

Outline of Indicators of Climate Change Discovery

Lesson

Link: Indicators of Climate Change

Each resource is a graph or model that demonstrates a current or predicted trend for a climate-related variable. They are accompanied by "Key Points" or a "Full Summary" to allow students to gain a better understanding of what the data represents.

Student lab groups will be tasked with reading and generating an explanation of what each resource says to them as they circulate between stations.

The instructor will act as a field guide and provide support for those groups that are unsure about the material they are observing. It will be important for the instructor to simply provide clarity on how to read the model and not to interpret the data on behalf of the students.

At the conclusion of the circulation period, a whole class discussion will take place to see what students have taken away from the activity. At this point the instructor will look to make connections between human activities, anthropogenic carbon dioxide emissions, and general trends in environmental variables.

Station 1: **Indicators** = "Annual Greenhouse Index" and "Terrestrial Carbon Storage"

Station 2: **Indicators** = "Atmospheric Carbon Dioxide" and "Start of Spring"

Station 3: **Indicators** = "US Surface Temperatures" and "Global Surface Temperatures"

Station 4: **Indicators** = "Arctic Sea Ice Extent" and "Frost Free Season"

Station 5: **Indicators** = "Sea Surface Temperatures" and "Ocean Chlorophyll Concentrations"

Station 6: **Indicators** = Maps provided by the Nature Conservancy of Coastal Long Island Dating back to 1900.