

NSF Data Management Plan Specifications:

The following text is from the [NSF Grant Proposal Guide section II.C.2.i](#)

Plans for data management and sharing of the products of research. Proposals must include a supplementary document of no more than two pages labeled “Data Management Plan”. This supplement should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results (see [AAG Chapter VI.D.4](#)), and may include:

1. the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
2. the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
3. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
4. policies and provisions for re-use, re-distribution, and the production of derivatives; and
5. plans for archiving data, samples, and other research products, and for preservation of access to them.

Data management requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available at:

<http://www.nsf.gov/bfa/dias/policy/dmp.jsp>. If guidance specific to the program is not available, then the requirements established in this section apply.

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined Data Management Plan, regardless of the number of non-lead collaborative proposals or subawards included. Fastlane will not permit submission of a proposal that is missing a Data Management Plan. Proposals for supplementary support to an existing award are not required to include a Data Management Plan.

A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification. Proposers who feel that the plan cannot fit within the supplement limit of two pages may use part of the 15-page Project Description for additional data management information. Proposers are advised that the Data Management Plan may not be used to circumvent the 15-page Project Description limitation. The Data Management Plan will be reviewed as an integral part of the proposal, coming under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.

Links to program-specific requirements:

[Division of Earth Sciences](#)

Draft Text for NSF Data Management Plans for Projects Submitting Data to Neotoma

Data from this project will be submitted to the Neotoma paleoecology database (www.neotomadb.org). The data submitted will be [*place description of data to be submitted here*]. Neotoma stores fossil and other stratigraphic data for the past 5 million years (the Quaternary and Pliocene), and provides tools for finding, visualizing, downloading, and uploading data. Neotoma supports multidisciplinary research by providing a common cyberinfrastructure for discipline-specific paleoecological datasets. This infrastructure has been developed over decades in a number of discipline-specific databases, which are now merged into Neotoma. Constituent data types include diatoms, insects, ostracodes, packrat middens, pollen, plant macrofossils, testate amoebae, vertebrates, mollusks, geochemistry, and new data types are being added. Neotoma combines a centralized database structure, thereby reducing IT development and maintenance costs, and a decentralized scientific governance structure, in which expert working groups are charged with oversight of data quality, data accession, and setting development priorities for particular data types. Recent Neotoma development is funded by the NSF Geoinformatics Program.

Metadata stored in Neotoma include site locations and descriptions, sediment descriptions, information about the original workers, publications, geochronologic data, and age models. Data and metadata standards have been established by working groups for the various data types. A full description of the Neotoma relational database structure and the base tables used to store data and metadata is available from the Neotoma website. Data can be searched and viewed at the Neotoma website. Individual datasets can be downloaded as .csv files, which are easily imported into Microsoft Excel or other spreadsheet programs. The entire database is also available for download in either Microsoft Access for SQL Server format.

The Neotoma Database is stored on an enterprise-class network storage appliance that is mirrored to a secondary off-site appliance for disaster-recovery purposes. Additionally, snapshots of the file system on which the database is stored are taken hourly and rolled into daily, weekly, and monthly snapshots. Separate quarterly snapshots of the full database are archived to tape and held for a minimum of 5 years.

All data submitted to Neotoma are public domain and free to use for non-commercial purposes (<http://creativecommons.org/licenses/by-nc/3.0/>). Neotoma has established a data-use policy (<http://www.neotomadb.org/index.php/data/category/use>), including the following points. (1) Normal ethics apply to co-authorship of scientific publications that make use of data obtained from Neotoma. (2) Such publications should cite the original publications when possible. (3) Synoptic studies that use large quantities of data should seek solutions that ultimately lead to an individual entry for each data records in the web of science. (4) Contributors should potentially be invited as co-authors if a user makes significant use of any individual contributor's data, if any individual contributor's data comprise a substantial portion of a larger dataset analyzed, or if a contributor makes a significant contribution to the analysis of the data or to the interpretation of the results.