Meteorology and sea surface temperature (MET) 1 minute data from eleven R/V Endeavor cruises in the Gulf of Maine and Georges Bank area during 1995 (GB project)

Website: https://www.bco-dmo.org/dataset/2308
Data Type: Cruise Results
Version: 1
Version Date: 2004-04-28

Project
» U.S. GLOBEC Georges Bank (GB)

Program
» U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Contributors	Affiliation	Role
Payne, Richard	Woods Hole Oceanographic Institution (WHOI)	Principal Investigator
Groman, Robert C.	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Abstract
Meteorology and sea surface temperature (MET) 1 minute data from eleven R/V Endeavor cruises in the Gulf of Maine and Georges Bank area during 1995.

Table of Contents

Coverage

Spatial Extent: **N**:42.3729 **E**:-65.6088 **S**:39.6869 **W**:-71.4198
Temporal Extent: 1995-01-10 - 1995-07-14

Dataset Description

Continuous along track meteorology and sea surface data, 1 minute values, 1995

Processed by:
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Additional
data processing notes are available.

The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate.

Processing Notes

1. Concatenate daily 1 minute files into one file for whole cruise
2. Edit file for obvious bad data, i.e., missing data, garbage characters, etc.
3. Run program which reformats data. Output parameters:
   Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth.
4. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths.
5. Iterate steps 2-4 until no more obvious bad points.
6. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator.
7. Check plots of true wind speed and direction to make sure they look ok.
8. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m.

From: Richard E. Payne / 11 Apr 1997 09:05:25 -0400
Updated: April 28, 2004; G.Heimerdinger

Methods & Sampling

The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate.

Data Processing Description

1. Concatenate daily 1 minute files into one file for whole cruise
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   Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth.
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Edo depth error correction: replace bad value with previous value.
EN268 - Data gap 20:47:17 to 24:00:00 on last day. Filled it with

linearly interpolated data. There was a problem with short wave
formatting in raw data. Values > 999.9 read ****. Replaced
garbage with 999.9 except for a few not near the middle of the
day which were replaced with previous value. A number of gaps
in Edo depth. 8465 records, 284 interpolated.

Cruise	Exp	Spds	Dirs	AT	RH	BP	SST	EDOZ	LWR	SWR	Comments
EN268	GLOBEC	---	---	---	---	---	---	---	---	---	

Data Files

File
emet_W1_1995.csv (Comma Separated Values (.csv), 28.73 MB)
MD5:9d3bdcd761d1cd113e3236225325e0c0
Primary data file for dataset ID 2308

Parameters

Parameter	Description	Units
cruiseid	cruise identifier	
year	year, GMT e.g. 1997.	
si	scientific investigator responsible for this cruise	
month_gmt	month of year, GMT e.g. 6 is June	
day_gmt	day of month, GMT	
time_gmt	time of day, GMT, 24 hour clock	hoursandminutes
lat	latitude, south is negative	decimaldegrees
lon	longitude, west is negative	decimaldegrees
depth_w	water depth	meters
depth_cs	Chirp Sonar water depth	meters
wind_speed_c	wind speed corrected for ship's motion	meters/second
wind_dir_c	wind direction, meteorologic convention, corrected for ship's motion	degrees
wind_speed_r	wind speed, relative to ship	meters/second
wind_dir_r	wind direction, relative to ship, meteorologic convention	degrees
temp_air	air temperature	degreesC
humidity	relative humidity	percent
press_bar	barometric pressure	millibars
precip_level	level in the precipitation gauge, total precipitation between two times is the difference in levels (+5 0 cm if the gauge self-siphoned)	centimeters
ed_sw	short wave downward irradiance	watts/meter^2/second
ed_lw	long wave downward irradiance	watts/meter^2/second
temp_ss1	sea surface temperature 1 meter below the surface	degreesC
temp_ss3	sea surface temperature 3 meters below the surface	degreesC
temp_ss5	sea surface temperature 5 meters below the surface	degreesC
cond_mM	sea surface conductivity	mmho/centimeter
sal_ss3	sea surface salinity, nominally measured at 3 meters	PSU
speed_trim	trimble GPS speed made good	meters/second
course	shi p's course	degrees
course_trim	trimble GPS course made good	degrees
yrday_gmt	Julian day, GMT e.g. 29.5 is January 29 at 1200 hours	decimalday
numb_records	number of records used to compute this value	

Instruments

Dataset-specific Instrument Name	Thermosalinograph
Generic Instrument Name	Thermosalinograph
Dataset-specific Description	Thermosalinograph used to obtain a continuous record of sea surface temperature and salinity.
Generic Instrument Description	A thermosalinograph (TSG) is used to obtain a continuous record of sea surface temperature and salinity. On many research vessels the TSG is integrated into the ship's underway seawater sampling system and reported with the underway or alongtrack data.

