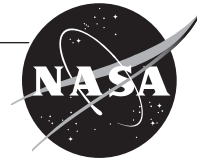# _WHAT'S NEW_ from **NASA EOSDIS Data Centers**

NASA Earth Observing System Data and Information System (EOSDIS) data centers provide data, information, and services that advance understanding and knowledge of our home planet. For more information about the EOSDIS Distributed Active Archive Centers (DAACs) see: http://nasadaacs.eos.nasa.gov. For more information about science, exploration, and discovery at NASA visit NASA Science Mission Directorate: http://science.hq.nasa.gov.

ASF DAAC

Alaska Satellite Facility DAAC
http://www.asf.alaska.edu

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

Outreach Products (General Audience)
Capturing a Dynamic Planet – Using Synthetic Aperture Radar to View the Earth (CD-ROM)

This product features a SAR Image Gallery and a SAR Science Concepts section. The image gallery contains Level 2 data products as well as an assortment of SAR images from around the world with captions explaining each image. The Science Concepts section explains the basic concepts of SAR and InSAR.

Global Rain Forest Mapping Project, Mainland South-East Asia Rain Forest Mosaic (CD-ROM)

This product contains mosaics of SAR images of the mainland part of South-East Asia and sections of southern China and north-east India. Each mosaic depicts the region during the predominantly dry season in Jan./Feb. 1997 and during the rainy season in August 1998 and may be used by anyone studying this region of the world. The mosaics have a 100-meter resolution and were created from nearly 4,000 full-resolution images. The above discs can be ordered at: http://www.asf.alaska.edu/unrestricted_products/CDorderform.html.

GES DAAC

NASA Goddard Space Flight Center Earth Sciences DAAC
http://disc.gsfc.nasa.gov

Atmospheric Composition, Atmospheric Dynamics, Global Precipitation, Ocean Biology, Ocean Dynamics, Solar Irradiance

Data

TOMS Version 8
http://disc.gsfc.nasa.gov/data/dataset/TOMS

TOMS Version 8 gridded 1x1.25 degree Level 3 data in ASCII format (in a 2-disk DVD-ROM set) and Level 2 instrument level resolution data in HDF-EOS5 format are both available from the GES DAAC.

Aura OMI, MLS, and HIRDLS
http://disc.gsfc.nasa.gov/Aura/

(1) OMI Level 2 Total Ozone product (including aerosol index and effective surface reflectivity parameters) and (2) all 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). Other Level 2 OMI data products (cloud, aerosols, SO2, NO2, BrO, HCHO, OClO) will be available in the future. HIRDLS data release has been delayed.

AIRS Reprocessing

AIRS started reprocessing with Algorithm Version 4, which is archived as ECS Collection 3. The new release features improved algorithms and three types of gridded Level 3 products (daily, 8-day, and monthly means).

MODIS Reprocessing

Terra and Aqua MODIS started reprocessing into Collection 5. The new collection offers more accurate geolocations, numerous improvements to the cloud top and optical properties, improved aerosol retrieval, and further refined sea surface temperatures.

TRMM Reprocessing
http//disc.gsfc.nasa.gov/precipitation/TRMMV5-V6Changes.shtml

TRMM has completed its Version 6 reprocessing.

Tools and Services

GES-DISC Interactive Online Visualization and Analysis Infrastructure (Giovanni)
http://disc.gsfc.nasa.gov/techlab/giovanni/index.shtml

Giovanni is a Web interface that allows users to perform interactive data analysis online without having to download any data. Giovanni is currently supporting interfaces for AIRS, MLS, TOMS & OMI, MODIS, Ocean Color, TRMM, and UARS/HALOE.

Upgraded Subsetting Services
http://disc.gsfc.nasa.gov/data/

These services are available from the DAAC archive and Data Pool and currently include Aura Level 2 MLS and OMI spatial and parameter subsets; AIRS Levels 1 and 2 channel and parameter subsets; MODIS Level 1B channel subset; and MODIS Atmosphere Level 3 parameter subset.

GeoTIFF Conversion

The MODIS Level 1B on-the-fly channel subset service now includes an optional conversion to GeoTIFF format, thus enabling users to obtain the subsets in a format compatible with GIS applications.

