



What's New

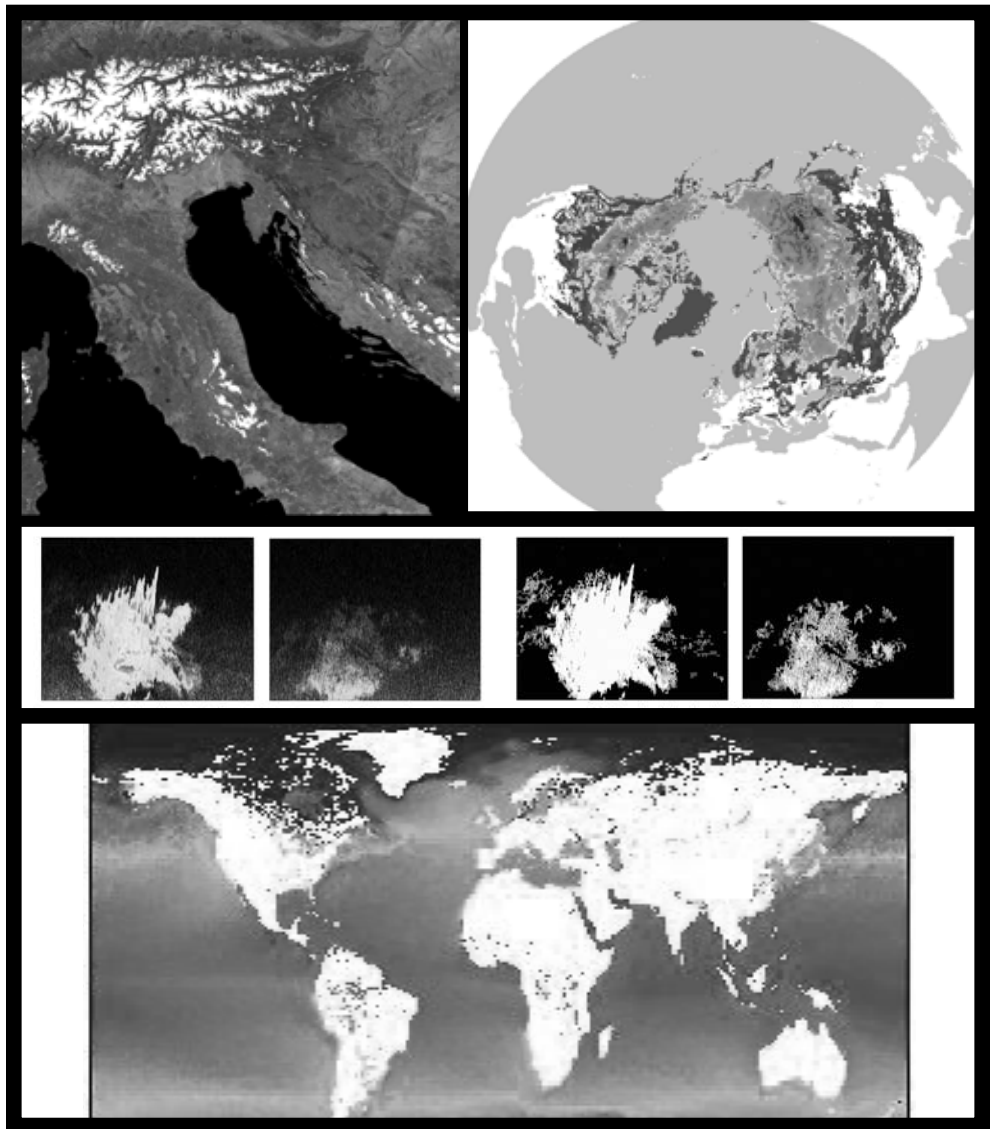
NASA EOSDIS Data Centers

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NASA Earth Observing System Data and Information System (EOSDIS) data centers provide a wide variety of interdisciplinary Earth system science data, information, services, and tools to a diverse group of users, ranging from scientists and policy makers to applications and educational communities. NASA's unique view of Earth from space enables us to study and advance our understanding of the planet's interrelated processes.

For more information about the EOSDIS data centers see: <http://nasadaacs.eos.nasa.gov>.
For more information about science at NASA see: <http://science.hq.nasa.gov>

ATMOSPHERE

Clouds and the Earth's Radiant Energy System (CERES)

http://eosweb.larc.nasa.gov/PRODOCS/ceres/table_ceres.html

Energy Balanced and Filled (EBAF) data include monthly and climatological regional, zonal, and global averages of top-of-atmosphere (TOA) clear-sky and all-sky Longwave (LW) and Shortwave (SW) fluxes, where the net flux is constrained to the global heat storage. These data are in netCDF format and are designed for climate modelers.

Global Land Data Assimilation System (GLDAS) data

<http://disc.sci.gsfc.nasa.gov/hydrology/>

Global Land Data Assimilation System (GLDAS) data products are now available. The new Hydrology Data and Information Services Center (HDISC) <http://disc.gsfc.nasa.gov/hydrology/hydro_get_data.shtml> portal enables both ftp and Mirador access to GLDAS data sets. Spatial and temporal subsetting capabilities are available to simplify processing and reduce data transfer and storage burdens. Features include:

- Online Portal to GLDAS data sets
- Serves as easy access to archive and distribution system
- On the fly subsetting, Open-source Project Data Access Protocol (OPeNDAP) and GrADS Data Server (GDS) services available
- North American Land Data Assimilation System (NLDAS) data will soon be available through the HDISC portal (late 2008)

Aura Ozone Mapping Instrument (OMI), Microwave Limb Sounder (MLS) and High Resolution Dynamics Limb Sounder (HIRDLS)

<http://disc.gsfc.nasa.gov/Aura>
<http://acdsc.gsfc.nasa.gov>

The Atmospheric Composition DISC (ACDISC) has recently added new data products for HIRDLS, and the OMLER (OMI / Aura Surface Reflectance Climatology).

- 004 HIRDLS2 data files (based on V2.04.19 algorithm) contains retrievals of temperature, ozone (O₃), nitric acid (HNO₃), CFC-11 (CF₂Cl), CFC-12 (CFCl₃), cloud top pressure and aerosol extinction
- OMI/Aura Surface Reflectance Climatology Level-3 Global 0.5deg Lat/Lon Grid

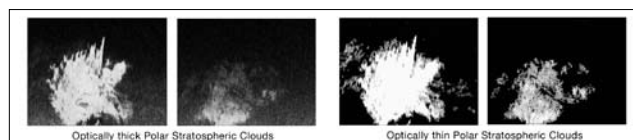
Multi-angle Imaging SpectroRadiometer (MISR) Plume Height Climatology Project

<http://eosweb.larc.nasa.gov/PRODOCS/misr/data.html>

The "MISR Plume Height Climatology Project" Web site is a publicly-available repository for wildfire plume data acquired using the MISR and Moderate Resolution Imaging Spectroradiometer (MODIS) instruments on Terra, and processed to produce an aerosol injection height climatology supporting wildfire, climate change, and air quality studies. The data include:

- Location and time of plume observations
- Plume height measurements from which injection heights may be deduced
- Approximate radiative power of associated fires
- Direction of transport of plumes
- Areas of individual smoke plumes
- Aerosol properties and albedo estimates

Similar information is also provided for selected regions of dense smoke not clearly associated with specific fire sources (smoke clouds), and whose direction of transport is not easily determined. Currently, the Web site contains downloadable data and images of smoke plumes for the Alaska 2004, and the North America 2002, 2005, 2006, and 2007 fire years. Processing of other locations and years is underway and results will be added to the web site as they become available. The data were processed using the MISR Interactive eXplorer (MINX).



