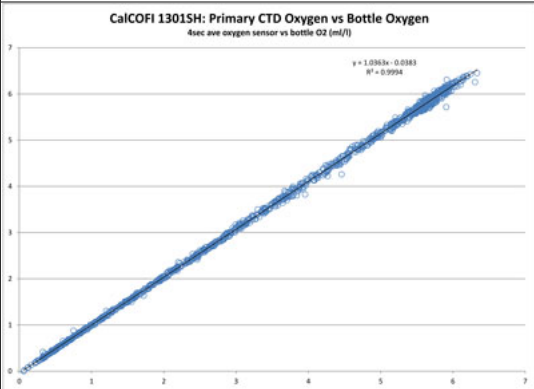
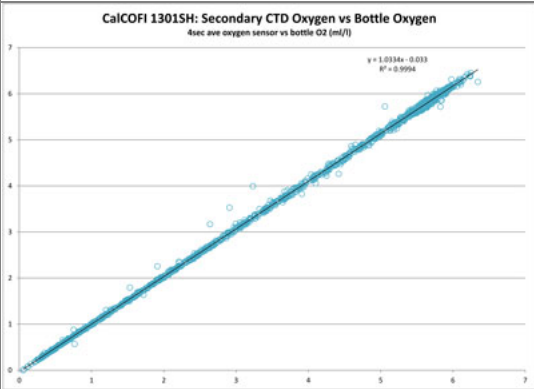


Parent Category: 2013 Cruises (/cruises/2013-cruises.html)
Category: CalCOFI 1301SH (/cruises/2013-cruises/calcofi-1301sh.html)
📅 Last Updated: 10 March 2017

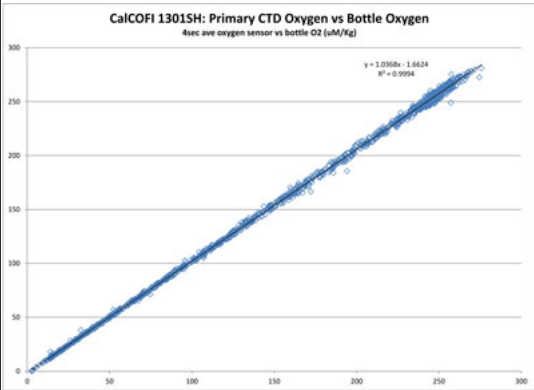
CTD Processing Summary CalCOFI 1301SH CTD Data FinalQC (2017 reprocessing, adding QC columns)		
Download 1301SH CTD raw cast files zipped (http://cappuccino.ucsd.edu/downloads/2013/20-1301SH_CTDcast.zip)		Download 1301SH FinalQC CTD + bottle data (http://cappuccino.ucsd.edu/d/1301SH_CTDFinalQC.zip)
General CTD Notes - data acquisition notes, logistics, processing - see below		
CTD sensor corrections derived by comparing 4 secs of CTD sensor data (prior to bottle closure) to bottle samples		
Dual T, S, & O2	Primary Sensor	Secondary Sensor
Salinity offset (bottle - CTD salinity; > 350m only; Seabird SBE4)	-0.0078	-0.00627
Oxygen ml/L (dual Seabird SBE43)	y = 1.0363x - 0.0383 R ² = 0.9994	y = 1.0334x - 0.033 R ² = 0.9994
Oxygen umoles/Kg (dual Seabird SBE43)	y = 1.0368x - 1.6624 R ² = 0.9994	y = 1.0339x - 1.4348 R ² = 0.9994
Single sensors	Linear	Polynomial
Nitrate - ISUS 4sec ave voltage vs Bottle Nitrate (Satlantic MBARI-ISUS v2)	y = 28.196x - 8.825 R ² = 0.9834	
Fluorometer - linear & polynomial regressions	y = 5.72x - 0.1329 R ² = 0.6927	y = 1.6023x ² +4.8558x-0.0829 R ² = 0.6974



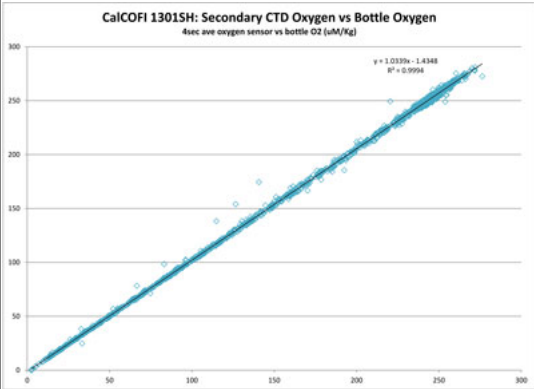
(http://www.calcofi.org/downloads/cruise_data/2013/1301/1301_Final_Regressions/1301SH_Ox1MLvsOxBML.jpg)

