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**COASTAL UPWELLING EXPERIMENT
HYDROGRAPHIC DATA REPORT**

June-August 1973

by

Adriana Huyer

and

William E. Gilbert

Data Report 59

Reference 74-8

May 1974

Office for the International
Decade of Ocean Exploration
National Science Foundation
Grant GX-28746

OREGON STATE UNIVERSITY

School of Oceanography
Oregon State University
Corvallis, OR 97331

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COASTAL UPWELLING EXPERIMENT HYDROGRAPHIC DATA REPORT

June - September 1973

Introduction

Hydrographic observations were made over the continental shelf and slope off Oregon during the 1973 Coastal Upwelling Experiment (CUE-II) from three ships: R/V OCEANOGRAPHER, R/V THOMAS G. THOMPSON, and R/V YAQUINA. This report contains the observations made on four YAQUINA cruises between June and August 1973 (Table I). Observations were made in the vicinity of the CUE-II buoy garden (Figure 1).

The report contains a separate section for each of the four cruises, with a cruise narrative, maps showing station positions, profiles of temperature, salinity, and sigma-t for groups of stations, and a listing of the observed and computed parameters at standard depths.

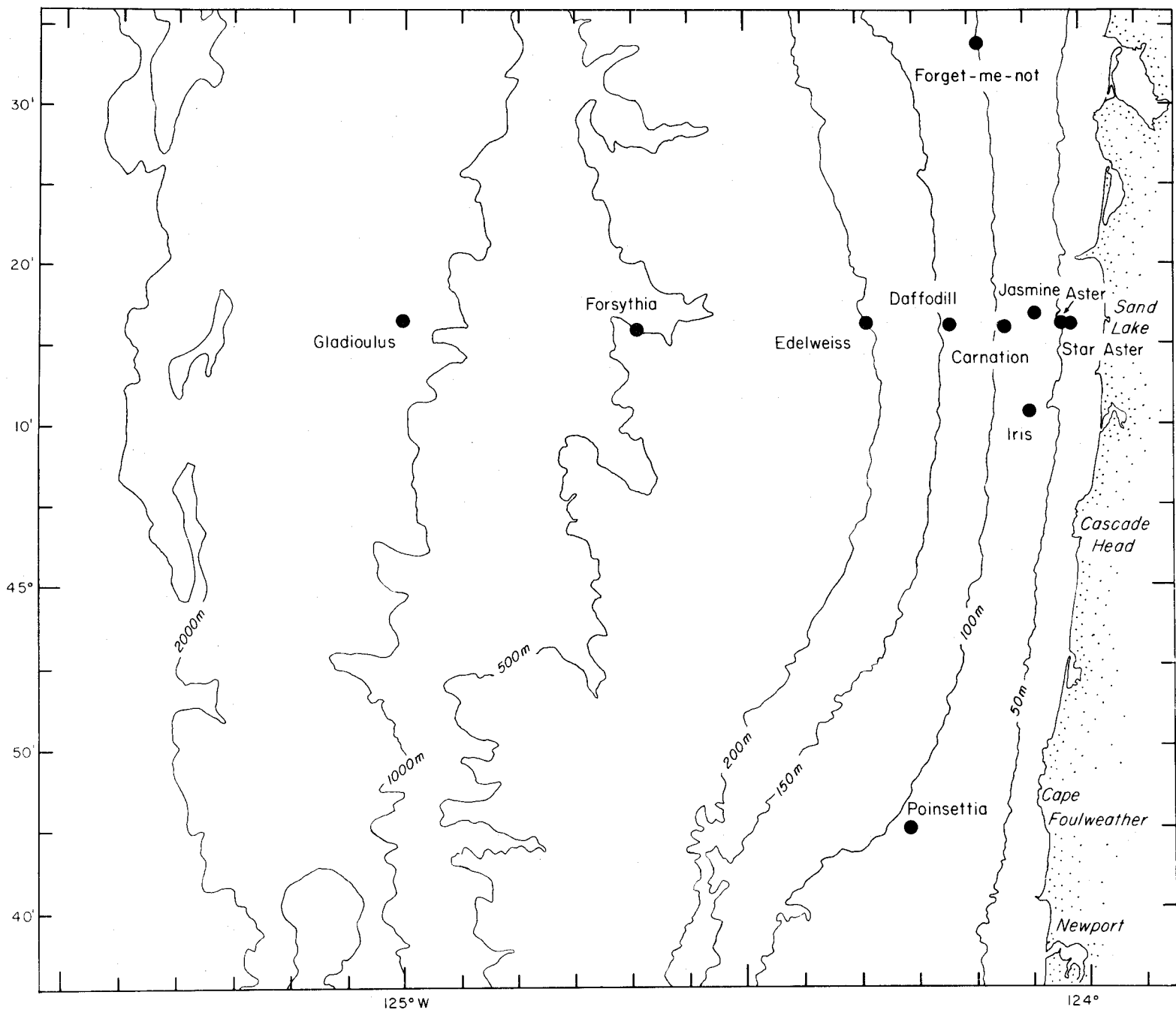
Sampling Procedures

At each station, conductivity, temperature and pressure were measured using a Geodyne conductivity-temperature-depth (CTD) unit. The system digitizes the data at four-second intervals and the data are recorded on both magnetic tape and punched paper tape. Data were not recorded while the unit was being raised at the end of each cast. We attempted to obtain one observation per meter by lowering the CTD at about 15 m/min. Actual lowering rates usually exceeded this, and the depth resolution is 1 m, so we actually obtained about one observation for every 2 or 3 m depth interval. In water depths less than 200 m, we attempted to obtain observations to within 10 m of the bottom.

0 10 20 30 Kilometers

0 5 10 15 Nautical Miles

Figure 1. CUE-II buoy garden.



An NIO sampling bottle was hung about 2 m above the CTD sensors; occasionally reversing thermometers were used on the bottle. The bottle was tripped using a regular messenger while the CTD was at some specified depth. A salinity sample was drawn for each CTD cast.

A surface bucket sample was taken, the bucket temperature measured and a salinity sample was drawn from the bucket. Wet and dry air temperature observations were made on the well deck with a psychrometer with forced (mechanically or electrically driven) ventilation. Other weather observations were made by the ship's officers.

Sample salinities were determined on an inductive salinometer. The error is believed to be less than 0.01 o/oo. Reversing thermometers were read by two observers.

Data Processing Procedures

The CTD unit has sensors to measure pressure, temperature and conductance. The sensor outputs are digitized sequentially once every four seconds and recorded on magnetic tape and punched paper tape. As well, the data are available for on-line processing. The magnetic tapes form the basic data set; the paper tapes are used for backup. The sensor outputs are recorded sequentially; the relevant portions of the output are: WORD 6 for pressure, WORD 8 for temperature, and WORD 9 for conductance. The sensor outputs are converted to engineering units by the following equations:

$$P = [-10.4281 + 0.506372 (\text{WORD } 6) - 1.112899 \times 10^{-6} (\text{WORD } 6)^2] \text{ db}$$

$$T = [-1.8633 + 8.988032 (\text{WORD } 8) + 1.204592 \times 10^{-8} (\text{WORD } 8)^2]^\circ\text{C}$$

$$C = [1.465 \times 10^{-5} (\text{WORD } 9) \times (.9805)] \text{ mmhos/cm}^2$$

Table I. Hydrographic cruises by R/V YAQUINA during the 1973 Coastal Upwelling Experiment.

<u>Cruise</u>	<u>Dates</u>	<u>No. of Stations</u>
Y7306E	27 June - 1 July	47
Y7307A	9 - 14 July	138
Y7308A	16 - 20 August	72
Y7308B	21 - 24 August	41

Table II. Comparison between temperatures obtained with CTD and with a pair of protected reversing thermometers during Y7306E.

<u>Cruise</u>	<u>Station</u>	<u>Depth</u>	<u>T_s</u>	<u>T_{CTD}</u>
Y7306E	1	30	7.96†	7.95
	2	40	7.89+†	7.95
	3	82	7.16†	7.16
	4	113	6.76	6.78
	6	239	6.03	6.03
	7	356	5.39†	5.41
	8	403	5.19	5.17
	9	445	5.10	5.14
	10	508	4.73†	4.71
	11	502	4.80†	4.80
	12	452	4.87†	4.88
	13	421	5.12	5.11
	14	371	5.23	5.23
	15	325	5.41	5.41
	16	5	14.04x†	14.12
	17	126	6.52	6.55
	18	109	6.61†	6.63
	20	54	7.03†	7.05
	21	29	7.12†	7.14

+ Thermometer had apparently not reached equilibrium with surroundings when it was reversed.

x These observations were in a region of relatively strong vertical gradient.

† Only one of the reversing thermometers operated properly.

The equation for the conductivity implicitly includes a nominal cell constant to obtain conductivity from conductance, and explicitly includes a factor (.9805) obtained during CUE-I (Anon., 1972) to correct the nominal cell constant.

The depth in meters is taken to be the same as the pressure in decibars; this is a reasonable approximation over the range of observed depths.

For each station, all observations (depth, temperature and conductivity) are computed. Then observations at decreasing depths are deleted and observations at the same depth are averaged. These observations are compared to the NIO bottle samples obtained.

Comparison of CTD temperatures with reversing thermometers (Tables II, III and IV) suggested that CTD temperatures might be too high. However, comparison with STD data from OCEANOGRAPHER at two stations suggested the CTD temperature data might be too low. The thermometers had not been recently calibrated, and during one cruise, the two thermometers used showed a systematic difference; using the higher reading thermometer would result in good agreement with the CTD. OCEANOGRAPHER data showed lower salinities as well as higher temperatures, suggesting there might be a difference in the depth sensors. The CTD depth sensor was frequently checked against the precision depth recorder and agreed well. We concluded that the original temperature equation was probably valid.

A salinity sample was collected on almost every CTD cast. The sample depth was assumed to be 2 m less than the CTD depth at the time the bottle tripped. Sample temperature was assumed to be equal to the CTD temperature reading at the sample depth. Sample conductivity was computed from depth,

Table III. Comparison between temperatures obtained with CTD and a pair of protected reversing thermometers during Y7308A.

<u>Station</u>	<u>Depth</u>	<u>T_s</u>	<u>T_{CTD}</u>
4	384	5.55	5.58
16	49	6.96	6.96
45	72	6.89	6.88

Table IV. Comparison between temperatures obtained with CTD and a pair of protected reversing thermometers during Y7308B.

<u>Station</u>	<u>Depth</u>	<u>Thermometers</u>		<u>T_{CTD}</u>
		<u>#8529</u>	<u>#3548</u>	
16	98	6.65	6.68	6.69
23	178	6.59	6.61	6.64
27	177	6.63	6.64	6.67
30	442	5.13	5.15	5.16
34	96	7.83	7.86	7.86
38	1010	--	3.49	3.49
47	155	6.66	6.69	6.70

Table V. Coefficients of the best straight line fit of the form $y = a + bx$ between the sample conductivity (y) and the CTD conductivity.

<u>Cruise</u>	<u>a</u>	<u>b</u>
Y7306E	-0.328	1.00537
Y7307A	-0.321	1.00559
Y7308A	-0.568	1.01295
Y7308B	-0.356	1.00682

temperature and salinity. For each cruise, the sample conductivities were compared with the CTD conductivities at the same depth and a best straight line was obtained by a least squares fit. The coefficients of the best straight line varied from cruise to cruise (Table V). For each cruise, the linear function was used to correct all CTD conductivity data.

The salinity was computed from the depth, temperature, and conductivity data using the equations from Perkin and Walker (1972). Sigma-t was computed using Knudsen's equation as reported by Sweers (1971).

Profiles of temperature and salinity were examined for anomalous values. Values which were obviously in error were deleted, or replaced if a correct value was obvious. Sigma-t was corrected when either the temperature or salinity were replaced.

For each station, the location and weather data were punched on cards. This header data was merged with the CTD observations to produce a final data file for each cruise. The file was processed to provide a listing for each station, showing header data, and observed and computed parameters at standard depths and the shallowest and deepest observed depths. The computed parameters were calculated from the complete data array. The data format and units are as follows:

NO:	consecutive station number
LAT:	the latitude in degrees and minutes north
LONG:	the longitude in degrees and minutes west
STN:	station location code for positions in the Coastal Upwelling Experiment grid of stations
DEPTH:	depth to the bottom in meters
DATE:	month/day/year
TIME:	hours and minutes, Universal time
AIR TEMP:	dry air temperature in degrees Celsius
WET BULB:	wet bulb temperature in degrees Celsius

WIND DIR: direction in degrees True from which the wind blows
 SPEED: wind speed in knots
 SWELL DIR: direction in degrees True from which the swell comes
 HT: swell height in feet
 PER: period of swell in seconds
 CLOUD TYPE: the two predominant cloud types coded according to the
 World Meteorological Organization code (on page 11)
 AMT: coded cloud amount (see WMO code, page 11)
 BAR: the sea level atmospheric pressure in millibars
 over 1000 mb
 WEA: present weather code (see WMO code, p. 9, 10)
 INSTR: OSU I designates Oregon State University's Geodyne
 conductivity-temperature-depth system
 BKT TEMP: bucket temperature in degrees Celsius
 SAL: salinity of the bucket sample in parts per thousand
 SAMPLE DEPTH: depth of the sampling bottle on the CTD wire at the
 time it closed, in meters
 SAL: salinity of the subsurface sample, in parts per
 thousand

The data columns give observed and computed data for the standard depths and the deepest observation. If the shallowest observation was not at 0 m, it is given as well. For each depth, the temperature (TEMP) and salinity (SAL) values are observed or interpolated linearly from the nearest neighboring observations. Sigma-t (SIGMA), specific volume anomaly $\times 10^5$ (SVA), dynamic height (DELD) in dynamic meters and potential energy in 10^8 ergs cm^{-2} (POTE) are given for each depth.

WMO WEATHER CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure		ww		
No meteors except photometeors	{	00	Cloud development not observed or not observable	} characteristic change of the state of sky during the past hour
		01	Clouds generally dissolving or becoming less developed	
		02	State of sky on the whole unchanged	
Haze, dust, sand or smoke	{	03	Clouds generally forming or developing	
		04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
		05	Haze	
		06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
		07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
		08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
		09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
		10	Mist	
		11	Patches of shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea	
12	More of less continuous			
13	Lightning visible, no thunder heard			
14	Precipitation within sight, not reaching the ground or the surface of the sea			
15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station			
16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station			
17	Thunderstorm, but no precipitation at the time of observation			
18	Squalls	} at or within sight of the station during the preceding hour or at the time of observation		
19	Funnel clouds			
<hr/>				
ww = 20 - 29 Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation				
20 Drizzle (not freezing) or snow grains				
21 Rain (not freezing)				
22 Snow				
23 Rain and snow or ice pellets, type (A)				
24 Freezing drizzle or freezing rain				
25 Shower(s) of rain				
26 Shower(s) of snow, or of rain and snow				
27 Shower(s) of hail, or of rain and hail				
28 Fog or ice fog				
29 Thunderstorm (with or without precipitation)				
<hr/>				
ww = 30 - 39 Duststorm, sandstorm, drifting or blowing snow				
30 } - has decreased during the preceding hour				
31 } Slight or moderate dust-storm or sand-storm				
32 } - no appreciable change during the preceding hour				
33 } - has begun or has increased during the preceding hour				
33 } Severe dust-storm or sand-storm				
34 } - has decreased during the preceding hour				
35 } - no appreciable change during the preceding hour				
36 } - has begun or has increased during the preceding hour				
36 Slight or moderate blowing snow				
37 Heavy drifting snow				
38 Slight or moderate blowing snow				
39 Heavy blowing snow				
} generally low (below eye level)				
} generally high (above eye level)				
<hr/>				
ww = 40 - 49 Fog or ice fog at the time of observation				
40 Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer				
41 Fog or ice fog in patches				
42 Fog or ice fog, sky visible				
43 Fog or ice fog, sky invisible				
44 Fog or ice fog, sky visible				
45 Fog or ice fog, sky invisible				
46 Fog or ice fog, sky visible				
47 Fog or ice fog, sky invisible				
48 Fog, depositing time, sky visible				
49 Fog, depositing time, sky invisible				

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- 50 Drizzle, not freezing, intermittent
- 51 Drizzle, not freezing, continuous
- 52 Drizzle, not freezing, intermittent
- 53 Drizzle, not freezing, continuous
- 54 Drizzle, not freezing, intermittent
- 55 Drizzle, not freezing, continuous
- 56 Drizzle, freezing, slight
- 57 Drizzle, freezing, moderate or heavy (dense)
- 58 Drizzle and rain, slight
- 59 Drizzle and rain, moderate or heavy

ww = 60 - 69 Rain

- 60 Rain, not freezing, intermittent
- 61 Rain, not freezing, continuous
- 62 Rain, not freezing, intermittent
- 63 Rain, not freezing, continuous
- 64 Rain, not freezing, intermittent
- 65 Rain, not freezing, continuous
- 66 Rain, freezing, slight
- 67 Rain, freezing, moderate or heavy
- 68 Rain or drizzle and snow, slight
- 69 Rain or drizzle and snow, moderate or heavy

70 - 79 Solid precipitation not in showers

- ww
- 70 Intermittent fall of snow flakes
 - 71 Continuous fall of snow flakes
 - 72 Intermittent fall of snow flakes
 - 73 Continuous fall of snow flakes
 - 74 Intermittent fall of snow flakes
 - 75 Continuous fall of snow flakes
 - 76 Ice prisms (with or without fog)
 - 77 Snow grains (with or without fog)
 - 78 Isolated starlike snow crystals (with or without fog)
 - 79 Ice pellets, type (a)

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- 80 Rain shower(s), slight
- 81 Rain shower(s), moderate or heavy
- 82 Rain shower(s), violent
- 83 Shower(s) of rain and snow mixed, slight
- 84 Shower(s) of rain and snow mixed, moderate or heavy
- 85 Snow shower(s), slight
- 86 Snow shower(s), moderate or heavy
- 87 Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed
- 88 Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder
- 90 Slight rain at time of observation
- 91 Moderate or heavy rain at time of observation
- 92 Slight snow, or rain and snow mixed or hail at time of observation
- 93 Moderate or heavy snow, or rain and snow mixed or hail at time of observation
- 94 Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation
- 95 Thunderstorm, slight or moderate, with hail at time of observation
- 96 Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation
- 97 Thunderstorm, combined with duststorm or sandstorm at time of observation
- 98 Thunderstorm, heavy, with hail at time of observation

} slight at time of observation

} moderate at time of observation

} heavy (dense) at time of observation

} - slight

} - moderate or heavy

} - slight

} - moderate or heavy

} thunderstorm during the preceding hour but not at time of observation

} thunderstorm at time of observation

WMO WEATHER CODE (cont.)

CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

YAQUINA CRUISE Y7306E

27 June - 2 July 1973

The purpose of YAQUINA cruise Y7306E was to moor several arrays of current meters, to make hydrographic observations and to test a device for measuring temperature microstructure. YAQUINA departed Newport, Oregon about 1800 Z, 27 June and proceeded to $44^{\circ}45'N$, $124^{\circ}17'W$ to service a current meter array (Poinsettia). At 0130 Z, 28 June we began to occupy a line of hydrographic stations along $45^{\circ}00'N$ (Stn. 1-9). The line was completed at 1130 Z, 28 June. A hydrographic line along $45^{\circ}16.5'N$ (Stn. 10-21) was begun at 1500 Z, 28 June and completed at 0615 Z, 29 June. A line along $45^{\circ}30'N$ was begun at 0816 Z, 29 June but interrupted at 1100 Z (Stns. 22-26) because weather had become suitable for mooring current meter arrays. Arrays were moored at $45^{\circ}16.5'N$, $124^{\circ}08'W$ (Carnation) and at $45^{\circ}16.5'N$, $124^{\circ}02'W$ (Aster) on 29 June. The hydrographic line along $45^{\circ}16.5'N$ was repeated between 0250 and 1130 Z, 30 June. The surface float of the Carnation array had become partially submerged and Carnation was removed on 30 June. Another current meter array (Forsythia) was moored at $45^{\circ}16.5'N$, $124^{\circ}41'W$ on 30 June. The ship returned to Newport to exchange the buoy personnel for the microstructure group, and the final line of hydrographic stations (37-47) was occupied along $44^{\circ}40'N$ between 0600 Z and 1800 Z, 1 July. Hydrographic station positions are shown in Figure 2.

Personnel standing hydrographic watches during the cruise were R. L. Smith, D. Barstow, R. Jones, A. Huyer, J. Peters, T. Wright, C. Koblinsky, H. Frese, R. Bates and R. Hansen. R. R. Kapaun kept the CTD system operating.

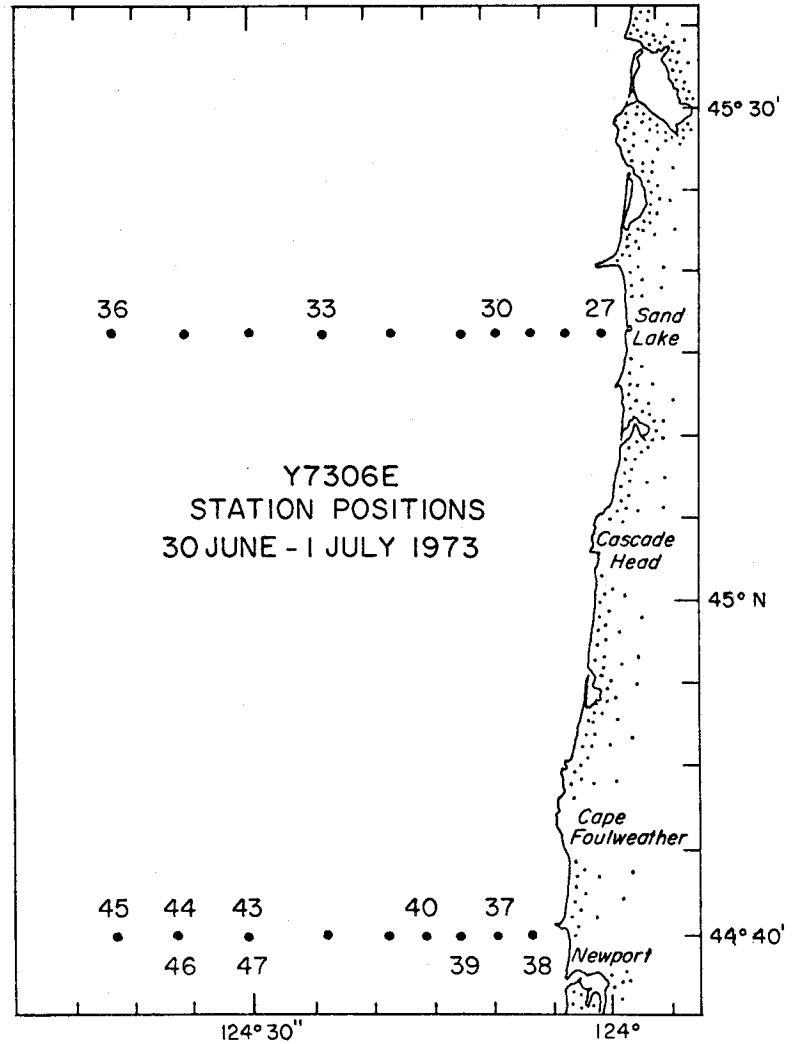
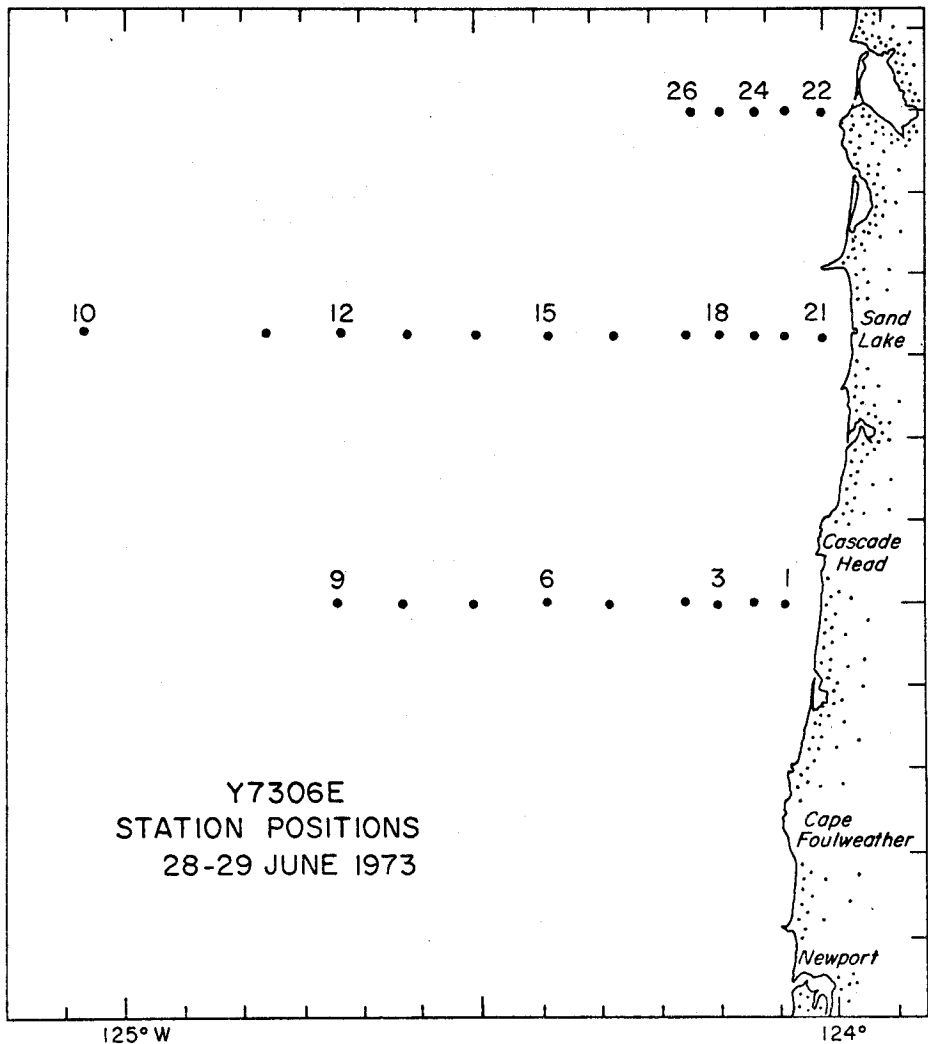


Figure 2. Positions of hydrographic stations occupied by R/V YAQUINA, 28 June - 1 July 1973.

The salinity from the subsurface sample on each CTD cast was compared to the final computed CTD salinity. The differences are plotted both vs. the sample salinity and vs. the station number (Figure 3). The standard deviation of the differences is 0.025 o/oo.

Staggered profiles of temperature, salinity and sigma-t for each line of stations are in the following pages - i.e., for stations 1-9, 10-21, 22-26, 27-36 and 37-45 (Figures 4-8). The profiles are offset by a separation proportional to the distance between the station positions. Profiles for stations 46 and 47 are shown with those of 43 and 44 (Figure 9). Station number is shown beside each profile. As well, the surface and 200 m (or bottom) parameter value is shown for each profile in the figures.

Observed and computed parameters are listed at standard depths and shown for each station with the time, location and weather data (p. 22-29).

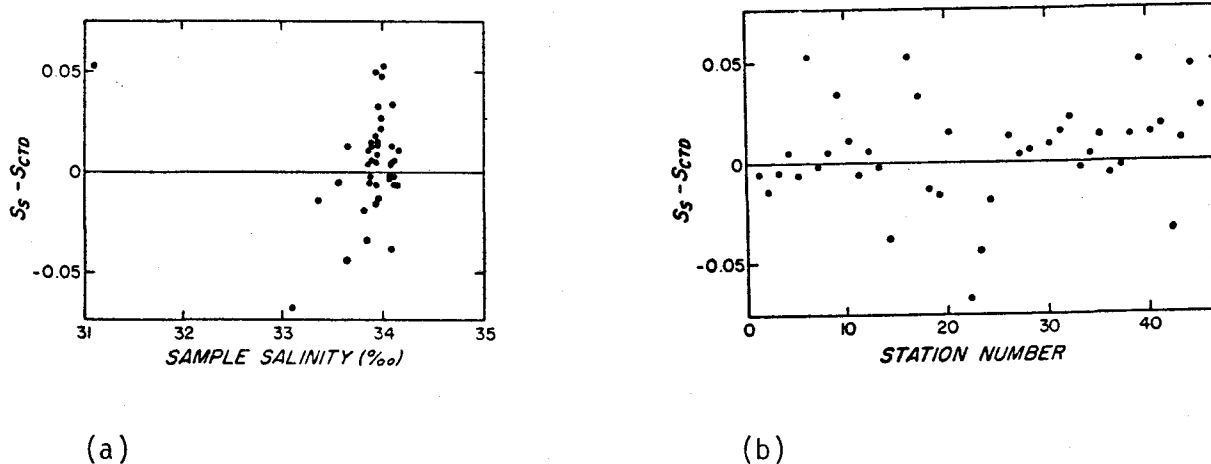


Figure 3. Comparison between sample salinity (S_s) and CTD salinity (S_{CTD}), Y7306E: (a) the difference vs. sample salinity, and (b) the difference vs. station number.

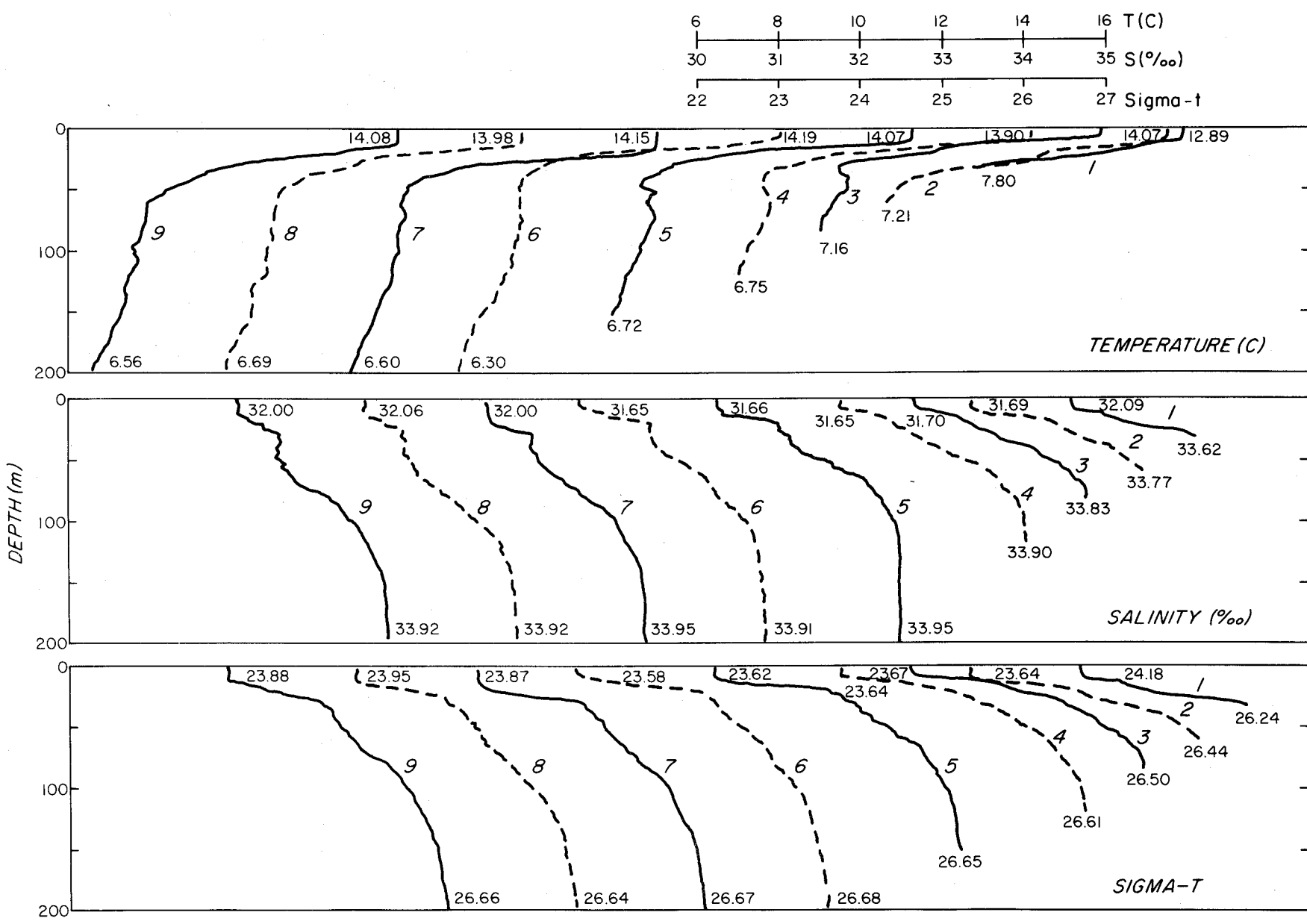


Figure 4. Staggered profiles of temperature, salinity and sigma-t, for stations along 45°00'N, 28 June 1973.

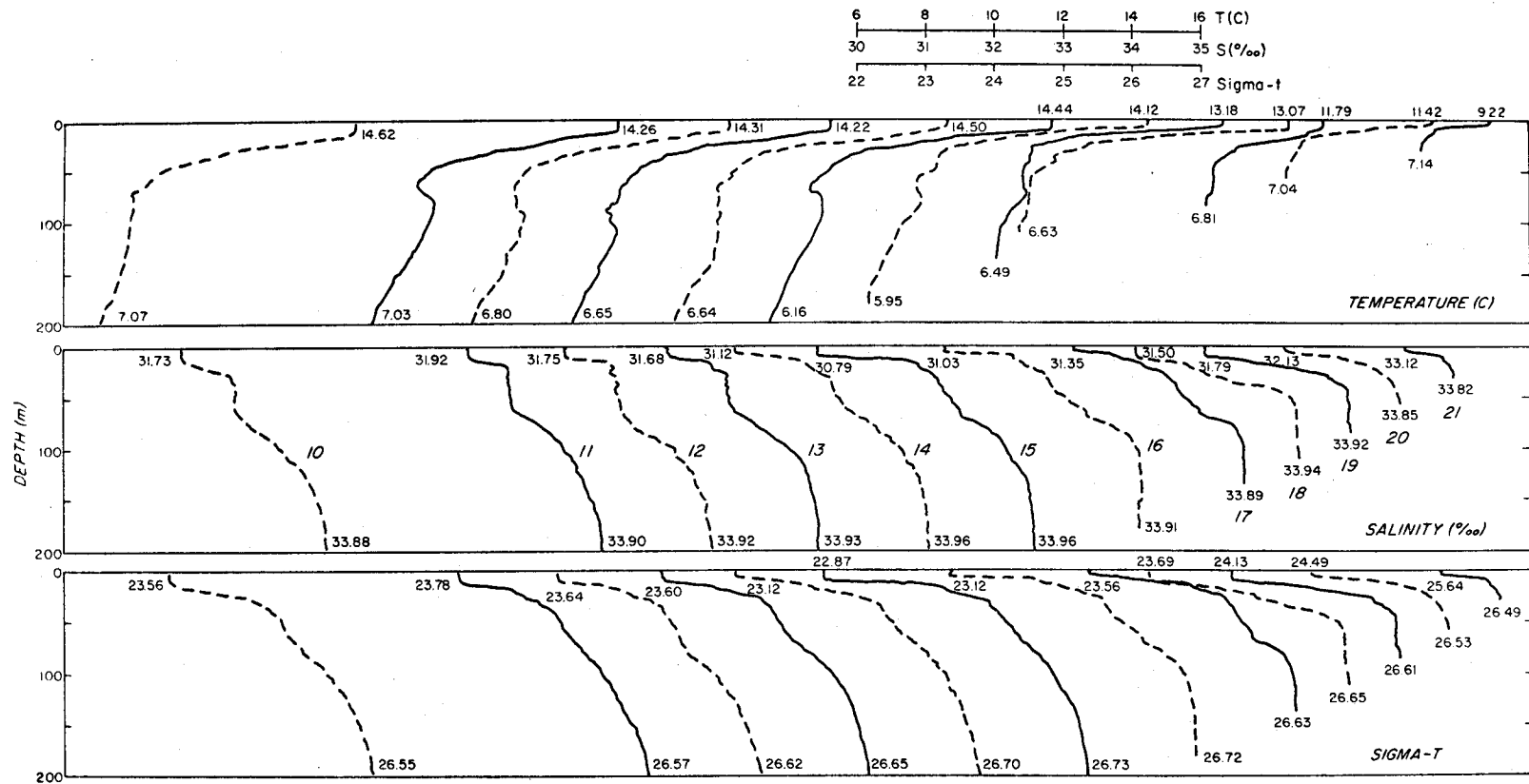


Figure 5. Staggered profiles of temperature, salinity and sigma-t, for stations along 45°16'N, 28-29 June 1973.

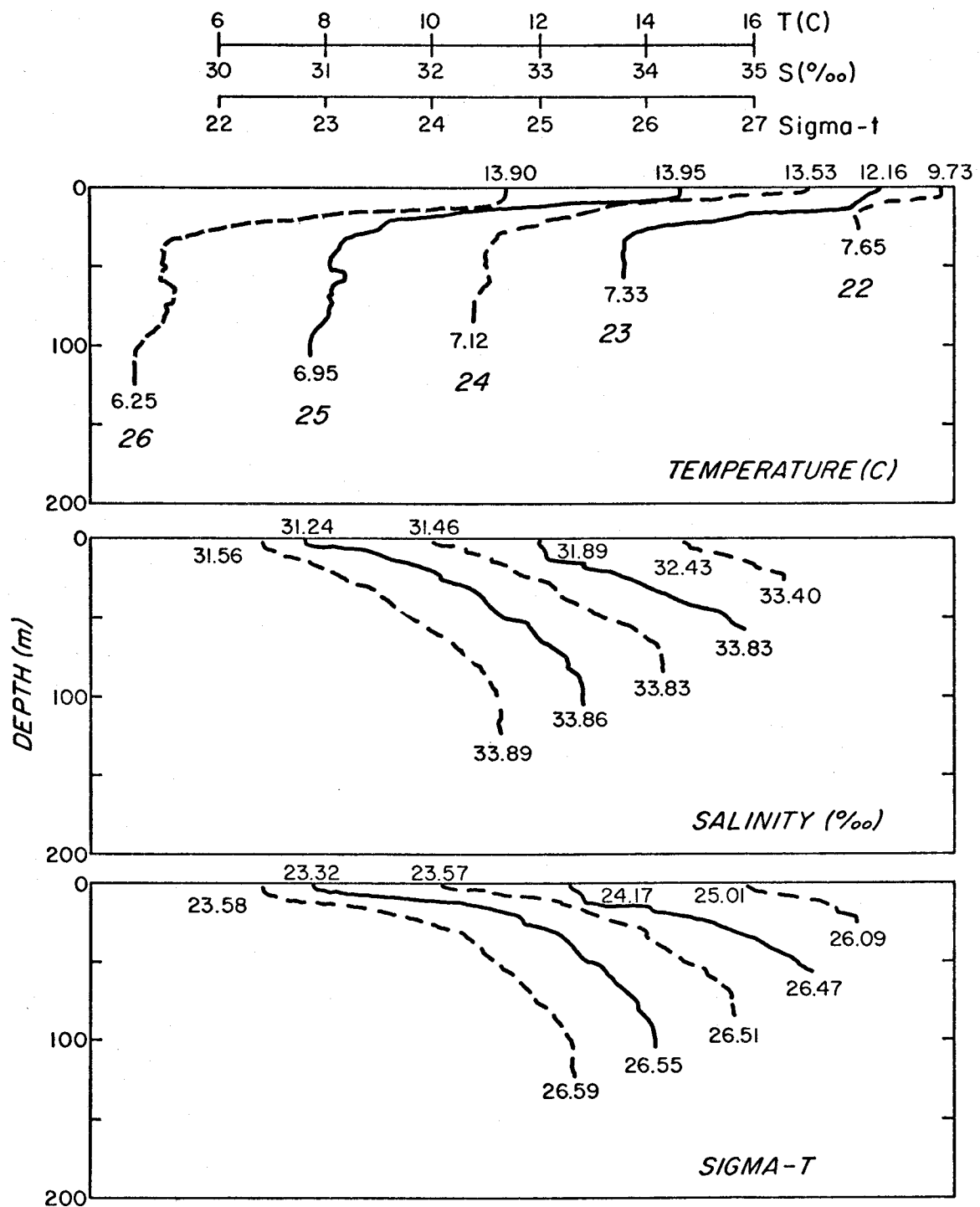


Figure 6. Staggered profiles of temperature, salinity and sigma-t for stations along 45°30'N, 29 June 1973.

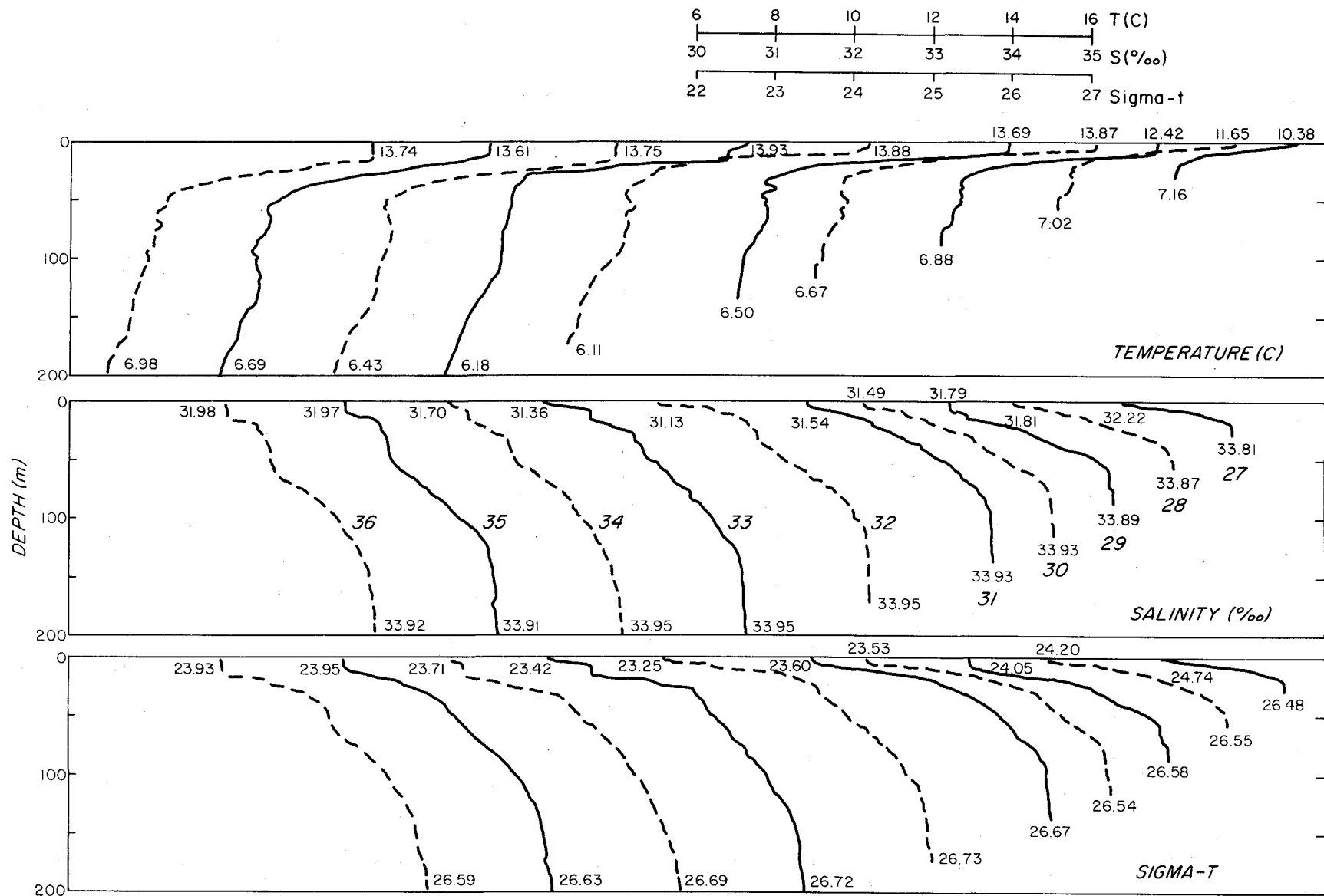


Figure 7. Staggered profiles of temperature, salinity and sigma-t for stations along 45°16'N, 30 June 1973.

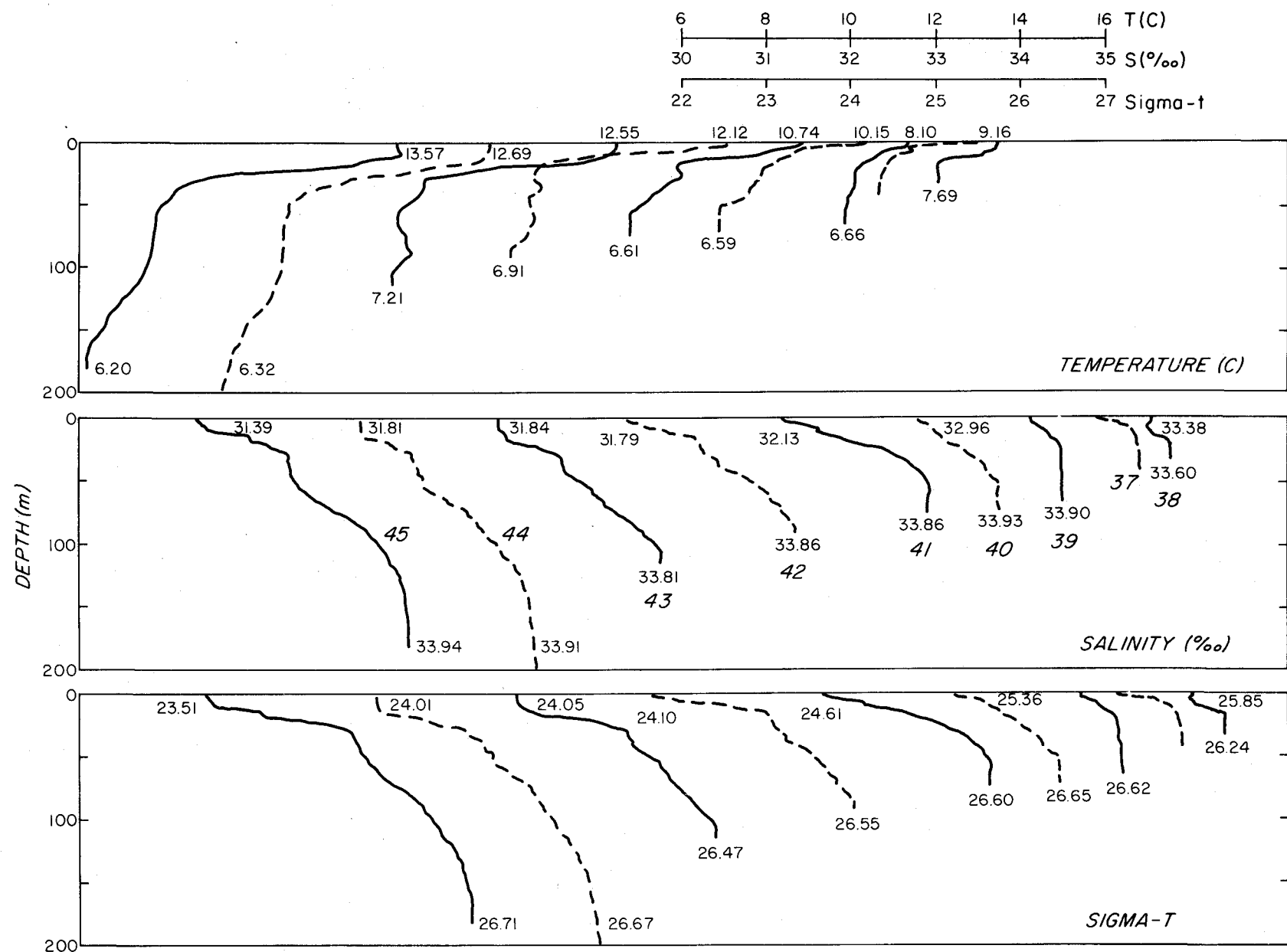


Figure 8. Staggered profiles of temperature, salinity and sigma-t for stations along 44°40'N, 1 July 1973.

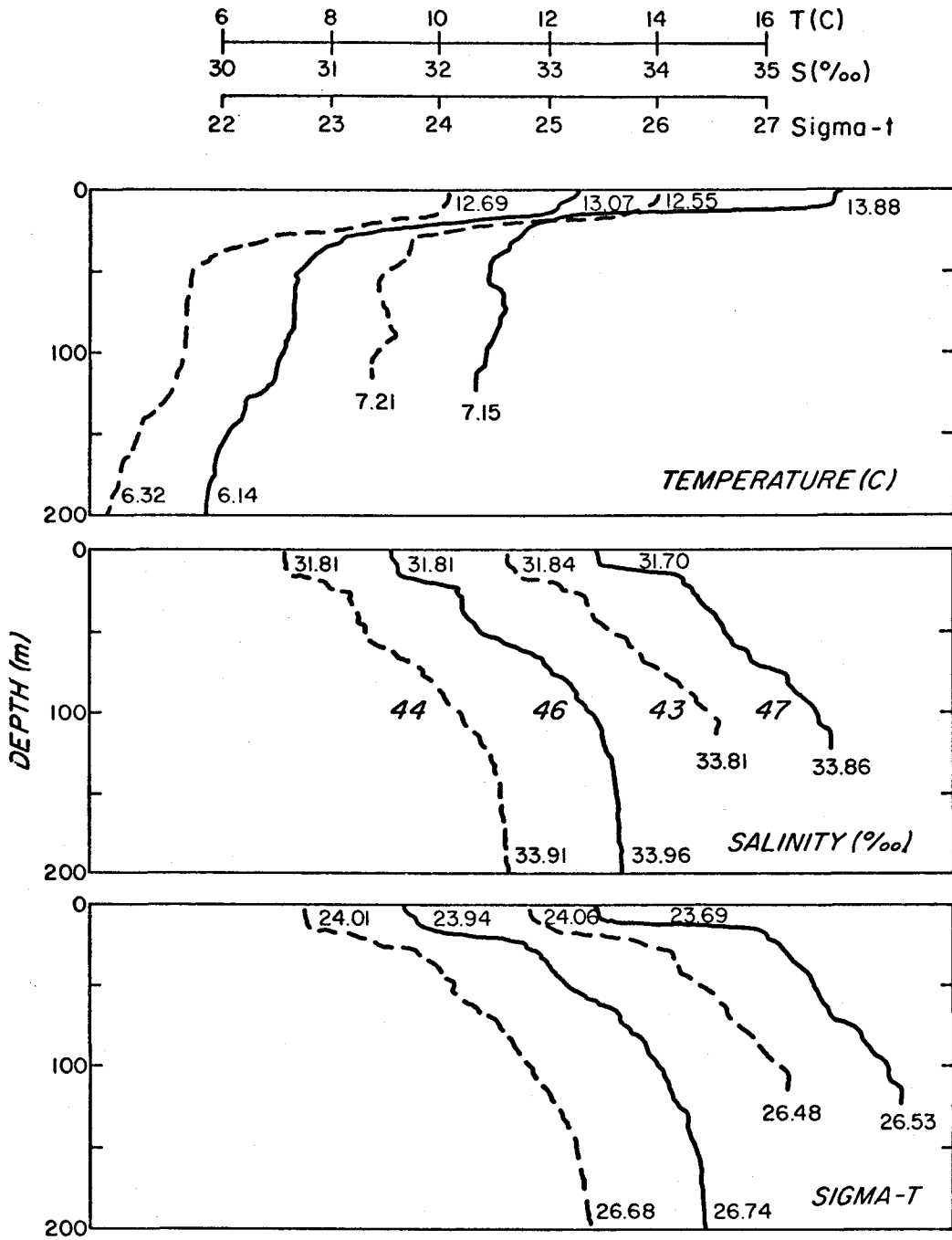


Figure 9. Profiles for repeated stations, 1 July 1973.

NO 1 LAT 45 0 LONG 124 3.0 STN H 1 DEPTH 35
 DATE 6/28/73 TIME 130 AIR TEMP 60.2 WET BULB 57.1
 WIND DIR 0 SPEED 22 SWELL CIR 350 HT 5 FER 8
 CLOUD TYPE 8 - 0 AMT 2 BAR 21.1 WEA 2 INSTR CSU1
 BKT TEMP 13.5 SAL 32.123 SAMPLE DEPTH 30 SAL 33.533

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	12.89	32.09	24.19	374.4	0	0
10	12.77	32.12	24.24	370.2	.037	.019
20	10.96	32.69	25.01	296.5	.070	.067
30	7.95	33.54	26.1E	187.3	.094	.125
32	7.80	33.62	26.25	179.2	.097	.137

NO 2 LAT 45 0 LONG 124 6.0 STN H 2 DEPTH 70
 DATE 6/28/73 TIME 220 AIR TEMP 60.0 WET BULB 56.8
 WIND DIR 350 SPEED 25 SWELL CIR 350 HT 5 FER 8
 CLOUD TYPE 8 - 0 AMT 1 BAR 19.9 WEA 2 INSTR CSU1
 BKT TEMP 14.2 SAL 31.727 SAMPLE DEPTH 40 SAL 33.334

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.07	31.69	23.65	426.3	0	0
2	14.07	31.69	23.65	426.3	.009	.001
10	13.93	31.69	23.68	423.8	.043	.021
20	11.12	32.64	24.95	302.9	.079	.074
30	9.81	32.96	25.42	258.0	.108	.146
40	7.95	33.35	26.02	201.6	.130	.225
50	7.51	33.56	26.24	180.0	.149	.310
60	7.21	33.76	26.44	161.2	.166	.404
61	7.21	33.77	26.45	160.5	.168	.414

NO 3 LAT 44 59.9 LONG 124 8.9 STN H 3 DEPTH 95
 DATE 6/28/73 TIME 323 AIR TEMP 58.5 WET BULB 55.6
 WIND DIR 350 SPEED 28 SWELL CIR 350 HT 5 FER 6
 CLOUD TYPE 8 - 0 AMT 6 BAR 20.0 WEA 2 INSTR CSU1
 BKT TEMP 14.2 SAL 31.716 SAMPLE DEPTH 82 SAL 33.843

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.99	31.70	23.67	424.0	0	0
10	11.93	31.89	24.22	372.4	.041	.020
20	9.72	32.34	24.96	302.0	.074	.069
30	7.58	32.73	25.58	242.5	.101	.135
40	7.81	33.14	25.97	215.2	.124	.216
50	7.78	33.33	26.03	200.4	.145	.310
60	7.45	33.64	26.31	173.4	.163	.411
70	7.27	33.78	26.45	160.7	.180	.520
80	7.17	33.83	26.51	155.4	.196	.637
84	7.16	33.83	26.50	155.7	.202	.688

NO 4 LAT 45 0 LONG 124 12.0 STN H 4 DEPTH 124
 DATE 6/28/73 TIME 419 AIR TEMP 57.9 WET BULB 55.2
 WIND DIR 350 SPEED 26 SWELL CIR 350 HT 5 FER 6
 CLOUD TYPE 8 - 0 AMT 8 BAR 20.0 WEA 2 INSTR CSU1
 BKT TEMP 14.0 SAL 31.652 SAMPLE DEPTH 113 SAL 33.905

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.90	31.65	23.65	425.9	0	0
2	13.90	31.65	23.65	426.0	.009	.001
10	13.52	31.76	23.82	410.5	.043	.021
20	9.49	32.28	24.94	303.7	.077	.073
30	8.15	32.51	25.33	266.2	.106	.143
40	7.39	32.79	25.66	235.2	.131	.230
50	7.40	33.14	25.93	209.8	.153	.330
60	7.51	33.43	26.14	189.9	.173	.439
70	7.45	33.59	26.28	176.9	.191	.557
80	7.32	33.72	26.40	166.0	.208	.686
90	7.13	33.83	26.51	155.4	.224	.822
100	6.96	33.88	26.57	150.0	.239	.965
110	6.88	33.91	26.61	146.4	.254	1.121
119	6.75	33.90	26.62	145.6	.267	1.271

NO 5 LAT 45 0 LONG 124 17.9 STN H 5 DEPTH 165
 DATE 6/28/73 TIME 525 AIR TEMP 57.7 WET BULB 54.8
 WIND DIR 350 SPEED 24 SWELL CIR 350 HT 5 FER 6
 CLOUD TYPE 6 - 0 AMT 8 BAR 20.2 WEA 2 INSTR CSU1
 BKT TEMP 14.1 SAL 31.659 SAMPLE DEPTH 147 SAL 33.912

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.07	31.66	23.63	428.5	0	0
1	14.07	31.66	23.63	428.5	.004	.000
10	13.99	31.70	23.67	424.2	.043	.021
20	9.77	32.3E	24.9E	301.7	.079	.075
30	8.22	32.52	25.33	267.0	.108	.145
40	7.53	32.65	25.53	247.9	.134	.236
50	7.73	32.94	25.73	229.2	.158	.343
60	7.58	33.21	25.96	206.8	.179	.463
70	7.78	33.52	26.17	187.4	.199	.590
80	7.66	33.64	26.28	176.6	.217	.727
90	7.54	33.74	26.38	167.6	.234	.873
100	7.44	33.84	26.47	159.0	.251	1.028
110	7.25	33.88	26.53	153.6	.266	1.191
120	7.07	33.91	26.58	149.1	.281	1.366
130	7.03	33.91	26.58	148.9	.296	1.552
140	6.94	33.92	26.61	146.9	.311	1.751
150	6.74	33.96	26.66	141.5	.326	1.962
151	6.72	33.95	26.66	142.0	.327	1.983

NO 6 LAT 44 59.9 LONG 124 24.3 STN H 6 DEPTH 260
 DATE 6/28/73 TIME 647 AIR TEMP 58.0 WET BULB 54.8
 WIND DIR 350 SPEED 22 SWELL CIR 350 HT 5 FER 6
 CLOUD TYPE 6 - 8 AMT 8 BAR 20.2 WEA 2 INSTR CSU1
 BKT TEMP 14.3 SAL 31.654 SAMPLE DEPTH 239 SAL 33.981

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.19	31.65	23.59	431.6	0	0
2	14.19	31.65	23.59	431.6	.009	.001
10	13.75	31.80	23.79	412.7	.043	.021
20	9.63	32.48	25.08	290.6	.079	.074
30	8.34	32.52	25.31	263.6	.107	.143
40	7.87	32.60	25.44	256.3	.133	.235
50	7.79	32.82	25.62	238.9	.158	.347
60	7.80	33.0E	25.81	221.4	.181	.473
70	7.82	33.25	25.9E	207.7	.202	.611
80	7.82	33.33	26.02	201.9	.222	.765
90	7.77	33.54	26.19	189.7	.242	.929
100	7.66	33.68	26.32	173.9	.260	1.100
110	7.63	33.77	26.39	167.0	.277	1.277
120	7.43	33.82	26.4E	160.7	.293	1.466
130	7.27	33.85	26.51	156.4	.309	1.664
140	7.21	33.8E	26.52	155.0	.324	1.874
150	6.89	33.90	26.60	147.9	.340	2.093
160	6.69	33.89	26.62	146.2	.354	2.322
170	6.59	33.92	26.65	142.8	.369	2.560
180	6.47	33.92	26.67	141.7	.383	2.809
190	6.36	33.94	26.70	138.6	.397	3.068
200	6.30	33.91	26.68	140.2	.411	3.340
225	6.09	33.95	26.74	134.9	.445	4.066
250	6.03	33.91	26.72	137.4	.479	4.871
252	6.02	33.90	26.71	138.1	.482	4.940

NO 7 LAT 45 0 LONG 124 30.0 STN H 7 DEPTH 398
 DATE 6/28/73 TIME 830 AIR TEMP 58.0 WET BLLB 54.0
 WIND DIR 360 SPEED 24 SWELL DIR 360 HT 8 PER 6
 CLOUD TYPE 6 - 8 AMT 4 BAR 20.5 WEA 1 INSTR CSU1
 BKT TEMP 14.2 SAL 32.025 SAMPLE DEPTH 356 SAL 34.036

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	14.15	32.00	23.87	405.1	0	0
3	14.15	32.00	23.87	405.2	.012	.002
10	14.17	32.02	23.88	404.2	.040	.020
20	13.70	32.07	24.02	391.7	.080	.080
30	9.55	32.55	25.15	283.9	.114	.163
40	8.41	32.53	25.31	268.6	.142	.259
50	8.07	32.63	25.43	257.0	.168	.377
60	7.89	32.78	25.58	243.5	.193	.514
70	7.99	32.98	25.72	230.1	.216	.667
80	7.84	33.19	25.91	212.5	.238	.832
90	7.81	33.45	26.11	193.0	.259	1.004
100	7.81	33.58	26.22	183.5	.277	1.183
110	7.67	33.65	26.29	176.8	.295	1.371
120	7.66	33.74	26.36	169.7	.313	1.570
130	7.57	33.83	26.44	162.3	.329	1.778
140	7.40	33.88	26.51	156.1	.345	1.951
150	7.28	33.91	26.55	152.4	.361	2.215
160	7.17	33.93	26.58	149.5	.376	2.449
170	7.02	33.94	26.61	146.9	.391	2.694
180	6.87	33.94	26.64	144.7	.405	2.949
190	6.77	33.94	26.64	143.9	.420	3.217
200	6.60	33.95	26.67	141.1	.434	3.496
225	6.34	33.96	26.72	137.3	.469	4.235
250	6.09	33.98	26.77	133.0	.502	5.037
300	5.76	34.01	26.83	127.0	.568	6.826
388	5.33	34.06	26.92	119.4	.675	10.517

NO 9 LAT 45 0 LONG 124 42.0 STN DEPTH 486
 DATE 6/28/73 TIME 1102 AIR TEMP 57.6 WET BLLB 53.4
 WIND DIR 0 SPEED 22 SWELL DIR 350 HT 6 PER 0
 CLOUD TYPE 8 - 3 AMT 5 BAR 21.5 WEA 2 INSTR CSU1
 BKT TEMP 14.1 SAL 32.086 SAMPLE DEPTH 445 SAL 34.072

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	14.08	32.00	23.88	403.7	0	0
10	14.06	32.08	23.95	397.4	.040	.020
20	12.67	32.26	24.37	358.3	.078	.078
30	10.10	32.62	25.11	287.8	.109	.155
40	9.10	32.56	25.22	276.9	.137	.253
50	8.43	32.59	25.35	265.1	.164	.374
60	7.96	32.71	25.51	249.6	.190	.516
70	7.91	32.86	25.64	237.9	.215	.675
80	7.84	33.20	25.91	212.2	.237	.844
90	7.75	33.34	26.04	200.3	.258	1.018
100	7.62	33.48	26.17	188.3	.277	1.202
110	7.71	33.59	26.24	181.5	.295	1.395
120	7.51	33.67	26.33	172.5	.313	1.557
130	7.39	33.75	26.41	165.4	.330	1.808
140	7.45	33.83	26.47	160.3	.346	2.028
150	7.32	33.88	26.52	155.2	.362	2.255
160	7.15	33.89	26.55	152.3	.377	2.454
170	7.05	33.90	26.57	150.5	.392	2.743
180	6.88	33.91	26.61	147.5	.407	3.003
190	6.68	33.93	26.65	143.5	.422	3.273
200	6.56	33.92	26.66	142.7	.436	3.551
225	6.23	33.94	26.72	137.3	.471	4.291
250	6.00	33.96	26.76	133.0	.505	5.093
300	5.75	33.99	26.82	128.7	.570	6.659
400	5.25	34.04	26.92	119.7	.695	11.242
472	5.07	34.09	26.96	114.9	.780	14.549

