



## EARTH SYSTEM SCIENCE

## Data and Services

## LAND Data Set Reference Sheet

December 2016

Physical Properties	Data Center	<b>Selected Data Sets and Data Collections</b> <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: <a href="https://earthdata.nasa.gov">https://earthdata.nasa.gov</a></i>
<b>Fire Occurrence</b> Extent, thermal anomalies	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>Custom SAR Interferograms (ERS-1, ERS-2, JERS-1, PALSAR, RADARSAT-1)</li> <li>UAVSAR Repeat Pass Interferometric products</li> </ul>
	<b>GES DISC</b> <a href="http://disc.sci.gsfc.nasa.gov">http://disc.sci.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>TRMM/TSDIS Fire Products (Daily Hot Spot Image and Monthly Composite Map of Fire Counts)</li> </ul>
	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>ASTER L1B Registered Radiance at the Sensor</li> <li>ASTER Level 2 Surface Emissivity</li> <li>ASTER Level 2 Surface Kinetic Temperature</li> <li>ASTER Level 2 Surface Radiance</li> <li>ASTER Level 2 Surface Radiance SWIR Crosstalk</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 5-Min L2 Swath 1km</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 5600m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Monthly L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 250m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 500m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 1km and 500m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 250m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 5-Min L2 Swath 1km</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 8-Day L3 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Daily L3 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Monthly L3 Global 500m SIN Grid</li> </ul>
<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>CARVE: Alaskan Fire Emissions Database (AKFED), 2001-2013</li> <li>Global Fire Emissions Database</li> <li>LBA-ECO LC-23 ASTER and MODIS Fire Data Comparison for Brazil: 2003-2004</li> <li>LBA: Characterization of Vegetation Fire Dynamics for Brazil 2001-2003, and Forest Structure Measurements for GLAS Validation: Santarem 2004</li> <li>NACP Peatland Landcover Type and Wildfire Burn Severity Maps, Alberta, Canada</li> <li>SAFARI 2000 Data Sets: ASTER and MODIS Fire Data Comparison; Emissions and MODIS Burned Areas</li> </ul>	
<b>Gravity</b> Gravity Field Models, Measurements	<b>CDDIS</b> <a href="http://cddis.gsfc.nasa.gov">http://cddis.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>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 (SL ground network; Time-tagged range-rate measurements from DORIS ground network</li> <li>Daily and weekly precision satellite orbits derived from GNSS, SLR, and DORIS ground network observations. Note: Precise satellite orbits are required for higher level products.</li> <li>Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks</li> </ul>
	<b>PO.DAAC</b> <a href="http://podaac.jpl.nasa.gov">http://podaac.jpl.nasa.gov</a>	<ul style="list-style-type: none"> <li>GRACE Level 2 Monthly Gravity Field Estimates</li> <li>Surface Mass Density Changes from GRACE (monthly mass grids of water equivalent thickness)</li> </ul>

