



Polar Science Network Committee

Matthew A. Lazzara, PhD.

AMRC, SSEC, UW-Madison

Outline

- Who is the PNSC?
- UNAVCO
- IRIS/PASSCAL
- History
- Mission
- Membership
- Fostering collaborations
- Future Workshop

UNAVCO IRIS/PASSCAL

➤ UNAVCO:

- a non-profit university-governed consortium, facilitates geoscience research and education using geodesy.

➤ IRIS/PASSCAL:

- Incorporated Research Institution For Seismology
- Program for Array Seismic Studies of the Continental Lithosphere

Who is the PNSC?

“ The Polar Networks Science Committee, established jointly by action of the board and the IRIS consortium, advises the boards of UNAVCO and IRIS on the activities of this UNAVCO program. Members serve three year terms and are eligible for reappointment.”

“ The Polar Networks Science Committee (PNSC) is a committee constituted by the Boards of Directors of UNAVCO and IRIS with the goal of coordinating their efforts in polar instrumentation and polar observing networks.”

PNSC Tasking

- To engage the science/research community in developing a sustainable vision for polar geodetic and seismic networks
- To coordinate input to IRIS and UNAVCO from the science/research community regarding polar, networks and facilities and to provide information to the research community on the polar instrumentation capabilities of the facilities.
- To advise and engage IRIS and UNAVCO on initiatives related to technology and facilities for support of polar geodetic and seismic research.
- To provide advice on the technical and logistic challenges of polar-focused data acquisition, and to facilitate coordination between IRIS/PASSCAL and UNAVCO development efforts.
- To facilitate linkages between IRIS/UNAVCO efforts and other polar scientific communities.

UNAVCO

- Carol Raymond
 - Chair
 - JPL
- Erik Ivins
 - JPL
- Matthew Lazzara
 - UW-Madison
- Leigh Stearns
 - KU

IRIS/PASSCAL

- Andy Nyblade
 - Vice Chair
 - Penn State
- Jason Amudson
 - U. Alaska
- Samantha Hansen
 - U. Alabama
- Meredith Nettles
 - Lamont Doherty

Membership

PNSC

UNAVCO

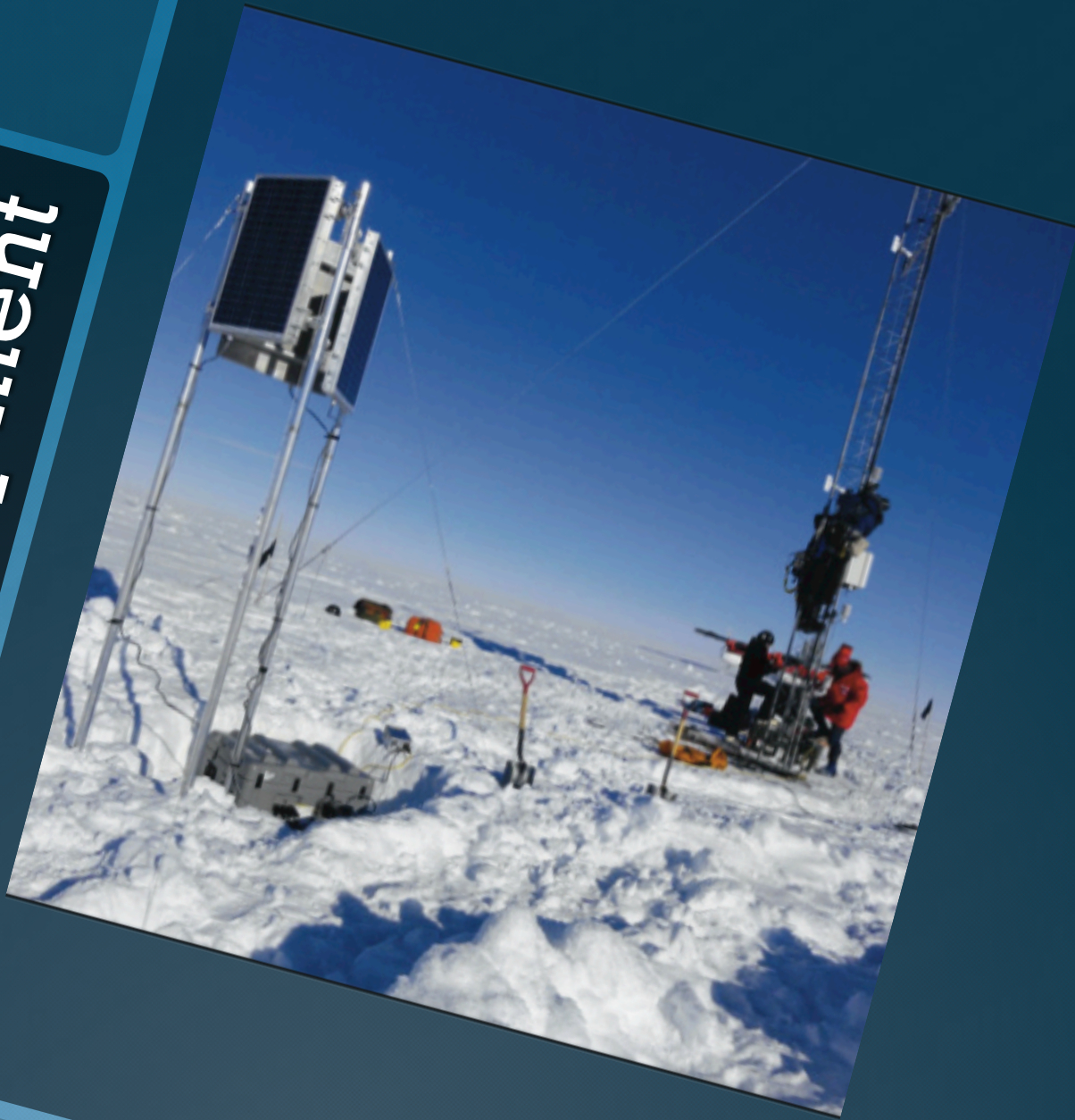
- Joe Pettit
- Seth White
- Glen Mattioli
- Meghan Miller

IRIS/PASSCAL

- Kent Anderson
- James Gridley
- Paul Carpenter
- Bruce Beaudoin

**Observers
Committee**

Power System Development



Facility Plan



A Facility Plan for Polar Seismic and Geodetic Science: Meeting Community Needs Through IRIS and UNAVCO Polar Services

This plan has been coordinated by the Polar Networks Science Committee, a joint IRIS/UNAVCO committee, with input from a broad cross-section of the polar seismic and geodetic science community,
NOVEMBER 2012

Sample Recommendations

“ Collaborations with other members of the polar instrumentation community should be cultivated, for example the Automatic Weather Station group or the space physics community, to maximize the science return on the investment in remote autonomous stations. “

“ Foster and support collaborations with other polar science communities to advance mutual goals of improved data return and of quality from multi-sensor stations “

Sample Recommendations

- “ There are technological challenges to supporting both short- and long-term, continuous acquisition of seismic and GPS data from polar regions. These include developing sustainable solutions for power and communications, improving environmental enclosures, and cold-hardening equipment.”
- “ Continue close collaboration to improve power and communication systems for continuously operating stations“

Future Workshop

- Discussion of Polar Observing Systems
- Moving to a “base” network
- Opportunity for other observing systems collocated
- Matches recommendations of APOS workshop report
- Details TBA





Thank you!

“ The PNSC is one of the most engaged and productive committees I have ever interacted with... ”

- Seth White
- http://www.iris.edu/hq/about_iris/governance/polar
- <http://www.unavco.org/community/governance/committees/polar.html>