

What's New

NASA EOSDIS Data Centers

Data

2

Tools and Services

6

Outreach Products

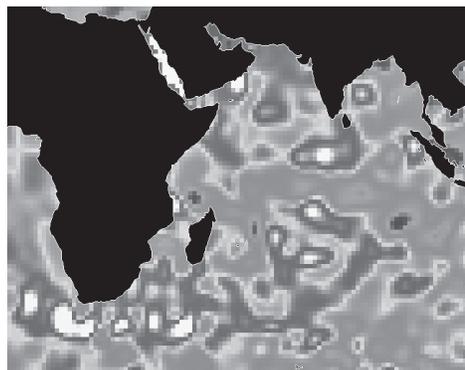
10

Announcements

11

Data Center Information

12



NASA Earth Observing System Data and Information System (EOSDIS) and related 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

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

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

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

- » OMI Level 2 Total Ozone product (including aerosol index and effective surface reflectivity parameters); NO₂ (total and tropospheric columns); BrO, SO₂, HCHO, and OCIO total columns; aerosol extinction and absorption optical depth; and cloud products (pressure and fraction).
- » MLS Level 1 Radiance and Level 2 Atmospheric Composition products (O₃, BrO, ClO, HCl, HOCl, OH, HO₂, HCN, CO, HNO₃, N₂O, and SO₂; Temperature, Water Vapor, Humidity, and Geopotential Height).

Tropical Rainfall Measuring Mission (TRMM) Global Precipitation Climatology Project (GPCP) Merged Products

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

Provides two final products, the combined satellite-gauge precipitation estimate and the combined satellite-gauge precipitation error estimate. The complete data set, which includes the input and intermediate data files, contains a suite of 27 products providing monthly, global gridded values of precipitation totals and supporting information for the 22-year period January 1979 - January 2004.

Tropical Cloud Systems and Processes (TCSP) Research Experiment

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

Studies the dynamics and thermodynamics of precipitating cloud systems, including tropical cyclones, over the tropical eastern Pacific. Geophysical parameters measured by the TCSP datasets include ocean products, brightness temperatures (T_b), infrared and visible radiances, and radar reflectivity.

NASA African Monsoon Multidisciplinary Analyses (NAMMA) Campaign

<http://namma.msfc.nasa.gov/>

Conducted in August 2006 this mission was based in the Cape Verde Islands, 350 miles off the coast of Senegal in west Africa. The Global Hydrology Resource Center (GHRC) provided real-time and static web support, data ingest, and archive for the project. NASA scientists employed surface observation networks and aircraft to characterize the evolution and structure of African Easterly Waves (AEWs) and

Mesoscale Convective Systems over continental western Africa, and their associated impacts on regional water and energy budgets. Satellite data including Aqua, TRMM, and the recently-launched Cloudsat/CALIPSO were incorporated to improve the project forecasts and flight plans.

Lightning Imaging Sensor (LIS) Optical Transient Detector (OTD)
11 Year (1995-2005) v2.2 Climatology Datasets

http://thunder.nsstc.nasa.gov/data/#GRIDDED_Data

These new data provide a global lightning and thunderstorm climatology from which changes (even subtle temperature variations) might be easily detected. Release includes updates to the existing low and high resolution LIS/OTD full climatology gridded composite lightning build, Annual Climatology, diurnal climatology and low resolution time series datasets. Four new datasets were also added to this release, including a high resolution annual and monthly climatology, a low resolution monthly time series, and a low resolution annual diurnal climatology.



NASA DC-8 flying over the marine cloud layer during the NASA African Monsoon Multidisciplinary Activities (NAMMA) experiment. The NAMMA experiment (Aug-Sept 2006) investigated the birth of tropical storms (e.g., hurricanes) in the vicinity of Cape Verde Islands off the coast of West Africa. NAMMA studied the deleterious effect of the Saharan dust blown off the continent on the genesis and growth of tropical storms. Courtesy of: Global Hydrology Resource Center (GHRC)

Polar Ozone and Aerosol Measurements (POAM) III

http://eosweb.larc.nasa.gov/PRODOCS/poam3/table_poam3.html

Measures the vertical distribution of atmospheric ozone, water vapor, nitrogen dioxide, and aerosol extinction over the polar regions. These data are available for April 22, 1988 to the present.

Tropospheric Emission Spectrometer (TES)

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

Level 2 Special Observation Nadir measurements of water vapor, ozone, carbon monoxide, atmospheric temperature, and heavy water; Level 1B Special Observation Low Resolution and High resolution data are available for August 22, 2004 to present. Special observations are research measurements of localized or regional phenomena such as volcanoes, biomass burning, or air pollution events, or observations made to support field campaigns and other validation efforts.

Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO)

http://eosweb.larc.nasa.gov/PRODOCS/calipso/table_calipso.html

Lidar level 1B measurements of attenuated backscatter, Lidar Level 2 Cloud and Aerosol Layer Products and Vertical Feature Mask, Imaging Infrared Radiometer (IIR) Level 1 radiance and Wide Field Camera(WFC) radiance data are available for May 1, 2006 to the present.

