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Monthly Temperature and Salinity Measurements of Continental Shelf Waters of the Northwestern Gulf of Mexico, 1963-65

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Monthly Temperature and Salinity Measurements of Continental Shelf Waters of the Northwestern Gulf of Mexico, 1963-65[1]

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ABSTRACT

Temperature and salinity observations made monthly from January 1963 to December 1965 at 48 stations in the northwestern Gulf of Mexico are presented. Off the coasts of Louisiana and Texas monthly average temperatures of surface and bottom waters at station depths of 7, 14, 28, 46, and 73 m exhibited seasonal trends that were similar over a 3-yr period. Monthly average temperatures of surface and bottom waters were generally similar at station depths of 7 and 14 m, but differences were noted at station depths of 28, 46, and 73 m and increased with depth. Maximum average temperatures of bottom waters at station depths generally greater than 14 m occurred after surface temperatures had passed their maximum and were dropping.

Salinities of surface and bottom waters varied markedly at 7- and 14-m stations, whereas at deeper stations seasonal fluctuations were restricted primarily to surface waters. The magnitude of yearly salinity fluctuations decreased with an increase in distance offshore. The effects of the seasonal freshwater inflow of the Mississippi River and other Louisiana rivers on salinities were clearly apparent in Louisiana and Texas offshore waters, although in the latter case there may have been a 1- or 2-mo lag.

INTRODUCTION

Between 1962 and 1965 the Galveston Laboratory of the National Marine Fisheries Service, formerly the Bureau of Commercial Fisheries, conducted an intensive survey of the waters over the continental shelf of the northwestern Gulf of Mexico. This survey was designed primarily to provide biological information on shrimp (Kutkuhn 1963; Temple and Fischer 1965 and 1967; Brusher et al. 1972; and Temple 1973) and finfish (Moore et al. 1970), but hydrographic data also were collected during the study to provide information essential for a more complete understanding of the environment over the continental shelf.

Hydrographic studies have been conducted periodically throughout the offshore waters of the Gulf of Mexico over the past 35 yr, but these studies generally have been either 1) extensive efforts covering large geographical areas of the Gulf on a seasonal or sporadic basis, or, 2) intensive efforts investigating specific phenomena over a restricted geographical area. Studies in the first category include those reported by Collier 1958; Ichiye 1962; Armstrong and Grady 1967 and 1968; and Nowlin and McLellan 1967. Those in the second category include investigations reported by Gunter 1945; Marvin 1955; Drummond and Austin 1958; Curl 1959; Finucane and Dragovich 1959; Wennekens 1959; Dragovich 1961 and 1963; Dragovich et al. 1961 and 1963; Jones et al. 1965; Stevenson and Leipper 1967; Armstrong 1967 and 1969; Armstrong et al. 1967; and Nowlin and Parker 1974. Additional general information is provided by Fuglister 1947; Leipper 1954; and U.S. Naval Oceanographic Office 1972.

The temperature and salinity information presented in this report adds to the hydrographic data base for the Gulf of Mexico, and is unique in several respects. First, measurements were made generally on a monthly basis at specified locations in the northwestern Gulf of Mexico over a 3-yr period, thus providing a time series heretofore unavailable. Second, these measurements were restricted to a portion of the U.S. continental shelf that is noted for its valuable shrimp and mineral resources which must receive adequate consideration in extended jurisdiction and coastal zone management.

PROCEDURES

Between January 1963 and December 1965, 35 cruises were conducted in continental shelf waters with the 27-m chartered shrimp trawler MV *Gus III*. Observations were made monthly at stations positioned on eight transects located west of the mouth of the Mississippi River and extending to just north of the Mexico-U.S. border (Fig. 1). Stations on two additional transects east of the Mississippi River were occupied only in 1963 during every other month beginning in February. Along each transect stations were positioned in predetermined total

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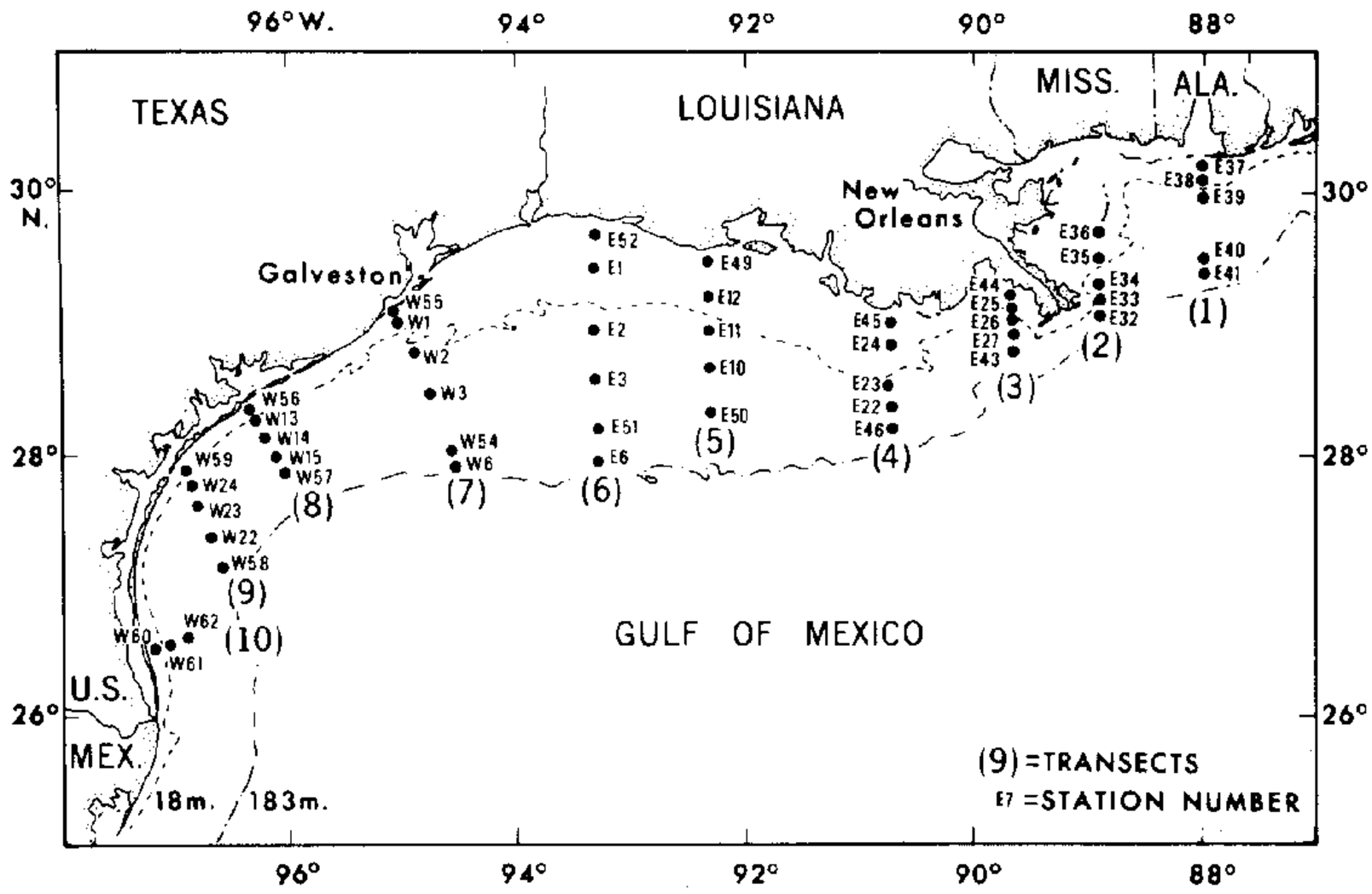

Figure 1.—Transects with stations occupied during the National Marine Fisheries Service's investigation of the continental shelf waters of the northwestern Gulf of Mexico, 1963-65.

water depths recorded originally in fathoms but converted herein to the nearest meter. Operations were conducted around the clock, and the time required to complete a cruise ranged from 10 to 24 days; the average cruise was completed in 14 days. Occasionally some stations could not be occupied because of adverse weather conditions or mechanical breakdowns.

Temperatures were measured with mechanical bathythermographs that were allowed to sound bottom on all casts. Surface bucket temperatures were taken for correction purposes with stem thermometers graduated to 0.1°C. In the laboratory, temperature and depth corrections were calculated for each slide before photography, and bathythermogram profiles were aligned by the average correction process as outlined by LaFond (1951). For tabulation purposes, temperatures at a station were recorded at 0 (surface), 3, 11, 24, 43, 70, 107, and B (bottom) meters, depending on total water depth.

Samples of surface water for salinity determinations were obtained from the bucket samples used for bathythermograph reference temperatures. Samples of subsurface waters were taken at depths of 3, 11, 24, 43, 70, and 107 m with Nansen bottles. The deepest sample at any station was 3 m above the bottom. Depths were determined from the wire angles and precalculated length-of-wire tables. Regardless of the method of collection, all samples were drawn into 200-ml culture tubes with Polyseal caps. Chlorinity was determined in the laboratory by the Knudsen method as soon as possible after each cruise.

All temperature and salinity values obtained at each station during this survey are listed by station and grouped by transects in Tables 1-10.

RESULTS

Temperatures and salinities of waters over the continental shelf of the Gulf of Mexico are affected by a number of factors such as air temperatures, surface winds, oceanic currents, and freshwater inflow. Of these, one significant factor in the area under consideration is the discharge from the Mississippi River which has a more pronounced or immediate effect on waters off Louisiana than on those off Texas. For this reason and because State agencies in Louisiana and Texas are concerned with natural resources off their respective coasts, the data have been grouped for 1) Louisiana waters (Tables 3-6), and 2) Texas waters (Tables 7-10). Data generated from east of the Mississippi River (Tables 1-2) and from 110 m of water (Table 6, Station E6 and Table 7, Station W6) are listed for informational purposes only.

Louisiana Offshore Waters

Monthly average surface and bottom temperatures (averaged for observations at stations of like bottom depths) over the 3-yr period are plotted for five depth zones in Figure 2. Within each depth zone, the trends were similar between years, and differences between depths were consistent. Surface and bottom water temperatures closely approximated one another at the 7-m stations, but the yearly range from a low of about 13.0°C to the high of 30.5°C was greater at this depth than noted at the deeper zones. As depth increased, the differences between surface and bottom temperatures increased and were greatest at the 73-m stations. Surface temperatures at all stations generally dropped during the fall and winter, warmed during the spring, and attained highest values in the summer. Bottom temperatures at depths greater than 7 m, however, only approximated this general cycle inasmuch as highest values frequently occurred when surface waters were cooling. This was particularly pronounced at the two deepest (46 to 73 m) zones.

Monthly average surface and near-bottom salinities for five depth zones are presented in Figure 3. Also in-

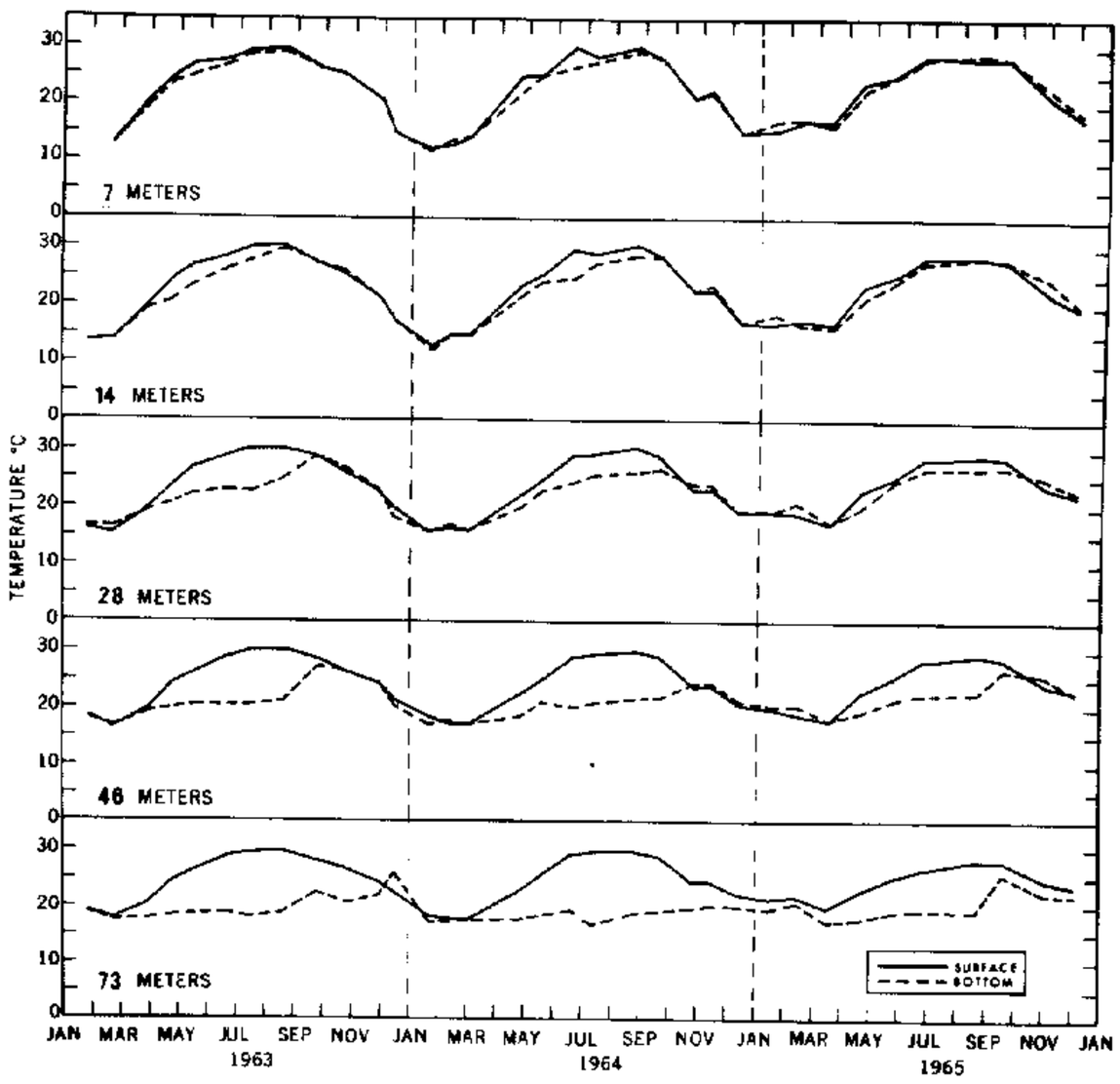

Figure 2.—Temperature trends of surface and bottom waters over the continental shelf off Louisiana, 1963-65.

cluded is the monthly discharge of fresh water from the Mississippi River and other Louisiana rivers. Trends in salinities were generally similar between years at the respective depths, but differences did exist between depths. At the 7-m stations, surface salinities generally reflected near-bottom conditions with values ranging from a low of 16.5‰ to a high of 33.7‰. Annual variations decreased with increasing depth and distance offshore, with near-bottom salinities being virtually invariant at the 46- and 73-m depth zones. The effects and extent of the seasonal discharge of fresh water from the Mississippi River on offshore salinity values were readily apparent over the entire continental shelf off Louisiana.

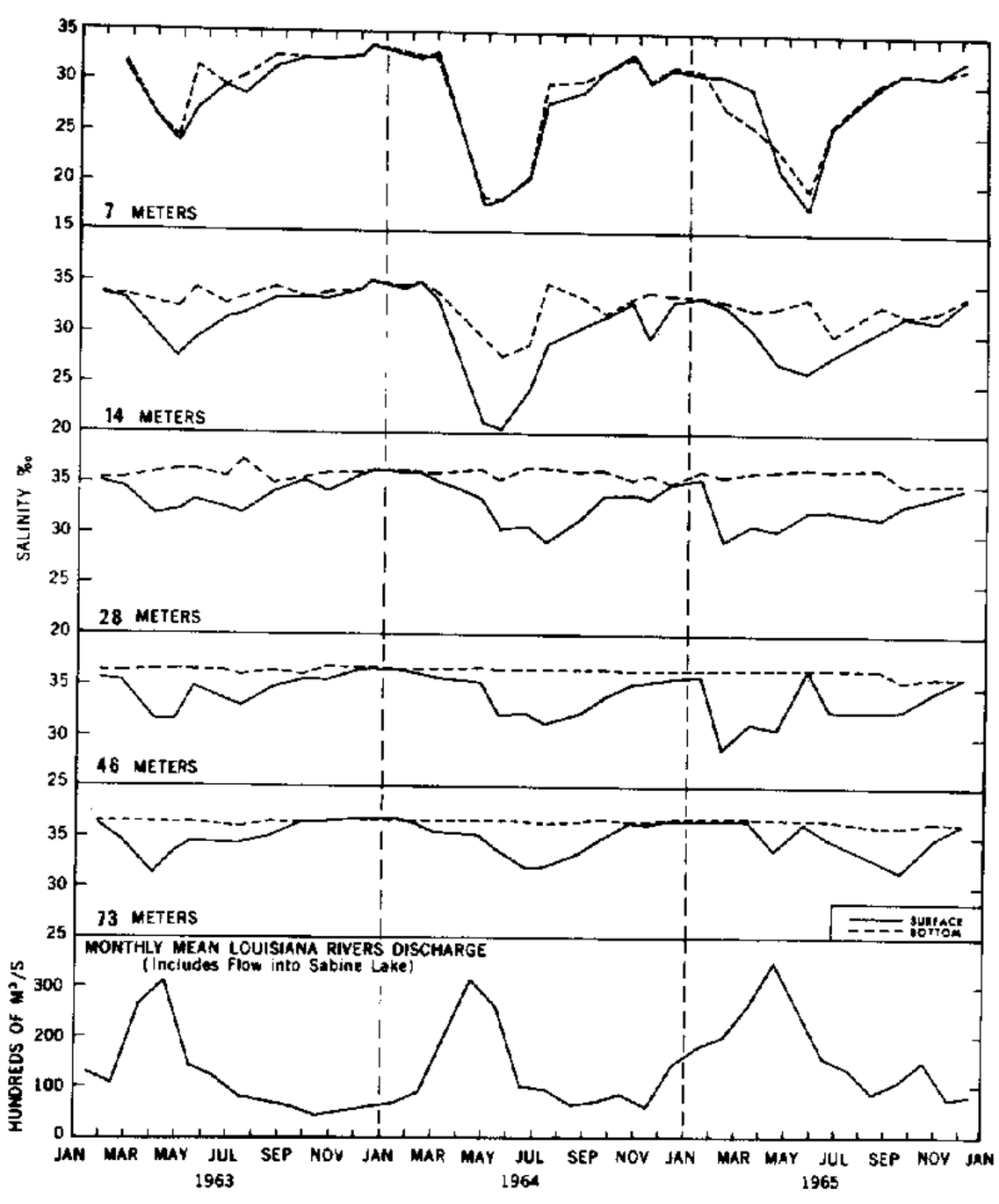

Figure 3.—Salinity trends in surface and bottom waters over the continental shelf off Louisiana, 1963-65.

Texas Offshore Waters

Trends in monthly average temperatures of surface and bottom waters at five depth zones are illustrated in Figure 4. Similar trends were apparent each year, but as in Louisiana waters, differences did occur with increased distance offshore or total depth. Monthly average temperatures of surface and bottom waters at depths of 7 and 14 m were generally similar over the 3-yr period, ranging from a low of about 10.5°C in February 1963 to a high of 30°C in September 1963. Temperature ranges of both surface and bottom waters decreased offshore and with increasing depth. Also, differences between surface and bottom measurements, when they occurred, were more pronounced in the deep waters than in the shallow waters. At depths of 28 m or greater, average monthly values revealed that maximum bottom temperatures occurred generally during a time when temperatures of surface waters were decreasing.

Yearly trends in monthly average salinity values of surface and near-bottom waters off Texas (Fig. 5) were more pronounced at station depths of 7 and 14 m than at the deeper stations (28, 46, and 73 m). Seasonal variations in salinities of surface and near-bottom waters were generally similar out to a depth of 28 m, but beyond that depth near-bottom salinities exhibited little seasonal change. Marked decreases in salinity values, either in surface and/or bottom waters, were related to

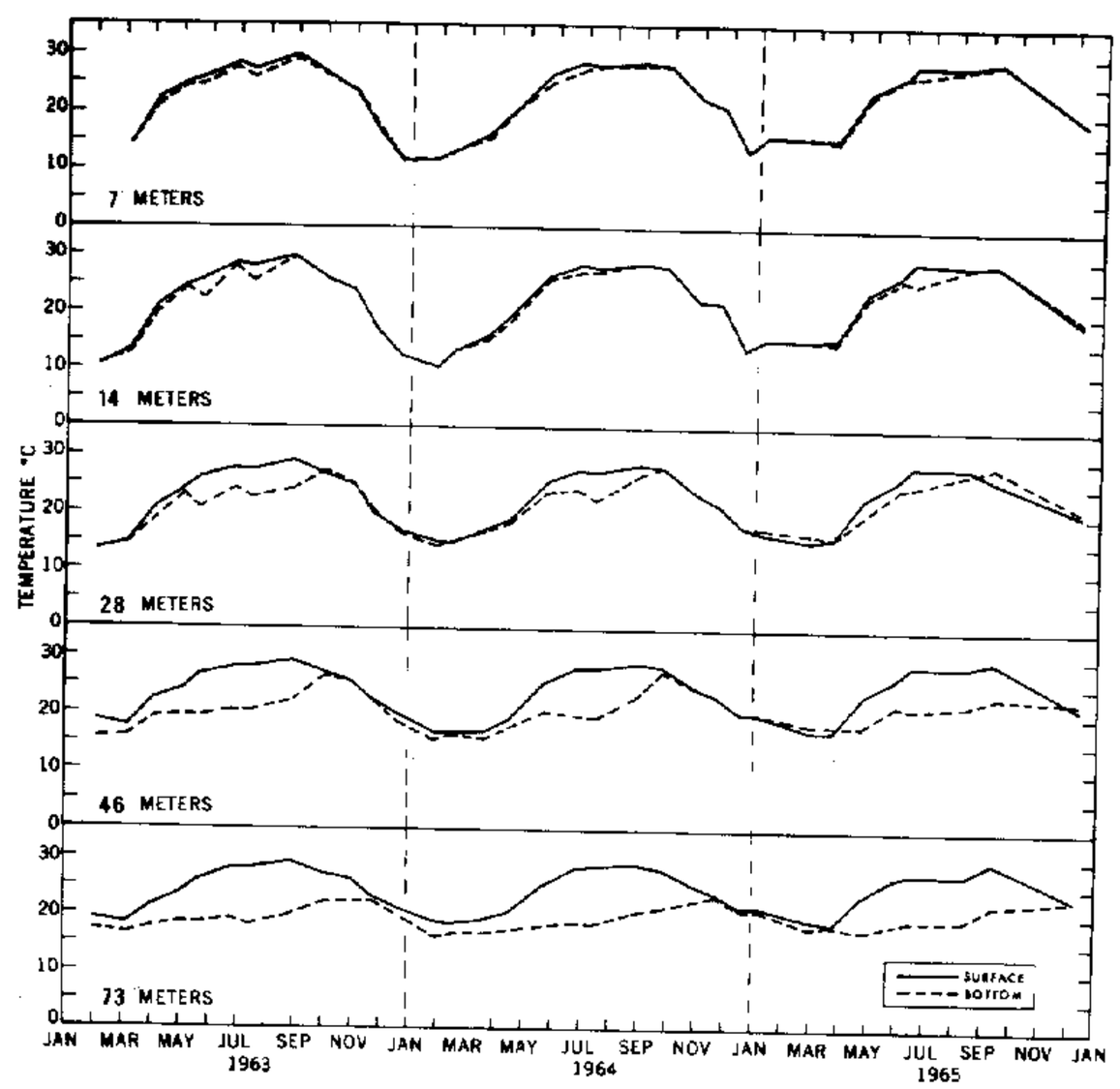

Figure 4.—Temperature trends of surface and bottom waters over the continental shelf off Texas, 1963-65.

