



Interoperability in CEOS Atmospheric Composition Portal

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The Atmospheric Composition Constellation (ACC) and the Workgroup for Information Systems and Services (WGISS) within the Committee on Earth Observation Satellites (CEOS) is developing a portal to support interoperability among the atmospheric composition research and applications communities. The portal will provide data access, tools and contextual guidance for an international suite of remote sensing datasets. The initial prototype will provide access to services and data hosted by the World Data Center for Remote Sensing of the Atmosphere (WDC-RSAT), NASA's Goddard Earth Sciences Data and Information Services Center (GES DISC) and DataFed. Distributed access to data is implemented via interoperability standards, including the Open Geospatial Consortium's (OGC) Web Map Service (WMS) and Web Coverage Service (WCS). An initial prototype implementation has been developed to compare data from WDC-RSAT, DataFed and GES DISC, using the GES DISC Giovanni tool for online analysis and visualization. Data are transmitted from WDC-RSAT and DataFed via WCS to Giovanni for analysis and the resulting visualization is transmitted via WMS to WDC-RSAT (which is hosting the portal). Users make the data comparison request through a graphical interface that resides on the ACP but that accesses data and analysis services distributed across the ACP network.