My NASA Data - Mini Lesson/Activity

Using Models to Explore Chlorophyll and Radiation Data: Student Activity

**Student Directions**

Play the animation of seasonal chlorophyll concentration and net radiation, and then answer the following questions.

1. Review the color bar scale for net radiation. What do the colors mean?

   ![Net Radiation Color Bar](image)

2. Review the color bar scale for chlorophyll concentration. What do the colors mean?

   ![Chlorophyll Color Bar](image)

3. In the Northern Hemisphere, what are the values for net radiation during the spring and fall?

4. List the value of net radiation in the Northern Hemisphere during the summer, then list the value of net radiation in the Northern Hemisphere during winter. What do you notice?

5. Which two seasons experience a greater difference in net radiation values? Fall and spring or
summer and winter?
6. What patterns do you observe between net radiation and chlorophyll concentration?
7. Which regions of the world experience both the extreme highs and lows for both net radiation and chlorophyll concentration?
8. Which regions do not experience these extremes?

Teachers, these mini lessons/student activities are perfect "warm up" tasks that can be used as a hook, bellringer, exit slip, etc.

Teachers who are interested in receiving the answer key, please contact MND from your school email address at larc-mynasadata@mail.nasa.gov. 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. To receive the keys please provide the following:

1. The link to the school/institution's teacher directory where you are employed so we can verify that you are a teacher
2. Ensure that the school email address is provided in your response as we are unable to send to personal email accounts