This set of four images show an example of CALIPSO Polar Stratospheric Cloud (PSC) detection. The two left paired images are optically thick PSCs from July 24, 2006. (Left image: 523-nm backscatter coefficient image, Right image: Corresponding PSC mask produced by the cloud detection algorithm) This figure illustrates the sensitivity of the detection algorithm to tenuous clouds.

Image and caption courtesy: CALIPSO Science Team

Surface Radiation Budget (SRB)

http://eosweb.larc.nasa.gov/PRODOCS/srb/table_srb.html

Release 3 data products are now available for the Quality Control (QC) Longwave 3-hourly and 3-hourly monthly, daily, and monthly averages; Shortwave 3-hourly and 3-hourly monthly, daily and monthly local, and daily and monthly UTC averages; and QC Shortwave daily and monthly averages. These data are available for July 1, 1993 through June 30, 2007.

Surface meteorology and Solar Energy

http://eosweb.larc.nasa.gov/PRODOCS/sse/table_sse.html

The Release 6.0 Surface meteorology and Solar Energy (SSE) data set contains parameters formulated for assessing and designing renewable energy systems. This latest release contains new parameters based on recommendations by the renewable energy industry and it is more accurate than previous releases. Online plotting capabilities allow quick evaluation of potential renewable energy projects for any region of the world. The SSE data set is formulated from NASA satellite- and reanalysis-derived insolation and meteorological data for the 22-year period of July 1983 through June 2005. Results are provided for 1° latitude by 1° longitude grid cells over the globe.

The SSE Web Site includes:

- Ability to obtain SSE data for locations, global/regional areas, and daily and monthly ground measurements
- Over 200 satellite-derived meteorology and solar energy parameters averaged over 22 years (July 1, 1983 to June 30, 2005)
- ASCII text and color plots on both global and regional scales
- Measurements of global solar energy for 1195 ground sites

Stratospheric Aerosol and Gas Experiment (SAGE) III

http://eosweb.larc.nasa.gov/PRODOCS/sage3/table_sage3.html

SAGE III-measured water vapor profiles are being released for the first time in Version 4 of SAGE III Solar Level-1 and -2 products. This version contains other improvements over previous versions, including reduced noise and decreased uncertainties in ozone, NO₂, and aerosol extinction profiles and improved agreement with ozonesonde data in the Upper Troposphere/Lower Stratosphere (UT/LS) region. The algorithms used in this version's processing are increasingly standardized with other Solar Occultation Science Team missions by performing retrievals with the ozone absorption cross sections used by SCanning Imaging SpectroMeter for Atmospheric CHartography

(SCIAMACHY) and using a new oblate earth model. Other improvements in the Version 4 processing include revised point registration and refraction algorithms.

Tropospheric Emission Spectrometer (TES)

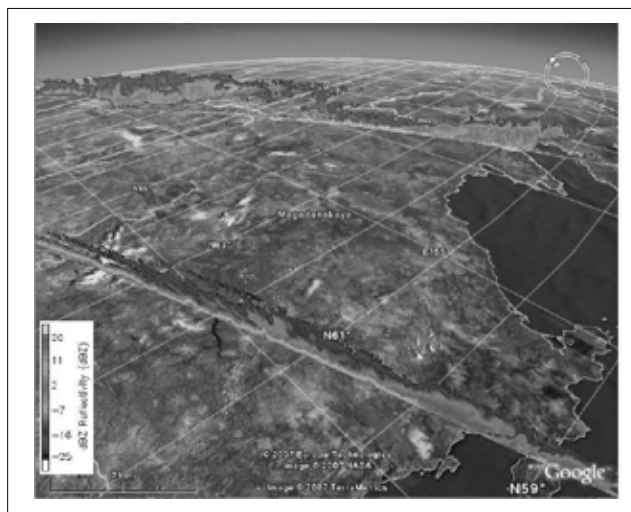
http://eosweb.larc.nasa.gov/PRODOCS/tes/table_tes.html

Version 4 TES Level-2 data products contain improved nadir temperature, ozone, and methane products, which improve the bias compared to meteorological analysis values. New quality flag information was added for the ozone product. The format of the Level-2 products was also revised. This release includes new supplemental products for both global surveys and special observations, which may be used to assist in the independent processing of retrievals.

Atmospheric Infrared Sounder (AIRS) Near Real Time (NRT) Data Products

http://disc.sci.gsfc.nasa.gov/AIRS/data_access.shtml#NRT

Aqua AIRS Level-1B (L1B) and Level-2 (L2) data products are available in near-real time and are especially useful for users whose primary interest is the low latency for data availability. Data are generally available within 3 hours of observation.



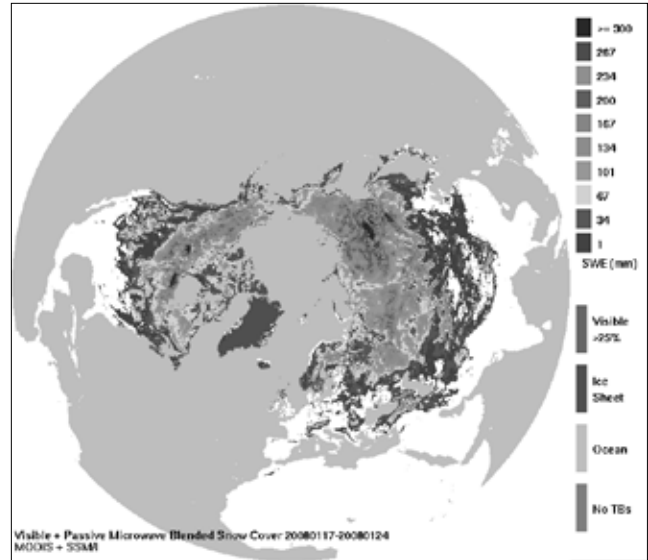
CRYOSPHERE

Greenland Ice Sheet Melt Characteristics Derived from Passive Microwave Data, Data Set

NSIDC has released the *Greenland Ice Sheet Melt Characteristics Derived from Passive Microwave Data* data set which is a binary indicator of the state of melt of each pixel on the Greenland ice sheet for each day of observation. The Greenland ice sheet melt extent data, acquired as part of NASA's Program for Arctic Regional Climate Assessment (PARCA) program, is a daily estimate of the spatial extent of wet snow on the Greenland ice sheet since 1979. It is derived from SSM/I and SMMR passive microwave satellite brightness temperature characteristics using the cross-polarized gradient ratio (XPGR) of Abdalati and Steffen (1997). The data are provided in a variety of formats including raw data in ASCII format, data in binary format gridded on a Greenland subset of the Northern Hemisphere polar stereographic projection and annual and complete time series climatologies in binary and GeoTIFF format all at a resolution of 25 km. All data are available via FTP. For more information see the product Web site (<http://nsidc.org/data/nsidc-0218.html>).

