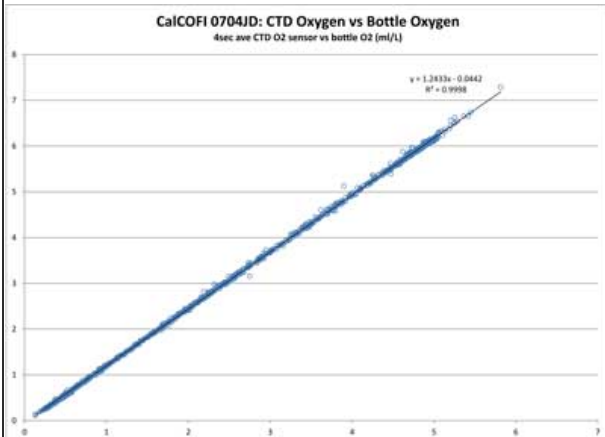
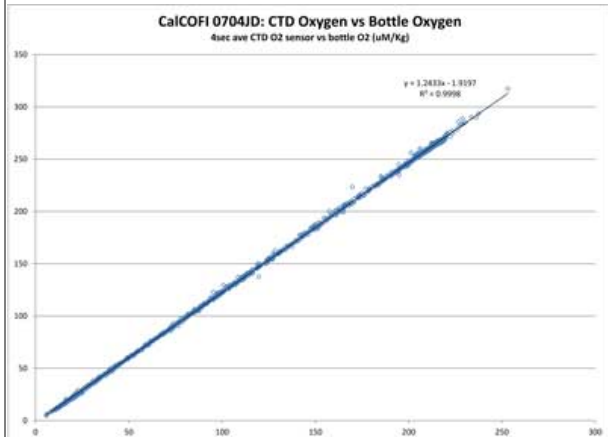
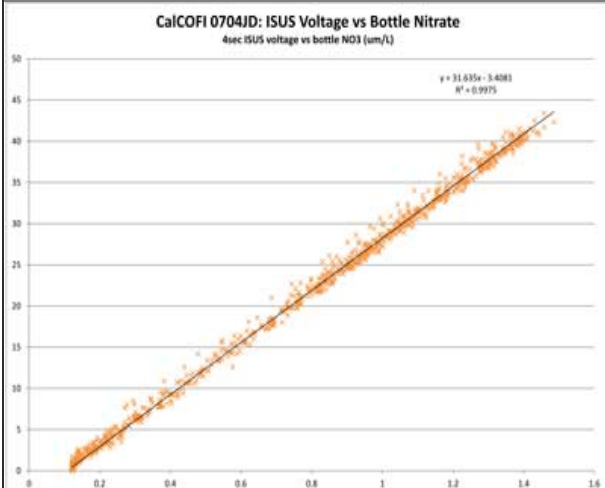
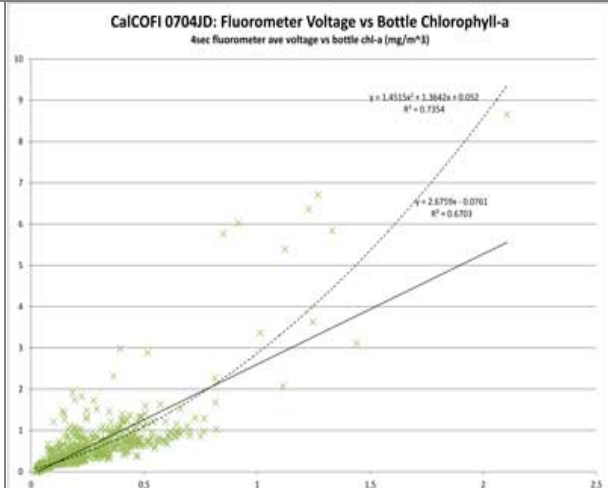
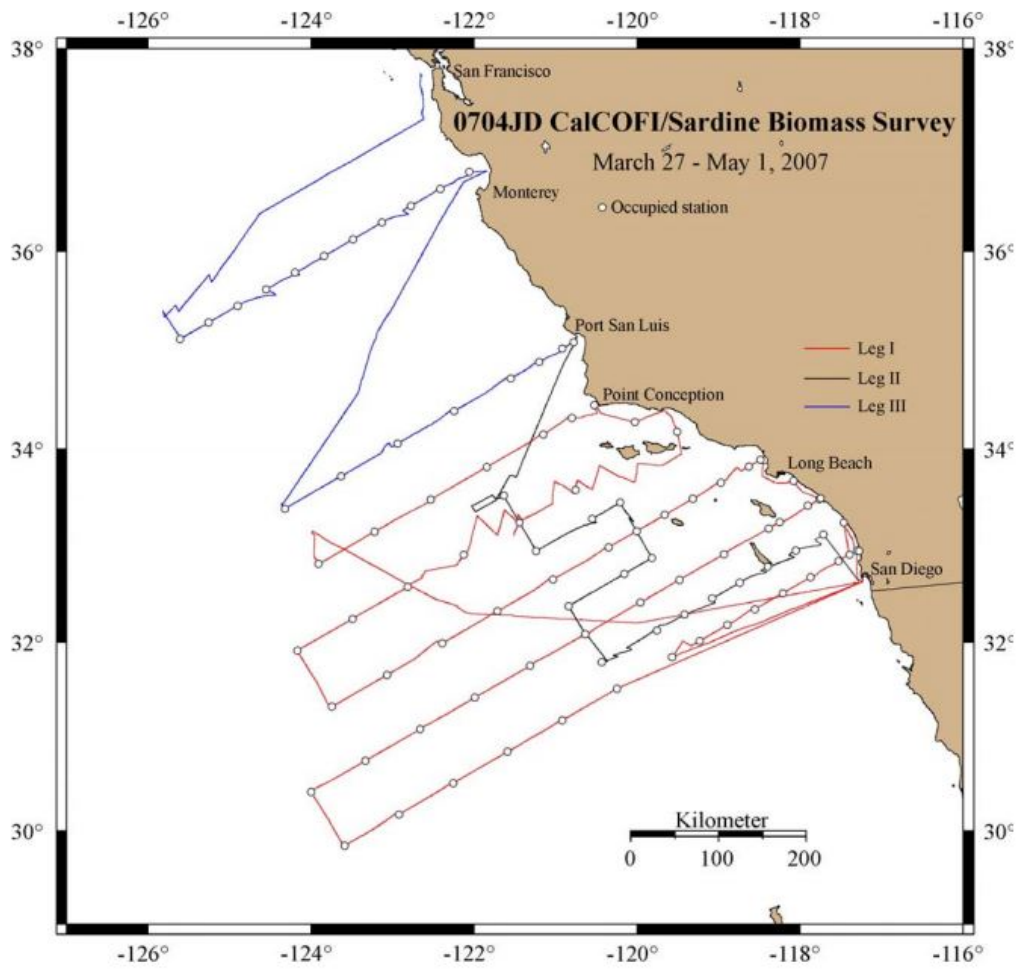


