



Sun-Earth Day 2010 Would you like to engage students of all ages with NASA scientists and satellite data to explore, discover and understand the connections between our sun, the Earth, other planets and the galaxy? Join us in Sun-Earth Day, a program that provides resources and events throughout the year to culminate in a celebration around the spring equinox. Using the exciting theme of Magnetic Storms, Sun-Earth Day 2010 will take us into the science of electricity, magnetism and plasma. Learn how magnetism is a key to our understanding of the Sun and its violent storms, and how this understanding comes from new spacecraft observations. This knowledge is important because magnetic storms can affect our communication, homeland security and astronaut safety.

Sun-Earth Day Resources:

- Access to printed and online resources, year-round activities and programs
- Connect to NASA missions
- Learn about celestial events including eclipses and equinoxes
- Capture students' interest through inspirational experiences
- Create your own Sun-Earth event and we will support you!
- Join the Sun-Earth Day community on Facebook and Twitter

Key Components:

- **Space Weather Media Viewer:** view multiple NASA satellite images of the Sun and Earth with this web tool.
- **Space Weather Action Center:** students may observe, analyze and broadcast the predictions of a solar/geomagnetic storm using authentic NASA data and green screen technology.
- **Podcasts, Vodcasts, NASA Edge and Technology Through Time:** use them alone or with related education activities.
- **Dancing Lights:** explore the beauty, science and mythology of the auroras in this activity.
- **Culminating Event – March 20, 2010:** watch our webcast from the NSTA Conference in Philadelphia.

Key Concepts:

- The Sun and its impact on the solar system can be understood through studies of universal processes that combine disciplines.
- We live in the atmosphere of a dynamic, magnetic star that interacts with the Earth and the planets beyond.
- Magnetospheres and atmospheres of the Earth and other planets respond to space weather.
- Humans who live and work in space are affected by space weather.
- Human beings use technology (past, present, and future) to make discoveries about the universe.

Sun-Earth Day Themes:

- 2010:** Magnetic Storms
- 2009:** IYA: Our Sun – Yours to Discover
- 2008:** IHY: Space Weather Around the World
- 2007:** IHY: Living in the Atmosphere of the Sun
- 2006:** Eclipse in a Different Light
- 2005:** Ancient Observatories, Timeless Knowledge
- 2004:** The Transit of Venus
- 2003:** Live from the Aurora
- 2002:** Celebrating the Spring Equinox and Native American Perspectives
- 2001:** Having a Solar Blast/Total Solar Eclipse

<http://sunearthday.nasa.gov>