

# Data Center



The CPI Data Center is provided as a service to government agencies or commercial enterprises interested in distributing scientific data to third party entities. It empowers organizations that are inhibited from distributing scientific data on their own networks by agency or organizational Information Technology (IT) policies, or computational & financial resources, with a rapid cost-effective means of providing users with access to their data, as well as the opportunity for users and/or potential users to interact in an on-line environment. The Data Center provides an automated or near-automated data ingest capability to support data set hosting and query capabilities of scientific data as well as web-based collaboration. The Data Center provides a securely-managed data set hosting capability that is web accessible, searchable, and available for download through a CPI maintained search engine.

The CPI Data Center provides the following capabilities:

- Automated ingest of new data using a secure automated Data Center ingest interface or through customized delivery mechanisms.
- Automated metadata extraction to support dataset query-ability with support for standard hierarchical data file formats (HDF, HDF5, HDF5-EOS, NETCDF), valid XML (with or without schemas), as well as customized data file formats (fee based).
- Wiki based collaboration environment for each dataset.
- Support for simple metadata queries with planned support for indexed spatial and complex data range queries
- Option to download small data volumes directly from the Data Center data server or (if the retrieved data volume is larger than the current Data Center limitations), the option to have the data shipped using a variety of media for data delivery including DVD, Blu-ray, tape, and HDD.
- Ability to provide both free or secure payment based access to data by users.
- Tiered support services provided at reasonable costs through level of service agreements.

**WINDSAT DATA SETS**

Home Search

**Search Criteria**

**Time Selection**

Starts at: 2003 February 1 01:28 (hr:min)

Ends at: 2012 January 1 00:01 (hr:min)

**Processing Level Selection**

Any  SDR  EDR

**Resolution Selection**

Any  Low  Medium  High

Datasets per page: 10

SEARCH

You can order the entire WindSat data collection [here](#)

WindSat

You are here: TWiki > WindSat Web > Welcome

Welcome to the WindSat web

WindSat is a satellite-based polarimetric microwave radiometer developed by the Naval Research Laboratory Remote Sensing Division and the Naval Center for Space Technology for the U.S. Navy and the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Integrated Program Office (IPO). WindSat is designed to demonstrate the capability of polarimetric microwave radiometry to measure the ocean surface wind vector from space. It is the primary payload on the Coriolis mission, which is jointly sponsored by the DOD Space Test Program and the U.S. Navy (SPANAR PMN-16), Spectrum-Asst of Gilbert, Arizona, built the spacecraft. The WindSat/Coriolis mission was launched on a Titan II rocket from Vandenberg Air Force Base on 06 January 2003.

In addition to providing the Navy with badly needed ocean surface wind vector measurements, WindSat also measures other environmental parameters such as sea surface temperature, total precipitable water, integrated cloud liquid water, and rain rate over the ocean. Furthermore, WindSat provides risk reduction for the NPOESS Microwave Imager and Sounder (MSI), which is the future operational microwave imager tasked with supplying ocean surface wind data. Risk reduction activities include supplying data for model and retrieval algorithm development, sharing technical lessons learned, and using WindSat data to develop CMIS calibration, data exploitation, and data assimilation applications.

**Dataset**

Instructions for receiving data:

- Click on Search
- Choose search criteria and click on the Search link below
- Select files with checkboxes and click on Add Selections to Cart
- Click Return to Results if you wish to select more files
- When finished selecting files, click on Create Tar File
- When requesting fewer than 250 files, it will take a minute to create the tar file before taking you to the download page
  - Click on windsat\_download\_tar to download the data
- The download limit is 250 files. For more than 250 files, a form will appear asking for your email address, and we will contact you for mailing information

• [Terms of Use](#) - WindSat data terms of use

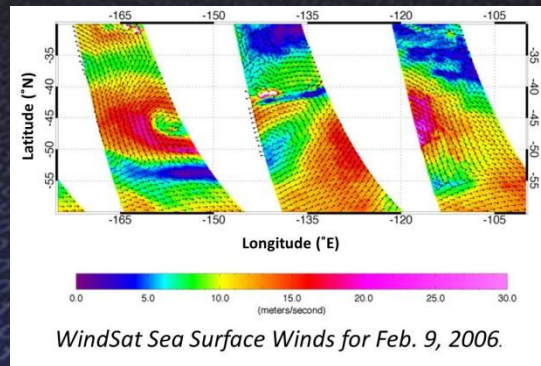
• [Search](#) - Query page for WindSat data sets

• [Data Collection](#) - Request that all of the WindSat data be sent to you

Currently, the Data Center supports the following data products:

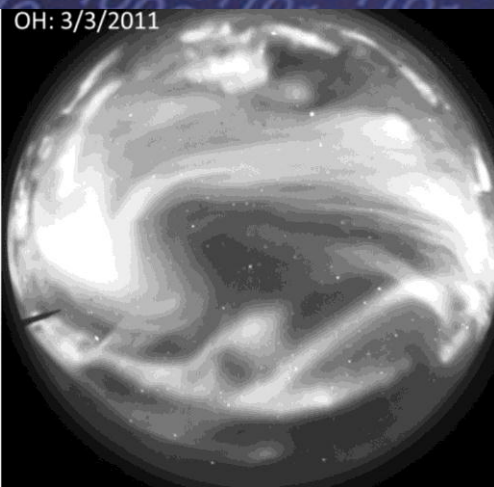
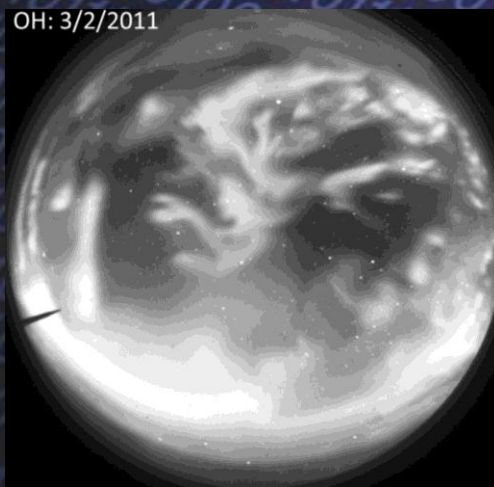
### 1. WindSat

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### 2. MAID

The CPI Mesospheric Airglow Imaging and Dynamics (MAID) project uses a suite of instruments, including the acquisition of a new airglow imager, to investigate short-period gravity waves in the Arctic atmosphere over Alaska. The main instrument is an airglow imager (shown right), a state of the art optical instrument, designed to remotely sense the faint airglow emissions. The data hosted includes nightly summary files acquired by the NICT Lidar and raw image data. The image data consists of several images acquired using a suite of standard airglow filters. In addition to the raw image data, nightly summary files, known as keograms, are also available.



Raw images of spectacular aurora captured in the OH airglow emissions on the nights of March 2 & 3, 2011.