



**Sun-Earth Day 2011** Early civilizations, as far back as the Neolithic age, built monuments and temples that were aligned with the rising/setting sun on the equinoxes and solstices. Today, modern ground based observatories and spacecraft observe the sun in great detail across the full electromagnetic spectrum. In partnership with NASA EDGE, Sun-Earth Day will produce video and webcast programming of ancient solar observatories that will be shared with formal and informal education audiences worldwide. These programs will highlight Chaco Canyon (New Mexico), Hovenweep (Utah), Chichen Itza (Mexico), Cahokia Mounds (Illinois), and Sunspot (New Mexico). Many of these sites present unique opportunities to develop authentic cultural connections between traditional Native American and modern astronomy, highlighting the importance of the Sun across the ages. We will involve scientists, missions, and research programs to share NASA heliophysics research with diverse audiences.

### Sun-Earth Day Resources:

- Access to printed and online resources, year-round activities and programs
- Connect to NASA missions
- Learn about equinoxes, solstices, and the 2012 Transit of Venus
- 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:

- **Multimedia:** Latest Sun Earth Day Podcasts and NASA Edge Vodcasts. Use them alone or with related education activities.
- **Articles:** Discover more with 'Technology Through Time' and 'What's Up!'
- **Space Weather Media Viewer:** View multiple NASA satellite images of the Sun and Earth in near real time.
- **Space Weather Action Center:** Students observe, analyze and broadcast the predictions of a solar/geomagnetic storm using authentic NASA data and green screen technology.
- **Culminating Event - March 19, 2011:** Watch our webcast.

### Key Concepts:

- The Sun is a dynamic, magnetic star that impacts the Earth and other planets in our solar system.
- Understanding the mysteries of the Sun has been a primary motivator for civilizations over thousands of years.
- Human beings use technology (past, present, and future) to understand the Sun and the Universe beyond.
- Human beings from diverse cultures have viewed the Sun as the source of life.
- Stewardship of these sacred sites is our collective responsibility.

<http://sunearthday.nasa.gov>

### Sun-Earth Day Themes:

- 2011:** Ancient Mysteries Future Discoveries
- 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:** Native American Perspectives
- 2001:** Having a Solar Blast