

Societal Uses and Benefits of Moderate Resolution Imagery in the United States

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Survey Objectives

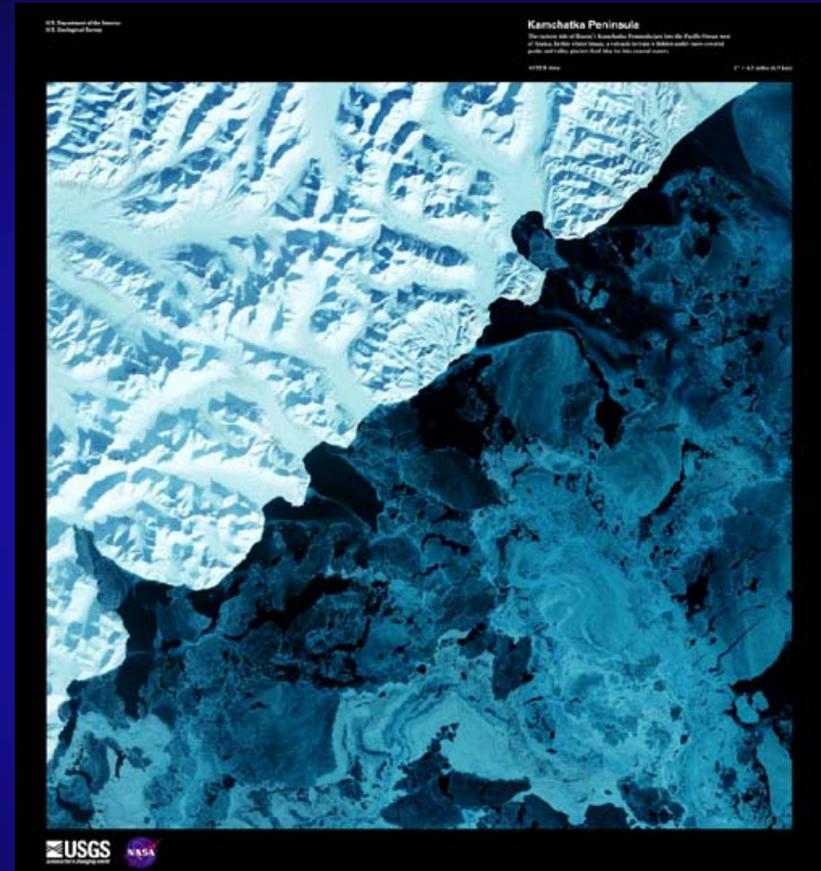
Better understand the uses of moderate resolution imagery, including those previously not captured or detailed

- Identify and classify users
- Understand how and why imagery is being used
- Qualitatively and quantitatively measure societal benefits of this imagery



