## Education Event Report

Event Name: GIS Day 2002 and Geography Action Week 2002

## Participant and Report Author : Joseph Kerski, Geographer, USGS

Dates: 15-26 November 2002

Location: Denver, Colorado

The USGS Rocky Mountain Mapping Center (RMMC) staff were involved with 10 activities for the 2002 Geography Awareness Week and GIS Day.

# What is GIS Day and Geography Awareness Week?

GIS Day is a grassroots event that formalizes the practice of geographic information systems (GIS) users and vendors of opening their doors to schools, businesses, and the general public to showcase real-world applications of this important technology. The event is principally sponsored by the National Geographic Society, the Association of American Geographers. University Consortium for Geographic Information Science, the United States Geological Survey, The Library of Congress, Sun Microsystems, and ESRI.

This is the fourth year that GIS Day has occurred, and we have participated during all four years. In 2001, thousands of organizations hosted GIS Day events in more than 81 different countries. Through the combined efforts of GIS Dav participants, millions of children and adults have learned about GIS technology through geography, and how it affects their everyday lives.



Joseph Kerski, left, with some of the participants in this year's GIS Day activities.

The note I posted on <u>www.gisday.com</u> during May 2002 read as follows:

Do you love maps and GIS? The USGS National Mapping facility in Denver is the place to be on GIS Day! Come tour the building where over 50,000,000 maps, posters, books, and digital data are shipped to data users around the world. USGS scientists and educational staff will conduct GIS, GPS, and mapping workshops throughout the day. In addition, how would you like to display your GIS-generated maps before thousands of people who visit the USGS Map Sales office in Denver each month? The USGS is sponsoring a Map Gallery and contest! All submitted entries will be placed on display at the USGS Rocky Mountain Mapping Center during November 2002. Winning entries will receive free maps and spatial data. To enter, contact Joseph Kerski, USGS Geographer, at jikerski@usgs.gov.

GIS Day is part of the National Geographic Society's initiative, *Geography Action*, which is a year-long initiative encompassing key educational achievements such as GIS Day and Geography Awareness Week. The theme for 2002 was America's Backyard: Exploring Your Public Lands. In addition to events such as GIS Day and Geography Awareness Week, there have also been several worldwide activities supporting geography action, with their goal being to engage people in learning and caring about geography.

#### USGS Rocky Mountain Mapping Center Activities for GIS Day and Geography Awareness Week

(1) Tour for conference attendees at the Pecora Land Remote Sensing Conference. This conference brought together some of the premier researchers and developers in the international remote sensing community. The USGS operated two exhibits at the conference, where we displayed USGS digital imagery, elevation, land cover, hydrography, and other data and products. On 15 November 2002, we conducted a tour of the Rocky Mountain Mapping Center for the conference attendees. Richard Jimenez and other staff included the distribution facility, research, and digital map production in the tour.

(2) Richard Dieter and Joseph Kerski conducted а "Lunch and Learn" "Caving--Exploring the presentation on Underground Wilderness." We wanted to conduct this presentation because (1) caving fits in with geography and exploration, and (2) the theme for this year's Geography Action Week was "Exploring Your Public Lands." All of the caves we explored and showed were on either National Park Service, BLM, or US Forest Service Lands. We work regularly with the staff from these organizations to conduct restoration and obtain entry permits.



One of the photographs that Richard Dieter took as we were emerging from a cave in New Mexico during one of our caving trips.

We were thrilled to see 65 people from the USGS attend this presentation, including Amy Bern from the USGS Geologic Discipline, new education director for the National Speleological Society. During our 2001 caving presentation at REI's Denver store, Dr Hazel Barton was in the audience! She was one of the two stars and producers of the IMAX Cave Movie and it was a thrill and honor to meet her.



Marty Morey and Joseph Kerski during one of our many adventures over the years in caves; this one during Fall 2002.

(3) Joseph Kerski and Christina Baker, USGS education intern and student in geography and education at the University of Colorado, conducted a GIS workshop and conducted tours of our facility several times during GIS Day, 20 November 2002. Attendees included a wide variety of people: GIS professionals, USGS scientists from our geology program, GIS students and their professor from Metropolitan State College of Denver's GIS Program, home schoolers and their parents/teachers, other federal employees, and the general public. Approximately 35 people attended the events throughout the day. Joseph Kerski will also give a keynote address at the GIS Day Events at Front Range Community College, Boulder, Colorado, on 4 December 2002.



