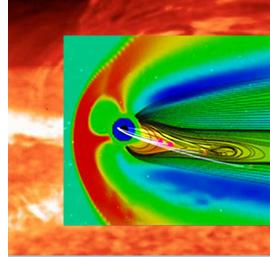


Heliophysics Science Division: Our View of Space Weather









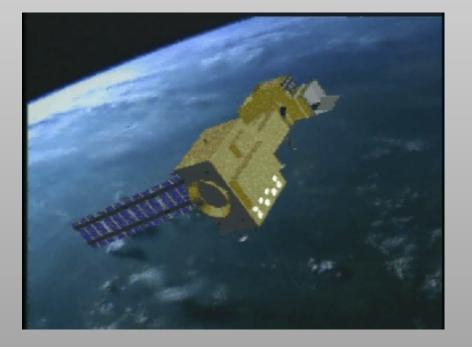
HSD conducts, for NASA, research on the Sun, the heliosphere, and interactions of Earth, other planets, small bodies, and interstellar gas with the heliosphere. Research also encompasses geospace -- Earth's uppermost atmosphere, the ionosphere, and the magnetosphere -- and the changing environmental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

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









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

Space Weather is largely a research field

• HSD HSD 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







- 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
- Develop continually new technologies, approaches, and capabilities to serve NASA's robotic mission needs

We seek your input!



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