

Maps, Mapping, and Geospatial Technologies

Title: Get Started with Imagery

Due Date: March 6, 2023 at 11:59 pm

Required Resources:

- An internet enabled computer

Purpose:

The purpose of this lab is for you to get hands-on experience with how different band combinations can reveal different insights about the earth. In this lab, you will use [Esri's Landsat App](#) to “travel” to different places around the world and apply different band combinations to reveal information about each place. As you complete the lab exercise today, think about different band combinations can be applied to different use cases in the world of GIS.

Learning Objectives:

- Apply different band combinations of Landsat imagery
- Understand how different band combinations can reveal different insights about the earth

Deliverables:

This week, your primary deliverable will be a few screenshots based on your use of the Landsat App as well as answers to a few questions and a written observation statement. Upload your write up to the lab assignment on myCourses. All the tasks below should be included in the same word document (or PDF). Name your write-up using this convention before posting:

[your last name]_Week7_lab.docx

Don't forget to include the link to your web app in the write up!!!

Grading:

This assignment will be graded out of **15** points. The number of points for each task is noted in the description of each task.

Task 1: Get Started with Imagery (15 points)

For this lab, you will use a resource from the Learn ArcGIS pages to get familiar with the Esri Landsat Viewer app. Complete all steps for the [Get started with imagery](https://learn.arcgis.com/en/projects/get-started-with-imagery/) (<https://learn.arcgis.com/en/projects/get-started-with-imagery/>) tutorial. It would be beneficial to review the questions for the assignment **before you begin** so you are able to capture required screenshots or answer questions along the way.

Question 1: There were a few different sections in this exercise where you used different band combinations. Which did you find the most interesting and insightful? Why?

Question 2: In the **Create your own spectral view**, you were asked to search for a location and create your own band combination. What location did you choose? What band combination did you find to be the most insightful? Why?

Question 3: Provide a screenshot of a few different band combinations from the **Create your own spectral view**. Ensure that you include a caption or text that notes the location as well as the band combination used.

Question 4: What are your overall observations of using band combinations to extract insights about the earth, especially using bands that cannot be viewed by the naked eye? (~100 words)

Question 5: What are your impressions of the Landsat Viewer web application? Think about the layout, the use of interactive elements, etc. (~100 words)