Teaching Notes

I used this module as part of a lab exercise introducing climate models in a general sense. Before the students worked their way through the module, I showed them two videos introducing climate models:

<https://www.youtube.com/watch?v=XGi2a0tNjOo>

<https://www.youtube.com/watch?v=bkcrH9tYv8g>

I followed these with a short lecture summarizing points from the videos, and explaining that you test climate models by comparing their predictions of past trends to the actual observed trends and that climate models have shown high reliability in this regard. I showed predictions of climate changes associated with the eruption of Mt. Pinatubo as an example. I also mentioned criticisms of climate models that have appeared in the general media and by climate denial outlets and gave responses to those criticisms.  The students then worked through the TIEE exercise in pairs. Overall, the exercise worked well. The students were not too challenged by the quantitative aspects of the module although I did need to remind them that the slope of the line in regression could be used as a measure of the extent of temperature change over time. They were more challenged by the use of Excel as a program and I answered a lot of technical questions in this regard.  Combined with the introduction to climate models, this was a good exercise.  I think it would not have been challenging enough for my students without the additional material.