UNIVERSITY OF CALIFORNIA, SAN DIEGO SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

**CalCOFI Cruise 1101**
**12 January – 4 February 2011**

**CC Reference 12-02**
**14 August 2012**

**UNIVERSITY OF CALIFORNIA, SAN DIEGO**

**SCRIPPS INSTITUTION OF OCEANOGRAPHY**

**LA JOLLA, CALIFORNIA 92093-0227**

# PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

**CalCOFI Cruise 1101**
**12 January – 4 February 2011**

**CC Reference 12-02**
**14 August 2012**

CONTENTS

Introduction ..... 3

Literature Cited ..... 8

CalCOFI Cruise 1101

List of Figures ..... 10

Personnel ..... 21

Tabulated Rosette Cast Data ..... 22

Tabulated Primary Productivity Data ..... 69

Tabulated Macrozooplankton Data ..... 73

## INTRODUCTION

The data presented in this report were collected during cruise 1101* of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *New Horizon* of Scripps Institution of Oceanography, University of California, San Diego. The CalCOFI program was organized in the late 1940's to study the causes of variations in population size of fishes of importance to the State of California. It is carried out by NOAA's National Marine Fisheries Service Southwest Fisheries Science Center, the California Department of Fish and Game, and the Integrative Oceanography Division (IOD) at Scripps Institution of Oceanography (SIO). IOD contributes to this program by investigations of the physical, chemical and biological structure of the California Current. Data from the cruises were collected and processed by personnel of the Integrative Oceanography Division and the Southwest Fisheries Science Center. SIO staff members from the Ocean Data Facility participate in the chemical analysis of nutrient samples at sea. CalCOFI data presented in this report and collected on previous cruises can be accessed at http://www.calcofi.org.

## STANDARD PROCEDURES

### *CTD/Rosette Cast Data*

A Sea-Bird Electronics, Inc., Conductivity-Temperature-Depth (CTD) instrument (Seabird 911, Serial number 1049) with a rosette was deployed at each station on these cruises. The rosette was equipped with 24 ten-liter plastic (PVC) bottles equipped with epoxy-coated springs and Viton O-rings. Each CTD/rosette cast usually sampled 20 depths to a maximum sampling depth of 525 meters, bottom depth permitting. Occasional stations have multiple bottles tripped at the same depth to provide more water for ancillary programs. The sample spacing was designed to sample depth intervals as close as 10 meters around the sharp upper thermocline features such as the chlorophyll, oxygen, nitrite maxima and the shallow salinity minimum. Salinity, oxygen and nutrients were determined at sea for all depths sampled. Chlorophyll-*a* and phaeopigments were determined at sea on samples from the top 200 meters, bottom depth permitting.

Pressures and temperatures assigned to the water sample data were derived from the CTD signals recorded just prior to the bottle trip. Pressures have been converted to depths by the Saunders (1981) pressure-to-depth conversion technique. CTD temperatures reported with the bottle data have been rounded to the nearest hundredth of a degree Celsius.

Salinity samples were collected from all rosette bottles and analyzed at sea using a Guildline model 8410 Portasal salinometer. Salinity samples were drawn into 200 ml Kimax high-alumina borosilicate bottles that were rinsed three times with sample prior to filling. The results were compared with the CTD salinity to verify that the rosette bottle did not mis-trip or leak. The salinometer was standardized before and after each group of samples with standardized seawater. Periodic checks on the conductivity of the standardized seawater were made by comparison with IAPSO Standard Seawater batch P149. Salinity values were calculated using the algorithms for the Practical Salinity Scale, 1978 (UNESCO, 1981a) and are reported to three decimal places, provided that accepted standards were met.

Dissolved oxygen analyses were performed with an Ocean Data Facility of Scripps Institution of Oceanography designed automated oxygen titrator using photometric end-point detection based on the absorption of 365nm wavelength ultra-violet light. A computer using PC software controlled the titration of the samples and the data logging. The method used a modified-Winkler titration following the technique of Carpenter (1965) with modifications by Culberson (1991), but with higher concentrations of thiosulfate solution (50 g/l). Standard KIO3

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

solutions prepared ashore were run at the beginning of each run. Reagent and sea water blanks were determined to account for presence of oxidizing or reducing materials.

Nutrient samples were analyzed at sea by the Scripps Ocean Data Facility for dissolved silicate, phosphate, nitrate, nitrite, and ammonium using procedures similar to those described in Gordon et al. (1993) and Koroleff (1969, 1970). Samples were collected in 45 ml high-density polypropylene screw-capped tubes which were acid washed and rinsed with sample three times prior to filling. Daily standardizations and drift corrections were accomplished by running freshly prepared mid-range standards at the beginning and end of each group of samples. Samples not analyzed immediately after collection were refrigerated and run the following day. In addition to daily standardizations, periodic full calibrations were performed with sets of six different concentration standards.

Samples for chlorophyll-*a* and phaeopigments were collected in calibrated 138 ml polyethylene bottles and filtered onto Whatman GF/F filters. The pigments were extracted in cold 90% acetone (Venrick and Hayward, 1984) for a minimum of 24 hours. Chlorophyll a and phaeopigment concentrations were determined from fluorescence readings before and after acidification with a Turner Designs Fluorometer Model 10-AU-005-CE (Yentsch and Menzel, 1963; Holm-Hansen *et al*., 1965).

Evaluation of the water sample data involved comparisons with the CTD data, adjacent stations and consideration of the variation of a property as a function of density or depth and the relationships with other properties (Klein, 1973). Precision estimates for routine analyses were made on CalCOFI cruise 9003 and are reported in SIO Ref. 91-4.

*Primary Productivity Sampling*

Primary productivity samples were taken each day shortly before local apparent noon (LAN). Primary production was estimated from $^{14}C$ uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). The depths with ambient light intensities corresponding to light levels simulated by the on-deck incubators were identified and sampled on the rosette up-cast. Occasionally an extra bottle or two were tripped in addition to the usual 20 levels sampled in the combined rosette-productivity cast in order to maintain the normal sampling depth resolution. Triplicate samples (two light and one dark control) were drawn from each productivity sample depth into 250 ml polycarbonate incubation bottles. Samples were inoculated with 49.66 µCi of $^{14}C$ as $NaHCO_3$ (200µl of stock solution) prepared in a 0.3 g/liter solution of sodium carbonate (Fitzwater *et al*., 1982). Samples were incubated from LAN to civil twilight in seawater-cooled incubators with neutral-density screens which simulate *in situ* light levels. At the end of the incubation, the samples were filtered onto Millipore HA filters and placed in scintillation vials. One half ml of 10% HCl was added to each sample. The sample was then allowed to sit, without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation cocktail were added to each sample and the samples were returned to SIO where the radioactivity was determined with a scintillation counter. Salinity, oxygen, nutrients, chlorophyll-*a* and phaeopigments were determined from all rosette productivity bottles.

*Macrozooplankton Net Tows*

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 meters to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of each pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (>5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al*. (1972).

*Ancillary Programs*

Several ancillary programs produced data on these cruises that are not presented in this report. These programs include:

1) *Underway Data*: Continuous near surface measurements of temperature, salinity and *in vivo* chlorophyll fluorescence were recorded from seawater pumped through the ship's uncontaminated seawater system. Water was drawn from a depth of approximately 3 meters. The data were logged in one-minute averages using a Sea-Bird Electronics, Inc., SBE 45 MicroTSG Thermosalinograph and a Wetlabs Wetstar fluorometer.

2) *ADCP*. Continuous profiles of ocean currents and acoustic backscatter between 20 and 500 meters deep were measured along the shiptrack from a hull-mounted 150 kHz Acoustic Doppler Current Profiler (ADCP). The ADCP data were averaged over 3-minute intervals. Sixty 8-meter depth bins were recorded. (T. Chereskin, SIO)

3) *California Current Ecosystem Long Term Ecological Research Program*: The CCE-LTER program augments standard CalCOFI measurements to further characterize the lower trophic levels as well as the carbon system. These additional samples, taken at all CalCOFI stations, are for measurements of particulate organic carbon and nitrogen, dissolved organic carbon and nitrogen, taxon-specific phytoplankton pigments, flow-cytometric counts of bacteria and picoautotrophs, microscopic counts of nano- microplankton, determination of mesozooplankton size structure using a Laser Optical Plankton Counter, and mesozooplankton community structure. (M. Ohman, SIO)

4) *SCCOOS Nearshore Observations*: The objective of these observations is to extend CalCOFI time series to the nearshore. Nearshore observations consist of 9 stations at the ends and interspersed with current CalCOFI lines on the 20 m isobath with a standard set of CalCOFI observations. (R. Goericke, SIO)

5) *Inorganic Carbon System*: The CalCOFI group collected samples for the characterization of the inorganic carbon system at selected locations along the cruise track. Total inorganic carbon and alkalinity will be measured which will allow the calculation of pH and $pCO_2$. The objectives of these measurements are first the long-term characterization of the inorganic carbon system and its response to changing ocean climate and second measurements of pH in the coastal zone in order to monitor the impact of 'corrosive' waters on benthic ecosystems in the Southern California Bight. (R. Goericke, SIO)

6) *Marine mammal observations*. During daylight transits, visual line-transect surveys were conducted by marine mammal observers focusing on cetaceans. Acoustic line-transect surveys were performed using a towed hydrophone array which consists of multiple hydrophone elements that sample sounds up to 100 kHz allowing for localization of calling animals. Acoustic monitoring also takes place on individual stations using sonobuoys. (J. Hildebrand, SIO)

7) *Lagrangian Drifter Buoys*. Surface Velocity Program (SVP) drifters, drogued at 15 meters depth, were deployed at 7 stations. The drifter observations of position and SST approximately every hour following the 15-meter currents supplement Eulerian current profiles. This will provide new insight into the connection between continental shelf flows and the larger scale California Current located further offshore. Drifter pairs were deployed at 6 of the 7 stations to assess the relative motion of drifter pairs which gives an understanding of energy as a function of spatial scale. Drifter tracks are displayed in near real-time on the web (http://www.icess.ucsb.edu/drifter/realtime-SVP/index.php). (C. Ohlmann, UCSB)

8) *Nitrate isotope:* Seawater samples are acquired using the CTD-rosette and shipped frozen to Princeton University. The nitrogen and oxygen isotopic composition of nitrate is measured using strains of denitrifying bacteria that reduce nitrate to N2O. (P. Rafter, Princeton University).

9) *Micronekton trawling*: A Matsuda-Oozeki-Hu trawl (MOHT) with 5 $m^2$ mouth opening and 1.77 mm mesh is used to sample the micronekton (krill, small pelagic fishes, squids, etc) within the epipelagic (upper 200 m) and mesopelagic (200 - 500 m) depth horizons. The samples provide size- and species composition data on the pelagic community, which is combined with Ek-60 multi-frequency acoustic data to estimate the distribution and abundance of the micronekton. (T. Koslow, SIO)

## TABULATED DATA

### *CTD/Rosette Cast Data*

The time reported is the Coordinated Universal Time (UTC) of the first rosette bottle trip on the up cast. The rosette bottles tripped on the up cast are reported as cast 2, where cast 1 is considered to be the down CTD profile. The sample number reported is the cast number followed by a two-digit rosette bottle number. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter, 1980) and are reported in meters. Weather conditions have been coded using WMO code 4501. Secchi depths are reported for most daylight stations.

Data values from discreet sampled CTD rosette were interpolated and are reported for standard depths. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Multiple bottles tripped at the same depth to provide water for ancillary programs are not used in the calculation of standard depth data. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (UNESCO, 1981b). Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), and dynamic height or geopotential anomaly are included with both observed and interpolated standard depth levels.

On stations where primary productivity samples were drawn a footnote appears after each productivity depth sampled. The corresponding primary productivity data are reported in a separate section following the tabulated rosette cast data.

### *Primary Productivity Data*

In addition to the normal hydrographic data that are reported in the rosette cast data section, the tabulated data include: the *in situ* light levels at which the samples were collected, the uptake from each of the replicate light bottles, uptake 1 and uptake 2 (which have been corrected for dark uptake by subtracting the dark value), the mean of the two uptake values and the dark uptake. The uptake values are totals for the incubation period. Also shown are the times of LAN, civil twilight, and the value of the mean uptake integrated from the surface to the deepest sample, assuming the shallowest value continues to the surface and that negative values (when dark uptake exceeds light uptake) are zero. The uptake data are reported to two significant digits (values <1.00) or one decimal (values >1.00). Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to UTC, add eight hours to the PST time. Incubation light intensities are listed in a footnote at the bottom of each page.

### *Macrozooplankton Data*

Macrozooplankton biomass volumes are tabulated as total biomass volume ($cm^3/1000m^3$ strained) and as the total volume minus the volume of larger organisms under the heading "Small." Tow times are given in local PST (+8) time.

## FOOTNOTES

In addition to footnotes, special notations are used without footnotes because the meaning is always the same:

D: CTD salinity value listed in place of normal shipboard salinity analysis.
ISL: After a depth value indicates that this is an interpolated or extrapolated standard level.
U: Uncertain value. Values which are not used in interpolation because they seem to be in error without

apparent reason.

## LITERATURE CITED


Anderson, G. C., compiler, 1971. "Oxygen Analysis," Marine Technician's Handbook, SIO Ref. No. 71-8, Sea Grant Pub. No. 9.

Carpenter, J. H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. *Limnol. Oceanogr., 10*: 141-143.

Carter, D. J. T., 1980. Echo-sounding correction tables. Third Edition. Hydrographic Department, Ministry of Defence, Taunton, U.K., NP 139: 150 pp.

Culberson, C. H. 1991. Dissolved oxygen. WHP Operations and Methods -- July 1991.

Fitzwater, S. E., G. A. Knauer and J. H. Martin, 1982. Metal contamination and its effect on primary production measurements. *Limnol. Oceanogr., 27*: 544-551.

Gordon, L. I., J. C. Jennings, Jr., A. A. Ross, and J. M. Krest, 1993. A suggested protocol for continuous flow automated analysis of seawater nutrients (phosphate, nitrate, nitrite and silicic acid) in the WOCE Hydrographic Program and the Joint Global Ocean Fluxes Study. WOCE Operations Manual, Part 3.1.3 "WHP Operations and Methods," *WHP Office Report WHPO 91-1*.

Holm-Hansen, O., C. J. Lorenzen, R. W. Holmes and J. D. H. Strickland, 1965. Fluorometric determination of chlorophyll. *J. Cons. perm. int. Explor. Mer, 30*: 3-15.

Klein, H. T., 1973. A new technique for processing physical oceanographic data. SIO Ref. No. 73-14.

Koroleff, F. 1969. Direct determination of ammonia in natural waters as Indophenol Blue. Int. Con. Explor. Sea, C.M. C: 9.

Koroleff, F. 1970. The above paper revised, Int. Con. Explor. Sea, Information on techniques and methods for sea water analysis. Interlab Report No. 3, 19-22.

Kramer, D., M. J. Kalin, E. G. Stevens, J. R. Thrailkill and J. R. Zweifel, 1972. Collecting and processing data on fish eggs and larvae in the California Current region. *NOAA Technical Report NMFS CIRC-370:* 38 pp.

Lean, D. R. S. and B. K. Burnison, 1979. An evaluation of errors in the $^{14}C$ method of primary production measurement. *Limnol. Oceanogr., 24*: 917-928.

Reid, J. L. and A. W. Mantyla, 1976. The effect of the geostrophic flow upon coastal sea elevations in the northern North Pacific Ocean. *J. Geophys. Res., 81:* 3100-3110.

Parsons, T. R., Y. Maita, C. M. Lalli, 1984. *A Manual of Chemical and Biological Methods for Seawater Analysis*. Pergamon Press Ltd., 3-28.

Saunders, P. M., 1981. Practical conversion of pressure to depth. *J. Phys. Oceanogr., 11*: 573-574.

Scripps Institution of Oceanography, University of California, 1991. Physical, Chemical and Biological Data, CalCOFI Cruises 9003 and 9004. SIO Ref. 91-4, 96 pp.

UNESCO, 1981, a. Background papers and supporting data on the Practical Salinity Scale, 1978. *UNESCO Tech. Pap. in Mar. Sci., No. 37*.

UNESCO, 1981, b. Background papers and supporting data on the International Equation of State 1980. *UNESCO Tech. Pap. in Mar. Sci., No. 38.*

Venrick, E. L. and T. L. Hayward, 1984. Determining chlorophyll on the 1984 CalCOFI surveys. *CalCOFI Rep., Vol. XXV*: 74-79.

Weiss, R. F., 1970. The solubility of nitrogen, oxygen and argon in water and seawater. *Deep-Sea Res., 17:* 721-735.

Yentsch, C. S. and D. W. Menzel, 1963. A method for the determination of phytoplankton, chlorophyll and phaeophytin by fluorescence. *Deep-Sea Res., 10:* 221-231.

FIGURES

Cruise 1101

1. CalCOFI Cruise 1101 track and station positions.

2. Horizontal distribution of dynamic height anomaly (0 over 500m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).

3. Horizontal distributions at 10 meters: A) chlorophyll-*a*; B) potential density; C) temperature; and D) salinity.

4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.

5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-*a*; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

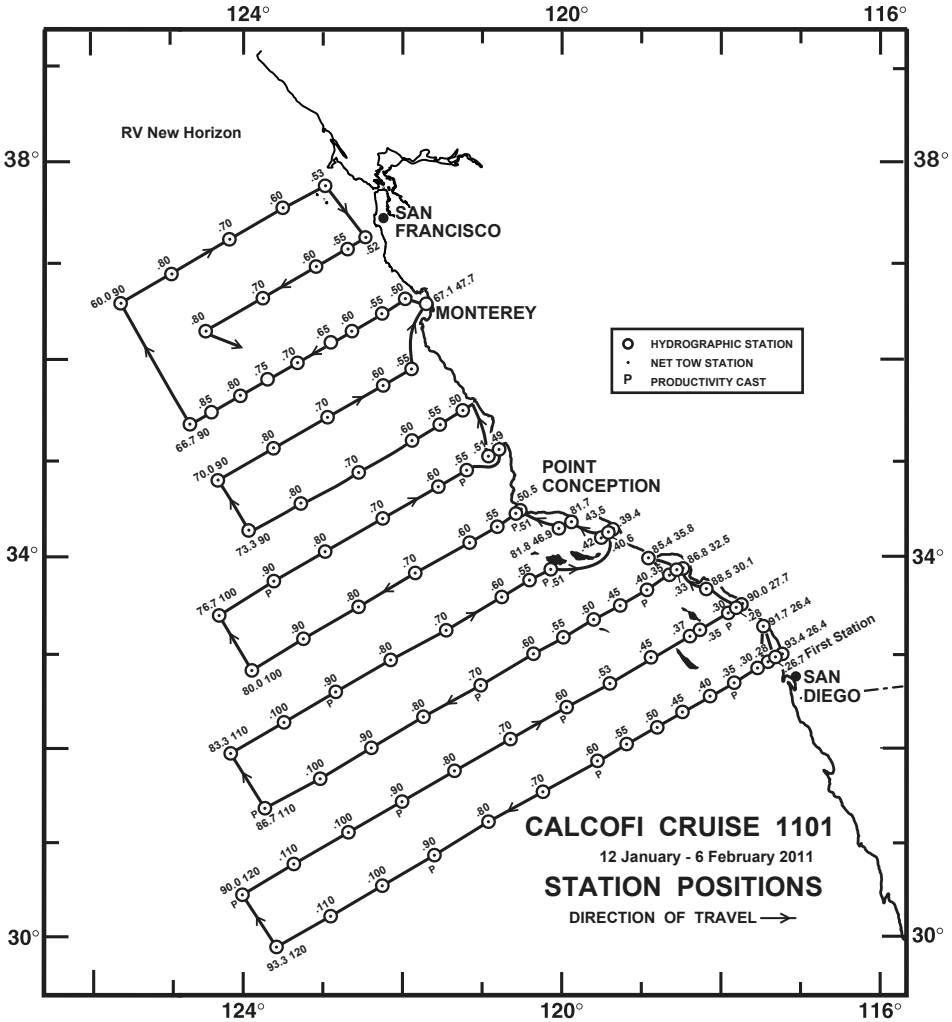


FIGURE 1

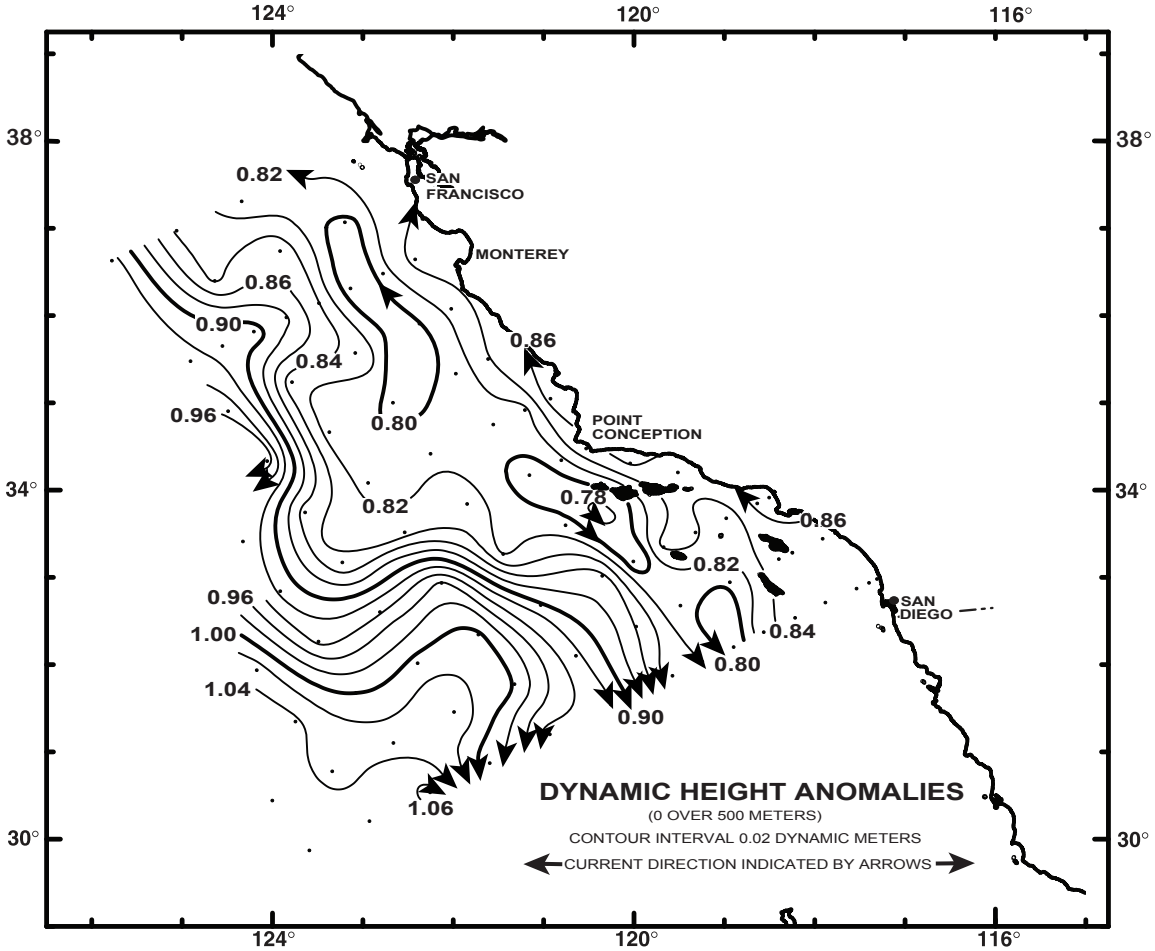


FIGURE 2

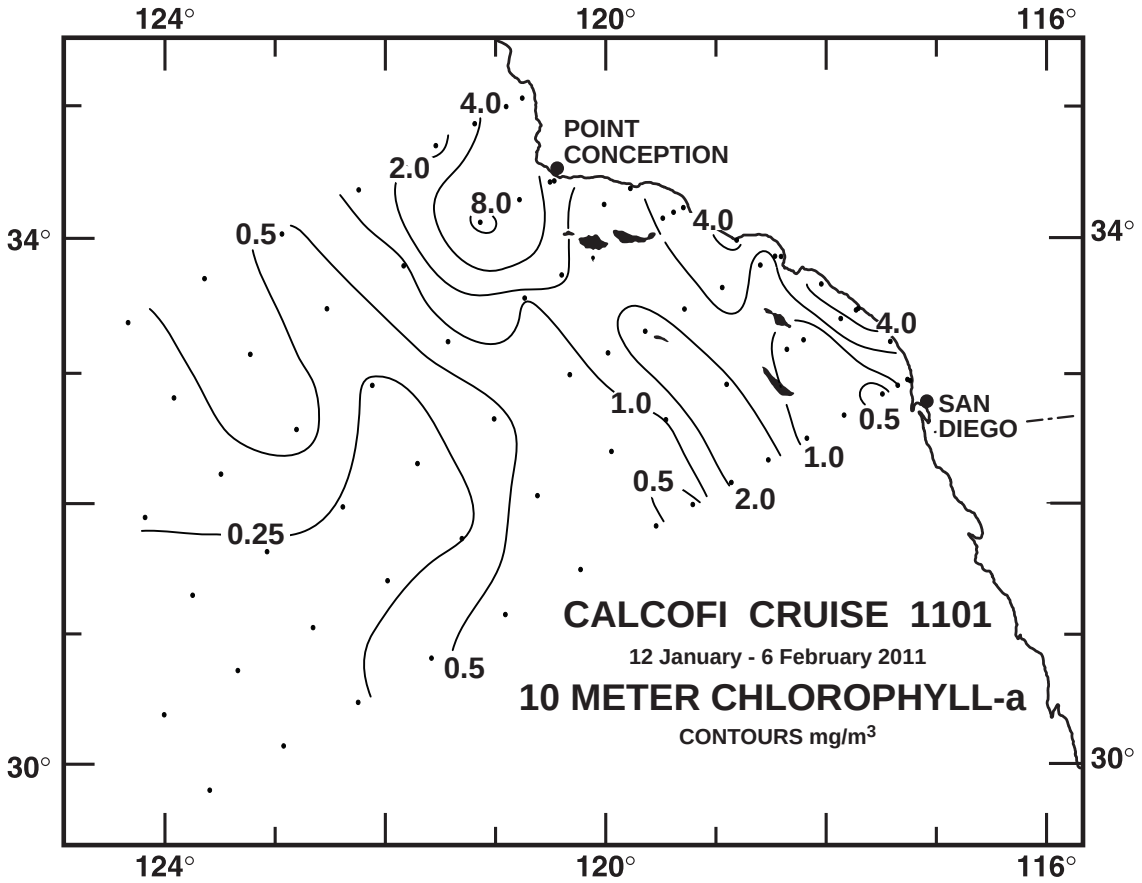


FIGURE 3A

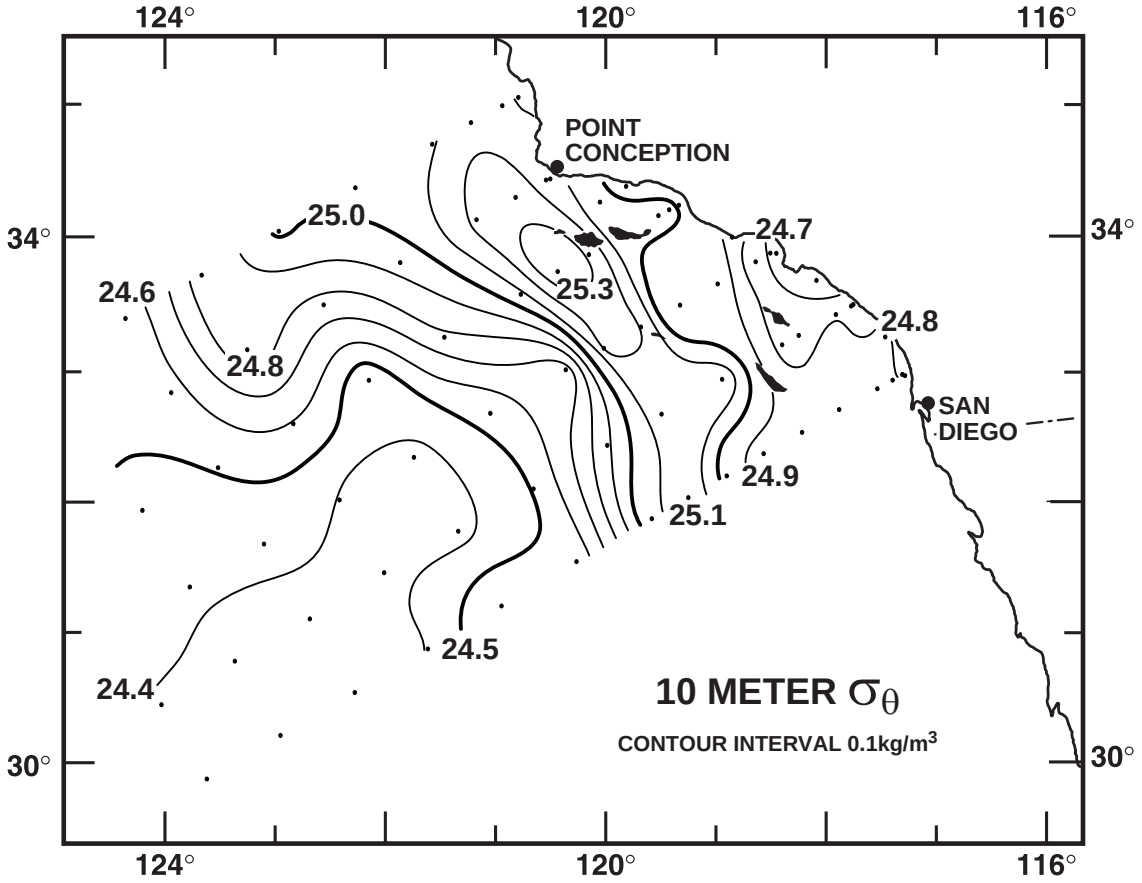


FIGURE 3B

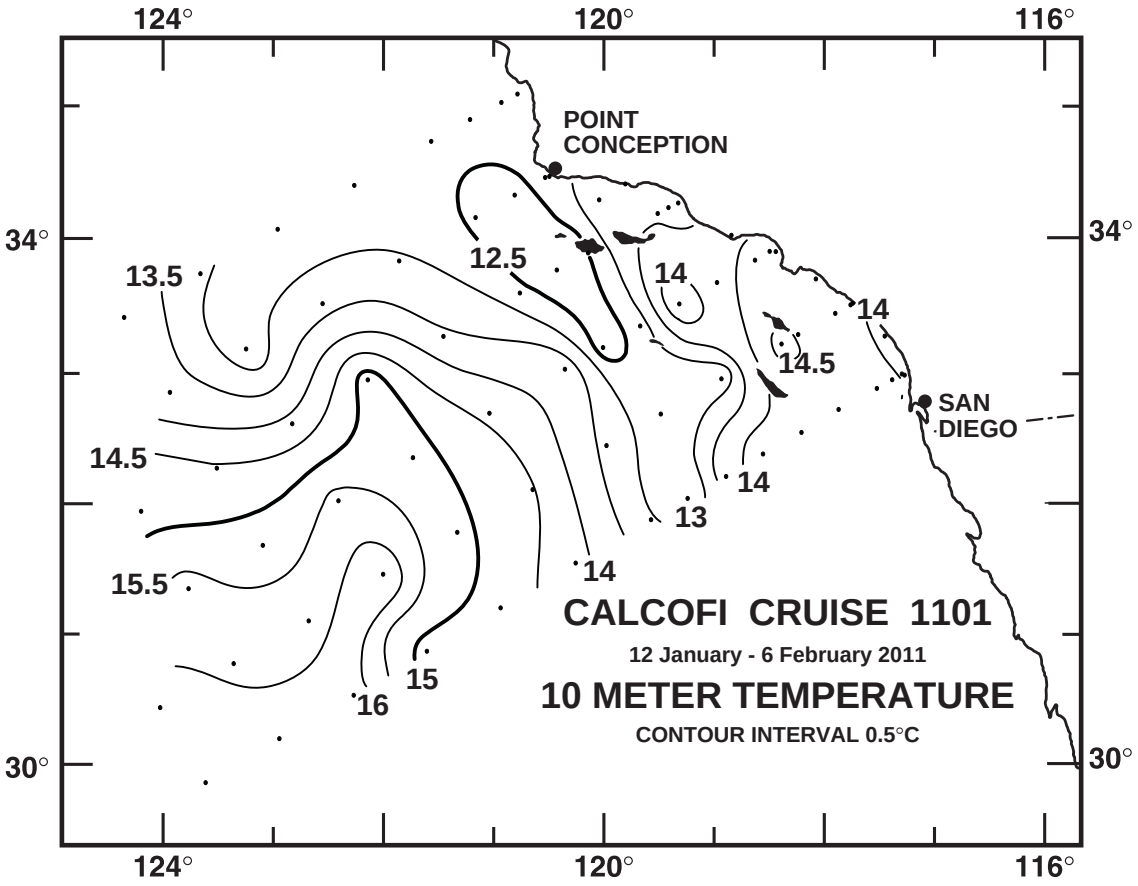


FIGURE 3C

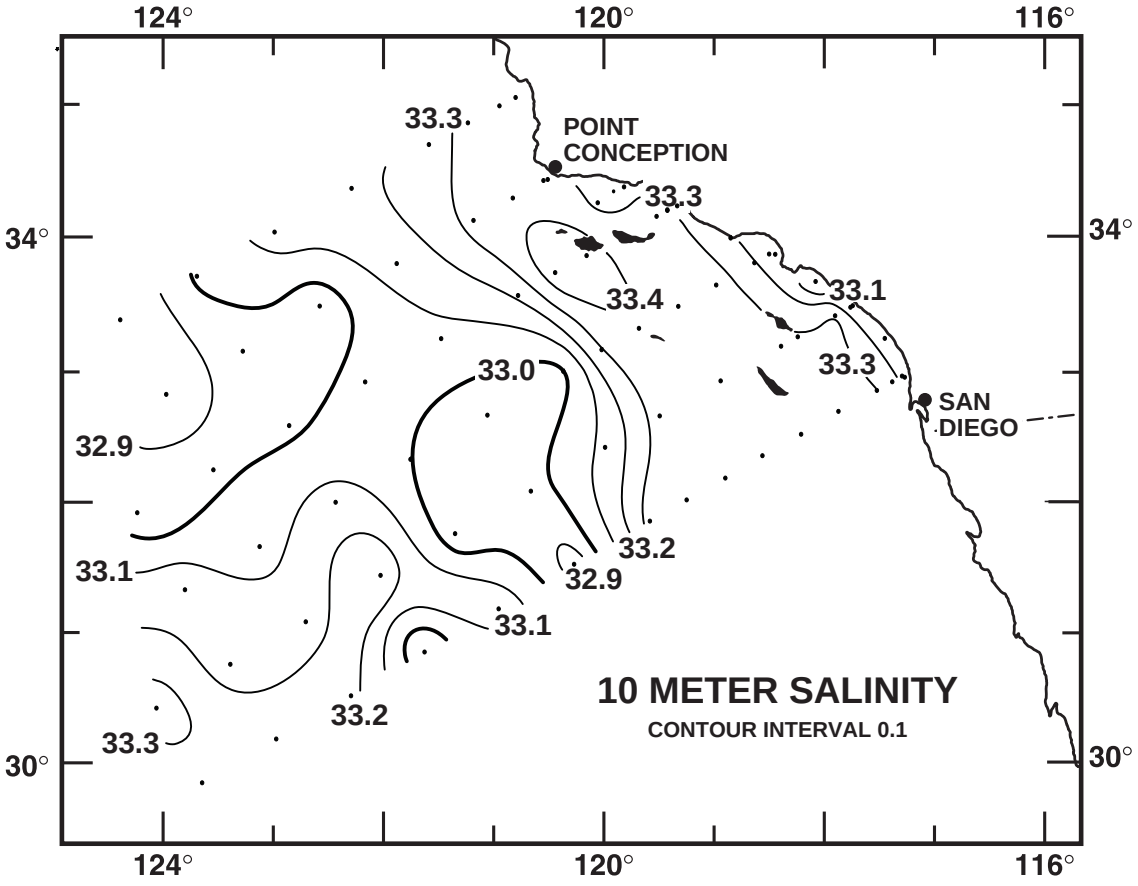


FIGURE 3D

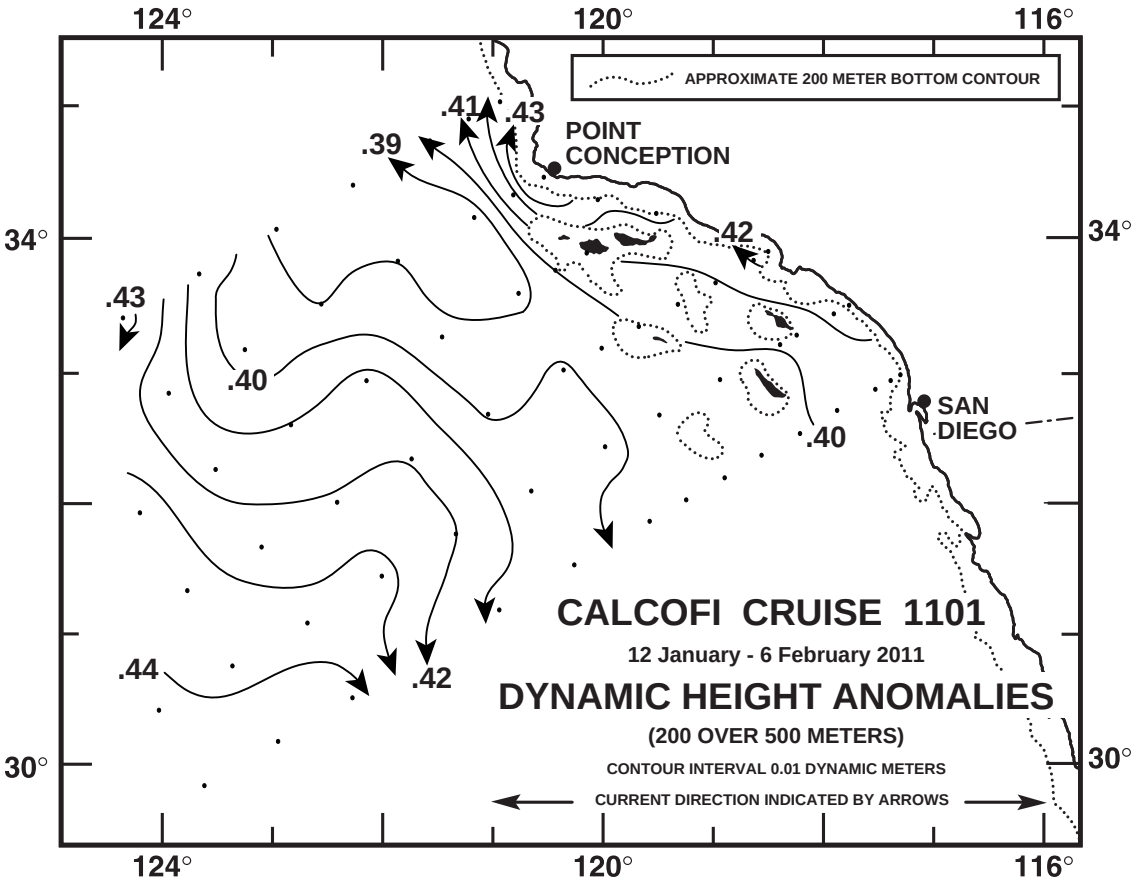


FIGURE 4A

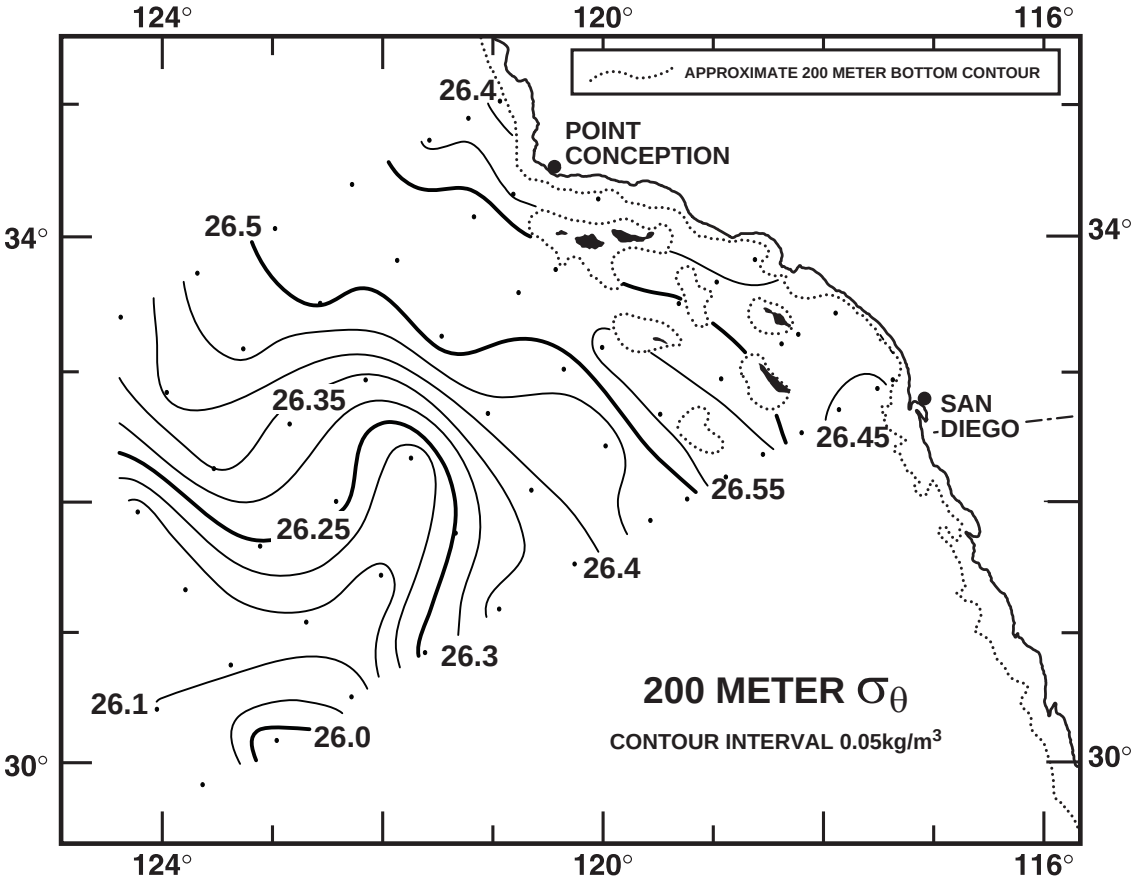


FIGURE 4B

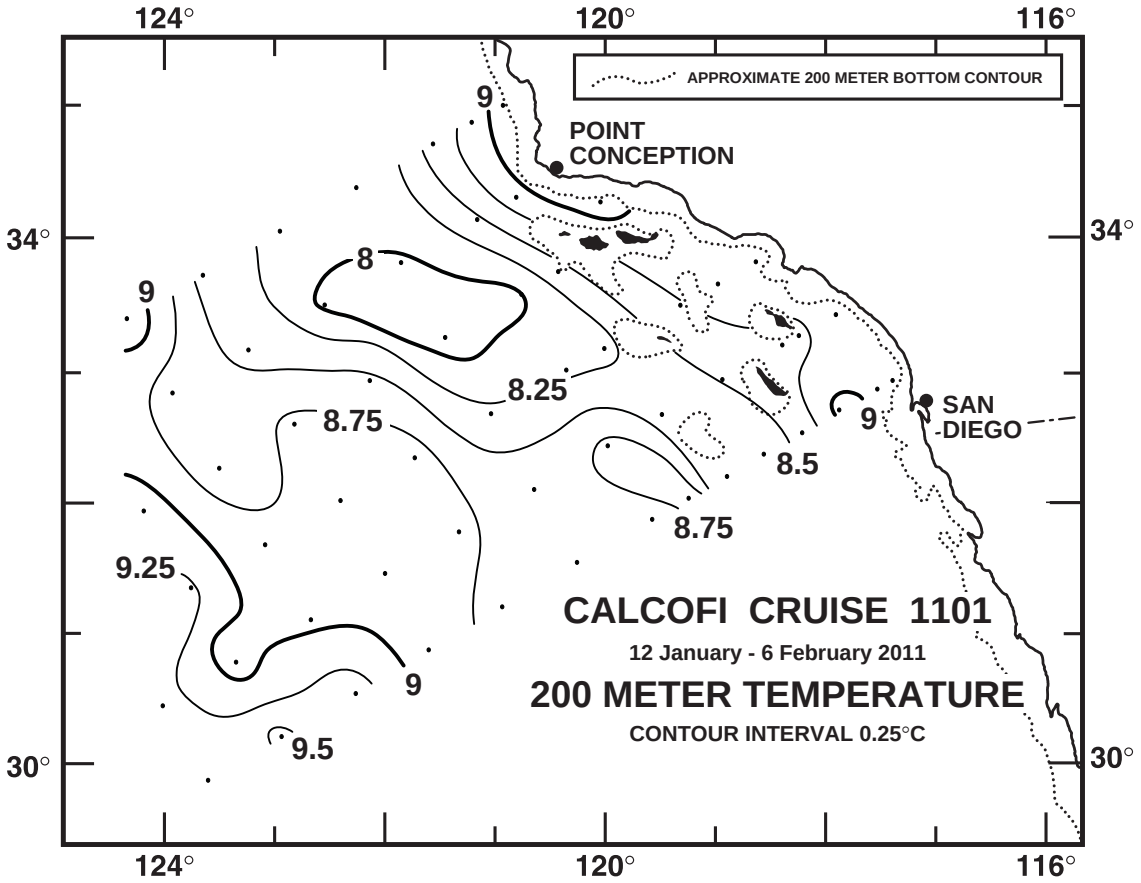


FIGURE 4C

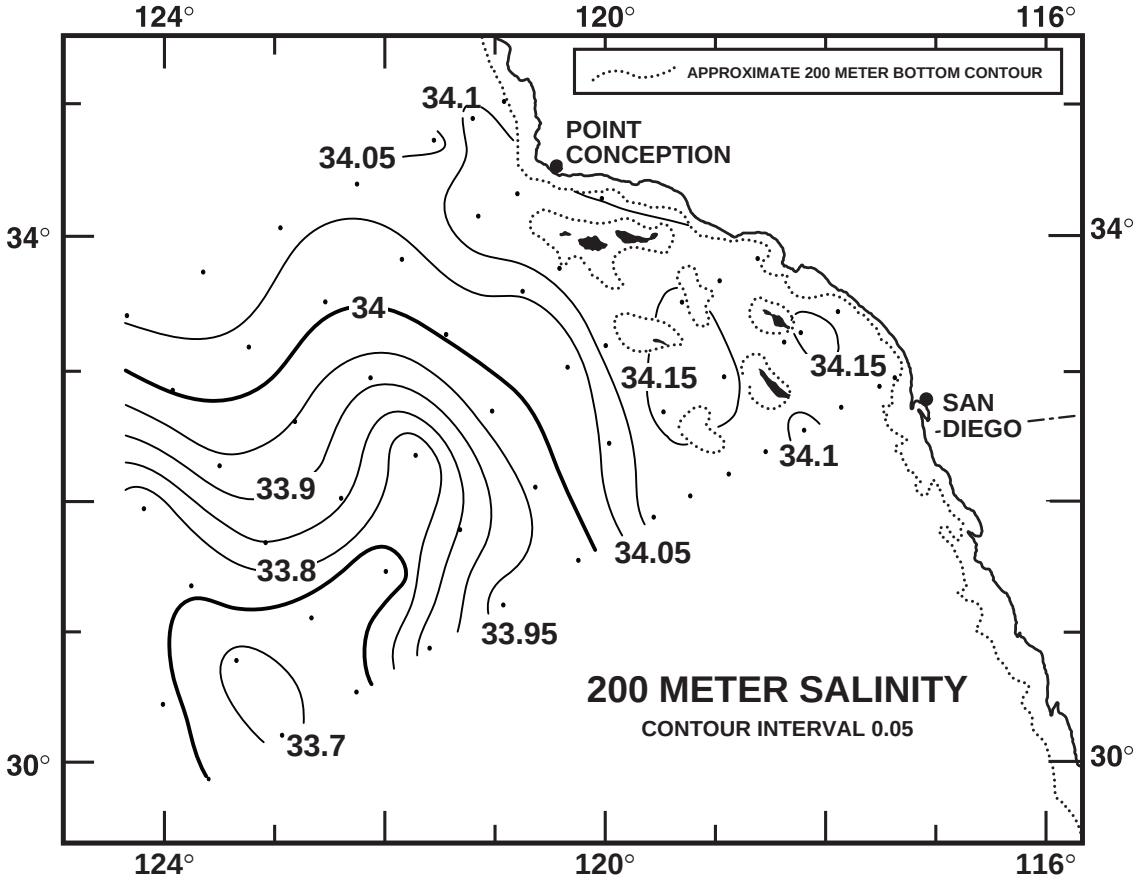


FIGURE 4D

# CALCOFI CRUISE 1101

**16 - 19 January 2011**

## POTENTIAL DENSITY ($\sigma_\theta$) ALONG CALCOFI LINE 90

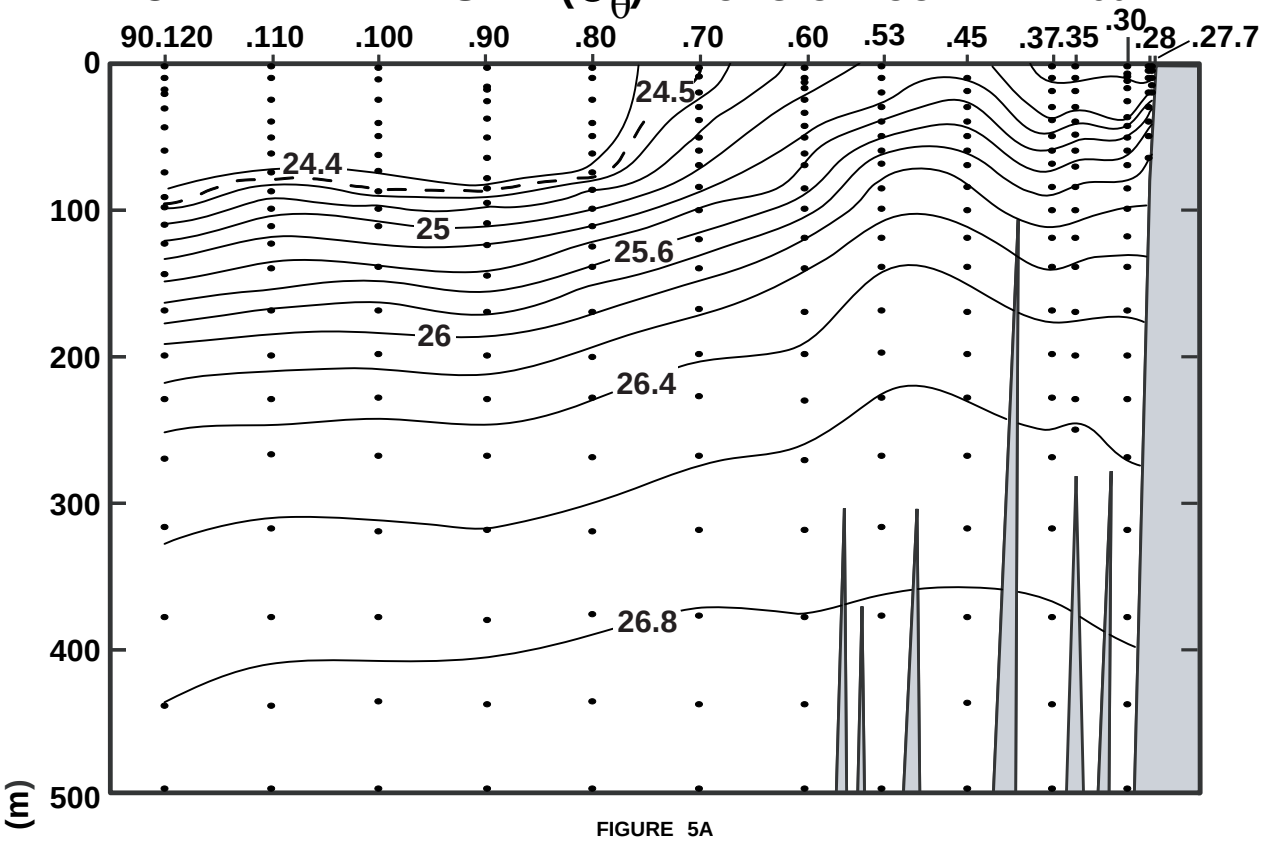


FIGURE 5A

## TEMPERATURE ( °C) ALONG CALCOFI LINE 90

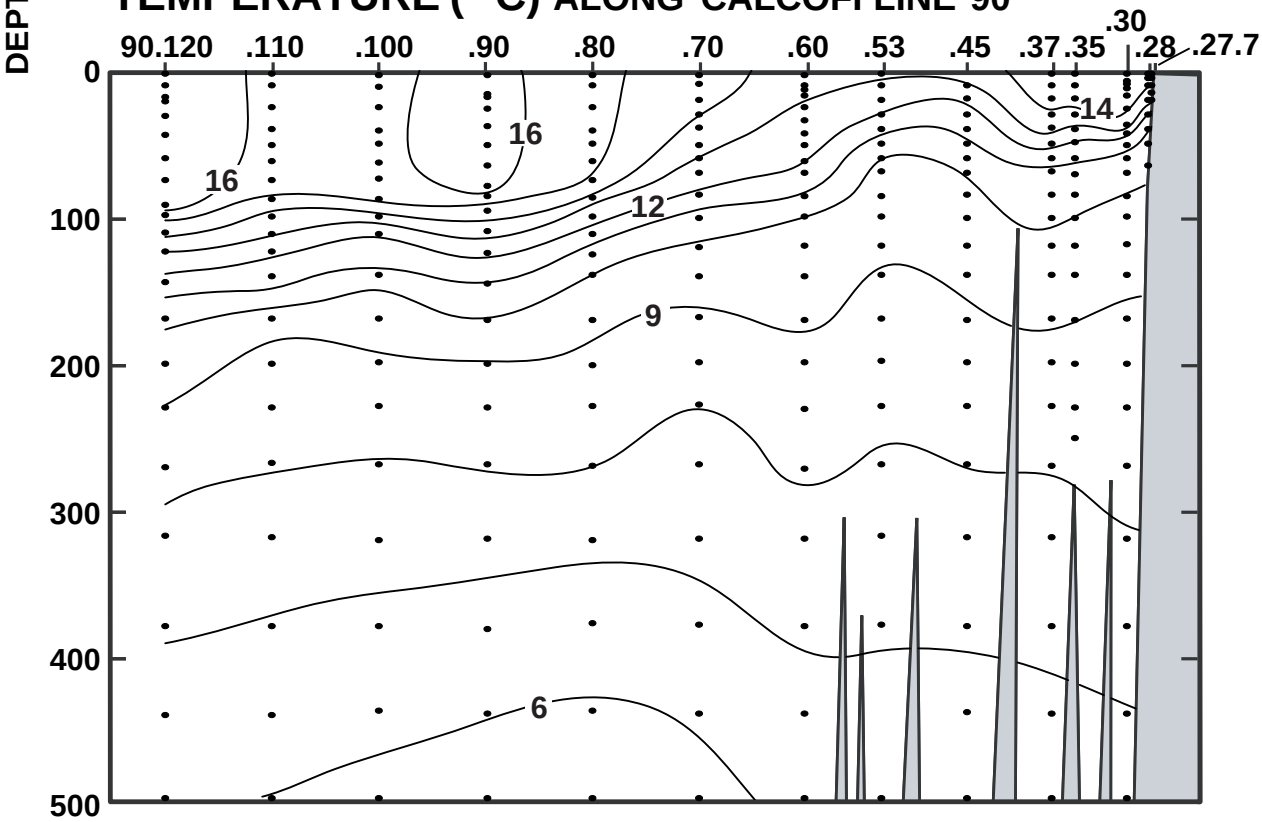


FIGURE 5B

# CALCOFI CRUISE 1101

**16 - 19 January 2011**

## SALINITY ALONG CALCOFI LINE 90

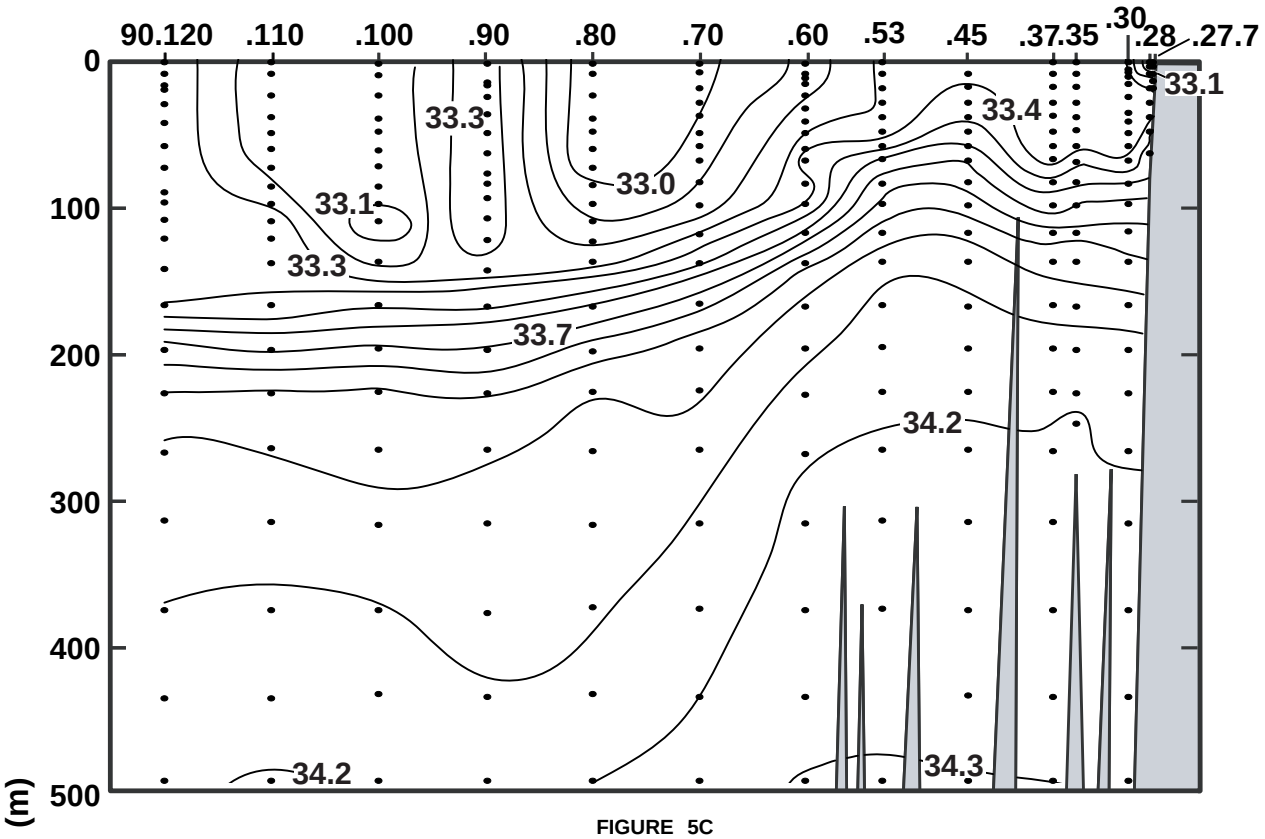


FIGURE 5C

## SILICATE (μM/L) ALONG CALCOFI LINE 90

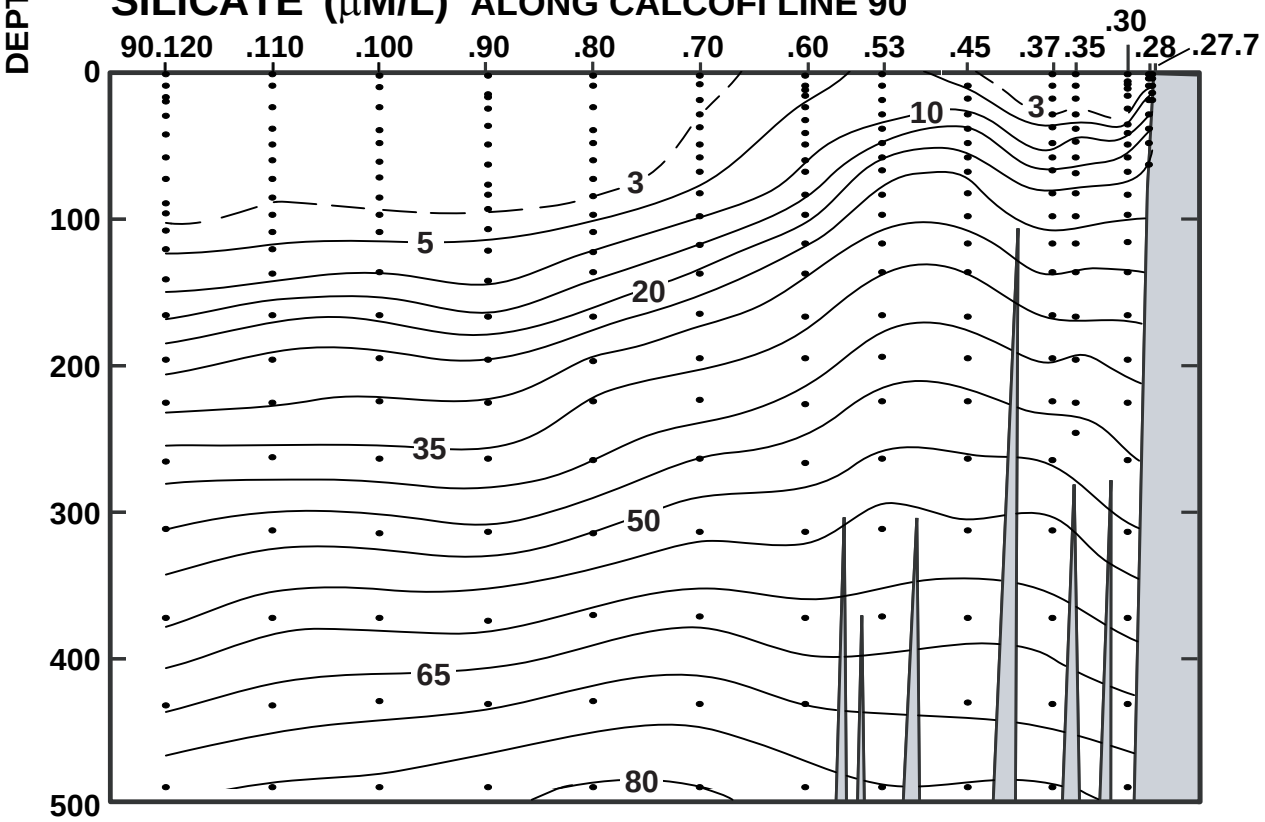


FIGURE 5D

# CALCOFI CRUISE 1101

**16 - 19 January 2011**

## NITRATE (μM/L) ALONG CALCOFI LINE 90

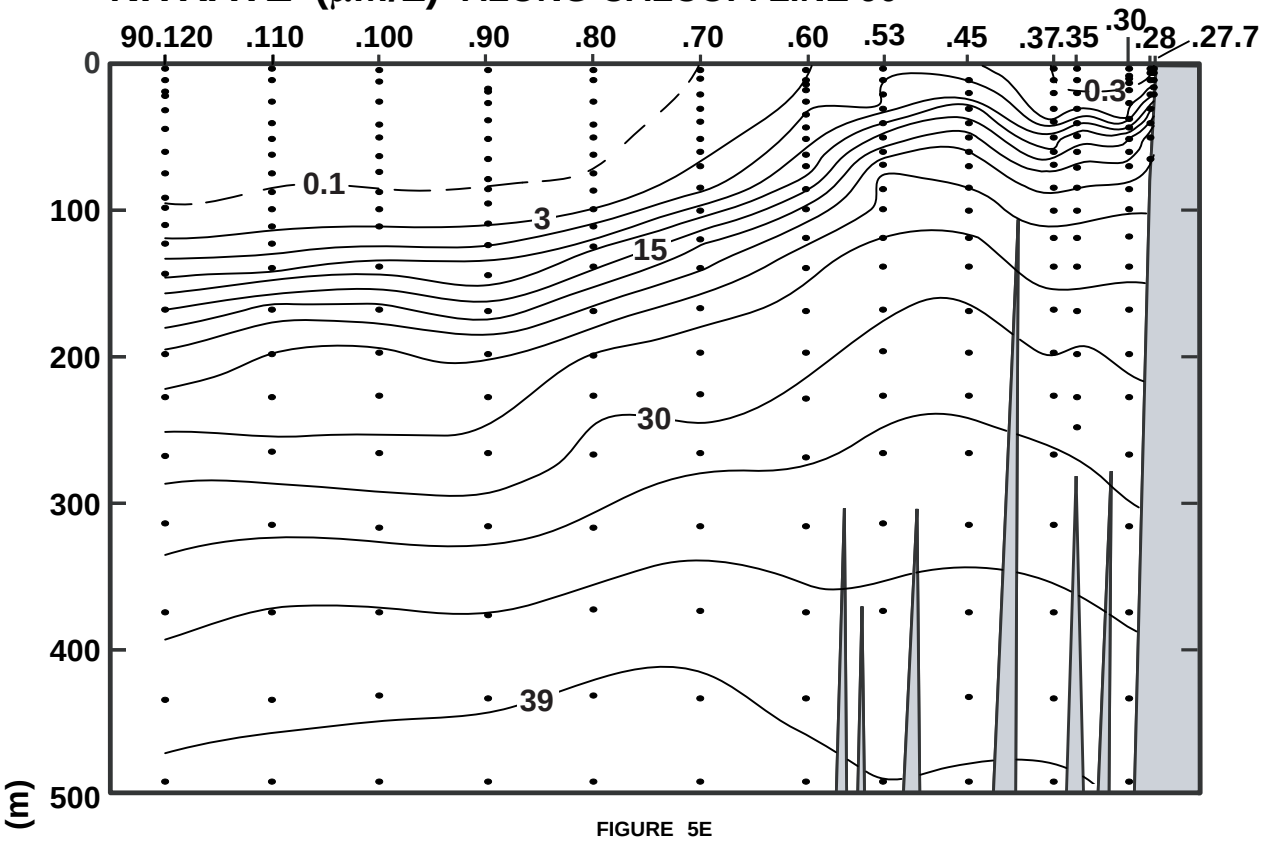


FIGURE 5E

## PHOSPHATE (μM/L) ALONG CALCOFI LINE 90

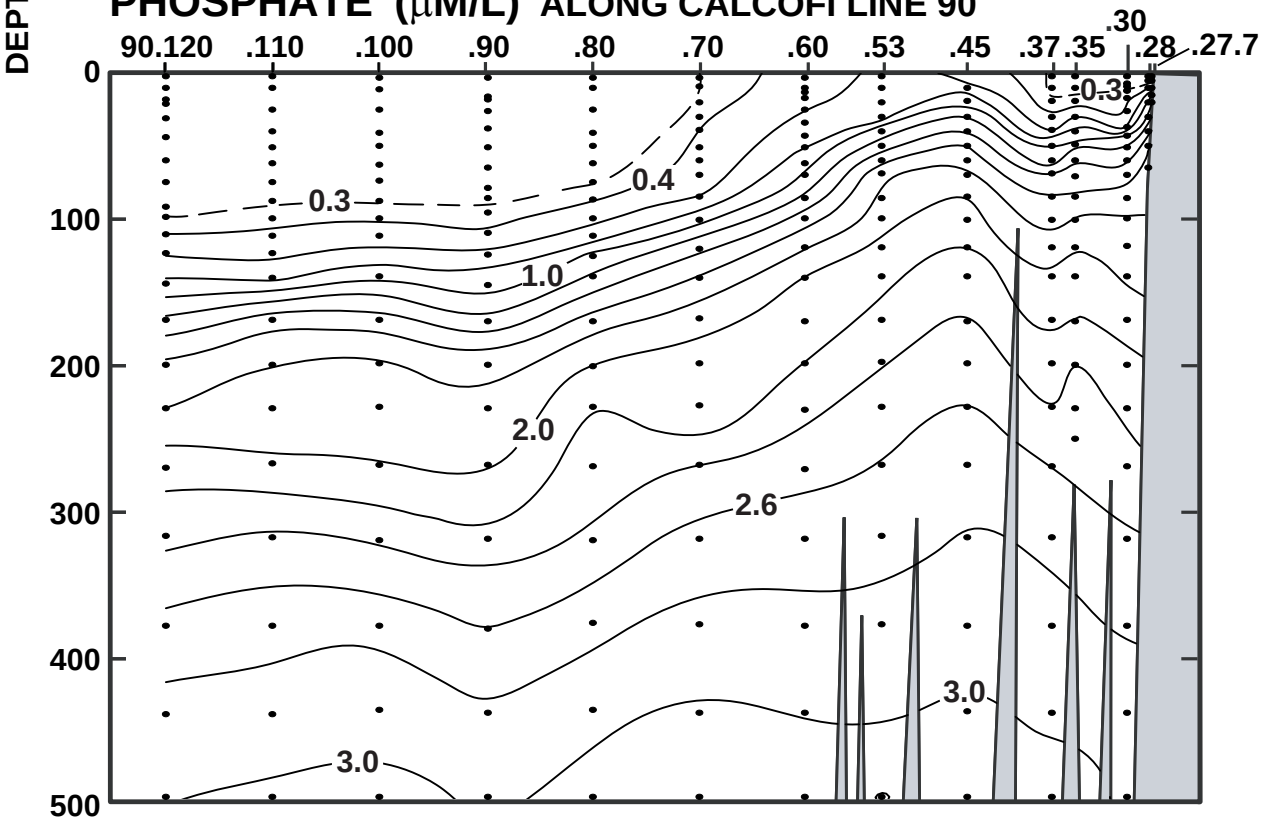


FIGURE 5F

# CALCOFI CRUISE 1101

**16 - 19 January 2011**

## CHLOROPHYLL-a (μg/L) ALONG CALCOFI LINE 90

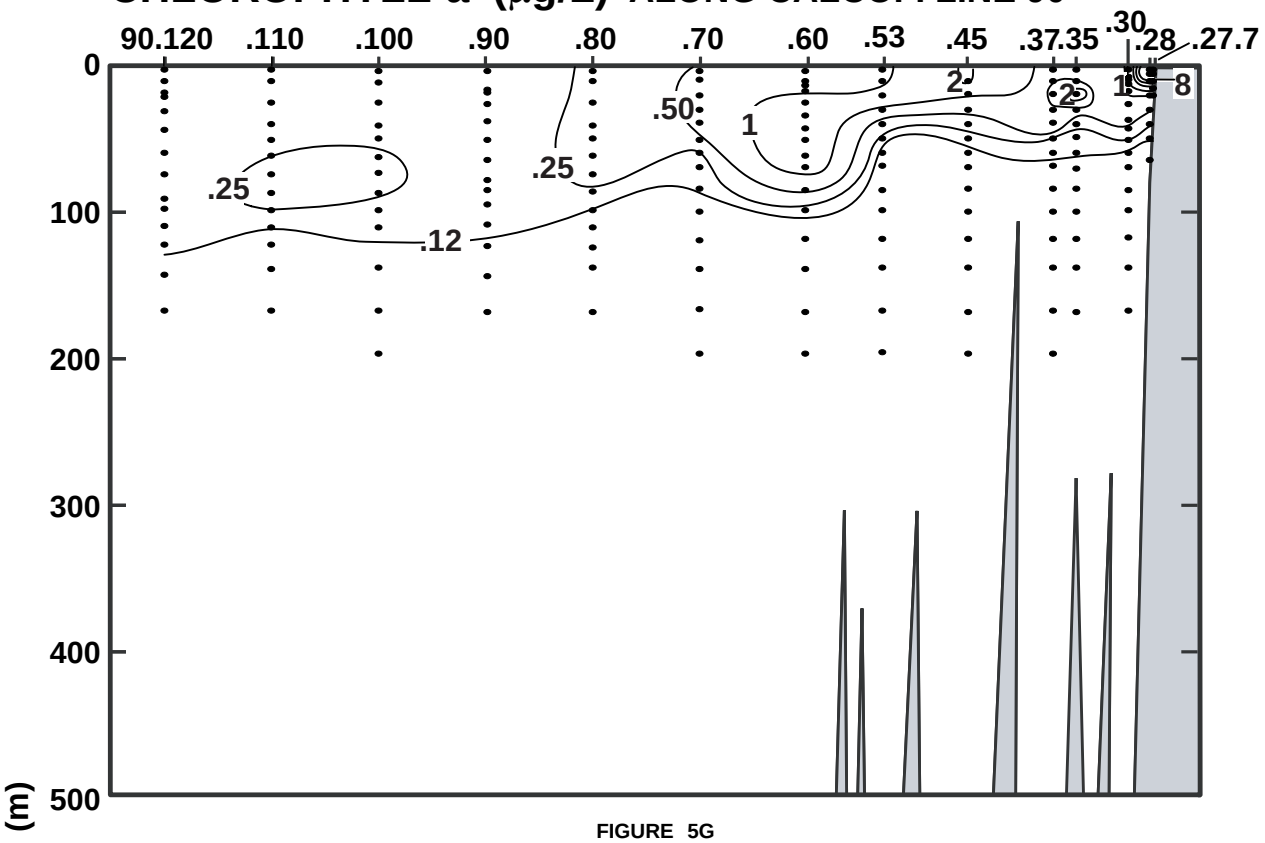


FIGURE 5G

## OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

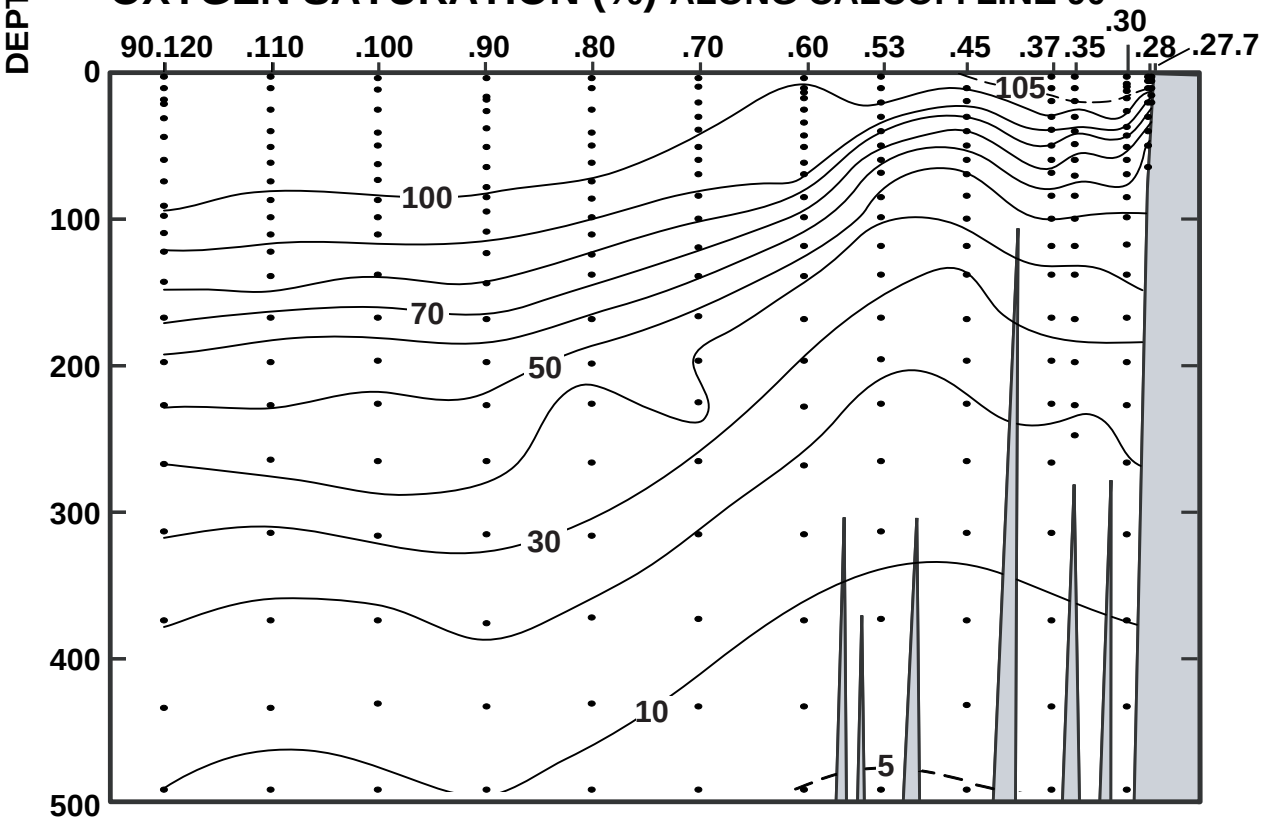


FIGURE 5H

# CALCOFI CRUISE 1101

**16 - 19 January 2011**

## OXYGEN (mL/L) ALONG CALCOFI LINE 90

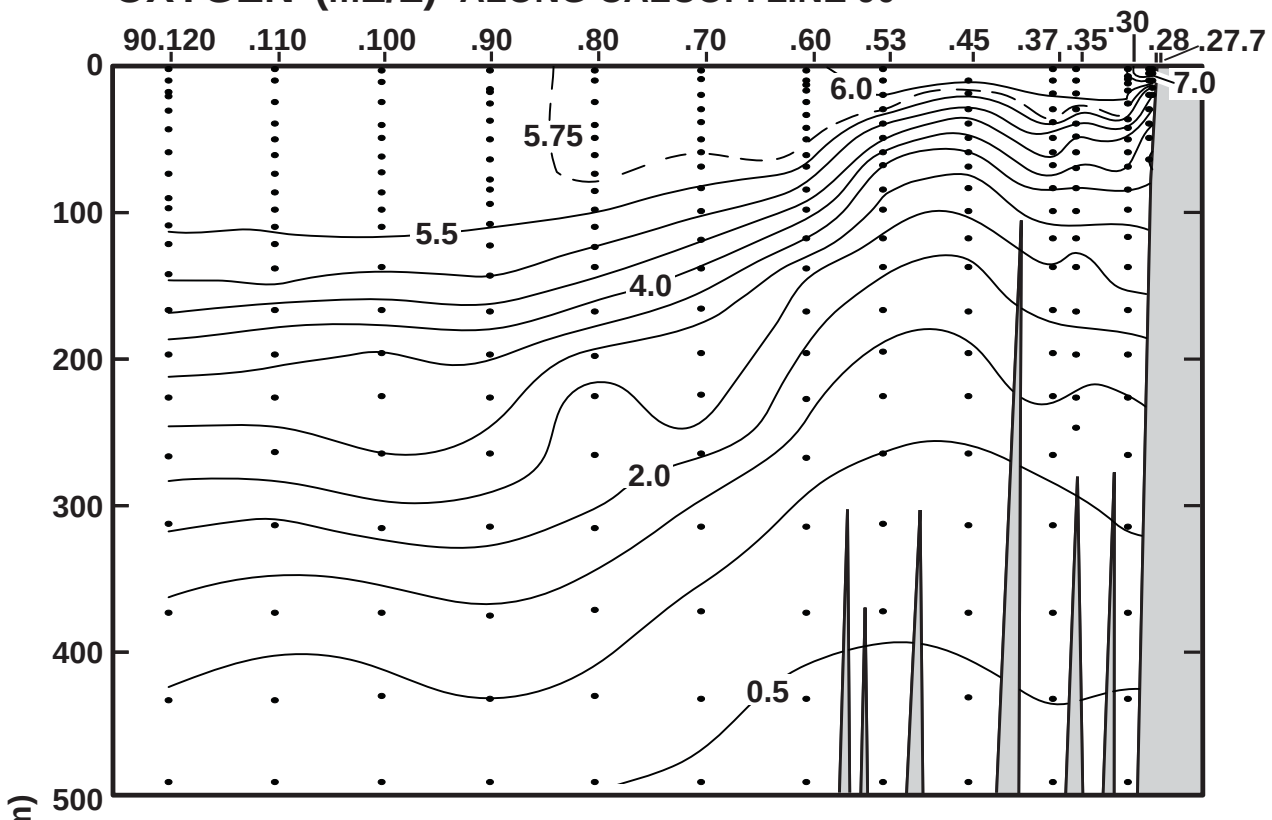


FIGURE 5I

## NITRITE (μM/L) ALONG CALCOFI LINE 90

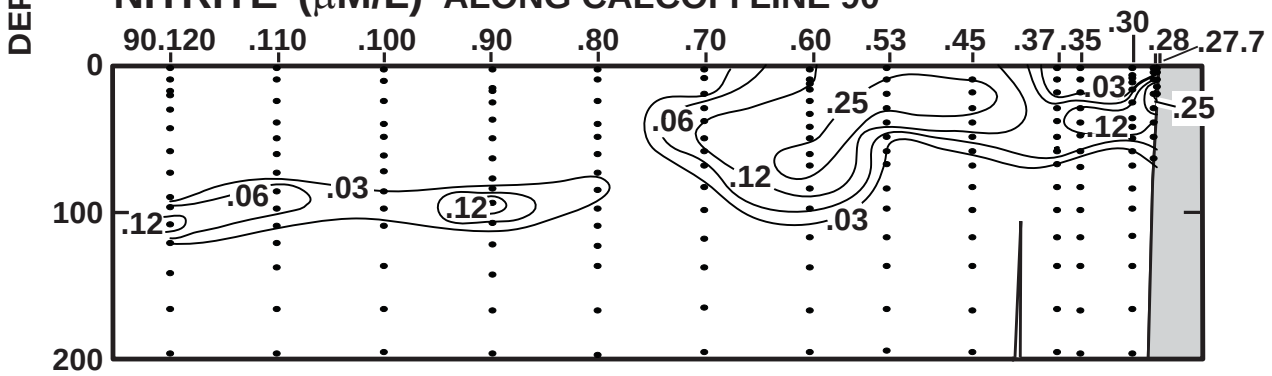


FIGURE 5J

## PHAEOPIGMENTS (μg/L) ALONG CALCOFI LINE 90

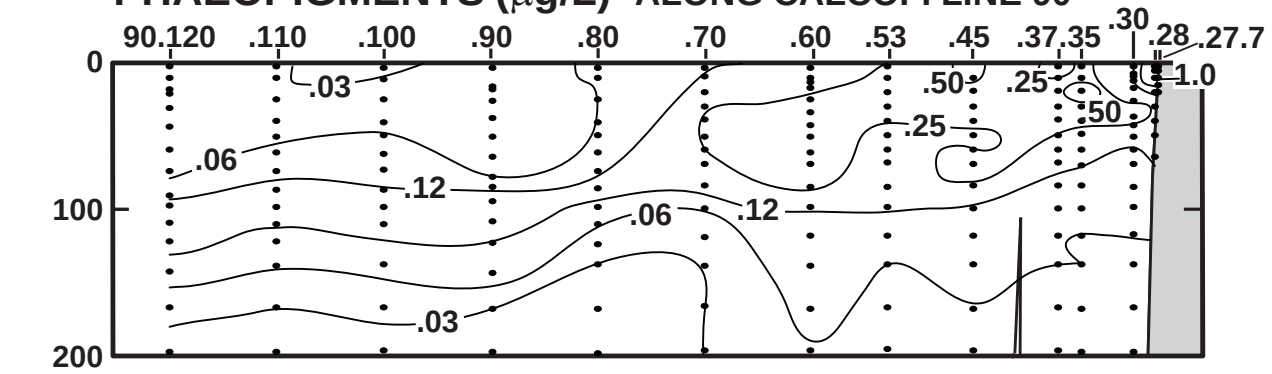


FIGURE 5K

PERSONNEL

CalCOFI Cruise 1101

SHIP'S CAPTAIN

Murray Stein, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

| | | Participating (Leg) |
|---|---|---|
| Griffith, David A (Chief Scientist) | Fishery Biologist, NMFS | 1-3 |
| Abramenkoff, Dimitry | Fishery Biologist, NMFS | 1-3 |
| Adams, Jesse | Contractor, UCSC | 2-3 |
| Allen, Caitlin | SIO | 1 |
| Aragon, Jennifer | Volunteer, SIO | 1-3 |
| Bassett, Hannah | Marine Mammal Acoustician, SIO | 1-3 |
| Becker, Susan | Staff Research Associate, SIO | 1-3 |
| Blum, Marguerite | Oceanographer, MBARI | 2-3 |
| Breese, Dawn | Bird Observer, FIAER | 2 |
| Camacho-Wiley Dominique | Marine Mammal Observer, MPL | 1-3 |
| Dovel, Shonna | Staff Research Associate, SIO | 1 |
| Faber, David | Staff Research Associate, SIO | 1 |
| Manion, Susan | Fishery Biologist, NMFS | 1-3 |
| Renfree, Josiah | Acoustic Technician, SWFSC | 1 |
| Roadman, Megan | Staff Research Associate, SIO | 1 |
| Rodgers-Wolgast, Jennifer | Staff Research Associate, SIO | 1 |
| Sessions, Steve | Acoustic Technician, SWFSC | 1-3 |
| Shaw, Katherine | Volunteer, SIO | 1-3 |
| Susner, Grant M. | Staff Research Associate, SIO | 1-3 |
| Webb, Sophie | Bird Observer, FIAER | 1 |
| Whitaker, Katherine | Marine Mammal Observer, MPL | 1-3 |
| Wolgast, David | Staff Research Associate, SIO | 1-3 |

San Diego to Avila, California, 12 Jan. – 29 Jan., 2011
Avila to Santa Cruz, California, 29 Jan. – 31 Jan., 2011
Santa Cruz to San Diego, California, 31 Jan. – 4 Feb., 2011

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 60.0 53.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 50.7 N | 123 6.2 W | 03/02/11 | 2151 UTC | 93 m | 250 02 kn | 330 01 05 | 1 | 1030.2 mb | 11.4 C | 10.3 C | 07m | 6/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.86 | 11.86 | 32.711 | 24.838 | 310.2 | 0.000 | 7.74 | 125.7 | | | | | | 8.28 | 1.11 | 0 | |
| 2 | 11.86 | 11.86 | 32.711 | 24.838 | 310.2 | 0.006 | 7.74 | 125.7 | | | | | | 8.28 | 1.11 | 2 | 209 |
| 5 | 11.76 | 11.76 | 32.723 | 24.866 | 307.6 | 0.015 | 7.45 | D120.7 | | | | | | 9.10 | 1.34 | 5 | 208 |
| 10 | 11.62 | 11.62 | 32.796 | 24.949 | 299.9 | 0.031 | 6.79 | 109.8 | | | | | | 5.39 | 0.90 | 10 | 207 |
| 20 | 11.46 | 11.46 | 33.182 | 25.278 | 268.8 | 0.059 | 5.44 | 87.9 | | | | | | 1.89 | 0.71 | 20 | 206 |
| 30 | 11.12 | 11.12 | 33.376 | 25.491 | 248.8 | 0.085 | 4.82 | 77.4 | | | | | | 0.44 | 0.42 | 30 | 205 |
| 40 | 10.71 | 10.71 | 33.493 | 25.655 | 233.4 | 0.109 | 4.16 | D 66.2 | | | | | | 0.31 | 0.36 | 40 | 204 |
| 50 | 10.22 | 10.21 | 33.565 | 25.796 | 220.2 | 0.132 | 3.63 | 57.2 | | | | | | 0.24 | 0.40 | 50 | 203 |
| 61 | 10.02 | 10.01 | 33.642 | 25.890 | 211.5 | 0.156 | 3.25 | D 51.0 | | | | | | 0.16 | 0.31 | 61 | 202 |
| 75 ISL | 9.73 D | 9.72 | 33.747 D | 26.021 | 199.3 | 0.184 | 2.79 | D 43.5 | | | | | | 0.12 | 0.32 | 75 | |
| 80 | 9.72 | 9.71 | 33.752 | 26.026 | 198.9 | 0.194 | 2.66 | 41.5 | | | | | | 0.11 | 0.33 | 80 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 60.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 36.9 N | 123 36.6 W | 03/02/11 | 1714 UTC | 3994 m | 290 03 kn | 330 03 06 | 1 | 1031.2 mb | 13.4 C | 12.0 C | 25m | 4/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.83 | 11.83 | 33.251 | 25.263 | 269.7 | 0.000 | 6.17 | 100.5 | | | | | | 0.53 | 0.18 | 0 | |
| 3 | 11.83 | 11.83 | 33.251 | 25.263 | 269.8 | 0.008 | 6.17 | 100.5 | | | | | | 0.53 | 0.18 | 3 | 220 |
| 5 | 11.83 | 11.83 | 33.251 | 25.263 | 269.8 | 0.013 | | | | | | | | 0.49 | 0.20 | 5 | 219 |
| 10 | 11.81 | 11.81 | 33.251 | 25.267 | 269.6 | 0.027 | 6.16 | 100.3 | | | | | | 0.63 | 0.16 | 10 | 218 |
| 20 | 11.80 | 11.80 | 33.266 | 25.281 | 268.5 | 0.054 | 6.14 | 99.9 | | | | | | 0.71 | 0.32 | 20 | 217 |
| 30 | 11.78 | 11.78 | 33.282 | 25.297 | 267.2 | 0.081 | 6.20 | D100.9 | | | | | | 0.77 | 0.24 | 30 | 216 |
| 41 | 11.74 | 11.73 | 33.293 | 25.313 | 266.0 | 0.110 | 6.07 | D 98.7 | | | | | | 0.64 | 0.29 | 41 | 215 |
| 49 | 11.14 | 11.13 | 33.334 | 25.455 | 252.7 | 0.131 | 5.25 | 84.3 | | | | | | 0.34 | 0.23 | 49 | 214 |
| 50 ISL | 10.93 D | 10.92 | 33.358 D | 25.511 | 247.3 | 0.133 | 4.92 | D 78.6 | | | | | | 0.32 | 0.24 | 50 | |
| 60 | 10.65 | 10.64 | 33.486 | 25.660 | 233.4 | 0.157 | 4.16 | D 66.1 | | | | | | 0.19 | 0.36 | 60 | 213 |
| 75 ISL | 9.95 D | 9.94 | 33.642 D | 25.902 | 210.6 | 0.191 | 3.38 | D 53.0 | | | | | | 0.06 | 0.23 | 75 | |
| 80 | 9.86 | 9.85 | 33.663 | 25.933 | 207.7 | 0.201 | 3.17 | 49.6 | | | | | | 0.04 | 0.17 | 80 | 212 |
| 100 ISL | 9.45 D | 9.44 | 33.756 D | 26.074 | 194.7 | 0.241 | 2.92 | D 45.3 | | | | | | 0.02 | 0.17 | 101 | |
| 101 | 9.47 | 9.46 | 33.755 | 26.070 | 195.1 | 0.243 | 2.87 | 44.5 | | | | | | 0.02 | 0.17 | 102 | 211 |
| 119 | 9.34 | 9.33 | 33.861 | 26.174 | 185.6 | 0.277 | 2.42 | 37.5 | | | | | | 0.04 | 0.13 | 120 | 210 |
| 125 ISL | 9.34 D | 9.33 | 33.876 D | 26.186 | 184.6 | 0.289 | 2.39 | D 37.0 | | | | | | 0.04 | 0.12 | 126 | |
| 150 ISL | 8.88 D | 8.86 | 33.933 D | 26.304 | 173.8 | 0.333 | 2.36 | D 36.2 | | | | | | 0.02 | 0.10 | 151 | |
| 151 | 8.93 | 8.91 | 33.926 | 26.291 | 175.1 | 0.335 | 2.33 | 35.8 | | | | | | 0.02 | 0.10 | 152 | 209 |
| 170 | 8.79 | 8.77 | 33.986 | 26.360 | 168.8 | 0.368 | 2.17 | D 33.2 | | | | | | 0.02 | 0.11 | 171 | 208 |
| 200 ISL | 8.48 D | 8.46 | 34.020 D | 26.435 | 162.2 | 0.417 | 2.00 | D 30.4 | | | | | | 0.02 | 0.08 | 201 | |
| 202 | 8.48 | 8.46 | 34.022 | 26.437 | 162.1 | 0.421 | 1.94 | 29.5 | | | | | | 0.02 | 0.08 | 203 | 207 |
| 230 | 8.11 | 8.09 | 34.065 | 26.527 | 153.9 | 0.465 | 1.69 | D 25.5 | | | | | | | | 231 | 206 |
| 250 ISL | 7.89 D | 7.86 | 34.081 D | 26.572 | 149.9 | 0.495 | 1.55 | D 23.2 | | | | | | | | 252 | |
| 270 | 7.67 | 7.64 | 34.091 | 26.612 | 146.3 | 0.525 | 1.44 | 21.5 | | | | | | | | 272 | 205 |
| 300 ISL | 7.33 D | 7.30 | 34.114 D | 26.679 | 140.3 | 0.568 | 1.22 | D 18.1 | | | | | | | | 302 | |
| 321 | 7.18 | 7.15 | 34.131 | 26.714 | 137.2 | 0.597 | 1.05 | D 15.5 | | | | | | | | 323 | 204 |
| 380 | 6.67 | 6.64 | 34.155 | 26.803 | 129.4 | 0.676 | 0.82 | 12.0 | | | | | | | | 383 | 203 |
| 400 ISL | 6.57 D | 6.53 | 34.171 D | 26.829 | 127.1 | 0.701 | 0.76 | D 11.1 | | | | | | | | 403 | |
| 442 | 6.35 | 6.31 | 34.200 | 26.881 | 122.6 | 0.754 | 0.59 | D 8.5 | | | | | | | | 445 | 202 |
| 500 ISL | 5.96 D | 5.92 | 34.222 D | 26.949 | 116.6 | 0.823 | 0.47 | D 6.7 | | | | | | | | 504 | |
| 515 | 5.79 | 5.75 | 34.222 | 26.970 | 114.6 | 0.841 | 0.43 | 6.1 | | | | | | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 60.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 17.1 N | 124 20.2 W | 03/02/11 | 1105 UTC | 3990 m | 120 02 kn | | | 1028.9 mb | 11.7 C | 10.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.56 | 11.56 | 33.043 | 25.151 | 280.4 | 0.000 | 6.23 | 100.7 | | | | | | 0.66 | 0.16 | 0 | |
| 3 | 11.56 | 11.56 | 33.043 | 25.151 | 280.4 | 0.008 | 6.23 | 100.7 | | | | | | 0.66 | 0.16 | 3 | 220 |
| 5 | 11.55 | 11.55 | 33.042 | 25.153 | 280.4 | 0.014 | | | | | | | | 0.70 | 0.14 | 5 | 219 |
| 10 ISL | 11.56 D | 11.56 | 33.041 D | 25.150 | 280.7 | 0.028 | 6.23 D | 100.7 | | | | | | 0.65 | 0.16 | 10 | |
| 11 | 11.56 | 11.56 | 33.042 | 25.151 | 280.7 | 0.031 | 6.25 | 101.1 | | | | | | 0.64 | 0.16 | 11 | 218 |
| 20 | 11.54 | 11.54 | 33.052 | 25.163 | 279.8 | 0.056 | 6.20 | 100.2 | | | | | | 0.89 | 0.31 | 20 | 217 |
| 30 ISL | 11.44 D | 11.44 | 33.113 D | 25.228 | 273.8 | 0.084 | 5.97 D | 96.3 | | | | | | 0.65 | 0.25 | 30 | |
| 31 | 11.43 | 11.43 | 33.114 | 25.231 | 273.5 | 0.086 | 5.90 D | 95.2 | | | | | | 0.61 | 0.24 | 31 | 216 |
| 40 | 10.99 | 10.99 | 33.243 | 25.411 | 256.6 | 0.110 | 5.16 D | 82.5 | | | | | | 0.31 | 0.30 | 40 | 215 |
| 50 | 10.56 | 10.55 | 33.491 | 25.679 | 231.3 | 0.135 | 3.97 | 63.0 | | | | | | 0.15 | 0.27 | 50 | 214 |
| 60 | 9.99 | 9.98 | 33.617 | 25.875 | 212.8 | 0.157 | 3.27 D | 51.3 | | | | | | 0.07 | 0.24 | 60 | 213 |
| 75 ISL | 9.64 D | 9.63 | 33.679 D | 25.982 | 203.0 | 0.188 | 3.12 D | 48.6 | | | | | | 0.05 | 0.20 | 75 | |
| 79 | 9.62 | 9.61 | 33.715 | 26.014 | 200.1 | 0.196 | 2.90 | 45.1 | | | | | | 0.04 | 0.19 | 79 | 212 |
| 100 ISL | 9.30 D | 9.29 | 33.830 D | 26.156 | 186.9 | 0.237 | 2.56 D | 39.6 | | | | | | 0.03 | 0.13 | 101 | |
| 101 | 9.30 | 9.29 | 33.830 | 26.156 | 186.9 | 0.239 | 2.55 | 39.4 | | | | | | 0.03 | 0.13 | 102 | 211 |
| 119 | 9.10 | 9.09 | 33.908 | 26.250 | 178.4 | 0.272 | 2.36 | 36.3 | | | | | | 0.02 | 0.16 | 120 | 210 |
| 125 ISL | 9.06 D | 9.05 | 33.914 D | 26.261 | 177.5 | 0.282 | 2.36 D | 36.3 | | | | | | 0.02 | 0.15 | 126 | |
| 150 ISL | 8.80 D | 8.78 | 34.005 D | 26.373 | 167.2 | 0.325 | 1.99 D | 30.5 | | | | | | 0.02 | 0.09 | 151 | |
| 151 | 8.83 | 8.81 | 34.004 | 26.368 | 167.8 | 0.327 | 1.98 | 30.3 | | | | | | 0.02 | 0.09 | 152 | 209 |
| 170 | 8.47 | 8.45 | 34.013 | 26.431 | 162.0 | 0.358 | 2.09 D | 31.8 | | | | | | 0.02 | 0.08 | 171 | 208 |
| 200 ISL | 8.20 D | 8.18 | 34.069 D | 26.516 | 154.4 | 0.406 | 1.70 D | 25.7 | | | | | | 0.02 | 0.07 | 201 | |
| 201 | 8.21 | 8.19 | 34.064 | 26.511 | 155.0 | 0.407 | 1.75 | 26.4 | | | | | | 0.02 A | 0.07 A | 202 | 207 |
| 229 | 7.97 | 7.95 | 34.102 | 26.577 | 149.1 | 0.450 | 1.42 D | 21.3 | | | | | | | | 230 | 206 |
| 250 ISL | 7.81 D | 7.79 | 34.106 D | 26.604 | 146.8 | 0.481 | 1.37 D | 20.5 | | | | | | | | 252 | |
| 270 | 7.46 | 7.43 | 34.109 | 26.656 | 142.0 | 0.510 | 1.28 | 19.0 | | | | | | | | 272 | 205 |
| 300 ISL | 7.20 D | 7.17 | 34.120 D | 26.702 | 138.0 | 0.552 | 1.15 D | 17.0 | | | | | | | | 302 | |
| 320 | 6.99 | 6.96 | 34.129 | 26.738 | 134.8 | 0.579 | 1.03 D | 15.1 | | | | | | | | 322 | 204 |
| 379 | 6.54 | 6.51 | 34.153 | 26.818 | 127.8 | 0.657 | 0.81 | 11.8 | | | | | | | | 382 | 203 |
| 400 ISL | 6.36 D | 6.32 | 34.152 D | 26.841 | 125.7 | 0.683 | 0.76 D | 11.0 | | | | | | | | 403 | |
| 442 | 6.03 | 5.99 | 34.159 | 26.889 | 121.5 | 0.735 | 0.69 D | 9.9 | | | | | | | | 445 | 202 |
| 500 ISL | 5.94 D | 5.90 | 34.235 D | 26.961 | 115.4 | 0.804 | 0.42 D | 6.0 | | | | | | | | 504 | |
| 516 | 5.82 | 5.78 | 34.251 | 26.989 | 112.9 | 0.822 | 0.38 | 5.4 | | | | | | | | 520 | 201 |

