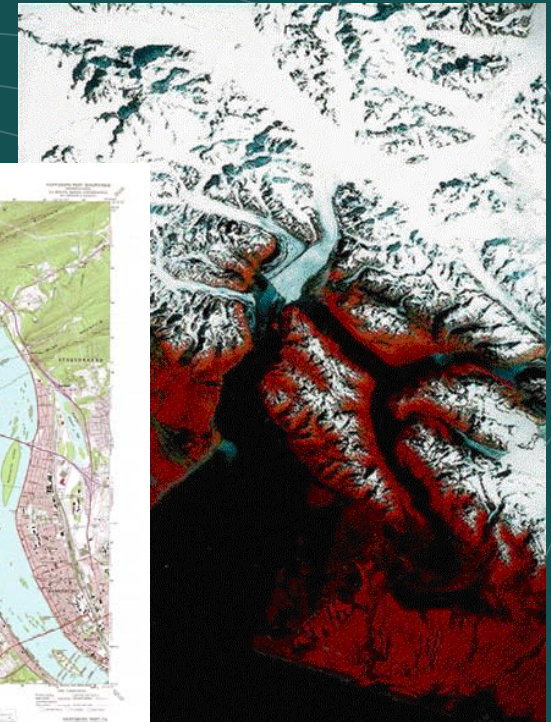


“Working Together with Space Grant”

Western Regional Space Grant Meeting

September 27, 2003

Rapid City, SD



USGS EROS Data Center

- Institutional Member of the SD Space Grant Consortium
- US Geological Survey, Department of the Interior
- Located 16 miles outside Sioux Falls, SD, eastern border of the state, on a 318 acre site
- Annual budget of \$55 - \$60 million using directly congressionally obligated funds, proceeds from data sales, and funds from cooperators.

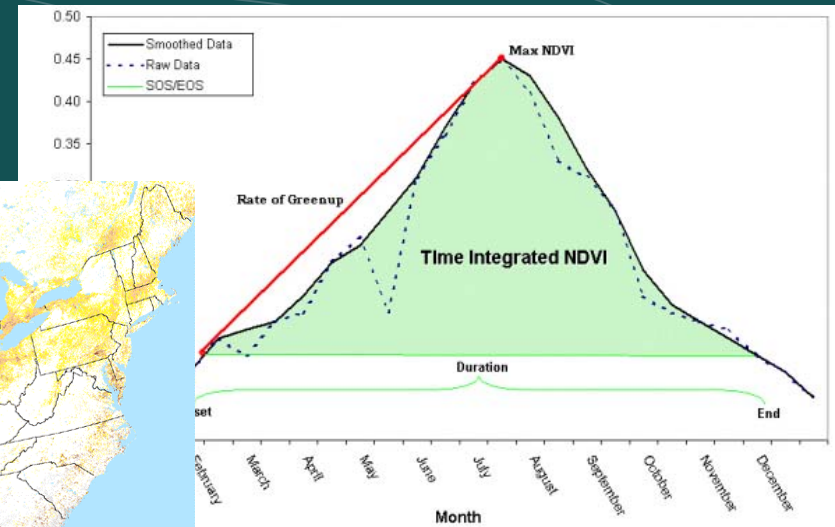
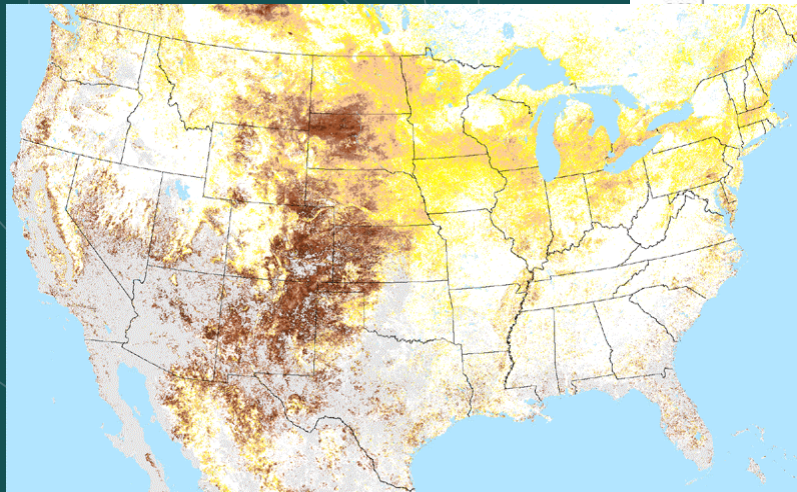


