

UC San Diego

SIO Reference

Title

Surface Water Temperatures At Shore Stations, United States West Coast 1984

Permalink

<https://escholarship.org/uc/item/0qj8q7jr>

Author

Scripps Institution of Oceanography

Publication Date

1985-12-01

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

SURFACE WATER TEMPERATURES
AT SHORE STATIONS

United States West Coast

1984

Including surface *salinities* from
several stations and *five-meter*
temperatures and *salinities* at
Scripps Pier.

Sponsored by:

Marine Life Research Group
Scripps Institution of Oceanography

Approved for distribution:


W. A. Nierenberg, Director

CONTENTS

Introduction	3
Station Descriptions	4
Surface-Temperature Stations in Geographical Order	7
Alphabetical List of Surface-Temperature Stations	9
Shoreline Surface Water-Temperature Data	
Station Location Chart	11
Daily Observations 1984	12
Distribution	40

INTRODUCTION

This report presents temperature and salinity data observed during 1984 at shoreline stations along the west coast of North America from the Strait of Juan de Fuca, Washington to La Jolla, California. The data consists of daily recorded temperature and salinity values when available, with monthly means, ranges and standard deviations based on these observations. Also computed are yearly mean, maximum and minimum values for those stations with some observations for every month of the year. Please note that reports issued for the years prior to 1974 did not include daily recorded values.

Various agencies and individuals volunteer to make daily observations which are sent monthly to the Scripps Institution of Oceanography Marine Life Research Group for processing. The agencies are National Oceanic and Atmospheric Administration/National Ocean Survey (NOAA/NOS), U. S. Coast Guard, Point Reyes Bird Observatory, The California State Park System, Oregon State University, California State University, Pacific Gas and Electric Company, California Department of Fish and Game, Pacific Missile Test Center and Scripps Institution of Oceanography of the University of California, San Diego. All stations, excluding those of NOAA/NOS, Pacific Missile Test Center and those reporting to Oregon State University, are maintained in cooperation with Scripps Institution of Oceanography, which supplies them with thermometers.

Observations are taken by measuring the temperature of a sample of water scooped from the surface in a bucket or bottle. The temperatures are recorded as observed with no attempt to screen or eliminate observer errors.

Annually, NOAA/NOS sends to Scripps Institution daily temperatures and density values from four tide stations located at Neah Bay, Washington and Crescent City, Port San Luis and Santa Monica, California. Temperature readings for Santa Monica, Port San Luis, Crescent City and Neah Bay are recorded to 0.5°F. Pacific Missile Test Center temperature readings are recorded to 0.1°F. These Fahrenheit readings have been converted and are reported to the nearest 0.1°C.

Temperatures from Scripps' cooperative stations and from stations reporting to Oregon State University are read to the nearest 0.1°C with calibrated thermometers except for Morro Bay, which is read to the nearest degree Fahrenheit. The observations are considered accurate to approximately $\pm 0.2^\circ\text{C}$.

Salinities from Scripps Pier, Balboa, S.E. Farallon Island, San Clemente, Bodega Bay and Trinidad are obtained from sea water samples in special salinity bottles supplied by Scripps. Water samples are forwarded to Scripps at the end of each month for salinity determination by inductive salinometer. Salinities are listed to hundredths of a part per thousand. Values of maximum salinities may possibly be in error due to evaporation or contamination of the sample in the bottles.

Reported salinities exceeding 34‰ may be due to faulty sampling techniques. Salinities less than 30‰ are due to local precipitation or fresh water runoff. Neither are representative of offshore oceanic waters. As with previous reports in this series, all salinities higher than 34.9‰ have been omitted.

The data presented is grouped in three 10-day periods; 1 to 10, 11 to 20, and 21 to 30 (or 31). The mean is computed for each 10-day period. The monthly means, maxima and minima are reported. Where some data was recorded for every month of the year, the annual mean, maximum and minimum are also given.

CALIFORNIA STATION DESCRIPTIONS

From time to time questions arise concerning just where the temperatures are taken and how representative these temperatures might be.

Crescent City

This is a Coast and Geodetic Survey tide gauge station located on the end of the Coast Guard Pier inside the harbor at Crescent City. The harbor has a small entrance formed by two breakwaters. Temperatures at the tide gauge site and the water on the beach outside the breakwater are nearly the same.

Trinidad Bay and Trinidad Beach

California State University-Humboldt operates a marine laboratory on this rocky headland. Temperatures are taken daily off the fishing pier on the lee side or southeast side of the headland and on the beach on the northwest side of the headland. In May, 1977 the laboratory began collecting water samples in bottles supplied by Scripps, returning the samples monthly for salinity determination by inductive salinometer. The salinity values for 1984 are included in this report and will differ from the values determined by uncalibrated hydrometer readings and listed by the marine laboratory in their monthly report. Due to the similarity of the salinities from the coast and the bay, except during periods of large run-off, the bay salinities were discontinued May 31, 1979.

Salt Point State Park

The rangers take daily water temperatures from Gerstle Cove. This station took over reporting from the old Fort Ross station about 10 miles down the coast. Temperatures at both stations are virtually the same, and as this is a steep rocky coast, the temperatures are very representative of the coastal waters. Summer upwelling temperatures show this section of the coast to be one of the coldest.

Bodega Bay

The University of California Marine Biological Laboratory located at Horseshoe Cove takes daily water temperature and water samples at the intake pipe to their aquarium water system located in a deep rocky channel on the northern headland of the cove. Since the water is deep and the headland steep and rocky, the temperatures are quite representative of the coastal water. This station continues the coverage provided earlier by Sonoma Coast State Beach.

Farallon Islands

The islands are now part of the Point Reyes National Park and Bird Sanctuary. Personnel stationed on S.E. Farallon, where the Coast Guard lighthouse is located, take daily temperature and salinity samples. Salinity samples are sealed in special bottles supplied by Scripps and mailed back when the supply boat comes out to the island. The boat landing on the southeast side of the island is steep and rocky, so the measurements are very representative of the oceanic waters around the islands. Measurements are interrupted from time to time because of weather, personnel and supply problems caused by the islands' location 26 miles west of the Golden Gate Bridge, where they catch the full force of winter storms and the strong summer northwesterers.

Santa Cruz

A new buoy-gauge thermistor unit has been installed in the wharfmaster's office with the thermistor located in a protective pipe on a pier piling under the office. Formerly this area was monitored by Natural Bridges State Park and Twin Lakes State Park. Maintenance of this new wharf station will be carried out by the Marine Biology Department of the University of California, Santa Cruz.

Pacific Grove

Hopkins Marine Station of Stanford University takes daily temperatures from a beach on the north side of Point Cabrillo just north of their main laboratory buildings. The location is exposed to the northwest swell as it sweeps past Point Pinos so is very representative of the coastal conditions on the south side of Monterey Bay.

Granite Canyon

Personnel of the Marine Culture Laboratory of the California Department of Fish and Game take a daily temperature off the rocks near the water intake for the laboratory.

Morro Bay

The Pacific Gas and Electric Company has a major power generating plant located at the entrance to Morro Bay's harbor mouth. Temperatures are logged from the thermograph that monitors the cooling intake water for the generators. Temperatures are recorded about 8 A.M. every morning, which reduces the effect of tidal heating from back-bay water. Since the discharge of hot water is outside the bay, the intake temperatures are quite representative of those found in the southern end of Estero Bay. (The northern part of the bay is generally cooler. This condition existed long before the power plant went in and was noted in earlier measurements made by Daniel Brown of SIO.)

Port San Luis

The Coast and Geodetic Survey's tide-gauge station is located on the old fishing pier in the northwest corner of the harbor. The old site was on Avila recreational pier which was a better location. The new location is less subject to storm damage, particularly from the southeast winter gales. However, the counterclockwise circulation of current in the bay traps the river run-off from San Luis Creek in the northwest corner of the bay behind the breakwater. Temperature is also about 0.1°C warmer at the new site.

Santa Barbara

Personnel of the Harbor Department now take daily water temperatures off their boat dock instead of the breakwater by the corner where it meets the beach. This is done every morning early before the sun heats up the beach and so gives a representative temperature of the coastal water. Temperatures were formerly collected from the harbor master's dock, but the configuration of the harbor changed, so the site was moved to the beach by the breakwater.

Point Mugu

Personnel at the Pacific Missile Test Center have been recording weather observations continuously since 1946 and water temperatures since 1967. At the present time daily water temperatures are being recorded four times a day from an electric thermistor at the end of a 300-foot pier. This is located at the beginning of a sub-marine canyon in a lagoon open to the sea on three sides.

Point Dume

The Los Angeles County Lifeguards man the station at Zuma Beach County Park west of Point Dume. They take daily water temperatures in the surf early every morning thus giving representative temperatures for this section of the coast.

Santa Monica

This tide-gauge station is located at the end of the Santa Monica pier near the harbormaster's office. Although located behind the breakwater, there is sufficient water flow to make this representative of the nearshore waters.

Balboa

The city lifeguards have a Telcor electric thermometer with sensor in a pipe on one of the pier pilings and take daily temperature and salinity samples from their office located on the Newport Beach pier. The calibration of this thermometer is checked with a glass thermometer occasionally. Since these samples are taken in deeper water, and not from the surf, they reflect coastal conditions accurately. The salinity is affected during winter storms by run-off from the Santa Ana River mouth located only a mile or so up the beach from the pier.

San Clemente

Personnel of the Department of Marine Safety of the City of San Clemente take daily temperatures and salinity samples off the pier. This station was established to take over the temperature monitoring on this section of the coast from the old Dana Point and Doheny Beach stations. The new yacht harbor at Dana Point removed the Dana Point station, but the San Clemente pier site is so similar that the long record for this area is still preserved.

La Jolla

Daily temperature and salinity measurements are made at the end of the Scripps Institution of Oceanography pier. Two levels of measurement are made: surface and 5 meter or bottom. The temperatures at the end of Scripps pier fluctuate considerably because of the presence of nearby Scripps Canyon and upwelling from it.

Many stations have disappeared in the last 10 years. The automation of Coast Guard Lighthouses and elimination of the Blunts Reef lightship off Cape Mendocino have left serious gaps in our coastal coverage. Due to severe storm damage and subsequent loss of the thermistor temperature measurement system, there are no data after January, 1983 for Point Arena. It is hoped that this station can be reactivated at some future date. New state parks and new marine laboratories may be able to extend some of our coverage in the future. The participants are all volunteers, people seriously interested in the sea at their doorstep, and it is to these people we owe the success of this long-range program.

SURFACE-TEMPERATURE STATIONS
IN GEOGRAPHICAL ORDER

<i>Station Name</i>	<i>Position</i>	<i>Location</i>	<i>Page</i>
<i>Washington</i>			
Neah Bay	48°22.0'N, 124°37.0'W	NOAA/NOS Tide Gauge Station Strait of Juan De Fuca	12
<i>Oregon</i>			
Charleston	43°21.0'N, 124°19.0'W	From surface of bay	13
<i>California</i>			
Crescent City	41°21.0'N, 124°11.0'W	NOAA/NOS Tide Gauge Station Crescent City	14
Trinidad Beach	41°03.6'N, 124°08.9'W	Trinidad Beach	15
Trinidad Bay	41°03.3'N, 124°08.9'W	Trinidad Bay Fishing Pier, southeast side of headland	17
Salt Point State Park	38°34.0'N, 123°19.7'W	Beach at Gerstle Cove	18
Bodega Bay	38°19.0'N, 123°04.3'W	Intake pipe at north head- land of Horseshoe Cove	19
Farallon Island	37°41.8'N, 122°59.9'W	SE Farallon Island at the boat landing on S.E. side of the island	21
Santa Cruz	36°57.5'N, 122°01.0'W	Wharfmaster's office on the pier	23
Pacific Grove	36°37.3'N, 121°54.2'W	Beach on north side of Point Cabrillo, Hopkins Marine Station	24
Granite Canyon	36°25.9'N, 121°55.0'W	Off rocks near water intake for laboratory	25

<i>Station Name</i>	<i>Position</i>	<i>Location</i>	<i>Page</i>
<i>California (cont.)</i>			
Morro Bay	35°22.2'N, 120°51.6'W	Thermograph record of intake water at Pacific Gas and Electric	26
Port San Luis	35°10.3'N, 120°45.2'W	NOAA/NOS Tide Gauge Station Port San Luis	27
Santa Barbara	34°24.2'N, 119°41.6'W	Off boat dock	28
Point Mugu	34°06.0'N, 119°05.0'W	At outer end of 300' pier	29
Point Dume: west of	34°01.1'N, 118°49.5'W	Beach at Zuma Beach County Park	30
Santa Monica	34°00.0'N, 118°30.0'W	NOAA/NOS Tide Gauge Station Santa Monica	31
Balboa	33°36.0'N, 117°54.0'W	Lifeguard office on Newport Beach Pier	32
San Clemente	33°25.0'N, 117°37.0'W	San Clemente Pier	34
La Jolla: Scripps Pier, Surface	32°52.0'N, 117°15.3'W	Outer end of pier at Scripps Institution of Oceanography La Jolla	36
La Jolla: Scripps Pier, Bottom	32°52.0'N, 117°15.3'W	Outer end of pier at Scripps Institution of Oceanography La Jolla	38

