBS	T0078	2374	36107	2458			15343	562	011			003	031	088
224	OBS	T0098	2071	36182	2549			15270	487	038			055	046	126
	STD	0100	2041	3619	2558	0024553	0338	15263	468						
224	OBS	T0107	1938	36218	2587			15236	385	047			076	080	092

NODC STATION DATA

NODC CC ID	SH	LAT	LON	MSQ ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
				WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO V. OBS									
312302	EZ	30141N	080081W	117	00	12	15	009	1973	019	057	0278	3	27		2	XO	0		0041
				00	F00	122	194	189	08											

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	P04	TOTP	N02	N03	SI04	DOC
	STD	0000	2561	3599	2393	0039903	0000	15374							
009	OBS	0000	2561	35995	2393			15374		002			000	009	064
	STD	0010	2563	3600	2392	0039990	0040	15376							
009	OBS	T0018	2564	36000	2392			15377	474	007				078	108
	STD	0020	2558	3600	2394	0039849	0080	15376	457						
	STD	0030	2528	3601	2404	0038961	0119	15371	391						
009	OBS	T0046	2489	36025	2417			15365	358	000			000	016	050
	STD	0050	2486	3603	2418	0037650	0196	15365	389						
009	OBS	T0071	2450	36071	2432			15360	487	004				047	076
	STD	0075	2448	3608	2434	0036295	0288	15360	487						
009	OBS	T0094	2372	36117	2459			15346	474	007			000	021	046
	STD	0100	2281	3611	2485	0031504	0373	15324	457						
	STD	0125	1918	3607	2581	0022452	0441	15232	395						
009	OBS	T0141	1702	36039	2632			15172	363	049			108	043	030
	STD	0150	1568	3589	2652	0015695	0488	15131	347						
009	OBS	T0188	1139	35395	2703			14989	301	122			222	118	036
	STD	0200	1106	3535	2705	0010640	0554	14979	301						
	STD	0250	0970	3516	2715	0009810	0605	14936	302						
009	OBS	T0263	0934	35110	2717			14924	302	160			269	169	054

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312302	EZ	30130N	079542W		116	09	12	15	033	1973	019	056	0544	3	27		2	X0	0			0042
									32	F02	142	194	189	10								

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2616	3608	2382	0040913	0000	15387	381						
033	OBS	0000	2616	36083	2382			15387	381	004			000	017	046
	STD	0010	2618	3608	2382	0041009	0041	15389	398						
	STD	0020	2619	3608	2381	0041087	0082	15391	415						
	STD	0030	2619	3608	2381	0041164	0123	15393	431						
033	OBS	T0047	2620	36078	2380			15396	460	002			000	017	056
	STD	0050	2620	3608	2381	0041265	0206	15396	427						
033	OBS	T0070	2619	36084	2381			15399	323	000			000	013	050
	STD	0075	2616	3609	2383	0041150	0309	15400	367						
033	OBS	T0093	2607	36190	2393			15402	458	004			000	016	046
	STD	0100	2588	3628	2406	0039061	0409	15399	438						
033	OBS	T0117	2528	36464	2438			15390	409	009			012	012	040
	STD	0125	2492	3653	2454	0034570	0501	15384	410						
033	OBS	T0140	2416	36623	2484			15370	412	019			016	016	034
	STD	0150	2348	3666	2507	0029582	0581	15355	400						
033	OBS	T0187	2096	36685	2581			15297	363	009			051	022	026
	STD	0200	1998	3655	2597	0021222	0708	15272	363						
	STD	0250	1647	3609	2649	0016290	0802	15174	354						
033	OBS	T0285	1424	35824	2679			15106	340	090			160	075	108
	STD	0300	1332	3574	2691	0012325	0873	15078	328						
033	OBS	T0336	1132	35516	2714			15013	308	100			215	110	108
	STD	0400	0845	3510	2730	0008563	0978	14913	306						
033	OBS	T0421	0770	34957	2730			14886	305	175			273	204	150

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STAND
312302		E7	30101N	079446W	116	09	12	15	058	1973	019	055	0823	3	32		3		X0		0	0043