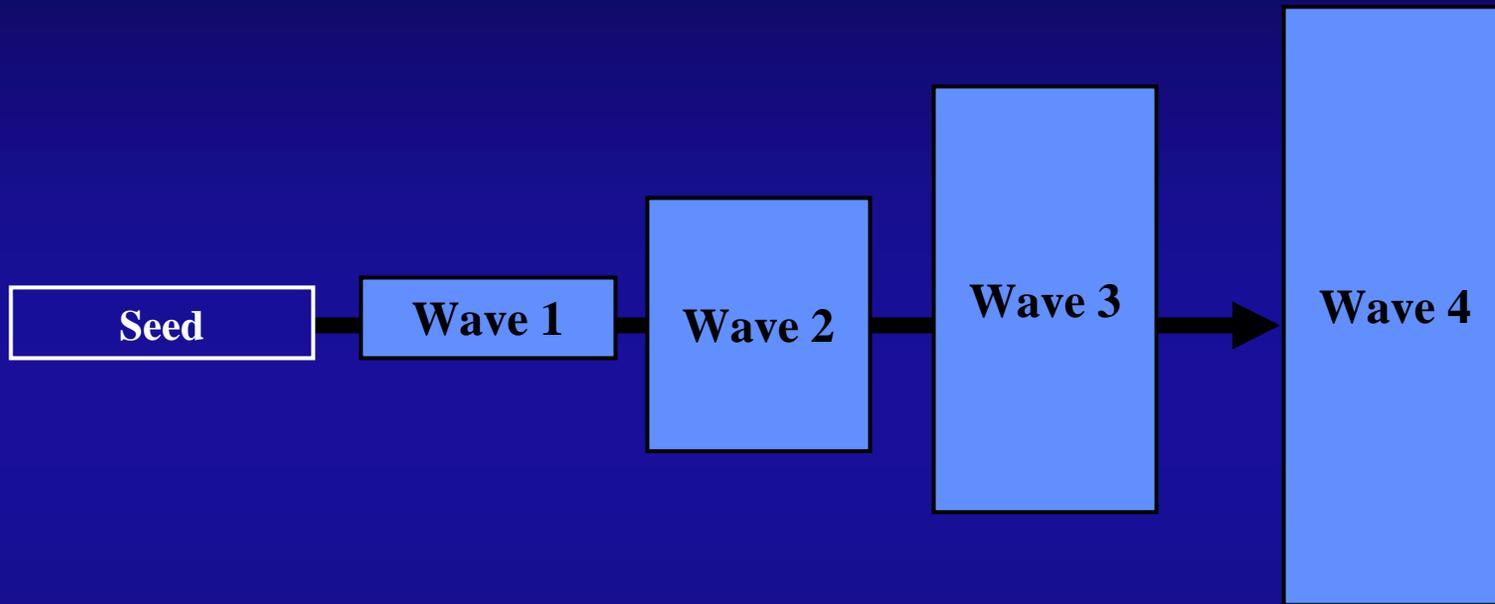
Survey Components

- Phase I:
 - User assessment
 - Potential user identification
 - Refinement through snowball sampling
- Phase II:
 - User survey



Kamchatka Peninsula
(<http://eros.usgs.gov/imagegallery/index.php>)

Stages in the Snowball Sampling



Seed sends names of three contacts (Wave 1)

Wave 1 respondents each send the names of three contacts (Wave 2)

Each wave provides exponentially more contacts



Phase I: User Assessment Results

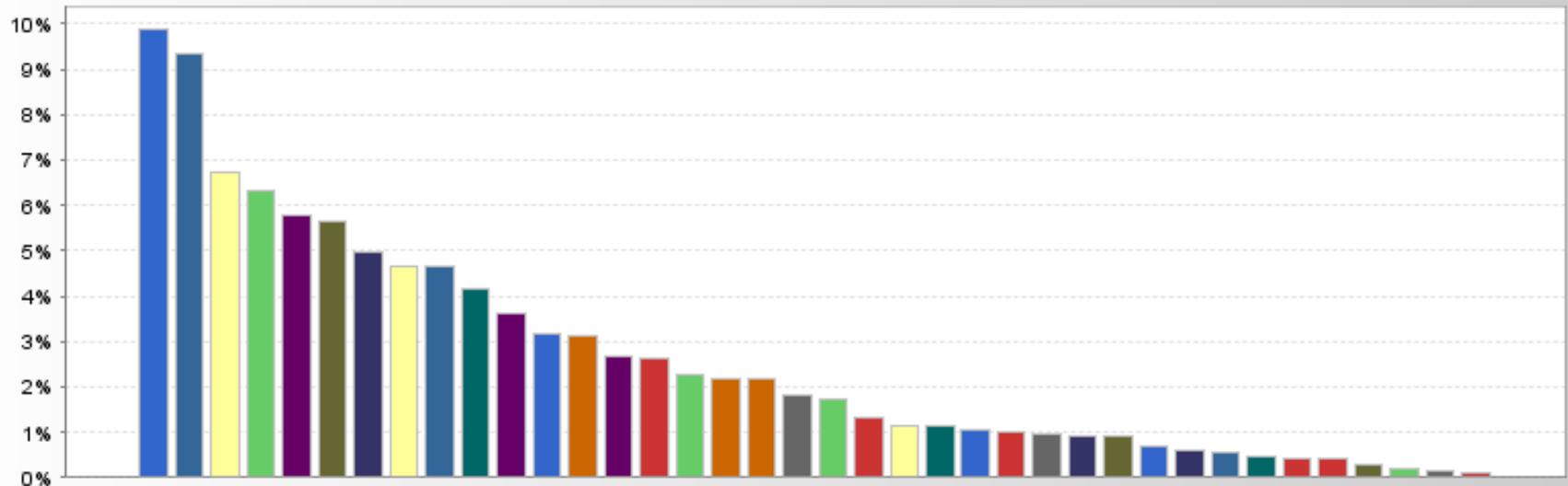
- Total email addresses: ~25,500
- Undeliverable email addresses: ~3,500
- Valid email addresses: ~22,000
- Total respondents: ~5,150
 - Moderate resolution imagery users: ~3750



Phase I: User Assessment

Verification of Application

What is the primary area in which you have used moderate resolution imagery?