EDC Mission

- To promote new uses, new users, and new understanding of land information, so that others can better understand our planet.
- To ensure scientists, researchers, businesses, decision makers, and the public have ready access to the land information they need.
- To safeguard and expand the world's largest civilian archive of remotely sensed land data.

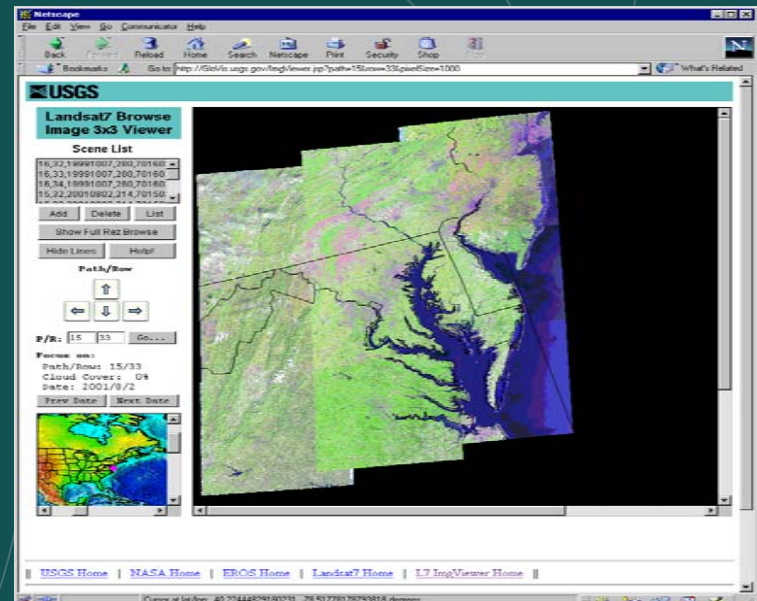
EDC Example – Promoting new users

- Using the vantage point of satellites for observing seasonal dynamics of the landscape, develop of a set of phenological metrics such as growing season onset, end, and duration.



EDC Example – Ensuring ready access

- Development and improvement of Internet access tools to view and order recently acquired imagery.
- Earth Explorer
 - earthexplorer.usgs.gov
- Web Mapping Services
 - gisdata.usgs.net/index.php
- Global Visualization
 - GloVis.usgs.gov
- General Web Access
 - edc.usgs.gov



EDC Example – Expanding archive

- Daily ingest of nearly 2 TB of image data from Landsat 5, Landsat 7, Terra, Aqua, EO-1 satellites using on site 5 m and 10 m satellite antennas and tape deliveries from foreign ground receiving stations.
- 4 decades of Satellite Imagery archive
- Corona
- SPOT Pan/ Multispectral
- Landsat MSS/TM/ETM
- AVHRR



Relation to SD SGC Mission

- Establishing links between SGC institutions
 - EDC personnel located on campuses, University personnel located at EDC, shared investigations
- Promoting science, math, & engineering education
 - EDC outreach program places scientists & engineering into local classrooms and on the SD educational network
- Providing graduate and undergraduate training
 - EDC employs students as seasonal and year long interns, both at the EDC facility and remotely as part-timers during the school year
- Developing the state infrastructure
 - EDC serves as a State University network hub & Internet II hub

Importance of SGC to EDC

- Provides the state with leadership on space related issues.
- Provides a communication forum for earth remote sensing topics in the state
- Promotes early math, science, & engineering education of future workforce
- Promotes cooperative research efforts
- Avoids duplication of efforts between members
- Provides ready access to future employees through internships of university students
- Provides staff with opportunities to communicate & share knowledge with students and public.