0704JD CTD Processing Summary

Parent Category: Older Cruises (/cruises/older-cruises.html)
Category: 2007 Cruises (/cruises/older-cruises/183-2007-cruises.html)
Last Updated: 30 November 2018

CTD Processing Summary CalCOFI 0704JD CTD Final Data (reprocessed/reformatted 11/2018)		
NOAA 0704JD Cruise Report pdf (http://cappuccino.ucsd.edu/downloads/2007/0704JD/0704JD.rpt.pdf)		
Download 0704JD CTD raw cast files zipped (http://cappuccino.ucsd.edu/downloads/2007/20-0704JD_CTDCast.zip)	Download 0704JD FinalQC CTD + bottle data (http://cappuccino.ucsd.edu/downloads/2007/20-0704JD_CTDFinalQC.zip)	
General CTD Notes - data acquisition cast notes, logistics, processing notes are listed below		
CTD sensor corrections derived by comparing 4 secs of CTD sensor data (prior to bottle closure) to bottle samples		
Dual T & S	Primary Sensor	Secondary Sensor
Temperature, dual SBE3	No offset or correction	No offset or correction
Salinity offset (bottle - CTD salinity; > 350m only; Seabird SBE4; fliers excluded)	-0.0016	0.0003
Single sensors - note only one CTD O2 sensor	ml/L	uM/Kg
Oxygen (ml/L & uM/Kg; single Seabird SBE43)	y = 1.2433x - 0.0442 R ² = 0.9998	y = 1.2433x - 1.9197 R ² = 0.9998
Nitrate - Satlantic MBARI-ISUS (SN#111 v2)	y = 31.635x - 3.4081 R ² = 0.9975	
Seapoint Fluorometer - linear & polynomial regressions	y = 2.6759x - 0.0761 R ² = 0.6703	y = 1.4515x ² + 1.3642x + 0.052 R ² = 0.7354
		
http://cappuccino.ucsd.edu/downloads/2007/0704JD/0704JD_Ox1MLvsOxBML.jpg		http://cappuccino.ucsd.edu/downloads/2007/0704JD/0704JD_Ox1UMvsOxBUM.jpg
		
http://cappuccino.ucsd.edu/downloads/2007/0704JD/0704JD_ISUSVsNO3.jpg		http://cappuccino.ucsd.edu/downloads/2007/0704JD/0704JD_FIVvsChla.jpg

