



EARTH SYSTEM SCIENCE

Data and Services

LAND Data Set Reference Sheet

February 2008

Physical Properties	Data Center	Selected Data Sets and Data Collections <i>Complete data set listings available through each individual data center. For more information about NASA's Earth Observing System Data and Information System (EOSDIS) data centers, see: http://nasadaacs.eos.nasa.gov</i>
Land Cover & Land Use Change	ASF DAAC http://www.asf.alaska.edu	<ul style="list-style-type: none"> • RADARSAT-1, ERS-1, ERS-2, JERS and PALSAR SAR images • JERS-1 SAR Image Mosaics [multiple-CD sets containing composited images of rain forests in 1) the Amazon region, 2) Central American and South American Pantanal regions, 3) Africa, and 4) Southeast Asia] • JERS-1 SAR Global Boreal Forest Mapping Project: Boreal North America, Winter 1997-98 and Summer 1998, DVD ROM
	LaRC DAAC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • Multi-angle Imaging SpectroRadiometer (MISR) Level 1B2 Terrain Data, Level 2 Surface Parameters, and Level 3 Component Global Land (daily, monthly, quarterly, and yearly) Products • Biomass Burning data set
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER L1B Registered Radiance at the Sensor • ASTER Level 2 Surface Reflectance • ASTER Level 2 Surface Reflectance SWIR Crosstalk-Corrected • ASTER Level 3 Digital Elevation Model • ASTER Level 3 Orthorectified Images • MODIS/Terra and MODIS/Aqua Land Cover Type Yearly L3 Global .05Deg CMG • MODIS/Terra and MODIS/Aqua Land Cover Type Yearly Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 500m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 250m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Cover Conversion 96-Day L3 Global 250m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Continuous Fields Yearly L3 Global 500m ISIN Grid • MODIS/Terra and MODIS/Aqua Land Cover Dynamics Yearly L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 0.5Deg CMG • MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 0.5Deg CMG
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • BOREAS Data Sets: BOREAS AFM-12 1 km AVHRR Seasonal Land Cover Classification; BOREAS TE-18 Landsat TM Physical Classification Image of the NSA • Remote Sensing Data: MODIS Land Cover product (MOD12Q1) subsetted to 7 X 7 km for 1,052 field sites and presented in ASCII format • SAFARI 2000: MODIS L3 albedo and land cover data, Southern Africa • LBA: Landsat TM and orthorectified ETM+ for legal Amazonia, and Land Use/Land Cover time series Ji_Parana Basin, Brazil 1986-2001, and Forest Structure Measurements for GLAS Validation: Santarem 2004 • Characteristics of African Savanna Biomes for Determining Woody Cover
Soils	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • Soil Moisture Experiment (SMEX) and Cold Climate Processes Experiment (CLPX) Data • AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, & QC EASE-Grids • AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parameters, & QC EASE-Grids
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • Soil Collection Data Sets: Global Gridded Surfaces of Selected Soil Characteristics (IGBP-DIS); Global Data Set of Derived Soil Properties, 0.5-Degree Grid (ISRIC-WISE)
Vegetation Dynamics	LaRC DAAC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • MISR Level 2 Surface Parameters and Level 3 Component Global Land (daily, monthly, quarterly, and yearly) Products • Clouds and the Earth's Radiant Energy System (CERES) Synoptic Radiative Fluxes and Clouds (SYN), Monthly Regional Radiative Fluxes and Clouds (AVG), and Monthly Zonal and Global Radiative Fluxes and Clouds (ZAVG) Products [from Terra]

