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Integrating ArcGIS Online with GEOSS Data Access Broker

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The Global Earth Observation System of Systems (GEOSS) seeks to address 9 societal benefit areas for Earth observations to address: disasters, health, energy, climate, agriculture, ecosystems, biodiversity, water, and weather. As governments and their partners continue to monitor the face of the Earth, the collection, storage, analysis, and sharing of these observations remain fragmented, incomplete, or redundant. Major observational gaps also remain (particularly as we seek to look beneath the surface of the land and the water). As such, GEO's credo is that "decision makers need a global, coordinated, comprehensive, and sustained system of observing systems."
Not surprisingly, one of the largest block of issues facing GEOSS is in the area of data: the access to data (including the building services to make the data more accessible), inadequate data integration and interoperability, error and uncertainty of observations, spatial and temporal gaps in observations, and the related issues of user involvement and capacity building. This is especially for people who stand to gain the most benefit from the datasets, but don't have the resources or knowledge to use them.
Esri has millions of GIS and imagery users in hundreds of thousands of organizations around the world that work in the aforementioned 9 GEO societal benefit areas. Esri is therefore proud to have entered into a partnership with GEOSS, more specifically by way of a Memorandum of Understanding (MOU) between Esri and the Earth and Space Science Informatics (ESSI) Laboratory of Prof. Stefano Nativi at the CNR (National Research Council of Italy) Institute of Atmospheric Pollution Research.

Esri is working with the ESSI Lab to integrate ArcGIS Online by way of the ArcGIS Online API into the GEOSS Data Access Broker (DAB), resulting in the discoverability of all public content from ArcGIS Online through many of the search portals that participate in this network (e.g., DataOne, CEOS, CUAHSI, OneGeology, IOOS).
The synergistic efforts will include:
1) Providing the GEOSS community with access to Esri GIS community content, expertise and technology through the GEOSS DAB, as well as to collaboration tools via the ArcGIS platform.
2) Encouraging the Esri GIS community to participate as contributors and users of GEOSS.
3) Supporting the extension of GEOSS to include ArcGIS Online publicly-available data.
4) Collaboration on outreach to both the GIS and GEO communities on effective use of GEOSS, particularly for environmental decision-making.
5) Collaboration on the evolution of GEOSS as an open and interoperable platform in conjunction with the GEOSS community. Protocols such as OPenDAP and formats such as netCDF will play a critical role.

This talk will present the initial results of the collaboration which includes the integration of ArcGIS Online in the GEOSS DAB.