



## EARTH SYSTEM SCIENCE

## Data and Services

ATMOSPHERE *Data Set Reference Sheet*

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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>Atmospheric Temperature</b>	<b>ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>International Satellite Cloud Climatology Project (ISCCP) data sets</li> <li>Stratospheric Aerosol and Gas Experiment (SAGE) III L2 Solar Event and Lunar Event Species Profiles</li> <li>Surface meteorology and Solar Energy (SSE) data set</li> <li>Tropospheric Emission Spectrometer (TES) L2 Atmospheric Temperatures Nadir and L2 Atmospheric Temperatures Nadir Special Observations data</li> </ul>
	<b>GES DISC</b> <a href="http://disc.gsfc.nasa.gov">http://disc.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>AIRS/Aqua Level 2 Products</li> <li>AIRS/Aqua Level 3 Daily, Multiday, and Monthly Physical Retrieval Products</li> <li>TOVS Pathfinder Path A and Path B Atmospheric and Surface Parameters, 5-Day Atmospheric Sounding Data from TOVS</li> <li>MSU Limb93 Data Sets [e.g., MSU LIMB93 Daily Lower Tropospheric Temperature (along with Daily Upper Tropospheric and Lower Stratospheric Temperature Data Sets)]</li> <li>UARS CLAES, HRDI, ISAMS, MLS, and WINDII Level 3A Daily Data (Level 3AT Time Ordered and Level 3AL Latitude Ordered), HALOE Level 3AT Time Ordered Data</li> <li>A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System</li> <li>Atmospheric Dynamics Data - CPC/ACDB Analysis</li> <li>MLS/Aura Level 2 Daily Profiles of Temperature at 2-3 km Vertical Resolution</li> <li>HIRDLS/Aura Level 2 vertical profiles of O<sub>3</sub>, H<sub>2</sub>O, CH<sub>4</sub>, N<sub>2</sub>O, NO<sub>2</sub>, HNO<sub>3</sub>, N<sub>2</sub>O<sub>5</sub>, ClONO<sub>2</sub>, CFC-11, CFC-12, Temperature, Cloud Top Pressure, and four Aerosol Extinctions (HIRDLS2)</li> </ul>
	<b>GHRC</b> <a href="http://ghrc.nsstc.nasa.gov">http://ghrc.nsstc.nasa.gov</a>	<ul style="list-style-type: none"> <li>CAMEX-3 Data Sets [e.g., CAMEX-3 DC-8 Meteorological Measurement System MMS, CAMEX-3 Airborne Vertical Atmosphere Profiling System (AVAPS)]</li> <li>CAMEX-4 Data Sets [e.g., CAMEX-4 Microwave Temperature Profiler, CAMEX-4 DC-8 Meteorological Measurement System (MMS)]</li> <li>NAMMA DC-8 Meteorological Measurement System (MMS)</li> </ul>
	<b>MODAPS</b> <a href="http://ladsweb.nascom.nasa.gov/">http://ladsweb.nascom.nasa.gov/</a>	<ul style="list-style-type: none"> <li>MOD07_L2 - MODIS/Terra and MODIS Aqua Level 2 Joint Atmosphere Product of Profiles, Total Column Ozone, Water Vapor, and Stability Indices</li> <li>MOD08_D3, MOD08_E3, MOD08_M3 - MODIS/Terra and MODIS Aqua Level 3 Daily, 8-day, and Monthly Joint Aerosol/Water vapor/Cloud Products</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>TOVS Pathfinder Path-P Daily and Monthly Arctic Atmospheric Grids</li> <li>NCEP/NCAR Arctic Marine Rawinsonde Archive</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-06 Mean Temperature Profile Data, BOREAS AFM-08 ECMWF Hourly Surface and Upper Air Data for the SSA and NSA</li> <li>FIFE Data Sets: Atmospheric Profiles: TOVS-NOAA, Radiosonde-NCDC</li> <li>Climatological Data Set: Global 30-Year Mean Monthly Climatology 1961-1990 (New et al.)</li> <li>SAFARI 2000: AVHRR-derived land use surface temperature maps for Africa 1995-2000</li> </ul>
<b>Atmospheric Humidity</b>	<b>ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>SAGE III L2 Solar Event and Lunar Event Species Profiles</li> <li>NASA Water Vapor Project (NVAP) data sets</li> <li>SSE data set</li> <li>TES L2 H<sub>2</sub>O Nadir and L2 H<sub>2</sub>O Nadir Special Observations data</li> <li>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]</li> </ul>

