

# Final Project Options

The format and final product for the project will be announced soon. **For now, pick a project by Friday Oct. 14** and email Trish with your choice. Whatever you do, you must address issues both on the science side and on the human mind-change side. The balance of how you do that is up to you. You will need to consult closely with Trish as your project plans develop.

1. Analyze the recent events of **Hurricane Katrina** (and perhaps Rita) through the lens of our course. You will need to access both the scientific literature and the media. Some questions you might consider addressing:
  - a. What does the latest scientific research say about whether hurricanes are really coming more often and with more intensity? If there has been an increase in hurricane activity, is this associated with either gradual or abrupt climate change, or not?
  - b. According to the latest scientific research, what might we expect with regard to hurricanes if abrupt climate change occurred?
  - c. Discuss several mind changes associated with these events (rich territory here!).
    - How have you changed your mind, and about what, as these Hurricane events have unfolded recently?
    - What kind of mind change is the American public experiencing and what is your evidence for this?
    - What kind of changes in public institutions are being called for in the wake of this disaster?
    - Is there any evidence for a mind change in the White House and the federal government regarding their role in this disaster?
    - Up to now, what has been the "paradigm" for dealing with environmental disasters like this? Is there any evidence that this paradigm is shifting, or needs shifting?
    - What does science say about why New Orleans was so vulnerable to a hurricane? Does the current public discussion in the media reflect the latest science knowledge?
    - In the media talk of rebuilding new Orleans, what evidence do you see for shifts in thinking and "mind change"?

2. Discuss the situation in **the Arctic** and/or the **North Atlantic Ocean today**.
  - a. What are scientists observing today that is of concern? Drawing from the scientific literature, present and discuss the relevant data, its interpretation by scientists, and the implications.
  - b. Is there scientific evidence that we are nearing a tipping point in climate?
  - c. What is the relationship between what is happening today in the North Atlantic and the events that scientists think might have triggered the Younger Dryas? (go beyond our course discussion)
  - d. Why is there so much focus on recent changes in the Arctic? How might this relate to possible tipping points in climate?
  - e. As you look at the science data, what kind of mind changes are you experiencing?
  - f. As you look at the science data, what kinds of changes are needed in the policy arena to deal with abrupt climate change?
  
3. Study an abrupt climate change event linked to **past civilization collapse**. Learn about both the science/climate/data side and how it informs the collapse of a civilization. What role did abrupt climate change play? What role did human decision making, culture, and influence on the environment play? Some options for study:
  - a. The Anasazi in the American Southwest (drought)
  - b. The Vikings vs. the Inuit in Greenland
  - c. The Akkadian Empire collapses in Mesopotamia (~4200 B.P drought)
  
4. Learn and write about what is known regarding the link between a possible abrupt climate change event triggered by recent **global warming**. Some questions you might address:
  - a. What does the most reliable scientific research have to say about this link?
  - b. What kind of scientific predictions are out there? How certain or uncertain are these predictions and why?
  - c. Given your learning on this topic with relation to our course, what kind of mind changes are you experiencing?
  - d. What kind of mind change might need to occur in the framing of the debate about global warming, given your learning about abrupt climate change?