General notes: Station Pattern & Cruise Track



CalCOFI 0704JD • 28 Mar - 29 Apr 2007 (Legs 1 & 2) • NOAA RV David Starr Jordan • San Diego to San Diego

Cruise and CTD Data Processing Notes

CalCOFI 0704JD on NOAA RV David Starr Jordan Leg 1 successfully occupied 57 of 75 scheduled stations Mar 28 - Apr 15. Acoustic calibration was performed so arrival to the 1st CalCOFI station was ~2130PST Mar 28, missing the 1st day prodo station. Leg I's last station was 80.0 100.0; only 4 of the 9 SCCOOS stations were occupied on Leg I.

From NOAA's 0704JD Cruise Report:

- Leg I: Departed the Nimitz Marine Facility (MARFAC) at 0800 on March 27, 2007 and moved to an anchorage off of Harbor Island to calibrate the EK-60 scientific sounder. Completed calibration operations around noon and moved to the Navy fuel pier for fueling operations. Departed the fuel pier around 1600 and proceeded to the first station (93.3/26.7 - position 32° 57.38'N 117° 18.32'W). Continued to occupy stations up to 80.0 100.0 at which time operations were discontinued and the ship pulled back into San Diego (MARFAC), California to complete leg I on April 16.
- Leg II: Departed the Nimitz Marine Facility on April 19 after exchanging scientific personnel and gear and began trawling operations within the California bight. Pulled into Port San Luis on April 23 to exchange scientific personnel which completed leg II.
- Leg III: After completion of the personnel exchange, the ship remained anchored in the lee of Point San Luis to complete the overboard installation of the multi-beam transducer. Once installment was complete, operations continued at station 76.7/49.0 (35° 5.295'N 120° 46.644'W) since occupation of line 76.7 was not performed on leg I due to delays and weather. The Jordan concluded the survey in San Francisco, California on May 1, 2007.

Seabird 911+ configuration:

Primary Temperature (#1324), Conductivity (#2206), and O2 sensor (#1075), pumped (#55060); Secondary Temperature (#1049), Conductivity (#722) pumped (#52236); Wetlabs (CST-490DR) 25cm transmissometer (misabeled Chelsea/Seatech in con); Seapoint chlorophyll fluorometer (SCF2483 @10x); Benthos/Datasonics Altimeter (#46604); MBARI-ISUS v2 (#109-P. Franks); remote PAR (#4544), surface PAR (#6369) was connected.

(Freq0=T0; Freq1=C0; Freq2=Pr; Freq3=T1; Freq4=C1; V0=Trans; V1=Fl; V2=ISUS; V3=open; V4=O21; V5=open; V6=Altimeter; V7-Remote PAR)

Voltage	Sensor
V0	Trans
V1	Fluor
V2	ISUS
V3	
V4	O2
V5	
V6	Altimeter
V7	Remote PAR

CalCOFI 0704JD CTD Data Processing & Console Ops Notes

Removed salt fliers on both primary & secondary comparisons.

1000m CTD casts were performed on Line 66.7 (MBARI-SECRET) on Leg III this cruise.

Only one O2 sensor was deployed and a SBE11v1 Deck Unit - requiring Align-CTD offset of secondary conductivity (0.073sec) was used.

CalCOFI 0704JD CTD Data Processing Notes Seabird 911+ CTD with Deck Unit v1 requires AlignCTD of secondary conductivity sensor by 0.73sec. This has been applied along with a 4sec oxygen sensor offset. V0 - Transmissometer V1 - Seapoint Fluorometer V2 - ISUS v2 Nitrate sensor, user-polynomial V3 - open V4 - SBE43 O2 sensor V5 - open V6 - Altimeter V7 - PAR V15 - Surface PAR Please note there is only one oxygen sensor deployed in 2007. Secondary sensor plots will only have O2 bottle data, no secondary O2 profiles.

There were no real issues with the ISUS this cruise except Cast 001 NO3 vs ISUS voltages were removed from the correction regression. Although the same CTD-rosetter was deployed on Legs II & III, no ISUS was deployed. Bottle sample nutrients including NO3 samples were collected and processed.

JRW 11/30/2018