<b>Land Cover &amp; Land Use Change</b>	<b>ASDC DAAC</b> <a href="https://eosweb.larc.nasa.gov">https://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• Biomass Burning data set</li> <li>• 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</li> </ul>
	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>• Custom SAR Interferograms (ERS-1, ERS-2, JERS-1, PALSAR, RADARSAT-1)</li> <li>• Global Boreal Forest Mapping Project, JERS-1 SAR image mosaics of Boreal North America, Winter 1997-98 and Summer 1998</li> <li>• Global Rainforest Mapping Project, JERS-1 SAR image mosaics of rain forests in 1) the Amazon region, 2) Central American and South American Pantanal regions, 3) Africa, and 4) Southeast Asia</li> <li>• MEaSURES Wetlands Extent and Inundated Wetlands Time Series</li> <li>• SAR Data for Terrestrial Ecologists</li> <li>• UAVSAR Repeat Pass Interferometric products</li> </ul>
	<b>GES DISC</b> <a href="http://disc.sci.gsfc.nasa.gov">http://disc.sci.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• MODIS Normalized Difference Vegetation Index, MAIRS Monthly, 8-Day, and Monthly High Resolution, through Giovanni tool</li> </ul>
	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>• ASTER Global Digital Elevation Model (GDEM) 1 Arc-Second</li> <li>• ASTER L1B Registered Radiance at the Sensor</li> <li>• ASTER Level 1 Precision Terrain Corrected Registered At-Sensor Radiance</li> <li>• ASTER Level 2 Surface Radiance</li> <li>• ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected</li> <li>• ASTER Level 2 Surface Reflectance</li> <li>• ASTER Level 2 Surface Reflectance SWIR Crosstalk-Corrected</li> <li>• ASTER Level 3 Digital Elevation Model</li> <li>• ASTER Level 3 Orthorectified Images</li> <li>• MEaSURES Web-Enabled Landsat Data</li> <li>• MODIS/Aqua Ocean Reflectance Daily L2G-Lite Global 1 KM SIN Grid</li> <li>• MODIS/Terra 250 meter Land Water Mask</li> <li>• MODIS/Terra and MODIS/Aqua Land Cover Dynamics Yearly L3 Global 500 m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Land Cover Type Yearly L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Land Cover Type Yearly L3 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 1km and 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 1km SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 1km SIN Grid</li> <li>• MODIS/Terra Vegetation Continuous Fields Yearly L3 Global 250m SIN Grid</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• SMAPVEX12 Land Cover Classification Map</li> <li>• Soil Moisture Experiment (SMEX) Data</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• BOREAS Data Sets: BOREAS AFM-12 1 km AVHRR Seasonal Land Cover Classification; BOREAS TE-18 Landsat TM Physical Classification Image of the NSA</li> <li>• Characteristics of African Savanna Biomes for Determining Woody Cover</li> <li>• CMS: Land Cover Projections (5.6-km) from GCAM v3.1 for Conterminous USA, 2005-2095</li> <li>• Harmonized Global Land Use for Years 1500 -2100, V1</li> <li>• 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</li> <li>• MODIS Collection 5 Fixed Sites Subsetting and Visualization Tool</li> <li>• MODIS Collection 5 Global Subsetting and Visualization Tool</li> <li>• MODIS Collection 5 Land Product Subsets Web Service</li> <li>• NACP Aboveground Biomass and Carbon Baseline Data, U.S.A., 2000</li> <li>• NACP MStMIP: Global and North American Driver Data for Multi-Model Intercomparison</li> <li>• NACP North American Forest Dynamics Project</li> <li>• Remote Sensing Data: MODIS Land Cover product (MOD12Q1) subsetted to 7 X 7 km for 1,147 field sites and presented in ASCII and Geotiff formats</li> <li>• SAFARI 2000: MODIS L3 albedo and land cover data, Southern Africa</li> </ul>
<b>SEDAC</b> <a href="http://sedac.ciesin.columbia.edu">http://sedac.ciesin.columbia.edu</a>	<ul style="list-style-type: none"> <li>• Global Mangrove Forests Distribution, v1</li> </ul>	