CRYOSPHERE

Advanced Microwave Scanning Radiometer- Earth Observing System (AMSR-E) Gridded Brightness Temperatures

<http://nsidc.org/data/nsidc-0301.html>

<http://nsidc.org/data/nsidc-0302.html>

- » Three EASE-Grid (Equal-Area Scalable Earth Grid) projections: North or South (Lambert Azimuthal) or Global (Cylindrical), and in a global, quarter-degree grid. AMSR-E data are interpolated to the output grids from swath space using an inverse-distance squared method.
- » Data sets complement and extend NSIDC's SSMR and SSM/I 25km EASE-Grid brightness temperature data sets, with the AMSR-E EASE-Grid North and South data initially available from the beginning of the AMSRE campaign (June 2002) and the AMSR-E EASE-Grid Global and quarter-degree gridded data available from August 2006.

Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I Passive Microwave Data

<http://nsidc.org/data/nsidc-0051.html>

- » This product provides a consistent time series of sea ice concentrations (the fraction, or percentage, of ocean area covered by sea ice) spanning the coverage of several passive microwave instruments. Sea ice algorithm coefficients are changed to reduce differences in sea ice extent and area as estimated using the SMMR and SSM/I sensors.
- » Data include gridded daily (every other day for SMMR data) and monthly averaged sea ice concentrations for both the north and south polar regions. Two types of data are provided: final data and preliminary data. Final data are produced at GSFC about once per year, with roughly a one-year latency, and include data since 26 October 1978. Final data are produced from SMMR brightness temperature data Processed at NASA GSFC and SSM/I brightness temperature data processed at the National Snow and Ice Data Center (NSIDC).
- » Preliminary data are produced at NSIDC approximately every three months (quarterly), using SSM/I data acquired from Remote Sensing Systems, Inc. (RSS), and include roughly the most recent three to twelve months of processed data.

MODIS Version 5 Sea Ice Products

<http://nsidc.org/data/modis>

Version 5 (V005) of the MODIS/Terra sea ice products contains many improvements over the previous versions. These improvements include the addition of fractional snow cover to MOD10_L2 and MOD10A, a conservative cloud mask used for all products, monthly snow products available in the Climate Modeling Grid (CMG) format, removal of sea ice by IST and combined sea ice fields, availability of browse images for all products, and HDF compression for all products.

HUMAN DIMENSIONS

United States Census Gridded Data

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

Raster data sets that include a wide variety of socioeconomic characteristics in addition to population and housing counts. These gridded data sets transform irregularly shaped census block and block group boundaries into a regular surface – a raster grid – for faster and easier analysis. The raster format allows analysis at a higher resolution for a larger area than is feasible using Census statistical units. The gridding and reformatting also makes it easier to combine data to support vulnerability analysis; for example, studying how particular social groups were affected by Hurricane Katrina. Data sets are currently available for the year 2000.

Human Appropriation of Net Primary Productivity

<http://sedac.ciesin.columbia.edu/es/hanpp.html>

How does the spatial distribution of human consumption of carbon (as embodied in food, fiber, and wood products) compare to the ability of land-based ecosystems to produce it? Research led by NASA scientists attempted to address this question by comparing satellite-derived maps of net primary productivity (NPP) with human appropriation of carbon, which is partly derived from SEDAC's Gridded Population of the World dataset. The resulting global spatial distribution of NPP, Human Appropriation of NPP (HANPP) and HANPP as a percentage of local NPP data are available for downloading in raster GRID and GeoTIFF formats. In addition, tabular data by country on total estimated consumption of NPP in the form of food, paper, wood, and fiber can be accessed.

Global Distribution of Poverty

www.ciesin.columbia.edu/povmap

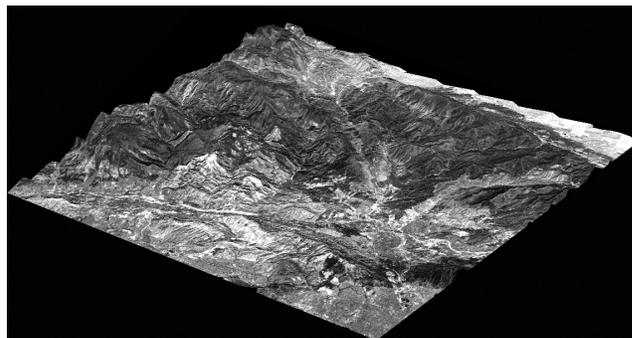
The Global Poverty Mapping Project seeks to enhance current understanding of the global distribution of poverty and the geographic and biophysical conditions of where the poor live. Additionally, the project aims to assist policy makers, development agencies, and the poor themselves in designing interventions to reduce poverty. Global, national, and subnational data and maps are available.

LAND

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

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

The Large-Scale Biosphere-Atmosphere Experiment in Amazonia (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. Four new data sets are available: Gridded surface radiation and rain rates for Amazonia in 1999, geostationary satellite sensor radiance data for Amazonia 1998-2001, geoscience laser altimeter system forest structure measurements for Santarem in 2004 and comparative fire data in Brazil derived from ASTER and MODIS for 2003-2004.



To emphasize topography this Orthorectified ASTER image is overlaid on the DEM image of the northwestern part of Los Angeles County with a backdrop of the Tehachapi Mountains. The image is vertically exaggerated at five times. In the lower right is the northwestern end of the San Fernando Valley with Santa Clarita to its north. In the middle right is Castaic Lake with Interstate-5 trending northwest to southeast. Image acquired 8/7/2004. Courtesy of: Land Processes Distributed Active Archive Center (LP DAAC), United States Geological Survey (USGS) Center for Earth Resources Observation and Science (EROS)

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. Three new regional and global data sets have been released including: Thirty meter leaf area index maps for the Valeri Site in Larose Canada, global atmospheric nitrogen deposition maps for the years 1860, 1993, and 2050, and Version 2 of a global fire emissions data base.

