

Lab 4 Image Processing 2**Name:**

Upload the following files to the instructor:

- (1) "Your Name_ASTER Temp GIS.tif" geotiff
- (2) "YourName_ASTER_Temp_Density_Slice" shapefile
- (3) "YourName_drone_mosaic_thumbnail" jpg
- (4D) "YourName_Landsat_ColorIR_Masked_Water_GIS" geotiff

Question 1: A. What is the range in DN values (min – max)?

B. What is the DN range for the bin with the highest Count (located at the peak of the histogram)?

Question 2: A. What is the highest temperature in °C recorded by the ASTER TIR system? (Hint: Refer to the *Quick Stats* Histogram table)

B. Do you think you should use this highest temperature if only one pixel recorded it? YES or NO

Question 3: What is the DN at the black edges of the two images?

Question 4: A. What happens to the visibility of the underwater sand bars and ripples on the sea floor as you display the blue, then green, and then red bands? (Hint: read the textbook Chapter 3 and look at Plate 9).

B. Why?

C. What happens to the brightness of water as you display the reflected infrared bands (Bands 4, 5, 6)? (*Contrast-stretch* each band to make the change more clear).

D. Why?