

Intermountain News

ASPRS Intermountain Region

Winter 2001

The 2002 Winter Games From Space Remote Sensing Imagery of Olympic Venues

Newly available imagery from NASA and Space Imaging captures the beauty of the Wasatch Front, home to the 19th Winter Olympic Games held February 8-24, 2002. Visualizations from remote sensing images have been seen in the news media, and event planners have found them useful as well.

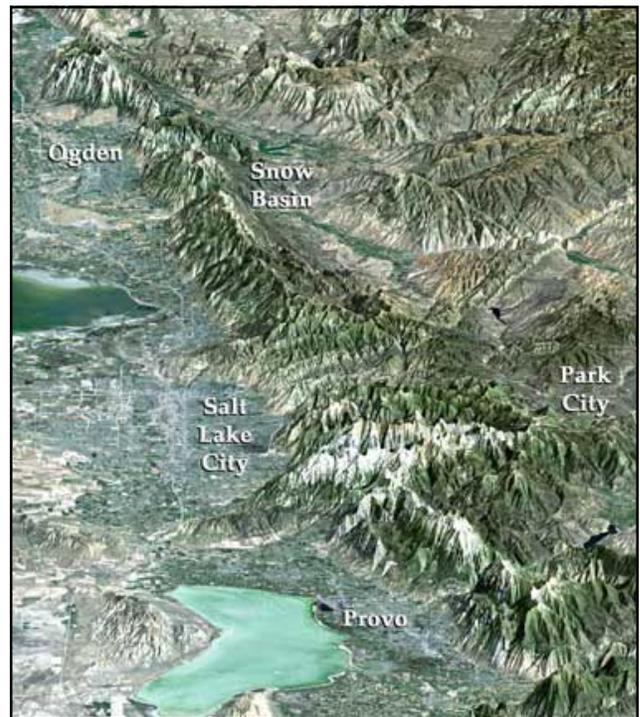
The Shuttle Radar Topography Mission (SRTM), flown aboard the Space Shuttle Endeavor two years ago, collected digital elevation measurements of the Earth's surface using radar interferometry. NASA's Jet Propulsion Laboratory (JPL) has used SRTM data to produce spectacular image drapes, some of which have been published on the Web at www.jpl.nasa.gov/srtm and www.jpl.nasa.gov/images/earth/usa/west.html

NASA's image wizards also produced a breathtaking animation that was seen as part of the "E Theater 2002" show at Kingsbury Hall at the University of Utah and on KSL-TV in Salt Lake City. Blending images from a series of sensors with different resolutions, the "Olympic Zoom" takes the viewer from Earth orbit to Rice-Eccles Stadium, site of the Olympic opening and closing ceremonies. An MPEG version of the "Olympic Zoom" is available on the Intermountain region website at www.asprs.org/Intermountain.

Space Imaging's IKONOS satellite has been a useful tool for planners of the 2002 Winter Olympics. Extensive recent construction on sites such as the Snowbasin Ski Area near Ogden and the Olympic Village in Salt Lake City has made maps out of date. An updated and timely source of geospatial data was needed for all kinds of planning purposes, from transportation to security.

IKONOS was the world's first commercial high-resolution Earth imaging satellite, launched on September 24, 1999. A year later, Space Imaging published images of the Olympic Park in Sydney, Australia. On average, IKONOS collects about 900 images per day from an orbit 432 miles up. It records one-meter panchromatic and four-meter multispectral imagery. Merging the datasets produces pan-sharpened color images.

Examples of full resolution IKONOS images can be found on the Space Imaging website, www.spaceimaging.com.



Landsat imagery combined with an SRTM digital elevation model produced this perspective view of 2002 Olympic venues (courtesy NASA/JPL).

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National Director's Corner

The votes are in for the changing of our bylaws to reflect the National Bylaws language. [see the *Intermountain Region website for the new bylaws - ed.*]

We will be receiving the language for an amendment to recognize our region as an incorporation for tax exemption status purposes like the National ASPRS has. It will require that we provide the National with some needed information and a very small fee for us to conduct our business in a tax-exempt environment. I think that we will be doing enough business to offset the fee for incorporation.

We had what I would call a very good year, in that we had two technical and eight exec meetings plus the committee meetings. The results are successful technical meetings and a great Utah GIS Day for the children on October 7th, 2001. A week later, the National GIS Day was conducted in other parts of the state with the local GIS Specialists and users presenting to the children. We had a table at the UGIC Conference held at Park City last fall.

