UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 7805
13 May - 11 June 1978

CalCOFI Cruise 7807
21 June - 17 July 1978

CalCOFI Cruise 7808
31 July - 27 August 1978

CRUCERO JD-7805
13 de mayo - 11 de junio 1978

CRUCERO AH-7807, JD-7807
21 de junio - 17 de julio 1978

CRUCERO AH-7808, JD-7808
31 de julio - 27 de augosto 1978

Sponsored by

Marine Research Committee

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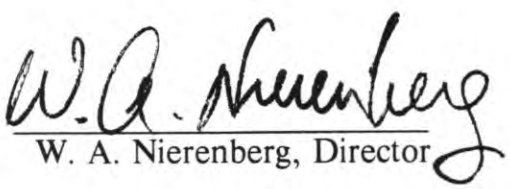

W. A. Nierenberg, Director

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INTRODUCTION

The data in this report were collected during Cruises 7805*, 7807, and 7808 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service, and the RV *Alejandro de Humboldt* of the Instituto Nacional de Pesca of the Mexican Federal Government. In addition, tritium data from Cruises 7801, 7803, 7804 and 7808 are included in this report. The report preceding this one in the series was SIO Ref. 82-21, which included data for 1977 and 1978.

These data were collected and processed by personnel of the Data Collection and Processing Group, Marine Life Research Group (DCPG**, MLRG) of Scripps Institution of Oceanography, the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), and the Instituto Nacional de Pesca (INP), various branches.

STANDARD PROCEDURES

Hydrographic Cast Data

Most of the hydrographic casts consisted of 18 Nansen bottles. At most stations the maximum sampling depth was 500 meters, bottom depth permitting. Temperature, salinity, oxygen and nutrients were determined for all depths on each station.

At selected stations 10-meter bottles were cast with samples being taken for temperature, salinity, oxygen and nutrients.

In general, paired protected reversing thermometers were used to determine temperatures which were recorded in hundredths of a Celsius degree. Unless otherwise noted, temperatures determined using *unprotected* (pressure) thermometers or surface "bucket" thermometers were

* The first two digits of the cruise designator represent the year and the second two digits the month of the cruise.

** Now the Physical and Chemical Oceanographic Data Facility (PACODF).

INTRODUCCION

Los datos de este informe fueron obtenidos durante los cruceros 7805*, 7807, y 7808 realizados dentro del programa de cooperación cientifico-técnico entre CalCOFI (California Cooperative Oceanic Fisheries Investigations) y el Instituto Nacional de Pesca del Departamento de Pesca** de México, a bordo del BI *David Starr Jordan*, del National Maarine Fisheries Service de los Estados Unidos y el BI *Alejandro de Humboldt*, del Departamento de Pesca, México. Además los datos de tritio de los cruceros 7801, 7803, 7804 y 7808 se incluyen en este reporte. El informe precendente a éste en la serie era el SIO Ref. 82-21, que incluye datos para 1977 y 1978.

Estos datos fueron colectados y procesados por el personal del Data Collection and Processing Group del Marine Life Research Group (DCPG***, MLRG) del Scripps Institution of Oceanography, y por el personal del Southwest Fisheries Center del National Marine Fisheries Service (NMFS), y del Instituto Nacional de la Pesca (INP) del Departamento de Pesca.

METODOS

Obtención de Datos Hidrográficos

El mayor número de lances realizados se efectuaron con 18 botellas, muestreándose la mayoría de las estaciones hasta una profundidad máxima de 500 metros, cuando la profundidad lo permitía. Se determinó en todas las profundidades de cada estación temperatura, salinidad, oxígeno y nutrientes. Se seleccionaron también estaciones para el muestreo a 10 metros de profundidad, para la toma de estos datos.

Para determinar temperatura se utilizaron por lo general termómetros de inversión dobles, registrándose ésta en grados centígrados, con aproximación centesímos. La temperatura superficial se determinó empleando termómetros de cubeta no pretegidos, registrándola en décimas

* Los primeros dos dígitos representan el año y los dos que siguen, el mes en que se efectuó el crucero.

** Ahora llamado la Secretaría de Pesca.

*** Ahora llamado Physical and Chemical Oceanographic Data Facility (PACODF).

recorded to tenths of a degree. Sample bottles used below 100 meters were equipped with unprotected thermometers for depth determination.

Salinity values on both ships for all cruises included were determined using models 6220 and 6230 Hytech or Plessey (now Grundy Environmental Systems, Inc.) inductive salinometers, an Autolab inductive salinometer, and a Guildline model 8400 Autosal inductive salinometer. Except for a few major malfunctions when salinometers could no longer be used, problems consisted of bubbles in the cells, excessive drift (samples were rerun) and stirring motor breakdowns. All samples were analyzed at sea.

The salinity values were recorded and reported to three decimal places, provided accepted standards were met. If only one determination per sample was obtained, or there was doubt concerning the accuracy of the analytical results, the salinities were reported to two decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971).

Phosphate, silicate, nitrite and nitrate were determined using an automated analyzer consisting of the following components:

Sampler: A.H. Thomas Model 253 Little Dipper with a 20-position sampling rack.

Proportioning Pump: Technicon® Auto-Analyzer® II Proportioning Pump with air bar.

Detectors: Hitachi Model 100-10 spectrophotometers with flow-through cell adaptors.

Recorders: Hitachi Model 056 two-pen recorders with felt tip pens.

The procedures used are basically those described in Atlas *et al.* (1971). There were very few problems associated with the silicate and nitrate analyses. In general, these data were processed in a routine manner. Nitrites tend to vary between poor and very poor after the first week of each cruise, depending on whether or not contamina-

de grados. Para profundidades mayores de 100 metros se equiparon con termómetros no protegidos.

La salinidad fue determinada utilizando salinómetros de inducción modelos 6220 y 6230 Hytech o Plessey (ahora Grundy Environmental Systems, Inc.), un salinómetro inducción Autolab, y un salinómetro de inducción Autosal modelo 8400. Excepto por algunos malos funcionamientos en que ya se podían utilizar los salinómetros, problemas consistían de la formación de burbujas en las celdas, excesivas partículas y mal funcionamiento del motor (estos muestreos se hicieron de nuevo). Todas las muestras fueron analizadas a bordo.

Los valores de salinidad se registraron y se reportaron en milésimas de aproximación, de acuerdo con el procedimiento estándar aceptado. Cuando sólo se realizó una determinación por muestra ó había una duda respecto a la confiabilidad de los datos, la salinidad se reportpo en centésimos.

El oxígeno disuelto fue determinado por el método Winkler modificado por Carpenter (1965) usando el equipo y procedimientos descritas por Anderson (1971).

Fosfato, silicato, nitrito y nitrato se determinaron con la ayuda del analizador automático con las siguientes especificaciones:

Muestredor: A.H. Thomas Modelo 253 Little Dipper con una roseta muestreadora con 20 posiciones.

Bomba abastecedora: Technicon® Auto-Analyzer® II Bomba Abastecedora con barra de aire.

Sensores: Hitachi Modelo 100-10 espectrofotómetros con adaptadores que permiten el flujo libre por las celdas.

Registradores: Hitachi Modelo 056 dos registradores que consisten de plumas con puntas de fieltro.

Los procedimientos usados son básicamente los descritos en Atlas *et al.* (1971). Los silicatos y nitratos fueron procesados con poca dificultad y de

tion occurred when the sample bottles were not routinely cleaned with hydrochloric acid. When contamination was evident, the typically "high" nitrite values were omitted for the station and the tabulated nitrate value is nitrate plus nitrite. This tabulated value is probably closer to the correct value than had a correction with the "high" nitrite been made.

Phosphate data are less reliable than the other measurements due to a number of problems including: poor sensitivity, poorly defined peaks, a serious memory effect and a very slow response time. Temperature control at the elevated temperature required for the analysis was also a problem at times. The initially calculated phosphate values were often unreasonable. Adjustments were made based on two factors: one, expedition phosphate data show that there is very little phosphate variation at a depth of 500 meters (approx. 2.8 to 3.1 μg-at/L) and two, a plot of phosphate vs. nitrate is essentially linear and constant, and the cruise nitrates are believed to be acceptable. The phosphate factors and baselines were adjusted to bring the phosphate results into reasonable agreement with the historical 500-m phosphate range and the phosphate-nitrate relationship.

The observed data have been evaluated using standard DCPG techniques (Klein, 1973). This involves consideration of their variation as functions of density or depth and their relations to each other, and comparison with concurrent bathythermogram (BT or XBT) or CTDO observations and with previous or adjacent observations.

Chlorophyll samples were collected from the first 12 levels of 18 bottle casts or all levels of shallow casts.

Chlorophyll samples were analyzed on all cruises by fluorometer using the technique of Owen (1974).

Secchi disk observations were made on most stations occurring between 0900 and 1600 Pacific

manera rutinaria. Las muestras para determinar nitritos fueron contaminados en varios de los cruceros. Los nitritos tendían a variarse, siendo entre malos y muy malos, después de las primeras semanas de cada crucero, dependiendo de si la contaminación ocurrío cuando las botellas muestreadoras no fueron limpiadas rutinamente con ácido hidroclórico. Cuando la contaminación era muy evidente, los valores típicamente "altos" de nitrito eran suprimidos para aquella estción y el valor tabulado de nitrato es probablemente más cercano al valor correcto que si le hubiera hecho una corrección con el valor "alto" del nitrito.

Los datos fosfatos son menos confiables que las otras medidas debido a una serie de problemas que incluyen lo siguiente: mala sensibilidad, picos mal definidos, un serio efecto de memoria, y un lento tiempo de respuesta. El mantenimiento de la temperatura a la temperatura elevada requerida por el análisis también resultó roblemático a veces. Los valores de fosfatos que se calculaban inicialmente eran a menudo irrazonables. Se hicieron ajustes, basándose en dos factores: datos de fosfato de expedición muestran que hay muy poca variación de fosfato a una profundidad de 500 metros (approx. 2.8 a 3.1 μg-at/L) y, un diagrama de fosfato contra nitrato es escencialmente linear y constante, y se cree que los nitratos de los cruceros son aceptables. Los factores de fosfato y las líneas de base fueron ajustados para que estuvieran los resultados de fosfato de acuerdo con el rango fosfático histórico de 500 metros y la relación fosfato-nitrato.

Los datos observados fueron evaluados usando las técnicas estándares del Data Collection and Processing Group (DCPG) (Klein, 1973). Estas técnicas consideran sus variaciones en función de la densidad ó profundidad y las relaciones de una con otra y en comparación con batitermogramas simultáneos (BT ó XBT) ó con CTDO, así como con observaciones previas.

Las muestras fueron colectadas de los primeros 12 niveles de un lance de 18 botellas ó de todos los niveles en los muestreos realizados a poca profundidad.

Las muestras de clorofila en todos los cruceros se analizaron por fluorometría utilizando la tecnica de Owen (1974).

Standard Time (PST, +8) for all cruises. These data are tabulated following the chlorophyll data.

Tritium samples were collected at selected stations along CalCOFI lines 63, 77, 83 and 93 (or 97) spanning the period from January through August, 1978. All samples were drawn into gallon glass bottles filled with argon and returned to the laboratory for the tritium analysis by the method outlined by Bainbridge (1965). All samples were analyzed by personnel at the Mount Soledad Tritium Laboratory. The results which are tabulated at the end of this report give the tritium concentrations and one sigma counting error.

Data collected with an *in situ* Conductivity/Temperature/Depth/Oxygen recorder (CTDO) during the cruises in this report will appear in a separate report.

Starting with Cruise 7712, the standard CalCOFI oblique tow, 300 meters of wire out, depth permitting, was made with an open Bongo frame with a 505 μ net on the starboard side and a 333 μ net on the port side. Starboard samples were preserved in formalin; port samples were preserved in an alcohol solution for otolith studies.

Periodically, a heretofore standard 1-m CalCOFI tow was taken in order to extend the comparisons between the Bongo and 1-m net tows made during the 1975 CalCOFI cruises.

Manta (neuston) surface tows were made on all net-tow stations, weather conditions permitting, and on selected stations vertical phytoplankton tows were made to a depth of 100 m (depth permitting).

TABULATED DATA

The time for bottle casts is reported in Greenwich Mean Time. It is the time of the messenger release. Secchi disk observations are reported in local time (PST).

When more than one cast was lowered on a station, the messenger times for the first and last casts are given. Multiple casts, excluding the surface casts, are indicated by a footnote letter following the observed depth.

Las observaciones con disco Secchi se efectuaron en todas las estaciones realizadas entre las 0900 y las 1600 horas tiempo del Pacífico (PST) para todos los cruceros. Estos datos son tabulados por separado y siguen a los datos de clorofila.

Muestras de tritio fueron colectadas en ciertas estaciones de las líneas CalCOFI 63, 77, 83 y 93 (ó 97) durante el periódo de Enero 1978 a Agosto del mismo año. Todas las muestras se pusieron en botellas de vidrio de un galon conteniendo argon y se regresaron al laboratorio para el análisis del tritio utilizando la técnica descrita por Bainbridge (1965). Todas las muestras se analizaron en el laboratorio de tritio de Mt. Soledad. Los resultados que se tabulan al final de este informe dan las concentraciones del tritio y la desviación estándar.

Los datos colectados con una unidad de conductividad/temperatura/profundidad/oxigeno (CTDO) *in situ* durante los cruceros que aquí se reportan aparecerán en un reporte por separado.

Inciándose con el crucero 7712 se hizo un arrastre oblicuo estándar de CalCOFI, cuando ésto fuera permitido por una profundidad equivalente a un filar de 300 metros de cable. Se hizo con un marco abierto Bongo con una red de 505μ en el lado estribor y una red de 333μ en el lado babor. Las muestras del lado babor fueron preservados en una solución de alcohol para estudios de otolitos.

Periódicamente los arrastres CalCOFI de 1 metro que eran estándares hasta la fecha se hicieron para poder extender las comparaciones que se hicieron durante los cruceros CalCOFI de 1975.

También se hicieron arrastres superficiales Manta (neuston) y en estaciones selectas se hicieron arrastres verticales de fitoplancton hasta una profundidad de 100 metros (si la profundidad lo permitía).

DATOS TABULADOS

El tiempo registrado para los lances de botella fue el tiempo del meridiano de Greenwich. Es la hora del envío del mensajero. Las observaciones del disco de Secchi son registradas en tiempo local (hora del Pacífico).

Bottom depths, determined acoustically, have been corrected using Matthews' (1939) tables and are reported in meters. On the *Humboldt*, the echo sounding units had a rated maximum sounding range of 1000 meters. Depths greater than this are from the navigational charts and, after conversion to meters, have been listed to the nearest five meters. The weather and dominant waves are coded using the National Oceanographic Data Center (NODC) method.

Data for all cruises presented in this report were obtained by bottle casts or from separate lowerings to obtain the Secchi disk data. The data appear in two forms:

1. Data from the sample bottle casts are tabulated with the observed levels of depth on the left of a page, and standard depth values of temperature, salinity and oxygen interpolated from these observations on the right. Computed values of thermosteric anomaly (DT) are included with the observed levels and computed values of sigma-t (SIGT), thermosteric anomaly (DT) and geopotential anomaly (DD) are included with the interpolated levels.

2. Chlorophyll, phaeophytin, Secchi disk, and tritium data appear as separate sections.

With the addition of chlorophyll-a, phaeophytin, Secchi disk observations and tritium, the same parameters have been tabulated in this report as in previous reports. The decimal has been omitted from the CalCOFI station number so station 90.65 appears in the tabulated data as 90065. [The CalCOFI station designations have been in use for over 20 years. The first part specifies a line normal to the general trend of the coast line (CalCOFI line). The second part specifies a station position relative to the coast on the CalCOFI line.] The column headings are to be interpreted as follows:

Cuando se realizó más de un lance por estación se anota la hora del envío del primer mensajero y del último. Multiples lances, excluyendo a lances superficiales, se señalan con una letra al calce después de la profundidad observada.

Cuando la profundidad del fondo se determinó acústicamente, fue corregida utilizando las tablas de Matthews (1939), registrándola en metros. En el BI *Humboldt*, las profundidades mayores de 1000 metros no fueron registradas por la ecosonda, así que éstas se obtuvieron de cartas de navegación y después de ser convertidas a metros, fueron listadas con aproximación a cinco metros. El tiempo y oleaje dominante se codificaron usando el método del National Oceanographic Data Center (NODC).

Los datos de todos los cruceros presentados en este informe se obtuvieron de lances con botellas ó de bajadas separadas para obtener los datos del disco Secchi. Estos datos se registran en dos formas:

1. Los datos provenientes de lances con botellas y tabulados en niveles de profundidad se ubicaron al margen izquierdo de la página y los valores de profundidades estándares correspondientes a temperatura, salinidad, oxígeno, interpolados de estas observaciones, al lado derecho. Valores computados de la anomalía termostérica (DT) se incluyen con los niveles observados, y los valores computados de sigma-t (SIGT), anomalía termostérica (DT), y anomalía geopotencial (DD) se incluyen con los niveles interpolados.

2. Clorofila, feofitina, datos del disco Secchi, y tritio aparecen en una sección separada.

Con la adición de clorofila-a, feofitina, observaciones del disco Secchi, y tritio, los mismos parámetros son tabulados en este informe como en reportes previos. El punto decimal de las estaciones de CalCOFI se omitió, así que los datos de la estación número 90.65 se registran como 90065. [Las designaciones de estaciones CalCOFI han estado en uso durante más de veinte años. La

Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved Oxygen	ml/L
PO4	"Reactive" inorganic phosphate-phosphorous	μg-at/L
SIO3	"Reactive" inorganic silicate-silicon	μg-at/L
NO2	"Reactive" nitrite-nitrogen	μg-at/L
NO3	"Reactive" nitrate-nitrogen	μg-at/L
DT	δ_T = Thermosteric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)\ 10^3$ where $\rho_{s,t,0}$ is the density the parcel would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dyn. meters
CHL.A	Chlorophyll-a	mg/m^3
PHAEO	Phaeophytin	mg/m^3
TU ± σTU	Tritium (± sigma counting error)	TU

Z	Profundidad	Metros
T	Temperatura	°C
S	Salinidad	‰
O2	Oxeno	ml/L
PO4	Fosfato-fósforo inorgánico "reactivo"	μg-at/L
SIO3	Silicato-Silicio inorgánico "reactivo"	μg-at/L
NO2	Nitrito-nitrógeno "reactivo"	μg-at/L
NO3	Nitrato-nitrógeno "reactivo"	μg-at/L
DT	δ_T = Anomalía termostérica	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)\ 10^3$ donde $\rho_{s,t,0}$ es la densidad que tendría la parcela si ésta se moviera isotérmicamente hasta la superficie del mar.	g/L
DD	Anomalía geopotencial, referida a la superficie del mar.	metros din.
CHL.A	Clorofila-a	mg/m^3
PHAEO	Feofitina	mg/m^3
TU ± σTU	Tritium (± error de conteo del sigma)	TU

primera parte especifica una línea normal a la tendencia general de la costa (Línea CalCOFI). La segunda parte especifica la posición de una estación relativo a la costa en la linea CalCOFI.] Los símbolos del encabezado de las columnas se deben interpretar de la siguiente manera:

Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved Oxygen	ml/L
PO4	"Reactive" inorganic phosphate-phosphorous	μg-at/L
SIO3	"Reactive" inorganic silicate-silicon	μg-at/L
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DD	Geopotential anomaly, referred to the sea surface.	dyn. meters
CHL.A	Chlorophyll-a	mg/m^3
PHAEO	Phaeophytin	mg/m^3
TU ± σTU	Tritium (± sigma counting error)	TU

Z	Profundidad	Metros
T	Temperatura	°C
S	Salinidad	‰
O2	Oxeno	ml/L
PO4	Fosfato-fósforo inorgánico "reactivo"	μg-at/L
SIO3	Silicato-Silicio inorgánico "reactivo"	μg-at/L
NO2	Nitrito-nitrógeno "reactivo"	μg-at/L
NO3	Nitrato-nitrógeno "reactivo"	μg-at/L
DT	δ_T = Anomalía termostérica	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)\ 10^3$ donde $\rho_{s,t,0}$ es la densidad que tendría la parcela si ésta se moviera isotérmicamente hasta la superficie del mar.	g/L
DD	Anomalía geopotencial, referida a la superficie del mar.	metros din.
CHL.A	Clorofila-a	mg/m^3
PHAEO	Feofitina	mg/m^3
TU ± σTU	Tritium (± error de conteo del sigma)	TU

FOOTNOTES

Data which appear to be in error without obvious reason are reported, but flagged uncertain with a U. Such data were not used in the determination of data at standard depths. Footnotes are used to indicate data which have required special processing.

NOTAS AL CALCE

Los datos que aparecen con errores sin explicación obvia son reportados, pero se les señala con una U. Estos datos no fueron utilizados en la determinación de datos a profundidades estándares. Se utilizan las notas al calce para indicar los datos que han requerido un procesamiento especial.

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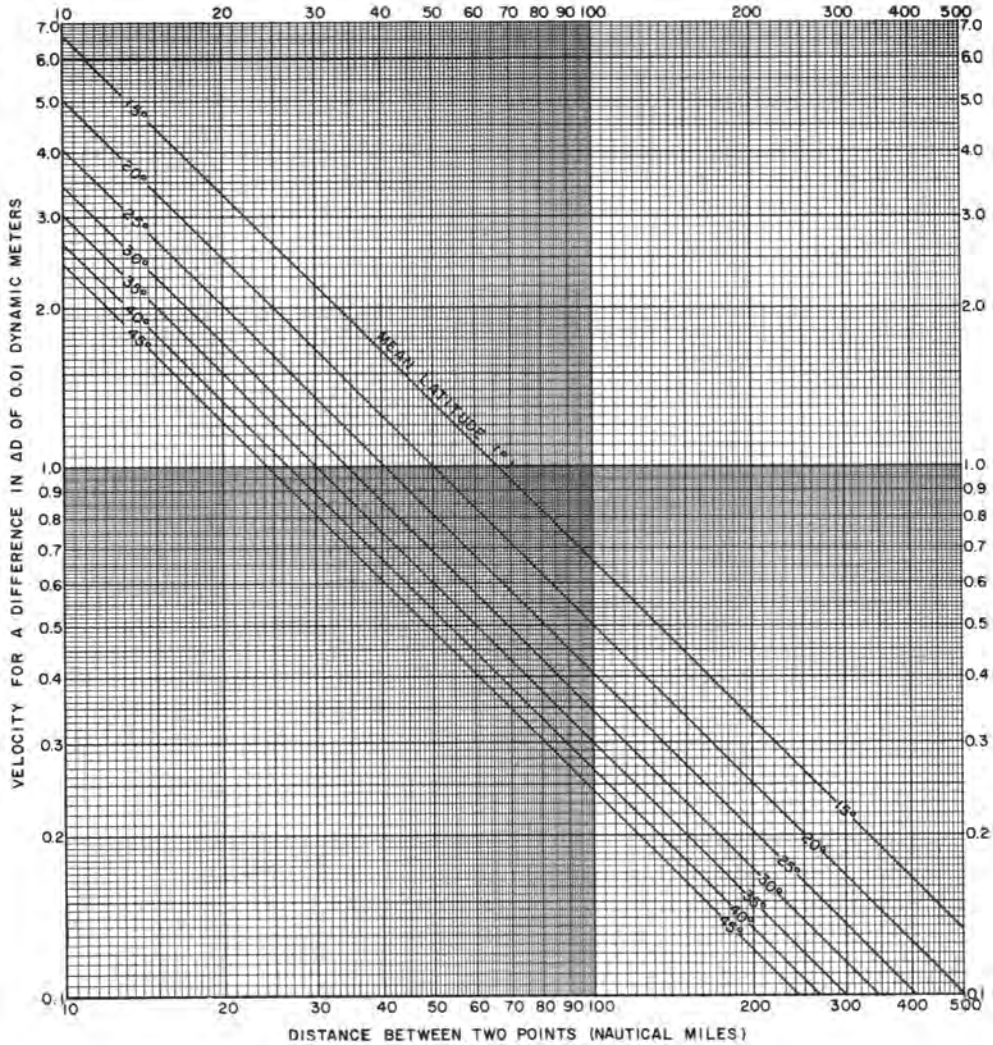

VELOCITY OF GEOSTROPHIC FLOW
(NAUTICAL MILES PER DAY)

cm/sec	0	1	2	3	4	5	6	7	8	9
0	KNOTS / NM/DAY	0.02 / 0.47	0.04 / 0.93	0.06 / 1.40	0.08 / 1.86	0.10 / 2.33	0.12 / 2.80	0.14 / 3.26	0.16 / 3.73	0.17 / 4.20
10	0.19 / 4.66	0.21 / 5.13	0.23 / 5.59	0.25 / 6.06	0.27 / 6.53	0.29 / 6.99	0.31 / 7.46	0.33 / 7.93	0.35 / 8.39	0.37 / 8.86
20	0.39 / 9.32	0.41 / 9.79	0.43 / 10.26	0.45 / 10.72	0.47 / 11.19	0.49 / 11.66	0.51 / 12.12	0.52 / 12.59	0.54 / 13.05	0.56 / 13.52
30	0.58 / 13.99	0.60 / 14.45	0.62 / 14.92	0.64 / 15.38	0.66 / 15.85	0.68 / 16.32	0.70 / 16.78	0.72 / 17.25	0.74 / 17.72	0.76 / 18.18
40	0.78 / 18.65	0.80 / 19.11	0.82 / 19.58	0.84 / 20.05	0.85 / 20.51	0.87 / 20.98	0.89 / 21.45	0.91 / 21.91	0.93 / 22.38	0.95 / 22.84
50	0.97 / 23.31	0.99 / 23.78	1.01 / 24.24	1.03 / 24.71	1.05 / 25.17	1.07 / 25.64	1.09 / 26.11	1.11 / 26.57	1.13 / 27.04	1.15 / 27.51
60	1.17 / 27.98	1.18 / 28.44	1.20 / 28.90	1.22 / 29.37	1.24 / 29.84	1.26 / 30.30	1.28 / 30.77	1.30 / 31.24	1.32 / 31.70	1.34 / 32.17
70	1.36 / 32.63	1.38 / 33.10	1.40 / 33.57	1.42 / 34.03	1.44 / 34.50	1.46 / 34.96	1.48 / 35.43	1.50 / 35.90	1.52 / 36.36	1.53 / 36.83
80	1.55 / 37.30	1.57 / 37.76	1.59 / 38.23	1.61 / 38.69	1.63 / 39.16	1.65 / 39.63	1.67 / 40.09	1.69 / 40.56	1.71 / 41.03	1.73 / 41.49
90	1.75 / 41.96	1.77 / 42.42	1.79 / 42.89	1.81 / 43.36	1.83 / 43.82	1.85 / 44.29	1.86 / 44.76	1.88 / 45.22	1.90 / 45.69	1.92 / 46.15
100	1.94 / 46.62	1.96 / 47.09	1.98 / 47.55	2.00 / 48.02	2.02 / 48.48	2.04 / 48.95	2.06 / 49.42	2.08 / 49.88	2.10 / 50.35	2.12 / 50.82

CONVERSION TABLE
(CENTIMETERS / SECOND – KNOTS – NAUTICAL MILES / DAY)

1 cm/sec = 0.019 kts = 0.466 NAUTICAL MILES / DAY
1 kt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec
1 NAUTICAL MILE / DAY = 0.042 kts = 2.14 cm/sec

FIGURES

Cruise 7805

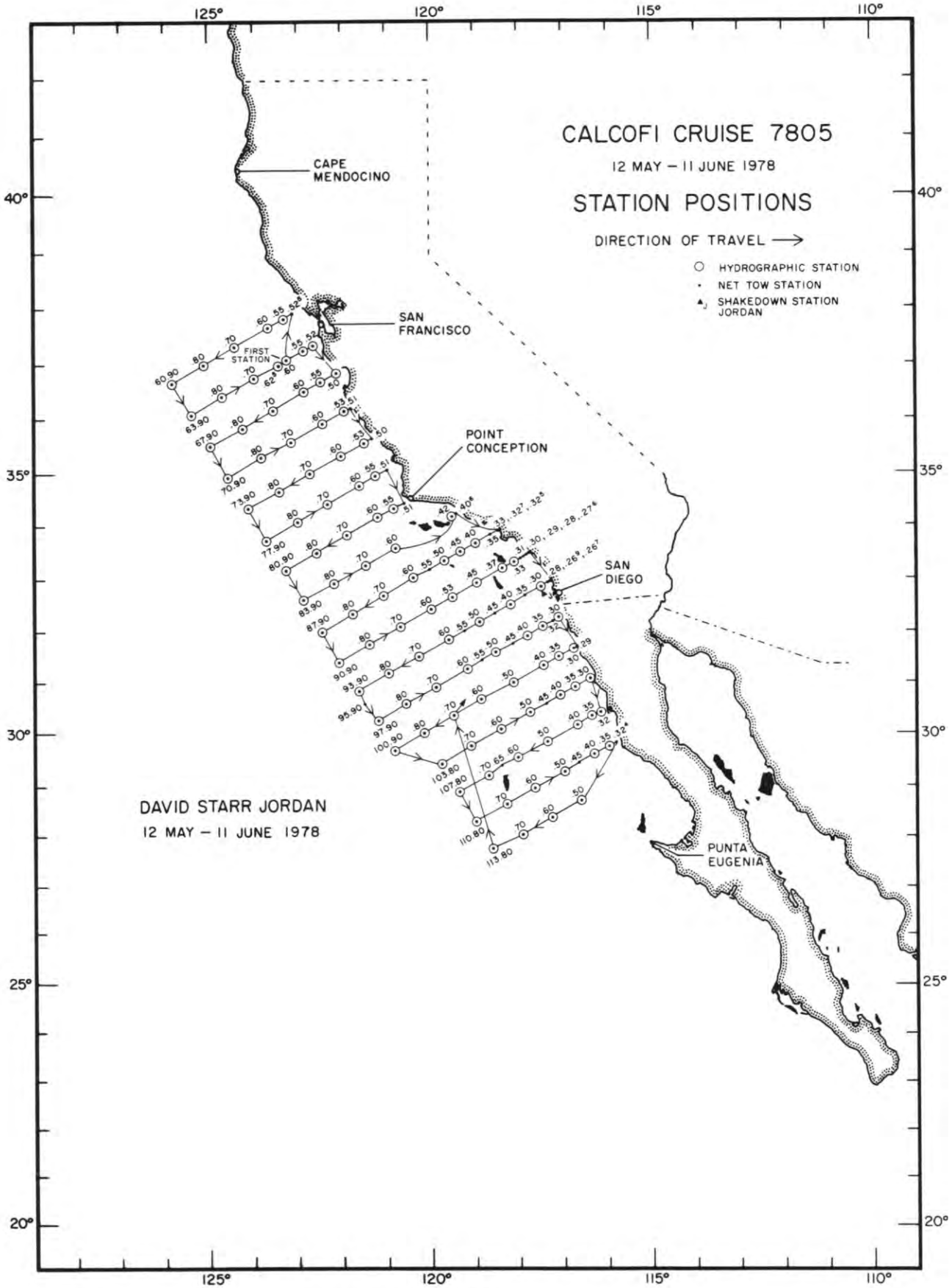
CALCOFI CRUISE 7805
12 MAY – 11 JUNE 1978
STATION POSITIONS
DIRECTION OF TRAVEL →
HYDROGRAPHIC STATION
NET TOW STATION
SHAKEDOWN STATION JORDAN
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
FIRST STATION
DAVID STARR JORDAN
12 MAY – 11 JUNE 1978
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 1

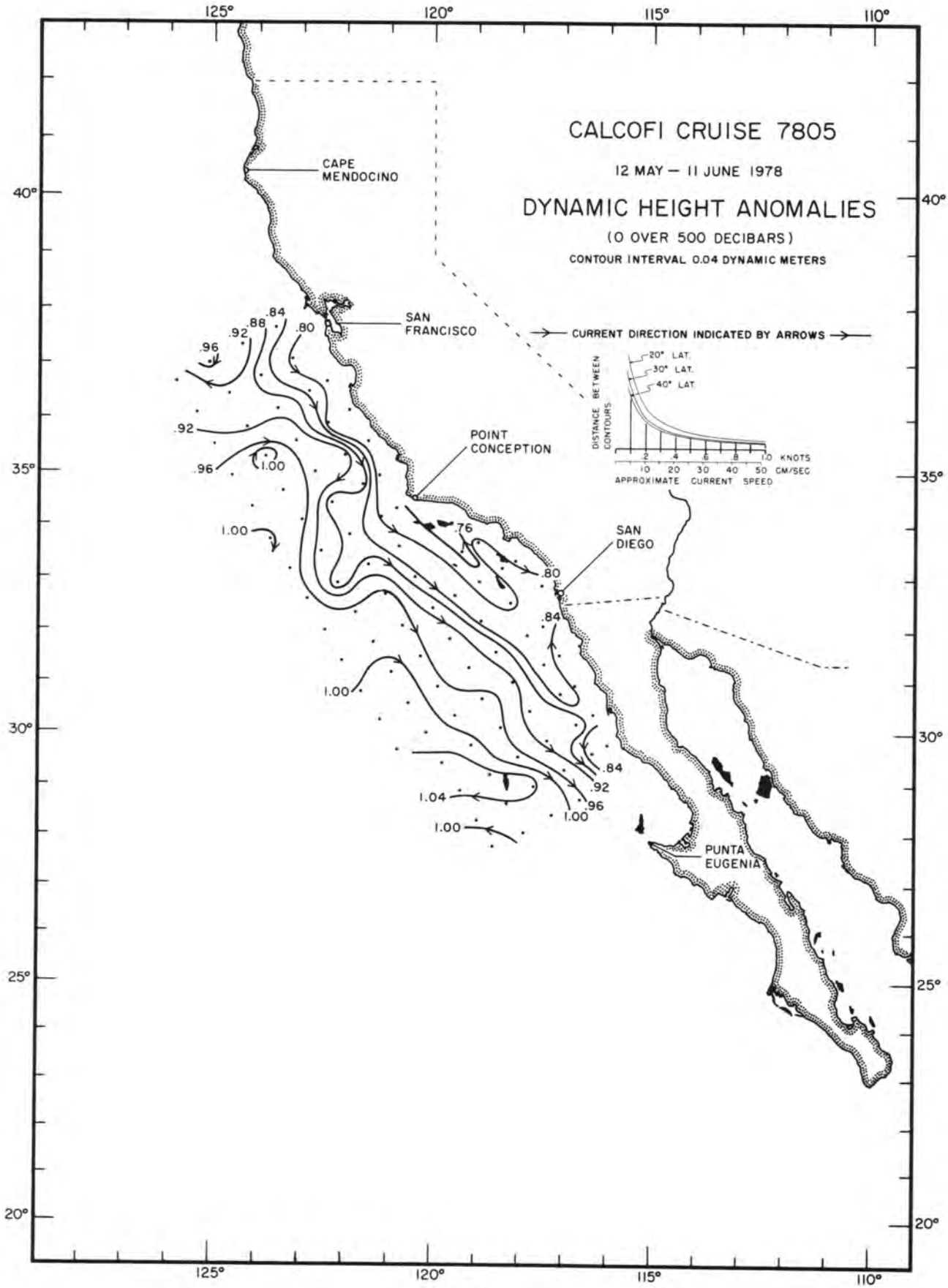
CALCOFI CRUISE 7805
12 MAY – 11 JUNE 1978
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
CURRENT DIRECTION INDICATED BY ARROWS
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
125°
120°
115°
110°
40°
35°
30°
25°
20°
.96
.92
.88
.84
.80
.92
.96
1.00
1.00
.76
.80
.84
1.00
.84
.92
.96
1.00
1.04
1.00

FIGURE 2

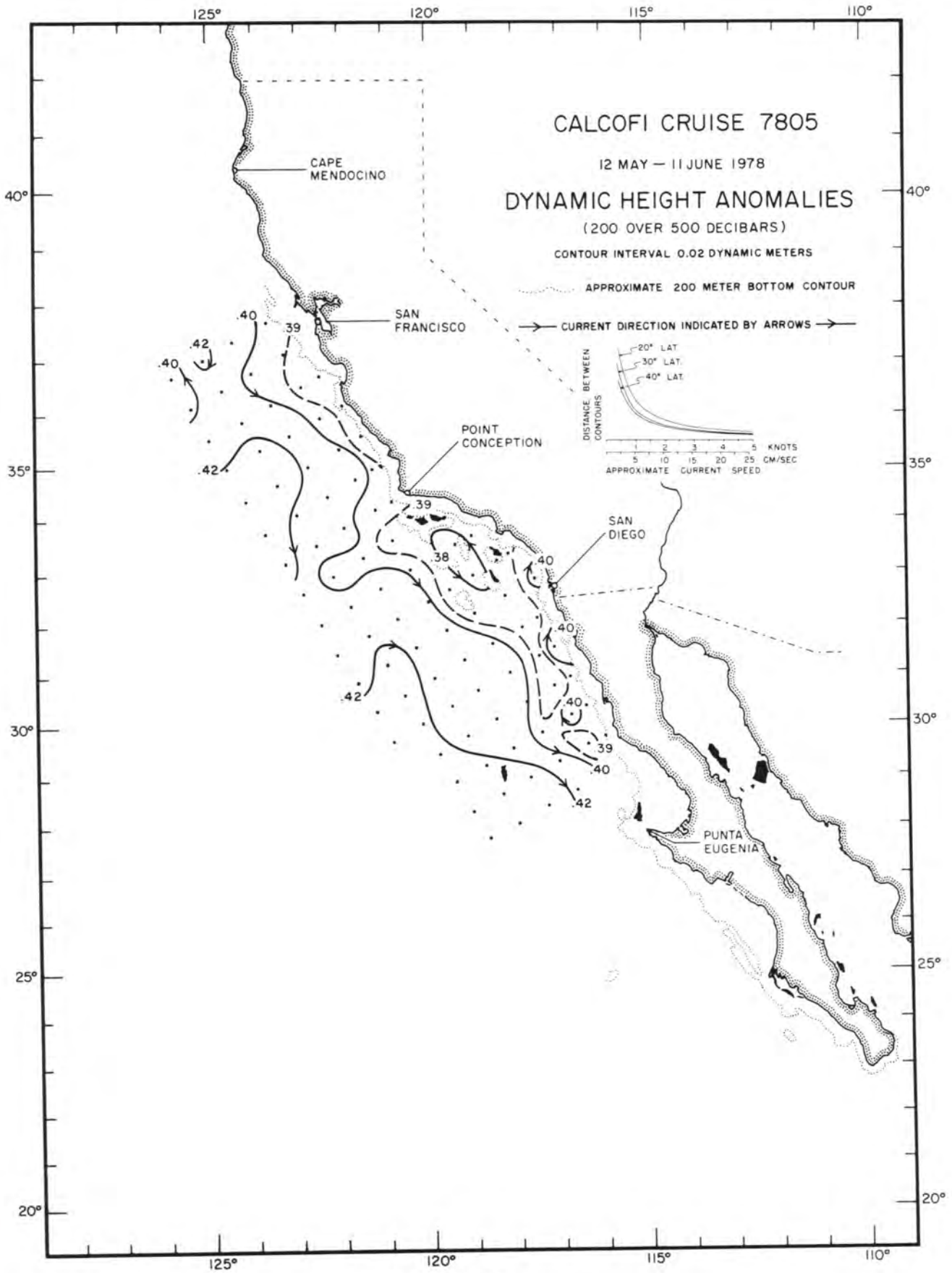
CALCOFI CRUISE 7805
12 MAY — 11 JUNE 1978
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
APPROXIMATE 200 METER BOTTOM CONTOUR
CURRENT DIRECTION INDICATED BY ARROWS
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
1 2 3 4 5 KNOTS
5 10 15 20 25 CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
.40
.39
.42
.38

FIGURE 3

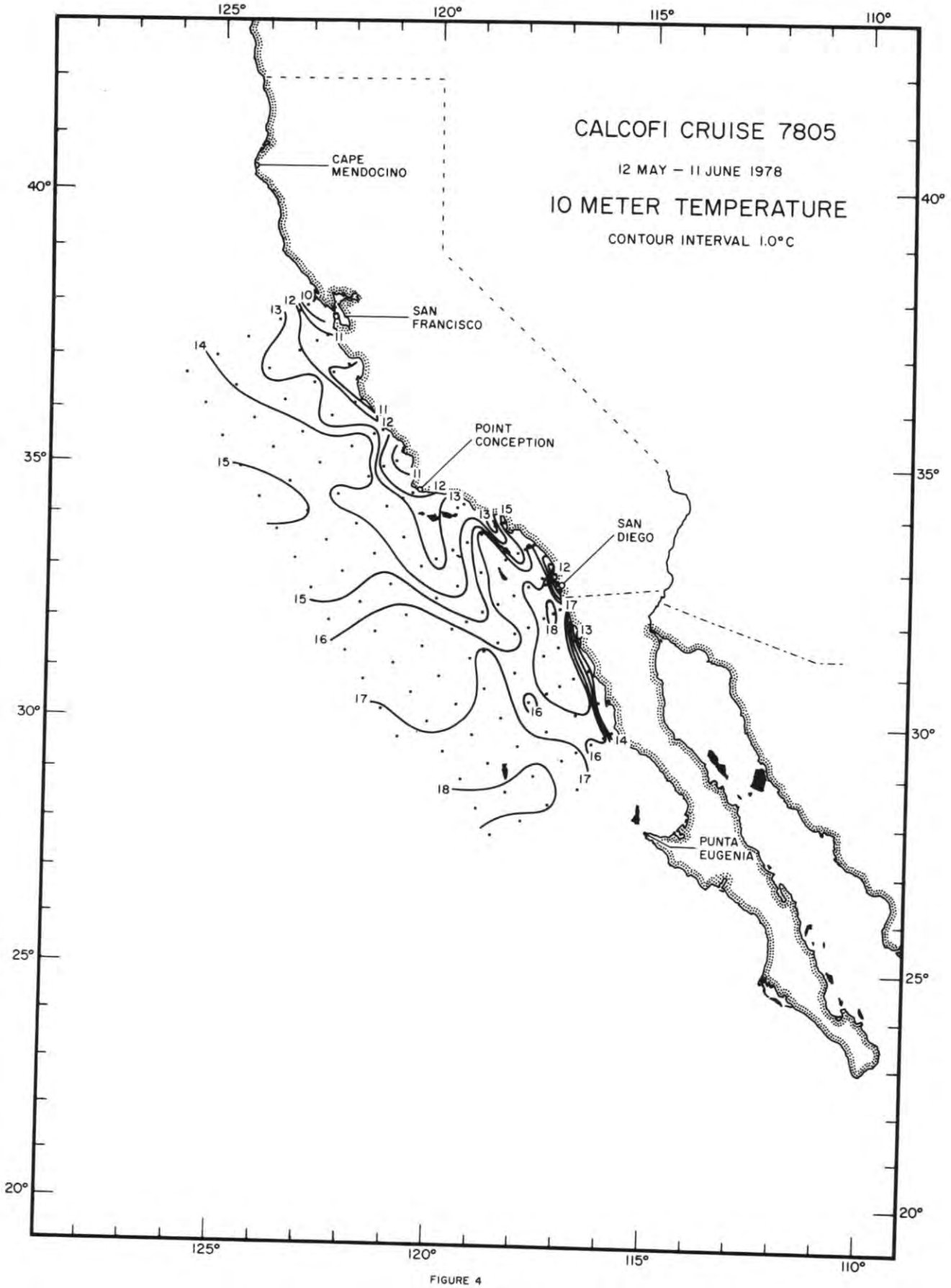
CALCOFI CRUISE 7805
12 MAY – 11 JUNE 1978
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 4

