

EDUCATION EVENT REPORT AND RECOMMENDATIONS

Event: Fifth Biennial USGS Geographic Information Systems (GIS) Workshop, 2004

Attendee and Report Writer's Name: Joseph Kerski, Geographer

Location: Denver, Colorado

Other USGS Participants: Approximately 180 USGS professionals who use GIS, representing geography, biology, hydrology, and geology disciplines.

Date: 1-5 March 2004

Background



Every two or three years, USGS staff who regularly use GIS gather to exchange technical information, receive training from each other and from ESRI and other private company staff, and listen to presentations from academia, nonprofit organizations, government, and private industry about GIS data, partnerships, and developments. In 2004, we held the fifth biennial USGS GIS workshop. This event has developed into something that all of us

in the USGS geospatial community look forward to. The planning of this event to meet everyone's needs is quite labor intensive, but fortunately, once again many excellent colleagues stepped forward and donated their valuable time to ensuring the event's success. The event was held in Building 810 and Building 53 of the Denver Federal Center, Denver, Colorado.

Day 1



Registration at the workshop totaled about 180, representing all four USGS disciplines and many different job classifications.

The workshop included morning plenary sessions for the entire group followed by about 10 concurrently running

afternoon hands-on GIS sessions and presentations. Vendor exhibits, Birds-of-a-Feather meetings, a Town Hall meeting, and a poster session were other highlights of this successful event. The workshop featured the following topics:

- GIS Fundamentals
- GIS Software Tools
- GIS Trends
- GPS/Mobile Mapping
- ArcIMS
- ArcSDE
- Cartography, Presentation, and Publication
- Data Dissemination
- Data Models
- Decision Support Systems
- Hazards
- Health Applications
- Homeland Security
- Image Processing
- LIDAR/IFSAR
- Land Cover/Land Characterization, Vegetation Mapping, and Wildfire Mapping
- National-Scope Datasets (all Disciplines)
- Programming and Scripting
- Project Applications and Modeling
- Scientific Visualization and 3-D Modeling
- System Administration, System Security, and Networking Tools
- USGS Policies and GIS Initiatives

Casadevall greets attendees on the first day of the workshop.



Dr Michael Goodchild, one of the key researchers and leaders in the geographic information sciences field, discussed the future of GIS, with an emphasis on geographic tools in society and the importance of geography in the 21st Century. I have been using his GI Systems and Science textbook in the university classes I have taught for the past two years and I and others have a great deal of respect for him



USGS Central Region Director Tom



Jennifer Sieverling was our workshop coordinator who went above and beyond the call of duty to ensure that the workshop was a valuable experience.



Barb Ray, right, was a key member of the workshop planning staff. Other members included Jennifer Sieverling, Mike Mulligan, Susan Stitt, Doug Yager, Luke Blair, Carma San Juan, Roland Viger, Rick Spengler, Stephen Char, Brenda Dutton, Jacque Coles, Bob Pierce, Naomi Krishock, and Joseph Kerski, I'm sure there were others that are not listed here but who contributed their time and energy to making this event a success.



Vendors at the USGS GIS workshop included Rockware, ESRI, National Geographic Maps, and Leica Geosystems.



Ben Kelley, left, examines one of the posters in the poster session. Ben was our facilities and computer specialist for the workshop and his technical expertise ensured that all of the computer, audio, and video equipment ran smoothly.





Above, views of the many hands-on sessions conducted by ESRI, USGS, and other staffs.

(GIO) Karen Siderelis discusses the role of the GIO for the attendees.

Poster Session

The poster session provided an opportunity for USGS staff to share their work with their colleagues. We will use many of these posters this August at the ESRI User Conference in San Diego.



Mark DeMulder, our Acting Chief Scientist for Geography at the USGS, emphasized homeland security and The National Map in his presentation.

