

ARSET Advanced NDVI Homework 4

Please complete all of these questions and submit the form to receive credit. The first few questions refer to the lecture review and the remaining questions refer to specific steps within the homework handout. Homework must be submitted by March 16th, 2016.

* Required

1. Name *

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2. Email *

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3. 1. What does the Soil Adjusted Vegetation Index include that the NDVI does not? *

Mark only one oval.

- ☐ A. The green band
- ☐ B. The red band
- ☐ C. A soil brightness correction factor
- ☐ D. A canopy correction factor

4. 2. What might be best to measure subtle differences in vegetation moisture? *

Mark only one oval.

- ☐ A. The Normalized Difference Vegetation Index (NDVI)
- ☐ B. The Normalized Difference Moisture Index (NDMI)
- ☐ C. The blue band
- ☐ D. The surface reflectance

5. 3. What are the steps you need to take to create a Normalized Burn Ratio Difference Map (or a Burn Severity Map)? *

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6. 4. What does the Landsat Surface Reflectance product correct for? *

Mark only one oval.

- ☐ A. Water Vapor
- ☐ B. Aerosol Optical Thickness
- ☐ C. Clouds
- ☐ D. All of the above

7. 5. The Landsat Surface Reflectance products are considered provisional. *

Mark only one oval.

- ☐ A. True
- ☐ B. False

8. 6. Take a look at the USGS MODIS Reprojection Tool Web Interface, or MRTWeb (<https://mrtweb.cr.usgs.gov>) from the exercise. List three other products available other then the one we downloaded. *

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9. 7. Explain what the MODIS scaling factor is and why it is used. *

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10. 8. What Render Type should you use to display your MODIS NDVI anomaly image in QGIS? *

Mark only one oval.

- ☐ A. Singleband pseudocolor
- ☐ B. Multiband color
- ☐ C. Singleband gray
- ☐ D. Paletted

11. 9. What is the average NDVI anomaly for the area you selected in the homework exercise? How did you find it? *

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12. 10. Go back to the MRTWeb website here: <https://mrtweb.cr.usgs.gov> and repeat the exercise for a region that is of interest for your work or research. Provide a description of the NDVI anomalies in the region you selected and include: 1) name of the area (country, state, park boundaries, etc.), 2) the time period you used to create the average NDVI values, 3) the time period for which you obtained the NDVI anomalies, and 4) if the anomalies are generally greater than, less than, or about the same to the long term average and what that could indicate about the vegetation. *

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