



## EARTH SYSTEM SCIENCE

# Data and Services

## CALIBRATED RADIANCE AND SOLAR RADIANCE *Data Set Reference Sheet*

December 2009

### Calibrated Radiance

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="http://nasadaacs.eos.nasa.gov">http://nasadaacs.eos.nasa.gov</a></i>
<b>Calibrated Data/Imagery from Passive Sensors</b> Radiance, Brightness Temperature	<b>LaRC ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• Airborne Multi-angle Imaging SpectroRadiometer (AirMISR) data sets</li> <li>• MODIS Airborne Simulator (MAS) data sets [from various field campaigns]</li> <li>• International Satellite Cloud Climatology Project (ISCCP) B3 data product</li> <li>• First ISCCP Regional Experiment (FIRE) data sets</li> <li>• Chesapeake Lighthouse and Aircraft Measurements for Satellites (CLAMS) (AirMISR_CLAMS_2001, CLAMS_ER2_MAS, and CLAMS_CV580_CAR)</li> <li>• CERES SSF TOA/Surface Fluxes and Clouds, and MISR Ellipsoid and Terrain Radiances data</li> <li>• Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) Infrared Imaging Radiometer Level 1B radiance data</li> <li>• CALIPSO Wide Field Camera Level 1A 125 m and 1 km Native Science data and 1 km Registered Science data</li> <li>• Tropospheric Emission Spectrometer (TES) L1B Standard and Special Observation products</li> </ul>
	<b>ASF SDC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• AVNIR-2 and PRISM Level 1B1 Radiometrically calibrated data at sensor point products and Level 1B2 geometrically corrected data products (from Americas ALOS Data Node at ASF)</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>• AIRS/Aqua Infrared Geolocated Radiances</li> <li>• AIRS/Aqua Visible Geolocated Radiances</li> <li>• AIRS/Aqua AMSU-A Geolocated Brightness Temperatures</li> <li>• AIRS/Aqua L2 Cloud Cleared Radiance Product</li> <li>• TRMM 1B11 Microwave Brightness Temperature (TMI)</li> <li>• MLS/Aura L1 Microwave Radiances (118, 190, 240 and 640 GHz, and 2.5 THz)</li> <li>• MLS Level 1 Radiances from Digital Autocorrelators</li> <li>• MLS Level 1 Radiances from Filter Banks for GHz and THz</li> <li>• OMI Level 1B UV Global and Zoom-in Geolocated Earthshine Radiances</li> <li>• OMI Level 1B VIS Global and Zoom-in Geolocated Earthshine Radiances</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>• Advanced Microwave Sounding Unit Swath (AMSU-A) from NOAA-15, NOAA-16, and NOAA-17</li> <li>• MSFC SSM/I Tb and Product Grids from DMSP F13, F14, and F15</li> <li>• MSFC SSM/I Tb and Product Swaths from DMSP F13, F14, and F15</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 On-Demand L2 Surface Radiance</li> <li>• ASTER On-Demand L2 Brightness Temperature at the Sensor</li> </ul>
	<b>MODAPS LAADS</b> <a href="http://ladsweb.nascom.nasa.gov/">http://ladsweb.nascom.nasa.gov/</a>	<ul style="list-style-type: none"> <li>• MODIS/Terra and MODIS/Aqua Calibrated Radiances at 1 km, 500 m, and 250 m, plus subsets at 5 km spatial resolution</li> <li>• MODIS/Terra and MODIS/Aqua Aeronet-based Surface Reflection Validation Network (MODASRVN and MYDASRVN)</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 Level-3B AVHRR-LAC Imagery: Scaled at-Sensor Radiance in LGSOWG Format</li> <li>• BOREAS RSS-14 GOES-7 Level-1A Visible, Infrared, and Water Vapor Images</li> <li>• SAFARI 2000: Solar Spectral Flux Radiometer Data, Southern Africa</li> <li>• LBA: Radiance data 1998-2001, and gridded surface radiation and rain rates 1999 for Amazonia.</li> </ul>

