My NASA Data - Mini Lesson/Activity

Clouds and Climate Impacts

Student Directions

Review the NOVA PBS video - *The Climate Wild Card* about the different effects of clouds on climate and Earth's energy budget. Then answer questions and brainstorm to complete a flow chart of events that might occur if the percentage of absorbing clouds increases.

Video: The Climate Wild Card

Video

The Climate Wild Card | https://www.youtube.com/watch?v=Py1dEFKuJJU | Source: NOVA PBS

Steps:

1. Check with your instructor on how to submit your answers
2. How will clouds respond as the planet warms?
3. Could we see an increase in reflecting clouds, which would help to slow the global warming trend?
4. Or will there be an increase in absorbing clouds, which could dramatically speed up the warming?
5. How would this warming affect the polar regions and in turn affect coastal areas?

As a class, brainstorm how the polar regions and coastal areas might be affected if there is an increase in absorbing clouds. Fill in the chain of events in the flow chart that might occur if the percentage of absorbing clouds increases.

Teachers, 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