Climate Modelling Written Assignment

DUE 3/3 on Inquire or Hardcopy – save your file as a PDF before uploading to Inquire to insure that graphs do not get altered

Write a brief account (approximately 2-4 pages of text, graphs on additional pages) explaining your findings. This should be written in the following sections:

- 1- Title: Give your work a descriptive title that is concise, but would give a naïve reader a good indication of the contents of your paper. For example, the title "Model results" is pretty uninformative, as is the title "Climate change results".
- 2- Introduction. This section should introduce the concept of GCM models and discuss the value of modeling to predict future climates. It should also discuss uncertainty about future atmospheric chemistry and why it is important to consider various possible future atmospheres. State the objectives of the exercise. (2-4 paragraphs)
- 3- Methods. Briefly mention the model used, the time scale of the simulation, the geographic location of the data used, and the statistical procedures performed.
- 4- Results. Include graphs for each model run discussed from your location. Number each figure, and provide an explanatory caption for each figure. Refer to the figures at appropriate points in the text. You should include a few additional graphs (3-8) from other locations to reference when you are comparing your findings to other latitudes in your discussion.
- 5- Discussion. Discuss the changes seen in climate for <u>your location</u> between 2001-2100. Describe the differences seen among SRES scenarios and across seasons. Compare your findings with those of other students for other latitudes.

Your work will be assessed on:

- The appropriateness and accuracy of your statistical analyses and graphs. Graphs should have appropriate scales to the axes, and have appropriate titles and axis legends.
- The explanation of the concepts of global climate modeling and emissions scenarios.
- The explanation of the procedures used to analyze the data.
- The interpretations of any differences seen in the results for different scenarios, seasons, and latitudes.
- The clarity of the presentation, including overall organization, paragraph and sentence structure, grammar, spelling, and choice of words.

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