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Technical Report No. 185

**PHYSICAL, CHEMICAL, AND CURRENT DATA FROM
ARLIS II: EASTERN ARCTIC OCEAN, GREENLAND
SEA, AND DENMARK STRAIT AREAS
FEBRUARY 1964 - MAY 1965
VOLUME I**

by

RICHARD B. TRIPP AND KOU KUSUNOKI

Scientific Program
Under the general direction of
Lawrence K. Coachman

Arctic Institute of North America
Subcontract ONR-368
and

Office of Naval Research
Contract Nonr-477(37)
Project NR 083 012

Reference M67-16
March 1967



SEATTLE, WASHINGTON 98105

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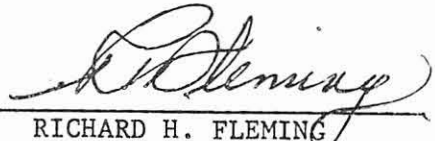
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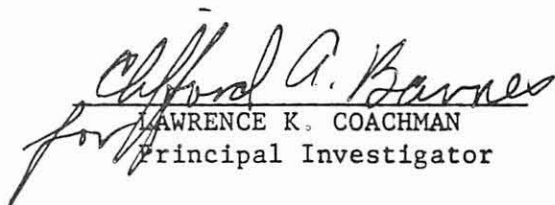
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ABSTRACT

This report contains tabulated physical and chemical data collected from February to 31 December 1964 at Arctic Research Laboratory Ice Station No. 2 (ARLIS II) as it moved through the Eastern Arctic Ocean into the Greenland Sea. These data were collected as part of a study of the water characteristics of the Arctic Ocean and Greenland Sea.

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INTRODUCTION

This two-volume report contains oceanographic data collected from ARLIS II during 1964 and the first half of 1965 on cruise AR2-2 (Part A), 4 February - 31 December 1964 (Volume I), and AR2-2 (Part B), 1 January - 8 May 1965 (Volume II). This was the last cruise before evacuation of ARLIS II on 11 May 1965.

The objective of this cruise was to provide data on the eastern Arctic Ocean and Greenland Sea areas (AR2-2, Part A). During the last part of the cruise (AR2-2, Part B), emphasis was on detailed hydrographic and current measurements in the East Greenland Current.

Operation and Types of Observations

ARLIS II (Arctic Research Laboratory Ice Station No. 2) was an ice floe of approximately 3.25 x 2.0 km (Fig. 1) in area and 13 to 26 m in thickness. There were many piles of glacial debris on its surface (Fig. 1). These piles, ranging from large boulders to fine silt, probably represent a terminal moraine that was originally deposited on some ice shelf in the Canadian Archipelago (Smith, 1964). During the summer melt season, a river, muddy with glacial silt, cascaded off the edge of the island onto the pack ice. The island rode low in the water and was saturated with salt to within a few meters of the surface (Brewer, 1962).

The oceanographic working area was located near the edge of the island, approximately 1 km from the main camp. Sampling was done through a 2-m² hole in the ice, which was 5.5 m thick at the sampling site. The sampling area was sheltered by an insulated plywood prefab hut housing the gasoline driven hydrographic winch, diesel stove, and oceanographic sampling and measuring equipment. There were 1550 m of 5/32-inch wire on the winch drum until January 1965; at that time, a 3000-m reel of wire was installed. The hydro hole was kept free of ice by electric heating cables in the water and an electric fan installed over it to prevent the stratification of cooled air over the surface of the water.

At the start of the cruise, ARLIS II was located in the Arctic Ocean north of Greenland. The island moved southward into the Greenland Sea, following the East Greenland Current until it was abandoned in the Denmark Strait. Figs. 2 and 3 show the island track and location of oceanographic stations accomplished during Part A of the cruise. The island track and oceanographic station locations for Part B of the cruise are down in Volume II.

The island's position was obtained through celestial navigation. Representatives from the Department of Atmospheric Sciences, University of Washington and University of Wisconsin were responsible for the navigation. Navigational fixes were obtained daily, weather permitting.

A list of the navigational positions for both parts of the cruise is given in Table 1 of this volume.

Temperature was measured at all hydrographic stations of cruise AR2-2. Salinity, dissolved oxygen, phosphate-P, and silicate-Si determinations were made at selected stations. Water samples for the analysis of deuterium were taken on 20 and 30 January 1965 and were sent to Captain David C. Nutt, Dartmouth College. Samples for the analysis of silicate-Si were sent to Dr. U. Stefánsson at the Fisheries Research Institute, Reykjavik, Iceland. Plankton samples, taken at periodic intervals throughout the cruise, were sent for analysis to the Plankton Laboratory, Faculty of Fisheries, Hokkaido University, Sapporo, Japan.

During cruise AR2-2 (Part B) direct current measurements were obtained at various levels in the East Greenland Current. These are reported in Volume II.

Collection of Data

Nansen bottles were used to obtain water samples for salinity, dissolved oxygen, and nutrient analyses. The observed and interpolated data are shown in Table 2. Samples were collected at standard oceanographic depths (U.S. Navy Hydrographic Office, 1955a). The presence of heating cables and the accumulation of freshwater in the hydro hole made surface observations nonrepresentative; hence none were made. For convenience in programming the computer for data reduction, it was assumed that the surface temperature, salinity, dissolved oxygen, and nutrient values were the same as the next deeper sampling depth.

Determination of Properties and Accuracy of Measurements

Two protected reversing thermometers were used on each Nansen bottle. For deep casts (usually 200 m and deeper), all the Nansen bottles also carried an unprotected thermometer.

The depths of subsurface observations were calculated from measured wire angles and from smoothed curves of wire length minus thermometric depth ($L - Z$) versus wire length (L). The latter is the difference method described by LaFond (1951).

The salinity determinations for all samples except those collected during January 1965 were made on an inductive salinometer (Model RS-7A, Industrial Instruments, Inc., Cedar Grove, New Jersey). These values are considered to be accurate to $\pm 0.003\%$. During January 1965, salinity samples were titrated using the Knudsen method (Oxner, 1920) and are judged to be accurate to $\pm 0.012\%$.

The dissolved oxygen analyses were made using a modified Winkler method (Strickland and Parsons, 1965).

Nutrient analyses for silicate-Si and phosphate-P were accomplished using a photoelectric colorimeter (Robinson and Thompson, 1948a, 1948b) (Lumetron, model 402-E, Photovolt Corporation, New York 16, N.Y.). Difficulty in keeping a stable power supply forced discontinuation of nutrient analyses after February 1965.

The following quantities were computed with the IBM 7094-7040 Direct Couple System at the Research Computer Laboratory of the University of Washington: sigma-t (σ_t); apparent oxygen utilization (AOU) and oxygen saturation for observed values; the interpolated values of temperature, salinity, and oxygen at standard oceanographic depths; the interpolation error for each of the above quantities; sigma-t (σ_t) for interpolated values; specific volume anomaly ($\Sigma\Delta D$); and variance ratio.

Oxygen solubility was calculated according to the equations of Truesdale and Gameson (1957). The interpolation program was based on two three-point Lagrange parabolic interpolation polynomials (Buckingham, 1957). The equations for sigma-t (σ_t) were taken from LaFond (1951), and the equations for specific volume anomaly and geopotential anomaly were those used by the U.S. Navy Hydrographic Office in their computer program (U.S. Navy Hydrographic Office, 1955b), except that the pressure in decibars was used instead of the depth. The equations for pressure and potential energy anomaly were taken from Froese (1960).

The variance ratio is the ratio of the variance of the interpolated polynomial to the variance of the measurement. The magnitude of this ratio gives an indication of whether the vertical spacing of observed values is adequate to accurately portray the distribution of properties in that region of the curve. As shown by Rattray (1962), the value should remain close to unity. The two quantities, variance ratio and error of interpolation, can be taken as joint indication of the accuracy of the interpolated values. A large variance ratio indicates inadequate vertical spacing of observed values, but if the vertical gradient of properties is small in this region of the curve, the error of interpolation will still be small. On the other hand, a small variance ratio may be accompanied by large errors of interpolation in regions of large vertical gradients, such as the thermocline or halocline. Large values of the variance ratio, which may occur at the final interpolated depth, reflect a necessary change in the interpolation scheme at that depth when there is only one observed value below the desired standard depth.

Personnel

The following persons were members of the scientific party on cruise AR2-2:

Fushimi, Hiroji
Kusunoki, Kou (Scientific Leader)
Miura, Shoji

These scientists were staff members of the Institute of Low Temperature Science, Hokkaido University, Sapporo, Japan, under subcontract with the Arctic Institute of North America (Subcontract ONR 335).

Mr. N. E. Baxter and Mr. Donald Johnson, representatives of the General Motors Research Laboratory, Santa Barbara, California, were engaged in the installation of the drift meter system between 31 January 1965 and 15 February 1965.

Data reduction was accomplished by Dr. Kusunoki and R. B. Tripp, Department of Oceanography, University of Washington, assisted by the Data Analysis, Publications, and Cartography sections of that Department.

Acknowledgments

Funds for this investigation were provided by the U.S. Office of Naval Research through Contract Nonr-477(37), Project NR 083 012 and the Arctic Institute of North America, Subcontract ONR-368.

EXPLANATION OF DATA TABLES

The information in the data tables was transcribed directly from IBM cards using an IBM Type 1401 Data Processing System. A blank space in the tables or headings indicates that no observation was taken. The original data and the interpolated and computed values punched on the cards are recorded or coded in accordance with the procedures used by the U.S. Navy Hydrographic Office (1960). The codes used will be found in the National Oceanographic Data Center Manual Series Publication M-2 (Rev. Aug 1964). Abbreviations and column headings are described below.

Abbreviations and Headings Used in Data Tables

DATE	Greenwich month/day/year
HR	Greenwich mean time to the nearest hour and tenths of hour of the messenger drop on the first cast
LAT LONG	Latitude and longitude in degrees, minutes and on some stations, tenths of minutes
SDG	Depth of water in meters as determined by a PDR (Precision Depth Recorder)
WEA	State of weather (<i>See</i> code, page 9.)
WVEL ___ DIR ___	Wind velocity in knots Wind direction (<i>See</i> code, page 8.)
VIS	Range of visibility (<i>See</i> code, page 8.)
BA	Barometric pressure in millibars and tenths of millibars (To obtain the barometric pressure, add 900 if this number is above 50 and 1000 if below 50.)
CL ___ AMT ___	Cloud type (<i>See</i> code, page 7.) Cloud cover in eighths (oktas) (<i>See</i> code, page 8.)
DRY	Air temperature, dry bulb, in degrees and tenths of a degree Celsius
WET	Air temperature, wet bulb, in degrees and tenths of a degree Celsius
RELHU	Relative humidity expressed in percent

WA	Wire angle in degrees (The first number is the wire angle for Cast 1; the second for Cast 2, etc. Dashes (--) indicate the wire angle was not recorded for that cast.)
CST	Cast number
DEPTH	Depth in meters from which sample was obtained
TEMP	Temperature in degrees Celsius to hundredths
SAL	Salinity in parts per thousand to thousandths
SIGMA-T (σ_t)	An expression for the density of seawater at atmospheric pressure at the indicated temperature and salinity (To convert sigma-t values to density, divide by 1000 and add 1; thus, sigma-t 22.42 = density 1.02242.)
OXYGEN (Dissolved oxygen)	
ML/L	In milliliters per liter to hundredths
MGA/L	In milligram-atoms per liter to thousandths
AOU	Apparent oxygen utilization in milligram-atoms per liter to thousandths
SATN	Percent of oxygen saturation
PHOS	Phosphate-phosphorous in microgram-atoms per liter to hundredths
SIL	Silicate-silicon in microgram-atoms per liter to hundredths
SP VOL ANOMALY	The anomaly of specific volume ($10^5 \delta$) at the indicated temperature, salinity, and pressure compared to a standard water of 0°C and 35‰ salinity at the same pressure (Tabular values multiplied by 10^{-5} will give the anomaly in units of cubic centimeters per gram.)
GEOPOT ANOMALY	Geopotential anomaly ($\Sigma \Delta D$) in dynamic meters of the layer of water between the surface and the indicated depth
POT ENERGY	Potential energy anomaly in units of 10^8 ergs/cm ² of the layer of water between the surface and the indicated depth

OXY (Oxygen)	Interpolated values at standard depths in milliliters per liter to hundredths
VAR RATIO	Ratio of the variance of the interpolation polynomial to the variance of the measurement (The value of the variance ratio is an indication of the vertical spacing of the observed values upon which the interpolation is based. Values close to 1 indicate optimum spacing. Values greater than 3 indicate that the vertical spacing is inadequate to represent faithfully the distribution of properties in this region of the curve. In the case of missing values, where different combinations of observed values may be used to interpolate at the same depth, the variance ratio indicating the worst spacing has been printed. Values greater than 100 have been printed as 99.99. If the observed depth corresponds to a desired standard depth, no interpolation is made and the variance ratio is not computed.)
E(T)	Interpolation error, in degrees Celsius, of the temperature value at this depth (If the observed depth corresponds to a desired standard depth, the interpolation error will be zero.)
E(S)	Interpolation error, in parts per thousand, of the salinity value at this depth (<i>See</i> comments under E(T) above.)
E(O)	Interpolation error, in milliliters per liter, of the oxygen value at this depth (<i>See</i> comments under E(T) above.)

Codes Used for Reporting Observations

Taken from National Oceanographic Data Center "Processing Physical and Chemical Data from Oceanographic Stations," Part 1, Coding and Key-punching (1964).

Cloud Type. WMO Code 0500

Code		Code	
0	Cirrus	7	Stratus
1	Cirrocumulus	8	Cumulus
2	Cirrostratus	9	Cumulonimbus
3	Alto cumulus	X	Cloud not visible owing to darkness, fog, dust-storm, sandstorm, or other analogous phenomena
4	Altostratus		
5	Nimbostratus		
6	Stratocumulus		

Amount of Cloud Cover. WMO Code 2700

Code

0	0	0
1	1 oktas or less, but not 0	1/10 or less, but not 0
2	2 oktas	2/10 - 3/10
3	3 oktas	4/10
4	4 oktas	5/10
5	5 oktas	6/10
6	6 oktas	7/10 - 8/10
7	7 oktas or more, but not 8	9/10 or more, but not 10/10
8	8 oktas	10/10
9	Sky obscured or cloud amount cannot be estimated	

Visibility. WMO Code 4300

Code

0	Less than 50 m	(less than 55 yards)
1	50-200 m	(approx 55-220 yards)
2	200-500 m	(approx 220-550 yards)
3	500-1000 m	(approx 550 yards-5/8 nm)
4	1-2 km	(approx 5/8 nm-1 nm)
5	2-4 km	(approx 1-2 nm)
6	4-10 km	(approx 2-6 nm)
7	10-20 km	(approx 6-12 nm)
8	20-50 km	(approx 12-30 nm)
9	50 km or more	(30 nm or more)

Direction. Compass direction from which wind is coming

Code

00	Calm, or no value
01 to 36	Each value represents 1/10 of the true direction in degrees, measured clockwise from the north, with 36 representing true north

NUMERICAL WEATHER CODES—PRESENT WEATHER

00 Cloud development NOT observed or NOT observable during past hour.	01 Clouds generally dissolving or becoming less developed during past hour.	02 State of sky on the whole unchanged during past hour.	03 Clouds generally forming or developing during past hour.	04 Visibility reduced by smoke.	05 Haze.	06 Widespread dust in suspension in the air NOT raised by wind, at time of observation.	07 Dust or sand raised by wind, at time of observation.	08 Well developed dust devil(s) within past hour.	09 Duststorm or sandstorm within sight of station during past hour.
10 Light fog.	11 Patches of shallow fog at station, NOT deeper than 6 feet on land.	12 More or less continuous shallow fog at station, NOT deeper than 6 feet on land.	13 Lightning visible, no thunder heard.	14 Precipitation within sight, but NOT reaching the ground.	15 Precipitation within sight, reaching the ground, but distant from station.	16 Precipitation within sight, reaching the ground, near to but NOT at station.	17 Thunder heard, but no precipitation at the station.	18 Squall(s) within sight during past hour.	19 Funnel cloud(s) within sight during past hour.
20 Drizzle (NOT freezing and NOT falling as showers) during past hour, but NOT at time of observation.	21 Rain (NOT freezing and NOT falling as showers) during past hour, but NOT at time of observation.	22 Snow (NOT falling as showers) during past hour, but NOT at time of observation.	23 Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation.	24 Freezing drizzle or freezing rain (NOT falling as showers) during past hour, but NOT at time of observation.	25 Showers of rain during past hour, but NOT at time of observation.	26 Showers of snow, or of rain and snow, during past hour, but NOT at time of observation.	27 Showers of hail, or of hail and rain, during past hour, but NOT at time of observation.	28 Fog during past hour, but NOT at time of observation.	29 Thunderstorm (with or without precipitation) during past hour, but NOT at time of observation.
30 Slight or moderate duststorm or sandstorm has decreased during past hour.	31 Slight or moderate duststorm or sandstorm, no appreciable change during past hour.	32 Slight or moderate duststorm or sandstorm has increased during past hour.	33 Severe duststorm or sandstorm, has decreased during past hour.	34 Severe duststorm or sandstorm, no appreciable change during past hour.	35 Severe duststorm or sandstorm, has increased during past hour.	36 Slight or moderate drifting snow, generally low.	37 Heavy drifting snow, generally low.	38 Slight or moderate drifting snow, generally high.	39 Heavy drifting snow, generally high.
40 Fog at distance at time of observation, but NOT at station during past hour.	41 Fog in patches.	42 Fog, sky discernible, has become thinner during past hour.	43 Fog, sky NOT discernible, has become thinner during past hour.	44 Fog, sky discernible, no appreciable change during past hour.	45 Fog, sky NOT discernible, no appreciable change during past hour.	46 Fog, sky discernible, has begun or become thicker during past hour.	47 Fog, sky NOT discernible, has begun or become thicker during past hour.	48 Fog, depositing rime, sky discernible.	49 Fog, depositing rime, sky not discernible.
50 Intermittent drizzle (NOT freezing) slight at time of observation.	51 Continuous drizzle (NOT freezing) slight at time of observation.	52 Intermittent drizzle (NOT freezing) moderate at time of observation.	53 Continuous drizzle (NOT freezing), moderate at time of observation.	54 Intermittent drizzle (NOT freezing), thick at time of observation.	55 Continuous drizzle (NOT freezing), thick at time of observation.	56 Slight freezing drizzle.	57 Moderate or thick freezing drizzle.	58 Drizzle and rain, slight.	59 Drizzle and rain, moderate or heavy.
60 Intermittent rain (NOT freezing), slight at time of observation.	61 Continuous rain (NOT freezing), slight at time of observation.	62 Intermittent rain (NOT freezing), moderate at time of observation.	63 Continuous rain (NOT freezing), moderate at time of observation.	64 Intermittent rain (NOT freezing), heavy at time of observation.	65 Continuous rain (NOT freezing), heavy at time of observation.	66 Slight freezing rain.	67 Moderate or heavy freezing rain.	68 Rain or drizzle and snow, slight.	69 Rain or drizzle and snow, moderate or heavy.
70 Intermittent fall of snowflakes, slight at time of observation.	71 Continuous fall of snowflakes, moderate at time of observation.	72 Intermittent fall of snowflakes, moderate at time of observation.	73 Continuous fall of snowflakes, moderate at time of observation.	74 Intermittent fall of snowflakes, heavy at time of observation.	75 Continuous fall of snowflakes, heavy at time of observation.	76 Ice needles (with or without fog).	77 Granular snow (with or without fog).	78 Isolated starlike snow crystals (with or without fog).	79 Ice pellets (steel U.S. definition).
80 Slight rain shower(s).	81 Moderate or heavy rain shower(s).	82 Violent rain shower(s).	83 Slight shower(s) of rain and snow mixed.	84 Moderate or heavy shower(s) of rain and snow mixed.	85 Slight snow shower(s).	86 Moderate or heavy snow shower(s).	87 Slight shower(s) of soft or small hail with or without rain or rain and snow mixed.	88 Moderate or heavy shower(s) of soft or small hail with or without rain or rain and snow mixed.	89 Slight shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.
90 Moderate or heavy shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.	91 Slight rain at time of observation, but NOT at time of observation.	92 Moderate or heavy rain at time of observation, but NOT at time of observation.	93 Slight snow or rain and snow mixed or hail at time of observation, but NOT at time of observation.	94 Mod. or heavy snow, or rain and snow mixed or hail at time of observation, but NOT at time of observation.	95 Slight or mod. thunderstorm without hail, but with rain and/or snow at time of observation.	96 Slight or moderate thunderstorm, with hail at time of observation.	97 Heavy thunderstorm, without hail, but with rain and/or snow at time of observation.	98 Thunderstorm combined with duststorm or sandstorm at time of observation.	99 Heavy thunderstorm with hail at time of observation.

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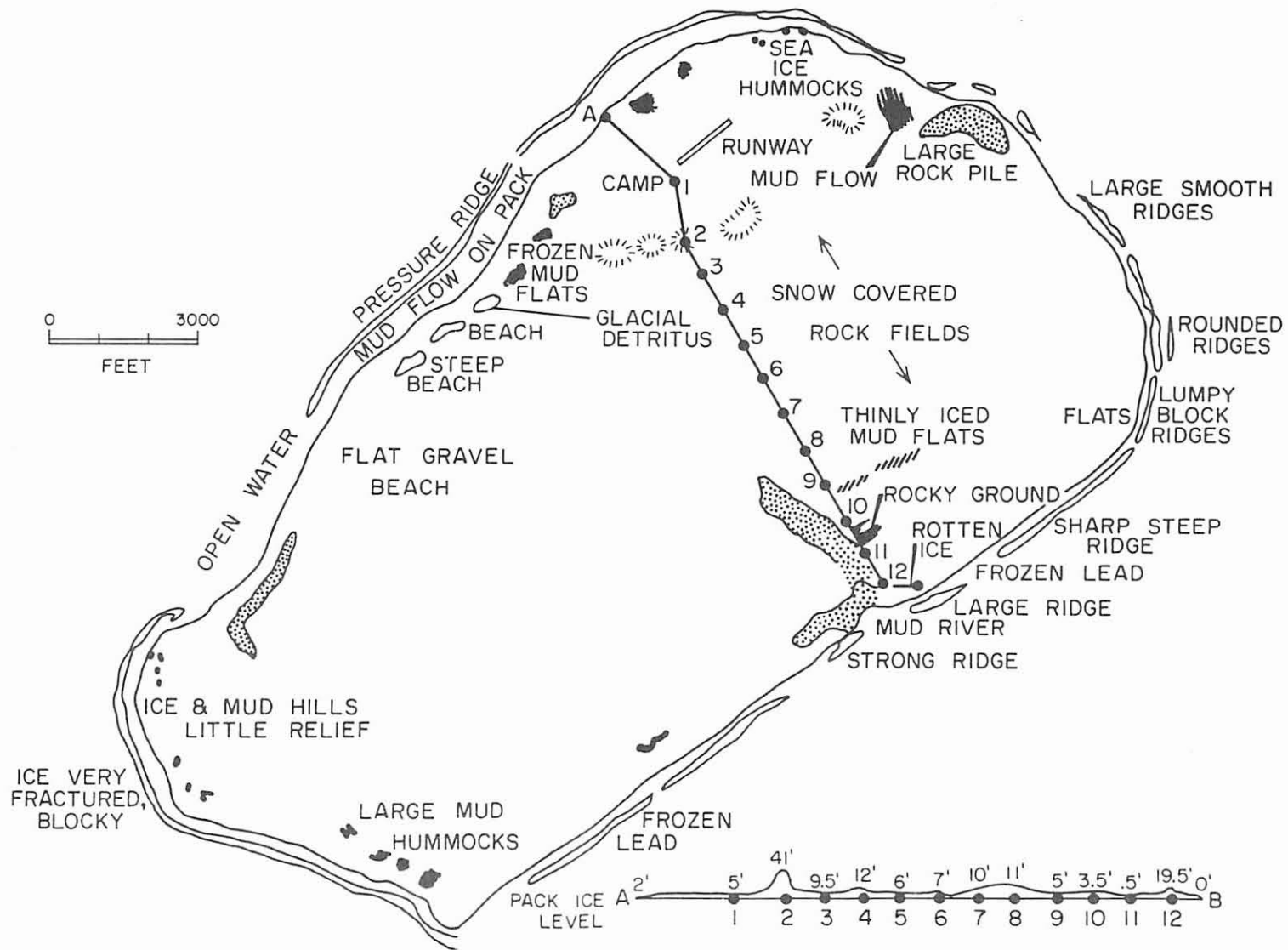


Fig. 1. Map of ice island ARLIS II.

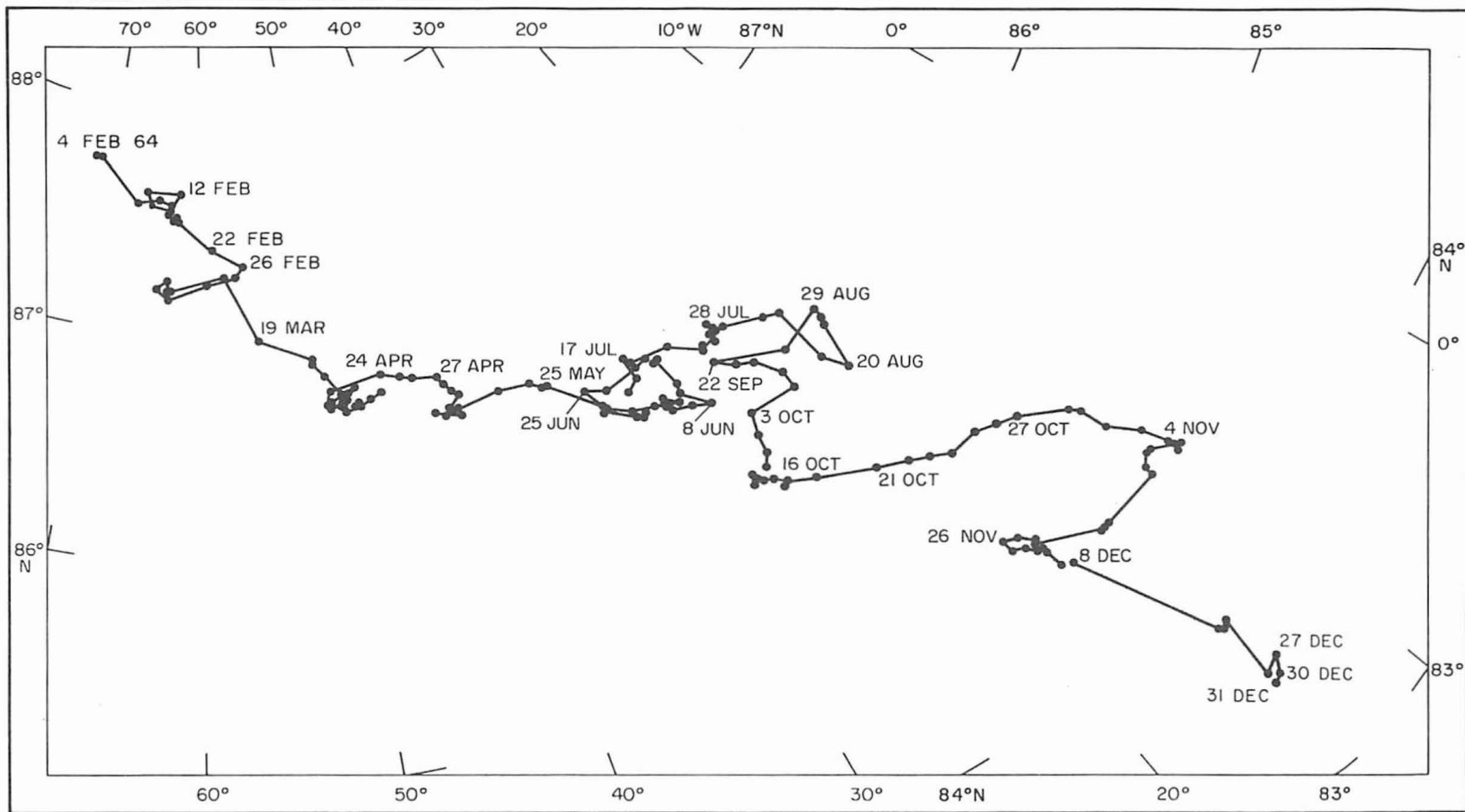


Fig. 2. Chart of a portion of the Arctic Ocean showing the track of ARLIS II from 4 February - 31 December 1964.

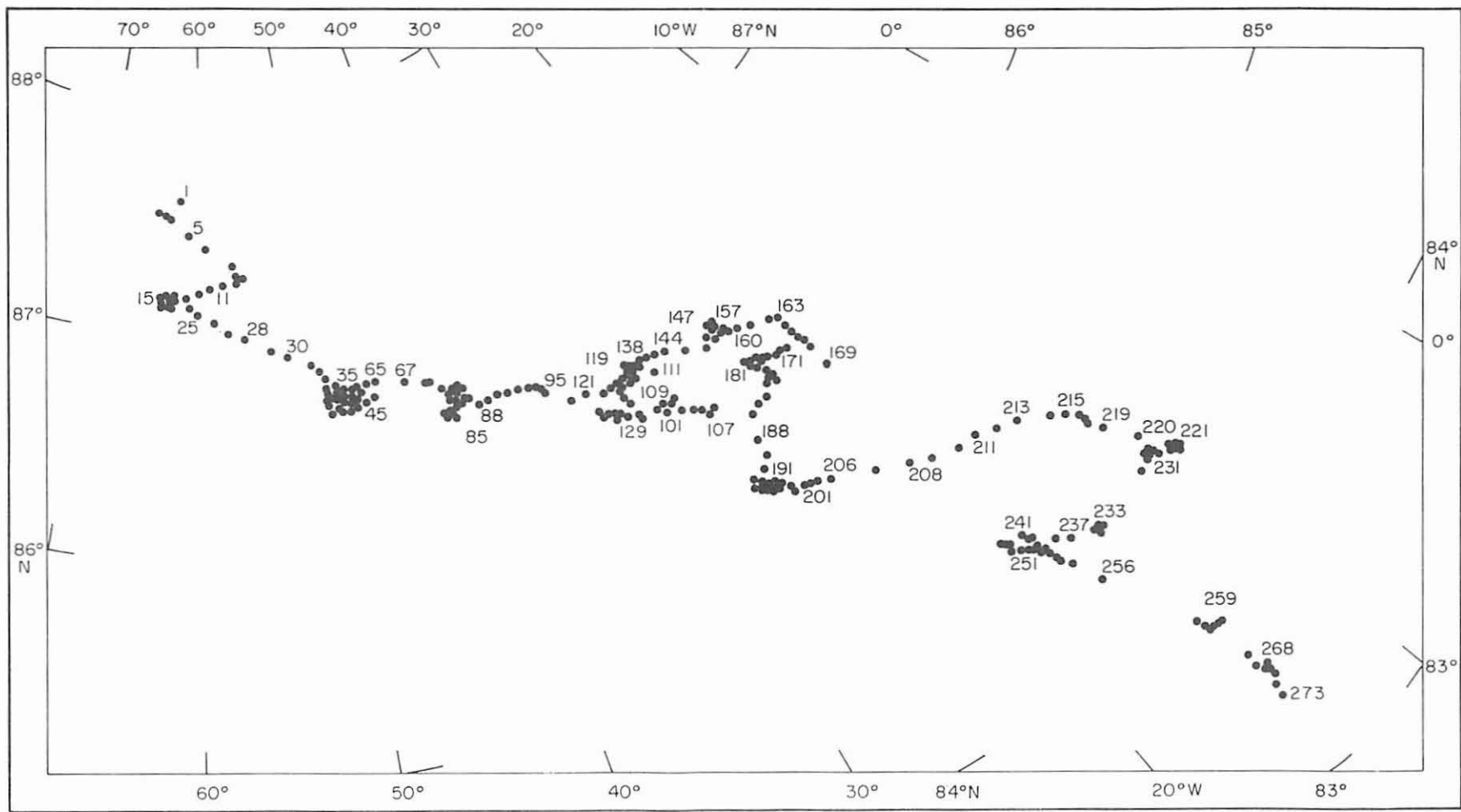


Fig. 3. Location of oceanographic stations accomplished during Cruise AR2-2 (Part A), 4 February - 31 December 1964.

TABLE 1

*Navigational positions, ARLIS II, Cruise AR2-2,
4 February 1964 - 8 May 1965*

Date	Time (GMT)	Latitude (N)	Longitude (W)
February 1964			
4	0047	87°46.5'	71°56'
5	0041	87°46.0'	71°02'
7	0041	87°36.2'	66°40'
9	0038	87°36.7'	64°50'
10	0044	87°35.4'	63°19'
11	0127	87°38.8'	62°35'
12	0113	87°38.6'	62°16'
14	0158	87°34.5'	65°46'
15	0139	87°32.7'	65°12'
16	0100	87°31.4'	63°28'
17	0040	87°31.3'	63°48'
18	0210	87°28'	63°10'
20	0144	87°29'	63°00'
22	0049	87°22.6'	59°10'
26	0710	87°17.4'	56°46'
28	0900	87°15.7'	57°22'
March			
1	0830	87°13.9'	59°56'
3	1200	87°09.0'	63°12' x
4	0300	87°12.1'	64°06'
5	1200	87°14.7'	63°35' x
12	1200	87°09.8'	63°35' x
13	0200	87°10.7'	63°03'
15	0800	87°14.7'	58°09'
19	0625	86°57'	55°35' x
20	2325	86°49.3'	51°47' x
21	0300	86°48.9'	51°35.8'
22	0000	86°46.7'	50°47.6' x
23	0000	86°45.1'	49°51.2' x
24	0720	86°44.5'	49°09.7'
25	1200	86°47.1'	48°27' x
26	1200	86°45'	49°10' x
27	1200	86°39'	50°38' x
28	1200	86°37.5'	49°30' x
29	1130	86°39.6'	48°37.2'
30	1200	86°41.8'	46°55' x
31	1050	86°39.6'	47°20.6'
April			
3	2125	86°38.8'	49°05'
4	1530	86°38.3'	48°37.7'
6	1700	86°37.9'	48°56.7'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
April 1964			
10	1215	86°41.7'	49°46.3'
11	1015	86°39.5'	49°44.6'
13	1010	86°40.4'	49°34.3'
16	2150	86°39.8'	50°41.1'
18	1910	86°40.7'	50°35'
19	2030	86°42.8'	50°35.7'
21	0610	86°44.0'	50°13.9'
24	2000	86°44.3'	46°18.5'
25	1510	86°43.8'	45°00.0'
26	2110	86°43.0'	44°18'
27	2115	86°39.4'	42°44'
28	0900	86°37.0'	42°07'
28	2118	86°35.0'	41°42'
30	0130	86°34.2'	41°18'
May			
2	1450	86°31.8'	42°08'
4	1605	86°30.5'	42°22'
6	1525	86°31.5'	41°47'
7	1530	86°31.4'	42°11'
10	0926	86°31.2'	43°06'
12	0630	86°28.3'	41°36'
13	1515	86°31.5'	42°21'
19	0830	86°32.3'	38°18'
20	2200	86°29.9'	36°12'
22	2040	86°25.4'	35°27'
25	0810	86°24.3'	35°09'
27	2130	86°15.0'	32°25'
28	2000	86°12.0'	30°51'
29	1950	86°09.0'	29°07'
30	0205	86°08.4'	28°45'
31	1430	86°08.7'	27°51'
June			
2	0615	86°10.1'	28°50'
3	1754	86°09.2'	28°52'
4	1915	86°08'	28°30'
5	0704	86°06'	28°29'
6	1709	86°03'	27°12'
8	1900	86°00'	26°11'
12	0100	86°08.5'	27°30'
13	2136	86°13.5'	27°20'
15	2336	86°19.9'	27°42'
16	2017	86°20.3'	28°20'
19	1945	86°19.5'	29°16'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
June 1964			
23	1028	86°16.1'	31°51'
25	0015	86°16.6'	33°00'
29	0012	86°11.3'	32°24'
29	2020	86°12.9'	32°23'
July			
3	1857	86°08.6'	30°54'
6	2009	86°08.2'	30°31'
7	1630	86°09.1'	30°13'
9	2012	86°16.6'	30°16'
15	1918	86°19.5'	29°37'
17	0645	86°21.3'	29°41'
17	1942	86°18.3'	29°16'
20	1905	86°18.0'	26°29'
22	1624	86°13.6'	24°40'
25	1910	86°16.1'	22°46'
28	2133	86°18.3'	23°12'
29	1930	86°17.0'	23°08'
August			
1	1856	86°16.5'	23°38'
4	1627	86°16.2'	23°15'
6	1948	86°14.4'	23°54'
9	1909	86°10.9'	20°04'
10	2015	86°08.6'	19°18'
16	0654	85°51.1'	19°02'
20	0115	85°47.7'	18°21'
24	0115	85°58.6'	17°46'
27	2142	86°00.9'	17°39'
29	2107	86°04.2'	17°36'
September			
8	1904	86°00'	20°28'
22	2350	86°12.0'	24°40'
24	0555	86°06'	23°34'
25	0000	86°03'	22°30' x
26	0000	85°54'	21°30' x
28		85°50'	21°30' x
October			
1	2010	85°51.0'	24°30'
3	0000	85°44.7'	25°00'
3	2005	85°39.9'	25°04'
5	0020	85°37.2'	25°50'
7	0600	85°32.8'	26°59'
8	0630	85°33.3'	26°55'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
October 1964			
10	0000	85°32.2'	26°42'
10	2030	85°32.6'	26°39'
12	0020	85°32.5'	26°05'
12	2000	85°30.5'	25°51'
13	2255	85°33.5'	26°34'
14	2020	85°33.4'	26°04'
16	0015	85°29.6'	25°02'
16	2145	85°29.7'	25°11'
20	0630	85°23.2'	23°55'
21	2015	85°18.5'	20°51'
22	2015	85°16.9'	19°14'
23	2020	85°13.3'	18°15'
24	2030	85°10.3'	17°05'
26	0000	85°10.4'	15°47'
26	2020	85°08.0'	14°52'
27	2015	85°05.2'	13°57'
30	0000	84°54.9'	11°51'
November			
1	2030	84°52.3'	11°36'
3	0010	84°44.9'	11°10'
3	2020	84°37.3'	10°16'
4	2000	84°31.4'	09°37'
5	2200	84°29.6'	09°27'
6	2000	84°29.4'	09°33'
7	2000	84°30.0'	09°35'
8	2000	84°29.4'	09°46'
9	2005	84°32.3'	10°19'
10	2000	84°33.9'	10°54'
12	2000	84°33.1'	10°59'
13	2010	84°31.9'	11°13'
14	2010	84°29.4'	11°12'
18	0000	84°29.5'	14°25'
18	2000	84°28.9'	14°36'
19	2010	84°29.2'	14°43'
22	0624	84°38.7'	17°13'
24	0620	84°42.6'	17°53'
25	0240	84°42.6'	17°53'
26	2005	84°44.0'	18°25'
28	0230	84°42.5'	18°24'
28	2000	84°40.8'	18°19'
30	0225	84°37.8'	17°43'
30	2005	84°36.9'	17°27'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
December 1964			
1	2015	84°37.1'	17°34'
2	2025	84°36.4'	17°16'
3	2025	84°35.5'	17°16'
4	2110	84°36.0'	17°11'
7	2020	84°28.2'	17°04'
8	2025	84°27.9'	16°54'
12	0845	83°48.5'	14°18'
14	2045	83°48.0'	14°07'
17	0015	83°49.7'	13°55'
24	2205	83°31.7'	14°10'
25	2130	83°30.6'	
27	2125	83°33.0'	13°30'
30	2125	83°29.6'	13°59'
31	2115	83°28.0'	14°12'
January 1965			
3	0005	83°27.0'	14°23'
6	0210	83°08.6'	13°13'
10	1140	82°51.5'	12°20'
12	0840	82°48.3'	12°18'
14	2130	82°24.5'	11°38.5'
17	0100	82°20.8'	10°57'
19	1000	82°10.7'	09°54'
21	1010	81°59.5'	08°53'
27	0710	81°31.0'	06°27'
28	0355	81°12.5'	06°09'
29	1700	80°49.3'	06°15'
31	1445	80°34.0'	
February			
1	1550	80°28.0'	06°15'
6	1230	79°51.5'	05°20'
11	1655	78°31.5'	08°07'
13	1514	78°14'	09°08'
14	2010	77°58.7'	09°20'
15	0055	77°56.6'	09°34'
16	0928	77°54'	09°46'
17	0913	77°49'	09°41'
18	2010	77°46.0'	09°37'
19	1835	77°37.5'	09°26'
20	0125	77°36.9'	09°14'
21	2035	77°28.6'	09°38'
22	0900	77°28'	09°54'
23	1820	77°20.5'	09°52'
24	1720	77°17.0'	10°08'
25	1915	77°12.2'	10°28'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
February 1965			
26	0635	77°09.8'	10°35'
26	1900	77°06.9'	10°38'
27	0858	77°07'	10°49'
28	1955	77°00.3'	10°53'
March			
1	2005	76°55.7'	10°54'
2	2225	76°43.2'	11°45'
3	2055	76°32.9'	12°02'
4	0849	76°30'	12°02'
5	2110	76°22.4'	12°01'
6	0918	76°19'	12°10'
7	1508	76°10'	12°30'
8	2200	76°01.2'	12°51'
9	0900	75°55'	12°56'
10	0859	75°42'	13°06'
11	0911	75°29'	13°26'
12	2030	75°09.5'	13°31'
13	2110	75°04.0'	13°30'
14	2105	74°53.0'	13°36'
15	0859	74°47'	13°48'
16	2050	74°30.5'	14°20'
17	2115	74°20.5'	14°33'
18	2115	74°14.6'	14°45'
19	2115	74°09.7'	14°53'
20	0850	74°04'	15°05'
21	2110	73°48.2'	15°38'
22	2145	73°27.1'	16°02'
23	2210	73°09.8'	16°28'
24	2115	72°56.8'	16°51'
25	2120	72°50.2'	16°44'
26	2105	72°46.5'	16°41'
27	0909	72°46'	16°37'
28	2135	72°43.2'	16°26'
29	2130	72°39.6'	16°29'
30	2200	72°34.6'	16°32'
31	1610	72°32.4'	16°33'
31	2220	72°27.5'	16°38'
April			
1	0903	72°26'	16°48'
2	0922	72°21'	17°09'
3		72°16.3'	17°33'
4	0950	72°04.0'	17°25'
4	2155	72°00.5'	17°24'
5	0944	71°59'	17°31'

TABLE 1 (continued)

Date	Time (GMT)	Latitude (N)	Longitude (W)
April 1965			
6	2340	72°52.6'	17°22'
7	1200	71°50.6'	17°25'
8	0926	71°37'	17°37'
9	0942	71°23'	17°51'
10	0956	71°07'	18°04'
11	0943	70°53'	18°17'
12	1041	70°38'	18°31'
13	1216	70°22'	18°46'
14	0915	70°09'	18°58'
16	0058	69°23.6'	19°58'
17	1340	69°07.5'	20°13'
18	1320	68°58.2'	20°32'
19	0000	68°55.0'	20°35'
20	1150	68°47.0'	20°45'
21	1335	68°43.0'	20°48'
22	0904	68°38'	21°05'
23	1125	68°31.5'	21°28'
24	0924	68°19'	22°13'
25	1445	68°02.5'	23°13'
26	1500	67°52.5'	23°40'
27	1105	67°48.2'	23°47'
28	0958	67°43'	23°58'
29	0927	67°37'	24°10'
30	0852	67°32'	24°21'
May			
1	1025	67°25.5'	24°33'
2	1250	67°18.6'	24°51'
3	1330	67°14.0'	25°19'
4	1350	67°12.0'	25°34'
5	1340	67°07.8'	25°46'
6	1340	67°05.2'	25°59'
7	1440	67°02.8'	26°18'
8	1535	66°54.5'	26°31'

AR CRUISE AR2 STATION 001 OBSERVED VALUES

DATE 10/02/64	BAROMETER 05.7	WEATHER X0	WIND VELOC 06	WAVE PERIOD
HOUR 21.4	TEMP DRY -33.0	VISIBILITY 6	WIND DIREC 17	SECCHI
LAT 87-38.2N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 62-42.0W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 1395
MESSENGER TIMES: 21.4, 23.5	00, 00			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHNS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.75	31.858	25.65	8.47	0.756	-0.003	100	1.04	20
1	10	-1.73	31.858	25.65	8.27	0.739	0.014	98	1.00	19
1	25	-1.73	31.821	25.62	8.30	0.741	0.012	98	1.00	18
1	50	-1.73	31.870	25.66	8.45	0.755	-0.002	100	1.60	19
1	75	-1.58	32.680	26.31	6.57	0.587	0.158	79	1.95	30
1	100	-1.47	33.510	26.98	6.20	0.554	0.184	75	1.60	29
1	125	-1.43	34.124	27.48	6.56	0.586	0.148	80	1.10	20
1	150	-1.17	34.377	27.67	6.72	0.600	0.127	83	0.55	13
1	175	-0.79	34.496	27.76	6.68	0.597	0.122	83	0.90	19
1	200	-0.42	34.615	27.84	6.70	0.598	0.113	84	0.95	13
1	250	0.10	34.831	27.98	6.46	0.577	0.123	82	1.00	12
2	300	0.41	34.881	28.01	6.53	0.583	0.111	84	0.90	13
2	350	0.50	34.913	28.03	6.57	0.587	0.105	85	1.00	14
2	400	0.57	34.981	28.08	6.53	0.583	0.107	84	0.90	13
2	450	0.47	34.998	28.10	6.55	0.585	0.107	85	0.90	13
2	500	0.45	34.998	28.10	6.62	0.591	0.101	85	1.20	13
2	600	0.27	34.985	28.10	6.58	0.588	0.108	84	1.35	13
2	700	0.14	34.998	28.12	6.58	0.588	0.111	84	0.90	12
2	800	-0.03	35.011	28.13	6.62	0.591	0.109	84	1.00	10
2	900	-0.06	35.000	28.13	6.60	0.589	0.113	84	1.10	16
2	1000	-0.16	34.985	28.12	6.63	0.592	0.112	84	1.20	11
2	1200	-0.29	35.010	28.15	6.58	0.588	0.119	83	1.20	18

DEPTH	AR CRUISE AR2			STATION 001 INTERPOLATED AND COMPUTED VALUES							
	TEMP	F(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.75	0.00	31.858	0.000	25.65	234.9	0.000	0.00	8.47	0.00	
10	-1.73	0.00	31.858	0.000	25.65	234.8	0.024	0.01	8.27	0.00	
20	-1.73	0.00	31.833	0.003	25.63	236.6	0.048	0.05	8.27	0.01	0.67
30	-1.74	0.00	31.795	0.017	25.60	239.5	0.072	0.11	8.41	0.06	0.86
50	-1.73	0.00	31.870	0.000	25.66	233.5	0.120	0.31	8.45	0.00	
75	-1.58	0.00	32.680	0.000	26.31	171.3	0.171	0.62	6.57	0.00	
100	-1.47	0.00	33.510	0.000	26.98	107.8	0.206	0.93	6.20	0.00	
150	-1.17	0.00	34.377	0.000	27.67	42.1	0.243	1.37	6.72	0.00	
200	-0.42	0.00	34.615	0.000	27.84	27.1	0.261	1.68	6.70	0.00	
250	0.10	0.00	34.831	0.000	27.98	13.4	0.271	1.90	6.46	0.00	
300	0.41	0.00	34.881	0.000	28.01	11.5	0.277	2.08	6.53	0.00	
400	0.57	0.00	34.981	0.000	28.08	5.1	0.286	2.36	6.53	0.00	
500	0.45	0.00	34.998	0.000	28.10	3.1	0.290	2.55	6.62	0.00	
600	0.27	0.00	34.985	0.000	28.10	3.0	0.293	2.73	6.58	0.00	
700	0.14	0.00	34.998	0.000	28.12	1.1	0.295	2.86	6.58	0.00	
800	0.03	0.00	35.011	0.000	28.13	-0.6	0.295	2.87	6.62	0.00	
1000	-0.16	0.00	34.985	0.000	28.12	-0.1	0.295	2.81	6.63	0.00	
1200	-0.29	0.00	35.010	0.000	28.15	-3.1	0.291	2.42	6.58	0.00	

AR CRUISE AR2 STATION 002 OBSERVED VALUES

DATE 17/02/64	BAROMETER 19.0	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HOUR 00.7	TEMP DRY -39.5	VISIBILITY 6	WIND DIREC 29	SECCHI
LAT 87-31.3N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 63-48.0W	REL HUMID	CLOUD AMT 4	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.7				
WIRE ANGLES: 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	10	-1.73			
1	25	-1.73			
1	51	-1.73			
1	76	-1.53			
1	102	-1.48			
1	127	-1.40			
1	153	-1.04			
1	178	-0.66			
1	204	-0.39			
1	255	0.16			
1	306	0.47			

AR CRUISE AR2 STATION 003 OBSERVED VALUES

DATE 18/02/64	BAROMETER 21.9	WEATHER	X1	WIND VELOC	06	WAVE PERIOD
HOUR 01.3	TEMP DRY -40.0	VISIBILITY	6	WIND DIREC	26	SECCHI
LAT 87-28.1N	TEMP WET	CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG 63-11.0W	REL HUMID	CLOUD AMT	1	WAVE HEIGHT		SOUNDING
MESSNGER TIMES: 01.3	--					
WIRE ANGLES:						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ANU	SATN
1	10	-1.72						
1	20	-1.68						
1	31	-1.73						
1	51	-1.75						
1	76	-1.54						
1	102	-1.47						
1	153	-1.07						
1	204	-0.37						
1	255	0.16						
1	306	0.43						
1	408	0.49						
1	510	0.45						
1	611	0.25						

AR CRUISE AR2 STATION 004 OBSERVED VALUES

DATE 19/02/64	BAROMETER 17.0	WEATHER X2	WIND VELOC 07	WAVE PERIOD
HOUR 00.2	TEMP DRY -39.0	VISIBILITY 6	WIND DIREC 27	SECCHI
LAT 87-28.0N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 63-05.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.2	==			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	10	-1.73						
1	20	-1.75						
1	31	-1.74						
1	51	-1.74						
1	76	-1.55						
1	102	-1.47						
1	153	-1.03						
1	204	-0.37						
1	255	0.12						
1	306	0.43						
1	408	0.49						
1	510	0.44						
1	611	0.25						

AR CRUISE AR2 STATION 005 OBSERVED VALUES

DATE 20/02/64 BAROMETER 23.0 WEATHER X3 WIND VELOC 13 WAVE PERIOD
 HOUR 21.8 TEMP DRY -38.0 VISIBILITY 6 WIND DIREC 20 SECCHI
 LAT 87-26.3N TEMP WET CLOUD TYPE 0 WAVE DIREC WATER COLOR
 LONG 61-22. W REL HUMID CLOUD AMT 3 WAVE HEIGHT SOUNDING 1137
 MESSENGER TIMES: 21.8, 23.4
 WIRE ANGLES: 02, 05

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	10	-1.74	31.672	25.50	8.52	0.761	-0.007	101	0.60	17
1	20	-1.74	31.708	25.53	8.62	0.770	-0.016	102	0.70	18
1	30	-1.74	31.780	25.59	8.49	0.758	-0.005	101	0.80	18
1	51	-1.74			8.55	0.764			0.80	18
1	76	-1.55	32.664	26.30	6.53	0.583	0.161	78	1.90	15
1	101	-1.45	33.513	26.98	6.46	0.577	0.161	78	1.20	15
1	127	-1.44	34.126	27.48	6.79	0.606	0.128	83	0.60	14
1	153	-1.06	34.271	27.58	6.78	0.606	0.120	83	0.70	12
1	204	-0.36	34.487	27.73	6.62	0.591	0.119	83	0.70	14
1	255	0.16	34.596	27.79	6.62	0.591	0.109	84	0.60	14
1	306	0.51	34.812	27.95	6.66	0.595	0.098	86	0.60	12
1	357	0.56	34.830	27.96	6.74	0.602	0.089	87	0.50	13
1	408	0.52	34.867	27.99	6.62	0.591	0.101	85	0.60	14
2	458	0.50	34.921	28.03	6.65	0.594	0.098	86	0.60	16
2	509	0.43	34.939	28.05	6.71	0.599	0.094	86	0.50	14
2	559	0.35			6.71	0.599			0.60	14
2	610	0.26	34.921	28.05	6.67	0.596	0.101	86	0.60	14
2	711	0.11	34.903	28.04	6.74	0.602	0.098	86	0.60	11
2	812	-0.02	34.921	28.06	6.73	0.601	0.101	86	0.60	15
2	914	-0.08	34.957	28.10	6.67	0.596	0.107	85	0.60	14
2	1016	-0.18	34.957	28.10	6.67	0.596	0.109	85	0.60	18
2	1119	-0.27	34.975	28.12	6.62	0.591	0.115	84	0.80	16
2	1137	-0.29								

AR CRUISE AR2 STATION 005 INTERPOLATED AND COMPUTED VALUES											
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.74	0.00	31.672	0.000	25.50	249.2	0.000	0.00	8.52	0.00	
10	-1.74	0.00	31.672	0.000	25.50	249.1	0.026	0.01	8.52	0.00	
20	-1.74	0.00	31.708	0.000	25.53	246.3	0.051	0.05	8.62	0.00	
30	-1.74	0.00	31.780	0.000	25.59	240.6	0.075	0.11	8.49	0.00	
50	-1.74	0.00	32.055	0.001	25.81	219.3	0.121	0.30	8.56	0.02	1.65
75	-1.56	0.00	32.635	0.000	26.28	174.8	0.171	0.61	6.61	0.03	0.98
100	-1.45	0.00	33.479	0.003	26.96	110.2	0.207	0.93	6.44	0.01	0.95
150	-1.11	0.01	34.267	0.008	27.58	50.8	0.247	1.41	6.79	0.00	0.81
200	-0.41	0.00	34.474	0.000	27.72	37.9	0.270	1.80	6.63	0.00	0.89
250	0.12	0.00	34.585	0.003	27.79	32.1	0.287	2.21	6.62	0.00	0.87
300	0.48	0.00	34.789	0.005	27.93	18.9	0.300	2.56	6.65	0.00	0.85
400	0.53	0.00	34.860	0.000	27.98	14.0	0.317	3.15	6.64	0.01	0.81
500	0.44	0.00	34.938	0.000	28.05	7.6	0.328	3.63	6.70	0.00	0.79
600	0.28	0.00	34.924	0.001	28.05	7.6	0.336	4.07	6.68	0.00	0.87
700	0.12	0.00	34.904	0.001	28.04	8.1	0.343	4.60	6.73	0.00	0.86
800	-0.01	0.00	34.917	0.000	28.06	6.1	0.351	5.15	6.73	0.00	0.84
1000	-0.16	0.00	34.958	0.001	28.10	1.9	0.359	5.86	6.67	0.00	0.80

DATA AT 0 METERS WAS ASSUMED FOR PURPOSES OF INTERPOLATION.