GHRC

Global Hydrology Resource Center
http://ghrc.msfc.nasa.gov/

Hydrologic Cycle, Severe Weather Interactions, Lightning, Convection

Data

Tropical Cloud Systems and Processes (TCSP) Research Experiment
http://camex.nsstc.nasa.gov/tcsp/

The GHRC supported the TCSP research experiment this summer by providing real-time and static web support, data ingest, and archive for the project PIs. The GHRC will be the data distribution and user services site for many of the datasets. The TCSP studies the dynamics and thermodynamics of precipitating cloud systems, including tropical cyclones, over the tropical eastern Pacific.

AMSR-E SIPS Data Reprocessing

The AMSR-E SIPS at the GHRC will begin reprocessing all the level 2 and higher products this fall 2005. The reprocessing will use the JAXA L1A Version 2 files and the most current algorithms for the Level 2 and higher products from the start of the mission (July 2002) to current. The reprocessed data will be available for public distribution by the NSIDC DAAC. For more information about the data, contact the NSIDC User Services at nsidc@nsidc.org.

GHRC continued

Tools and Service

GHRC Data Pool Version 2
http://datapool.nsstc.nasa.gov

As part of the NASA-funded DISCOVER project, the GHRC and UAH have enhanced the GHRC Data Pool environment. The Data Pool interface provides data search, subsetting, automated packaging and notification, and an integrated order tracking system for passive microwave and other related products.

Improvements for Version 2 Include:
- File-level subsetting for all available data products
- Data visualization through OGC-compliant Web map services
- Use of distributed service architecture for improved reliability against network interruptions
- Performance improvements for processing large orders

LaRC DAAC

NASA Langley Research Center DAAC
http://eosweb.larc.nasa.gov
Radiation Budget, Clouds, Aerosols, Tropospheric Chemistry

Data

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

Many new CERES products are available from the Terra and Aqua missions including various top of atmosphere (TOA) and surface fluxes and clouds; single satellite fluxes and clouds; clouds and radiative swath; and TOA and surface averages.

Earth Radiation Budget Experiment (ERBE)

ERBE Nonscanner Earth Radiant Flux and Albedo (S-10N) Wide Field Of View (WFOV) Edition 3 data product contains temporally and spatially averaged shortwave and longwave TOA fluxes derived from one month of ERBE nonscanning WFOV instruments aboard the Earth Radiation Budget Satellite.

International Satellite Cloud Climatology Project (ISCCP)

ISCCP B3, D1, D2, DX, TOVS, and ICESNOW for October 2001 through December 2004 are now available in native format.

MISR Climatology

MISR monthly, global 1° x 1° "Clim-Likely" aerosol climatology, derived from 'typical-year' aerosol transport model results are available for individual 1° x 1° boxes or as global monthly files. This data set was developed as an initial step in identifying a range of components and mixtures for the MISR Standard Aerosol Retrieval Algorithm climatology, and as one standard against which to compare MISR aerosol air mass type retrieval results.

North American Research Strategy for Tropospheric Ozone (NARSTO)

NARSTO Pacific 2001 Air Quality Study ocurred in the Lower Fraser Valley in British Columbia, Canada. Aerosols and various chemical species data are available for six sites from the study.

Tropospheric Emission Spectrometer (TES)

TES standard data products will include profile measurements of ozone, water vapor, carbon monoxide, methane, nitrogen dioxide, and nitric acid for 16 orbits every other day. TES Level 2 Nadir measurements of water vapor, ozone, carbon monoxide and atmospheric temperature are available.

Tools and Services

MISR Level 3 Imagery
http://eosweb.larc.nasa.gov/PRODOCS/misr/level3/overview.html

Cloud albedo parameters are available along with MISR Level 3 global data products such as radiances, aerosol optical depth, surface reflectance, and vegetation indices. The MISR Level 3 data are available for viewing, animating, and downloading from the Web site.

MY NASA DATA
http://mynasadata.larc.nasa.gov/las/servlets/dataset

The MY NASA DATA Web site allows users to create custom microsets for desired time series, parameters and geographical regions. Currently, over 100 parameters from the CERES, MISR, Surface Radiation Budget (SRB), Tropospheric Ozone Residual (TOR) and the ISCCP are available from the Web site.