NO 8 LAT 45 0 LONG 124 36.0 STN DEPTH 437
 DATE 6/28/73 TIME 943 AIR TEMP 57.5 WET BLLB 53.8
 WIND DIR 360 SPEED 20 SWELL DIR 350 HT 6 PER 6
 CLOUD TYPE 6 - 8 AMT 4 BAR 20.8 WEA 2 INSTR CSU1
 BKT TEMP 14.1 SAL 32.066 SAMPLE DEPTH 403 SAL 34.063

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.98	32.06	23.95	397.4	0	0
10	13.98	32.06	23.95	397.6	.040	.020
20	11.44	32.31	24.63	333.0	.077	.075
30	9.85	32.54	25.08	290.4	.107	.151
40	8.66	32.56	25.29	270.6	.135	.248
50	8.16	32.62	25.41	259.0	.162	.367
60	7.98	32.72	25.52	249.2	.187	.506
70	7.92	32.89	25.66	235.8	.212	.665
80	7.84	33.11	25.84	218.5	.234	.835
90	7.89	33.28	25.97	206.7	.255	1.015
100	7.72	33.43	26.11	193.4	.275	1.204
110	7.72	33.63	26.27	179.6	.294	1.399
120	7.72	33.74	26.36	170.4	.311	1.599
130	7.35	33.77	26.43	163.5	.328	1.807
140	7.39	33.85	26.49	158.2	.344	2.023
150	7.34	33.88	26.52	155.4	.360	2.245
160	7.21	33.90	26.56	152.0	.375	2.488
170	7.00	33.91	26.59	148.9	.390	2.736
180	6.85	33.91	26.61	147.1	.405	2.995
190	6.72	33.93	26.64	144.0	.419	3.264
200	6.69	33.92	26.64	144.3	.434	3.545
225	6.48	33.94	26.68	140.6	.469	4.301
250	6.11	33.95	26.74	135.5	.504	5.124
300	5.72	34.01	26.83	127.0	.570	6.930
400	5.19	34.06	26.94	117.9	.693	11.221
430	5.00	34.09	26.98	113.7	.727	12.665

NO 10 LAT 45 16.6 LONG 125 3.5 STN DEPTH 1600
 DATE 6/28/73 TIME 1509 AIR TEMP 56.3 WET BLLB 50.1
 WIND DIR 340 SPEED 17 SWELL DIR 350 HT 5 PER 6
 CLOUD TYPE 6 - 0 AMT 8 BAR 22.0 WEA 2 INSTR CSU1
 BKT TEMP 14.5 SAL 31.760 SAMPLE DEPTH 568 SAL 34.129

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	14.62	31.73	23.56	434.3	0	0
1	14.62	31.73	23.56	434.3	.004	.000
10	14.61	31.74	23.57	433.6	.043	.022
20	13.31	32.03	24.06	387.3	.085	.084
30	10.95	32.49	24.86	311.6	.120	.169
40	9.81	32.54	25.10	288.9	.150	.274
50	8.88	32.54	25.24	275.3	.177	.399
60	8.51	32.55	25.31	269.3	.205	.549
70	7.99	32.66	25.46	254.3	.231	.720
80	8.04	32.81	25.58	243.9	.256	.907
90	8.02	33.08	25.79	223.4	.279	1.106
100	7.96	33.23	25.92	211.6	.301	1.312
110	7.94	33.34	26.01	203.3	.322	1.528
120	7.87	33.52	26.16	189.1	.341	1.753
130	7.83	33.60	26.23	182.4	.360	1.985
140	7.78	33.69	26.31	175.4	.378	2.225
150	7.66	33.76	26.38	169.0	.395	2.475
160	7.58	33.81	26.43	164.4	.411	2.733
170	7.50	33.85	26.47	160.4	.428	3.000
180	7.25	33.88	26.53	154.7	.443	3.277
190	7.16	33.88	26.54	154.0	.459	3.563
200	7.07	33.89	26.56	152.0	.474	3.861
225	6.76	33.92	26.63	146.2	.512	4.656
250	6.50	33.93	26.67	142.0	.548	5.511
300	5.93	33.96	26.77	132.8	.615	7.372
400	5.23	34.04	26.92	119.6	.740	11.728
500	4.73	34.13	27.05	108.2	.854	16.855
510	4.71	34.15	27.06	106.6	.865	17.397

NO 11 LAT 45 16.6 LONG 124 48.0 STN DEPTH 647
 DATE 6/28/73 TIME 1724 AIR TEMP 57.0 WET BULL 51.8
 WIND DIR 0 SPEED 18 SWELL DIR 350 HT 4 PER 6
 CLOUD TYPE 6 - 0 AMT 8 BAR 22.0 WEA 0 INSTR CSU1
 BKT TEMP 13.3 SAL 31.985 SAMPLE DEPTH 502 SAL 34.112

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.26	31.92	23.79	413.1	0	0
2	14.26	31.92	23.79	413.2	.008	.001
10	14.24	31.95	23.81	411.2	.041	.021
20	12.40	32.50	24.60	335.7	.079	.076
30	10.80	32.52	24.91	307.0	.111	.156
40	9.47	32.56	25.16	282.5	.140	.259
50	8.71	32.55	25.28	271.7	.168	.363
60	8.36	32.60	25.37	263.4	.195	.531
70	8.52	32.83	25.52	249.2	.220	.698
80	8.89	33.05	25.64	238.1	.245	.881
90	8.86	33.22	25.77	225.4	.268	1.078
100	8.74	33.33	25.88	215.5	.290	1.286
110	8.60	33.45	26.00	204.6	.311	1.506
120	8.43	33.52	26.08	196.8	.331	1.735
130	8.24	33.60	26.17	188.5	.350	1.977
140	8.06	33.67	26.25	181.4	.369	2.227
150	7.93	33.73	26.33	173.4	.387	2.485
160	7.64	33.77	26.39	167.9	.403	2.746
170	7.45	33.83	26.47	160.7	.420	3.016
180	7.23	33.86	26.52	156.0	.436	3.292
190	7.14	33.88	26.55	153.1	.451	3.577
200	7.03	33.90	26.58	150.5	.466	3.874
225	6.79	33.91	26.62	146.6	.503	4.666
250	6.36	33.92	26.68	140.9	.540	5.522
300	5.88	33.94	26.76	134.0	.608	7.402
400	5.23	34.03	26.91	120.6	.735	11.824
500	4.80	34.12	27.03	109.8	.849	16.971
504	4.80	34.12	27.03	109.8	.854	17.191

NO 12 LAT 45 16.6 LONG 124 41.9 STN DEPTH 484
 DATE 6/28/73 TIME 1845 AIR TEMP 57.5 WET BULL 51.9
 WIND DIR 350 SPEED 19 SWELL DIR 350 HT 4 PER 6
 CLOUD TYPE 6 - 0 AMT 8 BAR 22.2 WEA 2 INSTR CSU1
 BKT TEMP 14.3 SAL 31.777 SAMPLE DEPTH 452 SAL 34.094

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.31	31.75	23.64	426.6	0	0
2	14.31	31.75	23.64	426.7	.009	.001
10	14.31	31.75	23.64	426.9	.043	.021
20	12.16	32.48	24.63	332.9	.080	.076
30	10.15	32.51	25.02	296.4	.112	.155
40	9.07	32.48	25.17	282.4	.140	.256
50	8.41	32.53	25.30	269.4	.168	.379
60	8.18	32.60	25.39	261.1	.194	.525
70	8.05	32.65	25.45	255.5	.220	.692
80	8.15	32.78	25.54	247.4	.245	.880
90	8.24	33.09	25.77	225.4	.269	1.081
100	8.29	33.33	25.95	208.5	.291	1.289
110	8.19	33.43	26.04	200.0	.311	1.503
120	8.11	33.58	26.17	188.0	.330	1.725
130	7.81	33.67	26.28	177.5	.349	1.953
140	7.80	33.70	26.31	175.2	.366	2.192
150	7.68	33.79	26.40	166.8	.383	2.439
160	7.47	33.82	26.46	161.5	.400	2.693
170	7.25	33.84	26.50	157.5	.416	2.957
180	7.02	33.88	26.56	151.5	.431	3.226
190	6.89	33.90	26.60	148.5	.446	3.505
200	6.79	33.92	26.62	146.1	.461	3.792
225	6.32	33.93	26.70	139.3	.497	4.552
250	6.15	33.92	26.71	138.2	.531	5.372
300	5.81	33.97	26.79	130.9	.599	7.224
400	5.24	34.04	26.92	119.9	.723	11.575
474	4.81	34.12	27.03	109.7	.808	15.266

NO 13 LAT 45 16.5 LONG 124 36.0 STN DEPTH 460
 DATE 6/28/73 TIME 2003 AIR TEMP 58.8 WET BULL 53.0
 WIND DIR 360 SPEED 22 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.2 WEA 0 INSTR CSU1
 BKT TEMP 14.2 SAL 31.684 SAMPLE DEPTH 421 SAL 34.066

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.22	31.68	23.61	430.0	0	0
1	14.22	31.68	23.61	430.0	.004	.000
10	14.19	31.73	23.65	426.0	.043	.021
20	12.21	32.38	24.55	341.2	.080	.077
30	10.07	32.58	25.08	290.3	.111	.154
40	9.17	32.63	25.27	272.8	.139	.252
50	8.59	32.61	25.34	265.5	.166	.373
60	8.25	32.67	25.44	256.4	.192	.517
70	8.03	32.87	25.63	238.8	.217	.679
80	7.98	33.08	25.80	222.7	.241	.852
90	7.62	33.28	26.01	203.0	.262	1.032
100	7.79	33.50	26.16	189.1	.281	1.219
110	7.98	33.65	26.25	180.8	.300	1.412
120	7.82	33.73	26.33	172.8	.317	1.615
130	7.67	33.78	26.39	167.1	.334	1.826
140	7.48	33.81	26.45	162.1	.351	2.047
150	7.42	33.87	26.50	157.3	.367	2.279
160	7.25	33.89	26.54	153.6	.382	2.520
170	7.02	33.91	26.59	148.9	.397	2.768
180	6.90	33.94	26.63	145.5	.412	3.028
190	6.74	33.92	26.64	144.7	.427	3.297
200	6.65	33.93	26.65	143.2	.441	3.578
225	6.36	33.94	26.70	139.1	.477	4.331
250	6.20	33.96	26.74	135.9	.511	5.146
300	5.66	33.97	26.81	129.0	.577	6.970
400	5.17	34.05	26.94	117.9	.700	11.243
452	4.97	34.11	27.00	112.1	.760	13.811

NO 14 LAT 45 16.3 LONG 124 30.0 STN DEPTH 407
 DATE 6/28/73 TIME 2128 AIR TEMP 58.2 WET BULL 53.0
 WIND DIR 360 SPEED 22 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.2 WEA 0 INSTR CSU1
 BKT TEMP 14.4 SAL 31.110 SAMPLE DEPTH 371 SAL 34.050

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.50	31.12	23.12	476.6	0	0
1	14.50	31.12	23.12	476.6	.005	.000
10	14.03	31.70	23.66	425.0	.047	.023
20	12.32	32.21	24.40	355.3	.085	.080
30	9.66	32.50	25.08	290.0	.117	.158
40	8.70	32.57	25.29	270.2	.144	.255
50	8.26	32.63	25.41	259.3	.171	.374
60	8.00	32.75	25.54	246.8	.196	.513
70	7.79	32.95	25.72	229.6	.220	.667
80	7.81	33.21	25.93	210.4	.242	.831
90	7.85	33.40	26.07	196.9	.262	1.005
100	7.78	33.56	26.20	184.7	.281	1.187
110	7.81	33.63	26.26	179.9	.299	1.377
120	7.77	33.75	26.35	170.8	.317	1.580
130	7.68	33.82	26.42	164.3	.334	1.789
140	7.61	33.87	26.47	159.8	.350	2.009
150	7.33	33.89	26.53	154.6	.366	2.237
160	7.14	33.93	26.58	149.3	.381	2.472
170	6.92	33.93	26.62	145.9	.396	2.716
180	6.76	33.93	26.64	144.7	.410	2.970
190	6.56	33.95	26.66	140.4	.424	3.232
200	6.42	33.96	26.70	138.5	.438	3.504
225	6.17	33.97	26.75	134.4	.472	4.227
250	5.95	34.00	26.80	130.0	.505	5.011
300	5.57	34.05	26.88	122.0	.569	6.749
397	5.12	34.09	26.97	114.7	.683	10.739

NO 15 LAT 45 16.5 LONG 124 24.0 STN DEPTH 375
 DATE 6/28/73 TIME 2254 AIR TEMP 59.2 WET BULB 52.4
 WIND DIR 350 SPEED 22 SWELL CIR 350 HT 5 FER 8
 CLOUD TYPE 6 - 3 AMT 3 BAR 21.8 WEA 2 INSTR CSU1
 BKT TEMP 14.0 SAL 30.762 SAMPLE DEPTH 325 SAL 34.026

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.44	30.79	22.88	499.7	0	0
10	14.41	30.78	22.88	503.0	.050	.025
20	11.07	32.26	24.66	330.2	.088	.081
30	8.95	32.48	25.18	280.4	.119	.156
40	8.22	32.60	25.39	261.1	.146	.250
50	7.85	32.69	25.51	250.0	.171	.366
60	7.49	32.80	25.65	236.6	.196	.499
70	7.34	32.88	25.73	228.7	.219	.649
80	7.71	33.26	25.96	205.5	.240	.810
90	7.70	33.44	26.12	192.2	.260	.979
100	7.6E	33.55	26.21	183.6	.279	1.158
110	7.47	33.62	26.30	175.9	.297	1.348
120	7.34	33.74	26.41	165.4	.314	1.544
130	7.16	33.92	26.56	157.2	.330	1.746
140	6.92	33.89	26.58	148.9	.346	1.953
150	6.79	33.89	26.61	147.0	.360	2.168
160	6.65	33.90	26.63	144.7	.375	2.394
170	6.54	33.92	26.66	142.1	.389	2.630
180	6.39	33.93	26.69	139.4	.403	2.877
190	6.24	33.95	26.72	136.4	.417	3.132
200	6.15	33.95	26.73	135.4	.431	3.398
225	5.93	33.96	26.77	132.2	.464	4.109
250	5.82	33.98	26.80	129.7	.497	4.886
300	5.53	34.00	26.85	125.2	.561	6.644
327	5.3E	33.92	26.81	129.5	.595	7.716

NO 16 LAT 45 16.5 LONG 124 18.0 STN DEPTH 190
 DATE 6/29/73 TIME 117 AIR TEMP 58.0 WET BULB 52.3
 WIND DIR 360 SPEED 22 SWELL CIR 360 HT 5 FER 7
 CLOUD TYPE 6 - 8 AMT 6 BAR 21.1 WEA 3 INSTR CSU1
 BKT TEMP 13.7 SAL 31.115 SAMPLE DEPTH 5 SAL 31.071

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.12	31.03	23.13	475.8	0	0
1	14.12	31.03	23.13	475.8	.005	.000
10	11.82	32.11	24.41	353.9	.044	.021
20	9.52	32.29	24.55	303.0	.077	.070
30	8.16	32.55	25.36	263.9	.105	.139
40	7.92	32.64	25.46	254.0	.131	.229
50	7.84	32.83	25.62	238.9	.156	.341
60	7.32	33.02	25.85	217.8	.179	.466
70	7.34	33.20	25.96	205.2	.200	.602
80	7.48	33.56	26.25	179.7	.219	.745
90	7.26	33.79	26.46	160.5	.236	.889
100	6.97	33.88	26.57	149.4	.251	1.036
110	6.78	33.92	26.63	144.6	.266	1.190
120	6.62	33.94	26.66	141.0	.280	1.355
130	6.50	33.95	26.69	138.8	.294	1.531
140	6.32	33.95	26.71	136.7	.308	1.718
150	6.23	33.95	26.72	135.7	.322	1.916
160	6.03	33.89	26.70	137.8	.335	2.128
170	5.94	33.91	26.73	135.4	.349	2.353
180	5.95	33.90	26.72	136.3	.363	2.590
181	5.95	33.91	26.73	135.6	.364	2.615

NO 17 LAT 45 16.5 LONG 124 12.0 STN DEPTH 146
 DATE 6/29/73 TIME 315 AIR TEMP 57.5 WET BULB 51.6
 WIND DIR 0 SPEED 20 SWELL CIR 0 HT 5 FER 6
 CLOUD TYPE 6 - 0 AMT 6 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 13.1 SAL 31.443 SAMPLE DEPTH 126 SAL 33.931

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.18	31.35	23.56	434.3	0	0
10	11.19	31.96	24.41	354.1	.041	.020
20	8.39	32.44	25.24	275.2	.071	.064
30	7.59	32.76	25.60	240.5	.096	.127
40	7.53	32.90	25.72	229.5	.120	.209
50	7.32	33.01	25.84	218.4	.142	.310
60	7.32	33.19	25.98	205.2	.163	.426
70	7.45	33.45	26.17	187.7	.183	.557
80	7.23	33.76	26.44	162.1	.201	.686
90	6.89	33.83	26.54	152.3	.216	.819
100	6.77	33.86	26.59	148.2	.231	.961
110	6.61	33.88	26.62	145.2	.246	1.115
120	6.58	33.98	26.62	144.9	.260	1.281
130	6.54	33.88	26.63	144.3	.275	1.461
136	6.49	33.89	26.64	143.3	.283	1.575

NO 18 LAT 45 16.4 LONG 124 9.1 STN DEPTH 117
 DATE 6/29/73 TIME 354 AIR TEMP 56.6 WET BULB 51.9
 WIND DIR 0 SPEED 20 SWELL CIR 0 HT 5 FER 6
 CLOUD TYPE 6 - 0 AMT 6 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 13.0 SAL 31.511 SAMPLE DEPTH 109 SAL 33.925

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.07	31.50	23.70	421.2	0	0
10	12.91	31.55	23.77	414.8	.042	.021
20	10.20	32.32	24.86	311.4	.078	.074
30	8.34	32.72	25.47	253.4	.106	.143
40	7.72	33.49	26.16	187.9	.128	.222
50	7.29	33.81	26.47	158.5	.146	.299
60	6.98	33.90	26.59	147.4	.161	.383
70	6.9E	33.90	26.58	147.9	.176	.479
80	6.93	33.90	26.59	147.4	.191	.589
90	6.88	33.90	26.60	146.9	.205	.714
100	6.74	33.92	26.63	143.7	.220	.852
110	6.63	33.94	26.66	141.0	.234	1.001
111	6.63	33.94	26.6E	141.0	.235	1.017

NO 19 LAT 45 16.3 LONG 124 6.1 STN DEPTH 91
 DATE 6/29/73 TIME 442 AIR TEMP 55.9 WET BULB 51.1
 WIND DIR 0 SPEED 17 SWELL DIR 0 HT 4 FER 6
 CLOUD TYPE 6 - 0 AMT 6 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 12.0 SAL 31.770 SAMPLE DEPTH 83 SAL 33.902

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	11.79	31.7E	24.14	379.0	0	0
1	11.79	31.7E	24.14	379.0	.004	.000
10	11.78	31.77	24.15	378.7	.038	.019
20	9.08	32.90	25.49	251.0	.068	.063
30	7.68	33.58	26.24	180.2	.089	.114
40	7.22	33.79	26.47	158.5	.106	.173
50	7.03	33.87	26.55	150.5	.121	.242
60	7.02	33.87	26.56	150.5	.136	.325
70	6.99	33.87	26.5E	150.0	.151	.423
80	6.83	33.91	26.62	145.1	.166	.533
85	6.81	33.92	26.62	144.4	.173	.593

NO 20 LAT 45 16.3 LONG 124 3.1 STN DEPTH 61
 DATE 6/29/73 TIME 522 AIR TEMP 55.3 WET BULB 51.4
 WIND DIR 0 SPEED 15 SWELL CIR 0 HT 4 FER 6
 CLOUD TYPE 6 - 0 AMT 7 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 11.6 SAL 32.169 SAMPLE DEPTH 54 SAL 33.853

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	11.42	32.13	24.50	345.3	0	0
1	11.42	32.13	24.50	345.3	.003	.000
10	9.62	32.90	25.41	259.1	.032	.015
20	7.62	33.38	26.09	194.5	.054	.048
30	7.42	33.65	26.33	171.7	.072	.053
40	7.22	33.77	26.45	160.0	.089	.151
50	7.06	33.84	26.53	153.1	.105	.221
58	7.04	33.85	26.54	152.3	.117	.287

NO 21 LAT 45 16.5 LONG 124 .1 STN DEPTH 37
 DATE 6/29/73 TIME 602 AIR TEMP 54.6 WET BULB 50.5
 WIND DIR 0 SPEED 17 SWELL CIR 350 HT 3 FER 6
 CLOUD TYPE 6 - 0 AMT 7 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 9.6 SAL 33.150 SAMPLE DEPTH 29 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	9.22	33.12	25.64	236.5	0	0
1	9.22	33.12	25.64	236.5	.002	.000
10	7.56	33.67	26.32	171.9	.022	.010
20	7.24	33.80	26.47	158.1	.038	.035
30	7.14	33.82	26.50	155.4	.054	.073
31	7.14	33.82	26.50	155.4	.055	.078

NO 22 LAT 45 30.0 LONG 124 0 STN DEPTH 27
 DATE 6/29/73 TIME 816 AIR TEMP 53.0 WET BULB 50.2
 WIND DIR 360 SPEED 10 SWELL CIR 0 HT 0 FER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.1 WEA 0 INSTR CSU1
 BKT TEMP 10.2 SAL 32.444 SAMPLE DEPTH 17 SAL 33.070

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.73	32.43	25.02	295.5	0	0
2	9.73	32.43	25.02	295.5	.006	.001
10	8.01	32.79	25.57	243.6	.028	.013
20	7.60	33.17	25.92	210.3	.050	.046
27	7.65	33.40	26.10	193.5	.064	.079

NO 23 LAT 45 30.0 LONG 124 3.0 STN DEPTH 65
 DATE 6/29/73 TIME 053 AIR TEMP 51.2 WET BULB 0
 WIND DIR 360 SPEED 10 SWELL DIR 0 HT 0 FER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 53.8 WEA 0 INSTR CSU1
 BKT TEMP 12.4 SAL 31.902 SAMPLE DEPTH 51 SAL 33.614

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	12.16	31.89	24.18	375.9	0	0
10	11.70	31.96	24.32	362.9	.037	.018
20	9.34	32.37	25.04	294.3	.070	.067
30	7.51	32.84	25.68	233.1	.096	.131
40	7.34	33.23	26.01	202.2	.118	.206
50	7.35	33.62	26.31	173.2	.136	.290
57	7.33	33.83	26.48	157.6	.148	.353

NO 24 LAT 45 30.0 LONG 124 6.0 STN DEPTH 88
 DATE 6/29/73 TIME 090 AIR TEMP 56.1 WET BULB 52.4
 WIND DIR 360 SPEED 16 SWELL DIR 0 HT 0 FER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.1 WEA 0 INSTR CSU1
 BKT TEMP 13.0 SAL 31.579 SAMPLE DEPTH 69 SAL 33.779

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.53	31.46	23.58	432.8	0	0
10	10.60	32.08	24.61	335.2	.039	.018
20	8.75	32.41	25.16	282.9	.069	.063
30	7.62	32.81	25.64	237.4	.095	.128
40	7.36	32.97	25.80	221.8	.118	.209
50	7.36	33.26	26.03	200.0	.139	.304
60	7.43	33.60	26.29	176.1	.158	.405
70	7.16	33.81	26.49	157.0	.174	.512
80	7.13	33.83	26.51	155.3	.190	.629
85	7.12	33.83	26.51	155.2	.197	.693

NO 25 LAT 45 30.0 LONG 124 9.0 STN DEPTH 108
 DATE 6/29/73 TIME 1012 AIR TEMP 56.4 WET BULB 51.2
 WIND DIR 350 SPEED 18 SWELL DIR 0 HT 0 FER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 0 INSTR CSU1
 BKT TEMP 13.4 SAL 31.256 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	13.95	31.24	23.33	457.0	0	0
10	11.61	31.91	24.29	365.0	.043	.021
20	8.45	32.44	25.23	276.0	.075	.068
30	7.81	32.73	25.55	245.6	.102	.134
40	7.43	32.94	25.77	225.0	.125	.215
50	7.31	33.13	25.93	209.4	.147	.313
60	7.49	33.43	26.14	189.6	.167	.421
70	7.30	33.62	26.32	173.2	.185	.539
80	7.25	33.75	26.43	162.8	.202	.665
90	7.03	33.85	26.54	152.5	.217	.800
100	6.95	33.88	26.57	149.5	.233	.942
106	6.95	33.86	26.56	151.0	.242	1.035

NO 26 LAT 45 30.0 LONG 124 12.0 STN DEPTH 128
 DATE 6/29/73 TIME 1043 AIR TEMP 56.2 WET BULB 50.2
 WIND DIR 350 SPEED 14 SWELL DIR 340 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 8 BAR 20.2 WEA 0 INSTR CSU1
 BKT TEMP 13.4 SAL 31.676 SAMPLE DEPTH 99 SAL 33.861

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	13.90	31.56	23.58	432.5	0	0
10	13.72	31.78	23.79	413.1	.043	.021
20	9.99	32.24	24.83	314.0	.078	.074
30	7.89	32.56	25.41	259.4	.107	.144
40	7.42	32.84	25.69	232.3	.131	.229
50	7.50	33.01	25.81	220.8	.154	.331
60	7.44	33.29	26.04	199.3	.175	.446
70	7.61	33.51	26.19	185.4	.194	.572
80	7.43	33.68	26.35	170.5	.212	.707
90	7.21	33.78	26.46	160.2	.229	.848
100	6.95	33.85	26.55	151.7	.244	.995
110	6.86	33.89	26.59	147.7	.259	1.152
120	6.86	33.87	26.58	149.3	.274	1.323
125	6.85	33.89	26.59	147.8	.281	1.414

NO 27 LAT 45 16.5 LONG 124 0 STN DEPTH 36
 DATE 6/30/73 TIME 248 AIR TEMP 54.9 WET BULB 50.9
 WIND DIR 340 SPEED 8 SWELL DIR 310 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 6 BAR 20.6 WEA 2 INSTR CSU1
 BKT TEMP 13.2 SAL 32.448 SAMPLE DEPTH 29 SAL 33.822

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	10.38	32.22	24.75	321.3	0	0
10	7.86	33.40	26.07	196.1	.026	.012
20	7.24	33.32	26.49	156.6	.044	.038
30	7.16	33.91	26.49	156.4	.059	.077
30	7.16	33.81	26.49	156.4	.059	.077

NO 28 LAT 45 16.4 LONG 124 3.0 STN DEPTH 60
 DATE 6/30/73 TIME 334 AIR TEMP 55.0 WET BULB 52.1
 WIND DIR 0 SPEED 10 SWELL DIR 320 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 7 BAR 20.6 WEA 2 INSTR CSU1
 BKT TEMP 11.8 SAL 31.837 SAMPLE DEPTH 56 SAL 33.664

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	11.65	31.81	24.21	372.9	0	0
10	8.98	32.41	25.12	285.7	.034	.016
20	7.41	32.89	25.73	228.1	.059	.053
30	7.38	33.46	26.15	185.2	.080	.104
40	7.31	33.74	26.41	163.8	.097	.164
50	7.03	33.86	26.55	151.3	.112	.235
58	7.02	33.87	26.56	150.5	.125	.300

NO 29 LAT 45 16.4 LONG 124 6.0 STN DEPTH 92
 DATE 6/30/73 TIME 408 AIR TEMP 55.9 WET BULB 51.3
 WIND DIR 0 SPEED 14 SWELL DIR 320 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 7 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 12.5 SAL 31.817 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	12.42	31.79	24.05	387.9	0	0
10	12.33	31.83	24.10	383.7	.039	.019
20	8.61	32.46	25.22	276.8	.072	.069
30	7.56	32.86	25.69	232.5	.097	.131
40	7.46	33.22	25.98	204.5	.119	.207
50	7.42	33.66	26.33	171.7	.138	.291
60	7.20	33.82	26.49	156.6	.154	.360
70	7.16	33.83	26.50	155.5	.170	.482
80	6.88	33.89	26.59	147.5	.185	.594
88	6.88	33.89	26.59	147.6	.197	.693

NO 30 LAT 45 16.5 LONG 124 9.0 STN DEPTH 119
 DATE 6/30/73 TIME 443 AIR TEMP 56.2 WET BULB 52.7
 WIND DIR 320 SPEED 16 SWELL DIR 320 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 7 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 13.8 SAL 31.514 SAMPLE DEPTH 112 SAL 33.917

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.87	31.49	23.54	437.1	0	0
1	13.87	31.49	23.54	437.1	.004	.000
10	11.69	32.00	24.35	359.7	.042	.020
20	8.84	32.33	25.08	290.2	.074	.068
30	7.53	32.81	25.65	236.1	.100	.132
40	7.35	33.03	25.85	217.2	.123	.211
50	7.57	33.30	26.03	200.2	.143	.305
60	7.37	33.54	26.25	179.6	.163	.409
70	7.24	33.78	26.45	160.3	.179	.519
80	7.02	33.88	26.56	150.1	.195	.635
90	6.88	33.90	26.60	146.9	.210	.761
100	6.86	33.89	26.60	147.2	.225	.901
110	6.68	33.92	26.64	143.1	.239	1.054
117	6.67	33.93	26.65	142.3	.249	1.168

NO 31 LAT 45 16.4 LONG 124 11.9 STN DEPTH 146
 DATE 6/30/73 TIME 518 AIR TEMP 56.7 WET BULB 52.7
 WIND DIR 320 SPEED 22 SWELL DIR 320 HT 3 FER 8
 CLOUD TYPE 6 - 8 AMT 8 BAR 20.9 WEA 2 INSTR CSU1
 BKT TEMP 13.6 SAL 31.566 SAMPLE DEPTH 136 SAL 33.923

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.69	31.54	23.61	430.0	0	0
10	13.19	31.86	23.97	395.9	.042	.021
20	8.66	32.37	25.15	283.8	.075	.069
30	7.58	32.67	25.54	247.0	.102	.136
40	7.74	33.04	25.80	221.7	.125	.217
50	7.48	33.20	25.96	206.5	.147	.313
60	7.54	33.47	26.17	187.3	.166	.421
70	7.39	33.61	26.30	175.0	.185	.540
80	7.23	33.77	26.45	160.9	.201	.665
90	7.02	33.87	26.56	151.0	.217	.797
100	6.92	33.89	26.58	148.6	.232	.939
110	6.86	33.89	26.59	147.7	.247	1.094
120	6.78	33.91	26.62	145.3	.261	1.263
130	6.75	33.91	26.62	145.0	.276	1.444
138	6.50	33.93	26.67	140.4	.287	1.599

NO 32 LAT 45 15.5 LONG 124 18.0 STN DEPTH 167
DATE 6/30/73 TIME 606 AIR TEMP 56.3 WET BULB 52.8
WIND DIR 330 SPEED 18 SWELL DIR 320 HT 4 PER 8
CLOUD TYPE 6 - 8 AMT 7 BAR 20.9 WEA 2 INSTR CSU1
BKT TEMP 13.7 SAL 31.229 SAMPLE DEPTH 173 SAL 33.960

Table with 7 columns: DEPTH, TEMP, SAL, SIGMA, SVA, CELD, PCTE. Rows 0-174.

NO 34 LAT 45 16.5 LONG 124 30.0 STN DEPTH 407
DATE 6/30/73 TIME 818 AIR TEMP 56.2 WET BULB 51.8
WIND DIR 360 SPEED 18 SWELL DIR 330 HT 5 FLR 5
CLOUD TYPE 6 - 8 AMT 3 BAR 20.8 WEA 2 INSTR OSU1
BKT TEMP 13.4 SAL 31.727 SAMPLE DEPTH 376 SAL 34.052

Table with 7 columns: DEPTH, TEMP, SAL, SIGMA, SVA, CELD, PCTE. Rows 0-407.

NO 33 LAT 45 16.5 LONG 124 24.0 STN DEPTH 340
DATE 6/30/73 TIME 703 AIR TEMP 56.4 WET BULB 52.2
WIND DIR 340 SPEED 16 SWELL DIR 330 HT 4 FER 6
CLOUD TYPE 0 - 0 AMT 0 BAR 20.8 WEA 0 INSTR CSU1
BKT TEMP 13.2 SAL 31.456 SAMPLE DEPTH 338 SAL 34.035

Table with 7 columns: DEPTH, TEMP, SAL, SIGMA, SVA, CELD, PCTE. Rows 0-367.

NO 35 LAT 45 16.5 LONG 124 36.0 STN DEPTH 457
DATE 6/30/73 TIME 935 AIR TEMP 56.8 WET BULB 52.4
WIND DIR 340 SPEED 16 SWELL DIR 330 HT 5 FER 6
CLOUD TYPE 6 - 8 AMT 2 BAR 20.5 WEA 2 INSTR CSU1
BKT TEMP 13.4 SAL 31.590 SAMPLE DEPTH 422 SAL 34.061

Table with 7 columns: DEPTH, TEMP, SAL, SIGMA, SVA, CELD, PCTE. Rows 0-453.

NO 36 LAT 45 16.5 LONG 124 42.0 STN K 8 DEPTH 480
 DATE 6/30/73 TIME 1100 AIR TEMP 55.8 WET BULB 51.2
 WIND DIR 340 SPEED 18 SWELL DIR 330 HT 6 PER 6
 CLOUD TYPE 6 - 8 AMT 6 BAR 20.2 WEA 2 INSTR CSU1
 BKT TEMP 13.6 SAL 32.024 SAMPLE DEPTH 451 SAL 34.092

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.74	31.98	23.94	398.6	0	0
10	13.75	32.00	23.95	397.6	.040	.020
20	12.28	32.41	24.56	340.2	.078	.077
30	10.20	32.54	25.03	295.3	.111	.158
40	8.91	32.57	25.26	273.3	.139	.258
50	8.48	32.57	25.33	267.2	.166	.379
60	8.22	32.62	25.40	260.0	.192	.523
70	8.36	32.83	25.55	246.5	.218	.688
80	8.17	33.11	25.80	223.1	.241	.863
90	8.11	33.29	25.95	208.7	.263	1.046
100	8.06	33.43	26.06	198.1	.283	1.238
110	7.88	33.52	26.16	189.1	.302	1.441
120	7.78	33.67	26.29	176.5	.321	1.651
130	7.68	33.72	26.34	171.7	.338	1.868
140	7.61	33.83	26.44	162.7	.355	2.093
150	7.55	33.85	26.46	160.8	.371	2.328
160	7.52	33.85	26.47	160.3	.387	2.576
170	7.34	33.88	26.51	156.1	.403	2.836
180	7.16	33.90	26.56	152.0	.418	3.103
190	7.01	33.92	26.60	148.5	.433	3.380
200	6.86	33.90	26.59	149.2	.448	3.669
225	6.70	33.93	26.65	144.3	.484	4.450
250	6.42	33.92	26.68	141.4	.520	5.295
300	5.79	33.97	26.79	130.7	.587	7.143
400	5.20	34.04	26.92	119.4	.711	11.469
477	4.76	34.09	27.01	111.3	.799	15.318

NO 37 LAT 44 40.0 LONG 124 9.0 STN D 0.5 DEPTH 51
 DATE 7/ 1/73 TIME 640 AIR TEMP 54.1 WET BULB 51.8
 WIND DIR 0 SPEED 0 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 0 INSTR CSU1
 BKT TEMP 10.6 SAL 33.238 SAMPLE DEPTH 41 SAL 33.846

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	9.64	33.38	25.78	223.6	0	0
10	7.52	33.78	26.41	163.1	.019	.009
20	7.27	33.80	26.47	158.4	.035	.033
30	7.14	33.85	26.52	153.1	.050	.071
40	7.13	33.82	26.50	155.4	.066	.125
43	7.09	33.86	26.54	151.9	.070	.144

NO 38 LAT 44 40.0 LONG 124 6.0 STN D 2 DEPTH 35
 DATE 7/ 1/73 TIME 748 AIR TEMP 53.2 WET BULB 51.8
 WIND DIR 360 SPEED 6 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 0 INSTR CSU1
 BKT TEMP 9.8 SAL 33.417 SAMPLE DEPTH 25 SAL 33.621

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	9.16	33.38	25.85	216.3	0	0
10	8.69	33.36	25.91	210.9	.022	.011
20	7.65	33.61	26.26	177.7	.040	.039
30	7.69	33.60	26.25	179.2	.058	.083
33	7.69	33.60	26.25	179.2	.064	.100

NO 39 LAT 44 40.0 LONG 124 12.0 STN D 3 DEPTH 68
 DATE 7/ 1/73 TIME 837 AIR TEMP 54.2 WET BULB 52.1
 WIND DIR 40 SPEED 6 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.1 WEA 0 INSTR CSU1
 BKT TEMP 10.0 SAL 33.367 SAMPLE DEPTH 48 SAL 33.908

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	8.10	33.47	26.09	194.1	0	0
10	7.49	33.67	26.34	170.6	.018	.009
20	6.99	33.85	26.54	151.0	.034	.033
30	6.90	33.86	26.56	149.3	.049	.070
40	6.83	33.87	26.58	148.0	.064	.122
50	6.71	33.89	26.61	144.9	.079	.188
60	6.68	33.88	26.61	145.4	.093	.268
66	6.66	33.90	26.63	143.7	.102	.322

NO 40 LAT 44 40.0 LONG 124 15.0 STN D 3.5 DEPTH 73
 DATE 7/ 1/73 TIME 911 AIR TEMP 53.2 WET BULB 51.8
 WIND DIR 30 SPEED 4 SWELL DIR 320 HT 3 PER 5
 CLOUD TYPE 7 - 6 AMT 3 BAR 20.2 WEA 0 INSTR CSU1
 BKT TEMP 10.6 SAL 32.976 SAMPLE DEPTH 59 SAL 33.922

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	10.15	32.96	25.36	262.8	0	0
10	8.34	33.16	25.80	221.1	.024	.011
20	7.70	33.35	26.05	197.5	.045	.043
30	7.52	33.62	26.29	175.4	.063	.089
40	7.30	33.77	26.44	161.4	.080	.147
50	6.81	33.88	26.60	146.6	.096	.217
60	6.60	33.90	26.64	142.9	.110	.295
70	6.59	33.92	26.66	141.1	.124	.388
72	6.59	33.93	26.66	140.7	.127	.408

NO 41 LAT 44 40.0 LONG 124 18.0 STN D 4 DEPTH 79
 DATE 7/ 1/73 TIME 945 AIR TEMP 52.6 WET BULB 51.8
 WIND DIR 30 SPEED 4 SWELL DIR 320 HT 3 PER 5
 CLOUD TYPE 7 - 6 AMT 8 BAR 21.8 WEA 0 INSTR CSU1
 BKT TEMP 10.9 SAL 32.191 SAMPLE DEPTH 53 SAL 33.896

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	10.74	32.13	24.62	333.8	0	0
1	10.74	32.13	24.62	333.9	.003	.000
10	9.66	32.53	25.11	287.1	.031	.015
20	7.73	33.06	25.82	219.8	.056	.051
30	7.65	33.53	26.20	184.3	.076	.101
40	7.26	33.73	26.41	163.6	.093	.161
50	6.91	33.87	26.57	148.9	.108	.231
60	6.61	33.89	26.63	143.7	.123	.310
70	6.61	33.88	26.62	144.6	.137	.404
75	6.61	33.86	26.60	146.2	.145	.457

NO 42 LAT 44 40.0 LONG 124 24.0 STN D 5 DEPTH 95
 DATE 7/ 1/73 TIME 1025 AIR TEMP 54.8 WET BULB 52.4
 WIND DIR 30 SPEED 6 SWELL DIR 310 HT 3 PER 5
 CLOUD TYPE 7 - 6 AMT 8 BAR 21.3 WEA 0 INSTR CSU1
 BKT TEMP 12.2 SAL 31.917 SAMPLE DEPTH 84 SAL 33.814

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	12.12	31.79	24.11	382.6	0	0
10	8.99	32.33	25.06	291.8	.035	.016
20	7.56	32.73	25.58	242.4	.061	.055
30	7.48	32.83	25.66	233.6	.085	.115
40	7.53	33.03	25.82	219.6	.107	.194
50	7.40	33.34	26.09	194.9	.128	.286
60	7.47	33.55	26.24	180.4	.147	.390
70	7.35	33.70	26.36	167.7	.164	.504
80	7.10	33.79	26.48	158.3	.181	.628
90	5.91	33.86	26.56	150.3	.196	.757
92	5.91	33.86	26.56	150.3	.199	.784

NO 43 LAT 44 40.0 LONG 124 30.0 STN D 6 DEPTH 124
 DATE 7/ 1/73 TIME 1105 AIR TEMP 54.5 WET BULB 53.8
 WIND DIR 30 SPEED 6 SWELL DIR 310 HT 3 PER 0
 CLOUD TYPE 6 - 8 AMT 6 BAR 21.2 WEA 50 INSTR CSU1
 BKT TEMP 12.3 SAL 31.884 SAMPLE DEPTH 110 SAL 33.829

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	12.55	31.84	24.06	386.6	0	0
10	12.37	31.93	24.17	377.1	.038	.019
20	9.91	32.23	24.83	313.7	.074	.072
30	7.97	32.61	25.43	256.8	.102	.142
40	7.89	32.68	25.50	250.6	.127	.231
50	7.52	32.83	25.67	234.5	.152	.340
60	7.34	33.03	25.85	217.4	.174	.463
70	7.45	33.20	25.97	206.3	.195	.600
80	7.55	33.46	26.16	188.5	.215	.749
90	7.64	33.61	26.26	178.8	.234	.905
100	7.34	33.75	26.42	164.3	.251	1.068
110	7.21	33.83	26.49	157.1	.266	1.234
115	7.21	33.81	26.48	158.4	.274	1.322

NO 44 LAT 44 40.1 LONG 124 36.1 STN D 7 DEPTH 254
 DATE 7/ 1/73 TIME 1155 AIR TEMP 55.5 WET BULB 53.0
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 8
 CLOUD TYPE 6 - 0 AMT 6 BAR 21.6 WEA 2 INSTR CSU1
 BKT TEMP 12.8 SAL 31.850 SAMPLE DEPTH 228 SAL 33.966

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.69	31.81	24.01	391.4	0	0
10	12.62	31.82	24.04	389.3	.039	.020
20	11.35	32.16	24.53	342.3	.076	.075
30	9.33	32.42	25.08	290.6	.108	.153
40	8.35	32.51	25.30	269.4	.136	.251
50	7.92	32.59	25.42	257.8	.162	.370
60	7.88	32.73	25.54	247.1	.188	.510
70	7.80	33.03	25.79	223.7	.212	.664
80	7.75	33.20	25.92	211.1	.233	.827
90	7.79	33.32	26.02	202.3	.254	1.003
100	7.75	33.46	26.13	191.5	.274	1.191
110	7.68	33.54	26.20	184.8	.293	1.389
120	7.56	33.67	26.32	173.6	.310	1.592
130	7.40	33.76	26.42	164.9	.327	1.802
140	7.05	33.82	26.51	155.8	.343	2.019
150	6.89	33.84	26.55	152.2	.359	2.240
160	6.77	33.85	26.57	150.2	.374	2.474
170	6.59	33.89	26.63	145.1	.388	2.717
180	6.52	33.90	26.64	143.7	.403	2.970
190	6.42	33.90	26.66	142.2	.417	3.234
200	6.32	33.91	26.68	140.5	.431	3.508
225	6.15	33.92	26.71	137.7	.466	4.243
233	6.13	33.92	26.71	137.8	.477	4.496

NO 46 LAT 44 40.0 LONG 124 36.0 STN D 7 DEPTH 202
 DATE 7/ 1/73 TIME 1523 AIR TEMP 56.9 WET BULB 53.3
 WIND DIR 0 SPEED 10 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 3 - 6 AMT 5 BAR 21.1 WEA 2 INSTR CSU1
 BKT TEMP 13.1 SAL 31.847 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.07	31.81	23.94	398.4	0	0
10	12.70	31.89	24.07	385.9	.039	.020
20	10.79	32.12	24.60	335.8	.077	.075
30	8.72	32.49	25.23	276.3	.106	.148
40	8.16	32.50	25.32	267.7	.133	.244
50	7.87	32.65	25.48	252.7	.160	.361
60	7.82	32.99	25.75	226.8	.184	.493
70	7.79	33.23	25.94	206.7	.205	.634
80	7.81	33.43	26.10	194.3	.226	.785
90	7.70	33.56	26.22	183.3	.244	.945
100	7.58	33.69	26.34	172.1	.262	1.116
110	7.47	33.76	26.41	165.6	.279	1.292
120	7.32	33.80	26.46	160.7	.295	1.480
130	6.90	33.88	26.58	149.2	.311	1.674
140	6.82	33.88	26.59	148.3	.326	1.875
150	6.53	33.92	26.66	141.7	.340	2.085
160	6.40	33.93	26.69	139.5	.354	2.303
170	6.31	33.95	26.71	137.3	.368	2.531
180	6.22	33.95	26.72	136.0	.382	2.772
190	6.18	33.95	26.73	135.6	.396	3.023
200	6.14	33.96	26.74	134.5	.409	3.285
209	6.13	33.96	26.74	134.5	.421	3.533

NO 45 LAT 44 40.0 LONG 124 42.0 STN D 8 DEPTH 216
 DATE 7/ 1/73 TIME 1250 AIR TEMP 55.8 WET BULB 52.2
 WIND DIR 20 SPEED 7 SWELL DIR 310 HT 4 PER 6
 CLOUD TYPE 6 - 8 AMT 7 BAR 21.3 WEA 2 INSTR CSU1
 BKT TEMP 13.6 SAL 31.433 SAMPLE DEPTH 177 SAL 33.965

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.57	31.39	23.52	438.7	0	0
10	13.69	31.55	23.62	429.5	.043	.022
20	12.05	32.17	24.41	354.0	.082	.079
30	8.87	32.51	25.22	276.8	.113	.155
40	8.30	32.55	25.34	266.0	.140	.249
50	7.94	32.60	25.43	257.4	.166	.368
60	7.83	32.74	25.55	245.6	.191	.506
70	7.81	32.98	25.75	227.5	.215	.661
80	7.75	33.25	25.97	206.5	.237	.823
90	7.68	33.43	26.12	192.6	.257	.992
100	7.61	33.57	26.24	181.4	.275	1.169
110	7.47	33.68	26.34	171.5	.293	1.353
120	7.21	33.78	26.46	160.7	.310	1.545
130	6.97	33.83	26.53	153.9	.325	1.740
140	6.70	33.89	26.61	146.0	.340	1.940
150	6.56	33.91	26.65	142.9	.354	2.150
160	6.28	33.94	26.71	137.2	.369	2.368
170	6.21	33.93	26.71	137.2	.382	2.594
180	6.20	33.94	26.72	136.5	.396	2.833
182	6.20	33.94	26.72	136.5	.399	2.882

NO 47 LAT 44 40.1 LONG 124 30.2 STN DEPTH 122
 DATE 7/ 1/73 TIME 1734 AIR TEMP 57.1 WET BULB 54.2
 WIND DIR 0 SPEED 10 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 3 - 6 AMT 4 BAR 20.5 WEA 2 INSTR CSU1
 BKT TEMP 14.0 SAL 31.677 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.88	31.70	23.69	421.9	0	0
10	13.71	31.74	23.76	415.9	.042	.021
20	8.30	32.48	25.28	270.9	.073	.067
30	7.91	32.65	25.47	253.2	.099	.131
40	7.58	32.79	25.63	238.2	.124	.217
50	7.40	32.88	25.73	228.8	.147	.322
60	7.56	33.00	25.80	222.5	.170	.445
70	7.66	33.15	25.90	212.9	.191	.586
80	7.59	33.47	26.16	188.0	.211	.733
90	7.50	33.58	26.26	179.0	.229	.890
100	7.35	33.72	26.40	166.3	.247	1.053
110	7.24	33.81	26.48	158.7	.263	1.224
120	7.15	33.86	26.53	153.9	.278	1.401
123	7.15	33.86	26.53	153.9	.283	1.457

YAQUINA CRUISE Y7307A

The main purpose of this cruise was to make direct current observations in the CUE-II area by means of vane and parachute drogues. Dr. Merritt Stevenson of the Inter-American Tropical Tuna Commission was chief scientist. Other personnel participating in the cruise were: D. Barstow, R. R. Kapaun, B. Wyatt, T. Wright, L. Alvarez, G. Bodvarsson, and R. Bates, of Oregon State University; H. Frese, J. Wroblewski, of Florida State University; R. Wagner and E. Light of IATTC; and observers T. Poynter, J. Cloud and K. Keen.

The following cruise narrative is taken from the cruise report by M. Stevenson published in the CUEA Newsletter (Vol. 2, No. 8):

The following objectives were carried out aboard the R/V YAQUINA by personnel from IATTC, OSU and FSU.

1. To make hydrographic lines normal to the coast to delineate physical characteristics of the upwelling front (if present), associated with active coastal upwelling.
2. To use vane and small-diameter parachute drogues in locations based on CTD data to:
 - a. Make direct measurements of nearsurface (0-10 m) currents on the seaward side of the upwelling front;
 - b. Track both kinds of drogues for up to 4 days time if necessary, to determine the alongshore scale length of motion associated with the upwelling front; and
 - c. If possible to deploy drogues so as to estimate the magnitude of horizontal turbulence of water seaward of the upwelling front.

As a result of the considerable efforts of the scientific party, it was possible to conduct 2 drogue experiments, one commencing on July 10 and the other on July 13, rather than one within the cruise period. The cruise apparently coincided with a major "upwelling event", with gale forces prevailing during much of the cruise period.

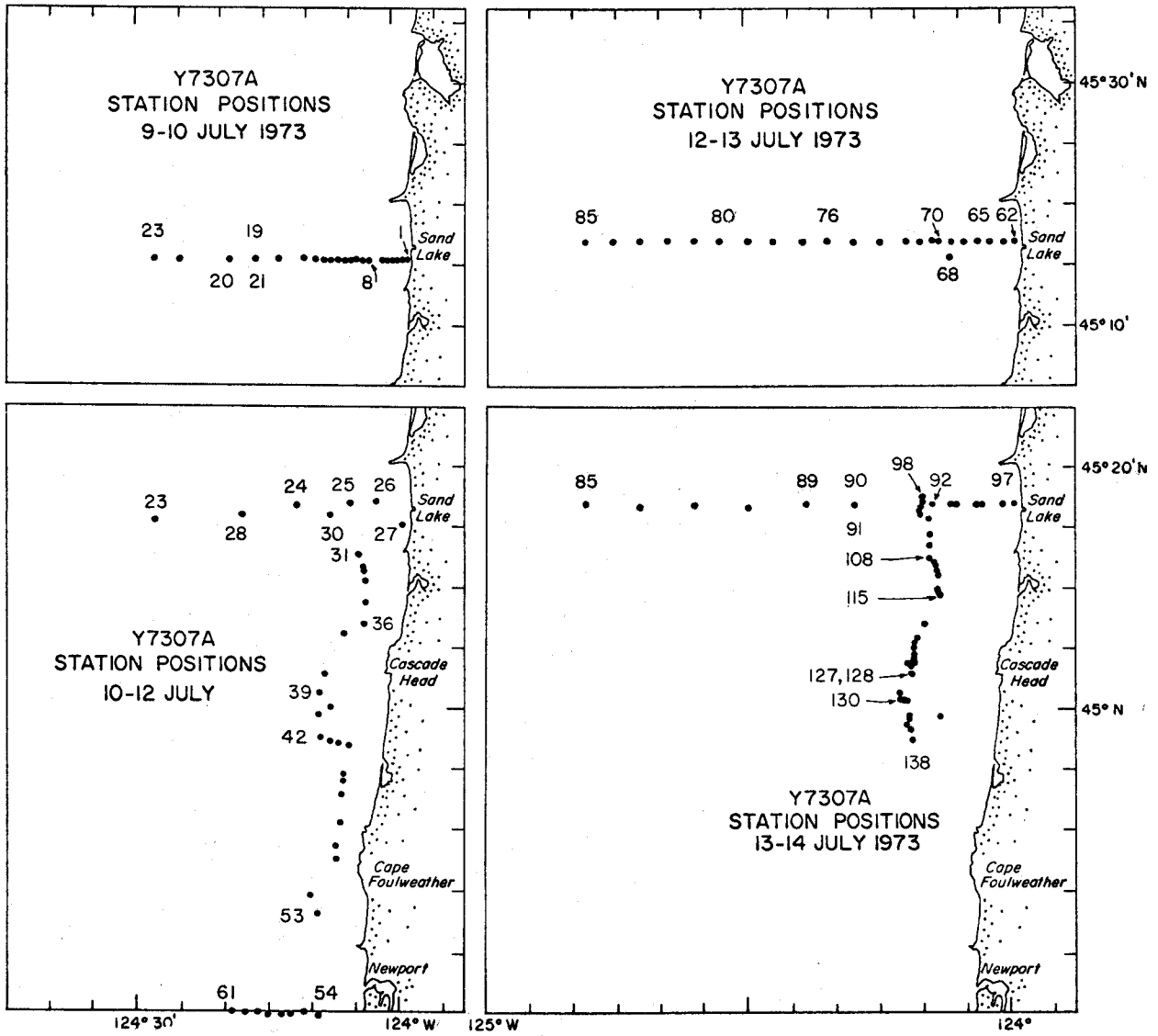


Figure 10. Positions of hydrographic stations occupied by R/V YAQUINA, 9-14 July 1973.

Hydrographic sections were made along the K-Line on July 9, 12 and 13. A hydro-line was also made near Yaquina Head after drogues were recovered from the first drogue experiment. A total of 136 CTD stations were made during the 6-day cruise, most of these as part of the Lagrangian STD time series. Inter-calibration STD casts were made with the R/V OCEANOGRAPHER (P.O.L., NOAA) and the R/V THOMPSON (University of Washington) during the cruise period.

Hydrographic station positions for this cruise are shown in Figure 10. Sample and CTD salinities were compared; the standard deviation of the differences is 0.031 o/oo. Differences are plotted vs. sample salinity and vs. station no. (Fig. 11). Staggered profiles of temperature, salinity and sigma-t for each line or group of stations are shown in Figures 12-18. Of each figure except Figure 16, the value of the parameter at the bottom of each profile is shown. Profiles are offset by a constant amount.

The data at standard depths is listed on pages 47-67.

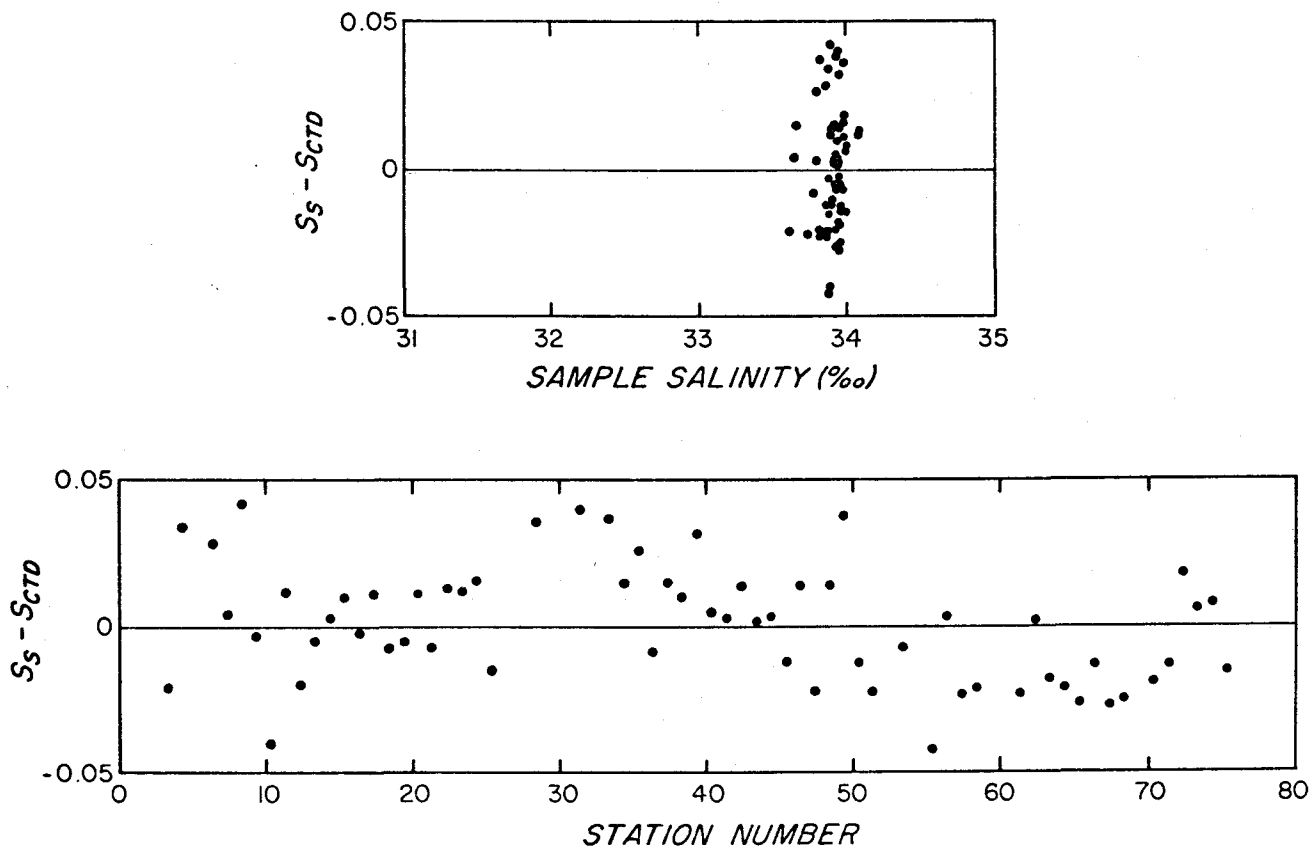


Figure 11. Comparison between sample salinity (S_s) and CTD salinity (S_{CTD}), Y7307A.

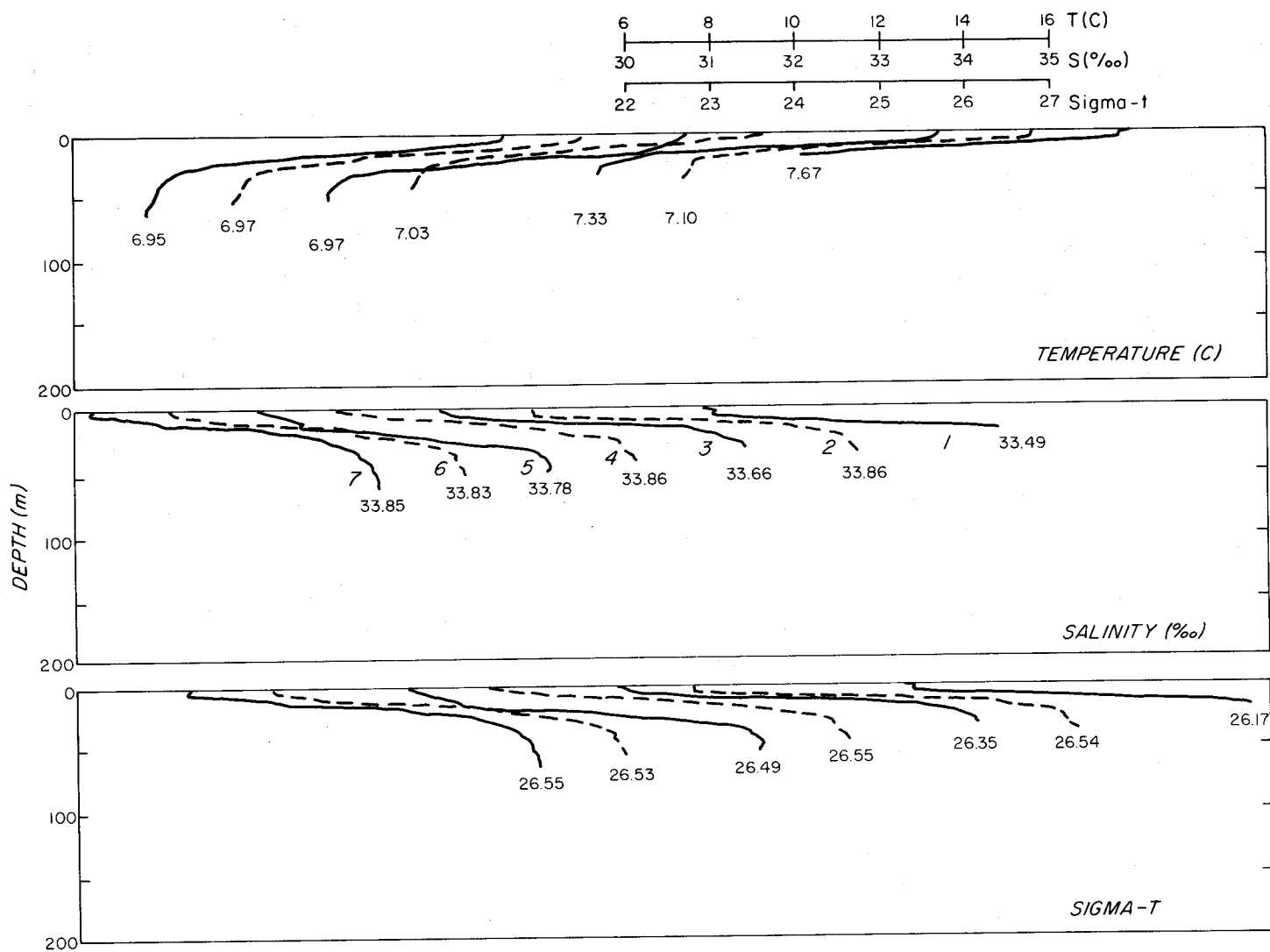


Figure 12(a). Staggered profiles of temperature, salinity and sigma-t for stations 1-7 along 45°16'N, 9-10 July 1973.

