

### **Survey Path 4: Users of High- and Low-Resolution Imagery**

This path is for users who have never used any type of moderate-resolution imagery. Questions about current or past use of moderate-resolution imagery are not included for this reason so the path is much shorter than both Paths 1 and 2 and about the same length as Path 3. The focus of this path is determining why users have not used moderate-resolution imagery and their plans to use it in the future.

Thank you for participating in this study of moderate-resolution satellite imagery. Your input will help the USGS understand how moderate-resolution imagery is being used. Your responses will also clarify current and potential applications of this imagery.

This survey will take approximately 15 to 35 minutes to complete, depending upon the type of moderate-resolution imagery you use. You can pause at any time; simply close the window and your answers will be saved. To resume and complete the survey, you will need to click on the link to the survey in the email you received. At that point, you can answer any remaining questions and/or edit any of your previous responses. At the end of the survey, click on the “Submit” button to finish the survey. All responses will be kept confidential and will not be linked to your email address.

This survey was approved by the Office of Management and Budget (1028-XXXX).

#### **Section 1: Your Use of Moderate Resolution Imagery**

The primary purpose of this section is to find out the types of satellite imagery the respondents are currently using and how they are using the images they are acquiring. The responses to Questions 1 and 2 will be used to determine the subsequent survey path each respondent will follow.

Please tell us about the type of satellite imagery you use, and how and why you use it.

Questions 1-3 will help the USGS to characterize the community of moderate-resolution imagery users by ascertaining if respondents are currently using moderate-resolution imagery and, if they are not currently using moderate-resolution imagery, what type of imagery they are using. This information is necessary to determine subsequent questions each respondent will be asked.

#### **Q1**

For the purposes of this study, moderate-resolution imagery is that which:

- covers relatively large geographic areas ( $>60 \text{ km}^2$ ),
- has a spatial resolution between 5 and 120 m,
- is characterized by repetitive coverage, and
- includes measurements from several portions of the electromagnetic spectrum.

Moderate-resolution imagery is collected by Landsat, SPOT, ASTER, Resourcesat, CBERS, and other missions. To see examples of products based on moderate-resolution imagery, [click here](#).

Examples of products based on moderate-resolution-imagery include:

- National Land Cover Database
- LandFire and Gap Analysis Project vegetation maps
- Wildfire burn severity maps produced by the USGS

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- Coastal Zone Analysis Program land cover change products
- USDA National Agricultural Statistical Service crop type maps
- FireLine from Insurance Services Office (ISO)
- Google Earth (moderate-resolution mixed with higher resolution imagery)

Based on the definition below, have you ever used, processed, or supplied moderate-resolution imagery in your work? *Please check only one.*

- Yes → *Respondent will be automatically directed to **survey paths 1,2, or 3 for users of moderate-resolution imagery***
- No
- Don't know → *END of survey*

#### Q2

Have you ever used satellite imagery of any kind in your work? *Please check only one.*

- Yes
- No → *END of survey*
- Don't know → *END of survey*

#### Q3

What type of imagery have you used? *Please check all that apply.*

- High-resolution ( Less than 5 meters, for example, IKONOS, QuickBird, WorldView)
- Low-resolution (Greater than 120 meters, for example, MODIS, AVHRR, MERIS, SPOT VEGETATION)

Question 4 explores why users of high- and low-resolution imagery are not using moderate-resolution imagery. This is critical information for the USGS for the future development of satellites and current and future provision of satellite imagery.

#### Q4

What are the reasons you have not used moderate-resolution imagery in your work? *Please check all that apply.*

- My work has not required moderate-resolution imagery.
- Moderate-resolution imagery has not been easily accessible.
- Moderate-resolution imagery has not been readily available.
- The cost of moderate-resolution imagery has been too high.
- Data quality has been insufficient for my needs.
- Licensing or distribution restrictions have been problematic.
- The spatial resolution has not met my needs.
- The available spectral bands have not met my needs.
- The temporal resolution/frequency of coverage has not met my needs.
- Other (please specify) \_\_\_\_\_

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Questions 5 and 6 explore the possibility of high- and low-resolution users using moderate-resolution imagery in the future. Finding out what attributes of the imagery could be improved is important to the USGS for future satellite mission planning.

