

A topographic map of the Arctic region, showing landmasses in shades of green and brown, and the surrounding ocean in dark blue. The map is centered on the North Pole, with the Arctic Ocean and surrounding continents visible.

NSF / ARCUS Arctic GIS Workshop

22-24 January 2001
Seattle, Washington

Bill Manley, co-chair
Institute of Arctic and Alpine
Research (INSTAAR)

Mark Sorenson, co-chair
Geographic Planning
Collaborative Inc. (GPC)

A topographic map of the Arctic region, showing landmasses in shades of green and brown, and the surrounding ocean in dark blue. The map is centered on the North Pole, with the Arctic Ocean and surrounding continents visible. The text is overlaid on the map.

Primary Objective:

Provide NSF with community input and recommendations to enhance the use of internet-based GIS for Arctic research.

A topographic map of the Arctic region, showing landmasses in shades of green, brown, and tan, and the surrounding ocean in dark blue. The map is centered on the North Pole, with the Arctic Ocean and surrounding continents visible.

Credit due:

Arctic Research Consortium of the United States (ARCUS)

- Wendy Warnick, Executive Director
- Renee Crain, Project Manager
- Zeb Polly, Systems Administrator
- Diane Wallace, Executive Assistant
- Sue Mitchell, Project Manager

A topographic map of the Arctic region, showing landmasses in shades of green and brown, and the surrounding ocean in dark blue. The map is oriented with North at the top.

Organizing Committee:

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Working Group Leaders:

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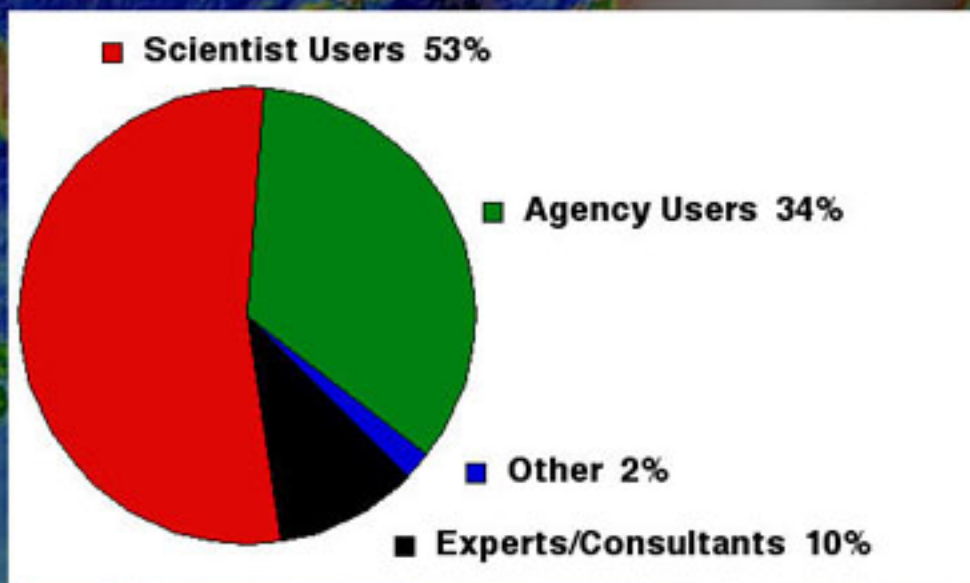
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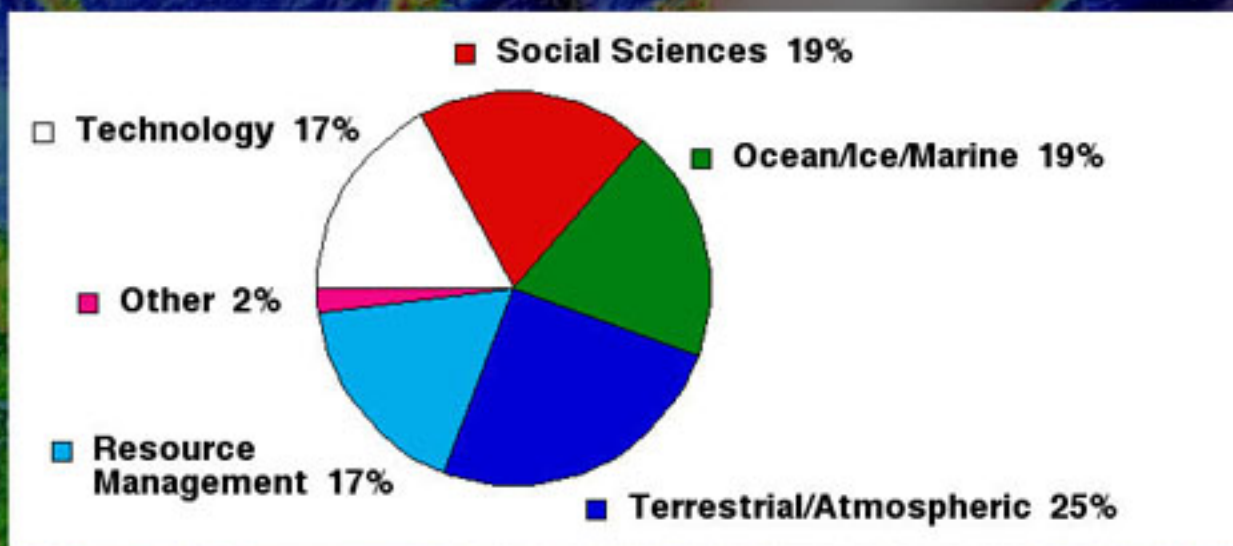
Workshop Participants:

