



## **EarthCube – A Community-led, Interdisciplinary Collaboration for Geoscience Cyberinfrastructure**

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The US NSF EarthCube Test Enterprise Governance Project completed its initial two-year long process to engage the community and test a demonstration governing organization with the goal of facilitating a community-led process on designing and developing a geoscience cyberinfrastructure.

Conclusions are that EarthCube is viable, has engaged a broad spectrum of end-users and contributors, and has begun to foster a sense of urgency around the importance of open and shared data. Levels of trust among participants are growing. At the same time, the active participants in EarthCube represent a very small sub-set of the larger population of geoscientists. Results from Stage I of this project have impacted NSF decisions on the direction of the EarthCube program.

The overall tone of EarthCube events has had a constructive, problem-solving orientation. The technical and organizational elements of EarthCube are poised to support a functional infrastructure for the geosciences community. The process for establishing shared technological standards has notable progress but there is a continuing need to expand technological and cultural alignment. Increasing emphasis is being given to the interdependencies among EarthCube funded projects. The newly developed EarthCube Technology Plan highlights important progress in this area by five working groups focusing on: 1. Use cases; 2. Funded project gap analysis; 3. Testbed development; 4. Standards; and 5. Architecture.

The EarthCube governance implementing processes to facilitate community convergence on a system architecture, which is expected to emerge naturally from a set of data principles, user requirements, science drivers, technology capabilities, and domain needs.