

Assignment 4

Access all of the slopes on the googlesheets page. You can find the link to the googlesheet page in the Project Resources folder.

Examine the results.

1. What is the geographic pattern of temperature change? Was it greater at some latitudes than at others? Did it differ between arctic and tropical regions?
2. Provide one hypothesis of geographic patterns of temperature change [see Chapter 1 in your textbook for explanation and example of a hypothesis]. What environmental factors may shape the temperature change at this location?
3. Select a new location within North America that has not been analyzed yet and predict the temperature change there. What is your location and how did you determine its temperature change (be specific)? Explain/show/provide evidence for your answer.
4. Go to the primary literature (i.e., peer-reviewed original research journal articles ONLY) and investigate how climate models have been used with organisms. In particular, investigate the taxa that you have been following in phenology. Using at least as many sources as members on your team (i.e., 1 for each person) explain what climate models are used and the predictions they have generated. How will the organisms be impacted? And how will this impact other organisms? This written portion of this assignment should be no more than 1 paragraph long (~1/2 a page).