	WATER CLP	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	29	F03	146	206	200				10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2561	3618	2407	0038557	0000	15376	478						
058	OBS	0000	2561	36183	2407			15376	478	007			000	016	
	STD	0010	2558	3618	2408	0038516	0039	15377	484						
	STD	0020	2556	3619	2409	0038466	0077	15378	490						
	STD	0030	2553	3619	2409	0038417	0115	15379	493						
058	OBS	T0048	2549	36196	2411			15381	496	004			000	014	
	STD	0050	2546	3620	2412	0038235	0192	15381	495						
	STD	0075	2520	3621	2422	0037427	0287	15379	485						
058	OBS	T0096	2504	36233	2428			15379	481	006			000	049	
	STD	0100	2502	3623	2429	0036873	0380	15379	481						
058	OBS	T0121	2493	36263	2434			15381	481	004			000	014	
	STD	0125	2489	3628	2436	0036274	0471	15381	497						
058	OBS	T0145	2424	36346	2461			15369	511	003			000	017	
	STD	0150	2381	3644	2481	0032124	0557	15361	474						
058	OBS	T0169	2251	36726	2540			15335	382	022			043	016	
058	OBS	T0193	2162						372	024			044	021	
	STD	0200	2125	3664	2569	0023876	0697	15307	373						
	STD	0250	1883	3647	2620	0019128	0804	15247	380						
058	OBS	T0288	1728	36316	2647			15207	386	049			070	038	
	STD	0300	1693	3626	2651	0016292	0893	15198	379						
058	OBS	T0384	1448	35854	2676			15131	336	095			159	076	
	STD	0400	1401	3578	2680	0013682	1042	15117	330						
	STD	0500	1112	3534	2704	0011535	1169	15030	304						
058	OBS	T0527	1034	35225	2709			15005	301				235	148	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STANO	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
											WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS			
312302	FZ		30375N	079360W	116	09	12	15	099	1973	019	054	0742	3	27		2		X1	8	2	0044
											22	F02	146		200	194			10			

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2573	3620	2404	0038803	0000	15379	473						
099	OBS	0000	2573	36198	2404			15379	473	007			000	012	108
	STD	0010	2574	3621	2405	0038780	0039	15381	472						
	STD	0020	2575	3622	2405	0038776	0078	15383	471						
	STD	0030	2575	3623	2406	0038790	0116	15384	470						
099	OBS	T0048	2577	36233	2406			15388	469	006			000	011	064
	STD	0050	2576	3623	2406	0038863	0194	15388	469						
	STD	0075	2568	3622	2407	0038802	0291	15390	467						
099	OBS	T0097	2560	36208	2409			15392	466	006			000	014	056
	STD	0100	2556	3622	2411	0038558	0388	15391	473						
099	OBS	T0121	2492	36287	2436			15381	478	006			000	011	056
	STD	0125	2466	3638	2451	0034856	0480	15376	456						
099	OBS	T0145	2345	36707	2512			15354	389	019			028	016	108
	STD	0150	2316	3672	2521	0028282	0558	15348	391						
099	OBS	T0170	2211	36744	2553			15325	399	021			041	015	088
099	OBS	T0194	2105	36727	2581			15301		025			049	019	092
	STD	0200	2081	3672	2587	0022166	0685	15296							
	STD	0250	1879	3657	2629	0018297	0786	15247							
099	OBS	T0291	1706	36373	2657			15202		028			056	025	072
	STD	0300	1657	3629	2662	0015231	0870	15187							
099	OBS	T0387	1273	35642	2696			15071		107			148	090	080
	STD	0400	1230	3557	2699	0011791	1005	15058							
	STD	0500	1021	3524	2712	0010650	1117	14997							
099	OBS	T0532	1001	35215	2714			14994		158			216	151	116

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRND	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						116	09	12	15	131	1973	019	053		0486	3	27		2	X1	8	7		0045