AR CRUISE AR2 STATION 006 OBSERVED VALUES

DATE 22/02/64 BAROMETER 22.0 WEATHER X0 WIND VELOC 10 WAVE PERIOD
 HOUR 01.5 TEMP DRY -42.0 VISIBILITY 6 WIND DIREC 19 SECCHI
 LAT 87-22.6N TEMP WET CLOUD TYPF WAVE DIREC WATER COLOR
 LONG 59-09.0W REL HUMID CLOUD AMT 0 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 01.5
 WIRE ANGLES: 10

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	20	-1.74						
1	30	-1.72						
1	50	-1.69						
1	75	-1.56						
1	101	-1.44						
1	151	-1.05						
1	201	-0.35						
1	252	0.19						
1	302	0.45						
1	403	0.54						
1	505	0.48						
1	606	0.24						

AR CRUISE AR2 STATION 007 OBSERVED VALUES

DATE 25/02/64	BAROMETER 15.0	WEATHER X4	WIND VELOC 05	WAVE PERIOD
HOUR 00.8	TEMP DRY -42.5	VISIBILITY 6	WIND DIREC 20	SECCHI
LAT 87-18.9N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 57-29.0W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.8				
WIRE ANGLES: 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	10	-1.74			
1	20	-1.74			
1	30	-1.73			
1	51	-1.73			
1	76	-1.55			
1	102	-1.46			
1	153	-1.05			
1	204	-0.30			
1	305	0.44			
1	407	0.51			
1	509	0.47			
1	611	0.23			

AR CRUISE AR2 STATION 008 OBSERVED VALUES

DATE 26/02/64 BAROMETER 17.0 WEATHER X4 WIND VELOC 03 WAVE PERIOD
 HOUR 00.9 TEMP DRY -43.0 VISIBILITY 6 WIND DIREC 24 SECCHI
 LAT 87-17.7N TEMP WET CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 56-55.0W REL HUMID CLOUD AMT 1 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 00.9
 WIRE ANGLES: --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	
					ML/L MGA/L	AOU SATN
1	10	-1.68				
1	20	-1.73				
1	30	-1.72				
1	51	-1.73				
1	76	-1.55				
1	102	-1.46				
1	153	-1.07				
1	204	-0.28				
1	305	0.44				
1	407	0.54				
1	509	0.46				
1	611	0.24				

AR CRUISE AR2 STATION 009 OBSERVED VALUES

DATE 27/02/64	BAROMETER 19.0	WEATHER X1	WIND VELOC 04	WAVE PERIOD
HOUR 00.9	TEMP DRY -40.8	VISIBILITY 6	WIND DIREC 33	SECCHI
LAT 87-16.8N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 56-59.0W	RFL HUMID	CLOUD AMT 6	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.9	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	10	-1.71						
1	20	-1.75						
1	30	-1.74						
1	51	-1.73						
1	76	-1.55						
1	102	-1.46						
1	153	-1.06						
1	204	-0.32						
1	305	0.50						
1	407	0.55						
1	509	0.48						
1	611	0.25						

	AR	CRUISE	AR2	STATION	010	OBSERVED	VALUES	
DATE	27/02/64	BAROMETER	20.0	WEATHER	X	WIND VELOC	XX	WAVE PERIOD
HOUR	22.2	TEMP DRY	-37.8	VISIBILITY	6	WIND DIREC	XX	SECCHI
LAT	87-16.1N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	57-14.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 22.2							
WIRE	ANGLES:	00						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	10	-1.73			
1	20	-1.74			
1	30	-1.73			
1	51	-1.74			
1	76	-1.55			
1	102	-1.46			
1	153	-1.06			
1	204	-0.33			
1	305	0.59			
1	407	0.54			
1	509	0.50			
1	611	0.26			

AR CRUISE AR2

STATION 011

OBSERVED VALUES

DATE 29/02/64
 HOUR 00.7
 LAT 87-15.0N
 LONG 58-14.0W
 MESSENGER TIMES: 00.7
 WIRE ANGLES: 01

BAROMETER 22.0
 TEMP DRY -35.2
 TEMP WET
 REL HUMID

WEATHER X3
 VISIBILITY 6
 CLOUD TYPE 0
 CLOUD AMT 1
 WIND VELOC 15
 WIND DIREC 04
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	10	-1.71						
1	20	-1.72						
1	30	-1.74						
1	51	-1.72						
1	76	-1.57						
1	102	-1.46						
1	153	-1.08						
1	204	-0.35						
1	305	0.46						
1	407	0.51						
1	509	0.50						
1	611	0.28						

AR CRUISE AR2 STATION 012 OBSERVED VALUES

DATE 01/03/64	BAROMETER 27.0	WEATHER X4	WIND VELOC 12	WAVE PERIOD
HOUR 01.8	TEMP DRY -30.3	VISIBILITY 6	WIND DIREC 06	SECCHI
LAT 87-14.2N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 59-36.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 01.8	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	10	-1.73			
1	20	-1.73			
1	30	-1.73			
1	51	-1.73			
1	76	-1.56			
1	102	-1.47			
1	153	-1.08			
1	204	-0.37			
1	305	0.51			
1	407	0.50			
1	509	0.49			
1	611	0.49			

AR CRUISE AR2 STATION 013 OBSERVED VALUES

DATE	02/03/64	BAROMETER	24.0	WEATHER	X3	WIND VELOC	22	WAVE PERIOD
HOUR	03.3	TEMP DRY	-30.8	VISIBILITY	5	WIND DIREC	05	SECCHI
LAT	87-13.4N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	60-07.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	03.3							
WIRE ANGLES:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	10	-1.74						
1	20	-1.73						
1	30	-1.72						
1	50	-1.72						
1	75	-1.55						
1	100	-1.47						
1	150	-1.18						
1	200	-0.38						
1	300	0.50						
1	400	0.49						
1	500	0.45						
1	600	0.29						
1	700	0.17						

AR CRUISE AR2 STATION 014 OBSERVED VALUES

DATE	03/03/64	BAROMETER	11.0	WEATHER	X3	WIND VELOC	20	WAVE PERIOD
HOUR	02.0	TEMP DRY	-25.7	VISIBILITY	X	WIND DIREC	04	SECCHI
LAT	87-12.8N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	62-32.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.5							
WIRE ANGLES:	02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	10	-1.73			
1	20	-1.73			
1	31	-1.72			
1	51	-1.72			
1	76	-1.49			
1	102	-1.46			
1	153	-1.18			
1	203	-0.39			
1	305	0.57			
1	407	0.47			
1	509	0.46			
1	610	0.41			

AR CRUISE AR2 STATION 015 OBSERVED VALUES

DATE 04/03/64	BAROMETER 08:0	WEATHER X7	WIND VELOC 12	WAVE PERIOD
HOUR 23.0	TEMP DRY -35.5	VISIBILITY X	WIND DIREC 20	SECCHI
LAT 87-12.0N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 64-00.0W	REL HUMID	CLOUD AMT 5	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 23,0; 00,8				
WIRE ANGLES: 00, 02				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS
					ML/L	MGA/L	AOU	SATN	
1	10	-1.72	31.650	25.48	8.64	0.772	-0.018	102	1.05
1	20	-1.72	31.670	25.50	8.60	0.768	-0.015	102	1.12
1	31	-1.72	31.680	25.50	8.56	0.765	-0.011	101	0.70
1	51	-1.72	31.690	25.51	8.60	0.768	-0.015	102	1.00
1	76	-1.50	32.760	26.37	6.32	0.564	0.178	76	1.65
1	102	-1.47	33.440	26.92	6.32	0.564	0.174	76	1.30
1	127	-1.41	34.110	27.47	6.77	0.605	0.129	82	0.86
1	153	-1.10	34.300	27.61	6.88	0.614	0.112	85	0.86
1	178	-0.73	34.450	27.72	6.69	0.598	0.121	83	0.70
1	203	-0.37	34.560	27.79	6.75	0.603	0.108	85	0.95
1	254	0.21	34.650	27.83	6.83	0.610	0.089	87	0.86
2	305	0.53	34.790	27.93	6.63	0.592	0.100	86	0.95
2	356	0.58	34.840	27.96	6.63	0.592	0.099	86	0.95
2	407	0.52	34.840	27.97	6.61	0.590	0.102	85	0.86
2	458	0.51	34.850	27.98	6.66	0.595	0.097	86	0.95
2	509	0.46	34.885	28.01	6.74	0.602	0.091	87	0.95
2	610	0.26	34.885	28.02	6.72	0.600	0.097	86	0.95
2	712	0.15	34.885	28.03	6.76	0.604	0.095	86	1.05
1	814	0.02	34.900	28.04	6.73	0.601	0.100	86	0.95
1	915	-0.07	34.900	28.05	6.69	0.598	0.105	85	0.95
1	1017	-0.16	34.910	28.06	6.67	0.596	0.109	85	
1	1119	-0.26	34.910	28.07	6.68	0.597	0.110	84	0.95

AR CRUISE AR2 STATION 015 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.72	0.00	31.650	0.000	25.48	251.0	0.000	0.00	8.64	0.00	
10	-1.72	0.00	31.650	0.000	25.48	250.9	0.026	0.01	8.64	0.00	
20	-1.72	0.00	31.670	0.000	25.50	249.2	0.051	0.05	8.60	0.00	
30	-1.72	0.00	31.679	0.000	25.50	248.4	0.076	0.12	8.56	0.00	0.84
50	-1.72	0.00	31.681	0.006	25.51	248.1	0.126	0.32	8.62	0.01	0.92
75	-1.51	0.00	32.710	0.010	26.33	169.2	0.179	0.65	6.41	0.03	0.94
100	-1.47	0.00	33.395	0.005	26.89	116.6	0.215	0.96	6.27	0.02	0.90
150	-1.14	0.00	34.292	0.008	27.60	48.7	0.256	1.45	6.88	0.00	0.85
200	-0.41	0.00	34.549	0.000	27.78	32.1	0.277	1.81	6.74	0.00	0.80
250	0.17	0.00	34.645	0.003	27.83	27.9	0.292	2.16	6.83	0.00	0.89
300	0.51	0.00	34.777	0.002	27.92	20.0	0.304	2.49	6.65	0.01	0.87
400	0.53	0.00	34.841	0.001	27.97	15.4	0.322	3.12	6.61	0.00	0.83
500	0.47	0.00	34.879	0.001	28.00	12.3	0.336	3.76	6.73	0.00	0.73
600	0.28	0.00	34.887	0.001	28.02	10.4	0.347	4.40	6.73	0.00	0.87
700	0.16	0.00	34.885	0.000	28.02	9.8	0.357	5.08	6.76	0.00	0.85
800	0.04	0.00	34.898	0.001	28.04	7.9	0.366	5.77	6.74	0.00	0.83
1000	-0.14	0.00	34.908	0.000	28.06	5.8	0.380	7.03	6.67	0.00	0.80

DATA AT 0 METERS WAS ASSUMED FOR PURPOSES OF INTERPOLATION.

AR CRUISE AR2 STATION 016 OBSERVED VALUES

DATE	06/03/64	BAROMETER	13.0	WEATHER	X2	WIND VELOC	12	WAVE PERIOD
HOUR	01.1	TEMP DRY	-29.6	VISIBILITY	6	WIND DIREC	05	SECCHI
LAT	87-11.8N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	63-52.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.1							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	10	-1.73			
1	20	-1.73			
1	31	-1.72			
1	51	-1.73			
1	76	-1.58			
1	102	-1.46			
1	153	-1.07			
1	203	-0.37			
1	305	0.48			
1	407	0.57			
1	509	0.50			
1	610	0.27			

AR CRUISE AR2 STATION 017 OBSERVED VALUES

DATE	07/03/64	BAROMETER	13.0	WEATHER	X1	WIND VELOC	12	WAVE PERIOD
HOUR	00.9	TEMP DRY	-25.6	VISIBILITY	6	WIND DIREC	06	SECCHI
LAT	87-11.6N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	63-42.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.9							
WTRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.72						
1	10	-1.73						
1	20	-1.73						
1	31	-1.73						
1	51	-1.72						
1	76	-1.52						
1	102	-1.48						
1	153	-1.11						
1	203	-0.38						
1	305	0.57						
1	407	0.51						
1	509	0.51						
1	610	0.27						

AR CRUISE AR2 STATION 018 OBSERVED VALUES

DATE 08/03/64	BAROMETER 08.0	WEATHER X1	WIND VELOC 11	WAVE PERIOD
HOUR 01.4	TEMP DRY -33.1	VISIBILITY 6	WIND DIREC 05	SECCHI
LAT 87-11.5N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 63-38.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 01.4				
WIRE ANGLES: --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	2	-1.59			
1	10	-1.73			
1	20	-1.69			
1	31	-1.72			
1	51	-1.72			
1	76	-1.51			
1	102	-1.46			
1	153	-1.15			
1	203	-0.39			
1	305	0.58			
1	407	0.52			
1	509	0.51			
1	610	0.29			

AR CRUISE AR2 STATION 019 OBSERVED VALUES

DATE 09/03/64	BAROMETER 06.0	WEATHER X1	WIND VELOC 05	WAVE PERIOD
HOUR 01.0	TEMP DRY -36.4	VISIBILITY X	WIND DIREC 09	SECCHI
LAT 87-11.3N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 63-31.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 01.0				
WIRE ANGLES: 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.72			
1	10	-1.72			
1	20	-1.71			
1	31	-1.72			
1	51	-1.72			
1	76	-1.50			
1	102	-1.46			
1	152	-1.16			
1	203	-0.38			
1	305	0.54			
1	406	0.51			
1	508	0.50			
1	610	0.30			

	AR	CRUISE	AR2	STATION	020	OBSERVED VALUES		
DATE	10/03/64	BAROMETER	08.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	00.6	TEMP DRY	-40.0	VISIBILITY	6	WIND DIREC	22	SECCHI
LAT	87-11.2N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	63-24.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.6							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.72			
1	10	-1.72			
1	20	-1.71			
1	31	-1.73			
1	51	-1.71			
1	76	-1.55			
1	102	-1.47			
1	152	-1.12			
1	203	-0.38			
1	305	0.55			
1	406	0.53			
1	508	0.50			
1	610	0.30			

AR CRUISE AR2 STATION 021 OBSERVED VALUES

DATE 11/03/64	BAROMETER 01.0	WEATHER X1	WIND VELOC 05	WAVE PERIOD
HOUR 00.6	TEMP DRY -40.0	VISIBILITY 6	WIND DIREC 15	SECCHI
LAT 87-11.1N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 63-17.0W	REL HUMID	CLOUD AMT 6	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.6				
WIRE ANGLES:	00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.73			
1	10	-1.72			
1	20	-1.71			
1	31	-1.72			
1	51	-1.71			
1	76	-1.50			
1	102	-1.47			
1	152	-1.10			
1	203	-0.36			
1	305	0.54			
1	406	0.51			
1	508	0.49			
1	610	0.30			

AR CRUISE AR2 STATION 022 OBSERVED VALUES

DATE 12/03/64	BAROMETER 94.0	WEATHER X1	WIND VELOC 05	WAVE PERIOD
HOUR 02.5	TEMP DRY -40.0	VISIBILITY 6	WIND DIREC 28	SECCHI
LAT 87-10.9N	TEMP WET	CLOUD TYPF 4	WAVE DIREC	WATER COLOR
LONG 63-10.0W	REL HUMID	CLOUD AMT 3	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 02.5	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	5	-1.73			
1	10	-1.73			
1	20	-1.72			
1	31	-1.73			
1	51	-1.73			
1	76	-1.52			
1	102	-1.47			
1	152	-1.12			
1	203	-0.36			
1	305	0.56			
1	406	0.52			
1	508	0.50			
1	610	0.29			

AR CRUISE AR2 STATION 023 OBSERVED VALUES

DATE	13/03/64	BAROMETER	00.0	WEATHER	X3	WIND VELOC	17	WAVE PERIOD
HOUR	01.2	TEMP DRY	-45.0	VISIBILITY	4	WIND DIREC	22	SECCHI
LAT	87-10.7N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	63-03.0W	REL HUMID		CLOUD AMT	5	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 01.2							
WIRE	ANGLES: --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.73						
1	20	-1.74						
1	31	-1.73						
1	51	-1.73						
1	76	-1.73						
1	102	-1.53						
1	152	-1.47						
1	203	-1.10						
1	305	-0.40						
1	406	0.54						
1	508	0.49						
1	610	0.49						

AR CRUISE AR2 STATION 024 OBSERVED VALUES

DATE	14/03/64	BAROMETER	06.0	WEATHER	X4	WIND VELOC	14	WAVE PERIOD
HOUR	00.6	TEMP DRY	-41.0	VISIBILITY	5	WIND DIREC	22	SECCHI
LAT	87-08.1N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	61-42.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.6							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.73						
1	20	-1.74						
1	31	-1.74						
1	51	-1.74						
1	76	-1.58						
1	102	-1.48						
1	152	-1.19						
1	203	-0.37						
1	305	0.44						
1	406	0.50						
1	508	0.45						
1	610	0.29						

AR CRUISE AR2 STATION 025 OBSERVED VALUES

DATE 14/03/64 BAROMETER 11.0 WEATHER X1 WIND VELOC 14
 HOUR 20.6 TEMP DRY -40.0 VISIBILITY 6 WIND DIREC 20
 LAT 87-05.9N TEMP WET CLOUD TYPE X WAVE DIREC
 LONG 60-31.0W REL HUMID CLOUD AMT 1 WAVE HEIGHT
 MESSENGER TIMES: 20.6, 22.5, 23.8
 WIRE ANGLES: 00, 04, 04

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 1170

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	ADU	SATN		
1	10	-1.75	31.852	25.64	8.67	0.774	-0.021	103	1.30	11
1	20	-1.75	31.852	25.64	8.64	0.772	-0.019	102	1.20	10
1	30	-1.73	31.834	25.63	8.71	0.778	-0.025	103	1.20	9
1	41	-1.73	31.852	25.64	8.69	0.776	-0.023	103	1.30	9
1	51	-1.75	31.852	25.64	8.60	0.768	-0.015	102	1.25	10
1	61	-1.74	31.888	25.67	8.64	0.772	-0.019	103	1.23	9
1	71	-1.58	32.448	26.12	7.00	0.625	0.121	84	1.70	22
1	81	-1.54	32.791	26.40	6.58	0.588	0.156	79	1.86	26
1	91	-1.53	33.043	26.60	6.32	0.564	0.177	76	1.96	26
1	101	-1.47	33.459	26.94	6.53	0.583	0.155	79	1.47	18
1	127	-1.43	34.072	27.44	6.67	0.596	0.139	81	0.96	13
1	152	-1.07	34.307	27.61	6.88	0.614	0.111	85	1.08	12
2	177	-0.66	34.451	27.71	6.76	0.604	0.113	84	0.96	12
2	203	-0.34	34.542	27.77	6.70	0.598	0.112	84	1.04	11
2	254	0.18	34.704	27.88	6.63	0.592	0.107	85	1.04	12
2	304	0.48	34.830	27.96	6.80	0.607	0.086	88	1.04	13
2	355	0.56	34.867	27.99	6.77	0.605	0.087	87	1.04	10
2	406	0.53	34.867	27.99	6.75	0.603	0.089	87	1.04	12
2	456	0.51	34.885	28.01	6.83	0.610	0.082	88	1.10	13
2	507	0.46	34.885	28.01	6.78	0.606	0.087	87	0.99	13
2	558	0.34	34.903	28.03	6.76	0.604	0.091	87	1.04	12
2	608	0.25	34.903	28.03	6.83	0.610	0.087	88	1.05	12
2	710	0.12	34.903	28.04	6.81	0.608	0.091	87	1.08	10
3	811	0.01	34.885	28.03	6.87	0.614	0.088	87	1.10	10
3	913	-0.07	34.885	28.04	6.86	0.613	0.090	87	1.04	11
3	1014	-0.15	34.903	28.06	6.69	0.598	0.107	85	1.04	11
3	1115	-0.24	34.921	28.07	6.73	0.601	0.105	85	1.04	12
3	1170	-0.29								

AR CRUISE AR2		STATION 025 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.75	0.00	31.852	0.000	25.64	235.3	0.000	0.00	8.67	0.00	
10	-1.75	0.00	31.852	0.000	25.64	235.2	0.024	0.01	8.67	0.00	
20	-1.75	0.00	31.852	0.000	25.64	235.2	0.048	0.05	8.64	0.00	
30	-1.73	0.00	31.834	0.000	25.63	236.5	0.072	0.11	8.71	0.00	
50	-1.75	0.00	31.852	0.001	25.64	234.9	0.119	0.31	8.61	0.00	0.87
75	-1.55	0.00	32.604	0.005	26.25	177.3	0.171	0.63	6.75	0.04	0.65
100	-1.48	0.00	33.416	0.004	26.91	115.0	0.208	0.95	6.50	0.01	0.82
150	-1.11	0.00	34.296	0.003	27.61	48.6	0.249	1.44	6.87	0.00	0.89
200	-0.37	0.00	34.533	0.001	27.77	33.5	0.270	1.80	6.70	0.00	0.81
250	0.15	0.00	34.692	0.000	27.87	24.2	0.284	2.13	6.63	0.00	0.89
300	0.46	0.00	34.822	0.001	27.96	16.3	0.294	2.41	6.79	0.01	0.89
400	0.54	0.00	34.867	0.001	27.99	13.5	0.310	2.94	6.75	0.00	0.85
500	0.47	0.00	34.885	0.001	28.01	11.8	0.322	3.53	6.79	0.00	0.83
600	0.26	0.00	34.904	0.000	28.03	9.0	0.333	4.12	6.82	0.00	0.75
700	0.13	0.00	34.903	0.000	28.04	8.2	0.341	4.70	6.82	0.00	0.87
800	0.02	0.00	34.887	0.001	28.03	8.6	0.350	5.35	6.86	0.00	0.86
1000	-0.14	0.00	34.900	0.000	28.05	6.4	0.365	6.74	6.71	0.01	0.82

DATA AT 0 METERS WAS ASSUMED FOR PURPOSES OF INTERPOLATION.

AR CRUISE AR2 STATION 026 OBSERVED VALUES

DATE 16/03/64	BAROMETER 05.0	WEATHER X3	WIND VELOC 23	WAVE PERIOD
HOUR 01.6	TEMP DRY -32.0	VISIBILITY 5	WIND DIREC 05	SECCHI
LAT 87-02.6N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 58-49.0W	REL HUMID	CLOUD AMT 5	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 01.6				
WIRE ANGLES: 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	ML/L	MGA/L	AOU	SATN
1	10	-1.73							
1	20	-1.74							
1	30	-1.75							
1	51	-1.74							
1	76	-1.56							
1	102	-1.50							
1	152	-1.07							
1	203	-0.40							
1	352	0.43							
1	454	0.49							
1	556	0.39							
1	658	0.20							

AR CRUISE AR2 STATION 027 OBSERVED VALUES

DATE	17/03/64	BAROMETER	01.0	WEATHER	X2	WIND VELOC	07	WAVE PERIOD
HOUR	00.6	TEMP DRY	-28.6	VISIBILITY	7	WIND DIREC	34	SECCHI
LAT	87-00.1N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	57-28.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.6							
WIRE ANGLES:	01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.73						
1	20	-1.73						
1	30	-1.73						
1	51	-1.73						
1	76	-1.56						
1	101	-1.47						
1	152	-1.10						
1	203	-0.36						
1	304	0.39						
1	406	0.50						
1	507	0.46						
1	608	0.27						

AR CRUISE AR2

STATION 028

OBSERVED VALUES

DATE 18/03/64

HOUR 00.3

LAT 86-57.4N

LONG 57-03.0W

MESSENGER TIMES: 00.3

WIRE ANGLFS: 04

BAROMETER 88.0

TEMP DRY -28.5

TEMP WET

REL HUMID

04

WEATHER X3

VISIBILITY 6

CLOUD TYPE 6

CLOUD AMT 6

WIND VELOC 15

WIND DIREC 28

WAVE DIREC

WAVE HEIGHT

WAVE PERIOD

SECCHI

WATER COLOR

SOUNDING

CST DEPTH TEMP SAL SIGMA-T

***** OXYGEN *****

ML/L MGA/L ADU SATN

1	5	-1.73
1	10	-1.73
1	20	-1.74
1	30	-1.74

1	51	-1.73
1	76	-1.57
1	102	-1.48
1	152	-1.18

1	203	-0.36
1	304	0.42
1	406	0.47
1	507	0.47

1	608	0.29
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AR CRUISE AR2 STATION 029 OBSERVED VALUES

DATE 19/03/64	BAROMETER 01.0	WEATHER X3	WIND VELOC 23	WAVE PERIOD
HOUR 00.2	TEMP DRY -33.0	VISIBILITY 4	WIND DIREC 28	SECCHI
LAT 86-54.6N	TEMP WFT	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 54-37.0W	REL HUMID	CLOUD AMT 5	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.2				
WIRE ANGLES: 04				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.73			
1	30	-1.73			
1	51	-1.73			
1	76	-1.58			
1	102	-1.46			
1	152	-1.13			
1	203	-0.35			
1	304	0.56			
1	405	0.51			
1	507	0.51			
1	608	0.28			

AR CRUISE AR2 STATION 030 OBSERVED VALUES

DATE	20/03/64	BAROMETER	11.0	WEATHER	X3	WIND VELOC	27	WAVE PERIOD
HOUR	00.9	TEMP DRY	-35.0	VISIBILITY	4	WIND DIREC	25	SECCHI
LAT	86-51.9N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	53-09.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.9							
WIRE ANGLES:	11							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.73			
1	30	-1.74			
1	50	-1.73			
1	75	-1.57			
1	100	-1.46			
1	149	-1.06			
1	199	-0.27			
1	299	0.40			
1	398	0.50			
1	497	0.50			
1	596	0.30			

AR CRUISE AR2 STATION 031 OBSERVED VALUES

DATE 21/03/64	BAROMETER 12.0	WEATHER X1	WIND VELOC 15	WAVE PERIOD
HOUR 00.0	TEMP DRY -35.0	VISIBILITY 6	WIND DIREC 27	SECCHI
LAT 86-49.3N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 51-46.0W	RFL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.0				
WIRE ANGLES: 03				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.72						
1	10	-1.72						
1	20	-1.72						
1	30	-1.73						
1	51	-1.72						
1	76	-1.57						
1	101	-1.47						
1	152	-1.06						
1	203	-0.27						
1	304	0.57						
1	406	0.55						
1	507	0.50						
1	608	0.30						

AR CRUISE AR2 STATION 032 OBSERVED VALUES

DATE 22/03/64	BAROMETER 11.0	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HOUR 02.4	TEMP DRY -38.0	VISIBILITY 6	WIND DIREC 24	SECCHI
LAT 86-46.6N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 50-24.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 02.4				
WIRE ANGLES:	00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.74			
1	30	-1.73			
1	51	-1.73			
1	76	-1.56			
1	101	-1.47			
1	152	-1.12			
1	203	-0.21			
1	304	0.75			
1	406	0.61			
1	507	0.54			
1	608	0.36			

AR CRUISE AR2 STATION 033 OBSERVED VALUES

DATE 22/03/64	BAROMETER 08.0	WEATHER	X4	WIND VELOC	08	WAVE PERIOD
HOUR 18.7	TEMP DRY -38.4	VISIBILITY	5	WIND DIREC	23	SECCHI
LAT 86-45.5N	TEMP WET	CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG 50-04.0W	REL HUMID	CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES: 18.7						
WIRE ANGLES:	00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.72						
1	10	-1.72						
1	20	-1.72						
1	30	-1.73						
1	51	-1.72						
1	76	-1.56						
1	101	-1.46						
1	152	-1.12						
1	203	-0.35						
1	304	0.63						
1	406	0.61						
1	507	0.57						
1	608	0.33						

AR CRUISE AR2

STATION 034

OBSERVED VALUES

DATE 23/03/64

BAROMETER 17.0

WEATHER X4

WIND VELOC 07

WAVE PERIOD

HOUR 19.9

TEMP DRY -43.0

VISIBILITY 6

WIND DIREC 25

SECCHI

LAT 86-44.1N

TEMP WET

CLOUD TYPE X

WAVE DIREC

WATER COLOR

LONG 49-24.8W

REL HUMID

CLOUD AMT 1

WAVE HEIGHT

SOUNDING

MESSENGER TIMES: 19.9

WIRE ANGLES: 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.72						
1	10	-1.72						
1	20	-1.72						
1	30	-1.72						
1	51	-1.72						
1	76	-1.57						
1	101	-1.48						
1	152	-1.09						
1	203	-0.35						
1	304	0.67						
1	406	0.62						
1	507	0.57						
1	608	0.32						

AR CRUISE AR2 STATION 035 OBSERVED VALUES

DATE 24/03/64 BAROMETER 16.0 WEATHER X7 WIND VELOC 13 WAVE PERIOD
 HOUR 20.1 TEMP DRY -37.8 VISIBILITY 6 WIND DIREC 19 SECCHI
 LAT 86-44.0N TEMP WET CLOUD TYPE 3 WAVE DIREC WATER COLOR
 LONG 49-06.3W REL HUMID CLOUD AMT 3 WAVE HEIGHT SOUNDING 2254
 MESSENGER TIMES: 20.1, 22.1, 23.9
 WIRE ANGLES: --, --, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	3	-1.71	31.789	25.59	8.69	0.776	-0.024	103	0.99	11
1	10	-1.72	31.771	25.58	8.70	0.777	-0.024	103	1.24	11
1	20	-1.73	31.771	25.58	8.73	0.780	-0.027	104	1.17	11
1	30	-1.74	31.789	25.59	8.69	0.775	-0.023	103	1.17	12
1	41	-1.72	31.771	25.58	8.76	0.782	-0.029	104	1.13	4
1	51	-1.72	31.771	25.58	8.64	0.772	-0.019	102	1.17	10
1	61	-1.71	31.789	25.59	8.73	0.780	-0.027	104	1.13	11
1	71	-1.57	32.646	26.28	6.90	0.616	0.129	83	1.65	24
1	81	-1.54	33.007	26.58	6.46	0.577	0.165	78	1.65	31
1	101	-1.49	33.666	27.11	6.57	0.587	0.151	80	1.17	16
1	127	-1.40	34.181	27.52	6.79	0.606	0.127	83	0.90	11
1	152	-1.05	34.397	27.69	6.83	0.610	0.115	84	0.86	10
2	177	-0.65	34.515	27.77	6.81	0.608	0.108	85	0.95	10
2	203	-0.31	34.614	27.83	6.76	0.604	0.105	85	0.95	8
2	254	0.22	34.589	27.78	6.75	0.603	0.096	86	0.95	8
2	304	0.62	34.695	27.85	6.75	0.603	0.088	87	0.86	10
2	355	0.63	34.921	28.03	6.78	0.606	0.084	88	0.95	10
2	406	0.60	34.921	28.03	6.74	0.602	0.088	87	0.98	10
2	456	0.57	34.921	28.03	6.75	0.603	0.088	87	0.95	10
2	507	0.55	34.912	28.02	6.83	0.610	0.081	88	1.08	8
2	608	0.33	34.957	28.07	6.85	0.612	0.083	88	0.98	8
2	710	0.12	34.948	28.08	6.81	0.608	0.091	87	1.03	10
2	811	0.01	34.957	28.09	6.88	0.614	0.087	88	0.98	10
2	913	-0.13	34.948	28.09	6.94	0.620	0.084	88	1.13	10
3	1014	-0.22	34.948	28.10	7.05	0.630	0.076	89	1.13	14
3	1217	-0.32	34.948	28.10	6.94	0.620	0.088	88	1.04	11
3	1420	-0.37	35.002	28.15	6.78	0.606	0.103	86	1.14	11
3	1622	-0.42	35.002	28.15	6.79	0.606	0.103	86	1.17	12

(CONTINUED)

AR CRUISE AR2		STATION 035		OBSERVED VALUES (CONTINUED)				
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		PHOS	SIL
					ML/L	MGA/L	ADU SATN	
3	1825	-0.47	34.975	28.13	6.83	0.610	0.100 86	1.13 14
3	2028	-0.54	34.984	28.14	6.78	0.606	0.106 85	1.13 12
3	2231	-0.63	34.984	28.14	6.82	0.609	0.104 85	1.04 11
3	2254	-0.64	34.984	28.14				

AR CRUISE AR2		STATION 035		INTERPOLATED AND COMPUTED VALUES							
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPUT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.71	0.00	31.789	0.000	25.59	240.3	0.000	0.00	8.69	0.00	
10	-1.72	0.00	31.771	0.000	25.58	241.5	0.025	0.01	8.70	0.00	
20	-1.73	0.00	31.771	0.000	25.58	241.4	0.049	0.05	8.73	0.00	
30	-1.74	0.00	31.789	0.000	25.59	239.9	0.073	0.11	8.69	0.00	
50	-1.72	0.00	31.770	0.000	25.58	241.2	0.122	0.31	8.65	0.01	0.87
75	-1.55	0.00	32.821	0.019	26.43	160.6	0.172	0.62	6.62	0.04	0.63
100	-1.49	0.00	33.637	0.001	27.08	98.0	0.205	0.91	6.55	0.01	0.92
150	-1.08	0.00	34.387	0.002	27.68	41.7	0.240	1.32	6.83	0.00	0.89
200	-0.35	0.00	34.605	0.001	27.83	28.2	0.258	1.63	6.77	0.00	0.81
250	0.18	0.00	34.594	0.005	27.79	31.9	0.273	1.98	6.75	0.00	0.89
300	0.60	0.00	34.682	0.000	27.84	27.8	0.288	2.40	6.75	0.00	0.89
400	0.60	0.00	34.927	0.004	28.03	9.4	0.307	3.03	6.75	0.00	0.85
500	0.55	0.00	34.913	0.001	28.02	10.3	0.317	3.49	6.82	0.00	0.78
600	0.35	0.00	34.953	0.002	28.07	6.0	0.325	3.95	6.85	0.00	0.89
700	0.14	0.00	34.950	0.001	28.08	4.7	0.330	4.31	6.81	0.00	0.87
800	0.02	0.00	34.956	0.001	28.09	3.4	0.334	4.62	6.87	0.00	0.86
1000	-0.21	0.00	34.948	0.000	28.10	2.3	0.340	5.15	7.04	0.00	0.77
1200	-0.31	0.00	34.947	0.001	28.10	1.4	0.344	5.57	6.96	0.01	0.89
1500	-0.39	0.00	35.007	0.001	28.15	-3.9	0.340	4.92	6.77	0.01	0.65
2000	-0.53	0.00	34.982	0.001	28.14	-3.9	0.320	1.34	6.79	0.00	0.83

AR CRUISE AR2 STATION 036 OBSERVED VALUES

DATE 25/03/64	BAROMETER 22.0	WEATHER X0	WIND VELOC 07	WAVE PERIOD
HOUR 20.8	TEMP DRY -39.8	VISIBILITY 7	WIND DTREC 20	SECCHI
LAT 86-43.0N	TEMP WET	CLOUD TYPF X	WAVE DIREC	WATER COLOR
LONG 49-00.0W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING
MESSENGER TIMES:	00			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.73						
1	20	-1.74						
1	30	-1.74						
1	51	-1.72						
1	76	-1.58						
1	101	-1.50						
1	152	-1.04						
1	203	-0.31						
1	304	0.62						
1	406	0.60						
1	507	0.55						
1	608	0.32						

	AR	CRUISE	AR2	STATION	037	OBSERVED	VALUES	
DATE	27/03/64	BAROMETER	05.0	WEATHER	X3	WIND VELOC	21	WAVE PERIOD
HOUR	01.4	TEMP DRY	-22.8	VISIBILITY	2	WIND DIREC	06	SECCHI
LAT	86-41.9N	TEMP WET		CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	48-52.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 01.4							
WIRE	ANGLES: 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.73			
1	10	-1.73			
1	20	-1.72			
1	30	-1.75			
1	51	-1.74			
1	76	-1.56			
1	101	-1.47			
1	152	-1.17			
1	203	-0.30			
1	304	0.58			
1	406	0.56			
1	507	0.50			
1	608	0.32			

AR CRUISE AR2 STATION 038 OBSERVED VALUES

DATE	27/03/64	BAROMETER	05.0	WEATHER	X2	WIND VELOC	15	WAVE PERIOD
HOUR	20.7	TEMP DRY	-32.2	VISIBILITY	6	WIND DIREC	28	SECCHI
LAT	86-41.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	48-47.4W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.7							
WIRE ANGLFS:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	10	-1.74						
1	20	-1.74						
1	30	-1.74						
1	51	-1.74						
1	76	-1.56						
1	101	-1.49						
1	152	-1.17						
1	203	-0.37						
1	304	0.55						
1	406	0.50						
1	507	0.49						
1	608	0.32						

AR CRUISE AR2 STATION 039 OBSERVED VALUES

DATE 29/03/64	BAROMETER 23.0	WEATHER X1	WIND VELOC 11	WAVE PERIOD
HOUR 00.7	TEMP DRY -35.0	VISIBILITY 6	WIND DIREC 17	SECCHI
LAT 86-40.0N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 48-40.0W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.7				
WIRE ANGLES:	00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.73			
1	10	-1.72			
1	25	-1.72			
1	51	-1.72			
1	76	-1.57			
1	101	-1.47			
1	152	-1.09			
1	203	-0.34			
1	304	0.65			
1	406	0.61			
1	507	0.56			
1	608	0.31			

AR CRUISE AR2 STATION 040 OBSERVED VALUES

DATE 30/03/64	BAROMETER 29.0	WEATHER X0	WIND VELOC 03	WAVE PERIOD
HOUR 00.4	TEMP DRY -36.0	VISIBILITY 7	WIND DIREC 05	SECCHI
LAT 86-39.6N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 48-16.0W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.4	--			
WIRE ANGLFS:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.73						
1	20	-1.74						
1	30	-1.73						
1	51	-1.73						
1	76	-1.57						
1	101	-1.45						
1	152	-1.08						
1	203	-0.32						
1	304	0.62						
1	406	0.60						
1	507	0.56						
1	608	0.34						

AR CRUISE AR2 STATION 041 OBSERVED VALUES

DATE	30/03/64	BAROMETER	27.0	WEATHER	X0	WIND VELOC	07	WAVE PERIOD
HOUR	23.5	TEMP DRY	-33.5	VISIBILITY	6	WIND DIREC	03	SECCHI
LAT	86-39.6N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	47-38.7W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.5							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.58						
1	10	-1.74						
1	20	-1.74						
1	30	-1.74						
1	51	-1.73						
1	76	-1.58						
1	101	-1.46						
1	152	-1.08						
1	203	-0.31						
1	304	0.65						
1	406	0.60						
1	507	0.57						
1	608	0.35						

	AR	CRUISE	AR2	STATION	042	OBSERVED	VALUES	
DATE	01/04/64	BAROMETER	23.0	WEATHER	x1	WIND	VELOC	06
HOUR	00.5	TEMP DRY	-31.4	VISIBILITY	7	WIND	DIREC	08
LAT	86-39.4N	TEMP WET		CLOUD TYPE	3	WAVE	DIREC	
LONG	47-31.0W	REL HUMID		CLOUD AMT	6	WAVE	HEIGHT	
MESSENGER	TIMES: 00.5							WAVE PERIOD
WIRE	ANGLES:							SECCHI
								WATER COLOR
								SOUNDING

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.70			
1	10	-1.73			
1	20	-1.73			
1	30	-1.73			
1	51	-1.72			
1	76	-1.57			
1	101	-1.46			
1	152	-1.10			
1	202	-0.31			
1	304	0.70			
1	405	0.61			
1	506	0.57			
1	607	0.37			

AR CRUISE AR2 STATION 043 OBSERVED VALUES

DATE 01/04/64	BAROMETER 18.0	WEATHER X1	WIND VELOC 07	WAVE PERIOD
HOUR 19.7	TEMP DRY -34.7	VISIBILITY 6	WIND DIREC 21	SECCHI
LAT 86-39.2N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 47-46.0W	REL HUMID	CLOUD AMT 4	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 19.7				
WIRE ANGLES: 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.62			
1	10	-1.73			
1	20	-1.73			
1	30	-1.73			
1	51	-1.73			
1	76	-1.59			
1	101	-1.47			
1	152	-1.07			
1	202	-0.33			
1	304	0.71			
1	405	0.61			
1	506	0.57			
1	607	0.35			

AR CRUISE AR2 STATION 044 OBSERVED VALUES

DATE	02/04/64	BAROMETER	20.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	20.4	TEMP DRY	-36.4	VISIBILITY	6	WIND DIREC	30	SECCHI
LAT	86-38.9N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	48-05.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.4							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.61						
1	10	-1.72						
1	20	-1.73						
1	30	-1.72						
1	51	-1.72						
1	76	-1.57						
1	101	-1.47						
1	152	-1.10						
1	202	-0.32						
1	304	0.67						
1	405	0.60						
1	506	0.57						
1	607	0.36						

AR CRUISE AR2 STATION 045 OBSERVED VALUES

DATE 03/04/64	BAROMETER 24.0	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HOUR 20.7	TEMP DRY -40.3	VISIBILITY 6	WIND DIREC 18	SECCHI
LAT 86-38.5N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 48-23.3W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 20.7, 22.1, 23.9				
WIRE ANGLES: --, --, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.71	31.789	25.59	8.58	0.766	-0.014	102	1.30	11
1	10	-1.73	31.798	25.60	8.83	0.789	-0.036	105	1.30	11
1	20	-1.73	31.798	25.60	8.83	0.789	-0.036	105	1.20	11
1	30	-1.72	31.834	25.63	8.74	0.781	-0.028	104	1.20	11
1	41	-1.73	31.825	25.62	8.71	0.778	-0.025	103	1.30	12
1	51	-1.73	31.870	25.66	8.64	0.772	-0.019	103	1.20	12
1	61	-1.70	31.906	25.69	8.51	0.760	-0.008	101	1.30	14
1	71	-1.57	32.673	26.31	6.86	0.613	0.132	82	1.74	24
1	81	-1.54	33.089	26.64	6.48	0.579	0.163	78	1.91	30
1	101	-1.47	33.675	27.12	6.60	0.589	0.148	80	1.30	18
1	127	-1.44	34.163	27.51	7.03	0.628	0.106	86	1.04	14
1	152	-1.09	34.379	27.67	7.02	0.627	0.099	86	0.95	12
1	177	-0.69	34.487	27.75	6.98	0.624	0.094	87	0.95	10
2	203	-0.35	34.605	27.83	6.97	0.623	0.087	88	0.95	10
2	254	0.30	34.812	27.96	6.83	0.610	0.086	88	0.95	10
2	304	0.64	34.921	28.03	6.90	0.616	0.073	89	0.95	11
2	355	0.74	34.948	28.04	6.92	0.618	0.069	90	1.04	10
2	406	0.61	34.957	28.06	6.91	0.617	0.073	89	1.04	10
2	456	0.57	34.948	28.05	6.82	0.609	0.082	88	1.04	10
2	506	0.59	34.984	28.08	6.95	0.621	0.069	90	1.04	10
2	557	0.47	34.957	28.07	6.88	0.614	0.078	89	1.13	10
2	607	0.34	34.966	28.08	6.84	0.611	0.084	88	1.04	10
2	810	0.01	34.939	28.08	6.94	0.620	0.081	88	1.04	10
2	1011	-0.20	34.957	28.10	6.98	0.623	0.082	88	1.20	11
2	1214	-0.31	34.957	28.11	6.97	0.623	0.085	88	1.13	11
3	1417	-0.37	34.993	28.14	6.96	0.622	0.087	88	1.13	11
3	1619	-0.43	35.002	28.15	6.78	0.606	0.104	85	1.20	11
3	1822	-0.46	34.993	28.14	6.80	0.607	0.103	86	1.13	12

(CONTINUED)

		AR	CRUISE	AR2	STATION 045				OBSERVED VALUES			(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** ML/L	OXYGEN MGA/L	***** AOU	***** SATN	PHOS	SIL		
3	2024	-0.51	34.975	28.13	6.85	0.612	0.099	86	1.13	14		
3	2226	-0.58	34.984	28.14	6.94	0.620	0.093	87	1.20	12		
3	2429	-0.65	34.975	28.14	7.04	0.629	0.085	88	1.20	12		

		AR	CRUISE	AR2	STATION 045								INTERPOLATED AND COMPUTED VALUES	
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO			
0	-1.71	0.00	31.789	0.000	25.59	240.3	0.000	0.00	8.58	0.00				
10	-1.73	0.00	31.798	0.000	25.60	239.4	0.025	0.01	8.83	0.00				
20	-1.73	0.00	31.798	0.000	25.60	239.3	0.049	0.05	8.83	0.00				
30	-1.72	0.00	31.834	0.000	25.63	236.5	0.073	0.11	8.74	0.00				
50	-1.73	0.00	31.865	0.001	25.65	233.9	0.120	0.31	8.65	0.00	0.87			
75	-1.55	0.00	32.865	0.011	26.46	157.2	0.169	0.61	6.61	0.04	0.63			
100	-1.47	0.00	33.652	0.001	27.10	96.9	0.201	0.89	6.58	0.01	0.92			
150	-1.12	0.00	34.368	0.002	27.67	43.0	0.237	1.31	7.03	0.00	0.89			
200	-0.39	0.00	34.591	0.000	27.82	29.0	0.255	1.62	6.97	0.00	0.81			
250	0.25	0.00	34.798	0.001	27.95	16.8	0.266	1.88	6.84	0.00	0.89			
300	0.62	0.00	34.915	0.000	28.02	10.3	0.273	2.07	6.89	0.00	0.89			
400	0.63	0.01	34.957	0.000	28.06	7.3	0.282	2.38	6.91	0.00	0.85			
500	0.59	0.00	34.980	0.002	28.08	5.5	0.289	2.68	6.93	0.01	0.84			
600	0.36	0.00	34.964	0.001	28.08	5.2	0.294	2.98	6.84	0.00	0.75			
700	0.16	0.01	34.957	0.006	28.08	4.4	0.299	3.30	6.86	0.02	1.37			
800	0.02	0.00	34.941	0.001	28.08	4.6	0.303	3.65	6.93	0.00	0.94			
1000	-0.19	0.00	34.956	0.001	28.10	1.9	0.310	4.22	6.98	0.00	0.92			
1200	-0.30	0.00	34.957	0.001	28.11	0.8	0.312	4.52	6.97	0.00	0.90			
1500	-0.40	0.00	34.999	0.000	28.15	-3.4	0.308	3.86	6.88	0.01	0.65			
2000	-0.50	0.00	34.977	0.001	28.13	-3.3	0.291	0.81	6.84	0.00	0.85			

AR CRUISE AR2 STATION 046 OBSERVED VALUES

DATE 04/04/64 BAROMETER 14.0 WEATHER X0 WIND VELOC 08 WAVE PERIOD
 HOUR 20.4 TEMP DRY -38.3 VISIBILITY 7 WIND DIREC 04 SECCHI
 LAT 86-38.3N TEMP WET CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 48-40.0W REL HUMID CLOUD AMT 0 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 20.4
 WIRE ANGLES: 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.62						
1	10	-1.73						
1	20	-1.76						
1	30	-1.76						
1	51	-1.75						
1	76	-1.59						
1	101	-1.48						
1	152	-1.13						
1	202	-0.37						
1	304	0.66						
1	405	0.59						
1	506	0.57						
1	607	0.34						

AR CRUISE AR2

STATION 047

OBSERVED VALUES

DATE	05/04/64	BAROMETER	12.0	WEATHER	X1	WIND VELOC	09	WAVE PERIOD
HOUR	20.3	TEMP DRY	-39.5	VISIBILITY	6	WIND DIREC	07	SECCHI
LAT	86-38.1N	TEMP WET		CLOUD TYPF	3	WAVE DIREC		WATER COLOR
LONG	48-49.0W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.3							
WIRF ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.72						
1	10	-1.74						
1	20	-1.74						
1	30	-1.74						
1	51	-1.74						
1	76	-1.58						
1	101	-1.47						
1	152	-1.12						
1	202	-0.36						
1	304	0.66						
1	405	0.60						
1	506	0.57						
1	607	0.36						

AR CRUISE AR2 STATION 048 OBSERVED VALUES

DATE	06/04/64	BAROMETER	05.0	WEATHER	X3	WIND VELOC	21	WAVE PERIOD
HOUR	20.5	TEMP DRY	-31.9	VISIBILITY	2	WIND DIREC	04	SECCHI
LAT	86-38.1N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	48-59.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.5							
WIRE ANGLFS:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.74			
1	10	-1.74			
1	20	-1.74			
1	30	-1.73			
1	51	-1.74			
1	76	-1.57			
1	101	-1.50			
1	152	-1.12			
1	202	-0.33			
1	304	0.66			
1	405	0.61			
1	506	0.58			
1	607	0.34			

AR CRUISE AR2 STATION 049 OBSERVED VALUES

DATE	08/04/64	BAROMETER	10.0	WEATHER	X1	WIND VELOC	04	WAVE PERIOD
HOUR	00.3	TEMP DRY	-31.2	VISIBILITY	7	WIND DIREC	33	SECCHI
LAT	86-39.4N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	49-16.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.3							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ANU	SATN
1	5	-1.73						
1	10	-1.74						
1	20	-1.74						
1	30	-1.73						
1	51	-1.74						
1	76	-1.57						
1	101	-1.48						
1	152	-1.12						
1	202	-0.34						
1	304	0.70						
1	405	0.62						
1	506	0.57						
1	607	0.35						

AR CRUISE AR2 STATION 050 OBSERVED VALUES

DATE 08/04/64	BAROMETER 14.0	WEATHER X7	WIND VELOC 09	WAVE PERIOD
HOUR 20.9	TEMP DRY -25.7	VISIBILITY 5	WIND DIREC 01	SECCHI
LAT 86-40.3N	TEMP WFT	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 49-28.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 20.9				
WIRE ANGLES:	00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.73			
1	30	-1.75			
1	51	-1.73			
1	76	-1.58			
1	101	-1.46			
1	152	-1.12			
1	202	-0.35			
1	304	0.67			
1	405	0.60			
1	506	0.56			
1	607	0.34			

AR CRUISE AR2 STATION 051 OBSERVED VALUES

DATE 09/04/64	BAROMETER 14.0	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HOUR 20.3	TEMP DRY -29.8	VISIBILITY 6	WIND DIREC 21	SECCHI
LAT 86-41.4N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 49-43.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 20.3				
WIRE ANGLES: 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	10	-1.73			
1	20	-1.72			
1	30	-1.74			
1	51	-1.74			
1	76	-1.58			
1	101	-1.47			
1	152	-1.15			
1	202	-0.36			
1	304	0.70			
1	405	0.63			
1	506	0.56			
1	607	0.37			

AR CRUISE AR2 STATION 052 OBSERVED VALUES

DATE	10/04/64	BAROMETER	22.0	WEATHER	X7	WIND VELOC	09	WAVE PERIOD
HOUR	20.1	TEMP DRY	-29.8	VISIBILITY	6	WIND DIREC	01	SECCHI
LAT	86-40.9N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	49-46.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 20.1							
WIRE	ANGLES: 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.72			
1	30	-1.73			
1	51	-1.74			
1	76	-1.58			
1	101	-1.48			
1	152	-1.17			
1	202	-0.41			
1	304	0.70			
1	405	0.63			
1	506	0.58			
1	607	0.36			

AR CRUISE AR2

STATION 053

OBSERVED VALUES

DATE 11/04/64
 HOUR 20.5
 LAT 86-39.7N
 LONG 49-42.0W

BAROMETER 06.0
 TEMP DRY -16.6
 TEMP WET
 REL HUMID

WEATHER X0
 VISIBILITY 7
 CLOUD TYPE X
 CLOUD AMT 0

WIND VELOC 07
 WIND DIREC 14
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING

MESSENGER TIMES: 20.5
 WIRE ANGLES: 00

CST DEPTH TEMP SAL SIGMA-T

***** OXYGEN *****
 ML/L MGA/L AOU SATN

1	5	-1.72		
1	10	-1.73		
1	20	-1.73		
1	30	-1.73		
1	51	-1.73		
1	76	-1.58		
1	101	-1.48		
1	152	-1.12		
1	202	-0.35		
1	304	0.68		
1	405	0.62		
1	506	0.59		
1	607	0.37		

AR CRUISE AR2 STATION 054 OBSERVED VALUES

DATE	13/04/64	BAROMETER	17.0	WEATHER	X0	WIND VELOC	05	WAVE PERIOD
HOUR	01.5	TEMP DRY	-36.9	VISIBILITY	6	WIND DIREC	34	SECCHI
LAT	86-40.2N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	49-36.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMFS:	01.5							
WTRE ANGLES:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ANU	SATN
1	5	-1.72						
1	10	-1.73						
1	20	-1.73						
1	30	-1.73						
1	51	-1.73						
1	76	-1.58						
1	101	-1.48						
1	152	-1.14						
1	202	-0.34						
1	303	0.67						
1	404	0.62						
1	506	0.60						
1	607	0.37						

AR CRUISE AR?

