



NOAA's National Centers for Environmental Information

CLASS Access

STAR JPSS 2015 Annual Science Team Meeting, August 24 - 28, 2015



NOAA Satellite and Information Service | National Centers for Environmental Information

Discussion Points

- CLASS's role verses NCEI's role
- What's in CLASS
- Access statistics and patterns
- Types of users accessing data
- Level of access services in CLASS
- Other access

CLASS Role vs. NCEI Role

- Comprehensive Large Array-data Stewardship System (CLASS) is managed by the NESDIS Office of Satellite Ground Services (OSGS). CLASS's current responsibilities include ingest, management, archival and access to its information holdings.
- NOAA's National Centers for Environmental Information (NCEI), in addition to providing similar services as CLASS, are responsible for data stewardship and user support of all information holdings in CLASS and in NCEI.

What JPSS Data can be Accessed?

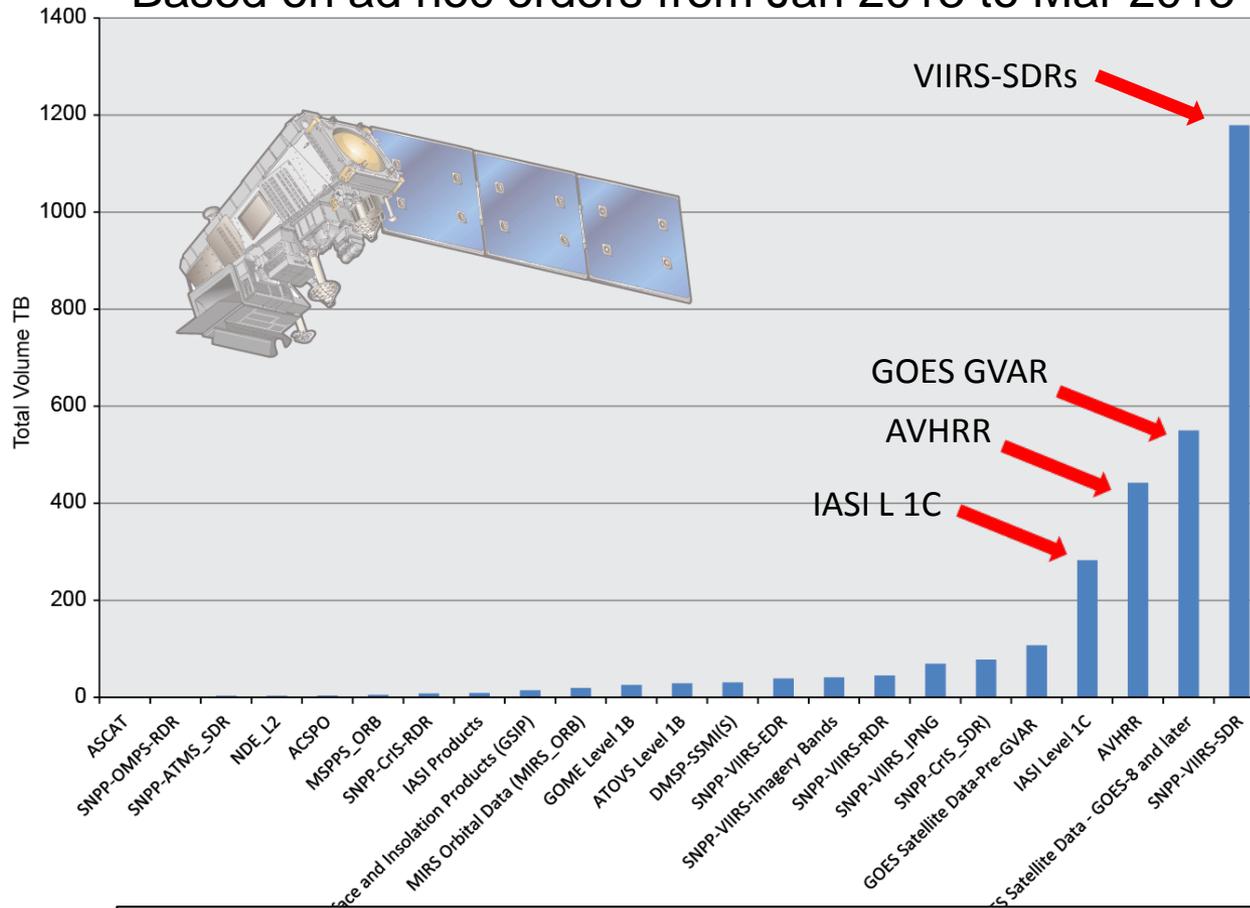
- There are 80 data families in CLASS.
 - 28 JPSS data families - ingest
 - 3 NDE data families listed under S-NPP
- Each family of data may contain many data types.
- Altogether there close to 150 JPSS datasets in CLASS.
- The most popular are the SDR datasets.

