

ARSET Advanced NDVI Homework 3

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 9th, 2016.

* Required

1. Name *

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2. Email *

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3. 1. Name the two satellites that carry the MODIS sensor. *

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4. 2. A single MODIS image covers an area that is much larger than a single Landsat image. *

Mark only one oval.

- ☐ A. True
- ☐ B. False

5. 3. Which option is NOT a MODIS land product? *

Mark only one oval.

- ☐ A. Thermal Anomalies/Fire
- ☐ B. Vegetation Indices
- ☐ C. Canopy Density
- ☐ D. Land Cover/Change

6. 4. Take a look at the Worldview website here: <https://worldview.earthdata.nasa.gov/> and click on the Add Layers button. Name a data product and the sensor (e.g. Fires and Thermal Anomalies: MODIS) that would be useful for your topic area or study region. *

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7. 5. What type of data does the Global Agricultural Monitoring (GLAM) Project provide? *

Mark only one oval.

- ☐ A. Landsat 16-day corrected reflectance
- ☐ B. MODIS daily corrected reflectance
- ☐ C. MODIS Land Cover/Change
- ☐ D. MODIS 16-day 250 meter NDVI composites

8. 6. According to the GLAM website (see your exercise), the NDVI values in Ethiopia during the summer months of 2015 were: *

Mark only one oval.

- ☐ A. Higher than normal
- ☐ B. Lower than normal
- ☐ C. The same as normal
- ☐ D. Not available

9. 7. What does your answer to the previous question tell you about the vegetation conditions in Ethiopia during the summer months of 2015? *

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10. 8. What file type from the GLAM Data Delivery Directory would be the most appropriate to download and use for analysis in QGIS? *

Mark only one oval.

- ☐ A. .jpg
- ☐ B. .txt
- ☐ C. .png
- ☐ D. .tif

11. 9. Using the GIMMS website here: <http://glam1.gsfc.nasa.gov/> select a time period and country of interest to you. Take a look at the NDVI anomalies for this region. First, state the year and country you have chosen. Second, state if the NDVI anomalies are higher or lower than normal. Hint: Remember to click on the "Submit" button under the "Query DB" panel on the left side of the website to display the figure of the regional NDVI anomalies for your country of interest. *

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12. 10. While viewing the NDVI anomaly graph from the previous question, select two more years to be added to the graph. Remember to click on “Update” to display the lines for those two years. Describe how they compare to the long term mean. *

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