



## **Snow and Ice Products from the MODIS, AMSR-E, and GLAS Instruments on NASA's EOS Satellites**

R. Weaver, W. Meier, R. Armstrong, D. Fowler, A. Leon, T. Scambos

National Snow and Ice Data Center, CIRES, University of Colorado, Boulder, CO, USA 80309

Sensors on the NASA Earth Observing System (EOS) satellites are a significant advancement over their predecessors and are providing a wealth of information on snow and ice. The Moderate Resolution Imaging Spectroradiometer (MODIS) onboard the Aqua and Terra spacecraft and the Advanced Microwave Scanning Radiometer for EOS (AMSR-E) on the Aqua spacecraft provide improved visible/infrared and passive microwave imagery and products. The Geoscience Laser Altimeter System (GLAS) on the Ice, Cloud, and land Elevation Satellite (ICESat) is the first satellite-borne laser altimeter and represents an entirely new technology for ice remote sensing.

Data sets and geophysical products from these sensors have now been available for 1-3 years depending upon the sensor and product suite. As one of NASA's Distributed Active Archive Centers (DAACs), the National Snow and Ice Data Center in Boulder, CO is the repository for the MODIS snow and ice products and all products from ASMR-E and ICESat/GLAS.

We present information and data examples of standard snow and ice products available from NSIDC. In addition we present several case studies that demonstrate the utility of combinations of the products and value-added fields derived from the standard products.