Employment Field



Workshop Participants:

Area of Interest



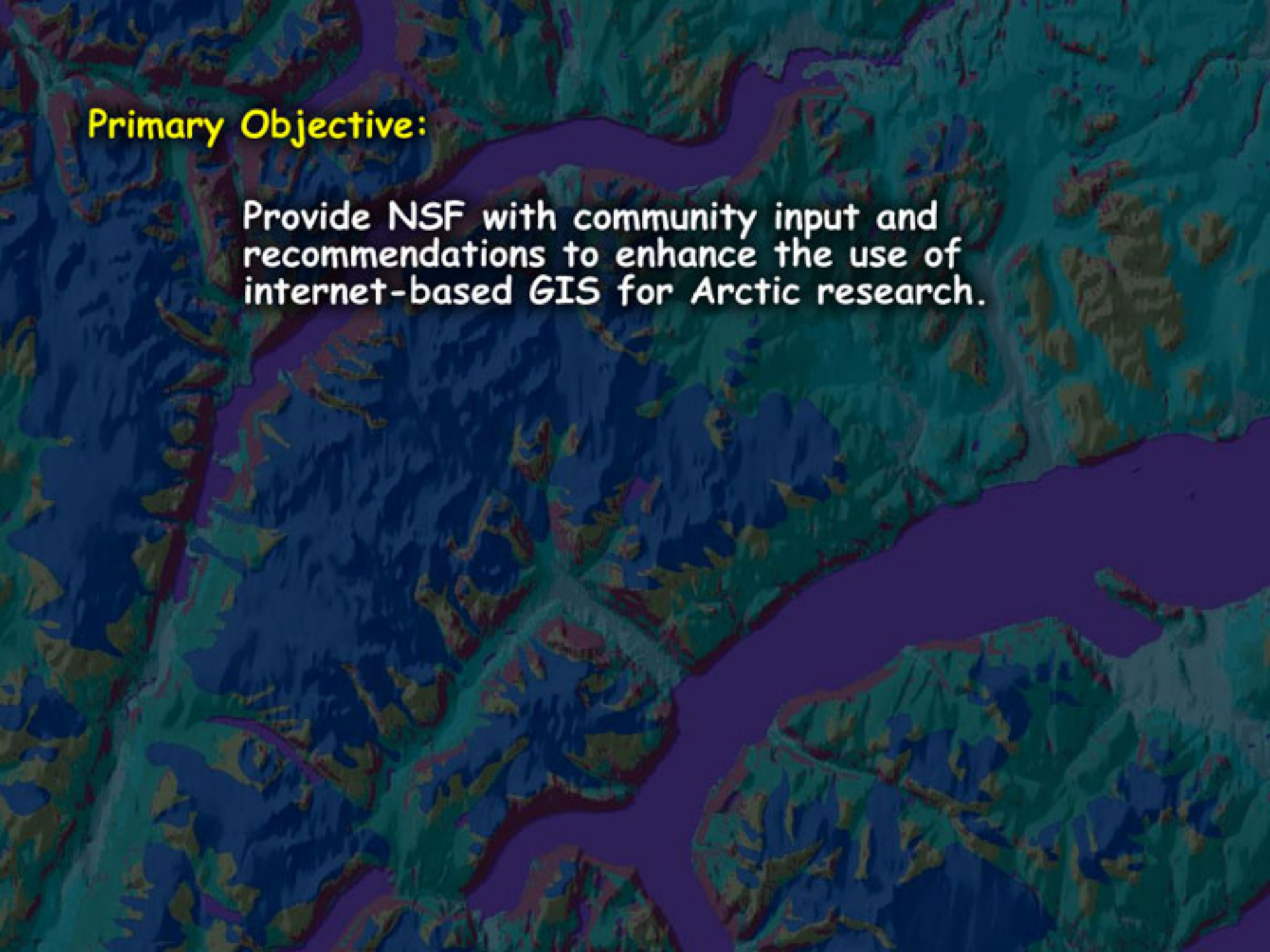
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A 3D topographic map of a mountainous region, likely in the Arctic, showing a complex network of rivers and valleys. The terrain is color-coded by elevation, with higher elevations in shades of brown and red, and lower elevations in shades of green and blue. A prominent river system flows through the center of the map. The text is overlaid on a semi-transparent blue rectangular background.