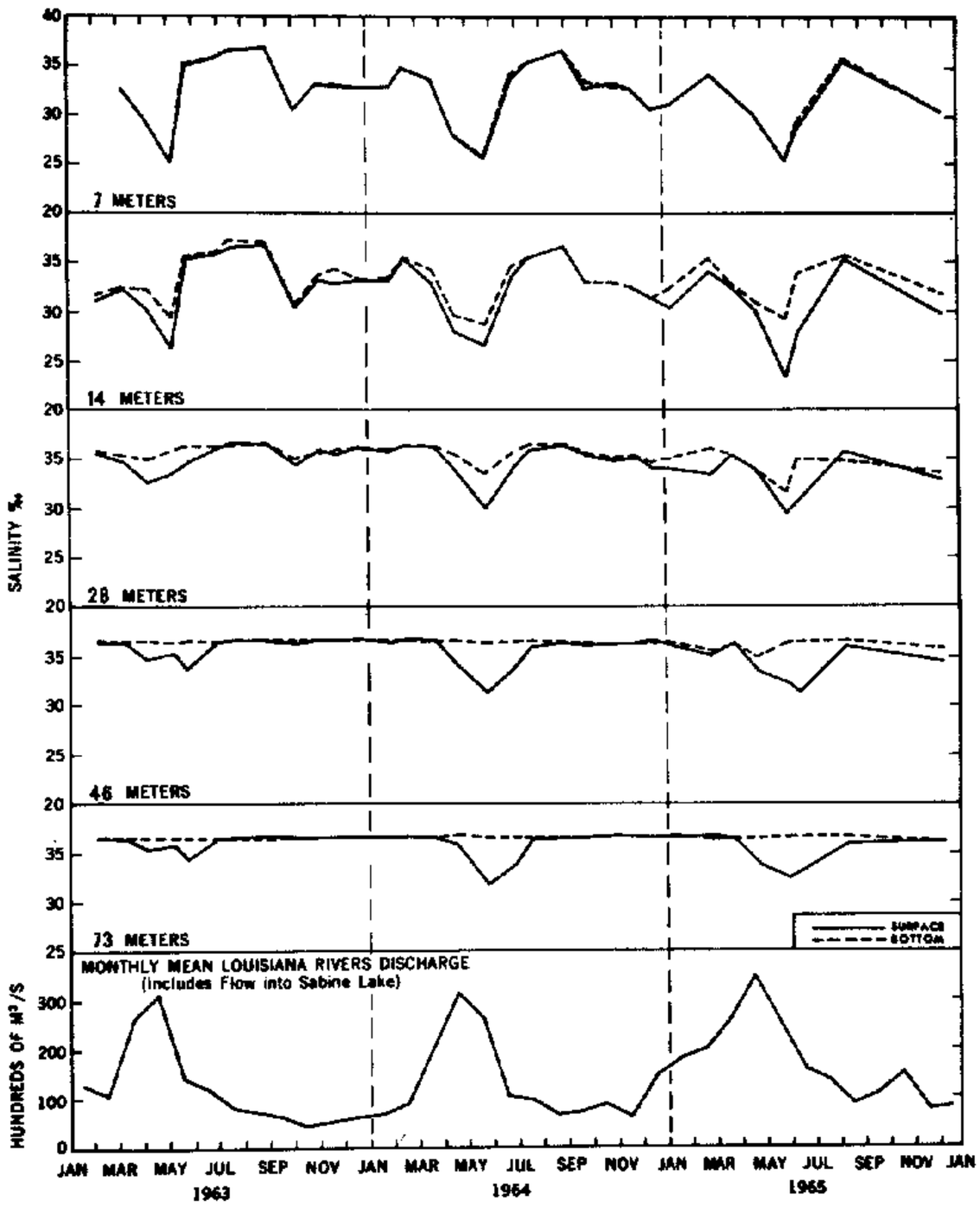

Figure 5.—Salinity trends in surface and bottom waters over the continental shelf off Texas, 1963-65.

peak outflow of fresh water from the Mississippi River although there may be a time lag of 1 to 2 mo. Superimposed on these marked changes were other minor changes evident at the shallower stations and which probably resulted from local river discharges.

LITERATURE CITED

ARMSTRONG, R. S.
1967. The subtropical underwater of the eastern Gulf of Mexico. Commer. Fish. Rev. 29(3):46-48.
1969. Late-winter waters of Yucatan Straits—a 1968 'Geronimo' survey in Gulf of Mexico. Commer. Fish. Rev. 31(2):33-36.

ARMSTRONG, R. S., and J. R. GRADY.
1967. "Geronimo" cruises entire Gulf of Mexico in late winter. Commer. Fish. Rev. 29(10):35-40.
1968. The late-summer waters of the Gulf of Mexico. Commer. Fish. Rev. 30(8 and 9):56-60.

ARMSTRONG, R. S., J. R. GRADY, and R. E. STEVENSON.
1967. Cruise "Delta I" of the "Geronimo." Commer. Fish. Rev. 29(2):15-18.

BRUSHER, H. A., W. C. RENFRO, and R. A. NEAL.
1972. Notes on distribution, size, and ovarian development of some penaeid shrimps in the northwestern Gulf of Mexico, 1961-62. Contrib. Mar. Sci. 16:75-87.

COLLIER, A.
1958. Gulf of Mexico physical and chemical data from *Alaska* cruises. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 249, 417 p.

CURL, H., JR.
1959. The hydrography of the inshore northeastern Gulf of Mexico. Publ. Inst. Mar. Sci. Univ. Tex. 6:193-205.

DRAGOVICH, A.
1961. Relative abundance of plankton off Naples, Florida, and associated hydrographic data, 1956-57. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 372, 41 p.
1963. Hydrology and plankton of coastal waters at Naples, Florida. Q. J. Fla. Acad. Sci. 26:22-47.

DRAGOVICH, A., J. H. FINUCANE, J. A. KELLY, JR., and B. Z. MAY.
1963. Counts of red-tide organisms, *Gymnodinium breve*, and associated oceanographic data from Florida west coast, 1960-61. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 455, 40 p.

DRAGOVICH, A., J. H. FINUCANE, and B. Z. MAY.
1961. Counts of red tide organisms, *Gymnodinium breve*, and associated oceanographic data from Florida west coast, 1957-59. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 369, 175 p.

DRUMMOND, K. A., and G. B. AUSTIN, JR.
1958. Some aspects of the physical oceanography of the Gulf of Mexico. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 249, p. 5-13.

FINUCANE, J. H., and A. DRAGOVICH.
1959. Counts of red tide organisms, *Gymnodinium breve*, and associated oceanographic data from Florida west coast, 1954-57. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 289, 220 p.

FUGLISTER, F. C.
1947. Average monthly sea surface temperatures of the Western North Atlantic Ocean. Pap. Phys. Oceanogr. Meteorol. 10:1-25.

GUNTER, G.
1945. Studies on marine fishes in Texas. Publ. Inst. Mar. Sci. Univ. Tex. 1:1-190.

ICHIYE, T.
1962. Circulation and water mass distribution in the Gulf of Mexico. Geofisica Internacional (Mexico City) 2:46-76.

JONES, R. S., B. J. COPELAND, and H. D. HOESE.
1965. A study of the hydrography of inshore waters in the western Gulf of Mexico off Port Aransas, Texas. Publ. Inst. Mar. Sci. Univ. Tex. 10:22-32.

KUTKUHN, J. H.
1963. Expanded research on Gulf of Mexico shrimp resources. Proc. Gulf Caribb. Fish. Inst., 15 Annu. Sess., 1962, p. 65-76.

LaFOND, E. C.
1951. Processing oceanographic data. U.S. Navy Hydrogr. Off. Publ. 614, 114 p.

LEIPPER, D. F.
1954. Physical oceanography of the Gulf of Mexico. U.S. Fish Wildl. Serv., Fish. Bull. 55:119-137.

MARVIN, K. T.
1955. Oceanographic observations in west coast Florida waters, 1949-52. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 149, 32 p.

MOORE, D., H. A. BRUSHER, and L. TRENT.
1970. Relative abundance, seasonal distribution, and species composition of demersal fishes off Louisiana and Texas, 1962-1964. Contrib. Mar. Sci. Univ. Tex. 15:45-70.

NOWLIN, W. D., JR., and H. J. McLELLAN.
1967. A characterization of the Gulf of Mexico waters in winter. J. Mar. Res. 25:29-59.

NOWLIN, W. D., JR., and C. A. PARKER.
1974. Effects of a cold-air outbreak on shelf waters of the Gulf of Mexico. J. Phys. Oceanogr. 4:467-486.

STEVENSON, R. E., and D. F. LEIPPER.
1967. Influence of the hurricane on the structure of the thermocline. *In* Hurricane Symposium, October 10-11, 1966, Houston, Texas, p. 158-199. Am. Soc. Oceanogr., Houston, Tex.

TEMPLE, R. F.
1973. Shrimp research at the Galveston Laboratory of the Gulf Coastal Fisheries Center. Mar. Fish. Rev. 35(3, 4):16-20.

TEMPLE, R. F., and C. C. FISCHER.
1965. Vertical distribution of the planktonic stages of penaeid shrimp. Publ. Inst. Mar. Sci. Univ. Tex. 10:59-67.
1967. Seasonal distribution and relative abundance of planktonic-stage shrimp (*Penaeus spp.*) in the northwestern Gulf of Mexico, 1961. U.S. Fish Wildl. Serv., Fish. Bull. 66:323-334.

U.S. NAVAL OCEANOGRAPHIC OFFICE.
1972. Environmental-acoustics atlas of the Caribbean Sea and Gulf of Mexico, Vol. II, Marine environment. U.S. Nav. Oceanogr. Off., Wash., D.C.

WENNEKENS, M. P.
1959. Water mass properties of the Straits of Florida and related waters. Bull. Mar. Sci. Gulf Caribb. 9:1-52.

Table 1. Monthly temperature and salinity observations at stations on transect 1, 1963

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
STATION: E-37 DEPTH: 7 M LATITUDE: 30°12' N LONGITUDE: 88°00' W																		
2	26	2	1963	13.8	13.8						13.8	35.48	35.54					
4	26	4	1963	22.4	22.6						18.3	28.34	30.97					
6	19	6	1963	25.6	25.5						20.6	30.48	32.34					
8	21	8	1963	28.6	28.6						27.2	23.41	32.85					
10	25	10	1963	24.1	24.3						24.4	30.76	33.34					
12	14	12	1963	14.9	14.9						15.5	33.54	33.71					
STATION: E-38 DEPTH: 14 M LATITUDE: 30°09' N LONGITUDE: 88°00' W																		
2	26	2	1963	12.9	12.9	12.9					12.9	35.22	00.00	35.13				
4	25	4	1963	23.0	22.4	17.9					17.8	30.46	31.07	35.14				
6	19	6	1963	25.1	24.9	21.7					21.7	32.69	32.73	35.91				
8	21	8	1963	00.0	00.0	00.0					00.0	27.35	33.33	35.30				
10	25	10	1963	24.4	24.3	24.2					24.2	34.04	33.67	34.63				
12	14	12	1963	15.2	15.2	15.4					15.9	34.09	34.12	34.45				
STATION: E-39 DEPTH: 28 M LATITUDE: 29°58' N LONGITUDE: 88°00' W																		
2	28	2	1963	12.4	12.4	12.4	13.6				13.4	32.74	32.72	33.38	35.60			
4	25	4	1963	23.5	23.3	21.1	17.0				17.0	32.45	32.34	32.90	34.00			
6	19	6	1963	27.8	27.8	27.8	20.5				20.2	34.42	34.07	34.22	36.47			
8	21	8	1963	29.5	29.6	30.0	24.7				23.9	32.84	32.44	35.98	36.35			
10	26	10	1963	25.2	25.2	25.2	25.2				24.8	35.70	35.80	35.68	35.69			
12	14	12	1963	17.3	17.3	17.3	17.3				17.3	00.00	35.71	35.71	35.81			
STATION: E-40 DEPTH: 46 M LATITUDE: 29°30' N LONGITUDE: 88°00' W																		
2	28	2	1963	13.8	13.8	13.8	13.8	14.2			15.3	35.33	35.34	35.26	35.36	35.60		
4	25	4	1963	23.4	23.4	23.4	20.0	17.8			17.5	33.00	33.10	33.26	36.32	36.15		
6	18	6	1963	28.1	27.8	27.2	23.6	20.1			20.1	32.22	34.53	34.80	36.32	36.49		
8	21	8	1963	30.2	30.2	30.2	27.8	21.9			21.9	33.51	33.34	35.51	36.42	36.46		
10	26	10	1963	26.0	26.0	26.0	26.0	26.0			25.7	36.17	35.97	36.08	35.92	36.04		
12	14	12	1963	20.8	20.8	20.8	20.7	20.7			20.7	36.39	36.30	36.36	36.36	36.32		
STATION: E-41 DEPTH: 73 M LATITUDE: 29°25' N LONGITUDE: 88°00' W																		
2	28	2	1963	15.2	15.2	15.2	15.0	14.6	15.3		15.3	35.79	00.00	00.00	00.00	00.00	00.00	
4	25	4	1963	23.1	23.2	23.3	21.1	20.3	18.2		17.7	34.66	34.38	34.86	35.53	36.35	36.25	
6	18	6	1963	28.2	27.9	27.7	24.9	20.8	18.6		17.9	32.05	34.18	36.41	36.60	36.54	00.00	
8	21	8	1963	30.1	29.9	30.0	28.9	23.9	19.9		19.9	33.76	33.69	34.75	36.39	36.35	36.42	
10	26	10	1963	26.1	26 1	26.1	26.1	26.7	20.0		17.8	35.84	35.61	36.27	35.86	36.41	36.53	
12	14	12	1963	20.4	20.4	20.4	20.4	20.4	17.6		17.6	36.01	36.02	36.05	00.00	00.00	36.77	

Table 2. Monthly temperature and salinity observations at stations on transect 2, 1963

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
STATION: E-36 DEPTH: 7 M LATITUDE: 29°42' N LONGITUDE: 88°52' W																		
2	26	2	1963	12.7	12.7						12.7	33.35	33.23					
4	24	4	1963	24.5	24.0						19.7	30.93	31.33					
6	18	6	1963	25.6	25.6						20.1	28.82	34.38					
8	21	8	1963	30.0	30.0						27.9	34.09	33.97					
10	24	10	1963	24.7	24.7						24.1	34.07	34.06					
12	13	12	1963	16.3	16.3						16.3	34.15	34.20					
STATION: E-35 DEPTH: 14 M LATITUDE: 29°31' N LONGITUDE: 88°52' W																		
2	25	2	1963	13.2	12.9	12.7					12.2	33.80	33.73	33.68				
4	24	4	1963	23.4	22.8	19.7					19.5	29.10	30.83	34.86				
6	18	6	1963	21.8	21.8	18.9					18.8	36.41	34.80	36.45				
8	20	8	1963	30.1	29.9	23.0					22.2	34.64	36.28	36.40				
10	24	10	1963	24.8	24.8	24.8					24.7	25.75	34.54	34.62				
12	13	12	1963	19.6	19.6	19.6					19.8	35.89	35.91	36.19				
STATION: E-34 DEPTH: 28 M LATITUDE: 29°21' N LONGITUDE: 88°52' W																		
2	25	2	1963	14.2	13.7	13.5	12.5				12.6	34.99	34.89	34.88	34.51			
4	24	4	1963	24.7	23.9	18.6	18.1				17.9	22.40	32.58	36.00	36.06			
6	18	6	1963	23.2	23.2	20.8	19.3				18.8	27.64	33.65	36.48	36.46			
8	20	8	1963	28.6	28.1	24.7	23.1				23.1	33.85	33.85	36.43	36.39			
10	24	10	1963	26.1	26.1	26.1	26.4				26.6	35.45	35.44	35.51	35.82			
12	13	12	1963	20.5	20.4	20.3	20.0				20.0	35.87	35.87	35.89	35.98			
STATION: E-33 DEPTH: 46 M LATITUDE: 29°18' N LONGITUDE: 88°52' W																		
2	25	2	1963	13.6	14.3	14.5	15.2	14.3			14.2	33.90	34.36	34.98	35.40	35.18		
4	24	4	1963	24.3	21.4	19.1	18.6	17.3			17.3	23.02	00.00	36.32	36.24	36.10		
6	18	6	1963	22.7	22.2	20.7	19.2	18.2			18.2	00.00	36.34	36.50	36.48	36.37		
8	20	8	1963	28.0	26.9	23.3	22.2	22.1			22.1	33.05	33.67	36.44	36.39	36.42		
10	23	10	1963	25.7	25.7	25.8	26.8	26.9			26.9	35.19	35.08	35.23	35.95	36.68		
12	13	12	1963	19.9	20.0	20.4	20.4	20.1			20.1	34.14	34.35	34.31	35.95	36.34		
STATION: E-32 DEPTH: 73 M LATITUDE: 29°09' N LONGITUDE: 88°52' W																		
2	25	2	1963	13.9	14.8	14.8	15.3	16.1	14.7		14.6	33.48	35.03	35.45	35.66	35.93	36.04	
4	24	4	1963	20.9	21.7	22.1	20.9	19.2	17.6		17.6	20.55	35.29	36.22	36.56	36.28	36.20	
6	18	6	1963	27.1	27.1	23.6	20.8	18.6	17.1		16.4	33.51	35.98	36.48	36.56	36.22	36.40	
8	20	8	1963	29.6	29.6	26.7	20.8	19.4	17.3		17.2	24.80	32.30	35.46	36.36	36.49	36.32	
10	23	10	1963	26.2	26.2	26.5	26.8	27.1	22.2		19.3	35.04	35.12	35.55	35.81	36.64	36.62	
12	13	12	1963	19.8	19.9	20.0	20.6	20.1	17.8		17.7	33.98	34.21	34.65	35.80	36.42	36.26	

Table 3. Monthly temperature and salinity observations at stations on transect 3, 1963-1965

STATION: E-44
DEPTH: 7 M
LATITUDE: 29°15' N
LONGITUDE: 89°42' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	~107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	24	2	1963	14.3	14.3						14.3	32.40	32.32					
3	29	3	1963	19.9	19.9						17.9	21.15	21.50					
4	27	4	1963	27.1	26.8						25.8	19.91	19.77					
5	17	5	1963	28.1	28.1						25.2	28.61	29.04					
6	22	6	1963	27.3	27.3						27.3	25.78	25.94					
7	12	7	1963	28.9	28.9						28.4	31.53	32.02					
8	19	8	1963	29.9	29.4						27.7	27.71	33.08					
9	26	9	1963	27.1	27.0						26.8	31.10	31.13					
10	23	10	1963	25.1	25.1						26.3	32.51	32.48					
11	23	11	1963	21.8	21.8						22.1	32.29	32.13					
12	12	12	1963	16.0	16.0						17.2	33.31	33.19					
13	22	1	1964	13.8	13.7						13.4	32.93	33.09					
14	10	2	1964	15.6	15.6						15.6	34.44	34.40					
15	29	2	1964	14.7	14.8						15.6	32.41	31.88					
16	24	4	1964	27.3	27.2						19.5	15.64	17.83					
17	17	5	1964	25.1	25.0						24.9	13.26	13.22					
18	20	6	1964	30.9	30.5						22.8	14.60	14.71					
19	12	7	1964	29.1	29.1						26.6	26.55	33.16					
20	24	8	1964	31.7	30.3						29.7	24.75	28.29					
21	20	9	1964	28.4	28.3						28.2	30.39	30.55					
22	24	10	1964	22.2	22.3						22.3	32.89	32.92					
23	13	11	1964	21.9	21.9						21.7	29.79	29.80					
24	11	12	1964	17.6	17.6						16.3	32.28	32.26					
25	18	1	1965	15.4	15.5						21.0	31.55	31.61					
26	12	2	1965	18.7	18.7						18.6	30.28	30.51					
27	15	3	1965	17.7	17.6						17.3	27.17	27.57					
28	17	4	1965	23.5	23.5						20.1	20.55	20.47					
29	22	5	1965	25.2	25.3						23.6	13.44	16.18					
30	21	6	1965	28.4	28.4						27.9	23.34	23.37					
32	22	8	1965	28.4	28.3						28.7	00.00	00.00					
34	29	10	1965	22.5	22.5						25.6	31.96	31.94					
35	4	12	1965	19.9	20.0						20.4	33.49	33.42					

STATION: E-25
DEPTH: 14 M
LATITUDE: 29°10' N
LONGITUDE: 89°42' W

Cruise	Day	Month	Year	0	3	11	24	43	70	~107	B	0	3	11	24	43	70	107
1	26	1	1963	15.3	15.3	15.3					15.3	34.05	34.00	33.98				
2	24	2	1963	14.6	14.6	14.6					14.6	32.39	32.62	32.68				
3	29	3	1963	19.9	19.4	17.8					17.8	21.08	21.01	33.12				
4	27	4	1963	25.4	25.4	19.2					19.1	19.84	19.84	34.55				
5	17	5	1963	26.9	26.9	25.6					22.6	30.32	30.44	32.02				
6	21	6	1963	28.4	28.3	27.7					26.1	28.99	35.41	33.91				
7	12	7	1963	29.2	29.2	28.3					26.7	31.01	32.99	35.40				
8	19	8	1963	30.0	30.3	30.7					28.2	32.79	32.76	34.14				
9	26	9	1963	27.8	27.8	27.8					27.8	32.54	32.37	32.58				
10	23	10	1963	24.9	24.9	26.1					27.1	32.02	32.24	35.61				
11	23	11	1963	22.3	22.3	22.3					22.4	34.12	34.11	34.16				
12	12	12	1963	18.7	18.7	18.7					18.6	35.48	35.33	35.31				
13	22	1	1964	14.7	14.5	14.6					14.6	33.73	33.79	35.11				
14	10	2	1964	16.4	16.4	16.4					16.4	34.81	34.89	34.87				
15	28	2	1964	15.5	15.5	15.5					15.5	32.86	32.84	34.87				
16	24	4	1964	22.3	22.3	19.9					19.9	17.88	18.01	30.20				
17	17	5	1964	24.2	24.3	24.4					23.6	15.47	15.60	21.50				
18	20	6	1964	30.1	30.1	24.0					22.1	20.51	24.71	21.36				
19	12	7	1964	29.2	29.2	27.7					27.0	31.19	31.14	36.24				
20	24	8	1964	31.7	30.0	29.2					28.4	29.07	31.65	32.87				
21	20	9	1964	28.1	27.9	28.3					28.2	30.12	30.10	31.64				
22	24	10	1964	22.3	22.3	23.0					23.1	33.24	33.13	33.77				
23	13	11	1964	21.8	22.2	22.5					24.5	29.62	29.81	34.79				
24	11	12	1964	18.1	18.1	17.7					17.8	32.89	32.82	33.52				
25	18	1	1965	16.9	16.8	20.5					21.3	32.50	32.49	32.62				
26	12	2	1965	18.6	18.6	18.5					16.6	31.23	31.25	32.49				
27	15	3	1965	16.7	16.7	16.5					17.7	26.99	28.08	32.52				
28	17	4	1965	22.7	22.3	19.7					19.7	19.43	19.53	34.82				
29	22	5	1965	25.3	25.3	23.0					22.8	19.00	19.02	35.21				
30	21	6	1965	28.0	28.0	28.0					26.7	24.13	24.02	24.64				
32	22	8	1965	28.5	28.5	28.6					28.6	30.35	30.67	34.31				
34	29	10	1965	22.6	22.6	25.7					25.8	32.01	32.03	33.24				
35	4	12	1965	20.7	20.8	21.2					21.2	33.40	33.46	33.82				

Table 3. (Continued)

