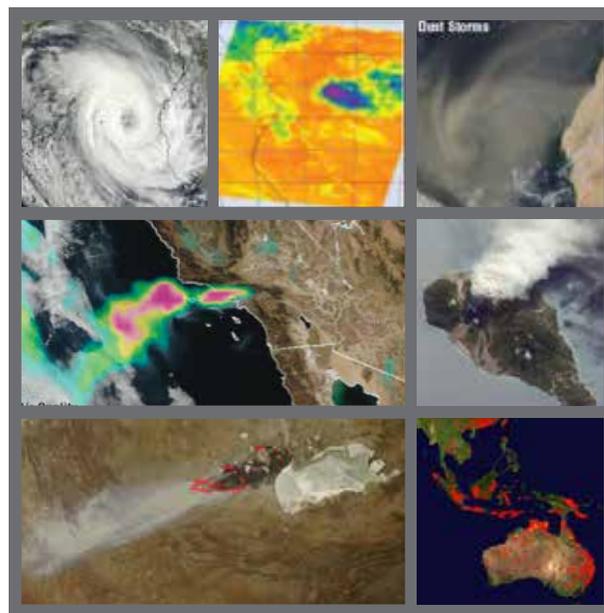# DATA & APPLICATIONS ONLINE

Land Atmosphere Near real-time Capability for EOS (LANCE)

Overview

The Land Atmosphere Near real-time Capability for EOS (LANCE) provides free access to Earth Science data and imagery within 3 hours of observation. Near Real-Time (NRT) products from the MODIS, OMI, AIRS, and MLS instruments are used in a variety of applications such as numerical weather prediction; forecasting and monitoring natural hazards, air quality studies, disaster relief, and homeland security. These applications typically need data much more quickly than routine science processing can provide, and can accommodate trading science product quality for timely access.

Key Features

Products and Average Latencies:

- AIRS: Radiances, Temperature and Moisture Profiles, Clouds and Trace Gases, Precipitation and Dust, 75 –140 minutes
- MLS: Ozone, 75 –140 minutes
- MODIS: Radiances, Cloud/Aerosols, Water Vapor, Fire, Snow Cover, Sea Ice, Land Surface Reflectance, Land Surface Temperature: 90 –125 minutes (Latency excludes daily Land Surface Reflectance)
- OMI: Ozone, Sulfur Dioxide, Aerosols, 100 –165 minutes (Latency excludes Level 3 Ozone)

Tools for Browse, Data Selection and Download

- Worldview provides the capability to interactively browse and download full resolution imagery available through LANCE.
- Global Imagery Browse Services (GIBS) provides several types of web mapping services for users who want to directly access imagery in their own web mapping interface or client.
- Rapid Response enables users to view and download MODIS images for a large number of user-specified, geographically subsetted images in GIS-compatible format.
- Fire Information for Resource Management System (FIRMS) allows users to subscribe to near real-time, daily and weekly fire email alerts for their area of interest. FIRMS provides MODIS hotspots/fire for viewing in Web Fire Mapper and for download in a variety of data formats.

Access

- To register and access near real-time data visit, https://earthdata.nasa.gov/lance.

LANCE is a component of the NASA Earth Observing System Data and Information System (EOSDIS). EOSDIS and its twelve Distributed Active Archive Centers (DAACs) provide access to data from NASA's Earth Science Missions.

To learn more about other data and tools freely available from EOSDIS, go to earthdata.nasa.gov.

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