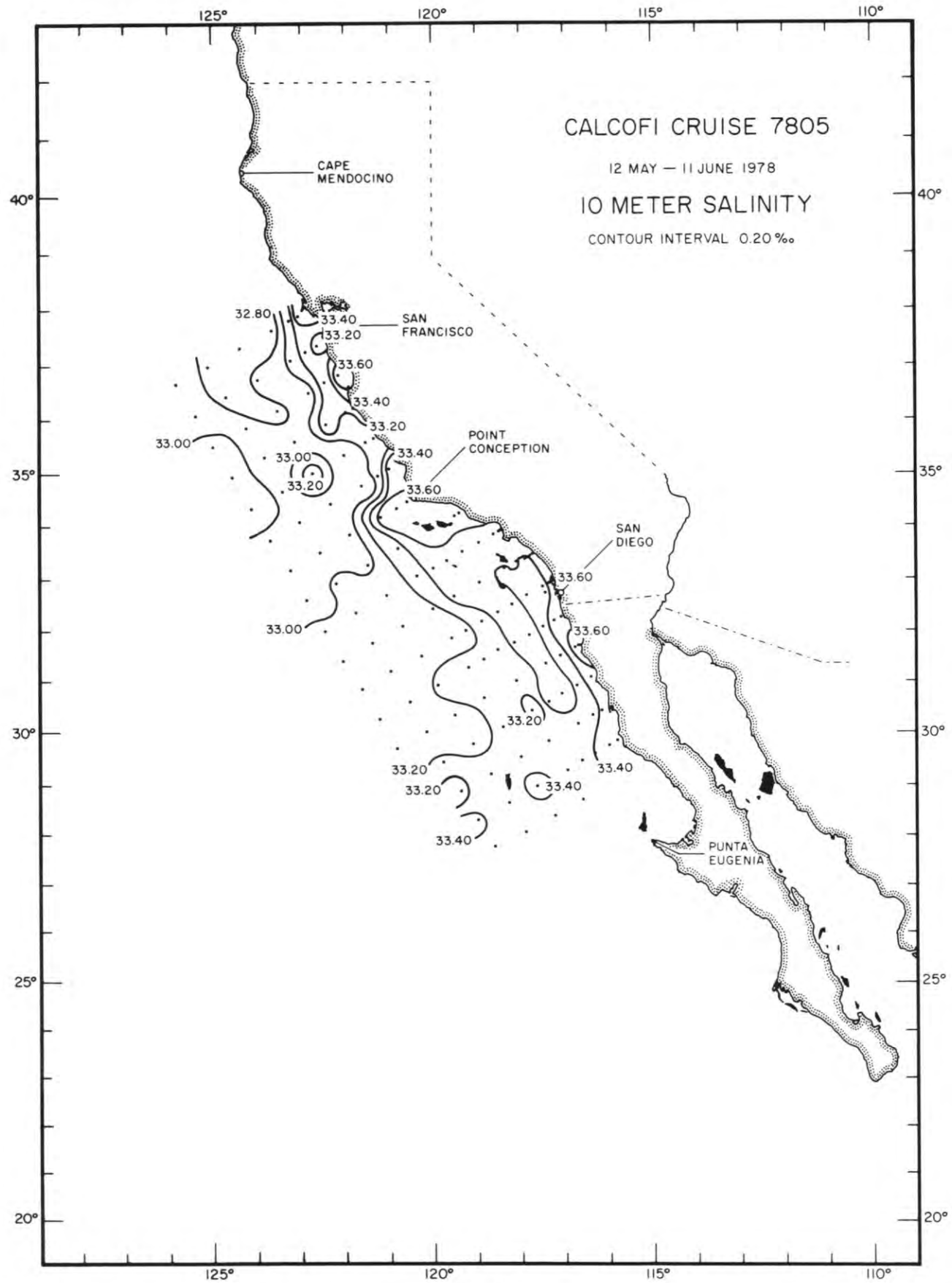
CALCOFI CRUISE 7805
12 MAY — 11 JUNE 1978
10 METER SALINITY
CONTOUR INTERVAL 0.20 ‰
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
32.80
33.00
33.20
33.40
33.60
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 5

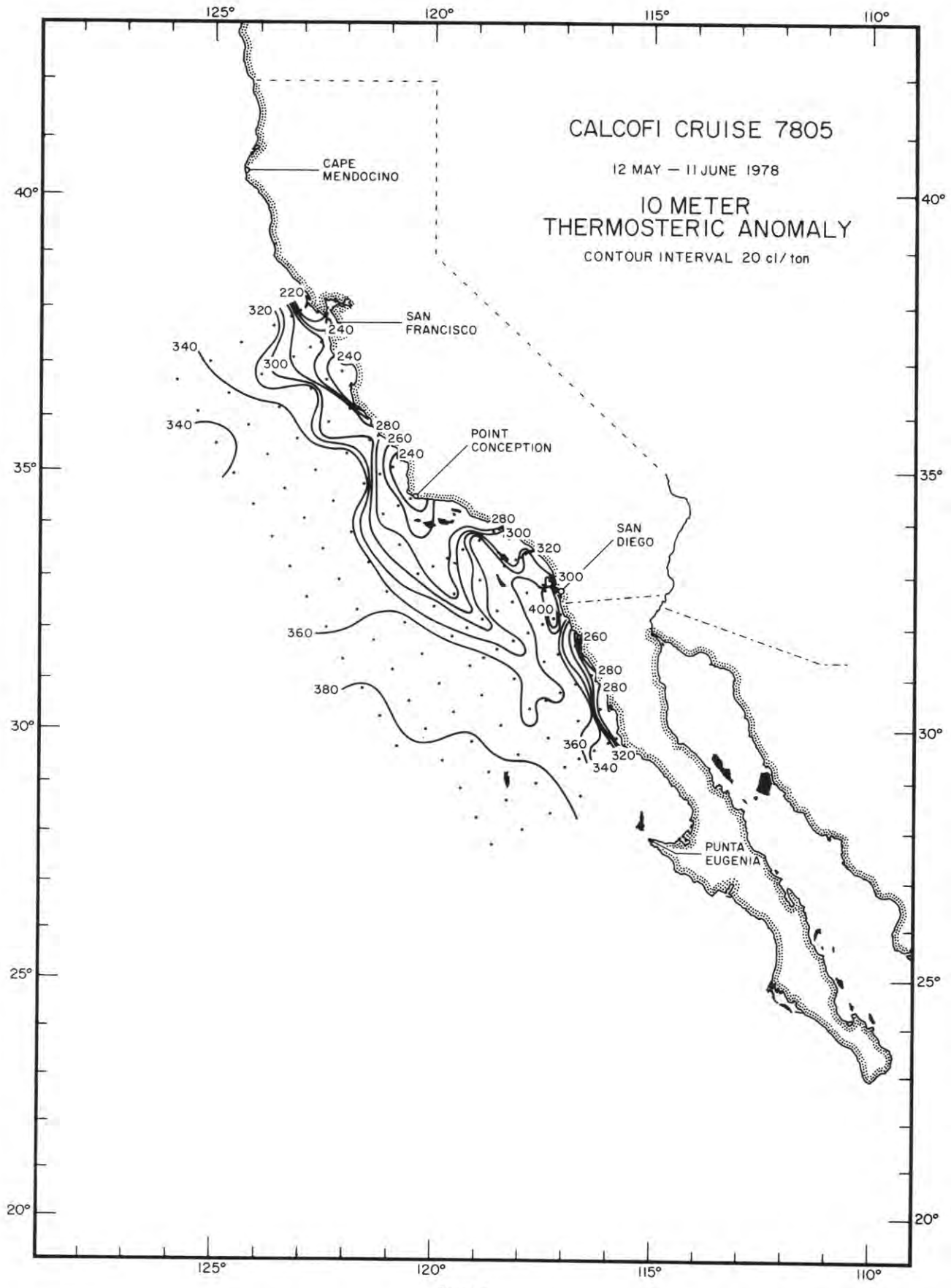
CALCOFI CRUISE 7805
12 MAY — 11 JUNE 1978
10 METER
THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
220
320
240
340
300
280
260
400
360
380

FIGURE 6

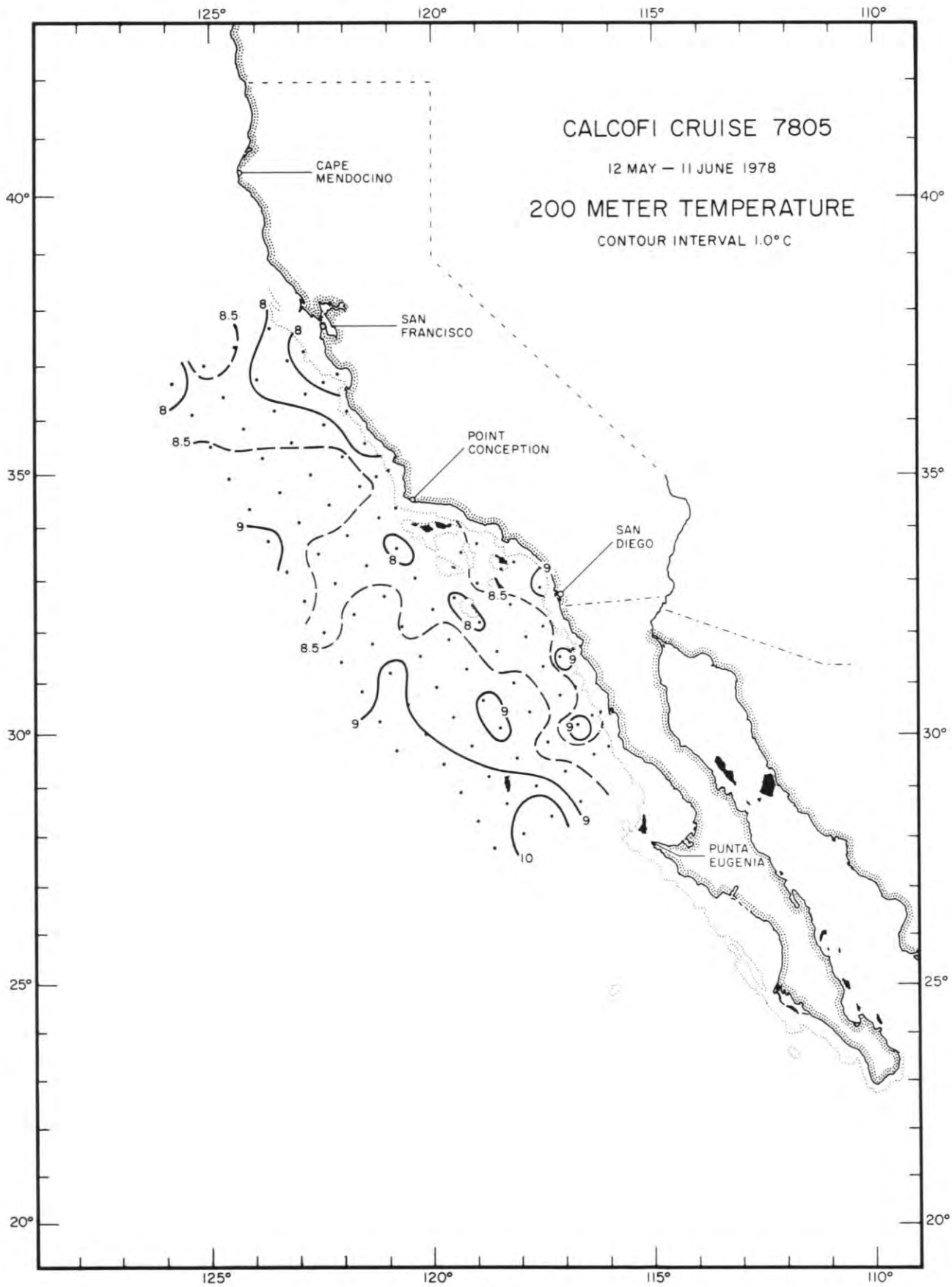
CALCOFI CRUISE 7805
12 MAY — 11 JUNE 1978
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0° C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
8
8.5
9
10

FIGURE 7

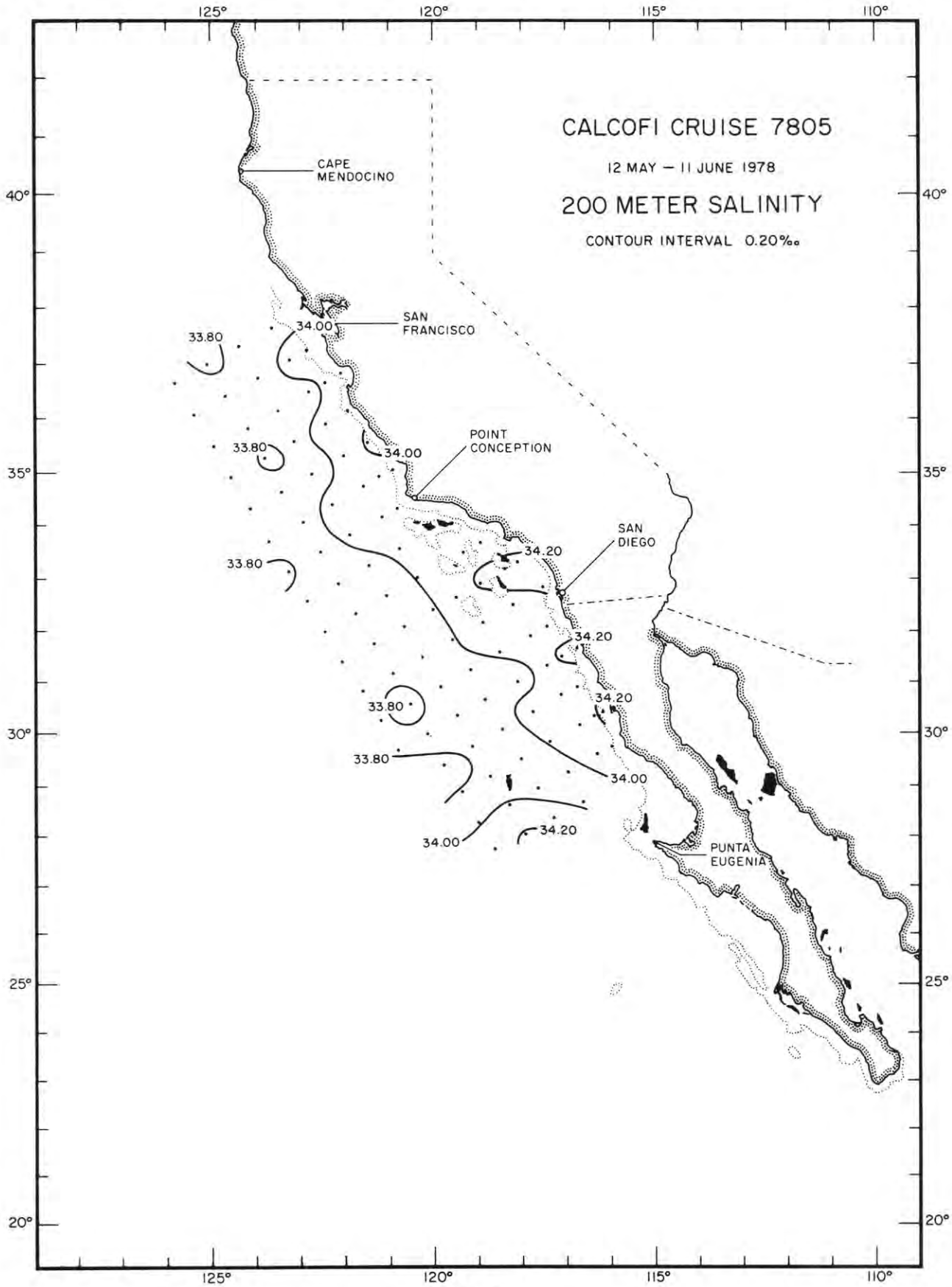
CALCOFI CRUISE 7805
12 MAY — 11 JUNE 1978
200 METER SALINITY
CONTOUR INTERVAL 0.20‰
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
33.80
34.00
34.20
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 8

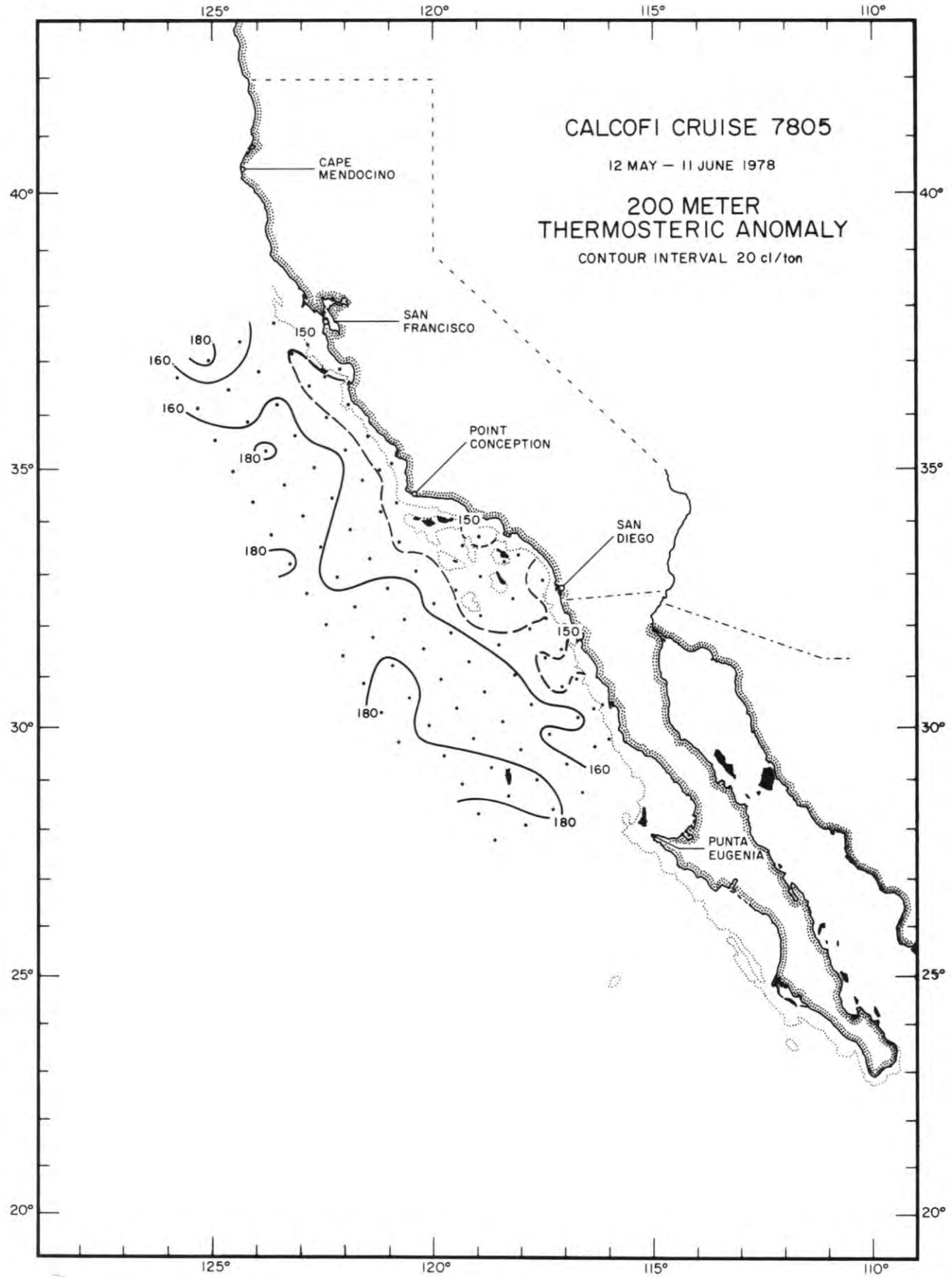
CALCOFI CRUISE 7805
12 MAY – 11 JUNE 1978
200 METER
THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
150
160
180

FIGURE 9

PERSONNEL

Cruise 7805

SHIP'S CAPTAIN

Roll, Milton RV David Starr Jordan

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV David Starr Jordan:

Metoyer, Jack D. (in charge)	Biological Technician NMFS
Bliss, Kenneth A.	Oceanographer NMFS
Devonald, F. Kim	Graduate Student SIO
Fastenau, Henry C.	Marine Technician DCPG*
Fiedler, Paul C.	Graduate Student SIO
Granados, Jose Luis	Oceanographer INP
Johnson, Frank W.	Marine Technician DCPG
Johnson, Treve L.	Marine Technician DCPG
Masten, Douglas M.	Staff Research Associate DCPG
Millan, Roberto	Oceanographer CICESE
Muus, David A. (senior DCPG observer)	Staff Research Associate DCPG
Sanchez, Carol A.	Biological Technician NMFS
Wolfe, Margaret S.	Marine Technician DCPG

* DCPG: Now Physical & Chemical Oceanographic Data Facility (PACODF)

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 60055

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 47.0N	123 15.0W	05/15/78	0148 GMT	142M	210	15KT	1	210 3 4

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	12.42	33.050	7.99	0.34	1.	0.00	0.4	294.9	0	12.42	33.050	7.99	25.019	294.9	0.000
9	12.02	33.111	8.13	0.54	1.	0.00	0.3	283.2	10	11.92	33.114	8.04	25.162	281.3	0.029
30	9.87	33.212	5.66	1.00	15.	0.13	12.1	239.5	20	10.91	33.149	6.99	25.373	261.2	0.056
38	9.42	33.311	5.11	1.44	19.	0.14	15.8	225.2	30	9.87	33.212	5.66	25.601	239.5	0.081
54	8.81	33.484	4.27	1.73	25.	0.06	20.2	203.1	50	8.92	33.443	4.42	25.934	207.9	0.126
69	8.63	33.638	4.40	1.84	29.	0.10	22.5	189.0	75	8.57	33.679	4.13	26.173	185.1	0.175
83	8.51	33.725	3.69	2.05	31.	0.07	24.1	180.8	100	8.55	33.833	3.19	26.297	173.4	0.221
99	8.55	33.827	3.21	2.20	32.	0.07	25.4	173.9							
118	8.44	33.920	2.94	2.30	36.	0.08	27.0	165.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 60060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 37.0N	123 37.0W	05/15/78	0522 GMT	3165M	240	16KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.42	32.774	6.52	0.25	2.	0.00	0.1	333.9	0	13.42	32.774	6.52	24.609	333.9	0.000
10	13.29	32.774	6.61	0.28	2.	0.00	0.1	331.4	10	13.29	32.774	6.61	24.635	331.4	0.033
29	11.82	32.774	6.70	0.34	2.	0.00	0.1	304.4	20	12.56	32.774	6.66	24.778	317.8	0.066
38	11.43	32.831	6.39	0.45	5.	0.06	2.2	293.4	30	11.78	32.776	6.68	24.927	303.6	0.097
47	10.70	33.044	5.57	0.77	11.	0.11	8.5	265.4	50	10.50	33.065	5.58	25.381	260.5	0.153
61	9.96	33.068	5.63	0.94	15.	0.12	11.2	251.6	75	9.84	33.094	5.61	25.514	247.8	0.217
75	9.84	33.094	5.61	1.01	15.	0.12	11.9	247.8	100	9.27	33.337	4.75	25.795	221.0	0.276
93	9.62	33.278	4.90	1.18	17.	0.08	15.0	230.7	125	8.49	33.556	4.22	26.089	193.1	0.329
116	8.52	33.468	4.47	1.40	24.	0.04	19.5	200.0	150	8.32	33.736	3.59	26.256	177.3	0.375
135	8.45	33.630	3.94	1.68	30.	0.09	23.4	187.0	200	7.88	33.947	2.86	26.487	155.4	0.460
163	8.21	33.814	3.31	1.75	35.	0.01	26.1	169.9	250	6.80	33.955	3.17	26.645	140.3	0.536
191	8.13	33.949	2.76	2.12	39.	0.02	28.3	158.7	300	6.42	33.980	2.71	26.716	133.6	0.606
219	7.28	33.941	3.17	2.06	43.	0.00	28.8	147.6	400	5.65	34.037	1.45	26.858	120.2	0.738
257	6.74	33.959	3.17	2.09	48.	0.00	29.7	139.2	500	5.33	34.169	0.66	27.000	106.7	0.857
313	6.34	33.985	2.53	2.41	57.	0.00	33.1	132.3							
385	5.72	34.016	1.63	2.64	70.	0.00	37.9	122.5							
455	5.47	34.120	0.89	2.89	81.	0.00	40.7	111.9							
532	5.25	34.194	0.61	3.00	90.	0.00	41.8	103.8							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 60070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 17.0N	124 22.0W	05/15/78	1142 GMT	3920M	270	18KT	1	270 6 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
3	13.22	32.745	6.33	0.53	4.	0.00	0.0	332.2	0	13.22	32.745	6.33	24.627	332.2	0.000
12	13.08	32.739	6.35	0.62	4.	0.00	0.0	330.0	10	13.12	32.741	6.35	24.643	330.7	0.033
30	12.44	32.723	6.39	0.61	4.	0.00	0.0	319.3	20	12.81	32.733	6.37	24.697	325.5	0.066
39	12.19	32.713	6.37	0.61	4.	0.01	0.3	315.5	30	12.44	32.723	6.39	24.762	319.3	0.098
48	12.06	32.702	6.34	0.53	5.	0.03	0.6	314.0	50	12.03	32.698	6.33	24.820	313.8	0.162
62	11.77	32.700	6.29	0.49	5.	0.06	1.2	309.0	75	11.34	32.808	5.99	25.032	293.6	0.238
75	11.34	32.808	5.99	0.62	7.	0.13	3.9	293.6	100	10.43	32.939	5.71	25.294	268.7	0.309
93	10.90	32.898	5.91	0.73	9.	0.14	5.9	279.5	125	9.53	33.200	5.54	25.648	235.0	0.372
115	9.52	33.065	5.37	0.91	13.	0.08	11.5	244.9	150	9.09	33.404	5.21	25.877	213.2	0.429
132	9.53	33.280	5.65	1.06	17.	0.11	13.2	229.1	200	8.51	33.850	3.29	26.315	171.7	0.527
158	8.84	33.450	4.89	1.39	25.	0.11	19.3	206.1	250	7.90	34.044	2.42	26.560	148.4	0.609
183	8.36	33.682	4.07	1.69	31.	0.09	23.6	181.8	300	6.91	33.977	3.05	26.647	140.1	0.683
209	8.61	33.927	2.91	1.80	33.	0.02	26.2	167.3	400	5.64	34.002	1.76	26.832	122.6	0.819
242	8.06	34.046	2.33	1.99	41.	0.01	29.5	150.5	500	5.29	34.141	0.76	26.983	108.3	0.940
293	7.03	33.980	3.09	1.98	46.	0.00	29.5	141.4							
357	6.10	33.981	2.30	2.35	58.	0.00	34.3	129.7							
423	5.46	34.022	1.48	2.42	73.	0.00	38.7	119.1							
495	5.30	34.134	0.79	2.92	83.	0.00	41.1	108.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 60080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 56.5N	125 04.0W	05/15/78	1704 GMT	4110M	270	18KT	1	270 8 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.65	32.753	6.24	0.29	2.	0.01	0.0	339.8	0	13.65	32.753	6.24	24.547	339.8	0.000
10	13.61	32.753	6.25	0.44	2.	0.00	0.0	339.1	10	13.61	32.753	6.25	24.555	339.1	0.034
29	12.80	32.801	6.52	0.37	2.	0.00	0.0	320.2	20	13.29	32.783	6.37	24.641	330.8	0.067
38	12.14	32.777	6.66	0.33	2.	0.00	0.0	309.9	30	12.72	32.799	6.54	24.765	319.0	0.100
52	11.78	32.822	6.48	0.45	4.	0.03	0.9	300.2	50	11.80	32.815	6.53	24.952	301.3	0.162
66	11.48	32.839	6.13	0.64	7.	0.07	3.1	293.7	75	11.27	32.872	6.10	25.094	287.7	0.236
90	10.84	32.946	6.04	0.83	10.	0.09	6.0	274.9	100	10.44	33.006	5.96	25.344	264.0	0.306
108	10.15	33.053	5.90	1.00	13.	0.10	9.3	255.7	125	9.92	33.129	5.84	25.528	246.4	0.370
127	9.90	33.136	5.83	1.13	15.	0.11	11.1	245.6	150	9.62	33.249	5.35	25.671	232.8	0.431
146	9.57	33.207	5.56	1.28	18.	0.13	13.5	235.2	200	8.67	33.732	3.72	26.199	182.7	0.536
173	9.79	33.517	4.10	1.58	21.	0.06	18.2	215.7	250	7.92	33.970	2.89	26.499	154.2	0.622
205	8.44	33.766	3.69	1.80	30.	0.03	23.5	176.8	300	7.19	34.007	2.64	26.632	141.6	0.698
233	8.15	33.925	3.03	1.95	36.	0.02	26.8	160.8	400	6.11	34.044	1.53	26.806	125.1	0.837
280	7.48	34.001	2.80	2.11	43.	0.01	29.2	145.8	500	5.30	34.094	1.01	26.945	111.9	0.961
332	6.76	34.006	2.33	2.29	53.	0.01	32.4	136.0							
412	6.01	34.051	1.40	2.50	67.	0.01	37.1	123.3							
493	5.29	34.080	1.05	2.71	81.	0.01	39.9	112.8							
576	5.44	34.246	0.44	2.93	89.	0.00	40.8	102.1							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 60090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 37.0N	125 47.0W	05/15/78	2303 GMT	4495M	310	20KT	1	310 8 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	14.74	32.906	6.04	0.33	4.	0.01	0.0	350.2	0	14.74	32.906	6.04	24.437	350.2	0.000
11	14.72	32.905	6.03	0.31	4.	0.00	0.0	349.9	10	14.72	32.905	6.03	24.441	349.9	0.035
30	14.48	32.904	6.06	0.31	4.	0.00	0.0	345.1	20	14.66	32.905	6.04	24.454	348.7	0.070
39	14.18	32.902	6.08	0.31	4.	0.00	0.0	339.3	30	14.48	32.904	6.06	24.491	345.1	0.105
54	13.86	32.912	6.13	0.31	4.	0.00	0.0	332.3	50	13.92	32.910	6.12	24.611	333.7	0.173
68	13.81	32.913	6.08	0.32	4.	0.00	0.0	331.2	75	12.97	32.992	5.73	24.866	309.4	0.254
92	10.53	33.281	4.69	1.06	14.	0.13	13.8	245.0	100	9.85	33.389	4.38	25.742	226.1	0.321
110	9.25	33.508	4.06	1.46	21.	0.02	19.9	207.9	125	8.82	33.664	3.70	26.123	189.9	0.374
129	8.76	33.699	3.62	1.66	27.	0.01	23.3	186.4	150	8.46	33.842	3.23	26.317	171.4	0.419
147	8.50	33.826	3.27	1.82	31.	0.01	25.3	173.2	200	7.86	33.995	2.75	26.527	151.6	0.502
175	8.15	33.939	2.95	2.01	36.	0.00	27.5	159.8	250	7.22	34.030	2.40	26.646	140.2	0.576
207	7.78	34.004	2.70	2.12	41.	0.00	29.1	149.7	300	6.64	34.048	1.89	26.740	131.3	0.646
234	7.43	34.023	2.53	2.19	45.	0.00	30.3	143.5	400	5.80	34.105	1.09	26.892	116.9	0.775
279	6.86	34.039	2.12	2.34	53.	0.00	33.0	134.8	500	5.11	34.142	0.80	27.005	106.2	0.892
331	6.34	34.062	1.56	2.56	62.		36.2	126.5							
410	5.73	34.110	1.04	2.75	74.		39.3	115.6							
490	5.12	34.128	0.84	2.86	85.	0.01	41.1	107.3							
573	5.07	34.251	0.43					97.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63052

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 19.0N	122 36.0W	05/17/78	0803 GMT	88M	330	20KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	11.25	33.156	8.00	0.16	3.	0.01	0.7	266.4	0	11.25	33.156	8.00	25.318	266.4	0.000
9	11.22	33.149	7.95	0.21	3.	0.01	0.9	266.4	10	11.08	33.186	7.69	25.371	261.3	0.026
19	9.67	33.566	5.13	1.03	17.	0.23	16.6	210.2	20	9.57	33.589	4.98	25.944	206.9	0.050
28	8.99	33.716	4.13	1.51	28.	0.26	23.1	188.6	30	8.91	33.747	3.92	26.173	185.2	0.069
46	8.62	33.931	2.62	1.82	38.	0.16	27.2	167.2	50	8.56	33.952	2.56	26.388	164.8	0.105
70	8.35	33.999	2.25	1.81	42.	0.16	28.6	158.2	75	8.31	34.010	2.21	26.472	156.8	0.145

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63055

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 13.0N	122 50.0W	05/17/78	0335 GMT	297M	320	28KT	1	330 8 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	11.28	33.214	6.94	0.88	3.	0.15	4.6	262.6	0	11.28	33.214	6.94	25.358	262.6	0.000
10	11.27	33.213	6.94	0.89	3.	0.11	4.8	262.5	10	11.27	33.213	6.94	25.359	262.5	0.026
29	10.18	33.256	5.22	1.38	13.	0.16	12.9	241.2	20	10.78	33.227	6.17	25.457	253.2	0.052
43	9.41	33.557	4.09	1.74	23.	0.15	20.1	206.8	30	10.11	33.275	5.12	25.609	238.8	0.077
52	9.26	33.693	3.68	1.90	26.	0.18	22.6	194.4	50	9.28	33.669	3.75	26.054	196.5	0.120
66	9.20	33.724	3.60	1.99	27.	0.18	23.2	191.2	75	9.18	33.756	3.49	26.137	188.6	0.169
81	9.17	33.783	3.41	2.03	28.	0.20	24.0	186.3	100	8.88	33.867	3.11	26.272	175.8	0.215
100	8.88	33.867	3.11	2.06	31.	0.15	25.3	175.8	125	8.58	33.986	2.63	26.411	162.6	0.258
123	8.59	33.982	2.63	2.17	36.	0.08	27.0	162.9	150	8.52	34.010	2.58	26.439	159.9	0.299
142	8.55	34.000	2.62	2.17	36.	0.04	27.2	161.0	200	8.19	34.060	2.17	26.528	151.4	0.378
176	8.38	34.039	2.37	2.21	39.	0.01	28.3	155.6	250	7.74	34.125	1.65	26.647	140.2	0.453
205	8.15	34.064	2.13	2.25	42.	0.01	29.5	150.5							
244	7.79	34.118	1.70	2.40	49.	0.00	31.6	141.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 03.1N	123 12.0W	05/14/78	1808 GMT	2500M	240	10KT	1	270 7 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.11	32.810	6.53	0.56	2.	0.03	0.7	325.3	0	13.11	32.810	6.53	24.699	325.3	0.000
10	12.11	32.881	6.63	0.56	3.	0.11	1.6	301.7	10	12.11	32.881	6.63	24.947	301.7	0.031
29	10.87	33.144	6.42		13.			260.8	20	11.40	33.020	6.52	25.185	279.0	0.060
40	10.05	33.239	5.54	0.98	18.	0.14	13.2	240.4	30	10.78	33.154	6.33	25.400	258.6	0.087
48	10.05	33.301	5.43	1.28	19.	0.13	14.3	235.8	50	10.02	33.317	5.33	25.657	234.2	0.137
62	9.75	33.408	4.56	1.49	22.	0.12	17.7	223.1	75	9.41	33.515	3.79	25.911	210.0	0.193
76	9.39	33.523	3.74	1.55	24.	0.09	20.7	209.0	100	9.23	33.739	3.14	26.116	190.6	0.243
96	9.26	33.713	3.21	1.76	28.	0.03	23.4	192.9	125	8.90	33.870	2.87	26.270	175.9	0.289
118	9.04	33.833	2.92	1.80	30.	0.02	25.0	180.7	150	8.54	33.961	2.66	26.398	163.8	0.333
138	8.65	33.928	2.78	1.90	34.	0.02	26.6	167.8	200	7.98	34.039	2.42	26.543	150.0	0.413
166	8.43	33.990	2.52	2.01	38.	0.02	27.9	160.0	250	7.35	34.055	2.18	26.647	140.1	0.487
193	8.06	34.030	2.45	2.06	40.	0.01	29.1	151.7	300	6.87	34.086	1.61	26.739	131.5	0.557
221	7.75	34.056	2.30	2.15	45.	0.01	30.3	145.4	400	6.20	34.176	0.82	26.898	116.4	0.686
260	7.22	34.054	2.12	2.15	51.	0.01	32.0	138.4	500	5.64	34.218	0.52	27.002	106.5	0.803
315	6.77	34.102	1.40	2.38	60.	0.01	35.3	129.0							
386	6.30	34.167	0.89	2.44	71.	0.00	38.0	118.2							
456	5.84	34.201	0.62	2.67	80.	0.00	39.9	110.1							
531	5.54	34.228	0.48	2.55	87.	0.03	40.8	104.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37 03.0N	123 12.0W	05/16/78	2300 GMT	2595M	290	24KT	0	330 8 8

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.90	32.959	7.11	0.21	1.	0.03	0.4	310.4	0	12.90	32.959	7.11	24.855	310.4	0.000
11	11.33	33.164	7.12	0.40	3.	0.08	3.8	267.2	10	11.45	33.149	7.12	25.276	270.4	0.029
29	10.65	33.234	6.07	0.76	9.	0.16	9.1	250.5	20	10.86	33.219	6.78	25.436	255.2	0.055
39	9.96	33.325	4.83	1.26	19.	0.21	15.6	232.6	30	10.58	33.243	5.94	25.505	248.7	0.081
53	9.79	33.442	4.44	1.42	19.	0.19	17.6	221.2	50	9.81	33.420	4.46	25.773	223.2	0.128
67	9.13	33.522	3.91	1.46	21.	0.15	20.1	205.1	75	9.06	33.624	3.66	26.054	196.4	0.181
90	8.92	33.775	3.28	1.62	27.	0.07	23.8	183.2	100	8.87	33.835	3.11	26.247	178.1	0.228
109	8.83	33.872	3.00	1.80	29.	0.06	25.2	174.6	125	8.68	33.926	2.86	26.349	168.4	0.272
127	8.66	33.932	2.84	1.84	32.	0.05	26.0	167.7	150	8.39	34.001	2.60	26.453	158.6	0.313
147	8.43	33.994	2.63	1.96	35.	0.03	27.5	159.7	200	7.79	34.057	2.27	26.585	146.0	0.391
174	8.08	34.043	2.37	2.09	40.	0.03	28.8	151.0	250	7.37	34.109	1.66	26.687	136.4	0.463
207	7.73	34.060	2.23	2.14	44.	0.02	30.1	144.9	300	6.79	34.128	1.27	26.782	127.3	0.531
236	7.54	34.103	1.80	2.26	49.	0.01	32.1	139.1	400	6.11	34.183	0.81	26.916	114.6	0.657
282	6.96	34.115	1.41	2.42	57.	0.01	34.6	130.5	500	5.58	34.231	0.58	27.019	104.8	0.773
334	6.53	34.154	1.03	2.59	65.	0.01	36.8	122.0							
414	6.03	34.188	0.78	2.75	74.	0.00	38.8	113.3							
493	5.62	34.227	0.60	2.83	83.	0.00	39.9	105.6							
573	5.17	34.279	0.42	2.91	93.	0.00	41.5	96.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 42.5N	123 55.0W	05/16/78	1654 GMT	3825M	330	30KT	1	330 8 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.88	32.839	6.56	0.51	4.	0.01	0.1	318.9	0	12.88	32.839	6.56	24.766	318.9	0.000
10	12.84	32.839	6.56	0.59	3.	0.00	0.1	318.2	10	12.84	32.839	6.56	24.774	318.2	0.032
29	12.72	32.838	6.55	0.60	3.	0.01	0.2	316.0	20	12.78	32.839	6.55	24.786	317.0	0.064
39	12.05	32.925	6.73	0.67	3.	0.01	0.3	297.4	30	12.67	32.846	6.58	24.813	314.5	0.095
53	11.20	32.978	6.13	0.90	8.	0.13	4.9	278.7	50	11.38	32.969	6.29	25.149	282.5	0.155
67	10.22	33.070	5.71	1.13	13.	0.11	9.5	255.6	75	9.84	33.132	5.53	25.543	245.0	0.221
90	9.38	33.274	5.08	1.40	20.	0.15	15.6	227.3	100	9.23	33.411	4.49	25.861	214.8	0.279
108	9.13	33.511	4.05	1.63	24.	0.04	19.9	205.9	125	8.74	33.594	3.82	26.079	194.0	0.331
127	8.70	33.599	3.81	1.70	27.	0.01	21.5	193.0	150	8.50	33.742	3.36	26.234	179.4	0.378
145	8.49	33.692	3.56	1.84	31.	0.02	23.8	183.0	200	7.82	33.967	3.35	26.511	153.0	0.463
173	8.52	33.961	2.64	2.07	36.	0.00	27.1	163.5	250	7.25	34.003	2.75	26.621	142.6	0.539
206	7.65	33.967	3.52	2.03	38.	0.00	26.1	150.7	300	6.68	34.018	2.27	26.710	134.2	0.610
233	7.47	34.005	2.87	2.19	43.	0.00	29.1	145.4	400	5.86	34.080	1.15	26.866	119.4	0.741
279	6.86	33.999	2.62	2.32	49.	0.00	31.0	137.8	500	5.17	34.135	0.76	26.993	107.3	0.860
330	6.48	34.051	1.71	2.54	58.	0.00	34.7	129.1							
410	5.77	34.082	1.11	2.69	72.	0.00	38.6	118.2							
490	5.22	34.128	0.80	2.90	84.	0.00	40.7	108.5							
571	4.91	34.195	0.52	3.11	93.	0.00	42.2	100.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 23.0N	124 38.5W	05/16/78	1051 GMT	3920M	330	25KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.98	32.753	6.15	0.52	4.	0.01	0.0	346.3	0	13.98	32.753	6.15	24.479	346.3	0.000
11	13.99	32.756	6.15	0.50	4.	0.02	0.0	346.2	10	13.99	32.755	6.15	24.479	346.3	0.035
30	13.83	32.829	6.15	0.49	4.	0.01	0.0	337.8	20	13.92	32.784	6.15	24.515	342.8	0.069
40	13.85	32.876	6.14	0.48	4.	0.01	0.0	334.7	30	13.83	32.829	6.15	24.568	337.8	0.103
54	13.27	32.766	6.20	0.49	3.	0.01	0.0	331.6	50	13.44	32.801	6.19	24.625	332.4	0.170
68	13.25	32.799	6.13	0.48	4.	0.02	0.0	328.8	75	12.39	32.890	5.85	24.900	306.2	0.251
91	10.21	33.191	5.00	0.99	13.	0.11	11.9	246.5	100	9.76	33.333	4.56	25.712	228.9	0.318
109	9.54	33.448	4.19	1.31	20.	0.06	18.1	216.9	125	9.16	33.566	3.88	25.991	202.4	0.372
128	9.12	33.584	3.83	1.51	23.	0.02	21.0	200.3	150	9.07	33.797	3.19	26.187	183.8	0.421
146	9.09	33.770	3.28	1.67	27.	0.01	23.7	186.1	200	8.33	33.980	2.83	26.445	159.4	0.509
174	8.82	33.902	2.86	1.90	31.	0.01	25.9	172.3	250	7.73	34.048	2.34	26.588	145.8	0.587
206	8.22	33.993	2.83	2.01	35.	0.02	27.5	156.7	300	7.29	34.077	1.95	26.674	137.6	0.660
234	7.92	34.037	2.45	2.08	40.	0.01	29.2	149.2	400	6.41	34.152	0.98	26.851	120.8	0.794
277	7.43	34.059	2.19	2.26	45.	0.01	31.0	140.9	500	5.71	34.206	0.64	26.985	108.1	0.915
328	7.13	34.100	1.64	2.36	52.	0.00	33.3	133.8							
405	6.36	34.155	0.94	2.60	66.	0.00	37.5	119.9							
484	5.82	34.201	0.65	2.77	76.	0.00	39.4	109.9							
565	5.22	34.214	0.58	2.84	86.	0.02	41.0	102.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 63090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 03.0N	125 20.0W	05/16/78	0513 GMT	4500M	320	20KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	14.85	32.899	6.01	0.50	4.	0.00	0.0	353.0
11	14.84	32.899	6.04	0.39	4.	0.00	0.0	352.8
30	14.57	32.900	6.06	0.39	4.	0.00	0.0	347.2
39	14.25	32.899	6.06	0.38	4.	0.00	0.0	340.9
53	13.90	32.888	6.12	0.36	4.	0.00	0.0	334.8
67	13.85	32.893	6.06	0.38	4.	0.00	0.0	333.4
90	10.98	33.218	4.92	0.92	13.	0.23	11.7	257.2
109	9.66	33.404	4.34	1.29	19.	0.04	18.1	222.0
128	8.99	33.566	4.04	1.45	24.	0.02	20.9	199.7
146	8.79	33.712	3.65	1.55	27.	0.02	23.2	185.9
174	8.49	33.867	3.14	1.83	33.	0.00	26.3	170.0
206	8.13	33.970	2.82	1.96	37.	0.00	28.2	157.2
234	7.72	34.016	2.61	2.01	43.	0.00	29.8	148.0
281	6.90	34.008	2.42	2.21	51.	0.00	32.3	137.7
333	6.39	34.031	1.83	2.29	60.	0.00	35.5	129.5
412	5.59	34.058	1.26	2.56	66.	0.00	39.3	117.9
492	5.25	34.142	0.72	2.73	86.	0.00	41.5	107.7
573	5.05	34.232	0.44	2.82	94.	0.00	42.6	98.8