STATION: E-26
DEPTH: 28 M
LATITUDE: 29°05' N
LONGITUDE: 89°42' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	26	1	1963	15.4	15.4	15.4	16.5				16.5	33.22	33.20	33.17	34.44			
2	24	2	1963	14.7	14.6	14.8	14.2				16.3	31.97	32.11	32.86	33.52			
3	29	3	1963	18.8	18.8	18.6	18.3				18.3	20.40	20.64	30.02	35.37			
4	27	4	1963	25.8	25.8	22.2	20.1				20.1	21.50	21.43	27.30	36.11			
5	17	5	1963	27.4	27.4	24.1	21.7				20.7	32.00	31.99	35.83	36.50			
6	21	6	1963	28.1	27.9	27.4	20.2				20.3	32.64	32.66	33.41	36.40			
7	12	7	1963	29.9	29.9	28.9	21.9				20.4	29.89	30.34	34.90	39.26			
8	20	8	1963	30.2	30.1	30.0	23.3				23.3	33.74	33.77	34.09	34.84			
9	26	9	1963	28.1	27.9	27.9	28.1				28.1	33.21	33.16	33.14	33.20			
10	23	10	1963	25.1	25.1	25.9	27.2				27.2	31.52	31.45	32.89	36.60			
11	23	11	1963	23.6	23.6	23.8	23.6				24.1	35.48	35.63	35.92	36.28			
12	12	12	1963	20.8	20.8	20.8	20.8				16.3	36.16	36.16	36.15	36.26			
13	22	1	1964	15.9	15.9	15.9	16.0				16.1	34.86	34.69	34.81	35.59			
14	10	2	1964	17.2	17.2	17.2	17.3				18.7	34.98	35.04	35.00	35.13			
15	28	2	1964	15.8	15.8	15.9	16.2				17.1	32.88	32.76	33.89	35.47			
16	24	4	1964	22.3	22.2	22.4	19.8				18.6	24.78	27.48	33.93	35.82			
17	17	5	1964	23.7	23.7	23.9	22.9				21.3	15.77	16.56	24.17	31.58			
18	20	6	1964	29.7	29.5	26.5	22.1				21.4	19.53	19.77	35.73	36.58			
19	12	7	1964	29.8	29.8	28.8	26.5				25.3	26.93	27.00	34.34	36.73			
20	24	8	1964	30.8	29.8	29.5	24.7				22.6	27.70	28.01	30.18	36.49			
21	20	9	1964	28.1	28.1	28.2	27.0				27.0	33.56	33.40	34.23	36.32			
22	23	10	1964	22.6	22.6	22.7	24.2				24.6	33.26	33.27	33.63	34.78			
23	13	11	1964	22.2	22.4	23.3	24.6				24.6	29.66	29.74	33.04	36.42			
24	11	12	1964	19.1	19.1	19.1	18.4				18.3	32.78	32.83	32.78	33.65			
25	17	1	1965	17.5	17.5	18.9	21.2				21.2	33.03	32.99	34.49	36.40			
26	12	2	1965	18.7	18.3	18.3	20.0				20.6	29.28	30.13	32.45	35.77			
27	15	3	1965	16.7	16.7	16.5	17.9				17.9	20.62	25.98	31.88	35.28			
28	17	4	1965	24.3	24.2	22.3	20.2				20.0	14.26	17.56	36.02	36.70			
29	22	5	1965	25.3	25.3	24.8	24.5				23.5	18.35	18.38	36.19	36.70			
30	21	6	1965	28.0	28.0	28.0	25.9				25.9	22.35	22.80	27.67	35.42			
32	22	8	1965	28.7	28.6	29.2	27.1				25.5	28.20	28.18	32.79	36.65			
34	29	10	1965	23.1	23.2	24.7	26.2				26.2	32.16	32.12	33.51	35.23			
35	4	12	1965	21.3	21.7	22.6	24.0				24.0	33.30	32.79	33.93	35.25			

STATION: E-27
DEPTH: 46 M
LATITUDE: 28°59' N
LONGITUDE: 89°42' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
1	26	1	1963	16.0	16.0	16.2	16.9	18.6			18.7	33.33	33.41	33.80	34.42	35.68		
2	25	2	1963	14.7	14.8	15.2	15.6	16.9			17.1	31.74	31.92	33.38	34.16	35.62		
3	29	3	1963	17.7	19.9	19.6	19.8	19.8			19.9	16.38	20.27	28.64	36.16	36.24		
4	27	4	1963	24.7	24.4	21.3	20.5	18.9			18.9	21.94	23.54	31.79	36.30	36.26		
5	17	5	1963	27.4	27.2	24.1	22.0	19.1			19.0	30.80	30.84	36.07	36.57	36.34		
6	21	6	1963	28.0	27.8	27.6	20.9	18.9			18.3	32.42	32.51	32.90	36.41	36.36		
7	12	7	1963	29.8	29.8	29.7	24.2	19.3			18.6	31.65	31.66	32.68	36.52	36.36		
8	20	8	1963	30.1	30.0	30.0	24.4	20.2			20.1	33.88	33.80	33.85	36.48	36.35		
9	26	9	1963	27.8	27.5	27.8	28.0	28.0			28.0	33.35	33.25	33.41	34.08	34.41		
10	23	10	1963	25.1	25.1	26.1	26.7	26.4			26.0	31.77	31.65	34.57	36.04	36.65		
11	23	11	1963	23.2	23.2	23.2	23.3	23.4			23.4	35.51	35.58	35.52	35.96	36.17		
12	12	12	1963	21.6	21.6	21.4	21.4	20.7			20.3	36.40	36.47	36.51	36.50	36.43		
13	22	1	1964	19.1	19.1	19.1	19.0	17.2			16.9	36.53	36.50	36.52	36.46	36.18		
14	10	2	1964	17.2	17.2	17.3	18.1	18.8			18.8	34.89	34.84	34.87	35.43	36.24		
15	28	2	1964	16.6	16.6	16.8	17.2	17.8			17.8	33.14	33.05	33.78	35.87	36.50		
16	24	4	1964	22.1	22.2	22.9	22.3	19.3			18.9	30.79	32.97	36.65	36.81	36.78		
17	17	5	1964	23.7	23.8	23.8	24.4	23.2			21.8	17.92	17.80	28.79	35.99	36.33		
18	20	6	1964	30.3	30.3	27.2	25.4	18.6			18.4	18.59	19.01	35.41	31.40	36.31		
19	12	7	1964	29.5	29.6	28.8	27.8	21.8			19.2	28.99	33.37	36.32	36.64	36.66		
20	24	8	1964	29.8	29.7	29.5	27.7	20.7			20.3	29.79	29.64	32.24	36.50	36.53		
21	20	9	1964	28.5	28.5	28.7	28.2	22.2			21.4	29.79	29.78	31.46	35.78	36.50		
22	23	10	1964	22.7	22.7	22.8	25.1	25.1			24.9	33.31	33.26	33.60	36.47	36.47		
23	13	11	1964	24.1	24.1	24.2	24.2	24.2			24.3	36.15	36.22	36.41	36.31	36.36		
24	11	12	1964	19.7	19.7	18.8	21.7	22.1			22.1	33.65	33.78	33.87	35.65	36.15		
25	17	1	1965	19.2	19.2	19.2	19.6	21.1			21.1	34.52	34.36	34.59	34.86	36.52		
26	11	2	1965	18.7	18.3	17.6	19.5	20.2			20.2	28.55	29.68	33.19	35.52	36.46		
27	15	3	1965	15.7	15.8	16.8	17.0	18.7			17.5	18.18	24.96	32.88	34.71	36.00		
28	17	4	1965	23.5	22.7	23.1	21.0	19.5			19.5	13.72	19.02	35.92	36.59	36.56		
29	22	5	1965	24.7	24.7	24.5	24.0	21.3			21.3	36.27	36.62	36.37	36.49	36.50		
30	21	6	1965	27.8	27.7	27.5	27.0	23.3			22.1	20.92	21.15	30.44	36.28	36.47		
32	21	8	1965	29.0	29.2	29.4	27.7	22.2			22.2	27.79	27.79	31.99	36.28	36.61		
34	29	10	1965	22.9	23.0	25.0	25.2	26.5			26.5	31.78	31.78	33.24	35.39	36.13		
35	4	12	1965	23.7	23.7	23.7	23.6	23.6			23.6	36.47	00.00	00.00	36.49	36.51		

Table 3. (Continued)

STATION: E-43
DEPTH: 73 M
LATITUDE: 28°48' N
LONGITUDE: 89°42' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	26	1	1963	17.5	17.5	17.6	17.8	18.4	18.5		18.4	34.93	34.97	35.11	35.60	36.03	36.16	
2	25	2	1963	16.4	16.5	16.6	16.8	17.2	16.9		16.8	28.95	34.90	35.32	34.98	36.05	36.28	
3	29	3	1963	19.5	19.7	19.3	19.7	18.7	17.1		17.2	14.99	29.17	35.18	36.40	36.35	36.08	
4	27	4	1963	25.6	24.2	22.7	22.1	20.7	17.9		17.9	24.15	30.40	35.94	36.48	36.41	36.25	
5	16	5	1963	27.3	25.8	24.2	22.2	19.4	17.2		17.2	29.25	30.92	35.57	36.19	36.28	36.38	
6	21	6	1963	28.4	28.3	28.2	25.0	20.7	17.4		17.4	31.52	31.52	32.33	36.43	36.55	36.40	
7	13	7	1963	29.4	29.6	29.3	25.6	19.4	17.3		17.3	33.49	33.04	35.07	36.32	34.74	36.42	
8	20	8	1963	29.6	29.7	30.2	25.6	20.8	16.6		16.6	33.48	33.34	33.75	36.48	36.41	36.17	
9	26	9	1963	27.9	27.9	28.1	28.2	28.3	28.4		28.3	35.50	35.40	35.78	35.93	36.00	36.18	
10	23	10	1963	26.7	26.8	26.9	27.1	27.2	21.1		18.2	36.18	36.10	36.32	36.57	36.64	36.43	
11	23	11	1963	23.9	23.9	23.9	23.9	23.8	22.9		21.9	36.67	36.62	36.70	36.68	36.76	36.67	
12	13	12	1963	22.4	22.4	22.4	22.1	21.7	19.6		18.1	36.95	36.62	36.57	00.00	36.59	36.39	
13	22	1	1964	19.2	19.2	19.1	18.8	18.2	17.0		16.9	36.63	36.60	36.62	36.63	36.50	36.37	
14	10	2	1964	17.2	17.2	17.7	17.8	17.8	17.8		16.0	34.87	34.93	35.97	36.47	36.38	36.59	
15	28	2	1964	15.2	15.4	17.3	18.8	18.8	18.3		17.8	32.08	32.17	33.57	36.25	36.41	36.36	
16	24	4	1964	21.3	21.2	22.0	22.5	22.0	18.4		18.3	29.69	33.06	35.58	36.52	36.78	36.51	
17	17	5	1964	24.6	24.6	23.9	23.9	22.9	18.4		17.6	24.55	24.19	32.80	36.39	36.57	36.50	
18	20	6	1964	30.7	30.7	30.5	28.2	24.4	19.8		19.8	18.67	28.90	36.55	36.80	36.72	36.48	
19	12	7	1964	29.9	29.4	28.6	27.7	22.4	13.8		13.8	27.94	34.24	36.38	36.62	36.82	35.88	
20	24	8	1964	29.7	29.6	28.1	25.4	24.4	18.9		18.9	29.81	29.80	36.37	36.22	36.49	36.42	
21	20	9	1964	28.8	28.8	28.9	28.8	22.3	19.1		19.1	33.52	33.58	35.17	35.82	36.60	36.93	
22	23	10	1964	24.8	24.8	24.8	24.7	24.6	17.4		17.3	36.52	36.49	36.49	36.52	36.50	36.58	
23	13	11	1964	24.3	24.4	24.5	24.4	24.4	19.5		19.4	36.23	36.24	36.57	36.56	36.60	36.51	
24	11	12	1964	22.3	22.3	22.3	22.3	22.2	21.9		19.5	36.56	36.58	36.64	36.60	36.58	36.59	
26	11	2	1965	21.8	21.8	21.8	21.7	21.7	20.8		20.6	36.72	36.87	36.71	36.76	36.55	36.69	
28	17	4	1965	22.5	22.7	23.0	22.4	19.6	16.6		16.7	24.88	23.11	35.18	36.48	36.33	36.64	
29	23	5	1965	25.1	25.1	25.1	24.4	22.8	19.5		19.4	36.67	36.73	36.70	36.66	36.61	36.54	
30	21	6	1965	24.9	24.9	24.2	22.9	20.2	20.0		20.0	30.46	31.99	33.74	35.53	36.68	36.55	
32	21	8	1965	27.1	27.1	26.4	22.5	20.3	19.4		19.4	28.20	28.19	32.72	35.34	36.64	36.73	
33	20	9	1965	27.4	27.4	27.4	27.6	27.2	25.5		24.0	30.99	33.58	35.41	36.00	00.00	35.97	
34	28	10	1965	24.8	25.0	27.0	26.5	26.5	22.5		22.5	31.78	31.78	36.22	36.22	36.28	36.49	

Table 4. Monthly temperature and salinity observations at stations on transect 4, 1963-1965

STATION: E-45
DEPTH: 7 M
LATITUDE: 29°00' N
LONGITUDE: 90°40' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	23	2	1963	13.2	13.2						13.3	34.26	34.22					
3	30	3	1963	20.4	20.4						20.3	25.85	25.82					
4	28	4	1963	26.2	26.2						24.9	25.52	25.55					
5	17	5	1963	27.2	25.0						23.5	21.97	32.13					
6	22	6	1963	26.8	26.8						26.8	28.97	29.05					
7	12	7	1963	29.6	30.2						28.8	25.16	29.26					
8	19	8	1963	29.4	29.2						28.8	32.37	32.66					
9	27	9	1963	27.7	27.7						27.1	35.63	35.59					
10	22	10	1963	25.1	25.0						24.9	32.60	32.38					
11	22	11	1963	20.8	20.8						20.7	34.21	34.10					
12	12	12	1963	17.2	17.2						17.2	35.06	35.20					
13	23	1	1964	14.7	14.2						14.6	34.90	34.92					
14	9	2	1964	13.0	14.2						14.8	32.04	32.44					
15	29	2	1964	14.8	14.8						14.7	33.77	33.77					
16	25	4	1964	23.8	23.7						21.2	18.21	18.21					
17	17	5	1964	24.9	24.8						24.8	16.70	16.81					
18	20	6	1964	31.3	30.0						24.8	00.00	21.38					
19	12	7	1964	29.4	29.3						26.4	27.39	28.18					
20	25	8	1964	30.2	30.5						28.2	26.33	26.94					
21	21	9	1964	28.7	28.7						28.7	31.03	31.00					
22	24	10	1964	21.3	21.3						21.3	34.09	33.48					
23	13	11	1964	22.6	22.5						22.0	30.60	30.47					
24	10	12	1964	16.8	16.6						15.8	32.73	32.71					
25	17	1	1965	15.5	15.6						15.7	30.18	30.12					
26	12	2	1965	18.8	18.8						18.8	31.45	31.33					
27	16	3	1965	17.8	17.7						16.6	28.42	28.31					
28	18	4	1965	22.7	22.8						22.8	25.78	25.70					
29	22	5	1965	25.4	25.4						24.9	19.61	20.81					
30	22	6	1965	27.8	27.8						27.8	25.46	25.37					
32	22	7	1965	28.5	28.6						29.1	30.74	30.76					
33	19	9	1965	28.2	28.2						28.2	31.22	31.18					
34	29	10	1965	20.6	20.5						20.3	31.13	30.86					
35	3	12	1965	19.0	19.2						19.4	31.74	31.85					

Table 4. (Continued)

STATION: E-24
DEPTH: 14 M
LATITUDE: 28°53' N
LONGITUDE: 90°40' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	25	1	1963	15.3	15.3	15.3					15.3	34.10	34.01	33.98				
2	22	2	1963	14.3	14.3	14.3					14.3	34.67	34.70	34.60				
3	30	3	1963	20.2	20.2	20.2					19.9	30.16	30.24	30.20				
4	28	4	1963	25.7	25.7	21.1					20.7	27.02	27.01	29.10				
5	17	5	1963	27.0	26.9	21.7					21.5	28.01	27.93	35.50				
6	22	6	1963	27.4	27.4	27.4					26.5	31.80	31.94	00.00				
7	12	7	1963	29.9	29.9	27.2					26.9	27.05	36.83	34.84				
8	19	8	1963	29.8	29.9	30.0					28.8	32.98	32.90	35.00				
9	27	9	1963	28.0	28.0	28.0					28.0	35.78	35.65	35.62				
10	22	10	1963	25.7	25.7	25.8					25.5	33.77	33.75	33.87				
11	22	11	1963	21.3	21.3	21.4					21.6	34.97	35.04	35.08				
12	12	12	1963	19.2	19.2	19.1					19.0	35.85	35.80	36.15				
13	23	1	1964	15.2	14.7	14.7					14.8	35.16	35.11	35.29				
14	9	2	1964	15.7	15.7	15.7					15.6	35.38	35.30	35.32				
15	29	2	1964	14.9	14.9	14.8					14.8	33.96	33.91	33.95				
16	25	4	1964	24.0	24.1	20.7					20.7	17.55	17.61	30.81				
17	17	5	1964	24.9	24.9	24.1					23.3	18.67	18.71	30.61				
18	20	6	1964	30.2	30.0	24.7					24.2	20.62	20.88	34.45				
19	12	7	1964	29.3	29.2	26.6					26.5	28.56	28.75	36.18				
20	25	8	1964	30.2	30.2	27.9					27.9	28.13	28.10	35.95				
21	20	9	1964	28.6	28.6	28.5					28.5	31.80	31.80	31.88				
22	24	10	1964	22.8	22.8	22.8					22.8	33.89	33.81	33.93				
23	13	11	1964	22.7	22.6	23.0					23.7	30.36	30.31	00.00				
24	10	12	1964	18.3	18.3	17.8					17.8	33.28	33.26	33.39				
25	18	1	1965	15.4	15.4	18.2					18.5	00.00	32.31	34.30				
26	12	2	1965	19.1	19.1	19.1					19.1	34.48	34.42	34.55				
27	16	3	1965	17.5	17.5	16.3					16.3	30.87	30.86	32.68				
28	18	4	1965	23.0	23.0	20.2					20.2	27.35	27.48	30.86				
29	22	5	1965	25.0	25.0	25.2					24.0	26.44	27.03	32.43				
30	22	6	1965	27.8	27.8	27.9					26.8	25.68	25.68	30.15				
32	22	8	1965	28.3	28.7	28.7					28.2	31.29	30.88	33.88				
33	19	9	1965	28.3	28.3	28.3					28.0	31.98	32.30	32.01				
34	29	10	1965	22.6	22.6	23.0					23.9	32.14	32.18	32.27				
35	3	12	1965	20.8	20.8	20.8					20.9	33.62	33.44	33.48				

STATION: E-23
DEPTH: 28 M
LATITUDE: 28°33' N
LONGITUDE: 90°40' W

1	27	1	1963	17.1	17.1	17.0	17.1				17.2	34.86	35.03	35.34	35.51			
2	23	2	1963	16.4	16.4	16.4	16.4				16.8	36.08	36.12	36.15	36.18			
3	29	3	1963	19.7	19.7	19.3	18.9				18.9	35.53	35.44	35.43	35.88			
4	23	4	1963	23.2	22.8	22.4	19.9				19.9	35.85	35.69	36.39	36.42			
5	16	5	1963	26.7	26.4	25.0	21.9				21.2	31.47	31.50	34.92	36.02			
6	21	6	1963	28.4	28.4	28.1	21.9				21.9	33.17	33.18	33.60	36.21			
7	13	7	1963	29.6	29.6	29.7	22.4				21.9	31.85	31.76	33.77	36.39			
8	19	8	1963	29.9	30.0	30.1	23.9				23.9	33.94	00.00	34.35	36.27			
9	26	9	1963	28.2	28.2	28.1	28.0				28.0	36.15	36.24	36.31	36.48			
10	22	10	1963	26.2	26.2	26.3	26.5				26.6	34.44	36.72	36.18	36.35			
11	22	11	1963	23.1	23.1	23.1	23.0				23.0	36.01	36.97	35.99	35.94			
12	15	12	1963	18.2	18.2	18.2	18.2				18.0	35.99	36.10	36.10	36.64			
13	20	1	1964	17.8	17.8	17.8	17.8				17.8	36.31	36.45	36.59	36.60			
14	9	2	1964	17.1	17.1	17.1	16.9				16.8	36.57	36.63	36.57	36.62			
15	1	3	1964	17.1	17.1	17.1	17.1				17.1	36.39	36.33	36.31	36.40			
16	23	4	1964	22.5	22.3	22.2	20.6				20.7	35.92	35.95	36.42	36.26			
17	14	5	1964	25.1	25.1	24.8	24.6				21.9	33.05	33.22	36.16	36.67			
18	19	6	1964	28.0	28.0	27.4	23.9				22.8	36.24	36.23	36.70	36.69			
19	11	7	1964	29.4	29.4	28.0	25.7				25.4	29.67	31.32	36.32	36.63			
20	23	8	1964	30.8	30.2	29.8	26.8				25.9	32.54	32.51	32.61	36.39			
21	19	9	1964	29.2	29.2	29.2	27.2				24.2	34.54	34.59	35.46	36.42			
22	23	10	1964	23.8	23.8	23.8	24.1				24.2	35.20	35.11	35.49	36.09			
23	12	11	1964	23.3	23.6	23.7	24.1				24.1	34.45	35.21	35.35	36.21			
24	12	12	1964	21.3	21.3	21.3	21.3				21.3	36.34	36.29	36.36	36.34			
25	19	1	1965	20.3	20.3	20.2	20.0				18.1	36.77	36.76	36.75	36.67			
27	14	3	1965	17.0	16.7	16.8	18.1				18.1	31.19	31.89	34.02	35.90			
28	17	4	1965	22.5	22.4	22.3	20.3				19.5	35.40	35.27	35.64	36.35			
29	23	5	1965	24.8	24.8	24.7	24.7				23.8	36.79	36.90	36.49	36.53			
30	20	6	1965	29.1	29.0	28.3	26.0				25.0	33.53	33.53	35.05	36.45			
32	20	8	1965	28.9	28.8	29.2	27.2				27.2	33.32	33.37	33.72	36.42			
33	19	9	1965	28.6	28.6	27.7	27.3				27.0	33.03	33.03	34.31	34.99			
34	29	10	1965	25.2	25.2	25.2	25.3				25.4	35.70	35.68	35.63	35.69			

Table 4. (Continued)