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. Six new data sets have been released including: Continental land surface temperature maps for 1995-2000; Dry season 2000 solar spectral flux radiometer data, instrument measurements of pollution in the troposphere (MOPITT) of carbon monoxide, aerosol fatty acid and stable isotope data for Mongu; and MODIS subsets of airborne simulator data, albedo, and land cover data.

Model Archive

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

The ORNL DAAC currently archives and distributes the following model products: 3 benchmark model versions: BIOME-BCG, Inte-

grated Biosphere Simulator (IBIS), and Land Surface Model (LSM), CENTURY, Version 4 (VEMAP), 2 PNet model products, and 2 models used in published research results associated with specific model implementations: BIOME-BCG (Law et al.) and BIOME-BGC.

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 fifteen orthorectified ASTER Level-1B calibrated radiance images, one per each band, including Band 3B. 2. AST14DMO is the short name of the ASTER on-demand product comprised of both the Level-3 DEM and Orthorectified Image product. The distributed product is a zipped multi-file containing both a DEM, and fifteen orthorectified L1B calibrated radiance images, one per each band.

ASTER Shortwave Infrared (SWIR) Crosstalk-Corrected Products

http://lpdaac.usgs.gov/aster/ast_07xts.asp

http://lpdaac.usgs.gov/aster/ast_09xts.asp

A new suite of higher-level on-demand ASTER L2 Surface Reflectance SWIR, and L2 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 infra-red 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.

OCEANS

The GODAE High Resolution Sea Surface Temperature Pilot Project (GHRSSST-PP)

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

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

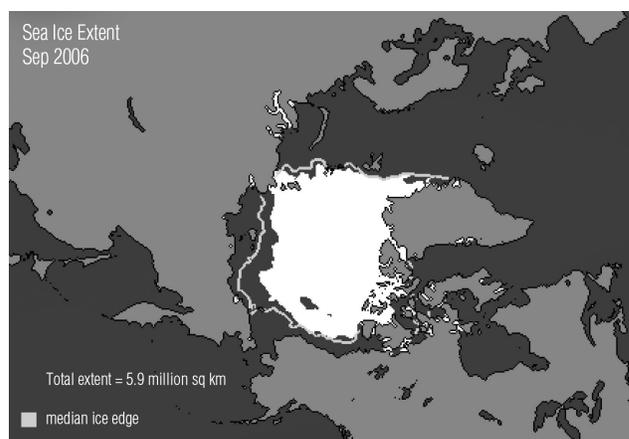
An international collaboration to produce a new generation of global satellite-based SST measurements from infrared and microwave in-

struments. Near real-time Level-2 Preprocessed (L2P) and Level 4 merged SST products containing satellite-specific SST uncertainty statistics and other relevant ancillary information are available through a 30-45 day rolling store in netCDF format. L2P products are available within 6-12 hours of satellite overpass. The spatial resolution is global and regional, with resolution dependent on the sensor. The resolution ranges from 1km global coverage for MODIS and AATSR to 25 km global coverage for AMSR-E, and TMI. L4 blended products are available daily with both global and regional spatial coverages. The highest resolution is the France IFEMER MED at 2km (regional-Mediterranean Sea) while the global NOAA NCDC Reynolds product has 25km. All products are available through <ftp://podaac.jpl.nasa.gov/GHRSSST>. Historical data that are 30 days or older can be found at the GHRSSST Longterm Stewardship and Reanalysis Center (LTSRF) at <http://ghrsst.nodc.noaa.gov>.

Jason Data for Ocean Surface Topography Measurements

<http://podaac.jpl.nasa.gov/ost/index.html>

Jason, a follow-on mission to the highly successful TOPEX/POSEIDON mission, provides an extended continuous time series of high-accuracy measurements of the ocean surface topography. New version "b" Jason science data products are available for August 4, 2004 (cycle 95) onward and reprocessed data for January 15, 2002 - August 11, 2002 (cycles 1-21). Improved algorithms include: orbits, wet path delay, re-tracking, tide models, sea state bias, mean sea surface, wind speed, non-tidal high frequency corrections and rain flagging.



This image shows the average sea ice extent for the month of September; the gray line indicates the average September sea ice extent from 1979-2000. 2006 had the second-lowest average September sea ice extent on record. Courtesy of: National Snow and Ice Data Center (NSDIC).

TOOLS AND SERVICES

SeaWiFS Data Analysis System (SeaDAS) 5.05 Released

<http://oceancolor.gsfc.nasa.gov/seadas/>

SeaDAS is a comprehensive image analysis package for the processing, display, analysis, and quality control of ocean color data. Supported sensors are MODIS, SeaWiFS, OCTS, and CZCS. Key features include variety of data processing, data visualization, and data projection capabilities and selection of data output formats.

Synthetic Aperture Radar (SAR) Data Conversion Tool
Alaska Satellite Facility (ASF) Convert Tool

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

- » Enables a user of ASF SAR data to geocode the data using a variety of projections and export the images as geotiffs for use in GIS programs.
- » Enables user to terrain correct the data.
- » Contains metadata viewer.
- » Creates browse imagery .
- » Other export formats include tiff and jpeg.