Z	T	S	O2	SIGT	DT	DD
0	14.85	32.899	6.01	24.408	353.0	0.000
10	14.84	32.899	6.04	24.411	352.8	0.035
20	14.77	32.899	6.05	24.426	351.4	0.071
30	14.57	32.900	6.06	24.469	347.2	0.106
50	13.95	32.891	6.11	24.590	335.7	0.174
75	12.97	32.983	5.71	24.859	310.1	0.255
100	10.19	33.324	4.58	25.635	236.3	0.324
125	9.06	33.542	4.08	25.990	202.5	0.379
150	8.75	33.739	3.57	26.193	183.3	0.428
200	8.20	33.956	2.87	26.446	159.3	0.515
250	7.43	34.017	2.55	26.607	144.0	0.593
300	6.69	34.015	2.22	26.707	134.4	0.665
400	5.70	34.052	1.33	26.864	119.6	0.796
500	5.22	34.151	0.68	26.999	106.8	0.915

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 48.0N	122 05.0W	05/17/78	1604 GMT	380M	310	5KT	0	320 3 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	11.13	33.686	6.80	0.97	4.	0.05	3.1	225.3
10	11.03	33.691	6.49	1.11	4.		5.0	223.2
29	9.41	33.808	4.00	1.56	20.	0.23	19.3	188.2
43	8.93	33.894	3.21	2.01	32.	0.12	25.2	174.5
57	8.90	33.916	3.07	1.92	34.	0.05	26.2	172.4
72	8.80	33.949	2.88	1.98	35.	0.09	26.7	168.5
86	8.80	33.954	2.83	2.23	35.	0.14	26.7	168.1
105	8.72	33.960	2.87	2.24	35.	0.13	27.1	166.5
129	8.70	33.964	2.77	2.17	36.	0.08	26.8	165.9
158	8.69	33.969	2.72	2.19	36.	0.11	27.1	165.4
191	8.50	34.003	2.51	2.21	39.	0.04	27.6	160.1
224	7.90	34.091	1.95	2.42	47.	0.03	30.9	144.9
257	7.69	34.107	1.70	2.51	50.	0.01	31.9	140.8
295	7.38	34.136	1.45	2.54	55.			134.4

Z	T	S	O2	SIGT	DT	DD
0	11.13	33.686	6.80	25.751	225.3	0.000
10	11.03	33.691	6.49	25.773	223.2	0.022
20	10.23	33.741	5.23	25.952	206.2	0.044
30	9.36	33.816	3.92	26.155	186.8	0.064
50	8.91	33.905	3.14	26.296	173.5	0.100
75	8.80	33.950	2.86	26.349	168.4	0.143
100	8.74	33.959	2.86	26.365	166.9	0.185
125	8.70	33.964	2.79	26.375	165.9	0.227
150	8.69	33.968	2.74	26.380	165.5	0.269
200	8.34	34.028	2.36	26.481	155.9	0.351
250	7.72	34.106	1.74	26.635	141.3	0.428
300	7.35	34.136	1.42	26.711	134.1	0.499

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67055

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 39.0N	122 26.0W	05/17/78	1912 GMT	2130M	310	17KT	0	330 6 4

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	11.24	33.335	7.04	0.84	7.	0.11	6.0	253.0
12	10.88	33.345	6.71	0.92	7.	0.07	6.9	246.2
30	10.84	33.357	6.54	0.97	6.	0.13	7.7	244.6
40	10.84	33.357	6.58	1.00	6.	0.19	7.8	244.6
50	10.32	33.407	5.58	1.42	12.	0.17	12.8	232.3
64	9.82	33.602	4.74	1.69	18.	0.20	17.0	209.9
78	9.50	33.672	4.18	1.86	21.	0.17	19.9	199.7
96	9.29	33.759	3.86	1.97	26.	0.14	21.9	190.0
121	8.85	33.865	3.15	2.08	30.	0.04	24.7	175.5
139	8.74	33.917	2.98	2.17	32.	0.05	25.6	170.0
166	8.47	34.006	2.60	2.31	37.	0.02	27.4	159.4
194	8.11	34.057	2.42	2.39	41.	0.01	28.9	150.4
222	7.87	34.085	2.13	2.49	44.	0.01	30.3	145.0
258	7.43	34.110	1.76	2.65	51.	0.01	32.4	137.1
312	6.85	34.111	1.41	2.72	58.	0.01	35.1	129.3
384	6.52	34.200	0.99	2.90	68.	0.01	37.4	118.5
453	6.02	34.240	0.59	3.01	78.	0.01	38.9	109.3
529	5.64	34.267	0.46	3.10	85.	0.03	40.1	102.8

Z	T	S	O2	SIGT	DT	DD
0	11.24	33.335	7.04	25.459	253.0	0.000
10	10.93	33.344	6.76	25.521	247.1	0.025
20	10.86	33.351	6.63	25.538	245.5	0.050
30	10.84	33.357	6.54	25.547	244.6	0.074
50	10.32	33.407	5.58	25.676	232.3	0.122
75	9.56	33.663	4.28	26.004	201.2	0.177
100	9.21	33.778	3.74	26.149	187.4	0.226
125	8.82	33.878	3.10	26.289	174.1	0.271
150	8.64	33.955	2.82	26.378	165.7	0.314
200	8.06	34.064	2.36	26.552	149.1	0.395
250	7.53	34.106	1.84	26.662	138.8	0.469
300	6.96	34.110	1.48	26.745	130.8	0.538
400	6.41	34.212	0.89	26.900	116.2	0.667
500	5.76	34.259	0.51	27.019	104.9	0.783

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 28.0N	122 47.5W	05/17/78	2336 GMT	2975M	320	21KT	0	310 7 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	13.58	32.814	6.35	0.46	2.	0.01	0.0	334.0
11	13.35	32.824	7.43U	0.45	2.	0.00	0.1	328.9
30	11.45	33.007	6.59	0.64	3.	0.09	3.3	280.8
40	10.80	33.063	5.78	0.92	10.	0.16	7.9	265.6
49	10.18	33.073	5.46	1.06	13.	0.10	11.0	254.7
64	9.74	33.222	5.03	1.29	17.	0.14	14.4	236.7
78	9.69	33.414	4.21	1.45	20.	0.04	18.0	221.7
97	9.31	33.577	3.72	1.60	25.	0.01	21.0	203.8
120	8.90	33.745	3.37	1.70	29.	0.01	23.5	185.1
139	8.74	33.865	3.03	1.81	32.	0.00	25.5	173.8
167	8.17	33.914	3.21	1.87	34.	0.01	26.0	161.9
195	7.61	33.955	3.20	1.93	39.	0.01	27.2	151.0
222	7.42	34.006	2.72	2.01	43.	0.00	29.5	144.7
260	6.85	34.008	2.45	2.08	50.	0.01	31.4	137.0
315	6.37	34.043	1.77	2.31	60.	0.01	35.1	128.3
386	5.71	34.070	1.26	2.50	71.	0.02	38.0	118.4
456	5.09	34.086	1.06	2.57	82.	0.00	40.0	110.1
533	4.69	34.145	0.76	2.75	93.	0.00	41.8	101.4

Z	T	S	O2	SIGT	DT	DD
0	13.58	32.814	6.35	24.608	334.0	0.000
10	13.40	32.829	6.42	24.656	329.4	0.033
20	12.52	32.901	6.50	24.884	307.7	0.065
30	11.45	33.007	6.59	25.166	280.8	0.095
50	10.13	33.080	5.44	25.454	253.5	0.148
75	9.69	33.374	4.39	25.756	224.8	0.208
100	9.25	33.601	3.67	26.005	201.1	0.262
125	8.86	33.781	3.26	26.208	181.8	0.310
150	8.54	33.894	3.06	26.346	168.7	0.355
200	7.57	33.966	3.12	26.547	149.7	0.436
250	7.01	34.008	2.51	26.658	139.1	0.510
300	6.47	34.032	1.97	26.750	130.4	0.579
400	5.58	34.072	1.21	26.895	116.7	0.707
500	4.83	34.115	0.90	27.016	105.1	0.823

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 08.0N	123 29.5W	05/18/78	0522 GMT	3165M	330	23KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.71	32.747	6.24	0.34	3.	0.02	0.0	341.4	0	13.71	32.747	6.24	24.530	341.4	0.000
11	13.71	32.746	6.24	0.28	3.	0.01	0.0	341.5	10	13.71	32.747	6.24	24.529	341.5	0.034
30	13.72	32.747	6.25	0.26	3.	0.00	0.0	341.6	20	13.71	32.747	6.24	24.528	341.6	0.068
40	13.62	32.750	6.27	0.26	3.	0.00	0.0	339.5	30	13.72	32.747	6.25	24.528	341.6	0.103
49	13.33	32.774	6.27	0.28	3.	0.00	0.1	332.2	50	13.28	32.776	6.26	24.639	331.0	0.170
64	12.44	32.822	6.18	0.41	5.	0.07	1.1	312.0	75	11.87	32.917	6.23	25.018	294.9	0.249
77	11.76	32.937	6.24	0.50	5.	0.06	2.6	291.4	100	9.89	33.200	5.15	25.588	240.8	0.316
96	10.04	33.152	5.23	0.87	12.	0.07	10.4	246.6	125	9.31	33.452	4.61	25.878	213.2	0.373
120	9.48	33.411	4.82	1.34	20.	0.00	17.9	218.7	150	8.70	33.651	3.73	26.131	189.1	0.424
139	8.88	33.556	4.02	1.61	25.	0.01	21.0	198.8	200	8.18	33.938	2.97	26.434	160.3	0.513
167	8.52	33.785	3.41	1.94	31.	0.00	24.8	176.5	250	7.51	33.999	2.83	26.581	146.4	0.592
196	8.22	33.925	3.01	2.02	35.	0.00	26.8	161.8	300	6.88	34.013	2.42	26.680	137.0	0.665
223	7.93	33.984	2.82	2.06	39.	0.00	28.1	153.3	400	6.11	34.109	1.14	26.857	120.2	0.798
261	7.33	33.999	2.83	2.14	44.	0.01	29.0	144.0	500	5.15	34.173	0.71	27.026	104.2	0.916
317	6.72	34.021	2.17	2.35	54.	0.02	32.8	134.4							
388	6.23	34.098	1.24	2.62	66.	0.00	36.9	122.5							
458	5.50	34.153	0.79	2.78	80.	0.00	39.3	109.7							
535	4.90	34.182	0.64	2.91	93.	0.03	40.9	100.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 48.0N	124 12.0W	05/18/78	1049 GMT	3920M	330	26KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.43	32.883	6.04	0.52	5.	0.00	0.0	345.7	0	14.43	32.883	6.04	24.485	345.7	0.000
9	14.43	32.883	6.03	0.44	5.	0.00	0.0	345.7	10	14.43	32.883	6.03	24.485	345.7	0.035
34	14.45	32.882	6.05	0.42	5.	0.00	0.0	346.1	20	14.44	32.882	6.04	24.483	345.9	0.069
43	14.45	32.882	6.10	0.40	4.	0.00	0.0	346.1	30	14.45	32.882	6.05	24.480	346.1	0.104
57	13.96	32.866	6.08	0.43	5.	0.00	0.0	337.6	50	14.20	32.874	6.09	24.525	341.9	0.173
71	11.95	32.912	5.67	0.63	6.	0.17	3.8	296.6	75	11.54	32.953	5.56	25.108	286.4	0.252
95	10.09	33.184	5.22	1.04	13.	0.00	12.2	245.1	100	9.81	33.226	5.28	25.621	237.5	0.318
113	9.24	33.331	5.34	0.98	15.	0.01	11.4	220.9	125	8.90	33.453	4.90	25.945	206.8	0.374
132	8.78	33.528	4.57	1.30	22.	0.01	17.3	199.4	150	8.75	33.735	3.86	26.189	183.6	0.423
160	8.73	33.825	3.52	1.63	29.	0.00	23.3	176.6	200	8.34	33.977	2.80	26.442	159.6	0.511
187	8.45	33.945	3.00	1.91	34.	0.00	25.9	163.6	250	7.62	34.008	2.69	26.573	147.2	0.589
225	8.06	34.005	2.59	2.07	39.	0.00	28.3	153.6	300	7.09	34.046	2.11	26.677	137.3	0.663
252	7.58	34.008	2.70	2.12	42.	0.01	29.2	146.7	400	5.87	34.042	1.59	26.835	122.3	0.797
298	7.12	34.047	2.12	2.23	50.	0.06	30.1	137.6	500	5.20	34.132	0.79	26.987	107.9	0.918
359	6.18	34.006	2.02	2.46	60.	0.00	34.7	128.8	600	4.76	34.226	0.47	27.111	96.2	1.026
452	5.59	34.106	0.99	2.72	75.	0.07	38.0	114.3							
538	4.93	34.155	0.70	2.91	91.	0.02	41.5	103.2							
609	4.76	34.238	0.43	3.05	100.	0.00	42.9	95.2							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 67090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 28.0N	124 55.0W	05/18/78	1604 GMT	4310M	330	20KT	2	330 7 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.45	33.190	6.07	0.35	4.	0.01	0.0	323.6	0	14.45	33.190	6.07	24.717	323.6	0.000
11	14.44	33.191	6.03	0.39	4.	0.00	0.1	323.3	10	14.44	33.191	6.03	24.720	323.3	0.032
29	14.46	33.192	6.02	0.31	4.	0.00	0.1	323.6	20	14.45	33.191	6.03	24.718	323.5	0.065
39	14.46	33.192	6.06	0.30	4.	0.00	0.1	323.6	30	14.46	33.192	6.02	24.717	323.6	0.097
53	14.18	33.204	6.05	0.28	4.	0.00	0.1	317.2	50	14.26	33.202	6.05	24.765	319.0	0.162
67	13.74	33.211	6.09	0.27	4.	0.00	0.1	308.0	75	13.03	33.144	5.90	24.973	299.3	0.239
90	11.46	33.061	5.38	0.66	8.	0.11	6.6	277.0	100	10.63	33.142	5.02	25.417	257.0	0.309
109	9.99	33.241	4.76	1.04	15.	0.01	14.0	239.3	125	9.21	33.355	4.72	25.820	218.7	0.369
128	9.11	33.377	4.71	1.14	19.	0.02	15.4	215.5	150	8.90	33.625	3.92	26.079	194.1	0.422
146	8.93	33.584	4.06	1.42	23.	0.00	19.8	197.5	200	8.56	33.933	2.78	26.373	166.1	0.513
174	8.76	33.822	3.21	1.74	30.	0.00	23.9	177.3	250	7.85	33.994	2.78	26.528	151.4	0.595
207	8.49	33.949	2.71	1.93	35.	0.00	27.0	163.9	300	7.03	33.991	2.89	26.642	140.7	0.670
236	8.08	33.991	2.61	1.97	38.	0.01	28.2	154.9	400	5.72	34.033	1.47	26.847	121.2	0.805
282	7.31	33.989	3.10	1.95	42.	0.01	27.6	144.5	500	5.56	34.186	0.61	26.986	108.0	0.926
332	6.57	33.998	2.31	2.18	53.	0.00	31.8	134.2							
412	5.61	34.044	1.35	2.50	71.	0.00	38.0	119.1							
492	5.58	34.176	0.66	2.69	80.	0.01	39.2	108.9							
572	5.29	34.248	0.40	2.86	89.	0.00	40.8	100.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 70053

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
36 06.5N	121 54.0W	05/19/78	1816 GMT	1075M	340	5KT	4	320 3 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.74	33.156	6.46	0.60	1.	0.05	2.7	293.0	0	12.74	33.156	6.46	25.039	293.0	0.000
10	12.33	33.162	6.41	0.60	1.	0.08	3.1	285.0	10	12.33	33.162	6.41	25.122	285.0	0.029
29	11.24	33.253	6.26	0.71	3.	0.08	6.1	259.1	20	11.84	33.191	6.33	25.237	274.1	0.057
39	10.25	33.387	5.24	1.09	12.	0.10	12.7	232.6	30	11.14	33.268	6.17	25.424	256.3	0.083
48	9.60	33.426	4.36	1.38	19.	0.12	16.3	219.4	50	9.57	33.466	4.22	25.847	216.1	0.131
62	9.40	33.668	3.66	1.59	24.	0.07	20.4	198.4	75	9.21	33.749	3.43	26.127	189.5	0.182
76	9.19	33.751	3.42	1.71	26.	0.04	21.7	189.0	100	8.73	33.827	3.26	26.264	176.5	0.228
95	8.78	33.805	3.32	1.81	29.	0.04	23.6	178.8	125	8.51	33.924	2.96	26.374	166.1	0.271
118	8.59	33.901	3.04	1.87	33.	0.03	24.1	168.9	150	8.10	33.958	3.02	26.462	157.7	0.312
137	8.34	33.952	2.89	1.95	35.	0.03	26.2	161.5	200	7.42	34.016	2.86	26.607	143.9	0.389
166	7.79	33.956	3.23	1.98	38.	0.00	26.3	153.4	250	7.51	34.157	1.46	26.704	134.7	0.461
192	7.33	33.981	3.23	2.01	42.	0.00	27.6	145.3	300	7.15	34.189	1.10	26.781	127.4	0.529
220	7.72	34.110	1.82	2.24	47.	0.00	31.0	141.0	400	6.56	34.225	0.71	26.890	117.1	0.656
258	7.41	34.160	1.36	2.37	54.	0.02	33.0	133.0	500	5.93	34.269	0.41	27.006	106.1	0.774
314	7.07	34.194	1.05	2.52	60.	0.01	34.5	126.0							
383	6.69	34.217	0.78	2.62	68.	0.00	36.5	119.4							
453	6.17	34.251	0.51	2.70	76.		37.6	110.3							
529	5.83	34.277	0.39	2.82	84.		39.0	104.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 70060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 53.0N	122 22.6W	05/19/78	1329 GMT	2975M	290	12KT	4	300 4 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.24	33.345	6.77	0.50	0.	0.14	5.0	269.9	0	12.24	33.345	6.77	25.281	269.9	0.000
11	12.22	33.344	6.63	0.49	0.	0.05	5.0	269.7	10	12.22	33.344	6.64	25.284	269.7	0.027
30	11.33	33.391	6.50	0.62	1.	0.18	6.4	250.4	20	11.92	33.357	6.57	25.350	263.4	0.054
38	10.87	33.431	6.06	0.88	6.	0.18	8.5	239.7	30	11.33	33.391	6.50	25.486	250.4	0.079
53	10.17	33.458	4.78	1.21	13.	0.17	13.4	226.1	50	10.30	33.458	5.02	25.720	228.2	0.127
67	9.54	33.415	4.59	1.41	18.	0.12	16.6	219.3	75	9.32	33.474	4.34	25.894	211.7	0.183
91	9.08	33.628	3.82	1.65	24.	0.05	21.3	196.5	100	9.01	33.663	3.68	26.092	192.8	0.234
110	8.95	33.705	3.53	1.78	26.	0.09	23.0	188.8	125	8.81	33.846	3.16	26.267	176.2	0.280
127	8.79	33.866	3.11	1.88	31.	0.05	24.9	174.5	150	8.62	33.995	2.59	26.413	162.4	0.323
147	8.65	33.985	2.63	2.04	34.	0.05	27.1	163.6	200	8.11	34.059	2.27	26.541	150.2	0.403
175	8.34	34.040	2.38	2.15	39.	0.03	28.4	155.0	250	7.56	34.078	2.03	26.635	141.3	0.478
208	8.04	34.063	2.24	2.21	41.	0.03	29.3	149.0	300	6.92	34.071	1.83	26.720	133.3	0.549
235	7.82	34.091	2.01	2.28	45.	0.02	30.8	143.8	400	6.18	34.135	1.02	26.869	119.1	0.680
281	7.04	34.051	2.06	2.33	51.	0.02	32.6	136.3	500	5.56	34.234	0.53	27.024	104.4	0.797
333	6.79	34.115	1.37	2.55	59.	0.02	35.4	128.2							
412	6.06	34.138	0.99	2.71	70.	0.01	38.4	117.5							
491	5.60	34.225	0.56	2.86	82.	0.02	40.2	105.5							
573	5.30	34.291	0.37	2.91	90.	0.03	41.5	97.1							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 70070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 33.0N	123 06.0W	05/19/78	0830 GMT	3730M	320	13KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.61	32.871	6.03	0.19	4.		0.1	350.2	0	14.61	32.871	6.03	24.438	350.2	0.000
10	14.60	32.871	6.01	0.15	4.		0.1	350.0	10	14.60	32.871	6.01	24.440	350.0	0.035
28	14.44	32.870	6.03	0.13	4.		0.1	346.8	20	14.51	32.871	6.02	24.459	348.2	0.070
37	14.42	32.871	6.02	0.14	4.		0.1	346.4	30	14.43	32.870	6.03	24.475	346.6	0.105
51	14.37	32.874	6.06	0.14	4.		0.1	345.1	50	14.37	32.874	6.06	24.491	345.1	0.174
64	13.96	32.924	6.05	0.14	4.		0.1	333.3	75	12.99	32.951	5.95	24.831	312.8	0.257
87	11.65	33.013	5.72	0.37	7.		4.4	283.9	100	10.21	33.167	5.24	25.508	248.3	0.327
105	9.73	33.229	5.08	0.95	14.		12.4	236.0	125	8.95	33.360	4.98	25.865	214.4	0.386
123	8.95	33.336	5.05	1.03	17.		14.1	216.2	150	8.85	33.627	4.27	26.089	193.1	0.437
141	8.96	33.536	4.33	1.34	22.		18.8	201.5	200	8.49	33.947	2.76	26.395	164.1	0.528
169	8.58	33.788	4.16	1.65	27.		21.1	177.2	250	7.39	33.972	3.55	26.576	146.8	0.608
201	8.48	33.949	2.73	1.98	35.		27.1	163.8	300	6.61	33.966	3.10	26.680	137.0	0.681
228	7.82	33.967	3.66	1.85	35.		25.4	153.0	400	5.67	34.030	1.55	26.850	120.9	0.814
274	7.00	33.971	3.44	1.95	43.		27.5	141.7	500	5.00	34.105	0.91	26.989	107.7	0.934
324	6.30	33.965	2.73	2.30	53.		32.1	133.3							
403	5.65	34.033	1.51	2.69	69.		37.1	120.4							
482	5.09	34.089	1.01	2.92	82.		40.4	109.9							
563	4.77	34.170	0.61	3.22	94.		42.2	100.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 70080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 15.7N	123 46.0W	05/19/78	0317 GMT	3925M	320	17KT	1	330 6 5

P	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	14.91	32.946	5.97	0.36	4.	0.00	0.0	350.8	0	14.91	32.946	5.97	24.432	350.8	0.000
12	14.88	32.949	5.97	0.33	4.	0.00	0.0	350.0	10	14.89	32.949	5.97	24.438	350.2	0.035
31	14.77	32.968	5.98	0.33	4.	0.00	0.0	346.3	20	14.85	32.958	5.97	24.454	348.6	0.070
40	14.76	32.969	5.96	0.34	4.	0.00	0.0	346.1	30	14.78	32.968	5.98	24.476	346.5	0.105
54	14.74	32.970	6.05	0.32	4.	0.00	0.0	345.6	50	14.75	32.970	6.02	24.484	345.8	0.174
68	14.46	32.966	6.01	0.30	4.	0.00	0.0	340.2	75	14.33	32.978	6.03	24.579	336.8	0.260
91	13.60	33.002	6.07	0.31	4.	0.00	0.0	320.6	100	12.58	33.008	5.95	24.954	301.0	0.340
110	11.40	33.030	5.77	0.54	5.	0.14	4.4	278.3	125	10.36	33.084	5.47	25.418	256.9	0.411
129	10.16	33.106	5.38	0.80	11.	0.05	9.6	252.0	150	9.40	33.331	4.81	25.771	223.4	0.471
147	9.48	33.306	4.84	1.08	17.	0.03	15.0	226.4	200	8.82	33.781	3.53	26.214	181.2	0.574
175	8.92	33.519	4.54	1.42	22.	0.02	18.4	202.2	250	8.34	33.995	2.90	26.455	158.3	0.661
208	8.81	33.857	3.21	1.69	30.	0.01	24.9	175.5	300	7.58	34.005	3.12	26.575	147.0	0.740
237	8.49	33.969	2.89	1.84	34.	0.01	26.9	162.4	400	5.92	33.978	2.37	26.778	127.7	0.882
283	7.90	34.017	2.91	1.94	39.	0.01	28.2	150.4	500	5.35	34.093	1.07	26.938	112.6	1.008
335	6.90	33.970	3.45	1.94	45.	0.01	28.3	140.5							
414	5.76	33.987	2.04	2.34	65.	0.01	36.2	125.2							
495	5.38	34.088	1.11	2.63	79.	0.00	40.3	113.2							
573	4.94	34.150	0.77	2.79	91.	0.00	42.3	103.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 70090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 53.9N	124 30.8W	05/18/78	2130 GMT	4310M	310	18KT	1	330 6 7

P	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.05	33.114	5.96	0.40	5.	0.04	0.1	341.4	0	15.05	33.114	5.96	24.530	341.4	0.000
11	14.99	33.115	5.96	0.35	4.	0.02	0.1	340.1	10	15.00	33.115	5.96	24.542	340.3	0.034
29	14.93	33.116	5.95	0.32	4.	0.01	0.1	338.8	20	14.95	33.115	5.95	24.553	339.3	0.068
57	14.91	33.116	5.98	0.29	4.	0.01	0.1	338.4	30	14.93	33.116	5.95	24.558	338.8	0.102
66	14.45	33.134	6.02	0.28	4.	0.01	0.0	327.7	50	14.92	33.116	5.97	24.560	338.6	0.170
80	14.35	33.119	6.03	0.26	4.	0.00	0.0	326.8	75	14.39	33.125	6.03	24.680	327.1	0.254
94	12.18	33.070	5.90	0.45	6.	0.06	2.5	289.1	100	11.58	33.072	5.75	25.192	278.4	0.330
108	10.99	33.092	5.52	0.66	9.	0.08	7.2	266.7	125	10.16	33.223	5.03	25.560	243.4	0.396
132	9.96	33.294	4.82	0.95	15.	0.05	14.0	234.9	150	9.58	33.484	4.28	25.861	214.8	0.454
150	9.58	33.484	4.28	1.25	19.	0.02	18.3	214.8	200	8.76	33.884	3.55	26.304	172.7	0.552
178	9.04	33.765	3.60	1.64	27.	0.01	23.2	185.7	250	7.77	33.956	3.20	26.510	153.1	0.636
206	8.67	33.902	3.54	1.64	30.	0.02	24.2	170.1	300	7.42	34.044	2.41	26.630	141.8	0.712
234	7.96	33.926	3.38	1.76	35.	0.02	26.5	158.0	400	6.40	34.100	1.23	26.813	124.4	0.850
280	7.57	34.016	2.77	1.92	49.	0.03	28.6	145.9	500	6.06	34.225	0.62	26.955	111.0	0.974
329	7.18	34.074	1.91	2.19	51.	0.02	33.1	136.4							
410	6.30	34.104	1.17	2.43	65.	0.04	36.9	122.9							
489	6.12	34.217	0.64	2.62	74.	0.02	39.0	112.3							
567	5.50	34.230	0.49	2.79	84.	0.02	40.8	104.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 73053

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 31.7N	121 28.3W	05/20/78	0236 GMT	750M	300	13KT	4	280 1 6

P	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.77	33.040	6.23	0.68	3.	0.08	1.9	321.1	0	13.77	33.040	6.23	24.743	321.1	0.000
11	13.65	33.076	6.28	0.71	3.	0.05	1.8	316.1	10	13.66	33.073	6.27	24.790	316.7	0.032
30	11.35	33.313	6.00	0.98	5.	0.13	6.9	256.5	20	12.67	33.172	6.15	25.063	290.6	0.062
50	10.53	33.426	5.33	1.33	12.	0.20	12.1	234.4	30	11.35	33.313	6.00	25.422	256.5	0.090
69	9.95	33.471	4.85	1.60	17.	0.17	15.7	221.6	50	9.88	33.470	4.81	25.799	220.6	0.138
83	9.14	33.458	4.44	1.65	22.	0.08	18.1	210.0	75	8.94	33.562	4.19	26.024	199.3	0.190
97	8.93	33.583	4.15	1.71	23.	0.03	20.0	197.6	100	8.80	33.775	3.36	26.212	181.4	0.238
96	8.80	33.753	3.45	1.95	28.	0.05	23.7	183.0	125	8.68	33.881	3.08	26.315	171.7	0.283
119	8.81	33.864	3.10	2.03	31.	0.04	25.0	174.9	150	8.21	33.934	3.01	26.428	160.9	0.325
138	8.35	33.910	3.05	2.12	34.	0.03	26.5	164.8	200	7.55	33.990	2.98	26.569	147.6	0.404
165	8.07	33.958	2.98	2.19	37.	0.01	27.2	157.2	250	7.01	34.033	2.36	26.677	137.3	0.477
192	7.67	33.985A	3.00	2.23	40.	0.01	28.0	149.6	300	6.86	34.132	1.38	26.776	127.9	0.545
220	7.27	34.003	2.84	2.30	44.	0.00	28.8	142.9	400	6.13	34.196	0.74	26.923	114.0	0.671
266	6.98	34.040	2.24	2.44	51.	0.00	32.0	136.3	500	5.69	34.259	0.52	27.028	104.0	0.786
330	6.84	34.153	1.20	2.75	60.	0.00	35.6	126.1							
379	6.36	34.199	0.79	2.88	70.	0.00	38.0	116.6							
450	5.67	34.195	0.65	2.96	80.	0.00	40.1	108.6							
527	5.70	34.288	0.44	3.04	84.	0.03	40.2	101.9							

A) IT IS ASSUMED THAT TWO DIGITS WERE REVERSED IN RECORDING THE CONDUCTIVITY RATIO. THE LISTED OBSERVED AND INTERPOLATED VALUES INCORPORATE THE CORRECTION OF 0.071 PPT.

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 73060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 17.5N	121 58.0W	05/20/78	0621 GMT	2130M	300	8KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	14.91	32.919	5.96	0.59	4.	0.01	0.1	352.8
11	14.83	32.931	5.97	0.53	4.	0.00	0.1	350.2
40	14.56	32.951	5.99	0.50	4.	0.00	0.1	343.3
63	13.70	32.919	6.08	0.51	4.	0.01	0.2	328.6
82	11.19	33.041	5.76	0.76	7.	0.05	4.5	273.8
96	10.19	33.116	5.42	1.01	10.	0.03	8.8	251.7
110	9.49	33.234	5.03	1.29	15.	0.02	13.3	231.9
129	9.03	33.402	4.75	1.37	18.	0.02	14.7	212.5
147	8.68	33.703	4.00	1.59	25.	0.02	18.5	184.9
171	8.52	33.828	3.35	1.94	30.	0.02	24.3	173.3
194	8.66	34.011	2.48	2.21	35.	0.01	26.3	161.8
217	8.21	34.042	2.44	2.32	38.	0.00	28.3	153.0
245	7.88	34.068	2.21	2.46	43.	0.00	29.9	146.4
277	7.30	34.055	2.21	2.46	47.	0.09	30.5	139.4
324	6.84	34.089	1.63	2.70	55.	0.01	34.2	130.8
385	6.67	34.195	0.92	2.86	64.	0.06	36.0	120.8
456	5.71	34.140	0.84	2.99	75.	0.01	39.4	113.1
532	5.33	34.207	0.54	3.12	85.	0.00	41.1	103.7

Z	T	S	O2	SIGT	DT	DD
0	14.91	32.919	5.96	24.411	352.8	0.000
10	14.84	32.931	5.97	24.434	350.5	0.035
20	14.77	32.943	5.98	24.459	348.2	0.070
30	14.68	32.950	5.98	24.484	345.8	0.105
50	14.37	32.945	6.03	24.546	339.9	0.174
75	12.14	32.981	5.91	25.017	295.0	0.253
100	9.96	33.148	5.30	25.536	245.7	0.322
125	9.10	33.361	4.82	25.842	216.6	0.380
150	8.66	33.729	3.92	26.199	182.7	0.430
200	8.56	34.027	2.47	26.446	159.2	0.517
250	7.79	34.067	2.21	26.594	145.2	0.596
300	7.03	34.065	1.97	26.701	135.1	0.668
400	6.48	34.186	0.90	26.870	119.0	0.800
500	5.41	34.164	0.69	26.988	107.9	0.919

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 73070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 58.0N	122 40.0W	05/20/78	1205 GMT	4015M	300	12KT	2	320 4 8

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	14.77	33.227	6.02	0.47	3.	0.00	0.0	327.4
10	14.70	33.229	6.02	0.48	3.	0.00	0.0	325.8
30	14.37	33.220	6.08	0.49	3.	0.00	0.0	319.8
39	14.29	33.226	6.15	0.50	3.	0.00	0.0	317.8
53	14.02	33.197	5.75	0.50	4.	0.00	0.0	314.5
68	13.53	33.188	6.06	0.55	4.	0.01	0.5	305.6
91	11.74	33.045	5.71	0.76	8.	0.21	5.6	283.1
109	11.12	33.099	5.45	0.89	10.	0.21	7.7	268.4
129	9.93	33.175	5.11	1.05	14.	0.06	11.8	243.2
147	10.42	33.585	3.90	1.67	19.	0.01	17.8	220.8
175	9.69	33.789	3.26	1.51	25.	0.02	21.9	194.0
207	8.55	33.835	3.46	1.80	25.	0.01	22.1	173.2
235	8.06	33.965	3.12	1.83	30.	0.01	24.0	156.5
280	7.25	33.978	3.26	1.95	36.	0.00	26.8	144.5
331	6.64	34.016	2.20	2.20	53.	0.00	33.1	133.7
410	6.00	34.060	1.40	2.51	66.	0.00	37.6	122.5
490	5.25	34.083	1.06	2.73	80.	0.00	40.1	112.2
573	4.91	34.153	0.70	2.93	91.	0.00	41.9	103.2

Z	T	S	O2	SIGT	DT	DD
0	14.77	33.227	6.02	24.678	327.4	0.000
10	14.70	33.229	6.02	24.694	325.8	0.033
20	14.54	33.224	6.04	24.724	322.9	0.065
30	14.37	33.220	6.08	24.757	319.8	0.097
50	14.09	33.205	5.83	24.803	315.4	0.161
75	12.99	33.138	6.01	24.974	299.1	0.238
100	11.41	33.064	5.58	25.217	276.0	0.311
125	10.12	33.143	5.22	25.505	248.6	0.377
150	10.39	33.624	3.78	25.832	217.5	0.436
200	8.79	33.829	3.40	26.256	177.2	0.536
250	7.78	33.970	3.18	26.519	152.3	0.621
300	6.98	33.992	2.91	26.650	139.9	0.696
400	6.07	34.056	1.46	26.820	123.7	0.832
500	5.19	34.089	1.02	26.954	111.0	0.955

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 73080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 38.0N	123 22.0W	05/20/78	1706 GMT	4020M	290	10KT	1	300 3 8

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	15.01	32.955	5.94		4.	0.00	0.2	352.2
11	14.97	32.954	5.96		4.	0.00	0.2	351.4
29	14.68	32.947	6.00		4.	0.01	0.1	346.0
39	14.65	32.951	6.12		4.	0.00	0.1	345.1
53	14.52	32.952	6.00	0.64	4.	0.00	0.1	342.4
67	14.26	32.931	6.05	0.56	4.	0.00	0.1	338.8
92	13.17	33.017	6.06	0.57	4.	0.00	0.0	311.3
109	11.14	33.049	5.68	0.80	7.	0.10	4.9	272.4
128	9.95	33.169	5.09	1.14	13.	0.03	11.1	244.0
147	9.58	33.430	4.41	1.46	19.	0.04	16.5	218.8
175	9.17	33.708	3.85	1.76	24.	0.04	20.5	191.9
208	8.74	33.889	3.38	1.88	30.	0.03	24.3	172.0
236	8.33	33.996	2.85	2.01	36.	0.03	26.9	158.1
283	7.73	34.040	2.46	2.21	43.	0.01	29.5	146.4
335	7.15	34.080	1.77	2.43	53.	0.01	32.9	135.5
414	6.59	34.148	1.03	2.64	63.	0.01	37.1	123.2
492	5.98	34.196	0.61	2.77	75.		38.2	112.1
570	5.55	34.254	0.40	2.90	85.		40.6	102.8

Z	T	S	O2	SIGT	DT	DD
0	15.01	32.955	5.94	24.417	352.2	0.000
10	14.97	32.954	5.96	24.425	351.4	0.035
20	14.84	32.951	5.98	24.450	349.1	0.070
30	14.68	32.948	6.01	24.483	345.9	0.105
50	14.56	32.952	6.03	24.511	343.2	0.174
75	14.08	32.956	6.05	24.615	333.3	0.259
100	12.22	33.025	5.91	25.036	293.2	0.338
125	10.07	33.144	5.19	25.513	247.8	0.406
150	9.53	33.466	4.33	25.854	215.4	0.465
200	8.84	33.855	3.49	26.268	176.1	0.564
250	8.14	34.019	2.71	26.504	153.7	0.649
300	7.53	34.054	2.24	26.621	142.6	0.725
400	6.68	34.137	1.14	26.805	125.2	0.864
500	5.93	34.202	0.58	26.953	111.1	0.989

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 73090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 18.5N	124 04.0W	05/20/78	2256 GMT	3075M	290	10KT	1	290 3 8

E	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.66	33.121	5.91	0.48	3.	0.01	0.0	353.6	0	15.66	33.121	5.91	24.402	353.6	0.000
9	15.25	33.126	5.93	0.47	3.	0.00	0.1	344.7	10	15.22	33.126	5.93	24.503	344.0	0.035
27	14.98	33.131	5.96	0.45	3.	0.00	0.0	338.7	20	15.03	33.130	5.95	24.547	339.8	0.069
37	14.89	33.135	5.96	0.46	3.	0.00	0.0	336.6	30	14.95	33.132	5.96	24.566	338.0	0.103
46	14.87	33.135	5.97	0.47	3.	0.00	0.1	336.1	50	14.73	33.138	5.99	24.616	333.2	0.170
60	14.37	33.146	6.02	0.47	3.	0.00	0.0	325.2	75	14.23	33.142	6.01	24.726	322.8	0.253
74	14.29	33.147	6.01	0.48	3.	0.00	0.0	323.5	100	12.10	33.058	5.98	25.086	288.5	0.330
92	12.83	33.054	6.06	0.51	4.	0.00	0.0	302.2	125	10.11	33.134	5.31	25.500	249.1	0.398
116	10.73	33.063	5.63	0.77	8.	0.01	6.3	264.5	150	9.29	33.424	4.50	25.861	214.8	0.456
134	9.63	33.231	4.97	1.10	15.	0.10	13.5	234.3	200	8.68	33.864	3.40	26.300	173.1	0.555
162	9.20	33.565	4.20	1.60	22.	0.00	19.3	203.0	250	8.21	34.013	2.86	26.489	155.1	0.639
190	8.78	33.804	3.55	1.69	28.	0.01	23.0	178.9	300	7.66	34.071	2.21	26.616	143.1	0.716
218	8.53	33.943	3.18	1.83	32.	0.00	25.3	164.9	400	6.71	34.155	1.12	26.814	124.3	0.855
256	8.15	34.020	2.80	1.98	37.	0.00	27.5	153.7	500	5.85	34.186	0.71	26.951	111.3	0.979
312	7.53	34.081	2.04	2.21	47.	0.00	31.3	140.6							
383	6.90	34.151	1.23	2.48	60.	0.00	35.5	127.0							
452	6.18	34.161	0.90	2.57	70.	0.00	38.1	117.2							
527	5.72	34.205	0.62	2.76	80.	0.00	40.0	108.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77051

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
35 02.0N	120 56.5W	05/22/78	0408 GMT	283M	310	11KT		

E	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	11.31	33.449	6.53	0.53	6.	0.02	5.4	245.8	0	11.31	33.449	6.53	25.534	245.8	0.000
11	10.81	33.453	5.95	0.66	8.	0.01	8.2	237.0	10	10.84	33.452	5.99	25.620	237.7	0.024
29	10.75	33.492	5.80	0.77	8.	0.10	9.2	233.1	20	10.78	33.476	5.86	25.650	234.8	0.048
43	10.37	33.553	5.07	1.00	14.	0.19	13.3	222.3	30	10.74	33.498	5.76	25.674	232.5	0.071
55	9.50	33.528	4.39	1.25	21.	0.09	18.0	210.3	50	9.86	33.534	4.67	25.852	215.6	0.116
69	9.14	33.678	3.78	1.41	25.	0.03	21.2	193.7	75	9.08	33.733	3.58	26.136	188.7	0.167
81	9.05	33.784	3.41	1.49	28.	0.00	22.8	184.5	100	9.09	33.941	3.02	26.297	173.4	0.213
101	9.09	33.948	3.01	1.60	29.	0.01	23.9	172.9	125	8.92	34.038	2.78	26.399	163.7	0.255
124	8.94	34.035	2.80	1.71	32.	0.01	25.5	164.2	150	8.50	34.100	2.26	26.512	153.0	0.296
142	8.60	34.085A	2.43	1.88	36.	0.00	27.6	155.4	200	8.26	34.127	1.81	26.571	147.3	0.372
174	8.33	34.123	1.86	2.11	44.	0.02	29.3	148.7	250	7.95	34.154	1.48	26.639	141.0	0.446
204	8.25	34.127	1.80	2.12	44.	0.02	29.5	147.2							
242	8.00	34.150	1.53	2.28	50.	0.01	31.0	141.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77055

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 54.5N	121 13.0W	05/22/78	0121 GMT	555M	280	6KT	2	280 3 8

E	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.20	33.139	6.29	0.46	1.	0.07	1.5	322.3	0	14.20	33.139	6.29	24.731	322.3	0.000
11	11.10	33.186	5.70	0.80	8.	0.21	7.3	261.6	10	11.33	33.179	5.75	25.320	266.2	0.029
30	9.91	33.255	5.10	1.12	15.	0.10	13.1	237.0	20	10.54	33.217	5.33	25.491	249.9	0.055
44	10.16	33.476	5.11	1.33	19.	0.26	15.6	224.6	30	9.91	33.255	5.10	25.628	237.0	0.080
54	9.98	33.505	4.98	1.40	20.	0.20	16.2	219.6	50	10.09	33.500	5.06	25.787	221.8	0.126
68	9.14	33.572	4.25	1.55	23.	0.04	19.3	201.5	75	9.14	33.643	3.90	26.055	196.4	0.178
82	9.15	33.700	3.61	1.70	26.	0.09	22.0	192.2	100	9.08	33.850	3.23	26.226	180.1	0.226
96	9.10	33.827	3.30	1.78	29.	0.07	23.4	182.0	125	8.96	33.956	2.79	26.328	170.4	0.270
119	8.99	33.927	2.91	1.87	31.	0.09	24.6	172.9	150	8.74	34.029	2.46	26.420	161.7	0.312
138	8.88	34.009	2.56	1.99	34.	0.01	26.6	165.2	200	8.35	34.123	1.91	26.554	149.0	0.392
166	8.56	34.047	2.35	2.06	38.	0.04	27.2	157.7	250	7.89	34.146	1.63	26.642	140.7	0.466
193	8.41	34.117	1.95	2.26	42.	0.01	29.4	150.3	300	7.33	34.178	1.11	26.746	130.7	0.536
221	8.15	34.128	1.82	2.35	45.	0.01	30.6	145.7	400	6.65	34.219	0.80	26.873	118.7	0.666
258	7.81	34.151	1.57	2.40	49.	0.01	31.7	139.2	500	5.96	34.265	0.55	26.999	106.8	0.785
313	7.20	34.185	0.98	2.57	59.	0.00	34.6	128.4							
364	6.96	34.203	0.91	2.62	63.	0.00	35.6	123.9							
421	6.46	34.229	0.73	2.73	71.	0.00	37.5	115.5							
479	6.08	34.256	0.59	2.89	78.	0.00	39.0	108.9							

A) AN ERROR OF -0.005 (0.197 PPT) IN THE CONDUCTIVITY RATIO HAS BEEN ASSUMED FOR THIS VALUE.

