

Meteorology and sea surface temperature (MET) 1 minute data from twenty R/V Endeavor and R/V Oceanus cruises in the Gulf of Maine and Georges Bank area during 1999 (GB project)

Website: <https://www.bco-dmo.org/dataset/2320>

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 twenty R/V Endeavor and R/V Oceanus cruises in the Gulf of Maine and Georges Bank area during 1999

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Coverage

Spatial Extent: N:43.9203 E:-65.4665 S:39.8412 W:-71.4245

Temporal Extent: 1999-02-21 - 1999-12-14

Dataset Description

Continuous along track meteorology and sea surface data, 1 minute values, 1999

Processed by:

Richard Payne
Woods Hole Oceanographic Institution
Woods Hole, MA 20543
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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 May 28, 1999

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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Edo depth error correction: replace bad value with previous value.

EN323 - Good data. Air temp noisy. The noise has been traced to stack

gases passing over the RH and AT sensors as the ship turns. This causes the AT to be momentarily anomalously high and the RH low. Edo depth not useful.

EN323 GLOBEC --- --- --- --- --- --- --- --- ---

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Data Files

File
emet_W1_1999.csv (Comma Separated Values (.csv), 59.45 MB) MD5:3a56f8a976d17526c90937158bf85a52
Primary data file for dataset ID 2320

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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 (+50 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	ship's course	degrees
course_trim	trimble GPS course made good	degrees
yday_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	

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Instruments

EN320

Website	https://www.bco-dmo.org/deployment/57427
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en320new/en320mda.htm
Start Date	1999-03-10
End Date	1999-03-23
Description	<p>broad-scale</p> <p>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.</p> <p>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. EN320 - Excellent data but no useful Edo depths. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN320 GLOBEC --- --- --- --- --- --- --- --- --- --- ---</p>

EN321

Website	https://www.bco-dmo.org/deployment/57428
Platform	R/V Endeavor
Start Date	1999-03-28
End Date	1999-04-11
Description	<p>process</p> <p>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.</p> <p>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. EN321 - Excellent data but no useful Edo depths. 50 records had \$HEHDT in the Edo depth field. Many records had missing gyro 2. Processed with only gyro 1. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN321 GLOBEC --- --- --- --- --- --- --- --- --- --- ---</p>

EN322

Website	https://www.bco-dmo.org/deployment/57429
Platform	R/V Endeavor
Start Date	1999-04-17
End Date	1999-05-02
Description	<p>process</p> <p>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.</p> <p>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. EN322 - Good data. Air temp noisy. Edo depth has useful data but not edited. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN322 GLOBEC --- --- --- --- --- --- --- --- --- ---</p>

EN323

Website	https://www.bco-dmo.org/deployment/57430
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en323/globecnew.html
Start Date	1999-05-05
End Date	1999-05-12
Description	<p>process</p> <p>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.</p> <p>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. EN323 - Good data. Air temp noisy. The noise has been traced to stack gases passing over the RH and AT sensors as the ship turns. This causes the AT to be momentarily anomalously high and the RH low. Edo depth not useful. EN323 GLOBEC --- --- --- --- --- --- --- --- --- ---</p>

EN324

Website	https://www.bco-dmo.org/deployment/57432
Platform	R/V Endeavor
Start Date	1999-06-13
End Date	1999-06-30
Description	<p>process</p> <p>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.</p> <p>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. EN325 - Very clean data. RH goes up to 108 %RH. No Edo depths. GPS data from Trimble NAVTRAK, no Trimble TASMOM data. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN325 GLOBEC --- --- --- --- --- -----</p>

EN330

Website	https://www.bco-dmo.org/deployment/57433
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en330/en330new.htm
Start Date	1999-10-16
End Date	1999-10-26
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN330 GLOBEC --- --- --- --- --- --- --- --- --- ---</p>

EN331

Website	https://www.bco-dmo.org/deployment/57434
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en331/en331rpt.6sept2000.html
Start Date	1999-12-04
End Date	1999-12-13
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL EN331 GLOBEC --- --- --- --- --- --- --- --- --- ---</p>

OC336

Website	https://www.bco-dmo.org/deployment/57459
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc336/oc336cruise-report.html
Start Date	1999-02-11
End Date	1999-02-23
Description	<p>broad-scale</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC336 GLOBEC Good Good Good Good Good Good Good Good Noisy Noisy</p>

OC338

Website	https://www.bco-dmo.org/deployment/57461
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc338/OC338.pdf
Start Date	1999-03-08
End Date	1999-03-13
Description	<p>long term mooring</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC338 GLOBEC Good Good Good Good Good Good Good Good Noisy Noisy</p>

OC339

Website	https://www.bco-dmo.org/deployment/57462
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc339/OC339.htm
Start Date	1999-03-17
End Date	1999-03-25
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC339 GLOBEC Good Good Good Good Good Good Good Good Noisy Noisy</p>

OC340

Website	https://www.bco-dmo.org/deployment/57463
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc340/oc340rpt.html
Start Date	1999-03-28
End Date	1999-04-12
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC340 GLOBEC Good Good Good Good Good Good Good Good Noisy Noisy</p>

OC341

Website	https://www.bco-dmo.org/deployment/57464
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc341/reptoc341.html
Start Date	1999-04-16
End Date	1999-04-27
Description	<p>broad-scale</p> <p>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.</p> <p>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. OC341 - Anemometer died after 2 days. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC341 GLOBEC --- --- Good Good Good Good Good Good Noisy Noisy</p>

OC342

Website	https://www.bco-dmo.org/deployment/57465
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc342/oc342cruisereport.html
Start Date	1999-05-20
End Date	1999-06-07
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC342 GLOBEC Good Good Good Good Good Noisy Good Good Noisy Noisy</p>

OC343

Website	https://www.bco-dmo.org/deployment/57466
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc343/oc343rpt.html
Start Date	1999-06-15
End Date	1999-06-30
Description	<p>process</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC343 GLOBEC Good Good Good Bad Good Good Good Good Good Good</p>

OC344

Website	https://www.bco-dmo.org/deployment/57467
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc344/OC344.pdf
Start Date	1999-07-06
End Date	1999-07-11
Description	<p>long term mooring</p> <p>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.</p> <p>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. OC344 - Bad spot in SSECOND & SSAL on day 191 Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC344 GLOBEC Good Good Good Bad Good Good Good Good Good Good</p>

OC345

Website	https://www.bco-dmo.org/deployment/57468
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc345/crurptoc345.html
Start Date	1999-08-01
End Date	1999-08-06
Description	<p>long term mooring</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC345 GLOBEC Good Good Good Good Good Good Good Good Good Good Good</p>

OC346

Website	https://www.bco-dmo.org/deployment/57469
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc346/OC346.pdf
Start Date	1999-08-11
End Date	1999-08-20
Description	<p>long term mooring</p> <p>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.</p> <p>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. OC346 - Gap from 228.73-229.00 Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC346 GLOBEC Good Good Good Good Good Good Good Good Good Good</p>

OC347

Website	https://www.bco-dmo.org/deployment/57470
Platform	R/V Oceanus
Report	http://globec.who.edu/globec-dir/reports/oc347/oc347.htm
Start Date	1999-08-25
End Date	1999-08-30
Description	<p>long term mooring</p> <p>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.</p> <p>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. Cruise Exp Spds Dirs AT RH BP SST SWR Prec SSC SSAL OC347 GLOBEC Good Good Good Good Good Good Good Good Good Good</p>

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Project Information

U.S. GLOBEC Georges Bank (GB)

Website: http://globec.who.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.

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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).

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Funding

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

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