STATION: E-22
DEPTH: 46 M
LATITUDE: 28°22' N
LONGITUDE: 90°40' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	3	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	28	1	1963	19.2	19.2	19.2	19.2	19.3			19.2	36.29	36.32	36.40	36.33	36.33		
2	23	2	1963	16.9	16.9	16.9	16.9	16.9			17.0	36.38	36.33	36.60	36.33	36.43		
3	28	3	1963	20.4	20.4	20.3	20.1	19.4			19.4	36.43	36.32	36.16	36.39	36.43		
4	22	4	1963	23.2	22.8	22.6	21.9	19.3			19.4	36.53	36.59	36.60	36.58	36.56		
5	16	5	1963	25.8	25.6	25.4	24.6	20.2			20.2	36.79	36.62	36.67	36.65	36.53		
6	21	6	1963	28.7	28.7	28.3	23.9	20.9			20.9	33.85	33.72	34.34	36.28	36.46		
7	13	7	1963	29.7	29.8	29.8	26.7	21.1			20.4	32.47	32.36	32.87	34.93	34.45		
8	19	8	1963	29.9	29.9	30.0	27.2	22.1			22.0	33.98	33.88	34.92	35.23	36.40		
9	26	9	1963	28.3	28.3	28.3	28.2	28.2			28.2	36.46	36.55	36.45	36.44	36.40		
10	22	10	1963	26.9	26.9	26.9	26.9	26.9			26.6	36.66	36.68	36.61	36.69	36.67		
11	22	11	1963	23.7	23.7	23.7	23.6	23.6			23.6	36.71	36.67	36.75	36.68	36.69		
12	15	12	1963	20.4	20.4	20.4	20.4	20.4			20.4	36.53	36.54	36.47	36.50	36.57		
13	20	1	1964	19.2	19.2	19.2	18.5	18.4			18.4	36.47	36.50	36.48	36.59	36.52		
14	9	2	1964	18.2	18.2	18.1	18.1	18.0			18.0	36.75	36.64	36.56	36.61	36.58		
15	1	3	1964	17.5	17.5	17.5	17.5	17.5			17.5	36.58	36.61	36.59	36.57	00.00		
16	24	4	1964	23.4	23.2	22.7	21.8	19.7			19.2	36.92	36.89	36.88	36.68	36.63		
17	14	5	1964	25.3	25.3	25.1	24.3	20.8			20.5	36.81	36.76	36.95	36.73	36.52		
18	19	6	1964	27.6	27.6	27.6	26.9	22.8			20.7	36.88	36.90	36.88	36.90	36.74		
19	11	7	1964	29.2	29.1	28.4	27.8	22.6			20.7	30.60	30.70	36.14	36.65	36.73		
20	23	8	1964	30.6	30.4	29.8	26.7	21.4			21.4	31.78	31.58	31.66	36.60	36.55		
21	19	9	1964	29.5	29.4	29.3	29.3	25.7			22.7	35.92	35.92	35.89	36.05	36.50		
22	23	10	1964	24.6	24.6	24.6	24.6	24.7			24.7	36.26	36.31	36.29	36.44	36.37		
23	12	11	1964	23.9	23.9	23.8	23.8	24.1			24.1	32.80	35.99	35.97	36.10	36.48		
24	12	12	1964	21.5	21.6	21.6	21.6	21.5			21.5	36.44	36.42	36.47	36.55	36.49		
25	19	1	1965	20.3	20.3	20.3	20.2	20.2			20.2	36.63	36.60	36.62	36.63	36.58		
27	15	3	1965	17.4	17.4	17.6	18.9	18.8			18.7	32.94	33.08	34.48	36.32	36.42		
28	17	4	1965	23.0	23.0	22.9	22.5	22.5			19.0	36.33	36.37	36.38	36.39	36.35		
29	23	5	1965	24.7	24.7	24.7	24.5	21.2			20.3	36.64	36.59	36.60	36.60	36.48		
30	21	6	1965	28.2	28.2	28.1	27.0	24.0			23.1	36.20	36.35	36.47	36.56	36.54		
32	20	8	1965	29.0	29.0	29.0	28.7	23.2			22.7	34.29	34.36	34.43	36.10	36.58		
33	18	9	1965	28.5	28.5	28.0	27.7	26.5			26.5	32.70	32.72	33.51	34.43	35.86		
34	30	10	1965	25.5	25.5	25.5	25.5	25.6			25.6	36.09	36.03	36.08	36.16	36.29		

STATION: E-46
DEPTH: 73 M
LATITUDE: 28°14' N
LONGITUDE: 90°40' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	3	0	3	11	24	43	70	107
1	28	1	1963	19.3	19.2	19.2	19.1	19.0	18.8		18.7	36.39	36.48	36.48	36.41	36.47	36.43	
2	23	2	1963	18.3	18.2	18.2	18.1	18.1	18.0		17.9	36.53	36.42	36.52	36.61	36.53	36.51	
3	28	3	1963	21.4	21.1	20.9	20.8	19.7	18.9		18.9	36.70	36.59	36.57	36.61	36.54	36.42	
4	23	4	1963	23.7	23.3	22.7	22.1	20.6	18.6		18.6	36.65	36.58	36.62	36.62	36.42	00.00	
5	16	5	1963	25.7	25.6	25.1	24.6	22.3	18.3		18.3	36.65	36.65	36.62	36.61	36.57	36.41	
6	21	6	1963	28.4	28.4	28.3	27.2	23.3	18.7		18.8	35.75	35.84	35.85	36.42	36.54	36.37	
7	13	7	1963	29.4	29.4	29.7	26.1	21.9	18.9		17.7	33.78	33.63	34.19	35.58	36.51	36.47	
8	19	8	1963	29.9	29.9	30.0	30.0	25.6	19.8		19.7	34.34	34.31	34.91	36.15	36.30	36.42	
9	26	9	1963	27.7	27.7	27.6	27.6	27.5	24.4		23.1	36.55	36.54	36.52	36.50	36.51	36.56	
10	22	10	1963	27.1	27.0	26.9	26.8	26.8	24.7		19.9	36.60	36.58	36.60	36.62	36.74	36.56	
11	23	11	1963	24.0	24.0	23.9	23.9	23.9	23.1		20.7	36.78	36.78	36.83	36.74	36.76	36.67	
12	15	12	1963	21.9	21.9	21.9	21.9	21.9	20.9		20.7	36.64	36.67	36.63	36.64	36.60	36.45	
13	20	1	1964	16.4	16.3	16.2	16.2	16.4	15.7		15.6	36.63	36.61	36.62	36.59	36.62	36.62	
14	9	2	1964	19.0	19.0	19.0	19.0	19.0	18.1		17.9	36.82	36.62	36.77	36.66	36.58	36.66	
15	1	3	1964	18.0	18.0	18.0	18.0	17.9	17.6		17.6	36.58	36.54	36.55	36.57	36.62	36.56	
16	24	4	1964	23.8	23.8	22.7	21.6	20.0	18.2		18.2	36.89	36.94	36.95	36.70	36.75	36.68	
17	14	5	1964	25.4	25.3	25.2	23.3	20.7	19.2		18.6	36.88	36.79	36.81	36.68	36.62	36.51	
18	19	6	1964	28.3	28.2	28.1	26.7	23.8	19.5		18.1	36.95	36.91	36.79	36.87	36.76	36.49	
19	11	7	1964	29.4	28.9	28.4	28.2	22.5	19.2		17.9	33.57	35.40	36.61	36.67	00.00	36.58	
20	24	8	1964	30.3	30.4	29.6	26.9	21.2	18.3		18.3	32.20	32.09	32.12	36.54	36.56	36.46	
21	19	9	1964	29.6	29.6	29.4	29.1	27.2	19.9		19.9	35.98	35.86	35.90	36.06	36.54	36.60	
22	23	10	1964	25.2	25.2	25.2	25.2	24.7	22.3		19.4	36.53	36.54	36.58	36.52	36.46	36.48	
23	12	11	1964	24.7	24.8	24.8	24.7	24.6	23.4		21.2	35.98	36.12	36.39	36.32	36.38	00.00	
24	11	12	1964	22.5	22.5	22.5	22.4	22.4	22.2		18.4	36.72	36.73	36.68	36.67	36.69	36.69	
25	19	1	1965	21.6	21.6	21.6	21.6	21.6	21.4		16.9	36.77	36.75	36.79	36.82	36175	36.80	
27	15	3	1965	20.1	20.1	20.1	19.6	19.0	18.3		16.6	36.71	36.79	36.68	36.58	36.63	36.68	
28	17	4	1965	23.1	23.1	23.1	21.7	19.2	18.3		17.7	36.45	36.52	36.32	36.36	36.24	36.45	
29	23	5	1965	24.8	24.8	24.8	24.8	22.5	19.7		19.1	36.64	36.64	36.64	36.65	36.69	36.67	
30	21	6	1965	26.4	26.4	25.3	23.8	20.6	19.2		19.2	36.45	36.59	36.45	36.59	36.64	36.67	
32	20	8	1965	28.6	28.6	28.1	23.9	21.1	18.7		18.7	34.26	34.00	34.11	35.39	36.74	36.65	
33	18	9	1965	28.5	28.5	28.1	27.5	00.0	00.0		27.3	32.34	32.38	35.17	35.90	00.00	00.00	
34	30	10	1965	25.2	25.2	25.2	25.2	25.1	23.5		21.0	36.48	36.40	36.42	36.48	36.46	36.69	

Table 5. Monthly temperature and salinity observations at stations on transect 5, 1963-1965

STATION: E-49
DEPTH: 7 M
LATITUDE: 29°27' N
LONGITUDE: 92°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	21	2	1963	12.6	12.4						12.1	29.78	30.95					
3	30	3	1963	20.8	20.8						20.2	30.82	30.82					
4	21	4	1963	23.2	23.1						22.8	22.40	24.69					
5	18	5	1963	26.4	26.4						26.3	29.84	29.85					
6	23	6	1963	28.3	28.3						28.3	30.94	30.93					
7	12	7	1963	29.3	29.6						28.4	25.35	27.93					
8	23	8	1963	29.9	29.9						29.9	32.07	32.07					
9	27	9	1963	25.7	25.8						26.3	32.15	31.93					
10	22	10	1963	24.8	24.7						24.6	33.27	33.25					
11	22	11	1963	20.4	20.3						19.9	33.12	33.05					
12	11	12	1963	16.2	16.2						16.0	33.99	33.96					
13	23	1	1964	9.6	9.1						10.1	31.44	31.81					
14	8	2	1964	11.9	12.2						12.8	31.88	32.89					
15	1	3	1964	13.3	13.3						13.6	00.00	31.77					
16	25	4	1964	25.9	25.5						24.5	20.93	20.81					
17	18	5	1964	25.2	25.2						25.4	23.64	23.81					
18	18	6	1964	29.3	29.3						29.2	26.02	25.99					
19	13	7	1964	28.6	28.6						28.5	27.18	27.17					
20	25	8	1964	30.4	30.3						30.0	30.35	30.38					
21	21	9	1964	28.3	28.2						28.2	31.96	31.96					
22	25	10	1964	21.2	21.3						21.3	31.86	31.79					
23	14	11	1964	22.8	22.5						22.6	30.47	30.61					
24	12	12	1964	15.0	15.1						15.4	31.38	33.01					
25	16	1	1965	16.7	16.7						16.7	33.60	33.38					
26	13	2	1965	17.3	17.3						17.3	34.18	20.18					
27	16	3	1965	16.6	15.8						15.2	35.20	20.18					
28	19	4	1965	23.7	23.8						23.5	13.64	20.87					
29	20	5	1965	26.1	26.0						25.9	27.44	27.47					
30	24	6	1965	29.2	29.1						29.0	28.44	28.78					
32	24	8	1965	28.0	28.5						29.1	29.84	29.92					
34	30	10	1965	21.5	21.5						21.5	29.78	29.72					
35	5	12	1965	15.5	17.7						18.3	00.00	30.05					

STATION: E-12
DEPTH: 14 M
LATITUDE: 29°08' N
LONGITUDE: 92°20' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
1	22	1	1963	12.1	11.9	11.8					11.9	33.24	33.13	33.14				
2	21	2	1963	13.8	13.8	14.2					14.3	31.95	32.60	34.12				
3	30	3	1963	20.4	20.3	20.2					20.2	33.91	33.82	33.93				
4	22	4	1963	23.4	23.3	22.6					20.8	31.63	31.85	33.83				
5	18	5	1963	26.8	26.8	24.4					24.0	29.15	29.22	35.85				
6	23	6	1963	28.4	28.4	28.4					26.7	31.20	31.05	31.58				
7	12	7	1963	29.6	29.4	25.8					25.6	35.83	30.76	30.21				
8	23	8	1963	30.3	30.3	30.5					30.4	32.82	32.97	34.66				
9	27	9	1963	26.8	26.8	26.8					26.8	32.80	32.70	32.97				
10	22	10	1963	25.3	25.2	25.2					25.1	34.07	33.73	33.74				
11	21	11	1963	19.9	19.9	19.9					19.8	33.47	33.48	33.54				
12	11	12	1963	16.6	16.6	16.1					16.1	34.11	34.09	33.98				
13	23	1	1964	10.6	10.4	9.9					9.9	33.38	33.40	33.56				
15	1	3	1964	13.8	13.7	13.8					14.4	33.09	32.93	33.22				
16	25	4	1964	23.0	22.9	22.7					22.4	20.89	29.98	28.92				
17	18	5	1964	25.2	25.1	25.1					25.0	00.00	00.00	00.00				
18	18	6	1964	29.2	29.1	27.7					25.4	29.24	29.70	32.43				
19	13	7	1964	28.6	28.6	28.7					26.6	27.20	27.43	35.70				
20	25	8	1964	30.4	30.0	29.7					28.1	32.73	31.17	31.92				
21	21	9	1964	28.2	28.2	28.2					28.2	32.17	32.19	32.16				
22	24	10	1964	21.7	21.7	21.2					20.8	32.03	32.23	32.30				
23	14	11	1964	22.9	22.9	22.9					22.9	34.45	34.39	34.45				
24	12	12	1964	15.0	15.3	15.8					15.8	32.58	33.89	34.05				
25	16	1	1965	16.0	16.0	16.0					16.0	33.21	33.20	33.21				
26	13	2	1965	17.4	17.4	17.4					17.4	34.49	34.48	34.50				
27	16	3	1965	16.6	16.4	16.1					16.1	33.56	35.58	34.16				
28	19	4	1965	23.2	23.2	22.6					22.6	32.06	32.01	33.25				
29	20	5	1965	25.4	25.3	25.2					25.0	33.28	33.44	33.60				
30	24	6	1965	29.4	29.3	28.6					28.5	30.48	30.50	33.34				
32	24	8	1965	28.7	28.7	29.1					29.1	30.55	30.42	31.72				
34	30	10	1965	21.6	21.7	24.0					24.5	29.78	29.85	31.60				
35	5	12	1965	17.4	17.4	18.3					18.8	33.42	33.13	33.64				

Table 5. (Continued)

STATION: E-11
DEPTH: 28 M
LATITUDE: 28°55' N
LONGITUDE: 92°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	22	1	1963	15.5	15.5	15.4	15.5				15.5	35.22	35.09	35.13	35.33			
2	21	2	1963	13.9	14.2	14.7	15.7				15.7	33.36	34.12	34.88	35.73			
3	30	3	1963	20.1	20.0	19.9	19.7				19.7	34.91	34.92	35.37	35.58			
4	22	4	1963	22.4	22.4	21.9	20.7				20.6	35.01	35.06	36.10	36.44			
5	15	5	1963	27.0	25.6	24.8	22.3				22.3	33.97	35.76	35.88	36.02			
6	20	6	1963	28.9	28.9	28.9	24.9				24.9	32.11	31.98	32.22	35.10			
7	11	7	1963	29.8	29.7	29.4	26.1				23.4	00.00	33.09	34.55	36.43			
8	18	8	1963	29.7	29.7	30.6	24.4				24.4	32.53	31.97	33.64	36.63			
9	23	9	1963	28.9	28.9	28.9	28.9				29.4	35.98	35.96	35.94	35.97			
10	21	10	1963	26.2	26.2	26.2	26.2				26.2	35.20	35.24	35.96	35.53			
11	21	11	1963	22.3	22.3	22.3	22.3				22.2	35.69	35.60	35.61	35.67			
12	11	12	1963	19.9	19.9	19.8	19.6				19.5	36.31	36.11	36.20	36.13			
13	19	1	1964	16.7	16.7	16.7	16.6				15.1	36.71	36.73	36.85	36.65			
15	2	3	1964	15.0	15.0	15.0	15.0				15.0	34.85	35.33	35.40	35.36			
16	23	4	1964	21.7	21.7	21.7	21.0				20.5	36.85	36.84	36.89	36.80			
17	18	5	1964	24.4	24.4	24.4	24.3				24.3	36.37	36.40	36.41	36.47			
18	18	6	1964	28.2	28.1	27.6	26.0				25.9	35.97	36.23	36.70	36.69			
19	13	7	1964	28.3	28.3	28.6	26.0				25.6	29.39	29.45	30.67	36.62			
20	25	8	1964	29.7	29.7	29.7	27.4				27.4	32.75	32.71	32.77	36.30			
21	19	9	1964	28.4	28.4	28.7	26.6				26.4	33.14	33.08	33.69	36.25			
22	22	10	1964	21.7	21.5	23.5	23.8				23.9	31.95	31.98	34.52	36.06			
23	14	11	1964	23.6	23.6	23.6	23.6				23.6	35.60	35.59	35.68	36.32			
24	12	12	1964	18.5	18.5	19.1	18.8				18.8	35.57	35.54	35.88	00.00			
25	16	1	1965	19.4	19.4	19.4	19.5				19.7	35.42	35.40	35.67	35.62			
27	14	3	1965	17.0	17.0	17.2	16.5				16.5	35.40	35.44	35.70	36.27			
28	19	4	1965	22.3	22.2	22.0	20.7				20.8	35.80	35.87	36.18	36.38			
29	25	5	1965	25.3	25.3	25.0	24.9				24.9	36.80	36.79	36.71	36.73			
30	13	6	1965	28.5	28.3	27.7	27.0				27.0	36.55	36.45	36.54	36.94			
32	24	8	1965	29.3	29.3	29.2	27.1				26.8	31.74	31.98	32.30	36.77			
34	30	10	1965	22.9	23.0	23.5	25.0				24.9	32.82	32.70	33.18	35.65			
35	2	12	1965	22.3	22.3	22.3	22.2				22.2	35.28	35.26	35.25	35.26			

STATION: E-10
DEPTH: 46 M
LATITUDE: 28°32' N
LONGITUDE: 92°20' W

1	29	1	1963	18.7	18.7	18.6	18.4	17.8			17.8	36.51	36.53	36.56	36.57	36.52		
2	21	2	1963	17.3	17.3	17.3	17.2	17.1			17.0	36.57	36.67	36.54	36.63	36.56		
3	28	3	1963	20.2	20.1	20.1	19.7	19.4			19.3	36.61	35.64	36.67	36.40	36.46		
4	28	4	1963	24.6	24.5	24.4	22.6	21.7			20.5	36.65	36.57	36.58	36.56	36.45		
5	15	5	1963	25.2	25.0	24.7	24.3	20.4			20.0	36.41	36.30	36.30	36.65	36.32		
6	20	6	1963	28.7	28.4	28.2	24.9	21.7			21.0	34.07	00.00	34.19	35.84	36.13		
7	11	7	1963	29.6	29.6	29.4	23.8	21.1			21.0	33.83	34.23	34.62	35.51	36.49		
8	18	8	1963	29.7	29.7	29.7	28.9	21.6			21.5	35.28	35.28	36.14	36.63	36.51		
9	23	9	1963	29.0	28.9	28.9	28.7	25.3			25.3	36.20	36.30	36.19	36.25	36.47		
10	21	10	1963	26.7	26.7	26.7	26.7	26.7			26.7	36.64	36.33	36.40	36.52	36.60		
11	21	11	1963	24.3	24.3	24.2	24.2	24.1			24.0	36.77	36.86	36.83	36.79	36.82		
12	11	12	1963	21.9	21.9	21.7	21.7	21.1			21.1	36.70	36.70	36.82	36.76	36.86		
13	19	1	1964	17.6	17.6	17.5	16.8	16.6			16.0	36.69	36.69	36.69	36.65	36.63		
15	2	3	1964	16.7	16.7	16.7	16.6	16.3			16.3	36.81	36.64	36.66	36.74	36.60		
16	23	4	1964	21.7	21.7	21.4	19.9	19.6			16.2	36.86	36.81	36.81	36.84	36.81		
17	14	5	1964	24.6	24.6	24.6	24.3	20.6			20.2	36.73	36.71	36.69	36.73	36.68		
18	21	6	1964	28.3	28.3	27.9	26.8	21.5			20.3	36.70	36.70	36.71	00.00	36.64		
19	11	7	1964	29.6	29.3	28.4	27.9	25.2			22.0	30.30	30.61	34.78	36.66	36.65		
20	23	8	1964	29.7	29.7	29.7	28.7	23.2			22.6	32.84	32.82	32.83	36.36	36.61		
21	19	9	1964	28.7	28.7	28.7	29.7	21.9			21.9	33.83	33.90	33.84	35.15	36.74		
22	22	10	1964	23.3	23.3	23.8	23.3	23.5			22.8	35.70	35.67	35.89	35.92	36.30		
23	12	11	1964	23.6	23.6	23.6	23.8	23.8			23.9	36.22	36.14	36.13	36.41	36.38		
24	10	12	1964	20.3	20.3	20.3	20.3	20.3			20.3	36.32	36.30	36.30	36.46	36.63		
25	16	1	1965	19.3	19.3	19.3	19.3	19.3			19.3	36.29	36.45	36.21	36.29	36.28		
27	14	3	1965	18.6	18.6	18.5	18.2	17.2			17.2	36.73	36.70	36.69	36.67	36.70		
28	16	4	1965	22.3	22.3	22.2	22.2	19.5			19.3	36.48	36.38	36.40	36.42	36.47		
29	25	5	1965	25.4	25.4	25.3	24.7	21.7			20.8	36.64	36.64	36.65	36.71	36.58		
30	19	6	1965	28.3	28.3	28.2	26.8	22.7			21.7	36.38	38.06	36.54	36.54	36.71		
32	20	8	1965	29.3	29.2	29.2	27.5	22.0			22.0	32.97	32.97	34.88	36.68	36.71		
34	30	10	1965	24.1	24.1	24.1	24.1	24.9			24.9	35.32	35.34	35.28	35.23	35.72		
35	2	12	1965	22.9	22.9	22.9	22.8	22.7			22.7	35.71	35.71	35.68	35.61	35.70		

Table 5. (Continued)

STATION: E-50
DEPTH: 73 M
LATITUDE: 28°10' N
LONGITUDE: 92°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	29	1	1963	20.2	20.2	20.1	20.1	20.0	19.7		19.7	36.52	36.59	36.60	36.46	36.56	36.53	
2	21	2	1963	18.3	18.2	18.2	18.1	18.1	17.4		17.4	37.09	36.88	36.61	36.75	36.68	36.56	
3	28	3	1963	20.2	20.2	20.0	19.6	18.2	17.7		17.7	36.55	36.61	36.59	36.57	36.41	36.61	
4	28	4	1963	23.8	23.8	23.6	22.1	20.0	18.4		18.4	36.57	00.00	00.00	36.66	36.54	36.44	
5	15	5	1963	25.4	24.9	24.8	23.3	21.7	19.0		19.0	36.42	36.35	36.35	36.72	36.61	36.39	
6	20	6	1963	28.9	28.9	28.8	26.1	22.2	19.4		19.4	34.58	34.55	34.59	35.71	36.45	35.03	
7	11	7	1963	29.6	29.6	29.4	28.9	25.8	19.7		19.1	36.10	36.22	36.06	36.41	36.57	36.43	
8	18	8	1963	29.9	29.9	30.2	29.2	24.7	20.2		19.2	35.41	35.47	35.68	00.00	36.40	36.48	
9	23	9	1963	28.7	28.7	28.6	28.6	24.0	18.6		18.6	36.42	36.40	36.24	36.28	36.45	36.39	
10	21	10	1963	26.9	26.8	26.8	26.7	26.7	25.6		22.8	36.71	36.72	36.66	36.85	36.65	36.67	
11	21	11	1963	24.2	24.2	24.2	24.2	24.2	24.2		24.2	36.89	36.73	36.70	36.82	36.72	36.75	
12	11	12	1963	22.7	22.7	22.6	22.4	22.4	22.2		22.2	36.79	36.68	36.69	36.72	36.70	37.01	
13	19	1	1964	18.7	18.7	18.6	18.5	18.2	17.7		17.6	36.73	36.70	36.68	36.65	36.68	36.63	
15	2	3	1964	18.2	18.2	18.2	18.1	17.8	17.6		17.6	36.66	00.00	00.00	00.00	00.00	00.00	
16	23	4	1964	22.9	22.9	22.5	20.2	18.9	17.6		16.5	36.88	36.90	36.84	36.80	36.85	36.77	
17	14	5	1964	25.2	25.2	25.1	24.6	20.0	18.6		18.4	36.72	36.73	36.70	36.76	36.59	36.62	
18	21	6	1964	28.3	28.3	28.2	26.3	21.2	18.2		18.1	36.49	36.48	36.63	36.81	36.60	36.65	
19	10	7	1964	29.6	29.3	28.8	28.4	23.4	19.0		17.4	32.40	32.67	35.16	36.07	36.68	36.60	
20	23	8	1964	29.7	29.7	29.7	29.5	24.4	19.4		19.4	36.46	36.41	36.40	36.39	36.70	36.61	
21	18	9	1964	28.5	28.7	28.9	29.2	23.8	19.0		18.6	33.40	33.49	34.18	36.35	36.53	36.45	
22	22	10	1964	23.9	23.9	23.9	23.9	24.1	21.7		21.0	36.29	36.22	36.29	36.20	36.31	36.48	
23	12	11	1964	23.9	23.9	23.9	23.9	24.0	22.5		20.7	35.91	36.00	36.02	35.95	35.91	36.41	
24	9	12	1964	22.1	22.1	22.1	22.1	22.1	22.1		22.1	36.68	36.73	36.75	36.70	36.69	36.74	
25	16	1	1965	21.1	21.1	21.1	21.0	20.6	20.4		20.3	36.97	36.76	36.80	36.98	36.77	36.58	
27	14	3	1965	19.3	19.3	19.3	18.7	17.6	17.4		17.4	36.75	36.67	36.67	36.77	36.65	36.75	
28	16	4	1965	23.2	23.2	23.1	20.8	19.3	18.2		18.0	36.57	36.65	36.61	36.69	36.61	36.58	
29	26	5	1965	25.6	25.6	25.4	24.7	21.3	19.0		19.0	36.43	36.38	36.38	36.51	36.69	36.60	
30	20	6	1965	25.9	25.9	25.8	23.3	20.6	19.6		19.6	35.66	35.79	35.77	36.48	36.59	36.34	
32	20	8	1965	27.8	27.8	26.9	22.8	20.0	18.9		18.9	33.20	33.24	33.72	36.53	36.71	36.71	
34	30	10	1965	25.0	25.0	25.1	25.2	24.5	22.2		22.1	35.74	36.47	36.04	36.12	36.38	36.42	
35	2	12	1965	23.6	23.6	23.7	23.7	23.7	22.0		21.6	36.13	36.11	36.24	36.11	36.29	36.38	