<b>Soil Moisture</b>	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>• Custom SAR Interferograms (ERS-1, ERS-2, JERS-1, PALSAR, RADARSAT-1)</li> <li>• MEaSURES Wetlands Extent and Inundated Wetlands Time Series</li> <li>• SMAP L1A Raw Data (Half Orbit)</li> <li>• SMAP L1B RADAR Sigma-0 (Time Ordered)</li> <li>• SMAP L1C RADAR Sigma-0 (Half Orbit)</li> <li>• UAVSAR Repeat Pass Interferometric products</li> </ul>
	<b>GES DISC</b> <a href="http://disc.sci.gsfc.nasa.gov">http://disc.sci.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System</li> <li>• Four-dimensional Assimilated Dataset for the TOGA COARE Intensive Observing Period (IOP)</li> <li>• Global Land Data Assimilation System (GLDAS) Model Products</li> <li>• North American Land Data Assimilation System Hourly Data Products</li> </ul>
	<b>GHRC DAAC</b> <a href="http://ghrc.nsstc.nasa.gov">http://ghrc.nsstc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• NRT AMSR2 Unified L2B Half-Orbit 25 km EASE-Grid Surface Soil Moisture</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, &amp; QC EASE-Grids</li> <li>• AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parameters, &amp; QC EASE-Grids</li> <li>• Aquarius L2 Swath Single Orbit Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Annual Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Daily, Weekly, &amp; Monthly Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Monthly Soil Moisture Climatology</li> <li>• Aquarius L3 Gridded 1-Degree Seasonal Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Seasonal Soil Moisture Climatology</li> <li>• Daily Global Land Surface Parameters Derived from AMSR-E</li> <li>• SMAP L1A Radiometer Time-Ordered Parsed Telemetry</li> <li>• SMAP L1B Radiometer Half-Orbit Time-Ordered Brightness Temperatures</li> <li>• SMAP L1C Radiometer Half-Orbit 36 km EASE-Grid Brightness Temperatures</li> <li>• SMAP L2 Radar Half-Orbit 3 km EASE-Grid Soil Moisture</li> <li>• SMAP L2 Radar/Radiometer Half-Orbit 9 km EASE-Grid Soil Moisture</li> <li>• SMAP L2 Radiometer Half-Orbit 36 km EASE-Grid Soil Moisture</li> <li>• SMAP L3 Radar Global Daily 3 km EASE-Grid Soil Moisture</li> <li>• SMAP L3 Radar Northern Hemisphere Daily 3 km EASE-Grid Freeze/Thaw State</li> <li>• SMAP L3 Radar/Radiometer Global Daily 9 km EASE-Grid Soil Moisture</li> <li>• SMAP L3 Radiometer Global Daily 36 km EASE-Grid Soil Moisture</li> <li>• SMAP L4 Global 3-hourly 9 km Surface and Rootzone Soil Moisture Analysis Update</li> <li>• SMAP L4 Global 3-hourly 9 km Surface and Rootzone Soil Moisture Geophysical Data</li> <li>• SMAP L4 Global 9 km Surface and Rootzone Soil Moisture Land Model Constants</li> <li>• SMAP L4 Global Daily 9 km Carbon Net Ecosystem Exchange</li> <li>• SMAPVEX12 Core-Based In Situ Soil Moisture Data for Agricultural Area</li> <li>• SMAPVEX12 Probe-Based In Situ Soil Moisture Data for Forest Area</li> <li>• Soil Moisture Experiment (SMEX) Data</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• BOREAS Data Set: BOREAS HYD-06 Ground Gravimetric Soil Moisture</li> <li>• FIFE Data Set: Soil Moisture Gravimetric Data</li> </ul>
<b>Soils</b>	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, &amp; QC EASE-Grids</li> <li>• AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parameters, &amp; QC EASE-Grids</li> <li>• Aquarius L2 Swath Single Orbit Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Daily, Weekly, &amp; Monthly Soil Moisture</li> <li>• Aquarius L3 Gridded 1-Degree Seasonal Soil Moisture</li> <li>• Cold Land Process Field Experiment (CLPX) Data</li> <li>• SMAPVEX12 Core-Based In Situ Soil Moisture Data for Agricultural Area</li> <li>• SMAPVEX12 Probe-Based In Situ Soil Moisture Data for Forest Area</li> <li>• Soil Moisture Experiment (SMEX) Data</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• A Compilation of Global Soil Microbial Biomass Carbon, Nitrogen, and Phosphorus Data</li> <li>• AirMOSS: L2 Hourly In-Ground Soil Moisture at AirMOSS Sites, 2011-2015</li> <li>• AirMOSS: L2/3 Volumetric Soil Moisture Profiles Derived From Radar, 2012-2015</li> <li>• NACP MsTMIP: Global and North American Driver Data for Multi-Model Intercomparison</li> <li>• NACP MsTMIP: Unified North American Soil Map</li> <li>• RegridDED Harmonized World Soil Database v1.2</li> <li>• 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)</li> <li>• Soil Moisture Profiles and Temperature Data from SoilSCAPE Sites, USA</li> </ul>