Global EASE-Grid 8-day Blended SSM/I and MODIS Snow Cover

NSIDC has released the *Global EASE-Grid 8-day Blended SSM/I and MODIS Snow Cover* data set suitable for continental- to hemispheric-scale seasonal fluctuations of snow covered area (SCA) and snow water equivalent (SWE). This data set comprises global, 8-day SWE data from 2000 through 2007, enhanced with SCA derived from MODIS visible wavelength bands. The new data set blends visible and microwave data at higher temporal resolution (8-day) and is the first snow cover product to be released in netCDF format, at the request of modelers. Produced in the 25-km Equal-Area Scaleable Earth Grid (EASE-Grid), the new product is unique in blending information from both passive microwave and visible sensors on a global scale for the period when both types of sensor data are available. For more information, see the product Web site <<http://nsidc.org/data/nsidc-0321.html>>.



Global EASE-Grid 8-day Blended SSM/I and MODIS Snow Cover Northern Hemisphere Browse Image Average snow water equivalent (in millimeters) from the passive microwave sensor with the additional red area classified as snow by MODIS for more than 25% of the grid cell area for 17 January 2008 to 24 January 2008.

HUMAN DIMENSIONS

Last of the Wild, v2

<http://sedac.ciesin.columbia.edu/wildareas/>

The Last of the Wild, v2 depicts human influence on terrestrial ecosystems using data sets compiled circa 2005. The data collection includes the Human Influence Index (HII) grids, Human Footprint grids, and the Last of the Wild vector data. The data sets are available in global and continental scales. Global data are available in the geographic coordinate system at 30 arcsec grid cell size and Interrupted Goode Homolosine Projection at 1 km grid cell size. Continental level data is only available in the geographic coordinate system. Data are also available in ASCII (.asc) and ArcInfo Grids. The Last of the Wild vector data are available only in shapefile format.



Species Distribution Grids

<http://sedac.ciesin.columbia.edu/species>

Data on nearly 12,000 species are distributed via the Species Distribution Grids Web site. Data are available for global amphibian distributions, and for birds and mammals in the Americas. Vector shapefiles produced by a consortium led by NatureServe, as well as original grids (a raster version of the vector data) and presence grids (raster data depicting the presence or absence of each species), produced by SEDAC are available. The grids are intended to be of assistance to researchers for modeling, conservation, and human dimensions research purposes. The data sets include:

- 5810 species of amphibian
- 4166 species of aves
- 1716 species of mammalia

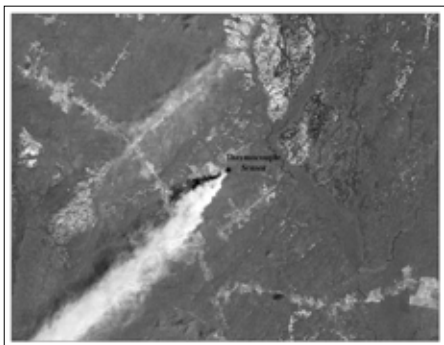
The grids are at 1-km (30 arc-second) resolution in GeoTIFF format. In addition, species richness maps at continental and global scales can be downloaded for each of the classes.

LAND

The Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA)

<http://daac.ornl.gov/LBA/lba.html>

The LBA was an international research initiative conducted from 1995–2006 and led by Brazil. The project focused on understanding how tropical forest conversion, regrowth, and selective logging influence carbon storage, nutrient dynamics, trace gas fluxes, and the prospect for sustainable land use in Amazonia. Eleven new data sets are available: 2003 Vegetation Fire Data Roraima, Brazil; 5-km resolution 2001 AVHRR derived fire occurrence in Amazonia; CO₂ and temperature profiles, CO concentrations, CO and H₂O Eddy Fluxes, and H₂O profiles at the km 67 Flux Tower Site; and forest litter, ground-based biometry, coarse woody debris, and tree diameter data at the km 67 Flux Tower Site.



Regional and Global Data

<http://daac.ornl.gov/tem.shtml>

The Oak Ridge National Laboratory (ORNL) Distributed Active Archive Center (DAAC) compiles, archives, and distributes regional and global data (RGD) to improve the understanding of the structure and function of various ecosystems. Two new regional and global data sets have been released: Characteristics of African Savanna Biomes for determining woody cover, and version 2.1 of a global fire emissions database.

ASTER Shortwave Infrared (SWIR) Crosstalk-Corrected Products

https://lpdaac.usgs.gov/lpdaac/products/aster_product_table

A new suite of higher-level on-demand ASTER Level-2 Surface Reflectance SWIR, and Level-2 Surface Radiance SWIR crosstalk-corrected products have been released. The crosstalk problem involves incident light reflecting off the ASTER Band 4 detector and being projected onto other SWIR detectors (VNIR retrieved products are not affected). These products contain atmospherically corrected shortwave infrared data and include both the VNIR reflectance and radiance products along with the SWIR crosstalk-corrected products. The LP DAAC continues to offer the original suite of SWIR crosstalk-uncorrected radiance and reflectance products.

Model Archive

http://daac.ornl.gov/model_intro.shtml

The ORNL DAAC currently archives and distributes the following model products: three benchmark model versions—BIOME-BCG, Integrated Biosphere Simulator (IBIS), and Land Surface Model (LSM); CENTURY—Version 4 (VEMAP); two PNet model products; two models used in published research results associated with specific model implementations—BIOME-BCG (Law et al.) and BIOME-BGC; and Mapped Atmosphere-Plant-Soil System (MAPSS Version 1.0).

Advanced Spaceborne Thermal Emission Radiometer (ASTER) Level-3 Orthorectified Imagery

<http://lpdaac.usgs.gov/aster/asterdataprod.asp>

Beginning March 7, 2007, the LP DAAC offers a new suite of ASTER Level-3 on-demand Orthorectified Image products. An orthorectified image is similar to a map with near-vertical views for every location. These products are generated using ASTER Level-1A data and

a DEM derived from the same data. Two product suites are planned for release: 1. AST140TH is the short name of the ASTER on-demand Level-3 Orthorectified product, which includes 15 orthorectified ASTER Level-1B calibrated radiance images, 1 per each band, including Band 3B. 2. AST14DMO is the short name of the ASTER on-demand product composed of both the Level-3 DEM and Orthorectified Image product. The distributed product is a zipped multi-file containing both a DEM, and 15 orthorectified Level-1B calibrated radiance images, 1 per each band.

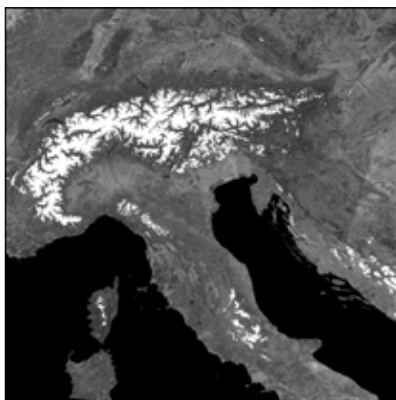
Southern African Regional Science Initiative (SAFARI) 2000

<http://daac.ornl.gov/S2K/safari.html>

The SAFARI 2000 project was an international regional science initiative conducted from 1992–2000 to develop a better understanding of the Earth–atmosphere–human system in Southern Africa. The final data set in this field campaign has been published, MISR Level-2 Data, Dry Season 2000.

