**DataONE - a Distributed Infrastructure Facilitating Data Management for the Earth Sciences**

Dave Vieglais

Director for Development and Operations

Data Observation Network for Earth

The Data Observation Network for Earth is a project funded by the United Stated National Science Foundation to design, build, deploy, and maintain infrastructure supporting the long term storage and reuse of data with emphasis on the earth sciences domain.  DataONE builds on a federation of data repositories that have implemented a standard set of Member Node services to enable data creation, cataloging, indexing, and replication as facilitated by a smaller set of Coordinating Nodes. Investigator Tools are applications that have been adapted to work with the Member and Coordinating Node services to provide seamless creation of, and access to content held by the federation of Member Nodes. A small set of investigator tools will be used to demonstrate key aspects of the data lifecycle as supported by DataONE.