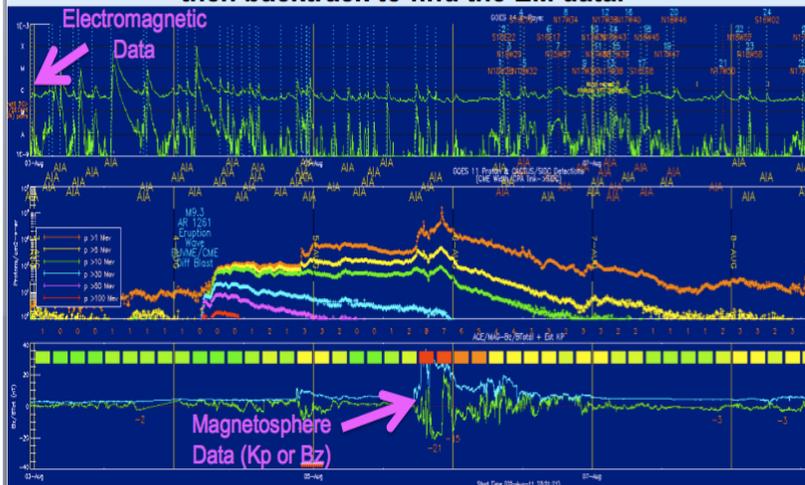


## Review of Data Collection (Latest Events)

**HINT: Look for changes in Kp Index (Magnetosphere) first then backtrack to find the EM data.**



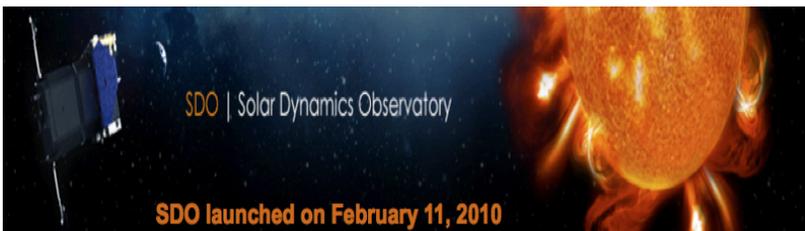
**Goals of the SOHO mission are:**

- To learn the structure and dynamics of the interior of the Sun
- To discover the origin of the solar wind, and how it is accelerated
- To understand the corona's temperature

**Onboard it contains 12 instruments**

- 3 instruments probe the Sun's interior
- 3 instruments measure the solar atmosphere
- 6 instruments keep track of the far-reaching solar winds

SOHO was launched on December 2, 1995



**Goals of the SDO:**

•To understand the causes of solar variability and its impacts on Earth, driving towards a predictive capability, the solar variations that influence life on Earth and humanity's technological systems by determining:

•How the Sun's magnetic field is generated and structured.

•How this stored magnetic energy is converted and released into the heliosphere and geospace in the form of solar wind, energetic particles, and variations in the solar irradiance.

**Instruments On Board:**

- Atmospheric Imaging Assembly (AIA)
- EUV Variability Experiment (EVE)
- Helioseismic and Magnetic Imager (HMI)

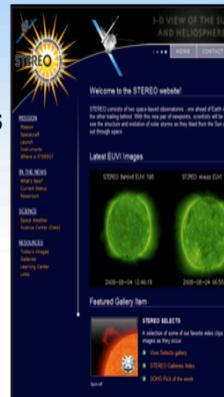
## STEREO

Solar Terrestrial Relations Observatory

Launched in Oct. 2006, its mission is to study CME's

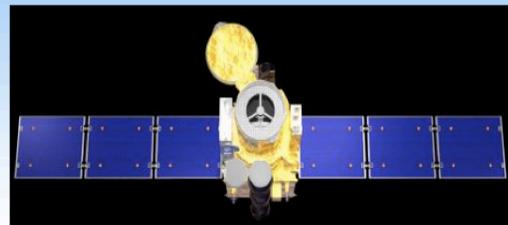
**Goals:**

- understand the causes of CME initiation
- improve our understanding of the solar wind
- generate the first real-time 3D images of the Sun



[http://www.nasa.gov/mission\\_pages/sterEO/main/index.html](http://www.nasa.gov/mission_pages/sterEO/main/index.html)

## HINODE



Launched in Sept. 2006 (Japanese), its mission is to answer the following questions:

- Why does the hot corona exist above the cooler chromosphere?
- What drives explosive events such as solar flares?
- What creates the Sun's magnetic fields?

## Integrated Space Weather Analysis System

<http://iswa.ccmc.gsfc.nasa.gov:8080/IswaSystemWebApp/>