[ ]

Deployments

EN259

Website	https://www.bco-dmo.org/deployment/57399
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en259.html
Start Date	1995-01-10
End Date	1995-01-22
Description	process zoology **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN259 - Standard processing. 17625 data records Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN259 GLOBEC OK OK OK >100 Good Peaks Gap

EN260

Website	https://www.bco-dmo.org/deployment/57400
Platform	R/V Endeavor
Start Date	1995-01-29
End Date	1995-02-06
Description	long term mooring deployment **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN260 - Standard processing. 7641 data records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN260 GLOBEC Noisy OK OK OK Good Good Good

EN261

Website	https://www.bco-dmo.org/deployment/57401
Platform	R/V Endeavor
Start Date	1995-02-10
End Date	1995-02-20
Description	broad-scale **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. EN261 - Standard processing except added SSTHULL. SSTHULL is only SST in 15 & 60 minute averages. 14168 data records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN261 GLOBEC OK Good Good Noisy Good Good Good

EN262

Website	https://www.bco-dmo.org/deployment/57402
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en262/EN262.pdf
Start Date	1995-02-23
End Date	1995-03-10
Description	process zoology **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN262 - Standard Processing with SSTHULL. 22,489 records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN262 GLOBEC Good OK Good Good Good Spikes ---

EN264

Website	https://www.bco-dmo.org/deployment/57404
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en264.html
Start Date	1995-03-26
End Date	1995-04-08
Description	process zoology
	Methods & Sampling
	The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate.
	Processing Description
	Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN264 - Standard Processing with SSTHULL. 116,543 records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN264 GLOBEC Good Good Good Noisy Good Good Good RH >100

EN265

Website	https://www.bco-dmo.org/deployment/57405
Platform	R/V Endeavor
Start Date	1995-04-11
End Date	1995-04-22
Description	broad-scale **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN265 - Standard processing with all variables up to now plus long-wave radiation. 15,742 records. 5/12/98 - Reprocessed with later software which corrects the time base. One day gap from 109.6 to 110.6. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN265 GLOBEC Spikes ? Spikes Spikes Good Spike Bad Section RH >100

EN266

Website	https://www.bco-dmo.org/deployment/57406
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en266/EN266.pdf
Start Date	1995-04-26
End Date	1995-05-08
Description	process zoology **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** 1. Concatenate daily 1 minute files into one file for whole cruise 2. Edit file for obvious bad data, i.e., missing data, garbage characters, etc. 3. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. 4. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. 5. Iterate steps 2-4 until no more obvious bad points. 6. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. 7. Check plots of true wind speed and direction to make sure they look ok. 8. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN266 - Standard processing with all variables up to now plus short-wave radiation except that the SW values should be divided by about 5. 18,198 records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN266 GLOBEC Good Good Noisy Noisy Good Spike Bad S Good Good RH >100

EN267I

Website	https://www.bco-dmo.org/deployment/57407
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en267/EN267.pdf
Start Date	1995-05-22
End Date	1995-06-05
Description	process zoology **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN267 - Very dirty. Had 3 gaps, one 11 hours with a few smatterings of data. Processed with interpolating form of ENMET. 39,198 records, 783 interpolated records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN267 GLOBEC --- --- --- --- --- --- --- --- ---

EN267II

Website	https://www.bco-dmo.org/deployment/57408
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en267L2/EN267L2.pdf
Start Date	1995-06-08
End Date	1995-06-19
Description	process **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN267 - Very dirty. Had 3 gaps, one 11 hours with a few smatterings of data. Processed with interpolating form of ENMET. 39,198 records, 783 interpolated records. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN267 GLOBEC --- --- --- --- --- --- --- --- ---