A) FIRST FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 60.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 56.9 N | 125 3.4 W | 03/02/11 | 0435 UTC | 4301 m | 280 07 kn | | | 1029.2 mb | 12.1 C | 10.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.58 | 12.58 | 32.752 | 24.734 | 320.1 | 0.000 | 6.24 | 102.9 | | | | | | 0.60 | 0.17 | 0 | |
| 3 | 12.58 | 12.58 | 32.752 | 24.734 | 320.2 | 0.010 | 6.24 | 102.9 | | | | | | 0.60 | 0.17 | 3 | 222 |
| 5 | 12.58 | 12.58 | 32.752 | 24.734 | 320.2 | 0.016 | | | | | | | | 0.59 | 0.17 | 5 | 221 |
| 10 | 12.44 | 12.44 | 32.751 | 24.760 | 317.8 | 0.032 | 6.27 | 103.1 | | | | | | 0.77 | 0.25 | 10 | 220 |
| 20 | 12.41 | 12.41 | 32.753 | 24.768 | 317.4 | 0.064 | 6.26 | 102.9 | | | | | | 0.94 | 0.30 | 20 | 219 |
| 30 | 12.41 | 12.41 | 32.758 | 24.772 | 317.2 | 0.095 | 6.25 D | 102.7 | | | | | | 1.07 | 0.29 | 30 | 218 |
| 40 | 12.36 | 12.35 | 32.772 | 24.793 | 315.5 | 0.127 | 6.13 D | 100.6 | | | | | | 0.87 | 0.30 | 40 | 217 |
| 50 | 11.62 | 11.61 | 32.970 | 25.085 | 287.9 | 0.157 | 5.70 | 92.2 | | | | | | 0.38 | 0.22 | 50 | 216 |
| 60 | 11.01 | 11.00 | 33.096 | 25.293 | 268.3 | 0.185 | 5.33 D | 85.2 | | | | | | 0.19 | 0.14 | 60 | 215 |
| 75 ISL | 10.28 D | 10.27 | 33.261 D | 25.549 | 244.2 | 0.223 | 4.80 D | 75.6 | | | | | | 0.13 | 0.13 | 75 | |
| 80 | 10.18 | 10.17 | 33.330 | 25.620 | 237.6 | 0.236 | 4.60 | 72.3 | | | | | | 0.11 | 0.13 | 80 | 214 |
| 100 | 8.98 | 8.97 | 33.497 | 25.946 | 206.7 | 0.280 | 3.89 | 59.6 | | | | | | 0.01 | 0.07 | 101 | 213 |
| 120 | 8.57 | 8.56 | 33.660 | 26.138 | 188.8 | 0.320 | 3.43 | 52.1 | | | | | | 0.01 | 0.07 | 121 | 212 |
| 125 ISL | 8.42 D | 8.41 | 33.675 D | 26.173 | 185.6 | 0.329 | 3.50 D | 53.0 | | | | | | 0.01 | 0.06 | 126 | |
| 150 | 7.96 | 7.95 | 33.824 | 26.359 | 168.3 | 0.373 | 3.27 | 49.1 | | | | | | 0.00 | 0.04 | 151 | 211 |
| 170 | 7.87 | 7.85 | 33.909 | 26.439 | 161.0 | 0.406 | 2.77 D | 41.5 | | | | | | 0.01 | 0.04 | 171 | 210 |
| 200 | 7.45 | 7.43 | 33.956 | 26.537 | 152.1 | 0.453 | 2.49 | 36.9 | | | | | | 0.01 | 0.04 | 201 | 209 |
| 231 | 7.25 | 7.23 | 34.018 | 26.614 | 145.2 | 0.499 | 1.84 D | 27.2 | | | | | | | | 232 | 208 |
| 250 ISL | 7.08 D | 7.06 | 34.022 D | 26.641 | 142.9 | 0.527 | 1.79 D | 26.3 | | | | | | | | 252 | |
| 269 | 6.93 | 6.90 | 34.071 | 26.700 | 137.5 | 0.553 | 1.36 | 19.9 | | | | | | | | 271 | 207 |
| 300 ISL | 6.35 D | 6.32 | 34.047 D | 26.758 | 132.1 | 0.595 | 1.30 D | 18.8 | | | | | | | | 302 | |
| 320 | 6.24 | 6.21 | 34.053 | 26.778 | 130.5 | 0.621 | 1.22 D | 17.6 | | | | | | | | 322 | 206 |
| 377 | 6.20 | 6.17 | 34.154 | 26.863 | 123.2 | 0.693 | 0.73 | 10.5 | | | | | | | | 380 | 204 |
| 400 ISL | 6.11 D | 6.07 | 34.155 D | 26.876 | 122.3 | 0.722 | 0.69 D | 9.9 | | | | | | | | 403 | |
| 440 | 5.49 | 5.45 | 34.138 | 26.939 | 116.2 | 0.769 | 0.69 D | 9.8 | | | | | | | | 443 | 202 |
| 500 ISL | 5.22 D | 5.18 | 34.183 D | 27.007 | 110.3 | 0.837 | 0.49 D | 6.9 | | | | | | | | 504 | |
| 514 | 5.15 | 5.11 | 34.182 | 27.014 | 109.6 | 0.853 | 0.45 | 6.3 | | | | | | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 60.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 36.3 N | 125 46.4 W | 02/02/11 | 2213 UTC | 4513 m | 320 11 kn | 010 03 05 | 1 | 1027.1 mb | 12.0 C | 11.9 C | 22m | 3/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.96 | 12.96 | 32.728 | 24.642 | 328.9 | 0.000 | 6.12 | 101.7 | | | | | | 0.39 | 0.08 | 0 | |
| 3 | 12.96 | 12.96 | 32.728 | 24.642 | 329.0 | 0.010 | 6.12 | 101.7 | | | | | | 0.39 | 0.08 | 3 | 220 |
| 5 | 12.98 | 12.98 | 32.728 | 24.638 | 329.4 | 0.016 | | | | | | | | 0.35 | 0.09 | 5 | 219 |
| 10 | 12.86 | 12.86 | 32.725 | 24.659 | 327.5 | 0.033 | 6.13 | 101.7 | | | | | | 0.39 | 0.15 | 10 | 218 |
| 20 | 12.63 | 12.63 | 32.698 | 24.683 | 325.4 | 0.066 | 6.15 | 101.5 | | | | | | 0.46 | 0.13 | 20 | 217 |
| 30 | 12.48 | 12.48 | 32.673 | 24.693 | 324.8 | 0.098 | 6.16 | 101.3 | | | | | | 0.50 | 0.14 | 30 | 216 |
| 40 | 12.40 | 12.39 | 32.663 | 24.701 | 324.3 | 0.130 | 6.17 | 101.3 | | | | | | 0.52 | 0.13 | 40 | 215 |
| 50 | 12.34 | 12.33 | 32.655 | 24.706 | 324.0 | 0.163 | 6.18 | 101.3 | | | | | | 0.51 | 0.13 | 50 | 214 |
| 60 | 11.64 | 11.63 | 32.647 | 24.830 | 312.3 | 0.195 | 6.20 | D100.2 | | | | | | 0.30 | 0.13 | 60 | 213 |
| 75 ISL | 11.10 D | 11.09 | 32.733 D | 24.995 | 297.0 | 0.240 | 6.18 | D 98.7 | | | | | | 0.12 | 0.11 | 75 | |
| 80 | 11.01 | 11.00 | 32.804 | 25.066 | 290.3 | 0.255 | 5.89 | 94.0 | | | | | | 0.10 | 0.10 | 80 | 212 |
| 100 | 11.27 | 11.26 | 33.209 | 25.335 | 265.2 | 0.311 | 5.70 | 91.7 | | | | | | 0.20 | 0.29 | 100 | 211 |
| 119 | 9.65 | 9.64 | 33.430 | 25.787 | 222.4 | 0.357 | 4.05 | 63.0 | | | | | | 0.05 | 0.12 | 120 | 210 |
| 125 ISL | 9.60 D | 9.59 | 33.509 D | 25.857 | 215.9 | 0.370 | 3.90 | D 60.6 | | | | | | 0.04 | 0.12 | 126 | |
| 150 ISL | 9.26 D | 9.24 | 33.724 D | 26.080 | 195.1 | 0.421 | 3.03 | D 46.8 | | | | | | 0.01 | 0.11 | 151 | |
| 152 | 9.26 | 9.24 | 33.738 | 26.091 | 194.1 | 0.425 | 2.89 | 44.6 | | | | | | 0.01 | 0.11 | 153 | 209 |
| 170 | 8.74 | 8.72 | 33.805 | 26.226 | 181.5 | 0.459 | 2.93 | D 44.7 | | | | | | 0.01 | 0.09 | 171 | 208 |
| 200 | 8.62 | 8.60 | 33.957 | 26.365 | 169.0 | 0.512 | 2.24 | 34.1 | | | | | | 0.01 | 0.05 | 201 | 207 |
| 231 | 8.12 | 8.10 | 33.987 | 26.464 | 159.9 | 0.563 | 2.18 | D 32.8 | | | | | | | | 232 | 206 |
| 250 ISL | 7.75 D | 7.73 | 33.988 D | 26.520 | 154.8 | 0.593 | 2.25 | D 33.6 | | | | | | | | 251 | |
| 271 | 7.35 | 7.32 | 33.971 | 26.563 | 150.7 | 0.625 | 2.44 | 36.1 | | | | | | | | 273 | 205 |
| 300 ISL | 7.01 D | 6.98 | 33.984 D | 26.621 | 145.5 | 0.668 | 2.30 | D 33.8 | | | | | | | | 302 | |
| 321 | 6.78 | 6.75 | 33.989 | 26.656 | 142.3 | 0.698 | 2.14 | D 31.3 | | | | | | | | 323 | 204 |
| 380 | 6.58 | 6.55 | 34.091 | 26.764 | 132.9 | 0.779 | 1.06 | 15.4 | | | | | | | | 382 | 203 |
| 400 ISL | 6.36 D | 6.32 | 34.098 D | 26.799 | 129.8 | 0.805 | 1.01 | D 14.6 | | | | | | | | 403 | |
| 440 | 6.03 | 5.99 | 34.126 | 26.863 | 123.9 | 0.856 | 0.81 | D 11.6 | | | | | | | | 443 | 202 |
| 500 ISL | 5.67 D | 5.63 | 34.157 D | 26.933 | 117.8 | 0.929 | 0.61 | D 8.7 | | | | | | | | 504 | |
| 516 | 5.63 | 5.59 | 34.161 | 26.941 | 117.1 | 0.947 | 0.56 | 8.0 | | | | | | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 63.3 52.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 18.5 N | 122 37.2 W | 04/02/11 | 0259 UTC | 93 m | 270 07 kn | | | 1028.6 mb | 11.5 C | 10.1 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.90 | 11.90 | 33.327 | 25.309 | 265.3 | 0.000 | 8.00 | 130.5 | | | | | | 13.75 | 2.71 | 0 | |
| 2 | 11.90 | 11.90 | 33.327 | 25.309 | 265.4 | 0.005 | 8.00 | 130.5 | | | | | | 13.75 | 2.71 | 2 | 209 |
| 5 | 11.90 | 11.90 | 33.327 | 25.309 | 265.5 | 0.013 | | | | | | | | 14.27 | 2.40 | 5 | 208 |
| 10 | 11.67 | 11.67 | 33.326 | 25.351 | 261.6 | 0.026 | 7.62 | 123.7 | | | | | | 14.69 | 2.07 | 10 | 207 |
| 20 | 11.47 | 11.47 | 33.337 | 25.397 | 257.5 | 0.052 | 6.34 | 102.5 | | | | | | 12.71 | 1.32 | 20 | 206 |
| 30 | 11.32 | 11.32 | 33.357 | 25.440 | 253.6 | 0.078 | 5.91 | 95.3 | | | | | | 11.38 | 0.64 | 30 | 205 |
| 39 | 11.07 | 11.07 | 33.387 | 25.508 | 247.3 | 0.101 | 5.27 | D 84.5 | | | | | | 7.78 | 1.44 | 39 | 204 |
| 50 | 10.43 | 10.42 | 33.517 | 25.722 | 227.2 | 0.127 | 3.98 | 63.0 | | | | | | 1.50 | 0.72 | 50 | 203 |
| 61 | 10.27 | 10.26 | 33.540 | 25.768 | 223.1 | 0.151 | 3.48 | D 54.9 | | | | | | 0.53 | 0.58 | 61 | 202 |
| 75 ISL | 10.04 D | 10.03 | 33.652 D | 25.895 | 211.4 | 0.182 | 3.15 | D 49.5 | | | | | | 0.32 | 0.63 | 75 | |
| 80 | 10.04 | 10.03 | 33.659 | 25.900 | 210.9 | 0.192 | 3.09 | 48.5 | | | | | | 0.24 | 0.65 | 80 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 63.3 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 12.7 N | 122 50.4 W | 04/02/11 | 0511 UTC | 306 m | 270 09 kn | | | 1029.1 mb | 9.5 C | 8.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.89 | 11.89 | 33.294 | 25.285 | 267.6 | 0.000 | 5.96 | 97.2 | | | | | | 0.70 | 0.22 | 0 | |
| 2 | 11.89 | 11.89 | 33.294 | 25.285 | 267.7 | 0.005 | 5.96 | 97.2 | | | | | | 0.70 | 0.22 | 2 | 217 |
| 5 | 11.89 | 11.89 | 33.294 | 25.286 | 267.7 | 0.013 | | | | | | | | 0.64 | 0.17 | 5 | 216 |
| 10 | 11.83 | 11.83 | 33.301 | 25.302 | 266.3 | 0.027 | 5.94 | 96.8 | | | | | | 1.08 | 0.28 | 10 | 215 |
| 20 | 11.59 | 11.59 | 33.322 | 25.363 | 260.7 | 0.053 | 5.75 | D 93.2 | | | | | | 0.44 | 0.17 | 20 | 214 |
| 30 | 10.81 | 10.81 | 33.393 | 25.559 | 242.3 | 0.078 | 4.67 | 74.5 | | | | | | 0.30 | 0.13 | 30 | 213 |
| 40 | 10.34 | 10.34 | 33.391 | 25.639 | 234.9 | 0.102 | 4.44 | D 70.1 | | | | | | 0.30 | 0.25 | 40 | 212 |
| 50 | 10.23 | 10.22 | 33.425 | 25.685 | 230.7 | 0.125 | 4.21 | 66.3 | | | | | | 0.28 | 0.22 | 50 | 211 |
| 60 | 9.79 | 9.78 | 33.448 | 25.777 | 222.2 | 0.148 | 3.86 | D 60.2 | | | | | | 0.18 | 0.24 | 60 | 210 |
| 75 ISL | 9.67 D | 9.66 | 33.610 D | 25.923 | 208.6 | 0.180 | 3.40 | D 52.9 | | | | | | 0.10 | 0.24 | 75 | |
| 81 | 9.38 | 9.37 | 33.716 | 26.054 | 196.3 | 0.192 | 3.01 | 46.6 | | | | | | 0.08 | 0.24 | 81 | 209 |
| 100 ISL | 9.14 D | 9.13 | 33.876 D | 26.218 | 181.0 | 0.228 | 2.45 | D 37.8 | | | | | | 0.08 | 0.17 | 101 | |
| 101 | 9.14 | 9.13 | 33.878 | 26.219 | 180.9 | 0.230 | 2.41 | 37.1 | | | | | | 0.08 | 0.17 | 102 | 208 |
| 120 | 9.06 | 9.05 | 33.907 | 26.255 | 177.9 | 0.264 | 2.35 | 36.2 | | | | | | 0.04 | 0.15 | 121 | 207 |
| 125 ISL | 8.89 D | 8.88 | 33.948 D | 26.314 | 172.4 | 0.273 | 2.31 | D 35.4 | | | | | | 0.03 | 0.14 | 126 | |
| 150 | 8.65 | 8.63 | 34.000 | 26.393 | 165.3 | 0.315 | 2.06 | 31.4 | | | | | | 0.02 | 0.11 | 151 | 206 |
| 171 | 8.51 | 8.49 | 34.014 | 26.426 | 162.6 | 0.350 | 2.07 | D 31.5 | | | | | | 0.01 | 0.14 | 172 | 205 |
| 200 | 8.25 | 8.23 | 34.036 | 26.483 | 157.6 | 0.396 | 1.95 | 29.5 | | | | | | 0.01 | 0.07 | 201 | 204 |
| 231 | 8.26 | 8.24 | 34.061 | 26.501 | 156.4 | 0.445 | 1.79 | D 27.1 | | | | | | | | 232 | 203 |
| 250 ISL | 8.01 D | 7.98 | 34.108 D | 26.576 | 149.6 | 0.474 | 1.44 | D 21.7 | | | | | | | | 252 | |
| 271 | 7.83 | 7.80 | 34.122 | 26.614 | 146.3 | 0.505 | 1.30 | 19.5 | | | | | | | | 273 | 202 |
| 292 | 7.69 | 7.66 | 34.131 | 26.641 | 144.0 | 0.535 | 1.21 | 18.1 | | | | | | | | 294 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 63.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 2.7 N | 123 11.7 W | 04/02/11 | 0857 UTC | 2545 m | 250 09 kn | | | 1028.7 mb | 11.5 C | 10.2 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.83 | 11.83 | 33.272 | 25.280 | 268.2 | 0.000 | 6.16 | 100.3 | | | | | | 0.73 | 0.17 | 0 | |
| 3 | 11.83 | 11.83 | 33.272 | 25.280 | 268.2 | 0.008 | 6.16 | 100.3 | | | | | | 0.73 | 0.17 | 3 | 220 |
| 5 | 11.83 | 11.83 | 33.273 | 25.280 | 268.2 | 0.013 | | | | | | | | 0.69 | 0.17 | 5 | 219 |
| 10 | 11.84 | 11.84 | 33.273 | 25.279 | 268.5 | 0.027 | 6.16 | 100.4 | | | | | | 0.69 | 0.19 | 10 | 218 |
| 19 | 11.85 | 11.85 | 33.283 | 25.285 | 268.1 | 0.051 | 6.12 | 99.7 | | | | | | 0.79 | 0.06 | 19 | 217 |
| 20 ISL | 11.85 D | 11.85 | 33.282 D | 25.284 | 268.2 | 0.054 | 6.14 | D100.1 | | | | | | 0.78 | 0.07 | 20 | |
| 30 | 11.76 | 11.76 | 33.305 | 25.319 | 265.2 | 0.080 | 6.02 | D 97.9 | | | | | | 0.63 | 0.24 | 30 | 216 |
| 40 | 11.33 | 11.33 | 33.407 | 25.477 | 250.3 | 0.106 | 4.99 | D 80.5 | | | | | | 0.53 | 0.31 | 40 | 215 |
| 50 ISL | 10.89 D | 10.88 | 33.457 D | 25.595 | 239.3 | 0.131 | 4.51 | D 72.1 | | | | | | 0.41 | 0.33 | 50 | |
| 51 | 10.90 | 10.89 | 33.456 | 25.593 | 239.6 | 0.133 | 4.45 | 71.1 | | | | | | 0.39 | 0.33 | 51 | 214 |
| 60 | 10.19 | 10.18 | 33.528 | 25.772 | 222.7 | 0.154 | 3.87 | D 60.9 | | | | | | 0.21 | 0.34 | 60 | 213 |
| 75 ISL | 9.71 D | 9.70 | 33.666 D | 25.961 | 205.0 | 0.186 | 3.23 | D 50.4 | | | | | | 0.08 | 0.24 | 75 | |
| 79 | 9.58 | 9.57 | 33.694 | 26.004 | 201.0 | 0.194 | 3.09 | 48.0 | | | | | | 0.07 | 0.21 | 79 | 212 |
| 100 | 9.17 | 9.16 | 33.857 | 26.198 | 182.9 | 0.234 | 2.55 | 39.3 | | | | | | 0.04 | 0.16 | 101 | 211 |
| 120 | 8.99 | 8.98 | 33.931 | 26.285 | 175.0 | 0.270 | 2.37 | 36.4 | | | | | | 0.03 | 0.14 | 121 | 210 |
| 125 ISL | 8.98 D | 8.97 | 33.951 D | 26.302 | 173.5 | 0.279 | 2.25 | D 34.6 | | | | | | 0.03 | 0.14 | 126 | |
| 150 | 8.82 | 8.80 | 34.011 | 26.375 | 167.1 | 0.321 | 1.98 | 30.3 | | | | | | 0.02 | 0.12 | 151 | 209 |
| 170 | 8.67 | 8.65 | 34.050 | 26.429 | 162.3 | 0.354 | 1.77 | D 27.0 | | | | | | 0.05 | 0.12 | 171 | 208 |
| 200 ISL | 8.39 D | 8.37 | 34.084 D | 26.499 | 156.1 | 0.402 | 1.60 | D 24.3 | | | | | | 0.11 | 0.12 | 201 | |
| 201 | 8.39 | 8.37 | 34.085 | 26.500 | 156.0 | 0.404 | 1.56 | 23.7 | | | | | | 0.11 | 0.12 | 202 | 207 |
| 229 | 8.14 | 8.12 | 34.107 | 26.555 | 151.2 | 0.447 | 1.46 | D 22.0 | | | | | | | | 230 | 206 |
| 250 ISL | 7.87 D | 7.84 | 34.127 D | 26.611 | 146.2 | 0.478 | 1.30 | D 19.5 | | | | | | | | 252 | |
| 270 | 7.65 | 7.62 | 34.143 | 26.656 | 142.2 | 0.507 | 1.12 | 16.7 | | | | | | | | 272 | 205 |
| 300 ISL | 7.34 D | 7.31 | 34.157 D | 26.712 | 137.2 | 0.549 | 0.99 | D 14.7 | | | | | | | | 302 | |
| 323 | 7.22 | 7.19 | 34.168 | 26.737 | 135.1 | 0.580 | 0.89 | D 13.1 | | | | | | | | 325 | 204 |
| 379 | 6.64 | 6.61 | 34.188 | 26.833 | 126.5 | 0.653 | 0.67 | 9.8 | | | | | | | | 382 | 203 |
| 400 ISL | 6.51 D | 6.47 | 34.208 D | 26.866 | 123.6 | 0.679 | 0.60 | D 8.7 | | | | | | | | 403 | |
| 439 | 6.24 | 6.20 | 34.224 | 26.914 | 119.4 | 0.727 | 0.51 | D 7.4 | | | | | | | | 442 | 202 |
| 500 ISL | 5.92 D | 5.88 | 34.245 D | 26.972 | 114.4 | 0.798 | 0.42 | D 6.0 | | | | | | | | 504 | |
| 514 | 5.84 | 5.80 | 34.254 | 26.989 | 112.9 | 0.814 | 0.37 | 5.3 | | | | | | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 63.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 42.9 N | 123 54.7 W | 04/02/11 | 1457 UTC | 3882 m | 280 13 kn | 340 03 05 | 1 | 1028.2 mb | 12.5 C | 11.1 C | 12m | 3/8 | CU |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.39 | 13.39 | 32.891 | 24.682 | 325.0 | 0.000 | 6.07 | 101.9 | | | | | | 0.63 | 0.18 | 0 | |
| 2 | 13.39 | 13.39 | 32.891 | 24.683 | 325.1 | 0.007 | 6.07 | 101.9 | | | | | | 0.63 | 0.18 | 2 | 220 |
| 6 | 13.39 | 13.39 | 32.891 | 24.683 | 325.1 | 0.020 | | | | | | | | 0.65 | 0.18 | 6 | 219 |
| 9 | 13.40 | 13.40 | 32.891 | 24.681 | 325.4 | 0.029 | 6.07 | 101.9 | | | | | | 0.62 | 0.20 | 9 | 218 |
| 10 ISL | 13.40 D | 13.40 | 32.889 D | 24.679 | 325.6 | 0.033 | 6.03 | D101.3 | | | | | | 0.62 | 0.20 | 10 | |
| 20 | 13.40 | 13.40 | 32.891 | 24.681 | 325.7 | 0.065 | 6.07 | 101.9 | | | | | | 0.64 | 0.19 | 20 | 217 |
| 29 | 13.40 | 13.40 | 32.891 | 24.681 | 325.9 | 0.094 | 6.04 | D101.4 | | | | | | 0.60 | 0.19 | 29 | 216 |
| 30 ISL | 13.40 D | 13.40 | 32.889 D | 24.680 | 326.1 | 0.098 | 6.05 | D101.6 | | | | | | 0.59 | 0.19 | 30 | |
| 40 | 13.11 | 13.10 | 32.847 | 24.705 | 323.9 | 0.130 | 6.02 | D100.5 | | | | | | 0.45 | 0.20 | 40 | 215 |
| 50 ISL | 12.76 D | 12.75 | 32.990 D | 24.885 | 307.0 | 0.162 | 5.80 | D 96.2 | | | | | | 0.33 | 0.19 | 50 | |
| 51 | 12.79 | 12.78 | 33.070 | 24.941 | 301.7 | 0.165 | 5.51 | 91.5 | | | | | | 0.32 | 0.19 | 51 | 214 |
| 59 | 12.20 | 12.19 | 33.260 | 25.202 | 277.0 | 0.188 | 4.81 | D 78.9 | | | | | | 0.17 | 0.15 | 59 | 213 |
| 75 ISL | 10.45 D | 10.44 | 33.390 D | 25.620 | 237.4 | 0.229 | 4.21 | D 66.6 | | | | | | 0.08 | 0.09 | 75 | |
| 85 | 10.06 | 10.05 | 33.404 | 25.698 | 230.2 | 0.252 | 4.14 | 64.9 | | | | | | 0.03 | 0.06 | 85 | 212 |
| 99 | 9.46 | 9.45 | 33.552 | 25.913 | 210.0 | 0.283 | 3.68 | 57.0 | | | | | | 0.01 | 0.04 | 100 | 211 |
| 100 ISL | 9.42 D | 9.41 | 33.579 D | 25.940 | 207.4 | 0.285 | 3.61 | D 55.9 | | | | | | 0.01 | 0.04 | 101 | |
| 119 | 9.15 | 9.14 | 33.729 | 26.101 | 192.5 | 0.323 | 3.13 | 48.2 | | | | | | 0.01 | 0.04 | 120 | 210 |
| 125 ISL | 8.95 D | 8.94 | 33.785 D | 26.177 | 185.4 | 0.335 | 3.06 | D 46.9 | | | | | | 0.01 | 0.04 | 126 | |
| 150 | 8.58 | 8.56 | 33.898 | 26.323 | 171.9 | 0.379 | 2.79 | 42.5 | | | | | | 0.00 | 0.03 | 151 | 209 |
| 170 | 8.38 | 8.36 | 33.972 | 26.412 | 163.7 | 0.413 | 2.38 | D 36.1 | | | | | | 0.01 | 0.04 | 171 | 208 |
| 197 | 8.14 | 8.12 | 33.993 | 26.465 | 159.1 | 0.456 | 2.41 | 36.3 | | | | | | 0.02 | 0.03 | 198 | 207 |
| 200 ISL | 8.09 D | 8.07 | 33.990 D | 26.471 | 158.7 | 0.461 | 2.50 | D 37.6 | | | | | | | | 201 | |
| 230 | 7.64 | 7.62 | 34.012 | 26.554 | 151.1 | 0.508 | 2.34 | D 34.9 | | | | | | | | 231 | 206 |
| 250 ISL | 7.40 D | 7.38 | 34.036 D | 26.607 | 146.3 | 0.537 | 1.88 | D 27.9 | | | | | | | | 252 | |
| 275 | 6.99 | 6.96 | 34.037 | 26.665 | 140.9 | 0.573 | 1.77 | 26.0 | | | | | | | | 277 | 205 |
| 300 ISL | 6.80 D | 6.77 | 34.054 D | 26.705 | 137.5 | 0.608 | 1.51 | D 22.1 | | | | | | | | 302 | |
| 319 | 6.65 | 6.62 | 34.070 | 26.738 | 134.6 | 0.634 | 1.34 | D 19.5 | | | | | | | | 321 | 204 |
| 379 | 6.59 | 6.56 | 34.171 | 26.826 | 127.1 | 0.712 | 0.76 | 11.1 | | | | | | | | 382 | 203 |
| 400 ISL | 6.54 D | 6.50 | 34.197 D | 26.853 | 124.8 | 0.739 | 0.65 | D 9.5 | | | | | | | | 403 | |
| 438 | 6.27 | 6.23 | 34.214 | 26.902 | 120.5 | 0.786 | 0.56 | D 8.1 | | | | | | | | 441 | 202 |
| 500 ISL | 5.88 D | 5.84 | 34.246 D | 26.978 | 113.8 | 0.858 | 0.41 | D 5.9 | | | | | | | | 504 | |
| 518 | 5.80 | 5.76 | 34.251 | 26.992 | 112.7 | 0.879 | 0.37 | 5.3 | | | | | | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 63.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 22.4 N | 124 38.1 W | 04/02/11 | 2134 UTC | 4165 m | 280 26 kn | 340 06 05 | 1 | 1027.5 mb | 13.5 C | 12.5 C | 14m | 4/8 | CU |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.50 D | 13.50 | 32.760 D | 24.559 | 336.8 | 0.000 | 6.09 D | 102.4 | | | | | | 0.43 | 0.13 | 0 | |
| 3 | 13.50 | 13.50 | 32.813 | 24.600 | 332.9 | 0.010 | 6.09 | 102.4 | | | | | | 0.43 | 0.13 | 3 | 220 |
| 5 | 13.50 | 13.50 | 32.813 | 24.600 | 333.0 | 0.017 | 6.10 D | 102.6 | | | | | | 0.42 | 0.12 | 5 | 219 |
| 10 | 13.50 | 13.50 | 32.813 | 24.600 | 333.1 | 0.033 | 6.09 | 102.4 | | | | | | 0.48 | 0.14 | 10 | 218 |
| 20 | 12.81 | 12.81 | 32.775 | 24.708 | 323.1 | 0.066 | 6.23 | 103.3 | | | | | | 0.57 | 0.15 | 20 | 217 |
| 30 | 12.34 | 12.34 | 32.753 | 24.782 | 316.3 | 0.098 | 6.26 D | 102.7 | | | | | | 0.62 | 0.20 | 30 | 216 |
| 40 | 11.92 | 11.91 | 32.910 | 24.983 | 297.4 | 0.129 | 6.09 D | 99.1 | | | | | | 0.75 | 0.33 | 40 | 215 |
| 50 | 11.37 | 11.36 | 33.009 | 25.161 | 280.7 | 0.158 | 5.77 | 92.9 | | | | | | 0.40 | 0.23 | 50 | 214 |
| 61 | 10.33 | 10.32 | 33.103 | 25.417 | 256.4 | 0.187 | 5.21 D | 82.0 | | | | | | 0.09 | 0.07 | 61 | 213 |
| 75 ISL | 9.93 D | 9.92 | 33.381 D | 25.701 | 229.7 | 0.221 | 4.20 D | 65.7 | | | | | | 0.05 | 0.07 | 75 | |
| 80 | 9.76 | 9.75 | 33.469 | 25.798 | 220.5 | 0.233 | 3.94 | 61.4 | | | | | | 0.03 | 0.07 | 80 | 212 |
| 100 | 9.32 | 9.31 | 33.607 | 25.978 | 203.8 | 0.275 | 3.39 | 52.4 | | | | | | 0.01 | 0.07 | 101 | 211 |
| 120 | 8.77 | 8.76 | 33.688 | 26.129 | 189.7 | 0.314 | 3.29 | 50.2 | | | | | | 0.00 | 0.06 | 121 | 210 |
| 125 ISL | 8.52 D | 8.51 | 33.735 D | 26.205 | 182.6 | 0.324 | 3.23 D | 49.0 | | | | | | 0.00 | 0.06 | 126 | |
| 150 | 8.15 | 8.13 | 33.845 | 26.347 | 169.5 | 0.368 | 3.08 | 46.4 | | | | | | 0.00 | 0.05 | 151 | 209 |
| 171 | 7.78 | 7.76 | 33.891 | 26.438 | 161.1 | 0.402 | 2.94 D | 43.9 | | | | | | 0.01 | 0.04 | 172 | 208 |
| 200 | 7.23 | 7.21 | 33.910 | 26.531 | 152.5 | 0.448 | 3.03 | 44.7 | | | | | | 0.01 | 0.03 | 201 | 207 |
| 232 | 6.72 | 6.70 | 33.935 | 26.621 | 144.3 | 0.495 | 2.61 D | 38.1 | | | | | | | | 233 | 206 |
| 250 ISL | 6.82 D | 6.80 | 34.000 D | 26.659 | 141.0 | 0.521 | 1.93 D | 28.2 | | | | | | | | 252 | |
| 270 | 6.64 | 6.62 | 34.012 | 26.693 | 138.1 | 0.549 | 1.72 | 25.0 | | | | | | | | 272 | 205 |
| 300 ISL | 6.41 D | 6.38 | 34.042 D | 26.747 | 133.2 | 0.590 | 1.30 D | 18.8 | | | | | | | | 302 | |
| 320 | 6.28 | 6.25 | 34.054 | 26.773 | 130.9 | 0.616 | 1.18 D | 17.0 | | | | | | | | 322 | 204 |
| 378 | 5.83 | 5.80 | 34.086 | 26.856 | 123.6 | 0.690 | 0.91 | 13.0 | | | | | | | | 381 | 203 |
| 400 ISL | 5.66 D | 5.63 | 34.095 D | 26.884 | 121.0 | 0.717 | 0.84 D | 12.0 | | | | | | | | 403 | |
| 440 | 5.61 | 5.57 | 34.150 | 26.934 | 116.8 | 0.764 | 0.58 D | 8.2 | | | | | | | | 443 | 202 |
| 500 ISL | 5.06 D | 5.02 | 34.151 D | 27.000 | 110.7 | 0.833 | 0.52 D | 7.3 | | | | | | | | 504 | |
| 519 | 4.95 | 4.91 | 34.158 | 27.018 | 109.1 | 0.853 | 0.52 | 7.3 | | | | | | | | 523 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 47.1 N | 122 3.4 W | 01/02/11 | 0215 UTC | 254 m | 260 14 kn | | | 1021.2 mb | 11.8 C | 10.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.52 | 12.52 | 33.187 | 25.083 | 286.9 | 0.000 | 6.16 | 101.8 | | | | | | 0.76 | 0.28 | 0 | |
| 2 | 12.52 | 12.52 | 33.187 | 25.083 | 286.9 | 0.006 | 6.16 | 101.8 | | | | | | 0.76 | 0.28 | 2 | 214 |
| 5 | 12.52 | 12.52 | 33.187 | 25.083 | 287.0 | 0.014 | | | | | | | | 0.88 | 0.39 | 5 | 213 |
| 10 | 12.51 | 12.51 | 33.188 | 25.086 | 286.9 | 0.029 | 6.16 | 101.7 | | | | | | 0.98 | 0.35 | 10 | 212 |
| 20 | 12.52 | 12.52 | 33.187 | 25.083 | 287.4 | 0.057 | 6.16 | 101.8 | | | | | | 1.00 | 0.31 | 20 | 211 |
| 30 | 11.74 | 11.74 | 33.261 | 25.288 | 268.1 | 0.085 | 5.30 D | 86.1 | | | | | | 0.94 | 0.45 | 30 | 210 |
| 40 | 10.94 | 10.94 | 33.393 | 25.536 | 244.7 | 0.111 | 4.82 D | 77.1 | | | | | | 0.51 | 0.38 | 40 | 209 |
| 50 | 10.75 | 10.74 | 33.436 | 25.603 | 238.5 | 0.135 | 4.60 | 73.3 | | | | | | 0.34 | 0.34 | 50 | 208 |
| 59 | 10.54 | 10.53 | 33.480 | 25.675 | 231.9 | 0.156 | 4.25 D | 67.4 | | | | | | 0.25 | 0.30 | 59 | 207 |
| 75 ISL | 10.14 D | 10.13 | 33.617 D | 25.850 | 215.6 | 0.192 | 3.38 D | 53.2 | | | | | | 0.13 | 0.23 | 75 | |
| 80 | 10.05 | 10.04 | 33.656 | 25.896 | 211.3 | 0.203 | 3.14 | 49.3 | | | | | | 0.10 | 0.22 | 80 | 206 |
| 100 | 9.74 | 9.73 | 33.709 | 25.990 | 202.8 | 0.244 | 2.99 | 46.7 | | | | | | 0.06 | 0.22 | 101 | 205 |
| 120 | 9.55 | 9.54 | 33.761 | 26.062 | 196.3 | 0.284 | 2.85 D | 44.3 | | | | | | 0.06 | 0.19 | 121 | 204 |
| 125 ISL | 9.48 D | 9.47 | 33.796 D | 26.101 | 192.7 | 0.294 | 2.75 D | 42.7 | | | | | | 0.05 | 0.18 | 126 | |
| 149 | 9.06 | 9.04 | 33.911 | 26.259 | 178.1 | 0.338 | 2.31 | 35.5 | | | | | | 0.03 | 0.16 | 150 | 203 |
| 150 ISL | 8.95 D | 8.93 | 33.938 D | 26.297 | 174.5 | 0.340 | 2.29 D | 35.2 | | | | | | 0.03 | 0.16 | 151 | |
| 170 | 8.72 | 8.70 | 33.993 | 26.377 | 167.3 | 0.374 | 2.20 D | 33.6 | | | | | | 0.03 | 0.13 | 171 | 202 |
| 200 ISL | 8.55 D | 8.53 | 34.022 D | 26.426 | 163.1 | 0.424 | 2.07 D | 31.5 | | | | | | 0.02 | 0.12 | 201 | |
| 202 | 8.55 | 8.53 | 34.025 | 26.429 | 162.9 | 0.427 | 2.00 | 30.4 | | | | | | 0.02 | 0.12 | 203 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 37.2 N | 122 25.0 W | 01/02/11 | 0609 UTC | 1733 m | 280 18 kn | | | 1022.5 mb | 12.5 C | 10.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.21 | 12.21 | 33.191 | 25.145 | 280.9 | 0.000 | 6.12 | 100.4 | | | | | | 0.77 | 0.31 | 0 | |
| 3 | 12.21 | 12.21 | 33.191 | 25.145 | 281.0 | 0.008 | 6.12 | 100.4 | | | | | | 0.77 | 0.31 | 3 | 220 |
| 5 | 12.21 | 12.21 | 33.192 | 25.146 | 281.0 | 0.014 | | | | | | | | 0.73 | 0.35 | 5 | 219 |
| 10 | 12.21 | 12.21 | 33.192 | 25.146 | 281.1 | 0.028 | 6.13 | 100.6 | | | | | | 0.74 | 0.30 | 10 | 218 |
| 20 | 12.21 | 12.21 | 33.191 | 25.146 | 281.4 | 0.056 | 6.16 | 101.1 | | | | | | 0.79 | 0.41 | 20 | 217 |
| 30 | 12.25 | 12.25 | 33.208 | 25.152 | 281.1 | 0.084 | 6.09 | D100.0 | | | | | | 0.61 | 0.29 | 30 | 216 |
| 40 | 12.21 | 12.20 | 33.222 | 25.170 | 279.6 | 0.112 | 5.95 | 97.7 | | | | | | 0.53 | 0.33 | 40 | 215 |
| 50 ISL | 11.52 D | 11.51 | 33.304 D | 25.363 | 261.5 | 0.139 | 5.25 D | 85.0 | | | | | | 0.36 | 0.30 | 50 | |
| 60 | 11.25 | 11.24 | 33.350 | 25.448 | 253.6 | 0.165 | 4.82 D | 77.6 | | | | | | 0.19 | 0.27 | 60 | 214 |
| 75 ISL | 10.56 D | 10.55 | 33.474 D | 25.667 | 233.1 | 0.202 | 4.37 D | 69.3 | | | | | | 0.16 | 0.31 | 75 | |
| 80 | 10.45 | 10.44 | 33.484 | 25.694 | 230.6 | 0.213 | 4.17 | 66.0 | | | | | | 0.15 | 0.32 | 80 | 213 |
| 100 | 9.75 | 9.74 | 33.641 | 25.935 | 208.0 | 0.257 | 3.17 | 49.5 | | | | | | 0.05 | 0.28 | 101 | 212 |
| 125 ISL | 9.25 D | 9.24 | 33.824 D | 26.160 | 187.1 | 0.307 | 2.67 D | 41.2 | | | | | | 0.03 | 0.23 | 126 | |
| 150 ISL | 8.99 D | 8.97 | 33.915 D | 26.273 | 176.8 | 0.352 | 2.31 D | 35.5 | | | | | | 0.01 | 0.17 | 151 | |
| 151 | 8.99 | 8.97 | 33.920 | 26.277 | 176.4 | 0.354 | 2.30 D | 35.3 | | | | | | 0.01 | 0.17 | 152 | 211 |
| 200 | 8.20 | 8.18 | 33.991 | 26.455 | 160.2 | 0.436 | 2.33 | 35.2 | | | | | | 0.01 | 0.09 | 201 | 210 |
| 230 | 7.92 | 7.90 | 34.041 | 26.536 | 152.9 | 0.483 | 1.95 | 29.3 | | | | | | | | 231 | 209 |
| 250 ISL | 7.66 D | 7.64 | 34.047 D | 26.579 | 149.1 | 0.513 | 1.86 D | 27.7 | | | | | | | | 252 | |
| 300 | 7.25 | 7.22 | 34.073 | 26.658 | 142.2 | 0.586 | 1.57 D | 23.2 | | | | | | | | 302 | 208 |
| 400 ISL | 6.73 D | 6.69 | 34.157 D | 26.797 | 130.3 | 0.723 | 0.89 D | 13.0 | | | | | | | | 403 | |
| 401 | 6.72 | 6.68 | 34.153 | 26.795 | 130.5 | 0.724 | 0.87 | 12.7 | | | | | | | | 404 | 207 |
| 500 ISL | 6.25 D | 6.21 | 34.232 D | 26.920 | 119.7 | 0.848 | 0.49 D | 7.1 | | | | | | | | 504 | |
| 501 | 6.26 | 6.22 | 34.233 | 26.919 | 119.8 | 0.849 | 0.49 D | 7.1 | | | | | | | | 505 | 206 |
| 600 ISL | 5.40 D | 5.35 | 34.310 D | 27.087 | 104.2 | 0.960 | 0.28 D | 4.0 | | | | | | | | 605 | |
| 601 | 5.39 | 5.34 | 34.311 | 27.089 | 104.0 | 0.961 | 0.26 | 3.7 | | | | | | | | 606 | 205 |
| 700 ISL | 4.79 D | 4.73 | 34.365 D | 27.202 | 93.6 | 1.059 | 0.24 D | 3.3 | | | | | | | | 705 | |
| 701 | 4.79 | 4.73 | 34.367 | 27.204 | 93.5 | 1.060 | 0.24 D | 3.3 | | | | | | | | 707 | 204 |
| 800 ISL | 4.51 D | 4.45 | 34.397 D | 27.259 | 88.9 | 1.150 | 0.28 D | 3.9 | | | | | | | | 807 | |
| 803 | 4.50 | 4.44 | 34.399 | 27.262 | 88.6 | 1.152 | 0.26 | 3.6 | | | | | | | | 810 | 203 |
| 900 | 4.29 | 4.22 | 34.422 | 27.303 | 85.3 | 1.237 | 0.32 D | 4.4 | | | | | | | | 908 | 202 |
| 1000 ISL | 4.01 D | 3.93 | 34.450 D | 27.356 | 80.7 | 1.320 | 0.41 D | 5.6 | | | | | | | | 1009 | |
| 1030 | 3.94 | 3.86 | 34.461 | 27.372 | 79.4 | 1.344 | 0.41 | 5.6 | | | | | | | | 1039 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 27.4 N | 122 46.4 W | 01/02/11 | 1034 UTC | 2940 m | 280 21 kn | | | 1021.8 mb | 11.9 C | 10.3 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.51 | 12.51 | 33.187 | 25.085 | 286.7 | 0.000 | 6.11 | 100.9 | | | | | | 0.94 | 0.24 | 0 | |
| 3 | 12.51 | 12.51 | 33.187 | 25.085 | 286.8 | 0.009 | 6.11 | 100.9 | | | | | | 0.94 | 0.24 | 3 | 220 |
| 5 | 12.51 | 12.51 | 33.187 | 25.085 | 286.8 | 0.014 | | | | | | | | 0.92 | 0.36 | 5 | 219 |
| 9 | 12.51 | 12.51 | 33.187 | 25.085 | 286.9 | 0.026 | 6.14 | 101.4 | | | | | | 0.85 | 0.34 | 9 | 218 |
| 10 ISL | 12.52 D | 12.52 | 33.185 D | 25.082 | 287.3 | 0.029 | 6.17 | D101.9 | | | | | | 0.85 | 0.34 | 10 | |
| 19 | 12.52 | 12.52 | 33.187 | 25.083 | 287.3 | 0.055 | 6.13 | 101.3 | | | | | | 0.90 | 0.34 | 19 | 217 |
| 20 ISL | 12.52 D | 12.52 | 33.184 D | 25.081 | 287.6 | 0.057 | 6.17 | D101.9 | | | | | | 0.89 | 0.34 | 20 | |
| 30 | 12.48 | 12.48 | 33.190 | 25.094 | 286.6 | 0.086 | 6.06 | D100.0 | | | | | | 0.81 | 0.33 | 30 | 216 |
| 40 | 11.61 | 11.60 | 33.273 | 25.322 | 265.1 | 0.114 | 5.27 | 85.4 | | | | | | 0.35 | 0.29 | 40 | 215 |
| 50 ISL | 10.86 D | 10.85 | 33.350 D | 25.517 | 246.7 | 0.139 | 4.87 D | 77.7 | | | | | | 0.23 | 0.30 | 50 | |
| 60 | 10.70 | 10.69 | 33.384 | 25.572 | 241.7 | 0.164 | 4.34 D | 69.0 | | | | | | 0.12 | 0.30 | 60 | 214 |
| 75 ISL | 9.83 D | 9.82 | 33.564 D | 25.861 | 214.5 | 0.198 | 3.50 D | 54.7 | | | | | | 0.05 | 0.22 | 75 | |
| 80 | 9.78 | 9.77 | 33.582 | 25.883 | 212.5 | 0.209 | 3.53 | 55.1 | | | | | | 0.04 | 0.19 | 80 | 213 |
| 100 ISL | 9.38 D | 9.37 | 33.795 D | 26.116 | 190.8 | 0.249 | 2.65 D | 41.0 | | | | | | 0.01 | 0.19 | 101 | |
| 102 | 9.40 | 9.39 | 33.797 | 26.114 | 191.0 | 0.253 | 2.67 | 41.4 | | | | | | 0.01 | 0.19 | 103 | 212 |
| 125 ISL | 9.14 D | 9.13 | 33.949 D | 26.275 | 176.1 | 0.295 | 2.18 D | 33.6 | | | | | | 0.01 | 0.16 | 126 | |
| 149 | 8.64 | 8.62 | 33.970 | 26.371 | 167.4 | 0.336 | 2.32 D | 35.4 | | | | | | 0.01 | 0.12 | 150 | 211 |
| 150 ISL | 8.61 D | 8.59 | 33.972 D | 26.377 | 166.8 | 0.338 | 2.32 D | 35.4 | | | | | | 0.01 | 0.12 | 151 | |
| 200 | 8.22 | 8.20 | 34.059 | 26.505 | 155.4 | 0.418 | 1.94 | 29.3 | | | | | | 0.01 | 0.09 | 201 | 210 |
| 232 | 8.01 | 7.99 | 34.105 | 26.573 | 149.5 | 0.467 | 1.45 | 21.8 | | | | | | | | 233 | 209 |
| 250 ISL | 7.81 D | 7.79 | 34.127 D | 26.620 | 145.3 | 0.494 | 1.34 D | 20.1 | | | | | | | | 252 | |
| 300 ISL | 7.32 D | 7.29 | 34.154 D | 26.712 | 137.2 | 0.564 | 1.04 D | 15.4 | | | | | | | | 302 | |
| 301 | 7.34 | 7.31 | 34.155 | 26.710 | 137.4 | 0.566 | 1.03 D | 15.3 | | | | | | | | 303 | 208 |
| 400 | 6.64 | 6.60 | 34.199 | 26.842 | 126.0 | 0.696 | 0.62 | 9.0 | | | | | | | | 403 | 207 |
| 500 ISL | 5.72 D | 5.68 | 34.215 D | 26.973 | 114.1 | 0.816 | 0.45 D | 6.4 | | | | | | | | 504 | |
| 503 | 5.71 | 5.67 | 34.220 | 26.978 | 113.6 | 0.820 | 0.45 D | 6.4 | | | | | | | | 507 | 206 |
| 600 | 5.32 | 5.27 | 34.298 | 27.087 | 104.1 | 0.925 | 0.25 | 3.5 | | | | | | | | 605 | 205 |
| 700 ISL | 4.97 D | 4.91 | 34.358 D | 27.176 | 96.4 | 1.025 | 0.23 D | 3.2 | | | | | | | | 706 | |
| 702 | 4.97 | 4.91 | 34.359 | 27.177 | 96.3 | 1.027 | 0.24 D | 3.4 | | | | | | | | 708 | 204 |
| 800 ISL | 4.53 D | 4.47 | 34.396 D | 27.256 | 89.2 | 1.118 | 0.27 D | 3.7 | | | | | | | | 807 | |
| 802 | 4.53 | 4.47 | 34.398 | 27.258 | 89.1 | 1.120 | 0.25 | 3.5 | | | | | | | | 809 | 203 |
| 900 ISL | 4.20 D | 4.13 | 34.428 D | 27.318 | 83.8 | 1.205 | 0.34 D | 4.7 | | | | | | | | 908 | |
| 904 | 4.20 | 4.13 | 34.429 | 27.318 | 83.8 | 1.208 | 0.35 D | 4.8 | | | | | | | | 912 | 202 |
| 1000 ISL | 3.93 D | 3.85 | 34.453 D | 27.366 | 79.6 | 1.286 | 0.43 D | 5.9 | | | | | | | | 1009 | |
| 1033 | 3.86 | 3.78 | 34.457 | 27.377 | 78.7 | 1.313 | 0.41 | 5.6 | | | | | | | | 1042 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 65.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 17.2 N | 123 8.0 W | 01/02/11 | 1459 UTC | 3257 m | 280 19 kn | | | 1021.3 mb | 11.8 C | 10.3 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.88 | 11.88 | 33.118 | 25.151 | 280.4 | 0.000 | 6.17 | 100.5 | | | | | | 1.07 | 0.74 | 0 | |
| 2 | 11.88 | 11.88 | 33.118 | 25.151 | 280.5 | 0.006 | 6.17 | 100.5 | | | | | | 1.07 | 0.74 | 2 | 220 |
| 5 | 11.88 | 11.88 | 33.114 | 25.148 | 280.9 | 0.014 | | | | | | | | 1.16 | 0.64 | 5 | 219 |
| 10 | 11.88 | 11.88 | 33.112 | 25.146 | 281.1 | 0.028 | 6.21 | 101.2 | | | | | | 1.19 | 0.68 | 10 | 218 |
| 20 | 11.93 | 11.93 | 33.207 | 25.211 | 275.2 | 0.056 | 6.18 | 100.8 | | | | | | 1.05 | 0.46 | 20 | 217 |
| 30 | 11.73 | 11.73 | 33.290 | 25.313 | 265.8 | 0.083 | 6.00 D | 97.5 | | | | | | 0.57 | 0.53 | 30 | 216 |
| 41 | 11.00 | 11.00 | 33.397 | 25.529 | 245.4 | 0.111 | 4.71 | 75.4 | | | | | | 0.21 | 0.39 | 41 | 215 |
| 50 ISL | 10.15 D | 10.14 | 33.624 D | 25.854 | 214.7 | 0.132 | 3.44 D | 54.1 | | | | | | 0.14 | 0.34 | 50 | |
| 61 | 9.92 | 9.91 | 33.670 | 25.928 | 207.8 | 0.155 | 3.09 D | 48.4 | | | | | | 0.05 | 0.31 | 61 | 214 |
| 75 ISL | 9.48 D | 9.47 | 33.750 D | 26.064 | 195.2 | 0.183 | 2.88 D | 44.7 | | | | | | 0.04 | 0.24 | 75 | |
| 81 | 9.39 | 9.38 | 33.787 | 26.108 | 191.2 | 0.195 | 2.67 | 41.4 | | | | | | 0.03 | 0.21 | 81 | 213 |
| 100 ISL | 9.04 D | 9.03 | 33.920 D | 26.268 | 176.3 | 0.230 | 2.33 D | 35.8 | | | | | | 0.03 | 0.19 | 101 | |
| 101 | 9.04 | 9.03 | 33.919 | 26.267 | 176.3 | 0.231 | 2.30 | 35.4 | | | | | | 0.03 | 0.19 | 102 | 212 |
| 125 ISL | 8.70 D | 8.69 | 33.986 D | 26.374 | 166.7 | 0.273 | 2.10 D | 32.1 | | | | | | 0.02 | 0.15 | 126 | |
| 150 | 8.52 | 8.50 | 34.043 | 26.446 | 160.2 | 0.313 | 1.85 D | 28.1 | | | | | | 0.01 | 0.12 | 151 | 211 |
| 200 ISL | 8.07 D | 8.05 | 34.099 D | 26.559 | 150.3 | 0.391 | 1.47 D | 22.1 | | | | | | 0.01 | 0.12 | 201 | |
| 201 | 8.07 | 8.05 | 34.099 | 26.559 | 150.3 | 0.393 | 1.44 | 21.7 | | | | | | 0.01 | 0.12 | 202 | 210 |
| 232 | 7.88 | 7.86 | 34.105 | 26.592 | 147.6 | 0.439 | 1.38 | 20.7 | | | | | | | | 233 | 209 |
| 250 ISL | 7.69 D | 7.67 | 34.120 D | 26.632 | 144.1 | 0.465 | 1.35 D | 20.2 | | | | | | | | 252 | |
| 300 | 7.26 | 7.23 | 34.141 | 26.710 | 137.3 | 0.535 | 1.03 D | 15.2 | | | | | | | | 302 | 208 |
| 400 ISL | 6.44 D | 6.40 | 34.186 D | 26.858 | 124.3 | 0.666 | 0.61 D | 8.8 | | | | | | | | 403 | |
| 401 | 6.44 | 6.40 | 34.188 | 26.859 | 124.2 | 0.667 | 0.61 | 8.8 | | | | | | | | 404 | 207 |
| 500 ISL | 5.70 D | 5.66 | 34.248 D | 27.001 | 111.4 | 0.784 | 0.35 D | 5.0 | | | | | | | | 504 | |
| 501 | 5.70 | 5.66 | 34.249 | 27.002 | 111.3 | 0.785 | 0.35 D | 5.0 | | | | | | | | 505 | 206 |
| 600 | 5.31 | 5.26 | 34.296 | 27.087 | 104.1 | 0.892 | 0.24 | 3.4 | | | | | | | | 605 | 205 |
| 699 | 4.88 | 4.82 | 34.352 | 27.182 | 95.7 | 0.991 | 0.22 D | 3.1 | | | | | | | | 705 | 204 |
| 700 ISL | 4.86 D | 4.80 | 34.353 D | 27.185 | 95.4 | 0.992 | 0.22 D | 3.1 | | | | | | | | 706 | |
| 800 | 4.49 | 4.43 | 34.397 | 27.261 | 88.6 | 1.084 | 0.24 | 3.3 | | | | | | | | 807 | 203 |
| 900 ISL | 4.19 D | 4.12 | 34.429 D | 27.319 | 83.6 | 1.170 | 0.33 D | 4.5 | | | | | | | | 908 | |
| 901 | 4.20 | 4.13 | 34.430 | 27.319 | 83.6 | 1.171 | 0.33 D | 4.5 | | | | | | | | 909 | 202 |
| 1000 ISL | 3.90 D | 3.82 | 34.458 D | 27.373 | 78.8 | 1.251 | 0.44 D | 6.0 | | | | | | | | 1009 | |
| 1030 | 3.82 | 3.74 | 34.464 | 27.386 | 77.7 | 1.274 | 0.45 | 6.1 | | | | | | | | 1039 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 7.1 N | 123 28.9 W | 01/02/11 | 1841 UTC | 3574 m | 290 19 kn | 330 09 10 | 1 | 1022.2 mb | 13.1 C | 11.9 C | 15m | 4/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.90 | 11.90 | 32.885 | 24.966 | 298.0 | 0.000 | 6.25 | 101.7 | | | | | | 1.16 | 0.45 | 0 | |
| 3 | 11.90 | 11.90 | 32.885 | 24.966 | 298.1 | 0.009 | 6.25 | 101.7 | | | | | | 1.16 | 0.45 | 3 | 220 |
| 5 | 11.91 | 11.91 | 32.888 | 24.967 | 298.1 | 0.015 | | | | | | | | 1.07 | 0.39 | 5 | 219 |
| 10 ISL | 11.91 D | 11.91 | 32.883 D | 24.963 | 298.6 | 0.030 | 6.25 | 101.7 | | | | | | 1.10 | 0.36 | 10 | |
| 11 | 11.91 | 11.91 | 32.884 | 24.964 | 298.5 | 0.033 | 6.25 | 101.7 | | | | | | 1.11 | 0.35 | 11 | 218 |
| 20 ISL | 11.87 D | 11.87 | 32.906 D | 24.988 | 296.4 | 0.060 | 6.25 D | 101.6 | | | | | | 1.19 | 0.62 | 20 | |
| 21 | 11.86 | 11.86 | 32.916 | 24.998 | 295.5 | 0.063 | 6.24 | 101.5 | | | | | | 1.20 | 0.65 | 21 | 217 |
| 30 ISL | 11.83 D | 11.83 | 32.934 D | 25.018 | 293.8 | 0.089 | 6.25 D | 101.6 | | | | | | 1.16 | 0.56 | 30 | |
| 31 | 11.83 | 11.83 | 32.937 | 25.020 | 293.6 | 0.092 | 6.22 D | 101.1 | | | | | | 1.16 | 0.54 | 31 | 216 |
| 41 | 11.67 | 11.66 | 32.982 | 25.085 | 287.7 | 0.121 | 6.09 | 98.7 | | | | | | 0.88 | 0.57 | 41 | 215 |
| 50 ISL | 11.52 D | 11.51 | 33.036 D | 25.154 | 281.3 | 0.147 | 6.02 D | 97.2 | | | | | | 0.63 | 0.53 | 50 | |
| 59 | 11.43 | 11.42 | 33.190 | 25.291 | 268.5 | 0.171 | 5.75 D | 92.8 | | | | | | 0.41 | 0.50 | 59 | 214 |
| 75 ISL | 10.19 D | 10.18 | 33.277 D | 25.577 | 241.6 | 0.212 | 4.90 D | 77.0 | | | | | | 0.14 | 0.32 | 75 | |
| 80 | 9.98 | 9.97 | 33.267 | 25.604 | 239.0 | 0.224 | 4.72 | 73.8 | | | | | | 0.09 | 0.26 | 80 | 213 |
| 100 | 9.56 | 9.55 | 33.579 | 25.918 | 209.6 | 0.269 | 3.51 | 54.5 | | | | | | 0.03 | 0.13 | 101 | 212 |
| 125 ISL | 9.10 D | 9.09 | 33.833 D | 26.191 | 184.1 | 0.318 | 2.76 D | 42.5 | | | | | | 0.02 | 0.09 | 126 | |
| 150 | 8.68 | 8.66 | 33.917 | 26.323 | 171.9 | 0.363 | 3.25 D | 49.6 | | | | | | 0.01 | 0.06 | 151 | 211 |
| 200 | 7.98 | 7.96 | 34.004 | 26.498 | 156.1 | 0.445 | 2.24 | 33.7 | | | | | | 0.01 | 0.09 | 201 | 210 |
| 230 | 7.92 | 7.90 | 34.082 | 26.568 | 149.9 | 0.491 | 1.56 | 23.4 | | | | | | | | 231 | 209 |
| 250 ISL | 7.73 D | 7.71 | 34.078 D | 26.593 | 147.8 | 0.520 | 1.62 D | 24.2 | | | | | | | | 252 | |
| 300 ISL | 7.08 D | 7.05 | 34.094 D | 26.698 | 138.3 | 0.592 | 1.28 D | 18.8 | | | | | | | | 302 | |
| 301 | 7.11 | 7.08 | 34.096 | 26.696 | 138.6 | 0.593 | 1.27 D | 18.7 | | | | | | | | 303 | 208 |
| 400 ISL | 6.09 D | 6.05 | 34.147 D | 26.872 | 122.6 | 0.723 | 0.74 D | 10.6 | | | | | | | | 403 | |
| 401 | 6.10 | 6.06 | 34.150 | 26.873 | 122.5 | 0.724 | 0.72 | 10.4 | | | | | | | | 404 | 207 |
| 500 | 5.59 | 5.55 | 34.219 | 26.992 | 112.1 | 0.840 | 0.43 D | 6.1 | | | | | | | | 504 | 206 |
| 600 ISL | 4.93 D | 4.88 | 34.244 D | 27.089 | 103.3 | 0.948 | 0.31 D | 4.3 | | | | | | | | 605 | |
| 601 | 4.93 | 4.88 | 34.246 | 27.091 | 103.2 | 0.949 | 0.29 | 4.1 | | | | | | | | 606 | 205 |
| 700 ISL | 4.80 D | 4.74 | 34.344 D | 27.184 | 95.3 | 1.047 | 0.22 D | 3.1 | | | | | | | | 705 | |
| 701 | 4.80 | 4.74 | 34.352 | 27.191 | 94.7 | 1.048 | 0.23 D | 3.2 | | | | | | | | 706 | 204 |
| 800 | 4.43 | 4.37 | 34.408 | 27.276 | 87.1 | 1.138 | 0.27 | 3.7 | | | | | | | | 806 | 203 |
| 900 ISL | 4.11 D | 4.04 | 34.439 D | 27.336 | 81.9 | 1.222 | 0.37 D | 5.1 | | | | | | | | 908 | |
| 901 | 4.11 | 4.04 | 34.441 | 27.337 | 81.7 | 1.223 | 0.37 D | 5.1 | | | | | | | | 909 | 202 |
| 1000 ISL | 3.88 D | 3.80 | 34.459 D | 27.376 | 78.5 | 1.303 | 0.45 D | 6.1 | | | | | | | | 1009 | |
| 1030 | 3.84 | 3.76 | 34.463 | 27.383 | 78.0 | 1.326 | 0.45 | 6.1 | | | | | | | | 1039 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 75.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 57.3 N | 123 50.5 W | 01/02/11 | 2308 UTC | 3877 m | 290 21 kn | 350 06 05 | 1 | 1020.2 mb | 13.0 C | 12.0 C | 16m | 7/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.07 | 13.07 | 32.753 | 24.639 | 329.1 | 0.000 | 6.12 | 102.0 | | | | | | 0.76 | 0.21 | 0 | |
| 3 | 13.07 | 13.07 | 32.753 | 24.640 | 329.2 | 0.010 | 6.12 | 102.0 | | | | | | 0.76 | 0.21 | 3 | 220 |
| 5 | 13.07 | 13.07 | 32.754 | 24.640 | 329.1 | 0.016 | | | | | | | | 0.75 | 0.20 | 5 | 219 |
| 10 | 13.08 | 13.08 | 32.755 | 24.639 | 329.4 | 0.033 | 6.15 | 102.5 | | | | | | 0.73 | 0.19 | 10 | 218 |
| 20 | 13.09 | 13.09 | 32.757 | 24.639 | 329.7 | 0.066 | 6.12 | 102.0 | | | | | | 0.75 | 0.19 | 20 | 217 |
| 30 ISL | 13.01 D | 13.01 | 32.751 D | 24.651 | 328.8 | 0.099 | 6.15 | D102.4 | | | | | | 0.77 | 0.20 | 30 | |
| 31 | 13.04 | 13.04 | 32.755 | 24.648 | 329.1 | 0.102 | 6.16 | D102.6 | | | | | | 0.77 | 0.20 | 31 | 216 |
| 40 | 12.69 | 12.68 | 32.728 | 24.695 | 324.8 | 0.132 | 6.18 | 102.1 | | | | | | 0.77 | 0.17 | 40 | 215 |
| 50 ISL | 12.52 D | 12.51 | 32.721 D | 24.723 | 322.4 | 0.164 | 6.21 | D102.3 | | | | | | 0.70 | 0.26 | 50 | |
| 62 | 11.91 | 11.90 | 32.843 | 24.933 | 302.7 | 0.201 | 5.91 | D 96.1 | | | | | | 0.61 | 0.35 | 62 | 214 |
| 75 ISL | 10.70 D | 10.69 | 32.974 D | 25.253 | 272.4 | 0.239 | 5.59 | D 88.7 | | | | | | 0.25 | 0.19 | 75 | |
| 80 | 10.42 | 10.41 | 33.061 | 25.369 | 261.4 | 0.252 | 5.27 | 83.1 | | | | | | 0.12 | 0.12 | 80 | 213 |
| 100 ISL | 10.21 D | 10.20 | 33.467 D | 25.722 | 228.3 | 0.301 | 3.88 | D 61.1 | | | | | | 0.06 | 0.09 | 100 | |
| 102 | 10.22 | 10.21 | 33.470 | 25.723 | 228.3 | 0.306 | 3.84 | 60.5 | | | | | | 0.05 | 0.09 | 102 | 212 |
| 125 ISL | 9.27 D | 9.26 | 33.697 D | 26.057 | 196.8 | 0.355 | 3.32 | D 51.3 | | | | | | 0.03 | 0.06 | 126 | |
| 150 | 8.63 | 8.61 | 33.794 | 26.234 | 180.3 | 0.402 | 3.37 | D 51.3 | | | | | | 0.01 | 0.03 | 151 | 211 |
| 200 ISL | 8.16 D | 8.14 | 34.026 D | 26.488 | 157.0 | 0.486 | 1.94 | D 29.3 | | | | | | 0.01 | 0.03 | 201 | |
| 201 | 8.16 | 8.14 | 34.027 | 26.489 | 157.0 | 0.488 | 1.93 | 29.1 | | | | | | 0.01 | 0.03 | 202 | 210 |
| 230 | 7.78 | 7.76 | 34.055 | 26.568 | 149.9 | 0.532 | 1.76 | 26.3 | | | | | | | | 231 | 209 |
| 250 ISL | 7.38 D | 7.36 | 34.040 D | 26.613 | 145.7 | 0.562 | 1.83 | D 27.1 | | | | | | | | 252 | |
| 300 ISL | 7.09 D | 7.06 | 34.102 D | 26.703 | 137.8 | 0.632 | 1.27 | D 18.7 | | | | | | | | 302 | |
| 301 | 7.08 | 7.05 | 34.101 | 26.704 | 137.8 | 0.634 | 1.27 | D 18.7 | | | | | | | | 303 | 208 |
| 400 ISL | 6.48 D | 6.44 | 34.189 D | 26.855 | 124.6 | 0.764 | 0.67 | D 9.7 | | | | | | | | 403 | |
| 401 | 6.50 | 6.46 | 34.196 | 26.858 | 124.4 | 0.765 | 0.64 | 9.3 | | | | | | | | 404 | 207 |
| 500 | 5.85 | 5.81 | 34.249 | 26.984 | 113.2 | 0.883 | 0.39 | D 5.6 | | | | | | | | 504 | 206 |
| 600 ISL | 5.37 D | 5.32 | 34.303 D | 27.085 | 104.3 | 0.991 | 0.26 | D 3.7 | | | | | | | | 604 | |
| 601 | 5.37 | 5.32 | 34.306 | 27.088 | 104.1 | 0.992 | 0.25 | 3.5 | | | | | | | | 605 | 205 |
| 700 ISL | 4.73 D | 4.67 | 34.319 D | 27.172 | 96.3 | 1.092 | 0.23 | D 3.2 | | | | | | | | 705 | |
| 702 | 4.73 | 4.67 | 34.321 | 27.174 | 96.2 | 1.094 | 0.23 | D 3.2 | | | | | | | | 707 | 204 |
| 800 ISL | 4.44 D | 4.38 | 34.379 D | 27.252 | 89.4 | 1.184 | 0.26 | D 3.6 | | | | | | | | 806 | |
| 803 | 4.44 | 4.38 | 34.381 | 27.254 | 89.2 | 1.187 | 0.24 | 3.3 | | | | | | | | 809 | 203 |
| 900 ISL | 4.19 D | 4.12 | 34.423 D | 27.315 | 84.0 | 1.271 | 0.34 | D 4.7 | | | | | | | | 908 | |
| 902 | 4.19 | 4.12 | 34.425 | 27.316 | 83.9 | 1.273 | 0.34 | D 4.7 | | | | | | | | 910 | 202 |
| 1000 ISL | 3.89 D | 3.81 | 34.457 D | 27.373 | 78.8 | 1.353 | 0.45 | D 6.1 | | | | | | | | 1009 | |
| 1030 | 3.81 | 3.73 | 34.467 | 27.390 | 77.4 | 1.376 | 0.48 | 6.5 | | | | | | | | 1039 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 47.5 N | 124 12.1 W | 02/02/11 | 0248 UTC | 3956 m | 280 21 kn | | | 1020.2 mb | 13.0 C | 11.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.17 | 13.17 | 32.722 | 24.596 | 333.3 | 0.000 | 6.06 | 101.2 | | | | | | 0.56 | 0.16 | 0 | |
| 2 | 13.17 | 13.17 | 32.722 | 24.596 | 333.3 | 0.007 | 6.06 | 101.2 | | | | | | 0.56 | 0.16 | 2 | 221 |
| 5 | 13.18 | 13.18 | 32.722 | 24.594 | 333.6 | 0.017 | | | | | | | | 0.58 | 0.17 | 5 | 220 |
| 10 | 13.18 | 13.18 | 32.722 | 24.594 | 333.7 | 0.033 | 6.07 | 101.4 | | | | | | 0.57 | 0.17 | 10 | 219 |
| 20 | 13.18 | 13.18 | 32.722 | 24.594 | 333.9 | 0.067 | 6.08 | 101.5 | | | | | | 0.56 | 0.17 | 20 | 218 |
| 30 | 13.18 | 13.18 | 32.721 | 24.594 | 334.2 | 0.100 | 6.08 | D101.5 | | | | | | 0.56 | 0.17 | 30 | 217 |
| 40 | 13.15 | 13.14 | 32.719 | 24.598 | 334.1 | 0.134 | 6.07 | 101.3 | | | | | | 0.55 | 0.16 | 40 | 216 |
| 50 ISL | 12.98 D | 12.97 | 32.715 D | 24.629 | 331.4 | 0.167 | 6.07 | D100.9 | | | | | | 0.57 | 0.18 | 50 | |
| 60 | 12.86 | 12.85 | 32.733 | 24.667 | 328.0 | 0.200 | 6.05 | D100.4 | | | | | | 0.59 | 0.20 | 60 | 215 |
| 75 ISL | 11.42 D | 11.41 | 32.846 D | 25.026 | 294.1 | 0.246 | 5.83 | D 93.9 | | | | | | 0.33 | 0.16 | 75 | |
| 80 | 11.00 | 10.99 | 32.895 | 25.139 | 283.4 | 0.261 | 5.75 | 91.8 | | | | | | 0.23 | 0.14 | 80 | 214 |
| 100 | 10.19 | 10.18 | 33.251 | 25.557 | 244.0 | 0.314 | 4.83 | 75.9 | | | | | | 0.07 | 0.11 | 100 | 213 |
| 125 ISL | 8.93 D | 8.92 | 33.447 D | 25.916 | 210.1 | 0.370 | 4.30 | D 65.8 | | | | | | 0.04 | 0.07 | 126 | |
| 150 | 9.11 | 9.09 | 33.783 | 26.151 | 188.4 | 0.420 | 2.96 | D 45.6 | | | | | | 0.00 | 0.05 | 151 | 212 |
| 200 ISL | 8.31 D | 8.29 | 33.975 D | 26.426 | 163.0 | 0.508 | 2.43 | D 36.8 | | | | | | 0.00 | 0.05 | 201 | |
| 201 | 8.32 | 8.30 | 33.976 | 26.425 | 163.1 | 0.510 | 2.44 | 36.9 | | | | | | 0.00 | 0.05 | 202 | 211 |
| 231 | 7.79 | 7.77 | 33.999 | 26.522 | 154.2 | 0.557 | 2.27 | 34.0 | | | | | | | | 232 | 210 |
| 250 ISL | 7.62 D | 7.60 | 34.018 D | 26.562 | 150.7 | 0.586 | 2.00 | D 29.8 | | | | | | | | 251 | |
| 300 ISL | 7.00 D | 6.97 | 34.038 D | 26.665 | 141.4 | 0.659 | 1.65 | D 24.2 | | | | | | | | 302 | |
| 301 | 6.99 | 6.96 | 34.039 | 26.667 | 141.2 | 0.661 | 1.64 | D 24.1 | | | | | | | | 303 | 209 |
| 400 | 6.04 | 6.01 | 34.093 | 26.835 | 126.0 | 0.793 | 1.04 | 14.9 | | | | | | | | 403 | 208 |
| 500 ISL | 5.32 D | 5.28 | 34.160 D | 26.977 | 113.2 | 0.913 | 0.58 | D 8.2 | | | | | | | | 503 | |
| 501 | 5.32 | 5.28 | 34.161 | 26.978 | 113.1 | 0.914 | 0.58 | D 8.2 | | | | | | | | 505 | 207 |
| 600 | 5.00 | 4.95 | 34.272 | 27.104 | 102.1 | 1.020 | 0.25 | 3.5 | | | | | | | | 604 | 206 |
| 698 | 4.91 | 4.85 | 34.372 | 27.194 | 94.6 | 1.116 | 0.24 | D 3.4 | | | | | | | | 703 | 205 |
| 700 ISL | 4.91 D | 4.85 | 34.373 D | 27.195 | 94.5 | 1.118 | 0.24 | D 3.4 | | | | | | | | 705 | |
| 800 | 4.57 | 4.51 | 34.406 | 27.260 | 88.9 | 1.210 | 0.27 | 3.7 | | | | | | | | 806 | 203 |
| 900 ISL | 4.26 D | 4.19 | 34.438 D | 27.319 | 83.8 | 1.296 | 0.36 | D 5.0 | | | | | | | | 907 | |
| 902 | 4.26 | 4.19 | 34.441 | 27.322 | 83.5 | 1.298 | 0.37 | D 5.1 | | | | | | | | 909 | 202 |
| 1000 ISL | 3.91 D | 3.83 | 34.450 D | 27.366 | 79.6 | 1.378 | 0.43 | D 5.9 | | | | | | | | 1009 | |
| 1034 | 3.83 | 3.75 | 34.456 | 27.379 | 78.4 | 1.405 | 0.45 | 6.1 | | | | | | | | 1043 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 85.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 37.6 N | 124 33.0 W | 02/02/11 | 0712 UTC | 4198 m | 280 17 kn | | | 1021.5 mb | 13.2 C | 11.6 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.63 | 13.63 | 32.793 | 24.558 | 336.8 | 0.000 | 6.01 | 101.4 | | | | | | 0.74 | 0.23 | 0 | |
| 3 | 13.63 | 13.63 | 32.793 | 24.558 | 336.9 | 0.010 | 6.01 | 101.4 | | | | | | 0.74 | 0.23 | 3 | 220 |
| 5 | 13.63 | 13.63 | 32.793 | 24.558 | 336.9 | 0.017 | | | | | | | | 0.76 | 0.23 | 5 | 219 |
| 9 | 13.63 | 13.63 | 32.793 | 24.559 | 337.1 | 0.030 | 6.02 | 101.5 | | | | | | 0.74 | 0.23 | 9 | 218 |
| 10 ISL | 13.64 D | 13.64 | 32.791 D | 24.555 | 337.4 | 0.034 | 6.03 | D101.7 | | | | | | 0.74 | 0.23 | 10 | |
| 20 | 13.64 | 13.64 | 32.793 | 24.557 | 337.5 | 0.067 | 6.01 | 101.4 | | | | | | 0.72 | 0.23 | 20 | 217 |
| 30 | 13.64 | 13.64 | 32.792 | 24.556 | 337.8 | 0.101 | 6.03 | D101.7 | | | | | | 0.73 | 0.21 | 30 | 216 |
| 40 | 13.64 | 13.63 | 32.793 | 24.557 | 338.0 | 0.135 | 6.01 | 101.4 | | | | | | 0.73 | 0.22 | 40 | 215 |
| 50 ISL | 13.54 D | 13.53 | 32.815 D | 24.595 | 334.7 | 0.169 | 6.02 | D101.3 | | | | | | 0.69 | 0.28 | 50 | |
| 61 | 13.09 | 13.08 | 32.927 | 24.772 | 318.1 | 0.205 | 5.84 | D 97.5 | | | | | | 0.58 | 0.31 | 61 | 214 |
| 75 ISL | 11.47 D | 11.46 | 32.909 D | 25.065 | 290.3 | 0.247 | 5.78 | D 93.2 | | | | | | 0.24 | 0.17 | 75 | |
| 80 | 11.18 | 11.17 | 32.952 | 25.151 | 282.2 | 0.261 | 5.60 | 89.7 | | | | | | 0.13 | 0.12 | 80 | 213 |
| 100 ISL | 10.57 D | 10.56 | 33.267 D | 25.504 | 249.0 | 0.315 | 4.58 | D 72.6 | | | | | | 0.07 | 0.10 | 100 | |
| 101 | 10.62 | 10.61 | 33.266 | 25.495 | 250.0 | 0.317 | 4.64 | 73.6 | | | | | | 0.07 | 0.10 | 101 | 212 |
| 125 ISL | 9.48 D | 9.47 | 33.554 D | 25.912 | 210.7 | 0.372 | 3.74 | D 58.0 | | | | | | 0.03 | 0.07 | 126 | |
| 150 | 9.02 | 9.00 | 33.751 | 26.140 | 189.4 | 0.422 | 3.11 | D 47.8 | | | | | | 0.01 | 0.04 | 151 | 211 |
| 200 | 8.35 | 8.33 | 33.959 | 26.407 | 164.8 | 0.511 | 2.53 | 38.3 | | | | | | 0.00 | 0.03 | 201 | 210 |
| 231 | 7.88 | 7.86 | 34.001 | 26.511 | 155.3 | 0.561 | 2.23 | 33.4 | | | | | | | | 232 | 209 |
| 250 ISL | 7.63 D | 7.61 | 34.018 D | 26.560 | 150.8 | 0.590 | 2.04 | D 30.4 | | | | | | | | 251 | |
| 300 | 7.07 | 7.04 | 34.045 | 26.661 | 141.8 | 0.663 | 1.64 | D 24.1 | | | | | | | | 302 | 208 |
| 400 | 6.02 | 5.99 | 34.087 | 26.833 | 126.2 | 0.797 | 1.02 | 14.6 | | | | | | | | 403 | 207 |
| 500 | 5.47 | 5.43 | 34.183 | 26.977 | 113.3 | 0.916 | 0.51 | D 7.2 | | | | | | | | 503 | 206 |
| 600 ISL | 4.95 D | 4.90 | 34.254 D | 27.095 | 102.8 | 1.025 | 0.29 | D 4.1 | | | | | | | | 604 | |
| 601 | 4.95 | 4.90 | 34.256 | 27.097 | 102.6 | 1.026 | 0.28 | 3.9 | | | | | | | | 605 | 205 |
| 700 ISL | 4.60 D | 4.55 | 34.328 D | 27.194 | 94.1 | 1.123 | 0.23 | D 3.2 | | | | | | | | 705 | |
| 701 | 4.60 | 4.54 | 34.329 | 27.194 | 94.0 | 1.124 | 0.23 | D 3.2 | | | | | | | | 706 | 204 |
| 800 ISL | 4.28 D | 4.22 | 34.376 D | 27.267 | 87.7 | 1.214 | 0.26 | D 3.6 | | | | | | | | 806 | |
| 801 | 4.28 | 4.22 | 34.378 | 27.269 | 87.5 | 1.215 | 0.24 | 3.3 | | | | | | | | 807 | 203 |
| 899 | 4.04 | 3.97 | 34.421 | 27.329 | 82.4 | 1.298 | 0.36 | D 4.9 | | | | | | | | 906 | 202 |
| 900 ISL | 4.04 D | 3.97 | 34.420 D | 27.328 | 82.5 | 1.299 | 0.36 | D 4.9 | | | | | | | | 907 | |
| 1000 ISL | 3.84 D | 3.76 | 34.453 D | 27.375 | 78.5 | 1.379 | 0.48 | D 6.5 | | | | | | | | 1009 | |
| 1031 | 3.78 | 3.70 | 34.459 | 27.386 | 77.6 | 1.403 | 0.49 | 6.7 | | | | | | | | 1040 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 66.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 27.2 N | 124 54.2 W | 02/02/11 | 1123 UTC | 4399 m | 290 18 kn | | | 1022.5 mb | 12.9 C | 11.6 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.88 | 12.88 | 32.694 | 24.631 | 329.9 | 0.000 | 6.14 | 101.9 | | | | | | 0.56 | 0.15 | 0 | |
| 2 | 12.88 | 12.88 | 32.694 | 24.631 | 330.0 | 0.007 | 6.14 | 101.9 | | | | | | 0.56 | 0.15 | 2 | 220 |
| 5 | 12.89 | 12.89 | 32.694 | 24.629 | 330.2 | 0.017 | | | | | | | | 0.53 | 0.15 | 5 | 219 |
| 10 | 12.89 | 12.89 | 32.694 | 24.629 | 330.3 | 0.033 | 6.13 | 101.7 | | | | | | 0.52 | 0.14 | 10 | 218 |
| 20 | 12.89 | 12.89 | 32.694 | 24.630 | 330.5 | 0.066 | 6.13 | 101.7 | | | | | | 0.53 | 0.16 | 20 | 217 |
| 30 | 12.90 | 12.90 | 32.694 | 24.628 | 331.0 | 0.099 | 6.13 | D101.8 | | | | | | 0.53 | 0.15 | 30 | 216 |
| 40 | 12.88 | 12.87 | 32.695 | 24.633 | 330.8 | 0.132 | 6.13 | 101.7 | | | | | | 0.57 | 0.16 | 40 | 215 |
| 50 ISL | 12.87 D | 12.86 | 32.694 D | 24.634 | 330.9 | 0.165 | 6.14 | D101.8 | | | | | | 0.58 | 0.17 | 50 | |
| 59 | 12.85 | 12.84 | 32.694 | 24.638 | 330.7 | 0.195 | 6.13 | D101.6 | | | | | | 0.58 | 0.18 | 59 | 214 |
| 75 ISL | 11.77 D | 11.76 | 32.913 D | 25.014 | 295.3 | 0.245 | 5.91 | D 95.9 | | | | | | 0.35 | 0.16 | 75 | |
| 79 | 11.74 | 11.73 | 32.928 | 25.031 | 293.7 | 0.257 | 5.90 | 95.7 | | | | | | 0.28 | 0.15 | 79 | 213 |
| 100 ISL | 11.00 D | 10.99 | 33.167 D | 25.351 | 263.7 | 0.315 | 5.40 | D 86.3 | | | | | | 0.13 | 0.13 | 100 | |
| 101 | 11.03 | 11.02 | 33.194 | 25.367 | 262.2 | 0.318 | 5.42 | 86.7 | | | | | | 0.13 | 0.13 | 101 | 212 |
| 125 ISL | 9.48 D | 9.47 | 33.392 D | 25.785 | 222.7 | 0.376 | 4.34 | D 67.2 | | | | | | 0.05 | 0.08 | 126 | |
| 150 | 8.54 | 8.52 | 33.576 | 26.077 | 195.2 | 0.429 | 4.18 | D 63.4 | | | | | | 0.01 | 0.04 | 151 | 211 |
| 199 | 8.47 | 8.45 | 33.948 | 26.380 | 167.4 | 0.517 | 2.58 | 39.2 | | | | | | 0.00 | 0.04 | 200 | 210 |
| 200 ISL | 8.45 D | 8.43 | 33.948 D | 26.383 | 167.1 | 0.519 | 2.59 | D 39.3 | | | | | | | | 201 | |
| 231 | 7.95 | 7.93 | 33.989 | 26.491 | 157.2 | 0.569 | 2.47 | 37.1 | | | | | | | | 232 | 209 |
| 250 ISL | 7.69 D | 7.67 | 34.008 D | 26.544 | 152.4 | 0.599 | 2.14 | D 31.9 | | | | | | | | 251 | |
| 300 ISL | 7.09 D | 7.06 | 34.049 D | 26.661 | 141.8 | 0.672 | 1.61 | D 23.7 | | | | | | | | 302 | |
| 301 | 7.07 | 7.04 | 34.044 | 26.660 | 141.9 | 0.674 | 1.62 | D 23.8 | | | | | | | | 303 | 208 |
| 400 ISL | 5.92 D | 5.89 | 34.096 D | 26.853 | 124.2 | 0.805 | 0.94 | D 13.5 | | | | | | | | 403 | |
| 405 | 5.89 | 5.86 | 34.101 | 26.860 | 123.5 | 0.812 | 0.93 | 13.3 | | | | | | | | 408 | 207 |
| 500 ISL | 5.43 D | 5.39 | 34.176 D | 26.977 | 113.3 | 0.924 | 0.52 | D 7.4 | | | | | | | | 503 | |
| 502 | 5.43 | 5.39 | 34.178 | 26.978 | 113.2 | 0.926 | 0.50 | D 7.1 | | | | | | | | 505 | 206 |
| 599 | 4.95 | 4.90 | 34.258 | 27.098 | 102.5 | 1.031 | 0.27 | 3.8 | | | | | | | | 603 | 205 |
| 600 ISL | 4.94 D | 4.89 | 34.258 D | 27.099 | 102.4 | 1.032 | 0.28 | D 3.9 | | | | | | | | 604 | |
| 700 | 4.74 | 4.68 | 34.346 | 27.193 | 94.4 | 1.130 | 0.22 | D 3.1 | | | | | | | | 705 | 204 |
| 800 | 4.36 | 4.30 | 34.386 | 27.266 | 87.9 | 1.222 | 0.27 | 3.7 | | | | | | | | 806 | 203 |
| 900 ISL | 4.15 D | 4.08 | 34.437 D | 27.330 | 82.5 | 1.307 | 0.36 | D 4.9 | | | | | | | | 907 | |
| 902 | 4.16 | 4.09 | 34.438 | 27.330 | 82.6 | 1.308 | 0.36 | D 4.9 | | | | | | | | 909 | 202 |
| 1000 ISL | 3.84 D | 3.76 | 34.456 D | 27.378 | 78.3 | 1.387 | 0.43 | D 5.9 | | | | | | | | 1009 | |
| 1033 | 3.76 | 3.68 | 34.463 | 27.391 | 77.1 | 1.413 | 0.45 | 6.1 | | | | | | | | 1042 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 67.1 47.7