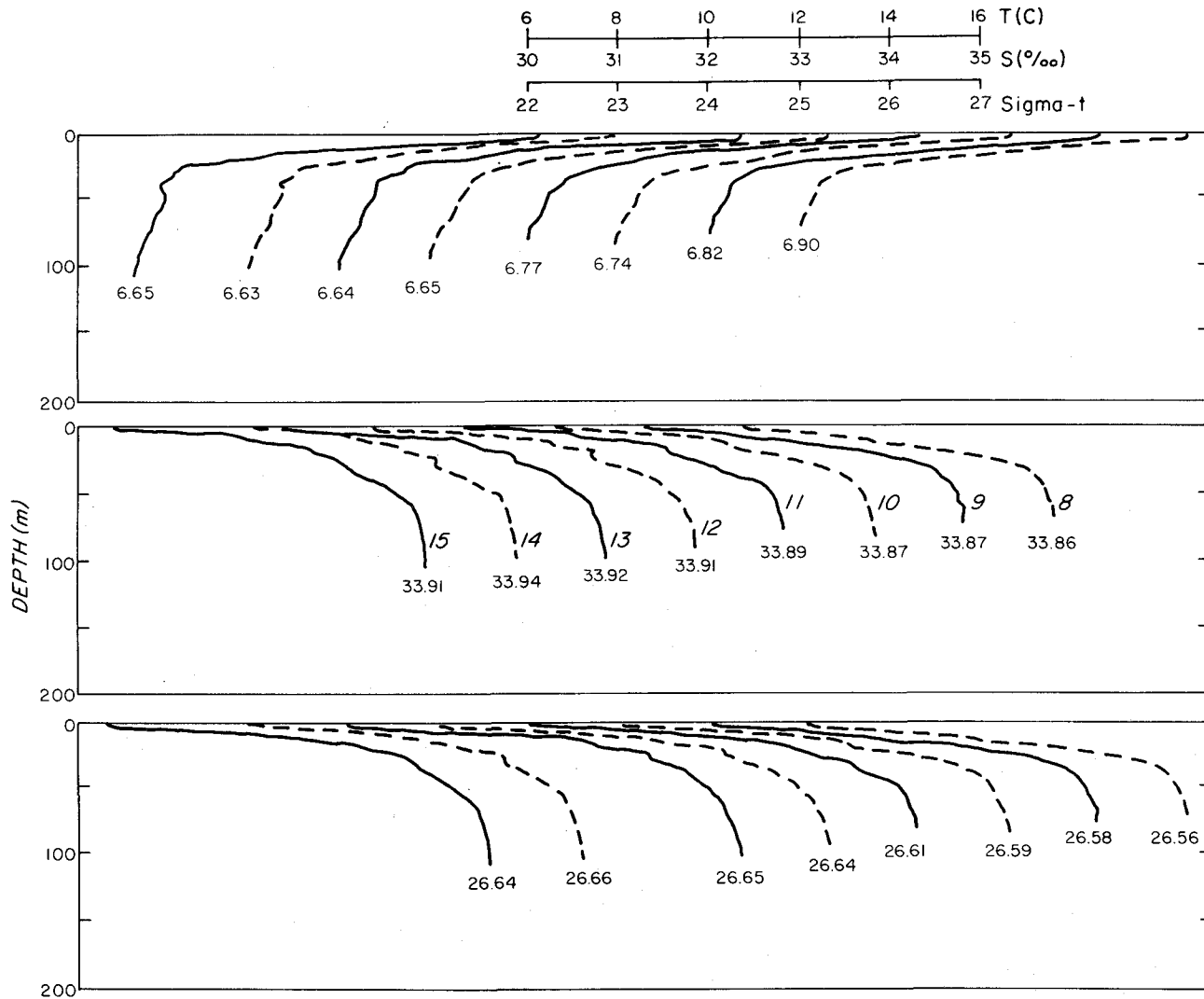


Figure 12(b). Staggered profiles of temperature, salinity and sigma-t for stations 8-15 along 45°16'N, 9-10 July 1973.

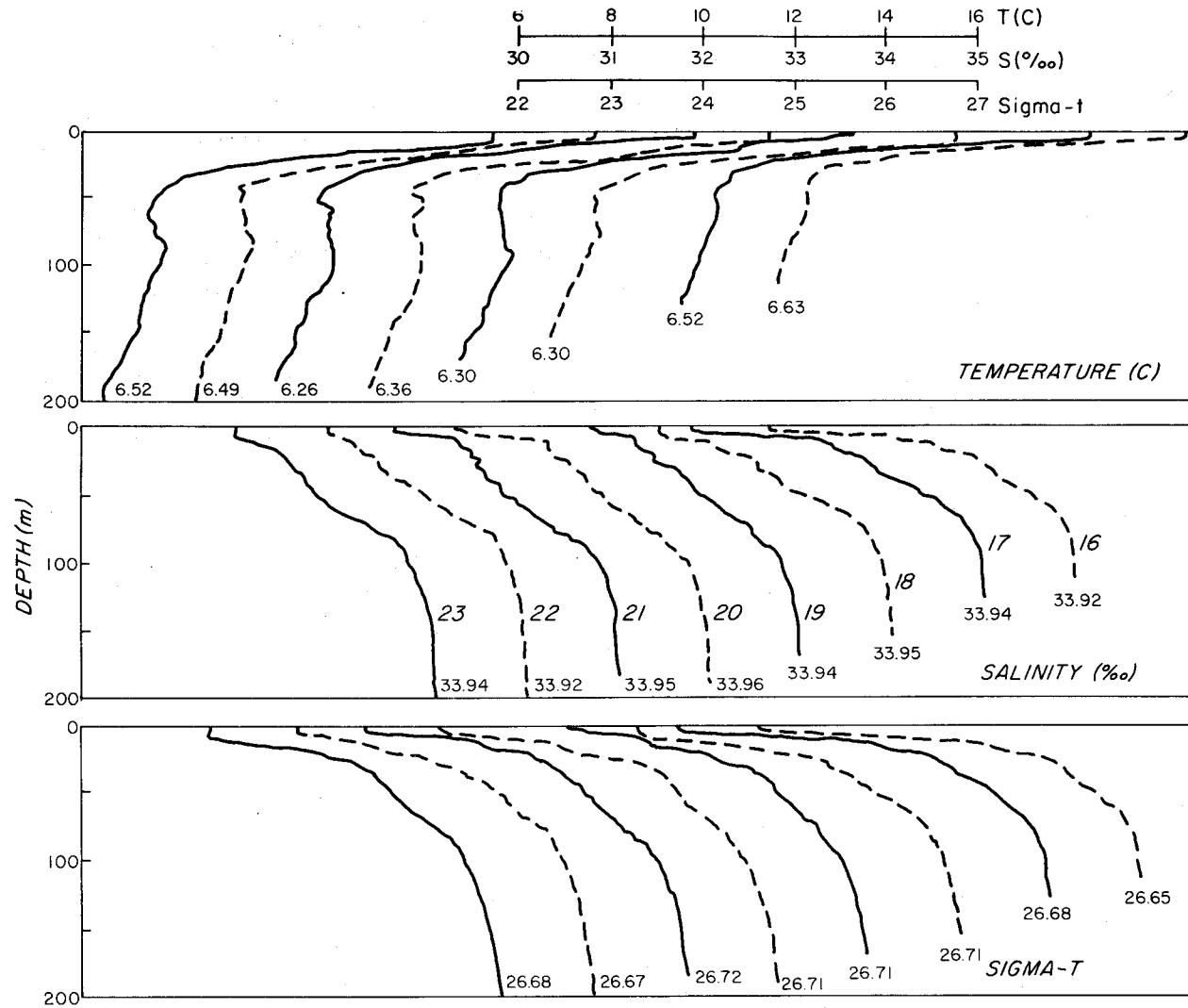


Figure 12(c). Staggered profiles of temperature, salinity and sigma-t for stations 16-23 along 45°16'N, 9-10 July 1973.

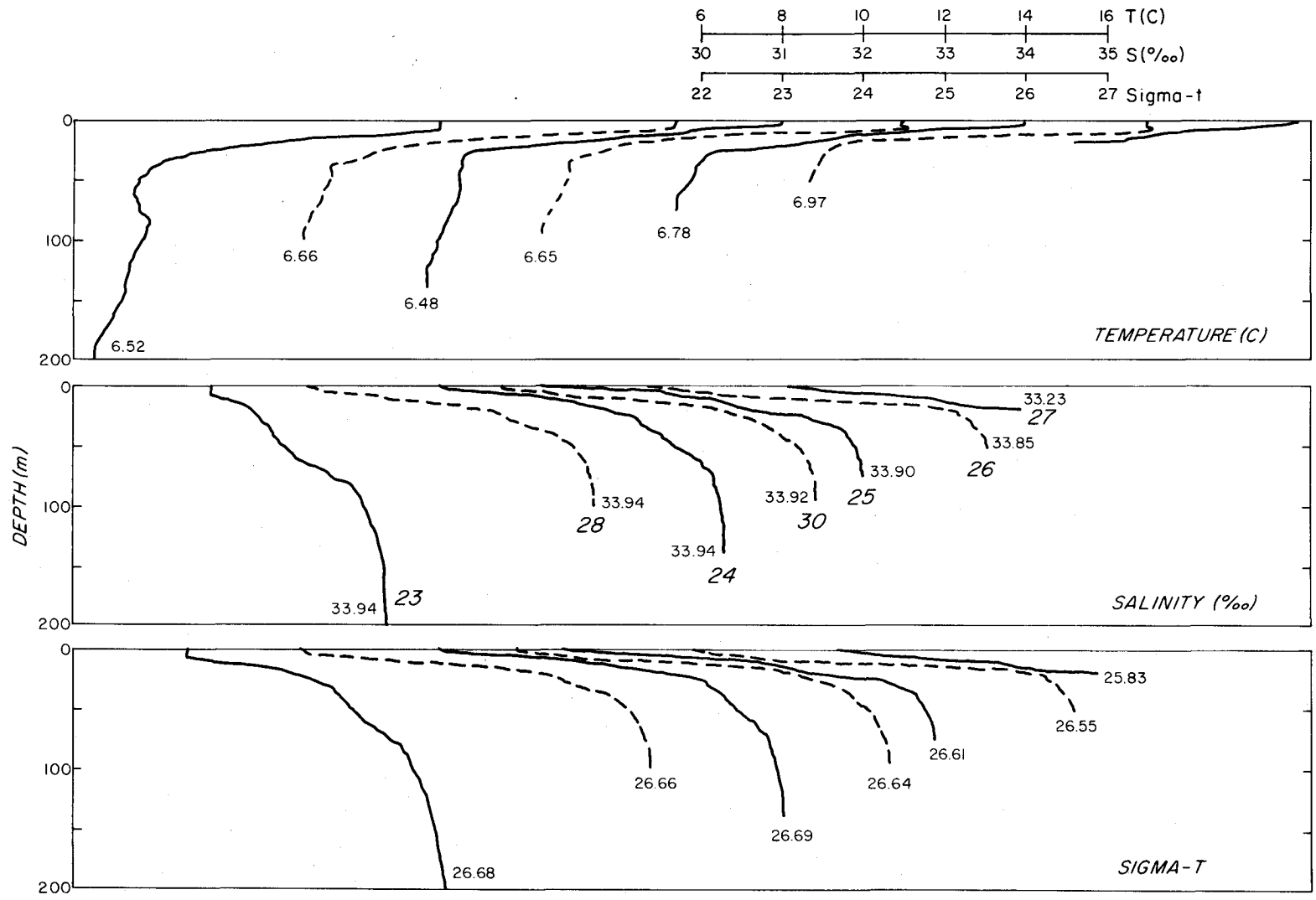


Figure 13. Staggered profiles of temperature, salinity and sigma-t for stations near 45°16'N, 10 July 1973.

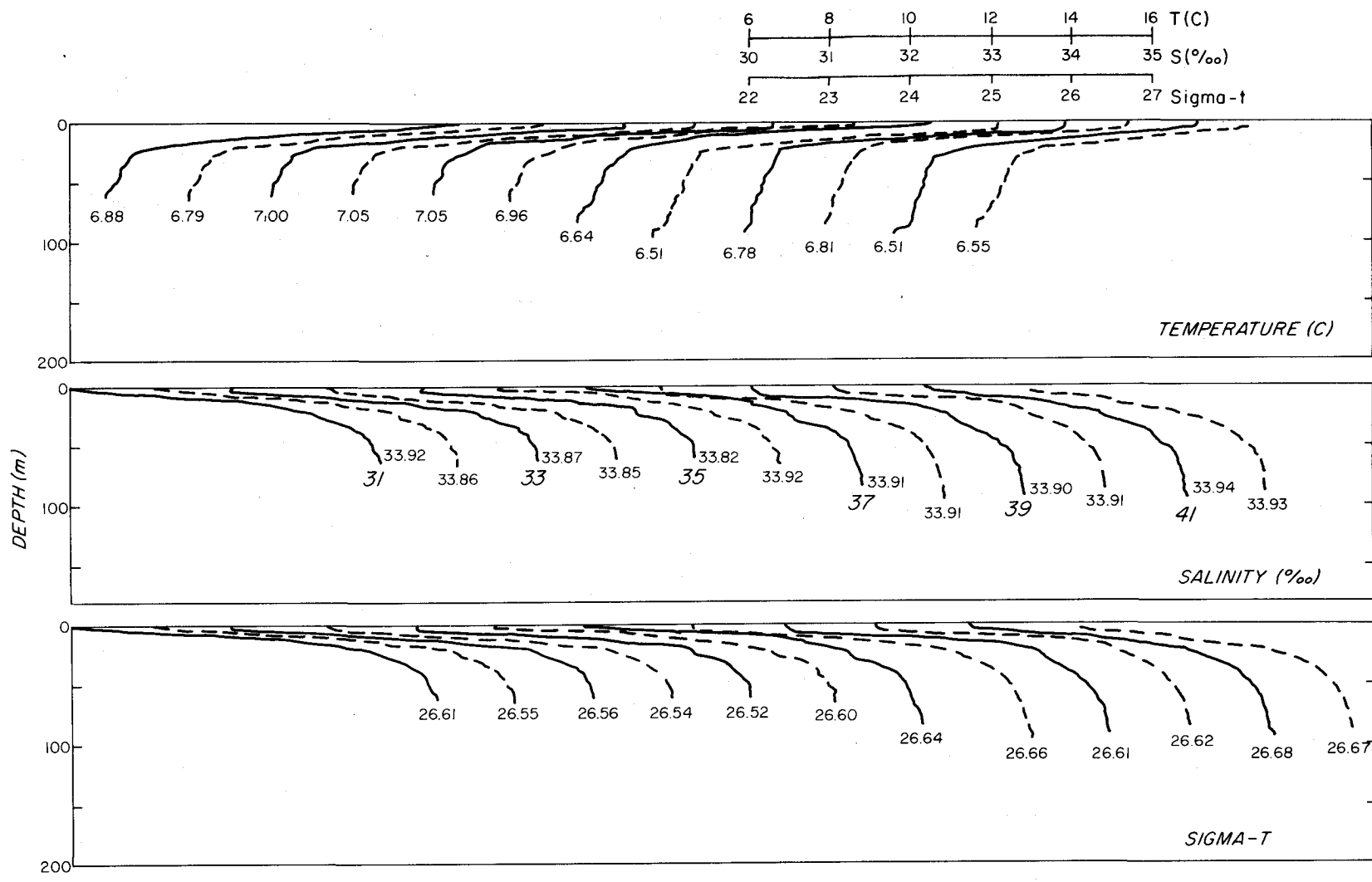


Figure 14(a). Staggered profiles of temperature, salinity and sigma-t for stations 31-42 in the vicinity of drogues, 10-11 July, 1973.

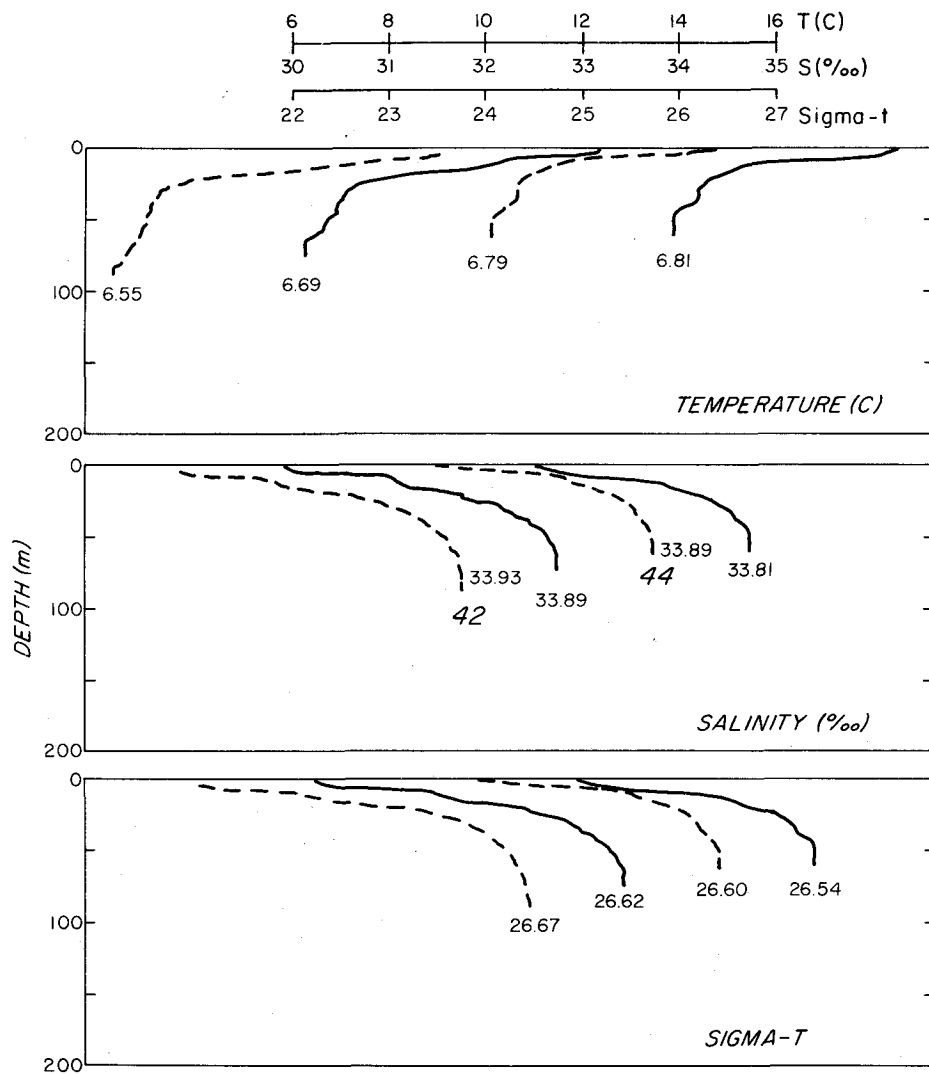


Figure 14(b). Staggered profiles of temperature, salinity and sigma-t for stations 42-45 in the vicinity of drogues, 10-11 July 1973.

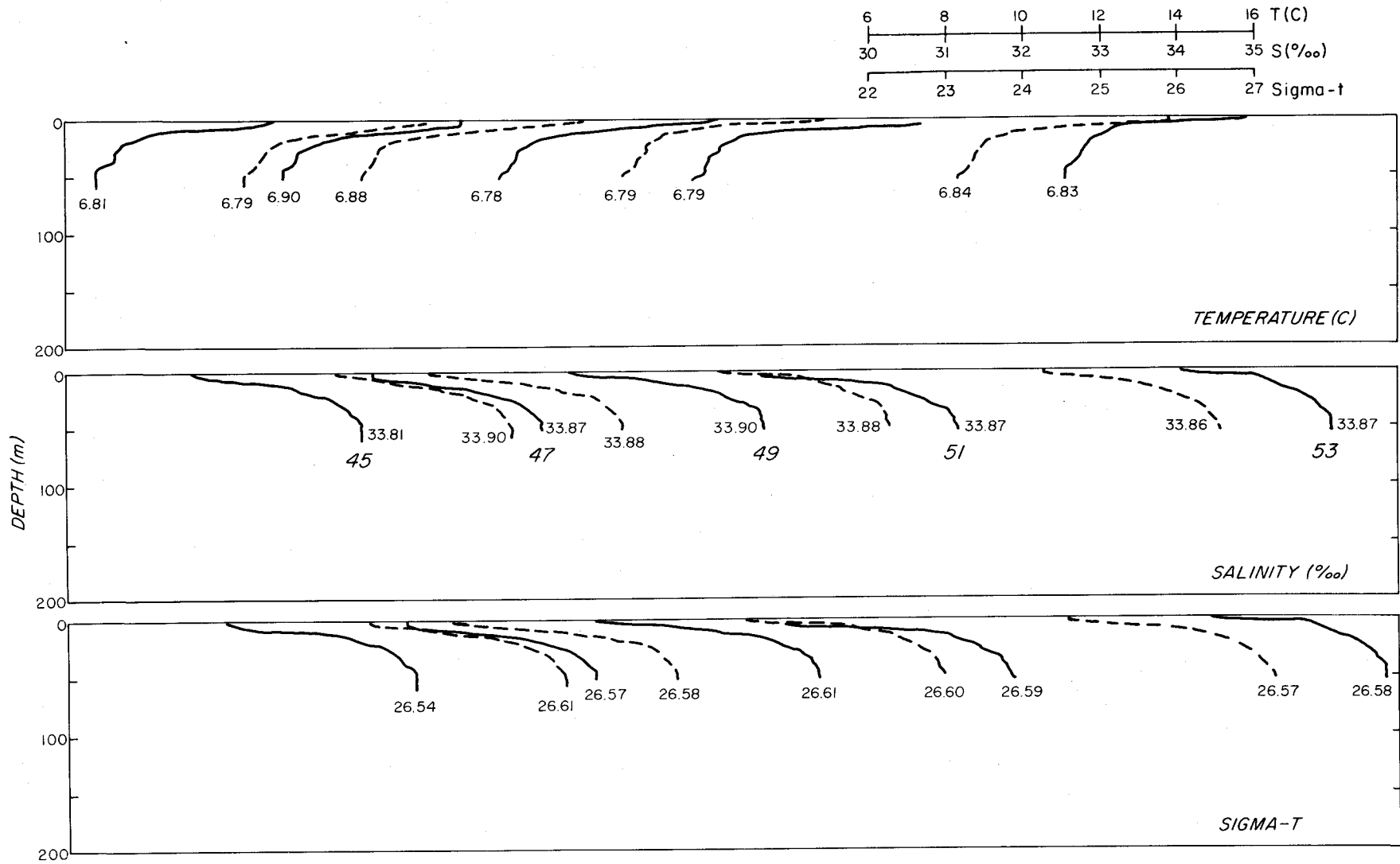


Figure 14(c). Staggered profiles of temperature, salinity and sigma-t for stations 45-53 in the vicinity of drogues, 10-11 July 1973.

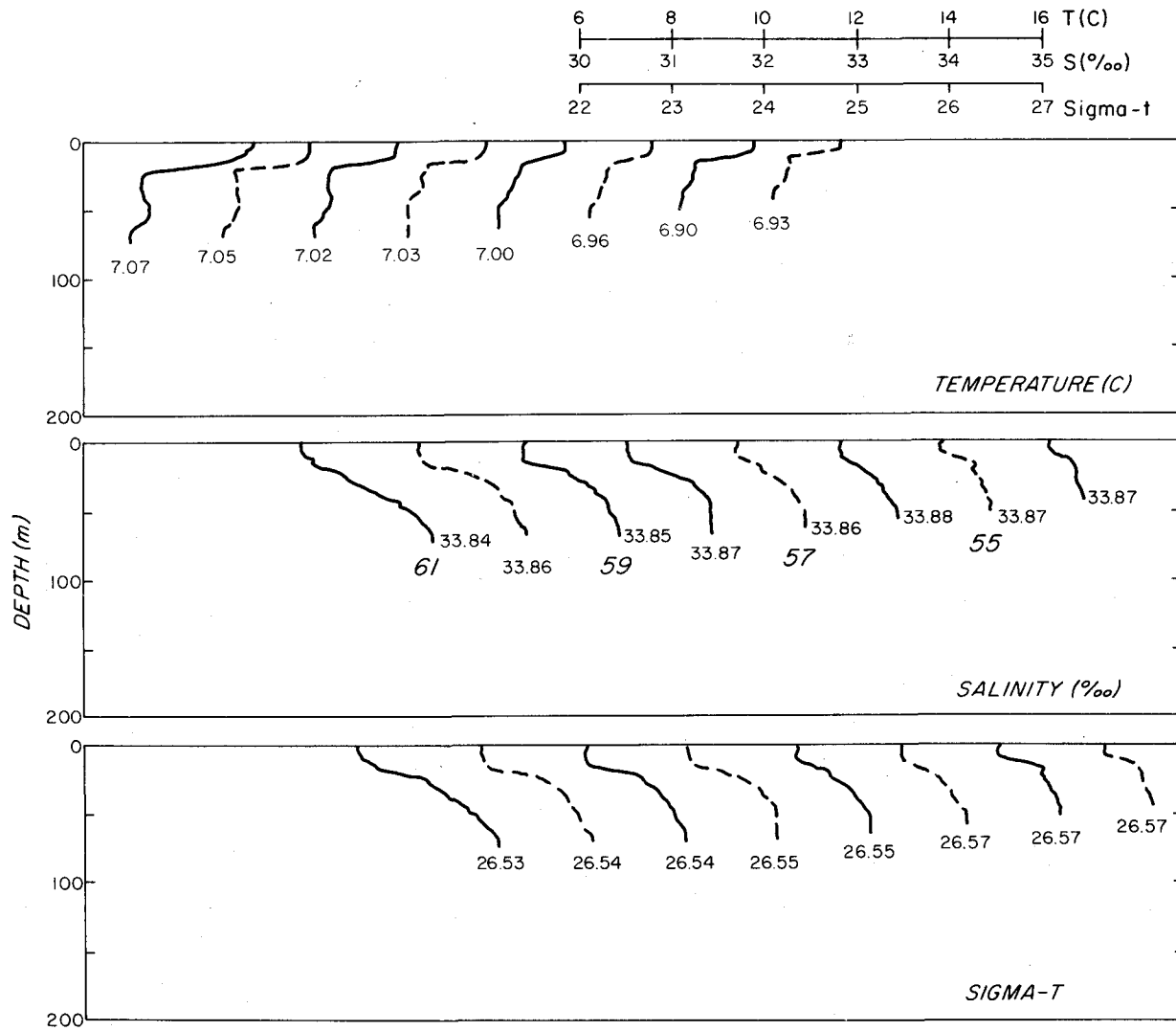


Figure 15. Staggered profiles of temperature, salinity and sigma-t for stations along 44°35'N, 12 July 1973.

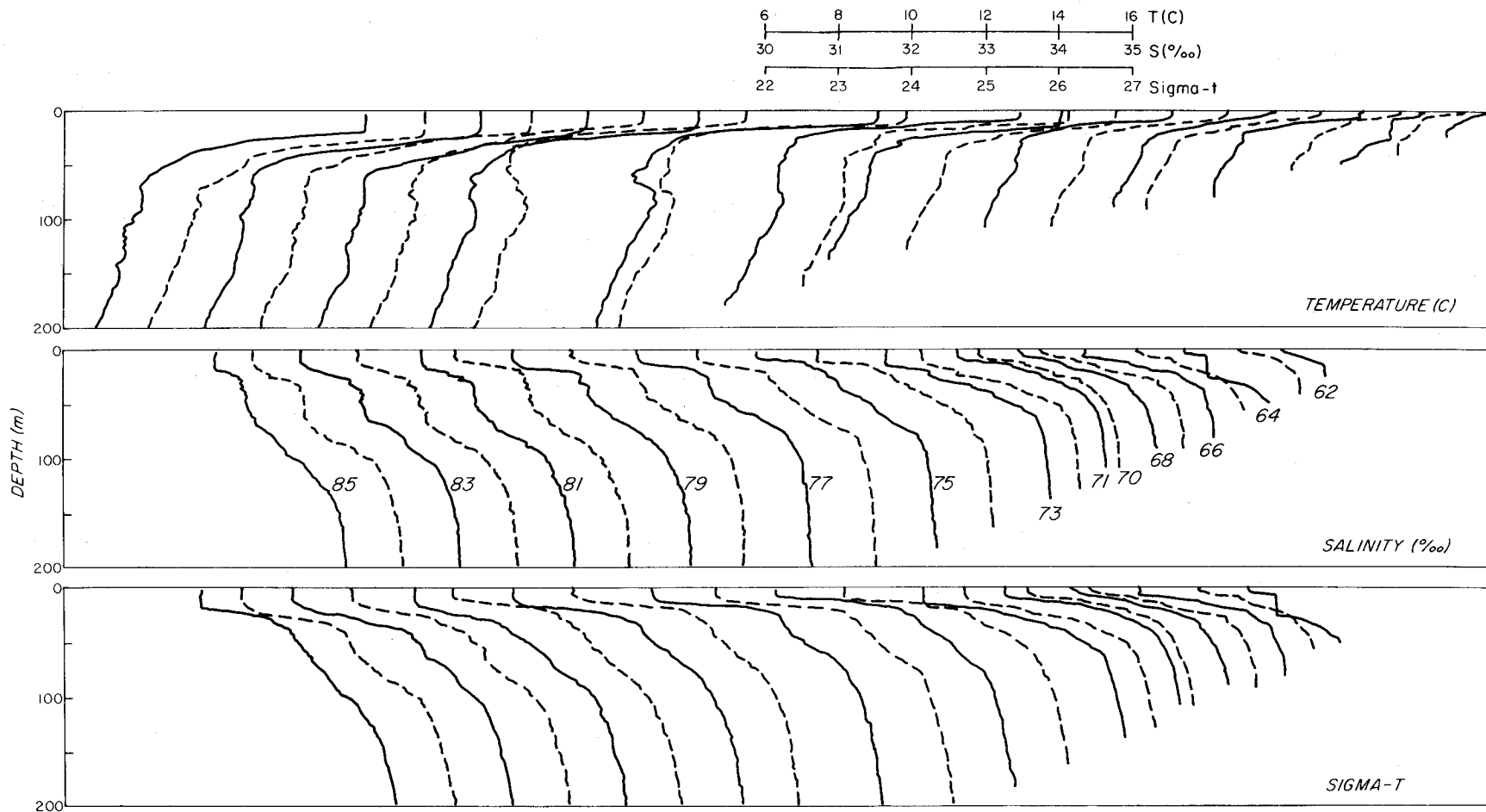


Figure 16. Staggered profiles of temperature, salinity and sigma-t for stations along 45°16'N, 12-13 July 1973. See listings on pages 54-58 for surface and bottom values.

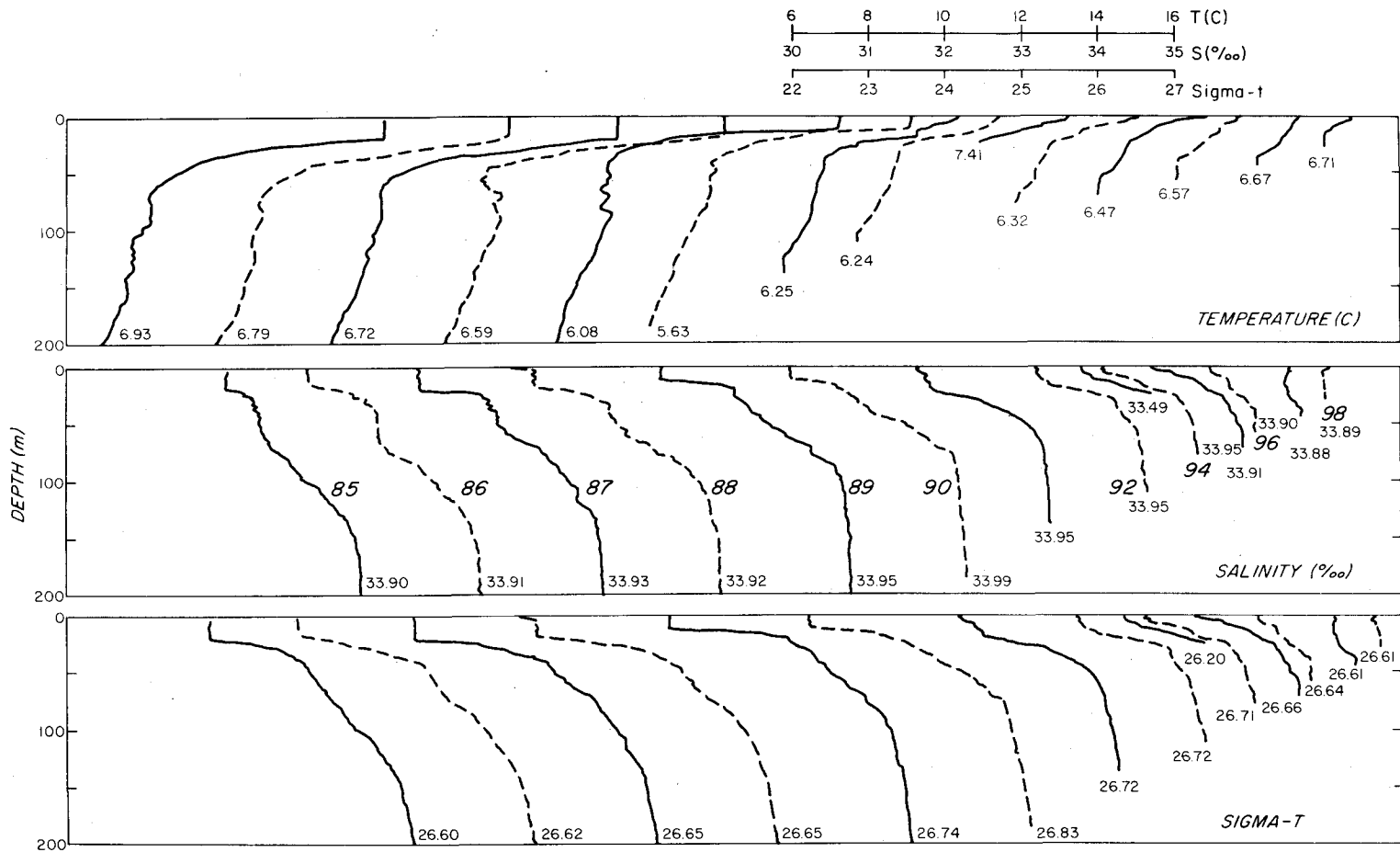


Figure 17. Staggered profiles of temperature, salinity and sigma-t for stations along 45°16'N, 13 July 1973.

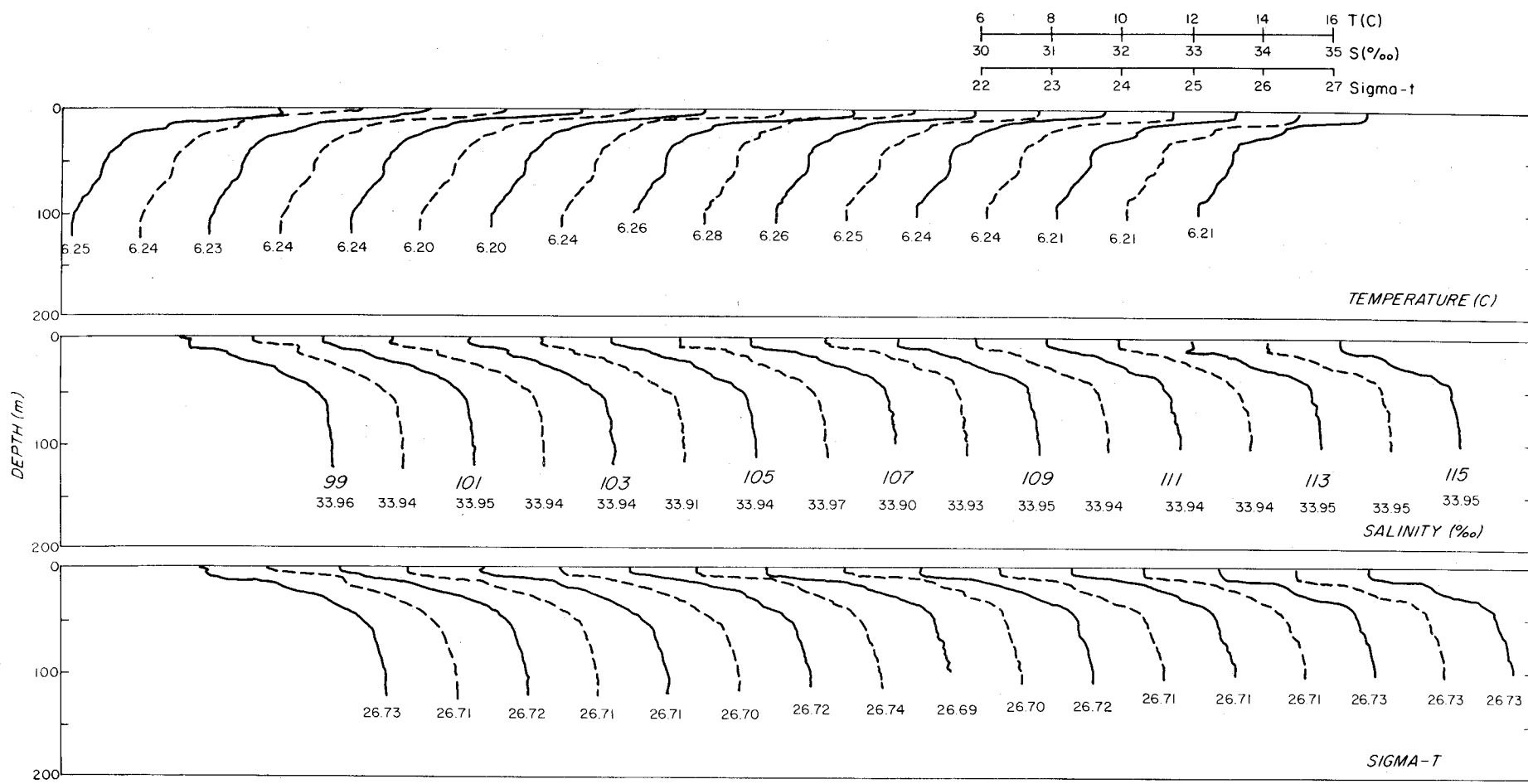


Figure 18(a). Staggered profiles of temperature, salinity and sigma-t for stations 99-115 in the vicinity of drogues, 13-14 July 1973.

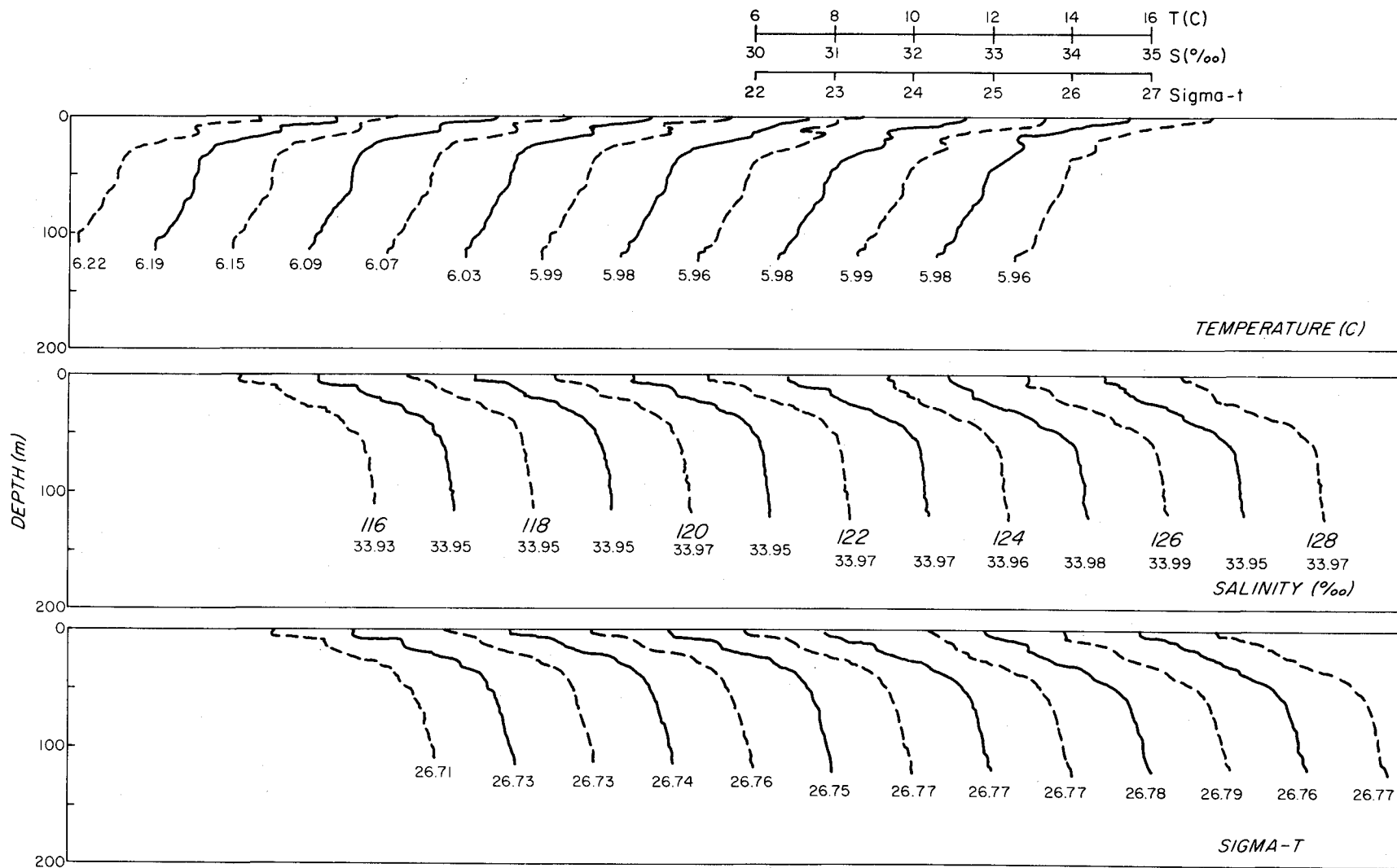


Figure 18(b). Staggered profiles of temperature, salinity and sigma-t for stations 116-128 in the vicinity of drogues, 13-14 July 1973.

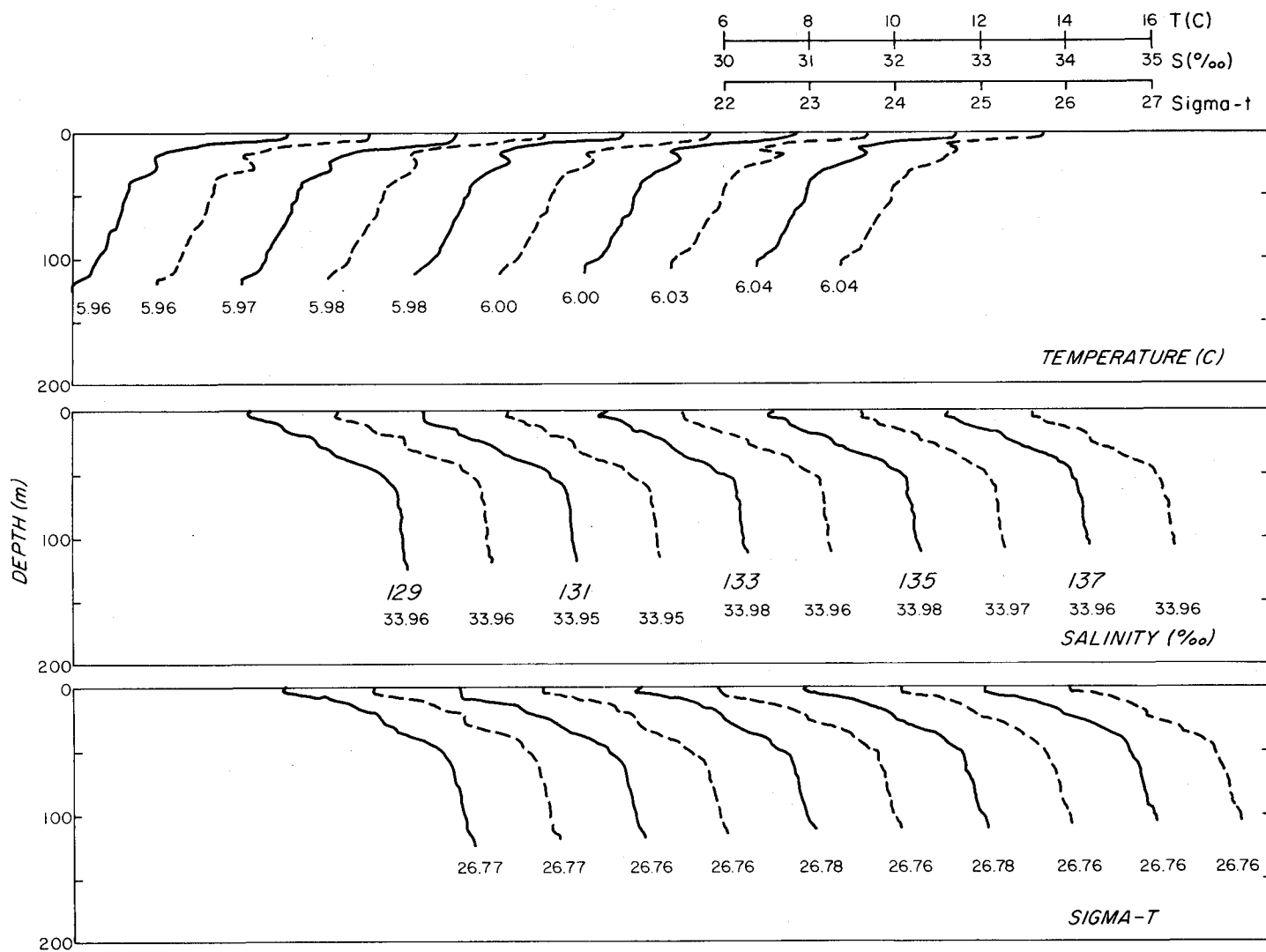


Figure 18(c). Staggered profiles of temperature, salinity and sigma-t for stations 129-138 in the vicinity of drogues, 13-14 July 1973.

NO 1 LAT 45 15.0 LONG 123 59.4 STN DEPTH 20
 DATE 7/ 9/73 TIME 2142 AIR TEMP 59.9 WET BULB 56.9
 WIND DIR 330 SPEED 18 SWELL DIR 300 HT 3 FER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.3 WEA 2 INSTR OSU1
 BKT TEMP 15.7 SAL 29.903 SAMPLE DEPTH 4 SAL 29.882

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.60	29.96	22.00	584.0	0	0
10	12.08	31.44	23.84	407.9	.055	.026
18	7.67	33.49	26.17	186.9	.077	.057

NO 2 LAT 45 15.0 LONG 124 0 STN DEPTH 37
 DATE 7/ 9/73 TIME 2208 AIR TEMP 59.7 WET BULB 56.5
 WIND DIR 330 SPEED 20 SWELL DIR 300 HT 3 FER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 29.742 SAMPLE DEPTH 23 SAL 33.575

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.43	29.81	21.92	591.5	0	0
10	11.25	32.03	24.45	350.0	.054	.025
20	7.55	33.54	26.22	181.6	.079	.061
30	7.27	33.78	26.45	160.1	.095	.102
36	7.10	33.86	26.54	152.0	.105	.133

NO 3 LAT 45 15.0 LONG 124 .6 STN DEPTH 45
 DATE 7/ 9/73 TIME 2231 AIR TEMP 59.9 WET BULB 56.6
 WIND DIR 330 SPEED 20 SWELL DIR 300 HT 3 FER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 21.8 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 30.020 SAMPLE DEPTH 27 SAL 33.603

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.49	29.92	21.99	584.7	0	0
10	12.86	31.22	23.53	438.2	.054	.026
20	8.09	33.33	25.98	204.7	.081	.065
30	7.36	33.64	26.33	171.7	.100	.111
33	7.33	33.66	26.35	169.9	.105	.128

NO 4 LAT 45 15.0 LONG 124 1.2 STN DEPTH 50
 DATE 7/ 9/73 TIME 2251 AIR TEMP 60.0 WET BULB 56.9
 WIND DIR 330 SPEED 12 SWELL DIR 300 HT 3 FER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 21.3 WEA 2 INSTR OSU1
 BKT TEMP 15.7 SAL 30.247 SAMPLE DEPTH 42 SAL 33.818

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.58	30.27	22.24	560.9	0	0
10	11.69	31.68	24.10	383.6	.049	.023
20	8.11	33.00	25.72	229.5	.079	.066
30	7.29	33.68	26.37	167.8	.097	.111
40	7.08	33.84	26.52	153.3	.113	.168
44	7.03	33.86	26.55	151.2	.119	.193

NO 5 LAT 45 15.0 LONG 124 1.7 STN DEPTH 53
 DATE 7/ 9/73 TIME 2310 AIR TEMP 61.0 WET BULB 57.5
 WIND DIR 330 SPEED 20 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 21.3 WEA 2 INSTR OSU1
 BKT TEMP 15.4 SAL 30.450 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.46	30.34	22.32	553.3	0	0
10	14.90	30.90	22.87	501.1	.053	.026
20	11.10	31.98	24.44	351.3	.099	.093
30	7.76	33.30	26.00	202.5	.127	.162
40	7.14	33.80	26.48	157.0	.144	.222
50	6.97	33.80	26.51	155.1	.159	.251
51	6.97	33.78	26.49	156.4	.161	.259

NO 6 LAT 45 15.0 LONG 124 2.2 STN DEPTH 56
 DATE 7/ 9/73 TIME 2332 AIR TEMP 61.5 WET BULB 59.0
 WIND DIR 330 SPEED 20 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.5 WEA 2 INSTR OSU1
 BKT TEMP 15.5 SAL 30.356 SAMPLE DEPTH 48 SAL 33.794

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.27	30.32	22.34	550.8	0	0
1	15.27	30.32	22.34	550.9	.006	.000
10	13.69	30.88	23.10	479.2	.053	.026
20	9.42	32.63	25.22	276.7	.087	.076
30	7.45	33.52	26.22	181.9	.109	.130
40	7.21	33.72	26.41	163.9	.126	.189
50	7.00	33.84	26.53	152.4	.142	.260
53	6.97	33.83	26.53	152.7	.147	.264

NO 7 LAT 45 15.0 LONG 124 0 STN DEPTH 64
 DATE 7/ 9/73 TIME 2353 AIR TEMP 59.5 WET BULB 57.0
 WIND DIR 330 SPEED 20 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.5 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 30.314 SAMPLE DEPTH 38 SAL 33.668

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.46	30.34	22.32	553.3	0	0
10	13.40	31.21	23.41	448.9	.051	.025
20	8.67	32.91	25.56	244.2	.085	.074
30	7.53	33.43	26.14	189.7	.107	.127
40	7.25	33.69	26.38	166.7	.124	.189
50	7.13	33.77	26.46	159.3	.141	.261
60	6.96	33.84	26.54	152.0	.156	.346
63	6.95	33.85	26.55	151.1	.161	.374

NO 8 LAT 45 15.0 LONG 124 3.7 STN DEPTH 69
 DATE 7/10/73 TIME 20 AIR TEMP 62.0 WET BULB 58.5
 WIND DIR 0 SPEED 18 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.4 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 33.392 SAMPLE DEPTH 66 SAL 33.820

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.48	30.37	22.34	551.5	0	0
10	11.84	31.81	24.17	376.4	.048	.022
20	9.14	32.71	25.34	265.9	.081	.070
30	7.55	33.49	26.18	185.5	.103	.124
40	7.24	33.70	26.39	165.8	.120	.185
50	7.11	33.78	26.47	158.5	.136	.258
60	6.95	33.86	26.56	150.4	.152	.343
68	6.90	33.86	26.56	149.8	.164	.419

NO 9 LAT 45 15.0 LONG 124 4.4 STN DEPTH 76
 DATE 7/10/73 TIME 43 AIR TEMP 62.0 WET BULB 58.0
 WIND DIR 0 SPEED 18 SWELL DIR 300 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 20.2 WEA 2 INSTR OSU1
 BKT TEMP 15.7 SAL 30.352 SAMPLE DEPTH 60 SAL 33.845

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.51	30.31	22.29	556.5	0	0
10	12.54	31.65	23.92	400.9	.049	.023
20	8.83	32.82	25.47	252.2	.081	.070
30	7.61	33.42	26.12	191.5	.103	.123
40	7.28	33.65	26.34	170.3	.121	.186
50	7.17	33.76	26.45	160.6	.137	.259
60	6.92	33.84	26.55	151.5	.153	.345
70	6.83	33.86	26.57	148.9	.168	.441
74	6.82	33.87	26.58	148.1	.174	.484

NO 10 LAT 45 15.0 LONG 124 5.2 STN DEPTH 84
 DATE 7/10/73 TIME 110 AIR TEMP 60.5 WET BULB 57.0
 WIND DIR 340 SPEED 20 SWELL CIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.2 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 30.324 SAMPLE DEPTH 70 SAL 33.892

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.54	30.30	22.27	557.9	0	0
10	11.26	32.06	24.47	347.9	.046	.021
20	9.23	32.60	25.23	275.5	.078	.068
30	7.63	33.27	26.00	202.9	.101	.126
40	7.31	33.62	26.32	172.7	.120	.192
50	7.22	33.73	26.42	163.5	.137	.267
60	7.00	33.80	26.50	155.5	.153	.354
70	6.84	33.84	26.56	150.3	.168	.453
80	6.74	33.89	26.61	145.7	.183	.563
83	6.74	33.87	26.59	147.2	.187	.599

NO 14 LAT 45 15.0 LONG 124 8.0 STN DEPTH 111
 DATE 7/10/73 TIME 240 AIR TEMP 60.5 WET BULB 57.0
 WIND DIR 0 SPEED 18 SWELL CIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 1 BAR 19.6 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 30.384 SAMPLE DEPTH 96 SAL 33.919

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	14.77	30.92	22.91	496.7	0	0
10	10.98	32.19	24.62	333.5	.041	.019
20	8.43	32.74	25.47	253.4	.070	.061
30	7.65	33.01	25.79	222.9	.092	.118
40	7.45	33.38	26.11	192.5	.113	.190
50	7.31	33.68	26.37	168.4	.131	.271
60	7.15	33.79	26.47	158.2	.147	.360
70	7.04	33.85	26.54	152.0	.163	.460
80	6.84	33.90	26.61	146.0	.178	.572
90	6.74	33.91	26.63	144.3	.192	.695
99	6.63	33.94	26.66	140.8	.205	.817

NO 11 LAT 45 15.0 LONG 124 5.9 STN DEPTH 90
 DATE 7/10/73 TIME 142 AIR TEMP 62.0 WET BULB 58.9
 WIND DIR 340 SPEED 20 SWELL CIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 19.7 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 30.272 SAMPLE DEPTH 76 SAL 33.850

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.57	30.26	22.23	561.4	0	0
10	11.39	32.01	24.41	353.8	.046	.021
20	9.01	32.60	25.27	272.3	.076	.065
30	7.77	33.10	25.85	217.5	.100	.126
40	7.46	33.51	26.21	182.9	.121	.197
50	7.23	33.72	26.41	164.3	.138	.273
60	7.07	33.79	26.49	157.1	.154	.361
70	6.85	33.84	26.56	150.7	.169	.460
79	6.77	33.89	26.61	146.1	.182	.560

NO 15 LAT 45 15.0 LONG 124 8.8 STN DEPTH 114
 DATE 7/10/73 TIME 308 AIR TEMP 60.0 WET BULB 57.0
 WIND DIR 0 SPEED 15 SWELL CIR 300 HT 4 FER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 18.8 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 30.475 SAMPLE DEPTH 103 SAL 33.902

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.69	30.45	22.35	550.0	0	0
10	11.61	31.94	24.32	362.8	.047	.021
20	8.22	32.67	25.44	255.6	.076	.065
30	7.55	33.02	25.81	220.5	.099	.122
40	7.31	33.27	26.04	198.8	.121	.196
50	7.39	33.58	26.28	176.9	.139	.279
60	7.15	33.77	26.46	159.7	.156	.371
70	7.07	33.84	26.53	153.6	.171	.473
80	6.94	33.88	26.57	149.0	.187	.586
90	6.78	33.89	26.60	146.3	.201	.711
100	6.70	33.92	26.64	143.2	.216	.848
106	6.65	33.91	26.64	143.4	.224	.936

NO 12 LAT 45 15.0 LONG 124 6.5 STN DEPTH 95
 DATE 7/10/73 TIME 202 AIR TEMP 61.5 WET BULB 58.0
 WIND DIR 340 SPEED 20 SWELL CIR 300 HT 4 FER 8
 CLOUD TYPE 8 - 0 AMT 1 BAR 19.3 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 30.288 SAMPLE DEPTH 81 SAL 33.912

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.55	30.31	22.28	557.3	0	0
1	15.55	30.31	22.28	557.4	.006	.000
10	11.63	31.95	24.32	362.4	.047	.022
20	8.79	32.78	25.44	255.6	.078	.066
30	7.82	33.00	25.76	225.6	.102	.127
40	7.49	33.42	26.14	190.0	.123	.199
50	7.29	33.62	26.32	172.6	.140	.279
60	7.15	33.78	26.47	159.0	.157	.370
70	6.88	33.85	26.56	150.3	.172	.470
80	6.77	33.89	26.61	146.0	.187	.581
90	6.66	33.90	26.63	144.0	.202	.704
93	6.65	33.91	26.64	143.2	.206	.743

NO 16 LAT 45 15.1 LONG 124 9.6 STN DEPTH 122
 DATE 7/10/73 TIME 444 AIR TEMP 60.5 WET BULB 58.0
 WIND DIR 0 SPEED 13 SWELL CIR 300 HT 4 FER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 18.7 WEA 2 INSTR CSU1
 BKT TEMP 15.9 SAL 30.555 SAMPLE DEPTH 112 SAL 33.924

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.65	30.46	22.37	548.4	0	0
10	12.22	31.96	24.22	372.0	.048	.022
20	9.26	32.64	25.26	273.0	.079	.067
30	7.48	32.96	25.78	224.0	.103	.127
40	7.31	33.16	25.96	207.0	.124	.202
50	7.30	33.44	26.17	186.5	.144	.291
60	7.28	33.67	26.36	168.9	.162	.389
70	7.11	33.80	26.49	157.1	.178	.494
80	6.94	33.88	26.57	149.3	.193	.609
90	6.81	33.91	26.62	145.0	.208	.734
100	6.73	33.92	26.63	143.6	.223	.871
110	6.63	33.93	26.66	141.7	.237	1.021
113	6.63	33.92	26.65	142.5	.241	1.068

NO 13 LAT 45 15.0 LONG 124 7.2 STN DEPTH 101
 DATE 7/10/73 TIME 216 AIR TEMP 61.3 WET BULB 58.1
 WIND DIR 0 SPEED 18 SWELL CIR 300 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 1 BAR 19.3 WEA 1 INSTR CSU1
 BKT TEMP 15.8 SAL 30.339 SAMPLE DEPTH 88 SAL 33.907

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.61	30.29	22.25	560.0	0	0
1	15.61	30.29	22.25	560.1	.006	.000
10	10.98	32.25	24.66	329.6	.048	.021
20	8.58	32.84	25.52	248.1	.077	.065
30	7.65	33.03	25.81	221.1	.101	.124
40	7.48	33.38	26.11	192.8	.121	.195
50	7.36	33.60	26.30	174.8	.140	.277
60	7.17	33.75	26.44	161.2	.156	.368
70	7.07	33.83	26.52	154.5	.172	.471
80	6.82	33.88	26.59	147.9	.187	.585
90	6.70	33.91	26.63	143.8	.202	.709
99	6.64	33.92	26.65	142.4	.215	.830

NO 17 LAT 45 15.2 LONG 124 11.0 STN DEPTH 136
 DATE 7/10/73 TIME 511 AIR TEMP 59.5 WET BULB 57.0
 WIND DIR 0 SPEED 13 SWELL CIR 300 HT 4 FER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 18.7 WEA 2 INSTR CSU1
 BKT TEMP 15.7 SAL 30.743 SAMPLE DEPTH 126 SAL 33.931

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.58	30.70	22.57	529.4	0	0
10	12.17	32.09	24.33	361.6	.048	.022
20	8.68	32.48	25.23	275.9	.079	.069
30	7.62	32.71	25.56	244.9	.105	.133
40	7.41	33.00	25.81	220.6	.129	.215
50	7.27	33.30	26.07	196.2	.149	.309
60	7.33	33.55	26.26	178.5	.168	.411
70	7.23	33.69	26.39	166.9	.185	.523
80	7.08	33.81	26.50	156.1	.201	.643
90	6.94	33.86	26.56	150.7	.217	.773
100	6.79	33.92	26.63	144.4	.231	.912
110	6.74	33.90	26.62	145.4	.246	1.064
120	6.60	33.92	26.65	141.9	.260	1.229
128	6.52	33.94	26.68	139.8	.271	1.368

NO 18 LAT 45 15.1 LONG 124 13.8 STN DEPTH 162
 DATE 7/10/73 TIME 551 AIR TEMP 59.5 WET BULB 57.0
 WIND DIR 340 SPEED 12 SWELL DIR 300 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 19.0 WEA 2 INSTR OSU1
 BKT TEMP 15.5 SAL 31.385 SAMPLE DEPTH 152 SAL 33.949

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.29	31.35	23.13	475.7	0	0
10	15.07	31.51	23.30	459.8	.047	.023
20	10.49	32.16	24.69	327.7	.085	.079
30	8.26	32.44	25.26	273.4	.114	.151
40	7.59	32.73	25.58	242.8	.140	.242
50	7.28	32.89	25.75	226.9	.163	.347
60	7.28	33.29	26.06	197.2	.184	.462
70	7.34	33.54	26.25	179.5	.203	.583
80	7.32	33.69	26.37	168.2	.220	.712
90	7.14	33.76	26.45	160.6	.237	.852
100	7.03	33.82	26.51	155.0	.252	1.000
110	6.88	33.86	26.57	150.2	.267	1.159
120	6.67	33.89	26.62	145.0	.282	1.328
130	6.56	33.91	26.65	142.6	.297	1.509
140	6.47	33.93	26.68	140.1	.311	1.699
150	6.32	33.93	26.70	138.0	.325	1.901
155	6.30	33.95	26.71	136.6	.331	2.005

NO 19 LAT 45 15.0 LONG 124 16.6 STN DEPTH 180
 DATE 7/10/73 TIME 739 AIR TEMP 59.0 WET BULB 56.4
 WIND DIR 320 SPEED 12 SWELL DIR 300 HT 4 PER 6
 CLOUD TYPE 3 - 0 AMT 2 BAR 19.2 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 31.507 SAMPLE DEPTH 146 SAL 33.927

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.01	31.60	23.38	451.7	0	0
10	12.69	32.11	24.25	369.5	.042	.020
20	10.27	32.32	24.85	312.5	.077	.072
30	8.14	32.53	25.34	265.4	.106	.145
40	7.30	32.70	25.60	241.1	.131	.233
50	7.19	32.80	25.69	232.4	.155	.339
60	7.25	33.04	25.87	215.4	.177	.461
70	7.29	33.25	26.03	200.4	.198	.596
80	7.34	33.43	26.17	187.6	.217	.739
90	7.55	33.65	26.31	174.5	.235	.893
100	7.39	33.74	26.40	165.8	.252	1.054
110	7.18	33.78	26.46	160.1	.266	1.224
120	7.02	33.86	26.55	152.2	.284	1.404
130	6.91	33.87	26.57	150.1	.299	1.593
140	6.84	33.91	26.61	146.4	.314	1.793
150	6.63	33.92	26.65	143.0	.328	2.003
160	6.44	33.92	26.68	140.4	.342	2.222
170	6.30	33.94	26.71	137.6	.356	2.452

