IndySCC Competition
CESM Application

Using the F2000climo compset with f09_f09_mg17 resolution (just as you did in the homework), complete the longest simulation that you can. Make sure it produces daily output of surface air temperature (TREFHT). Extract and concatenate all of the TREFHT output into a single file. Use a modified version of the example code provided in the homework to produce a timeseries of global mean TREFHT; this will be a vector that has a length equal to the number of days of simulation that you complete. Submit a single text file with this timeseries, with the global mean TREFHT for each day on a new line; the end result will be a text file where the number of lines is equal to the number of days completed in your simulation. Please also submit all of your timing files so we can see what you did.

Scoring will be based on the length of the simulation you are able to complete. The team that completes the longest correct simulation will receive 100 points. All other teams will receive a fraction of 100 points that corresponds to the relative lengths of their simulations compared to the longest simulation. For example, let's say Team A completes the longest simulation of 34 days. Team B completes a simulation that is 28 days. Team A will receive 100 points, and Team B will receive 100*(28/34) = 82 points.

You are encouraged to optimize your simulation setup to ensure efficient throughput. Things you may want to modify include the number of processors assigned to your simulation, processor layout, file I/O, or any other exploration you conducted when completing the homework.

Failure to follow instructions may result in a 0 for this portion of the competition, so please pay close attention!