

## NASA- A Year in the Life of Earth's CO2

Background for Teacher to facilitate discussion and explain phenomenon.

You are viewing a NASA computer model of CO2 in the atmosphere. Patterns to notice: difference in Northern versus Southern Hemisphere, change with seasons. Scientific Models like this CO2 visualization is made by a computer model call GEOS-5. It is part of a project that uses real data on the conditions of the atmosphere and emissions, pollution, etc., to run its own simulation of the behavior of Earth's atmosphere. (

Questions for Students (can complete together in class discussion so teacher can assess prior knowledge or in partners or independently then with discussion)

Watch the link with your teacher and answer the following questions:

- 1) How would you describe what you are seeing?
- 2) Predict the future of the phenomenon based on the model you've observed.
- 3) What evidence of Earth System interaction (among Atmosphere, Hydrosphere, Biosphere, Cryosphere, Geosphere) do you see?
- 4) What question would you like to research based on this model?

<https://mydasdata.larc.nasa.gov/mini-lesson/systems-and-system-models-atmospheric-carbon-dioxide-model-2014>