

Raw drifter data from RVIB Nathaniel B. Palmer and ARSV Laurence M. Gould cruises NBP0103, L NBP0202 in the Southern Ocean from 2001-2002 (SOGLOBEC project)

Website: <https://www.bco-dmo.org/dataset/2365>

Data Type: Cruise Results

Version: 1

Version Date: 2012-06-18

Project

» [U.S. GLOBEC Southern Ocean](#) (SOGLOBEC)

Program

» [U.S. GLOBal ocean ECosystems dynamics](#) (U.S. GLOBEC)

Contributors	Affiliation	Role
Limeburner, Richard	Woods Hole Oceanographic Institution (WHOI)	Principal Investigator
Allison, Dicky	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager
Rauch, Shannon	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Abstract

The following was extracted from the Cruise Report of the N.B. Palmer Cruise 01-03: 2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner) Surface satellite to study the near surface Lagrangian currents in the SO GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm) transmitter and batteries tethered to a holey sock drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "float" follows the mean water motion at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides ocean current.

Table of Contents

- [Coverage](#)
- [Dataset Description](#)
 - [Acquisition Description](#)
 - [Processing Description](#)
- [Parameters](#)
- [Instruments](#)
- [Deployments](#)
- [Project Information](#)
- [Program Information](#)
- [Funding](#)

Coverage

Spatial Extent: N:-60.282 E:-60.319 S:-70.457 W:-77.556

Temporal Extent: 2001-03-26 - 2002-04-16

Dataset Description

ARGOS Tracked Near Surface Drifter Data

The following was extracted from the Cruise Report of the N.B. Palmer Cruise 01-03. The complete cruise report can be seen [here](#) or on the [SO GLOBEC website](#)

2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner)

Surface drifters are being deployed and tracked via satellite to study the near surface Lagrangian currents in the SO GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitter and batteries tethered to a holey sock drogue centered at 15 m below the surface. The drogue is designed to "lock" itself to the water so that the surface float follows the mean water motion at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lagrangian measurement of the 15-m ocean current.

Data contributed by:

Richard Limeburner

Woods Hole Oceanographic Institution

Woods Hole, MA 02543

file updated June 18 2012; smr.

BCO-DMO made the following changes to the formatting of the data: Calculated actual 'yrday_gmt' values from the original 'yrday_special' column; Added cr scientific notation to integers; Added month_gmt, day_gmt, and time_gmt.

[[table of contents](#) | [back to top](#)]

Parameter	Description	Units
year	Four-digit year.	dimensionless
drifterid	PI assigned drifter identification number.	dimensionless
argosid	ARGOS assigned drifter identification.	dimensionless
date_start_gmt	Date the drifter was initially deployed; reported as month/day/year, i.e. 3/26/01, GMT.	dimensionless
time_gmt	Time of day as hours and minutes (HHMM format), GMT.	dimensionless
lat_start	Latitude where drifter was deployed, negative = South.	decimal degrees
lon_start	Longitude where drifter was deployed, negative = West.	decimal degrees
comments	If drifter was deployed at a mooring site, mooring name is reported.	N/A
yday_gmt	Decimal year day (January 1, at 1200 hr. = year day 1.5).	Decimal year day
lon	Longitude, negative = West.	decimal degrees
lat	Latitude, negative = South.	decimal degrees
temp_ss	Sea surface temperature; depth of sensor unknown or variable; temp data uncorrected, has errors.	degrees C
depth_drifter	Drifter submergence in meters - uncorrected, has errors.	meters
year_start	Year when the drifter was initially deployed.	dimensionless
cruise_id	Identifier for the cruise on which the drifter was initially deployed.	dimensionless
time_start_gmt	Time at which the drifter was initially deployed as hours and minutes (HHMM), GMT.	dimensionless
month_gmt	Month of year (01 to 12); calculated from yday_gmt.	dimensionless
day_gmt	Day of month (01 to 31); calculated from yday_gmt.	dimensionless

[[table of contents](#) | [back to top](#)]