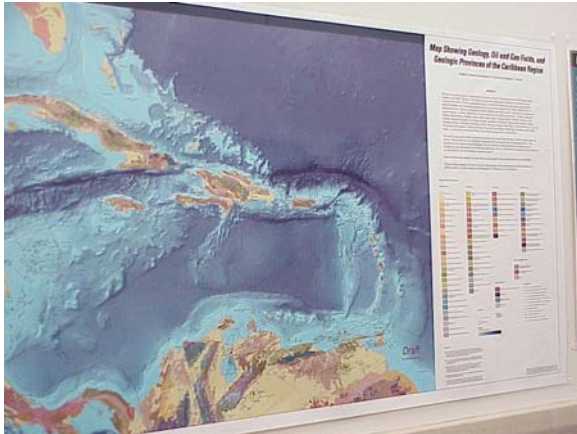


The USGS poster session featured dozens of posters that I was very impressed with. These well illustrated the versatility of GIS as well as the innovative character of the people who use GIS tools. The poster session provided additional opportunity for networking. My poster was entitled "Partnerships for GIS Education."



USGS Geographic Information Officer

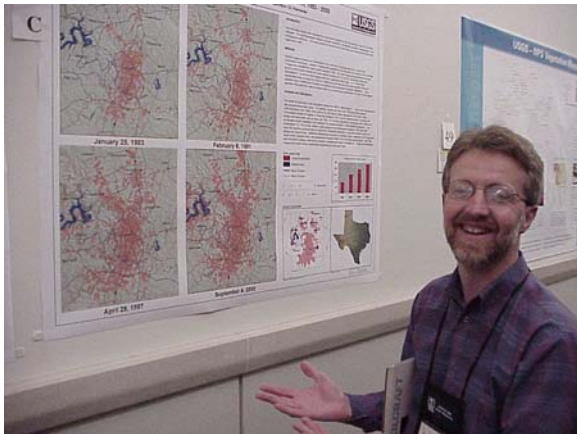




This map of the geology of the Caribbean Sea won the "best use of color" award in our poster award session and really was quite impressive.



One of the two halls housing the posters.



Dave Hester, USGS Rocky Mountain Mapping Center Geographer, discusses his poster about land use change, urban dynamics, and aquifer impacts in Texas.



An enjoyable part of every USGS GIS workshop is the poster awards session; some of the awards had humorous titles such as "worst use of color."





Networking is an important part of working in the field of GIS.

My Activities at the Workshop

On Monday, I gave a presentation on spatial data distribution and access. I also attended part of an Introduction to ArcGIS class. On Tuesday, I conducted a class called GIS Fundamentals with David Litke and Jennifer Sieverling and presented my poster. On Wednesday, I attended Curtis Price and Steve Kopp's excellent raster display and analysis class. On Friday, I presented in the National Datasets track, and taught a shortened version of the GIS Fundamentals with Jennifer Sieverling.

Day 2



One of our favorite speakers at all of our USGS GIS workshops is Clint Brown from ESRI Redlands. This year, he emphasized new developments in ArcGIS 9 in his presentation.

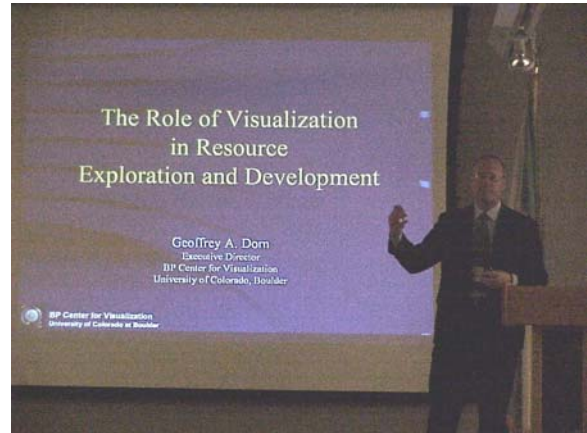


Ken Snyder from PlaceMatters discusses community-based and community design issues and developments.