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 47.3 N | 121 50.3 W | 01/02/11 | 0019 UTC | 199 m | 160 07 kn | 260 06 07 | 1 | 1022.1 mb | 13.2 C | 11.8 C | 06m | 3/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.25 | 12.25 | 33.246 | 25.180 | 277.6 | 0.000 | 6.94 | 114.0 | | | | | | 7.79 | 1.75 | 0 | |
| 2 | 12.25 | 12.25 | 33.246 | 25.180 | 277.7 | 0.006 | 6.94 | 114.0 | | | | | | 7.79 | 1.75 | 2 | 214 |
| 5 | 12.26 | 12.26 | 33.246 | 25.178 | 277.9 | 0.014 | | | | | | | | 8.01 | 1.86 | 5 | 213 |
| 10 | 12.22 | 12.22 | 33.252 | 25.191 | 276.9 | 0.028 | 6.99 | 114.8 | | | | | | 8.76 | 2.01 | 10 | 212 |
| 20 | 11.98 | 11.98 | 33.257 | 25.240 | 272.4 | 0.055 | 7.05 | 115.2 | | | | | | 16.38 | 2.86 | 20 | 211 |
| 30 ISL | 11.48 D | 11.48 | 33.353 D | 25.408 | 256.7 | 0.082 | 5.87 D | 94.9 | | | | | | 9.09 | 1.64 | 30 | |
| 31 | 11.42 | 11.42 | 33.363 | 25.426 | 255.0 | 0.084 | 5.81 D | 93.9 | | | | | | 8.12 | 1.48 | 31 | 210 |
| 40 | 11.24 | 11.24 | 33.388 | 25.479 | 250.2 | 0.107 | 5.39 D | 86.7 | | | | | | 6.55 | 1.00 | 40 | 209 |
| 50 ISL | 11.08 D | 11.07 | 33.406 D | 25.522 | 246.3 | 0.132 | 5.17 D | 82.9 | | | | | | 3.48 | 0.62 | 50 | |
| 51 | 11.09 | 11.08 | 33.404 | 25.518 | 246.7 | 0.134 | 5.20 | 83.4 | | | | | | 3.19 | 0.60 | 51 | 208 |
| 61 | 10.87 | 10.86 | 33.443 | 25.588 | 240.3 | 0.159 | 4.84 D | 77.3 | | | | | | 2.07 | 0.79 | 61 | 207 |
| 75 ISL | 10.61 D | 10.60 | 33.491 D | 25.671 | 232.6 | 0.192 | 4.41 D | 70.0 | | | | | | 1.23 | 0.80 | 75 | |
| 82 | 10.47 | 10.46 | 33.516 | 25.715 | 228.6 | 0.208 | 4.19 | 66.4 | | | | | | 1.03 | 0.80 | 82 | 206 |
| 100 | 10.15 | 10.14 | 33.591 | 25.829 | 218.1 | 0.248 | 3.80 | 59.8 | | | | | | 0.88 | 0.74 | 101 | 205 |
| 121 | 9.93 | 9.92 | 33.644 | 25.908 | 211.1 | 0.293 | 3.52 | 55.1 | | | | | | 0.81 | 0.73 | 122 | 204 |
| 125 ISL | 9.93 D | 9.92 | 33.645 D | 25.909 | 211.1 | 0.302 | 3.51 D | 55.0 | | | | | | 0.79 | 0.70 | 126 | |
| 150 | 9.60 | 9.58 | 33.721 | 26.023 | 200.7 | 0.353 | 3.06 | 47.6 | | | | | | 0.72 | 0.60 | 151 | 203 |
| 172 | 9.19 | 9.17 | 33.810 | 26.159 | 188.0 | 0.396 | 2.59 D | 39.9 | | | | | | 0.71 | 0.79 | 173 | 202 |
| 189 | 8.75 | 8.73 | 33.907 | 26.305 | 174.4 | 0.427 | 2.23 | 34.1 | | | | | | 0.74 | 0.97 | 190 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 70.0 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 3.2 N | 122 1.1 W | 31/01/11 | 1553 UTC | 1339 m | 260 16 kn | 300 06 06 | 1 | 1023.2 mb | 13.5 C | 11.0 C | 16m | 7/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.39 | 12.39 | 33.205 | 25.122 | 283.2 | 0.000 | 6.09 | 100.3 | | | | | | 0.48 | 0.23 | 0 | |
| 3 | 12.39 | 12.39 | 33.205 | 25.122 | 283.2 | 0.008 | 6.09 | 100.3 | | | | | | 0.48 | 0.23 | 3 | 220 |
| 9 | 12.39 | 12.39 | 33.206 | 25.123 | 283.3 | 0.025 | 6.11 | 100.7 | | | | | | 0.50 | 0.31 | 9 | 219 |
| 10 ISL | 12.38 D | 12.38 | 33.204 D | 25.123 | 283.3 | 0.028 | 6.11 D | 100.6 | | | | | | 0.50 | 0.30 | 10 | |
| 20 | 12.37 | 12.37 | 33.210 | 25.130 | 282.9 | 0.057 | 6.09 | 100.3 | | | | | | 0.49 | 0.19 | 20 | 218 |
| 30 | 12.03 | 12.03 | 33.284 | 25.252 | 271.5 | 0.084 | 5.70 D | 93.2 | | | | | | 0.42 | 0.17 | 30 | 217 |
| 40 | 11.64 | 11.63 | 33.322 | 25.354 | 262.0 | 0.111 | 5.23 D | 84.9 | | | | | | 0.35 | 0.26 | 40 | 216 |
| 49 | 10.93 | 10.92 | 33.398 | 25.542 | 244.3 | 0.134 | 4.40 | 70.3 | | | | | | 0.21 | 0.25 | 49 | 215 |
| 50 ISL | 10.95 D | 10.94 | 33.402 D | 25.542 | 244.4 | 0.136 | 4.49 D | 71.8 | | | | | | 0.20 | 0.24 | 50 | |
| 61 | 10.59 | 10.58 | 33.477 | 25.664 | 233.0 | 0.163 | 3.87 D | 61.4 | | | | | | 0.14 | 0.17 | 61 | 214 |
| 71 | 10.14 | 10.13 | 33.561 | 25.807 | 219.6 | 0.185 | 3.51 | 55.2 | | | | | | 0.07 | 0.18 | 71 | 213 |
| 75 ISL | 10.01 D | 10.00 | 33.592 D | 25.853 | 215.3 | 0.194 | 3.38 D | 53.0 | | | | | | 0.05 | 0.17 | 75 | |
| 84 | 9.65 | 9.64 | 33.691 | 25.990 | 202.4 | 0.213 | 3.04 D | 47.3 | | | | | | 0.02 | 0.15 | 84 | 212 |
| 100 | 9.27 | 9.26 | 33.799 | 26.137 | 188.8 | 0.244 | 2.79 | 43.1 | | | | | | 0.01 | 0.12 | 101 | 211 |
| 120 | 9.08 | 9.07 | 33.846 | 26.204 | 182.7 | 0.281 | 2.79 | 42.9 | | | | | | 0.01 | 0.09 | 121 | 210 |
| 125 ISL | 9.05 D | 9.04 | 33.868 D | 26.226 | 180.7 | 0.290 | 2.67 D | 41.1 | | | | | | 0.01 | 0.09 | 126 | |
| 140 | 9.06 | 9.04 | 33.979 | 26.312 | 172.9 | 0.317 | 2.18 | 33.6 | | | | | | 0.01 | 0.10 | 141 | 209 |
| 150 ISL | 8.95 D | 8.93 | 34.000 D | 26.346 | 169.8 | 0.334 | 2.16 D | 33.2 | | | | | | 0.01 | 0.09 | 151 | |
| 170 | 8.70 | 8.68 | 34.025 | 26.405 | 164.6 | 0.367 | 2.08 D | 31.8 | | | | | | 0.00 | 0.07 | 171 | 208 |
| 200 | 8.57 | 8.55 | 34.100 | 26.484 | 157.6 | 0.416 | 1.69 | 25.7 | | | | | | 0.00 | 0.07 | 201 | 207 |
| 231 | 8.24 | 8.22 | 34.097 | 26.533 | 153.5 | 0.464 | 1.66 D | 25.1 | | | | | | | | 232 | 206 |
| 250 ISL | 8.03 D | 8.00 | 34.108 D | 26.573 | 149.9 | 0.493 | 1.45 D | 21.8 | | | | | | | | 252 | |
| 268 | 7.91 | 7.88 | 34.123 | 26.603 | 147.3 | 0.519 | 1.31 | 19.7 | | | | | | | | 270 | 205 |
| 300 ISL | 7.58 D | 7.55 | 34.166 D | 26.685 | 139.9 | 0.565 | 1.12 D | 16.7 | | | | | | | | 302 | |
| 322 | 7.50 | 7.47 | 34.169 | 26.699 | 138.9 | 0.596 | 0.98 D | 14.6 | | | | | | | | 324 | 204 |
| 379 | 7.05 | 7.01 | 34.188 | 26.777 | 132.1 | 0.673 | 0.75 | 11.0 | | | | | | | | 382 | 203 |
| 400 ISL | 6.95 D | 6.91 | 34.191 D | 26.794 | 130.8 | 0.701 | 0.72 D | 10.6 | | | | | | | | 403 | |
| 441 | 6.57 | 6.53 | 34.216 | 26.865 | 124.3 | 0.753 | 0.57 D | 8.3 | | | | | | | | 444 | 202 |
| 500 ISL | 6.03 D | 5.99 | 34.255 D | 26.966 | 115.1 | 0.824 | 0.40 D | 5.7 | | | | | | | | 504 | |
| 516 | 5.97 | 5.92 | 34.255 | 26.974 | 114.5 | 0.842 | 0.35 | 5.0 | | | | | | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 70.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 53.0 N | 122 22.2 W | 31/01/11 | 1116 UTC | 3066 m | 280 18 kn | | | 1022.1 mb | 11.7 C | 10.1 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.31 | 12.31 | 33.240 | 25.164 | 279.1 | 0.000 | 6.16 | 101.3 | | | | | | 1.49 | 0.35 | 0 | |
| 2 | 12.31 | 12.31 | 33.240 | 25.164 | 279.2 | 0.006 | 6.16 | 101.3 | | | | | | 1.49 | 0.35 | 2 | 220 |
| 10 | 12.30 | 12.30 | 33.241 | 25.167 | 279.1 | 0.028 | 6.18 | 101.6 | | | | | | 1.56 | 0.28 | 10 | 219 |
| 19 | 12.31 | 12.31 | 33.241 | 25.165 | 279.5 | 0.053 | 6.17 | 101.5 | | | | | | 1.44 | 0.44 | 19 | 218 |
| 20 ISL | 12.30 D | 12.30 | 33.240 D | 25.167 | 279.4 | 0.056 | 6.18 D | 101.6 | | | | | | 1.37 | 0.43 | 20 | |
| 30 | 11.71 | 11.71 | 33.332 | 25.349 | 262.3 | 0.083 | 5.38 D | 87.4 | | | | | | 0.62 | 0.27 | 30 | 217 |
| 39 | 11.27 | 11.27 | 33.395 | 25.479 | 250.2 | 0.106 | 4.80 D | 77.3 | | | | | | 0.36 | 0.31 | 39 | 216 |
| 49 | 10.70 | 10.69 | 33.486 | 25.651 | 234.0 | 0.130 | 4.18 | 66.5 | | | | | | 0.22 | 0.29 | 49 | 215 |
| 50 ISL | 10.61 D | 10.60 | 33.511 D | 25.686 | 230.6 | 0.133 | 3.90 D | 62.0 | | | | | | 0.20 | 0.29 | 50 | |
| 60 | 10.29 | 10.28 | 33.566 | 25.785 | 221.5 | 0.155 | 3.44 D | 54.3 | | | | | | 0.08 | 0.26 | 60 | 214 |
| 69 | 9.99 | 9.98 | 33.620 | 25.878 | 212.8 | 0.175 | 3.24 | 50.8 | | | | | | 0.05 | 0.18 | 69 | 213 |
| 75 ISL | 9.62 D | 9.61 | 33.700 D | 26.002 | 201.1 | 0.187 | 3.26 D | 50.7 | | | | | | 0.03 | 0.15 | 75 | |
| 86 | 9.36 | 9.35 | 33.741 | 26.077 | 194.2 | 0.209 | 3.04 D | 47.0 | | | | | | 0.01 | 0.12 | 86 | 212 |
| 100 ISL | 9.19 D | 9.18 | 33.846 D | 26.186 | 184.0 | 0.235 | 2.82 D | 43.5 | | | | | | 0.01 | 0.12 | 101 | |
| 101 | 9.21 | 9.20 | 33.830 | 26.171 | 185.5 | 0.237 | 2.80 | 43.2 | | | | | | 0.01 | 0.12 | 102 | 211 |
| 120 | 8.89 | 8.88 | 33.920 | 26.292 | 174.3 | 0.271 | 2.69 | 41.2 | | | | | | 0.00 | 0.08 | 121 | 210 |
| 125 ISL | 8.89 D | 8.88 | 33.938 D | 26.306 | 173.1 | 0.280 | 2.66 D | 40.8 | | | | | | 0.00 | 0.08 | 126 | |
| 139 | 8.81 | 8.80 | 33.963 | 26.339 | 170.3 | 0.304 | 2.53 | 38.7 | | | | | | 0.01 | 0.09 | 140 | 209 |
| 150 ISL | 8.77 D | 8.75 | 34.023 D | 26.392 | 165.4 | 0.323 | 2.25 D | 34.4 | | | | | | 0.01 | 0.08 | 151 | |
| 171 | 8.59 | 8.57 | 34.075 | 26.461 | 159.2 | 0.357 | 1.92 D | 29.3 | | | | | | 0.00 | 0.06 | 172 | 208 |
| 200 ISL | 8.46 D | 8.44 | 34.107 D | 26.507 | 155.4 | 0.402 | 1.70 D | 25.8 | | | | | | 0.00 | 0.06 | 201 | |
| 201 | 8.46 | 8.44 | 34.108 | 26.507 | 155.4 | 0.404 | 1.67 | 25.4 | | | | | | 0.00 | 0.06 | 202 | 207 |
| 232 | 8.03 | 8.01 | 34.115 | 26.578 | 149.1 | 0.451 | 1.56 D | 23.5 | | | | | | | | 233 | 206 |
| 250 ISL | 7.75 D | 7.73 | 34.115 D | 26.619 | 145.3 | 0.477 | 1.47 D | 22.0 | | | | | | | | 252 | |
| 271 | 7.66 | 7.63 | 34.144 | 26.656 | 142.2 | 0.508 | 1.25 | 18.7 | | | | | | | | 273 | 205 |
| 300 ISL | 7.44 D | 7.41 | 34.165 D | 26.704 | 138.0 | 0.548 | 1.01 D | 15.0 | | | | | | | | 302 | |
| 320 | 7.29 | 7.26 | 34.174 | 26.732 | 135.6 | 0.576 | 0.90 D | 13.3 | | | | | | | | 322 | 204 |
| 381 | 6.80 | 6.76 | 34.198 | 26.819 | 128.0 | 0.656 | 0.65 | 9.5 | | | | | | | | 384 | 203 |
| 400 ISL | 6.65 D | 6.61 | 34.212 D | 26.851 | 125.2 | 0.680 | 0.59 D | 8.6 | | | | | | | | 403 | |
| 439 | 6.34 | 6.30 | 34.231 | 26.907 | 120.1 | 0.728 | 0.48 D | 6.9 | | | | | | | | 442 | 202 |
| 500 ISL | 5.93 D | 5.89 | 34.260 D | 26.982 | 113.4 | 0.799 | 0.40 D | 5.7 | | | | | | | | 504 | |
| 515 | 5.84 | 5.80 | 34.267 | 26.999 | 111.9 | 0.816 | 0.34 | 4.9 | | | | | | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 70.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 32.8 N | 123 4.8 W | 31/01/11 | 0427 UTC | 3809 m | 270 24 kn | | | 1020.1 mb | 13.0 C | 10.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.14 | 12.14 | 32.887 | 24.923 | 302.1 | 0.000 | 6.35 | 103.9 | | | | | | 1.70 | 0.52 | 0 | |
| 3 | 12.14 | 12.14 | 32.887 | 24.923 | 302.2 | 0.009 | 6.35 | 103.9 | | | | | | 1.70 | 0.52 | 3 | 220 |
| 10 | 12.14 | 12.14 | 32.886 | 24.922 | 302.4 | 0.030 | 6.36 | 104.0 | | | | | | 1.74 | 0.49 | 10 | 219 |
| 20 | 12.13 | 12.13 | 32.892 | 24.929 | 302.0 | 0.060 | 6.35 | 103.8 | | | | | | 1.82 | 0.53 | 20 | 218 |
| 30 ISL | 11.67 D | 11.67 | 33.072 D | 25.155 | 280.8 | 0.090 | 6.20 D | 100.5 | | | | | | 1.24 | 0.50 | 30 | |
| 31 | 11.73 | 11.73 | 33.063 | 25.136 | 282.5 | 0.092 | 6.14 D | 99.7 | | | | | | 1.16 | 0.50 | 31 | 217 |
| 40 | 11.66 | 11.65 | 33.165 | 25.229 | 274.0 | 0.117 | 6.08 D | 98.6 | | | | | | 0.57 | 0.39 | 40 | 216 |
| 50 ISL | 11.43 D | 11.42 | 33.207 D | 25.304 | 267.1 | 0.145 | 5.90 D | 95.2 | | | | | | 0.45 | 0.40 | 50 | |
| 51 | 11.39 | 11.38 | 33.200 | 25.306 | 266.9 | 0.147 | 5.89 | 95.0 | | | | | | 0.44 | 0.40 | 51 | 215 |
| 58 | 11.64 | 11.63 | 33.290 | 25.330 | 264.8 | 0.166 | 5.83 D | 94.6 | | | | | | 0.39 | 0.38 | 58 | 214 |
| 71 | 10.64 | 10.63 | 33.211 | 25.448 | 253.7 | 0.199 | 5.08 | 80.6 | | | | | | 0.11 | 0.16 | 71 | 213 |
| 75 ISL | 10.35 D | 10.34 | 33.244 D | 25.524 | 246.6 | 0.209 | 4.89 D | 77.1 | | | | | | 0.09 | 0.13 | 75 | |
| 86 | 9.51 | 9.50 | 33.343 | 25.741 | 226.0 | 0.235 | 4.33 D | 67.1 | | | | | | 0.04 | 0.09 | 86 | 212 |
| 100 | 8.77 | 8.76 | 33.447 | 25.940 | 207.3 | 0.266 | 4.22 | 64.3 | | | | | | 0.01 | 0.08 | 101 | 211 |
| 122 | 8.87 | 8.86 | 33.697 | 26.121 | 190.6 | 0.310 | 3.44 | 52.6 | | | | | | 0.01 | 0.05 | 123 | 210 |
| 125 ISL | 8.83 D | 8.82 | 33.770 D | 26.184 | 184.6 | 0.315 | 3.12 D | 47.7 | | | | | | 0.01 | 0.05 | 126 | |
| 140 | 8.85 | 8.84 | 33.909 | 26.290 | 174.9 | 0.342 | 2.61 | 40.0 | | | | | | 0.00 | 0.04 | 141 | 209 |
| 150 ISL | 8.60 D | 8.58 | 33.919 D | 26.337 | 170.6 | 0.359 | 2.92 D | 44.5 | | | | | | 0.00 | 0.04 | 151 | |
| 171 | 8.55 | 8.53 | 33.998 | 26.407 | 164.3 | 0.395 | 2.32 D | 35.3 | | | | | | 0.00 | 0.03 | 172 | 208 |
| 199 | 8.36 | 8.34 | 34.050 | 26.477 | 158.2 | 0.440 | 1.82 | 27.6 | | | | | | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 8.38 D | 8.36 | 34.058 D | 26.480 | 157.9 | 0.441 | 1.75 D | 26.5 | | | | | | | | 201 | |
| 233 | 8.01 | 7.99 | 34.079 | 26.553 | 151.5 | 0.492 | 1.65 D | 24.8 | | | | | | | | 234 | 206 |
| 250 ISL | 7.83 D | 7.81 | 34.088 D | 26.587 | 148.5 | 0.518 | 1.51 D | 22.6 | | | | | | | | 252 | |
| 270 | 7.47 | 7.44 | 34.090 | 26.640 | 143.5 | 0.547 | 1.37 | 20.4 | | | | | | | | 272 | 205 |
| 300 ISL | 7.09 D | 7.06 | 34.115 D | 26.713 | 136.9 | 0.589 | 1.18 D | 17.4 | | | | | | | | 302 | |
| 320 | 6.98 | 6.95 | 34.134 | 26.744 | 134.3 | 0.616 | 0.98 D | 14.4 | | | | | | | | 322 | 204 |
| 381 | 6.62 | 6.59 | 34.190 | 26.837 | 126.1 | 0.696 | 0.63 | 9.2 | | | | | | | | 384 | 203 |
| 400 ISL | 6.50 D | 6.46 | 34.196 D | 26.858 | 124.3 | 0.719 | 0.62 D | 9.0 | | | | | | | | 403 | |
| 441 | 6.20 | 6.16 | 34.212 | 26.910 | 119.7 | 0.770 | 0.52 D | 7.5 | | | | | | | | 444 | 202 |
| 500 ISL | 5.84 D | 5.80 | 34.252 D | 26.987 | 112.9 | 0.838 | 0.40 D | 5.7 | | | | | | | | 504 | |
| 515 | 5.78 | 5.74 | 34.252 | 26.995 | 112.3 | 0.855 | 0.35 | 5.0 | | | | | | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 70.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 12.8 N | 123 46.8 W | 30/01/11 | 2143 UTC | 4077 m | 230 20 kn | 300 08 06 | 1 | 1018.5 mb | 14.0 C | 12.0 C | 23m | 6/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.37 | 12.37 | 33.197 | 25.119 | 283.4 | 0.000 | 6.13 | 100.9 | 7.0 | 0.66 | 5.1 | 0.16 | 0.45 | 0.39 | 0.11 | 0 | |
| 3 | 12.37 | 12.37 | 33.197 | 25.120 | 283.5 | 0.009 | 6.13 | 100.9 | 7.0 | 0.66 | 5.1 | 0.16 | 0.45 | 0.39 | 0.11 | 3 | 220 |
| 9 | 12.37 | 12.37 | 33.198 | 25.120 | 283.5 | 0.026 | 6.17 | 101.6 | 6.6 | 0.65 | 5.1 | 0.16 | 0.49 | 0.41 | 0.11 | 9 | 219 |
| 10 ISL | 12.37 D | 12.37 | 33.196 D | 25.119 | 283.7 | 0.028 | 6.17 | 101.6 | 6.6 | 0.65 | 5.1 | 0.16 | 0.49 | 0.41 | 0.11 | 10 | |
| 20 | 12.35 | 12.35 | 33.202 | 25.128 | 283.1 | 0.057 | 6.13 | 100.9 | 6.9 | 0.65 | 5.2 | 0.17 | 0.50 | 0.43 | 0.13 | 20 | 218 |
| 30 ISL | 11.89 D | 11.89 | 33.260 D | 25.260 | 270.8 | 0.084 | 5.74 D | 93.6 | 8.7 | 0.89 | 8.6 | 0.32 | 0.55 | 0.31 | 0.11 | 30 | |
| 31 | 11.88 | 11.88 | 33.261 | 25.262 | 270.6 | 0.087 | 5.73 D | 93.4 | 8.9 | 0.91 | 8.9 | 0.34 | 0.55 | 0.30 | 0.11 | 31 | 217 |
| 40 | 11.75 | 11.74 | 33.270 | 25.294 | 267.8 | 0.111 | 5.53 D | 89.9 | 9.4 | 0.95 | 9.6 | 0.35 | 0.44 | 0.22 | 0.13 | 40 | 216 |
| 50 ISL | 11.32 D | 11.31 | 33.309 D | 25.403 | 257.6 | 0.138 | 5.07 D | 81.7 | 11.0 | 1.12 | 12.3 | 0.38 | 0.17 | 0.21 | 0.26 | 50 | |
| 51 | 11.28 | 11.27 | 33.319 | 25.418 | 256.2 | 0.140 | 5.19 | 83.6 | 11.2 | 1.14 | 12.6 | 0.38 | 0.14 | 0.21 | 0.27 | 51 | 215 |
| 60 | 10.80 | 10.79 | 33.341 | 25.521 | 246.6 | 0.163 | 4.50 D | 71.7 | 13.3 | 1.31 | 15.6 | 0.14 | 0.04 | 0.17 | 0.26 | 60 | 214 |
| 70 | 10.50 | 10.49 | 33.394 | 25.615 | 237.9 | 0.187 | 4.14 | 65.6 | 15.9 | 1.49 | 18.4 | 0.08 | 0.01 | 0.14 | 0.26 | 70 | 213 |
| 75 ISL | 10.21 D | 10.20 | 33.488 D | 25.738 | 226.2 | 0.199 | 3.76 D | 59.2 | 17.2 | 1.57 | 19.6 | 0.07 | 0.01 | 0.14 | 0.30 | 75 | |
| 85 | 10.02 | 10.01 | 33.522 | 25.797 | 220.9 | 0.221 | 3.50 D | 54.9 | 20.0 | 1.72 | 21.9 | 0.05 | 0.00 | 0.12 | 0.36 | 85 | 212 |
| 100 | 9.47 | 9.46 | 33.672 | 26.005 | 201.3 | 0.253 | 3.13 | 48.5 | 24.9 | 1.93 | 25.7 | 0.02 | 0.00 | 0.04 | 0.19 | 101 | 211 |
| 119 | 9.11 | 9.10 | 33.799 | 26.163 | 186.7 | 0.289 | 2.76 | 42.5 | 28.6 | 2.05 | 27.3 | 0.01 | 0.00 | 0.01 | 0.13 | 120 | 210 |
| 125 ISL | 9.03 D | 9.02 | 33.838 D | 26.206 | 182.6 | 0.301 | 2.75 D | 42.3 | 29.6 | 2.04 | 27.5 | 0.01 | 0.00 | 0.01 | 0.14 | 126 | |
| 140 | 8.41 | 8.40 | 33.870 | 26.327 | 171.2 | 0.327 | 2.90 | 44.0 | 32.0 | 2.03 | 27.8 | 0.00 | 0.00 | 0.01 | 0.16 | 141 | 209 |
| 150 ISL | 8.79 D | 8.77 | 34.000 D | 26.371 | 167.4 | 0.344 | 2.09 D | 32.0 | 33.5 | 2.10 | 28.7 | 0.00 | 0.00 | 0.01 | 0.15 | 151 | |
| 172 | 8.60 | 8.58 | 34.029 | 26.423 | 162.8 | 0.380 | 1.95 D | 29.7 | 36.5 | 2.31 | 30.8 | 0.00 | 0.00 | 0.01 | 0.11 | 173 | 208 |
| 200 | 8.37 | 8.35 | 34.069 | 26.490 | 156.9 | 0.425 | 1.65 | 25.0 | 40.2 | 2.44 | 32.1 | 0.00 | 0.00 | 0.00 | 0.07 | 201 | 207 |
| 229 | 8.04 | 8.02 | 34.088 | 26.555 | 151.2 | 0.470 | 1.58 D | 23.8 | 43.3 | 2.50 | 33.0 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 7.73 D | 7.71 | 34.098 D | 26.609 | 146.3 | 0.501 | 1.48 D | 22.1 | 45.8 | 2.52 | 33.6 | 0.00 | 0.00 | | | 252 | |
| 271 | 7.57 | 7.54 | 34.099 | 26.633 | 144.3 | 0.532 | 1.41 | 21.0 | 48.5 | 2.55 | 34.3 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.20 D | 7.17 | 34.108 D | 26.693 | 138.9 | 0.573 | 1.31 D | 19.3 | 53.0 | 2.66 | 35.5 | 0.00 | 0.00 | | | 302 | |
| 319 | 7.15 | 7.12 | 34.141 | 26.726 | 136.1 | 0.599 | 1.04 D | 15.3 | 56.0 | 2.74 | 36.3 | 0.00 | 0.00 | | | 321 | 204 |
| 381 | 6.68 | 6.64 | 34.179 | 26.820 | 127.7 | 0.681 | 0.71 | 10.4 | 64.2 | 2.86 | 38.1 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.55 D | 6.51 | 34.183 D | 26.841 | 126.0 | 0.705 | 0.71 D | 10.3 | 66.1 | 2.90 | 38.5 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.29 | 6.25 | 34.203 | 26.891 | 121.6 | 0.755 | 0.59 D | 8.5 | 70.5 | 2.97 | 39.3 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.79 D | 5.75 | 34.231 D | 26.977 | 113.8 | 0.825 | 0.46 D | 6.6 | 79.5 | 3.04 | 40.7 | 0.00 | 0.00 | | | 504 | |
| 515 | 5.66 | 5.62 | 34.235 | 26.996 | 112.0 | 0.842 | 0.37 | 5.3 | 81.8 | 3.06 | 41.1 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 70.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 52.8 N | 124 29.2 W | 30/01/11 | 1541 UTC | 4326 m | 230 25 kn | 320 12 08 | 1 | 1018.9 mb | 14.0 C | 12.1 C | | 7/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.05 | 14.05 | 32.800 | 24.478 | 344.5 | 0.000 | 5.96 | 101.4 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 0 | |
| 3 | 14.05 | 14.05 | 32.800 | 24.478 | 344.6 | 0.010 | 5.96 | 101.4 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 3 | 220 |
| 10 | 14.05 | 14.05 | 32.800 | 24.478 | 344.7 | 0.034 | 5.95 | 101.2 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 10 | 219 |
| 19 | 14.05 | 14.05 | 32.801 | 24.479 | 344.9 | 0.065 | 5.97 | 101.6 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 19 | 218 |
| 20 ISL | 14.05 D | 14.05 | 32.799 D | 24.478 | 345.1 | 0.069 | 5.99 D | 101.9 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 20 | |
| 30 | 14.05 | 14.05 | 32.801 | 24.479 | 345.2 | 0.103 | 5.99 D | 101.9 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.25 | 0.08 | 30 | 217 |
| 40 | 14.05 | 14.04 | 32.802 | 24.480 | 345.3 | 0.138 | 5.96 D | 101.4 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.25 | 0.08 | 40 | 216 |
| 48 | 13.92 | 13.91 | 32.814 | 24.517 | 342.1 | 0.165 | 5.98 | 101.5 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.43 | 0.15 | 48 | 215 |
| 50 ISL | 13.85 D | 13.84 | 32.830 D | 24.544 | 339.6 | 0.172 | 6.02 D | 102.0 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.44 | 0.16 | 50 | |
| 60 | 13.79 | 13.78 | 32.821 | 24.549 | 339.4 | 0.206 | 6.02 D | 101.9 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.52 | 0.20 | 60 | 214 |
| 71 | 13.66 | 13.65 | 32.812 | 24.569 | 337.8 | 0.243 | 6.00 | 101.2 | 1.8 | 0.33 | 0.1 | 0.00 | 0.05 | 0.47 | 0.20 | 71 | 213 |
| 75 ISL | 13.36 D | 13.35 | 32.841 D | 24.652 | 329.9 | 0.257 | 5.96 D | 100.0 | 2.2 | 0.38 | 0.8 | 0.04 | 0.04 | 0.39 | 0.18 | 75 | |
| 86 | 12.40 | 12.39 | 32.913 | 24.896 | 306.9 | 0.292 | 5.70 D | 93.7 | 3.9 | 0.57 | 3.5 | 0.14 | 0.00 | 0.17 | 0.13 | 86 | 212 |
| 100 ISL | 11.02 D | 11.01 | 33.012 D | 25.227 | 275.5 | 0.333 | 5.42 D | 86.6 | 6.5 | 0.80 | 7.4 | 0.01 | 0.00 | 0.07 | 0.08 | 100 | |
| 101 | 11.02 | 11.01 | 33.010 | 25.225 | 275.7 | 0.335 | 5.44 | 86.9 | 6.7 | 0.82 | 7.7 | 0.00 | 0.00 | 0.07 | 0.08 | 101 | 211 |
| 121 | 9.82 | 9.81 | 33.328 | 25.679 | 232.7 | 0.386 | 4.52 | 70.5 | 15.1 | 1.36 | 16.8 | 0.00 | 0.00 | 0.01 | 0.03 | 122 | 210 |
| 125 ISL | 9.61 D | 9.60 | 33.395 D | 25.766 | 224.5 | 0.395 | 4.35 D | 67.5 | 16.7 | 1.45 | 18.2 | 0.00 | 0.00 | 0.01 | 0.03 | 126 | |
| 141 | 9.29 | 9.27 | 33.595 | 25.975 | 205.0 | 0.430 | 3.70 | 57.1 | 22.3 | 1.72 | 22.7 | 0.00 | 0.00 | 0.01 | 0.02 | 142 | 209 |
| 150 ISL | 9.10 D | 9.08 | 33.692 D | 26.081 | 195.0 | 0.448 | 3.68 D | 56.6 | 24.4 | 1.80 | 24.0 | 0.00 | 0.00 | 0.01 | 0.04 | 151 | |
| 170 | 8.85 | 8.83 | 33.826 | 26.226 | 181.6 | 0.485 | 3.28 D | 50.2 | 27.8 | 1.87 | 25.4 | 0.00 | 0.00 | 0.01 | 0.08 | 171 | 208 |
| 199 | 8.58 | 8.56 | 33.941 | 26.358 | 169.5 | 0.536 | 3.17 | 48.3 | 31.4 | 1.90 | 26.1 | 0.00 | 0.00 | 0.00 | 0.02 | 200 | 207 |
| 200 ISL | 8.56 D | 8.54 | 33.960 D | 26.376 | 167.8 | 0.538 | 2.88 D | 43.8 | 31.6 | 1.91 | 26.2 | 0.00 | 0.00 | | | 201 | |
| 230 | 8.32 | 8.30 | 34.012 | 26.454 | 160.9 | 0.587 | 2.26 D | 34.2 | 37.4 | 2.24 | 30.4 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.41 D | 8.38 | 34.086 D | 26.499 | 157.1 | 0.619 | 1.82 D | 27.6 | 40.3 | 2.34 | 31.6 | 0.00 | 0.00 | | | 251 | |
| 272 | 7.98 | 7.95 | 34.067 | 26.548 | 152.6 | 0.653 | 1.77 | 26.6 | 43.2 | 2.42 | 32.3 | 0.00 | 0.00 | | | 274 | 205 |
| 300 ISL | 7.77 D | 7.74 | 34.126 D | 26.626 | 145.6 | 0.695 | 1.32 D | 19.7 | 47.7 | 2.57 | 33.9 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.60 | 7.57 | 34.139 | 26.661 | 142.5 | 0.724 | 1.20 D | 17.9 | 51.0 | 2.67 | 35.0 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.90 | 6.86 | 34.137 | 26.758 | 133.8 | 0.807 | 0.95 | 13.9 | 59.3 | 2.82 | 37.3 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.72 D | 6.68 | 34.160 D | 26.800 | 130.0 | 0.833 | 0.85 D | 12.4 | 62.3 | 2.88 | 37.9 | 0.00 | 0.00 | | | 403 | |
| 447 | 6.41 | 6.37 | 34.194 | 26.869 | 123.9 | 0.893 | 0.67 D | 9.7 | 69.1 | 3.03 | 39.2 | 0.00 | 0.00 | | | 450 | 202 |
| 500 ISL | 6.03 D | 5.99 | 34.230 D | 26.946 | 117.0 | 0.957 | 0.53 D | 7.6 | 76.0 | 3.13 | 40.3 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.95 | 5.90 | 34.244 | 26.967 | 115.1 | 0.974 | 0.40 | 5.7 | 77.9 | 3.16 | 40.6 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 38.4 N | 121 15.8 W | 29/01/11 | 0743 UTC | 43 m | 260 13 kn | | | 1018.1 mb | 11.8 C | 10.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.85 | 11.85 | 33.358 | 25.343 | 262.2 | 0.000 | 5.61 | 91.5 | 11.5 | 0.97 | 10.0 | 0.26 | 0.66 | 1.72 | 0.50 | 0 | |
| 2 | 11.85 | 11.85 | 33.358 | 25.343 | 262.2 | 0.005 | 5.61 | 91.5 | 11.5 | 0.97 | 10.0 | 0.26 | 0.66 | 1.72 | 0.50 | 2 | 205 |
| 5 | 11.80 | 11.80 | 33.369 | 25.361 | 260.6 | 0.013 | 5.48 | 89.3 | 12.3 | 1.02 | 10.7 | 0.26 | 0.27 | 1.69 | 0.50 | 5 | 204 |
| 10 | 11.48 | 11.48 | 33.424 | 25.462 | 251.0 | 0.026 | 5.00 | 80.9 | 14.6 | 1.18 | 12.9 | 0.27 | 0.26 | 1.37 | 0.58 | 10 | 203 |
| 20 | 11.24 | 11.24 | 33.464 | 25.537 | 244.1 | 0.051 | 4.60 | 74.1 | 16.2 | 1.27 | 14.5 | 0.28 | 0.20 | 0.89 | 0.57 | 20 | 202 |
| 30 | 11.10 | 11.10 | 33.487 | 25.581 | 240.2 | 0.075 | 4.33 | 69.5 | 17.7 | 1.36 | 16.0 | 0.27 | 0.14 | 0.62 | 0.52 | 30 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 28.7 N | 121 36.6 W | 29/01/11 | 1101 UTC | 990 m | 250 13 kn | | | 1017.6 mb | 11.3 C | 9.6 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.93 | 12.93 | 33.117 | 24.949 | 299.6 | 0.000 | 6.13 | 102.1 | 3.9 | 0.47 | 3.0 | 0.11 | 0.09 | 0.68 | 0.23 | 0 | |
| 3 | 12.93 | 12.93 | 33.117 | 24.949 | 299.7 | 0.009 | 6.13 | 102.1 | 3.9 | 0.47 | 3.0 | 0.11 | 0.09 | 0.68 | 0.23 | 3 | 220 |
| 10 | 12.94 | 12.94 | 33.118 | 24.948 | 300.0 | 0.030 | 6.13 | 102.1 | 3.9 | 0.46 | 3.0 | 0.11 | 0.06 | 0.66 | 0.22 | 10 | 219 |
| 20 | 12.93 | 12.93 | 33.118 | 24.950 | 300.0 | 0.060 | 6.13 | 102.1 | 3.9 | 0.45 | 3.0 | 0.12 | 0.06 | 0.67 | 0.26 | 20 | 218 |
| 30 | 12.85 | 12.85 | 33.119 | 24.967 | 298.7 | 0.090 | 6.12 | 101.7 | 4.2 | 0.48 | 3.5 | 0.12 | 0.10 | 0.63 | 0.24 | 30 | 217 |
| 39 | 12.63 | 12.62 | 33.154 | 25.037 | 292.3 | 0.117 | 6.08 | 100.6 | 4.7 | 0.55 | 4.4 | 0.14 | 0.26 | 0.52 | 0.22 | 39 | 216 |
| 50 | 12.12 | 12.11 | 33.170 | 25.147 | 282.0 | 0.148 | 5.67 | 92.9 | 6.1 | 0.73 | 7.0 | 0.29 | 0.26 | 0.34 | 0.23 | 50 | 215 |
| 62 | 11.30 | 11.29 | 33.220 | 25.338 | 264.1 | 0.181 | 5.26 | 84.7 | 8.8 | 0.97 | 11.2 | 0.08 | 0.00 | 0.18 | 0.15 | 62 | 214 |
| 70 | 10.62 | 10.61 | 33.370 | 25.575 | 241.6 | 0.201 | 4.29 | 68.1 | 14.6 | 1.39 | 17.7 | 0.01 | 0.00 | 0.10 | 0.11 | 70 | 213 |
| 75 ISL | 10.17 D | 10.16 | 33.511 D | 25.762 | 223.9 | 0.213 | 3.75 D | 59.0 | 17.8 | 1.56 | 20.4 | 0.01 | 0.00 | 0.06 | 0.10 | 75 | |
| 85 | 9.74 | 9.73 | 33.616 | 25.917 | 209.4 | 0.234 | 3.32 | 51.8 | 22.7 | 1.76 | 23.8 | 0.00 | 0.00 | 0.02 | 0.09 | 85 | 212 |
| 99 | 9.69 | 9.68 | 33.750 | 26.030 | 198.9 | 0.263 | 2.84 | 44.3 | 25.8 | 1.91 | 25.4 | 0.00 | 0.00 | 0.01 | 0.08 | 100 | 211 |
| 100 ISL | 9.69 D | 9.68 | 33.750 D | 26.030 | 199.0 | 0.265 | 2.85 D | 44.4 | 25.9 | 1.92 | 25.5 | 0.00 | 0.00 | 0.01 | 0.08 | 101 | |
| 120 | 9.52 | 9.51 | 33.818 | 26.111 | 191.6 | 0.304 | 2.68 | 41.6 | 27.6 | 1.99 | 26.3 | 0.00 | 0.00 | 0.01 | 0.08 | 121 | 210 |
| 125 ISL | 9.28 D | 9.27 | 33.891 D | 26.208 | 182.6 | 0.313 | 2.60 D | 40.2 | 28.3 | 2.00 | 26.6 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 139 | 9.20 | 9.18 | 33.911 | 26.236 | 180.1 | 0.339 | 2.52 | 38.9 | 30.2 | 2.03 | 27.4 | 0.00 | 0.00 | 0.00 | 0.07 | 140 | 209 |
| 150 ISL | 9.17 D | 9.15 | 33.924 D | 26.251 | 178.9 | 0.359 | 2.52 D | 38.9 | 31.3 | 2.06 | 28.0 | 0.00 | 0.00 | 0.00 | 0.06 | 151 | |
| 170 | 8.76 | 8.74 | 33.960 | 26.345 | 170.3 | 0.393 | 2.39 | 36.5 | 33.0 | 2.11 | 29.0 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 200 ISL | 8.25 D | 8.23 | 34.003 D | 26.457 | 160.0 | 0.443 | 2.34 D | 35.4 | 36.5 | 2.16 | 29.9 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | |
| 201 | 8.29 | 8.27 | 34.001 | 26.449 | 160.8 | 0.445 | 2.37 | 35.9 | 36.6 | 2.16 | 29.9 | 0.00 | 0.00 | 0.00 | 0.05 | 202 | 207 |
| 230 | 7.91 | 7.89 | 34.035 | 26.533 | 153.2 | 0.490 | 2.10 | 31.5 | 41.4 | 2.28 | 31.6 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.56 D | 7.54 | 34.063 D | 26.606 | 146.5 | 0.520 | 1.78 D | 26.5 | 46.1 | 2.42 | 33.3 | 0.00 | 0.00 | | | 252 | |
| 269 | 7.34 | 7.31 | 34.085 | 26.655 | 142.1 | 0.548 | 1.48 | 21.9 | 50.5 | 2.56 | 34.9 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.14 D | 7.11 | 34.105 D | 26.699 | 138.3 | 0.591 | 1.30 D | 19.2 | 55.0 | 2.66 | 36.3 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.88 | 6.85 | 34.102 | 26.732 | 135.3 | 0.618 | 1.16 | 17.0 | 57.4 | 2.70 | 36.9 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.30 | 6.27 | 34.106 | 26.812 | 128.1 | 0.697 | 1.02 | 14.7 | 65.4 | 2.82 | 38.6 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.13 D | 6.09 | 34.123 D | 26.848 | 124.9 | 0.723 | 0.91 D | 13.1 | 68.9 | 2.88 | 39.3 | 0.00 | 0.00 | | | 403 | |
| 439 | 5.83 | 5.79 | 34.162 | 26.917 | 118.7 | 0.770 | 0.67 | 9.6 | 75.4 | 3.00 | 40.4 | 0.00 | 0.00 | | | 442 | 202 |
| 500 ISL | 5.84 D | 5.80 | 34.259 D | 26.993 | 112.3 | 0.841 | 0.40 D | 5.7 | 80.4 | 3.09 | 41.0 | 0.00 | 0.00 | | | 504 | |
| 517 | 5.71 | 5.67 | 34.257 | 27.007 | 111.0 | 0.860 | 0.38 | 5.4 | 81.8 | 3.12 | 41.2 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 18.6 N | 121 58.0 W | 29/01/11 | 1514 UTC | 2503 m | 270 19 kn | 330 06 05 | 2 | 1018.1 mb | 11.7 C | 10.7 C | | 8/8 SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.65 | 12.65 | 33.155 | 25.033 | 291.6 | 0.000 | 6.20 | 102.7 | 5.1 | 0.57 | 3.7 | 0.09 | 0.14 | 0.85 | 0.29 | 0 | |
| 2 | 12.65 | 12.65 | 33.155 | 25.033 | 291.7 | 0.006 | 6.20 | 102.7 | 5.1 | 0.57 | 3.7 | 0.09 | 0.14 | 0.85 | 0.29 | 2 | 220 |
| 10 ISL | 12.65 D | 12.65 | 33.153 D | 25.032 | 292.0 | 0.029 | 6.22 D | 103.0 | 5.1 | 0.56 | 3.7 | 0.09 | 0.13 | 0.83 | 0.23 | 10 | |
| 11 | 12.65 | 12.65 | 33.155 | 25.033 | 291.9 | 0.032 | 6.20 | 102.7 | 5.1 | 0.56 | 3.7 | 0.09 | 0.13 | 0.83 | 0.22 | 11 | 219 |
| 20 | 12.65 | 12.65 | 33.154 | 25.033 | 292.2 | 0.058 | 6.21 | 102.8 | 5.1 | 0.56 | 3.7 | 0.09 | 0.14 | 0.87 | 0.25 | 20 | 218 |
| 30 ISL | 12.63 D | 12.63 | 33.156 D | 25.038 | 291.9 | 0.088 | 6.17 D | 102.1 | 5.1 | 0.57 | 3.9 | 0.10 | 0.17 | 0.83 | 0.24 | 30 | |
| 31 | 12.64 | 12.64 | 33.156 | 25.036 | 292.1 | 0.091 | 6.17 D | 102.2 | 5.1 | 0.57 | 3.9 | 0.10 | 0.17 | 0.83 | 0.24 | 31 | 217 |
| 39 | 12.39 | 12.38 | 33.174 | 25.099 | 286.4 | 0.114 | 5.92 D | 97.5 | 5.5 | 0.69 | 5.4 | 0.17 | 0.34 | 0.60 | 0.33 | 39 | 216 |
| 49 | 11.05 | 11.04 | 33.228 | 25.388 | 259.0 | 0.141 | 5.09 | 81.5 | 10.5 | 1.11 | 12.3 | 0.10 | 0.00 | 0.25 | 0.18 | 49 | 215 |
| 50 ISL | 10.90 D | 10.89 | 33.260 D | 25.440 | 254.0 | 0.143 | 4.94 D | 78.9 | 11.3 | 1.16 | 13.0 | 0.09 | 0.00 | 0.23 | 0.17 | 50 | |
| 60 | 9.54 | 9.53 | 33.339 | 25.733 | 226.3 | 0.167 | 4.29 D | 66.5 | 18.3 | 1.53 | 18.9 | 0.02 | 0.00 | 0.12 | 0.13 | 60 | 214 |
| 70 | 9.25 | 9.24 | 33.387 | 25.817 | 218.5 | 0.190 | 4.09 | 63.0 | 20.4 | 1.64 | 20.6 | 0.02 | 0.00 | 0.08 | 0.10 | 70 | 213 |
| 75 ISL | 9.07 D | 9.06 | 33.435 D | 25.883 | 212.2 | 0.201 | 3.97 D | 60.9 | 22.3 | 1.76 | 22.5 | 0.01 | 0.00 | 0.06 | 0.10 | 75 | |
| 84 | 9.41 | 9.40 | 33.692 | 26.030 | 198.6 | 0.219 | 2.89 D | 44.8 | 25.9 | 1.99 | 26.0 | 0.00 | 0.00 | 0.03 | 0.09 | 84 | 212 |
| 100 | 9.31 | 9.30 | 33.834 | 26.158 | 186.8 | 0.250 | 2.45 | 37.9 | 29.4 | 2.12 | 28.1 | 0.00 | 0.00 | 0.02 | 0.38 | 101 | 211 |
| 119 | 9.05 | 9.04 | 33.920 | 26.267 | 176.8 | 0.284 | 2.28 | 35.1 | 31.9 | 2.18 | 28.9 | 0.00 | 0.00 | 0.00 | 0.09 | 120 | 210 |
| 125 ISL | 8.98 D | 8.97 | 33.933 D | 26.288 | 174.8 | 0.295 | 2.32 D | 35.6 | 32.2 | 2.16 | 28.8 | 0.00 | 0.00 | 0.00 | 0.08 | 126 | |
| 140 | 8.78 | 8.77 | 33.953 | 26.336 | 170.6 | 0.321 | 2.48 | 37.9 | 32.7 | 2.12 | 28.5 | 0.00 | 0.00 | 0.01 | 0.07 | 141 | 209 |
| 150 ISL | 8.59 D | 8.57 | 33.974 D | 26.382 | 166.4 | 0.338 | 2.48 D | 37.8 | 33.8 | 2.14 | 28.8 | 0.00 | 0.00 | 0.01 | 0.06 | 151 | |
| 171 | 8.32 | 8.30 | 33.999 | 26.443 | 160.9 | 0.372 | 2.33 D | 35.3 | 36.7 | 2.22 | 29.8 | 0.00 | 0.00 | 0.00 | 0.05 | 172 | 208 |
| 200 ISL | 7.99 D | 7.97 | 34.043 D | 26.527 | 153.3 | 0.418 | 1.99 D | 29.9 | 41.0 | 2.35 | 31.5 | 0.00 | 0.00 | 0.00 | 0.04 | 201 | |
| 201 | 7.99 | 7.97 | 34.043 | 26.527 | 153.3 | 0.419 | 1.99 | 29.9 | 41.2 | 2.36 | 31.6 | 0.00 | 0.00 | 0.00 | 0.04 | 202 | 207 |
| 229 | 7.66 | 7.64 | 34.074 | 26.600 | 146.8 | 0.461 | 1.59 D | 23.7 | 46.5 | 2.51 | 33.5 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 7.34 D | 7.32 | 34.080 D | 26.650 | 142.2 | 0.491 | 1.50 D | 22.2 | 49.8 | 2.59 | 34.5 | 0.00 | 0.00 | | | 252 | |
| 274 | 7.17 | 7.14 | 34.090 | 26.682 | 139.4 | 0.525 | 1.32 | 19.5 | 53.3 | 2.65 | 35.5 | 0.00 | 0.00 | | | 276 | 205 |
| 300 ISL | 6.88 D | 6.85 | 34.097 D | 26.728 | 135.3 | 0.561 | 1.23 D | 18.0 | 57.2 | 2.70 | 36.5 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.66 | 6.63 | 34.100 | 26.760 | 132.5 | 0.588 | 1.12 D | 16.3 | 60.2 | 2.74 | 37.2 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.30 | 6.27 | 34.175 | 26.867 | 123.0 | 0.666 | 0.70 | 10.1 | 68.9 | 2.93 | 38.9 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.16 D | 6.12 | 34.181 D | 26.890 | 121.0 | 0.689 | 0.66 D | 9.5 | 70.8 | 2.97 | 39.3 | 0.00 | 0.00 | | | 403 | |
| 438 | 6.02 | 5.98 | 34.200 | 26.923 | 118.3 | 0.734 | 0.57 D | 8.2 | 74.3 | 3.04 | 40.0 | 0.00 | 0.00 | | | 441 | 202 |
| 500 ISL | 5.73 D | 5.69 | 34.276 D | 27.020 | 109.7 | 0.805 | 0.34 D | 4.9 | 82.0 | 3.16 | 41.1 | 0.00 | 0.00 | | | 504 | |
| 514 | 5.66 | 5.62 | 34.281 | 27.032 | 108.6 | 0.820 | 0.30 | 4.3 | 83.7 | 3.19 | 41.4 | 0.00 | 0.00 | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 58.6 N | 122 39.8 W | 29/01/11 | 2122 UTC | 4067 m | 190 09 kn | 310 05 05 | 2 | 1019.4 mb | 13.0 C | 12.0 C | 16m | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.72 | 12.72 | 33.155 | 25.019 | 292.9 | 0.000 | 6.14 | 101.8 | 4.8 | 0.58 | 4.0 | 0.13 | 0.18 | 0.63 | 0.18 | 0 | |
| 2 | 12.72 | 12.72 | 33.155 | 25.019 | 293.0 | 0.006 | 6.14 | 101.8 | 4.8 | 0.58 | 4.0 | 0.13 | 0.18 | 0.63 | 0.18 | 2 | 220 |
| 10 ISL | 12.65 D | 12.65 | 33.157 D | 25.035 | 291.7 | 0.029 | 6.15 D | 101.8 | 4.8 | 0.59 | 4.2 | 0.14 | 0.22 | 0.63 | 0.20 | 10 | |
| 11 | 12.63 | 12.63 | 33.164 | 25.044 | 290.9 | 0.032 | 6.14 | 101.6 | 4.8 | 0.59 | 4.2 | 0.14 | 0.23 | 0.63 | 0.20 | 11 | 219 |
| 20 ISL | 12.56 D | 12.56 | 33.161 D | 25.056 | 290.0 | 0.058 | 6.14 D | 101.5 | 4.9 | 0.60 | 4.3 | 0.15 | 0.27 | 0.67 | 0.27 | 20 | |
| 21 | 12.56 | 12.56 | 33.163 | 25.057 | 289.9 | 0.061 | 6.12 | 101.2 | 4.9 | 0.60 | 4.3 | 0.15 | 0.28 | 0.67 | 0.28 | 21 | 218 |
| 30 ISL | 12.50 D | 12.50 | 33.188 D | 25.088 | 287.1 | 0.087 | 6.00 D | 99.1 | 5.3 | 0.65 | 4.9 | 0.19 | 0.42 | 0.63 | 0.29 | 30 | |
| 31 | 12.52 | 12.52 | 33.191 | 25.087 | 287.3 | 0.090 | 5.92 D | 97.8 | 5.4 | 0.66 | 5.0 | 0.20 | 0.43 | 0.63 | 0.29 | 31 | 217 |
| 41 | 11.91 | 11.90 | 33.281 | 25.273 | 269.9 | 0.118 | 4.87 D | 79.5 | 8.7 | 1.01 | 10.5 | 0.33 | 0.10 | 0.30 | 0.24 | 41 | 216 |
| 50 | 10.77 | 10.76 | 33.479 | 25.633 | 235.7 | 0.141 | 4.00 | 63.8 | 15.5 | 1.56 | 19.1 | 0.03 | 0.00 | 0.09 | 0.15 | 50 | 215 |
| 61 | 10.32 | 10.31 | 33.533 | 25.754 | 224.4 | 0.166 | 3.53 D | 55.7 | 19.1 | 1.70 | 21.6 | 0.02 | 0.00 | 0.05 | 0.13 | 61 | 214 |
| 70 | 9.96 | 9.95 | 33.597 | 25.865 | 214.0 | 0.186 | 3.27 | 51.2 | 21.9 | 1.83 | 23.8 | 0.01 | 0.00 | 0.04 | 0.12 | 70 | 213 |
| 75 ISL | 9.76 D | 9.75 | 33.674 D | 25.958 | 205.2 | 0.196 | 3.03 D | 47.3 | 23.5 | 1.90 | 24.9 | 0.01 | 0.00 | 0.03 | 0.12 | 75 | |
| 85 | 9.59 | 9.58 | 33.722 | 26.024 | 199.2 | 0.216 | 2.74 D | 42.6 | 26.1 | 2.01 | 26.6 | 0.01 | 0.00 | 0.01 | 0.12 | 85 | 212 |
| 100 | 9.29 | 9.28 | 33.784 | 26.122 | 190.2 | 0.246 | 2.70 | 41.7 | 28.0 | 2.04 | 27.0 | 0.01 | 0.00 | 0.01 | 0.11 | 101 | 211 |
| 120 | 8.80 | 8.79 | 33.873 | 26.269 | 176.5 | 0.282 | 2.57 | 39.3 | 31.5 | 2.11 | 28.3 | 0.00 | 0.00 | 0.00 | 0.07 | 121 | 210 |
| 125 ISL | 8.72 D | 8.71 | 33.909 D | 26.310 | 172.7 | 0.291 | 2.47 D | 37.7 | 32.0 | 2.11 | 28.3 | 0.00 | 0.00 | 0.00 | 0.07 | 126 | |
| 139 | 8.38 | 8.37 | 33.918 | 26.370 | 167.2 | 0.315 | 2.77 | 42.0 | 33.4 | 2.09 | 28.2 | 0.00 | 0.00 | 0.00 | 0.06 | 140 | 209 |
| 150 ISL | 8.07 D | 8.05 | 33.954 D | 26.444 | 160.2 | 0.333 | 2.84 D | 42.7 | 35.0 | 2.10 | 28.5 | 0.00 | 0.00 | 0.00 | 0.06 | 151 | |
| 169 | 7.75 | 7.73 | 33.960 | 26.496 | 155.5 | 0.363 | 2.74 D | 40.9 | 38.1 | 2.13 | 29.3 | 0.00 | 0.00 | 0.00 | 0.06 | 170 | 208 |
| 200 ISL | 7.49 D | 7.47 | 34.011 D | 26.574 | 148.6 | 0.410 | 2.16 D | 32.1 | 42.6 | 2.26 | 31.2 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | |
| 201 | 7.44 | 7.42 | 33.979 | 26.556 | 150.3 | 0.411 | 2.12 D | 31.5 | 42.7 | 2.27 | 31.3 | 0.00 | 0.00 | 0.00 | 0.05 | 202 | 207 |
| 230 | 7.29 | 7.27 | 34.022 | 26.611 | 145.5 | 0.454 | 1.66 D | 24.5 | 47.2 | 2.42 | 33.2 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.33 D | 7.31 | 34.077 D | 26.649 | 142.2 | 0.483 | 1.46 D | 21.6 | 50.2 | 2.53 | 34.4 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.25 | 7.22 | 34.109 | 26.686 | 139.1 | 0.511 | 1.23 | 18.2 | 53.1 | 2.64 | 35.4 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.07 D | 7.04 | 34.140 D | 26.736 | 134.8 | 0.552 | 0.93 D | 13.7 | 57.8 | 2.77 | 36.5 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.01 | 6.98 | 34.188 | 26.782 | 130.7 | 0.580 | 0.69 D | 10.1 | 61.0 | 2.85 | 37.1 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 6.53 | 6.50 | 34.214 | 26.868 | 123.1 | 0.656 | 0.55 | 8.0 | 68.4 | 2.96 | 38.5 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.41 D | 6.37 | 34.222 D | 26.890 | 121.2 | 0.679 | 0.48 D | 7.0 | 70.4 | 2.99 | 38.9 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.17 | 6.13 | 34.235 | 26.932 | 117.7 | 0.728 | 0.41 D | 5.9 | 74.8 | 3.06 | 39.6 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.70 D | 5.66 | 34.257 D | 27.008 | 110.7 | 0.796 | 0.31 D | 4.4 | 81.8 | 3.14 | 40.8 | 0.00 | 0.00 | | | 504 | |
| 515 | 5.66 | 5.62 | 34.263 | 27.018 | 109.9 | 0.812 | 0.30 | 4.3 | 83.6 | 3.16 | 41.1 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 38.4 N | 123 22.0 W | 30/01/11 | 0316 UTC | 4159 m | 180 10 kn | | | 1020.0 mb | 14.0 C | 12.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.59 | 12.59 | 33.194 | 25.075 | 287.7 | 0.000 | 6.08 | 100.6 | 5.1 | 0.61 | 4.4 | 0.24 | 0.29 | 0.57 | 0.19 | 0 | |
| 3 | 12.59 | 12.59 | 33.194 | 25.075 | 287.7 | 0.009 | 6.08 | 100.6 | 5.1 | 0.61 | 4.4 | 0.24 | 0.29 | 0.57 | 0.19 | 3 | 220 |
| 10 | 12.58 | 12.58 | 33.194 | 25.077 | 287.7 | 0.029 | 6.08 | 100.6 | 5.2 | 0.62 | 4.5 | 0.23 | 0.35 | 0.56 | 0.23 | 10 | 219 |
| 20 | 12.53 | 12.53 | 33.194 | 25.087 | 287.0 | 0.058 | 6.04 | 99.8 | 5.3 | 0.65 | 4.7 | 0.20 | 0.54 | 0.50 | 0.18 | 20 | 218 |
| 30 | 12.51 | 12.51 | 33.196 | 25.093 | 286.7 | 0.086 | 6.08 D | 100.4 | 5.3 | 0.65 | 4.7 | 0.20 | 0.54 | 0.48 | 0.16 | 30 | 217 |
| 40 | 12.48 | 12.47 | 33.202 | 25.103 | 286.0 | 0.115 | 5.93 D | 97.9 | 5.4 | 0.68 | 5.1 | 0.27 | 0.55 | 0.32 | 0.22 | 40 | 216 |
| 50 | 11.79 | 11.78 | 33.256 | 25.276 | 269.8 | 0.143 | 5.23 | 85.1 | 8.3 | 0.96 | 10.0 | 0.19 | 0.00 | 0.16 | 0.20 | 50 | 215 |
| 60 | 10.93 | 10.92 | 33.443 | 25.577 | 241.2 | 0.168 | 4.02 D | 64.3 | 14.4 | 1.44 | 17.7 | 0.00 | 0.00 | 0.07 | 0.43 | 60 | 214 |
| 70 | 10.05 | 10.04 | 33.575 | 25.833 | 217.1 | 0.191 | 3.50 | 54.9 | 20.9 | 1.74 | 22.4 | 0.00 | 0.00 | 0.02 | 0.18 | 70 | 213 |
| 75 ISL | 9.70 D | 9.69 | 33.668 D | 25.964 | 204.7 | 0.202 | 3.29 D | 51.3 | 22.9 | 1.84 | 23.9 | 0.00 | 0.00 | 0.02 | 0.17 | 75 | |
| 85 | 9.53 | 9.52 | 33.695 | 26.013 | 200.2 | 0.222 | 2.97 D | 46.1 | 25.6 | 1.97 | 25.8 | 0.00 | 0.00 | 0.02 | 0.14 | 85 | 212 |
| 100 | 9.19 | 9.18 | 33.785 | 26.139 | 188.6 | 0.251 | 2.75 | 42.4 | 28.7 | 2.05 | 27.3 | 0.00 | 0.00 | 0.01 | 0.13 | 101 | 211 |
| 120 | 8.99 | 8.98 | 33.922 | 26.278 | 175.7 | 0.287 | 2.30 | 35.3 | 32.3 | 2.17 | 29.1 | 0.00 | 0.00 | 0.01 | 0.09 | 121 | 210 |
| 125 ISL | 8.98 D | 8.97 | 33.942 D | 26.295 | 174.2 | 0.296 | 2.25 D | 34.6 | 32.9 | 2.19 | 29.3 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 140 | 8.78 | 8.77 | 33.985 | 26.361 | 168.2 | 0.322 | 2.11 | 32.3 | 34.4 | 2.24 | 29.9 | 0.00 | 0.00 | 0.00 | 0.07 | 141 | 209 |
| 150 ISL | 8.60 D | 8.58 | 34.018 D | 26.415 | 163.2 | 0.338 | 2.07 D | 31.5 | 35.6 | 2.28 | 30.3 | 0.00 | 0.00 | 0.00 | 0.06 | 151 | |
| 170 | 8.46 | 8.44 | 34.044 | 26.457 | 159.6 | 0.371 | 1.88 D | 28.6 | 38.3 | 2.35 | 31.2 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 200 | 8.05 | 8.03 | 34.071 | 26.540 | 152.1 | 0.417 | 1.71 | 25.7 | 42.7 | 2.44 | 32.4 | 0.00 | 0.00 | 0.00 | 0.04 | 201 | 207 |
| 230 | 7.72 | 7.70 | 34.090 | 26.604 | 146.4 | 0.462 | 1.53 D | 22.9 | 47.3 | 2.54 | 33.9 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.54 D | 7.52 | 34.112 D | 26.647 | 142.6 | 0.491 | 1.31 D | 19.5 | 50.0 | 2.63 | 34.8 | 0.00 | 0.00 | | | 252 | |
| 269 | 7.43 | 7.40 | 34.126 | 26.674 | 140.3 | 0.518 | 1.16 | 17.2 | 52.5 | 2.71 | 35.5 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.26 D | 7.23 | 34.155 D | 26.721 | 136.2 | 0.561 | 0.97 D | 14.3 | 57.3 | 2.79 | 36.7 | 0.00 | 0.00 | | | 302 | |
| 321 | 6.77 | 6.74 | 34.114 | 26.756 | 132.9 | 0.589 | 1.06 D | 15.5 | 60.4 | 2.84 | 37.5 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 6.51 | 6.48 | 34.185 | 26.848 | 125.0 | 0.667 | 0.66 | 9.6 | 67.1 | 3.04 | 38.9 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.42 D | 6.38 | 34.196 D | 26.868 | 123.3 | 0.690 | 0.64 D | 9.3 | 69.3 | 3.08 | 39.3 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.12 | 6.08 | 34.214 | 26.921 | 118.6 | 0.740 | 0.52 D | 7.5 | 74.2 | 3.14 | 40.1 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.76 D | 5.72 | 34.250 D | 26.995 | 112.0 | 0.808 | 0.37 D | 5.3 | 81.7 | 3.19 | 41.1 | 0.00 | 0.00 | | | 504 | |
| 518 | 5.64 | 5.60 | 34.261 | 27.019 | 109.9 | 0.828 | 0.30 | 4.3 | 84.0 | 3.20 | 41.4 | 0.00 | 0.00 | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 73.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 18.5 N | 124 3.3 W | 30/01/11 | 0907 UTC | 3180 m | 210 13 kn | | | 1019.1 mb | 14.5 C | 12.6 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.08 | 14.08 | 32.834 | 24.498 | 342.6 | 0.000 | 5.96 | 101.5 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.25 | 0.07 | 0 | |
| 2 | 14.08 | 14.08 | 32.834 | 24.498 | 342.6 | 0.007 | 5.96 | 101.5 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.25 | 0.07 | 2 | 220 |
| 9 | 14.08 | 14.08 | 32.833 | 24.497 | 342.9 | 0.031 | 5.97 | 101.6 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 9 | 219 |
| 10 ISL | 14.09 D | 14.09 | 32.831 D | 24.494 | 343.3 | 0.034 | 6.00 | D102.2 | 1.5 | 0.31 | 0.1 | 0.00 | 0.00 | 0.24 | 0.08 | 10 | |
| 20 | 14.09 | 14.09 | 32.833 | 24.496 | 343.4 | 0.069 | 5.97 | 101.7 | 1.6 | 0.31 | 0.1 | 0.00 | 0.00 | 0.25 | 0.07 | 20 | 218 |
| 30 ISL | 14.07 D | 14.07 | 32.832 D | 24.499 | 343.3 | 0.103 | 6.00 | D102.1 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.25 | 0.07 | 30 | |
| 31 | 14.08 | 14.08 | 32.834 | 24.499 | 343.4 | 0.106 | 6.00 | D102.2 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.25 | 0.07 | 31 | 217 |
| 39 | 14.03 | 14.02 | 32.834 | 24.509 | 342.6 | 0.134 | 5.99 | D101.9 | 1.6 | 0.32 | 0.1 | 0.00 | 0.00 | 0.26 | 0.08 | 39 | 216 |
| 50 ISL | 13.65 D | 13.64 | 32.790 D | 24.553 | 338.7 | 0.171 | 6.04 | D101.9 | 1.8 | 0.34 | 0.1 | 0.00 | 0.00 | 0.61 | 0.21 | 50 | |
| 51 | 13.66 | 13.65 | 32.791 | 24.552 | 338.8 | 0.175 | 6.00 | 101.2 | 1.8 | 0.34 | 0.1 | 0.00 | 0.00 | 0.64 | 0.22 | 51 | 215 |
| 59 | 13.49 | 13.48 | 32.802 | 24.595 | 334.9 | 0.202 | 5.99 | D100.7 | 1.8 | 0.36 | 0.3 | 0.03 | 0.05 | 0.56 | 0.26 | 59 | 214 |
| 70 | 13.01 | 13.00 | 32.855 | 24.732 | 322.1 | 0.238 | 5.83 | 97.1 | 2.7 | 0.49 | 2.1 | 0.24 | 0.01 | 0.30 | 0.18 | 70 | 213 |
| 75 ISL | 12.61 D | 12.60 | 32.964 D | 24.895 | 306.7 | 0.253 | 5.70 | D 94.2 | 3.8 | 0.61 | 4.0 | 0.18 | 0.01 | 0.21 | 0.15 | 75 | |
| 85 | 11.43 | 11.42 | 33.079 | 25.205 | 277.3 | 0.283 | 5.28 | D 85.1 | 7.1 | 0.90 | 8.7 | 0.01 | 0.00 | 0.09 | 0.09 | 85 | 212 |
| 100 | 10.69 | 10.68 | 33.331 | 25.533 | 246.3 | 0.322 | 4.37 | 69.5 | 14.1 | 1.38 | 16.6 | 0.00 | 0.00 | 0.05 | 0.06 | 100 | 211 |
| 118 | 10.14 | 10.13 | 33.710 | 25.924 | 209.5 | 0.363 | 2.70 | 42.5 | 24.0 | 2.01 | 25.5 | 0.00 | 0.00 | 0.01 | 0.05 | 119 | 210 |
| 125 ISL | 9.82 D | 9.81 | 33.861 D | 26.096 | 193.3 | 0.377 | 2.07 | D 32.4 | 27.1 | 2.14 | 27.4 | 0.00 | 0.00 | 0.01 | 0.05 | 126 | |
| 140 | 9.56 | 9.54 | 33.912 | 26.179 | 185.7 | 0.406 | 1.86 | 28.9 | 32.0 | 2.28 | 29.5 | 0.00 | 0.00 | 0.00 | 0.04 | 141 | 209 |
| 150 ISL | 9.49 D | 9.47 | 33.929 D | 26.204 | 183.5 | 0.424 | 1.84 | D 28.6 | 32.4 | 2.29 | 29.7 | 0.00 | 0.00 | 0.00 | 0.04 | 151 | |
| 169 | 9.42 | 9.40 | 33.948 | 26.230 | 181.4 | 0.459 | 1.76 | D 27.3 | 33.3 | 2.32 | 30.0 | 0.00 | 0.00 | 0.00 | 0.03 | 170 | 208 |
| 199 | 9.30 | 9.28 | 33.978 | 26.274 | 177.8 | 0.513 | 1.65 | 25.5 | 34.4 | 2.34 | 30.4 | 0.00 | 0.00 | 0.00 | 0.03 | 200 | 207 |
| 200 ISL | 9.29 D | 9.27 | 33.980 D | 26.277 | 177.5 | 0.514 | 1.67 | D 25.8 | 34.4 | 2.34 | 30.4 | 0.00 | 0.00 | | | 201 | |
| 229 | 9.12 | 9.09 | 34.022 | 26.338 | 172.3 | 0.565 | 1.58 | D 24.4 | 36.1 | 2.39 | 31.0 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 9.02 D | 8.99 | 34.045 D | 26.372 | 169.5 | 0.601 | 1.53 | D 23.5 | 37.6 | 2.42 | 31.4 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.87 | 8.84 | 34.076 | 26.420 | 165.2 | 0.634 | 1.43 | 21.9 | 39.2 | 2.45 | 31.7 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 8.76 D | 8.73 | 34.151 D | 26.497 | 158.5 | 0.683 | 1.20 | D 18.4 | 41.3 | 2.54 | 32.2 | 0.00 | 0.00 | | | 302 | |
| 322 | 8.73 | 8.70 | 34.185 | 26.528 | 155.9 | 0.718 | 1.05 | D 16.1 | 42.9 | 2.61 | 32.6 | 0.00 | 0.00 | | | 324 | 204 |
| 381 | 8.28 | 8.24 | 34.217 | 26.623 | 147.8 | 0.807 | 0.97 | 14.7 | 47.3 | 2.65 | 33.4 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 8.04 D | 8.00 | 34.200 D | 26.646 | 145.7 | 0.835 | 1.01 | D 15.2 | 49.7 | 2.67 | 34.2 | 0.00 | 0.00 | | | 403 | |
| 441 | 7.34 | 7.30 | 34.165 | 26.720 | 138.8 | 0.893 | 0.95 | D 14.1 | 55.9 | 2.74 | 36.1 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.52 D | 6.47 | 34.200 D | 26.859 | 125.7 | 0.971 | 0.67 | D 9.7 | 66.7 | 2.95 | 38.5 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.40 | 6.35 | 34.197 | 26.873 | 124.5 | 0.993 | 0.59 | 8.6 | 69.8 | 3.01 | 39.2 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 49.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 5.2 N | 120 46.5 W | 28/01/11 | 2345 UTC | 73 m | 250 26 kn | 320 04 04 | 0 | 1015.6 mb | 13.0 C | 11.2 C | 05m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.46 | 12.46 | 33.394 | 25.255 | 270.5 | 0.000 | 6.44 | 106.4 | 4.3 | 0.55 | 3.7 | 0.16 | 0.05 | 7.09 | 0.92 | 0 | |
| 2 | 12.46 | 12.46 | 33.394 | 25.255 | 270.6 | 0.005 | 6.44 | 106.4 | 4.3 | 0.55 | 3.7 | 0.16 | 0.05 | 7.09 | 0.92 | 2 | 208 |
| 5 | 12.45 | 12.45 | 33.390 | 25.254 | 270.7 | 0.014 | 6.42 | 106.0 | 4.3 | 0.58 | 3.8 | 0.16 | 0.04 | 7.28 | 0.95 | 5 | 207 |
| 10 | 12.45 | 12.45 | 33.390 | 25.254 | 270.8 | 0.027 | 6.42 | 106.0 | 4.3 | 0.60 | 3.8 | 0.19 | 0.05 | 6.90 | 0.88 | 10 | 206 |
| 20 | 12.00 | 12.00 | 33.409 | 25.355 | 261.5 | 0.054 | 5.53 | 90.5 | 8.1 | 0.93 | 8.4 | 0.26 | 0.38 | 3.81 | 0.94 | 20 | 205 |
| 30 ISL | 11.81 D | 11.81 | 33.418 D | 25.397 | 257.7 | 0.080 | 5.25 | 85.5 | 10.2 | 1.03 | 10.3 | 0.29 | 0.40 | 3.34 | 1.12 | 30 | |
| 31 | 11.80 | 11.80 | 33.425 | 25.405 | 257.0 | 0.082 | 5.22 | 85.0 | 10.4 | 1.04 | 10.5 | 0.29 | 0.40 | 3.33 | 1.13 | 31 | 204 |
| 40 | 11.40 | 11.40 | 33.464 | 25.509 | 247.3 | 0.105 | 4.48 | 72.4 | 14.3 | 1.34 | 14.3 | 0.32 | 0.25 | 1.84 | 1.07 | 40 | 203 |
| 49 | 11.28 | 11.27 | 33.506 | 25.563 | 242.3 | 0.127 | 4.01 | 64.6 | 17.6 | 1.53 | 15.8 | 0.33 | 0.46 | 1.29 | 1.30 | 49 | 202 |
| 50 ISL | 11.30 D | 11.29 | 33.501 D | 25.556 | 243.1 | 0.129 | 3.99 | 64.3 | 17.7 | 1.54 | 15.9 | 0.33 | 0.47 | 1.28 | 1.33 | 50 | |
| 64 | 11.12 | 11.11 | 33.532 | 25.613 | 238.0 | 0.163 | 3.75 | 60.2 | 19.8 | 1.66 | 17.1 | 0.31 | 0.55 | 1.16 | 1.70 | 64 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 53.6 N | 121 12.2 W | 28/01/11 | 1741 UTC | 571 m | 260 17 kn | 300 04 04 | 1 | 1019.0 mb | 13.3 C | 11.9 C | 07m | 4/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.69 | 12.69 | 33.389 | 25.206 | 275.1 | 0.000 | 7.06 | 117.2 | 1.2 | 0.60 | 0.7 | 0.04 | 0.07 | 3.81 | 0.64 | 0 | |
| 2 A | 12.69 | 12.69 | 33.389 | 25.207 | 275.2 | 0.006 | 7.06 | 117.2 | 1.2 | 0.60 | 0.7 | 0.04 | 0.07 | 3.81 | 0.64 | 2 | 223 |
| 5 A | 12.63 | 12.63 | 33.392 | 25.221 | 273.9 | 0.014 | 6.97 | 115.6 | 1.4 | 0.37 | 1.0 | 0.04 | 0.01 | 3.76 | 0.74 | 5 | 221 |
| 5 A | 12.65 | 12.65 | 33.390 | 25.215 | 274.4 | 0.014 | 6.98 | 115.8 | 1.3 | 0.44 | 1.0 | 0.05 | 0.04 | 3.72 | 0.79 | 5 | 222 |
| 8 A | 12.77 | 12.77 | 33.386 | 25.189 | 277.0 | 0.022 | 7.16 | 119.0 | 0.6 | 0.23 | 0.2 | 0.02 | 0.00 | 3.79 | 0.65 | 8 | 220 |
| 10 ISL | 12.76 D | 12.76 | 33.386 D | 25.191 | 276.9 | 0.028 | 7.18 D | 119.4 | 0.7 | 0.26 | 0.3 | 0.02 | 0.00 | 3.75 | 0.66 | 10 | |
| 11 A | 12.75 | 12.75 | 33.387 | 25.193 | 276.7 | 0.030 | 7.15 | 118.8 | 0.7 | 0.27 | 0.3 | 0.02 | 0.01 | 3.73 | 0.67 | 11 | 219 |
| 20 ISL | 12.30 D | 12.30 | 33.402 D | 25.292 | 267.5 | 0.055 | 6.54 D | 107.7 | 3.0 | 0.49 | 3.3 | 0.09 | 0.14 | 4.33 | 0.75 | 20 | |
| 23 A | 12.19 | 12.19 | 33.405 | 25.316 | 265.3 | 0.063 | 6.23 | 102.3 | 4.5 | 0.61 | 5.0 | 0.12 | 0.21 | 4.46 | 0.78 | 23 | 218 |
| 30 ISL | 11.68 D | 11.68 | 33.413 D | 25.418 | 255.8 | 0.081 | 5.31 D | 86.3 | 9.4 | 1.04 | 10.2 | 0.21 | 0.46 | 3.62 | 1.11 | 30 | |
| 32 | 11.55 | 11.55 | 33.401 | 25.432 | 254.4 | 0.086 | 5.06 | 82.0 | 10.8 | 1.16 | 11.7 | 0.23 | 0.50 | 3.29 | 1.18 | 32 | 217 |
| 40 | 11.03 | 11.03 | 33.435 | 25.553 | 243.1 | 0.106 | 4.42 | 70.8 | 14.7 | 1.48 | 15.7 | 0.22 | 0.24 | 2.18 | 0.87 | 40 | 216 |
| 50 | 10.32 | 10.31 | 33.589 | 25.797 | 220.1 | 0.129 | 3.30 | 52.1 | 21.9 | 1.82 | 21.8 | 0.08 | 0.00 | 1.46 | 0.78 | 50 | 215 |
| 60 | 9.67 | 9.66 | 33.595 | 25.911 | 209.4 | 0.151 | 3.39 | 52.8 | 23.4 | 1.85 | 23.1 | 0.03 | 0.00 | 0.60 | 0.52 | 60 | 214 |
| 70 | 9.74 | 9.73 | 33.703 | 25.984 | 202.7 | 0.171 | 2.95 | 46.0 | 25.6 | 1.94 | 24.3 | 0.02 | 0.00 | 0.65 | 0.53 | 70 | 213 |
| 75 ISL | 9.61 D | 9.60 | 33.748 D | 26.041 | 197.4 | 0.181 | 2.87 D | 44.7 | 26.5 | 1.97 | 24.9 | 0.02 | 0.00 | 0.58 | 0.48 | 75 | |
| 86 | 9.46 | 9.45 | 33.791 | 26.099 | 192.0 | 0.203 | 2.72 | 42.2 | 28.4 | 2.05 | 26.1 | 0.01 | 0.00 | 0.37 | 0.36 | 86 | 212 |
| 100 | 9.70 | 9.69 | 33.924 | 26.164 | 186.2 | 0.229 | 2.09 | 32.6 | 31.2 | 2.19 | 27.0 | 0.01 | 0.00 | 0.26 | 0.31 | 101 | 211 |
| 119 | 9.51 | 9.50 | 34.014 | 26.266 | 176.9 | 0.264 | 1.81 | 28.2 | 34.1 | 2.28 | 28.3 | 0.01 | 0.00 | 0.14 | 0.28 | 120 | 210 |
| 125 ISL | 9.49 D | 9.48 | 34.023 D | 26.277 | 176.1 | 0.274 | 1.80 D | 28.0 | 34.4 | 2.28 | 28.5 | 0.01 | 0.00 | 0.14 | 0.28 | 126 | |
| 141 | 9.42 | 9.40 | 34.059 | 26.317 | 172.6 | 0.302 | 1.69 | 26.2 | 35.0 | 2.29 | 28.7 | 0.00 | 0.00 | 0.15 | 0.27 | 142 | 209 |
| 150 ISL | 9.35 D | 9.33 | 34.069 D | 26.336 | 170.9 | 0.318 | 1.66 D | 25.7 | 35.6 | 2.30 | 28.9 | 0.00 | 0.00 | 0.15 | 0.26 | 151 | |
| 170 | 9.17 | 9.15 | 34.087 | 26.379 | 167.2 | 0.351 | 1.63 | 25.2 | 37.1 | 2.33 | 29.3 | 0.00 | 0.00 | 0.14 | 0.22 | 171 | 208 |
| 200 | 8.87 | 8.85 | 34.126 | 26.458 | 160.2 | 0.401 | 1.58 | 24.2 | 39.3 | 2.40 | 30.2 | 0.00 | 0.00 | 0.06 | 0.14 | 201 | 207 |
| 234 | 8.52 | 8.50 | 34.129 | 26.515 | 155.3 | 0.454 | 1.57 | 23.9 | 41.9 | 2.43 | 31.1 | 0.00 | 0.00 | | | 235 | 206 |
| 250 ISL | 8.07 D | 8.04 | 34.079 D | 26.544 | 152.6 | 0.479 | 1.88 D | 28.3 | 42.9 | 2.38 | 31.3 | 0.00 | 0.00 | | | 252 | |
| 271 | 7.68 | 7.65 | 34.035 | 26.567 | 150.6 | 0.511 | 2.08 | 31.0 | 44.6 | 2.33 | 31.7 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.52 D | 7.49 | 34.106 D | 26.646 | 143.5 | 0.553 | 1.56 D | 23.2 | 49.3 | 2.48 | 33.3 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.36 | 7.33 | 34.127 | 26.686 | 140.0 | 0.583 | 1.34 | 19.9 | 53.1 | 2.64 | 34.6 | 0.00 | 0.00 | | | 323 | 204 |
| 382 | 7.04 | 7.00 | 34.197 | 26.786 | 131.3 | 0.666 | 0.76 | 11.2 | 61.7 | 2.90 | 36.5 | 0.00 | 0.00 | | | 385 | 203 |
| 400 ISL | 6.91 D | 6.87 | 34.206 D | 26.811 | 129.1 | 0.689 | 0.66 D | 9.7 | 63.8 | 2.94 | 37.0 | 0.00 | 0.00 | | | 403 | |
| 443 | 6.60 | 6.56 | 34.221 | 26.865 | 124.4 | 0.744 | 0.58 | 8.4 | 68.5 | 2.99 | 38.1 | 0.00 | 0.00 | | | 446 | 202 |
| 500 ISL | 6.15 D | 6.11 | 34.244 D | 26.942 | 117.5 | 0.813 | 0.47 D | 6.8 | 74.9 | 3.07 | 39.3 | 0.00 | 0.00 | | | 504 | |
| 514 | 6.14 | 6.09 | 34.251 | 26.949 | 117.0 | 0.829 | 0.42 | 6.1 | 76.5 | 3.09 | 39.6 | 0.00 | 0.00 | | | 518 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 43.6 N | 121 33.2 W | 28/01/11 | 1305 UTC | 915 m | 270 14 kn | | | 1018.1 mb | 11.5 C | 10.6 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.67 | 12.67 | 33.221 | 25.080 | 287.1 | 0.000 | 6.11 | 101.3 | 5.6 | 0.72 | 4.9 | 0.25 | 0.05 | 0.99 | 0.34 | 0 | |
| 2 | 12.67 | 12.67 | 33.221 | 25.080 | 287.2 | 0.006 | 6.11 | 101.3 | 5.6 | 0.72 | 4.9 | 0.25 | 0.05 | 0.99 | 0.34 | 2 | 220 |
| 10 | 12.67 | 12.67 | 33.221 | 25.080 | 287.4 | 0.029 | 6.11 | 101.3 | 5.6 | 0.66 | 4.9 | 0.25 | 0.06 | 0.98 | 0.28 | 10 | 219 |
| 20 | 12.65 | 12.65 | 33.221 | 25.085 | 287.2 | 0.057 | 6.10 | 101.1 | 5.6 | 0.66 | 5.0 | 0.26 | 0.07 | 0.97 A | 0.33 A | 20 | 218 |
| 30 ISL | 12.34 D | 12.34 | 33.253 D | 25.169 | 279.4 | 0.086 | 6.02 D | 99.1 | 5.1 | 0.72 | 5.7 | 0.32 | 0.39 | 1.11 | 0.44 | 30 | |
| 31 | 12.34 | 12.34 | 33.252 | 25.169 | 279.5 | 0.089 | 5.98 | 98.4 | 5.0 | 0.73 | 5.8 | 0.32 | 0.41 | 1.12 | 0.44 | 31 | 217 |
| 40 | 12.00 | 11.99 | 33.300 | 25.271 | 270.0 | 0.113 | 5.45 | 89.1 | 7.9 | 0.95 | 9.3 | 0.26 | 0.18 | 1.13 | 0.27 | 40 | 216 |
| 49 | 11.20 | 11.19 | 33.356 | 25.461 | 252.1 | 0.137 | 4.68 | 75.2 | 12.9 | 1.29 | 14.6 | 0.07 | 0.00 | 0.66 | 0.37 | 49 | 215 |
| 50 ISL | 11.16 D | 11.15 | 33.370 D | 25.479 | 250.4 | 0.139 | 4.57 D | 73.4 | 13.3 | 1.31 | 15.0 | 0.07 | 0.00 | 0.60 | 0.36 | 50 | |
| 60 | 10.57 | 10.56 | 33.428 | 25.629 | 236.3 | 0.164 | 4.15 | 65.8 | 16.7 | 1.50 | 18.0 | 0.03 | 0.00 | 0.21 | 0.26 | 60 | 214 |
| 71 | 9.99 | 9.98 | 33.583 | 25.849 | 215.6 | 0.189 | 3.42 | 53.6 | 21.9 | 1.77 | 22.2 | 0.02 | 0.00 | 0.36 | 0.39 | 71 | 213 |
| 75 ISL | 9.92 D | 9.91 | 33.713 D | 25.962 | 204.9 | 0.197 | 2.97 D | 46.5 | 23.8 | 1.86 | 23.3 | 0.02 | 0.00 | 0.34 | 0.42 | 75 | |
| 85 | 9.93 | 9.92 | 33.796 | 26.026 | 199.1 | 0.217 | 2.50 | 39.2 | 27.6 | 2.03 | 25.2 | 0.01 | 0.00 | 0.27 | 0.45 | 85 | 212 |
| 100 | 9.83 | 9.82 | 33.854 | 26.088 | 193.5 | 0.247 | 2.30 | 36.0 | 29.1 | 2.09 | 26.1 | 0.01 | 0.00 | 0.40 | 0.39 | 101 | 211 |
| 120 | 9.64 | 9.63 | 33.956 | 26.199 | 183.3 | 0.284 | 2.02 | 31.5 | 31.8 | 2.20 | 27.4 | 0.00 | 0.00 | 0.22 | 0.42 | 121 | 210 |
| 125 ISL | 9.58 D | 9.57 | 33.970 D | 26.220 | 181.4 | 0.293 | 2.05 D | 31.9 | 32.2 | 2.21 | 27.6 | 0.00 | 0.00 | 0.19 | 0.44 | 126 | |
| 150 | 9.32 | 9.30 | 34.027 | 26.308 | 173.6 | 0.338 | 1.90 | 29.4 | 33.9 | 2.26 | 28.4 | 0.00 | 0.00 | 0.09 | 0.52 | 151 | 209 |
| 171 | 9.21 | 9.19 | 34.074 | 26.363 | 168.8 | 0.374 | 1.74 | 26.9 | 35.7 | 2.31 | 29.0 | 0.00 | 0.00 | 0.08 | 0.25 | 172 | 208 |
| 200 | 8.65 | 8.63 | 34.034 | 26.420 | 163.7 | 0.422 | 2.18 | 33.3 | 36.0 | 2.19 | 29.1 | 0.00 | 0.00 | 0.08 | 0.25 | 201 | 207 |
| 230 | 8.50 | 8.48 | 34.121 | 26.512 | 155.5 | 0.470 | 1.62 | 24.6 | 41.2 | 2.41 | 31.0 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.20 D | 8.17 | 34.148 D | 26.579 | 149.4 | 0.500 | 1.42 D | 21.5 | 44.6 | 2.51 | 32.1 | 0.00 | 0.00 | | | 252 | |
| 272 | 7.96 | 7.93 | 34.164 | 26.628 | 145.1 | 0.533 | 1.19 | 17.9 | 48.4 | 2.60 | 33.3 | 0.00 | 0.00 | | | 274 | 205 |
| 300 ISL | 7.50 D | 7.47 | 34.189 D | 26.714 | 137.1 | 0.572 | 0.96 D | 14.3 | 54.1 | 2.73 | 34.7 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.35 | 7.32 | 34.196 | 26.741 | 134.8 | 0.601 | 0.83 | 12.3 | 58.0 | 2.81 | 35.6 | 0.00 | 0.00 | | | 323 | 204 |
| 380 | 6.92 | 6.88 | 34.223 | 26.823 | 127.7 | 0.678 | 0.66 | 9.7 | 63.6 | 2.92 | 37.3 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.82 D | 6.78 | 34.233 D | 26.844 | 125.9 | 0.704 | 0.61 D | 8.9 | 66.3 | 2.96 | 37.9 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.39 | 6.35 | 34.245 | 26.911 | 119.8 | 0.753 | 0.53 | 7.7 | 71.8 | 3.04 | 39.0 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.99 D | 5.95 | 34.272 D | 26.984 | 113.3 | 0.823 | 0.38 D | 5.5 | 78.0 | 3.13 | 40.0 | 0.00 | 0.00 | | | 504 | |
| 516 | 5.94 | 5.89 | 34.284 | 27.000 | 112.0 | 0.841 | 0.34 | 4.9 | 79.7 | 3.16 | 40.3 | 0.00 | 0.00 | | | 520 | 201 |

