What is the NSO?

At the National Solar Observatory (NSO), our mission is to advance our knowledge of the Sun. The NSO built and manages NSF's Inouye Solar Telescope in Hawaii. As the largest solar telescope on Earth, it's dedicated to studying the layers of the Sun's atmosphere and specifically, its magnetism. The Sun's magnetic fields are the cause of solar storms called Space Weather that affect technologies on Earth.

What's in this brochure?

The activities in this brochure help you to explore the layers of our Sun. First, create a science demo of convection at work. This is the same convection found at the surface of our Sun! Next, use an online tool to explore the Sun's chromosphere. This is the layer above the surface, where filaments, prominences, and solar flares are found. In the activity, you will capture a solar flare from our Sun by making your own solar movie at helioviewer.org

Title	Description
Recreate the Surface of the Sun!	Learn about convection on our Sun and how to create a demo for it!
Capture a Solar Flare on our Sun	Use the Helioviewer online tool to create movies of our Sun that capture solar flares.

More info at www.nso.edu/for-public/educators/

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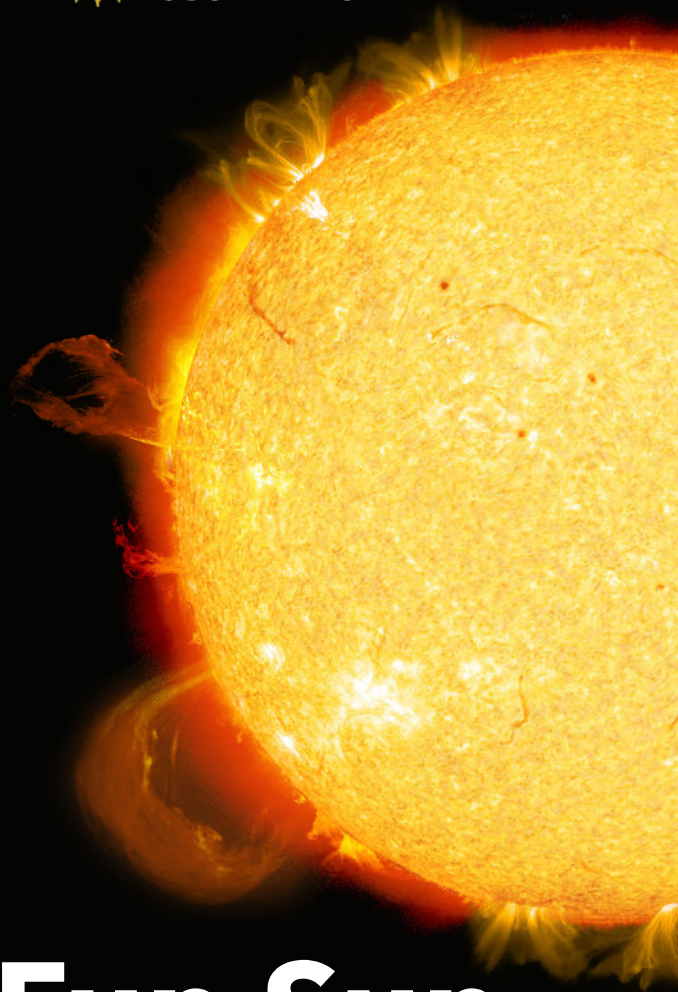
The National Solar Observatory (NSO) is the national center for ground-based solar physics in the United States (www.nso.edu) and is operated by the Association of Universities for Research in Astronomy (AURA) under a cooperative agreement with the National Science Foundation Division of Astronomical Sciences.

The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 to promote the progress of science. NSF supports basic research and people to create knowledge that transforms the future.

NATIONAL SOLAR OBSERVATORY



Fun Sun Science Activities

Sun Science Activities

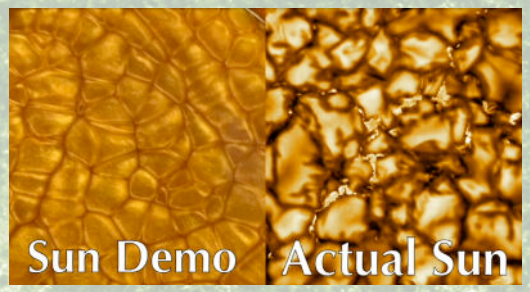
Recreate the Surface (Photosphere) of our Sun

Create a science demo that provides a quick lesson on convection and why the surface of the Sun looks like bubbling cheese!

1. Watch the "Learn from Home" video
2. Follow the instructions in the video to create a demonstration of the convection happening at the surface of our Sun
3. Continue to explore the Sun's layers and what scientists observe about them.

Learn from Home video

nso.edu/sun-demo



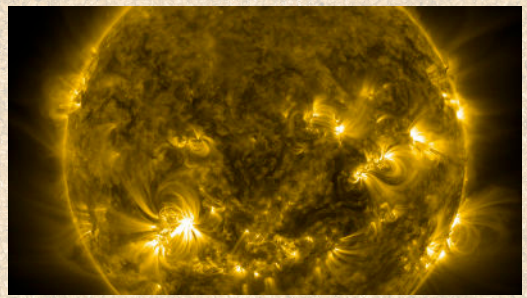
Capture a Solar Flare in the Chromosphere of our Sun

Use the Helioviewer online tool to create movies of our Sun that capture solar flares.

1. Watch the Helioviewer Activity Video
2. Create your movie at helioviewer.org
3. Continue to explore the Helioviewer tool to see what else you can capture!

Helioviewer Activity Video

nso.edu/helioviewer-activity



More Educational Resources:

NSO's Google Classrooms

National Solar Observatory's google classrooms are resources for teachers, parents and K-12 students. Here, you'll find engaging activities where students learn about careers in astronomy, STEM science principles, and stories of new discoveries!

*must have a gmail account

www.classroom.google.com

Hub for K-12 STEM Online Resources
Class Code: **acmluyv**

NSO Youth Classroom
Class Code: **7iz25jn**

Learn from Home Webinars

Meet the people behind the observatory. NSO staff from a diversity of career and educational backgrounds come together to talk about their jobs at a solar physics observatory! Meet scientists, engineers, educators, and more!

nso.edu/learn-from-home