



# Cryosphere Working Group

---

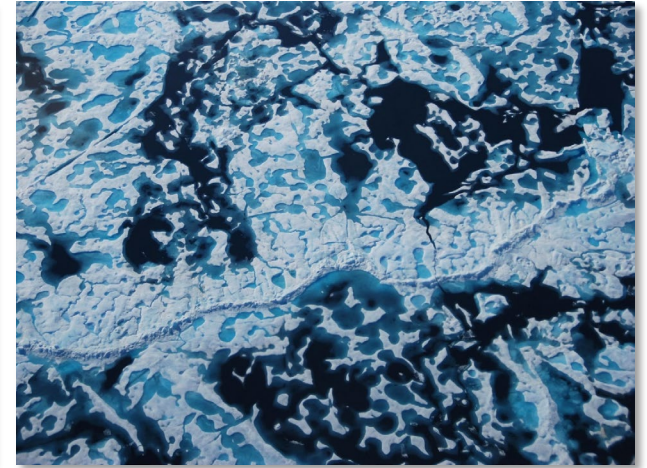
## US Representatives

- Robert Hawley (Dartmouth College)
- Melinda Webster (U. of Washington)
- Greta Wells (2021 IASC Fellow, U. Iceland)

## Scope

Glaciers, ice sheets, seasonal snow, sea ice,  
& permafrost\*

\*cross cutting with Terrestrial Working Group



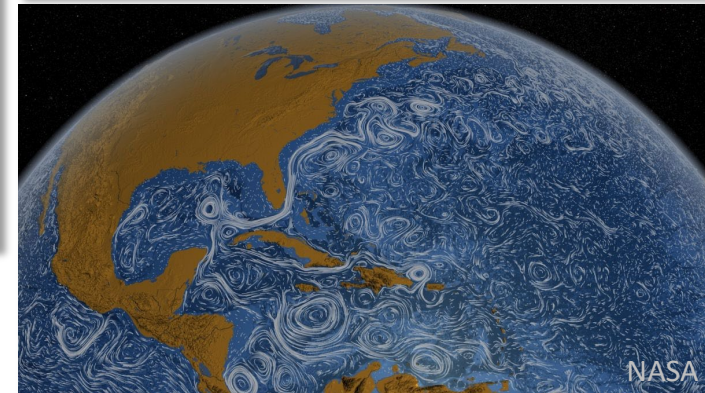
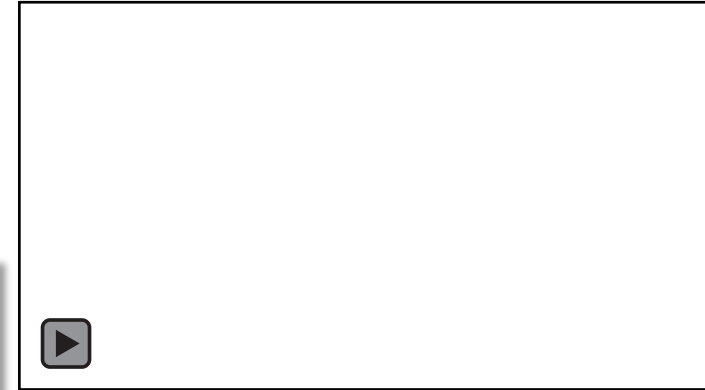




# Cryosphere Working Group

## Critical Issues Being Discussed

1. Improve knowledge of past, current, & future Arctic cryospheric states across spatial & temporal scales;
2. Advance understanding of cryosphere, atmosphere, terrestrial, ocean, & biological interactions;
3. Improve predictive capacity for extreme cryospheric events; and
4. Improve understanding of interactions between cryosphere & human society.





# Cryosphere Working Group

## Current Activities

**Early career engagement through workshops & summer schools:**

Cryosphere-specific activities:

- International Summer School in Glaciology,
- Juneau Icefield Research Program.

13 cross-cutting activities:

- Interdisciplinary workshops on changing polar climate (science + education),
- Cryospheric hazards & societal impacts,
- Active early career involvement in ICARP IV & IPY planning.

**Our priority areas of focus are**

- Advance knowledge of cryosphere-biosphere-climate interactions,
- Interactions between changing cryosphere & Arctic communities.





## Future Directions

### Which areas are on the horizon?

Near-term (ICARP IV) & long-term (5<sup>th</sup> IPY) planning:

- Build international collaborations,
- Bring different knowledge practices together,
- Support activities that help fill critical knowledge gaps:
  - Assessments,
  - Themed workshops.

### Is there anything PRB can do to support these areas?

- How can relationships built from past international collaborative efforts be sustained (i.e., MOSAiC)?
- Can mechanisms of all sizes be put into place to help facilitate international collaborative projects & logistical support?



L. Nixon