



## Sun-Earth Day 2008

Celebrating IHY (International Heliophysical Year)

<http://sunearthday.nasa.gov>

For Sun-Earth Day 2008, we will engage a world-wide audience in the celebration of the International Heliophysical Year (IHY). Tremendous strides have been made as our satellites and ground-based observatories attentively monitor the Sun to understand the processes which govern the Sun's influence on our solar system. We will use the popular Sun-Earth Day framework to offer a series of coordinated events to promote and highlight the Sun, its connection to the Earth and other planets, and support the spirit of international collaboration. Planned activities for Sun-Earth Day 2008, "Space Weather Around the World - IHY," include:

- **SWIMM:** a Space Weather Interactive Media Maker web-tool to allow educators and scientists to create their own multi-media resource to enhance teaching and learning at all levels.
- **Rock-n-Sol:** a musical composition by children internationally inspired by space weather and incorporating sonifications of solar data.
- **Space Weather Action Centers (SWAC):** for students to track a solar storm featuring podcasts of multi-cultural perspectives on IHY.
- **Solar Week,** featuring *Solar Energy*, in a week-long series of web-based activities, games and online chats with scientists for middle school students.
- **Printed and Online Resources:** for educators, museums, amateur astronomers, and scientists.
- **Total Solar Eclipse:** a live broadcast from China on August 1, 2008 highlighting investigations associated with the eclipse by the international heliophysics community.

### Sun-Earth Day Themes

2001 – *Having a Solar Blast/Total Solar Eclipse*

2002 – *Celebrating the Spring Equinox  
and Native American Perspectives*

2003 – *Live from the Aurora*

2004 – *The Transit of Venus*

2005 – *Ancient Observatories, Timeless Knowledge*

2006 – *Eclipse in a Different Light*

2007 – *IHY: Living in the Atmosphere of the Sun*

2008 – *IHY: Space Weather Around the World*

### Key Concepts for Sun-Earth Day 2008, "Space Weather Around the World - IHY."

- \* *We live in the atmosphere of a dynamic, magnetic star that interacts with the Earth and the planets beyond.*
  - o *Magnetospheres and atmospheres of the Earth and other planets respond to space weather.*
  - o *The Sun and its impact on the solar system can be understood through studies of universal processes that combine disciplines.*
- \* *There is beauty, relevance, and significance in space science.*
  - o *The Sun, solar system, and Universe beyond have always been important to humans of all cultures.*
  - o *Eclipses have inspired people to observe and understand the Sun-Earth-Moon system.*
  - o *Human beings from diverse cultures have viewed the Sun as the source of life.*
- \* *Human beings use technology (past, present, and future) to make discoveries about the Universe.*
  - o *Humans who live and work in space, and use technologies we all depend on, are affected by space weather.*

<http://sunearthday.nasa.gov>