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 23.5 N | 122 14.8 W | 28/01/11 | 0654 UTC | 4022 m | 260 11 kn | | | 1020.6 mb | 12.0 C | 11.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.75 | 12.75 | 33.199 | 25.047 | 290.3 | 0.000 | 6.45 | 107.1 | 2.6 | 0.48 | 3.0 | 0.20 | 0.14 | 2.23 | 0.19 | 0 | |
| 2 | 12.75 | 12.75 | 33.199 | 25.048 | 290.3 | 0.006 | 6.45 | 107.1 | 2.6 | 0.48 | 3.0 | 0.20 | 0.14 | 2.23 | 0.19 | 2 | 220 |
| 10 | 12.73 | 12.73 | 33.196 | 25.049 | 290.3 | 0.029 | 6.45 | 107.0 | 2.7 | 0.48 | 3.1 | 0.20 | 0.14 | 1.22 | 0.08 | 10 | 219 |
| 20 | 12.48 | 12.48 | 33.226 | 25.121 | 283.7 | 0.058 | 5.97 | 98.6 | 5.6 | 0.69 | 5.5 | 0.32 | 0.33 | 1.30 | 0.35 | 20 | 218 |
| 30 | 12.32 | 12.32 | 33.266 | 25.183 | 278.1 | 0.086 | 5.86 | 96.4 | 6.4 | 0.77 | 6.7 | 0.36 | 0.44 | 1.34 | 0.48 | 30 | 217 |
| 40 | 12.28 | 12.27 | 33.297 | 25.215 | 275.3 | 0.113 | 5.89 | 96.9 | 7.5 | 0.85 | 7.8 | 0.40 | 0.29 | 1.07 | 0.38 | 40 | 216 |
| 50 | 12.25 | 12.24 | 33.311 | 25.232 | 274.0 | 0.141 | 5.90 | 97.0 | 7.7 | 0.87 | 8.1 | 0.40 | 0.38 | 0.77 | 0.36 | 50 | 215 |
| 60 | 11.91 | 11.90 | 33.327 | 25.309 | 266.9 | 0.168 | 5.55 | 90.6 | 9.0 | 0.99 | 10.0 | 0.36 | 0.46 | 0.29 | 0.22 | 60 | 214 |
| 70 | 11.02 | 11.01 | 33.379 | 25.512 | 247.7 | 0.194 | 4.52 | 72.4 | 13.9 | 1.31 | 15.7 | 0.06 | 0.00 | 0.16 | 0.25 | 70 | 213 |
| 75 ISL | 10.88 D | 10.87 | 33.411 D | 25.562 | 243.1 | 0.206 | 4.49 D | 71.7 | 16.4 | 1.44 | 18.0 | 0.04 | 0.00 | 0.11 | 0.22 | 75 | |
| 85 | 9.52 | 9.51 | 33.471 | 25.839 | 216.7 | 0.229 | 3.78 | 58.6 | 21.0 | 1.67 | 21.8 | 0.01 | 0.00 | 0.05 | 0.16 | 85 | 212 |
| 100 | 9.54 | 9.53 | 33.694 | 26.011 | 200.8 | 0.260 | 2.90 | 45.0 | 25.8 | 1.95 | 25.7 | 0.00 | 0.00 | 0.01 | 0.17 | 101 | 211 |
| 120 | 9.23 | 9.22 | 33.836 | 26.172 | 185.8 | 0.299 | 2.51 | 38.8 | 29.6 | 2.07 | 27.7 | 0.00 | 0.00 | 0.01 | 0.15 | 121 | 210 |
| 125 ISL | 9.08 D | 9.07 | 33.880 D | 26.231 | 180.3 | 0.308 | 2.45 D | 37.7 | 30.5 | 2.09 | 28.1 | 0.00 | 0.00 | 0.01 | 0.14 | 126 | |
| 140 | 8.89 | 8.88 | 33.926 | 26.297 | 174.3 | 0.335 | 2.32 | 35.6 | 32.8 | 2.14 | 28.9 | 0.00 | 0.00 | 0.01 | 0.11 | 141 | 209 |
| 150 ISL | 8.68 D | 8.66 | 33.980 D | 26.372 | 167.2 | 0.352 | 2.25 D | 34.3 | 34.1 | 2.17 | 29.1 | 0.00 | 0.00 | 0.01 | 0.10 | 151 | |
| 170 | 8.65 | 8.63 | 34.048 | 26.431 | 162.1 | 0.385 | 2.08 | 31.7 | 36.7 | 2.22 | 29.3 | 0.00 | 0.00 | 0.00 | 0.08 | 171 | 208 |
| 200 | 8.10 | 8.08 | 34.063 | 26.526 | 153.4 | 0.432 | 1.95 | 29.4 | 41.3 | 2.31 | 31.0 | 0.00 | 0.00 | 0.00 | 0.06 | 201 | 207 |
| 231 | 7.68 | 7.66 | 34.046 | 26.575 | 149.2 | 0.479 | 1.90 | 28.4 | 44.9 | 2.37 | 32.3 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 7.75 D | 7.73 | 34.133 D | 26.634 | 144.0 | 0.507 | 1.39 D | 20.8 | 48.3 | 2.48 | 33.4 | 0.00 | 0.00 | | | 252 | |
| 271 | 7.26 | 7.23 | 34.125 | 26.697 | 138.0 | 0.536 | 1.28 | 18.9 | 52.5 | 2.62 | 34.7 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.04 D | 7.01 | 34.149 D | 26.747 | 133.7 | 0.576 | 1.04 D | 15.3 | 57.9 | 2.75 | 36.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.92 | 6.89 | 34.177 | 26.786 | 130.2 | 0.602 | 0.84 | 12.3 | 61.4 | 2.82 | 36.8 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.49 | 6.46 | 34.234 | 26.889 | 121.1 | 0.679 | 0.57 | 8.3 | 69.7 | 2.98 | 38.5 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.35 D | 6.31 | 34.247 D | 26.917 | 118.6 | 0.702 | 0.52 D | 7.5 | 71.7 | 3.01 | 38.9 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.14 | 6.10 | 34.263 | 26.958 | 115.2 | 0.750 | 0.41 | 5.9 | 76.0 | 3.07 | 39.6 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.75 D | 5.71 | 34.287 D | 27.026 | 109.1 | 0.816 | 0.35 D | 5.0 | 83.2 | 3.16 | 40.9 | 0.00 | 0.00 | | | 504 | |
| 516 | 5.57 | 5.53 | 34.279 | 27.042 | 107.6 | 0.833 | 0.30 | 4.3 | 85.2 | 3.19 | 41.3 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 3.5 N | 122 56.3 W | 27/01/11 | 2359 UTC | 4237 m | 250 07 kn | 290 04 06 | 0 | 1021.1 mb | 14.1 C | 13.6 C | 24m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.15 | 13.15 | 33.171 | 24.947 | 299.8 | 0.000 | 6.10 | 102.1 | 4.9 | 0.58 | 3.9 | 0.15 | 0.30 | 0.39 | 0.17 | 0 | |
| 2 | 13.15 | 13.15 | 33.171 | 24.947 | 299.9 | 0.006 | 6.10 | 102.1 | 4.9 | 0.58 | 3.9 | 0.15 | 0.30 | 0.39 | 0.17 | 2 | 220 |
| 10 | 12.77 | 12.77 | 33.170 | 25.021 | 293.0 | 0.030 | 6.12 | 101.6 | 5.0 | 0.58 | 4.0 | 0.16 | 0.30 | 0.39 | 0.08 | 10 | 219 |
| 20 | 12.68 | 12.68 | 33.173 | 25.042 | 291.3 | 0.059 | 6.12 | 101.4 | 5.1 | 0.58 | 4.1 | 0.17 | 0.29 | 0.45 | 0.17 | 20 | 218 |
| 30 | 12.63 | 12.63 | 33.169 | 25.048 | 290.9 | 0.088 | 6.11 | 101.1 | 5.1 | 0.60 | 4.2 | 0.19 | 0.38 | 0.49 | 0.19 | 30 | 217 |
| 40 | 12.53 | 12.52 | 33.174 | 25.072 | 289.0 | 0.117 | 6.02 | 99.4 | 5.3 | 0.63 | 4.6 | 0.24 | 0.46 | 0.41 | 0.20 | 40 | 216 |
| 50 | 12.24 | 12.23 | 33.213 | 25.158 | 281.0 | 0.146 | 5.83 | 95.7 | 6.1 | 0.77 | 6.3 | 0.39 | 0.59 | 0.27 | 0.16 | 50 | 215 |
| 60 | 11.93 | 11.92 | 33.331 | 25.308 | 267.0 | 0.173 | 5.31 | 86.7 | 8.4 | 1.00 | 10.8 | 0.26 | 0.00 | 0.15 | 0.18 | 60 | 214 |
| 70 | 10.35 | 10.34 | 33.540 | 25.754 | 224.6 | 0.198 | 3.59 | 56.7 | 19.4 | 1.70 | 21.8 | 0.01 | 0.00 | 0.04 | 0.16 | 70 | 213 |
| 75 ISL | 10.00 D | 9.99 | 33.616 D | 25.873 | 213.4 | 0.208 | 3.25 D | 51.0 | 22.2 | 1.78 | 23.1 | 0.01 | 0.00 | 0.03 | 0.15 | 75 | |
| 85 | 9.62 | 9.61 | 33.680 | 25.986 | 202.8 | 0.229 | 2.97 | 46.2 | 25.4 | 1.95 | 25.7 | 0.01 | 0.00 | 0.02 | 0.12 | 85 | 212 |
| 100 | 9.25 | 9.24 | 33.813 | 26.151 | 187.4 | 0.259 | 2.55 | 39.4 | 29.5 | 2.09 | 27.9 | 0.00 | 0.00 | 0.01 | 0.09 | 101 | 211 |
| 120 | 9.05 | 9.04 | 33.933 | 26.277 | 175.8 | 0.295 | 2.15 | 33.1 | 32.9 | 2.20 | 29.4 | 0.00 | 0.00 | 0.00 | 0.06 | 121 | 210 |
| 125 ISL | 9.03 D | 9.02 | 33.950 D | 26.294 | 174.3 | 0.304 | 2.12 D | 32.6 | 33.4 | 2.21 | 29.5 | 0.00 | 0.01 | 0.00 | 0.06 | 126 | |
| 141 | 8.81 | 8.80 | 33.979 | 26.351 | 169.1 | 0.331 | 2.09 | 32.0 | 34.8 | 2.23 | 29.8 | 0.01 | 0.03 | 0.00 | 0.06 | 142 | 209 |
| 150 ISL | 8.71 D | 8.69 | 34.001 D | 26.384 | 166.1 | 0.346 | 2.06 D | 31.5 | 36.0 | 2.26 | 30.2 | 0.01 | 0.02 | 0.00 | 0.06 | 151 | |
| 170 | 8.44 | 8.42 | 34.045 | 26.461 | 159.2 | 0.379 | 1.85 | 28.1 | 38.9 | 2.32 | 31.2 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 200 | 8.15 | 8.13 | 34.071 | 26.525 | 153.5 | 0.426 | 1.69 | 25.5 | 42.5 | 2.40 | 32.2 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | 207 |
| 230 | 7.76 | 7.74 | 34.078 | 26.589 | 147.9 | 0.471 | 1.60 | 23.9 | 46.7 | 2.47 | 33.3 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.50 D | 7.48 | 34.105 D | 26.647 | 142.5 | 0.500 | 1.38 D | 20.5 | 50.3 | 2.55 | 34.3 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.16 | 7.13 | 34.093 | 26.686 | 139.0 | 0.528 | 1.32 | 19.5 | 54.0 | 2.64 | 35.4 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 6.75 D | 6.72 | 34.099 D | 26.747 | 133.5 | 0.569 | 1.19 D | 17.4 | 59.1 | 2.76 | 36.8 | 0.00 | 0.00 | | | 302 | |
| 321 | 6.74 | 6.71 | 34.139 | 26.780 | 130.7 | 0.597 | 0.95 | 13.9 | 62.2 | 2.84 | 37.6 | 0.00 | 0.00 | | | 323 | 204 |
| 380 | 6.46 | 6.43 | 34.182 | 26.852 | 124.6 | 0.672 | 0.67 | 9.7 | 67.9 | 2.97 | 38.9 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.23 D | 6.19 | 34.183 D | 26.882 | 121.7 | 0.697 | 0.63 D | 9.1 | 70.7 | 3.01 | 39.4 | 0.00 | 0.00 | | | 403 | |
| 441 | 5.99 | 5.95 | 34.217 | 26.940 | 116.6 | 0.745 | 0.48 | 6.9 | 76.5 | 3.08 | 40.2 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.69 D | 5.65 | 34.249 D | 27.003 | 111.2 | 0.813 | 0.37 D | 5.3 | 82.0 | 3.14 | 41.0 | 0.00 | 0.00 | | | 504 | |
| 517 | 5.64 | 5.60 | 34.261 | 27.019 | 109.9 | 0.831 | 0.31 | 4.4 | 83.6 | 3.16 | 41.2 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 43.2 N | 123 38.1 W | 27/01/11 | 1757 UTC | 4169 m | 280 04 kn | 230 03 07 | 1 | 1023.4 mb | 12.5 C | 11.0 C | 17m | 7/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.13 | 13.13 | 33.022 | 24.836 | 310.4 | 0.000 | 6.11 | 102.1 | 4.0 | 0.49 | 2.2 | 0.08 | 0.05 | 0.59 | 0.15 | 0 | |
| 2 A | 13.13 | 13.13 | 33.022 | 24.836 | 310.5 | 0.006 | 6.11 | 102.1 | 4.0 | 0.49 | 2.2 | 0.08 | 0.05 | 0.59 | 0.15 | 2 | 222 |
| 10 ISL | 12.99 D | 12.99 | 33.030 D | 24.870 | 307.4 | 0.031 | 6.15 D | 102.5 | 4.0 | 0.50 | 2.4 | 0.09 | 0.07 | 0.63 | 0.16 | 10 | |
| 11 A | 12.99 | 12.99 | 33.031 | 24.871 | 307.4 | 0.034 | 6.11 | 101.8 | 4.0 | 0.50 | 2.5 | 0.09 | 0.07 | 0.64 | 0.16 | 11 | 221 |
| 14 A | 12.98 | 12.98 | 33.031 | 24.873 | 307.3 | 0.043 | 6.07 | 101.1 | 4.1 | 0.51 | 2.7 | 0.10 | 0.11 | 0.64 | 0.16 | 14 | 220 |
| 18 A | 12.95 | 12.95 | 33.046 | 24.890 | 305.7 | 0.055 | 6.08 | 101.3 | 4.3 | 0.52 | 2.8 | 0.10 | 0.13 | 0.62 | 0.18 | 18 | 219 |
| 20 ISL | 12.90 D | 12.90 | 33.063 D | 24.913 | 303.5 | 0.062 | 6.19 D | 103.0 | 4.5 | 0.53 | 3.0 | 0.10 | 0.12 | 0.72 | 0.24 | 20 | |
| 28 A | 12.65 | 12.65 | 33.122 | 25.008 | 294.7 | 0.086 | 6.13 | 101.5 | 5.1 | 0.59 | 3.9 | 0.15 | 0.08 | 1.08 | 0.45 | 28 | 218 |
| 30 ISL | 12.53 D | 12.53 | 33.147 D | 25.051 | 290.7 | 0.091 | 6.14 D | 101.4 | 5.2 | 0.61 | 4.1 | 0.17 | 0.12 | 1.02 | 0.43 | 30 | |
| 37 | 12.43 | 12.43 | 33.158 | 25.079 | 288.2 | 0.112 | 5.98 | 98.6 | 5.6 | 0.67 | 5.0 | 0.25 | 0.26 | 0.66 | 0.38 | 37 | 217 |
| 45 | 12.11 | 12.10 | 33.172 | 25.151 | 281.6 | 0.134 | 5.72 | 93.7 | 6.6 | 0.78 | 7.0 | 0.32 | 0.18 | 0.37 | 0.32 | 45 | 216 |
| 50 ISL | 11.72 D | 11.71 | 33.183 D | 25.232 | 273.9 | 0.148 | 5.36 D | 87.0 | 7.4 | 0.88 | 8.7 | 0.19 | 0.08 | 0.24 | 0.23 | 50 | |
| 55 A | 11.24 | 11.23 | 33.152 | 25.295 | 268.0 | 0.162 | 5.19 | 83.4 | 8.5 | 0.99 | 10.5 | 0.04 | 0.00 | 0.15 | 0.14 | 55 | 215 |
| 62 | 10.97 | 10.96 | 33.211 | 25.390 | 259.1 | 0.180 | 4.96 | 79.3 | 10.6 | 1.14 | 12.9 | 0.02 | 0.00 | 0.10 | 0.12 | 62 | 214 |
| 70 | 10.44 | 10.43 | 33.216 | 25.486 | 250.1 | 0.201 | 4.90 | 77.4 | 12.3 | 1.23 | 14.2 | 0.02 | 0.00 | 0.07 | 0.13 | 70 | 213 |
| 75 ISL | 10.09 D | 10.08 | 33.320 D | 25.627 | 236.8 | 0.213 | 4.47 D | 70.1 | 14.0 | 1.34 | 15.9 | 0.02 | 0.00 | 0.06 | 0.13 | 75 | |
| 86 | 9.96 | 9.95 | 33.403 | 25.714 | 228.7 | 0.238 | 4.12 | 64.5 | 17.7 | 1.57 | 19.6 | 0.02 | 0.00 | 0.04 | 0.11 | 86 | 212 |
| 100 ISL | 9.38 D | 9.37 | 33.512 D | 25.894 | 211.7 | 0.269 | 4.02 D | 62.1 | 20.1 | 1.63 | 20.8 | 0.01 | 0.00 | 0.01 | 0.07 | 101 | |
| 101 | 9.38 | 9.37 | 33.511 | 25.894 | 211.8 | 0.271 | 3.99 | 61.7 | 20.3 | 1.63 | 20.9 | 0.01 | 0.00 | 0.01 | 0.07 | 102 | 211 |
| 121 | 9.10 | 9.09 | 33.739 | 26.117 | 191.0 | 0.312 | 3.15 | 48.5 | 26.8 | 1.94 | 25.5 | 0.00 | 0.00 | 0.01 | 0.07 | 122 | 210 |
| 125 ISL | 9.08 D | 9.07 | 33.789 D | 26.160 | 187.0 | 0.319 | 3.02 D | 46.5 | 27.8 | 1.94 | 25.8 | 0.00 | 0.00 | 0.01 | 0.06 | 126 | |
| 139 | 8.43 | 8.42 | 33.805 | 26.273 | 176.3 | 0.345 | 3.20 | 48.5 | 30.9 | 1.95 | 26.7 | 0.00 | 0.00 | 0.00 | 0.04 | 140 | 209 |
| 150 ISL | 8.75 D | 8.73 | 33.970 D | 26.354 | 169.1 | 0.364 | 2.21 D | 33.8 | 33.4 | 2.07 | 28.2 | 0.00 | 0.00 | 0.00 | 0.04 | 151 | |
| 169 | 8.66 | 8.64 | 34.020 | 26.407 | 164.3 | 0.395 | 1.89 | 28.8 | 37.2 | 2.29 | 30.8 | 0.00 | 0.00 | 0.00 | 0.04 | 170 | 208 |
| 200 | 8.38 | 8.36 | 34.065 | 26.486 | 157.4 | 0.445 | 1.69 | 25.6 | 40.3 | 2.37 | 31.8 | 0.00 | 0.00 | 0.00 | 0.04 | 201 | 207 |
| 229 | 8.17 | 8.15 | 34.090 | 26.538 | 152.9 | 0.490 | 1.53 | 23.1 | 43.2 | 2.45 | 32.6 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 7.98 D | 7.95 | 34.105 D | 26.578 | 149.4 | 0.522 | 1.47 D | 22.1 | 45.4 | 2.48 | 33.1 | 0.00 | 0.00 | | | 251 | |
| 272 | 7.62 | 7.59 | 34.086 | 26.616 | 146.0 | 0.554 | 1.57 | 23.4 | 47.9 | 2.51 | 33.7 | 0.00 | 0.00 | | | 274 | 205 |
| 300 ISL | 7.20 D | 7.17 | 34.075 D | 26.667 | 141.4 | 0.595 | 1.53 D | 22.6 | 52.0 | 2.60 | 34.9 | 0.00 | 0.00 | | | 302 | |
| 319 | 7.10 | 7.07 | 34.098 | 26.699 | 138.6 | 0.621 | 1.25 | 18.4 | 54.9 | 2.67 | 35.8 | 0.00 | 0.00 | | | 321 | 204 |
| 381 | 6.62 | 6.59 | 34.144 | 26.801 | 129.5 | 0.704 | 0.88 | 12.8 | 63.4 | 2.87 | 37.9 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.46 D | 6.42 | 34.156 D | 26.831 | 126.8 | 0.729 | 0.81 D | 11.8 | 66.0 | 2.92 | 38.4 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.25 | 6.21 | 34.205 | 26.898 | 120.9 | 0.779 | 0.56 | 8.1 | 71.7 | 3.01 | 39.4 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.73 D | 5.69 | 34.223 D | 26.978 | 113.6 | 0.849 | 0.49 D | 7.0 | 80.1 | 3.11 | 40.8 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.67 | 5.63 | 34.239 | 26.998 | 111.8 | 0.866 | 0.40 | 5.7 | 82.2 | 3.13 | 41.1 | 0.00 | 0.00 | | | 519 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 76.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 23.2 N | 124 19.4 W | 27/01/11 | 1141 UTC | 4575 m | 100 02 kn | | | 1021.1 mb | 12.5 C | 11.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.93 | 13.93 | 32.807 | 24.508 | 341.6 | 0.000 | 6.02 | 102.2 | 2.1 | 0.33 | 0.2 | 0.00 | 0.00 | 0.32 | 0.06 | 0 | |
| 2 | 13.93 | 13.93 | 32.807 | 24.508 | 341.7 | 0.007 | 6.02 | 102.2 | 2.1 | 0.33 | 0.2 | 0.00 | 0.00 | 0.32 | 0.06 | 2 | 220 |
| 10 | 13.98 | 13.98 | 32.841 D | 24.524 | 340.4 | 0.034 | 6.00 | 102.0 | 2.1 | 0.32 | 0.2 | 0.00 | 0.00 | 0.37 | 0.06 | 10 | 219 |
| 20 | 13.96 | 13.96 | 32.842 | 24.529 | 340.2 | 0.068 | 5.99 | 101.7 | 2.2 | 0.31 | 0.2 | 0.00 | 0.00 | 0.37 | 0.09 | 20 | 218 |
| 30 | 13.88 | 13.88 | 32.823 | 24.531 | 340.2 | 0.102 | 6.00 | 101.7 | 2.2 | 0.33 | 0.2 | 0.00 | 0.00 | 0.47 | 0.13 | 30 | 217 |
| 39 | 13.58 | 13.57 | 32.772 | 24.553 | 338.4 | 0.133 | 6.02 | 101.4 | 2.2 | 0.35 | 0.3 | 0.01 | 0.07 | 0.43 | 0.12 | 39 | 216 |
| 50 ISL | 13.30 D | 13.29 | 32.789 D | 24.623 | 332.0 | 0.170 | 6.07 D | 101.7 | 2.3 | 0.38 | 0.6 | 0.04 | 0.11 | 0.38 | 0.14 | 50 | |
| 51 | 13.40 | 13.39 | 32.772 | 24.590 | 335.2 | 0.173 | 5.99 | 100.5 | 2.3 | 0.38 | 0.6 | 0.05 | 0.11 | 0.37 | 0.14 | 51 | 215 |
| 61 | 12.33 | 12.32 | 32.913 | 24.908 | 305.0 | 0.205 | 5.79 | 95.1 | 4.1 | 0.60 | 3.9 | 0.13 | 0.00 | 0.31 | 0.20 | 61 | 214 |
| 71 | 12.03 | 12.02 | 33.013 | 25.043 | 292.5 | 0.235 | 5.61 | 91.6 | 4.7 | 0.72 | 5.5 | 0.02 | 0.00 | 0.20 | 0.13 | 71 | 213 |
| 75 ISL | 11.90 D | 11.89 | 33.108 D | 25.141 | 283.2 | 0.246 | 5.52 D | 89.9 | 5.1 | 0.77 | 6.4 | 0.02 | 0.00 | 0.15 | 0.11 | 75 | |
| 86 | 11.50 | 11.49 | 33.210 D | 25.294 | 268.8 | 0.277 | 5.13 D | 82.9 | | | | | | 0.06 | 0.07 | 86 | 212 |
| 100 ISL | 10.51 D | 10.50 | 33.354 D | 25.582 | 241.6 | 0.312 | 4.42 D | 70.0 | 11.9 | 1.25 | 14.5 | 0.00 | 0.00 | 0.07 | 0.08 | 100 | |
| 101 | 10.54 | 10.53 | 33.297 | 25.533 | 246.3 | 0.315 | 4.64 | 73.5 | 12.3 | 1.27 | 14.9 | 0.00 | 0.00 | 0.07 | 0.08 | 101 | 211 |
| 120 | 9.88 | 9.87 | 33.639 | 25.912 | 210.6 | 0.358 | 3.11 | 48.7 | 23.3 | 1.87 | 24.4 | 0.00 | 0.00 | 0.02 | 0.05 | 121 | 210 |
| 125 ISL | 9.80 D | 9.79 | 33.681 D | 25.958 | 206.3 | 0.369 | 3.04 D | 47.5 | 24.8 | 1.94 | 25.5 | 0.00 | 0.00 | 0.02 | 0.05 | 126 | |
| 141 | 9.61 | 9.59 | 33.803 | 26.085 | 194.6 | 0.401 | 2.50 | 38.9 | 27.9 | 2.06 | 27.1 | 0.00 | 0.00 | 0.01 | 0.05 | 142 | 209 |
| 150 ISL | 9.50 D | 9.48 | 33.899 D | 26.178 | 185.9 | 0.418 | 2.25 D | 35.0 | 29.9 | 2.14 | 28.0 | 0.00 | 0.00 | 0.01 | 0.05 | 151 | |
| 170 | 9.40 | 9.38 | 34.006 | 26.279 | 176.8 | 0.454 | 1.74 | 27.0 | 33.6 | 2.27 | 29.5 | 0.00 | 0.00 | 0.00 | 0.04 | 171 | 208 |
| 200 | 9.24 | 9.22 | 34.075 | 26.359 | 169.7 | 0.506 | 1.59 | 24.6 | 35.2 | 2.34 | 29.9 | 0.00 | 0.00 | 0.00 | 0.04 | 201 | 207 |
| 230 | 9.02 | 9.00 | 34.133 | 26.440 | 162.6 | 0.556 | 1.37 | 21.1 | 38.4 | 2.42 | 30.9 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.90 D | 8.87 | 34.156 D | 26.478 | 159.4 | 0.588 | 1.31 D | 20.1 | 40.0 | 2.47 | 31.4 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.73 | 8.70 | 34.174 | 26.519 | 155.8 | 0.621 | 1.16 | 17.7 | 41.8 | 2.53 | 32.0 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 8.48 D | 8.45 | 34.207 D | 26.584 | 150.1 | 0.666 | 0.99 D | 15.1 | 45.3 | 2.62 | 33.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 8.27 | 8.24 | 34.218 | 26.625 | 146.5 | 0.695 | 0.88 | 13.3 | 47.7 | 2.68 | 33.7 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 7.86 | 7.82 | 34.228 | 26.694 | 140.7 | 0.781 | 0.75 | 11.2 | 52.6 | 2.79 | 35.0 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 7.62 D | 7.58 | 34.226 D | 26.728 | 137.7 | 0.809 | 0.75 D | 11.2 | 54.9 | 2.83 | 35.5 | 0.00 | 0.00 | | | 403 | |
| 442 | 7.28 | 7.24 | 34.236 | 26.784 | 132.7 | 0.866 | 0.62 | 9.2 | 60.1 | 2.91 | 36.7 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 6.63 D | 6.58 | 34.224 D | 26.864 | 125.4 | 0.941 | 0.58 D | 8.5 | 67.0 | 2.98 | 38.3 | 0.00 | 0.00 | | | 503 | |
| 515 | 6.51 | 6.46 | 34.213 | 26.871 | 124.8 | 0.960 | 0.56 | 8.1 | 68.8 | 3.00 | 38.7 | 0.00 | 0.00 | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 50.5

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 27.6 N | 120 29.2 W | 25/01/11 | 1708 UTC | 25 m | 340 03 kn | 230 01 03 | 0 | 1017.2 mb | 15.1 C | 13.0 C | | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.92 | 12.92 | 33.317 | 25.106 | 284.7 | 0.000 | 6.02 | 100.4 | 5.2 | 0.63 | 2.9 | 0.18 | 0.85 | 3.23 | 0.58 | 0 | |
| 2 | 12.92 | 12.92 | 33.317 | 25.106 | 284.8 | 0.006 | 6.02 | 100.4 | 5.2 | 0.63 | 2.9 | 0.18 | 0.85 | 3.23 | 0.58 | 2 | 206 |
| 5 | 12.88 | 12.88 | 33.317 | 25.114 | 284.1 | 0.014 | 5.98 | 99.6 | 5.2 | 0.66 | 3.0 | 0.18 | 0.82 | 2.74 | 0.59 | 5 | 205 |
| 10 | 12.73 | 12.73 | 33.324 | 25.149 | 280.9 | 0.028 | 5.78 | 96.0 | 6.0 | 0.72 | 3.9 | 0.20 | 0.98 | 2.22 | 0.57 | 10 | 203 |
| 10 | 12.73 | 12.73 | 33.323 | 25.148 | 281.0 | 0.028 | | | | | | | | | | 10 | 204 |
| 15 | 12.27 | 12.27 | 33.377 | 25.278 | 268.7 | 0.042 | 4.95 | 81.4 | 10.5 | 1.05 | 8.6 | 0.29 | 0.99 | 1.34 | 0.70 | 15 | 202 |
| 18 | 12.15 | 12.15 | 33.387 | 25.309 | 265.8 | 0.050 | 4.80 | 78.8 | 11.2 | 1.11 | 9.4 | 0.30 | 0.96 | 1.21 | 0.49 | 18 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 51.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 27.1 N | 120 31.5 W | 25/01/11 | 1800 UTC | 77 m | 090 04 kn | 280 02 06 | 0 | 1017.5 mb | 13.4 C | 12.7 C | 10m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.08 | 13.08 | 33.295 | 25.057 | 289.3 | 0.000 | 6.23 | 104.2 | 4.2 | 0.48 | 2.0 | 0.12 | 0.59 | 2.64 | 0.50 | 0 | |
| 2 A | 13.08 | 13.08 | 33.295 | 25.057 | 289.4 | 0.006 | 6.23 | 104.2 | 4.2 | 0.48 | 2.0 | 0.12 | 0.59 | 2.64 | 0.50 | 2 | 211 |
| 6 A | 13.00 | 13.00 | 33.301 | 25.078 | 287.5 | 0.017 | 6.17 | 103.0 | 4.4 | 0.50 | 2.2 | 0.13 | 0.60 | 2.80 | 0.50 | 6 | 210 |
| 8 A | 12.90 | 12.90 | 33.307 | 25.102 | 285.3 | 0.023 | 6.10 | 101.6 | 4.5 | 0.51 | 2.5 | 0.14 | 0.54 | 3.04 | 0.49 | 8 | 209 |
| 10 ISL | 12.84 D | 12.84 | 33.320 D | 25.124 | 283.2 | 0.029 | 5.93 D | 98.7 | 4.8 | 0.57 | 3.1 | 0.15 | 0.59 | 3.21 | 0.46 | 10 | |
| 11 A | 12.83 | 12.83 | 33.322 | 25.128 | 282.9 | 0.032 | 5.92 | 98.5 | 5.0 | 0.60 | 3.4 | 0.16 | 0.63 | 3.27 | 0.45 | 11 | 208 |
| 16 A | 12.81 | 12.81 | 33.328 | 25.136 | 282.2 | 0.046 | 5.91 | 98.3 | 4.9 | 0.62 | 3.8 | 0.17 | 0.79 | 3.16 | 0.47 | 16 | 207 |
| 20 ISL | 12.78 D | 12.78 | 33.334 D | 25.147 | 281.3 | 0.057 | 5.87 D | 97.6 | 6.7 | 0.79 | 6.4 | 0.23 | 0.75 | 2.75 | 0.57 | 20 | |
| 25 | 12.51 | 12.51 | 33.430 | 25.274 | 269.4 | 0.071 | 5.28 | 87.3 | 8.9 | 0.99 | 9.4 | 0.29 | 0.70 | 2.32 | 0.71 | 25 | 206 |
| 30 ISL | 12.11 D | 12.11 | 33.430 D | 25.350 | 262.2 | 0.084 | 5.29 D | 86.8 | 8.4 | 0.97 | 9.0 | 0.28 | 0.69 | 2.51 | 0.82 | 30 | |
| 32 A | 12.11 | 12.11 | 33.420 | 25.343 | 263.0 | 0.089 | 5.36 | 87.9 | 8.2 | 0.96 | 8.7 | 0.27 | 0.69 | 2.61 | 0.84 | 32 | 205 |
| 41 | 11.92 | 11.91 | 33.452 | 25.403 | 257.4 | 0.113 | 5.04 | 82.3 | 10.8 | 1.15 | 10.8 | 0.30 | 0.72 | 2.39 | 0.70 | 41 | 204 |
| 50 | 11.90 | 11.89 | 33.452 | 25.407 | 257.3 | 0.136 | 5.05 | 82.5 | 10.8 | 1.10 | 10.8 | 0.28 | 0.71 | 2.60 | 0.75 | 50 | 203 |
| 60 | 11.85 | 11.84 | 33.453 | 25.418 | 256.5 | 0.162 | 4.90 | 79.9 | 11.5 | 1.15 | 11.3 | 0.28 | 0.68 | 2.31 | 0.62 | 60 | 202 |
| 65 | 11.71 | 11.70 | 33.460 | 25.449 | 253.6 | 0.174 | 4.60 | 74.8 | 13.1 | 1.21 | 12.6 | 0.26 | 0.57 | 2.07 | 0.55 | 65 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 19.1 N | 120 48.0 W | 25/01/11 | 2102 UTC | 747 m | 240 03 kn | 280 03 06 | 1 | 1016.1 mb | 15.0 C | 13.6 C | 05m | 2/8 ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.97 | 12.97 | 33.361 | 25.130 | 282.4 | 0.000 | 7.25 | 121.0 | 0.5 | 0.28 | 0.7 | 0.07 | 0.02 | 6.40 | 0.83 | 0 | |
| 2 | 12.97 | 12.97 | 33.361 | 25.130 | 282.5 | 0.006 | 7.25 | 121.0 | 0.5 | 0.28 | 0.7 | 0.07 | 0.02 | 6.40 | 0.83 | 2 | 221 |
| 10 | 12.16 | 12.16 | 33.369 | 25.293 | 267.1 | 0.028 | 6.26 | 102.7 | 3.8 | 0.61 | 5.4 | 0.22 | 0.29 | 6.38 | 0.43 | 10 | 219 |
| 10 | 12.19 | 12.19 | 33.364 | 25.283 | 268.1 | 0.028 | | | | | | | | | | 10 | 220 |
| 20 | 11.93 | 11.93 | 33.375 | 25.341 | 262.8 | 0.054 | 5.74 | 93.7 | 6.3 | 0.81 | 7.8 | 0.23 | 0.68 | 4.42 | 1.83 | 20 | 218 |
| 30 | 11.34 | 11.34 | 33.454 | 25.512 | 246.8 | 0.080 | 4.79 | 77.3 | 12.3 | 1.24 | 13.5 | 0.20 | 0.50 | 1.69 | 1.30 | 30 | 217 |
| 39 | 11.08 | 11.08 | 33.556 | 25.638 | 235.0 | 0.101 | 4.23 | 67.9 | 16.3 | 1.41 | 16.5 | 0.20 | 0.29 | 1.67 | 0.66 | 39 | 216 |
| 50 | 10.82 | 10.81 | 33.610 | 25.727 | 226.8 | 0.127 | 3.92 | 62.6 | 18.6 | 1.53 | 18.2 | 0.18 | 0.20 | 1.97 | 0.64 | 50 | 215 |
| 59 | 10.18 | 10.17 | 33.724 | 25.927 | 208.0 | 0.146 | 3.12 | 49.2 | 23.9 | 1.82 | 22.7 | 0.12 | 0.00 | 0.87 | 0.50 | 59 | 214 |
| 71 | 9.84 | 9.83 | 33.787 | 26.033 | 198.0 | 0.171 | 2.85 | 44.6 | 26.0 | 1.91 | 24.5 | 0.05 | 0.00 | 0.41 | 0.28 | 71 | 213 |
| 75 ISL | 9.83 D | 9.82 | 33.798 D | 26.044 | 197.1 | 0.179 | 2.82 D | 44.1 | 26.7 | 1.94 | 24.9 | 0.04 | 0.00 | 0.39 | 0.30 | 75 | |
| 85 | 9.64 | 9.63 | 33.866 | 26.129 | 189.3 | 0.198 | 2.56 | 39.9 | 28.5 | 2.01 | 25.8 | 0.03 | 0.00 | 0.35 | 0.36 | 85 | 212 |
| 99 | 9.55 | 9.54 | 33.913 | 26.180 | 184.6 | 0.224 | 2.36 | 36.7 | 30.5 | 2.09 | 26.6 | 0.03 | 0.00 | 0.24 | 0.20 | 100 | 211 |
| 100 ISL | 9.55 D | 9.54 | 33.917 D | 26.183 | 184.4 | 0.226 | 2.35 D | 36.6 | 30.6 | 2.09 | 26.7 | 0.03 | 0.00 | 0.23 | 0.20 | 101 | |
| 121 | 9.42 | 9.41 | 33.979 | 26.254 | 178.2 | 0.264 | 2.12 | 32.9 | 32.4 | 2.18 | 27.6 | 0.01 | 0.00 | 0.17 | 0.24 | 122 | 210 |
| 125 ISL | 9.40 D | 9.39 | 33.989 D | 26.265 | 177.2 | 0.271 | 2.12 D | 32.9 | 32.7 | 2.19 | 27.8 | 0.01 | 0.00 | 0.17 | 0.25 | 126 | |
| 140 | 9.28 | 9.26 | 34.021 | 26.309 | 173.2 | 0.297 | 1.96 | 30.3 | 33.9 | 2.24 | 28.3 | 0.00 | 0.00 | 0.17 | 0.27 | 141 | 209 |
| 150 ISL | 9.25 D | 9.23 | 34.045 D | 26.333 | 171.2 | 0.315 | 1.90 D | 29.4 | 34.7 | 2.27 | 28.7 | 0.00 | 0.00 | 0.14 | 0.25 | 151 | |
| 170 | 9.11 | 9.09 | 34.091 | 26.392 | 166.0 | 0.348 | 1.72 | 26.5 | 36.3 | 2.32 | 29.4 | 0.00 | 0.00 | 0.08 | 0.19 | 171 | 208 |
| 200 | 8.94 | 8.92 | 34.119 | 26.442 | 161.8 | 0.397 | 1.64 | 25.2 | 37.8 | 2.32 | 29.8 | 0.00 | 0.00 | 0.06 | 0.12 | 201 | 207 |
| 230 | 8.81 | 8.79 | 34.154 | 26.490 | 157.8 | 0.445 | 1.44 | 22.1 | 40.1 | 2.42 | 30.7 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.71 D | 8.68 | 34.160 D | 26.510 | 156.2 | 0.477 | 1.42 D | 21.7 | 41.9 | 2.46 | 31.3 | 0.00 | 0.00 | | | 252 | |
| 270 | 8.45 | 8.42 | 34.178 | 26.565 | 151.3 | 0.508 | 1.27 | 19.3 | 44.0 | 2.50 | 31.9 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 8.20 D | 8.17 | 34.204 D | 26.624 | 146.1 | 0.552 | 1.08 D | 16.3 | 48.3 | 2.60 | 33.2 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.88 | 7.85 | 34.217 | 26.682 | 140.8 | 0.581 | 0.91 | 13.7 | 51.3 | 2.67 | 34.1 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 7.26 | 7.22 | 34.216 | 26.770 | 133.0 | 0.664 | 0.74 | 10.9 | 58.1 | 2.80 | 36.1 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 7.14 D | 7.10 | 34.215 D | 26.787 | 131.6 | 0.689 | 0.75 D | 11.1 | 60.1 | 2.83 | 36.6 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.76 | 6.72 | 34.222 | 26.844 | 126.5 | 0.741 | 0.65 | 9.5 | 64.3 | 2.88 | 37.7 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.34 D | 6.29 | 34.246 D | 26.919 | 119.9 | 0.815 | 0.49 D | 7.1 | 71.4 | 2.96 | 39.0 | 0.00 | 0.00 | | | 504 | |
| 516 | 6.18 | 6.13 | 34.243 | 26.938 | 118.2 | 0.834 | 0.46 | 6.6 | 73.3 | 2.98 | 39.4 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 8.8 N | 121 9.2 W | 26/01/11 | 0120 UTC | 2210 m | 310 03 kn | 280 03 06 | 0 | 1015.3 mb | 13.2 C | 12.3 C | | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.96 | 12.96 | 33.422 | 25.179 | 277.7 | 0.000 | 7.34 | 122.6 | 0.6 | 0.27 | 1.5 | 0.13 | 0.04 | 8.89 | 0.71 | 0 | |
| 2 | 12.96 | 12.96 | 33.422 | 25.179 | 277.8 | 0.006 | 7.34 | 122.6 | 0.6 | 0.27 | 1.5 | 0.13 | 0.04 | 8.89 | 0.71 | 2 | 220 |
| 10 | 12.37 | 12.37 | 33.357 | 25.244 | 271.8 | 0.028 | 7.06 | 116.4 | 1.2 | 0.32 | 1.5 | 0.10 | 0.06 | 9.26 | 1.08 | 10 | 219 |
| 20 | 12.25 | 12.25 | 33.353 | 25.264 | 270.2 | 0.055 | 6.73 | 110.6 | 1.2 | 0.35 | 2.3 | 0.11 | 0.11 | 10.59 | 1.19 | 20 | 218 |
| 30 | 12.20 | 12.20 | 33.360 | 25.279 | 269.0 | 0.082 | 6.38 | 104.8 | 2.2 | 0.52 | 3.9 | 0.14 | 0.34 | 8.88 | 0.98 | 30 | 217 |
| 40 | 12.04 | 12.03 | 33.461 | 25.388 | 258.9 | 0.108 | 5.76 | 94.3 | 6.3 | 0.85 | 8.7 | 0.20 | 0.35 | 6.46 | 0.89 | 40 | 216 |
| 50 | 11.58 | 11.57 | 33.513 | 25.514 | 247.1 | 0.133 | 5.15 | 83.5 | 11.9 | 1.21 | 13.3 | 0.27 | 0.23 | 3.75 | 0.71 | 50 | 215 |
| 60 | 10.89 | 10.88 | 33.600 | 25.707 | 229.0 | 0.157 | 4.05 | 64.8 | 18.0 | 1.53 | 18.1 | 0.22 | 0.15 | 1.59 | 0.55 | 60 | 214 |
| 70 | 10.01 | 10.00 | 33.772 | 25.993 | 201.9 | 0.179 | 2.84 | 44.6 | 25.8 | 1.94 | 24.3 | 0.06 | 0.00 | 0.71 | 0.38 | 70 | 213 |
| 75 ISL | 9.88 D | 9.87 | 33.785 D | 26.025 | 198.9 | 0.189 | 2.84 D | 44.5 | 26.7 | 1.97 | 24.8 | 0.05 | 0.00 | 0.77 | 0.40 | 75 | |
| 85 | 9.69 | 9.68 | 33.836 | 26.097 | 192.3 | 0.208 | 2.60 | 40.6 | 28.4 | 2.04 | 25.8 | 0.02 | 0.00 | 0.89 | 0.48 | 85 | 212 |
| 100 | 9.61 | 9.60 | 33.883 | 26.147 | 187.9 | 0.237 | 2.41 | 37.5 | 29.7 | 2.10 | 26.6 | 0.03 | 0.00 | 0.55 | 0.39 | 101 | 211 |
| 120 | 9.26 | 9.25 | 33.943 | 26.251 | 178.3 | 0.273 | 2.38 | 36.8 | 31.4 | 2.12 | 27.5 | 0.00 | 0.00 | 0.25 | 0.27 | 121 | 210 |
| 125 ISL | 9.26 D | 9.25 | 33.934 D | 26.244 | 179.1 | 0.282 | 2.39 D | 36.9 | 31.9 | 2.15 | 27.7 | 0.00 | 0.00 | 0.21 | 0.24 | 126 | |
| 141 | 9.30 | 9.28 | 34.017 | 26.303 | 173.8 | 0.311 | 1.97 | 30.5 | 33.8 | 2.24 | 28.4 | 0.00 | 0.00 | 0.14 | 0.18 | 142 | 209 |
| 150 ISL | 9.23 D | 9.21 | 34.050 D | 26.340 | 170.5 | 0.326 | 1.88 D | 29.1 | 35.0 | 2.28 | 28.9 | 0.00 | 0.00 | 0.13 | 0.16 | 151 | |
| 170 | 8.93 | 8.91 | 34.097 | 26.425 | 162.7 | 0.359 | 1.68 | 25.8 | 38.0 | 2.36 | 30.0 | 0.00 | 0.00 | 0.11 | 0.14 | 171 | 208 |
| 200 | 8.45 | 8.43 | 34.170 | 26.558 | 150.6 | 0.406 | 1.28 | 19.5 | 44.1 | 2.52 | 32.0 | 0.00 | 0.00 | 0.09 | 0.16 | 201 | 207 |
| 230 | 7.51 | 7.49 | 34.100 | 26.642 | 142.7 | 0.450 | 1.56 | 23.2 | 49.5 | 2.52 | 33.8 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.24 D | 7.22 | 34.115 D | 26.692 | 138.2 | 0.478 | 1.39 D | 20.5 | 52.8 | 2.57 | 34.8 | 0.00 | 0.00 | | | 252 | |
| 270 | 6.99 | 6.96 | 34.104 | 26.718 | 135.9 | 0.506 | 1.30 | 19.1 | 55.8 | 2.65 | 35.7 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.17 D | 7.14 | 34.188 D | 26.760 | 132.5 | 0.546 | 0.92 D | 13.6 | 59.0 | 2.77 | 36.4 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.05 | 7.02 | 34.216 | 26.799 | 129.1 | 0.572 | 0.74 | 10.9 | 60.9 | 2.85 | 36.8 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.55 | 6.52 | 34.254 | 26.897 | 120.4 | 0.648 | 0.50 | 7.3 | 69.2 | 2.97 | 38.6 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.45 D | 6.41 | 34.256 D | 26.912 | 119.2 | 0.671 | 0.52 D | 7.5 | 70.9 | 3.00 | 38.9 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.26 | 6.22 | 34.271 | 26.949 | 116.1 | 0.719 | 0.41 | 5.9 | 74.1 | 3.04 | 39.4 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.00 D | 5.96 | 34.300 D | 27.005 | 111.4 | 0.786 | 0.36 D | 5.2 | 79.0 | 3.10 | 40.3 | 0.00 | 0.00 | | | 504 | |
| 516 | 5.92 | 5.87 | 34.308 | 27.022 | 109.9 | 0.804 | 0.29 | 4.2 | 80.3 | 3.11 | 40.5 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 49.0 N | 121 50.5 W | 26/01/11 | 0808 UTC | 3631 m | 300 04 kn | | | 1017.0 mb | 13.3 C | 12.3 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.06 | 13.06 | 33.143 | 24.943 | 300.2 | 0.000 | 6.00 | 100.2 | 4.6 | 0.57 | 3.6 | 0.19 | 0.23 | 0.60 | 0.15 | 0 | |
| 2 | 13.06 | 13.06 | 33.143 | 24.943 | 300.2 | 0.006 | 6.00 | 100.2 | 4.6 | 0.57 | 3.6 | 0.19 | 0.23 | 0.60 | 0.15 | 2 | 220 |
| 10 | 13.05 | 13.05 | 33.146 | 24.948 | 300.0 | 0.030 | 6.01 | 100.4 | 4.6 | 0.55 | 3.7 | 0.19 | 0.22 | 0.79 | 0.15 | 10 | 219 |
| 20 | 13.02 | 13.02 | 33.149 | 24.956 | 299.5 | 0.060 | 6.02 | 100.5 | 4.7 | 0.55 | 3.7 | 0.20 | 0.21 | 0.76 | 0.29 | 20 | 218 |
| 29 | 12.92 | 12.92 | 33.147 | 24.975 | 297.9 | 0.087 | 6.05 | 100.8 | 4.7 | 0.55 | 3.7 | 0.20 | 0.19 | 0.84 | 0.25 | 29 | 217 |
| 30 ISL | 12.92 D | 12.92 | 33.146 D | 24.974 | 298.0 | 0.090 | 6.07 D | 101.1 | 4.7 | 0.55 | 3.7 | 0.20 | 0.19 | 0.84 | 0.25 | 30 | |
| 40 | 12.91 | 12.90 | 33.147 | 24.977 | 298.0 | 0.120 | 6.03 | 100.4 | 4.8 | 0.56 | 3.8 | 0.20 | 0.21 | 0.88 | 0.23 | 40 | 216 |
| 50 | 12.90 | 12.89 | 33.174 | 25.000 | 296.1 | 0.149 | 5.97 | 99.4 | 5.2 | 0.59 | 4.2 | 0.25 | 0.29 | 0.65 | 0.30 | 50 | 215 |
| 60 | 12.62 | 12.61 | 33.188 | 25.066 | 290.1 | 0.179 | 5.76 | 95.3 | 6.0 | 0.69 | 5.6 | 0.35 | 0.27 | 0.33 | 0.22 | 60 | 214 |
| 70 | 10.85 | 10.84 | 33.333 | 25.506 | 248.2 | 0.206 | 4.41 | 70.3 | 14.0 | 1.36 | 16.5 | 0.02 | 0.00 | 0.10 | 0.12 | 70 | 213 |
| 75 ISL | 10.23 D | 10.22 | 33.402 D | 25.667 | 233.0 | 0.218 | 4.08 D | 64.2 | 16.8 | 1.54 | 19.2 | 0.02 | 0.00 | 0.08 | 0.11 | 75 | |
| 85 | 9.77 | 9.76 | 33.491 | 25.814 | 219.1 | 0.240 | 3.76 | 58.6 | 21.0 | 1.73 | 22.0 | 0.01 | 0.00 | 0.04 | 0.09 | 85 | 212 |
| 100 | 9.28 | 9.27 | 33.636 | 26.008 | 201.0 | 0.272 | 3.33 | 51.4 | 25.8 | 1.92 | 25.0 | 0.00 | 0.00 | 0.03 | 0.09 | 100 | 211 |
| 119 | 9.20 | 9.19 | 33.832 | 26.174 | 185.6 | 0.308 | 2.51 | 38.7 | 30.1 | 2.11 | 28.0 | 0.00 | 0.00 | 0.03 | 0.08 | 120 | 210 |
| 125 ISL | 9.03 D | 9.02 | 33.874 D | 26.234 | 180.0 | 0.319 | 2.52 D | 38.7 | 30.9 | 2.12 | 28.3 | 0.00 | 0.00 | 0.03 | 0.08 | 126 | |
| 140 | 8.92 | 8.91 | 33.907 | 26.278 | 176.1 | 0.346 | 2.42 | 37.1 | 32.4 | 2.14 | 28.7 | 0.00 | 0.00 | 0.03 | 0.07 | 141 | 209 |
| 150 ISL | 8.80 D | 8.78 | 33.940 D | 26.322 | 172.0 | 0.364 | 2.44 D | 37.3 | 33.8 | 2.17 | 29.2 | 0.00 | 0.00 | 0.02 | 0.06 | 151 | |
| 170 | 8.57 | 8.55 | 34.010 | 26.413 | 163.7 | 0.397 | 2.08 | 31.7 | 36.6 | 2.23 | 30.2 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 199 | 8.08 | 8.06 | 34.024 | 26.499 | 156.0 | 0.443 | 2.04 | 30.7 | 40.2 | 2.30 | 31.3 | 0.00 | 0.00 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 7.94 D | 7.92 | 34.033 D | 26.526 | 153.3 | 0.445 | 2.04 | 30.6 | 40.4 | 2.30 | 31.3 | 0.00 | 0.00 | | | 201 | |
| 230 | 7.48 | 7.46 | 34.029 | 26.590 | 147.6 | 0.490 | 2.02 | 30.0 | 46.1 | 2.38 | 32.5 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.28 D | 7.26 | 34.045 D | 26.631 | 143.9 | 0.519 | 1.87 D | 27.6 | 48.9 | 2.45 | 33.5 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.14 | 7.11 | 34.055 | 26.659 | 141.6 | 0.548 | 1.65 | 24.3 | 51.7 | 2.54 | 34.5 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 6.84 D | 6.81 | 34.081 D | 26.721 | 136.0 | 0.589 | 1.35 D | 19.8 | 57.3 | 2.68 | 36.2 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.60 | 6.57 | 34.091 | 26.761 | 132.4 | 0.616 | 1.16 | 16.9 | 61.0 | 2.77 | 37.3 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.41 | 6.38 | 34.174 | 26.852 | 124.5 | 0.693 | 0.69 | 10.0 | 68.1 | 2.95 | 38.7 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.39 D | 6.35 | 34.204 D | 26.878 | 122.3 | 0.718 | 0.61 D | 8.8 | 70.1 | 3.00 | 39.1 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.13 | 6.09 | 34.220 | 26.925 | 118.2 | 0.767 | 0.49 | 7.1 | 74.3 | 3.08 | 39.8 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.82 D | 5.78 | 34.262 D | 26.998 | 111.9 | 0.835 | 0.38 D | 5.4 | 81.3 | 3.21 | 40.9 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.75 | 5.71 | 34.271 | 27.013 | 110.5 | 0.853 | 0.31 | 4.4 | 83.2 | 3.24 | 41.2 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.5 N | 122 32.0 W | 26/01/11 | 1437 UTC | 4003 m | 310 07 kn | | | 1017.4 mb | 12.5 C | 11.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.80 | 13.80 | 32.953 | 24.647 | 328.4 | 0.000 | 6.03 | 102.2 | 2.9 | 0.34 | 0.4 | 0.01 | 0.08 | 0.54 | 0.11 | 0 | |
| 3 | 13.80 | 13.80 | 32.953 | 24.647 | 328.4 | 0.010 | 6.03 | 102.2 | 2.9 | 0.34 | 0.4 | 0.01 | 0.08 | 0.54 | 0.11 | 3 | 220 |
| 10 | 13.14 | 13.14 | 32.921 | 24.756 | 318.3 | 0.032 | 6.10 | 101.9 | 3.8 | 0.42 | 1.5 | 0.05 | 0.05 | 0.48 | 0.12 | 10 | 219 |
| 20 | 12.81 | 12.81 | 32.997 | 24.880 | 306.7 | 0.064 | 6.09 | 101.1 | 4.4 | 0.51 | 2.8 | 0.11 | 0.08 | 0.59 | 0.18 | 20 | 218 |
| 30 | 12.76 | 12.76 | 33.010 | 24.900 | 305.1 | 0.094 | 6.07 | 100.7 | 4.5 | 0.52 | 3.0 | 0.12 | 0.09 | 0.58 | 0.19 | 30 | 217 |
| 39 | 12.91 | 12.90 | 33.124 | 24.959 | 299.7 | 0.122 | 6.04 | 100.5 | 4.7 | 0.54 | 3.7 | 0.14 | 0.08 | 0.57 | 0.22 | 39 | 216 |
| 50 | 12.12 | 12.11 | 33.086 | 25.082 | 288.2 | 0.154 | 5.78 | 94.6 | 6.1 | 0.72 | 6.0 | 0.22 | 0.12 | 0.40 | 0.22 | 50 | 215 |
| 61 | 11.02 | 11.01 | 33.133 | 25.320 | 265.7 | 0.184 | 5.40 | 86.3 | 9.0 | 0.98 | 10.3 | 0.04 | 0.00 | 0.16 | 0.16 | 61 | 214 |
| 70 | 9.87 | 9.86 | 33.181 | 25.555 | 243.4 | 0.207 | 4.90 | 76.4 | 14.2 | 1.29 | 15.1 | 0.01 | 0.00 | 0.08 | 0.11 | 70 | 213 |
| 75 ISL | 9.92 D | 9.91 | 33.402 D | 25.719 | 227.9 | 0.219 | 4.14 D | 64.7 | 16.9 | 1.46 | 17.8 | 0.01 | 0.00 | 0.05 | 0.09 | 75 | |
| 85 | 9.63 | 9.62 | 33.552 | 25.885 | 212.4 | 0.241 | 3.69 | 57.4 | 21.5 | 1.74 | 22.3 | 0.00 | 0.00 | 0.02 | 0.07 | 85 | 212 |
| 99 | 9.24 | 9.23 | 33.710 | 26.072 | 194.9 | 0.270 | 3.30 | 50.9 | 25.7 | 1.88 | 24.8 | 0.00 | 0.00 | 0.01 | 0.05 | 99 | 211 |
| 100 ISL | 9.24 D | 9.23 | 33.712 D | 26.073 | 194.7 | 0.272 | 3.30 D | 50.9 | 25.9 | 1.89 | 24.9 | 0.00 | 0.00 | 0.01 | 0.05 | 100 | |
| 120 | 8.88 | 8.87 | 33.800 | 26.200 | 183.1 | 0.309 | 3.01 | 46.1 | 29.2 | 1.99 | 26.7 | 0.00 | 0.00 | 0.01 | 0.04 | 121 | 210 |
| 125 ISL | 8.80 D | 8.79 | 33.823 D | 26.230 | 180.3 | 0.318 | 2.97 D | 45.4 | 29.8 | 2.00 | 26.9 | 0.00 | 0.00 | 0.01 | 0.04 | 126 | |
| 139 | 8.60 | 8.59 | 33.860 | 26.291 | 174.8 | 0.343 | 2.94 | 44.8 | 31.5 | 2.03 | 27.5 | 0.00 | 0.00 | 0.01 | 0.05 | 140 | 209 |
| 150 ISL | 8.43 D | 8.41 | 33.919 D | 26.363 | 168.1 | 0.362 | 2.75 D | 41.7 | 33.2 | 2.08 | 28.2 | 0.00 | 0.00 | 0.01 | 0.04 | 151 | |
| 170 | 8.26 | 8.24 | 33.968 | 26.427 | 162.3 | 0.395 | 2.45 | 37.0 | 36.4 | 2.17 | 29.7 | 0.00 | 0.00 | 0.00 | 0.03 | 171 | 208 |
| 200 | 7.94 | 7.92 | 34.015 | 26.512 | 154.7 | 0.443 | 2.15 | 32.3 | 40.8 | 2.29 | 31.3 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | 207 |
| 230 | 7.54 | 7.52 | 34.035 | 26.586 | 148.0 | 0.488 | 1.93 | 28.7 | 45.8 | 2.39 | 32.7 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.44 D | 7.42 | 34.078 D | 26.635 | 143.7 | 0.517 | 1.57 D | 23.3 | 49.1 | 2.49 | 33.8 | 0.00 | 0.00 | | | 251 | |
| 274 | 7.26 | 7.23 | 34.094 | 26.673 | 140.4 | 0.551 | 1.37 | 20.3 | 53.0 | 2.61 | 35.1 | 0.00 | 0.00 | | | 276 | 205 |
| 300 ISL | 7.14 D | 7.11 | 34.143 D | 26.729 | 135.5 | 0.587 | 1.06 D | 15.6 | 57.3 | 2.73 | 36.4 | 0.00 | 0.00 | | | 302 | |
| 319 | 6.83 | 6.80 | 34.136 | 26.766 | 132.1 | 0.613 | 0.95 | 13.9 | 60.3 | 2.81 | 37.3 | 0.00 | 0.00 | | | 321 | 204 |
| 380 | 6.45 | 6.42 | 34.187 | 26.857 | 124.1 | 0.691 | 0.64 | 9.3 | 68.7 | 2.96 | 38.9 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.25 D | 6.21 | 34.176 D | 26.874 | 122.5 | 0.715 | 0.65 D | 9.4 | 71.3 | 3.01 | 39.4 | 0.00 | 0.00 | | | 403 | |
| 441 | 5.93 | 5.89 | 34.192 | 26.928 | 117.7 | 0.765 | 0.54 | 7.7 | 76.2 | 3.09 | 40.4 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.68 D | 5.64 | 34.238 D | 26.996 | 111.9 | 0.832 | 0.39 D | 5.6 | 82.3 | 3.18 | 41.3 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.61 | 5.57 | 34.262 | 27.023 | 109.4 | 0.851 | 0.32 | 4.6 | 84.1 | 3.21 | 41.5 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 8.8 N | 123 13.4 W | 26/01/11 | 2157 UTC | 4240 m | 350 06 kn | 320 02 05 | 2 | 1018.7 mb | 12.8 C | 12.2 C | 16m | 8/8 ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.10 | 13.10 | 32.948 | 24.784 | 315.3 | 0.000 | 6.16 | 102.9 | 4.3 | 0.46 | 2.0 | 0.06 | 0.01 | 0.48 | 0.10 | 0 | |
| 3 | 13.10 | 13.10 | 32.948 | 24.785 | 315.4 | 0.009 | 6.16 | 102.8 | 4.3 | 0.46 | 2.0 | 0.06 | 0.01 | 0.48 | 0.10 | 3 | 224 |
| 10 | 12.57 | 12.57 | 32.942 | 24.884 | 306.1 | 0.031 | 6.21 | 102.5 | 4.8 | 0.53 | 2.9 | 0.09 | 0.02 | 0.62 | 0.19 | 10 | 223 |
| 19 | 12.49 | 12.49 | 32.943 | 24.900 | 304.8 | 0.059 | 6.17 | 101.7 | 5.0 | 0.54 | 3.0 | 0.10 | 0.00 | 0.81 | 0.26 | 19 | 222 |
| 20 ISL | 12.49 D | 12.49 | 32.946 D | 24.902 | 304.6 | 0.062 | 6.20 D | 102.2 | 5.0 | 0.54 | 3.0 | 0.10 | 0.00 | 0.81 | 0.27 | 20 | |
| 30 | 12.42 | 12.42 | 32.968 | 24.933 | 301.9 | 0.092 | 6.14 | 101.1 | 5.2 | 0.57 | 3.5 | 0.11 | 0.01 | 0.82 | 0.33 | 30 | 221 |
| 39 | 12.26 | 12.25 | 33.061 | 25.036 | 292.3 | 0.119 | 6.15 | 100.9 | 5.8 | 0.62 | 4.4 | 0.17 | 0.04 | 0.78 | 0.41 | 39 | 220 |
| 50 | 11.73 | 11.72 | 33.101 | 25.166 | 280.2 | 0.150 | 5.84 | 94.8 | 6.9 | 0.78 | 6.8 | 0.34 | 0.04 | 0.38 | 0.24 | 50 | 219 |
| 59 | 10.97 | 10.96 | 33.117 | 25.317 | 266.0 | 0.175 | 5.31 | 84.8 | 8.8 | 0.95 | 9.8 | 0.03 | 0.00 | 0.14 | 0.11 | 59 | 218 |
| 69 | 10.16 | 10.15 | 33.189 | 25.513 | 247.5 | 0.201 | 4.97 | 78.0 | 12.8 | 1.21 | 13.9 | 0.01 | 0.00 | 0.09 | 0.07 | 69 | 217 |
| 75 ISL | 10.03 D | 10.02 | 33.235 D | 25.571 | 242.1 | 0.215 | 4.78 D | 74.8 | 15.3 | 1.36 | 16.4 | 0.00 | 0.00 | 0.06 | 0.07 | 75 | |
| 85 | 9.73 | 9.72 | 33.392 | 25.743 | 225.8 | 0.239 | 4.13 | 64.3 | 19.3 | 1.59 | 20.0 | 0.00 | 0.00 | 0.03 | 0.07 | 85 | 216 |
| 100 | 9.43 | 9.42 | 33.567 | 25.929 | 208.4 | 0.271 | 3.54 | 54.8 | 23.6 | 1.82 | 23.6 | 0.00 | 0.00 | 0.02 | 0.04 | 100 | 215 |
| 119 | 9.27 | 9.26 | 33.751 | 26.099 | 192.7 | 0.309 | 2.88 | 44.5 | 28.1 | 2.03 | 26.7 | 0.00 | 0.00 | 0.01 | 0.05 | 120 | 214 |
| 125 ISL | 9.20 D | 9.19 | 33.795 D | 26.145 | 188.4 | 0.321 | 2.78 D | 42.9 | 29.4 | 2.09 | 27.4 | 0.00 | 0.00 | 0.01 | 0.05 | 126 | |
| 140 | 9.05 | 9.03 | 33.908 | 26.258 | 178.0 | 0.348 | 2.34 | 36.0 | 32.4 | 2.20 | 28.8 | 0.00 | 0.00 | 0.00 | 0.04 | 141 | 213 |
| 150 ISL | 8.90 D | 8.88 | 33.958 D | 26.321 | 172.2 | 0.366 | 2.21 D | 33.9 | 34.2 | 2.24 | 29.5 | 0.00 | 0.00 | 0.00 | 0.04 | 151 | |
| 170 | 8.67 | 8.65 | 34.010 | 26.398 | 165.2 | 0.399 | 1.94 | 29.6 | 37.2 | 2.30 | 30.6 | 0.00 | 0.00 | 0.00 | 0.03 | 171 | 212 |
| 200 | 8.38 | 8.36 | 34.047 | 26.472 | 158.7 | 0.448 | 1.80 | 27.3 | 40.1 | 2.38 | 31.6 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | 211 |
| 230 | 7.82 | 7.80 | 34.059 | 26.565 | 150.2 | 0.494 | 1.81 | 27.1 | 44.9 | 2.44 | 32.6 | 0.00 | 0.00 | | | 231 | 210 |
| 250 ISL | 7.62 D | 7.60 | 34.094 D | 26.622 | 145.0 | 0.524 | 1.40 D | 20.9 | 49.0 | 2.56 | 33.9 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.34 | 7.31 | 34.093 | 26.661 | 141.5 | 0.553 | 1.32 | 19.5 | 53.0 | 2.68 | 35.3 | 0.00 | 0.00 | | | 272 | 209 |
| 300 ISL | 7.19 D | 7.16 | 34.144 D | 26.722 | 136.1 | 0.594 | 1.08 D | 15.9 | 56.5 | 2.77 | 36.1 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.16 | 7.13 | 34.166 | 26.744 | 134.3 | 0.621 | 0.92 | 13.6 | 58.5 | 2.82 | 36.5 | 0.00 | 0.00 | | | 322 | 208 |
| 380 | 6.46 | 6.43 | 34.181 | 26.851 | 124.6 | 0.699 | 0.70 | 10.2 | 68.3 | 2.99 | 38.8 | 0.00 | 0.00 | | | 382 | 207 |
| 400 ISL | 6.35 D | 6.31 | 34.201 D | 26.881 | 122.0 | 0.724 | 0.62 D | 9.0 | 71.1 | 3.04 | 39.3 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.06 | 6.02 | 34.218 | 26.932 | 117.5 | 0.772 | 0.48 | 6.9 | 76.0 | 3.12 | 40.1 | 0.00 | 0.00 | | | 443 | 206 |
| 500 ISL | 5.80 D | 5.76 | 34.253 D | 26.993 | 112.3 | 0.840 | 0.38 D | 5.4 | 81.5 | 3.21 | 41.0 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.77 | 5.73 | 34.268 | 27.009 | 111.0 | 0.857 | 0.33 | 4.7 | 82.8 | 3.23 | 41.2 | 0.00 | 0.00 | | | 519 | 205 |
| 600 ISL | 5.34 D | 5.29 | 34.315 D | 27.099 | 103.1 | 0.948 | 0.25 D | 3.5 | 91.7 | 3.31 | 42.4 | 0.00 | 0.00 | | | 604 | |
| 650 | 5.09 | 5.04 | 34.346 | 27.153 | 98.2 | 0.998 | 0.21 | 3.0 | 97.1 | 3.34 | 43.0 | 0.00 | 0.00 | | | 655 | 204 |
| 700 CSL | 4.86 | 4.80 | 34.371 | 27.199 | 94.1 | 1.047 | 0.23 | 3.2 | | | | | | | | 705 | 200 |
| 800 CSL | 4.52 | 4.46 | 34.422 | 27.278 | 87.1 | 1.137 | 0.31 | 4.3 | | | | | | | | 806 | 200 |
| 900 CSL | 4.19 | 4.12 | 34.442 | 27.330 | 82.6 | 1.222 | 0.37 | 5.1 | | | | | | | | 907 | 200 |
| 1000 CSL | 3.89 | 3.81 | 34.466 | 27.380 | 78.1 | 1.302 | 0.48 | 6.6 | | | | | | | | 1008 | 200 |
| 1100 CSL | 3.64 | 3.56 | 34.488 | 27.424 | 74.4 | 1.379 | 0.59 | 8.0 | | | | | | | | 1110 | 200 |
| 1200 CSL | 3.39 | 3.30 | 34.509 | 27.465 | 70.6 | 1.451 | 0.71 | 9.6 | | | | | | | | 1211 | 200 |
| 1300 CSL | 3.16 | 3.07 | 34.526 | 27.501 | 67.3 | 1.520 | 0.83 | 11.1 | | | | | | | | 1312 | 200 |
| 1400 CSL | 2.98 | 2.88 | 34.542 | 27.531 | 64.7 | 1.586 | 0.93 | 12.4 | | | | | | | | 1413 | 200 |
| 1500 CSL | 2.78 | 2.67 | 34.556 | 27.560 | 61.9 | 1.649 | 1.07 | 14.2 | | | | | | | | 1515 | 200 |
| 1600 CSL | 2.61 | 2.50 | 34.569 | 27.586 | 59.5 | 1.710 | 1.19 | 15.7 | | | | | | | | 1616 | 200 |
| 1800 CSL | 2.29 | 2.16 | 34.596 | 27.635 | 54.7 | 1.824 | 1.48 | 19.4 | | | | | | | | 1819 | 200 |
| 2000 CSL | 2.10 | 1.96 | 34.619 | 27.670 | 51.6 | 1.931 | 1.77 | 23.1 | | | | | | | | 2022 | 200 |
| 2002 | 2.10 | 1.96 | 34.617 | 27.668 | 51.8 | 1.932 | 1.75 | 22.8 | 166.6 | 3.02 | 42.0 | 0.00 | 0.00 | | | 2024 | 203 |
| 2200 CSL | 1.95 | 1.79 | 34.633 | 27.694 | 49.5 | 2.032 | 2.01 | 26.1 | | | | | | | | 2226 | 200 |
| 2400 CSL | 1.85 | 1.68 | 34.644 | 27.711 | 48.2 | 2.130 | 2.21 | 28.6 | | | | | | | | 2429 | 200 |
| 2600 CSL | 1.75 | 1.56 | 34.650 | 27.725 | 47.2 | 2.225 | 2.30 | 29.7 | | | | | | | | 2633 | 200 |
| 2800 CSL | 1.67 | 1.46 | 34.658 | 27.738 | 46.2 | 2.319 | 2.46 | 31.7 | | | | | | | | 2837 | 200 |
| 3000 CSL | 1.62 | 1.40 | 34.663 | 27.747 | 45.8 | 2.411 | 2.61 | 33.6 | | | | | | | | 3041 | 200 |
| 3200 CSL | 1.59 | 1.35 | 34.667 | 27.754 | 45.7 | 2.502 | 2.71 | 34.8 | | | | | | | | 3245 | 200 |
| 3400 CSL | 1.55 | 1.29 | 34.671 | 27.761 | 45.4 | 2.593 | 2.81 | 36.0 | | | | | | | | 3449 | 200 |
| 3542 | 1.53 | 1.25 | 34.678 | 27.769 | 45.0 | 2.658 | 2.92 | 37.4 | 175.0 | 2.73 | 38.7 | 0.00 | 0.00 | | | 3595 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° 02;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 80.0 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 49.0 N | 123 54.6 W | 27/01/11 | 0538 UTC | 4346 m | 330 03 kn | | | 1019.7 mb | 11.0 C | 10.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.62 | 13.62 | 32.796 | 24.563 | 336.4 | 0.000 | 6.07 | 102.4 | 2.4 | 0.34 | 0.2 | 0.00 | 0.00 | 0.40 | 0.09 | 0 | |
| 2 | 13.62 | 13.62 | 32.796 D | 24.563 | 336.5 | 0.007 | 6.07 | 102.4 | 2.4 | 0.34 | 0.2 | 0.00 | 0.00 | 0.40 | 0.09 | 2 | 220 |
| 10 | 13.63 | 13.63 | 32.799 | 24.563 | 336.6 | 0.034 | 6.07 | 102.4 | 2.3 | 0.34 | 0.2 | 0.00 | 0.00 | 0.40 | 0.09 | 10 | 219 |
| 20 | 13.52 | 13.52 | 32.789 | 24.578 | 335.5 | 0.067 | 6.08 | 102.3 | 2.3 | 0.35 | 0.2 | 0.01 | 0.00 | 0.51 | 0.12 | 20 | 218 |
| 30 ISL | 13.17 D | 13.17 | 32.894 D | 24.730 | 321.3 | 0.100 | 6.02 | 100.6 | 3.1 | 0.44 | 1.5 | 0.12 | 0.01 | 0.74 | 0.20 | 30 | |
| 31 | 13.18 | 13.18 | 32.901 | 24.733 | 321.0 | 0.103 | 6.02 | 100.6 | 3.2 | 0.45 | 1.6 | 0.13 | 0.01 | 0.76 | 0.21 | 31 | 217 |
| 40 | 12.88 | 12.87 | 32.942 | 24.824 | 312.6 | 0.132 | 6.08 | 101.0 | 3.8 | 0.49 | 2.4 | 0.14 | 0.01 | 0.85 | 0.30 | 40 | 216 |
| 50 | 12.69 | 12.68 | 32.953 | 24.870 | 308.4 | 0.163 | 6.12 | 101.3 | 4.1 | 0.51 | 2.8 | 0.15 | 0.02 | 0.81 | 0.31 | 50 | 215 |
| 61 | 12.33 | 12.32 | 32.952 | 24.939 | 302.2 | 0.196 | 6.04 | 99.2 | 4.7 | 0.57 | 3.8 | 0.20 | 0.08 | 0.57 | 0.27 | 61 | 214 |
| 70 | 12.15 | 12.14 | 33.016 | 25.022 | 294.4 | 0.223 | 5.75 | 94.1 | 5.0 | 0.67 | 5.3 | 0.17 | 0.01 | 0.32 | 0.20 | 70 | 213 |
| 75 ISL | 11.76 D | 11.75 | 33.066 D | 25.134 | 283.8 | 0.238 | 5.74 D | 93.2 | 5.4 | 0.71 | 6.0 | 0.17 | 0.01 | 0.24 | 0.18 | 75 | |
| 85 | 11.55 | 11.54 | 33.112 | 25.209 | 276.9 | 0.266 | 5.63 | 91.0 | 6.8 | 0.81 | 7.8 | 0.17 | 0.00 | 0.16 | 0.15 | 85 | 212 |
| 100 | 10.49 | 10.48 | 33.148 | 25.425 | 256.5 | 0.306 | 5.07 | 80.1 | 10.5 | 1.06 | 12.0 | 0.02 | 0.00 | 0.08 | 0.08 | 100 | 211 |
| 120 | 9.69 | 9.68 | 33.475 | 25.815 | 219.7 | 0.353 | 3.84 | 59.8 | 20.6 | 1.68 | 21.7 | 0.00 | 0.00 | 0.02 | 0.06 | 121 | 210 |
| 125 ISL | 9.65 D | 9.64 | 33.550 D | 25.881 | 213.6 | 0.364 | 3.54 D | 55.1 | 22.5 | 1.77 | 23.2 | 0.00 | 0.00 | 0.02 | 0.06 | 126 | |
| 140 | 9.34 | 9.32 | 33.727 | 26.070 | 195.9 | 0.395 | 2.94 | 45.5 | 27.1 | 1.97 | 26.3 | 0.00 | 0.00 | 0.01 | 0.05 | 141 | 209 |
| 150 ISL | 9.28 D | 9.26 | 33.774 D | 26.116 | 191.7 | 0.414 | 2.80 D | 43.3 | 29.1 | 2.05 | 27.5 | 0.00 | 0.00 | 0.01 | 0.05 | 151 | |
| 171 | 9.00 | 8.98 | 33.919 | 26.275 | 177.0 | 0.453 | 2.33 | 35.8 | 32.1 | 2.14 | 28.8 | 0.00 | 0.00 | 0.00 | 0.04 | 172 | 208 |
| 200 | 8.58 | 8.56 | 34.005 | 26.408 | 164.8 | 0.503 | 2.09 | 31.8 | 36.2 | 2.23 | 30.3 | 0.00 | 0.00 | 0.00 | 0.04 | 201 | 207 |
| 230 | 8.28 | 8.26 | 34.059 | 26.497 | 156.8 | 0.551 | 1.75 | 26.5 | 40.8 | 2.35 | 31.8 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.14 D | 8.11 | 34.095 D | 26.546 | 152.5 | 0.582 | 1.54 D | 23.2 | 42.9 | 2.41 | 32.5 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.95 | 7.92 | 34.086 | 26.568 | 150.7 | 0.612 | 1.53 | 23.0 | 44.9 | 2.46 | 33.1 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.49 D | 7.46 | 34.087 D | 26.635 | 144.5 | 0.656 | 1.55 D | 23.0 | 48.7 | 2.52 | 34.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.40 | 7.37 | 34.106 | 26.663 | 142.2 | 0.685 | 1.36 | 20.2 | 51.5 | 2.57 | 34.6 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.81 | 6.77 | 34.148 | 26.778 | 131.8 | 0.767 | 0.92 | 13.5 | 61.2 | 2.80 | 37.2 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.65 D | 6.61 | 34.177 D | 26.823 | 127.8 | 0.793 | 0.75 D | 10.9 | 63.8 | 2.85 | 37.8 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.43 | 6.39 | 34.207 | 26.876 | 123.1 | 0.843 | 0.60 | 8.7 | 68.9 | 2.94 | 38.8 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.88 D | 5.84 | 34.234 D | 26.968 | 114.7 | 0.915 | 0.44 D | 6.3 | 77.9 | 3.06 | 40.3 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.82 | 5.78 | 34.243 | 26.983 | 113.5 | 0.932 | 0.38 | 5.4 | 80.1 | 3.09 | 40.7 | 0.00 | 0.00 | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 81.7 43.5

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 24.2 N | 119 48.1 W | 25/01/11 | 0836 UTC | 22 m | 350 03 kn | | | 1016.1 mb | 13.3 C | 11.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.31 | 13.31 | 33.250 | 24.976 | 297.0 | 0.000 | 6.21 | 104.3 | 4.5 | 0.46 | 0.7 | 0.09 | 1.07 | 3.11 | 0.64 | 0 | |
| 2 | 13.31 | 13.31 | 33.250 | 24.976 | 297.1 | 0.006 | 6.21 | 104.3 | 4.5 | 0.46 | 0.7 | 0.09 | 1.07 | 3.11 | 0.64 | 2 | 204 |
| 5 | 13.30 | 13.30 | 33.250 | 24.978 | 297.0 | 0.015 | 6.19 | 104.0 | 4.4 | 0.46 | 0.7 | 0.09 | 1.04 | 3.28 | 0.55 | 5 | 203 |
| 10 | 13.05 | 13.05 | 33.274 | 25.047 | 290.6 | 0.030 | 5.75 | 96.1 | 5.3 | 0.60 | 1.5 | 0.13 | 1.56 | 1.64 | 0.55 | 10 | 202 |
| 15 | 13.07 | 13.07 | 33.272 | 25.042 | 291.2 | 0.044 | 5.82 | 97.3 | 4.9 | 0.60 | 1.4 | 0.12 | 1.45 | 1.87 | 0.57 | 15 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 81.8 46.9

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 16.9 N | 120 2.3 W | 25/01/11 | 1218 UTC | 582 m | 090 03 kn | | | 1016.1 mb | 14.4 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.781 | 13.781 | 33.278 | 24.902 | 304.1 | 0.000 | 7.00 | 118.8 | 1.0 | 0.19 | 0.1 | 0.00 | 0.00 | | | 0 | |
| 2 | 13.781 | 13.781 | 33.278 | 24.902 | 304.1 | 0.006 | 7.00 | 118.8 | 1.0 | 0.19 | 0.1 | 0.00 | 0.00 | 0.93 | 0.22 | 2 | 224 |
| 10 | 13.45 | 13.45 | 33.274 | 24.967 | 298.2 | 0.030 | 7.05 | 118.8 | 1.1 | 0.20 | 0.1 | 0.00 | 0.02 | 1.55 | 0.35 | 10 | 223 |
| 20 | 13.08 | 13.08 | 33.308 | 25.068 | 288.9 | 0.060 | 5.97 | 99.9 | 2.7 | 0.53 | 2.5 | 0.11 | 0.73 | 1.40 | 0.62 | 20 | 222 |
| 30 | 12.75 | 12.75 | 33.339 | 25.157 | 280.6 | 0.088 | 5.49 | 91.2 | 5.4 | 0.74 | 5.6 | 0.20 | 0.76 | 0.88 | 0.36 | 30 | 221 |
| 41 | 12.45 | 12.44 | 33.385 | 25.251 | 272.0 | 0.118 | 5.27 | 87.0 | 7.0 | 0.86 | 7.6 | 0.21 | 0.66 | 1.07 | 0.51 | 41 | 220 |
| 50 | 12.23 | 12.22 | 33.404 | 25.308 | 266.8 | 0.143 | 5.01 | 82.4 | 8.6 | 0.98 | 9.4 | 0.25 | 0.56 | 1.19 | 0.55 | 50 | 219 |
| 59 | 11.95 | 11.94 | 33.435 | 25.385 | 259.6 | 0.166 | 4.74 | 77.5 | 10.6 | 1.10 | 11.5 | 0.24 | 0.26 | 1.24 | 0.63 | 59 | 218 |
| 71 | 11.35 | 11.34 | 33.502 | 25.548 | 244.3 | 0.197 | 4.16 | 67.1 | 14.8 | 1.33 | 15.2 | 0.19 | 0.15 | 1.03 | 0.70 | 71 | 217 |
| 75 ISL | 10.95 D | 10.94 | 33.526 D | 25.639 | 235.8 | 0.206 | 4.00 D | 64.0 | 16.6 | 1.44 | 16.9 | 0.15 | 0.10 | 0.84 | 0.62 | 75 | |
| 86 | 10.52 | 10.51 | 33.617 | 25.785 | 222.0 | 0.231 | 3.22 | 51.1 | 21.4 | 1.73 | 21.2 | 0.05 | 0.00 | 0.33 | 0.37 | 86 | 216 |
| 100 ISL | 10.11 D | 10.10 | 33.765 D | 25.971 | 204.6 | 0.261 | 2.75 D | 43.3 | 25.3 | 1.93 | 23.9 | 0.04 | 0.00 | 0.26 | 0.29 | 101 | |
| 101 | 10.11 | 10.10 | 33.762 | 25.969 | 204.9 | 0.263 | 2.72 | 42.8 | 25.5 | 1.94 | 24.0 | 0.04 | 0.00 | 0.26 | 0.29 | 102 | 215 |
| 121 | 10.00 | 9.99 | 33.802 | 26.019 | 200.5 | 0.304 | 2.61 | 41.0 | 27.0 | 1.98 | 24.6 | 0.03 | 0.00 | 0.19 | 0.19 | 122 | 214 |
| 125 ISL | 9.77 D | 9.76 | 33.895 D | 26.130 | 190.0 | 0.312 | 2.42 D | 37.8 | 28.1 | 2.02 | 25.2 | 0.03 | 0.00 | 0.17 | 0.19 | 126 | |
| 140 | 9.45 | 9.43 | 33.997 | 26.263 | 177.7 | 0.339 | 2.05 | 31.8 | 32.6 | 2.18 | 27.7 | 0.01 | 0.00 | 0.10 | 0.18 | 141 | 213 |
| 150 ISL | 9.34 D | 9.32 | 34.031 D | 26.308 | 173.6 | 0.357 | 1.97 D | 30.5 | 34.3 | 2.23 | 28.4 | 0.01 | 0.00 | 0.09 | 0.16 | 151 | |
| 171 | 9.18 | 9.16 | 34.073 | 26.367 | 168.4 | 0.393 | 1.74 | 26.9 | 36.4 | 2.28 | 29.1 | 0.01 | 0.00 | 0.08 | 0.14 | 172 | 212 |
| 200 ISL | 9.10 D | 9.08 | 34.099 D | 26.401 | 165.8 | 0.441 | 1.62 D | 25.0 | 38.0 | 2.35 | 29.7 | 0.00 | 0.00 | 0.08 | 0.17 | 201 | |
| 201 | 9.10 | 9.08 | 34.096 | 26.398 | 166.0 | 0.443 | 1.61 | 24.8 | 38.1 | 2.35 | 29.7 | 0.00 | 0.00 | 0.08 | 0.17 | 202 | 211 |
| 231 | 8.90 | 8.88 | 34.139 | 26.464 | 160.3 | 0.492 | 1.39 | 21.3 | 41.0 | 2.45 | 30.6 | 0.00 | 0.00 | | | 232 | 210 |
| 250 ISL | 8.76 D | 8.73 | 34.162 D | 26.504 | 156.8 | 0.522 | 1.06 D | 16.2 | 45.0 | 2.59 | 31.7 | 0.00 | 0.00 | | | 252 | |
| 269 | 8.55 | 8.52 | 34.175 | 26.547 | 153.0 | 0.551 | 0.79 | 12.0 | 49.6 | 2.73 | 32.8 | 0.00 | 0.00 | | | 271 | 209 |
| 300 ISL | 8.03 D | 8.00 | 34.193 D | 26.640 | 144.4 | 0.597 | 0.51 D | 7.7 | 55.5 | 2.86 | 34.2 | 0.00 | 0.00 | | | 302 | |
| 319 | 7.82 | 7.79 | 34.192 | 26.671 | 141.8 | 0.625 | 0.50 | 7.5 | 58.7 | 2.92 | 34.8 | 0.00 | 0.00 | | | 321 | 208 |
| 381 | 7.37 | 7.33 | 34.207 | 26.748 | 135.2 | 0.710 | 0.30 | 4.4 | 68.1 | 3.12 | 34.7 | 0.00 | 0.00 | | | 383 | 207 |
| 400 ISL | 7.20 D | 7.16 | 34.215 D | 26.778 | 132.5 | 0.736 | 0.22 D | 3.2 | 71.9 | 3.17 | 34.4 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.85 | 6.81 | 34.224 | 26.834 | 127.6 | 0.788 | 0.15 | 2.2 | 81.2 | 3.28 | 33.1 | 0.00 | 0.00 | | | 443 | 206 |
| 476 | 6.60 | 6.56 | 34.237 | 26.878 | 123.7 | 0.833 | 0.11 | 1.6 | 91.1 | 3.44 | 30.6 | 0.00 | 0.00 | | | 479 | 205 |
| 500 ISL | 6.55 D | 6.50 | 34.242 D | 26.889 | 123.0 | 0.863 | 0.08 D | 1.2 | 98.5 | 3.65 | 27.9 | 0.00 | 0.00 | | | 503 | |
| 516 | 6.51 | 6.46 | 34.243 | 26.895 | 122.6 | 0.882 | 0.04 | 0.6 | 100.4 | 3.71 | 27.3 | 0.00 | 0.00 | | | 520 | 204 |
| 533 | 6.47 | 6.42 | 34.245 | 26.902 | 122.1 | 0.903 | 0.10 | 1.5 | 95.6 | 3.57 | 29.7 | 0.00 | 0.00 | | | 537 | 203 |
| 560 | 6.42 | 6.37 | 34.244 | 26.908 | 121.9 | 0.936 | 0.03 | 0.4 | 103.2 | 3.75 | 27.3 | 0.00 | 0.00 | | | 564 | 202 |
| 565 | 6.42 | 6.37 | 34.245 | 26.909 | 121.9 | 0.942 | 0.02 | 0.3 | 103.3 | 3.72 | 27.3 | 0.00 | 0.00 | | | 569 | 201 |

A) SANTA BARBARA BASIN STATION.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 39.4

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 15.5 N | 119 19.5 W | 25/01/11 | 0527 UTC | 21 m | 300 05 kn | | | 1016.7 mb | 13.2 C | 11.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.46 | 13.46 | 33.281 | 24.970 | 297.6 | 0.000 | 6.88 | 116.0 | 0.5 | 0.20 | 0.1 | 0.01 | 0.00 | 3.25 | 0.62 | 0 | |
| 2 | 13.46 | 13.46 | 33.281 | 24.970 | 297.7 | 0.006 | 6.88 | 116.0 | 0.5 | 0.20 | 0.1 | 0.01 | 0.00 | 3.25 | 0.62 | 2 | 205 |
| 5 | 13.45 | 13.45 | 33.280 | 24.971 | 297.6 | 0.015 | 6.85 | 115.4 | 0.6 | 0.20 | 0.1 | 0.01 | 0.00 | 3.31 | 0.62 | 5 | 204 |
| 10 | 13.41 | 13.41 | 33.281 | 24.980 | 296.9 | 0.030 | 6.74 | 113.5 | 0.8 | 0.30 | 0.2 | 0.03 | 0.12 | 3.92 | 0.69 | 10 | 202 |
| 10 | 13.40 | 13.40 | 33.283 | 24.984 | 296.6 | 0.030 | | | | | | | | | | 10 | 203 |
| 15 | 13.36 | 13.36 | 33.283 | 24.992 | 295.9 | 0.045 | 6.42 | 108.0 | 1.5 | 0.38 | 0.3 | 0.06 | 0.40 | 4.41 | 0.71 | 15 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 40.6