Most Popular Datasets

| Satellite/instruments | Period of record | Volume archived |
|--|------------------|-----------------|
| S-NPP VIIRS xDRs | 2012 to current | ~4400 TB |
| GOES GVAR and pre-GVAR Imager datasets | 1979 to current | ~335 TB |
| POES/MetOp AVHRR and ATOVS Level 1b datasets | 1978 to current | ~116 TB |
| MetOp IASI datasets | 2007 to current | ~109 TB |

Most Popular Datasets by Volume*

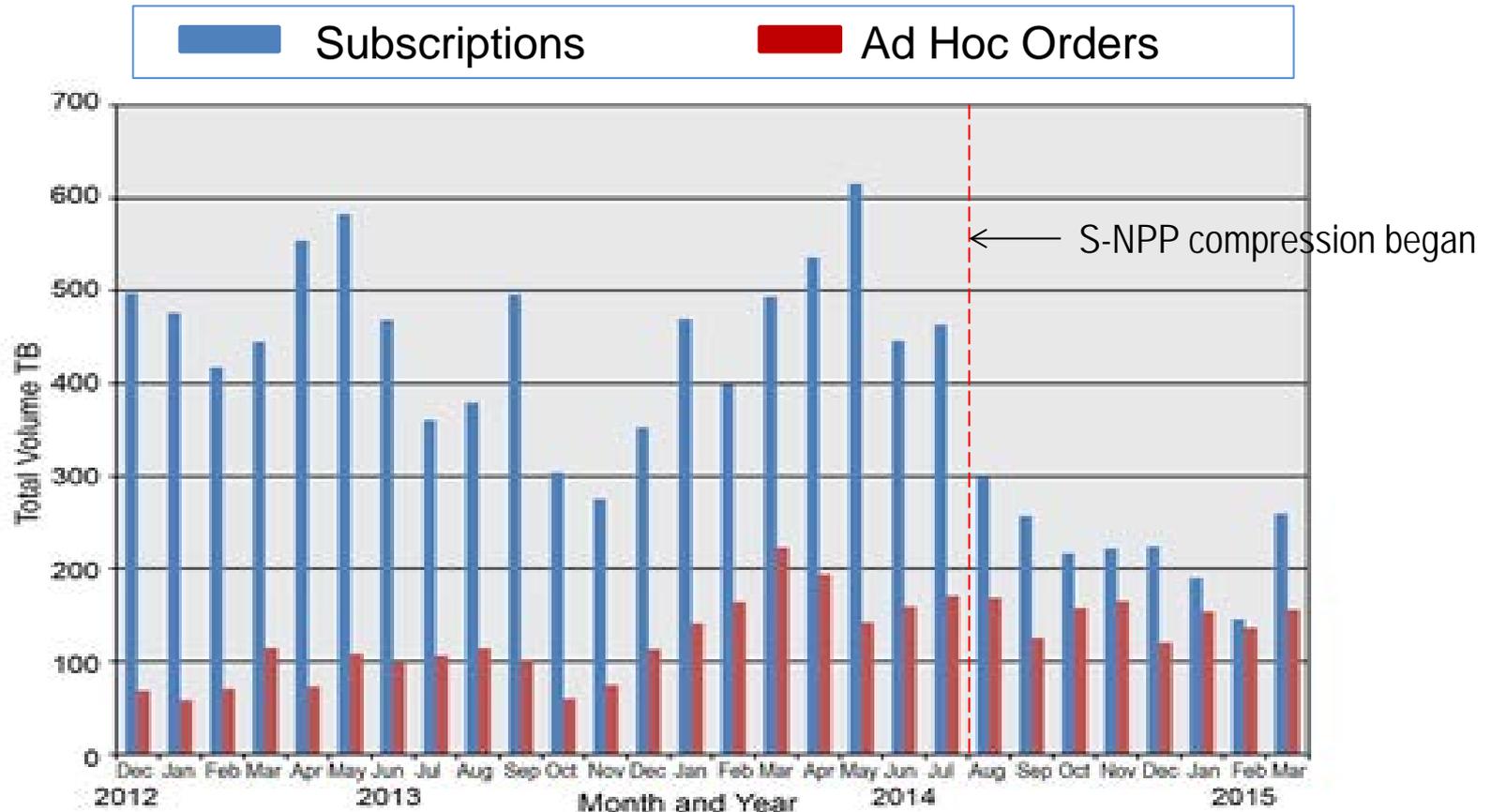
*Based on ad hoc orders from Jan 2013 to Mar 2015



