

# Earth System Science: A Key to Climate Literacy

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TERC is developing an *Earth Systems Climate EarthLabs* module that will join four existing *EarthLabs* modules (focused on Hurricanes, Fisheries, Corals, and Drought). This module will become part of a high school capstone Earth and Space science curriculum that uses the latest NASA data and visualization tools. The project will also develop a mechanism for teacher professional development to facilitate effective use of the module. The *Earth Systems Climate EarthLabs* module will be comprised of nine sequential, lab-based activities to introduce students to the topic of climate change. The activities will include a combination of fieldwork and in-classroom assignments and will integrate NASA data access and analysis tools such as NASA Earth Observations (NEO), NASA Image Composite Editor (ICE), and the Goddard Interactive Online Visualization and Analysis Infrastructure (Giovanni). The module will be available on the web and integrate professional development support.

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