Preston Hudlow

Dr. Hua Liu

GEOG 404

27 March 2024

Assignment 6

Question 1: What is the projection information for the image (projection & datum)? How many bands does this image have?

This image uses a UTM, Zone 18 projection with a WGS 84 datum. This image has 6 bands.

Question 2: What area of Norfolk is identified in location A?

Location A shows the location of Old Dominion University. This area is near Lambers Point.

Question 3: What is the name of the water body in location B?

This body of water is called the Little Creek Reservoir.

Question 4: Name the road in location C.

The road is called E Ocean View Ave.

Question 5: Name the geographic feature in location D.

This is a runway strip located at Norfolk International Airport.

Question 6: Which band combination(s) is the easiest in interpreting each of the following features: water bodies, vegetation, transportation networks, and urban areas?

Water bodies	Bands 5,4,3
Vegetation	Bands 5,4,3
Transportation Networks	Bands 6,4,3
Urban Areas	Bands 4,3,2

Question 7: Discuss the differences between two images, lanier.img and convolve.img. Discuss the possible application of convolution process in a remote sensing project.

Between the two images are major differences. In the Lanier image, the color of vegetation is bright red and leaves man-made features with a white color. The two types of land are very distinguishable between the two. Water also appears a dark blackish blue. In the convolve image the texture of the color of the vegetation and cities have changed. Instead of being filled in with color, the area is outlined with the corresponding feature. This feature allows for a better look at the intricacy of the layout. Roads and their path can be seen a little easier this way.

Question 8: Discuss the possible application of brightness inversion and reversion process in a remote sensing project.

These processes allow the image to reveal unseen details by enhancing areas to emphasize the contrast. This allows the recording of valuable information and can be used in several projects like scientific research, or environmental monitoring.