<b>Solid Earth</b> Earth Orientation Parameters (EOP), Crustal Dynamics, Geodesy	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>Custom SAR Interferograms (ERS-1, ERS-2, JERS-1, PALSAR, RADARSAT-1)</li> <li>UAVSAR Repeat Pass Interferometric products</li> </ul>
	<b>CDDIS</b> <a href="http://cddis.gsfc.nasa.gov">http://cddis.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>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</li> <li>Daily and hourly files of round trip time of flight from satellite laser ranging (SLR) ground network</li> <li>GNSS data from National Geospatial-Intelligence Agency (NGA) sites</li> <li>Ground Network/Satellite Measurements: Daily, hourly, and sub-hourly code and phase observations from GNSS ground network</li> <li>Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks</li> <li>Time-tagged range-rate measurements from DORIS ground network</li> </ul>
<b>Surface Temperature</b>	<b>ASDC DAAC</b> <a href="https://eosweb.larc.nasa.gov">https://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>CERES Clouds and Radiative Swath (CRS), Clouds and the Earth's Radiant Energy System (CERES) TOA/ Surface Fluxes, Clouds, and Aerosols (SSF1deg), Single Scanner Footprint TOA/Surface Fluxes and Clouds (SSF), SYN1deg Products [from TRMM, Terra, and Aqua]</li> <li>International Satellite Cloud Climatology Project (ISCCP) D1 and D2 data products</li> <li>Surface Radiation Budget (SRB) data sets (monthly)</li> </ul>
	<b>GES DISC</b> <a href="http://disc.sci.gsfc.nasa.gov">http://disc.sci.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System</li> <li>Goddard DAAC Climatology Interdisciplinary Data Collection</li> <li>MODIS Land Surface Temperature, MAIRS Monthly, 8-day, and Monthly High Resolution, through Giovanni tool</li> <li>TOVS Pathfinder Path A Atmospheric and Surface Parameters</li> </ul>
	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>ASTER Global Emissivity Dataset (GED), Monthly, 0.05 degree</li> <li>ASTER Global Emissivity Dataset (GED), 2000-2008, 100 meter and 1 kilometer</li> <li>ASTER Level 2 Surface Emissivity</li> <li>ASTER Level 2 Surface Kinetic Temperature</li> <li>ASTER Level 3 Orthorectified Images</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 5-Min L2 Swath 1km</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 5600m SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Monthly L3 Global 0.05Deg CMG</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 5-Min L2 Swath 1km</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 8-Day L3 1km SIN Grid</li> <li>MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Daily L3 1km SIN Grid</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>Daily Global Land Surface Parameters Derived from AMSR-E</li> <li>IceBridge KT19 IR Surface Temperature</li> <li>IceBridge NSERC L1B Geolocated Meteorologic and Surface Temperature Data</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>BOREAS Data Set: BOREAS TE-11 Surface Meteorological Data</li> <li>Climate Collection Data Set: Global Monthly Climatology for the Twentieth Century (New et al.)</li> <li>Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 3</li> <li>Remote Sensing Data Set: MODIS Land Surface Temperature (MOD11A2) subsetted to 7 x 7 km for 1,147 sites worldwide and presented in ASCII and Geotiff formats</li> <li>SAFARI 2000 TOVS Surface and Atmospheric Data</li> </ul>
	<b>SEDAC</b> <a href="http://sedac.ciesin.columbia.edu">http://sedac.ciesin.columbia.edu</a>	<ul style="list-style-type: none"> <li>Global Urban Heat Island (UHI) - average summer daytime max/nighttime min land surface temperatures within urban areas and surrounding rural areas, as well as the temperature difference between urban and rural areas.</li> </ul>
	<b>Surface Topography</b> Elevation, slope, DEMs	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>
<b>CDDIS</b> <a href="http://cddis.gsfc.nasa.gov">http://cddis.gsfc.nasa.gov</a>		<ul style="list-style-type: none"> <li>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</li> <li>Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks</li> </ul>

