



US Geoscience Information Network, Web Services for Geoscience Information Discovery and Access

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The US Geoscience information network has developed metadata profiles for interoperable catalog services based on ISO19139 and the OGC CSW 2.0.2. Currently data services are being deployed for the US Dept. of Energy-funded National Geothermal Data System. These services utilize OGC Web Map Services, Web Feature Services, and THREDDS-served NetCDF for gridded datasets. Services and underlying datasets (along with a wide variety of other information and non information resources) are registered in the catalog system. Metadata for registration is produced by various workflows, including harvest from OGC capabilities documents, Drupal-based web applications, transformation from tabular compilations. Catalog search is implemented using the ESRI Geoportal open-source server. We are pursuing various client applications to demonstrate discovery and utilization of the data services. Currently operational applications allow catalog search and data acquisition from map services in an ESRI ArcMap extension, a catalog browse and search application built on openlayers and Django. We are developing use cases and requirements for other applications to utilize geothermal data services for resource exploration and evaluation.