



EARTH SYSTEM SCIENCE

Data and Services

CALIBRATED RADIANCE AND SOLAR RADIANCE *Data Set Reference Sheet*

December 2008

Calibrated Radiance

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>
Radiance/ Brightness Temperature/ Sigma-0	ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • Airborne Multi-angle Imaging SpectroRadiometer (AirMISR) data sets • MODIS Airborne Simulator (MAS) data sets [from various field campaigns] • International Satellite Cloud Climatology Project (ISCCP) B3 data product • First ISCCP Regional Experiment (FIRE) data sets • Chesapeake Lighthouse and Aircraft Measurements for Satellites (CLAMS) (AirMISR_CLAMS_2001, CLAMS_ER2_MAS, and CLAMS_CV580_CAR) • CERES SSF TOA/Surface Fluxes and Clouds, and MISR Ellipsoid and Terrain Radiances data • Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) Infrared Imaging Radiometer Level 1B radiance data • CALIPSO Wide Field Camera Level 1A 125 m and 1 km Native Science data and 1 km Registered Science data • Tropospheric Emission Spectrometer (TES) L1B Standard and Special Observation products
	ASF DAAC http://www.asf.alaska.edu	<ul style="list-style-type: none"> • RAMP AMM-1 SAR Image Mosaic of Antarctica • SAR image data sets • 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) • PALSAR Level 1.5 Multi-look processed image projected onto map coordinates products (from Americas ALOS Data Node at ASF) • AirSAR data
	GES DISC http://disc.gsfc.nasa.gov	<ul style="list-style-type: none"> • AIRS/Aqua Infrared Geolocated Radiances • AIRS/Aqua Visible Geolocated Radiances • AIRS/Aqua AMSU-A Geolocated Brightness Temperatures • AIRS/Aqua L2 Cloud Cleared Radiance Product • TRMM 1B11 Microwave Brightness Temperature (TMI) • MLS/Aura L1 Microwave Radiances (118, 190, 240 and 640 GHz, and 2.5 THz) • MLS Level 1 Radiances from Digital Autocorrelators • MLS Level 1 Radiances from Filter Banks for GHz and THz • OMI Level 1B UV Global and Zoom-in Geolocated Earthshine Radiances • OMI Level 1B VIS Global and Zoom-in Geolocated Earthshine Radiances
	GHRC http://ghrc.nsstc.nasa.gov	<ul style="list-style-type: none"> • Advanced Microwave Sounding Unit Swath (AMSU-A) from NOAA-15, NOAA-16 • MSFC SSM/I Brightness Temperature Grids from DMSP F-13, F-14, and F-15
	LP DAAC http://lpdaac.usgs.gov	<ul style="list-style-type: none"> • ASTER L1B Registered Radiance at the Sensor • ASTER On-Demand L2 Surface Radiance • ASTER On-Demand L2 Brightness Temperature at the Sensor
	MODAPS http://ladsweb.nascom.nasa.gov/	<ul style="list-style-type: none"> • MODIS/Terra and MODIS/Aqua Calibrated Radiances at 1 km, 500 m, and 250 m, plus subsets at 5 km spatial resolution • MODIS/Terra and MODIS/Aqua Aeronet-based Surface Reflection Validation Network (MODASRVN and MYDASRVN)
	ORNL DAAC http://daac.ornl.gov	<ul style="list-style-type: none"> • BOREAS Level-3B AVHRR-LAC Imagery: Scaled at-Sensor Radiance in LGSOWG Format • BOREAS RSS-14 GOES-7 Level-1A Visible, Infrared, and Water Vapor Images • SAFARI 2000: Solar Spectral Flux Radiometer Data, Southern Africa • LBA: Radiance data 1998-2001, and gridded surface radiation and rain rates 1999 for Amazonia.
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • BYU High Resolution Images of ERS Sigma-0 Measurements (D. Long)

Radiance/ Brightness Temperature/ Sigma-0 (continued)	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • Nimbus-7 SMMR Polar Gridded Radiances and Sea Ice Concentrations • AVHRR 1-km Level 1b Polar Data Set • DMSP SSM/I Daily Polar Gridded Brightness Temperatures • DMSP SSM/I Pathfinder Daily EASE-Grid Brightness Temperatures • AMSR-E/Aqua L2A Global Swath Spatially-Resampled Brightness Temperatures (Tb) • Nimbus-7 SMMR Pathfinder Daily EASE-Grid Brightness Temperatures • AMSR-E/Aqua Daily EASE-Grid Brightness Temperatures • AMSR-E/Aqua Daily L3 25 km Tb, Sea Ice Temperature, & Sea Ice Conc. Polar Grids • AMSR-E/Aqua Daily L3 12.5 km Tb, Sea Ice Conc., & Snow Depth Polar Grids • AMSR-E/Aqua Daily L3 6.25 km 89 GHz Brightness Temperature (Tb) Polar Grids • AMSR-E/Aqua Global Quarter-Degree Gridded Brightness Temperatures
Solar Radiance		
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Total Solar Irradiance	ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • Activity Cavity Radiometer Irradiance Monitor (ACRIM) II and III daily data sets • Earth Radiation Budget Experiment (ERBE) Total Solar Irradiance and Solar Constants
	GES DISC http://disc.gsfc.nasa.gov	<ul style="list-style-type: none"> • SORCE Level 3 Total Solar Irradiance Daily Means • SORCE Level 3 Total Solar Irradiance 6-Hour Means
	ORNL DAAC http://daac.ornl.gov	<ul style="list-style-type: none"> • Safari 2000: MOPITT Tropospheric Carbon Monoxide, Southern Africa, Dry Season 2000 • LBA: Cd-07 GOES-8 L1 Radiance Data for Amazonia 1998-2001 and L3 Gridded Surface Radiation and Rain Rate for Amazonia: 1999
Ultraviolet Spectral Irradiance	ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • 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]
	GES DISC http://disc.gsfc.nasa.gov	<ul style="list-style-type: none"> • UARS SOLSTICE Level 3BS Daily Solar Data (Daily mean solar spectra corrected for instrument degradation, plus additional solar parameters) • UARS SUSIM Level 3BS Daily Solar Data (Daily mean solar spectra corrected for instrument degradation, plus additional solar parameters) • SORCE Level 3 Solar Spectral Irradiance Daily Means • OMI/Aura Surface UV Irradiance Daily L3 Global 1.0x1.0 deg Grid • OMI/Aura Surface UV Irradiances 1-orbit L2 Swath 13x24 km
	ORNL DAAC http://daac.ornl.gov	<ul style="list-style-type: none"> • FIFE: Satellite Atmospheric Correction Coefficients 1987-1999

ASDC Atmospheric Science Data Center

ASF DAAC Alaska Satellite Facility DAAC

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

GHRC Global Hydrology Resource Center

LP DAAC Land Processes DAAC

MODAPS 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

Produced by:
Earth Science Data and Information System (ESDIS) Project
Code 423
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