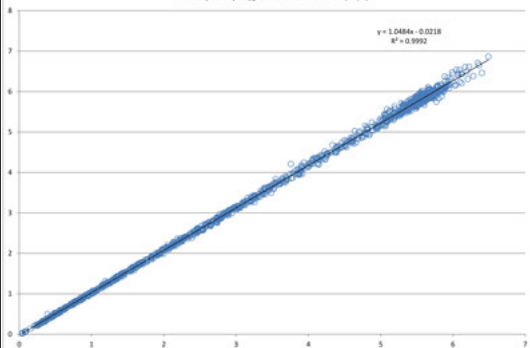
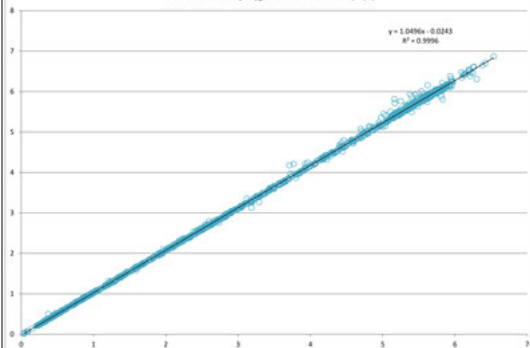
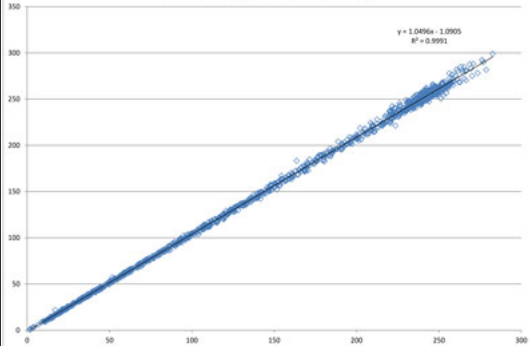
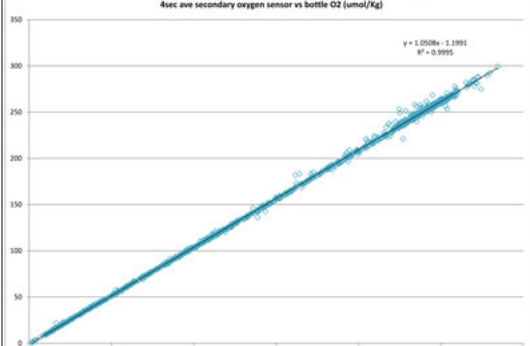
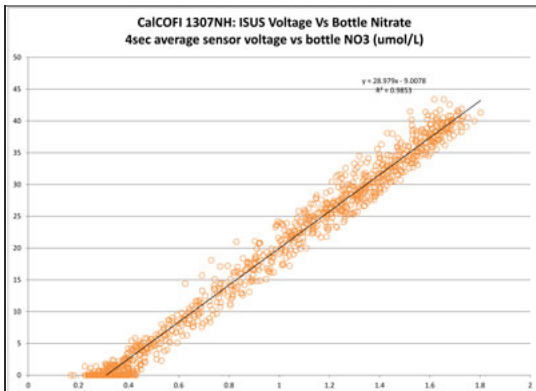
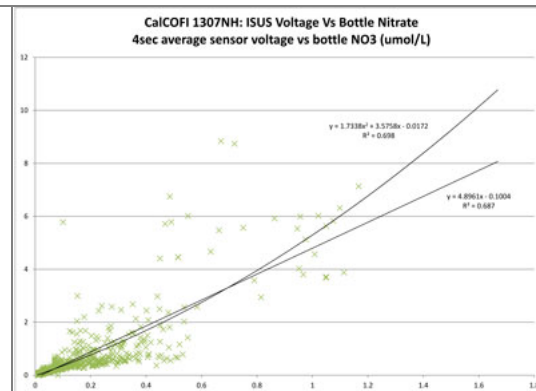


Parent Category: 2013 Cruises (/cruises/2013-cruises.html)  
Category: CalCOFI 1307NH (/cruises/2013-cruises/calcofi-1307nh.html)  
📅 Last Updated: 10 March 2017

CTD Processing Summary CalCOFI 1307NH CTD Data Final		
Download 1307NH CTD raw cast files zipped ( <a href="http://cappuccino.ucsd.edu/downloads/2013/20-1307NH_CTDcast.zip">http://cappuccino.ucsd.edu/downloads/2013/20-1307NH_CTDcast.zip</a> )		Download 1307NH FinalQC CTD + bottle data ( <a href="http://cappuccino.ucsd.edu/downloads/2013/20-1307NH_CTDFinalQC.zip">http://cappuccino.ucsd.edu/downloads/2013/20-1307NH_CTDFinalQC.zip</a> )
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 ( <a href="http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Salt_Offsets.pdf">http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Salt_Offsets.pdf</a> ) (bottle - CTD salinity; > 350m only; Seabird SBE4)	-0.00214	-0.00226
Oxygen ml/L (dual Seabird SBE43)	y = 1.0484x - 0.0219 R² = 0.9992	y = 1.0496x - 0.0243 R² = 0.9994
Oxygen umoles/Kg (dual Seabird SBE43)	y = 1.0496x - 1.0905 R² = 0.9991	y = 1.0508x - 1.1991 R² = 0.9995
Single sensors	Linear	Polynomial
Nitrate - ISUS 4sec ave voltage vs Bottle Nitrate (Satlantic MBARI-ISUS v2)	y = 28.979x - 9.0078 R² = 0.9853	
Fluorometer - linear & polynomial regressions		y = 1.7338x²+3.5758x-0.0172 R² = 0.698
<div>CalCOFI 1307NH: Primary CTD Oxygen Vs Bottle Oxygen 4sec ave primary oxygen sensor vs bottle O2 (ml/L) </div> ( <a href="http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox1MLVsOxB.pdf">http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox1MLVsOxB.pdf</a> )	<div>CalCOFI 1307NH: Secondary CTD Oxygen Vs Bottle Oxygen 4sec ave secondary oxygen sensor vs bottle O2 (ml/L) </div> ( <a href="http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox2MLVsOxB.pdf">http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox2MLVsOxB.pdf</a> )	
<div>CalCOFI 1307NH: Primary CTD Oxygen Vs Bottle Oxygen 4sec ave primary oxygen sensor vs bottle O2 (umol/Kg) </div> ( <a href="http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox1UMVsOxB.jpg">http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox1UMVsOxB.jpg</a> )	<div>CalCOFI 1307NH: Secondary CTD Oxygen Vs Bottle Oxygen 4sec ave secondary oxygen sensor vs bottle O2 (umol/Kg) </div> ( <a href="http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox2UMVsOxB.jpg">http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_Ox2UMVsOxB.jpg</a> )	