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 44.0N	121 34.0W	05/21/78	2104 GMT	972M	280	7KT	2	280 3 8

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.33	32.814	6.15	0.41	3.	0.01	0.0	348.7	0	14.33	32.814	6.15	24.453	348.7	0.000
9	14.15	32.805	6.14	0.43	3.	0.00	0.0	345.8	10	14.15	32.810	6.14	24.487	345.5	0.035
28	14.22	32.908	6.09	0.45	1.	0.00	0.0	339.7	20	14.19	32.862	6.11	24.519	342.5	0.069
38	13.60	32.809	6.30	0.42	3.	0.00	0.1	334.8	30	14.09	32.889	6.13	24.560	338.5	0.103
48	13.51	32.791	6.28	0.43	3.	0.00	0.1	334.4	50	13.24	32.828	6.20	24.686	326.6	0.170
82	11.34	33.095	5.63	0.70	6.	0.16	5.7	272.4	75	10.25	33.164	5.25	25.498	249.2	0.242
76	10.20	33.167	5.22	0.98	13.	0.07	11.2	248.1	100	9.76	33.630	3.83	25.945	206.8	0.300
95	9.79	33.547	4.09	1.36	20.	0.06	18.4	213.5	125	9.63	33.898	2.79	26.175	185.0	0.349
118	9.69	33.852	3.03	1.70	27.	0.03	23.4	189.3	150	9.37	33.992	2.04	26.290	174.0	0.395
136	9.52	33.945	2.46	1.85	31.	0.04	25.8	179.8	200	8.80	34.094	1.92	26.461	157.8	0.479
164	9.21	34.026	1.76	1.86	36.	0.01	27.1	169.0	250	8.46	34.143	1.71	26.552	149.1	0.558
192	8.84	34.088	1.94	1.97	40.	0.02	28.5	158.8	300	7.95	34.185	1.41	26.662	138.7	0.633
219	8.73	34.102	1.88	2.05	41.	0.00	29.3	156.1	400	7.00	34.206	0.98	26.814	124.3	0.770
256	8.40	34.151	1.67	2.14	45.	0.00	30.7	147.6	500	6.16	34.262	0.50	26.971	109.5	0.893
310	7.85	34.189	1.35	2.27	51.	0.00	32.8	136.9							
379	7.16	34.194	1.11	2.43	59.	0.00	35.4	127.2							
449	6.64	34.236	0.69	2.56	68.	0.01	37.7	117.3							
524	5.91	34.273	0.44	2.76	81.	0.00	40.1	105.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 24.4N	122 16.4W	05/21/78	1528 GMT	3920M	280	8KT	2	280 3 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	13.81	32.840	6.19	0.57	3.	0.00	0.2	336.6	0	13.81	32.840	6.19	24.581	336.6	0.000
11	13.71	32.866	6.25	0.58	3.	0.00	0.2	332.7	10	13.72	32.864	6.25	24.618	333.1	0.033
30	12.50	33.066	6.26	0.67	5.	0.08	3.8	295.2	20	13.23	32.951	6.25	24.783	317.3	0.066
39	11.86	33.146	6.25	0.67	4.	0.14	4.7	277.8	30	12.50	33.066	6.26	25.015	295.2	0.097
53	10.83	33.200	5.37	0.86	11.	0.18	9.2	256.0	50	11.02	33.187	5.56	25.384	260.1	0.152
67	10.67	33.368	5.49	0.94	11.	0.21	11.3	240.9	75	10.40	33.403	5.17	25.660	233.9	0.215
91	9.91	33.475	4.28	1.12	19.	0.11	16.6	220.7	100	9.94	33.594	3.87	25.886	212.4	0.271
110	9.99	33.724	3.47	1.39	24.	0.22	20.7	203.5	125	9.68	33.812	3.00	26.100	192.1	0.322
128	9.60	33.822	2.93	1.48	28.	0.02	22.5	190.1	150	9.31	33.907	2.75	26.234	179.3	0.369
147	9.34	33.895	2.78	1.68	30.	0.06	24.5	180.7	200	8.74	34.042	2.31	26.430	160.7	0.456
174	9.09	33.991	2.50	1.91	34.	0.06	25.5	169.7	250	8.09	34.076	2.10	26.556	148.7	0.535
206	8.66	34.050	2.27	2.00	38.	0.04	26.8	158.9	300	7.14	34.065	1.88	26.685	136.5	0.609
233	8.43	34.083	2.07	2.11	41.	0.04	28.9	153.1	400	6.32	34.138	0.95	26.853	120.7	0.742
279	7.45	34.057	2.12	2.21	48.	0.02	31.3	141.3	500	5.71	34.223	0.54	26.997	106.9	0.862
329	6.81	34.085	1.48	2.43	58.	0.01	34.6	130.7							
407	6.29	34.144	0.92	2.61	69.	0.00	37.7	119.8							
485	5.78	34.210	0.59	2.75	80.		38.9	108.7							
566	5.50	34.278	0.36	2.94	88.		40.5	100.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 04.0N	122 57.0W	05/21/78	0908 GMT	4310M	280	12KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.17	32.915	5.95	0.63	4.	0.00	0.1	358.4	0	15.17	32.915	5.95	24.352	358.4	0.000
11	15.07	32.916	5.95	0.56	4.	0.00	0.1	356.3	10	15.08	32.916	5.95	24.372	356.5	0.036
30	14.81	32.950	5.98	0.54	3.	0.00	0.1	348.5	20	14.97	32.932	5.96	24.408	353.1	0.071
39	14.62	32.950	6.00	0.54	3.	0.00	0.1	344.6	30	14.81	32.950	5.98	24.456	348.5	0.106
53	14.18	32.952	6.07	0.52	3.	0.00	0.1	335.6	50	14.27	32.952	6.06	24.572	337.4	0.175
67	14.05	32.949	6.06	0.48	4.	0.00	0.1	333.3	75	13.58	32.965	5.97	24.722	323.1	0.258
95	11.84	33.062	5.74	0.63	6.	0.02	3.4	283.6	100	11.33	33.105	5.52	25.263	271.6	0.333
109	10.49	33.183	5.14	0.88	12.	0.02	9.8	251.6	125	9.67	33.251	4.91	25.665	233.4	0.397
127	9.61	33.258	4.89	1.09	16.	0.02	13.8	232.0	150	9.37	33.451	4.39	25.869	214.0	0.453
146	9.43	33.403	4.52	1.27	19.	0.02	16.5	218.5	200	8.71	33.922	2.99	26.340	169.2	0.551
176	8.98	33.760	3.53	1.63	28.	0.02	22.2	185.2	250	8.06	34.030	2.67	26.524	151.8	0.633
205	8.66	33.943	2.91	1.75	32.	0.01	25.0	166.9	300	7.38	34.068	2.06	26.654	139.5	0.708
232	8.29	34.004	2.82	1.85	36.	0.01	26.7	156.9	400	6.58	34.154	1.00	26.831	122.7	0.845
276	7.73	34.053	2.38	2.03	43.	0.00	29.5	145.4	500	5.98	34.232	0.63	26.970	109.5	0.967
325	7.04	34.082	1.73	2.22	54.	0.00	33.0	134.0							
405	6.56	34.159	0.96	2.47	65.	0.00	36.7	122.0							
483	6.08	34.221	0.95U	2.60	75.	0.00	37.6	111.5							
564	5.65	34.268	0.40	2.74	84.	0.01	39.6	102.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 77090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 43.0N	123 39.0W	05/21/78	0354 GMT	4120M	280	13KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.29	32.955	5.92	0.55	4.	0.00	0.0	358.0	0	15.29	32.955	5.92	24.356	358.0	0.000
10	14.99	32.950	5.95	0.54	4.	0.00	0.0	352.1	10	14.99	32.950	5.95	24.417	352.1	0.036
39	14.90	32.950	5.96	0.57	4.	0.00	0.0	350.3	20	14.96	32.950	5.95	24.424	351.5	0.071
82	14.71	32.949	6.01	0.52	4.	0.00	0.0	346.5	30	14.93	32.950	5.96	24.430	350.9	0.106
81	14.12	32.950	6.08	0.52	4.	0.00	0.0	334.6	50	14.85	32.950	5.98	24.447	349.3	0.176
95	12.92	32.993	6.13	0.55	5.	0.00	0.0	308.3	75	14.40	32.947	6.06	24.542	340.3	0.263
109	11.31	33.051	5.73	0.75	8.	0.07	4.7	275.2	100	12.34	33.008	6.02	25.000	296.6	0.343
126	9.91	33.207	5.05	0.99	14.	0.01	10.8	240.5	125	9.97	33.196	5.09	25.572	242.3	0.411
146	9.87	33.528	4.13	1.24	19.	0.01	15.1	216.1	150	9.84	33.582	3.96	25.894	211.7	0.468
169	9.64	33.780	3.31	1.60	25.	0.01	21.5	193.8	200	9.27	33.933	2.78	26.262	176.7	0.567
192	9.38	33.894	2.91	1.86	30.	0.01	22.6	181.4	250	8.47	34.052	2.39	26.481	155.9	0.652
215	9.03	33.995	2.57	2.00	33.	0.00	25.9	168.5	300	7.97	34.101	2.00	26.593	145.2	0.730
243	8.55	34.044	2.42	2.11	37.	0.00	27.6	157.7	400	7.11	34.167	1.20	26.769	128.6	0.873
276	8.21	34.076	2.23	2.22	41.	0.03	28.0	150.4	500	6.32	34.220	0.69	26.918	114.5	1.001
322	7.77	34.122	1.77	2.39	48.	0.00	31.3	140.8							
385	7.25	34.159	1.31	2.61	56.	0.00	33.5	131.0							
456	6.62	34.196	0.86	2.77	66.	0.04	36.7	120.0							
531	6.14	34.236	0.63	2.96	74.	0.00	38.9	111.1							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 80055

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 19.0N	120 48.0W	05/22/78	1130 GMT	760M	330	24KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.16	33.628	5.97	0.82	13.	0.04	5.9	266.2	0	13.16	33.628	5.97	25.320	266.2	0.000
10	13.09	33.648	5.96	0.81	13.	0.13	6.0	263.4	10	13.09	33.648	5.96	25.349	263.4	0.026
43	10.46	33.792	3.36	1.51	22.	0.38	19.6	206.2	20	12.40	33.678	5.29	25.508	248.3	0.052
71	9.62	33.932	2.56	1.79	30.	0.09	23.7	182.3	30	11.61	33.719	4.52	25.688	231.3	0.076
89	9.38	33.997	2.33	1.97	33.	0.12	25.2	173.7	50	10.16	33.830	3.07	26.032	198.5	0.119
103	9.18	34.045	2.14	2.11	35.	0.04	26.7	167.1	75	9.56	33.948	2.50	26.225	180.2	0.167
116	9.00	34.078	2.12	2.14	37.	0.08	27.5	161.9	100	9.22	34.035	2.17	26.348	168.5	0.211
135	8.94	34.097	1.98	2.11	38.	0.03	26.7	159.6	125	8.96	34.089	2.06	26.431	160.6	0.253
153	8.77	34.128	1.86	2.12	40.	0.09	26.7	154.7	150	8.80	34.123	1.88	26.484	155.6	0.293
181	8.56	34.154	1.71	2.27	43.	0.04	29.5	149.7	200	8.40	34.173	1.61	26.586	145.9	0.370
205	8.35	34.178	1.58	2.32	45.	0.08	28.8	144.9	250	7.99	34.205	1.31	26.672	137.8	0.443
229	8.11	34.196	1.42	2.41	48.	0.04	31.1	140.1	300	7.75	34.219	1.17	26.719	133.4	0.513
261	7.95	34.208	1.27	2.49	50.	0.02	32.2	136.9	400	7.14	34.230	0.93	26.814	124.3	0.647
299	7.76	34.219	1.17	2.53	53.	0.02	32.4	133.5	500	6.06	34.283	0.48	27.000	106.7	0.769
345	7.47	34.230	1.02	2.62	57.	0.01	34.1	128.7							
410	7.07	34.230	0.91	2.63	62.	0.00	35.0	123.3							
490	6.15	34.277	0.51	2.82	76.	0.02	35.9	108.1							
570	5.64	34.318	0.37	2.92	86.	0.01	40.5	99.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 80060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 09.0N	121 09.0W	05/22/78	1503 GMT	2220M	330	22KT	2	330 6 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.26	33.626	5.97	0.81	12.		6.3	268.3	0	13.26	33.626	5.97	25.298	268.3	0.000
11	13.23	33.626	5.93	0.82	13.		6.7	267.7	10	13.23	33.626	5.94	25.304	267.7	0.027
30	12.55	33.607	5.73	1.04	13.		9.6	256.3	20	12.96	33.618	5.82	25.351	263.3	0.053
39	12.37	33.603	5.75	1.08	13.		10.1	253.3	30	12.55	33.607	5.73	25.424	256.3	0.079
53	11.24	33.651	4.53	1.32	17.		14.5	229.7	50	11.49	33.638	4.82	25.647	235.1	0.129
69	10.89	33.692	4.10	1.42	19.		16.4	220.7	75	10.70	33.710	3.89	25.846	216.2	0.186
91	10.15	33.779	3.31	1.62	24.		20.5	202.1	100	9.85	33.844	2.97	26.096	192.5	0.237
110	9.54	33.914	2.67	1.82	29.		23.9	182.4	125	9.15	33.970	2.59	26.309	172.2	0.283
130	9.04	33.981	2.56	1.88	33.		24.8	169.7	150	8.76	34.011	2.47	26.402	163.4	0.326
149	8.78	34.010	2.47	1.99	34.		26.5	163.7	200	8.19	34.062	2.22	26.531	151.2	0.406
177	8.38	34.035	2.39	2.01	38.		27.1	155.9	250	7.82	34.108	1.86	26.621	142.6	0.481
208	8.14	34.071	2.16	2.13	41.		29.2	149.8	300	7.29	34.155	1.34	26.734	131.9	0.552
236	7.99	34.093	2.02	2.18	44.		29.9	146.0	400	6.64	34.229	0.76	26.882	117.8	0.682
283	7.41	34.144	1.45	2.36	53.		32.5	134.3	500	6.17	34.283	0.48	26.986	108.0	0.802
334	7.11	34.173	1.18	2.49	57.		34.1	128.1							
413	6.55	34.240	0.69	2.66	68.		36.8	115.9							
494	6.20	34.280	0.49	2.68	75.		37.0	108.5							
574	5.74	34.312	0.35	2.80	83.		39.3	100.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 80070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 48.5N	121 51.0W	05/22/78	2048 GMT	3740M	320	20KT	1	320 7 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	14.40	32.943	6.15	0.42	3.	0.00	0.1	340.7	0	14.40	32.943	6.15	24.538	340.7	0.000
11	14.37	32.942	6.14	0.40	3.	0.00	0.0	340.2	10	14.37	32.942	6.14	24.543	340.2	0.034
31	13.39	33.014	6.30	0.44	3.	0.05	1.2	315.7	20	14.14	32.987	6.24	24.626	332.3	0.068
40	12.45	32.943	6.13	0.57	6.	0.07	3.2	303.3	30	13.48	33.013	6.30	24.781	317.5	0.100
54	11.15	33.087	5.47	0.77	9.	0.23	7.1	269.8	50	11.45	33.021	5.70	25.176	279.9	0.160
68	10.97	33.409	4.41	1.14	15.	0.15	13.6	243.0	75	10.79	33.489	4.15	25.657	234.1	0.225
92	10.33	33.604	3.79	1.38	19.	0.03	17.8	217.9	100	10.17	33.676	3.57	25.912	210.0	0.281
110	9.98	33.756	3.32	1.59	23.	0.03	20.5	201.0	125	9.69	33.828	3.09	26.110	191.2	0.331
129	9.62	33.841	3.04	1.79	27.	0.01	22.7	189.0	150	9.29	33.903	2.81	26.234	179.3	0.378
148	9.34	33.897	2.82	1.94	29.	0.02	24.2	180.5	200	8.41	34.043	2.43	26.482	155.8	0.464
175	8.71	33.977	2.73	2.07	34.	0.03	25.9	165.1	250	7.84	34.081	2.03	26.597	144.9	0.541
207	8.35	34.056	2.34	2.11	39.	0.03	27.8	153.9	300	7.49	34.144	1.51	26.698	135.3	0.613
235	8.00	34.068	2.16	2.21	42.	0.01	28.9	148.1	400	6.71	34.218	0.82	26.865	119.5	0.746
281	7.58	34.115	1.72	2.35	49.	0.00	31.5	138.7	500	5.71	34.230	0.47	27.003	106.4	0.865
331	7.35	34.188	1.19	2.52	56.	0.00	33.4	130.2							
415	6.54	34.219	0.77	2.71	67.	0.00	36.7	117.3							
494	5.75	34.226	0.49	2.82	79.	0.00	39.0	107.2							
575	5.35	34.306	0.30	2.91	89.	0.01	40.4	96.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 80080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 29.4N	122 31.0W	05/23/78	0154 GMT	3925M	330	30KT	1	330 8 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
3	14.23	32.902	6.11	0.47	3.	0.00	0.1	340.3	0	14.23	32.902	6.11	24.542	340.3	0.000
12	14.23	32.899	6.09	0.47	3.	0.00	0.2	340.5	10	14.23	32.899	6.09	24.540	340.5	0.034
30	14.19	32.908	6.13	0.47	3.	0.01	0.3	339.1	20	14.21	32.904	6.11	24.546	339.9	0.068
39	13.55	32.933	6.21	0.45	3.	0.01	0.5	324.7	30	14.19	32.908	6.13	24.555	339.1	0.102
49	13.12	32.948	6.14	0.49	3.	0.04	1.2	315.4	50	13.06	32.954	6.12	24.820	313.8	0.168
62	12.14	33.034	5.81	0.59	6.	0.10	3.1	291.0	75	10.83	33.104	5.40	25.353	263.1	0.240
76	10.73	33.109	5.37	0.86	10.	0.07	8.6	261.1	100	9.74	33.287	4.85	25.680	232.0	0.302
94	9.83	33.202	5.11	1.04	13.	0.03	11.9	239.6	125	9.35	33.567	4.09	25.961	205.2	0.358
117	9.60	33.524	4.14	1.37	19.	0.08	17.5	212.2	150	8.99	33.753	3.58	26.165	185.9	0.407
136	9.03	33.613	4.05	1.52	22.	0.00	20.4	196.8	200	8.43	33.979	2.79	26.430	160.8	0.495
163	8.96	33.867	3.10	1.88	29.	0.03	24.5	177.0	250	7.68	34.036	2.43	26.586	146.0	0.574
191	8.57	33.960	2.83	1.93	33.	0.00	26.6	164.3	300	7.10	34.079	1.75	26.702	135.0	0.646
219	8.12	34.007	2.72	2.04	37.	0.00	28.1	154.3	400	6.38	34.147	0.97	26.853	120.6	0.779
256	7.60	34.040	2.36	2.15	43.	0.00	30.3	144.6	500	5.65	34.168	0.56	26.961	110.3	0.901
312	6.98	34.088	1.58	2.41	54.	0.00	34.4	132.7							
382	6.49	34.133	1.06	2.61	63.	0.00	37.2	123.1							
453	6.02	34.176	0.74	2.74	72.	0.00	39.3	114.1							
530	5.38	34.147	0.45	2.81	79.	0.00	40.1	108.8							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 80090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 09.0N	123 13.0W	05/23/78	0725 GMT	4310M	330	33KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	14.79	32.906	6.00	0.54	3.	0.00	0.0	351.3	0	14.79	32.906	6.00	24.427	351.3	0.000
10	14.78	32.905	6.00	0.51	3.	0.00	0.0	351.1	10	14.78	32.905	6.00	24.428	351.1	0.035
33	14.81	32.904	5.99	0.50	3.	0.00	0.0	351.8	20	14.79	32.905	6.00	24.426	351.3	0.070
42	14.57	32.907	6.05	0.46	3.	0.00	0.1	346.7	30	14.81	32.904	5.99	24.421	351.8	0.106
55	14.36	32.908	6.05	0.46	4.	0.00	0.1	342.4	50	14.83	32.908	6.05	24.420	351.9	0.176
71	14.11	32.896	6.02	0.44	4.	0.00	0.0	338.4	75	13.83	32.921	6.00	24.638	331.1	0.262
93	12.30	33.051	5.84	0.59	6.	0.08	2.6	292.7	100	11.80	33.063	5.73	25.145	282.9	0.339
111	11.08	33.087	5.49	0.72	8.	0.08	5.2	268.6	125	10.24	33.205	5.04	25.533	246.0	0.406
130	9.98	33.254	4.87	0.96	14.	0.07	10.5	238.1	150	9.34	33.414	4.47	25.845	216.3	0.464
159	9.18	33.479	4.33	1.39	20.	0.02	17.8	209.0	200	8.90	33.772	3.50	26.195	183.1	0.566
187	9.00	33.673	3.78	1.68	26.	0.04	20.7	191.9	250	8.22	33.994	2.88	26.472	156.8	0.653
224	8.65	33.925	3.07	1.89	31.	0.01	25.2	168.0	300	7.53	34.043	2.47	26.613	143.4	0.730
252	8.19	33.996	2.87	2.04	35.	0.00	27.2	156.1	400	6.45	34.112	1.25	26.815	124.2	0.869
299	7.54	34.042	2.48	2.15	43.	0.01	29.3	143.6	500	5.69	34.171	0.72	26.958	110.6	0.993
360	6.86	34.091	1.60	2.43	55.	0.00	34.3	130.9	600	5.19	34.247	0.44	27.079	99.2	1.104
452	6.00	34.138	0.94	2.66	69.	0.00	38.0	116.7							
535	5.51	34.197	0.60	2.82	80.	0.04	40.5	106.6							
608	5.15	34.253	0.43	2.95	88.	0.00	42.0	98.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 83042

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 10.0N	119 29.5W	05/25/78	1035 GMT	181M	260	12KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.59	33.628	5.86	1.02	11.	0.07	4.3	274.5	0	13.59	33.628	5.86	25.233	274.5	0.000
25	13.43	33.659	5.67	1.01	12.	0.07	4.2	269.1	10	13.53	33.639	5.79	25.253	272.6	0.027
48	10.08	33.791	3.36	1.45	22.	0.15	19.8	200.0	20	13.46	33.653	5.71	25.277	270.3	0.055
67	9.87	33.836	3.20	1.61	24.	0.09	21.6	193.3	30	12.69	33.676	5.16	25.449	254.0	0.081
81	9.69	33.909	2.95	1.68	27.	0.59	22.6	185.1	50	10.06	33.796	3.34	26.024	199.3	0.126
95	9.56	34.048	2.35	1.85	31.	0.09	25.7	172.8	75	9.77	33.872	3.09	26.132	189.0	0.175
109	9.46	34.082	2.23	1.90	33.	0.06	26.1	168.7	100	9.52	34.067	2.31	26.324	170.8	0.221
118	9.40	34.095	2.19	1.95	34.	0.09	26.4	166.8	125	9.40	34.096	2.18	26.367	166.7	0.263
137	9.40	34.098	2.17	1.93	34.	0.08	26.8	166.6	150	9.40	34.100	2.14	26.370	166.4	0.306
146	9.40	34.099	2.15	2.03	34.	0.13	26.9	166.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 83060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 34.0N	120 45.0W	05/24/78	0626 GMT	1850M	320	32KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	13.52		6.06	0.96	6.		3.5		0	13.52	33.334	6.06	25.021	294.7	0.000
11	13.52	33.334	6.06	0.94	6.		3.5	294.7	10	13.52	33.335	6.06	25.021	294.7	0.029
30	13.51	33.345	6.07	0.94	6.		3.6	293.7	20	13.52	33.340	6.06	25.026	294.2	0.059
39	13.39	33.346	6.05	0.93	6.		3.8	291.3	30	13.51	33.345	6.07	25.031	293.7	0.088
53	12.97	33.327	5.92	0.92	5.		4.5	284.7	50	13.06	33.332	5.95	25.111	286.1	0.147
66	10.13	33.315	4.76	1.27	15.		13.3	236.0	75	9.79	33.481	4.44	25.822	218.4	0.210
89	9.27	33.584	4.15	1.53	22.		19.0	202.6	100	9.12	33.734	3.67	26.129	189.3	0.261
108	9.06	33.829	3.34	1.82	28.		23.2	181.3	125	8.83	33.929	2.97	26.328	170.4	0.307
126	8.82	33.932	2.96	1.95	31.		24.7	170.0	150	8.63	33.964	2.84	26.386	164.9	0.349
145	8.71	33.952	2.89	1.98	33.		25.6	166.9	200	7.95	34.046	2.38	26.554	149.0	0.429
171	8.26	34.014	2.61	2.08	38.		27.0	155.8	250	7.25	34.073	1.89	26.675	137.5	0.503
204	7.91	34.048	2.35	2.22	42.		29.3	148.3	300	7.00	34.149	1.27	26.769	128.5	0.572
230	7.54	34.057	2.17	2.25	47.		30.5	142.5	400	6.50	34.254	0.68	26.921	114.2	0.698
275	6.99	34.102	1.52	2.42	56.		33.7	131.8	500	6.06	34.297	0.43	27.011	105.6	0.814
325	7.02	34.187	1.08	2.58	61.		34.8	125.9							
400	6.50	34.254	0.68	2.71	71.		37.0	114.2							
475	6.16	34.288	0.45	2.79	77.		37.8	107.5							
549	5.88	34.309	0.40	2.81	83.		38.7	102.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 83070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 14.5N	121 26.0W	05/24/78	0114 GMT	3740M	320	34KT	1	320 12 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.54	32.981	6.05	0.60	5.	0.00	0.0	340.7	0	14.54	32.981	6.05	24.537	340.7	0.000
11	14.54	32.980	6.04	0.59	4.	0.00	0.0	340.8	10	14.54	32.980	6.04	24.537	340.8	0.034
30	14.56	32.981	6.05	0.59	4.	0.00	0.0	341.1	20	14.55	32.980	6.04	24.535	341.0	0.068
39	14.55	32.981	6.05	0.54	4.	0.01	0.0	340.9	30	14.56	32.981	6.05	24.533	341.1	0.102
55	14.55	32.984	6.07	0.53	4.	0.01	0.0	340.7	50	14.55	32.983	6.06	24.537	340.8	0.171
68	13.00	33.050	5.89	0.66	6.	0.19	1.7	305.7	75	12.04	33.162	5.42	25.176	279.9	0.249
91	10.28	33.441	4.31	1.25	17.	0.07	16.1	229.1	100	10.10	33.523	4.13	25.804	220.1	0.312
110	9.89	33.542	4.06	1.48	20.	0.05	18.5	215.4	125	9.50	33.655	3.85	26.006	201.0	0.365
129	9.39	33.688	3.79	1.57	24.	0.01	21.0	196.8	150	8.80	33.864	3.41	26.281	174.9	0.413
147	8.86	33.846	3.45	1.81	29.	0.00	24.0	177.0	200	8.26	33.988	3.07	26.462	157.7	0.497
175	8.49	33.959	3.15	2.02	33.	0.02	25.4	163.2	250	7.76	34.063	2.19	26.595	145.1	0.575
208	8.19	33.992	3.02	2.05	35.	0.01	27.0	156.4	300	7.26	34.101	1.70	26.697	135.4	0.647
235	7.91	34.048	2.38	2.21	41.	0.02	29.7	148.3	400	6.55	34.211	0.87	26.880	118.0	0.779
281	7.46	34.084	1.92	2.35	48.	0.01	32.3	139.4	500	5.67	34.243	0.50	27.018	105.0	0.897
332	6.94	34.133	1.34	2.56	57.	0.01	35.4	128.9							
411	6.49	34.221	0.82	2.75	66.	0.01	37.9	116.5							
491	5.73	34.238	0.52	2.90	79.	0.00	40.7	106.0							
573	5.35	34.292	0.37	3.01	88.	0.00	41.9	97.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 83080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 54.0N	122 08.0W	05/23/78	1901 GMT	4120M	330	24KT	1	330 10 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	14.32	33.050	6.07	0.54	2.	0.01	0.1	331.2	0	14.32	33.050	6.07	24.637	331.2	0.000
11	14.31	33.045	6.08	0.52	2.	0.00	0.1	331.4	10	14.31	33.046	6.08	24.635	331.4	0.033
30	13.83	33.037	6.12	0.52	2.	0.00	0.1	322.5	20	14.08	33.042	6.10	24.679	327.2	0.066
39	12.60	33.043	5.94	0.61	4.	0.09	1.8	298.7	30	13.83	33.037	6.12	24.729	322.5	0.099
53	11.91	33.239	5.70	0.77	5.	0.17	5.3	271.8	50	12.01	33.199	5.76	25.210	276.6	0.159
68	10.70	33.195	5.07	1.02	12.	0.16	10.4	254.2	75	10.49	33.280	4.73	25.547	244.6	0.224
89	10.21	33.457	4.24	1.29	17.	0.04	16.8	226.8	100	9.59	33.444	4.33	25.827	218.0	0.283
109	9.14	33.427	4.44	1.41	20.	0.02	17.7	212.3	125	9.11	33.564	4.13	25.998	201.7	0.336
128	9.11	33.589	4.04	1.54	23.	0.02	20.1	199.8	150	9.09	33.788	3.39	26.176	184.9	0.385
146	9.16	33.758	3.41	1.66	25.	0.00	22.3	188.0	200	8.07	33.985	3.00	26.488	155.2	0.471
173	8.57	33.915	3.30	1.88	31.	0.01	24.7	167.6	250	7.38	34.036	2.40	26.628	141.9	0.547
207	7.96	33.994	2.91	1.94	37.	0.00	26.9	153.0	300	6.62	34.045	1.80	26.741	131.2	0.618
235	7.63	34.029	2.62	2.05	42.	0.00	29.0	145.8	400	5.79	34.104	1.10	26.894	116.7	0.746
281	6.86	34.042	1.97	2.24	52.	0.01	32.6	134.6	500	5.39	34.215	0.55	27.029	103.9	0.862
333	6.27	34.054	1.57	2.37	61.	0.00	35.1	126.3							
411	5.73	34.115	1.03	2.55	72.	0.01	38.4	115.2							
492	5.40	34.203	0.59	2.66	83.	0.00	40.6	104.9							
572	5.35	34.317	0.30	2.76	89.	0.00	41.2	95.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 83090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 34.5N	122 50.0W	05/23/78	1347 GMT	4215M	330	28KT	1	330 8 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.63	32.909	6.04	0.34	3.	0.01	0.0	347.8	0	14.63	32.909	6.04	24.463	347.8	0.000
10	14.62	32.907	6.04	0.33	3.	0.00	0.0	347.7	10	14.62	32.907	6.04	24.464	347.7	0.035
33	14.63	32.907	6.02	0.34	3.	0.00	0.0	347.9	20	14.63	32.907	6.03	24.462	347.9	0.070
41	14.62	32.907	6.03	0.35	3.	0.00	0.0	347.7	30	14.63	32.907	6.02	24.462	347.9	0.104
54	14.24	32.898	6.07	0.36	2.	0.00	0.0	340.8	50	14.38	32.901	6.06	24.510	343.4	0.174
68	13.90	32.910	6.07	0.41	2.	0.00	0.0	333.2	75	13.42	32.955	6.02	24.749	320.6	0.257
91	12.29	33.093	5.85	0.62	5.	0.20	3.6	289.4	100	12.11	33.171	5.77	25.170	280.5	0.333
109	11.83	33.214	5.67	0.74	6.	0.18	5.8	272.2	125	10.08	33.135	5.32	25.505	248.6	0.400
127	9.85	33.127	5.27	0.94	12.	0.04	11.0	245.5	150	8.87	33.347	4.76	25.866	214.3	0.458
155	8.82	33.417	4.63	1.30	20.	0.02	17.3	208.2	200	8.77	33.911	3.09	26.324	170.8	0.556
183	8.87	33.774	3.59	1.81	27.	0.05	22.6	182.5	250	7.77	34.002	3.19	26.546	149.8	0.638
219	8.51	33.995	2.81	1.98	33.	0.04	26.1	160.8	300	7.14	34.044	2.24	26.669	138.0	0.712
247	7.82	34.000	3.22	2.01	37.	0.02	26.9	150.6	400	6.15	34.136	0.96	26.873	118.7	0.846
294	7.20	34.036	2.36	2.28	46.	0.00	31.3	139.5	500	5.37	34.187	0.62	27.010	105.7	0.964
354	6.61	34.112	1.29	2.59	60.	0.02	35.7	126.2							
448	5.72	34.152	0.82	2.85	69.	0.00	39.8	112.4							
533	5.20	34.213	0.52	3.00	87.	0.01	41.1	101.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 40.0N	118 58.0W	05/25/78	2321 GMT	890M	210	10KT	1	220 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.57	33.415	5.90	0.68	3.	0.00	0.2	374.3	0	17.57	33.415	5.90	24.185	374.3	0.000
11	16.05	33.411	6.22	0.65	4.	0.00	0.1	340.8	10	16.20	33.411	6.20	24.502	344.0	0.036
30	13.35	33.430	5.84	0.81	7.	0.11	3.2	284.4	20	14.72	33.412	6.04	24.829	312.9	0.069
40	12.14	33.476	4.92	1.05	11.	0.28	8.7	258.5	30	13.35	33.430	5.84	25.129	284.4	0.099
49	11.87	33.498	4.67	1.12	12.	0.29	10.3	252.0	50	11.82	33.503	4.61	25.482	250.8	0.152
64	11.09	33.597	3.72	1.40	16.	0.39	15.3	231.1	75	10.63	33.700	3.49	25.850	215.8	0.211
78	10.52	33.729	3.46	1.51	20.	0.19	18.6	211.8	100	9.90	33.902	3.02	26.133	188.9	0.262
97	9.96	33.885	3.07	1.69	25.	0.03	21.9	191.2	125	9.50	34.017	2.59	26.289	174.2	0.308
121	9.57	33.998	2.66	1.84	30.	0.01	24.2	176.6	150	9.20	34.112	2.23	26.412	162.5	0.351
139	9.30	34.078	2.38	1.95	34.	0.01	26.1	166.5	200	8.73	34.154	1.94	26.519	152.3	0.431
167	9.08	34.145	2.06	2.11	37.	0.02	27.3	158.2	250	8.11	34.215	1.39	26.662	138.7	0.506
195	8.79	34.150	1.98	2.21	39.	0.00	28.4	153.4	300	7.55	34.247	1.03	26.769	128.5	0.575
223	8.45	34.178	1.71	2.29	44.	0.00	30.0	146.3	400	6.72	34.285	0.61	26.916	114.7	0.702
260	7.99	34.228	1.28	2.45	50.	0.00	32.1	136.0	500	6.17	34.322	0.44	27.016	105.1	0.819
315	7.40	34.249	0.96	2.58	58.	0.02	34.5	126.3							
384	6.81	34.279	0.65	2.75	67.	0.00	36.8	116.3							
455	6.44	34.304	0.52	2.78	74.		37.4	109.7							
532	5.97	34.335	0.39	2.84	85.		38.1	101.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87045

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 30.0N	119 19.0W	05/26/78	0308 GMT	1620M	270	20KT	1	270 4 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.29	33.447	5.83	0.89	6.	0.04	2.1	322.0	0	15.29	33.447	5.83	24.734	322.0	0.000
11	14.35	33.460	5.65	0.98	8.	0.05	4.0	301.8	10	14.49	33.456	5.67	24.913	305.0	0.031
29	10.02	33.757	3.49	1.54	22.	0.14	20.0	201.6	20	12.05	33.583	4.56	25.500	249.1	0.059
38	9.93	33.788	3.35	1.71	23.	0.06	21.0	197.9	30	10.01	33.761	3.47	26.004	201.2	0.082
48	9.72	33.842	3.16	1.87	25.	0.02	22.2	190.5	50	9.67	33.853	3.12	26.132	189.0	0.121
62	9.44	33.908	2.91	1.96	28.	0.01	23.8	181.3	75	9.38	33.950	2.76	26.256	177.3	0.167
77	9.38	33.955	2.74	1.99	30.	0.00	24.7	176.8	100	9.21	34.023	2.48	26.341	169.2	0.211
94	9.25	34.004	2.55	2.11	31.	0.00	25.6	171.2	125	8.93	34.097	2.14	26.442	159.6	0.252
118	9.04	34.077	2.24	2.18	35.	0.00	26.9	162.6	150	8.61	34.142	1.86	26.529	151.4	0.292
137	8.75	34.125	1.98	2.28	39.	0.00	28.3	154.7	200	8.23	34.180	1.58	26.617	143.0	0.367
166	8.48	34.155	1.75	2.31	43.	0.01	29.3	148.5	250	7.77	34.228	1.17	26.723	133.0	0.438
193	8.29	34.173	1.63	2.36	45.	0.00	30.5	144.4	300	7.35	34.250	0.92	26.800	125.6	0.505
220	8.04	34.201	1.42	2.45	49.	0.00	31.6	138.7	400	6.63	34.295	0.58	26.935	112.8	0.629
257	7.71	34.233	1.12	2.52	54.	0.00	33.1	131.7	500	5.93	34.335	0.37	27.059	101.1	0.743
312	7.26	34.253	0.88	2.59	61.	0.00	34.8	124.1							
381	6.78	34.286	0.64	2.69	69.	0.00	36.7	115.4							
452	6.23	34.317	0.44	2.72	79.	0.12	37.6	106.1							
527	5.78	34.344	0.35	2.81	88.	0.00	38.7	98.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 20.0N	119 39.5W	05/26/78	0618 GMT	71M	300	28KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.37	33.525	5.61	0.31	11.		5.9	277.8	0	13.37	33.525	5.61	25.198	277.8	0.000
10	13.36	33.525	5.58	0.48	11.		6.4	277.6	10	13.36	33.525	5.58	25.200	277.6	0.028
20	13.27	33.527	5.54	0.52	12.		7.5	275.8	20	13.27	33.527	5.54	25.220	275.8	0.055
29	12.70	33.544	5.27	0.64	13.		9.0	263.8	30	12.60	33.550	5.21	25.370	261.4	0.082
39	11.65	33.615	4.60	0.85	16.		13.4	239.5	50	10.83	33.685	4.06	25.802	220.4	0.131
57	10.50	33.718	3.83	1.20	23.		18.7	212.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 00.5N	120 21.0W	05/29/78	0130 GMT	630M	320	25KT	0	330 6 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.51	33.217	6.04	0.39	4.	0.03	1.2	322.8	0	14.51	33.217	6.04	24.725	322.8	0.000
10	13.39	33.296	6.01	0.60	7.	0.09	3.7	295.0	10	13.39	33.296	6.01	25.018	295.0	0.031
29	12.63	33.523	5.95	0.83	11.	0.15	7.8	264.0	20	12.99	33.482	5.99	25.240	273.8	0.059
38	12.60	33.521	5.88	0.88	12.	0.14	8.0	263.6	30	12.63	33.523	5.94	25.344	264.0	0.086
52	12.54	33.536	5.75	0.94	12.	0.13	8.6	261.4	50	12.55	33.533	5.77	25.367	261.8	0.139
86	12.50	33.566	5.66	0.99	13.	0.14	9.3	258.4	75	11.64	33.509	5.25	25.520	247.2	0.203
89	10.16	33.452	4.51	1.18	17.	0.15	15.5	226.4	100	9.78	33.512	4.22	25.850	215.8	0.261
108	9.64	33.580	4.05	1.31	21.	0.03	18.9	208.7	125	9.25	33.752	3.57	26.123	189.9	0.313
126	9.23	33.761	3.55	1.44	25.	0.00	22.2	188.9	150	8.95	33.851	3.29	26.247	178.1	0.359
145	9.01	33.834	3.34	1.59	28.	0.00	23.7	180.1	200	8.38	33.999	2.70	26.452	158.6	0.445
172	8.71	33.918	3.07	1.81	32.	0.01	25.2	169.4	250	7.98	34.064	2.28	26.563	148.1	0.524
205	8.33	34.011	2.64	1.98	37.	0.01	27.6	157.0	300	7.47	34.131	1.66	26.690	136.0	0.597
233	8.11	34.045	2.42	2.12	40.	0.01	28.9	151.3	400	6.49	34.246	0.74	26.916	114.6	0.728
279	7.73	34.097	1.98	2.32	46.	0.01	31.0	142.1	500	6.03	34.286	0.52	27.006	106.1	0.844
330	7.09	34.180	1.22	2.52	58.	0.02	34.5	127.3							
409	6.43	34.251	0.71	2.78	70.	0.00	37.6	113.5							
488	6.10	34.279	0.54	2.91	76.	0.08	38.9	107.4							
567	5.55	34.334	0.39	2.99	86.	0.03	40.6	96.8							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 39.5N	121 02.0W	05/29/78	0744 GMT	3925M	330	25KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
3	15.30	33.116	5.92	0.31	4.	0.00	0.1	346.4	0	15.30	33.116	5.92	24.477	346.4	0.000
12	15.30	33.116	5.91	0.36	3.	0.02	0.0	346.4	10	15.30	33.116	5.91	24.477	346.4	0.035
31	15.31	33.115	5.92	0.31	3.	0.01	0.0	346.7	20	15.30	33.116	5.91	24.477	346.4	0.069
40	15.26	33.113	5.92	0.29	3.	0.01	0.0	345.8	30	15.31	33.115	5.92	24.474	346.7	0.104
54	14.46	33.117	5.99	0.30	3.	0.02	0.2	329.1	50	14.71	33.115	5.97	24.603	334.4	0.172
68	14.08	33.128	5.97	0.34	3.	0.04	0.7	320.8	75	14.00	33.144	5.95	24.776	318.0	0.254
91	13.66	33.178	5.90	0.40	5.	0.10	2.2	308.9	100	13.22	33.182	5.79	24.963	300.1	0.332
109	12.56	33.191	5.61	0.58	6.	0.18	4.9	287.1	125	10.60	33.273	4.98	25.524	246.8	0.401
127	10.36	33.291	4.89	0.94	13.	0.08	12.6	241.5	150	9.52	33.588	4.08	25.951	206.2	0.459
146	9.60	33.553	4.18	1.31	20.	0.05	18.1	210.0	200	8.90	33.882	3.18	26.281	174.9	0.555
175	9.22	33.739	3.62	1.72	26.	0.03	21.8	190.4	250	8.12	34.039	2.50	26.523	151.9	0.639
207	8.80	33.915	3.07	1.89	31.	0.01	24.9	171.0	300	7.37	34.101	1.77	26.681	136.9	0.714
235	8.37	34.002	2.76	2.02	37.	0.01	26.4	158.2	400	6.49	34.177	0.93	26.861	119.9	0.847
281	7.63	34.092	1.96	2.35	48.	0.00	31.3	141.1	500	5.89	34.268	0.47	27.010	105.7	0.966
333	6.99	34.107	1.52	2.56	58.	0.01	34.7	131.4							
411	6.43	34.190	0.84	2.84	69.	0.00	37.7	118.1							
492	5.93	34.262	0.49	3.06	80.	0.01	40.0	106.6							
573	5.60	34.314	0.35	3.14	88.	0.00	41.1	98.8							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 20.0N	121 43.0W	05/29/78	1320 GMT	3925M	330	30KT	1	330 6 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.19	33.007	5.92	0.28	4.	0.01	0.0	352.1	0	15.19	33.007	5.92	24.418	352.1	0.000
11	15.19	33.005	5.93	0.27	4.	0.00	0.1	352.3	10	15.19	33.005	5.93	24.416	352.3	0.035
29	15.21	33.005	5.93	0.27	4.	0.00	0.0	352.7	20	15.20	33.005	5.93	24.414	352.5	0.071
39	15.16	33.002	5.95	0.24	4.	0.00	0.0	351.8	30	15.21	33.005	5.93	24.412	352.7	0.106
53	14.41	32.983	6.10	0.25	4.	0.00	0.0	337.9	50	14.60	32.989	6.07	24.531	341.3	0.175
67	13.86	32.949	6.13	0.26	4.	0.00	0.0	329.5	75	13.37	32.996	6.03	24.789	316.8	0.259
90	12.24	33.105	5.70	0.54	8.	0.29	4.7	287.6	100	11.30	33.128	5.43	25.286	269.4	0.332
109	10.54	33.150	5.20	0.81	11.	0.16	9.8	254.9	125	9.90	33.232	4.94	25.611	238.5	0.396
127	9.85	33.246	4.91	0.99	14.	0.03	13.0	236.7	150	9.34	33.519	4.23	25.926	208.6	0.453
146	9.40	33.488	4.30	1.28	19.	0.03	17.6	211.7	200	8.74	33.882	3.34	26.305	172.6	0.549
174	9.09	33.669	3.89	1.65	24.	0.04	20.4	193.6	250	7.94	34.019	2.85	26.534	150.9	0.632
206	8.65	33.924	3.23	1.83	31.	0.01	24.9	168.1	300	7.41	34.078	1.97	26.657	139.2	0.707
234	8.15	33.994	3.09	1.94	35.	0.02	26.5	155.7	400	6.46	34.150	0.94	26.844	121.4	0.843
280	7.62	34.052	2.31	2.22	44.	0.02	30.2	144.0	500	5.94	34.248	0.51	26.988	107.8	0.963
333	7.08	34.114	1.48	2.47	55.	0.02	33.0	132.1							
480	6.38	34.155	0.89	2.73	67.	0.00	37.5	120.1							
490	6.00	34.241	0.54	2.91	76.		39.0	109.0							
570	5.43	34.266	0.38	3.03	88.		40.7	100.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 87090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 59.0N	122 24.0W	05/29/78	1905 GMT	4020M	320	26KT	1	310 7 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.58	33.022	5.89	0.31	3.	0.00	0.1	359.2	0	15.58	33.022	5.89	24.344	359.2	0.000
10	15.57	33.023	5.87	0.30	3.	0.00	0.0	358.9	10	15.57	33.023	5.87	24.347	358.9	0.036
28	15.54	33.019	5.87	0.30	3.	0.00	0.0	358.5	20	15.56	33.021	5.87	24.347	358.8	0.072
57	15.32	33.000	5.93	0.30	3.	0.00	0.0	355.3	30	15.52	33.018	5.87	24.354	358.2	0.108
66	14.73	32.933	6.03	0.30	3.	0.00	0.0	348.1	50	15.37	33.005	5.91	24.376	356.1	0.179
80	14.72	33.118	5.99	0.27	3.	0.00	0.0	334.3	75	14.72	33.045	6.01	24.547	339.8	0.267
94	13.54	33.072	6.10	0.33	4.	0.01	0.1	314.3	100	12.57	33.045	5.95	24.984	298.1	0.347
108	11.27	33.037	5.68	0.55	7.	0.18	4.7	275.5	125	9.91	33.156	5.26	25.550	244.4	0.416
131	9.68	33.219	5.14	0.92	14.	0.03	12.2	236.0	150	9.18	33.452	4.84	25.900	211.0	0.473
150	9.18	33.452	4.84	1.12	18.	0.02	15.0	211.0	200	8.43	33.866	3.70	26.341	169.2	0.570
178	8.76	33.741	4.09	1.64	26.	0.02	21.1	183.3	250	7.71	34.017	2.80	26.566	147.8	0.651
206	8.34	33.890	3.60	1.80	31.	0.02	24.2	166.1	300	7.12	34.042	2.35	26.670	138.0	0.725
234	7.92	33.996	3.05	2.00	38.	0.11	27.0	152.3	400	6.20	34.115	1.17	26.850	120.9	0.859
281	7.34	34.028	2.45	2.22	46.	0.04	30.3	141.9	500	5.91	34.267	0.42	27.006	106.1	0.978
330	6.79	34.063	2.20	2.47	56.	0.05	34.0	132.1							
411	6.13	34.125	1.00	2.76	69.	0.01	38.1	119.3							
491	5.95	34.257	0.43	3.01	79.	0.01	40.2	107.2							
571	5.50	34.303	0.35	3.16	88.	0.00	41.9	98.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90033

