



The CEOS Water Portal

Satoko MIURA (1), Shinichi SEKIOKA (1), Kaori KUROIWA (2), Yoshiyuki KUDO (2), and Michihiro KOIDE (2)

(1) Japan Aerospace Exploration Agency, Mission Operations System Office, Tsukuba, Japan , (2) Remote Sensing Technology Center of Japan, Tokyo, Japan

The CEOS Water is a one of the DIAS (Data Integration and Analysis System, http://www.editoria.u-tokyo.ac.jp/projects/dias/?locale=en_US) data distributed systems.

The CEOS Water Portal system is distributed in the sense that, while the portal system is located in Tokyo, the data is located in archive centers which are globally distributed. For example, some in-situ data is archived at the National Center for Atmospheric Research (NCAR) Earth Observing Laboratory in Boulder, Colorado, USA. The NWP station time series and global gridded model output data is archived at the Max Planck Institute for Meteorology (MPIM) in cooperation with the World Data Center for Climate in Hamburg, Germany. Part of satellite data is archived at DIAS storage at the University of Tokyo, Japan.

This portal does not store data. Instead, according to requests made by users on the web page, it retrieves data from distributed data centers on-the-fly and lets them download and see rendered images/plots.

Considering the popularity among water related data centers, OpenDAP protocol is mainly being used between this portal and most of data centers.

And this portal also is connected to a kind of data brokering system, which is already connected to multiple data centers. For this interface, OpenSearch protocol is being used.

The CEOS Water Portal intends to extend its users to include decision makers and officers like river administrators by facilitating a feedback loop. One example of data and information flow centered on the CEOS Water Portal is shown below.

- (1) Scientists get various data needed for Model Calculation (WEB-DHM, for example) via the portal.
- (2) Scientists use Model output data and do analysis.
- (3) Scientists register their use cases into the portal.
- (4) Decision makers and officers can refer and acquire use cases and data easily.

Users can access the CEOS Water Portal system at <http://waterportal.ceos.org/>.