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 13.4 N | 119 24.8 W | 25/01/11 | 0355 UTC | 41 m | 250 02 kn | | | 1016.2 mb | 14.6 C | 13.4 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.01 | 14.01 | 33.300 | 24.872 | 306.9 | 0.000 | 6.57 | 112.0 | 0.8 | 0.24 | 0.3 | 0.02 | 0.03 | 1.84 | 0.25 | 0 | |
| 2 | 14.01 | 14.01 | 33.300 | 24.872 | 307.0 | 0.006 | 6.57 | 112.0 | 0.8 | 0.24 | 0.3 | 0.02 | 0.03 | 1.84 | 0.25 | 2 | 206 |
| 5 | 13.83 | 13.83 | 33.293 | 24.904 | 304.0 | 0.015 | 6.66 | 113.1 | 0.6 | 0.22 | 0.3 | 0.00 | 0.03 | 1.31 | 0.22 | 5 | 205 |
| 10 | 13.30 | 13.30 | 33.315 | 25.029 | 292.3 | 0.030 | 6.07 | 102.0 | 3.0 | 0.50 | 2.6 | 0.12 | 0.37 | 2.87 | 0.55 | 10 | 203 |
| 10 | 13.31 | 13.31 | 33.316 | 25.028 | 292.4 | 0.030 | | | | | | | | | | 10 | 204 |
| 20 | 13.28 | 13.28 | 33.319 | 25.036 | 291.9 | 0.059 | 6.03 | 101.3 | 3.1 | 0.52 | 2.7 | 0.13 | 0.42 | 3.05 | 0.64 | 20 | 202 |
| 30 | 13.20 | 13.20 | 33.322 | 25.055 | 290.4 | 0.089 | 5.89 | 98.8 | 3.9 | 0.61 | 3.5 | 0.16 | 0.61 | 2.72 | 0.69 | 30 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 42.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 10.7 N | 119 30.6 W | 25/01/11 | 0154 UTC | 124 m | 250 01 kn | | | 1015.6 mb | 14.6 C | 13.4 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.15 | 14.15 | 33.325 | 24.862 | 307.9 | 0.000 | 6.74 | 115.3 | 0.3 | 0.15 | 0.1 | 0.00 | 0.00 | 2.31 | 0.34 | 0 | |
| 2 | 14.15 | 14.15 | 33.325 | 24.862 | 307.9 | 0.006 | 6.74 | 115.3 | 0.3 | 0.15 | 0.1 | 0.00 | 0.00 | 2.31 | 0.34 | 2 | 213 |
| 10 | 13.45 | 13.45 | 33.344 | 25.021 | 293.0 | 0.030 | 6.91 | 116.5 | 0.4 | 0.18 | 0.2 | 0.01 | 0.00 | 2.36 | 0.40 | 10 | 211 |
| 10 | 13.45 | 13.45 | 33.342 | 25.020 | 293.2 | 0.030 | | | | | | | | | | 10 | 212 |
| 20 | 12.89 | 12.89 | 33.348 | 25.136 | 282.3 | 0.059 | 6.64 | 110.6 | 1.0 | 0.29 | 1.3 | 0.07 | 0.03 | 5.11 | 0.77 | 20 | 210 |
| 30 | 12.21 | 12.21 | 33.386 | 25.297 | 267.2 | 0.086 | 5.25 | 86.3 | 7.2 | 0.87 | 8.5 | 0.21 | 0.20 | 2.62 | 0.69 | 30 | 209 |
| 40 | 11.41 | 11.41 | 33.434 | 25.484 | 249.7 | 0.112 | 4.30 | 69.5 | 13.5 | 1.31 | 15.1 | 0.15 | 0.00 | 0.92 | 0.47 | 40 | 208 |
| 50 | 10.93 | 10.92 | 33.485 | 25.610 | 237.9 | 0.137 | 3.92 | 62.7 | 16.4 | 1.47 | 17.8 | 0.05 | 0.00 | 0.74 | 0.43 | 50 | 207 |
| 60 | 10.71 | 10.70 | 33.613 | 25.749 | 225.0 | 0.160 | 3.54 | 56.4 | 20.0 | 1.61 | 19.3 | 0.10 | 0.11 | 0.79 | 0.52 | 60 | 206 |
| 69 | 10.51 | 10.50 | 33.622 | 25.791 | 221.1 | 0.180 | 3.34 | 53.0 | 21.4 | 1.69 | 20.7 | 0.06 | 0.04 | 0.60 | 0.40 | 69 | 205 |
| 75 ISL | 10.33 D | 10.32 | 33.635 D | 25.832 | 217.3 | 0.193 | 3.22 D | 50.9 | 22.2 | 1.74 | 21.5 | 0.04 | 0.02 | 0.49 | 0.35 | 75 | |
| 85 | 10.25 | 10.24 | 33.684 | 25.884 | 212.6 | 0.215 | 3.02 | 47.6 | 23.6 | 1.82 | 22.6 | 0.01 | 0.00 | 0.34 | 0.29 | 85 | 204 |
| 100 | 10.05 | 10.04 | 33.785 | 25.997 | 202.2 | 0.246 | 2.68 | 42.1 | 26.5 | 1.95 | 24.1 | 0.03 | 0.00 | 0.25 | 0.26 | 101 | 203 |
| 120 | 10.01 | 10.00 | 33.802 | 26.018 | 200.7 | 0.286 | 2.63 | 41.3 | 27.1 | 1.99 | 24.4 | 0.03 | 0.00 | 0.21 | 0.30 | 121 | 202 |
| 125 ISL | 9.99 D | 9.98 | 33.813 D | 26.030 | 199.6 | 0.296 | 2.61 D | 41.0 | 27.2 | 1.99 | 24.6 | 0.03 | 0.00 | 0.19 | 0.33 | 126 | |
| 126 | 9.99 | 9.98 | 33.813 | 26.030 | 199.6 | 0.298 | 2.59 | 40.7 | 27.2 | 1.99 | 24.6 | 0.03 | 0.00 | 0.19 | 0.33 | 127 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 51.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 52.7 N | 120 8.3 W | 24/01/11 | 1937 UTC | 104 m | 240 11 kn | 290 02 06 | 1 | 1016.6 mb | 18.1 C | 14.7 C | 11m | 1/8 ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.73 | 12.73 | 33.462 | 25.255 | 270.5 | 0.000 | 5.24 | 87.1 | 9.9 | 0.94 | 8.7 | 0.13 | 0.34 | 0.95 | 0.29 | 0 | |
| 2 A | 12.73 | 12.73 | 33.462 | 25.255 | 270.5 | 0.005 | 5.24 | 87.1 | 9.9 | 0.94 | 8.7 | 0.13 | 0.34 | 0.95 | 0.29 | 2 | 214 |
| 7 A | 12.62 | 12.62 | 33.462 | 25.277 | 268.6 | 0.019 | 5.17 | 85.7 | 10.0 | 0.95 | 8.9 | 0.13 | 0.30 | 1.02 | 0.34 | 7 | 213 |
| 8 A | 12.58 | 12.58 | 33.465 | 25.287 | 267.7 | 0.022 | 5.19 | 86.0 | 10.0 | 0.96 | 8.9 | 0.13 | 0.29 | 1.00 | 0.31 | 8 | 212 |
| 10 ISL | 12.48 D | 12.48 | 33.465 D | 25.306 | 265.9 | 0.027 | 5.15 D | 85.1 | 10.2 | 0.99 | 9.2 | 0.13 | 0.29 | 1.01 | 0.31 | 10 | |
| 12 A | 12.48 | 12.48 | 33.468 | 25.309 | 265.7 | 0.032 | 5.10 | 84.3 | 10.4 | 1.01 | 9.5 | 0.13 | 0.29 | 1.05 | 0.32 | 12 | 210 |
| 12 | 12.47 | 12.47 | 33.465 | 25.308 | 265.7 | 0.032 | | | | | | | | | | 12 | 211 |
| 17 A | 12.40 | 12.40 | 33.478 | 25.332 | 263.6 | 0.045 | 5.11 | 84.3 | 10.3 | 0.99 | 9.5 | 0.13 | 0.26 | 1.05 | 0.32 | 17 | 209 |
| 20 ISL | 12.18 D | 12.18 | 33.479 D | 25.375 | 259.6 | 0.053 | 5.02 D | 82.5 | 11.4 | 1.06 | 10.7 | 0.13 | 0.24 | 1.03 | 0.32 | 20 | |
| 26 | 11.66 | 11.66 | 33.519 | 25.504 | 247.5 | 0.069 | 4.44 | 72.2 | 14.5 | 1.25 | 13.8 | 0.13 | 0.21 | 0.97 | 0.34 | 26 | 208 |
| 30 ISL | 11.16 D | 11.16 | 33.550 D | 25.619 | 236.6 | 0.078 | 4.24 D | 68.2 | 16.4 | 1.37 | 15.5 | 0.13 | 0.20 | 0.91 | 0.37 | 30 | |
| 36 A | 10.90 | 10.90 | 33.603 | 25.707 | 228.4 | 0.092 | 3.80 | 60.8 | 19.0 | 1.52 | 17.8 | 0.12 | 0.18 | 0.81 | 0.39 | 36 | 207 |
| 44 | 10.56 | 10.55 | 33.645 | 25.799 | 219.8 | 0.110 | 3.45 | 54.8 | 21.6 | 1.66 | 20.0 | 0.10 | 0.12 | 0.65 | 0.31 | 44 | 206 |
| 50 | 10.43 | 10.42 | 33.666 | 25.838 | 216.2 | 0.123 | 3.34 | 52.9 | 22.6 | 1.72 | 20.8 | 0.10 | 0.11 | 0.56 | 0.26 | 50 | 205 |
| 61 | 10.16 | 10.15 | 33.710 | 25.919 | 208.7 | 0.147 | 3.09 | 48.7 | 24.3 | 1.82 | 22.4 | 0.08 | 0.05 | 0.33 | 0.21 | 61 | 204 |
| 70 | 10.06 | 10.05 | 33.742 | 25.961 | 204.9 | 0.165 | 2.96 | 46.5 | 25.7 | 1.88 | 23.0 | 0.08 | 0.08 | 0.36 | 0.27 | 70 | 203 |
| 75 ISL | 10.01 D | 10.00 | 33.761 D | 25.985 | 202.8 | 0.175 | 2.90 D | 45.5 | 26.7 | 1.93 | 23.7 | 0.07 | 0.07 | 0.30 | 0.26 | 75 | |
| 85 | 9.74 | 9.73 | 33.835 | 26.088 | 193.2 | 0.195 | 2.60 | 40.6 | 28.9 | 2.02 | 25.1 | 0.06 | 0.04 | 0.17 | 0.20 | 85 | 202 |
| 95 | 9.57 | 9.56 | 33.895 | 26.163 | 186.2 | 0.214 | 2.39 | 37.2 | 31.1 | 2.10 | 26.1 | 0.05 | 0.00 | 0.14 | 0.16 | 96 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 44.9 N | 120 25.2 W | 24/01/11 | 1514 UTC | 1099 m | 250 18 kn | 290 05 05 | 0 | 1015.5 mb | 14.5 C | 12.0 C | 12m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.11 | 12.11 | 33.481 | 25.389 | 257.7 | 0.000 | 5.92 | 97.1 | 8.6 | 0.90 | 9.7 | 0.25 | 0.29 | 2.15 | 0.50 | 0 | |
| 3 | 12.11 | 12.11 | 33.481 | 25.389 | 257.8 | 0.008 | 5.92 | 97.1 | 8.6 | 0.90 | 9.7 | 0.25 | 0.29 | 2.15 | 0.50 | 3 | 221 |
| 10 | 12.10 | 12.10 | 33.484 | 25.394 | 257.6 | 0.026 | 5.88 | 96.4 | 8.8 | 0.91 | 9.8 | 0.25 | 0.30 | 2.28 | 0.46 | 10 | 219 |
| 10 | 12.09 | 12.09 | 33.489 | 25.399 | 257.0 | 0.026 | | | | | | | | | | 10 | 220 |
| 20 | 11.67 | 11.67 | 33.537 | 25.516 | 246.2 | 0.051 | 5.26 | 85.5 | 13.3 | 1.19 | 13.2 | 0.23 | 0.43 | 1.49 | 0.55 | 20 | 218 |
| 30 ISL | 10.94 D | 10.94 | 33.540 D | 25.650 | 233.6 | 0.075 | 4.36 D | 69.8 | 17.2 | 1.46 | 17.4 | 0.18 | 0.21 | 0.86 | 0.39 | 30 | |
| 31 | 10.81 | 10.81 | 33.552 | 25.683 | 230.5 | 0.077 | 4.28 | 68.3 | 17.7 | 1.49 | 17.9 | 0.17 | 0.18 | 0.80 | 0.37 | 31 | 217 |
| 41 | 9.98 | 9.98 | 33.732 | 25.966 | 203.8 | 0.099 | 2.94 | 46.1 | 25.4 | 1.90 | 24.1 | 0.04 | 0.00 | 0.14 | 0.20 | 41 | 216 |
| 50 | 9.85 | 9.84 | 33.775 | 26.022 | 198.7 | 0.117 | 2.75 | 43.0 | 26.8 | 1.96 | 24.9 | 0.03 | 0.00 | 0.11 | 0.18 | 50 | 215 |
| 60 | 9.76 | 9.75 | 33.836 | 26.085 | 192.9 | 0.137 | 2.53 | 39.5 | 28.5 | 2.03 | 25.8 | 0.02 | 0.00 | 0.08 A | 0.17 A | 60 | 214 |
| 70 | 9.71 | 9.70 | 33.859 | 26.111 | 190.6 | 0.156 | 2.44 | 38.1 | 29.3 | 2.06 | 26.2 | 0.01 | 0.00 | 0.07 B | 0.15 B | 70 | 213 |
| 75 ISL | 9.62 D | 9.61 | 33.901 D | 26.159 | 186.2 | 0.165 | 2.38 D | 37.1 | 29.9 | 2.09 | 26.5 | 0.01 | 0.00 | 0.06 | 0.15 | 75 | |
| 84 | 9.54 | 9.53 | 33.933 | 26.197 | 182.7 | 0.182 | 2.22 | 34.5 | 31.3 | 2.16 | 27.2 | 0.00 | 0.00 | 0.05 | 0.14 | 84 | 212 |
| 99 | 9.38 | 9.37 | 33.998 | 26.275 | 175.7 | 0.209 | 2.00 | 31.0 | 33.6 | 2.24 | 28.2 | 0.01 | 0.00 | 0.06 | 0.10 | 100 | 211 |
| 100 ISL | 9.37 D | 9.36 | 33.999 D | 26.277 | 175.5 | 0.210 | 2.02 D | 31.3 | 33.7 | 2.24 | 28.3 | 0.01 | 0.00 | 0.06 | 0.10 | 101 | |
| 120 | 9.25 | 9.24 | 34.062 | 26.346 | 169.3 | 0.245 | 1.80 | 27.8 | 35.5 | 2.30 | 29.0 | 0.00 | 0.00 | 0.01 | 0.13 | 121 | 210 |
| 125 ISL | 9.24 D | 9.23 | 34.072 D | 26.356 | 168.5 | 0.253 | 1.77 D | 27.4 | 35.8 | 2.31 | 29.1 | 0.00 | 0.00 | 0.01 | 0.12 | 126 | |
| 140 | 9.19 | 9.17 | 34.094 | 26.381 | 166.4 | 0.279 | 1.66 | 25.6 | 36.8 | 2.32 | 29.3 | 0.00 | 0.00 | 0.01 | 0.09 | 141 | 209 |
| 150 ISL | 9.14 D | 9.12 | 34.110 D | 26.402 | 164.6 | 0.295 | 1.63 D | 25.2 | 37.5 | 2.34 | 29.6 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 169 | 8.94 | 8.92 | 34.135 | 26.453 | 160.0 | 0.326 | 1.57 | 24.1 | 39.0 | 2.39 | 30.2 | 0.00 | 0.00 | 0.01 | 0.05 | 170 | 208 |
| 200 | 8.38 | 8.36 | 34.124 | 26.532 | 153.0 | 0.374 | 1.60 | 24.3 | 42.5 | 2.42 | 31.4 | 0.00 | 0.00 | 0.01 | 0.06 | 201 | 207 |
| 231 | 8.23 | 8.21 | 34.170 | 26.591 | 147.9 | 0.421 | 1.28 | 19.4 | 46.4 | 2.56 | 32.6 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.11 D | 8.08 | 34.193 D | 26.628 | 144.7 | 0.449 | 1.12 D | 16.9 | 48.8 | 2.62 | 33.3 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.86 | 7.83 | 34.192 | 26.664 | 141.5 | 0.478 | 1.03 | 15.4 | 51.2 | 2.67 | 34.0 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.74 D | 7.71 | 34.221 D | 26.705 | 138.1 | 0.519 | 0.85 D | 12.7 | 53.9 | 2.73 | 34.7 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.63 | 7.60 | 34.227 | 26.726 | 136.5 | 0.548 | 0.80 | 11.9 | 55.7 | 2.76 | 35.1 | 0.00 | 0.00 | | | 323 | 204 |
| 382 | 7.18 | 7.14 | 34.239 | 26.800 | 130.2 | 0.630 | 0.64 | 9.5 | 61.5 | 2.88 | 36.6 | 0.00 | 0.00 | | | 385 | 203 |
| 400 ISL | 7.04 D | 7.00 | 34.241 D | 26.821 | 128.3 | 0.653 | 0.61 D | 9.0 | 64.0 | 2.92 | 37.2 | 0.00 | 0.00 | | | 403 | |
| 444 | 6.56 | 6.52 | 34.249 | 26.892 | 121.8 | 0.708 | 0.52 | 7.6 | 70.2 | 3.01 | 38.5 | 0.00 | 0.00 | | | 447 | 202 |
| 500 ISL | 6.22 D | 6.18 | 34.278 D | 26.960 | 115.9 | 0.774 | 0.39 D | 5.6 | 76.4 | 3.09 | 39.6 | 0.00 | 0.00 | | | 504 | |
| 511 | 6.16 | 6.11 | 34.288 | 26.976 | 114.5 | 0.787 | 0.36 | 5.2 | 77.6 | 3.10 | 39.8 | 0.00 | 0.00 | | | 515 | 201 |

A) FIRST FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
B) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 34.4 N | 120 45.2 W | 24/01/11 | 1032 UTC | 1385 m | 270 16 kn | | | 1016.9 mb | 14.0 C | 12.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.61 | 12.61 | 33.207 | 25.081 | 287.1 | 0.000 | 5.98 | 99.0 | 6.5 | 0.69 | 5.8 | 0.18 | 0.04 | 0.82 | 0.22 | 0 | |
| 3 | 12.61 | 12.61 | 33.207 | 25.081 | 287.1 | 0.009 | 5.98 | 99.0 | 6.5 | 0.69 | 5.8 | 0.18 | 0.04 | 0.82 | 0.22 | 3 | 221 |
| 10 | 12.62 | 12.62 | 33.211 | 25.082 | 287.2 | 0.029 | 5.98 | 99.0 | 6.4 | 0.70 | 5.8 | 0.18 | 0.05 | 0.85 | 0.24 | 10 | 219 |
| 10 | 12.62 | 12.62 | 33.209 | 25.081 | 287.3 | 0.029 | | | | | | | | | | 10 | 220 |
| 20 | 12.57 | 12.57 | 33.226 | 25.104 | 285.4 | 0.057 | 6.00 | 99.2 | 6.5 | 0.71 | 5.9 | 0.20 | 0.05 | 1.03 | 0.33 | 20 | 218 |
| 30 | 12.48 | 12.48 | 33.249 | 25.139 | 282.3 | 0.086 | 5.98 | 98.7 | 6.9 | 0.75 | 6.4 | 0.23 | 0.15 | 1.23 | 0.43 | 30 | 217 |
| 40 | 12.41 | 12.40 | 33.253 | 25.156 | 280.9 | 0.114 | 5.94 | 97.9 | 7.2 | 0.77 | 6.9 | 0.24 | 0.09 | 1.11 | 0.40 | 40 | 216 |
| 49 | 11.91 | 11.90 | 33.300 | 25.287 | 268.6 | 0.139 | 5.46 | 89.1 | 9.1 | 0.96 | 9.5 | 0.51 | 0.19 | 0.19 | 0.18 | 49 | 215 |
| 50 ISL | 11.35 D | 11.34 | 33.278 D | 25.373 | 260.4 | 0.141 | 5.44 D | 87.7 | 9.5 | 1.00 | 10.1 | 0.48 | 0.18 | 0.18 | 0.17 | 50 | |
| 60 | 10.63 | 10.62 | 33.276 | 25.500 | 248.6 | 0.167 | 4.56 | 72.4 | 13.9 | 1.33 | 15.7 | 0.05 | 0.00 | 0.10 | 0.10 | 60 | 214 |
| 70 | 10.01 | 10.00 | 33.367 | 25.677 | 231.9 | 0.191 | 4.36 | 68.3 | 17.0 | 1.44 | 17.9 | 0.06 | 0.02 | 0.19 | 0.11 | 70 | 213 |
| 75 ISL | 9.73 D | 9.72 | 33.428 D | 25.771 | 223.0 | 0.202 | 4.19 D | 65.3 | 18.3 | 1.50 | 18.9 | 0.05 | 0.02 | 0.15 | 0.10 | 75 | |
| 84 | 9.63 | 9.62 | 33.457 | 25.811 | 219.4 | 0.222 | 3.98 | 61.9 | 20.7 | 1.62 | 20.7 | 0.02 | 0.00 | 0.04 | 0.08 | 84 | 212 |
| 100 ISL | 9.19 D | 9.18 | 33.698 D | 26.071 | 195.0 | 0.255 | 3.25 D | 50.1 | 26.6 | 1.89 | 25.0 | 0.00 | 0.00 | 0.01 | 0.06 | 101 | |
| 101 | 9.20 | 9.19 | 33.689 | 26.062 | 195.9 | 0.257 | 3.23 | 49.8 | 27.0 | 1.91 | 25.3 | 0.00 | 0.00 | 0.01 | 0.06 | 102 | 211 |
| 120 | 8.89 | 8.88 | 33.866 | 26.250 | 178.3 | 0.293 | 2.69 | 41.2 | 31.4 | 2.07 | 27.8 | 0.00 | 0.00 | 0.01 | 0.08 | 121 | 210 |
| 125 ISL | 8.82 D | 8.81 | 33.910 D | 26.295 | 174.1 | 0.301 | 2.61 D | 39.9 | 32.2 | 2.09 | 28.1 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 140 | 8.65 | 8.64 | 33.951 | 26.354 | 168.8 | 0.327 | 2.48 | 37.8 | 34.3 | 2.12 | 28.7 | 0.00 | 0.00 | 0.01 | 0.07 | 141 | 209 |
| 150 ISL | 8.43 D | 8.41 | 33.979 D | 26.410 | 163.6 | 0.344 | 2.51 D | 38.1 | 35.6 | 2.13 | 29.0 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 170 | 8.19 | 8.17 | 34.010 | 26.471 | 158.1 | 0.376 | 2.41 | 36.4 | 38.2 | 2.15 | 29.5 | 0.00 | 0.00 | 0.00 | 0.07 | 171 | 208 |
| 200 | 7.97 | 7.95 | 34.051 | 26.536 | 152.4 | 0.423 | 2.09 | 31.4 | 42.2 | 2.29 | 31.1 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | 207 |
| 230 | 7.83 | 7.81 | 34.095 | 26.592 | 147.6 | 0.468 | 1.66 | 24.9 | 46.3 | 2.44 | 32.6 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.77 D | 7.75 | 34.139 D | 26.635 | 143.8 | 0.497 | 1.38 D | 20.6 | 49.4 | 2.52 | 33.6 | 0.00 | 0.00 | | | 252 | |
| 271 | 7.28 | 7.25 | 34.105 | 26.679 | 139.8 | 0.527 | 1.37 | 20.3 | 52.8 | 2.59 | 34.7 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.14 D | 7.11 | 34.163 D | 26.744 | 134.0 | 0.566 | 1.03 D | 15.2 | 57.3 | 2.72 | 35.9 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.94 | 6.91 | 34.164 | 26.773 | 131.5 | 0.593 | 0.95 | 13.9 | 60.1 | 2.80 | 36.6 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.66 | 6.62 | 34.223 | 26.858 | 124.2 | 0.671 | 0.63 | 9.2 | 66.6 | 2.93 | 37.9 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.48 D | 6.44 | 34.220 D | 26.879 | 122.3 | 0.694 | 0.61 D | 8.9 | 69.5 | 2.98 | 38.4 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.18 | 6.14 | 34.260 | 26.950 | 115.9 | 0.742 | 0.40 | 5.8 | 75.4 | 3.07 | 39.5 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.99 D | 5.95 | 34.310 D | 27.014 | 110.5 | 0.810 | 0.29 D | 4.2 | 80.0 | 3.16 | 40.3 | 0.00 | 0.00 | | | 504 | |
| 516 | 5.95 | 5.90 | 34.315 | 27.024 | 109.8 | 0.827 | 0.26 | 3.7 | 81.2 | 3.19 | 40.5 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 14.6 N | 121 26.6 W | 24/01/11 | 0418 UTC | 3806 m | 300 08 kn | | | 1018.9 mb | 14.1 C | 13.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.680 | 13.680 | 33.074 | 24.765 | 317.1 | 0.000 | 6.09 | 103.0 | 3.6 | 0.38 | 1.2 | 0.05 | 0.01 | 0.67 | 0.09 | 0 | |
| 2 | 13.680 | 13.680 | 33.074 | 24.766 | 317.2 | 0.006 | 6.09 | 103.0 | 3.6 | 0.38 | 1.2 | 0.05 | 0.01 | 0.67 | 0.09 | 2 | 222 |
| 10 | 13.55 | 13.55 | 33.073 | 24.791 | 314.9 | 0.032 | 6.08 | D102.5 | | | | | | | | 10 | 221 |
| 10 | 13.55 | 13.55 | 33.073 | 24.791 | 314.9 | 0.032 | 6.01 | 101.4 | 3.6 | 0.40 | 1.5 | 0.06 | 0.00 | 0.74 | 0.13 | 10 | 220 |
| 20 | 13.51 | 13.51 | 33.078 | 24.803 | 314.0 | 0.063 | 5.98 | 100.8 | 3.6 | 0.42 | 1.7 | 0.08 | 0.03 | 0.52 | 0.21 | 20 | 219 |
| 30 | 13.48 | 13.48 | 33.093 | 24.822 | 312.6 | 0.094 | 5.93 | 99.9 | 3.8 | 0.43 | 2.0 | 0.09 | 0.06 | 0.48 | 0.20 | 30 | 218 |
| 40 | 13.21 | 13.20 | 33.133 | 24.907 | 304.7 | 0.125 | 5.74 | 96.2 | 4.7 | 0.54 | 3.8 | 0.11 | 0.06 | 0.37 | 0.18 | 40 | 217 |
| 50 | 11.72 | 11.71 | 33.317 | 25.336 | 264.0 | 0.154 | 4.75 | 77.2 | 10.3 | 1.12 | 12.9 | 0.01 | 0.01 | 0.17 | 0.11 | 50 | 216 |
| 60 | 11.11 | 11.10 | 33.340 | 25.465 | 251.9 | 0.180 | 4.45 | 71.4 | 13.1 | 1.30 | 15.7 | 0.00 | 0.00 | 0.10 | 0.09 | 60 | 215 |
| 70 | 9.87 | 9.86 | 33.429 | 25.749 | 225.0 | 0.203 | 4.02 | 62.8 | 18.9 | 1.58 | 20.3 | 0.00 | 0.00 | 0.03 | 0.05 | 70 | 214 |
| 75 ISL | 9.65 D | 9.64 | 33.484 D | 25.828 | 217.6 | 0.214 | 3.96 D | 61.6 | 20.6 | 1.66 | 21.5 | 0.00 | 0.00 | 0.03 | 0.05 | 75 | |
| 85 | 9.55 | 9.54 | 33.566 | 25.909 | 210.1 | 0.236 | 3.57 | 55.4 | 23.0 | 1.76 | 23.1 | 0.00 | 0.00 | 0.02 | 0.04 | 85 | 213 |
| 100 | 9.20 | 9.19 | 33.722 | 26.088 | 193.4 | 0.266 | 3.09 | 47.6 | 27.2 | 1.94 | 25.9 | 0.00 | 0.00 | 0.01 | 0.04 | 100 | 212 |
| 120 | 9.07 | 9.06 | 33.828 | 26.192 | 183.9 | 0.304 | 2.75 | 42.3 | 29.9 | 2.03 | 27.2 | 0.00 | 0.00 | 0.00 | 0.04 | 121 | 211 |
| 125 ISL | 8.86 D | 8.85 | 33.849 D | 26.241 | 179.2 | 0.313 | 2.85 D | 43.6 | 30.6 | 2.04 | 27.5 | 0.00 | 0.00 | 0.00 | 0.04 | 126 | |
| 140 | 8.65 | 8.64 | 33.924 | 26.333 | 170.8 | 0.339 | 2.64 | 40.3 | 32.7 | 2.05 | 28.2 | 0.00 | 0.00 | 0.00 | 0.02 | 141 | 210 |
| 150 ISL | 8.50 D | 8.48 | 33.937 D | 26.366 | 167.8 | 0.356 | 2.88 D | 43.8 | 34.0 | 2.06 | 28.5 | 0.00 | 0.00 | 0.00 | 0.02 | 151 | |
| 171 | 8.18 | 8.16 | 33.987 | 26.454 | 159.7 | 0.390 | 2.54 | 38.3 | 36.8 | 2.11 | 29.2 | 0.00 | 0.00 | 0.00 | 0.01 | 172 | 209 |
| 200 ISL | 7.79 D | 7.77 | 34.012 D | 26.532 | 152.7 | 0.436 | 2.12 D | 31.7 | 41.9 | 2.30 | 31.6 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 7.81 | 7.79 | 34.015 | 26.531 | 152.8 | 0.437 | 2.08 | 31.1 | 42.1 | 2.31 | 31.7 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 208 |
| 230 | 7.45 | 7.43 | 34.025 | 26.591 | 147.5 | 0.481 | 2.08 | 30.9 | 46.0 | 2.35 | 32.3 | 0.00 | 0.00 | | | 231 | 207 |
| 250 ISL | 7.63 D | 7.61 | 34.116 D | 26.638 | 143.6 | 0.510 | 1.52 D | 22.7 | 49.2 | 2.50 | 33.6 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.48 | 7.45 | 34.143 | 26.680 | 139.8 | 0.540 | 1.16 | 17.2 | 52.5 | 2.68 | 35.0 | 0.00 | 0.00 | | | 273 | 206 |
| 300 ISL | 7.25 D | 7.22 | 34.147 D | 26.716 | 136.7 | 0.580 | 1.05 D | 15.5 | 55.8 | 2.76 | 36.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.11 | 7.08 | 34.158 | 26.745 | 134.3 | 0.607 | 0.92 | 13.6 | 57.9 | 2.79 | 36.5 | 0.00 | 0.00 | | | 322 | 205 |
| 380 | 6.66 | 6.63 | 34.208 | 26.846 | 125.3 | 0.685 | 0.61 | 8.9 | 66.5 | 2.97 | 38.2 | 0.00 | 0.00 | | | 382 | 204 |
| 400 ISL | 6.48 D | 6.44 | 34.215 D | 26.875 | 122.7 | 0.710 | 0.57 D | 8.3 | 68.9 | 3.00 | 38.7 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.23 | 6.19 | 34.238 | 26.926 | 118.2 | 0.758 | 0.48 | 6.9 | 73.3 | 3.04 | 39.5 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.88 D | 5.84 | 34.264 D | 26.992 | 112.5 | 0.827 | 0.36 D | 5.2 | 80.1 | 3.10 | 40.5 | 0.00 | 0.00 | | | 503 | |
| 511 | 5.82 | 5.78 | 34.278 | 27.010 | 110.8 | 0.839 | 0.37 | 5.3 | 81.4 | 3.11 | 40.7 | 0.00 | 0.00 | | | 515 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 54.7 N | 122 7.5 W | 23/01/11 | 2147 UTC | 4187 m | 010 10 kn | 340 03 06 | 1 | 1017.5 mb | 15.9 C | 15.0 C | 28m | 3/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.46 | 15.46 | 33.069 | 24.384 | 353.4 | 0.000 | 5.78 | 101.4 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.18 | 0.04 | 0 | |
| 2 | 15.46 | 15.46 | 33.069 | 24.384 | 353.5 | 0.007 | 5.78 | 101.4 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.18 | 0.04 | 2 | 221 |
| 9 | 15.34 | 15.34 | 33.053 | 24.398 | 352.4 | 0.032 | | | | | | | | | | 9 | 220 |
| 10 | 15.28 | 15.28 | 33.051 | 24.410 | 351.3 | 0.035 | 5.79 | 101.1 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.20 | 0.02 | 10 | 219 |
| 20 ISL | 15.28 D | 15.28 | 33.054 D | 24.413 | 351.3 | 0.070 | 5.79 | 101.1 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.19 | 0.04 | 20 | |
| 25 | 15.28 | 15.28 | 33.058 | 24.416 | 351.2 | 0.088 | 5.79 | 101.1 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 25 | 218 |
| 30 ISL | 15.28 D | 15.28 | 33.055 D | 24.414 | 351.5 | 0.106 | 5.80 | 101.3 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.19 | 0.05 | 30 | |
| 40 | 15.28 | 15.27 | 33.058 | 24.416 | 351.6 | 0.141 | 5.82 | 101.7 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.22 | 0.04 | 40 | 217 |
| 50 | 15.29 | 15.28 | 33.060 | 24.416 | 351.9 | 0.176 | 5.78 | 101.0 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.22 | 0.05 | 50 | 216 |
| 62 | 13.94 | 13.93 | 33.100 | 24.734 | 321.8 | 0.216 | 5.76 | 97.9 | 3.0 | 0.36 | 0.5 | 0.13 | 0.00 | 0.36 | 0.20 | 62 | 215 |
| 75 ISL | 13.16 D | 13.15 | 33.159 D | 24.938 | 302.7 | 0.257 | 5.72 D | 95.7 | 3.5 | 0.40 | 1.5 | 0.06 | 0.00 | 0.27 | 0.14 | 75 | |
| 76 | 13.30 | 13.29 | 33.166 | 24.915 | 304.9 | 0.260 | 5.67 | 95.2 | 3.5 | 0.41 | 1.6 | 0.05 | 0.00 | 0.26 | 0.14 | 76 | 214 |
| 87 | 12.66 | 12.65 | 33.170 | 25.045 | 292.8 | 0.293 | 5.58 | 92.4 | 4.4 | 0.56 | 3.9 | 0.01 | 0.00 | 0.13 | 0.08 | 87 | 213 |
| 99 | 12.11 | 12.10 | 33.119 | 25.111 | 286.7 | 0.328 | 5.51 | 90.2 | 5.7 | 0.73 | 6.3 | 0.00 | 0.00 | 0.09 | 0.06 | 99 | 212 |
| 100 ISL | 12.07 D | 12.06 | 33.126 D | 25.124 | 285.5 | 0.330 | 5.52 D | 90.3 | 5.8 | 0.74 | 6.4 | 0.00 | 0.00 | 0.09 | 0.06 | 100 | |
| 111 | 11.47 | 11.46 | 33.180 | 25.277 | 271.1 | 0.361 | 5.31 | 85.7 | 7.2 | 0.81 | 7.9 | 0.00 | 0.00 | 0.05 | 0.07 | 111 | 211 |
| 125 | 10.71 | 10.70 | 33.293 | 25.501 | 250.0 | 0.398 | 4.93 | 78.4 | 10.8 | 1.03 | 11.8 | 0.00 | 0.00 | 0.04 | 0.03 | 126 | 210 |
| 141 | 9.93 | 9.91 | 33.396 | 25.714 | 229.8 | 0.436 | 4.48 | 70.1 | 16.1 | 1.35 | 16.8 | 0.00 | 0.00 | 0.01 | 0.03 | 142 | 209 |
| 150 ISL | 9.19 D | 9.17 | 33.451 D | 25.878 | 214.2 | 0.456 | 4.31 D | 66.3 | 19.1 | 1.50 | 19.2 | 0.00 | 0.00 | 0.01 | 0.03 | 151 | |
| 170 | 8.98 | 8.96 | 33.650 | 26.067 | 196.6 | 0.497 | 3.72 | 57.0 | 24.6 | 1.73 | 23.0 | 0.00 | 0.00 | 0.00 | 0.02 | 171 | 208 |
| 200 ISL | 8.61 D | 8.59 | 33.912 D | 26.331 | 172.1 | 0.552 | 3.68 D | 56.0 | 27.1 | 1.70 | 23.2 | 0.00 | 0.00 | 0.00 | 0.01 | 201 | |
| 201 | 8.78 | 8.76 | 33.907 | 26.301 | 175.1 | 0.554 | 3.73 | 57.0 | 27.2 | 1.70 | 23.2 | 0.00 | 0.00 | 0.00 | 0.01 | 202 | 207 |
| 231 | 8.26 | 8.24 | 33.966 | 26.427 | 163.5 | 0.605 | 3.30 | 49.9 | 32.7 | 1.87 | 25.9 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 7.93 D | 7.90 | 33.990 D | 26.495 | 157.2 | 0.635 | 2.85 D | 42.8 | 36.9 | 2.03 | 28.0 | 0.00 | 0.00 | | | 251 | |
| 273 | 7.63 | 7.60 | 34.009 | 26.554 | 151.9 | 0.671 | 2.40 | 35.8 | 42.3 | 2.22 | 30.6 | 0.00 | 0.00 | | | 275 | 205 |
| 300 ISL | 7.29 D | 7.26 | 34.032 D | 26.620 | 145.8 | 0.711 | 2.07 D | 30.6 | 48.2 | 2.40 | 32.9 | 0.00 | 0.00 | | | 302 | |
| 319 | 7.02 | 6.99 | 34.047 | 26.670 | 141.3 | 0.738 | 1.69 | 24.8 | 52.2 | 2.50 | 34.3 | 0.00 | 0.00 | | | 321 | 204 |
| 379 | 6.27 | 6.24 | 34.071 | 26.789 | 130.3 | 0.820 | 1.24 | 17.9 | 63.8 | 2.73 | 37.4 | 0.00 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.06 D | 6.03 | 34.083 D | 26.825 | 127.0 | 0.847 | 1.17 D | 16.8 | 67.5 | 2.79 | 38.3 | 0.00 | 0.00 | | | 402 | |
| 446 | 5.74 | 5.70 | 34.126 | 26.899 | 120.3 | 0.904 | 0.79 | 11.3 | 74.7 | 2.91 | 39.8 | 0.00 | 0.00 | | | 449 | 202 |
| 500 ISL | 5.39 D | 5.35 | 34.158 D | 26.967 | 114.2 | 0.967 | 0.65 D | 9.2 | 81.5 | 3.03 | 41.0 | 0.00 | 0.00 | | | 503 | |
| 514 | 5.34 | 5.30 | 34.172 | 26.984 | 112.7 | 0.983 | 0.54 | 7.6 | 83.3 | 3.06 | 41.3 | 0.00 | 0.00 | | | 517 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 34.7 N | 122 48.4 W | 23/01/11 | 1639 UTC | 4278 m | 270 03 kn | 330 03 08 | 1 | 1016.4 mb | 13.9 C | 12.3 C | 16m | 7/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.14 | 14.14 | 32.977 | 24.596 | 333.3 | 0.000 | 5.95 | 101.5 | 2.8 | 0.34 | 0.1 | 0.01 | 0.01 | 0.62 | 0.19 | 0 | |
| 2 A | 14.14 | 14.14 | 32.977 | 24.596 | 333.3 | 0.007 | 5.95 | 101.5 | 2.8 | 0.34 | 0.1 | 0.01 | 0.01 | 0.62 | 0.19 | 2 | 223 |
| 10 A | 14.13 | 14.13 | 32.970 | 24.593 | 333.8 | 0.033 | 5.96 | 101.7 | 2.8 | 0.34 | 0.2 | 0.01 | 0.01 | 0.61 | 0.17 | 10 | 221 |
| 10 | 14.13 | 14.13 | 32.971 | 24.594 | 333.8 | 0.033 | 5.97 | 101.8 | | | | | | | | 10 | 222 |
| 13 A | 14.17 | 14.17 | 32.988 | 24.598 | 333.4 | 0.043 | 5.96 | 101.8 | 2.8 | 0.33 | 0.1 | 0.01 | 0.01 | 0.58 | 0.17 | 13 | 220 |
| 17 A | 14.22 | 14.22 | 33.005 | 24.601 | 333.2 | 0.057 | 5.95 | 101.7 | 2.7 | 0.33 | 0.1 | 0.01 | 0.02 | 0.54 | 0.18 | 17 | 219 |
| 20 ISL | 14.22 D | 14.22 | 33.005 D | 24.601 | 333.3 | 0.067 | 5.97 | D102.0 | 2.7 | 0.33 | 0.1 | 0.01 | 0.02 | 0.54 | 0.18 | 20 | |
| 25 A | 14.21 | 14.21 | 33.005 | 24.604 | 333.2 | 0.083 | 5.96 | 101.8 | 2.7 | 0.33 | 0.2 | 0.01 | 0.02 | 0.55 | 0.18 | 25 | 218 |
| 30 ISL | 14.18 D | 14.18 | 32.995 D | 24.602 | 333.5 | 0.100 | 5.97 | D101.9 | 2.7 | 0.34 | 0.2 | 0.01 | 0.05 | 0.54 | 0.18 | 30 | |
| 35 | 14.09 | 14.09 | 32.984 | 24.613 | 332.7 | 0.117 | 5.95 | 101.4 | 2.7 | 0.35 | 0.2 | 0.02 | 0.08 | 0.53 | 0.19 | 35 | 217 |
| 42 | 13.77 | 13.76 | 32.950 | 24.652 | 329.0 | 0.140 | 5.98 | 101.2 | 2.9 | 0.37 | 0.5 | 0.04 | 0.09 | 0.49 | 0.21 | 42 | 216 |
| 43 | 13.76 | 13.75 | 32.949 | 24.654 | 328.9 | 0.143 | 5.98 | 101.2 | 3.0 | 0.38 | 0.5 | 0.04 | 0.11 | 0.46 B | 0.23 B | 43 | 215 |
| 50 ISL | 13.73 D | 13.72 | 32.948 D | 24.659 | 328.6 | 0.166 | 5.99 | D101.3 | 3.0 | 0.38 | 0.5 | 0.04 | 0.12 | 0.45 | 0.22 | 50 | |
| 61 | 13.70 | 13.69 | 32.947 | 24.665 | 328.4 | 0.202 | 5.97 | 100.9 | 3.0 | 0.38 | 0.6 | 0.05 | 0.14 | 0.43 | 0.20 | 61 | 214 |
| 70 | 13.68 | 13.67 | 32.957 | 24.677 | 327.5 | 0.232 | 5.97 | 100.9 | 3.0 | 0.38 | 0.7 | 0.06 | 0.17 | 0.30 | 0.16 | 70 | 213 |
| 75 ISL | 13.54 D | 13.53 | 32.974 D | 24.719 | 323.6 | 0.248 | 5.93 | D 99.9 | 3.2 | 0.41 | 1.2 | 0.05 | 0.12 | 0.23 | 0.14 | 75 | |
| 85 | 12.45 | 12.44 | 33.084 | 25.019 | 295.2 | 0.279 | 5.64 | 92.9 | 4.1 | 0.52 | 2.8 | 0.03 | 0.00 | 0.12 | 0.11 | 85 | 212 |
| 100 | 11.48 | 11.47 | 33.182 | 25.276 | 270.9 | 0.321 | 5.31 | 85.8 | 6.8 | 0.74 | 6.8 | 0.00 | 0.00 | 0.09 | 0.07 | 100 | 211 |
| 120 | 10.18 | 10.17 | 33.252 | 25.560 | 244.1 | 0.373 | 4.90 | 77.0 | 12.0 | 1.11 | 12.7 | 0.00 | 0.00 | 0.03 | 0.03 | 121 | 210 |
| 125 ISL | 9.71 D | 9.70 | 33.322 D | 25.693 | 231.5 | 0.385 | 4.66 | D 72.5 | 14.4 | 1.25 | 14.9 | 0.00 | 0.00 | 0.02 | 0.03 | 126 | |
| 140 | 9.64 | 9.62 | 33.620 | 25.937 | 208.6 | 0.418 | 3.70 | 57.6 | 21.8 | 1.66 | 21.5 | 0.00 | 0.00 | 0.01 | 0.03 | 141 | 209 |
| 150 ISL | 9.50 D | 9.48 | 33.707 D | 26.028 | 200.1 | 0.438 | 3.08 | D 47.8 | 25.3 | 1.85 | 24.2 | 0.00 | 0.00 | 0.00 | 0.03 | 151 | |
| 170 | 9.29 | 9.27 | 33.845 | 26.171 | 187.0 | 0.477 | 2.50 | 38.6 | 30.2 | 2.09 | 27.4 | 0.00 | 0.00 | 0.00 | 0.03 | 171 | 208 |
| 200 | 8.85 | 8.83 | 33.948 | 26.322 | 173.1 | 0.531 | 2.38 | 36.5 | 33.4 | 2.16 | 28.5 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | 207 |
| 230 | 8.16 | 8.14 | 34.004 | 26.472 | 159.2 | 0.581 | 2.26 | 34.1 | 38.7 | 2.24 | 30.1 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.86 D | 7.84 | 34.016 D | 26.526 | 154.2 | 0.612 | 2.20 | D 33.0 | 41.8 | 2.28 | 31.0 | 0.00 | 0.02 | | | 251 | |
| 271 | 7.57 | 7.54 | 34.019 | 26.570 | 150.2 | 0.644 | 2.06 | 30.7 | 45.0 | 2.33 | 32.0 | 0.00 | 0.03 | | | 273 | 205 |
| 300 ISL | 7.23 D | 7.20 | 34.045 D | 26.639 | 144.0 | 0.687 | 1.77 | D 26.1 | 50.5 | 2.47 | 33.8 | 0.00 | 0.02 | | | 302 | |
| 321 | 6.97 | 6.94 | 34.055 | 26.683 | 140.0 | 0.717 | 1.50 | 22.0 | 54.6 | 2.58 | 35.1 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 6.31 | 6.28 | 34.075 | 26.787 | 130.6 | 0.798 | 1.16 | 16.8 | 64.6 | 2.76 | 37.6 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.16 D | 6.12 | 34.100 D | 26.826 | 127.0 | 0.822 | 1.01 | D 14.5 | 67.8 | 2.84 | 38.3 | 0.00 | 0.00 | | | 402 | |
| 441 | 5.96 | 5.92 | 34.163 | 26.901 | 120.3 | 0.873 | 0.65 | 9.3 | 74.4 | 3.00 | 39.5 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.59 D | 5.55 | 34.204 D | 26.980 | 113.3 | 0.942 | 0.49 | D 7.0 | 81.7 | 3.10 | 40.7 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.54 | 5.50 | 34.212 | 26.992 | 112.2 | 0.961 | 0.43 | 6.1 | 83.8 | 3.13 | 41.0 | 0.00 | 0.00 | | | 520 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
B) FIRST FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 14.4 N | 123 29.2 W | 23/01/11 | 0912 UTC | 4202 m | 270 10 kn | | | 1014.5 mb | 13.4 C | 12.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.57 | 14.57 | 32.976 | 24.505 | 341.9 | 0.000 | 5.91 | 101.7 | 2.5 | 0.31 | 0.0 | 0.00 | 0.00 | 0.33 | 0.10 | 0 | |
| 2 | 14.57 | 14.57 | 32.976 | 24.505 | 342.0 | 0.007 | 5.91 | 101.7 | 2.5 | 0.31 | 0.0 | 0.00 | 0.00 | 0.33 | 0.10 | 2 | 221 |
| 10 CSL | 14.57 | 14.57 | 32.978 | 24.507 | 342.0 | 0.034 | 5.92 | 101.9 | | | | | | | | 10 | 200 |
| 10 | 14.57 | 14.57 | 32.983 | 24.510 | 341.7 | 0.034 | | | | | | | | | | 10 | 220 |
| 11 | 14.58 | 14.58 | 32.979 | 24.505 | 342.2 | 0.038 | 5.90 | 101.6 | 2.4 | 0.30 | 0.0 | 0.00 | 0.00 | 0.33 | 0.10 | 11 | 219 |
| 19 | 14.44 | 14.44 | 32.974 | 24.531 | 340.0 | 0.065 | 5.92 | 101.6 | 2.5 | 0.30 | 0.0 | 0.00 | 0.00 | 0.36 | 0.11 | 19 | 218 |
| 20 ISL | 13.86 D | 13.86 | 32.883 D | 24.582 | 335.2 | 0.068 | 6.06 | D102.7 | 2.5 | 0.30 | 0.0 | 0.00 | 0.00 | 0.38 | 0.12 | 20 | |
| 29 | 13.77 | 13.77 | 32.881 | 24.599 | 333.8 | 0.098 | 6.07 | 102.7 | 2.8 | 0.34 | 0.2 | 0.02 | 0.00 | 0.58 | 0.18 | 29 | 217 |
| 30 ISL | 13.77 D | 13.77 | 32.878 D | 24.596 | 334.0 | 0.102 | 6.07 | D102.7 | 2.8 | 0.34 | 0.2 | 0.02 | 0.00 | 0.58 | 0.18 | 30 | |
| 40 | 13.64 | 13.63 | 32.877 | 24.622 | 331.8 | 0.135 | 6.05 | 102.1 | 2.9 | 0.35 | 0.3 | 0.03 | 0.03 | 0.60 | 0.21 | 40 | 216 |
| 50 | 13.63 | 13.62 | 32.891 | 24.635 | 330.8 | 0.168 | 6.00 | 101.2 | 3.0 | 0.37 | 0.4 | 0.04 | 0.09 | 0.39 | 0.20 | 50 | 215 |
| 60 | 13.46 | 13.45 | 33.033 | 24.780 | 317.4 | 0.201 | 5.83 | 98.1 | 3.3 | 0.42 | 1.1 | 0.11 | 0.18 | 0.16 | 0.14 | 60 | 214 |
| 69 | 13.20 | 13.19 | 33.150 | 24.923 | 304.0 | 0.229 | 5.69 | 95.3 | 3.7 | 0.44 | 1.8 | 0.07 | 0.00 | 0.14 | 0.14 | 69 | 213 |
| 75 ISL | 13.87 D | 13.86 | 33.434 D | 25.007 | 296.3 | 0.247 | 5.67 | D 96.5 | 3.8 | 0.42 | 1.9 | 0.05 | 0.00 | 0.13 | 0.14 | 75 | |
| 84 | 13.09 | 13.08 | 33.332 | 25.086 | 288.9 | 0.273 | 5.57 | 93.2 | 3.9 | 0.40 | 2.0 | 0.02 | 0.00 | 0.12 | 0.12 | 84 | 212 |
| 99 | 11.48 | 11.47 | 33.182 | 25.276 | 270.9 | 0.315 | 5.37 | 86.7 | 6.4 | 0.69 | 6.0 | 0.00 | 0.00 | 0.06 | 0.07 | 99 | 211 |
| 100 ISL | 11.41 D | 11.40 | 33.207 D | 25.308 | 267.8 | 0.318 | 5.31 | D 85.7 | 6.9 | 0.73 | 6.5 | 0.00 | 0.00 | 0.06 | 0.07 | 100 | |
| 120 | 9.56 | 9.55 | 33.339 | 25.730 | 227.7 | 0.367 | 4.54 | 70.4 | 17.0 | 1.39 | 17.1 | 0.00 | 0.00 | 0.01 | 0.02 | 121 | 210 |
| 125 ISL | 9.47 D | 9.46 | 33.411 D | 25.801 | 221.1 | 0.378 | 4.41 | D 68.3 | 18.5 | 1.47 | 18.3 | 0.00 | 0.00 | 0.01 | 0.02 | 126 | |
| 139 | 9.25 | 9.23 | 33.597 | 25.983 | 204.1 | 0.408 | 4.08 | 62.9 | 21.3 | 1.59 | 20.3 | 0.00 | 0.00 | 0.01 | 0.01 | 140 | 209 |
| 150 ISL | 9.15 D | 9.13 | 33.710 D | 26.087 | 194.4 | 0.430 | 4.02 | D 61.9 | 22.7 | 1.64 | 21.2 | 0.00 | 0.00 | 0.01 | 0.01 | 151 | |
| 170 | 9.05 | 9.03 | 33.811 | 26.182 | 185.8 | 0.468 | 3.80 | 58.4 | 24.9 | 1.68 | 22.2 | 0.00 | 0.00 | 0.00 | 0.01 | 171 | 208 |
| 200 ISL | 8.56 D | 8.54 | 33.941 D | 26.361 | 169.2 | 0.521 | 3.43 | D 52.2 | 29.8 | 1.82 | 24.6 | 0.00 | 0.00 | 0.00 | 0.01 | 201 | |
| 201 | 8.59 | 8.57 | 33.938 | 26.354 | 169.9 | 0.523 | 3.43 | 52.2 | 30.0 | 1.83 | 24.7 | 0.00 | 0.00 | 0.00 | 0.01 | 202 | 207 |
| 231 | 8.13 | 8.11 | 33.991 | 26.466 | 159.7 | 0.572 | 2.65 | 39.9 | 37.4 | 2.14 | 28.8 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 7.90 D | 7.87 | 34.025 D | 26.527 | 154.2 | 0.602 | 2.24 | D 33.6 | 41.7 | 2.31 | 30.9 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.64 | 7.61 | 34.050 | 26.584 | 148.9 | 0.634 | 1.86 | 27.7 | 45.9 | 2.47 | 32.8 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.34 D | 7.31 | 34.042 D | 26.621 | 145.8 | 0.677 | 1.90 | D 28.1 | 50.1 | 2.57 | 34.1 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.12 | 7.09 | 34.061 | 26.667 | 141.6 | 0.707 | 1.56 | 23.0 | 53.0 | 2.61 | 34.8 | 0.00 | 0.00 | | | 323 | 204 |
| 382 | 6.29 | 6.26 | 34.070 | 26.785 | 130.7 | 0.790 | 1.18 | 17.0 | 64.3 | 2.79 | 37.7 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.16 D | 6.12 | 34.090 D | 26.818 | 127.8 | 0.813 | 1.10 | D 15.8 | 67.2 | 2.84 | 38.3 | 0.00 | 0.00 | | | 402 | |
| 442 | 5.87 | 5.83 | 34.116 | 26.875 | 122.6 | 0.866 | 0.82 | 11.7 | 73.4 | 2.95 | 39.6 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 5.59 D | 5.55 | 34.179 D | 26.960 | 115.1 | 0.935 | 0.56 | D 8.0 | 81.9 | 3.08 | 40.9 | 0.00 | 0.00 | | | 503 | |
| 518 | 5.39 | 5.35 | 34.187 | 26.990 | 112.2 | 0.955 | 0.47 | 6.6 | 84.5 | 3.12 | 41.3 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 54.7 N | 124 10.2 W | 23/01/11 | 0203 UTC | 4204 m | 270 08 kn | | | 1014.9 mb | 13.0 C | 12.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.78 | 14.78 | 32.906 | 24.406 | 351.3 | 0.000 | 5.91 | 102.1 | 2.1 | 0.31 | 0.0 | 0.00 | 0.00 | 0.24 | 0.08 | 0 | |
| 2 | 14.78 | 14.78 | 32.906 | 24.406 | 351.4 | 0.007 | 5.91 | 102.1 | 2.1 | 0.31 | 0.0 | 0.00 | 0.00 | 0.24 | 0.08 | 2 | 221 |
| 9 | 14.78 | 14.78 | 32.906 | 24.406 | 351.6 | 0.032 | | | | | | | | | | 9 | 220 |
| 10 | 14.79 | 14.79 | 32.906 | 24.404 | 351.8 | 0.035 | 5.87 | 101.4 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.23 | 0.07 | 10 | 219 |
| 20 ISL | 14.78 D | 14.78 | 32.904 D | 24.405 | 352.0 | 0.070 | 5.88 | D101.6 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.25 | 0.08 | 20 | |
| 24 | 14.77 | 14.77 | 32.905 | 24.408 | 351.8 | 0.084 | 5.88 | 101.6 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.26 | 0.08 | 24 | 218 |
| 30 ISL | 14.77 D | 14.77 | 32.906 D | 24.409 | 351.9 | 0.106 | 5.89 | D101.7 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.26 | 0.08 | 30 | |
| 41 | 14.76 | 14.75 | 32.903 | 24.409 | 352.2 | 0.144 | 5.88 | 101.5 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.28 | 0.09 | 41 | 217 |
| 50 | 14.76 | 14.75 | 32.903 | 24.410 | 352.5 | 0.176 | 5.88 | 101.5 | 2.1 | 0.30 | 0.0 | 0.00 | 0.00 | 0.32 | 0.09 | 50 | 216 |
| 62 | 14.77 | 14.76 | 32.914 | 24.416 | 352.2 | 0.218 | 5.86 | 101.2 | 2.1 | 0.29 | 0.0 | 0.00 | 0.00 | 0.35 | 0.13 | 62 | 215 |
| 75 | 15.72 | 15.71 | 33.245 | 24.464 | 348.1 | 0.264 | 5.70 | 100.6 | 2.3 | 0.24 | 0.0 | 0.00 | 0.02 | 0.20 | 0.08 | 75 | 214 |
| 87 | 16.02 | 16.01 | 33.410 | 24.524 | 342.9 | 0.305 | 5.65 | 100.4 | 2.4 | 0.22 | 0.0 | 0.00 | 0.03 | 0.18 | 0.11 | 87 | 213 |
| 100 ISL | 14.62 D | 14.61 | 33.558 D | 24.946 | 302.9 | 0.347 | 5.74 D | 99.2 | 3.0 | 0.21 | 0.1 | 0.07 | 0.02 | 0.17 | 0.16 | 100 | |
| 101 | 14.65 | 14.64 | 33.555 | 24.937 | 303.8 | 0.350 | 5.77 | 99.8 | 3.0 | 0.21 | 0.1 | 0.07 | 0.02 | 0.17 | 0.16 | 101 | 212 |
| 112 | 13.67 | 13.65 | 33.526 | 25.120 | 286.5 | 0.383 | 5.65 | 95.8 | 3.3 | 0.28 | 1.0 | 0.04 | 0.00 | 0.12 | 0.13 | 112 | 211 |
| 125 | 12.06 | 12.04 | 33.265 | 25.234 | 275.6 | 0.419 | 5.44 | 89.0 | 5.3 | 0.56 | 4.5 | 0.01 | 0.00 | 0.07 | 0.07 | 126 | 210 |
| 130 | 11.65 | 11.63 | 33.206 | 25.265 | 272.8 | 0.433 | 5.36 | 86.9 | 6.3 | 0.68 | 6.1 | 0.00 | 0.00 | 0.06 | 0.06 | 131 | 209 |
| 150 ISL | 10.86 D | 10.84 | 33.408 D | 25.564 | 244.5 | 0.485 | 5.08 D | 81.1 | 11.1 | 1.03 | 11.6 | 0.00 | 0.00 | 0.03 | 0.03 | 151 | |
| 170 | 9.72 | 9.70 | 33.516 | 25.844 | 218.1 | 0.531 | 4.64 | 72.3 | 16.0 | 1.27 | 15.9 | 0.00 | 0.00 | 0.01 | 0.02 | 171 | 208 |
| 200 ISL | 9.15 D | 9.13 | 33.745 D | 26.115 | 192.8 | 0.593 | 4.15 D | 63.9 | 22.2 | 1.52 | 20.4 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 9.15 | 9.13 | 33.726 | 26.101 | 194.2 | 0.595 | 4.13 | 63.6 | 22.4 | 1.53 | 20.5 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 229 | 8.84 | 8.82 | 33.895 | 26.282 | 177.4 | 0.647 | 4.03 | 61.7 | 25.3 | 1.58 | 21.6 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 8.29 D | 8.26 | 33.954 D | 26.413 | 165.1 | 0.683 | 3.74 D | 56.6 | 29.9 | 1.74 | 23.9 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.01 | 7.98 | 33.961 | 26.461 | 160.8 | 0.715 | 3.26 | 49.0 | 35.0 | 1.93 | 26.7 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.80 D | 7.77 | 34.027 D | 26.544 | 153.4 | 0.762 | 1.95 D | 29.2 | 42.1 | 2.24 | 30.6 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.50 | 7.47 | 34.032 | 26.591 | 149.1 | 0.792 | 1.91 | 28.4 | 46.7 | 2.43 | 33.0 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.73 | 6.69 | 34.078 | 26.734 | 135.9 | 0.878 | 1.22 | 17.8 | 59.3 | 2.76 | 37.0 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.59 D | 6.55 | 34.093 D | 26.765 | 133.2 | 0.905 | 1.11 D | 16.2 | 62.4 | 2.81 | 37.6 | 0.00 | 0.00 | | | 402 | |
| 441 | 6.10 | 6.06 | 34.094 | 26.829 | 127.2 | 0.958 | 1.06 | 15.2 | 68.5 | 2.88 | 38.6 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.49 D | 5.45 | 34.124 D | 26.928 | 118.0 | 1.031 | 0.80 D | 11.3 | 79.3 | 3.03 | 40.5 | 0.00 | 0.00 | | | 503 | |
| 519 | 5.38 | 5.34 | 34.143 | 26.957 | 115.4 | 1.053 | 0.70 | 9.9 | 82.8 | 3.08 | 41.1 | 0.00 | 0.00 | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 85.4 35.8

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 0.7 N | 118 50.7 W | 20/01/11 | 1007 UTC | 48 m | 120 02 kn | | | 1015.1 mb | 14.5 C | 12.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.82 | 13.82 | 33.195 | 24.830 | 310.9 | 0.000 | 6.72 | 114.1 | 1.3 | 0.29 | 0.1 | 0.01 | 0.04 | 3.31 | 0.72 | 0 | |
| 2 | 13.82 | 13.82 | 33.195 | 24.830 | 311.0 | 0.006 | 6.72 | 114.1 | 1.3 | 0.29 | 0.1 | 0.01 | 0.04 | 3.31 | 0.72 | 2 | 207 |
| 5 | 13.82 | 13.82 | 33.196 | 24.831 | 311.0 | 0.016 | 6.73 | 114.2 | 1.4 | 0.32 | 0.1 | 0.01 | 0.02 | 3.38 | 0.75 | 5 | 206 |
| 10 | 13.66 | 13.66 | 33.208 | 24.873 | 307.1 | 0.031 | 6.66 | 112.7 | 1.4 | 0.27 | 0.0 | 0.00 | 0.01 | 4.75 | 0.92 | 10 | 204 |
| 10 | 13.67 | 13.67 | 33.208 | 24.871 | 307.3 | 0.031 | | | | | | | | | | 10 | 205 |
| 20 | 13.17 | 13.17 | 33.258 | 25.011 | 294.3 | 0.061 | 5.89 | 98.7 | 3.3 | 0.51 | 1.8 | 0.11 | 0.99 | 3.86 | 0.84 | 20 | 203 |
| 30 | 12.56 | 12.56 | 33.337 | 25.192 | 277.3 | 0.090 | 5.00 | 82.7 | 8.7 | 0.99 | 7.6 | 0.35 | 1.90 | 1.27 | 0.69 | 30 | 202 |
| 41 | 11.77 | 11.76 | 33.418 | 25.405 | 257.3 | 0.119 | 4.21 | 68.5 | 14.1 | 1.34 | 13.5 | 0.43 | 1.14 | 1.08 | 0.64 | 41 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 33.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 53.4 N | 118 30.0 W | 20/01/11 | 0639 UTC | 59 m | 080 06 kn | | | 1013.5 mb | 15.0 C | 13.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.34 | 14.34 | 33.165 | 24.699 | 323.4 | 0.000 | 6.94 | 119.0 | 0.6 | 0.20 | 0.0 | 0.00 | 0.00 | 1.24 | 0.36 | 0 | |
| 2 | 14.34 | 14.34 | 33.165 | 24.699 | 323.5 | 0.006 | 6.94 | 119.0 | 0.6 | 0.20 | 0.0 | 0.00 | 0.00 | 1.24 | 0.36 | 2 | 208 |
| 5 | 14.26 | 14.26 | 33.169 | 24.719 | 321.7 | 0.016 | 7.02 | 120.2 | 0.7 | 0.21 | 0.0 | 0.00 | 0.00 | 1.38 | 0.37 | 5 | 207 |
| 10 | 14.19 | 14.19 | 33.166 | 24.732 | 320.6 | 0.032 | 7.04 | 120.4 | 0.8 | 0.21 | 0.0 | 0.00 | 0.00 | 1.54 | 0.40 | 10 | 205 |
| 10 | 14.20 | 14.20 | 33.164 | 24.728 | 321.0 | 0.032 | | | | | | | | | | 10 | 206 |
| 20 | 13.72 | 13.72 | 33.184 | 24.843 | 310.3 | 0.064 | 6.88 | 116.5 | 1.2 | 0.23 | 0.0 | 0.00 | 0.00 | 2.52 | 0.61 | 20 | 204 |
| 30 | 13.47 | 13.47 | 33.239 D | 24.936 | 301.6 | 0.094 | 6.02 | 101.5 | 2.2 | 0.34 | 0.1 | 0.01 | 0.09 | 4.88 | 1.33 | 30 | 203 |
| 40 | 13.08 | 13.07 | 33.283 | 25.049 | 291.2 | 0.124 | 6.20 | 103.7 | 1.9 | 0.41 | 1.2 | 0.07 | 1.10 | 2.56 | 0.74 | 40 | 202 |
| 50 | 12.40 | 12.39 | 33.319 | 25.209 | 276.1 | 0.152 | 4.93 | 81.3 | 9.1 | 1.03 | 8.1 | 0.42 | 4.77 | 0.89 | 0.53 | 50 | 201 |