<b>Atmospheric Humidity</b> (continued)	<b>GES DISC</b> <a href="http://disc.gsfc.nasa.gov">http://disc.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• AIRS/Aqua Level 2 Products</li> <li>• AIRS/Aqua Level 3 Daily, Multiday, and Monthly Physical Retrieval Products</li> <li>• TOVS Pathfinder Path A and Path B Atmospheric and Surface Parameters, 5-Day Atmospheric Sounding Data from TOVS</li> <li>• UARS CLAES, ISAMS, and MLS Level 3A Daily Data (Level 3AT Time Ordered and Level 3AL Latitude Ordered), HALOE Level 3AT Time Ordered Data.</li> <li>• A Multi-year Global Analysis Employing the Goddard EOS (GEOS) Data Assimilation System</li> <li>• MLS/Aura Level 2 Daily Profiles of Water Vapor, Relative Humidity with respect to Ice, and Ice Water Content at 2-3 km Vertical Resolution</li> </ul>
	<b>GHRC</b> <a href="http://ghrc.nsstc.nasa.gov">http://ghrc.nsstc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• CAMEX-3 Data Sets (August-September, 1998)</li> <li>• CAMEX-4 Data Sets (August-September, 2001)</li> <li>• GOES Water Vapor Transport CD</li> </ul> <b>Over Ocean Only</b> <ul style="list-style-type: none"> <li>• MSFC SSM/I Swath and Daily Gridded Integrated Water Vapor Products from DMSP F13, F14, and F15</li> <li>• MSFC SSM/I Swath and Daily Gridded Cloud Liquid Water Products from DMSP F13, F14, and F15</li> <li>• TRMM Microwave Imager (TMI) Wentz Ocean Products [integrated water vapor and cloud liquid water]</li> <li>• NAMMA DC-8 Dropsonde</li> </ul>
	<b>MODAPS</b> <a href="http://ladsweb.nascom.nasa.gov/">http://ladsweb.nascom.nasa.gov/</a>	<ul style="list-style-type: none"> <li>• MOD05_L2 &amp; MYD05_L2 - MODIS/Terra &amp; MODIS/Aqua Level 2 Total Precipitable Water Vapor Test Results</li> <li>• MOD07_L2 &amp; MYD07_L2 - MODIS/Terra and MODIS/Aqua Level 2 Joint Atmosphere Product of Profiles, Total Column Ozone, Water Vapor, and Stability Indices</li> <li>• MODATML2 &amp; MYDATML2 - MODIS/Terra &amp; MODIS/Aqua Level 2 Joint Atmospheric Product</li> <li>• MOD08_D3, MOD08_E3, MOD08_M3 &amp; MYD08_D3, MYD08_E3, MYD08_M3 - MODIS/Terra &amp; MODIS/Aqua Level 3 Daily, 8-day, and Monthly Joint Aerosol/Water vapor/Cloud Products</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 L2B Global Swath Ocean Products derived from Wentz Algorithm [integrated water vapor and cloud liquid water]</li> <li>• AMSR-E/Aqua Daily, Weekly, and Monthly L3 Ocean Products [integrated water vapor and cloud liquid water]</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-08 ECMWF Hourly Surface and Upper Air Data for the SSA and NSA</li> <li>• FIFE Data Sets: Atmospheric Profiles: TOVS-NOAA, Radiosonde-NCDC</li> <li>• Climatological Data Set: Global 30-Year Mean Monthly Climatology 1961-1990 (New et al.)</li> </ul>
