CTD profile data from R/V Pelican cruises PE03-NGOMEX, PE04-NGOMEX, PE06-NGOMEX, PE07-NGOMEX, PE09-05, PE11-06 in the Northern Gulf of Mexico, 28-30N 89-94W; 2003-2010 (GoMX NGOMEX project)

Website: https://www.bco-dmo.org/dataset/3547
Version: 28 September 2011
Version Date: 2011-09-28

Project
» NGOMEX - Living Marine Resources of the Northern Gulf of Mexico (GoMX - NGOMEX)

Program
» Gulf of Mexico - Deepwater Horizon Oil Spill (GoMX - DHOS)

Contributors	Affiliation	Role
Roman, Michael R.	University of Maryland Center for Environmental Science (UMCES/HPL)	Principal Investigator
Boicourt, William C.	University of Maryland Center for Environmental Science (UMCES/HPL)	Co-Principal Investigator
Pierson, James J.	University of Maryland Center for Environmental Science (UMCES/HPL)	Co-Principal Investigator, Contact
Pietrafesa, Leonard	University of Maryland Center for Environmental Science (UMCES/HPL)	Contact
Gegg, Stephen R.	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	Data Publisher, BCO-DMO Data Manager

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Dataset Description

Multi Year CTD Profile Data

Methods & Sampling

(see individual deployments)

Data Processing Description

Generated from CTD .cnv files contributed by Jamie Pierson

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Data Files

File
PELICAN_CTD.csv (Comma Separated Values (.csv), 237.54 MB) MD5:d59169984d21c62bcdf91a0623bf0456 Primary data file for dataset ID 3547

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Parameters

Parameter	Description	Units
dataset	dataset id	text
date	date (GMT)	yyyymmdd
time	time(GMT)	hhmmss
lon	longitude (West is negative)	decimal degrees
lat	latitude (South is negative)	decimal degrees
timeS	Elapsed Time	seconds
scan	Scan Count	integer
prDM	Pressure Digiquartz	decibars
depSM	Depth salt water	meters
t090	Temperature ITS-90	degrees celsius
c0	Conductivity	mS/cm
sal00	Salinity Practical	PSU
sigma_t00	Density sigma-t	Kg/m^3
sbeox0	Oxygen SBE 43	mg/l
sbeox0_PS	Oxygen SBE 43 percent saturation	percentage
sbeox1	Oxygen SBE 43 2	mg/l
sbeox1_PS	Oxygen SBE 43 2 percent saturation	percentage
flScufa	Fluorescence Turner SCUFA	ug/L
bat	Beam Attenuation Chelsea/Seatech/WET Labs CStar	1/m
xmiss	Beam Transmission Chelsea/Seatech/WET Labs CStar	percentage
xmiss1	Beam Transmission Chelsea/Seatech/WET Labs Cstar 2	percentage
altm	Altimeter	meters
par	PAR/Irradiance Biospherical/Licor	(tbd)
spar	SPAR/Surface Irradiance	(tbd)
flag	flag	integer
Year	Year of data collection	yyyy

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Instruments

Dataset-specific Instrument Name	CTD Sea-Bird 9
Generic Instrument Name	CTD Sea-Bird 9
Generic Instrument Description	The Sea-Bird SBE 9 is a type of CTD instrument package. The SBE 9 is the Underwater Unit and is most often combined with the SBE 11 Deck Unit (for real-time readout using conductive wire) when deployed from a research vessel. The combination of the SBE 9 and SBE 11 is called a SBE 911. The SBE 9 uses Sea-Bird's standard modular temperature and conductivity sensors (SBE 3 and SBE 4). The SBE 9 CTD can be configured with auxiliary sensors to measure other parameters including dissolved oxygen, pH, turbidity, fluorometer, altimeter, etc.). Note that in most cases, it is more accurate to specify SBE 911 than SBE 9 since it is likely a SBE 11 deck unit was used. more information from Sea-Bird Electronics

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Deployments

PE03-NGOMEX

Website	https://www.bco-dmo.org/deployment/58120
Platform	R/V Pelican
Start Date	2003-06-30
End Date	2003-08-05
	2003 Sampling cruise to the Northern Gulf of MexicoNote: Deployment Id assigned by BCO-DMO staff (not official) **Methods & Sampling** * Sea-Bird SBE 9 Data File: * FileName = C:BACKUPCONFIGBOICOURTM1.dat * Software Version Seasave Win32 V 5.28c * Temperature SN = 031811 * Conductivity SN = 264 * Number of Bytes Per Scan = 30 * Number of Voltage Words = 4 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Jul 30 2003 12:06:23 ** Ship: R/V Pelican ** Cruise: BOICOURT 2003 ** Station: M1 ** Latitude: 29.41973 ** Longitude: 93 39.275 ** Date 30-07-03 ** Time 17:01 GMT # nquan = 16 # nvalues = 12 # units = specified # name 0 = timeS: Time, Elapsed [seconds] # name 1 = scan: Scan Count # name 2 = prDM: Pressure, Digiquartz [db] # name 3 = depSM: Depth [salt water, m] # name 4 = t090C: Temperature [ITS-90, deg C] # name 5 = c0mS/cm: Conductivity [mS/cm] # name 6 = sal00: Salinity, Practical [PSU] # name 7 = sigma-t00: Density [sigma-t, Kg/m^3] # name 8 = oxMg/L: Oxygen, Beckman/YSI [mg/l] # name 9 = oxPS: Oxygen, Beckman/YSI [% saturation] # name 10 = oxsMg/L: Oxygen, Beckman/YSI, 2 [mg/l] # name 11 = oxsPS: Oxygen, Beckman/YSI, 2 [% saturation] # name 12 = wetStar: Fluorescence, WET Labs WETstar [mg/m^3] # name 13 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m] # name 14 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%] # name 15 = flag: flag # span 0 = 1.548, 228.562 # span 1 = 38, 5486 # span 2 = 2.013, 7.551 # span 3 = 2.000, 7.500 # span 4 = 29.0197, 29.4224 # span 5 = 51.419144, 51.585839 # span 6 = 30.8293, 31.0064 # span 7 = 18.7988, 19.0624 # span 8 = 4.12578, 5.59592 # span 9 = 63.87021, 87.08206 # span 10 = 4.32196, 5.76541 # span 11 = 66.90722, 89.59509 # span 12 = 0.2389, 0.3838 # span 13 = 2.1467, 7.0378 # span 14 = 17.7559, 58.4687 # span 15 = 0.0000e+00, 0.0000e+00 # interval = meters: 0.5 # start_time = Jul 30 2003 12:06:23 # bad_flag = -9.990e-29 # Sensors count="13" # sensor Channel="1" # !-- Frequency 0, Temperature -- # TemperatureSensor SensorID="55" # SerialNumber 031811SerialNumber # CalibrationDate 12 jun 02CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A

