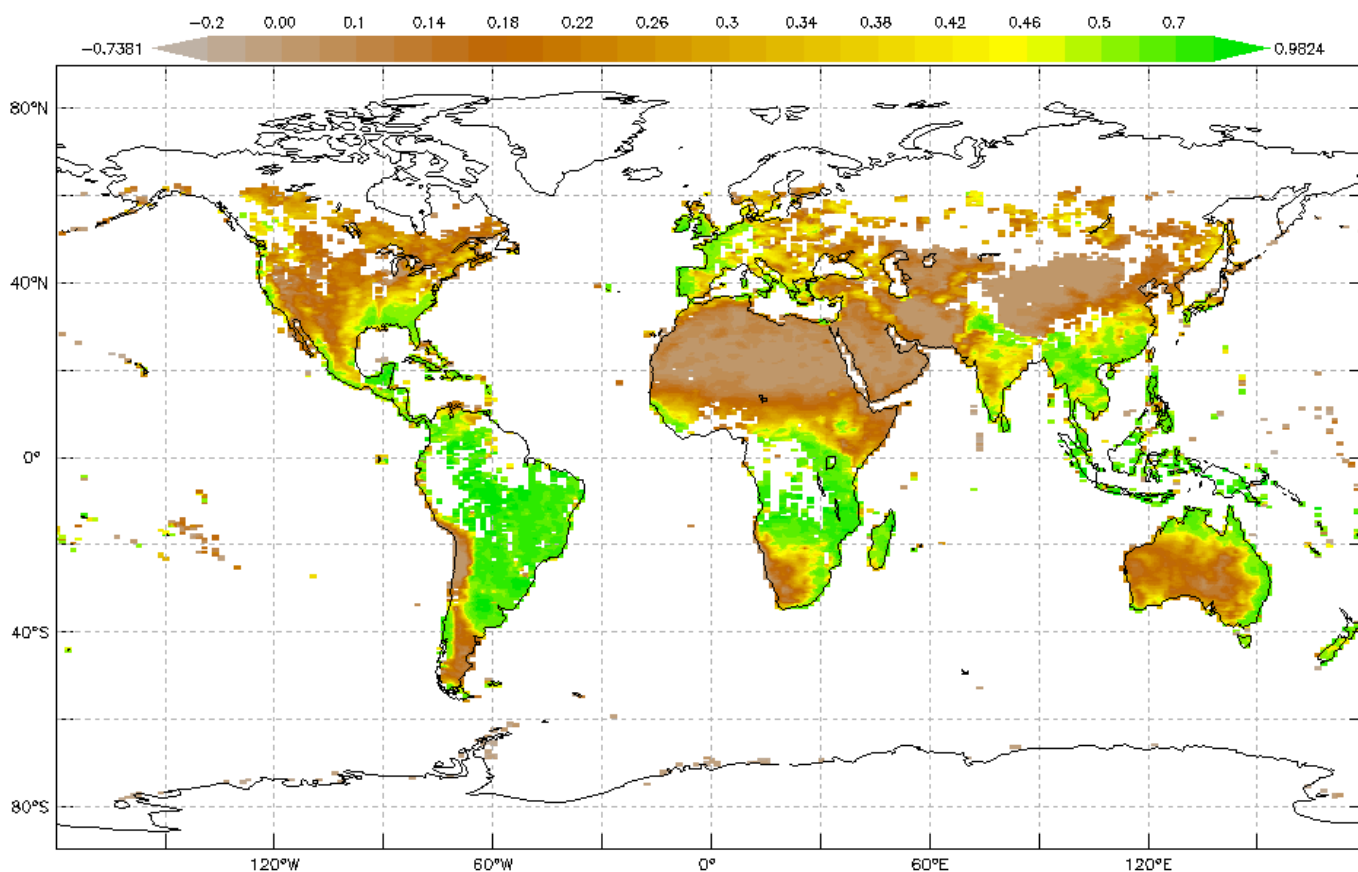


My NASA Data - Mini Lesson/Activity

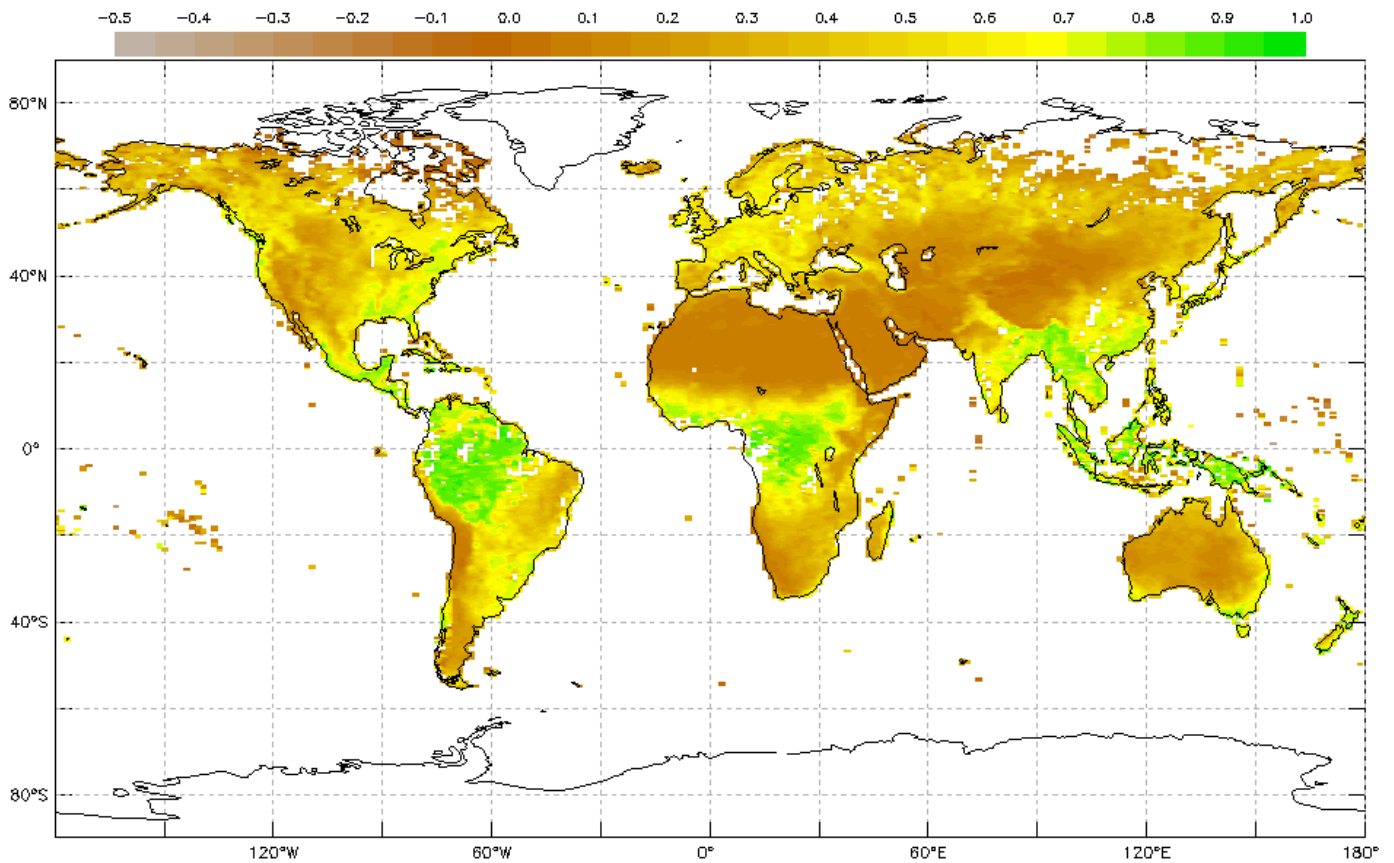
Analysis & Application of Seasonal Vegetation Data



Student Directions

NDVI is a measure of the "greenness" of Earth Landscapes. Observe the seasonal map of Monthly Normalized Difference Vegetation below. Match the image with the four different maps for the months of 2017. These are available in Document Resources or in handouts provided by your teacher.

You will analyze these data for any changes in vegetation that are occurring throughout the year.



[Monthly Normalized Difference Vegetation Index](#)

Source: [My NASA Data](#), [NASA MISR](#)

https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/NDVI_D_plot_image.png

The colors on this maps show a measure of the "greenness" of Earth's landscapes. The values on these maps—ranging from -0.1 to 0.9—have no unit. Rather, they are index values in which higher values (0.4 to 0.9) show lands covered by green, leafy vegetation and lower values (0 to 0.4) show lands where there is little or no vegetation.

Steps:

1. Check with your instructor on how to submit your answers.
2. The vegetation maps (Images A-D) were created to represent the following time periods: February 2017, June 2017, October 2017, and December 2017 but are not in order.
3. Match the maps with their corresponding months from 2017 based on your observations. For example, Map X = February 2017, etc.
4. Identify the seasonal cycles for vegetation throughout the year by answering the following questions.
 1. What changes do you see through the year?
 2. Choose a location or region. During which months do the extreme highs and lows occur? What explanations can you suggest for the timing of those extremes?
 3. Which regions experience both the extreme highs and lows? Which regions don't experience the extremes? Why do you think this happens?

The images can be downloaded, printed, and distributed in a Face-to-Face setting, along with the questions below. Alternatively, virtual learners will need to access the Document Resources [PDF](#) to view the maps.

These mini lessons/student activities are perfect "warm up" tasks that can be used as a hook, bell ringer, exit slip, etc. They take less than a class period to complete. Learn more on the "[My NASA Data What are Mini Lessons?](#)" page.

Teachers who are interested in receiving the answer key, please complete the [Teacher Key Request and Verification Form](#). We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

My NASA Data Visualization Tool

- [Earth System Data Explorer](#)