<b>Surface Topography</b> Elevation, slope, DEMs (continued)	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>• ASTER Global Digital Elevation Model (GDEM) 1 Arc-Second</li> <li>• ASTER Level 3 Digital Elevation Model</li> <li>• MEaSURES SRTM Version 3.0 (SRTM Plus)</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• Antarctic 5-km Digital Elevation Model from ERS-1 Altimetry</li> <li>• GLAS/ICESat 1 km Laser Altimetry Digital Elevation Model of Greenland</li> <li>• GLAS/ICESat 500 m Laser Altimetry Digital Elevation Model of Antarctica</li> <li>• GLAS/ICESat L1B Global Elevation Data</li> <li>• GLAS/ICESat L2 Global Land Surface Altimetry Data</li> <li>• Greenland 5 km DEM, Ice Thickness, and Bedrock Elevation Grids</li> <li>• IceBridge Aircraft Data Sets (a large collection of data sets bridging the ICESat-1 and ICESat-2 missions)</li> <li>• IceBridge Level-4 ATM Surface Elevation Rate of Change</li> <li>• IceBridge LVIS L2 Geolocated Surface Elevation Product</li> <li>• IceBridge MCoRDS L3 Gridded Ice Thickness, Surface, and Bottom</li> <li>• MEaSURES Greenland Ice Mapping Project (GIMP) Digital Elevation Model</li> <li>• Radarsat Antarctic Mapping Project Digital Elevation Model Version 2</li> <li>• RAMP AMM-1 SAR Image Mosaic of Antarctica</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• FLUXNET, MODIS ASCII Subset, and Net Primary Productivity (NPP) site elevation and other topographic feature extraction with WebGIS</li> <li>• Pre-ABOVE: Active Layer Thickness data suite</li> </ul>
<b>Vegetation Dynamics</b>	<b>ASDC DAAC</b> <a href="https://eosweb.larc.nasa.gov">https://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• Clouds and the Earth's Radiant Energy System (CERES) Synoptic Radiative Fluxes and Clouds (SYN1deg), Monthly Regional Radiative Fluxes and Clouds (SYN1deg), and Monthly Zonal and Global Radiative Fluxes and Clouds (SYN1deg) Products [from Terra and Aqua]</li> <li>• MISR Level 2 Surface Parameters and Level 3 Component Global Land (daily, monthly, quarterly, and yearly) Products</li> </ul>
	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>• Global Boreal Forest Mapping Project, JERS-1 SAR image mosaics of Boreal North America, Winter 1997-98 and Summer 1998</li> <li>• Global Rainforest Mapping Project, JERS-1 SAR image mosaics of rain forests in 1) the Amazon region, 2) Central American and South American Pantanal regions, 3) Africa, and 4) Southeast Asia</li> <li>• MEaSURES Wetlands Extent and Inundated Wetlands Time Series</li> <li>• SAR Data for Terrestrial Ecologists (PALSAR GeoTIFF subsets of 42 flux tower locations)</li> </ul>
	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>• ASTER Global Emissivity Dataset (GED), 2000-2008, 100 meter and 1 kilometer</li> <li>• ASTER Global Emissivity Dataset (GED), Monthly, 0.05 degree</li> <li>• ASTER L1B Registered Radiance at the Sensor</li> <li>• ASTER Level 1 Precision Terrain Corrected Registered At-Sensor Radiance</li> <li>• ASTER Level 2 Surface Radiance</li> <li>• ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected</li> <li>• ASTER Level 2 Surface Reflectance</li> <li>• ASTER Level 2 Surface Reflectance SWIR Crosstalk-Corrected</li> <li>• ASTER Level 3 Orthorectified Registered Radiance at the Sensor</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Vegetation Indices Daily Global 0.05Deg CMG</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Vegetation Indices 7-Day Global 0.05Deg CMG</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Vegetation Indices 15-Day Global 0.05Deg CMG</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Vegetation Indices Monthly Global 0.05Deg CMG</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Phenology EVI2 Yearly Global 0.05Deg CMG</li> <li>• MEaSURES Vegetation Index and Phenology (VIP) Phenology NDVI Yearly Global 0.05Deg CMG</li> <li>• MODIS/Aqua Ocean Reflectance Daily L2G-Lite Global 1 KM SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Gross Primary Productivity 8-day L4 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Land Cover Dynamics Yearly L3 Global 500 m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Leaf Area Index/FPAR 4-Day L4 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Leaf Area Index/FPAR 8-Day L4 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 1km SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices 16-Day L3 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Vegetation Indices Monthly L3 Global 1km SIN Grid</li> <li>• MODIS/Terra Net Primary Productivity Yearly L4 Global 500m SIN Grid</li> <li>• MODIS/Terra Vegetation Continuous Fields Yearly L3 Global 250m SIN Grid</li> </ul>