A) UNUSUAL PROFILES AND ODD NO3/PO4 RATIOS MAY BE DUE TO THE
PROXIMITY OF THIS STATION TO THE HYPERION WASTE-WATER OUTFALL.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 49.4 N | 118 37.9 W | 20/01/11 | 1245 UTC | 687 m | 090 01 kn | | | 1015.5 mb | 14.5 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.46 | 14.46 | 33.186 | 24.690 | 324.3 | 0.000 | 6.51 | 112.0 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 1.00 | 0.30 | 0 | |
| 2 | 14.46 | 14.46 | 33.186 | 24.690 | 324.3 | 0.006 | 6.51 | 111.9 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 1.00 | 0.30 | 2 | 221 |
| 10 | 14.47 | 14.47 | 33.189 | 24.691 | 324.5 | 0.032 | 6.53 | 112.3 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 1.09 | 0.34 | 10 | 219 |
| 10 | 14.45 | 14.45 | 33.187 | 24.693 | 324.3 | 0.032 | | | | | | | | | | 10 | 220 |
| 19 | 13.81 | 13.81 | 33.226 | 24.857 | 308.9 | 0.061 | 6.52 | 110.7 | 1.4 | 0.25 | 0.0 | 0.00 | 0.00 | 4.64 | 0.69 | 19 | 218 |
| 20 ISL | 13.67 D | 13.67 | 33.243 D | 24.899 | 305.0 | 0.064 | 6.00 | D101.6 | 1.7 | 0.29 | 0.4 | 0.07 | 0.05 | 4.43 | 0.68 | 20 | |
| 30 | 13.18 | 13.18 | 33.281 | 25.027 | 293.0 | 0.094 | 5.21 | 87.3 | 5.8 | 0.75 | 5.8 | 0.64 | 0.43 | 1.03 | 0.63 | 30 | 217 |
| 40 | 12.32 | 12.31 | 33.342 | 25.242 | 272.7 | 0.122 | 4.53 | 74.6 | 10.2 | 1.09 | 12.2 | 0.08 | 0.00 | 0.37 | 0.32 | 40 | 216 |
| 50 | 11.33 | 11.32 | 33.395 | 25.468 | 251.4 | 0.148 | 4.08 | 65.8 | 14.2 | 1.36 | 16.4 | 0.03 | 0.00 | 0.27 | 0.29 | 50 | 215 |
| 60 | 10.94 | 10.93 | 33.463 | 25.591 | 239.9 | 0.173 | 3.74 | 59.8 | 17.1 | 1.55 | 18.8 | 0.02 | 0.00 | 0.11 | 0.21 | 60 | 214 |
| 70 | 10.74 | 10.73 | 33.510 | 25.663 | 233.3 | 0.197 | 3.58 | 57.0 | 18.8 | 1.62 | 20.0 | 0.02 | 0.00 | 0.09 | 0.19 | 70 | 213 |
| 75 ISL | 10.52 D | 10.51 | 33.585 D | 25.760 | 224.2 | 0.208 | 3.36 | D 53.3 | 20.3 | 1.67 | 20.8 | 0.02 | 0.00 | 0.08 | 0.17 | 75 | |
| 86 | 10.30 | 10.29 | 33.661 | 25.858 | 215.1 | 0.232 | 3.06 | 48.3 | 23.3 | 1.78 | 22.4 | 0.01 | 0.00 | 0.05 | 0.12 | 86 | 212 |
| 100 | 10.21 | 10.20 | 33.712 | 25.913 | 210.2 | 0.262 | 2.91 | 45.9 | 24.4 | 1.82 | 23.0 | 0.01 | 0.00 | 0.04 | 0.13 | 101 | 211 |
| 120 | 10.00 | 9.99 | 33.802 | 26.019 | 200.5 | 0.303 | 2.67 | 41.9 | 26.7 | 1.93 | 24.3 | 0.01 | 0.00 | 0.02 | 0.13 | 121 | 210 |
| 125 ISL | 9.96 D | 9.95 | 33.817 D | 26.038 | 198.8 | 0.313 | 2.65 | D 41.6 | 27.3 | 1.95 | 24.7 | 0.01 | 0.00 | 0.02 | 0.12 | 126 | |
| 140 | 9.68 | 9.66 | 33.904 | 26.153 | 188.2 | 0.342 | 2.47 | 38.5 | 29.2 | 2.00 | 25.8 | 0.00 | 0.00 | 0.02 | 0.10 | 141 | 209 |
| 150 ISL | 9.42 D | 9.40 | 33.957 D | 26.237 | 180.3 | 0.361 | 2.45 | D 38.0 | 30.8 | 2.06 | 26.6 | 0.00 | 0.00 | 0.02 | 0.09 | 151 | |
| 170 | 9.28 | 9.26 | 34.048 | 26.331 | 171.8 | 0.396 | 2.02 | 31.3 | 34.1 | 2.18 | 28.0 | 0.00 | 0.00 | 0.01 | 0.07 | 171 | 208 |
| 200 | 9.02 | 9.00 | 34.108 | 26.420 | 163.9 | 0.446 | 1.77 | 27.2 | 37.6 | 2.28 | 29.2 | 0.00 | 0.00 | 0.01 | 0.08 | 201 | 207 |
| 230 | 8.77 | 8.75 | 34.162 | 26.502 | 156.6 | 0.494 | 1.48 | 22.7 | 41.2 | 2.42 | 30.5 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.58 D | 8.55 | 34.175 D | 26.542 | 153.1 | 0.525 | 1.38 | D 21.0 | 42.8 | 2.47 | 31.1 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.51 | 8.48 | 34.189 | 26.564 | 151.4 | 0.556 | 1.28 | 19.5 | 44.3 | 2.50 | 31.6 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 8.35 D | 8.32 | 34.203 D | 26.600 | 148.4 | 0.601 | 1.18 | D 17.9 | 47.2 | 2.59 | 32.6 | 0.00 | 0.00 | | | 302 | |
| 323 | 8.17 | 8.14 | 34.234 | 26.652 | 143.8 | 0.634 | 0.91 | 13.7 | 49.8 | 2.66 | 33.4 | 0.00 | 0.00 | | | 325 | 204 |
| 379 | 7.61 | 7.57 | 34.251 | 26.748 | 135.3 | 0.712 | 0.67 | 10.0 | 56.9 | 2.79 | 35.3 | 0.00 | 0.00 | | | 381 | 203 |
| 400 ISL | 7.44 D | 7.40 | 34.259 D | 26.779 | 132.6 | 0.740 | 0.63 | D 9.4 | 59.7 | 2.85 | 35.9 | 0.00 | 0.00 | | | 403 | |
| 441 | 7.06 | 7.02 | 34.270 | 26.841 | 127.1 | 0.794 | 0.50 | 7.4 | 64.9 | 2.95 | 36.9 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.66 D | 6.61 | 34.286 D | 26.909 | 121.2 | 0.867 | 0.41 | D 6.0 | 71.3 | 3.03 | 38.0 | 0.00 | 0.00 | | | 503 | |
| 518 | 6.57 | 6.52 | 34.289 | 26.923 | 120.0 | 0.889 | 0.35 | 5.1 | 73.3 | 3.05 | 38.3 | 0.00 | 0.00 | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 39.2 N | 118 58.5 W | 20/01/11 | 1743 UTC | 711 m | 260 07 kn | 270 04 08 | 0 | 1017.8 mb | 16.1 C | 14.2 C | 10m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.68 | 13.68 | 33.363 | 24.989 | 295.8 | 0.000 | 6.89 | 116.7 | 0.1 | 0.12 | 0.0 | 0.00 | 0.00 | 2.54 | 0.59 | 0 | |
| 3 A | 13.68 | 13.68 | 33.363 | 24.989 | 295.9 | 0.009 | 6.89 | 116.7 | 0.1 | 0.12 | 0.0 | 0.00 | 0.00 | 2.54 | 0.59 | 3 | 224 |
| 6 A | 13.61 | 13.61 | 33.357 | 24.999 | 295.1 | 0.018 | 7.11 | 120.3 | 0.0 | 0.11 | 0.0 | 0.00 | 0.00 | 2.72 | 0.70 | 6 | 223 |
| 8 A | 13.57 | 13.57 | 33.357 | 25.007 | 294.4 | 0.024 | 7.01 | 118.5 | 0.0 | 0.12 | 0.0 | 0.00 | 0.00 | 2.75 | 0.67 | 8 | 222 |
| 10 ISL | 13.50 D | 13.50 | 33.360 D | 25.023 | 292.8 | 0.030 | 7.01 | 118.3 | 0.0 | 0.12 | 0.0 | 0.00 | 0.02 | 2.95 | 0.71 | 10 | |
| 11 A | 13.44 | 13.44 | 33.360 | 25.036 | 291.7 | 0.032 | 7.01 | 118.2 | 0.0 | 0.12 | 0.1 | 0.00 | 0.04 | 3.13 | 0.76 | 11 | 221 |
| 16 A | 13.10 | 13.10 | 33.373 | 25.114 | 284.4 | 0.047 | 6.79 | 113.7 | 0.1 | 0.21 | 0.8 | 0.02 | 0.27 | 4.81 | 1.30 | 16 | 220 |
| 20 ISL | 12.91 D | 12.91 | 33.375 D | 25.153 | 280.7 | 0.058 | 6.53 | D108.9 | 1.7 | 0.47 | 3.0 | 0.05 | 0.47 | 4.70 | 1.41 | 20 | |
| 24 | 12.76 | 12.76 | 33.389 | 25.193 | 277.0 | 0.069 | 5.80 | 96.4 | 3.9 | 0.75 | 5.5 | 0.09 | 0.62 | 4.59 | 1.53 | 24 | 219 |
| 30 ISL | 12.47 D | 12.47 | 33.395 D | 25.255 | 271.3 | 0.086 | 5.44 | D 89.9 | 6.7 | 0.95 | 8.1 | 0.21 | 0.56 | 3.71 | 1.28 | 30 | |
| 32 A | 12.32 | 12.32 | 33.397 | 25.285 | 268.5 | 0.091 | 5.23 | 86.1 | 7.6 | 0.99 | 8.8 | 0.25 | 0.54 | 3.34 | 1.16 | 32 | 218 |
| 41 | 11.94 | 11.93 | 33.418 | 25.373 | 260.3 | 0.115 | 4.74 | 77.4 | 10.7 | 1.17 | 11.9 | 0.31 | 0.24 | 1.71 | 0.78 | 41 | 217 |
| 50 | 11.41 | 11.40 | 33.431 | 25.482 | 250.2 | 0.138 | 4.19 | 67.7 | 14.0 | 1.38 | 15.6 | 0.11 | 0.00 | 0.68 | 0.40 | 50 | 216 |
| 60 | 10.88 | 10.87 | 33.529 | 25.653 | 234.0 | 0.162 | 3.76 | 60.1 | 17.9 | 1.57 | 18.5 | 0.06 | 0.00 | 0.30 | 0.30 | 60 | 215 |
| 71 | 10.61 | 10.60 | 33.588 | 25.747 | 225.4 | 0.187 | 3.44 | 54.7 | 20.2 | 1.75 | 20.3 | 0.03 | 0.00 | 0.18 | 0.24 | 71 | 214 |
| 75 ISL | 10.37 D | 10.36 | 33.659 D | 25.844 | 216.2 | 0.196 | 3.21 | D 50.8 | 21.9 | 1.84 | 21.5 | 0.02 | 0.00 | 0.13 | 0.21 | 75 | |
| 85 | 10.08 | 10.07 | 33.774 | 25.983 | 203.2 | 0.217 | 2.76 | 43.4 | 25.9 | 2.02 | 24.2 | 0.01 | 0.00 | 0.05 | 0.14 | 85 | 213 |
| 100 ISL | 9.92 D | 9.91 | 33.857 D | 26.075 | 194.7 | 0.247 | 2.55 | D 40.0 | 27.8 | 2.06 | 25.2 | 0.00 | 0.00 | 0.08 | 0.20 | 101 | |
| 101 | 9.92 | 9.91 | 33.853 | 26.072 | 195.0 | 0.249 | 2.51 | 39.4 | 27.9 | 2.06 | 25.2 | 0.00 | 0.00 | 0.08 | 0.20 | 102 | 212 |
| 120 | 9.68 | 9.67 | 33.944 | 26.184 | 184.8 | 0.285 | 2.34 | 36.5 | 29.9 | 2.13 | 26.3 | 0.00 | 0.00 | 0.02 | 0.09 | 121 | 211 |
| 125 ISL | 9.60 D | 9.59 | 33.974 D | 26.220 | 181.4 | 0.294 | 2.32 | D 36.1 | 30.7 | 2.15 | 26.7 | 0.00 | 0.00 | 0.02 | 0.08 | 126 | |
| 140 | 9.46 | 9.44 | 34.028 | 26.286 | 175.5 | 0.321 | 2.01 | 31.2 | 33.0 | 2.22 | 27.7 | 0.00 | 0.00 | 0.01 | 0.06 | 141 | 210 |
| 150 ISL | 9.34 D | 9.32 | 34.030 D | 26.307 | 173.7 | 0.338 | 2.08 | D 32.2 | 33.9 | 2.26 | 28.1 | 0.00 | 0.00 | 0.01 | 0.06 | 151 | |
| 171 | 9.17 | 9.15 | 34.067 | 26.364 | 168.7 | 0.374 | 1.91 | 29.5 | 35.4 | 2.33 | 28.6 | 0.00 | 0.00 | 0.01 | 0.07 | 172 | 209 |
| 200 ISL | 8.92 D | 8.90 | 34.135 D | 26.457 | 160.3 | 0.422 | 1.63 | D 25.0 | 38.7 | 2.38 | 29.9 | 0.00 | 0.00 | 0.01 | 0.07 | 201 | |
| 201 | 8.92 | 8.90 | 34.135 | 26.457 | 160.3 | 0.424 | 1.61 | 24.7 | 38.8 | 2.38 | 29.9 | 0.00 | 0.00 | 0.01 | 0.07 | 202 | 208 |
| 230 | 8.67 | 8.65 | 34.178 | 26.531 | 153.9 | 0.469 | 1.37 | 20.9 | 42.1 | 2.54 | 31.0 | 0.00 | 0.00 | | | 231 | 207 |
| 250 ISL | 8.48 D | 8.45 | 34.199 D | 26.577 | 149.8 | 0.500 | 1.22 | D 18.6 | 44.8 | 2.61 | 32.0 | 0.00 | 0.00 | | | 252 | |
| 270 | 8.34 | 8.31 | 34.229 | 26.622 | 145.8 | 0.529 | 0.95 | 14.4 | 47.5 | 2.67 | 32.9 | 0.00 | 0.00 | | | 272 | 206 |
| 300 ISL | 8.09 D | 8.06 | 34.243 D | 26.671 | 141.6 | 0.572 | 0.84 | D 12.7 | 50.5 | 2.82 | 33.8 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.95 | 7.92 | 34.252 | 26.699 | 139.2 | 0.602 | 0.77 | 11.6 | 52.6 | 2.91 | 34.4 | 0.00 | 0.00 | | | 323 | 205 |
| 381 | 7.37 | 7.33 | 34.261 | 26.790 | 131.2 | 0.683 | 0.58 | 8.6 | 60.6 | 2.97 | 36.3 | 0.00 | 0.00 | | | 384 | 204 |
| 400 ISL | 7.19 D | 7.15 | 34.265 D | 26.819 | 128.6 | 0.708 | 0.56 | D 8.3 | 62.8 | 3.00 | 36.8 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.89 | 6.85 | 34.273 | 26.867 | 124.5 | 0.759 | 0.47 | 6.9 | 67.6 | 3.07 | 37.7 | 0.00 | 0.00 | | | 444 | 203 |
| 500 ISL | 6.42 D | 6.37 | 34.302 D | 26.953 | 116.8 | 0.831 | 0.34 | D 4.9 | 75.4 | 3.17 | 38.9 | 0.00 | 0.00 | | | 503 | |
| 516 | 6.36 | 6.31 | 34.302 | 26.961 | 116.2 | 0.849 | 0.31 | 4.5 | 77.6 | 3.19 | 39.1 | 0.00 | 0.00 | | | 520 | 202 |
| 600 ISL | 5.68 D | 5.63 | 34.358 D | 27.092 | 104.2 | 0.942 | 0.20 | D 2.9 | 88.6 | 3.29 | 38.8 | 0.00 | 0.00 | | | 604 | |
| 700 ISL | 5.32 D | 5.26 | 34.390 D | 27.161 | 98.4 | 1.043 | 0.12 | D 1.7 | 101.8 | 3.42 | 38.6 | 0.00 | 0.00 | | | 705 | |
| 717 | 5.30 | 5.24 | 34.395 | 27.168 | 98.0 | 1.060 | 0.10 | 1.4 | 104.0 | 3.44 | 38.5 | 0.00 | 0.00 | | | 722 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.4 N | 119 18.9 W | 20/01/11 | 2217 UTC | 1645 m | 260 03 kn | 270 04 07 | 0 | 1016.2 mb | 17.0 C | 13.5 C | 15m | 3/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.97 | 14.97 | 33.290 | 24.661 | 327.0 | 0.000 | 6.14 | 106.8 | 2.1 | 0.31 | 0.0 | 0.00 | 0.00 | 0.56 | 0.08 | 0 | |
| 3 | 14.97 | 14.97 | 33.290 | 24.661 | 327.1 | 0.010 | 6.14 | 106.8 | 2.1 | 0.31 | 0.0 | 0.00 | 0.00 | 0.56 | 0.08 | 3 | 221 |
| 10 | 14.57 | 14.57 | 33.289 | 24.746 | 319.2 | 0.032 | 6.14 | 105.9 | 1.9 | 0.29 | 0.1 | 0.00 | 0.00 | 0.55 | 0.19 | 10 | 219 |
| 10 | 14.57 | 14.57 | 33.297 | 24.753 | 318.6 | 0.032 | | | | | | | | | | 10 | 220 |
| 20 | 14.46 | 14.46 | 33.308 | 24.785 | 315.9 | 0.064 | 6.12 | 105.3 | 1.7 | 0.29 | 0.2 | 0.00 | 0.01 | 0.96 | 0.42 | 20 | 218 |
| 30 | 14.32 | 14.32 | 33.318 | 24.822 | 312.6 | 0.096 | 6.10 | 104.7 | 1.7 | 0.30 | 0.3 | 0.02 | 0.05 | 1.03 | 0.19 | 30 | 217 |
| 40 | 12.72 | 12.71 | 33.318 | 25.147 | 281.9 | 0.125 | 4.82 | 80.0 | 7.8 | 0.95 | 9.7 | 0.12 | 0.00 | 0.44 | 0.29 | 40 | 216 |
| 50 ISL | 11.62 D | 11.61 | 33.326 D | 25.361 | 261.6 | 0.152 | 4.64 D | 75.3 | 10.8 | 1.12 | 12.7 | 0.12 | 0.02 | 0.27 | 0.18 | 50 | |
| 51 | 11.60 | 11.59 | 33.338 | 25.375 | 260.4 | 0.155 | 4.58 | 74.3 | 11.0 | 1.13 | 12.8 | 0.12 | 0.02 | 0.27 | 0.17 | 51 | 215 |
| 61 | 10.62 | 10.61 | 33.302 | 25.522 | 246.5 | 0.180 | 4.44 | 70.5 | 14.3 | 1.31 | 15.9 | 0.03 | 0.00 | 0.12 | 0.15 | 61 | 214 |
| 70 | 10.26 | 10.25 | 33.402 | 25.662 | 233.3 | 0.202 | 4.15 | 65.4 | 17.1 | 1.45 | 18.3 | 0.02 | 0.00 | 0.07 | 0.09 | 70 | 213 |
| 75 ISL | 10.08 D | 10.07 | 33.472 D | 25.747 | 225.3 | 0.213 | 4.02 D | 63.1 | 18.8 | 1.54 | 19.6 | 0.02 | 0.00 | 0.06 | 0.09 | 75 | |
| 86 | 10.11 | 10.10 | 33.626 | 25.863 | 214.6 | 0.238 | 3.34 | 52.5 | 22.0 | 1.71 | 22.0 | 0.02 | 0.00 | 0.04 | 0.09 | 86 | 212 |
| 100 | 9.90 | 9.89 | 33.693 | 25.950 | 206.5 | 0.267 | 3.23 | 50.6 | 23.3 | 1.77 | 22.9 | 0.01 | 0.00 | 0.02 | 0.08 | 101 | 211 |
| 118 | 9.66 | 9.65 | 33.846 | 26.110 | 191.7 | 0.303 | 2.72 | 42.4 | 27.3 | 1.95 | 25.1 | 0.00 | 0.00 | 0.01 | 0.08 | 119 | 210 |
| 125 ISL | 9.56 D | 9.55 | 33.909 D | 26.176 | 185.6 | 0.316 | 2.62 D | 40.8 | 28.6 | 2.00 | 25.7 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 141 | 9.39 | 9.37 | 34.010 | 26.283 | 175.8 | 0.345 | 2.30 | 35.7 | 31.6 | 2.09 | 27.0 | 0.00 | 0.00 | 0.01 | 0.07 | 142 | 209 |
| 150 ISL | 9.25 D | 9.23 | 34.060 D | 26.345 | 170.0 | 0.361 | 2.14 D | 33.1 | 33.5 | 2.16 | 27.9 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 170 | 9.03 | 9.01 | 34.105 | 26.416 | 163.7 | 0.394 | 1.73 | 26.6 | 37.3 | 2.32 | 29.5 | 0.00 | 0.00 | 0.00 | 0.06 | 171 | 208 |
| 200 ISL | 8.73 D | 8.71 | 34.162 D | 26.508 | 155.4 | 0.442 | 1.61 D | 24.6 | 40.4 | 2.43 | 30.4 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | |
| 202 | 8.73 | 8.71 | 34.164 | 26.510 | 155.3 | 0.445 | 1.59 | 24.3 | 40.5 | 2.43 | 30.4 | 0.00 | 0.00 | 0.00 | 0.05 | 203 | 207 |
| 230 | 8.51 | 8.49 | 34.174 | 26.552 | 151.7 | 0.488 | 1.45 | 22.1 | 43.0 | 2.48 | 31.3 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.32 D | 8.29 | 34.203 D | 26.604 | 147.1 | 0.518 | 1.22 D | 18.5 | 45.6 | 2.54 | 32.1 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.14 | 8.11 | 34.220 | 26.645 | 143.5 | 0.547 | 1.07 | 16.2 | 48.4 | 2.61 | 33.0 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.93 D | 7.90 | 34.226 D | 26.681 | 140.5 | 0.590 | 0.95 D | 14.3 | 51.6 | 2.67 | 33.9 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.80 | 7.77 | 34.240 | 26.711 | 137.9 | 0.619 | 0.80 | 12.0 | 53.7 | 2.71 | 34.5 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 7.29 | 7.25 | 34.274 | 26.812 | 129.1 | 0.699 | 0.56 | 8.3 | 61.2 | 2.84 | 36.2 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 7.10 D | 7.06 | 34.270 D | 26.835 | 127.0 | 0.723 | 0.53 D | 7.8 | 63.5 | 2.90 | 36.8 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.78 | 6.74 | 34.280 | 26.887 | 122.4 | 0.773 | 0.44 | 6.4 | 68.4 | 3.00 | 37.9 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.33 D | 6.28 | 34.304 D | 26.966 | 115.4 | 0.845 | 0.33 D | 4.8 | 75.6 | 3.03 | 38.8 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.25 | 6.20 | 34.310 | 26.982 | 114.1 | 0.864 | 0.30 | 4.3 | 77.7 | 3.04 | 39.1 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 19.3 N | 119 40.1 W | 21/01/11 | 0246 UTC | 80 m | 270 03 kn | | | 1016.9 mb | 13.5 C | 12.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.14 | 13.14 | 33.401 | 25.127 | 282.7 | 0.000 | 6.22 | 104.2 | 4.5 | 0.50 | 4.5 | 0.18 | 0.00 | 3.39 | 0.38 | 0 | |
| 3 | 13.14 | 13.14 | 33.401 | 25.127 | 282.7 | 0.008 | 6.22 | 104.2 | 4.5 | 0.50 | 4.5 | 0.18 | 0.00 | 3.39 | 0.38 | 3 | 210 |
| 5 | 13.18 | 13.18 | 33.405 | 25.122 | 283.3 | 0.014 | 6.24 | 104.7 | 4.3 | 0.51 | 4.4 | 0.18 | 0.00 | 3.48 | 0.57 | 5 | 209 |
| 10 | 12.74 | 12.74 | 33.402 | 25.207 | 275.3 | 0.028 | 6.01 | 99.9 | 6.2 | 0.62 | 6.2 | 0.21 | 0.00 | 3.15 | 0.56 | 10 | 207 |
| 10 | 12.75 | 12.75 | 33.400 | 25.203 | 275.7 | 0.028 | | | | | | | | | | 10 | 208 |
| 20 | 12.58 | 12.58 | 33.414 | 25.248 | 271.7 | 0.055 | 5.81 | 96.2 | 6.7 | 0.69 | 7.0 | 0.22 | 0.05 | 3.21 | 0.63 | 20 | 206 |
| 30 | 12.55 | 12.55 | 33.420 | 25.258 | 271.0 | 0.083 | 5.68 | 94.0 | 7.3 | 0.74 | 7.5 | 0.22 | 0.06 | 3.19 | 0.61 | 30 | 205 |
| 40 | 12.47 | 12.46 | 33.426 | 25.279 | 269.3 | 0.110 | 5.61 | 92.7 | 7.7 | 0.78 | 7.9 | 0.23 | 0.09 | 3.07 | 0.38 | 40 | 204 |
| 50 | 11.72 | 11.71 | 33.485 | 25.467 | 251.6 | 0.136 | 4.74 | 77.1 | 13.1 | 1.11 | 12.9 | 0.22 | 0.13 | 0.93 | 0.42 | 50 | 203 |
| 61 | 11.10 | 11.09 | 33.547 | 25.628 | 236.5 | 0.163 | 4.15 | 66.6 | 17.1 | 1.33 | 16.6 | 0.16 | 0.06 | 0.65 | 0.27 | 61 | 202 |
| 70 | 10.17 | 10.16 | 33.726 | 25.930 | 207.9 | 0.183 | 3.03 | 47.7 | 25.5 | 1.74 | 22.9 | 0.09 | 0.00 | 0.08 | 0.19 | 70 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 9.5 N | 120 0.2 W | 21/01/11 | 0707 UTC | 1202 m | 280 11 kn | | | 1017.6 mb | 14.0 C | 11.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.36 | 12.36 | 33.301 | 25.202 | 275.6 | 0.000 | 5.83 | 96.0 | 7.5 | 0.78 | 7.7 | 0.23 | 0.15 | 1.01 | 0.21 | 0 | |
| 3 | 12.36 | 12.36 | 33.301 | 25.202 | 275.6 | 0.008 | 5.83 | 96.0 | 7.5 | 0.78 | 7.7 | 0.23 | 0.15 | 1.01 | 0.21 | 3 | 221 |
| 10 | 12.26 | 12.26 | 33.303 | 25.223 | 273.8 | 0.027 | 5.86 | 96.3 | 7.5 | 0.79 | 7.9 | 0.23 | 0.18 | 1.37 | 0.31 | 10 | 219 |
| 10 | 12.26 | 12.26 | 33.303 | 25.223 | 273.8 | 0.027 | | | | | | | | | | 10 | 220 |
| 20 | 12.22 | 12.22 | 33.305 | 25.232 | 273.2 | 0.055 | 5.80 | 95.3 | 7.6 | 0.80 | 8.0 | 0.23 | 0.23 | 1.41 | 0.31 | 20 | 218 |
| 30 | 11.92 | 11.92 | 33.279 | 25.269 | 269.9 | 0.082 | 5.60 | 91.4 | 8.4 | 0.86 | 9.0 | 0.19 | 0.25 | 1.11 | 0.27 | 30 | 217 |
| 40 | 10.97 | 10.97 | 33.207 | 25.386 | 259.0 | 0.108 | 5.05 | 80.7 | 10.8 | 1.03 | 11.8 | 0.07 | 0.02 | 0.26 | 0.08 | 40 | 216 |
| 50 | 9.94 | 9.93 | 33.323 | 25.654 | 233.6 | 0.133 | 4.48 | 70.1 | 16.6 | 1.34 | 17.2 | 0.02 | 0.00 | 0.05 | 0.06 | 50 | 215 |
| 60 | 9.61 | 9.60 | 33.475 | 25.828 | 217.3 | 0.156 | 3.92 | 60.9 | 21.4 | 1.55 | 21.1 | 0.01 | 0.00 | 0.04 | 0.06 | 60 | 214 |
| 70 | 9.81 | 9.80 | 33.591 | 25.885 | 212.1 | 0.177 | 3.46 | 54.0 | 23.5 | 1.63 | 22.4 | 0.01 | 0.00 | 0.04 | 0.09 | 70 | 213 |
| 75 ISL | 9.92 D | 9.91 | 33.695 D | 25.948 | 206.2 | 0.188 | 3.09 D | 48.4 | 25.2 | 1.70 | 23.4 | 0.01 | 0.00 | 0.03 | 0.10 | 75 | |
| 85 | 9.85 | 9.84 | 33.833 | 26.068 | 195.1 | 0.208 | 2.52 | 39.4 | 28.7 | 1.86 | 25.5 | 0.02 | 0.00 | 0.02 | 0.11 | 85 | 212 |
| 100 | 9.56 | 9.55 | 33.956 | 26.212 | 181.6 | 0.236 | 2.15 | 33.5 | 32.3 | 2.01 | 27.2 | 0.01 | 0.00 | 0.01 | 0.12 | 101 | 211 |
| 120 | 8.89 | 8.88 | 33.996 | 26.352 | 168.7 | 0.271 | 2.36 | 36.2 | 34.6 | 1.96 | 27.9 | 0.01 | 0.00 | 0.01 | 0.12 | 121 | 210 |
| 125 ISL | 8.89 D | 8.88 | 34.011 D | 26.364 | 167.7 | 0.279 | 2.33 D | 35.7 | 35.4 | 1.99 | 28.3 | 0.01 | 0.00 | 0.01 | 0.11 | 126 | |
| 140 | 8.77 | 8.76 | 34.055 | 26.417 | 162.9 | 0.304 | 1.98 | 30.3 | 37.8 | 2.10 | 29.4 | 0.00 | 0.00 | 0.01 | 0.09 | 141 | 209 |
| 150 ISL | 8.64 D | 8.62 | 34.079 D | 26.456 | 159.3 | 0.320 | 1.90 D | 29.0 | 39.3 | 2.13 | 29.9 | 0.00 | 0.00 | 0.01 | 0.08 | 151 | |
| 170 | 8.44 | 8.42 | 34.097 | 26.501 | 155.4 | 0.352 | 1.73 | 26.3 | 42.1 | 2.17 | 30.8 | 0.00 | 0.00 | 0.01 | 0.07 | 171 | 208 |
| 200 ISL | 8.15 D | 8.13 | 34.120 D | 26.564 | 149.9 | 0.397 | 1.58 D | 23.8 | 45.2 | 2.26 | 31.8 | 0.00 | 0.00 | 0.01 | 0.06 | 201 | |
| 201 | 8.18 | 8.16 | 34.116 | 26.556 | 150.7 | 0.399 | 1.58 | 23.9 | 45.3 | 2.26 | 31.8 | 0.00 | 0.00 | 0.01 | 0.06 | 202 | 207 |
| 230 | 7.97 | 7.95 | 34.140 | 26.607 | 146.3 | 0.442 | 1.38 | 20.7 | 48.7 | 2.35 | 32.8 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.86 D | 7.83 | 34.176 D | 26.651 | 142.4 | 0.471 | 1.18 D | 17.7 | 51.1 | 2.41 | 33.5 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.72 | 7.69 | 34.186 | 26.680 | 140.0 | 0.499 | 1.05 | 15.7 | 53.5 | 2.47 | 34.2 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.48 D | 7.45 | 34.204 D | 26.729 | 135.7 | 0.540 | 0.91 D | 13.5 | 56.7 | 2.56 | 35.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.46 | 7.43 | 34.229 | 26.752 | 133.9 | 0.567 | 0.75 | 11.1 | 58.8 | 2.61 | 35.5 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.93 | 6.89 | 34.246 | 26.839 | 126.2 | 0.645 | 0.58 | 8.5 | 66.6 | 2.73 | 37.2 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.82 D | 6.78 | 34.256 D | 26.863 | 124.2 | 0.670 | 0.57 D | 8.3 | 69.2 | 2.76 | 37.7 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.48 | 6.44 | 34.276 | 26.924 | 118.7 | 0.720 | 0.45 D | 6.5 | 74.4 | 2.81 | 38.7 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.07 D | 6.03 | 34.305 D | 27.000 | 111.9 | 0.788 | 0.35 D | 5.0 | 80.7 | 2.90 | 39.7 | 0.00 | 0.00 | | | 504 | |
| 515 | 6.05 | 6.00 | 34.305 | 27.003 | 111.8 | 0.805 | 0.30 | 4.3 | 82.3 | 2.92 | 40.0 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 59.6 N | 120 20.8 W | 21/01/11 | 1151 UTC | 722 m | 270 11 kn | | | 1016.2 mb | 14.0 C | 11.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.99 | 13.99 | 32.950 | 24.606 | 332.3 | 0.000 | 6.01 | 102.2 | 2.9 | 0.31 | 0.2 | 0.02 | 0.00 | 0.61 | 0.19 | 0 | |
| 2 | 13.99 | 13.99 | 32.950 | 24.606 | 332.3 | 0.007 | 6.01 | 102.2 | 2.9 | 0.31 | 0.2 | 0.02 | 0.00 | 0.61 | 0.19 | 2 | 221 |
| 10 CSL | 13.99 | 13.99 | 32.948 | 24.605 | 332.7 | 0.033 | 6.04 | 102.7 | | | | | | | | 10 | 200 |
| 10 | 14.00 | 14.00 | 32.946 | 24.601 | 333.0 | 0.033 | | | | | | | | | | 10 | 220 |
| 11 | 14.00 | 14.00 | 32.947 | 24.602 | 333.0 | 0.037 | 6.01 | 102.2 | 2.9 | 0.31 | 0.2 | 0.02 | 0.00 | 0.54 | 0.16 | 11 | 219 |
| 20 | 13.99 | 13.99 | 32.948 | 24.605 | 332.9 | 0.067 | 6.01 | 102.2 | 2.9 | 0.31 | 0.2 | 0.02 | 0.00 | 0.65 | 0.20 | 20 | 218 |
| 30 | 13.64 | 13.64 | 33.000 | 24.717 | 322.5 | 0.099 | 5.90 | 99.6 | 3.3 | 0.37 | 1.1 | 0.11 | 0.03 | 0.41 | 0.22 | 30 | 217 |
| 41 | 12.92 | 12.91 | 33.039 | 24.891 | 306.2 | 0.134 | 5.73 | 95.4 | 3.9 | 0.46 | 2.5 | 0.13 | 0.00 | 0.25 | 0.25 | 41 | 216 |
| 50 ISL | 11.60 D | 11.59 | 32.996 D | 25.109 | 285.6 | 0.161 | 5.62 D | 90.9 | 5.2 | 0.58 | 4.5 | 0.01 | 0.00 | 0.13 | 0.13 | 50 | |
| 51 | 11.63 | 11.62 | 32.995 | 25.102 | 286.2 | 0.163 | 5.60 | 90.7 | 5.4 | 0.60 | 4.8 | 0.00 | 0.00 | 0.12 | 0.12 | 51 | 215 |
| 60 | 11.26 | 11.25 | 33.086 | 25.241 | 273.3 | 0.189 | 5.34 | 85.8 | 7.5 | 0.77 | 7.9 | 0.00 | 0.00 | 0.07 | 0.08 | 60 | 214 |
| 70 | 10.72 | 10.71 | 33.148 | 25.385 | 259.7 | 0.215 | 5.03 | 79.9 | 10.3 | 0.94 | 11.0 | 0.00 | 0.00 | 0.05 | 0.06 | 70 | 213 |
| 75 ISL | 10.38 D | 10.37 | 33.208 D | 25.490 | 249.8 | 0.228 | 4.82 D | 76.0 | 11.8 | 1.02 | 12.5 | 0.00 | 0.00 | 0.04 | 0.05 | 75 | |
| 85 | 10.03 | 10.02 | 33.250 | 25.583 | 241.2 | 0.252 | 4.67 | 73.1 | 14.9 | 1.18 | 15.3 | 0.00 | 0.00 | 0.03 | 0.04 | 85 | 212 |
| 100 ISL | 9.51 D | 9.50 | 33.394 D | 25.781 | 222.5 | 0.287 | 4.25 D | 65.8 | 18.7 | 1.36 | 18.4 | 0.00 | 0.00 | 0.02 | 0.03 | 100 | |
| 101 | 9.51 | 9.50 | 33.376 | 25.767 | 223.9 | 0.290 | 4.32 | 66.9 | 19.0 | 1.37 | 18.6 | 0.00 | 0.00 | 0.02 | 0.03 | 101 | 211 |
| 118 | 9.14 | 9.13 | 33.624 | 26.021 | 200.1 | 0.326 | 3.57 | 54.9 | 25.8 | 1.65 | 23.7 | 0.00 | 0.00 | 0.00 | 0.03 | 119 | 210 |
| 125 ISL | 9.07 D | 9.06 | 33.688 D | 26.082 | 194.4 | 0.339 | 3.42 D | 52.6 | 28.1 | 1.74 | 25.2 | 0.00 | 0.00 | 0.00 | 0.03 | 126 | |
| 139 | 8.92 | 8.91 | 33.843 | 26.227 | 180.8 | 0.366 | 2.78 | 42.6 | 31.8 | 1.88 | 27.3 | 0.00 | 0.00 | 0.00 | 0.03 | 140 | 209 |
| 150 ISL | 8.83 D | 8.81 | 33.917 D | 26.300 | 174.2 | 0.385 | 2.64 D | 40.4 | 33.4 | 1.90 | 27.7 | 0.00 | 0.00 | 0.00 | 0.03 | 151 | |
| 171 | 8.64 | 8.62 | 33.968 | 26.370 | 167.9 | 0.421 | 2.50 | 38.1 | 35.4 | 1.95 | 28.4 | 0.00 | 0.00 | 0.00 | 0.03 | 172 | 208 |
| 200 ISL | 8.23 D | 8.21 | 34.012 D | 26.467 | 159.1 | 0.468 | 2.62 | 39.6 | 38.1 | 1.93 | 28.6 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 203 | 8.19 | 8.17 | 34.002 | 26.465 | 159.3 | 0.473 | 2.62 | 39.5 | 38.5 | 1.93 | 28.6 | 0.00 | 0.00 | 0.00 | 0.02 | 204 | 207 |
| 227 | 8.26 | 8.24 | 34.101 | 26.533 | 153.4 | 0.511 | 1.72 | 26.0 | 44.2 | 2.24 | 31.3 | 0.00 | 0.00 | | | 228 | 206 |
| 250 ISL | 8.11 D | 8.08 | 34.134 D | 26.581 | 149.1 | 0.546 | 1.52 D | 22.9 | 47.9 | 2.36 | 32.6 | 0.00 | 0.00 | | | 251 | |
| 269 | 7.92 | 7.89 | 34.154 | 26.625 | 145.2 | 0.574 | 1.27 | 19.1 | 50.4 | 2.40 | 33.2 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.63 D | 7.60 | 34.179 D | 26.688 | 139.7 | 0.618 | 1.09 D | 16.3 | 54.5 | 2.48 | 34.4 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.45 | 7.42 | 34.189 | 26.722 | 136.7 | 0.647 | 0.93 | 13.8 | 57.1 | 2.52 | 35.1 | 0.00 | 0.00 | | | 323 | 204 |
| 379 | 7.01 | 6.97 | 34.228 | 26.814 | 128.6 | 0.724 | 0.66 | 9.7 | 64.4 | 2.64 | 36.7 | 0.00 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.81 D | 6.77 | 34.248 D | 26.858 | 124.7 | 0.750 | 0.57 D | 8.3 | 66.8 | 2.68 | 37.2 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.63 | 6.59 | 34.264 | 26.895 | 121.6 | 0.801 | 0.46 | 6.7 | 71.3 | 2.75 | 38.0 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.15 D | 6.11 | 34.298 D | 26.985 | 113.5 | 0.870 | 0.34 D | 4.9 | 78.1 | 2.81 | 39.2 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.13 | 6.08 | 34.301 | 26.990 | 113.2 | 0.889 | 0.31 | 4.5 | 80.1 | 2.83 | 39.6 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 39.5 N | 121 1.7 W | 21/01/11 | 1847 UTC | 3790 m | 270 07 kn | 100 04 06 | 0 | 1018.3 mb | 15.2 C | 13.9 C | 18m | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.50 | 14.50 | 32.958 | 24.506 | 341.9 | 0.000 | 5.97 | 102.6 | 2.6 | 0.30 | 0.0 | 0.00 | 0.00 | 0.41 | 0.12 | 0 | |
| 3 A | 14.50 | 14.50 | 32.958 | 24.506 | 341.9 | 0.010 | 5.97 | 102.6 | 2.6 | 0.30 | 0.0 | 0.00 | 0.00 | 0.41 | 0.12 | 3 | 223 |
| 10 ISL | 14.43 D | 14.43 | 32.949 D | 24.514 | 341.3 | 0.034 | 6.01 D | 103.1 | 2.6 | 0.30 | 0.0 | 0.00 | 0.00 | 0.41 | 0.12 | 10 | |
| 12 A | 14.43 | 14.43 | 32.949 | 24.514 | 341.4 | 0.041 | 5.97 | 102.4 | 2.6 | 0.30 | 0.0 | 0.00 | 0.00 | 0.41 | 0.12 | 12 | 221 |
| 12 | 14.44 | 14.44 | 32.952 | 24.514 | 341.4 | 0.041 | | | | | | | | | | 12 | 222 |
| 14 A | 14.35 | 14.35 | 32.950 | 24.531 | 339.8 | 0.048 | 5.97 | 102.3 | 2.5 | 0.30 | 0.0 | 0.00 | 0.00 | 0.39 | 0.12 | 14 | 220 |
| 19 A | 14.13 | 14.13 | 32.938 | 24.568 | 336.4 | 0.065 | 5.98 | 102.0 | 2.7 | 0.32 | 0.2 | 0.02 | 0.00 | 0.41 | 0.14 | 19 | 219 |
| 20 ISL | 14.10 D | 14.10 | 32.938 D | 24.575 | 335.8 | 0.068 | 6.02 D | 102.6 | 2.7 | 0.32 | 0.2 | 0.02 | 0.00 | 0.42 | 0.14 | 20 | |
| 28 A | 13.94 | 13.94 | 32.939 | 24.609 | 332.8 | 0.095 | 5.98 | 101.6 | 2.8 | 0.34 | 0.4 | 0.04 | 0.00 | 0.52 | 0.17 | 28 | 218 |
| 30 ISL | 13.91 D | 13.91 | 32.941 D | 24.616 | 332.1 | 0.101 | 6.01 D | 102.0 | 2.8 | 0.34 | 0.5 | 0.04 | 0.00 | 0.51 | 0.17 | 30 | |
| 38 | 13.80 | 13.79 | 32.952 | 24.648 | 329.4 | 0.128 | 5.96 | 101.0 | 3.0 | 0.36 | 0.7 | 0.07 | 0.03 | 0.41 | 0.17 | 38 | 217 |
| 48 | 13.69 | 13.68 | 32.978 | 24.691 | 325.5 | 0.161 | 5.92 | 100.1 | 3.1 | 0.39 | 1.0 | 0.12 | 0.10 | 0.35 | 0.20 | 48 | 216 |
| 50 ISL | 13.63 D | 13.62 | 32.996 D | 24.717 | 323.1 | 0.167 | 5.90 D | 99.6 | 3.2 | 0.40 | 1.2 | 0.15 | 0.11 | 0.33 | 0.20 | 50 | |
| 59 A | 13.44 | 13.43 | 33.063 | 24.807 | 314.7 | 0.196 | 5.78 | 97.2 | 3.6 | 0.46 | 2.0 | 0.21 | 0.15 | 0.24 | 0.20 | 59 | 215 |
| 64 | 13.04 | 13.03 | 33.114 | 24.927 | 303.5 | 0.211 | 5.68 | 94.8 | 3.8 | 0.47 | 2.4 | 0.14 | 0.00 | 0.17 | 0.17 | 64 | 214 |
| 70 | 12.48 | 12.47 | 33.165 | 25.075 | 289.4 | 0.229 | 5.56 | 91.7 | 4.5 | 0.51 | 3.4 | 0.04 | 0.00 | 0.13 | 0.14 | 70 | 213 |
| 75 ISL | 11.54 D | 11.53 | 33.081 D | 25.186 | 278.8 | 0.243 | 5.55 D | 89.7 | 5.5 | 0.60 | 4.8 | 0.03 | 0.00 | 0.11 | 0.11 | 75 | |
| 85 | 11.14 | 11.13 | 33.088 | 25.264 | 271.6 | 0.271 | 5.23 | 83.8 | 7.9 | 0.83 | 8.2 | 0.00 | 0.00 | 0.07 | 0.07 | 85 | 212 |
| 100 | 10.22 | 10.21 | 33.183 | 25.499 | 249.5 | 0.310 | 4.93 | 77.5 | 11.7 | 1.14 | 12.6 | 0.00 | 0.00 | 0.04 | 0.04 | 100 | 211 |
| 121 | 9.60 | 9.59 | 33.298 | 25.692 | 231.4 | 0.360 | 4.54 | 70.4 | 16.3 | 1.37 | 17.0 | 0.00 | 0.00 | 0.01 | 0.03 | 122 | 210 |
| 125 ISL | 9.46 D | 9.45 | 33.413 D | 25.805 | 220.8 | 0.369 | 4.31 D | 66.7 | 17.8 | 1.45 | 18.3 | 0.00 | 0.00 | 0.01 | 0.03 | 126 | |
| 141 | 9.15 | 9.13 | 33.586 | 25.990 | 203.5 | 0.403 | 3.66 | 56.3 | 24.1 | 1.77 | 23.3 | 0.00 | 0.00 | 0.01 | 0.03 | 142 | 209 |
| 150 ISL | 9.02 D | 9.00 | 33.689 D | 26.091 | 194.0 | 0.421 | 3.44 D | 52.8 | 26.5 | 1.87 | 25.0 | 0.00 | 0.00 | 0.01 | 0.03 | 151 | |
| 170 | 8.80 | 8.78 | 33.841 | 26.245 | 179.7 | 0.459 | 2.85 | 43.6 | 30.8 | 2.02 | 27.4 | 0.00 | 0.00 | 0.00 | 0.04 | 171 | 208 |
| 200 ISL | 8.30 D | 8.28 | 33.981 D | 26.432 | 162.4 | 0.510 | 2.49 D | 37.7 | 36.2 | 2.18 | 29.5 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 8.32 | 8.30 | 33.977 | 26.426 | 163.0 | 0.512 | 2.44 | 36.9 | 36.4 | 2.18 | 29.5 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 230 | 8.03 | 8.01 | 34.021 | 26.504 | 156.0 | 0.558 | 2.32 | 34.9 | 39.9 | 2.26 | 30.3 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 7.95 D | 7.92 | 34.072 D | 26.556 | 151.4 | 0.589 | 1.87 D | 28.1 | 43.9 | 2.38 | 31.8 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.61 | 7.58 | 34.096 | 26.625 | 145.1 | 0.620 | 1.55 | 23.1 | 48.5 | 2.52 | 33.6 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.02 D | 6.99 | 34.062 D | 26.681 | 139.9 | 0.661 | 1.60 D | 23.5 | 53.7 | 2.61 | 35.1 | 0.00 | 0.00 | | | 302 | |
| 320 | 6.79 | 6.76 | 34.075 | 26.723 | 136.1 | 0.689 | 1.37 | 20.0 | 57.0 | 2.66 | 36.0 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.42 | 6.39 | 34.155 | 26.836 | 126.0 | 0.767 | 0.76 | 11.0 | 66.8 | 2.86 | 38.4 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.25 D | 6.21 | 34.174 D | 26.873 | 122.7 | 0.792 | 0.69 D | 10.0 | 69.6 | 2.93 | 39.0 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.00 | 5.96 | 34.201 | 26.926 | 117.9 | 0.840 | 0.53 | 7.6 | 74.9 | 3.04 | 39.9 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.66 D | 5.62 | 34.248 D | 27.006 | 110.9 | 0.909 | 0.42 D | 6.0 | 83.2 | 3.12 | 41.0 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.53 | 5.49 | 34.253 | 27.026 | 109.1 | 0.927 | 0.35 | 5.0 | 85.4 | 3.14 | 41.3 | 0.00 | 0.00 | | | 520 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 19.2 N | 121 43.1 W | 22/01/11 | 0117 UTC | 4067 m | 270 08 kn | 290 04 06 | 0 | 1016.3 mb | 15.0 C | 13.3 C | | 3/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.24 | 15.24 | 32.994 | 24.375 | 354.3 | 0.000 | 5.81 | 101.4 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.17 | 0.05 | 0 | |
| 2 | 15.24 | 15.24 | 32.994 | 24.375 | 354.4 | 0.007 | 5.81 | 101.4 | 2.2 | 0.29 | 0.0 | 0.00 | 0.00 | 0.17 | 0.05 | 2 | 221 |
| 9 | 15.22 | 15.22 | 32.995 | 24.380 | 354.1 | 0.032 | | | | | | | | | | 9 | 220 |
| 10 | 15.22 | 15.22 | 32.994 | 24.379 | 354.2 | 0.035 | 5.80 | 101.2 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 10 | 219 |
| 20 ISL | 15.10 D | 15.10 | 32.996 D | 24.407 | 351.8 | 0.071 | 5.82 D | 101.3 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.17 | 0.06 | 20 | |
| 25 | 15.10 | 15.10 | 32.997 | 24.408 | 351.9 | 0.088 | 5.79 | 100.7 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.17 | 0.07 | 25 | 218 |
| 30 ISL | 15.09 D | 15.09 | 32.996 D | 24.410 | 351.9 | 0.106 | 5.79 D | 100.7 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.17 | 0.07 | 30 | |
| 40 | 15.09 | 15.08 | 32.996 | 24.410 | 352.2 | 0.141 | 5.79 | 100.7 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 40 | 217 |
| 50 | 15.09 | 15.08 | 32.995 | 24.410 | 352.5 | 0.176 | 5.80 | 100.9 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.21 | 0.07 | 50 | 216 |
| 62 | 15.09 | 15.08 | 32.997 | 24.411 | 352.7 | 0.219 | 5.79 | 100.7 | 2.1 | 0.29 | 0.0 | 0.00 | 0.00 | 0.22 | 0.06 | 62 | 215 |
| 75 | 15.09 | 15.08 | 32.996 | 24.411 | 353.1 | 0.265 | 5.77 | 100.4 | 2.1 | 0.28 | 0.0 | 0.00 | 0.00 | 0.22 | 0.06 | 75 | 214 |
| 87 | 13.96 | 13.95 | 33.027 | 24.674 | 328.2 | 0.305 | 5.78 | 98.3 | 2.9 | 0.37 | 0.5 | 0.15 | 0.06 | 0.20 | 0.14 | 87 | 213 |
| 100 ISL | 13.04 D | 13.03 | 33.189 D | 24.986 | 298.8 | 0.346 | 5.60 D | 93.5 | 3.7 | 0.41 | 1.9 | 0.05 | 0.01 | 0.13 | 0.12 | 100 | |
| 101 | 13.04 | 13.03 | 33.200 | 24.994 | 298.0 | 0.349 | 5.60 | 93.5 | 3.8 | 0.42 | 2.1 | 0.04 | 0.00 | 0.12 | 0.12 | 101 | 212 |
| 112 | 12.03 | 12.02 | 33.096 | 25.108 | 287.3 | 0.381 | 5.44 | 88.9 | 5.3 | 0.59 | 4.6 | 0.01 | 0.00 | 0.08 | 0.07 | 112 | 211 |
| 124 | 11.10 | 11.08 | 33.092 | 25.275 | 271.4 | 0.415 | 5.23 | 83.7 | 7.9 | 0.83 | 8.2 | 0.00 | 0.00 | 0.05 | 0.04 | 125 | 210 |
| 125 ISL | 11.03 D | 11.01 | 33.099 D | 25.293 | 269.8 | 0.418 | 5.23 D | 83.6 | 8.2 | 0.85 | 8.5 | 0.00 | 0.00 | 0.05 | 0.04 | 126 | |
| 140 | 10.12 | 10.10 | 33.192 | 25.523 | 248.0 | 0.456 | 4.88 | 76.5 | 12.6 | 1.13 | 13.3 | 0.00 | 0.00 | 0.02 | 0.02 | 141 | 209 |
| 150 ISL | 9.60 D | 9.58 | 33.311 D | 25.703 | 231.0 | 0.480 | 4.56 D | 70.7 | 16.2 | 1.32 | 16.5 | 0.00 | 0.00 | 0.01 | 0.02 | 151 | |
| 168 | 9.17 | 9.15 | 33.526 | 25.940 | 208.7 | 0.520 | 3.96 | 60.9 | 22.1 | 1.62 | 21.4 | 0.00 | 0.00 | 0.00 | 0.01 | 169 | 208 |
| 200 | 8.90 | 8.88 | 33.744 | 26.154 | 189.0 | 0.584 | 3.33 | 51.0 | 27.5 | 1.84 | 25.0 | 0.00 | 0.00 | 0.00 | 0.01 | 201 | 207 |
| 231 | 8.38 | 8.36 | 33.949 | 26.395 | 166.5 | 0.639 | 2.77 | 42.0 | 34.4 | 2.02 | 28.1 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.06 D | 8.03 | 33.982 D | 26.469 | 159.7 | 0.670 | 2.67 D | 40.2 | 38.2 | 2.12 | 29.5 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.72 | 7.69 | 34.002 | 26.535 | 153.6 | 0.701 | 2.35 | 35.1 | 42.0 | 2.22 | 30.8 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.28 D | 7.25 | 34.019 D | 26.611 | 146.6 | 0.746 | 2.06 D | 30.5 | 47.9 | 2.37 | 32.7 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.01 | 6.98 | 34.029 | 26.657 | 142.5 | 0.776 | 1.85 | 27.2 | 52.0 | 2.47 | 34.0 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 6.37 | 6.34 | 34.069 | 26.774 | 131.8 | 0.859 | 1.29 | 18.7 | 63.0 | 2.74 | 37.3 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.12 D | 6.08 | 34.072 D | 26.809 | 128.6 | 0.883 | 1.21 D | 17.4 | 66.9 | 2.80 | 38.2 | 0.00 | 0.00 | | | 402 | |
| 441 | 5.71 | 5.67 | 34.108 | 26.889 | 121.2 | 0.935 | 0.91 | 13.0 | 74.6 | 2.90 | 39.8 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.59 D | 5.55 | 34.201 D | 26.977 | 113.5 | 1.004 | 0.50 D | 7.1 | 81.1 | 3.08 | 40.9 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.57 | 5.53 | 34.221 | 26.996 | 111.9 | 1.022 | 0.43 | 6.1 | 82.9 | 3.13 | 41.2 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 59.5 N | 122 23.4 W | 22/01/11 | 0741 UTC | 4087 m | 270 12 kn | | | 1016.4 mb | 14.5 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.69 | 15.69 | 33.143 | 24.390 | 352.9 | 0.000 | 5.71 | 100.6 | 2.3 | 0.29 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 0 | |
| 2 | 15.69 | 15.69 | 33.143 | 24.390 | 352.9 | 0.007 | 5.71 | 100.6 | 2.3 | 0.29 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 2 | 221 |
| 10 | 15.71 | 15.71 | 33.144 | 24.387 | 353.5 | 0.035 | 5.73 | 101.0 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 10 | 219 |
| 10 | 15.71 | 15.71 | 33.143 | 24.386 | 353.6 | 0.035 | | | | | | | | | | 10 | 220 |
| 20 ISL | 15.71 D | 15.71 | 33.145 D | 24.388 | 353.7 | 0.071 | 5.75 | D101.4 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.15 | 0.04 | 20 | |
| 25 | 15.70 | 15.70 | 33.144 | 24.389 | 353.7 | 0.088 | 5.72 | 100.8 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 25 | 218 |
| 30 ISL | 15.70 D | 15.70 | 33.145 D | 24.390 | 353.8 | 0.106 | 5.75 | D101.3 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 30 | |
| 40 | 15.70 | 15.69 | 33.146 | 24.391 | 354.0 | 0.141 | 5.74 | 101.2 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.16 | 0.06 | 40 | 217 |
| 50 ISL | 15.70 D | 15.69 | 33.148 D | 24.393 | 354.1 | 0.177 | 5.73 | D101.0 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 50 | |
| 51 | 15.70 | 15.69 | 33.152 | 24.396 | 353.8 | 0.180 | 5.72 | 100.8 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 51 | 216 |
| 62 | 15.70 | 15.69 | 33.149 | 24.394 | 354.4 | 0.219 | 5.70 | 100.5 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 62 | 215 |
| 75 | 15.71 | 15.70 | 33.151 | 24.394 | 354.8 | 0.265 | 5.70 | 100.5 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.20 | 0.06 | 75 | 214 |
| 88 | 15.69 | 15.68 | 33.153 | 24.401 | 354.6 | 0.312 | 5.70 | 100.4 | 2.4 | 0.28 | 0.0 | 0.00 | 0.00 | 0.19 | 0.07 | 88 | 213 |
| 100 ISL | 13.09 D | 13.08 | 33.037 D | 24.858 | 311.0 | 0.351 | 5.68 | D 94.8 | 3.7 | 0.43 | 1.5 | 0.02 | 0.00 | 0.24 | 0.16 | 100 | |
| 101 | 13.11 | 13.10 | 33.041 | 24.857 | 311.1 | 0.355 | 5.68 | 94.9 | 3.8 | 0.45 | 1.7 | 0.02 | 0.00 | 0.24 | 0.17 | 101 | 212 |
| 112 | 11.94 | 11.93 | 33.061 | 25.098 | 288.2 | 0.388 | 5.45 | 88.8 | 5.6 | 0.63 | 4.8 | 0.00 | 0.00 | 0.08 | 0.08 | 112 | 211 |
| 125 | 11.06 | 11.04 | 33.108 | 25.295 | 269.6 | 0.424 | 5.20 | 83.2 | 8.5 | 0.89 | 8.8 | 0.00 | 0.00 | 0.05 | 0.05 | 126 | 210 |
| 140 | 10.24 | 10.22 | 33.287 | 25.577 | 242.9 | 0.462 | 4.81 | 75.7 | 12.8 | 1.17 | 13.5 | 0.00 | 0.00 | 0.02 | 0.03 | 141 | 209 |
| 150 ISL | 9.55 D | 9.53 | 33.361 D | 25.750 | 226.5 | 0.486 | 4.52 | D 70.1 | 15.6 | 1.31 | 16.0 | 0.00 | 0.00 | 0.02 | 0.03 | 151 | |
| 169 | 9.42 | 9.40 | 33.648 | 25.996 | 203.6 | 0.527 | 4.04 | 62.6 | 20.8 | 1.53 | 20.1 | 0.00 | 0.00 | 0.01 | 0.02 | 170 | 208 |
| 199 | 8.81 | 8.79 | 33.850 | 26.251 | 179.7 | 0.584 | 3.27 | 50.0 | 28.8 | 1.85 | 25.3 | 0.00 | 0.00 | 0.00 | 0.02 | 200 | 207 |
| 200 ISL | 8.79 D | 8.77 | 33.869 D | 26.269 | 178.0 | 0.586 | 3.30 | D 50.5 | 28.9 | 1.85 | 25.4 | 0.00 | 0.00 | | | 201 | |
| 230 | 8.45 | 8.43 | 33.952 | 26.387 | 167.3 | 0.638 | 3.10 | 47.1 | 32.2 | 1.91 | 26.4 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.10 D | 8.07 | 33.986 D | 26.467 | 160.0 | 0.670 | 2.84 | D 42.8 | 35.9 | 2.00 | 27.8 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.82 | 7.79 | 33.998 | 26.518 | 155.3 | 0.702 | 2.62 | 39.2 | 40.2 | 2.12 | 29.4 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.33 D | 7.30 | 34.019 D | 26.604 | 147.3 | 0.747 | 2.23 | D 33.0 | 46.2 | 2.29 | 31.7 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.09 | 7.06 | 34.024 | 26.642 | 144.0 | 0.778 | 2.02 | 29.7 | 50.5 | 2.41 | 33.2 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 6.40 | 6.37 | 34.089 | 26.786 | 130.7 | 0.860 | 1.19 | 17.2 | 63.6 | 2.74 | 37.3 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.29 D | 6.25 | 34.096 D | 26.806 | 129.0 | 0.885 | 1.14 | D 16.5 | 66.4 | 2.80 | 38.0 | 0.00 | 0.00 | | | 402 | |
| 441 | 5.99 | 5.95 | 34.125 | 26.867 | 123.5 | 0.937 | 0.89 | 12.8 | 71.6 | 2.90 | 39.1 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.51 D | 5.47 | 34.179 D | 26.969 | 114.1 | 1.007 | 0.59 | D 8.4 | 80.4 | 3.05 | 40.7 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.46 | 5.42 | 34.188 | 26.983 | 113.0 | 1.026 | 0.52 | 7.4 | 83.0 | 3.09 | 41.1 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 39.2 N | 123 4.3 W | 22/01/11 | 1342 UTC | 4131 m | 240 10 kn | | | 1015.3 mb | 14.1 C | 12.7 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.26 | 15.26 | 33.072 | 24.430 | 349.0 | 0.000 | 5.77 | 100.8 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 0 | |
| 2 | 15.26 | 15.26 | 33.072 | 24.430 | 349.1 | 0.007 | 5.77 | 100.8 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 2 | 224 |
| 10 | 15.26 | 15.26 | 33.068 | 24.427 | 349.6 | 0.035 | 5.78 | 100.9 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.16 | 0.04 | 10 | 222 |
| 10 | 15.26 | 15.26 | 33.067 | 24.427 | 349.7 | 0.035 | | | | | | | | | | 10 | 223 |
| 13 | 15.25 | 15.25 | 33.069 | 24.430 | 349.4 | 0.045 | 5.77 | 100.7 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 13 | 221 |
| 16 | 15.26 | 15.26 | 33.069 | 24.428 | 349.7 | 0.056 | 5.79 | 101.1 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 16 | 220 |
| 20 ISL | 15.27 D | 15.27 | 33.068 D | 24.426 | 350.1 | 0.070 | 5.78 | D101.0 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 20 | |
| 22 | 15.26 | 15.26 | 33.067 | 24.427 | 350.0 | 0.077 | 5.77 | 100.8 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 22 | 219 |
| 30 ISL | 15.39 D | 15.39 | 33.114 D | 24.435 | 349.5 | 0.105 | 5.76 | D100.9 | 2.2 | 0.25 | 0.0 | 0.00 | 0.00 | 0.18 | 0.07 | 30 | |
| 32 | 15.39 | 15.39 | 33.117 | 24.437 | 349.3 | 0.112 | 5.76 | 100.9 | 2.3 | 0.25 | 0.0 | 0.00 | 0.00 | 0.19 | 0.07 | 32 | 218 |
| 45 | 15.37 | 15.36 | 33.116 | 24.441 | 349.3 | 0.157 | 5.75 | 100.7 | 2.3 | 0.25 | 0.0 | 0.00 | 0.00 | 0.23 | 0.07 | 45 | 217 |
| 50 ISL | 15.36 D | 15.35 | 33.111 D | 24.440 | 349.6 | 0.175 | 5.75 | D100.6 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.24 | 0.08 | 50 | |
| 56 | 15.35 | 15.34 | 33.116 | 24.446 | 349.2 | 0.196 | 5.75 | 100.6 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.25 | 0.08 | 56 | 216 |
| 68 | 15.37 | 15.36 | 33.125 | 24.449 | 349.3 | 0.238 | 5.75 | 100.7 | 2.2 | 0.25 | 0.0 | 0.00 | 0.00 | 0.27 | 0.07 | 68 | 215 |
| 75 | 13.81 | 13.80 | 33.000 | 24.684 | 327.0 | 0.261 | 5.86 | 99.3 | 3.0 | 0.35 | 0.7 | 0.10 | 0.14 | 0.30 | 0.22 | 75 | 214 |
| 84 | 13.58 | 13.57 | 33.081 | 24.793 | 316.7 | 0.290 | 5.79 | 97.7 | 3.2 | 0.36 | 0.9 | 0.11 | 0.00 | 0.24 | 0.18 | 84 | 213 |
| 95 | 13.35 | 13.34 | 33.251 | 24.972 | 300.1 | 0.324 | 5.68 | 95.5 | 3.5 | 0.33 | 1.2 | 0.05 | 0.00 | 0.20 | 0.17 | 95 | 212 |
| 100 ISL | 12.70 D | 12.69 | 33.187 D | 25.051 | 292.6 | 0.339 | 5.67 | D 94.0 | 3.8 | 0.37 | 1.8 | 0.03 | 0.00 | 0.17 | 0.15 | 100 | |
| 110 | 12.19 | 12.18 | 33.163 | 25.130 | 285.2 | 0.368 | 5.48 | 89.9 | 5.0 | 0.52 | 3.9 | 0.01 | 0.00 | 0.11 | 0.11 | 110 | 211 |
| 125 ISL | 10.99 D | 10.97 | 33.205 D | 25.383 | 261.2 | 0.409 | 5.15 | D 82.3 | 8.6 | 0.83 | 8.8 | 0.00 | 0.00 | 0.05 | 0.06 | 126 | |
| 126 | 10.93 | 10.91 | 33.166 | 25.363 | 263.1 | 0.412 | 5.15 | 82.2 | 8.9 | 0.85 | 9.1 | 0.00 | 0.00 | 0.05 | 0.06 | 127 | 210 |
| 145 | 10.20 | 10.18 | 33.396 | 25.669 | 234.3 | 0.459 | 4.79 | 75.3 | 13.0 | 1.09 | 13.3 | 0.00 | 0.00 | 0.02 | 0.03 | 146 | 209 |
| 150 ISL | 10.13 D | 10.11 | 33.425 D | 25.704 | 231.1 | 0.470 | 4.76 | D 74.8 | 14.8 | 1.20 | 15.0 | 0.00 | 0.00 | 0.01 | 0.03 | 151 | |
| 171 | 9.38 | 9.36 | 33.575 | 25.945 | 208.4 | 0.517 | 3.79 | 58.6 | 22.5 | 1.66 | 21.7 | 0.00 | 0.00 | 0.00 | 0.03 | 172 | 208 |
| 200 ISL | 8.85 D | 8.83 | 33.854 D | 26.248 | 180.1 | 0.573 | 3.33 | D 51.0 | 28.6 | 1.84 | 24.9 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 8.86 | 8.84 | 33.855 | 26.247 | 180.2 | 0.575 | 3.28 | 50.2 | 28.8 | 1.84 | 25.0 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 231 | 8.49 | 8.47 | 33.951 | 26.380 | 168.0 | 0.627 | 2.45 | 37.2 | 35.3 | 2.15 | 29.1 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.09 D | 8.06 | 33.970 D | 26.456 | 161.0 | 0.658 | 2.55 | D 38.4 | 38.7 | 2.23 | 30.5 | 0.00 | 0.00 | | | 251 | |
| 272 | 7.78 | 7.75 | 34.004 | 26.528 | 154.4 | 0.693 | 2.14 | 32.0 | 42.4 | 2.29 | 31.5 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.39 D | 7.36 | 34.031 D | 26.605 | 147.3 | 0.735 | 1.93 | D 28.6 | 47.6 | 2.40 | 33.1 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.18 | 7.15 | 34.046 | 26.647 | 143.5 | 0.764 | 1.69 | 24.9 | 51.2 | 2.48 | 34.1 | 0.00 | 0.00 | | | 322 | 204 |
| 382 | 6.65 | 6.62 | 34.079 | 26.745 | 134.8 | 0.850 | 1.26 | 18.4 | 59.6 | 2.65 | 36.6 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 6.41 D | 6.37 | 34.081 D | 26.779 | 131.7 | 0.874 | 1.19 | D 17.2 | 62.2 | 2.72 | 37.3 | 0.00 | 0.00 | | | 402 | |
| 440 | 6.18 | 6.14 | 34.113 | 26.834 | 126.8 | 0.926 | 0.95 | 13.7 | 68.1 | 2.86 | 38.6 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.74 D | 5.70 | 34.151 D | 26.920 | 119.1 | 1.000 | 0.70 | D 10.0 | 77.7 | 3.00 | 40.2 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.62 | 5.58 | 34.178 | 26.956 | 115.8 | 1.020 | 0.59 | 8.4 | 80.4 | 3.04 | 40.7 | 0.00 | 0.00 | | | 520 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 19.4 N | 123 44.5 W | 22/01/11 | 1946 UTC | 3872 m | 320 06 kn | 330 03 04 | 1 | 1016.7 mb | 15.5 C | 13.9 C | 32m | 2/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.76 | 15.76 | 33.179 | 24.402 | 351.7 | 0.000 | 5.71 | 100.8 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 0 | |
| 2 A | 15.76 | 15.76 | 33.179 | 24.402 | 351.8 | 0.007 | 5.71 | 100.8 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 2 | 222 |
| 10 ISL | 15.73 D | 15.73 | 33.185 D | 24.414 | 350.9 | 0.035 | 5.75 D | 101.4 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.13 | 0.05 | 10 | |
| 12 | 15.73 | 15.73 | 33.187 | 24.415 | 350.8 | 0.042 | 5.72 | 100.9 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.13 | 0.05 | 12 | 220 |
| 12 | 15.73 | 15.73 | 33.184 | 24.413 | 351.1 | 0.042 | | | | | | | | | | 12 | 221 |
| 20 ISL | 15.74 D | 15.74 | 33.189 D | 24.415 | 351.1 | 0.070 | 5.75 D | 101.5 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.13 | 0.04 | 20 | |
| 21 A | 15.74 | 15.74 | 33.189 | 24.415 | 351.1 | 0.074 | 5.73 | 101.1 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.13 | 0.04 | 21 | 219 |
| 24 A | 15.73 | 15.73 | 33.194 | 24.421 | 350.7 | 0.084 | 5.72 | 100.9 | 2.3 | 0.25 | 0.0 | 0.00 | 0.00 | 0.13 | 0.05 | 24 | 218 |
| 30 ISL | 15.72 D | 15.72 | 33.186 D | 24.417 | 351.2 | 0.105 | 5.75 D | 101.4 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.13 | 0.05 | 30 | |
| 34 A | 15.75 | 15.74 | 33.197 | 24.419 | 351.1 | 0.119 | 5.73 | 101.1 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.13 | 0.05 | 34 | 217 |
| 42 | 15.75 | 15.74 | 33.197 | 24.420 | 351.4 | 0.147 | 5.72 | 100.9 | 2.2 | 0.25 | 0.0 | 0.00 | 0.02 | 0.14 | 0.04 | 42 | 216 |
| 50 A | 15.74 | 15.73 | 33.197 | 24.422 | 351.4 | 0.176 | 5.76 | 101.6 | 2.3 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 50 | 215 |
| 69 | 15.83 | 15.82 | 33.220 | 24.420 | 352.2 | 0.242 | 5.71 | 100.9 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 69 | 214 |
| 75 ISL | 15.87 D | 15.86 | 33.230 D | 24.419 | 352.4 | 0.264 | 5.71 D | 101.0 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.17 | 0.06 | 75 | |
| 87 | 15.83 | 15.82 | 33.239 | 24.435 | 351.3 | 0.306 | 5.70 | 100.8 | 2.3 | 0.24 | 0.0 | 0.00 | 0.00 | 0.20 | 0.07 | 87 | 213 |
| 100 ISL | 14.56 D | 14.55 | 33.252 D | 24.723 | 324.1 | 0.350 | 5.77 D | 99.4 | 2.9 | 0.30 | 0.2 | 0.08 | 0.00 | 0.25 | 0.14 | 100 | |
| 101 A | 14.47 | 14.46 | 33.242 | 24.734 | 323.0 | 0.353 | 5.78 | 99.4 | 2.9 | 0.30 | 0.2 | 0.09 | 0.00 | 0.25 | 0.15 | 101 | 212 |
| 114 | 14.54 | 14.52 | 33.496 | 24.916 | 306.2 | 0.394 | 5.75 | 99.2 | 3.0 | 0.23 | 0.2 | 0.11 | 0.00 | 0.17 | 0.18 | 114 | 211 |
| 124 | 14.13 | 14.11 | 33.505 | 25.009 | 297.5 | 0.424 | 5.72 | 97.9 | 3.1 | 0.24 | 0.4 | 0.14 | 0.00 | 0.15 | 0.16 | 125 | 210 |
| 125 ISL | 14.09 D | 14.07 | 33.499 D | 25.013 | 297.1 | 0.427 | 5.72 D | 97.8 | 3.1 | 0.25 | 0.5 | 0.14 | 0.00 | 0.15 | 0.16 | 126 | |
| 145 | 12.05 | 12.03 | 33.295 | 25.260 | 273.7 | 0.484 | 5.42 | 88.7 | 5.3 | 0.54 | 4.5 | 0.00 | 0.00 | 0.07 | 0.08 | 146 | 209 |
| 150 ISL | 10.82 D | 10.80 | 33.199 D | 25.409 | 259.3 | 0.497 | 5.19 D | 82.6 | 6.5 | 0.64 | 6.1 | 0.00 | 0.00 | 0.06 | 0.07 | 151 | |
| 170 | 10.35 | 10.33 | 33.442 | 25.680 | 233.9 | 0.547 | 4.83 | 76.2 | 12.4 | 1.07 | 13.0 | 0.00 | 0.00 | 0.02 | 0.03 | 171 | 208 |
| 200 | 9.30 | 9.28 | 33.754 | 26.098 | 194.4 | 0.611 | 4.08 | 63.0 | 21.9 | 1.51 | 20.3 | 0.00 | 0.00 | 0.00 | 0.01 | 201 | 207 |
| 229 | 8.75 | 8.73 | 33.910 | 26.308 | 174.9 | 0.665 | 2.90 | 44.3 | 31.7 | 1.98 | 27.1 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 8.33 D | 8.30 | 33.967 D | 26.417 | 164.8 | 0.700 | 2.50 D | 37.8 | 36.1 | 2.14 | 29.3 | 0.00 | 0.00 | | | 251 | |
| 268 | 8.07 | 8.04 | 33.989 | 26.474 | 159.6 | 0.729 | 2.32 | 34.9 | 39.2 | 2.22 | 30.4 | 0.00 | 0.00 | | | 269 | 205 |
| 300 ISL | 7.55 D | 7.52 | 34.020 D | 26.574 | 150.3 | 0.779 | 2.13 D | 31.7 | 45.5 | 2.36 | 32.4 | 0.00 | 0.00 | | | 302 | |
| 322 | 7.22 | 7.19 | 34.028 | 26.627 | 145.4 | 0.811 | 1.85 | 27.3 | 49.8 | 2.44 | 33.6 | 0.00 | 0.00 | | | 324 | 204 |
| 381 | 6.55 | 6.52 | 34.064 | 26.747 | 134.6 | 0.894 | 1.32 | 19.2 | 60.6 | 2.71 | 36.8 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.39 D | 6.35 | 34.069 D | 26.772 | 132.3 | 0.919 | 1.24 D | 18.0 | 63.5 | 2.77 | 37.5 | 0.00 | 0.00 | | | 402 | |
| 440 | 6.01 | 5.97 | 34.088 | 26.836 | 126.5 | 0.971 | 1.04 | 14.9 | 69.6 | 2.87 | 38.8 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.59 D | 5.55 | 34.150 D | 26.937 | 117.3 | 1.044 | 0.70 D | 9.9 | 79.9 | 3.05 | 40.5 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.53 | 5.49 | 34.176 | 26.965 | 114.8 | 1.063 | 0.55 | 7.8 | 82.7 | 3.10 | 41.0 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.8 32.5

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 53.3 N | 118 26.7 W | 20/01/11 | 0539 UTC | 28 m | 040 05 kn | | | 1013.2 mb | 15.0 C | 13.2 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.71 | 14.71 | 33.155 | 24.613 | 331.6 | 0.000 | 7.15 | 123.6 | 1.1 | 0.18 | 0.0 | 0.00 | 0.06 | 2.14 | 0.42 | 0 | |
| 2 | 14.71 | 14.71 | 33.155 | 24.613 | 331.7 | 0.007 | 7.15 | 123.6 | 1.1 | 0.18 | 0.0 | 0.00 | 0.06 | 2.14 | 0.42 | 2 | 205 |
| 5 | 14.69 | 14.69 | 33.155 | 24.617 | 331.4 | 0.017 | 7.17 | 123.9 | 1.0 | 0.20 | 0.0 | 0.00 | 0.08 | 2.26 | 0.44 | 5 | 204 |
| 10 | 14.22 | 14.22 | 33.158 | 24.719 | 321.8 | 0.033 | 7.29 | 124.7 | 0.9 | 0.20 | 0.0 | 0.00 | 0.04 | 4.49 | 0.74 | 10 | 203 |
| 15 | 13.40 | 13.40 | 33.175 | 24.901 | 304.6 | 0.049 | 5.74 | 96.6 | 3.0 | 0.46 | 1.0 | 0.08 | 1.27 | 6.39 | 1.34 | 15 | 202 |
| 20 | 13.28 | 13.28 | 33.201 | 24.945 | 300.6 | 0.064 | 5.18 | 86.9 | 5.1 | 0.71 | 3.0 | 0.22 | 3.94 | 2.67 | 0.98 | 20 | 201 |

A) UNUSUAL PROFILES AND ODD NO3/PO4 RATIOS MAY BE DUE TO THE
PROXIMITY OF THIS STATION TO THE HYPERION WASTE-WATER OUTFALL.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 88.5 30.1

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 40.8 N | 118 5.0 W | 20/01/11 | 0153 UTC | 19 m | 080 06 kn | | | 1011.5 mb | 14.1 C | 13.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.48 | 14.48 | 32.887 | 24.455 | 346.7 | 0.000 | 7.07 | 121.4 | 0.5 | 0.10 | 0.0 | 0.00 | 0.02 | 4.18 | 0.29 | 0 | |
| 2 | 14.48 | 14.48 | 32.887 | 24.455 | 346.7 | 0.007 | 7.07 | 121.4 | 0.5 | 0.10 | 0.0 | 0.00 | 0.02 | 4.18 | 0.29 | 2 | 203 |
| 5 | 14.47 | 14.47 | 32.882 | 24.453 | 347.0 | 0.017 | 7.05 | 121.0 | 0.5 | 0.12 | 0.0 | 0.00 | 0.02 | 4.05 | 0.35 | 5 | 202 |
| 10 | 14.07 | 14.07 | 32.974 | 24.608 | 332.3 | 0.034 | 6.89 | 117.4 | 0.7 | 0.17 | 0.1 | 0.02 | 0.13 | 6.02 | 0.62 | 10 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 27.7

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.7 N | 117 45.0 W | 19/01/11 | 2311 UTC | 29 m | 100 03 kn | 160 01 03 | 2 | 1010.8 mb | 14.5 C | 13.5 C | | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.24 | 14.24 | 33.037 | 24.621 | 330.8 | 0.000 | 7.22 | 123.5 | 1.9 | 0.25 | 0.1 | 0.03 | 0.02 | 10.48 | 1.53 | 0 | |
| 2 | 14.24 | 14.24 | 33.037 | 24.621 | 330.9 | 0.007 | 7.22 | 123.5 | 1.9 | 0.25 | 0.1 | 0.03 | 0.02 | 10.48 | 1.53 | 2 | 205 |
| 5 | 14.24 | 14.24 | 33.038 | 24.622 | 330.9 | 0.017 | 7.30 | 124.9 | 1.9 | 0.25 | 0.1 | 0.03 | 0.01 | 10.81 | 1.02 | 5 | 204 |
| 10 | 13.99 | 13.99 | 33.172 | 24.778 | 316.2 | 0.033 | 6.32 | 107.6 | 2.7 | 0.47 | 1.2 | 0.15 | 0.16 | 8.23 | 0.76 | 10 | 203 |
| 15 | 13.56 | 13.56 | 33.236 | 24.916 | 303.2 | 0.048 | 5.42 | 91.5 | 4.9 | 0.81 | 3.8 | 0.47 | 0.93 | 2.72 | 1.13 | 15 | 202 |
| 20 | 13.23 | 13.23 | 33.287 | 25.021 | 293.3 | 0.063 | 4.87 | 81.7 | 7.6 | 1.10 | 6.8 | 0.69 | 1.99 | 0.87 | 0.67 | 20 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 28.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.0 N | 117 46.2 W | 19/01/11 | 2129 UTC | 76 m | 100 03 kn | 320 01 07 | 2 | 1010.9 mb | 14.5 C | 13.5 C | 05m | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.53 | 14.53 | 32.990 | 24.524 | 340.1 | 0.000 | 8.12 | 139.7 | 0.0 | 0.11 | 0.0 | 0.00 | 0.00 | 11.94 | 1.91 | 0 | |
| 2 | 14.53 | 14.53 | 32.990 | 24.524 | 340.1 | 0.007 | 8.12 | 139.7 | 0.0 | 0.11 | 0.0 | 0.00 | 0.00 | 11.94 | 1.91 | 2 | 208 |
| 5 | 14.53 | 14.53 | 32.993 | 24.526 | 340.0 | 0.017 | 8.25 | 141.9 | 0.0 | 0.09 | 0.0 | 0.00 | 0.02 | 15.05 | 1.79 | 5 | 207 |
| 10 | 14.05 | 14.05 | 33.060 | 24.679 | 325.6 | 0.034 | 6.44 | 109.7 | 1.0 | 0.23 | 0.0 | 0.01 | 0.01 | 8.35 | 2.03 | 10 | 206 |
| 20 | 13.78 | 13.78 | 33.303 | 24.922 | 302.7 | 0.065 | 5.48 | 93.0 | 3.9 | 0.59 | 3.3 | 0.37 | 0.77 | 0.81 | 0.55 | 20 | 205 |
| 30 | 11.54 | 11.54 | 33.315 | 25.367 | 260.6 | 0.093 | 4.53 | 73.3 | 10.4 | 1.16 | 12.7 | 0.38 | 0.02 | 0.37 | 0.22 | 30 | 204 |
| 40 | 10.88 | 10.88 | 33.402 | 25.554 | 243.0 | 0.118 | 4.12 | 65.8 | 15.0 | 1.40 | 17.1 | 0.04 | 0.02 | 0.19 | 0.20 | 40 | 203 |
| 50 | 10.48 | 10.47 | 33.522 | 25.718 | 227.7 | 0.142 | 3.57 | 56.6 | 19.6 | 1.61 | 19.9 | 0.10 | 0.02 | 0.09 | 0.17 | 50 | 202 |
| 65 | 10.24 | 10.23 | 33.594 | 25.815 | 218.7 | 0.175 | 3.38 | 53.3 | 21.3 | 1.74 | 21.2 | 0.04 | 0.00 | 0.04 | 0.14 | 65 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 30.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 25.1 N | 117 54.5 W | 19/01/11 | 1816 UTC | 615 m | 080 07 kn | 330 01 09 | 2 | 1012.8 mb | 14.5 C | 13.2 C | 11m | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.71 | 14.71 | 33.300 | 24.725 | 321.0 | 0.000 | 6.29 | 108.8 | 1.9 | 0.31 | 0.0 | 0.00 | 0.02 | 1.22 | 0.26 | 0 | |
| 2 A | 14.71 | 14.71 | 33.300 | 24.725 | 321.0 | 0.006 | 6.29 | 108.8 | 1.9 | 0.31 | 0.0 | 0.00 | 0.02 | 1.22 | 0.26 | 2 | 223 |
| 7 A | 14.59 | 14.59 | 33.321 | 24.767 | 317.2 | 0.022 | 6.36 | 109.7 | 1.8 | 0.30 | 0.0 | 0.00 | 0.00 | 1.18 | 0.43 | 7 | 222 |
| 9 A | 14.51 | 14.51 | 33.330 | 24.791 | 315.0 | 0.029 | 6.32 | 108.9 | 2.0 | 0.31 | 0.0 | 0.00 | 0.00 | 1.43 | 0.32 | 9 | 221 |
| 10 ISL | 14.44 D | 14.44 | 33.334 D | 24.809 | 313.3 | 0.032 | 6.30 | D108.4 | 2.1 | 0.32 | 0.0 | 0.00 | 0.01 | 1.52 | 0.36 | 10 | |
| 12 A | 14.41 | 14.41 | 33.334 | 24.815 | 312.7 | 0.038 | 6.20 | 106.6 | 2.2 | 0.33 | 0.1 | 0.01 | 0.02 | 1.61 | 0.48 | 12 | 220 |
| 17 A | 14.35 | 14.35 | 33.348 | 24.839 | 310.6 | 0.054 | 6.07 | 104.2 | 2.5 | 0.36 | 0.6 | 0.03 | 0.03 | 1.12 | 0.28 | 17 | 219 |
| 20 ISL | 14.29 D | 14.29 | 33.350 D | 24.853 | 309.4 | 0.063 | 6.03 | D103.4 | 2.6 | 0.38 | 0.9 | 0.04 | 0.05 | 1.05 | 0.24 | 20 | |
| 26 | 14.24 | 14.24 | 33.353 | 24.866 | 308.3 | 0.082 | 5.86 | 100.4 | 2.8 | 0.42 | 1.6 | 0.08 | 0.11 | 0.92 | 0.16 | 26 | 218 |
| 30 ISL | 13.97 D | 13.97 | 33.317 D | 24.895 | 305.7 | 0.094 | 5.88 | D100.2 | 3.1 | 0.46 | 2.1 | 0.12 | 0.20 | 0.79 | 0.24 | 30 | |
| 37 A | 13.78 | 13.77 | 33.321 | 24.937 | 301.8 | 0.115 | 5.62 | 95.4 | 3.6 | 0.54 | 2.9 | 0.19 | 0.35 | 0.61 | 0.36 | 37 | 217 |
| 43 | 12.41 | 12.40 | 33.296 | 25.190 | 277.8 | 0.132 | 4.93 | 81.3 | 7.8 | 0.92 | 9.1 | 0.25 | 0.00 | 0.57 | 0.22 | 43 | 216 |
| 50 ISL | 11.44 D | 11.43 | 33.344 D | 25.408 | 257.1 | 0.151 | 4.41 D | 71.3 | 11.9 | 1.23 | 14.3 | 0.08 | 0.00 | 0.28 | 0.19 | 50 | |
| 51 | 11.40 | 11.39 | 33.344 | 25.416 | 256.4 | 0.154 | 4.42 | 71.4 | 12.4 | 1.26 | 14.8 | 0.05 | 0.00 | 0.23 | 0.19 | 51 | 215 |
| 60 | 10.71 | 10.70 | 33.319 | 25.520 | 246.7 | 0.176 | 4.38 | 69.6 | 14.5 | 1.34 | 16.1 | 0.02 | 0.00 | 0.12 | 0.10 | 60 | 214 |
| 70 | 10.29 | 10.28 | 33.428 | 25.677 | 231.9 | 0.200 | 4.05 | 63.9 | 17.3 | 1.52 | 18.8 | 0.01 | 0.00 | 0.07 | 0.12 | 70 | 213 |
| 75 ISL | 10.13 D | 10.12 | 33.461 D | 25.730 | 227.0 | 0.212 | 4.03 D | 63.3 | 18.6 | 1.58 | 19.9 | 0.01 | 0.00 | 0.05 | 0.11 | 75 | |
| 86 | 10.02 | 10.01 | 33.597 | 25.855 | 215.3 | 0.236 | 3.52 | 55.2 | 21.2 | 1.69 | 21.8 | 0.00 | 0.00 | 0.03 | 0.07 | 86 | 212 |
| 100 | 9.69 | 9.68 | 33.726 | 26.011 | 200.7 | 0.265 | 3.16 | 49.3 | 24.5 | 1.81 | 23.7 | 0.00 | 0.00 | 0.02 | 0.08 | 101 | 211 |
| 119 | 9.42 | 9.41 | 33.829 | 26.136 | 189.2 | 0.302 | 2.92 | 45.3 | 27.1 | 1.87 | 25.1 | 0.00 | 0.00 | 0.01 | 0.07 | 120 | 210 |
| 125 ISL | 9.39 D | 9.38 | 33.851 D | 26.158 | 187.2 | 0.314 | 2.87 D | 44.5 | 27.9 | 1.90 | 25.5 | 0.00 | 0.00 | 0.01 | 0.06 | 126 | |
| 140 | 9.19 | 9.17 | 33.918 | 26.243 | 179.5 | 0.341 | 2.65 | 40.9 | 30.1 | 1.97 | 26.5 | 0.00 | 0.00 | 0.01 | 0.05 | 141 | 209 |
| 150 ISL | 9.06 D | 9.04 | 33.969 D | 26.304 | 173.9 | 0.359 | 2.60 D | 40.0 | 31.6 | 2.01 | 27.1 | 0.00 | 0.00 | 0.01 | 0.05 | 151 | |
| 170 | 8.87 | 8.85 | 34.032 | 26.384 | 166.6 | 0.393 | 2.28 | 35.0 | 34.5 | 2.09 | 28.2 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 200 ISL | 8.88 D | 8.86 | 34.144 D | 26.470 | 159.0 | 0.442 | 1.80 D | 27.6 | 38.0 | 2.24 | 29.2 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | |
| 201 | 8.90 | 8.88 | 34.135 | 26.460 | 160.0 | 0.443 | 1.81 | 27.8 | 38.1 | 2.25 | 29.2 | 0.00 | 0.00 | 0.00 | 0.05 | 202 | 207 |
| 231 | 8.63 | 8.61 | 34.177 | 26.536 | 153.4 | 0.490 | 1.49 | 22.7 | 41.9 | 2.36 | 30.6 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.50 D | 8.47 | 34.190 D | 26.566 | 150.8 | 0.519 | 1.39 D | 21.2 | 43.5 | 2.40 | 31.3 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.28 | 8.25 | 34.182 | 26.594 | 148.4 | 0.551 | 1.33 | 20.1 | 45.2 | 2.44 | 31.9 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 8.14 D | 8.11 | 34.227 D | 26.651 | 143.5 | 0.593 | 1.07 D | 16.2 | 48.2 | 2.55 | 32.8 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.91 | 7.88 | 34.217 | 26.677 | 141.3 | 0.623 | 1.03 | 15.5 | 50.6 | 2.63 | 33.5 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 7.44 | 7.40 | 34.252 | 26.773 | 132.8 | 0.705 | 0.68 | 10.1 | 58.0 | 2.76 | 35.7 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 7.29 D | 7.25 | 34.258 D | 26.800 | 130.6 | 0.730 | 0.60 D | 8.9 | 60.5 | 2.83 | 36.2 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.96 | 6.92 | 34.272 | 26.857 | 125.5 | 0.783 | 0.47 | 6.9 | 65.9 | 2.96 | 37.2 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.49 D | 6.44 | 34.292 D | 26.936 | 118.5 | 0.855 | 0.36 D | 5.2 | 72.8 | 2.98 | 38.5 | 0.00 | 0.00 | | | 503 | |
| 516 | 6.39 | 6.34 | 34.298 | 26.954 | 116.9 | 0.873 | 0.31 | 4.5 | 74.7 | 2.98 | 38.8 | 0.00 | 0.00 | | | 520 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 15.4 N | 118 14.6 W | 19/01/11 | 1411 UTC | 261 m | 110 03 kn | | | 1011.3 mb | 14.0 C | 13.4 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.79 | 14.79 | 33.302 | 24.709 | 322.5 | 0.000 | 6.36 | 110.2 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.88 | 0.27 | 0 | |
| 2 | 14.79 | 14.79 | 33.302 | 24.709 | 322.5 | 0.006 | 6.36 | 110.2 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.88 | 0.27 | 2 | 217 |
| 10 | 14.44 | 14.44 | 33.310 | 24.790 | 315.0 | 0.032 | 6.40 | 110.1 | 2.4 | 0.29 | 0.0 | 0.00 | 0.00 | 0.59 | 0.35 | 10 | 215 |
| 10 | 14.45 | 14.45 | 33.306 | 24.785 | 315.5 | 0.032 | | | | | | | | | | 10 | 216 |
| 19 | 14.00 | 14.00 | 33.306 | 24.879 | 306.8 | 0.060 | 6.10 | 104.0 | 2.0 | 0.36 | 0.2 | 0.02 | 0.08 | 2.71 | 0.87 | 19 | 214 |
| 20 ISL | 13.98 D | 13.98 | 33.315 D | 24.891 | 305.8 | 0.063 | 5.93 | D101.1 | 2.1 | 0.37 | 0.3 | 0.03 | 0.11 | 2.60 | 0.84 | 20 | |
| 30 | 13.73 | 13.73 | 33.336 | 24.959 | 299.6 | 0.093 | 5.64 | 95.6 | 4.0 | 0.56 | 3.2 | 0.15 | 0.35 | 0.71 | 0.39 | 30 | 213 |
| 40 | 12.41 | 12.40 | 33.338 | 25.222 | 274.7 | 0.122 | 4.78 | 78.8 | 8.9 | 1.03 | 10.6 | 0.18 | 0.00 | 0.25 | 0.27 | 40 | 212 |
| 49 | 11.76 | 11.75 | 33.385 | 25.381 | 259.7 | 0.146 | 4.46 | 72.6 | 11.7 | 1.19 | 13.6 | 0.11 | 0.00 | 0.17 | 0.20 | 49 | 211 |
| 50 ISL | 11.69 D | 11.68 | 33.375 D | 25.387 | 259.2 | 0.149 | 4.44 | D 72.1 | 11.9 | 1.21 | 13.9 | 0.10 | 0.00 | 0.17 | 0.20 | 50 | |
| 60 | 11.13 | 11.12 | 33.399 | 25.507 | 247.9 | 0.174 | 4.19 | 67.3 | 14.3 | 1.36 | 16.4 | 0.03 | 0.00 | 0.14 | 0.18 | 60 | 210 |
| 71 | 10.55 | 10.54 | 33.485 | 25.677 | 232.0 | 0.200 | 3.86 | 61.2 | 17.8 | 1.53 | 19.0 | 0.01 | 0.00 | 0.07 | 0.15 | 71 | 209 |
| 75 ISL | 10.40 D | 10.39 | 33.527 D | 25.736 | 226.5 | 0.210 | 3.73 | D 59.0 | 18.8 | 1.57 | 19.7 | 0.01 | 0.00 | 0.05 | 0.13 | 75 | |
| 85 | 10.23 | 10.22 | 33.588 | 25.813 | 219.4 | 0.232 | 3.48 | 54.8 | 21.0 | 1.67 | 21.0 | 0.01 | 0.00 | 0.03 | 0.10 | 85 | 208 |
| 100 ISL | 9.99 D | 9.98 | 33.711 D | 25.949 | 206.7 | 0.264 | 3.15 | D 49.4 | 23.8 | 1.82 | 22.6 | 0.00 | 0.00 | 0.01 | 0.09 | 101 | |
| 101 | 9.99 | 9.98 | 33.705 | 25.945 | 207.1 | 0.266 | 3.15 | 49.4 | 24.0 | 1.83 | 22.7 | 0.00 | 0.00 | 0.01 | 0.09 | 102 | 207 |
| 120 | 9.70 | 9.69 | 33.835 | 26.095 | 193.2 | 0.304 | 2.81 | 43.8 | 27.1 | 1.98 | 24.9 | 0.00 | 0.00 | 0.01 | 0.06 | 121 | 206 |
| 125 ISL | 9.67 D | 9.66 | 33.905 D | 26.155 | 187.7 | 0.313 | 2.64 | D 41.2 | 28.0 | 2.02 | 25.3 | 0.00 | 0.00 | 0.01 | 0.06 | 126 | |
| 140 | 9.71 | 9.69 | 34.001 | 26.224 | 181.5 | 0.341 | 2.28 | 35.6 | 30.5 | 2.13 | 26.2 | 0.00 | 0.00 | 0.01 | 0.06 | 141 | 205 |
| 150 ISL | 9.43 D | 9.41 | 33.990 D | 26.261 | 178.1 | 0.359 | 2.38 | D 36.9 | 31.7 | 2.17 | 26.9 | 0.00 | 0.00 | 0.01 | 0.05 | 151 | |
| 171 | 9.06 | 9.04 | 34.058 | 26.374 | 167.6 | 0.395 | 2.16 | 33.3 | 34.5 | 2.24 | 28.3 | 0.00 | 0.00 | 0.00 | 0.04 | 172 | 204 |
| 200 ISL | 8.67 D | 8.65 | 34.168 D | 26.522 | 154.1 | 0.442 | 1.52 | D 23.2 | 41.2 | 2.43 | 30.6 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | |
| 201 | 8.67 | 8.65 | 34.167 | 26.521 | 154.2 | 0.444 | 1.51 | 23.1 | 41.4 | 2.44 | 30.7 | 0.00 | 0.00 | 0.00 | 0.05 | 202 | 203 |
| 231 | 8.41 | 8.39 | 34.184 | 26.575 | 149.5 | 0.489 | 1.37 | 20.8 | 44.4 | 2.51 | 31.6 | 0.00 | 0.00 | | | 232 | 202 |
| 250 ISL | 8.33 D | 8.30 | 34.217 D | 26.614 | 146.2 | 0.517 | 1.07 | D 16.2 | 46.8 | 2.58 | 32.5 | 0.00 | 0.00 | | | 251 | |
| 252 | 8.33 | 8.30 | 34.217 | 26.614 | 146.3 | 0.520 | 1.06 | 16.1 | 47.1 | 2.59 | 32.6 | 0.00 | 0.00 | | | 254 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 37.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 11.1 N | 118 23.6 W | 19/01/11 | 1109 UTC | 1184 m | 290 06 kn | | | 1012.0 mb | 14.0 C | 13.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.80 | 14.80 | 33.318 | 24.719 | 321.5 | 0.000 | 6.04 | 104.7 | 1.1 | 0.29 | 0.0 | 0.00 | 0.00 | 0.70 | 0.20 | 0 | |
| 2 | 14.80 | 14.80 | 33.318 | 24.719 | 321.6 | 0.006 | 6.04 | 104.7 | 1.1 | 0.29 | 0.0 | 0.00 | 0.00 | 0.70 | 0.20 | 2 | 220 |
| 10 | 14.67 | 14.67 | 33.323 | 24.751 | 318.7 | 0.032 | 6.10 | 105.4 | 1.0 | 0.28 | 0.0 | 0.00 | 0.03 | 0.65 | 0.23 | 10 | 219 |
| 19 | 14.25 | 14.25 | 33.329 | 24.845 | 310.1 | 0.060 | 6.08 | 104.2 | 1.3 | 0.30 | 0.3 | 0.01 | 0.07 | 1.03 | 0.40 | 19 | 218 |
| 20 ISL | 14.20 D | 14.20 | 33.338 D | 24.863 | 308.4 | 0.063 | 6.07 | D103.9 | 1.4 | 0.31 | 0.4 | 0.01 | 0.08 | 1.00 | 0.39 | 20 | |
| 30 | 14.06 | 14.06 | 33.346 | 24.898 | 305.3 | 0.094 | 5.96 | 101.7 | 2.8 | 0.41 | 1.3 | 0.06 | 0.29 | 0.65 | 0.29 | 30 | 217 |
| 39 | 13.79 | 13.78 | 33.346 | 24.954 | 300.2 | 0.121 | 5.79 | 98.3 | 3.1 | 0.48 | 2.1 | 0.09 | 0.60 | 0.96 | 0.48 | 39 | 216 |
| 50 | 12.07 | 12.06 | 33.254 | 25.222 | 274.9 | 0.153 | 4.81 | 78.7 | 9.2 | 1.01 | 10.7 | 0.09 | 0.01 | 0.21 | 0.21 | 50 | 215 |
| 60 | 12.05 | 12.04 | 33.334 | 25.288 | 268.9 | 0.180 | 4.68 | 76.6 | 10.2 | 1.07 | 11.8 | 0.14 | 0.02 | 0.23 | 0.21 | 60 | 214 |
| 69 | 10.76 | 10.75 | 33.348 | 25.534 | 245.6 | 0.203 | 4.28 | 68.1 | 14.9 | 1.34 | 16.4 | 0.02 | 0.00 | 0.07 | 0.12 | 69 | 213 |
| 75 ISL | 10.66 D | 10.65 | 33.403 D | 25.594 | 240.0 | 0.218 | 4.16 | D 66.1 | 17.2 | 1.46 | 18.4 | 0.01 | 0.00 | 0.05 | 0.10 | 75 | |
| 85 | 10.42 | 10.41 | 33.534 | 25.738 | 226.5 | 0.241 | 3.56 | 56.3 | 19.9 | 1.60 | 20.4 | 0.00 | 0.00 | 0.03 | 0.08 | 85 | 212 |
| 100 ISL | 10.19 D | 10.18 | 33.630 D | 25.852 | 215.9 | 0.274 | 3.31 | D 52.1 | 22.0 | 1.70 | 21.7 | 0.01 | 0.00 | 0.02 | 0.08 | 100 | |
| 101 | 10.19 | 10.18 | 33.628 | 25.851 | 216.1 | 0.277 | 3.30 | 52.0 | 22.1 | 1.70 | 21.8 | 0.01 | 0.00 | 0.02 | 0.08 | 101 | 211 |
| 120 | 9.85 | 9.84 | 33.830 | 26.066 | 196.0 | 0.316 | 2.82 | 44.1 | 26.7 | 1.88 | 24.1 | 0.00 | 0.00 | 0.01 | 0.06 | 121 | 210 |
| 125 ISL | 9.78 D | 9.77 | 33.886 D | 26.122 | 190.8 | 0.325 | 2.76 | D 43.1 | 27.5 | 1.92 | 24.5 | 0.00 | 0.00 | 0.01 | 0.06 | 126 | |
| 140 | 9.63 | 9.61 | 33.925 | 26.177 | 185.8 | 0.354 | 2.52 | 39.3 | 29.3 | 2.00 | 25.7 | 0.00 | 0.00 | 0.01 | 0.06 | 141 | 209 |
| 150 ISL | 9.58 D | 9.56 | 33.992 D | 26.238 | 180.3 | 0.372 | 2.33 | D 36.3 | 30.6 | 2.04 | 26.4 | 0.00 | 0.00 | 0.01 | 0.05 | 151 | |
| 170 | 9.21 | 9.19 | 34.041 | 26.337 | 171.2 | 0.407 | 2.17 | 33.5 | 33.5 | 2.11 | 27.8 | 0.00 | 0.00 | 0.01 | 0.04 | 171 | 208 |
| 200 | 8.70 | 8.68 | 34.121 | 26.481 | 158.0 | 0.456 | 1.85 | 28.3 | 39.1 | 2.26 | 29.7 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | 207 |
| 230 | 8.38 | 8.36 | 34.145 | 26.549 | 152.0 | 0.503 | 1.66 | 25.2 | 43.2 | 2.37 | 31.0 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.37 D | 8.34 | 34.195 D | 26.590 | 148.5 | 0.533 | 1.30 | D 19.7 | 46.4 | 2.48 | 32.1 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.03 | 8.00 | 34.201 | 26.646 | 143.3 | 0.564 | 1.11 | 16.7 | 49.8 | 2.60 | 33.3 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.78 D | 7.75 | 34.229 D | 26.705 | 138.1 | 0.604 | 0.95 | D 14.2 | 53.9 | 2.70 | 34.5 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.58 | 7.55 | 34.233 | 26.738 | 135.3 | 0.632 | 0.83 | 12.4 | 56.5 | 2.75 | 35.1 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 7.12 | 7.08 | 34.253 | 26.819 | 128.3 | 0.712 | 0.62 | 9.1 | 62.8 | 2.89 | 36.7 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 7.10 D | 7.06 | 34.256 D | 26.824 | 128.1 | 0.737 | 0.63 | D 9.3 | 64.4 | 2.91 | 37.1 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.72 | 6.68 | 34.261 | 26.880 | 123.1 | 0.788 | 0.52 | 7.6 | 68.1 | 2.96 | 37.9 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.25 D | 6.21 | 34.300 D | 26.974 | 114.7 | 0.858 | 0.37 | D 5.3 | 75.6 | 3.07 | 39.5 | 0.00 | 0.02 | | | 503 | |
| 518 | 6.16 | 6.11 | 34.310 | 26.993 | 113.0 | 0.879 | 0.30 | 4.3 | 77.9 | 3.10 | 40.0 | 0.00 | 0.03 | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 55.2 N | 118 56.1 W | 19/01/11 | 0449 UTC | 1701 m | 060 02 kn | | | 1011.4 mb | 15.2 C | 14.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.57 | 13.57 | 33.387 | 25.030 | 291.9 | 0.000 | 6.17 | 104.3 | | | | | | 1.22 | 0.27 | 0 | |
| 2 | 13.57 | 13.57 | 33.387 | 25.030 | 292.0 | 0.006 | 6.17 | 104.3 | | | | | | 1.22 | 0.27 | 2 | 221 |
| 10 | 12.78 | 12.78 | 33.403 | 25.200 | 276.0 | 0.029 | 6.21 | 103.3 | 4.4 | 0.64 | 5.2 | 0.20 | 0.08 | 2.19 | 0.57 | 10 | 219 |
| 10 | 12.80 | 12.80 | 33.398 | 25.192 | 276.7 | 0.029 | | | | | | | | | | 10 | 220 |
| 19 | 12.22 | 12.22 | 33.396 | 25.303 | 266.4 | 0.053 | 5.66 | 93.0 | 8.1 | 0.91 | 8.4 | 0.40 | 0.15 | 1.25 | 0.40 | 19 | 218 |
| 20 ISL | 12.10 D | 12.10 | 33.403 D | 25.331 | 263.8 | 0.056 | 5.58 D | 91.5 | 8.5 | 0.94 | 8.9 | 0.40 | 0.14 | 1.16 | 0.39 | 20 | |
| 30 | 11.49 | 11.49 | 33.440 | 25.474 | 250.5 | 0.081 | 4.73 | 76.6 | 12.6 | 1.23 | 13.6 | 0.29 | 0.00 | 0.51 | 0.33 | 30 | 217 |
| 40 | 11.13 | 11.13 | 33.480 | 25.570 | 241.5 | 0.106 | 4.31 | 69.2 | 15.2 | 1.39 | 16.0 | 0.19 | 0.00 | 0.30 | 0.33 | 40 | 216 |
| 50 | 10.76 | 10.75 | 33.557 | 25.696 | 229.7 | 0.130 | 3.76 | 59.9 | 18.8 | 1.61 | 19.2 | 0.06 | 0.00 | 0.18 | 0.20 | 50 | 215 |
| 60 | 10.43 | 10.42 | 33.611 | 25.796 | 220.5 | 0.152 | 3.45 | 54.6 | 21.2 | 1.72 | 21.0 | 0.03 | 0.00 | 0.09 | 0.18 | 60 | 214 |
| 70 | 10.03 | 10.02 | 33.704 | 25.937 | 207.2 | 0.173 | 3.06 | 48.1 | 24.6 | 1.88 | 23.4 | 0.01 | 0.00 | 0.05 | 0.58 | 70 | 213 |
| 75 ISL | 9.99 D | 9.98 | 33.708 D | 25.947 | 206.4 | 0.184 | 3.08 D | 48.3 | 25.4 | 1.92 | 24.0 | 0.01 | 0.00 | 0.04 | 0.49 | 75 | |
| 85 | 9.89 | 9.88 | 33.766 | 26.009 | 200.7 | 0.204 | 2.80 | 43.9 | 26.3 | 1.97 | 24.6 | 0.01 | 0.00 | 0.03 | 0.16 | 85 | 212 |
| 100 ISL | 9.70 D | 9.69 | 33.853 D | 26.109 | 191.5 | 0.234 | 2.57 D | 40.1 | 28.4 | 2.05 | 25.7 | 0.01 | 0.00 | 0.01 | 0.12 | 101 | |
| 101 | 9.71 | 9.70 | 33.851 | 26.106 | 191.8 | 0.235 | 2.54 | 39.6 | 28.6 | 2.06 | 25.8 | 0.01 | 0.00 | 0.01 | 0.12 | 102 | 211 |
| 120 | 9.42 | 9.41 | 33.974 | 26.250 | 178.5 | 0.271 | 2.23 | 34.6 | 31.8 | 2.18 | 27.4 | 0.00 | 0.00 | 0.01 | 0.10 | 121 | 210 |
| 125 ISL | 9.34 D | 9.33 | 34.017 D | 26.296 | 174.1 | 0.279 | 2.19 D | 33.9 | 32.6 | 2.21 | 27.8 | 0.00 | 0.00 | 0.01 | 0.09 | 126 | |
| 140 | 9.22 | 9.20 | 34.054 | 26.345 | 169.8 | 0.305 | 1.91 | 29.5 | 34.9 | 2.29 | 28.7 | 0.00 | 0.00 | 0.01 | 0.08 | 141 | 209 |
| 150 ISL | 9.04 D | 9.02 | 34.082 D | 26.396 | 165.2 | 0.322 | 1.91 D | 29.4 | 36.3 | 2.34 | 29.3 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 171 | 8.86 | 8.84 | 34.132 | 26.464 | 159.1 | 0.356 | 1.62 | 24.8 | 39.1 | 2.43 | 30.4 | 0.00 | 0.00 | 0.01 | 0.06 | 172 | 208 |
| 200 | 8.51 | 8.49 | 34.164 | 26.544 | 151.9 | 0.401 | 1.43 | 21.8 | 43.0 | 2.54 | 31.6 | 0.00 | 0.00 | 0.01 | 0.06 | 201 | 207 |
| 230 | 8.27 | 8.25 | 34.184 | 26.596 | 147.4 | 0.446 | 1.26 | 19.1 | 46.1 | 2.60 | 32.5 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.16 D | 8.13 | 34.207 D | 26.631 | 144.4 | 0.475 | 1.11 D | 16.8 | 48.2 | 2.67 | 33.2 | 0.00 | 0.00 | | | 252 | |
| 270 | 8.05 | 8.02 | 34.226 | 26.663 | 141.8 | 0.504 | 0.93 | 14.0 | 50.3 | 2.73 | 33.8 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.80 D | 7.77 | 34.239 D | 26.710 | 137.7 | 0.546 | 0.83 D | 12.4 | 53.4 | 2.78 | 34.6 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.68 | 7.65 | 34.244 | 26.732 | 135.9 | 0.573 | 0.74 | 11.1 | 55.5 | 2.81 | 35.1 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 7.10 | 7.06 | 34.265 | 26.831 | 127.1 | 0.653 | 0.54 | 8.0 | 63.2 | 2.98 | 37.0 | 0.00 | 0.00 | | | 384 | 203 |
| 400 ISL | 7.00 D | 6.96 | 34.266 D | 26.846 | 125.9 | 0.677 | 0.52 D | 7.6 | 65.1 | 3.00 | 37.4 | 0.00 | 0.01 | | | 403 | |
| 440 | 6.75 | 6.71 | 34.277 | 26.889 | 122.3 | 0.727 | 0.43 | 6.3 | 68.8 | 3.02 | 38.0 | 0.00 | 0.03 | | | 443 | 202 |
| 500 ISL | 6.28 D | 6.24 | 34.303 D | 26.972 | 114.8 | 0.798 | 0.33 D | 4.8 | 75.6 | 3.11 | 39.3 | 0.00 | 0.02 | | | 503 | |
| 515 | 6.23 | 6.18 | 34.304 | 26.979 | 114.3 | 0.815 | 0.30 | 4.3 | 77.3 | 3.13 | 39.6 | 0.00 | 0.02 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 53.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 39.1 N | 119 28.9 W | 18/01/11 | 2305 UTC | 1319 m | 240 06 kn | 310 04 05 | 0 | 1011.0 mb | 14.8 C | 13.2 C | 14m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.19 | 13.19 | 33.324 | 25.057 | 289.3 | 0.000 | 6.05 | 101.4 | 6.1 | 0.66 | 5.7 | 0.23 | 0.07 | 0.85 | 0.25 | 0 | |
| 2 | 13.19 | 13.19 | 33.324 | 25.058 | 289.4 | 0.006 | 6.05 | 101.4 | 6.1 | 0.66 | 5.7 | 0.23 | 0.07 | 0.85 | 0.25 | 2 | 220 |
| 10 | 12.89 | 12.89 | 33.324 | 25.117 | 283.9 | 0.029 | 6.03 | 100.5 | 6.1 | 0.67 | 5.9 | 0.25 | 0.10 | 0.93 | 0.34 | 10 | 219 |
| 20 | 12.79 | 12.79 | 33.315 | 25.130 | 282.9 | 0.057 | 6.03 | 100.3 | 6.2 | 0.68 | 5.9 | 0.26 | 0.09 | 1.09 | 0.36 | 20 | 218 |
| 30 | 12.56 | 12.56 | 33.302 | 25.165 | 279.8 | 0.085 | 5.91 | 97.8 | 6.7 | 0.71 | 6.3 | 0.29 | 0.11 | 1.01 | 0.36 | 30 | 217 |
| 40 | 11.22 | 11.22 | 33.312 | 25.423 | 255.5 | 0.112 | 4.90 | 78.8 | 11.7 | 1.12 | 12.9 | 0.16 | 0.00 | 0.29 | 0.26 | 40 | 216 |
| 50 | 10.64 | 10.63 | 33.336 | 25.545 | 244.1 | 0.137 | 4.58 | 72.7 | 14.2 | 1.26 | 15.2 | 0.03 | 0.00 | 0.13 | 0.18 | 50 | 215 |
| 60 | 9.95 | 9.94 | 33.452 | 25.753 | 224.4 | 0.160 | 4.00 | 62.6 | 19.0 | 1.53 | 19.4 | 0.01 | 0.00 | 0.06 | 0.12 | 60 | 214 |
| 69 | 9.74 | 9.73 | 33.618 | 25.918 | 208.9 | 0.180 | 3.40 | 53.0 | 23.2 | 1.75 | 22.6 | 0.01 | 0.00 | 0.04 | 0.12 | 69 | 213 |
| 75 ISL | 9.71 D | 9.70 | 33.658 D | 25.954 | 205.6 | 0.192 | 3.32 D | 51.8 | 24.7 | 1.78 | 23.7 | 0.01 | 0.00 | 0.03 | 0.11 | 75 | |
| 86 | 9.50 | 9.49 | 33.766 | 26.073 | 194.5 | 0.214 | 3.04 | 47.2 | 26.3 | 1.84 | 24.6 | 0.00 | 0.00 | 0.01 | 0.10 | 86 | 212 |
| 100 | 9.37 | 9.36 | 33.822 | 26.139 | 188.6 | 0.241 | 2.87 | 44.4 | 27.8 | 1.88 | 25.3 | 0.00 | 0.00 | 0.01 | 0.13 | 101 | 211 |
| 120 | 9.09 | 9.08 | 33.964 | 26.295 | 174.1 | 0.277 | 2.38 | 36.7 | 32.1 | 2.04 | 27.5 | 0.00 | 0.00 | 0.01 | 0.09 | 121 | 210 |
| 125 ISL | 9.05 D | 9.04 | 33.989 D | 26.321 | 171.7 | 0.286 | 2.32 D | 35.7 | 33.0 | 2.08 | 27.8 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 140 | 8.93 | 8.91 | 34.049 | 26.387 | 165.7 | 0.311 | 2.05 | 31.5 | 35.4 | 2.17 | 28.6 | 0.00 | 0.00 | 0.00 | 0.05 | 141 | 209 |
| 150 ISL | 8.83 D | 8.81 | 34.075 D | 26.423 | 162.5 | 0.328 | 2.00 D | 30.6 | 36.4 | 2.19 | 28.9 | 0.00 | 0.00 | 0.00 | 0.05 | 151 | |
| 170 | 8.73 | 8.71 | 34.101 | 26.460 | 159.4 | 0.360 | 1.80 | 27.5 | 38.4 | 2.22 | 29.6 | 0.00 | 0.00 | 0.00 | 0.05 | 171 | 208 |
| 199 | 8.46 | 8.44 | 34.163 | 26.551 | 151.3 | 0.405 | 1.41 | 21.4 | 43.2 | 2.40 | 31.2 | 0.00 | 0.00 | 0.00 | 0.05 | 200 | 207 |
| 200 ISL | 8.42 D | 8.40 | 34.173 D | 26.564 | 149.9 | 0.407 | 1.37 D | 20.8 | 43.3 | 2.40 | 31.2 | 0.00 | 0.00 | | | 201 | |
| 230 | 8.20 | 8.18 | 34.185 | 26.608 | 146.3 | 0.451 | 1.19 | 18.0 | 46.7 | 2.49 | 32.4 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.01 D | 7.98 | 34.192 D | 26.642 | 143.4 | 0.480 | 1.12 D | 16.9 | 48.7 | 2.55 | 33.0 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.91 | 7.88 | 34.203 | 26.666 | 141.4 | 0.508 | 1.00 | 15.0 | 50.8 | 2.60 | 33.6 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.54 D | 7.51 | 34.228 D | 26.739 | 134.8 | 0.550 | 0.81 D | 12.1 | 54.9 | 2.67 | 34.6 | 0.00 | 0.00 | | | 302 | |
| 319 | 7.45 | 7.42 | 34.228 | 26.752 | 133.8 | 0.575 | 0.76 | 11.3 | 57.4 | 2.71 | 35.2 | 0.00 | 0.00 | | | 321 | 204 |
| 380 | 7.14 | 7.10 | 34.259 | 26.821 | 128.1 | 0.655 | 0.56 | 8.3 | 62.1 | 2.82 | 36.4 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.97 D | 6.93 | 34.268 D | 26.852 | 125.4 | 0.681 | 0.51 D | 7.5 | 64.3 | 2.85 | 36.8 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.67 | 6.63 | 34.276 | 26.899 | 121.3 | 0.731 | 0.42 | 6.1 | | | | | | | | 444 | 202 |
| 500 ISL | 6.18 D | 6.14 | 34.305 D | 26.986 | 113.4 | 0.800 | 0.32 D | 4.6 | 75.2 | 2.99 | 39.0 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.17 | 6.12 | 34.304 | 26.987 | 113.5 | 0.820 | 0.30 | 4.3 | 77.1 | 3.01 | 39.4 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 24.7 N | 119 58.3 W | 18/01/11 | 1717 UTC | 867 m | 260 10 kn | 260 06 05 | 0 | 1012.9 mb | 16.6 C | 14.8 C | 16m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.35 | 13.35 | 33.128 | 24.874 | 306.8 | 0.000 | 5.96 | 100.1 | 4.0 | 0.49 | 2.8 | 0.11 | 0.05 | 0.60 | 0.14 | 0 | |
| 3 A | 13.35 | 13.35 | 33.128 | 24.874 | 306.8 | 0.009 | 5.96 | 100.1 | 4.0 | 0.49 | 2.8 | 0.11 | 0.05 | 0.60 | 0.14 | 3 | 222 |
| 10 A | 13.32 | 13.32 | 33.130 | 24.882 | 306.3 | 0.031 | 5.94 | 99.7 | 4.1 | 0.47 | 2.8 | 0.11 | 0.05 | 0.61 | 0.17 | 10 | 221 |
| 13 A | 13.28 | 13.28 | 33.134 | 24.893 | 305.3 | 0.040 | 5.89 | 98.8 | 4.2 | 0.50 | 3.0 | 0.11 | 0.06 | 0.65 | 0.18 | 13 | 220 |
| 17 A | 13.14 | 13.14 | 33.163 | 24.943 | 300.6 | 0.052 | 5.93 | 99.2 | 4.6 | 0.55 | 3.7 | 0.13 | 0.13 | 0.87 | 0.22 | 17 | 219 |
| 20 ISL | 13.02 D | 13.02 | 33.192 D | 24.990 | 296.3 | 0.061 | 5.96 D | 99.5 | 5.0 | 0.59 | 4.3 | 0.15 | 0.17 | 1.09 | 0.26 | 20 | |
| 25 A | 12.84 | 12.84 | 33.228 | 25.053 | 290.4 | 0.076 | 5.93 | 98.6 | 5.6 | 0.64 | 5.3 | 0.17 | 0.22 | 1.40 | 0.33 | 25 | 218 |
| 30 ISL | 12.68 D | 12.68 | 33.263 D | 25.112 | 284.9 | 0.090 | 5.91 D | 98.0 | 6.0 | 0.68 | 5.9 | 0.18 | 0.25 | 1.43 | 0.33 | 30 | |
| 34 | 12.67 | 12.67 | 33.264 | 25.114 | 284.8 | 0.101 | 5.89 | 97.6 | 6.3 | 0.70 | 6.2 | 0.19 | 0.27 | 1.46 | 0.33 | 34 | 217 |
| 43 | 12.61 | 12.60 | 33.263 | 25.125 | 284.0 | 0.127 | 5.88 | 97.4 | 6.5 | 0.72 | 6.5 | 0.18 | 0.28 | 1.25 | 0.29 | 43 | 216 |
| 50 ISL | 12.34 D | 12.33 | 33.297 D | 25.204 | 276.7 | 0.147 | 5.82 D | 95.8 | 7.3 | 0.78 | 7.4 | 0.20 | 0.31 | 1.40 | 0.43 | 50 | |
| 51 A | 12.32 | 12.31 | 33.296 | 25.207 | 276.4 | 0.149 | 5.82 | 95.8 | 7.5 | 0.79 | 7.6 | 0.20 | 0.32 | 1.43 | 0.45 | 51 | 215 |
| 62 | 11.94 | 11.93 | 33.405 | 25.364 | 261.7 | 0.179 | 5.63 | 92.0 | 9.8 | 0.97 | 9.9 | 0.31 | 0.43 | 1.46 | 0.46 | 62 | 214 |
| 70 | 11.87 | 11.86 | 33.421 | 25.389 | 259.5 | 0.200 | 5.54 | 90.4 | 10.1 | 0.99 | 10.3 | 0.31 | 0.47 | 1.23 | 0.40 | 70 | 213 |
| 75 ISL | 11.87 D | 11.86 | 33.439 D | 25.404 | 258.3 | 0.213 | 5.54 D | 90.4 | 10.9 | 1.05 | 11.4 | 0.28 | 0.34 | 0.98 | 0.37 | 75 | |
| 86 | 10.77 | 10.76 | 33.333 | 25.521 | 247.2 | 0.241 | 4.82 | 76.7 | 13.6 | 1.25 | 14.6 | 0.18 | 0.02 | 0.44 | 0.28 | 86 | 212 |
| 100 | 9.94 | 9.93 | 33.396 | 25.712 | 229.2 | 0.274 | 4.30 | 67.3 | 18.1 | 1.50 | 18.7 | 0.05 | 0.00 | 0.13 | 0.13 | 100 | 211 |
| 120 | 9.40 | 9.39 | 33.651 | 26.000 | 202.1 | 0.317 | 3.48 | 53.9 | 24.5 | 1.79 | 23.4 | 0.00 | 0.00 | 0.01 | 0.06 | 121 | 210 |
| 125 ISL | 9.41 D | 9.40 | 33.688 D | 26.028 | 199.6 | 0.327 | 3.47 D | 53.7 | 25.9 | 1.85 | 24.2 | 0.00 | 0.00 | 0.01 | 0.06 | 126 | |
| 141 | 9.39 | 9.37 | 33.865 | 26.170 | 186.5 | 0.358 | 2.60 | 40.3 | 29.7 | 2.01 | 26.3 | 0.00 | 0.00 | 0.00 | 0.08 | 142 | 209 |
| 150 ISL | 9.24 D | 9.22 | 33.947 D | 26.258 | 178.3 | 0.374 | 2.49 D | 38.5 | 31.2 | 2.06 | 27.0 | 0.00 | 0.00 | 0.00 | 0.08 | 151 | |
| 171 | 9.15 | 9.13 | 34.021 | 26.331 | 171.8 | 0.411 | 2.16 | 33.3 | 33.7 | 2.13 | 28.0 | 0.00 | 0.00 | 0.00 | 0.07 | 172 | 208 |
| 200 | 8.83 | 8.81 | 34.059 | 26.412 | 164.6 | 0.460 | 2.03 | 31.1 | 36.4 | 2.19 | 29.1 | 0.00 | 0.00 | 0.00 | 0.06 | 201 | 207 |
| 232 | 8.58 | 8.56 | 34.148 | 26.521 | 154.8 | 0.511 | 1.55 | 23.6 | 41.7 | 2.35 | 30.7 | 0.00 | 0.00 | | | 233 | 206 |
| 250 ISL | 8.26 D | 8.23 | 34.157 D | 26.577 | 149.6 | 0.538 | 1.49 D | 22.5 | 44.2 | 2.44 | 31.6 | 0.00 | 0.00 | | | 251 | |
| 273 | 8.19 | 8.16 | 34.191 | 26.615 | 146.5 | 0.572 | 1.19 | 18.0 | 47.2 | 2.55 | 32.6 | 0.00 | 0.00 | | | 275 | 205 |
| 300 ISL | 7.87 D | 7.84 | 34.218 D | 26.684 | 140.2 | 0.611 | 0.98 D | 14.7 | 50.7 | 2.63 | 33.6 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.77 | 7.74 | 34.227 | 26.706 | 138.5 | 0.640 | 0.88 | 13.2 | 53.4 | 2.68 | 34.3 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 7.25 | 7.21 | 34.255 | 26.802 | 129.9 | 0.721 | 0.60 | 8.9 | 60.9 | 2.86 | 36.3 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 7.04 D | 7.00 | 34.265 D | 26.840 | 126.6 | 0.745 | 0.55 D | 8.1 | 63.7 | 2.90 | 36.9 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.66 | 6.62 | 34.279 | 26.903 | 120.9 | 0.796 | 0.42 | 6.1 | 69.8 | 2.99 | 38.2 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.19 D | 6.15 | 34.308 D | 26.987 | 113.3 | 0.865 | 0.34 D | 4.9 | 77.2 | 3.10 | 39.6 | 0.00 | 0.00 | | | 503 | |
| 515 | 6.11 | 6.06 | 34.310 | 26.999 | 112.3 | 0.882 | 0.29 | 4.2 | 79.1 | 3.13 | 39.9 | 0.00 | 0.00 | | | 519 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 4.6 N | 120 38.3 W | 18/01/11 | 0956 UTC | 3828 m | 260 15 kn | | | 1012.8 mb | 15.0 C | 13.8 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.61 | 14.61 | 32.972 | 24.493 | 343.0 | 0.000 | 5.92 | 102.0 | 2.5 | 0.30 | 0.1 | 0.00 | 0.00 | 0.51 | 0.10 | 0 | |
| 3 | 14.61 | 14.61 | 32.972 | 24.493 | 343.1 | 0.010 | 5.92 | 102.0 | 2.5 | 0.30 | 0.1 | 0.00 | 0.00 | 0.51 | 0.10 | 3 | 220 |
| 9 | 14.58 | 14.58 | 32.973 | 24.501 | 342.6 | 0.031 | 5.91 | 101.7 | 2.5 | 0.29 | 0.2 | 0.01 | 0.00 | 0.60 | 0.14 | 9 | 219 |
| 10 ISL | 14.58 D | 14.58 | 32.976 D | 24.503 | 342.4 | 0.034 | 5.93 D | 102.1 | 2.5 | 0.29 | 0.2 | 0.01 | 0.00 | 0.60 | 0.14 | 10 | |
| 20 | 14.39 | 14.39 | 32.981 | 24.547 | 338.5 | 0.068 | 5.95 | 102.0 | 2.8 | 0.31 | 0.3 | 0.02 | 0.00 | 0.61 | 0.14 | 20 | 218 |
| 30 | 13.65 | 13.65 | 32.990 | 24.707 | 323.5 | 0.101 | 6.00 | 101.3 | 3.3 | 0.39 | 1.1 | 0.09 | 0.02 | 0.64 | 0.25 | 30 | 217 |
| 39 | 13.50 | 13.49 | 33.000 | 24.746 | 320.0 | 0.130 | 5.97 | 100.5 | 3.4 | 0.40 | 1.4 | 0.12 | 0.07 | 0.59 | 0.25 | 39 | 216 |
| 50 ISL | 13.29 D | 13.28 | 33.036 D | 24.816 | 313.6 | 0.165 | 5.87 D | 98.4 | 3.6 | 0.42 | 1.7 | 0.14 | 0.05 | 0.36 | 0.27 | 50 | |
| 51 | 13.28 | 13.27 | 33.033 | 24.816 | 313.7 | 0.168 | 5.84 | 97.9 | 3.6 | 0.42 | 1.7 | 0.14 | 0.05 | 0.34 | 0.27 | 51 | 215 |
| 60 | 12.87 | 12.86 | 33.038 | 24.901 | 305.8 | 0.196 | 5.74 | 95.4 | 3.7 | 0.45 | 2.0 | 0.09 | 0.00 | 0.28 | 0.25 | 60 | 214 |
| 70 | 12.53 | 12.52 | 33.071 | 24.993 | 297.3 | 0.226 | 5.64 | 93.1 | 4.3 | 0.49 | 2.9 | 0.03 | 0.00 | 0.17 | 0.21 | 70 | 213 |
| 75 ISL | 12.21 D | 12.20 | 33.074 D | 25.056 | 291.3 | 0.241 | 5.55 D | 91.0 | 4.5 | 0.51 | 3.3 | 0.03 | 0.00 | 0.15 | 0.19 | 75 | |
| 85 | 12.00 | 11.99 | 33.081 | 25.101 | 287.2 | 0.270 | 5.45 | 89.0 | 5.4 | 0.60 | 4.7 | 0.02 | 0.00 | 0.13 | 0.15 | 85 | 212 |
| 100 ISL | 10.50 D | 10.49 | 33.154 D | 25.428 | 256.2 | 0.311 | 5.07 D | 80.2 | 9.4 | 0.93 | 10.0 | 0.00 | 0.00 | 0.05 | 0.06 | 100 | |
| 101 | 10.71 | 10.70 | 33.123 | 25.368 | 262.0 | 0.313 | 5.10 | 81.0 | 9.7 | 0.96 | 10.4 | 0.00 | 0.00 | 0.05 | 0.05 | 101 | 211 |
| 121 | 9.80 | 9.79 | 33.310 | 25.668 | 233.7 | 0.363 | 4.49 | 70.0 | 16.2 | 1.37 | 17.2 | 0.00 | 0.00 | 0.02 | 0.05 | 122 | 210 |
| 125 ISL | 9.64 D | 9.63 | 33.364 D | 25.737 | 227.3 | 0.372 | 4.38 D | 68.0 | 17.1 | 1.43 | 18.0 | 0.00 | 0.00 | 0.02 | 0.05 | 126 | |
| 141 | 9.40 | 9.38 | 33.470 | 25.859 | 215.9 | 0.408 | 4.04 | 62.5 | 20.5 | 1.61 | 20.6 | 0.00 | 0.00 | 0.01 | 0.03 | 142 | 209 |
| 150 ISL | 9.11 D | 9.09 | 33.623 D | 26.025 | 200.3 | 0.426 | 3.70 D | 56.9 | 22.9 | 1.72 | 22.4 | 0.00 | 0.00 | 0.01 | 0.03 | 151 | |
| 169 | 8.90 | 8.88 | 33.761 | 26.167 | 187.2 | 0.463 | 3.24 | 49.6 | 28.1 | 1.91 | 25.7 | 0.00 | 0.00 | 0.00 | 0.03 | 170 | 208 |
| 200 | 8.50 | 8.48 | 33.969 | 26.392 | 166.3 | 0.518 | 2.60 | 39.5 | 34.3 | 2.09 | 28.4 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | 207 |
| 229 | 7.98 | 7.96 | 33.985 | 26.483 | 157.9 | 0.565 | 2.97 | 44.6 | 36.6 | 2.03 | 28.0 | 0.00 | 0.00 | | | 230 | 206 |
| 250 ISL | 7.71 D | 7.69 | 34.003 D | 26.537 | 153.1 | 0.598 | 2.63 D | 39.3 | 40.9 | 2.20 | 29.9 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.56 | 7.53 | 34.038 | 26.586 | 148.7 | 0.628 | 2.07 | 30.8 | 45.6 | 2.41 | 32.3 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.39 D | 7.36 | 34.101 D | 26.661 | 142.1 | 0.671 | 1.46 D | 21.6 | 50.8 | 2.58 | 34.3 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.15 | 7.12 | 34.103 | 26.696 | 138.9 | 0.701 | 1.34 | 19.8 | 54.2 | 2.67 | 35.4 | 0.00 | 0.00 | | | 323 | 204 |
| 380 | 6.64 | 6.61 | 34.163 | 26.813 | 128.4 | 0.780 | 0.85 | 12.4 | 63.9 | 2.90 | 37.8 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.42 D | 6.38 | 34.173 D | 26.850 | 125.0 | 0.805 | 0.78 D | 11.3 | 67.2 | 2.95 | 38.5 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.07 | 6.03 | 34.196 | 26.914 | 119.2 | 0.855 | 0.60 | 8.6 | 73.4 | 3.02 | 39.7 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.74 D | 5.70 | 34.240 D | 26.990 | 112.5 | 0.924 | 0.44 D | 6.3 | 80.2 | 3.14 | 40.8 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.69 | 5.65 | 34.264 | 27.015 | 110.3 | 0.942 | 0.37 | 5.3 | 82.2 | 3.18 | 41.1 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 45.1 N | 121 19.1 W | 18/01/11 | 0152 UTC | 3770 m | 290 16 kn | | | 1014.0 mb | 16.7 C | 14.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.17 | 15.17 | 32.924 | 24.336 | 358.0 | 0.000 | 5.79 | 100.8 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.23 | 0.07 | 0 | |
| 3 | 15.17 | 15.17 | 32.924 | 24.336 | 358.1 | 0.011 | 5.79 | 100.8 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.23 | 0.07 | 3 | 220 |
| 10 | 15.17 | 15.17 | 32.924 | 24.336 | 358.3 | 0.036 | 5.81 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.23 | 0.07 | 10 | 219 |
| 20 ISL | 15.17 D | 15.17 | 32.924 D | 24.336 | 358.6 | 0.072 | 5.82 | D101.4 | 1.8 | 0.27 | 0.0 | 0.00 | 0.00 | 0.26 | 0.06 | 20 | |
| 25 | 15.14 | 15.14 | 32.923 | 24.342 | 358.2 | 0.090 | 5.82 | 101.3 | 1.8 | 0.27 | 0.0 | 0.00 | 0.00 | 0.28 | 0.05 | 25 | 218 |
| 30 ISL | 15.11 D | 15.11 | 32.921 D | 24.348 | 357.8 | 0.107 | 5.83 | D101.4 | 1.8 | 0.27 | 0.0 | 0.00 | 0.00 | 0.28 | 0.06 | 30 | |
| 41 | 15.09 | 15.08 | 32.920 | 24.351 | 357.8 | 0.147 | 5.81 | 101.0 | 1.8 | 0.27 | 0.0 | 0.00 | 0.00 | 0.27 | 0.07 | 41 | 217 |
| 50 | 15.05 | 15.04 | 32.914 | 24.356 | 357.6 | 0.179 | 5.80 | 100.8 | 1.8 | 0.27 | 0.0 | 0.00 | 0.00 | 0.33 | 0.06 | 50 | 216 |
| 62 | 15.03 | 15.02 | 32.915 | 24.361 | 357.4 | 0.222 | 5.83 | 101.2 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.35 | 0.07 | 62 | 215 |
| 75 | 15.00 | 14.99 | 32.911 | 24.365 | 357.5 | 0.268 | 5.80 | 100.6 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.33 | 0.09 | 75 | 214 |
| 87 | 13.25 | 13.24 | 33.038 | 24.827 | 313.6 | 0.309 | 5.69 | 95.3 | 3.1 | 0.41 | 1.2 | 0.05 | 0.00 | 0.20 | 0.18 | 87 | 213 |
| 100 | 12.47 | 12.46 | 33.054 | 24.992 | 298.1 | 0.348 | 5.55 | 91.5 | 4.0 | 0.50 | 2.9 | 0.00 | 0.00 | 0.10 | 0.10 | 100 | 212 |
| 112 | 11.60 | 11.59 | 33.096 | 25.188 | 279.6 | 0.383 | 5.31 | 85.9 | 6.4 | 0.72 | 6.4 | 0.00 | 0.00 | 0.08 | 0.06 | 112 | 211 |
| 125 ISL | 10.41 D | 10.40 | 33.178 D | 25.463 | 253.5 | 0.418 | 4.99 | D 78.7 | 10.6 | 1.05 | 11.6 | 0.00 | 0.00 | 0.04 | 0.04 | 126 | |
| 126 | 10.41 | 10.40 | 33.181 | 25.465 | 253.3 | 0.420 | 4.97 | 78.4 | 10.9 | 1.07 | 12.0 | 0.00 | 0.00 | 0.04 | 0.04 | 127 | 210 |
| 140 | 10.03 | 10.01 | 33.262 | 25.593 | 241.3 | 0.455 | 4.76 | 74.5 | 13.4 | 1.22 | 14.3 | 0.00 | 0.00 | 0.03 | 0.03 | 141 | 209 |
| 150 ISL | 9.54 D | 9.52 | 33.406 D | 25.787 | 223.0 | 0.478 | 4.35 | D 67.4 | 16.3 | 1.38 | 16.9 | 0.00 | 0.00 | 0.02 | 0.03 | 151 | |
| 171 | 9.17 | 9.15 | 33.594 | 25.994 | 203.7 | 0.523 | 3.80 | 58.5 | 23.0 | 1.71 | 22.4 | 0.00 | 0.00 | 0.01 | 0.02 | 172 | 208 |
| 200 ISL | 8.83 D | 8.81 | 33.849 D | 26.247 | 180.1 | 0.579 | 2.88 | D 44.1 | 30.2 | 2.00 | 27.0 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 202 | 8.82 | 8.80 | 33.857 | 26.255 | 179.4 | 0.582 | 2.89 | 44.2 | 30.6 | 2.01 | 27.2 | 0.00 | 0.00 | 0.00 | 0.02 | 203 | 207 |
| 230 | 8.63 | 8.61 | 33.998 | 26.396 | 166.6 | 0.631 | 2.22 | 33.8 | 35.6 | 2.19 | 29.5 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.27 D | 8.24 | 34.010 D | 26.460 | 160.7 | 0.663 | 2.21 | D 33.4 | 37.5 | 2.23 | 30.1 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.07 | 8.04 | 34.016 | 26.495 | 157.6 | 0.697 | 2.23 | 33.6 | 39.5 | 2.25 | 30.5 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.46 D | 7.43 | 34.030 D | 26.595 | 148.3 | 0.741 | 2.13 | D 31.6 | 45.3 | 2.36 | 32.2 | 0.00 | 0.00 | | | 302 | |
| 322 | 7.22 | 7.19 | 34.051 | 26.645 | 143.7 | 0.773 | 1.80 | 26.6 | 50.3 | 2.46 | 33.7 | 0.00 | 0.00 | | | 324 | 204 |
| 379 | 6.52 | 6.49 | 34.087 | 26.769 | 132.4 | 0.852 | 1.25 | 18.2 | 61.0 | 2.72 | 36.9 | 0.00 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.28 D | 6.24 | 34.104 D | 26.814 | 128.3 | 0.879 | 1.11 | D 16.0 | 64.9 | 2.81 | 37.9 | 0.00 | 0.00 | | | 402 | |
| 439 | 5.91 | 5.87 | 34.120 | 26.873 | 122.8 | 0.928 | 0.88 | 12.6 | 71.8 | 2.96 | 39.4 | 0.00 | 0.00 | | | 442 | 202 |
| 500 ISL | 5.59 D | 5.55 | 34.199 D | 26.976 | 113.6 | 1.000 | 0.53 | D 7.5 | 80.6 | 3.07 | 40.7 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.58 | 5.54 | 34.220 | 26.994 | 112.1 | 1.018 | 0.43 | 6.1 | 82.9 | 3.10 | 41.1 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 26.0 N | 121 59.2 W | 17/01/11 | 1812 UTC | 3883 m | 290 24 kn | 240 08 05 | 1 | 1016.0 mb | 18.1 C | 16.1 C | 23m | 1/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.32 | 16.32 | 33.318 | 24.382 | 353.6 | 0.000 | 5.64 | 100.8 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 0 | |
| 3 | 16.32 | 16.32 | 33.318 | 24.382 | 353.7 | 0.011 | 5.64 | 100.8 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 3 | 224 |
| 10 ISL | 16.31 D | 16.31 | 33.319 D | 24.386 | 353.6 | 0.035 | 5.69 | D101.6 | 2.2 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 10 | |
| 16 | 16.31 | 16.31 | 33.320 | 24.387 | 353.7 | 0.057 | 5.67 | 101.3 | 2.2 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.04 | 16 | 223 |
| 18 | 16.31 | 16.31 | 33.320 | 24.387 | 353.7 | 0.064 | 5.65 | 100.9 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 18 | 222 |
| 20 ISL | 16.31 D | 16.31 | 33.319 D | 24.386 | 353.9 | 0.071 | 5.65 | 100.9 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 20 | |
| 26 | 16.32 | 16.32 | 33.320 | 24.385 | 354.2 | 0.092 | 5.65 | 100.9 | 1.9 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 26 | 221 |
| 30 ISL | 16.31 D | 16.31 | 33.319 D | 24.386 | 354.2 | 0.106 | 5.65 | 100.9 | 1.9 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 30 | |
| 38 | 16.30 | 16.29 | 33.321 | 24.391 | 354.0 | 0.134 | 5.66 | 101.1 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 38 | 220 |
| 50 ISL | 16.30 D | 16.29 | 33.319 D | 24.389 | 354.5 | 0.177 | 5.68 | D101.4 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 50 | |
| 51 | 16.30 | 16.29 | 33.320 | 24.390 | 354.5 | 0.181 | 5.64 | 100.7 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 51 | 219 |
| 65 | 16.30 | 16.29 | 33.328 | 24.397 | 354.3 | 0.230 | 5.65 | 100.9 | 2.1 | 0.24 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 65 | 218 |
| 75 ISL | 16.30 D | 16.29 | 33.319 D | 24.390 | 355.3 | 0.266 | 5.63 | 100.5 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 75 | |
| 79 | 16.30 | 16.29 | 33.319 | 24.390 | 355.4 | 0.280 | 5.63 | 100.5 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 79 | 217 |
| 86 | 16.21 | 16.20 | 33.310 | 24.404 | 354.3 | 0.305 | 5.64 | 100.5 | 2.2 | 0.26 | 0.1 | 0.01 | 0.00 | 0.17 | 0.08 | 86 | 216 |
| 96 | 14.51 | 14.50 | 33.249 | 24.731 | 323.2 | 0.339 | 5.65 | 97.3 | 3.0 | 0.35 | 0.6 | 0.16 | 0.00 | 0.22 | 0.23 | 96 | 215 |
| 100 ISL | 14.33 D | 14.32 | 33.346 D | 24.844 | 312.5 | 0.351 | 5.64 | D 96.8 | 3.1 | 0.36 | 0.9 | 0.14 | 0.00 | 0.21 | 0.21 | 100 | |
| 110 | 13.39 | 13.37 | 33.263 | 24.973 | 300.3 | 0.382 | 5.54 | 93.2 | 3.6 | 0.41 | 2.1 | 0.04 | 0.00 | 0.17 | 0.16 | 110 | 214 |
| 125 | 12.40 | 12.38 | 33.316 | 25.209 | 278.1 | 0.425 | 5.24 | 86.4 | 6.0 | 0.66 | 6.0 | 0.00 | 0.00 | 0.10 | 0.12 | 126 | 213 |
| 146 | 11.13 | 11.11 | 33.271 | 25.410 | 259.2 | 0.482 | 5.03 | 80.7 | 9.4 | 0.91 | 10.2 | 0.00 | 0.00 | 0.05 | 0.08 | 147 | 212 |
| 150 ISL | 10.97 D | 10.95 | 33.354 D | 25.503 | 250.4 | 0.492 | 4.92 | D 78.7 | 10.2 | 0.96 | 11.1 | 0.00 | 0.00 | 0.04 | 0.07 | 151 | |
| 171 | 10.08 | 10.06 | 33.484 | 25.759 | 226.3 | 0.542 | 4.42 | 69.4 | 15.3 | 1.26 | 16.2 | 0.00 | 0.00 | 0.01 | 0.03 | 172 | 211 |
| 200 ISL | 8.91 D | 8.89 | 33.713 D | 26.128 | 191.4 | 0.603 | 3.56 | D 54.5 | 24.8 | 1.70 | 23.3 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 8.97 | 8.95 | 33.675 | 26.089 | 195.2 | 0.604 | 3.62 | 55.5 | 25.1 | 1.71 | 23.5 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 210 |
| 231 | 8.69 | 8.67 | 33.891 | 26.302 | 175.5 | 0.660 | 3.22 | 49.1 | 29.6 | 1.82 | 25.7 | 0.00 | 0.00 | | | 232 | 209 |
| 250 ISL | 8.33 D | 8.30 | 33.956 D | 26.409 | 165.6 | 0.692 | 3.07 | D 46.5 | 32.7 | 1.89 | 26.8 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.09 | 8.06 | 33.991 | 26.472 | 159.8 | 0.725 | 2.87 | 43.2 | 36.1 | 1.97 | 27.9 | 0.00 | 0.00 | | | 271 | 208 |
| 300 ISL | 7.61 D | 7.58 | 34.014 D | 26.561 | 151.6 | 0.772 | 2.45 | D 36.5 | 41.6 | 2.13 | 30.1 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.36 | 7.33 | 34.020 | 26.601 | 148.0 | 0.803 | 2.26 | 33.5 | 45.7 | 2.25 | 31.7 | 0.00 | 0.00 | | | 323 | 207 |
| 383 | 6.64 | 6.60 | 34.076 | 26.744 | 134.9 | 0.891 | 1.46 | 21.3 | 58.3 | 2.60 | 36.0 | 0.00 | 0.00 | | | 385 | 206 |
| 400 ISL | 6.33 D | 6.29 | 34.074 D | 26.784 | 131.2 | 0.913 | 1.37 | D 19.8 | 61.7 | 2.67 | 36.9 | 0.00 | 0.00 | | | 402 | |
| 441 | 6.03 | 5.99 | 34.109 | 26.850 | 125.2 | 0.966 | 1.01 | 14.5 | 69.3 | 2.81 | 38.6 | 0.00 | 0.00 | | | 444 | 205 |
| 500 ISL | 5.68 D | 5.64 | 34.161 D | 26.935 | 117.6 | 1.038 | 0.74 | D 10.5 | 78.3 | 2.97 | 40.4 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.53 | 5.49 | 34.169 | 26.959 | 115.3 | 1.055 | 0.64 | 9.1 | 80.4 | 3.00 | 40.8 | 0.00 | 0.00 | | | 518 | 204 |
| 600 CSL | 5.08 | 5.03 | 34.246 | 27.074 | 104.9 | 1.149 | 0.41 | 5.8 | | | | | | | | 604 | 200 |
| 700 CSL | 4.79 | 4.73 | 34.345 | 27.186 | 95.1 | 1.249 | 0.28 | 3.9 | | | | | | | | 705 | 200 |
| 800 CSL | 4.58 | 4.52 | 34.421 | 27.271 | 87.9 | 1.340 | 0.33 | 4.6 | | | | | | | | 806 | 200 |
| 900 CSL | 4.18 | 4.11 | 34.440 | 27.329 | 82.6 | 1.426 | 0.42 | 5.8 | | | | | | | | 907 | 200 |
| 1000 CSL | 3.91 | 3.83 | 34.471 | 27.382 | 78.0 | 1.506 | 0.55 | 7.5 | | | | | | | | 1008 | 200 |
| 1100 CSL | 3.64 | 3.56 | 34.502 | 27.435 | 73.3 | 1.582 | 0.69 | 9.4 | | | | | | | | 1109 | 200 |
| 1200 CSL | 3.39 | 3.30 | 34.524 | 27.477 | 69.5 | 1.653 | 0.81 | 10.9 | | | | | | | | 1210 | 200 |
| 1300 CSL | 3.15 | 3.06 | 34.535 | 27.509 | 66.6 | 1.721 | 0.92 | 12.3 | | | | | | | | 1312 | 200 |
| 1400 CSL | 2.95 | 2.85 | 34.551 | 27.540 | 63.7 | 1.786 | 1.04 | 13.9 | | | | | | | | 1413 | 200 |
| 1500 CSL | 2.76 | 2.65 | 34.566 | 27.570 | 60.9 | 1.848 | 1.18 | 15.7 | | | | | | | | 1514 | 200 |
| 1600 CSL | 2.59 | 2.48 | 34.579 | 27.595 | 58.5 | 1.908 | 1.30 | 17.2 | | | | | | | | 1616 | 200 |
| 1800 CSL | 2.27 | 2.14 | 34.606 | 27.645 | 53.7 | 2.020 | 1.62 | 21.2 | | | | | | | | 1819 | 200 |
| 2000 CSL | 2.06 | 1.92 | 34.625 | 27.677 | 50.7 | 2.125 | 1.90 | 24.8 | | | | | | | | 2022 | 200 |
| 2200 CSL | 1.92 | 1.77 | 34.638 | 27.700 | 48.8 | 2.224 | 2.11 | 27.4 | | | | | | | | 2225 | 200 |
| 2400 CSL | 1.81 | 1.64 | 34.649 | 27.718 | 47.4 | 2.320 | 2.31 | 29.9 | | | | | | | | 2428 | 200 |
| 2600 CSL | 1.72 | 1.53 | 34.657 | 27.733 | 46.3 | 2.414 | 2.48 | 32.0 | | | | | | | | 2632 | 200 |
| 2800 CSL | 1.66 | 1.46 | 34.662 | 27.742 | 45.8 | 2.506 | 2.60 | 33.5 | | | | | | | | 2836 | 200 |
| 3000 CSL | 1.60 | 1.38 | 34.668 | 27.753 | 45.2 | 2.597 | 2.74 | 35.2 | | | | | | | | 3040 | 200 |
| 3200 CSL | 1.56 | 1.32 | 34.671 | 27.759 | 45.0 | 2.687 | 2.83 | 36.3 | | | | | | | | 3244 | 200 |
| 3400 CSL | 1.53 | 1.27 | 34.675 | 27.766 | 44.9 | 2.777 | 2.94 | 37.7 | | | | | | | | 3449 | 200 |
| 3539 | 1.53 | 1.25 | 34.677 | 27.769 | 45.1 | 2.840 | 2.95 | 37.8 | 172.1 | 2.62 | 38.3 | 0.00 | 0.00 | | | 3591 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 4.7 N | 122 39.5 W | 17/01/11 | 0907 UTC | 4072 m | 280 21 kn | | | 1018.5 mb | 15.4 C | 14.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.78 | 15.78 | 33.138 | 24.366 | 355.2 | 0.000 | 5.73 | 101.2 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.20 | 0.02 | 0 | |
| 3 | 15.78 | 15.78 | 33.138 | 24.366 | 355.2 | 0.011 | 5.73 | 101.2 | 2.3 | 0.28 | 0.0 | 0.00 | 0.00 | 0.20 | 0.02 | 3 | 220 |
| 10 ISL | 15.78 D | 15.78 | 33.137 D | 24.366 | 355.5 | 0.036 | 5.72 | D101.0 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.19 | 0.04 | 10 | |
| 11 | 15.78 | 15.78 | 33.137 | 24.366 | 355.5 | 0.039 | 5.72 | 101.0 | 2.2 | 0.28 | 0.0 | 0.00 | 0.00 | 0.19 | 0.04 | 11 | 219 |
| 20 ISL | 15.78 D | 15.78 | 33.136 D | 24.365 | 355.9 | 0.071 | 5.72 | D101.0 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 20 | |
| 25 | 15.78 | 15.78 | 33.136 | 24.365 | 356.0 | 0.089 | 5.72 | 101.0 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 25 | 218 |
| 30 ISL | 15.78 D | 15.78 | 33.137 D | 24.366 | 356.1 | 0.107 | 5.72 | D101.0 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 30 | |
| 41 | 15.79 | 15.78 | 33.138 | 24.365 | 356.5 | 0.146 | 5.72 | 101.0 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.17 | 0.05 | 41 | 217 |
| 50 | 15.78 | 15.77 | 33.146 | 24.374 | 356.0 | 0.178 | 5.71 | 100.8 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.21 | 0.05 | 50 | 216 |
| 63 | 15.80 | 15.79 | 33.164 | 24.384 | 355.4 | 0.224 | 5.69 | 100.5 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.28 | 0.14 | 63 | 215 |
| 74 | 15.81 | 15.80 | 33.170 | 24.386 | 355.5 | 0.263 | 5.68 | 100.3 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.30 | 0.06 | 74 | 214 |
| 75 ISL | 15.82 D | 15.81 | 33.172 D | 24.386 | 355.6 | 0.267 | 5.69 | D100.5 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.30 | 0.06 | 75 | |
| 88 | 15.52 | 15.51 | 33.180 | 24.459 | 349.0 | 0.313 | 5.69 | 99.9 | 2.4 | 0.27 | 0.1 | 0.03 | 0.00 | 0.26 | 0.12 | 88 | 213 |
| 100 | 13.24 | 13.23 | 33.108 | 24.883 | 308.6 | 0.352 | 5.75 | 96.4 | 3.4 | 0.39 | 1.2 | 0.06 | 0.00 | 0.21 | 0.19 | 100 | 212 |
| 112 | 12.05 | 12.04 | 32.994 | 25.025 | 295.1 | 0.388 | 5.71 | 93.2 | 3.9 | 0.49 | 2.5 | 0.01 | 0.00 | 0.16 | 0.15 | 112 | 211 |
| 125 | 11.56 | 11.54 | 33.066 | 25.172 | 281.4 | 0.426 | 5.50 | 88.9 | | | | | | 0.09 | 0.08 | 126 | 210 |
| 140 | 10.72 | 10.70 | 33.159 | 25.395 | 260.4 | 0.466 | 5.06 | 80.4 | 9.8 | 0.95 | 10.4 | 0.00 | 0.00 | 0.06 | 0.07 | 141 | 209 |
| 150 ISL | 9.93 D | 9.91 | 33.302 D | 25.641 | 237.0 | 0.491 | 4.83 | D 75.5 | 12.8 | 1.14 | 13.5 | 0.00 | 0.00 | 0.04 | 0.06 | 151 | |
| 170 | 9.43 | 9.41 | 33.495 | 25.874 | 215.1 | 0.537 | 4.28 | 66.2 | 19.1 | 1.50 | 19.1 | 0.00 | 0.00 | 0.01 | 0.04 | 171 | 208 |
| 200 | 8.92 | 8.90 | 33.721 | 26.133 | 191.0 | 0.597 | 3.45 | 52.8 | 26.7 | 1.85 | 24.6 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | 207 |
| 230 | 8.68 | 8.66 | 33.916 | 26.324 | 173.4 | 0.652 | 3.19 | 48.7 | 30.5 | 1.92 | 25.9 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.23 D | 8.20 | 33.969 D | 26.434 | 163.1 | 0.686 | 3.06 | D 46.2 | 33.4 | 1.95 | 26.7 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.91 | 7.88 | 33.984 | 26.493 | 157.7 | 0.718 | 3.04 | 45.6 | 36.7 | 2.01 | 27.7 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.50 D | 7.47 | 33.999 D | 26.565 | 151.2 | 0.764 | 2.57 | D 38.2 | 43.2 | 2.21 | 30.3 | 0.00 | 0.00 | | | 302 | |
| 322 | 7.26 | 7.23 | 34.023 | 26.618 | 146.4 | 0.797 | 2.14 | 31.6 | 48.2 | 2.38 | 32.3 | 0.00 | 0.00 | | | 324 | 204 |
| 381 | 6.82 | 6.78 | 34.109 | 26.746 | 134.8 | 0.880 | 1.21 | 17.7 | 58.5 | 2.74 | 36.2 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.63 D | 6.59 | 34.121 D | 26.781 | 131.6 | 0.905 | 1.12 | D 16.3 | 61.7 | 2.82 | 37.1 | 0.00 | 0.00 | | | 402 | |
| 439 | 6.28 | 6.24 | 34.141 | 26.843 | 126.0 | 0.955 | 0.88 | 12.7 | 68.0 | 2.95 | 38.5 | 0.00 | 0.00 | | | 442 | 202 |
| 500 ISL | 5.76 D | 5.72 | 34.179 D | 26.939 | 117.3 | 1.030 | 0.63 | D 9.0 | 76.1 | 3.08 | 40.0 | 0.00 | 0.00 | | | 503 | |
| 520 | 5.76 | 5.72 | 34.220 | 26.972 | 114.5 | 1.053 | 0.49 | 7.0 | 78.8 | 3.12 | 40.5 | 0.00 | 0.00 | | | 523 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 45.2 N | 123 20.1 W | 17/01/11 | 0042 UTC | 4041 m | 300 20 kn | 350 06 05 | 0 | 1018.7 mb | 15.5 C | 14.0 C | | 3/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.82 | 15.82 | 33.127 | 24.349 | 356.8 | 0.000 | 5.70 | 100.7 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 0 | |
| 2 | 15.82 | 15.82 | 33.127 | 24.349 | 356.9 | 0.007 | 5.70 | 100.7 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 2 | 220 |
| 10 | 15.82 | 15.82 | 33.127 | 24.349 | 357.1 | 0.036 | 5.70 | 100.7 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.17 | 0.02 | 10 | 219 |
| 20 ISL | 15.83 D | 15.83 | 33.128 D | 24.348 | 357.5 | 0.071 | 5.72 | D101.1 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.17 | 0.03 | 20 | |
| 25 | 15.82 | 15.82 | 33.128 | 24.350 | 357.4 | 0.089 | 5.71 | 100.9 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.17 | 0.04 | 25 | 218 |
| 30 ISL | 15.80 D | 15.80 | 33.130 D | 24.356 | 357.0 | 0.107 | 5.73 | D101.2 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.17 | 0.04 | 30 | |
| 40 | 15.78 | 15.77 | 33.134 | 24.364 | 356.6 | 0.143 | 5.73 | 101.1 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.17 | 0.04 | 40 | 217 |
| 50 ISL | 15.77 D | 15.76 | 33.138 D | 24.370 | 356.4 | 0.178 | 5.71 | D100.8 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.22 | 0.05 | 50 | |
| 51 | 15.77 | 15.76 | 33.139 | 24.371 | 356.3 | 0.182 | 5.70 | 100.6 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.22 | 0.05 | 51 | 216 |
| 62 | 15.77 | 15.76 | 33.138 | 24.370 | 356.7 | 0.221 | 5.70 | 100.6 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.23 | 0.08 | 62 | 215 |
| 75 | 15.79 | 15.78 | 33.150 | 24.375 | 356.6 | 0.268 | 5.70 | 100.6 | 2.3 | 0.27 | 0.0 | 0.00 | 0.00 | 0.28 | 0.04 | 75 | 214 |
| 88 | 14.61 | 14.60 | 33.268 | 24.724 | 323.6 | 0.312 | 5.77 | 99.6 | 2.9 | 0.29 | 0.2 | 0.10 | 0.00 | 0.32 | 0.22 | 88 | 213 |
| 100 | 13.69 | 13.68 | 33.286 | 24.930 | 304.2 | 0.350 | 5.67 | 96.0 | 3.4 | 0.35 | 1.0 | 0.08 | 0.00 | 0.25 | 0.14 | 100 | 212 |
| 112 | 13.06 | 13.04 | 33.355 | 25.110 | 287.3 | 0.385 | 5.47 | 91.5 | 4.2 | 0.44 | 2.7 | 0.01 | 0.00 | 0.12 | 0.13 | 112 | 211 |
| 124 | 12.35 | 12.33 | 33.373 | 25.263 | 273.0 | 0.419 | 5.37 | 88.5 | 5.4 | 0.55 | 4.6 | 0.00 | 0.00 | 0.07 | 0.08 | 125 | 210 |
| 125 ISL | 12.21 D | 12.19 | 33.377 D | 25.293 | 270.1 | 0.421 | 5.35 | D 87.9 | 5.5 | 0.56 | 4.7 | 0.00 | 0.00 | 0.07 | 0.08 | 126 | |
| 141 | 11.42 | 11.40 | 33.382 | 25.444 | 256.0 | 0.463 | 5.17 | 83.5 | 7.8 | 0.75 | 7.9 | 0.00 | 0.00 | 0.05 | 0.06 | 142 | 209 |
| 150 ISL | 11.18 D | 11.16 | 33.400 D | 25.501 | 250.6 | 0.486 | 5.10 | D 81.9 | 11.2 | 0.99 | 11.5 | 0.00 | 0.00 | 0.04 | 0.05 | 151 | |
| 170 | 9.29 | 9.27 | 33.410 | 25.830 | 219.2 | 0.533 | 4.28 | 66.0 | 19.6 | 1.54 | 19.5 | 0.00 | 0.00 | 0.01 | 0.03 | 171 | 208 |
| 200 ISL | 8.82 D | 8.80 | 33.685 D | 26.120 | 192.1 | 0.595 | 3.59 | D 54.9 | 26.4 | 1.79 | 24.1 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 8.82 | 8.80 | 33.683 | 26.119 | 192.3 | 0.597 | 3.58 | 54.7 | 26.5 | 1.79 | 24.2 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 231 | 8.71 | 8.69 | 33.915 | 26.318 | 174.0 | 0.652 | 3.36 | 51.3 | 29.3 | 1.81 | 24.9 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.50 D | 8.47 | 33.982 D | 26.403 | 166.2 | 0.684 | 2.99 | D 45.4 | 32.6 | 1.91 | 26.2 | 0.00 | 0.00 | | | 251 | |
| 269 | 8.10 | 8.07 | 33.989 | 26.469 | 160.1 | 0.715 | 2.88 | 43.4 | 36.5 | 2.04 | 27.9 | 0.00 | 0.00 | | | 270 | 205 |
| 300 ISL | 7.70 D | 7.67 | 34.041 D | 26.569 | 150.9 | 0.763 | 2.27 | D 33.9 | 43.5 | 2.28 | 30.8 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.46 | 7.43 | 34.058 | 26.617 | 146.6 | 0.793 | 1.91 | 28.4 | 48.0 | 2.43 | 32.6 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.91 | 6.87 | 34.120 | 26.743 | 135.2 | 0.879 | 1.17 | 17.2 | 58.6 | 2.74 | 36.2 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.70 D | 6.66 | 34.134 D | 26.782 | 131.6 | 0.904 | 1.06 | D 15.5 | 61.4 | 2.78 | 37.0 | 0.00 | 0.00 | | | 402 | |
| 442 | 6.40 | 6.36 | 34.157 | 26.841 | 126.5 | 0.959 | 0.83 | 12.0 | 67.4 | 2.86 | 38.3 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 5.98 D | 5.94 | 34.212 D | 26.938 | 117.6 | 1.029 | 0.54 | D 7.7 | 75.6 | 3.03 | 39.9 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.89 | 5.85 | 34.222 | 26.957 | 115.9 | 1.047 | 0.48 | 6.9 | 77.7 | 3.08 | 40.3 | 0.00 | 0.00 | | | 518 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 90.0 120.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 25.1 N | 123 59.9 W | 16/01/11 | 1714 UTC | 4232 m | 290 16 kn | 240 04 05 | 0 | 1021.0 mb | 17.1 C | 16.4 C | 28m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.57 | 16.57 | 33.376 | 24.369 | 354.8 | 0.000 | 5.62 | 100.9 | 2.0 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 0 | |
| 2 A | 16.57 | 16.57 | 33.376 | 24.369 | 354.9 | 0.007 | 5.62 | 100.9 | 2.0 | 0.28 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 2 | 221 |
| 10 | 16.56 | 16.56 | 33.373 | 24.370 | 355.1 | 0.035 | 5.62 | 100.9 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 10 | 220 |
| 18 A | 16.57 | 16.57 | 33.375 | 24.369 | 355.4 | 0.064 | 5.63 | 101.1 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 18 | 219 |
| 20 ISL | 16.56 D | 16.56 | 33.374 D | 24.371 | 355.4 | 0.071 | 5.63 | D101.1 | 2.0 | 0.26 | 0.0 | 0.00 | 0.03 | 0.15 | 0.05 | 20 | |
| 21 A | 16.56 | 16.56 | 33.376 | 24.372 | 355.2 | 0.075 | 5.61 | 100.7 | 1.9 | 0.26 | 0.0 | 0.00 | 0.04 | 0.15 | 0.05 | 21 | 218 |
| 30 ISL | 16.57 D | 16.57 | 33.375 D | 24.370 | 355.8 | 0.107 | 5.63 | D101.1 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 30 | |
| 31 A | 16.57 | 16.57 | 33.375 | 24.370 | 355.8 | 0.110 | 5.61 | 100.7 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 31 | 217 |
| 44 A | 16.57 | 16.56 | 33.374 | 24.369 | 356.3 | 0.156 | 5.61 | 100.7 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 44 | 216 |
| 50 ISL | 16.57 D | 16.56 | 33.374 D | 24.370 | 356.5 | 0.178 | 5.63 | D101.1 | 2.2 | 0.27 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 50 | |
| 60 | 16.57 | 16.56 | 33.374 | 24.370 | 356.7 | 0.213 | 5.62 | 100.9 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 60 | 215 |
| 75 | 16.57 | 16.56 | 33.375 | 24.371 | 357.1 | 0.267 | 5.59 | 100.4 | 2.2 | 0.26 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 75 | 214 |
| 92 A | 16.48 | 16.47 | 33.362 | 24.383 | 356.6 | 0.328 | 5.62 | 100.7 | 2.3 | 0.26 | 0.0 | 0.00 | 0.00 | 0.17 | 0.08 | 92 | 213 |
| 99 | 15.80 | 15.78 | 33.323 | 24.507 | 344.8 | 0.352 | 5.61 | 99.2 | 2.5 | 0.30 | 0.2 | 0.07 | 0.00 | 0.23 | 0.18 | 99 | 212 |
| 100 ISL | 15.17 D | 15.15 | 33.299 D | 24.628 | 333.2 | 0.356 | 5.68 | D 99.1 | 2.6 | 0.31 | 0.2 | 0.08 | 0.00 | 0.23 | 0.18 | 100 | |
| 111 | 14.26 | 14.24 | 33.277 | 24.806 | 316.5 | 0.391 | 5.57 | 95.4 | 3.4 | 0.40 | 1.1 | 0.16 | 0.00 | 0.20 | 0.17 | 111 | 211 |
| 124 | 13.17 | 13.15 | 33.264 | 25.018 | 296.4 | 0.431 | 5.36 | 89.8 | 4.6 | 0.58 | 3.8 | 0.02 | 0.00 | 0.14 | 0.15 | 124 | 210 |
| 125 ISL | 12.81 D | 12.79 | 33.263 D | 25.089 | 289.6 | 0.434 | 5.32 | D 88.4 | 4.7 | 0.59 | 4.0 | 0.02 | 0.00 | 0.14 | 0.15 | 125 | |
| 145 | 11.69 | 11.67 | 33.275 | 25.311 | 268.7 | 0.490 | 5.11 | 83.0 | 7.9 | 0.85 | 8.3 | 0.00 | 0.00 | 0.08 | 0.08 | 146 | 209 |
| 150 ISL | 11.29 D | 11.27 | 33.303 D | 25.406 | 259.7 | 0.503 | 4.97 | D 80.0 | 9.0 | 0.93 | 9.6 | 0.00 | 0.00 | 0.07 | 0.07 | 151 | |
| 170 | 10.28 | 10.26 | 33.410 | 25.667 | 235.1 | 0.553 | 4.56 | 71.9 | 14.1 | 1.24 | 15.0 | 0.00 | 0.00 | 0.02 | 0.04 | 171 | 208 |
| 200 ISL | 9.34 D | 9.32 | 33.755 D | 26.093 | 195.0 | 0.617 | 3.76 | D 58.2 | 22.7 | 1.63 | 21.4 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 9.38 | 9.36 | 33.744 | 26.078 | 196.5 | 0.619 | 3.75 | 58.0 | 23.0 | 1.64 | 21.6 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 231 | 8.98 | 8.96 | 33.903 | 26.267 | 179.0 | 0.675 | 3.28 | 50.4 | 28.5 | 1.81 | 24.5 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.59 D | 8.56 | 33.975 D | 26.384 | 168.0 | 0.708 | 3.02 | D 46.0 | 32.7 | 1.95 | 26.5 | 0.00 | 0.00 | | | 251 | |
| 272 | 8.21 | 8.18 | 34.014 | 26.473 | 159.9 | 0.744 | 2.64 | 39.9 | 37.4 | 2.12 | 28.7 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.98 D | 7.95 | 34.035 D | 26.524 | 155.4 | 0.789 | 2.41 | D 36.2 | 42.1 | 2.26 | 30.6 | 0.00 | 0.03 | | | 302 | |
| 319 | 7.71 | 7.68 | 34.052 | 26.577 | 150.5 | 0.818 | 2.07 | 30.9 | 44.9 | 2.34 | 31.7 | 0.00 | 0.05 | | | 321 | 204 |
| 381 | 7.20 | 7.16 | 34.104 | 26.691 | 140.4 | 0.908 | 1.41 | 20.8 | 53.9 | 2.65 | 35.0 | 0.00 | 0.07 | | | 383 | 203 |
| 400 ISL | 6.88 D | 6.84 | 34.119 D | 26.746 | 135.2 | 0.934 | 1.21 | D 17.7 | 57.1 | 2.73 | 36.0 | 0.00 | 0.05 | | | 402 | |
| 442 | 6.57 | 6.53 | 34.138 | 26.803 | 130.2 | 0.990 | 0.95 | 13.8 | 64.2 | 2.88 | 37.9 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 6.09 D | 6.05 | 34.178 D | 26.897 | 121.6 | 1.063 | 0.69 | D 9.9 | 73.5 | 2.99 | 39.6 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.93 | 5.89 | 34.181 | 26.920 | 119.5 | 1.081 | 0.62 | 8.9 | 75.9 | 3.02 | 40.1 | 0.00 | 0.00 | | | 518 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 91.7 26.4

