2001 Arctic GIS Workshop | Agenda

2001 Arctic GIS Workshop
Bell Harbor International Conference Center
Seattle, Washington
22-24 January 2001

Sunday, 21 January 2001

07:00 pm	Icebreaker reception with refreshments.	

Monday, 22 January 2001

08:00 am	Registration and Light Buffet Breakfast	
08:30 am	Welcome and Opening Remarks Workshop co-chairs: *William Manley, Institute of Arctic and Alpine Research, University of Colorado, Boulder and* *Mark Sorensen, Geographic Planning Collaborative, Inc*	**3.4 MB**
08:55 am	Context of the Workshop *Simon Stephenson, Arctic Research Support and Logistics Program, National Science Foundation*	
09:15 am	Current and Potential Uses for GIS in Academic Arctic Research *Michael Goodchild, National Center for Geographic Information and Analysis and Department of Geography, University of Santa Barbara*	**3.7 MB**
09:50 am	Current and Potential Uses for Geospatial Information and Technologies in Government *Mark Reichardt, Open GIS Consortium, Inc*	**4.9 MB**
10:25 am	Break	
10:45 am	Digital Earth *Jeff de la Beaujardiere, Digital Earth, NASA*	**1.8 MB**
11:20 am	Advances in GIScience Towards Web-Based Arctic GIS *Max Egenhofer, National Center for Geographic Information and Analysis University of Maine*	**9.8 MB**
12:00 pm - 01:00 pm	Lunch	
01:30 pm	Demonstrations on GIS Technology and Research Programs Using Web-based GIS: Building and Deploying Enterprise Geographic Information Systems, the Creation and the Delivery of Content *Christopher Kroot (TREESystems), Stu Rich (St. George Consulting Group), and Amar Das (St. George Consulting Group)*	
	The University of Alaska Fairbanks: A member of an Arctic GIS community *Skip Walker (Director, Northern Ecosystem Analysis and Mapping Laboratory-NEAML), Shari George (GIS Specialist, International Arctic Research Center), Julie Knudson (NEAML), Hilmar Maier (NEAML)*	**19.8 MB**
	The Alaska Geographic Data Clearinghouse *Mark Shasby (Earth Resources Observation Systems-EROS, USGS) and Emily Binnian (EROS, USGS)*	**1.3 MB**
	On-line Resources, Strategy, and Environmental Data Tools *Hugo Ahlenius and Lorant Czaran (UNEP, Global Resource Information Database (GRID) - Arendal)*	**744 KB**
03:00 pm	Summary of the tasks of the workshop	

William Manley and Mark Sorensen

- Understanding the current state of the art and existing GIS information.
- Identify potential for GIS-what could be accomplished through unification, data sharing, and using GIS in new ways.
- Technology and infrastructure necessary to achieve an Internet GIS for the Arctic.

WORKING GROUP BREAK-OUT SESSION 1 (1-hour)

02:45 pm   Working groups A-F will address the following question.

- Working Group A: Simon Wilson; Sound (main plenary session room)
- Working Group B: Lee Cooper; Pacific Board Room
- Working Group C: Sue Moore; Olympic Suite
- Working Group D: Jon Dunham; Coastal
- Working Group E: Duane Marble; Pierside
- Working Group F: Stphane Pesant; Port

Working Group Question:

1. How would Arctic science benefit from improved GIS? In other words, what are the most significant Arctic research questions and programs that could be addressed with improved GIS capability?

PLENARY SESSION:

03:45 pm   Reports from working groups A-F (10 minutes per working group)

04:45 pm   Break

05:00 pm   Workshop discussion of WG Session 1 findings: Synthesis of key features and critical issues; identify overlap and variation, emerging themes and key questions.

05:30 pm   Adjourn

06:00 pm   Buffet Dinner

07:30 pm   "Science Shorts": Science talks with refreshments

Wired, Vision and Wisdom
Lars Kullerud, Head GIS/Visual Communications Unit, __GRID__-Arendal, Norway

Proposed spatial and temporal reconstruction of the environment for the Iqaluktuuq Project, Victoria Island, Nunavut Canada
Julie Ross, Department of Anthropology, University of Toronto, Canada   **3.2 MB**

GIS Tools for Collecting and Accessing Arctic Bathymetry: International Bathymetric Chart of the Arctic Ocean (IBCAO)
Martin Jakobsson, Center for Coastal and Ocean Mapping, University of New Hampshire   **11.3 MB**

GIS and the Northern Sea Route: Applications During INSROP
Lawson Brigham, Scott Polar Research Institute, Cambridge UK

Tuesday, 23 January 2001

08:00 am   Coffee and Light Buffet Breakfast

PLENARY SESSION

08:30 am	Summary of process so far: Revisit the synthesis and raise new points *William Manley and Mark Sorensen*	**64.5 KB**

09:30 am   Working groups A-F will address the following question.