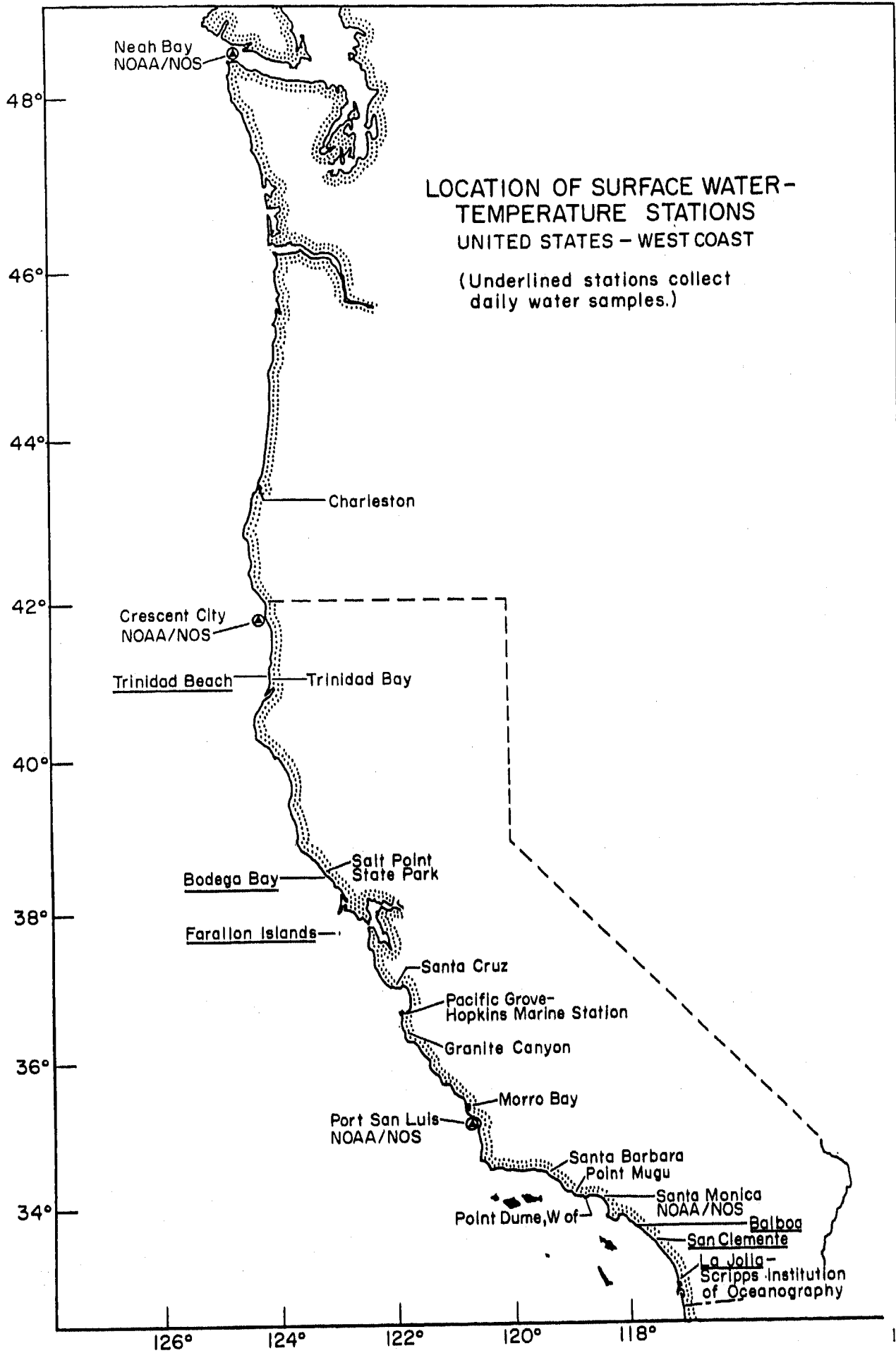
ALPHABETICAL LIST OF
SURFACE-TEMPERATURE STATIONS

<i>STATION NAME</i>	<i>TYPE OF DATA COLLECTED</i>	<i>AGENCY</i>	<i>PAGE</i>
Balboa	T ¹ S ² d ³	NPB	32
Bodega Bay	TS d	UCML	19
Charleston, Oregon	T d	OSU	13
Crescent City	T d	NOAA/NOS	14
Farallon Island, S.E.	TS d	USCG & PRBO	21
Granite Canyon	T d	CFG	25
La Jolla: Scripps Pier surface	TS d	SIO	36
La Jolla: Scripps Pier bottom	TS d	SIO	38
Morro Bay	T d	PG & E	26
Neah Bay, Washington	T d	NOAA/NOS	12
Pacific Grove	T d	HMS	24
Point Dume, west of	T d	LAC	30
Point Mugu	T d	PMTC	29
Port San Luis	T d	NOAA/NOS	27
Salt Point State Park	T d	CSP	18
San Clemente	TS d	SC	34
Santa Barbara	T d	SB	28
Santa Cruz	T d	CSC	23

<i>STATION NAME</i>	<i>TYPE OF DATA COLLECTED</i>	<i>AGENCY</i>	<i>PAGE</i>
Santa Monica	T	d	NOAA/NOS 31
Trinidad Bay	T	d	CSU 17
Trinidad Beach	TS	d	CSU 15

CFG:	California Department of Fish and Game, Marine Culture Lab
CSC:	City of Santa Cruz, California
CSP:	California State Park System
CSU:	Humboldt State University
HMS:	Hopkins Marine Station, Pacific Grove, California
LAC:	Los Angeles County
NOAA/NOS:	National Oceanic and Atmospheric Admn./National Ocean Survey
NPB:	City of Newport Beach, California
OSU:	Oregon State University, Corvallis, Oregon
PG & E:	Pacific Gas and Electric Company
PMTC:	Pacific Missile Test Center
PRBO:	Point Reyes Bird Observatory
SB:	City of Santa Barbara, California
SC:	City of San Clemente, California
SIO:	University of California, Scripps Institution of Oceanography, La Jolla, California
UCML:	University of California, Marine Laboratory, Bodega Bay
USGG:	United States Coast Guard

¹ T:	Surface temperatures
² S:	Surface salinities
³ d:	Values taken daily



YEAR 1984

TEMPERATURE

NEAH BAY

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	8.3	7.8	8.3	9.4	10.6	11.7		12.2	10.6	11.1	7.8	8.3
2	8.3	7.8	8.6	9.4	9.4			13.3	11.1	10.8	10.0	7.8
3	8.3	7.8	8.6	10.0					12.2	11.1	8.3	7.5
4		7.8	8.1	8.9	11.4				12.2	10.3		7.2
5		8.1	8.3	9.2	9.4			10.0	12.2	11.7	10.0	6.7
6	8.6	8.1	8.3	9.2	10.6	10.3	12.2	10.8	12.2	11.4	10.0	6.4
7	8.6	7.8	8.3	10.8	10.8			11.7	11.7	11.1	10.3	8.3
8	8.3		8.9	11.7	10.6	10.6	11.4	11.7	11.9	12.2	10.6	8.6
9	8.3	8.1	9.2	12.2	10.6				11.7	12.2	10.0	8.3
10	8.3	8.3	9.4	10.6	11.1			11.7	11.7	12.8	10.0	8.3
11	8.9	8.3	9.7	11.1	10.8			11.9	12.2	12.8	10.0	8.3
12	8.3	8.3	9.4	10.8		10.6		11.9	12.2	12.8	10.0	8.3
13	8.1	8.3	9.2					11.1	12.2	12.8	10.6	8.3
14	8.3	8.3	9.4	9.7	11.4			11.1	12.2	12.8	10.0	8.3
15	6.4	9.2	9.4	10.6	11.4	11.1	15.0	11.1	15.0	12.5	9.7	8.6
16	6.1	9.7	9.7	11.4	11.7	12.2		11.9	14.4	11.7	10.0	7.2
17	6.4		11.1	11.1	11.9		11.1	13.6	15.6	12.5		7.2
18						10.8		13.1	15.6	11.7	9.4	6.7
19	6.1	8.6	10.0	10.6	10.0		11.4	13.1	15.0	11.7	10.0	6.1
20	8.6	8.6	9.4	10.6			11.4	14.2	15.0	11.7		7.2
21			9.4	10.6	10.6		13.3	13.9		10.8		7.8
22	7.2	9.4	9.4	11.7	11.4	11.7	13.1	15.0		11.1	10.0	
23	7.2	9.4	9.4	10.6	11.7	12.8	13.3	14.4	11.7	11.1	9.7	
24	7.8	9.8	9.8	10.6	13.1	13.9	13.3	13.3	11.7	10.8	9.4	
25				10.6	12.5	12.8	13.3	13.3	11.7	10.8	9.4	7.8
26	7.8	7.8	9.7	12.5	12.5	13.1	10.0	11.9	11.7	10.0	9.4	7.8
27	8.3	7.8	9.7	12.2	13.3	12.2	12.2	10.6	11.4	10.0	6.4	7.8
28	8.3	8.3	9.4	11.1	13.3	12.8	11.4	10.6	11.9	9.4	8.9	7.2
29	8.3	8.3	9.4	12.2	12.8	11.7	13.9	10.3	11.9	9.4	8.9	7.2
30	7.8		9.7	10.6	12.2	11.7	10.8	10.3	11.7	9.4	8.9	
31	7.8				12.2	12.2		11.7	11.7	5.6		
1-10 MEANS	8.39	7.93	8.67	9.22	10.59	10.77	11.67	11.79	11.75	11.36	9.73	7.74
SAMPLE SIZE	7	7	8	5	9	3	4	7	10	10	9	10
11-20 MEANS	7.00	8.36	9.50	10.36	11.15	11.17	12.15	12.50	14.02	12.10	9.96	7.62
SAMPLE SIZE	6	5	5	7	6	4	4	7	8	8	8	10
21-31 MEANS	7.77	8.12	9.56	11.13	12.20	12.69	12.46	12.50	11.68	9.80	8.95	7.56
SAMPLE SIZE	8	4	8	9	8	7	9	9	6	9	8	5
MONTHLY MEANS	7.76	8.11	9.21	10.42	11.30	11.84	12.20	12.28	12.49	11.06	9.56	7.66
SAMPLE SIZE	21	16	21	21	23	14	17	23	24	27	25	25
MAXIMUM VALUE	8.9	8.6	10.0	12.2	13.3	13.9	15.0	15.0	15.6	12.8	10.6	8.6
MINIMUM VALUE	6.1	7.8	8.1	8.9	9.4	10.3	10.0	10.0	10.6	5.6	6.4	6.1
RANGE	2.8	0.8	1.9	3.3	3.9	3.6	5.0	5.0	5.0	7.2	4.2	2.5
STANDARD DEV.	0.86	0.29	0.54	0.99	1.10	1.11	1.29	1.37	1.44	1.45	0.95	0.72
ANNUAL MIN						10.32						
ANNUAL MEAN												
ANNUAL MAX												
		5.6										15.6

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		10.2	10.6		11.4	11.9		11.0		12.6	11.6	10.0
2		10.4	10.8	11.1	11.3		12.8	11.8		11.8	11.6	11.1
3	10.8	10.2		10.6	11.4			11.7		11.2	11.8	11.1
4	11.2			10.7	11.3	9.6			13.1	12.4	11.8	10.7
5	11.5		11.2	10.7					13.3	13.0	11.9	10.8
6	11.6	10.2	10.9	11.2		10.0		12.1	14.1		11.9	11.1
7		10.2	11.1		11.9	10.5		13.1	15.0		12.0	10.7
8		10.6	11.1		11.5	10.6		12.3			11.5	10.9
9	11.4	10.6	11.5		11.6		10.7	12.4		13.5	11.8	11.2
10	11.4			10.5	11.9		11.0	12.3		13.3		10.8
11	10.8			10.4	11.9	12.0	10.4		13.2	13.8	11.6	10.7
12	11.0		11.2	10.5	11.5	11.5	11.1		13.0	14.0	11.8	10.7
13	11.0	10.6	11.2	10.8	12.7	10.7	11.9	13.9	12.8		11.7	11.0
14		10.5			12.7	11.1		12.6	12.5	13.3	11.8	11.0
15		10.5	11.2		12.7		11.2	12.4		13.2	11.6	10.6
16	10.4	10.4	11.1	11.9	13.4		11.3	14.3		12.9	11.5	
17	10.3	10.2		11.3	13.2	10.1	11.4		13.4	12.4		9.9
18	9.8			11.8	12.8	10.2	12.5		12.6	12.6	11.7	9.5
19	10.3		11.6	11.9		9.2	12.6	12.5	10.8		11.7	10.1
20	10.0	10.6	11.3	11.7	12.9			11.8	11.4	12.7	11.7	10.2
21		10.6	11.2		11.8	11.7		12.5		12.3	12.3	10.2
22		10.6	11.4		12.2		10.5	12.7		12.5	11.8	10.4
23	10.6				12.2	11.8	10.8	12.4	12.2	12.5	11.5	10.3
24	10.8			10.6	12.4	12.0	10.8			12.5	11.0	10.2
25	10.6			10.1	12.3	10.2	11.7	12.4		12.5	11.2	10.2
26	10.6		10.8	10.5		11.3	11.8		11.6		11.2	10.2
27	10.7	10.2	11.0	10.4	12.3	12.3	12.5	12.7	11.9		11.2	9.9
28		10.5	11.2		12.8	12.8		13.8	11.5	12.4	11.2	
29		10.5	11.2		12.8	12.2	11.4	13.0		12.1	9.9	9.7
30	10.3		10.8	11.7	12.0		10.6			11.9		
31	10.2				12.0							
1-10 MEANS SAMPLE SIZE	11.32 6	10.34 7	11.03 7	10.80 6	11.49 7	10.52 5	11.50 3	12.09 8	13.87 4	12.66 8	11.77 9	10.84 10
11-20 MEANS SAMPLE SIZE	10.45 8	10.47 6	11.27 6	11.29 8	12.78 6	10.69 7	11.55 8	13.14 5	12.47 8	13.17 7	11.67 8	10.44 8
21-31 MEANS SAMPLE SIZE	10.54 7	10.48 5	11.06 7	10.66 5	12.30 8	11.79 8	11.33 7	12.70 7	11.72 5	12.34 7	11.28 10	10.14 8
MONTHLY MEANS SAMPLE SIZE	10.73 21	10.42 18	11.11 20	10.97 19	12.17 21	11.08 20	11.46 18	12.56 20	12.58 17	12.72 22	11.56 27	10.50 26
MAXIMUM VALUE	11.6	10.6	11.6	11.9	13.4	12.8	12.8	14.3	15.0	14.0	12.3	11.2
MINIMUM VALUE	9.8	10.2	10.6	10.1	11.3	9.2	10.4	11.0	10.8	11.2	9.9	9.5
RANGE	1.8	0.4	1.0	1.8	2.1	3.6	2.4	3.3	4.2	2.8	2.4	1.7
STANDARD DEV.	0.50	0.17	0.25	0.59	0.65	1.01	0.76	0.78	1.08	0.69	0.45	0.48
ANNUAL MIN	9.2					11.49						
ANNUAL MEAN												15.0
ANNUAL MAX												

