

4 The Earth's magnetosphere

Reading

“The Exploration of the Earth's magnetosphere,” by David Stern, sections 1, 3, 4, 20, 23

Report

Write a 3-4 page report (typed, double-spaced, 12-point font, 1-inch margins) on some aspect of the solar-terrestrial interaction. Some suggestions are (but you are not limited to):

- aurora
- conjugate aurora
- radiation belts (Van Allen belts)
- plasmasphere
- ionosphere
- magnetotail
- magnetic storms
- heliopause

This report must be very specific. That is, rather than being descriptive, I would like you to try to be quantitative. You now know how to calculate many things, so make sure you calculate something relevant to your report's topic.

You must email me your title, and a one paragraph “abstract,” by Monday, August 3, 2009 at 5pm. The abstract should be 3-7 sentences, describing your planned report topic. Include this abstract as a short, single-spaced paragraph at the beginning of your report.

As usual, you must quote your references. In addition to online sources (give the name of the page, the URL, and the date accessed), you must have at least one book reference from the ERAU library (give the title, author, publisher and date of publication).