23 CLASS data families with over 2 TB delivered

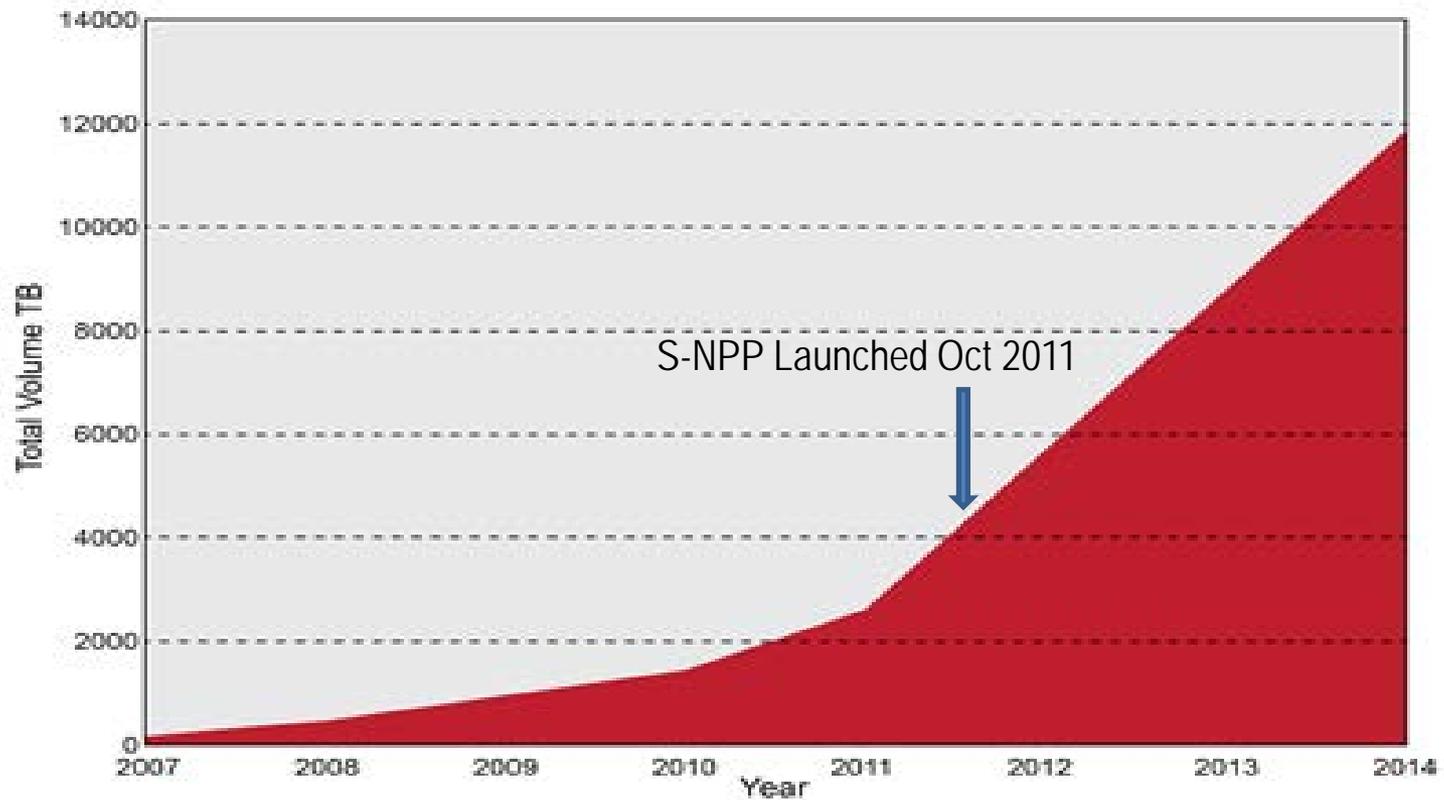


Monthly Totals (TB) Accessed

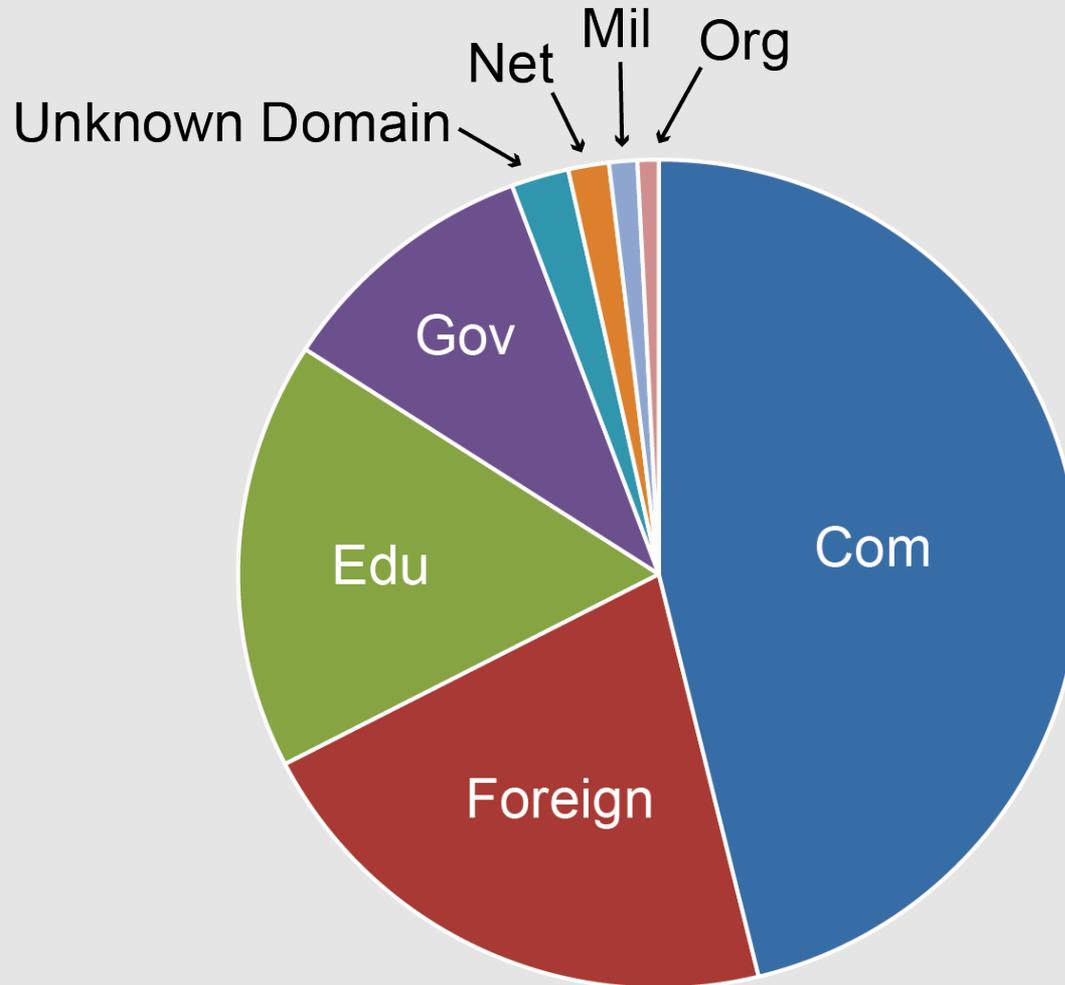


Total Archive Growth in CLASS

Total archive volume in CLASS is around 11.5 PB



Who are the users of CLASS?



How do I access data from CLASS?

Step 1: Register for a user id account at www.class.noaa.gov (minimal information: your name, e-mail address, a password)

Step 2: Select from the drop down product menu and highlight a dataset

Step 3: On the Search page make your selections (geographic region, start/end dates and times, and data types).

Step 4: Determine if you need greater access or a subscription

Note: Always provide your user ID when contacting the CLASS helpdesk



Levels of Access Services

| CLASS order types: | Average completion time | Average File Limit | Contact the CLASS Help Desk? |
|---|-------------------------------|--------------------|------------------------------|
| Ad hoc orders (Use Search button to obtain inventory) | Usually within 12 to 24 hours | Up to 500 files | No |
| Large orders (use Quick Search button to skip inventory) | 24 to 48 hours | 1000 | No |
| Block orders (use Quick Search button) | > 48 hours | 3000 | Yes |
| Subscription (standing orders) | < 6-7 hours | No limit | Yes |