STATION 055

OBSERVED VALUES

DATE 13/04/64

BAROMETER 20.0

WEATHER X1

WIND VELOC 14

WAVE PERIOD

HOUR 19.8

TEMP DRY -25.2

VISIBILITY 6

WIND DIREC 01

SECCHI

LAT 86-40.3N

TEMP WET

CLOUD TYPE 6

WAVE DIREC

WATER COLOR

LONG 49-42.0W

REL HUMID

CLOUD AMT 7

WAVE HEIGHT

SOUNDING 2420

MESSENGER TIMES: 19.8, 21.1, 22.5

WIRE ANGLES: 00, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.67	31.906	25.69	8.78	0.784	-0.033	104	1.19	13
1	10	-1.73	31.906	25.69	8.89	0.794	-0.042	106	1.28	12
1	20	-1.73	31.906	25.69	8.85	0.790	-0.038	105	1.28	12
1	30	-1.73	31.924	25.70	8.86	0.791	-0.039	105	1.28	12
1	41	-1.73	31.924	25.70	8.85	0.790	-0.038	105	1.28	12
1	51	-1.73	31.942	25.72	8.77	0.783	-0.031	104	1.28	13
1	61	-1.72	31.951	25.72	8.85	0.790	-0.038	105	1.28	13
1	71	-1.63	32.457	26.13	7.48	0.668	0.079	89	1.56	23
1	81	-1.52	33.007	26.58	6.63	0.592	0.150	80	1.84	30
1	91	-1.48	33.359	26.86	6.55	0.585	0.154	79	1.47	27
1	101	-1.46	33.657	27.10	6.77	0.605	0.132	82	1.19	18
1	126	-1.44	34.136	27.49	7.06	0.631	0.104	86	1.00	12
2	152	-1.11	34.361	27.66	7.12	0.636	0.090	88	0.92	9
2	202	-0.34	34.623	27.84	7.12	0.636	0.074	90	0.92	9
2	253	0.22	34.776	27.93	6.98	0.623	0.075	89	0.92	9
2	303	0.67	34.912	28.02	7.00	0.625	0.064	91	0.92	8
2	354	0.70	34.921	28.02	7.06	0.631	0.058	92	0.92	8
2	404	0.62	34.948	28.05	6.98	0.623	0.066	90	1.00	9
2	455	0.60	34.948	28.05	6.97	0.623	0.068	90	1.00	9
2	506	0.58	34.939	28.04	7.15	0.639	0.052	92	1.00	8
2	557	0.49	34.939	28.05	7.06	0.631	0.062	91	1.10	9
2	607	0.38	34.939	28.06	7.13	0.637	0.057	92	1.00	9
2	708	0.18	34.957	28.08	7.11	0.635	0.063	91	1.00	9
2	809	0.06	34.966	28.10	7.19	0.642	0.058	92	1.00	8
2	1011	-0.14	34.939	28.08	7.22	0.645	0.059	92	1.10	8
3	1213	-0.30	34.975	28.12	7.18	0.641	0.066	91	1.19	8
3	1415	-0.36	34.975	28.12	6.99	0.624	0.084	88	1.19	11
3	1618	-0.40	35.002	28.15	7.00	0.625	0.084	88	1.19	12

(CONTINUED)

		AR	CRUISE	AR2	STATION 055		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		***** SATN *****		PHOS	SIL	
					ML/L	MGA/L	AOU	SATN			
3	1820	-0.45	34.993	28.14	6.99	0.624	0.085	88	1.19	12	
3	2022	-0.49	35.002	28.15	7.02	0.627	0.084	88	1.19	12	
3	2224	-0.54	34.993	28.15	7.15	0.639	0.073	90	1.19	12	
3	2420	-0.64	34.984	28.14							

		AR	CRUISE	AR2	STATION 055		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO	
0	-1.67	0.00	31.906	0.000	25.69	231.3	0.000	0.00	8.78	0.00		
10	-1.73	0.00	31.906	0.000	25.69	231.1	0.024	0.01	8.89	0.00		
20	-1.73	0.00	31.906	0.000	25.69	231.0	0.047	0.05	8.85	0.00		
30	-1.73	0.00	31.924	0.000	25.70	229.5	0.070	0.11	8.86	0.00		
50	-1.73	0.00	31.940	0.000	25.72	228.1	0.116	0.30	8.78	0.00	0.87	
75	-1.58	0.00	32.686	0.010	26.32	170.9	0.167	0.61	7.06	0.01	0.65	
100	-1.46	0.00	33.630	0.000	27.08	98.6	0.201	0.90	6.74	0.01	0.82	
150	-1.14	0.00	34.350	0.003	27.65	44.3	0.237	1.33	7.12	0.00	0.86	
200	-0.37	0.00	34.616	0.001	27.83	27.3	0.255	1.64	7.12	0.00	0.94	
250	0.19	0.00	34.769	0.001	27.93	18.6	0.266	1.91	6.99	0.00	0.92	
300	0.65	0.00	34.906	0.001	28.01	11.2	0.274	2.11	7.00	0.00	0.92	
400	0.63	0.00	34.946	0.001	28.05	8.2	0.283	2.46	6.99	0.00	0.89	
500	0.58	0.00	34.940	0.000	28.04	8.5	0.292	2.85	7.13	0.01	0.85	
600	0.40	0.00	34.939	0.000	28.06	7.3	0.300	3.29	7.12	0.00	0.77	
700	0.19	0.00	34.955	0.000	28.08	4.7	0.306	3.69	7.11	0.00	0.89	
800	0.07	0.00	34.966	0.000	28.10	3.1	0.310	3.99	7.18	0.00	0.84	
1000	-0.13	0.00	34.940	0.001	28.09	3.5	0.316	4.61	7.22	0.00	0.92	
1200	-0.29	0.00	34.972	0.001	28.12	-0.3	0.320	4.94	7.19	0.00	0.91	
1500	-0.38	0.00	34.987	0.003	28.13	-2.3	0.316	4.34	6.98	0.01	0.65	
2000	-0.49	0.00	35.001	0.001	28.15	-4.9	0.297	0.86	7.01	0.00	0.86	

AR CRUISE AR2 STATION 056 OBSERVED VALUES

DATE 14/04/64	BAROMETER 24.0	WEATHER X2	WIND VELOC 00	WAVE PERIOD
HOUR 20.1	TEMP DRY -22.0	VISIBILITY 5	WIND DIREC 00	SECCHI
LAT 86-40.3N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 50-01.0W	RFL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 20.1	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.74			
1	30	-1.74			
1	51	-1.73			
1	76	-1.58			
1	101	-1.47			
1	152	-1.15			
1	202	-0.36			
1	303	0.65			
1	404	0.62			
1	506	0.61			
1	607	0.34			

AR CRUISE AR2 STATION 057 OBSERVED VALUES

DATE	15/04/64	BAROMETER	21.0	WEATHER	X2	WIND VELOC	05	WAVE PERIOD
HOUR	19.5	TEMP DRY	-19.8	VISIBILITY	4	WIND DIREC	05	SECCHI
LAT	86-40.0N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	50-20.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.5							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		
					ML/L	MGA/L	AOU SATN
1	5	-1.73					
1	10	-1.73					
1	20	-1.75					
1	30	-1.75					
1	51	-1.74					
1	76	-1.59					
1	101	-1.47					
1	152	-1.16					
1	202	-0.37					
1	303	0.68					
1	404	0.61					
1	506	0.60					
1	607	0.35					

AR CRUISE AR2 STATION 058 OBSERVED VALUES

DATE	16/04/64	BAROMETER	16.0	WEATHER	X1	WIND VELOC	02	WAVE PERIOD
HOUR	20.3	TEMP DRY	-23.8	VISIBILITY	7	WIND DIREC	13	SECCHI
LAT	86-39.8N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	50-40.0W	REL HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.3							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.74						
1	10	-1.74						
1	20	-1.74						
1	30	-1.73						
1	51	-1.74						
1	76	-1.58						
1	101	-1.47						
1	152	-1.13						
1	202	-0.38						
1	303	0.66						
1	404	0.61						
1	506	0.58						
1	607	0.61						

AR CRUISE AR2 STATION 059 OBSERVED VALUES

DATE	17/04/64	BAROMETER	10.0	WEATHER	X1	WIND VELOC	11	WAVE PERIOD
HOUR	19.4	TEMP DRY	-17.0	VISIBILITY	5	WIND DIREC	08	SECCHI
LAT	86-40.7N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	50-36.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.4							
WIRE ANGLES:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.73			
1	10	-1.73			
1	20	-1.74			
1	30	-1.74			
1	51	-1.74			
1	76	-1.58			
1	101	-1.47			
1	152	-1.14			
1	202	-0.36			
1	303	0.57			
1	404	0.56			
1	506	0.56			
1	607	0.35			

AR CRUISE AR2 STATION 060 OBSERVED VALUES

DATE	17/04/64	BAROMETER	20.0	WEATHER	X3	WIND VELOC	13	WAVE PERIOD
HOUR	01.8	TEMP DRY	-30.6	VISIBILITY	6	WIND DIREC	21	SECCHI
LAT	86-42.0N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	50-37.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.8							
WIRE ANGLES:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.74						
1	10	-1.73						
1	20	-1.74						
1	30	-1.74						
1	51	-1.73						
1	76	-1.57						
1	101	-1.48						
1	152	-1.11						
1	202	-0.35						
1	303	0.68						
1	404	0.62						
1	506	0.57						
1	607	0.36						

AR CRUISE AR2 STATION 061 OBSERVED VALUES

DATE	20/04/64	BAROMETER	06.0	WEATHER	X1	WIND VELOC	13	WAVE PERIOD
HOUR	00.0	TEMP DRY	-21.9	VISIBILITY	6	WIND DIREC	09	SECCHI
LAT	86-42.9N	TEMP WET		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	50-33.4W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 00.0							
WIRE ANGLES:		03						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.72						
1	20	-1.74						
1	30	-1.74						
1	51	-1.73						
1	76	-1.58						
1	101	-1.47						
1	152	-1.17						
1	202	-0.36						
1	303	0.54						
1	404	0.57						
1	506	0.56						
1	607	0.34						

AR CRUISE AR2 STATION 062 OBSERVED VALUES

DATE	21/04/64	BAROMETER	12.0	WEATHER	X1	WIND VELOC	11	WAVE PERIOD
HOUR	00.0	TEMP DRY	-25.4	VISIBILITY	6	WIND DIREC	27	SECCHI
LAT	86-43.8N	TEMP WET		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	50-18.0W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.0							
WIRE ANGLES:	01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.74						
1	10	-1.73						
1	20	-1.75						
1	30	-1.74						
1	51	-1.74						
1	76	-1.58						
1	101	-1.47						
1	152	-1.16						
1	202	-0.36						
1	303	0.68						
1	404	0.61						
1	506	0.57						
1	607	0.36						

	AR	CRUISE	AR2	STATION	063	OBSERVED	VALUES	
DATE	22/04/64	BAROMETER	23.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	01.4	TEMP DRY	-27.0	VISIBILITY	6	WIND DIREC	28	SECCHI
LAT	86-44.1N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	49-21.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 01.4							
WIRE	ANGLES: 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.73			
1	10	-1.73			
1	20	-1.74			
1	30	-1.73			
1	51	-1.73			
1	76	-1.56			
1	101	-1.47			
1	152	-1.14			
1	202	-0.37			
1	303	0.66			
1	404	0.62			
1	506	0.58			
1	607	0.38			

AR CRUISE AR2

STATION 064

OBSERVED VALUES

DATE	23/04/64	BAROMETER	23.0	WEATHER	X0	WIND VELOC	15	WAVE PERIOD
HOUR	01.5	TEMP DRY	-26.8	VISIBILITY	6	WIND DIREC	19	SECCHI
LAT	86-44.2N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	48-15.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.5							
WIRE ANGLES:	01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.71						
1	10	-1.72						
1	20	-1.72						
1	30	-1.72						
1	51	-1.72						
1	76	-1.57						
1	101	-1.46						
1	152	-1.14						
1	202	-0.35						
1	303	0.66						
1	404	0.62						
1	506	0.58						
1	607	0.32						

AR CRUISE AR2 STATION 065 OBSERVED VALUES

DATE 23/04/64 BARMETER 12.0 WEATHER x1 WIND VELOC 11
 HOUR 20.0 TEMP DRY -27.2 VISIBILITY 6 WIND DIREC 21
 LAT 86-44.2N TEMP WET CLOUD TYPE 0 WAVE DIREC
 LONG 47-24.0W REL HUMID CLOUD AMT 1 WAVE HEIGHT
 MESSENGER TIMES: 20.0, 21.4, 22.9
 WIRE ANGLES: 00, --, 04

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 1450

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.71	31.861	25.65	8.87	0.792	-0.040	105	1.15	12
1	10	-1.73	31.870	25.66	8.78	0.784	-0.032	104	1.20	12
1	20	-1.73	31.870	25.66	8.95	0.799	-0.047	106	1.23	12
1	40	-1.73	31.879	25.67	8.92	0.797	-0.044	106	1.20	14
1	61	-1.67	32.267	25.98	7.99	0.714	0.036	95	1.51	18
1	71	-1.59	32.628	26.27	6.95	0.621	0.125	83	1.84	27
1	81	-1.54	32.953	26.53	6.57	0.587	0.156	79	2.03	32
1	91	-1.50	33.188	26.72	6.43	0.574	0.166	78	1.88	31
1	101	-1.43	33.594	27.05	6.55	0.585	0.152	79	1.32	19
1	111	-1.43	33.820	27.23	6.64	0.593	0.143	81	1.20	16
1	121	-1.43	34.036	27.41	6.97	0.623	0.112	85	1.06	12
1	131	-1.40	34.154	27.50	6.94	0.620	0.113	85	1.08	10
1	152	-1.15	34.325	27.63	7.08	0.632	0.095	87	0.94	9
2	202	-0.32	34.578	27.80	7.07	0.631	0.078	89	1.01	8
2	253	0.31	34.758	27.91	6.89	0.615	0.081	88	1.01	8
2	303	0.64	34.848	27.97	6.92	0.618	0.072	90	1.03	8
2	354	0.72	34.857	27.98	7.04	0.629	0.061	91	1.08	18
2	404	0.60	34.876	27.99	6.97	0.623	0.068	90	1.15	8
2	455	0.59	34.857	27.98	6.94	0.620	0.071	90	1.15	8
2	506	0.54	34.894	28.01	7.03	0.628	0.064	91	1.15	8
2	556	0.46	34.903	28.02	7.01	0.626	0.067	90	1.15	8
2	607	0.33	34.903	28.03	6.98	0.623	0.072	90	1.10	9
2	708	0.14	34.903	28.04	6.97	0.623	0.076	89	1.13	10
2	809	0.02	34.912	28.05	6.77	0.605	0.097	86	1.20	9
2	910	-0.12	34.894	28.05	7.11	0.635	0.069	90	1.18	9
3	1011	-0.18	34.903	28.06	7.09	0.633	0.072	90	1.15	9
3	1213	-0.32	34.912	28.07	6.90	0.616	0.091	87	1.06	9
3	1415	-0.41	34.939	28.10	7.12	0.636	0.073	90	1.13	10
3	1450	-0.43	35.002	28.15						

AR CRUISE AR2 STATION 065 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.71	0.00	31.861	0.000	25.65	234.7	0.000	0.00	8.87	0.00	
10	-1.73	0.00	31.870	0.000	25.66	233.9	0.024	0.01	8.78	0.00	
20	-1.73	0.00	31.870	0.000	25.66	233.8	0.048	0.05	8.95	0.00	
30	-1.73	0.00	31.852	0.014	25.64	235.1	0.071	0.11	9.02	0.01	0.79
50	-1.71	0.00	32.008	0.005	25.77	222.9	0.117	0.30	8.64	0.03	0.82
75	-1.57	0.00	32.766	0.002	26.38	164.8	0.166	0.60	6.74	0.02	0.65
100	-1.44	0.00	33.554	0.005	27.02	104.5	0.200	0.90	6.53	0.00	0.87
150	-1.18	0.00	34.312	0.001	27.62	47.1	0.238	1.35	7.06	0.01	0.83
200	-0.35	0.00	34.571	0.001	27.80	30.8	0.258	1.69	7.08	0.00	0.94
250	0.28	0.00	34.750	0.000	27.91	20.6	0.271	1.99	6.90	0.00	0.92
300	0.63	0.00	34.845	0.000	27.97	15.6	0.280	2.24	6.91	0.00	0.92
400	0.61	0.00	34.875	0.001	27.99	13.4	0.295	2.76	6.98	0.00	0.89
500	0.55	0.00	34.889	0.001	28.01	12.0	0.308	3.35	7.02	0.00	0.85
600	0.35	0.00	34.903	0.000	28.03	9.7	0.319	3.97	6.98	0.00	0.78
700	0.15	0.00	34.903	0.000	28.04	8.4	0.328	4.57	6.97	0.00	0.89
800	0.03	0.00	34.912	0.000	28.05	6.9	0.335	5.16	6.78	0.01	0.88
1000	-0.18	0.00	34.901	0.000	28.06	6.0	0.348	6.36	7.10	0.01	0.81
1200	-0.31	0.00	34.911	0.000	28.07	4.1	0.359	7.51	6.91	0.01	0.91

	AR	CRUISE	AR2	STATION	066	OBSERVED	VALUES	
DATE	24/04/64	BAROMETER	14.0	WEATHER	X1	WIND VELOC	14	WAVE PERIOD
HOUR	20.3	TEMP DRY	-28.2	VISIBILITY	6	WIND DIREC	24	SECCHI
LAT	86-44.3N	TEMP WFT		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	46-17.0W	RFL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 20.3							
WIRE	ANGLES: 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	10	-1.74						
1	20	-1.74						
1	30	-1.74						
1	51	-1.73						
1	76	-1.59						
1	101	-1.45						
1	152	-1.08						
1	202	-0.30						
1	303	0.60						
1	404	0.51						
1	506	0.55						
1	607	0.30						

AR CRUISE AR2 STATION 067 OBSERVED VALUES

DATE	25/04/64	BAROMETER	12.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	20.1	TEMP DRY	-27.1	VISIBILITY	6	WIND DIREC	22	SECCHI
LAT	86-43.3N	TEMP WET		CLOUD TYPF	0	WAVE DIREC		WATER COLOR
LONG	44-47.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 20.1							
WIRE	ANGLES:	01						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	10	-1.72						
1	20	-1.72						
1	30	-1.73						
1	51	-1.73						
1	76	-1.58						
1	101	-1.45						
1	152	-1.05						
1	202	-0.33						
1	303	0.56						
1	404	0.52						
1	505	0.52						
1	606	0.27						

AR CRUISE AR2 STATION 068 OBSERVED VALUES

DATE 27/04/64 BARMETER 08.0 WEATHER XO WIND VELOC 11 WAVE PERIOD
 HOUR 01.1 TEMP DRY -27.3 VISIBILITY 6 WIND DIREC 26 SECCHI
 LAT 86-40.5N TEMP WET CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 43-32.0W REL HUMID CLOUD AMT 0 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 01.1
 WIRE ANGLES: --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.71			
1	10	-1.72			
1	20	-1.72			
1	30	-1.72			
1	51	-1.72			
1	76	-1.60			
1	101	-1.43			
1	152	-1.07			
1	202	-0.36			
1	303	0.55			
1	404	0.54			
1	505	0.52			
1	606	0.28			

AR CRUISE AR2 STATION 069 OBSERVED VALUES

DATE	27/04/64	BAROMETER	10.0	WEATHER	X3	WIND VELOC	12	WAVE PERIOD
HOUR	19.8	TEMP DRY	-24.2	VISIBILITY	5	WIND DIREC	27	SECCHI
LAT	86-38.8N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	42-42.0W	RFL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 19.8							
WIRE	ANGLES: 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.71						
1	10	-1.72						
1	20	-1.72						
1	30	-1.74						
1	51	-1.72						
1	76	-1.59						
1	101	-1.45						
1	152	-1.27						
1	202	-0.32						
1	303	0.72						
1	404	0.71						
1	505	0.61						
1	606	0.34						

AR CRUISE AR2 STATION 070 OBSERVED VALUES

DATE 28/04/64	BAROMETER 20.0	WEATHER	x2	WIND VELOC	09	WAVE PERIOD
HOUR 19.8	TEMP DRY -21.2	VISIBILITY	6	WIND DIREC	28	SECCHI
LAT 86-35.4N	TEMP WET	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG 41-45.0W	REL HUMID	CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES: 19.8						
WIRE ANGLES:	00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.72			
1	10	-1.73			
1	20	-1.73			
1	30	-1.74			
1	51	-1.73			
1	76	-1.59			
1	101	-1.47			
1	152	-1.23			
1	202	-0.40			
1	303	0.94			
1	404	0.89			
1	505	0.72			
1	606	0.35			

	AR CRUISE AR2	STATION 071	OBSERVED VALUES				
DATE	29/04/64	BAROMETER 24.0	WEATHER	X0	WIND VELOC	03	WAVE PERIOD
HOUR	19.6	TEMP DRY -20.0	VISIBILITY	6	WIND DIREC	27	SECCHI
LAT	86-34.4N	TEMP WET	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	41-21.0W	REL HUMID	CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 19.6						
WIRE	ANGLES:	00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	10	-1.74			
1	20	-1.73			
1	30	-1.74			
1	51	-1.73			
1	76	-1.62			
1	101	-1.49			

AR CRUISE AR2 STATION 072 OBSERVED VALUES

DATE 30/04/64 BAROMETER 13.0 WEATHER X2 WIND VELOC 15 WAVE PERIOD
 HOUR 20.8 TEMP DRY -21.9 VISIBILITY 5 WIND DIREC 07 SECCHI
 LAT 86-33.5N TEMP WFT CLOUD TYPE 2 WAVE DIREC WATER COLOR
 LONG 41-26.5W RFL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 20.8
 WIRE ANGLES: 02

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	APU	SATN
1	5	-1.71						
1	10	-1.73						
1	20	-1.73						
1	30	-1.73						
1	51	-1.73						
1	76	-1.58						
1	101	-1.45						
1	152	-1.24						
1	202	-0.35						
1	303	0.90						
1	404	0.63						
1	505	0.68						
1	606	0.27						

AR CRUISE AR2 STATION 073 OBSERVED VALUES

DATE	01/05/64	BAROMETER	26.0	WEATHER	X2	WIND VELOC	08	WAVE PERIOD
HOUR	20.6	TEMP DRY	-21.9	VISIBILITY	6	WIND DIREC	36	SECCHI
LAT	86-32.7N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	41-41.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 20.6							
WIRE	ANGLES:	00						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.73						
1	10	-1.72						
1	20	-1.72						
1	30	-1.72						
1	51	-1.73						
1	76	-1.58						
1	101	-1.44						
1	152	-1.25						
1	202	-0.38						
1	303	0.91						
1	404	0.78						
1	505	0.54						
1	606	0.27						

AR CRUISE AR2 STATION 074 OBSERVED VALUES

DATE	02/05/64	BAROMETER	31.0	WEATHER	X0	WIND VELOC	07	WAVE PERIOD
HOUR	20.7	TEMP DRY	-20.4	VISIBILITY	6	WIND DIREC	25	SECCHI
LAT	86-31.9N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	41-56.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.7							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ANU	SATN
1	5	-1.43						
1	10	-1.72						
1	20	-1.73						
1	30	-1.72						
1	51	-1.72						
1	76	-1.59						
1	101	-1.48						
1	152	-1.28						
1	202	-0.36						
1	303	0.88						
1	404	0.78						
1	505	0.66						
1	606	0.28						

AR CRUISE AR2 STATION 075 OBSERVED VALUES

DATE	03/05/64	BAROMETER	30.0	WEATHER	X1	WIND VELOC	03	WAVE PERIOD	
HOUR	20.9	TEMP DRY	-18.6	VISIBILITY	6	WIND DIREC	33	SECCHI	
LAT	86-31.0N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR	
LONG	42-10.7W	RFL HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING	3700
MESSENGER	TIMES: 20.9, 22.0, 23.7								
WIRE	ANGLES: --, --, 00								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.66	31.843	25.64	8.66	0.773	-0.022	103	1.70	17
1	10	-1.74	31.852	25.64	8.73	0.780	-0.027	104	1.20	11
1	30	-1.74	31.681*	25.51	8.69	0.776	-0.022	103	1.10	10
1	41	-1.74	31.870	25.66	8.62	0.770	-0.017	102	1.15	11
1	51	-1.73	31.834	25.63	8.66	0.773	-0.021	103	1.60	16
1	61	-1.71	32.051	25.81	8.17	0.730	0.021	97	2.00	14
1	71	-1.62	32.439	26.12	7.31	0.653	0.094	87	1.97	20
1	81	-1.56	32.836	26.44	6.59	0.589	0.155	79	1.97	27
1	91	-1.49	33.197	26.73	6.21	0.555	0.186	75	1.75	27
1	101	-1.48	33.456	26.94	6.34	0.566	0.172	77	1.48	23
1	127	-1.49	34.063	27.43	6.95	0.621	0.115	84	1.10	12
1	152	-1.23	34.289	27.61	6.92	0.618	0.111	85	0.92	
1	177	-0.81	34.433	27.71	7.11	0.635	0.085	88	1.00	8
2	203	-0.33	34.560	27.79	6.88	0.614	0.095	87	1.30	9
2	254	0.49	34.767	27.91	6.85	0.612	0.081	88	1.10	7
2	304	0.95	34.885	27.98	6.81	0.608	0.076	89	1.00	8
2	355	0.86	34.912	28.01	6.76	0.604	0.082	88	1.10	8
2	406	0.85	34.903	28.00	6.82	0.609	0.077	89	1.00	8
2	456	0.83	34.903	28.00	6.83	0.610	0.076	89	1.10	8
2	507	0.66	34.912	28.02	6.93	0.619	0.070	90	1.37	7
2	608	0.35	34.912	28.04	6.84	0.611	0.084	88	1.30	9
2	710	0.10	34.912	28.05	6.88	0.614	0.085	88	1.25	10
2	811	-0.06	34.894	28.04	6.94	0.620	0.083	88	1.20	8
2	913	-0.15	34.903	28.06	7.04	0.629	0.076	89	1.15	
3	1014	-0.24	34.903	28.06	6.97	0.623	0.084	88	0.92	8
3	1217	-0.37	34.903	28.07	7.07	0.631	0.077	89	1.15	7
3	1420	-0.46	34.921	28.09	6.99	0.624	0.086	88	1.15	8
3	1724	-0.56	34.930	28.10	6.87	0.614	0.099	86	1.10	9

(CONTINUED)

		AR CRUISE AR2		STATION 075		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL
					ML/L	MGA/L	ANU	SATN		
3	2028	-0.65	34.912	28.09	6.90	0.616	0.098	86	1.15	9
3	2434	-0.75	34.939	28.11	6.97	0.623	0.093	87	1.15	9

		AR CRUISE AR2		STATION 075		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.66	0.00	31.843	0.000	25.64	236.2	0.000	0.00	8.66	0.00	
10	-1.74	0.00	31.852	0.000	25.64	235.3	0.024	0.01	8.73	0.00	
20	-1.75	0.01	31.869	0.007	25.66	233.8	0.048	0.05	8.73	0.01	1.34
30	-1.74	0.00	31.876	0.007	25.66	233.2	0.071	0.11	8.69	0.00	1.37
50	-1.73	0.00	31.832	0.004	25.63	236.4	0.119	0.30	8.67	0.01	0.88
75	-1.59	0.00	32.599	0.002	26.25	177.5	0.171	0.63	6.99	0.01	0.65
100	-1.48	0.00	33.433	0.001	26.92	113.7	0.208	0.95	6.31	0.01	0.82
150	-1.26	0.00	34.279	0.003	27.60	49.3	0.249	1.43	6.93	0.01	0.89
200	-0.39	0.00	34.546	0.000	27.78	32.5	0.269	1.79	6.91	0.01	0.81
250	0.43	0.00	34.753	0.000	27.90	21.3	0.283	2.10	6.84	0.01	0.89
300	0.93	0.00	34.879	0.000	27.97	15.1	0.292	2.36	6.81	0.00	0.89
400	0.85	0.00	34.905	0.001	28.00	12.8	0.306	2.86	6.81	0.00	0.85
500	0.69	0.00	34.911	0.000	28.01	11.4	0.318	3.42	6.92	0.00	0.78
600	0.37	0.00	34.912	0.000	28.04	9.1	0.329	4.00	6.85	0.01	0.89
700	0.12	0.00	34.912	0.000	28.05	7.4	0.337	4.55	6.87	0.00	0.87
800	-0.05	0.00	34.896	0.001	28.04	7.5	0.345	5.14	6.93	0.00	0.86
1000	-0.23	0.00	34.903	0.000	28.06	5.5	0.358	6.34	6.98	0.00	0.77
1200	-0.36	0.00	34.903	0.000	28.07	4.4	0.368	7.46	7.06	0.01	0.89
1500	-0.49	0.00	34.926	0.000	28.09	1.3	0.376	8.58	6.95	0.00	0.80
2000	-0.64	0.00	34.914	0.001	28.09	0.0	0.380	9.10	6.89	0.00	0.86

AR CRUISE AR2 STATION 076 OBSERVED VALUES

DATE	04/05/64	BAROMETER	28.0	WEATHER	X0	WIND VELOC	04	WAVE PERIOD
HOUR	21.4	TEMP DRY	-22.0	VISIBILITY	6	WIND DIREC	04	SECCHI
LAT	86-30.5N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	42-15.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	21.4							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.66						
1	10	-1.73						
1	20	-1.73						
1	30	-1.73						
1	51	-1.74						
1	76	-1.59						
1	101	-1.45						
1	152	-1.27						
1	202	-0.41						
1	303	0.91						
1	404	0.86						
1	505	0.72						
1	606	0.35						

AR CRUISE AR2 STATION 077 OBSERVED VALUES

DATE	06/05/64	BAROMETER	29.0	WEATHER	X1	WIND VELOC	04	WAVE PERIOD
HOUR	00.0	TEMP DRY	-24.1	VISIBILITY	6	WIND DIREC	11	SECCHI
LAT	86-31.2N	TEMP WFT		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	41-57.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 00.0							
WIRE	ANGLES:	00						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.45						
1	10	-1.70						
1	20	-1.73						
1	30	-1.72						
1	51	-1.72						
1	76	-1.60						
1	101	-1.47						
1	152	-1.31						
1	202	-0.39						
1	303	0.85						
1	404	0.93						
1	505	0.70						
1	606	0.34						

AR CRUISE AR2 STATION 078 OBSERVED VALUES

DATE 07/05/64	BAROMETER 29.0	WEATHER X1	WIND VELOC 08	WAVE PERIOD
HOUR 00.0	TEMP DRY -22.6	VISIBILITY 6	WIND DIREC 07	SECCHI
LAT 86-31.4N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 41-55.0W	RFL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.0, 00.9				
WIRE ANGLES:	00, --			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.67			
1	10	-1.74			
1	20	-1.74			
1	30	-1.75			
1	40	-1.74			
1	51	-1.73			
1	61	-1.71			
1	71	-1.64			
1	81	-1.56			
1	91	-1.51			
1	101	-1.47			
1	111	-1.52			
2	126	-1.50			
2	152	-1.28			
2	202	-0.37			
2	253	0.57			
2	303	0.93			
2	354	0.84			

AR CRUISE AR2 STATION 079 OBSERVED VALUES

DATE	07/05/64	BAROMETER	22.0	WEATHER	X2	WIND VELOC	16	WAVE PERIOD
HOUR	19.9	TEMP DRY	-20.1	VISIBILITY	6	WIND DIREC	07	SECCHI
LAT	86-31.3N	TEMP WET		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	42-12.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.9, 21.5							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.71						
1	20	-1.73						
1	40	-1.73						
1	61	-1.73						
1	71	-1.61						
1	81	-1.57						
1	91	-1.51						
1	101	-1.48						
1	126	-1.41						
1	152	-1.20						
1	202	-0.42						
1	253	0.23						
1	303	0.87						
2	354	0.70						
2	404	0.64						
2	455	0.60						
2	505	0.65						
2	556	0.46						
2	606	0.32						
2	707	0.08						
2	808	-0.03						
2	909	-0.16						
2	1010	-0.23						
2	1212	-0.36						
2	1515	-0.49						

AR CRUISE AR2 STATION 080 OBSERVED VALUES

DATE	09/05/64	BAROMETER	12.0	WEATHER	X1	WIND VELOC	10	WAVE PERIOD
HOUR	00.1	TEMP DRY	-17.0	VISIBILITY	4	WIND DIREC	09	SECCHI
LAT	86-31.6N	TEMP WET		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	42-13.8W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.1, 01.3							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.61						
1	25	-1.73						
1	51	-1.73						
1	61	-1.70						
1	71	-1.61						
1	81	-1.58						
1	91	-1.50						
1	101	-1.47						
1	126	-1.42						
1	151	-1.20						
1	202	-0.40						
1	252	0.45						
1	303	0.85						
2	353	0.89						
2	404	0.97						
2	454	0.83						
2	505	0.67						
2	555	0.47						
2	605	0.31						
2	706	0.09						
2	807	-0.05						
2	908	-0.16						
2	1009	-0.26						
2	1211	-0.36						
2	1514	-0.47						

AR CRUISE AR2 STATION 081 OBSERVED VALUES

DATE 09/05/64	BAROMETER 11.0	WEATHER X2	WIND VELOC 05	WAVE PERIOD
HOUR 19.4	TEMP DRY -19.5	VISIBILITY 6	WIND DIREC 24	SECCHI
LAT 86-31.4N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 42-15.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSFNGER TIMES: 19.4, 20.4				
WTRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	20	-1.72						
1	51	-1.73						
1	61	-1.70						
1	71	-1.64						
1	81	-1.57						
1	91	-1.52						
1	101	-1.49						
1	126	-1.40						
1	151	-1.08						
1	202	-0.35						
1	252	0.54						
2	303	0.90						
2	353	0.85						
2	404	0.81						
2	454	0.76						
2	505	0.71						
2	555	0.45						
2	605	0.32						
2	706	0.09						
2	807	-0.06						
2	908	-0.16						
2	1009	-0.26						
2	1211	-0.36						
2	1514	-0.50						

AR CRUISE AR2 STATION 082 OBSERVED VALUES

DATE	10/05/64	BAROMETER	11.0	WEATHER	X1	WIND VELOC	09	WAVE PERIOD
HOUR	19.7	TEMP DRY	-22.0	VISIBILITY	6	WIND DIREC	29	SECCHI
LAT	86-31.4N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	42-17.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.7, 21.2							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.72			
1	10	-1.74			
1	40	-1.73			
1	51	-1.74			
1	61	-1.68			
1	71	-1.63			
1	81	-1.55			
1	91	-1.50			
1	101	-1.45			
1	126	-1.43			
1	151	-1.12			
1	177	-0.75			
1	202	-0.37			
2	252	0.53			
2	303	0.90			
2	353	0.92			
2	404	0.91			
2	454	0.82			
2	505	0.61			
2	605	0.32			
2	706	0.12			
2	807	-0.04			
2	1009	-0.23			
2	1211	-0.35			
2	1514	-0.53			

AR CRUISE AR2 STATION 083 OBSERVED VALUES

DATE	11/05/64	BAROMETER	12.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	20.5	TEMP DRY	-19.7	VISIBILITY	6	WIND DIREC	26	SECCHI
LAT	86-31.4N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	42-19.0W	REL HUMID		CLOUD AMT	5	WAVE HEIGHT		SOUNDING 3400
MESSENGER TIMES:	20.5, 21.4							
WIRE ANGLES:	00, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	10	-1.75						
1	40	-1.73						
1	61	-1.71						
1	71	-1.63						
1	81	-1.57						
1	91	-1.50						
1	101	-1.49						
1	126	-1.41						
1	151	-1.18						
1	202	-0.36						
1	252	0.37						
1	303	0.80						
2	353	0.72						
2	404	0.87						
2	454	0.75						
2	505	0.64						
2	555	0.53						
2	605	0.38						
2	706	0.12						
2	807	-0.04						
2	908	-0.16						
2	1009	-0.26						
2	1211	-0.33						
2	1514	-0.48						

AR CRUISE AR2 STATION 084 OBSERVED VALUES

DATE 12/05/64	BAROMETER 16.0	WEATHER X1	WIND VELOC 05	WAVE PERIOD
HOUR 20.2	TEMP DRY -15.9	VISIBILITY 6	WIND DIREC 24	SECCHI
LAT 86-31.5N	TEMP WET	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 42-20.0W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING 3390
MESSENGER TIMES: 20.2, 22.0				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
2	5	-1.70						
2	20	-1.73						
2	40	-1.73						
2	61	-1.69						
2	71	-1.63						
2	81	-1.57						
2	91	-1.49						
2	101	-1.47						
2	126	-1.42						
2	151	-1.18						
2	202	-0.34						
2	252	0.43						
2	303	0.83						
1	353	0.75						
1	404	0.84						
1	454	0.69						
1	505	0.58						
1	555	0.47						
1	605	0.35						
1	706	0.12						
1	807	-0.05						
1	908	-0.16						
1	1009	-0.26						
1	1211	-0.32						
1	1514	-0.48						

AR CRUISE AR2 STATION 085 OBSERVED VALUES

DATE 13/05/64 BAROMETER 12.0 WEATHER x1 WIND VELOC 04 WAVE PERIOD
 HOUR 19.6 TEMP DRY -19.9 VISIBILITY 6 WIND DIREC 18 SECCHI
 LAT 86-31.5N TEMP WET CLOUD TYPE 2 WAVE DIREC WATER COLOR
 LONG 42-13.6W REL HUMID CLOUD AMT 1 WAVE HEIGHT SOUNDING 3420
 MESSENGER TIMES: 19.6, 21.0, 22.6
 WIRE ANGLES: 00, --, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.73	31.816	25.62	8.76	0.782	-0.029	104	1.10	10
1	10	-1.75	31.816	25.62	8.87	0.792	-0.039	105	1.20	10
1	30	-1.72	31.825	25.62	8.80	0.786	-0.033	104	1.10	10
1	41	-1.75	31.852	25.64	8.82	0.788	-0.035	105	1.10	9
1	51	-1.71	31.924	25.70	8.52	0.761	-0.009	101	1.28	11
1	61	-1.71	32.177	25.91	8.26	0.738	0.013	98	1.37	12
1	71	-1.61	32.466	26.14	7.53	0.673	0.074	90	1.46	16
1	81	-1.56	32.800	26.41	6.84	0.611	0.133	82	1.46	18
1	91	-1.48	33.287	26.80	6.31	0.564	0.176	76	1.56	22
1	101	-1.47	33.576	27.04	6.50	0.581	0.157	79	1.28	15
1	127	-1.42	34.099	27.46	6.85	0.612	0.122	83	1.00	10
1	152	-1.22	34.298	27.61	6.99	0.624	0.104	86	0.92	7
2	177	-0.72	34.451	27.72	6.85	0.612	0.106	85	0.92	12
2	203	-0.35	34.551	27.78	6.83	0.610	0.100	86	0.92	12
2	254	0.46			6.78	0.606			0.92	12
2	304	0.84	34.686	27.82	6.80	0.607	0.080	88	0.92	12
2	355	0.67	34.848	27.97					1.00	13
2	406	0.80	34.903	28.00	6.75	0.603	0.084	88	1.00	10
2	456	0.80	34.894	27.99	6.72	0.600	0.086	87	1.00	7
2	507	0.62	34.930	28.03	6.82	0.609	0.081	88	1.00	7
2	608	0.38	34.921	28.04	6.89	0.615	0.079	89	1.10	7
3	811	-0.04	34.939	28.08	7.02	0.627	0.075	89	0.92	8
3	1014	-0.26	34.921	28.08	7.09	0.633	0.073	90	0.92	8
3	1217	-0.34	34.912	28.07	6.87	0.614	0.095	87	1.00	8
3	1420	-0.47	34.939	28.10	6.91	0.617	0.093	87	1.10	10
3	1624	-0.49	34.930	28.09	6.87	0.614	0.097	86	1.05	7
3	1825	-0.56	34.939	28.10	6.82	0.609	0.103	86	1.05	7
3	2028	-0.65	34.930	28.10	6.76	0.604	0.110	85	1.10	8

(CONTINUED)

		AR	CRUISE	AR2	STATION 085		OBSERVED VALUES			(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	*****	OXYGEN	*****	PHOS	SIL	
					ML/L	MGA/L	AOU	SATN		
3	2231	-0.71	34.912	28.09	6.88	0.614	0.101	86	1.10	9
3	2434	-0.75	34.867	28.05	6.93	0.619	0.097	86	1.10	10

		AR	CRUISE	AR2	STATION 085		INTERPOLATED AND COMPUTED VALUES				
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.73	0.00	31.816	0.000	25.62	238.2	0.000	0.00	8.76	0.00	
10	-1.75	0.00	31.816	0.000	25.62	238.0	0.024	0.01	8.87	0.00	
20	-1.74	0.01	31.816	0.002	25.62	237.9	0.048	0.05	8.88	0.04	1.42
30	-1.72	0.00	31.825	0.000	25.62	237.2	0.072	0.11	8.80	0.00	
50	-1.71	0.00	31.912	0.002	25.69	230.3	0.119	0.30	8.56	0.01	0.87
75	-1.59	0.00	32.588	0.004	26.24	178.4	0.171	0.63	7.24	0.00	0.65
100	-1.47	0.00	33.553	0.002	27.02	104.5	0.207	0.93	6.47	0.01	0.82
150	-1.24	0.00	34.288	0.003	27.61	48.6	0.245	1.39	6.99	0.00	0.89
200	-0.39	0.00	34.542	0.001	27.78	32.8	0.266	1.75	6.83	0.00	0.81
250	0.40	0.01	34.624	0.027	27.80	30.9	0.282	2.12	6.78	0.00	1.42
300	0.83	0.00	34.682	0.004	27.82	29.3	0.297	2.55	6.80	0.00	0.98
400	0.78	0.01	34.901	0.001	28.00	12.6	0.318	3.27	6.75	0.00	0.97
500	0.65	0.00	34.925	0.001	28.03	10.1	0.330	3.79	6.80	0.00	0.78
600	0.40	0.00	34.923	0.001	28.04	8.5	0.339	4.32	6.89	0.00	0.86
700	0.17	0.00	34.928	0.003	28.06	6.6	0.347	4.82	6.95	0.00	0.81
800	-0.02	0.00	34.938	0.001	28.08	4.5	0.352	5.25	7.01	0.00	0.92
1000	-0.25	0.00	34.923	0.000	28.08	3.9	0.361	6.03	7.09	0.00	0.90
1200	-0.34	0.00	34.912	0.000	28.07	3.9	0.369	6.92	6.89	0.01	0.89
1500	-0.48	0.01	34.937	0.002	28.10	0.5	0.375	7.78	6.90	0.00	0.66
2000	-0.64	0.00	34.932	0.000	28.10	-1.3	0.373	7.32	6.76	0.00	0.83

AR CRUISE AR2 STATION 086 OBSERVED VALUES

DATE	14/05/64	BAROMETER	09.0	WEATHER	X1	WIND VELOC	07	WAVE PERIOD
HOUR	23.2	TEMP DRY	-16.1	VISIBILITY	7	WIND DIREC	21	SECCHI
LAT	86-31.9N	TEMP WET		CLOUD TYPF	4	WAVE DIREC		WATER COLOR
LONG	41-25.0W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING 3470
MESSENGER TIMES:	23.2, 00.8							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	25	-1.74			
1	50	-1.74			
1	60	-1.70			
1	71	-1.65			
1	81	-1.56			
1	91	-1.50			
1	101	-1.48			
1	126	-1.42			
1	151	-1.18			
1	176	-0.75			
1	202	-0.36			
2	252	0.53			
2	302	0.86			
2	353	0.75			
2	403	0.98			
2	454	0.82			
2	504	0.70			
2	554	0.52			
2	605	0.32			
2	706	0.10			
2	806	-0.04			
2	1008	-0.25			
2	1210	-0.34			
2	1512	-0.49			

AR CRUISE AR2 STATION 087 OBSERVED VALUES

DATE	15/05/64	BAROMETER	08.0	WEATHER	X0	WIND VELOC	07	WAVE PERIOD
HOUR	19.8	TEMP DRY	-12.6	VISIBILITY	6	WIND DIREC	17	SECCHI
LAT	86-32.2N	TEMP WET		CLOUD TYPF	X	WAVE DIREC		WATER COLOR
LONG	40-48.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING 3610
MESSENGER TIMES:	19.8, 21.2							
WIRE ANGLES:	00, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	20	-1.72			
1	40	-1.72			
1	60	-1.70			
1	71	-1.63			
1	81	-1.58			
1	91	-1.48			
1	101	-1.50			
1	126	-1.44			
1	151	-1.19			
1	202	-0.41			
1	252	0.54			
1	302	0.88			
2	353	0.78			
2	403	0.89			
2	454	0.79			
2	504	0.71			
2	554	0.55			
2	605	0.37			
2	706	0.08			
2	806	-0.04			
2	907	-0.16			
2	1008	-0.26			
2	1210	-0.34			
2	1512	-0.50			

AR CRUISE AR2 STATION 088 OBSERVED VALUES

DATE 16/05/64 BAROMETER 08.0 WEATHER X2 WIND VELOC 10 WAVE PERIOD
 HOUR 23.9 TFMP DRY -12.3 VISIBILITY 6 WIND DIREC 21 SECCHI
 LAT 86-32.5N TFMP WET CLOUD TYPE 2 WAVE DIREC WATER COLOR
 LONG 39-59.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3610
 MESSENGER TIMES: 23.9, 01.5
 WIRE ANGLES: 00, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.74						
1	20	-1.76						
1	40	-1.75						
1	60	-1.73						
1	71	-1.63						
1	81	-1.59						
1	91	-1.50						
1	101	-1.51						
1	126	-1.44						
1	151	-1.24						
1	202	-0.37						
1	252	0.48						
1	302	0.89						
2	353	0.77						
2	403	0.91						
2	454	0.82						
2	504	0.70						
2	554	0.52						
2	605	0.32						
2	706	0.12						
2	806	-0.05						
2	907	-0.17						
2	1008	-0.27						
2	1210	-0.36						
2	1512	-0.51						

AR CRUISE AR2 STATION 089 OBSERVED VALUES

DATE 18/05/64	BAROMETER 09.0	WEATHER X2	WIND VELOC 14	WAVE PERIOD
HOUR 00.1	TEMP DRY -14.9	VISIBILITY 4	WIND DIREC 27	SECCHI
LAT 86-32.8N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 39-14.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3550
MESSENGER TIMES: 00.1, 01.2				
WTRE ANGLES: 02, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
2	5	-1.72			
2	25	-1.73			
2	50	-1.74			
2	60	-1.75			
2	71	-1.63			
2	81	-1.59			
2	91	-1.52			
2	101	-1.50			
2	111	-1.48			
2	121	-1.55			
2	151	-1.22			
2	176	-0.81			
2	202	-0.36			
1	252	-0.46			
1	302	0.85			
1	353	0.84			
1	403	0.92			
1	454	0.78			
1	504	0.68			
1	605	0.34			
1	806	-0.05			
1	907	-0.17			
1	1008	-0.24			
1	1210	-0.35			
1	1512	-0.51			

AR CRUISE AR2 STATION 090 OBSERVED VALUES

DATE	18/05/64	BAROMETER	13.0	WEATHER	X2	WIND VELOC	18	WAVE PERIOD
HOUR	21.1	TEMP DRY	-14.3	VISIBILITY	5	WIND DIREC	28	SECCHI
LAT	86-33.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	38-35.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3650
MESSENGER TIMES:	21.1, 23.0							
WIRE ANGLES:	00, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	ADU SATN
1	5	-1.71				
1	25	-1.74				
1	50	-1.72				
1	60	-1.72				
1	71	-1.63				
1	81	-1.60				
1	91	-1.51				
1	101	-1.49				
1	126	-1.54				
1	151	-1.27				
1	176	-0.71				
1	202	-0.17				
1	252	0.55				
2	301	0.83				
2	352	0.84				
2	402	0.97				
2	453	0.79				
2	503	0.71				
2	553	0.51				
2	603	0.32				
2	704	-0.14				
2	804	-0.06				
2	1006	-0.27				
2	1207	-0.38				
2	1509	-0.52				

AR CRUISE AR2 STATION 091 OBSERVED VALUES

DATE	19/05/64	BAROMETER	15.0	WEATHER	X2	WIND VELOC	13	WAVE PERIOD
HOUR	20.3	TEMP DRY	-15.8	VISIBILITY	5	WIND DIREC	24	SECCHI
LAT	86-33.5N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	37-51.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3650
MESSENGER TIMES:	20.3, 22.1							
WIRE ANGLES:	01, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
2	5	-1.70			
2	25	-1.74			
2	50	-1.74			
2	60	-1.72			
2	71	-1.67			
2	81	-1.57			
2	91	-1.53			
2	101	-1.52			
2	126	-1.55			
2	151	-1.54			
2	176	-1.23			
2	202	-0.84			
1	252	0.56			
1	302	0.87			
1	353	0.91			
1	403	0.96			
1	454	0.81			
1	504	0.71			
1	605	0.34			
1	806	-0.06			
1	907	-0.17			
1	1008	-0.26			
1	1210	-0.38			
1	1512	-0.51			

AR CRUISE AR2 STATION 092 OBSERVED VALUES

DATE 20/05/64 BAROMETER 08.0 WEATHER X2 WIND VELOC 12 WAVE PERIOD
 HOUR 20.3 TEMP DRY -11.6 VISIBILITY 6 WIND DIREC 24 SECCHI
 LAT 86-34.1N TEMP WET CLOUD TYPE 2 WAVE DIREC WATER COLOR
 LONG 37-00.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3660
 MESSENGER TIMES: 20.3, 23.9
 WIRE ANGLES: 02, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
2	5	-1.70						
2	25	-1.74						
2	50	-1.72						
2	60	-1.71						
2	71	-1.66						
2	81	-1.60						
2	91	-1.52						
2	101	-1.57						
2	111	-1.55						
2	121	-1.52						
2	151	-1.23						
2	176	-0.79						
2	202	-0.24						
1	252	0.57						
1	302	0.88						
1	353	0.92						
1	403	0.95						
1	454	0.81						
1	504	0.67						
1	605	0.33						
1	806	-0.04						
1	907	-0.17						
1	1008	-0.27						
1	1210	-0.36						
1	1512	-0.51						

AR CRUISE AR2

STATION 093

OBSERVED VALUES

DATE 21/05/64	BAROMETER 10.0	WEATHER X2	WIND VELOC 12	WAVE PERIOD
HOUR 19.9	TEMP DRY -11.2	VISIBILITY 6	WIND DIREC 27	SECCHI
LAT 86-34.6N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 36-17.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3680
MESSENGER TIMES: 19.9, 21.3				
WIRE ANGLES: 01, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
2	5	-1.69						
2	25	-1.75						
2	50	-1.73						
2	60	-1.72						
2	71	-1.66						
2	81	-1.57						
2	91	-1.52						
2	101	-1.57						
2	111	-1.53						
2	121	-1.52						
2	151	-1.27						
2	176	-0.76						
2	202	-0.29						
1	252	0.51						
1	302	0.80						
1	353	0.88						
1	403	0.86						
1	454	0.76						
1	504	0.64						
1	605	0.30						
1	806	-0.05						
1	907	-0.19						
1	1008	-0.28						
1	1210	-0.38						
1	1512	-0.51						

AR CRUISE AR2 STATION 094 OBSERVED VALUES

DATE 22/05/64	BAROMETER 14.8	WEATHER X1	WIND VELOC 04	WAVE PERIOD
HOUR 20.1	TEMP DRY -12.9	VISIBILITY 7	WIND DIREC 32	SECCHI
LAT 86-35.0N	TEMP WFT	CLOUD TYPE 2	WAVE DIREC	WATER COLOR
LONG 35-27.0W	REL HUMID	CLOUD AMT 4	WAVE HEIGHT	SOUNDING 3660
MESSENGER TIMES: 20.1, 21.4				
WIRE ANGLES: 00, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.69			
1	25	-1.72			
1	50	-1.72			
1	60	-1.72			
1	70	-1.64			
1	81	-1.57			
1	91	-1.51			
1	101	-1.52			
1	111	-1.52			
1	121	-1.52			
1	151	-1.24			
1	176	-0.72			
1	201	-0.29			
2	252	0.53			
2	302	0.80			
2	352	0.85			
2	403	0.91			
2	453	0.74			
2	504	0.65			
2	604	0.35			
2	806	-0.07			
2	906	-0.17			
2	1007	-0.27			
2	1208	-0.38			
2	1511	-0.52			

AR CRUISE AR2 STATION 095 OBSERVED VALUES

DATE 23/05/64 BAROMETER 16.7 WEATHER X2 WIND VELOC 07 WAVE PERIOD
 HOUR 19.9 TEMP DRY -14.7 VISIBILITY 6 WIND DIREC 10 SECCHI
 LAT 86-31.0N TEMP WFT CLOUD TYPE 6 WAVE DIREC WATER COLOR
 LONG 35-22.7W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3670
 MESSENGER TIMES: 19.9, 21.5, 23.4
 WIRE ANGLES: 00, --, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.71	31.599	25.44	8.79	0.785	-0.031	104	1.00	10
1	10	-1.74	31.627	25.46	8.94	0.798	-0.044	106	1.00	10
1	30	-1.74	31.645	25.48	8.90	0.795	-0.041	105	1.00	11
1	40	-1.75	31.726	25.54	8.87	0.792	-0.038	105	0.92	12
1	50	-1.73	31.825	25.62	8.73	0.780	-0.027	104	0.92	12
1	60	-1.70	32.033	25.79	8.32	0.743	0.008	99	1.10	13
1	70	-1.63	32.421	26.10	7.66	0.684	0.063	92	0.94	16
1	81	-1.61	32.746	26.37	7.01	0.626	0.119	84	1.47	20
1	91	-1.52	33.332	26.84	6.65	0.594	0.146	80	1.00	19
1	101	-1.53	33.621	27.07	6.75	0.603	0.136	82	0.92	15
1	111	-1.55	33.910	27.31	7.15	0.639	0.099	87	0.94	11
1	126	-1.52	34.126	27.48	7.04	0.629	0.107	85	0.92	12
2	151	-1.22	34.325	27.63	6.98	0.623	0.105	86	0.92	9
2	176	-0.70	34.442	27.71	7.06	0.631	0.087	88	0.92	9
2	201	-0.26	34.560	27.78	6.96	0.622	0.087	88	0.92	9
2	252	0.55	34.776	27.91	6.90	0.616	0.076	89	0.92	9
2	302	0.81	34.876	27.98	6.95	0.621	0.066	90	0.92	8
2	352	0.82	34.885	27.99	6.91	0.617	0.069	90	0.83	8
2	403	0.90	34.885	27.98	6.98	0.623	0.061	91	0.83	9
2	453	0.68	34.903	28.01	6.94	0.620	0.069	90	0.83	9
2	504	0.68	34.885	27.99	6.98	0.623	0.066	90	0.92	9
2	604	0.34	34.903	28.03	7.14	0.638	0.057	92	0.83	10
2	705	0.10	34.903	28.04	7.04	0.629	0.071	90	0.83	10
3	806	-0.05	34.921	28.07	7.06	0.631	0.072	90	0.83	7
3	906	-0.20	34.921	28.07	7.08	0.632	0.073	90	0.92	8
3	1007	-0.27	34.903	28.06	6.90	0.616	0.091	87	1.00	8
3	1108	-0.34	34.921	28.08	7.05	0.630	0.078	89	0.92	10
3	1309	-0.44	34.912	28.08	6.91	0.617	0.093	87	1.00	8

(CONTINUED)

		AR	CRUISE	AR2	STATION 095				OBSERVED VALUES			(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	*****	OXYGEN	*****	PHOS			SIL	
					ML/L	MGA/L	AOU	SATN				
3	1410	-0.48	34.903	28.07	6.93	0.619	0.092	87	0.87		10	
3	1511	-0.52	34.894	28.07	6.87	0.614	0.098	86	0.87		10	

		AR	CRUISE	AR2	STATION 095				INTERPOLATED AND COMPUTED VALUES			
DEPTH	TEMP	E (C)	SAL	F (S)	SIGMA-T	SP VOL	GEOPOT	POT	OXY	E (C)	VAR	
						ANOMALY	ANOMALY	ENERGY	ML/L		RATIO	
0	-1.71	0.00	31.599	0.000	25.44	254.9	0.000	0.00	8.79	0.00		
10	-1.74	0.00	31.627	0.000	25.46	252.6	0.026	0.01	8.94	0.00		
20	-1.75	0.01	31.633	0.014	25.47	252.0	0.051	0.05	8.99	0.04	1.45	
30	-1.74	0.00	31.645	0.000	25.48	251.0	0.077	0.12	8.90	0.00		
50	-1.73	0.00	31.825	0.000	25.62	237.0	0.126	0.32	8.73	0.00		
75	-1.62	0.01	32.555	0.018	26.21	180.9	0.179	0.65	7.34	0.01	0.67	
100	-1.53	0.00	33.599	0.004	27.06	100.8	0.214	0.95	6.72	0.00	0.87	
150	-1.24	0.00	34.320	0.001	27.63	46.3	0.251	1.39	6.98	0.00	0.94	
200	-0.28	0.00	34.555	0.000	27.78	32.3	0.271	1.74	6.97	0.00	0.92	
250	0.52	0.00	34.769	0.001	27.91	20.7	0.284	2.04	6.90	0.00	0.94	
300	0.81	0.00	34.874	0.000	27.98	14.6	0.293	2.29	6.95	0.00	0.94	
400	0.90	0.00	34.885	0.000	27.98	14.7	0.308	2.82	6.98	0.00	0.92	
500	0.68	0.00	34.887	0.001	28.00	13.1	0.322	3.47	6.97	0.00	0.86	
600	0.36	0.00	34.902	0.001	28.03	9.8	0.334	4.11	7.14	0.00	0.94	
700	0.11	0.00	34.903	0.000	28.04	8.1	0.343	4.71	7.05	0.00	0.93	
800	-0.04	0.00	34.920	0.000	28.06	5.7	0.350	5.25	7.06	0.00	0.92	
1000	-0.27	0.00	34.904	0.001	28.06	5.2	0.361	6.26	6.91	0.01	0.90	
1200	-0.39	0.00	34.921	0.002	28.08	2.8	0.369	7.15	7.01	0.03	0.94	
1500	-0.52	0.00	34.895	0.000	28.07	3.3	0.378	8.45	6.88	0.00	2.93	

AR CRUISE AR2 STATION 096 OBSERVED VALUES

DATE	24/05/64	BAROMETER	XX.7	WEATHER	X2	WIND VELOC	05	WAVE PERIOD
HOUR	19.6	TEMP DRY	-13.4	VISIBILITY	6	WIND DIREC	33	SECCHI
LAT	86-26.8N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	35-14.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3650
MESSENGER TIMES:	19.6, 20.7							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.73						
1	50	-1.72						
1	60	-1.72						
1	70	-1.66						
1	81	-1.59						
1	91	-1.55						
1	101	-1.53						
1	111	-1.51						
1	121	-1.52						
1	151	-1.22						
1	176	-0.72						
1	201	-0.27						
2	252	0.55						
2	302	0.80						
2	352	0.80						
2	403	0.90						
2	453	0.78						
2	504	0.64						
2	604	0.31						
2	806	-0.05						
2	906	-0.19						
2	1007	-0.29						
2	1208	-0.38						
2	1511	-0.53						