([http://www.calcofi.org/downloads/cruise\\_data/2013/1307/1307\\_Final\\_Regressions/1307NH\\_ISUSVsNO3.pdf](http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final_Regressions/1307NH_ISUSVsNO3.pdf))



([http://www.calcofi.org/downloads/cruise\\_data/2013/1307/1307\\_Final](http://www.calcofi.org/downloads/cruise_data/2013/1307/1307_Final))

### General notes: This is the final CTD Processing Summary from 1307NH cruise

CalCOFI 1307NH: 74 stations occupied, 66 standard & 8 SCCOOS (80.0 50.5 dropped due to weather); station order was impacted by Naval Operations.

CTD configuration was standard: Seabird 911+ with dual T, C, O<sub>2</sub>, & pumps; Wetlabs C-Star 25cm transmissometer; Biospherical QSP200L PAR; Datasonics/Benthos Altimeter; NEW ADDITION replacing our Seapoint Fluorometer. Sensitivity setting was 0-50mg/m<sup>3</sup>; Seabird pH; Satlantic ISUS v2 & battery. Please refer to the xmlcon files or cruise prospectus for additional info.

This cruise had many non-confirmation problems - bottles being closed but no confirmation returning. It was later discovered faulty conductive wire(s) were to blame after the questionable wire conductor and shield ground used.

Cast 001 93.3 26.7: CTD started down but archiving was not initiated so it was brought back to surface, data acquisition started then lowered

Cast 002 93.4 26.4: No trip at #3, tripped 2 at 5m. Omit #4, re-numbered #5 to surface bottle.

Cast 007 93 40- Bottle 11 didn't confirm, fired again and the next bottle to be fired advanced by 2 numbers. 2 bottles were tripped at 100m.

Cast 008 93.3 45.0- 270m #5, non confirm\_ next bottle jumped from 5 to 7.

Cast 009 93.3 50.0: #12 85m no confirmation - updated to #14 next depth

Cast 012 93 70- Really high NO<sub>3</sub>, Non confirm 1 and 2, finally caught up at 3

Cast 013 93.3 80.0- Non confirms at #'s 6, 11, 15, 16,17, 18 went from 16-18should be 19? Think #16 was a non closure 3 bottles still open at surface, sent back down to trip 48 m for prodo v

Cast 014 93 90- 2 non confirms at 380m non confirm at 270m and non confirms at 50m and 40m, Duplicates at 380 m and no 40m bottle

Cast 021 - 3500m deep cast "Scan length error: expected = 88, actual = 15" message seen during the upcast on-screen at 657m. **No CTD sensor data collected between 1758m-1267m d restarted at 1266m to surface.** Another glitch: oxygen upcast profile from ~1800-1300m looks wrong

Cast 023 90.0 70.0: Eventlog GPS wrong, computer serving GPS frozen

Cast 032 86.7 110.0- 4 bottles tripped at 29 m extras are 19 20 21 22 brought on deck reset 19-22; put back into water after resetting

Cast 039 83.3 55.0: bottle #21 mistripped, no closure

Cast 044 81.9 46.9- Popped 2 bottles at 20m, pulled CTD on deck emptied bottle 23 and sent back in to sample 10m depth. No ph data.

Cast 046 80 55- 15 m DIC Sample.

Cast 047 80 60-No ISUS Data.

Cast 050 80 90- Transmissometer spikey near terminal depth at 400-515m.

Cast 054 77 80- Inversion at 50m

Cast 062 87.45: ISUS sent in unplugged, returned to deck immediately but did not work

Cast 063 87.40: ISUS still not working even though the battery was replaced; went from 765 to 700 then back to 750 on upcast to get 15m-off-bottom bottle

Cast 064 87.35: still no ISUS data; down-welled O<sub>2</sub> feature at 250m

Cast 065 85.4 35.8: No ISUS data

Cast 066 87.33: No ISUS data

Cast 067 86.8 32.5: ISUS data finally, main cable questionable

Cast 062-69: No reliable ISUS data.

Cast 073 90 37- Bottle 20 did not close, sent CTD back down and used bottle 24 to sample 20m

Note: this page was updated 16Oct2015; CTD data was reprocessed using new data code format and final regressions were regenerated. 2015 reprocessing added data-quality code columns an ("9") or questionable data ("8"). Data values should not have changed from the previously published final CTD data. But the column number on updated CTD.csvs has changed from 65 to 82. R 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>)