Description	# B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.84672291e-003G # H 6.68269270e-004H # I 2.33131322e-005I # J 1.64663833e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="2" # !-- Frequency 1, Conductivity -- # ConductivitySensor SensorID="3" # SerialNumber 264SerialNumber # CalibrationDate 8 may 01CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -4.19440033e+000G # H 4.82653897e-001H # I -1.61166935e-003I # J 1.10042649e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="3" # !-- Frequency 2, Pressure, Digiquartz with TC -- # PressureSensor SensorID="45" # SerialNumber 91105SerialNumber # CalibrationDate 29 jan 03CalibrationDate # C1 -2.308421e+004C1 # C2 -9.603117e-002C2 # C3 7.467294e-003C3 # D1 3.635348e-002D1 # D2 0.000000e+000D2 # T1 3.089052e+001T1 # T2 -4.307788e-004T2 # T3 4.900409e-006T3 # T4 0.000000e+000T4 # Slope 0.99982000Slope # Offset 0.47410Offset # T5 0.000000e+000T5 # AD590M 1.285760e-002AD590M # AD590B -8.801559e+000AD590B # PressureSensor # sensor # sensor Channel="4" # !-- Frequency 3, Temperature, 2 -- # TemperatureSensor SensorID="55" # SerialNumber 03P4247SerialNumber # CalibrationDate 06 jan 03CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.35997689e-003G # H 6.48854117e-004H # I 2.31522490e-005I # J 1.92152742e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="5" # !-- Frequency 4, Conductivity, 2 -- # ConductivitySensor SensorID="3" # SerialNumber 042100SerialNumber # CalibrationDate 7 feb 03CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -9.23048559e+000G # H 1.22635789e+000H # I -2.57278744e-003I # J 2.58397872e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="6" # !-- A/D voltage 0, Oxygen Current, Beckman/YSI -- # OxygenSensor SensorID="36" # SerialNumber 130106SerialNumber # CalibrationDate 7 feb 03CalibrationDate # M 4.1284e-007M # B -2.1881e-010B # Soc 3.4565Soc # Boc -0.0078Boc # Tcor -0.0330Tcor # Pcor 1.50e-004Pcor # Tau 2.0Tau # Wt 0.67Wt # OxygenSensor # sensor # sensor Channel="7" # !-- A/D voltage 1, Oxygen Temperature, Beckman/YSI -- # OxygenSensor SensorID="39" # SerialNumber SerialNumber # CalibrationDate CalibrationDate # K 8.9970K # C -6.8299C # OxygenSensor # sensor # sensor Channel="8" # !-- A/D voltage 2, Transmissometer, Chelsea/Seatech/WET Lab CStar -- # TransChelseaSeatechWetlabCStarSensor SensorID="59" # SerialNumber CST488DRSerialNumber # CalibrationDate 6/3/03CalibrationDate # M 21.2430M # B -1.2110B # PathLength 0.250PathLength # TransChelseaSeatechWetlabCStarSensor # sensor # sensor Channel="9" # !-- A/D voltage 3, Fluorometer, WET Labs WETstar -- # FluoroWetlabWetstarSensor SensorID="21" # SerialNumber SerialNumber # CalibrationDate 02/26/03CalibrationDate # ScaleFactor 1.000ScaleFactor # Vblank 0.037Vblank # FluoroWetlabWetstarSensor # sensor # sensor Channel="10" # !-- A/D voltage 4, Altimeter -- # AltimeterSensor SensorID="0" # SerialNumber PSA-916-937SerialNumber # CalibrationDate CalibrationDate # ScaleFactor 16.500ScaleFactor # Offset 0.000Offset # AltimeterSensor # sensor # sensor Channel="11" # !-- A/D voltage 5, Free -- # sensor # sensor Channel="12" # !-- A/D voltage 6, Oxygen Current, Beckman/YSI, 2 -- # OxygenSensor SensorID="36" # SerialNumber 130244SerialNumber #

	CalibrationDate 19 april 02CalibrationDate # M 2.4642e-007M # B -6.1604e-010B # Soc 3.1783Soc # Boc -0.0067Boc # Tcor -0.0330Tcor # Pcor 1.50e-004Pcor # Tau 2.0Tau # Wt 0.67Wt # OxygenSensor # sensor # sensor Channel="13" # !-- A/D voltage 7, Oxygen Temperature, Beckman/YSI, 2 -- # OxygenSensor SensorID="39" # SerialNumber SerialNumber # CalibrationDate CalibrationDate # K 8.9958K # C -6.8191C # OxygenSensor # sensor # Sensors # datcnv_date = Jul 26 2010 10:54:21, 7.20f # datcnv_in = D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.dat D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.CON # datcnv_skipover = 0 # datcnv_ox_tau_correction = yes # wildedit_date = Jul 26 2010 12:49:10, 7.20f # wildedit_in = D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.cnv # wildedit_pass1_nstd = 2.0 # wildedit_pass2_nstd = 20.0 # wildedit_pass2_mindelta = 0.000e+000 # wildedit_npoint = 100 # wildedit_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 oxMg/L oxPS oxsMg/L oxsPS wetStar bat xmiss # wildedit_excl_bad_scans = yes # filter_date = Jul 26 2010 13:00:00, 7.20f # filter_in = D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.cnv # filter_low_pass_tc_A = 0.030 # filter_low_pass_tc_B = 0.150 # filter_low_pass_A_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 oxMg/L oxPS oxsMg/L oxsPS wetStar bat # filter_low_pass_B_vars = # loopedit_date = Jul 26 2010 13:02:23, 7.20f # loopedit_in = D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.cnv # loopedit_minVelocity = 0.250 # loopedit_surfaceSoak: do not remove # loopedit_excl_bad_scans = yes # binavg_date = Jul 26 2010 13:28:31, 7.20f # binavg_in = D:Data2003NGOMEXPelican_CDCTDCTD DATAM1.cnv # binavg_bintype = meters # binavg_binsize = 0.5 # binavg_excl_bad_scans = yes # binavg_skipover = 0 # binavg_surface_bin = no, min = 0.000, max = 0.000, value = 0.000 # file_type = ascii *END* **Processing Description** BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2003_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2003_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values "nd" (not reported for that year) - Station/Dataset Ids containing an apostrophe ('), apostrophe changed to lower case a (a) in the id.

PE04-NGOMEX

Website	https://www.bco-dmo.org/deployment/58121
Platform	R/V Pelican
Start Date	2004-07-28
End Date	2004-08-02
	2004 Sampling cruise to the Northern Gulf of MexicoNote: Deployment Id assigned by BCO-DMO staff (not official) **Methods & Sampling** * Sea-Bird SBE 9 Data File: * FileName = C:BACKUPCONFIGBOICOURTJULY O4STATION3.dat * Software Version Seasave Win32 V 5.30a * Temperature SN = 2518 * Conductivity SN = 1836 * Number of Bytes Per Scan = 30 * Number of Voltage Words = 4 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Jul 29 2004 11:26:02 * NMEA Latitude = 28 46.000 N * NMEA Longitude = 092 22.000 W * NMEA UTC (Time) = 16:34:36 * Store Lat/Lon Data = Add to Header Only ** Ship: R/V PELICAN ** Cruise: BOICOURT 2004 PE0454 ** Station: 3 ** Latitude: 28 46.439 ** Longitude: 92 22.947 ** Date (GMT): 7-29-04 ** Time (GMT): 16:34 # nquan = 16 # nvalues = 66 # units = specified # name 0 = timeS: Time, Elapsed [seconds] # name 1 = scan: Scan Count # name 2 = prDM: Pressure, Digiquartz [db] # name 3 = depSM: Depth [salt water, m] # name 4 = t090C: Temperature [ITS-90, deg C] # name 5 = c0mS/cm: Conductivity [mS/cm] # name 6 = sal00: Salinity, Practical [PSU] # name 7 = sigma-t00: Density [sigma-t, Kg/m^3] # name 8 = sbeox0Mg/L: Oxygen, SBE 43 [mg/l] # name 9 = sbeox0PS: Oxygen, SBE 43 [% saturation] #

