A10. Data Policies



GeoPRISMS Data Policy

In an effort to move towards a more efficient and open data sharing policy that ensures all data obtained with federal funds are accessible to the general public, NSF now requires all submitted proposals to include a data management plan. This document outlines data archiving and preservation requirements that Principal Investigators accepting NSF-GeoPRISMS support are obligated to meet. The information within this document is subject to revision as new policies come into play, and new means for archiving and accessing GeoPRISMS data become available.

NSF-OCE and NSF-EAR require the preservation of all data, samples, physical collections, curriculum materials and related research and education materials deriving from NSF funding, as well as the rapid archiving and dissemination of data. GeoPRISMS data need to be quickly released and available to all researchers in order to maximize technology transfer across the program, encourage integration of science within and across the initiatives, facilitate coordination of research, and permit construction and testing of hypotheses. The GeoPRISMS Data Management System (DMS) will serve as a requisite archive for all GeoPRISMS metadata, with linkages to other approved data repositories for selected data types. Due to the multidisciplinary nature of GeoPRISMS research, a number of different archives are approved for data archiving and are described below. In accepting support from the NSF-GeoPRISMS program, each Principal Investigator is obligated to meet the following data-management requirements.

Timing

Basic metadata (e.g., data types, sample types and locations, cruise navigation, etc.) must be provided to the GeoPRISMS DMS upon collection and no later than 60 days of the end of a field program. Digital metadata forms are available for downloading from the <u>GeoPRISMS DMS website</u> and should be used by all GeoPRISMS funded PIs during their field programs. Metadata forms, survey reports, survey navigation, cruise reports and cruise navigation should be sent to the GeoPRISMS DMS at <u>info@marinegeo.org</u>. Metadata will be made publicly available when placed in the archive registered in the DMS.

All data collected with GeoPRISMS funding must be archived as soon as practically possible and certainly within two years of the time the Principal Investigator(s) obtain access to them. Data will not be publicly released ahead of the two year limit unless specifically authorized by the PI(s) or required by the data policy governing that particular data (see Appendix 1). For data collected in continuing and multi-year projects, PIs are encouraged to submit new data as it becomes available.

Two years following the end of a field program, field data must be made freely available, consistent with NSF OCE/EAR, IRIS/PASSCAL and OBSIP policies where applicable. In the case of datasets not available to the investigators at completion of the field project (for example, because they are assembled by the relevant data-center before distribution) the two year moratorium period begins on the date that the complete dataset is made available to investigators. However, Principal Investigators are encouraged to

release data to other primary site investigators as soon as possible, and preferably within one year, following the end of a field season or completion of dataset processing.

Processed datasets must be made publicly available within two years following acquisition/generation. This policy applies even to those data and results that Principal Investigators have traditionally not been required to make publicly available (e.g. stacked and migrated seismic sections, geochemical analyses, DEMs and other rasters, tables of geologic samples). Processed data sets that directly support a publication are appropriate candidate products for archiving.

Archival

Digital data should be submitted to the <u>GeoPRISMS DMS</u> unless an alternate dedicated standard national repository exists for that data type (e.g. IRIS, UNAVCO, see Appendix below for full list of accepted alternate disciplinary repositories). Data must be in the format required by the applicable repository and Principal Investigators should work with repository personnel as data are being collected to assure compliance with their standards. In the case that data are submitted to an alternate national repository, GeoPRISMS DMS personnel must be notified of this submission so that proper cataloging and linkage with these data centers can be established and maintained. PIs are encouraged to submit digital data to the GeoPRISMS DMS immediately following their cruise/expedition/field program, where it will be incorporated with access restrictions as specified above.

Non-digital data for which no standard archive exists (e.g. land geological samples) must be archived by the Principal Investigator. Such data/samples must be made available to researchers upon request, but with all incurred costs borne by the recipient, rather than the provider.

In dealing with geological specimens, GeoPRISMS-funded investigators must: 1) include in the metadata provided to the GeoPRISMS DMS a list of samples taken and their location; 2) store samples in an NSF–supported repository or an alternative location (including their home institution) which has a written NSF-approved sample distribution policy (See Appendix IV of the NSF Division of Ocean Sciences Data and Sample Policy listed below; 3) follow the NSF-approved sample distribution policy and 4) Notify the GeoPRISMS DMS of any changes in permanent location for sample storage.

Documenting NSF Compliance

NSF now requires that all proposals provide a data management plan for the archival, documentation and sharing of data, samples, physical collections, curriculum materials and other related research and education products. Plans for the handling of data and other products will be considered in the review process. Compliance with the appropriate data policy will be evaluated in consideration of a Principal Investigator's record of prior support.

Annual reports must document compliance. Where a final report is due before the deadline for data submittal, the PI must notify the cognizant Program Officer after final data submittal.

Exceptions to this data policy may occur only through agreement between the PI and the cognizant Program Officer at NSF.