ASF SAR Training Processor

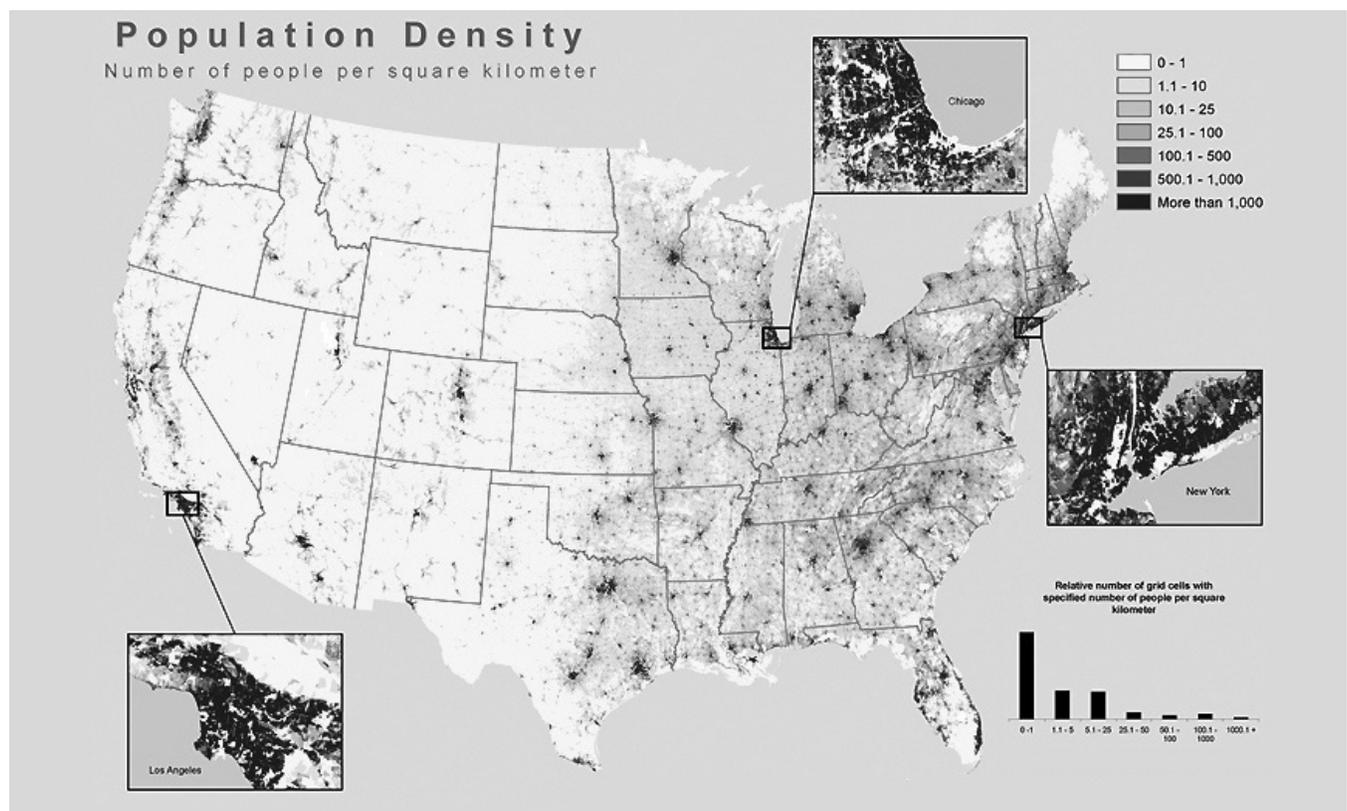
<http://www.asf.alaska.edu/softwaretools/>

- » Enables user to follow the steps as a SAR image is processed from Level 0 raw data to a Level 1 image via the range-Doppler technique.
- » Writes images at each processing stage, giving user visibility into the intermediate steps of the process.
- » Enables user to modify various parameters as well as steps that are performed to visualize the impact of each on the final product.

NAMMA Real Time Mission Monitor (RTMM)

<http://namma.msfc.nasa.gov/flighttracks.html>

Integrates satellite and radar imagery, model output data, lightning location observations, aircraft navigation data, overlays (e.g., dropsonde analyses), and other data sets into a user-friendly visualization display (Google Earth). A key feature during NAMMA was to provide, for the first time, a local RTMM capability on the DC-8 aircraft itself during the flights. This enabled on-board scientists and air crew personnel to have access to in-flight imagery and data sets that were unavailable during prior campaigns.



Courtesy of: Socioeconomic Data and Applications Center (SEDAC)

Beta Test Version of MODIS Land Product Subsets (Collection 5, Data Visualization/ Acquisition)

<http://daac.ornl.gov/MODIS/modis.html>

Web-based tool to obtain data for global field sites or flux towers which allows you to choose sites by country, continent, network, or land use classification. Site selections can be made with Google-Earth, MODIS-WebGIS, and pick lists. Selected sites can be viewed for a single composite period or as a time-series for the MODIS period, then downloaded in ASCII format. GeoTIFF images can be selected, viewed, and downloaded with MODIS-WebGIS.

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

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

- » Web interface that performs interactive data analysis online without having to download any data. »Currently supports interfaces for AIRS, MLS, TOMS & OMI, MODIS, Ocean Color, TRMM, and UARS/HALOE, and Agriculture.
- » A new Web Service for the MODIS interface enables direct access of user-specified spatial and parameter subsetted daily Level 3 data.