TEMPERATURE

TRINIDAD BEACH

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		10.8	11.0	9.2	10.2	10.1		13.0		12.5	10.7	11.0
2		10.8	10.7	9.9	11.8	10.0	11.0	13.0		13.1	11.6	10.2
3		10.9	11.7	9.9		10.6		14.0		12.7	13.8	11.0
4		11.3	12.0	9.2	13.0	10.2		14.0	14.0	12.7	12.7	11.0
5	12.0	11.9	11.2	10.0	13.8		11.0		14.0	12.7	12.8	11.7
6		10.8	11.0	9.0	13.8	12.5	11.0		14.0	13.7	12.5	11.7
7		11.0	11.2	9.2	9.0					14.3	12.5	12.0
8		11.2	11.5	9.8	11.1			13.0		15.0	12.0	11.1
9	11.5	11.2	12.1	9.0	8.9		12.0	14.0		14.7	11.8	11.5
10	12.0	10.9	12.1	11.2	10.9		11.0	14.0		14.0	12.0	
11	11.5	11.0	12.0	9.6	11.0	9.5	12.0		12.0	14.5	12.3	
12	11.9	12.0	11.4	10.4	12.0	10.5	10.0		12.0	14.8	12.5	
13	11.0	11.2	11.2	9.8	12.0	9.8	11.0	14.0	13.0	14.8	12.7	
14	11.0	11.0	12.4	13.2	10.5	9.8				14.3	12.2	
15	11.0	11.2	11.2	12.3	11.6	9.8				13.0	12.2	
16		11.0	11.0	10.2	9.5		13.0	15.0	12.0	12.0	12.8	10.7
17	11.1	11.2	11.0	11.0	12.0		12.0		12.0	12.4	12.7	10.7
18	11.0	11.2	10.6	10.6	10.2	10.8	11.0			12.6	12.7	10.7
19	11.0	11.5	11.8	12.1	12.1	9.8	12.0			12.8	12.7	11.0
20	10.8		10.7	12.0	12.0	10.2	12.0			12.7	12.7	10.5
21	11.6	10.8	14.0	9.5	9.5	11.5		15.0		12.5	12.3	
22	11.5	10.5	14.2	10.4	10.4	9.2	13.0			13.0	11.7	
23		10.0	10.2	10.2	10.4			15.0		13.4		
24	11.2	10.4	9.8	9.8	13.0				11.9	12.5		
25	11.0	10.6	10.7	9.8	9.8	10.8	15.0		14.0	12.0	10.0	
26	11.0	12.5	8.5	8.5	12.8	10.8	15.0	14.0	11.5	11.2	10.7	
27	12.2	10.5	10.0	10.0	12.8	10.8	13.0		11.5	11.3	11.0	
28	12.2	11.0	11.3	10.2	10.2	10.2		14.0	11.0	11.5	11.0	
29	12.1	10.8	11.3	8.5	12.0	11.4	12.0	13.0		11.2	11.5	
30	10.5		9.2		10.0					11.5		
31	11.0				10.5							
1-10 MEANS SAMPLE SIZE	11.83 3	11.08 10	11.45 10	9.61 9	11.09 8	10.68 5	11.20 5	13.50 5	14.00 3	13.54 10	12.24 10	11.24 9
11-20 MEANS SAMPLE SIZE	11.14 9	11.26 9	11.75 4	10.96 10	11.29 10	10.02 8	11.63 8	14.25 4	12.25 4	13.47 9	12.55 10	10.72 4
21-31 MEANS SAMPLE SIZE	11.43 10	10.79 9	10.25 2	10.74 8	11.04 11	10.67 7	13.60 5	14.20 5	11.98 5	12.07 11	11.17 7	
MONTHLY MEANS SAMPLE SIZE	11.37 22	11.04 28	11.37 16	10.44 27	11.14 29	10.41 20	12.06 18	13.93 15	12.57 12	12.98 30	12.08 27	11.08 13
MAXIMUM VALUE	12.2	12.5	12.4	14.2	13.8	12.5	15.0	15.0	14.0	15.0	13.8	12.0
MINIMUM VALUE	10.5	10.0	9.2	8.5	8.9	9.2	10.0	13.0	11.0	11.2	10.0	10.2
RANGE	1.7	2.5	3.2	5.7	4.9	3.3	5.0	2.0	3.0	3.8	3.8	1.8
STANDARD DEV.	0.51	0.50	0.76	1.52	1.30	0.77	1.35	0.70	1.15	1.15	0.84	0.52
ANNUAL MIN						11.71						
ANNUAL MEAN												
ANNUAL MAX												
		8.5										15.0

SALINITY

TRINIDAD BEACH

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	30.33	32.62	30.24	33.46	32.18	33.95		34.02		33.59	33.18	29.55
2		32.73	30.57	33.62	32.81	33.87	33.89	33.68		33.44	32.98	30.10
3		32.89	32.19	33.62	32.30	34.08		33.74		33.42	32.70	29.15
4		32.74	32.02	33.14					33.37	33.26	32.46	29.29
5		32.69	32.16	33.15	32.72	33.60	33.66		33.17	33.37	32.57	29.98
6		32.59	31.81	33.25	32.85		33.91		33.27	33.10	31.54	30.35
7		32.54	31.81	33.57	33.37	33.11		33.57		33.01	32.05	30.58
8		32.41	31.53	33.11	32.61		33.83	33.88		32.96	31.66	30.72
9		32.03	31.17	33.51	33.27		34.08	33.61		32.45	32.45	31.11
10		31.17	32.21	32.10	33.27		33.92		33.45	32.94	32.07	
11		31.03	31.87	32.95	32.58	33.69			33.47	33.00	33.55	
12		31.53	32.33	32.57	32.31	33.57	33.91	33.76	33.68	32.77	28.03	
13		31.45	31.73	32.72	31.76	33.77	33.88	33.63		33.12	25.92	
14		32.21	31.31	32.24	32.13	33.65		33.78		33.32	28.10	
15		31.45	31.37	30.78	32.73	33.60		33.78		33.17	29.37	
16			30.67	32.34	32.92		33.81		33.46	33.39	30.38	32.08
17		32.09	30.16	32.67	32.87		33.84				31.45	32.09
18		32.06	29.43	32.10	32.88	33.90	33.87			33.24	30.39	32.08
19		31.98	28.90	31.74	32.06	33.76	33.70			33.11	29.68	32.29
20		32.10		32.17	32.87	33.71	33.80			33.14	32.69	
21		31.77	29.44	32.24	33.39	33.77		33.49		33.21		
22		31.78	31.22	32.57	33.32	34.13				33.14		
23			31.58	32.61	33.00		33.80			33.21	32.78	
24		32.42	31.17	33.03	33.15			33.58	33.70	33.22		
25		32.32	31.72	33.53	33.31	33.65	33.62		33.80	33.28		
26		32.26	32.14	32.93	33.91	33.59	33.59		33.79	33.33	31.59	
27		32.94	30.50	33.86	33.33	33.84	33.74	33.46	33.82	33.41	30.88	
28		32.73	30.31	33.73	33.16	34.06		33.31	33.65	33.28	30.78	
29		32.80	29.95	31.86	32.80	33.72		33.30		33.21	29.44	
30			33.09		33.16		33.73			33.37	28.03	
31					33.65					32.50		
1-10 MEANS		30.93	32.54	33.19	32.85	33.72	33.87	33.75	33.27	33.24	32.35	30.09
SAMPLE SIZE		3	10	9	9	5	5	6	3	9	10	9
11-20 MEANS		31.77	30.86	30.93	32.23	33.71	33.84	33.74	33.51	33.13	29.89	32.13
SAMPLE SIZE		9	9	3	10	8	8	4	4	9	10	4
21-31 MEANS		32.42	30.89	32.99	32.93	33.87	33.70	33.43	33.75	33.19	30.88	
SAMPLE SIZE		9	9	2	8	7	5	5	5	11	7	
MONTHLY MEANS		31.93	31.47	31.56	32.76	33.77	33.81	33.64	33.55	33.19	31.06	30.72
SAMPLE SIZE		21	28	15	27	20	18	15	12	29	27	13
MAXIMUM VALUE		32.94	32.89	33.09	33.86	34.13	34.08	34.02	33.82	33.59	33.55	32.29
MINIMUM VALUE		30.33	28.90	30.08	30.78	33.11	33.59	33.30	33.17	32.50	25.92	29.15
RANGE		2.61	3.99	3.01	3.08	1.02	0.49	0.72	0.65	1.09	7.63	3.14
STANDARD DEV.		0.67	1.15	0.87	0.72	0.23	0.13	0.20	0.22	0.22	1.91	1.12
ANNUAL MIN		25.92		ANNUAL MEAN		32.53		ANNUAL MAX		34.13		

TEMPERATURE

TRINIDAD BAY

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		11.0	11.0	8.8	9.4	9.7	10.0	14.0		12.5	10.7	11.0
2		11.0	10.0			9.3		13.0		13.4	11.5	10.0
3		11.3	11.2	9.4	10.3	9.0		12.0		13.5	12.2	10.0
4		11.7	13.2	9.5			12.0		13.0	13.0	12.5	10.7
5	12.0	11.3	10.8	9.7	10.3	10.1	11.0		15.0	13.0	13.0	12.0
6		11.0	11.0	8.2	12.9				12.0	13.9	12.2	11.5
7		11.0	11.3	9.2	11.2	11.2		14.0		14.3	12.5	11.7
8		11.2	11.3	10.2	11.2		11.0	14.0		15.0	12.0	11.0
9	12.0	11.0	12.1	9.2	9.2		11.0	14.0		15.0	11.1	12.0
10	11.9	11.0	12.1	10.9	10.8		11.0		11.0	15.0	12.3	
11	11.5	10.8	12.0	9.8	11.2	9.8	11.0	14.0	11.0	15.0	12.0	
12	11.9	11.5	11.8	10.5	12.5	10.5	10.0		12.0	14.8	12.2	
13	11.0	11.2		9.8	12.3	9.8	10.0	13.0	12.0	15.0	12.2	
14	11.0	11.0	12.0	13.8	10.2	9.8	13.0	13.0		14.2	11.9	
15	11.0	11.0	11.2	12.3	10.3	9.8	13.0	13.0		13.0	11.7	
16		11.0		10.2	8.8		13.0	14.0	12.0	11.7	12.8	10.0
17		11.2	11.2	10.1	9.8		11.0			13.2	12.0	10.0
18	11.0	11.2		10.8	9.6	9.8	12.0			12.4	12.4	10.2
19	10.9	11.5		11.4	10.0	9.8	12.0			11.9	12.5	10.8
20	10.9		11.5	10.8	11.3	9.0	11.0			13.8	12.0	10.0
21	11.2	10.8		11.2	9.2	8.9		15.0		12.6	12.5	
22	11.0	10.2		12.2	9.1		12.0			12.0	11.4	
23		10.1		10.2	10.2					12.7		
24	11.0	10.0		8.7	9.7		14.0	14.0	10.3	12.8		
25	11.0	11.1		8.3	9.8	10.4	14.0		12.0	13.0		
26	11.0	11.5		8.5	11.0	12.2	13.0		10.9	11.8	9.0	
27	11.6	10.5		11.3	11.3	12.2	12.0	13.0	11.0	11.3	10.7	
28	12.1	10.9		8.3	10.4	9.8		14.0	11.0	11.2	10.9	
29	13.4	10.8	9.3	8.6	11.4	9.8	13.0	14.0	11.0	11.0	10.7	
30	10.5		8.9		9.7				11.0	11.0	11.0	
31	11.0			8.9	8.9				11.3	11.3		
1-10 MEANS	11.97	11.15	11.32	9.46	10.41	9.86	11.00	13.50	13.33	13.84	12.00	11.10
SAMPLE SIZE	3	10	10	9	8	5	5	6	3	10	10	9
11-20 MEANS	11.13	11.16	11.75	10.95	10.60	9.79	11.44	13.25	11.75	13.62	12.15	10.25
SAMPLE SIZE	9	9	4	10	10	8	9	4	4	9	10	4
21-31 MEANS	11.38	10.66	9.10	9.50	10.06	10.44	12.80	14.00	11.04	11.88	10.89	
SAMPLE SIZE	10	9	2	8	11	7	5	5	5	11	7	
MONTHLY MEANS	11.36	10.99	11.19	10.02	10.34	10.03	11.68	13.60	11.85	13.06	11.77	10.84
SAMPLE SIZE	22	28	16	27	29	20	19	15	12	30	27	13
MAXIMUM VALUE	13.4	11.7	13.2	13.8	12.9	12.2	14.0	15.0	15.0	15.0	13.0	12.0
MINIMUM VALUE	10.5	10.0	8.9	8.2	8.8	8.9	10.0	12.0	10.3	11.0	9.0	10.0
RANGE	2.9	1.7	4.3	5.6	4.1	3.3	4.0	3.0	4.7	4.0	4.0	2.0
STANDARD DEV.	0.64	0.40	1.09	1.37	1.09	0.91	1.16	0.74	1.24	1.32	0.85	0.77
ANNUAL MIN		8.2		ANNUAL MEAN		11.39		ANNUAL MAX				15.0