Description	name 10 = sbeox1Mg/L: Oxygen, SBE 43, 2 [mg/l] # name 11 = sbeox1PS: Oxygen, SBE 43, 2 [% saturation] # name 12 = flScufa: Fluorescence, Turner SCUFA [ug/L] # name 13 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m] # name 14 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%] # name 15 = flag: flag # span 0 = 4.535, 318.347 # span 1 = 110, 7641 # span 2 = 1.191, 33.287 # span 3 = 1.183, 33.061 # span 4 = 23.2467, 30.7329 # span 5 = 47.700486, 56.593017 # span 6 = 27.5191, 35.9887 # span 7 = 15.8858, 24.6120 # span 8 = 4.85358, 6.42356 # span 9 = 70.11133, 100.25908 # span 10 = 4.73068, 6.60658 # span 11 = 68.33739, 103.11559 # span 12 = 0.0250, 0.0814 # span 13 = 0.4419, 1.7325 # span 14 = 64.9247, 89.5426 # span 15 = 0.0000e+00, 0.0000e+00 # interval = decibars: 0.5 # start_time = Jul 29 2004 11:26:02 # bad_flag = -9.990e-29 # Sensors count="13" # sensor Channel="1" # !-- Frequency 0, Temperature -- # TemperatureSensor SensorID="55" # SerialNumber 2518SerialNumber # CalibrationDate 15 JAN 04CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.35768508e-003G # H 6.40985933e-004H # I 2.23177036e-005I # J 2.02676841e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="2" # !-- Frequency 1, Conductivity -- # ConductivitySensor SensorID="3" # SerialNumber 1836SerialNumber # CalibrationDate 22 APR 04CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -4.07338214e+000G # H 5.60175755e-001H # I -9.64339754e-004I # J 8.15271275e-005J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="3" # !-- Frequency 2, Pressure, Digiquartz with TC -- # PressureSensor SensorID="45" # SerialNumber 0461SerialNumber # CalibrationDate 30 JAN 04CalibrationDate # C1 -5.122857e+004C1 # C2 -3.440773e-001C2 # C3 1.326090e-002C3 # D1 4.009300e-002D1 # D2 0.000000e+000D2 # T1 3.003551e+001T1 # T2 -3.732322e-004T2 # T3 3.971920e-006T3 # T4 3.181770e-009T4 # Slope 1.00006000Slope # Offset 0.41170Offset # T5 0.000000e+000T5 # AD590M 1.281640e-002AD590M # AD590B -9.225620e+000AD590B # PressureSensor # sensor # sensor Channel="4" # !-- Frequency 3, Temperature, 2 -- # TemperatureSensor SensorID="55" # SerialNumber 2556SerialNumber # CalibrationDate 24 APR 04CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.36590530e-003G # H 6.45029954e-004H # I 2.34212224e-005I # J 2.24040916e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="5" # !-- Frequency 4, Conductivity, 2 -- # ConductivitySensor SensorID="3" # SerialNumber 2125SerialNumber # CalibrationDate 22 APR 04CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -1.06861922e+001G # H 1.57986628e+000H # I -3.27809550e-003I # J 3.22735996e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="6" # !-- A/D voltage 0, Oxygen, SBE 43 -- # OxygenSensor SensorID="38" # SerialNumber 0696SerialNumber # CalibrationDate 28may04CalibrationDate # Use2007Equation 0Use2007Equation # CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 4.5130e-001Soc # offset -0.5053offset # Pcor 1.35e-004Pcor # Tcor 0.0001Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for

Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 0.0000e+000Soc # offset 0.0000offset # A 0.0000e+000A # B 0.0000e+000B # C 0.0000e+000C # D0 2.5826e+000D0 # D1 1.92634e-004D1 # D2 -4.64803e-002D2 # E 0.0000e+000E # Tau20 0.0000Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="7" # !-- A/D voltage 1, Oxygen, SBE 43, 2 -- # OxygenSensor SensorID="38" # SerialNumber 0691SerialNumber # CalibrationDate 28may04CalibrationDate # Use2007Equation 0Use2007Equation # CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 4.4940e-001Soc # offset -0.4982offset # Pcor 1.35e-004Pcor # Tcor 0.0001Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 0.0000e+000Soc # offset 0.0000offset # A 0.0000e+000A # B 0.0000e+000B # C 0.0000e+000C # D0 2.5826e+000D0 # D1 1.92634e-004D1 # D2 -4.64803e-002D2 # E 0.0000e+000E # Tau20 0.0000Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="8" # !-- A/D voltage 2, Altimeter -- # AltimeterSensor SensorID="0" # SerialNumber psaSerialNumber # CalibrationDate CalibrationDate # ScaleFactor 16.500ScaleFactor # Offset 0.000Offset # AltimeterSensor # sensor # sensor Channel="9" # !-- A/D voltage 3, Transmissometer, Chelsea/Seatech/WET Lab CStar -- # TransChelseaSeatechWetlabCStarSensor SensorID="59" # SerialNumber 488drSerialNumber # CalibrationDate 6-12-04CalibrationDate # M 20.1240M # B -1.4700B # PathLength 0.250PathLength # TransChelseaSeatechWetlabCStarSensor # sensor # sensor Channel="10" # !-- A/D voltage 4, Fluorometer, Turner SCUFA -- # FluoroTurnerSCUFA_Sensor SensorID="17" # SerialNumber 0610SerialNumber # CalibrationDate 6-10-04CalibrationDate # B 0.00000000e+000B # MX 1.00000000e+000MX # MY 0.00000000e+000MY # Units 4Units # ScaleFactor 1.00000000e+000ScaleFactor # Offset 0.00000000e+000Offset # FluoroTurnerSCUFA_Sensor # sensor # sensor Channel="11" # !-- A/D voltage 5, Free -- # sensor # sensor Channel="12" # !-- A/D voltage 6, Free -- # sensor # sensor Channel="13" # !-- A/D voltage 7, Free -- # sensor # Sensors # datcnv_date = Jul 26 2010 13:46:30, 7.20f # datcnv_in = D:Data2004NGOMEXctd3.dat D:Data2004NGOMEXctd3.CON # datcnv_skipover = 0 # datcnv_ox_hysteresis_correction = no # datcnv_ox_tau_correction = yes # wildedit_date = Jul 26 2010 13:48:44, 7.20f # wildedit_in = D:Data2004NGOMEXctd3.cnv # wildedit_pass1_nstd = 2.0 # wildedit_pass2_nstd = 20.0 # wildedit_pass2_mindelta = 0.000e+000 # wildedit_npoint = 100 # wildedit_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox0PS sbeox1Mg/L sbeox1PS flScufa bat xmiss # wildedit_excl_bad_scans = yes # filter_date = Jul 26 2010 13:51:03, 7.20f # filter_in = D:Data2004NGOMEXctd3.cnv # filter_low_pass_tc_A = 0.030 # filter_low_pass_tc_B = 0.150 # filter_low_pass_A_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox0PS sbeox1Mg/L sbeox1PS flScufa bat # filter_low_pass_B_vars = # loopedit_date = Jul 26 2010 14:01:13, 7.20f # loopedit_in = D:Data2004NGOMEXctd3.cnv # loopedit_minVelocity = 0.250 # loopedit_surfaceSoak: do not remove # loopedit_excl_bad_scans = yes # binavg_date = Jul 26 2010 14:20:23, 7.20f # binavg_in = D:Data2004NGOMEXctd3.cnv # binavg_bintype = decibars # binavg_binsize = 0.5 # binavg_excl_bad_scans = yes # binavg_skipover = 0 # binavg_surface_bin = no, min = 0.000, max = 0.000, value = 0.000 # file_type = ascii *END*

Processing Description

BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2004_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2004_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values "nd" (not reported for that year)