MODIS Burned Area Product

The Land Processes (LP) DAAC released the MODIS Burned Area product (MCD45A1) on October 1, 2008. MCD45A1 is a monthly Level-3 gridded 500-m product, which contains burning and quality information on a per-pixel basis. Produced from both the Terra and Aqua MODIS-derived daily surface reflectance inputs, the algorithm analyzes the daily surface reflectance dynamics to locate rapid changes, uses that information to detect the approximate date of burning, and maps the spatial extent of recent fires. It provides varied quality assessment information and a single summary quality assessment score for each pixel. Please visit <http://lpdaac.usgs.gov> for more details on the products and services available from the LP DAAC.



OCEANS

The Group for High Resolution Sea Surface Temperature (GHRSSST) Project

<http://ghrsst.jpl.nasa.gov>

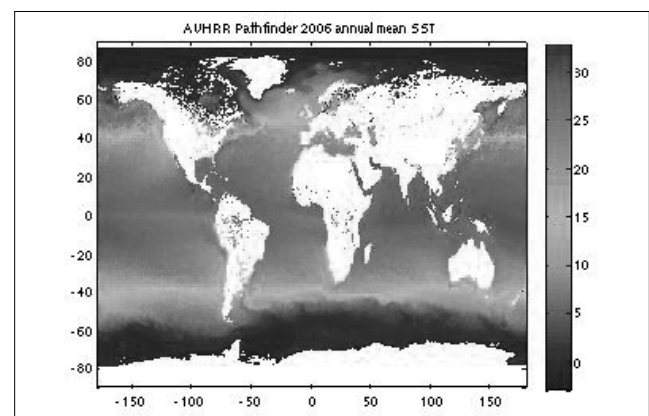
<http://www.ghrsst-pp.org>

GHRSSST, formerly known as the Global Ocean Data Assimilation Experiment (GODAE) High Resolution Sea Surface Temperature Pilot Project, continues to serve the scientific, modeling, and applications communities with Level-2, -3, and -4 sea surface temperature (SST) data from a wide variety of sources. For 2008, 6 new global and regional Level-4 gap-free products have been added. In the near future, GHRSSST will also distribute a new global 1-km SST Level-2 product from the Advanced Very High Resolution Radiometer (AVHRR) sensor onboard MetOp. All products are available through the JPL Global Data Assembly Center via <http://ghrsst.jpl.nasa.gov>. Historical data that are 30 days or older can be found at the GHRSSST Long Term Stewardship and Reanalysis Facility (LTSRF) at <http://ghrsst.nodc.noaa.gov>.

AVHRR Pathfinder Sea Surface Temperature Version 5 Data

<http://podaac.jpl.nasa.gov/PRODUCTS/p216.html>

The longest running climate-quality satellite sea surface temperature data set has been upgraded and access has been improved. Pathfinder version 5 sea surface temperature data provided by the NOAA National Oceanographic Data Center (NODC) now runs from 1985 through 2007. At 4-km resolution, these products are available in daily, 5-day, 7-day, 8-day, monthly, and yearly averages. The data through 2006 has been finalized and 2007 interim data are now available. The PO.DAAC has re-organized this historic data set into distinct daytime and nighttime directories.



TOOLS AND SERVICES

Convert to Vector Tool

<http://www.asf.alaska.edu/sardatacenter/softwaretools>

The Convert to Vector tool transforms point or scene information to formats that are compatible with external applications such as Google Earth, ArcGIS, text editors, and spreadsheet software. The tool provides the capability to quickly and easily view the extent of a Synthetic Aperture Radar (SAR) data set or metadata file.

Global Change Master Directory (GCMD)

<http://gcmd.nasa.gov>

A directory to discover Earth science data and data-related services, the GCMD database currently holds more than 23,000 metadata descriptions relevant to climate change and environmental science. The CEOS International Directory Network (IDN) <<http://idn.ceos.org/>> is a related GCMD international effort to assist researchers in locating information on available data sets, services, and associated Earth observation platforms and instruments. New features include:

- Climate Diagnostics Portal providing visualizations of climate trends and variability that could be readily interpreted by decision makers and the general public.
- Prototype Platform and Instrument interface allowing users to easily scan, sort, and subset records associated with space-based platforms and Instruments.
- Link to search NASA data from the GCMD homepage.

NetCDF/CF1 Conversion at the GSFC Earth Sciences Data and Information Services Center (GES DISC)

<http://mirador.gsfc.nasa.gov>

Several HDF4 data sets can now be converted on the fly to netCDF/CF-1 format. This makes them easily importable into some netCDF-capable tools such as IDV and McIDAS-V. NetCDF conversion can be accessed in the shopping cart of the GES DISC's Mirador search tool (URL above). The conversion is available for:

- AIRS Level-3 (gridded) data
- AIRS Level-2 Standard Retrievals (imports only into IDV and McIDAS-V)
- TOMS Level-3 (gridded) data
- OMI Level-3 (gridded) Ozone and UVB data

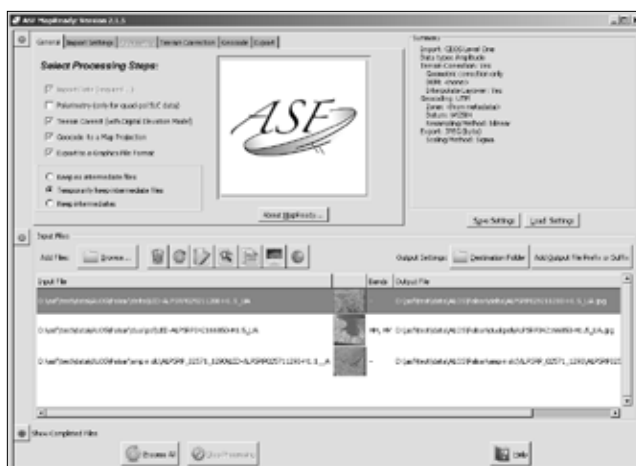
MapReady Tool Suite

<http://www.asf.alaska.edu/sardatacenter/softwaretools>

The MapReady Tool Suite includes several tools for working with remotely sensed data: MapReady, ASFView, CEOS Metadata Viewer, and the Projection Coordinate Converter. Each tool can be used through a graphical user interface or through the command line. The tool suite is available with prepackaged installers for Windows and Linux; source code is also available.

MapReady Features:

- Accepts Committee on Earth Observation Satellites (CEOS), GeoTIFF, and Alaska Satellite Facility (ASF) format data
- Data can be geocoded to a variety of map projections
- SAR data can be terrain corrected
- Includes CEOS and ASF metadata viewers
- Imagery can be displayed in the viewer
- Thumbnails are displayed for all queued and processed images
- Data can be processed and saved to the GeoTIFF format for use in Geographic Information System (GIS) programs
- Capability to perform decompositions and classifications on polarimetric SAR data
- Faraday Rotation can be corrected for in fully polarimetric SAR data



HDF5 Data through OPeNDAP at the GSFC Earth Sciences Data and Information Services Center (GES DISC)

<http://acdisc.sci.gsfc.nasa.gov/opensdap>

Several OMI Level-3 HDF5 data sets are now offered on an experimental basis through OPeNDAP. This should make these OMI products easily importable into many OPeNDAP-capable tools, such as IDV, McIDAS-V, and Panoply.