Table 6. Monthly temperature and salinity observations at stations on transect 6, 1963-1965

STATION: E-52
DEPTH: 7 M
LATITUDE: 29°42' N
LONGITUDE: 93°18' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	2	3	1963	12.2	12.2						12.3	29.30	30.02					
3	31	3	1963	20.7	20.7						20.7	26.92	26.83					
4	21	4	1963	23.6	22.6						22.6	28.12	26.90					
5	14	5	1963	26.2	26.1						24.7	27.93	34.90					
6	23	6	1963	28.9	28.9						24.7	32.30	32.30					
7	10	7	1963	29.9	29.9						29.4	32.74	32.84					
8	23	8	1963	30.3	30.2						30.2	32.63	32.67					
9	28	9	1963	26.2	26.3						26.4	30.47	30.34					
10	20	10	1963	25.4	25.4						25.3	30.91	30.84					
11	20	11	1963	19.2	19.2						19.1	31.78	31.62					
12	16	12	1963	11.1	11.1						11.0	32.31	32.52					
13	24	1	1964	10.9	9.4						9.5	32.23	32.34					
14	8	2	1964	10.9	10.9						11.3	30.64	30.61					
16	25	4	1964	24.5	24.4						24.0	16.89	18.09					
17	19	5	1964	26.0	26.0						25.5	19.76	19.76					
18	18	6	1964	29.7	29.7						28.4	20.71	20.65					
19	14	7	1964	28.5	28.5						28.4	30.84	30.88					
20	26	8	1964	29.6	29.6						29.5	34.69	34.62					
21	22	9	1964	27.9	27.9						28.0	30.66	30.55					
22	25	10	1964	20.6	20.6						20.6	00.00	00.00					
23	14	11	1964	22.6	22.6						22.5	29.86	29.88					
24	13	12	1964	13.0	13.0						13.3	29.66	28.77					
25	15	1	1965	15.3	15.6						15.7	28.47	29.30					
26	13	2	1965	13.6	13.6						15.3	27.61	27.47					
27	17	3	1965	16.4	16.3						16.2	27.61	27.47					
28	19	4	1965	25.2	24.1						23.3	26.10	26.08					
29	19	5	1965	26.0	26.1						25.8	10.18	13.35					
32	24	8	1965	28.8	29.0						29.1	29.63	29.67					
35	5	12	1965	17.3	17.1						17.0	00.00	00.00					

Table 6. (Continued)

STATION: E-1
DEPTH: 14 M
LATITUDE: 29°22' N
LONGITUDE: 93°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	22	1	1963	12.1	12.0	11.9					11.9	33.84	33.80	34.03				
2	20	2	1963	12.1	12.2	12.2					12.3	33.63	33.92	33.90				
3	31	3	1963	19.1	19.1	19.2					19.2	34.20	34.51	34.53				
4	21	4	1963	22.8	22.9	22.5					22.1	31.50	31.57	32.25				
5	14	5	1963	25.8	25.8	25.3					25.2	30.06	30.12	33.53				
6	23	6	1963	29.1	29.1	29.1					25.2	33.25	33.22	33.20				
7	10	7	1963	29.9	29.9	29.9					29.9	33.58	33.73	33.91				
8	23	8	1963	31.7	31.1	30.6					30.6	34.90	00.00	00.00				
9	27	9	1963	27.1	27.1	27.1					27.1	32.94	32.87	32.95				
10	20	10	1963	25.6	25.6	25.6					26.5	33.11	33.16	33.18				
11	20	11	1963	20.7	20.7	20.7					20.7	34.57	34.57	34.55				
12	16	12	1963	14.2	14.2	14.2					14.1	35.30	35.23	35.21				
13	24	1	1964	11.3	10.9	10.4					10.3	34.31	34.64	34.85				
14	8	2	1964	11.8	11.8	11.7					11.7	34.85	35.11	35.03				
16	25	4	1964	23.4	23.4	23.0					22.9	28.14	28.21	29.05				
17	18	5	1964	25.6	25.6	25.2					24.9	27.36	27.35	30.65				
18	18	6	1964	28.6	28.6	28.5					26.9	27.13	27.24	27.20				
19	14	7	1964	28.9	28.8	28.1					28.1	28.80	28.78	30.98				
20	26	8	1964	29.4	29.4	29.7					29.6	32.77	33.08	33.38				
21	21	9	1964	28.6	28.6	28.4					28.2	32.38	32.36	32.23				
22	25	10	1964	21.5	21.5	21.5					21.5	33.75	33.79	33.78				
23	15	11	1964	22.7	22.7	22.7					22.7	23.98	32.88	32.88				
24	13	12	1964	16.0	16.0	16.2					16.3	33.62	33.55	34.30				
25	15	1	1965	18.1	18.1	18.1					18.1	34.85	34.92	34.98				
26	13	2	1965	14.5	14.5	14.5					14.5	31.24	31.23	31.42				
27	17	3	1965	16.2	16.1	14.4					14.5	30.42	30.46	31.01				
28	19	4	1965	24.4	23.0	22.2					22.0	29.10	30.39	31.66				
29	19	5	1965	25.5	25.5	25.1					25.0	25.94	30.03	33.70				
30	24	6	1965	29.1	29.1	28.8					28.6	31.42	31.14	32.18				
32	24	8	1965	28.3	28.4	29.3					29.5	29.91	30.17	31.94				
35	5	12	1965	19.7	19.6	19.6					19.6	33.77	33.82	34.14				

STATION: E-2
DEPTH: 28 M
LATITUDE: 28°46' N
LONGITUDE: 93°20' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
1	30	1	1963	17.6	16.6	17.4	17.2				17.2	36.58	36.52	36.58	36.50			
2	20	2	1963	16.7	16.7	16.7	16.7				16.7	36.56	36.56	36.71	36.56			
3	27	3	1963	19.7	19.6	19.6	19.4				19.4	36.51	36.49	36.51	36.75			
4	29	4	1963	23.6	23.6	23.6	21.8				21.8	36.54	36.50	36.41	36.37			
5	14	5	1963	25.1	24.8	24.7	24.1				23.8	35.62	35.72	35.72	36.59			
6	19	6	1963	28.9	28.9	28.4	23.7				23.7	32.50	32.46	32.54	35.12			
7	10	7	1963	30.1	29.8	28.6	25.6				23.7	34.17	34.17	34.67	36.17			
8	17	8	1963	29.9	29.9	29.9	27.3				27.3	36.10	35.99	36.02	32.27			
9	22	9	1963	29.1	29.1	29.1	29.1				29.1	36.12	36.10	36.03	36.45			
10	20	10	1963	26.6	26.5	26.4	26.4				26.2	35.57	35.40	35.34	35.44			
11	20	11	1963	22.6	22.5	22.2	22.3				22.3	35.98	36.12	35.91	36.13			
12	10	12	1963	19.3	19.3	19.2	19.2				19.1	36.09	35.90	35.87	35.93			
13	19	1	1964	13.3	13.3	13.2	12.8				12.9	36.15	36.21	36.06	36.22			
14	24	2	1964	15.0	15.0	15.0	15.0				15.1	36.70	36.65	36.67	36.63			
15	3	3	1964	15.1	15.1	15.1	14.5				14.5	36.62	36.49	36.49	36.62			
16	22	4	1964	21.4	21.4	21.0	19.7				19.7	36.79	36.39	36.75	36.76			
17	13	5	1964	24.4	24.4	24.1	23.4				23.4	36.68	36.60	37.17	36.64			
18	22	6	1964	29.5	29.3	28.2	26.8				25.9	31.00	31.08	33.11	36.19			
19	10	7	1964	29.0	29.0	27.8	25.5				24.3	30.25	30.20	30.78	36.63			
20	21	8	1964	29.6	29.6	29.6	28.5				27.2	33.80	33.78	35.98	35.32			
21	18	9	1964	28.9	28.9	28.8	28.8				28.3	34.51	34.43	34.43	36.20			
22	21	10	1964	23.6	23.6	23.6	23.7				23.7	34.92	34.89	34.90	34.98			
23	11	11	1964	22.7	22.7	22.8	23.1				23.2	34.21	34.19	34.38	34.74			
24	9	12	1964	19.1	19.1	19.1	18.9				18.9	35.48	35.49	35.50	35.57			
25	15	1	1965	18.7	18.6	18.5	18.4				18.4	36.19	36.14	36.08	36.10			
27	13	3	1965	17.0	17.0	16.6	16.3				16.2	36.52	36.57	36.68	36.71			
28	15	4	1965	22.1	22.1	22.0	19.5				18.8	35.97	35.90	35.80	35.78			
29	26	5	1965	25.5	25.5	25.3	25.0				25.0	36.51	36.50	36.46	36.46			
30	19	6	1965	28.4	28.4	27.7	26.8				26.8	36.67	36.71	36.71	36.69			
32	19	8	1965	29.2	29.3	29.0	28.3				27.8	33.38	32.80	33.51	36.49			
34	31	10	1965	23.7	23.7	23.7	24.0				24.2	34.52	00.00	33.47	34.72			
35	1	12	1965	22.8	22.7	22.7	22.7				22.7	35.50	35.44	35.44	35.41			

Table 6. (Continued)

STATION: E-3
DEPTH: 46 M
LATITUDE: 28°28' N
LONGITUDE: 93°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	30	1	1963	18.7	18.7	18.6	17.8	17.7			17.7	36.49	36.46	36.57	36.55	36.57		
2	20	2	1963	18.0	17.9	17.9	17.8	17.8			16.8	36.60	37.01	36.67	36.68	36.69		
3	27	3	1963	20.5	20.4	20.3	20.0	18.3			18.3	36.59	36.64	36.65	36.62	36.61		
4	29	4	1963	24.2	24.2	24.2	22.2	20.4			20.3	00.00	36.43	36.39	36.47	36.52		
5	14	5	1963	25.6	25.2	24.9	24.0	21.5			21.1	35.43	35.89	36.09	36.64	36.61		
6	19	6	1963	28.7	28.7	27.2	25.3	22.2			20.2	33.78	33.81	34.14	35.67	36.48		
7	11	7	1963	30.0	30.0	29.7	28.9	22.5			20.3	33.97	34.62	34.25	35.30	36.39		
8	17	8	1963	29.8	29.8	29.8	29.7	21.2			20.7	36.51	36.52	36.44	36.50	36.43		
9	22	9	1963	28.6	28.6	28.6	28.5	27.2			26.3	36.32	36.34	36.28	36.14	36.50		
10	20	10	1963	26.8	26.8	26.8	26.7	26.7			26.7	36.68	36.60	36.67	36.59	36.65		
11	20	11	1963	24.2	24.2	24.1	23.9	23.9			23.9	36.82	36.79	36.90	36.82	36.88		
12	10	12	1963	21.3	21.3	21.3	21.3	20.7			20.4	36.80	36.72	00.00	36.72	36.86		
13	19	1	1964	16.7	16.7	16.7	16.3	16.1			16.0	36.65	36.56	36.60	36.52	36.54		
14	24	2	1964	16.8	16.8	16.8	16.8	16.6			16.4	36.64	36.65	36.67	36.63	36.56		
15	2	3	1964	17.6	17.6	17.5	17.3	16.6			16.6	36.61	36.69	36.64	36.60	36.69		
16	22	4	1964	22.1	22.1	21.4	19.6	19.0			19.0	36.76	36.72	36.94	36.98	36.91		
17	13	5	1964	24.9	24.9	24.4	23.4	20.7			20.1	36.48	36.42	36.66	36.70	36.72		
18	21	6	1964	29.4	28.9	28.2	27.7	20.6			20.6	36.36	36.26	36.22	36.42	36.48		
19	10	7	1964	28.6	28.6	28.1	27.6	23.2			21.2	34.30	34.23	34.80	36.31	36.58		
20	21	8	1964	29.7	29.7	29.7	28.7	22.7			21.8	34.58	34.39	34.47	36.10	36.60		
21	18	9	1964	28.8	28.8	28.8	28.5	23.7			21.2	36.07	36.06	36.08	36.42	36.63		
22	21	10	1964	24.0	23.9	23.8	23.7	24.0			23.9	35.48	36.59	35.38	35.30	35.32		
23	11	11	1964	24.3	24.3	24.3	24.6	24.6			24.6	36.21	36.30	36.16	36.18	36.48		
24	9	12	1964	21.4	21.4	21.4	21.4	21.4			21.4	36.41	36.49	36.54	36.39	36.48		
25	15	1	1965	20.7	20.7	20.6	19.9	19.8			19.6	36.61	36.62	36.66	36.49	36.46		
27	13	3	1965	18.7	18.7	18.6	18.3	18.1			17.7	36.85	36.72	36.70	36.69	36.73		
28	15	4	1965	22.5	22.5	22.2	19.2	18.3			18.3	36.57	36.54	36.54	36.57	36.56		
29	26	5	1965	25.3	25.3	25.2	25.1	22.6			22.6	36.70	36.67	36.64	36.61	36.56		
30	19	6	1965	28.6	28.6	28.0	26.0	23.8			22.1	36.71	36.60	36.74	36.65	00.00		
32	19	8	1965	29.1	29.1	29.2	28.8	23.3			23.0	35.14	34.94	34.99	36.09	36.59		
34	31	10	1965	24.8	24.8	24.8	24.8	25.0			25.3	35.62	35.64	35.57	35.63	35.74		
35	1	12	1965	22.4	22.4	22.3	22.3	22.2			22.2	35.77	36.09	35.97	35.93	35.93		

STATION: E-51
DEPTH: 73 M
LATITUDE: 28°09' N
LONGITUDE: 93°20' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
1	30	1	1963	19.7	19.6	19.6	19.5	19.4	18.5		18.5	36.55	36.49	36.55	36.55	36.57	36.55	
2	20	2	1963	18.6	18.5	18.4	18.4	18.3	18.2		17.7	36.69	37.05	36.79	36.59	36.80	36.68	
3	27	3	1963	20.1	20.1	19.7	19.2	18.7	17.9		17.9	36.68	36.67	36.62	36.59	36.63	36.50	
4	29	4	1963	23.8	23.8	23.8	22.2	20.1	18.6		18.5	36.40	36.52	36.48	00.00	36.47	36.49	
5	15	5	1963	25.7	25.4	25.3	24.9	22.7	19.3		19.3	35.68	35.68	36.22	36.43	36.61	36.61	
6	19	6	1963	28.5	28.5	28.4	25.6	22.8	19.7		19.3	35.04	35.23	35.31	35.76	36.47	36.55	
7	11	7	1963	29.3	29.3	28.9	27.3	21.7	18.7		17.9	34.19	34.17	34.59	36.23	36.54	34.84	
8	17	8	1963	29.6	29.6	29.6	29.6	24.3	19.4		18.9	36.60	36.52	36.63	36.44	36.43	36.65	
9	22	9	1963	27.7	28.2	28.1	28.1	25.8	20.0		20.0	36.75	36.67	37.03	36.73	36.58	36.49	
10	21	10	1963	26.8	26.8	26.7	26.7	26.7	22.8		22.1	36.71	36.82	36.66	36.78	36.68	36.48	
11	21	11	1963	24.7	24.6	24.6	24.5	24.4	24.4		20.7	36.69	36.79	36.69	36.79	36.76	36.84	
12	11	12	1963	22.8	22.8	22.8	22.8	22.7	22.3		22.1	36.89	36.79	36.73	36.68	36.76	36.72	
13	18	1	1964	17.9	17.9	17.9	17.8	17.7	17.7		17.7	36.68	36.77	36.80	36.69	36.80	36.71	
14	24	2	1964	17.6	17.6	17.6	17.6	17.3	17.1		17.1	36.66	36.68	36.65	36.59	36.67	36.65	
15	2	3	1964	17.5	17.5	17.4	17.4	17.3	17.1		17.1	36.69	36.59	36.70	36.69	36.65	36.64	
16	22	4	1964	22.0	21.9	19.5	18.7	17.7	16.8		16.9	36.70	36.72	36.76	36.84	36.83	36.78	
17	13	5	1964	25.5	25.4	25.3	23.5	19.8	17.8		17.8	36.43	36.34	36.34	36.34	00.00	00.00	
18	21	6	1964	28.9	28.9	28.9	27.5	23.3	20.2		20.2	35.73	35.69	35.99	36.59	36.64	36.18	
19	10	7	1964	29.0	28.9	28.7	27.5	21.4	18.2		17.9	33.85	33.80	34.44	36.31	36.65	36.64	
20	21	8	1964	29.9	29.9	29.8	27.4	21.1	18.7		18.7	35.04	34.95	34.98	35.29	35.43	36.43	
21	18	9	1964	28.8	28.8	28.8	28.8	23.2	19.2		19.2	36.23	36.17	36.15	36.17	36.50	36.71	
22	21	10	1964	23.8	23.8	23.8	24.1	23.8	21.9		20.6	35.88	35.85	35.87	36.32	36.40	36.46	
23	11	11	1964	24.9	24.9	24.9	24.8	24.7	22.7		19.6	36.38	36.41	36.37	36.68	36.45	36.65	
24	9	12	1964	21.9	21.9	21.9	21.8	21.8	21.8		19.8	36.75	36.76	36.73	36.82	36.77	36.74	
25	16	1	1965	21.3	21.3	21.2	21.2	21.1	21.0		20.9	36.79	36.74	36.91	36.76	36.78	36.75	
27	13	3	1965	19.3	19.3	19.2	18.6	18.4	18.1		17.2	36.52	36.48	36.58	36.56	36.60	36.71	
28	15	4	1965	22.9	22.9	22.8	21.1	18.9	18.2		17.9	36.60	36.57	36.58	36.55	36.56	36.65	
29	26	5	1965	25.3	25.3	25.3	25.1	20.3	19.0		19.0	36.55	36.54	36.58	36.55	36.60	36.64	
30	19	6	1965	28.8	26.1	25.3	22.6	19.6	19.2		19.2	36.31	36.25	35.84	36.47	36.65	36.63	
32	19	8	1965	29.1	28.6	28.6	24.4	20.1	19.3		19.3	34.88	34.64	37.79	35.68	36.71	33.77	
34	31	10	1965	24.5	24.5	24.5	24.6	25.3	23.2		23.2	35.69	35.35	35.36	35.46	36.13	36.40	
35	1	12	1965	23.6	23.6	23.6	23.6	23.6	23.6		22.2	36.09	36.06	36.06	36.08	36.06	36.06	

Table 6. (Continued)

STATION: E-6
DEPTH: 110 M
LATITUDE: 27°59' N
LONGITUDE: 93°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	30	1	1963	20.3	20.3	20.2	20.2	20.0	19.9	19.1	19.1	36.58	36.50	36.51	36.55	36.51	36.50	36.59
2	21	2	1963	19.2	19.1	19.1	18.9	18.8	18.7	15.9	15.7	36.81	36.61	36.61	36.73	36.65	36.58	36.21
3	27	3	1963	20.0	19.9	19.8	19.6	19.1	17.8	17.7	17.7	36.62	36.62	36.60	36.64	36.51	36.43	36.54
5	15	5	1963	25.6	25.2	25.2	25.1	20.4	19.8	18.6	18.4	36.35	36.25	36.29	36.32	36.40	36.58	36.49
6	19	6	1963	29.1	29.1	28.9	27.4	25.0	20.3	18.3	17.7	35.30	35.17	35.36	36.65	36.52	36.54	36.43
7	11	7	1963	29.1	29.3	28.6	26.1	22.2	18.6	17.7	17.7	33.91	33.86	35.25	36.31	36.52	36.51	36.53
8	17	8	1963	29.8	29.8	29.8	29.7	23.3	20.0	17.8	16.4	00.00	36.46	36.87	36.62	36.45	36.38	36.33
9	22	9	1963	28.5	28.4	28.3	28.2	26.8	20.8	17.2	17.2	36.61	00.00	36.56	36.54	36.57	36.97	36.44
10	21	10	1963	26.7	26.7	26.7	26.7	26.6	23.9	20.3	20.3	36.91	36.60	36.59	36.66	36.62	36.48	36.65
11	21	11	1963	24.8	24.8	24.7	24.7	24.6	24.4	19.2	19.1	36.60	00.00	00.00	00.00	00.00	00.00	00.00
12	11	12	1963	22.9	22.9	22.9	22.9	22.9	22.8	17.9	17.7	36.65	36.61	37.11	36.95	36.76	36.68	36.31
13	18	1	1964	18.7	18.7	18.6	18.3	17.9	17.8	17.6	17.6	36.68	36.68	36.68	36.72	36.68	36.77	36.74
14	24	2	1964	16.6	16.6	16.6	16.3	16.2	16.0	15.9	15.8	36.57	36.60	36.62	36.56	36.58	36.70	36.57
15	2	3	1964	18.3	18.3	18.4	18.3	18.3	18.0	17.2	17.4	36.60	36.66	36.58	36.66	36.75	36.69	36.66
16	22	4	1964	23.1	23.0	22.8	21.3	20.3	18.7	17.1	16.8	36.88	36.84	36.83	36.92	36.74	36.85	36.67
17	13	5	1964	25.3	25.4	25.3	24.7	22.3	18.8	17.3	17.3	36.20	36.19	36.26	36.68	36.68	36.61	36.48
18	21	6	1964	28.6	28.4	28.2	26.7	21.7	19.3	17.2	17.2	00.00	35.54	35.63	36.57	36.64	36.59	36.55
19	10	7	1964	28.8	28.8	28.6	25.6	20.9	18.7	17.2	17.2	33.71	33.68	33.60	35.90	36.73	36.54	36.47
20	21	8	1964	30.1	30.1	29.9	28.9	22.5	18.1	17.3	17.3	35.22	35.23	35.59	36.60	36.57	36.37	36.39
21	18	9	1964	29.2	29.2	29.2	29.2	29.0	20.4	18.5	17.4	36.69	36.72	36.78	36.72	36.70	36.61	36.55
22	22	10	1964	23.9	24.0	23.9	23.9	23.8	22.8	18.4	18.3	36.40	36.41	36.43	36.42	36.45	36.48	36.41
23	11	11	1964	25.3	25.3	25.2	25.2	25.1	23.9	19.0	18.6	36.78	36.52	36.48	36.50	36.57	36.53	36.45
24	9	12	1964	22.4	22.4	22.4	22.4	22.4	22.6	19.4	19.4	36.79	36.75	36.74	36.69	36.74	36.78	36.70
25	16	1	1965	21.9	21.9	21.9	21.9	21.8	21.8	17.8	17.8	36.85	37.01	36.99	36.89	36.82	36.81	36.50
28	15	4	1965	23.9	23.6	23.3	22.8	20.4	19.7	17.9	17.8	36.54	36.57	36.62	36.63	36.57	36.55	36.42
29	26	5	1965	25.6	25.6	25.6	25.1	21.4	19.3	17.9	17.9	36.65	36.45	36.46	36.74	36.59	36.60	36.48
30	19	6	1965	25.9	25.9	25.1	22.8	20.5	19.3	18.1	18.1	36.10	35.96	35.66	36.51	36.54	36.73	36.64
32	19	8	1965	29.4	29.4	28.3	25.3	22.0	19.6	16.7	16.5	35.54	35.47	35.75	36.23	36.67	36.80	36.45
34	31	10	1965	25.4	25.3	25.3	25.2	25.2	25.0	20.2	20.0	36.66	36.33	36.33	36.34	36.40	36.43	36.60