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	00	F00	152	200	194				10

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2605	3604	2383	0040858	0000	15384	471						
131	OBS	0000	2605	36045	2383			15384	471	007			000	015	084
	STD	0010	2608	3605	2382	0040981	0041	15387	465						
131	OBS	0010	2608	36046	2382			15387	465	012			000	016	080
	STD	0020	2602	3604	2383	0040877	0082	15387	460						
131	OBS	0020	2602	36041	2383			15387	460	007			000	015	100
	STD	0030	2602	3603	2382	0041009	0123	15388	465						
131	OBS	T0049	2601	36015	2382			15391	473	007			000	017	136
	STD	0050	2601	3602	2382	0041146	0205	15391	473						
	STD	0075	2597	3603	2384	0041021	0308	15395	476						
131	OBS	T0098	2594	36049	2386			15398	478	007			000	016	030
	STD	0100	2588	3608	2391	0040487	0410	15397	474						
	STD	0125	2509	3641	2440	0035914	0505	15387	432						
131	OBS	T0148	2436	36572	2474			15375		019			022	016	108
	STD	0150	2413	3657	2481	0032066	0590	15370	398						
131	OBS	T0184	2053	36566	2583			15284	363	040			053	030	174
	STD	0200	1923	3643	2607	0020217	0721	15250	358						
	STD	0250	1547	3599	2664	0014827	0808	15142	339						
131	OBS	T0257	1498	35924	2671			15127	336	088			132	075	156
	STD	0300	1206	3550	2699	0011573	0874	15032	316						
131	OBS	T0322	1089	35339	2708			14993	304	104			203	116	064
	STD	0400	0855	3504	2724	0009155	0978	14916							
131	OBS	T0403	0852	35039	2724			14916		164			285	186	060

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
312302	FZ	30435N	079580W	116	09	12	15	158	1973	019	052		0255	3	27		2	X2	8	7		0046
										20	F01	156	200	194		09						

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
	STD	0000	2546	3599	2397	0039512	0000	15370							
158	OBS	0000	2546	35988	2397			15370		021			000	018	092
	STD	0010	2542	3599	2398	0039444	0039	15371							
	STD	0020	2538	3599	2399	0039357	0079	15372							
	STD	0030	2535	3599	2401	0039252	0118	15372							
	STD	0050	2527	3601	2404	0039006	0196	15374							
158	OBS	0050	2527	36010	2404			15374		007			000	016	084
	STD	0075	2477	3604	2422	0037423	0292	15367							
158	OBS	0075	2477	36041	2422			15367		009			000	016	088
	STD	0100	2411	3608	2445	0035338	0383	15356							
158	OBS	0100	2411	36081	2445			15356		009			000	017	092
	STD	0125	2290	3657	2517	0028514	0463	15336							
158	OBS	0125	2290	36572	2517			15336		022			019	026	072
	STD	0150	1564	3628	2683	0012725	0514	15134							
158	OBS	0150	1564							069			124	057	108
	STD	0200	1360	3573	2685	0012643	0578	15070							
158	OBS	0200	1360	35729	2685			15070		124			180	094	072
158	OBS	0225	1158	35464	2705			15003		128			154	110	088
	STD	0250	0903												
158	OBS	0250	0903							164			264	167	108

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	30415N	080057W	117	00	12	15	183	1973	019	051		0096	3	27		3	X2	8	8		0047
								20	F04	125	194	194	04									
		STD	0000	2474	3605	2423	0036993	0000	15354													
	183	OBS	0000	2474	36047	2423			15354		007			000	017	072						
		STD	0010	2471	3604	2423	0037006	0037	15355													
		STD	0020	2468	3604	2424	0036965	0074	15356													
	183	OBS	0020	2468	36038	2424			15356		009			002	020	080						
		STD	0030	2451	3605	2431	0036396	0111	15353													
		STD	0050	2398	3608	2449	0034775	0182	15344													
	183	OBS	0050	2398	36081	2449			15344		013			000	019	100						
		STD	0075	2298	3611	2480	0031890	0265	15324													
	183	OBS	0095	2191	36121	2511			15301		036			041	034	060						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312302	E7		30425N	080110W	117	00	12	15	196	1973	019	050	0045	3	20		3	X2	8	8		0048

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
	20	F04	125	194	194		02		

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2370	3611	2459	0033603	0000	15330							
196	OBS	0000	2370	36106	2459			15330		009			000	024	076
	STD	0010	2356	3611	2463	0033216	0033	15328							
	STD	0020	2341	3611	2468	0032829	0066	15326							
	STD	0030	2327	3612	2472	0032450	0099	15324							
196	OBS	0042	2310	36121	2477			15322		022			016	026	088