Simple, Scalable, Script-Based, Science Processor for Measurements (S4PM) version 5.27.0 is now available to the open source community from SourceForge.

<http://sourceforge.net/projects/s4pm/>

S4PM is a system for highly automated processing of science data. It is the main processing engine at the Goddard Earth Sciences Data and Information Services Center (GES DISC). S4PM was released to the open source and is available at SourceForge (see above URL).

Mirador

<http://g0dup05u.ecs.nasa.gov/OPS/mirador/>

- Simplified Web interface for searching, browsing, and ordering Earth science data at NASA Goddard Earth Sciences Data and Information Services Center (GES DISC).
- Features include quick response, data file hit estimator, Gazetter, and interactive shopping cart. Available data include AIRS; Aura (MLS, OMI); TOMS; TRMM; and UARS.



A-Train Data Depot (ATDD)

<http://disc.sci.gsfc.nasa.gov/atdd/>

- Processes, archives, allow, access to, visualizes, analyzes, and correlates distributed atmospheric measurements from A-Train instruments.
- Provides easy online data access and services for science, applications, and educational use so that users get exactly the data they want, and not large files of data that would take much time and effort by individuals to co-register and refine.
- Data sets currently accessible from, and co-registered in, the ATDD include CloudSat, Microwave Limb Sounder (MLS), Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) lidar, MODIS, AIRS, OMI, and Polarization and Directionality of Earth Reflectances (POLDER).

GES DISC Northern Eurasian Earth Science Partnership Initiative (NEESPI) Portal

<http://neespi.sci.gsfc.nasa.gov/>

- A multi-sensor, online, easy access data archive and distribution system to provide advanced data management capabilities in support of the NEESPI scientific objectives.
- Tools include data analysis and visualization, data mining and other technique, on multi-instrument atmospheric and land parameters.

Acquiring Data Through the GES DISC Web Map Service

http://disc.sci.gsfc.nasa.gov/services/wxs_ogc.shtml

GES DISC data users who have Open Geospatial Consortium Web Map Service (OGC WMS) clients can now access rainfall data from TRMM, and humidity, temperature, clouds, and trace gases data from AIRS through their client. The GES DISC is providing several layers through the OGC WMS using the Minnesota MapServer.

Giovanni Air Quality Instance

http://disc.gsfc.nasa.gov/techlab/giovanni/giovanni_air_quality_instance.shtml

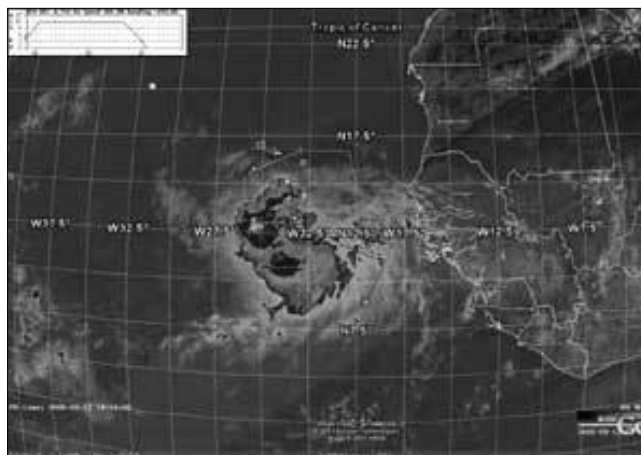
A new Giovanni instance dedicated to air quality related data is now available. The instance includes global aerosol and cloud data from

MODIS, global aerosol data from OMI, and the AIRNow Fine Particulate Matter (PM2.5) ground-based monitoring product for the continental United States.

NASA Real Time Mission Monitor (RTMM)

<http://rtmm.nsstc.nasa.gov/>

- Facilitates mission planning by providing satellite overpass projections and atmospheric model forecasts
- Uses Google Earth as its visualization engine
- Satellite imagery, aircraft state information, and surface data sets into a single easy-to-use visualization package
- Post-mission playbacks enable the scientist to review the completed flight missions



MISR Interactive eXplorer (MINX)

<http://www.openchannelsoftware.com/projects/MINX>

MINX is an interactive application written in IDL that functions both as a general-purpose tool to visualize MISR data and as a specialized tool to retrieve detailed plume heights and wind velocities from wild-fire smoke, and volcanic and dust plumes. MINX includes high-level options to:

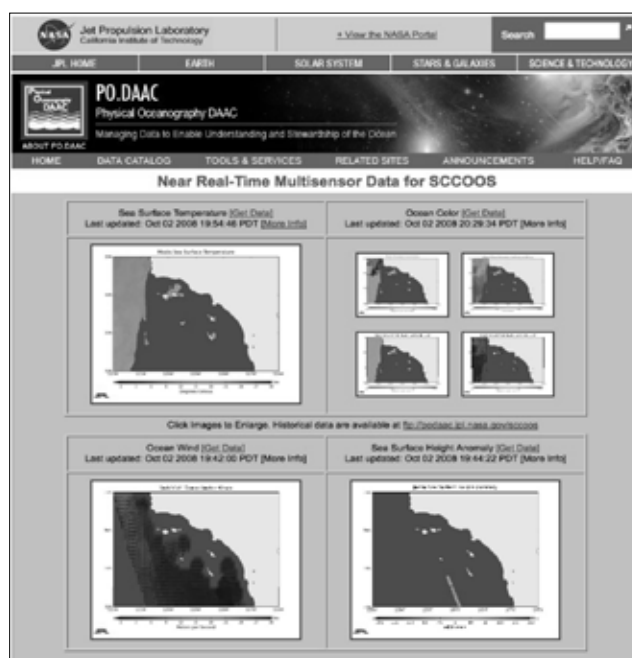
- Interactively digitize plumes in order to automatically retrieve heights and winds from MISR multi-angle imagery
- Make scrollable, single-camera and multi-camera true-color and false-color images of MISR radiance data
- Create animations of the nine MISR camera images providing a 3-D perspective of MISR scenes
- Display plots of top-of-atmosphere Bidirectional Reflectance Factor (BRF) vs. camera angle for selected pixels

- Difference images acquired on MISR orbits that share the same ground track
- Create map views of MISR orbit locations
- Save images and animations to disk in various formats

Southern California Coastal Observing System (SCCOOS) Web Site

<http://podaac.jpl.nasa.gov/sccoos>

JPL's Physical Oceanography Data Active Archive Center (PO.DAAC) has revised and updated the Web site it has developed and managed as a contributor to SCCOOS. The new PO.DAAC SCCOOS Web site facilitates the viewing and retrieval of near-real time Level-2 subsetted and mapped parameters pertaining to the coastal region between Morro Bay, California and Baja, California, including MODIS sea surface temperature and chlorophyll, Quick Scatterometer (QuikSCAT) ocean winds, and Jason-1 sea surface height anomalies.