Table 7. Monthly temperature and salinity observations at stations on transect 7, 1963-1965

STATION: W-55
DEPTH: 7 M
LATITUDE: 29°03' N
LONGITUDE: 95°06' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	11	3	1963	14.7	14.8						14.8	31.47	31.43					
3	2	4	1963	22.2	22.2						20.4	28.97	28.97					
4	7	5	1963	25.2	25.3						24.0	22.68	23.23					
5	19	5	1963	26.7	26.6						23.2	33.68	34.82					
6	1	7	1963	29.0	28.9						28.8	34.90	34.81					
7	17	7	1963	28.7	28.7						28.4	36.15	36.17					
8	28	8	1963	31.1	31.1						31.1	37.06	36.97					
9	1	10	1963	25.9	25.9						25.9	29.29	29.26					
10	31	10	1963	24.6	24.6						24.6	30.74	30.67					
11	30	11	1963	16.2	00.0						00.0	31.99	32.10					
12	19	12	1963	11.8	11.8						11.6	32.18	32.09					
13	26	1	1964	9.9	9.7						9.4	32.01	31.83					
14	19	2	1964	12.4	12.4						12.2	33.55	33.72					
15	22	3	1964	15.1	15.0						14.6	31.78	31.93					
16	15	4	1964	19.7	19.6						19.4	25.81	25.76					
17	22	5	1964	27.1	27.1						26.2	23.47	23.49					
18	24	6	1964	29.6	29.6						25.8	31.58	31.59					
19	16	7	1964	28.5	28.5						28.5	34.52	34.79					
20	29	8	1964	29.6	29.6						29.6	36.64	36.62					
21	25	9	1964	28.0	28.0						28.0	30.45	30.41					
22	28	10	1964	21.9	21.9						21.9	31.96	32.02					
23	19	11	1964	23.5	23.5						23.5	31.10	31.05					
24	19	12	1964	12.1	12.1						12.1	28.66	28.61					
25	10	1	1965	15.4	15.4						16.0	30.45	30.41					
26	26	2	1965	13.8	14.2						14.2	32.78	33.13					
27	20	3	1965	14.7	14.7						14.5	30.16	30.12					
28	23	4	1965	23.9	23.9						23.8	28.96	29.01					
29	2	6	1965	27.3	27.3						26.4	21.06	20.96					
30	15	6	1965	29.3	28.8						25.9	24.70	25.68					
32	11	8	1965	29.0	28.9						28.7	34.84	35.07					
33	8	9	1965	29.8	29.7						29.6	00.00	00.00					
35	9	12	1965	17.3	17.2						17.1	00.00	00.00					

Table 7. (Continued)

STATION: W-1
DEPTH: 14 M
LATITUDE: 29°01' N
LONGITUDE: 95°05' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	6	2	1963	10.3	10.3	10.9					10.8	31.00	31.00	31.70				
2	2	3	1963	12.8	12.8	12.8					12.8	31.31	31.40	31.31				
3	3	4	1963	21.9	22.0	19.4					19.2	29.34	29.40	32.40				
4	7	5	1963	25.2	25.3	24.0					23.9	00.00	32.62	34.11				
5	20	5	1963	25.6	26.1	23.2					23.0	34.32	34.92	35.81				
6	1	7	1963	28.9	28.9	28.6					28.1	34.69	34.69	35.26				
7	17	7	1963	29.3	29.3	29.3					29.3	36.53	36.38	36.61				
8	28	8	1963	30.4	30.2	30.1					30.1	00.00	36.94	36.92				
9	2	10	1963	26.0	26.1	26.2					26.1	30.22	30.36	30.68				
10	31	10	1963	24.3	24.4	24.9					25.1	30.81	30.76	32.56				
11	30	11	1963	17.4	17.4	17.5					17.6	33.20	33.13	33.35				
12	19	12	1963	12.3	12.3	12.3					12.3	32.59	32.52	32.54				
13	26	1	1964	9.8	9.8	9.8					9.9	32.79	32.87	34.01				
14	19	2	1964	12.4	12.4	12.4					12.4	35.02	34.91	34.97				
15	22	3	1964	15.1	15.1	14.9					14.9	31.93	32.08	34.80				
16	15	4	1964	19.4	19.4	19.3					19.2	28.78	28.88	29.31				
17	22	5	1964	26.4	26.4	26.3					25.8	26.34	26.40	27.05				
18	25	6	1964	29.0	28.6	25.8					25.0	31.61	31.83	34.29				
19	16	7	1964	27.9	27.9	26.8					26.5	34.84	34.82	34.87				
20	29	8	1964	29.3	29.3	29.3					29.2	36.37	36.37	36.33				
21	25	9	1964	27.9	27.9	27.9					27.9	31.40	31.33	31.49				
22	28	10	1964	22.0	22.0	22.0					22.1	32.86	32.88	32.89				
23	19	11	1964	23.9	23.0	23.0					23.0	31.00	30.98	30.99				
24	19	12	1964	12.8	12.8	13.2					13.3	30.15	30.12	30.61				
25	10	1	1965	15.4	15.4	15.5					16.3	30.51	30.52	33.79				
26	26	2	1965	13.7	14.0	14.7					14.7	33.37	33.68	35.55				
27	21	3	1965	14.8	14.8	14.9					14.9	32.47	32.39	32.40				
28	23	4	1965	23.4	23.3	23.2					23.0	29.97	29.96	30.02				
29	2	6	1965	27.1	27.1	26.7					26.6	21.16	21.12	31.94				
30	15	6	1965	29.3	28.7	25.6					25.5	24.51	26.59	34.81				
32	11	8	1965	29.0	29.0	28.6					28.5	34.87	35.28	35.32				
33	9	9	1965	29.6	29.5	29.4					29.4	00.00	00.00	00.00				
35	9	12	1965	18.9	18.9	18.9					18.9	00.00	00.00	00.00				

STATION: W-2
DEPTH: 28 M
LATITUDE: 28°40' N
LONGITUDE: 94°56' W

1	31	1	1963	13.4	13.2	12.7	13.4				13.4	35.45	35.50	35.30	35.78			
2	3	3	1963	14.2	13.7	13.5	13.8				13.8	35.73	35.73	35.68	35.98			
3	3	4	1963	20.1	19.7	19.3	18.5				18.5	36.17	36.23	36.46	36.24			
4	7	5	1963	23.7	24.1	24.2	23.6				23.3	34.13	34.97	35.24	35.37			
5	20	5	1963	26.4	26.4	25.7	23.1				22.8	32.29	32.24	33.53	36.08			
6	26	6	1963	28.7	28.6	28.6	26.1				26.0	34.45	34.93	34.91	35.58			
7	17	7	1963	29.2	29.2	29.2	28.8				24.7	36.44	36.44	36.38	36.37			
8	31	8	1963	29.9	29.8	29.7	29.6				28.6	36.62	36.89	36.57	36.64			
9	2	10	1963	27.5	27.5	27.5	27.5				27.4	36.33	36.37	36.36	36.32			
10	31	10	1963	25.7	25.7	25.7	25.6				25.6	36.24	36.28	36.30	36.27			
11	30	11	1963	20.8	20.8	20.8	20.8				20.7	36.24	36.17	36.21	36.19			
12	19	12	1963	17.3	17.3	17.3	17.3				17.2	36.21	36.39	36.31	36.61			
13	26	1	1964	14.8	14.8	14.8	14.4				13.8	36.53	36.64	36.66	36.77			
14	23	2	1964	13.7	13.6	13.6	13.7				13.8	36.31	36.19	36.21	36.24			
15	18	3	1964	17.3	17.3	17.1	16.8				16.8	36.81	36.68	36.70	36.70			
16	15	4	1964	18.6	18.6	18.6	18.6				18.4	36.56	36.53	36.68	36.57			
17	22	5	1964	25.2	25.2	25.2	24.3				24.1	36.15	36.14	36.20	36.29			
18	25	6	1964	28.3	28.2	28.1	26.4				24.8	32.74	32.65	32.85	35.05			
19	16	7	1964	28.5	28.5	28.6	23.1				23.1	34.02	34.00	34.84	36.34			
20	29	8	1964	29.4	29.4	29.4	29.1				29.1	35.12	35.10	35.55	36.12			
21	29	9	1964	27.9	27.9	28.0	28.3				28.3	34.97	00.00	35.01	35.42			
22	28	10	1964	23.5	23.5	23.4	23.4				23.3	35.06	35.07	35.04	35.09			
23	27	11	1964	21.7	21.7	21.6	21.5				21.5	35.41	35.56	35.45	35.40			
24	16	12	1964	18.3	18.3	18.3	18.2				18.3	35.36	35.33	35.40	00.00			
25	7	1	1965	16.3	16.3	16.4	16.6				16.6	34.50	34.50	34.99	35.33			
26	26	2	1965	16.5	16.5	16.5	16.5				16.5	36.62	36.62	36.58	36.59			
27	21	3	1965	15.9	15.9	15.8	15.8				15.7	36.00	35.95	35.91	35.98			
28	23	4	1965	22.4	22.3	22.2	21.6				21.6	36.59	36.57	36.59	36.46			
29	2	6	1965	27.1	27.1	25.5	25.0				25.0	22.68	22.58	35.09	35.68			
30	11	6	1965	29.7	28.9	26.5	26.0				25.8	30.89	31.50	34.66	36.36			
32	11	8	1965	29.2	29.1	29.2	28.3				28.3	34.02	34.84	35.04	35.02			
33	9	9	1965	29.3	29.3	29.2	29.1				29.2	00.00	00.00	00.00	00.00			
35	9	12	1965	21.2	21.2	21.2	21.2				21.1	00.00	00.00	00.00	00.00			

Table 7. (Continued)

STATION: W-3
DEPTH: 46 M
LATITUDE: 28°18' N
LONGITUDE: 94°46' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	31	1	1963	18.7	18.6	18.2	17.7	17.1			15.9	36.32	36.37	36.54	36.60	36.56		
2	3	3	1963	18.2	18.1	18.1	17.9	17.2			17.4	36.55	36.55	36.60	36.56	36.57		
3	3	4	1963	21.9	21.9	21.7	19.5	19.0			18.9	36.71	36.61	36.54	36.59	36.61		
4	7	5	1963	24.3	24.2	24.1	22.2	19.7			19.6	35.40	35.32	35.54	36.30	36.56		
5	20	5	1963	26.6	26.6	25.7	23.2	20.6			20.2	32.24	32.39	34.93	36.50	36.63		
6	26	6	1963	28.7	28.4	28.3	25.0	21.2			21.1	35.88	35.86	35.98	36.39	36.39		
7	17	7	1963	29.1	29.1	29.1	29.1	22.3			20.2	36.56	36.48	36.58	36.57	36.42		
8	31	8	1963	30.0	30.0	29.9	29.6	23.5			23.5	36.60	36.60	36.52	36.57	36.38		
9	2	10	1963	27.5	27.5	27.5	27.5	27.5			27.4	36.40	36.49	36.51	36.42	36.50		
10	31	10	1963	26.2	26.2	26.2	26.2	26.2			26.1	36.68	36.64	36.67	36.63	36.62		
11	30	11	1963	22.7	22.7	22.7	22.7	22.7			22.7	36.84	36.73	36.68	36.72	36.79		
12	19	12	1963	20.7	20.7	20.7	20.6	20.6			20.6	36.88	36.84	36.80	36.80	36.81		
13	26	1	1964	16.7	16.7	16.7	16.6	16.1			16.1	36.55	36.79	36.59	36.64	36.71		
14	23	2	1964	16.5	16.5	16.4	16.4	16.3			16.3	36.79	36.76	36.73	36.65	00.00		
15	18	3	1964	18.2	18.2	18.1	17.6	16.0			16.0	36.72	36.70	36.74	36.68	36.70		
16	15	4	1964	19.5	19.5	19.4	18.7	18.2			18.2	36.68	36.68	36.61	36.76	36.83		
17	22	5	1964	25.9	25.8	25.7	23.9	21.1			20.6	33.65	33.62	33.90	36.57	36.62		
18	25	6	1964	28.1	28.1	27.9	26.5	21.1			20.5	32.76	32.72	32.97	34.46	36.49		
19	16	7	1964	28.7	28.7	28.7	28.4	22.9			20.4	33.76	33.35	33.80	35.72	36.47		
20	29	8	1964	29.8	29.8	29.7	29.4	24.3			22.5	34.54	34.50	34.50	36.31	36.43		
21	29	9	1964	28.3	28.3	28.2	28.3	27.3			27.0	35.91	35.84	35.88	35.96	36.26		
22	28	10	1964	24.8	24.8	24.8	24.8	24.8			24.8	36.15	36.11	36.39	36.32	36.46		
23	27	11	1964	23.2	23.2	23.2	23.1	23.1			23.1	36.58	36.65	36.57	36.56	36.55		
24	16	12	1964	20.8	20.8	20.8	20.8	20.8			20.8	36.65	36.58	36.62	36.61	36.61		
25	7	1	1965	20.6	20.6	20.5	20.4	20.4			20.4	36.69	36.64	36.70	36.71	36.86		
26	26	2	1965	18.7	18.7	18.6	18.6	18.5			18.5	36.76	36.69	36.92	36.73	36.73		
27	21	3	1965	17.3	17.3	17.2	17.2	17.2			17.2	36.58	36.47	36.52	36.59	36.59		
28	23	4	1965	22.5	22.5	22.4	19.7	17.6			17.6	36.37	36.32	36.53	36.51	36.58		
32	11	8	1965	29.3	29.3	29.3	28.0	21.3			20.9	34.57	34.70	35.05	36.53	36.53		
33	9	9	1965	29.3	29.3	29.3	29.3	23.5			23.4	00.00	00.00	00.00	00.00	00.00		
35	9	12	1965	21.8	21.8	21.8	21.7	21.7			21.7	36.00	35.97	35.97	36.00	36.04		

STATION: W-54
DEPTH: 73 M
LATITUDE: 28°00' N
LONGITUDE: 94°38' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
1	31	1	1963	19.2	19.1	18.8	18.4	18.2	17.3		17.2	36.49	36.43	36.41	36.54	36.53	36.57	
2	3	3	1963	18.6	18.6	18.5	18.3	17.5	17.4		17.2	36.57	36.51	36.55	36.49	36.54	36.57	
3	3	4	1963	21.6	21.6	21.5	20.0	19.3	18.4		18.1	36.55	36.57	36.61	36.53	36.58	36.50	
4	6	5	1963	24.2	24.1	23.9	23.3	20.5	18.6		18.4	35.71	35.71	35.68	35.62	36.37	36.63	
5	20	5	1963	26.3	26.2	25.7	25.3	20.8	19.3		18.6	32.90	32.93	35.40	36.24	36.41	36.51	
6	26	6	1963	28.6	28.6	28.6	28.3	23.8	19.7		19.6	36.46	36.49	36.46	00.00	36.35	36.49	
7	17	7	1963	28.8	28.7	28.6	27.8	22.8	19.1		19.1	36.59	36.46	36.50	36.49	36.48	36.42	
8	31	8	1963	29.7	29.7	29.6	25.6	21.9	18.3		18.2	36.89	36.90	36.43	36.63	36.31	36.33	
9	2	10	1963	27.3	27.3	27.3	27.3	27.3	23.5		21.4	36.59	36.61	36.54	36.58	36.57	36.43	
10	31	10	1963	26.3	26.3	26.3	26.2	26.2	26.1		22.7	36.76	36.63	36.74	36.75	36.69	36.63	
11	30	11	1963	23.3	23.3	23.3	23.3	23.3	23.3		21.4	36.84	36.85	36.83	36.82	36.76	36.81	
12	19	12	1963	21.1	21.1	21.1	21.0	20.9	20.7		20.7	36.77	36.71	36.71	36.70	36.77	36.76	
13	26	1	1964	18.3	18.3	18.2	18.2	18.2	17.4		17.3	36.60	36.72	36.64	36.62	36.77	36.62	
14	23	2	1964	18.2	18.2	18.2	18.1	17.9	17.1		17.0	36.75	36.65	36.54	36.49	36.70	00.00	
15	18	3	1964	19.5	19.5	19.5	19.4	19.3	17.5		17.5	36.59	36.59	36.58	36.58	36.54	36.51	
16	15	4	1964	20.7	20.7	20.6	19.2	18.4	16.8		16.8	36.65	36.62	36.61	36.45	36.66	36.58	
17	22	5	1964	26.1	26.1	26.0	23.9	19.1	17.9		17.9	33.30	33.29	34.34	36.35	36.37	36.54	
18	25	6	1964	28.1	28.1	27.9	27.6	21.6	18.6		18.6	33.26	33.27	33.35	34.62	36.51	36.40	
19	16	7	1964	28.7	28.7	28.7	28.4	25.1	20.3		17.5	35.05	35.04	36.02	36.55	36.66	36.62	
20	30	8	1964	29.6	29.6	29.4	29.2	24.4	20.1		19.9	36.16	36.05	36.63	36.64	36.72	36.60	
21	28	9	1964	28.2	28.2	28.1	28.1	20.7	20.3		20.2	35.97	35.90	35.89	36.20	36.60	36.60	
22	28	10	1964	25.4	25.4	25.4	25.3	25.4	21.9		21.9	36.68	36.59	36.62	36.62	36.65	36.60	
23	27	11	1964	23.4	23.4	23.4	23.3	23.3	23.2		23.1	36.80	36.70	36.65	36.66	36.68	36.65	
24	16	12	1964	21.7	21.7	21.7	21.7	21.7	21.7		21.7	36.67	36.66	36.66	36.69	36.68	36.67	
25	7	1	1965	22.1	22.1	22.1	22.0	21.9	21.2		21.1	36.82	36.78	36.80	36.81	36.78	36.76	
26	26	2	1965	19.6	19.6	19.4	19.4	19.4	19.3		19.3	36.78	36.69	36.70	36.72	36.68	36.67	
27	21	3	1965	17.7	17.7	17.7	17.7	17.7	17.1		17.1	36.32	36.30	36.31	36.26	36.28	36.32	
28	23	4	1965	22.5	22.5	22.4	22.3	19.7	17.8		17.7	36.56	36.68	36.66	36.51	36.76	36.51	
29	2	6	1965	26.6	26.6	26.4	24.7	20.6	18.8		18.8	35.58	35.57	35.64	36.54	36.65	36.63	
30	12	6	1965	26.5	26.5	24.7	20.6	19.3	18.9		18.9	35.23	35.45	35.92	36.06	36.58	36.61	
32	11	8	1965	26.7	26.4	24.8	20.8	19.3	19.0		19.0	34.64	35.08	35.19	36.53	36.61	36.69	
35	9	12	1965	23.4	23.4	23.3	23.2	23.2	23.1		23.1	00.00	00.00	00.00	00.00	00.00	00.00	

Table 7. (Continued)

STATION: W-6
DEPTH: 110 M
LATITUDE: 27°55' N
LONGITUDE: 94°36' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
1	31	1	1963	20.3	20.1	19.8	19.6	19.1	19.0	00.0	00.0	36.40	36.42	36.51	36.49	36.45	36.52	36.56
2	3	3	1963	19.7	19.7	19.6	19.5	18.9	18.3	17.1	17.1	36.65	36.57	36.62	36.53	36.56	36.57	36.58
3	3	4	1963	21.7	21.6	20.4	19.8	19.2	18.7	17.5	17.3	36.50	36.44	36.61	36.49	36.54	36.52	36.42
4	6	5	1963	24.1	24.1	24.0	23.4	20.9	19.3	18.8	18.8	35.47	35.34	35.45	35.44	36.41	36.58	36.49
5	20	5	1963	26.8	26.4	26.3	26.1	23.6	20.9	20.2	19.9	33.50	35.58	36.00	36.33	36.53	36.51	36.50
6	26	6	1963	28.9	28.8	28.7	28.4	24.5	20.9	18.8	18.7	36.88	36.48	36.58	36.54	36.41	36.49	36.46
7	16	7	1963	29.1	29.1	28.8	28.7	25.9	18.4	17.8	17.8	36.53	36.36	36.51	36.52	36.47	36.40	36.35
8	31	8	1963	29.9	29.8	29.7	25.6	21.7	18.6	16.9	16.9	36.43	36.39	36.42	36.45	36.41	36.28	36.30
9	2	10	1963	26.8	26.8	26.7	26.7	26.6	22.1	17.6	17.6	36.50	36.48	36.38	36.39	36.41	36.49	36.34
10	31	10	1963	26.3	26.2	26.2	26.1	26.1	23.9	19.9	17.9	36.79	36.62	36.71	36.75	36.67	36.63	36.47
11	30	11	1963	23.5	23.5	23.5	23.4	23.4	23.3	19.2	19.1	36.83	36.73	36.78	36.79	36.75	36.72	36.59
12	19	12	1963	21.6	21.5	21.4	21.3	21.3	21.2	20.3	17.1	36.70	36.70	36.55	36.71	36.78	36.69	36.34
13	26	1	1964	19.4	19.4	19.4	19.3	19.3	19.0	17.8	17.6	36.66	36.62	36.66	36.67	36.62	36.62	36.55
14	23	2	1964	18.6	18.6	18.6	18.6	18.5	17.9	17.4	17.4	36.74	36.63	36.65	36.65	36.61	36.70	00.00
15	18	3	1964	20.3	20.2	19.8	19.4	19.3	18.9	17.8	17.7	36.72	36.68	36.59	36.65	36.64	36.56	36.48
16	15	4	1964	20.8	20.8	20.7	20.4	20.3	18.8	17.1	00.0	36.68	36.65	36.66	36.65	36.74	36.69	36.86
17	22	5	1964	25.8	25.7	25.7	23.9	19.7	18.2	17.6	16.8	25.72	34.60	34.74	36.28	36.26	36.41	36.54
18	25	6	1964	28.3	28.3	28.3	27.1	21.8	19.0	18.2	17.4	33.51	33.47	32.91	35.77	36.47	36.49	36.46
19	16	7	1964	28.6	28.6	28.6	28.3	25.6	20.8	17.4	16.5	36.39	36.38	36.36	36.39	36.71	36.57	36.50
20	30	8	1964	29.5	29.5	29.5	29.3	26.3	20.8	18.3	17.9	36.64	36.61	36.63	36.63	36.74	36.63	36.46
21	28	9	1964	28.7	28.8	28.7	28.7	28.0	19.3	19.0	18.9	36.18	36.34	36.62	36.64	36.78	36.60	36.66
22	29	10	1964	25.7	25.7	25.7	25.7	25.6	21.0	19.1	18.8	36.82	36.81	36.80	36.91	36.88	36.57	36.51
23	27	11	1964	23.5	23.5	23.5	23.4	23.4	23.3	18.6	18.3	36.74	36.71	36.72	36.76	36.80	36.77	36.56
24	16	12	1964	21.8	21.8	21.8	21.8	21.8	21.8	18.8	18.7	36.82	36.66	36.75	36.67	36.68	36.66	36.57
25	7	1	1965	22.2	22.2	22.2	22.1	21.9	21.5	21.1	20.8	36.81	36.78	36.80	36.81	36.78	36.76	36.76
26	27	2	1965	19.6	19.7	19.7	19.6	19.3	19.2	18.3	17.8	36.76	36.72	36.79	36.69	36.70	36.73	36.68
27	21	3	1965	19.8	19.8	19.8	19.7	19.7	19.7	16.9	16.9	36.83	36.60	36.67	36.68	36.70	36.67	36.39
28	23	4	1965	23.3	23.3	23.1	22.5	21.1	18.2	17.4	17.4	36.68	36.47	36.68	36.66	36.78	36.43	36.42
29	1	6	1965	26.8	26.8	26.7	24.9	21.1	18.9	18.8	18.8	35.49	35.52	35.46	36.38	36.62	36.59	36.57
30	12	6	1965	25.6	24.9	22.2	20.3	18.8	17.9	17.2	17.1	35.00	35.05	35.33	36.57	36.24	34.82	36.53
32	11	8	1965	26.6	26.6	25.3	20.8	19.4	17.4	16.7	16.7	35.49	36.03	36.67	35.73	36.52	36.60	36.50
35	9	12	1965	23.5	23.5	23.5	23.5	23.5	23.5	19.8	19.6	00.00	00.00	00.00	00.00	00.00	00.00	00.00

