Directions: The following questions will help you analyze the data to determine the answer to the big question, "Has there been a measurable disturbance in the Earth’s magnetic field?" You can answer each of the questions on the back of this paper or on a separate Magnetosphere Answer Sheet.

Refer to the Kp index (Estimated Planetary K Index):
   a) What three days does this graph cover?
   b) What were the highest K index levels for each of these days?
   c) Are there any Kp values of 5 or higher?
   d) Are there any Kp values of 7 or higher?

Refer to the (Optional) Kp Auroral Map:
   e) What is the longitude, latitude, and corrected geomagnetic latitude for your area?
   f) What would the Kp level have to be for us to see aurora in our area?
   g) Are there any areas in the world that might see auroral activity, based on this data, in the next few hours? Where?

Refer to the Magnetosphere Graph:
   h) What is the current level of geomagnetic storm activity?
   i) When did the geomagnetic storm arrive at the ACE satellite?
   j) From the Magnetosphere Graph, what is the estimated time that the storm will arrive at Earth?

Comprehension Question: Based on the data you have analyzed from these instruments, answer the question, "Has there been a measurable disturbance in Earth’s magnetic field?" Be sure to cite specific data in your response!