TEMPERATURE

SALT POINT

DEC

NOV

OCT

SEP

AUG

JUL

JUN

MAY

APR

MAR

FEB

JAN

DAYS

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			10.8	8.6	9.2	8.8	12.3	11.7				
2			10.4	8.4	9.5	8.8	13.0	11.2				
3			10.4	8.3	9.6	8.7	13.3	10.2				
4			10.5	9.0	9.2	9.0	13.0	9.8				
5			10.6	8.9	8.2	9.0	12.9	9.5				
6			10.0	9.0	8.2	8.9	12.2	10.0				
7			11.1		8.2	8.9	12.0	10.5				
8			10.9		8.3	8.8	10.9	10.9				
9			11.1		8.0	9.8	11.4	11.4				
10			11.3		8.4	9.0	12.8	12.8				
11	11.5		11.1	9.1	9.2	9.0	12.2	11.6				
12	11.8		11.0	9.0	9.2	9.0	12.8	12.1				
13	11.7		11.3	8.9	9.0	8.5	12.8	12.2				
14	10.6		11.3	8.7	8.3	8.7	12.8	12.0				
15			11.5	8.9	8.5	8.9	13.0	12.0				
16			11.3	9.1	8.2	9.4	14.0	11.8				
17	11.1		11.7	9.2	8.0	9.9	11.4	11.4				
18	11.2			9.0	8.2	9.2	11.7	11.7				
19			11.8	8.9	8.4	9.0	12.4	12.4				
20	10.9		11.8	9.1	8.2	8.8	13.0	13.0				
21	10.9		10.6	8.2	8.2	8.5	13.0	12.7				
22			9.8	9.1	8.2	8.9	12.7	12.7				
23			9.8	9.1	8.4	9.2	13.0	12.2				
24	11.0		9.5	9.8	9.8	10.1	12.4	12.4				
25			9.7	8.2	8.2	10.8	12.3	12.3				
26			9.5	8.4	8.4		12.8	12.8				
27			9.3	8.6	8.6	10.4	13.1	13.1				
28	11.0		8.9	8.3	8.8	10.1	13.5	13.5				
29	11.0		8.5	8.3	9.0	10.2	13.7	13.7				
30	11.0		8.5	8.5	8.8	10.4	12.8	12.8				
31	11.0		8.4	8.5	8.5		12.6	12.6				
1-10 MEANS			10.71	8.70	8.68	8.97	12.67	10.80				
SAMPLE SIZE			10	6	10	10	7	10				
11-20 MEANS			11.48	8.99	8.57	9.00	13.56	12.04				
SAMPLE SIZE			9	10	10	10	5	10				
21-31 MEANS			9.32	8.78	8.63	9.84	13.00	12.83				
SAMPLE SIZE			11	6	11	9	2	11				
MONTHLY MEANS			10.43	8.85	8.63	9.25	13.04	11.92				
SAMPLE SIZE			30	22	31	29	14	31				
MAXIMUM VALUE			11.8	9.4	9.8	10.8	15.2	13.7				
MINIMUM VALUE			8.4	8.3	8.0	8.5	12.0	9.5				
RANGE			3.4	1.1	1.8	2.3	3.2	4.2				
STANDARD DEV.			1.04	0.32	0.50	0.65	0.79	1.08				
ANNUAL MIN												
ANNUAL MEAN												
ANNUAL MAX												

TEMPERATURE

BODEGA BAY

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		12.3	10.9	9.0	9.8	10.8	12.8	13.2	13.2	13.2		12.2
2		12.7		8.8	9.8		12.8	12.3	13.3	13.3		12.0
3	11.9	12.4		10.0	10.0	11.1	12.8	11.8	14.3	14.3		12.2
4	11.0		11.0	10.5	10.5	10.9	13.4	10.9	13.2	14.2		12.2
5	11.0	12.5	11.2	9.8	8.5	10.4	13.8	11.8	12.8	14.2		12.3
6			11.2		8.5	10.1						
7		12.5	11.1		8.8	10.1		11.4	14.0	14.0		
8	11.2	12.6	11.0	8.8	9.0	11.5	11.5	12.3	14.0	14.0		
9	11.0	12.5	11.0	10.2	8.3	10.6	10.6	12.4	13.2	14.0		12.3
10				9.8	8.5	10.0	11.2		12.9	14.2		
11		11.7	11.5	9.5	8.6	9.9	11.0	12.6	13.0	14.2	13.0	12.5
12		11.2	12.0	10.5	8.6	9.9		12.5	13.0	12.5	12.3	11.9
13			12.2		8.6			12.3	13.0	12.0	12.2	
14		11.6	12.0	10.0	8.4		16.3	12.6	13.0	12.0	12.0	
15		11.6	12.5	9.2	8.6		16.0	14.0	14.0	10.9		10.2
16	11.2		11.8	9.0	8.7	10.8	15.4	14.8	14.8	10.4		10.5
17	11.0		11.2	9.5	8.7	10.6	15.6	14.6	14.6	10.6		10.9
18	11.0		11.2			10.2	16.0	12.6	12.8	10.6		11.0
19	11.1	11.4	10.7		8.7	10.1		12.9	12.8	11.3	12.3	
20		11.2	10.0		8.6	10.0	14.6	12.8	12.8	11.3		
21		10.9	9.7	9.8	8.6			12.5	12.5	11.3		
22	10.8	10.8	9.3	8.8	8.5		15.0	13.0	12.4	11.7		
23	11.0		8.8	8.2	8.5	10.4	12.8	12.3	12.3	11.7		
24	11.3		8.8	8.3		10.5	12.4	12.3	12.3	11.4		12.1
25	11.7		9.7	8.0		10.5		14.1	13.5	12.4		12.4
26	12.0	11.0	9.3			10.3	13.0	13.5	13.5	12.4		12.4
27		10.9	8.8	8.2	11.0	10.4		12.8	11.4	12.4		
28	12.4				11.1		13.0	12.8	11.4	12.4		
29	12.5				10.0		13.0	12.5	11.1	12.4		
30												
31												
1-10 MEANS	11.22	12.50	11.07	9.54	9.34	10.57	12.48	11.91	12.76	13.86		12.20
SAMPLE SIZE	5	7	6	8	8	6	6	8	5	7		5
11-20 MEANS	11.07	11.52	11.84	9.62	8.57	10.20	14.50	12.48	13.56	12.01	12.34	11.26
SAMPLE SIZE	4	4	4	8	6	7	7	6	8	7	7	7
21-31 MEANS	11.67	11.03	9.54	8.55	9.49	10.31	13.47	13.01	12.66	11.41	12.32	11.00
SAMPLE SIZE	7	7	8	6	8	7	6	9	5	7	5	1
MONTHLY MEANS	11.38	11.71	10.79	9.30	9.18	10.35	13.54	12.49	13.09	12.43	12.33	11.60
SAMPLE SIZE	16	18	22	22	22	20	19	23	18	21	12	13
MAXIMUM VALUE	12.5	12.7	12.5	10.5	11.1	11.1	16.3	14.1	14.8	14.3	13.0	12.3
MINIMUM VALUE	10.8	10.8	8.8	8.0	8.3	9.9	10.6	10.9	11.8	10.4	12.0	10.2
RANGE	1.7	1.9	3.7	2.5	2.8	1.2	5.7	3.2	3.0	3.9	1.0	2.1
STANDARD DEV.	0.54	0.70	1.11	0.74	0.94	0.35	1.81	0.73	0.76	1.39	0.26	0.76
ANNUAL MIN						11.52						
ANNUAL MEAN												
ANNUAL MAX												
		8.0										16.3

YEAR 1984

SALINITY

BODEGA BAY

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			32.96	33.94	34.28	34.21		33.69		33.55		
2		31.11		33.96	34.09		34.55	33.72		33.55	32.80	
3	29.68	31.59		34.01	34.12		33.87					33.00
4	28.04			34.20	34.04	33.88			33.33	33.44		32.81
5	27.95		33.55	34.25		33.94	34.01	34.06	33.70	33.45	33.79	32.81
6		31.80	33.04	33.92		33.88	34.02	33.47	33.73	33.45	32.82	32.96
7			33.05		34.05	34.00			33.74			
8		32.65	33.29		34.03	31.45		33.74		33.44	33.23	
9	30.74	31.77	32.95	33.98	34.06		33.87	33.50	33.33	33.46		
10	30.76			33.87	34.00	34.02	29.85	33.39	32.00	33.74		32.48
11				34.00	34.04	34.07	32.86		33.42	33.51		33.47
12			33.32								33.33	
13		32.21	33.08	33.77	33.88	34.36	33.89	33.49	33.61	33.61	32.94	33.22
14		32.43	33.12	33.77	33.98		33.12	33.78	33.61	33.61	33.02	33.47
15		33.10	32.58	33.77	34.07		33.82	33.68		33.62	32.80	
16		32.45	32.24	33.83	34.07		33.49	33.43		33.26	32.81	33.43
17	28.79	32.63	32.09	33.63	34.36	34.08	32.87	33.68	33.72	33.64	32.81	32.56
18	31.86			34.03		33.96	33.50	33.43	33.68	33.24	32.85	33.02
19	29.24		33.33	34.03	34.36	33.85	32.71		33.32	33.32	32.81	32.96
20	32.47		33.20	33.87		33.85		34.47	33.89	33.50	33.18	32.57
21		33.05	33.47		34.10	31.66						
22			33.65		34.09	34.13		33.27		33.75		
23	33.47	33.34	33.90	33.96	33.98		34.18	33.41	33.84	33.84		
24	32.47	33.32		33.80	33.91			33.42	33.62	33.70		
25	33.25			33.88	33.99	33.73	34.10		33.70	33.26		
26				33.82		34.05	33.51		33.63	33.18	33.09	
27	33.30	33.15	33.85	34.36		33.95	33.66	33.55	33.47	33.00	33.00	
28		33.36	33.87			34.10		33.70		32.92	33.32	
29		33.41		34.08	34.10	33.95	33.76	33.61	33.50	33.32		
30	31.14		33.89		34.37		33.94	33.30	33.51	32.52		
31	31.96											
1-10 MEANS SAMPLE SIZE	29.43 5	31.91 6	33.14 6	34.02 8	34.08 8	33.56 6	32.86 6	33.69 7	33.57 5	33.52 7	33.16 4	32.95 5
11-20 MEANS SAMPLE SIZE	30.59 4	32.56 5	32.87 8	33.83 8	34.05 6	34.06 6	33.31 7	33.48 6	33.39 7	33.45 7	32.94 7	33.02 7
21-31 MEANS SAMPLE SIZE	32.69 7	33.27 6	33.77 6	33.98 6	34.06 8	33.65 7	33.86 6	33.59 8	33.66 5	33.53 7	33.00 6	32.57 1
MONTHLY MEANS SAMPLE SIZE	31.15 16	32.58 17	33.22 20	33.94 22	34.07 22	33.75 19	33.34 19	33.59 21	33.52 17	33.50 21	33.01 17	32.96 13
MAXIMUM VALUE	33.47	33.41	33.90	34.36	34.37	34.36	34.55	34.47	33.99	33.84	33.79	33.47
MINIMUM VALUE	27.95	31.11	32.09	33.63	33.88	31.45	29.85	33.12	32.00	33.18	32.52	32.48
RANGE	5.52	2.30	1.81	0.73	0.49	2.91	4.70	1.35	1.99	0.66	1.27	0.99
STANDARD DEV.	1.92	0.70	0.51	0.17	0.13	0.79	1.14	0.29	0.44	0.18	0.29	0.32
ANNUAL MIN	27.95			ANNUAL MEAN		33.22		ANNUAL MAX		34.55		