More Information

General information on NSF data policies

Depending on funding and resources used, the following data policies and others may apply:

- OCE
- EAR
- EarthScope
- <u>IODP</u>
- <u>UNAVCO</u>
- IRIS PASSCAL
- <u>List of Other Approved Data Repositories</u> (excel file, 70kb)
- Click here for a PDF version of this document
- Click here to go to the MARGINS Data Policy

MARGINS Data Policy (Released 30 June, 2005)

NSF-OCE and NSF-EAR require the preservation of all data, samples, physical collections, curriculum materials and related research and education materials deriving from NSF funding, as well as the rapid archiving and dissemination of data. MARGINS data need to be quickly released and available to all researchers in order to maximize technology transfer across the program, encourage integration of science within and across the initiatives, facilitate coordination of research, and permit construction and testing of hypotheses. The MARGINS Data Management System (DMS) will serve as a requisite archive for all MARGINS metadata, with linkages to other approved data repositories for selected data types. In accepting support from the NSF-MARGINS program, each Principal Investigator is obligated to meet the following data-management requirements:

Timing

- Basic metadata (e.g., data types, sample types and locations, cruise navigation, etc.) must be provided to the MARGINS DMS within 60 days of the end of a field program. Digital metadata forms are now available for downloading from the MARGINS DMS website (www.marine-geo.org/margins/) and should be used by all MARGINS funded PIs during their field programs. Metadata forms, survey reports, survey navigation, cruise reports and cruise navigation should be sent to the MARGINS DMS at info@marine-geo.org.
- All data collected with MARGINS funding must be archived as soon as practically possible and certainly within two years of the time the Principal Investigator(s) obtain access to them. Data will not be publicly released ahead of the two year limit unless specifically authorized by the PI(s). For data collected in continuing and multi-year projects, PIs are encouraged to submitted new data at yearly intervals.
- Two years following the end of a field program, data must be made freely available, consistent with IRIS/PASSCAL and OBSIP policies where applicable. In the case of datasets not available to the investigators at completion of the field project (for example, because they are assembled by the relevant data-center before distribution) the two year moratorium period begins on the date that the complete dataset is made available to investigators. However, Principal Investigators are encouraged to release data to other focus site investigators as soon as possible, and preferably within one year, following the end of a field season or completion of dataset processing.
- Processed datasets must be made publicly available within two years following acquisition/generation. This policy applies even to those data and results that Principal Investigators have traditionally not been required to make publicly available (e.g. stacked and migrated seismic sections, geochemical analyses, DEMs and other rasters, tables of geological samples).

Archival

• Digital data should be submitted to the MARGINS DMS (www.marine-geo.org/margins/) unless an alternate standard national repository exists (see Appendix below for list of accepted alternate repositories). Data must be in the format required by the applicable repository. In the case that data are submitted to an alternate national repository, the MARGINS DMS team must be notified of this submission so that proper cataloging of these data and linkage with these data centers can be maintained. PIs are encouraged to submit digital data to the MARGINS DMS

- immediately following their cruise/expedition, where it will be incorporated with access restrictions as specified by the investigator, normally within the time periods specified in the MARGINS data policy.
- Non-digital data for which no standard archive exists (e.g. land geological samples) must be archived by the Principal Investigator. Such data/samples must be made available to researchers upon request, but with all incurred costs borne by the recipient, rather than the provider.
- In dealing with geological specimens, MARGINS-funded investigators must: 1) include in the metadata provided to the MARGINS DMS a list of samples taken and their location; 2) store samples in an NSF-supported repository or an alternative location (including their home institution) which has a written NSF-approved sample distribution policy (See Appendix IV of the NSF Division of Ocean Sciences Data and Sample Policy: www.nsf.gov/pubs/2004/nsf04004/nsf04004.pdf); 3) follow the NSF-approved sample distribution policy and 4) Notify the MARGINS DMS of any changes in permanent location for sample storage.

Documenting NSF compliance

- The NSF grant proposal guide (www.nsf.gov/publications/pub summ.jsp?ods key=gpg) requires that proposal Project Descriptions outline plans for the archival, documentation and sharing of data, samples, physical collections, curriculum materials and other related research and education products. Plans for the handling of data and other products will be considered in the review process. Compliance with the appropriate data policy will be evaluated in consideration of a Principal Investigators record of prior support.
- Annual reports must document compliance. Where a final report is due before the deadline for data submittal, the PI must notify the cognizant Program Officer after final data submittal.
- Exceptions to this data policy may occur only through agreement between the PI and the cognizant Program Officer at NSF Appendices.

Appendices

Appendix 1: Other applicable data policies

Depending on funding and resources used, the following data policies and others may apply.

OCE: www.nsf.gov/pubs/2004/nsf04004/nsf04004.pdf
EAR: www.geo.nsf.gov/ear/EAR data policy 204.doc

IODP: http://www.iodp.org/index.php?option=com docman&task=doc download&gid=395

UNAVCO: www.unavco.org/community/policies forms/DataPolicy.html

PASSCAL: www.passcal.nmt.edu/information/Policies/data.delivery.html

Appendix 2: Alternative Approved Data Repositories

See attached Excel spreadsheet: http://www.nsf-margins.org/XLS/DataArchives.xls

Note: If a particular data type is not mentioned here, check with your program officer or the MARGINS Office for specific guidance.