AR CRUISE AR2 STATION 097 OBSERVED VALUES

DATE	26/05/64	BAROMETER	16.9	WEATHER	X2	WIND VELOC	15	WAVE PERIOD
HOUR	20.1	TEMP DRY	-08.6	VISIBILITY	6	WIND DIREC	26	SECCHI
LAT	86-19.2N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	33-33.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3650
MESSENGER TIMES:	20.1, 21.0							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.71			
1	25	-1.71			
1	50	-1.72			
1	60	-1.70			
1	70	-1.61			
1	81	-1.56			
1	91	-1.53			
1	101	-1.53			
1	111	-1.52			
1	121	-1.54			
1	151	-1.21			
1	176	-0.75			
1	201	-0.29			
2	252	0.46			
2	302	0.71			
2	352	0.84			
2	403	0.86			
2	453	0.74			
2	504	0.61			
2	604	0.27			
2	806	-0.08			
2	906	-0.20			
2	1007	-0.31			
2	1208	-0.39			
2	1511	-0.53			

AR CRUISE AR2 STATION 098 OBSERVED VALUES

DATE	29/05/64	BAROMETER	19.7	WEATHER	X1	WIND VELOC	18	WAVE PERIOD
HOUR	00.5	TEMP DRY	-08.9	VISIBILITY	5	WIND DIREC	27	SECCHI
LAT	86-11.4N	TEMP WET		CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	30-36.0W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.5, 02.0							3670
WIRE ANGLES:	02, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.70						
1	50	-1.71						
1	60	-1.68						
1	70	-1.60						
1	81	-1.58						
1	91	-1.53						
1	101	-1.54						
1	111	-1.51						
1	121	-1.53						
1	151	-1.08						
1	176	-0.58						
1	201	-0.22						
2	251	0.48						
2	301	0.73						
2	351	0.85						
2	402	0.86						
2	452	0.74						
2	503	0.60						
2	603	0.25						
2	804	-0.10						
2	904	-0.21						
2	1005	-0.30						
2	1206	-0.40						
2	1508	-0.43						

AR CRUISE AR2 STATION 099 OBSERVED VALUES

DATE 30/05/64	BAROMETER 11.2	WEATHER X2	WIND VELOC 17	WAVE PERIOD
HOUR 00.9	TEMP DRY -05.4	VISIBILITY 5	WIND DIREC 25	SECCHI
LAT 86-08.4N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 28-50.0W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3960
MESSENGER TIMES: 00.9, 03.0				
WIRE ANGLES: --, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.67			
1	25	-1.72			
1	50	-1.66			
1	60	-1.62			
1	70	-1.57			
1	81	-1.54			
1	91	-1.54			
1	101	-1.56			
1	111	-1.49			
1	121	-1.45			
1	151	-0.86			
1	176	-0.45			
1	201	-0.06			
2	252	0.47			
2	302	0.73			
2	352	0.78			
2	403	0.90			
2	453	0.77			
2	504	0.62			
2	604	0.29			
2	806	-0.11			
2	906	-0.20			
2	1007	-0.29			
2	1208	-0.41			
2	1511	-0.48			

	AR	CRUISE	AR2	STATION	100	OBSERVED	VALUES	
DATE	01/06/64	BAROMETER	18.8	WEATHER	X2	WIND VELOC	13	WAVE PERIOD
HOUR	01.0	TEMP DRY	-07.8	VISIBILITY	6	WIND DIREC	11	SECCHI
LAT	86-09.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	28-09.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3840
MESSENGER	TIMES: 01.0, 02.6							
WIRE	ANGLES: 00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.67			
1	25	-1.66			
1	50	-1.70			
1	60	-1.63			
1	70	-1.59			
1	80	-1.56			
1	91	-1.55			
1	101	-1.57			
1	111	-1.51			
1	121	-1.48			
1	151	-1.04			
1	176	-0.59			
1	201	-0.13			
2	252	0.48			
2	302	0.75			
2	352	0.91			
2	402	0.80			
2	453	0.73			
2	504	0.61			
2	604	0.23			
2	805	-0.11			
2	905	-0.22			
2	1006	-0.31			
2	1207	-0.40			
2	1509	-0.55			

AR CRUISE AR2 STATION 101 OBSERVED VALUES

DATE 01/06/64 BARMETER 19.0 WEATHER X3 WIND VELOC 15 WAVE PERIOD
 HOUR 19.9 TEMP DRY -07.5 VISIBILITY 6 WIND DIREC 12 SECCHI
 LAT 86-09.7N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 28-34.0W RFL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 19.9, 21.5, :-
 WIRE ANGLES: 00, --, :-

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67	31.338	25.23				
1	10	-1.69	31.338	25.23				
1	25	-1.70	31.347	25.23				
1	40	-1.70	31.347	25.23				
1	50	-1.65	31.410	25.28				
1	60	-1.67	31.915	25.69				
1	70	-1.58	32.502	26.17				
1	80	-1.57	33.179	26.72				
1	91	-1.55	33.540	27.01				
1	101	-1.57	33.805	27.22				
1	111	-1.52	34.036	27.41				
2	121	-1.50	34.199	27.54				
2	151	-1.10	34.397	27.69				
2	176	-0.66	34.506	27.76				
2	201	-0.24	34.587	27.81				
2	252	0.50	34.839	27.97				
2	302	0.73	34.921	28.02				
2	352	0.89	34.921	28.01				
2	402	0.81	34.903	28.00				
2	453	0.75	34.930	28.03				
2	504	0.58	34.939	28.04				
2	604	0.24	34.937	28.06				
3	705	0.07	34.939	28.08				
3	806	-0.11	34.912	28.06				
3	906	-0.24	34.921	28.07				
3	1007	-0.29	34.930	28.08				
3	1108	-0.37	34.921	28.08				
3	1208	-0.41	34.948	28.10				

(CONTINUED)

		AR	CRUISE	AR2	STATION	101	OBSERVED VALUES	(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
3	1309	-0.45	34.939	28.10				
3	1510	-0.54	34.939	28.10				

		AR	CRUISE	AR2	STATION	101	INTERPOLATED AND COMPUTED VALUES				
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.67	0.00	31.338	0.000	25.23	275.1	0.000	0.00			
10	-1.69	0.00	31.338	0.000	25.23	274.9	0.028	0.01			
20	-1.70	0.00	31.344	0.001	25.23	274.4	0.056	0.06			0.92
30	-1.71	0.00	31.341	0.005	25.23	274.5	0.084	0.13			0.72
50	-1.65	0.00	31.410	0.000	25.28	269.1	0.138	0.35			
75	-1.57	0.00	32.856	0.018	26.45	157.9	0.192	0.68			0.63
100	-1.57	0.00	33.781	0.000	27.20	86.8	0.223	0.95			0.87
150	-1.12	0.00	34.395	0.002	27.69	41.0	0.255	1.33			0.96
200	-0.26	0.00	34.584	0.000	27.80	30.3	0.273	1.64			0.92
250	0.48	0.00	34.830	0.002	27.96	15.8	0.285	1.90			0.94
300	0.73	0.00	34.920	0.001	28.02	10.6	0.291	2.09			0.94
400	0.82	0.00	34.903	0.000	28.00	12.7	0.303	2.52			0.94
500	0.60	0.00	34.939	0.000	28.04	8.6	0.314	3.00			0.86
600	0.25	0.00	34.937	0.000	28.06	6.4	0.321	3.43			0.94
700	0.03	0.00	34.939	0.000	28.08	4.8	0.327	3.80			0.93
800	-0.10	0.00	34.914	0.001	28.06	5.8	0.332	4.22			0.92
1000	-0.29	0.00	34.930	0.000	28.08	3.1	0.341	5.02			0.90
1200	-0.41	0.00	34.946	0.001	28.10	0.8	0.345	5.44			0.94
1500	-0.53	0.00	34.936	0.001	28.10	0.2	0.347	5.63			17.84

AR CRUISE AR2 STATION 102 OBSERVED VALUES

DATE 02/06/64	BAROMETER 21.0	WEATHER X7	WIND VELOC 03	WAVE PERIOD
HOUR 23.6	TEMP DRY -09.8	VISIBILITY 6	WIND DIREC 10	SECCHI
LAT 86-08.9N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 28-33. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3780
MESSENGER TIMES: 23.6, 01.6				
WTRE ANGLES: 00, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	AOU SATN
1	5	-1.68				
1	25	-1.70				
1	50	-1.69				
1	60	-1.67				
1	70	-1.59				
1	80	-1.59				
1	91	-1.55				
1	101	-1.57				
1	111	-1.52				
1	121	-1.48				
1	151	-1.06				
1	176	-0.63				
1	201	-0.37				
2	252	0.48				
2	302	0.74				
2	352	0.87				
2	402	0.86				
2	453	0.77				
2	504	0.60				
2	604	0.25				
2	805	-0.10				
2	905	-0.20				
2	1006	-0.28				
2	1207	-0.39				
2	1509	-0.54				

AR CRUISE AR2 STATION 103 OBSERVED VALUES

DATE	04/06/64	BAROMETER	17.0	WEATHER	X2	WIND VELOC	10	WAVE PERIOD
HOUR	23.5	TEMP DRY	-09.8	VISIBILITY	4	WIND DIREC	28	SECCHI
LAT	86-05.7N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	27-50. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3920
MESSENGER TIMES:	23.5, 00.8							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** DXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	25	-1.69						
1	50	-1.70						
1	60	-1.67						
1	70	-1.59						
1	80	-1.59						
1	91	-1.55						
1	101	-1.55						
1	111	-1.50						
1	121	-1.49						
1	151	-1.11						
1	176	-0.60						
1	201	-0.16						
2	252	0.45						
2	302	0.74						
2	352	0.89						
2	402	0.88						
2	453	0.72						
2	504	0.62						
2	604	0.27						
2	805	-0.07						
2	905	-0.20						
2	1006	-0.29						
2	1207	-0.40						
2	1509	-0.53						

AR CRUISE AR2 STATION 104 OBSERVED VALUES

DATE 06/06/64	BAROMETER 14.0	WEATHER X2	WIND VELOC 08	WAVE PERIOD
HOUR 00.0	TEMP DRY -01.6	VISIBILITY 6	WIND DIREC 30	SECCHI
LAT 86-04.1N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 27-28. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3775
MESSENGER TIMES: 00.0, 01.4	--, --			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.68			
1	25	-1.69			
1	50	-1.70			
1	60	-1.05			
1	70	-1.58			
1	80	-1.58			
1	91	-1.57			
1	101	-1.55			
1	111	-1.52			
1	121	-1.50			
1	151	-1.09			
1	176	-0.58			
1	201	-0.07			
2	252	0.52			
2	302	0.74			
2	352	0.91			
2	402	0.82			
2	453	0.72			
2	504	0.59			
2	604	0.25			
2	805	-0.12			
2	905	-0.21			
2	1006	-0.28			
2	1207	-0.41			
2	1509	-0.53			

	AR	CRUISE	AR2	STATION	105	OBSERVED VALUES		
DATE	06/06/64	BAROMETER	14.0	WEATHER	X2	WIND VELOC	12	WAVE PERIOD
HOUR	23.8	TEMP DRY	00.1	VISIBILITY	7	WIND DIREC	27	SECCHI
LAT	86-02.2N	TEMP WET		CLOUD TYPF	7	WAVE DIREC		WATER COLOR
LONG	27-15. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3730
MESSENGER	TIMES: 23.8, 01.0							
WIRE	ANGLES: 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.66						
1	25	-1.69						
1	50	-1.67						
1	60	-1.63						
1	70	-1.59						
1	80	-1.57						
1	91	-1.53						
1	101	-1.54						
1	111	-1.49						
1	121	-1.48						
1	151	-1.04						
1	176	-0.57						
1	201	-0.18						
2	252	0.51						
2	302	0.74						
2	352	0.89						
2	402	0.85						
2	453	0.72						
2	504	0.62						
2	604	0.24						
2	805	-0.10						
2	905	-0.20						
2	1006	-0.29						
2	1207	-0.39						
2	1509	-0.54						

AR CRUISE AR2 STATION 106 OBSERVED VALUES

DATE 07/06/64	BAROMETER 15.4	WEATHER X2	WIND VELOC 09	WAVE PERIOD
HOUR 23.7	TEMP DRY 00.1	VISIBILITY 6	WIND DIREC 23	SECCHI
LAT 85-59.2N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 27-23. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3715
MESSENGER TIMES: 23.7, 01.2, 03.2				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.67			
1	25	-1.68			
1	50	-1.68			
1	60	-1.64			
1	70	-1.56			
1	80	-1.56			
1	91	-1.54			
1	101	-1.55			
1	111	-1.52			
1	121	-1.50			
1	151	-1.02			
1	175	-0.55			
1	201	-0.09			
2	252	0.47			
2	302	0.75			
2	352	0.90			
2	402	0.88			
2	453	0.73			
2	504	0.54			
3	604	0.23			
3	805	-0.13			
3	905	-0.22			
3	1006	-0.25			
3	1207	-0.40			
3	1509	-0.53			

AR CRUISE AR2 STATION 107 OBSERVED VALUES

DATE	09/06/64	BAROMETER	22.0	WEATHER		WIND VELOC	07	WAVE PERIOD
HOUR	00.2	TEMP DRY	-04.2	VISIBILITY	6	WIND DIREC	13	SECCHI
LAT	85-56.2N	TEMP WET	-04.7	CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	27-30. W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING 3770
MESSENGER TIMES:	00.2, 01.4							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	APU	SATN
1	5	-1.66						
1	25	-1.68						
1	50	-1.69						
1	60	-1.66						
1	70	-1.58						
1	80	-1.56						
1	91	-1.56						
1	101	-1.58						
1	111	-1.52						
1	121	-1.50						
1	151	-1.09						
1	176	-0.58						
1	201	-0.09						
2	252	0.48						
2	302	0.76						
2	352	0.92						
2	402	0.85						
2	453	0.74						
2	504	0.59						
2	604	0.27						
2	805	-0.10						
2	905	-0.21						
2	1006	-0.29						
2	1207	-0.41						
2	1509	-0.54						

AR CRUISE AR2 STATION 108 OBSERVED VALUES

DATE	11/06/64	BAROMETER	18.0	WEATHER	X1	WIND VELOC	13	WAVE PERIOD
HOUR	00.2	TEMP DRY	-03.0	VISIBILITY	5	WIND DIREC	13	SECCHI
LAT	85-52.0N	TEMP WET	-03.3	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	27-51. W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 3864
MESSENGER TIMES:	00.2, 01.6							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.67			
1	25	-1.70			
1	50	-1.71			
1	60	-1.68			
1	70	-1.60			
1	80	-1.58			
1	90	-1.57			
1	101	-1.58			
1	111	-1.53			
1	121	-1.51			
1	151	-1.14			
1	176	-0.64			
1	201	-0.34			
2	251	0.47			
2	302	0.74			
2	352	0.86			
2	402	0.84			
2	452	0.75			
2	503	0.60			
2	603	0.27			
2	804	-0.10			
2	905	-0.22			
2	1005	-0.29			
2	1206	-0.40			
2	1508	-0.53			

AR CRUISE AR2 STATION 109 OBSERVED VALUES

DATE 13/06/64 BARMETER 03.0 WEATHER X2 WIND VELOC 05 WAVE PERIOD
 HOUR 00.2 TEMP DRY -02.5 VISIBILITY 6 WIND DIREC 21 SECCHI
 LAT 86-10.0N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 28-41.0W RFL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3789
 MESSENGER TIMES: 00.2, 01.6, 20.3
 WTRF ANGLES: 00, 00, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.66	31.166	25.09	8.96	0.800	-0.045	106	1.52	11
1	10	-1.69	31.175	25.10	8.98	0.802	-0.046	106	1.38	10
1	25	-1.69	31.193	25.11	9.02	0.806	-0.050	107	1.29	10
1	40	-1.67	31.184	25.10	9.00	0.804	-0.049	106	1.29	10
1	50	-1.65	31.311	25.20	8.79	0.785	-0.031	104	1.42	8
1	60	-1.64	31.988	25.75	7.71	0.689	0.061	92	1.65	12
1	70	-1.56	32.682	26.31	7.02	0.627	0.118	84	1.65	14
1	80	-1.57	33.269	26.79	6.90	0.616	0.125	83	1.38	16
1	90	-1.57	33.585	27.05	7.03	0.628	0.112	85	1.29	12
1	101	-1.60	33.802	27.22	7.14	0.638	0.102	86	1.15	10
1	111	-1.59	34.063	27.43	7.12	0.636	0.102	86	1.00	11
1	121	-1.51	34.117	27.47	7.05	0.630	0.106	86	1.00	10
1	151	-1.13	34.334	27.64	7.27	0.649	0.077	89	1.00	10
1	176	-0.69	34.487	27.74	6.95	0.621	0.095	87	1.15	10
1	201	-0.13	34.623	27.83	6.95	0.621	0.085	88	1.00	7
1	251	0.53	34.812	27.95	6.85	0.612	0.080	88	0.92	7
1	302	0.73	34.867	27.97	6.82	0.609	0.078	89	1.00	8
2	352	0.85	34.876	27.98	6.86	0.613	0.073	89	1.10	9
2	402	0.90	34.948	28.03	6.86	0.613	0.072	90	1.00	10
2	452	0.73	34.894	28.00	6.92	0.618	0.070	90	1.00	10
2	503	0.59	34.921	28.03	6.88	0.614	0.076	89	1.00	10
2	603	0.28	34.912	28.04	6.94	0.620	0.076	89	1.00	10
2	704	0.06	34.885	28.03	6.96	0.622	0.079	89	1.00	10
2	804	-0.11	34.885	28.04	6.93	0.619	0.085	88	1.00	10
2	905	-0.22	34.912	28.07	6.93	0.619	0.087	88	1.10	10
2	1005	-0.27	34.885	28.05	6.97	0.623	0.084	88	1.10	9
2	1106	-0.35	34.921	28.08	6.92	0.618	0.090	87	1.15	10
2	1206	-0.41	34.912	28.08	7.17	0.640	0.069	90	1.15	10

(CONTINUED)

		AR	CRUISE	AR2	STATION 109				OBSERVED VALUES			(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL		
					ML/L	MGA/L	ANU	SATN				
3	1307	-0.44	34.939	28.10	7.04	0.629	-0.081	89	0.96		10	
3	1508	-0.52	34.921	28.09	9.06	0.809	-0.098	114	1.24		12	

		AR	CRUISE	AR2	STATION 109				INTERPOLATED AND COMPUTED VALUES			
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VUL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO	
0	-1.66	0.00	31.166	0.000	25.09	288.3	0.000	0.00	8.96	0.00		
10	-1.69	0.00	31.175	0.000	25.10	287.5	0.030	0.02	8.98	0.00		
20	-1.70	0.00	31.189	0.000	25.11	286.3	0.058	0.06	9.01	0.00	0.92	
30	-1.69	0.00	31.178	0.010	25.10	287.0	0.087	0.13	9.04	0.01	0.72	
50	-1.65	0.00	31.311	0.000	25.20	276.7	0.144	0.37	8.79	0.00		
75	-1.56	0.00	32.999	0.007	26.57	146.9	0.197	0.69	6.91	0.01	0.64	
100	-1.60	0.00	33.784	0.003	27.21	86.4	0.227	0.94	7.13	0.00	0.88	
150	-1.15	0.00	34.326	0.001	27.63	46.1	0.260	1.34	7.26	0.01	0.96	
200	-0.15	0.00	34.618	0.000	27.83	28.2	0.279	1.67	6.95	0.00	0.92	
250	0.52	0.00	34.809	0.000	27.94	17.6	0.290	1.93	6.85	0.00	0.97	
300	0.78	0.00	34.867	0.001	27.97	15.0	0.299	2.16	6.82	0.00	0.94	
400	0.90	0.00	34.946	0.001	28.03	10.1	0.311	2.60	6.86	0.00	0.94	
500	0.60	0.00	34.919	0.001	28.03	10.2	0.322	3.08	6.88	0.00	0.89	
600	0.29	0.00	34.913	0.000	28.04	8.5	0.331	3.61	6.94	0.00	0.95	
700	0.07	0.00	34.886	0.000	28.03	9.0	0.340	4.20	6.96	0.00	0.94	
800	-0.10	0.00	34.884	0.000	28.04	7.9	0.348	4.86	6.93	0.00	0.94	
1000	-0.27	0.00	34.886	0.001	28.05	6.5	0.363	6.20	6.97	0.00	0.93	
1200	-0.41	0.00	34.913	0.001	28.08	3.3	0.373	7.28	7.16	0.01	0.92	
1500	-0.51	0.00	34.927	0.001	28.09	1.0	0.379	8.13	8.86	0.02	19.09	

AR CRUISE AR2 STATION 110 OBSERVED VALUES

DATE	13/06/64	BAROMETER	45.0	WEATHER	X4	WIND VELOC	14	WAVE PERIOD
HOUR	20.4	TEMP DRY	-02.1	VISIBILITY	4	WIND DIREC	18	SECCHI
LAT	86-12.4N	TEMP WFT	-02.1	CLOUD TYPF	X	WAVE DIREC		WATER COLOR
LONG	28-36. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3831
MESSENGER TIMES:	20.4, 21.9							
WIRE ANGLFS:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.68						
1	50	-1.69						
1	60	-1.64						
1	70	-1.57						
1	80	-1.56						
1	90	-1.58						
1	101	-1.59						
1	111	-1.55						
1	121	-1.54						
1	151	-1.16						
1	176	-0.63						
1	201	-0.26						
2	251	0.48						
2	302	0.73						
2	352	0.92						
2	402	0.86						
2	452	0.75						
2	503	0.56						
2	603	0.24						
2	804	-0.10						
2	905	-0.20						
2	1005	-0.30						
2	1206	-0.40						
2	1508	-0.54						

AR CRUISE AR2 STATION 111 OBSERVED VALUES

DATE 14/06/64	BAROMETER 03.0	WEATHER X3	WIND VELOC 19	WAVE PERIOD
HOUR 20.2	TEMP DRY -01.7	VISIBILITY 5	WIND DIREC 09	SECCHI
LAT 86-15.2N	TEMP WET -01.9	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 28-30. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3892
MESSENGER TIMES: 20.2, 21.9				
WIRE ANGLES: 03, 06				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.67			
1	25	-1.69			
1	50	-1.69			
1	60	-1.65			
1	70	-1.58			
1	80	-1.58			
1	90	-1.59			
1	101	-1.61			
1	111	-1.57			
1	121	-1.53			
1	151	-1.11			
1	176	-0.56			
1	201	-0.06			
1	251	0.54			
1	302	0.77			
1	352	0.79			
1	402	0.89			
2	450	0.76			
2	501	0.61			
2	601	0.27			
2	800	-0.11			
2	900	-0.21			
2	1000	-0.30			
2	1200	-0.41			
2	1501	-0.55			

AR CRUISE AR2 STATION 112 OBSERVED VALUES

DATE	16/06/64	BAROMETER	05.0	WEATHER	X2	WIND VELOC	13	WAVE PERIOD
HOUR	01.3	TEMP DRY	-01.6	VISIBILITY	6	WIND DIREC	09	SECCHI
LAT	86-18.7N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	28-23. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.3, 02.3							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.66			
1	25	-1.67			
1	50	-1.67			
1	60	-1.64			
1	70	-1.55			
1	80	-1.59			
1	90	-1.59			
1	101	-1.60			
1	111	-1.55			
1	121	-1.53			
1	151	-1.08			
1	176	-0.60			
1	201	-0.13			
2	251	0.48			
2	302	0.73			
2	352	0.86			
2	402	0.86			
2	452	0.75			
2	503	0.57			
2	603	0.23			
2	804	-0.12			
2	905	-0.22			
2	1005	-0.30			
2	1206	-0.39			
2	1508	-0.50			

AR CRUISE AR2 STATION 113 OBSERVED VALUES

DATE 16/06/64 BAROMETER 13.0 WEATHER X4 WIND VELOC 12 WAVE PERIOD
 HOUR 19.5 TEMP DRY -00.5 VISIBILITY 3 WIND DIREC 10 SECCHI
 LAT 86-20.8N TEMP WET -00.5 CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 28-29. W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3818
 MESSENGER TIMES: 19.5, 20.5, 21.7
 WIRE ANGLES: 00, 00, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.67			
1	25	-1.69			
1	50	-1.67			
1	60	-1.65			
1	70	-1.57			
1	80	-1.56			
1	90	-1.56			
1	101	-1.57			
1	111	-1.56			
1	121	-1.48			
1	151	-1.04			
1	176	-0.60			
1	201	-0.20			
2	251	0.46			
2	302	0.73			
2	352	0.83			
3	402	0.85			
3	452	0.73			
3	503	0.61			
3	603	0.28			
3	804	-0.09			
3	905	-0.20			
3	1005	-0.28			
3	1206	-0.39			
3	1508	-0.55			

AR CRUISE AR2 STATION 114 OBSERVED VALUES

DATE 17/06/64	BAROMETER 15.0	WEATHER X2	WIND VFLOC 08	WAVE PERIOD
HOUR 19.7	TEMP DRY -01.4	VISIBILITY 4	WIND DIREC 07	SECCHI
LAT 86-20.7N	TEMP WFT	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 28-47. W	RFL HUMID	CLOUD AMT 8	WAVE HFTIGHT	SOUNDING 3804
MESSENGER TIMES: 19.7, 20.7				
WTRE ANGLES: --, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.70						
1	50	-1.70						
1	60	-1.68						
1	70	-1.59						
1	80	-1.57						
1	90	-1.57						
1	101	-1.58						
1	111	-1.53						
1	121	-1.53						
1	151	-1.07						
1	176	-0.57						
1	201	-0.18						
2	251	0.47						
2	302	0.71						
2	352	0.83						
2	402	0.84						
2	452	0.73						
2	503	0.63						
2	603	0.26						
2	804	-0.10						
2	905	-0.21						
2	1005	-0.28						
2	1206	-0.40						
2	1508	-0.53						

AR CRUISE AR2 STATION 115 OBSERVED VALUES

DATE 18/06/64
 HOUR .
 LAT 86-20.4N
 LONG 29-20. W
 MESSENGER TIMES:
 WIRE ANGLES:

BAROMETER 13.0
 TEMP DRY -02.9
 TEMP WET
 REL HUMID
 :-, :-

WEATHER X2
 VISIBILITY 4
 CLOUD TYPE 7
 CLOUD AMT 8
 WIND VELOC 07
 WIND DTREC 11
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 3841

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.69			
1	25	-1.70			
1	50	-1.71			
1	60	-1.64			
1	70	-1.61			
1	80	-1.53			
1	90	-1.56			
1	100	-1.57			
1	110	-1.55			
1	126	-1.49			
1	151	-1.09			
1	176	-0.67			
1	201	-0.17			
2	251	0.49			
2	301	0.75			
2	351	0.84			
2	402	0.86			
2	452	0.73			
2	502	0.61			
2	602	0.25			
2	803	-0.09			
2	904	-0.21			
2	1004	-0.28			
2	1205	-0.38			
2	1506	-0.55			

AR CRUISE AR2 STATION 116 OBSERVED VALUES

DATE	20/06/64	BAROMETER	10.0	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	01.5	TEMP DRY	-04.6	VISIBILITY	6	WIND DIRFC	07	SECCHI
LAT	86-20.0N	TEMP WFT		CLOUD TYPE	8	WAVE DIREC		WATER COLOR
LONG	29-52. W	REL HUMID		CLOUD AMT	4	WAVE HEIGHT		SOUNDING 3805
MESSENGER TIMES: 01.5, 02.1								
WIRE ANGLES: --, 01								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	25	-1.68						
1	50	-1.70						
1	60	-1.69						
1	70	-1.60						
1	80	-1.57						
1	90	-1.54						
1	100	-1.57						
1	110	-1.56						
1	121	-1.54						
1	151	-1.21						
1	176	-0.72						
1	201	-0.26						
2	251	0.49						
2	301	0.73						
2	351	0.89						
2	402	0.86						
2	452	0.74						
2	502	0.59						
2	602	0.26						
2	803	-0.09						
2	904	-0.20						
2	1004	-0.28						
2	1205	-0.39						
2	1506	-0.54						

AR CRUISE AR2 STATION 117 OBSERVED VALUES

DATE	24/06/64	BAROMETER	07.0	WEATHER	X1	WIND VELOC	16	WAVE PERIOD
HOUR	23.7	TEMP DRY	-04.6	VISIBILITY	6	WIND DIREC	07	SECCHI
LAT	86-19.0N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	30-22. W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.7, 01.1							
WIRE ANGLES:	00, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.68						
1	50	-1.70						
1	70	-1.66						
1	80	-1.56						
1	90	-1.55						
1	100	-1.55						
1	110	-1.58						
1	121	-1.51						
1	151	-1.19						
1	176	-0.74						
1	201	-0.22						
2	251	0.52						
2	301	0.74						
2	351	0.89						
2	402	0.90						
2	452	0.75						
2	502	0.61						
2	602	0.29						
2	803	-0.09						
2	904	-0.20						
2	1004	-0.27						
2	1205	-0.39						
2	1506	-0.52						

AR CRUISE AR2 STATION 118 OBSERVED VALUES

DATE 22/06/64	BAROMETER 06.0	WEATHER X2	WIND VELOC XX	WAVE PERIOD
HOUR 00.7	TEMP DRY -01.1	VISIBILITY X	WIND DIREC XX	SECCHI
LAT 86-17.8N	TEMP WFT	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 30-56. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.7, 02.2				
WIRE ANGLES: --, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	5	-1.70			
1	25	-1.72			
1	50	-1.71			
1	60	-1.69			
1	70	-1.60			
1	80	-1.56			
1	90	-1.54			
1	100	-1.56			
1	110	-1.55			
1	121	-1.55			
1	151	-1.19			
2	176	-0.70			
2	201	-0.25			
2	251	0.53			
2	301	0.77			
2	351	0.86			
2	402	0.91			
2	452	0.79			
2	502	0.65			
2	602	0.27			
2	803	-0.10			
2	904	-0.18			
2	1004	-0.28			
2	1205	-0.39			
2	1506	-0.53			

AR CRUISE AR2 STATION 119 OBSERVED VALUES

DATE 22/06/64 BAROMETER 06.0 WEATHER WIND VELOC WAVE PERIOD
 HOUR 20.1 TEMP DRY VISIBILITY WIND DIREC SECCHI
 LAT 86-17.0N TEMP WET CLOUD TYPE WAVE DIREC WATER COLOR
 LONG 31-23.0W REL HUMID CLOUD AMT WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 20.1, 21.5, 23.5
 WIRE ANGLES: --, --, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.69	31.599	25.44	8.88	0.793	-0.040	105	1.73	10
1	10	-1.69	31.599	25.44	8.96	0.800	-0.047	106	1.73	11
1	25	-1.71	31.690	25.51	8.88	0.793	-0.040	105	1.83	11
1	40	-1.70	31.726	25.54	8.79	0.785	-0.032	104	1.78	11
1	50	-1.69	31.717	25.53	8.92	0.797	-0.044	106	1.68	11
1	60	-1.71	31.762	25.57	8.81	0.787	-0.034	105	1.63	11
1	70	-1.61	32.349	26.04	7.70	0.688	0.060	92	1.97	17
1	80	-1.58	33.423	26.91	6.98	0.623	0.117	84	2.07	20
1	90	-1.53			6.81	0.608			1.73	18
1	100	-1.54	33.675	27.12	6.96	0.622	0.117	84	1.58	15
1	110	-1.55	33.865	27.27	6.97	0.623	0.115	84	1.34	13
1	121	-1.55	33.991	27.37	7.08	0.632	0.105	86	1.48	11
1	151	-1.21	34.298	27.61	7.00	0.625	0.103	86	1.09	9
1	176	-0.80	34.496	27.76	6.98	0.623	0.096	87	1.09	9
1	301	0.76	34.903	28.00	6.82	0.609	0.078	89	1.09	9
2	351	0.82	34.912	28.01	6.81	0.608	0.078	89	1.09	9
2	402	0.87	34.876	27.98	6.82	0.609	0.076	89	1.09	9
2	452	0.76	34.957	28.05	6.75	0.603	0.084	88	1.09	9
3	502	0.63	34.984	28.08	6.92	0.618	0.071	90	1.19	9
3	603	0.31	34.975	28.09	7.25	0.648	0.048	93	1.19	9
3	703	0.08	34.975	28.10	6.97	0.623	0.077	89	1.19	9
3	803	-0.07	34.966	28.10	6.97	0.623	0.080	89	1.19	10
3	904	-0.18	34.957	28.10	7.06	0.631	0.074	89	1.14	9
3	1004	-0.27	34.975	28.12	6.99	0.624	0.082	88	1.14	10
3	1104	-0.34	34.993	28.14	6.94	0.620	0.088	88	1.14	10
3	1205	-0.40	34.975	28.13	6.86	0.613	0.096	86	1.14	11
3	1305	-0.43	34.966	28.12	6.87	0.614	0.096	86	1.19	11
3	1486	-0.53	34.984	28.14	6.95	0.621	0.091	87	1.14	12

AR CRUISE AR2 STATION 119 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.69	0.00	31.599	0.000	25.44	254.9	0.000	0.00	8.88	0.00	
10	-1.69	0.00	31.599	0.000	25.44	254.8	0.026	0.01	8.96	0.00	
20	-1.70	0.00	31.655	0.007	25.48	250.4	0.052	0.05	8.93	0.02	0.92
30	-1.71	0.00	31.708	0.000	25.53	246.2	0.077	0.12	8.83	0.01	0.72
50	-1.69	0.00	31.717	0.000	25.53	245.4	0.126	0.32	8.92	0.00	
75	-1.59	0.00	32.895	0.047	26.49	154.8	0.177	0.63	7.28	0.01	0.64
100	-1.54	0.00	33.675	0.000	27.12	94.9	0.208	0.90	6.96	0.00	
150	-1.23	0.00	34.289	0.000	27.60	48.7	0.244	1.34	7.01	0.00	0.95
200	-0.44	0.00	34.633	0.011	27.85	25.6	0.263	1.66	6.95	0.01	1.61
250	0.19	0.02	34.829	0.017	27.98	14.1	0.273	1.88	6.88	0.01	2.04
300	0.67	0.06	34.903	0.001	28.01	11.5	0.279	2.06	6.82	0.00	1.53
400	0.87	0.00	34.877	0.001	27.98	15.1	0.293	2.56	6.82	0.00	0.97
500	0.64	0.00	34.984	0.000	28.08	5.5	0.303	3.01	6.91	0.00	0.92
600	0.32	0.00	34.976	0.000	28.09	4.0	0.308	3.28	7.24	0.00	0.95
700	0.09	0.00	34.975	0.000	28.10	2.5	0.311	3.50	6.98	0.00	0.96
800	-0.07	0.00	34.966	0.000	28.10	2.1	0.314	3.67	6.97	0.00	0.96
1000	-0.27	0.00	34.974	0.000	28.12	-0.1	0.316	3.84	6.99	0.00	0.94
1200	-0.40	0.00	34.976	0.000	28.13	-1.4	0.314	3.66	6.86	0.00	0.93

AR CRUISE AR2 STATION 120 OBSERVED VALUES

DATE	23/06/64	BAROMETER	04.1	WEATHER		WIND VELOC	10	WAVE PERIOD
HOUR	23.8	TEMP DRY	-02.1	VISIBILITY	5	WIND DIREC	12	SECCHI
LAT	86-16.1N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	32-02.1W	REL HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING 3589
MESSENGER	TIMES: 23.8, 01.0							
WIRE ANGLES:		00, --						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	AOU SATN
1	5	-1.66				
1	25	-1.70				
1	50	-1.70				
1	60	-1.70				
1	70	-1.63				
1	80	-1.57				
1	90	-1.54				
1	100	-1.56				
1	110	-1.55				
1	121	-1.55				
1	151	-1.25				
1	176	-0.76				
1	201	-0.25				
2	251	0.48				
2	301	0.75				
2	351	0.83				
2	402	0.86				
2	452	0.75				
2	502	0.67				
2	602	0.30				
2	803	-0.07				
2	904	-0.19				
2	1004	-0.27				
2	1205	-0.41				
2	1506	-0.51				

AR CRUISE AR2 STATION 121 OBSERVED VALUES

DATE	25/06/64	BAROMETER	04.5	WEATHER	X3	WIND VELOC	29	WAVE PERIOD
HOUR	01.1	TEMP DRY	00.4	VISIBILITY	4	WIND DIREC	10	SECCHI
LAT	86-17.2N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	32-42. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3589
MESSENGER TIMES:	01.1, 02.9							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.71						
1	25	-1.72						
1	50	-1.72						
1	60	-1.73						
1	70	-1.62						
1	80	-1.57						
1	90	-1.53						
1	100	-1.57						
1	110	-1.55						
1	121	-1.52						
1	151	-1.27						
2	176	-0.69						
2	201	-0.26						
2	251	0.49						
2	301	0.76						
2	351	0.86						
2	402	0.92						
2	452	0.79						
2	502	0.67						
2	602	0.30						
2	803	-0.10						
2	904	-0.19						
2	1004	-0.28						
2	1205	-0.38						
2	1506	-0.52						

AR CRUISE AR2 STATION 122 OBSERVED VALUES

DATE	26/06/64	BAROMETER	05.1	WEATHER	X7	WIND VELOC	14	WAVE PERIOD
HOUR	00.1	TEMP DRY	00.3	VISIBILITY	5	WIND DIREC	10	SECCHI
LAT	86-15.8N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	32-36. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3545
MESSENGER TIMES:	00.1, 01.4							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.71						
1	50	-1.73						
1	60	-1.73						
1	70	-1.63						
1	80	-1.58						
1	90	-1.55						
1	100	-1.52						
1	110	-1.56						
1	121	-1.55						
1	151	-1.25						
1	176	-0.76						
1	201	-0.30						
2	251	0.56						
2	301	0.84						
2	351	0.95						
2	402	0.89						
2	452	0.81						
2	502	0.63						
2	602	0.27						
2	803	-0.07						
2	904	-0.20						
2	1004	-0.33						
2	1205	-0.39						
2	1486	-0.51						

AR CRUISE AR2 STATION 123 OBSERVED VALUES

DATE 27/06/64	BAROMETER 05.4	WEATHER X4	WIND VELOC 04	WAVE PERIOD
HOUR 00.6	TEMP DRY 00.9	VISIBILITY 4	WIND DIREC 07	SECCHI
LAT 86-14.5N	TEMP WET	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 32-29. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3567
MESSENGER TIMES: 00.6, 01.8				
WIRE ANGLES: --, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.70			
1	25	-1.69			
1	50	-1.72			
1	60	-1.70			
1	70	-1.64			
1	80	-1.58			
1	90	-1.49			
1	100	-1.50			
1	110	-1.55			
1	121	-1.54			
1	151	-1.24			
1	176	-0.74			
1	201	-0.26			
2	251	0.53			
2	301	0.82			
2	351	0.89			
2	402	0.91			
2	452	0.82			
2	502	0.64			
2	602	0.28			
2	803	-0.09			
2	904	-0.20			
2	1004	-0.28			
2	1205	-0.38			
2	1486	-0.51			

AR CRUISE AR2 STATION 124 OBSERVED VALUES

DATE	27/06/64	BAROMETER	07.1	WEATHER	X2	WIND VELOC	13	WAVE PERIOD
HOUR	23.7	TEMP DRY	00.4	VISIBILITY	5	WIND DIREC	31	SECCHI
LAT	86-13.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	32-23. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3508
MESSENGER TIMES:	23.7, 00.9							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.66			
1	25	-1.69			
1	50	-1.71			
1	60	-1.71			
1	70	-1.64			
1	80	-1.57			
1	90	-1.53			
1	100	-1.55			
1	110	-1.55			
1	121	-1.53			
1	151	-1.20			
1	176	-0.78			
1	201	-0.23			
2	251	0.51			
2	301	0.84			
2	351	0.92			
2	402	0.91			
2	452	0.79			
2	502	0.67			
2	602	0.29			
2	803	-0.08			
2	904	-0.19			
2	1004	-0.27			
2	1205	-0.40			
2	1486	-0.53			

AR CRUISE AR2 STATION 125 OBSERVED VALUES

DATE	29/06/64	BAROMETER	08.8	WEATHER	X4	WIND VELOC	06	WAVE PERIOD
HOUR	00.9	TEMP DRY	-02.8	VISIBILITY	3	WIND DIREC	22	SECCHI
LAT	86-11.8N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	32-16. W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING 3537
MESSENGER TIMES:	00.9, 02.0							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.69			
1	25	-1.71			
1	50	-1.71			
1	60	-1.68			
1	70	-1.64			
1	80	-1.58			
1	90	-1.54			
1	100	-1.55			
1	110	-1.55			
1	121	-1.54			
1	151	-1.19			
1	176	-0.64			
1	201	-0.26			
2	251	0.48			
2	301	0.72			
2	351	0.86			
2	402	0.86			
2	452	0.74			
2	502	0.62			
2	602	0.28			
2	803	-0.08			
2	904	-0.20			
2	1004	-0.27			
2	1205	-0.39			

AR CRUISE AR2 STATION 126 OBSERVED VALUES

DATE	29/06/64	BAROMETER	10.5	WEATHER	X1	WIND VELOC	07	WAVE PERIOD
HOUR	23.8	TEMP DRY	-01.1	VISIBILITY	6	WIND DIREC	14	SECCHI
LAT	86-11.6N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	32-15. W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.8, 01.2							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	25	-1.71						
1	50	-1.72						
1	60	-1.72						
1	70	-1.64						
1	80	-1.57						
1	90	-1.54						
1	100	-1.57						
1	110	-1.55						
1	121	-1.55						
1	151	-1.21						
1	176	-0.67						
1	201	-0.25						
2	251	0.49						
2	301	0.73						
2	351	0.89						
2	402	0.85						
2	452	0.73						
2	502	0.62						
2	602	0.27						
2	803	-0.09						
2	904	-0.21						
2	1004	-0.28						
2	1205	-0.38						
2	1506	-0.55						

AR CRUISE AR2 STATION 127 OBSERVED VALUES

DATE	01/07/64	BAROMETER	03.4	WEATHER	X2	WIND VELOC	16	WAVE PERIOD
HOUR	01.2	TEMP DRY	-02.0	VISIBILITY	6	WIND DIREC	99	SECCHI
LAT	86-10.8N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	31-53. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3582
MESSENGER TIMES:	01.2, 02.4							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.69						
1	25	-1.71						
1	50	-1.72						
1	60	-1.70						
1	70	-1.65						
1	80	-1.58						
1	90	-1.50						
1	100	-1.54						
1	110	-1.53						
1	121	-1.52						
1	151	-1.23						
1	176	-0.71						
1	201	-0.31						
2	251	0.54						
2	301	0.78						
2	351	0.86						
2	402	0.91						
2	452	0.76						
2	502	0.62						
2	602	0.29						
2	803	-0.09						
2	904	-0.18						
2	1004	-0.27						
2	1205	-0.40						
2	1505	-0.54						

AR CRUISE AR2 STATION 128 OBSERVED VALUES

DATE	01/07/64	BAROMETER	03.4	WEATHER		WIND VELOC		WAVE PERIOD
HOUR	23.7	TEMP DRY		VISIBILITY		WIND DIREC		SECCHI
LAT	86-10.1N	TEMP WET		CLOUD TYPE		WAVE DIREC		WATER COLOR
LONG	31-33.1W	REL HUMID		CLOUD AMT		WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.7, 01.2							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AQU	SATN
1	5	-1.68						
1	25	-1.70						
1	50	-1.72						
1	60	-1.71						
1	70	-1.59						
1	80	-1.57						
1	90	-1.45						
1	100	-1.55						
1	110	-1.54						
1	120	-1.53						
1	150	-1.18						
1	176	-0.70						
1	201	-0.24						
2	251	0.51						
2	301	0.72						
2	351	0.87						
2	401	0.85						
2	451	0.72						
2	502	0.52						
2	602	0.29						
2	802	-0.09						
2	903	-0.19						
2	1003	-0.28						
2	1204	-0.41						
2	1505	-0.52						

AR CRUISE AR2 STATION 129 OBSERVED VALUES
 DATE 02/07/64 BAROMETER 98.0 WEATHER X7 WIND VELOC 14 WAVE PERIOD
 HOUR 20.2 TEMP DRY 00.1 VISIBILITY 5 WIND DIREC 18 SECCHI
 LAT 86-09.4N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 31-14.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 20.2, 22.9
 WIRE ANGLES: 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.67	31.599	25.44	8.83	0.789	-0.036	105	1.34	12
1	10	-1.70	31.590	25.43	8.85	0.790	-0.037	105	1.34	12
1	25	-1.71	31.618	25.45	8.83	0.789	-0.035	105	1.34	12
1	40	-1.71	31.690	25.51	8.81	0.787	-0.034	104	1.34	
1	50	-1.69	31.726	25.54	8.75	0.781	-0.029	104	1.34	12
1	60	-1.70	31.933	25.71	8.53	0.762	-0.010	101	1.53	14
1	70	-1.63	32.394	26.08	7.70	0.688	0.060	92	1.44	14
1	80	-1.58	33.034	26.60	6.77	0.605	0.138	81	1.28	21
1	90	-1.55	33.513	26.99	6.80	0.607	0.132	82	1.28	17
1	100	-1.55	33.784	27.21	6.92	0.618	0.120	84	0.94	15
1	110	-1.57	33.946	27.34	6.98	0.623	0.114	84	1.04	13
1	120	-1.57	34.063	27.43	7.34	0.656	0.082	89	0.84	12
1	150	-1.21	34.334	27.64	7.00	0.625	0.103	86	0.89	
1	201	-0.25	34.668	27.87	6.88	0.614	0.093	87	0.99	11
1	251	0.50	34.839	27.97	6.83	0.610	0.083	88	1.04	11
1	301	0.74	34.894	28.00	6.76	0.604	0.084	88	0.74	11
2	351	0.85	34.930	28.02	6.81	0.608	0.077	89	1.04	11
2	401	0.88	34.930	28.02	6.80	0.607	0.078	89	0.84	11
2	451	0.73	34.930	28.03	6.51	0.581	0.106	85	0.69	
2	502	0.45	35.002	28.10	6.82	0.609	0.083	88	0.99	11
2	602	0.29	34.957	28.08	6.86	0.613	0.083	88	0.99	11
2	702	0.06	35.002	28.12	6.86	0.613	0.087	88	1.09	11
2	802	-0.10	35.011	28.14	6.90	0.616	0.087	88	1.18	11
2	903	-0.19	35.002	28.14	6.94	0.620	0.085	88	0.99	11
2	1003	-0.28	34.939	28.09	6.92	0.618	0.089	87	0.69	11
2	1103	-0.35	34.993	28.14	6.63	0.592	0.116	84	0.79	
2	1204	-0.40	35.011	28.16	6.71	0.599	0.109	85	1.04	
2	1304	-0.46	35.002	28.15	6.90	0.616	0.094	87	1.04	12
2	1505	-0.52	34.975	28.13	6.89	0.615	0.096	87	0.94	13

		AR	CRUISE	AR2	STATION 129		INTERPOLATED AND COMPUTED VALUES				
DEPTH	TEMP	F(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.67	0.00	31.599	0.000	25.44	255.0	0.000	0.00	8.83	0.00	
10	-1.70	0.00	31.590	0.000	25.43	255.5	0.026	0.01	8.85	0.00	
20	-1.71	0.00	31.602	0.001	25.44	254.5	0.052	0.05	8.84	0.00	0.92
30	-1.71	0.00	31.641	0.002	25.47	251.4	0.077	0.12	8.83	0.00	0.72
50	-1.69	0.00	31.726	0.000	25.54	244.7	0.127	0.32	8.75	0.00	
75	-1.60	0.00	32.713	0.014	26.34	168.8	0.179	0.65	7.18	0.04	0.64
100	-1.55	0.00	33.784	0.000	27.21	86.5	0.212	0.92	6.92	0.00	
150	-1.21	0.00	34.334	0.000	27.64	45.3	0.245	1.32	7.00	0.00	
200	-0.27	0.00	34.663	0.000	27.87	24.2	0.262	1.62	6.88	0.00	0.97
250	0.49	0.00	34.837	0.000	27.97	15.3	0.272	1.85	6.83	0.00	0.97
300	0.74	0.00	34.894	0.000	28.00	12.7	0.279	2.04	6.76	0.00	0.97
400	0.88	0.00	34.930	0.000	28.02	11.1	0.291	2.47	6.80	0.00	0.97
500	0.46	0.00	34.999	0.001	28.10	3.1	0.299	2.78	6.80	0.01	0.93
600	0.29	0.00	34.959	0.001	28.08	5.1	0.303	3.02	6.86	0.00	0.97
700	0.06	0.00	35.001	0.000	28.12	0.4	0.305	3.20	6.86	0.00	0.97
800	-0.10	0.00	35.011	0.000	28.14	-1.5	0.305	3.15	6.90	0.00	0.97
1000	-0.28	0.00	34.940	0.001	28.09	2.4	0.306	3.27	6.92	0.00	0.96
1200	-0.40	0.00	35.011	0.000	28.16	-4.0	0.304	3.02	6.70	0.00	0.94
1500	-0.52	0.00	34.975	0.000	28.13	-2.6	0.294	1.65	6.89	0.00	20.70

AR CRUISE AR2 STATION 130 OBSERVED VALUES

DATE	04/07/64	BARDMETER	98.0	WEATHER	WIND VELOC	WAVE PERIOD
HOUR	01.4	TEMP DRY		VISIBILITY	WIND DIREC	SECCHI
LAT	86-08.6N	TEMP WET		CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG	30-54. W	REL HUMID		CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES:	01.4, 02.6					
WIRE ANGLES:	00, 00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.70						
1	50	-1.71						
1	60	-1.69						
1	70	-1.65						
1	80	-1.57						
1	90	-1.55						
1	100	-1.56						
1	110	-1.56						
1	120	-1.56						
1	150	-1.18						
1	176	-0.64						
2	251	0.53						
2	301	0.76						
2	351	0.86						
2	401	0.91						
2	451	0.77						
2	502	0.60						
2	602	0.28						
2	802	-0.09						
2	903	-0.21						
2	1204	-0.40						
2	1505	-0.52						

AR CRUISE AR2 STATION 131 OBSERVED VALUES

DATE 05/07/64	BAROMETER 98.0	WEATHER	WIND VELOC	WAVE PERIOD
HOUR 00.4	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI
LAT 86-08.2N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG 30-49. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.4, 01.5				
WIRE ANGLES: --, --				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	25	-1.70						
1	50	-1.71						
1	60	-1.70						
1	70	-1.61						
1	80	-1.57						
1	90	-1.56						
1	100	-1.57						
1	110	-1.56						
1	120	-1.54						
1	150	-1.19						
1	176	-0.65						
1	201	-0.27						
2	251	0.51						
2	301	0.77						
2	351	0.88						
2	401	0.89						
2	451	0.78						
2	502	0.66						
2	602	0.26						
2	802	-0.09						
2	903	-0.20						
2	1003	-0.28						
2	1505	-0.52						

AR CRUISE AR2 STATION 132 OBSERVED VALUES

DATE 07/07/64	BAROMETER 98.0	WEATHER	WIND VELOC	WAVE PERIOD
HOUR 00.2	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI
LAT 86-08.3N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG 30-40. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00, 01.5				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.66						
1	25	-1.68						
1	50	-1.69						
1	60	-1.67						
1	70	-1.60						
1	80	-1.58						
1	90	-1.54						
1	100	-1.57						
1	110	-1.55						
1	120	-1.54						
1	150	-1.17						
1	176	-0.66						
1	201	-0.19						
2	251	0.50						
2	301	0.76						
2	351	0.88						
2	401	0.89						
2	451	0.74						
2	502	0.63						
2	602	0.30						
2	802	-0.08						
2	903	-0.20						
2	1003	-0.27						
2	1204	-0.40						
2	1505	-0.53						

AR CRUISE AR2 STATION 133 OBSERVED VALUES

DATE 08/07/64	BAROMETER 98.0	WEATHER	WIND VELOC	WAVE PERIOD
HOUR 00.3	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI
LAT 86-11.2N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG 30-33. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.3, 02.2				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.63			
1	25	-1.67			
1	50	-1.68			
1	60	-1.68			
1	70	-1.60			
1	80	-1.56			
1	90	-1.56			
1	100	-1.58			
1	110	-1.55			
1	120	-1.53			
1	150	-1.15			
1	176	-0.72			
1	201	-0.22			
2	251	0.53			
2	301	0.76			
2	351	0.87			
2	401	0.86			
2	451	0.73			
2	502	0.61			
2	602	0.28			
2	802	-0.08			
2	903	-0.20			
2	1003	-0.26			
2	1204	-0.38			
2	1505	-0.52			

AR CRUISE AR2 STATION 134 OBSERVED VALUES

DATE	09/07/64	BAROMETER	98.0	WEATHER	WIND VELOC	WAVE PERIOD
HOUR	00.5	TEMP DRY		VISIBILITY	WIND DIREC	SECCHI
LAT	86-14.1N	TEMP WET		CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG	30-27. W	REL HUMID		CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES:	00.5, 01.8					
WIRE ANGLES:	00, 00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AQU	SATN
1	5	-1.65						
1	25	-1.68						
1	50	-1.70						
1	60	-1.67						
1	70	-1.59						
1	80	-1.57						
1	90	-1.56						
1	100	-1.58						
1	110	-1.55						
1	120	-1.53						
1	150	-1.19						
1	176	-0.68						
1	201	-0.20						
2	251	0.55						
2	301	0.77						
2	351	0.88						
2	401	0.89						
2	451	0.77						
2	502	0.63						
2	602	0.29						
2	802	-0.08						
2	903	-0.20						
2	1003	-0.27						
2	1204	-0.39						
2	1505	-0.52						

AR CRUISE AR2 STATION 135 OBSERVED VALUES

AR2-135 CONSISTS OF THE FOLLOWING TIME STUDY STATIONS, A THROUGH R.

