Surface meteorological data from Dismal Island off the Antarctic Peninsula from the Autonomous Weather station from 2001-2003 (SOGLOBEC project)

Website: https://www.bco-dmo.org/dataset/2346
Data Type: Other Field Results
Version: 1
Version Date: 2003-04-30

Project
» U.S. GLOBEC Southern Ocean (SOGLOBEC)

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

Contributors	Affiliation	Role
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Abstract
Surface meteorological data from Dismal Island off the Antarctic Peninsula from the Autonomous Weather station from 2001-2003 (SOGLOBEC project)

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Coverage

Temporal Extent: 2001-05-23 - 2003-04-30

Dataset Description

SO GLOBEC Moored Array, Drifter, and Float Component

PIs: Bob Beardsley, Dick Limeburner, Breck Owen

Surface meteorological data collected at Dismal Island

Methods & Sampling

Surface meteorological data collected at Dismal Island.
Location 68.09S - 68.82W, elev. 10m (source http://amrc.ssec.wisc.edu/aws/)

Source File: SOG_aws_rawNEW2.mat (from Mike Caruso)

Records: 16969

Period: Start: 05/23/2001 00 GMT
Stop: 04/30/2003 00 GMT

Sample Rate: 1 hr

Data Processing Description

Processing by Beardsley group:
Edit barometric pressure, air temp., relative humidity, and wind speed by:
(a) removing values outside bounds,
(b) convert wind speed and direction (met convention) into east and north wind components u,v (ocean convention),
(c) removing wild points, (csub1) average resulting edited data in 1 hr time bins to create uniform hourly time series,
(d) truncate each variable into common time base,
(e) compute wind stress, sensible heat flux and latent heat flux using COARE26, with SST set to 0 and sensor height 12 m).
Save times tuv0 when raw wind speed = 0 (prop stuck due to icing, etc). [edit_aws_rawD.m, awsintA.m, coare26v.m]

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Data Files

File
awsD.csv (Comma Separated Values (.csv), 2.18 MB) MD5:ab9522d5efe96cfe04eb39a503aa4417 Primary data file for dataset ID 2346

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Parameters

Parameter	Description	Units
year	year	
month_gmt	month of year, GMT	
day_gmt	day of month, GMT	
hour_gmt	time, GMT 24 hour clock, whole hours	
press_bar	barometric pressure (mb)	millibars

julian_day	Julian day (decimal day) as a reference, Julian day 2440000 begins at 0000 hours, May 23, 1968.	dec.day
wind_speed	wind speed	m/sec
wind_dir_e	wind direction with reference to East (deg wrt E)reported in the meteorological convention (winds from) as:positive 0-180 degrees, counter clockwise from Eastnegative 0-180 degrees, clockwise from East	deg wrt E
wind_vel_u	east component of wind velocity, reported in the oceanographic convention (winds to)	m/sec
wind_vel_v	north component of wind velocity, reported in the oceanographic convention (winds to)	m/sec
temp_air	air temperature	degrees C.
humidity	relative humidity	percent
wind_tau_n	wind stress	Newtons/m²
wind_taux_n	east component of wind stress	Newtons/m²
wind_tauy_n	north component of wind stress	Newtons/m²
heat_flux_sens	sensible heat flux	watts/m²
heat_flux_lat	latent heat flux	watts/m²

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Instruments

Dataset-specific Instrument Name	Automatic Weather Station
Generic Instrument Name	Automated Weather Station
Dataset-specific Description	Automated Weather Station
Generic Instrument Description	Land-based AWS systems are designed to record meteorological information.

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Deployments

Dismal_Island

Website	https://www.bco-dmo.org/deployment/57633
Platform	Autonomous Weather station
Start Date	2001-05-23
End Date	2003-04-30
Description	**Methods & Sampling** Surface meteorological data collected at Dismal Island. Location 68.09S - 68.82W, elev. 10m (source http://amrc.ssec.wisc.edu/aws/) **Processing Description** Processing by Beardsley group: Edit barometric pressure, air temp., relative humidity, and wind speed by: (a) removing values outside bounds, (b) convert wind speed and direction (met convention) into east and north wind components u,v (ocean convention), (c) removing wild points, (csub1) average resulting edited data in 1 hr time bins to create uniform hourly time series, (d) truncate each variable into common time base, (e) compute wind stress, sensible heat flux and latent heat flux using COARE26, with SST set to 0 and sensor height 12 m). Save times tuv0 when raw wind speed = 0 (prop stuck due to icing, etc). [edit_aws_rawD.m, awsintA.m, coare26v.m]

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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 from several disciplines. Physicists, 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, and chemistry. Our objectives require quantitative analysis of interdisciplinary data sets and, therefore, data must be exchanged between researchers. To extract the full scientific value, data must be made available to the scientific community on a timely basis.

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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
NSF Antarctic Sciences (NSF ANT)	ANT-0537827
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