Proposed Access Increases to JPSS Data

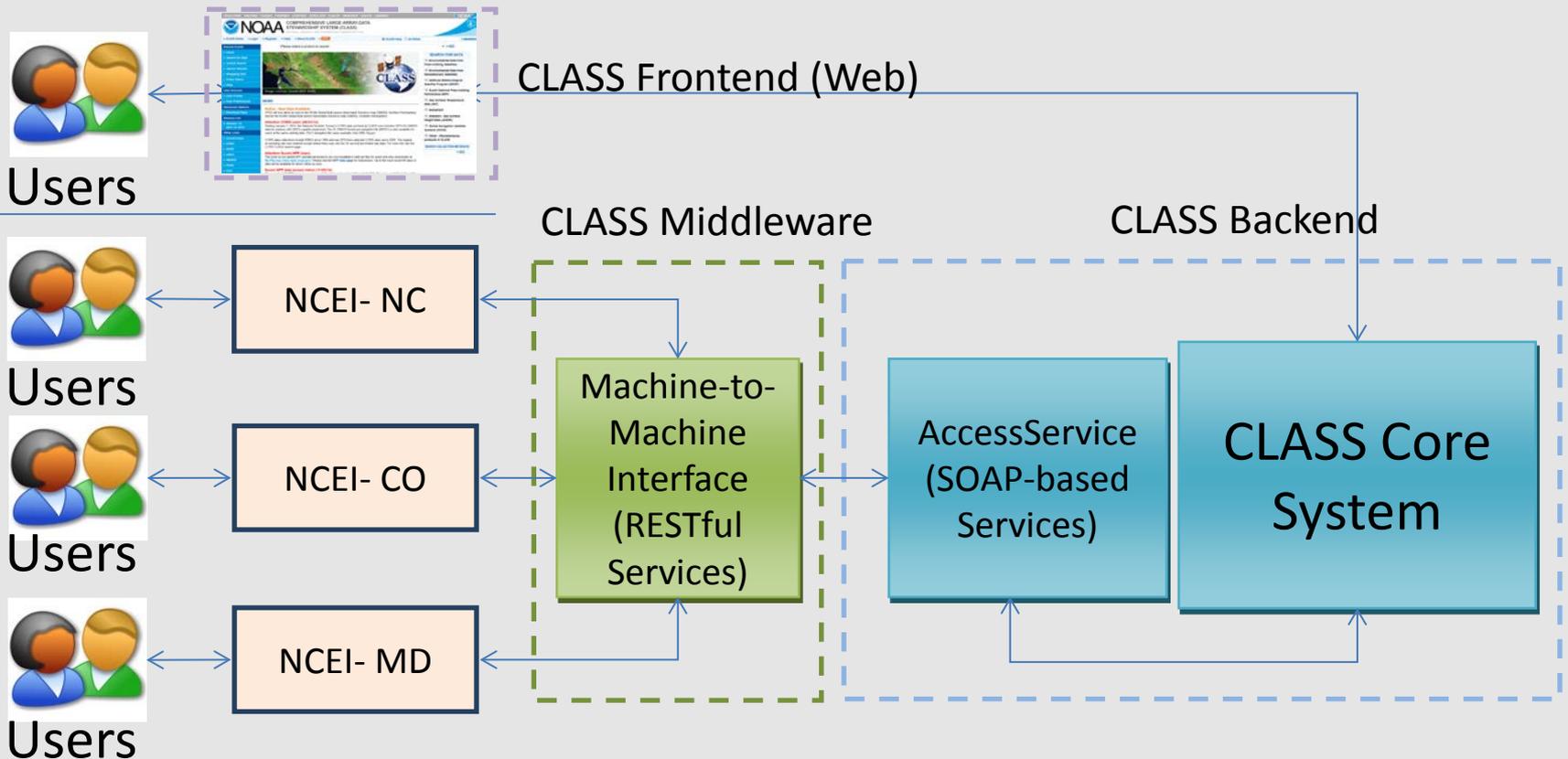
| CLASS Data Family | Large Order File Limit | Proposed Limit | Block Order File Limit | Proposed Limit | Estimated Volume (GB) for Proposed Large Order (based on largest files within the group) |
|-------------------|------------------------|----------------|------------------------|----------------|--|
| ATMS_RDR | 1000 | 3000 | 3000 | 6000 | <10 GB |
| ATMS_SDR | 1000 | 3000 | 3000 | 6000 | <14 GB |
| ATMS_TDR | 1000 | 3000 | 3000 | 6000 | <10 GB |
| CERES_RDR | 1000 | 5000 | 3000 | 10000 | <10 GB |
| CRIS_RDR | 1000 | 2000 | 3000 | 5000 | up to 270 GB |
| CRIS_SDR | 1000 | 2000 | 3000 | 5000 | up to 500 GB |
| CRIS_IP | 1000 | 5000 | 3000 | 10000 | ~5.5 (restricted) |
| CRIMSS_EDR | 1000 | 5000 | 3000 | 10000 | <10 GB (product discontinued as of 9/8/2014) |
| CRIMSS_IP | 1000 | 5000 | 3000 | 10000 | <10 GB (restricted) |
| OMPS_RDR | 1000 | 3000 | 3000 | 6000 | up to 210 GB (orbital files) |
| OMPS_SDR | 1000 | 2000 | 3000 | 4000 | up to 750 GB |
| OMPS_IP | 1000 | 3000 | 3000 | 6000 | ~60 GB |
| OMPS_EDR | 1000 | 3000 | 3000 | 10000 | up to 123 GB |
| VIIRS_RDR | 1000 | 2000 | 2000 | 4000 | up to 450 GB |
| VIIRS_SDR | 1000 | 2000 | 2000 | 4000 | up to 500 GB |
| VIIRS_I_EDR | 1000 | keep | 2000 | 4000 | up to 1000 GB |
| VIIRS_EDR | 1000 | keep | 2000 | 4000 | up to 750 GB |
| VIIRS_IPGD | 1000 | keep | 3000 | 4000 | up to 450 GB |
| VIIRS_IPNG | 1000 | keep | 3000 | 4000 | up to 725 GB |