NO 20 LAT 45 15.0 LONG 124 19.5 STN DEPTH 217
 DATE 7/10/73 TIME 818 AIR TEMP 59.7 WET BULB 56.3
 WIND DIR 330 SPEED 10 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 3 - 0 AMT 2 BAR 19.8 WEA 2 INSTR OSU1
 BKT TEMP 15.3 SAL 31.023 SAMPLE DEPTH 189 SAL 33.941

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.19	31.09	22.95	492.7	0	0
10	13.36	32.07	24.08	384.9	.047	.023
20	11.89	32.19	24.46	349.4	.083	.077
30	8.13	32.44	25.28	271.6	.113	.152
40	7.44	32.59	25.50	250.8	.139	.243
50	7.57	32.76	25.61	240.4	.164	.353
60	7.44	32.90	25.74	228.4	.187	.482
70	7.36	33.13	25.93	210.3	.209	.624
80	7.53	33.43	26.14	190.4	.229	.774
90	7.51	33.56	26.24	180.6	.248	.932
100	7.53	33.71	26.36	169.9	.265	1.099
110	7.43	33.78	26.42	163.9	.282	1.275
120	7.33	33.81	26.47	159.7	.298	1.461
130	7.15	33.86	26.53	154.1	.314	1.658
140	6.91	33.90	26.59	148.0	.329	1.864
150	6.85	33.92	26.62	145.9	.344	2.076
160	6.75	33.93	26.64	144.0	.358	2.300
170	6.63	33.94	26.66	141.8	.373	2.536
180	6.47	33.93	26.68	140.6	.387	2.782
190	6.36	33.96	26.71	137.6	.401	3.040
191	6.36	33.96	26.71	137.1	.402	3.066

NO 21 LAT 45 15.0 LONG 124 16.6 STN DEPTH 224
 DATE 7/10/73 TIME 928 AIR TEMP 59.0 WET BULB 55.9
 WIND DIR 320 SPEED 10 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 4 - 0 AMT 2 BAR 19.0 WEA 2 INSTR OSU1
 BKT TEMP 15.7 SAL 31.482 SAMPLE DEPTH 184 SAL 33.949

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.53	31.47	23.17	471.9	0	0
10	12.47	32.16	24.33	361.8	.043	.020
20	9.55	32.32	24.96	301.2	.077	.070
30	8.22	32.40	25.23	275.9	.106	.142
40	7.57	32.51	25.41	258.9	.132	.235
50	7.19	32.65	25.57	243.6	.157	.347
60	7.58	32.92	25.73	228.8	.181	.476
70	7.45	33.14	25.92	210.8	.203	.619
80	7.53	33.40	26.12	192.7	.223	.771
90	7.55	33.61	26.28	177.5	.241	.928
100	7.54	33.74	26.38	168.1	.259	1.092
110	7.43	33.82	26.46	160.5	.275	1.265
120	7.19	33.84	26.51	155.9	.291	1.448
130	6.99	33.90	26.58	148.9	.306	1.637
140	6.90	33.93	26.62	145.7	.321	1.836
150	6.70	33.92	26.64	143.9	.335	2.047
160	6.69	33.92	26.64	143.9	.350	2.270
170	6.47	33.94	26.68	139.8	.364	2.505
180	6.34	33.95	26.70	137.9	.378	2.748
185	6.26	33.95	26.72	136.5	.385	2.873

NO 22 LAT 45 15.0 LONG 124 25.2 STN DEPTH 380
 DATE 7/10/73 TIME 1043 AIR TEMP 59.0 WET BULB 55.5
 WIND DIR 300 SPEED 8 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 3 - 0 AMT 2 BAR 20.1 WEA 2 INSTR OSU1
 BKT TEMP 15.5 SAL 31.718 SAMPLE DEPTH 357 SAL 34.039

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.39	31.70	23.38	452.2	0	0
10	13.34	31.98	24.02	391.3	.043	.021
20	11.46	32.20	24.55	341.2	.080	.076
30	8.84	32.33	25.08	290.0	.111	.152
40	7.51	32.55	25.45	255.1	.138	.247
50	7.53	32.82	25.66	235.4	.162	.357
60	7.64	33.04	25.82	220.7	.185	.483
70	7.62	33.29	26.02	201.9	.207	.622
80	7.84	33.58	26.21	183.6	.226	.765
90	7.74	33.65	26.28	176.9	.244	.919
100	7.61	33.69	26.33	172.5	.261	1.085
110	7.52	33.79	26.42	164.0	.278	1.261
120	7.31	33.83	26.48	158.2	.294	1.447
130	7.25	33.88	26.53	153.9	.310	1.642
140	7.20	33.89	26.55	152.6	.325	1.849
150	7.07	33.90	26.57	150.3	.341	2.069
160	6.98	33.92	26.60	147.8	.355	2.301
170	6.73	33.92	26.63	145.0	.370	2.542
180	6.70	33.93	26.65	143.6	.384	2.794
190	6.60	33.92	26.65	143.2	.399	3.057
200	6.49	33.92	26.67	141.5	.413	3.333
225	6.23	33.96	26.73	136.2	.447	4.069
250	6.06	33.96	26.76	133.7	.481	4.870
300	5.70	33.99	26.82	128.1	.546	6.660
358	5.33	34.04	26.91	120.5	.618	9.014

NO 23 LAT 45 15.0 LONG 124 28.0 STN DEPTH 396
 DATE 7/10/73 TIME 1133 AIR TEMP 59.2 WET BULB 56.1
 WIND DIR 300 SPEED 12 SWELL DIR 300 HT 3 PER 8
 CLOUD TYPE 6 - 8 AMT 8 BAR 21.0 WEA 2 INSTR OSU1
 BKT TEMP 15.4 SAL 31.741 SAMPLE DEPTH 375 SAL 34.040

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.16	31.70	23.43	447.4	0	0
10	14.60	31.87	23.68	423.8	.044	.022
20	10.79	32.22	24.68	328.1	.081	.077
30	8.82	32.38	25.12	286.3	.112	.152
40	7.97	32.51	25.36	264.0	.139	.247
50	7.61	32.64	25.51	249.9	.165	.363
60	7.51	32.80	25.65	236.8	.189	.496
70	7.64	33.17	25.92	211.1	.211	.643
80	7.81	33.47	26.13	191.3	.232	.796
90	7.83	33.59	26.22	182.8	.251	.956
100	7.75	33.63	26.26	178.9	.269	1.127
110	7.55	33.73	26.37	169.1	.286	1.309
120	7.43	33.79	26.43	163.3	.303	1.501
130	7.37	33.84	26.48	158.5	.319	1.702
140	7.30	33.88	26.52	154.7	.335	1.914
150	7.22	33.91	26.56	151.6	.350	2.136
160	7.04	33.90	26.58	150.1	.365	2.370
170	6.91	33.92	26.61	147.0	.380	2.615
180	6.71	33.92	26.63	144.8	.394	2.870
190	6.55	33.92	26.66	142.2	.409	3.136
200	6.52	33.94	26.68	140.8	.423	3.412
225	6.33	33.95	26.71	138.4	.458	4.150
250	6.07	33.96	26.75	134.3	.492	4.958
300	5.79	33.99	26.81	128.9	.557	6.758
393	5.26	34.04	26.91	120.1	.672	10.718

NO 24 LAT 45 16.3 LONG 124 12.0 STN DEPTH 143
 DATE 7/10/73 TIME 1320 AIR TEMP 58.8 WET BULB 54.8
 WIND DIR 300 SPEED 6 SWELL DIR 300 HT 2 PER 8
 CLOUD TYPE 6 - 0 AMT 1 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 15.0 SAL 30.424 SAMPLE DEPTH 127 SAL 33.936

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.27	30.39	22.40	545.7	0	0
10	12.81	31.67	23.88	404.1	.048	.023
20	9.38	32.50	25.13	285.2	.082	.073
30	7.35	32.89	25.74	227.5	.107	.134
40	7.32	33.15	25.94	208.2	.129	.211
50	7.29	33.31	26.08	195.7	.149	.301
60	7.30	33.55	26.27	178.1	.168	.403
70	7.18	33.75	26.44	162.1	.185	.513
80	7.04	33.81	26.51	155.2	.200	.630
90	6.89	33.90	26.60	147.0	.216	.759
100	6.72	33.90	26.62	145.0	.230	.899
110	6.66	33.92	26.64	143.1	.245	1.050
120	6.56	33.94	26.67	140.2	.259	1.213
130	6.48	33.95	26.69	138.6	.273	1.386
140	6.48	33.94	26.68	139.5	.287	1.574

NO 25 LAT 44 16.5 LONG 124 6.0 STN DEPTH 81
 DATE 7/10/73 TIME 1415 AIR TEMP 0 WET BULB 0
 WIND DIR 290 SPEED 6 SWELL DIR 300 HT 2 PER 8
 CLOUD TYPE 8 - 3 AMT 6 BAR 22.4 WEA 2 INSTR OSU1
 BKT TEMP 15.6 SAL 29.858 SAMPLE DEPTH 61 SAL 33.857

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.47	29.84	21.93	590.1	0	0
1	15.47	29.84	21.93	590.2	.006	.000
10	12.10	31.77	24.10	383.5	.049	.023
20	9.72	32.46	25.05	293.4	.082	.071
30	7.50	33.34	26.07	196.0	.105	.129
40	7.25	33.69	26.38	166.7	.123	.191
50	7.14	33.79	26.48	157.9	.139	.264
60	6.88	33.84	26.55	150.9	.155	.342
70	6.81	33.87	26.58	147.9	.170	.444
76	6.78	33.90	26.61	145.4	.178	.508

NO 26 LAT 45 16.6 LONG 124 3.0 STN DEPTH 59
 DATE 7/10/73 TIME 1449 AIR TEMP 60.6 WET BULB 57.0
 WIND DIR 250 SPEED 2 SWELL DIR 300 HT 2 PER 8
 CLOUD TYPE 3 - 8 AMT 5 BAR 22.8 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 29.649 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.41	29.61	21.77	605.8	0	0
1	15.41	29.61	21.77	605.8	.006	.000
10	14.58	30.90	22.94	494.6	.056	.027
20	7.72	33.37	26.06	196.6	.085	.068
30	7.30	33.65	26.34	170.2	.103	.113
40	7.17	33.79	26.47	158.2	.120	.171
50	6.99	33.85	26.54	151.5	.135	.240
52	6.97	33.85	26.55	151.2	.138	.256

NO 27 LAT 45 14.8 LONG 124 59.5 STN DEPTH 22
 DATE 7/10/73 TIME 1539 AIR TEMP 60.5 WET BULB 56.5
 WIND DIR 250 SPEED 2 SWELL DIR 300 HT 2 PER 6
 CLOUD TYPE 5 - 0 AMT 9 BAR 23.7 WEA 2 INSTR OSU1
 BKT TEMP 15.1 SAL 29.999 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.39	30.23	22.46	539.8	0	0
10	10.75	32.09	24.59	337.2	.045	.021
19	8.59	33.23	25.83	219.3	.072	.060

NO 28 LAT 45 15.5 LONG 124 18.2 STN DEPTH 105
 DATE 7/10/73 TIME 1757 AIR TEMP 57.0 WET BULB 57.0
 WIND DIR 280 SPEED 10 SWELL DIR 300 HT 2 PER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 25.0 WEA 2 INSTR OSU1
 BKT TEMP 16.1 SAL 30.388 SAMPLE DEPTH 99 SAL 33.916

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.89	30.41	22.28	557.1	0	0
1	15.89	30.41	22.28	557.1	.006	.000
10	13.70	31.35	23.46	444.4	.052	.025
20	9.48	32.67	25.25	274.2	.088	.077
30	8.22	32.99	25.69	232.0	.113	.139
40	7.33	33.46	26.19	184.9	.134	.212
50	7.31	33.68	26.37	168.4	.151	.291
60	7.13	33.88	26.49	157.2	.168	.380
70	7.02	33.88	26.56	149.9	.183	.480
80	6.80	33.93	26.63	143.5	.198	.590
90	6.70	33.94	26.65	141.6	.212	.711
100	6.65	33.95	26.67	140.3	.226	.845
101	6.66	33.94	26.66	141.2	.227	.859

NO 30 LAT 45 15.5 LONG 124 8.1 STN DEPTH 105
 DATE 7/10/73 TIME 1900 AIR TEMP 59.0 WET BULB 57.5
 WIND DIR 300 SPEED 5 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 6 - 0 AMT 9 BAR 25.9 WEA 1 INSTR OSU1
 BKT TEMP 15.9 SAL 29.996 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.63	29.98	22.01	583.2	0	0
10	13.78	30.95	23.14	475.3	.055	.027
20	8.92	32.63	25.31	268.7	.088	.075
30	7.71	33.17	25.91	211.5	.112	.134
40	7.34	33.48	26.20	183.5	.132	.202
50	7.29	33.68	26.37	168.1	.149	.281
60	7.12	33.79	26.48	157.4	.165	.370
70	6.95	33.86	26.56	150.5	.181	.470
80	6.80	33.91	26.62	145.0	.196	.580
90	6.66	33.92	26.64	142.6	.210	.703
96	6.65	33.92	26.64	142.5	.218	.782

NO 31 LAT 45 12.4 LONG 124 4.7 STN DEPTH 78
 DATE 7/10/73 TIME 2237 AIR TEMP 59.0 WET BULB 57.5
 WIND DIR 320 SPEED 14 SWELL DIR 300 HT 3 FER 7
 CLOUD TYPE 6 - 0 AMT 9 BAR 27.4 WEA 0 INSTR CSU1
 BKT TEMP 15.9 SAL 29.945 SAMPLE DEPTH 60 SAL 33.882

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.80	29.87	21.89	594.8	0	0
1	15.80	29.87	21.89	594.8	.006	.000
10	11.79	31.70	24.09	384.0	.051	.023
20	8.43	32.95	25.63	237.5	.080	.067
30	7.51	33.41	26.12	191.3	.101	.119
40	7.27	33.72	26.40	164.7	.119	.181
50	7.14	33.82	26.50	155.7	.135	.252
60	6.88	33.92	26.61	145.0	.150	.335
63	6.88	33.92	26.61	145.0	.154	.362

NO 35 LAT 45 8.5 LONG 124 4.0 STN DEPTH 62
 DATE 7/11/73 TIME 140 AIR TEMP 58.0 WET BULB 54.5
 WIND DIR 350 SPEED 14 SWELL DIR 300 HT 3 FER 8
 CLOUD TYPE 6 - 0 AMT 8 BAR 27.9 WEA 2 INSTR CSU1
 BKT TEMP 15.6 SAL 30.275 SAMPLE DEPTH 44 SAL 33.736

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.61	30.40	22.33	552.0	0	0
1	15.61	30.40	22.33	552.0	.006	.000
10	11.55	31.89	24.29	365.4	.050	.024
20	8.13	33.07	25.77	224.7	.079	.064
30	7.46	33.51	26.21	182.8	.099	.116
40	7.28	33.66	26.35	169.3	.117	.178
50	7.09	33.83	26.51	154.3	.133	.250
60	7.05	33.82	26.51	154.6	.149	.336

NO 32 LAT 45 11.3 LONG 124 4.3 STN DEPTH 54
 DATE 7/10/73 TIME 2344 AIR TEMP 60.2 WET BULB 57.1
 WIND DIR 330 SPEED 15 SWELL DIR 300 HT 3 FER 8
 CLOUD TYPE 6 - 0 AMT 8 BAR 27.6 WEA 2 INSTR OSU1
 BKT TEMP 16.1 SAL 29.946 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.90	30.03	21.99	585.1	0	0
1	15.90	30.03	21.99	585.2	.006	.000
10	11.65	31.71	24.13	380.4	.050	.023
20	8.38	32.95	25.64	237.1	.081	.068
30	7.53	33.38	26.10	193.4	.102	.121
40	7.29	33.67	26.36	168.7	.120	.183
50	7.17	33.78	26.47	158.7	.136	.256
60	6.98	33.87	26.56	150.0	.152	.340
66	6.97	33.86	26.55	150.7	.161	.397

NO 36 LAT 45 36.8 LONG 124 4.1 STN DEPTH 66
 DATE 7/11/73 TIME 230 AIR TEMP 59.5 WET BULB 54.5
 WIND DIR 340 SPEED 15 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 6 - 8 AMT 7 BAR 27.8 WEA 2 INSTR OSU1
 BKT TEMP 15.8 SAL 30.359 SAMPLE DEPTH 44 SAL 33.750

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.65	30.39	22.32	553.5	0	0
10	11.10	32.06	24.50	345.2	.045	.020
20	8.29	32.96	25.66	235.0	.074	.062
30	7.50	33.47	26.17	186.3	.095	.115
40	7.29	33.68	26.37	168.0	.112	.176
50	7.15	33.80	26.48	157.3	.129	.249
60	6.97	33.88	26.57	149.1	.144	.332
66	6.96	33.92	26.60	146.1	.153	.388

NO 33 LAT 45 11.0 LONG 124 4.2 STN DEPTH 64
 DATE 7/11/73 TIME 0 AIR TEMP 60.0 WET BULB 56.1
 WIND DIR 330 SPEED 15 SWELL DIR 300 HT 3 FER 8
 CLOUD TYPE 6 - 0 AMT 8 BAR 27.8 WEA 2 INSTR CSU1
 BKT TEMP 16.0 SAL 29.998 SAMPLE DEPTH 46 SAL 33.745

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.91	30.00	21.96	587.5	0	0
10	12.32	31.38	23.75	416.6	.053	.025
20	8.13	33.08	25.78	223.8	.085	.071
30	7.54	33.41	26.12	191.2	.106	.123
40	7.25	33.75	26.43	162.2	.123	.183
50	7.11	33.82	26.50	155.3	.139	.255
60	7.02	33.86	26.55	151.3	.154	.339
62	7.00	33.87	26.56	150.3	.157	.357

NO 37 LAT 45 6.0 LONG 124 6.5 STN DEPTH 88
 DATE 7/11/73 TIME 333 AIR TEMP 58.8 WET BULB 54.6
 WIND DIR 340 SPEED 17 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 3 BAR 27.7 WEA 1 INSTR OSU1
 BKT TEMP 15.6 SAL 30.368 SAMPLE DEPTH 66 SAL 33.867

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.47	30.43	22.39	546.9	0	0
1	15.47	30.43	22.39	546.9	.005	.000
10	10.45	32.30	24.80	316.7	.045	.020
20	8.19	32.85	25.59	241.9	.072	.061
30	7.63	33.17	25.92	210.4	.095	.117
40	7.36	33.62	26.31	173.4	.114	.182
50	7.25	33.76	26.44	161.2	.130	.257
60	7.07	33.83	26.52	154.2	.146	.343
70	6.88	33.90	26.60	146.6	.161	.442
80	6.64	33.92	26.65	142.2	.176	.550
84	6.64	33.91	26.64	143.0	.181	.597

NO 34 LAT 45 10.3 LONG 124 4.0 STN DEPTH 62
 DATE 7/11/73 TIME 30 AIR TEMP 59.9 WET BULB 55.9
 WIND DIR 330 SPEED 14 SWELL DIR 300 HT 3 FER 7
 CLOUD TYPE 6 - 8 AMT 8 BAR 28.0 WEA 2 INSTR OSU1
 BKT TEMP 15.7 SAL 30.363 SAMPLE DEPTH 38 SAL 33.617

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.65	30.17	22.15	569.7	0	0
10	12.75	31.17	23.51	439.8	.052	.025
20	8.27	33.02	25.71	230.3	.084	.071
30	7.57	33.42	26.13	190.9	.105	.124
40	7.28	33.68	26.37	167.8	.123	.186
50	7.11	33.81	26.50	156.0	.139	.259
60	7.05	33.84	26.53	153.2	.155	.343
61	7.05	33.85	26.54	152.4	.156	.352

NO 38 LAT 45 2.7 LONG 124 8.5 STN DEPTH 96
 DATE 7/11/73 TIME 500 AIR TEMP 58.0 WET BULB 54.0
 WIND DIR 350 SPEED 17 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 6 - 0 AMT 3 BAR 28.0 WEA 2 INSTR CSU1
 BKT TEMP 15.2 SAL 30.414 SAMPLE DEPTH 93 SAL 33.932

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	15.17	30.34	22.38	547.3	0	0
10	13.87	31.15	23.27	462.3	.053	.026
20	8.70	32.70	25.39	260.3	.086	.074
30	7.59	33.20	25.95	207.6	.109	.131
40	7.44	33.51	26.21	182.6	.129	.199
50	7.25	33.71	26.40	165.3	.146	.277
60	7.23	33.79	26.46	159.3	.162	.367
70	7.01	33.85	26.54	152.0	.178	.468
80	6.88	33.88	26.58	148.2	.193	.580
90	6.52	33.94	26.68	139.3	.207	.703
96	6.51	33.91	26.66	141.5	.216	.781

NO 39 LAT 45 1.2 LONG 124 9.2 STN DEPTH 98
 DATE 7/11/73 TIME 600 AIR TEMP 57.6 WET BULB 53.8
 WIND DIR 350 SPEED 20 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 4 BAR 28.0 WEA 3 INSTR OSU1
 BKT TEMP 14.9 SAL 30.517 SAMPLE DEPTH 81 SAL 33.890

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.85	30.50	22.57	529.1	0	0
10	12.64	31.64	23.89	403.2	.052	.025
20	8.18	32.78	25.53	246.9	.082	.070
30	7.62	33.07	25.84	217.7	.105	.126
40	7.47	33.45	26.16	187.5	.125	.197
50	7.32	33.65	26.34	170.8	.143	.278
60	7.18	33.78	26.46	159.4	.160	.388
70	7.01	33.86	26.55	151.3	.175	.469
80	6.98	33.91	26.60	147.0	.190	.580
90	6.82	33.92	26.62	144.6	.205	.705
92	6.78	33.90	26.61	145.6	.208	.731

NO 40 LAT 45 0 LONG 124 8.0 STN DEPTH 93
 DATE 7/11/73 TIME 700 AIR TEMP 58.0 WET BULB 53.5
 WIND DIR 350 SPEED 18 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 28.0 WEA 3 INSTR OSU1
 BKT TEMP 14.5 SAL 30.525 SAMPLE DEPTH 78 SAL 33.887

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.38	30.53	22.69	517.6	0	0
2	14.38	30.53	22.69	517.6	.010	.001
10	11.43	32.11	24.48	347.1	.049	.023
20	7.98	32.91	25.67	234.4	.076	.063
30	7.54	33.23	25.98	204.4	.098	.119
40	7.35	33.54	26.25	179.2	.117	.185
50	7.23	33.70	26.39	165.8	.134	.262
60	7.13	33.84	26.52	154.2	.150	.349
70	7.03	33.89	26.57	149.3	.165	.448
80	6.94	33.91	26.59	147.2	.180	.559
86	6.81	33.91	26.62	145.2	.189	.632

NO 41 LAT 44 59.4 LONG 124 9.3 STN DEPTH 96
 DATE 7/11/73 TIME 800 AIR TEMP 57.5 WET BULB 54.0
 WIND DIR 350 SPEED 20 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 28.1 WEA 3 INSTR OSU1
 BKT TEMP 14.3 SAL 30.658 SAMPLE DEPTH 84 SAL 33.899

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.15	30.67	22.85	502.8	0	0
10	11.87	31.90	24.24	370.3	.047	.022
20	8.84	32.71	25.38	261.6	.078	.068
30	7.56	33.12	25.89	213.2	.101	.126
40	7.34	33.50	26.22	182.0	.121	.194
50	7.28	33.67	26.37	168.4	.138	.273
60	7.17	33.81	26.49	157.0	.154	.362
70	7.04	33.87	26.55	150.9	.170	.461
80	6.99	33.91	26.59	147.5	.185	.573
90	6.60	33.93	26.66	141.0	.199	.698
94	6.51	33.94	26.68	139.2	.205	.749

NO 42 LAT 44 57.6 LONG 124 9.0 STN DEPTH 91
 DATE 7/11/73 TIME 900 AIR TEMP 56.0 WET BULB 52.5
 WIND DIR 0 SPEED 14 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 4 BAR 28.0 WEA 3 INSTR OSU1
 BKT TEMP 13.7 SAL 30.860 SAMPLE DEPTH 83 SAL 33.908

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.44	30.95	23.21	468.6	0	0
4	13.44	30.95	23.21	468.7	.019	.004
10	11.57	31.91	24.30	364.3	.044	.021
20	8.60	32.69	25.40	259.5	.076	.069
30	7.52	33.25	26.00	202.9	.099	.125
40	7.34	33.52	26.24	180.6	.118	.192
50	7.27	33.75	26.43	162.6	.136	.269
60	7.14	33.84	26.52	154.3	.151	.356
70	6.91	33.90	26.59	147.0	.166	.454
80	6.75	33.91	26.62	144.3	.181	.562
88	6.55	33.93	26.67	140.4	.192	.658

NO 43 LAT 44 57.3 LONG 124 8.0 STN DEPTH 82
 DATE 7/11/73 TIME 1000 AIR TEMP 54.9 WET BULB 51.9
 WIND DIR 50 SPEED 12 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 28.0 WEA 3 INSTR OSU1
 BKT TEMP 13.0 SAL 31.120 SAMPLE DEPTH 67 SAL 33.910

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.83	31.04	23.39	450.6	0	0
10	10.65	32.20	24.69	327.4	.040	.018
20	8.39	32.92	25.61	239.4	.069	.062
30	7.52	33.32	26.05	197.7	.091	.116
40	7.34	33.63	26.32	172.8	.110	.181
50	7.13	33.79	26.48	157.8	.126	.254
60	6.86	33.88	26.59	147.4	.141	.338
70	6.69	33.89	26.62	144.9	.156	.432
74	6.69	33.89	26.62	145.0	.161	.474

NO 44 LAT 44 57.1 LONG 124 7.0 STN DEPTH 64
 DATE 7/11/73 TIME 1100 AIR TEMP 54.0 WET BULB 50.5
 WIND DIR 0 SPEED 0 SWELL DIR 0 HT 0 FER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 2 INSTR OSU1
 BKT TEMP 11.8 SAL 31.640 SAMPLE DEPTH 57 SAL 33.898

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.64	31.54	24.00	392.6	0	0
10	8.27	33.03	25.72	229.4	.030	.013
20	7.49	33.45	26.16	187.5	.051	.045
30	7.34	33.69	26.37	167.8	.069	.088
40	7.12	33.79	26.48	157.2	.085	.145
50	6.81	33.89	26.60	146.2	.100	.213
60	6.79	33.90	26.61	145.3	.114	.293
62	6.79	33.89	26.60	146.1	.117	.311

NO 45 LAT 44 57.0 LONG 124 6.0 STN DEPTH 62
 DATE 7/11/73 TIME 1200 AIR TEMP 55.0 WET BULB 51.2
 WIND DIR 200 SPEED 8 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 6 - 0 AMT 1 BAR 28.0 WEA 2 INSTR OSU1
 BKT TEMP 11.8 SAL 31.644 SAMPLE DEPTH 52 SAL 33.894

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.50	31.66	24.12	381.4	0	0
10	8.85	32.72	25.39	260.9	.034	.016
20	7.68	33.30	26.02	201.2	.057	.050
30	7.34	33.65	26.34	170.4	.075	.095
40	7.02	33.84	26.53	152.5	.092	.152
50	6.82	33.88	26.59	147.0	.106	.219
60	6.81	33.89	26.60	146.3	.121	.299
61	6.81	33.81	26.54	152.3	.123	.309

NO 46 LAT 44 45.7 LONG 124 6.4 STN DEPTH 63
 DATE 7/11/73 TIME 1300 AIR TEMP 54.0 WET BULB 50.8
 WIND DIR 200 SPEED 6 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 8 - 0 AMT 1 BAR 28.0 WEA 2 INSTR OSU1
 BKT TEMP 12.0 SAL 31.565 SAMPLE DEPTH 47 SAL 33.868

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.60	31.57	24.03	389.7	0	0
2	11.60	31.57	24.03	389.8	.008	.001
10	9.86	32.40	24.97	300.3	.035	.017
20	7.73	33.27	25.98	204.1	.060	.052
30	7.34	33.69	26.37	167.7	.078	.099
40	7.14	33.80	26.48	157.0	.094	.155
50	6.82	33.89	26.60	145.9	.109	.223
58	6.79	33.90	26.61	145.3	.121	.286

NO 47 LAT 44 54.2 LONG 124 6.4 STN DEPTH 53
 DATE 7/11/73 TIME 1400 AIR TEMP 55.5 WET BULB 53.2
 WIND DIR 300 SPEED 7 SWELL DIR 300 HT 4 FER 8
 CLOUD TYPE 6 - 0 AMT 1 BAR 28.0 WEA 2 INSTR OSU1
 BKT TEMP 12.4 SAL 31.625 SAMPLE DEPTH 35 SAL 33.724

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.61	31.59	24.05	388.4	0	0
10	10.31	32.25	24.78	318.2	.037	.018
20	7.91	33.16	25.87	214.8	.062	.055
30	7.31	33.60	26.30	174.1	.081	.102
40	7.09	33.80	26.49	156.4	.098	.160
50	6.91	33.86	26.56	149.7	.113	.228
52	6.90	33.87	26.57	148.8	.116	.244

NO 48 LAT 44 53.0 LONG 124 6.7 STN DEPTH 57
 DATE 7/11/73 TIME 1500 AIR TEMP 57.3 WET BULB 54.1
 WIND DIR 350 SPEED 15 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 27.9 WEA 2 INSTR CSL1
 BKT TEMP 12.3 SAL 0 SAMPLE DEPTH 45 SAL 33.858

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.71	31.33	23.64	427.1	0	0
10	9.75	32.62	25.17	281.9	.037	.017
20	7.70	33.33	26.04	199.3	.062	.053
30	7.32	33.65	26.34	170.4	.079	.097
40	7.11	33.81	26.50	155.9	.096	.155
50	6.90	33.89	26.59	147.3	.111	.222
53	6.88	33.88	26.59	147.8	.115	.245

NO 53 LAT 44 43.4 LONG 124 9.3 STN DEPTH 58
 DATE 7/11/73 TIME 2015 AIR TEMP 59.0 WET BULB 56.0
 WIND DIR 350 SPEED 18 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 36.5 WEA 2 INSTR CSL1
 BKT TEMP 12.0 SAL 31.901 SAMPLE DEPTH 52 SAL 33.899

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	11.64	31.92	24.30	364.6	0	0
10	8.07	33.04	25.76	225.6	.029	.013
20	7.51	33.44	26.15	188.4	.049	.044
30	7.28	33.68	26.37	167.3	.067	.088
40	7.06	33.85	26.53	152.2	.083	.144
50	6.83	33.90	26.61	145.7	.098	.210
55	6.83	33.87	26.58	148.0	.105	.249

NO 49 LAT 44 50.8 LONG 124 6.8 STN DEPTH 58
 DATE 7/11/73 TIME 1604 AIR TEMP 56.6 WET BULB 53.2
 WIND DIR 350 SPEED 19 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 27.8 WEA 2 INSTR OSU1
 BKT TEMP 12.8 SAL 0 SAMPLE DEPTH 47 SAL 33.864

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.67	31.30	23.62	428.6	0	0
10	9.48	32.61	25.20	278.4	.036	.016
20	7.68	33.33	26.04	199.0	.059	.050
30	7.29	33.69	26.38	167.1	.077	.096
40	7.12	33.86	26.53	152.3	.093	.151
50	6.81	33.89	26.60	146.2	.108	.218
53	6.78	33.90	26.61	145.1	.112	.240

NO 54 LAT 44 35.2 LONG 124 9.1 STN DEPTH 50
 DATE 7/12/73 TIME 503 AIR TEMP 54.0 WET BULB 51.5
 WIND DIR 350 SPEED 24 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 0 - 0 AMT 1 BAR 23.5 WEA 2 INSTR CSU1
 BKT TEMP 9.0 SAL 33.464 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	8.43	33.50	26.06	196.5	0	0
10	7.91	33.56	26.19	185.0	.020	.010
20	7.31	33.78	26.44	160.5	.036	.035
30	7.20	33.78	26.46	158.9	.052	.074
40	6.95	33.85	26.55	150.4	.068	.128
44	6.93	33.87	26.57	149.1	.074	.153

NO 50 LAT 44 48.9 LONG 124 7.2 STN DEPTH 56
 DATE 7/11/73 TIME 1715 AIR TEMP 57.0 WET BULB 53.8
 WIND DIR 350 SPEED 22 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 27.0 WEA 2 INSTR CSL1
 BKT TEMP 12.3 SAL 31.687 SAMPLE DEPTH 43 SAL 33.844

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.25	31.62	23.55	397.4	0	0
10	8.53	32.97	25.63	237.6	.031	.014
20	7.57	33.39	26.10	193.0	.052	.045
30	7.43	33.75	26.40	164.5	.070	.089
40	7.15	33.84	26.51	154.2	.085	.145
50	6.79	33.88	26.59	146.6	.101	.213

NO 55 LAT 44 35.6 LONG 124 10.6 STN DEPTH 54
 DATE 7/12/73 TIME 533 AIR TEMP 52.5 WET BULB 51.0
 WIND DIR 350 SPEED 24 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.4 WEA 2 INSTR OSU1
 BKT TEMP 8.9 SAL 33.349 SAMPLE DEPTH 40 SAL 33.884

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	8.56	33.38	25.95	207.3	0	0
10	8.36	33.39	25.99	203.9	.021	.011
20	7.23	33.72	26.41	163.9	.039	.037
30	7.17	33.76	26.45	159.9	.055	.078
40	6.97	33.84	26.54	151.8	.071	.132
50	6.91	33.86	26.56	149.7	.086	.200
52	6.90	33.87	26.57	148.8	.089	.215

NO 51 LAT 44 47.8 LONG 124 7.2 STN DEPTH 60
 DATE 7/11/73 TIME 1805 AIR TEMP 59.0 WET BULB 54.6
 WIND DIR 350 SPEED 22 SWELL DIR 300 HT 4 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 26.9 WEA 2 INSTR OSU1
 BKT TEMP 13.2 SAL 31.237 SAMPLE DEPTH 46 SAL 33.834

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.83	31.29	23.59	432.2	0	0
5	12.83	31.29	23.59	432.3	.022	.005
10	9.77	32.43	25.81	296.3	.040	.019
20	7.82	33.16	25.89	213.6	.064	.054
30	7.42	33.53	26.23	180.7	.084	.102
40	7.15	33.77	26.46	159.4	.100	.161
50	6.97	33.86	26.55	150.5	.116	.231
54	6.79	33.87	26.59	147.4	.122	.262

NO 56 LAT 44 35.4 LONG 124 12.1 STN DEPTH 60
 DATE 7/12/73 TIME 600 AIR TEMP 51.0 WET BULB 52.0
 WIND DIR 350 SPEED 24 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.6 WEA 2 INSTR OSU1
 BKT TEMP 8.7 SAL 33.273 SAMPLE DEPTH 40 SAL 33.795

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	8.34	33.26	25.89	213.1	0	0
10	8.30	33.26	25.89	212.7	.021	.011
20	7.42	33.46	26.18	185.8	.041	.040
30	7.29	33.65	26.35	170.0	.059	.084
40	7.18	33.76	26.45	160.5	.076	.142
50	6.97	33.87	26.56	149.9	.091	.212
57	6.96	33.88	26.57	149.0	.102	.268

NO 52 LAT 44 44.9 LONG 124 10.1 STN DEPTH 62
 DATE 7/11/73 TIME 1900 AIR TEMP 57.0 WET BULB 53.5
 WIND DIR 350 SPEED 20 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 26.9 WEA 2 INSTR OSU1
 BKT TEMP 12.9 SAL 31.474 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.43	31.52	23.84	408.0	0	0
10	8.97	32.57	25.25	273.7	.037	.017
20	7.61	33.16	25.92	210.7	.060	.052
30	7.37	33.56	26.26	177.8	.080	.100
40	7.21	33.72	26.41	163.9	.097	.159
50	6.93	33.85	26.55	150.7	.112	.230
54	6.84	33.86	26.57	149.8	.116	.261

NO 57 LAT 44 35.4 LONG 124 13.3 STN DEPTH 65
 DATE 7/12/73 TIME 624 AIR TEMP 51.0 WET BULB 52.2
 WIND DIR 350 SPEED 20 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.0 WEA 2 INSTR OSU1
 BKT TEMP 8.9 SAL 33.086 SAMPLE DEPTH 43 SAL 33.805

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	8.44	33.15	25.79	222.7	0	0
10	8.40	33.10	25.75	226.0	.023	.011
20	7.47	33.37	26.10	193.2	.043	.042
30	7.34	33.62	26.31	172.9	.062	.088
40	7.19	33.75	26.44	161.4	.079	.147
50	7.00	33.85	26.54	151.6	.094	.217
60	7.00	33.86	26.55	151.0	.109	.300
64	7.00	33.86	26.55	151.1	.115	.337

NO 58 LAT 44 35.4 LONG 124 14.8 STN DEPTH 70
 DATE 7/12/73 TIME 652 AIR TEMP 51.0 WET BULB 53.3
 WIND DIR 350 SPEED 20 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.2 WEA 2 INSTR OSU1
 BKT TEMP 8.9 SAL 32.934 SAMPLE DEPTH 53 SAL 33.863

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.75	32.95	25.58	242.1	0	0
10	8.68	32.94	25.59	242.0	.024	.012
20	7.48	33.22	25.98	204.5	.047	.046
30	7.35	33.66	26.34	170.1	.066	.092
40	7.15	33.79	26.47	157.9	.082	.150
50	7.03	33.84	26.53	152.7	.098	.219
60	7.03	33.85	26.54	152.1	.113	.303
69	7.03	33.87	26.55	150.8	.127	.391

NO 59 LAT 44 35.5 LONG 124 16.1 STN DEPTH 75
 DATE 7/12/73 TIME 722 AIR TEMP 51.0 WET BULB 53.0
 WIND DIR 350 SPEED 20 SWELL DIR 300 HT 4 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.8 WEA 2 INSTR OSU1
 BKT TEMP 9.7 SAL 32.825 SAMPLE DEPTH 68 SAL 33.872

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.81	32.84	25.49	251.1	0	0
10	8.77	32.81	25.47	252.6	.025	.013
20	7.39	33.20	25.98	204.8	.049	.048
30	7.35	33.49	26.21	182.8	.069	.096
40	7.43	33.64	26.32	172.8	.086	.158
50	7.29	33.75	26.42	162.9	.103	.233
60	7.04	33.84	26.53	153.0	.119	.320
70	7.02	33.85	26.54	152.2	.134	.419

NO 60 LAT 44 35.5 LONG 124 17.5 STN DEPTH 76
 DATE 7/12/73 TIME 744 AIR TEMP 51.5 WET BULB 53.6
 WIND DIR 350 SPEED 20 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.8 WEA 2 INSTR OSU1
 BKT TEMP 9.4 SAL 32.726 SAMPLE DEPTH 65 SAL 33.864

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.95	32.69	25.35	264.3	0	0
10	8.94	32.68	25.34	265.1	.026	.013
20	7.38	33.03	25.85	217.3	.052	.051
30	7.38	33.42	26.16	187.9	.072	.101
40	7.37	33.59	26.29	175.7	.090	.164
50	7.38	33.71	26.38	166.7	.107	.241
60	7.24	33.77	26.45	160.9	.124	.331
69	7.05	33.86	26.54	151.8	.137	.420

NO 61 LAT 44 35.5 LONG 124 19.0 STN DEPTH 75
 DATE 7/12/73 TIME 810 AIR TEMP 52.0 WET BULB 54.6
 WIND DIR 350 SPEED 20 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.8 WEA 2 INSTR OSU1
 BKT TEMP 10.1 SAL 32.402 SAMPLE DEPTH 66 SAL 33.855

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.75	32.44	25.03	295.0	0	0
10	9.55	32.45	25.07	291.4	.029	.015
20	8.28	32.69	25.45	255.0	.057	.056
30	7.30	33.01	25.84	217.9	.080	.113
40	7.35	33.30	26.06	197.1	.101	.185
50	7.46	33.59	26.27	177.1	.119	.269
60	7.34	33.76	26.42	163.0	.136	.352
70	7.07	33.84	26.53	153.6	.152	.464
73	7.07	33.84	26.53	153.6	.157	.497

NO 62 LAT 45 16.4 LONG 123 59.8 STN DEPTH 32
 DATE 7/12/73 TIME 1550 AIR TEMP 55.5 WET BULB 53.0
 WIND DIR 350 SPEED 20 SWELL DIR 330 HT 6 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 24.5 WEA 2 INSTR OSU1
 BKT TEMP 8.5 SAL 33.314 SAMPLE DEPTH 14 SAL 33.880

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.01	33.29	25.96	206.2	0	0
10	7.18	33.75	26.44	160.8	.019	.009
20	6.74	33.90	26.62	144.1	.034	.031
26	6.74	33.92	26.63	142.7	.042	.051

NO 63 LAT 45 16.4 LONG 124 1.0 STN DEPTH
 DATE 7/12/97 TIME 700 AIR TEMP 52.0 WET BULB 51.5
 WIND DIR SPEED SWELL DIR HT FER
 CLOUD TYPE - AMT BAR WEA INSTR
 BKT TEMP 8.9 SAL 33.077 SAMPLE DEPTH 33 SAL 33.924

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.57	33.05	25.69	232.0	0	0
10	7.34	33.57	26.28	176.4	.021	.010
20	7.07	33.82	26.51	154.3	.037	.034
30	6.68	33.90	26.63	143.5	.052	.071
40	6.65	33.90	26.63	143.2	.066	.121
43	6.65	33.90	26.63	143.3	.071	.139

NO 64 LAT 45 16.4 LONG 124 2.6 STN DEPTH 45
 DATE 7/12/73 TIME 1638 AIR TEMP 52.0 WET BULB 50.0
 WIND DIR 0 SPEED 16 SWELL DIR 330 HT 5 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 25.0 WEA 2 INSTR OSU1
 BKT TEMP 9.5 SAL 32.631 SAMPLE DEPTH 41 SAL 33.793

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.08	32.71	25.34	264.8	0	0
10	8.13	33.04	25.75	226.7	.025	.012
20	8.07	33.06	25.77	224.5	.047	.046
30	7.65	33.30	26.02	201.0	.069	.101
40	7.16	33.75	26.44	161.0	.087	.162
50	6.66	33.89	26.62	144.2	.102	.230
51	6.65	33.91	26.64	142.6	.104	.237

NO 65 LAT 45 16.5 LONG 124 4.0 STN DEPTH 68
 DATE 7/12/73 TIME 1705 AIR TEMP 53.0 WET BULB 52.5
 WIND DIR 0 SPEED 16 SWELL DIR 340 HT 5 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 25.0 WEA 2 INSTR OSU1
 BKT TEMP 10.0 SAL 32.412 SAMPLE DEPTH 48 SAL 33.918

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.69	32.49	25.07	290.4	0	0
1	9.69	32.49	25.07	290.4	.003	.000
10	8.35	32.95	25.64	236.5	.028	.013
20	7.66	33.25	25.98	204.7	.050	.047
30	7.23	33.69	26.39	166.3	.068	.092
40	7.04	33.80	26.50	155.7	.085	.148
50	6.72	33.89	26.61	145.0	.100	.215
57	6.65	33.93	26.65	141.2	.110	.269

NO 66 LAT 45 16.4 LONG 124 5.5 STN DEPTH 26
 DATE 7/12/73 TIME 1749 AIR TEMP 56.0 WET BULB 54.5
 WIND DIR 350 SPEED 22 SWELL DIR 340 HT 5 FER 7
 CLOUD TYPE 8 - 6 AMT 2 BAR 24.7 WEA 2 INSTR OSU1
 BKT TEMP 11.0 SAL 32.113 SAMPLE DEPTH 73 SAL 33.935

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.69	32.15	24.64	331.5	0	0
1	10.69	32.15	24.64	331.6	.003	.000
10	9.53	32.37	25.01	297.0	.033	.016
20	7.67	33.17	25.91	210.8	.058	.053
30	7.35	33.58	26.28	176.1	.076	.099
40	7.10	33.79	26.48	157.2	.093	.157
50	6.90	33.83	26.54	151.8	.108	.226
60	6.67	33.88	26.62	144.8	.123	.307
70	6.56	33.92	26.65	141.3	.137	.400
80	6.53	33.92	26.66	140.8	.151	.505
82	6.54	33.91	26.65	141.7	.154	.528

NO 67 LAT 45 16.4 LONG 124 7.0 STN DEPTH 100
 DATE 7/12/73 TIME 1821 AIR TEMP 57.0 WET BULB 55.0
 WIND DIR 350 SPEED 22 SWELL DIR 340 HT 5 FER 7
 CLOUD TYPE 8 - 6 AMT 2 BAR 24.4 WEA 2 INSTR OSU1
 BKT TEMP 11.6 SAL 31.924 SAMPLE DEPTH 84 SAL 33.939

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.32	31.81	24.27	367.2	0	0
10	9.88	32.43	25.00	298.0	.034	.017
20	8.45	32.84	25.55	245.9	.062	.057
30	7.34	33.56	26.27	177.0	.082	.108
40	7.19	33.74	26.43	162.2	.099	.168
50	7.01	33.83	26.53	153.2	.115	.240
60	6.79	33.86	26.58	148.3	.130	.322
70	6.63	33.90	26.63	143.4	.145	.417
80	6.50	33.92	26.66	140.4	.159	.523
90	6.48	33.92	26.67	140.3	.173	.643
93	6.48	33.91	26.66	141.1	.177	.682

NO 68 LAT 45 15.0 LONG 124 7.2 STN DEPTH 95
 DATE 7/12/73 TIME 1948 AIR TEMP 55.5 WET BULB 54.0
 WIND DIR 350 SPEED 16 SWELL DIR 350 HT 4 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 24.6 WEA 0 INSTR CSU1
 BKT TEMP 11.4 SAL 32.048 SAMPLE DEPTH 86 SAL 33.937

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.01	32.05	24.51	344.2	0	0
10	9.70	32.38	24.99	298.9	.033	.016
20	8.17	32.90	25.63	238.1	.060	.056
30	7.43	33.42	26.14	189.1	.081	.107
40	7.27	33.58	26.30	174.7	.099	.170
50	7.15	33.75	26.44	161.3	.115	.245
60	6.96	33.83	26.53	152.8	.131	.331
70	6.72	33.86	26.59	147.5	.146	.429
80	6.53	33.91	26.65	141.5	.161	.538
90	6.47	33.94	26.68	138.6	.175	.658
92	6.47	33.94	26.68	136.7	.177	.683

NO 72 LAT 45 16.5 LONG 124 10.5 STN DEPTH 133
 DATE 7/12/73 TIME 2225 AIR TEMP 57.0 WET BULB 54.9
 WIND DIR 350 SPEED 28 SWELL DIR 350 HT 6 FER 7
 CLOUD TYPE 8 - 6 AMT 2 BAR 23.3 WEA 0 INSTR CSU1
 BKT TEMP 12.4 SAL 31.784 SAMPLE DEPTH 113 SAL 33.934

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.08	31.78	24.11	382.6	0	0
1	12.08	31.78	24.11	382.6	.004	.000
10	11.99	31.81	24.15	379.0	.038	.019
20	9.83	32.29	24.89	308.2	.074	.072
30	8.15	32.87	25.61	239.9	.102	.141
40	7.40	33.20	25.98	205.2	.124	.218
50	7.29	33.59	26.30	174.8	.143	.303
60	7.21	33.77	26.45	160.5	.159	.394
70	7.17	33.86	26.53	153.4	.175	.495
80	6.96	33.90	26.59	147.8	.190	.608
90	6.78	33.93	26.63	143.7	.205	.732
100	6.60	33.92	26.65	141.9	.219	.867
110	6.47	33.93	26.68	139.7	.233	1.014
120	6.31	33.94	26.71	137.0	.246	1.171
130	6.23	33.98	26.75	133.2	.260	1.338

NO 70 LAT 45 16.5 LONG 124 8.4 STN DEPTH 113
 DATE 7/12/73 TIME 2115 AIR TEMP 55.5 WET BULB 53.4
 WIND DIR 350 SPEED 16 SWELL DIR 350 HT 6 PER 7
 CLOUD TYPE 8 - 6 AMT 3 BAR 24.2 WEA 3 INSTR CSU1
 BKT TEMP 11.6 SAL 31.950 SAMPLE DEPTH 100 SAL 33.941

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.34	32.00	24.41	353.5	0	0
10	10.93	32.11	24.57	338.7	.035	.017
20	8.14	32.91	25.64	236.6	.063	.058
30	7.45	33.39	26.12	191.3	.084	.110
40	7.34	33.60	26.30	174.6	.102	.174
50	7.29	33.75	26.42	162.9	.119	.249
60	7.13	33.80	26.49	157.2	.135	.337
70	6.91	33.85	26.55	150.7	.150	.437
80	6.67	33.89	26.62	144.7	.165	.547
90	6.58	33.91	26.65	142.3	.179	.668
100	6.41	33.92	26.68	139.5	.193	.802
109	6.40	33.91	26.67	140.3	.206	.933

NO 73 LAT 45 16.5 LONG 124 12.0 STN DEPTH 144
 DATE 7/12/73 TIME 2247 AIR TEMP 60.5 WET BULB 57.0
 WIND DIR 350 SPEED 28 SWELL DIR 350 HT 6 PER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 23.1 WEA 2 INSTR CSU1
 BKT TEMP 12.8 SAL 31.702 SAMPLE DEPTH 132 SAL 33.956

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.58	31.73	23.97	395.3	0	0
10	12.52	31.74	23.99	394.1	.039	.020
20	10.24	32.28	24.82	315.0	.077	.076
30	7.98	32.56	25.39	260.6	.106	.147
40	7.41	33.17	25.95	207.6	.129	.229
50	7.29	33.41	26.15	188.5	.149	.318
60	7.28	33.72	26.40	165.2	.167	.415
70	7.21	33.82	26.49	156.9	.183	.518
80	7.14	33.88	26.55	151.7	.198	.634
90	6.92	33.91	26.60	146.7	.213	.761
100	6.69	33.91	26.63	143.5	.228	.899
110	6.58	33.94	26.67	140.4	.242	1.048
120	6.39	33.94	26.69	138.0	.256	1.208
130	6.22	33.96	26.74	134.2	.270	1.378
139	6.15	33.97	26.75	133.1	.282	1.539

NO 71 LAT 45 16.5 LONG 124 9.0 STN DEPTH 120
 DATE 7/12/73 TIME 2150 AIR TEMP 56.7 WET BULB 54.5
 WIND DIR 350 SPEED 22 SWELL DIR 350 HT 6 PER 7
 CLOUD TYPE 8 - 6 AMT 2 BAR 23.9 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 105 SAL 33.945

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.61	31.82	24.22	371.4	0	0
10	11.28	31.98	24.41	354.2	.037	.018
20	8.25	32.78	25.52	247.9	.065	.060
30	7.38	33.27	26.03	199.6	.087	.115
40	7.34	33.59	26.29	175.3	.106	.181
50	7.27	33.73	26.41	164.1	.123	.257
60	7.18	33.81	26.49	157.1	.139	.345
70	6.93	33.85	26.55	151.0	.155	.445
80	6.74	33.87	26.59	147.2	.169	.555
90	6.57	33.89	26.63	143.6	.184	.678
100	6.41	33.92	26.68	139.5	.198	.812
110	6.37	33.92	26.68	139.2	.212	.958

NO 74 LAT 45 16.4 LONG 124 15.0 STN DEPTH 168
 DATE 7/12/73 TIME 2330 AIR TEMP 56.1 WET BULB 58.9
 WIND DIR 350 SPEED 30 SWELL DIR 350 HT 6 PER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.7 WEA 2 INSTR CSU1
 BKT TEMP 13.6 SAL 31.566 SAMPLE DEPTH 160 SAL 33.964

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.45	31.51	23.63	427.6	0	0
10	13.42	31.56	23.68	423.6	.042	.021
20	8.66	32.42	25.18	280.6	.077	.072
30	8.06	32.65	25.45	255.0	.104	.138
40	7.60	32.99	25.79	223.2	.127	.221
50	7.32	33.25	26.03	200.6	.148	.315
60	7.24	33.52	26.25	179.3	.167	.418
70	7.28	33.67	26.37	168.7	.184	.530
80	7.26	33.74	26.42	164.0	.201	.655
90	7.20	33.85	26.51	154.9	.217	.790
100	7.01	33.88	26.56	150.2	.232	.934
110	6.90	33.91	26.60	146.7	.247	1.090
120	6.72	33.93	26.64	143.1	.261	1.257
130	6.56	33.91	26.65	142.6	.276	1.434
140	6.42	33.94	26.69	138.7	.290	1.622
150	6.18	33.96	26.74	134.2	.303	1.820
160	6.14	33.94	26.73	135.5	.317	2.027
164	6.14	33.98	26.76	132.5	.322	2.114

NO 75 LAT 45 16.4 LONG 124 18.0 STN DEPTH 186
 DATE 7/13/73 TIME 15 AIR TEMP 56.4 WET BULB 58.6
 WIND DIR 350 SPEED 30 SWELL DIR 350 HT 7 PER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.4 WEA 2 INSTR CSU1
 BKT TEMP 14.1 SAL 31.655 SAMPLE DEPTH 169 SAL 33.967

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.90	31.52	23.55	435.5	0	0
3	13.90	31.52	23.55	435.6	.013	.002
10	13.56	31.62	23.70	421.8	.043	.022
20	8.73	32.45	25.19	279.6	.076	.070
30	7.75	32.65	25.50	250.7	.103	.135
40	7.50	32.79	25.64	237.1	.127	.221
50	7.29	33.11	25.92	210.6	.150	.322
60	7.25	33.24	26.03	200.5	.170	.435
70	7.24	33.47	26.21	183.4	.189	.560
80	7.37	33.75	26.41	164.4	.207	.689
90	7.33	33.83	26.48	158.1	.223	.827
100	7.18	33.87	26.53	153.7	.238	.974
110	7.01	33.89	26.57	149.7	.254	1.134
120	6.73	33.93	26.64	143.1	.268	1.304
130	6.64	33.92	26.65	142.8	.283	1.482
140	6.49	33.93	26.67	140.3	.297	1.673
150	6.37	33.94	26.69	138.5	.311	1.876
160	6.16	33.96	26.74	133.8	.324	2.088
170	6.04	33.96	26.76	132.9	.336	2.308
180	5.78	34.00	26.82	126.8	.351	2.533
182	5.78	33.99	26.81	127.6	.353	2.579

NO 76 LAT 45 16.4 LONG 124 21.0 STN DEPTH 300
 DATE 7/13/73 TIME 104 AIR TEMP 57.0 WET BULB 59.1
 WIND DIR 350 SPEED 30 SWELL DIR 350 HT 8 PER 8
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.4 WEA 2 INSTR OSU1
 BKT TEMP 14.3 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.06	31.48	23.49	441.5	0	0
10	13.97	31.52	23.54	437.1	.044	.022
20	9.15	32.39	25.08	289.9	.082	.078
30	7.79	32.56	25.42	258.0	.109	.145
40	7.61	32.69	25.55	246.0	.134	.233
50	7.46	32.87	25.71	230.8	.158	.339
60	7.40	33.10	25.90	212.9	.180	.462
70	7.25	33.35	26.12	192.1	.201	.594
80	7.63	33.70	26.33	172.1	.219	.729
90	7.57	33.75	26.39	167.1	.236	.873
100	7.48	33.79	26.43	163.3	.252	1.030
110	7.41	33.84	26.48	158.4	.268	1.199
120	7.27	33.87	26.52	154.6	.284	1.378
130	7.05	33.89	26.57	150.4	.299	1.569
140	6.86	33.92	26.61	146.1	.314	1.769
150	6.60	33.92	26.65	142.3	.328	1.979
160	6.48	33.93	26.68	140.5	.343	2.198
170	6.30	33.93	26.70	138.3	.357	2.429
180	6.26	33.95	26.72	136.6	.370	2.670
190	6.17	33.96	26.74	134.3	.384	2.921
200	6.09	33.97	26.76	133.1	.397	3.183
225	5.80	33.97	26.79	129.9	.430	3.883
250	5.58	34.01	26.85	124.5	.462	4.636
289	5.37	34.03	26.89	121.0	.510	5.915

NO 77 LAT 45 16.4 LONG 124 24.0 STN DEPTH 375
 DATE 7/13/73 TIME 155 AIR TEMP 56.9 WET BULB 58.8
 WIND DIR 350 SPEED 26 SWELL DIR 350 HT 8 PER 8
 CLOUD TYPE 8 - 0 AMT 4 BAR 22.2 WEA 2 INSTR OSU1
 BKT TEMP 14.3 SAL 31.540 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.00	31.57	23.57	433.7	0	0
10	13.91	31.60	23.61	430.0	.043	.022
20	9.53	32.39	25.02	295.7	.081	.076
30	8.24	32.54	25.34	265.4	.108	.144
40	7.74	32.60	25.46	254.5	.134	.235
50	7.59	32.83	25.65	235.9	.159	.347
60	7.17	33.12	25.95	208.4	.181	.470
70	7.58	33.44	26.14	190.5	.201	.599
80	7.78	33.63	26.26	175.3	.220	.737
90	7.72	33.73	26.35	171.0	.237	.887
100	7.61	33.84	26.45	161.3	.254	1.044
110	7.36	33.87	26.51	155.8	.270	1.211
120	7.23	33.85	26.51	155.7	.285	1.390
130	7.05	33.90	26.58	149.7	.300	1.580
140	6.94	33.92	26.61	146.9	.315	1.781
150	6.76	33.93	26.64	143.5	.330	1.991
160	6.62	33.94	26.66	141.8	.344	2.212
170	6.53	33.96	26.69	139.0	.358	2.445
180	6.36	33.95	26.71	137.8	.372	2.688
190	6.24	33.95	26.72	136.4	.386	2.942
200	6.22	33.96	26.73	135.5	.399	3.206
225	5.94	33.97	26.78	131.6	.433	3.913
250	5.79	33.98	26.80	129.1	.465	4.686
300	5.51	34.02	26.87	123.5	.529	6.427
365	5.27	34.07	26.94	117.7	.607	9.038

NO 78 LAT 45 16.4 LONG 124 27.2 STN DEPTH 390
 DATE 7/13/73 TIME 301 AIR TEMP 58.5 WET BULB 57.0
 WIND DIR 350 SPEED 28 SWELL DIR 350 HT 8 PER 7
 CLOUD TYPE 8 - 0 AMT 9 BAR 22.1 WEA 2 INSTR OSU1
 BKT TEMP 14.2 SAL 31.541 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.97	31.53	23.55	436.1	0	0
10	13.92	31.59	23.60	431.0	.043	.022
20	10.21	32.42	24.93	304.1	.081	.077
30	8.01	32.47	25.32	267.8	.109	.147
40	7.44	32.59	25.49	251.2	.135	.237
50	7.43	32.75	25.62	239.3	.160	.349
60	7.52	33.00	25.60	222.3	.183	.476
70	7.60	33.26	26.00	203.9	.205	.615
80	7.89	33.52	26.16	188.8	.224	.762
90	7.90	33.68	26.28	177.4	.243	.918
100	7.77	33.76	26.36	169.5	.260	1.083
110	7.58	33.79	26.41	164.8	.277	1.257
120	7.32	33.86	26.51	156.2	.293	1.443
130	7.21	33.87	26.53	154.1	.308	1.639
140	7.12	33.90	26.57	150.8	.324	1.844
150	7.08	33.91	26.58	149.7	.339	2.061
160	7.06	33.92	26.59	148.5	.353	2.292
170	6.97	33.92	26.60	147.8	.368	2.535
180	6.71	33.93	26.65	143.4	.383	2.788
190	6.59	33.93	26.66	142.0	.397	3.052
200	6.42	33.92	26.68	141.0	.411	3.328
225	6.33	33.96	26.72	137.2	.446	4.067
250	5.97	33.96	26.76	133.0	.480	4.870
300	5.54	33.99	26.84	125.8	.544	6.649
386	5.24	34.07	26.94	117.5	.649	10.225

NO 79 LAT 45 16.5 LONG 124 30.0 STN
 DATE 7/13/73 TIME 402 AIR TEMP 58.0
 WIND DIR 350 SPEED 26 SWELL DIR 350
 CLOUD TYPE 8 - 0 AMT 9 BAR 22.0 WEA
 BKT TEMP 14.4 SAL 31.472 SAMPLE DEPTH

DEPTH 400
 WET BULB 57.0
 HT 8 PER 7
 2 INSTR OSU1
 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	POTE
0	14.11	31.48	23.48	442.5	0	0
10	14.13	31.47	23.47	443.8	.044	.022
20	13.13	32.21	24.24	370.5	.087	.086
30	9.58	32.40	25.02	295.9	.120	.166
40	8.77	32.54	25.26	273.7	.148	.264
50	8.29	32.61	25.38	261.8	.174	.385
60	7.87	32.83	25.62	239.5	.199	.522
70	7.90	33.05	25.79	223.6	.223	.673
80	7.79	33.28	25.99	204.9	.244	.832
90	7.97	33.47	26.11	193.7	.264	1.000
100	7.96	33.60	26.21	184.2	.282	1.179
110	7.88	33.69	26.29	176.4	.301	1.368
120	7.60	33.76	26.39	167.5	.318	1.565
130	7.47	33.82	26.45	161.8	.334	1.772
140	7.35	33.83	26.48	159.1	.350	1.987
150	7.24	33.86	26.52	155.6	.366	2.214
160	7.23	33.90	26.55	152.6	.381	2.450
170	7.06	33.92	26.59	149.0	.396	2.698
180	6.99	33.92	26.60	147.8	.411	2.958
190	6.80	33.94	26.64	144.4	.426	3.228
200	6.66	33.93	26.65	143.4	.440	3.509
225	6.38	33.95	26.71	138.3	.475	4.259
250	6.23	33.96	26.73	136.3	.510	5.074
300	5.71	34.00	26.83	127.6	.575	6.884
395	5.17	34.05	26.93	118.3	.691	10.896

NO 81 LAT 45 16.5 LONG 124 36.0 STN
 DATE 7/13/73 TIME 628 AIR TEMP 57.0
 WIND DIR 350 SPEED 26 SWELL DIR 350
 CLOUD TYPE 6 - 0 AMT 8 BAR 22.3 WEA
 BKT TEMP 14.4 SAL 31.783 SAMPLE DEPTH