AR CRUISE AR2 STATION 00A OBSERVED VALUES

DATE	09/07/64	BAROMETER	13.7	WEATHER	X2	WIND VELOC	07	WAVE PERIOD
HOUR	21.1	TEMP DRY		VISIBILITY	5	WIND DIREC	14	SECCHI
LAT	86-16.3N	TEMP WET		CLOUD TYPF	6	WAVE DIREC		WATER COLOR
LONG	30-21.4W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	21.1							3685
WIRE ANGLES:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.65						
1	50	-1.69						
1	60	-1.72						
1	70	-1.66						
1	80	-1.55						
1	90	-1.56						
1	100	-1.56						
1	110	-1.56						
1	120	-1.52						
1	130	-1.45						
1	150	-1.17						
1	175	-0.75						
1	200	-0.21						
1	225	0.23						
1	250	0.56						
1	275	0.77						
1	300	0.80						

AR CRUISE AR2 STATION 00B OBSERVED VALUES

DATE 09/07/64	BAROMETER 13.7	WEATHER	WIND VELOC	WAVE PERIOD
HOUR 22.6	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI
LAT 86-16.3N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG 30-21. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 22.6	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	25	-1.68			
1	50	-1.69			
1	60	-1.72			
1	70	-1.67			
1	80	-1.56			
1	90	-1.56			
1	100	-1.56			
1	110	-1.56			
1	120	-1.53			
1	130	-1.46			
1	150	-1.21			
1	175	-0.72			
1	200	-0.18			
1	225	0.17			
1	250	0.56			
1	275	0.83			
1	300	0.82			

	AR	CRUISE	AR2	STATION	00C	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	00.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.4N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-20. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 00.1							
WIRE	ANGLES: --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.66						
1	50	-1.70						
1	60	-1.71						
1	70	-1.68						
1	80	-1.56						
1	90	-1.56						
1	100	-1.56						
1	110	-1.56						
1	120	-1.51						
1	130	-1.45						
1	150	-1.21						
1	175	-0.70						
1	200	-0.20						
1	225	0.23						
1	250	0.56						
1	275	0.82						
1	300	0.81						

	AR	CRUISE	AR2	STATION	00D	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	01.6	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.4N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-20. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 01.6							
WIRE	ANGLES: ==							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.65						
1	50	-1.70						
1	60	-1.70						
1	70	-1.64						
1	80	-1.55						
1	90	-1.56						
1	100	-1.56						
1	110	-1.57						
1	120	-1.52						
1	130	-1.45						
1	150	-1.17						
1	175	-0.64						
1	200	-0.20						
1	225	0.23						
1	250	0.55						
1	275	0.80						
1	300	0.79						

	AR	CRUISE	AR2	STATION	00E	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	03.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.4N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-19. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 03.1							
WIRE	ANGLES:							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L	MGA/L
					ADU	SATN
1	25	-1.67				
1	50	-1.70				
1	60	-1.70				
1	70	-1.66				
1	80	-1.56				
1	90	-1.56				
1	100	-1.57				
1	110	-1.56				
1	120	-1.51				
1	130	-1.43				
1	150	-1.17				
1	175	-0.67				
1	200	-0.21				
1	225	0.22				
1	250	0.56				
1	275	0.74				
1	300	0.80				

AR CRUISE AR2 STATION 00F OBSERVED VALUES

DATE 10/07/64	BAROMETER 13.7	WEATHER	WIND VELOC	WAVE PERIOD
HOUR 04.6	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI
LAT 86-16.5N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG 30-19. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 04.6	--			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	25	-1.67			
1	50	-1.69			
1	60	-1.69			
1	70	-1.63			
1	80	-1.56			
1	90	-1.56			
1	100	-1.55			
1	110	-1.55			
1	120	-1.52			
1	130	-1.46			
1	150	-1.10			
1	175	-0.68			
1	200	-0.18			
1	225	0.16			
1	250	0.56			
1	275	0.71			
1	300	0.79			

	AR	CRUISE	AR2	STATION	00G	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	06.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.5N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-19. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 06.1							
WIRE	ANGLES:	--						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.65						
1	50	-1.69						
1	60	-1.70						
1	70	-1.65						
1	80	-1.57						
1	90	-1.57						
1	100	-1.57						
1	110	-1.56						
1	120	-1.53						
1	130	-1.46						
1	150	-1.11						
1	175	-0.69						
1	200	-0.18						
1	225	0.22						
1	250	0.57						
1	275	0.80						
1	300	0.79						

	AR	CRUISE	AR2	STATION	00H	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	07.6	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.5N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-18. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 07.6							
WIRE	ANGLES:	--						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AQU	SATN
1	25	-1.65						
1	50	-1.69						
1	60	-1.70						
1	70	-1.65						
1	80	-1.57						
1	90	-1.56						
1	100	-1.56						
1	110	-1.56						
1	120	-1.52						
1	130	-1.47						
1	150	-1.13						
1	175	-0.68						
1	200	-0.20						
1	225	0.16						
1	250	0.56						
1	275	0.73						
1	300	0.79						

	AR	CRUISE	AR2	STATION	00T	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	09.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.6N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-18. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 09.1							
WIRE	ANGLES:	--						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	ML/L	MGA/L	AOU	SATN
1	25	-1.66							
1	50	-1.70							
1	60	-1.70							
1	70	-1.64							
1	80	-1.56							
1	90	-1.56							
1	100	-1.57							
1	110	-1.57							
1	120	-1.53							
1	130	-1.46							
1	150	-1.16							
1	175	-0.70							
1	200	-0.23							
1	225	0.16							
1	250	0.56							
1	275	0.80							
1	300	0.79							

	AR	CRUISE	AR2	STATION	00J	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	10.6	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.6N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-17. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 10.6							
WIRE	ANGLES:							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		
					ML/L	MGA/L	AOU SATN
1	25	-1.65					
1	50	-1.70					
1	60	-1.70					
1	70	-1.64					
1	80	-1.56					
1	90	-1.56					
1	100	-1.57					
1	110	-1.56					
1	120	-1.51					
1	130	-1.45					
1	150	-1.21					
1	175	-0.67					
1	200	-0.19					
1	225	0.23					
1	250	0.56					
1	275	0.82					
1	300	0.79					

	AR	CRUISE	AR2	STATION	00K	OBSERVED	VALUES	
DATE	10/07/64	BARMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	12.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.7N	TEMP WFT		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-17. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 12.1							
WIRE	ANGLES:	--						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	25	-1.65			
1	50	-1.70			
1	60	-1.70			
1	70	-1.64			
1	80	-1.66			
1	90	-1.57			
1	100	-1.56			
1	110	-1.56			
1	120	-1.51			
1	130	-1.44			
1	150	-1.20			
1	175	-0.72			
1	200	-0.22			
1	225	0.19			
1	250	0.56			
1	275	0.81			
1	300	0.82			

	AR	CRUISE	AR2	STATION	00L	OBSERVED VALUES		
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	13.6	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.7N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-16. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 13.6							
WIRE	ANGLES:							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		
					ML/L	MGA/L	AOU SATN
1	25	-1.64					
1	50	-1.69					
1	60	-1.71					
1	70	-1.64					
1	80	-1.56					
1	90	-1.56					
1	100	-1.56					
1	110	-1.56					
1	120	-1.51					
1	130	-1.44					
1	150	-1.19					
1	175	-0.66					
1	200	-0.16					
1	225	0.19					
1	250	0.56					
1	275	0.75					
1	300	0.80					

	AR	CRUISE	AR2	STATION	00M	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	15.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.7N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-16. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER TIMES:	15.1							
WIRE ANGLFS:	--							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.65						
1	50	-1.70						
1	60	-1.70						
1	70	-1.66						
1	80	-1.56						
1	90	-1.56						
1	100	-1.57						
1	110	-1.57						
1	120	-1.53						
1	130	-1.46						
1	150	-1.17						
1	175	-0.70						
1	200	-0.16						
1	225	0.19						
1	250	0.56						
1	275	0.81						
1	300	0.82						

	AR	CRUISE	AR2	STATION	00N	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	16.6	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.8N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-16. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 16.6							
WIRE	ANGLES: --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.66						
1	50	-1.70						
1	60	-1.72						
1	70	-1.64						
1	80	-1.55						
1	90	-1.56						
1	100	-1.56						
1	110	-1.57						
1	120	-1.52						
1	130	-1.45						
1	150	-1.19						
1	175	-0.66						
1	200	-0.16						
1	225	0.23						
1	250	0.56						
1	275	0.78						
1	300	0.81						

	AR	CRUISE	AR2	STATION	000	OBSERVED	VALUES	
DATE	10/07/64	BARDMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	18.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.8N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-15. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 18.1							
WIRE	ANGLES:	--						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	25	-1.65			
1	50	-1.70			
1	60	-1.70			
1	70	-1.64			
1	80	-1.56			
1	90	-1.56			
1	100	-1.55			
1	110	-1.56			
1	120	-1.52			
1	130	-1.48			
1	150	-1.15			
1	175	-0.66			
1	200	-0.20			
1	225	0.16			
1	250	0.56			
1	275	0.70			
1	300	0.82			

	AR	CRUISE AR2	STATION OOP	OBSERVED VALUES		
DATE	10/07/64	BAROMETER 13.7	WEATHER	WIND VELOC		WAVE PERIOD
HOUR	19.6	TEMP DRY	VISIBILITY	WIND DIREC		SECCHI
LAT	86-16.8N	TEMP WET	CLOUD TYPE	WAVE DIREC		WATER COLOR
LONG	30-15. W	REL HUMID	CLOUD AMT	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.6	--				
WIRE ANGLES:						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	AOU SATN
1	25	-1.67				
1	50	-1.70				
1	60	-1.71				
1	70	-1.64				
1	80	-1.56				
1	90	-1.56				
1	100	-1.56				
1	110	-1.57				
1	120	-1.54				
1	130	-1.48				
1	150	-1.18				
1	175	-0.68				
1	200	-0.19				
1	225	0.19				
1	250	0.56				
1	275	0.73				
1	300	0.81				

	AR	CRUISE	AR2	STATION	000	OBSERVED	VALUES	
DATE	10/07/64	BAROMETER	13.7	WEATHER		WIND	VELOC	WAVE PERIOD
HOUR	21.1	TEMP DRY		VISIBILITY		WIND	DIREC	SECCHI
LAT	86-16.9N	TEMP WET		CLOUD TYPE		WAVE	DIREC	WATER COLOR
LONG	30-14. W	REL HUMID		CLOUD AMT		WAVE	HEIGHT	SOUNDING
MESSENGER	TIMES: 21.1							
WIRE	ANGLES: --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	25	-1.67			
1	50	-1.70			
1	60	-1.70			
1	70	-1.68			
1	80	-1.56			
1	90	-1.55			
1	100	-1.55			
1	110	-1.56			
1	120	-1.52			
1	130	-1.47			
1	150	-1.16			
1	175	-0.68			
1	200	-0.23			
1	225	0.18			
1	250	0.56			
1	275	0.82			
1	300	0.80			

	AR	CRUISE AR2	STATION 00R	OBSERVED VALUES		
DATE	10/07/64	BAROMETER 13.7	WEATHER	WIND VELOC	WAVE PERIOD	
HOUR	22.6	TEMP DRY	VISIBILITY	WIND DIREC	SECCHI	
LAT	86-16.9N	TEMP WET	CLOUD TYPE	WAVE DIREC	WATER COLOR	
LONG	30-14. W	REL HUMID	CLOUD AMT	WAVE HEIGHT	SOUNDING	
MESSENGER	TIMES: 22.6					
WIRE	ANGLES: --					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.67						
1	50	-1.69						
1	60	-1.70						
1	70	-1.66						
1	80	-1.56						
1	90	-1.56						
1	100	-1.54						
1	110	-1.58						
1	120	-1.53						
1	130	-1.47						
1	150	-1.17						
1	175	-0.72						
1	200	-0.23						
1	225	0.21						
1	250	0.56						
1	275	0.79						
1	300	0.78						

AR CRUISE AR2 STATION 136 OBSERVED VALUES

DATE	10/07/64	BAROMETER	09.5	WEATHER	X2	WIND VELOC	11	WAVE PERIOD
HOUR	22.6	TEMP DRY	-03.7	VISIBILITY	5	WIND DIREC	00	SECCHI
LAT	86-16.9N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	30-14. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3715
MESSENGER TIMES:	22.6, 23.9							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	25	-1.67						
1	50	-1.70						
1	60	-1.70						
1	70	-1.66						
1	80	-1.56						
1	90	-1.56						
1	100	-1.53						
1	110	-1.59						
1	120	-1.53						
1	130	-1.47						
1	150	-1.18						
1	175	-0.73						
1	200	-0.23						
1	225	0.21						
1	250	0.56						
1	275	0.80						
2	301	0.78						
2	351	0.82						
2	401	0.90						
2	451	0.76						
2	501	0.65						
2	601	0.31						
2	701	0.07						
2	802	-0.09						
2	902	-0.20						
2	1002	-0.28						
2	1202	-0.39						
2	1502	-0.52						

AR CRUISE AR2 STATION 137 OBSERVED VALUES

DATE 13/07/64	BAROMETER 86.3	WEATHER	x2	WIND VELOC	16	WAVE PERIOD
HOUR 00.4	TEMP DRY -00.7	VISIBILITY	5	WIND DIREC	24	SECCHI
LAT 86-18.2N	TEMP WET	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG 29-59. W	REL HUMID	CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES: 00.4, 01.4						
WTRE ANGLES: 00, 04						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.66			
1	25	-1.67			
1	50	-1.70			
1	60	-1.68			
1	70	-1.57			
1	80	-1.56			
1	90	-1.54			
1	100	-1.57			
1	110	-1.54			
1	120	-1.52			
1	150	-1.13			
1	175	-0.71			
1	200	-0.26			
2	250	0.50			
2	300	0.74			
2	350	0.92			
2	400	0.86			
2	450	0.76			
2	500	0.61			
2	600	0.29			
2	800	-0.09			
2	900	-0.19			
2	1000	-0.27			
2	1200	-0.38			
2	1500	-0.52			

AR CRUISE AR2 STATION 138 OBSERVED VALUES

DATE	13/07/64	BAROMETER	88.8	WEATHER	X2	WIND VELOC	16	WAVE PERIOD	
HOUR	21.6	TEMP DRY	-00.1	VISIBILITY	6	WIND DIREC	16	SECCHI	
LAT	86-18.7N	TEMP WET		CLOUD TYPE	6	WAVE DIREC		WATER COLOR	
LONG	29-53.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING	3796
MESSENGER TIMES:	21.6, 23.9								
WIRE ANGLES:	00, 04								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.66	31.266	25.17	8.94	0.798	-0.044	106	1.50	12
1	10	-1.67	31.284	25.18	8.96	0.800	-0.046	106	1.55	12
1	25	-1.67	31.293	25.19	8.90	0.795	-0.040	105	1.40	12
1	40	-1.64	31.383	25.26	8.92	0.797	-0.043	106	1.45	12
1	50	-1.65	31.545	25.39	8.75	0.781	-0.029	104	1.40	12
1	60	-1.64	32.276	25.99	7.76	0.693	0.055	93	1.50	17
1	70	-1.58	32.664	26.30	7.15	0.639	0.106	86	1.50	20
1	80	-1.57	33.305	26.82	6.89	0.615	0.126	83	1.35	20
1	90	-1.58	33.738	27.17	7.02	0.627	0.112	85	1.20	15
1	100	-1.58	33.919	27.32	7.03	0.628	0.110	85	1.20	13
1	110	-1.58	34.081	27.45	7.03	0.628	0.109	85	1.45	11
1	120	-1.49	34.235	27.57	7.01	0.626	0.108	85	1.20	11
1	150	-1.04	34.433	27.72	6.98	0.623	0.101	86	1.10	11
1	175	-0.60	34.632	27.86	6.94	0.620	0.095	87	0.95	11
1	200	-0.23	34.632	27.84	6.97	0.623	0.085	88	0.92	11
1	250	0.35	34.857	27.99	6.84	0.611	0.084	88	0.86	11
1	301	0.74			6.76	0.604			0.95	11
2	351	0.84	34.975	28.06	6.81	0.608	0.077	89	0.82	11
2	401	0.85	34.957	28.04	6.80	0.607	0.078	89	0.92	11
2	451	0.75	34.975	28.06	6.53	0.583	0.104	85		
2	501	0.56	34.939	28.05	6.85	0.612	0.079	89	1.20	11
2	601	0.28	34.939	28.06	6.88	0.614	0.082	88	1.20	11
2	701	0.05	35.029	28.15	6.89	0.615	0.085	88	1.20	11
2	802	-0.12	34.966	28.11	6.90	0.616	0.087	88	1.11	11
2	902	-0.20	34.966	28.11	6.91	0.617	0.088	88	0.77	11
2	1002	-0.28	34.966	28.11	6.91	0.617	0.089	87	1.00	11
2	1102	-0.34	34.957	28.11	6.73	0.601	0.107	85	1.00	
2	1202	-0.40	34.957	28.11	6.82	0.609	0.100	86	1.06	

(CONTINUED)

		AR CRUISE AR2		STATION 138		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	PHOS	SIL			
					ML/L MGA/L ANU SATN					
2	1303	-0.44	34.966	28.12	6.90	0.616	0.093	87	1.20	13
2	1503	-0.54	34.957	28.12	6.89	0.615	0.096	86	1.00	13

		AR CRUISE AR2		STATION 138		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(C)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.66	0.00	31.266	0.000	25.17	280.6	0.000	0.00	8.94	0.00	
10	-1.67	0.00	31.284	0.000	25.18	279.1	0.029	0.01	8.96	0.00	
20	-1.67	0.00	31.287	0.004	25.19	278.8	0.057	0.06	8.92	0.01	0.72
30	-1.66	0.00	31.308	0.004	25.20	277.1	0.085	0.13	8.92	0.02	0.72
50	-1.65	0.00	31.545	0.000	25.39	258.7	0.139	0.35	8.75	0.00	
75	-1.57	0.00	32.982	0.019	26.56	148.2	0.190	0.66	6.97	0.00	0.64
100	-1.58	0.00	33.919	0.000	27.32	76.1	0.218	0.90	7.03	0.00	
150	-1.04	0.00	34.433	0.000	27.72	38.4	0.247	1.25	6.98	0.00	
200	-0.23	0.00	34.632	0.000	27.84	26.7	0.264	1.54	6.97	0.00	
250	0.35	0.00	34.857	0.000	27.99	12.9	0.273	1.76	6.84	0.00	
300	0.73	0.00	34.951	0.014	28.04	8.3	0.279	1.91	6.76	0.00	0.97
400	0.85	0.00	34.973	0.011	28.05	7.7	0.287	2.20	6.80	0.00	0.97
500	0.56	0.00	34.940	0.000	28.05	8.3	0.295	2.57	6.84	0.00	0.96
600	0.28	0.00	34.939	0.000	28.06	6.5	0.303	2.99	6.88	0.00	0.98
700	0.05	0.00	35.028	0.000	28.15	-1.8	0.305	3.13	6.89	0.00	0.99
800	-0.12	0.00	34.968	0.001	28.11	1.6	0.305	3.13	6.90	0.00	0.97
1000	-0.28	0.00	34.966	0.000	28.11	0.4	0.307	3.31	6.91	0.00	0.97
1200	-0.40	0.00	34.957	0.000	28.11	0.0	0.307	3.36	6.82	0.00	0.97
1500	-0.54	0.00	34.958	0.000	28.12	-1.5	0.305	3.02	6.89	0.00	22.58

AR CRUISE AR2 STATION 139 OBSERVED VALUES

DATE 16/07/64	BAROMETER 43.0	WEATHER X1	WIND VELOC 18	WAVE PERIOD
HOUR 01.0	TEMP DRY 00.2	VISIBILITY 5	WIND DIREC 08	SECCHI
LAT 86-19.7N	TEMP WET	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 29-37. W	REL HUMID	CLOUD AMT 7	WAVE HEIGHT	SOUNDING 3992
MESSENGER TIMES: 01.0, 02.5				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.66						
1	50	-1.69						
1	60	-1.66						
1	70	-1.56						
1	80	-1.55						
1	90	-1.59						
1	100	-1.58						
1	110	-1.54						
1	120	-1.52						
1	150	-1.03						
1	175	-0.53						
1	200	-0.09						
2	250	0.52						
2	301	0.74						
2	351	0.88						
2	401	0.90						
2	451	0.79						
2	501	0.59						
2	601	0.02						
2	802	-0.11						
2	902	-0.21						
2	1002	-0.30						
2	1202	-0.40						
2	1503	-0.52						

	AR	C.RUISE	AR2	STATION	140	OBSERVED	VALUES	
DATE	16/07/64	BAROMETER	04.3	WEATHER	X4	WIND VELOC	10	WAVE PERIOD
HOUR	21.3	TEMP DRY	-01.5	VISIBILITY	4	WIND DIREC	32	SECCHI
LAT	86-18.7N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	29-27. W	REL HUMID		CLOUD AMT	9	WAVE HEIGHT		SOUNDING 3715
MESSENGER TIMES:	21.3, 00.7							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.63			
1	25	-1.64			
1	50	-1.70			
1	60	-1.66			
1	70	-1.57			
1	80	-1.56			
1	90	-1.56			
1	100	-1.58			
1	110	-1.54			
1	120	-1.51			
1	150	-1.03			
1	175	-0.60			
1	200	-0.08			
2	250	0.51			
2	301	0.75			
2	351	0.92			
2	401	0.89			
2	451	0.79			
2	501	0.59			
2	601	0.27			
2	802	-0.10			
2	902	-0.21			
2	1002	-0.29			
2	1202	-0.42			
2	1503	-0.55			

AR CRUISE AR2 STATION 141 OBSERVED VALUES

DATE	18/07/64	BAROMETER	05.2	WEATHER	X1	WIND VELOC	09	WAVE PERIOD
HOUR	01.0	TEMP DRY	-02.6	VISIBILITY	5	WIND DIREC	23	SECCHI
LAT	86-17.5N	TEMP WET	-02.8	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	29-03. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.0, 02.2							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.66						
1	50	-1.70						
1	60	-1.63						
1	70	-1.55						
1	80	-1.56						
1	90	-1.56						
1	100	-1.59						
1	110	-1.54						
1	120	-1.51						
1	150	-1.08						
1	175	-0.55						
1	200	-0.14						
2	250	0.49						
2	301	0.72						
2	351	0.92						
2	401	0.86						
2	451	0.74						
2	501	0.60						
2	601	0.23						
2	802	-0.10						
2	902	-0.20						
2	1002	-0.29						
2	1202	-0.40						
2	1503	-0.54						

AR CRUISE AR2 STATION 142 OBSERVED VALUES

DATE	18/07/64	BAROMETER	03.1	WEATHER	X2	WIND VELOC	06	WAVE PERIOD
HOUR	23.9	TEMP DRY	-00.6	VISIBILITY	6	WIND DIREC	24	SECCHI
LAT	86-17.5N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	28-10. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3693
MESSENGER TIMES:	23.9, 01.0							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.63						
1	25	-1.66						
1	50	-1.69						
1	60	-1.65						
1	70	-1.54						
1	80	-1.56						
1	90	-1.56						
1	100	-1.56						
1	110	-1.54						
1	120	-1.50						
1	150	-1.06						
1	175	-0.54						
1	200	-0.09						
2	250	0.50						
2	301	0.73						
2	351	0.90						
2	401	0.85						
2	451	0.74						
2	501	0.61						
2	601	0.29						
2	802	-0.09						
2	902	-0.21						
2	1002	-0.29						
2	1202	-0.40						
2	1503	-0.54						

AR CRUISE AR2 STATION 143 OBSERVED VALUES

DATE	20/07/64	BAROMETER	75.0	WEATHER	X2	WIND VELOC	15	WAVE PERIOD
HOUR	00.7	TEMP DRY	01.1	VISIBILITY	6	WIND DIREC	19	SECCHI
LAT	86-17.4N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	27-12. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3811
MESSENGER TIMES:	00.7, 02.1							
WIRE ANGLES:	02, 06							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AQU	SATN
1	5	-1.63						
1	25	-1.63						
1	50	-1.70						
1	60	-1.67						
1	70	-1.56						
1	80	-1.58						
1	90	-1.57						
1	100	-1.59						
1	110	-1.56						
1	120	-1.52						
1	150	-0.99						
1	175	-0.50						
1	200	-0.07						
2	249	0.52						
2	299	0.74						
2	349	0.93						
2	399	0.85						
2	449	0.78						
2	499	0.63						
2	599	0.26						
2	798	-0.10						
2	898	-0.21						
2	998	-0.29						
2	1197	-0.40						
2	1497	-0.52						

AR CRUISE AR2 STATION 144 OBSERVED VALUES

DATE	21/07/64	BAROMETER	57.0	WEATHER	X4	WIND VELOC	06	WAVE PERIOD
HOUR	00.1	TEMP DRY	-00.5	VISIBILITY	4	WIND DIREC	20	SECCHI
LAT	86-16.9N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	26-17. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING 3907
MESSENGER TIMES:	00.1, 01.4							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.63			
1	25	-1.64			
1	50	-1.69			
1	60	-1.64			
1	70	-1.56			
1	80	-1.59			
1	90	-1.56			
1	100	-1.58			
1	110	-1.53			
1	120	-1.48			
1	150	-1.03			
1	175	-0.54			
1	200	-0.05			
2	250	0.48			
2	300	0.74			
2	350	0.92			
2	400	0.83			
2	450	0.74			
2	501	0.57			
2	601	0.23			
2	801	-0.12			
2	901	-0.23			
2	1001	-0.32			
2	1201	-0.42			
2	1502	-0.55			

	AR	CRUISE	AR2	STATION	145	OBSERVED	VALUES	
DATE	22/07/64	BAROMETER	95.0	WEATHER	X2	WIND VELOC	09	WAVE PERIOD
HOUR	00.7	TEMP DRY	-00.2	VISIBILITY	5	WIND DIREC	23	SECCHI
LAT	86-14.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	25-15. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3855
MESSENGER	TIMES: 00.7, 02.0							
WIRE	ANGLES: 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.61			
1	25	-1.62			
1	50	-1.67			
1	60	-1.65			
1	70	-1.56			
1	80	-1.58			
1	90	-1.57			
1	100	-1.57			
1	110	-1.53			
1	120	-1.50			
1	150	-1.09			
1	175	-0.57			
1	200	-0.07			
2	250	0.46			
2	300	0.72			
2	350	0.91			
2	400	0.78			
2	450	0.67			
2	501	0.48			
2	601	0.16			
2	801	-0.15			
2	901	-0.24			
2	1001	-0.32			
2	1201	-0.43			

AR CRUISE AR2 STATION 146 OBSERVED VALUES

DATE	23/07/64	BAROMETER	05.4	WEATHER	X4	WIND VELOC	11	WAVE PERIOD
HOUR	00.9	TEMP DRY	-00.3	VISIBILITY	4	WIND DIREC	23	SECCHI
LAT	86-12.2N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	24-19. W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.9, 02.3							3848
WIRE ANGLES:	00, 10							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.59						
1	25	-1.61						
1	50	-1.68						
1	60	-1.64						
1	70	-1.56						
1	80	-1.58						
1	90	-1.56						
1	100	-1.56						
1	110	-1.54						
1	120	-1.51						
1	150	-1.18						
1	175	-0.67						
1	200	-0.38						
2	247	0.40						
2	297	0.73						
2	346	0.93						
2	396	0.77						
2	445	0.65						
2	496	0.43						
2	595	0.11						
2	794	-0.17						
2	893	-0.27						
2	1002	-0.34						
2	1191	-0.43						
2	1490	-0.53						

AR CRUISE AR2 STATION 147 OBSERVED VALUES

DATE 24/07/64 BARMETER 70.0 WEATHER X4 WIND VELOC 08 WAVE PERIOD
 HOUR 23.9 TEMP DRY -00.2 VISIBILITY 4 WIND DIREC 15 SECCHI
 LAT 86-14.8N TEMP WET -00.2 CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 23-03.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 4011
 MESSENGER TIMES: 23.9, 01.2
 WIRE ANGLES: 00, 01

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		PHOS	SIL		
					ML/L	MGA/L				
1	5	-1.61	31.085	25.02	8.94	0.798	-0.044	106	1.15	11
1	10	-1.61	31.058	25.00	8.98	0.802	-0.047	106	1.05	11
1	25	-1.61	31.103	25.04	8.94	0.798	-0.044	106	1.15	11
1	40	-1.59	31.121	25.05	9.03	0.807	-0.053	107	1.05	
1	50	-1.67	31.392	25.27	8.75	0.781	-0.028	104	1.15	13
1	60	-1.62	32.303	26.01	7.69	0.687	0.061	92	1.45	17
1	70	-1.58	32.989	26.56	7.01	0.626	0.117	84	1.40	20
1	80	-1.59	33.413	26.91	6.92	0.618	0.123	83	1.25	17
1	90	-1.57	33.729	27.16	7.02	0.627	0.112	85	1.15	14
1	100	-1.55	33.937	27.33	7.01	0.626	0.111	85	1.00	13
1	110	-1.56	34.154	27.51	7.02	0.627	0.109	85	0.96	13
1	120	-1.51	34.208	27.55	7.02	0.627	0.108	85	0.92	12
1	150	-0.98	34.415	27.70	6.97	0.623	0.101	86	0.96	11
1	175	-0.53	34.596	27.83	6.91	0.617	0.096	87	0.96	12
1	200	-0.06	34.650	27.85	6.93	0.619	0.085	88	1.10	11
1	250	0.49	34.803	27.94	6.94	0.620	0.073	89	1.05	10
2	300	0.76	34.948	28.04	6.81	0.608	0.079	89	1.08	11
2	350	0.89	34.966	28.05	6.85	0.612	0.073	89	1.05	11
2	400	0.80	34.876	27.98	6.87	0.614	0.073	89	1.00	11
2	450	0.75	34.939	28.03	6.74	0.602	0.085	88	1.10	
2	500	0.54	34.966	28.07	6.88	0.614	0.077	89	1.15	11
2	601	0.23	34.984	28.10	6.86	0.613	0.084	88	1.20	11
2	701	0.03	35.038	28.16	6.90	0.616	0.084	88	1.15	11
2	801	-0.14	34.921	28.07	6.96	0.622	0.083	88	1.25	11
2	901	-0.23	34.895	28.05	6.93	0.619	0.087	88	1.05	11
2	1001	-0.31	34.930	28.09	6.91	0.617	0.090	87	1.25	11
2	1101	-0.37	34.921	28.08	6.92	0.618	0.091	87	1.15	
2	1201	-0.42	34.975	28.13	6.90	0.616	0.093	87	1.25	12
2	1502	-0.54	34.957	28.12	6.81	0.608	0.104	85	1.20	13

		AR CRUISE AR2		STATION 147		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.61	0.00	31.085	0.000	25.02	294.7	0.000	0.00	8.94	0.00	
10	-1.61	0.00	31.058	0.000	25.00	296.6	0.030	0.02	8.98	0.00	
20	-1.61	0.00	31.079	0.008	25.02	294.9	0.060	0.06	8.96	0.01	0.92
30	-1.60	0.01	31.085	0.018	25.02	294.4	0.090	0.14	9.00	0.03	0.72
50	-1.67	0.00	31.392	0.000	25.27	270.4	0.147	0.37	8.75	0.00	
75	-1.58	0.00	33.224	0.006	26.75	129.6	0.197	0.67	6.92	0.02	0.64
100	-1.55	0.00	33.937	0.000	27.33	74.8	0.223	0.89	7.01	0.00	
150	-0.98	0.00	34.415	0.000	27.70	40.0	0.252	1.24	6.97	0.00	
200	-0.06	0.00	34.650	0.000	27.85	26.3	0.268	1.53	6.93	0.00	
250	0.49	0.00	34.803	0.000	27.94	17.9	0.280	1.78	6.94	0.00	
300	0.76	0.00	34.948	0.000	28.04	8.7	0.286	1.97	6.81	0.00	
400	0.80	0.00	34.876	0.000	27.98	14.6	0.298	2.41	6.87	0.00	
500	0.54	0.00	34.966	0.000	28.07	6.2	0.309	2.87	6.88	0.00	
600	0.23	0.00	34.984	0.000	28.10	2.8	0.313	3.12	6.86	0.00	0.98
700	0.03	0.00	35.038	0.000	28.16	-2.6	0.313	3.11	6.90	0.00	0.99
800	-0.14	0.00	34.922	0.000	28.07	4.8	0.314	3.22	6.96	0.00	0.99
1000	-0.31	0.00	34.930	0.000	28.09	3.0	0.322	3.93	6.91	0.00	0.99
1200	-0.42	0.00	34.974	0.000	28.13	-1.4	0.324	4.06	6.90	0.00	0.98
1500	-0.54	0.00	34.960	0.001	28.12	-1.7	0.319	3.39	6.81	0.00	38.90

AR CRUISE AR2 STATION 148 OBSERVED VALUES

DATE	26/07/64	BAROMETER	32.0	WEATHER	X	WIND VELOC	12	WAVE PERIOD
HOUR	00.4	TEMP DRY	00.6	VISIBILITY	5	WIND DIREC	12	SECCHI
LAT	86-16.2N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	22-27. W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 00.4, 02.2							3937
WIRE	ANGLES: 00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.57			
1	25	-1.57			
1	50	-1.67			
1	60	-1.61			
1	70	-1.57			
1	80	-1.59			
1	90	-1.56			
1	100	-1.58			
1	110	-1.52			
1	120	-1.47			
1	150	-0.95			
1	175	-0.42			
1	200	-0.10			
2	250	0.52			
2	300	0.74			
2	350	0.94			
2	400	0.81			
2	450	0.75			
2	501	0.58			
2	601	0.27			
2	801	-0.10			
2	901	-0.21			
2	1001	-0.30			
2	1201	-0.39			
2	1502	-0.52			

AR CRUISE AR2 STATION 149 OBSERVED VALUES

DATE 27/07/64	BAROMETER 42.0	WEATHER X4	WIND VELOC 00	WAVE PERIOD
HOUR 00.1	TEMP DRY 01.1	VISIBILITY 2	WIND DIREC 00	SECCHI
LAT 86-16.9N	TEMP WET 00.8	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 22-43. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3959
MESSENGER TIMES: 00.1, 01.3				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	5	-1.55			
1	25	-1.58			
1	50	-1.69			
1	60	-1.60			
1	70	-1.57			
1	80	-1.58			
1	90	-1.56			
1	100	-1.57			
1	110	-1.52			
1	120	-1.48			
1	150	-0.98			
1	175	-0.52			
1	200	-0.09			
2	250	0.48			
2	300	0.73			
2	350	0.92			
2	400	0.83			
2	450	0.77			
2	501	0.59			
2	601	0.28			
2	801	-0.11			
2	901	-0.21			
2	1001	-0.29			
2	1201	-0.42			
2	1501	-0.54			

	AR	CRUISE	AR2	STATION	150	OBSERVED	VALUES	
DATE	28/07/64	BAROMETER	53.0	WEATHER	XX	WIND VELOC	16	WAVE PERIOD
HOUR	00.6	TEMP DRY	00.2	VISIBILITY	5	WIND DIREC	12	SECCHI
LAT	86-17.8N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	22-59. W	REL HUMID		CLOUD AMT	X	WAVE HEIGHT		SOUNDING 3848
MESSENGER	TIMES: 00.6, 01.8							
WIRE	ANGLES: 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.59			
1	25	-1.59			
1	50	-1.68			
1	60	-1.60			
1	70	-1.57			
1	80	-1.58			
1	90	-1.58			
1	100	-1.56			
1	110	-1.52			
1	120	-1.50			
1	150	-0.96			
1	175	-0.50			
1	200	-0.05			
2	250	0.49			
2	300	0.73			
2	350	0.90			
2	400	0.78			
2	450	0.73			
2	501	0.56			
2	601	0.22			
2	801	-0.09			
2	901	-0.22			
2	1001	-0.31			
2	1201	-0.41			
2	1501	-0.51			

AR CRUISE AR2 STATION 151 OBSERVED VALUES

DATE 29/07/64	BAROMETER 95.0	WEATHER X4	WIND VELOC 08	WAVE PERIOD
HOUR 00.9	TEMP DRY -01.6	VISIBILITY 4	WIND DIREC 07	SECCHI
LAT 86-18.1N	TEMP WFT -01.8	CLOUD TYPF X	WAVE DIREC	WATER COLOR
LONG 23-11. W	REL HUMID	CLOUD AMT 4	WAVE HEIGHT	SOUNDING 3959
MESSENGER TIMES: 00.9, 02.3				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.57			
1	25	-1.58			
1	50	-1.68			
1	60	-1.58			
1	70	-1.58			
1	80	-1.57			
1	90	-1.56			
1	100	-1.55			
1	110	-1.51			
1	120	-1.48			
1	150	-1.02			
1	175	-0.53			
1	200	-0.05			
2	250	0.47			
2	300	0.71			
2	350	0.91			
2	400	0.85			
2	450	0.74			
2	500	0.59			
2	600	0.24			
2	800	-0.10			
2	900	-0.21			
2	1000	-0.29			
2	1200	-0.40			
2	1500	-0.53			

	AR	CRUISE	AR2	STATION	152	OBSERVED	VALUES	
DATE	30/07/64	BAROMETER	02.0	WEATHER	X4	WIND VELOC	11	WAVE PERIOD
HOUR	01.1	TEMP DRY	-00.7	VISIBILITY	4	WIND DIREC	16	SECCHI
LAT	86-17.1N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	23-09. W	RFL HUMID		CLOUD AMT	X	WAVE HEIGHT		SOUNDING 3952
MESSENGER TIMES:	01.1, 02.2							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.60			
1	25	-1.61			
1	50	-1.69			
1	60	-1.61			
1	70	-1.57			
1	80	-1.58			
1	90	-1.56			
1	100	-1.59			
1	110	-1.52			
1	120	-1.48			
1	150	-1.00			
1	175	-0.52			
1	200	-0.08			
2	250	0.49			
2	300	0.74			
2	350	0.93			
2	400	0.83			
2	450	0.76			
2	500	0.59			
2	600	0.24			
2	800	-0.07			
2	900	-0.22			
2	1000	-0.29			
2	1200	-0.42			

AR CRUISE AR2 STATION 153 OBSERVED VALUES

DATE 31/07/64	BAROMETER 05.3	WEATHER X1	WIND VELOC 03	WAVE PERIOD
HOUR 00.5	TEMP DRY -02.3	VISIBILITY 6	WIND DIREC 11	SECCHI
LAT 86-16.9N	TEMP WET	CLOUD TYPE 3	WAVE DIREC	WATER COLOR
LONG 23-09. W	RFL HUMID	CLOUD AMT 3	WAVE HEIGHT	SOUNDING 4011
MESSENGER TIMES: 00.5, 01.9	--, --			
WIRE ANGLES:				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.57			
1	25	-1.60			
1	50	-1.68			
1	60	-1.61			
1	70	-1.58			
1	80	-1.59			
1	90	-1.58			
1	100	-1.56			
1	110	-1.53			
1	120	-1.48			
1	150	-1.00			
1	175	-0.46			
1	200	-0.05			
2	250	0.48			
2	300	0.73			
2	350	0.90			
2	400	0.83			
2	450	0.75			
2	500	0.59			
2	600	0.25			
2	800	-0.10			
2	900	-0.21			
2	1000	-0.29			
2	1200	-0.42			
2	1500	-0.55			

AR CRUISE AR2 STATION 154 OBSERVED VALUES

DATE 01/08/64	BAROMETER 04.8	WEATHER X6	WIND VELOC 05	WAVE PERIOD
HOUR 01.0	TEMP DRY 00.4	VISIBILITY 5	WIND DIREC 34	SECCHI
LAT 86-16.7N	TEMP WET	CLOUD TYPF 7	WAVE DIREC	WATER COLOR
LONG 23-09. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3959
MESSENGER TIMES: 01.0, 02.0				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.58						
1	25	-1.57						
1	50	-1.69						
1	60	-1.62						
1	70	-1.57						
1	80	-1.57						
1	90	-1.55						
1	100	-1.57						
1	110	-1.52						
1	120	-1.47						
1	150	-0.95						
1	175	-0.46						
1	200	-0.05						
2	250	0.49						
2	300	0.74						
2	350	0.94						
2	400	0.83						
2	450	0.74						
2	500	0.56						
2	600	0.24						
2	800	-0.10						
2	900	-0.20						
2	1000	-0.29						
2	1200	-0.42						
2	1500	-0.54						

AR CRUISE AR2 STATION 155 OBSERVED VALUES

DATE	01/08/64	BAROMETER	03.1	WEATHER	X1	WIND VELOC	04	WAVE PERIOD
HOUR	20.7	TEMP DRY	00.8	VISIBILITY	6	WIND DIREC	33	SECCHI
LAT	86-16.5N	TEMP WET	-00.2	CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	23-10. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	20.7, 00.5							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.54						
1	25	-1.54						
1	50	-1.69						
1	60	-1.60						
1	70	-1.58						
1	80	-1.57						
1	90	-1.56						
1	100	-1.56						
1	110	-1.53						
1	120	-1.48						
1	150	-0.99						
1	175	-0.52						
1	200	-0.07						
2	250	0.50						
2	300	0.73						
2	350	0.94						
2	400	0.80						
2	450	0.77						
2	500	0.59						
2	600	0.24						
2	800	-0.12						
2	900	-0.22						
2	1000	-0.29						
2	1200	-0.43						
2	1500	-0.55						

AR CRUISE AR2 STATION 156 OBSERVED VALUES

DATE 03/08/64 BARMETER 01.0 WEATHER X4 WIND VELOC 06 WAVE PERIOD
 HOUR 00.1 TEMP DRY 00.2 VISIBILITY 2 WIND DIREC 31 SECCHI
 LAT 86-16.3N TEMP WET 00.1 CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 23-10. W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3937
 MESSENGER TIMES: 00.1, 01.4
 WIRE ANGLES: 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.56						
1	25	-1.56						
1	50	-1.69						
1	60	-1.62						
1	70	-1.57						
1	80	-1.58						
1	90	-1.56						
1	100	-1.56						
1	110	-1.52						
1	120	-1.48						
1	150	-0.99						
1	175	-0.44						
1	200	-0.05						
2	250	0.48						
2	300	0.73						
2	350	0.91						
2	400	0.82						
2	450	0.74						
2	500	0.59						
2	600	0.24						
2	800	-0.11						
2	900	-0.22						
2	1000	-0.29						
2	1200	-0.40						
2	1500	-0.53						

AR CRUISE AR2 STATION 157 OBSERVED VALUES

DATE 03/08/64 BARMETER 19.0 WEATHER X4 WIND VELOC 08 WAVE PERIOD
 HOUR 21.1 TEMP DRY 00.1 VISIBILITY 3 WIND DIREC 23 SECCHI
 LAT 86-16.1N TEMP WET 00.1 CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 23-10.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3952
 MESSENGER TIMES: 21.1, 00.6
 WIRE ANGLES: --, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	ANU	SATN		
1	5	-1.54	31.004	24.95	9.01	0.805	-0.051	107	1.15	12
1	10	-1.58	31.031	24.98	9.01	0.805	-0.051	107	1.15	12
1	25	-1.61	31.076	25.01	9.01	0.805	-0.050	107	1.15	12
1	40	-1.62	31.103	25.04	8.97	0.801	-0.047	106	1.10	
1	50	-1.67	31.374	25.26	8.78	0.784	-0.030	104	1.10	13
1	60	-1.62	32.249	25.96	7.60	0.679	0.069	91	1.50	18
1	70	-1.57	32.980	26.55	7.03	0.628	0.115	84	1.45	20
1	80	-1.58	33.423	26.91	6.98	0.623	0.117	84	1.25	18
1	90	-1.57	33.693	27.13	7.04	0.629	0.110	85	1.10	15
1	100	-1.56	33.883	27.29	7.01	0.626	0.112	85	1.00	13
1	110	-1.52	34.117	27.47	7.05	0.630	0.106	86	0.92	
1	120	-1.47	34.163	27.51	7.12	0.636	0.099	87	0.82	
1	150	-1.04	34.442	27.72	7.11	0.635	0.089	88	0.82	
1	175	-0.57	34.506	27.76	6.95	0.621	0.094	87		
1	200	-0.04	34.596	27.80	6.96	0.622	0.082	88	1.06	10
1	250	0.47	34.776	27.92	6.91	0.617	0.076	89	1.00	10
1	300	0.74	34.885	27.99	6.83	0.610	0.078	89	1.10	10
2	350	0.91	34.921	28.01	6.85	0.612	0.073	89	1.10	10
2	400	0.78	34.894	28.00	6.85	0.612	0.075	89	1.00	10
2	450	0.73	34.913	28.01	6.80	0.607	0.081	88	1.06	
2	500	0.55	34.885	28.00	6.90	0.616	0.075	89	1.20	10
2	600	0.23	34.885	28.02	6.95	0.621	0.077	89	1.20	10
2	700	0.03	34.921	28.06	6.95	0.621	0.080	89	1.06	11
2	800	-0.15	34.894	28.05	6.93	0.619	0.086	88	1.15	11
2	900	-0.22	34.912	28.07	6.95	0.621	0.085	88	0.96	10
2	1000	-0.29	34.912	28.07	6.94	0.620	0.087	88	1.15	10
2	1100	-0.34	34.921	28.08	6.81	0.608	0.100	86	0.96	
2	1200	-0.41	34.930	28.09	6.83	0.610	0.099	86	1.10	11

(CONTINUED)

		AR CRUISE AR2		STATION 157		OBSERVED VALUES				(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL	
					ML/L	MGA/L	ANU	SATN			
2	1300	-0.46	34.975	28.13	6.89	0.615	0.095	87			
2	1500	-0.52	35.002	28.15	6.80	0.607	0.104	85	1.15	11	

		AR CRUISE AR2		STATION 157		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.54	0.00	31.004	0.000	24.95	301.0	0.000	0.00	9.01	0.00	
10	-1.58	0.00	31.031	0.000	24.98	298.8	0.031	0.02	9.01	0.00	
20	-1.61	0.00	31.065	0.001	25.00	296.0	0.061	0.06	9.01	0.00	0.92
30	-1.61	0.00	31.061	0.018	25.00	296.2	0.090	0.14	9.02	0.01	0.72
50	-1.67	0.00	31.374	0.000	25.26	271.8	0.148	0.37	8.78	0.00	
75	-1.57	0.00	33.230	0.005	26.76	129.1	0.198	0.67	6.97	0.02	0.64
100	-1.56	0.00	33.883	0.000	27.29	78.9	0.224	0.90	7.01	0.00	
150	-1.04	0.00	34.442	0.000	27.72	37.7	0.254	1.25	7.11	0.00	
200	-0.04	0.00	34.596	0.000	27.80	30.5	0.271	1.55	6.96	0.00	
250	0.47	0.00	34.776	0.000	27.92	19.8	0.284	1.84	6.91	0.00	
300	0.74	0.00	34.885	0.000	27.99	13.4	0.292	2.07	6.83	0.00	
400	0.78	0.00	34.894	0.000	28.00	13.1	0.305	2.55	6.85	0.00	
500	0.55	0.00	34.885	0.000	28.00	12.4	0.318	3.15	6.90	0.00	
600	0.23	0.00	34.885	0.000	28.02	10.2	0.330	3.78	6.95	0.00	
700	0.03	0.00	34.921	0.000	28.06	6.1	0.338	4.33	6.95	0.00	
800	-0.15	0.00	34.894	0.000	28.05	6.9	0.344	4.84	6.93	0.00	
1000	-0.29	0.00	34.912	0.000	28.07	4.4	0.356	5.87	6.94	0.00	
1200	-0.41	0.00	34.930	0.000	28.09	2.0	0.362	6.58	6.83	0.00	
1500	-0.52	0.00	35.002	0.000	28.15	-4.6	0.358	5.85	6.80	0.00	

AR CRUISE AR2 STATION 158 OBSERVED VALUES

DATE	05/08/64	BAROMETER	05.2	WEATHER	X1	WIND VELOC	11	WAVE PERIOD
HOUR	00.0	TEMP DRY	-01.2	VISIBILITY	6	WIND DIREC	10	SECCHI
LAT	86-15.6N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	23-01. W	REL HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING 3930
MESSENGER TIMES:	00.0, 01.9							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.59			
1	25	-1.59			
1	50	-1.69			
1	60	-1.60			
1	70	-1.60			
1	80	-1.58			
1	90	-1.57			
1	100	-1.58			
1	110	-1.53			
1	120	-1.50			
1	150	-1.01			
1	175	-0.43			
1	200	-0.07			
2	250	0.48			
2	300	0.74			
2	350	0.91			
2	400	0.82			
2	450	0.75			
2	500	0.56			
2	600	0.25			
2	800	-0.12			
2	900	-0.22			
2	1000	-0.30			
2	1200	-0.42			
2	1500	-0.51			

AR CRUISE AR2 STATION 159 OBSERVED VALUES

DATE	06/08/64	BAROMETER	02.1	WEATHER	X7	WIND VELOC	15	WAVE PERIOD
HOUR	00.6	TEMP DRY	-00.6	VISIBILITY	4	WIND DIREC	12	SECCHI
LAT	86-14.2N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	22-24. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.6, 01.7							
WTRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	AOU SATN
1	5	-1.57				
1	25	-1.58				
1	50	-1.69				
1	60	-1.61				
1	70	-1.58				
1	80	-1.57				
1	90	-1.57				
1	100	-1.60				
1	110	-1.53				
1	120	-1.51				
1	150	-1.01				
1	175	-0.41				
1	200	-0.02				
2	250	0.52				
2	300	0.74				
2	350	0.93				
2	400	0.85				
2	450	0.77				
2	500	0.58				
2	599	0.25				
2	799	-0.09				
2	899	-0.21				
2	999	-0.30				
2	1199	-0.41				
2	1499	-0.54				

AR CRUISE AR2 STATION 160 OBSERVED VALUES

DATE	07/08/64	BAROMETER	05.3	WEATHER	X2	WIND VELOC	12	WAVE PERIOD
HOUR	00.7	TEMP DRY	-01.0	VISIBILITY	6	WIND DIREC	23	SECCHI
LAT	86-12.9N	TEMP WET		CLOUD TYPF	7	WAVE DIREC		WATER COLOR
LONG	21-47. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3944
MESSENGER TIMES:	00.7, 02.0							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.58						
1	25	-1.58						
1	50	-1.68						
1	60	-1.61						
1	70	-1.57						
1	80	-1.57						
1	90	-1.57						
1	100	-1.57						
1	110	-1.53						
1	120	-1.52						
1	150	-1.01						
1	175	-0.50						
1	200	-0.05						
2	250	0.51						
2	300	0.74						
2	350	0.91						
2	400	0.80						
2	450	0.75						
2	500	0.59						
2	599	0.24						
2	799	-0.10						
2	899	-0.23						
2	999	-0.30						
2	1199	-0.41						
2	1499	-0.53						

AR CRUISE AR2 STATION 161 OBSERVED VALUES

DATE 09/08/64 BAROMETER 16.1 WEATHER X2 WIND VELOC 11 WAVE PERIOD
 HOUR 00.0 TEMP DRY 00.3 VISIBILITY 5 WIND DIREC 23 SECCHI
 LAT 86-10.2N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 23-35. W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 4003
 MESSENGER TIMES: 00.0, 01.1
 WIRE ANGLES: 00, 02

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.58			
1	25	-1.58			
1	50	-1.69			
1	60	-1.60			
1	70	-1.58			
1	80	-1.59			
1	90	-1.56			
1	100	-1.58			
1	110	-1.54			
1	120	-1.47			
1	150	-1.02			
1	175	-0.40			
1	200	-0.05			
2	250	0.63			
2	300	0.82			
2	350	1.00			
2	400	0.92			
2	450	0.82			
2	500	0.65			
2	599	0.29			
2	799	-0.08			
2	899	-0.19			
2	999	-0.28			
2	1199	-0.40			
2	1499	-0.53			

AR CRUISE AR2 STATION 162 OBSERVED VALUES

DATE	10/08/64	BAROMETER	25.9	WEATHER	XX	WIND VELOC	08	WAVE PERIOD	
HR	00.2	TEMP DRY	-02.2	VISIBILITY	7	WIND DIREC	25	SECCHI	
LAT	86-09.6N	TEMP WFT		CLOUD TYPE	X	WAVE DIREC		WATER COLOR	
LONG	19-59. W	REL HUMID		CLOUD AMT	X	WAVE HEIGHT		SOUNDING	4048
MESSENGER TIMES:	00.2, 01.6								
WIRE ANGLES:	00, 02								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.59						
1	25	-1.58						
1	50	-1.68						
1	60	-1.61						
1	70	-1.57						
1	80	-1.58						
1	90	-1.58						
1	100	-1.58						
1	110	-1.53						
1	120	-1.46						
1	150	-0.98						
1	175	-0.41						
1	200	-0.04						
2	250	0.59						
2	300	0.77						
2	350	1.02						
2	400	0.87						
2	450	0.79						
2	500	0.60						
2	599	0.28						
2	699	0.07						
2	899	-0.21						
2	999	-0.28						
2	1199	-0.40						
2	1499	-0.54						

AR CRUISE AR2 STATION 163 OBSERVED VALUES

DATE	11/08/64	BAROMETER	30.0	WEATHER	X1	WIND VELOC	03	WAVE PERIOD
HOUR	00.0	TEMP DRY	-04.0	VISIBILITY	7	WIND DIREC	21	SECCHI
LAT	86-11.5N	TEMP WET	-04.6	CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	19-36. W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.0, 01.6							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ANU	SATN
1	5	-1.58						
1	25	-1.58						
1	50	-1.66						
1	60	-1.67						
1	70	-1.57						
1	80	-1.56						
1	90	-1.56						
1	100	-1.57						
1	110	-1.55						
1	120	-1.51						
1	150	-1.05						
1	175	-0.50						
1	200	-0.10						
2	250	0.51						
2	300	0.73						
2	350	0.90						
2	400	0.87						
2	450	0.76						
2	500	0.60						
2	599	0.25						
2	799	-0.09						
2	899	-0.20						
2	999	-0.28						
2	1199	-0.40						
2	1499	-0.54						

AR CRUISE AR2 STATION 164 OBSERVED VALUES

DATE	13/08/64	BAROMETER	23.6	WEATHER	X2	WIND VELOC	11	WAVE PERIOD
HOUR	01.5	TEMP DRY	-01.5	VISIBILITY	4	WIND DIREC	32	SECCHI
LAT	86-06.4N	TEMP WFT		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	19-20. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.5, 02.6							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	
					ML/L	MGA/L
1	5	-1.57				
1	25	-1.57				
1	50	-1.69				
1	60	-1.60				
1	70	-1.59				
1	80	-1.58				
1	90	-1.58				
1	100	-1.53				
1	110	-1.53				
1	120	-1.48				
1	150	-1.04				
1	175	-0.50				
1	200	-0.13				
2	250	0.45				
2	299	0.69				
2	349	0.85				
2	399	0.76				
2	449	0.71				
2	499	0.57				
2	599	0.24				
2	699	0.05				
2	898	-0.20				
2	998	-0.28				
2	1198	-0.40				
2	1497	-0.52				

AR CRUISE AR2 STATION 165 OBSERVED VALUES

DATE	14/08/64	BAROMETER	31.7	WEATHER	X2	WIND VELOC	12	WAVE PERIOD
HOUR	00.2	TEMP DRY	-00.5	VISIBILITY	5	WIND DIREC	32	SECCHI
LAT	86-04.0N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	19-12. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3974
MESSENGER	TIMES: 00.2, 01.6							
WIRE ANGLES:		00,	00					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.58						
1	25	-1.58						
1	50	-1.68						
1	60	-1.63						
1	70	-1.58						
1	80	-1.60						
1	90	-1.59						
1	100	-1.58						
1	110	-1.53						
1	120	-1.46						
1	150	-0.99						
1	175	-0.50						
1	200	-0.10						
2	250	0.47						
2	299	0.69						
2	349	0.84						
2	399	0.76						
2	449	0.70						
2	499	0.57						
2	599	0.24						
2	798	-0.08						
2	898	-0.18						
2	998	-0.27						
2	1198	-0.38						
2	1497	-0.50						

AR CRUISE AR2 STATION 166 OBSERVED VALUES

DATE 15/08/64	BAROMETER 30.0	WEATHER X4	WIND VELOC 11	WAVE PERIOD
HOUR 00.3	TEMP DRY -00.8	VISIBILITY 4	WIND DIREC 31	SECCHI
LAT 86-01.6N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 19-04. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.3, 01.6				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.59						
1	25	-1.59						
1	50	-1.63						
1	60	-1.63						
1	70	-1.57						
1	80	-1.57						
1	90	-1.56						
1	100	-1.57						
1	110	-1.52						
1	120	-1.47						
1	150	-0.94						
1	175	-0.50						
1	200	-0.04						
2	250	0.51						
2	299	0.70						
2	349	0.82						
2	399	0.81						
2	449	0.70						
2	499	0.58						
2	599	0.25						
2	699	0.05						
2	798	-0.08						
2	898	-0.19						
2	998	-0.27						
2	1198	-0.40						

AR CRUISE AR2		STATION 167	OBSERVED VALUES					
DATE	16/08/64	BAROMETER	26.2	WEATHER	X1	WIND VELOC	08	WAVE PERIOD
HOUR	00.3	TEMP DRY	-00.5	VISIBILITY	4	WIND DIREC	04	SECCHI
LAT	85-59.1N	TEMP WET		CLOUD TYPE	3	WAVE DIREC		WATER COLOR
LONG	18-56. W	REL HUMID		CLOUD AMT	4	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.3, 01.6							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.58						
1	25	-1.58						
1	50	-1.68						
1	60	-1.62						
1	70	-1.58						
1	80	-1.56						
1	90	-1.55						
1	100	-1.56						
1	110	-1.53						
1	120	-1.48						
1	150	-1.01						
1	175	-0.57						
1	200	-0.16						
2	250	0.50						
2	299	0.71						
2	349	0.92						
2	399	0.80						
2	449	0.72						
2	499	0.58						
2	599	0.24						
2	798	-0.06						
2	898	-0.21						
2	998	-0.27						
2	1198	-0.40						
2	1497	-0.53						