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 18.5N	118 07.0W	05/27/78	0412 GMT	760M	270	7KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	18.60	33.515	5.85	0.33	2.		0.0	391.0	0	18.60	33.515	5.85	24.009	391.0	0.000
10	14.82	33.505	6.22	0.45	4.		0.0	308.1	10	14.82	33.505	6.22	24.880	308.1	0.035
29	10.85	33.721	3.47	1.01	18.		13.8	217.9	20	12.20	33.613	4.83	25.496	249.5	0.063
38	10.48	33.790	3.40	1.43	21.		19.2	206.6	30	10.78	33.731	3.46	25.848	216.0	0.086
48	10.33	33.832	3.18	1.51	22.		18.9	201.1	50	10.30	33.843	3.14	26.020	199.7	0.128
62	10.09	33.912	2.94	1.63	25.		21.1	191.3	75	9.91	33.971	2.77	26.186	183.9	0.176
77	9.88	33.979	2.75	1.72	27.		23.1	182.9	100	9.58	34.045	2.54	26.299	173.2	0.221
95	9.63	34.036	2.56	1.78	29.		22.7	174.8	125	9.33	34.089	2.40	26.373	166.2	0.264
120	9.38	34.077	2.46	1.88	32.		25.4	167.8	150	9.02	34.126	2.19	26.451	158.7	0.306
138	9.19	34.117	2.25	1.91	34.		24.0	161.9	200	8.65	34.204	1.72	26.571	147.4	0.384
167	8.80	34.135	2.12	2.05	38.		27.5	154.7	250	8.23	34.243	1.33	26.667	138.3	0.457
194	8.60	34.177	1.85	2.13	41.		28.1	148.6	300	7.78	34.245	1.12	26.735	131.8	0.527
221	8.79	34.284	1.29	2.29	44.		28.9	143.5	400	6.93	34.281	0.69	26.884	117.7	0.658
259	8.01	34.221	1.34	2.32	49.		29.5	136.8	500	6.14	34.320	0.41	27.020	104.8	0.775
314	7.75	34.260	1.02	2.46	54.		32.0	130.3							
385	7.08	34.276	0.75	2.62	63.		35.0	120.0							
455	6.43	34.302	0.50	2.73	73.		37.8	109.7							
530	6.00	34.332	0.38	2.82	81.		39.5	102.2							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90037

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 11.0N	118 22.5W	05/27/78	0058 GMT	1200M	270	10KT	1	270 3 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.03	33.411	5.82	0.33	3.		0.1	385.2	0	18.03	33.411	5.82	24.071	385.2	0.000
10	16.59	33.397	5.97	0.33	3.		0.1	353.6	10	16.59	33.397	5.97	24.402	353.6	0.037
29	11.77	33.507	4.48	1.24	11.		11.4	249.6	20	13.00	33.440	5.31	25.207	277.0	0.069
38	11.18	33.581	3.93	1.62	14.		15.4	233.9	30	11.68	33.516	4.41	25.518	247.4	0.095
48	10.88	33.621	3.83	1.68	17.		16.6	225.8	50	10.82	33.644	3.77	25.773	223.1	0.142
61	10.50	33.773	3.39	1.89	21.		19.4	208.2	75	10.22	33.848	3.17	26.037	198.1	0.195
75	10.22	33.848	3.17	2.00	23.		20.9	198.1	100	9.89	33.940	2.89	26.164	186.0	0.243
94	9.94	33.913	2.98	2.12	25.		22.6	188.8	125	9.71	34.041	2.53	26.273	175.7	0.289
117	9.77	34.014	2.63	2.22	29.		24.0	178.6	150	9.48	34.127	2.18	26.379	165.6	0.333
136	9.62	34.075	2.40	2.31	31.		25.0	171.7	200	8.78	34.209	1.68	26.554	149.0	0.413
163	9.32	34.169	1.98	2.37	36.		26.6	160.1	250	8.35	34.242	1.34	26.648	140.0	0.487
191	8.89	34.201	1.76	2.54	39.		29.1	151.2	300	7.87	34.250	1.10	26.726	132.6	0.558
219	8.59	34.223	1.53	2.62	43.		29.6	145.0	400	6.88	34.275	0.68	26.886	117.5	0.689
256	8.30	34.245	1.31	2.71	47.		30.7	139.2	500	6.12	34.322	0.43	27.023	104.5	0.806
311	7.75	34.250	1.05	2.78	52.		32.4	131.0							
379	7.07	34.265	0.76	2.92	61.		35.2	120.7							
448	6.48	34.299	0.53	3.03	70.		36.3	110.6							
522	5.99	34.330	0.40	3.02	78.		38.2	102.3							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90045

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 54.5N	118 55.5W	05/26/78	1933 GMT	1665M	280	9KT	1	280 3 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.89	33.445	5.87					334.9	0	15.89	33.445	5.87	24.599	334.9	0.000
11	15.49	33.442	5.89	0.38	5.		0.5	326.6	10	15.52	33.443	5.89	24.679	327.2	0.033
29	11.11	33.543	4.45	0.36	15.		12.8	235.5	20	15.32	33.442	5.25	24.723	323.0	0.066
39	10.60	33.645	3.89	0.86	18.		16.9	219.3	30	11.06	33.553	4.39	25.660	233.9	0.094
48	10.25	33.742	3.44	1.15	21.		18.9	206.4	50	10.21	33.753	3.40	25.964	205.0	0.138
62	10.05	33.795	3.28	1.33	23.		20.4	199.3	75	9.80	33.872	3.07	26.127	189.6	0.187
76	9.78	33.878	3.05	1.47	26.		22.3	188.8	100	9.46	33.986	2.73	26.270	175.9	0.233
95	9.56	33.973	2.77	1.55	28.		23.1	178.3	125	9.12	34.067	2.38	26.389	164.6	0.277
118	9.16	34.031	2.53	1.70	32.		25.6	167.8	150	9.02	34.162	1.97	26.480	156.0	0.317
137	9.09	34.127	2.11	1.68	35.		25.7	159.7	200	8.61	34.225	1.55	26.594	145.2	0.394
165	8.92	34.185	1.86	2.26	42.		28.0	152.8	250	7.94	34.242	1.13	26.709	134.3	0.466
193	8.69	34.220	1.61	2.31	43.		28.3	146.7	300	7.36	34.255	0.86	26.804	125.3	0.533
221	8.34	34.233	1.38	2.35	47.		29.1	140.7	400	6.59	34.295	0.53	26.941	112.2	0.657
258	7.83	34.244	1.07	2.34	52.		30.2	132.6	500	6.10	34.318	0.38	27.023	104.5	0.772
315	7.21	34.259	0.80	2.47	61.		33.6	123.0							
384	6.68	34.291	0.56	2.64	68.		36.0	113.7							
454	6.31	34.305	0.46	2.74	74.		37.5	108.0							
529	5.98	34.327	0.32	2.79	81.		38.6	102.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90053

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 39.0N	119 28.5W	05/28/78	1551 GMT	1200M	300	10KT	0	300 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	13.49	33.517	5.73	0.71	10.		7.0	280.7	0	13.49	33.517	5.73	25.168	280.7	0.000
12	13.44	33.517	5.87	0.64	10.		6.7	279.7	10	13.45	33.517	5.85	25.176	279.9	0.029
31	13.43	33.516	5.80	0.80	10.		6.9	279.6	20	13.44	33.517	5.86	25.178	279.7	0.056
40	13.35	33.516	5.82	0.84	11.		7.6	278.1	30	13.43	33.517	5.81	25.179	279.6	0.084
54	12.82	33.449	5.78	0.85	9.		7.6	273.0	50	12.99	33.468	5.79	25.230	274.8	0.140
87	12.43	33.462	5.39	0.92	11.		9.2	264.8	75	11.71	33.421	5.13	25.440	254.8	0.206
92	10.09	33.419	4.51	1.18	16.		15.5	227.7	100	9.71	33.539	4.11	25.882	212.8	0.265
110	9.42	33.694	3.68	1.47	23.		21.1	196.8	125	9.29	33.759	3.49	26.123	189.9	0.316
128	9.27	33.766	3.47	1.61	26.		22.5	189.1	150	8.73	33.922	3.05	26.338	169.5	0.362
147	8.78	33.908	3.09	1.81	31.		25.1	171.2	200	7.97	34.038	2.51	26.544	149.9	0.443
175	8.40	33.994	2.79	1.98	36.		26.4	159.3	250	7.90	34.182	1.49	26.669	138.1	0.517
207	7.89	34.052	2.40	2.14	42.		29.4	147.7	300	7.06	34.183	1.18	26.788	126.7	0.585
235	8.10	34.172	1.56	2.35	47.		30.4	141.7	400	6.47	34.263	0.58	26.931	113.2	0.711
281	7.29	34.170	1.34	2.49	55.		33.3	130.7	500	6.04	34.312	0.39	27.026	104.2	0.826
331	6.79	34.210	0.92	2.75	64.		36.1	121.2							
410	6.44	34.269	0.55	2.93	71.		38.0	112.3							
491	6.08	34.308	0.40	2.97	78.		39.3	105.0							
573	5.77	34.339	0.33	3.12	85.		40.4	99.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 24.9N	119 57.5W	05/30/78	1856 GMT	1000M	280	19KT	2	280 4 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.82	33.202	6.03	0.37	4.	0.00	0.3	330.2	0	14.82	33.202	6.03	24.648	330.2	0.000
10	14.79	33.198	6.04	0.42	4.	0.02	0.5	329.9	10	14.79	33.198	6.04	24.651	329.9	0.033
29	14.69	33.198	6.03	0.41	4.	0.02	0.5	327.9	20	14.76	33.197	6.03	24.657	329.3	0.066
38	14.56	33.202	6.09	0.41	4.	0.05	0.5	324.9	30	14.68	33.199	6.04	24.676	327.6	0.099
52	14.40	33.206	5.97	0.40	4.	0.05	0.9	321.4	50	14.42	33.206	6.00	24.736	321.8	0.164
64	13.54	33.237	5.82	0.52	5.	0.10	2.9	302.2	75	12.57	33.226	5.56	25.125	284.7	0.240
90	11.22	33.244	5.11	0.80	10.	0.19	9.7	259.4	100	10.41	33.327	4.82	25.598	239.8	0.306
107	9.95	33.403	4.60	1.09	16.	0.04	15.2	226.6	125	9.49	33.626	3.98	25.985	203.0	0.362
126	9.48	33.638	3.95	1.31	22.	0.03	19.4	201.9	150	8.94	33.856	3.30	26.254	177.5	0.410
144	9.02	33.822	3.40	1.57	27.	0.02	23.1	181.2	200	8.43	33.996	2.84	26.443	159.5	0.496
172	8.75	33.930	3.07	1.79	32.	0.01	25.0	169.1	250	7.85	34.049	2.43	26.571	147.3	0.575
205	8.37	34.004	2.81	1.91	35.	0.00	27.2	158.1	300	7.30	34.100	1.78	26.690	136.1	0.648
232	8.07	34.037	2.60	2.01	39.	0.00	28.5	151.3	400	6.51	34.210	0.81	26.884	117.6	0.780
278	7.51	34.068	2.11	2.18	47.	0.00	31.1	141.3	500	5.99	34.289	0.44	27.014	105.3	0.898
329	7.06	34.145	1.35	2.41	57.	0.00	34.2	129.5							
406	6.47	34.214	0.78	2.70	68.	0.00	37.8	116.8							
485	6.05	34.279	0.48	2.87	77.		39.5	106.8							
565	5.76	34.317	0.36	2.94	84.		40.5	100.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 04.5N	120 38.5W	05/30/78	1156 GMT	3740M	300	18KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.24	33.109	5.80	0.44	3.	0.00	0.1	367.0	0	16.24	33.109	5.80	24.262	367.0	0.000
10	16.23	33.109	5.80	0.50	3.	0.00	0.1	366.7	10	16.23	33.109	5.80	24.264	366.7	0.037
29	16.23	33.107	5.80	0.51	3.	0.00	0.1	366.9	20	16.23	33.108	5.80	24.264	366.8	0.073
38	16.23	33.105	5.81	0.52	3.	0.00	0.0	367.0	30	16.23	33.107	5.80	24.263	366.9	0.110
52	15.59	33.124	5.91	0.53	3.	0.00	0.0	351.9	50	15.72	33.121	5.89	24.388	354.9	0.183
66	14.49	33.127	6.04	0.55	3.	0.03	0.4	329.0	75	14.03	33.127	6.00	24.757	319.8	0.267
89	13.10	33.128	5.94	0.58	5.	0.03	1.4	301.8	100	11.57	33.154	5.52	25.258	272.1	0.342
108	10.54	33.200	5.19	0.79	11.	0.09	9.7	251.2	125	10.02	33.324	4.78	25.663	233.6	0.406
126	10.01	33.333	4.76	0.98	15.	0.04	13.8	232.8	150	9.31	33.651	4.01	26.035	198.3	0.460
145	9.41	33.607	4.12	1.22	21.	0.02	18.8	203.1	200	8.49	33.923	3.27	26.377	165.8	0.553
172	8.97	33.785	3.63	1.53	27.	0.01	22.2	183.2	250	7.76	34.023	2.64	26.564	148.1	0.633
205	8.40	33.941	3.22	1.68	32.	0.01	25.1	163.2	300	7.38	34.082	1.93	26.665	138.5	0.707
233	7.96	33.996	2.90	1.80	37.	0.02	27.1	152.8	400	6.59	34.183	0.95	26.852	120.7	0.842
279	7.50	34.060	2.19	1.99	46.	0.01	30.4	141.7	500	5.98	34.277	0.40	27.006	106.1	0.962
331	7.22	34.111	1.59	2.20	52.	0.01	33.1	134.2							
410	6.50	34.193	0.87	2.46	66.	0.00	37.1	118.7							
490	6.04	34.270	0.41	2.67	77.	0.02	39.4	107.3							
570	5.55	34.317	0.32	2.82	86.	0.06	41.1	98.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 44.5N	121 19.5W	05/30/78	0602 GMT	3740M	320	21KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.64	33.113	5.75	0.40	7.	0.00	0.1	375.4	0	16.64	33.113	5.75	24.173	375.4	0.000
11	16.64	33.113	5.82	0.47	7.	0.02	0.1	375.4	10	16.64	33.113	5.82	24.173	375.4	0.038
30	16.63	33.111	5.75	0.55	7.	0.00	0.1	375.3	20	16.64	33.112	5.80	24.173	375.5	0.075
40	16.54	33.108	5.74	0.54	6.	0.03	0.1	373.6	30	16.63	33.111	5.75	24.174	375.3	0.113
54	16.49	33.101	5.75	0.50	6.	0.02	0.1	373.0	50	16.50	33.104	5.75	24.197	373.1	0.188
68	14.99	33.066	6.03	0.42	7.	0.00	0.1	343.7	75	14.23	33.068	5.96	24.670	328.1	0.276
92	12.47	33.104	5.78	0.50	9.	0.16	1.8	291.9	100	11.72	33.118	5.58	25.203	277.4	0.352
110	10.87	33.156	5.29	0.71	13.	0.12	8.3	259.9	125	9.85	33.309	4.86	25.679	232.1	0.416
128	9.70	33.343	4.78	0.84	19.	0.05	13.2	227.1	150	9.33	33.554	4.36	25.956	205.7	0.472
147	9.36	33.519	4.47	1.01	22.	0.13	16.3	208.8	200	8.76	33.916	3.11	26.329	170.4	0.567
175	9.10	33.813	3.47	1.38	31.	0.03	21.7	183.1	250	8.10	34.007	2.92	26.501	154.0	0.651
207	8.66	33.929	3.07	1.60	35.	0.00	25.2	167.9	300	7.36	34.038	2.34	26.633	141.5	0.727
236	8.30	33.993	3.01	1.75	38.	0.00	26.2	157.9	400	6.52	34.139	1.15	26.827	123.0	0.864
282	7.63	34.025	2.61	1.89	45.	0.00	28.6	146.1	500	5.92	34.228	0.61	26.975	109.0	0.986
333	6.93	34.066	1.82	2.15	57.	0.01	31.9	133.7							
413	6.47	34.153	1.06	2.44	68.	0.01	36.4	121.4							
494	5.96	34.224	0.63	2.60	78.		38.6	109.8							
575	5.38	34.260	0.43	2.78	89.		40.3	100.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 90090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 24.0N	122 01.0W	05/30/78	0128 GMT	3830M	320	23KT	1	310 7 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.53	33.113	5.75	0.42	3.	0.00	0.0	373.0	0	16.53	33.113	5.75	24.199	373.0	0.000
10	16.53	33.112	5.76	0.43	3.	0.00	0.0	373.0	10	16.53	33.112	5.76	24.198	373.0	0.037
28	16.41	33.107	5.78	0.42	3.	0.00	0.0	370.8	20	16.47	33.109	5.77	24.209	372.0	0.075
37	16.37	33.104	5.79	0.42	3.	0.00	0.0	370.1	30	16.40	33.107	5.78	24.224	370.6	0.112
50	15.98	33.102	5.86	0.40	3.	0.00	0.0	361.8	50	15.98	33.102	5.86	24.316	361.8	0.185
63	15.09	33.114	5.98	0.40	3.	0.00	0.0	342.2	75	13.52	33.124	5.84	24.859	310.0	0.270
85	12.14	33.161	5.60	0.59	7.	0.11	4.7	281.7	100	10.86	33.258	5.08	25.466	252.3	0.340
103	10.66	33.278	4.98	0.88	12.	0.06	11.6	247.4	125	9.60	33.403	4.67	25.794	221.1	0.400
121	9.70	33.386	4.70	1.11	16.	0.03	15.4	223.9	150	9.25	33.581	4.25	25.990	202.6	0.454
139	9.39	33.472	4.52	1.28	19.	0.01	17.1	212.8	200	8.82	33.919	3.14	26.321	171.0	0.549
166	9.09	33.746	3.81	1.62	26.	0.01	21.5	187.9	250	8.07	34.030	2.62	26.523	151.9	0.632
197	8.86	33.906	3.20	1.73	30.	0.01	24.6	172.6	300	7.43	34.046	2.29	26.629	141.9	0.707
224	8.49	34.002	2.76	1.92	35.	0.01	27.0	160.0	400	6.45	34.115	1.18	26.818	123.9	0.845
269	7.78	34.032	2.56	2.08	42.	0.01	29.3	147.6	500	5.82	34.196	0.70	26.962	110.3	0.969
319	7.25	34.054	2.10	2.29	50.	0.01	32.4	138.8							
397	6.47	34.113	1.20	2.60	64.	0.00	37.2	124.3							
476	5.94	34.169	0.81	2.75	75.	0.00	39.4	113.7							
555	5.62	34.273	0.45	2.92	85.	0.00	41.1	102.2							

RV DAVID STARR JORDAN

CALCOFI CRUISE 7805

93030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 50.5N	117 31.0W	05/27/78	2128 GMT	785M	280	13KT	0	280 1 4

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	18.13	33.370	5.83	0.30	5.		0.1	390.5
10	16.78	33.343	6.08	0.33	5.		0.1	361.7
29	12.01	33.402	5.26	0.80	11.		7.7	261.6
38	11.31	33.487	4.64	1.08	15.		12.3	243.0
48	10.98	33.546	4.27	1.29	16.		14.7	233.0
62	10.19	33.709	3.67	1.57	22.		19.1	207.9
75	10.16	33.851	3.07	1.78	25.		21.5	196.9
94	9.98	34.005	2.60	1.96	29.		23.7	182.6
118	9.86	34.091	2.30	2.07	32.		25.1	174.3
136	9.73	34.141	2.07	2.10	34.		26.1	168.5
164	9.41	34.204	1.83	2.06	38.		27.4	158.9
193	9.21	34.239	1.63	2.11	40.		28.5	153.2
219	8.88	34.218	1.68	2.12	41.		29.1	149.7
257	8.59	34.238	1.45	2.16	45.		30.2	143.9
314	8.09	34.260	1.12	2.26	51.		31.8	135.1
385	7.28	34.274	0.72	2.47	61.		35.2	122.8
454	6.51	34.304	0.43	2.66	73.		37.9	110.6
529	6.06	34.330	0.30	2.79	81.		39.5	103.1

Z	T	S	O2	SIGT	DT	DD
0	18.13	33.370	5.83	24.015	390.5	0.000
10	16.78	33.343	6.08	24.317	361.7	0.038
20	14.15	33.374	5.80	24.922	304.1	0.071
30	11.89	33.412	5.19	25.399	258.7	0.099
50	10.85	33.567	4.19	25.707	229.4	0.148
75	10.16	33.851	3.07	26.049	196.9	0.202
100	9.95	34.033	2.51	26.227	180.0	0.249
125	9.81	34.112	2.21	26.311	172.1	0.294
150	9.57	34.176	1.94	26.401	163.5	0.337
200	9.12	34.235	1.64	26.520	152.2	0.417
250	8.64	34.232	1.51	26.595	145.0	0.494
300	8.22	34.256	1.20	26.677	137.3	0.567
400	7.10	34.280	0.65	26.860	120.0	0.701
500	6.19	34.321	0.33	27.015	105.3	0.820

RV DAVID STARR JORDAN

CALCOFI CRUISE 7805

93040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 30.0N	118 11.5W	05/28/78	0356 GMT	1850M	290	8KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	16.97	33.460	5.87	0.33	3.	0.00	0.1	357.4
11	16.84	33.453	5.90	0.31	3.	0.00	0.1	355.1
29	12.05	33.458	4.89	0.79	11.	0.23	9.5	258.2
39	11.02	33.540	4.31	1.10	15.	0.33	14.7	234.2
48	10.73	33.609	3.89	1.29	17.	0.11	16.6	224.1
63	10.17	33.667	3.66	1.38	20.	0.05	19.0	210.6
76	9.83	33.750	3.43	1.52	23.	0.06	20.8	199.1
96	9.59	33.865	3.08	1.62	26.	0.02	22.5	186.8
118	9.28	33.956	2.82	1.76	30.	0.00	23.9	175.2
137	9.01	33.999	2.67	1.79	33.	0.00	25.1	167.9
166	8.46	34.048	2.60	1.91	38.	0.02	26.0	156.1
193	8.24	34.097	2.23	2.12	42.	0.04	28.7	149.3
221	7.99	34.125	1.94	2.16	46.	0.00	29.9	143.7
258	7.66	34.180	1.45	2.33	52.	0.01	31.6	135.0
314	7.36	34.249	0.91	2.48	60.	0.01	32.6	125.8
384	6.80	34.278	0.65	2.69	69.	0.00	36.0	116.2
454	6.32	34.311	0.47	2.76	77.		37.5	107.7
529	5.87	34.345	0.37	2.82	86.		38.4	99.7

Z	T	S	O2	SIGT	DT	DD
0	16.97	33.460	5.87	24.362	357.4	0.000
10	16.85	33.454	5.90	24.384	355.3	0.036
20	14.59	33.455	5.49	24.891	307.0	0.069
30	11.89	33.466	4.83	25.440	254.8	0.097
50	10.65	33.618	3.84	25.783	222.2	0.145
75	9.85	33.743	3.45	26.017	199.9	0.198
100	9.54	33.885	3.02	26.180	184.5	0.246
125	9.18	33.975	2.76	26.307	172.4	0.292
150	8.75	34.022	2.65	26.413	162.4	0.334
200	8.18	34.105	2.16	26.566	147.9	0.413
250	7.73	34.168	1.56	26.682	136.8	0.486
300	7.43	34.235	1.02	26.777	127.8	0.555
400	6.68	34.285	0.60	26.921	114.2	0.681
500	6.04	34.332	0.40	27.042	102.7	0.796

RV DAVID STARR JORDAN

CALCOFI CRUISE 7805

93050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 10.0N	118 52.5W	05/28/78	0949 GMT	1385M	270	10KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	14.51	33.341	6.05	0.44	7.		1.9	313.7
10	14.46	33.340	6.03	0.41	8.		0.9	312.8
30	14.32	33.395	5.90	0.40	7.		0.1	306.0
40	13.90	33.397	5.82	0.55	9.		4.4	297.5
53	12.41	33.350	5.42	0.72	9.		6.6	272.7
68	11.27	33.313	4.95	0.89	11.		10.6	255.2
92	9.78	33.524	4.24	1.27	18.		17.9	215.0
110	9.40	33.684	3.86	1.44	22.		19.9	197.2
130	9.15	33.813	3.36	1.64	27.		23.3	183.8
148	8.76	33.945	2.88	1.80	32.		24.5	168.2
176	8.30	34.047	2.46	2.12	39.		28.3	153.9
209	7.89	34.104	2.02	2.30	45.		30.4	143.8
237	7.72	34.127	1.80	2.41	48.		31.4	139.7
282	7.31	34.178	1.30	2.58	56.		33.5	130.4
335	7.07	34.245	0.84	2.76	62.		35.4	122.2
413	6.61	34.287	0.53	2.89	71.		37.2	113.1
493	6.09	34.320	0.39	3.03	81.		39.4	104.2
573	5.83	34.335	0.34	3.11	84.		40.5	100.0

Z	T	S	O2	SIGT	DT	DD
0	14.51	33.341	6.05	24.821	313.7	0.000
10	14.46	33.340	6.03	24.830	312.8	0.031
20	14.39	33.351	5.97	24.853	310.6	0.063
30	14.32	33.395	5.90	24.902	306.0	0.093
50	12.78	33.362	5.53	25.189	278.7	0.152
75	10.76	33.357	4.73	25.562	243.2	0.218
100	9.56	33.599	4.07	25.952	206.1	0.274
125	9.21	33.783	3.49	26.153	187.1	0.324
150	8.72	33.956	2.84	26.366	166.9	0.369
200	7.98	34.094	2.13	26.586	145.9	0.449
250	7.60	34.141	1.66	26.679	137.1	0.521
300	7.22	34.202	1.12	26.782	127.3	0.590
400	6.69	34.283	0.56	26.917	114.5	0.716
500	6.06	34.322	0.38	27.032	103.6	0.831

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 93060

LATITUDE 31 50.0N | LONGITUDE 119 34.0W | MO/DAY/YR 05/31/78 | MESSENGER TIME 0241 GMT | BOTTOM 2555M | WIND 280 | SPEED 14KT | WEATHER 2 | DOMINANT WAVES 280 4 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.09	33.160	5.83	0.25	3.	0.00	0.0	360.0
11	16.06	33.159	5.82	0.27	3.	0.00	0.0	359.4
29	15.80	33.158	5.86	0.27	4.	0.00	0.0	353.9
39	15.35	33.158	5.97	0.28	4.	0.00	0.0	344.4
48	15.03	33.124	6.03	0.30	4.	0.01	0.0	340.2
62	13.58	33.073	6.17	0.32	4.	0.01	0.0	315.0
76	12.95	33.094	6.10	0.35	5.	0.02	0.2	301.5
94	11.34	33.168	5.46	0.67	9.	0.12	7.0	267.1
118	9.80	33.392	4.72	1.00	16.	0.07	14.5	225.1
136	9.49	33.577	4.22	1.25	20.	0.02	18.3	206.5
164	9.05	33.758	3.79	1.58	26.	0.04	21.4	186.4
192	8.70	33.968	3.09	1.78	32.	0.00	25.1	165.6
219	8.39	34.015	2.86	1.91	35.	0.01	26.5	157.6
257	7.88	34.055	2.47	2.05	42.	0.01	28.9	147.3
311	7.17	34.104	1.69	2.29	53.	0.00	32.6	134.0
381	6.76	34.192	1.00	2.55	64.	0.00	35.7	122.1
452	6.05	34.201	0.72	2.75	75.	0.17	37.7	112.6
531	5.70	34.277	0.45	2.87	84.	0.07	39.5	102.8

Z	T	S	O2	SIGT	DT	DD
0	16.09	33.160	5.83	24.335	360.0	0.000
10	16.06	33.159	5.82	24.341	359.4	0.036
20	15.99	33.159	5.84	24.357	357.9	0.072
30	15.76	33.158	5.87	24.408	353.1	0.108
50	14.83	33.114	6.05	24.577	337.0	0.177
75	12.99	33.092	6.10	24.939	302.4	0.257
100	10.86	33.216	5.26	25.433	255.4	0.327
125	9.64	33.467	4.51	25.838	216.9	0.387
150	9.26	33.674	4.00	26.060	195.8	0.439
200	8.61	33.991	3.00	26.411	162.6	0.530
250	7.98	34.049	2.55	26.552	149.1	0.610
300	7.30	34.094	1.85	26.685	136.5	0.684
400	6.57	34.195	0.90	26.866	119.4	0.817
500	5.78	34.240	0.55	27.001	106.6	0.936

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 93070

LATITUDE 31 30.0N | LONGITUDE 120 14.0W | MO/DAY/YR 05/31/78 | MESSENGER TIME 0827 GMT | BOTTOM 3925M | WIND 280 | SPEED 14KT | WEATHER | DOMINANT WAVES

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.43	33.134	5.58	0.50	4.		0.2	369.3
10	16.42	33.133	5.66	0.50	4.		0.2	369.1
29	16.42	33.133	5.69	0.50	4.		0.1	369.1
39	16.25	33.135	5.64	0.50	4.		0.1	365.3
47	16.02	33.133	5.83	0.51	3.		0.1	360.4
62	15.74	33.135	5.85	0.53	3.		0.1	354.3
76	14.57	33.116	5.99	0.57	4.		0.1	331.4
94	11.71	33.147	5.63	0.76	7.		3.7	275.1
117	10.78	33.267	5.21	1.01	11.		8.0	250.2
136	10.11	33.429	4.80	1.20	14.		12.7	227.3
163	9.34	33.678	3.91	1.67	23.		19.0	196.7
191	8.83	33.835	3.54	1.77	27.		21.9	177.4
219	8.45	33.946	3.32	1.94	32.		24.2	163.6
254	7.98	34.004	2.72	2.08	38.		27.0	152.5
309	7.18	34.067	1.74	2.37	51.		32.1	136.9
379	6.72	34.117	1.06	2.60	60.		35.3	127.2
448	6.08	34.175	0.62	2.80	73.		38.7	114.9
525	5.67	34.240	0.32	2.95	82.		40.4	105.2

Z	T	S	O2	SIGT	DT	DD
0	16.43	33.134	5.58	24.238	369.3	0.000
10	16.42	33.133	5.66	24.239	369.1	0.037
20	16.42	33.133	5.68	24.239	369.1	0.074
30	16.41	33.133	5.69	24.242	368.9	0.111
50	16.00	33.133	5.83	24.335	360.0	0.184
75	14.68	33.118	5.98	24.612	333.7	0.271
100	11.31	33.174	5.52	25.320	266.2	0.347
125	10.49	33.332	5.05	25.589	240.6	0.411
150	9.68	33.563	4.33	25.905	210.6	0.468
200	8.70	33.877	3.47	26.307	172.4	0.565
250	8.03	34.000	2.80	26.505	153.6	0.649
300	7.30	34.059	1.89	26.658	139.1	0.724
400	6.52	34.134	0.91	26.823	123.4	0.860
500	5.77	34.219	0.40	26.987	107.9	0.982

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 93080

LATITUDE 31 10.5N | LONGITUDE 120 55.0W | MO/DAY/YR 05/31/78 | MESSENGER TIME 1446 GMT | BOTTOM 3740M | WIND 280 | SPEED 10KT | WEATHER 2 | DOMINANT WAVES 320 4 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	16.74	33.129	5.74	0.28	2.	0.00	0.5	376.4
10	16.73	33.129	5.74	0.28	2.	0.00	0.5	376.2
30	16.74	33.128	5.72	0.24	2.	0.00	0.5	376.5
39	16.72	33.130	5.72	0.24	2.	0.00	0.5	375.9
52	16.72	33.145	5.74	0.28	2.	0.01	0.5	374.8
66	15.75	33.047	5.88	0.31	3.	0.00	0.5	361.0
90	13.50	33.052	6.10	0.41	4.		0.6	315.0
108	11.75	33.043	5.89	0.36	6.		2.3	283.4
127	10.72	33.126	5.47	0.48	9.		6.7	259.6
146	9.76	33.332	4.98	0.83	15.		12.9	228.9
174	9.75	33.740	4.07	1.28	21.		17.9	198.5
207	9.20	33.873	3.78	1.37	25.		21.0	180.1
235	8.42	33.970	3.27	1.60	33.		25.1	161.3
282	7.84	34.018	2.71	1.84	42.		28.2	149.5
333	7.29	34.069	2.07	2.08	50.		31.2	138.2
413	6.46	34.146	1.12	2.45	65.		36.8	121.7
493	5.85	34.209	0.67	2.68	78.		39.3	109.6
572	5.54	34.279	0.36	2.81	87.		40.5	100.8

Z	T	S	O2	SIGT	DT	DD
0	16.74	33.129	5.74	24.163	376.4	0.000
10	16.73	33.129	5.74	24.165	376.2	0.038
20	16.74	33.129	5.73	24.163	376.4	0.075
30	16.74	33.128	5.72	24.162	376.5	0.113
50	16.72	33.143	5.74	24.178	375.0	0.188
75	14.96	33.037	6.00	24.491	345.1	0.279
100	12.48	33.041	6.01	24.999	296.8	0.360
125	10.81	33.113	5.52	25.363	262.1	0.430
150	9.76	33.404	4.84	25.768	223.6	0.492
200	9.36	33.862	3.82	26.191	183.4	0.595
250	8.18	33.994	3.07	26.478	156.1	0.682
300	7.64	34.036	2.48	26.592	145.4	0.760
400	6.59	34.134	1.26	26.815	124.2	0.900
500	5.81	34.215	0.64	26.978	108.7	1.022

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 93090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 50.0N	121 34.5W	05/31/78	2026 GMT	4120M	280	12KT	2	300 4 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.82	33.069	5.75	0.35	3.	0.00	0.0	382.6	0	16.82	33.069	5.75	24.098	382.6	0.000
10	16.71	33.067	5.76	0.37	3.	0.00	0.0	380.3	10	16.71	33.067	5.76	24.122	380.3	0.038
29	16.69	33.065	5.74	0.25	3.	0.00	0.0	380.0	20	16.70	33.066	5.75	24.124	380.2	0.076
57	15.14	32.960	6.02	0.37	3.	0.00	0.0	354.5	30	16.63	33.057	5.75	24.132	379.3	0.114
66	15.24	33.071	5.96	0.42	4.	0.00	0.0	348.5	50	15.50	32.959	5.96	24.312	362.2	0.189
80	14.75	33.084	5.94	0.32	4.	0.00	0.0	337.4	75	15.02	33.080	5.95	24.511	343.3	0.277
94	13.31	33.108	6.08	0.43	4.	0.00	0.0	307.3	100	12.80	33.093	6.04	24.977	298.8	0.358
108	12.15	33.070	5.93	0.39	5.	0.07	0.4	288.5	125	10.57	33.107	5.52	25.401	258.5	0.428
131	10.08	33.148	5.34	0.94	12.	0.00	9.9	247.6	150	9.38	33.384	4.84	25.815	219.1	0.489
150	9.38	33.384	4.84	0.97	17.	0.04	14.3	219.1	200	8.79	33.891	3.41	26.305	172.6	0.588
178	9.11	33.730	3.89	1.74	25.	0.00	21.1	189.4	250	8.05	33.995	3.47	26.499	154.2	0.672
206	8.69	33.919	3.34	1.89	31.	0.03	23.9	169.1	300	7.27	34.026	2.58	26.636	141.2	0.748
234	8.27	33.979	3.59	1.90	33.	0.07	23.8	158.5	400	6.31	34.137	1.12	26.852	120.7	0.884
281	7.61	34.012	2.97	2.06	42.	0.00	27.9	146.8	500	5.74	34.235	0.54	27.003	106.4	1.004
332	6.75	34.053	1.93	2.44	56.	0.10	33.3	132.4							
411	6.28	34.150	1.04	2.78	69.	0.00	37.4	119.2							
492	5.78	34.228	0.57	2.94	80.	0.00	40.0	107.4							
573	5.44	34.291	0.35	3.08	88.	0.01	42.1	98.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 94030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 42.7N	117 26.8W	05/13/78	0218 GMT	585M	270	7KT	4	270 5 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2A	18.22	33.363	5.80		3.	0.01	0.2	393.1	0	18.22	33.363	5.80	23.988	393.1	0.000
10	16.50	33.331	6.00		4.	0.06	0.1	356.4	10	16.50	33.331	6.00	24.372	356.4	0.037
20	14.87	33.322	6.15		4.	0.00	0.0	322.5	20	14.87	33.322	6.15	24.729	322.5	0.071
29	12.10	33.392	5.19		10.	0.01	7.7	264.0	30	11.96	33.400	5.11	25.376	260.8	0.101
39	11.34	33.455	4.52		13.	0.13	12.0	245.9	50	10.93	33.554	3.97	25.685	231.6	0.150
48	11.04	33.507	4.10		16.	0.08	14.9	236.9	75	9.91	33.762	3.53	26.021	199.5	0.204
57	10.51	33.709	3.62		20.	0.04	17.7	213.1	100	9.82	33.989	2.66	26.213	181.3	0.252
67	10.11	33.718	3.67		22.	0.05	19.4	205.9	125	9.73	34.052	2.44	26.279	175.1	0.298
76	9.90	33.771	3.49		23.	0.00	20.6	198.6	150	9.48	34.087	2.29	26.347	168.6	0.341
85	9.93	33.926	2.81		28.	0.00	22.7	187.6							
94	9.88	33.954	2.79		29.	0.00	23.4	184.8							
104	9.79	34.011	2.57		30.	0.02	24.5	179.1							
115	9.76	34.032	2.47		31.	0.02	24.9	177.1							
124	9.74	34.051	2.44		31.	0.02	25.1	175.4							
134	9.61	34.060	2.39		32.	0.00	25.7	172.7							
144	9.52	34.079	2.35		32.	0.01	26.1	169.8							
153	9.46	34.092	2.26		33.	0.00	26.5	167.9							
162	9.39	34.124	2.14		35.	0.02	26.8	164.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 16.0N	117 07.0W	06/02/78	1413 GMT	58M	350	6KT	2	0

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.71	33.429	5.70	0.55	4.		0.1	399.9	0	18.71	33.429	5.70	23.917	399.9	0.000
11	17.58	33.423	6.07	0.52	5.		0.1	373.9	10	17.69	33.423	6.03	24.162	376.5	0.039
20	11.21	33.569	4.44	1.26	15.		12.0	235.3	20	11.21	33.569	4.44	25.646	235.3	0.069
30	10.84	33.611	4.06	1.49	17.		15.7	225.9	30	10.84	33.611	4.06	25.744	225.9	0.093
39	10.64	33.663	3.69	1.62	19.		17.1	218.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97035

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 05.5N	117 27.5W	06/02/78	0955 GMT	1110M	270	6KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.78	33.383	5.70	0.56	4.		0.0	381.4	0	17.78	33.383	5.70	24.110	381.4	0.000
11	17.35	33.363	5.77	0.51	4.		0.0	373.1	10	17.39	33.365	5.76	24.189	373.9	0.038
29	13.94	33.280	6.10	0.53	5.		0.1	306.9	20	15.80	33.307	6.02	24.513	343.1	0.074
39	12.44 B	33.298	5.61	0.83	8.		5.4	277.0	30	13.77	33.281	6.06	24.927	303.6	0.106
53	10.99	33.360	4.80	1.18	13.		10.7	246.9	50	11.25	33.347	4.95	25.466	252.4	0.162
67	10.02	33.412	4.59	1.40	16.		13.9	227.1	75	9.99	33.506	4.28	25.809	219.7	0.221
91	9.94	33.651	3.76	1.60	22.		18.4	208.1	100	9.89	33.738	3.85	26.007	200.9	0.274
109	9.78	33.811	3.92	1.76	26.		18.5	193.8	125	9.33	33.878	3.35	26.209	181.8	0.323
128	9.24	33.888	3.22	1.89	27.		23.0	179.6	150	8.94	34.002	2.73	26.368	166.6	0.367
146	9.01	33.992	2.76	2.19	32.		27.1	168.4	200	8.25	34.090	2.25	26.543	150.0	0.448
174	8.51	34.035	2.64	2.27	37.		26.5	157.8	250	8.23	34.213	1.46	26.643	140.5	0.522
207	8.22	34.107	2.12	2.43	42.		29.5	148.3	300	7.79	34.247	1.07	26.735	131.8	0.593
234	8.26	34.186	1.65	2.45	45.		29.9	143.0	400	6.71	34.287	0.56	26.919	114.3	0.721
279	8.05	34.238	1.21	2.54	49.		31.6	136.1	500	6.06	34.331	0.40	27.038	103.1	0.836
330	7.37	34.254	0.90	2.75	59.		34.5	125.5							
410	6.63	34.292	0.52	2.94	70.		38.4	113.0							
491	6.12	34.327	0.41	3.11	81.		40.9	104.0							
573	5.61	34.360	0.32	3.18	89.		43.0	95.5							

A) A SHAKEDOWN STATION.
B) ALTERNATE VALUE, 12.28 DEGREES.