LP DAAC

Land Processes DAAC
http://LPDAAC.usgs.gov
Land Processes

Data

MODIS Data Products
http://LPDAAC.usgs.gov/modis/dataproducts.asp

The MODIS Aqua V004 products are now available. The V004 collection represents validated data, meaning that product uncertainties are generally well defined over a range of representative conditions, depending on the level of validation achieved. Also the V004 BRDF/Albedo suite of products now includes combined Terra and Aqua data. A V005 product collection is expected to be processed and become available in 2006.

MODIS Browse Images

Specific V004 MODIS products now provide browse images for identifying cloud cover and geographic areas. Additional Terra and Aqua MODIS products will provide browse data as they continue to be released.

Tools and Services

The ASTER DEM Coverage Map
http://LPDAAC.usgs.gov/aster/dem_map.asp

Data Pool
http://LPDAAC.usgs.gov/datapool/datapool.asp

A new feature allows 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.

MODextract Tool
http://LPDAAC.usgs.gov/landdaac/tools/datapool/index.asp

A script has been released that can be used to locate and retrieve MODIS Land products from the LP DAAC Data Pool and will download the data to the user's machine.

MODIS LDOPE Tools
http://LPDAAC.usgs.gov/landdaac/tools/ldope/index.asp

Version 1.4 of the Land Data Operational Product Evaluation (LDOPE) tools was released July 2004. For information about the new features including statistical and masking capabilities visit the Web site.

MODIS Reprojection Tool (MRT)
http://LPDAAC.usgs.gov/landdaac/tools/modis/index.asp

A new version of the MRT was released July 2004.

MRT Swath Tool
http://LPDAAC.usgs.gov/landdaac/tools/mrtswath/index.asp.

The LP DAAC has released a software tool for re-projecting MODIS Level 1B and Level 2 swath data to gridded products.

GloVis
http://glovis.usgs.gov/

MODIS land products with associated browse are available through the USGS Global Visualization Viewer Web site, offering expedient perusal of global and regional data availability on the basis of browse images and metadata attributes.

NSIDC DAAC

National Snow and Ice Data Center DAAC
http://nsidc.org
Snow and Ice, Cryosphere and Climate

Data

NASA Scatterometer Climate Pathfinder (SCP) Arctic and Antarctic Ice Extent from QuikSCAT, 1999-2004
http://nsidc.org/data/nsidc-0265.html

This data set consists of sea ice extent for the Arctic (60-90°N) and Antarctic (52-90°S) derived from Seawinds on QuikSCAT. The data are in Scatterometer Image Reconstruction (SIR) binary image format, along with ASCII text files containing latitude and longitude coordinates along the sea ice edge, and browse images of SIR files in Portable Network Graphics (PNG) format. Estimates of sea ice extent are derived from daily-averaged QuikSCAT sigma-0 measurements and extend from 19 July 1999 to 31 December 2004. Ancillary products include daily-averaged total sea ice extent (km^2) in ASCII format produced by NSIDC.

Global Monthly EASE-Grid Snow Water Equivalent (SWE) Climatology
http://nsidc.org/data/nsidc-0271.html

This data set comprises global, monthly satellite-derived snow water equivalent (SWE) climatologies from November 1978 through June 2003. Global data are gridded to the Northern and Southern 25 km Equal-Area Scalable Earth Grids (EASE-Grids). Global snow water equivalent is derived from Scanning Multichannel Microwave Radiometer (SMMR) and selected Special Sensor Microwave/Imagers (SSM/I). These data are suitable for continental-scale time-series studies of snow cover and water equivalent. Also, see the SWE Climatology browse animations at: http://nsidc.org/data/docs/daac/nsidc0271_ease_grid_swe_climatology/browse/viewer.html.