PE06-NGOMEX

Website	https://www.bco-dmo.org/deployment/58122
Platform	R/V Pelican
Start Date	2006-08-04
End Date	2006-08-13
Description	2006 Sampling cruise to the Northern Gulf of MexicoNote: Deployment Id and Chief Scientist assigned by BCO-DMO staff (not official) **Methods & Sampling** * Sea-Bird SBE 9 Data File: * FileName = C:CTDLudsinB6.dat * Software Version Seasave Win32 V 5.37c * Temperature SN = 1119 * Conductivity SN = 3044 * Number of Bytes Per Scan = 40 * Number of Voltage Words = 5 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Aug 13 2006 11:13:03 * NMEA Latitude = 28 59.48 N * NMEA Longitude = 090 04.50 W * NMEA UTC (Time) = 11:13:44 * Store Lat/Lon Data = Append to Every Scan ** Ship: RV Pelican ** Cruise: LUDSIN 06-58 # nquan = 10 # nvalues = 8422 # units = specified # name 0 = depSM: Depth [salt water, m] # name 1 = prDM: Pressure, Digiquartz [db] # name 2 = t090C: Temperature [ITS-90, deg C] # name 3 = sal00: Salinity [PSU] # name 4 = sbeox0ML/L: Oxygen, SBE 43 [ml/l] # name 5 = xmiss: Beam Transmission, Chelsea/Seatech/Wetlab CStar [%] # name 6 = xmiss1: Beam Transmission, Chelsea/Seatech/Wetlab CStar, 2 [%] # name 7 = flScufa: Fluorescence, Turner SCUFA [ug/L] # name 8 = altM: Altimeter [m] # name 9 = flag: 0.000e+00 # span 0 = -1.145, 20.210 # span 1 = -1.153, 20.348 # span 2 = 27.6482, 30.9299 # span 3 = 29.6224, 35.9634 # span 4 = 0.01947, 4.43011 # span 5 = 26.0559, 97.4272 # span 6 = 76.7223, 106.5122 # span 7 = 0.0818, 0.5140 # span 8 = 0.00, 100.00 # span 9 = 0.0000e+00, 0.0000e+00 # interval = seconds: 0.0416667 # start_time = Aug 13 2006 11:13:03 # bad_flag = -9.990e-29 # sensor 0 = Frequency 0 temperature, primary, 1119, 27-Sep-05 # sensor 1 = Frequency 1 conductivity, primary, 3044, 18-may-05, cpcor = -9.5700e-08 # sensor 2 = Frequency 2 pressure, 0461, 01-May-06 # sensor 3 = Frequency 3 temperature, secondary, 4515, 26-apr-05 # sensor 4 = Frequency 4 conductivity, secondary, 2100, 28 JUL 05, cpcor = -9.5700e-08 # sensor 5 = Extrnl Volt 0 Oxygen, SBE, primary, 0810, 26-MAY-06 # sensor 6 = Extrnl Volt 1 Oxygen, SBE, secondary, 0803, 13-APR-06 # sensor 7 = Extrnl Volt 2 altimeter # sensor 8 = Extrnl Volt 3 transmissometer, primary, CST, 25 JUN 065 # sensor 9 = Extrnl Volt 4 irradiance (PAR), primary, 4531, 06 JAN 06 # sensor 10 = Extrnl Volt 5 transmissometer, secondary, CST-238PR, 2/22/05 # sensor 11 = Extrnl Volt 6 Fluorometer, Turner, SCUFA, primary # sensor 12 = Extrnl Volt 9 surface irradiance (SPAR), degrees = 0.0 # datcnv_date = Aug 13 2006 11:20:13, 5.37b # datcnv_in = c:CTDLudsin6.dat c:CTDLudsinB6.con # datcnv_skipover = 1000 # wildedit_date = Aug 13 2006 11:20:13, 5.37b # wildedit_in = c:CTDLudsin6.cnv # wildedit_pass1_nstd = 2.0 # wildedit_pass2_nstd = 20.0 # wildedit_pass2_mindelta = 0.000e+000 # wildedit_npoint = 100 # wildedit_vars = depSM prDM t090C sal00 sbeox0ML/L xmiss xmiss1 flScufa altM # wildedit_excl_bad_scans = yes # file_type = ascii *END* **Processing Description** BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2006_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2006_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values "nd" (not reported for that year)

PE07-NGOMEX

Website	https://www.bco-dmo.org/deployment/58123
Platform	R/V Pelican
Start Date	2007-07-21
End Date	2007-08-07
Description	2007 Sampling cruise to the Northern Gulf of MexicoNote: Deployment Id and Chief Scientist assigned by BCO-DMO staff (not official) **Methods & Sampling** * Sea-Bird SBE 9 Data File: * FileName = C:CTDdataPE08-0610.hex * Software Version Seasave V 7.12 * Temperature SN = 4511 * Conductivity SN = 043044 * Number of Bytes Per Scan = 40 * Number of Voltage Words = 5 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Aug 01 2007 02:48:27 * NMEA Latitude = 28 45.17 N * NMEA Longitude = 090 27.62 W * NMEA UTC (Time) = Aug 01 2007 01:48:25 * Store Lat/Lon Data = Append to Every Scan ** Ship: ** Station: ** Operator: # nquan = 14 # nvalues = 2302 # units = specified # name 0 = timeS: Time, Elapsed [seconds] # name 1 = depSM: Depth [salt water, m] # name 2 = prDM: Pressure, Digiquartz [db] # name 3 = t090C: Temperature [ITS-90, deg C] # name 4 = c0mS/cm: Conductivity [mS/cm] # name 5 = sal00: Salinity [PSU] # name 6 = sbeox0Mg/L: Oxygen, SBE 43 [mg/l] # name 7 = sbeox1Mg/L: Oxygen, SBE 43, 2 [mg/l] # name 8 = par: PAR/Irradiance, Biospherical/Licor # name 9 = spar: SPAR/Surface Irradiance # name 10 = flScufa: Fluorescence, Turner SCUFA [ug/L] # name 11 = latitude: Latitude [deg] # name 12 = longitude: Longitude [deg] # name 13 = flag: 0.000e+00 # span 0 = 0.000, 95.875 # span 1 = 0.782, 17.013 # span 2 = 0.788, 17.128 # span 3 = 28.5100, 29.6287 # span 4 = 50.073039, 57.558735 # span 5 = 29.7112, 35.5415 # span 6 = 2.18439, 6.54479 # span 7 = 1.87443, 5.99733 # span 8 = 1.0000e-12, 2.0921e+00 # span 9 = 6.3333e+00, 1.0556e+01 # span 10 = 0.2454, 0.5482 # span 11 = 28.75282, 28.75298 # span 12 = -90.46058, -90.46032 # span 13 = 0.0000e+00, 0.0000e+00 # interval = seconds: 0.0416667 # start_time = Aug 01 2007 02:48:27 # bad_flag = -9.990e-29 # sensor 0 = Frequency 0 temperature, primary, 4511, 16 MAR 07 # sensor 1 = Frequency 1 conductivity, primary, 043044, 14 MAR 07, cpcor = -9.5700e-08 # sensor 2 = Frequency 2 pressure, 0797, 30-June-06 # sensor 3 = Frequency 3 temperature, secondary, 1811, 11 JUL 06 # sensor 4 = Frequency 4 conductivity, secondary, 3079, 14 JUL 06, cpcor = -9.5700e-08 # sensor 5 = Extrnl Volt 0 Oxygen, SBE, primary, 0769, 19 JUL 06 # sensor 6 = Extrnl Volt 1 Oxygen, SBE, secondary, 0803, 13-APR-06 # sensor 7 = Extrnl Volt 2 irradiance (PAR), primary, 4560, 06 JAN 06 # sensor 8 = Extrnl Volt 4 altimeter # sensor 9 = Extrnl Volt 5 transmissometer, primary, CST-868DR, 1/24/06 # sensor 10 = Extrnl Volt 6 Fluorometer, Turner, SCUFA, primary # sensor 11 = Extrnl Volt 9 surface irradiance (SPAR), degrees = 0.0 # datcnv_date = Aug 17 2007 09:08:08, 7.12 # datcnv_in = C:Data2007NGOMEXCTD10.hex C:Data2007NGOMEXCTD10.CON # datcnv_skipover = 0 # file_type = ascii *END* **Processing Description** BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2007_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2007_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values "nd" (not reported for that year)