TEMPERATURE

FARALLON ISLAND

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13.2	13.0	12.7	10.6	10.4	10.9	11.2	13.5	15.0	15.0	11.9	13.2
2	12.8	13.1	12.0	10.5	10.6	11.1	11.9	13.8	14.5	14.6		13.0
3	12.3	13.0	12.6	10.6	10.6	10.9	12.3	12.9	14.6	15.0		12.8
4	12.5	12.9	12.2	10.7			12.5	12.9	14.6	14.8		
5	12.2	13.5	12.5		10.8	11.0	12.8	12.7	14.5	14.8		
6	12.3	13.0	12.6	10.9	10.6	10.3	12.9	12.8	14.9	15.5		13.1
7	12.0	13.0	12.6	10.9	10.5	11.6	13.0	12.9	14.6	15.9	12.4	13.9
8	12.0	13.0	12.8	11.0	10.5	10.8	13.1	13.0	14.3	15.5	12.5	13.2
9	11.8	13.0	13.2	11.1	10.4	11.1	12.9	13.4	14.2	15.5		
10		12.9	13.2	11.4	10.5	10.8	12.1	14.3	13.9	15.8		13.2
11	12.2	13.0	13.0	11.4	10.6	10.9	12.5	14.6	14.2	15.2		13.2
12	12.1	12.8	13.0	11.4	10.2	10.7	12.1	13.8	14.4	15.7		13.0
13	11.9	13.0	12.8	11.5	10.9	10.5	12.8	13.2	14.3	15.7	13.0	12.9
14	12.1	12.9	12.6	11.4	10.2	10.4	12.7	12.8	14.7	15.7	13.4	12.9
15		12.7	12.6	11.9	10.1	10.8	14.1	13.8	14.4	13.3		12.5
16	12.2	12.6	12.7	11.1	9.9	10.8	14.1	13.5	14.6	13.0	13.6	12.4
17	12.0	12.6	12.6	10.8	10.3	10.6	14.0	13.2	14.3	13.0	13.8	12.2
18	11.7	11.8	12.4	10.7	10.6	11.0	14.2	13.7	14.2	13.0		12.1
19	12.1	13.1	12.9	10.9	10.5	10.9	14.2	14.0	14.8	12.6	13.5	12.3
20	11.9	12.8	13.1	10.9	10.6	11.6	14.0	13.5	14.8	12.8		12.1
21	12.1	12.4	12.6	10.9	10.3	10.9	14.2	14.0	15.0	13.1	13.2	12.0
22	12.0	12.2	12.0	10.4	10.2	10.9	13.9	13.9	15.0	12.3	13.5	12.0
23	12.7	12.2	12.1	10.7	10.5	11.0	13.7	13.7	15.0	12.6	13.5	12.0
24	12.9	12.2	12.1	10.7	10.5	11.0	13.7	13.7	14.0	12.3	13.2	12.0
25	13.0	11.7	12.1	9.9	10.7	11.2	14.9	13.8	14.0	12.2	13.0	11.9
26	13.1	12.0	11.7	9.5	10.4	11.2	15.1	13.8	13.5	12.3	13.0	12.0
27	13.0	11.7	11.9	9.3	10.3	11.2	15.0	14.2	14.2	12.3	13.0	11.8
28	13.0	12.0	11.5	9.8	12.2	11.7	13.5	14.2	14.2	12.4	13.0	12.4
29	13.1	12.3	10.4	9.9	13.0	11.1	13.3	14.2	14.5	13.2	13.1	11.3
30	13.0	10.6	10.6	10.0	11.8	11.2	13.1	14.4	14.6	13.1	13.2	11.8
31	13.2	10.4	11.1	11.1	11.1	13.0	13.0	15.0	12.0	12.0		
1-10 MEANS SAMPLE SIZE	12.37 9	13.04 10	12.64 10	10.86 9	10.51 9	10.94 9	12.47 10	13.26 10	14.53 10	15.29 9	12.27 3	13.06 7
11-20 MEANS SAMPLE SIZE	12.02 9	12.73 10	12.77 10	11.20 10	10.39 10	10.82 10	13.47 10	13.61 10	14.47 10	13.81 9	13.46 5	12.53 10
21-31 MEANS SAMPLE SIZE	12.83 11	12.02 9	11.52 11	9.97 10	10.97 11	11.22 10	14.08 11	14.06 11	14.40 10	12.53 11	13.12 8	11.85 8
MONTHLY MEANS SAMPLE SIZE	12.43 29	12.63 29	12.31 31	10.67 29	10.64 30	11.00 29	13.36 31	13.66 31	14.47 30	13.78 29	13.07 16	12.46 25
MAXIMUM VALUE	13.2	13.5	13.2	11.9	13.0	11.8	15.2	15.0	15.0	15.9	13.8	13.2
MINIMUM VALUE	11.7	11.7	10.4	9.3	9.9	10.3	11.2	12.7	13.5	12.0	11.9	11.3
RANGE	1.5	1.8	2.8	2.6	3.1	1.5	4.0	2.3	1.5	3.9	1.9	1.9
STANDARD DEV.	0.48	0.48	0.75	0.67	0.65	0.36	1.01	0.57	0.37	1.40	0.49	0.56
ANNUAL MIN	9.3			ANNUAL MEAN	12.54			ANNUAL MAX	15.9			

TEMPERATURE

SANTA CRUZ

DAYS	TEMPERATURE												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	13.6		12.8		12.6	11.6	15.0	16.0	16.0		13.6		
2	13.6	13.6	13.4	13.0	12.8	13.6					13.2	13.4	
3	13.8	13.6	13.8	11.6	12.2	12.6		16.4	16.2			13.2	
4	13.6	13.4	14.2	12.8	11.0	12.8		16.4	16.6		17.2	13.0	
5	13.4	13.0	12.8	12.2	10.0	14.4		16.2	17.0		12.4	13.0	
6	13.4	13.6	12.8	13.0	12.8	15.8		15.8	17.2		12.4	13.0	
7	13.8	13.4	13.2	13.2	13.2	15.6		15.6		16.2		13.2	
8	14.0					17.0							
9	13.4	13.6	13.2	11.8	14.0	14.8	15.0	16.0	14.6	14.6	13.0	13.2	
10	13.6	13.6	14.4	13.6	14.0	14.0	15.6	16.0	16.0	16.0	13.8	13.2	
11	13.8	13.0	14.2	14.2	13.2	14.6	15.8	16.2	15.0	15.0	13.4	13.2	
12	13.8	13.0	13.8	12.2	14.8	14.8	14.0	15.4	15.8	15.8	13.4	13.2	
13		13.8	14.0	12.6	15.8	14.4	17.0	15.6	15.6	13.6	13.6	12.6	
14	12.8	13.6	14.0		11.4	14.4		15.8	15.0	13.6	12.2		
15	13.4		14.2			14.4			14.2	13.6	12.2		
16	13.6	13.6	13.8	14.4		15.2	15.4	16.2	14.2	14.2	12.2		
17	13.8	13.6	14.2			14.4	17.6	16.2	14.0	14.4	12.4		
18		13.8	13.8	13.2		13.2	16.8	16.2	14.0	14.4	12.4		
19	13.6	13.6	14.0		13.6		15.6	16.8	16.6	14.2	14.0	12.4	
20	13.6	13.6	13.8		12.8	16.0	16.0	16.0	17.0	14.0	14.0	12.2	
21	13.6	13.6	13.8	15.1	13.8	17.0	17.0	16.0	17.0	14.0	14.0	12.2	
22	12.2	12.8	13.0	13.6	14.2	16.0	16.0	15.4	13.6	13.4	13.6		
23	13.0	12.4				16.2	16.2	16.2	13.6	13.6	13.8		
24	13.2	12.8	14.4		13.6	14.8	16.6	16.2	13.4	13.4	12.2		
25	13.6	13.0	14.0				15.8	16.2	13.8				
26				10.0	14.6	14.8	16.2	15.4	15.4	13.6	13.6	12.2	
27				10.0			16.0	16.0	13.8	13.8	13.6	12.0	
28		12.8	13.0	11.0	15.2	13.8	18.4	14.8	13.8	13.6	13.4	12.0	
29	12.8	12.8		12.0	12.8	13.8		15.6	13.4	13.4			
30	13.4			12.6				16.8	13.6	13.6			
31			11.7					14.8	13.4	13.4	11.8		
1-10 MEANS SAMPLE SIZE	13.62 10	13.47 8	13.36 10	12.57 7	12.32 8	13.32 5	15.00 4	16.06 7	16.60 5	15.40 2	12.91 7	13.14 7	
11-20 MEANS SAMPLE SIZE	13.55 8	13.51 9	13.98 10	13.07 3	13.36 5	14.43 7	16.02 8	16.02 8	16.50 6	14.66 7	13.84 9	12.60 10	
21-31 MEANS SAMPLE SIZE	13.11 7	12.89 7	13.22 5	12.04 7	14.03 6	14.30 4	16.52 8	15.84 9	16.27 6	13.62 11	13.66 7	12.07 6	
MONTHLY MEANS SAMPLE SIZE	13.46 25	13.32 24	13.58 25	12.44 17	13.14 19	14.05 16	16.02 20	15.97 24	16.45 17	14.16 20	13.50 23	12.63 23	
MAXIMUM VALUE	14.0	13.8	14.4	15.1	15.6	15.2	18.4	16.8	17.4	16.2	14.4	13.4	
MINIMUM VALUE	12.2	12.4	11.7	10.0	10.0	11.6	14.0	14.8	15.4	13.4	12.4	11.8	
RANGE	1.8	1.4	2.7	5.1	5.6	3.6	4.4	2.0	2.0	2.8	2.0	1.6	
STANDARD DEV.	0.40	0.40	0.66	1.37	1.40	0.95	1.04	0.54	0.63	0.82	0.54	0.51	
ANNUAL *MIN	10.0			ANNUAL *MEAN	14.06							ANNUAL *MAX	18.4

PACIFIC GROVE TEMPERATURE

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13.2	12.8	12.8	12.2	11.8	12.0	13.2	15.3	16.0	16.0	11.9	13.5
2	13.0	12.9	13.0	11.4	11.9	12.5	13.7	15.5	16.2	15.5	11.9	13.5
3	12.8	13.0	13.5	11.5	12.0	12.6	14.0	15.5	16.5	16.0	12.5	13.0
4	12.9	13.5	13.5	11.4	12.0	12.6	13.8	15.5	15.2	15.9	12.1	13.0
5	13.0	13.5	12.2	11.1	12.5	13.0	14.5	15.5	15.0	16.0	13.1	12.9
6	13.0	12.9	12.5	11.8	12.5	13.0	15.2	15.8	14.5	16.2	13.1	13.0
7	12.8	12.8	12.9	12.5	12.0	12.1	15.0	13.7	13.1	16.0	13.1	13.0
8	12.8	13.0	12.9	12.8	13.0	12.9	15.2	13.9	15.0	15.8	13.6	13.0
9	12.9	13.0	12.5	12.7	12.5	13.1	14.9	14.2	15.0	16.5	13.6	13.0
10	13.0	13.8	13.8	11.9	12.0	13.0	14.9	14.4	15.0	16.0	13.6	13.0
11	13.0	13.5	13.5	11.9	12.0	12.3	14.9	14.2	14.5	15.9	14.5	13.1
12	12.8	13.5	13.3	11.4	12.2	13.0	15.4	14.0	15.3	16.0	14.0	13.1
13	12.4	13.3	13.9	12.0	12.0	13.8	15.0	14.1	15.4	15.9	14.0	12.5
14	12.5	13.0	12.8	12.2	11.9	13.3	16.2	14.0	15.4	16.0	13.9	12.1
15	12.8	13.0	13.0	12.2	11.2	13.2	17.9	14.4	16.0	15.2	14.0	12.0
16	12.5	13.0	13.0	12.0	11.1	13.8	16.9	14.9	16.2	15.0	14.1	11.8
17	12.2	13.0	13.2	12.8	12.1	14.0	16.3	14.5	16.0	13.0	14.0	12.0
18	12.0	12.8	13.0	12.0	12.1	12.1	16.3	14.5	15.5	13.5	14.2	12.0
19	12.0	13.0	13.1	12.0	12.0	12.1	16.2	14.8	15.6	14.0	14.2	12.0
20	12.0	13.5	13.2	11.7	12.0	15.0	16.9	15.0	16.1	14.0	14.6	12.0
21	13.0	13.1	13.0	12.0	11.9	12.6	16.9	14.5	16.3	14.0	14.2	12.0
22	12.8	12.9	13.1	12.0	12.1	13.1	17.0	14.9	15.2	13.0	14.0	12.0
23	12.0	13.0	13.2	12.1	11.9	13.2	16.8	15.0	15.0	13.0	14.0	12.0
24	12.5	13.0	13.2	12.0	11.0	13.0	17.0	15.1	15.5	13.0	14.0	12.0
25	12.0	13.5	13.2	12.0	10.9	13.3	16.0	15.0	15.2	12.4	14.0	12.0
26	13.0	13.2	13.3	11.1	12.0	13.0	16.0	15.4	14.1	12.1	13.2	11.9
27	12.3	12.9	12.4	11.2	13.5	13.0	16.2	14.9	14.9	12.5	13.1	11.8
28	12.5	12.5	12.8	13.0	13.8	13.1	16.5	15.1	15.3	12.5	13.3	12.0
29	12.8	12.9	12.6	12.8	12.3	12.7	16.5	15.0	15.0	12.6	13.1	12.0
30	12.7	12.0	12.0	11.9	12.4	13.2	16.8	15.0	15.2	12.6	13.2	12.0
31	13.0	12.5	12.5	11.4	11.4	16.7	16.7	14.9	14.9	12.1	12.1	12.0
1-10 MEANS SAMPLE SIZE	12.94 10	13.12 10	12.87 10	11.93 10	12.22 10	12.67 10	14.44 10	14.89 10	15.15 10	15.99 10	12.85 10	13.09 10
11-20 MEANS SAMPLE SIZE	12.42 10	13.16 10	13.20 10	12.02 10	11.86 10	13.26 10	16.20 10	14.44 10	15.60 10	14.85 10	14.15 10	12.26 10
21-31 MEANS SAMPLE SIZE	12.60 11	13.00 9	12.84 11	12.01 10	12.11 11	13.02 10	16.58 11	15.03 11	15.17 10	12.71 11	13.61 10	11.97 11
MONTHLY MEANS SAMPLE SIZE	12.65 31	13.10 29	12.96 31	11.99 30	12.06 31	12.98 30	15.77 31	14.79 31	15.31 30	14.46 31	13.54 30	12.43 31
MAXIMUM VALUE	13.2	13.8	13.9	13.0	13.8	15.0	17.9	15.8	16.5	16.5	14.6	13.5
MINIMUM VALUE	12.0	12.5	12.0	11.1	10.9	12.0	13.2	13.7	13.1	12.1	11.9	11.8
RANGE	1.2	1.3	1.9	1.9	2.9	3.0	4.7	2.1	3.4	4.4	2.7	1.7
STANDARD DEV.	0.37	0.29	0.47	0.51	0.62	0.63	1.16	0.55	0.71	1.57	0.73	0.56
ANNUAL MIN	10.9					13.50						
ANNUAL MEAN												
ANNUAL MAX												

