

# The ORNL DAAC: Contributing to the ESIP Federation<sup>1</sup>

## - Source for Biogeochemical Dynamics Data

### Land Validation

- NPP
- LAI

In-situ Observations → ? ← Remote Sensing

• MODIS Core Test Sites

### Field Campaigns

- FIFE
- OTTER
- SNF
- BOREAS
- LBA

### Flux Tower Sites

Flux data aggregated to daily, monthly, and yearly values

- FluxNet

### Regional and Global Data

- Climate
- Soils
- Vegetation
- Hydroclimatology

Member of the LBA-Ecology ESIP Cluster

## - Contributing to ESIP System-wide Interoperability

Mercury, a distributed, XML Web-based metadata search and data retrieval system developed by the ORNL DAAC, has been selected to serve as a component of the ESIP System-wide Interoperability Layer (funding is pending). Key features of this system will include:

- Distributed data and metadata
- Automated harvesting of metadata
- Frequent re-builds of the index
- Compliant with Z39.50 and FGDC standards
- Fielded and free text searching
- Geospatial and temporal searching
- Integrated data and Web page searches
- No special software needed to be a data supplier
- COTS based
- Custom Metadata Editor

Development of Mercury is supported by NASA's LBA-Ecology Project, the NASA Earth Science Data and Information System Project, the NASA Prototype Office, and seed money from ORNL.

Example of using Mercury at the DAAC

**Projects using Mercury**

- LBA-Ecology
- SAFARI 2000
- NASA ESIP Federation
- NARSTO
- Carbon Sequestration
- ORNL DAAC
- EOS Land Validation
- Regional and Global Data

<http://www.mercury.ornl.gov/>

### Contacts:

Larry Voorhees (voorheesld@ornl.gov)  
 Tim Rhyne (rhynebt@ornl.gov)  
 Bob Cook (cookrb@ornl.gov)  
 Oak Ridge National Laboratory<sup>2</sup>  
 Oak Ridge, Tennessee 37831

Learn more about the ORNL DAAC  
 at <http://www.daac.ornl.gov>

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