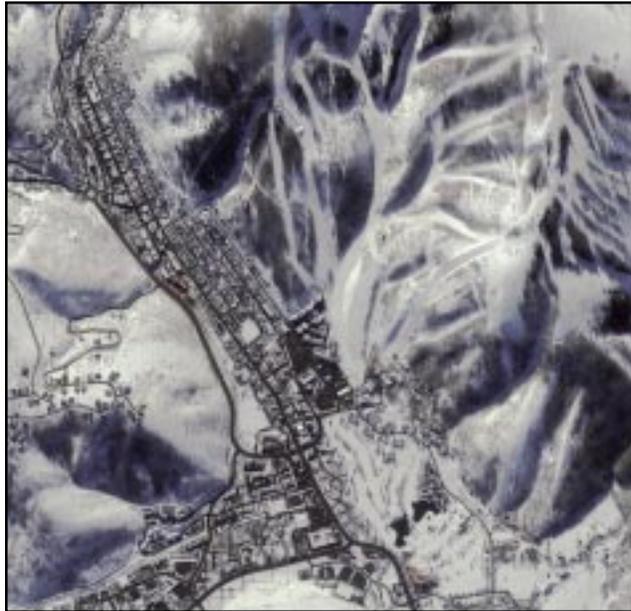
I would like to see future technical meetings occurring in Idaho and the southern part of Utah. We have had meetings in Price, Salt Lake and Logan. Cindy Clark deserves a lot of praise for her work organizing these events.

I am quite happy there is a wide variety of expertise in the individuals supporting the offices of President, Vice President, Secretary/Treasurer and especially the Newsletter Editor. Without these people I would find my job as Director in jeopardy.

THANKS!

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Winter Games From Space



Park City area IKONOS image acquired January 7, 2002 (courtesy Space Imaging).



Rice-Eccles Stadium on January 7, 2002, ready to seat 56,000 spectators for Olympic ceremonies (courtesy Space Imaging).



Looking east at the Wasatch Front, with elevations exaggerated five times. Landsat imagery draped over an SRTM digital elevation model (courtesy NASA/JPL).

Vegetation and Geologic Mapping Highlighted at Fall Technical Meeting

Utah is a complex mosaic of diverse landscapes that are challenging to map accurately, even with the aid of GIS. This was the theme of our three presenters at the ASPRS Intermountain Region fall technical meeting at the College of Eastern Utah in Price last November.

Ecological mapping is a key project for Pete Kilbourne of the Manti-LaSal National Forest. There is a National Hierarchical Framework of Ecological Units, on various scales from the broad ecoregions down to small land units or sites, but Utah has been fully mapped only to the ecoregion level. A complete terrestrial ecological inventory is needed to inform federal, state and county land use planning. The Manti-LaSal NF has completed an inventory of the La Sal Mountains near Moab, developing methods that could be applied elsewhere.

In 2000, the Utah Geological Survey published a 1:500,000 statewide digital geologic map. Now they are working on 1:100,000 quadrangle maps, a project expected to take 10-15 years to complete. A major problem is edge-matching quads that were mapped in the field by different geologists in different years. Both the inherent subjectivity of geologic mapping (especially for Quaternary mapping units) and changing standards result in maps that can be hard and time-consuming to reconcile for use in a GIS. Neil Storey of the Utah Geological Survey brought us up to date on the St. George Geologic Hazards Project, which has tackled the edge-matching problem head-on using nine 1:24,000 scale geologic quadrangles.

Introducing the ASPRS Intermountain Website

The national ASPRS now offers web hosting services to the regions, thanks to webmaster Dr. Jim Hipple of the University of Missouri Department of Geography (Jim earned his PhD. at the University of Utah). This made it very easy for us to finally get a website going. All I needed was a password to upload files. But ASPRS Assistant Web Page Editor Martin Willis made it even easier by creating an initial home page for us to add to.

Visit www.asprs.org/Intermountain for information on past and future meetings, our newsletter (in living color!), and the occasional interesting hyperlink. And please send me your suggestions on how to make our home on the Web more useful.

Rich Warnick
rwarnick@fs.fed.us



Lunch buffet at College of Eastern Utah, National Director Lloyd Blackburn in foreground.

Gery Wakefield gave a presentation about the National Park Service Northern Colorado Plateau Network vegetation mapping project for 16 NPS units. One goal of the project is to conform to a uniform classification scheme with repeatable results. Another is to achieve 80% classification accuracy (compared to 50% for the Gap Analysis Project), with a minimum mapping unit of 0.5 hectare. So far, only Zion National Park has a vegetation layer that is considered complete.

Intermountain Region Winter Technical Meeting

"Hydrologic Applications of GIS and Remote Sensing"

- Cindy Clark, AGRC
- Mike Williamson, US Forest Service
- Karen Hansen, USGS

*Friday, March 8th
9:30 am to 3:00 pm
Salt Lake Community College
Redwood Road Campus Student Center
Salt Lake City, Utah*

Calendar of Events

ASPRS Intermountain Region
Winter Technical Meeting
Salt Lake City, UT March 8, 2002
www.asprs.org/Intermountain/

RS 2002 Ninth Biennial Forest Service
Remote Sensing Applications Conference
San Diego, CA April 8-12, 2002
www.fs.fed.us/eng/rsac/rs2002/

2002 ASPRS-ACSM Annual Conference
and FIG XXII Congress
Washington, DC April 22-26, 2002
www.fig2002.com/

Pecora 15 Remote Sensing Symposium
Denver, CO November 8-15, 2002
www.asprs.org/Pecora-ISPRS-2002/

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