TEMPERATURE

GRANITE CANYON

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13.1	12.8	11.0	10.3	10.0	10.9	10.6	12.7	12.1	13.8	11.8	12.8
2	13.0	12.7	10.9	9.5	11.0	11.6	11.8	12.3	11.9	13.2	12.1	12.8
3	13.2	13.0	11.0	9.8	10.6	11.0	12.0	11.9	12.4	14.1	12.6	12.8
4	13.2	13.0	11.0	9.5	9.4	10.6	12.6	11.5	12.8	13.6	12.0	13.0
5	13.3	13.7	10.9	10.0	8.9	10.9	13.4	11.1	13.4	13.8	12.9	13.0
6	13.5	12.7	12.2	11.2	8.1	11.1	13.8	11.6	13.1	13.9	14.2	13.2
7	13.7	12.9	12.1	10.0	9.0	11.9	13.3	11.8	12.7	13.7	15.0	13.3
8	13.5	13.0	12.0	10.0	9.0	10.9	12.7	12.0	12.7	13.6	15.2	13.4
9	12.9	13.1	12.2	9.2	8.9	10.8	12.1	12.6	13.0	13.0	14.6	13.7
10	12.8	13.0	12.0	9.5	8.8	10.0	11.8	12.9	15.0	13.1	14.7	13.9
11	12.2	12.5	11.0	9.5	9.3	9.8	11.9	15.0	14.0	13.6	14.6	14.1
12	12.1	12.9	11.0	9.6	9.8	10.1	11.6	14.6	13.8	13.1	14.6	14.2
13	12.7	13.0	12.1	10.2	9.8	10.6	12.0	13.5	13.6	13.9	14.7	12.0
14	12.7	12.0	12.0	10.3	8.9	10.4	12.9	12.8	13.8	12.6	14.9	10.9
15	12.9	12.2	12.1	10.8	8.9	11.1	15.2	12.9	14.1	12.0	14.9	11.2
16	13.0	12.3	12.0	10.1	8.7	12.7	15.1	12.9	13.5	11.7	15.0	12.1
17	12.6	11.4	12.0	9.6	8.8	12.2	15.9	12.8	14.5	11.9	14.6	12.2
18	12.6	11.9	11.7	9.9	8.8	11.8	16.0	12.5	15.2	11.7	14.7	12.4
19	12.7	11.7	11.2	10.8	9.0	11.7	16.3	12.5	16.6	12.3	14.7	12.4
20	12.4	11.3	11.0	10.2	9.0	11.4	16.7	13.7	16.6	11.7	14.1	12.4
21	12.8	11.2	10.9	9.7	9.0	10.8	16.0	14.6	14.3	11.7	12.9	12.3
22	12.9	10.5	10.0	9.6	9.2	11.1	13.9	14.8	13.0	11.6	13.2	12.3
23	12.2	10.5	9.8	10.1	9.4	11.0	14.7	14.3	14.1	11.6	13.4	12.3
24	11.9	11.3	9.9	9.0	9.5	11.2	14.5	13.4	14.2	11.8	12.9	12.5
25	12.0	11.0	9.9	8.7	9.1	11.6	14.2	13.6	14.7	11.9	13.4	12.6
26	11.9	10.7	9.9	8.0	9.1	11.4	13.2	13.6	14.6	12.4	13.1	12.7
27	11.6	10.5	9.7	8.8	9.0	11.2	12.8	13.8	14.7	12.3	12.8	12.7
28	13.4	10.8	9.5	9.7	10.0	11.1	12.6	14.3	15.7	11.8	13.4	12.4
29	13.5	11.0	10.0	10.1	11.0	11.1	12.2	14.0	15.8	11.9	13.4	12.3
30	13.0	10.0	10.0	9.5	10.7	10.4	12.9	13.3	14.7	11.9	12.8	12.3
31	13.0	10.3	10.3	10.7	10.7	13.1	12.6	12.6	14.7	11.8	14.7	12.1
1-10 MEANS SAMPLE SIZE	13.22 10	12.99 10	11.53 10	9.90 10	9.37 10	10.97 10	12.41 10	12.04 10	12.91 10	13.58 10	13.51 10	13.19 10
11-20 MEANS SAMPLE SIZE	12.59 10	12.12 10	11.61 10	10.10 10	9.02 9	11.18 10	14.36 10	13.32 10	14.57 10	12.45 10	14.68 9	12.39 9
21-31 MEANS SAMPLE SIZE	12.56 11	10.83 9	9.99 11	9.32 10	9.73 11	11.09 10	13.65 11	13.85 11	14.58 10	11.89 11	13.07 10	12.38 11
MONTHLY MEANS SAMPLE SIZE	12.78 31	12.02 29	11.01 31	9.77 30	9.40 30	11.08 30	13.48 31	13.09 31	14.02 30	12.62 31	13.72 29	12.65 30
MAXIMUM VALUE	13.7	13.7	12.2	11.2	11.0	12.7	16.7	15.0	16.6	14.1	15.2	14.2
MINIMUM VALUE	11.6	10.5	9.5	8.0	8.1	9.8	10.6	11.1	11.9	11.6	11.8	10.9
RANGE	2.1	3.2	2.7	3.2	2.9	2.9	6.1	3.9	4.7	2.5	3.4	3.3
STANDARD DEV.	0.54	0.98	0.90	0.65	0.77	0.63	1.60	1.03	1.22	0.88	1.05	0.74
ANNUAL MIN	8.0					12.14						
ANNUAL MEAN												
ANNUAL MAX												16.7

TEMPERATURE

PORT SAN LUIS

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		13.3	12.8		11.7	16.7		17.8		18.9	12.2	
2		13.3	12.8	11.7	11.7		15.6	17.2		18.9	12.2	
3	13.3	12.8		11.7	11.7		15.6	17.2				12.8
4	12.8		12.8	12.2		17.2			18.3	18.3		12.8
5	12.8	12.8	12.8			17.2			18.3		11.7	12.8
6	12.8		12.8			16.7			19.4	18.3		12.8
7		13.3	12.2		12.2		16.1	16.1			13.9	
8	13.3	12.8	12.2	11.7	12.2	17.8		15.6		16.7	14.4	
9	13.3	13.6	12.8	11.7	12.2		18.3	15.6		16.1	14.4	14.4
10	13.3			12.2	12.2		17.8	16.1	18.3	16.1		14.4
11	13.3		13.3	11.7	12.2	13.9	17.8	18.3	18.3	15.6	14.4	13.9
12	13.3		13.3	11.7	12.2	14.4	17.8	16.7	18.3	14.4	14.4	14.4
13	12.8		13.3	11.7	14.4	13.9	18.3	16.1	18.3	14.4		
14		13.3	12.8			13.9		18.3		15.6		
15		13.3	12.8	14.4	13.9	17.8		18.9		15.6		
16	12.8	13.3	13.3	14.4	14.4	17.8	17.8	18.9	18.3	13.9		12.2
17	12.8	12.8	13.3	14.4	14.4	17.8	17.8	18.9	18.3	13.9		11.7
18	13.3			14.4	14.4	14.4	17.8	18.9	18.3	13.3	14.4	11.7
19	13.3		13.3	14.4		14.4	17.2	18.3	18.9	13.3	14.4	12.2
20	13.3	13.3	13.3		13.3	15.6	17.8	18.3	18.3	14.4		
21		12.2	12.8		13.3	16.1		17.8	18.3	13.9	14.4	
22		12.2	12.8		13.3		17.8	17.8	18.9	13.3		
23	12.8	12.8	12.8	12.2	13.3	16.7	16.7	17.8	18.9	13.3		
24	13.3	12.8		11.7	13.3		16.7	17.8	18.3	13.3		
25	13.3		12.2	11.7	14.4	16.7	17.7	17.8	17.8	13.3		12.2
26	12.8		12.2	11.7		16.7	16.7	17.8	17.8	13.3		12.2
27	12.8	12.2	12.8	11.2		17.2	16.7	18.3	17.8	12.8	12.8	11.7
28		12.2			13.3	17.2	16.7	18.3	17.8	12.8	12.2	
29		12.2	12.2		13.3	17.2	17.8	18.3	17.8	12.8	12.8	
30	13.3		12.2	11.7	16.7		17.8	18.3	17.8	12.8		
31	13.3						17.8	17.8				
1-10 MEANS	13.05	13.13	12.63	11.78	11.91	17.12	16.68	16.51	18.85	17.78	13.01	13.12
SAMPLE SIZE	6	7	7	6	7	5	5	7	4	5	7	5
11-20 MEANS	13.11	13.22	13.16	13.24	13.86	14.30	17.79	17.87	18.39	14.86	14.40	13.05
SAMPLE SIZE	8	6	7	7	5	8	8	6	7	7	6	8
21-31 MEANS	13.09	12.37	12.56	11.70	13.86	16.60	17.42	18.05	18.15	13.24	12.88	12.07
SAMPLE SIZE	7	7	8	6	8	7	6	8	6	7	5	4
MONTHLY MEANS	13.09	12.89	12.77	12.29	13.18	15.81	17.38	17.49	18.41	15.03	13.44	12.84
SAMPLE SIZE	21	20	22	19	20	20	19	21	17	19	18	17
MAXIMUM VALUE	13.3	13.6	13.3	14.4	16.7	17.8	18.3	18.9	19.4	18.9	14.4	14.4
MINIMUM VALUE	12.8	12.2	12.2	11.2	11.7	13.9	15.6	15.6	17.8	12.8	11.7	11.7
RANGE	0.5	1.4	1.1	3.2	5.0	3.9	2.7	3.3	1.6	6.1	2.7	2.7
STANDARD DEV.	0.25	0.47	0.42	1.08	1.29	1.38	0.83	1.05	0.48	2.05	1.03	0.98
ANNUAL MIN						14.55						
ANNUAL MEAN												
ANNUAL MAX												
ANNUAL MEAN	11.2										19.4	

YEAR 1984

TEMPERATURE

SANTA MONICA

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15.6				16.1			21.7		21.1		15.0
2	14.7				16.7			20.0	23.3	19.4	17.8	14.4
3	15.0	15.6	16.1	16.1	15.3	20.0	21.1	20.6	23.3	19.4	17.8	13.9
4	15.0	14.7	16.7	16.1		19.4	20.6	20.8	23.3			
5	15.0	16.1	15.6	16.1	15.8			20.6		19.4	18.3	14.4
6		15.6	15.6				20.6	20.6	23.1			
7		15.6	16.1				20.6	20.6	23.3	19.2	17.2	15.0
8	15.0			16.1	17.8		22.2		22.8		17.2	15.3
9	15.0			16.9		20.0		21.1	23.1	18.3	17.5	13.9
10						20.0		21.1	22.8	18.9	17.2	13.3
11				17.4	18.3	20.6		22.2		18.9	16.1	
12				17.8	18.3		22.8	23.3	22.8			
13				17.2	17.8	20.0	21.7	23.3	23.1	18.3	17.2	12.8
14				17.2	19.4		21.1			17.8		15.6
15		13.9	15.6	17.2	18.9	20.0		22.8	22.8	16.1	16.1	
16	14.4	13.9	15.6	16.7	18.3		21.7	23.3	22.5	16.4	16.4	13.9
17	14.4	13.3	15.6	17.8	17.8	20.6	21.7	19.4	19.4	15.6	15.6	
18	14.4		15.6	17.2	20.6	20.6		22.2	19.4	18.3	15.6	13.9
19				19.4	19.4		21.7	22.2	22.2	16.7		
20	14.4		15.6	16.7	18.3	19.4	21.7	23.3	22.2	18.3	15.6	13.3
21	14.4		15.6	15.6	17.8	20.6	21.7	22.8	21.9	16.1	15.6	
22			16.1	15.6	20.6	20.6		22.2	22.2	18.3	15.6	
23	14.2		16.1	14.2	19.4		21.7	22.2	21.4	16.7		
24	14.4			14.4	20.0	19.4	21.7	22.8	21.1	17.8	15.6	13.3
25	14.4			19.4	19.4	20.0	21.7	22.8	21.9	18.3	15.6	13.3
26			16.1			18.3	22.2	23.3	21.9		15.0	
27	13.9	15.6	16.1			20.6		23.3	22.2		15.0	
28		16.1	16.7	15.0		20.8	21.7	23.3	21.4	18.9	14.4	13.9
29		15.0	16.7			20.0	21.7	22.8			13.9	13.9
30	14.4		15.6			20.6	20.6	22.8	21.1	17.8		
31	14.4							21.9				
1-10 MEANS SAMPLE SIZE	15.00 7	15.70 5	16.02 5	16.22 5	16.67 6	19.80 3	20.90 6	20.72 6	23.16 5	19.70 5	17.66 5	14.54 5
11-20 MEANS SAMPLE SIZE	14.60 6	13.70 3	15.68 6	17.29 7	18.24 7	20.12 5	21.68 6	22.38 6	22.85 6	18.05 6	16.90 7	14.34 7
21-31 MEANS SAMPLE SIZE	14.30 7	15.42 4	16.17 8	14.80 4	19.44 5	20.10 9	21.60 6	22.72 8	21.37 6	17.77 7	15.26 7	13.66 5
MONTHLY MEANS SAMPLE SIZE	14.63 20	15.11 12	15.96 19	16.33 16	18.05 18	20.05 17	21.39 18	22.02 20	22.42 17	18.40 18	16.49 19	14.20 17
MAXIMUM VALUE	15.6	16.1	16.7	17.8	20.6	20.8	22.8	23.3	23.3	21.1	18.3	15.6
MINIMUM VALUE	13.9	13.3	15.6	14.2	15.3	18.3	20.3	20.0	19.4	16.1	14.4	12.8
RANGE	1.7	2.8	1.1	3.6	5.3	2.5	2.5	3.3	3.9	5.0	3.9	2.8
STANDARD DEV.	0.40	0.92	0.40	1.11	1.48	0.61	0.68	1.14	1.02	1.23	1.15	0.84
ANNUAL MIN	12.5					17.92						
ANNUAL MEAN												
ANNUAL MAX												23.3

