HW #2 ESS 7 The Perils of Space (Due Wednesday May 14, 2008)

1) Go to spaceweather.com (What date did you visit the site? _____)
   a. How many sunspots are on the sun?

   b. What is the forecast for space weather storms?

   c. Describe how the sun looks different in the visible compared to the Extreme Ultraviolet on the day that you visited the web-site

2) We use the Dst magnetic index to characterize the occurrence and strength of a magnetic storm. What does Dst stand for? What electrical current in the Earth's magnetosphere does this index measure? Draw a time-series of Dst for a "classic" storm (Draw Dst on the y-axis versus time on the x-axis). Be sure to label the axes.

3) Explain why aurora can cause problems with radio communication?