AR CRUISE AR2 STATION 168 OBSERVED VALUES

DATE 19/08/64	BAROMETER 24.0	WEATHER X4	WIND VELOC 04	WAVE PERIOD
HOUR 00.8	TEMP DRY 00.0	VISIBILITY 3	WIND DIREC 24	SECCHI
LAT 85-51.6N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 18-32. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.8, 01.9				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.55						
1	25	-1.58						
1	50	-1.63						
1	60	-1.61						
1	70	-1.57						
1	80	-1.54						
1	90	-1.56						
1	100	-1.56						
1	110	-1.53						
1	120	-1.48						
1	150	-1.08						
1	175	-0.57						
1	200	-0.18						
2	250	0.48						
2	299	0.70						
2	349	0.89						
2	399	0.78						
2	449	0.71						
2	499	0.53						
2	599	0.25						
2	798	-0.11						
2	898	-0.21						
2	998	-0.29						
2	1198	-0.39						
2	1497	-0.50						

AR CRUISE AR2 STATION 169 OBSERVED VALUES

DATE 19/08/64 BAROMETER 24.0 WEATHER X4 WIND VELOC 00 WAVE PERIOD
 HOUR 20.3 TEMP DRY 00.3 VISIBILITY 3 WIND DIREC 00 SECCHI
 LAT 85-49.6N TEMP WET CLOUD TYPE X WAVE DIREC WATER COLOR
 LONG 78-26.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING
 MESSENGER TIMES: 20.3, 21.4, 23.1
 WIRE ANGLES: 00, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.57	30.877	24.85	8.88	0.793	-0.038	105	0.95	12
1	10	-1.58	30.950	24.91	8.89	0.794	-0.039	105	0.90	9
1	25	-1.60	30.959	24.92	8.87	0.792	-0.037	105	0.95	9
1	40	-1.58	30.995	24.95	8.89	0.794	-0.040	105	1.06	9
1	50	-1.63	31.419	25.29	8.80	0.786	-0.033	104	1.02	10
1	60	-1.58	32.484	26.15	7.41	0.662	0.084	89	1.20	16
1	70	-1.56	33.152	26.69	6.87	0.614	0.128	83	1.24	18
1	80	-1.52	33.540	27.01	6.81	0.608	0.131	82	1.15	17
1	90	-1.56	33.811	27.23	6.97	0.623	0.116	84	0.98	12
1	100	-1.54	33.964	27.35	6.98	0.623	0.114	85	1.06	12
1	110	-1.53	34.054	27.42	7.03	0.628	0.109	85	0.95	11
2	120	-1.48	34.135	27.49	7.11	0.635	0.100	86	0.76	9
2	150	-1.08	34.370	27.67	7.05	0.630	0.096	87	0.81	9
2	175	-0.58	34.478	27.73	7.10	0.634	0.081	89	0.98	9
2	200	-0.17	34.605	27.82	6.96	0.622	0.085	88	0.95	9
2	250	0.47	34.776	27.92	6.92	0.618	0.075	89	0.95	9
2	299	0.69	34.903	28.01	7.00	0.625	0.063	91	0.90	9
2	349	0.88	34.894	27.99	6.90	0.616	0.069	90	0.85	9
2	399	0.77	34.921	28.02	7.01	0.626	0.061	91	0.76	9
2	449	0.71	34.921	28.02	7.05	0.630	0.059	91	0.98	9
2	499	0.54	34.993	28.09	7.04	0.629	0.062	91	1.02	9
3	599	0.23	35.029	28.14	6.87	0.614	0.083	88	1.02	9
3	699	0.02	34.894	28.04	6.91	0.617	0.084	88	0.85	9
3	798	-0.10	34.864	28.02	6.93	0.619	0.085	88	0.95	9
3	898	-0.20	34.857	28.02	6.93	0.619	0.087	88	0.98	9
3	998	-0.29	34.839	28.01	6.93	0.619	0.089	87	0.73	9
3	1098	-0.33	34.903	28.06	6.91	0.617	0.091	87	1.15	9
3	1198	-0.40	34.830	28.01	6.90	0.616	0.093	87	1.32	9

(CONTINUED)

		AR CRUISE AR2	STATION 169		OBSERVED VALUES				(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		PHOS	SIL		
					ML/L	MGA/L	AOU	SATN		
3	1297	-0.42	34.921	28.08	6.89	0.615	0.094	87	1.02	9
3	1497	-0.49	34.921	28.09	6.84	0.611	0.100	86	1.20	11

		AR CRUISE AR2	STATION 169		INTERPOLATED AND COMPUTED VALUES						
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(D)	VAR RATIO
0	-1.57	0.00	30.877	0.000	24.85	310.8	0.000	0.00	8.88	0.00	
10	-1.58	0.00	30.950	0.000	24.91	305.0	0.032	0.02	8.89	0.00	
20	-1.60	0.00	30.956#		24.92	304.4	0.062	0.06	8.88	0.00	0.72
30	-1.59	0.01	30.971#		24.93	303.2	0.093	0.14	8.88	0.01	0.72
50	-1.63	0.00	31.419	0.000	25.29	268.4	0.150	0.37	8.80	0.00	
75	-1.54	0.00	33.371	0.007	26.87	118.4	0.199	0.66	6.80	0.01	0.64
100	-1.54	0.00	33.964	0.000	27.35	72.8	0.223	0.87	6.98	0.00	
150	-1.08	0.00	34.370	0.000	27.67	43.0	0.252	1.23	7.05	0.00	
200	-0.17	0.00	34.605	0.000	27.82	29.1	0.271	1.55	6.96	0.00	
250	0.47	0.00	34.776	0.000	27.92	19.8	0.283	1.82	6.92	0.00	
300	0.70	0.00	34.903	0.001	28.01	11.7	0.291	2.04	7.00	0.00	0.97
400	0.77	0.00	34.921	0.000	28.02	11.0	0.302	2.45	7.01	0.00	0.97
500	0.54	0.00	34.994	0.000	28.09	4.0	0.310	2.79	7.04	0.00	1.00
600	0.23	0.00	35.028	0.000	28.14	-0.6	0.312	2.88	6.87	0.00	0.99
700	0.02	0.00	34.893	0.000	28.04	8.1	0.315	3.15	6.91	0.00	0.98
800	-0.10	0.00	34.864	0.000	28.02	9.5	0.324	3.85	6.93	0.00	0.97
1000	-0.29	0.00	34.841	0.001	28.01	9.8	0.344	5.65	6.93	0.00	0.97
1200	-0.40	0.00	34.831	0.001	28.01	9.4	0.363	7.85	6.90	0.00	0.97

AR CRUISE AR2 STATION 170 OBSERVED VALUES

DATE	15/09/64	BAROMETER	21.0	WEATHER	X4	WIND VELOC	07	WAVE PERIOD
HOUR	01.2	TEMP DRY	-00.7	VISIBILITY	2	WIND DIREC	11	SECCHI
LAT	86-01.2N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	21-15. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	01.2, 02.2							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	10	-1.68						
1	25	-1.71						
1	40	-1.67						
1	50	-1.66						
1	60	-1.63						
1	70	-1.61						
1	80	-1.58						
1	90	-1.58						
1	100	-1.58						
1	110	-1.56						
2	120	-1.50						
2	150	-1.15						
2	175	-0.56						
2	200	-0.17						
2	250	0.53						
2	299	0.74						
2	349	0.88						
2	399	0.86						
2	449	0.76						
2	499	0.61						
2	599	0.25						
2	798	-0.09						
2	898	-0.20						
2	998	-0.29						
2	1198	-0.40						
2	1497	-0.53						

AR CRUISE AR2 STATION 171 OBSERVED VALUES

DATE 15/09/64 BARMETER 22.2 WEATHER X1 WIND VELOC 04 WAVE PERIOD
 HOUR 23.8 TEMP DRY -13.1 VISIBILITY 7 WIND DIREC 12 SECCHI
 LAT 86-01.3N TEMP WET -13.1 CLOUD TYPF 6 WAVE DIREC WATER COLOR
 LONG 21-22.0W REL HUMID CLOUD AMT 1 WAVE HEIGHT SOUNDING 3877
 MESSENGER TIMES: 23.8, 00.6, 01.6
 WIRE ANGLES: --, --, --

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.68	31.293	25.19	8.92	0.797	-0.042	106	1.06	11
1	10	-1.68	31.320	25.21	8.92	0.797	-0.042	106	1.17	11
1	25	-1.70	31.293	25.19	8.96	0.800	-0.045	106	1.17	10
1	40	-1.67	31.247	25.15	8.93	0.798	-0.043	106	1.17	11
1	50	-1.66	31.563	25.41	8.63	0.771	-0.018	102	1.39	13
1	60	-1.64	32.159	25.89	7.90	0.706	0.044	94	1.44	16
1	70	-1.60	32.836	26.44	7.15	0.639	0.106	86		18
1	80	-1.58	33.314	26.83	7.03	0.628	0.114	85	1.12	20
1	90	-1.60	33.684	27.13	7.17	0.640	0.099	87		12
1	100	-1.61	33.892	27.29	7.09	0.633	0.106	86	0.96	11
1	110	-1.59	34.036	27.41	7.14	0.638	0.100	86	0.96	10
2	120	-1.54	34.135	27.49	7.04	0.629	0.107	85	0.96	11
2	150	-1.13	34.334	27.64	6.99	0.624	0.102	86	0.85	10
2	175	-0.57	34.460	27.72	7.01	0.626	0.089	88	0.90	10
2	200	-0.16	34.614	27.82	6.91	0.617	0.089	87	0.85	10
2	250	0.50	34.821	27.95	6.82	0.609	0.083	88	0.96	11
2	299	0.72	34.848	27.96	6.82	0.609	0.079	88	1.06	11
2	349	0.86	34.939	28.03	6.86	0.613	0.073	89	1.06	10
2	399	0.90	34.903	28.00	6.86	0.613	0.072	89	0.90	10
2	449	0.73	34.930	28.03	6.91	0.617	0.071	90	0.96	10
2	499	0.60	34.921	28.03	6.91	0.617	0.073	89	1.06	10
3	599	0.25	34.930	28.06	6.97	0.623	0.074	89	1.01	10
3	699	0.04	34.921	28.06	6.91	0.617	0.084	88	1.01	10
3	798	-0.10	34.885	28.04	6.95	0.621	0.083	88	1.06	11
3	898	-0.21	34.921	28.07	6.95	0.621	0.085	88	1.01	11
3	998	-0.29	34.930	28.08	6.95	0.621	0.086	88	1.01	10
3	1098	-0.34	34.930	28.09	6.95	0.621	0.087	88	1.06	10
3	1198	-0.40	34.912	28.08	6.96	0.622	0.088	88	0.96	12

(CONTINUED)

		AR CRUISE AR2		STATION 171		OBSERVED VALUES				(CONTINUED)		
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****		PHOS	SIL			
						ML/L	MGA/L	AOU	SATN			
3	1297	-0.45	34.948	28.11	6.93	0.619	0.091	87	0.90	12		
3	1497	-0.52	34.948	28.11	6.84	0.611	0.100	86	1.23	12		

		AR CRUISE AR2		STATION 171		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	F(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.68	0.00	31.293	0.000	25.19	278.5	0.000	0.00	8.92	0.00	
10	-1.68	0.00	31.320	0.000	25.21	276.3	0.028	0.01	8.92	0.00	
20	-1.69	0.00	31.308	0.002	25.20	277.1	0.056	0.06	8.95	0.00	1.12
30	-1.69	0.00	31.278#		25.18	279.4	0.084	0.13	8.98	0.02	0.72
50	-1.66	0.00	31.563	0.000	25.41	257.3	0.138	0.35	8.63	0.00	
75	-1.59	0.00	33.094	0.004	26.65	139.5	0.188	0.65	7.03	0.02	0.64
100	-1.61	0.00	33.892	0.000	27.29	78.1	0.216	0.89	7.09	0.00	
150	-1.13	0.00	34.334	0.000	27.64	45.6	0.247	1.27	6.99	0.00	
200	-0.16	0.00	34.614	0.000	27.82	28.5	0.266	1.59	6.91	0.00	
250	0.50	0.00	34.821	0.000	27.95	16.6	0.277	1.85	6.82	0.00	
300	0.72	0.00	34.850	0.001	27.96	15.9	0.285	2.08	6.82	0.00	0.97
400	0.90	0.00	34.903	0.000	28.00	13.3	0.300	2.60	6.86	0.00	0.97
500	0.60	0.00	34.921	0.000	28.03	10.0	0.312	3.13	6.91	0.00	1.00
600	0.25	0.00	34.930	0.000	28.06	6.9	0.320	3.61	6.97	0.00	0.99
700	0.04	0.00	34.921	0.000	28.06	6.2	0.327	4.05	6.91	0.00	0.98
800	-0.10	0.00	34.885	0.000	28.04	7.9	0.334	4.61	6.95	0.00	0.97
1000	-0.29	0.00	34.930	0.000	28.08	3.0	0.345	5.58	6.95	0.00	0.97
1200	-0.40	0.00	34.913	0.000	28.08	3.3	0.351	6.31	6.96	0.00	0.97

AR CRUISE AR2 STATION 172 OBSERVED VALUES

DATE 16/09/64	BARDOMETER 24.4	WEATHER X1	WIND VELOC 04	WAVE PERIOD
HRUR 23.8	TEMP DRY -18.1	VISIBILITY 6	WIND DIREC 27	SECCHI
LAT 86-01.5N	TEMP WET -18.2	CLOUD TYPE 2	WAVE DIREC	WATER COLOR
LONG 21-29. W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 23.8, 00.9				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.66						
1	50	-1.68						
1	60	-1.66						
1	70	-1.60						
1	80	-1.59						
1	90	-1.59						
1	100	-1.57						
1	110	-1.55						
1	120	-1.51						
1	150	-1.09						
1	175	-0.54						
1	200	-0.17						
2	250	0.50						
2	299	0.75						
2	349	0.90						
2	399	0.84						
2	449	0.75						
2	499	0.61						
2	599	0.25						
2	798	-0.10						
2	898	-0.21						
2	998	-0.29						
2	1198	-0.40						
2	1497	-0.52						

AR CRUISE AR2 STATION 173 OBSERVED VALUES

DATE 18/09/64	BAROMETER 19.5	WEATHER X7	WIND VELOC 07	WAVE PERIOD
HOUR 00.1	TEMP DRY -12.4	VISIBILITY 3	WIND DIREC 30	SECCHI
LAT 86-01.7N	TEMP WET -13.9	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 21-37. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.1, 01.4				
WIRE ANGLES: 00, 02				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.67						
1	50	-1.68						
1	60	-1.66						
1	70	-1.60						
1	80	-1.58						
1	90	-1.58						
1	100	-1.58						
1	110	-1.56						
1	120	-1.50						
1	150	-1.10						
1	175	-0.55						
1	200	-0.08						
2	250	0.50						
2	299	0.73						
2	349	0.86						
2	399	0.82						
2	449	0.73						
2	499	0.56						
2	599	0.24						
2	699	-0.04						
2	898	-0.22						
2	998	-0.30						
2	1198	-0.39						
2	1497	-0.53						

AR CRUISE AR2 STATION 174 - OBSERVED VALUES

DATE	18/09/64	BAROMETER	21.5	WEATHER	X7	WIND VELOC	02	WAVE PERIOD
HOUR	23.9	TEMP DRY	-12.1	VISIBILITY	4	WIND DIREC	30	SECCHI
LAT	86-01.9N	TEMP WET	-13.1	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	21-45. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3848
MESSENGER TIMES:	23.9, 01.0							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.62						
1	25	-1.68						
1	50	-1.70						
1	60	-1.69						
1	70	-1.62						
1	80	-1.58						
1	90	-1.58						
1	100	-1.59						
1	110	-1.57						
1	120	-1.53						
1	150	-1.11						
1	174	-0.60						
1	199	-0.18						
2	249	0.50						
2	299	0.74						
2	349	0.92						
2	399	0.84						
2	449	0.74						
2	499	0.59						
2	598	0.22						
2	798	-0.11						
2	897	-0.21						
2	997	-0.31						
2	1196	-0.41						
2	1496	-0.54						

AR CRUISE AR2 STATION 175 OBSERVED VALUES

DATE	20/09/64	BAROMETER	21.5	WEATHER	WIND VELOC	WAVE PERIOD
HOUR	00.3	TEMP DRY		VISIBILITY	WIND DIREC	SECCHI
LAT	86-02.1N	TEMP WET		CLOUD TYPE	WAVE DIREC	WATER COLOR
LONG	21-52. W	REL HUMID		CLOUD AMT	WAVE HEIGHT	SOUNDING
MESSENGER	TIMES: 00.3, 01.5					
WIRE	ANGLES: 00.0, 01.02					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.69						
1	50	-1.71						
1	60	-1.68						
1	70	-1.63						
1	80	-1.58						
1	90	-1.58						
1	100	-1.58						
1	110	-1.56						
1	120	-1.53						
1	150	-1.19						
1	174	-0.63						
1	199	-0.11						
2	249	0.55						
2	299	0.77						
2	349	0.96						
2	399	0.86						
2	449	0.73						
2	499	0.58						
2	598	0.23						
2	698	0.03						
2	897	-0.23						
2	997	-0.30						
2	1196	-0.40						
2	1496	-0.52						

AR CRUISE AR2 STATION 176 - OBSERVED VALUES

DATE	21/09/64	BAROMETER	25.0	WEATHER	X7	WIND VELOC	04	WAVE PERIOD	
HOUR	00.3	TEMP DRY	-14.2	VISIBILITY	6	WIND DIREC	24	SECCHI	
LAT	86-02.3N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR	
LONG	22-00. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING	3826
MESSENGER	TIMES: 00.3, 01.7								
WIRE	ANGLES: 00, 00								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.67						
1	50	-1.71						
1	60	-1.69						
1	70	-1.65						
1	80	-1.59						
1	90	-1.56						
1	100	-1.59						
1	110	-1.56						
1	120	-1.55						
1	150	-1.20						
1	174	-0.73						
1	199	-0.26						
2	249	0.54						
2	299	0.74						
2	349	0.94						
2	399	0.82						
2	449	0.73						
2	499	0.55						
2	598	0.23						
2	798	-0.14						
2	897	-0.24						
2	997	-0.31						
2	1196	-0.41						
2	1496	-0.53						

AR CRUISE AR2 STATION 177 OBSERVED VALUES

DATE 22/09/64	BAROMETER 17.3	WEATHER X3	WIND VELOC 20	WAVE PERIOD
HOUR 00.9	TEMP DRY -12.1	VISIBILITY 3	WIND DIREC 14	SECCHI
LAT 86-02.5N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 22-08. W	REL HUMID	CLOUD AMT 7	WAVE HEIGHT	SOUNDING 3811
MESSENGER TIMES: 00.9, 01.9				
WIRE ANGLES: 01, 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	ML/L	MGA/L	ADU	SATN
1	5	-1.69							
1	25	-1.67							
1	50	-1.71							
1	60	-1.68							
1	70	-1.61							
1	80	-1.58							
1	90	-1.57							
1	100	-1.59							
1	110	-1.57							
1	120	-1.57							
1	150	-1.21							
1	174	-0.61							
1	199	-0.21							
2	249	0.56							
2	299	0.75							
2	349	0.97							
2	399	0.87							
2	449	0.76							
2	499	0.59							
2	598	0.24							
2	698	0.02							
2	897	-0.22							
2	997	-0.30							
2	1196	-0.40							
2	1496	-0.54							

AR CRUISE AR2 STATION 178 - OBSERVED VALUES

DATE	22/09/64	BAROMETER	04.1	WEATHER	X3	WIND VELOC	11	WAVE PERIOD
HOUR	19.5	TEMP DRY	-10.4	VISIBILITY	6	WIND DIREC	16	SECCHI
LAT	86-02.6N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	22-14. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	19.5, 23.7							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.68						
1	25	-1.68						
1	50	-1.69						
1	60	-1.65						
1	70	-1.60						
1	80	-1.58						
1	90	-1.57						
1	100	-1.58						
1	110	-1.55						
1	120	-1.51						
1	150	-1.19						
1	174	-0.60						
1	199	-0.17						
2	249	0.51						
2	299	0.94						
2	349	0.88						
2	399	0.84						
2	449	0.77						
2	499	0.60						
2	598	0.25						
2	698	0.03						
2	897	-0.21						
2	997	-0.29						
2	1196	-0.41						
2	1496	-0.52						

AR CRUISE AR2

STATION 179

OBSERVED VALUES

DATE 24/09/64

BAROMETER 07.1

WEATHER

X7

WIND VELOC

18

HOUR 00.9

TEMP DRY -11.2

VISIBILITY

4

WIND DIREC

28

LAT 86-02.8N

TEMP WET

CLOUD TYPE

7

WAVE DIREC

WAVE PERIOD

LONG 22-23. W

REL HUMID

CLOUD AMT

8

WAVE HEIGHT

SECCHI

WATER COLOR

MESSENGER TIMES: 00.9, 01.9

02, 03

SOUNDING 3796

WIRE ANGLES:

CST DEPTH TEMP SAL SIGMA-T

***** OXYGEN *****

ML/L MGA/L ADU SATN

1	5	-1.68
1	25	-1.68
1	50	-1.69
1	60	-1.67

1	70	-1.62
1	80	-1.58
1	90	-1.58
1	100	-1.57

1	110	-1.55
1	120	-1.53
1	150	-1.19
1	174	-0.61

1	199	-0.15
2	249	0.55
2	299	0.76
2	349	0.87

2	399	0.86
2	449	0.76
2	499	0.59
2	598	0.24

2	698	0.05
2	897	-0.20
2	997	-0.29
2	1196	-0.40

2	1496	-0.53
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AR CRUISE AR2 STATION 180 - OBSERVED VALUES

DATE 25/09/64	BAROMETER 18.0	WEATHER X3	WIND VELOC 18	WAVE PERIOD
HOUR 00.1	TEMP DRY -14.0	VISIBILITY 4	WIND DIREC 29	SECCHI
LAT 86-03.0N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 22-31. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.1, 01.3				
WIRE ANGLES:	00, 04			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.69						
1	50	-1.69						
1	60	-1.69						
1	70	-1.69						
1	80	-1.58						
1	90	-1.58						
1	100	-1.62						
1	110	-1.59						
1	120	-1.56						
1	150	-1.24						
1	174	-0.71						
1	199	-0.28						
2	248	0.55						
2	298	0.76						
2	348	0.91						
2	398	0.86						
2	448	0.78						
2	498	0.61						
2	597	0.27						
2	696	0.06						
2	895	-0.20						
2	995	-0.27						
2	1194	-0.41						
2	1493	-0.53						

AR CRUISE AR2 STATION 181 OBSERVED VALUES

DATE 26/09/64 BAROMETER 18.0 WEATHER X4 WIND VELOC 03 WAVE PERIOD
 HOUR 00.2 TEMP DRY -16.6 VISIBILITY 6 WIND DIREC 27 SECCHI
 LAT 86-01.4N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 22-46.0W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3833
 MESSENGER TIMES: 00, 01, 02, 03
 WIRE ANGLES: 00, 01, 02, 03

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	ADU	SATN		
1	5	-1.69	31.536	25.39	8.84	0.790	-0.036	105	1.06	12
1	10	-1.69	31.527	25.38	8.85	0.790	-0.037	105	1.06	12
1	25	-1.69	31.527	25.38	8.81	0.787	-0.033	104	1.20	11
1	40	-1.69	31.563	25.41	8.80	0.786	-0.033	104	1.06	12
1	50	-1.68	31.627	25.46	8.73	0.780	-0.027	104	1.15	12
1	60	-1.68	31.897	25.68	8.41	0.751	0.000	100	1.24	14
1	70	-1.67	32.321	26.02	7.84	0.700	0.049	94	1.38	15
1	80	-1.58	32.872	26.47					1.29	20
1	90	-1.58	33.305	26.82	6.97	0.623	0.119	84	1.15	18
1	100	-1.60	33.603	27.06	7.07	0.631	0.109	85	1.02	16
1	110	-1.61	33.802	27.22	7.30	0.652	0.087	88	0.89	12
2	120	-1.59	34.027	27.40	7.07	0.631	0.106	86	0.94	10
2	149	-1.27	34.280	27.60	6.99	0.624	0.106	86	0.98	10
2	174	-0.82	34.388	27.67	6.93	0.619	0.101	86	0.98	10
2	199	-0.31	34.506	27.74	6.90	0.616	0.093	87	0.94	10
2	249	0.53	34.731	27.88	6.82	0.609	0.083	88	0.94	11
2	299	0.76	34.839	27.95	6.78	0.606	0.082	88	1.06	12
2	349	0.86	34.894	27.99	6.82	0.609	0.076	89	0.98	11
2	398	0.86	34.867	27.97	6.83	0.610	0.076	89	0.98	11
2	448	0.75	34.894	28.00	6.87	0.614	0.074	89	1.06	10
2	498	0.57	34.876	27.99	6.86	0.613	0.078	89	1.06	10
3	598	0.26	34.894	28.03	6.89	0.615	0.081	88	1.06	10
3	697	0.04	34.894	28.04	6.93	0.619	0.082	88	0.98	11
3	797	-0.09	34.885	28.04	6.92	0.618	0.085	88	1.02	10
3	896	-0.20	34.867	28.03	6.94	0.620	0.086	88	1.06	10
3	996	-0.30	34.921	28.08	6.91	0.617	0.090	87	0.98	10
3	1096	-0.34	34.930	28.09	6.91	0.617	0.091	87	1.06	10
3	1195	-0.40	34.930	28.09	6.91	0.617	0.092	87	1.15	10

(CONTINUED)

		AR CRUISE AR2		STATION 181 - OBSERVED VALUES						(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL	
					ML/L	MGA/L	AOU	SATN			
3	1295	-0.45	34.912	28.08	6.90	0.616	0.094	87	1.06	10	
3	1494	-0.52	34.939	28.10	6.83	0.610	0.101	86	1.11	13	

		AR CRUISE AR2		STATION 181 INTERPOLATED AND COMPUTED VALUES							
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.69	0.00	31.536	0.000	25.39	259.8	0.000	0.00	8.84	0.00	
10	-1.69	0.00	31.527	0.000	25.38	260.4	0.027	0.01	8.85	0.00	
20	-1.69	0.00	31.523	0.000	25.38	260.6	0.053	0.05	8.83	0.01	0.92
30	-1.69	0.00	31.533	0.001	25.39	259.7	0.079	0.12	8.81	0.01	0.72
50	-1.68	0.00	31.627	0.000	25.46	252.3	0.131	0.33	8.73	0.00	
75	-1.62	0.01	32.596	0.010	26.24	177.7	0.185	0.67	7.54	0.03	0.94
100	-1.60	0.00	33.603	0.000	27.06	100.3	0.220	0.97	7.07	0.00	
150	-1.25	0.00	34.285	0.001	27.60	48.9	0.257	1.42	6.99	0.00	0.94
200	-0.29	0.00	34.511	0.000	27.75	35.6	0.279	1.79	6.90	0.00	0.99
250	0.54	0.00	34.734	0.000	27.88	23.4	0.294	2.13	6.82	0.00	0.97
300	0.76	0.00	34.841	0.000	27.95	16.9	0.304	2.41	6.78	0.00	0.97
400	0.86	0.00	34.868	0.001	27.97	15.7	0.320	3.00	6.83	0.00	0.94
500	0.56	0.00	34.876	0.000	27.99	13.1	0.335	3.66	6.86	0.00	0.99
600	0.25	0.00	34.894	0.000	28.03	9.7	0.346	4.31	6.89	0.00	0.97
700	0.04	0.00	34.894	0.000	28.04	8.2	0.355	4.91	6.93	0.00	0.96
800	-0.09	0.00	34.884	0.000	28.04	8.0	0.364	5.54	6.92	0.00	0.96
1000	-0.30	0.00	34.922	0.000	28.08	3.6	0.375	6.59	6.91	0.00	0.94
1200	-0.40	0.00	34.929	0.000	28.09	2.1	0.381	7.22	6.91	0.00	0.94

AR CRUISE AR2 STATION 182 OBSERVED VALUES

DATE 27/09/64 BAROMETER 04.1 WEATHER X7 WIND VELOC 07 WAVE PERIOD
 HOUR 00.5 TEMP DRY -13.4 VISIBILITY 6 WIND DIREC 32 SECCHI
 LAT 85-59.9N TEMP WET CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 23-02. W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 3833
 MESSENGER TIMES: 00.5, 01.4
 WIRE ANGLES: 00, 02

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.69			
1	25	-1.68			
1	50	-1.69			
1	60	-1.68			
1	70	-1.65			
1	80	-1.60			
1	90	-1.56			
1	100	-1.60			
1	110	-1.57			
1	120	-1.58			
1	149	-1.29			
1	174	-0.78			
1	199	-0.33			
2	249	0.56			
2	299	0.76			
2	349	0.92			
2	398	0.86			
2	448	0.78			
2	498	0.57			
2	598	0.25			
2	697	0.03			
2	896	-0.22			
2	996	-0.31			
2	1195	-0.42			
2	1494	-0.54			

AR CRUISE AR2 STATION 183 - OBSERVED VALUES

DATE 28/09/64	BAROMETER 04.7	WEATHER X2	WIND VELOC 01	WAVE PERIOD
HOUR 00.6	TEMP DRY -15.6	VISIBILITY 6	WIND DIREC 35	SECCHI
LAT 85-58.3N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 23-18. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3841
MESSENGER TIMES: 00.6, 01.5				
WTRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.57						
1	25	-1.69						
1	50	-1.69						
1	60	-1.67						
1	70	-1.66						
1	80	-1.59						
1	90	-1.56						
1	100	-1.60						
1	110	-1.58						
1	120	-1.56						
1	149	-1.27						
1	174	-0.81						
1	199	-0.25						
2	249	0.54						
2	299	0.74						
2	349	0.90						
2	398	0.84						
2	448	0.78						
2	498	0.60						
2	598	0.28						
2	697	0.03						
2	896	-0.21						
2	996	-0.29						
2	1195	-0.42						
2	1494	-0.51						

AR CRUISE AR2 STATION 184 OBSERVED VALUES

DATE 29/09/64	BAROMETER 04.7	WEATHER X2	WIND VELOC 07	WAVE PERIOD
HOUR 00.9	TEMP DRY -15.6	VISIBILITY 6	WIND DIREC 03	SECCHI
LAT 85-56.8N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 23-35. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3818
MESSENGER TIMES: 00.9, 01.9				
WIRE ANGLES: 00, 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.70			
1	25	-1.70			
1	50	-1.70			
1	60	-1.69			
1	70	-1.66			
1	80	-1.60			
1	90	-1.57			
1	100	-1.60			
1	110	-1.59			
1	120	-1.56			
1	149	-1.33			
1	174	-0.74			
1	199	-0.34			
2	249	0.48			
2	299	0.75			
2	349	0.89			
2	398	0.84			
2	448	0.74			
2	498	0.57			
2	598	0.22			
2	697	0.03			
2	896	-0.23			
2	996	-0.31			
2	1195	-0.42			
2	1494	-0.52			

AR CRUISE AR2 STATION 185 - OBSERVED VALUES

DATE 30/09/64	BAROMETER 01.0	WEATHER X3	WIND VELOC 12	WAVE PERIOD
HOOR 00.2	TEMP DRY -18.6	VISIBILITY 6	WIND DIREC 06	SECCHI
LAT 85-55.3N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 23-50. W	REL HUMID	CLOUD AMT 7	WAVE HEIGHT	SOUNDING 3796
MESSENGER TIMES: 00.2, 01.3, 02.2				
WIRE ANGLES: 00.0, 04.0, 03.0				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.71						
1	50	-1.72						
1	60	-1.68						
1	70	-1.68						
1	80	-1.63						
1	90	-1.59						
1	100	-1.58						
1	110	-1.58						
1	120	-1.56						
1	149	-1.34						
1	174	-0.80						
1	199	-0.35						
3	249	0.40						
3	299	0.75						
3	349	0.88						
3	398	0.81						
3	448	0.70						
3	498	0.56						
2	598	0.21						
2	697	-0.01						
2	896	-0.25						
2	996	-0.31						
2	1195	-0.42						
2	1494	-0.54						

AR CRUISE AR2 STATION 184 OBSERVED VALUES

DATE 29/09/64	BAROMETER 04.7	WEATHER X2	WIND VELOC 07	WAVE PERIOD
HOUR 00.9	TEMP DRY -15.6	VISIBILITY 6	WIND DIREC 03	SECCHI
LAT 85-56.8N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 23-35. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3818
MESSENGER TIMES: 00.9, 01.9				
WIRE ANGLES: 00, 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.70			
1	25	-1.70			
1	50	-1.70			
1	60	-1.69			
1	70	-1.66			
1	80	-1.60			
1	90	-1.57			
1	100	-1.60			
1	110	-1.59			
1	120	-1.56			
1	149	-1.33			
1	174	-0.74			
1	199	-0.34			
2	249	0.48			
2	299	0.75			
2	349	0.89			
2	398	0.84			
2	448	0.74			
2	498	0.57			
2	598	0.22			
2	697	0.03			
2	896	-0.23			
2	996	-0.31			
2	1195	-0.42			
2	1494	-0.52			

AR CRUISE AR2 STATION 185 - OBSERVED VALUES

DATE 30/09/64	BAROMETER 01.0	WEATHER X3	WIND VELOC 12	WAVE PERIOD
HOUR 00.2	TEMP DRY -18.6	VISIBILITY 6	WIND DIREC 06	SECCHI
LAT 85-55.3N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 23-50.3W	REL HUMID	CLOUD AMT 7	WAVE HEIGHT	SOUNDING 3796
MESSENGER TIMES: 00.2, 01.3, 02.2				
WIRE ANGLES: 00, 04, 03				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.71						
1	50	-1.72						
1	60	-1.68						
1	70	-1.68						
1	80	-1.63						
1	90	-1.59						
1	100	-1.58						
1	110	-1.58						
1	120	-1.56						
1	149	-1.34						
1	174	-0.80						
1	199	-0.35						
3	249	0.40						
3	299	0.75						
3	349	0.88						
3	398	0.81						
3	448	0.70						
3	498	0.56						
2	598	0.21						
2	697	-0.01						
2	896	-0.25						
2	996	-0.31						
2	1195	-0.42						
2	1494	-0.54						

AR CRUISE AR2 STATION 186 OBSERVED VALUES

DATE 01/10/64	BAROMETER 57.0	WEATHER X7	WIND VELOC 11	WAVE PERIOD
HOUR 00.4	TEMP DRY -15.8	VISIBILITY 5	WIND DIREC 36	SECCHI
LAT 85-53.2N	TEMP WET	CLOUD TYPF X	WAVE DIREC	WATER COLOR
LONG 24-11. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.4, 01.5				
WIRE ANGLFS: 00, 05				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.70			
1	25	-1.70			
1	50	-1.70			
1	60	-1.68			
1	70	-1.68			
1	80	-1.66			
1	90	-1.59			
1	100	-1.58			
1	110	-1.57			
1	120	-1.56			
1	149	-1.39			
1	174	-0.96			
1	199	-0.62			
2	248	0.09			
2	298	0.54			
2	348	0.73			
2	397	0.62			
2	447	0.46			
2	497	0.31			
2	596	0.06			
2	695	-0.10			
2	894	-0.24			
2	994	-0.34			
2	1192	-0.43			
2	1490	-0.53			

AR CRUISE AR2 STATION 187 - OBSERVED VALUES

DATE	01/10/64	BAROMETER	75.0	WEATHER	X4	WIND VELOC	13	WAVE PERIOD	
HOUR	23.8	TEMP DRY	-21.7	VISIBILITY	6	WIND DIREC	27	SECCHI	
LAT	85-50.3N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR	
LONG	24-33. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING	3711
MESSENGER TIMES:	23.8, 00.9, 01.8								
WIRE ANGLES:	01, 04								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	APU	SATN
1	5	-1.69						
1	25	-1.69						
1	50	-1.71						
1	60	-1.71						
1	70	-1.68						
1	80	-1.67						
1	90	-1.57						
1	100	-1.58						
1	110	-1.59						
1	120	-1.60						
1	149	-1.30						
1	174	-0.95						
2	199	-0.40						
2	249	0.42						
2	299	0.75						
2	349	0.87						
2	398	0.89						
2	448	0.76						
2	498	0.61						
2	598	0.26						
2	697	0.07						
3	896	-0.20						
3	996	-0.28						
3	1195	-0.39						
3	1494	-0.52						

AR CRUISE AR2 STATION 188 OBSERVED VALUES

DATE	03/10/64	BAROMETER	04.5	WEATHER	X7	WIND VELOC	16	WAVE PERIOD
HOUR	00.4	TEMP DRY	-15.6	VISIBILITY	4	WIND DIREC	30	SECCHI
LAT	85-44.7N	TEMP WET		CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	25-00. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.4, 01.6							
WIRE ANGLES:	02, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.70						
1	50	-1.73						
1	60	-1.70						
1	70	-1.69						
1	80	-1.62						
1	90	-1.55						
1	100	-1.57						
1	110	-1.57						
1	120	-1.55						
1	149	-1.31						
1	174	-0.90						
1	199	-0.38						
2	249	0.56						
2	299	0.79						
2	349	0.82						
2	398	0.91						
2	448	0.84						
2	498	0.72						
2	598	0.34						
2	697	0.10						
2	896	-0.17						
2	996	-0.26						
2	1195	-0.37						
2	1494	-0.51						

AR CRUISE AR2 STATION 189 - OBSERVED VALUES

DATE	04/10/64	BAROMETER	03.1	WEATHER	X2	WIND VELOC	11	WAVE PERIOD
HOUR	00.1	TEMP DRY	-14.2	VISIBILITY	4	WIND DIREC	32	SECCHI
LAT	85-39.5N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	25-01. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 00.1, 01.2							
WIRE	ANGLES: 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.60						
1	25	-1.70						
1	50	-1.71						
1	60	-1.68						
1	70	-1.66						
1	80	-1.59						
1	90	-1.55						
1	100	-1.57						
1	110	-1.55						
1	120	-1.51						
1	149	-1.21						
1	174	-0.72						
1	199	-0.26						
2	249	0.53						
2	299	0.84						
2	349	0.91						
2	398	0.90						
2	448	0.79						
2	498	0.61						
2	598	0.31						
2	697	0.09						
2	896	-0.16						
2	996	-0.24						
2	1195	-0.34						
2	1494	-0.46						

AR CRUISE AR2 STATION 190 OBSERVED VALUES

DATE 05/10/64	BAROMETER 01.8	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HOUR 00.4	TEMP DRY -12.6	VISIBILITY 6	WIND DIREC 02	SECCHI
LAT 85-37.2N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 25-50. W	RFL HUMID	CLOUD AMT 5	WAVE HEIGHT	SOUNDING 3070
MESSENGER TIMES: 00.4, 01.3				
WIRE ANGLES: 01, 02				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	
					ML/L MGA/L	AOU SATN
1	5	-1.71				
1	25	-1.71				
1	50	-1.71				
1	60	-1.69				
1	70	-1.63				
1	80	-1.56				
1	90	-1.53				
1	100	-1.53				
1	110	-1.48				
1	119	-1.48				
1	149	-1.08				
1	174	-0.68				
1	199	-0.22				
2	249	0.40				
2	299	0.71				
2	348	0.79				
2	398	0.59				
2	448	0.56				
2	498	0.51				
2	597	0.28				
2	697	0.14				
2	896	-0.09				
2	995	-0.18				
2	1194	-0.29				
2	1493	-0.43				

AR CRUISE AR2 STATION 191 - OBSERVED VALUES

DATE 05/10/64 BAROMETER 10.9 WEATHER WIND VELOC 06
 HOUR 23.6 TEMP DRY 14.4 VISIBILITY 7 WIND DIREC 03 WAVE PERIOD
 LAT 85-35.3N TEMP WET CLOUD TYPE 7 WAVE DIREC SECCHI
 LONG 26-54. W RFL HUMID CLOUD AMT 8 WAVE HEIGHT WATER COLOR
 MESSENGER TIMES: 23.6, 00.4, 01.4 SOUNDING 2538
 WIRE ANGLES: 00, 00, 02

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.72	31.618	25.45	8.77	0.783	-0.029	104	0.85	9
1	10	-1.73	31.618	25.45	8.73	0.780	-0.026	103	1.11	9
1	25	-1.73	31.618	25.45	8.78	0.784	-0.030	104	1.06	8
1	40	-1.73	31.636	25.47	8.70	0.777	-0.023	103	0.89	10
1	50	-1.69	31.915	25.69	8.66	0.773	-0.022	103	1.06	10
1	60	-1.67	32.132	25.87	8.17	0.730	0.020	97	0.89	12
1	70	-1.60	32.574	26.23	7.20	0.643	0.103	86	1.06	20
1	80	-1.55	33.025	26.59	6.80	0.607	0.135	82		
1	90	-1.53	33.513	26.99	6.71	0.599	0.140	81	0.98	14
1	100	-1.52	33.729	27.16	6.86	0.613	0.125	83	0.89	12
2	110	-1.39	34.054	27.42	6.59	0.589	0.145	80	0.98	14
2	119	-1.31	34.406	27.70	6.72	0.600	0.130	82	0.94	14
2	149	-0.91	34.533	27.79	6.76	0.604	0.118	84	0.98	11
2	174	-0.57	34.569	27.81	6.74	0.602	0.112	84	0.94	9
2	199	-0.24	34.767	27.95	6.66	0.595	0.112	84		
2	249	0.32	34.854	27.99	6.66	0.595	0.101	85	0.98	9
2	299	0.68	34.867	27.98	6.73	0.601	0.088	87	1.06	9
2	348	0.70	34.867	27.98	6.72	0.600	0.088	87	1.06	9
2	398	0.59	34.867	27.99	6.73	0.601	0.090	87	0.80	10
2	448	0.59	34.867	27.99	6.84	0.611	0.080	88	0.75	10
2	498	0.53	34.885	28.00	6.82	0.609	0.083	88	0.75	10
3	597	0.29	34.857	28.00	6.80	0.607	0.089	87		
3	697	0.12	34.867	28.01	6.77	0.605	0.095	86	1.02	9
3	796	0.01	34.857	28.01	6.83	0.610	0.092	87	0.98	10
3	896	-0.11	34.867	28.02	6.84	0.611	0.093	87	0.98	9
3	995	-0.17			6.81	0.608			0.98	12
3	1095	-0.25	34.876	28.04	6.84	0.611	0.096	86	1.11	11
3	1194	-0.29	34.848	28.02	6.82	0.609	0.098	86	1.50	10

(CONTINUED)

		AR CRUISE AR2		STATION 191		OBSERVED VALUES				(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** ML/L	OXYGEN MGA/L	***** ADU	SATN	PHOS	SIL	
3	1294	-0.32	34.867	28.04	6.79	0.606	0.102	86	0.98	11	
3	1493	-0.40	34.867	28.04	6.76	0.604	0.106	85	1.11	12	

		AR CRUISE AR2		STATION 191		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.72	0.00	31.618	0.000	25.45	253.4	0.000	0.00	8.77	0.00	
10	-1.73	0.00	31.618	0.000	25.45	253.3	0.026	0.01	8.73	0.00	
20	-1.73	0.00	31.617	0.001	25.45	253.3	0.052	0.05	8.76	0.01	0.92
30	-1.73	0.00	31.596	0.017	25.44	254.8	0.077	0.12	8.76	0.01	0.72
50	-1.69	0.00	31.915	0.000	25.69	230.1	0.126	0.32	8.66	0.00	
75	-1.57	0.00	32.797	0.001	26.41	162.4	0.175	0.62	6.94	0.01	0.64
100	-1.52	0.00	33.729	0.000	27.16	90.8	0.207	0.90	6.86	0.00	
150	-0.90	0.00	34.533	0.001	27.79	31.3	0.238	1.25	6.76	0.00	0.94
200	-0.23	0.00	34.771	0.001	27.95	16.2	0.250	1.46	6.66	0.00	0.99
250	0.33	0.00	34.855	0.000	27.99	13.0	0.257	1.63	6.66	0.00	0.97
300	0.68	0.00	34.867	0.000	27.98	14.3	0.264	1.82	6.73	0.00	0.97
400	0.59	0.00	34.867	0.000	27.99	13.9	0.278	2.33	6.73	0.00	0.94
500	0.53	0.00	34.885	0.000	28.00	12.2	0.292	2.94	6.82	0.00	0.99
600	0.28	0.00	34.857	0.000	28.00	12.7	0.304	3.65	6.80	0.00	0.96
700	0.12	0.00	34.867	0.000	28.01	10.8	0.316	4.44	6.77	0.00	0.96
800	0.00	0.00	34.857	0.000	28.01	10.7	0.327	5.28	6.83	0.00	0.95
1000	-0.17	0.00	34.878	0.003	28.04	7.8	0.346	6.99	6.81	0.00	0.94
1200	-0.29	0.00	34.849	0.001	28.02	8.9	0.363	8.92	6.82	0.00	0.92

AR CRUISE AR2 STATION 192 - OBSERVED VALUES

DATE	07/10/64	BAROMETER	06.5	WEATHER	X7	WIND VELOC	15	WAVE PERIOD
HOUR	00.1	TEMP DRY	-08.0	VISIBILITY	5	WIND DIREC	12	SECCHI
LAT	85-33.2N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	26-58. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 00.1, 01.2, 02.0							
WIRE ANGLES:		00, 00, 00						

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	25	-1.70						
1	50	-1.71						
1	60	-1.67						
1	70	-1.58						
1	80	-1.54						
1	90	-1.52						
1	100	-1.52						
1	110	-1.48						
1	119	-1.34						
1	149	-0.92						
1	174	-0.60						
1	199	-0.27						
2	249	0.28						
2	299	0.59						
2	348	0.59						
2	398	0.56						
2	448	0.55						
2	498	0.47						
2	597	0.30						
2	697	0.15						
3	896	-0.08						
3	995	-0.18						
3	1194	-0.30						
3	1493	-0.42						

AR CRUISE AR2 STATION 193 OBSERVED VALUES

DATE 08/10/64	BAROMETER 09.6	WEATHER X7	WIND VELOC 12	WAVE PERIOD
HR 00.7	TEMP DRY 16.2	VISIBILITY 5	WIND DIREC 28	SECCHI
LAT 85-33.2N	TEMP WET	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 26-56.0W	RFL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 2649
MESSENGER TIMES: 00.7, 01.7				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	5	-1.71			
1	25	-1.71			
1	50	-1.71			
1	60	-1.68			
1	70	-1.60			
1	80	-1.53			
1	90	-1.53			
1	100	-1.51			
1	110	-1.49			
1	119	-1.37			
1	149	-0.96			
1	174	-0.59			
1	199	-0.28			
2	249	0.28			
2	299	0.62			
2	348	0.65			
2	398	0.53			
2	448	0.54			
2	498	0.51			
2	597	0.27			
2	796	0.03			
2	896	-0.07			
2	995	-0.19			
2	1194	-0.29			
2	1493	-0.45			

AR CRUISE AR2 STATION 194 - OBSERVED VALUES

DATE 09/10/64	BAROMETER 20.5	WEATHER X4	WIND VELOC 08	WAVE PERIOD
HOUR 00.1	TEMP DRY -19.9	VISIBILITY 4	WIND DIREC 23	SECCHI
LAT 85-32.9N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 26-50. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 2634
MESSENGER TIMES: 00.1, 01.2				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.67						
1	25	-1.70						
1	50	-1.70						
1	60	-1.68						
1	70	-1.60						
1	80	-1.55						
1	90	-1.52						
1	100	-1.49						
1	110	-1.40						
1	119	-1.34						
1	149	-0.93						
1	174	-0.59						
1	199	-0.28						
2	249	0.30						
2	299	0.61						
2	348	0.67						
2	398	0.55						
2	448	0.55						
2	498	0.52						
2	597	0.29						
2	697	0.15						
2	896	-0.09						
2	995	-0.17						
2	1194	-0.30						
2	1493	-0.41						

AR CRUISE AR2

STATION 195

OBSERVED VALUES

DATE 10/10/64

HOUR 01.0

LAT 85-32.2N

LONG 26-42.0 W

MESSENGER TIMES: 01.0, 02.0

WIRE ANGLES:

BAROMETER 27.3

TEMP DRY -19.3

TEMP WET

REL HUMID

00, 00

00, 00

WEATHER

VISIBILITY

CLOUD TYPE

CLOUD AMT

X2

6

7

8

WIND VELOC 06

WIND DIREC 27

WAVE DIREC

WAVE HEIGHT

WAVE PERIOD

SECCHI

WATER COLOR

SOUNDING 2501

CST DEPTH TEMP

SAL SIGMA-T

***** OXYGEN *****

ML/L MGA/L ADU SATN

1 5 -1.66

1 25 -1.73

1 50 -1.72

1 60 -1.68

1 70 -1.60

1 80 -1.54

1 90 -1.54

1 100 -1.46

1 110 -1.39

1 119 -1.33

1 149 -0.97

1 174 -0.57

1 199 -0.26

2 249 0.30

2 299 0.60

2 348 0.68

2 398 0.53

2 448 0.53

2 498 0.49

2 597 0.29

2 796 0.03

2 896 -0.10

2 995 -0.17

2 1194 -0.30

2 1493 -0.42

AR CRUISE AR2 STATION 196 - OBSERVED VALUES

DATE	11/10/64	BAROMETER	23.9	WEATHER	X4	WIND VELOC	07	WAVE PERIOD
HOUR	00.2	TEMP DRY	-20.8	VISIBILITY	4	WIND DIREC	23	SECCHI
LAT	85-32.6N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	26-34. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 2353
MESSENGER TIMES:	00.2, 01.5							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.65						
1	25	-1.72						
1	50	-1.70						
1	60	-1.68						
1	70	-1.61						
1	80	-1.55						
1	90	-1.54						
1	100	-1.47						
1	110	-1.39						
1	119	-1.32						
1	149	-0.92						
1	174	-0.60						
2	199	-0.25						
2	249	0.30						
2	299	0.60						
2	348	0.59						
2	398	0.52						
2	448	0.52						
2	498	0.47						
2	597	0.29						
2	697	0.15						
2	896	-0.08						
2	995	-0.18						
2	1194	-0.31						
2	1493	-0.42						

AR CRUISE AR2

STATION 197

OBSERVED VALUES

DATE 12/10/64
 HOUR 00.3
 LAT 85-32.5N
 LONG 26-04. W
 MESSENGER TIMES: 00.3, 01.4
 WIRE ANGLES: 00, 01

BAROMETER 27.0
 TEMP DRY -17.8
 TEMP WET
 REL HUMID

WEATHER X7
 VISIBILITY 6
 CLOUD TYPE 6
 CLOUD AMT 4

WIND VELOC 15
 WIND DIREC 27
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 2146

CST DEPTH TEMP SAL SIGMA-T

***** OXYGEN *****
 ML/L MGA/L AOU SATN

1	5	-1.72
1	25	-1.72
1	50	-1.72
1	60	-1.67
1	70	-1.61
1	80	-1.55
1	90	-1.53
1	100	-1.52
1	110	-1.46
1	119	-1.31
1	149	-0.94
1	174	-0.57
1	199	-0.27
2	249	0.31
2	299	0.55
2	348	0.60
2	398	0.56
2	448	0.55
2	498	0.52
2	597	0.31
2	796	-0.04
2	896	-0.06
2	995	-0.15
2	1194	-0.28
2	1493	-0.42

AR CRUISE AR2 STATION 198 - OBSERVED VALUES

DATE	12/10/64	BAROMETER	15.9	WEATHER	X3	WIND VELOC	13	WAVE PERIOD
HOUR	23.9	TEMP DRY	-22.8	VISIBILITY	5	WIND DIREC	11	SECCHI
LAT	85-30.7N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	25-49. W	REL HUMID		CLOUD AMT	2	WAVE HEIGHT		SOUNDING 2131
MESSENGER	TIMES: 23.9, 01.0, 02.0							
WIRE	ANGLES: 00, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.72						
1	25	-1.72						
1	50	-1.71						
1	60	-1.67						
1	70	-1.61						
1	80	-1.54						
1	90	-1.51						
1	100	-1.49						
1	110	-1.38						
1	119	-1.31						
1	149	-0.94						
1	174	-0.62						
1	199	-0.20						
3	248	0.26						
3	297	0.58						
3	346	0.62						
3	396	0.58						
3	446	0.55						
3	495	0.52						
2	594	0.32						
2	792	0.03						
2	891	-0.06						
2	989	-0.15						
2	1187	-0.29						
2	1484	-0.40						

AR CRUISE AR2 STATION 199 OBSERVED VALUES

DATE 14/10/64	BAROMETER 46.0	WEATHER X2	WIND VELOC 11	WAVE PERIOD
HOUR 00.2	TEMP DRY -15.6	VISIBILITY 6	WIND DIREC 14	SECCHI
LAT 85-33.5N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 26-24. W	RFL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 2875
MESSENGER TIMES: 00, 01, 02, 03				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.71			
1	25	-1.73			
1	50	-1.70			
1	60	-1.67			
1	70	-1.63			
1	80	-1.56			
1	89	-1.52			
1	99	-1.52			
1	109	-1.40			
1	119	-1.37			
1	149	-1.03			
1	174	-0.62			
1	199	-0.27			
2	248	0.32			
2	298	0.71			
2	348	0.63			
2	398	0.59			
2	447	0.56			
2	497	0.53			
2	596	0.30			
2	795	0.04			
2	895	-0.09			
2	994	-0.17			
2	1193	-0.29			
2	1491	-0.42			

AR CRUISE AR2 STATION 200 OBSERVED VALUES

DATE	15/10/64	BAROMETER	87.0	WEATHER	X3	WIND VELOC	17	WAVE PERIOD
HOUR	00.0	TEMP DRY	-18.3	VISIBILITY	1	WIND DIREC	28	SECCHI
LAT	85-33.0N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	25-57. W	REL HUMID		CLOUD AMT	X	WAVE HEIGHT		SOUNDING 2486
MESSENGER TIMES:	00.0, 01.0							
WIRE ANGLES:	00, 03							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.70						
1	5	-1.70						
1	25	-1.71						
1	50	-1.71						
1	60	-1.69						
1	70	-1.61						
1	80	-1.56						
1	89	-1.53						
1	99	-1.50						
1	109	-1.44						
1	119	-1.34						
1	149	-0.98						
1	174	-0.58						
1	199	-0.30						
2	248	0.30						
2	298	0.59						
2	348	0.59						
2	398	0.54						
2	447	0.53						
2	497	0.49						
2	596	0.30						
2	795	0.02						
2	895	-0.10						
2	994	-0.16						
2	1193	-0.30						
2	1491	-0.44						