Vegetation Dynamics (continued)	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER L1B Registered Radiance at the Sensor • ASTER Level 2 Surface Radiance • ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected • ASTER Level 2 Surface Reflectance • ASTER Level 2 Surface Reflectance SWIR Crosstalk-Corrected • ASTER Level 3 Digital Elevation Model • ASTER Level 3 Orthorectified Images • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 250m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 500m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Land Cover Dynamics Yearly L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Leaf Area Index/FPAR 8-day L4 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Net Photosynthesis 8-Day L4 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Net Primary Production Yearly L4 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Cover Conversion 96-Day L3 Global 250m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Continuous Fields Yearly L3 Global 500m SIN Grid
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • Field Campaign Vegetation Indices and Biology Data Sets: Photosynthesis, Biomass, Leaf Chlorophyll, and Leaf Area Index • Remote Sensing Data: MODIS Vegetation Dynamics Products [LAI/FPAR (MOD15A2), ENVI (MOD13A2), and NPP (MOD17A2)] subsetted to 7 X 7 km for 1,052 field sites worldwide and presented in ASCII format • Vegetation Collection: Net Primary Productivity data sets; Biomass Allocation and Growth Data of Seeded Plants; and Leaf Area Index Maps at 30-m Valeri site, Larose Canada • Model Archive: Archive of Biogeochemical Models [latest addition: MAPSS (Mapped Atmosphere-Plant-Soil System Model) Version 1.0]
Surface Temperature	GES DISC http://daac.gsfc.nasa.gov	<ul style="list-style-type: none"> • TOVS Pathfinder Path A Atmospheric and Surface Parameters • A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System • Goddard DAAC Climatology Interdisciplinary Data Collection
	LaRC DAAC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • Surface Radiation Budget (SRB) data sets (daily and monthly) • International Satellite Cloud Climatology Project (ISCCP) D1 and D2 data products • CERES Clouds and Radiative Swath (CRS), Monthly Gridded Single Satellite Fluxes and Clouds (FSW), Monthly Gridded TOA/Surface Fluxes and Clouds (SFC), Monthly TOA/Surface Averages (SRBAVG), Single Scanner Footprint TOA/Surface Fluxes and Clouds (SSF), SYN, AVG, and ZAVG Products [from TRMM, Terra, and Aqua]
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER Level 2 Surface Emissivity • ASTER On-Demand Level 2 Surface Kinetic Temperature • ASTER Level 3 Orthorectified Images • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 5km SIN Grid • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily 5-min L2 Swath 1km • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 0.05Deg CMG • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 0.05Deg CMG • MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Monthly L3 Global 0.05Deg CMG
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • AVHRR Polar Pathfinder Twice-Daily 1.25 km, 5 km, and 25 km EASE-Grid Composites [Polar Regions] • AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, & QC EASE-Grids • AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parameters, & QC EASE-Grids
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • BOREAS Data Set: BOREAS TE-11 Surface Meteorological Data • SAFARI 2000 TOVS Surface and Atmospheric Data • Remote Sensing Data Set: MODIS Land Surface Temperature (MOD11A2) subsetted to 7 x 7 km for 1,052 sites worldwide and presented in ASCII format • Climate Collection Data Set: Global Monthly Climatology for the Twentieth Century (New et al.)
Gravity Gravity Field Models, Measurements	CDDIS http://cddis.gsfc.nasa.gov	<ul style="list-style-type: none"> • Ground Network/Satellite Measurements: Daily, hourly, and sub-hourly code and phase observations from GNSS ground network; Daily and hourly files of round trip time of flight from satellite laser ranging (SLR) ground network; Time-tagged range-rate measurements from DORIS ground network; • Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • GRACE Level 2 Monthly Gravity Field Estimates

