

Teacher Workshop & Student-Scientist Research Observation Project

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TEACHER WORKSHOP:

- ✓ **JAZZED and INSPIRED 95 TEACHERS from 90 SCHOOLS in Ohio, Michigan, Pennsylvania, New York, Kansas, Oregon**
- FREE, 5-day Seminar for Teachers Grades 5-12
- 15 Teachers Receive Graduate Credit
- Participation in Satellite Research Observation Project
- Motivating & Fun-filled GPS Treasure Hunt Activity
- Tours of NASA Glenn Research Center
- Content:
 - What is Remote Sensing
 - Weather-Observing Techniques
 - Global Positioning System (GPS)
 - 5E Lesson Plan Model/Constructivist Theory Learning
 - * Teachers Learn how to Apply Content into Curriculum
- Participants' Comments:
 - "Complementary aspects of university researchers, practicing teachers, & a facilitator worked beautifully."
 - "Instructors went above and beyond to present a wide variety of usable information in an enjoyable format."

TEACHER IMPACTS:

- ❖ **Increase knowledge of Science Content & Teaching**
- ❖ **Illustrates Technology Applications in Classroom**

STUDENT-SCIENTIST RESEARCH PROJECT:

- ✓ **EXPANDED the MINDS & EXCITED over 2,100 STUDENTS**
- Students are Engaged as "Scientists in the Field"
- Students Collect Data for 4 Weeks
- Students and Teachers Participate in 2 Web Casts
- Students Submit Data via Internet for University Researchers to Validate Data from Satellites

STUDENT IMPACTS:

- ❖ **Opportunity to Interact with Scientists**
- ❖ **Connects to Real-Life Experiences**
- ❖ **Creates Science and Technology Career Awareness**

FOR FURTHER READING:

<http://www.remotesensing.utoledo.edu/edu/SATEL.html>



Figure 1. Teachers practicing 'how to collect data' for Student-Scientist Research Observation Project.

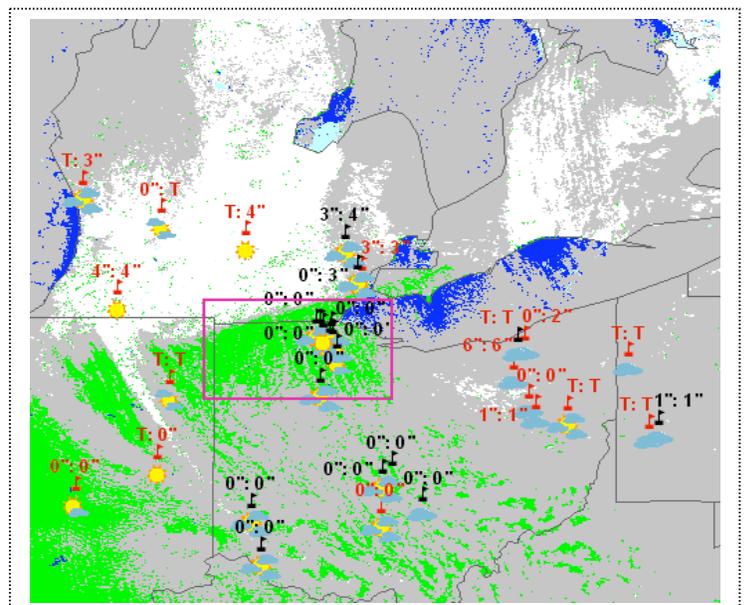


Figure 2. Remotely sensed snow (white) and clouds (gray) compared to students' ground observations. Schools are denoted by red or black flag. Number on left is 24-hour snowfall ('T' means 'trace'). Number on right is accumulated total snowfall.