Atmospheric Composition Data and Information Services Center (ACDISC)

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

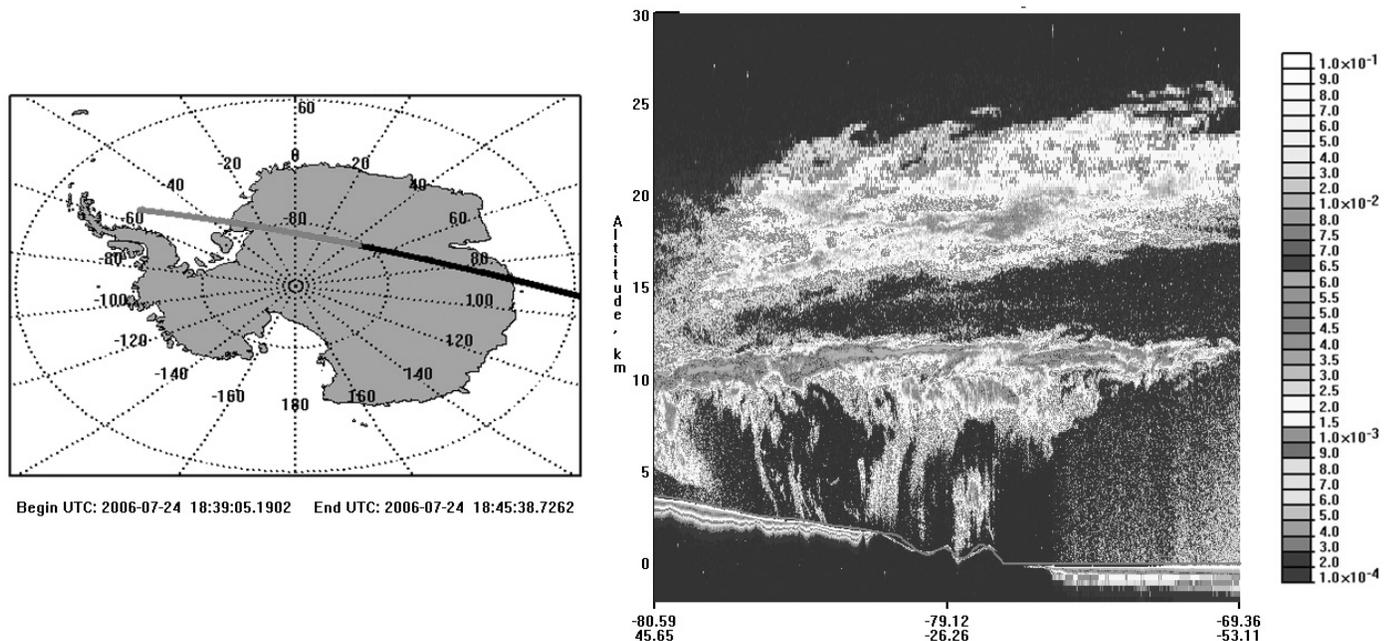
- » Online Portal to the Atmospheric Composition (AC) specific data holdings.
- » Serves as easy access archive and distribution system employing data analysis and visualization, data mining, and other user requested techniques
- » Provides convenient access to AC data and information from multiple platforms ranging from heritage TOMS and UARS datasets, to the most recent data (e.g. SORCE, AIRS Aura OMI, MLS, and HIRDLS) as well as AC datasets residing at other remote archive sites.

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, Gazetteer, and interactive shopping cart Available data include: AIRS, Aura (MLS, OMI), TOMS, TRMM, and UARS.

CALIPSO Lidar 532 nm Total Attenuated Backscatter, km/sr



CALIPSO Lidar Level 1B image of a Polar Stratospheric Cloud over Antarctica on July 24, 2007. Courtesy of: NASA LaRC CALIPSO team.

Hurricane Portal

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

Designed for viewing and studying hurricanes by utilizing various measurements by the NASA remote-sensing instruments. The portal consists of four main components: 1) Current Conditions (in pre-selected regions and updated daily): the latest maps and profiles from NASA satellites, such as, TRMM, AIRS, etc. 2) Event based: the latest maps and profiles for an active tropical storm or hurricane, 3) Science focus: Examples/stories describing the data usage in hurricane monitoring and research and 4) Archives: maps and profiles from past tropical storms and hurricanes.

Hurricane Archive

<http://daac.gsfc.nasa.gov/hurricane/gallery.shtml>

Provides data information, data sets, animations, maps and profiles from past tropical storms and hurricanes

Hurricane Viewer

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

Application for animating hurricane path, their varying levels of intensity and atmospheric information occurring at the time of the event. Available as a beta (experimental) version, with additional features and animation options to be added.

Multi-Angle Imaging SpectroRadiometer (MISR) Order and Customization Tool

<http://10dup05.larc.nasa.gov/MISR/cgi-bin/MISR/main.cgi>

- » Allows users to order and customize data in a single interface.
- » Features include: non-consecutive path and orbit search, sorting search results by date, camera, path, orbit, and file version.
- » Customization options include: subsetting by parameter, block and spatial coordinates, add latitude and longitude layers, unpacking and unscaling applicable fields.
- » Allows users to save searches and customizations.
- » Support EOS Validation site subsets.
- » Output data format in HDF-EOS stacked-block grid or conventional grid.