Surface Topography Elevation, slope, DEMs	ASF DAAC http://www.asf.alaska.edu	<ul style="list-style-type: none"> • RADARSAT-1, ERS-1, ERS-2, JERS and PALSAR SAR images • The Ends of the Earth CD with Antarctic and Alaska image mosaics
	CDDIS http://cddis.gsfc.nasa.gov	<ul style="list-style-type: none"> • Ground Network/Satellite Measurements: Daily, hourly, and sub-hourly code and phase observations from GNSS ground network; Daily and sub-daily GNSS satellite orbits and clocks; Daily and hourly files of round trip time of flight from satellite laser ranging (SLR) ground network; Time-tagged range-rate measurements from DORIS ground network • Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER Digital Elevation Model
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • Radarsat Antarctic Mapping Project Digital Elevation Model Version 2 • RAMP AMM-1 SAR Image Mosaic of Antarctica • GLAS/ICESat L2 Global Land Surface Altimetry Data • GLAS/ICESat L1B Global Elevation Data • Greenland 5 km DEM, Ice Thickness, and Bedrock Elevation Grids • Antarctic 5-km Digital Elevation Model from ERS-1 Altimetry • MODIS Mosaic of Antarctica (MOA) Image Map • GLAS/ICESat 500 m Laser Altimetry Digital Elevation Model of Antarctica • GLAS/ICESat 1 km Laser Altimetry Digital Elevation Model of Greenland
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • FLUXNET, MODIS ASCII Subset, and Net Primary Productivity (NPP) site elevation and other topographic feature extraction with WebGIS
Fire Occurrence Extent, thermal anomalies	GES DISC http://daac.gsfc.nasa.gov	<ul style="list-style-type: none"> • TRMM/TSDIS Fire Products (Daily Hot Spot Image and Monthly Composite Map of Fire Counts)
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 5-min L2 Swath 1 km • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Daily L3 Global 1 km SIN Grid • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 8-day L3 Global 1 km SIN Grid • ASTER Level 2 Surface Kinetic Temperature • ASTER Level 2 Brightness Temperature at the Sensor • ASTER Level 2 Surface Emissivity • ASTER Level 2 Surface Radiance • ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • SAFARI 2000 Data Sets: ASTER and MODIS Fire Data Comparison; Emissions and MODIS Burned Areas • LBA: Characterization of Vegetation Fire Dynamics for Brazil 2001-2003, and Forest Structure Measurements for GLAS Validation: Santarem 2004 • Global Fire Emissions Database, Version 2.1 (GFEDv2.1)
Volcanic Effects Frequency of occurrence, thermal anomalies, impact	LaRC DAAC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • MISR Level 2 Aerosol Parameters, Level 2 TOA/Cloud Stereo Parameters, and Level 3 Component Global Aerosol Daily Product • Stratospheric Aerosol and Gas Experiment (SAGE) II data set • SAGE III Level 2 Solar Event Species Profiles
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER Level 2 Surface Kinetic Temperature • ASTER Level 2 Brightness Temperature at the Sensor • ASTER Level 2 Surface Emissivity • ASTER Level 2 Surface Radiance • ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 5-Min L2 Swath 1km • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Daily L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 8-Day L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Land Cover Type 96-Day L3 Global 1km SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 250m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 500m SIN Grid • MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 1km SIN Grid
Solid Earth Earth Orientation Parameters (EOP), Crustal Dynamics, Geodesy	CDDIS http://cddis.gsfc.nasa.gov	<ul style="list-style-type: none"> • Daily and weekly Earth Orientation Parameters (EOP) - polar motion and rates, length-of-day values, nutation) derived from GNSS, SLR, VLBI, and DORIS ground network measurements • Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks

Soil Wetness Soil Moisture	GES DISC http://daac.gsfc.nasa.gov	<ul style="list-style-type: none"> • A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System • Four-dimensional Assimilated Dataset for the TOGA COARE Intensive Observing Period (IOP)
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, & QC EASE-Grids • AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parameters, & QC EASE-Grids • SMEX02 Soil Moisture Validation Data Sets
	ORNL DAAC http://www.daac.ornl.gov	<ul style="list-style-type: none"> • BOREAS Data Set: BOREAS HYD-06 Ground Gravimetric Soil Moisture • FIFE Data Set: Soil Moisture Gravimetric Data

ASF DAAC Alaska Satellite Facility DAAC

CDDIS Crustal Dynamics Data Information System

GES DISC Goddard Space Flight Center (GSFC) Earth Sciences Data and Information Services Center (DISC)

LaRC DAAC Langley Research Center DAAC

LP DAAC Land Processes DAAC

NSIDC DAAC National Snow and Ice Data Center DAAC

ORNL DAAC Oak Ridge National Laboratory DAAC

PO.DAAC Physical Oceanography DAAC

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