



## EARTH SYSTEM SCIENCE

## Data and Services

## CRYOSPHERE Data Set Reference Sheet

December 2009

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>Land Ice</b> Ice sheet topography, ice sheet volume change, glacier change	<b>LaRC ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• Multi-angle Imaging SpectroRadiometer (MISR) Level 1B2 Ellipsoid Data, Level 1B2 Terrain Data, Level 2 Surface Parameters, and Level 3 Component Global Land (daily, monthly, quarterly, and yearly) Products</li> <li>• International Satellite Cloud Climatology Project (ISCCP) D1, D2, and ICESNOW data 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>• RAMP AMM-1 SAR Image Mosaic of Antarctica 125m resolution mosaic via ftp and 25m resolution mosaic tiles on DVD (to NASA-approved investigators)</li> <li>• RADARSAT-1, ERS-1, ERS-2, JERS-1 and PALSAR SAR images</li> <li>• International Polar Year Datasets (Level 0 and Level 1 SAR)</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 Digital Elevation Model</li> <li>• ASTER L1B Registered Radiance at the Sensor</li> </ul>
	<b>NSIDC DAAC</b> <a href="http://nsidc.org/daac">http://nsidc.org/daac</a>	<ul style="list-style-type: none"> <li>• Greenland Ice Sheet Melt Characteristics Derived from Passive Microwave Data</li> <li>• GLAS/ICESat 500 m Laser Altimetry Digital Elevation Model of Antarctica</li> <li>• GLAS/ICESat 1 km Laser Altimetry Digital Elevation Model of Greenland</li> <li>• Greenland 5 km DEM, Ice Thickness, and Bedrock Elevation Grids</li> <li>• Greenland Ice Sheet Melt Characteristics Derived from Passive Microwave Data</li> <li>• Antarctic 5-km DEM from ERS-1 Altimetry</li> <li>• Digital SAR Mosaic and Elevation Map of the Greenland Ice Sheet</li> <li>• GLAS/ICESat L1B Global Elevation Data</li> <li>• GLAS/ICESat L2 Global Antarctic and Greenland Ice Sheet Altimetry Data</li> <li>• Radarsat Antarctic Mapping Project Digital Elevation Model Version 2</li> <li>• RAMP AMM-1 SAR Image Mosaic of Antarctica</li> <li>• Antarctic Ice Velocity Data</li> <li>• Program for Arctic Regional Climate Assessment (PARCA) Data</li> <li>• Images of Antarctic Ice Shelves [from AVHRR and MODIS]</li> <li>• Global Monthly EASE-Grid Snow Water Equivalent Climatology</li> <li>• MODIS Mosaic of Antarctica (MOA) Image Map</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 Daily Browse Images of QuikSCAT Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of NSCAT Sigma-0 Measurements</li> <li>• BYU Daily Browse Images of NSCAT Sigma-0 Measurements</li> <li>• BYU Daily Browse Images of SeaWinds Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of Seasat Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of ERS Sigma-0 Measurements</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 (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> <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> </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>Sea Ice</b> Extent, concentration, motion, 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>• ISCCP D1, D2, and ICESNOW Data Products</li> <li>• MISR Level 1B2 Ellipsoid Data</li> <li>• First ISCCP Regional Experiment (FIRE) data sets</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>• RADARSAT-1, ERS-1, ERS-2, JERS-1 and PALSAR SAR images</li> <li>• ERS-1 Ice Motion Vectors</li> <li>• Radarsat-1 (1996-2008) and ERS-1 (1991-93) Geophysical Processing System Sea Ice 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>• Bootstrap Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I</li> <li>• Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I