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Secondary Objective:

Assess the "State-of-the-Art" of internet-based GIS for Arctic Research



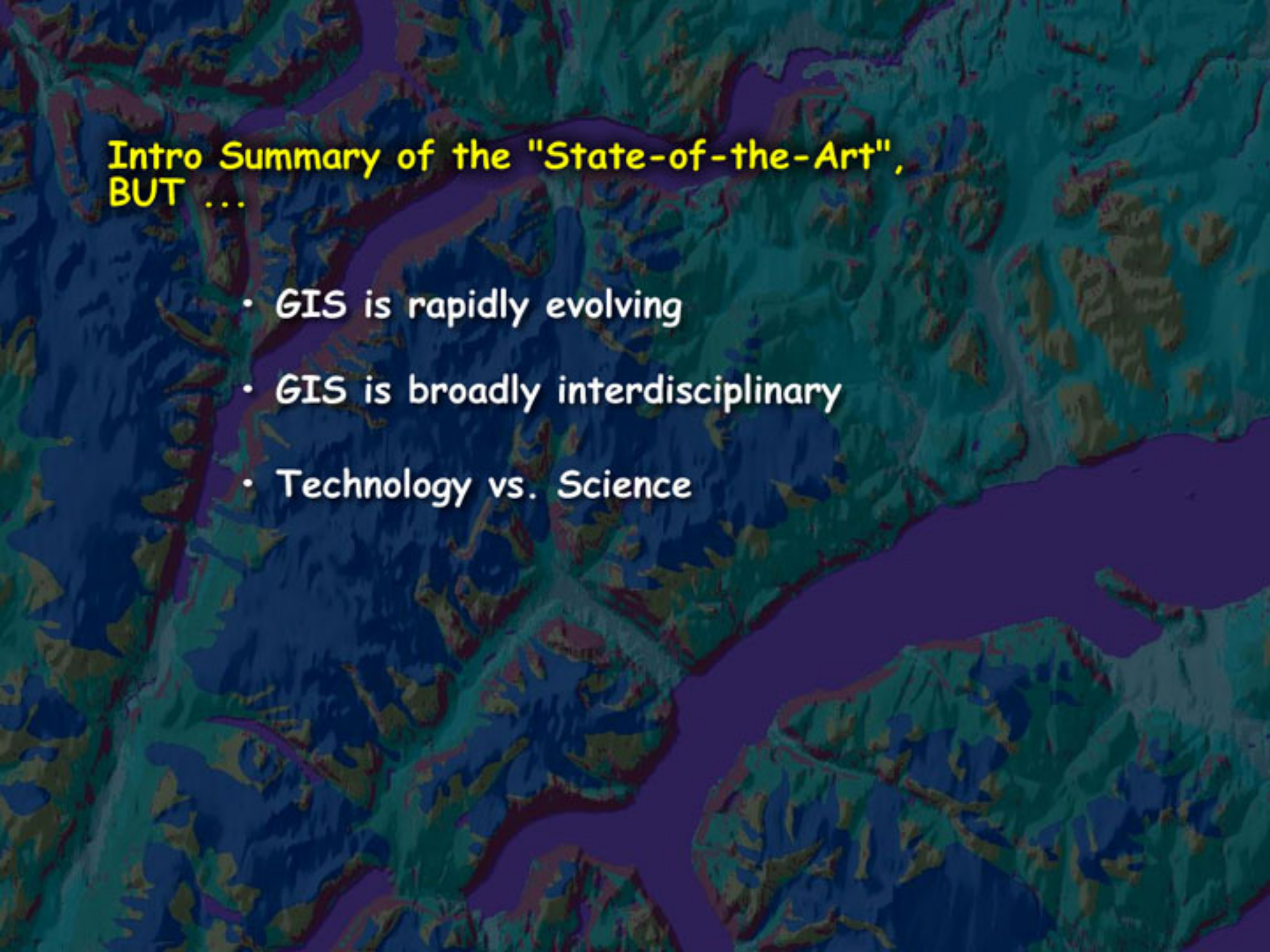
Intro Summary of the "State-of-the-Art",
BUT ...

- GIS is rapidly evolving



**Intro Summary of the "State-of-the-Art",
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- GIS is broadly interdisciplinary



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- Diverse spectrum of universities, agencies, and companies



Intro Summary of the "State-of-the-Art", BUT ...

- GIS is rapidly evolving
- GIS is broadly interdisciplinary
- Technology vs. Science
- Diverse spectrum of universities, agencies, and companies
- Too few coordinating efforts to share data and discoveries

Tremendous Potential of *GIS* for Arctic Research:

- *GIS* technology rapidly improving

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Tremendous Potential of GIS for Arctic Research:

- GIS technology rapidly improving
- Datasets more readily available
- Broad new avenues of research
- Interdisciplinary collaboration
- Share discoveries with others
- The power of internet-based GIS

Thus, this workshop:

- Keynote presentations
- GIS demonstrations
- "Reality Roundtable"
- "Science Shorts"
- Poster session

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and

- 6 working groups
- 3 synthesis groups
- plenary discussion

Goal restated:

- Promote creation and flow of georeferenced information



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Questions to address:

- Which Arctic science issues would benefit?

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- What strategies could be used to implement?

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Questions to address:

- Which Arctic science issues would benefit?
- What strategies could be used to implement?
- What are the anticipated impacts?



Products:

- White Paper
- Final Report