MISR Browse Tool

<http://eosweb.larc.nasa.gov/MISRBR/>

The MISR Browse Tool allows easy access to images from the MISR instrument. The browse images are produced from the ellipsoid product for each camera, reduced to 2.2 km resolution. The MISR red,

green, and blue bands are used to create a color image, which are intentionally clipped and gamma-stretched to make cloud, ocean, and land features visible. The images are in JPEG format. Features of the new browse tool are:

- Searching for images by latitude/longitude region, date, path, and orbit.
- Displaying crossing paths
- Displaying block range for selected latitude/longitude region
- The browse image is overlaid on a map which can be turned on and off

Discovery, Access, and Delivery of Data for the International Polar Year (IPY) (DADDI)

<http://nsidc.org/daddi/>

The DADDI search and access system is now available to all IPY data users. This interface provides access to Arctic data from the four DADDI partners: NSIDC, the Socioeconomic Data and Applications Center (SEDAC), The Oak Ridge National Laboratory Distributed Active Archive Center for Biogeochemical Dynamics (ORNL DAAC), and the Canadian Cryospheric Information Network (CCIN). In addition, all IPY data registered in the IPY Metadata Portal at the Global Change Master Directory (GCMD) are also searchable. The DADDI search system does not replace the GCMD, but augments it by providing a different search and presentation interface, including filters and faceted search options. Direct links to data are included in the DADDI search output where sufficient information is provided from the data source. Access to the DADDI search system is available through the IPY Data and Information Service (IPYDIS) and the DADDI Web page

NSIDC DataViewer

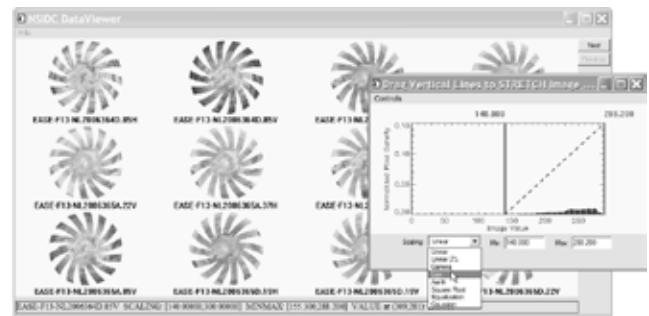
NSIDC is currently working to create interactive data analysis tools. The first tool in this project, written as a prototype for other tools to come, is the DataViewer.

The DataViewer is written in the IDL language and can be run on the freely-available IDL Virtual Machine, for those users who do not own an IDL license. Source code is available from NSIDC. The tool allows the user to open any number of images obtained from the DAAC public archives. The entire set of images can be viewed quickly and easily in a user-configured grid. Other functions of this tool include:

- A resizable output window
- Ability to stretch the contrast for all the images as a group or for each individual image

- Application of individual color tables
- Image annotation
- Ability to save images in various formats (JPEG, TIFF, PNG, and PostScript)

For more information about the DataViewer, contact nsidc@nsidc.org.



Above: A sample image of the output configuration from NSIDC's DataViewer.

Acquiring Data Through the GES DISC Web Map Service MODIS Interactive Subsetting Tool (MIST)

NSIDC has created and released the MODIS Interactive Subsetting Tool (MIST) for public use. NSIDC created MIST in order to provide users with a 7 km by 7 km subset time series of certain Version 5 (V005) MODIS products over the Greenland Climate Network (GC-Net) and the International Arctic Systems for Observing the Atmosphere (IASOA) stations. MIST also provides limited online analysis capabilities that include generating time series and scatter plots. Data are provided in a text Comma Separated Value (CSV) file format, courtesy of the Oak Ridge National Laboratory Distributive Active Archive Center (ORNL DAAC). For more information, contact nsidc@nsidc.org.

LP DAAC MODIS Reprojection Tool Web Interface (MRTWeb)

MRTWeb is a new Web-based tool that combines the search, visualization, and selection functions of the Global Visualization Viewer (GloVis) with the mosaicking, spatial subsetting, band subsetting, reprojection, and reformatting functions of the MODIS Reprojection Tool (MRT). MRTWeb provides these enhanced discovery and delivery services for standard MODIS land data tiles stored in the LP DAAC online archive. As the migration of LP DAAC data to the online archive proceeds, a progressively larger proportion of the MODIS holdings will be exposed to MRTWeb. Ultimately, all MODIS land tiles will be available for access via MRTWeb. *For information visit,*

<http://lpdaac.usgs.gov>

2008 TerraViva! SEDAC Viewer

<http://sedac.ciesin.columbia.edu/terraVivaUserWeb/>

The TerraViva! SEDAC map viewer and standalone software application enables the visualization and integration of hundreds of socioeconomic and environmental variables including a range of satellite-based data. The 2008 version adds several SEDAC data sets, including Human Appropriation of Net Primary Productivity (HANPP) and the Natural Disaster Hotspots data collection. These new data build on a collection that includes SEDAC's Gridded Population of the World (GPW) and Last of the Wild data sets as well as data such as global temperature, precipitation, land use and land cover data.

Highlights of the 2008 TerraViva! SEDAC Viewer include:

- A global data viewing engine lets users examine hundreds of variables.
- Dynamic color-coded maps for quick comparison of countries.
- Support for rendering maps in more than 15 different geographic projections.
- Ability to create customized maps and charts.
- A library of maps by theme: population distribution, land cover, physical geography, and more.
- A Gazetteer to pinpoint cities, states, provinces, countries, water bodies, and weather stations.
- Designed for use in Microsoft Windows 98, 2000, XP, or NT 4.0 with Service Pack 3 or later.



MODIS Global Subsetting and Visualization Tool

http://www.modis.ornl.gov/modis/modis_subsets3.cfm

The ORNL DAAC offers a MODIS Global Subsetting and Visualization tool for Collection 5. This tool provides custom subsets of Moderate Resolution Imaging Spectroradiometer (MODIS) Land products in ASCII format on demand for any location on Earth. Site selection from a pick list or by coordinate definition can be defined from one pixel up to 201 X 201 km. Processing of these custom subsets may take up to 60 minutes to complete, so the tool sends an e-mail notification containing a URL for output delivery upon completion.

New RSS Datacasting Service

<http://datacasting.jpl.nasa.gov>

The Datacasting Project has extended the RSS concept to create Datacasting feeds that describe the availability and content of new Earth Science data files. Users subscribe to the feeds using the Datacasting Feed Reader, which provides the capability to identify, browse and download files. In addition, users are able to filter feeds to identify files that meet a specific need (e.g., identify those files that contain greater than 80% cloud free data in the Mediterranean, or contain data related to hurricane Lola). The Datacasting web site contains specifics about the project, as well instructions for downloading Feed creation and Feed Reader software. For information, please contact the Datacasting Team at: datacasting@list.jpl.nasa.gov

OUTREACH PRODUCTS

Sensing Our Planet

NASA Earth Science Research Features 2008

<http://nasadaacs.eos.nasa.gov/articles/index.html>

A collection of stories showcasing the value of NASA's contributions in Earth system science by highlighting the breadth and depth of interdisciplinary Earth science data. These stories focus on some of the ways that scientists use this data to address real problems in the world, the fascinating science that the data makes possible, and how the data enables readers to understand Earth as a set of interrelated systems.



el-2 (AIRX2*) and Level-3 (AIRX3*) products. Previous to October 1, 2007, the products will remain as V5.0; starting from October 1, 2007, they will be V5.2.

