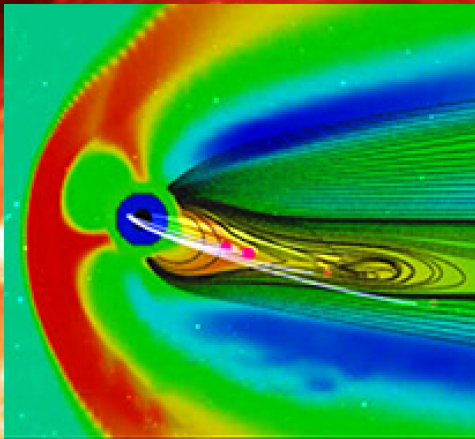
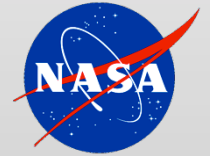


Heliophysics Science Division: Our View of Space Weather



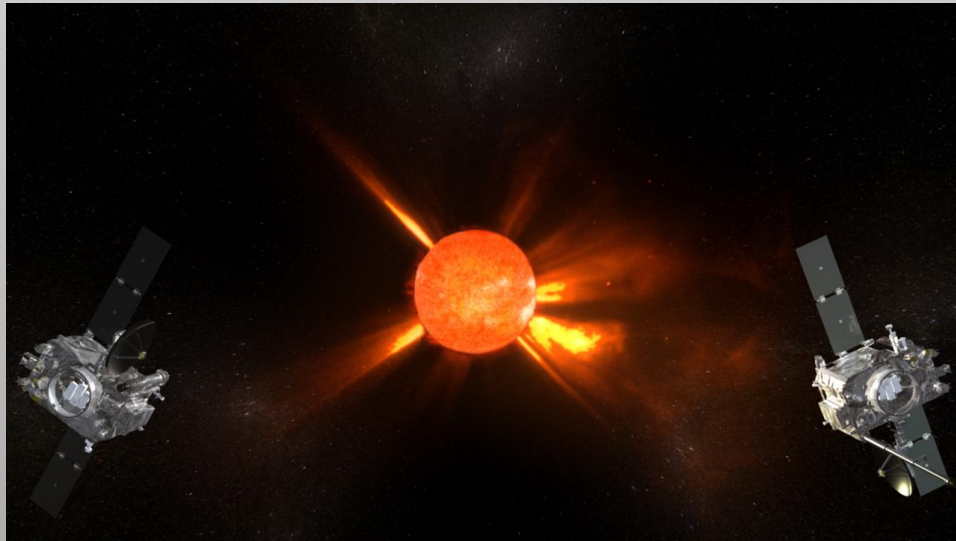


Mission



For NASA, **HSD** conducts research on the Sun and the heliosphere, including interactions of the Earth, other planets, small bodies, and interstellar gas with the heliosphere. Our research also encompasses geospace – Earth's uppermost atmosphere, the ionosphere, and the magnetosphere – and the changing environmental conditions throughout the coupled heliosphere.

Our research involves leading or participating in scientific flight missions, instruments, the analysis of measurements, and theory and modeling. Our research also directly addresses societal needs by seeking to understand the sources of space weather effects.

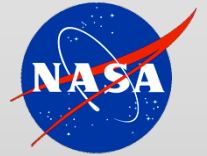


- Substantial societal relevance
- More so than terrestrial weather, many scientific underpinnings not understood
- Model development immature
- Driver data primarily from research missions

Space Weather is largely a research field.



HSD Role in Space Weather

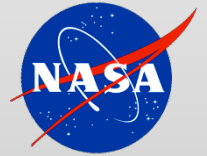


In collaboration with NASA HQ:

- Address key scientific problems
- Provide access to space weather-relevant data streams
- Develop space research models with environmental applications
- Test models for space weather applications
- Facilitate knowledge and technology applications to address societal needs
- Provide tailored, timely, and accurate information, warnings, and forecasts for NASA's internal space weather needs



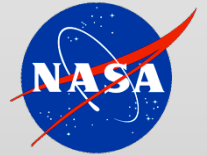
HSD Commitment to NASA's Missions



- Through the CCMC and the SWRC, identify and bring to bear the latest knowledge and technology on NASA's needs
- Partner with SRAG to support, through SRAG, the human flight program
- Continually develop continually new technologies, approaches, and capabilities to serve NASA's robotic mission needs