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	16.1	15.0	15.3	16.1	15.6	20.0	19.7	20.6	21.1	20.0	18.6	15.6
2	15.3	15.1	15.6	15.6	15.6	20.0	20.0	19.5	22.2	19.2	17.8	15.3
3	15.3	15.7	15.6	16.1	16.1	21.0	20.0	19.5	21.8	19.4	17.5	15.6
4	15.3	15.6	15.6	14.8	16.1	20.0	19.5	20.6	20.6	18.9	17.8	15.0
5	15.3	15.6	15.0	15.3	14.4	19.0	17.2	20.6	20.6	18.9	18.3	15.0
6	15.3	15.6	15.0	16.0	16.1	19.8	18.3	21.1	21.1	18.9	18.3	15.0
7	15.3	15.6	15.0	15.6	16.1	20.1	18.6	21.0	22.0	18.9	18.1	15.0
8	15.3	15.6	15.3	16.1	16.1	21.0	18.3	22.8	22.8	18.3	18.2	15.0
9	15.3	16.1	15.5	16.7	17.2	20.0	18.1	22.8	22.8	18.9	17.2	15.0
10	15.0	15.8	15.8	16.7	17.2	20.0	18.4	22.5	22.5	19.4	17.0	15.0
11	15.6	15.6	16.7	17.0	16.1	20.0	19.4	23.2	22.5	19.4	17.2	15.6
12	15.0	15.6	16.7	16.7	16.7	20.0	20.8	22.2	23.3	19.4	17.2	15.6
13	15.0	15.6	17.2	17.2	17.8	20.0	19.0	22.2	23.3	19.2	17.2	15.6
14	15.0	15.6	16.7	18.3	17.8	20.0	18.9	22.8	22.5	19.7	16.8	13.3
15	15.0	15.6	16.7	18.3	17.8	19.9	18.9	22.8	21.7	20.0	16.8	13.3
16	15.0	15.6	15.6	17.2	17.8	19.9	18.9	22.8	22.8	19.7	17.2	13.3
17	15.0	15.6	16.4	17.3	18.9	19.0	20.0	21.1	22.8	20.0	15.0	13.0
18	15.0	13.4	15.6	17.2	18.1	19.4	20.0	22.0	22.2	19.4	16.7	13.3
19	15.0	13.6	16.1	17.2	19.4	19.4	20.5	22.0	22.2	18.9	16.7	13.9
20	14.7	13.3	16.1	16.8	19.4	19.4	20.5	22.8	22.2	19.2	16.7	13.9
21	14.9	13.3	17.0	17.8	19.4	18.9	19.5	23.3	21.1	18.9	16.7	13.9
22	15.0	13.9	16.7	17.2	19.4	20.0	20.0	21.1	21.1	18.9	16.1	13.3
23	14.7	14.0	16.0	15.0	19.4	20.5	21.0	20.0	22.2	18.3	16.1	13.3
24	15.0	14.4	16.7	16.7	20.0	19.0	19.5	20.0	22.2	17.8	16.1	13.6
25	15.0	14.7	16.7	18.3	20.0	19.4	20.0	21.1	22.2	17.8	16.1	13.9
26	15.6	14.7	16.1	18.3	20.0	18.0	18.1	21.7	20.0	18.3	15.6	13.9
27	13.9	14.4	16.7	14.4	20.5	18.0	21.1	19.4	18.6	18.6	16.0	13.8
28	13.9	14.4	16.7	14.4	20.0	20.0	21.1	20.6	19.4	18.6	15.6	13.9
29	14.5	15.0	16.7	14.4	19.8	20.2	20.6	19.4	20.0	18.6	15.6	13.9
30	15.0	16.7	16.7	16.1	19.8	20.5	20.0	18.9	20.0	18.6	15.6	13.9
31	15.0	17.0	17.0	17.0	19.9	19.4	19.4	21.1	20.0	18.6	15.6	13.9
1-10 MEANS	15.35	15.57	15.37	15.90	16.05	20.03	18.80	21.02	21.75	19.08	17.88	15.15
SAMPLE SIZE	10	10	10	10	10	10	10	10	10	10	10	10
11-20 MEANS	15.03	14.95	16.38	17.32	17.98	19.70	19.69	22.39	22.55	19.49	16.75	14.08
SAMPLE SIZE	10	10	10	10	10	10	10	10	10	10	10	10
21-31 MEANS	14.77	14.31	16.64	16.26	19.84	19.45	20.03	20.60	20.68	18.45	15.95	13.75
SAMPLE SIZE	11	9	11	10	11	10	11	11	10	11	10	11
MONTHLY MEANS	15.04	14.97	16.15	16.49	18.02	19.73	19.52	21.31	21.66	18.99	16.86	14.31
SAMPLE SIZE	31	29	31	30	31	30	31	31	30	31	30	31
MAXIMUM VALUE	16.1	16.1	17.2	18.3	20.5	21.0	21.1	23.3	23.3	20.0	18.6	15.6
MINIMUM VALUE	13.9	13.3	15.0	14.4	14.4	18.0	17.2	18.9	18.6	17.8	15.0	13.0
RANGE	2.2	2.8	2.2	3.9	6.1	3.0	3.9	4.4	4.7	2.2	3.6	2.6
STANDARD DEV.	0.43	0.85	0.67	1.18	1.75	0.70	1.00	1.28	1.19	0.58	0.95	0.87
ANNUAL MIN	13.0					17.75						
ANNUAL MEAN												
ANNUAL MAX												23.3

SALINITY

BALBOA

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32.94	33.42	33.48	33.39	33.56	33.58	33.71	33.53	33.62	33.53	33.61	33.35
2	33.38	33.48	33.53	33.45	33.56	33.60	33.89	33.63	33.66	33.50	33.46	33.21
3	33.37	33.43	33.55	33.60	33.82	33.60	33.72	33.48	33.58	33.54	33.47	33.23
4	33.32	33.45	33.45	33.49	33.70	33.60	33.64	33.49	33.62	33.48	33.50	33.39
5	33.32	33.43	33.50	33.70	33.59	33.60	33.62	33.47	33.71	33.50	33.45	33.19
6	33.27	33.40	33.49	33.39	33.93	33.63	33.62	33.52	33.61	33.50	33.57	33.44
7	33.20	33.45	33.31	33.42	33.46	33.64	34.06	33.77	33.66	33.48	33.48	33.41
8	33.26	33.40	33.42	33.44	33.57	33.65	33.67	33.70	33.61	33.47	33.42	33.35
9	33.23	33.39	33.42	33.44	33.56	33.56	33.62	33.60	33.61	33.46	33.38	33.44
10	33.24	33.37	33.36	33.44	33.60	33.61	33.63	33.87	33.58	33.44	33.48	33.50
11	33.23	33.45	33.44	33.50	33.64	33.60	33.70	33.67	33.60	33.46	33.47	33.22
12	33.44	33.48	33.29	33.51	33.66	33.61	33.61	33.62	33.60	33.44	33.25	33.37
13	33.40	33.41	33.43	33.45	33.59	33.61	33.64	33.43	33.66	33.47	33.29	32.74
14	33.18	33.54	33.44	33.49	33.61	33.69	33.87	33.66	33.78	33.47	33.39	33.35
15	33.28	33.34	33.31	33.41	33.89	33.70	33.57	33.52	33.54	33.45	33.37	33.27
16	33.25	33.29	33.40	33.47	33.59	33.66	33.56	33.57	33.54	33.52	33.31	33.33
17	33.25	33.25	33.33	33.41	33.56	33.60	33.72	33.50	33.56	33.52	33.40	33.21
18	33.28	33.42	33.33	33.41	33.57	33.65	33.57	33.45	33.59	33.47	33.43	33.47
19	33.34	33.37	33.31	33.45	33.57	33.98	33.57	33.50	33.51	33.51	33.55	33.37
20	33.25	33.40	33.41	33.15	33.57	33.75	33.94	33.44	33.60	33.46	33.42	33.35
21	33.28	33.50	33.49	33.47	33.47	33.66	33.58	33.71	33.65	33.63	33.40	33.36
22	33.22	33.41	33.32	33.51	33.57	33.64	33.58	33.59	33.66	33.57	33.31	33.24
23	33.21	33.46	33.45	33.48	33.62	33.65	33.63	33.47	33.66	33.54	33.33	33.25
24	33.28	33.50	33.32	33.43	33.62	33.62	33.64	33.52	33.75	33.52	33.60	33.40
25	33.21	33.43	33.49	33.49	34.06	33.60	33.62	33.28	33.80	33.52	33.33	33.28
26	33.35	33.44	33.63	33.49	33.65	33.58	33.66	33.48	33.60	33.53	33.34	33.24
27	33.39	33.44	33.44	33.51	33.77	33.50	33.56	33.75	33.49	33.58	33.37	33.08
28	33.34	33.28	33.44	33.54	33.63	33.70	33.56	33.60	33.52	33.61	33.30	33.14
29	33.34	33.40	33.51	33.47	33.62	33.70	33.45	33.57	33.54	33.71	33.37	33.23
30	33.39	33.47	33.47	33.53	33.55	33.68	33.44	33.57	33.57	33.68	33.33	33.27
31	33.44	33.67	33.67	33.67	33.55	33.68	33.44	33.58	33.57	33.48	33.33	33.33
1-10 MEANS SAMPLE SIZE	33.25 10	33.42 10	33.44 10	33.47 10	33.63 10	33.61 10	33.72 10	33.61 10	33.63 10	33.49 10	33.48 10	33.35 10
11-20 MEANS SAMPLE SIZE	33.29 10	33.39 10	33.37 10	33.42 10	33.62 10	33.69 10	33.67 10	33.54 10	33.62 8	33.48 10	33.39 10	33.27 10
21-31 MEANS SAMPLE SIZE	33.31 11	33.43 9	33.48 11	33.49 10	33.68 9	33.63 10	33.57 9	33.54 11	33.62 10	33.58 11	33.37 10	33.26 11
MONTHLY MEANS SAMPLE SIZE	33.29 31	33.41 29	33.43 31	33.46 30	33.64 29	33.64 30	33.66 29	33.56 31	33.62 28	33.52 31	33.41 30	33.29 31
MAXIMUM VALUE	33.44	33.54	33.67	33.70	34.06	33.98	34.06	33.87	33.80	33.71	33.61	33.50
MINIMUM VALUE	32.94	33.25	33.29	33.15	33.46	33.50	33.44	33.28	33.49	33.44	33.25	32.74
RANGE	0.50	0.29	0.38	0.55	0.60	0.48	0.62	0.59	0.31	0.27	0.36	0.76
STANDARD DEV.	0.10	0.07	0.10	0.10	0.13	0.09	0.14	0.13	0.08	0.08	0.10	0.14
ANNUAL MIN	32.74					33.50						
ANNUAL MEAN												
ANNUAL MAX												
												34.06