AR CRUISE AR2

STATION 201

OBSERVED VALUES

DATE 16/10/64
 HOUR 00.2
 LAT 85-29.5N
 LONG 25-02. W
 MESSENGER TIMES: 00.2, 01.1, 02.2
 WIRE ANGLES: 00, 00, 00

BAROMETER 12.9
 TEMP DRY -20.3
 TEMP WET
 REL HUMID

WEATHER X1
 VISIBILITY 8
 CLOUD TYPE 6
 CLOUD AMT 3

WIND VELOC 10
 WIND DIREC 24
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	5	-1.70	31.717	25.53	8.84	0.790	-0.037	105	0.90	12
1	10	-1.71	31.735	25.55	8.85	0.790	-0.038	105	1.15	12
1	25	-1.71	31.726	25.54	8.81	0.787	-0.034	104	1.00	11
1	40	-1.71	31.789	25.59					1.15	12
1	50	-1.69	31.933	25.71	8.60	0.768	-0.017	102	1.10	12
1	60	-1.67	32.087	25.83	8.27	0.739	0.012	98	1.20	14
1	70	-1.64	32.439	26.12	7.69	0.687	0.061	92	1.28	17
1	80	-1.55	32.998	26.57	6.73	0.601	0.142	81	2.10	18
1	90	-1.54	33.395	26.89	6.65	0.594	0.146	80	0.95	20
1	99	-1.48	33.747	27.17	6.67	0.596	0.141	81	1.05	16
1	109	-1.41	34.018	27.39	6.62	0.591	0.143	81	1.20	14
2	119	-1.35	34.108	27.46	6.74	0.602	0.130	82	1.20	14
2	149	-1.01	34.334	27.63	6.80	0.607	0.117	84	1.15	10
2	174	-0.63	34.478	27.74	6.81	0.608	0.108	85	0.90	10
2	199	-0.24	34.623	27.83	6.76	0.604	0.104	85	1.10	8
2	249	0.28	34.758	27.92	6.65	0.594	0.103	85	1.15	10
2	299	0.57	34.857	27.98	6.73	0.601	0.090	87	1.05	10
2	348	0.58	34.857	27.98	6.71	0.599	0.092	87	1.15	9
2	398	0.58	34.885	28.00	6.71	0.599	0.091	87	1.10	10
2	448	0.50	34.894	28.01	6.71	0.599	0.093	87	1.15	9
3	497	0.48	34.894	28.01	6.74	0.602	0.091	87	1.15	10
3	596	0.30	34.912	28.04	6.78	0.606	0.090	87	2.20	13
3	696	0.11	34.921	28.06	6.81	0.608	0.091	87	1.20	12
3	795	0.03	34.930	28.07	6.80	0.607	0.094	87	1.25	10
3	895	-0.05	34.921	28.07	6.82	0.609	0.093	87	1.25	12
3	994	-0.17	34.921	28.07	6.79	0.606	0.098	86	1.20	12
3	1093	-0.22	34.957	28.10	6.81	0.608	0.097	86	1.25	12
3	1193	-0.27	34.948	28.10	6.79	0.606	0.100	86	1.35	12

(CONTINUED)

		AR CRUISE AR2		STATION 201		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
3	1292	-0.32	34.936	28.09	6.81	0.608	0.099	86	0.95	12
3	1491	-0.42	34.966	28.12	6.78	0.606	0.104	85	1.15	12

		AR CRUISE AR2		STATION 201		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.70	0.00	31.717	0.000	25.53	245.8	0.000	0.00	8.84	0.00	
10	-1.71	0.00	31.735	0.000	25.55	244.3	0.025	0.01	8.85	0.00	
20	-1.71	0.00	31.730	0.006	25.55	244.6	0.050	0.05	8.83	0.00	0.92
30	-1.71	0.00	31.733	0.004	25.55	244.3	0.074	0.11	8.81	0.02	0.92
50	-1.69	0.00	31.933	0.000	25.71	228.7	0.122	0.31	8.60	0.00	
75	-1.59	0.01	32.716	0.015	26.34	168.6	0.172	0.62	7.18	0.05	0.64
100	-1.47	0.00	33.781	0.001	27.20	87.0	0.204	0.90	6.66	0.00	0.88
150	-1.00	0.00	34.340	0.000	27.64	45.6	0.238	1.30	6.80	0.00	0.94
200	-0.23	0.00	34.627	0.001	27.84	27.1	0.256	1.62	6.76	0.00	0.99
250	0.29	0.00	34.761	0.000	27.92	19.8	0.268	1.88	6.65	0.00	0.97
300	0.57	0.00	34.857	0.000	27.98	14.3	0.277	2.12	6.73	0.00	0.97
400	0.58	0.00	34.886	0.000	28.00	12.4	0.290	2.60	6.71	0.00	0.94
500	0.48	0.00	34.894	0.000	28.01	11.1	0.302	3.15	6.74	0.00	0.99
600	0.29	0.00	34.912	0.000	28.04	8.6	0.312	3.71	6.78	0.00	0.94
700	0.11	0.00	34.922	0.000	28.06	6.6	0.319	4.21	6.81	0.00	0.94
800	0.03	0.00	34.930	0.000	28.07	5.5	0.326	4.68	6.80	0.00	0.93
1000	-0.17	0.00	34.923	0.001	28.07	4.4	0.336	5.60	6.79	0.00	0.92
1200	-0.27	0.00	34.947	0.000	28.10	1.8	0.342	6.28	6.79	0.00	0.91

AR CRUISE AR2

STATION 202

OBSERVED VALUES

DATE 17/10/64

HOUR 00.5

LAT 85-27.5N

LONG 25-08. W

MESSENGER TIMES: 00.5, 01.4

WIRE ANGLES: 01, 02

BAROMETER 18.4

TEMP DRY -21.6

TEMP WET

REL HUMID

01, 02

WEATHER X1

VISIBILITY 7

CLOUD TYPE 2

CLOUD AMT 3

WIND VELOC 08

WIND DIREC 09

WAVE DIREC

WAVE HEIGHT

WAVE PERIOD

SECCHI

WATER COLOR

SOUNDING 2449

CST DEPTH TEMP

SAL SIGMA-T

***** OXYGEN *****

ML/L MGA/L ADU SATN

1 5 -1.71

1 25 -1.71

1 50 -1.71

1 60 -1.71

1 70 -1.62

1 80 -1.55

1 89 -1.54

1 99 -1.49

1 109 -1.43

1 119 -1.33

1 149 -0.96

1 174 -0.59

1 199 -0.29

2 248 0.25

2 298 0.57

2 348 0.61

2 398 0.54

2 447 0.54

2 497 0.49

2 596 0.30

2 795 0.05

2 895 -0.05

2 994 -0.16

2 1193 -0.29

2 1491 -0.42

AR CRUISE AR2 STATION 203 OBSERVED VALUES

DATE	18/10/64	BAROMETER	08.1	WEATHER	X7	WIND VELOC	14	WAVE PERIOD
HOUR	00.1	TEMP DRY	-13.4	VISIBILITY	3	WIND DIREC	06	SECCHI
LAT	85-26.2N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	24-46. W	RFL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 2139
MESSENGER	TIMES: 00.1, 01.0							
WIRE ANGLES:		00,	03					

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.70			
1	25	-1.70			
1	50	-1.71			
1	60	-1.67			
1	70	-1.62			
1	80	-1.55			
1	89	-1.52			
1	99	-1.49			
1	109	-1.41			
1	119	-1.33			
1	149	-0.99			
1	174	-0.62			
1	199	-0.27			
2	248	0.27			
2	298	0.56			
2	348	0.60			
2	398	0.54			
2	447	0.54			
2	497	0.51			
2	596	0.29			
2	795	0.02			
2	895	-0.08			
2	994	-0.17			
2	1193	-0.29			
2	1491	-0.39			

AR CRUISE AR2 STATION 204 OBSERVED VALUES

DATE	18/10/64	BAROMETER	05.2	WEATHER	X2	WIND VELOC	16	WAVE PERIOD
HOUR	23.6	TEMP DRY	-18.8	VISIBILITY	6	WIND DIREC	28	SECCHI
LAT	85-24.9N	TEMP WET		CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	24-24. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.6, 00.5							
WIRF ANGLES:	00, 03							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.70						
1	25	-1.71						
1	50	-1.71						
1	60	-1.68						
1	70	-1.61						
1	79	-1.55						
1	89	-1.54						
1	99	-1.49						
1	109	-1.41						
1	119	-1.32						
1	149	-0.91						
1	174	-0.60						
1	199	-0.31						
2	248	0.27						
2	298	0.58						
2	348	0.60						
2	397	0.58						
2	447	0.56						
2	496	0.56						
2	596	0.30						
2	794	-0.04						
2	894	-0.06						
2	993	-0.16						
2	1192	-0.29						
2	1490	-0.41						

AR CRUISE AR2 STATION 205 OBSERVED VALUES

DATE	20/10/64	BAROMETER	02.9	WEATHER	X3	WIND VELOC	21	WAVE PERIOD
HR	00.7	TEMP DRY	-20.4	VISIBILITY	3	WIND DIREC	26	SECCHI
LAT	85-23.6N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	24-01.0 W	RFL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.7, 01.9							2056
WTRE ANGLES:	03, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		
					ML/L	MGA/L	AOU
1	5	-1.70					
1	25	-1.70					
1	50	-1.71					
1	60	-1.66					
1	70	-1.59					
1	79	-1.55					
1	89	-1.52					
1	99	-1.53					
1	109	-1.50					
1	119	-1.49					
1	149	-1.09					
1	174	-0.70					
1	199	-0.29					
2	246	0.35					
2	296	0.62					
2	346	0.67					
2	394	0.60					
2	444	0.54					
2	493	0.51					
2	592	0.30					
2	789	0.03					
2	888	-0.08					
2	987	-0.19					
2	1184	-0.28					
2	1481	-0.43					

AR CRUISE AR2 STATION 206 OBSERVED VALUES

DATE	21/10/65	BAROMETER	39.0	WEATHER	X3	WIND VELOC	23	WAVE PERIOD
HR	00.3	TEMP DRY	-21.2	VISIBILITY	3	WIND DIREC	26	SECCHI
LAT	85-21.1N	TEMP WET	-21.5	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	23-00. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING 2405
MESSENGER TIMES:	00.3, 01.5							
WTRE ANGLES:	02, 06							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	5	-1.70			
1	25	-1.69			
1	50	-1.69			
1	60	-1.69			
1	70	-1.62			
1	79	-1.54			
1	89	-1.52			
1	99	-1.55			
1	109	-1.55			
1	119	-1.51			
1	149	-1.13			
1	174	-0.73			
1	199	-0.19			
2	245	0.38			
2	294	0.62			
2	344	0.79			
2	392	0.60			
2	441	0.58			
2	490	0.52			
2	589	0.32			
2	785	0.07			
2	884	-0.06			
2	982	-0.12			
2	1180	-0.26			
2	1477	-0.41			

AR CRUISE AR2 STATION 207 OBSERVED VALUES

DATE	21/10/64	BAROMETER	46.0	WEATHER	X3	WIND VELOC	21	WAVE PERIOD	
HOUR	23.9	TEMP DRY	-22.4	VISIBILITY	3	WIND DIREC	25	SECCHI	
LAT	85-18.3N	TEMP WET	-22.5	CLOUD TYPE	6	WAVE DIREC		WATER COLOR	
LONG	20-40. W	REL HUMID		CLOUD AMT	4	WAVE HEIGHT		SOUNDING	2279
MESSENGR	TIMES: 23.9, 00.8, 01.4								
WTRE	ANGLES: 02, 04, 04								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.69						
1	25	-1.69						
1	50	-1.69						
1	60	-1.69						
1	70	-1.63						
1	79	-1.58						
1	89	-1.54						
1	99	-1.54						
1	109	-1.47						
1	119	-1.49						
1	149	-1.21						
1	174	-0.71						
1	199	-0.16						
2	247	0.55						
2	297	0.79						
2	347	0.69						
2	395	0.61						
2	445	0.57						
2	495	0.53						
2	594	0.30						
3	786	0.03						
3	885	-0.08						
3	983	-0.16						
3	1180	-0.33						
3	1478	-0.44						

AR CRUISE AR2 STATION 208 OBSERVED VALUES

DATE	23/10/64	BAROMETER	03.4	WEATHER	X1	WIND VELOC	12	WAVE PERIOD
HOUR	00.2	TEMP DRY	-24.0	VISIBILITY	6	WIND DIREC	23	SECCHI
LAT	85-16.4N	TEMP WET	-24.2	CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	19-07. W	REL HUMID		CLOUD AMT	5	WAVE HEIGHT		SOUNDING 1976
MESSENGER TIMES:	00.2, 01.3, 02.2							
WIRE ANGLES:	01, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	5	-1.70			
1	25	-1.70			
1	50	-1.70			
1	60	-1.65			
1	69	-1.60			
1	79	-1.56			
1	89	-1.54			
1	99	-1.53			
1	109	-1.46			
1	119	-1.41			
1	149	-0.95			
1	174	-0.67			
1	198	-0.27			
2	248	0.45			
2	298	0.74			
2	347	0.75			
2	397	0.70			
2	446	0.60			
2	496	0.58			
2	595	0.34			
2	794	0.02			
2	893	-0.07			
2	992	-0.21			
2	1091	-0.25			
3	1190	-0.30			
3	1488	-0.42			

AR CRUISE AR2 STATION 209 OBSERVED VALUES

DATE 24/10/64	BAROMETER 85.0	WEATHER X3	WIND VELOC 20	WAVE PERIOD
HOUR 00.5	TEMP DRY -31.3	VISIBILITY 3	WIND DIREC 28	SECCHI
LAT 85-12.9N	TEMP WFT -31.5	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 18-05. W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 1404
MESSENGER TIMES: 00.5, 01.5				
WTRE ANGLES: 01, 05				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	5	-1.66						
1	25	-1.68						
1	50	-1.67						
1	60	-1.61						
1	69	-1.57						
1	79	-1.55						
1	89	-1.54						
1	99	-1.52						
1	109	-1.47						
1	119	-1.40						
1	149	-0.83						
1	174	-0.45						
1	198	-0.06						
2	245	0.43						
2	295	0.64						
2	343	0.70						
2	393	0.59						
2	441	0.53						
2	491	0.46						
2	589	0.24						
2	786	0.02						
2	884	-0.10						
2	982	-0.17						
2	1178	-0.31						
2	1404	-0.40						

AR CRUISE AR2 STATION 210 OBSERVED VALUES

DATE 25/10/64	BAROMETER 97.0	WEATHER X1	WIND VELOC 10	WAVE PERIOD
HOUR 00.5	TEMP DRY -29.8	VISIBILITY 7	WIND DIREC 19	SECCHI
LAT 85-10.3N	TEMP WET -30.0	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 16-55. W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING 0910
MESSENGER TIMES: 00.5, 01.5, 02.1				
WIRE ANGLFS:	00, 02, 02			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	8	-1.69			
1	25	-1.70			
1	50	-1.70			
1	60	-1.70			
1	69	-1.60			
1	79	-1.54			
1	89	-1.53			
1	99	-1.46			
1	109	-1.41			
1	119	-1.22			
1	149	-0.78			
1	174	-0.38			
1	198	-0.06			
2	248	0.44			
2	298	0.48			
2	347	0.53			
2	397	0.50			
2	446	0.44			
2	496	0.38			
2	595	0.24			
2	695	0.10			
3	794	-0.02			
3	844	-0.13			

AR CRUISE AR2 STATION 211 OBSERVED VALUES

DATE 26/10/64 BAROMETER 97.0 WEATHER X1 WIND VELOC 09
 HOUR 00.3 TEMP DRY -23.3 VISIBILITY 7 WIND DIREC 22
 LAT 85-10.4N TEMP WET -23.3 CLOUD TYPE 7 WAVE DIREC
 LONG 15-47. W RFL HUMID CLOUD AMT 2 WAVE HEIGHT
 MESSENGER TIMES: 00.3, 01.1, 02.2
 WIRE ANGLES: 00, 02, 04

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 0940

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.68	31.229	25.14	8.91	0.796	-0.041	105	0.75	8
1	10	-1.69	31.238	25.15	8.93	0.798	-0.042	106	0.83	9
1	25	-1.69	31.238	25.15	8.93	0.798	-0.042	106	0.75	10
1	40	-1.69			8.83	0.789			0.75	8
1	50	-1.64	31.997	25.76	8.08	0.722	0.028	96	0.75	12
1	60	-1.57	32.845	26.45	7.03	0.628	0.116	84	1.30	17
1	69	-1.56	33.359	26.86	6.85	0.612	0.129	83	0.88	14
1	79	-1.53	33.675	27.12	6.90	0.616	0.122	83	1.35	12
1	89	-1.49	33.928	27.32	6.90	0.616	0.120	84	0.88	10
1	99	-1.45	34.036	27.41	6.91	0.617	0.118	84	0.83	8
1	109	-1.35	34.199	27.54	6.94	0.620	0.112	85	0.70	9
1	119	-1.23	34.469	27.75	6.92	0.618	0.110	85	0.78	9
2	149	-0.74			6.86	0.613			0.78	8
2	174	-0.32	34.569	27.79	6.79	0.606	0.103	85	0.78	9
2	198	-0.03	34.668	27.86	6.72	0.600	0.103	85	0.88	7
2	248	0.40	34.785	27.93	6.63	0.592	0.103	85	0.88	8
2	288	0.49	34.839	27.97	6.71	0.599	0.093	87	0.88	9
2	347	0.49	34.830	27.96	6.64	0.593	0.100	86	0.88	10
2	397	0.48	34.839	27.97	6.69	0.598	0.095	86	0.70	8
2	446	0.43			6.71	0.599			0.78	8
2	496	0.34	34.867	28.00	6.66	0.595	0.101	86	1.06	9
2	595	0.22	34.848	27.99	6.72	0.600	0.098	86	1.02	10
2	694	0.10	34.839	27.99	6.74	0.602	0.098	86	1.02	10
3	786	-0.03	34.867	28.02	6.78	0.606	0.097	86	0.88	10
3	884	-0.14	34.632	27.84	6.77	0.605	0.101	86	0.78	10

AR CRUISE AR2 STATION 211 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.68	0.00	31.229	0.000	25.14	283.5	0.000	0.00	8.91	0.00	
10	-1.69	0.00	31.238	0.000	25.15	282.6	0.029	0.02	8.93	0.00	
20	-1.69	0.00	31.238#		25.15	282.5	0.057	0.06	8.94	0.00	0.72
30	-1.69	0.00	31.390#		25.27	270.7	0.085	0.13	8.97	0.04	0.72
50	-1.64	0.00	31.997	0.000	25.76	223.9	0.135	0.33	8.08	0.00	
75	-1.54	0.00	33.568	0.008	27.03	103.2	0.176	0.58	6.87	0.01	0.66
100	-1.44	0.00	34.049	0.001	27.42	66.6	0.198	0.76	6.91	0.00	0.87
150	-0.72	0.00	34.533#		27.78	32.0	0.223	1.06	6.86	0.00	0.94
200	-0.01	0.00	34.674	0.000	27.86	24.7	0.237	1.31	6.71	0.00	0.98
250	0.41	0.00	34.789	0.000	27.93	18.4	0.248	1.56	6.63	0.00	0.92
300	0.50	0.00	34.841	0.003	27.97	15.1	0.256	1.79	6.70	0.01	0.83
400	0.48	0.00	34.840	0.000	27.97	15.1	0.272	2.34	6.69	0.00	0.98
500	0.33	0.00	34.867	0.000	28.00	12.3	0.285	2.98	6.66	0.00	0.98
600	0.21	0.00	34.847	0.000	27.99	13.0	0.298	3.70	6.72	0.00	0.93
700	0.09	0.00	34.844	0.003	28.00	12.4	0.311	4.55	6.74	0.00	0.91
800	-0.05	0.00	34.857	0.002	28.01	10.4	0.322	5.43	6.77	0.01	5.04

AR CRUISE AR2 STATION 212 OBSERVED VALUES

DATE	27/10/64	BAROMETER	73.0	WEATHER	X4	WIND VELOC	15	WAVE PERIOD
HOUR	00.0	TEMP DRY	-27.8	VISIBILITY	6	WIND DIREC	25	SECCHI
LAT	85-07.7N	TEMP WET	-27.8	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	14-45. W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING 1006
MESSENGER TIMES:	00, 0, 00, 9							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.68			
1	25	-1.68			
1	50	-1.67			
1	59	-1.59			
1	69	-1.55			
1	79	-1.53			
1	89	-1.51			
1	99	-1.48			
1	109	-1.37			
1	119	-1.25			
1	149	-0.74			
1	173	-0.39			
1	198	-0.02			
2	248	0.38			
2	297	0.49			
2	347	0.51			
2	396	0.47			
2	446	0.44			
2	496	0.36			
2	595	0.22			
2	793	0.03			
2	892	-0.11			
2	991	-0.18			

AR CRUISE AR2 STATION 213 OBSERVED VALUES

DATE 28/10/64	BAROMETER 01.2	WEATHER X0	WIND VELOC 19	WAVE PERIOD
HOUR 00.0	TEMP DRY -26.4	VISIBILITY 6	WIND DIREC 25	SECCHI
LAT 85-04.5N	TEMP WET -26.4	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 13-50. W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 2094
MESSENGER TIMES: 00.0				
WIRE ANGLES: 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.68			
1	25	-1.69			
1	50	-1.66			
1	59	-1.63			
1	69	-1.55			
1	79	-1.54			
1	89	-1.52			
1	99	-1.47			
1	109	-1.38			
1	119	-1.27			
1	149	-0.81			
1	173	-0.47			
1	198	-0.14			

AR CRUISE AR2 STATION 214 OBSERVED VALUES

DATE 29/10/64	BAROMETER 02.6	WEATHER X3	WIND VELOC 22	WAVE PERIOD
HOUR 00.2	TEMP DRY -19.8	VISIBILITY 2	WIND DIREC 28	SECCHI
LAT 84-58.8N	TEMP WET -19.8	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 12-51. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3863
MESSENGER TIMES: 00.2, 01.1, 01.7				
WIRE ANGLES: 02, 05, 05				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.68			
1	25	-1.69			
1	50	-1.70			
1	59	-1.72			
1	69	-1.64			
1	79	-1.58			
1	89	-1.58			
1	99	-1.52			
1	109	-1.46			
1	119	-1.42			
1	149	-0.93			
1	173	-0.51			
1	198	-0.22			
2	247	0.25			
2	296	0.50			
2	346	0.53			
2	394	0.53			
2	444	0.53			
2	494	0.44			
2	593	0.30			
2	790	0.06			
3	887	-0.02			
3	985	-0.14			
3	1182	-0.25			
3	1477	-0.40			

AR CRUISE AR2 STATION 215 OBSERVED VALUES

DATE	29/10/64	BAROMETER	14.8	WEATHER	X1	WIND VELOC	13	WAVE PERIOD
HOUR	23.8	TEMP DRY	-22.2	VISIBILITY	6	WIND DIREC	27	SECCHI
LAT	84-53.4N	TEMP WET	-22.2	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-55. W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 3833
MESSENGER TIMES:	23.8, 00.8							
WTRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.68			
1	25	-1.68			
1	50	-1.68			
1	59	-1.62			
1	69	-1.63			
1	79	-1.56			
1	89	-1.55			
1	99	-1.53			
1	109	-1.48			
1	119	-1.37			
1	149	-0.82			
1	173	-0.49			
1	198	-0.15			
2	248	0.39			
2	297	0.64			
2	347	0.64			
2	396	0.55			
2	446	0.51			
2	496	0.47			
2	595	0.27			
2	793	0.05			
2	892	-0.08			
2	991	-0.15			
2	1189	-0.30			
2	1486	-0.41			

AR CRUISE AR2

STATION 216

OBSERVED VALUES

DATE 30/10/64

BAROMETER 15.8

WEATHER X1

WIND VELOC 06

WAVE PERIOD

HOUR 23.9

TEMP DRY -31.4

VISIBILITY 7

WIND DIREC 32

SECCHI

LAT 84-51.1N

TEMP WFT -31.4

CLOUD TYPE 7

WAVE DIREC

WATER COLOR

LONG 11-31. W

REL HUMID

CLOUD AMT 1

WAVE HEIGHT

SOUNDING 3885

MESSENGER TIMES: 23.9, 01.3

WIRE ANGLES: 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.64						
1	25	-1.68						
1	49	-1.68						
1	59	-1.63						
1	69	-1.61						
1	79	-1.57						
1	89	-1.53						
1	99	-1.50						
1	109	-1.46						
1	119	-1.40						
1	148	-0.92						
1	173	-0.51						
1	198	-0.18						
2	248	0.35						
2	297	0.54						
2	346	0.59						
2	396	0.52						
2	445	0.51						
2	495	0.44						
2	594	0.28						
2	792	0.03						
2	891	-0.06						
2	990	-0.15						
2	1188	-0.30						
2	1485	-0.41						

AR CRUISE AR2 STATION 215 OBSERVED VALUES

DATE	29/10/64	BAROMETER	14.8	WEATHER	X1	WIND VELOC	13	WAVE PERIOD
HOUR	23.8	TEMP DRY	-22.2	VISIBILITY	6	WIND DIREC	27	SECCHI
LAT	84-53.4N	TEMP WET	-22.2	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-55. W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 3833
MESSENGER TIMES:	23.8, 00.8							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.68			
1	25	-1.68			
1	50	-1.68			
1	59	-1.62			
1	69	-1.63			
1	79	-1.56			
1	89	-1.55			
1	99	-1.53			
1	109	-1.48			
1	119	-1.37			
1	149	-0.82			
1	173	-0.49			
1	198	-0.15			
2	248	0.39			
2	297	0.64			
2	347	0.64			
2	396	0.55			
2	446	0.51			
2	496	0.47			
2	595	0.27			
2	793	0.05			
2	892	-0.08			
2	991	-0.15			
2	1189	-0.30			
2	1486	-0.41			

AR CRUISE AR2

STATION 216

OBSERVED VALUES

DATE 30/10/64
 HOUR 23.9
 LAT 84-51.1N
 LONG 11-31. W
 MESSENGER TIMES: 23.9, 01.3
 WIRE ANGLES:

BAROMETER 15.8
 TEMP DRY -31.4
 TEMP WFT -31.4
 REL HUMID
 00, 00

WEATHER X1
 VISIBILITY 7
 CLOUD TYPE 7
 CLOUD AMT 1

WIND VELOC 06
 WIND DIREC 32
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING 3885

CST DEPTH TEMP SAL SIGMA-T

***** OXYGEN *****
 ML/L MGA/L AOU SATN

1	7	-1.64
1	25	-1.68
1	49	-1.68
1	59	-1.63
1	69	-1.61
1	79	-1.57
1	89	-1.53
1	99	-1.50
1	109	-1.46
1	119	-1.40
1	148	-0.92
1	173	-0.51
1	198	-0.18
2	248	0.35
2	297	0.54
2	346	0.59
2	396	0.52
2	445	0.51
2	495	0.44
2	594	0.28
2	792	0.03
2	891	-0.06
2	990	-0.15
2	1188	-0.30
2	1485	-0.41

AR CRUISE AR2 STATION 217 OBSERVED VALUES

DATE	01/11/64	BAROMETER	18.5	WEATHER	X2	WIND VELOC	11	WAVE PERIOD
HOUR	00.2	TEMP DRY	-24.0	VISIBILITY	6	WIND DIREC	27	SECCHI
LAT	84-51.8N	TEMP WET	-24.0	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-34. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.2, 01.1							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.69						
1	25	-1.70						
1	49	-1.69						
1	59	-1.69						
1	69	-1.59						
1	79	-1.56						
1	89	-1.54						
1	99	-1.54						
1	109	-1.49						
1	119	-1.39						
1	148	-0.84						
1	173	-0.52						
1	198	-0.16						
2	297	0.60						
2	346	0.63						
2	396	0.52						
2	445	0.50						
2	495	0.50						
2	594	0.30						
2	792	0.05						
2	891	-0.07						
2	990	-0.16						
2	1188	-0.26						
2	1485	-0.40						

AR CRUISE AR2 STATION 218 OBSERVED VALUES

DATE	01/11/64	BAROMETER	15.7	WEATHER	X1	WIND VELOC	03	WAVE PERIOD
HOUR	23.3	TEMP DRY	-33.0	VISIBILITY	6	WIND DIREC	01	SECCHI
LAT	84-52.0N	TEMP WET	-33.0	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-33. W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 4107
MESSENGER TIMES:	23.3, 00.5							
WIRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.67						
1	25	-1.67						
1	49	-1.69						
1	59	-1.69						
1	69	-1.60						
1	79	-1.56						
1	89	-1.56						
1	99	-1.54						
1	109	-1.51						
1	119	-1.35						
1	148	-0.81						
1	173	-0.46						
1	198	-0.18						
2	248	0.31						
2	297	0.63						
2	346	0.59						
2	396	0.53						
2	445	0.51						
2	495	0.44						
2	594	0.29						
2	792	0.04						
2	891	-0.04						
2	990	-0.13						
2	1188	-0.26						
2	1485	-0.46						

AR CRUISE AR2 STATION 219 OBSERVED VALUES

DATE	03/11/64	BAROMETER	19.1	WEATHER	X3	WIND VELOC	21	WAVE PERIOD
HOUR	01.8	TEMP DRY	-29.6	VISIBILITY	3	WIND DIREC	30	SECCHI
LAT	84-49.0N	TEMP WET	-29.6	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-06.0W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 3648
MESSENGER TIMES:	01.8, 02.9							
WTRE ANGLES:	--, --							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.63			
1	25	-1.68			
1	49	-1.71			
1	59	-1.62			
1	69	-1.58			
1	79	-1.55			
1	89	-1.55			
1	99	-1.54			
1	109	-1.50			
1	119	-1.46			
1	148	-1.01			
1	173	-0.54			
1	198	-0.19			
2	244	0.37			
2	292	0.72			
2	340	0.62			
2	389	0.70			
2	438	0.68			
2	486	0.66			
2	584	0.37			
2	779	0.04			
2	876	-0.03			
2	974	-0.13			
2	1170	-0.28			
2	1455	-0.44			

AR CRUISE AR2 STATION 220 OBSERVED VALUES

DATE	03/11/64	BAROMETER	23.8	WEATHER	X3	WIND VELOC	20	WAVE PERIOD
HOUR	23.8	TEMP DRY	-26.4	VISIBILITY	4	WIND DIREC	31	SECCHI
LAT	84-36.7N	TEMP WFT		CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	10-10. W	REL HUMID		CLOUD AMT	3	WAVE HEIGHT		SOUNDING 3929
MESSENGER TIMES:	23.8, 01.0, 01.8							
WIRE ANGLES:	03, 05, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	AOU SATN
1	7	-1.69				
1	25	-1.70				
1	49	-1.70				
1	59	-1.69				
1	69	-1.62				
1	79	-1.58				
1	89	-1.56				
1	99	-1.55				
1	109	-1.52				
1	119	-1.51				
1	148	-1.11				
1	173	-0.68				
1	198	-0.20				
2	246	0.48				
2	295	0.69				
2	344	0.64				
2	394	0.76				
2	442	0.76				
2	491	0.65				
2	590	0.32				
2	786	-0.02				
3	879	-0.10				
3	977	-0.16				
3	1173	-0.34				
3	1466	-0.43				

AR CRUISE AR2 STATION 221 OBSERVED VALUES

DATE 05/11/64 BARMETER 25.3 WEATHER X1 WIND VELOC 08 WAVE PERIOD
 HOUR 00.6 TEMP DRY -29.3 VISIBILITY 7 WIND DIREC 29 SECCHI
 LAT 84-31.1N TEMP WET -29.3 CLOUD TYPE 3 WAVE DIREC WATER COLOR
 LONG 9-35. W REL HUMID CLOUD AMT 6 WAVE HEIGHT SOUNDING 3900
 MESSENGER TIMES: 00.6, 01.5, 02.4
 WIRE ANGLES: --, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.70	31.527	25.38	8.79	0.785	-0.031	104	0.83	10
1	10	-1.70	31.491	25.35	8.88	0.793	-0.039	105	0.93	8
1	25	-1.70	31.500	25.36	8.91	0.796	-0.042	106	0.88	8
1	40	-1.71	31.527	25.38	8.84	0.790	-0.035	105	0.93	8
1	49	-1.73	32.394	26.08	8.64	0.772	-0.022	103	0.93	8
1	59	-1.73	32.628	26.27	8.51	0.760	-0.012	102	0.74	11
1	69	-1.73	32.827	26.43	8.32	0.743	0.004	99	0.93	10
1	79	-1.64	33.206	26.74	7.70	0.688	0.056	93	1.25	14
1	89	-1.58	33.540	27.01	7.12	0.636	0.104	86	0.97	16
1	99	-1.53	33.856	27.26	6.99	0.624	0.113	85	1.11	11
1	109	-1.53	34.063	27.43	7.01	0.626	0.110	85	1.02	9
1	119	-1.48	34.163	27.51	7.01	0.626	0.109	85	1.02	9
2	148	-1.00	34.388	27.68	6.96	0.622	0.102	86	0.93	9
2	173	-0.52	34.506	27.75	7.00	0.625	0.089	88	1.02	9
2	198	-0.16	34.632	27.84	6.79	0.606	0.100	86	1.02	9
2	247	0.44	34.821	27.96	6.75	0.603	0.091	87	1.02	8
2	297	0.73	34.894	28.00	6.81	0.608	0.080	88	1.11	8
2	346	0.67	34.912	28.02	6.75	0.603	0.086	88	0.93	9
2	396	0.62	34.939	28.04	6.80	0.607	0.082	88	1.11	10
2	445	0.53	34.930	28.04	6.74	0.602	0.090	87	1.02	8
2	495	0.48	34.921	28.04	6.77	0.605	0.088	87	1.11	7
2	593	0.27	34.939	28.06	6.72	0.600	0.096	86	1.20	9
2	692	0.12	34.930	28.06	6.86	0.613	0.086	88	1.20	9
3	791	0.02	34.930	28.07	6.76	0.604	0.097	86	1.11	9
3	890	-0.11	34.948	28.09	6.82	0.609	0.094	87	1.02	8
3	989	-0.20	34.939	28.09	6.84	0.611	0.094	87	1.11	9
3	1088	-0.25	34.966	28.11	6.80	0.607	0.099	86	1.20	8
3	1187	-0.29	34.948	28.10	6.79	0.606	0.100	86	1.25	8

(CONTINUED)

		AR CRUISE AR2		STATION 221		OBSERVED VALUES				(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		PHOS	SIL			
					ML/L	MGA/L	AOU	SATN			
3	1286	-0.34	34.966	28.12	6.80	0.607	0.100	86	1.57	8	
3	1484	-0.42	34.957	28.11	6.77	0.605	0.105	85	1.15	9	

		AR CRUISE AR2		STATION 221		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E (C)	SAL	E (S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E (D)	VAR RATIO
0	-1.70	0.00	31.527	0.000	25.38	260.5	0.000	0.00	8.79	0.00	
10	-1.70	0.00	31.491	0.000	25.35	263.1	0.027	0.01	8.88	0.00	
20	-1.70	0.00	31.497#		25.36	262.6	0.053	0.05	8.91	0.00	0.72
30	-1.70	0.00	31.509#		25.37	261.5	0.080	0.12	8.91	0.01	0.73
50	-1.73	0.00	32.435	0.011	26.12	190.0	0.125	0.30	8.63	0.00	0.88
75	-1.68	0.00	33.046	0.009	26.61	143.0	0.167	0.56	7.97	0.02	0.65
100	-1.53	0.00	33.882	0.000	27.28	79.1	0.195	0.80	6.99	0.00	0.87
150	-0.96	0.00	34.399	0.001	27.68	41.3	0.225	1.17	6.97	0.00	0.88
200	-0.13	0.00	34.642	0.000	27.84	26.5	0.243	1.47	6.78	0.00	0.98
250	0.47	0.00	34.828	0.001	27.96	15.8	0.253	1.71	6.75	0.00	0.92
300	0.73	0.00	34.896	0.001	28.00	12.5	0.260	1.91	6.81	0.00	0.91
400	0.61	0.00	34.939	0.000	28.04	8.6	0.271	2.28	6.80	0.00	0.89
500	0.47	0.00	34.922	0.001	28.04	9.0	0.280	2.69	6.77	0.00	0.97
600	0.26	0.00	34.939	0.000	28.06	6.4	0.288	3.13	6.73	0.00	0.90
700	0.11	0.00	34.929	0.000	28.06	6.1	0.294	3.54	6.85	0.00	0.89
800	0.01	0.00	34.932	0.001	28.07	5.2	0.300	3.98	6.76	0.00	0.88
1000	-0.21	0.00	34.942	0.001	28.09	2.8	0.308	4.70	6.84	0.00	0.85
1200	-0.30	0.00	34.950	0.001	28.10	1.4	0.312	5.16	6.79	0.00	0.84

AR CRUISE AR2 STATION 222 OBSERVED VALUES

DATE	06/11/64	BAROMETER	26.9	WEATHER	X1	WIND VELOC	09	WAVE PERIOD
HOUR	00.6	TEMP DRY	-27.9	VISIBILITY	6	WIND DIREC	34	SECCHI
LAT	84-29.6N	TEMP WET	-27.9	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	9-28. W	REL HUMID		CLOUD AMT	7	WAVE HEIGHT		SOUNDING 3718
MESSENGER TIMES:	00.6, 01.6							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	ADU	SATN
1	7	-1.69						
1	25	-1.70						
1	49	-1.73						
1	59	-1.73						
1	69	-1.71						
1	79	-1.60						
1	89	-1.56						
1	99	-1.53						
1	109	-1.49						
1	119	-1.49						
1	148	-0.99						
1	173	-0.56						
1	198	-0.18						
2	247	0.40						
2	297	0.68						
2	346	0.68						
2	396	0.59						
2	445	0.58						
2	494	0.52						
2	593	0.27						
2	791	0.02						
2	890	-0.10						
2	989	-0.17						
2	1187	-0.29						
2	1484	-0.43						

AR CRUISE AR2 STATION 223 OBSERVED VALUES

DATE	07/11/64	BAROMETER	29.1	WEATHER	X2	WIND VELOC	06	WAVE PERIOD
HOUR	00.5	TEMP DRY	-33.8	VISIBILITY	5	WIND DIREC	34	SECCHI
LAT	84-29.7N	TEMP WET	-33.8	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	9-33. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3907
MESSENGER TIMES:	00.5, 01.4, 02.2							
WIRE ANGLES:	00, 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****	*****
					ML/L MGA/L	ADU SATN
1	7	-1.69				
1	25	-1.70				
1	49	-1.71				
1	59	-1.73				
1	69	-1.72				
1	79	-1.70				
1	89	-1.69				
3	99	-1.53				
3	109	-1.49				
3	119	-1.43				
3	148	-0.95				
3	173	-0.58				
3	198	-0.24				
2	247	0.37				
2	297	0.66				
2	346	0.68				
2	396	0.64				
2	445	0.54				
2	494	0.47				
2	593	0.25				
2	791	0.02				
2	890	-0.10				
2	989	-0.16				
2	1187	-0.31				
2	1484	-0.43				

AR CRUISE AR2 STATION 224 OBSERVED VALUES

DATE	08/11/64	BAROMETER	25.1	WEATHER	X2	WIND VELOC	01	WAVE PERIOD	
HOUR	00.1	TEMP DRY	-29.5	VISIBILITY	6	WIND DIREC	03	SECCHI	
LAT	84-29.9N	TEMP WET	-29.5	CLOUD TYPE	7	WAVE DIREC		WATER COLOR	
LONG	9-36. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING	3878
MESSENGER TIMES:	00.1, 01.3								
WIRE ANGLES:	--, --								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	5	-1.71						
1	25	-1.71						
1	49	-1.71						
1	59	-1.73						
1	69	-1.72						
1	79	-1.60						
1	89	-1.57						
1	99	-1.54						
1	109	-1.46						
1	119	-1.42						
1	148	-0.93						
1	173	-0.55						
1	198	-0.19						
2	247	0.36						
2	296	0.65						
2	346	0.67						
2	395	0.61						
2	445	0.57						
2	494	0.46						
2	593	0.30						
2	790	0.03						
2	889	-0.08						
2	988	-0.16						
2	1186	-0.28						
2	1482	-0.43						

AR CRUISE AR2 STATION 225 OBSERVED VALUES

DATE 09/11/64 BAROMETER 22.8 WEATHER X1 WIND VELOC 06 WAVE PERIOD
 HOUR 00.3 TEMP DRY -31.6 VISIBILITY 7 WIND DIREC 12 SECCHI
 LAT 84-29.8N TEMP WET -31.6 CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 9-50.0W REL HUMID CLOUD AMT 5 WAVE HEIGHT SOUNDING 3855
 MESSENGER TIMES: 00.3, 01.6
 WIRE ANGLES: 01, 02, 02

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.69						
1	25	-1.69						
1	49	-1.71						
1	59	-1.74						
1	69	-1.69						
1	79	-1.60						
1	89	-1.57						
1	99	-1.56						
1	109	-1.52						
1	119	-1.50						
1	148	-1.02						
1	173	-0.56						
1	198	-0.24						
3	247	0.44						
3	296	0.70						
3	346	0.65						
3	395	0.55						
3	445	0.55						
3	494	0.45						
3	593	0.26						
3	790	0.12						
3	889	-0.11						
3	988	-0.17						
3	1186	-0.28						
3	1482	-0.45						

AR CRUISE AR2 STATION 226 OBSERVED VALUES

DATE	10/11/64	BAROMETER	12.1	WEATHER	X1	WIND VELOC	10	WAVE PERIOD
HOUR	00.6	TEMP DRY	-28.0	VISIBILITY	7	WIND DIREC	07	SECCHI
LAT	84-32.5N	TEMP WET	-28.0	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	10-22. W	REL HUMID		CLOUD AMT	6	WAVE HEIGHT		SOUNDING 3944
MESSENGER TIMES:	00.6, 01.4							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.69			
1	25	-1.69			
1	49	-1.69			
1	59	-1.69			
1	69	-1.64			
1	79	-1.57			
1	89	-1.54			
1	99	-1.54			
1	109	-1.52			
1	119	-1.44			
1	148	-0.99			
1	173	-0.55			
1	198	-0.14			
2	247	0.50			
2	296	0.72			
2	346	0.82			
2	395	0.80			
2	445	0.74			
2	494	0.68			
2	593	0.33			
2	790	-0.04			
2	889	-0.18			
2	988	-0.25			
2	1186	-0.31			
2	1482	-0.44			

AR CRUISE AR2 STATION 227 OBSERVED VALUES

DATE 11/11/64	BAROMETER 11.1	WEATHER X2	WIND VELOC 06	WAVE PERIOD
HOUR 00.8	TEMP DRY -29.6	VISIBILITY 6	WIND DIREC 03	SECCHI
LAT 84-33.9N	TEMP WET -29.6	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 10-54. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3966
MESSENGER TIMES: 00.8, 01.6				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.69						
1	25	-1.71						
1	49	-1.69						
1	59	-1.72						
1	69	-1.63						
1	79	-1.58						
1	89	-1.56						
1	99	-1.55						
1	109	-1.50						
1	119	-1.44						
1	148	-0.92						
1	173	-0.58						
1	198	-0.15						
2	247	0.45						
2	296	0.71						
2	346	0.81						
2	395	0.65						
2	445	0.73						
2	494	0.58						
2	593	0.26						
2	790	-0.05						
2	889	-0.18						
2	988	-0.25						
2	1186	-0.35						
2	1482	-0.43						

AR CRUISE AR2 STATION 228 OBSERVED VALUES

DATE	12/11/64	BAROMETER	14.3	WEATHER	X2	WIND VELOC	06	WAVE PERIOD
HOUR	00.2	TEMP DRY	-26.3	VISIBILITY	6	WIND DIREC	34	SECCHI
LAT	84-33.4N	TEMP WET	-26.3	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	10-57. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3949
MESSENGER TIMES:	00.2, 01.0							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.70			
1	25	-1.70			
1	49	-1.69			
1	59	-1.69			
1	69	-1.63			
1	79	-1.57			
1	89	-1.55			
1	99	-1.54			
1	109	-1.50			
1	118	-1.42			
1	148	-0.91			
1	173	-0.50			
1	197	-0.16			
2	247	0.50			
2	296	0.71			
2	345	0.84			
2	395	0.70			
2	444	0.74			
2	493	0.62			
2	592	0.31			
2	790	-0.04			
2	888	-0.16			
2	987	-0.25			
2	1184	-0.33			
2	1480	-0.43			

AR CRUISE AR2 STATION 229 OBSERVED VALUES

DATE	13/11/64	BAROMETER	13.2	WEATHER	X2	WIND VELOC	07	WAVE PERIOD
HOUR	00.1	TEMP DRY	-24.6	VISIBILITY	6	WIND DIREC	34	SECCHI
LAT	84-32.9N	TEMP WET	-24.6	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	11-01. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3922
MESSENGER TIMES:	00.1, 01.4							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.69						
1	25	-1.70						
1	49	-1.70						
1	59	-1.65						
1	69	-1.58						
1	79	-1.56						
1	89	-1.55						
1	99	-1.51						
1	109	-1.41						
1	118	-1.27						
1	148	-0.80						
1	173	-0.41						
1	197	-0.03						
2	247	0.48						
2	296	0.72						
2	345	0.64						
2	395	0.70						
2	444	0.71						
2	493	0.64						
2	592	0.33						
2	790	-0.04						
2	888	-0.14						
2	987	-0.25						
2	1184	-0.36						
2	1480	-0.43						

AR CRUISE AR2 STATION 230 OBSERVED VALUES

DATE 14/11/64	BAROMETER 14.0	WEATHER XO	WIND VELOC 11	WAVE PERIOD
HOUR 00.4	TEMP DRY -30.5	VISIBILITY 7	WIND DIREC 35	SECCHI
LAT 84-31.5N	TEMP WET -30.5	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 11-13. W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 3974
MESSENGER TIMES: 00.4, 01.4				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.70			
1	25	-1.69			
1	49	-1.69			
1	59	-1.69			
1	69	-1.63			
1	79	-1.56			
1	89	-1.54			
1	99	-1.54			
1	109	-1.49			
1	118	-1.43			
1	148	-0.98			
1	173	-0.57			
1	197	-0.20			
2	247	0.47			
2	296	0.71			
2	345	0.73			
2	395	0.60			
2	444	0.59			
2	493	0.55			
2	592	0.29			
2	790	-0.03			
2	888	-0.13			
2	987	-0.24			
2	1184	-0.34			
2	1480	-0.44			

AR CRUISE AR2 STATION 231 OBSERVED VALUES

DATE 15/11/65 BAROMETER 14.6 WEATHER X1 WIND VELOC 13 WAVE PERIOD
 HOUR 00.0 TEMP DRY -32.5 VISIBILITY 5 WIND DIREC 36 SECCHI
 LAT 84-29.4N TEMP WET -32.5 CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 11-21.0W REL HUMID 2 WAVE HEIGHT SOUNDING 3989
 MESSENGER TIMES: 00.0, 00.8, 01.7
 WIRE ANGLES: 00, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.71	31.491	25.35	8.89	0.794	-0.040	105	0.84	9
1	10	-1.69	31.527	25.38	8.94	0.798	-0.045	106	0.84	10
1	25	-1.69	31.509	25.37	8.82	0.788	-0.034	105	0.75	10
1	39	-1.70	31.536	25.39	8.86	0.791	-0.038	105	0.65	9
1	49	-1.69	31.586	25.43	8.83	0.789	-0.035	105	0.65	7
1	59	-1.64	32.466	26.14	8.31	0.742	0.005	99	0.70	12
1	69	-1.63	32.989	26.56	7.60	0.679	0.066	91	1.06	14
1	79	-1.55	33.368	26.87	6.99	0.624	0.116	84	1.02	16
1	89	-1.54	33.693	27.13	6.95	0.621	0.118	84	1.02	12
1	99	-1.53	33.883	27.29	7.03	0.628	0.109	85	1.02	10
1	109	-1.52	34.045	27.42	7.06	0.631	0.106	86	0.97	10
1	118	-1.41	34.181	27.52	7.00	0.625	0.108	85	0.97	9
2	148	-0.99	34.361	27.66	6.96	0.622	0.102	86	0.84	10
2	173	-0.60	34.487	27.74	6.94	0.620	0.096	87	0.88	9
2	197	-0.21	34.578	27.80	6.93	0.619	0.088	88	0.93	9
2	247	0.50	34.767	27.91	6.86	0.613	0.080	88	0.93	10
2	296	0.69	34.821	27.94	6.86	0.613	0.076	89	0.93	10
2	345	0.71	34.867	27.98	6.81	0.608	0.080	88	0.93	10
2	394	0.65	34.885	28.00	6.85	0.612	0.078	89	0.93	10
2	444	0.61	34.885	28.00	6.83	0.610	0.080	88	1.06	10
2	493	0.56	34.876	27.99	6.82	0.609	0.082	88	0.88	10
2	592	0.30	34.885	28.02	6.87	0.614	0.082	88	0.93	10
2	690	0.13	34.876	28.02	6.95	0.621	0.079	89	1.06	10
3	789	-0.01			6.98	0.623			0.93	10
3	887	-0.11			6.87	0.614				9
3	986	-0.24	34.867	28.03	6.97	0.623	0.084	88	0.93	10
3	1085	-0.29	34.948	28.10	6.96	0.622	0.085	88	0.97	10
3	1183	-0.34	34.939	28.09	6.93	0.619	0.089	87		10

(CONTINUED)

		AR CRUISE AR2		STATION 231		OBSERVED VALUES			(CONTINUED)	
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		PHOS	SIL		
					ML/L	MGA/L	AOU	SATN		
3	1282	-0.38			6.90	0.616			1.02	
3	1479	-0.42	34.903	28.07	6.80	0.607	0.102	86	1.02	11

		AR CRUISE AR2		STATION 231		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.71	0.00	31.491	0.000	25.35	263.2	0.000	0.00	8.89	0.00	
10	-1.69	0.00	31.527	0.000	25.38	260.4	0.027	0.01	8.94	0.00	
20	-1.68	0.01	31.531	0.014	25.38	260.0	0.053	0.05	8.88	0.03	1.39
30	-1.69	0.00	31.513	0.000	25.37	261.2	0.079	0.12	8.83	0.01	0.69
50	-1.68	0.00	31.663	0.018	25.49	249.5	0.131	0.33	8.79	0.00	0.87
75	-1.58	0.01	33.228	0.004	26.76	129.2	0.178	0.62	7.19	0.02	0.65
100	-1.53	0.00	33.900	0.000	27.30	77.7	0.205	0.84	7.04	0.00	0.87
150	-0.96	0.00	34.372	0.000	27.66	43.3	0.235	1.21	6.96	0.00	0.88
200	-0.16	0.00	34.591	0.001	27.81	30.2	0.254	1.54	6.93	0.00	0.98
250	0.52	0.00	34.772	0.001	27.91	20.4	0.266	1.83	6.86	0.00	0.91
300	0.70	0.00	34.825	0.000	27.95	17.6	0.276	2.10	6.86	0.00	0.89
400	0.64	0.00	34.886	0.000	28.00	12.8	0.291	2.63	6.85	0.00	0.85
500	0.54	0.00	34.876	0.001	28.00	13.0	0.304	3.24	6.82	0.00	0.97
600	0.28	0.00	34.885	0.000	28.02	10.6	0.316	3.91	6.88	0.00	0.90
700	0.11	0.00	34.872	0.002	28.02	10.4	0.327	4.61	6.96	0.00	1.01
800	-0.02	0.00	34.849	0.014	28.01	11.2	0.338	5.46	6.97	0.01	1.34
1000	-0.25	0.00	34.880	0.003	28.04	7.1	0.356	7.13	6.97	0.00	0.82
1200	-0.35	0.00	34.932	0.002	28.09	2.3	0.366	8.15	6.93	0.00	7.70

AR CRUISE AR2 STATION 232 OBSERVED VALUES

DATE 15/11/64	BAROMETER 03.9	WEATHER X3	WIND VELOC 24	WAVE PERIOD
HOUR 23.7	TEMP DRY -23.3	VISIBILITY 1	WIND DIREC 04	SECCHI
LAT 84-29.4N	TEMP WFT -23.3	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 12-54. W	REL HUMID	CLOUD AMT 9	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 23.7, 00.5				
WIRE ANGLES: 00, 02				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.70			
1	24	-1.70			
1	49	-1.70			
1	59	-1.68			
1	69	-1.64			
1	79	-1.61			
1	89	-1.56			
1	99	-1.54			
1	108	-1.49			
1	118	-1.47			
1	148	-0.94			
1	173	-0.61			
2	197	-0.23			
2	246	0.31			
2	296	0.66			
2	345	0.56			
2	394	0.56			
2	444	0.53			
2	493	0.46			
2	592	0.25			
2	789	0.03			
2	887	-0.08			
2	986	-0.18			
2	1183	-0.34			
2	1479	-0.47			

AR CRUISE AR2 STATION 233 OBSERVED VALUES

DATE	17/11/64	BAROMETER	08.6	WEATHER	X7	WIND VELOC	18	WAVE PERIOD	
HOUR	01.4	TEMP DRY	-17.7	VISIBILITY	3	WIND DIREC	06	SECCHI	
LAT	84-29.5N	TEMP WET	-17.7	CLOUD TYPE	4	WAVE DIREC		WATER COLOR	
LONG	14-25. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING	3892
MESSENGER TIMES:	01.4, 01.4								
WIRE ANGLES:	02, --								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	24	-1.70						
1	49	-1.69						
1	59	-1.68						
1	69	-1.65						
1	79	-1.58						
1	89	-1.53						
1	99	-1.52						
1	108	-1.50						
1	118	-1.43						
1	148	-1.03						
1	173	-0.52						
1	197	-0.11						
2	247	0.37						
2	297	0.66						
2	346	0.68						
2	396	0.64						
2	445	0.54						
2	494	0.47						
2	593	0.25						
2	791	0.02						
2	890	-0.10						
2	989	-0.16						
2	1187	-0.31						
2	1484	-0.43						

AR CRUISE AR2

STATION 234

OBSERVED VALUES

DATE 18/11/64	BAROMETER 27.4	WEATHER X3	WIND VELOC 21	WAVE PERIOD
HOUR 00.3	TEMP DRY -22.0	VISIBILITY 2	WIND DIREC 07	SECCHI
LAT 84-29.7N	TEMP WET -22.0	CLOUD TYPF 4	WAVE DIREC	WATER COLOR
LONG 14-31. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 3870
MESSENGER TIMES: 00.3, 01.2, 01.9				
WIRE ANGLES: 01, 04, 04				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	24	-1.70						
1	49	-1.70						
1	59	-1.68						
1	69	-1.63						
1	79	-1.58						
1	89	-1.55						
1	99	-1.51						
1	108	-1.46						
1	118	-1.40						
1	148	-0.84						
1	173	-0.51						
1	197	-0.20						
2	246	0.41						
2	296	0.63						
2	345	0.69						
2	394	0.61						
2	444	0.56						
2	493	0.49						
2	592	0.33						
2	789	0.01						
3	887	-0.11						
3	986	-0.19						
3	1183	-0.33						
3	1479	-0.41						

AR CRUISE AR2

STATION 235

OBSERVED VALUES

DATE 19/11/64
 HOUR 00.4
 LAT 84-29.8N
 LONG 14-37. W
 MESSENGER TIMES: 00.4, 01.4
 WIRE ANGLES: 00, 00

BAROMETER 47.6
 TEMP DRY -36.0
 TEMP WET -36.0
 REL HUMID

WEATHER XO
 VISIBILITY 7
 CLOUD TYPE X
 CLOUD AMT 0
 WIND VELOC 09
 WIND DIREC 04
 WAVE DIREC
 WAVE HEIGHT

WAVE PERIOD
 SECCHI
 WATER COLOR
 SOUNDING

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.69						
1	25	-1.69						
1	49	-1.69						
1	59	-1.67						
1	69	-1.63						
1	79	-1.58						
1	89	-1.53						
1	98	-1.50						
1	108	-1.48						
1	118	-1.39						
1	148	-0.88						
1	172	-0.54						
1	197	-0.16						
2	246	0.40						
2	295	0.65						
2	345	0.70						
2	394	0.62						
2	443	0.58						
2	492	0.51						
2	591	0.27						
2	788	0.04						
2	886	-0.08						
2	985	-0.17						
2	1182	-0.28						
2	1477	-0.43						

AR CRUISE AR2 STATION 236 OBSERVED VALUES

DATE 19/11/64	BAROMETER 43.7	WEATHER X0	WIND VELOC 11	WAVE PERIOD
HOUR 23.8	TEMP DRY -35.6	VISIBILITY 7	WIND DIREC 11	SECCHI
LAT 84-29.7N	TEMP WET -35.6	CLOUD TYPF X	WAVE DIREC	WATER COLOR
LONG 14-51. W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 3767
MESSFNGER TIMES: 23.8, 01.7				
WIRE ANGLES: 00, 02				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.70						
1	49	-1.70						
1	59	-1.69						
1	69	-1.64						
1	79	-1.58						
1	89	-1.55						
1	98	-1.51						
1	108	-1.47						
1	118	-1.43						
1	148	-0.91						
1	172	-0.51						
1	197	-0.18						
2	246	0.39						
2	295	0.64						
2	345	0.68						
2	394	0.65						
2	443	0.60						
2	492	0.50						
2	591	0.30						
2	788	0.04						
2	886	-0.08						
2	985	-0.15						
2	1182	-0.26						
2	1477	-0.41						

