

Cruise track from ARSV Laurence M. Gould LMG0102 from February - March 2001 (Antarctic Inverts project)

Website: <https://www.bco-dmo.org/dataset/679412>

Version:

Version Date: 2016-12-29

Project

» [Genetic connectivity and biogeographic patterns of Antarctic benthic invertebrates](#) (Antarctic Inverts)

Contributors	Affiliation	Role
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Dataset Description

Processed ship-based Navigation Data from the Antarctic Peninsula acquired during the Laurence M. Gould expedition LMG0102 (2001). This data set was acquired with a ship-based Navigation system during Laurence M. Gould expedition LMG0102 conducted in 2001 (Chief Scientist: Dr. Craig Smith). These data files are of Text File (ASCII) format. The dates and time were not available with the downloaded data. A few points (first, last, 2 in the middle, were added manually by BCO-DMO.

Methods & Sampling

Downloaded from IEDA at http://www.marine-geo.org/tools/search/DataSets.php?data_set_uids=11843,11844

Data Processing Description

BCO-DMO Processing notes:

- downloaded and served the primary navigation data from IEDA: http://www.marine-geo.org/tools/search/DataSets.php?data_set_uids=11843,11844

Reference:

Smith, C., (2015). Processed ship-based Navigation Data acquired during the Laurence M. Gould expedition LMG0102 (2001). Integrated Earth Data Applications (IEDA). doi: <http://dx.doi.org/10.1594/IEDA/311843>.

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Data Files

File
LMG0102_cruisetrack.csv (Comma Separated Values (.csv), 125.66 KB) MD5:010813739d1e59300b7245a7bf104888
Primary data file for dataset ID 679412

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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
longitude	longitude; east is positive	decimal degrees
latitude	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

LMG0102

Website	https://www.bco-dmo.org/deployment/671723
Platform	ARSV Laurence M. Gould
Start Date	2001-02-20
End Date	2001-03-14
Description	Benthopelagic studies

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.

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