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STAND
312302		FZ	30410N	080280W	117	00	12	15	224	1973	019	049	0034	3	22		3	X1	8	6		0049

	WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
		22	F04	122		222	217		01

	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC
		STD	0000	2140	3620	2532	0026631	0000	15273							
	224	OBS	0000	2140	36205	2532			15273		010			000	023	136

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
31	2302	EZ	30492N	080448W	117	00	12	16	003	1973	019	048	0030	3	20		3	X2	5	8		0050

WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
				20	F04	119	211	206		01

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	1996	3628	2577	0022361	0000	15235							
033	OBS	0000	1996	36283	2577			15235		010			000	034	076

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	NO OBS V									
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	F7	30510N	080550W	117	00	12	16	015	1973	019	047		0020	3	29		2	X1	8	3		0051
						29	F03			194	183		01									
		STD	0000		1854	3561		2562		0023775	0000	15188										
	015	OBS	0000		1854	35607		2562				15188			017				000	006	140	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	30538N	081067W	117	01	12	16	023	1973	019	046		0014	3	29		2	X1	8	3		0052
								29	F03	119	194	183		01								
		STD	0000	1754	3479	2524	0027357	0000	15149													
	023	OBS	0000	1754	34791	2524			15149		017				000	001	146					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302		EZ	31106N	081020W	117	11	12	16	055	1973	019	42B	0015	3	22		2	X2	8	8		0053

WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS
				29	F01	112	161	161		01

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	1670	3457	2527	0027076	0000	15121							
055	OBS	0000	1670	34568	2527			15121		019			000	008	160

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	EZ	31275N	080575W	117	10	12	16	078	1973	019	042		0014	3	09		3	X2	8	8		0054
						34	F01	105	156	156			01									
		STD	0000	1590	3459	2548	0025135	0000	15097													
	078	OBS	0000	1590	34594	2548			15097		019								000	000	150	

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
											WATER CLR	WIND TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
	CASTMSG		CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC					
312302	FZ	31257N	080525W	117	10	12	16	085	1973	019	041		0024	3	09		2	X6	8	8		0055
								34	F01	091	156	156	01									
			STD	0000	1681	3485	2546	0025280	0000	15128												
	085		OBS	0000	1681	34849	2546			15128		018				000	006	120				

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STAND	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
						WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	31217N	080410W	117	10	12	16	104	1973	019	040		0019	3	27		2	X6	5	8		0056
							34	F02	091	150	144		01									
		STD	0000	1747	3409	2472	0032323	0000	15138													
	104	OBS	0000	1747	34087	2472			15138		018			003	019	136						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STANO	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
									WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS						
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	FZ	31175N	080302W	117	10	12	16	119	1973	019	039		0025	3	27		3	X2	5	8		0057
								32	F02	915	150	144		01								
		STD	0000	1914	3561	2547	0025226	0000	15205													
	119	OBS	0000	1914	35608	2547			15205		007				000	008	146					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	WC	CLOUD TY	CLOUD AMT	NODC STANO
											WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS			
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SIO4	DOC						
312302	E7	31122N	080150W	117	10	12	16	141	1973	019	038		0036	3	32		3	X6	5	8		0058
								32	F02	081	150	144	01									
		STD	0000	2193	3609	2508	0028873	0000	15285													
	141	OBS	0000	2193	36090	2508			15285		005			000	011	092						

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STANO	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANO
						WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	EZ	31065N	079590W	116	19	12	16	160	1973	019	037		0047	3	18		3	X6	5	2		0059
								32	F02	064	150	144		03								
		STD	0000	2394	3603	2446	0034803	0000	15335													
	160	OBS	0000	2394	36033	2446			15335		004				000	018	072					
		STD	0010	2402	3606	2446	0034870	0035	15338													
		STD	0020	2405	3608	2446	0034855	0070	15341													
	160	OBS	0020	2405	36081	2446			15341		006				000	019	054					
		STD	0030	2403	3608	2447	0034814	0105	15342													
	160	OBS	0046	2389	36089	2452			15342		005				000	019	072					