“Which CERES Data Product Do I Want?” Interface

http://eosweb.larc.nasa.gov/PRODOCS/ceres/search/ceres_form.php

User friendly interface helps users determine the specific CERES data product(s) that meet a desired search criteria based on product type, temporal and spatial resolution, and applicable studies.

“Which MISR Data Product Do I Want?” Interface

http://eosweb.larc.nasa.gov/PRODOCS/misr/search/misr_form.php

User friendly interface helps users determine the specific MISR data product(s) that meet a desired search criteria based on product type, temporal and spatial resolution, and applicable studies.

Visualization and Analysis Tool for HDF data files-view_hdf

http://eosweb.larc.nasa.gov/HPDOCS/view_hdf.html

- » Tool can be used to select and subset variables from either Science Data Set (SDS) or vdata structures in any HDF file. »Capability to render both two-and three-dimensional graphics, and plot geolocated data onto various world map projections.
- » An IDL Virtual Machine version of the view_hdf software is now available. It is a pre-compiled software package that uses the IDL Virtual Machine, a free runtime version of IDL.

Visualization and Analysis tool for MISR and AirMISR-misr_view

http://eosweb.larc.nasa.gov/PRODOCS/misr/tools/misr_view.html

- » Now available as a pre-compiled software package that uses the IDL Virtual Machine.
- » Newest release includes improved HDF and netCDF “save data” capabilities, enhancements to the image stretch interface, and allows scaling of saved images.

MISR Utilities

http://eosweb.larc.nasa.gov/PRODOCS/misr/tools/idl_utilities.html

- » Written in IDL programming language, a set of callable routines that can be used to read data and metadata values stored in MISR Level 1B2, Level 2 and Level 3 data products.
- » Also available are ASCII conversion routines that read parameters from MISR Level 1B2 or AGP data files and write them to a set of ASCII formatted files, with one output file for each MISR block for each parameter.

TES Read Software

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

The TES L1B and L2 read software packages allow users to access the parameters in TES data files.

Land Processes Data Pool

<http://lpdaac.usgs.gov/datapool/datapool.asp>

- » Provides online access to land processes data archive where users can obtain select
- » Land processes data products from both the NASA Terra and Aqua satellite platforms at no charge.
 - New features allow access to MODIS land products via product type, tile, and map selections.
 - Separate methods are offered for tile grid products and climate modeling grid products.

Data Format Conversion Tool HDF-EOS to GeoTIFF (HEG) works with AMSR-E data

http://nsidc.org/data/data_pool

- » Now available for the AMSR-E L2A Brightness Temperatures, the L2B Ocean Products, and the L3 Ocean Grids through the Data Pool Web access.
- » The HEG converter enables format conversions and projection changes. Options dependent upon the data set, but typically include conversion to GeoTIFF and reprojection to geographic, UTM, and other projections. Provides spatial and band subsetting.

ICESat/GLAS Subsetter

<http://nsidc.org/data/icesat/order.html>

Users of ICESat/GLAS data are now able to spatially subset certain GLAS products. The ordering interface allows you to choose GLAS product(s) you are interested in, a time period, and options to enter one or multiple sets of spatial bounding coordinates.

ORNL Map Servers

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

Web based GIS tool that enables users to browse, query, and display spatial data using a standard web browser. Based upon ESRI ArcIMS and Minnesota Mapserver technology. Includes a number of land cover, biophysical, elevation, and geopolitical layers, as well as access to other relevant Open Geospatial Consortium (OGC) layers. Users can interrogate map features and extract and download selected map features including map layers (shape files). »The ORNL DAAC WebGIS supports Web Map Service (WMS) and Web Coverage Service (WCS) OpenGIS protocols.

MPEG Movie Output from POET

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

POET is PO.DAAC's on-line subset, visualization and data access tool. In addition to image, GIS, scientific, and raw formats, users can now create and download MPEG movies. This feature is particularly useful for classroom use.

Global Change Master Directory (GCMD)

<http://gcmd.nasa.gov>

A directory to Earth science data and services, the GCMD database currently holds more than 19,000 Earth science data sets and services covering all aspects of Earth and environmental sciences. Features available on the GCMD website with the latest upgrade include:

- » Spatial search using Google Map
- » Two-level Related_URL fields to capture additional data and service types, including web services
- » Relative time capability to access real-time data pools
- » Refinement by spatial and temporal resolution
- » Support for international and mathematical characters in the metadata display
- » Expanded biological classification taxonomies and geological time keywords
- » New GCMD homepage AND metadata display

MODIS L1 and Atmospheres Archive and Distribution System (LAADS)

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

Capabilities include parameter sub-setting, geographic sub-setting, day/night granule search, metadata search, masking, channel sub-setting, tile re-projection, order tracking, user push or pull, and a shopping cart. Granule re-projection, GeoTIFF re-formatting and mosaicing will be added to this list over the next few months. This is the sole source for MODIS L1 and atmospheric data products.