DEPTH 490
 WET BULB 56.0
 HT 7 FER 7
 2 INSTR OSU1
 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	POTE
0	14.22	31.81	23.71	420.4	0	0
10	14.22	31.81	23.71	420.7	.042	.021
20	13.94	32.00	23.91	461.5	.084	.083
30	11.75	32.45	24.68	328.3	.121	.175
40	10.26	32.53	25.01	297.2	.151	.282
50	9.06	32.57	25.24	275.7	.180	.411
60	8.10	32.67	25.46	255.0	.207	.557
70	8.04	32.83	25.59	242.0	.231	.718
80	8.04	33.03	25.75	227.2	.255	.895
90	7.97	33.26	25.94	209.3	.276	1.077
100	7.91	33.52	26.15	189.3	.296	1.262
110	7.74	33.63	26.27	178.9	.314	1.456
120	7.67	33.66	26.30	176.1	.332	1.662
130	7.57	33.73	26.37	169.3	.349	1.877
140	7.62	33.79	26.41	165.8	.366	2.103
150	7.60	33.82	26.44	163.1	.383	2.342
160	7.40	33.87	26.50	157.2	.399	2.590
170	7.17	33.90	26.56	152.0	.414	2.845
180	7.06	33.91	26.58	149.9	.429	3.110
190	6.94	33.91	26.60	148.4	.444	3.387
200	6.79	33.91	26.62	146.6	.459	3.675
225	6.51	33.92	26.66	142.5	.495	4.441
250	6.19	33.94	26.72	137.0	.530	5.266
300	5.67	33.99	26.83	127.7	.596	7.084
400	5.11	34.09	26.97	114.4	.718	11.325
447	4.78	34.13	27.04	108.3	.769	13.518

NO 80 LAT 46 16.5 LONG 124 33.2 STN
 DATE 7/13/73 TIME 508 AIR TEMP 58.0
 WIND DIR 350 SPEED 26 SWELL DIR 350
 CLOUD TYPE 8 - 0 AMT 9 BAR 22.8 WEA
 BKT TEMP 14.4 SAL 31.522 SAMPLE DEPTH

DEPTH 430
 WET BULB 57.0
 HT 8 PER 7
 2 INSTR OSU1
 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	POTE
0	14.26	31.55	23.50	440.3	0	0
10	14.28	31.54	23.49	441.7	.044	.022
20	11.62	32.42	24.69	327.7	.083	.079
30	10.34	32.46	24.94	303.5	.114	.156
40	8.84	32.54	25.25	274.5	.143	.256
50	8.21	32.58	25.38	262.3	.169	.377
60	7.99	32.71	25.51	250.0	.195	.519
70	7.92	32.88	25.65	236.6	.220	.676
80	7.88	33.13	25.85	217.6	.242	.846
90	8.01	33.42	26.06	198.0	.263	1.023
100	8.00	33.56	26.17	187.6	.282	1.208
110	7.78	33.63	26.26	179.5	.301	1.401
120	7.68	33.69	26.32	173.8	.319	1.605
130	7.61	33.76	26.39	167.8	.336	1.817
140	7.44	33.82	26.46	161.1	.352	2.040
150	7.44	33.87	26.50	157.6	.368	2.271
160	7.35	33.90	26.53	154.2	.384	2.513
170	7.24	33.89	26.54	153.6	.399	2.766
180	7.03	33.90	26.58	150.1	.414	3.030
190	6.88	33.90	26.60	148.4	.429	3.306
200	6.75	33.92	26.63	145.3	.444	3.590
225	6.41	33.94	26.69	139.8	.479	4.344
250	6.17	33.95	26.73	136.3	.514	5.162
300	5.59	33.98	26.83	127.5	.579	6.958
400	5.21	34.07	26.94	117.3	.700	11.187
422	4.79	34.16	27.06	105.9	.724	12.193

NO 82 LAT 45 16.5 LONG 124 39.0 STN
 DATE 7/13/73 TIME 730 AIR TEMP 57.3
 WIND DIR 0 SPEED 24 SWELL DIR 350
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.9 WEA
 BKT TEMP 14.4 SAL 31.685 SAMPLE DEPTH

DEPTH 379
 WET BULB 56.2
 HT 7 FER 7
 2 INSTR OSU1
 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	POTE
0	14.24	31.70	23.62	428.9	0	0
10	14.24	31.70	23.62	429.1	.043	.021
20	14.14	32.06	23.92	400.8	.085	.084
30	11.14	32.43	24.78	319.0	.120	.172
40	9.75	32.54	25.10	288.4	.151	.278
50	8.89	32.56	25.26	273.9	.178	.403
60	8.13	32.65	25.44	256.5	.205	.546
70	8.00	32.70	25.50	251.1	.230	.712
80	8.06	32.99	25.72	230.5	.254	.893
90	7.98	33.25	25.93	210.6	.276	1.081
100	8.00	33.43	26.07	197.3	.296	1.271
110	7.69	33.58	26.23	181.9	.315	1.468
120	7.76	33.71	26.33	173.4	.333	1.672
130	7.68	33.76	26.38	168.7	.350	1.866
140	7.62	33.81	26.42	164.4	.367	2.110
150	7.52	33.84	26.46	160.7	.383	2.347
160	7.32	33.85	26.50	157.6	.399	2.592
170	7.14	33.89	26.56	152.2	.414	2.844
180	6.95	33.91	26.59	148.8	.429	3.109
190	6.84	33.91	26.61	147.1	.444	3.383
200	6.81	33.92	26.62	146.5	.459	3.669
225	6.51	33.94	26.68	141.0	.495	4.434
250	6.22	33.96	26.73	136.2	.529	5.259
300	5.77	33.99	26.81	128.9	.556	7.089
400	5.11	34.09	26.97	114.9	.718	11.358
478	4.75	34.17	27.08	105.3	.805	15.138

NO 83 LAT 45 16.5 LONG 124 42.0 STN DEPTH 496
 DATE 7/13/73 TIME 835 AIR TEMP 57.4 WET BULB 56.6
 WIND DIR 350 SPEED 30 SWELL DIR 350 HT 7 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.9 WEA 2 INSTR OSU1
 BKT TEMP 14.5 SAL 31.718 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	14.40	31.74	23.62	429.1	0	0
10	14.41	31.74	23.62	429.6	.043	.021
20	14.36	32.00	23.83	409.8	.085	.085
30	12.40	32.40	24.53	343.1	.123	.179
40	9.81	32.55	25.10	288.5	.155	.289
50	8.58	32.58	25.32	267.9	.183	.413
60	8.17	32.62	25.41	259.6	.209	.558
70	8.21	32.90	25.62	239.2	.234	.723
80	8.15	33.11	25.80	222.9	.257	.895
90	7.95	33.22	25.92	211.6	.279	1.080
100	7.83	33.42	26.09	195.6	.299	1.273
110	7.90	33.61	26.23	182.6	.318	1.470
120	7.84	33.68	26.29	176.8	.336	1.676
130	7.73	33.75	26.36	170.2	.353	1.893
140	7.66	33.80	26.41	165.7	.370	2.119
150	7.60	33.85	26.46	161.3	.387	2.355
160	7.37	33.88	26.51	156.0	.403	2.603
170	7.23	33.89	26.54	153.5	.418	2.858
180	7.03	33.89	26.57	151.0	.433	3.125
190	6.94	33.91	26.60	148.4	.448	3.401
200	6.81	33.92	26.62	146.5	.463	3.688
225	6.47	33.94	26.68	140.8	.499	4.448
250	6.22	33.96	26.74	135.9	.533	5.273
300	5.78	33.98	26.80	129.8	.600	7.099
400	5.09	34.10	26.98	113.7	.721	11.338
474	4.70	34.17	27.08	104.7	.803	14.908

NO 85 LAT 45 16.5 LONG 124 48.0 STN DEPTH 563
 DATE 7/13/73 TIME 1040 AIR TEMP 57.6 WET BULB 56.3
 WIND DIR 350 SPEED 22 SWELL DIR 350 HT 7 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.5 WEA 2 INSTR OSU1
 BKT TEMP 14.7 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	14.40	32.14	23.93	399.8	0	0
3	14.40	32.14	23.93	399.9	.012	.002
10	14.41	32.11	23.90	402.4	.040	.020
20	14.34	32.20	23.98	394.7	.080	.080
30	10.73	32.51	24.91	366.2	.114	.164
40	9.45	32.59	25.19	280.0	.144	.268
50	8.90	32.57	25.26	273.7	.172	.353
60	8.39	32.62	25.38	262.4	.198	.540
70	8.14	32.71	25.49	252.3	.224	.707
80	8.23	32.93	25.65	237.0	.248	.890
90	8.24	33.06	25.75	228.0	.272	1.087
100	7.96	33.23	25.92	211.6	.294	1.298
110	7.77	33.40	26.08	196.4	.314	1.510
120	7.72	33.55	26.21	184.7	.333	1.730
130	7.76	33.71	26.33	173.6	.351	1.957
140	7.60	33.75	26.38	168.5	.369	2.190
150	7.62	33.84	26.45	162.3	.385	2.430
160	7.57	33.85	26.46	161.0	.401	2.681
170	7.39	33.89	26.52	155.7	.417	2.941
180	7.23	33.90	26.55	152.9	.433	3.212
190	7.12	33.91	26.57	150.9	.448	3.493
200	6.93	33.90	26.60	148.8	.463	3.784
225	6.63	33.93	26.66	143.3	.499	4.593
250	6.37	33.94	26.70	139.6	.534	5.385
300	5.82	33.98	26.80	130.3	.601	7.238
400	5.24	34.06	26.93	118.5	.726	11.588
500	4.75	34.16	27.07	106.3	.838	16.613
600	4.44	34.25	27.17	96.9	.939	22.179
623	4.38	34.27	27.20	95.0	.961	23.528

NO 84 LAT 45 16.5 LONG 124 45.0 STN DEPTH 585
 DATE 7/13/73 TIME 930 AIR TEMP 57.0 WET BULB 56.1
 WIND DIR 350 SPEED 25 SWELL DIR 350 HT 8 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 14.7 SAL 31.827 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	14.46	31.85	23.69	422.3	0	0
10	14.47	31.86	23.70	421.9	.042	.021
20	14.44	31.99	23.80	412.4	.084	.084
30	12.22	32.38	24.54	341.5	.123	.180
40	10.03	32.55	25.07	292.0	.154	.288
50	9.49	32.58	25.18	281.5	.182	.416
60	9.06	32.57	25.24	275.9	.210	.569
70	8.36	32.64	25.40	260.3	.237	.744
80	8.18	32.86	25.60	241.8	.262	.932
90	8.25	33.19	25.85	218.5	.285	1.129
100	8.09	33.41	26.04	200.0	.306	1.326
110	7.93	33.60	26.21	183.8	.325	1.525
120	7.83	33.67	26.28	177.4	.343	1.734
130	7.75	33.74	26.35	171.5	.361	1.951
140	7.62	33.75	26.38	168.6	.378	2.180
150	7.49	33.79	26.43	164.2	.394	2.421
160	7.34	33.85	26.50	157.8	.410	2.669
170	7.26	33.87	26.52	155.4	.426	2.927
180	7.12	33.88	26.55	152.9	.441	3.197
190	6.95	33.90	26.59	149.2	.456	3.477
200	6.78	33.87	26.59	149.4	.471	3.765
225	6.46	33.93	26.68	141.1	.507	4.525
250	6.16	33.95	26.73	135.9	.542	5.348
300	5.74	34.01	26.83	127.1	.608	7.162
400	5.15	34.07	26.95	116.6	.730	11.449
500	4.70	34.16	27.07	105.6	.841	16.407
544	4.51	34.21	27.13	100.2	.886	18.758

NO 86 LAT 44 16.3 LONG 124 42.0 STN DEPTH 493
 DATE 7/13/73 TIME 1210 AIR TEMP 54.2 WET BULB 58.3
 WIND DIR 350 SPEED 22 SWELL DIR 350 HT 7 PER 8
 CLOUD TYPE 6 - 8 AMT 4 BAR 21.0 WEA 2 INSTR OSU1
 BKT TEMP 14.9 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	14.51	31.62	23.50	440.1	0	0
10	14.51	31.64	23.52	439.0	.044	.022
20	14.34	32.12	23.92	400.6	.087	.086
30	12.05	32.38	24.58	338.5	.124	.178
40	9.73	32.54	25.11	288.0	.155	.287
50	8.99	32.58	25.26	274.0	.183	.413
60	8.35	32.58	25.35	264.8	.210	.561
70	8.02	32.67	25.47	253.6	.236	.730
80	7.97	32.91	25.67	235.3	.261	.915
90	7.99	33.15	25.85	217.8	.283	1.105
100	7.86	33.32	26.01	203.5	.304	1.306
110	7.77	33.41	26.08	196.1	.324	1.515
120	7.66	33.60	26.22	183.0	.343	1.732
130	7.60	33.70	26.31	174.9	.361	1.956
140	7.66	33.78	26.39	167.1	.378	2.186
150	7.56	33.83	26.45	162.3	.395	2.425
160	7.49	33.88	26.50	157.7	.411	2.674
170	7.37	33.87	26.51	156.9	.426	2.932
180	7.28	33.90	26.54	153.6	.442	3.203
190	7.00	33.90	26.58	150.2	.457	3.484
200	6.79	33.91	26.62	146.6	.472	3.775
225	6.51	33.94	26.68	141.0	.508	4.542
250	6.25	33.95	26.72	137.3	.543	5.371
300	5.81	33.99	26.81	129.4	.609	7.190
400	5.23	34.07	26.94	117.6	.732	11.476
482	4.65	34.18	27.09	103.4	.824	15.507

NO 87 LAT 45 16.4 LONG 124 36.0 STN DEPTH 460
 DATE 7/13/73 TIME 1333 AIR TEMP 57.5 WET BULB 58.9
 WIND DIR 350 SPEED 26 SWELL DIR 350 HT 7 PER 8
 CLOUD TYPE 8 - 0 AMT 2 BAR 20.8 WEA 2 INSTR OSU1
 BKT TEMP 14.7 SAL 31.540 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	14.25	31.49	23.46	444.5	0	0
10	14.26	31.54	23.49	441.3	.044	.022
20	14.25	31.53	23.49	442.1	.088	.088
30	11.74	32.46	24.70	327.1	.125	.178
40	9.28	32.55	25.19	260.4	.155	.284
50	8.52	32.54	25.30	270.0	.182	.407
60	8.08	32.74	25.52	249.1	.208	.550
70	8.04	33.06	25.78	224.9	.232	.764
80	8.07	33.22	25.90	213.2	.254	.868
90	8.07	33.36	26.01	203.3	.275	1.044
100	7.92	33.51	26.15	190.2	.295	1.231
110	7.85	33.60	26.23	182.7	.313	1.426
120	7.64	33.65	26.29	176.5	.331	1.634
130	7.63	33.80	26.41	165.4	.348	1.846
140	7.54	33.85	26.47	160.3	.364	2.064
150	7.45	33.89	26.51	155.9	.380	2.293
160	7.33	33.90	26.54	154.0	.396	2.534
170	7.09	33.91	26.58	150.2	.411	2.785
180	6.98	33.94	26.62	146.6	.426	3.044
190	6.87	33.94	26.63	145.3	.440	3.315
200	6.72	33.93	26.65	143.9	.455	3.597
225	6.36	33.95	26.71	138.4	.490	4.344
250	6.14	33.95	26.74	135.6	.524	5.153
300	5.71	34.00	26.83	127.4	.589	6.950
400	5.11	34.09	26.97	114.7	.710	11.147
460	4.76	34.17	27.07	105.2	.775	13.961

NO 89 LAT 45 16.5 LONG 124 23.5 STN DEPTH 350
 DATE 7/13/73 TIME 1617 AIR TEMP 59.0 WET BULB 59.0
 WIND DIR 340 SPEED 22 SWELL DIR 350 HT 6 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 20.3 WEA 2 INSTR OSU1
 BKT TEMP 14.0 SAL 31.433 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	13.58	31.44	23.55	435.2	0	0
10	13.57	31.42	23.54	436.7	.044	.022
20	9.08	32.39	25.09	288.9	.079	.074
30	7.89	32.50	25.36	263.4	.107	.143
40	7.52	32.64	25.52	249.7	.132	.232
50	7.51	32.86	25.69	232.2	.156	.340
60	7.44	33.08	25.88	214.5	.179	.462
70	7.48	33.43	26.15	189.6	.199	.594
80	7.25	33.51	26.24	180.4	.218	.735
90	7.53	33.75	26.39	166.7	.235	.880
100	7.34	33.81	26.46	159.9	.251	1.036
110	7.23	33.87	26.53	154.1	.267	1.201
120	7.14	33.87	26.54	153.0	.282	1.377
130	6.94	33.87	26.57	150.5	.298	1.566
140	6.70	33.92	26.64	143.8	.312	1.764
150	6.62	33.95	26.67	140.7	.327	1.972
160	6.48	33.90	26.65	142.7	.341	2.191
170	6.32	33.92	26.69	139.3	.355	2.423
180	6.27	33.94	26.71	137.3	.369	2.665
190	6.15	33.93	26.72	136.7	.382	2.917
200	6.08	33.95	26.74	134.9	.396	3.182
225	5.94	33.97	26.78	131.6	.429	3.850
250	5.70	33.98	26.81	128.2	.462	4.664
300	5.42	34.03	26.89	121.7	.524	6.362
346	5.33	34.04	26.91	120.4	.580	8.170

NO 88 LAT 44 16.3 LONG 124 30.0 STN DEPTH 400
 DATE 7/13/73 TIME 1435 AIR TEMP 57.9 WET BULB 57.1
 WIND DIR 350 SPEED 22 SWELL DIR 350 HT 7 PER 8
 CLOUD TYPE 6 - 0 AMT 8 BAR 20.5 WEA 2 INSTR OSU1
 BKT TEMP 14.5 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	13.92	31.11	23.23	466.0	0	0
10	13.94	31.49	23.52	438.7	.044	.022
20	13.24	31.91	23.98	394.7	.088	.087
30	9.93	32.39	24.96	302.1	.123	.173
40	8.50	32.42	25.21	278.5	.152	.274
50	7.68	32.54	25.42	258.3	.178	.393
60	7.61	32.67	25.53	247.8	.203	.531
70	8.07	32.99	25.72	230.5	.227	.686
80	7.90	33.28	25.97	206.3	.249	.850
90	8.02	33.49	26.11	192.9	.269	1.019
100	7.91	33.63	26.24	181.1	.288	1.198
110	7.76	33.71	26.33	173.3	.305	1.384
120	7.57	33.77	26.40	166.3	.322	1.578
130	7.47	33.79	26.43	163.6	.339	1.784
140	7.34	33.84	26.49	158.3	.355	2.001
150	7.29	33.88	26.53	154.8	.370	2.227
160	7.16	33.91	26.57	151.0	.386	2.463
170	6.97	33.90	26.59	149.3	.401	2.711
180	6.88	33.90	26.60	148.2	.416	2.971
190	6.71	33.89	26.61	146.9	.430	3.244
200	6.59	33.92	26.65	143.2	.445	3.525
225	6.31	33.94	26.71	138.5	.480	4.276
250	6.04	33.96	26.76	133.9	.514	5.087
300	5.53	33.99	26.84	126.0	.579	6.873
400	5.15	34.07	26.95	116.6	.700	11.051
419	4.79	34.14	27.05	107.4	.721	11.951

NO 90 LAT 45 16.6 LONG 124 17.9 STN DEPTH 186
 DATE 7/13/73 TIME 1713 AIR TEMP 58.0 WET BULB 57.0
 WIND DIR 340 SPEED 18 SWELL DIR 340 HT 6 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 20.0 WEA 2 INSTR OSU1
 BKT TEMP 13.1 SAL 31.675 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	12.59	31.65	23.91	401.3	0	0
10	12.52	31.69	23.95	397.3	.040	.020
20	9.27	32.38	25.06	292.5	.073	.069
30	7.99	32.60	25.42	258.0	.100	.136
40	7.29	32.76	25.65	236.3	.125	.222
50	7.35	33.20	25.98	204.7	.147	.321
60	7.23	33.41	26.16	188.0	.166	.428
70	7.21	33.60	26.32	173.3	.184	.544
80	7.15	33.86	26.53	153.3	.206	.664
90	7.08	33.89	26.56	150.3	.216	.794
100	6.95	33.90	26.59	148.0	.231	.936
110	6.73	33.90	26.62	145.2	.245	1.090
120	6.52	33.90	26.65	142.7	.259	1.254
130	6.29	33.92	26.69	138.4	.273	1.428
140	6.23	33.94	26.72	136.3	.287	1.612
150	6.06	33.96	26.75	132.8	.300	1.807
160	5.97	33.97	26.77	131.1	.314	2.011
170	5.83	33.99	26.81	129.0	.327	2.224
180	5.70	34.00	26.83	125.8	.339	2.447
185	5.63	33.99	26.83	125.8	.346	2.561

NO 91 LAT 45 16.4 LONG 124 18.0 STN DEPTH 144
 DATE 7/13/73 TIME 1801 AIR TEMP 57.0 WET BULB 55.0
 WIND DIR 0 SPEED 14 SWELL DIR 340 HT 5 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 20.1 WEA 2 INSTR OSU1
 BKT TEMP 11.3 SAL 32.203 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	10.92	32.20	24.64	331.6	0	0
10	10.14	32.29	24.84	312.5	.032	.016
20	9.16	32.41	25.10	288.6	.063	.061
30	7.70	33.05	25.82	220.0	.088	.124
40	7.32	33.42	26.16	187.7	.108	.195
50	7.28	33.64	26.34	170.7	.126	.276
60	7.15	33.75	26.44	161.2	.143	.366
70	7.10	33.84	26.52	154.0	.158	.468
80	6.97	33.87	26.56	150.2	.174	.582
90	6.74	33.90	26.61	145.3	.188	.708
100	6.59	33.90	26.64	143.3	.203	.845
110	6.40	33.92	26.68	139.7	.217	.994
120	6.28	33.92	26.70	138.0	.231	1.154
130	6.25	33.93	26.71	137.2	.245	1.325
138	6.25	33.95	26.72	135.8	.256	1.472

NO 92 LAT 45 16.5 LONG 124 9.0 STN DEPTH 116
 DATE 7/14/73 TIME 28 AIR TEMP 54.5 WET BULB 53.5
 WIND DIR 0 SPEED 14 SWELL DIR 340 HT 5 FER 7
 CLOUD TYPE 6 - 0 AMT 1 BAR 20.0 WEA 2 INSTR OSU1
 BKT TEMP 10.4 SAL 32.480 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	10.07	32.47	25.00	297.8	0	0
10	9.66	32.54	25.12	286.1	.029	.014
20	8.13	33.00	25.71	229.8	.056	.054
30	7.35	33.54	26.25	179.0	.076	.103
40	7.30	33.62	26.32	172.6	.093	.165
50	7.18	33.75	26.43	161.9	.110	.241
60	7.10	33.84	26.52	154.1	.126	.327
70	6.93	33.87	26.57	149.5	.141	.426
80	6.75	33.90	26.61	145.3	.156	.537
90	6.56	33.89	26.63	143.5	.170	.660
100	6.34	33.92	26.68	138.9	.184	.793
110	6.24	33.95	26.72	135.5	.198	.936
111	6.24	33.95	26.72	135.3	.199	.951

NO 93 LAT 45 16.5 LONG 124 7.0 STN DEPTH 95
 DATE 7/13/73 TIME 1910 AIR TEMP 57.2 WET BULB 56.4
 WIND DIR 350 SPEED 12 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 1 BAR 20.1 WEA 2 INSTR OSU1
 BKT TEMP 10.2 SAL 32.597 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	9.75	32.57	25.13	285.4	0	0
10	9.07	32.70	25.34	265.5	.028	.014
20	7.70	33.19	25.93	209.7	.051	.048
24	7.41	33.49	26.20	183.5	.059	.065

NO 94 LAT 45 16.5 LONG 124 6.5 STN DEPTH 80
 DATE 7/13/73 TIME 1953 AIR TEMP 57.9 WET BULB 56.6
 WIND DIR 350 SPEED 12 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 19.8 WEA 2 INSTR OSU1
 BKT TEMP 10.1 SAL 32.646 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	9.64	32.72	25.26	272.6	0	0
1	9.64	32.72	25.26	272.6	.003	.000
10	8.42	33.01	25.68	233.2	.026	.013
20	7.81	33.26	25.97	206.0	.048	.045
30	7.22	33.70	26.39	165.4	.065	.088
40	7.05	33.80	26.50	155.4	.081	.144
50	6.88	33.88	26.58	147.8	.096	.211
60	6.70	33.91	26.63	143.4	.111	.292
70	6.43	33.92	26.68	138.9	.125	.384
77	6.32	33.95	26.71	135.8	.134	.454

NO 95 LAT 45 16.5 LONG 124 4.1 STN DEPTH 78
 DATE 7/13/73 TIME 2019 AIR TEMP 57.9 WET BULB 56.5
 WIND DIR 0 SPEED 14 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 19.6 WEA 2 INSTR OSU1
 BKT TEMP 9.8 SAL 32.751 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	9.45	32.72	25.29	269.6	0	0
10	8.03	33.19	25.88	214.1	.024	.012
20	7.55	33.43	26.14	189.8	.044	.041
30	7.24	33.67	26.37	167.5	.062	.085
40	7.10	33.76	26.46	159.5	.078	.142
50	6.88	33.85	26.56	150.0	.093	.211
60	6.52	33.91	26.65	141.1	.108	.290
70	6.47	33.91	26.66	140.6	.122	.381
71	6.47	33.91	26.66	140.6	.123	.391

NO 96 LAT 45 16.5 LONG 124 3.5 STN DEPTH 64
 DATE 7/13/73 TIME 2045 AIR TEMP 57.5 WET BULB 56.3
 WIND DIR 0 SPEED 18 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 19.6 WEA 2 INSTR OSU1
 BKT TEMP 8.7 SAL 33.266 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	8.24	33.25	25.89	212.4	0	0
10	7.74	33.50	26.16	187.0	.020	.010
20	7.41	33.57	26.27	177.5	.038	.037
30	7.06	33.80	26.50	155.8	.055	.079
40	6.61	33.90	26.63	142.7	.070	.131
50	6.59	33.88	26.62	144.1	.084	.195
57	6.57	33.90	26.64	142.4	.094	.249

NO 97 LAT 45 16.5 LONG 124 1.2 STN DEPTH 52
 DATE 7/13/73 TIME 2106 AIR TEMP 57.9 WET BULB 56.3
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 19.1 WEA 2 INSTR OSU1
 BKT TEMP 8.5 SAL 33.681 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	7.80	33.78	26.37	166.8	0	0
10	7.59	33.69	26.33	170.9	.017	.009
20	7.34	33.71	26.39	166.1	.034	.034
30	7.06	33.80	26.50	155.8	.050	.075
40	6.67	33.90	26.63	143.5	.065	.126
44	6.67	33.88	26.61	145.0	.071	.150

NO 98 LAT 45 16.5 LONG 124 59.8 STN DEPTH 34
 DATE 7/13/73 TIME 2127 AIR TEMP 59.2 WET BULB 56.6
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 18.5 WEA 2 INSTR OSU1
 BKT TEMP 7.9 SAL 33.839 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	7.45	33.93	26.54	150.9	0	0
10	6.92	33.89	26.58	147.0	.015	.008
20	6.71	33.90	26.62	143.7	.030	.029
27	6.71	33.89	26.61	144.5	.040	.053

NO 99 LAT 45 17.1 LONG 124 10.3 STN DEPTH 126
 DATE 7/13/73 TIME 2330 AIR TEMP 58.5 WET BULB 57.0
 WIND DIR 0 SPEED 12 SWELL DIR 340 HT 6 FER 7
 CLOUD TYPE 6 - 0 AMT 1 BAR 18.1 WEA 2 INSTR OSU1
 BKT TEMP 12.3 SAL 31.889 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.21	31.71	24.03	390.1	0	0
10	11.51	31.89	24.30	364.7	.038	.019
20	9.00	32.57	25.25	274.3	.068	.063
30	7.79	33.13	25.87	215.5	.092	.122
40	7.46	33.44	26.16	188.1	.112	.193
50	7.25	33.66	26.36	168.9	.130	.273
60	7.14	33.84	26.52	154.3	.146	.360
70	6.98	33.87	26.56	149.9	.161	.459
80	6.76	33.88	26.60	146.7	.176	.571
90	6.51	33.91	26.66	141.4	.190	.692
100	6.34	33.94	26.71	136.8	.204	.825
110	6.28	33.93	26.71	136.8	.218	.968
120	6.25	33.95	26.72	135.5	.231	1.125
123	6.25	33.96	26.73	134.8	.235	1.175

NO 100 LAT 45 16.7 LONG 124 10.2 STN DEPTH 126
 DATE 7/14/73 TIME 0 AIR TEMP 60.0 WET BULB 57.1
 WIND DIR 350 SPEED 15 SWELL DIR 330 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.2 WEA 2 INSTR OSU1
 BKT TEMP 13.0 SAL 31.782 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.59	31.79	24.02	391.0	0	0
1	12.59	31.79	24.02	391.0	.004	.000
10	9.40	32.47	25.11	287.6	.035	.016
20	8.84	32.67	25.35	264.5	.063	.059
30	7.81	33.10	25.84	218.1	.087	.118
40	7.48	33.43	26.15	189.1	.107	.188
50	7.25	33.67	26.37	168.3	.125	.268
60	7.14	33.82	26.50	155.9	.141	.357
70	7.02	33.85	26.54	152.2	.157	.456
80	6.72	33.89	26.61	145.4	.171	.567
90	6.51	33.91	26.66	141.4	.186	.688
100	6.34	33.93	26.70	137.6	.200	.820
110	6.24	33.95	26.72	135.3	.213	.963
120	6.25	33.95	26.72	135.3	.227	1.118
126	6.24	33.94	26.71	136.2	.235	1.219

NO 103 LAT 45 15.5 LONG 124 9.5 STN DEPTH 122
 DATE 7/14/73 TIME 130 AIR TEMP 59.3 WET BULB 57.1
 WIND DIR 350 SPEED 14 SWELL DIR 340 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 8 BAR 17.8 WEA 2 INSTR OSU1
 BKT TEMP 13.0 SAL 31.800 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.84	31.88	24.04	389.0	0	0
1	12.84	31.88	24.04	389.0	.004	.000
10	10.55	32.23	24.73	323.5	.038	.018
20	8.58	32.70	25.41	258.8	.066	.061
30	7.79	33.13	25.87	215.5	.096	.120
40	7.49	33.42	26.14	190.1	.110	.190
50	7.28	33.64	26.34	170.9	.128	.270
60	7.15	33.83	26.51	155.2	.144	.359
70	7.03	33.85	26.54	152.0	.160	.459
80	6.71	33.90	26.62	144.2	.174	.570
90	6.51	33.90	26.65	142.1	.189	.691
100	6.29	33.95	26.71	136.0	.203	.823
110	6.24	33.97	26.74	134.0	.216	.965
120	6.24	33.92	26.70	137.3	.230	1.121
121	6.24	33.94	26.71	136.2	.231	1.138

NO 101 LAT 45 16.5 LONG 124 10.0 STN DEPTH 126
 DATE 7/14/73 TIME 30 AIR TEMP 58.0 WET BULB 56.6
 WIND DIR 350 SPEED 12 SWELL DIR 340 HT 6 PER 7
 CLOUD TYPE 6 - 0 AMT 1 BAR 19.1 WEA 2 INSTR OSU1
 BKT TEMP 12.2 SAL 31.734 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.56	31.78	24.02	391.2	0	0
1	12.56	31.78	24.02	391.2	.004	.000
10	11.16	32.00	24.45	350.3	.038	.018
20	8.80	32.57	25.28	271.4	.068	.063
30	7.74	33.13	25.87	214.9	.092	.122
40	7.40	33.50	26.22	182.5	.111	.191
50	7.20	33.72	26.41	164.2	.129	.268
60	7.14	33.84	26.52	154.3	.145	.355
70	6.89	33.86	26.57	149.7	.160	.454
80	6.67	33.90	26.63	143.8	.174	.564
90	6.47	33.91	26.66	140.9	.189	.684
100	6.37	33.93	26.69	138.2	.202	.816
110	6.24	33.94	26.72	135.7	.216	.958
120	6.23	33.95	26.72	135.5	.230	1.114
122	6.23	33.95	26.72	135.3	.232	1.146

NO 104 LAT 44 16.5 LONG 124 10.5 STN DEPTH 120
 DATE 7/14/73 TIME 200 AIR TEMP 57.2 WET BULB 55.0
 WIND DIR 350 SPEED 14 SWELL DIR 340 HT 4 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.6 WEA 2 INSTR OSU1
 BKT TEMP 12.9 SAL 31.873 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.35	31.86	24.12	381.5	0	0
10	10.37	32.22	24.75	321.1	.037	.018
20	8.53	32.78	25.48	251.8	.065	.060
30	7.83	33.13	25.86	216.1	.089	.118
40	7.52	33.40	26.12	191.9	.109	.189
50	7.28	33.64	26.34	171.0	.127	.269
60	7.14	33.84	26.52	154.3	.142	.356
70	6.93	33.85	26.55	151.0	.158	.455
80	6.70	33.91	26.63	143.7	.172	.565
90	6.45	33.92	26.67	139.9	.187	.686
100	6.28	33.93	26.70	137.1	.200	.817
110	6.20	33.94	26.72	135.5	.214	.959
118	6.20	33.91	26.70	137.9	.225	1.083

NO 102 LAT 45 16.0 LONG 124 10.7 STN DEPTH 125
 DATE 7/14/73 TIME 100 AIR TEMP 58.3 WET BULB 56.2
 WIND DIR 350 SPEED 12 SWELL DIR 330 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 13.0 SAL 31.735 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.67	31.77	23.99	393.9	0	0
10	10.89	32.04	24.52	343.2	.038	.019
20	8.50	32.63	25.37	262.9	.067	.062
30	7.77	33.10	25.85	217.5	.091	.120
40	7.41	33.49	26.20	183.7	.111	.189
50	7.21	33.71	26.40	164.9	.128	.268
60	7.15	33.83	26.51	155.2	.144	.355
70	6.99	33.87	26.56	150.3	.159	.454
80	6.67	33.90	26.63	144.0	.174	.563
90	6.51	33.91	26.66	141.4	.188	.683
100	6.36	33.93	26.69	137.8	.202	.816
110	6.24	33.95	26.72	135.5	.216	.959
120	6.24	33.94	26.72	135.8	.229	1.114
122	6.24	33.94	26.71	136.2	.232	1.147

NO 105 LAT 45 15.7 LONG 124 10.5 STN DEPTH 117
 DATE 7/14/73 TIME 230 AIR TEMP 58.0 WET BULB 55.9
 WIND DIR 350 SPEED 15 SWELL DIR 340 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.2 WEA 2 INSTR OSU1
 BKT TEMP 12.6 SAL 31.907 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.33	31.88	24.14	379.7	0	0
10	10.67	32.25	24.72	324.4	.037	.018
20	8.48	32.78	25.49	251.1	.065	.059
30	7.77	33.18	25.91	211.6	.087	.115
40	7.45	33.46	26.18	186.2	.107	.185
50	7.23	33.72	26.41	164.3	.124	.263
60	7.15	33.84	26.51	154.5	.140	.349
70	6.91	33.86	26.56	150.0	.155	.448
80	6.74	33.90	26.62	144.9	.170	.558
90	6.47	33.93	26.68	139.4	.184	.679
100	6.28	33.94	26.71	136.4	.198	.810
110	6.20	33.94	26.72	135.5	.212	.952
114	6.20	33.94	26.72	135.6	.217	1.012

NO 106 LAT 45 14.2 LONG 124 9.3 STN DEPTH 118
 DATE 7/14/73 TIME 300 AIR TEMP 57.0 WET BULB 54.7
 WIND DIR 350 SPEED 22 SWELL DIR 340 HT 5 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.0 WEA 2 INSTR CSU1
 BKT TEMP 12.3 SAL 31.940 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.49	31.84	24.08	385.5	0	0
1	12.49	31.84	24.08	385.5	.004	.000
10	9.65	32.19	24.85	312.1	.038	.018
20	8.31	32.83	25.56	244.7	.064	.058
30	7.75	33.21	25.93	209.0	.087	.114
40	7.36	33.56	26.26	177.8	.106	.182
50	7.20	33.73	26.42	163.2	.123	.259
60	7.15	33.84	26.51	154.5	.139	.346
70	7.02	33.85	26.54	152.2	.155	.446
80	6.72	33.90	26.62	144.7	.169	.556
90	6.48	33.91	26.66	141.0	.183	.677
100	6.29	33.92	26.70	137.6	.197	.809
110	6.24	33.96	26.73	134.2	.211	.951
114	6.24	33.97	26.74	133.8	.216	1.011

NO 109 LAT 45 11.9 LONG 124 8.9 STN DEPTH 114
 DATE 7/14/73 TIME 430 AIR TEMP 56.7 WET BULB 54.1
 WIND DIR 350 SPEED 18 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.4 WEA 2 INSTR OSU1
 BKT TEMP 12.2 SAL 31.938 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	11.96	31.93	24.24	369.4	0	0
1	11.96	31.93	24.24	369.4	.004	.000
10	9.91	32.41	24.98	299.9	.036	.018
20	8.38	32.83	25.54	246.0	.064	.058
30	7.75	33.22	25.94	208.3	.086	.114
40	7.28	33.65	26.35	170.1	.105	.179
50	7.15	33.78	26.47	158.8	.121	.251
60	7.12	33.82	26.50	155.6	.137	.338
70	6.83	33.89	26.60	146.7	.152	.436
80	6.58	33.91	26.65	142.1	.166	.545
90	6.36	33.94	26.70	137.3	.180	.664
100	6.27	33.95	26.72	135.5	.194	.793
110	6.26	33.95	26.72	135.5	.207	.936

NO 107 LAT 45 13.2 LONG 124 9.4 STN DEPTH 116
 DATE 7/14/73 TIME 330 AIR TEMP 57.0 WET BULB 55.0
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.0 WEA 2 INSTR OSU1
 BKT TEMP 12.7 SAL 31.873 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.49	31.84	24.08	385.5	0	0
10	11.34	32.08	24.48	347.5	.038	.019
20	8.48	32.80	25.51	249.6	.066	.060
30	7.68	33.27	26.00	203.3	.088	.116
40	7.28	33.64	26.34	170.8	.107	.180
50	7.16	33.76	26.45	160.4	.123	.254
60	7.15	33.83	26.51	155.2	.139	.341
70	6.83	33.87	26.58	148.6	.155	.441
80	6.67	33.86	26.60	147.0	.169	.551
90	6.44	33.94	26.69	138.3	.183	.672
100	6.26	33.90	26.68	139.1	.197	.804

NO 110 LAT 45 11.7 LONG 124 8.7 STN DEPTH 110
 DATE 7/14/73 TIME 500 AIR TEMP 55.5 WET BULB 54.3
 WIND DIR 350 SPEED 16 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.5 WEA 2 INSTR OSU1
 BKT TEMP 12.0 SAL 32.029 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	11.76	32.02	24.35	359.3	0	0
1	11.76	32.02	24.35	359.3	.004	.000
10	10.45	32.15	24.68	327.8	.035	.018
20	8.51	32.73	25.45	255.3	.063	.058
30	7.84	33.19	25.91	211.8	.086	.115
40	7.34	33.58	26.28	176.1	.105	.183
50	7.18	33.77	26.45	160.0	.122	.258
60	7.14	33.83	26.51	155.1	.138	.344
70	6.86	33.89	26.59	147.1	.153	.443
80	6.58	33.91	26.65	142.1	.167	.552
90	6.34	33.92	26.69	138.5	.181	.671
100	6.26	33.93	26.70	136.9	.195	.800
107	6.25	33.94	26.71	136.1	.205	.899

NO 108 LAT 45 12.3 LONG 124 9.4 STN DEPTH 115
 DATE 7/14/73 TIME 400 AIR TEMP 56.8 WET BULB 54.5
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.2 WEA 2 INSTR CSU1
 BKT TEMP 12.4 SAL 32.009 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	12.23	31.92	24.19	374.9	0	0
10	8.94	32.42	25.14	284.4	.036	.017
20	8.02	32.99	25.72	229.0	.062	.055
30	7.61	33.32	26.04	198.9	.083	.109
40	7.21	33.71	26.41	164.4	.101	.171
50	7.18	33.77	26.45	159.9	.117	.243
60	7.13	33.83	26.51	155.0	.132	.329
70	6.87	33.85	26.56	150.2	.148	.429
80	6.71	33.89	26.61	145.3	.162	.539
90	6.45	33.93	26.68	139.1	.177	.662
100	6.29	33.93	26.70	136.8	.191	.794
110	6.28	33.93	26.70	137.3	.205	.938
111	6.28	33.93	26.70	137.3	.206	.953

NO 111 LAT 45 11.2 LONG 124 18.5 STN DEPTH 108
 DATE 7/14/73 TIME 530 AIR TEMP 54.5 WET BULB 53.0
 WIND DIR 300 SPEED 12 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.1 WEA 2 INSTR OSU1
 BKT TEMP 12.0 SAL 32.082 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	CELD	POTE
0	11.65	32.07	24.41	353.7	0	0
10	9.88	32.25	24.86	311.3	.035	.017
20	8.27	32.92	25.63	237.7	.061	.056
30	7.76	33.22	25.94	208.4	.083	.111
40	7.28	33.65	26.35	170.1	.102	.175
50	7.18	33.77	26.45	159.9	.118	.249
60	7.14	33.82	26.50	155.8	.134	.336
70	6.88	33.88	26.58	148.1	.149	.436
80	6.60	33.92	26.65	141.6	.164	.545
90	6.31	33.95	26.71	136.2	.178	.664
100	6.24	33.95	26.72	135.2	.191	.752
104	6.24	33.94	26.71	136.0	.197	.848

NO 112 LAT 45 10.9 LONG 124 8.3 STN DEPTH 108
 DATE 7/14/73 TIME 600 AIR TEMP 56.0 WET BULB 53.7
 WIND DIR 340 SPEED 16 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 11.9 SAL 32.067 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.54	32.06	24.42	352.5	0	0
10	10.95	32.22	24.65	330.6	.035	.017
20	8.23	32.89	25.61	235.5	.062	.058
30	7.70	33.29	26.00	202.4	.084	.112
40	7.33	33.59	26.29	175.2	.103	.177
50	7.18	33.77	26.45	159.9	.119	.252
60	7.14	33.82	26.50	155.8	.135	.338
70	6.77	33.90	26.61	145.1	.150	.436
80	6.52	33.93	26.67	139.9	.165	.543
90	6.28	33.95	26.72	135.5	.178	.661
100	6.24	33.94	26.71	135.9	.192	.789
105	6.24	33.94	26.71	136.0	.199	.859

NO 115 LAT 45 9.4 LONG 124 8.2 STN DEPTH 106
 DATE 7/14/73 TIME 730 AIR TEMP 55.0 WET BULB 53.5
 WIND DIR 190 SPEED 10 SWELL DIR 340 HT 3 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.196 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.08	32.19	24.61	335.1	0	0
10	10.41	32.25	24.77	319.5	.033	.017
20	8.65	32.89	25.55	245.4	.060	.056
30	7.52	33.39	26.11	192.5	.082	.111
40	7.21	33.74	26.42	162.9	.100	.173
50	7.21	33.80	26.48	157.7	.116	.244
60	7.03	33.84	26.53	152.9	.131	.330
70	6.73	33.91	26.63	143.9	.146	.426
80	6.61	33.93	26.66	141.0	.161	.534
90	6.24	33.94	26.72	135.5	.174	.651
100	6.21	33.95	26.72	135.2	.188	.760
101	6.21	33.95	26.73	134.8	.189	.793

NO 113 LAT 45 39.8 LONG 124 8.4 STN DEPTH 108
 DATE 7/14/73 TIME 630 AIR TEMP 55.1 WET BULB 53.5
 WIND DIR 350 SPEED 15 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.5 WEA 2 INSTR OSU1
 BKT TEMP 11.7 SAL 32.071 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.36	32.09	24.48	347.2	0	0
1	11.36	32.09	24.48	347.2	.003	.000
10	10.58	32.02	24.56	339.7	.035	.017
20	8.52	32.79	25.50	250.7	.063	.059
30	7.79	33.23	25.94	208.1	.086	.117
40	7.24	33.71	26.40	165.4	.104	.180
50	7.22	33.80	26.48	157.9	.120	.252
60	7.03	33.85	26.54	152.2	.136	.338
70	6.74	33.88	26.60	146.3	.151	.434
80	6.58	33.94	26.67	139.9	.165	.542
90	6.26	33.92	26.70	137.2	.179	.659
100	6.21	33.94	26.72	135.5	.193	.788
103	6.21	33.95	26.73	134.8	.197	.829

NO 116 LAT 45 7.0 LONG 124 9.9 STN DEPTH 113
 DATE 7/14/73 TIME 830 AIR TEMP 54.5 WET BULB 53.5
 WIND DIR 0 SPEED 12 SWELL DIR 330 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.2 SAL 32.212 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.88	32.20	24.65	331.0	0	0
10	9.17	32.69	25.31	267.8	.031	.015
20	8.69	32.91	25.56	244.9	.057	.054
30	7.61	33.30	26.03	200.4	.079	.108
40	7.33	33.55	26.26	178.3	.098	.173
50	7.22	33.72	26.41	163.8	.115	.251
60	7.14	33.82	26.50	155.8	.131	.338
70	6.88	33.88	26.58	148.1	.146	.438
80	6.75	33.88	26.60	146.6	.161	.548
90	6.51	33.91	26.66	141.4	.175	.670
100	6.24	33.94	26.71	135.9	.189	.802
110	6.22	33.93	26.71	136.5	.203	.945

NO 114 LAT 45 39.6 LONG 124 8.4 STN DEPTH 107
 DATE 7/14/73 TIME 700 AIR TEMP 56.0 WET BULB 54.1
 WIND DIR 0 SPEED 14 SWELL DIR 340 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.6 SAL 32.176 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.18	32.16	24.56	339.0	0	0
2	11.18	32.16	24.56	339.0	.007	.001
10	11.03	32.16	24.59	336.4	.034	.017
20	8.69	32.85	25.51	249.0	.063	.059
30	7.56	33.36	26.08	195.3	.085	.116
40	7.22	33.73	26.42	163.3	.103	.177
50	7.19	33.81	26.48	157.1	.119	.249
60	7.02	33.85	26.54	152.0	.135	.335
70	6.73	33.91	26.63	143.9	.149	.430
80	6.54	33.92	26.66	140.9	.164	.537
90	6.23	33.93	26.71	136.4	.177	.654
100	6.21	33.95	26.73	134.8	.191	.782
105	6.21	33.95	26.73	134.8	.198	.852

NO 117 LAT 45 5.8 LONG 124 10.8 STN DEPTH 117
 DATE 7/14/73 TIME 900 AIR TEMP 54.0 WET BULB 53.0
 WIND DIR 0 SPEED 12 SWELL DIR 330 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.3 SAL 32.223 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.78	32.22	24.68	327.8	0	0
10	9.40	32.72	25.30	269.0	.031	.015
20	8.37	33.01	25.69	232.5	.057	.053
30	7.60	33.31	26.04	199.2	.078	.106
40	7.27	33.62	26.32	172.2	.097	.170
50	7.24	33.69	26.38	166.7	.113	.245
60	7.17	33.81	26.49	157.0	.129	.333
70	7.05	33.84	26.53	153.3	.145	.433
80	6.87	33.89	26.59	147.4	.160	.546
90	6.70	33.91	26.63	143.8	.174	.670
100	6.47	33.92	26.66	140.7	.189	.805
110	6.20	33.95	26.73	134.8	.202	.949
115	6.19	33.95	26.73	134.7	.209	1.025

NO 118 LAT 45 5.2 LONG 124 10.5 STN DEPTH 119
 DATE 7/14/73 TIME 930 AIR TEMP 53.5 WET BULB 52.5
 WIND DIR 0 SPEED 12 SWELL DIR 0 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.1 SAL 32.228 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.51	32.29	24.78	318.2	0	0
10	9.44	32.71	25.28	271.8	.029	.014
20	8.34	33.03	25.71	230.5	.054	.052
30	7.47	33.42	26.14	189.6	.075	.103
40	7.24	33.70	26.39	165.8	.092	.164
50	7.16	33.80	26.48	157.4	.108	.237
60	7.15	33.83	26.51	155.2	.124	.323
70	6.98	33.84	26.54	152.5	.139	.423
80	6.76	33.98	26.60	146.7	.154	.535
90	6.55	33.91	26.65	141.9	.169	.657
100	6.33	33.94	26.70	137.0	.183	.790
110	6.16	33.94	26.72	135.0	.196	.932
114	6.15	33.95	26.73	134.2	.202	.993

NO 121 LAT 45 4.5 LONG 124 11.1 STN DEPTH 124
 DATE 7/14/73 TIME 1100 AIR TEMP 53.6 WET BULB 53.0
 WIND DIR 0 SPEED 12 SWELL DIR 330 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 2 INSTR CSU1
 BKT TEMP 11.1 SAL 32.220 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.81	32.19	24.65	330.6	0	0
10	9.34	32.64	25.25	274.1	.031	.015
20	8.50	32.95	25.62	239.2	.058	.054
30	7.51	33.31	26.05	198.3	.079	.107
40	7.28	33.65	26.35	170.1	.097	.170
50	7.16	33.77	26.46	159.7	.113	.244
60	7.13	33.84	26.52	153.8	.129	.330
70	6.87	33.89	26.59	147.2	.144	.428
80	6.72	33.90	26.62	144.7	.159	.537
90	6.55	33.92	26.66	140.8	.173	.659
100	6.40	33.94	26.69	138.0	.187	.792
110	6.19	33.96	26.74	133.9	.201	.934
120	6.03	33.96	26.76	132.1	.214	1.087
122	6.03	33.95	26.75	132.9	.216	1.119

NO 119 LAT 45 5.0 LONG 124 11.0 STN DEPTH 120
 DATE 7/14/73 TIME 1000 AIR TEMP 54.0 WET BULB 52.5
 WIND DIR 0 SPEED 12 SWELL DIR 330 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.1 SAL 32.213 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.89	32.20	24.65	331.1	0	0
10	9.38	32.69	25.27	271.7	.031	.015
20	8.24	33.03	25.72	229.1	.056	.053
30	7.51	33.40	26.11	191.9	.077	.104
40	7.28	33.65	26.34	170.4	.095	.166
50	7.18	33.75	26.43	161.9	.111	.241
60	7.15	33.83	26.51	155.2	.127	.328
70	6.97	33.87	26.56	150.0	.142	.427
80	6.72	33.91	26.63	143.9	.157	.538
90	6.53	33.93	26.67	140.4	.171	.659
100	6.39	33.94	26.69	137.8	.185	.791
110	6.18	33.94	26.72	135.3	.199	.933
115	6.09	33.95	26.74	133.5	.206	1.069

NO 122 LAT 45 5.0 LONG 124 11.1 STN DEPTH 124
 DATE 7/14/73 TIME 1130 AIR TEMP 53.9 WET BULB 52.0
 WIND DIR 0 SPEED 10 SWELL DIR 330 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.2 WEA 2 INSTR OSU1
 BKT TEMP 11.2 SAL 32.195 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.88	32.16	24.62	333.9	0	0
10	9.37	32.65	25.25	273.8	.031	.015
20	8.57	32.93	25.59	241.3	.057	.054
30	7.53	33.33	26.06	197.1	.079	.108
40	7.27	33.66	26.35	169.6	.097	.171
50	7.15	33.78	26.47	158.8	.114	.246
60	7.10	33.84	26.52	153.8	.129	.332
70	6.85	33.88	26.59	147.7	.144	.430
80	6.65	33.88	26.62	145.0	.159	.539
90	6.48	33.91	26.66	141.0	.173	.661
100	6.24	33.94	26.71	135.9	.187	.794
110	6.15	33.95	26.73	134.2	.201	.936
120	5.99	33.97	26.77	130.8	.214	1.087
123	5.99	33.97	26.77	130.9	.218	1.135

NO 120 LAT 45 5.4 LONG 124 11.0 STN DEPTH 122
 DATE 7/14/73 TIME 1000 AIR TEMP 53.0 WET BULB 52.0
 WIND DIR 0 SPEED 12 SWELL DIR 330 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.9 WEA 2 INSTR OSU1
 BKT TEMP 11.0 SAL 32.220 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.78	32.21	24.67	328.6	0	0
1	10.78	32.21	24.67	328.6	.003	.000
10	9.35	32.68	25.28	271.3	.030	.015
20	8.21	32.98	25.69	232.4	.056	.053
30	7.49	33.42	26.14	189.9	.077	.104
40	7.28	33.64	26.34	170.8	.095	.167
50	7.21	33.73	26.42	163.3	.111	.242
60	7.15	33.82	26.49	156.3	.127	.329
70	6.92	33.86	26.56	150.1	.143	.429
80	6.78	33.88	26.60	146.9	.158	.540
90	6.57	33.91	26.64	142.5	.172	.662
100	6.41	33.93	26.69	138.7	.186	.795
110	6.21	33.94	26.72	135.7	.200	.938
118	6.07	33.97	26.76	131.8	.210	1.060

NO 123 LAT 45 4.2 LONG 124 11.1 STN DEPTH 122
 DATE 7/14/73 TIME 1200 AIR TEMP 53.0 WET BULB 52.0
 WIND DIR 0 SPEED 8 SWELL DIR 320 HT 4 PER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.4 WEA 2 INSTR CSU1
 BKT TEMP 11.1 SAL 32.182 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.81	32.17	24.64	332.0	0	0
2	10.81	32.17	24.64	332.1	.007	.001
10	9.83	32.36	24.95	302.4	.032	.016
20	9.08	32.79	25.40	259.6	.059	.056
30	7.71	33.25	25.97	205.5	.082	.114
40	7.35	33.54	26.25	179.2	.102	.182
50	7.24	33.72	26.41	164.5	.119	.258
60	7.13	33.84	26.52	154.3	.135	.345
70	6.88	33.88	26.58	148.1	.150	.444
80	6.76	33.88	26.60	146.4	.165	.554
90	6.56	33.91	26.65	142.0	.179	.677
100	6.44	33.92	26.67	140.1	.193	.811
110	6.18	33.95	26.73	134.8	.207	.956
120	5.98	33.97	26.77	130.7	.220	1.110
121	5.98	33.97	26.77	130.7	.222	1.126

NO 124 LAT 45 3.8 LONG 124 11.0 STN DEPTH 122
 DATE 7/14/73 TIME 1230 AIR TEMP 52.0 WET BULB 51.3
 WIND DIR 0 SPEED 8 SWELL DIR 320 HT 4 FER 8
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.5 WEA 2 INSTR CSU1
 BKT TEMP 11.1 SAL 32.182 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.23	32.44	24.95	302.6	0	0
1	10.23	32.44	24.95	302.6	.003	.000
10	9.02	32.52	25.20	278.2	.029	.014
20	8.86	32.82	25.46	253.8	.056	.054
30	8.00	33.11	25.82	219.9	.080	.115
40	7.39	33.47	26.19	184.5	.100	.185
50	7.26	33.68	26.37	167.7	.118	.263
60	7.14	33.82	26.50	155.8	.134	.352
70	7.06	33.88	26.56	150.5	.149	.452
80	6.80	33.88	26.60	146.8	.164	.563
90	6.61	33.92	26.65	141.9	.178	.686
100	6.47	33.91	26.66	140.8	.193	.820
110	6.33	33.94	26.70	137.2	.207	.967
120	5.97	33.98	26.78	129.9	.220	1.120
125	5.96	33.96	26.77	131.3	.226	1.200

NO 127 LAT 45 2.9 LONG 124 11.2 STN DEPTH 122
 DATE 7/14/73 TIME 1400 AIR TEMP 53.2 WET BULB 53.0
 WIND DIR 0 SPEED 10 SWELL DIR 320 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 12.1 WEA 2 INSTR OSU1
 BKT TEMP 11.3 SAL 32.175 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.90	32.12	24.58	337.2	0	0
10	9.55	32.35	24.99	298.8	.032	.016
20	8.02	32.56	25.39	261.0	.060	.057
30	8.03	33.04	25.76	225.6	.084	.117
40	7.61	33.29	26.02	201.3	.105	.192
50	7.28	33.61	26.32	173.1	.124	.274
60	7.15	33.80	26.48	157.5	.140	.365
70	7.12	33.83	26.51	155.0	.156	.466
80	6.85	33.87	26.58	148.6	.171	.579
90	6.62	33.90	26.63	143.5	.186	.703
100	6.50	33.90	26.65	142.1	.200	.838
110	6.21	33.93	26.71	136.4	.214	.985
120	5.98	33.95	26.76	132.0	.227	1.140
121	5.98	33.95	26.76	132.2	.229	1.156

NO 125 LAT 45 3.8 LONG 124 11.4 STN DEPTH 124
 DATE 7/14/73 TIME 1300 AIR TEMP 52.0 WET BULB 51.3
 WIND DIR 0 SPEED 8 SWELL DIR 320 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.4 WEA 2 INSTR OSU1
 BKT TEMP 11.0 SAL 32.214 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.76	32.19	24.66	329.7	0	0
10	9.09	32.38	25.08	289.6	.032	.016
20	8.67	32.59	25.31	268.0	.060	.057
30	8.17	33.04	25.74	227.5	.085	.120
40	7.56	33.30	26.04	199.6	.106	.193
50	7.28	33.63	26.34	171.3	.125	.276
60	7.15	33.80	26.49	157.1	.141	.366
70	7.10	33.85	26.53	153.2	.156	.467
80	6.85	33.88	26.59	147.6	.171	.580
90	6.59	33.92	26.65	141.7	.186	.703
100	6.48	33.93	26.68	139.7	.200	.836
110	6.23	33.93	26.71	136.5	.214	.982
120	6.01	33.96	26.76	131.5	.227	1.136
122	5.98	33.98	26.78	130.0	.230	1.168

NO 128 LAT 45 2.9 LONG 124 11.2 STN DEPTH 128
 DATE 7/14/73 TIME 1430 AIR TEMP 55.0 WET BULB 54.2
 WIND DIR 0 SPEED 10 SWELL DIR 320 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.158 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.01	32.14	24.58	337.6	0	0
1	11.01	32.14	24.58	337.6	.003	.000
10	9.35	32.43	25.08	289.8	.032	.016
20	8.00	32.58	25.40	259.2	.059	.056
30	7.98	32.97	25.71	230.1	.084	.117
40	7.34	33.43	26.17	187.2	.105	.190
50	7.26	33.66	26.36	169.2	.122	.269
60	7.14	33.82	26.50	156.1	.139	.358
70	7.02	33.88	26.56	149.9	.154	.457
80	6.79	33.90	26.61	145.6	.169	.588
90	6.65	33.91	26.64	142.9	.183	.691
100	6.51	33.91	26.66	141.5	.197	.826
110	6.41	33.93	26.68	138.9	.211	.974
120	5.97	33.94	26.75	132.8	.225	1.129
124	5.96	33.97	26.77	130.5	.230	1.194

NO 126 LAT 45 3.5 LONG 124 11.5 STN DEPTH 122
 DATE 7/14/73 TIME 1330 AIR TEMP 52.9 WET BULB 53.8
 WIND DIR 0 SPEED 12 SWELL DIR 320 HT 4 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.4 WEA 2 INSTR CSU1
 BKT TEMP 11.1 SAL 32.213 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.75	32.19	24.66	329.6	0	0
10	9.87	32.39	24.97	300.8	.033	.016
20	8.07	32.54	25.36	263.2	.060	.057
30	8.11	33.04	25.75	226.4	.085	.119
40	7.53	33.32	26.05	198.4	.106	.192
50	7.27	33.64	26.34	170.8	.124	.274
60	7.15	33.80	26.48	157.5	.141	.364
70	7.09	33.85	26.53	152.9	.156	.464
80	6.82	33.89	26.60	147.0	.171	.577
90	6.62	33.92	26.65	142.3	.186	.699
100	6.47	33.92	26.67	140.3	.200	.833
110	6.22	33.95	26.73	134.8	.213	.976
119	5.99	33.99	26.79	129.3	.225	1.113

NO 129 LAT 45 1.3 LONG 124 12.9 STN DEPTH 130
 DATE 7/14/73 TIME 1500 AIR TEMP 56.2 WET BULB 54.5
 WIND DIR 350 SPEED 14 SWELL DIR 320 HT 5 FER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.6 WEA 2 INSTR CSU1
 BKT TEMP 11.5 SAL 32.101 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.09	32.10	24.53	341.9	0	0
10	9.26	32.40	25.07	290.7	.033	.016
20	7.92	32.83	25.61	239.5	.059	.056
30	7.91	33.00	25.75	226.6	.083	.114
40	7.32	33.31	26.07	195.9	.104	.188
50	7.26	33.66	26.35	169.5	.122	.269
60	7.15	33.81	26.49	156.7	.138	.358
70	7.08	33.87	26.55	151.5	.154	.458
80	6.86	33.90	26.60	146.5	.169	.570
90	6.76	33.89	26.61	146.0	.183	.694
100	6.58	33.91	26.65	142.4	.198	.831
110	6.40	33.94	26.69	138.0	.212	.978
120	5.97	33.98	26.78	129.9	.225	1.134
126	5.96	33.96	26.77	131.3	.233	1.230

NO 130 LAT 45 .8 LONG 124 12.7 STN DEPTH 126
 DATE 7/14/73 TIME 1530 AIR TEMP 55.5 WET BULB 54.2
 WIND DIR 350 SPEED 14 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.8 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.153 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	11.01	32.14	24.58	337.6	0	0
10	9.38	32.45	25.14	284.3	.033	.016
20	8.07	32.83	25.59	241.6	.059	.056
30	6.13	32.98	25.70	231.6	.083	.115
40	7.35	33.48	26.20	183.7	.104	.187
50	7.25	33.69	26.38	167.0	.121	.265
60	7.14	33.84	26.52	154.3	.137	.352
70	7.03	33.85	26.54	152.3	.152	.452
80	6.78	33.88	26.60	146.9	.167	.563
90	6.65	33.91	26.64	143.2	.182	.686
100	6.51	33.91	26.65	141.8	.196	.821
110	6.38	33.93	26.69	138.6	.210	.968
120	5.96	33.96	26.77	131.2	.223	1.122

NO 133 LAT 44 59.6 LONG 124 8.2 STN DEPTH 118
 DATE 7/14/73 TIME 1700 AIR TEMP 56.8 WET BULB 54.6
 WIND DIR 350 SPEED 14 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 11.3 SAL 32.208 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	10.95	32.29	24.71	325.5	0	0
1	10.95	32.29	24.71	325.5	.003	.000
10	8.68	32.51	25.25	273.7	.031	.015
20	8.19	32.90	25.63	238.1	.057	.053
30	7.88	33.11	25.84	218.3	.079	.110
40	7.39	33.47	26.19	184.7	.100	.181
50	7.26	33.68	26.37	167.7	.117	.260
60	7.11	33.85	26.53	153.1	.133	.346
70	6.92	33.87	26.57	149.2	.148	.445
80	6.78	33.89	26.60	146.4	.163	.555
90	6.63	33.91	26.64	142.9	.177	.679
100	6.44	33.94	26.69	138.7	.192	.812
110	6.10	33.98	26.76	131.5	.205	.955
113	5.98	33.98	26.78	129.9	.209	.999

NO 131 LAT 45 .8 LONG 124 12.2 STN DEPTH 122
 DATE 7/14/73 TIME 1600 AIR TEMP 56.0 WET BULB 53.8
 WIND DIR 350 SPEED 13 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 17.8 WEA 2 INSTR OSU1
 BKT TEMP 11.5 SAL 32.158 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	11.03	32.13	24.57	338.7	0	0
1	11.03	32.13	24.57	338.7	.003	.000
10	10.36	32.21	24.74	322.2	.034	.017
20	8.22	32.60	25.39	260.6	.062	.058
30	8.09	33.02	25.74	227.6	.086	.118
40	7.38	33.37	26.11	192.3	.107	.192
50	7.28	33.64	26.34	170.6	.125	.273
60	7.15	33.82	26.50	156.0	.141	.363
70	7.02	33.86	26.55	151.6	.157	.462
80	6.82	33.89	26.60	146.5	.172	.574
90	6.66	33.90	26.63	143.8	.186	.698
100	6.50	33.92	26.66	140.7	.200	.832
110	6.32	33.95	26.71	136.5	.214	.979
119	5.97	33.95	26.76	132.1	.226	1.115

NO 134 LAT 44 59.5 LONG 124 11.6 STN DEPTH 116
 DATE 7/14/73 TIME 1730 AIR TEMP 56.9 WET BULB 54.9
 WIND DIR 350 SPEED 13 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 11.8 SAL 32.181 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	10.99	32.19	24.62	333.6	0	0
10	9.55	32.34	24.98	299.5	.033	.016
20	8.20	32.88	25.61	239.7	.059	.055
30	7.79	33.13	25.87	215.5	.082	.112
40	7.37	33.50	26.21	182.7	.101	.180
50	7.21	33.76	26.44	161.1	.118	.257
60	7.13	33.83	26.51	155.2	.134	.343
70	6.90	33.88	26.58	148.0	.149	.441
80	6.76	33.88	26.60	146.7	.164	.552
90	6.60	33.92	26.65	141.8	.178	.674
100	6.40	33.92	26.68	139.1	.193	.808
110	6.04	33.96	26.75	132.4	.206	.951
112	6.00	33.96	26.76	131.6	.209	.980

NO 132 LAT 45 .7 LONG 124 12.0 STN DEPTH 122
 DATE 7/14/73 TIME 1635 AIR TEMP 56.0 WET BULB 53.8
 WIND DIR 350 SPEED 12 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.1 WEA 2 INSTR OSU1
 BKT TEMP 11.6 SAL 32.189 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	11.10	32.13	24.56	339.8	0	0
10	9.43	32.32	24.98	299.2	.033	.016
20	8.01	32.72	25.52	248.7	.059	.055
30	7.94	32.95	25.70	231.0	.083	.114
40	7.51	33.27	26.02	201.5	.105	.190
50	7.28	33.59	26.30	174.7	.123	.273
60	7.17	33.79	26.47	158.2	.140	.365
70	7.00	33.83	26.53	153.4	.155	.465
80	6.82	33.87	26.59	148.0	.170	.579
90	6.63	33.90	26.63	143.7	.185	.703
100	6.50	33.91	26.66	141.4	.199	.838
110	6.18	33.93	26.71	136.0	.213	.984
116	5.98	33.95	26.76	132.2	.221	1.075

NO 135 LAT 44 59.3 LONG 124 11.6 STN DEPTH 114
 DATE 7/14/73 TIME 1800 AIR TEMP 57.0 WET BULB 55.7
 WIND DIR 350 SPEED 13 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 11.5 SAL 32.179 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	POTE
0	11.06	32.26	24.66	329.6	0	0
10	8.74	32.46	25.20	278.5	.031	.015
20	8.27	32.90	25.62	239.2	.057	.053
30	7.79	33.10	25.84	217.8	.080	.110
40	7.33	33.53	26.25	179.7	.099	.178
50	7.19	33.79	26.46	159.0	.117	.255
60	7.14	33.84	26.51	154.6	.132	.341
70	6.90	33.86	26.56	149.9	.148	.441
80	6.74	33.89	26.61	145.7	.162	.551
90	6.58	33.91	26.65	142.3	.177	.673
100	6.30	33.94	26.70	137.1	.191	.806
110	6.00	33.99	26.78	129.3	.204	.945
111	6.00	33.98	26.78	130.1	.205	.959

NO 136 LAT 44 58.8 LONG 124 12.0 STN DEPTH 111
 DATE 7/14/73 TIME 1830 AIR TEMP 58.8 WET BULB 55.8
 WIND DIR 350 SPEED 16 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.281 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.37	32.27	24.79	317.4	0	0
10	8.51	32.45	25.23	275.9	.030	.015
20	8.49	32.94	25.61	239.5	.056	.052
30	7.61	33.26	25.99	203.4	.078	.108
40	7.32	33.54	26.25	178.8	.097	.174
50	7.22	33.75	26.43	162.4	.114	.250
60	7.15	33.84	26.51	154.5	.130	.337
70	6.88	33.98	26.58	148.1	.145	.435
80	6.68	33.89	26.62	145.0	.159	.544
90	6.51	33.91	26.66	141.4	.174	.666
100	6.11	33.94	26.73	134.3	.188	.797
108	6.03	33.97	26.76	131.2	.198	.906

NO 137 LAT 44 58.4 LONG 124 11.5 STN DEPTH 110
 DATE 7/14/73 TIME 1900 AIR TEMP 55.7 WET BULB 54.1
 WIND DIR 350 SPEED 16 SWELL DIR 320 HT 5 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.0 WEA 5 INSTR OSU1
 BKT TEMP 11.4 SAL 32.275 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.77	32.27	24.72	324.0	0	0
10	8.72	32.47	25.21	277.5	.031	.015
20	8.47	32.96	25.63	238.0	.056	.053
30	7.59	33.29	26.02	200.6	.078	.107
40	7.29	33.62	26.32	172.4	.097	.171
50	7.24	33.76	26.44	161.5	.113	.245
60	6.97	33.83	26.53	152.9	.129	.332
70	6.81	33.88	26.59	147.2	.144	.429
80	6.64	33.89	26.62	144.4	.158	.539
90	6.52	33.91	26.65	141.5	.173	.660
100	6.12	33.93	26.72	135.2	.186	.751
106	6.04	33.96	26.76	132.0	.194	.873

NO 138 LAT 44 57.6 LONG 128 11.4 STN DEPTH 109
 DATE 7/14/73 TIME 1930 AIR TEMP 26.0 WET BULB 54.3
 WIND DIR 350 SPEED 18 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 18.4 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.274 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.80	32.27	24.72	324.5	0	0
10	8.57	32.53	25.28	271.0	.030	.015
20	8.45	32.96	25.63	237.7	.055	.052
30	7.65	33.27	26.00	203.3	.078	.108
40	7.33	33.54	26.25	178.9	.097	.175
50	7.24	33.75	26.43	162.2	.114	.250
60	7.07	33.81	26.50	156.0	.130	.337
70	6.84	33.88	26.59	147.3	.145	.436
80	6.66	33.89	26.62	144.7	.160	.545
90	6.54	33.92	26.66	141.4	.174	.666
100	6.11	33.94	26.73	134.3	.188	.797
106	6.04	33.96	26.76	132.0	.195	.879

YAQUINA CRUISE Y7308A

The purpose of this cruise was to study surface fronts on the continental shelf between Newport and Cape Lookout using thermosalinograph, CTD, and an attended profiling current meter. Chief scientist was Dr. Chris Mooers of University of Miami. Other personnel participating in the cruise were T. Curtin, D. Barstow, R. Kapaun, D. Leech, T. Wright, J. Wroblewski, D. Johnson, R. Johnson, M. McDonald, D. Imlah, J. Crawford, E. McKay, P. Fry, and J. Curtin.