PE09-05

Website	https://www.bco-dmo.org/deployment/58124
Platform	R/V Pelican
Start Date	2008-08-01
End Date	2008-08-12

2008 Sampling cruise to the Northern Gulf of MexicoNote: Cruise ID confirmed with R2R catalog Original cruise data are available from the NSF R2R data catalog

Methods & Sampling

* Sea-Bird SBE 9 Data File: * FileName = C:CTD dataPE09-05 Brandt8-7-085058-7-08505.hex * Software Version Seasave V 7.12 * Temperature SN = 0657 * Conductivity SN = 040264 * Number of Bytes Per Scan = 40 * Number of Voltage Words = 5 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Aug 07 2008 05:10:45 * NMEA Latitude = 28 45.55 N * NMEA Longitude = 090 14.01 W * NMEA UTC (Time) = Aug 07 2008 05:10:32 * Store Lat/Lon Data = Append to Every Scan ** Ship: ** Station: ** Operator: # nquan = 18 # nvalues = 56 # units = specified # name 0 = timeS: Time, Elapsed [seconds] # name 1 = scan: Scan Count # name 2 = prDM: Pressure, Digiquartz [db] # name 3 = depSM: Depth [salt water, m] # name 4 = t090C: Temperature [ITS-90, deg C] # name 5 = c0mS/cm: Conductivity [mS/cm] # name 6 = sal00: Salinity, Practical [PSU] # name 7 = sigma-t00: Density [sigma-t, Kg/m^3] # name 8 = sbeox0Mg/L: Oxygen, SBE 43 [mg/l] # name 9 = sbeox0PS: Oxygen, SBE 43 [% saturation] # name 10 = sbeox1Mg/L: Oxygen, SBE 43, 2 [mg/l] # name 11 = sbeox1PS: Oxygen, SBE 43, 2 [% saturation] # name 12 = flScufa: Fluorescence, Turner SCUFA [ug/L] # name 13 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m] # name 14 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%] # name 15 = par: PAR/Irradiance, Biospherical/Licor # name 16 = spar: SPAR/Surface Irradiance # name 17 = flag: flag # span 0 = 19.483, 131.674 # span 1 = 469, 3161 # span 2 = 1.007, 28.695 # span 3 = 1.000, 28.500 # span 4 = 23.2604, 29.2674 # span 5 = 46.760556, 53.973079 # span 6 = 27.7176, 36.2663 # span 7 = 16.5199, 24.8186 # span 8 = 1.11342, 7.35191 # span 9 = 16.50586, 111.91562 # span 10 = 1.12867, 7.28398 # span 11 = 16.39704, 110.88124 # span 12 = 0.1337, 0.9080 # span 13 = 1.0136, 8.1236 # span 14 = 11.5654, 77.6156 # span 15 = 1.0000e-12, 6.6682e-02 # span 16 = 8.1400e+00, 9.6953e+00 # span 17 = 0.0000e+00, 0.0000e+00 # interval = meters: 0.5 # start_time = Aug 07 2008 05:10:32 # bad_flag = -9.990e-29 # Sensors count="15" # sensor Channel="1" # !-- Frequency 0, Temperature -- # TemperatureSensor SensorID="55" # SerialNumber 0657SerialNumber # CalibrationDate 08 Mar 06CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.82420805e-003G # H 6.73461602e-004H # I 2.64768469e-005I # J 2.14551718e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="2" # !-- Frequency 1, Conductivity -- # ConductivitySensor SensorID="3" # SerialNumber 040264SerialNumber # CalibrationDate 14 Mar 07CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -4.20169422e+000G # H 4.84165785e-001H # I -1.82967448e-003I # J 1.21108509e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="3" # !-- Frequency 2, Pressure, Digiquartz with TC -- # PressureSensor SensorID="45" # SerialNumber 0461SerialNumber # CalibrationDate 26-Oct-07CalibrationDate # C1 -5.122857e+004C1 # C2 -3.440773e-001C2 # C3 1.326090e-002C3 # D1 4.009300e-002D1 # D2 0.000000e+000D2 # T1 3.003551e+001T1 # T2 -3.732322e-004T2 # T3 3.971920e-006T3 # T4 3.181770e-009T4 # Slope 1.00000000Slope # Offset -0.15930Offset # T5 0.000000e+000T5 # AD590M 1.281640e-002AD590M # AD590B -9.225620e+000AD590B # PressureSensor # sensor # sensor Channel="4" # !-- Frequency 3, Temperature, 2 -- # TemperatureSensor SensorID="55" # SerialNumber 4511SerialNumber # CalibrationDate 16 Mar 07CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.41110252e-003G # H 6.44708648e-004H # I 2.19014386e-005I # J 1.79495630e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor

Description	Channel="5" # !-- Frequency 4, Conductivity, 2 -- # ConductivitySensor SensorID="3" # SerialNumber 2100SerialNumber # CalibrationDate 25 Sep 07CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -9.22095062e+000G # H 1.22480229e+000H # I -2.25762303e-003I # J 2.20335634e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="6" # !-- A/D voltage 0, Oxygen, SBE 43 -- # OxygenSensor SensorID="38" # SerialNumber 0769SerialNumber # CalibrationDate 13-May-08CalibrationDate # Use2007Equation 1Use2007Equation # CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 3.9370e-001Soc # offset -0.5328offset # Pcor 1.35e-004Pcor # Tcor -0.0001Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 4.0840e-001Soc # offset -0.5019offset # A -1.2181e-003A # B 8.4003e-005B # C -2.0319e-006C # D0 2.5826e+000D0 # D1 0.00000e+000D1 # D2 0.00000e+000D2 # E 3.6000e-002E # Tau20 1.4800Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="7" # !-- A/D voltage 1, Oxygen, SBE 43, 2 -- # OxygenSensor SensorID="38" # SerialNumber 1419SerialNumber # CalibrationDate 07-May-08CalibrationDate # Use2007Equation 1Use2007Equation # CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 3.9370e-001Soc # offset -0.5328offset # Pcor 1.35e-004Pcor # Tcor -0.0001Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 3.6560e-001Soc # offset -0.5077offset # A -1.5086e-003A # B 2.0717e-004B # C -3.8732e-006C # D0 2.5826e+000D0 # D1 0.00000e+000D1 # D2 0.00000e+000D2 # E 3.6000e-002E # Tau20 1.0900Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="8" # !-- A/D voltage 2, PAR/Irradiance, Biospherical/Licor -- # PAR_BiosphericalLicorChelseaSensor SensorID="42" # SerialNumber 4560SerialNumber # CalibrationDate 09 SEP 07CalibrationDate # M 1.00000000M # B 0.00000000B # CalibrationConstant 26520000000.00000000CalibrationConstant # Multiplier 1.00000000Multiplier # Offset -0.10989000Offset # PAR_BiosphericalLicorChelseaSensor # sensor # sensor Channel="9" # !-- A/D voltage 3, Free -- # sensor # sensor Channel="10" # !-- A/D voltage 4, Altimeter -- # AltimeterSensor SensorID="0" # SerialNumber 937SerialNumber # CalibrationDate 11 FEB 06CalibrationDate # ScaleFactor 15.000ScaleFactor # Offset 0.000Offset # AltimeterSensor # sensor # sensor Channel="11" # !-- A/D voltage 5, Transmissometer, Chelsea/Seatech/WET Lab CStar -- # TransChelseaSeatechWetlabCStarSensor SensorID="59" # SerialNumber CST-868DRSerialNumber # CalibrationDate 1/24/06CalibrationDate # M 20.2897M # B -1.1156B # PathLength 0.250PathLength # TransChelseaSeatechWetlabCStarSensor # sensor # sensor Channel="12" # !-- A/D voltage 6, Fluorometer, Turner SCUFA -- # FluoroTurnerSCUFA_Sensor SensorID="17" # SerialNumber 610SerialNumber # CalibrationDate 27/01/06CalibrationDate # B 0.00000000e+000B # MX 1.00000000e+000MX # MY 0.00000000e+000MY # Units 4Units # ScaleFactor 1.00000000e+000ScaleFactor # Offset 0.00000000e+000Offset # FluoroTurnerSCUFA_Sensor # sensor # sensor Channel="13" # !-- A/D voltage 7, Free -- # sensor # sensor Channel="14" # !-- SPAR voltage, Unavailable -- # sensor # sensor Channel="15" # !-- SPAR voltage, SPAR/Surface Irradiance -- # SPAR_Sensor SensorID="51" # SerialNumber 6409SerialNumber # CalibrationDate 27 FEB 06CalibrationDate # ConversionFactor 1729.00000000ConversionFactor # RatioMultiplier 1.00000000RatioMultiplier # SPAR_Sensor # sensor # Sensors # datcnv_date = Jul 26 2010 16:24:33, 7.20f # datcnv_in = D:Data2008NGOMEXCTD8-7-085058-7-08505.hex D:Data2008NGOMEXCTD8-7-085058-7-08505.CON # datcnv_skipover =

	0 # datcnv_ox_hysteresis_correction = yes # datcnv_ox_tau_correction = yes # wildedit_date = Jul 27 2010 09:52:39, 7.20f # wildedit_in = D:Data2008NGOMEXCTD8-7-08505.cnv # wildedit_pass1_nstd = 2.0 # wildedit_pass2_nstd = 20.0 # wildedit_pass2_mindelta = 0.000e+000 # wildedit_npoint = 100 # wildedit_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox0PS sbeox1Mg/L sbeox1PS flScufa bat xmiss par spar # wildedit_excl_bad_scans = yes # filter_date = Jul 27 2010 09:54:04, 7.20f # filter_in = D:Data2008NGOMEXCTD8-7-08505.cnv # filter_low_pass_tc_A = 0.030 # filter_low_pass_tc_B = 0.150 # filter_low_pass_A_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox0PS sbeox1Mg/L sbeox1PS bat par spar # filter_low_pass_B_vars = # loopedit_date = Jul 27 2010 09:56:09, 7.20f # loopedit_in = D:Data2008NGOMEXCTD8-7-08505.cnv # loopedit_minVelocity = 0.250 # loopedit_surfaceSoak: do not remove # loopedit_excl_bad_scans = yes # binavg_date = Jul 27 2010 11:26:22, 7.20f # binavg_in = D:Data2008NGOMEXCTD8-7-08505.cnv # binavg_bintype = meters # binavg_binsize = 0.5 # binavg_excl_bad_scans = yes # binavg_skipover = 0 # binavg_surface_bin = no, min = 0.000, max = 0.000, value = 0.000 # file_type = ascii *END* **Processing Description** BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2008_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2008_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values "nd" (not reported for that year)

PE11-06

Website	https://www.bco-dmo.org/deployment/58640
Platform	R/V Pelican
Start Date	2010-09-01
End Date	2010-09-07
	2010 Sampling cruise to the Northern Gulf of MexicoNote: Cruise ID confirmed with R2R catalog Original cruise data are available from the NSF R2R data catalog **Methods & Sampling** * Sea-Bird SBE 9 Data File: * FileName = C:CTD DataPE11-06 ROMANB10B10.hex * Software Version Seasave V 7.20a * Temperature SN = 4247 * Conductivity SN = 0264 * Number of Bytes Per Scan = 40 * Number of Voltage Words = 5 * Number of Scans Averaged by the Deck Unit = 1 * System UpLoad Time = Sep 07 2010 07:59:26 * NMEA Latitude = 28 45.73 N * NMEA Longitude = 089 56.13 W * NMEA UTC (Time) = Sep 07 2010 07:59:58 * Store Lat/Lon Data = Append to Every Scan ** Ship: ** Station: ** Operator: # nquan = 18 # nvalues = 95 # units = specified # name 0 = timeS: Time, Elapsed [seconds] # name 1 = scan: Scan Count # name 2 = prDM: Pressure, Digiquartz [db] # name 3 = depSM: Depth [salt water, m] # name 4 = t090C: Temperature [ITS-90, deg C] # name 5 = c0mS/cm: Conductivity [mS/cm] # name 6 = sal00: Salinity, Practical [PSU] # name 7 = sigma-t00: Density [sigma-t, Kg/m^3] # name 8 = sbeox0Mg/L: Oxygen, SBE 43 [mg/l] # name 9 = sbeox1Mg/L: Oxygen, SBE 43, 2 [mg/l] # name 10 = sbeox0PS: Oxygen, SBE 43 [% saturation] # name 11 = sbeox1PS: Oxygen, SBE 43, 2 [% saturation] # name 12 = flScufa: Fluorescence, Turner SCUFA [RFU] # name 13 = par: PAR/Irradiance, Biospherical/Licor # name 14 = spar: SPAR/Surface Irradiance # name 15 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m] # name 16 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%] # name 17 = flag: flag # span 0 = 1.927, 256.778 # span 1 = 47, 6164 # span 2 = 0.503, 47.826 # span 3 = 0.500, 47.500 # span 4 = 20.5914, 29.3861 # span 5 = 50.240653, 56.507240 # span 6 = 32.7297, 36.4015 # span 7 = 20.2676, 25.6565 # span 8 = 2.80668, 6.22850 # span 9 = 2.81400, 6.22322 # span 10 = 38.67641, 97.58156 # span 11 = 38.77726, 97.50160 # span 12 = 0.0293,