Anne Hale Miglarese describes the role of GIS and standards and seacoast mapping at NOAA.

Mark Negri from the USGS discussed USGS and ESRI agreements for products and services.



Geoffrey Dorn from the University of Colorado spoke about scientific visualization and modeling.

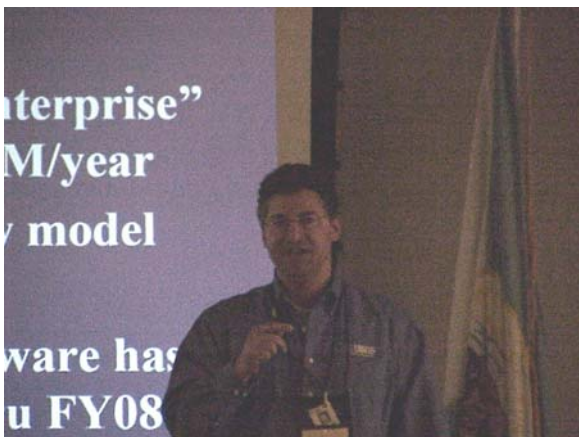
Day 3



Bob Pierce, Chief, Enterprise GIS, discusses enterprise GIS developments and projects.



Colorado School of Mines Professor Keith Turner presented during Day 3 of the workshop, including such topics as geologic applications and 3D visualization.





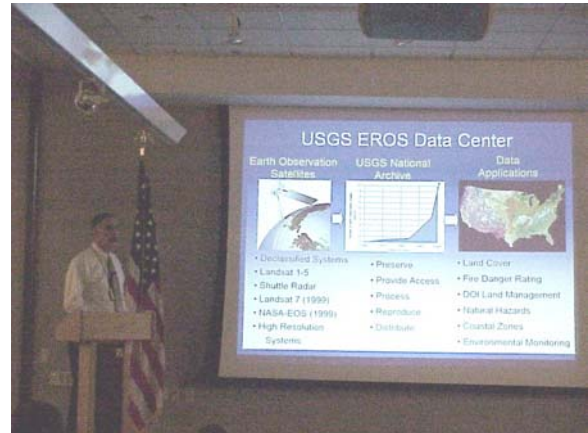
John Kineman from NOAA gave a plenary presentation on Day 3.

Day 4 and 5



Melissa Massaro from the Center for Disease Control discusses advances in medical applications of GIS.

Earth Observing System.



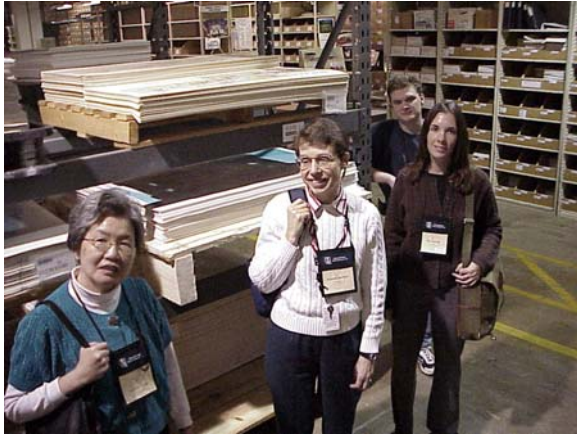
USGS scientist Nick VanDriel discussed remote sensing issues and developments.



Jeff Young of Leica Geosystems discussed important research and development trends in Remote Sensing on Day 4.



Dr Jon Ranson from NASA discussed the



Richard Shields and I conducted tours for the attendees at the USGS GIS workshop, most of whom had not yet visited the USGS Rocky Mountain Mapping Center. I thank Richard and those who he scheduled to give presentations on what they do at the Rocky Mountain Center for their help.

Acknowledgements

I thank all those who coordinated, attended, and presented at this conference, or otherwise supported the event in a myriad of ways, for making the event valuable to so many people.

* End of USGS GIS 2004 Report ***