Table 8. Monthly temperature and salinity observations at stations on transect 8, 1963-1965

STATION: W-56
DEPTH: 7 M
LATITUDE: 28°23' N
LONGITUDE: 96°20' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	8	3	1963	13.9	13.8						13.1	31.72	31.92					
3	7	4	1963	20.8	20.8						20.2	30.38	30.40					
4	3	5	1963	24.5	24.5						24.5	25.61	25.61					
5	22	5	1963	26.4	26.2						26.0	34.87	34.94					
6	27	6	1963	28.7	28.7						28.3	35.70	35.67					
7	16	7	1963	29.2	29.2						24.7	36.80	36.71					
8	28	8	1963	30.2	30.2						30.2	36.88	36.87					
9	5	10	1963	25.8	25.8						25.7	30.17	30.17					
10	4	11	1963	23.0	23.0						22.9	33.84	33.78					
11	1	12	1963	16.7	16.7						18.8	32.74	32.79					
12	20	12	1963	11.1	11.1						10.8	31.81	31.80					
13	30	1	1964	12.2	12.9						11.9	32.29	32.42					
14	19	2	1964	13.4	13.4						13.4	35.44	35.46					
15	21	3	1964	16.1	16.0						15.5	33.37	33.32					
16	18	4	1964	21.0	21.0						21.1	27.12	27.21					
17	25	5	1964	26.7	26.2						25.0	00.00	00.00					
18	27	6	1964	29.2	29.1						28.6	33.57	33.49					
19	19	7	1964	28.6	28.6						28.5	34.53	34.44					
20	1	9	1964	29.3	29.3						29.0	36.85	36.83					
21	25	9	1964	28.3	28.3						28.3	33.35	33.21					
22	31	10	1964	22.7	22.7						22.7	32.83	32.76					
23	26	11	1964	17.7	17.7						17.7	31.73	31.68					
24	18	12	1964	13.9	13.9						13.9	31.12	31.09					
25	10	1	1965	15.7	15.7						15.7	30.56	30.52					
26	1	3	1965	15.9	15.9						15.8	34.53	34.52					
27	25	3	1965	16.5	16.4						15.7	31.10	31.17					
28	26	4	1965	24.4	24.2						23.2	30.81	31.00					
29	29	5	1965	26.8	27.0						27.1	20.15	20.71					
30	14	6	1965	30.0	29.3						26.8	26.21	27.33					
32	14	8	1965	29.3	29.2						28.6	34.78	34.74					
33	12	9	1965	29.3	29.2						29.2	00.00	00.00					
35	12	12	1965	19.1	19.2						19.5	28.93	29.36					

Table 8. (Continued)

STATION: W-13
DEPTH: 14 M
LATITUDE: 28°19' N
LONGITUDE: 96°21' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	8	3	1963	14.1	14.1	12.8					12.8	00.00	32.92	31.75				
3	7	4	1963	20.8	20.8	20.8					19.8	30.71	30.71	00.00				
4	3	5	1963	24.7	24.7	24.7					24.7	25.85	25.88	25.91				
5	22	5	1963	26.2	26.1	23.4					23.1	35.52	35.42	35.72				
7	16	7	1963	29.2	29.2	25.0					24.3	36.67	00.00	00.00				
8	28	8	1963	30.3	30.3	30.3					30.3	37.03	36.93	36.92				
9	5	10	1963	25.9	25.8	26.0					26.3	30.63	30.57	31.71				
10	4	11	1963	23.4	23.4	23.3					23.3	33.97	33.94	33.72				
11	1	12	1963	17.4	17.4	19.2					19.3	32.61	32.47	34.05				
12	20	12	1963	13.3	13.3	13.3					13.2	33.06	33.55	33.50				
13	30	1	1964	11.1	11.0	10.9					10.9	32.88	32.84	32.82				
14	19	2	1964	13.8	13.8	13.8					13.8	35.73	35.67	35.69				
15	21	3	1964	16.2	16.0	15.6					15.6	32.88	32.89	32.94				
16	18	4	1964	20.8	20.5	19.9					19.1	27.34	27.81	30.92				
17	25	5	1964	00.0	00.0	00.0					00.0	27.17	28.94	31.89				
18	27	6	1964	28.9	28.8	27.9					27.9	33.83	33.80	33.85				
19	19	7	1964	28.2	28.2	28.1					28.1	35.59	35.62	35.58				
20	1	9	1964	29.0	29.0	29.0					29.0	36.78	36.77	36.73				
21	25	9	1964	28.4	28.3	28.3					28.3	33.28	33.26	33.29				
22	31	10	1964	22.6	22.6	22.6					22.6	32.85	32.82	32.81				
23	26	11	1964	18.5	18.5	18.8					20.4	32.05	32.16	32.40				
24	18	12	1964	14.4	14.4	14.4					14.4	31.71	31.73	31.77				
25	10	1	1965	15.6	15.6	15.6					15.7	30.53	30.48	30.81				
26	1	3	1965	16.2	16.2	16.2					16.3	34.19	34.56	00.00				
27	24	3	1965	16.7	16.5	15.6					15.6	31.78	31.87	32.25				
28	25	4	1965	24.7	24.3	23.6					23.6	30.98	30.97	31.11				
29	29	5	1965	27.0	27.0	26.3					25.5	22.32	22.40	29.40				
30	14	6	1965	30.6	28.0	25.1					25.1	28.08	29.19	33.88				
32	14	8	1965	29.2	29.1	28.9					28.8	34.82	34.86	35.10				
33	12	9	1965	29.2	29.2	29.2					29.1	00.00	00.00	00.00				
35	12	12	1965	19.0	19.0	20.2					20.3	28.73	30.44	32.74				

STATION: W-14
DEPTH: 28 M
LATITUDE: 28°07' N
LONGITUDE: 96°13'30" W

2	8	3	1963	15.6	14.2	14.1	14.7				15.1	00.00	35.70	35.56	35.80			
3	4	4	1963	19.5	19.5	19.2	19.7				19.8	33.64	33.81	35.13	36.27			
4	2	5	1963	23.6	23.6	23.6	23.6				23.5	33.75	33.84	33.82	34.67			
5	21	5	1963	26.0	26.0	25.4	22.2				20.2	35.15	35.10	35.47	36.07			
6	27	6	1963	27.8	27.7	27.7	24.7				24.7	36.38	36.38	36.40	36.32			
7	16	7	1963	27.8	27.7	27.7	23.9				21.7	36.44	36.45	36.54	36.41			
8	30	8	1963	29.3	29.3	29.3	23.9				22.3	37.04	36.68	36.66	36.61			
9	3	10	1963	27.5	27.5	27.5	27.5				27.5	36.11	36.04	36.24	36.40			
10	1	11	1963	25.6	25.6	25.6	25.6				25.5	36.44	36.32	36.37	36.32			
11	1	12	1963	19.4	19.4	19.6	20.4				20.3	35.54	35.65	35.94	36.14			
12	20	12	1963	18.6	18.6	18.6	18.2				17.9	36.79	36.69	36.71	36.78			
13	28	1	1964	17.4	17.4	17.4	17.3				15.9	36.69	36.63	36.59	36.62			
14	19	2	1964	16.1	16.1	16.0	15.9				15.9	36.74	36.78	36.70	36.65			
15	22	3	1964	16.8	16.8	16.8	16.8				16.8	36.22	36.18	36.20	36.29			
16	16	4	1964	18.8	18.8	18.5	18.2				18.2	35.36	35.46	35.46	36.06			
17	23	5	1964	26.3	26.2	25.4	23.6				23.2	26.42	26.48	30.21	35.40			
18	26	6	1964	28.3	28.3	28.2	24.0				23.9	33.57	33.35	33.45	35.79			
19	17	7	1964	27.5	27.5	27.4	21.8				21.8	36.37	36.39	36.33	36.40			
20	30	8	1964	29.3	28.8	28.6	28.1				28.0	36.76	36.69	36.70	36.71			
21	28	9	1964	28.4	28.4	28.4	28.3				28.3	35.17	35.16	35.22	35.31			
22	29	10	1964	24.0	24.0	24.1	24.3				24.3	35.48	35.52	35.55	35.68			
23	26	11	1964	21.6	21.6	21.6	21.6				22.5	35.57	35.49	00.00	35.50			
24	17	12	1964	18.6	18.6	18.6	18.5				18.3	35.34	35.31	35.33	35.24			
25	8	1	1965	16.9	00.0	00.0	00.0				17.4	34.79	34.79	34.80	35.00			
26	27	2	1965	14.7	00.0	00.0	0.00				17.4	31.78	31.53	35.18	36.54			
27	22	3	1965	15.7	00.0	00.0	00.0				15.7	35.38	35.34	35.41	35.45			
28	24	4	1965	22.0	00.0	00.0	00.0				20.5	35.08	35.05	35.27	35.50			
29	29	5	1965	26.1	00.0	00.0	00.0				24.3	31.73	31.20	35.05	26.36			
30	13	6	1965	29.1	00.0	00.0	00.0				24.6	27.80	28.03	29.94	35.41			
32	12	8	1965	28.7	00.0	00.0	00.0				27.1	35.60	35.63	35.56	31.35			
33	11	9	1965	29.3	29.2	29.1	28.9				28.9	00.00	00.00	00.00	00.00			
35	10	12	1965	21.3	21.3	21.3	21.2				21.2	34.92	34.87	34.81	34.79			

Table 8. (Continued)

STATION: W-15
DEPTH: 46 M
LATITUDE: 27°57' N
LONGITUDE: 96°07' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	8	3	1963	16.9	16.9	16.9	15.0	15.6			15.7	36.35	36.22	36.27	36.01	36.28		
3	4	4	1963	22.1	22.1	22.1	21.4	19.1			19.1	36.34	36.36	36.30	36.37	36.44		
4	2	5	1963	23.8	23.8	23.8	21.1	20.3			20.2	35.30	35.21	35.02	36.06	36.02		
5	21	5	1963	26.5	26.4	25.9	22.8	20.0			19.6	32.34	32.49	33.96	35.97	36.55		
6	27	6	1963	28.8	28.6	28.5	24.4	22.2			22.2	36.35	36.37	36.42	36.45	36.42		
7	16	7	1963	28.5	28.5	28.5	28.3	23.3			20.5	36.58	36.53	36.51	36.41	36.47		
8	30	8	1963	28.7	28.6	28.2	25.4	23.1			23.1	36.30	37.04	36.32	36.50	36.54		
9	3	10	1963	27.2	27.2	27.1	27.0	26.9			27.0	36.62	36.50	36.57	36.55	36.54		
10	1	11	1963	26.2	26.2	26.2	26.2	26.2			26.1	36.59	36.63	36.60	36.70	36.72		
11	1	12	1963	22.7	22.7	22.7	22.7	22.7			22.6	36.71	36.68	36.62	36.65	36.69		
12	20	12	1963	20.9	20.9	20.8	20.8	19.8			19.6	36.80	36.69	36.70	36.75	36.88		
13	28	1	1964	18.2	18.2	17.9	17.2	14.3			14.0	36.55	36.56	36.60	36.60	36.27		
14	19	2	1964	17.0	17.0	17.0	16.9	16.4			16.4	36.59	36.75	36.55	36.65	36.63		
15	19	3	1964	16.9	16.9	16.9	16.9	16.9			16.9	36.53	36.40	36.39	36.41	36.59		
16	16	4	1964	19.4	19.4	19.2	18.7	17.9			17.9	34.39	36.11	36.51	36.73	36.70		
17	23	5	1964	25.6	25.4	25.4	22.7	21.1			21.0	31.99	32.20	34.53	35.94	36.20		
18	26	6	1964	28.2	28.1	28.1	25.9	20.7			19.9	33.46	33.44	33.57	34.88	36.50		
19	17	7	1964	28.2	28.2	28.2	27.3	19.4			19.4	36.58	36.50	36.62	36.50	36.65		
20	30	8	1964	29.2	29.0	28.7	28.5	26.2			25.2	36.70	36.60	36.59	36.62	36.46		
21	28	9	1964	28.3	28.3	28.3	28.3	28.2			27.9	35.62	35.60	35.68	35.87	36.27		
22	29	10	1964	24.9	24.9	24.9	24.9	24.9			24.9	36.33	36.33	36.31	36.32	36.33		
23	26	11	1964	22.9	22.9	22.9	22.9	22.9			22.9	36.50	36.50	36.48	36.57	36.48		
24	17	12	1964	20.6	20.6	20.5	20.6	20.4			20.3	36.42	36.57	36.42	36.48	36.51		
25	8	1	1965	20.8	20.8	20.7	20.4	20.3			20.0	36.67	36.68	00.00	36.55	36.51		
26	27	2	1965	18.7	18.7	18.6	18.6	18.6			18.6	36.67	36.64	36.80	36.67	36.68		
27	22	3	1965	17.7	17.7	17.6	17.6	17.6			17.6	36.66	36.09	36.04	36.10	36.13		
28	24	4	1965	23.3	23.2	22.5	21.5	18.9			18.8	35.00	34.80	35.79	36.41	36.33		
29	1	6	1965	26.6	26.6	26.3	25.5	22.3			20.1	33.51	35.31	34.41	35.31	36.62		
30	12	6	1965	30.0	28.2	27.0	26.1	23.8			20.7	30.72	31.03	32.53	35.67	36.59		
32	12	8	1965	28.5	28.5	28.4	28.3	21.3			21.2	36.17	36.19	36.04	36.06	36.59		
33	11	9	1965	29.3	29.3	29.3	29.2	23.8			23.7	00.00	00.00	00.00	00.00	00.00		
35	10	12	1965	22.6	22.6	22.6	22.6	22.6			22.6	00.00	00.00	00.00	00.00	00.00		

STATION: W-57
DEPTH: 73 M
LATITUDE: 27°46' N
LONGITUDE: 96°00' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
2	8	3	1963	18.6	18.6	18.6	18.5	17.9	17.3		16.4	36.61	36.51	36.48	36.42	36.55	36.50	
3	4	4	1963	21.6	21.3	21.2	20.6	19.8	18.1		18.1	36.27	36.20	36.28	36.29	36.35	36.63	
4	2	5	1963	23.9	23.9	23.9	23.9	21.1	19.6		19.3	35.87	35.87	35.86	35.82	36.31	36.38	
5	21	5	1963	26.5	26.3	25.7	23.4	20.7	19.3		19.3	34.25	34.38	34.98	35.90	36.36	36.42	
6	26	6	1963	28.6	28.5	28.3	25.6	22.2	19.8		19.6	36.50	36.42	36.52	36.42	36.30	36.44	
7	16	7	1963	29.1	29.1	29.0	28.9	22.7	20.0		18.2	36.54	36.48	36.52	36.59	36.48	36.35	
8	30	8	1963	29.4	29.4	29.4	29.7	26.4	23.7		22.8	36.84	36.37	36.70	36.51	36.76	36.56	
9	2	10	1963	26.9	26.8	26.8	26.7	26.7	21.7		21.5	36.82	36.47	36.42	36.49	00.00	36.48	
10	1	11	1963	26.3	26.3	26.3	26.2	26.2	26.1		22.5	36.59	36.63	36.60	36.73	36.64	36.73	
11	30	11	1963	23.3	23.3	23.3	23.3	23.3	23.3		23.2	36.80	36.76	36.77	36.82	36.76	36.73	
12	20	12	1963	20.8	20.8	20.8	20.8	20.8	19.7		19.6	36.66	36.56	36.75	36.76	36.70	36.71	
13	28	1	1964	19.5	19.5	19.4	19.3	18.9	17.2		16.4	36.64	36.66	36.61	36.64	36.51	36.51	
14	20	2	1964	18.3	18.3	18.2	17.9	17.0	16.9		16.9	36.71	36.64	36.63	36.56	36.57	36.71	
15	19	3	1964	19.5	19.5	19.5	19.4	18.5	16.0		15.8	36.58	36.57	36.59	36.55	36.50	36.57	
16	16	4	1964	20.3	20.3	20.2	18.8	18.1	17.1		16.9	36.45	36.29	36.30	36.41	36.68	36.75	
17	23	5	1964	24.9	24.9	25.1	22.7	19.4	18.8		18.4	32.05	32.60	33.78	36.16	36.52	36.49	
18	25	6	1964	28.4	28.4	28.2	23.8	21.2	19.3		18.9	32.85	33.00	33.18	35.49	36.57	36.54	
19	17	7	1964	28.6	28.6	28.6	28.1	26.2	19.0		19.0	36.74	36.72	36.67	36.74	36.64	36.52	
20	30	8	1964	28.8	28.7	28.7	28.6	24.3	20.9		20.9	36.70	36.66	36.71	36.70	36.65	36.66	
21	28	9	1964	28.3	28.3	28.3	28.3	22.8	21.6		21.6	36.51	36.50	36.52	36.51	36.62	36.58	
22	29	10	1964	25.4	25.4	25.4	25.4	25.4	23.6		20.8	36.72	36.68	36.71	36.69	36.70	36.59	
23	26	11	1964	23.9	23.9	23.9	23.9	23.9	23.5		23.5	36.64	36.51	36.58	36.48	36.52	36.48	
24	17	12	1964	22.2	22.2	22.2	22.2	22.2	21.4		21.4	36.65	36.58	36.66	36.58	36.57	36.58	
25	7	1	1965	22.3	22.3	22.2	22.2	22.1	21.8		21.3	36.82	36.79	36.80	36.78	36.80	36.78	
26	27	2	1965	18.4	18.4	18.4	18.4	18.4	18.4		18.4	36.59	36.60	36.53	36.58	36.60	36.63	
27	22	3	1965	19.6	19.6	19.6	19.5	19.4	19.3		19.3	36.69	36.68	36.67	36.80	36.71	36.77	
28	24	4	1965	23.3	23.3	22.7	20.9	19.1	17.5		17.5	35.45	35.41	35.42	36.66	36.52	36.49	
29	1	6	1965	26.6	26.6	26.1	23.3	20.6	19.7		18.5	32.78	32.74	33.61	36.48	36.61	36.63	
30	12	6	1965	28.6	26.7	25.1	22.9	19.9	19.5		19.6	31.85	32.09	27.43	34.99	36.65	36.39	
32	12	8	1965	27.7	27.7	27.2	23.9	21.8	19.9		19.9	36.61	36.66	36.69	36.61	36.72	36.60	
33	11	9	1965	29.0	28.9	28.9	26.7	22.8	21.6		21.6	00.00	00.00	00.00	00.00	00.00	00.00	
35	10	12	1965	23.2	23.2	23.2	23.2	23.2	23.2		23.3	00.00	00.00	00.00	00.00	00.00	00.00	

Table 9. Monthly temperature and salinity observations at stations on transect 9, 1963-1965

STATION: W-59
DEPTH: 7 M
LATITUDE: 27°51' N
LONGITUDE: 97°01' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	9	3	1963	15.3	15.3						15.0	32.49	32.53					
3	6	4	1963	23.6	23.6						22.7	29.41	29.30					
4	5	5	1963	25.6	25.6						25.2	27.20	27.20					
5	22	5	1963	24.8	24.4						24.7	36.29	36.23					
6	27	6	1963	29.0	29.0						28.9	36.47	36.50					
7	16	7	1963	26.2	25.0						28.0	37.02	37.31					
8	28	8	1963	30.1	30.1						29.6	36.89	36.89					
9	3	10	1963	26.2	26.2						26.7	30.52	30.40					
10	3	11	1963	23.6	23.6						23.6	34.31	34.30					
11	1	12	1963	17.3	17.3						15.9	32.99	32.98					
12	21	12	1963	11.9	11.8						11.8	33.30	33.30					
13	30	1	1964	11.6	11.6						11.6	33.12	33.12					
14	20	2	1964	13.8	13.8						13.8	35.31	35.41					
15	20	3	1964	17.2	17.1						15.6	34.14	34.15					
16	18	4	1964	21.0	21.0						19.7	27.22	27.31					
17	25	5	1964	00.0	00.0						00.0	25.54	25.60					
18	27	6	1964	28.3	28.2						28.3	00.00	35.10					
19	18	7	1964	28.5	28.4						28.2	36.04	36.02					
20	1	9	1964	29.2	29.2						29.2	36.76	36.76					
21	29	9	1964	28.5	28.5						28.6	34.29	34.35					
22	31	10	1964	22.9	22.9						22.7	33.31	33.30					
23	20	11	1964	23.5	23.5						23.5	34.26	34.24					
24	18	12	1964	12.8	12.8						12.8	31.15	31.12					
25	9	1	1965	17.0	17.0						16.9	30.89	30.90					
26	1	3	1965	16.0	16.0						16.5	34.00	34.08					
27	23	3	1965	16.4	16.1						15.3	33.36	33.36					
28	24	4	1965	23.3	23.2						22.7	30.28	30.25					
29	30	5	1965	26.5	26.5						26.4	26.77	26.77					
30	14	6	1965	28.5	28.5						27.2	28.95	28.98					
32	12	8	1965	28.8	28.7						28.6	36.62	36.61					
33	12	9	1965	29.4	29.4						29.3	00.00	00.00					
35	10	12	1965	19.3	19.2						19.1	30.81	30.44					

