The Space Grant Internet
Telescope Network: The Beginning

Dr. Paul S. Hardersen
Director, ND Space Grant Consortium
National Space Grant Directors Meeting
Las Cruces, New Mexico, Fall 2007
Since the March meeting....

- Introduced Internet telescope network concept to Space Grant community in March 2007.

- **What has happened?**
  - Met with Rocky Mountain SG reps (April).
  - ND Internet Obs #1 operational (May).
  - Began construction for 2\textsuperscript{nd} obs (June).
  - Formalized participation by SD (July).

- **Space Grant Internet Telescope Network (SGITN) began operations August 1, 2007.**
What is the SGITN?

• **What**: A national network of Internet observatories for research and education.

• **Why**: Increase access to research facilities for non-AURA colleges and universities. Encourage research!

• **Who**: University students/faculty in participating Space Grant States (host and affiliate institutions).

• **Where**: Any location with modest Internet access.
Current participants

![Map of the United States with current participants marked by stars. The states marked are South Dakota, Wyoming, and Colorado.](image-url)
Facilities overview: South Dakota

- **Badlands Observatory**, near Quinn, SD.

- Ron Dyvig, operator.

- 26-inch-aperture Newtonian w/UBVRI filters.

- Subsidized through cost-sharing arrangement. **No cost to students.**
Facilities overview: North Dakota
Facilities overview: North Dakota
Facilities overview: North Dakota

- **Observatory #1**: 16” aperture SCT w/UBVRI filters.
- **Observatory #2**: 10” aperture SCT w/UBVRI filters operational by 1/1/2008.
- **Observatory #3**: 20” aperture SCT w/UBVRI filters and stellar spectrograph. Construction in Summer 2008.
- **Observatory #4**: Small radio telescope, 7’ diameter, measures L-band of neutral H at 1.42 GHz.
SGITN: http://sgitn.space.edu
How does the SGITN operate?

• For qualified individuals wanting to use the Network:

  1. Read information on the SGITN web site.
  2. Submit request via online PDF forms.
  3. Receive project approval and observing time.
  4. Schedule observing time and begin work.

  ➤ Can use any available observatory.
  ➤ Given entire nights to observe.
  ➤ Observing time dependent on demand and needs.
The Space Grant Internet Telescope Network (SGITN) is a partnership of online astronomical observatories whose goal is to facilitate undergraduate, graduate, and faculty research and education in astronomy. Participating observatories in the Network currently include:

- University of North Dakota (UND) Observatory
- Badlands Observatory, South Dakota

The SGITN is not open to the general public. To participate in the Network, the user must satisfy the following criteria:

- Be an undergraduate student, graduate student, or faculty member who studies or works at a university or college that is a Space Grant host institution or affiliate that is participating in the Network.
- For students, observing projects must be part of a well-defined research or education project that has been approved by the student’s faculty advisor.
- Have experience using astronomical equipment locally and remotely, which includes optical and/or radio telescopes, CCD cameras, and spectrographs. Other requirements include the ability to create an observing plan, observe independently, and reduce, analyze, and interpret the resulting data.
- Students and faculty using the Network will be encouraged to submit a summary of their research results on the Network web site.
- For more information, contact your state Space Grant Consortium.
- If you are an approved user, please see the Observers tab and Schedule tab for important information.
Observer request form

SGITN Observer's Request Form

Date: 

Student name: 
Address: 
Address: 
City/State: 
Zip/Postal code: 
Work phone: 
Email address: 

University of North Dakota
Department of Space Studies
4149 University Avenue Stop 9008
526 Clifford Hall
Grand Forks, ND 58202-9008
Phone: (701) 777-4896
### SGITN schedule page

![Schedule Page](image-url)

**September 2007**

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# Access page

## Space Grant Internet Telescope Network

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Telescope control via ACP
An inside view....
The key ingredients

- Committed telescope operators at each observatory.
- Good coordination between Network admin and all observatories.
- Clear, constant communication with all users and observatory operators.
- Well-maintained equipment.
- Advertising to attract students and faculty to the Network.
SGITN Yahoo group

Are you a SF Bay Area Group Moderator? We want to hear from you!
Join the Groups team on the Yahoo! campus to share your thoughts. Read more...

Home

Activity within 7 days:
5 New Members - 6 New Links - 4 New Messages - 4 New Photos - 3 New Files - New Questions

Description (edit)
This Yahoo group is for participants and potential users for the national Space Grant Internet Telescope Network (SGITN). Our web site is http://sgitn.space.edu. This is a coordinated group of small ACP-controllable astronomical observatories that is associated with the NASA Space Grant program. The goal of the SGITN is to provide astronomical resources to students and faculty in Space Grant states participating in this project. The Network is not open to the general public. For each state that has an observatory as a part of the Network, students and faculty at all Space Grant colleges within that state will have access to this Network.

There is no cost for students and faculty that use the Network.

For more information, please visit our web site or send an email to Dr. Paul Hardersen at
And now, for a demo.....
Building a national network

• **Goal**: Make the SGITN a truly national network
  
  ➔ Observatories participating from coast-to-coast.
  
  ➔ Offer a diverse range of instrumentation to facilitate many types of research projects.
  
  ➔ Help fulfill the Space Grant mission --
    
    ➔ Attract students to STEM disciplines.
    ➔ Encourage workforce development via research careers.
Get involved!

- Encourage your state observatories to join.

- Find faculty and students interested in building, maintaining, and operating small observatories.

- Encourage colleges and universities to commit resources.

Questions?