



The Changing Research Data Paradigm in the United States of America

Clifford Jacobs

National Science Foundation, Division of Atmospheric Sciences, Arlington, United States (cjacobs@nsf.gov)

Numerous advisory groups to the National Science Foundation (NSF) expressed concern about immediacy of the crisis in data-intensive science. Research data, its access, integrity, curation, exponential growth, and longevity are important points of discussion with the National Science Foundation (NSF) and throughout the government. The importance of this issue has prompted NSF to clarify its long standing policy on data sharing. The NSF expects funded investigators to share their research results with other investigators, including data resulting from the funded activities. In January 2011 a new NSF data policy will take effect that will assist NSF with enforcement of its data management policy. In part, there will be a new requirement that will require that all proposals describe plans for data management that include enabling access and sharing of the products of research. Often, plans will provide information on the long-term preservation of data produced as a result of an NSF research grant. In some cases, data management plans would assert the absence of a need for such plans. However, all data management plans will be subject to peer review under existing NSF review criteria. The required plan should be appropriate to the specific technical, disciplinary, and scientific contexts of the project as determined by peer review panels and cognizant NSF programs. Details of the new requirements will be discussed as well as the larger U.S. Government context surrounding the emergence of data-intensive science and engineering.