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	STAND	DEPTH BOT	DNP	WAVE OBS DR	HT	P	S	WC	CLOUD TY	AMT	NODC STANC
						WATER CLR	TP	WIND DR	F/S	BAR	AIR TEMP DRY	WET	V	NO OBS								
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	F7	31050N	079522W	116	19	12	16	1973	019	036	0140	3	20	3	X2	5	8					0060
					20	F02	010	150	144	06												
		STD	0000	2422	3603	2437	0035639	0000	15341													
189		OBS	0000	2422	36028	2437			15341		004			000	017							
		STD	0010	2421	3603	2438	0035606	0036	15343													
		STD	0020	2420	3604	2439	0035573	0071	15344													
		STD	0030	2418	3604	2440	0035541	0107	15346													
		STD	0050	2416	3605	2441	0035475	0178	15348													
189		OBS	0050	2416	36054	2441			15348		005			000	017							
		STD	0075	2320	3609	2472	0032599	0263	15329													
189		OBS	0075	2320	36093	2472			15329		015			018	025							
		STD	0100	2204	3612	2508	0029329	0340	15305													
189		OBS	0100	2204	36121	2508			15305		027			039	034							
189		OBS	0115	1903	36143	2590			15227		045			087	046							
		STD	0125	1727	3608	2629	0017739	0399	15177													
189		OBS	0140	1500	35866	2666			15107		085			128	084							

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
312302	EZ		31028N	079476W		116	19	12	16	190	1973	019	035	0265	3	32		5	X2	5	8	0061

WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS
			32	F08	024	172	167	06

CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC
	STD	0000	2579	3609	2394	0039739	0000	15379							
190	OBS	0000	2579	36092	2394			15379		004			000	028	072
	STD	0010	2579	3609	2394	0039790	0040	15380							
	STD	0020	2579	3609	2394	0039831	0080	15382							
	STD	0030	2578	3609	2394	0039881	0119	15384							
	STD	0050	2578	3608	2394	0039972	0199	15387							
190	OBS	0050	2578	36085	2394			15387		004			000	033	090
	STD	0075	2526	3618	2417	0037891	0297	15380							
	STD	0100	2475	3624	2437	0036053	0389	15373							
190	OBS	T0100	2475	36238	2437			15373		000			005	008	156
	STD	0125	2193	3625	2521	0028173	0469	15307							
	STD	0150	1933	3626	2592	0021459	0531	15242							
190	OBS	T0150	1933	36265	2592			15242		036			081	037	056
	STD	0200	1481	3592	2674	0013766	0619	15112							
190	OBS	T0200	1481	35917	2674			15112		093			138	075	064
	STD	0250	1212	3550	2697	0011610	0683	15026							
190	OBS	T0250	1212	35496	2697			15026		103			219	113	072

NODC STATION DATA

NODC CC	ID	SH	LAT	LON	MSQ	ID	MO	DY	HR	YEAR	ORIGINATOR CRNO	ORIGINATOR STANO	DEPTH BOT	DEPTH DNP	WAVE OBS DR	WAVE OBS HT	WAVE OBS P	WAVE OBS S	CLOUD WC	CLOUD TY	CLOUD AMT	NODC STANO
					WATER CLR	WATER TP	WIND DR	WIND F/S	BAR	AIR TEMP DRY	AIR TEMP WET	AIR TEMP V	NO OBS									
	CASTMSG	CTYPE	DEPTH	TEMP	SAL	SIGMAT	SPVOLAN	DYNDPH	SVF	OXY	PO4	TOTP	NO2	NO3	SI04	DOC						
312302	FZ	30595N	079360W	116	09	12	16	225	1973	019	034		0550	3	32		7	X2	5	8		0062
								32	F08	024	161	156	10									
		STD	0000		3609																	
	225	OBS	0000		36093						005			000		112						
		STD	0010		3610																	
		STD	0020		3611																	
		STD	0030		3611																	
	225	OBS	T0048	2576	36124	2398			15386		000			000	010	070						
		STD	0050	2574	3613	2399	0039431		15386													
	225	OBS	T0072	2550	36221	2413			15385		004			000		056						
		STD	0075	2547	3622	2414	0038156		15385													
	225	OBS	T0095	2527	36247	2422			15384		002			000	009	060						
		STD	0100	2498	3633	2437	0036083		15379													
		STD	0125	2353	3662	2503	0029918		15352													
	225	OBS	T0143	2250	36731	2541			15330		024			023		064						
		STD	0150	2208	3672	2552	0025339		15321													
	225	OBS	T0192	1972	36588	2606			15264		022			061	024	054						
		STD	0200	1932	3656	2615	0019497		15254													
	225	OBS	T0238	1738	36347	2647			15202		053			081	057	032						
		STD	0250	1673	3624	2655	0015795		15183													
	225	OBS	T0284	1499	35957	2673			15132		065			153	057	042						
		STD	0300	1422	3584	2680	0013406		15108													
	225	OBS	T0377	1108	35366	2706			15009		145			230	205	042						
		STD	0400	1033	3526	2712	0010466		14985													
		STD	0500	0808	3499	2727	0008981		14914													
	225	OBS	T0523	0779	34971	2730			14907		178			237	218	046						