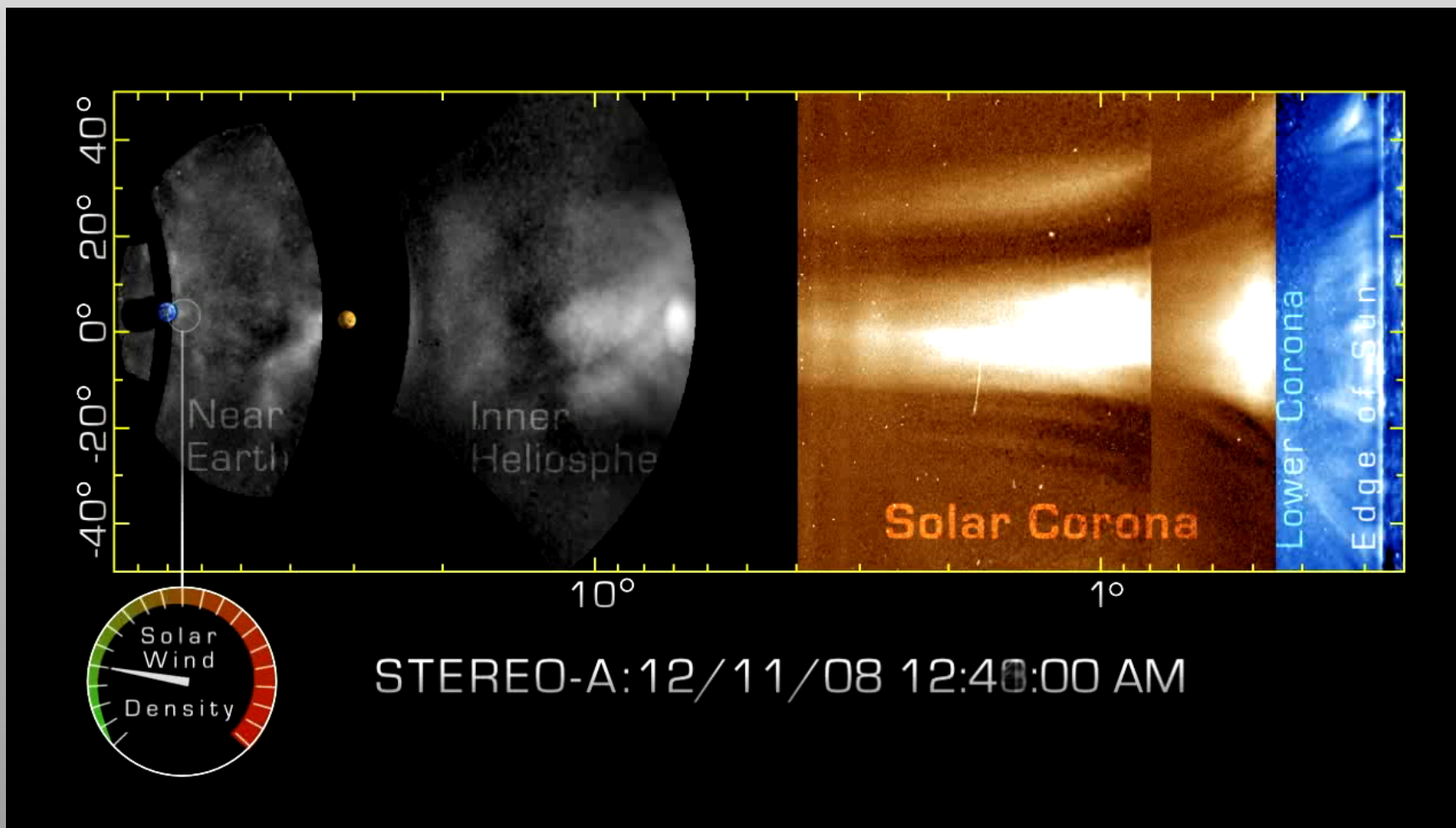


HSD and You



You are on the front lines, operating and safeguarding NASA's robotic spacecraft.

We seek your input!



Credit: NASA/GSFC, STEREO/SwRI, C. DeForest



STEREO B 24 August 2014