Passive Microwave Data</li> <li>• DMSP SSM/I Daily and Monthly Polar Gridded Sea Ice Concentrations</li> <li>• Near-Real-Time SSM/I-SSMIS EASE-Grid Daily Global Ice Concentration and Snow Extent</li> <li>• Near-Real-Time DMSP SSM/I-SSMIS Daily Polar Gridded Sea Ice Concentrations</li> <li>• Sea Ice Trends and Climatologies from SMMR and SSM/I</li> <li>• NASA Scatterometer Climate Pathfinder (SCP) Arctic and Antarctic Ice Extent from QuikSCAT, 1999-2004</li> <li>• AVHRR Polar Pathfinder Twice-Daily 5km and 25km EASE-Grid Composites</li> <li>• GLAS/ICESat L2 Sea Ice Altimetry Data</li> <li>• Polar Pathfinder Daily 25 km EASE-Grid Sea Ice Motion Vectors</li> <li>• When the Weather is Uggianaqtug: Inuit Observations of Environmental Change</li> <li>• AMSR-E/Aqua Daily L3 12.5 km Brightness Temperatures, Sea Ice Concentration, and Snow Depth Polar Grids</li> <li>• AMSR-E/Aqua Daily L3 25 km Brightness Temperatures &amp; Sea Ice Concentration Polar Grids</li> <li>• MODIS/Terra Sea Ice Extent 5-Min L2 Swath 1km Data</li> <li>• MODIS/Aqua Sea Ice Extent 5-Min L2 Swath 1km Data</li> <li>• MODIS/Terra Sea Ice Extent and IST Daily L3 Global 1km &amp; 4km EASE-Grid Data for Day and Night</li> <li>• MODIS/Aqua Sea Ice Extent and IST Daily L3 Global 1km &amp; 4km EASE-Grid Data for Day and Night</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 Daily Browse Images of NSCAT Sigma-0 Measurements</li> <li>• BYU Daily Browse Images of QuikSCAT Sigma-0 Measurements</li> <li>• BYU Daily Browse Images of SeaWinds Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of Seasat Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of ERS Sigma-0 Measurements</li> <li>• BYU Enhanced Resolution Images of NSCAT Sigma-0 Measurements</li> </ul>
<b>Snow Cover</b> Extent, water, equivalent, depth	<b>LaRC ASDC</b> <a href="http://eosweb.larc.nasa.gov">http://eosweb.larc.nasa.gov</a>	<ul style="list-style-type: none"> <li>• MISR Level 1B2 Ellipsoid Data and Level 1B2 Terrain Data</li> <li>• ISCCP D1, D2, and ICESNOW data 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>• Global EASE-Grid 8-day Blended SSM/I and MODIS Snow Cover Data</li> <li>• AMSR-E/Aqua Daily, 5-day, and Monthly L3 Global Snow Water Equivalent EASE-Grids</li> <li>• CLPX-Airborne: Airborne GPS Bistatic Radar</li> <li>• CLPX-Ground: Snow Measurements Data</li> <li>• CLPX-Satellite: MODIS Radiances, Reflectances, Snow Cover and Related Grids</li> <li>• Historical Soviet Daily Snow Depth Version 2 (HSDSD)</li> <li>• Near-Real-Time SSM/I-SSMIS EASE-Grid Daily Global Ice Concentration and Snow Extent</li> <li>• Global Monthly EASE-Grid Snow Water Equivalent (SWE) Climatology</li> <li>• Nimbus-7 SMMR Derived Monthly Global Snow Cover and Snow Depth</li> <li>• Northern Hemisphere EASE-Grid Weekly Snow Cover and Sea Ice Extent Version 3</li> <li>• Program for Arctic Regional Climate Assessment (PARCA) Data Sets</li> <li>• When the Weather is Uggianaqtug: Inuit Observations of Environmental Change</li> <li>• MODIS/Aqua L2 &amp; L3 Daily, 8-day, and Monthly Snow Cover Data</li> <li>• MODIS/Terra L2 &amp; L3 Daily, 8-day, and Monthly Snow Cover Data</li> <li>• IMS Daily Northern Hemisphere Snow and Ice Analysis at 4 km and 24 km Resolution</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)

**CDDIS** Crustal Dynamics Data Information System

**LP DAAC** Land Processes DAAC

**NSIDC DAAC** National Snow and Ice Data Center DAAC

**PO.DAAC** Physical Oceanography DAAC

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