Station positions are shown in Figure 19. Sample and CTD salinities are compared in Figure 20. The standard deviation of the difference between them is 0.028 o/oo. Staggered profiles of temperature, salinity and sigma-t are shown in Figures 21-24. The value of the bottom parameter is shown in each figure.

The data at standard depths are listed on pages 78-88.

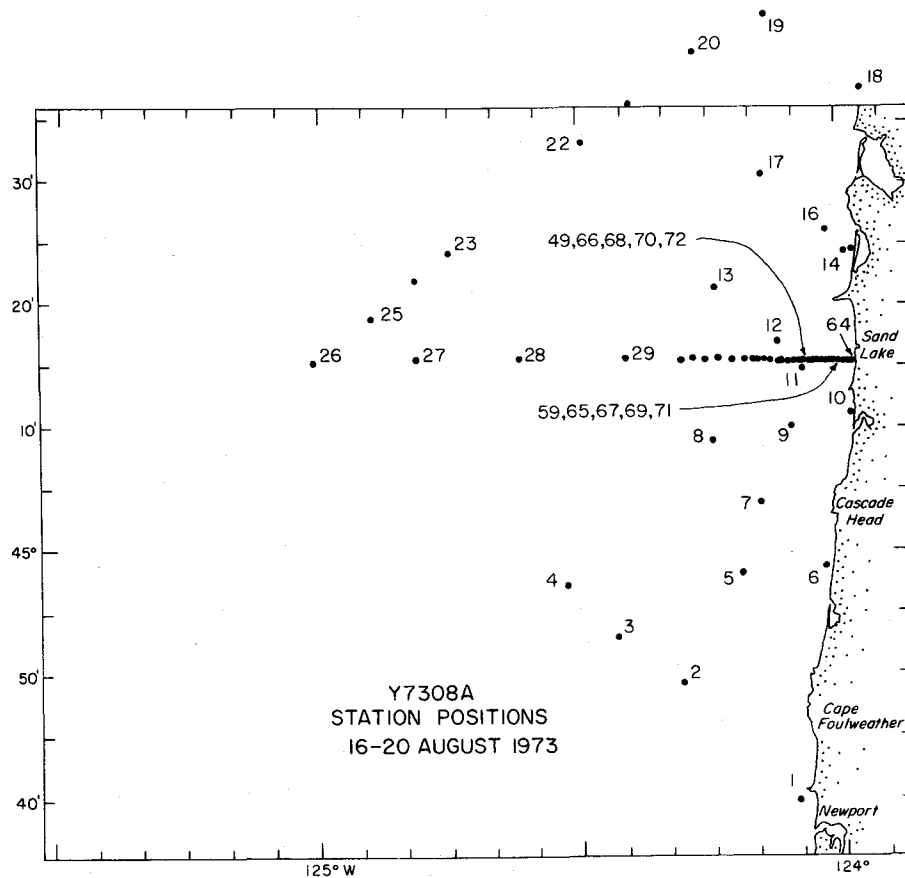


Figure 19. Positions of hydrographic stations occupied by R/V YAQUINA, 16-20 August 1973.

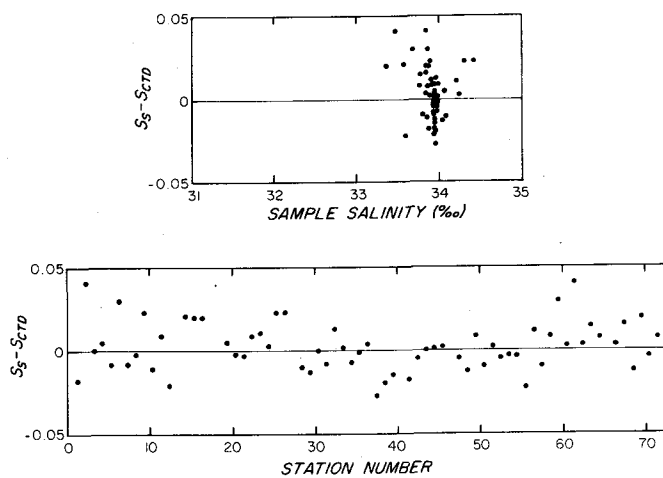


Figure 20. Comparison between sample salinity (S_S) and CTD salinity (S_{CTD}), Y7308A.

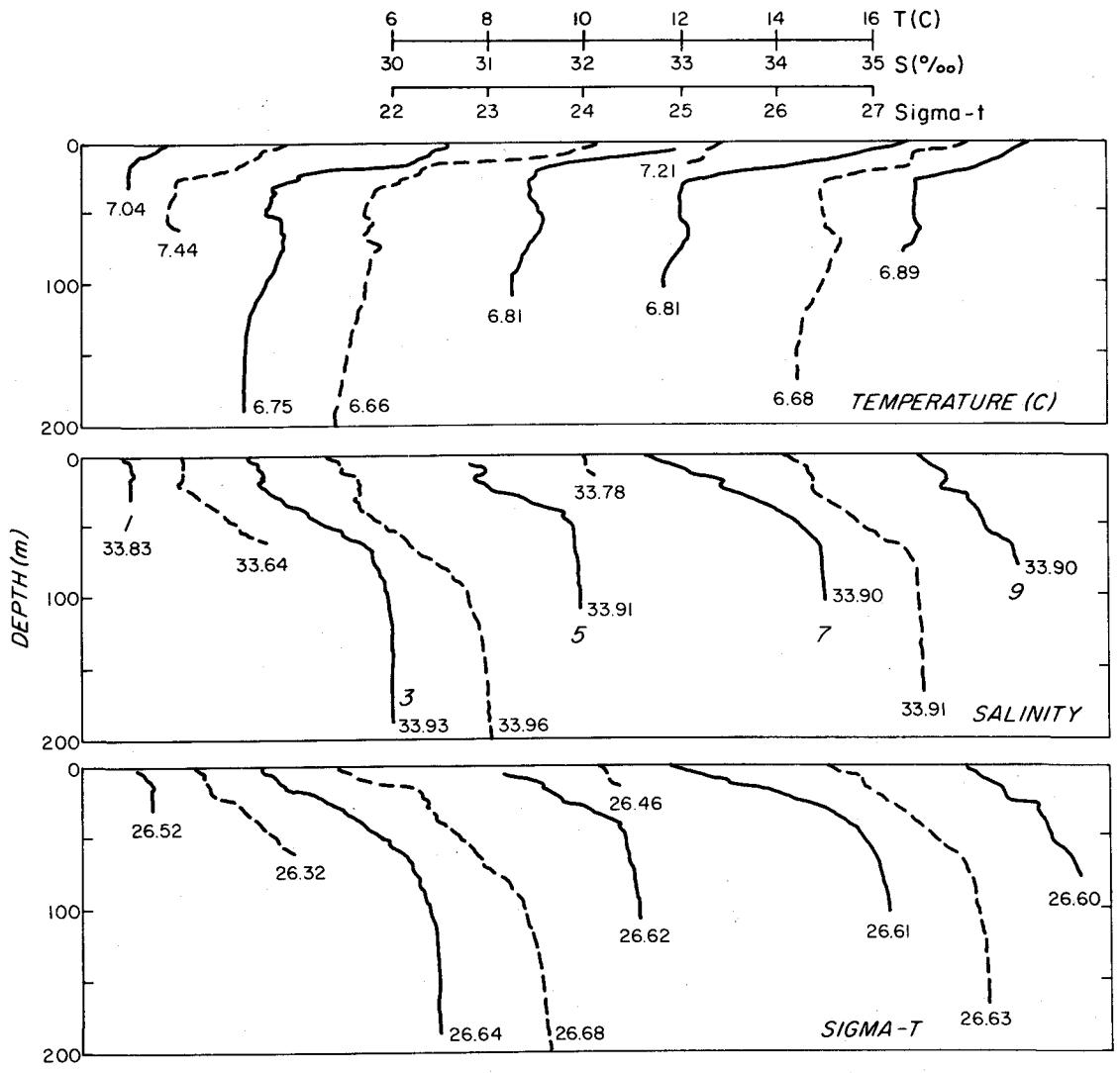


Figure 21(a). Staggered profiles of temperature, salinity and sigma-t for stations 1-9 along zig-zag line north of Newport, 16-18 July 1973.

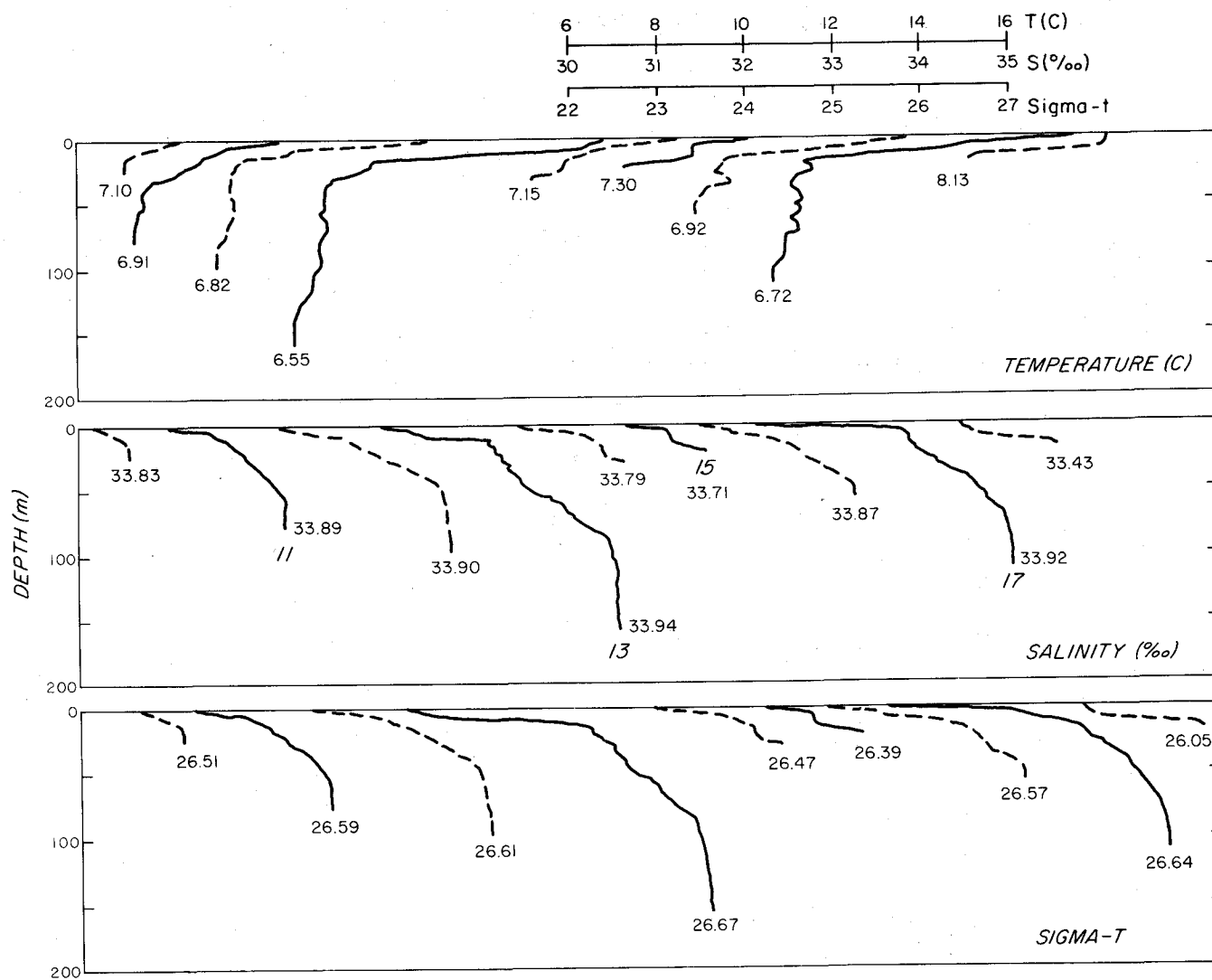


Figure 21(b). Staggered profiles of temperature, salinity and sigma-t for stations 10-18 along zig-zag line north of Newport, 16-18 July 1973.

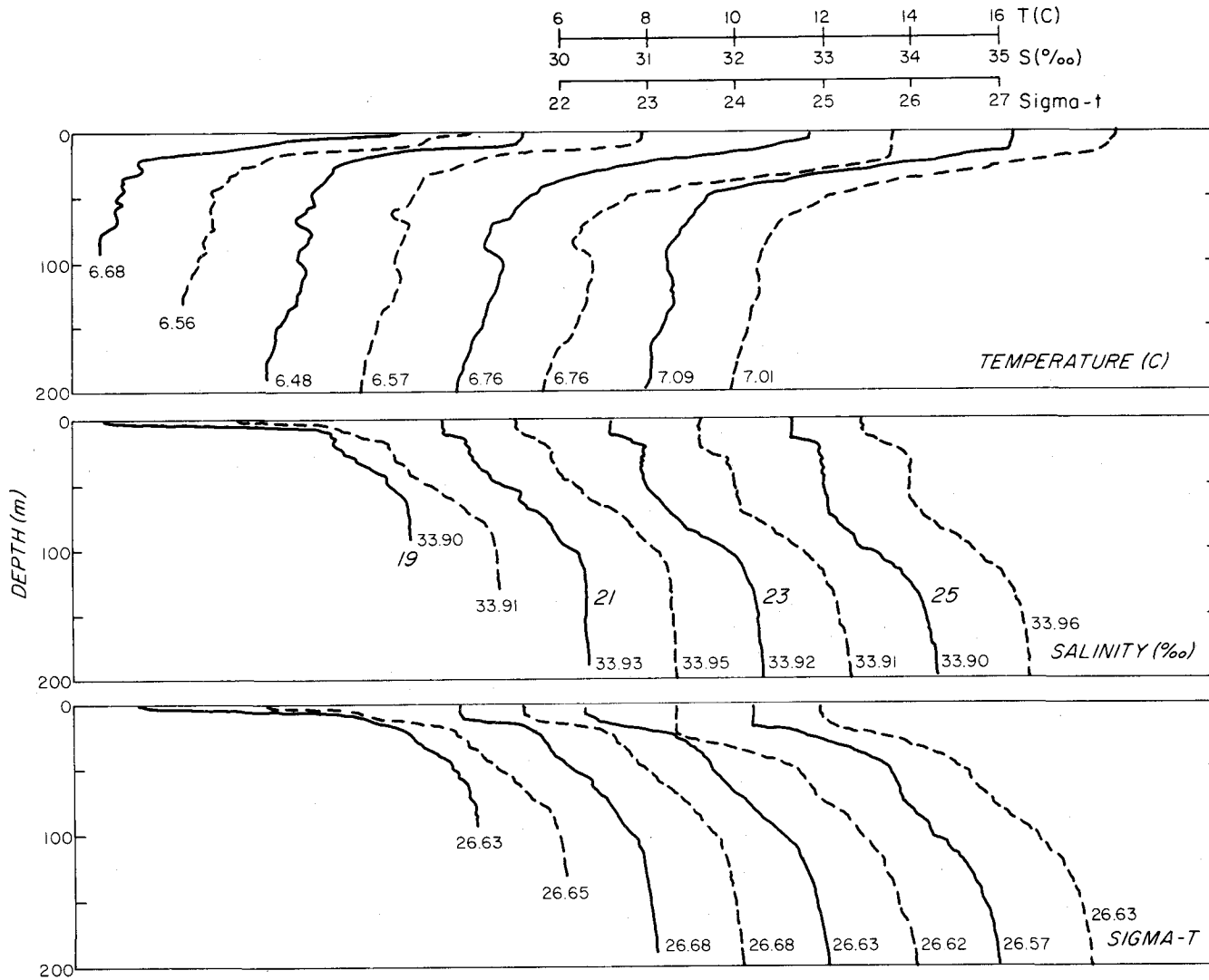


Figure 22. Staggered profiles of temperature, salinity and sigma-t for stations along a line between 45°45'N, 124°09'W and 45°15'N, 125°00'W, 18 July 1973.

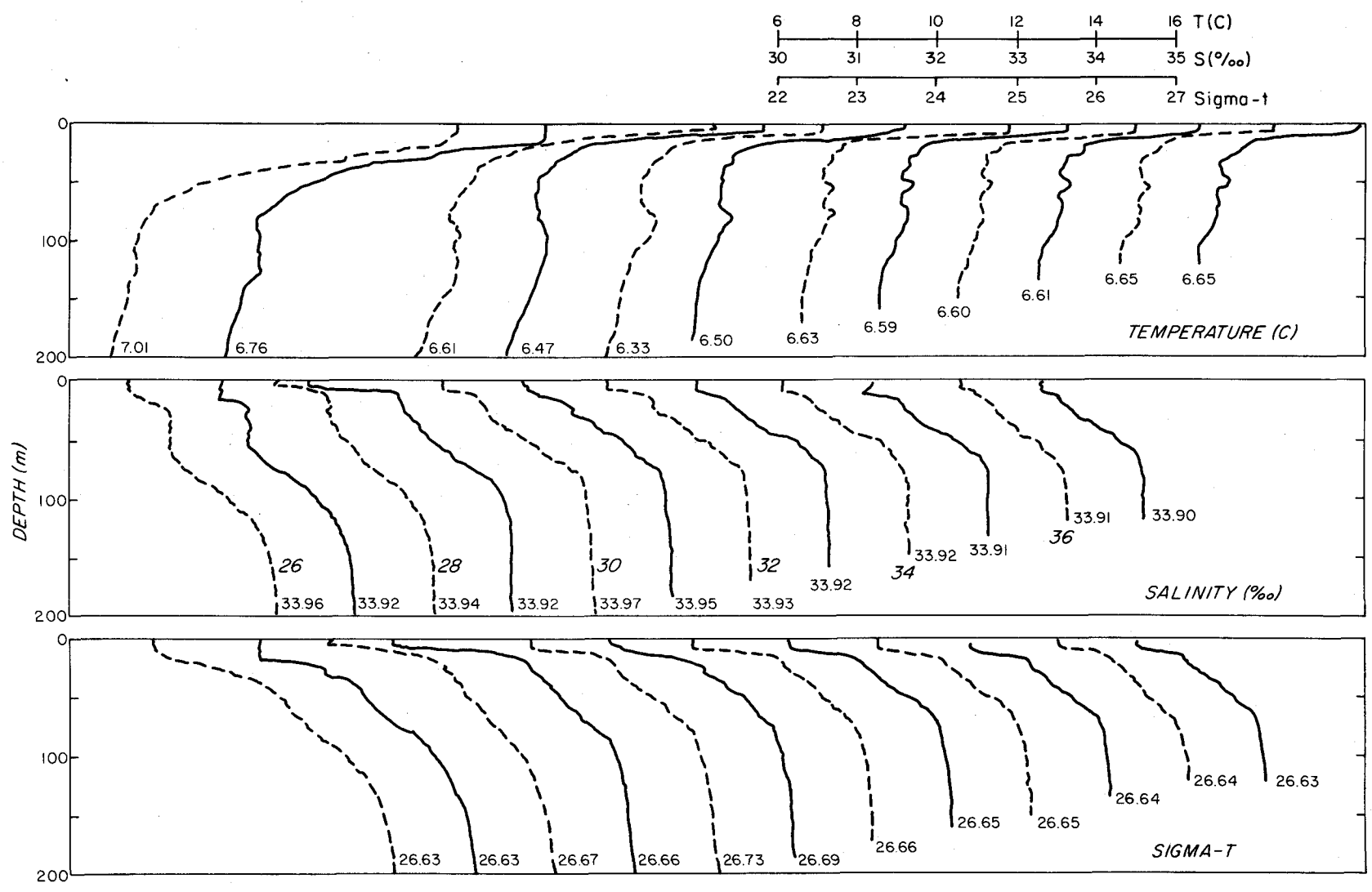


Figure 23(a). Staggered profiles of temperature, salinity and sigma-t for stations 26-37 along 45°15'N, 18-30 July 1973.

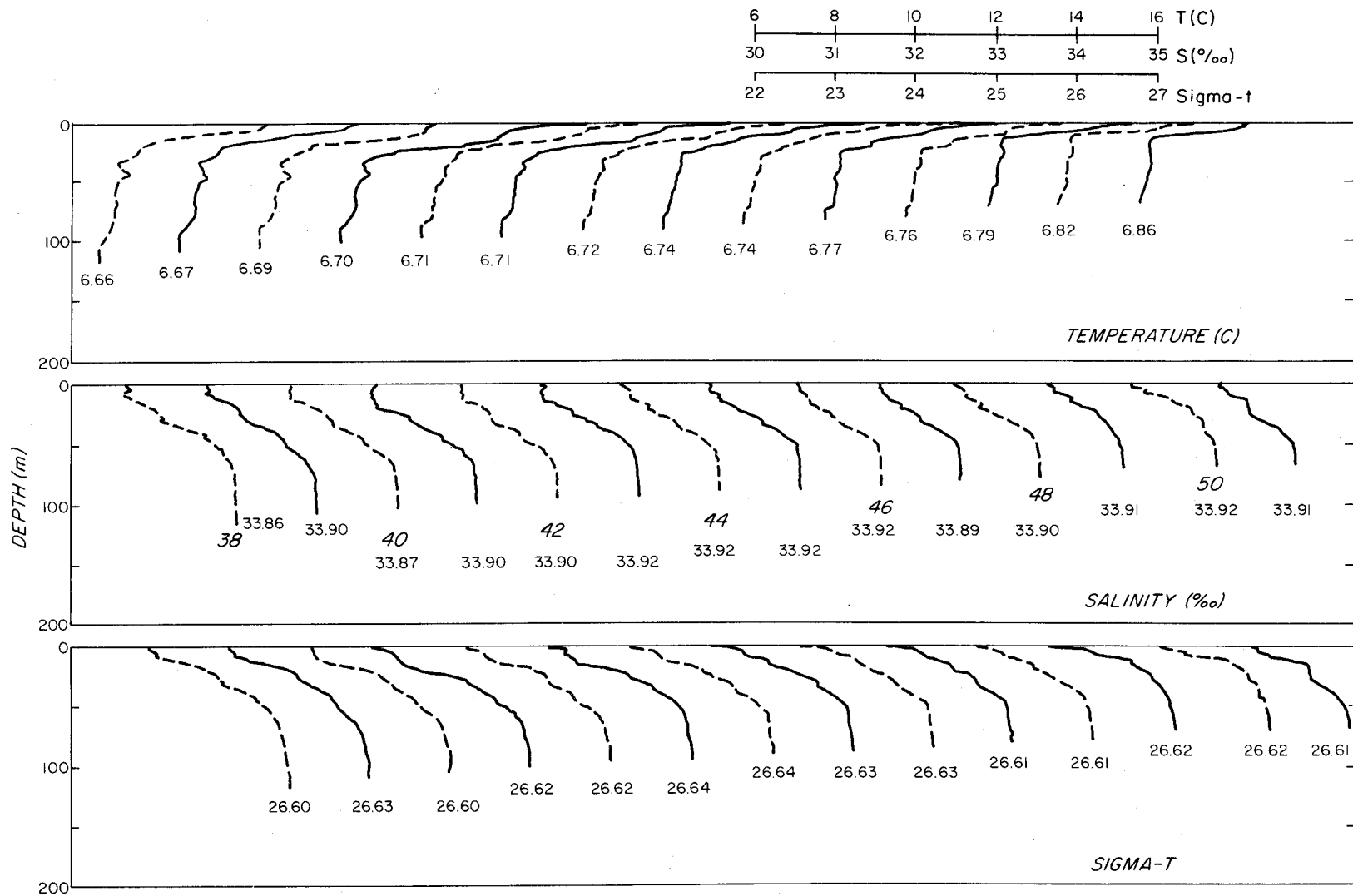


Figure 23(b). Staggered profiles of temperature, salinity and sigma-t for stations 38-51 along 45°15'N, 18-20 July 1973.

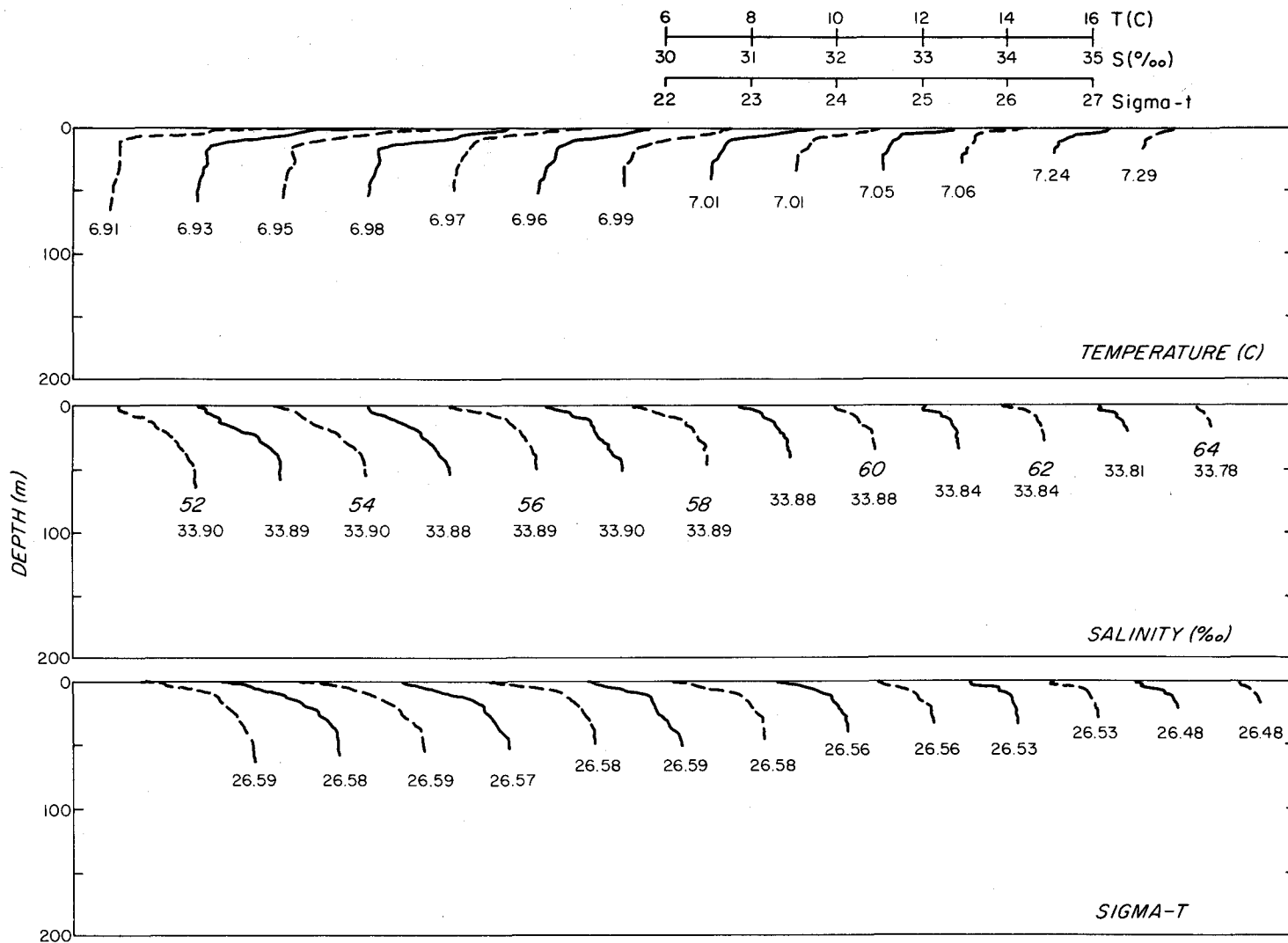


Figure 23(c). Staggered profiles of temperature, salinity and sigma-t for stations 52-64 along 45°15'N, 18-20 July 1973.

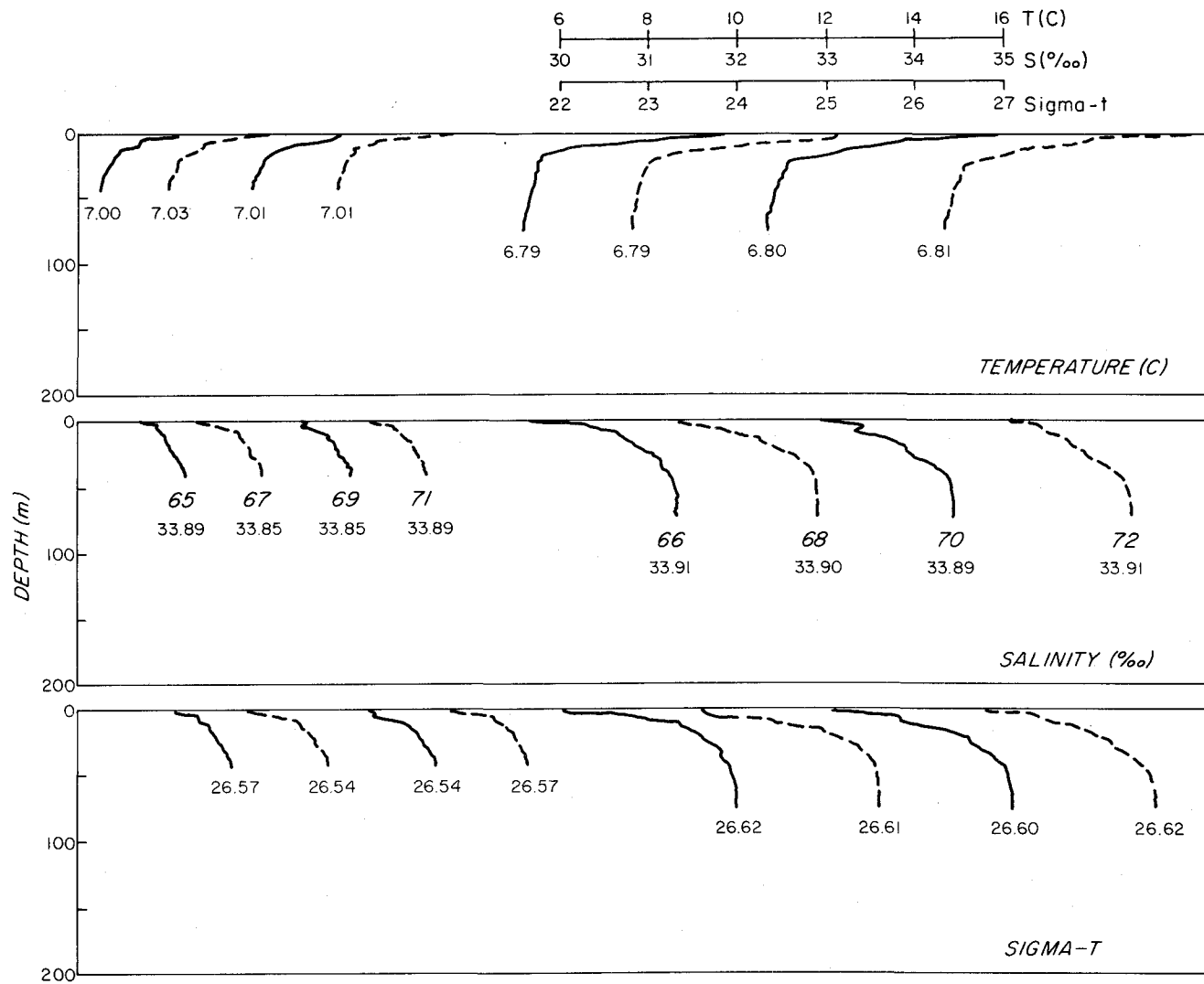


Figure 24. Staggered profiles of temperature, salinity and sigma-t for stations along 45°15'N, 20 July 1973.

NO 1 LAT 44 40.6 LONG 124 5.9 STN MA 1 DEPTH 33
 DATE 8/16/73 TIME 1703 AIR TEMP 53.1 WET BULB 52.1
 WIND DIR 260 SPEED 8 SWELL DIR 270 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 20.6 WEA 43 INSTR OSU1
 BKT TEMP 8.6 SAL 33.810 SAMPLE DEPTH 17 SAL 33.840

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	7.77	33.74	26.35	169.4	0	0
2	7.77	33.74	26.35	169.4	.003	.000
10	7.22	33.84	26.50	154.6	.016	.008
20	7.05	33.82	26.52	153.6	.031	.031
30	7.04	33.83	26.52	153.3	.047	.069
31	7.04	33.83	26.52	153.3	.046	.074

NO 2 LAT 44 49.5 LONG 124 18.9 STN MA 2 DEPTH 64
 DATE 8/16/73 TIME 1920 AIR TEMP 55.0 WET BULB 52.5
 WIND DIR 220 SPEED 10 SWELL DIR 280 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.2 WEA 1 INSTR OSU1
 BKT TEMP 9.8 SAL 32.777 SAMPLE DEPTH 57 SAL 33.441

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.69	32.75	25.28	271.1	0	0
10	9.09	32.76	25.38	261.4	.026	.013
20	8.41	32.71	25.45	255.3	.052	.052
30	7.34	32.95	25.79	222.9	.076	.110
40	7.26	33.17	25.97	215.6	.097	.186
50	7.18	33.35	26.12	191.2	.117	.275
60	7.43	33.61	26.29	175.4	.136	.377
61	7.44	33.64	26.32	173.3	.138	.388

NO 3 LAT 44 53.1 LONG 124 26.3 STN MA 3 DEPTH 190
 DATE 8/16/73 TIME 2105 AIR TEMP 54.9 WET BULB 54.5
 WIND DIR 230 SPEED 12 SWELL DIR 280 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.8 WEA 3 INSTR OSU1
 BKT TEMP 11.5 SAL 32.395 SAMPLE DEPTH 173 SAL 33.922

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.04	32.45	24.81	315.2	0	0
10	10.67	32.54	24.95	302.6	.031	.015
20	8.29	32.52	25.32	267.8	.060	.058
30	7.39	32.76	25.63	237.7	.085	.122
40	7.34	33.03	25.85	217.1	.108	.202
50	7.22	33.24	26.03	200.3	.129	.296
60	7.55	33.57	26.25	180.0	.148	.401
70	7.61	33.72	26.35	169.8	.166	.514
80	7.50	33.80	26.43	162.5	.182	.639
90	7.40	33.85	26.49	157.6	.199	.775
100	7.21	33.88	26.54	152.9	.214	.922
110	7.05	33.93	26.58	149.0	.229	1.081
120	6.91	33.93	26.62	145.7	.244	1.250
130	6.86	33.93	26.62	145.0	.258	1.432
140	6.86	33.94	26.64	143.6	.273	1.627
150	6.77	33.93	26.64	144.1	.287	1.836
160	6.77	33.92	26.63	145.0	.302	2.060
170	6.76	33.93	26.64	144.3	.316	2.299
180	6.76	33.92	26.63	145.1	.331	2.552
188	6.75	33.93	26.64	144.4	.342	2.765

NO 4 LAT 44 57.2 LONG 124 31.6 STN MA 4 DEPTH 418
 DATE 8/16/73 TIME 2315 AIR TEMP 58.8 WET BULB 55.5
 WIND DIR 210 SPEED 12 SWELL DIR 280 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 21.8 WEA 2 INSTR OSU1
 BKT TEMP 12.2 SAL 32.326 SAMPLE DEPTH 383 SAL 34.027

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.09	32.22	24.44	350.3	0	0
10	11.26	32.41	24.74	322.1	.034	.017
20	8.52	32.59	25.34	265.8	.063	.059
30	7.98	32.53	25.37	262.8	.089	.125
40	7.41	32.63	25.53	247.8	.114	.214
50	7.30	32.86	25.72	229.4	.138	.321
60	7.41	33.06	25.87	216.1	.160	.443
70	7.54	33.21	25.96	206.8	.181	.580
80	7.43	33.49	26.20	184.6	.201	.727
90	7.40	33.63	26.32	173.6	.219	.879
100	7.32	33.71	26.39	167.0	.236	1.039
110	7.32	33.77	26.44	162.7	.252	1.212
120	7.17	33.83	26.50	156.4	.268	1.395
130	7.07	33.87	26.55	152.2	.284	1.584
140	7.01	33.89	26.57	149.9	.299	1.792
150	6.93	33.92	26.61	146.9	.314	2.008
160	6.88	33.93	26.62	145.7	.328	2.235
170	6.83	33.93	26.63	145.2	.343	2.476
180	6.79	33.92	26.63	145.5	.357	2.729
190	6.68	33.95	26.66	142.4	.372	2.993
200	6.66	33.96	26.68	141.1	.386	3.269
225	6.53	33.97	26.70	139.3	.421	4.012
250	6.30	33.98	26.74	135.9	.455	4.829
300	6.13	34.00	26.78	132.3	.522	6.669
400	5.55	34.05	26.89	122.9	.650	11.126
412	5.53	34.05	26.89	122.8	.665	11.726

NO 5 LAT 44 58.2 LONG 124 12.0 STN MA 5 DEPTH 112
 DATE 8/17/73 TIME 237 AIR TEMP 56.7 WET BULB 55.5
 WIND DIR 10 SPEED 10 SWELL DIR 300 HT 4 PER 7
 CLOUD TYPE 6 - 0 AMT 6 BAR 22.2 WEA 1 INSTR OSU1
 BKT TEMP 10.9 SAL 32.623 SAMPLE DEPTH 91 SAL 33.890

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.21	32.71	25.16	282.3	0	0
6	10.21	32.71	25.16	282.4	.017	.005
10	9.28	32.90	25.46	254.3	.028	.014
20	7.36	32.87	25.72	229.3	.052	.050
30	7.17	33.30	26.09	194.6	.073	.103
40	7.21	33.70	26.40	165.4	.092	.167
50	7.46	33.83	26.46	159.2	.108	.240
60	7.43	33.86	26.49	157.0	.124	.327
70	7.21	33.87	26.53	153.2	.139	.428
80	7.05	33.88	26.56	150.4	.154	.542
90	6.91	33.89	26.58	148.3	.169	.668
100	6.81	33.91	26.62	145.4	.184	.807
109	6.81	33.91	26.62	145.5	.197	.944

NO 6 LAT 44 58.7 LONG 124 2.5 STN MA 6 DEPTH 18
 DATE 8/17/73 TIME 422 AIR TEMP 51.1 WET BULB 50.2
 WIND DIR 0 SPEED 5 SWELL DIR 300 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.0 WEA 1 INSTR OSU1
 BKT TEMP 9.3 SAL 33.519 SAMPLE DEPTH 4 SAL 33.652

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.14	33.59	26.18	185.7	0	0
10	7.58	33.69	26.34	170.7	.017	.009
15	7.21	33.78	26.46	159.1	.026	.019

NO 7 LAT 45 3.8 LONG 124 9.9 STN MA 7 DEPTH 107
 DATE 8/17/73 TIME 545 AIR TEMP 54.3 WET BULB 52.2
 WIND DIR 40 SPEED 4 SWELL DIR 310 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.0 WEA 2 INSTR OSU1
 BKT TEMP 12.0 SAL 32.007 SAMPLE DEPTH 91 SAL 33.890

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.07	32.01	24.29	365.5	0	0
10	10.82	32.43	24.84	313.2	.034	.017
20	8.80	32.83	25.48	252.1	.063	.059
30	7.23	33.08	25.91	211.7	.086	.116
40	7.16	33.40	26.17	187.1	.106	.185
50	7.18	33.63	26.35	170.3	.123	.265
60	7.37	33.81	26.46	159.3	.140	.355
70	7.26	33.85	26.51	155.4	.156	.457
80	7.06	33.87	26.55	151.4	.171	.572
90	6.88	33.88	26.58	148.4	.186	.699
100	6.82	33.89	26.60	147.0	.201	.839
103	6.81	33.90	26.61	146.2	.205	.884

NO 8 LAT 45 8.8 LONG 124 15.3 STN MA 8 DEPTH 170
 DATE 8/17/73 TIME 805 AIR TEMP 51.3 WET BULB 50.4
 WIND DIR 10 SPEED 6 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 23.0 WEA 1 INSTR OSU1
 BKT TEMP 10.6 SAL 32.374 SAMPLE DEPTH 146 SAL 33.914

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.35	32.45	24.93	303.8	0	0
10	9.15	32.70	25.32	266.7	.028	.014
20	8.59	32.79	25.48	252.0	.055	.053
30	7.23	32.85	25.73	228.9	.079	.113
40	7.16	33.10	25.93	209.5	.101	.190
50	7.21	33.29	26.07	196.1	.121	.281
60	7.24	33.50	26.23	181.0	.140	.384
70	7.63	33.73	26.40	165.6	.157	.494
80	7.43	33.86	26.49	157.1	.173	.616
90	7.35	33.86	26.50	156.1	.189	.748
100	7.22	33.87	26.53	153.8	.204	.896
110	7.06	33.88	26.56	151.1	.219	1.056
120	6.83	33.90	26.60	146.7	.234	1.227
130	6.79	33.88	26.59	147.8	.249	1.410
140	6.72	33.90	26.62	145.5	.263	1.607
150	6.68	33.91	26.63	144.3	.278	1.817
160	6.67	33.91	26.63	144.4	.292	2.041
168	6.68	33.91	26.63	144.7	.304	2.230

NO 9 LAT 45 9.8 LONG 124 6.4 STN MA 9 DEPTH 80
 DATE 8/17/73 TIME 1025 AIR TEMP 48.1 WET BULB 47.7
 WIND DIR 60 SPEED 5 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.5 WEA 2 INSTR OSU1
 BKT TEMP 9.5 SAL 32.686 SAMPLE DEPTH 70 SAL 33.859

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.54	32.86	25.39	260.6	0	0
1	9.54	32.86	25.39	260.7	.003	.000
10	9.07	33.05	25.61	239.6	.025	.012
20	8.24	33.12	25.79	222.4	.048	.046
30	7.18	33.37	26.14	189.5	.069	.398
40	7.16	33.49	26.24	180.4	.087	.162
50	7.15	33.56	26.29	175.2	.105	.242
60	7.23	33.77	26.45	160.8	.122	.335
70	7.12	33.88	26.55	151.3	.137	.435
78	6.89	33.90	26.60	146.9	.149	.524

NO 10 LAT 45 10.9 LONG 123 59.7 STN MA10 DEPTH 24
 DATE 8/17/73 TIME 1206 AIR TEMP 46.5 WET BULB 47.8
 WIND DIR 90 SPEED 8 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.2 WEA 2 INSTR OSU1
 BKT TEMP 8.5 SAL 33.499 SAMPLE DEPTH 17 SAL 33.823

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.40	33.37	25.96	205.8	0	0
10	7.36	33.74	26.41	164.0	.018	.009
20	7.11	33.83	26.51	154.1	.034	.032
25	7.10	33.83	26.51	154.0	.042	.050

NO 11 LAT 45 14.4 LONG 124 5.1 STN MA11 DEPTH 79
 DATE 8/17/73 TIME 1330 AIR TEMP 49.5 WET BULB 47.9
 WIND DIR 90 SPEED 4 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.5 WEA 2 INSTR OSU1
 BKT TEMP 10.9 SAL 32.321 SAMPLE DEPTH 63 SAL 33.883

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.30	32.53	25.00	297.1	0	0
1	10.30	32.53	25.00	297.1	.003	.000
10	8.78	33.13	25.72	229.3	.026	.012
20	8.22	33.37	25.99	203.5	.047	.044
30	7.45	33.53	26.23	181.1	.067	.093
40	7.14	33.69	26.40	165.2	.084	.153
50	7.16	33.83	26.50	155.6	.100	.225
60	6.98	33.90	26.58	147.8	.115	.307
70	6.92	33.89	26.58	147.9	.130	.404
78	6.91	33.89	26.59	147.9	.141	.491

NO 12 LAT 45 16.6 LONG 124 8.6 STN MA12 DEPTH 103
 DATE 8/17/73 TIME 1457 AIR TEMP 56.9 WET BULB 54.5
 WIND DIR 20 SPEED 4 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 0 - 3 AMT 1 BAR 23.0 WEA 3 INSTR OSU1
 BKT TEMP 11.6 SAL 32.335 SAMPLE DEPTH 82 SAL 33.903

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.75	32.16	24.46	348.8	0	0
10	8.48	32.71	25.44	256.2	.029	.014
20	7.26	32.98	25.82	219.7	.052	.049
30	7.15	33.29	26.08	195.0	.073	.100
40	7.13	33.66	26.38	167.3	.091	.164
50	7.23	33.81	26.48	157.6	.108	.236
60	7.20	33.87	26.53	152.9	.123	.322
70	7.06	33.87	26.55	151.2	.138	.421
80	6.88	33.89	26.59	147.5	.153	.534
90	6.82	33.91	26.61	145.4	.168	.658
98	6.82	33.90	26.61	146.2	.180	.768

NO 13 LAT 45 21.0 LONG 124 15.0 STN MA13 DEPTH 161
 DATE 8/17/73 TIME 1652 AIR TEMP 57.0 WET BULB 54.1
 WIND DIR 0 SPEED 4 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.1 WEA 2 INSTR OSU1
 BKT TEMP 13.9 SAL 30.823 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.74	30.89	23.10	478.7	0	0
1	13.74	30.89	23.10	478.7	.005	.000
10	11.36	32.21	24.57	338.5	.044	.021
20	8.34	32.50	25.29	270.0	.072	.063
30	7.44	32.66	25.55	245.8	.098	.128
40	7.26	32.76	25.65	235.8	.123	.213
50	7.26	32.92	25.77	224.6	.146	.317
60	7.27	33.25	26.04	199.7	.167	.433
70	7.31	33.40	26.15	189.5	.186	.560
80	7.14	33.63	26.35	170.3	.204	.694
90	7.20	33.82	26.49	157.1	.221	.832
100	7.08	33.86	26.54	152.7	.236	.979
110	6.99	33.91	26.59	147.9	.251	1.137
120	6.89	33.89	26.59	148.2	.266	1.306
130	6.65	33.91	26.64	143.7	.280	1.488
140	6.56	33.92	26.66	142.0	.295	1.681
150	6.56	33.91	26.65	142.9	.309	1.888
158	6.55	33.94	26.67	143.6	.320	2.062

NO 14 LAT 45 23.7 LONG 124 .5 STN MA14 DEPTH 31
 DATE 8/17/73 TIME 1925 AIR TEMP 54.7 WET BULB 52.2
 WIND DIR 300 SPEED 8 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 23.0 WEA 2 INSTR OSU1
 BKT TEMP 11.3 SAL 32.521 SAMPLE DEPTH 23 SAL 33.541

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.55	32.55	24.98	299.6	0	0
1	10.55	32.55	24.98	299.7	.003	.000
10	8.52	33.37	25.94	209.1	.025	.012
20	7.95	33.53	26.16	187.8	.044	.041
30	7.15	33.79	26.47	157.8	.062	.085
31	7.15	33.79	26.47	157.8	.064	.089

NO 15 LAT 45 23.8 LONG 123 59.4 STN MA15 DEPTH 23
 DATE 8/17/73 TIME 2024 AIR TEMP 55.4 WET BULB 52.3
 WIND DIR 310 SPEED 12 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 8 - 6 AMT 2 BAR 22.2 WEA 2 INSTR OSU1
 BKT TEMP 10.3 SAL 32.331 SAMPLE DEPTH 13 SAL 33.322

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.23	32.75	25.19	279.7	0	0
1	10.23	32.75	25.19	279.7	.003	.000
10	6.93	33.30	25.83	218.9	.024	.011
20	7.57	33.67	26.33	171.8	.044	.041
22	7.30	33.71	26.39	165.6	.047	.048

NO 16 LAT 45 25.5 LONG 124 2.5 STN MA16 DEPTH 60
 DATE 8/18/73 TIME 15 AIR TEMP 60.7 WET BULB 56.0
 WIND DIR 310 SPEED 15 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 21.9 WEA 2 INSTR OSU1
 BKT TEMP 11.7 SAL 32.348 SAMPLE DEPTH 49 SAL 33.842

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.85	32.12	24.41	353.5	0	0
10	9.51	32.76	25.31	267.8	.032	.015
20	7.51	33.22	25.98	204.9	.054	.049
30	7.68	33.43	26.12	191.7	.074	.098
40	7.17	33.67	26.37	167.5	.092	.161
50	6.94	33.86	26.56	150.1	.108	.232
57	6.92	33.87	26.57	149.2	.118	.288

NO 17 LAT 45 29.9 LONG 124 9.6 STN MA17 DEPTH 116
 DATE 8/18/73 TIME 225 AIR TEMP 58.0 WET BULB 53.7
 WIND DIR 300 SPEED 15 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 21.9 WEA 2 INSTR OSU1
 BKT TEMP 13.5 SAL 31.285 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.75	30.81	23.04	484.8	0	0
10	10.62	32.72	25.10	288.4	.035	.016
20	7.52	32.83	25.67	234.5	.060	.053
30	7.24	33.09	25.91	211.1	.083	.109
40	7.24	33.38	26.14	189.7	.103	.180
50	7.29	33.53	26.25	179.3	.121	.263
60	7.15	33.65	26.36	168.6	.139	.359
70	7.33	33.84	26.49	157.0	.155	.464
80	7.02	33.86	26.55	151.6	.170	.579
90	6.97	33.90	26.59	148.1	.185	.706
100	6.73	33.92	26.63	143.6	.200	.844
110	6.72	33.92	26.64	143.6	.214	.995
111	6.72	33.92	26.64	143.6	.216	1.011

NO 18 LAT 45 36.8 LONG 123 58.0 STN MA18 DEPTH 22
 DATE 8/18/73 TIME 446 AIR TEMP 53.0 WET BULB 50.1
 WIND DIR 0 SPEED 8 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.313 SAMPLE DEPTH 11 SAL 32.482

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.33	32.30	24.65	331.2	0	0
10	10.96	32.55	24.91	306.6	.032	.016
18	8.13	33.43	26.05	197.8	.051	.042

NO 19 LAT 45 44.4 LONG 124 9.1 STN MA19 DEPTH 96
 DATE 8/18/73 TIME 634 AIR TEMP 56.2 WET BULB 54.5
 WIND DIR 20 SPEED 9 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.1 WEA 2 INSTR OSU1
 BKT TEMP 13.6 SAL 30.290 SAMPLE DEPTH 77 SAL 33.897

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.55	30.37	22.74	513.4	0	0
1	13.55	30.37	22.74	513.4	.005	.000
10	10.35	33.00	25.36	263.7	.037	.016
20	7.64	33.06	25.83	218.6	.061	.051
30	7.68	33.31	26.02	200.6	.082	.104
40	7.19	33.49	26.23	180.8	.102	.171
50	7.05	33.67	26.39	165.7	.119	.249
60	6.99	33.83	26.53	153.1	.135	.336
70	7.01	33.86	26.55	151.3	.150	.434
80	6.68	33.90	26.63	144.2	.165	.544
90	6.68	33.90	26.63	144.3	.179	.667
93	6.68	33.90	26.63	144.3	.183	.707

NO 20 LAT 45 39.7 LONG 124 17.2 STN MA20 DEPTH 131
 DATE 8/18/73 TIME 815 AIR TEMP 56.2 WET BULB 52.7
 WIND DIR 10 SPEED 14 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 13.4 SAL 30.666 SAMPLE DEPTH 112 SAL 33.904

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.20	30.91	23.22	467.1	0	0
10	11.98	32.26	24.50	345.6	.039	.018
20	8.52	32.66	25.39	260.6	.069	.062
30	7.68	32.73	25.54	246.6	.094	.126
40	7.51	32.89	25.72	229.8	.118	.209
50	7.34	33.12	25.92	210.5	.140	.303
60	7.20	33.34	26.11	192.4	.160	.419
70	7.27	33.54	26.26	179.0	.179	.539
80	7.10	33.76	26.46	159.8	.196	.666
90	7.15	33.86	26.53	153.4	.211	.798
100	6.94	33.83	26.57	149.3	.226	.941
110	6.76	33.89	26.61	146.4	.241	1.095
120	6.66	33.89	26.62	145.2	.256	1.262
130	6.55	33.92	26.66	141.7	.270	1.441
131	6.56	33.91	26.65	142.6	.271	1.460

NO 21 LAT 45 35.5 LONG 124 24.5 STN MA21 DEPTH 192
 DATE 8/18/73 TIME 945 AIR TEMP 55.8 WET BULB 52.3
 WIND DIR 10 SPEED 12 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 12.4 SAL 32.245 SAMPLE DEPTH 175 SAL 33.935

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.33	32.25	24.42	352.4	0	0
10	12.21	32.26	24.45	349.7	.035	.018
20	8.61	32.53	25.28	271.6	.065	.061
30	7.99	32.59	25.41	258.5	.091	.127
40	7.72	32.73	25.57	244.2	.116	.215
50	7.53	32.93	25.75	227.2	.140	.321
60	7.39	33.15	25.94	208.6	.161	.439
70	7.16	33.35	26.13	191.3	.182	.571
80	7.49	33.50	26.20	164.4	.201	.713
90	7.23	33.58	26.30	175.4	.219	.866
100	7.28	33.75	26.42	163.9	.236	1.028
110	7.37	33.86	26.50	156.7	.252	1.154
120	7.24	33.89	26.54	152.6	.267	1.370
130	7.15	33.92	26.58	149.6	.282	1.559
140	6.94	33.90	26.59	148.4	.297	1.760
150	6.70	33.91	26.63	144.7	.311	1.972
160	6.67	33.91	26.63	144.4	.326	2.157
170	6.57	33.93	26.67	141.5	.340	2.433
180	6.48	33.93	26.68	140.8	.354	2.679
189	6.48	33.93	26.68	140.9	.367	2.913

NO 22 LAT 45 32.4 LONG 124 29.8 STN MA22 DEPTH 272
 DATE 8/18/73 TIME 1120 AIR TEMP 56.5 WET BULB 54.0
 WIND DIR 20 SPEED 15 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 5 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 13.1 SAL 32.108 SAMPLE DEPTH 245 SAL 33.963

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.10	32.07	24.14	379.8	0	0
10	12.90	32.16	24.24	370.1	.038	.019
20	9.45	32.43	25.07	291.5	.070	.067
30	8.57	32.50	25.26	273.4	.098	.137
40	7.59	32.58	25.41	259.0	.125	.229
50	7.79	32.77	25.58	242.7	.150	.342
60	7.36	32.92	25.76	225.8	.173	.471
70	7.71	33.23	25.96	207.6	.195	.611
80	7.61	33.40	26.11	193.5	.215	.761
90	7.47	33.53	26.23	182.3	.234	.920
100	7.36	33.71	26.38	167.6	.251	1.087
110	7.52	33.81	26.44	162.1	.268	1.260
120	7.43	33.87	26.50	157.0	.284	1.443
130	7.33	33.87	26.52	155.4	.299	1.638
140	7.05	33.87	26.55	152.1	.315	1.844
150	6.97	33.90	26.59	149.0	.330	2.062
160	6.89	33.89	26.59	148.6	.344	2.293
170	6.78	33.91	26.62	146.0	.359	2.534
180	6.68	33.92	26.64	144.2	.373	2.797
190	6.62	33.93	26.66	142.7	.388	3.053
200	6.57	33.95	26.68	140.7	.402	3.329
225	6.46	33.96	26.70	133.3	.437	4.078
250	6.27	33.97	26.73	135.0	.472	4.897
265	6.26	33.97	26.74	136.1	.492	5.423

NO 23 LAT 45 23.7 LONG 124 44.9 STN MA23 DEPTH 615
 DATE 8/18/73 TIME 1422 AIR TEMP 57.8 WET BULB 53.0
 WIND DIR 20 SPEED 14 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.4 WEA 2 INSTR OSU1
 BKT TEMP 15.0 SAL 32.151 SAMPLE DEPTH 574 SAL 34.181