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 14.7 N | 117 27.7 W | 13/01/11 | 0515 UTC | 19 m | 060 03 kn | | | 1022.5 mb | 13.5 C | 11.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.78 | 13.78 | 33.091 | 24.758 | 317.8 | 0.000 | 5.91 | 100.2 | 4.6 | 0.47 | 1.5 | 0.15 | 1.19 | 2.32 | 0.55 | 0 | |
| 1 | 13.78 | 13.78 | 33.091 | 24.758 | 317.8 | 0.003 | 5.91 | 100.2 | 4.6 | 0.47 | 1.5 | 0.15 | 1.19 | 2.32 | 0.55 | 1 | 204 |
| 5 | 13.78 | 13.78 | 33.084 D | 24.753 | 318.4 | 0.016 | 5.96 | 101.0 | 4.9 | 0.43 | 1.6 | 0.16 | 1.25 | 2.90 | 0.44 | 5 | 203 |
| 10 ISL | 13.84 D | 13.84 | 33.178 D | 24.813 | 312.8 | 0.032 | 5.82 | D 98.8 | 4.0 | 0.44 | 1.3 | 0.14 | 1.11 | 2.23 | 0.46 | 10 | |
| 12 | 13.85 | 13.85 | 33.180 | 24.813 | 312.9 | 0.038 | 5.82 | 98.8 | 3.6 | 0.44 | 1.2 | 0.13 | 1.06 | 1.96 | 0.47 | 12 | 201 |
| 12 | 13.85 | 13.85 | 33.182 | 24.814 | 312.8 | 0.038 | | | | | | | | | | 12 | 202 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 26.7

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 57.4 N | 117 18.4 W | 13/01/11 | 0144 UTC | 68 m | 330 03 kn | | | 1021.3 mb | 14.9 C | 13.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.25 | 14.25 | 33.194 | 24.740 | 319.5 | 0.000 | 6.05 | 103.6 | 3.0 | 0.38 | 0.0 | 0.11 | 0.41 | 1.55 | 0.44 | 0 | |
| 2 | 14.25 | 14.25 | 33.194 | 24.740 | 319.5 | 0.006 | 6.05 | 103.6 | 3.0 | 0.38 | 0.0 | 0.11 | 0.41 | 1.55 | 0.44 | 2 | 207 |
| 10 | 13.98 | 13.98 | 33.178 | 24.784 | 315.6 | 0.032 | 6.07 | 103.4 | 3.1 | 0.38 | 0.0 | 0.12 | 0.44 | 1.85 | 0.50 | 10 | 206 |
| 20 | 14.03 | 14.03 | 33.274 | 24.849 | 309.8 | 0.063 | 5.70 | 97.2 | 3.5 | 0.48 | 0.3 | 0.19 | 0.62 | 1.12 | 0.54 | 20 | 205 |
| 30 | 12.69 | 12.69 | 33.353 | 25.179 | 278.5 | 0.092 | 4.52 | 75.0 | 9.6 | 1.03 | 7.8 | 0.62 | 0.47 | 0.41 | 0.30 | 30 | 204 |
| 40 | 11.63 | 11.62 | 33.392 | 25.411 | 256.7 | 0.119 | 4.12 | 66.9 | 13.8 | 1.28 | 12.7 | 0.23 | 0.47 | 0.28 | 0.30 | 40 | 203 |
| 50 | 10.89 | 10.88 | 33.436 | 25.579 | 240.9 | 0.144 | 3.92 | 62.6 | 16.5 | 1.41 | 15.1 | 0.09 | 0.84 | 0.26 | 0.27 | 50 | 202 |
| 60 | 10.67 | 10.66 | 33.484 | 25.655 | 233.8 | 0.168 | 3.72 | 59.2 | 18.3 | 1.50 | 16.7 | 0.11 | 0.21 | 0.21 | 0.26 | 60 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 28.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 54.8 N | 117 23.7 W | 13/01/11 | 0914 UTC | 644 m | 050 03 kn | | | 1022.9 mb | 14.4 C | 12.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.09 | 14.09 | 33.238 | 24.808 | 313.1 | 0.000 | 5.97 | 101.9 | 2.7 | 0.36 | 0.6 | 0.09 | 0.25 | 0.99 | 0.36 | 0 | |
| 1 | 14.09 | 14.09 | 33.238 | 24.808 | 313.1 | 0.003 | 5.97 | 101.9 | 2.7 | 0.36 | 0.6 | 0.09 | 0.25 | 0.99 | 0.36 | 1 | 220 |
| 10 | 14.10 | 14.10 | 33.242 | 24.809 | 313.2 | 0.031 | 5.98 | 102.1 | 2.7 | 0.36 | 0.7 | 0.10 | 0.18 | 0.82 | 0.38 | 10 | 219 |
| 20 | 14.02 | 14.02 | 33.261 | 24.841 | 310.5 | 0.063 | 5.85 | 99.7 | 2.9 | 0.40 | 1.0 | 0.14 | 0.31 | 0.91 | 0.42 | 20 | 218 |
| 30 | 13.73 | 13.73 | 33.295 | 24.927 | 302.6 | 0.093 | 5.35 | 90.7 | 4.2 | 0.61 | 3.2 | 0.42 | 0.83 | 0.54 | 0.40 | 30 | 217 |
| 40 | 12.36 | 12.35 | 33.318 | 25.216 | 275.2 | 0.122 | 4.76 | 78.4 | 8.9 | 1.01 | 10.0 | 0.12 | 0.04 | 0.13 | 0.15 | 40 | 216 |
| 50 | 10.92 | 10.91 | 33.379 | 25.529 | 245.6 | 0.148 | 4.21 | 67.3 | 14.3 | 1.37 | 15.8 | 0.03 | 0.00 | 0.15 | 0.18 | 50 | 215 |
| 61 | 10.46 | 10.45 | 33.419 | 25.641 | 235.2 | 0.175 | 4.06 | 64.2 | 16.6 | 1.47 | 17.5 | 0.01 | 0.00 | 0.08 | 0.14 | 61 | 214 |
| 70 | 10.25 | 10.24 | 33.504 | 25.743 | 225.6 | 0.195 | 3.79 | 59.7 | 18.7 | 1.55 | 19.1 | 0.01 | 0.00 | 0.05 | 0.12 | 70 | 213 |
| 75 ISL | 10.15 D | 10.14 | 33.553 D | 25.799 | 220.5 | 0.206 | 3.69 D | 58.0 | 19.9 | 1.60 | 19.9 | 0.01 | 0.00 | 0.04 | 0.11 | 75 | |
| 85 | 9.92 | 9.91 | 33.695 | 25.948 | 206.4 | 0.228 | 3.35 | 52.5 | 22.5 | 1.70 | 21.3 | 0.01 | 0.00 | 0.03 | 0.09 | 85 | 212 |
| 100 ISL | 9.94 D | 9.93 | 33.854 D | 26.069 | 195.3 | 0.258 | 2.68 D | 42.0 | 26.6 | 1.90 | 23.4 | 0.01 | 0.00 | 0.03 | 0.13 | 101 | |
| 101 | 9.95 | 9.94 | 33.842 | 26.058 | 196.3 | 0.260 | 2.68 | 42.0 | 26.8 | 1.91 | 23.5 | 0.01 | 0.00 | 0.03 | 0.13 | 102 | 211 |
| 120 | 9.85 | 9.84 | 33.892 | 26.115 | 191.4 | 0.297 | 2.57 | 40.2 | 27.7 | 1.96 | 24.2 | 0.01 | 0.00 | 0.03 | 0.11 | 121 | 210 |
| 125 ISL | 9.78 D | 9.77 | 33.909 D | 26.140 | 189.1 | 0.306 | 2.58 D | 40.3 | 28.3 | 1.98 | 24.5 | 0.01 | 0.00 | 0.03 | 0.10 | 126 | |
| 141 | 9.66 | 9.64 | 34.013 | 26.241 | 179.8 | 0.336 | 2.29 | 35.7 | 30.3 | 2.04 | 25.6 | 0.00 | 0.00 | 0.02 | 0.08 | 142 | 209 |
| 150 ISL | 9.47 D | 9.45 | 34.035 D | 26.290 | 175.3 | 0.352 | 2.27 D | 35.3 | 31.1 | 2.05 | 26.0 | 0.00 | 0.00 | 0.02 | 0.08 | 151 | |
| 170 | 9.06 | 9.04 | 34.036 | 26.357 | 169.3 | 0.386 | 2.40 | 37.0 | 32.9 | 2.06 | 26.8 | 0.00 | 0.00 | 0.02 | 0.10 | 171 | 208 |
| 200 ISL | 8.91 D | 8.89 | 34.136 D | 26.460 | 160.1 | 0.436 | 1.70 D | 26.1 | 37.7 | 2.28 | 28.8 | 0.00 | 0.00 | 0.01 | 0.08 | 201 | |
| 201 | 8.90 | 8.88 | 34.135 | 26.460 | 160.0 | 0.437 | 1.73 | 26.6 | 37.9 | 2.29 | 28.9 | 0.00 | 0.00 | 0.01 | 0.08 | 202 | 207 |
| 230 | 8.60 | 8.58 | 34.174 | 26.538 | 153.1 | 0.483 | 1.36 | 20.7 | 42.2 | 2.46 | 30.8 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.35 D | 8.32 | 34.183 D | 26.584 | 149.0 | 0.513 | 1.31 D | 19.9 | 45.0 | 2.53 | 31.7 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.19 | 8.16 | 34.203 | 26.624 | 145.5 | 0.542 | 1.14 | 17.2 | 47.6 | 2.58 | 32.4 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.93 D | 7.90 | 34.233 D | 26.687 | 140.0 | 0.585 | 0.90 D | 13.5 | 51.2 | 2.68 | 33.5 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.76 | 7.73 | 34.233 | 26.712 | 137.9 | 0.614 | 0.84 | 12.6 | 53.6 | 2.74 | 34.2 | 0.00 | 0.00 | | | 323 | 204 |
| 380 | 7.28 | 7.24 | 34.259 | 26.802 | 130.0 | 0.693 | 0.58 | 8.6 | 60.6 | 2.87 | 36.0 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 7.10 D | 7.06 | 34.267 D | 26.833 | 127.2 | 0.719 | 0.53 D | 7.8 | 63.2 | 2.92 | 36.6 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.70 | 6.66 | 34.275 | 26.894 | 121.7 | 0.770 | 0.45 | 6.6 | 68.4 | 3.01 | 37.8 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.35 D | 6.30 | 34.300 D | 26.961 | 116.0 | 0.840 | 0.34 D | 4.9 | 73.9 | 3.08 | 38.8 | 0.00 | 0.00 | | | 503 | |
| 516 | 6.32 | 6.27 | 34.301 | 26.965 | 115.7 | 0.859 | 0.32 | 4.6 | 75.4 | 3.10 | 39.1 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 30.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 50.8 N | 117 32.0 W | 13/01/11 | 1241 UTC | 865 m | 000 04 kn | | | 1021.6 mb | 14.7 C | 12.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.15 | 14.15 | 33.303 | 24.845 | 309.5 | 0.000 | 5.82 | 99.5 | 2.2 | 0.40 | 0.7 | 0.06 | 0.38 | 0.31 | 0.09 | 0 | |
| 2 | 14.15 | 14.15 | 33.303 | 24.845 | 309.5 | 0.006 | 5.82 | 99.5 | 2.2 | 0.40 | 0.7 | 0.06 | 0.38 | 0.31 | 0.09 | 2 | 220 |
| 10 | 14.15 | 14.15 | 33.302 | 24.845 | 309.8 | 0.031 | 5.84 | 99.9 | 2.2 | 0.39 | 0.7 | 0.06 | 0.33 | 0.31 | 0.09 | 10 | 219 |
| 20 | 14.09 | 14.09 | 33.301 | 24.857 | 309.0 | 0.062 | 5.83 | 99.6 | 2.3 | 0.40 | 0.7 | 0.07 | 0.32 | 0.35 | 0.13 | 20 | 218 |
| 30 | 14.04 | 14.04 | 33.303 | 24.869 | 308.1 | 0.093 | 5.81 | 99.1 | 2.3 | 0.42 | 0.9 | 0.08 | 0.39 | 0.35 | 0.14 | 30 | 217 |
| 40 | 13.27 | 13.26 | 33.252 | 24.987 | 297.1 | 0.123 | 5.37 | 90.1 | 4.5 | 0.66 | 4.3 | 0.16 | 0.29 | 0.28 | 0.11 | 40 | 216 |
| 50 | 11.48 | 11.47 | 33.272 | 25.345 | 263.1 | 0.151 | 4.62 | 74.7 | 11.1 | 1.16 | 12.7 | 0.05 | 0.00 | 0.09 | 0.10 | 50 | 215 |
| 60 | 11.09 | 11.08 | 33.316 | 25.450 | 253.4 | 0.177 | 4.46 | 71.5 | 12.9 | 1.26 | 14.5 | 0.03 | 0.00 | 0.08 | 0.10 | 60 | 214 |
| 70 | 10.59 | 10.58 | 33.352 | 25.566 | 242.5 | 0.202 | 4.32 | 68.5 | 15.2 | 1.37 | 16.4 | 0.01 | 0.00 | 0.05 | 0.08 | 70 | 213 |
| 75 ISL | 10.45 D | 10.44 | 33.373 D | 25.607 | 238.7 | 0.214 | 4.24 D | 67.1 | 16.3 | 1.43 | 17.3 | 0.01 | 0.00 | 0.04 | 0.08 | 75 | |
| 84 | 10.21 | 10.20 | 33.465 | 25.720 | 228.1 | 0.235 | 3.97 | 62.5 | 18.2 | 1.53 | 18.9 | 0.01 | 0.00 | 0.03 | 0.08 | 84 | 212 |
| 100 | 9.88 | 9.87 | 33.679 | 25.943 | 207.3 | 0.270 | 3.41 | 53.4 | 22.4 | 1.69 | 21.6 | 0.00 | 0.00 | 0.01 | 0.05 | 100 | 211 |
| 120 | 9.56 | 9.55 | 33.809 | 26.098 | 192.9 | 0.310 | 2.90 | 45.1 | 26.6 | 1.88 | 24.4 | 0.00 | 0.00 | 0.01 | 0.07 | 121 | 210 |
| 125 ISL | 9.50 D | 9.49 | 33.822 D | 26.118 | 191.1 | 0.319 | 2.87 D | 44.6 | 27.4 | 1.92 | 24.7 | 0.00 | 0.00 | 0.01 | 0.07 | 126 | |
| 141 | 9.74 | 9.72 | 33.975 | 26.198 | 183.9 | 0.349 | 2.36 | 36.9 | 29.7 | 2.03 | 25.4 | 0.00 | 0.00 | 0.01 | 0.07 | 142 | 209 |
| 150 ISL | 9.68 D | 9.66 | 34.020 D | 26.244 | 179.8 | 0.365 | 2.29 D | 35.8 | 30.8 | 2.08 | 26.0 | 0.00 | 0.00 | 0.01 | 0.06 | 151 | |
| 170 | 9.40 | 9.38 | 34.080 | 26.337 | 171.3 | 0.401 | 2.06 | 32.0 | 33.0 | 2.15 | 27.2 | 0.00 | 0.00 | 0.01 | 0.05 | 171 | 208 |
| 200 | 8.98 | 8.96 | 34.124 | 26.439 | 162.1 | 0.451 | 1.96 | 30.1 | 36.2 | 2.21 | 28.3 | 0.00 | 0.00 | 0.01 | 0.04 | 201 | 207 |
| 230 | 8.50 | 8.48 | 34.126 | 26.516 | 155.2 | 0.498 | 1.89 | 28.8 | 40.3 | 2.27 | 29.6 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.29 D | 8.26 | 34.165 D | 26.579 | 149.5 | 0.529 | 1.53 D | 23.2 | 43.7 | 2.40 | 30.9 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.22 | 8.19 | 34.198 | 26.615 | 146.3 | 0.558 | 1.20 | 18.1 | 47.0 | 2.54 | 32.2 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 8.04 D | 8.01 | 34.226 D | 26.665 | 142.1 | 0.602 | 0.95 D | 14.3 | 50.3 | 2.64 | 33.3 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.86 | 7.83 | 34.229 | 26.694 | 139.6 | 0.631 | 0.90 | 13.5 | 52.4 | 2.68 | 33.9 | 0.00 | 0.00 | | | 323 | 204 |
| 380 | 7.37 | 7.33 | 34.257 | 26.787 | 131.5 | 0.711 | 0.63 | 9.3 | 59.8 | 2.85 | 35.8 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 7.15 D | 7.11 | 34.261 D | 26.821 | 128.4 | 0.737 | 0.57 D | 8.4 | 62.2 | 2.88 | 36.4 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.78 | 6.74 | 34.267 | 26.877 | 123.4 | 0.787 | 0.52 | 7.6 | 67.0 | 2.94 | 37.5 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.37 D | 6.32 | 34.292 D | 26.952 | 116.9 | 0.859 | 0.36 D | 5.2 | 74.5 | 3.04 | 39.1 | 0.00 | 0.00 | | | 503 | |
| 515 | 6.23 | 6.18 | 34.302 | 26.978 | 114.4 | 0.877 | 0.32 | 4.6 | 76.4 | 3.06 | 39.5 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 41.2 N | 117 52.7 W | 13/01/11 | 1840 UTC | 627 m | 280 07 kn | 290 02 06 | 0 | 1023.4 mb | 15.9 C | 13.2 C | 22m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.26 | 14.26 | 33.299 | 24.819 | 312.0 | 0.000 | 5.95 | 102.0 | 2.5 | 0.39 | 0.9 | 0.06 | 0.05 | 0.79 | 0.25 | 0 | |
| 2 A | 14.26 | 14.26 | 33.299 | 24.819 | 312.0 | 0.006 | 5.95 | 102.0 | 2.5 | 0.39 | 0.9 | 0.06 | 0.05 | 0.79 | 0.25 | 2 | 221 |
| 8 | 14.17 | 14.17 | 33.300 | 24.839 | 310.3 | 0.025 | 5.97 | 102.1 | 2.4 | 0.39 | 0.9 | 0.06 | 0.05 | 0.88 | 0.34 | 8 | 220 |
| 10 ISL | 14.17 D | 14.17 | 33.300 D | 24.839 | 310.4 | 0.031 | 5.98 D | 102.3 | 2.5 | 0.41 | 1.1 | 0.07 | 0.08 | 0.84 | 0.33 | 10 | |
| 14 A | 13.96 | 13.96 | 33.291 | 24.876 | 307.0 | 0.043 | 5.85 | 99.6 | 2.6 | 0.45 | 1.6 | 0.09 | 0.13 | 0.73 | 0.30 | 14 | 219 |
| 17 A | 13.91 | 13.91 | 33.292 | 24.887 | 306.0 | 0.053 | 5.78 | 98.3 | 2.7 | 0.46 | 1.9 | 0.11 | 0.14 | 0.66 | 0.31 | 17 | 218 |
| 20 ISL | 13.91 D | 13.91 | 33.295 D | 24.890 | 305.8 | 0.062 | 5.80 D | 98.7 | 2.8 | 0.47 | 2.0 | 0.13 | 0.16 | 0.61 | 0.29 | 20 | |
| 24 A | 13.85 | 13.85 | 33.295 | 24.902 | 304.8 | 0.074 | 5.68 | 96.5 | 3.0 | 0.50 | 2.4 | 0.15 | 0.18 | 0.56 | 0.26 | 24 | 217 |
| 30 ISL | 13.19 D | 13.19 | 33.298 D | 25.038 | 291.9 | 0.092 | 5.53 D | 92.7 | 4.5 | 0.65 | 4.7 | 0.21 | 0.11 | 0.50 | 0.24 | 30 | |
| 35 A | 12.82 | 12.82 | 33.274 | 25.093 | 286.9 | 0.106 | 5.08 | 84.5 | 6.5 | 0.83 | 7.5 | 0.24 | 0.04 | 0.44 | 0.23 | 35 | 216 |
| 47 | 11.46 | 11.45 | 33.367 | 25.423 | 255.7 | 0.139 | 4.26 | 68.9 | 13.2 | 1.31 | 15.1 | 0.01 | 0.00 | 0.17 | 0.23 | 47 | 215 |
| 50 ISL | 11.31 D | 11.30 | 33.381 D | 25.461 | 252.1 | 0.147 | 4.23 D | 68.2 | 14.0 | 1.35 | 15.8 | 0.01 | 0.00 | 0.14 | 0.22 | 50 | |
| 59 | 10.94 | 10.93 | 33.401 | 25.543 | 244.5 | 0.169 | 4.09 | 65.4 | 15.4 | 1.41 | 16.8 | 0.01 | 0.00 | 0.10 | 0.19 | 59 | 214 |
| 71 A | 10.63 | 10.62 | 33.456 | 25.641 | 235.5 | 0.198 | 3.96 | 62.9 | 16.8 | 1.49 | 18.1 | 0.01 | 0.00 | 0.06 | 0.13 | 71 | 213 |
| 75 ISL | 10.39 D | 10.38 | 33.534 D | 25.743 | 225.8 | 0.207 | 3.94 D | 62.3 | 17.8 | 1.54 | 18.8 | 0.01 | 0.00 | 0.05 | 0.12 | 75 | |
| 85 | 10.17 | 10.16 | 33.593 | 25.827 | 218.0 | 0.229 | 3.56 | 56.0 | 20.6 | 1.66 | 20.6 | 0.01 | 0.00 | 0.03 | 0.11 | 85 | 212 |
| 100 | 9.97 | 9.96 | 33.720 | 25.960 | 205.7 | 0.261 | 3.21 | 50.3 | 23.4 | 1.80 | 22.4 | 0.00 | 0.00 | 0.02 | 0.09 | 101 | 211 |
| 120 | 9.99 | 9.98 | 33.886 | 26.087 | 194.1 | 0.301 | 2.53 | 39.7 | 27.7 | 2.02 | 24.7 | 0.00 | 0.00 | 0.01 | 0.07 | 121 | 210 |
| 125 ISL | 10.00 D | 9.99 | 33.921 D | 26.112 | 191.8 | 0.311 | 2.48 D | 39.0 | 27.8 | 2.01 | 24.9 | 0.00 | 0.00 | 0.01 | 0.07 | 126 | |
| 140 | 9.60 | 9.58 | 33.898 | 26.161 | 187.4 | 0.339 | 2.70 | 42.0 | 28.2 | 2.00 | 25.3 | 0.00 | 0.00 | 0.02 | 0.07 | 141 | 209 |
| 150 ISL | 9.58 D | 9.56 | 33.951 D | 26.206 | 183.3 | 0.358 | 2.56 D | 39.9 | 28.9 | 2.01 | 25.7 | 0.00 | 0.00 | 0.02 | 0.06 | 151 | |
| 170 | 8.94 | 8.92 | 33.973 | 26.327 | 172.1 | 0.393 | 2.75 | 42.2 | 31.2 | 2.02 | 26.7 | 0.00 | 0.00 | 0.01 | 0.05 | 171 | 208 |
| 200 | 9.08 | 9.06 | 34.146 | 26.440 | 162.0 | 0.443 | 1.85 | 28.5 | 36.6 | 2.29 | 28.7 | 0.00 | 0.00 | 0.00 | 0.06 | 201 | 207 |
| 230 | 8.26 | 8.24 | 34.107 | 26.537 | 153.0 | 0.490 | 1.94 | 29.3 | 41.6 | 2.34 | 30.5 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.07 D | 8.04 | 34.129 D | 26.583 | 148.9 | 0.521 | 1.79 D | 27.0 | 44.7 | 2.44 | 31.6 | 0.00 | 0.00 | | | 251 | |
| 270 | 8.04 | 8.01 | 34.180 | 26.628 | 145.0 | 0.550 | 1.41 | 21.2 | 47.5 | 2.55 | 32.5 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.77 D | 7.74 | 34.194 D | 26.679 | 140.6 | 0.593 | 1.21 D | 18.1 | 51.3 | 2.68 | 33.7 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.72 | 7.69 | 34.234 | 26.718 | 137.2 | 0.621 | 0.91 | 13.6 | 53.6 | 2.76 | 34.4 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 7.17 | 7.13 | 34.240 | 26.802 | 129.9 | 0.702 | 0.69 | 10.2 | 60.8 | 2.90 | 36.5 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.98 D | 6.94 | 34.249 D | 26.835 | 126.9 | 0.727 | 0.64 D | 9.4 | 63.0 | 2.94 | 37.0 | 0.00 | 0.00 | | | 403 | |
| 442 | 6.74 | 6.70 | 34.276 | 26.890 | 122.2 | 0.779 | 0.48 | 7.0 | 67.9 | 3.03 | 38.1 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 6.35 D | 6.30 | 34.298 D | 26.959 | 116.1 | 0.848 | 0.39 D | 5.6 | 74.7 | 3.15 | 39.5 | 0.00 | 0.00 | | | 503 | |
| 518 | 6.22 | 6.17 | 34.308 | 26.984 | 113.9 | 0.869 | 0.32 | 4.6 | 76.8 | 3.19 | 40.0 | 0.00 | 0.00 | | | 522 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 30.7 N | 118 12.8 W | 13/01/11 | 2157 UTC | 1659 m | 260 06 kn | 260 02 05 | 0 | 1020.7 mb | 15.5 C | 13.5 C | 23m | 3/8 AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.51 | 14.51 | 33.328 | 24.789 | 314.9 | 0.000 | 5.92 | 102.0 | 1.5 | 0.35 | 0.5 | 0.04 | 0.15 | 0.56 | 0.25 | 0 | |
| 3 | 14.51 | 14.51 | 33.328 | 24.789 | 314.9 | 0.009 | 5.92 | 102.0 | 1.5 | 0.35 | 0.5 | 0.04 | 0.15 | 0.56 | 0.25 | 3 | 221 |
| 10 ISL | 14.30 D | 14.30 | 33.328 D | 24.834 | 310.9 | 0.031 | 5.97 D | 102.4 | 1.5 | 0.38 | 0.6 | 0.05 | 0.11 | 0.62 | 0.32 | 10 | |
| 11 | 14.30 | 14.30 | 33.328 | 24.834 | 310.9 | 0.034 | 5.94 | 101.9 | 1.5 | 0.38 | 0.6 | 0.05 | 0.10 | 0.63 | 0.33 | 11 | 219 |
| 11 | 14.30 | 14.30 | 33.326 | 24.832 | 311.1 | 0.034 | | | | | | | | | | 11 | 220 |
| 20 | 14.25 | 14.25 | 33.327 | 24.844 | 310.2 | 0.062 | 5.92 | 101.5 | 1.6 | 0.35 | 0.6 | 0.05 | 0.13 | 0.66 | 0.40 | 20 | 218 |
| 30 | 14.23 | 14.23 | 33.330 | 24.850 | 309.9 | 0.093 | 5.88 | 100.7 | 1.5 | 0.35 | 0.6 | 0.05 | 0.18 | 0.67 | 0.34 | 30 | 217 |
| 41 | 13.89 | 13.88 | 33.317 | 24.911 | 304.4 | 0.127 | 5.68 | 96.6 | 2.4 | 0.48 | 2.1 | 0.10 | 0.36 | 0.54 | 0.28 | 41 | 216 |
| 50 | 12.99 | 12.98 | 33.301 | 25.081 | 288.4 | 0.154 | 5.15 | 86.0 | 6.0 | 0.79 | 7.0 | 0.16 | 0.03 | 0.32 | 0.34 | 50 | 215 |
| 60 | 12.15 | 12.14 | 33.287 | 25.233 | 274.2 | 0.182 | 4.85 | 79.5 | 8.6 | 0.98 | 10.1 | 0.08 | 0.00 | 0.22 | 0.26 | 60 | 214 |
| 70 | 10.83 | 10.82 | 33.313 | 25.494 | 249.4 | 0.208 | 4.50 | 71.7 | 13.3 | 1.26 | 14.9 | 0.02 | 0.00 | 0.08 | 0.16 | 70 | 213 |
| 75 ISL | 10.80 D | 10.79 | 33.319 D | 25.504 | 248.5 | 0.221 | 4.50 D | 71.7 | 14.4 | 1.33 | 16.0 | 0.02 | 0.00 | 0.07 | 0.16 | 75 | |
| 85 | 10.33 | 10.32 | 33.388 | 25.640 | 235.8 | 0.245 | 4.24 | 66.9 | 16.0 | 1.41 | 17.5 | 0.01 | 0.00 | 0.05 | 0.16 | 85 | 212 |
| 100 | 10.02 | 10.01 | 33.552 | 25.820 | 218.9 | 0.279 | 3.70 | 58.0 | 19.9 | 1.61 | 20.7 | 0.00 | 0.00 | 0.03 | 0.11 | 100 | 211 |
| 120 | 9.56 | 9.55 | 33.740 | 26.044 | 198.0 | 0.321 | 3.13 | 48.7 | 25.1 | 1.84 | 24.1 | 0.00 | 0.00 | 0.01 | 0.08 | 121 | 210 |
| 125 ISL | 9.54 D | 9.53 | 33.760 D | 26.063 | 196.3 | 0.331 | 3.10 D | 48.2 | 26.2 | 1.88 | 24.7 | 0.00 | 0.00 | 0.01 | 0.08 | 126 | |
| 140 | 9.26 | 9.24 | 33.896 | 26.215 | 182.2 | 0.359 | 2.69 | 41.6 | 29.1 | 1.99 | 26.3 | 0.00 | 0.00 | 0.01 | 0.07 | 141 | 209 |
| 150 ISL | 9.00 D | 8.98 | 33.966 D | 26.311 | 173.1 | 0.377 | 2.56 D | 39.4 | 31.0 | 2.05 | 27.1 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 170 | 8.79 | 8.77 | 34.016 | 26.384 | 166.6 | 0.411 | 2.31 | 35.4 | 34.3 | 2.14 | 28.3 | 0.00 | 0.00 | 0.01 | 0.06 | 171 | 208 |
| 200 | 8.57 | 8.55 | 34.079 | 26.468 | 159.2 | 0.460 | 2.01 | 30.6 | 38.0 | 2.25 | 29.6 | 0.00 | 0.00 | 0.01 | 0.05 | 201 | 207 |
| 231 | 8.18 | 8.16 | 34.117 | 26.557 | 151.1 | 0.508 | 1.73 | 26.1 | 43.2 | 2.40 | 31.5 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 7.98 D | 7.95 | 34.138 D | 26.604 | 146.9 | 0.536 | 1.51 D | 22.7 | 46.4 | 2.48 | 32.5 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.76 | 7.73 | 34.155 | 26.650 | 142.8 | 0.566 | 1.34 | 20.0 | 49.7 | 2.57 | 33.5 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.52 D | 7.49 | 34.186 D | 26.709 | 137.6 | 0.607 | 1.10 D | 16.4 | 53.1 | 2.70 | 34.5 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.48 | 7.45 | 34.217 | 26.739 | 135.0 | 0.634 | 0.87 | 12.9 | 55.3 | 2.78 | 35.1 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.90 | 6.86 | 34.235 | 26.835 | 126.6 | 0.714 | 0.65 | 9.5 | 63.5 | 2.94 | 37.1 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.91 D | 6.87 | 34.268 D | 26.860 | 124.5 | 0.738 | 0.54 D | 7.9 | 65.6 | 2.98 | 37.6 | 0.00 | 0.00 | | | 403 | |
| 442 | 6.53 | 6.49 | 34.265 | 26.909 | 120.2 | 0.789 | 0.47 | 6.8 | 69.9 | 3.07 | 38.6 | 0.00 | 0.00 | | | 445 | 202 |
| 500 ISL | 6.16 D | 6.12 | 34.313 D | 26.995 | 112.5 | 0.857 | 0.31 D | 4.5 | 76.1 | 3.15 | 39.8 | 0.00 | 0.00 | | | 503 | |
| 516 | 6.13 | 6.08 | 34.313 | 26.999 | 112.3 | 0.875 | 0.28 | 4.0 | 77.8 | 3.17 | 40.1 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 20.9 N | 118 33.6 W | 14/01/11 | 0216 UTC | 1358 m | 250 11 kn | | | 1019.6 mb | 13.5 C | 12.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.42 | 14.42 | 33.337 | 24.815 | 312.4 | 0.000 | 6.19 | 106.5 | 0.1 | 0.29 | 0.0 | 0.00 | 0.04 | 2.55 | 0.18 | 0 | |
| 2 | 14.42 | 14.42 | 33.337 | 24.815 | 312.4 | 0.006 | 6.19 | 106.5 | 0.1 | 0.29 | 0.0 | 0.00 | 0.04 | 2.55 | 0.18 | 2 | 220 |
| 10 | 14.42 | 14.42 | 33.337 | 24.815 | 312.7 | 0.031 | 6.19 | 106.5 | 0.1 | 0.30 | 0.0 | 0.00 | 0.07 | 2.54 | 0.25 | 10 | 219 |
| 20 | 14.41 | 14.41 | 33.341 | 24.821 | 312.4 | 0.063 | 6.17 | 106.1 | 0.2 | 0.27 | 0.0 | 0.00 | 0.05 | 2.55 | 0.38 | 20 | 218 |
| 30 | 14.35 | 14.35 | 33.336 | 24.830 | 311.8 | 0.094 | 6.08 | 104.4 | 0.3 | 0.29 | 0.0 | 0.00 | 0.00 | 3.21 | 0.28 | 30 | 217 |
| 40 | 13.30 | 13.29 | 33.305 | 25.022 | 293.8 | 0.124 | 5.33 | 89.6 | 4.8 | 0.75 | 5.2 | 0.20 | 0.26 | 1.41 | 0.54 | 40 | 216 |
| 50 | 11.79 | 11.78 | 33.290 | 25.302 | 267.3 | 0.152 | 4.68 | 76.2 | 10.0 | 1.16 | 12.0 | 0.05 | 0.00 | 0.47 | 0.47 | 50 | 215 |
| 60 | 10.61 | 10.60 | 33.381 | 25.585 | 240.5 | 0.177 | 4.25 | 67.5 | 15.2 | 1.40 | 16.8 | 0.01 | 0.00 | 0.12 | 0.20 | 60 | 214 |
| 71 | 10.38 | 10.37 | 33.451 | 25.680 | 231.7 | 0.203 | 4.02 | 63.5 | 17.1 | 1.51 | 18.5 | 0.01 | 0.00 | 0.13 | 0.30 | 71 | 213 |
| 75 ISL | 10.33 D | 10.32 | 33.456 D | 25.692 | 230.6 | 0.213 | 4.00 D | 63.1 | 18.8 | 1.59 | 19.8 | 0.01 | 0.00 | 0.11 | 0.27 | 75 | |
| 85 | 9.80 | 9.79 | 33.665 | 25.945 | 206.7 | 0.235 | 3.33 | 52.0 | 22.9 | 1.78 | 22.8 | 0.00 | 0.00 | 0.05 | 0.15 | 85 | 212 |
| 100 | 9.73 | 9.72 | 33.699 | 25.984 | 203.4 | 0.265 | 3.22 | 50.2 | 23.8 | 1.81 | 23.4 | 0.00 | 0.00 | 0.05 | 0.13 | 100 | 211 |
| 120 | 9.29 | 9.28 | 33.881 | 26.198 | 183.4 | 0.304 | 2.71 | 41.9 | 28.9 | 2.01 | 26.1 | 0.00 | 0.00 | 0.03 | 0.08 | 121 | 210 |
| 125 ISL | 9.26 D | 9.25 | 33.896 D | 26.215 | 181.9 | 0.313 | 2.71 D | 41.9 | 30.1 | 2.05 | 26.6 | 0.00 | 0.00 | 0.02 | 0.08 | 126 | |
| 141 | 8.96 | 8.94 | 34.005 | 26.348 | 169.5 | 0.341 | 2.31 | 35.5 | 33.6 | 2.14 | 27.9 | 0.00 | 0.00 | 0.01 | 0.07 | 142 | 209 |
| 150 ISL | 8.91 D | 8.89 | 34.029 D | 26.375 | 167.1 | 0.356 | 2.24 D | 34.4 | 34.7 | 2.18 | 28.3 | 0.00 | 0.00 | 0.02 | 0.07 | 151 | |
| 171 | 8.78 | 8.76 | 34.089 | 26.443 | 161.1 | 0.391 | 1.99 | 30.5 | 37.0 | 2.27 | 29.1 | 0.00 | 0.00 | 0.04 | 0.08 | 172 | 208 |
| 200 | 8.36 | 8.34 | 34.141 | 26.549 | 151.4 | 0.436 | 1.59 | 24.1 | 42.7 | 2.44 | 31.2 | 0.00 | 0.00 | 0.02 | 0.06 | 201 | 207 |
| 230 | 8.19 | 8.17 | 34.150 | 26.582 | 148.8 | 0.481 | 1.47 | 22.2 | 44.9 | 2.50 | 31.9 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.03 D | 8.00 | 34.162 D | 26.615 | 145.9 | 0.511 | 1.37 D | 20.6 | 47.3 | 2.57 | 32.7 | 0.00 | 0.00 | | | 251 | |
| 269 | 7.84 | 7.81 | 34.183 | 26.660 | 141.9 | 0.538 | 1.19 | 17.8 | 50.0 | 2.64 | 33.6 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.44 D | 7.41 | 34.199 D | 26.731 | 135.5 | 0.581 | 0.98 D | 14.6 | 54.9 | 2.74 | 34.9 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.28 | 7.25 | 34.212 | 26.764 | 132.6 | 0.608 | 0.88 | 13.0 | 57.9 | 2.79 | 35.6 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.94 | 6.90 | 34.241 | 26.834 | 126.7 | 0.687 | 0.66 | 9.7 | 63.3 | 2.92 | 36.9 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.88 D | 6.84 | 34.239 D | 26.841 | 126.3 | 0.711 | 0.65 D | 9.5 | 65.2 | 2.95 | 37.4 | 0.00 | 0.00 | | | 403 | |
| 439 | 6.57 | 6.53 | 34.267 | 26.905 | 120.6 | 0.759 | 0.48 | 7.0 | 69.5 | 3.01 | 38.3 | 0.00 | 0.00 | | | 442 | 202 |
| 500 ISL | 6.25 D | 6.21 | 34.309 D | 26.981 | 114.0 | 0.831 | 0.32 D | 4.6 | 76.7 | 3.18 | 39.6 | 0.00 | 0.47 | | | 503 | |
| 516 | 6.11 | 6.06 | 34.321 | 27.008 | 111.5 | 0.849 | 0.29 | 4.2 | 78.6 | 3.23 | 40.0 | 0.00 | 0.59 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 10.6 N | 118 53.6 W | 14/01/11 | 0643 UTC | 1472 m | 260 12 kn | | | 1019.6 mb | 14.5 C | 13.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.79 | 13.79 | 33.355 | 24.960 | 298.6 | 0.000 | 6.15 | 104.4 | 0.8 | 0.33 | 1.2 | 0.05 | 0.03 | 2.17 | 0.35 | 0 | |
| 2 | 13.79 | 13.79 | 33.355 | 24.960 | 298.6 | 0.006 | 6.15 | 104.4 | 0.8 | 0.33 | 1.2 | 0.05 | 0.03 | 2.17 | 0.35 | 2 | 220 |
| 10 | 13.79 | 13.79 | 33.355 | 24.960 | 298.8 | 0.030 | 6.13 | 104.1 | 0.8 | 0.34 | 1.2 | 0.05 | 0.02 | 2.14 | 0.38 | 10 | 219 |
| 20 ISL | 13.06 D | 13.06 | 33.377 D | 25.125 | 283.4 | 0.059 | 6.07 D | 101.5 | 2.9 | 0.55 | 3.9 | 0.12 | 0.25 | 2.22 | 0.52 | 20 | |
| 21 | 13.02 | 13.02 | 33.379 | 25.135 | 282.5 | 0.062 | 5.98 | 99.9 | 3.2 | 0.58 | 4.3 | 0.13 | 0.28 | 2.23 | 0.54 | 21 | 218 |
| 30 | 12.55 | 12.55 | 33.392 | 25.237 | 273.0 | 0.087 | 5.41 | 89.5 | 6.7 | 0.89 | 7.7 | 0.25 | 0.46 | 2.11 | 0.60 | 30 | 217 |
| 40 | 11.79 | 11.78 | 33.434 | 25.414 | 256.4 | 0.113 | 4.49 | 73.1 | 12.0 | 1.22 | 13.5 | 0.29 | 0.00 | 0.33 | 0.27 | 40 | 216 |
| 50 | 11.40 | 11.39 | 33.459 | 25.505 | 247.9 | 0.139 | 4.23 | 68.3 | 13.9 | 1.35 | 15.5 | 0.17 | 0.00 | 0.22 | 0.23 | 50 | 215 |
| 61 | 10.70 | 10.69 | 33.531 | 25.686 | 230.9 | 0.165 | 3.75 | 59.7 | 18.0 | 1.57 | 19.0 | 0.06 | 0.00 | 0.10 | 0.18 | 61 | 214 |
| 70 | 10.32 | 10.31 | 33.585 | 25.795 | 220.8 | 0.185 | 3.51 | 55.4 | 20.4 | 1.68 | 20.9 | 0.02 | 0.00 | 0.05 | 0.15 | 70 | 213 |
| 75 ISL | 9.96 D | 9.95 | 33.658 D | 25.913 | 209.6 | 0.196 | 3.39 D | 53.1 | 21.7 | 1.73 | 21.8 | 0.01 | 0.00 | 0.04 | 0.14 | 75 | |
| 86 | 9.77 | 9.76 | 33.732 | 26.002 | 201.3 | 0.219 | 3.08 | 48.1 | 24.9 | 1.85 | 23.8 | 0.00 | 0.00 | 0.02 | 0.11 | 86 | 212 |
| 100 | 9.28 | 9.27 | 33.934 | 26.241 | 178.9 | 0.245 | 2.55 | 39.4 | 30.5 | 2.05 | 26.7 | 0.00 | 0.00 | 0.01 | 0.05 | 101 | 211 |
| 120 | 9.09 | 9.08 | 34.004 | 26.326 | 171.2 | 0.280 | 2.37 | 36.5 | 32.8 | 2.12 | 27.6 | 0.00 | 0.00 | 0.01 | 0.12 | 121 | 210 |
| 125 ISL | 9.05 D | 9.04 | 34.011 D | 26.338 | 170.1 | 0.289 | 2.40 D | 36.9 | 33.3 | 2.13 | 27.8 | 0.00 | 0.00 | 0.01 | 0.11 | 126 | |
| 141 | 8.85 | 8.83 | 34.043 | 26.395 | 165.0 | 0.315 | 2.26 | 34.6 | 35.0 | 2.17 | 28.4 | 0.00 | 0.00 | 0.00 | 0.05 | 142 | 209 |
| 150 ISL | 8.74 D | 8.72 | 34.060 D | 26.426 | 162.2 | 0.330 | 2.22 D | 33.9 | 36.2 | 2.21 | 28.8 | 0.00 | 0.00 | 0.00 | 0.05 | 151 | |
| 170 | 8.55 | 8.53 | 34.095 | 26.483 | 157.1 | 0.362 | 1.96 | 29.8 | 39.0 | 2.29 | 29.8 | 0.00 | 0.00 | 0.01 | 0.05 | 171 | 208 |
| 200 | 8.23 | 8.21 | 34.118 | 26.550 | 151.2 | 0.408 | 1.75 | 26.5 | 42.3 | 2.38 | 31.0 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | 207 |
| 231 | 8.03 | 8.01 | 34.137 | 26.595 | 147.4 | 0.455 | 1.54 | 23.2 | 46.1 | 2.47 | 32.2 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 7.77 D | 7.75 | 34.157 D | 26.650 | 142.5 | 0.482 | 1.36 D | 20.4 | 49.0 | 2.53 | 33.0 | 0.00 | 0.00 | | | 252 | |
| 270 | 7.59 | 7.56 | 34.159 | 26.677 | 140.1 | 0.510 | 1.26 | 18.8 | 52.0 | 2.61 | 33.9 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.46 D | 7.43 | 34.205 D | 26.732 | 135.3 | 0.552 | 0.97 D | 14.4 | 56.0 | 2.75 | 35.1 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.31 | 7.28 | 34.229 | 26.773 | 131.8 | 0.580 | 0.77 | 11.4 | 58.4 | 2.84 | 35.8 | 0.00 | 0.00 | | | 323 | 204 |
| 381 | 7.02 | 6.98 | 34.257 | 26.836 | 126.6 | 0.657 | 0.58 | 8.5 | 63.5 | 2.96 | 37.0 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.84 D | 6.80 | 34.273 D | 26.873 | 123.2 | 0.681 | 0.48 D | 7.0 | 66.3 | 3.00 | 37.6 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.49 | 6.45 | 34.289 | 26.933 | 117.8 | 0.729 | 0.39 | 5.7 | 72.4 | 3.08 | 38.8 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.17 D | 6.13 | 34.311 D | 26.992 | 112.8 | 0.798 | 0.30 D | 4.3 | 77.9 | 3.15 | 39.7 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.10 | 6.05 | 34.318 | 27.007 | 111.6 | 0.818 | 0.27 | 3.9 | 79.5 | 3.17 | 40.0 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 0.6 N | 119 14.4 W | 14/01/11 | 1202 UTC | 1610 m | 260 15 kn | | | 1018.3 mb | 14.3 C | 12.7 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.52 | 12.52 | 33.315 | 25.182 | 277.4 | 0.000 | 5.90 | 97.5 | 5.9 | 0.72 | 6.0 | 0.30 | 0.18 | 0.34 | 0.15 | 0 | |
| 2 | 12.52 | 12.52 | 33.315 | 25.182 | 277.5 | 0.006 | 5.90 | 97.5 | 5.9 | 0.72 | 6.0 | 0.30 | 0.18 | 0.34 | 0.15 | 2 | 221 |
| 9 | 12.52 | 12.52 | 33.319 | 25.185 | 277.4 | 0.025 | | | | | | | | | | 9 | 220 |
| 10 | 12.52 | 12.52 | 33.315 | 25.182 | 277.7 | 0.028 | 5.91 | 97.7 | 5.9 | 0.72 | 6.0 | 0.30 | 0.17 | 0.35 | 0.16 | 10 | 219 |
| 20 | 12.52 | 12.52 | 33.318 | 25.185 | 277.7 | 0.056 | 5.90 | 97.5 | 6.1 | 0.72 | 6.0 | 0.30 | 0.17 | 0.35 | 0.17 | 20 | 218 |
| 30 | 12.43 | 12.43 | 33.327 | 25.209 | 275.6 | 0.083 | 5.75 | 94.9 | 6.4 | 0.78 | 6.7 | 0.36 | 0.16 | 0.34 | 0.25 | 30 | 217 |
| 41 | 11.92 | 11.91 | 33.407 | 25.369 | 260.7 | 0.113 | 4.98 | 81.3 | 9.9 | 1.04 | 11.0 | 0.41 | 0.00 | 0.27 | 0.26 | 41 | 216 |
| 50 | 11.45 | 11.44 | 33.443 | 25.484 | 250.0 | 0.136 | 4.61 | 74.5 | 12.7 | 1.18 | 13.5 | 0.18 | 0.00 | 0.17 | 0.22 | 50 | 215 |
| 60 | 11.15 | 11.14 | 33.459 | 25.551 | 243.8 | 0.160 | 4.42 | 71.0 | 14.2 | 1.28 | 15.1 | 0.10 | 0.00 | 0.13 | 0.19 | 60 | 214 |
| 70 | 10.82 | 10.81 | 33.501 | 25.642 | 235.3 | 0.184 | 4.13 | 65.9 | 16.4 | 1.41 | 16.9 | 0.05 | 0.00 | 0.09 | 0.19 | 70 | 213 |
| 75 ISL | 10.64 D | 10.63 | 33.547 D | 25.710 | 229.0 | 0.196 | 3.90 D | 62.0 | 18.1 | 1.49 | 18.3 | 0.04 | 0.00 | 0.07 | 0.17 | 75 | |
| 85 | 10.24 | 10.23 | 33.628 | 25.842 | 216.6 | 0.218 | 3.41 | 53.8 | 21.8 | 1.66 | 21.1 | 0.02 | 0.00 | 0.03 | 0.13 | 85 | 212 |
| 100 | 9.83 | 9.82 | 33.738 | 25.997 | 202.1 | 0.250 | 2.99 | 46.8 | 25.6 | 1.82 | 23.6 | 0.01 | 0.00 | 0.01 | 0.13 | 101 | 211 |
| 120 | 9.49 | 9.48 | 33.900 | 26.180 | 185.1 | 0.288 | 2.43 | 37.8 | 30.3 | 2.02 | 26.4 | 0.00 | 0.00 | 0.01 | 0.10 | 121 | 210 |
| 125 ISL | 9.35 D | 9.34 | 33.957 D | 26.248 | 178.8 | 0.297 | 2.26 D | 35.0 | 31.2 | 2.06 | 26.9 | 0.00 | 0.00 | 0.01 | 0.09 | 126 | |
| 142 | 9.26 | 9.24 | 34.022 | 26.313 | 172.9 | 0.327 | 2.03 | 31.4 | 33.8 | 2.16 | 28.0 | 0.00 | 0.00 | 0.00 | 0.08 | 143 | 209 |
| 150 ISL | 9.19 D | 9.17 | 34.039 D | 26.338 | 170.7 | 0.341 | 2.04 D | 31.5 | 34.7 | 2.19 | 28.4 | 0.00 | 0.00 | 0.00 | 0.08 | 151 | |
| 171 | 9.03 | 9.01 | 34.086 | 26.401 | 165.1 | 0.376 | 1.77 | 27.2 | 36.9 | 2.25 | 29.2 | 0.00 | 0.00 | 0.00 | 0.07 | 172 | 208 |
| 200 ISL | 8.76 D | 8.74 | 34.136 D | 26.483 | 157.8 | 0.423 | 1.53 D | 23.4 | 40.5 | 2.36 | 30.4 | 0.00 | 0.00 | 0.00 | 0.07 | 201 | |
| 202 | 8.77 | 8.75 | 34.144 | 26.488 | 157.4 | 0.426 | 1.47 | 22.5 | 40.8 | 2.37 | 30.5 | 0.00 | 0.00 | 0.00 | 0.07 | 203 | 207 |
| 232 | 8.29 | 8.27 | 34.159 | 26.574 | 149.6 | 0.472 | 1.41 | 21.4 | 44.4 | 2.44 | 31.8 | 0.00 | 0.00 | | | 233 | 206 |
| 250 ISL | 8.16 D | 8.13 | 34.183 D | 26.612 | 146.2 | 0.499 | 1.29 D | 19.5 | 46.5 | 2.50 | 32.4 | 0.00 | 0.00 | | | 251 | |
| 272 | 8.01 | 7.98 | 34.197 | 26.646 | 143.4 | 0.531 | 1.12 | 16.9 | 49.2 | 2.57 | 33.1 | 0.00 | 0.00 | | | 274 | 205 |
| 300 ISL | 7.80 D | 7.77 | 34.229 D | 26.702 | 138.4 | 0.570 | 0.89 D | 13.3 | 52.8 | 2.66 | 34.1 | 0.00 | 0.00 | | | 302 | |
| 316 | 7.67 | 7.64 | 34.234 | 26.725 | 136.4 | 0.592 | 0.87 | 13.0 | 54.8 | 2.71 | 34.7 | 0.00 | 0.00 | | | 318 | 204 |
| 380 | 7.08 | 7.04 | 34.251 | 26.823 | 127.8 | 0.677 | 0.67 | 9.9 | 62.3 | 2.84 | 36.5 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.91 D | 6.87 | 34.268 D | 26.860 | 124.5 | 0.702 | 0.54 D | 7.9 | 64.9 | 2.89 | 37.1 | 0.00 | 0.00 | | | 403 | |
| 440 | 6.62 | 6.58 | 34.284 | 26.912 | 120.0 | 0.751 | 0.42 | 6.1 | 70.1 | 2.99 | 38.3 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.21 D | 6.17 | 34.309 D | 26.986 | 113.5 | 0.821 | 0.34 D | 4.9 | 77.8 | 3.07 | 39.7 | 0.00 | 0.00 | | | 503 | |
| 517 | 6.05 | 6.00 | 34.319 | 27.014 | 110.8 | 0.840 | 0.27 | 3.9 | 80.0 | 3.09 | 40.1 | 0.00 | 0.00 | | | 521 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 50.9 N | 119 34.2 W | 14/01/11 | 1805 UTC | 1931 m | 270 17 kn | 260 06 06 | 0 | 1020.2 mb | 15.5 C | 13.9 C | 16m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.05 | 13.05 | 33.346 | 25.102 | 285.0 | 0.000 | 5.85 | 97.8 | 4.3 | 0.65 | 4.7 | 0.33 | 0.22 | 0.51 | 0.31 | 0 | |
| 3 A | 13.05 | 13.05 | 33.346 | 25.103 | 285.1 | 0.009 | 5.85 | 97.8 | 4.3 | 0.65 | 4.7 | 0.33 | 0.22 | 0.51 | 0.31 | 3 | 222 |
| 10 ISL | 13.02 D | 13.02 | 33.346 D | 25.109 | 284.7 | 0.028 | 5.87 | 98.1 | 4.3 | 0.63 | 4.7 | 0.33 | 0.20 | 0.52 | 0.33 | 10 | |
| 11 A | 13.02 | 13.02 | 33.345 | 25.108 | 284.8 | 0.031 | 5.87 | 98.1 | 4.3 | 0.63 | 4.7 | 0.33 | 0.20 | 0.52 | 0.33 | 11 | 221 |
| 12 A | 13.03 | 13.03 | 33.345 | 25.106 | 285.0 | 0.034 | 5.85 | 97.8 | 4.3 | 0.64 | 4.7 | 0.33 | 0.21 | 0.48 | 0.29 | 12 | 220 |
| 17 A | 13.02 | 13.02 | 33.347 | 25.110 | 284.8 | 0.048 | 5.86 | 97.9 | 4.3 | 0.64 | 4.7 | 0.33 | 0.21 | 0.49 | 0.35 | 17 | 219 |
| 20 ISL | 13.01 D | 13.01 | 33.346 D | 25.111 | 284.8 | 0.057 | 5.93 D | 99.1 | 4.3 | 0.64 | 4.7 | 0.33 | 0.21 | 0.49 | 0.35 | 20 | |
| 25 A | 13.01 | 13.01 | 33.346 | 25.111 | 284.9 | 0.071 | 5.86 | 97.9 | 4.3 | 0.64 | 4.8 | 0.33 | 0.20 | 0.49 | 0.34 | 25 | 218 |
| 30 ISL | 13.01 D | 13.01 | 33.346 D | 25.111 | 285.0 | 0.085 | 5.92 D | 98.9 | 4.3 | 0.64 | 4.8 | 0.33 | 0.20 | 0.52 | 0.37 | 30 | |
| 34 | 13.01 | 13.01 | 33.349 | 25.114 | 284.9 | 0.097 | 5.84 | 97.6 | 4.3 | 0.64 | 4.8 | 0.33 | 0.20 | 0.53 | 0.38 | 34 | 217 |
| 43 | 12.83 | 12.82 | 33.344 | 25.145 | 282.1 | 0.122 | 5.69 | 94.7 | 4.8 | 0.69 | 5.6 | 0.31 | 0.17 | 0.40 | 0.31 | 43 | 216 |
| 50 ISL | 12.20 D | 12.19 | 33.340 D | 25.264 | 270.9 | 0.142 | 5.14 D | 84.4 | 7.0 | 0.89 | 9.0 | 0.12 | 0.04 | 0.20 | 0.29 | 50 | |
| 52 A | 12.13 | 12.12 | 33.341 | 25.278 | 269.6 | 0.147 | 5.07 | 83.1 | 7.8 | 0.96 | 10.1 | 0.07 | 0.00 | 0.14 | 0.29 | 52 | 215 |
| 61 | 11.49 | 11.48 | 33.393 | 25.438 | 254.6 | 0.171 | 4.43 | 71.7 | 12.0 | 1.21 | 13.9 | 0.03 | 0.00 | 0.07 | 0.13 | 61 | 214 |
| 69 | 11.11 | 11.10 | 33.431 | 25.536 | 245.4 | 0.191 | 4.32 | 69.3 | 14.3 | 1.33 | 15.9 | 0.03 | 0.00 | 0.05 | 0.13 | 69 | 213 |
| 75 ISL | 10.75 D | 10.74 | 33.468 D | 25.629 | 236.7 | 0.205 | 3.98 D | 63.4 | 16.9 | 1.46 | 18.1 | 0.03 | 0.00 | 0.04 | 0.12 | 75 | |
| 85 | 10.13 | 10.12 | 33.569 | 25.815 | 219.2 | 0.228 | 3.51 | 55.2 | 20.8 | 1.65 | 21.3 | 0.02 | 0.00 | 0.02 | 0.10 | 85 | 212 |
| 100 | 9.96 | 9.95 | 33.637 | 25.897 | 211.7 | 0.260 | 3.29 | 51.6 | 22.5 | 1.72 | 22.4 | 0.01 | 0.00 | 0.02 | 0.10 | 100 | 211 |
| 120 | 9.57 | 9.56 | 33.848 | 26.127 | 190.2 | 0.300 | 2.66 | 41.4 | 27.8 | 1.93 | 25.5 | 0.01 | 0.00 | 0.01 | 0.08 | 121 | 210 |
| 125 ISL | 9.47 D | 9.46 | 33.859 D | 26.152 | 187.9 | 0.310 | 2.75 D | 42.7 | 28.4 | 1.94 | 25.8 | 0.01 | 0.00 | 0.01 | 0.07 | 126 | |
| 140 | 9.27 | 9.25 | 33.929 | 26.239 | 179.9 | 0.338 | 2.54 | 39.3 | 29.9 | 1.97 | 26.5 | 0.00 | 0.00 | 0.02 | 0.06 | 141 | 209 |
| 150 ISL | 9.05 D | 9.03 | 33.970 D | 26.307 | 173.6 | 0.355 | 2.39 D | 36.8 | 32.0 | 2.04 | 27.4 | 0.00 | 0.00 | 0.02 | 0.05 | 151 | |
| 170 | 8.82 | 8.80 | 34.079 | 26.428 | 162.4 | 0.389 | 1.95 | 29.9 | 36.5 | 2.18 | 29.1 | 0.00 | 0.00 | 0.01 | 0.04 | 171 | 208 |
| 200 | 8.57 | 8.55 | 34.128 | 26.506 | 155.5 | 0.436 | 1.66 | 25.3 | 40.2 | 2.29 | 30.4 | 0.00 | 0.00 | 0.00 | 0.05 | 201 | 207 |
| 231 | 8.23 | 8.21 | 34.152 | 26.577 | 149.2 | 0.484 | 1.45 | 21.9 | 44.3 | 2.39 | 31.8 | 0.00 | 0.00 | | | 232 | 206 |
| 250 ISL | 8.00 D | 7.97 | 34.184 D | 26.637 | 143.8 | 0.512 | 1.25 D | 18.8 | 47.1 | 2.48 | 32.7 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.84 | 7.81 | 34.200 | 26.673 | 140.6 | 0.541 | 1.07 | 16.0 | 50.3 | 2.58 | 33.7 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.61 D | 7.58 | 34.238 D | 26.737 | 135.0 | 0.581 | 0.80 D | 11.9 | 54.4 | 2.68 | 34.8 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.45 | 7.42 | 34.248 | 26.768 | 132.3 | 0.608 | 0.68 | 10.1 | 57.1 | 2.74 | 35.5 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 6.91 | 6.87 | 34.266 | 26.858 | 124.4 | 0.686 | 0.51 | 7.5 | 65.1 | 2.86 | 37.3 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.79 D | 6.75 | 34.275 D | 26.882 | 122.4 | 0.710 | 0.49 D | 7.2 | 67.5 | 2.90 | 37.8 | 0.00 | 0.00 | | | 403 | |
| 441 | 6.42 | 6.38 | 34.300 | 26.951 | 116.1 | 0.759 | 0.36 | 5.2 | 72.6 | 2.99 | 38.9 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.03 D | 5.99 | 34.325 D | 27.021 | 109.9 | 0.825 | 0.29 D | 4.2 | 79.1 | 3.05 | 40.0 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.97 | 5.92 | 34.328 | 27.031 | 109.1 | 0.842 | 0.25 | 3.6 | 80.7 | 3.07 | 40.3 | 0.00 | 0.00 | | | 519 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 31.1 N | 120 15.0 W | 15/01/11 | 0049 UTC | 3945 m | 280 14 kn | 350 06 04 | 0 | 1018.7 mb | 15.0 C | 13.2 C | | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.15 | 14.15 | 32.876 | 24.516 | 340.9 | 0.000 | 5.93 | 101.1 | 2.0 | 0.31 | 0.1 | 0.02 | 0.00 | 0.70 | 0.21 | 0 | |
| 2 | 14.15 | 14.15 | 32.876 | 24.516 | 340.9 | 0.007 | 5.93 | 101.1 | 2.0 | 0.31 | 0.1 | 0.02 | 0.00 | 0.70 | 0.21 | 2 | 220 |
| 10 | 14.16 | 14.16 | 32.876 | 24.514 | 341.3 | 0.034 | 6.00 | 102.4 | 2.0 | 0.30 | 0.1 | 0.02 | 0.00 | 0.68 | 0.21 | 10 | 219 |
| 20 | 14.15 | 14.15 | 32.885 | 24.523 | 340.7 | 0.068 | 6.00 | 102.3 | 1.9 | 0.31 | 0.1 | 0.02 | 0.00 | 0.72 | 0.22 | 20 | 218 |
| 30 | 14.04 | 14.04 | 32.939 | 24.588 | 334.8 | 0.102 | 5.97 | 101.6 | 2.1 | 0.32 | 0.3 | 0.04 | 0.00 | 0.76 | 0.22 | 30 | 217 |
| 41 | 13.89 | 13.88 | 33.043 | 24.700 | 324.5 | 0.138 | 5.95 | 101.0 | 2.3 | 0.35 | 0.7 | 0.10 | 0.00 | 0.67 | 0.23 | 41 | 216 |
| 50 | 13.86 | 13.85 | 33.046 | 24.708 | 323.9 | 0.167 | 5.85 | 99.3 | 2.5 | 0.39 | 1.0 | 0.19 | 0.04 | 0.42 | 0.23 | 50 | 215 |
| 60 | 13.34 | 13.33 | 33.019 | 24.793 | 316.1 | 0.199 | 5.71 | 95.8 | 3.0 | 0.43 | 1.6 | 0.18 | 0.00 | 0.23 | 0.21 | 60 | 214 |
| 70 | 12.29 | 12.28 | 33.010 | 24.991 | 297.3 | 0.230 | 5.60 | 91.9 | 4.0 | 0.51 | 2.9 | 0.01 | 0.00 | 0.15 | 0.16 | 70 | 213 |
| 75 ISL | 11.94 D | 11.93 | 33.015 D | 25.061 | 290.8 | 0.245 | 5.60 D | 91.3 | 4.5 | 0.57 | 3.9 | 0.04 | 0.00 | 0.15 | 0.16 | 75 | |
| 85 | 11.86 | 11.85 | 33.123 | 25.160 | 281.6 | 0.273 | 5.43 | 88.4 | 6.0 | 0.74 | 6.6 | 0.15 | 0.00 | 0.14 | 0.16 | 85 | 212 |
| 99 | 11.51 | 11.50 | 33.286 | 25.352 | 263.7 | 0.312 | 5.03 | 81.4 | 9.4 | 1.04 | 11.2 | 0.13 | 0.00 | 0.09 | 0.13 | 99 | 211 |
| 100 ISL | 11.32 D | 11.31 | 33.281 D | 25.382 | 260.8 | 0.314 | 5.04 D | 81.2 | 9.7 | 1.06 | 11.5 | 0.12 | 0.00 | 0.09 | 0.13 | 100 | |
| 120 | 10.05 | 10.04 | 33.403 | 25.699 | 230.8 | 0.363 | 4.15 | 65.1 | 17.3 | 1.49 | 18.2 | 0.00 | 0.00 | 0.03 | 0.08 | 121 | 210 |
| 125 ISL | 9.91 D | 9.90 | 33.489 D | 25.790 | 222.3 | 0.375 | 3.93 D | 61.5 | 19.2 | 1.59 | 19.8 | 0.00 | 0.00 | 0.02 | 0.08 | 126 | |
| 141 | 9.74 | 9.72 | 33.688 | 25.974 | 205.2 | 0.409 | 3.14 | 49.0 | 24.2 | 1.84 | 23.7 | 0.00 | 0.00 | 0.01 | 0.09 | 142 | 209 |
| 150 ISL | 9.59 D | 9.57 | 33.770 D | 26.063 | 196.9 | 0.427 | 2.98 D | 46.4 | 25.3 | 1.84 | 24.0 | 0.00 | 0.00 | 0.01 | 0.07 | 151 | |
| 170 | 9.15 | 9.13 | 33.842 | 26.191 | 185.0 | 0.465 | 3.15 | 48.5 | 26.7 | 1.83 | 24.8 | 0.00 | 0.00 | 0.00 | 0.03 | 171 | 208 |
| 200 | 8.70 | 8.68 | 33.971 | 26.363 | 169.1 | 0.518 | 2.75 | 42.0 | 32.1 | 1.98 | 27.2 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | 207 |
| 230 | 8.29 | 8.27 | 34.054 | 26.491 | 157.4 | 0.567 | 2.11 | 31.9 | 38.7 | 2.21 | 30.1 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.08 D | 8.05 | 34.091 D | 26.552 | 151.9 | 0.598 | 1.99 D | 30.0 | 42.5 | 2.34 | 31.1 | 0.00 | 0.00 | | | 251 | |
| 271 | 7.96 | 7.93 | 34.149 | 26.616 | 146.2 | 0.630 | 1.57 | 23.6 | 46.1 | 2.45 | 31.9 | 0.00 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.46 D | 7.43 | 34.129 D | 26.673 | 141.0 | 0.671 | 1.52 D | 22.6 | 50.7 | 2.54 | 33.5 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.21 | 7.18 | 34.124 | 26.704 | 138.2 | 0.699 | 1.35 | 19.9 | 53.8 | 2.59 | 34.7 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.60 | 6.57 | 34.166 | 26.821 | 127.6 | 0.779 | 0.84 | 12.2 | 64.2 | 2.84 | 37.6 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.43 D | 6.39 | 34.173 D | 26.849 | 125.1 | 0.804 | 0.87 D | 12.6 | 67.1 | 2.89 | 38.3 | 0.00 | 0.00 | | | 402 | |
| 441 | 6.15 | 6.11 | 34.207 | 26.912 | 119.5 | 0.854 | 0.60 | 8.6 | 72.4 | 2.98 | 39.3 | 0.00 | 0.00 | | | 444 | 202 |
| 500 ISL | 5.75 D | 5.71 | 34.242 D | 26.990 | 112.5 | 0.923 | 0.47 D | 6.7 | 79.0 | 3.06 | 40.5 | 0.00 | 0.00 | | | 503 | |
| 522 | 5.71 | 5.67 | 34.259 | 27.009 | 110.9 | 0.947 | 0.36 | 5.1 | 81.5 | 3.09 | 40.9 | 0.00 | 0.00 | | | 525 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 10.6 N | 120 55.6 W | 15/01/11 | 0830 UTC | 3828 m | 290 17 kn | | | 1019.4 mb | 15.1 C | 13.8 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.82 | 14.82 | 33.213 | 24.634 | 329.6 | 0.000 | 5.79 | 100.3 | 1.7 | 0.32 | 0.1 | 0.01 | 0.00 | 0.57 | 0.19 | 0 | |
| 3 | 14.82 | 14.82 | 33.213 | 24.634 | 329.7 | 0.010 | 5.79 | 100.3 | 1.7 | 0.32 | 0.1 | 0.01 | 0.00 | 0.57 | 0.19 | 3 | 220 |
| 10 | 14.83 | 14.83 | 33.208 | 24.628 | 330.5 | 0.033 | 5.86 | 101.5 | 1.6 | 0.32 | 0.1 | 0.01 | 0.00 | 0.57 | 0.18 | 10 | 219 |
| 19 | 14.82 | 14.82 | 33.208 | 24.631 | 330.5 | 0.063 | 5.86 | 101.5 | 1.6 | 0.32 | 0.1 | 0.01 | 0.00 | 0.55 | 0.23 | 19 | 218 |
| 20 ISL | 14.83 D | 14.83 | 33.208 D | 24.629 | 330.7 | 0.066 | 5.90 D | 102.2 | 1.6 | 0.32 | 0.1 | 0.01 | 0.00 | 0.55 | 0.23 | 20 | |
| 29 | 14.82 | 14.82 | 33.207 | 24.630 | 330.8 | 0.096 | 5.85 | 101.3 | 1.6 | 0.34 | 0.1 | 0.01 | 0.00 | 0.57 | 0.21 | 29 | 217 |
| 30 ISL | 14.77 D | 14.77 | 33.205 D | 24.640 | 330.0 | 0.099 | 5.90 D | 102.1 | 1.6 | 0.34 | 0.1 | 0.01 | 0.00 | 0.57 | 0.21 | 30 | |
| 40 | 14.76 | 14.75 | 33.202 | 24.640 | 330.3 | 0.132 | 5.85 | 101.2 | 1.6 | 0.35 | 0.1 | 0.02 | 0.00 | 0.60 | 0.22 | 40 | 216 |
| 50 | 14.73 | 14.72 | 33.198 | 24.643 | 330.2 | 0.165 | 5.84 | 101.0 | 1.6 | 0.35 | 0.2 | 0.03 | 0.00 | 0.60 | 0.22 | 50 | 215 |
| 59 | 14.68 | 14.67 | 33.194 | 24.651 | 329.7 | 0.195 | 5.84 | 100.9 | 1.6 | 0.35 | 0.2 | 0.04 | 0.00 | 0.57 | 0.23 | 59 | 214 |
| 71 | 13.13 | 13.12 | 33.112 | 24.907 | 305.5 | 0.233 | 5.54 | 92.6 | 3.6 | 0.61 | 3.9 | 0.13 | 0.00 | 0.16 | 0.16 | 71 | 213 |
| 75 ISL | 12.50 D | 12.49 | 33.073 D | 25.000 | 296.7 | 0.245 | 5.54 D | 91.4 | 4.2 | 0.66 | 4.7 | 0.10 | 0.00 | 0.13 | 0.14 | 75 | |
| 85 | 11.78 | 11.77 | 33.072 | 25.135 | 284.0 | 0.274 | 5.38 | 87.4 | 5.9 | 0.77 | 6.6 | 0.01 | 0.00 | 0.07 | 0.09 | 85 | 212 |
| 99 | 10.87 | 10.86 | 33.135 | 25.349 | 263.8 | 0.312 | 5.07 | 80.8 | 9.6 | 1.03 | 10.9 | 0.00 | 0.00 | 0.05 | 0.06 | 99 | 211 |
| 100 ISL | 10.60 D | 10.59 | 33.188 D | 25.437 | 255.4 | 0.315 | 5.05 D | 80.0 | 9.9 | 1.05 | 11.3 | 0.00 | 0.00 | 0.05 | 0.06 | 100 | |
| 120 | 10.03 | 10.02 | 33.393 | 25.695 | 231.2 | 0.364 | 4.29 | 67.2 | 16.5 | 1.45 | 17.9 | 0.00 | 0.00 | 0.03 | 0.04 | 121 | 210 |
| 125 ISL | 9.91 D | 9.90 | 33.457 D | 25.765 | 224.7 | 0.375 | 4.25 D | 66.5 | 17.4 | 1.50 | 18.7 | 0.00 | 0.00 | 0.03 | 0.04 | 126 | |
| 144 | 9.76 | 9.74 | 33.562 | 25.872 | 214.9 | 0.417 | 3.82 | 59.6 | 20.1 | 1.62 | 20.9 | 0.00 | 0.00 | 0.01 | 0.04 | 145 | 209 |
| 150 ISL | 9.58 D | 9.56 | 33.622 D | 25.949 | 207.7 | 0.429 | 3.76 D | 58.4 | 21.5 | 1.67 | 21.8 | 0.00 | 0.00 | 0.01 | 0.04 | 151 | |
| 173 | 9.18 | 9.16 | 33.826 | 26.173 | 186.7 | 0.475 | 3.07 | 47.3 | 27.2 | 1.88 | 25.3 | 0.00 | 0.00 | 0.00 | 0.03 | 174 | 208 |
| 200 ISL | 8.66 D | 8.64 | 33.984 D | 26.380 | 167.5 | 0.523 | 2.53 D | 38.6 | 33.5 | 2.04 | 28.1 | 0.00 | 0.00 | 0.00 | 0.03 | 201 | |
| 201 | 8.67 | 8.65 | 33.982 | 26.376 | 167.9 | 0.524 | 2.51 | 38.3 | 33.7 | 2.05 | 28.2 | 0.00 | 0.00 | 0.00 | 0.03 | 202 | 207 |
| 232 | 8.22 | 8.20 | 34.044 | 26.494 | 157.1 | 0.575 | 2.17 | 32.8 | 39.3 | 2.21 | 30.2 | 0.00 | 0.00 | | | 233 | 206 |
| 250 ISL | 8.01 D | 7.98 | 34.072 D | 26.548 | 152.3 | 0.603 | 1.93 D | 29.0 | 42.2 | 2.30 | 31.2 | 0.00 | 0.00 | | | 251 | |
| 269 | 7.85 | 7.82 | 34.090 | 26.585 | 148.9 | 0.631 | 1.72 | 25.8 | 45.3 | 2.39 | 32.3 | 0.00 | 0.00 | | | 270 | 205 |
| 300 ISL | 7.58 D | 7.55 | 34.133 D | 26.659 | 142.4 | 0.676 | 1.33 D | 19.8 | 50.6 | 2.55 | 34.0 | 0.00 | 0.00 | | | 302 | |
| 323 | 7.39 | 7.36 | 34.173 | 26.718 | 137.1 | 0.708 | 1.05 | 15.6 | 54.5 | 2.66 | 35.2 | 0.00 | 0.00 | | | 325 | 204 |
| 377 | 6.91 | 6.87 | 34.215 | 26.818 | 128.1 | 0.780 | 0.70 | 10.3 | 62.5 | 2.82 | 37.0 | 0.00 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.72 D | 6.68 | 34.222 D | 26.849 | 125.3 | 0.809 | 0.64 D | 9.3 | 64.9 | 2.87 | 37.5 | 0.00 | 0.00 | | | 402 | |
| 447 | 6.51 | 6.47 | 34.258 | 26.906 | 120.5 | 0.867 | 0.48 | 7.0 | 69.6 | 2.95 | 38.5 | 0.00 | 0.00 | | | 450 | 202 |
| 500 ISL | 6.05 D | 6.01 | 34.281 D | 26.984 | 113.4 | 0.929 | 0.37 D | 5.3 | 77.0 | 3.03 | 39.9 | 0.00 | 0.00 | | | 503 | |
| 517 | 5.87 | 5.83 | 34.280 | 27.006 | 111.4 | 0.948 | 0.33 | 4.7 | 79.4 | 3.05 | 40.4 | 0.00 | 0.00 | | | 520 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 50.8 N | 121 35.5 W | 15/01/11 | 1620 UTC | 4104 m | 300 12 kn | 270 03 06 | 0 | 1020.5 mb | 17.4 C | 15.1 C | 16m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.75 | 14.75 | 32.875 | 24.389 | 353.0 | 0.000 | 5.86 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 0 | |
| 3 A | 14.75 | 14.75 | 32.875 | 24.389 | 353.1 | 0.011 | 5.86 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 3 | 224 |
| 10 A | 14.74 | 14.74 | 32.877 | 24.393 | 352.9 | 0.035 | 5.87 | 101.3 | 1.9 | 0.27 | 0.0 | 0.00 | 0.00 | 0.39 | 0.11 | 10 | 223 |
| 12 A | 14.75 | 14.75 | 32.875 | 24.389 | 353.3 | 0.042 | 5.86 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 12 | 222 |
| 17 A | 14.75 | 14.75 | 32.887 | 24.398 | 352.6 | 0.060 | 5.87 | 101.4 | 1.9 | 0.29 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 17 | 221 |
| 20 ISL | 14.75 D | 14.75 | 32.876 D | 24.390 | 353.5 | 0.071 | 5.90 D | 101.9 | 1.9 | 0.29 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 20 | |
| 24 A | 14.75 | 14.75 | 32.875 | 24.389 | 353.6 | 0.085 | 5.87 | 101.3 | 1.8 | 0.29 | 0.0 | 0.00 | 0.00 | 0.38 | 0.12 | 24 | 220 |
| 30 ISL | 14.74 D | 14.74 | 32.875 D | 24.392 | 353.6 | 0.106 | 5.90 D | 101.8 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 30 | |
| 35 | 14.74 | 14.73 | 32.874 | 24.391 | 353.8 | 0.124 | 5.88 | 101.5 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.38 | 0.11 | 35 | 219 |
| 44 | 14.74 | 14.73 | 32.874 | 24.391 | 354.0 | 0.155 | 5.89 | 101.7 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.40 | 0.13 | 44 | 218 |
| 50 ISL | 14.74 D | 14.73 | 32.874 D | 24.391 | 354.2 | 0.177 | 5.89 D | 101.7 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.40 | 0.13 | 50 | |
| 53 A | 14.74 | 14.73 | 32.873 | 24.391 | 354.3 | 0.187 | 5.87 | 101.3 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.40 | 0.13 | 53 | 217 |
| 59 | 14.72 | 14.71 | 32.888 | 24.407 | 353.0 | 0.209 | 5.84 | 100.8 | 1.8 | 0.28 | 0.0 | 0.00 | 0.00 | 0.43 | 0.18 | 59 | 216 |
| 65 | 14.20 | 14.19 | 32.935 | 24.553 | 339.2 | 0.229 | 5.81 | 99.2 | 2.3 | 0.36 | 0.5 | 0.25 | 0.06 | 0.29 | 0.21 | 65 | 215 |
| 75 ISL | 13.71 D | 13.70 | 33.036 D | 24.732 | 322.3 | 0.262 | 5.70 D | 96.4 | 2.8 | 0.41 | 1.0 | 0.31 | 0.01 | 0.21 | 0.20 | 75 | |
| 76 | 13.83 | 13.82 | 33.034 | 24.706 | 324.9 | 0.266 | 5.73 | 97.2 | 2.8 | 0.41 | 1.0 | 0.32 | 0.00 | 0.21 | 0.20 | 76 | 214 |
| 85 | 12.87 | 12.86 | 33.020 | 24.888 | 307.7 | 0.294 | 5.66 | 94.1 | 3.4 | 0.44 | 1.9 | 0.01 | 0.00 | 0.12 | 0.14 | 85 | 213 |
| 95 | 12.47 | 12.46 | 33.023 | 24.968 | 300.3 | 0.325 | 5.61 | 92.5 | 3.8 | 0.49 | 2.6 | 0.01 | 0.00 | 0.10 | 0.11 | 95 | 212 |
| 100 ISL | 12.42 D | 12.41 | 33.191 D | 25.108 | 287.1 | 0.339 | 5.48 D | 90.3 | 4.3 | 0.54 | 3.5 | 0.01 | 0.00 | 0.09 | 0.10 | 100 | |
| 111 | 11.85 | 11.84 | 33.224 | 25.241 | 274.6 | 0.370 | 5.29 | 86.1 | 6.2 | 0.68 | 6.2 | 0.00 | 0.00 | 0.07 | 0.09 | 111 | 211 |
| 125 | 10.73 | 10.72 | 33.276 | 25.484 | 251.6 | 0.407 | 5.01 | 79.7 | 10.0 | 0.95 | 10.9 | 0.00 | 0.00 | 0.04 | 0.05 | 126 | 210 |
| 145 | 9.94 | 9.92 | 33.448 | 25.753 | 226.2 | 0.455 | 4.56 | 71.3 | 15.2 | 1.24 | 15.9 | 0.00 | 0.00 | 0.02 | 0.03 | 146 | 209 |
| 150 ISL | 9.82 D | 9.80 | 33.499 D | 25.813 | 220.6 | 0.466 | 4.46 D | 69.6 | 16.8 | 1.32 | 17.2 | 0.00 | 0.00 | 0.02 | 0.03 | 151 | |
| 170 | 9.28 | 9.26 | 33.663 | 26.030 | 200.3 | 0.508 | 3.82 | 59.0 | 22.7 | 1.61 | 21.7 | 0.00 | 0.00 | 0.00 | 0.02 | 171 | 208 |
| 199 | 8.89 | 8.87 | 33.875 | 26.258 | 179.1 | 0.563 | 3.38 | 51.8 | 27.9 | 1.76 | 24.5 | 0.00 | 0.00 | 0.00 | 0.02 | 200 | 207 |
| 200 ISL | 8.86 D | 8.84 | 33.881 D | 26.268 | 178.2 | 0.565 | 3.39 D | 51.9 | 28.0 | 1.76 | 24.6 | 0.00 | 0.00 | | | 201 | |
| 230 | 8.44 | 8.42 | 33.964 | 26.398 | 166.3 | 0.616 | 3.17 | 48.1 | 32.1 | 1.85 | 26.0 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.21 D | 8.18 | 33.988 D | 26.452 | 161.4 | 0.649 | 2.94 D | 44.4 | 35.9 | 1.96 | 27.7 | 0.00 | 0.00 | | | 251 | |
| 270 | 7.82 | 7.79 | 34.009 | 26.526 | 154.5 | 0.681 | 2.60 | 38.9 | 40.1 | 2.09 | 29.5 | 0.00 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.28 D | 7.25 | 34.031 D | 26.621 | 145.7 | 0.726 | 2.12 D | 31.3 | 46.0 | 2.27 | 31.9 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.17 | 7.14 | 34.048 | 26.650 | 143.3 | 0.756 | 1.92 | 28.3 | 50.1 | 2.40 | 33.4 | 0.00 | 0.00 | | | 323 | 204 |
| 379 | 6.60 | 6.57 | 34.104 | 26.772 | 132.2 | 0.836 | 1.19 | 17.3 | 61.2 | 2.72 | 37.0 | 0.00 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.35 D | 6.31 | 34.122 D | 26.819 | 127.9 | 0.863 | 1.04 D | 15.1 | 65.0 | 2.80 | 37.9 | 0.00 | 0.00 | | | 402 | |
| 440 | 6.03 | 5.99 | 34.140 | 26.874 | 122.9 | 0.914 | 0.81 | 11.6 | 71.6 | 2.91 | 39.3 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.65 D | 5.61 | 34.187 D | 26.959 | 115.3 | 0.985 | 0.60 D | 8.5 | 79.5 | 3.05 | 40.7 | 0.00 | 0.00 | | | 503 | |
| 515 | 5.57 | 5.53 | 34.192 | 26.973 | 114.1 | 1.002 | 0.54 | 7.7 | 81.5 | 3.08 | 41.0 | 0.00 | 0.00 | | | 518 | 201 |

