##

## NSF Arctic Data Center

## **Data Management Plan:**

## **NSF Arctic Data Center guidance for creating your DMP\***

This document is a guide to help you write the required Data Management Plan (DMP) for NSF proposals to the Arctic directorate of the Division of Polar Programs (PLR). NSF requires your Data Management Plan to be **no longer than 2 pages**, single-spaced. All underlined areas in the sample text should be replaced with information that is accurate for your proposal. **Do not simply insert this document into your proposal**. If the NSF Arctic data Center team can be of service, please email support@arcticdata.io.

### 1. Products of Research

THIS SECTION REQUIRES THE FOLLOWING:

* Describe the data, samples, collections, software, materials, etc. that will be produced during your project
* Describe the approximate number and size of data files that will be produced during your project

**SAMPLE TEXT:**  The proposed project will collect and record < enter data types here, e.g.: samples, maps, tables, time series, temperature readings, imagery > over the course of this grant. These data include variables such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There will be approximately \_\_\_\_\_\_\_\_\_\_\_\_ files, each no larger than \_\_\_\_\_\_\_\_\_\_\_\_ < MB, GB, TB, other >, for a total storage size of approximately \_\_\_\_\_\_\_\_\_\_\_\_.

Additional data products this research will make available include < list any physical samples, software, model outputs, educational materials, etc >.

### 2. Data Format and Standards

THIS SECTION REQUIRES THE FOLLOWING:

* Describe data file format(s)
* Describe the metadata - information others might need to use your data
* Describe how data quality will be ensured

**SAMPLE TEXT:**  Data will be collected from < study area > in \_\_\_\_\_\_\_\_\_\_\_\_\_ format. Raw data will then be stored and processed in < open source formats, ASCII, text, Microsoft Excel, Matlab, R, ArcGIS, etc. > files. Our < research team lead, project manager, data curator, other > will implement and be responsible for maintaining data storage and backup systems, as well as interfacing with data repository personnel. The NSF Arctic Data Center will provide data archival, preservation, access, and metadata authoring services for our project.

 The NSF Arctic Data Center is an open-source, community resource for NSF-funded Arctic data. Data will be described in accordance with the NSF Arctic Data Center standards by our < research team lead, project manager, data curator, team member submitting data, etc. > using the existing NSF Arctic Data Center metadata authoring tool. The NSF Arctic Data Center metadata authoring tool will create metadata that are in compliance with EML and downloadable as ISO 19115, FGDC, and other metadata standards.

Appropriate QA/QC procedures for these data are ­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Additionally, all processing steps will be documented, including < transformations, etc >.

### 3. Policies for Access and Sharing

THIS SECTION REQUIRES THE FOLLOWING:

* How you will make your data and other products accessible?
* The approximate release date of data products
* Please be sure to check for specific release policies from the Directorate, Office, Division, Program, or other NSF unit to which you will be submitting. More information can be found at <http://www.nsf.gov/geo/geo-data-policies/index.jsp>

**SAMPLE TEXT:**  This project will upload data files and documentation to The NSF Arctic Data Center < describe when data will be released e.g.: as soon as they have been quality controlled and processed, annually, upon completion of project (see NSF guidelines for time requirements) >. The NSF Arctic Data Center publically releases data through their system immediately upon receipt. Data and data products will be made available with as few restrictions as possible. These data and metadata will be permanently archived and made freely available for access and use by all via web-based distribution through the NSF Arctic Data Center.

We < intend, do not intend > to impose a data embargo with the exception of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as approved by < the ARC Program Manager or other NSF unit >. We < expect, do not expect > that the data we generate will require special arrangements due to ethical restrictions or release of indigenous knowledge. There are < restrictions, no restrictions > on the use of data and products created by this project as long as the user includes a citation for the product. There are < privacy concerns, no privacy concerns > associated with the data.

Existing data < will, will not > be required for our analysis. These data include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­\_\_\_\_\_\_\_\_ and will be obtained from < list website, researcher >. Relevant data will also be made available through these channels: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­.

### 4. Policies and Provisions for Re-use

THIS SECTION REQUIRES THE FOLLOWING:

* Identify who will be most interested to use your data
* How will they be allowed to use your data?

**SAMPLE TEXT:**  Integration and re-use of the data relies on the data being well organized and adequately documented. The shared data are expected to be of interest to < list audience(s) >. It is possible that scientists from related disciplines may also use the data. To facilitate tracking of re-use and to give fair credit to the project and investigators, the NSF Arctic Data Center will provide a recommended formal citation, including a persistent identifier or digital object identifier (DOI) for the submitted data set(s).

### 5. Archiving of Data

THIS SECTION REQUIRES THE FOLLOWING:

* Will data be available after the funding for the project has ended?
* The long-term strategy for maintaining, curating, and archiving the data
* Description of necessary transformations to prepare data for preservation and data sharing

**SAMPLE TEXT:**  < Our data manager > will follow the NSF Arctic Data Center guidelines to provide accurate and complete documentation for data preservation. The NSF Arctic Data Center will ensure that the data are curated in a relevant long-term archive and ensure data will be available after project funding has ended. We will use the NSF Arctic Data Center tools to create metadata for long-term data preservation. Data will be described in accordance with the NSF Arctic Data Center standards.