<b>Vegetation Dynamics</b> (continued)	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parameters, &amp; QC EASE-Grids</li> <li>• SMAPVEX12 Vegetation Water Content Map</li> <li>• Soil Moisture Experiment (SMEX) Data</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• BigFoot Field Data for North American Sites, 1999-2003</li> <li>• Field Campaign Vegetation Indices and Biology Data Sets: Photosynthesis, Biomass, Leaf Chlorophyll, and Leaf Area Index</li> <li>• Harmonized Global Land Use for Years 1500 -2100, V1</li> <li>• Model Archive: Archive of Biogeochemical Models [latest addition: MAPSS (Mapped Atmosphere-Plant-Soil System Model) Version 1.0]</li> <li>• MODIS Collection 5 Fixed Sites Subsetting and Visualization Tool</li> <li>• MODIS Collection 5 Global Subsetting and Visualization Tool</li> <li>• MODIS Collection 5 Land Product Subsets Web Service</li> <li>• NACP North American Forest Dynamics Project</li> <li>• NACP Site Synthesis: Terrestrial Biosphere Model and Flux Tower Data (three data sets within this category)</li> <li>• Phenoregions For Monitoring Vegetation Responses to Climate Change</li> <li>• Remote Sensing Data: MODIS Vegetation Dynamics Products [LAI/fPAR (MOD15A2), EVI (MOD13A2), and GPP (MOD17A2)] subsetting to 7 X 7 km for 1,147 field sites worldwide and presented in ASCII and Geotiff formats</li> <li>• 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</li> </ul>
<b>Volcanic Effects</b> Frequency of occurrence, thermal anomalies, impact	<b>ASDC DAAC</b> <a href="https://eosweb.larc.nasa.gov">https://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• MISR Level 2 Aerosol Parameters, Level 2 TOA/Cloud Stereo Parameters, and Level 3 Component Global Aerosol Daily Product</li> <li>• SAGE III Level 2 Solar Event Species Profiles</li> <li>• Stratospheric Aerosol and Gas Experiment (SAGE) II data set</li> </ul>
	<b>ASF DAAC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• ASF Data Pool of processed SAR data and images (Sentinel-1A, Sentinel-1B, SMAP, Seasat, ALOS PALSAR, JERS-1, RADARSAT-1, ERS-1, ERS-2, UAVSAR, AIRSAR)</li> <li>• Custom SAR Interferograms (ERS-1, ERS-2, JERS-1, PALSAR, RADARSAT-1)</li> <li>• UAVSAR Repeat Pass Interferometric products</li> </ul>
	<b>LP DAAC</b> <a href="https://lpdaac.usgs.gov">https://lpdaac.usgs.gov</a>	<ul style="list-style-type: none"> <li>• ASTER L1B Registered Radiance at the Sensor</li> <li>• ASTER Level 1 Precision Terrain Corrected Registered At-Sensor Radiance</li> <li>• ASTER Level 2 Surface Emissivity</li> <li>• ASTER Level 2 Surface Kinetic Temperature</li> <li>• ASTER Level 2 Surface Radiance</li> <li>• ASTER Level 2 Surface Radiance SWIR Crosstalk-Corrected</li> <li>• ASTER Level 3 Digital Elevation Model</li> <li>• ASTER Level 3 Global Digital Elevation Model (GDEM) 1 Arc-Second</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 5-Min L2 Swath 1km</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity 8-Day L3 Global 1km SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 1km SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Daily L3 Global 5600m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Land Surface Temperature/Emissivity Monthly L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance 8-Day L3 Global 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 1km and 500m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L2G Global 250m SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Surface Reflectance Daily L3 Global 0.05Deg CMG</li> <li>• MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 5-Min L2 Swath 1km</li> <li>• MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire 8-Day L3 1km SIN Grid</li> <li>• MODIS/Terra and MODIS/Aqua Thermal Anomalies/Fire Daily L3 1km SIN Grid</li> </ul>

- ASDC DAAC** Atmospheric Science Data Center DAAC (ASDC DAAC) at NASA Langley Research Center
- ASF DAAC** Alaska Satellite Facility DAAC
- CDDIS** Crustal Dynamics Data Information System
- GES DISC** Goddard Earth Sciences Data and Information Services Center
- GHRC DAAC** Global Hydrology Resource 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
- SEDAC** Socioeconomic Data and Applications Data Center

Produced by:  
Earth Science Data and Information System (ESDIS) Project  
Code 423  
Goddard Space Flight Center  
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