SURFACE DRIFTER DATA

Four drift bottles were released at each of the following stations: 1, 3, 5, 20, 18, 16, 25, 23, 21, 43, 64, 62, 60, 41, and 39.

To date no drift bottles have been returned.

Table 2. Chlorophyll a and C^{14} uptake with respect to depth.

Station	Depth (m)	Chlorophyll a (mg/m^3)	C^{14} uptake $mgC/m^3/day$
1	0	.620	292.4
	7	.797	68.9
4	0	.339	3.24
	9	.339	11.93
	16	.353	17.61
11	0	.398	33.14
	16	.326	28.22
	25	.384	1.88
	37	.487	17.28
	54	.184	13.71
14	0	.398	55.36
	9	.425	22.14
	15	.475	19.20
	21	.443	7.06
	26	.378	2.58
17	0	.301	114.09
	9	.290	40.68
	16	.288	22.68
20	0	2.09	659.81
	2	2.016	893.91
21	0	1.09	39.51
	3	.826	240.89
	7	.974	156.44
24	0	.266	56.44
	8	.324	46.42
	13	.266	16.14
27	0	.723	34.54
	9	.796	38.09
	15	.761	53.90
	21	.761	30.62
	30	.693	9.38
30	0	.203	13.31
	17	.193	6.71
	29	.194	7.29
	41	.218	3.42
	59	.310	10.56

*The chlorophyll and carbon-^{14} productivity data are only considered accurate to 2 significant figures, at best, even though more are reported.

Table 2. (continued)

Station	Depth (m)	Chlorophyll *a* (mg/m^3)	C^{14} uptake $mgC/m^3/day$
30	0	.247	38.22
	17	.213	22.97
	29	.236	29.62
	37	.237	12.38
	54	.214	31.66
37	0	.306	42.50
	10	.354	46.69
	17	.442	0
	24	.354	8.33
	35	.413	18.62
40	0	.944	157.78
	8	.826	80.13
	13	.915	12.84
43	0	1.68	209.94
	3	1.83	398.90
	7	2.01	352.19
47	0	.826	17.51
	8	.885	43.34
	13	1.121	36.79
50	0	.369	119.41
	10	.378	22.39
	17	.438	16.26
	24	.390	8.00
	35	.420	25.99
54	0	.151	127.83
	16	.129	35.01
	25	.109	7.12
	37	.119	24.63
	54	.100	26.9
55	0	.133	50.65
	16	.122	14.83
	25	.144	7.67
	37	.317	8.55
	54	.094	13.13
59	0	.519	29.80
	10	.401	52.48
	16	.472	43.05
	24	.460	15.17
	35	.401	7.22

Table 2. (continued)

Station	Depth (m)	Chlorophyll *a* (mg/m^3)	C^{14} uptake mgC/m^3/day
61	0	.476	150.48
	9	1.02	103.36
	16	.812	96.74
	27	.770	54.81
	32	1.062	9.69
64	0	2.27	380.65
	3	2.124	811.84
	7	1.888	320.14

Table 3. Surface chlorophyll *a*, depth integrated chlorophyll *a* and C^{14} values.