Description	0.2385 # span 13 = 8.8072e-11, 4.6730e+00 # span 14 = 1.0638e+00, 2.0755e+00 # span 15 = 0.4489, 5.1419 # span 16 = 27.6581, 89.3825 # span 17 = 0.0000e+00, 0.0000e+00 # interval = meters: 0.5 # start_time = Sep 07 2010 07:59:58 # bad_flag = -9.990e-29 # Sensors count="15" # sensor Channel="1" # !-- Frequency 0, Temperature -- # TemperatureSensor SensorID="55" # SerialNumber 4247SerialNumber # CalibrationDate 24-Mar-10CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.35966130e-003G # H 6.48328817e-004H # I 2.27867318e-005I # J 1.83853908e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="2" # !-- Frequency 1, Conductivity -- # ConductivitySensor SensorID="3" # SerialNumber 0264SerialNumber # CalibrationDate 05-Mar-10CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -4.20097762e+000G # H 4.83930984e-001H # I -1.79318752e-003I # J 1.19240358e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="3" # !-- Frequency 2, Pressure, Digiquartz with TC -- # PressureSensor SensorID="45" # SerialNumber 0461SerialNumber # CalibrationDate 10-Dec-09 CalibrationDate # C1 -5.122857e+004C1 # C2 -3.440773e-001C2 # C3 1.326090e-002C3 # D1 4.009300e-002D1 # D2 0.000000e+000D2 # T1 3.003551e+001T1 # T2 -3.732322e-004T2 # T3 3.971920e-006T3 # T4 3.181770e-009T4 # Slope 0.99999900Slope # Offset -0.35200Offset # T5 0.000000e+000T5 # AD590M 1.281640e-002AD590M # AD590B -9.225620e+000AD590B # PressureSensor # sensor # sensor Channel="4" # !-- Frequency 3, Temperature, 2 -- # TemperatureSensor SensorID="55" # SerialNumber 1119SerialNumber # CalibrationDate 19-Nov-09 CalibrationDate # UseG_J 1UseG_J # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # F0_Old 0.000F0_Old # G 4.83755952e-003G # H 6.62505866e-004H # I 2.31895083e-005I # J 1.73996635e-006J # F0 1000.000F0 # Slope 1.00000000Slope # Offset 0.0000Offset # TemperatureSensor # sensor # sensor Channel="5" # !-- Frequency 4, Conductivity, 2 -- # ConductivitySensor SensorID="3" # SerialNumber 3044SerialNumber # CalibrationDate 20-Nov-09 CalibrationDate # UseG_J 1UseG_J # !-- Cell const and series R are applicable only for wide range sensors. -- # SeriesR 0.0000SeriesR # CellConst 2000.0000CellConst # ConductivityType 0ConductivityType # Coefficients equation="0" # A 0.00000000e+000A # B 0.00000000e+000B # C 0.00000000e+000C # D 0.00000000e+000D # M 0.0M # CPcor -9.57000000e-008CPcor # Coefficients # Coefficients equation="1" # G -1.05245205e+001G # H 1.49070307e+000H # I -3.97776541e-004I # J 1.06110549e-004J # CPcor -9.57000000e-008CPcor # CTcor 3.2500e-006CTcor # !-- WBOTC not applicable unless ConductivityType = 1. -- # WBOTC 0.00000000e+000WBOTC # Coefficients # Slope 1.00000000Slope # Offset 0.00000Offset # ConductivitySensor # sensor # sensor Channel="6" # !-- A/D voltage 0, Oxygen, SBE 43 -- # OxygenSensor SensorID="38" # SerialNumber 1419SerialNumber # CalibrationDate 16-JUL-10CalibrationDate # Use2007Equation 1Use2007Equation # CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 0.0000e+000Soc # offset 0.0000offset # Pcor 0.00e+000Pcor # Tcor 0.0000Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 4.3610e-001Soc # offset -0.5149offset # A -3.4704e-003A # B 1.9595e-004B # C -3.4627e-006C # D0 2.5826e+000D0 # D1 1.92630e-004D1 # D2 -4.64800e-002D2 # E 3.6000e-002E # Tau20 1.2000Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="7" # !-- A/D voltage 1, Oxygen, SBE 43, 2 -- # OxygenSensor SensorID="38" # SerialNumber 0803SerialNumber # CalibrationDate 16-JUL-10CalibrationDate # Use2007Equation 1Use2007Equation #

CalibrationCoefficients equation="0" # !-- Coefficients for Owens-Millard equation. -- # Boc 0.0000Boc # Soc 0.0000e+000Soc # offset 0.0000offset # Pcor 0.00e+000Pcor # Tcor 0.0000Tcor # Tau 0.0Tau # CalibrationCoefficients # CalibrationCoefficients equation="1" # !-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -- # Soc 4.1520e-001Soc # offset -0.5208offset # A -3.5112e-003A # B 1.9491e-004B # C -3.4089e-006C # D0 2.5826e+000D0 # D1 1.92630e-004D1 # D2 -4.64800e-002D2 # E 3.6000e-002E # Tau20 1.0400Tau20 # H1 -3.3000e-002H1 # H2 5.0000e+003H2 # H3 1.4500e+003H3 # CalibrationCoefficients # OxygenSensor # sensor # sensor Channel="8" # !-- A/D voltage 2, Altimeter -- # AltimeterSensor SensorID="0" # SerialNumber 1205SerialNumber # CalibrationDate 03-oct-08CalibrationDate # ScaleFactor 15.000ScaleFactor # Offset 0.000Offset # AltimeterSensor # sensor # sensor Channel="9" # !-- A/D voltage 3, Transmissometer, Chelsea/Seatech/WET Lab CStar -- # TransChelseaSeatechWetlabCStarSensor SensorID="59" # SerialNumber CST-868DRSerialNumber # CalibrationDate May-5-10CalibrationDate # M 19.7691M # B -1.1104B # PathLength 0.250PathLength # TransChelseaSeatechWetlabCStarSensor # sensor # sensor Channel="10" # !-- A/D voltage 4, PAR/Irradiance, Biospherical/Licor -- # PAR_BiosphericalLicorChelseaSensor SensorID="42" # SerialNumber 70292SerialNumber # CalibrationDate 06-18-10CalibrationDate # M 1.00000000M # B 0.00000000B # CalibrationConstant 12626262630.00000000CalibrationConstant # Multiplier 1.00000000Multiplier # Offset -0.08143740Offset # PAR_BiosphericalLicorChelseaSensor # sensor # sensor Channel="11" # !-- A/D voltage 5, Free -- # sensor # sensor Channel="12" # !-- A/D voltage 6, Fluorometer, Turner SCUFA -- # FluoroTurnerSCUFA_Sensor SensorID="17" # SerialNumber 610SerialNumber # CalibrationDate Oct-8-09CalibrationDate # B 0.00000000e+000B # MX 1.00000000e+000MX # MY 0.00000000e+000MY # Units 0Units # ScaleFactor 1.60000000e+000ScaleFactor # Offset 0.00000000e+000Offset # FluoroTurnerSCUFA_Sensor # sensor # sensor Channel="13" # !-- A/D voltage 7, Free -- # sensor # sensor Channel="14" # !-- SPAR voltage, Unavailable -- # sensor # sensor Channel="15" # !-- SPAR voltage, SPAR/Surface Irradiance -- # SPAR_Sensor SensorID="51" # SerialNumber 20367SerialNumber # CalibrationDate 7-Jan-10CalibrationDate # ConversionFactor 1622.58000000ConversionFactor # RatioMultiplier 1.00000000RatioMultiplier # SPAR_Sensor # sensor # Sensors # datcnv_date = Oct 25 2010 14:13:06, 7.20f # datcnv_in = D:Data2010NGOMEXPE11-06 RomanCTDB10.hex D:Data2010NGOMEXPE11-06 RomanCTDB10.XMLCON # datcnv_skipover = 0 # datcnv_ox_hysteresis_correction = yes # datcnv_ox_tau_correction = yes # wildedit_date = Oct 25 2010 14:15:59, 7.20f # wildedit_in = D:Data2010NGOMEXPE11-06 RomanCTDB10.cnv # wildedit_pass1_nstd = 2.0 # wildedit_pass2_nstd = 20.0 # wildedit_pass2_mindelta = 0.000e+000 # wildedit_npoint = 100 # wildedit_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox1Mg/L sbeox0PS sbeox1PS flScufa par spar bat xmiss # wildedit_excl_bad_scans = yes # filter_date = Oct 25 2010 14:20:12, 7.20f # filter_in = D:Data2010NGOMEXPE11-06 RomanCTDwildeditB10.cnv # filter_low_pass_tc_A = 0.030 # filter_low_pass_tc_B = 0.150 # filter_low_pass_A_vars = prDM depSM t090C c0mS/cm sal00 sigma-t00 sbeox0Mg/L sbeox1Mg/L sbeox0PS sbeox1PS par spar bat # filter_low_pass_B_vars = # loopedit_date = Oct 25 2010 14:21:20, 7.20f # loopedit_in = D:Data2010NGOMEXPE11-06 RomanCTDfilterB10.cnv # loopedit_minVelocity = 0.250 # loopedit_surfaceSoak: do not remove # loopedit_excl_bad_scans = yes # split_date = Oct 25 2010 14:25:56, 7.20f # split_in = D:Data2010NGOMEXPE11-06 RomanCTDloopeditB10.cnv # split_excl_bad_scans = yes # binavg_date = Oct 25 2010 14:26:47, 7.20f # binavg_in = D:Data2010NGOMEXPE11-06 RomanCTDsplitdB10.cnv # binavg_bintype = meters # binavg_binsize = 0.5 # binavg_excl_bad_scans = yes # binavg_skipover = 0 # binavg_surface_bin = no, min = 0.000, max = 0.000, value = 0.000 # file_type = ascii *END*