Levels of Access Services (2)

CLASS provides daily tar files containing publicly available S-NPP products for easy anonymous FTP download at: <ftp://ftp-npp.class.ngdc.noaa.gov/>

- Most recent 85 days
- 80 datatypes (including Geolocation files)
 - Newly added NDE_L2 NUCAPS and MIRS and NDE_Daily Polar Winds
- Data are compressed and “tar”-ed by datatype
- Sorted by Date (YYYYMMDD)/Data Family/Data Type
- Includes manifest files (xml format)
- No registration required for access

Other Access Under Development (Machine to Machine)



The M2M API implements a set of RESTful web services for searching, ordering, and order status querying of CLASS's information holdings.

Assistance and Support

For technical questions regarding access in CLASS:

class.help@noaa.gov
axel.graumann@noaa.gov

Tutorial on using CLASS:

CLASS Access tutorial - on CLASS Home Page in the News section





NOAA

COMPREHENSIVE LARGE ARRAY-DATA STEWARDSHIP SYSTEM (CLASS)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

» CLASS Home » Logout » Help » About CLASS » **RSS**

» CLASS Help » All NOAA

» SEARCH

Please select a product to search

» GO

Around CLASS

- » Home
- » Subscriptions
- » Archive Manager
- » Search for Data
- » Upload Search
- » Search Results
- » Shopping Cart
- » Order Status
- » Help

User Account

- » User Profile
- » User Preferences

Advanced Options

- » Download Keys

Release Info

- » Version 7.0.2.0.1
August 13, 2015

Other Links

- » CLASS Home
- » NCEI
- » NESDIS
- » NOAA
- » DOC



Image source: Suomi NPP VIIRS

NEWS**Attention S-NPP Users! (07/13/15):**

NESDIS S-NPP Data Exploitation (NDE) Level 2 and Level 3 Products are now available for the most recent 90 days at <ftp://ftp-npp.class.ngdc.noaa.gov>. These products are tarred and gzip compressed for easier access. The products include NOAA-Unique CrIS-ATMS Processing System (NUCAPS) Cloud-Cleared Radiances (CCRs) and Environmental Data Records (EDRs) and daily Level 3 NH/SH Polar Winds and Green Vegetation Fraction (GVF) products.

New tutorial on how to search and order data in CLASS! (04/27/15):

A tutorial for searching and ordering data through CLASS can be found here: [CLASS Data Access Tutorial](#). The tutorial gives a step by step screen capture views of the searching and ordering process from registering with CLASS to checking on the status of your order. It also covers the various levels of access services offered from CLASS at this time. If you have any questions please email the [CLASS Help Desk](#).

Attention Suomi NPP Users:

The most recent global NPP operational products are now available in daily tar files for quick and easy downloads at: <ftp://ftp-npp.class.ngdc.noaa.gov>. Please see the [NPP help page](#) for instructions. Up to the most recent 85 days of data will be available for direct online access.

Suomi NPP data access status (11/25/14):

The majority of S-NPP products are now available and can be ordered through CLASS. The ones available to the public will show the begin dates after the product name on the search page. Also, a "quick look" of which products are at which

SEARCH FOR DATA

- Environmental Data from Polar-orbiting Satellites
- Environmental Data from Geostationary Satellites
- Defense Meteorological Satellite Program (DMSP)
- Suomi National Polar-orbiting Partnership (NPP)
- Sea Surface Temperature data (SST)
- RADARSAT
- Altimetry / Sea Surface Height Data (JASON)
- Global Navigation Satellite Systems (GNSS)
- Other - Miscellaneous products in CLASS

SEARCH COLLECTION METADATA

» GO



Questions?