Integrating Data from Multiple Instruments to Further Facilitate Science

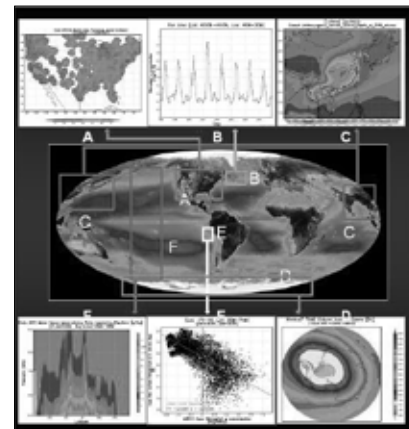
The GES DISC has developed five separate instances to facilitate the usage of data from multiple instruments to further science. Large data sets are reduced, co-registered, visualized on the same axis, and made available for public access. Instances include:

- NEESPI Portal <<http://neespi.sci.gsfc.nasa.gov/>>
- A-Train Data Depot <<http://disc.sci.gsfc.nasa.gov/atdd/>>
- Hurricane Portal <<http://disc.gsfc.nasa.gov/hurricane/>>
- Air Quality Giovanni <http://gdata1.sci.gsfc.nasa.gov/daac-bin/G3/gui.cgi?instance_id=Air_Quality>
- Ocean Color Time Series <<http://disc.sci.gsfc.nasa.gov/ocean-color/time-series/>>

NASA Imagery in Google Earth

<http://disc.sci.gsfc.nasa.gov/googleearth/>

The GES DISC has made a growing list of data available in Google Earth to facilitate scientific research. NASA imagery includes two dimensional (2D) flat data and three dimensional (3D) vertical data. Current data sets supported are from the CALIPSO, CloudSat, AIRS, TRMM, and MODIS instruments. Innovative solutions integrate the vertical data from the A-Train constellation satellites CloudSat, CALIPSO, and Aqua (mainly MODIS and AIRS products) into Google Earth to vividly expose cloud, aerosol, and H₂O characteristics and atmospheric temperature profile in the form of curtain along the satellite orbit.



GES DISC ANNOUNCEMENTS

New features added to Hurricane Portal

<http://disc.gsfc.nasa.gov/hurricane>

Designed for viewing and studying hurricanes by utilizing and providing various measurements by the NASA remote-sensing instruments. The Hurricane Data Analysis Tool now allows users to overlay various data products relevant to the study of hurricanes using an interactive tool. Data products include TRMM's product 3B42, TMI's sea surface temperature, QuikScat's wind, and NCEP's reanalysis sea level pressure. For the first time, data most relevant to hurricanes can be dynamically selected, overlaid, and made accessible for further study.

New Processing Algorithm for Selected AIRS Products

<http://disc.sci.gsfc.nasa.gov/AIRS/>

Completed AIRS Version 5.2 (V5.2) Data Reprocessing to address the AMSU-A channel 4 noise problem. The AIRS science team delivered a new V5.2 processing algorithm. It applies to AIRS+AMSU-A Lev-

New instances of GES-DISC Interactive Online Visualization and Analysis Infrastructure (Giovanni)

<http://disc.gsfc.nasa.gov/techlab/giovanni/>

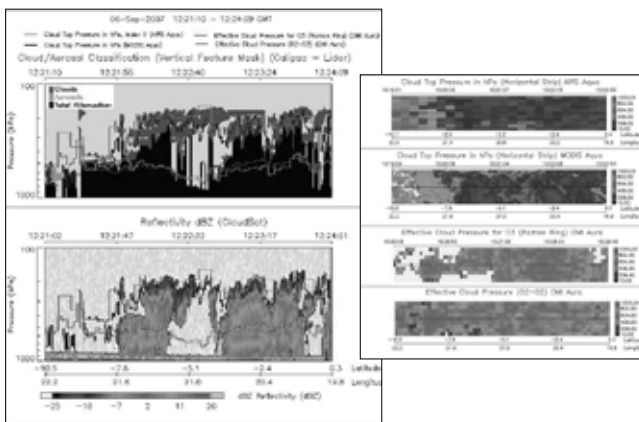
New features have enhanced Giovanni capability and new Giovanni instances have been implemented to include the following data sets:

- TRMM rainfall products, near-real time, 3-hourly, Multi-Satellite Precipitation Analysis, and rainfall ground observations
- MODIS aerosol optical thickness, Aura OMI, and GOCART model; surface PM2.5/particulate matter concentration (daily only)
- MODIS aerosol, cloud, water vapor, and other atmospheric data from the MOD08 and MYD08 products
- MISR global aerosol data from 0.5°×0.5° product MIL3MAE
- Air Quality: Daily 1°×1° EPA AIRNOW surface PM2.5 concentrations over the continental U.S., and daily MODIS and OMI aerosol data.
- AIRS global maps and vertical profiles of atmospheric parameters and trace gases

OMI L3 ozone, aerosol optical thickness, aerosol index and cloud fraction; L2G ozone, aerosol, SO₂ and NO₂ data, TOMS ozone, reflectivity, and aerosol index data

- MLS daily near-global profiles of trace gases
- HIRDLS daily near-global profiles of trace gases
- UARS HALOE long-term data set of atmospheric profiles of trace gases

Daily and monthly ocean color: global MODIS Aqua data, 8-day and monthly SeaWiFS, monthly GSM, and daily and monthly model data



LP DAAC ANNOUNCEMENTS

New Version of LP DAAC Web Site Available

A new version of the LP DAAC Web site is now available at <http://lpdaac.usgs.gov>. The structure and content of the Web site have been redesigned to improve access and understanding of LP DAAC products and services. Users are encouraged to visit the Web site and provide feedback on the redesign.

LP DAAC Online Archive Migration Underway

The LP DAAC has begun replacing its near-line, tape-based archive with an on-line, disk-based archive. Benefits of the online archive for users include faster access to data holdings and increased data distribution capacity. The online archive also enables the development and utilization of emerging Web service technologies to provide enhanced data discovery and delivery services. The online archive migration is planned for completion during 2009. Please visit <http://lpdaac.usgs.gov> for more details on the products and services available from the LP DAAC.

NSIDC DAAC ANNOUNCEMENTS

Advanced Microwave Scanning Radiometer for EOS (AMSR-E) Level-2B and Level-3 Reprocessing

Reprocessing has been completed for all AMSR-E/Aqua Level-2B and Level-3 products. Data from 19 June 2002 (the start of the AMSR-E mission) to present are now Version 2, the validated or transitional version of the algorithm. For more information, see the product Web site <http://nsidc.org/data/amsre/>.

AMSR-E Sea Ice Concentrations in Google Earth

Sea ice concentrations from AMSR-E/Aqua Daily L3 12.5 km Tb, Sea Ice Concentration, & Snow Depth Polar Grids (AE_SI12) have been created as .kml files for use in Earth browsers, such as Google Earth. These files include the latest 30-day, 60-day, and 90-day animations of the daily sea ice concentrations and sea ice extent in the Arctic. The animations are updated daily. To access the animations, see http://nsidc.org/data/virtual_globes/index.html.