Station	Surface Chlorophyll mg/m^3	Depth Integrated Chlorophyll *a* mg/m^2	Depth Integrated C^{14} mgC/m^2/day
1	.620	5.0	1264.5
2	.508		
3	.612		
4	.339	5.5	171.7
5	.451		
6	.448		
7	.314		
11	.398	19.9	1004.7
12	.333		
13	.277		
14	.398	11.2	575.6
15	.601		
16	.602		
17	.301	4.7	918.2
18	.265		
19	.324		
20	2.09	4.1	1553.7
21	1.09	6.5	1215.3
22	.702		
23	.277		
24	.266	3.8	567.8
25	.223		
26	.546		
27	.723	22.6	1036.4
28	.496		
29	.609		
30	.203	12.9	444.2
31	.238		
32	.247	12.3	1378.0
35	.101		
36	.295		
37	.306	13.1	786.7
38	.301		
39	.594		
40	.944	11.4	1184.1
41	.414		
42	.737		
43	1.68	12.9	2415.4
45	1.563		
46	1.534		
47	.826	11.9	443.7
48	.260		
49	.558		
50	.369	13.9	1116.1
51	.252		
52	.119		
53	.234		
54	.151	6.5	2120.8
55	.133	9.5	906.7

Table 3. (continued)

Station	Surface Chlorophyll mg/m^3	Depth Integrated Chlorophyll *a* mg/m^2	Depth Integrated C^{14} $mgC/m^2/day$
56	.101		
57	.104		
58	.306		
59	.519	15.7	1056.8
60	.590		
61	.476	26.4	2837.4
62	.806		
63	.549		
64	2.27	14.6	4052.7

Table 4. Particulate Organic Carbon (POC) and Nitrogen (PN)

Station	Depth (m)	POC µgC/L	PN µgN/L	C:N (atomic)
1	0	218	30	9:1
1	0	-	24	11:1
2	0	146	27	6:1
14	0	88	9	12:1
16	0	134	19	8:1
18	0	128	22	6:1
20	0	424	50	10:1
20	0	484	-	11:1
21	0	214	20	12:1
24	0	103	9	14:1
28	0	91	14	8:1
31	0	54	8	8:1
36	0	111	-	-
40	0	93	-	-
42	0	182	23	9:1
43	0	562	37	17:1
42-46	0	259	27	11:1
43-44	0	202	-	-
46	0	286	29	11:1
48	0	97	-	-
49	0	128	-	-
51	0	106	-	-
56	0	49	-	-
60	0	38	18	2:1
62	0	150	19	9:1
63	0	287	35	10:1
64	0	93	-	-

ZOOPLANKTON

Sampling Method: Plankton samples were collected with a half meter No. 20 mesh net towed obliquely through the entire water column. Although an impeller flow meter was mounted on the net, these measurements are only qualitative.

Data: The following data are the five dominant genera at each station in order of abundance. The average cephalothorax length and concentration/m^3 are also given.

Table 5. Generic composition (five dominant genera at each station listed in order of abundance), respective size ranges (cephalothorax length in mm) and concentrations.

Station	Genus	Size (mm)	Animal Concentration (copepods/m^3)
1	*Oncaea* sp.	.31	48.51
	Corycella sp.	.68	6.57
	Oithona sp.	.43	4.65
	Centropages sp.	1.30	.61
	Temora sp.	.78	.32
	Labidocera aestiva	1.50	.21
	Eucalanus sp.	1.89	.11
	Total Concentration:		60.98
21	*Eucalanus attenuatus*	1.81	.88
	Centropages typicus	1.42	.18
	Labidocera aestiva	1.52	.06
	Candicia curta	1.68	.02
	Total Concentration:		1.14
44	*Corycella* sp.	.42	4.21
	Calanus sp.	.74	3.20
	Centropages sp.	.91	1.21
	Eucalanus sp.	.81	.08
	Oithona sp.	.64	.07
	Total Concentration:		8.77
7	*Oithona* sp.	.66	6.15
	Calanus sp.	.75	3.91
	Centropages typicus	1.11	1.04
	Temora turbinata	.61	.51
	Total Concentration:		11.61
27	*Calanus* sp.	1.10	2.39
	Corycaeus sp.	.38	.81
	Oithona sp.	.66	.12
	Temora turbinata	.72	.08
	Calocalanus pavo	.49	.03
	Total Concentration:		3.43