### Q5

In the future, what type(s) of moderate-resolution imagery do you foresee using? *Please check only one.*

- None
- Landsat imagery only
- Landsat and other moderate-resolution imagery (for example, SPOT, CBERS, Resourcesat)
- Other moderate-resolution imagery only (for example, SPOT, CBERS, Resourcesat)

### Q6

Which of the following would make you more likely to use moderate-resolution imagery in the future? *Please check all that apply.*

- Changes in my work or projects.
- Improvements in the accessibility of moderate-resolution imagery.
- Improvements in the availability of moderate-resolution imagery.
- Decreases in the cost of moderate-resolution imagery.
- Reduction in licensing or distribution restrictions.
- Launch of new satellite(s) with improved spatial resolution.
- Launch of new satellite(s) with improved spectral bands.
- Launch of new satellite(s) with improved temporal resolution.
- Other (please specify) \_\_\_\_\_

## Section 2: A Little Bit About Yourself

Questions 7-16 are demographics questions. We need this information to provide a detailed picture of the moderate-resolution imagery user community, as well as satellite imagery users who are not currently part of the community. Additionally, in the case that another survey is conducted on this topic in the next few years, this information will be necessary to determine how the user community has changed. We would like establish a set of baseline data that can be used to characterize any changes in the user demographics.

Please tell us a little bit about yourself. Your answers to these questions will help further characterize users of moderate-resolution imagery. Answers are IN NO WAY linked to any individual taking this survey.

### Q7

In what sector do you work? *Please check all that apply.*

- Academic institution (for example, university, college)
- Federal government
- State government
- Local government (for example, county, municipal)

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- Private business
- Non-profit organization
- Tribe or nation
- Other (please specify) \_\_\_\_\_

**Q8**

Are you...?

- Male
- Female

**Q9**

In what year were you born?

Questions 10 and 11 will provide information on underrepresented users of satellite imagery. Decision makers would like to know the extent to which use has expanded to traditionally underrepresented groups.

**Q10**

What ethnicity do you consider yourself? *Please check only one.*

- Hispanic or Latino
- Not Hispanic or Latino

**Q11**

From what racial origin(s) do you consider yourself? *Please check all that apply.*

- American Indian or Alaska Native
- White
- Black or African American
- Asian
- Native Hawaiian or Other Pacific Islander

**Q12**

What is your highest level of formal schooling? *Please check only one.*

- Junior high or middle school
- Some high school
- High school diploma or GED
- Some college
- Associates degree
- Bachelors degree
- Some graduate school
- Masters degree
- Doctorate degree

Questions 13 and 14 will allow the USGS to determine the extent to which respondents are professionally trained and involved in the user community. Again, the user community may be changing to include people

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who have different professional backgrounds and baseline data needs to be established to determine if such changes are occurring.

**Q13**

What type(s) of education or training (for example, university degrees, technical certificates) have you received related to remote sensing or GIS? (*Open-ended - limit 500 characters*)

**Q14**

To which of the following remote sensing/GIS-related organizations do you belong? *Please check all that apply.*

- I am not a member of any remote sensing/GIS-related organizations.
- American Association for Geodetic Surveying
- American Congress of Surveying and Mapping (ACSM)
- American Society of Photogrammetry and Remote Sensing (ASPRS)
- Association of American Geographers (AAG)
- Cartography and Geographic Information Society (CAGIS)
- Consortium for International Earth Science Information Network (CIESIN)
- Geographic and Land Information Society (GLIS)
- National Society of Professional Surveyors (NSPS)
- National States Geographic Information Council (NSGIC)
- University Consortium for Geographic Information Science (UCGIS)
- Urban and Regional Information System Agencies (URISA)
- Other (please specify) \_\_\_\_\_

Question 15 is included to separate U.S.-based users from internationally-based users. While the opinions of international users are also important to the USGS, the current effort is focused on U.S.-based users because information about U.S. users is more relevant for the purposes of this information collection than information about users outside the borders of the U.S.

**Q15**

Are you, personally, based in or outside the United States? *Please check only one.*

- I am located in the United States.
- I am located outside of the United States.

Question 16 allows respondents to express any additional thoughts or concerns about the issues raised in the survey. The responses will be analyzed to determine any unforeseen issues or problems with moderate-resolution imagery that the USGS may choose to address.

**Q16**

Thank you for completing the survey. If you have any additional thoughts or concerns about the issues raised in the survey, please enter your remarks in the space below. (*Open-ended - limit 1500 characters*)