Dataset-specific Instrument Name	Drifter Buoy
Generic Instrument Name	Drifter Buoy
Dataset-specific Description	Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitter and batteries tethered to a holey sock drogue centered at 15 m
Generic Instrument Description	<p>Drifter buoy to include the Beardsley Drifter. Generic drifter buoys may be surface or sub-surface buoys that move with the current. They have a platform that allows for the measurement of surface drifts, air pressure and other variables. The Beardsley Drifters are near-surface satellite-track circulation patterns. They are WOCE-style drifters featuring holey sock drogues. Each drifter has a small (~ 30 cm diameter) surface float with a holey sock drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "lock" itself to the water's water motion at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lag current.</p> <p>(http://globec.who.edu/jg/info/globec/soglobec/drifters_argos%7Bdir=globec.who.edu/jg/dir/globec/soglobec/,data=globec.who.edu:80/jg/serv/)</p>

[[table of contents](#) | [back to top](#)]

Deployments

NBP0103

Website	https://www.bco-dmo.org/deployment/57636
Platform	RVIB Nathaniel B. Palmer
Report	http://globec.whoi.edu/so-dir/reports/nbp0103/nbp0103.html
Start Date	2001-04-24
End Date	2001-06-05
Description	<p>Acquisition Description</p> <p>2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner) Surface drifters are being deployed and tracked via satellite to study the near s GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitte drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "lock" itself to the water so that the at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lagrangian mea</p>

LMG0103

Website	https://www.bco-dmo.org/deployment/57635
Platform	ARSV Laurence M. Gould
Report	http://www.ccpo.odu.edu/Research/globec/cruises01/mooringcruise/lmg0103_menu.html
Start Date	2001-03-18
End Date	2001-04-13
Description	<p>Acquisition Description</p> <p>2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner) Surface drifters are being deployed and tracked via satellite to study the near s GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitte drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "lock" itself to the water so that the at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lagrangian mea</p>

LMG0201A

Website	https://www.bco-dmo.org/deployment/57640
Platform	ARSV Laurence M. Gould
Report	http://www.ccpo.odu.edu/Research/globec/main_cruises02/lmg0201a/LMG02-01A_Report.pdf
Start Date	2002-02-06
End Date	2002-03-03
Description	<p>Acquisition Description</p> <p>2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner) Surface drifters are being deployed and tracked via satellite to study the near s GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitte drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "lock" itself to the water so that the at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lagrangian mea</p>

NBP0202

Website	https://www.bco-dmo.org/deployment/57641
Platform	RVIB Nathaniel B. Palmer
Report	http://globec.whoi.edu/so-dir/reports/nbp0202/nbp0202b.html
Start Date	2002-04-09
End Date	2002-05-21
Description	<p>Acquisition Description</p> <p>2.0 Drifter Measurements (Bob Beardsley and Dick Limeburner) Surface drifters are being deployed and tracked via satellite to study the near s</p>

Description	GLOBEC study area on the western Antarctic Peninsula Shelf. Each drifter has a small (~ 30 cm diameter) surface float with ARGOS transmitte drogue centered at 15 m below the surface. The drogue, about 10 m tall and 1 m in diameter, is designed to "lock" itself to the water so that the at 15 m depth with very little slippage even in high winds. Thus measuring the drifter's position as a function of time provides a Lagrangian mea
--------------------	---

[[table of contents](#) | [back to top](#)]

Project Information

U.S. GLOBEC Southern Ocean (SOGLOBEC)

Website: http://www.ccpo.odu.edu/Research/globec_menu.html

Coverage: Southern Ocean

The fundamental objectives of United States Global Ocean Ecosystems Dynamics (U.S. GLOBEC) Program are dependent upon the cooperation of scientists biologists, and chemists must make use of data collected during U.S. GLOBEC field programs to further our understanding of the interplay of physics, biology, quantitative analysis of interdisciplinary data sets and, therefore, data must be exchanged between researchers. To extract the full scientific value, data must b on a timely basis.

[[table of contents](#) | [back to top](#)]

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 abundance and production of animals in the sea. The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest (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 Sc Peninsula (WAP).

[[table of contents](#) | [back to top](#)]

Funding

Funding Source	Award
National Science Foundation (NSF)	unknown GB NSF
NSF Antarctic Sciences (NSF ANT)	unknown SOGLOBEC NSF ANT

[[table of contents](#) | [back to top](#)]