EarthComm Earth System Evolution: Astronomy and Your Community Activity 5

This investigation will help you to:

- Structure of the Sun
- The Earth's Energy Budget
- Harmful Solar Radiation
- Sunspots and Solar Flares
- To learn more about daily solar activity, visit the following web sites:
- To learn more about the auroras, visit the following web sites:
- To learn more about how scientists maps Earth-approaching asteroids, visit the following web sites:
- To learn more about the hole in the ozone layer, visit the following web sites:
- To learn more about the life of British physicist Edward Victor Appleton, visit the following web sites:

Structure of the Sun

- A Look Inside Our Nearest Star! Montana State University
  Find out more about the interior structure of our nearest star. This page features a brief introduction with links to separate pages on different parts of the sun.
- Solar Radiation, National Snow and Ice Data Center
  Read this primer on solar radiation and learn about the factors that modify the role solar radiation plays in the Earth's energy budget.

Back to Top

The Earth's Energy Budget

- Earth's Energy Balance, EOS Terra Mission NASA
  This article focuses on the overarching priorities of the Earth Observing System. Please notice this is a pdf file.
- Earth's Energy Budget, Oklahoma Climatological Survey
  Follow along with a two page description of the balance between the amount of energy absorbed into and released out of the Earth's system.

Back to Top

Harmful Solar Radiation

- Ultraviolet Radiation, NAS - NASA
  Learn more about the health risks from ultraviolet radiation.
- Sunlight, Ultraviolet Radiation, and the Skin, National Institutes of Health
  A report from 1989 that addresses, among other issues, what are the sources of ultraviolet radiation, and is the extent of

human exposure changing over time?

- Ozone Depletion, EPA
  Navigate through a web site dedicated to the topic of ozone depletion. In particular, check out the Ozone Science Fact Sheet to review some basic facts.

Back to Top

Sunspots and Solar Flares

- Solar Flare Theory, Goddard Space Flight Center - NASA
  The purpose of this page is to provide some general information about solar flares, a "feel" for scientific research into the energetic emissions from flares, and a glance into the future of solar flare research.

Back to Top

To learn more about daily solar activity, visit the following web sites:

- Spaceweather
  Get the most recent information about solar flares, sunspots, and coronal holes.
- Solar Terrestrial Activity Report
  Check out the most recent sun spot data.
- The very latest SOHO images, The Solar and Heliospheric Observatory - NASA
  See some of the most recent images of the sun.

Back to Top

To learn more about the auroras, visit the following web sites:

- 'tis the Season for Auroras, NASA
  Autumn is a good time to spot Northern Lights, and scientists would like to know why.
- Auroras - Paintings in the Sky, Exploratorium
  This site will show you what auroras look like on Earth and from space, explain how they are created, and show you where they can be found. Teach yourself using the "Self-Guided Lesson" button.

Back to Top

To learn more about how scientists maps Earth-approaching asteroids, visit the following web sites:

- Airline Radiation Threat to be Assessed, BBC
  Learn about a study to monitor the amount of radiation to which airline passangers and crew are exposed in flight.

Back to Top

To learn more about the hole in the ozone layer, visit the following web sites:

- The Science of Ozone Depletion, EPA
  This page has links to articles that give overviews or broad information, shorter pieces that focus on specific aspects of ozone depletion, international organizations that issue regular updates, and images and animations of ozone levels and ozone depletion.

Back to Top

To learn more about the life of British physicist Edward Victor Appleton, visit the following web sites:

- Biography of Sir Edward Victor Appleton, Nobel e-Museum

Read a biography of the physicist Sir Edward Victor Appleton.

Back to Top