

Homework

Session 9: Stability and change in global atmospheric carbon

Data Activity Development

1. **Decide on two More Focused Questions.** Work with your partner to finalize your one to two More Focused Questions, (from the list you developed earlier in this session or from further brainstorming), that arise when thinking about investigating your TAQ through the use of data. Make certain your More Focused Questions include the 1-2 variables you are interested in investigating as well as the time and location from which you will gather the data. Remember, there are many interesting things to be learned by asking questions about how ecological processes change temporally (e.g. annually, seasonally, tidally, daily) and/or spatially (e.g. vertically in the water column, along an estuary, among different estuaries, in different parts of the world).
2. **Explore NERR SWMP data repository to help decide on questions.** One way that Testable Questions might emerge from your More Focused Questions is to explore relevant data repositories.
3. **List predictions** for each More Focused Question.
4. **Describe parameters.** Once the More Focused Questions have been identified, describe the geographic location and the time scale (e.g. days, months, seasons, years) of the data that you will need to answer this question.
5. **List the website and URL you explored.** Briefly describe why you think this website would help to answer your questions. Also describe the process required to access data on this website. (This ensures you can get back to the same data.)
6. **“Sources of online data” provides additional options.** This list provides the url’s of various, additional data repositories and portals for ocean, climate and environmental data in case you are interested in exploring questions and topics outside of what is testable using the NERR SWMP data. You should select one of these options if you have had previous experience with data explorations and manipulation.
7. **Complete Parts 1, 2 and 3 of the *Data Components of Final Project* worksheet.** Work with your partner to complete the worksheet and bring it to the next class to get feedback from peers and instructor. Refer to the *Data Components Glossary* handout as necessary.

Spurious Correlations

Review the Spurious Correlations website, find a favorite correlation, and be prepared to share it with the group in the next session: <http://www.tylervigen.com/spurious-correlations>

Reading

Use the active reading strategy with “*Background on CO₂ and Ocean pH*”