#### WHO WE ARE

The Polar Research Coordination Network aims to connect the Polar Science, Data and High-Performance and Distributed Computing (HPDC) communities to enable deeper penetration of computing methods and cyberinfrastructure into the polar sciences.



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FIND OUT MORE polar-computing.org polar-computing@googlegroups.com 🎔 @PolarComputing

Image: Courtesy Ted Scambos, NSIDC

**NSF** EarthCube **Research Coordination Network for** 

# **High-Performance Distributed Computing**

in the **Polar Sciences** 

polar-computing.org

#### **Calling all Polar Scientists** and HPDC experts interested in science

See our list of upcoming events inside and watch our Twitter feed @PolarComputing for announcements and community activities

> AE8F 81B4 1DA4 6DE9 563C D190 89D6 31BA 4997 BA35 6736 87A0 0FC0

DE57 2059 78C1 8254 54C1 83E0 8274 F3E7 6825 EB2D CDED 1C4C D02D 7554

385 98E8 FD93

3CD7 F35B, 0C8F AB89 5971 3D44 B6FE

1219 7868 BFF1 D436 E882 8971 D9E9 694C 4670 4399 6FA2 09D9 73B8 1C34

## THE VISION

Multi-dimensional, sustained and groundbreaking engagement between the Polar Science, Data Science and HPDC communities



## THEMES

Current and future challenges in Polar Science using high-resolution imagery

Build and strengthen partnerships between Polar and Cyber/Computer Scientists

Education and training

Data management and cyberinfrastructure



## EVENTS

## **XSEDE Conference** Miami, 17 - 22 July 2016

The RCN is partnering with XSEDE'16 to organize a two day Polar Science themed training to HPC, Computing Challenge and Hackathon. Vist polar-computing.org for updated information.

### **XSEDE** Training

Come take your first Steps into Using HPDC Resources

- Introduction to using HPDC systems
- Introduction to Python for Science
- Data management for the Polar Sciences

## Polar Computing Challenge Workshop

A gathering of XSEDE campus champions, and others involved in using HPDC resources for science, to talk about how HPDC can and should serve the Polar Science domain.

## Hackathon

Hacking Polar Computational Challenge

#### **Calling all Polar Scientists**

What could you do with a team of high-performance computing experts and two dedicated days?

We are looking for Polar domain science challenges that high performance computing (HPC) experts and technologies could help advance. We are planning a hackathon-style event that could offer you: some free coding, access to better hardware and the know-how of using such, or simply fresh computing eyes. If your challenge is accepted we will invite you (or a member of your team) to attend the 2016 XSEDE Conference at no cost, to work with an HPC team in person through this hackathon on your specific problem.

#### Suitable challenge ideas:

Any repetitive data processes that you currently do either manually or in a sequential manner. These might include:

- Data processing or analysis procedure that takes hours running on your laptop
- Visualizing your data in a new way
- Integrating multiple data sets
- Manipulating large files or many files

# SCAR BoF

#### Kuala Lumpur, 20-30 August 2016

At the next Scientific Committee on Antarctic Research (SCAR) Biannual meeting, we will be bringing together Antarctic researchers dealing with HPDC challenges from the international Antarctic community. We will discuss common challenges, share solutions, and brainstorm how lingering bottlenecks might be overcome. We will also discuss what skills polar scientists need to learn in order to take advantage of HPDC resources, and how we (the polar cyberinfrastructure community) might share in best practices and materials for training the next generation of Antarctic scientists.

# Spring Imagery Workshop

Minneapolis, June 2016, by invitation only

Hosted by the Polar Geospatial Centre, we are inviting senior PIs, accompanied by early career researchers, to attend a two day workshop on the integration of HPDC and satellite imagery. Senior researchers will assess the long-term needs of the imagery community for high performance computing, networking, and imagery storage, and to draft a proposal towards achieving such, while the early-career researchers will be trained in the basic elements of utilising HPDC resources.

Image: NDSIC Courtesy Alice O'Connor