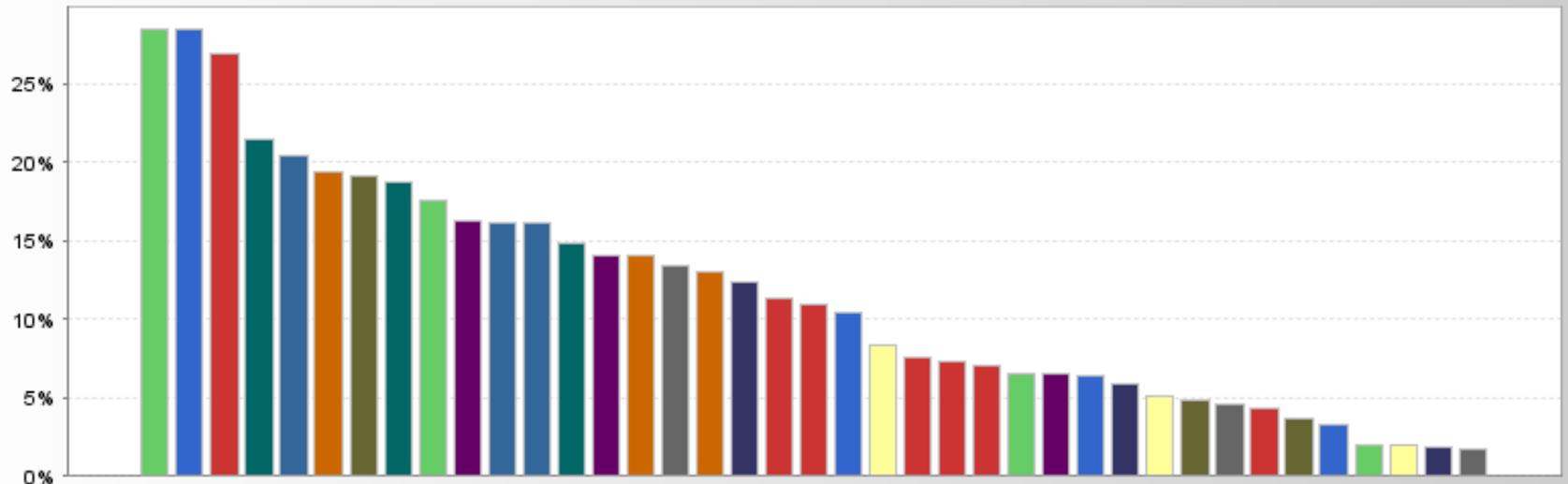


- Ecological/ecosystem monitoring ■ Agricultural management/production/conservation ■ Education: university/college
- Geology/glaciology ■ Forest management ■ Water resources (i.e., watershed management, water rights, hydrology)
- Engineering/construction/surveying ■ Urban planning and development (i.e., zoning, economic development, land use)
- Rural planning and development (i.e., zoning, economic development, land use) ■ Other area ■ Coastal monitoring and management
- Biodiversity conservation ■ Fish and wildlife management ■ Transportation ■ Urbanization (growth, sprawl, etc.)
- Emergency/disaster management ■ Fire management ■ Oil and gas/minerals exploration/extraction ■ Assessments and taxation
- Education: K-12 ■ Climate change ■ Utilities ■ Agricultural forecasting ■ Real estate/property management ■ Defense/national security
- Environmental regulation ■ Range/grassland management ■ Software development ■ Hazard insurance (i.e., crop, flood, fire)
- Technical training (workshops, short courses, etc.) ■ Recreation management ■ Anthropology/archaeology/cultural resource management
- Telecommunications ■ Law enforcement ■ Public health ■ Humanitarian aid

Phase I: User Assessment

Verification of Application

In what other areas have you used moderate resolution imagery? Please check all that apply.



- Ecological/ecosystem monitoring ■ Rural planning and development (i.e., zoning, economic development, land use)
- Urbanization (growth, sprawl, etc.) ■ Urban planning and development (i.e., zoning, economic development, land use) ■ Forest management
- Education: university/college ■ Geology/glaciology ■ Water resources (i.e., watershed management, water rights, hydrology)
- Coastal monitoring and management ■ Emergency/disaster management ■ Biodiversity conservation
- Agricultural management/production/conservation ■ Technical training (workshops, short courses, etc.) ■ Fish and wildlife management
- Climate change ■ Fire management ■ Engineering/construction/surveying ■ Range/grassland management ■ Transportation
- Recreation management ■ I do not use it in other areas ■ Utilities ■ Other area ■ Environmental regulation ■ Education: K-12
- Oil and gas/minerals exploration/extraction ■ Real estate/property management ■ Agricultural forecasting ■ Software development
- Assessments and taxation ■ Hazard insurance (i.e., crop, flood, fire) ■ Defense/national security ■ Law enforcement ■ Telecommunications
- Anthropology/archaeology/cultural resource protection ■ Public health ■ Humanitarian aid

Categories of Questions for Survey

- Identify, classify, and document users and uses
- Document and quantify (if possible) societal benefits and value of imagery
- Demographics
 - Sector, income, education, age, years in profession, professional memberships, etc.



Identify, Classify, and Document Users and Uses

- Type(s) of mod-res imagery used
- Determination of past use and reasons for no longer using imagery
- Type of user
- Acquisition of imagery
- Trends in amount of past and future use of imagery
- Scale/scope of projects using imagery
- Location of projects using imagery
- Primary and secondary applications of imagery
- New and unique applications of the imagery in the past 5 years and the next 5 years



Document and Quantify Benefits and Value of Imagery

- Brief overview of one current project in primary application area which uses imagery
 - How the information from project will be used in decision making
 - How the project will benefit the general public
- Importance of and satisfaction with attributes of imagery
- Potential conjoint with attributes of imagery (either general attributes or specific technical attributes)
- Value of information constituted/provided by imagery
 - What does the imagery save or enable?
 - What would users do without the imagery?
 - How much more would it cost or less effective the results be without the imagery?
 - What are users willing to pay to have access to the imagery?



Next Steps

- Peer review of survey—Due Jan 21st
- Pretest of survey—EROS, early Feb
- Launch survey mid winter/early spring