Northern Hemisphere EASE-Grid Weekly Snow Cover and Sea Ice Extent Version 3
http://nsidc.org/data/nsidc-0046.html

This product combines snow cover and sea ice extent at weekly intervals from 23 October 1978 through 5 June 2005, and snow cover from 3 October 1966 through 23 October 1978. (Sea ice data were not available prior to 23 October 1978.) The input sea ice data has changed for Version 3. The new sea ice data benefits from more extensive quality-control procedures that greatly reduce the number of pixels misclassified as sea ice due to weather effects and/or coastal contamination. The new sea ice data are also calibrated to provide a consistent long-term time series of sea ice extent, beginning with SMMR and extending through the SSM/I era. Data are provided in the Northern Hemisphere 25 km equal-area grid (NSIDC Nl EASE-Grid). A new browse animation of the entire time-series of the data set is at: http://nsidc.org/data/docs/daac/nsidc0046_nh_ease_snow_seaice/browse/viewer.html.

Services

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.

MODIS Snow and Sea Ice Products in the Data Pool
http://nsidc.org/data/data_pool.html

NSIDC has populated the Data Pool with the most recent 7 days of MODIS snow and sea ice products.

ORNL DAAC

Oak Ridge National Laboratory DAAC
http://www.daac.ornl.gov
Biogeochemical Dynamics, Ecological Data, Environmental Processes

Data

Climate Collections
http://daac.ornl.gov/CLIMATE/climate_collections.html

The data set Nitrogen Deposition Onto the United States and Western Europe, prepared by Elisabeth Holland and colleagues, contains data for wet deposition from 1978-1994 and dry nitrogen-species deposition from 1989-1994 for the United States and Western Europe. The investigator sent data change information for two deposition files. Newsletter with change information was sent to users.

Southern African Regional Science Initiative (SAFARI) 2000
http://daac.ornl.gov/S2K/safari.html

The SAFARI 2000 project was conducted during 1999-2001 to develop a better understanding of the Earth-atmosphere-human system in southern Africa. Twenty nine new data sets have been released. The data sets were originally prepared in coordination with investigators by the SAFARI 2000 Data Group at NASA's Goddard Space Flight Center. These data sets contain vegetation cover data, including leaf area index (LAI), leaf inclination angle, leaf spectral data, plant area index (PAI), and canopy structure data for sites along the Kalahari Transect; woody vegetation data for the Kalahari Transect and Skukuza; radiance data for Sua Pan and Skukuza sites; surface spectral reflectance, leaf area index (LAI), and photosynthetically active radiation (fPar) data for sites in Sua Pan; vegetation data and soil and plant C and N isotopes data for southern Africa; daily rainfall, leaf area, tree ring, FPAR, surface irradiance, and albedo data for sites in Mongu, Zambia; soil properties, surface albedo, and radiation flux data from Mongu and Skukuza sites; vegetation structure data for the Kataba site and PAR measurements for the Kalahari Transect for the wet season 2000; diffuse spectral irradiance for eight core sites in Southern Africa; daily rainfall estimates for Southern Africa; a global burned area map for Southern Africa for 2000; and modeled tropospheric air mass trajectories and burned area products for the 2000 dry season in Southern Africa.

Vegetation/Ecosystem Modeling and Analysis Project (VEMAP)
http://www.daac.ornl.gov/VEMAP/vemap.html

VEMAP was an international project studying the response of biogeochemical models and vegetation-type distribution models (i.e., biogeographical models) to variability in climate and to other spatial and temporal factors for the continental U.S. Two new data sets from Phase 2 of the VEMAP project have been released. The two data sets contain monthly and annual results, respectively, from experiments conducted to compare the ecological responses of the suite of VEMAP models to projected transient scenarios of climate and atmospheric carbon dioxide for the period 1994 to 2100.

Tools and Services

ORNL DAAC Newsletter

The first semiannual newsletter was distributed and includes announcements of new data sets and services being offered to the public as well as news of other happenings and events. Send comments and suggestions to ornldaac@ornl.gov.

PO.DAAC

Physical Oceanography DAAC
http://podaac.jpl.nasa.gov
Oceanic Processes, Air-Sea Interactions

Data

GHRSST-PP
http://ghrsst.jpl.nasa.gov

The GODAE High Resolution Sea Surface Temperature Pilot Project (GHRSST-PP) is an international collaboration to produce a new generation of global satellite-based SST measurements from infrared and microwave instruments. Near real-time Level-2 Preprocessed (L2P) and Level 4 merged SST products containing satellite-specific SST error statistics and other relevant ancillary information (e.g., diurnal warming) will be available through a 30-day rolling store. A metadata repository database will facilitate search and discovery of GHRSST-PP products also archived at the NOAA NODC as well as provide access to matchups of coincident *in situ* and satellite SST observations.

