EarthCollab: Enabling Scientific Collaboration and Discovery through Semantic Connections

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EarthCollab was funded as an EarthCube Building Blocks project in the fall of 2014. The project partners are the Library and Earth Observing Laboratory at NCAR, the Cornell University Library, and UNAVCO. The project is focused on enabling the discovery of geoscience research outputs using the Semantic Web. Semantic Web technologies provide a “web native” approach to connecting resources on the web, promoting flexible and extensible interoperability between resources. EarthCollab’s main accomplishments have been the creation of two new web-based resources that allow scientists to discover and explore information and data resources: Connect UNAVCO (http://connect.unavco.org/) and Arctic Data Connects (http://vivo.eol.ucar.edu). Both of these systems are based on the VIVO semantic software suite. The EarthCollab project has also developed software extensions for the VIVO software that enable connections between multiple VIVO instances. This is a novel feature that allows information about data and other scientific activities to be distributed among organizations, thereby increasing data discoverability and reducing duplication of information on the web. EarthCollab is thus contributing to broader community efforts that focus on increasing the transparency of relationships between scientific researchers, facilities, instruments, data, and publications.