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.95	32.19	23.85	407.2	0	0
2	14.95	32.19	23.85	407.3	.008	.001
10	14.32	32.18	23.97	395.5	.041	.020
20	12.15	32.51	24.66	330.5	.077	.075
30	10.25	32.56	25.04	294.6	.108	.151
40	8.97	32.55	25.24	275.7	.136	.250
50	8.47	32.58	25.33	266.8	.163	.372
60	8.16	32.70	25.47	253.5	.189	.515
70	7.62	32.82	25.65	236.9	.214	.675
80	7.51	33.01	25.81	221.4	.237	.846
90	7.46	33.21	25.98	205.7	.258	1.028
100	7.87	33.50	26.14	190.6	.278	1.215
110	7.79	33.67	26.29	176.6	.296	1.407
120	7.74	33.72	26.34	172.4	.314	1.607
130	7.55	33.79	26.42	164.7	.331	1.817
140	7.46	33.84	26.47	159.9	.347	2.035
150	7.37	33.87	26.51	156.3	.362	2.264
160	7.14	33.86	26.53	154.4	.376	2.504
170	7.04	33.89	26.57	150.9	.393	2.755
180	6.94	33.91	26.60	148.3	.408	3.016
190	6.80	33.94	26.64	144.3	.423	3.288
200	6.76	33.92	26.63	145.8	.437	3.572
225	6.53	33.95	26.68	140.5	.473	4.331
250	6.21	33.96	26.73	136.0	.508	5.150
300	5.91	34.00	26.80	129.9	.574	6.987
400	5.44	34.06	26.91	120.9	.700	11.388
500	4.92	34.12	27.01	111.4	.816	16.597
600	4.63	34.20	27.11	102.9	.923	22.433
603	4.64	34.19	27.10	103.8	.926	22.619

NO 24 LAT 45 21.6 LONG 124 48.5 STN MA24 DEPTH 629
 DATE 8/18/73 TIME 1633 AIR TEMP 57.2 WET BULB 53.1
 WIND DIR 20 SPEED 15 SWELL DIR 340 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.1 WEA 2 INSTR OSU1
 BKT TEMP 14.6 SAL 32.162 SAMPLE DEPTH 611 SAL 34.199

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.81	32.21	23.89	402.9	0	0
10	14.77	32.19	23.89	403.8	.040	.020
20	14.74	32.20	23.90	402.7	.081	.081
30	13.34	32.48	24.40	355.0	.120	.177
40	11.02	32.57	24.91	306.8	.152	.292
50	8.79	32.60	25.30	269.6	.181	.419
60	8.30	32.63	25.40	260.7	.207	.565
70	7.82	32.65	25.49	252.4	.233	.731
80	7.56	32.94	25.75	227.3	.257	.911
90	7.53	33.11	25.89	214.4	.279	1.098
100	7.88	33.34	26.02	202.3	.300	1.295
110	7.92	33.52	26.15	189.8	.319	1.501
120	7.79	33.63	26.26	180.1	.338	1.712
130	7.78	33.70	26.31	174.9	.356	1.936
140	7.65	33.77	26.39	167.7	.373	2.168
150	7.55	33.79	26.42	165.1	.389	2.409
160	7.37	33.82	26.47	160.5	.406	2.662
170	7.05	33.86	26.54	153.3	.421	2.920
180	6.94	33.88	26.57	150.5	.436	3.185
190	6.80	33.90	26.61	147.3	.451	3.460
200	6.76	33.91	26.62	146.2	.466	3.745
225	6.50	33.94	26.68	140.9	.502	4.506
250	6.42	33.97	26.71	136.3	.537	5.335
300	6.14	33.97	26.75	134.8	.605	7.207
400	5.49	34.03	26.88	123.7	.734	11.736
500	4.82	34.09	27.00	112.3	.852	17.018
600	4.53	34.18	27.11	103.2	.960	22.933
629	4.41	34.22	27.15	99.1	.989	24.748

NO 25 LAT 45 18.5 LONG 124 53.5 STN MA25 DEPTH 817
 DATE 8/18/73 TIME 1905 AIR TEMP 59.2 WET BULB 53.5
 WIND DIR 350 SPEED 16 SWELL DIR 210 HT 4 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 22.8 WEA 2 INSTR OSU1
 BKT TEMP 15.4 SAL 32.192 SAMPLE DEPTH 739 SAL 34.269

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.56	32.25	23.76	415.4	0	0
1	15.56	32.25	23.76	415.5	.004	.000
10	15.50	32.25	23.78	414.5	.042	.021
20	14.16	32.56	24.30	364.7	.082	.081
30	12.19	32.57	24.70	327.0	.117	.168
40	10.28	32.63	25.09	290.1	.147	.273
50	8.57	32.60	25.34	266.3	.174	.397
60	8.33	32.65	25.41	259.7	.201	.541
70	8.09	32.67	25.40	254.6	.227	.709
80	7.88	32.76	25.57	244.7	.252	.896
90	7.61	32.97	25.77	225.9	.275	1.096
100	7.60	33.00	25.79	223.7	.296	1.310
110	7.66	33.30	26.02	202.3	.318	1.528
120	7.72	33.50	26.17	188.2	.338	1.751
130	7.77	33.62	26.26	180.1	.356	1.981
140	7.61	33.72	26.36	170.6	.374	2.217
150	7.52	33.76	26.43	166.6	.391	2.462
160	7.32	33.81	26.47	160.5	.407	2.715
170	7.23	33.82	26.49	158.7	.423	2.978
180	7.24	33.88	26.53	154.5	.438	3.251
190	7.21	33.88	26.54	154.3	.454	3.536
200	7.09	33.90	26.57	151.3	.469	3.833
225	6.83	33.93	26.63	145.9	.506	4.621
250	6.59	33.96	26.68	141.4	.542	5.471
300	6.37	33.99	26.74	136.5	.611	7.371
400	5.41	34.04	26.93	122.0	.740	11.854
500	5.14	34.13	27.00	113.1	.856	17.082
600	4.55	34.20	27.12	101.9	.963	22.988
800	3.96	34.35	27.33	85.8	1.153	36.191
810	3.87	34.37	27.33	83.3	1.161	36.873

NO 26 LAT 45 15.0 LONG 125 0 STN SA 1 DEPTH1097
 DATE 8/18/73 TIME 2125 AIR TEMP 58.0 WET BULB 54.1
 WIND DIR 350 SPEED 16 SWELL DIR 340 HT 4 PER 7
 CLOUD TYPE 0 - 0 AMT 0 BAR 22.9 WEA 0 INSTR OSU1
 BKT TEMP 15.6 SAL 31.945 SAMPLE DEPTH 942 SAL 34.379

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	15.89	32.03	23.52	438.5	0	0
1	15.89	32.03	23.52	438.5	.004	.000
10	15.73	32.00	23.53	437.6	.044	.022
20	14.99	32.29	23.92	401.2	.086	.085
30	13.02	32.57	24.54	342.2	.122	.175
40	10.79	32.60	24.97	300.7	.154	.287
50	9.41	32.55	25.17	282.5	.184	.418
60	8.90	32.55	25.25	275.0	.211	.570
70	8.17	32.72	25.49	252.0	.238	.741
80	7.99	32.87	25.63	238.7	.262	.927
90	7.83	33.12	25.85	217.8	.285	1.123
100	7.73	33.30	26.01	202.9	.306	1.322
110	7.66	33.43	26.12	192.7	.326	1.530
120	7.72	33.63	26.27	178.8	.345	1.741
130	7.69	33.72	26.34	171.9	.362	1.959
140	7.51	33.79	26.42	164.3	.379	2.183
150	7.46	33.86	26.49	158.6	.395	2.416
160	7.38	33.88	26.51	156.1	.410	2.660
170	7.28	33.92	26.56	152.0	.426	2.914
180	7.19	33.94	26.59	149.4	.441	3.179
190	7.11	33.94	26.60	148.5	.456	3.454
200	7.01	33.96	26.63	145.8	.471	3.742
225	6.56	33.95	26.68	140.9	.506	4.503
250	6.37	33.98	26.73	136.3	.541	5.326
300	6.10	34.04	26.81	129.3	.608	7.153
400	5.41	34.05	26.90	121.2	.733	11.547
500	5.00	34.13	27.02	111.4	.850	16.805
600	4.70	34.19	27.10	104.4	.959	22.771
800	3.95	34.35	27.30	85.7	1.149	36.041
1000	3.54	34.44	27.42	75.9	1.311	50.575
1005	3.54	34.44	27.42	75.9	1.315	50.953

NO 27 LAT 45 15.2 LONG 124 48.4 STN SA 2 DEPTH 760
 DATE 8/19/73 TIME 35 AIR TEMP 59.0 WET BULB 54.9
 WIND DIR 340 SPEED 22 SWELL DIR 340 HT 4 PER 6
 CLOUD TYPE 4 - 0 AMT 3 BAR 21.2 WEA 2 INSTR OSU1
 BKT TEMP 14.5 SAL 32.156 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.91	32.23	23.89	403.5	0	0
10	14.92	32.24	23.89	403.2	.040	.020
20	13.54	32.47	24.36	359.3	.080	.080
30	11.86	32.53	24.73	324.1	.113	.162
40	9.80	32.59	25.13	285.4	.143	.267
50	9.03	32.60	25.27	273.1	.171	.393
60	8.35	32.62	25.38	261.8	.198	.541
70	8.05	32.77	25.55	246.6	.224	.706
80	7.58	33.05	25.83	219.4	.247	.881
90	7.59	33.30	26.03	201.1	.268	1.061
100	7.67	33.44	26.13	191.9	.288	1.248
110	7.62	33.56	26.23	182.5	.307	1.445
120	7.61	33.68	26.32	173.8	.325	1.650
130	7.61	33.74	26.37	169.3	.342	1.864
140	7.27	33.80	26.47	159.8	.358	2.085
150	7.20	33.86	26.52	155.0	.374	2.313
160	7.11	33.87	26.54	153.2	.389	2.551
170	6.99	33.88	26.57	150.6	.404	2.801
180	6.87	33.89	26.59	148.8	.419	3.061
190	6.81	33.90	26.61	147.4	.434	3.334
200	6.76	33.92	26.63	145.7	.449	3.618
225	6.61	33.94	26.67	142.3	.485	4.386
250	6.54	33.96	26.69	140.3	.520	5.225
300	6.18	34.03	26.79	131.1	.587	7.074
400	5.36	34.05	26.91	120.6	.713	11.468
500	4.94	34.10	27.00	113.0	.829	16.692
600	4.59	34.17	27.09	104.6	.938	22.652
671	4.38	34.24	27.17	97.6	1.010	27.214

NO 28 LAT 45 15.3 LONG 124 36.9 STN SA 3 DEPTH 485
 DATE 8/19/73 TIME 253 AIR TEMP 29.3 WET BULB 55.2
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 4 PER 7
 CLOUD TYPE 0 - 4 AMT 2 BAR 20.0 WEA 2 INSTR OSU1
 BKT TEMP 14.4 SAL 31.605 SAMPLE DEPTH 391 SAL 34.052

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	14.21	31.94	23.81	410.7	0	0
1	14.21	31.94	23.81	410.7	.004	.000
10	12.24	32.48	24.62	334.1	.039	.019
20	9.52	32.58	25.17	281.5	.069	.064
30	8.67	32.60	25.32	267.3	.097	.133
40	8.21	32.67	25.44	255.8	.123	.224
50	8.09	32.76	25.53	247.6	.148	.338
60	7.79	32.94	25.72	230.2	.172	.469
70	7.66	33.01	25.79	223.3	.195	.616
80	7.50	33.21	25.97	206.4	.216	.777
90	7.69	33.43	26.12	192.8	.236	.947
100	7.68	33.54	26.20	184.6	.255	1.125
110	7.63	33.66	26.30	175.2	.273	1.312
120	7.73	33.79	26.39	167.5	.290	1.507
130	7.70	33.82	26.42	164.6	.306	1.715
140	7.61	33.86	26.46	160.5	.323	1.933
150	7.35	33.90	26.53	154.1	.338	2.161
160	7.15	33.91	26.57	150.8	.354	2.397
170	6.98	33.90	26.58	149.4	.369	2.645
180	6.93	33.92	26.61	147.4	.384	2.905
190	6.84	33.91	26.61	146.8	.398	3.178
200	6.61	33.94	26.67	142.0	.413	3.461
225	6.27	33.95	26.72	137.2	.448	4.206
250	6.08	33.97	26.76	133.6	.482	5.012
300	5.75	34.01	26.83	127.0	.547	6.804
400	5.33	34.05	26.92	119.9	.670	11.113
444	5.15	34.08	26.96	116.3	.723	13.316

NO 29 LAT 45 15.2 LONG 124 24.9 STN SA 4 DEPTH 380
 DATE 8/19/73 TIME 531 AIR TEMP 57.3 WET BULB 53.2
 WIND DIR 0 SPEED 20 SWELL DIR 340 HT 4 PER 6
 CLOUD TYPE 4 - 0 AMT 1 BAR 19.9 WEA 2 INSTR OSU1
 BKT TEMP 13.1 SAL 31.265 SAMPLE DEPTH 338 SAL 34.015

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	13.03	31.27	23.53	437.4	0	0
10	11.54	32.20	24.53	342.4	.042	.020
20	8.37	32.49	25.28	271.1	.071	.064
30	7.88	32.58	25.42	257.7	.098	.130
40	7.55	32.71	25.57	243.7	.123	.218
50	7.26	32.83	25.71	231.1	.147	.324
60	7.22	33.04	25.88	215.0	.169	.447
70	7.28	33.27	26.05	193.8	.190	.581
80	7.30	33.50	26.23	181.7	.209	.724
90	7.45	33.71	26.37	168.3	.226	.871
100	7.53	33.79	26.43	163.6	.243	1.029
110	7.50	33.87	26.49	157.8	.259	1.198
120	7.41	33.89	26.52	154.8	.274	1.378
130	7.31	33.89	26.53	153.7	.290	1.571
140	7.19	33.91	26.56	151.0	.305	1.777
150	7.05	33.90	26.57	150.0	.320	1.995
160	6.95	33.91	26.59	148.4	.335	2.227
170	6.80	33.90	26.61	147.2	.350	2.471
180	6.68	33.91	26.63	144.8	.364	2.726
190	6.56	33.91	26.65	143.5	.379	2.994
200	6.47	33.92	26.66	142.1	.393	3.272
225	6.23	33.93	26.71	138.0	.428	4.011
250	6.07	33.96	26.75	134.7	.462	4.821
300	5.84	33.96	26.78	132.1	.529	6.655
365	5.59	34.00	26.84	126.7	.612	9.422

NO 30 LAT 45 15.0 LONG 124 18.7 STN SA 5 DEPTH 250
 DATE 8/19/73 TIME 755 AIR TEMP 56.0 WET BULB 52.8
 WIND DIR 350 SPEED 20 SWELL DIR 340 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 19.9 WEA 1 INSTR OSU1
 BKT TEMP 12.0 SAL 31.992 SAMPLE DEPTH 227 SAL 33.982

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.84	31.87	24.22	371.7	0	0
10	11.18	32.02	24.46	349.5	.036	.018
20	7.98	32.53	25.37	262.7	.064	.060
30	7.70	32.59	25.46	254.2	.090	.124
40	7.39	32.80	25.66	234.9	.115	.210
50	7.22	33.06	25.89	213.4	.137	.311
60	7.22	33.26	26.05	198.6	.158	.423
70	7.27	33.51	26.24	180.4	.177	.548
80	7.59	33.79	26.41	164.9	.194	.677
90	7.54	33.83	26.45	160.7	.210	.815
100	7.38	33.85	26.49	157.4	.226	.966
110	7.05	33.87	26.55	151.7	.242	1.129
120	6.93	33.99	26.58	148.7	.257	1.302
130	6.85	33.89	26.59	147.8	.272	1.487
140	6.73	33.91	26.63	144.9	.286	1.683
150	6.67	33.91	26.63	144.3	.301	1.892
160	6.64	33.93	26.65	142.5	.315	2.114
170	6.60	33.93	26.66	142.0	.329	2.349
180	6.54	33.95	26.68	140.4	.343	2.596
190	6.37	33.96	26.71	137.3	.357	2.853
200	6.33	33.97	26.73	136.1	.371	3.120
225	6.17	33.97	26.75	134.0	.405	3.837
248	6.15	33.97	26.75	134.5	.435	4.564

NO 31 LAT 45 15.2 LONG 124 17.3 STN SA 6 DEPTH 190
 DATE 8/19/73 TIME 935 AIR TEMP 54.2 WET BULB 51.7
 WIND DIR 350 SPEED 16 SWELL DIR 340 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 19.8 WEA 2 INSTR OSU1
 BKT TEMP 12.0 SAL 32.012 SAMPLE DEPTH 165 SAL 33.940

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.95	32.01	24.31	363.3	0	0
1	11.95	32.01	24.31	363.4	.004	.000
10	11.25	32.12	24.52	343.7	.036	.018
20	8.05	32.55	25.37	262.2	.066	.062
30	7.51	32.69	25.56	244.5	.091	.124
40	7.30	32.95	25.80	222.3	.114	.205
50	7.29	33.27	26.05	198.7	.135	.300
60	7.24	33.42	26.17	187.0	.154	.406
70	7.21	33.60	26.32	173.3	.172	.523
80	7.52	33.80	26.43	162.8	.189	.647
90	7.30	33.84	26.50	156.5	.205	.783
100	7.15	33.87	26.54	152.9	.220	.930
110	7.03	33.86	26.55	152.1	.236	1.051
120	6.88	33.90	26.60	147.5	.251	1.263
130	6.77	33.92	26.63	144.5	.265	1.444
140	6.70	33.91	26.63	144.2	.280	1.639
150	6.62	33.93	26.66	142.1	.294	1.845
160	6.60	33.93	26.66	142.0	.308	2.065
170	6.58	33.93	26.66	141.7	.322	2.298
180	6.56	33.93	26.67	141.4	.336	2.547
186	6.50	33.95	26.69	139.6	.345	2.700

NO 32 LAT 45 15.1 LONG 124 15.9 STN SA 7 DEPTH 172
 DATE 8/19/73 TIME 1130 AIR TEMP 55.2 WET BULB 53.1
 WIND DIR 350 SPEED 13 SWELL DIR 340 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 0 BAR 19.1 WEA 2 INSTR OSU1
 BKT TEMP 12.1 SAL 32.074 SAMPLE DEPTH 157 SAL 33.929

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.93	32.08	24.37	357.8	0	0
10	10.58	32.31	24.79	318.1	.036	.018
20	7.67	32.68	25.54	246.8	.062	.057
30	7.42	32.77	25.64	237.4	.086	.117
40	7.19	33.06	25.90	212.9	.108	.194
50	7.14	33.21	26.02	201.2	.129	.287
60	7.29	33.52	26.24	180.2	.148	.392
70	7.16	33.66	26.37	168.2	.165	.505
80	7.34	33.85	26.50	156.6	.181	.625
90	7.19	33.87	26.53	153.2	.197	.757
100	7.09	33.89	26.56	150.6	.212	.901
110	6.88	33.89	26.59	147.6	.227	1.057
120	6.86	33.92	26.61	146.0	.242	1.226
130	6.77	33.93	26.64	143.8	.256	1.406
140	6.70	33.92	26.64	143.8	.270	1.600
150	6.64	33.93	26.65	142.4	.285	1.808
160	6.63	33.94	26.66	141.7	.299	2.028
170	6.63	33.93	26.66	142.6	.313	2.262
172	6.63	33.93	26.66	142.6	.316	2.310

NO 33 LAT 45 15.2 LONG 124 14.4 STN SA 8 DEPTH 162
 DATE 8/19/73 TIME 1235 AIR TEMP 54.8 WET BULB 52.9
 WIND DIR 350 SPEED 12 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 0 WEA 3 INSTR OSU1
 BKT TEMP 11.0 SAL 32.218 SAMPLE DEPTH 147 SAL 33.930

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.41	32.23	24.58	337.7	0	0
10	10.53	32.25	24.75	321.7	.034	.017
20	7.69	32.66	25.51	249.0	.061	.057
30	7.35	32.83	25.69	232.4	.085	.117
40	7.27	33.03	25.86	216.5	.108	.196
50	7.47	33.44	26.16	188.4	.128	.287
60	7.17	33.66	26.37	168.2	.146	.385
70	7.15	33.81	26.49	156.9	.162	.492
80	7.33	33.88	26.52	154.3	.178	.609
90	7.22	33.68	26.54	152.5	.193	.739
100	7.05	33.89	26.57	149.7	.206	.883
110	6.97	33.92	26.60	146.9	.223	1.038
120	6.79	33.92	26.63	144.7	.236	1.206
130	6.68	33.91	26.63	144.1	.252	1.386
140	6.61	33.93	26.66	141.9	.266	1.578
150	6.59	33.93	26.66	141.8	.280	1.784
160	6.59	33.92	26.65	142.6	.295	2.004

NO 34 LAT 45 15.1 LONG 124 13.0 STN SA 9 DEPTH 155
 DATE 8/19/73 TIME 1338 AIR TEMP 54.0 WET BULB 52.0
 WIND DIR 60 SPEED 4 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 0 - 0 AMT 1 BAR 0 WEA 2 INSTR OSU1
 BKT TEMP 11.4 SAL 32.332 SAMPLE DEPTH 135 SAL 33.929

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.10	32.28	24.67	328.7	0	0
10	10.75	32.31	24.76	320.9	.033	.016
20	7.66	32.71	25.56	244.5	.060	.056
30	7.29	32.88	25.74	227.4	.083	.115
40	7.21	33.07	25.90	212.4	.105	.192
50	7.41	33.46	26.18	186.5	.125	.283
60	7.20	33.66	26.36	168.9	.143	.380
70	7.17	33.78	26.46	159.7	.160	.487
80	7.25	33.88	26.53	153.4	.175	.604
90	7.09	33.90	26.57	149.5	.190	.733
100	7.05	33.89	26.57	150.0	.205	.874
110	6.90	33.92	26.61	146.0	.220	1.029
120	6.82	33.92	26.62	145.1	.235	1.197
130	6.65	33.91	26.64	143.7	.249	1.379
140	6.60	33.92	26.65	142.5	.264	1.572
150	6.60	33.92	26.65	142.6	.278	1.778

NO 35 LAT 45 15.1 LONG 124 11.5 STN SA10 DEPTH 139
 DATE 8/19/73 TIME 1500 AIR TEMP 53.0 WET BULB 52.0
 WIND DIR 90 SPEED 4 SWELL DIR 330 HT 4 PER 6
 CLOUD TYPE 0 - 6 AMT 2 BAR 20.6 WEA 2 INSTR OSU1
 BKT TEMP 10.9 SAL 32.422 SAMPLE DEPTH 121 SAL 33.923

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.69	32.45	24.88	309.3	0	0
3	10.69	32.45	24.88	309.4	.009	.001
10	9.90	32.37	24.95	302.7	.031	.015
20	7.79	32.80	25.61	239.5	.058	.055
30	7.37	32.96	25.79	222.5	.081	.113
40	7.21	33.09	25.92	210.9	.103	.189
50	7.40	33.44	26.16	187.5	.122	.277
60	7.16	33.65	26.36	168.8	.140	.375
70	7.23	33.84	26.51	155.3	.156	.479
80	7.13	33.90	26.56	150.0	.171	.593
90	7.07	33.91	26.58	148.7	.186	.720
100	6.96	33.90	26.60	146.8	.201	.860
110	6.70	33.90	26.62	144.8	.216	1.012
120	6.61	33.92	26.65	142.8	.230	1.177
130	6.61	33.92	26.65	142.5	.244	1.355
134	6.61	33.91	26.64	143.3	.250	1.431

NO 36 LAT 45 15.1 LONG 124 10.7 STN SA11 DEPTH 126
 DATE 8/19/73 TIME 1555 AIR TEMP 26.1 WET BULB 53.5
 WIND DIR 350 SPEED 2 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 6 - 0 AMT 2 BAR 20.7 WEA 2 INSTR OSU1
 BKT TEMP 10.9 SAL 32.549 SAMPLE DEPTH 106 SAL 33.918

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.62	32.54	24.96	301.5	0	0
10	8.81	32.75	25.42	258.0	.029	.014
20	7.68	32.91	25.71	230.3	.054	.051
30	7.25	33.03	25.86	215.7	.076	.106
40	7.17	33.24	26.04	199.2	.097	.179
50	7.26	33.42	26.17	187.1	.116	.267
60	7.23	33.59	26.31	174.2	.134	.366
70	7.12	33.78	26.47	158.7	.151	.473
80	7.10	33.86	26.54	152.6	.166	.590
90	7.04	33.90	26.58	148.9	.181	.718
100	6.77	33.90	26.61	145.5	.196	.857
110	6.66	33.91	26.64	143.6	.211	1.008
120	6.65	33.92	26.64	142.9	.225	1.172
121	6.65	33.91	26.64	143.6	.226	1.189

NO 37 LAT 45 15.1 LONG 124 10.0 STN SA12 DEPTH 124
 DATE 8/19/73 TIME 1652 AIR TEMP 55.2 WET BULB 53.0
 WIND DIR 350 SPEED 2 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 6 - 0 AMT 2 BAR 20.5 WEA 2 INSTR OSU1
 BKT TEMP 11.2 SAL 32.553 SAMPLE DEPTH 112 SAL 33.919

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.75	32.58	24.97	300.7	0	0
3	10.75	32.58	24.97	300.8	.009	.001
10	9.52	32.57	25.16	282.0	.030	.015
20	7.83	32.81	25.61	239.8	.055	.052
30	7.34	33.02	25.84	217.7	.078	.109
40	7.21	33.26	26.05	198.2	.099	.182
50	7.42	33.53	26.23	181.3	.118	.267
60	7.08	33.74	26.44	161.4	.135	.362
70	7.19	33.84	26.51	155.2	.151	.464
80	7.10	33.86	26.54	152.6	.166	.578
90	6.96	33.88	26.57	149.4	.181	.706
100	6.74	33.89	26.61	146.0	.196	.846
110	6.65	33.89	26.62	145.0	.210	.999
120	6.65	33.90	26.63	144.3	.225	1.165
121	6.65	33.90	26.63	144.4	.226	1.183

NO 38 LAT 45 15.1 LONG 124 9.4 STN SA13 DEPTH 119
 DATE 8/19/73 TIME 1754 AIR TEMP 55.1 WET BULB 53.0
 WIND DIR 0 SPEED 0 SWELL DIR 320 HT 4 PER 6
 CLOUD TYPE 6 - 0 AMT 2 BAR 20.5 WEA 2 INSTR OSU1
 BKT TEMP 11.6 SAL 32.568 SAMPLE DEPTH 102 SAL 33.921

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.01	32.52	24.87	309.5	0	0
10	9.21	32.55	25.20	278.5	.030	.015
20	7.71	32.89	25.69	232.2	.055	.052
30	7.43	32.93	25.76	225.6	.078	.109
40	7.31	33.45	26.19	185.4	.096	.180
50	7.14	33.63	26.35	170.2	.116	.260
60	7.06	33.75	26.46	160.0	.132	.350
70	7.07	33.85	26.53	152.8	.148	.451
80	7.01	33.89	26.57	149.2	.163	.565
90	6.92	33.88	26.58	148.5	.178	.651
100	6.72	33.90	26.62	145.0	.193	.831
110	6.66	33.90	26.63	144.3	.207	.983
117	6.66	33.86	26.60	147.4	.217	1.097

NO 39 LAT 45 15.0 LONG 124 8.6 STN SA14 DEPTH 111
 DATE 8/19/73 TIME 1855 AIR TEMP 53.5 WET BULB 51.0
 WIND DIR 0 SPEED 4 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 20.6 WEA 2 INSTR CSU1
 BKT TEMP 12.0 SAL 32.597 SAMPLE DEPTH 94 SAL 33.916

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.11	32.53	24.86	310.4	0	0
1	11.11	32.53	24.86	310.5	.003	.000
10	9.56	32.58	25.17	281.6	.030	.015
20	7.73	32.91	25.70	231.0	.056	.052
30	7.39	33.04	25.65	216.8	.078	.109
40	7.27	33.38	26.14	190.1	.098	.179
50	7.17	33.52	26.26	178.4	.117	.262
60	7.06	33.74	26.45	160.7	.134	.356
70	7.08	33.84	26.52	153.8	.150	.458
80	6.98	33.90	26.58	148.1	.165	.572
90	6.73	33.89	26.61	145.8	.179	.697
100	6.68	33.90	26.63	144.4	.194	.834
108	6.67	33.90	26.63	144.4	.205	.955

NO 40 LAT 45 15.0 LONG 124 8.0 STN SA15 DEPTH 104
 DATE 8/19/73 TIME 1935 AIR TEMP 54.2 WET BULB 51.3
 WIND DIR 0 SPEED 0 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 2 BAR 20.8 WEA 2 INSTR OSU1
 BKT TEMP 12.3 SAL 32.614 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.09	32.60	24.92	304.9	0	0
10	10.55	32.56	24.99	298.9	.030	.015
20	7.95	32.92	25.68	233.3	.057	.054
30	7.37	33.10	25.90	212.1	.079	.110
40	7.26	33.34	26.11	192.8	.100	.181
50	7.17	33.53	26.26	178.1	.118	.264
60	7.05	33.76	26.46	159.1	.135	.356
70	7.07	33.88	26.56	150.6	.150	.456
80	6.91	33.91	26.60	146.8	.165	.568
90	6.69	33.91	26.63	143.7	.180	.691
100	6.69	33.92	26.64	143.4	.194	.828
104	6.69	33.87	26.60	146.9	.200	.887

NO 41 LAT 45 15.0 LONG 124 7.5 STN SA16 DEPTH 102
 DATE 8/19/73 TIME 2025 AIR TEMP 53.6 WET BULB 51.7
 WIND DIR 300 SPEED 4 SWELL DIR 320 HT 4 PER 7
 CLOUD TYPE 3 - 6 AMT 2 BAR 20.9 WEA 2 INSTR OSU1
 BKT TEMP 12.8 SAL 32.623 SAMPLE DEPTH 76 SAL 33.909

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.96	32.66	24.62	333.8	0	0
10	10.69	32.58	24.98	299.9	.031	.015
20	9.29	32.65	25.26	272.8	.060	.058
30	7.40	33.05	25.86	215.9	.083	.116
40	7.32	33.36	26.12	192.0	.103	.187
50	7.14	33.59	26.32	172.4	.122	.269
60	7.04	33.78	26.48	157.5	.138	.359
70	7.04	33.87	26.55	150.9	.153	.459
80	6.88	33.89	26.59	147.5	.168	.571
90	6.69	33.91	26.63	143.7	.183	.695
100	6.70	33.90	26.62	144.7	.197	.832

NO 42 LAT 45 15.0 LONG 124 7.2 STN SA17 DEPTH 96
 DATE 8/19/73 TIME 2120 AIR TEMP 54.9 WET BULB 53.2
 WIND DIR 300 SPEED 6 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 3 - 6 AMT 2 BAR 20.9 WEA 2 INSTR CSU1
 BKT TEMP 12.7 SAL 32.635 SAMPLE DEPTH 84 SAL 33.916

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.38	32.69	24.75	320.9	0	0
10	10.55	32.72	25.11	287.3	.030	.015
20	8.34	32.95	25.64	236.5	.056	.053
30	7.54	33.08	25.87	215.6	.078	.109
40	7.30	33.43	26.17	186.7	.098	.179
50	7.16	33.58	26.31	173.8	.117	.261
60	7.03	33.81	26.51	155.1	.133	.350
70	6.98	33.88	26.56	149.8	.148	.449
80	6.91	33.90	26.59	147.5	.163	.561
90	6.71	33.90	26.62	144.7	.177	.684
95	6.71	33.90	26.62	144.8	.185	.751

NO 43 LAT 45 15.0 LONG 124 6.8 STN SA18 DEPTH 96
 DATE 8/19/73 TIME 2210 AIR TEMP 56.0 WET BULB 53.9
 WIND DIR 300 SPEED 10 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 0 - 6 AMT 2 BAR 20.6 WEA 2 INSTR OSU1
 BKT TEMP 12.5 SAL 32.678 SAMPLE DEPTH 79 SAL 33.911

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.57	32.68	24.71	325.1	0	0
10	10.25	32.70	25.14	283.9	.029	.014
20	8.25	33.00	25.70	231.5	.056	.054
30	7.33	33.25	26.03	200.4	.077	.107
40	7.22	33.53	26.26	178.2	.096	.173
50	7.05	33.78	26.48	157.5	.113	.247
60	7.06	33.86	26.54	151.8	.128	.331
70	6.99	33.89	26.58	148.8	.143	.427
80	6.77	33.89	26.61	146.1	.158	.533
90	6.71	33.90	26.62	144.7	.172	.659
95	6.71	33.92	26.64	143.3	.179	.726

NO 44 LAT 45 15.0 LONG 124 6.5 STN SA19 DEPTH 93
 DATE 8/19/73 TIME 2254 AIR TEMP 60.0 WET BULB 56.2
 WIND DIR 300 SPEED 2 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 6 - 1 AMT 4 BAR 20.9 WEA 0 INSTR OSU1
 BKT TEMP 12.4 SAL 32.696 SAMPLE DEPTH 82 SAL 33.920

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.81	32.66	24.84	312.9	0	0
1	11.81	32.66	24.84	312.9	.003	.000
10	9.99	32.81	25.27	271.6	.029	.014
20	8.01	33.03	25.76	225.9	.054	.051
30	7.26	33.31	26.08	194.9	.075	.104
40	7.21	33.48	26.22	181.8	.094	.170
50	7.05	33.77	26.47	158.3	.110	.244
60	7.01	33.88	26.56	150.0	.126	.328
70	6.96	33.89	26.58	148.4	.140	.424
80	6.75	33.91	26.62	144.7	.155	.534
90	6.72	33.92	26.64	143.3	.169	.656

NO 45 LAT 45 15.0 LONG 124 6.0 STN SA20 DEPTH 91
 DATE 8/19/73 TIME 2338 AIR TEMP 59.1 WET BULB 56.2
 WIND DIR 340 SPEED 2 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 8 - 1 AMT 4 BAR 20.9 WEA 0 INSTR OSU1
 BKT TEMP 12.6 SAL 32.696 SAMPLE DEPTH 72 SAL 33.909

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.30	32.77	24.83	313.6	0	0
10	9.50	32.92	25.44	255.8	.028	.014
20	7.81	33.09	25.83	218.6	.052	.049
30	7.19	33.41	26.17	186.6	.072	.099
40	7.15	33.64	26.36	169.1	.090	.162
50	7.03	33.83	26.53	153.1	.106	.235
60	6.97	33.88	26.57	149.1	.121	.317
70	6.89	33.91	26.60	146.0	.136	.413
80	6.75	33.91	26.62	144.3	.150	.522
89	6.74	33.92	26.63	143.6	.163	.631

NO 46 LAT 45 15.0 LONG 124 5.7 STN SA21 DEPTH 88
 DATE 8/20/73 TIME 17 AIR TEMP 57.9 WET BULB 55.5
 WIND DIR 340 SPEED 5 SWELL DIR 320 HT 3 PER 7
 CLOUD TYPE 1 - 8 AMT 4 BAR 20.9 WEA 0 INSTR OSU1
 BKT TEMP 12.6 SAL 32.722 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.49	32.87	24.87	309.6	0	0
10	8.76	33.00	25.62	238.7	.026	.013
20	7.73	33.09	25.84	217.6	.049	.047
30	7.19	33.36	26.13	190.3	.070	.098
40	7.16	33.61	26.33	171.4	.088	.161
50	7.01	33.87	26.56	150.2	.104	.233
60	6.95	33.90	26.59	147.4	.119	.314
70	6.89	33.91	26.60	146.0	.133	.409
80	6.74	33.91	26.63	144.2	.148	.518
85	6.74	33.92	26.63	143.5	.155	.577

NO 47 LAT 45 15.0 LONG 124 5.4 STN SA22 DEPTH 84
 DATE 8/20/73 TIME 102 AIR TEMP 59.5 WET BULB 56.2
 WIND DIR 340 SPEED 6 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 1 - 8 AMT 8 BAR 20.9 WEA 0 INSTR OSU1
 BKT TEMP 13.1 SAL 32.762 SAMPLE DEPTH 74 SAL 33.916

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.16	32.90	24.96	301.5	0	0
10	9.13	32.96	25.53	247.1	.026	.013
20	7.90	33.18	25.89	213.2	.049	.046
30	7.14	33.40	26.17	186.7	.068	.095
40	7.13	33.66	26.38	167.3	.086	.157
50	7.06	33.87	26.55	150.9	.102	.228
60	7.03	33.89	26.57	149.2	.117	.310
70	6.94	33.91	26.60	146.6	.132	.406
80	6.77	33.89	26.61	146.1	.146	.515
81	6.77	33.89	26.61	146.1	.147	.527

NO 48 LAT 45 15.0 LONG 124 5.0 STN SA23 DEPTH 82
 DATE 8/20/73 TIME 147 AIR TEMP 58.3 WET BULB 55.4
 WIND DIR 340 SPEED 6 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 0 - 8 AMT 8 BAR 20.9 WEA 0 INSTR OSU1
 BKT TEMP 11.0 SAL 32.788 SAMPLE DEPTH 71 SAL 33.914

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.64	32.80	25.16	282.6	0	0
10	9.14	32.96	25.53	247.3	.026	.013
20	7.70	33.12	25.87	214.9	.048	.046
30	7.15	33.45	26.20	183.4	.068	.094
40	7.04	33.75	26.46	159.4	.085	.154
50	6.99	33.86	26.55	150.8	.100	.223
60	6.94	33.88	26.57	148.7	.115	.305
70	6.79	33.90	26.61	145.4	.130	.400
79	6.76	33.90	26.61	145.2	.143	.498

NO 49 LAT 45 15.0 LONG 124 4.6 STN SA24 DEPTH 73
 DATE 8/20/73 TIME 224 AIR TEMP 55.5 WET BULB 54.0
 WIND DIR 340 SPEED 6 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 0 - 8 AMT 8 BAR 20.9 WEA 2 INSTR OSU1
 BKT TEMP 12.6 SAL 32.866 SAMPLE DEPTH 57 SAL 33.903

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.87	32.93	25.04	294.1	0	0
10	8.07	33.20	25.88	213.9	.024	.012
20	7.12	33.42	26.19	184.8	.044	.041
30	7.12	33.67	26.38	166.3	.061	.084
40	7.04	33.79	26.49	156.5	.077	.140
50	7.04	33.89	26.57	149.2	.092	.208
60	6.88	33.90	26.60	146.5	.107	.289
70	6.79	33.91	26.62	144.7	.121	.383
71	6.79	33.91	26.62	144.7	.123	.394

NO 50 LAT 45 15.1 LONG 124 4.3 STN SA25 DEPTH 71
 DATE 8/20/73 TIME 259 AIR TEMP 56.7 WET BULB 54.9
 WIND DIR 340 SPEED 6 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 0 - 8 AMT 8 BAR 20.9 WEA 2 INSTR OSU1
 BKT TEMP 12.3 SAL 32.878 SAMPLE DEPTH 58 SAL 33.901

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.27	32.85	25.26	272.9	0	0
1	10.27	32.85	25.26	272.9	.003	.000
10	7.35	33.17	25.56	266.3	.025	.012
20	7.19	33.58	26.30	173.8	.044	.040
30	7.10	33.72	26.43	162.4	.061	.082
40	7.06	33.77	26.47	158.2	.077	.138
50	7.05	33.89	26.57	149.3	.092	.207
60	6.89	33.92	26.61	145.1	.107	.288
69	6.82	33.92	26.62	144.3	.126	.372

NO 51 LAT 45 15.1 LONG 124 4.0 STN SA26 DEPTH 69
 DATE 8/20/73 TIME 333 AIR TEMP 58.0 WET BULB 54.8
 WIND DIR 350 SPEED 6 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 0 - 6 AMT 5 BAR 21.2 WEA 2 INSTR OSU1
 BKT TEMP 11.5 SAL 32.904 SAMPLE DEPTH 58 SAL 33.899

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.53	32.96	25.30	269.0	0	0
10	7.90	33.08	25.81	220.5	.024	.012
20	7.11	33.29	26.09	194.4	.044	.042
30	7.13	33.44	26.20	183.6	.064	.089
40	7.10	33.72	26.43	162.5	.081	.149
50	7.01	33.84	26.53	152.5	.097	.220
60	6.92	33.90	26.59	147.0	.111	.302
68	6.86	33.91	26.61	145.6	.123	.377

NO 52 LAT 45 15.1 LONG 124 3.5 STN SA27 DEPTH 66
 DATE 8/20/73 TIME 428 AIR TEMP 56.3 WET BULB 54.1
 WIND DIR 330 SPEED 6 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 0 - 6 AMT 4 BAR 21.8 WEA 2 INSTR OSU1
 BKT TEMP 11.9 SAL 32.862 SAMPLE DEPTH 54 SAL 33.896

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.07	32.97	25.21	277.3	0	0
10	7.15	33.32	26.11	192.5	.023	.011
20	7.15	33.53	26.27	177.0	.042	.039
30	7.15	33.68	26.39	166.0	.059	.081
40	7.06	33.79	26.49	156.7	.075	.137
50	6.97	33.88	26.57	148.6	.090	.205
60	6.94	33.88	26.57	148.7	.105	.287
65	6.91	33.90	26.59	146.9	.112	.333

NO 53 LAT 45 15.1 LONG 124 3.2 STN SA28 DEPTH 60
 DATE 8/20/73 TIME 513 AIR TEMP 55.2 WET BULB 54.0
 WIND DIR 330 SPEED 7 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 6 - 8 AMT 3 BAR 21.9 WEA 2 INSTR OSU1
 BKT TEMP 11.6 SAL 32.855 SAMPLE DEPTH 49 SAL 33.895

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.06	32.86	25.13	285.2	0	0
10	7.61	33.18	25.93	209.1	.024	.011
20	7.15	33.46	26.22	182.2	.044	.041
30	7.15	33.71	26.41	163.7	.061	.084
40	7.01	33.88	26.56	149.4	.076	.138
50	6.96	33.88	26.57	148.8	.091	.205
59	6.93	33.89	26.58	147.8	.105	.278

NO 54 LAT 45 15.1 LONG 124 2.8 STN SA29 DEPTH 57
 DATE 8/20/73 TIME 544 AIR TEMP 55.0 WET BULB 53.8
 WIND DIR 330 SPEED 7 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 0 - 8 AMT 3 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 11.2 SAL 32.854 SAMPLE DEPTH 48 SAL 33.895

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.87	32.77	25.09	288.7	0	0
10	7.70	33.18	25.92	210.3	.024	.011
20	7.19	33.50	26.25	179.4	.043	.040
30	7.19	33.71	26.41	164.2	.061	.083
40	7.02	33.87	26.56	150.2	.076	.138
50	6.97	33.88	26.57	149.0	.091	.205
56	6.95	33.90	26.59	147.3	.100	.252

NO 55 LAT 45 15.1 LONG 124 2.5 STN SA30 DEPTH 55
 DATE 8/20/73 TIME 626 AIR TEMP 53.9 WET BULB 52.9
 WIND DIR 0 SPEED 5 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 2 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 10.7 SAL 32.880 SAMPLE DEPTH 21 SAL 33.564

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.30	32.90	25.29	269.7	0	0
10	8.35	33.19	25.83	213.6	.025	.012
20	7.22	33.55	26.28	176.4	.044	.040
30	7.20	33.68	26.38	166.6	.061	.084
40	7.08	33.80	26.49	156.2	.077	.140
50	7.00	33.88	26.57	149.4	.092	.208
54	6.98	33.88	26.57	149.2	.098	.239

NO 56 LAT 45 15.0 LONG 124 2.0 STN SA31 DEPTH 51
 DATE 8/20/73 TIME 725 AIR TEMP 54.5 WET BULB 52.8
 WIND DIR 0 SPEED 8 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 22.0 WEA 2 INSTR OSU1
 BKT TEMP 10.5 SAL 32.860 SAMPLE DEPTH 38 SAL 33.880

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	10.07	32.89	25.32	266.7	0	0
10	7.52	33.52	26.21	182.5	.022	.010
20	7.24	33.71	26.40	164.8	.039	.036
30	7.07	33.82	26.51	154.1	.055	.076
40	6.99	33.90	26.58	147.6	.071	.129
50	6.97	33.89	26.58	148.2	.085	.156

NO 57 LAT 45 15.0 LONG 124 1.8 STN SA32 DEPTH 53
 DATE 8/20/73 TIME 808 AIR TEMP 52.8 WET BULB 51.6
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 6 - 8 AMT 4 BAR 22.0 WEA 3 INSTR OSU1
 BKT TEMP 10.4 SAL 32.875 SAMPLE DEPTH 36 SAL 33.771

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.77	32.97	25.44	256.1	0	0
10	7.71	33.50	26.17	186.6	.022	.011
20	7.38	33.57	26.27	177.1	.040	.038
30	7.21	33.72	26.41	163.8	.058	.081
40	7.09	33.81	26.50	155.6	.074	.137
50	6.97	33.89	26.58	148.2	.089	.203
52	6.96	33.90	26.59	147.4	.092	.218

NO 58 LAT 45 15.0 LONG 124 1.4 STN SA33 DEPTH 47
 DATE 8/20/73 TIME 840 AIR TEMP 52.8 WET BULB 50.2
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 6 - 8 AMT 6 BAR 22.1 WEA 3 INSTR OSU1
 BKT TEMP 9.8 SAL 32.984 SAMPLE DEPTH 33 SAL 33.883

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.71	32.99	25.46	253.6	0	0
10	7.83	33.60	26.23	180.8	.022	.010
20	7.22	33.73	26.42	163.0	.039	.036
30	7.00	33.87	26.56	149.8	.055	.075
40	6.99	33.90	26.58	147.6	.069	.127
47	6.99	33.89	26.58	148.4	.080	.172

NO 59 LAT 45 15.0 LONG 124 1.0 STN SA34 DEPTH 44
 DATE 8/20/73 TIME 925 AIR TEMP 51.1 WET BULB 49.5
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 6 - 8 AMT 3 BAR 22.3 WEA 2 INSTR OSU1
 BKT TEMP 9.6 SAL 33.179 SAMPLE DEPTH 26 SAL 33.832

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.39	33.24	25.71	230.1	0	0
10	7.45	33.58	26.27	176.8	.020	.010
20	7.23	33.75	26.43	161.6	.037	.034
30	7.05	33.84	26.53	152.7	.052	.073
40	7.01	33.88	26.56	149.4	.067	.126
41	7.01	33.88	26.56	149.4	.069	.132

NO 60 LAT 45 15.0 LONG 124 .6 STN SA35 DEPTH 36
 DATE 8/20/73 TIME 958 AIR TEMP 51.8 WET BULB 48.9
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 6 - 8 AMT 2 BAR 22.3 WEA 2 INSTR OSU1
 BKT TEMP 9.0 SAL 33.390 SAMPLE DEPTH 24 SAL 33.849

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.95	33.38	25.89	213.1	0	0
10	7.38	33.68	26.36	168.7	.019	.009
20	7.06	33.87	26.55	150.5	.035	.033
30	7.03	33.86	26.55	151.0	.050	.071
35	7.01	33.88	26.56	149.3	.056	.095

NO 61 LAT 45 15.0 LONG 124 .2 STN SA36 DEPTH 36
 DATE 8/20/73 TIME 1030 AIR TEMP 49.0 WET BULB 47.9
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 2 PER 7
 CLOUD TYPE 6 - 8 AMT 3 BAR 22.6 WEA 2 INSTR OSU1
 BKT TEMP 8.9 SAL 33.463 SAMPLE DEPTH 22 SAL 33.811

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.71	33.45	25.98	204.3	0	0
10	7.33	33.72	26.39	165.1	.018	.009
20	7.12	33.81	26.49	155.7	.034	.033
30	7.05	33.84	26.53	152.7	.050	.071
34	7.05	33.84	26.53	152.8	.056	.090

NO 62 LAT 45 15.0 LONG 124 0 STN SA37 DEPTH 30
 DATE 8/20/73 TIME 1130 AIR TEMP 51.7 WET BULB 49.1
 WIND DIR 500 SPEED 2 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 6 - 8 AMT 3 BAR 22.6 WEA 2 INSTR OSU1
 BKT TEMP 9.1 SAL 33.408 SAMPLE DEPTH 16 SAL 33.808

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.54	33.44	26.00	202.6	0	0
10	7.35	33.76	26.42	162.3	.018	.008
20	7.15	33.80	26.48	156.9	.034	.032
28	7.06	33.84	26.53	152.8	.046	.061

NO 63 LAT 45 15.0 LONG 123 59.6 STN SA38 DEPTH 24
 DATE 8/20/73 TIME 1242 AIR TEMP 51.9 WET BULB 49.1
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 8 - 6 AMT 3 BAR 23.0 WEA 2 INSTR OSU1
 BKT TEMP 9.0 SAL 33.534 SAMPLE DEPTH 11 SAL 33.737

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.63	33.42	25.97	205.4	0	0
10	7.39	33.72	26.39	165.9	.018	.009
20	7.24	33.81	26.48	157.3	.034	.033
21	7.24	33.81	26.48	157.3	.036	.036

NO 64 LAT 45 15.0 LONG 123 59.2 STN SA39 DEPTH 20
 DATE 8/20/73 TIME 1355 AIR TEMP 50.0 WET BULB 48.0
 WIND DIR 0 SPEED 0 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 0 - 8 AMT 2 BAR 23.0 WEA 2 INSTR OSU1
 BKT TEMP 8.8 SAL 33.557 SAMPLE DEPTH 9 SAL 33.734

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.10	33.60	26.19	184.4	0	0
10	7.38	33.73	26.40	165.0	.017	.008
17	7.29	33.78	26.45	160.2	.029	.024

NO 65 LAT 45 15.1 LONG 124 1.0 STN T 1 DEPTH 46
 DATE 8/20/73 TIME 1415 AIR TEMP 49.0 WET BULB 47.9
 WIND DIR 0 SPEED 0 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 6 - 0 AMT 1 BAR 23.4 WEA 2 INSTR OSU1
 BKT TEMP 9.0 SAL 33.454 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	8.79	33.36	25.90	212.2	0	0
1	8.79	33.36	25.90	212.2	.002	.000
10	7.55	33.65	26.31	173.2	.019	.009
20	7.27	33.71	26.40	165.2	.036	.035
30	7.10	33.80	26.49	156.3	.052	.075
40	7.01	33.88	26.56	149.4	.067	.128
43	7.00	33.89	26.57	148.5	.072	.146

NO 66 LAT 45 15.1 LONG 124 4.7 STN T 2 DEPTH 77
 DATE 8/20/73 TIME 1528 AIR TEMP 52.9 WET BULB 52.0
 WIND DIR 70 SPEED 2 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 0 - 6 AMT 3 BAR 23.5 WEA 2 INSTR OSU1
 BKT TEMP 11.8 SAL 32.374 SAMPLE DEPTH 65 SAL 33.908

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.34	32.15	24.53	342.4	0	0
10	7.77	33.26	25.97	205.3	.027	.012
20	7.17	33.42	26.18	185.5	.046	.041
30	7.08	33.71	26.42	162.8	.064	.085
40	7.01	33.81	26.51	154.6	.080	.141
50	6.95	33.86	26.56	150.2	.095	.209
60	6.88	33.92	26.61	145.0	.110	.290
70	6.80	33.92	26.62	144.1	.124	.385
75	6.79	33.91	26.62	144.8	.131	.437

NO 67 LAT 45 15.1 LONG 124 1.0 STN T 3 DEPTH 44
 DATE 8/20/73 TIME 1628 AIR TEMP 63.1 WET BULB 58.9
 WIND DIR 0 SPEED 0 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 8 - 6 AMT 2 BAR 23.5 WEA 2 INSTR OSU1
 BKT TEMP 9.9 SAL 33.117 SAMPLE DEPTH 33 SAL 33.806

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.55	33.15	25.61	239.3	0	0
10	7.85	33.58	26.21	182.6	.021	.010
20	7.33	33.68	26.36	168.2	.038	.036
30	7.15	33.80	26.48	157.0	.055	.077
40	7.04	33.85	26.54	152.0	.070	.131
43	7.03	33.85	26.54	151.9	.075	.150

NO 68 LAT 45 15.1 LONG 124 4.8 STN T 4 DEPTH 77
 DATE 8/20/73 TIME 1721 AIR TEMP 55.0 WET BULB 53.2
 WIND DIR 300 SPEED 4 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.8 WEA 2 INSTR OSU1
 BKT TEMP 12.3 SAL 32.197 SAMPLE DEPTH 64 SAL 33.914

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	11.50	32.30	24.62	334.1	0	0
2	11.50	32.30	24.62	334.1	.007	.001
10	9.29	32.86	25.43	257.0	.030	.014
20	7.26	33.37	26.13	190.4	.052	.046
30	7.09	33.69	26.40	164.4	.070	.091
40	6.97	33.84	26.54	151.8	.086	.145
50	6.93	33.88	26.58	148.5	.101	.212
60	6.83	33.91	26.61	145.1	.115	.293
70	6.79	33.90	26.61	145.4	.130	.387
75	6.79	33.90	26.61	145.5	.137	.440

NO 69 LAT 45 15.1 LONG 124 1.0 STN T 5 DEPTH 44
 DATE 8/20/73 TIME 1823 AIR TEMP 56.8 WET BULB 54.1
 WIND DIR 320 SPEED 6 SWELL DIR 300 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.9 WEA 2 INSTR OSU1
 BKT TEMP 10.4 SAL 33.014 SAMPLE DEPTH 34 SAL 33.812

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.07	33.28	25.79	222.3	0	0
10	7.77	33.54	26.19	184.4	.021	.010
20	7.33	33.66	26.35	169.7	.038	.036
30	7.16	33.78	26.47	158.6	.055	.077
40	7.03	33.85	26.54	151.9	.070	.131
43	7.01	33.85	26.54	151.6	.075	.150

NO 70 LAT 45 15.0 LONG 124 4.6 STN T 6 DEPTH 77
 DATE 8/20/73 TIME 1920 AIR TEMP 55.7 WET BULB 53.2
 WIND DIR 330 SPEED 10 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 23.9 WEA 2 INSTR OSU1
 BKT TEMP 12.3 SAL 32.337 SAMPLE DEPTH 65 SAL 33.915

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.36	32.35	24.49	345.6	0	0
10	9.29	32.81	25.39	260.8	.029	.014
20	7.50	33.28	26.03	200.3	.051	.047
30	7.15	33.50	26.25	179.4	.070	.094
40	7.04	33.78	26.48	157.2	.087	.152
50	6.94	33.88	26.57	149.0	.102	.220
60	6.87	33.89	26.59	147.1	.117	.301
70	6.79	33.91	26.62	144.7	.131	.396
76	6.80	33.89	26.60	146.4	.140	.459

NO 71 LAT 45 15.0 LONG 124 1.0 STN T 7 DEPTH 44
 DATE 8/20/73 TIME 2010 AIR TEMP 0 WET BULB 0
 WIND DIR 320 SPEED 10 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 23.9 WEA 2 INSTR OSU1
 BKT TEMP 10.1 SAL 33.162 SAMPLE DEPTH 32 SAL 33.834

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	9.68	33.23	25.65	235.4	0	0
10	7.52	33.56	26.24	179.5	.020	.010
20	7.24	33.72	26.41	164.0	.037	.035
30	7.15	33.80	26.48	157.0	.053	.075
40	7.02	33.87	26.56	150.2	.069	.128
43	7.01	33.89	26.57	148.7	.073	.147

NO 72 LAT 45 15.0 LONG 124 4.6 STN T 8 DEPTH 77
 DATE 8/20/73 TIME 2100 AIR TEMP 0 WET BULB 0
 WIND DIR 310 SPEED 10 SWELL DIR 310 HT 3 PER 7
 CLOUD TYPE 8 - 0 AMT 2 BAR 23.9 WEA 2 INSTR OSU1
 BKT TEMP 12.6 SAL 32.482 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	POTE
0	12.44	32.56	24.64	331.6	0	0
10	8.95	32.90	25.51	248.9	.028	.013
20	7.63	33.22	25.96	206.5	.050	.046
30	7.23	33.45	26.20	184.2	.070	.094
40	7.08	33.71	26.42	163.4	.087	.154
50	6.97	33.85	26.55	151.2	.102	.225
60	6.89	33.91	26.60	145.8	.117	.307
70	6.81	33.92	26.62	144.2	.132	.401
75	6.81	33.91	26.62	145.0	.139	.454

YAQUINA Cruise Y7308B

21-24 August 1973

The primary purpose of this cruise was the hydrographic sampling along $44^{\circ}40.0'N$ and $45^{\circ}15'N$. Other purposes were to observe temperature micro-structure and to test two other CTD probes in preparation for JOINT-I, an upwelling project to be conducted in early 1974. These data are not included here, and hence station numbers are not all consecutive.

Personnel participating in the cruise were R. L. Smith, D. Caldwell, D. Barstow, R. Kapaun, S. Wilcox, M. Matsler, R. Jones, S. Eide, D. Root, A. Huyer, J. Wroblewski, T. Wright, H. Frese, G. Marmorino and R. deSzoeko.

Station positions are shown in Figure 25. Sample and CTD salinities were compared; the standard deviation of the differences is 0.025 o/oo. Differences are plotted vs. sample salinity and vs. station number in Figure 26.

Staggered profiles of temperature, salinity and sigma-t are shown in Figures 27-29. The values of the bottom parameters are shown for each profile. Data at standard depths are listed on pages 95-101.

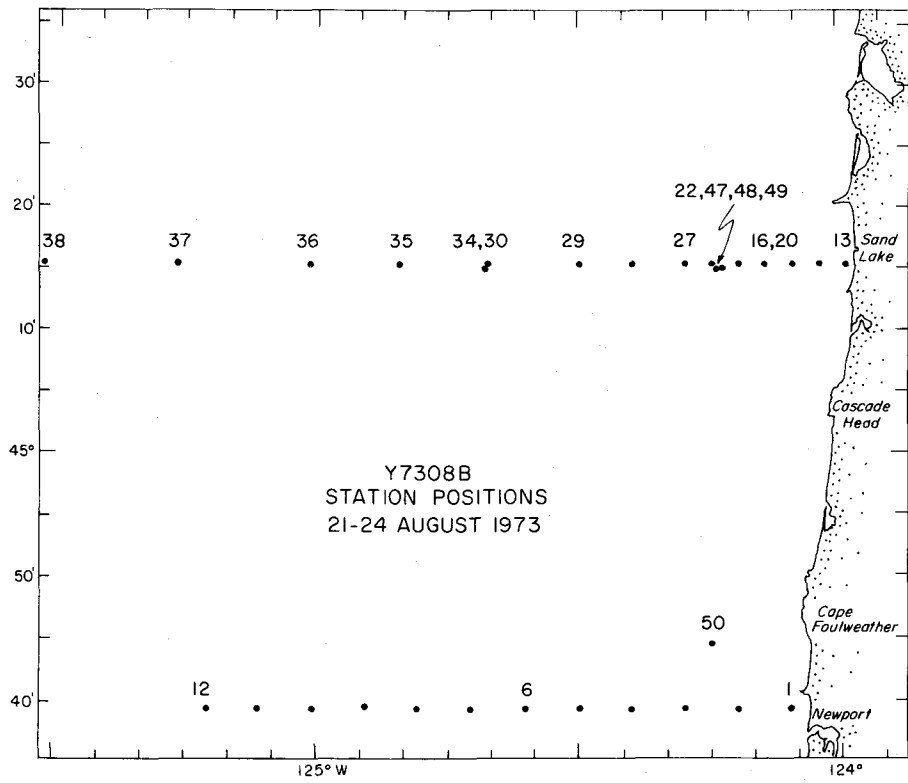


Figure 25. Positions of hydrographic stations occupied by YAQUINA, 21-24 August 1973.

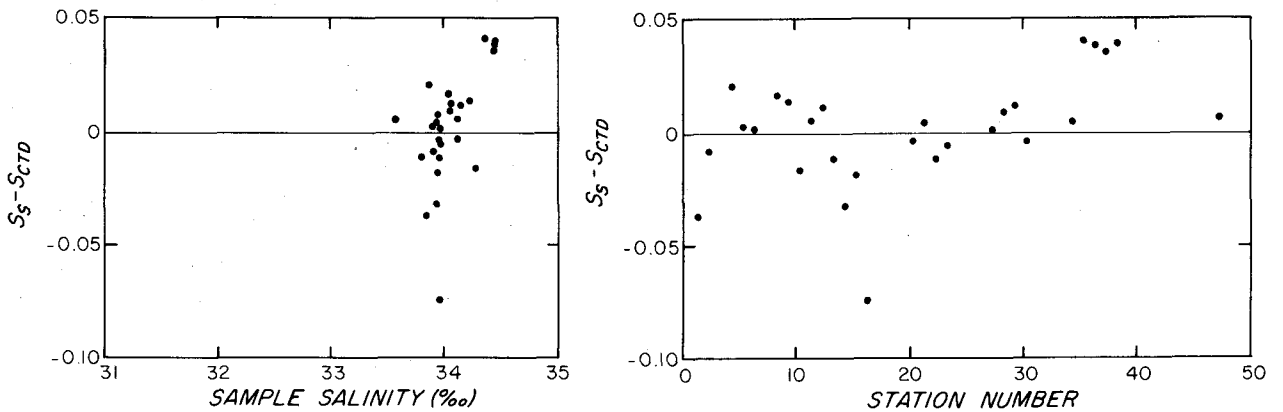


Figure 26. Comparison of sample and CTD salinities, Y7308B.

