Cruise track for LMG0414 from ARSV Laurence M. Gouldm November - December 2004 (Antarctic Inverts project)

Website: https://www.bco-dmo.org/dataset/679386
Data Type: Cruise Results
Version:
Version Date: 2017-01-17

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

Contributors	Affiliation	Role
Halanych, Kenneth M.	Auburn University	Chief Scientist
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Table of Contents

Dataset Description

From IEDA:
Processed ship-based Navigation Data from the Antarctic Peninsula acquired during the Laurence M. Gould expedition LMG0414 (2004)
This data set was acquired with a ship-based Navigation system during Laurence M. Gould expedition LMG0414 conducted in 2004 (Chief Scientist: Dr. Kenneth Halanych). These data files are of Text File (ASCII) format and include Navigation data and were processed after data collection. Data were acquired as part of the project(s): Relevance of planktonic larval despersal to endemism and biogeography of antarctic benthic invertebrates and Salpa thompsoni in the Southern Ocean: Bioenergetics, population dynamics and biogeochemical impact, and funding was provided by NSF grant(s): ANT03-38218 and ANT03-38290.

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=23561

Reference:
Halanych, K., (2016). Processed ship-based Navigation Data from the Antarctic Peninsula acquired during the Laurence M. Gould expedition LMG0414 (2004). Integrated Earth Data Applications (IEDA). doi: http://dx.doi.org/10.1594/IEDA/323561.

[table of contents | back to top]

Data Files

File
LMG0414_cruisetrack.csv (Comma Separated Values (.csv), 1.43 MB) MD5:783734b29ad51adab01528d6033c3368 Primary data file for dataset ID 679386

[table of contents | back to top]

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

[table of contents | back to top]

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.

[table of contents | back to top]

Deployments

LMG0414

Website	https://www.bco-dmo.org/deployment/57973
Platform	ARSV Laurence M. Gould
Start Date	2004-11-25
End Date	2004-12-14

[table of contents | back to top]

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.

[table of contents | back to top]

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

[table of contents | back to top]