AMSR-E/Aqua Daily L3 25 km Sea Ice Product

As part of reprocessing to Version 2, sea ice temperature was removed from the AMSR-E/Aqua Daily L3 25 km Tb, Sea Ice Temperature & Sea Ice Conc. Polar Grids (AE_SI25) algorithm because of inherent ambiguities between changes in the physical temperature of the ice

and changes in the ice emissivity. The AE_SI25 product name also changed to AMSR-E/Aqua Daily L3 25 km Brightness Temperature & Sea Ice Concentration Polar Grids. For more information see the product Web site <<http://nsidc.org/data/amsre/>>.

ICESat/GLAS Release-29

ICESat/GLAS Release-29 data for the Laser 3I campaign (02 October 2007 to 05 November 2007) are now available for the following products: GLA01 to GLA09 and GLA12 to GLA15. Release-29 is a significant release with extensive changes to the atmosphere processing, additions and corrections to the waveform and elevation processing, and the incorporation of new tide models. Significant improvements have been made to the data product format documentation, and this release will be accompanied with releases of the "Altimetry Data Products User Guide" and "Atmosphere Data Products User Guide."

For more information about Release-29, see the ICESat/GLAS Data Releases Web page <http://nsidc.org/data/icesat/data_releases.html>. For more information about ICESat/GLAS data, including ordering options, please see the ICESat/GLAS Web site <<http://nsidc.org/data/icesat/index.html>>.

ICESat/GLAS Reprocessing

ICESat/GLAS data reprocessing has begun. All laser periods will be reprocessed from Release-28 to Release-29. Until completion, a mix of the two releases will be available. For more information about the ICESat/GLAS data reprocessing contact nsidc@nsidc.org.

Sea Ice Trends and Climatologies from SMMR and SSM/I Data Products

NSIDC has updated the Sea Ice Trends and Climatologies from SMMR and SSM/I data products. These value-added products are now only derived from the Goddard Space Flight Center (GSFC) sea ice data sets: the NASA Team Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I Passive Microwave data set and the Bootstrap Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I data set. The NASA Team sea ice data now span 1979–2007, and the Bootstrap sea ice data now span 1979–2006. For additional information on the sea ice trends and climatologies, please see the product Web site <http://nsidc.org/data/smmr_ssmi_ancillary>.

PO.DAAC ANNOUNCEMENTS

Products Preview (formerly PO.DAAC Sandbox):

The PO.DAAC Sandbox has evolved into a dedicated Web page and access-controlled FTP site, now known as the Products Preview. This new service offers Principal Investigators (PIs) with unprecedented exposure of experimental and pre-vetted science data products to the PO.DAAC's diverse community of data users. The products submitted by the PI are reviewed by the relevant science team prior to distribution. The products are then archived, distributed, and maintained locally within the PO.DAAC. Prospective users are required to go through a brief registration process which informs the user of the inherent risk associated with experimental products. The PO.DAAC encourages users to report any abnormalities or defects with experimental products as early as possible. This feedback will be forwarded to the PI and used as part of the final review process by the relevant science team and the User Working Group prior to transition as a PO.DAAC standard data product.

The newest member to Products Preview is the Cross-Calibrated Multi-Platform (CCMP) ocean surface wind velocity data set (PI, Dr. Robert Atlas). This product is a blend of retrievals from both microwave radiometers (i.e., SSM/I, AMSR, and TMI) and scatterometers (i.e., NSCAT, QuikSCAT, and SeaWinds). A variational analysis method (VAM) combined with ECMWF Operational Analysis is used to provide gridded Level-3 ocean surface wind velocity at 6-hourly intervals on a 0.25° grid.

To access Products Preview, please visit the PO.DAAC home page: <<http://podaac.jpl.nasa.gov/>>.

Updated Pathfinder Announcement

The PO.DAAC is pleased to announce the availability of 2007 AVHRR Pathfinder SST data. Late 2005 and all 2006 data Pathfinder data sets have been upgraded with the finalized version 5 products. The PO.DAAC also re-organized this distinguished long running product into distinct daytime and nighttime directories from 1985 through 2007.

What's New is produced by:
Earth Science Data and Information System (ESDIS) Project
<http://esdis.eosdis.nasa.gov/>
Code 423
Goddard Space Flight Center
Greenbelt, MD 20771

For more information, please contact:
outreach@eos.nasa.gov

Alaska Satellite Facility DAAC—ASF DAAC

www.asf.alaska.edu

Synthetic Aperture Radar (SAR) Products, Sea Ice, Polar Processes, Geophysics

E-mail: asf@eos.nasa.gov

Telephone: 907-474-6166

Atmospheric Science Data Center—ASDC

<http://eosweb.larc.nasa.gov>

Radiation Budget, Clouds, Aerosols, Tropospheric Chemistry

E-mail: larc@eos.nasa.gov

Telephone: 757-864-8656

Crustal Dynamics Data Information System—CDDIS

<http://cddis.gsfc.nasa.gov>

Space Geodesy

E-mail: Carey.Noll@nasa.gov

Telephone: 301-614-6542

Global Hydrology Resource Center—GHRC

<http://ghrc.nsstc.nasa.gov>

Hydrologic Cycle, Severe Weather Interactions, Lightning, Atmospheric Convection

E-mail: ghrc@eos.nasa.gov

Telephone: 256-961-7932

Goddard Earth Sciences Data and Information Services Center—GES DISC

<http://disc.gsfc.nasa.gov>

Atmospheric Composition, Atmospheric Dynamics, Global Precipitation, Hydrology, Solar Irradiance, Global Modeling, Multi-Sensor Research Products

E-mail: help-disc@listserv.gsfc.nasa.gov

Telephone: 301-614-5224

Land Processes DAAC—LP DAAC

<http://LPDAAC.usgs.gov>

Surface Reflectance, Land Cover, Vegetation Indices

E-mail: LPDAAC@eos.nasa.gov

Telephone: 605-594-6116

Toll free: 866-573-3222

Level-1 Atmospheres Archive and**Distribution System (LAADS)—MODAPS**

<http://ladsweb.nascom.nasa.gov>

MODIS Level-1 and Atmosphere Data Products

E-mail: modapsuso@saicmodis.com

Telephone: 301-352-2106

Toll Free: 866-506-6347

National Snow and Ice Data Center DAAC—NSIDC DAAC

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Ocean Biology Processing Group

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Ocean Biology, Sea Surface Temperature, Biogeochemistry

E-mail/Telephone list: <http://oceancolor.gsfc.nasa.gov/staff>

Physical Oceanography DAAC—PO.DAAC

<http://podaac.jpl.nasa.gov>

Sea Surface Temperature, Ocean Winds, Circulation and Currents, Topography and Gravity

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Socioeconomic Data and Applications Center—SEDAC

<http://sedac.ciesin.columbia.edu>

Human Interactions, Land Use, Environmental Sustainability,

Geospatial Data, Multilateral Environmental Agreements

E-mail: ciesin.info@ciesin.columbia.edu

Telephone: 845-365-8920

For more information refer to <http://outreach.eos.nasa.gov>