EN268

Website	https://www.bco-dmo.org/deployment/57409
Platform	R/V Endeavor
Start Date	1995-06-26
End Date	1995-07-06
Description	process **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN268 - Data gap 20:47:17 to 24:00:00 on last day. Filled it with linearly interpolated data. There was a problem with short wave formatting in raw data. Values > 999.9 read ****. Replaced garbage with 999.9 except for a few not near the middle of the day which were replaced with previous value. A number of gaps in Edo depth. 8465 records, 284 interpolated. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN268 GLOBEC --- --- --- --- --- --- --- --- ---

EN269

Website	https://www.bco-dmo.org/deployment/57410
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en269/EN269.pdf
Start Date	1995-07-10
End Date	1995-07-13
Description	process mooring **Methods & Sampling** The sea surface temperature as measured by the hull sensor is not shown since the sea surface temperature as measured via the engine inlet (field name is temp_ss1) is more accurate. **Processing Description** Concatenate daily 1 minute files into one file for whole cruise Edit file for obvious bad data, i.e., missing data, garbage characters, etc. Run program which reformats data. Output parameters: Year day, lat, long, Speed made good, course made good, gyro 1 & 2, Edo speed, Edo indicator, port wind speed, starboard ws, port wind azimuth, starboard waz, air temp, relative humidity, barometric pressure, sea surface temp @5m & 1m depth, Edo depth, Chirp sonar depth. Put plots of all parameters on screen and look for obvious single bad points. Edit in basic concatenated file. Except I have not edited depths. Iterate steps 2-4 until no more obvious bad points. Run second program which computes true wind speed and direction from speed and course made good, gyros, larger of port or starboard ws and accompanying wind azimuth. Outputs are year day, lat lon, speed and course made good, gyro, relative ws and direction, true ws and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation,5m and 1m sea surface temps, Edo depth, Chirp sonar depth, Edo speed, Edo indicator. Check plots of true wind speed and direction to make sure they look ok. Run vector averaging program which produces 60 minute series. The program uses 60 consecutive records and does not check for missing records. I have not carried depths since hourly averages do not seem useful nor Edo speeds since they seem pretty generally useless. Output parameters are: Year day, lat, long, true wind speed and direction, air temp, relative humidity, barometric pressure, short- and long-wave radiation, sea surface temp @ 5m & 1m. Edo depth error correction: replace bad value with previous value. EN269 - 12 hour gap in AT, RH, BP, LW on day 194. A few SW values of **** near mid day. Replaced them with 999.9. A number of gaps in Edo depth. 4946 records, 3 interpolated. Cruise Exp Spds Dirs AT RH BP SST EDOZ LWR SWR Comments EN269 GLOBEC --- --- --- --- --- --- --- --- ---

[table of contents | back to top]

Project Information

U.S. GLOBEC Georges Bank (GB)

Website: http://globec.whoi.edu/globec_program.html

Coverage: Georges Bank, Gulf of Maine, Northwest Atlantic Ocean

The U.S. GLOBEC Georges Bank Program is a large multi- disciplinary multi-year oceanographic effort. The proximate goal is to understand the population dynamics of key species on the Bank - Cod, Haddock, and two species of zooplankton (*Calanus finmarchicus* and *Pseudocalanus*) - in terms of their coupling to the physical environment and in terms of their predators and prey. The ultimate goal is to be able to predict changes in the distribution and abundance of these species as a result of changes in their physical and biotic environment as well as to anticipate how their populations might respond to climate change.

The effort is substantial, requiring broad-scale surveys of the entire Bank, and process studies which focus both on the links between the target species and their physical environment, and the determination of

fundamental aspects of these species' life history (birth rates, growth rates, death rates, etc).

Equally important are the modelling efforts that are ongoing which seek to provide realistic predictions of the flow field and which utilize the life history information to produce an integrated view of the dynamics of the populations.

The U.S. GLOBEC Georges Bank Executive Committee (EXCO) provides program leadership and effective communication with the funding agencies.

Program Information

U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Website: http://www.usglobec.org/

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

Funding

Funding Source	Award
National Science Foundation (NSF)	unknown GB NSF
National Oceanic and Atmospheric Administration (NOAA)	unknown GB NOAA