NASA Earth Observations (NEO)

http://neo.sci.gsfc.nasa.gov/
How can NASA simplify public access to georeferenced data imagery?
Audience First

1. global NASA data imagery
2. high resolution
3. standard image formats (JPEG, PNG)
Satellite

HDF

CPU

MatLab

bandwidth

where is the data?

ENVI

domain

PhD

IDL

terabytes

proprietary data formats

User
Satellite HDF CPU MatLab ENVI IDL bandwidth terabytes domain PhD proprietary data formats User
Decision Process
1. Global NASA data imagery

Accessible topics
- core concepts
- user-suggested

Accessible data
- data expertise
2. High Resolution

Source dataset resolutions
- 1 km to 2 deg/pixel

Real-time processing
- resizing, subsetting, color palette application

Most users need 2048x1024 or less
Base Imagery Data

3600x1800

Data only

Grayscale

- Netpbm PGM (Portable Gray Map)
3. Standard image formats

JPEG
PNG
GeoTIFF
Other Decisions

Approach data processing from visualization perspective
Provide common temporal compositions
Access Mechanisms

Multiple vectors for access

- Website
- WMS (Web Mapping Service)
- FTP
NASA Earth Observations (NEO)

http://neo.sci.gsfc.nasa.gov/

Kevin Ward
kevin@eyeonclimate.com