Atlas of the Cryosphere

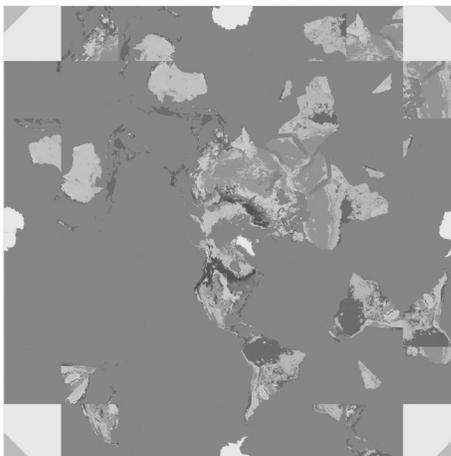
<http://nsidc.org/data/atlas>

This National Snow and Ice Data Center web site allows visitors to explore and dynamically map the Earth's frozen regions. Viewed from a polar perspective, the available scenes include snow cover, sea ice extent and concentration, glaciers, permafrost, and other critical components of the Earth's cryosphere.

Land Processes Origami Globe

<http://lpdaac.usgs.gov/education/Index.asp>

Educational product that features MODIS/Terra Land Cover data. It illustrates the International Geosphere-Biosphere Programme (IGBP) land cover classification scheme for data collected from year 2001.

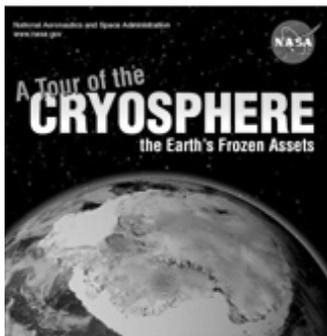


Tour of the Cryosphere DVD

<http://svs.gsfc.nasa.gov/vis/a000000/a003100/a003181/>

This 8-minute feature animation takes the viewer on a tour of the cryosphere as it exists around the world. From shrinking Arctic sea ice to retreating glaciers and collapsing Antarctic ice shelves, this unique global view of cryospheric research is shown with state-of-the-art Earth observing satellite data animations.

The animation also highlights the scientific importance of continued collection of this kind of data and how NASA Earth Observing satellites are providing scientists with unparalleled insight into how the cryosphere behaves, how it is changing, and what implications those changes have on the Earth's interrelated systems



NASA: Supporting Earth System Science 2006

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

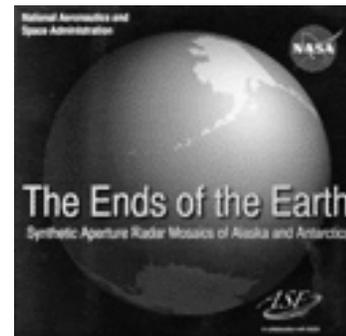
A collection of stories that showcase the value of NASA'S contributions in Earth system science by highlighting the breadth and depth of interdisciplinary Earth science data. This stories focus on some of the ways that scientists use our data to address real problems in our world, the fascinating science that our data makes possible, and how these data enable our ability to understand our Earth as a set of interrelated systems.



The Ends of the Earth (CDROM)

www.asf.alaska.edu/dataproducts/unrestricted.html

- » Features Synthetic Aperture Radar (SAR) Mosaics of Alaska and Antarctica including high-resolution imagery of the satellite ground station in McMurdo, Antarctica and the cities of Anchorage, Barrow and Fairbanks, Alaska.
- » Intuitive and interactive interface enable exploration of topography in varying levels of detail . This product represents a collaborative effort of NASA, the Alaska Satellite Facility, the Geographic Information Network of Alaska, and the Canadian Space Agency.



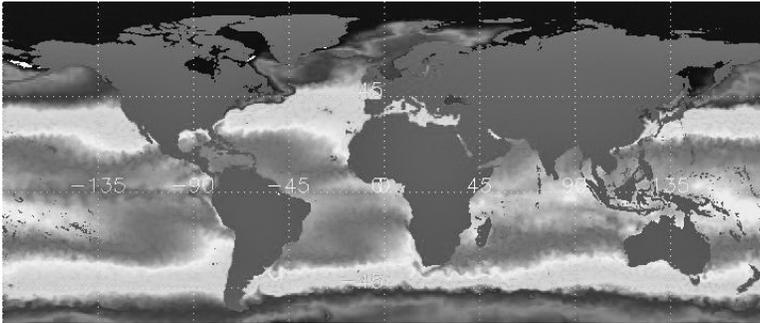


Image shows a global daily SST analysis for March 11, 2007 from the Operational Sea Surface Temperature and Sea Ice Analysis (OSTIA) product. The SST analysis is a blended product derived from infrared instruments such as AATSR and AVHRR, and microwave instruments such as AMSRE and TMI. The temperature ranges in the image from -3 to 30 degrees Celsius. Data is distributed through the GHRST-PP Global Data Assembly center (GDAC) in conjunction with the National Centre for Ocean Forecasting (NCOF) and the United Kingdom Meteorological Office (UK Met Office). Courtesy of: Physical Oceanography DAAC (PO.DAAC)

NATIONAL SNOW AND ICE DATA CENTER

AMSR-E/Aqua L2A Global Swath Spatially-Resampled Brightness Temperatures (Tb)

http://nsidc.org/data/ae_l2a.html

AMSR-E L2A brightness temperatures are now validated. The product maturity is upgraded to validated after the science software is tested and the algorithm is validated using the official NASA calibration.

