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EarthCube: A Community-Driven Cyberinfrastructure for the Geosciences

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EarthCube is creating a dynamic, System of Systems (SoS) infrastructure and data tools to collect, access, analyze, share, and visualize all forms of geoscience data and resources, using advanced collaboration, technological, and computational capabilities. EarthCube, as a joint effort between the U.S. National Science Foundation Directorate for Geosciences and the Division of Advanced Cyberinfrastructure, is a quickly growing community of scientists across all geoscience domains, as well as geoinformatics researchers and data scientists. EarthCube has attracted an evolving, dynamic virtual community of more than 2,500 contributors, including earth, ocean, polar, planetary, atmospheric, geospace, computer and social scientists, educators, and data and information professionals.

During 2017, EarthCube will transition to the implementation phase. The implementation will balance "innovation" and "production" to advance cross-disciplinary science goals as well as the development of future data scientists. This presentation will describe the current architecture design for the EarthCube cyberinfrastructure and implementation plan.