AR CRUISE AR2 STATION 237 OBSERVED VALUES

DATE 21/11/64	BAROMETER 29.5	WEATHER X3	WIND VELOC 19	WAVE PERIOD
HOUR 06.6	TEMP DRY -25.0	VISIBILITY 5	WIND DIREC 11	SECCHI
LAT 84-34.7N	TEMP WET -25.0	CLOUD TYPE 0	WAVE DIREC	WATER COLOR
LONG 16-11. W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 06.6, 07.3				
WIRE ANGLES: 02, 04				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	7	-1.68			
1	25	-1.70			
1	49	-1.70			
1	59	-1.61			
1	69	-1.61			
1	79	-1.56			
1	89	-1.54			
1	98	-1.52			
1	108	-1.45			
1	118	-1.40			
1	172	-0.51			
1	178	-0.94			
2	197	-0.18			
2	246	0.33			
2	295	0.53			
2	345	0.57			
2	394	0.58			
2	443	0.54			
2	492	0.49			
2	591	0.36			

AR CRUISE AR2 STATION 238 OBSERVED VALUES

DATE 22/11/64	BAROMETER 17.5	WEATHER X3	WIND VELOC 23	WAVE PERIOD
HOUR 00.2	TEMP DRY -15.0	VISIBILITY 2	WIND DIREC 11	SECCHI
LAT 84-37.6N	TEMP WET -15.0	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 16-56. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSFNGER TIMES: 00.2				
WIRE ANGLES: 05				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.69			
1	25	-1.70			
1	49	-1.67			
1	59	-1.62			
1	69	-1.61			
1	79	-1.56			
1	89	-1.54			
1	98	-1.51			
1	108	-1.46			
1	118	-1.35			
1	148	-1.01			
1	172	-0.76			
1	197	-0.48			

AR CRUISE AR2 STATION 239 OBSERVED VALUES

DATE 23/11/64	BAROMETER 00.3	WEATHER X0	WIND VELOC 13	WAVE PERIOD
HOUR 00.6	TEMP DRY -26.0	VISIBILITY 6	WIND DIREC 12	SECCHI
LAT 84-40.2N	TEMP WET -26.0	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 17-28. W	REL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING 1066
MESSENGER TIMES: 00.6				
WIRE ANGLES: 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.70			
1	25	-1.70			
1	49	-1.70			
1	59	-1.65			
1	69	-1.59			
1	79	-1.54			
1	89	-1.52			
1	98	-1.50			
1	108	-1.45			
1	118	-1.38			
1	148	-0.93			
1	172	-0.58			
1	197	-0.24			

AR CRUISE AR2 STATION 240 OBSERVED VALUES

DATE	24/11/64	BAROMETER	83.0	WEATHER	X7	WIND VELOC	10	WAVE PERIOD
HR	00.7	TEMP DRY	-23.8	VISIBILITY	5	WIND DIREC	24	SECCHI
LAT	84-42.1N	TEMP WET	-23.8	CLOUD TYPE	6	WAVE DIREC		WATER COLOR
LONG	17-48.0 W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 0962
MESSENGER TIMES:	00.7, 01.7							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.70			
1	25	-1.70			
1	49	-1.70			
1	59	-1.65			
1	69	-1.63			
1	79	-1.55			
1	89	-1.54			
1	98	-1.52			
1	108	-1.44			
1	118	-1.36			
1	148	-0.93			
1	172	-0.56			
2	197	-0.21			
2	246	0.27			
2	295	0.52			
2	344	0.51			
2	394	0.59			
2	443	0.52			
2	492	0.44			
2	590	0.29			
2	689	0.17			
2	787	0.06			
2	886	-0.05			
2	935	-0.10			

AR CRUISE AR2 STATION 241 OBSERVED VALUES
 DATE 25/11/64 BAROMETER 05.5 WEATHER X2 WIND VELOC 09 WAVE PERIOD
 HOUR 00.1 TEMP DRY -22.2 VISIBILITY 7 WIND DIREC 04 SECCHI
 LAT 84-42.6N TEMP WET -22.2 CLOUD TYPE 7 WAVE DIREC WATER COLOR
 LONG 17-53. W REL HUMID CLOUD AMT 8 WAVE HEIGHT SOUNDING 1095
 MESSENGR TIMES: 00.1, 01.1, 02.1
 WIRE ANGLES: 00, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.72	31.563	25.41	8.80	0.786	-0.032	104	1.25	10
1	10	-1.72	31.599	25.44	8.85	0.790	-0.037	105	1.30	10
1	25	-1.70	31.581	25.42	8.79	0.785	-0.031	104	1.35	10
1	39	-1.70	31.608	25.45	8.87	0.792	-0.039	105	1.30	10
1	49	-1.70	31.608	25.45	8.88	0.793	-0.040	105	1.30	10
1	59	-1.64	32.285	25.99	7.96	0.711	0.037	95	1.39	14
1	69	-1.64	32.899	26.49	7.65	0.683	0.062	92	1.20	14
1	79	-1.55	33.386	26.88	6.87	0.614	0.127	83	1.20	16
1	89	-1.53	33.648	27.10	6.84	0.611	0.128	83	1.25	14
1	98	-1.51	33.838	27.25	6.90	0.616	0.121	84	1.10	12
1	108	-1.48	34.018	27.39	6.89	0.615	0.120	84	1.06	10
1	118	-1.44	34.154	27.50	6.87	0.614	0.120	84	1.02	10
2	148	-0.96	34.163	27.49	6.86	0.613	0.112	85	0.93	10
2	172	-0.61	34.460	27.72	6.76	0.604	0.112	84	1.02	9
2	197	-0.30	34.587	27.81	6.73	0.601	0.108	85	1.02	9
2	246	0.23	34.740	27.90	6.59	0.589	0.110	84	1.02	9
2	295	0.42	34.812	27.95	6.58	0.588	0.106	85	1.10	9
2	344	0.48	34.848	27.98	6.57	0.587	0.106	85	1.10	9
2	394	0.56	34.848	27.97	6.64	0.593	0.098	86	1.10	9
2	443	0.50	34.857	27.98	6.62	0.591	0.101	85	1.10	9
2	492	0.44	34.867	27.99	6.69	0.598	0.096	86	1.15	9
2	590	0.28	34.848	27.99	6.67	0.596	0.101	86	1.15	9
2	689	0.15	34.867	28.01	6.71	0.599	0.100	86	1.15	9
3	787	0.07	34.848	28.00	6.74	0.602	0.099	86	1.15	9
3	886	-0.04	34.867	28.02	6.78	0.606	0.097	86	1.15	9
3	984	-0.11	34.894	28.05	6.78	0.606	0.098	86	1.15	9

		AR CRUISE AR2		STATION 241		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEOPOT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.72	0.00	31.563	0.000	25.41	257.7	0.000	0.00	8.80	0.00	
10	-1.72	0.00	31.599	0.000	25.44	254.8	0.026	0.01	8.85	0.00	
20	-1.71	0.00	31.603	0.014	25.44	254.4	0.052	0.05	8.83	0.02	1.39
30	-1.70	0.00	31.590	0.003	25.43	255.3	0.078	0.12	8.82	0.01	0.69
50	-1.69	0.00	31.662	0.011	25.49	249.6	0.128	0.33	8.80	0.02	0.87
75	-1.59	0.01	33.212	0.004	26.74	130.5	0.176	0.62	7.17	0.05	0.65
100	-1.50	0.00	33.877	0.000	27.28	79.5	0.203	0.84	6.90	0.00	0.78
150	-0.93	0.00	34.186	0.005	27.51	57.6	0.237	1.27	6.85	0.00	0.87
200	-0.26	0.00	34.599	0.000	27.82	29.1	0.259	1.65	6.72	0.00	0.97
250	0.25	0.00	34.748	0.001	27.91	20.6	0.272	1.93	6.59	0.00	0.89
300	0.43	0.00	34.817	0.000	27.96	16.4	0.281	2.19	6.58	0.00	0.86
400	0.56	0.00	34.849	0.000	27.97	15.0	0.297	2.76	6.64	0.00	0.84
500	0.43	0.00	34.866	0.001	27.99	13.0	0.311	3.41	6.69	0.00	0.96
600	0.27	0.00	34.850	0.001	27.99	13.1	0.324	4.15	6.67	0.00	0.87
700	0.14	0.00	34.865	0.001	28.01	11.1	0.336	4.97	6.71	0.00	0.85
800	0.06	0.00	34.849	0.001	28.00	11.7	0.348	5.86	6.75	0.00	0.83

AR CRUISE AR2 STATION 242 OBSERVED VALUES

DATE	26/11/64	BAROMETER	21.1	WEATHER	X2	WIND VELOC	08	WAVE PERIOD
HOUR	00.2	TEMP DRY	-22.0	VISIBILITY	6	WIND DIREC	09	SECCHI
LAT	84-43.3N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	18-09. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 0940
MESSENGER TIMES:	00.2, 01.1							
WIRE ANGLES:	00, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.70						
1	59	-1.63						
1	69	-1.63						
1	79	-1.57						
1	88	-1.54						
1	98	-1.52						
1	108	-1.48						
1	118	-1.43						
1	147	-0.95						
1	172	-0.50						
1	197	-0.22						
2	246	0.25						
2	295	0.49						
2	344	0.55						
2	393	0.56						
2	442	0.48						
2	491	0.44						
2	590	0.26						
2	688	0.15						
2	786	0.06						
2	885	-0.10						

AR CRUISE AR2 STATION 243 OBSERVED VALUES

DATE 26/11/64	BAROMETER 26.2	WEATHER X1	WIND VELOC 03	WAVE PERIOD
HOUR 21.8	TEMP DRY -18.8	VISIBILITY 6	WIND DIREC 16	SECCHI
LAT 84-44.0N	TEMP WET	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 18-25. W	REL HUMID	CLOUD AMT 7	WAVE HEIGHT	SOUNDING 0908
MESSENGER TIMES: 21.8, 22.6				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.71			
1	25	-1.71			
1	49	-1.70			
1	59	-1.66			
1	69	-1.62			
1	79	-1.58			
1	88	-1.55			
1	98	-1.54			
1	108	-1.48			
1	118	-1.40			
1	147	-0.97			
1	172	-0.57			
2	197	-0.16			
2	246	0.24			
2	295	0.43			
2	344	0.52			
2	393	0.48			
2	442	0.46			
2	491	0.40			
2	590	0.27			
2	688	0.13			
2	786	0.02			
2	885	-0.15			

AR CRUISE AR2 STATION 244 OBSERVED VALUES

DATE 28/11/64	BAROMETER 29.5	WEATHER X2	WIND VELOC 07	WAVE PERIOD
HOUR 00.1	TEMP DRY -23.4	VISIBILITY 6	WIND DIREC 30	SECCHI
LAT 84-42.6N	TEMP WET -23.4	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 18-24. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING 0903
MESSENGER TIMES: 00.1, 00.8				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.70						
1	59	-1.66						
1	69	-1.64						
1	79	-1.57						
1	88	-1.54						
1	98	-1.51						
1	108	-1.46						
1	118	-1.39						
1	147	-0.91						
1	172	-0.50						
2	197	-0.17						
2	246	0.30						
2	295	0.46						
2	344	0.52						
2	393	0.54						
2	442	0.49						
2	491	0.41						
2	590	0.26						
2	688	0.15						
2	786	0.03						
2	836	-0.06						

AR CRUISE AR2 STATION 245 OBSERVED VALUES

DATE 29/11/64	BAROMETER 07.9	WEATHER X1	WIND VELOC 09	WAVE PERIOD
HRUR 00.1	TEMP DRY -29.5	VISIBILITY 7	WIND DIREC 08	SECCHI
LAT 84-40.3N	TEMP WET -29.5	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 18-14. W	REL HUMID	CLOUD AMT 1	WAVE HEIGHT	SOUNDING 0925
MESSENGER TIMES: 00.1, 01.0				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.70			
1	25	-1.70			
1	49	-1.70			
1	59	-1.65			
1	69	-1.59			
1	79	-1.56			
1	88	-1.55			
1	98	-1.52			
1	108	-1.46			
1	118	-1.43			
1	147	-0.93			
1	172	-0.55			
2	197	-0.16			
2	246	0.36			
2	295	0.54			
2	344	0.58			
2	393	0.52			
2	442	0.45			
2	492	0.40			
2	590	0.23			
2	688	0.12			
2	786	0.01			
2	885	-0.13			

AR CRUISE AR2 STATION 246 OBSERVED VALUES

DATE	30/11/64	BAROMETER	04.1	WEATHER	X3	WIND VELOC	16	WAVE PERIOD
HOUR	05.1	TEMP DRY	-24.2	VISIBILITY	3	WIND DIREC	28	SECCHI
LAT	84-37.6N	TEMP WET	-24.2	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	17-40. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	05.1, 05.9, 06.7							1547
WIRE ANGLES:	00, 03, 01							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	7	-1.71			
1	25	-1.70			
1	49	-1.69			
1	59	-1.63			
1	69	-1.62			
1	79	-1.56			
1	88	-1.52			
1	98	-1.52			
1	108	-1.48			
1	118	-1.43			
1	147	-0.92			
1	172	-0.51			
1	197	-0.26			
3	246	0.32			
3	295	0.62			
3	344	0.53			
3	393	0.54			
3	442	0.49			
3	492	0.44			
2	590	0.29			
2	786	0.08			
2	885	-0.05			
2	983	-0.13			
2	1180	-0.24			
2	1425	-0.37			

AR CRUISE AR2 STATION 247 OBSERVED VALUES

DATE 01/12/64	BAROMETER 09.1	WEATHER X1	WIND VELOC 04	WAVE PERIOD
HOUR 00.0	TEMP DRY -40.1	VISIBILITY 6	WIND DIREC 19	SECCHI
LAT 84-36.9N	TEMP WET -40.1	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 17-28. W	REL HUMID	CLOUD AMT 2	WAVE HEIGHT	SOUNDING 1835
MESSENGER TIMES: 00, 01, 01				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.70						
1	49	-1.70						
1	59	-1.64						
1	69	-1.60						
1	79	-1.55						
1	88	-1.54						
1	98	-1.52						
1	108	-1.49						
1	118	-1.44						
1	147	-1.00						
1	172	-0.60						
2	196	-0.21						
2	246	0.35						
2	295	0.49						
2	344	0.52						
2	393	0.49						
2	442	0.49						
2	491	0.41						
2	589	0.28						
2	786	0.07						
2	884	-0.06						
2	982	-0.16						
2	1178	-0.24						
2	1424	-0.39						

AR CRUISE AR2 STATION 248 OBSERVED VALUES

DATE	02/12/64	BAROMETER	04.2	WEATHER	X1	WIND VELOC	09	WAVE PERIOD
HOUR	00.2	TEMP DRY	-34.4	VISIBILITY	6	WIND DIREC	13	SECCHI
LAT	84-37.0N	TEMP WET		CLOUD TYPE	0	WAVE DIREC		WATER COLOR
LONG	17-31. W	REL HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.2, 01.1, 01.6							1628
WIRE ANGLES:	00, 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.70			
1	25	-1.70			
1	49	-1.68			
1	59	-1.62			
1	69	-1.59			
1	79	-1.56			
1	88	-1.55			
1	98	-1.53			
1	108	-1.47			
1	118	-1.39			
1	147	-0.92			
1	172	-0.57			
2	196	-0.23			
2	246	0.28			
3	295	0.53			
3	344	0.57			
3	393	0.50			
3	442	0.49			
3	491	0.42			
3	589	0.31			
3	786	0.06			
3	884	-0.06			
3	982	-0.13			
3	1178	-0.25			
3	1424	-0.38			

AR CRUISE AR2 STATION 249 OBSERVED VALUES

DATE 03/12/64	BAROMETER 19.0	WEATHER X1	WIND VELOC 10	WAVE PERIOD
HOUR 00.1	TEMP DRY -34.1	VISIBILITY 6	WIND DIREC 32	SECCHI
LAT 84-36.3N	TEMP WET	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 17-16. W	REL HUMID	CLOUD AMT 6	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.1, 01.1				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.70						
1	49	-1.68						
1	59	-1.65						
1	69	-1.65						
1	79	-1.58						
1	88	-1.55						
1	98	-1.53						
1	108	-1.49						
1	118	-1.42						
1	147	-0.89						
1	172	-0.52						
2	196	-0.23						
2	246	0.29						
2	295	0.48						
2	344	0.54						
2	393	0.50						
2	442	0.48						
2	491	0.44						
2	589	0.27						
2	786	0.04						
2	884	-0.06						
2	982	-0.17						
2	1178	-0.24						
2	1424	-0.37						

AR CRUISE AR2 STATION 250 OBSERVED VALUES

DATE	04/12/64	BAROMETER	13.4	WEATHER	X0	WIND VELOC	08	WAVE PERIOD
HOUR	00.7	TEMP DRY	-33.3	VISIBILITY	6	WIND DIREC	15	SECCHI
LAT	84-35.5N	TEMP WET	-33.3	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	17-15. W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING 2842
MESSENGER	TIMES: 00.7, 02.0							
WIRE	ANGLES: 00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.71			
1	25	-1.70			
1	49	-1.67			
1	59	-1.67			
1	69	-1.65			
1	79	-1.58			
1	88	-1.53			
1	98	-1.52			
1	108	-1.47			
1	118	-1.40			
1	147	-1.02			
1	172	-0.54			
2	196	-0.15			
2	246	0.33			
2	295	0.65			
2	344	0.73			
2	393	0.53			
2	442	0.52			
2	491	0.51			
2	589	0.31			
2	786	0.03			
2	884	-0.09			
2	982	-0.17			
2	1178	-0.25			
2	1424	-0.37			

AR CRUISE AR2 STATION 251 OBSERVED VALUES

DATE	04/12/64	BAROMETER	01.9	WEATHER		WIND VELOC	07	WAVE PERIOD	
HOUR	23.8	TEMP DRY	-30.0	VISIBILITY	7	WIND DIREC	02	SECCHI	
LAT	84-35.2N	TEMP WET	-30.0	CLOUD TYPE	7	WAVE DIREC		WATER COLOR	
LONG	17-10. W	REF HUMID		CLOUD AMT	1	WAVE HEIGHT		SOUNDING	
MESSENGER TIMES:	23.8, 00.8, 01.8								
WIRE ANGLES:	00, 00, 02								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.70	31.473	25.34	8.85	0.790	-0.036	105	1.30	12
1	10	-1.70	31.491	25.35	8.82	0.788	-0.034	104	1.20	11
1	25	-1.70	31.491	25.35	8.86	0.791	-0.037	105	1.30	11
1	39	-1.70	31.509	25.37	8.83	0.789	-0.035	105	1.35	10
1	49	-1.69	31.618	25.45	8.79	0.785	-0.032	104	1.35	11
1	59	-1.65	32.457	26.13	7.90	0.706	0.042	94	1.35	14
1	69	-1.59	32.881	26.48	7.35	0.656	0.088	88	1.44	18
1	79	-1.56	33.359	26.86	6.95	0.621	0.120	84	1.30	19
1	88	-1.54	33.711	27.15	6.88	0.614	0.124	83	1.20	16
1	98	-1.51	33.937	27.33	6.94	0.620	0.117	84	1.11	12
1	108	-1.50	34.126	27.48	7.00	0.625	0.110	85	1.06	12
1	118	-1.43	34.217	27.55	7.04	0.629	0.105	86	1.06	11
2	147	-0.96	34.397	27.68	6.91	0.617	0.106	85	0.84	10
2	172	-0.50	34.533	27.77	6.89	0.615	0.098	86	0.93	10
2	196	-0.21	34.632	27.84	6.84	0.611	0.096	86	0.84	10
2	246	0.42	34.785	27.93	6.77	0.605	0.090	87	0.93	10
2	295	0.70	34.885	27.99	6.76	0.604	0.085	88	1.02	10
2	344	0.71	34.930	28.03	6.76	0.604	0.084	88	0.93	10
2	393	0.66	34.948	28.05	6.74	0.602	0.087	87	0.97	11
2	442	0.63	34.957	28.06	6.77	0.605	0.085	88	0.93	10
2	491	0.54	34.912	28.02	6.77	0.605	0.087	87	1.02	10
2	589	0.31	34.930	28.05	6.72	0.600	0.095	86	1.02	10
2	688	0.18	34.921	28.05	6.73	0.601	0.097	86	1.06	11
3	786	0.05	34.930	28.07	6.84	0.611	0.090	87	1.06	10
3	884	-0.11	34.930	28.08	6.87	0.614	0.090	87	1.02	10
3	982	-0.18	34.939	28.09	6.85	0.612	0.093	87	0.97	10
3	1080	-0.22	34.921	28.07	6.81	0.608	0.098	86	1.11	10
3	1178	-0.31	34.930	28.09	6.83	0.610	0.097	86	1.11	10

(CONTINUED)

		AR CRUISE AR2		STATION 251				OBSERVED VALUES			(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL	
						ML/L	MGA/L	AOU	SATN		
3	1277	-0.33	34.939	28.09	6.85	0.612	0.096	86	1.11	11	
3	1424	-0.42	34.948	28.11	6.85	0.612	0.098	86	1.11	11	

		AR CRUISE AR2		STATION 251				INTERPOLATED AND COMPUTED VALUES				
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO	
0	-1.70	0.00	31.473	0.000	25.34	264.6	0.000	0.00	8.85	0.00		
10	-1.70	0.00	31.491	0.000	25.35	263.1	0.027	0.01	8.82	0.00		
20	-1.70	0.00	31.498	0.006	25.36	262.5	0.054	0.05	8.83	0.01	1.39	
30	-1.70	0.00	31.487	0.005	25.35	263.2	0.080	0.12	8.85	0.00	0.69	
50	-1.69	0.00	31.695	0.017	25.52	247.1	0.131	0.33	8.71	0.02	0.87	
75	-1.57	0.00	33.170	0.006	26.71	133.7	0.179	0.62	7.08	0.01	0.67	
100	-1.51	0.00	33.980	0.002	27.36	71.6	0.205	0.84	6.95	0.00	0.77	
150	-0.90	0.00	34.415	0.000	27.70	40.3	0.233	1.19	6.91	0.00	0.83	
200	-0.15	0.00	34.647	0.000	27.85	26.0	0.250	1.48	6.83	0.00	0.97	
250	0.45	0.00	34.795	0.000	27.94	18.2	0.261	1.73	6.77	0.00	0.89	
300	0.71	0.00	34.891	0.000	28.00	12.7	0.269	1.95	6.76	0.00	0.86	
400	0.66	0.00	34.951	0.001	28.05	8.0	0.280	2.31	6.74	0.00	0.82	
500	0.52	0.00	34.911	0.002	28.03	10.2	0.289	2.74	6.77	0.00	0.96	
600	0.29	0.00	34.929	0.001	28.05	7.3	0.298	3.23	6.72	0.00	0.86	
700	0.16	0.00	34.922	0.000	28.05	7.0	0.305	3.71	6.74	0.00	0.84	
800	0.03	0.00	34.930	0.000	28.07	5.4	0.311	4.20	6.85	0.00	0.82	
1000	-0.19	0.00	34.936	0.001	28.08	3.4	0.320	5.00	6.84	0.00	0.78	
1200	-0.32	0.00	34.932	0.000	28.09	2.5	0.326	5.67	6.84	0.00	0.75	

AR CRUISE AR2 STATION 252 OBSERVED VALUES

DATE 06/12/64	BAROMETER 09.7	WEATHER X7	WIND VELOC 12	WAVE PERIOD
HOUR 00.2	TEMP DRY -31.5	VISIBILITY 4	WIND DIREC 01	SECCHI
LAT 84-32.9N	TEMP WET -31.5	CLOUD TYPE 4	WAVE DIREC	WATER COLOR
LONG 17-08. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.2, 01.4				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.70						
1	49	-1.70						
1	59	-1.69						
1	69	-1.65						
1	79	-1.56						
1	88	-1.54						
1	98	-1.52						
1	108	-1.51						
1	118	-1.43						
1	147	-1.02						
1	172	-0.50						
2	196	-0.21						
2	246	0.42						
2	295	0.73						
2	344	0.71						
2	393	0.69						
2	442	0.63						
2	491	0.57						
2	589	0.35						
2	786	0.03						
2	884	-0.07						
2	982	-0.13						
2	1178	-0.23						
2	1424	-0.38						

AR CRUISE AR2 STATION 253 OBSERVED VALUES

DATE 07/12/64	BAROMETER 07.7	WEATHER X7	WIND VELOC 13	WAVE PERIOD
HOUR 00.5	TEMP DRY -32.7	VISIBILITY 3	WIND DIREC 36	SECCHI
LAT 84-30.5N	TEMP WFT -32.7	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 17-06. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.5, 01.4				
WIRE ANGLES: 00, 01				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.70						
1	49	-1.70						
1	59	-1.70						
1	69	-1.64						
1	79	-1.55						
1	88	-1.53						
1	98	-1.56						
1	108	-1.48						
1	118	-1.47						
1	147	-0.99						
1	172	-0.57						
2	196	-0.16						
2	246	0.39						
2	295	0.72						
2	344	0.78						
2	393	0.57						
2	442	0.60						
2	491	0.55						
2	589	0.37						
2	786	0.05						
2	884	-0.07						
2	982	-0.12						
2	1178	-0.23						
2	1424	-0.35						

AR CRUISE AR2

STATION 254

OBSERVED VALUES

DATE 08/12/64	BAROMETER 06.3	WEATHER X1	WIND VELOC 08	WAVE PERIOD
HOUR 00.5	TEMP DRY -33.9	VISIBILITY 6	WIND DIREC 12	SECCHI
LAT 84-28.2N	TEMP WET -33.9	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 17-02. W	REL HUMID	CLOUD AMT 4	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.5, 01.4				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.71			
1	25	-1.71			
1	49	-1.71			
1	59	-1.68			
1	69	-1.66			
1	79	-1.57			
1	88	-1.53			
1	98	-1.54			
1	108	-1.48			
1	118	-1.47			
1	147	-0.96			
1	172	-0.57			
2	196	-0.24			
2	246	0.29			
2	295	0.59			
2	344	0.62			
2	393	0.60			
2	442	0.59			
2	491	0.53			
2	589	0.33			
2	786	0.04			
2	884	-0.07			
2	982	-0.12			
2	1178	-0.24			
2	1424	-0.36			

AR CRUISE AR2 STATION 255 OBSERVED VALUES

DATE 09/12/64	BAROMETER 03.2	WEATHER X0	WIND VELOC 08	WAVE PERIOD
HOUR 00.7	TEMP DRY -42.0	VISIBILITY 7	WIND DIREC 36	SECCHI
LAT 84-27.0N	TEMP WFT -42.0	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 16-46. W	RFL HUMID	CLOUD AMT 0	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.7, 01.7				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.70						
1	25	-1.71						
1	49	-1.71						
1	59	-1.66						
1	69	-1.65						
1	79	-1.56						
1	88	-1.53						
1	98	-1.55						
1	108	-1.51						
1	118	-1.45						
1	147	-1.04						
1	172	-0.62						
2	196	-0.28						
2	246	0.30						
2	295	0.58						
2	344	0.65						
2	393	0.58						
2	442	0.57						
2	491	0.47						
2	589	0.30						
2	786	0.06						
2	884	-0.04						
2	982	-0.15						
2	1178	-0.24						
2	1424	-0.38						

AR CRUISE AR2 STATION 256 OBSERVED VALUES

DATE	10/12/64	BAROMETER	13.0	WEATHER	X3	WIND VELOC	27	WAVE PERIOD
HOUR	01.4	TEMP DRY	-40.1	VISIBILITY	1	WIND DIREC	31	SECCHI
LAT	84-15.4N	TEMP WET	-40.1	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	16-03.0W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER	TIMES: 01.4, 02.3							
WIRE	ANGLES: 04, 05							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.70						
1	49	-1.71						
1	59	-1.63						
1	69	-1.59						
1	79	-1.59						
1	88	-1.54						
1	98	-1.53						
1	108	-1.49						
1	118	-1.43						
1	147	-1.00						
1	172	-0.63						
2	196	-0.35						
2	246	0.26						
2	295	0.57						
2	344	0.61						
2	393	0.64						
2	442	0.57						
2	491	0.57						
2	589	0.32						

AR CRUISE AR2

STATION 257

OBSERVED VALUES

DATE 13/12/64	BAROMETER 17.3	WEATHER X2	WIND VELOC 18	WAVE PERIOD
HOUR 01.6	TEMP DRY -26.9	VISIBILITY 6	WIND DIREC 01	SECCHI
LAT 83-49.8N	TEMP WFT -26.9	CLOUD TYPF 4	WAVE DIREC	WATER COLOR
LONG 14-25. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 01.6, 02.3				
WTRE ANGLES:	00, 03			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.71						
1	59	-1.72						
1	69	-1.68						
1	79	-1.59						
1	88	-1.54						
1	98	-1.53						
1	108	-1.49						
1	118	-1.43						
1	147	-1.01						
1	172	-0.58						
1	196	-0.24						
2	246	0.28						
2	295	0.61						
2	344	0.65						
2	393	0.65						
2	442	0.62						
2	491	0.54						
2	589	0.31						
2	786	0.03						
2	982	-0.14						
2	984	-0.07						
2	1424	-0.38						

AR CRUISE AR2 STATION 258 OBSERVED VALUES

DATE	13/12/64	BAROMETER	24.6	WEATHER	X7	WIND VELOC	10	WAVE PERIOD
HOUR	23.6	TEMP DRY	-18.4	VISIBILITY	6	WIND DIREC	01	SECCHI
LAT	83-48.8N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	14-15. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.6, 00.4							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.71						
1	59	-1.71						
1	69	-1.65						
1	79	-1.60						
1	88	-1.56						
1	98	-1.54						
1	108	-1.49						
1	118	-1.45						
1	147	-1.07						
1	172	-0.64						
2	196	-0.20						
2	246	-0.29						
2	295	0.65						
2	344	0.70						
2	393	0.61						
2	442	0.60						
2	491	0.55						
2	589	0.31						
2	786	0.02						
2	884	-0.09						
2	982	-0.24						
2	1178	-0.30						
2	1424	-0.39						

AR CRUISE AR2 STATION 259 OBSERVED VALUES

DATE	14/12/64	BAROMETER	25.4	WEATHER	X0	WIND VELOC	08	WAVE PERIOD
HOUR	23.8	TEMP DRY	-31.5	VISIBILITY	8	WIND DIREC	36	SECCHI
LAT	83-48.0N	TEMP WET	-31.5	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	14-06.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.8, 00.8, 02.0							
WIRE ANGLES:	00, 00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****				PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
1	7	-1.70	31.527	25.38	8.87	0.792	-0.038	105	1.11	11
1	10	-1.71	31.509	25.37	8.76	0.782	-0.028	104	1.11	9
1	25	-1.70	31.554	25.40	8.73	0.780	-0.026	103	1.11	10
1	39	-1.70	31.599	25.44	8.75	0.781	-0.028	104	1.11	9
1	49	-1.70	31.590	25.43	8.75	0.781	-0.028	104	1.06	9
1	59	-1.67	31.879	25.67	8.85	0.790	-0.039	105	1.11	9
1	69	-1.64	32.701	26.33	7.76	0.693	0.053	93	1.16	11
1	78	-1.61	33.179	26.72	7.33	0.655	0.088	88	1.11	13
1	88	-1.55	33.684	27.12	6.93	0.619	0.120	84	1.20	11
1	98	-1.50	33.901	27.30	6.93	0.619	0.118	84	1.25	10
1	108	-1.57	34.099	27.46	6.95	0.621	0.116	84	1.02	9
1	118	-1.41	34.190	27.53	6.91	0.617	0.116	84	1.02	9
2	147	-0.99	34.370	27.66	6.86	0.613	0.111	85	0.93	9
2	172	-0.60	34.506	27.76	6.82	0.609	0.106	85	0.88	9
2	196	-0.31	34.560	27.79	6.72	0.600	0.109	85	0.93	9
2	245	0.26	34.722	27.89	6.66	0.595	0.103	85	1.11	8
2	294	0.65	34.876	27.99	6.71	0.599	0.090	87	0.93	8
2	343	0.65	34.876	27.99	6.71	0.599	0.090	87	1.06	9
2	392	0.65	34.876	27.99	6.70	0.598	0.091	87	1.02	8
2	441	0.56	34.894	28.01	6.73	0.601	0.090	87	1.02	8
2	490	0.53	34.876	28.00	6.74	0.602	0.090	87	1.02	7
2	589	0.33	34.894	28.02	6.74	0.602	0.093	87	0.93	7
3	687	0.18	34.885	28.02	6.77	0.605	0.094	87	0.97	8
3	785	0.07	34.894	28.04	6.79	0.606	0.094	87	0.97	8
3	883	-0.06	34.894	28.04	6.80	0.607	0.095	86	1.06	7
3	981	-0.13	34.912	28.06	6.80	0.607	0.097	86	1.06	7
3	1079	-0.19								
3	1177	-0.24	34.930	28.08	6.82	0.609	0.097	86	0.93	7

(CONTINUED)

		AR CRUISE AR2		STATION 259		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****		*****		PHOS	SIL
					ML/L	MGA/L	AOU	SATN		
3	1275	-0.28	34.939	28.09	6.79	0.606	0.100	86	1.02	7
3	1422	-0.36	34.930	28.09	6.76	0.604	0.105	85	1.11	8

		AR CRUISE AR2		STATION 259		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.70	0.00	31.527	0.000	25.38	260.5	0.000	0.00	8.87	0.00	
10	-1.71	0.00	31.509	0.000	25.37	261.7	0.027	0.01	8.76	0.00	
20	-1.71	0.00	31.526	0.008	25.38	260.3	0.053	0.05	8.69	0.03	1.39
30	-1.70	0.00	31.574	0.003	25.42	256.6	0.079	0.12	8.74	0.00	0.69
50	-1.70	0.00	31.600	0.004	25.44	254.3	0.131	0.33	8.78	0.02	0.87
75	-1.62	0.00	33.035	0.008	26.60	144.0	0.181	0.64	7.44	0.02	0.66
100	-1.52	0.01	33.946	0.002	27.34	74.3	0.208	0.87	6.94	0.00	0.77
150	-0.94	0.00	34.389	0.001	27.68	42.1	0.238	1.23	6.86	0.00	0.83
200	-0.26	0.00	34.572	0.001	27.79	31.1	0.256	1.55	6.71	0.00	0.96
250	0.31	0.00	34.741	0.002	27.90	21.4	0.269	1.85	6.66	0.00	0.86
300	0.66	0.01	34.880	0.003	27.99	13.2	0.278	2.09	6.71	0.00	0.84
400	0.64	0.00	34.880	0.001	27.99	13.2	0.291	2.57	6.70	0.00	0.80
500	0.51	0.00	34.877	0.002	28.00	12.7	0.304	3.18	6.74	0.00	0.95
600	0.31	0.00	34.893	0.001	28.02	10.2	0.316	3.83	6.74	0.00	0.85
700	0.16	0.00	34.886	0.001	28.03	9.7	0.326	4.50	6.77	0.00	0.83
800	0.05	0.00	34.894	0.001	28.04	8.3	0.335	5.20	6.79	0.00	0.81
1000	-0.14	0.00	34.914	0.000	28.06	5.3	0.349	6.44	6.80	0.00	0.96
1200	-0.25	0.00	34.933	0.000	28.08	3.0	0.357	7.38	6.81	0.00	0.74

AR CRUISE AR2 STATION 260 OBSERVED VALUES

DATE	16/12/64	BAROMETER	18.8	WEATHER	X7	WIND VELOC	08	WAVE PERIOD
HOUR	05.5	TEMP DRY	-21.1	VISIBILITY	6	WIND DIREC	03	SECCHI
LAT	83-49.0N	TEMP WET	-21.1	CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	13-59. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	05.5							
WIRE ANGLES:	00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	10	-1.69						
1	49	-1.71						
1	74	-1.63						
1	98	-1.53						
1	118	-1.44						
1	147	-1.01						
1	196	-0.26						
1	245	0.36						
1	294	0.62						
1	343	0.62						
1	392	0.62						
1	441	0.55						
1	490	0.50						

AR CRUISE AR2 STATION 261 OBSERVED VALUES

DATE 17/12/64	BAROMETER 18.1	WEATHER X7	WIND VELOC 09	WAVE PERIOD
HOUR 00.1	TEMP DRY -15.8	VISIBILITY 6	WIND DIREC 10	SECCHI
LAT 83-49.7N	TEMP WET -15.8	CLOUD TYPE 6	WAVE DIREC	WATER COLOR
LONG 13-55. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.1, 00.9				
WIRE ANGLES:	00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.71			
1	25	-1.70			
1	49	-1.70			
1	59	-1.68			
1	69	-1.67			
1	78	-1.60			
1	88	-1.55			
1	98	-1.53			
1	108	-1.48			
1	118	-1.43			
1	147	-1.00			
1	172	-0.56			
1	196	-0.25			
2	245	0.29			
2	294	0.67			
2	343	0.65			
2	392	0.61			
2	441	0.59			
2	490	0.50			
2	589	0.27			
2	785	0.03			
2	883	-0.10			
2	981	-0.14			
2	1177	-0.24			
2	1422	-0.40			

AR CRUISE AR2 STATION 262 OBSERVED VALUES

DATE 17/12/64	BAROMETER 11.3	WEATHER X3	WIND VELOC 22	WAVE PERIOD
HOUR 23.8	TEMP DRY -09.0	VISIBILITY 3	WIND DIREC 13	SECCHI
LAT 83-55.3N	TEMP WET -09.0	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 14-42. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 23.8, 00.6, 01.2				
WTRE ANGLES: 04, 06, 06				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.71			
1	25	-1.71			
1	49	-1.70			
1	59	-1.68			
1	69	-1.67			
1	78	-1.60			
1	88	-1.55			
1	98	-1.51			
1	108	-1.48			
1	118	-1.41			
1	147	-0.99			
1	172	-0.55			
2	196	-0.24			
2	245	0.33			
2	294	0.59			
2	343	0.59			
2	392	0.62			
2	490	0.48			
3	589	0.31			
3	785	0.01			
3	883	-0.06			
3	981	-0.14			
3	1177	-0.28			
3	1422	-0.37			

AR CRUISE AR2 STATION 263 OBSERVED VALUES

DATE	19/12/64	BAROMETER	15.1	WEATHER	X7	WIND VELOC	07	WAVE PERIOD
HOUR	00.0	TEMP DRY	-08.1	VISIBILITY	4	WIND DIREC	12	SECCHI
LAT	84-00.9N	TEMP WET	-08.1	CLOUD TYPF	4	WAVE DIREC		WATER COLOR
LONG	15-32. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00, 0, 00, 7							
WIRE ANGLES:	00, 02							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.72						
1	59	-1.72						
1	69	-1.65						
1	78	-1.60						
1	88	-1.55						
1	98	-1.53						
1	108	-1.47						
1	118	-1.43						
1	147	-0.98						
1	172	-0.50						
1	196	-0.22						
2	245	0.39						
2	294	0.78						
2	343	0.77						
2	392	0.70						
2	441	0.64						
2	490	0.61						
2	589	0.37						
2	785	0.10						
2	883	-0.09						
2	981	-0.17						
2	1177	-0.26						
2	1422	-0.42						

AR CRUISE AR2 STATION 264 OBSERVED VALUES

DATE 19/12/64	BAROMETER 13.5	WEATHER X3	WIND VELOC 25	WAVE PERIOD
HOUR 23.5	TEMP DRY -03.7	VISIBILITY 5	WIND DIREC 12	SECCHI
LAT 84-06.7N	TEMP WET -03.7	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 16-22.4W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 23.5, 00.4, 01.4				
WIRE ANGLES: 02, 06, 06				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.72						
1	49	-1.72						
1	59	-1.69						
1	69	-1.60						
1	78	-1.56						
1	88	-1.52						
1	98	-1.51						
1	108	-1.45						
1	118	-1.37						
1	147	-1.03						
1	172	-0.71						
1	196	-0.31						
2	243	0.22						
2	291	0.57						
2	340	0.57						
2	389	0.58						
2	437	0.53						
2	486	0.53						
2	584	0.30						
3	778	0.03						
3	876	-0.07						
3	973	-0.15						
3	1167	-0.27						
3	1410	-0.35						

AR CRUISE AR2

STATION 265

OBSERVED VALUES

DATE	21/12/64	BAROMETER	98.3	WEATHER	X3	WIND VELOC	29	WAVE PERIOD
HOUR	00.3	TEMP DRY	-01.5	VISIBILITY	1	WIND DIREC	13	SECCHI
LAT	84-02.2N	TEMP WET	-01.5	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	15-59.2W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	00.3, 01.1							
WIRE ANGLES:	03, 06							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.70			
1	25	-1.71			
1	49	-1.71			
1	59	-1.69			
1	69	-1.60			
1	78	-1.57			
1	88	-1.52			
1	98	-1.52			
1	108	-1.49			
1	118	-1.42			
1	147	-1.05			
1	172	-0.66			
1	196	-0.30			
2	243	0.26			
2	291	0.52			
2	340	0.57			
2	389	0.65			
2	437	0.58			
2	486	0.55			
2	584	0.35			
2	779	0.05			

AR CRUISE AR2 STATION 266 OBSERVED VALUES

DATE	21/12/64	BAROMETER	98.9	WEATHER	X7	WIND VELOC	26	WAVE PERIOD
HR	23.9	TEMP DRY	-14.0	VISIBILITY	1	WIND DIREC	34	SECCHI
LAT	83-57.0N	TEMP WET	-14.0	CLOUD TYPE	X	WAVE DIREC		WATER COLOR
LONG	15-32. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING
MESSENGER TIMES:	23.9, 00.9							
WIRE ANGLES:	01, 04							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	25	-1.71						
1	49	-1.72						
1	59	-1.63						
1	69	-1.59						
1	78	-1.57						
1	88	-1.53						
1	98	-1.53						
1	108	-1.48						
1	118	-1.44						
1	147	-1.05						
1	172	-0.68						
1	196	-0.30						
2	245	0.20						
2	294	0.58						
2	343	0.60						
2	392	0.59						
2	441	0.58						
2	490	0.58						
2	589	0.34						
2	785	0.06						
2	883	-0.05						
2	981	-0.13						
2	1177	-0.24						
2	1422	-0.39						

AR CRUISE AR2 STATION 267 OBSERVED VALUES

DATE	24/12/65	BAROMETER	19.6	WEATHER	X0	WIND VELOC	11	WAVE PERIOD	
HOUR	23.9	TEMP DRY	-34.7	VISIBILITY	7	WIND DIREC	31	SECCHI	
LAT	83-31.6N	TEMP WET		CLOUD TYPE	X	WAVE DIREC		WATER COLOR	
LONG	14-08.0W	REL HUMID		CLOUD AMT	0	WAVE HEIGHT		SOUNDING	3700
MESSENGER	TIMES: 23.9, 00.9								
WIRE	ANGLES: 00, 00								

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.61						
1	24	-1.71						
1	49	-1.71						
1	59	-1.70						
1	69	-1.66						
1	78	-1.59						
1	88	-1.53						
1	98	-1.52						
1	108	-1.44						
1	118	-1.40						
1	147	-1.05						
1	172	-0.65						
1	196	-0.31						
2	245	0.26						
2	294	0.59						
2	343	0.63						
2	392	0.61						
2	441	0.58						
2	490	0.53						
2	588	0.30						
2	784	0.03						
2	882	-0.08						
2	980	-0.14						
2	1176	-0.25						
2	1421	-0.40						

AR CRUISE AR2 STATION 268 OBSERVED VALUES

DATE 25/12/64 BAROMETER 20.2 WEATHER X0 WIND VELOC 02
 HOUR 23.8 TEMP DRY -43.8 VISIBILITY 8 WIND DIREC 01 WAVE PERIOD
 LAT 83-30.8N TEMP WET CLOUD TYPE X WAVE DIREC SECCHI
 LONG 13-41.0W REL HUMID CLOUD AMT 0 WAVE HEIGHT WATER COLOR
 MESSENGER TIMES: 23.8, 00.9, 02.1 SOUNDING
 WIRE ANGLES: 00, 00, 00

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			PHOS	SIL	
					ML/L	MGA/L	AOU			
1	7	-1.70	31.636	25.47	8.75	0.781	-0.028	104	1.25	12
1	10	-1.71	31.627	25.46	8.73	0.780	-0.026	103	1.25	10
1	24	-1.70	31.627	25.46	8.83	0.789	-0.035	105	1.11	9
1	39	-1.70	31.645	25.48	8.78	0.784	-0.031	104	1.06	9
1	49	-1.71	31.627	25.46	8.83	0.789	-0.035	105	1.06	10
1	59	-1.68	31.627	25.46	8.78	0.784	-0.031	104	1.11	7
1	69	-1.65	32.746	26.37	7.85	0.701	0.045	94	1.25	11
1	78	-1.59	33.233	26.76	7.84	0.700	0.042	94	1.25	13
1	88	-1.55	33.612	27.07	7.08	0.632	0.107	86	1.25	15
1	98	-1.51	33.874	27.28	6.99	0.624	0.113	85	1.16	13
1	108	-1.48	34.018	27.39	6.99	0.624	0.111	85	1.16	11
1	118	-1.42	34.163	27.51	6.98	0.623	0.110	85	1.06	11
2	147	-1.12	34.370	27.67	6.91	0.617	0.109	85	1.06	9
2	172	-0.64	34.533	27.78	6.85	0.612	0.104	85	1.11	7
2	196	-0.30	34.614	27.83	6.81	0.608	0.101	86	0.97	7
2	245	0.26	34.686	27.86	6.72	0.600	0.098	86	0.97	7
2	294	0.61	34.812	27.94	6.67	0.596	0.095	86	0.97	7
2	343	0.61	34.857	27.98	6.69	0.598	0.093	87	1.11	9
2	392	0.59	34.848	27.97	6.72	0.600	0.091	87	1.11	9
2	441	0.58	34.857	27.98	6.74	0.602	0.089	87	1.06	8
2	490	0.52	34.876	28.00	6.78	0.606	0.086	88	1.16	9
2	588	0.31	34.848	27.99	6.80	0.607	0.089	87	1.11	9
3	686	0.18	34.867	28.01	6.82	0.609	0.089	87	1.16	8
3	784	0.03	34.876	28.02	6.82	0.609	0.092	87	1.16	8
3	882	-0.08	34.894	28.05	6.82	0.609	0.094	87	1.25	8
3	980	-0.13	34.867	28.03	6.82	0.609	0.095	86	0.97	8
3	1078	-0.20	34.903	28.06	6.83	0.610	0.095	86	1.11	8
3	1176	-0.26	34.921	28.08	6.80	0.607	0.099	86	1.16	8

(CONTINUED)

		AR CRUISE AR2		STATION 268		OBSERVED VALUES				(CONTINUED)
CST	DEPTH	TEMP	SAL	SIGMA-T	***** ML/L	OXYGEN MGA/L	***** ANU	SATN	PHOS	SIL
3	1274	-0.30	34.903	28.06	6.80	0.607	0.100	86	1.06	9
3	1421	-0.39	34.921	28.08	6.81	0.608	0.101	86	1.16	9

		AR CRUISE AR2		STATION 268		INTERPOLATED AND COMPUTED VALUES					
DEPTH	TEMP	E(T)	SAL	E(S)	SIGMA-T	SP VOL ANOMALY	GEO POT ANOMALY	POT ENERGY	OXY ML/L	E(O)	VAR RATIO
0	-1.70	0.00	31.636	0.000	25.47	252.1	0.000	0.00	8.75	0.00	
10	-1.71	0.00	31.627	0.000	25.46	252.6	0.026	0.01	8.73	0.00	
20	-1.71	0.00	31.623	0.002	25.46	252.9	0.051	0.05	8.79	0.02	1.19
30	-1.70	0.00	31.636	0.003	25.47	251.7	0.077	0.12	8.81	0.01	0.72
50	-1.71	0.00	31.601	0.017	25.44	254.2	0.128	0.33	8.85	0.01	0.87
75	-1.61	0.00	33.106	0.013	26.66	138.6	0.177	0.63	7.84	0.05	0.66
100	-1.50	0.00	33.907	0.003	27.30	77.2	0.204	0.86	6.99	0.00	0.77
150	-1.06	0.01	34.392	0.001	27.68	41.4	0.234	1.22	6.90	0.00	0.83
200	-0.25	0.00	34.621	0.002	27.83	27.5	0.252	1.52	6.80	0.00	0.96
250	0.31	0.00	34.699	0.002	27.87	24.6	0.265	1.83	6.71	0.00	0.86
300	0.62	0.01	34.821	0.000	27.95	17.4	0.275	2.12	6.67	0.00	0.84
400	0.59	0.00	34.849	0.000	27.97	15.3	0.292	2.71	6.72	0.00	0.80
500	0.50	0.00	34.874	0.002	28.00	12.8	0.306	3.36	6.78	0.00	0.95
600	0.29	0.00	34.849	0.001	27.99	13.3	0.319	4.11	6.80	0.00	0.84
700	0.16	0.00	34.868	0.000	28.01	11.0	0.332	4.92	6.82	0.00	0.82
800	0.01	0.00	34.880	0.001	28.03	9.1	0.342	5.70	6.82	0.00	0.80
1000	-0.14	0.00	34.873	0.002	28.03	8.4	0.359	7.33	6.82	0.00	0.76
1200	-0.27	0.00	34.917	0.002	28.07	4.0	0.372	8.71	6.80	0.00	0.73

AR CRUISE AR2 STATION 269 OBSERVED VALUES

DATE 27/12/64	BAROMETER 12.5	WEATHER X7	WIND VELOC 03	WAVE PERIOD
HOUR 00.9	TEMP DRY -34.0	VISIBILITY 6	WIND DIREC 06	SECCHI
LAT 83-32.5N	TEMP WET	CLOUD TYPE 7	WAVE DIREC	WATER COLOR
LONG 13-42. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.9, 01.8				
WIRE ANGLES: 00, 00				

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	7	-1.70			
1	24	-1.71			
1	49	-1.70			
1	59	-1.71			
1	69	-1.64			
1	78	-1.59			
1	88	-1.54			
1	98	-1.53			
1	108	-1.47			
1	118	-1.44			
1	147	-1.03			
1	172	-0.67			
2	196	-0.27			
2	245	0.29			
2	294	0.61			
2	343	0.62			
2	392	0.63			
2	441	0.60			
2	490	0.54			
2	588	0.33			
2	784	-0.04			
2	882	-0.07			
2	980	-0.13			
2	1176	-0.25			
2	1421	-0.40			

AR CRUISE AR2 STATION 270 OBSERVED VALUES

DATE 28/12/64	BAROMETER 09.8	WEATHER X4	WIND VELOC 01	WAVE PERIOD
HOUR 00.2	TEMP DRY -32.0	VISIBILITY 3	WIND DIREC 09	SECCHI
LAT 83-34.4N	TEMP WET	CLOUD TYPE X	WAVE DIREC	WATER COLOR
LONG 13-45. W	REL HUMID	CLOUD AMT 8	WAVE HEIGHT	SOUNDING
MESSENGER TIMES: 00.2, 01.1, 02.0				
WIRE ANGLES:	00, 00, 00			

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ADU SATN
1	7	-1.71			
1	24	-1.71			
1	49	-1.71			
1	59	-1.71			
1	69	-1.65			
1	78	-1.60			
1	88	-1.55			
1	98	-1.53			
1	108	-1.48			
1	118	-1.42			
1	147	-1.02			
1	172	-0.59			
2	196	-0.29			
2	245	0.33			
2	294	0.64			
3	343	0.65			
3	392	0.61			
3	441	0.57			
3	490	0.51			
3	588	0.31			
3	784	0.03			
3	882	-0.07			
3	980	-0.13			
3	1176	-0.25			
3	1421	-0.41			

AR CRUISE AR2 STATION 271 OBSERVED VALUES

DATE	28/12/64	BAROMETER	01.5	WEATHER	X2	WIND VELOC	10	WAVE PERIOD
HOUR	23.9	TEMP DRY	-26.0	VISIBILITY	6	WIND DIREC	14	SECCHI
LAT	83-33.1N	TEMP WET		CLOUD TYPE	7	WAVE DIREC		WATER COLOR
LONG	13-50. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3730
MESSENGER TIMES:	23.9, 00.8							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****			
					ML/L	MGA/L	AOU	SATN
1	7	-1.71						
1	24	-1.71						
1	49	-1.71						
1	59	-1.71						
1	69	-1.63						
1	78	-1.60						
1	88	-1.56						
1	98	-1.53						
1	108	-1.47						
1	118	-1.43						
1	147	-1.05						
1	172	-0.63						
2	196	-0.30						
2	245	0.31						
2	294	0.60						
2	343	0.63						
2	392	0.61						
2	441	0.60						
2	490	0.51						
2	588	0.31						
2	784	0.03						
2	882	-0.08						
2	980	-0.14						
2	1176	-0.26						
2	1421	-0.41						

AR CRUISE AR2 STATION 272 OBSERVED VALUES

DATE	29/12/64	BAROMETER	15.7	WEATHER	X7	WIND VELOC	05	WAVE PERIOD
HOUR	23.5	TEMP DRY	-27.0	VISIBILITY	4	WIND DIREC	05	SECCHI
LAT	83-31.4N	TEMP WET		CLOUD TYPE	4	WAVE DIREC		WATER COLOR
LONG	13-57. W	REL HUMID		CLOUD AMT	8	WAVE HEIGHT		SOUNDING 3700
MESSENGER TIMES:	23.5, 00.6							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L AOU SATN
1	7	-1.71			
1	24	-1.71			
1	49	-1.73			
1	59	-1.71			
1	69	-1.65			
1	78	-1.60			
1	88	-1.56			
1	98	-1.54			
1	108	-1.48			
1	118	-1.43			
1	147	-1.00			
1	172	-0.63			
2	196	-0.27			
2	245	0.29			
2	294	0.61			
2	343	0.63			
2	392	0.57			
2	441	0.57			
2	490	0.50			
2	588	0.30			
2	784	0.03			
2	882	-0.09			
2	980	-0.14			
2	1176	-0.26			
2	1421	-0.41			

AR CRUISE AR2 STATION 273 OBSERVED VALUES

DATE	30/12/64	BAROMETER	24.4	WEATHER	X1	WIND VELOC	05	WAVE PERIOD
HOUR	00.1	TEMP DRY	-32.5	VISIBILITY	6	WIND DIREC	05	SECCHI
LAT	83-29.7N	TEMP WET		CLOUD TYPE	2	WAVE DIREC		WATER COLOR
LONG	14-14. W	RFL HUMID		CLOUD AMT	4	WAVE HEIGHT		SOUNDING 3700
MESSENGER TIMES:	00.1, 01.3							
WIRE ANGLES:	00, 00							

CST	DEPTH	TEMP	SAL	SIGMA-T	***** OXYGEN *****
					ML/L MGA/L ANU SATN
1	7	-1.71			
1	24	-1.72			
1	49	-1.72			
1	59	-1.70			
1	69	-1.66			
1	78	-1.59			
1	88	-1.55			
1	98	-1.51			
1	108	-1.46			
1	118	-1.42			
1	147	-0.98			
1	172	-0.50			
2	196	-0.28			
2	245	0.30			
2	294	0.48			
2	343	0.51			
2	392	0.59			
2	441	0.50			
2	490	0.49			
2	588	0.27			
2	784	0.03			
2	882	-0.08			
2	980	-0.13			
2	1176	-0.25			
2	1421	-0.40			

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<p>This report contains tabulated physical and chemical data collected from February to 31 December 1964 at Arctic Research Laboratory Ice Station No. 2 (ARLIS II) as it moved through the Eastern Arctic Ocean into the Greenland Sea. These data were collected as part of a study of the water characteristics of the Arctic Ocean and Greenland Sea.</p>			

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