El Niño challenge
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Scenario: All communities like to know how and when changes in their local economy might occur. Natural disasters, financial crisis, a change in product supply or a variety of other factors could cause changes in the local economy. If communities know of changes in advance, they can better prepare themselves to minimize losses.

You have probably heard media reports about the effects of El Niño events. Leaders in your community want to know if an El Niño event could affect the climate and economy within our community. They have asked the EarthComm students in our class for help. They will host a statewide conference to discuss how to minimize the impact of El Niño, but only if your research reveals that El Niño events can actually affect our community. Can you help your community leaders to understand what an El Niño event is and how it affects communities?

Your Challenge: Your challenge is to give an overview of what an El Niño event is, when it occurs and what parts of the world it impacts. Your project will need to:

- Explain normal surface circulation of the South Pacific Ocean and how it changes during an El Niño event.
- Explain the relationship between ocean circulation patterns and atmospheric circulation and how they change during an El Niño event. How does this affect the weather here in Florida?
- Describe changes in global weather patterns due to an El Niño. Explain the impact on the United States, and include any local changes.
- Explain the relationship between ocean circulation patterns and the marine food chain. Describe the changes that occur in the South Pacific due to El Niño and include the possible global impact on people and weather. What medical (health, nutrition, disease) implications are there for an El Niño Event?
- Explain the advances in technology that helps predict an El Niño event. Does the use of technology lessen the global impact of an El Niño? Explain your answer.