TEMPERATURE

SAN CLEMENTE

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	16.8	16.0	14.8	16.5	16.5	20.4	22.0		21.5	20.5	18.3	
2	16.1	16.0	15.5	16.0	16.5	20.1	22.0		22.3	20.3	18.2	14.7
3		16.0	15.0	16.5	17.5	20.2	22.0		23.0	20.6	17.7	14.7
4		16.0	16.0	16.5	17.5	20.4	20.7	21.5	23.5	20.3	17.8	
5	14.7	16.1	15.1	16.5	17.1	20.1	20.9	23.0	22.5	20.3	17.8	
6		16.0	16.0	16.9	18.2	19.2	20.0	23.0	22.2	20.8	17.9	14.7
7		17.0	16.5	17.0	17.0	19.8	20.0	23.0	22.5	20.3	17.6	14.7
8	14.3	15.5	16.3	18.0	18.0	20.0	21.1		23.5	19.9	17.8	14.7
9		15.9	15.5	18.0	18.5	20.4	20.1	23.0	23.2	19.9	17.0	16.3
10		15.5	16.0	17.5	19.0	20.6	22.5	23.0	23.4	20.4	17.0	16.5
11		15.5	16.0	18.5	18.5	20.5	23.5	23.1	23.0	20.7	17.1	15.5
12		15.0	16.0	18.5	19.6	20.5	23.5	23.5	24.0	20.4	17.1	15.2
13		15.5	16.0	17.5	20.4	20.4	22.5	21.2	23.5	20.4	14.7	14.7
14	15.0	16.1	16.5	17.5	19.3	23.5	23.5	22.0	22.0	19.9	17.1	12.6
15	15.5	16.0	16.2	19.0	18.8	21.2	21.2	22.0	21.8	20.3	16.8	12.0
16	14.2	16.5	16.2	18.5	18.8	21.0	21.0	22.0	21.6	20.3	17.0	12.0
17	15.0	14.5	15.5	18.0	18.5	23.0	23.0		22.8	20.2	16.5	12.8
18	15.0	14.0	16.5	18.7	18.7	21.0	21.0		23.5	20.0	16.7	12.8
19	15.0	13.5	16.0	17.8	19.6	21.0	21.0		23.2	19.4	16.7	13.5
20	15.0	14.0	16.0	15.0	19.1	21.0	21.0		23.0	19.0	16.4	12.8
21	16.0	14.5	16.0	15.0	19.0	19.5	21.0	20.8	23.0	19.4	16.0	13.4
22	16.0	14.5	17.0	15.0	19.5	20.5	21.8		23.0	19.0	16.0	13.1
23		15.0	16.5	16.0	19.0	21.9	21.9	21.8	22.5	18.6	16.5	13.6
24	16.5	14.5	16.0	16.0	20.4	20.0	21.5	21.8	22.5	18.4	15.5	13.8
25	15.5	15.0	17.0	17.0	20.3	18.5	20.0	21.6	22.5	18.4	15.3	13.8
26	16.0	15.0	17.0	15.0	19.6	18.5	20.5	22.7	21.5	18.4	12.8	12.8
27	16.0	16.0	17.0	14.0	21.0	18.5	22.8	22.8	21.5	18.9	13.3	13.3
28	15.0	14.2	18.0	14.0	20.8	20.5	20.3	22.5	20.9	18.9	13.8	13.8
29	15.0	18.0	18.0	15.5	19.8	21.0	21.5	21.5	20.9	18.9	14.3	14.3
30	15.0	17.0	17.0	15.5	20.0	21.7	20.4	21.5	19.7	18.6	14.2	14.2
31	16.0			20.4	20.4		22.5	22.3		18.5	13.8	13.8
1-10 MEANS	15.47	16.00	15.72	16.94	17.62	20.12	21.26	22.75	22.76	20.33	17.71	15.27
SAMPLE SIZE	4	10	10	10	9	10	9	6	10	10	10	6
11-20 MEANS	14.96	15.06	16.10	17.94	19.18	20.47	21.94	22.36	22.84	20.06	16.82	13.56
SAMPLE SIZE	7	10	9	9	9	3	9	5	10	10	9	10
21-31 MEANS	15.70	14.84	17.06	15.30	19.98	19.86	21.10	21.94	21.52	18.73	15.82	13.61
SAMPLE SIZE	10	8	8	10	11	9	9	9	5	11	4	10
MONTHLY MEANS	15.41	15.33	16.24	16.69	19.00	20.06	21.43	22.29	22.54	19.67	17.03	13.97
SAMPLE SIZE	21	28	27	29	29	22	27	20	25	31	23	26
MAXIMUM VALUE	16.8	17.0	18.0	19.0	21.0	21.7	23.5	23.5	24.0	20.8	18.3	16.5
MINIMUM VALUE	14.2	13.5	14.8	14.0	16.5	18.5	20.0	20.8	19.7	18.4	15.3	12.0
RANGE	2.6	3.5	3.2	5.0	4.5	3.2	3.5	2.7	4.3	2.4	3.0	4.5
STANDARD DEV.	0.70	0.87	0.75	1.43	1.21	0.80	1.01	0.77	0.98	0.81	0.80	1.13
ANNUAL MIN	12.0			ANNUAL MEAN		18.31		ANNUAL MAX		24.0		

SALINITY

SAN CLEMENTE

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	33.34	33.37	33.78	33.50		33.68	33.68	33.83	33.89	33.56	33.67	33.43
2	33.37	33.41	33.51	33.52	33.57	33.66	33.66	34.01	33.63	33.52	33.60	33.45
3	33.40	33.37	33.49	33.37	33.55	34.06	33.65	33.72	34.06	33.56	33.60	33.17
4	33.39	33.38	33.48	33.51	33.49	33.89	33.68	33.70	33.86	33.59	33.54	33.49
5	33.33	33.42	33.52	33.58	33.56	33.89	33.64	33.83	33.59	33.76	33.54	
6	33.29	33.40	33.52	33.53	33.56	33.87	33.62	33.87	33.63	33.60	33.54	33.39
7	33.32	33.60	33.52	33.45	33.54	33.60	33.63	33.79	33.64	33.56	33.55	33.44
8	33.30	33.41	33.51	33.45	33.55	33.81	33.61	33.82	33.66	33.54	33.73	33.31
9	33.31	33.39	33.60	33.52	33.55	34.04	33.64	33.85	33.64	33.54	33.49	33.35
10	33.28	33.33	33.51	33.49	33.62	33.69	33.64	33.75	33.63	33.65	33.70	33.29
11	33.29	33.40	33.51	33.36	33.65	34.15	33.66	33.75	33.60	33.62	33.51	33.39
12	33.35	33.44	33.54	33.44	33.67		34.04	33.76	33.62	33.62	33.51	33.37
13	33.36	33.39	33.39	33.56	33.60	33.91	33.68	33.87	33.65	33.56		33.43
14	33.38	33.45	33.41	33.50	33.60	33.79	33.62	33.92	33.67	33.58	33.53	33.61
15	33.37	33.40	33.47	33.42	33.57	33.84	33.56	33.85	33.63	33.57	33.47	33.56
16	33.62	33.39	33.45	33.54	33.62	33.72	33.59	33.69	33.59	33.64	33.48	33.49
17	33.25	33.45	33.47	33.36	33.71	33.69	33.63	33.74	33.62	33.61	33.45	33.46
18	33.33	33.44	33.51	33.08	33.57	33.72	33.61	33.74	33.81	33.60	33.47	33.35
19	33.33	33.44	33.51	33.08	33.57	33.72	33.61	33.73	33.83	33.59	33.51	33.21
20	33.33	33.54	33.46	33.41	33.70	33.69	33.57	33.73	33.63	33.63	33.46	33.27
21	33.35	33.49	33.46	33.54	33.60	33.97	33.62	33.89	33.62	33.67		33.23
22	33.36	33.46	33.50	33.46	33.68	33.71	33.68	33.68	33.62	33.71	33.38	33.37
23	33.35	33.43	33.47	33.41	33.69	33.83	33.74	33.92	33.68	33.71	33.34	33.42
24	33.41	33.46	33.52	33.49	33.65	33.87	33.66	33.68	33.65	33.70	33.32	33.55
25	33.35	33.46	33.46	33.21	33.59	33.66	33.65	34.05	33.64	33.65	33.37	
26	33.35	33.45	33.42	33.49	33.66	33.62	33.74	33.73	33.61	33.65	33.37	33.35
27	33.40	33.48	33.49	33.52	33.64	33.59	33.66	33.82	33.57	33.68	33.41	33.41
28	33.53		33.41	33.40	33.66	33.65	33.66	33.71	33.57	33.71	33.58	33.41
29	33.46		33.45		33.60	33.80	33.67	33.61	33.53	33.76	33.34	33.33
30	33.45		33.39	33.43	33.60	33.69	33.66	33.77	33.49	33.68	33.34	33.22
31	33.41				33.62	33.67	33.67	33.84	33.49	33.71		33.36
1-10 MEANS SAMPLE SIZE	33.33 10	33.41 10	33.54 10	33.50 9	33.55 9	33.81 10	33.64 10	33.82 10	33.72 10	33.59 10	33.60 10	33.37 9
11-20 MEANS SAMPLE SIZE	33.36 10	33.43 10	33.47 10	33.40 10	33.65 10	33.83 9	33.65 10	33.78 9	33.67 10	33.59 10	33.49 9	33.42 10
21-31 MEANS SAMPLE SIZE	33.40 11	33.46 7	33.46 10	33.44 9	33.64 11	33.74 10	33.67 9	33.79 11	33.60 9	33.68 11	33.37 8	33.35 10
MONTHLY MEANS SAMPLE SIZE	33.37 31	33.43 27	33.49 30	33.45 28	33.62 30	33.79 29	33.66 29	33.80 30	33.67 29	33.62 31	33.50 27	33.38 29
MAXIMUM VALUE	33.62	33.60	33.78	33.58	33.83	34.15	34.04	34.05	34.06	33.76	33.73	33.61
MINIMUM VALUE	33.25	33.33	33.39	33.08	33.49	33.59	33.56	33.61	33.49	33.49	33.12	33.17
RANGE	0.37	0.27	0.39	0.50	0.34	0.56	0.48	0.44	0.57	0.27	0.61	0.44
STANDARD DEV.	0.08	0.07	0.08	0.11	0.07	0.15	0.09	0.10	0.12	0.08	0.13	0.11
ANNUAL MIN		33.08				33.56			ANNUAL MAX		34.15	
ANNUAL MEAN												

SCRIPPS PIER SURFACE TEMPERATURE

DAYS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15.9	15.6	14.4	15.5	15.8	19.9	21.7	23.5	22.3	21.6	18.0	15.5
2	15.9	15.7	14.5	16.0	16.4	20.3	22.0	22.6	22.9	20.7	18.0	15.3
3	15.7	15.5	14.8	16.2	16.8	20.3	22.0	21.5	23.8	21.0	18.1	15.0
4	15.9	15.7	14.8	16.4	16.7	20.3	21.9	22.2	24.3	21.0	18.0	15.1
5	15.8	15.6	14.5	16.2	17.2	20.1	22.0	22.4	24.3	20.3	17.2	15.0
6	15.7	15.7	14.2	16.2	17.2	19.9	21.4	23.6	23.8	20.1	18.2	15.1
7	15.7	15.8	14.8	16.1	17.7	20.2	21.2	22.4	23.7	20.9	17.8	15.2
8	15.7	15.6	15.3	16.4	16.8	20.1	22.5	22.9	23.8	19.4	17.7	15.4
9	15.7	15.5	15.7	16.5	18.2	20.1	22.3	23.0	23.8	19.3	17.9	14.7
10	15.7	15.6	15.2	16.6	18.4	20.3	22.1	21.9	23.4	19.9	17.2	15.0
11	15.5	14.6	15.2	16.9	18.4	20.0	23.6	22.4	23.2	20.1	16.8	14.9
12	14.8	15.5	15.0	16.7	16.7	19.8	21.5	22.3	22.6	19.8	16.8	15.1
13	15.1	15.5	15.6	17.9	18.5	19.7	20.2	23.0	22.7	20.3	17.5	14.2
14	15.5	15.6	15.9	17.2	18.0	19.7	19.0	22.0	22.6	19.6	17.6	13.7
15	15.4	15.3	15.6	17.5	17.9	19.8	20.3	23.2	22.9	20.2	17.1	12.6
16	14.9	15.3	15.5	17.0	16.5	20.6	20.9	24.4	23.6	20.1	16.8	13.2
17	14.9	13.7	15.3	17.6	17.8	20.8	21.7	24.1	24.0	20.2	16.8	13.2
18	14.8	14.0	15.1	17.2	19.4	20.5	23.2	23.1	24.0	19.7	16.7	13.7
19	14.8	14.9	15.2	17.4	19.8	20.6	22.4	24.2	25.0	19.6	16.8	13.9
20	14.9	14.1	15.6	16.1	19.2	20.6	23.6	24.0	24.3	19.7	16.3	14.1
21	14.5	14.0	15.4	15.3	19.1	21.1	22.8	23.9	23.5	18.9	16.4	14.1
22	14.9	13.5	15.8	15.9	18.9	19.5	22.7	23.6	22.8	19.7	16.1	14.0
23	14.8	13.8	16.5	15.4	19.3	21.3	22.6	23.5	22.8	18.3	15.6	13.1
24	15.0	13.9	16.5	15.5	19.1	21.1	22.8	23.2	22.6	18.9	15.8	13.5
25	15.0	14.2	16.4	15.7	19.3	20.5	23.4	23.3	22.5	18.2	15.7	13.8
26	14.9	14.5	16.0	15.2	19.1	20.9	21.6	23.5	21.9	18.2	15.3	13.7
27	14.7	13.9	16.3	14.2	20.0	21.0	23.0	23.7	22.3	18.7	15.6	13.8
28	14.8	13.8	16.4	14.7	20.0	21.9	22.7	24.1	22.2	18.1	15.2	13.7
29	14.7	13.9	16.2	15.3	19.7	21.5	23.6	23.0	22.4	18.1	15.1	14.1
30	15.2	15.5	16.6	15.5	19.4	21.7	23.8	23.8	21.6	18.1	15.2	14.1
31	14.9	16.6	16.6	19.9	19.9	23.3	23.3	23.6	18.0	18.0	15.2	14.3
1-10 MEANS	15.77	15.63	14.82	16.21	17.12	20.15	21.91	22.60	23.59	20.48	17.81	15.13
SAMPLE SIZE	10	10	10	10	10	10	10	10	9	10	10	10
11-20 MEANS	15.06	14.85	15.43	17.15	18.22	20.21	21.64	23.27	23.53	19.93	16.92	13.86
SAMPLE SIZE	10	10	10	10	10	10	10	10	10	10	10	10
21-31 MEANS	14.85	13.94	16.25	15.27	19.44	21.05	22.94	23.56	22.46	18.47	15.60	13.84
SAMPLE SIZE	11	9	11	10	11	10	11	11	10	11	10	11
MONTHLY MEANS	15.22	14.84	15.52	16.21	18.30	20.47	22.19	23.16	23.18	19.59	16.78	14.26
SAMPLE SIZE	31	29	31	30	31	30	31	31	29	31	30	31
MAXIMUM VALUE	15.9	15.8	16.6	17.9	20.0	21.9	23.8	24.4	25.0	21.6	18.2	15.5
MINIMUM VALUE	14.5	13.5	14.2	14.2	15.8	19.5	19.0	21.5	21.6	18.0	15.1	12.6
RANGE	1.4	2.3	2.4	3.7	4.2	2.4	4.8	2.9	3.4	3.6	3.1	2.9
STANDARD DEV.	0.45	0.82	0.70	0.89	1.24	0.62	1.11	0.75	0.85	1.04	1.00	0.78
ANNUAL MIN	12.6					12.31						
ANNUAL MEAN												
ANNUAL MAX												25.0