ICESat/GLAS Products

<http://nsidc.org/data/icesat>

- » Release-28 data are now available for several laser time periods (Laser 3E: 2006-02-22 to 2006-03-27, Laser 3D: 2005-10-21 to 2005-11-24, and Laser 2B: 2004-02-17 to 2004-03-21, Laser 3B: 2005-2-17 to 2005-03-24, Laser 3A: 2004-10-03 to 2004-11-08, Laser 2A: 2003-09-25 to 2003-11-18) This release includes all products, GLA01–GLA15, though not all products are available for all time periods.
- » Release-28 provides several enhancements, such as improved corrections for saturation effects, improved flags to aid users in data selection, and better descriptions of the altimetry products.
- » Beginning with this release, a YXX pattern for release numbers will be used in file names. The XX still indicates the release number (e.g., 28), but the Y now indicates a calibration level (currently 0 to 4); the higher the Y, the greater the level of calibration. Please see the ICESat/GLAS YXX Release Numbers page (http://nsidc.org/data/icesat/yxx_release_numbers.html) for details. For more information about this release, see the ICESat/GLAS Data Releases page (http://nsidc.org/data/icesat/detailed_disclaimer.html). For ordering options, see the ICESat/GLAS Order Data page (<http://nsidc.org/data/icesat/order.html>).

PHYSICAL OCEANOGRAPHY DATA CENTER

PO.DAAC Event Tracker: Beta-Version Now Available

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

- » A beta-version of the PO.DAAC Event Tracker is now available. This initial release is intended as a preview of a new tool that will provide subsets of PO.DAAC data holdings for major oceanographic events such as hurricanes and typhoons.
- » The Event Tracker currently only subsets wind and sigma0 data from SeaWinds on QuikSCAT along hurricane tracks in 2003, 2006 and 2007.
- » Future versions of this tool will include entire QuikSCAT data collection, altimetry data from Jason-1 and TOPEX/Poseidon as well as sea surface temperature data from MODIS and the NOAA AVHRR instruments.

LAND PROCESSES DATA CENTER

MODIS V005 Product Announcement

<http://lpdaac.usgs.gov/modis/dataproducts.asp>

- » The LP DAAC announces certain MODIS V005 land data products are available beginning on October 25, 2006. The current collection includes acquisitions from February 2000 forward and will grow as data are produced chronologically. Terra and Combined data are available now, and Aqua data are expected to follow in the summer of 2007. All data acquisitions starting January 1, 2007 will be processed as V005 products.
- » Current MODIS V005 land products include the following Terra, Aqua, or Combined data types:
 - Surface Reflectance
 - Vegetation Indices
 - Thermal Anomalies/Fire
 - BRDF/Albedo
 - Land Surface Temperature/Emissivity

NOTE: MODIS V004 production ended December 31, 2006. However, V004 collections, including acquisitions from February 2000 through December 2006, will remain available.

EOSDIS DATA CENTERS

Alaska Satellite Facility (ASF) DAAC - ASF DAAC

www.asf.alaska.edu

SAR, Sea Ice, Polar Processes and Geophysics

E-mail: asf@eos.nasa.gov

Telephone: +1 907-474-6166

Fax: +1 907-474-2665

Goddard Earth Sciences (GES) Data and Information Services Center (DISC) - GES DISC

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

Atmospheric composition, atmosphere dynamics, global precipitation, ocean biology, ocean dynamics and solar irradiance

E-mail: help@daac.gsfc.nasa.gov

Telephone: 1 301-614-5224

Fax: +1 301-614-5268

NASA Langley Research Center DAAC- LaRC DAAC

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

Radiation Budget, Clouds, Aerosols, Tropospheric Chemistry

E-mail: larc@eos.nasa.gov

Telephone: +1 757-864-8656

Fax: +1 757-864-8807

Land Processes DAAC- LP DAAC

<http://LPDAAC.usgs.gov>

Land Processes

E-mail: LPDAAC@eos.nasa.gov

Telephone: +1 605-594-6116

Toll free: +1 866-573-3222

Fax: +1 605-594-6963

National Snow and Ice Data Center DAAC-NSIDC DAAC

<http://nsidc.org>

Snow and Ice, Cryosphere, and Climate

E-mail: nsidc@nsidc.org

Telephone: +1 303-492-6199

Fax: +1 303-492-2468

Cover images courtesy of: NASA EOSDIS Outreach Team

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

Oak Ridge National Laboratory DAAC- ORNL DAAC

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

Biogeochemical Dynamics, Ecological Data, Environmental Processes

E-mail: ornldaac@ornl.gov

Telephone: +1 865-241-3952

Fax: +1 865-574-4665

Physical Oceanography DAAC- PO.DAAC

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

Oceanic Processes, Air-Sea Interactions

E-mail: podaac@podaac.jpl.nasa.gov

Telephone: +1 626-744-5508

Fax: +1 626-744-5506

Socioeconomic Data and Applications Center- SEDAC

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

Population, Sustainability, Geospatial Data, Multilateral Environmental Agreements

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

Telephone: +1 845-365-8920

Fax: +1 845-365-8922

RELATED DATA PROVIDERS

Global Hydrology Resource Center-GHRC

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

Hydrologic Cycle, Severe Weather Interactions, Lightning, Convection

E-mail: ghrc@eos.nasa.gov

Telephone: +1 256-961-7932

Fax: +1 256-961-7859

Moderate Resolution Data Center- MRDC

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

MODIS Level 1 and Atmosphere data products

E-mail: modapsuso@saicmodis.com

Telephone: +1 866-506-6347

Ocean Biology Processing Group

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

Ocean color

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

Telephone list: <http://oceancolor.gsfc.nasa.gov/seadas>

- Click on "Support" to access the telephone list.