Station	Genus	Size (mm)	Animal Concentration (copepods/m^3)
30	*Oithona* sp.	.58	.97
	Corycaeus sp.	.81	.51
	Pleuromamma abdominalis	1.49	.13
	Oncaea sp.	.41	.04
	Corycaeus speciosus	1.33	.02
	Rhincalanus cornutus	2.50	.02
	Total Concentration:		1.69
50	*Calanus* sp.	.96	1.89
	Oncaea sp.	.59	.76
	Oithona sp.	.71	.75
	Centropages typicus	1.11	.16
	Corycella sp.	.68	.14
	Eucalanus sp.	1.72	.13
	Temora turbinata	.74	.09
	Calocalanus pavo	.40	.03
	Euchaeta sp.	2.10	.02
	Sapphirina sp.	.85	.01
	Total Concentration:		3.98
53	*Oithona* sp.	.65	.50
	Oncaea sp.	.59	.42
	Calanus sp.	1.40	.09
	Farranula gracilis	.62	.09
	Corycaeus sp.	.62	.07
	Paracalanus sp.	.85	.07
	Candacia sp.	1.81	.05
	Phaenna spinifera	1.59	.05
	Calocalanus pavo	.57	.03
	Pleuromamma abdominalis	1.89	.03
	Corycaeus speciosus	1.00	.01
	Pleuromamma piseki	1.37	.01
	Total Concentration:		1.42
64	*Labidocera aestiva*	1.78	1.11
	Corycaeus sp.	.55	.81
	Eucalanus attenuattus	1.61	.48
	Centropages furcatus	1.27	.12
	Temora turbinata	1.33	.02
	Total Concentration		2.54

Table 6. Mean grain size, sorting, skewness and kurtosis (Folk and Ward values) for sediments from E-19-73. All values in phi (ϕ) where applicable.

Station #	Mz	σ_I	Sk	Kg
2	1.16	1.17	-0.38	1.05
3	1.27	1.01	-0.72	1.05
5	1.41	0.73	-0.15	0.97
12	4.20	0.79	-0.16	1.55
20	0.64	1.19	-0.05	1.01
22	0.61	0.98	-0.04	1.20
24	1.06	0.69	-0.15	1.03
25	0.26	0.90	-0.18	1.10
27	1.09	0.64	-0.18	0.95
28	0.29	1.13	0.15	1.03
38	0.91	0.68	-0.03	0.87
39	1.77	0.72	-0.22	1.14
40	1.83	0.69	-0.38	1.05
43	1.97	0.72	-0.40	1.41
45	1.44	0.70	-0.11	0.99
47	1.76	0.58	-0.19	1.16
51	0.66	1.20	-0.38	0.90
58	1.95	0.57	-0.17	0.98
60	1.20	0.74	-0.14	1.03

Table 7. Organic material in Continental Shelf sediments E-19-73.

Station #	$\bar{x}$ (%)	$S\bar{x}$ 05	$\bar{x} \pm$ $S\bar{x}$ .05
2	0.57	0.18	0.75 — 0.39
3	0.47	0.06	0.53 — 0.41
5	0.56	0.03	0.59 — 0.53
12	2.78	0.65	3.43 — 2.13
20	0.55	0.04	0.59 — 0.51
22	0.29	0.07	0.36 — 0.22
24	0.33	0.07	0.40 — 0.26
25	0.45	0.07	0.52 — 0.38
27	0.23	0.06	0.29 — 0.17
28	0.75	0.21	0.96 — 0.54
38	0.34	0.04	0.38 — 0.30
39	0.32	0.08	0.40 — 0.24
40	0.45	0.03	0.47 — 0.42
43	0.25	0.04	0.29 — 0.21
45	0.17	0.03	0.20 — 0.14
47	0.22	0.08	0.30 — 0.14
51	0.68	0.07	0.75 — 0.61
58	0.73	0.11	0.84 — 0.62
60	0.56	0.06	0.62 — 0.50

Table 8. Dissolved mercury data.

Station #	Mercury Concentrations (ng/1) December 1973
3	33
9	41
12	31
14	35
16	21
18	39
20	39
22	29
23	28
25	55
27	58
29	55
31	72
34	68
37	83
39	53
41	49
43	66
45	65
47	102
49	76
50	103
52	65
54	91
56	56
58	22
60	155
62	82
64	85
Average	60
Minimum	21
Maximum	155