Summary

Research continued on pre-launch validation efforts of the MODIS snow-mapping algorithm. Papers were written and presentations were given.

A MODIS snow and sea ice data products meeting was held with SDST and NSIDC leaders at NSIDC in Boulder, CO, on 5 May 1998.

A field program in North Dakota and Minnesota was supported in February 1998.

MODIS snow and sea ice deliveries were made.

Plans were initiated for development of the MODIS snow/sea ice albedo product.

MODIS snow and ice products deliveries (G. Riggs/RDC and H. Powell/GSC)

Version 2.0 of the MODIS daily sea ice algorithm code, MOD_PR29A1, was delivered to the SDST Configuration Management Officer on 13 January 1998.

Version 2.1 of the MODIS L2 snow algorithm, MOD_PR10, was delivered to the SDST Configuration Management Officer on 20 March 1998.

Version 2.1 of the MODIS L2 sea ice algorithm, MOD_PR29, was delivered to the SDST Configuration Management Officer on 13 April 1998.

Version 2.1 of the MODIS L3 snow algorithm, MOD_PR10A, was delivered to the SDST Configuration Management Officer on 11 June 1998.

Post-launch snow/sea ice albedo product development (A. Klein/USRA)

Efforts are also underway to develop a snow/sea ice albedo product. Currently, work in this area has focused on the development of Snow Bidirectional Distribution Functions (BRDF) kernels. A discrete-ordinates radiative transfer model (disort) has been used to develop a set of snow BRDFs for varying grain sizes and solar zenith angles for each of the MODIS bandpasses. These BRDFs will be used to account for the anisotropic reflectance of snow in the snow/sea ice albedo product. These BRDFs are currently being compared to the results of semi-empirical functions representing snow BRDF for use with the S6 atmospheric correction code. This supports the development of an atmospheric correction for snow-covered surfaces by Alex Polissar, Eric Vermote and others.

Journal papers


**Conference proceedings papers**


**Presentations**

D. Hall/974 gave a seminar on the MODIS snow and ice project to a group of MIT students on 28 January.

G. Riggs presented the SCF quality assessment (QA) plans at the MODLAND-SDST meeting 11-13 February 1998.

D. Hall gave talks on snow and sea ice validation plans for MODIS for the EOS PM1 project, at the EOS PM1 Validation Meeting on 1 – 2 April.
A. Klein gave a seminar on the MODIS snow and ice project to a group of City University of New York students on 16 April.

D. Hall gave a talk to science teachers on EOS and climate change/remote sensing and the cryosphere on 28 May 1998, at the AGU meeting in Boston, MA.


