Cruise track from ARSV Laurence M. Gould LMG1312 in the West Antarctic Peninsula Shelf from November to December 2013 (Antarctic Inverts project)

Website: https://www.bco-dmo.org/dataset/679426
Data Type: Cruise Results
Version:
Version Date: 2016-12-02

Project
» Genetic connectivity and biogeographic patterns of Antarctic benthic invertebrates (Antarctic Inverts)

Contributors	Affiliation	Role
Smith, Craig R.	University of Hawai'i at Mānoa (SOEST)	Chief Scientist
Copley, Nancy	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

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Dataset Description

From IEDA:
Processed ship-based Navigation Data (version 2) from the Southern Ocean acquired during the Laurence M. Gould expedition LMG1312 (2013)This data set was acquired with a ship-based Navigation system during Laurence M. Gould expedition LMG1312 conducted in 2013 (Chief Scientist: Dr. Kenneth Halanych). These data files are of MGDS:Nav format and include Primary Navigation data and were processed after data collection. Funding was provided by NSF grant(s): ANT10-43745.

Methods & Sampling

Downloaded from IEDA at http://www.marine-geo.org/tools/search/Files.php?data_set_uid=20972

Data Processing Description

BCO-DMO Processing notes:
- downloaded and served the primary navigation data from IEDA: http://www.marine-geo.org/tools/search/Files.php?data_set_uid=20972

Reference:

Halanych, K., (2015). Processed ship-based Navigation Data (version 2) from the Southern Ocean acquired during the Laurence M. Gould expedition LMG1312 (2013). Integrated Earth Data Applications (IEDA). doi: http://dx.doi.org/10.1594/IEDA/320972.

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Data Files

File
LMG1312_cruisetrack_LMG1312.csv (Comma Separated Values (.csv), 1.05 MB) MD5:2012eb308e61c859e7e7517057e076d4 LMG1312 cruise track from Halanych, K. (2015). Processed ship-based Navigation Data (version 2) from the Southern Ocean acquired during the Laurence M. Gould expedition LMG1312 (2013) [Data set]. Integrated Earth Data Applications (IEDA). https://doi.org/10.1594/IEDA/320972 downloaded 2016-12-02

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Parameters

Parameter	Description	Units
date	date; UTC; formatted as yyyy-mm-dd	unitless
time	time; UTC; formatted as HH:MM:SS	unitless
lon	longitude; east is positive	decimal degrees
lat	latitude; north is positive	decimal degrees

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Instruments

Dataset-specific Instrument Name	
Generic Instrument Name	Global Positioning System Receiver
Generic Instrument Description	The Global Positioning System (GPS) is a U.S. space-based radionavigation system that provides reliable positioning, navigation, and timing services to civilian users on a continuous worldwide basis. The U.S. Air Force develops, maintains, and operates the space and control segments of the NAVSTAR GPS transmitter system. Ships use a variety of receivers (e.g. Trimble and Ashtech) to interpret the GPS signal and determine accurate latitude and longitude.

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Deployments

LMG1312

Website	https://www.bco-dmo.org/deployment/666516
Platform	ARSV Laurence M. Gould
Report	http://dmoserv3.bco-dmo.org/jg/serv/BCO-DMO/OA_Antarctic_organisms/727518.html0%7Bdir=dmoserv3.whoi.edu/jg/dir/BCO-DMO/OA_Antarctic_organisms/,info=dmoserv3.bco-dmo.org/jg/info/BCO-DMO/OA_Antarctic_organisms/mg_ca_ratios%7D
Start Date	2013-11-22
End Date	2013-12-20
Description	Benthic invertebrate studies

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Project Information

Genetic connectivity and biogeographic patterns of Antarctic benthic invertebrates (Antarctic Inverts)

Coverage: Antarctica

Extracted from the NSF award abstract:

The research will explore the genetics, diversity, and biogeography of Antarctic marine benthic invertebrates, seeking to overturn the widely accepted suggestion that benthic fauna do not constitute a large, panmictic population. The investigators will sample adults and larvae from undersampled regions of West Antarctica that, combined with existing samples, will provide significant coverage of the western hemisphere of the Southern Ocean. The objectives are: 1) To assess the degree of genetic connectivity (or isolation) of benthic invertebrate species in the Western Antarctic using high-resolution genetic markers. 2) To begin exploring planktonic larvae spatial and bathymetric distributions for benthic shelf invertebrates in the Bellinghausen, Amundsen and Ross Seas. 3) To continue to develop a Marine Antarctic Genetic Inventory (MAGI) that relates larval and adult forms via DNA barcoding.

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Funding

Funding Source	Award
NSF Office of Polar Programs (formerly NSF PLR) (NSF OPP)	PLR-1043745
NSF Office of Polar Programs (formerly NSF PLR) (NSF OPP)	PLR-1043670

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