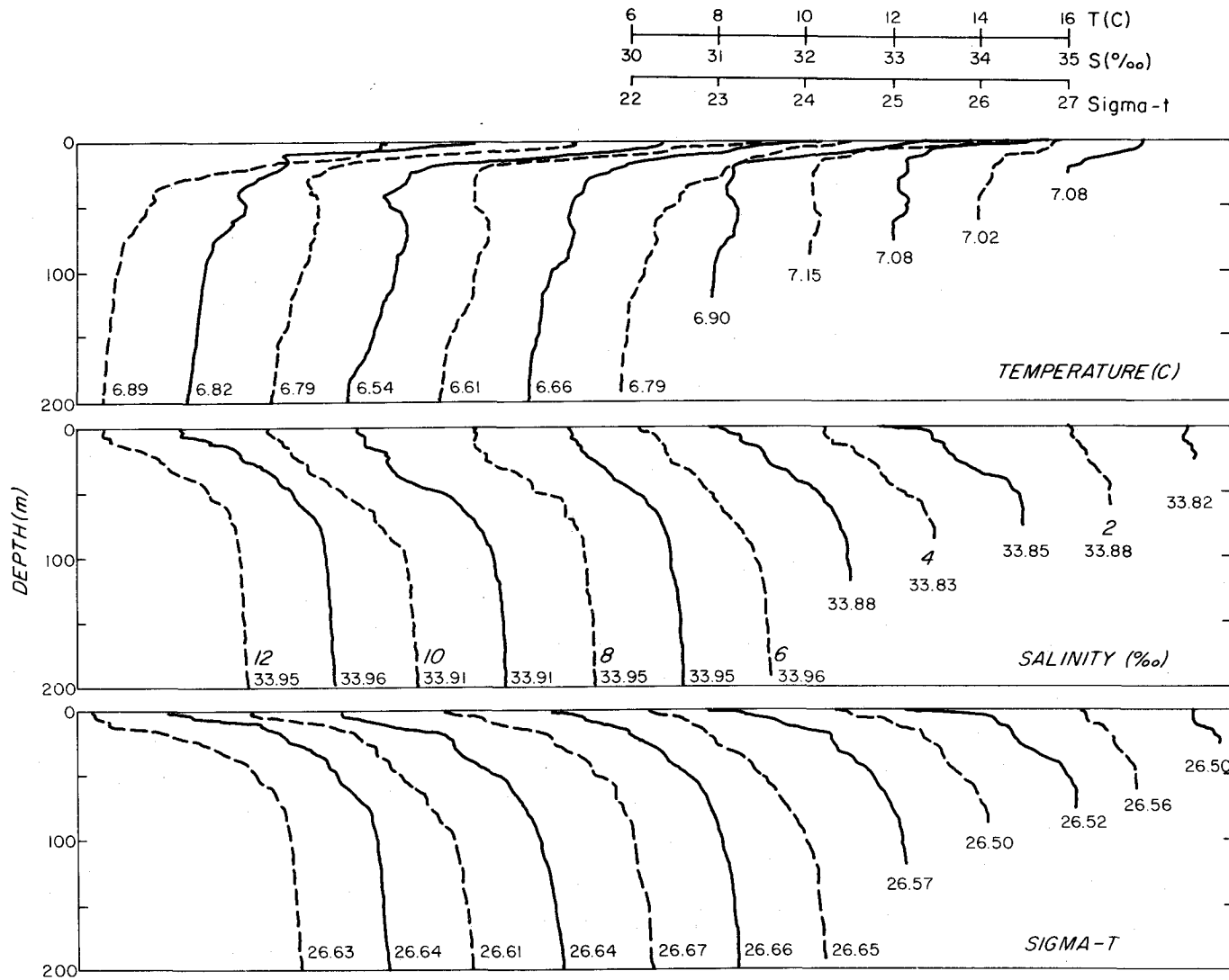


Figure 27. Staggered profiles of temperature, salinity and sigma-t for stations along 44°40'N, 21-22 August 1973.

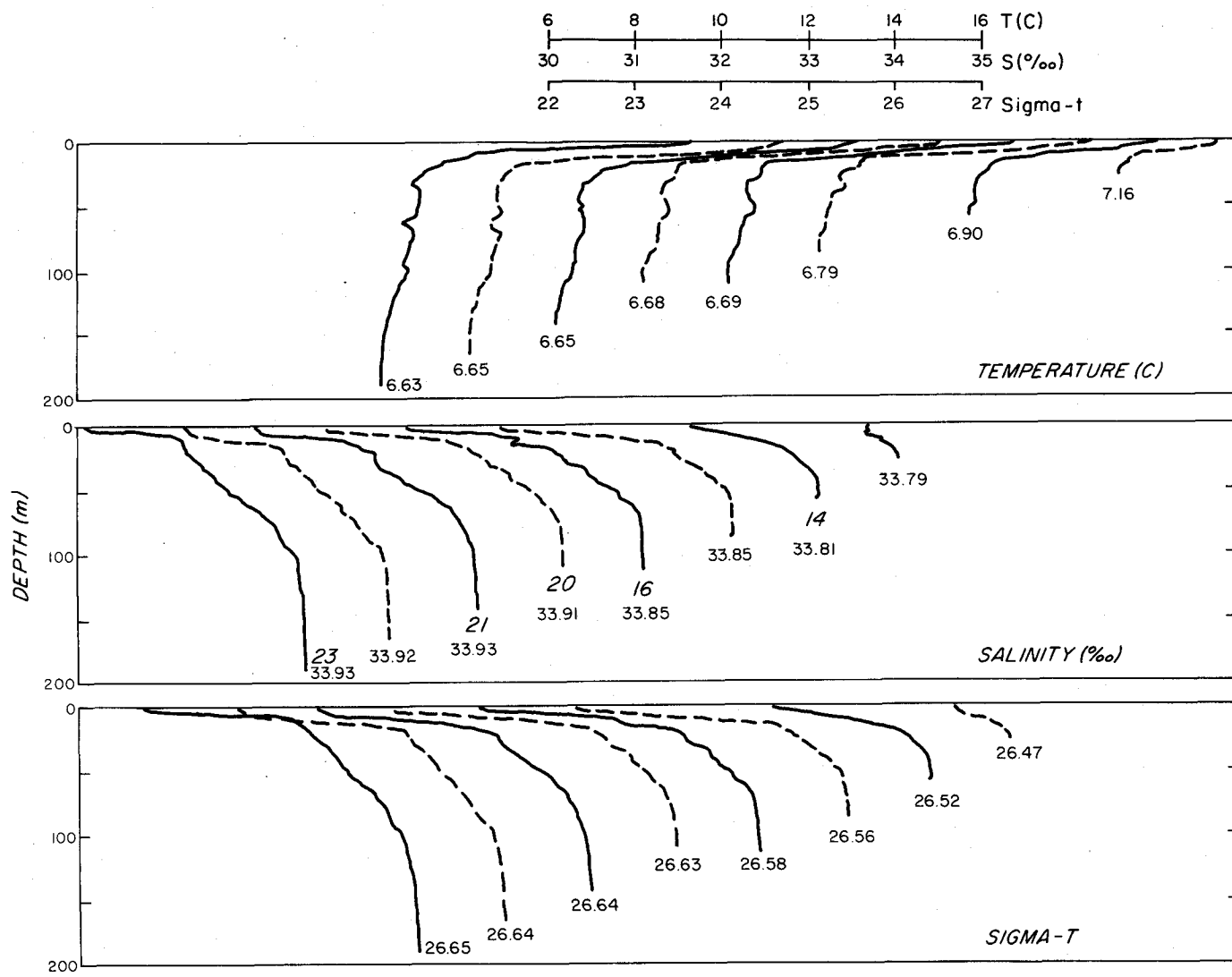


Figure 28(a). Staggered profiles of temperature, salinity and sigma-t for stations 13-23 along 45°15'N, 22-23 August 1973.

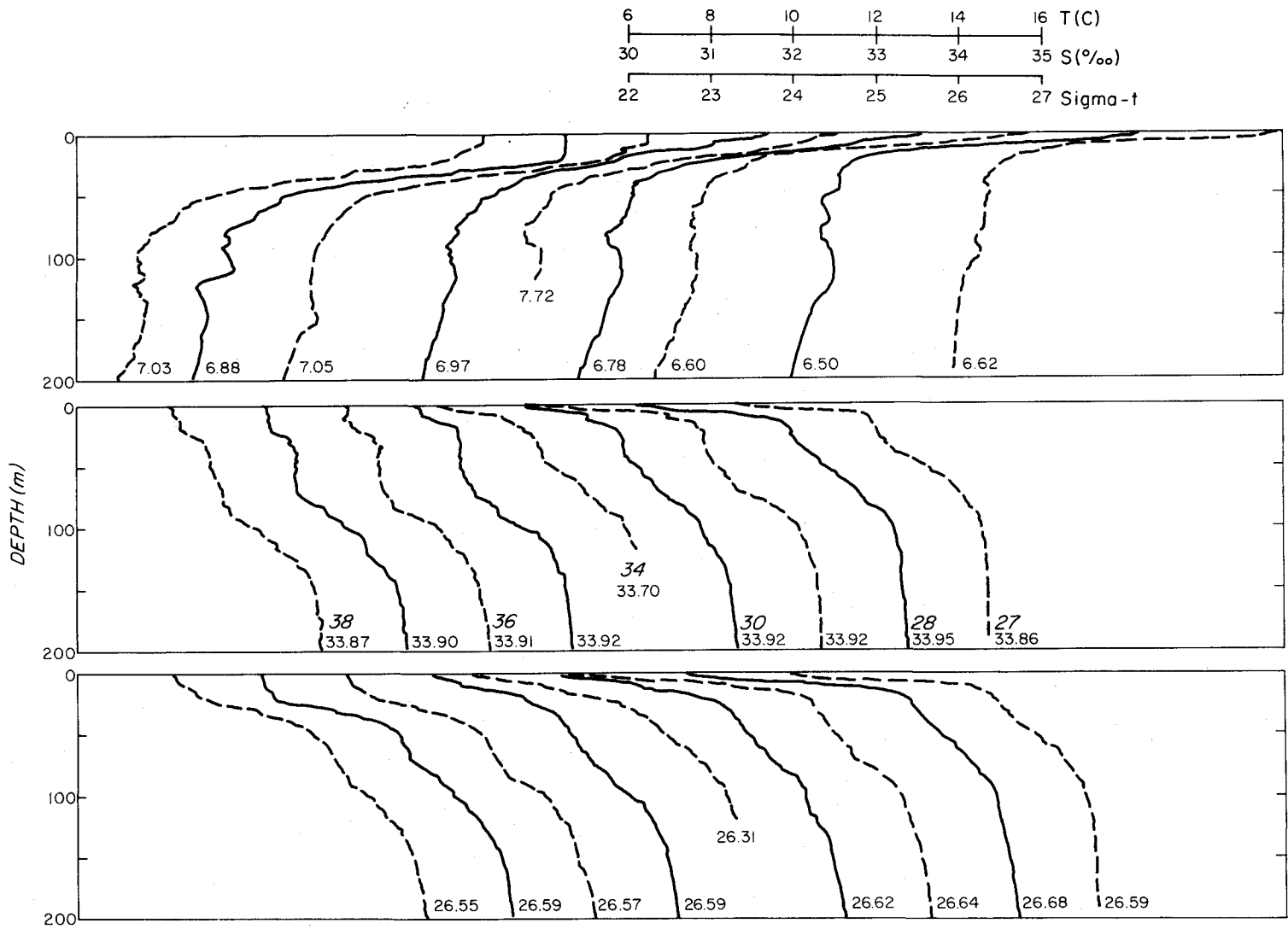


Figure 28(b). Staggered profiles of temperature, salinity and sigma-t for stations 27-38 along 45°15'N, 22-23 August 1973.

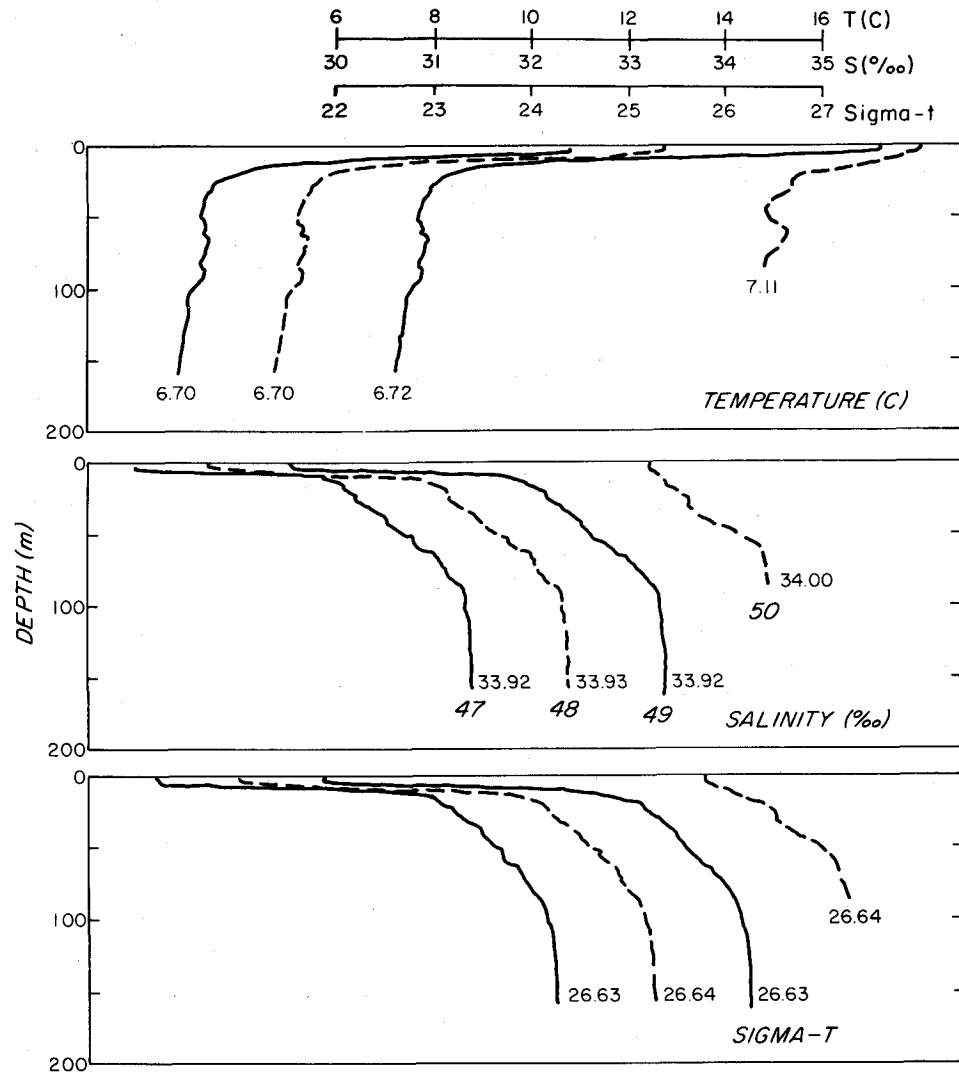


Figure 29. Staggered profiles of temperature, salinity and sigma-t at stations where temperature microstructure observations were made, 24 August 1973.

NO 1 LAT 44 40.0 LONG 124 6.0 STN D 2 DEPTH 27
 DATE 8/21/73 TIME 1810 AIR TEMP 52.0 WET BULB 50.1
 WIND DIR 270 SPEED 6 SWELL DIR 320 HT 3 FER 6
 CLOUD TYPE 4 - 0 AMT 1 BAR 23.0 WEA 1 INSTR CSU1
 BKT TEMP 9.2 SAL 0 SAMPLE DEPTH 12 SAL 33.799

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	8.85	33.76	26.20	183.4	0	0
1	8.85	33.76	26.20	183.4	.002	.000
10	8.37	33.70	26.23	181.0	.018	.009
20	7.25	33.81	26.47	158.0	.035	.034
26	7.08	33.82	26.51	154.5	.044	.055

NO 2 LAT 44 40.0 LONG 124 12.0 STN DEPTH 64
 DATE 8/21/73 TIME 1844 AIR TEMP 55.0 WET BULB 53.5
 WIND DIR 240 SPEED 6 SWELL DIR 340 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.2 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 54 SAL 33.870

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	9.03	33.37	25.87	215.0	0	0
10	8.43	33.42	26.00	202.7	.021	.010
20	7.40	33.61	26.29	174.7	.039	.038
30	7.32	33.66	26.35	169.7	.056	.081
40	7.12	33.80	26.49	156.8	.073	.138
50	7.03	33.86	26.55	151.3	.088	.206
60	7.02	33.87	26.56	150.5	.103	.289
62	7.02	33.88	26.56	149.8	.106	.307

NO 3 LAT 44 40.0 LONG 124 18.0 STN DEPTH 84
 DATE 8/21/73 TIME 1935 AIR TEMP 59.6 WET BULB 56.0
 WIND DIR 240 SPEED 4 SWELL DIR 340 HT 3 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.5 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	11.10	32.07	24.51	344.3	0	0
10	7.89	32.83	25.62	239.0	.027	.012
20	7.43	32.97	25.79	222.4	.049	.046
30	7.21	33.19	26.00	203.3	.071	.100
40	7.25	33.61	26.32	172.6	.090	.167
50	7.38	33.74	26.40	164.9	.107	.242
60	7.16	33.88	26.54	151.6	.122	.329
70	7.08	33.86	26.54	152.2	.138	.428
77	7.08	33.85	26.53	153.1	.148	.506

NO 4 LAT 44 40.0 LONG 124 24.0 STN DEPTH 90
 DATE 8/21/73 TIME 2018 AIR TEMP 62.0 WET BULB 57.8
 WIND DIR 240 SPEED 2 SWELL DIR 340 HT 3 FER 7
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 80 SAL 33.831

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	12.38	32.58	24.67	329.0	0	0
10	8.22	32.63	25.41	258.4	.029	.014
20	7.38	32.92	25.76	225.5	.053	.049
30	7.26	33.19	25.99	203.9	.074	.103
40	7.25	33.28	26.06	197.2	.094	.173
50	7.29	33.47	26.20	183.7	.114	.260
60	7.42	33.70	26.37	168.5	.131	.357
70	7.34	33.76	26.42	163.1	.148	.464
80	7.17	33.85	26.52	154.3	.164	.583
88	7.15	33.83	26.51	155.6	.176	.687

NO 5 LAT 44 40.0 LONG 124 30.0 STN DEPTH 120
 DATE 8/21/73 TIME 2120 AIR TEMP 63.5 WET BULB 58.8
 WIND DIR 0 SPEED 0 SWELL DIR 340 HT 3 FER 7
 CLOUD TYPE 8 - 0 AMT 3 BAR 24.0 WEA 3 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 109 SAL 33.859

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.17	32.11	23.95	397.4	0	0
10	9.75	32.64	25.18	280.4	.031	.015
20	7.43	32.98	25.72	229.2	.056	.052
30	7.37	32.97	25.80	221.8	.079	.108
40	7.25	33.23	26.02	201.0	.100	.162
50	7.49	33.49	26.19	185.0	.119	.268
60	7.51	33.61	26.28	176.5	.137	.367
70	7.43	33.72	26.38	167.3	.154	.478
80	7.19	33.79	26.46	159.5	.170	.600
90	7.03	33.83	26.52	154.1	.186	.732
100	6.97	33.86	26.55	151.2	.201	.876
110	6.95	33.87	26.57	150.3	.216	1.036
120	6.90	33.88	26.58	149.1	.231	1.208
121	6.90	33.88	26.58	149.1	.233	1.226

NO 6 LAT 44 40.0 LONG 124 36.0 STN DEPTH 198
 DATE 8/21/73 TIME 2206 AIR TEMP 61.2 WET BULB 57.9
 WIND DIR 0 SPEED 0 SWELL DIR 340 HT 3 FER 7
 CLOUD TYPE 8 - 0 AMT 3 BAR 24.0 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 181 SAL 33.940

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	12.36	32.45	24.57	338.2	0	0
10	10.36	32.70	25.13	285.7	.031	.015
20	9.39	32.78	25.35	265.0	.058	.056
30	8.81	32.90	25.53	247.2	.084	.120
40	8.20	33.15	25.82	219.9	.107	.201
50	8.03	33.26	25.93	209.6	.129	.298
60	7.64	33.40	26.10	193.9	.149	.409
70	7.58	33.51	26.19	185.0	.168	.533
80	7.60	33.65	26.30	175.0	.186	.669
90	7.43	33.73	26.39	166.9	.203	.814
100	7.37	33.78	26.44	162.5	.220	.970
110	7.23	33.85	26.51	155.6	.236	1.137
120	7.08	33.88	26.56	151.5	.251	1.313
130	6.98	33.91	26.59	148.1	.266	1.500
140	6.98	33.91	26.59	148.2	.281	1.700
150	6.96	33.92	26.60	147.3	.296	1.915
160	6.89	33.93	26.63	145.4	.310	2.142
170	6.85	33.94	26.63	144.7	.325	2.381
180	6.81	33.94	26.64	144.3	.339	2.633
190	6.79	33.96	26.66	142.7	.353	2.899
193	6.79	33.96	26.66	142.7	.358	2.981

NO 7 LAT 44 40.0 LONG 124 42.0 STN DEPTH 223
 DATE 8/21/73 TIME 2304 AIR TEMP 64.0 WET BULB 59.1
 WIND DIR 0 SPEED 0 SWELL DIR 340 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 5 BAR 24.0 WEA 3 INSTR CSU1
 BKT TEMP 13.5 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.98	32.63	24.39	355.5	0	0
10	10.41	32.72	25.13	285.0	.031	.015
20	8.79	32.83	25.40	251.9	.058	.055
30	8.07	33.03	25.75	226.9	.082	.115
40	7.93	33.18	25.89	213.9	.104	.191
50	7.69	33.42	26.10	193.3	.124	.283
60	7.62	33.57	26.24	180.9	.143	.384
70	7.73	33.70	26.32	172.9	.160	.498
80	7.68	33.76	26.38	168.0	.177	.626
90	7.59	33.90	26.42	163.5	.194	.766
100	7.22	33.83	26.50	156.8	.210	.918
110	7.14	33.83	26.51	155.8	.225	1.082
120	6.98	33.98	26.57	150.1	.241	1.258
130	6.99	33.90	26.58	148.9	.256	1.444
140	6.95	33.93	26.61	146.3	.270	1.643
150	6.88	33.93	26.62	145.5	.285	1.855
160	6.80	33.93	26.63	144.6	.300	2.081
170	6.71	33.95	26.66	142.1	.314	2.317
180	6.70	33.95	26.66	142.1	.328	2.565
190	6.68	33.96	26.67	141.3	.342	2.828
200	6.66	33.95	26.67	141.9	.356	3.106
217	6.63	33.96	26.68	141.0	.381	3.607

NO 8 LAT 44 40.0 LONG 124 48.2 STN DEPTH 336
 DATE 8/22/73 TIME 5 AIR TEMP 61.3 WET BULB 57.2
 WIND DIR 0 SPEED 0 SWELL DIR 320 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 5 BAR 24.0 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 306 SAL 33.995

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.21	32.45	24.20	373.3	0	0
10	11.23	32.54	24.85	311.9	.033	.016
20	7.65	32.67	25.52	248.1	.061	.057
30	7.43	32.81	25.67	234.5	.085	.117
40	7.43	33.20	25.97	205.6	.107	.194
50	7.44	33.24	26.00	202.9	.127	.286
60	7.73	33.62	26.26	178.7	.146	.388
70	7.74	33.62	26.26	179.0	.164	.504
80	7.70	33.77	26.38	167.5	.181	.633
90	7.51	33.82	26.45	161.3	.197	.772
100	7.46	33.83	26.46	160.0	.213	.924
110	7.41	33.85	26.49	158.0	.229	1.090
120	7.38	33.88	26.51	155.5	.245	1.270
130	7.21	33.87	26.53	154.1	.260	1.464
140	7.01	33.91	26.59	148.6	.276	1.668
150	6.84	33.93	26.63	145.1	.290	1.881
160	6.74	33.93	26.64	143.5	.305	2.105
170	6.72	33.93	26.65	143.4	.319	2.341
180	6.69	33.93	26.65	143.2	.333	2.591
190	6.67	33.94	26.66	142.8	.348	2.856
200	6.61	33.95	26.67	141.2	.362	3.132
225	6.48	33.98	26.71	137.7	.396	3.869
250	6.43	33.98	26.73	137.0	.431	4.686
300	6.19	34.00	26.77	133.5	.498	6.540
325	6.08	34.00	26.78	132.4	.531	7.573

NO 9 LAT 44 40.2 LONG 124 54.0 STN DEPTH 604
 DATE 8/22/73 TIME 140 AIR TEMP 60.3 WET BULB 56.9
 WIND DIR 0 SPEED 0 SWELL DIR 320 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 0 WEA 1 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 597 SAL 34.188

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.88	32.20	24.08	385.1	0	0
1	13.88	32.20	24.08	385.2	.004	.000
10	11.62	32.30	24.59	336.4	.037	.018
20	8.34	32.52	25.31	268.5	.067	.062
30	7.89	32.59	25.43	257.1	.093	.127
40	7.36	32.75	25.63	238.2	.118	.214
50	7.54	33.19	25.95	208.0	.140	.315
60	7.86	33.41	26.08	196.2	.160	.425
70	7.91	33.57	26.19	185.1	.179	.550
80	7.83	33.67	26.22	176.7	.198	.686
90	7.69	33.73	26.35	170.5	.215	.834
100	7.62	33.80	26.42	164.5	.232	.993
110	7.57	33.81	26.44	162.8	.248	1.165
120	7.39	33.87	26.56	156.4	.264	1.350
130	7.31	33.86	26.51	156.3	.280	1.546
140	7.20	33.88	26.54	153.4	.295	1.754
150	7.11	33.89	26.56	151.5	.310	1.975
160	6.99	33.90	26.58	149.4	.325	2.208
170	6.80	33.92	26.62	146.0	.340	2.452
180	6.63	33.90	26.63	144.9	.355	2.706
190	6.57	33.92	26.65	143.1	.369	2.972
200	6.54	33.91	26.65	143.3	.384	3.251
225	6.37	33.94	26.70	139.2	.419	3.998
250	6.33	33.98	26.73	136.1	.453	4.813
300	5.89	33.99	26.80	130.4	.519	6.637
400	5.42	34.06	26.91	120.4	.645	11.016
500	4.96	34.11	27.01	112.1	.760	16.206
600	4.59	34.20	27.12	102.4	.867	22.054
604	4.59	34.21	27.12	101.7	.871	22.298

NO 10 LAT 44 40.0 LONG 125 0 STN DEPTH 935
 DATE 8/22/73 TIME 330 AIR TEMP 57.1 WET BULB 55.3
 WIND DIR 300 SPEED 5 SWELL DIR 320 HT 3 FER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.3 WEA 2 INSTR CSU1
 BKT TEMP 14.0 SAL 0 SAMPLE DEPTH 678 SAL 34.238

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.71	32.17	24.05	384.1	0	0
10	10.06	32.36	24.91	306.0	.036	.017
20	8.08	32.46	25.30	269.7	.064	.059
30	7.68	32.64	25.50	250.5	.090	.124
40	7.81	32.86	25.65	236.1	.115	.209
50	7.90	33.05	25.79	223.3	.138	.313
60	7.90	33.27	25.96	207.1	.159	.431
70	7.81	33.42	26.05	194.9	.175	.560
80	7.71	33.54	26.20	184.7	.198	.702
90	7.67	33.71	26.34	171.7	.216	.854
100	7.50	33.79	26.42	163.9	.233	1.013
110	7.39	33.80	26.45	161.5	.249	1.183
120	7.26	33.83	26.50	157.2	.265	1.367
130	7.23	33.84	26.50	156.6	.280	1.563
140	7.17	33.85	26.52	155.2	.296	1.774
150	7.00	33.88	26.57	153.9	.311	1.997
160	6.96	33.87	26.56	151.2	.327	2.232
170	6.90	33.89	26.59	149.1	.342	2.479
180	6.87	33.90	26.60	148.3	.356	2.738
190	6.83	33.91	26.61	147.0	.371	3.012
200	6.79	33.91	26.62	146.6	.386	3.298
225	6.64	33.93	26.65	143.5	.422	4.069
250	6.57	33.94	26.67	142.2	.458	4.919
300	6.16	33.98	26.76	134.6	.528	6.841
400	5.53	34.04	26.88	123.8	.658	11.386
500	5.02	34.09	26.98	114.7	.777	16.731
600	4.61	34.18	27.10	104.1	.886	22.742
677	4.43	34.22	27.15	99.8	.964	27.696

NO 11 LAT 44 40.0 LONG 125 6.2 STN DEPTH 607
 DATE 8/22/73 TIME 446 AIR TEMP 58.0 WET BULB 55.4
 WIND DIR 280 SPEED 4 SWELL DIR 320 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.5 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 503 SAL 34.076

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
8	13.69	32.15	24.08	385.1	0	0
10	9.39	32.53	25.20	278.5	.034	.016
20	9.01	32.90	25.50	250.0	.060	.056
30	8.41	33.11	25.76	225.8	.084	.115
40	8.04	33.30	25.96	206.5	.106	.190
50	8.22	33.48	26.08	195.9	.126	.281
60	7.91	33.59	26.21	183.5	.145	.366
70	7.66	33.74	26.36	169.0	.163	.500
80	7.42	33.80	26.45	161.0	.179	.623
90	7.30	33.84	26.49	156.9	.195	.758
100	7.24	33.86	26.52	154.8	.211	.906
110	7.19	33.87	26.53	153.5	.226	1.068
120	7.15	33.89	26.55	151.7	.241	1.244
130	7.11	33.89	26.56	151.3	.256	1.434
140	7.07	33.92	26.59	148.7	.271	1.636
150	7.05	33.90	26.57	150.0	.286	1.853
160	6.99	33.92	26.60	147.9	.301	2.084
170	6.96	33.92	26.60	147.6	.316	2.327
180	6.91	33.94	26.63	145.6	.331	2.584
190	6.88	33.94	26.63	145.4	.345	2.853
200	6.81	33.95	26.64	144.2	.360	3.134
225	6.76	33.96	26.66	142.8	.396	3.897
250	6.67	33.97	26.68	141.2	.431	4.738
300	6.39	34.00	26.74	136.0	.501	6.651
400	5.70	34.04	26.86	125.6	.631	11.211
500	5.15	34.08	26.96	117.0	.753	16.694
505	5.14	34.09	26.97	116.2	.759	16.987

NO 12 LAT 44 40.0 LONG 125 12.0 STN DEPTH 1688
 DATE 8/22/73 TIME 600 AIR TEMP 58.3 WET BULB 54.8
 WIND DIR 270 SPEED 2 SWELL DIR 310 HT 3 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 23.5 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 528 SAL 34.110

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.60	32.30	24.21	372.4	0	0
10	12.83	32.39	24.44	351.5	.036	.018
20	10.18	32.84	25.27	272.2	.067	.063
30	8.54	33.05	25.69	232.1	.092	.125
40	8.08	33.40	26.04	199.7	.113	.200
50	7.92	33.53	26.16	187.9	.133	.287
60	7.77	33.71	26.32	172.6	.151	.387
70	7.54	33.76	26.40	165.9	.168	.497
80	7.34	33.83	26.47	158.5	.184	.617
90	7.28	33.85	26.50	155.9	.199	.751
100	7.22	33.86	26.52	154.2	.215	.898
110	7.15	33.87	26.54	153.0	.230	1.058
120	7.14	33.88	26.55	152.3	.245	1.233
130	7.09	33.90	26.57	150.3	.261	1.422
140	7.06	33.90	26.57	150.0	.275	1.624
150	7.01	33.92	26.60	148.0	.290	1.840
160	6.98	33.93	26.61	147.0	.305	2.069
170	6.96	33.92	26.60	147.6	.320	2.313
180	6.94	33.94	26.62	146.0	.335	2.570
190	6.92	33.94	26.62	145.9	.349	2.841
200	6.89	33.95	26.64	144.9	.364	3.124
225	6.84	33.96	26.65	143.9	.400	3.889
250	6.70	33.97	26.68	141.6	.435	4.736
300	6.50	33.99	26.72	138.2	.505	6.651
400	5.67	34.04	26.86	125.2	.636	11.216
500	5.18	34.12	26.99	114.4	.756	16.602
528	5.06	34.12	27.00	113.2	.788	18.246

NO 13 LAT 45 15.0 LONG 124 0 STN K 1 DEPTH 27
 DATE 8/22/73 TIME 1412 AIR TEMP 50.0 WET BULB 48.0
 WIND DIR 0 SPEED 0 SWELL DIR 300 HT 2 PER 6
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 20 SAL 33.763

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	9.45	33.45	25.86	215.5	0	0
10	7.65	33.59	26.25	178.8	.021	.010
20	7.23	33.75	26.43	161.6	.038	.035
26	7.16	33.79	26.47	157.8	.047	.057

NO 14 LAT 45 15.0 LONG 124 2.9 STN DEPTH 59
 DATE 8/22/73 TIME 1444 AIR TEMP 51.8 WET BULB 49.4
 WIND DIR 0 SPEED 0 SWELL DIR 300 HT 2 PER 6
 CLOUD TYPE 8 - 4 AMT 1 BAR 22.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 51 SAL 33.894

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	11.35	32.33	24.67	329.3	0	0
10	8.61	33.10	25.72	229.1	.029	.013
20	7.36	33.55	26.26	178.3	.049	.043
30	7.08	33.70	26.41	163.5	.066	.086
40	7.02	33.83	26.52	153.2	.081	.141
50	6.95	33.85	26.55	151.0	.097	.209
57	6.90	33.81	26.52	153.4	.107	.265

NO 15 LAT 45 15.0 LONG 124 6.0 STN K 2 DEPTH 89
 DATE 8/22/73 TIME 1520 AIR TEMP 52.2 WET BULB 50.1
 WIND DIR 130 SPEED 5 SWELL DIR 310 HT 2 PER 5
 CLOUD TYPE 8 - 0 AMT 1 BAR 22.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 78 SAL 33.910

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.14	31.16	23.43	447.5	0	0
10	10.49	32.57	25.90	297.8	.039	.018
20	7.72	33.21	25.94	208.5	.062	.052
30	7.23	33.39	26.15	188.6	.082	.102
40	7.14	33.61	26.33	171.2	.100	.165
50	7.05	33.81	26.50	155.2	.116	.238
60	6.92	33.86	26.56	150.0	.131	.322
70	6.88	33.86	26.57	149.6	.146	.418
80	6.79	33.88	26.55	147.1	.161	.529
87	6.79	33.85	26.57	149.4	.171	.615

NO 16 LAT 45 15.0 LONG 124 9.0 STN DEPTH 115
 DATE 8/22/73 TIME 1555 AIR TEMP 54.2 WET BULB 50.7
 WIND DIR 110 SPEED 6 SWELL DIR 310 HT 2 PER 6
 CLOUD TYPE 0 - 8 AMT 1 BAR 22.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 31.158 SAMPLE DEPTH 100 SAL 33.916

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	13.33	31.10	23.34	455.5	0	0
10	10.03	32.42	24.96	301.1	.039	.018
20	7.51	32.82	25.66	234.6	.066	.058
30	7.28	33.03	25.86	216.4	.089	.114
40	7.13	33.23	26.04	199.4	.109	.186
50	7.34	33.53	26.24	180.0	.128	.271
60	7.06	33.71	26.42	163.0	.145	.367
70	6.99	33.81	26.51	154.8	.161	.470
80	6.95	33.84	26.54	152.1	.177	.585
90	6.79	33.85	26.57	149.5	.192	.713
100	6.69	33.84	26.58	149.1	.207	.854
110	6.69	33.85	26.59	148.0	.221	1.010
113	6.69	33.85	26.58	148.5	.226	1.060

NO 20 LAT 45 15.0 LONG 124 9.0 STN DEPTH 114
 DATE 8/22/73 TIME 1820 AIR TEMP 58.0 WET BULB 54.0
 WIND DIR 220 SPEED 4 SWELL DIR 310 HT 2 FER 6
 CLOUD TYPE 0 - 8 APT 1 BAR 22.5 WEA 0 INSTR CSU1
 BKT TEMP 0 SAL 31.158 SAMPLE DEPTH 100 SAL 33.915

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.58	31.16	23.34	455.8	0	0
2	13.58	31.16	23.34	455.8	.009	.001
10	10.32	32.53	25.00	297.6	.040	.019
20	7.53	32.85	25.68	232.7	.066	.057
30	7.39	33.05	25.86	216.1	.088	.112
40	7.12	33.30	26.10	193.7	.109	.182
50	7.29	33.53	26.25	179.3	.127	.267
60	7.16	33.68	26.39	166.6	.144	.361
70	7.05	33.82	26.51	154.8	.160	.465
80	7.03	33.88	26.57	149.8	.176	.578
90	6.83	33.91	26.61	145.9	.190	.703
100	6.69	33.91	26.63	143.8	.205	.841
110	6.68	33.91	26.63	143.8	.219	.992

NO 21 LAT 45 15.0 LONG 124 12.0 STN DEPTH 152
 DATE 8/22/73 TIME 1911 AIR TEMP 58.5 WET BULB 55.0
 WIND DIR 240 SPEED 4 SWELL DIR 310 HT 3 FER 7
 CLOUD TYPE 6 - 8 APT 2 BAR 22.8 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 102 SAL 33.897

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.84	31.32	23.41	449.0	0	0
10	10.91	32.30	24.72	324.3	.041	.020
20	8.21	32.74	25.50	250.3	.070	.062
30	7.50	32.77	25.63	238.4	.094	.122
40	7.24	33.04	25.87	215.0	.117	.202
50	7.26	33.27	26.05	198.3	.138	.295
60	7.33	33.52	26.24	180.7	.156	.398
70	7.32	33.68	26.36	168.8	.174	.510
80	7.14	33.78	26.47	159.1	.190	.632
90	7.14	33.85	26.52	154.1	.206	.765
100	7.05	33.89	26.57	150.0	.221	.909
110	6.85	33.89	26.55	147.6	.236	1.066
120	6.75	33.90	26.62	145.6	.250	1.233
130	6.71	33.92	26.64	143.8	.265	1.414
140	6.65	33.93	26.65	142.4	.279	1.607
143	6.65	33.93	26.65	142.4	.283	1.667

NO 22 LAT 45 15.0 LONG 124 15.0 STN DEPTH 168
 DATE 8/22/73 TIME 1950 AIR TEMP 57.0 WET BULB 55.0
 WIND DIR 240 SPEED 7 SWELL DIR 310 HT 3 FER 7
 CLOUD TYPE 6 - 8 APT 2 BAR 22.5 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 154 SAL 33.923

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.12	31.50	23.49	441.2	0	0
10	12.15	31.92	24.20	373.7	.042	.021
20	7.71	32.68	25.52	247.8	.071	.062
30	7.46	32.73	25.60	240.9	.095	.123
40	7.30	32.98	25.82	220.3	.118	.203
50	7.33	33.08	25.89	213.4	.140	.300
60	7.27	33.30	26.07	196.3	.160	.412
70	7.39	33.47	26.19	185.4	.179	.536
80	7.33	33.58	26.28	176.6	.197	.672
90	7.19	33.72	26.41	164.4	.214	.817
100	7.17	33.85	26.52	154.6	.230	.966
110	7.01	33.88	26.56	150.4	.245	1.126
120	6.96	33.89	26.59	147.8	.260	1.297
130	6.76	33.90	26.61	145.9	.275	1.480
140	6.69	33.90	26.62	145.1	.289	1.675
150	6.67	33.91	26.63	144.3	.303	1.884
160	6.65	33.92	26.64	143.4	.318	2.107
165	6.65	33.92	26.64	143.5	.325	2.224

NO 23 LAT 45 15.0 LONG 124 18.0 STN DEPTH 192
 DATE 8/22/73 TIME 2025 AIR TEMP 60.1 WET BULB 55.6
 WIND DIR 240 SPEED 10 SWELL DIR 310 HT 3 FER 7
 CLOUD TYPE 0 - 6 APT 2 BAR 22.0 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 31.333 SAMPLE DEPTH 180 SAL 33.927

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	13.96	31.36	23.42	448.4	0	0
10	8.75	32.49	25.22	276.4	.037	.016
20	7.86	32.55	25.40	259.5	.063	.056
30	7.46	32.73	25.60	240.9	.088	.119
40	7.56	32.89	25.71	230.4	.112	.201
50	7.52	33.05	25.84	218.1	.134	.302
60	7.34	33.22	26.00	203.2	.156	.419
70	7.38	33.44	26.17	187.5	.175	.544
80	7.33	33.60	26.30	175.1	.193	.679
90	7.24	33.66	26.36	169.5	.210	.825
100	7.31	33.83	26.48	158.0	.227	.980
110	7.08	33.87	26.54	152.5	.242	1.144
120	6.95	33.88	26.57	149.8	.257	1.319
130	6.88	33.89	26.59	148.2	.272	1.505
140	6.80	33.90	26.61	146.6	.287	1.703
150	6.72	33.91	26.63	144.9	.301	1.914
160	6.70	33.92	26.64	144.1	.316	2.138
170	6.66	33.92	26.64	143.7	.330	2.375
180	6.64	33.92	26.65	143.6	.345	2.627
190	6.63	33.93	26.66	142.8	.359	2.891

NO 27 LAT 45 15.0 LONG 124 18.4 STN DEPTH 194
 DATE 8/22/73 TIME 2322 AIR TEMP 61.4 WET BULB 55.5
 WIND DIR 270 SPEED 11 SWELL DIR 310 HT 2 FER 6
 CLOUD TYPE 0 - 8 APT 2 BAR 21.2 WEA 1 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 179 SAL 33.930

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.62	30.87	22.90	497.4	0	0
10	9.50	32.44	25.07	291.4	.041	.018
20	8.10	32.55	25.37	262.5	.068	.059
30	7.65	32.62	25.49	251.6	.094	.123
40	7.39	32.80	25.66	234.9	.118	.207
50	7.47	33.15	25.93	210.0	.140	.307
60	7.42	33.40	26.13	190.9	.160	.419
70	7.41	33.53	26.23	181.2	.179	.539
80	7.30	33.66	26.35	170.2	.196	.670
90	7.18	33.80	26.48	157.9	.213	.810
100	7.25	33.85	26.51	155.7	.229	.960
110	7.00	33.87	26.56	151.0	.244	1.121
120	6.86	33.91	26.60	146.8	.259	1.292
130	6.80	33.91	26.62	145.7	.273	1.474
140	6.76	33.91	26.62	145.2	.288	1.670
150	6.74	33.93	26.64	143.7	.302	1.879
160	6.70	33.92	26.64	143.8	.317	2.102
170	6.69	33.92	26.64	144.1	.331	2.340
180	6.67	33.92	26.65	143.6	.346	2.591
190	6.63	33.93	26.66	142.8	.360	2.855
192	6.62	33.86	26.60	147.9	.363	2.910

NO 28 LAT 45 15.0 LONG 124 24.0 STN DEPTH 373
 DATE 8/23/73 TIME 35 AIR TEMP 61.0 WET BULB 56.0
 WIND DIR 270 SPEED 6 SWELL DIR 310 HT 2 PER 6
 CLOUD TYPE 8 - 6 AMT 4 BAR 21.1 WEA 3 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 359 SAL 34.022

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	PCTE
0	15.00	30.65	22.66	521.1	0	0
10	10.89	32.36	24.54	341.7	.045	.021
20	8.24	32.52	25.32	267.1	.074	.064
30	7.77	32.60	25.45	254.7	.100	.129
40	7.73	32.79	25.61	240.2	.125	.216
50	7.36	32.93	25.77	224.9	.148	.320
60	7.33	33.13	25.93	209.8	.170	.439
70	7.43	33.36	26.10	194.1	.190	.570
80	7.22	33.46	26.21	184.0	.209	.711
90	7.39	33.68	26.35	170.1	.227	.861
100	7.52	33.79	26.42	163.8	.243	1.019
110	7.56	33.81	26.43	163.0	.260	1.190
120	7.52	33.88	26.46	157.4	.276	1.375
130	7.32	33.90	26.54	153.4	.291	1.569
140	7.07	33.88	26.55	151.9	.307	1.776
150	6.94	33.90	26.59	148.8	.322	1.995
160	6.82	33.93	26.63	144.9	.336	2.223
170	6.75	33.93	26.64	143.8	.351	2.462
180	6.64	33.95	26.67	141.3	.365	2.712
190	6.57	33.93	26.66	142.1	.379	2.974
200	6.50	33.95	26.69	139.8	.393	3.246
225	6.34	33.99	26.74	135.3	.428	3.975
250	6.22	33.98	26.75	134.7	.461	4.777
300	5.97	33.95	26.79	131.4	.528	6.599
371	5.51	34.04	26.88	122.9	.618	9.637

NO 29 LAT 45 15.0 LONG 124 30.0 STN DEPTH 410
 DATE 8/23/73 TIME 143 AIR TEMP 60.9 WET BULB 56.2
 WIND DIR 270 SPEED 5 SWELL DIR 310 HT 2 PER 6
 CLOUD TYPE 8 - 1 AMT 5 BAR 20.8 WEA 3 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 396 SAL 34.039

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	PCTE
0	15.83	30.30	22.21	563.9	0	0
10	13.14	32.09	24.14	379.2	.046	.021
20	9.26	32.44	25.10	287.9	.079	.069
30	8.68	32.50	25.24	275.4	.107	.135
40	8.01	32.54	25.38	262.3	.133	.232
50	7.83	32.64	25.48	252.9	.159	.348
60	7.49	32.80	25.65	236.5	.184	.483
70	7.60	32.90	25.71	230.7	.207	.635
80	7.64	33.28	26.01	203.1	.229	.797
90	7.53	33.49	26.19	186.1	.248	.962
100	7.69	33.66	26.30	175.8	.266	1.134
110	7.63	33.69	26.33	172.9	.284	1.317
120	7.56	33.76	26.40	166.5	.301	1.511
130	7.52	33.82	26.45	162.1	.317	1.717
140	7.40	33.88	26.51	156.0	.333	1.931
150	7.30	33.88	26.52	154.9	.348	2.156
160	7.10	33.91	26.57	150.6	.364	2.392
170	6.94	33.92	26.61	147.4	.379	2.639
180	6.88	33.91	26.61	147.5	.393	2.897
190	6.71	33.93	26.64	143.9	.408	3.168
200	6.60	33.92	26.65	143.3	.422	3.449
225	6.29	33.93	26.70	138.9	.458	4.197
250	6.12	33.94	26.73	136.4	.492	5.008
300	5.72	33.99	26.81	128.7	.558	6.819
400	5.37	34.04	26.90	121.5	.682	11.169
407	5.33	33.79	26.71	139.7	.691	11.519

NO 30 LAT 45 15.0 LONG 124 40.2 STN DEPTH 450
 DATE 8/23/73 TIME 350 AIR TEMP 59.7 WET BULB 57.0
 WIND DIR 0 SPEED 0 SWELL DIR 310 HT 2 PER 6
 CLOUD TYPE 8 - 1 AMT 5 BAR 20.2 WEA 3 INSTR CSU1
 BKT TEMP 0 SAL 31.361 SAMPLE DEPTH 444 SAL 34.075

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	PCTE
0	15.19	31.33	23.14	475.1	0	0
1	15.19	31.33	23.14	475.2	.005	.000
10	13.45	32.09	24.08	385.2	.043	.020
20	10.45	32.44	24.91	306.5	.078	.072
30	8.92	32.54	25.23	275.9	.107	.144
40	8.22	32.54	25.34	265.5	.134	.239
50	8.19	32.68	25.46	254.9	.160	.356
60	8.06	32.80	25.57	244.3	.185	.492
70	7.84	32.96	25.72	229.9	.208	.645
80	7.47	33.14	25.92	211.2	.230	.811
90	7.55	33.37	26.09	195.3	.251	.982
100	7.82	33.47	26.13	191.8	.270	1.165
110	7.87	33.55	26.18	186.7	.289	1.364
120	7.84	33.66	26.27	178.3	.307	1.575
130	7.66	33.76	26.38	168.5	.325	1.792
140	7.52	33.81	26.44	163.0	.341	2.015
150	7.44	33.85	26.48	159.0	.357	2.251
160	7.33	33.85	26.50	157.4	.373	2.497
170	7.13	33.87	26.54	153.9	.389	2.755
180	7.01	33.89	26.57	150.7	.404	3.022
190	6.88	33.90	26.59	148.7	.419	3.299
200	6.78	33.92	26.63	145.7	.434	3.586
225	6.57	33.93	26.66	142.6	.470	4.351
250	6.28	33.95	26.72	137.7	.505	5.182
300	5.87	33.97	26.78	131.6	.572	7.028
400	5.43	34.06	26.91	120.7	.697	11.402
455	5.12	34.05	26.94	118.3	.762	14.180

NO 34 LAT 45 14.7 LONG 124 40.6 STN DEPTH 530
 DATE 8/23/73 TIME 553 AIR TEMP 0 WET BULB 0
 WIND DIR 130 SPEED 4 SWELL DIR 310 HT 2 PER 6
 CLOUD TYPE 8 - 0 AMT 2 BAR 20.2 WEA 2 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 98 SAL 33.836

DEPTH	TEMP	SAL	SIGMA	SWA	DELD	PCTE
0	15.19	31.25	23.08	481.0	0	0
10	13.95	32.05	23.95	397.9	.044	.021
20	11.52	32.34	24.64	331.9	.082	.077
30	9.89	32.49	25.04	294.1	.113	.154
40	8.81	32.55	25.26	273.3	.141	.253
50	8.16	32.65	25.43	257.0	.168	.372
60	7.98	32.91	25.67	235.0	.192	.508
70	7.74	33.08	25.83	219.2	.215	.655
80	7.45	33.23	25.99	204.2	.236	.813
90	7.61	33.45	26.14	190.2	.256	.982
100	7.86	33.56	26.19	185.6	.275	1.161
110	7.87	33.62	26.24	181.5	.293	1.353
119	7.72	33.70	26.32	173.6	.309	1.536

NO 35 LAT 45 15.0 LONG 124 50.0 STN DEPTH 812
 DATE 8/23/73 TIME 745 AIR TEMP 59.0 WET BULB 56.3
 WIND DIR 0 SPEED 0 SWELL CIR 310 HT 2 PER 7
 CLOUD TYPE 6 - 8 AMT 8 BAR 28.2 WEA 50 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 801 SAL 34.331

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	15.46	31.99	23.58	432.4	0	0
10	14.39	32.09	23.95	397.6	.041	.020
20	11.79	32.52	24.73	323.3	.077	.073
30	10.28	32.56	25.03	294.8	.108	.150
40	9.34	32.54	25.17	282.0	.136	.250
50	8.72	32.57	25.29	270.7	.164	.374
60	8.30	32.64	25.41	259.6	.190	.519
70	7.97	32.73	25.53	248.4	.216	.685
80	7.88	32.82	25.65	233.2	.240	.866
90	7.53	33.03	25.82	220.3	.263	1.058
100	7.70	33.30	26.01	202.7	.284	1.259
110	7.78	33.54	26.19	186.2	.303	1.461
120	7.75	33.67	26.30	176.2	.321	1.668
130	7.62	33.72	26.35	170.9	.338	1.884
140	7.49	33.84	26.47	160.3	.355	2.109
150	7.45	33.84	26.47	159.6	.371	2.342
160	7.36	33.86	26.50	157.1	.387	2.588
170	7.22	33.88	26.54	154.1	.403	2.844
180	7.14	33.89	26.56	152.1	.418	3.112
190	7.06	33.90	26.57	150.8	.433	3.390
200	6.96	33.92	26.60	148.1	.448	3.681
225	6.74	33.96	26.66	142.5	.484	4.454
250	6.62	33.96	26.68	141.3	.520	5.300
300	6.23	34.01	26.77	133.2	.588	7.176
400	5.39	34.07	26.92	119.5	.714	11.576
500	4.96	34.14	27.33	110.2	.829	16.720
600	4.53	34.22	27.14	100.2	.934	22.498
800	3.93	34.37	27.32	83.5	1.120	35.451
809	3.91	34.38	27.33	83.0	1.127	36.056

NO 37 LAT 45 15.1 LONG 125 15.0 STN DEPTH 1985
 DATE 8/23/73 TIME 1329 AIR TEMP 56.8 WET BULB 55.6
 WIND DIR 0 SPEED 0 SWELL CIR 300 HT 1 PER 6
 CLOUD TYPE 5 - 0 AMT 8 BAR 18.3 WEA 50 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 1002 SAL 34.406

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	16.39	32.15	23.50	440.5	0	0
10	16.39	32.23	23.56	434.9	.044	.022
20	15.94	32.25	23.68	424.0	.086	.086
30	13.26	32.50	24.44	351.9	.126	.184
40	10.58	32.58	25.00	298.7	.159	.257
50	9.10	32.54	25.21	278.6	.187	.427
60	8.69	32.55	25.28	271.9	.215	.578
70	8.28	32.55	25.34	265.9	.242	.752
80	7.65	32.74	25.58	243.4	.267	.943
90	7.65	32.96	25.75	227.4	.290	1.141
100	7.81	33.17	25.85	214.3	.312	1.349
110	7.87	33.38	26.05	199.1	.333	1.563
120	7.04	33.42	26.20	185.2	.352	1.783
130	7.11	33.56	26.30	175.8	.370	2.009
140	7.23	33.68	26.38	168.4	.387	2.240
150	7.24	33.79	26.47	160.4	.403	2.476
160	7.13	33.84	26.52	155.8	.419	2.721
170	7.11	33.87	26.54	153.4	.435	2.975
180	7.05	33.87	26.55	152.5	.450	3.242
190	6.97	33.90	26.59	149.3	.465	3.522
200	6.89	33.91	26.60	148.3	.480	3.811
225	6.62	33.93	26.66	143.2	.516	4.589
250	6.36	33.94	26.70	139.4	.552	5.429
300	5.91	33.98	26.79	131.4	.619	7.289
400	5.22	34.01	26.90	121.9	.746	11.708
500	4.75	34.13	27.04	108.5	.861	16.874
600	4.43	34.17	27.11	102.5	.967	22.689
800	3.94	34.35	27.31	85.5	1.154	35.738
1000	3.49	34.44	27.42	75.3	1.313	49.582
1002	3.49	34.44	27.42	75.3	1.314	50.133

NO 36 LAT 45 15.0 LONG 125 0 STN DEPTH 1298
 DATE 8/23/73 TIME 1012 AIR TEMP 57.4 WET BULB 54.0
 WIND DIR 340 SPEED 5 SWELL CIR 310 HT 1 PER 7
 CLOUD TYPE 6 - 8 AMT 8 BAR 19.2 WEA 50 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 1019 SAL 34.423

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	16.15	32.16	23.56	434.6	0	0
10	15.78	32.13	23.62	429.1	.043	.022
20	15.05	32.26	23.88	404.7	.085	.084
30	13.13	32.49	24.45	350.2	.122	.177
40	10.45	32.55	24.99	298.8	.154	.288
50	9.08	32.58	25.24	275.3	.183	.417
60	8.60	32.57	25.31	269.2	.210	.566
70	8.30	32.61	25.38	262.0	.237	.739
80	8.09	32.73	25.51	250.3	.262	.930
90	7.85	33.00	25.75	227.3	.286	1.136
100	7.79	33.28	25.98	205.5	.308	1.340
110	7.73	33.42	26.10	194.8	.328	1.549
120	7.70	33.54	26.20	185.2	.347	1.769
130	7.74	33.66	26.29	177.1	.365	1.993
140	7.81	33.74	26.34	172.2	.382	2.227
150	7.88	33.80	26.38	168.9	.399	2.473
160	7.52	33.81	26.44	163.1	.416	2.732
170	7.37	33.86	26.50	157.7	.432	2.996
180	7.25	33.89	26.54	153.9	.447	3.268
190	7.15	33.90	26.56	152.0	.463	3.550
200	7.05	33.92	26.59	149.6	.478	3.844
225	6.74	33.95	26.66	143.3	.514	4.622
250	6.61	33.96	26.68	141.2	.550	5.468
300	6.16	34.00	26.77	133.4	.618	7.348
400	5.46	34.03	26.88	123.3	.746	11.822
500	5.14	34.11	26.98	114.9	.865	17.155
600	4.51	34.24	27.16	98.5	.971	22.952
800	3.99	34.35	27.30	86.1	1.155	35.782
1000	3.52	34.45	27.43	74.9	1.314	50.128
1019	3.49	34.46	27.44	73.9	1.329	51.558

NO 38 LAT 45 15.2 LONG 125 30.0 STN DEPTH 3230
 DATE 8/23/73 TIME 1630 AIR TEMP 57.0 WET BULB 55.2
 WIND DIR 250 SPEED 4 SWELL DIR 290 HT 2 PER 6
 CLOUD TYPE 6 - 8 AMT 8 BAR 18.8 WEA 10 INSTR CSU1
 BKT TEMP 0 SAL 32.044 SAMPLE DEPTH 1012 SAL 34.422

DEPTH	TEMP	SAL	SIGMA	SVA	DELO	PCTE
0	16.12	32.02	23.46	444.1	0	0
10	15.75	32.13	23.63	428.5	.044	.022
20	15.08	32.19	23.92	410.4	.086	.085
30	12.78	32.45	24.49	347.1	.124	.180
40	10.87	32.53	24.91	307.2	.157	.294
50	9.37	32.51	25.14	284.9	.186	.426
60	8.59	32.61	25.34	266.0	.213	.576
70	8.35	32.67	25.42	258.2	.240	.747
80	7.82	32.70	25.52	248.7	.265	.937
90	7.67	32.79	25.62	240.1	.289	1.144
100	7.52	33.04	25.83	219.6	.312	1.361
110	7.55	33.25	25.99	204.6	.334	1.584
120	7.42	33.38	26.12	193.3	.354	1.814
130	7.61	33.56	26.23	182.6	.372	2.045
140	7.76	33.73	26.34	172.3	.390	2.284
150	7.70	33.78	26.39	167.9	.407	2.530
160	7.64	33.82	26.43	164.2	.423	2.787
170	7.43	33.81	26.45	162.2	.440	3.056
180	7.43	33.88	26.51	157.1	.456	3.334
190	7.22	33.86	26.52	155.9	.471	3.623
200	7.01	33.86	26.55	153.0	.487	3.925
225	6.67	33.90	26.63	146.1	.524	4.719
250	6.35	33.92	26.68	140.9	.560	5.576
300	5.98	33.97	26.77	133.1	.629	7.461
400	5.08	34.01	26.91	120.5	.756	11.894
500	4.67	34.09	27.02	110.6	.870	17.047
600	4.45	34.21	27.14	100.0	.976	22.828
800	3.97	34.35	27.30	86.2	1.162	35.816
1000	3.51	34.46	27.44	74.0	1.322	50.166
1027	3.45	34.47	27.45	72.8	1.342	52.155

NO 47 LAT 45 15.0 LONG 124 15.0 STN DEPTH 163
 DATE 8/24/73 TIME 515 AIR TEMP 0 WET BULB 0
 WIND DIR 0 SPEED 0 SWELL DIR 0 HT 0 PER 0
 CLOUD TYPE 0 - 0 AMT 0 BAR 0 WEA 0 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 157 SAL 33.514

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.92	30.40	22.48	537.9	0	0
2	14.92	30.40	22.48	537.9	.011	.001
10	9.93	32.36	24.93	304.0	.046	.021
20	7.94	32.61	25.44	256.2	.073	.061
30	7.44	32.81	25.66	234.7	.098	.122
40	7.23	33.02	25.86	216.4	.120	.199
50	7.16	33.20	26.01	202.2	.141	.254
60	7.25	33.36	26.12	191.6	.161	.401
70	7.33	33.58	26.28	176.4	.179	.519
80	7.18	33.69	26.39	166.4	.196	.647
90	7.24	33.85	26.51	155.5	.212	.782
100	7.03	33.84	26.53	153.5	.227	.928
110	6.90	33.89	26.59	148.2	.242	1.066
120	6.92	33.90	26.59	147.9	.257	1.256
130	6.82	33.91	26.61	146.0	.271	1.440
140	6.79	33.91	26.62	145.7	.286	1.636
150	6.72	33.91	26.63	144.6	.300	1.846
159	6.70	33.92	26.64	144.1	.313	2.047

NO 49 LAT 45 14.7 LONG 124 14.7 STN DEPTH 164
 DATE 8/24/73 TIME 840 AIR TEMP 56.2 WET BULB 55.0
 WIND DIR 190 SPEED 8 SWELL DIR 230 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 18.0 WEA 51 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.88	29.97	22.16	568.6	0	0
1	14.88	29.97	22.16	568.7	.006	.000
10	10.44	32.27	24.72	318.8	.048	.022
20	7.80	32.67	25.50	245.8	.076	.063
30	7.38	32.80	25.67	234.6	.100	.124
40	7.25	33.04	25.87	215.1	.123	.203
50	7.19	33.12	25.94	208.5	.144	.298
60	7.29	33.35	26.11	192.8	.164	.408
70	7.35	33.58	26.28	176.7	.183	.528
80	7.15	33.72	26.42	163.7	.200	.655
90	7.26	33.84	26.50	156.4	.216	.791
100	7.10	33.87	26.54	152.2	.231	.938
110	6.93	33.88	26.58	149.3	.246	1.096
120	6.87	33.91	26.61	146.5	.261	1.267
130	6.83	33.91	26.61	146.1	.276	1.449
140	6.76	33.91	26.62	145.3	.290	1.645
150	6.74	33.93	26.64	143.7	.305	1.854
160	6.72	33.93	26.64	143.6	.319	2.078
164	6.72	33.92	26.64	144.4	.325	2.172

NO 48 LAT 45 14.7 LONG 124 13.8 STN DEPTH 161
 DATE 8/24/73 TIME 715 AIR TEMP 57.5 WET BULB 56.0
 WIND DIR 190 SPEED 12 SWELL DIR 230 HT 3 PER 7
 CLOUD TYPE 6 - 0 AMT 8 BAR 18.0 WEA 51 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	14.86	30.14	22.29	555.7	0	0
10	10.63	32.25	24.73	323.3	.050	.023
20	7.77	32.65	25.49	250.9	.077	.064
30	7.43	32.75	25.62	239.0	.102	.125
40	7.26	33.00	25.84	218.6	.124	.204
50	7.17	33.17	25.98	204.9	.146	.300
60	7.21	33.40	26.16	188.1	.165	.467
70	7.33	33.57	26.28	176.8	.183	.524
80	7.21	33.67	26.37	168.2	.201	.654
90	7.26	33.84	26.50	156.4	.217	.792
100	7.05	33.85	26.54	153.0	.232	.938
110	6.94	33.88	26.57	149.5	.247	1.095
120	6.90	33.92	26.61	146.1	.262	1.265
130	6.88	33.91	26.61	146.7	.277	1.449
140	6.80	33.93	26.63	144.3	.291	1.645
150	6.73	33.92	26.63	144.3	.306	1.855
157	6.70	33.93	26.65	143.3	.316	2.010

NO 50 LAT 44 45.0 LONG 124 15.0 STN DEPTH 91
 DATE 8/24/73 TIME 1411 AIR TEMP 53.3 WET BULB 52.5
 WIND DIR 170 SPEED 27 SWELL DIR 170 HT 4 PER 3
 CLOUD TYPE 7 - 0 AMT 8 BAR 13.1 WEA 50 INSTR CSU1
 BKT TEMP 0 SAL 0 SAMPLE DEPTH 0 SAL 0

DEPTH	TEMP	SAL	SIGMA	SVA	DELD	PCTE
0	10.43	32.74	25.15	283.6	0	0
10	9.63	32.84	25.36	263.7	.028	.014
20	7.85	33.04	25.79	222.9	.052	.050
30	7.71	33.14	25.89	213.7	.074	.104
40	7.23	33.32	26.09	194.4	.095	.176
50	7.24	33.64	26.34	170.4	.113	.257
60	7.60	33.92	26.51	155.1	.129	.345
70	7.45	33.96	26.57	149.7	.144	.444
80	7.15	33.98	26.62	144.4	.159	.554
86	7.11	34.00	26.65	142.4	.167	.626

REFERENCES

- Anonymous. 1972. CUE-I Hydrographic Data Report, YAQUINA Cruise Y7207A 5-9 July 1972. School of Oceanography, Oregon State University. CUEA Data Report No. 2. 104 pp.
- Perkin, R. G. and E. R. Walker. 1972. Salinity calculations from in situ measurements. *Journal of Geophysical Research*. 77(33):6618-6621.
- Sweers, H. E. 1971. A comparison of methods used to calculate σ_t , specific volume anomaly, and dynamic height. *MTS Journal*. 5(3):7-26.