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Working Group Questions:

2) What is the expected pay-off in terms of research and broader societal benefits? (i.e., data sharing, collaboration, reducing redundancies, interdisciplinary linkages, new types of analyses, synthesis, data-model comparisons, establishing temporal baselines, logistics planning, outreach, education, guidance for PI?s that wish to learn and use GIS, etc.)

3) What components of an improved, internet-based GIS are needed for Arctic research?

- Key framework layers (i.e., interdisciplinary types of geo-referenced datasets such as DEM?s and physical, biological, climatologic, and cultural layers)
- Internet-based GIS capabilities (i.e., data-sharing, map display, GIS analysis, metadata, information resources, etc.)
- Specific internet-based GIS tools and applications

12:00 pm   Lunch

PLENARY SESSION

01 :00 pm   Reality Roundtable: Discussion of the lessons learned and challenges addressed in developing integrated GIS
Five panel members give 10-minute presentations, providing insights from diverse perspectives, followed by 20 minutes of moderated Q&A.
Moderated by Mark Sorensen
Panelists:
Allison Graves (GIS Consultant, North Slope Borough),
William Harbert (Department of Geology and Planetary Science, University of Pittsburgh),
Christopher Kroot (TREESystems),
Lars Kullerud (GRID-Arendal), Mark Shasby (USGS)

02:15 pm   Reports from working groups A-F (15 minutes per working group)

03:45 pm   Break

04:00 pm   Workshop discussion of WG SESSION 2 findings
William Manley and Mark Sorensen

Synthesis of key features and critical issues; identify overlap and variation, emerging themes and key questions.

WORKING GROUP BREAK-OUT FOCUSING ON IMPLEMENTATION (1 hour)

04:30 pm   Working groups A-F will address the following question.

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- Working Group B: Lee Cooper; Pacific Board Room
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- Working Group D: Jon Dunham; Coastal
- Working Group E: Duane Marble; Pierside
- Working Group F: Stéphane Pesant; Port

4) Identify a strategy for implementation of improved, internet-based Arctic GIS, considering:

- technology
- policies, procedures, and standards
- technical infrastructure
- administrative and legal infrastructure
- professional development infrastructure (synergy among discipline science, information technology, and geographic information sciences)
- coordination with other federal, international, educational, or private agencies, standards bodies, and other related organizations
- human resources
- financial resources

5) What potential challenges or impediments are likely to arise?

6) Prioritize specific recommendations for implementation.

05:15 - 07:00 pm	Poster Session with refreshments and no-host bar
07:00 pm	Banquet

Special Presentation
Arctic Science on the Move: Much New Information - Many Old Problems
Norbert Untersteiner
Professor Emeritus, Department of Atmospheric Sciences and Geophysics,
University of Washington and Sydney Chapman Visiting Professor at the University of Alaska Fairbanks

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Wednesday, 24 January 2001

08:00 am	Coffee and Light Breakfast	
08:30 am Working Groups	Synthesis and future directions *Bill Manley*	
	Arctic Spatial Data Infrastructure: Status Report, January 2006 *Mark Sorensen*	**31.0 KB**
	5-Year Vision for an Arctic GIS *Skip Walker*	**18.5 KB**

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PLENARY SESSION

10:30 am	Break
10:45 am	Working Group Reports
12:00 pm	Lunch
01:30 pm	Develop recommendations to enhance the use of Internet-based GIS for arctic research *William Manley and Mark Sorensen*

- Discuss arctic research needs, opportunities, and priorities for GIS.
- Identify specific support and infrastructure necessary to meet research needs.
- Develop overarching recommendations that provide broad support for the development of arctic GIS that meets the needs of the myriad users.
- Recommend priorities and develop planning and implementation timeline.

03:00 pm	Develop an action plan and timeline for preparation of a white paper and the final workshop report.
03:30 pm	Adjourn