Gravity Recovery And Climate Experiment (GRACE)
http://podaac.jpl.nasa.gov/grace/

GRACE mission data products are available from August 2002 to June 2004. Level 2 data products are monthly gravity field estimates as well as mean gravity field models. These are provided as sets of spherical harmonic coefficients of the geopotential. Level 1B data contain inter-satellite range variations and all corrections needed to derive monthly time-variations in Earth's gravity field.

Tools and Services

Faster Data Transfer Tool
http://podaac.jpl.nasa.gov/aspera

A new electronic transfer tool is available and provides reliable and faster data downloads; users have typically found up to 10x improvement over conventional FTP.

Web Site Enhancements
FAQ - https://podaac.custhelp.com

See our new, searchable Frequently Asked Questions (FAQ) Web site. By utilizing our free Sign-On Account, users can submit questions, track their status and update them all on-line.

Global Change Master Directory (GCMD)

A directory to Earth science data and services
http://gcmd.nasa.gov

The GCMD database currently holds more than 17,000 descriptions of Earth science data sets and services covering all aspects of Earth and environmental sciences. Features available on the GCMD Web site with the latest upgrade include:

- ISO 19115 metadata compliance
- Enhanced free-text search
- Highlighted search terms in the results
- Updated metadata authoring tools
- Access to prototype GIS mapserver
- Improved navigation through the science and services keywords

---

SEDAC

Socioeconomic Data and Applications Center
http://sedac.ciesin.columbia.edu
Population, Sustainability, Geospatial Data, Multilateral Environmental Agreements

Data

Gridded Population of the World (GPW v3)
http://sedac.ciesin.columbia.edu/gpw

GPW v3 is the third edition of a data product that shows spatially distributed population over the globe. The purpose of this project is to provide a spatially disaggregated population layer that is compatible with datasets from social, economic and earth science fields. In doing so, a comprehensive database of subnational population across the globe was compiled. GPW, Future Estimates: 2015 is an extension of the GPW v3 dataset that estimates future population for the year 2015 using the same methodology as GPW v3. Data are freely available for download in formats compatible with geospatial software.

Global Rural-Urban Mapping Project (GRUMP)
http://sedac.ciesin.columbia.edu/gpw

GRUMP developed out of a need for researchers to be able to identify population more specifically in rural and urban areas. The central data product resulting from GRUMP is called Gridded Population of the World with Urban Reallocation (GPW-UR). Additional datasets resulting from GRUMP include a land area grid that specifies urban areal extents worldwide, and a database of human settlements, their locations and populations. GRUMP differs from GPW in that it is lightly modeled. In addition to areal-weighted redistribution, GRUMP uses input from several non-census sources to estimate settlement points and derive urban extents based on those settlement points. The GRUMP population grid has an output resolution of 30 arc-seconds.

2005 Environmental Sustainability Index (ESI)
http://www.ciesin.columbia.edu/indicators/esi/

The ESI ranks 146 countries on 21 levels of sustainability covering natural resource endowments, past and present pollution levels, environmental management efforts, contributions to protection of the global commons, and a society's capacity to improve its environmental performance over time. The report was produced in collaboration with the Yale Center for Environmental Law and Policy and the World Economic Forum.

Intergovernmental Panel on Climate Change (IPCC) Scenario 1992 (IS92) Updated
http://sedac.ciesin.columbia.edu/ddc/index.html

The IPCC Socioeconomic Data Distribution Centre (DDC) is hosted by SEDAC in coordination with the Climatic Research Unit in the UK and the Deutches Klimarechenzentrum (DKRZ) in Germany under the supervision of the IPCC Task Group on Data and Scenario Support for Impact and Climate Analysis. The DDC Web site has undergone a major update to include version 1.1 of the IS92 Emission Scenario dataset. The Emission Scenario dataset was developed as the official digital version of the IS92 scenarios originally published in printed form in the 1992 Supplementary Report to the IPCC Scientific Assessment. The DDC also provides access to baseline and scenario data related to population, economic development, technology, and natural resources for use in climate impact assessments.