Processing Description

BCO-DMO Processing Notes - Awk written to reformat original .cnv files contributed by Jamie Pierson to BCO-DMO formatted records - AWK: NGOMEX_2010_CTD_2_BCODMO.awk - Header data for CTD data generated from .cnv files - space delimited reformatted to tab delimited - all records with "#" or "*" ignored - blank lines ignored - BCO-DMO header o/p from routine - Additional Awk written to reformat BCO-DMO formatted records to NGOMEX common format records - AWK: NGOMEX_2010_CTD_2_BCODMO_common_format.awk - O/P data with a set of parameters common to all the years of NGOMEX data - Some data values

	"nd" (not reported for that year)

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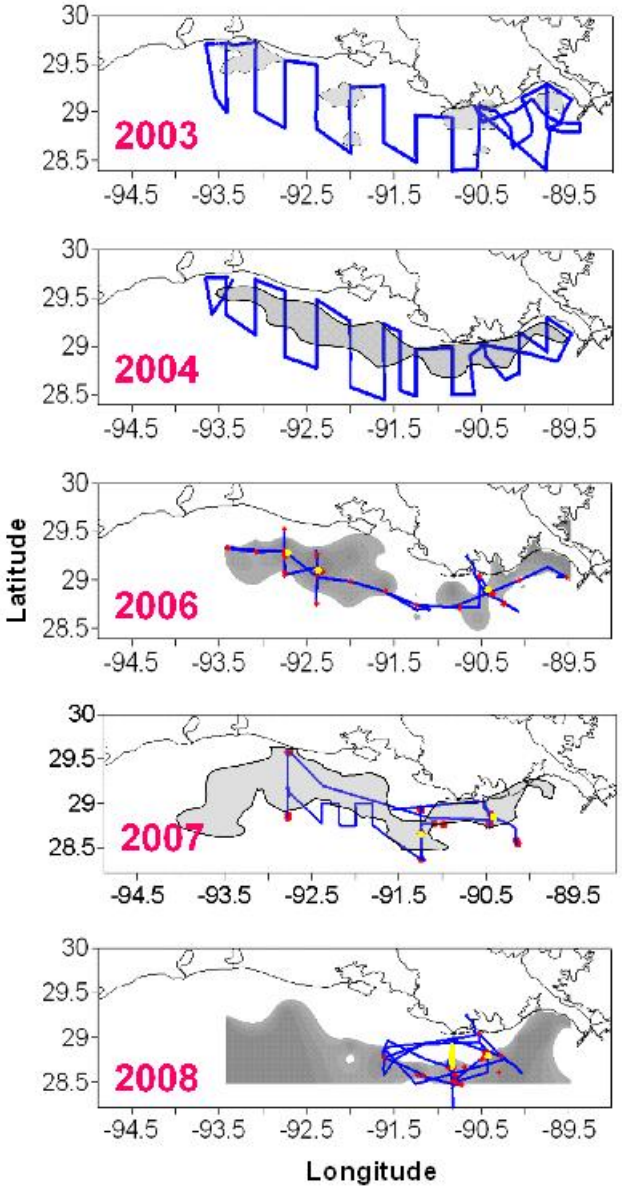
Project Information

NGOMEX - Living Marine Resources of the Northern Gulf of Mexico (GoMX - NGOMEX)

Coverage: Northern Gulf of Mexico, 28-30N 89-94W

NGOMEX - Living Organisms of the Northern Gulf of Mexico
A synthesis of data collected in the Northern Gulf of Mexico from 2003-2004, 2006-2008 and 2010
Data include:
- CTD Profiles
- Rosette Samples
- MIDAS underway metereological
- Towed SCANFISH
- Net Trawls
- Zooplankton counts

High-resolution mapping of the major ecosystem components of the NGOMEX by year



References:

Kimmel, D. G., W. C. Boicourt, J. J. Pierson, M. R. Roman, X. Zhang. 2010. The vertical distribution and diel variability of mesozooplankton biomass, abundance and size in response to hypoxia in the northern Gulf of Mexico USA. Journal of Plankton Research 32(8): 1185-1202. doi:10.1093/plankt/fbp136

Pierson, J. J., M. R. Roman, D. G. Kimmel, W. C. Boicourt, & X. Zhang. 2009. Quantifying changes in the vertical distribution of mesozooplankton in response to hypoxic bottom waters. Journal of Experimental Marine Biology and Ecology 381: S74-S79. doi.org/10.1016/j.jembe.2009.07.013

Kimmel, D. G., W. C. Boicourt, J. J. Pierson, M. R. Roman, & X. Zhang. 2009. A comparison of the mesozooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico using the biomass size spectrum. Journal of Experimental Marine Biology and Ecology 381: S65-S73. doi.org/10.1016/j.jembe.2009.07.012

Zhang, H., S. A. Ludsin, D. M. Mason, A. T. Adamack, S. B. Brandt, X. Zhang, D. G. Kimmel, M. R. Roman, & W. C. Boicourt. 2009. Hypoxia-driven changes in the behavior and spatial distribution of pelagic fish and mesozooplankton in the northern Gulf of Mexico. Journal of Experimental Marine Biology and Ecology. 381: S80-91. http://dx.doi.org/10.1016/j.jembe.2009.07.014

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Program Information

Gulf of Mexico - Deepwater Horizon Oil Spill (GoMX - DHOS)

Coverage: Northern Gulf of Mexico

Grants for Rapid Response Research (RAPID)
The RAPID funding mechanism is used for proposals having a severe urgency with regard to availability of, or access to data, facilities or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events.

GOM - Broader Impacts
The need to understand the impact of this largest oil spill to date on ecosystems and biochemical cycling is self evident. The consequences of the disaster and accompanying clean up measures (e.g. the distribution of dispersants) need to be evaluated to guide further mediating measures and to develop and improve responses to similar disasters in the future. Would it be advantageous if such oil aggregates sink, or should it rather remain suspended? Possibly measures can be developed to enhance sinking or suspension (e.g. addition of ballast minerals) once we understand their current formation and fate. Understanding the particle dynamics following the input of large amounts of oil and dispersants into the water is a prerequisite to develop response strategies for now and in the future.

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-1043261
NSF Division of Ocean Sciences (NSF OCE)	OCE-1043248
NSF Division of Ocean Sciences (NSF OCE)	OCE-1043249

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