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 54.4N	117 48.6W	06/02/78	0612 GMT	1200M	340	4KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.89	33.439	5.82	0.56	5.		0.1	357.2
10	16.73	33.440	5.85	0.57	5.		0.1	353.6
38	12.70	33.322	5.39	0.85	9.		6.0	280.1
61	10.17	33.420	4.65	1.25	16.		14.4	228.9
79	9.79	33.531	4.30	1.40	19.		17.4	214.6
94	9.54	33.633	4.06	1.53	21.		19.2	203.2
108	9.24	33.749	3.69	1.63	25.		21.5	189.9
126	9.00	33.881	3.26	1.79	30.		23.5	176.5
145	8.82	33.992	2.82	1.91	33.		25.8	165.6
167	8.49	34.023	2.67	1.97	36.		26.9	158.4
192	8.26	34.047	2.57	2.03	38.		27.4	153.3
215	7.95	34.091	2.19	2.14	43.		29.5	145.6
243	7.74	34.113	1.91	2.20	47.		30.2	141.1
276	7.56	34.153	1.56	2.32	52.		31.9	135.6
323	6.84	34.183	1.05	2.50	62.		35.5	123.8
383	6.79	34.290	0.56	2.66	68.		36.7	115.2
453	6.26	34.304	0.39	2.74	76.		38.7	107.5
528	5.84	34.323	0.33	2.74	83.		39.9	101.0

Z	T	S	O2	SIGT	DT	DD
0	16.89	33.439	5.82	24.365	357.2	0.000
10	16.73	33.440	5.85	24.403	353.6	0.036
20	15.53	33.382	5.76	24.629	332.0	0.070
30	14.07	33.338	5.59	24.911	305.2	0.102
50	11.19	33.358	5.00	25.485	250.5	0.158
75	9.81	33.506	4.37	25.840	216.8	0.216
100	9.41	33.682	3.91	26.043	197.5	0.269
125	9.01	33.874	3.28	26.257	177.2	0.316
150	8.75	34.004	2.77	26.400	163.6	0.359
200	8.15	34.063	2.45	26.537	150.6	0.439
250	7.71	34.122	1.84	26.649	140.0	0.514
300	7.19	34.167	1.29	26.758	129.6	0.583
400	6.68	34.299	0.49	26.932	113.1	0.710
500	5.98	34.316	0.35	27.037	103.2	0.825

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 36.0N	118 30.5W	06/01/78	2359 GMT	2415M	300	4KT	2	290 2 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	15.71	33.210	6.04	0.51	4.	0.00	0.2	348.2
10	15.55	33.209	6.05	0.47	4.	0.00	0.2	344.9
29	15.05	33.202	6.04	0.46	4.	0.01	0.6	334.9
38	14.42	33.155	6.08	0.43	4.	0.01	0.3	325.5
47	14.32	33.272A	5.87	0.63	7.	0.09	3.2	315.0
61	12.71	33.197	5.79	0.62	6.	0.09	3.3	289.4
75	10.97	33.196	5.31	0.84	10.	0.13	8.7	258.7
93	10.03	33.373	4.77	1.10	15.	0.05	14.0	230.1
116	9.58	33.618	4.08	1.33	20.	0.07	18.4	204.9
134	9.27	33.757	3.65	1.53	24.	0.01	21.7	189.8
162	8.83	33.904	3.19	1.87	31.	0.02	24.5	172.3
190	8.53	33.970	2.96	1.90	34.	0.00	26.2	162.9
217	8.26	34.063	2.40	2.07	40.	0.01	28.3	152.1
254	7.84	34.105	2.00	2.20	46.	0.01	30.5	143.1
309	7.61	34.180	1.38	2.39	53.	0.01	32.7	134.3
378	7.24	34.258	0.77	2.58	62.	0.00	35.5	123.5
447	6.37	34.274	0.54	2.72	75.		38.1	111.1
521	5.89	34.319	0.35	2.85	84.		39.5	101.9

Z	T	S	O2	SIGT	DT	DD
0	15.71	33.210	6.04	24.459	348.2	0.000
10	15.55	33.209	6.05	24.494	344.9	0.035
20	15.37	33.206	6.04	24.531	341.3	0.069
30	14.97	33.194	6.04	24.608	334.0	0.103
50	14.05	33.266	5.86	24.858	310.2	0.167
75	10.97	33.196	5.31	25.399	258.7	0.239
100	9.85	33.451	4.55	25.791	221.4	0.299
125	9.42	33.693	3.85	26.049	196.9	0.352
150	9.01	33.851	3.36	26.239	178.8	0.400
200	8.43	34.006	2.76	26.450	158.8	0.486
250	7.88	34.103	2.03	26.608	143.8	0.564
300	7.63	34.168	1.48	26.696	135.5	0.636
400	6.97	34.264	0.67	26.866	119.4	0.769
500	5.98	34.304	0.40	27.028	104.1	0.887

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 15.5N	119 10.0W	06/01/78	1850 GMT	3640M	260	8KT	2	260 1 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.71	33.235		0.26	3.	0.00	0.1	368.0
10	16.56	33.228	5.77	0.28	3.	0.00	0.1	365.2
29	16.37	33.217	5.80	0.31	3.	0.00	0.1	361.9
39	16.02	33.219	5.93	0.27	3.	0.00	0.1	354.2
48	15.20	33.197	6.04	0.26	3.	0.00	0.1	338.4
62	13.54	33.147	6.09	0.30	3.	0.01	0.2	308.8
76	12.37	33.179	5.70	0.49	6.	0.22	3.6	284.5
94	11.43	33.226	5.31	0.66	9.	0.14	7.5	264.3
117	10.49	33.378	4.76	0.94	13.	0.00	13.0	237.2
136	9.83	33.445	4.20B	1.11	17.	0.04	15.4	221.6
162	9.40	33.755	3.67	1.53	25.	0.02	21.1	192.0
191	8.92	33.928	3.18	1.69	29.	0.04	24.2	171.8
218	8.51	33.981	2.99	1.83	33.	0.05	25.8	161.8
255	7.99	34.039	2.60	2.00	40.	0.03	28.4	150.1
310	7.08	34.073	1.88	2.26	52.	0.02	33.0	135.1
378	6.31	34.128	1.14	2.53	73.	0.00	37.3	121.2
447	5.92	34.183	0.77	2.73	75.	0.01	39.3	112.4
521	5.62	34.266	0.43	2.86	85.	0.11	40.7	102.7

Z	T	S	O2	SIGT	DT	DD
0	16.71	33.235		24.251	368.0	0.000
10	16.56	33.228	5.77	24.280	365.2	0.037
20	16.47	33.222	5.79	24.295	363.8	0.073
30	16.35	33.217	5.81	24.320	361.5	0.110
50	14.96	33.188	6.05	24.606	334.2	0.179
75	12.44	33.176	5.73	25.112	286.0	0.257
100	11.16	33.265	5.18	25.418	256.9	0.326
125	10.19	33.402	4.52	25.695	230.6	0.387
150	9.56	33.606	3.89	25.958	205.6	0.442
200	8.78	33.952	3.11	26.354	168.0	0.537
250	8.06	34.033	2.66	26.527	151.5	0.619
300	7.24	34.069	2.01	26.674	137.6	0.694
400	6.16	34.145	1.00	26.879	118.1	0.827
500	5.69	34.240	0.52	27.013	105.5	0.944

A) IT IS ASSUMED THAT TWO DIGITS WERE REVERSED IN RECORDING THE CONDUCTIVITY RATIO. THE LISTED OBSERVED AND INTERPOLATED VALUES INCORPORATE THE CORRECTION OF -0.176 PPT.
B) IT APPEARS AS THOUGH A TITER OF 0.5332 WAS RECORDED AS 0.8332. THE LISTED OBSERVED AND INTERPOLATED VALUES INCORPORATE THE CORRECTION OF -2.37 ML/L.

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 55.0N	119 50.6W	06/01/78	1240 GMT	3785M	290	10KT	2	280 2 7

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.59	33.215	5.77	0.42	3.	0.00	0.1	366.9
10	16.59	33.216	5.71	0.40	3.	0.00	0.0	366.8
29	16.13	33.193	5.79	0.40	3.	0.00	0.0	358.4
38	16.06	33.188	5.81	0.38	3.	0.00	0.0	357.3
52	15.92	33.183	5.83	0.37	3.	0.00	0.0	354.6
66	15.39	33.177	5.90	0.36	3.	0.00	0.0	343.8
90	11.41	33.131	5.60	0.70	7.	0.33	5.1	271.0
108	10.54	33.261	5.11	0.95	11.	0.12	10.4	246.7
126	10.15	33.438	4.61	1.07	15.	0.06	12.6	227.3
145	9.92	33.648	4.06	1.33	19.	0.03	17.3	208.0
173	9.49	33.768	3.74	1.63	23.	0.05	19.7	192.4
205	8.86	33.925	3.26	1.79	29.	0.00	24.0	171.2
232	8.28	33.992	2.95	1.95	35.	0.00	26.5	157.7
278	7.62	34.036	2.57	2.14	43.	0.00	29.2	145.1
329	7.00	34.089	1.76	2.39	55.	0.01	32.4	132.9
407	6.37	34.170	1.04	2.71	67.	0.00	37.3	118.8
487	5.84	34.245	0.58	2.90	80.		39.5	106.8
568	5.58	34.320	0.34	3.00	87.		40.3	98.2

Z	T	S	O2	SIGT	DT	DD
0	16.59	33.215	5.77	24.263	366.9	0.000
10	16.59	33.216	5.71	24.264	366.8	0.037
20	16.35	33.204	5.74	24.308	362.6	0.073
30	16.12	33.193	5.79	24.354	358.2	0.109
50	15.95	33.184	5.83	24.384	355.3	0.181
75	13.94	33.130	5.84	24.778	317.8	0.265
100	10.79	33.196	5.34	25.432	255.6	0.338
125	10.16	33.428	4.64	25.719	228.3	0.399
150	9.85	33.677	3.98	25.966	204.8	0.453
200	8.97	33.903	3.33	26.286	174.4	0.550
250	7.99	34.015	2.81	26.523	151.9	0.634
300	7.34	34.059	2.23	26.653	139.6	0.709
400	6.42	34.163	1.09	26.860	119.9	0.844
500	5.78	34.258	0.53	27.016	105.2	0.962

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 35.0N	120 31.0W	06/01/78	0652 GMT	3925M	300	10KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.86	33.138	5.74	0.62	4.	0.04	0.0	378.5
10	16.84	33.137	5.73	0.57	3.	0.04	0.0	378.1
29	16.79	33.133	5.73	0.49	3.	0.01	0.0	377.2
39	16.67	33.129	5.77	0.52	3.	0.03	0.0	374.9
49	16.64	33.131	5.75	0.53	3.	0.02	0.0	374.1
63	16.60	33.127	5.74	0.51	3.	0.01	0.0	373.5
78	15.68	33.159	5.91	0.54	3.	0.03	0.0	351.3
95	13.82	33.180	6.01	0.50	4.	0.02	0.0	311.8
120	12.16	33.172	5.71	0.60	6.	0.18	3.1	281.2
139	11.06	33.325	5.12	0.79	10.	0.05	7.4	250.7
166	9.67	33.503	4.69	1.36	18.	0.06	15.1	214.8
194	9.10	33.748	4.07	1.53	23.	0.10	19.4	187.9
221	8.71	33.894	3.47	1.63	29.	0.06	22.6	171.2
258	8.11	34.005	2.93	1.84	36.	0.12	26.1	154.3
312	7.50	34.068	2.15	2.08	46.	0.18	29.9	141.1
381	6.96	34.142	1.33	2.36	57.	0.04	34.2	128.4
451	6.13	34.172	0.82	2.61	71.	0.03	38.2	115.8
526	5.66	34.230	0.55	2.82	81.	0.03	40.3	105.8

Z	T	S	O2	SIGT	DT	DD
0	16.86	33.138	5.74	24.141	378.5	0.000
10	16.84	33.137	5.73	24.145	378.1	0.038
20	16.81	33.136	5.73	24.150	377.6	0.076
30	16.78	33.133	5.73	24.156	377.0	0.113
50	16.64	33.131	5.75	24.187	374.1	0.189
75	15.93	33.152	5.87	24.365	357.1	0.281
100	13.43	33.172	5.99	24.914	304.8	0.364
125	11.86	33.207	5.56	25.246	273.3	0.437
150	10.43	33.396	4.93	25.649	235.0	0.501
200	9.01	33.787	3.93	26.189	183.6	0.608
250	8.24	33.988	3.03	26.465	157.4	0.695
300	7.61	34.060	2.32	26.613	143.3	0.772
400	6.73	34.151	1.16	26.809	124.8	0.912
500	5.77	34.208	0.61	26.977	108.8	1.035

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 97090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 15.7N	121 10.0W	06/01/78	0140 GMT	3830M	280	14KT	2	310 5 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	17.09	33.114	5.71	0.39	3.	0.00	0.0	385.3
10	17.03	33.113	5.70	0.39	3.	0.00	0.1	384.1
28	16.96	33.106	5.73	0.40	3.	0.00	0.1	383.0
37	16.90	33.104	5.72	0.41	3.	0.00	0.1	381.8
47	16.78	33.100	5.78	0.44	3.	0.00	0.1	379.4
60	15.82	33.009	5.91	0.47	3.	0.00	0.0	365.2
74	15.12	32.995	5.98	0.47	3.	0.00	0.0	351.5
93	14.04	33.116	6.06	0.52	3.	0.01	0.0	320.8
116	12.03	33.125	5.75	0.66	6.	0.15	3.0	282.3
134	10.91	33.148	5.47	0.88	9.	0.07	7.4	261.2
162	9.99	33.491	4.66	1.43	16.	0.03	14.4	220.8
190	9.52	33.746	4.04	1.54	21.	0.03	18.4	194.5
219	8.88	33.914	3.54	1.70	28.	0.03	22.2	172.3
256	8.32	34.002	3.13	1.90	34.	0.03	25.3	157.5
313	7.37	34.058	2.23	2.24	48.	0.03	30.8	140.1
382	6.74	34.125	1.35	2.50	60.	0.00	35.4	126.9
452	6.14	34.174	0.85	2.73	72.	0.00	38.5	115.7
527	5.74	34.262	0.45	2.93	82.	0.05	40.3	104.4

Z	T	S	O2	SIGT	DT	DD
0	17.09	33.114	5.71	24.069	385.3	0.000
10	17.03	33.113	5.70	24.083	384.1	0.038
20	16.99	33.109	5.72	24.089	383.5	0.077
30	16.95	33.106	5.73	24.096	382.8	0.115
50	16.59	33.080	5.81	24.160	376.6	0.191
75	15.07	33.002	5.98	24.439	350.1	0.283
100	13.43	33.124	5.99	24.875	308.5	0.366
125	11.42	33.127	5.62	25.264	271.5	0.439
150	10.30	33.328	5.02	25.619	237.8	0.503
200	9.30	33.815	3.85	26.164	186.0	0.611
250	8.40	33.994	3.19	26.445	159.3	0.699
300	7.57	34.049	2.44	26.611	143.5	0.777
400	6.57	34.137	1.20	26.819	123.9	0.916
500	5.86	34.227	0.58	26.982	108.4	1.039

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 40.5N	116 46.5W	06/03/78	2324 GMT	425M	300	19KT	0	300 2 2

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	18.04	33.701	7.09	0.30	9.		0.2	364.3	0	18.04	33.701	7.09	24.289	364.3	0.000
10	16.46	33.695	6.83	0.42	11.		1.3	329.0	10	16.46	33.695	6.83	24.660	329.0	0.035
29	10.76	33.770	3.30	1.24	20.		18.9	212.8	20	13.32	33.721	4.94	25.359	262.5	0.064
43	9.73	33.757	3.61	1.39	23.		20.6	197.0	30	10.62	33.765	3.32	25.903	210.8	0.088
53	9.66	33.807	3.44	1.51	25.		21.6	192.2	50	9.68	33.795	3.51	26.086	193.4	0.129
67	9.63	33.910	3.00	1.64	28.		23.0	184.1	75	9.74	33.980	2.61	26.220	180.7	0.176
81	9.82	34.021	2.37	1.76	31.		24.5	178.8	100	9.72	34.033	2.39	26.265	176.4	0.221
95	9.75	34.026	2.41	1.86	31.		24.7	177.4	125	9.53	34.083	2.26	26.335	169.8	0.265
119	9.58	34.069	2.28	1.90	33.		25.4	171.5	150	9.35	34.170	1.92	26.433	160.4	0.307
138	9.43	34.118	2.22	1.99	34.		26.1	165.5	200	8.90	34.277	1.19	26.588	145.8	0.385
166	9.23	34.236	1.49	2.21	41.		28.5	153.7	250	8.55	34.289	0.83	26.653	139.5	0.458
194	8.93	34.273	1.26	2.35	44.		29.6	146.4	300	8.01	34.300	0.75	26.743	131.0	0.528
226	8.80	34.283	0.91	2.35	46.		30.2	143.7	400	6.85	34.280	0.57	26.894	116.7	0.658
277	8.22	34.295	0.75	2.45	52.		31.9	134.3							
327	7.76	34.301	0.76	2.56	58.		33.6	127.4							
381	7.07	34.285	0.64	2.66	65.		36.2	119.2							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100035

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 30.5N	117 07.0W	06/04/78	0359 GMT	1200M	300	22KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	17.07	33.357	5.82	0.32	4.		0.0	367.2	0	17.07	33.357	5.82	24.260	367.2	0.000
10	17.03	33.352	5.84	0.31	4.		0.0	366.7	10	17.03	33.352	5.84	24.265	366.7	0.037
38	12.85	33.229	6.06	0.37	6.		1.6	289.7	20	15.79	33.278	5.92	24.492	345.1	0.072
61	10.78	33.446	4.71	0.82	13.		12.2	237.0	30	14.27	33.233	6.00	24.787	316.9	0.106
81	10.31	33.771	3.52	1.23	20.		18.9	205.3	50	11.59	33.316	5.44	25.380	260.5	0.163
94	9.97	33.945	2.93	1.46	25.		21.9	186.9	75	10.39	33.672	3.86	25.870	213.9	0.223
108	9.79	34.051	2.53	1.58	29.		23.6	176.2	100	9.87	33.999	2.74	26.213	181.3	0.273
127	9.80	34.116	2.20	1.76	32.		24.4	171.5	125	9.80	34.113	2.22	26.314	171.7	0.318
146	9.70	34.154	2.05	1.86	33.		25.7	167.1	150	9.68	34.160	2.02	26.371	166.3	0.361
169	9.57	34.188	1.89	1.92	36.		26.5	162.6	200	9.43	34.244	1.61	26.477	156.3	0.443
193	9.49	34.234	1.67	2.06	38.		27.0	157.9	250	8.97	34.313	1.12	26.606	144.1	0.520
216	9.27	34.264	1.47	2.15	40.		27.9	152.3	300	8.52	34.325	0.93	26.686	136.4	0.593
244	9.02	34.313	1.14	2.24	44.		28.8	144.8	400	7.53	34.309	0.70	26.821	123.6	0.729
276	8.74	34.313	1.06	2.33	46.		30.0	140.6	500	6.51	34.313	0.44	26.965	109.9	0.853
322	8.31	34.336	0.80	2.45	52.		31.7	132.6							
385	7.71	34.315	0.73	2.51	57.		33.4	125.6							
455	6.89	34.297	0.57	2.66	66.		36.2	116.0							
530	6.33	34.335	0.35	2.78	75.		38.1	106.0							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 21.0N	117 27.0W	06/04/78	0728 GMT	2035M	300	17KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.73	33.423	5.84	0.42	4.		0.1	377.4	0	17.73	33.423	5.84	24.153	377.4	0.000
11	17.71	33.422	5.79	0.38	4.		0.0	377.0	10	17.71	33.422	5.79	24.157	377.0	0.038
29	12.68	33.249	5.81	0.51	7.		1.5	285.1	20	15.62	33.304	5.80	24.551	339.5	0.074
39	11.07	33.323	5.10	0.92	12.		10.1	251.0	30	12.47	33.255	5.74	25.166	280.9	0.105
48	10.57	33.378	4.75	1.04	15.		11.4	238.6	50	10.50	33.403	4.66	25.642	235.6	0.157
61	10.24	33.553	4.16	1.31	18.		16.3	220.2	75	10.04	33.689	3.77	25.943	207.0	0.212
76	10.03	33.696	3.75	1.48	20.		18.9	206.3	100	9.57	33.833	3.32	26.133	188.9	0.262
95	9.65	33.811	3.38	1.60	25.		20.2	191.7	125	9.21	33.939	3.01	26.275	175.5	0.308
118	9.32	33.904	3.13	1.74	28.		23.4	179.7	150	8.94	34.045	2.58	26.402	163.4	0.351
137	9.04	33.996	2.79	1.87	32.		24.1	168.6	200	8.30	34.116	2.15	26.556	148.8	0.431
165	8.81	34.082	2.40	2.07	37.		26.8	158.8	250	8.03	34.228	1.33	26.684	136.7	0.504
192	8.35	34.093	2.30	2.17	40.		28.3	151.2	300	7.58	34.251	1.03	26.769	128.6	0.573
220	8.23	34.178	1.72	2.30	47.		29.6	143.1	400	6.95	34.312	0.54	26.905	115.7	0.701
258	7.97	34.235	1.26	2.54	50.		31.3	135.2	500	6.14	34.346	0.35	27.040	102.9	0.816
314	7.45	34.253	0.98	2.66	58.		33.2	126.7							
384	7.08	34.306	0.59	2.79	65.		35.8	117.8							
454	6.49	34.328	0.43	2.89	74.		38.1	108.5							
529	5.94	34.358	0.32	2.92	81.		40.2	99.6							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 100050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 00.5N	118 07.0W	06/04/78	1215 GMT	1765M	320	19KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.73	33.239	5.71	0.42	3.		0.1	368.2	0	16.73	33.239	5.71	24.249	368.2	0.000
10	16.70	33.238	5.75	0.40	3.		0.0	367.6	10	16.70	33.238	5.75	24.255	367.6	0.037
28	15.55	33.225	5.96	0.41	4.		0.0	343.7	20	16.16	33.229	5.86	24.371	356.6	0.073
37	14.87	33.229	6.01	0.41	4.		0.0	329.3	30	15.41	33.226	5.98	24.538	340.7	0.108
51	13.57	33.204	5.95	0.41	4.		0.8	305.2	50	13.66	33.207	5.95	24.893	306.9	0.173
64	12.59	33.188	5.70	0.56	6.		2.7	287.9	75	11.98	33.198	5.52	25.216	276.2	0.246
87	11.39	33.237	5.30	0.82	9.		6.6	262.8	100	10.63	33.332	4.93	25.565	242.9	0.312
105	10.38	33.378	4.77	1.02	13.		12.2	235.4	125	10.06	33.586	4.19	25.860	214.8	0.369
123	10.12	33.566	4.25	1.01	17.		13.4	217.3	150	9.39	33.767	3.65	26.113	190.9	0.421
141	9.53	33.721	3.77	1.42	22.		19.2	196.5	200	8.66	33.969	3.09	26.386	164.9	0.511
168	9.19	33.833	3.49	1.67	27.		21.0	183.0	250	7.99	34.047	2.59	26.549	149.4	0.592
200	8.66	33.969	3.09	1.82	32.		25.1	164.9	300	7.54	34.108	1.92	26.663	138.6	0.666
227	8.25	34.019	2.82	1.96	37.		26.6	155.2	400	6.57	34.192	0.97	26.862	119.7	0.901
273	7.77	34.071	2.33	2.13	44.		29.4	144.6	500	5.95	34.270	0.51	27.004	106.3	0.920
323	7.34	34.138	1.57	2.39	52.		32.5	133.8							
401	6.56	34.192	0.97	2.62	66.		36.9	119.6							
480	6.06	34.254	0.58	2.78	76.		39.3	108.8							
560	5.66	34.315	0.35	2.80	86.		39.9	99.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 100060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 40.6N	118 50.0W	06/04/78	1842 GMT	2790M	320	16KT	2	320 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.13	33.222	5.71	0.39	3.		0.1	378.4	0	17.13	33.222	5.71	24.142	378.4	0.000
10	17.11	33.221	5.70	0.39	3.		0.0	378.0	10	17.11	33.221	5.70	24.146	378.0	0.038
29	17.09	33.219	5.73	0.37	3.		0.0	377.7	20	17.10	33.220	5.72	24.148	377.8	0.076
38	17.02	33.212	5.71	0.36	3.		0.0	376.6	30	17.08	33.218	5.73	24.151	377.5	0.114
52	16.14	33.158	5.86	0.38	3.		0.0	361.2	50	16.31	33.168	5.83	24.291	364.2	0.188
67	14.79	33.108	6.02	0.39	3.		0.0	336.5	75	14.06	33.117	5.92	24.743	321.1	0.274
90	12.75	33.184	5.74	0.55	5.		2.6	291.1	100	11.97	33.257	5.39	25.263	271.7	0.349
109	11.37	33.335	5.02	0.84	10.		9.3	255.3	125	10.64	33.493	4.44	25.688	231.2	0.412
128	10.54	33.521	4.35	1.07	15.		14.5	227.5	150	10.05	33.672	3.93	25.928	208.5	0.468
146	10.10	33.635	4.07	1.25	18.		17.2	211.9	200	9.12	33.997	2.74	26.334	169.8	0.564
175	9.78	33.888	3.07	1.66	26.		22.0	188.1	250	8.56	34.073	2.40	26.483	155.7	0.648
207	8.95	34.015	2.69	2.01	39.		26.3	165.8	300	7.84	34.118	2.00	26.626	142.1	0.724
235	8.77	34.062	2.45	1.96	36.		27.3	159.7	400	7.07	34.238	0.90	26.830	122.7	0.863
282	8.05	34.094	2.25	2.02	42.		29.3	146.8	500	6.32	34.301	0.42	26.980	108.5	0.985
333	7.53	34.166	1.50	2.25	51.		32.6	134.3							
412	7.00	34.248	0.83	2.50	62.		35.9	121.0							
490	6.40	34.295	0.43	2.68	73.		38.7	109.9							
571	5.79	34.336	0.31	2.77	83.		40.5	99.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 100070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 20.5N	119 27.5W	06/04/78	2359 GMT	3740M	310	16KT	2	310 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.82	33.126	5.74	0.63	3.	0.00	0.1	378.4	0	16.82	33.126	5.74	24.142	378.4	0.000
11	16.80	33.126	5.76	0.60	3.	0.00	0.1	378.0	10	16.80	33.126	5.76	24.146	378.0	0.038
30	16.74	33.121	5.77	0.57	3.	0.00	0.1	377.0	20	16.77	33.124	5.76	24.151	377.5	0.076
39	16.61	33.116	5.85	0.59	3.	0.00	0.1	374.5	30	16.74	33.121	5.77	24.156	377.0	0.113
53	16.38	33.170	5.90	0.60	3.	0.00	0.0	365.5	50	16.47	33.163	5.89	24.251	368.0	0.188
66	15.38	33.082	5.96	0.61	3.	0.00	0.0	350.6	75	14.35	33.082	5.97	24.655	329.5	0.276
91	12.56	33.082	6.00	0.70	4.	0.04	0.7	295.1	100	11.96	33.121	5.79	25.160	281.5	0.353
109	11.46	33.174	5.53	0.86	7.	0.16	5.4	268.7	125	10.22	33.297	5.16	25.607	238.9	0.418
130	9.90	33.340	5.05	1.11	14.	0.02	12.2	230.5	150	9.56	33.510	4.61	25.883	212.7	0.476
147	9.63	33.479	4.70	1.29	16.	0.02	14.5	216.0	200	8.71	33.909	3.31	26.331	170.1	0.573
175	9.03	33.753	3.86	1.77	25.	0.01	20.9	186.5	250	7.95	34.034	2.55	26.545	149.9	0.655
207	8.63	33.939	3.18	1.91	31.	0.02	24.7	166.7	300	7.26	34.060	2.09	26.665	138.5	0.729
236	8.17	34.019	2.69	2.06	37.	0.04	27.1	154.1	400	6.39	34.164	0.98	26.864	119.5	0.863
282	7.48	34.048	2.30	2.23	46.	0.04	30.0	142.3	500	5.71	34.253	0.48	27.021	104.7	0.981
333	6.90	34.085	1.68	2.40	55.	0.04	33.6	131.9							
412	6.31	34.178	0.88	2.65	68.	0.01	37.5	117.5							
492	5.75	34.247	0.51	2.82	80.	0.00	40.4	105.6							
573	5.45	34.301	0.35	2.94	88.	0.00	41.7	98.1							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 25.5N	119 27.5W	06/11/78	1204 GMT	3740M	320	22KT		340 6 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
531A	5.74														
534	5.73														
537	5.72														
540	5.71														
543	5.67														
546	5.66														
549	5.65														
552	5.65														
555	5.63														
558	5.63														
561	5.62														
564	5.60														
568	5.61														

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 01.0N	120 07.0W	06/05/78	0511 GMT	3925M	310	20KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.91	33.141	5.74	0.58	6.		0.0	379.3	0	16.91	33.141	5.74	24.132	379.3	0.000
11	16.91	33.139	5.74	0.39	6.		0.0	379.5	10	16.91	33.140	5.74	24.131	379.5	0.038
30	16.92	33.139	5.74	0.34	6.		0.1	379.7	20	16.91	33.139	5.74	24.131	379.5	0.076
39	16.76	33.134	5.80	0.33	6.		0.1	376.5	30	16.92	33.139	5.74	24.128	379.7	0.114
48	16.67	33.132	5.81	0.28	6.		0.1	374.7	50	16.65	33.131	5.81	24.185	374.3	0.190
63	16.47	33.119	5.80	0.27	5.		0.1	371.2	75	16.12	33.112	5.85	24.291	364.2	0.282
77	16.02	33.113	5.86	0.27	6.		0.2	361.9	100	13.53	33.257	5.84	24.960	300.5	0.366
95	13.99	33.235	5.96	0.29	6.		0.2	311.1	125	11.39	33.329	5.16	25.425	256.2	0.436
120	11.85	33.318	5.25	0.49	10.		4.8	264.9	150	10.27	33.526	4.66	25.778	222.7	0.497
137	10.46	33.372	4.97	0.81	14.		10.5	237.2	200	9.02	33.860	3.67	26.244	178.4	0.599
165	10.05	33.659	4.30	1.29	21.		14.8	209.3	250	8.13	34.002	2.97	26.492	154.9	0.684
194	9.17	33.828	3.79	1.46	26.		20.9	183.0	300	7.45	34.039	2.43	26.621	142.6	0.761
221	8.57	33.951	3.28	1.65	33.		24.4	164.9	400	6.48	34.128	1.23	26.825	123.3	0.899
258	8.03	34.007	2.90	1.85	39.		27.1	153.0	500	5.94	34.238	0.57	26.981	108.5	1.021
314	7.27	34.047	2.27	2.11	50.		30.7	139.6							
384	6.59	34.108	1.40	2.44	63.		35.4	126.2							
454	6.16	34.196	0.79	2.68	74.		37.6	114.3							
531	5.81	34.259	0.50	2.80	83.		38.3	105.4							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 100090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 40.5N	120 47.0W	06/05/78	0939 GMT	3925M	340	13KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.14	33.136	5.74	0.34	3.		0.1	384.8	0	17.14	33.136	5.74	24.074	384.8	0.000
11	17.13	33.135	5.70	0.29	3.		0.1	384.7	10	17.13	33.135	5.70	24.076	384.7	0.038
29	17.08	33.135	5.73	0.28	3.		0.0	383.6	20	17.12	33.135	5.72	24.078	384.5	0.077
38	17.00	33.132	5.77	0.25	3.		0.0	382.0	30	17.07	33.135	5.73	24.090	383.4	0.115
52	16.92	33.135	5.80	0.27	3.		0.0	380.0	50	16.93	33.135	5.80	24.123	380.2	0.192
66	15.93	33.115	5.88	0.28	3.		0.0	359.8	75	15.61	33.212	5.89	24.482	346.0	0.283
89	15.00	33.336	5.90	0.27	3.		0.0	324.1	100	13.90	33.251	5.89	24.878	308.2	0.366
108	13.03	33.194	5.89	0.29	4.		0.0	295.6	125	11.64	33.334	5.66	25.385	260.0	0.437
127	11.49	33.351	5.62	0.55	7.		5.9	256.2	150	10.15	33.345	4.95	25.656	234.2	0.500
145	10.21	33.289	5.14	0.84	12.		9.9	239.2	200	9.25	33.812	3.84	26.170	185.4	0.607
173	9.90	33.601	4.14	1.31	18.		16.1	211.2	250	8.16	33.998	3.18	26.485	155.5	0.694
206	9.08	33.847	3.81	1.56	25.		20.9	180.2	300	7.52	34.030	2.57	26.604	144.2	0.771
234	8.43	33.969	3.38	1.70	32.		23.3	161.6	400	6.50	34.116	1.24	26.812	124.5	0.911
280	7.75	34.017	2.82	1.90	41.		27.1	148.3	500	5.82	34.222	0.63	26.982	108.4	1.033
333	7.18	34.050	2.15	2.18	51.		30.8	138.2							
412	6.39	34.129	1.10	2.52	67.		36.4	122.2							
492	5.87	34.214	0.66	2.78	80.		39.4	109.5							
570	5.48	34.288	0.41	2.96	91.		41.6	99.4							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 103030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 06.0N	116 24.5W	06/06/78	2259 GMT	67M	220	5KT	2	310 2 4

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.47	33.630	7.33	0.80	5.		0.2	334.0	0	16.47	33.630	7.33	24.608	334.0	0.000
11	14.08	33.459	6.88	0.43	5.		0.1	296.5	10	14.30	33.472	6.92	24.965	300.0	0.032
20	12.31	33.383	5.68	0.58	10.		2.4	268.4	20	12.31	33.383	5.68	25.297	268.4	0.060
30	11.18	33.402	4.80	0.86	13.		10.8	247.0	30	11.18	33.402	4.80	25.522	247.0	0.086
49	10.35	33.629	3.85	1.15	19.		17.5	216.4	50	10.31	33.640	3.81	25.859	214.9	0.132

A) A SPECIAL CAST FOR THE VERIFICATION OF THE PRESSURE FACTORS FOR THE UNPROTECTED REVERSING THERMOMETERS.

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103035

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 56.0N	116 45.0W	06/06/78	1951 GMT	1755M	360	7KT	2	300 2 4

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.46	33.372	5.68	0.29	3.		0.1	374.9	0	17.46	33.372	5.68	24.179	374.9	0.000
10	17.34	33.370	5.68	0.27	3.		0.0	372.3	10	17.34	33.370	5.68	24.206	372.3	0.037
29	15.42	33.244	6.02	0.29	3.		0.0	339.6	20	16.45	33.307	5.84	24.366	357.0	0.074
39	14.56	33.207	6.13	0.30	3.		0.1	324.6	30	15.35	33.239	6.03	24.559	338.6	0.109
48	12.99	33.269	5.88	0.42	6.		2.3	289.4	50	12.71	33.276	5.76	25.137	283.6	0.171
62	11.37	33.320	5.01	0.76	10.		9.5	256.4	75	10.47	33.443	4.57	25.679	232.1	0.236
75	10.47	33.443	4.57	0.95	14.		13.3	232.1	100	9.96	33.692	3.81	25.959	205.4	0.291
94	10.03	33.638	3.99	1.15	19.		17.6	210.5	125	9.56	33.884	3.15	26.175	184.9	0.341
118	9.74	33.834	3.31	1.34	25.		20.8	191.4	150	9.06	34.004	2.78	26.350	168.4	0.385
136	9.28	33.952	2.93	1.55	29.		23.8	175.5	200	8.60	34.152	2.03	26.539	150.4	0.467
164	8.92	34.043	2.64	1.73	34.		25.4	163.3	250	8.35	34.266	1.26	26.666	138.4	0.541
192	8.73	34.148	2.09	1.92	39.		28.2	152.7	300	8.12	34.307	0.82	26.733	132.0	0.611
219	8.31	34.159	1.89	2.01	44.		29.5	145.7	400	7.08	34.313	0.55	26.888	117.2	0.741
256	8.36	34.284	1.13	2.16	49.		31.2	137.2	500	6.29	34.345	0.31	27.019	104.8	0.859
312	8.01	34.309	0.80	2.28	54.		32.5	130.3							
382	7.25	34.306	0.61	2.43	63.		35.7	120.1							
453	6.62	34.335	0.39	2.52	73.		38.0	109.7							
529	6.13	34.347	0.28	2.60	80.		39.9	102.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 46.0N	117 04.5W	06/06/78	1640 GMT	1855M	360	4KT	2	300 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.01	33.517	5.81	0.43	4.		0.0	354.2	0	17.01	33.517	5.81	24.396	354.2	0.000
11	17.00	33.516	5.76	0.40	4.		0.0	354.0	10	17.00	33.516	5.77	24.398	354.0	0.035
28	15.09	33.332	6.16	0.43	5.		0.0	326.3	20	16.22	33.427	5.95	24.510	343.3	0.070
40	13.69	33.310	6.04	0.57	6.		1.6	299.8	30	14.88	33.319	6.14	24.725	322.8	0.104
48	12.46	33.404	5.39	0.77	9.		4.8	269.6	50	12.14	33.411	5.25	25.350	263.3	0.163
63	10.65	33.468	4.45	1.18	15.		13.6	233.2	75	10.62	33.632	3.87	25.799	220.6	0.223
75	10.62	33.632	3.87	1.36	17.		15.9	220.6	100	10.12	33.848	3.13	26.053	196.6	0.276
94	10.32	33.819	3.20	1.48	21.		18.8	201.9	125	9.32	33.936	2.96	26.256	177.3	0.323
118	9.50	33.906	3.04	1.71	27.		22.9	182.3	150	8.84	34.025	2.62	26.402	163.4	0.367
136	9.07	33.980	2.82	1.74	31.		24.1	170.2	200	8.36	34.125	2.09	26.554	149.0	0.446
164	8.67	34.062	2.43	2.03	37.		27.1	158.2	250	7.94	34.185	1.52	26.664	138.5	0.520
191	8.43		2.20	2.09	40.		27.8		300	7.52	34.226	1.09	26.757	129.7	0.589
218	8.23	34.144	1.85	2.20	44.		29.3	145.7	400	6.69	34.289	0.59	26.923	114.0	0.717
254	7.90	34.189	1.48	2.31	49.		30.8	137.7	500	6.12	34.344	0.32	27.041	102.8	0.831
308	7.46	34.231	1.03	2.48	57.		33.4	128.5							
376	6.86	34.274	0.72	2.66	66.		36.6	117.3							
445	6.41	34.316	0.39	2.79	74.		39.0	108.4							
520	6.03	34.353	0.30	2.90	82.		40.5	101.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 26.0N	117 44.5W	06/06/78	1020 GMT	2695M	290	10KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.97	33.183	5.88	0.32	4.		0.0	355.7	0	15.97	33.183	5.88	24.380	355.7	0.000
11	15.97	33.183	5.88	0.31	4.		0.0	355.7	10	15.97	33.183	5.88	24.380	355.7	0.036
30	15.80	33.228	5.99	0.32	4.		0.0	348.8	20	15.89	33.205	5.93	24.414	352.5	0.071
39	15.21	33.191	6.00	0.32	4.		0.0	339.1	30	15.80	33.228	5.99	24.452	348.8	0.106
48	14.88	33.192	6.01	0.32	4.		0.0	332.2	50	14.70	33.184	6.01	24.659	329.1	0.174
63	13.23	33.137	6.04	0.39	4.		0.2	303.6	75	11.86	33.165	5.64	25.213	276.4	0.250
76	11.76	33.169	5.60	0.60	7.		4.9	274.3	100	10.79	33.374	4.85	25.569	242.5	0.316
95	11.03	33.307	5.04	0.83	11.		9.1	251.5	125	9.80	33.658	3.92	25.959	205.4	0.372
117	10.04	33.600	4.20	1.19	18.		16.6	213.5	150	9.31	33.849	3.24	26.189	183.6	0.422
136	9.55	33.724	3.57	1.39	22.		19.9	196.6	200	8.79	34.053	2.54	26.431	160.7	0.509
165	9.13	33.968	2.97	1.76	31.		24.1	172.0	250	7.93	34.093	2.19	26.593	145.3	0.588
193	8.94	34.038	2.62	1.91	34.		25.6	164.0	300	7.84	34.202	1.40	26.692	135.9	0.660
221	8.31	34.086	2.34	2.07	40.		28.2	151.1	400	6.83	34.271	0.68	26.889	117.2	0.793
257	7.88	34.094	2.15	2.18	45.		29.9	144.4	500	6.04	34.306	0.42	27.021	104.7	0.910
314	7.83	34.237	1.14	2.47	53.		32.7	133.1							
384	6.99	34.263	0.74	2.69	64.		36.3	119.8							
454	6.37	34.293	0.51	2.84	74.		39.0	109.6							
529	5.86	34.310	0.38	2.93	85.		40.4	102.2							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 06.0N	118 25.0W	06/06/78	0531 GMT	2980M	310	16KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.09	33.219	5.70	0.91	5.		0.1	377.7	0	17.09	33.219	5.70	24.150	377.7	0.000
11	17.08	33.217	5.69	0.86	4.		0.0	377.6	10	17.08	33.217	5.69	24.150	377.6	0.038
29	17.02	33.211	5.73	0.82	4.		0.0	376.7	20	17.05	33.214	5.71	24.155	377.2	0.076
39	16.33	33.146	5.91	0.77	4.		0.0	366.2	30	16.96	33.203	5.75	24.166	376.1	0.113
49	15.57	33.220	6.06	0.76	4.		0.0	344.5	50	15.53	33.225	6.06	24.509	343.4	0.185
63	15.18	33.246	5.98	0.79	4.		0.0	334.4	75	14.71	33.244	5.96	24.703	325.0	0.269
77	14.59	33.241	5.96	0.77	4.		0.0	322.7	100	11.99	33.256	5.34	25.259	272.1	0.345
95	12.40	33.227	5.50	0.95	7.		4.4	281.5	125	10.71	33.479	4.51	25.665	233.4	0.408
118	10.97	33.408	4.74	1.18	13.		10.6	243.0	150	9.96	33.690	3.88	25.958	205.6	0.464
137	10.35	33.595	4.14	1.46	17.		15.8	218.9	200	9.02	33.975	3.04	26.334	169.9	0.560
165	9.57	33.782	3.64	1.78	25.		19.9	192.6	250	8.41	34.125	2.11	26.547	149.6	0.642
193	9.10	33.940	3.19	1.89	29.		23.9	173.7	300	7.84	34.197	1.43	26.689	136.2	0.715
220	8.81	34.058	2.59	2.03	34.		26.3	160.5	400	6.90	34.262	0.72	26.873	118.7	0.848
257	8.31	34.135	2.01	2.23	42.		29.4	147.5	500	6.13	34.312	0.42	27.014	105.4	0.967
311	7.73	34.209	1.30	2.42	52.		32.3	133.8							
381	7.11	34.251	0.83	2.70	61.		36.1	122.3							
452	6.39	34.290	0.49	2.85	73.		38.8	110.1							
528	6.07	34.321	0.38	2.92	79.		39.9	103.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 46.2N	119 04.8W	06/05/78	2321 GMT	1060M	300	13KT	2	310 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.31	33.177	5.71	0.48	3.	0.00	0.1	385.7	0	17.31	33.177	5.71	24.065	385.7	0.000
11	17.26	33.176	5.72	0.47	3.	0.00	0.1	384.6	10	17.26	33.176	5.72	24.077	384.6	0.039
30	17.23	33.170	5.72	0.47	3.	0.00	0.1	384.4	20	17.24	33.175	5.72	24.080	384.3	0.077
39	17.20	33.186	5.84	0.48	3.	0.00	0.1	382.6	30	17.23	33.170	5.72	24.079	384.4	0.116
49	17.26	33.213	5.81	0.46	3.	0.00	0.1	382.0	50	17.25	33.220	5.81	24.111	381.3	0.192
63	16.70	33.248	5.82	0.47	2.	0.00	0.1	366.9	75	15.09	33.071	5.98	24.489	345.3	0.284
77	14.79	33.044	6.00	0.50	3.	0.00	0.1	341.2	100	12.89	33.194	5.85	25.038	293.0	0.364
96	13.13	33.182	5.89	0.57	4.	0.04	0.2	298.4	125	11.29	33.210	5.47	25.352	263.2	0.434
119	11.79	33.212	5.57	0.72	7.	0.13	4.3	271.7	150	9.77	33.365	4.88	25.737	226.5	0.496
138	10.28	33.238	5.22	0.97	11.	0.04	10.1	244.1	200	8.75	33.890	3.48	26.310	172.1	0.597
166	9.36	33.573	4.38	1.47	21.	0.03	17.5	204.8	250	7.98	34.021	2.79	26.530	151.3	0.680
194	8.84	33.853	3.59	1.67	27.	0.01	22.6	176.2	300	7.32	34.063	2.17	26.658	139.1	0.755
221	8.46	33.977	3.16	1.83	32.	0.00	25.1	161.4	400	6.09	34.126	1.19	26.873	118.7	0.889
258	7.85	34.025	2.70	2.03	40.	0.01	28.3	149.1	500	5.81	34.281	0.47	27.031	103.8	1.006
313	7.17	34.071	2.02	2.26	51.	0.03	31.9	136.5							
383	6.24	34.107	1.35	2.53	66.	0.00	36.5	122.0							
453	5.80	34.198	0.75	2.74	79.		39.3	109.9							
530	5.82	34.323	0.35	2.89	83.		40.3	100.7							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 103080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 25.0N	119 43.9W	06/05/78	1811 GMT	3640M	300	12KT	2	310 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.64	33.209	5.69	0.42	2.		0.1	390.9	0	17.64	33.209	5.69	24.011	390.9	0.000
10	17.61	33.209	5.66	0.41	2.		0.1	390.2	10	17.61	33.209	5.66	24.018	390.2	0.039
29	17.46	33.193	5.68	0.38	2.		0.0	387.9	20	17.54	33.201	5.67	24.027	389.3	0.078
38	17.35	33.190	5.70	0.40	2.		0.0	385.7	30	17.45	33.193	5.68	24.044	387.7	0.117
48	17.26	33.178	5.80	0.39	2.		0.0	384.5	50	17.16	33.167	5.81	24.092	383.1	0.194
62	16.30	33.085	5.85	0.42	2.		0.0	370.0	75	15.13	33.025	6.00	24.443	349.7	0.286
76	15.05	33.024	6.01	0.43	3.		0.0	348.0	100	14.14	33.263	5.94	24.838	312.1	0.370
94	14.42	33.237	5.97	0.43	3.		0.0	319.6	125	12.65	33.289	5.70	25.158	281.6	0.445
117	13.19	33.282	5.81	0.54	4.		1.1	292.2	150	11.04	33.351	5.18	25.506	248.5	0.512
136	11.90	33.304	5.51	0.73	7.		4.7	266.8	200	9.48	33.710	4.39	26.052	196.6	0.625
164	10.35	33.424	4.87	1.31	14.		12.4	231.5	250	8.36	33.973	3.13	26.435	160.2	0.716
192	9.67	33.648	4.61	1.36	17.		14.9	204.1	300	7.60	34.047	2.45	26.605	144.1	0.794
220	9.02	33.844	3.78	1.70	25.		21.2	179.6	400	6.68	34.140	1.28	26.807	125.0	0.934
257	8.22	33.993	3.01	2.01	35.		26.6	156.7	500	5.62	34.185	0.74	26.978	108.7	1.057
313	7.46	34.051	2.31	2.28	46.		30.7	141.9							
383	6.91	34.135	1.41	2.58	59.		34.7	128.3							
452	5.99	34.152	0.99	2.81	73.		38.4	115.5							
528	5.50	34.209	0.61	2.96	85.		40.5	105.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107032