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.
D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 30.7 N | 122 15.1 W | 15/01/11 | 2208 UTC | 4179 m | 300 11 kn | 330 05 04 | 0 | 1018.9 mb | 17.5 C | 16.0 C | 38m | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.42 | 16.42 | 33.252 | 24.309 | 360.6 | 0.000 | 5.66 | 101.3 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.03 | 0 | |
| 2 | 16.42 | 16.42 | 33.252 | 24.309 | 360.7 | 0.007 | 5.66 | 101.3 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.14 | 0.03 | 2 | 220 |
| 10 | 16.33 | 16.33 | 33.250 | 24.328 | 359.1 | 0.036 | 5.66 | 101.1 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.02 | 10 | 219 |
| 20 ISL | 16.28 D | 16.28 | 33.269 D | 24.354 | 356.9 | 0.072 | 5.70 D | 101.7 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.16 | 0.02 | 20 | |
| 26 | 16.29 | 16.29 | 33.277 | 24.359 | 356.7 | 0.093 | 5.65 | 100.8 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.16 | 0.02 | 26 | 218 |
| 30 ISL | 16.31 D | 16.31 | 33.289 D | 24.363 | 356.4 | 0.107 | 5.68 D | 101.4 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.16 | 0.03 | 30 | |
| 40 | 16.34 | 16.33 | 33.305 | 24.369 | 356.1 | 0.143 | 5.64 | 100.8 | 2.1 | 0.24 | 0.0 | 0.00 | 0.00 | 0.15 | 0.04 | 40 | 217 |
| 50 | 16.38 | 16.37 | 33.322 | 24.373 | 356.1 | 0.179 | 5.64 | 100.9 | 2.1 | 0.24 | 0.0 | 0.00 | 0.00 | 0.16 | 0.05 | 50 | 216 |
| 61 | 16.41 | 16.40 | 33.334 | 24.376 | 356.2 | 0.218 | 5.63 | 100.7 | 2.1 | 0.23 | 0.0 | 0.00 | 0.00 | 0.18 | 0.05 | 61 | 215 |
| 75 | 16.43 | 16.42 | 33.341 | 24.377 | 356.5 | 0.268 | 5.60 | 100.2 | 2.1 | 0.23 | 0.0 | 0.00 | 0.00 | 0.21 | 0.05 | 75 | 214 |
| 87 | 16.41 | 16.40 | 33.353 | 24.392 | 355.5 | 0.310 | 5.62 | 100.6 | 2.1 | 0.23 | 0.0 | 0.00 | 0.00 | 0.21 | 0.07 | 87 | 213 |
| 100 | 15.11 | 15.09 | 33.365 | 24.692 | 327.2 | 0.355 | 5.65 | 98.5 | 2.6 | 0.27 | 0.1 | 0.12 | 0.00 | 0.27 | 0.24 | 100 | 212 |
| 112 | 14.59 | 14.57 | 33.352 | 24.794 | 317.7 | 0.394 | 5.56 | 95.9 | 3.0 | 0.32 | 0.6 | 0.20 | 0.00 | 0.30 | 0.16 | 112 | 211 |
| 125 | 13.56 | 13.54 | 33.302 | 24.970 | 301.1 | 0.434 | 5.41 | 91.4 | 4.0 | 0.46 | 2.7 | 0.04 | 0.00 | 0.22 | 0.14 | 125 | 210 |
| 141 | 12.08 | 12.06 | 33.275 | 25.238 | 275.6 | 0.480 | 5.17 | 84.6 | 6.7 | 0.72 | 7.0 | 0.00 | 0.00 | 0.10 | 0.10 | 142 | 209 |
| 150 ISL | 10.72 D | 10.70 | 33.341 D | 25.537 | 247.1 | 0.503 | 5.17 D | 82.2 | 8.7 | 0.87 | 9.5 | 0.00 | 0.00 | 0.06 | 0.08 | 151 | |
| 170 | 10.26 | 10.24 | 33.399 | 25.662 | 235.6 | 0.552 | 4.59 | 72.3 | 13.8 | 1.18 | 14.9 | 0.00 | 0.00 | 0.02 | 0.03 | 171 | 208 |
| 200 | 9.44 | 9.42 | 33.707 | 26.039 | 200.1 | 0.617 | 3.81 | 59.0 | 21.8 | 1.56 | 21.1 | 0.00 | 0.00 | 0.00 | 0.01 | 201 | 207 |
| 232 | 9.01 | 8.98 | 33.864 | 26.231 | 182.4 | 0.678 | 3.43 | 52.7 | 26.7 | 1.71 | 23.8 | 0.00 | 0.00 | | | 233 | 206 |
| 250 ISL | 8.66 D | 8.63 | 33.953 D | 26.356 | 170.7 | 0.710 | 3.17 D | 48.3 | 30.6 | 1.84 | 25.7 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.30 | 8.27 | 33.996 | 26.445 | 162.5 | 0.745 | 2.76 | 41.8 | 35.4 | 1.99 | 27.8 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.96 D | 7.93 | 34.022 D | 26.516 | 156.1 | 0.791 | 2.53 D | 38.0 | 40.8 | 2.14 | 30.0 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.64 | 7.61 | 34.038 | 26.576 | 150.6 | 0.822 | 2.19 | 32.6 | 44.3 | 2.24 | 31.3 | 0.00 | 0.00 | | | 322 | 204 |
| 381 | 7.05 | 7.01 | 34.113 | 26.718 | 137.7 | 0.910 | 1.27 | 18.7 | 56.3 | 2.63 | 35.5 | 0.00 | 0.00 | | | 383 | 203 |
| 400 ISL | 6.88 D | 6.84 | 34.123 D | 26.750 | 134.9 | 0.936 | 1.17 D | 17.1 | 59.3 | 2.70 | 36.3 | 0.00 | 0.00 | | | 402 | |
| 443 | 6.51 | 6.47 | 34.156 | 26.825 | 128.0 | 0.992 | 0.86 | 12.5 | 65.7 | 2.82 | 37.8 | 0.00 | 0.00 | | | 446 | 202 |
| 500 ISL | 5.96 D | 5.92 | 34.181 D | 26.916 | 119.7 | 1.063 | 0.66 D | 9.5 | 74.3 | 2.94 | 39.5 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.86 | 5.82 | 34.185 | 26.932 | 118.3 | 1.082 | 0.59 | 8.4 | 76.7 | 2.98 | 40.0 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 10.9 N | 122 55.4 W | 16/01/11 | 0420 UTC | 3986 m | 280 14 kn | | | 1019.4 mb | 17.0 C | 15.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.50 | 16.50 | 33.299 | 24.326 | 358.9 | 0.000 | 5.62 | 100.7 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.12 | 0.03 | 0 | |
| 3 | 16.50 | 16.50 | 33.299 | 24.326 | 359.0 | 0.011 | 5.62 | 100.7 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.12 | 0.03 | 3 | 220 |
| 10 | 16.50 | 16.50 | 33.299 | 24.327 | 359.2 | 0.036 | 5.63 | 100.9 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.02 | 10 | 219 |
| 20 ISL | 16.50 D | 16.50 | 33.302 D | 24.329 | 359.3 | 0.072 | 5.66 | D101.5 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.02 | 20 | |
| 25 | 16.51 | 16.51 | 33.327 | 24.346 | 357.8 | 0.090 | 5.63 | 101.0 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.02 | 25 | 218 |
| 30 ISL | 16.59 D | 16.59 | 33.359 D | 24.353 | 357.4 | 0.108 | 5.63 | D101.1 | 2.0 | 0.25 | 0.0 | 0.00 | 0.00 | 0.15 | 0.03 | 30 | |
| 40 | 16.59 | 16.58 | 33.363 | 24.356 | 357.4 | 0.143 | 5.60 | 100.6 | 2.0 | 0.24 | 0.0 | 0.00 | 0.00 | 0.15 | 0.05 | 40 | 217 |
| 50 | 16.54 | 16.53 | 33.353 | 24.360 | 357.3 | 0.179 | 5.61 | 100.7 | 1.9 | 0.24 | 0.0 | 0.00 | 0.00 | 0.17 | 0.05 | 50 | 216 |
| 62 | 16.49 | 16.48 | 33.341 | 24.363 | 357.4 | 0.222 | 5.62 | 100.7 | 1.9 | 0.23 | 0.0 | 0.00 | 0.00 | 0.19 | 0.04 | 62 | 215 |
| 75 | 16.48 | 16.47 | 33.338 | 24.364 | 357.8 | 0.268 | 5.61 | 100.5 | 2.0 | 0.23 | 0.0 | 0.00 | 0.00 | 0.22 | 0.03 | 75 | 214 |
| 87 | 16.46 | 16.45 | 33.338 | 24.369 | 357.7 | 0.311 | 5.61 | 100.5 | 1.9 | 0.23 | 0.0 | 0.00 | 0.00 | 0.21 | 0.05 | 87 | 213 |
| 100 | 14.79 | 14.78 | 33.287 | 24.701 | 326.2 | 0.356 | 5.62 | 97.3 | 2.6 | 0.31 | 0.2 | 0.18 | 0.00 | 0.32 | 0.16 | 100 | 212 |
| 112 | 13.94 | 13.92 | 33.253 | 24.854 | 311.9 | 0.394 | 5.50 | 93.6 | 3.4 | 0.41 | 1.7 | 0.10 | 0.00 | 0.28 | 0.15 | 112 | 211 |
| 124 | 13.06 | 13.04 | 33.253 | 25.032 | 295.1 | 0.431 | 5.34 | 89.2 | 4.7 | 0.55 | 4.1 | 0.01 | 0.00 | 0.16 | 0.16 | 124 | 210 |
| 125 ISL | 12.51 D | 12.49 | 33.260 D | 25.145 | 284.3 | 0.433 | 5.29 | D 87.4 | 4.8 | 0.56 | 4.3 | 0.01 | 0.00 | 0.15 | 0.16 | 125 | |
| 141 | 11.86 | 11.84 | 33.263 | 25.270 | 272.5 | 0.478 | 5.13 | 83.6 | 7.2 | 0.76 | 7.8 | 0.00 | 0.00 | 0.10 | 0.10 | 142 | 209 |
| 150 ISL | 11.18 D | 11.16 | 33.280 D | 25.408 | 259.5 | 0.502 | 5.05 | D 81.1 | 9.2 | 0.90 | 10.1 | 0.00 | 0.00 | 0.07 | 0.07 | 151 | |
| 170 | 10.24 | 10.22 | 33.400 | 25.666 | 235.2 | 0.551 | 4.56 | 71.8 | 13.9 | 1.20 | 15.1 | 0.00 | 0.00 | 0.02 | 0.03 | 171 | 208 |
| 200 ISL | 9.58 D | 9.56 | 33.669 D | 25.987 | 205.1 | 0.617 | 3.95 | D 61.4 | 20.0 | 1.48 | 20.0 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | |
| 201 | 9.57 | 9.55 | 33.665 | 25.985 | 205.3 | 0.620 | 3.93 | 61.1 | 20.2 | 1.49 | 20.2 | 0.00 | 0.00 | 0.00 | 0.02 | 202 | 207 |
| 230 | 8.97 | 8.95 | 33.899 | 26.265 | 179.1 | 0.675 | 2.85 | 43.8 | 29.5 | 1.91 | 26.4 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.69 D | 8.66 | 33.982 D | 26.374 | 169.0 | 0.710 | 2.58 | D 39.4 | 32.7 | 2.02 | 27.9 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.46 | 8.43 | 34.008 | 26.430 | 164.0 | 0.745 | 2.47 | 37.5 | 35.3 | 2.07 | 28.7 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.90 D | 7.87 | 34.060 D | 26.555 | 152.4 | 0.791 | 2.10 | D 31.5 | 41.3 | 2.24 | 30.9 | 0.00 | 0.00 | | | 302 | |
| 320 | 7.69 | 7.66 | 34.076 | 26.598 | 148.5 | 0.821 | 1.79 | 26.7 | 45.7 | 2.36 | 32.5 | 0.00 | 0.00 | | | 322 | 204 |
| 380 | 6.99 | 6.95 | 34.128 | 26.738 | 135.7 | 0.906 | 1.20 | 17.6 | 56.8 | 2.64 | 35.7 | 0.00 | 0.00 | | | 382 | 203 |
| 400 ISL | 6.71 D | 6.67 | 34.145 D | 26.790 | 130.9 | 0.933 | 1.05 | D 15.3 | 60.2 | 2.70 | 36.5 | 0.00 | 0.00 | | | 402 | |
| 440 | 6.36 | 6.32 | 34.157 | 26.846 | 125.9 | 0.984 | 0.88 | 12.7 | 66.5 | 2.80 | 37.9 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.89 D | 5.85 | 34.198 D | 26.938 | 117.5 | 1.057 | 0.64 | D 9.2 | 74.9 | 2.93 | 39.6 | 0.00 | 0.00 | | | 503 | |
| 516 | 5.79 | 5.75 | 34.205 | 26.956 | 115.9 | 1.076 | 0.55 | 7.9 | 77.2 | 2.96 | 40.1 | 0.00 | 0.00 | | | 519 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 120.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 50.8 N | 123 35.3 W | 16/01/11 | 1036 UTC | 4061 m | 300 19 kn | | | 1019.1 mb | 15.0 C | 11.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.35 | 16.35 | 33.244 | 24.318 | 359.7 | 0.000 | 5.64 | 100.8 | 2.0 | 0.28 | 0.0 | 0.00 | 0.00 | 0.14 | 0.06 | 0 | |
| 3 | 16.35 | 16.35 | 33.244 | 24.319 | 359.8 | 0.011 | 5.64 | 100.8 | 2.0 | 0.28 | 0.0 | 0.00 | 0.00 | 0.14 | 0.06 | 3 | 220 |
| 10 | 16.36 | 16.36 | 33.244 | 24.317 | 360.2 | 0.036 | 5.66 | 101.1 | 2.1 | 0.27 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 10 | 219 |
| 20 ISL | 16.36 D | 16.36 | 33.243 D | 24.316 | 360.5 | 0.072 | 5.67 | D101.3 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 20 | |
| 25 | 16.36 | 16.36 | 33.242 | 24.316 | 360.8 | 0.090 | 5.66 | 101.1 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 25 | 218 |
| 30 ISL | 16.37 D | 16.37 | 33.247 D | 24.317 | 360.8 | 0.108 | 5.67 | D101.3 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 30 | |
| 40 | 16.38 | 16.37 | 33.259 | 24.325 | 360.4 | 0.144 | 5.65 | 101.0 | 2.0 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.05 | 40 | 217 |
| 50 | 16.40 | 16.39 | 33.269 | 24.328 | 360.4 | 0.180 | 5.64 | 100.9 | 2.1 | 0.26 | 0.0 | 0.00 | 0.00 | 0.14 | 0.06 | 50 | 216 |
| 62 | 16.41 | 16.40 | 33.274 | 24.330 | 360.6 | 0.223 | 5.64 | 100.9 | 1.9 | 0.26 | 0.0 | 0.00 | 0.00 | 0.16 | 0.06 | 62 | 215 |
| 75 ISL | 16.36 D | 16.35 | 33.271 D | 24.340 | 360.1 | 0.270 | 5.65 | D101.0 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 75 | |
| 76 | 16.40 | 16.39 | 33.273 | 24.332 | 360.8 | 0.274 | 5.64 | 100.9 | 2.1 | 0.25 | 0.0 | 0.00 | 0.00 | 0.18 | 0.06 | 76 | 214 |
| 89 | 14.39 | 14.38 | 33.163 | 24.690 | 326.9 | 0.319 | 5.69 | 97.7 | 2.7 | 0.36 | 0.6 | 0.27 | 0.00 | 0.28 | 0.28 | 89 | 213 |
| 100 | 13.82 | 13.81 | 33.170 | 24.814 | 315.3 | 0.354 | 5.60 | 95.0 | 3.1 | 0.41 | 1.6 | 0.09 | 0.00 | 0.27 | 0.31 | 100 | 212 |
| 112 | 13.37 | 13.35 | 33.253 | 24.970 | 300.7 | 0.391 | 5.41 | 91.0 | 4.1 | 0.50 | 3.2 | 0.02 | 0.00 | 0.17 | 0.25 | 112 | 211 |
| 125 | 12.19 | 12.17 | 33.220 | 25.175 | 281.3 | 0.429 | 5.24 | 85.9 | 6.4 | 0.70 | 6.6 | 0.00 | 0.00 | 0.11 | 0.13 | 125 | 210 |
| 140 | 10.97 | 10.95 | 33.216 | 25.395 | 260.4 | 0.469 | 4.98 | 79.6 | 9.8 | 0.99 | 11.2 | 0.00 | 0.00 | 0.06 | 0.07 | 141 | 209 |
| 150 ISL | 10.43 D | 10.41 | 33.325 D | 25.575 | 243.4 | 0.495 | 4.81 | D 76.0 | 12.7 | 1.17 | 14.1 | 0.00 | 0.00 | 0.03 | 0.05 | 151 | |
| 170 | 9.76 | 9.74 | 33.554 | 25.866 | 215.9 | 0.540 | 4.09 | 63.8 | 18.4 | 1.46 | 19.1 | 0.00 | 0.00 | 0.00 | 0.03 | 171 | 208 |
| 200 | 9.30 | 9.28 | 33.746 | 26.092 | 195.0 | 0.602 | 3.42 | 52.8 | 24.5 | 1.73 | 23.4 | 0.00 | 0.00 | 0.00 | 0.02 | 201 | 207 |
| 230 | 8.92 | 8.90 | 33.909 | 26.281 | 177.6 | 0.658 | 2.76 | 42.3 | 30.5 | 1.98 | 27.0 | 0.00 | 0.00 | | | 231 | 206 |
| 250 ISL | 8.55 D | 8.52 | 33.995 D | 26.406 | 166.0 | 0.692 | 2.53 | D 38.5 | 34.6 | 2.09 | 28.6 | 0.00 | 0.00 | | | 251 | |
| 271 | 8.22 | 8.19 | 34.034 | 26.487 | 158.5 | 0.726 | 2.22 | 33.5 | 38.8 | 2.19 | 30.0 | 0.00 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.88 D | 7.85 | 34.066 D | 26.563 | 151.7 | 0.771 | 1.95 | D 29.2 | 44.3 | 2.34 | 31.9 | 0.00 | 0.00 | | | 302 | |
| 321 | 7.63 | 7.60 | 34.091 | 26.619 | 146.5 | 0.803 | 1.66 | 24.7 | 48.0 | 2.45 | 33.1 | 0.00 | 0.00 | | | 323 | 204 |
| 383 | 6.89 | 6.85 | 34.114 | 26.741 | 135.4 | 0.890 | 1.23 | 18.0 | 58.2 | 2.68 | 36.1 | 0.00 | 0.00 | | | 385 | 203 |
| 400 ISL | 6.66 D | 6.62 | 34.130 D | 26.785 | 131.4 | 0.913 | 1.10 | D 16.0 | 61.3 | 2.75 | 36.9 | 0.00 | 0.00 | | | 402 | |
| 440 | 6.28 | 6.24 | 34.151 | 26.851 | 125.3 | 0.964 | 0.85 | 12.3 | 68.6 | 2.90 | 38.5 | 0.00 | 0.00 | | | 443 | 202 |
| 500 ISL | 5.77 D | 5.73 | 34.197 D | 26.952 | 116.1 | 1.037 | 0.62 | D 8.9 | 77.5 | 3.05 | 40.2 | 0.00 | 0.00 | | | 503 | |
| 519 | 5.68 | 5.64 | 34.213 | 26.976 | 114.0 | 1.058 | 0.48 | 6.8 | 80.3 | 3.10 | 40.8 | 0.00 | 0.00 | | | 522 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.4 26.4

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 56.9 N | 117 17.0 W | 13/01/11 | 0043 UTC | 27 m | 300 03 kn | 300 01 05 | 0 | 1021.3 mb | 14.4 C | 12.9 C | | 0/8 |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | NH4 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.21 | 14.21 | 33.162 | 24.724 | 321.0 | 0.000 | 6.12 | 104.7 | 3.5 | 0.38 | 0.1 | 0.13 | 0.42 | 2.18 | 0.53 | 0 | |
| 2 | 14.21 | 14.21 | 33.162 | 24.724 | 321.1 | 0.006 | 6.12 | 104.7 | 3.5 | 0.38 | 0.1 | 0.13 | 0.42 | 2.18 | 0.53 | 2 | 204 |
| 5 | 14.07 | 14.07 | 33.149 | 24.743 | 319.4 | 0.016 | 6.12 | 104.4 | 3.7 | 0.39 | 0.1 | 0.16 | 0.58 | 2.93 | 0.67 | 5 | 203 |
| 10 | 13.82 | 13.82 | 33.172 | 24.813 | 312.9 | 0.032 | 5.82 | 98.8 | 3.9 | 0.45 | 0.2 | 0.22 | 1.03 | 1.52 | 0.99 | 10 | 202 |
| 15 | 13.78 | 13.78 | 33.230 | 24.866 | 308.0 | 0.047 | 5.43 | 92.1 | 4.4 | 0.57 | 0.8 | 0.29 | 1.45 | 1.19 | 0.85 | 15 | 201 |

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 1° O2;

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 76.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 34 53.6 N | 121 12.2 W | 28/01/11 | 1741 UTC | 7 m | 1220 - 1757 PST | 1218 PST | 1754 PST | 632.3 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12.69 | 33.389 | 25.207 | 7.06 | 117.2 | 1.2 | 0.60 | 0.7 | 0.04 | 3.81 | 0.64 | 64. A | 9.7 | 7.9 | 8.8 | 0.65 |
| 5 | 12.63 | 33.392 | 25.221 | 6.97 | 115.6 | 1.4 | 0.37 | 1.0 | 0.04 | 3.76 | 0.74 | 33. | 54.5 | 45.0 | 49.7 | 0.58 |
| 5 | 12.65 | 33.390 | 25.215 | 6.98 | 115.8 | 1.3 | 0.44 | 1.0 | 0.05 | 3.72 | 0.79 | 33. | 53.1 | 58.6 | 55.8 | 0.63 |
| 8 | 12.77 | 33.386 | 25.189 | 7.16 | 119.0 | 0.6 | 0.23 | 0.2 | 0.02 | 3.79 | 0.65 | 17. | 51.0 | 44.2 | 47.6 | 0.59 |
| 11 | 12.75 | 33.387 | 25.193 | 7.15 | 118.8 | 0.7 | 0.27 | 0.3 | 0.02 | 3.73 | 0.67 | 9.0 | 36.2 | 40.3 | 38.3 | 0.57 |
| 23 | 12.19 | 33.405 | 25.316 | 6.23 | 102.3 | 4.5 | 0.61 | 5.0 | 0.12 | 4.46 | 0.78 | 0.64 | 2.1 | 2.2 | 2.2 | 0.35 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 76.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 43.2 N | 123 38.1 W | 27/01/11 | 1757 UTC | 17 m | 1225 - 1807 PST | 1227 PST | 1804 PST | 508.0 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.13 | 33.022 | 24.836 | 6.11 | 102.1 | 4.0 | 0.49 | 2.2 | 0.08 | 0.59 | 0.15 | 83. A | 6.1 | 5.1 | 5.6 | 0.07 |
| 11 | 12.99 | 33.031 | 24.871 | 6.11 | 101.8 | 4.0 | 0.50 | 2.5 | 0.09 | 0.64 | 0.16 | 37. | 14.6 | 14.2 | 14.4 | 0.07 |
| 14 | 12.98 | 33.031 | 24.873 | 6.07 | 101.1 | 4.1 | 0.51 | 2.7 | 0.10 | 0.64 | 0.16 | 28. | 11.9 | 12.2 | 12.1 | 0.06 |
| 18 | 12.95 | 33.046 | 24.890 | 6.08 | 101.3 | 4.3 | 0.52 | 2.8 | 0.10 | 0.62 | 0.18 | 20. | 10.1 | 12.3 | 11.2 | 0.05 |
| 28 | 12.65 | 33.122 | 25.008 | 6.13 | 101.5 | 5.1 | 0.59 | 3.9 | 0.15 | 1.08 | 0.45 | 8.0 | 13.8 | 14.5 | 14.1 | 0.06 |
| 37 | 12.43 | 33.158 | 25.079 | 5.98 | 98.6 | 5.6 | 0.67 | 5.0 | 0.25 | 0.66 | 0.38 | | | | | |
| 45 | 12.11 | 33.172 | 25.151 | 5.72 | 93.7 | 6.6 | 0.78 | 7.0 | 0.32 | 0.37 | 0.32 | | | | | |
| 55 | 11.24 | 33.152 | 25.295 | 5.19 | 83.4 | 8.5 | 0.99 | 10.5 | 0.04 | 0.15 | 0.14 | 0.70 | 0.27 | 0.27 | 0.27 | 0.01 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 80.0 51.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 34 27.1 N | 120 31.5 W | 25/01/11 | 1800 UTC | 10 m | 1215 - 1802 PST | 1214 PST | 1755 PST | 934.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.08 | 33.295 | 25.057 | 6.23 | 104.2 | 4.2 | 0.48 | 2.0 | 0.12 | 2.64 | 0.50 | 74. A | 42.6 | 46.2 | 44.4 | 0.37 |
| 6 | 13.00 | 33.301 | 25.078 | 6.17 | 103.0 | 4.4 | 0.50 | 2.2 | 0.13 | 2.80 | 0.50 | 40. | 54.8 | 57.8 | 56.3 | 0.28 |
| 8 | 12.90 | 33.307 | 25.102 | 6.10 | 101.6 | 4.5 | 0.51 | 2.5 | 0.14 | 3.04 | 0.49 | 29. | 50.9 | 51.8 | 51.4 | 0.25 |
| 11 | 12.83 | 33.322 | 25.128 | 5.92 | 98.5 | 5.0 | 0.60 | 3.4 | 0.16 | 3.27 | 0.45 | 18. | 43.6 | 41.7 | 42.7 | 0.23 |
| 16 | 12.81 | 33.328 | 25.136 | 5.91 | 98.3 | 4.9 | 0.62 | 3.8 | 0.17 | 3.16 | 0.47 | 8.6 | 27.9 | 25.6 | 26.7 | 0.20 |
| 25 | 12.51 | 33.430 | 25.274 | 5.28 | 87.3 | 8.9 | 0.99 | 9.4 | 0.29 | 2.32 | 0.71 | | | | | |
| 32 | 12.11 | 33.420 | 25.343 | 5.36 | 87.9 | 8.2 | 0.96 | 8.7 | 0.27 | 2.61 | 0.84 | 0.74 | 0.92 | 1.1 | 1.0 | 0.10 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 83.3 51.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 52.7 N | 120 8.3 W | 24/01/11 | 1937 UTC | 11 m | 1222 - 1745 PST | 1213 PST | 1747 PST | 430.6 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12.73 | 33.462 | 25.255 | 5.24 | 87.1 | 9.9 | 0.94 | 8.7 | 0.13 | 0.95 | 0.29 | 76. A | 13.1 | 13.0 | 13.1 | 0.10 |
| 7 | 12.62 | 33.462 | 25.277 | 5.17 | 85.7 | 10.0 | 0.95 | 8.9 | 0.13 | 1.02 | 0.34 | 38. | 19.1 | 20.6 | 19.9 | 0.15 |
| 8 | 12.58 | 33.465 | 25.287 | 5.19 | 86.0 | 10.0 | 0.96 | 8.9 | 0.13 | 1.00 | 0.31 | 33. | 19.4 | 18.9 | 19.2 | 0.10 |
| 12 | 12.48 | 33.468 | 25.309 | 5.10 | 84.3 | 10.4 | 1.01 | 9.5 | 0.13 | 1.05 | 0.32 | 19. | 19.7 | 20.3 | 20.0 | 0.13 |
| 17 | 12.40 | 33.478 | 25.332 | 5.11 | 84.3 | 10.3 | 0.99 | 9.5 | 0.13 | 1.05 | 0.32 | 9.3 | 14.9 | 13.6 | 14.2 | 0.09 |
| 26 | 11.66 | 33.519 | 25.504 | 4.44 | 72.2 | 14.5 | 1.25 | 13.8 | 0.13 | 0.97 | 0.34 | | | | | |
| 36 | 10.90 | 33.603 | 25.707 | 3.80 | 60.8 | 19.0 | 1.52 | 17.8 | 0.12 | 0.81 | 0.39 | 0.66 | 0.40 | 0.33 | 0.37 | 0.06 |

A) INCUBATION LIGHT INTENSITIES WERE 93, 32, 6.5, 2.4, 0.68, 0.08 PERCENT RESPECTIVELY.

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 83.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 34.7 N | 122 48.4 W | 23/01/11 | 1639 UTC | 16 m | 1215 - 1755 PST | 1223 PST | 1802 PST | 217.7 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.14 | 32.977 | 24.596 | 5.95 | 101.5 | 2.8 | 0.34 | 0.1 | 0.01 | 0.62 | 0.19 | 83. A | 1.2 | 0.66 | 0.95 | 0.05 |
| 10 | 14.13 | 32.970 | 24.593 | 5.96 | 101.7 | 2.8 | 0.34 | 0.2 | 0.01 | 0.61 | 0.17 | 38. | 9.6 | 9.5 | 9.6 | 0.05 |
| 13 | 14.17 | 32.988 | 24.598 | 5.96 | 101.8 | 2.8 | 0.33 | 0.1 | 0.01 | 0.58 | 0.17 | 29. | 8.5 | 9.2 | 8.9 | 0.04 |
| 17 | 14.22 | 33.005 | 24.601 | 5.95 | 101.7 | 2.7 | 0.33 | 0.1 | 0.01 | 0.54 | 0.18 | 20. | 8.0 | 7.8 | 7.9 | 0.06 |
| 25 | 14.21 | 33.005 | 24.604 | 5.96 | 101.8 | 2.7 | 0.33 | 0.2 | 0.01 | 0.55 | 0.18 | 9.1 | 6.1 | 5.7 | 5.9 | 0.05 |
| 35 | 14.09 | 32.984 | 24.613 | 5.95 | 101.4 | 2.7 | 0.35 | 0.2 | 0.02 | 0.53 | 0.19 | | | | | |
| 42 | 13.77 | 32.950 | 24.652 | 5.98 | 101.2 | 2.9 | 0.37 | 0.5 | 0.04 | 0.49 | 0.21 | | | | | |
| 43 | 13.76 | 32.949 | 24.654 | 5.98 | 101.2 | 3.0 | 0.38 | 0.5 | 0.04 | 0.46B | 0.23B | 1.6 | 0.44 | 0.45 | 0.44 | 0.03 |

B) FIRST FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 39.2 N | 118 58.5 W | 20/01/11 | 1743 UTC | 10 m | 1205 - 1745 PST | 1207 PST | 1745 PST | 772.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 13.68 | 33.363 | 24.989 | 6.89 | 116.7 | 0.1 | 0.12 | 0.0 | 0.00 | 2.54 | 0.59 | 63. A | 25.1 | 25.8 | 25.4 | 0.28 |
| 6 | 13.61 | 33.357 | 24.999 | 7.11 | 120.3 | 0.0 | 0.11 | 0.0 | 0.00 | 2.72 | 0.70 | 40. | 36.4 | 28.8 | 32.6 | 0.28 |
| 8 | 13.57 | 33.357 | 25.007 | 7.01 | 118.5 | 0.0 | 0.12 | 0.0 | 0.00 | 2.75 | 0.67 | 29. | 24.4 | 28.9 | 26.7 | 0.28 |
| 11 | 13.44 | 33.360 | 25.036 | 7.01 | 118.2 | 0.0 | 0.12 | 0.1 | 0.00 | 3.13 | 0.76 | 18. | 33.0 | 33.2 | 33.1 | 0.27 |
| 16 | 13.10 | 33.373 | 25.114 | 6.79 | 113.7 | 0.1 | 0.21 | 0.8 | 0.02 | 4.81 | 1.30 | 8.6 | 33.9 | 34.8 | 34.4 | 0.29 |
| 24 | 12.76 | 33.389 | 25.193 | 5.80 | 96.4 | 3.9 | 0.75 | 5.5 | 0.09 | 4.59 | 1.53 | | | | | |
| 32 | 12.32 | 33.397 | 25.285 | 5.23 | 86.1 | 7.6 | 0.99 | 8.8 | 0.25 | 3.34 | 1.16 | 0.74 | 2.2 | 1.9 | 2.0 | 0.09 |

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 39.5 N | 121 1.7 W | 21/01/11 | 1847 UTC | 18 m | 1210 - 1755 PST | 1215 PST | 1753 PST | 272.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 14.50 | 32.958 | 24.506 | 5.97 | 102.6 | 2.6 | 0.30 | 0.0 | 0.00 | 0.41 | 0.12 | 77. A | 6.9 | 5.8 | 6.3 | 0.06 |
| 12 | 14.43 | 32.949 | 24.514 | 5.97 | 102.4 | 2.6 | 0.30 | 0.0 | 0.00 | 0.41 | 0.12 | 36. | 6.5 | 6.5 | 6.5 | 0.06 |
| 14 | 14.35 | 32.950 | 24.531 | 5.97 | 102.3 | 2.5 | 0.30 | 0.0 | 0.00 | 0.39 | 0.12 | 30. | 6.1 | 6.1 | 6.1 | 0.08 |
| 19 | 14.13 | 32.938 | 24.568 | 5.98 | 102.0 | 2.7 | 0.32 | 0.2 | 0.02 | 0.41 | 0.14 | 20. | 6.2 | 6.0 | 6.1 | 0.07 |
| 28 | 13.94 | 32.939 | 24.609 | 5.98 | 101.6 | 2.8 | 0.34 | 0.4 | 0.04 | 0.52 | 0.17 | 9.2 | 5.7 | 6.1 | 5.9 | 0.05 |
| 38 | 13.80 | 32.952 | 24.648 | 5.96 | 101.0 | 3.0 | 0.36 | 0.7 | 0.07 | 0.41 | 0.17 | | | | | |
| 48 | 13.69 | 32.978 | 24.691 | 5.92 | 100.1 | 3.1 | 0.39 | 1.0 | 0.12 | 0.35 | 0.20 | | | | | |
| 59 | 13.44 | 33.063 | 24.807 | 5.78 | 97.2 | 3.6 | 0.46 | 2.0 | 0.21 | 0.24 | 0.20 | 0.65 | 0.49 | 0.44 | 0.46 | 0.02 |

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 86.7 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 19.4 N | 123 44.5 W | 22/01/11 | 1946 UTC | 32 m | 1245 - 1805 PST | 1226 PST | 1806 PST | 111.6 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.76 | 33.179 | 24.402 | 5.71 | 100.8 | 2.3 | 0.26 | 0.0 | 0.00 | 0.14 | 0.05 | 91. A | 0.51 | 0.35 | 0.43 | 0.03 |
| 12 | 15.73 | 33.187 | 24.415 | 5.72 | 100.9 | 2.3 | 0.26 | 0.0 | 0.00 | 0.13 | 0.05 | | | | | |
| 21 | 15.74 | 33.189 | 24.415 | 5.73 | 101.1 | 2.3 | 0.26 | 0.0 | 0.00 | 0.13 | 0.04 | 37. | 1.8 | 1.9 | 1.9 | 0.03 |
| 24 | 15.73 | 33.194 | 24.421 | 5.72 | 100.9 | 2.3 | 0.25 | 0.0 | 0.00 | 0.13 | 0.05 | 32. | 1.7 | 1.8 | 1.8 | 0.03 |
| 34 | 15.75 | 33.197 | 24.419 | 5.73 | 101.1 | 2.3 | 0.24 | 0.0 | 0.00 | 0.13 | 0.05 | 20. | 1.5 | 1.7 | 1.6 | 0.03 |
| 42 | 15.75 | 33.197 | 24.420 | 5.72 | 100.9 | 2.2 | 0.25 | 0.0 | 0.00 | 0.14 | 0.04 | | | | | |
| 50 | 15.74 | 33.197 | 24.422 | 5.76 | 101.6 | 2.3 | 0.25 | 0.0 | 0.00 | 0.14 | 0.04 | 9.1 | 1.4 | 1.4 | 1.4 | 0.04 |
| 69 | 15.83 | 33.220 | 24.420 | 5.71 | 100.9 | 2.3 | 0.24 | 0.0 | 0.00 | 0.16 | 0.05 | | | | | |
| 87 | 15.83 | 33.239 | 24.436 | 5.70 | 100.8 | 2.3 | 0.24 | 0.0 | 0.00 | 0.20 | 0.07 | | | | | |
| 101 | 14.47 | 33.242 | 24.734 | 5.78 | 99.4 | 2.9 | 0.30 | 0.2 | 0.09 | 0.25 | 0.15 | 0.79 | 0.25 | 0.26 | 0.25 | 0.01 |

A) INCUBATION LIGHT INTENSITIES WERE 93, 32, 6.5, 2.4, 0.68, 0.08 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 90.0 30.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 25.1 N | 117 54.5 W | 19/01/11 | 1816 UTC | 11 m | 1205 - 1744 PST | 1202 PST | 1739 PST | 253.6 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.71 | 33.300 | 24.725 | 6.29 | 108.8 | 1.9 | 0.31 | 0.0 | 0.00 | 1.22 | 0.26 | 76. A | 16.4 | 16.9 | 16.7 | 0.15 |
| 7 | 14.59 | 33.321 | 24.767 | 6.36 | 109.7 | 1.8 | 0.30 | 0.0 | 0.00 | 1.18 | 0.43 | 38. | 10.7 | 11.7 | 11.2 | 0.12 |
| 9 | 14.51 | 33.330 | 24.791 | 6.32 | 108.9 | 2.0 | 0.31 | 0.0 | 0.00 | 1.43 | 0.32 | 28. | 12.4 | 12.8 | 12.6 | 0.13 |
| 12 | 14.41 | 33.334 | 24.815 | 6.20 | 106.6 | 2.2 | 0.33 | 0.1 | 0.01 | 1.61 | 0.48 | 19. | 11.3 | 11.0 | 11.2 | 0.09 |
| 17 | 14.35 | 33.348 | 24.839 | 6.07 | 104.2 | 2.5 | 0.36 | 0.6 | 0.03 | 1.12 | 0.28 | 9.3 | 5.2 | 4.7 | 4.9 | 0.05 |
| 26 | 14.24 | 33.353 | 24.866 | 5.86 | 100.4 | 2.8 | 0.42 | 1.6 | 0.08 | 0.92 | 0.16 | | | | | |
| 37 | 13.78 | 33.321 | 24.937 | 5.62 | 95.4 | 3.6 | 0.54 | 2.9 | 0.19 | 0.61 | 0.36 | 0.57 | 0.18 | 0.16 | 0.17 | 0.02 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 90.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 24.7 N | 119 58.3 W | 18/01/11 | 1717 UTC | 16 m | 1210 - 1755 PST | 1210 PST | 1744 PST | 480.0 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 13.35 | 33.128 | 24.874 | 5.96 | 100.1 | 4.0 | 0.49 | 2.8 | 0.11 | 0.60 | 0.14 | 75. A | 0.86 | 1.7 | 1.3 | 0.03 |
| 10 | 13.32 | 33.130 | 24.882 | 5.94 | 99.7 | 4.1 | 0.47 | 2.8 | 0.11 | 0.61 | 0.17 | 38. | 10.4 | 10.8 | 10.6 | 0.04 |
| 13 | 13.28 | 33.134 | 24.893 | 5.89 | 98.8 | 4.2 | 0.50 | 3.0 | 0.11 | 0.65 | 0.18 | 29. | 10.4 | 10.5 | 10.4 | 0.05 |
| 17 | 13.14 | 33.163 | 24.943 | 5.93 | 99.2 | 4.6 | 0.55 | 3.7 | 0.13 | 0.87 | 0.22 | 20. | 16.8 | 15.4 | 16.1 | 0.06 |
| 25 | 12.84 | 33.228 | 25.053 | 5.93 | 98.6 | 5.6 | 0.64 | 5.3 | 0.17 | 1.40 | 0.33 | 9.1 | 16.1 | 16.1 | 16.1 | 0.06 |
| 34 | 12.67 | 33.264 | 25.114 | 5.89 | 97.6 | 6.3 | 0.70 | 6.2 | 0.19 | 1.46 | 0.33 | | | | | |
| 43 | 12.61 | 33.263 | 25.125 | 5.88 | 97.4 | 6.5 | 0.72 | 6.5 | 0.18 | 1.25 | 0.29 | | | | | |
| 51 | 12.32 | 33.296 | 25.207 | 5.82 | 95.8 | 7.5 | 0.79 | 7.6 | 0.20 | 1.43 | 0.45 | 0.75 | 0.98 | 0.84 | 0.91 | 0.06 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 90.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 26.0 N | 121 59.2 W | 17/01/11 | 1812 UTC | 23 m | 1218 - 1755 PST | 1320 PST | 1755 PST | 62.3 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.32 | 33.318 | 24.382 | 5.64 | 100.8 | 2.2 | 0.26 | 0.0 | 0.00 | 0.14 | 0.04 | 82. A | 0.15 | 0.10 | 0.13 | 0.03 |
| 16 | 16.31 | 33.320 | 24.387 | 5.67 | 101.3 | 2.2 | 0.25 | 0.0 | 0.00 | 0.14 | 0.04 | 34. | 1.6 | 1.5 | 1.6 | 0.03 |
| 18 | 16.31 | 33.320 | 24.387 | 5.65 | 100.9 | 2.1 | 0.25 | 0.0 | 0.00 | 0.14 | 0.05 | 30. | 1.4 | 1.2 | 1.3 | 0.03 |
| 26 | 16.32 | 33.320 | 24.385 | 5.65 | 100.9 | 1.9 | 0.25 | 0.0 | 0.00 | 0.14 | 0.05 | 18. | 1.2 | 1.3 | 1.2 | 0.03 |
| 38 | 16.30 | 33.321 | 24.391 | 5.66 | 101.1 | 2.1 | 0.25 | 0.0 | 0.00 | 0.14 | 0.05 | 7.9 | 0.97 | 1.2 | 1.1 | 0.03 |
| 51 | 16.30 | 33.320 | 24.390 | 5.64 | 100.7 | 2.1 | 0.25 | 0.0 | 0.00 | 0.15 | 0.05 | | | | | |
| 65 | 16.30 | 33.328 | 24.397 | 5.65 | 100.9 | 2.1 | 0.24 | 0.0 | 0.00 | 0.15 | 0.05 | | | | | |
| 79 | 16.30 | 33.319 | 24.390 | 5.63 | 100.5 | 2.1 | 0.25 | 0.0 | 0.00 | 0.16 | 0.05 | 0.51 | 0.07 | 0.07 | 0.07 | 0.03 |

RV NEW HORIZON — CALCOFI CRUISE 1101 — STATION 90.0 120.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 30 25.1 N | 123 59.9 W | 16/01/11 | 1714 UTC | 28 m | 1225 - 1756 PST | 1226 PST | 1804 PST | 88.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16.57 | 33.376 | 24.369 | 5.62 | 100.9 | 2.0 | 0.28 | 0.0 | 0.00 | 0.18 | 0.05 | 90. A | 0.09 | 0.13 | 0.11 | 0.01 |
| 10 | 16.56 | 33.373 | 24.370 | 5.62 | 100.9 | 2.0 | 0.26 | 0.0 | 0.00 | 0.15 | 0.05 | | | | | |
| 18 | 16.57 | 33.375 | 24.369 | 5.63 | 101.1 | 2.2 | 0.26 | 0.0 | 0.00 | 0.14 | 0.05 | 37. | 1.7 | 1.7 | 1.7 | 0.01 |
| 21 | 16.56 | 33.376 | 24.372 | 5.61 | 100.7 | 1.9 | 0.26 | 0.0 | 0.00 | 0.15 | 0.05 | 32. | 1.5 | 1.5 | 1.5 | 0.01 |
| 31 | 16.57 | 33.375 | 24.370 | 5.61 | 100.7 | 2.0 | 0.26 | 0.0 | 0.00 | 0.15 | 0.05 | 18. | 1.7 | 1.6 | 1.6 | 0.01 |
| 44 | 16.57 | 33.374 | 24.369 | 5.61 | 100.7 | 2.2 | 0.27 | 0.0 | 0.00 | 0.15 | 0.05 | 9.0 | 1.3 | 1.4 | 1.3 | 0.01 |
| 60 | 16.57 | 33.374 | 24.370 | 5.62 | 100.9 | 2.2 | 0.26 | 0.0 | 0.00 | 0.15 | 0.05 | | | | | |
| 75 | 16.57 | 33.375 | 24.371 | 5.59 | 100.4 | 2.2 | 0.26 | 0.0 | 0.00 | 0.15 | 0.05 | | | | | |
| 92 | 16.48 | 33.362 | 24.383 | 5.62 | 100.7 | 2.3 | 0.26 | 0.0 | 0.00 | 0.17 | 0.08 | 0.64 | 0.14 | 0.11 | 0.13 | 0.00 |

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 41.2 N | 117 52.7 W | 13/01/11 | 1840 UTC | 22 m | 1200 - 1730 PST | 1200 PST | 1733 PST | 358.4 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.26 | 33.299 | 24.819 | 5.95 | 102.0 | 2.5 | 0.39 | 0.9 | 0.06 | 0.79 | 0.25 | 87. A | 12.1 | 12.7 | 12.4 | 0.09 |
| 8 | 14.17 | 33.300 | 24.839 | 5.97 | 102.1 | 2.4 | 0.39 | 0.9 | 0.06 | 0.88 | 0.34 | | | | | |
| 14 | 13.96 | 33.291 | 24.876 | 5.85 | 99.6 | 2.6 | 0.45 | 1.6 | 0.09 | 0.73 | 0.30 | 38. | 10.5 | 10.6 | 10.5 | 0.05 |
| 17 | 13.91 | 33.292 | 24.887 | 5.78 | 98.3 | 2.7 | 0.46 | 1.9 | 0.11 | 0.66 | 0.31 | 31. | 7.6 | 7.7 | 7.7 | 0.04 |
| 24 | 13.85 | 33.295 | 24.902 | 5.68 | 96.5 | 3.0 | 0.50 | 2.4 | 0.15 | 0.56 | 0.26 | 19. | 7.2 | 6.7 | 7.0 | 0.03 |
| 35 | 12.82 | 33.274 | 25.093 | 5.08 | 84.5 | 6.5 | 0.83 | 7.5 | 0.24 | 0.44 | 0.23 | 8.7 | 3.6 | 3.0 | 3.3 | 0.01 |
| 47 | 11.46 | 33.367 | 25.423 | 4.26 | 68.9 | 13.2 | 1.31 | 15.1 | 0.01 | 0.17 | 0.23 | | | | | |
| 59 | 10.94 | 33.401 | 25.543 | 4.09 | 65.4 | 15.4 | 1.41 | 16.8 | 0.01 | 0.10 | 0.19 | | | | | |
| 71 | 10.63 | 33.456 | 25.641 | 3.96 | 62.9 | 16.8 | 1.49 | 18.1 | 0.01 | 0.06 | 0.13 | 0.71 | 0.07 | 0.09 | 0.08 | 0.01 |

A) INCUBATION LIGHT INTENSITIES WERE 93, 32, 6.5, 2.4, 0.68, 0.08 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 50.9 N | 119 34.2 W | 14/01/11 | 1805 UTC | 16 m | 1205 - 1740 PST | 1207 PST | 1746 PST | 254.8 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 13.05 | 33.346 | 25.103 | 5.85 | 97.8 | 4.3 | 0.65 | 4.7 | 0.33 | 0.51 | 0.31 | 75. A | 6.9 | 6.1 | 6.5 | 0.08 |
| 11 | 13.02 | 33.345 | 25.108 | 5.87 | 98.1 | 4.3 | 0.63 | 4.7 | 0.33 | 0.52 | 0.33 | 35. | 9.2 | 9.6 | 9.4 | 0.04 |
| 12 | 13.03 | 33.345 | 25.106 | 5.85 | 97.8 | 4.3 | 0.64 | 4.7 | 0.33 | 0.48 | 0.29 | 32. | 8.7 | 9.2 | 9.0 | 0.06 |
| 17 | 13.02 | 33.347 | 25.110 | 5.86 | 97.9 | 4.3 | 0.64 | 4.7 | 0.33 | 0.49 | 0.35 | 20. | 6.8 | 6.3 | 6.6 | 0.04 |
| 25 | 13.01 | 33.346 | 25.111 | 5.86 | 97.9 | 4.3 | 0.64 | 4.8 | 0.33 | 0.49 | 0.34 | 9.1 | 5.2 | 5.7 | 5.4 | 0.04 |
| 34 | 13.01 | 33.349 | 25.114 | 5.84 | 97.6 | 4.3 | 0.64 | 4.8 | 0.33 | 0.53 | 0.38 | | | | | |
| 43 | 12.83 | 33.344 | 25.145 | 5.69 | 94.7 | 4.8 | 0.69 | 5.6 | 0.31 | 0.40 | 0.31 | | | | | |
| 52 | 12.13 | 33.341 | 25.278 | 5.07 | 83.1 | 7.8 | 0.96 | 10.1 | 0.07 | 0.14 | 0.29 | 0.68 | 0.20 | 0.18 | 0.19 | 0.03 |

RV NEW HORIZON CALCOFI CRUISE 1101 STATION 93.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 30 50.8 N | 121 35.5 W | 15/01/11 | 1620 UTC | 16 m | 1205 - 1750 PST | 1216 PST | 1753 PST | 143.6 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 14.75 | 32.875 | 24.389 | 5.86 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.38 | 0.11 | 75. A | 0.24 | 0.25 | 0.25 | 0.03 |
| 10 | 14.74 | 32.877 | 24.393 | 5.87 | 101.3 | 1.9 | 0.27 | 0.0 | 0.00 | 0.39 | 0.11 | 38. | 4.8 | 4.3 | 4.5 | 0.03 |
| 12 | 14.75 | 32.875 | 24.389 | 5.86 | 101.2 | 1.9 | 0.28 | 0.0 | 0.00 | 0.38 | 0.11 | 32. | 5.5 | 4.3 | 4.9 | 0.04 |
| 17 | 14.75 | 32.887 | 24.398 | 5.87 | 101.4 | 1.9 | 0.29 | 0.0 | 0.00 | 0.38 | 0.11 | 20. | 4.5 | 4.3 | 4.4 | 0.03 |
| 24 | 14.75 | 32.875 | 24.389 | 5.87 | 101.3 | 1.8 | 0.29 | 0.0 | 0.00 | 0.38 | 0.12 | 10. | 4.1 | 4.1 | 4.1 | 0.03 |
| 35 | 14.74 | 32.874 | 24.391 | 5.88 | 101.5 | 1.8 | 0.28 | 0.0 | 0.00 | 0.38 | 0.11 | | | | | |
| 44 | 14.74 | 32.874 | 24.391 | 5.89 | 101.7 | 1.8 | 0.28 | 0.0 | 0.00 | 0.40 | 0.13 | | | | | |
| 53 | 14.74 | 32.873 | 24.391 | 5.87 | 101.3 | 1.8 | 0.28 | 0.0 | 0.00 | 0.40 | 0.13 | 0.62 | 0.32 | 0.27 | 0.30 | 0.02 |

A) INCUBATION LIGHT INTENSITIES WERE 93, 32, 6.5, 2.4, 0.68, 0.08 PERCENT RESPECTIVELY.

CalCOFI Cruise 1101

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505mm

| Line | Sta. | Latitude N | Longitude W | Date Mo/Day | Time (PST) Start | Time (PST) End | Water Volume Strained ($m^3$) | Max. Tow Depth (m) | Volume per 1000 $m^3$ Strained Total ($cm^3$) | Volume per 1000 $m^3$ Strained Small ($cm^3$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 93.4 | 26.4 | 32 57.1 | 117 16.9 | 01/12 | 1703 | 1705 | 51 | 13 | 19 | 19 |
| 93.3 | 26.7 | 32 57.4 | 117 18.3 | 01/12 | 1835 | 1843 | 150 | 63 | 127 | 127 |
| 91.7 | 26.4 | 33 14.7 | 117 27.7 | 01/12 | 2132 | 2134 | 64 | 12 | 31 | 31 |
| 93.3 | 28.0 | 32 54.6 | 117 24.0 | 01/13 | 0250 | 0312 | 438 | 206 | 82 | 82 |
| 93.3 | 30.0 | 32 50.7 | 117 32.0 | 01/13 | 0555 | 0617 | 443 | 212 | 50 | 50 |
| 93.3 | 35.0 | 32 41.2 | 117 52.7 | 01/13 | 0935 | 0956 | 444 | 200 | 56 | 56 |
| 93.3 | 40.0 | 32 30.7 | 118 12.7 | 01/13 | 1514 | 1537 | 452 | 208 | 55 | 55 |
| 93.3 | 45.0 | 32 20.8 | 118 33.5 | 01/13 | 1933 | 1955 | 452 | 204 | 64 | 64 |
| 93.3 | 50.0 | 32 10.8 | 118 53.6 | 01/14 | 0010 | 0033 | 491 | 206 | 45 | 45 |
| 93.3 | 55.0 | 32 00.6 | 119 14.2 | 01/14 | 0526 | 0548 | 463 | 215 | 67 | 67 |
| 93.3 | 60.0 | 31 50.7 | 119 34.2 | 01/14 | 0850 | 0911 | 440 | 200 | 36 | 36 |
| 93.3 | 70.0 | 31 30.9 | 120 14.9 | 01/14 | 1758 | 1820 | 480 | 209 | 56 | 42 |
| 93.3 | 80.0 | 31 10.6 | 120 55.2 | 01/15 | 0149 | 0211 | 489 | 213 | 70 | 70 |
| 93.3 | 90.0 | 30 50.7 | 121 35.3 | 01/15 | 0655 | 0718 | 506 | 211 | 16 | 16 |
| 93.3 | 100.0 | 30 30.6 | 122 15.1 | 01/15 | 1519 | 1541 | 460 | 210 | 13 | 13 |
| 93.3 | 110.0 | 30 10.8 | 122 55.3 | 01/15 | 2132 | 2153 | 482 | 209 | 42 | 42 |
| 93.3 | 120.0 | 29 50.6 | 123 35.0 | 01/16 | 0352 | 0415 | 499 | 212 | 24 | 24 |
| 90.0 | 120.0 | 30 24.9 | 123 59.7 | 01/16 | 1051 | 1112 | 471 | 211 | 6 | 6 |
| 90.0 | 110.0 | 30 45.2 | 123 20.0 | 01/16 | 1807 | 1830 | 485 | 212 | 21 | 21 |
| 90.0 | 100.0 | 31 04.7 | 122 39.4 | 01/17 | 0238 | 0300 | 463 | 212 | 9 | 9 |
| 90.0 | 90.0 | 31 25.4 | 121 59.1 | 01/17 | 0805 | 0824 | 520 | 214 | 4 | 4 |
| 90.0 | 80.0 | 31 45.1 | 121 19.1 | 01/17 | 1919 | 1941 | 519 | 214 | 23 | 23 |
| 90.0 | 70.0 | 32 04.6 | 120 38.2 | 01/18 | 0335 | 0357 | 483 | 210 | 33 | 33 |
| 90.0 | 60.0 | 32 25.0 | 119 57.7 | 01/18 | 1056 | 1116 | 426 | 212 | 23 | 23 |
| 90.0 | 53.0 | 32 39.0 | 119 29.0 | 01/18 | 1633 | 1655 | 509 | 195 | 22 | 22 |
| 90.0 | 45.0 | 32 55.1 | 118 56.1 | 01/18 | 2216 | 2236 | 449 | 208 | 62 | 62 |
| 90.0 | 37.0 | 33 11.0 | 118 23.8 | 01/19 | 0439 | 0501 | 487 | 210 | 51 | 51 |
| 90.0 | 35.0 | 33 15.2 | 118 14.7 | 01/19 | 0732 | 0752 | 480 | 172 | 29 | 29 |
| 90.0 | 30.0 | 33 25.0 | 117 54.5 | 01/19 | 1147 | 1209 | 442 | 202 | 50 | 50 |
| 90.0 | 28.0 | 33 28.9 | 117 46.2 | 01/19 | 1430 | 1435 | 102 | 33 | 20 | 20 |
| 90.0 | 27.7 | 33 29.7 | 117 45.0 | 01/19 | 1526 | 1529 | 73 | 19 | 14 | 14 |
| 88.5 | 30.1 | 33 40.7 | 118 05.0 | 01/19 | 1806 | 1808 | 48 | 13 | 62 | 62 |
| 86.8 | 32.5 | 33 53.3 | 118 26.7 | 01/19 | 2203 | 2205 | 47 | 21 | 150 | 150 |
| 86.7 | 33.0 | 33 53.4 | 118 29.4 | 01/19 | 2339 | 2344 | 97 | 43 | 352 | 352 |
| 85.4 | 35.8 | 34 00.7 | 118 50.6 | 01/20 | 0225 | 0227 | 49 | 15 | 204 | 204 |
| 86.7 | 35.0 | 33 49.3 | 118 37.7 | 01/20 | 0620 | 0642 | 481 | 209 | 71 | 71 |
| 86.7 | 40.0 | 33 39.4 | 118 58.3 | 01/20 | 1122 | 1143 | 446 | 206 | 52 | 52 |
| 86.7 | 45.0 | 33 29.4 | 119 12.9 | 01/20 | 1545 | 1608 | 458 | 210 | 48 | 48 |
| 86.7 | 50.0 | 33 19.3 | 119 40.0 | 01/20 | 1947 | 1954 | 164 | 62 | 12 | 12 |
| 86.7 | 55.0 | 33 09.5 | 120 00.2 | 01/21 | 0036 | 0058 | 449 | 200 | 67 | 67 |
| 86.7 | 60.0 | 32 59.4 | 120 20.6 | 01/21 | 0530 | 0552 | 500 | 206 | 36 | 36 |
| 86.7 | 70.0 | 32 39.4 | 121 01.8 | 01/21 | 1220 | 1242 | 432 | 203 | 39 | 39 |
| 86.7 | 80.0 | 32 19.4 | 121 43.0 | 01/21 | 1824 | 1846 | 502 | 196 | 44 | 44 |
| 86.7 | 90.0 | 31 59.4 | 122 23.3 | 01/22 | 0047 | 0109 | 470 | 209 | 21 | 21 |
| 86.7 | 100.0 | 31 39.3 | 123 04.2 | 01/22 | 0653 | 0715 | 485 | 211 | 14 | 14 |
| 86.7 | 110.0 | 31 19.3 | 123 44.4 | 01/22 | 1245 | 1307 | 487 | 210 | 33 | 33 |
| 83.3 | 110.0 | 31 54.6 | 124 10.1 | 01/22 | 1905 | 1927 | 517 | 201 | 43 | 43 |
| 83.3 | 100.0 | 32 14.4 | 123 29.1 | 01/23 | 0216 | 0238 | 432 | 208 | 37 | 37 |
| 83.3 | 90.0 | 32 34.7 | 122 48.7 | 01/23 | 0710 | 0732 | 509 | 205 | 12 | 12 |
| 83.3 | 80.0 | 32 54.7 | 122 07.7 | 01/23 | 1454 | 1516 | 488 | 212 | 12 | 12 |
| 83.3 | 70.0 | 33 14.6 | 121 26.7 | 01/23 | 2144 | 2204 | 427 | 210 | 70 | 59 |
| 83.3 | 60.0 | 33 34.6 | 120 45.2 | 01/24 | 0407 | 0430 | 453 | 214 | 49 | 49 |
| 83.3 | 55.0 | 33 44.8 | 120 24.7 | 01/24 | 0855 | 0916 | 462 | 208 | 58 | 58 |
| 83.3 | 51.0 | 33 52.6 | 120 08.2 | 01/24 | 1245 | 1256 | 220 | 92 | 14 | 14 |
| 83.3 | 42.0 | 34 10.7 | 119 30.5 | 01/24 | 1856 | 1905 | 197 | 75 | 153 | 153 |
| 83.3 | 40.6 | 34 13.4 | 119 24.8 | 01/24 | 2043 | 2045 | 55 | 21 | 219 | 219 |
| 83.3 | 39.4 | 34 15.4 | 119 19.4 | 01/24 | 2143 | 2145 | 54 | 21 | 205 | 205 |
| 81.7 | 43.5 | 34 24.2 | 119 48.1 | 01/25 | 0049 | 0051 | 50 | 12 | 80 | 80 |
| 81.8 | 46.9 | 34 16.5 | 120 01.5 | 01/25 | 0548 | 0609 | 435 | 212 | 106 | 106 |
| 80.0 | 50.5 | 34 27.6 | 120 29.2 | 01/25 | 0924 | 0926 | 47 | 14 | 108 | 108 |
| 80.0 | 51.0 | 34 27.1 | 120 31.4 | 01/25 | 1102 | 1108 | 123 | 55 | 163 | 163 |
| 80.0 | 55.0 | 34 19.1 | 120 48.0 | 01/25 | 1428 | 1450 | 460 | 213 | 107 | 107 |
| 80.0 | 60.0 | 34 08.9 | 121 09.1 | 01/25 | 1842 | 1904 | 427 | 212 | 103 | 103 |
| 80.0 | 70.0 | 33 49.0 | 121 50.5 | 01/26 | 0138 | 0159 | 448 | 211 | 94 | 78 |
| 80.0 | 80.0 | 33 29.0 | 122 31.9 | 01/26 | 0759 | 0819 | 431 | 209 | 63 | 63 |
| 80.0 | 90.0 | 33 09.0 | 123 13.1 | 01/26 | 1613 | 1635 | 455 | 208 | 57 | 57 |
| 80.0 | 100.0 | 32 49.0 | 123 54.5 | 01/26 | 2258 | 2319 | 436 | 210 | 60 | 60 |
| 76.7 | 100.0 | 33 22.9 | 124 19.2 | 01/27 | 0451 | 0514 | 495 | 214 | 46 | 46 |
| 76.7 | 90.0 | 33 43.2 | 123 38.0 | 01/27 | 1105 | 1125 | 389 | 214 | 69 | 69 |
| 76.7 | 80.0 | 34 03.3 | 122 56.4 | 01/27 | 1703 | 1724 | 429 | 208 | 70 | 70 |
| 76.7 | 70.0 | 34 23.4 | 122 14.7 | 01/28 | 0007 | 0029 | 460 | 205 | 93 | 93 |
| 76.7 | 60.0 | 34 43.3 | 121 32.9 | 01/28 | 0614 | 0636 | 458 | 217 | 68 | 68 |
| 76.7 | 55.0 | 34 53.3 | 121 11.8 | 01/28 | 1058 | 1119 | 433 | 209 | 72 | 72 |
| 76.7 | 49.0 | 35 05.2 | 120 46.4 | 01/28 | 1634 | 1639 | 154 | 41 | 130 | 130 |
| 76.7 | 51.0 | 35 01.4 | 120 55.1 | 01/28 | 1844 | 1907 | 455 | 214 | 83 | 83 |
| 73.3 | 50.0 | 35 38.4 | 121 15.7 | 01/29 | 0032 | 0038 | 79 | 28 | 177 | 177 |
| 73.3 | 55.0 | 35 28.7 | 121 36.3 | 01/29 | 0416 | 0439 | 475 | 212 | 86 | 61 |
| 73.3 | 60.0 | 35 18.6 | 121 57.7 | 01/29 | 0827 | 0848 | 413 | 214 | 87 | 87 |
| 73.3 | 70.0 | 34 58.7 | 122 39.7 | 01/29 | 1425 | 1446 | 404 | 213 | 62 | 62 |
| 73.3 | 80.0 | 34 38.6 | 123 21.9 | 01/29 | 2020 | 2040 | 430 | 205 | 81 | 81 |
| 73.3 | 90.0 | 34 18.6 | 124 03.4 | 01/30 | 0216 | 0238 | 426 | 211 | 33 | 33 |
| 70.0 | 90.0 | 34 52.8 | 124 28.7 | 01/30 | 0828 | 0849 | 451 | 217 | 18 | 18 |
| 70.0 | 80.0 | 35 12.8 | 123 46.8 | 01/30 | 1447 | 1510 | 466 | 204 | 36 | 36 |
| 70.0 | 70.0 | 35 32.8 | 123 04.6 | 01/30 | 2142 | 2202 | 461 | 189 | 108 | 108 |
| 70.0 | 60.0 | 35 52.8 | 122 21.8 | 01/31 | 0434 | 0457 | 462 | 207 | 132 | 132 |
| 70.0 | 55.0 | 36 02.9 | 122 00.6 | 01/31 | 0913 | 0934 | 418 | 209 | 67 | 67 |
| 66.7 | 50.0 | 36 47.1 | 122 03.3 | 01/31 | 1907 | 1930 | 382 | 213 | 188 | 188 |
| 66.7 | 55.0 | 36 37.2 | 122 24.8 | 01/31 | 2325 | 2345 | 394 | 211 | 64 | 64 |
| 66.7 | 60.0 | 36 27.2 | 122 46.0 | 02/01 | 0355 | 0417 | 417 | 215 | 103 | 103 |
| 66.7 | 70.0 | 36 07.2 | 123 28.9 | 02/01 | 1204 | 1225 | 389 | 209 | 75 | 75 |
| 66.7 | 80.0 | 35 47.2 | 124 11.8 | 02/01 | 2000 | 2020 | 412 | 214 | 56 | 56 |
| 66.7 | 90.0 | 35 27.1 | 124 53.9 | 02/02 | 0439 | 0501 | 448 | 213 | 47 | 47 |
| 60.0 | 90.0 | 36 36.3 | 125 46.5 | 02/02 | 1514 | 1535 | 382 | 204 | 42 | 42 |
| 60.0 | 80.0 | 36 56.8 | 125 03.3 | 02/02 | 2139 | 2158 | 391 | 208 | 92 | 92 |
| 60.0 | 70.0 | 37 16.7 | 124 20.1 | 02/03 | 0415 | 0437 | 401 | 212 | 154 | 154 |
| 60.0 | 60.0 | 37 36.7 | 123 36.5 | 02/03 | 1028 | 1048 | 380 | 207 | 181 | 118 |
| 60.0 | 53.0 | 37 50.7 | 123 06.3 | 02/03 | 1443 | 1451 | 150 | 58 | 107 | 107 |
| 63.3 | 55.0 | 37 12.7 | 122 50.3 | 02/03 | 2210 | 2230 | 386 | 211 | 122 | 122 |
| 63.3 | 60.0 | 37 02.7 | 123 11.7 | 02/04 | 0206 | 0227 | 386 | 207 | 145 | 145 |
| 63.3 | 70.0 | 36 42.8 | 123 54.8 | 02/04 | 0813 | 0832 | 384 | 214 | 104 | 104 |
| 63.3 | 80.0 | 36 22.2 | 124 38.0 | 02/04 | 1437 | 1459 | 435 | 206 | 18 | 18 |