<b>Stratospheric Chemistry</b> Ozone, ClO, BrO, OH, trace gases	<b>ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• SAGE III L2 Solar Event and Lunar Event Species Profiles</li> <li>• SAGE II data set</li> <li>• Stratospheric Aerosol Measurement (SAM) II data set</li> <li>• Polar Ozone and Aerosol Measurement (POAM) II and III data sets</li> </ul>
	<b>GES DISC</b> <a href="http://disc.gsfc.nasa.gov">http://disc.gsfc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• TOMS Level 3 Total Ozone Daily Gridded 1.25 x 1.0 Degree Data</li> <li>• TOMS Level 2 Total Ozone at Instrument Resolution (50 x 50 km at Nadir)</li> <li>• SBUV Level 2 Ozone Profiles from Nimbus-7 and NOAA-9, 11 and 16 (SBUV/2)</li> <li>• UARS CLAES Level 3AT and Level 3AL Daily Data Products (O3 CH4, N2O, NO, NO2, N2O5, HNO3, ClONO2, CFC13, CF2Cl2, and H2O profiles)</li> <li>• UARS HALOE Level 2 and Level 3AT Daily Products (O3, HCl, HF, CH4, NO, NO2, and H2O profiles)</li> <li>• UARS ISAMS Level 3AT and Level 3AL Daily Data Products (CH4, CO, H2O, NO2, N2O, N2O5, and O3 profiles)</li> <li>• UARS MLS Level 3AT and Level 3AL Daily Data Products (CH3CN, ClO, H2O, HNO3, O3, and SO2 profiles)</li> <li>• MLS/Aura Level 2 Daily Profiles of BrO, CH3CN, ClO, CO, H2O, HCL, HCN, HNO3, HO2, HOCl, N2O, O3, OH, and SO2 at 2-3 km Vertical Resolution</li> <li>• OMI/Aura Level 2 Daily Total Column Ozone (O3) at Instrument Resolution (13 x 24 km at Nadir)</li> <li>• AIRS/Aqua Level 2 Product (Ozone Column and Profile)</li> <li>• AIRS/Aqua Level 3 Daily, Multiday, and Monthly Physical Retrieval Products (Ozone Column and Profile)</li> <li>• OMI/Aura Level 2 DOAS Total Column Ozone (O3) at Instrument Resolution</li> <li>• OMI/Aura Level 2 Total &amp; Tropospheric Column Nitrogen Dioxide (NO2) at Instrument Resolution</li> <li>• OMI/Aura Level 2 Total Column Sulphur Dioxide (SO2) at Instrument Resolution</li> <li>• OMI/Aura Level 2 Total Column Bromine Monoxide (BrO) at Instrument Resolution</li> <li>• OMI/Aura Level 2 Total Column Formaldehyde (HCHO) at Instrument Resolution</li> <li>• OMI/Aura Slant Column Chlorine Dioxide (OCIO) at Instrument Resolution</li> <li>• OMI/Aura TOMS-Like Ozone, Aerosol Index, Radiative Cloud Fraction Daily L3 Global 0.25x0.25 deg Grid</li> <li>• OMI/Aura TOMS-Like Ozone, Aerosol Index, Radiative Cloud Fraction Daily L3 Global 1.0x1.0 deg Grid</li> <li>• OMI/Aura DOAS Total Column Ozone Daily L3 Global 0.25 deg Lat/Lon Grid</li> <li>• HIRDLS/Aura Level 2 vertical profiles of O3, H2O, CH4, N2O, NO2, HNO3, N2O5, ClONO2, CFC-11, CFC-12, Temperature, Cloud Top Pressure, and four Aerosol Extinctions (HIRDLS2) - [GSFC, Please see note #1 below]</li> </ul>