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 25.8N	116 11.0W	06/07/78	0314 GMT	295M	320	6KT	2	240 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.80	33.536	6.35	0.40	7.		0.0	305.4	0	14.80	33.536	6.35	24.908	305.4	0.000
9	13.51	33.558	5.59	0.68	11.		3.6	278.1	10	13.38	33.565	5.48	25.227	275.1	0.029
28	11.62	33.692	3.77	1.36	17.		14.3	233.3	20	12.26	33.635	4.46	25.501	249.0	0.055
42	10.82	33.746	3.25	1.56	20.		17.2	215.6	30	11.47	33.702	3.66	25.700	230.1	0.079
52	10.60	33.775	3.19	1.64	21.		18.8	209.7	50	10.63	33.770	3.19	25.904	210.7	0.124
67	10.38	33.839	3.06	1.71	23.		20.0	201.4	75	10.36	33.849	3.01	26.012	200.4	0.175
81	10.34	33.860	2.94	1.71	24.		20.3	199.2	100	9.89	34.014	2.25	26.222	180.5	0.223
99	9.91	34.006	2.27	1.88	30.		23.8	181.4	125	9.51	34.160	2.02	26.398	163.8	0.267
123	9.53	34.154	2.04	1.93	35.		24.5	164.4	150	9.39	34.210	1.77	26.458	158.1	0.308
142	9.41	34.190	1.87	2.00	37.		26.3	159.9	200	9.24	34.282	1.37	26.539	150.4	0.387
175	9.34	34.264	1.50	2.04	40.		26.6	153.4	250	8.95	34.321	1.08	26.615	143.1	0.462
203	9.22	34.283	1.36	2.15	43.		28.6	150.1							
241	9.00	34.314	1.13	2.18	45.		29.1	144.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107035

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 21.5N	116 22.5W	06/07/78	0524 GMT	1850M	320	6KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
2	17.62	33.363	5.65	0.32	3.		0.1	379.2
10	17.34	33.356	5.68	0.26	3.		0.0	373.3
39	12.64	33.246	5.72	0.51	6.		3.4	284.5
61	10.90	33.398	4.71	0.93	12.		12.0	242.6
80	10.19	33.592	4.10	1.22	17.		16.9	216.5
93	9.92	33.732	3.63	1.41	21.		19.4	201.8
107	9.74	33.846	3.34	1.52	24.		21.2	190.5
126	9.43	33.983	2.91	1.69	28.		23.5	175.5
146	9.31	34.031	2.73	1.80	30.		24.3	170.1
169	9.12	34.111	2.34	1.93	34.		26.5	161.3
193	9.00	34.176	1.96	2.09	38.		27.7	154.7
215	8.72	34.211	1.68	2.19	41.		28.8	147.8
244	8.49	34.248	1.37	2.28	45.		30.1	141.7
277	8.12	34.263	1.12	2.42	50.		31.5	135.3
324	7.69	34.290	0.82	2.53	56.		33.1	127.2
384	7.19	34.297	0.62	2.67	63.		35.4	119.9
453	6.77	34.326	0.42	2.75	69.		37.3	112.2
528	6.27	34.344	0.32	2.81	77.		38.5	104.6

Z	T	S	O2	SIGT	DT	DD
0	17.62	33.363	5.65	24.133	379.2	0.000
10	17.34	33.356	5.68	24.195	373.3	0.038
20	15.89	33.286	5.69	24.476	346.5	0.074
30	14.26	33.247	5.71	24.800	315.7	0.107
50	11.61	33.309	5.25	25.371	261.4	0.165
75	10.32	33.539	4.25	25.778	222.7	0.226
100	9.83	33.792	3.47	26.060	195.9	0.278
125	9.44	33.977	2.93	26.267	176.2	0.325
150	9.28	34.045	2.67	26.347	168.6	0.369
200	8.91	34.189	1.87	26.518	152.4	0.451
250	8.42	34.252	1.32	26.643	140.5	0.527
300	7.90	34.277	0.96	26.742	131.1	0.597
400	7.09	34.304	0.57	26.880	118.1	0.727
500	6.46	34.339	0.34	26.993	107.4	0.847

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 11.0N	116 42.0W	06/07/78	0840 GMT	2695M	360	4KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	17.12	33.333	5.71	0.44	3.		0.1	370.0
10	16.72	33.293	5.79	0.40	4.		0.1	364.0
28	15.56	33.276	5.98	0.42	4.		0.1	340.2
37	14.33	33.193	6.06	0.43	4.		0.1	321.0
47	13.84	33.202	5.97	0.41	4.		0.1	310.6
80	11.83	33.231	5.41	0.74	8.		6.2	271.0
94	10.34	33.656	3.96	1.26	18.		15.0	214.2
117	10.01	33.845	3.39	1.55	22.		20.0	194.9
185	9.91	33.935	3.09	1.64	25.		20.0	186.7
183	9.81	34.085	2.50	1.94	30.		24.0	174.0
191	9.56	34.125	2.30	2.01	33.		25.1	167.1
219	9.32	34.189	1.93	2.10	37.		26.0	158.6
256	9.05	34.253	1.52	2.21	41.		27.3	149.7
312	8.34	34.331	0.87	2.45	51.		30.4	133.4
382	7.44	34.320	0.65	2.63	61.		34.2	121.6
453	6.87	34.331	0.48	2.77	69.		36.9	113.2
527	6.22	34.348	0.34	2.87	79.		39.7	103.7

Z	T	S	O2	SIGT	DT	DD
0	17.12	33.333	5.71	24.230	370.0	0.000
10	16.72	33.293	5.79	24.293	364.0	0.037
20	16.21	33.286	5.90	24.404	353.4	0.073
30	15.28	33.257	6.00	24.590	335.7	0.107
50	13.41	33.202	5.86	24.940	302.3	0.171
75	11.17	33.500	4.72	25.599	239.7	0.239
100	10.22	33.714	3.79	25.933	208.0	0.296
125	9.96	33.888	3.25	26.113	190.9	0.346
150	9.86	34.022	2.76	26.232	179.5	0.393
200	9.48	34.145	2.19	26.392	164.3	0.481
250	9.10	34.244	1.58	26.532	151.1	0.562
300	8.51	34.319	0.99	26.683	136.8	0.637
400	7.28	34.322	0.60	26.867	119.3	0.771
500	6.46	34.341	0.39	26.994	107.3	0.891

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 50.5N	117 22.0W	06/07/78	1358 GMT	2320M	300	13KT	2	300 1 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.83	33.249	4.83U	0.33	3.		0.0	369.7
10	16.79	33.248	5.71	0.35	3.		0.0	368.9
29	16.15	33.266	5.84	0.41	3.		0.0	353.6
38	15.36	33.231	6.00	0.45	3.		0.0	339.3
47	14.30	33.232	6.12	0.56	4.		0.0	317.5
61	13.10	33.204	5.77	0.62	5.		2.3	296.2
75	11.80	33.255	5.27	1.13	10.		7.5	268.7
93	10.84	33.385	4.78	1.47	15.		12.3	242.5
116	10.08	33.659	3.91	1.71	20.		18.1	209.8
135	9.88	33.758	3.55	1.81	23.		20.2	199.3
163	9.21	33.945	3.16	1.84	29.		23.3	175.0
191	8.58	33.990	3.13	1.83	32.		24.5	162.2
219	7.98	34.024	2.74		41.		28.0	151.0
256	7.49	34.088	2.05		52.			139.5
312	7.14	34.152	1.40		61.			130.0
382	6.67	34.247	0.75		75.			116.9
453	6.39	34.305	0.45		79.		38.4	109.0
528	5.98	34.340	0.33		82.		39.4	101.4

Z	T	S	O2	SIGT	DT	DD
0	16.83	33.249		24.233	369.7	0.000
10	16.79	33.248	5.71	24.242	368.9	0.037
20	16.59	33.254	5.78	24.293	364.0	0.074
30	16.08	33.263	5.86	24.416	352.2	0.110
50	14.02	33.225	6.08	24.833	312.6	0.176
75	11.80	33.255	5.27	25.294	268.7	0.249
100	10.55	33.472	4.50	25.686	231.4	0.312
125	9.97	33.712	3.71	25.973	204.2	0.367
150	9.55	33.864	3.31	26.162	186.2	0.417
200	8.37	34.001	3.03	26.455	158.4	0.505
250	7.55	34.078	2.16	26.637	141.1	0.581
300	7.20	34.140	1.51	26.736	131.7	0.652
400	6.59	34.265	0.65	26.917	114.6	0.780
500	6.15	34.330	0.35	27.027	104.2	0.896

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 32.0N	118 01.5W	06/07/78	2035 GMT	3640M	300	5KT	2	300 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.36	33.243	5.67	0.34	3.		0.0	382.0	0	17.36	33.243	5.67	24.104	382.0	0.000
9	17.19	33.243	5.67	0.29	3.		0.0	378.2	10	17.18	33.243	5.67	24.147	378.0	0.038
29	16.82	33.229	5.74	0.29	3.		0.0	370.9	20	17.04	33.237	5.71	24.175	375.2	0.076
38	16.34	33.209	5.85	0.32	3.		0.0	361.8	30	16.77	33.228	5.75	24.230	370.0	0.113
46	15.86	33.170	5.88	0.31	3.		0.0	354.3	50	15.60	33.176	5.91	24.457	348.4	0.185
61	14.88	33.219	5.97	0.35	3.		0.0	330.2	75	14.02	33.250	5.85	24.853	310.6	0.268
75	14.02	33.250	5.85		4.		0.4	310.6	100	11.34	33.135	5.56	25.286	269.5	0.341
93	11.87	33.102	5.74	0.50	6.		3.2	281.2	125	10.19	33.370	4.90	25.670	232.9	0.404
116	10.51	33.285	5.08	0.74	12.		9.3	244.4	150	9.45	33.630	4.24	25.995	202.1	0.459
135	9.90	33.468	4.69	0.96	15.		13.6	221.0	200	8.68	33.964	3.31	26.379	165.6	0.553
162	9.16	33.751	3.89	1.45	24.		19.4	188.6	250	7.96	34.016	2.90	26.528	151.4	0.634
190	8.83	33.935	3.38	1.61	29.		23.1	170.0	300	7.36	34.046	2.32	26.639	140.9	0.710
218	8.39	33.989	3.21	1.73	33.		24.5	159.5	400	6.36	34.158	0.97	26.863	119.7	0.845
255	7.90	34.018	2.84	1.89	39.		27.2	150.4	500	5.92	34.256	0.55	26.997	106.9	0.964
310	7.25	34.053	2.19	2.13	49.		30.3	138.9							
379	6.46	34.138	1.11	2.49	65.		36.5	122.4							
448	6.21	34.201	0.78	2.67	72.		37.7	114.6							
522	5.77	34.282	0.46	2.88	82.		40.1	103.2							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 11.0N	118 41.0W	06/08/78	0204 GMT	2980M	280	9KT	2	290 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.03	33.276	5.51	0.30	3.		0.0	395.0	0	18.03	33.276	5.51	23.968	395.0	0.000
11	17.86	33.281	5.60	0.24	2.		0.0	390.7	10	17.87	33.281	5.59	24.010	390.9	0.039
29	17.77	33.278	5.62	0.25	2.		0.0	388.8	20	17.80	33.280	5.61	24.027	389.4	0.078
39	17.67	33.262	5.69	0.22	2.		0.0	387.7	30	17.76	33.278	5.63	24.035	388.6	0.117
48	17.43	33.219	5.70	0.19	1.		0.0	385.4	50	17.32	33.198	5.71	24.079	384.4	0.195
62	16.68	33.114	5.80	0.20	1.		0.0	376.2	75	16.53	33.236	5.83	24.292	364.1	0.289
76	16.52	33.249	5.83	0.21	1.		0.0	362.8	100	14.86	33.460	5.77	24.838	312.1	0.374
95	15.47	33.497	5.81	0.12	1.		0.0	322.2	125	11.99	33.303	5.52	25.296	268.5	0.447
118	12.58	33.301	5.59	0.35	3.		2.8	279.4	150	10.63	33.406	5.08	25.622	237.5	0.511
137	11.21	33.309	5.36	0.51	6.		5.9	254.4	200	9.32	33.826	3.82	26.169	185.5	0.619
165	10.15	33.557	4.69	1.08	15.		13.8	218.5	250	8.36	34.000	3.09	26.456	158.2	0.707
193	9.41	33.785	3.95	1.35	21.		19.4	189.9	300	7.42	34.049	2.40	26.632	141.5	0.784
220	9.09	33.916	3.51	1.47	25.		21.4	175.3	400	6.57	34.161	1.19	26.838	122.1	0.921
258	8.15	34.015	2.98	1.73	34.		26.3	154.1	500	6.09	34.297	0.47	27.008	105.9	1.041
314	7.24	34.053	2.21	2.02	46.		31.1	138.8							
384	6.66	34.133	1.39	2.36	58.		35.7	125.3							
454	6.32	34.251	0.63	2.66	68.		39.3	112.2							
528	5.94	34.313	0.37	2.82	76.		41.3	102.9							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 107080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 51.5N	119 20.0W	06/08/78	0710 GMT	3545M	340	15KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.80	33.194	5.63	0.47	3.		0.0	395.6	0	17.80	33.194	5.63	23.961	395.6	0.000
10	17.80	33.193	5.61	0.38	3.		0.0	395.7	10	17.80	33.193	5.61	23.960	395.7	0.040
29	17.63	33.185	5.66	0.36	3.		0.0	392.4	20	17.74	33.190	5.63	23.973	394.5	0.079
39	17.47	33.168	5.68	0.32	3.		0.0	390.0	30	17.61	33.184	5.66	23.999	392.0	0.119
48	16.80	33.113	5.85	0.32	3.		0.0	378.9	50	16.79	33.130	5.85	24.151	377.5	0.196
62	16.72	33.232	5.84	0.32	3.		0.0	368.5	75	16.71	33.501	5.74	24.453	348.7	0.287
76	16.71	33.523	5.73	0.31	3.		0.0	347.1	100	14.91	33.480	5.73	24.842	311.7	0.370
93	15.64	33.510	5.78	0.29	3.		0.0	324.8	125	12.49	33.374	5.51	25.255	272.4	0.444
118	13.00	33.402	5.56	0.46	5.		2.1	279.8	150	11.01	33.411	5.21	25.559	243.5	0.509
135	11.87	33.349	5.43	0.61	7.		4.8	263.0	200	9.47	33.801	4.01	26.124	189.8	0.619
164	10.37	33.516	4.94	1.10	13.		11.0	225.1	250	8.33	34.005	3.07	26.464	157.5	0.708
192	9.70	33.737	4.24	1.29	18.		16.4	198.0	300	7.60	34.056	2.37	26.613	143.4	0.786
220	8.93	33.933	3.50	1.59	27.		22.1	171.6	400	6.50	34.119	1.40	26.814	124.3	0.925
257	8.22	34.010	3.00	1.85	35.		25.8	155.5	500	5.88	34.250	0.54	26.997	107.0	1.047
313	7.44	34.064	2.19	2.15	47.		30.3	140.6							
384	6.64	34.096	1.60	2.47	59.		34.6	127.7							
454	6.12	34.203	0.79	2.74	72.		38.1	113.3							
529	5.78	34.270	0.49	2.90	80.		39.7	104.2							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110035

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 46.0N	116 00.0W	06/09/78	1448 GMT	1110M	290	4KT	4	310 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	16.35	33.455	5.94	0.45	3.		0.0	344.1	0	16.35	33.455	5.94	24.502	344.1	0.000
11	15.99	33.452	6.01	0.43	2.		0.0	336.5	10	16.03	33.452	6.00	24.572	337.4	0.034
30	12.83	33.405	5.43	0.69	5.		3.8	276.4	20	14.71	33.418	5.85	24.836	312.3	0.067
39	11.69	33.442	4.83	0.96	9.		8.8	253.0	30	12.83	33.405	5.43	25.213	276.4	0.096
48	11.36	33.510	4.49	1.12	12.		11.8	242.2	50	11.28	33.520	4.43	25.594	240.1	0.148
62	10.83	33.568	4.16	1.23	14.		13.9	228.9	75	10.36	33.626	4.07	25.839	216.9	0.205
76	10.33	33.631	4.06	1.30	17.		16.0	215.9	100	9.78	33.847	3.40	26.111	191.1	0.257
95	9.79	33.810	3.54	1.46	22.		19.2	194.0	125	9.51	33.963	3.06	26.245	178.3	0.304
118	9.72	33.944	3.05	1.62	25.		21.8	183.0	150	8.86	34.003	3.02	26.380	165.5	0.347
137	9.11	33.984	3.09	1.73	29.		23.3	170.5	200	8.36	34.092	2.33	26.529	151.4	0.428
165	8.68	34.024	2.86	1.91	33.		25.0	161.1	250	7.83	34.131	1.86	26.638	141.0	0.503
192	8.43	34.088	2.37	2.01	38.		27.2	152.7	300	7.96	34.289	1.00	26.743	131.0	0.573
220	8.17	34.096	2.25	2.05	41.		28.4	148.4	400	7.12	34.317	0.51	26.885	117.6	0.704
257	7.77	34.144	1.74	2.21	47.		30.6	139.2	500	6.44	34.341	0.33	26.998	106.9	0.822
313	8.03	34.330	0.80	2.42	53.		32.1	129.0							
383	7.32	34.313	0.58	2.54	61.		35.0	120.5							
453	6.60	34.335	0.33	2.68	72.		37.4	109.4							
528	6.34	34.345	0.33	2.71	76.		38.2	105.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 36.5N	116 19.5W	06/09/78	1125 GMT	2415M	320	15KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.16	33.457	6.09	0.40	3.		0.0	339.8	0	16.16	33.457	6.09	24.547	339.8	0.000
10	15.99	33.455	6.04	0.36	3.		0.0	336.3	10	15.99	33.455	6.04	24.584	336.3	0.034
29	12.78	33.417	5.42	0.72	6.		4.7	274.6	20	14.51	33.438	5.71	24.895	306.7	0.066
38	11.45	33.489	4.50	1.08	12.		10.7	245.3	30	12.60	33.422	5.32	25.272	270.8	0.095
48	11.25	33.579	3.99	1.31	14.		14.0	235.2	50	11.17	33.598	3.93	25.675	232.5	0.145
62	10.71	33.700	3.72	1.46	18.		17.1	217.1	75	10.56	33.778	3.50	25.924	208.8	0.201
76	10.55	33.783	3.48	1.52	20.		17.7	208.3	100	10.26	33.890	3.18	26.063	195.6	0.252
94	10.31	33.876	3.22	1.70	23.		20.3	197.5	125	9.86	33.974	2.90	26.195	183.0	0.300
118	10.04	33.934	3.03	1.68	25.		20.2	188.8	150	9.44	34.102	2.38	26.366	166.8	0.344
136	9.58	34.039	2.68	1.89	29.		23.6	173.7	200	8.38	34.114	2.25	26.543	150.0	0.425
164	9.30	34.139	2.17	2.08	35.		25.1	162.0	250	7.56	34.107	1.99	26.659	139.0	0.499
192	8.54	34.117	2.27	2.16	39.		28.1	152.2	300	7.60	34.253	1.08	26.766	128.8	0.569
220	8.03	34.110	2.14	2.24	43.		29.2	145.4	400	6.97	34.338	0.46	26.923	113.9	0.696
258	7.47	34.106	1.92	2.34	49.		31.3	137.9	500	6.19	34.348	0.36	27.035	103.3	0.811
314	7.65	34.304	0.78	2.63	58.		32.6	125.6							
384	7.12	34.336	0.50	2.77	66.		36.1	116.1							
454	6.48	34.341	0.38	2.88	75.		37.8	107.5							
528	6.06	34.352	0.34	2.87	81.		39.5	101.4							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 15.8N	116 58.8W	06/09/78	0502 GMT	3545M	320	14KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.39	33.284	5.59	0.35	4.		0.1	379.7	0	17.39	33.284	5.59	24.128	379.7	0.000
10	17.26	33.278	5.64	0.29	4.		0.1	377.2	10	17.26	33.278	5.64	24.155	377.2	0.038
30	16.70	33.237	5.76	0.35	4.		0.1	367.7	20	17.07	33.260	5.68	24.184	374.4	0.075
39	16.08	33.223	5.92	0.35	3.		0.1	355.2	30	16.70	33.237	5.76	24.254	367.7	0.113
48	15.64	33.207	5.98	0.32	4.		0.1	346.9	50	15.51	33.208	6.00	24.502	344.1	0.184
62	14.58	33.213	6.05	0.38	4.		0.1	324.5	75	13.45	33.194	5.90	24.926	303.7	0.265
76	13.35	33.191	5.88	0.46	5.		0.7	301.9	100	10.65	33.187	5.35	25.449	254.0	0.336
94	11.00	33.144	5.50	0.60	9.		4.0	263.0	125	10.01	33.459	4.71	25.769	223.5	0.396
118	10.16	33.376	4.87	0.97	14.		12.2	232.0	150	9.60	33.713	4.11	26.035	198.3	0.449
137	9.81	33.597	4.43	1.06	17.		13.5	210.1	200	8.60	33.963	3.24	26.391	164.4	0.542
165	9.35	33.815	3.76	1.37	24.		20.2	186.7	250	7.92	34.071	2.45	26.577	146.8	0.621
193	8.73	33.941	3.31	1.62	30.		23.6	168.0	300	7.66	34.158	1.61	26.684	136.7	0.695
221	8.25	34.016	3.03	1.71	36.		23.8	155.5	400	6.97	34.286	0.62	26.881	117.9	0.827
258	7.86	34.084	2.28	2.01	44.		27.7	144.9	500	6.27	34.342	0.31	27.020	104.8	0.945
314	7.61	34.180	1.43	2.19	52.		30.3	134.3							
384	7.11	34.272	0.72	2.46	62.		34.4	120.7							
454	6.54	34.320	0.41	2.65	72.		37.5	109.8							
529	6.14	34.351	0.29	2.76	78.		39.0	102.5							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 56.5N	117 39.0W	06/09/78	0033 GMT	3545M	270	8KT	2	310 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.95	33.438	5.47	0.25	3.		0.1	405.0	0	18.95	33.438	5.47	23.863	405.0	0.000
10	18.56	33.429	5.52	0.22	3.		0.1	396.3	10	18.56	33.429	5.52	23.954	396.3	0.040
29	18.51	33.429	5.52	0.21	3.		0.1	395.1	20	18.54	33.429	5.52	23.959	395.9	0.080
38	18.43	33.422	5.59	0.20	3.		0.1	393.8	30	18.52	33.428	5.53	23.963	395.5	0.119
47	17.71	33.327	5.70	0.20	3.		0.1	383.9	50	17.62	33.345	5.70	24.120	380.5	0.197
61	17.41	33.433	5.72	0.22	3.		0.1	369.3	75	16.77	33.351	5.78	24.325	360.9	0.290
75	16.77	33.351	5.78	0.23	3.		0.1	360.9	100	13.97	33.360	5.73	24.949	301.6	0.374
93	14.58	33.335	5.83	0.42	6.		3.4	315.6	125	12.42	33.508	4.90	25.371	261.3	0.445
116	12.90	33.44R	5.29	0.48	6.		4.3	274.5	150	11.65	33.716	3.84	25.678	232.1	0.507
135	12.00	33.580	4.44	0.79	11.		10.4	248.3	200	9.94	33.958	3.21	26.169	185.5	0.614
163	11.39	33.821	3.46	1.16	17.		16.8	219.8	250	8.88	34.124	2.42	26.473	156.7	0.701
191	10.26	33.914	3.34	1.37	22.		19.7	193.9	300	8.26	34.197	1.70	26.625	142.2	0.779
219	9.38	34.046	2.87	1.58	29.		23.7	170.1	400	7.25	34.271	0.77	26.831	122.7	0.917
257	8.80	34.134	2.32	1.89	37.		26.9	154.7	500	6.41	34.302	0.45	26.971	109.5	1.040
314	8.11	34.212	1.52	2.16	48.		30.8	138.9							
384	7.42	34.268	0.85	2.47	58.		34.8	125.2							
454	6.72	34.277	0.60	2.66	68.		37.4	115.3							
530	6.27	34.326	0.36	2.73	76.		38.8	106.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 36.5N	118 18.0W	06/08/78	1847 GMT	3640M	310	9KT	1	300 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	18.34	33.278	5.58	0.35	4.		0.0	402.1	0	18.34	33.278	5.58	23.893	402.1	0.000
11	18.10	33.275	5.59	0.32	3.		0.0	396.7	10	18.12	33.276	5.59	23.945	397.2	0.040
29	17.86	33.253	5.64	0.30	3.		0.0	392.8	20	17.95	33.264	5.61	23.977	394.1	0.080
38	17.78	33.251	5.73	0.29	3.		0.0	391.1	30	17.85	33.252	5.65	23.993	392.6	0.119
47	17.68	33.279	5.65	0.29	3.		0.0	386.7	50	17.63	33.309	5.66	24.089	383.4	0.197
61	17.14	33.405	5.76	0.29	3.		0.0	365.3	75	15.48	33.388	5.81	24.646	330.3	0.287
75	15.48	33.388	5.81	0.34	3.		0.0	330.3	100	13.07	33.454	5.09	25.203	277.4	0.363
92	13.63	33.421	5.34	0.50	5.		1.9	290.5	125	11.89	33.578	4.44	25.526	246.6	0.429
116	12.28	33.531	4.62	0.73	9.		8.4	257.0	150	11.18	33.730	3.92	25.775	223.0	0.489
135	11.54	33.633	4.26	0.97	13.		12.5	236.2	200	9.97	34.001	2.98	26.198	182.7	0.592
162	10.95	33.807	3.64	1.21	17.		16.2	213.3	250	8.93	34.090	2.71	26.438	160.0	0.680
190	10.26	33.970	3.05	1.51	24.		21.0	189.7	300	8.43	34.175	1.90	26.583	146.2	0.759
216	9.52	34.034	2.92	1.66	28.		23.2	173.2	400	7.61	34.261	0.91	26.773	128.2	0.902
254	8.88	34.095	2.67	1.90	35.		25.8	158.8	500	6.58	34.307	0.45	26.952	111.2	1.029
310	8.36	34.191	1.72	2.13	44.		29.7	144.1							
379	7.88	34.259	1.04	2.40	53.		32.9	132.2							
448	6.98	34.266	0.69	2.58	64.		36.2	119.4							
523	6.48	34.334	0.35	2.73	74.		38.8	108.0							

RV DAVID STARR JORDAN — CALCOFI CRUISE 7805 — 110080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 17.0N	118 57.5W	06/08/78	1231 GMT	3835M	340	10KT	2	330 2 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.59	33.446	5.53	0.53	3.		0.0	395.8	0	18.59	33.446	5.53	23.959	395.8	0.000
10	18.56	33.446	5.54	0.46	3.		0.0	395.1	10	18.56	33.446	5.54	23.967	395.1	0.040
29	18.61	33.488	5.53	0.44	2.		0.0	393.2	20	18.58	33.468	5.53	23.977	394.1	0.079
38	18.59	33.532	5.67	0.39	2.		0.0	389.6	30	18.61	33.491	5.55	23.989	393.0	0.119
47	18.20	33.509	5.59	0.36	2.		0.0	382.0	50	18.03	33.496	5.62	24.136	379.0	0.196
61	17.09	33.437	5.78	0.39	2.		0.0	361.8	75	15.08	33.393	5.77	24.738	321.6	0.284
75	15.08	33.393	5.77	0.42	3.		0.0	321.6	100	12.82	33.498	4.86	25.286	269.5	0.358
94	13.22	33.469	5.03	0.64	6.		3.5	279.0	125	11.67	33.633	4.25	25.610	238.7	0.423
117	11.99	33.584	4.46	0.95	11.		10.5	247.8	150	10.82	33.734	3.99	25.843	216.5	0.480
136	11.29	33.693	4.02	1.14	15.		12.9	227.5	200	9.48	33.994	3.42	26.275	175.5	0.580
163	10.40	33.769	3.96	1.30	18.		16.5	206.9	250	9.09	34.175	2.08	26.479	156.1	0.665
191	9.52	33.932	3.76	1.46	24.		19.9	180.7	300	8.43	34.220	1.56	26.617	143.0	0.743
219	9.39	34.089	2.64	1.74	31.		23.6	167.1	400	7.38	34.258	0.92	26.802	125.4	0.883
256	9.02	34.184	2.02	2.07	39.		26.9	154.4	500	6.60	34.315	0.46	26.954	111.0	1.008
312	8.27	34.222	1.47	2.23	47.		29.2	140.5							
382	7.55	34.246	1.04	2.43	56.		33.3	128.6							
452	6.95	34.293	0.61	2.64	66.		36.4	117.0							
526	6.44	34.322	0.43	2.76	74.		38.5	108.4							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 113050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 41.5N	116 36.5W	06/10/78	0210 GMT	3450M	300	10KT	2	320 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.29	33.254	5.65	0.37	3.		0.1	379.6	0	17.29	33.254	5.65	24.129	379.6	0.000
10	17.14	33.243	5.68	0.40	3.		0.1	377.1	10	17.14	33.243	5.68	24.156	377.1	0.038
38	16.74	33.202	5.74	0.42	3.		0.1	371.1	20	17.00	33.229	5.69	24.178	374.9	0.075
62	15.00	33.126	5.99	0.42	3.		0.1	339.5	30	16.85	33.214	5.71	24.201	372.8	0.113
80	13.16	33.114	6.02	0.49	4.		0.1	304.0	50	16.00	33.162	5.87	24.357	357.9	0.186
94	11.69	33.186	5.57	0.66	7.		4.9	271.8	75	13.70	33.109	6.01	24.811	314.7	0.271
108	10.57	33.254	5.24	0.85	10.		9.2	247.7	100	11.15	33.208	5.42	25.376	260.9	0.343
127	10.12	33.544	4.81	1.00	14.		12.6	218.9	125	10.13	33.512	4.86	25.790	221.6	0.404
146	9.88	33.706	4.29	1.16	18.		15.9	203.1	150	9.86	33.748	4.13	26.020	199.7	0.457
169	9.67	33.914	3.53	1.39	23.		20.3	184.4	200	8.79	33.962	3.71	26.361	167.3	0.551
192	8.92	33.955	3.74	1.70	28.		21.4	169.8	250	8.28	34.061	2.65	26.516	152.6	0.633
216	8.61	33.977	3.53	1.80	30.		23.5	163.6	300	7.81	34.197	1.39	26.692	135.8	0.707
244	8.33	34.037	2.87	1.88	36.		26.4	155.1	400	7.12	34.285	0.66	26.860	119.9	0.841
276	8.08	34.162	1.76	2.10	45.		30.4	142.2	500	6.35	34.327	0.38	26.998	106.9	0.961
323	7.56	34.211	1.21	2.32	54.		33.0	131.3							
384	7.24	34.279	0.73	2.49	61.		35.3	121.9							
464	6.69	34.299	0.51	2.65	69.		37.1	113.2							
529	6.15	34.351	0.30	2.79	79.		39.4	102.6							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 113060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 22.0N	117 16.0W	06/10/78	0750 GMT	3545M	350	8KT		

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.07	33.295	5.63	0.46	3.		0.0	394.5	0	18.07	33.295	5.63	23.973	394.5	0.000
10	18.05	33.295	5.64	0.45	3.		0.0	394.1	10	18.05	33.295	5.64	23.977	394.1	0.039
29	17.93	33.290	5.64	0.43	3.		0.0	391.7	20	17.98	33.293	5.64	23.993	392.7	0.079
38	17.90	33.296	5.65	0.42	3.		0.0	390.6	30	17.93	33.290	5.64	24.003	391.7	0.118
47	17.68	33.430	5.70	0.40	3.		0.0	375.7	50	17.64	33.428	5.71	24.178	375.0	0.195
61	17.30	33.405	5.73	0.42	3.		0.0	368.9	75	16.09	33.294	5.85	24.438	350.2	0.286
75	16.09	33.294	5.85	0.43	3.		0.1	350.2	100	13.26	33.292	5.70	25.041	292.8	0.367
94	13.69	33.276	5.86	0.50	3.		0.1	302.3	125	12.03	33.451	4.75	25.402	258.4	0.437
117	12.42	33.380	5.06	0.71	7.		5.0	270.7	150	11.35	33.763	3.55	25.770	223.4	0.498
135	11.62	33.556	4.33	1.04	11.		11.3	243.3	200	10.30	34.079	2.50	26.202	182.4	0.601
164	11.18	33.934	2.93	1.48	20.		18.1	207.8	250	9.75	34.237	1.83	26.419	161.8	0.689
192	10.41	34.035	2.66	1.78	24.		22.3	187.4	300	9.03	34.269	1.51	26.562	148.2	0.770
219	10.12	34.177	2.12	2.02	29.		24.5	172.2	400	7.84	34.337	0.65	26.799	125.7	0.913
257	9.66	34.242	1.79	2.26	34.		26.5	160.0	500	6.81	34.335	0.39	26.943	112.1	1.039
313	8.84	34.274	1.43	2.44	40.		28.3	145.0							
383	8.06	34.335	0.74	2.71	50.		32.4	129.1							
452	7.20	34.334	0.49	2.88	60.		35.0	117.3							
527	6.66	34.334	0.37	2.97	68.		36.7	110.3							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 113070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 02.0N	117 55.0W	06/10/78	1216 GMT	2980M	330	10KT	2	330 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.92	33.232	5.63	0.33	3.		0.0	395.7	0	17.92	33.232	5.63	23.961	395.7	0.000
11	17.92	33.232	5.62	0.32	3.		0.0	395.7	10	17.92	33.232	5.62	23.961	395.7	0.040
30	17.27	33.188	5.69	0.31	3.		0.0	384.0	20	17.65	33.213	5.64	24.011	390.9	0.079
39	17.03	33.177	5.73	0.31	3.		0.0	379.4	30	17.27	33.188	5.69	24.083	384.0	0.118
48	16.92	33.174	5.79	0.29	3.		0.0	377.2	50	16.73	33.158	5.82	24.186	374.2	0.194
63	15.45	33.125	5.94	0.31	3.		0.0	348.9	75	15.32	33.353	5.82	24.654	329.6	0.292
77	15.30	33.396	5.79	0.31	3.		0.0	326.0	100	12.10	33.318	5.32	25.286	269.4	0.358
95	12.22	33.244	5.47	0.52	6.		3.3	277.0	125	11.44	33.559	4.41	25.597	239.9	0.422
119	11.65	33.498	4.64	0.90	11.		10.0	248.1	150	10.66	33.782	3.56	25.909	210.2	0.479
137	11.01	33.675	3.95	1.21	16.		14.7	224.0	200	10.41	34.211	1.91	26.285	174.5	0.577
165	10.40	33.901	3.12	1.53	24.		20.2	197.1	250	9.89	34.343	1.33	26.478	156.2	0.662
192	10.46	34.156	2.13	1.90	29.		23.8	179.3	300	9.38	34.395	0.88	26.604	144.2	0.740
220	10.23	34.307	1.52	2.15	35.		26.6	164.3	400	8.09	34.372	0.58	26.789	126.7	0.882
256	9.82	34.343	1.32	2.32	39.		27.6	155.0	500	7.06	34.371	0.37	26.937	112.6	1.009
311	9.26	34.404	0.78	2.52	45.		29.6	141.7							
380	8.28	34.371	0.63	2.69	54.		32.6	129.5							
451	7.62	34.378	0.47	2.82	61.		34.7	119.7							
527	6.71	34.364	0.32	2.91	72.		37.7	108.7							

RV DAVID STARR JORDAN CALCOFI CRUISE 7805 113080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
27 44.5N	118 36.0W	06/10/78	1753 GMT	3740M	310	9KT	2	310 3 5

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.89	33.240	5.60	0.15	3.		0.0	394.4	0	17.89	33.240	5.60	23.974	394.4	0.000
10	17.85	33.240	5.61	0.19	3.		0.0	393.5	10	17.85	33.240	5.61	23.984	393.5	0.039
29	17.28	33.201	5.71	0.23	3.		0.0	383.3	20	17.56	33.213	5.65	24.034	388.7	0.079
38	17.21	33.238	5.77	0.25	3.		0.0	379.0	30	17.27	33.205	5.72	24.096	382.8	0.117
46	17.13	33.251	5.79	0.22	3.		0.0	376.2	50	16.96	33.236	5.80	24.193	373.5	0.193
61	16.04	33.169	5.86	0.28	3.		0.0	358.2	75	13.97	33.129	6.04	24.771	318.5	0.280
75	13.97	33.129	6.04	0.34	3.		0.0	318.5	100	11.92	33.200	5.58	25.228	275.0	0.355
94	12.42	33.192	5.74	0.38	5.		1.1	284.5	125	10.59	33.455	4.64	25.666	233.3	0.419
117	10.81	33.302	5.00	0.85	11.		10.6	248.2	150	10.28	33.841	3.48	26.021	199.6	0.474
136	10.44	33.676	4.11	1.09	16.		14.4	214.4	200	9.60	34.106	2.38	26.341	169.1	0.568
164	10.14	33.946	2.96	1.58	24.		21.5	189.5	250	9.60	34.340	1.25	26.524	151.8	0.650
192	9.77	34.085	2.42	1.88	30.		24.5	173.3	300	8.71	34.296	1.22	26.634	141.4	0.726
220	9.29	34.162	2.23	2.09	35.		25.7	160.1	400	7.66	34.337	0.57	26.825	123.3	0.865
257	9.68	34.376	1.02	2.36	40.		28.8	150.4	500	6.65	34.357	0.32	26.982	108.4	0.988
314	8.30	34.250	1.28	2.47	47.		30.5	138.8							
383	7.81	34.326	0.68	2.68	56.		33.4	126.2							
452	7.15	34.357	0.33	2.87	66.		36.5	114.9							
525	6.37	34.350	0.31	2.96	76.		39.1	105.4							

60.052[5] 05/14/78 2344GMT 37 52.5N 123 03.5W
BOTTOM 88M WIND 190 10KT WEATHER 4
DOMINANT WAVES 260 5 5

70.051 05/19/78 2015GMT 36 11.3N 121 43.9W
BOTTOM 125M WIND 330 5KT WEATHER 1
DOMINANT WAVES 290 1 6

73.050 05/20/78 0030GMT 35 37.0N 121 17.0W
BOTTOM 103M WIND 290 10KT WEATHER 4
DOMINANT WAVES 280 1 6

80.051 05/22/78 0902GMT 34 26.0N 120 32.5W
BOTTOM 99M WIND 330 18KT WEATHER
DOMINANT WAVES

83.040[6] 05/25/78 0857GMT 34 12.5N 119 24.2W
BOTTOM 34M WIND 090 8KT WEATHER
DOMINANT WAVES

87.032[5] 05/25/78 1623GMT 33 53.5N 118 26.5W
BOTTOM 22M WIND 210 3KT WEATHER 1
DOMINANT WAVES 270 1 5

87.032[7] 05/25/78 1731GMT 33 54.5N 118 28.0W
BOTTOM 32M WIND 260 9KT WEATHER 1
DOMINANT WAVES 220 1 4

87.033 05/25/78 1823GMT 33 53.9N 118 29.0W
BOTTOM 50M WIND 240 9KT WEATHER 1
DOMINANT WAVES 230 2 5

87.035 05/25/78 2004GMT 33 50.0N 118 37.5W
BOTTOM 480M WIND 200 9KT WEATHER 1
DOMINANT WAVES 220 1 5

87.055 05/28/78 2133GMT 33 10.0N 120 00.0W
BOTTOM 1260M WIND 320 22KT WEATHER 0
DOMINANT WAVES 320 4 6

90.027[6] 05/27/78 1245GMT 33 29.3N 117 45.5W
BOTTOM 48M WIND 0KT WEATHER 0
DOMINANT WAVES 290 1 5

90.028 05/27/78 1136GMT 33 28.5N 117 46.7W
BOTTOM 355M WIND 010 4KT WEATHER
DOMINANT WAVES

90.029 05/27/78 1005GMT 33 27.0N 117 49.5W
BOTTOM 630M WIND 320 3KT WEATHER
DOMINANT WAVES

90.030 05/27/78 0757GMT 33 25.0N 117 53.5W
BOTTOM 630M WIND 320 5KT WEATHER
DOMINANT WAVES

90.031 05/27/78 0634GMT 33 23.0N 117 57.7W
BOTTOM 340M WIND 300 6KT WEATHER
DOMINANT WAVES

93.026[7] 05/27/78 1735GMT 32 57.2N 117 17.4W
BOTTOM 45M WIND 270 4KT WEATHER 0
DOMINANT WAVES 270 1 5

93.026[9] 05/27/78 1821GMT 32 56.8N 117 18.3W
BOTTOM 99M WIND 270 5KT WEATHER 0
DOMINANT WAVES 270 1 5

93.028 05/27/78 1929GMT 32 54.7N 117 21.8W
BOTTOM 575M WIND 270 9KT WEATHER 0
DOMINANT WAVES 270 2 5

93.035 05/28/78 0103GMT 32 40.5N 117 51.5W
BOTTOM 650M WIND 280 11KT WEATHER 0
DOMINANT WAVES 280 3 5

93.045 05/28/78 0655GMT 32 20.0N 118 32.0W
BOTTOM 1295M WIND 280 9KT WEATHER
DOMINANT WAVES

93.055 05/30/78 2355GMT 32 00.0N 119 13.5W
BOTTOM 1485M WIND 270 15KT WEATHER 2
DOMINANT WAVES 280 4 5

97.032 06/02/78 1230GMT 32 12.0N 117 15.2W
BOTTOM 1385M WIND 360 5KT WEATHER 2
DOMINANT WAVES 0

97.045 06/02/78 0306GMT 31 46.0N 118 08.5W
BOTTOM 1385M WIND 320 8KT WEATHER
DOMINANT WAVES

97.055 06/01/78 2108GMT 31 25.5N 118 49.5W
BOTTOM 1160M WIND 260 10KT WEATHER 2
DOMINANT WAVES 260 1 6

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
10	9.22	33.465	4.88	0.92	21.	0.10	17.6	210.7
10	10.59	33.477	6.63	0.84	8.	0.10	4.8	231.6
10	12.86	33.103	6.18	0.75	5.	0.12	4.1	299.1
10	11.73	33.737	4.72	1.27	19.	0.28	14.6	231.9
10	13.79	33.634	5.92	1.08	11.	0.07	4.2	277.9
10	15.00	33.549	6.66	0.90	8.	0.02	0.1	308.5
10	13.20	33.552	5.49	1.03	11.	0.12	6.0	272.6
10	13.65	33.552	5.88	0.76	10.	0.10	3.2	281.2
10	12.97	33.552	5.61	0.88	10.	0.19	6.5	268.2
10	12.90	33.485	6.09	0.91	9.		7.7	271.8
10	15.50	33.419	6.23	0.45	4.		0.0	328.5
10	18.16	33.464	5.78	0.40	3.		0.1	384.4
10	14.40	33.393	6.32	0.56	7.		0.4	307.7
10	16.62	33.477	6.38	0.42	4.		0.1	348.4
10	14.70	33.484	6.68	0.50	5.		0.1	307.1
10	12.88	33.593	4.47	0.86	15.		6.6	263.5
10	11.49	33.608	4.09	1.25	16.		13.1	237.2
10	17.92	33.420	5.86	0.32	5.		0.3	382.0
10	17.06	33.377	5.90	0.34	5.		0.0	365.5
10	16.44	33.445	5.90	0.38	6.		0.0	346.8
10	15.24	33.190	6.02	0.33	4.	0.03	0.1	339.8
10	18.77	33.426	5.82	0.57	5.		0.1	401.6
10	15.84	33.450	6.01	0.72	8.		1.5	333.4
10	17.05	33.262	5.71	0.38	4.	0.00	0.2	373.7

		Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
100.029	06/03/78 2211GMT 31 42.2N 116 43.4W BOTTOM 105M WIND 300 15KT WEATHER 0 DOMINANT WAVES 300 1 2	10	12.45	33.689	5.00	0.78	16.		8.4	248.5
103.045	06/06/78 1343GMT 30 36.0N 117 24.0W BOTTOM 2180M WIND 290 6KT WEATHER 2 DOMINANT WAVES 300 1 5	10	17.13	33.427	5.83	0.30	4.		0.1	363.4
4 110.032	06/09/78 1658GMT 29 51.2N 115 49.7W BOTTOM 48M WIND 140 18KT WEATHER 2 DOMINANT WAVES 310 3 5	10	13.24	33.552	6.24	0.64	7.		1.1	273.3
110.045	06/09/78 0805GMT 29 26.5N 116 39.5W BOTTOM 1115M WIND 330 12KT WEATHER DOMINANT WAVES	10	17.32	33.324	5.75	0.35	4.		0.1	375.2

RV DAVID STARR JORDAN — CHLOROPHYLL-A AND PHAEOPHYTIN — CALCOFI CRUISE 7805

	DEPTH	CHL A	PHAEO
STATION 60055	0	3.26	1.31
05/15/78	9	4.45	2.08
0148 GMT	30	2.57	1.94
	38	0.66	0.66
37 47.0N	54	0.41	0.41
123 15.0W	69	0.27	0.26
	83	0.27	0.51
	99	0.13	0.25
	118	0.11	0.30
STATION 60060	1	0.39	0.14
05/15/78	10	0.40	0.13
0522 GMT	29	1.45	0.54
	38	2.87	1.46
37 37.0N	47	2.08	1.48
123 37.0W	61	1.41	0.93
	75	0.85	0.46
	93	0.59	0.41
	116	0.05	0.13
	135	0.09	0.18
	163	0.05	0.18
	191	0.05	0.10
STATION 60070	3	0.24	0.11
05/15/78	12	0.28	0.09
1142 GMT	30	0.49	0.16
	39	0.69	0.29
37 17.0N	48	0.82	0.43
124 22.0W	62	0.92	0.53
	75	1.15	0.60
	93	1.15	0.52
	115	1.58	1.03
	132	1.45	0.58
	158	0.95	0.64
	183	0.38	0.54
STATION 60080	1	0.18	0.04
05/15/78	10	0.22	0.00
1704 GMT	29	0.20	0.09
	38	0.35	0.14
36 56.5N	52	0.76	0.52
125 04.0W	66	1.25	0.68
	90	1.38	1.05
	108	1.45	1.01
	127	0.92	0.61
	146	0.79	0.74
	173	0.49	0.41
	205	0.08	0.12
STATION 60090	2	0.08	0.04
05/15/78	11	0.04	0.02
2303 GMT	30	0.05	0.02
	39	0.10	0.07
36 37.0N	54	0.10	0.05
125 47.0W	68	0.16	0.11
	92	0.10	0.19
	110	0.02	0.08
	129	0.00	0.04
	147	0.01	0.02
	175	0.01	0.03
	207	0.00	0.02
STATION 63052	0	15.04	4.91
05/17/78	9	14.64	4.59
0803 GMT	19	6.33	1.80
	25	4.85	2.04
37 19.0N	46	1.25	0.85
122 36.0W	70	0.85	0.83
STATION 63055	1	4.45	0.77
05/17/78	10	4.35	0.87
0335 GMT	29	1.38	0.54
	43	1.08	0.64
37 13.0N	52	1.51	0.73
122 50.0W	66	1.78	0.77
	81	2.28	1.11
	100	2.57	0.99
	123	1.81	0.77
	142	0.76	0.75
	176	0.66	0.81
	205	0.69	0.60
STATION 63060	1	0.40	0.09
05/16/78	11	1.58	0.41
2300 GMT	29	1.88	1.50
	39	1.14	1.32
37 03.0N	53	2.28	0.99
123 12.0W	67	1.78	1.01
	90	1.38	1.04
	109	1.68	1.29
	127	1.51	0.95
	147	1.45	0.97
	174	0.76	0.66
	207	0.49	0.58
STATION 63070	1	0.62	0.15
05/16/78	10	0.66	0.17
1654 GMT	29	0.72	0.25
	39	1.35	0.66
36 42.5N	53	1.58	1.02
123 55.0W	67	1.22	0.77
	90	0.59	0.52
	108	0.19	0.26
	127	0.19	0.27
	145	0.18	0.20
	173	0.07	0.09
	206	0.06	0.08
STATION 63080	2	0.09	0.08
05/16/78	11	0.11	0.05
1051 GMT	30	0.09	0.05
	40	0.14	0.03
36 23.0N	54	0.14	0.07
124 38.5W	68	0.36	0.14
	91	0.28	0.21
	109	0.07	0.09
	128	0.05	0.09
	146	0.02	0.09
	174	0.03	0.05
	206	0.02	0.07
STATION 63090	2	0.01	0.13
05/16/78	11	0.06	0.04
0513 GMT	30	0.05	0.10
	39	0.07	0.09
36 03.0N	53	0.13	0.07
125 20.0W	67	0.27	0.12
	90	0.32	0.23
	109	0.15	0.11
	128	0.01	0.11
	146	0.00	0.04
	174	0.00	0.03
	206	0.00	0.03
STATION 67050	1	12.27	2.45
05/17/78	10	10.69	3.32
1604 GMT	29	4.15	0.95
	43	1.74	0.75
36 48.0N	57	1.48	0.95
122 05.0W	72	0.72	0.85
	86	0.56	0.87
	105	0.56	0.56
	129	0.53	0.55
	158	0.56	0.62
	191	0.39	0.78
	224	0.33	1.04
STATION 67055	1	7.72	2.14
05/17/78	12	10.29	2.29
1912 GMT	30	10.29	3.01
	40	9.50	3.21
36 39.0N	50	2.28	1.70
122 26.0W	64	2.97	2.08
	78	3.17	1.82
	96	1.58	1.27
	121	1.12	0.21
	139	0.43	0.63
	166	0.69	0.45
	194	0.40	0.49
STATION 67060	2	0.21	0.04
05/17/78	11	0.28	0.05
2336 GMT	30	0.51	0.44
	40	0.82	0.73
36 28.0N	49	0.44	0.44
122 47.5W	64	0.30	0.79
	78	0.18	0.35
	97	0.09	0.23
	120	0.07	0.19
	139	0.05	0.22
	167	0.04	0.10
	195	0.05	0.19
STATION 67070	2	0.16	0.06
05/18/78	11	0.16	0.05
0522 GMT	30	0.13	0.04
	40	0.22	0.05
36 08.0N	49	0.21	0.09
123 29.5W	64	0.34	0.19
	77	0.41	0.57
	96	0.30	0.31
	120	0.09	0.08
	139	0.02	0.08
	167	0.02	0.10
	196	0.01	0.05
STATION 67080	1	0.07	0.10
05/18/78	9	0.10	0.05
1049 GMT	34	0.09	0.04
	43	0.09	0.05
35 48.0N	57	0.20	0.08
124 12.0W	71	0.29	0.30
	95	0.11	0.11
	113	0.04	0.05
	132	0.01	0.04
	160	0.01	0.00
	187	0.01	0.02
	225	0.00	0.02
STATION 67090	1	0.06	0.09
05/18/78	11	0.10	0.03
1604 GMT	29	0.10	0.02
	39	0.10	0.02
35 28.0N	53	0.10	0.03
124 55.0W	67	0.19	0.07
	90	0.28	0.19
	109	0.12	0.12
	128	0.03	0.03
	146	0.00	0.02
	174	0.00	0.02
	207	0.01	0.02
STATION 70053	1	0.69	0.13
05/19/78	10	0.82	0.20
1816 GMT	29	1.66	0.93
	39	2.18	1.44
36 06.5N	48	1.58	1.15
121 54.0W	62	0.69	0.66
	76	0.32	0.32
	95	0.22	0.38
	118	0.16	0.31
	137	0.13	0.31
	166	0.11	0.20
	192	0.09	0.14
STATION 70060	1	1.12	0.49
05/19/78	11	0.99	0.54
1329 GMT	30	0.82	0.87
	38	1.02	1.16
35 53.0N	53	1.48	1.13
122 22.6W	67	1.38	1.23
	91	0.56	0.60
	110	0.49	0.52
	127	0.32	0.57
	147	0.34	0.45
	175	0.32	0.45
	208	0.22	0.25
STATION 70070	1	0.08	0.04
05/19/78	10	0.09	0.03
0830 GMT	28	0.10	0.03
	37	0.11	0.03
35 33.0N	51	0.11	0.04
123 06.0W	64	0.14	0.06
	87	0.47	0.27
	105	0.09	0.11
	123	0.05	0.04
	141	0.01	0.03
	169	0.00	0.03
	201	0.01	0.02
STATION 70080	2	0.07	0.02
05/19/78	12	0.07	0.02
0317 GMT	31	0.07	0.01
	40	0.09	0.01
35 15.7N	54	0.09	0.01
123 46.0W	68	0.09	0.02
	91	0.19	0.07
	110	0.29	0.17
	129	0.15	0.09
	147	0.06	0.06
	175	0.01	0.01
	208	0.00	0.01

	DEPTH	CHL A	PHAEO
STATION 70090	1	0.06	0.02
05/18/78	11	0.05	0.02
2130 GMT	29	0.07	0.02
	57	0.08	0.01
34 53.9N	66	0.08	0.03
124 30.8W	80	0.13	0.04
	94	0.41	0.18
	108	0.38	0.20
	132	0.11	0.13
	150	0.05	0.08
	178	0.01	0.03
	206	0.01	0.03
STATION 73070	1	0.09	0.04
05/20/78	10	0.10	0.03
1205 GMT	30	0.12	0.06
	39	0.15	0.06
34 58.0N	53	0.33	0.20
122 40.0W	68	0.51	0.24
	91	0.19	0.18
	109	0.17	0.21
	129	0.13	0.26
	147	0.08	0.23
	175	0.03	0.08
	207	0.01	0.05
STATION 77051	1	1.35	1.29
05/22/78	11	2.37	2.08
0408 GMT	29	3.26	1.66
	43	1.05	1.33
35 02.0N	55	1.29	2.16
120 56.5W	69	0.18	0.50
	81	0.15	0.42
	101	0.56	0.44
	124	0.46	0.23
	142	0.21	0.47
	174	0.24	0.37
	204	0.16	0.32
STATION 77070	0	0.30	0.14
05/21/78	11	0.41	0.20
1528 GMT	30	0.58	0.35
	39	0.56	0.58
34 24.4N	53	0.32	0.35
122 16.4W	67	0.26	0.41
	91	0.33	0.42
	110	0.34	0.77
	128	0.26	0.72
	147	0.18	0.52
	174	0.12	0.50
	206	0.11	0.41
STATION 80055	1	3.26	1.96
05/22/78	10	2.77	1.56
1130 GMT	43	0.23	0.34
	71	0.13	0.31
34 19.0N	89	0.10	0.27
120 48.0W	103	0.05	0.26
	116	0.05	0.18
	135	0.05	0.20
	153	0.03	0.20
	181	0.04	0.14
	205	0.03	0.16
	229	0.04	0.11
STATION 80080	3	0.11	0.10
05/23/78	12	0.12	0.07
0154 GMT	30	0.14	0.07
	39	0.26	0.15
33 29.4N	49	0.38	0.26
122 31.0W	62	0.32	0.21
	76	0.14	0.06
	94	0.09	0.11
	117	0.05	0.14
	136	0.01	0.09
	163	0.02	0.10
	191	0.01	0.11
STATION 83060	2	0.19	0.39
05/24/78	11	0.24	0.21
0626 GMT	30	0.27	0.22
	39	0.24	0.21
33 34.0N	53	0.23	0.25
120 45.0W	89	0.03	0.08
	108	0.01	0.12
	126	0.01	0.14
	145	0.01	0.14
	171	0.01	0.09
	204	0.01	0.11

	DEPTH	CHL A	PHAEO
STATION 73053	2	0.20	0.07
05/20/78	11	0.21	0.07
0236 GMT	30	0.11	0.08
	40	0.23	0.18
35 31.7N	49	0.17	0.45
121 28.3W	63	0.08	0.33
	77	0.11	0.28
	96	0.09	0.24
	119	0.13	0.25
	138	0.12	0.38
	165	0.12	0.29
	192	0.09	0.16
STATION 73080	1	0.08	0.01
05/20/78	11	0.09	0.01
1706 GMT	29	0.09	0.01
	39	0.09	0.02
34 38.0N	53	0.11	0.03
123 22.0W	67	0.13	0.04
	92	0.29	0.19
	109	0.29	0.20
	128	0.11	0.14
	147	0.05	0.04
	175	0.00	0.03
	208	0.00	0.05
STATION 77055	1	0.10	0.04
05/22/78	11	0.29	0.20
0121 GMT	30	0.32	0.29
	44	0.38	0.31
34 54.5N	54	0.13	0.16
121 13.0W	68	0.19	0.35
	82	0.09	0.22
	96	0.13	0.35
	119	0.07	0.19
	138	0.05	0.19
	166	0.03	0.13
	193	0.01	0.09
STATION 77080	1	0.07	0.05
05/21/78	11	0.07	0.04
0908 GMT	30	0.08	0.02
	39	0.09	0.04
34 04.0N	53	0.11	0.04
122 57.0W	67	0.16	0.16
	95	0.30	0.15
	109	0.24	0.16
	127	0.09	0.09
	146	0.05	0.11
	176	0.00	0.04
	205	0.00	0.03
STATION 80060	1	0.19	0.27
05/22/78	11	0.19	0.29
1503 GMT	30	0.24	0.47
	39	0.21	0.48
34 09.0N	53	0.22	0.47
121 09.0W	69	0.16	0.88
	91	0.08	0.33
	110	0.05	0.22
	130	0.03	0.22
	149	0.11	0.29
	177	0.04	0.32
	208	0.05	0.27
STATION 80090	2	0.09	0.09
05/23/78	10	0.09	0.07
0725 GMT	33	0.28	0.18
	42	0.38	0.26
33 09.0N	55	0.24	0.11
123 13.0W	71	0.27	0.18
	93	0.21	0.19
	111	0.18	0.11
	130	0.08	0.13
	159	0.02	0.05
	187	0.01	0.03
	224	0.01	0.03
STATION 83070	1	0.19	0.10
05/24/78	11	0.20	0.09
0114 GMT	30	0.20	0.10
	39	0.19	0.11
33 14.5N	55	0.18	0.09
121 26.0W	68	0.29	0.29
	91	0.09	0.16
	110	0.07	0.10
	129	0.02	0.04
	147	0.01	0.03
	175	0.01	0.02
	208	0.01	0.02

	DEPTH	CHL A	PHAEO
STATION 73060	2	0.06	0.06
05/20/78	11	0.06	0.04
0621 GMT	40	0.09	0.04
	63	0.16	0.10
35 17.5N	82	0.35	0.24
121 58.0W	96	0.26	0.20
	110	0.12	0.10
	129	0.05	0.04
	147	0.00	0.04
	171	0.01	0.02
	194	0.01	0.08
	217	0.01	0.04
STATION 73090	0	0.04	0.02
05/20/78	9	0.05	0.01
2256 GMT	27	0.05	0.01
	37	0.06	0.02
34 18.5N	46	0.08	0.02
124 04.0W	60	0.07	0.02
	74	0.13	0.05
	92	0.27	0.10
	116	0.27	0.12
	134	0.07	0.08
	162	0.01	0.04
	190	0.01	0.05
STATION 77060	0	0.09	0.04
05/21/78	9	0.11	0.04
2104 GMT	28	0.18	0.06
	38	0.47	0.21
34 44.0N	48	0.38	0.19
121 34.0W	62	0.47	0.22
	76	0.33	0.22
	95	0.10	0.17
	118	0.08	0.19
	136	0.10	0.29
	164	0.10	0.32
	192	0.04	0.24
STATION 77090	1	0.07	0.02
05/21/78	10	0.06	0.02
0354 GMT	39	0.09	0.02
	62	0.13	0.03
33 43.0N	81	0.17	0.06
123 39.0W	95	0.28	0.16
	109	0.27	0.16
	126	0.21	0.14
	146	0.07	0.08
	169	0.01	0.03
	192	0.00	0.03
	215	0.01	0.02
STATION 80070	2	0.30	0.12
05/22/78	11	0.27	0.13
2048 GMT	31	0.50	0.25
	40	0.60	0.28
33 48.5N	54	0.28	0.25
121 51.0W	68	0.10	0.27
	92	0.11	0.18
	110	0.05	0.14
	129	0.06	0.21
	148	0.07	0.16
	175	0.05	0.21
	207	0.05	0.21
STATION 83042	2	3.07	1.74
05/25/78	25	2.57	2.18
1035 GMT	48	0.09	0.20
	67	0.05	0.19
34 10.0N	81	0.04	0.13
119 29.5W	95	0.04	0.14
	109	0.03	0.15
	118	0.04	0.12
	137	0.05	0.11
	146	0.03	0.11
STATION 83080	2	0.29	0.21
05/23/78	11	0.30	0.22
1901 GMT	30	0.34	0.26
	39	0.38	0.20
32 54.0N	53	0.19	0.17
122 08.0W	68	0.18	0.11
	89	0.09	0.16
	109	0.04	0.09
	128	0.03	0.14
	146	0.02	0.10
	173	0.01	0.06
	207	0.01	0.04

	DEPTH	CHL A	PHAEO
STATION 83090	0	0.24	0.05
05/23/78	10	0.26	0.05
1347 GMT	33	0.24	0.06
	41	0.23	0.07
32 34.5N	54	0.50	0.19
122 50.0W	68	0.36	0.19
	91	0.19	0.18
	109	0.17	0.20
	127	0.15	0.10
	155	0.03	0.05
	183	0.01	0.02
	219	0.01	0.03
STATION 87040	1	0.16	0.07
05/25/78	11	0.39	0.17
2321 GMT	30	0.85	0.38
	40	0.63	0.22
33 40.0N	49	0.46	0.23
118 58.0W	64	0.15	0.15
	78	0.08	0.25
	97	0.03	0.16
	121	0.01	0.06
	139	0.01	0.05
	167	0.01	0.05
	195	0.01	0.05
STATION 87045	1	0.76	0.30
05/26/78	11	0.92	0.43
0308 GMT	29	0.29	0.17
	38	0.27	0.21
33 30.0N	48	0.08	0.15
119 19.0W	62	0.02	0.07
	77	0.01	0.08
	94	0.03	0.18
	118	0.01	0.09
	137	0.01	0.09
	166	0.01	0.08
	193	0.01	0.05
STATION 87050	1	0.82	0.25
05/26/78	10	0.82	0.25
0618 GMT	20	0.82	0.33
	29	0.69	0.37
33 20.0N	39	0.56	0.28
119 39.5W	57	0.28	0.19
STATION 87060	1	0.57	0.17
05/29/78	10	0.34	0.22
0130 GMT	29	0.76	0.36
	38	0.89	0.43
33 00.5N	52	0.28	0.23
120 21.0W	66	0.30	0.25
	89	0.10	0.12
	108	0.06	0.09
	126	0.04	0.10
	145	0.05	0.04
	172	0.01	0.08
	205	0.01	0.07
STATION 87070	3	0.14	0.08
05/29/78	12	0.16	0.06
0744 GMT	31	0.16	0.06
	40	0.16	0.08
32 39.5N	54	0.39	0.24
121 02.0W	68	0.45	0.27
	91	0.19	0.19
	109	0.15	0.13
	127	0.09	0.09
	146	0.05	0.07
	175	0.01	0.04
	207	0.01	0.04
STATION 87080	1	0.12	0.05
05/29/78	11	0.12	0.05
1320 GMT	29	0.12	0.05
	39	0.12	0.05
32 20.0N	53	0.24	0.12
121 43.0W	67	0.40	0.16
	90	0.19	0.09
	109	0.11	0.11
	127	0.09	0.11
	146	0.04	0.06
	174	0.01	0.03
	206	0.01	0.03
STATION 87090	0	0.08	0.01
05/29/78	10	0.08	0.01
1905 GMT	28	0.08	0.03
	57	0.09	0.02
31 59.0N	66	0.13	0.05
122 24.0W	80	0.14	0.06
	94	0.23	0.11
	108	0.21	0.07
	131	0.08	0.07
	150	0.02	0.07
	178	0.00	0.02
	206	0.01	0.01
STATION 90033	0	0.26	0.14
05/27/78	10	0.23	0.18
0412 GMT	29	0.51	0.30
	38	0.35	0.26
33 18.5N	48	0.22	0.17
118 07.0W	62	0.07	0.18
	77	0.06	0.46
	95	0.03	0.14
	120	0.03	0.10
	138	0.01	0.09
	167	0.00	0.05
	194	0.01	0.05
STATION 90037	1	0.18	0.06
05/27/78	10	0.26	0.10
0058 GMT	29	0.56	0.31
	38	0.40	0.24
33 11.0N	48	0.22	0.19
118 22.5W	61	0.15	0.08
	75	0.04	0.07
	94	0.03	0.06
	117	0.01	0.07
	136	0.02	0.03
	163	0.01	0.04
	191	0.02	0.07
STATION 90045	1	0.50	0.18
05/26/78	11	0.55	0.17
1933 GMT	29	0.26	0.14
	39	0.36	0.37
32 54.5N	48	0.26	0.17
118 55.5W	62	0.13	0.10
	76	0.03	0.06
	95	0.02	0.08
	118	0.02	0.05
	137	0.01	0.07
	165	0.01	0.04
	193	0.01	0.06
STATION 90053	1	0.34	0.18
05/28/78	12	0.72	0.20
1551 GMT	31	0.63	0.28
	40	0.49	0.21
32 39.0N	54	0.26	0.40
119 28.5W	67	0.16	0.24
	92	0.12	0.14
	110	0.03	0.10
	129	0.02	0.09
	147	0.01	0.10
	175	0.01	0.05
	207	0.01	0.03
STATION 90060	0	0.30	0.17
05/30/78	10	0.35	0.16
1856 GMT	29	0.40	0.19
	38	0.38	0.21
32 24.9N	52	0.36	0.21
119 57.5W	64	0.23	0.17
	90	0.21	0.16
	107	0.08	0.10
	126	0.03	0.07
	144	0.02	0.04
	172	0.02	0.03
	205	0.01	0.05
STATION 90070	1	0.07	0.04
05/30/78	10	0.08	0.02
1156 GMT	29	0.07	0.03
	38	0.08	0.03
32 04.5N	52	0.08	0.03
120 38.5W	66	0.30	0.25
	89	0.26	0.20
	108	0.22	0.14
	126	0.12	0.10
	145	0.05	0.08
	172	0.01	0.03
	205	0.01	0.02
STATION 90080	1	0.05	0.04
05/30/78	11	0.06	0.02
0602 GMT	30	0.06	0.02
	40	0.08	0.02
31 44.5N	54	0.09	0.03
121 19.5W	68	0.11	0.08
	92	0.32	0.12
	110	0.18	0.10
	128	0.08	0.06
	147	0.02	0.05
	175	0.01	0.02
	207	0.00	0.02
STATION 90090	1	0.05	0.02
05/30/78	10	0.05	0.02
0128 GMT	28	0.07	0.02
	37	0.07	0.02
31 24.0N	50	0.09	0.04
122 01.0W	63	0.11	0.07
	85	0.32	0.23
	103	0.17	0.14
	121	0.10	0.10
	139	0.05	0.05
	166	0.01	0.02
	197	0.00	0.02
STATION 93030	1	0.12	0.04
05/27/78	10	0.13	0.05
2128 GMT	29	0.47	0.21
	38	0.40	0.37
32 50.5N	48	0.33	0.18
117 31.0W	62	0.18	0.08
	75	0.08	0.13
	94	0.03	0.12
	118	0.01	0.09
	136	0.02	0.08
	164	0.01	0.06
	193	0.01	0.05
STATION 93040	2	0.18	0.14
05/28/78	11	0.18	0.10
0356 GMT	29	0.63	0.38
	39	0.51	0.29
32 30.0N	48	0.32	0.25
118 11.5W	63	0.09	0.14
	76	0.03	0.07
	96	0.01	0.11
	118	0.01	0.05
	137	0.01	0.07
	166	0.01	0.04
	193	0.00	0.04
STATION 93050	0	0.43	0.27
05/28/78	10	0.45	0.25
0949 GMT	30	0.47	0.32
	40	0.36	0.35
32 10.0N	53	0.19	0.18
118 52.5W	68	0.15	0.14
	92	0.05	0.10
	110	0.02	0.08
	130	0.01	0.05
	148	0.01	0.05
	176	0.00	0.06
	209	0.01	0.03
STATION 93060	1	0.09	0.04
05/31/78	11	0.09	0.03
0241 GMT	29	0.05	0.04
	39	0.09	0.04
31 50.0N	48	0.09	0.05
119 34.0W	62	0.18	0.13
	76	0.30	0.25
	94	0.27	0.23
	118	0.09	0.06
	136	0.05	0.03
	164	0.01	0.02
	192	0.00	0.02
STATION 93070	1	0.06	0.03
05/31/78	10	0.07	0.01
0827 GMT	29	0.09	0.01
	39	0.12	-0.00
31 30.0N	47	0.12	0.03
120 14.0W	62	0.14	0.06
	76	0.27	0.11
	94	0.21	0.20
	117	0.11	0.11
	136	0.06	0.06
	163	0.01	0.03
	191	0.00	0.02

	DEPTH	CHL A	PHAEO
STATION 93080	2	0.09	0.02
05/31/78	10	0.09	0.01
1446 GMT	30	0.08	0.03
	39	0.09	0.01
31 10.5N	52	0.10	0.02
120 55.0W	66	0.11	0.04
	90	0.17	0.09
	108	0.29	0.19
	127	0.16	0.14
	146	0.07	0.05
	174	0.01	0.03
	207	0.00	0.02
STATION 93090	1	0.06	0.02
05/31/78	10	0.07	0.01
2026 GMT	29	0.08	0.01
	57	0.11	0.03
30 50.0N	66	0.13	0.05
121 34.5W	80	0.16	0.06
	94	0.17	0.11
	108	0.29	0.20
	131	0.14	0.07
	150	0.03	0.04
	178	0.01	0.02
	206	0.00	0.02
STATION 97030	1	0.27	0.15
06/02/78	11	0.40	0.18
1413 GMT	20	0.95	0.70
	30	0.53	0.53
32 16.0N	39	0.36	0.44
117 07.0W			
STATION 97035	1	0.07	0.08
06/02/78	11	0.09	0.06
0955 GMT	29	0.43	0.23
	39	0.59	0.43
32 05.5N	53	0.26	0.18
117 27.5W	67	0.13	0.11
	91	0.05	0.07
	109	0.01	0.05
	128	0.01	0.08
	146	0.00	0.03
	174	0.00	0.03
	207	0.00	0.03
STATION 97040	0	0.16	0.08
06/02/78	10	0.14	0.09
0612 GMT	38	0.29	0.27
	61	0.07	0.09
31 54.4N	79	0.05	0.07
117 48.6W	94	0.02	0.05
	108	0.01	0.05
	126	0.00	0.04
	145	0.01	0.03
	167	0.00	0.04
	192	0.00	0.03
	215	0.01	0.02
STATION 97050	1	0.22	0.09
06/01/78	10	0.17	0.07
2359 GMT	29	0.32	0.15
	38	0.26	0.16
31 36.0N	47	0.22	0.22
118 30.5W	61	0.27	0.20
	75	0.16	0.20
	93	0.08	0.10
	116	0.03	0.05
	134	0.02	0.03
	162	0.01	0.02
	190	0.01	0.02
STATION 97060	1	0.10	0.02
06/01/78	10	0.09	0.03
1850 GMT	29	0.11	0.05
	39	0.18	0.05
31 15.5N	46	0.18	0.05
119 10.0W	62	0.34	0.19
	76	0.26	0.37
	94	0.18	0.23
	117	0.09	0.09
	136	0.05	0.08
	162	0.01	0.02
	191	0.01	0.02
STATION 97070	1	0.08	0.04
06/01/78	10	0.09	0.01
1240 GMT	29	0.10	0.05
	38	0.12	0.06
30 55.0N	52	0.14	0.05
119 50.6W	66	0.19	0.10
	90	0.17	0.18
	108	0.12	0.14
	126	0.08	0.07
	145	0.03	0.04
	173	0.01	0.03
	205	0.00	0.02
STATION 97080	0	0.05	0.05
06/01/78	10	0.06	0.03
0652 GMT	29	0.06	0.04
	39	0.09	0.02
30 35.0N	49	0.08	0.03
120 31.0W	63	0.09	0.06
	78	0.14	0.07
	95	0.21	0.19
	120	0.18	0.24
	139	0.10	0.10
	166	0.02	0.03
	194	0.01	0.01
STATION 97090	1	0.02	0.08
06/01/78	10	0.05	0.03
0140 GMT	28	0.07	0.02
	37	0.08	0.02
30 15.7N	47	0.08	0.04
121 10.0W	60	0.08	0.04
	74	0.10	0.07
	93	0.23	0.15
	116	0.05	0.07
	134	0.11	0.10
	162	0.04	0.05
	190	0.01	0.02
STATION 100030	0	2.57	0.57
06/03/78	10	5.84	1.11
2324 GMT	29	0.53	0.53
	43	0.07	0.16
31 40.5N	53	0.03	0.05
116 46.5W	67	0.02	0.07
	81	0.04	0.16
	95	0.02	0.15
	119	0.03	0.18
	138	0.04	0.11
	166	0.05	0.11
	194	0.01	0.13
STATION 100035	2	0.11	0.04
06/04/78	10	0.12	0.03
0359 GMT	38	0.85	0.34
	61	0.47	0.32
31 30.5N	81	0.14	0.18
117 07.0W	94	0.05	0.10
	108	0.03	0.09
	127	0.02	0.11
	146	0.02	0.10
	169	0.02	0.10
	193	0.02	0.08
	216	0.01	0.08
STATION 100040	1	0.09	0.06
06/04/78	11	0.09	0.06
0728 GMT	29	0.28	0.16
	39	0.27	0.19
31 21.0N	48	0.18	0.11
117 27.0W	61	0.12	0.09
	76	0.07	0.08
	95	0.03	0.10
	118	0.01	0.04
	137	0.01	0.03
	165	0.00	0.03
	192	0.01	0.02
STATION 100050	1	0.09	0.03
06/04/78	10	0.09	0.02
1215 GMT	28	0.18	0.09
	37	0.27	0.15
31 00.5N	51	0.26	0.20
118 07.0W	64	0.21	0.19
	87	0.17	0.17
	105	0.07	0.11
	123	0.05	0.06
	141	0.01	0.04
	168	0.01	0.02
	200	0.00	0.02
STATION 100060	1	0.09	0.03
06/04/78	10	0.10	0.02
1842 GMT	29	0.09	0.03
	38	0.11	0.02
30 40.6N	52	0.13	0.07
118 50.0W	67	0.22	0.06
	90	0.39	0.11
	109	0.17	0.14
	128	0.06	0.09
	146	0.03	0.05
	175	0.00	0.04
	207	0.01	0.04
STATION 100070	1	0.08	0.02
06/04/78	11	0.09	0.01
2359 GMT	30	0.09	0.02
	39	0.10	0.02
30 20.5N	53	0.15	0.06
119 27.5W	66	0.21	0.07
	91	0.35	0.25
	109	0.24	0.18
	130	0.07	0.06
	147	0.04	0.04
	175	0.01	0.03
	207	0.00	0.02
STATION 100080	1	0.05	0.05
06/05/78	11	0.08	0.02
0511 GMT	30	0.07	0.02
	39	0.10	0.02
30 01.0N	48	0.10	0.04
120 07.0W	63	0.16	0.04
	77	0.18	0.09
	95	0.23	0.22
	120	0.11	0.16
	137	0.05	0.08
	165	0.02	0.02
	194	0.01	0.02
STATION 100090	1	0.07	0.04
06/05/78	11	0.08	0.03
0939 GMT	29	0.09	0.03
	38	0.09	0.04
29 40.5N	52	0.10	0.05
120 47.0W	66	0.13	0.07
	89	0.21	0.15
	108	0.21	0.19
	127	0.11	0.15
	145	0.06	0.07
	173	0.02	0.03
	206	0.00	0.01
STATION 103030	1	1.25	0.34
06/06/78	11	2.08	0.53
2259 GMT	20	2.67	1.07
	30	0.72	0.48
31 06.0N	49	0.29	0.36
116 24.5W			
STATION 103035	1	0.15	0.02
06/06/78	10	0.47	0.07
1951 GMT	29	0.70	0.13
	39	0.33	0.10
30 56.0N	48	1.22	0.37
116 45.0W	62	0.28	0.22
	75	0.14	0.13
	94	0.16	0.05
	118	0.11	0.06
	136	0.01	0.03
	164	0.01	0.02
	192	0.00	0.03
STATION 103040	1	0.18	0.08
06/06/78	11	0.20	0.07
1640 GMT	28	0.33	0.19
	40	0.40	0.26
30 46.0N	48	0.28	0.24
117 04.5W	63	0.14	0.17
	75	0.12	0.18
	94	0.04	0.13
	118	0.01	0.04
	136	0.01	0.04
	164	0.01	0.05
	191	0.01	0.02

	DEPTH	CHL A	PHAEO
STATION 103050	1	0.13	0.06
06/06/78	11	0.13	0.06
1020 GMT	30	0.30	0.14
	39	0.24	0.15
30 26.0N	48	0.23	0.11
117 44.5W	63	0.32	0.26
	76	0.22	0.26
	95	0.19	0.21
	117	0.05	0.07
	136	0.01	0.05
	165	0.01	0.03
	193	0.00	0.03
STATION 103060	1	0.09	0.02
06/06/78	11	0.08	0.03
0531 GMT	29	0.09	0.03
	39	0.15	0.07
30 06.0N	49	0.21	0.11
118 25.0W	63	0.16	0.11
	77	0.17	0.12
	95	0.13	0.21
	118	0.15	-0.02
	137	0.04	0.06
	165	0.01	0.03
	193	0.00	0.25
STATION 103070	1	0.05	0.05
06/05/78	11	0.06	0.04
2321 GMT	30	0.07	0.03
	39	0.08	0.03
29 46.2N	49	0.09	0.04
119 04.8W	63	0.10	0.06
	77	0.13	0.09
	96	0.21	0.25
	119	0.15	0.16
	138	0.08	0.09
	166	0.02	0.02
	194	0.01	0.01
STATION 103080	1	0.10	0.00
06/05/78	10	0.09	0.02
1811 GMT	29	0.10	0.02
	38	0.11	0.02
29 25.0N	48	0.12	0.04
119 43.9W	62	0.14	0.05
	76	0.20	0.06
	94	0.22	0.13
	117	0.21	0.15
	136	0.12	0.11
	164	0.05	0.05
	192	0.02	0.01
STATION 107032	1	3.56	0.42
06/07/78	9	4.55	1.92
0314 GMT	28	1.28	0.96
	42	0.76	0.82
30 25.8N	52	0.56	0.76
116 11.0W	67	0.39	0.61
	81	0.39	0.53
	99	0.13	0.42
	123	0.06	0.23
	142	0.06	0.20
	175	0.06	0.15
	203	0.07	0.12
STATION 107035	2	0.09	0.09
06/07/78	10	0.09	0.07
0524 GMT	39	0.55	0.35
	61	0.29	0.24
30 21.5N	80	0.11	0.13
116 22.5W	93	0.05	0.07
	107	0.04	0.08
	126	0.00	0.05
	146	0.01	0.05
	169	0.01	0.04
	193	0.00	0.05
	215	0.01	0.04
STATION 107040	1	0.12	0.05
06/07/78	10	0.12	0.06
0840 GMT	28	0.19	0.05
	37	0.27	0.15
30 11.0N	47	0.22	0.15
116 42.0W	60	0.18	0.16
	94	0.22	0.11
	117	0.05	0.11
	135	0.02	0.07
	163	0.02	0.05
	191	0.01	0.06
	219	0.01	0.06
STATION 107050	1	0.09	0.06
06/07/78	10	0.10	0.03
1358 GMT	29	0.21	0.01
	38	0.24	0.09
29 50.5N	47	0.24	0.12
117 22.0W	61	0.27	0.15
	75	0.15	0.14
	93	0.13	0.06
	116	0.04	0.05
	135	0.02	0.02
	163	0.00	0.04
	191	0.01	0.01
STATION 107060	1	0.09	0.06
06/07/78	9	0.12	0.03
2035 GMT	29	0.18	0.04
	38	0.26	0.06
29 32.0N	46	0.27	0.08
118 01.5W	61	0.32	0.17
	75	0.24	0.16
	93	0.12	0.12
	116	0.07	0.15
	135	0.06	0.06
	162	0.01	0.02
	190	0.00	0.03
STATION 107070	1	0.06	0.02
06/08/78	11	0.06	0.02
0204 GMT	29	0.06	0.03
	39	0.08	0.03
29 11.0N	48	0.09	0.03
118 41.0W	62	0.09	0.05
	76	0.09	0.06
	95	0.21	0.07
	118	0.17	0.12
	137	0.12	0.08
	165	0.02	0.05
	193	0.01	0.01
STATION 107080	1	0.09	-0.00
06/08/78	10	0.08	0.03
0710 GMT	29	0.06	0.03
	39	0.08	0.03
28 51.5N	48	0.08	0.03
119 20.0W	62	0.11	0.06
	76	0.19	0.10
	93	0.19	0.16
	118	0.14	0.16
	135	0.11	0.11
	164	0.02	0.06
	192	0.01	0.01
STATION 110035	2	0.18	0.04
06/09/78	11	0.20	0.05
1448 GMT	30	1.35	0.48
	39	0.66	0.42
29 46.0N	48	0.22	0.22
116 00.0W	62	0.11	0.08
	76	0.06	0.09
	95	0.12	0.07
	118	0.02	0.06
	137	0.03	0.06
	165	0.02	0.05
	192	0.04	0.06
STATION 110040	1	0.22	0.10
06/09/78	10	0.24	0.08
1125 GMT	29	1.71	0.81
	38	0.32	0.29
29 36.5N	48	0.13	0.15
116 19.5W	62	0.17	0.21
	76	0.11	0.25
	94	0.04	0.11
	118	0.01	0.09
	136	0.01	0.07
	164	0.01	0.07
	192	0.01	0.07
STATION 110050	1	0.08	0.04
06/09/78	10	0.10	0.04
0502 GMT	30	0.13	0.04
	39	0.17	0.06
29 15.8N	48	0.21	0.08
116 58.8W	62	0.27	0.10
	76	0.22	0.13
	94	0.11	0.14
	118	0.07	0.09
	137	0.04	0.04
	165	0.01	0.03
	193	0.01	0.02
STATION 110060	1	0.07	0.02
06/09/78	10	0.08	0.02
0033 GMT	29	0.08	0.03
	38	0.09	0.02
28 56.5N	47	0.11	0.04
117 39.0W	61	0.17	0.04
	75	0.27	0.08
	93	0.27	0.20
	116	0.22	0.18
	135	0.10	0.11
	163	0.03	0.04
	191	0.00	0.03
STATION 110070	2	0.07	0.02
06/08/78	11	0.08	0.02
1847 GMT	29	0.09	0.03
	38	0.11	0.03
28 36.5N	47	0.13	0.04
118 18.0W	61	0.17	0.06
	75	0.28	0.12
	92	0.35	0.28
	116	0.19	0.16
	135	0.06	0.10
	162	0.02	0.04
	190	0.01	0.01
STATION 110080	1	0.06	0.05
06/08/78	10	0.07	0.02
1231 GMT	29	0.08	0.03
	38	0.09	0.03
28 17.0N	47	0.11	0.06
118 57.5W	61	0.16	0.07
	75	0.26	0.17
	94	0.26	0.29
	117	0.10	0.12
	136	0.04	0.06
	163	0.01	0.02
	191	0.01	0.01
STATION 113050	1	0.08	0.02
06/10/78	10	0.17	0.03
0210 GMT	38	0.16	0.02
	62	0.19	0.08
28 41.5N	80	0.21	0.11
116 36.5W	94	0.15	0.22
	108	0.09	0.13
	127	0.05	0.07
	146	0.01	0.03
	169	0.00	0.05
	192	0.01	0.01
	216	0.00	0.01
STATION 113060	1	0.08	0.04
06/10/78	10	0.06	0.05
0750 GMT	29	0.09	0.05
	38	0.10	0.06
28 22.0N	47	0.13	0.07
117 16.0W	61	0.15	0.07
	75	0.23	0.13
	94	0.26	0.18
	117	0.16	0.23
	135	0.08	0.13
	164	0.01	0.07
	192	0.01	0.04
STATION 113070	1	0.06	0.03
06/10/78	11	0.06	0.03
1216 GMT	30	0.07	0.03
	39	0.09	0.05
28 02.0N	48	0.11	0.05
117 55.0W	63	0.13	0.06
	77	0.15	0.10
	95	0.21	0.22
	119	0.11	0.11
	137	0.05	0.05
	165	0.01	0.06
	192	0.00	0.04
STATION 113080	1	0.14	-0.02
06/10/78	10	0.15	-0.02
1753 GMT	29	0.13	0.02
	38	0.13	0.02
27 44.5N	46	0.13	0.03
118 36.0W	61	0.24	0.07
	75	0.51	-0.01
	94	0.24	0.20
	117	0.21	0.02
	136	0.05	0.05
	164	0.01	0.03
	192	0.00	0.03

Secchi Disk Observations

CalCOFI Cruise 7805

Stat #	Mo	Dy	Local Time (+7:PDT)	Depth (m)	Weather	Clouds Type/Amt
60.052[5]	5	14	1638	3	4	- 9
60.080	5	15	1030	30	1	8 1
60.090	5	15	1535	20	1	8 2
63.060	5	16	1621	19	0	- 0
63.070	5	16	1015	14	1	8 1
67.050	5	17	0925	5	0	- 0
67.055	5	17	1230	8	0	- 0
67.060	5	17	1613	22	0	- 0
67.090	5	18	0923	18	2	7 8
70.051	5	19	1318	9	1	7 2
70.053	5	19	1131	17	4	7 2
70.090	5	18	1450	25	1	7 7
73.050	5	19	1732	19	4	7 8
73.080	5	20	1025	25	1	6 7
73.090	5	20	1655	30	1	6 7
77.060	5	21	1420	23	2	6 8
77.070	5	21	0848	17	2	6 8
80.060	5	22	0820	17	2	6 8
80.070	5	22	1410	14	1	6 6
83.070	5	23	1750	13	1	6 3
83.080	5	23	1225	17	1	6 6
87.032[5]	5	25	1000	4	1	8 1
87.032[7]	5	25	1050	5	1	8 1
87.033	5	25	1126	5	1	8 1
87.035	5	25	1308	7	1	8 1
87.040	5	25	1550	20	1	0 4
87.055	5	28	1425	15	0	- 0
87.090	5	29	1225	24	1	6 6
90.045	5	26	1206	15	1	4 1
90.053	5	28	0916	26	0	- 0
90.060	5	30	1218	17	2	6 8
90.090	5	29	1800	22	1	6 6
93.026[9]	5	27	1113	7	0	- 0
93.028	5	28	1223	20	0	- 0
93.030	5	27	1357	18	0	- 0
93.035	5	27	1748	21	0	- 0
93.055	5	30	1648	15	2	7 8
93.080	5	31	0805	27	2	7 8
93.090	5	31	1253	30	2	6 8

Stat #	Mo	Dy	Local Time (+7:PDT)	Depth (m)	Weather	Clouds Type/Amt
97.050	6	1	1640	19	2	7 8
97.055	6	1	1400	32	2	6 8
97.060	6	1	1208	36	2	6 8
97.090	5	31	1815	24	2	7 8
100.029	6	3	1514	7	0	- 0
100.030	6	3	1605	7	0	- 0
100.060	6	4	1203	24	2	7 8
100.070	6	4	1634	22	2	7 8
103.030	6	6	1550	9	2	7 8
103.035	6	6	1312	24	2	7 8
103.040	6	6	0955	27	2	7 8
103.070	6	5	1600	23	2	7 8
103.080	6	5	1230	31	2	7 8
107.060	6	7	1310	28	2	7 8
107.070	6	7	1840	29	2	7 8
110.032[4]	6	9	1000	10	2	7 8
110.060	6	8	1700	25	2	7 8
110.070	6	8	1210	36	1	7 7
113.050	6	9	1850	22	2	7 8
113.080	6	10	1112	35	2	7 8

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