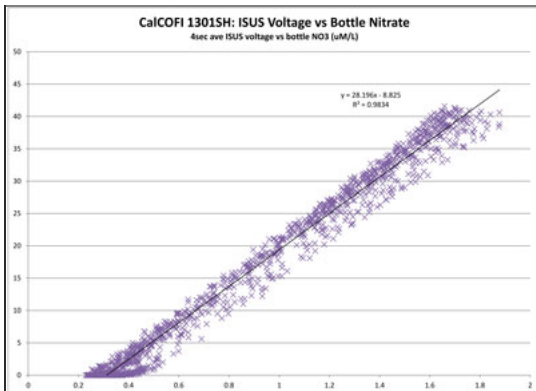


(http://www.calcofi.org/downloads/cruise_data/2013/1301/1301_Final_Regr)

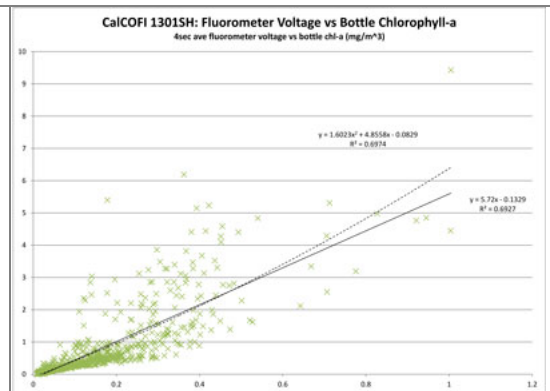


(http://www.calcofi.org/downloads/cruise_data/2013/1301/1301_Final_Regressions/1301SH_Ox1UMvsOxBUM.jpg)





(http://www.calcofi.org/downloads/cruise_data/2013/1301/1301_Final_Regressions/1301SH_ISUSVsNO3.jpg)



(http://www.calcofi.org/downloads/cruise_data/2013/1301/1301_Final_Regr)

General notes: This is the final CTD Processing Summary from 1301SH cruise

CalCOFI 1301SH occupied 90 stations from line 93.3 to 66.7 (San Diego to Monterey CA). Sixty-six standard CalCOFI stations (ie occupied quarterly) and 6 SCCOOS stations along with 18 center CTD-rosette. Net tows were performed on all stations. CUFES underway egg sampling, SCS meteorological and sea surface temperature/salinity/fluorometric data were collected during most transects. Net tows were secured during rough conditions to protect the pump.

CTD configuration was standard: Seabird 911+ with dual T, C, O₂, & pumps; Wetlabs C-Star 25cm transmissometer; Biospherical QSP200L PAR; Datasonics/Benthos Altimeter; NEW ADDITION: Seapoint Fluorometer. Sensitivity setting was 0-50mg/m³; Seabird pH; Satlantic ISUS v2 & battery. Please refer to the xmlcon files or cruise prospectus for additional details.

CTD cast notes:

Station 001 - 072 were 515m (depth-permitting), 20-24 bottle rosette CTD casts.

- Sensor data collected: dual temperature, dual conductivity (dual salinity), dual oxygen, fluorescence, transmissometer, remote PAR, altimeter, ISUS nitrate sensor, & pH. Altimeter note: on station 061 (voltage 2) was replaced by Shimada's Wetlabs EcoFLNTU fluorometer for diagnostic deployments vs our Seapoint Fluorometer. Data from this sensor may be good on stations 061-062 but does not have a good record on other stations.
- Seawater samples taken: oxygen, salinity, nutrients, chlorophylls, LTER ancillary samples, DIC, & daily primary productivity incubation samples.

Stations 073 - 083 were 515 (depth-permitting), 12 bottle rosette CTD casts.

- Sensor data collected unchanged: dual temperature, dual conductivity (dual salinity), dual oxygen, fluorescence, transmissometer, remote PAR, altimeter (on stations shallower than 515), ISUS nitrate sensor, & pH.
- Seawater samples taken: 12 oxygen, 2 salinities, 9 chlorophylls.

Stations 084 - 090 (line 67 off Monterey) were 1000m (depth-permitting)

- Sensor data collected unchanged: dual temperature, dual conductivity (dual salinity), dual oxygen, fluorescence, transmissometer, remote PAR, altimeter, ISUS nitrate sensor, & pH.
- Seawater samples taken: 12 oxygen, 2 salinities, 9 chlorophylls; plus 7 (24hr) primary productivity experiments performed by MBARI.

Station 007: the primary salinities during the upcast between 455-438m look bad, QC codes are "9" for those depths; use the 2nd salinities.

2017 reprocessing added data-quality code columns and data codes on bad or missing data ("9") or questionable data ("8"). Data values should not have changed from the previously published number. The number on updated CTD.csvs has changed from 65 to 82. Refer to the CTD.csv data format webpage: 65-column index (<http://calcofi.org/data/data-formats/607-ctd-csv-format-65cols.html>); 82-column index (<http://calcofi.org/data/data-formats/577-ctd-csv-format-qc.html>)