Participants tour the book and open files section of the USGS Rocky Mountain Mapping Center.



Some of the participants pose in the USGS Central Region Visitors Center during their tour of the mapping center.



The display that we set up for the week's events included a poster that we created called "Is It Geography?", a poster on how the USGS supports Geography and GIS education, a poster illustrating our work with universities, government agencies, and K-12 teachers on a Colorado biodiversity project, a poster illustrating before-and-after DEMs of Mt St Helens, and two GIS posters from ESRI.



More of the participants during their tour of the mapping center.

(4) Gene Jackson (RMMC) and Ron Beck (EDC) were instrumental in creating a display at RMMC of 41 images from "The Earth As Art." These are Landsat scenes from around the world that were selected primarily for their artistic content—colors and patterns.



I have seen a few of these on the online web site (http://landsat.gsfc.nasa.gov/earthasart/),

but I must say that there is something special about seeing these images in a framed setting up close that is truly magnificent.

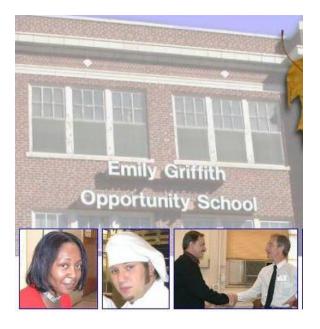


My favorite is the Lena River delta in Siberia.



Earth as Art is on display for the general public at the USGS RMMC through the rest of 2002.

(5) Joseph Kerski gave a presentation about GIS and USGS to the staff and Information Technology Dean of Emily Griffith Opportunity School in Denver, 21 November 2002.



I am happy to report that the school, which serves 15,000 students each year with its vocational and technical courses and has a high reputation in the community, is very interested in beginning a program in Geographic Information Systems. They are interested because of the career opportunities and interdisciplinary nature of GIS, and the fact that it complements their existing IT program so well.

(6) Together with representatives from the University of Colorado, ESRI, the Colorado Geographic Alliance, the Orton Foundation, and other organizations, Joseph Kerski attended a meeting to discuss the "GIS For Colorado" initiative. This initiative seeks to secure a GIS K-12 site license for all Colorado schools and to otherwise promote GIS in education throughout the state.

We hosted a workshop on water (7) resources and conducted a tour for the Rocky Mountain Chapter of the Geospatial Information and Technology Association (GITA). Over 100 people from the regional and remote sensing community GIS attended the quarterly GITA luncheon to hear speakers discuss water resource and GIS developments on 22 November 2002. Richard Jimenez and other RMMC staff included the following stops on the tour: Customer Service, Visitor Center, Land Use Land Cover mapping. National 1 Hydrography Dataset production, Digital Elevation Model production, map revision, and the map distribution facility.

(8) Together with the USGS Central Region Office of Communications, we operated a USGS informational exhibit and conducted several workshops for 700 teachers at the Colorado Science Teachers Association annual conference in Denver, 21 and 22 November 2002. The workshops included GIS, GPS, our new Geography Electronic Magazine of Science (GEMS), rocks, water, and minerals. For more information, see the separate report I wrote on this event. (9) Jeff Simley, USGS Cartographer, gave a presentation and demonstration on using the National Hydrography Dataset to the Federal GIS Coordinating Committee, 19 November 2002.

(10) Joseph Kerski conducted a hands-on GIS workshop for 22 preservice educators at the School of Education at the University Colorado. Boulder. These are of undergraduate and graduate students of Dr Otero in the education program who will soon be practicing science teachers. It is important to conduct workshops for preservice teachers because the seeds are planted in this way for the teachers to take into their own classrooms of the future. Our workshop there in October 2002 was featured in the School of Education's newsletter.



Preservice educators work with GIS and with Joseph Kerski at the University of Colorado's School of Education.

## Acknowledgements

I appreciated the time and efforts of USGS staffpersons for these activities. In particular, I would like to thank Richard Dieter for working on the caving presentation with me and for his help with the GIS Day display, and Gene Jackson and Ron Beck for their work on the Earth As Art satellite image display. I thank Christina Baker for her assistance on GIS Day and at the University of Colorado. I am sure there were others who were also involved behind the scenes with making these events a success, and I thank them as well.

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