<b>Sigma-0 / Backscatter</b>	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• Nimbus-7 SMMR Polar Gridded Radiances and Sea Ice Concentrations</li> <li>• DMSP SSM/I Daily Polar Gridded Brightness Temperatures</li> <li>• DMSP SSM/I Pathfinder Daily EASE-Grid Brightness Temperatures</li> <li>• AMSR-E/Aqua L2A Global Swath Spatially-Resampled Brightness Temperatures (Tb)</li> <li>• Nimbus-7 SMMR Pathfinder Daily EASE-Grid Brightness Temperatures</li> <li>• AMSR-E/Aqua Daily EASE-Grid Brightness Temperatures</li> <li>• AMSR-E/Aqua Daily L3 25 km Tb, &amp; Sea Ice Conc. Polar Grids</li> <li>• AMSR-E/Aqua Daily L3 12.5 km Tb, Sea Ice Conc., &amp; Snow Depth Polar Grids</li> <li>• AMSR-E/Aqua Daily L3 6.25 km 89 GHz Brightness Temperature (Tb) Polar Grids</li> <li>• AMSR-E/Aqua Global Quarter-Degree Gridded Brightness Temperatures</li> <li>• Uninhabited Aerial Vehicle Synthetic Aperture Radar (AVSAR) Data</li> <li>• AMSR/ADEOS II L2A Global Swath Spatially-Resampled Brightness Temperatures</li> </ul>
	<b>ASF SDC</b> <a href="http://www.asf.alaska.edu">http://www.asf.alaska.edu</a>	<ul style="list-style-type: none"> <li>• RAMP AMM-1 SAR Image Mosaic of Antarctica</li> <li>• SAR image data sets</li> <li>• PALSAR Level 1.5 Multi-look processed image projected onto map coordinates products (from Americas ALOS Data Node at ASF)</li> <li>• AirSAR data</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>• BYU High Resolution Images of ERS Sigma-0 Measurements (D. Long)</li> </ul>

## Solar Radiance

<b>Physical Properties</b>	<b>Data Center</b>	<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="http://nasadaacs.eos.nasa.gov">http://nasadaacs.eos.nasa.gov</a></i>
<b>Total Solar Irradiance</b>	<b>LaRC ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• Activity Cavity Radiometer Irradiance Monitor (ACRIM) II and III daily data sets</li> <li>• Earth Radiation Budget Experiment (ERBE) Total Solar Irradiance and Solar Constants</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>• SORCE Level 3 Total Solar Irradiance Daily Means</li> <li>• SORCE Level 3 Total Solar Irradiance 6-Hour Means</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• Safari 2000: MOPITT Tropospheric Carbon Monoxide, Southern Africa, Dry Season 2000</li> <li>• LBA: CD-07 GOES-8 L1 Radiance Data for Amazonia 1998-2001 and L3 Gridded Surface Radiation and Rain Rate for Amazonia: 1999</li> </ul>
<b>Ultraviolet Spectral Irradiance</b>	<b>LaRC ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• 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]</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>• UARS SOLSTICE Level 3BS Daily Solar Data (Daily mean solar spectra corrected for instrument degradation, plus additional solar parameters)</li> <li>• UARS SUSIM Level 3BS Daily Solar Data (Daily mean solar spectra corrected for instrument degradation, plus additional solar parameters)</li> <li>• SORCE Level 3 Solar Spectral Irradiance Daily Means</li> <li>• OMI/Aura Surface UV Irradiance Daily L3 Global 1.0x1.0 deg Grid</li> <li>• OMI/Aura Surface UV Irradiances 1-orbit L2 Swath 13x24 km</li> </ul>
	<b>ORNL DAAC</b> <a href="http://daac.ornl.gov">http://daac.ornl.gov</a>	<ul style="list-style-type: none"> <li>• FIFE: Satellite Atmospheric Correction Coefficients 1987-1999</li> </ul>

**LaRC ASDC** Langley Research Center (LaRC) Atmospheric Science Data Center (ASDC)

**ASF SDC** Alaska Satellite Facility (ASF) Synthetic Aperture Radar Data Center (SDC)

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

**GHRC DAAC** Global Hydrology Resource Center

**LP DAAC** Land Processes DAAC

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

**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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Earth Science Data and Information System (ESDIS) Project  
Code 423  
Goddard Space Flight Center  
Greenbelt, MD 20771

For more information, please contact [outreach@eos.nasa.gov](mailto:outreach@eos.nasa.gov)