STATION: W-24
DEPTH: 14 M
LATITUDE: 27°48' N
LONGITUDE: 97°00' W

Cruise	Day	Month	Year	0	3	11	24	43	70	107	B	0	3	11	24	43	70	107
2	9	3	1963	14.2	13.9	13.4					13.4	32.90	32.96	33.95				
3	6	4	1963	21.6	21.6	20.9					20.6	30.43	30.48	31.73				
4	3	5	1963	24.6	24.6	24.6					24.6	26.21	27.48	28.15				
5	22	5	1963	25.2	25.0	22.7					22.6	36.40	36.22	35.99				
6	27	6	1963	28.8	28.8	28.8					28.7	36.48	36.52	36.58				
7	16	7	1963	25.9	25.9	22.8					22.8	36.37	36.39	37.96				
8	28	8	1963	29.3	29.3	28.9					28.8	36.54	36.57	36.60				
9	3	10	1963	26.0	26.1	26.7					25.5	30.35	30.79	30.09				
10	3	11	1963	23.8	23.7	23.6					23.6	34.82	34.65	34.68				
11	1	12	1963	17.4	17.4	19.4					15.5	00.00	33.12	35.68				
12	21	12	1963	13.0	13.0	13.0					13.0	34.04	34.20	34.15				
13	30	1	1964	11.2	11.2	11.2					11.3	33.39	33.38	33.35				
14	20	2	1964	14.2	14.2	14.2					14.2	35.68	35.67	35.66				
15	20	3	1964	17.1	16.8	15.6					15.6	33.96	34.08	34.67				
16	18	4	1964	21.0	21.0	19.9					19.6	27.48	27.84	28.58				
17	25	5	1964	26.7	26.6	26.6					26.5	26.69	26.66	26.78				
18	27	6	1964	27.8	27.8	28.1					28.6	34.98	34.95	35.59				
19	18	7	1964	28.4	28.4	28.4					28.3	35.96	36.07	35.93				
20	1	9	1964	28.6	28.6	28.6					28.3	36.75	36.71	36.72				
21	25	9	1964	28.2	28.2	28.2					28.3	34.27	34.20	34.42				
22	31	10	1964	22.8	22.8	22.7					22.6	33.39	33.44	33.38				
23	20	11	1964	23.9	23.9	23.9					23.9	33.89	33.91	33.88				
24	18	12	1964	14.8	14.7	14.7					14.7	31.68	31.64	31.65				
25	9	1	1965	16.4	16.4	15.7					15.7	30.33	31.20	32.59				
26	1	3	1965	16.7	16.6	16.5					16.5	34.52	34.53	34.90				
27	23	3	1965	16.1	15.6	15.1					15.0	33.59	33.58	33.58				
28	24	4	1965	24.3	23.5	22.7					22.7	29.07	30.48	31.47				
29	30	5	1965	26.8	26.8	26.7					26.7	26.32	26.32	26.33				
30	14	6	1965	28.6	28.6	27.0					26.3	30.15	30.23	32.23				
32	12	8	1965	28.7	28.6	28.4					28.4	36.50	36.38	36.34				
33	12	9	1965	29.4	29.4	29.3					29.3	00.00	00.00	00.00				
35	10	12	1965	19.5	19.5	19.4					19.4	30.66	30.68	30.86				

Table 9. (Continued)

STATION: W-23
DEPTH: 28 M
LATITUDE: 27°35'30" N
LONGITUDE: 96°55' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	9	3	1963	15.6	15.6	15.6	15.3				15.3	34.49	34.71	35.79	35.66			
3	4	4	1963	22.4	22.3	20.4	18.3				17.7	29.42	29.52	35.34	35.90			
4	5	5	1963	24.8	24.8	24.4	23.9				22.9	32.63	32.73	32.73	31.12			
5	21	5	1963	25.8	25.4	24.4	19.4				19.3	36.02	36.05	36.15	36.36			
6	27	6	1963	27.8	27.8	23.9	23.8				23.8	36.52	36.49	36.40	36.49			
7	16	7	1963	27.6	27.5	27.4	23.1				23.1	36.46	36.43	36.40	36.42			
8	30	8	1963	29.1	29.1	29.0	22.4				22.3	36.52	36.90	36.47	36.60			
9	5	10	1963	26.3	26.7	26.9	27.0				27.0	33.09	33.45	34.45	34.80			
10	1	11	1963	25.5	25.5	25.5	25.5				25.4	36.18	00.00	00.00	00.00			
11	2	12	1963	21.2	21.2	21.2	21.2				21.3	36.39	36.29	36.32	36.38			
12	21	12	1963	16.8	16.8	16.8	16.8				16.6	36.10	36.19	36.14	36.10			
13	30	1	1964	16.0	16.0	16.0	15.8				15.4	36.00	35.97	35.95	35.94			
14	20	2	1964	15.2	15.2	15.1	15.2				15.2	35.70	35.76	35.74	35.75			
15	19	3	1964	16.8	16.8	16.8	16.8				16.8	35.60	35.74	36.16	36.21			
16	16	4	1964	19.3	19.3	19.0	17.7				17.5	29.63	29.64	31.05	33.93			
17	24	5	1964	25.3	25.3	25.4	25.0				24.4	00.00	00.00	00.00	00.00			
18	26	6	1964	27.8	27.7	27.4	25.6				25.0	33.86	33.83	34.13	35.19			
19	17	7	1964	27.6	27.6	27.2	21.6				21.5	36.68	36.64	36.62	36.51			
20	31	8	1964	28.4	28.4	28.3	28.1				27.2	36.72	36.68	36.67	36.71			
21	26	9	1964	28.7	28.4	28.5	28.4				28.5	34.38	34.34	35.48	35.42			
22	29	10	1964	23.7	23.6	23.5	00.0				00.0	34.40	34.38	34.78	35.04			
23	24	11	1964	21.9	21.9	21.9	21.9				21.9	35.15	35.11	35.13	35.15			
24	17	12	1964	17.3	17.9	18.5	18.7				18.8	32.70	34.78	34.88	35.57			
25	8	1	1965	16.9	16.9	19.8	20.5				20.3	34.15	34.01	35.38	36.32			
26	28	2	1965	15.3	15.3	16.7	17.8				17.6	31.77	31.72	35.78	36.40			
27	22	3	1965	16.0	16.0	16.0	15.9				15.9	35.39	35.32	35.27	35.32			
28	24	4	1965	24.0	23.2	20.3	19.9				19.8	00.00	00.00	00.00	00.00			
29	30	5	1965	26.6	26.6	26.5	25.6				25.2	00.00	35.27	29.65	31.52			
30	13	6	1965	27.5	27.5	27.5	25.7				24.1	30.85	30.86	31.33	34.20			
32	13	8	1965	28.4	28.4	28.3	28.2				28.2	36.52	36.48	36.56	36.61			
33	12	9	1965	29.3	29.2	28.7	28.6				28.6	00.00	00.00	00.00	00.00			
35	11	12	1965	20.2	20.5	21.2	21.3				21.2	31.89	31.82	33.91	34.00			

STATION: W-22
DEPTH: 46 M
LATITUDE: 27°21' N
LONGITUDE: 96°50' W

2	9	3	1963	16.9	16.9	17.0	16.9	14.5			14.5	36.39	36.44	36.42	36.46	36.19		
3	4	4	1963	23.6	22.8	21.1	20.2	19.6			19.5	31.61	33.85	35.97	36.35	36.43		
4	6	5	1963	24.6	24.5	24.1	21.1	20.3			19.7	34.74	33.88	35.60	35.98	36.25		
5	21	5	1963	26.3	25.7	25.4	20.9	19.4			19.4	36.31	36.32	36.39	36.38	36.40		
6	27	6	1963	27.2	26.2	26.0	22.6	19.8			19.7	36.57	36.34	36.51	36.53	36.43		
7	15	7	1963	27.2	27.1	26.9	24.1	20.8			20.7	36.48	36.51	36.45	36.48	36.49		
8	30	8	1963	28.8	28.8	26.7	24.2	21.7			21.7	36.42	36.28	36.32	36.35	36.57		
9	4	10	1963	26.9	27.0	27.1	27.6	27.2			26.8	35.42	35.26	35.51	36.12	36.32		
10	4	11	1963	25.7	25.7	25.7	25.6	25.6			25.6	36.54	36.47	36.52	36.52	36.50		
11	2	12	1963	22.6	22.6	22.6	22.6	22.6			22.5	36.50	36.59	36.45	36.54	36.56		
12	21	12	1963	18.7	18.7	18.5	18.1	17.4			17.1	36.60	36.59	36.59	36.62	36.30		
13	29	1	1964	16.3	16.3	16.3	18.1	16.2			16.1	35.74	35.74	35.89	36.63	36.39		
14	20	2	1964	17.3	17.3	17.3	17.3	17.3			17.2	36.62	36.59	36.55	36.63	36.56		
15	19	3	1964	18.4	18.2	17.8	17.4	17.3			17.3	36.39	36.38	36.30	36.35	36.27		
16	16	4	1964	17.9	18.4	19.2	18.2	17.7			17.7	33.18	33.13	35.80	36.45	36.41		
17	24	5	1964	25.4	25.4	25.4	23.9	21.7			20.5	31.70	31.90	33.58	35.63	36.30		
18	26	6	1964	28.2	28.2	27.9	25.8	20.3			19.0	33.73	33.71	34.66	36.00	36.46		
19	17	7	1964	27.5	27.5	27.4	22.2	19.2			19.2	36.72	36.66	36.81	36.64	36.79		
20	31	8	1964	28.7	28.7	28.5	28.3	27.7			22.8	36.78	36.69	36.63	36.70	36.62		
21	26	9	1964	28.4	28.3	28.2	28.1	27.3			25.2	36.32	36.32	36.61	36.66	36.62		
22	29	10	1964	25.4	25.4	25.4	25.2	25.1			25.2	36.40	36.18	36.29	36.31	36.32		
23	24	11	1964	23.5	23.5	23.5	23.5	23.5			23.5	36.18	36.18	36.15	36.18	36.18		
24	17	12	1964	20.2	20.2	20.1	19.9	20.5			20.2	36.12	36.12	36.04	36.03	36.26		
25	8	1	1965	20.8	20.8	20.7	20.7	21.0			21.0	36.28	36.21	36.23	36.32	36.61		
26	28	2	1965	16.5	16.5	16.7	17.9	18.1			18.0	34.43	34.36	36.27	35.80	36.40		
27	22	3	1965	17.7	17.7	17.6	17.4	17.8			17.8	35.86	35.92	35.88	35.82	36.06		
28	24	4	1965	24.9	24.7	22.0	18.1	17.6			17.6	00.00	00.00	00.00	00.00	00.00		
29	30	5	1965	26.5	26.5	26.4	25.3	23.1			22.8	29.85	29.93	30.30	34.92	36.54		
30	13	6	1965	27.9	27.9	27.7	25.5	22.3			20.9	30.57	30.58	30.93	35.00	36.50		
32	13	8	1965	28.2	28.1	28.0	27.9	24.2			22.3	36.63	36.62	36.57	36.59	36.69		
33	11	9	1965	30.1	30.1	29.9	29.5	22.6			22.6	00.00	00.00	00.00	00.00	00.00		
35	11	12	1965	21.7	21.8	21.8	22.8	23.5			23.5	34.22	34.23	34.25	34.99	35.57		

Table 9. (Continued)

STATION: W-58
DEPTH: 73 M
LATITUDE: 27°06' N
LONGITUDE: 96°45' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	9	3	1963	18.1	17.8	17.8	17.8	17.8	16.6		16.5	36.41	36.31	36.27	36.27	36.38	36.45	
3	5	4	1963	22.2	21.4	20.5	19.4	17.9	17.9		17.9	33.24	33.20	35.30	36.27	36.41	36.37	
4	6	5	1963	23.9	18.3	18.2	21.2	19.7	18.6		18.5	35.87	35.79	36.14	36.25	36.27	36.42	
5	22	5	1963	26.5	26.4	25.9	25.0	20.1	19.1		18.8	36.12	00.00	36.04	36.13	36.23	36.45	
6	28	6	1963	28.4	28.3	28.2	23.1	21.7	19.4		19.4	36.51	36.46	36.44	36.46	36.59	36.40	
7	15	7	1963	27.6	27.6	27.6	25.9	21.5	19.1		18.8	36.58	36.44	36.50	36.42	36.44	36.57	
8	29	8	1963	28.5	28.4	28.0	22.6	21.6	19.6		19.6	36.28	36.32	36.34	36.42	36.50	36.40	
9	4	10	1963	27.3	27.3	27.3	27.3	27.1	26.1		24.3	36.47	36.55	36.44	36.47	36.55	36.60	
10	4	11	1963	25.9	25.9	25.9	25.9	25.8	25.8		22.7	36.67	36.68	36.62	36.66	36.64	36.75	
11	2	12	1963	23.1	23.1	23.1	23.0	22.9	22.7		22.9	36.38	36.39	36.45	36.38	36.34	36.32	
12	22	12	1963	21.7	21.7	21.7	21.7	21.6	19.1		18.9	36.64	36.64	36.64	36.68	36.61	36.54	
13	29	1	1964	19.1	19.1	19.0	18.2	17.4	15.6		14.8	36.54	36.69	36.58	36.50	36.48	36.28	
14	20	2	1964	19.3	19.2	19.2	19.1	17.8	16.6		16.6	36.66	36.58	36.60	36.56	36.48	36.41	
15	19	3	1964	19.0	18.7	18.2	17.7	17.1	17.3		17.3	36.41	36.42	36.39	36.38	36.40	36.52	
16	17	4	1964	20.8	20.6	19.2	18.7	17.9	17.8		17.8	34.24	34.18	36.49	36.46	36.47	36.90	
17	24	5	1964	25.4	25.4	25.7	22.8	20.0	18.3		18.1	29.68	29.95	32.66	35.98	36.21	36.49	
18	26	6	1964	28.3	28.1	27.4	22.6	19.6	18.5		18.5	35.28	35.03	35.60	36.36	36.41	36.51	
19	18	7	1964	28.4	28.4	28.3	27.6	22.1	18.2		18.2	36.71	36.78	36.64	36.60	36.62	36.55	
20	31	8	1964	29.0	28.9	28.9	28.6	23.8	20.6		20.6	36.73	36.66	36.65	36.69	36.64	36.55	
21	26	9	1964	28.4	28.4	28.4	28.4	27.2	21.8		21.8	36.52	36.49	36.40	36.66	36.65	36.68	
22	30	10	1964	25.5	25.5	25.5	25.6	26.0	25.8		25.8	00.00	00.00	36.41	36.52	36.80	36.75	
23	24	11	1964	23.8	23.8	23.8	23.8	23.8	23.8		23.8	36.62	36.55	36.56	36.49	36.57	36.55	
24	17	12	1964	20.9	20.9	20.7	20.7	20.7	20.7		20.7	36.14	36.15	36.13	36.22	36.21	36.27	
25	8	1	1965	20.7	20.7	20.6	20.6	20.5	20.1		20.0	36.09	36.10	36.13	36.11	36.40	36.42	
26	28	2	1965	19.5	19.5	19.4	19.4	19.4	17.5		17.6	36.58	36.49	36.56	36.51	36.36	35.40	
27	22	3	1965	19.4	19.4	19.3	19.2	19.2	19.2		19.2	36.43	36.41	36.40	36.47	36.48	36.59	
28	24	4	1965	24.6	24.4	18.1	17.2	16.8	17.2		17.2	29.52	29.90	33.27	35.97	36.39	36.47	
29	30	5	1965	27.1	27.1	26.4	21.8	20.0	18.9		18.8	28.68	28.68	29.42	36.04	36.48	36.47	
30	13	6	1965	27.5	26.9	25.0	21.9	19.2	18.9		18.9	31.81	31.80	32.04	34.98	36.48	36.48	
32	13	8	1965	27.6	27.5	26.6	23.6	22.1	19.4		19.4	36.53	36.50	36.50	36.62	36.64	36.66	
33	11	9	1965	30.1	30.1	30.1	27.9	22.7	00.0		22.4	00.00	00.00	00.00	00.00	00.00	00.00	
35	11	12	1965	23.6	23.6	23.7	23.7	23.7	23.7		23.7	36.15	36.13	36.15	36.42	36.13	36.11	

Table 10. Monthly temperature and salinity observations at stations on transect 10, 1963-1965

STATION: W-60
DEPTH: 7 M
LATITUDE: 26°34' N
LONGITUDE: 97°16' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	9	3	1963	15.3	14.9						14.9	34.27	34.15					
6	28	6	1963	26.3	26.3						24.0	36.41	36.32					
7	15	7	1963	25.1	23.9						22.8	36.49	36.44					
8	29	8	1963	27.6	27.6						24.9	36.47	36.62					
9	4	10	1963	26.2	26.2						26.3	31.77	32.13					
10	3	11	1963	23.5	23.5						23.5	33.95	33.81					
11	2	12	1963	19.8	19.8						19.7	34.42	34.62					
12	22	12	1963	12.2	12.2						12.2	34.25	34.35					
13	30	1	1964	14.2	14.2						14.2	34.08	34.05					
15	20	3	1964	17.8	17.8						16.8	35.42	35.42					
16	17	4	1964	20.7	20.7						20.4	31.86	31.80					
17	24	5	1964	26.1	26.1						24.7	28.16	28.15					
18	27	6	1964	27.4	27.4						27.4	35.49	35.45					
19	18	7	1964	27.1	27.1						26.9	36.40	36.46					
20	31	8	1964	27.3	26.0						24.6	36.73	36.70					
21	26	9	1964	28.8	28.8						28.8	00.00	36.93					
22	30	10	1964	24.0	24.0						24.0	34.45	34.43					
23	24	11	1964	19.9	19.9						19.9	33.88	33.85					
24	18	12	1964	15.2	15.2						15.2	32.09	32.05					
25	9	1	1965	16.9	16.9						16.1	32.67	32.66					
26	28	2	1965	17.2	17.2						17.5	34.90	35.00					
27	23	3	1965	16.7	16.7						16.2	34.32	34.39					
28	25	4	1965	24.0	24.0						23.3	29.72	29.72					
29	31	5	1965	26.2	26.2						26.2	33.20	33.21					
30	14	6	1965	27.2	27.2						27.0	34.21	34.37					
32	14	8	1965	28.0	28.0						27.9	36.65	36.62					
35	11	12	1965	20.1	20.1						20.0	31.76	31.73					

Table 10. (Continued)

STATION: W-61
DEPTH: 23 M
LATITUDE: 26°36' N
LONGITUDE: 97°08' W

Cruise	Day	Month	Year	Temperature (°C) Depth (M) 0	3	11	24	43	70	107	B	Salinity (o/oo) Depth (M) 0	3	11	24	43	70	107
2	10	3	1963	14.5	14.5	13.7					15.1	33.78	33.73	34.13				
3	5	4	1963	21.9	21.8	21.7					18.3	31.23	31.22	31.29				
6	28	6	1963	27.2	27.2	22.1					21.8	36.39	36.42	36.40				
7	15	7	1963	25.5	25.3	23.3					22.2	36.90	00.00	00.00				
8	29	8	1963	28.2	28.0	26.7					23.6	36.61	36.52	36.56				
9	4	10	1963	26.7	26.7	26.8					28.1	31.95	31.96	32.29				
10	4	11	1963	24.4	24.4	24.4					24.3	34.80	34.63	34.72				
11	2	12	1963	18.6	18.7	20.3					20.6	33.17	33.11	34.75				
12	22	12	1963	15.2	15.2	15.2					15.0	35.29	35.31	35.25				
13	29	1	1964	12.4	12.3	12.3					12.2	33.96	33.91	33.91				
15	20	3	1964	17.1	16.6	16.5					16.4	36.72	35.41	35.53				
16	17	4	1964	19.8	19.8	19.7					19.5	00.00	00.00	00.00				
17	24	5	1964	25.6	25.5	25.1					22.9	27.49	27.42	28.69				
18	27	6	1964	26.7	26.4	24.1					23.9	35.88	35.90	35.98				
19	18	7	1964	25.4	25.4	24.3					23.2	36.47	36.49	36.45				
20	31	8	1964	28.3	27.5	26.3					23.4	36.69	36.66	36.65				
21	26	9	1964	00.0	00.0	00.0					00.0	36.48	36.42	36.50				
22	30	10	1964	24.0	24.0	23.9					23.9	34.53	34.55	34.50				
23	24	11	1964	21.6	21.6	21.6					21.7	34.46	34.42	34.50				
24	17	12	1964	16.0	16.0	16.2					16.7	32.59	32.59	33.09				
25	9	1	1965	16.8	16.7	16.4					17.4	32.48	32.45	33.35				
26	28	2	1965	15.5	15.5	16.1					16.2	33.09	33.15	34.59				
27	23	3	1965	16.7	16.6	16.6					16.6	34.65	34.63	34.81				
28	25	4	1965	23.8	23.8	23.5					18.7	29.29	29.22	29.79				
29	31	5	1965	26.1	26.0	26.0					25.0	33.18	33.18	33.27				
30	14	6	1965	27.9	27.9	26.3					25.7	32.71	32.73	33.81				
32	14	8	1965	27.7	27.6	27.5					27.3	36.50	36.63	36.58				
35	11	12	1965	20.0	19.9	20.4					21.4	31.55	31.53	31.53				

STATION: W-62
DEPTH: 46 M
LATITUDE: 26°41' N
LONGITUDE: 96°53' W

2	10	3	1963	18.2	18.1	18.1	16.8	16.6			16.6	36.09	36.43	36.41	36.41	36.38	
3	5	4	1963	00.0	00.0	00.0	00.0	00.0			00.0	33.39	33.41	36.26	35.96	36.52	
6	28	6	1963	27.3	27.2	26.4	21.4	19.8			19.8	36.45	00.00	00.00	00.00	36.30	
7	15	7	1963	27.0	27.0	26.9	24.0	20.8			20.4	36.48	36.47	36.37	36.48	36.45	
8	29	8	1963	29.3	29.2	29.1	24.1	21.4			21.3	36.67	36.63	36.64	36.43	36.33	
9	4	10	1963	27.9	27.9	27.9	27.9	27.6			25.6	36.27	36.35	36.41	36.46	36.48	
10	4	11	1963	25.6	25.6	25.7	25.7	25.7			25.7	36.34	36.32	36.36	36.33	36.52	
11	2	12	1963	22.8	22.8	22.8	22.8	22.8			23.6	36.05	36.05	35.94	35.88	36.13	
12	22	12	1963	19.8	19.8	19.3	18.7	18.6			18.4	36.69	36.62	36.60	36.66	36.63	
13	29	1	1964	16.7	16.7	16.7	16.8	16.4			16.4	36.24	36.27	36.24	36.31	36.62	
15	20	3	1964	14.6	14.5	14.4	14.3	00.0			13.2	36.56	36.49	36.48	36.49	36.49	
16	17	4	1964	20.6	20.6	19.3	20.3	17.9			17.9	32.30	32.23	35.88	36.71	36.50	
17	24	5	1964	25.8	25.7	25.1	22.9	20.3			19.7	27.12	26.91	33.32	36.00	36.57	
18	26	6	1964	27.7	27.7	27.4	22.2	20.3			20.2	35.46	35.59	35.53	36.32	36.48	
19	18	7	1964	27.4	27.3	23.6	21.5	19.1			19.1	36.58	36.55	36.62	36.61	36.54	
20	31	8	1964	27.8	27.7	27.6	24.4	21.9			21.9	36.70	36.71	36.71	36.63	36.63	
21	26	9	1964	28.8	28.8	28.8	28.8	28.9			28.9	36.15	36.18	36.32	36.16	36.30	
22	30	10	1964	24.6	24.7	24.7	24.8	25.0			25.0	35.50	35.72	36.05	35.99	35.76	
23	24	11	1964	23.4	23.4	23.4	23.6	23.6			23.7	35.92	35.87	35.80	36.09	35.93	
24	17	12	1964	20.3	20.2	20.3	21.0	21.1			21.1	35.68	35.77	35.89	36.17	36.22	
25	9	1	1965	18.2	18.2	17.6	19.5	20.0			20.0	34.27	34.26	34.90	35.96	36.12	
26	28	2	1965	15.5	15.5	16.4	18.2	18.0			17.9	32.19	32.15	34.88	36.03	32.71	
27	23	3	1965	16.9	16.9	16.8	17.6	17.8			17.8	35.08	35.07	35.16	35.61	35.86	
28	25	4	1965	24.4	24.3	21.5	18.2	17.9			17.8	28.47	28.42	32.51	36.09	32.02	
29	31	5	1965	26.5	26.4	26.0	24.2	23.0			23.0	33.06	33.03	33.98	35.12	36.22	
30	13	6	1965	27.9	27.8	26.6	24.1	22.5			22.3	33.02	34.37	35.33	36.10	36.50	
32	13	8	1965	28.2	27.9	27.9	26.5	23.7			23.6	36.50	36.49	36.48	36.53	36.67	
35	11	12	1965	20.4	20.4	22.6	23.3	00.0			23.2	32.61	32.12	34.74	35.17	35.68	

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