AMERICA VIEW NATIONAL CONSORTIUM FOR REMOTE SENSING EDUCATION, RESEARCH, AND APPLICATIONS

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PROJECT FACT
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Notre Dame L-Band Ground Station

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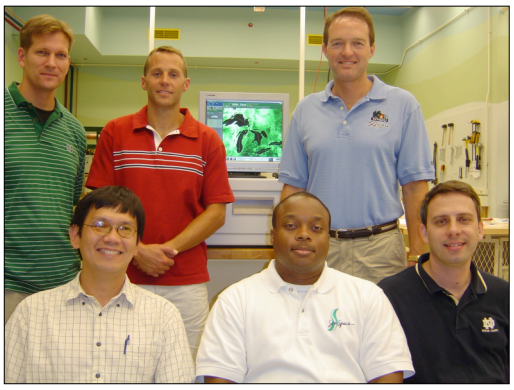
Introduction: Notre Dame is currently operating a, remote-sensing/receiving Earth environmental ground station that acquires signals in the L-band range of the spectrum. This system is tracking the series of NOAA-n satellites including the newly certified NOAA-18. The system ingests, analyzes data for post processing and automatically produces jpeg images for upload from the internet. The internet connection to the image products uses high-speed internet connections like STARTAP, Internet2/Abilene and ESnet capable of Gigabit through-put and 100Mb of capacity bandwidth to the campus.

The SeaSpace Corporation system consists of an antenna (flat 0.46m diameter), control and capture hardware (pc) and software (TeraScan).



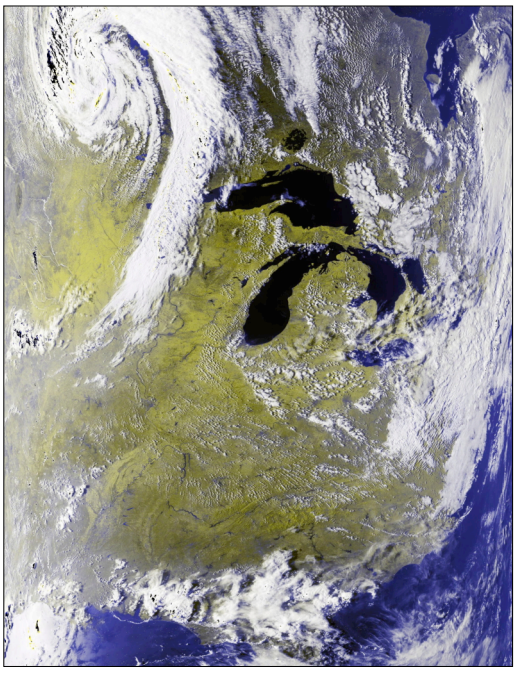
TeraScan Training Attendees: (front) Johanes Suhardjo, Eric Baptiste, David Cavalieri, (back) Dr. Scott Morris, Brian Drobnich, Mike Hoffman

Accomplishments:
Trained local educators on use of the station.

Defined master product generation scripts to track, acquire and post process data into jpeg image files.

Raw data and TDF files are available at:
http://ndsatbox.ame.nd.edu/
Online access to JPEG image products coming soon.

Established communication between educators and local weather scientist to plan future student activities.



JPEG Image Product Generated by Local High School Teacher Outreach Program Participant

Significance: This project established a remote sensing satellite imaging program at the University. It did so by building on the acquisition of hardware and software from a previous grant, thus, sustaining and growing the University's remote sensing satellite imaging capability.

This project began a process for sharing that capability with educators at different levels in the nearby community.

FOR FUTURE READING:

1. D. L. Glackin, *Crosslinks*, (The Aerospace Press, Summer 2004).
2. Bernstein, R.L. - **Oceanographic Applications of Weather Satellites** Paper presented at the 1995 Meteorological Satellite Data Users' Conference, Winchester, U.K., 1995