



SOS EXPLORER

NOAA's Data Visualization Education Tool

Find us at: sos.noaa.gov

WHAT IS SOSx?

SOS Explorer[™] (SOSx) is a flat screen version of the widely popular Science On a Sphere® (SOS). The revolutionary software takes SOS datasets, usually only seen on a 6-foot sphere, and makes them more accessible. Using the intuitive interface, users choose which visualizations they want to explore from a list of over 140. The display can be set up in a single screen mode for classrooms and individual use or a dual screen mode for exhibits.



plorer

What is SOS? (for context)

Science On a Sphere® is an interactive globe that can show dynamic, animated images of the atmosphere, oceans, and solar system. NOAA primarily uses SOS as an education and outreach tool to describe the environmental processes of Earth. The basic pieces include a Linux computer, four projectors, and a 68 inch carbon fiber sphere.





SOS Explorer mobile

What's great about it?

- Free to download and use
- <u>Compatible with Apple and Android devices</u>
- <u>100+ datasets</u>
- <u>User-guided tours</u>
- Data analysis tools
- Narrated educational videos
- Spherical and flat map views

What materials exist to help me?

- <u>SOS Explorer Resources</u>
- <u>Phenomena-based learning modules</u>
- <u>SOS Explorer mobile FAQ</u>





Teacher-as-learner exploration

- 1. Download the app on any mobile device
- 2. Watch intro video
- 3. Play around in app
- 4. Take a tour and/or do a scavenger hunt
- 5. Answer tour follow up questions (pdf's linked)
- 6. Discuss: How might you use this in your classroom?



In action: <u>Beth and Hil Show</u> provides examples of talking about the data and using the app.

Follow us on social media to stay in the loop on new datasets.

<u>Facebook</u> <u>Instagram</u> <u>Twitter</u> <u>YouTube</u>

Enjoy!

Send us your lessons and success stories Even the bugs you find!

Phenomena Based Learning Modules are so cool. Check them out here.

Kindergarten-12th Grade @



Can Elephants Sense Tsunamis Before they Happen?

Some large animals are able to sense tsunamis that we can't detect. Learn about what causes tsunamis and where they happen.



Lightning Lake

Venezuela's Lake Maracaibo has lightning storms almost half the days of the year, due to its unique combination of moisture, temperature, and topography.



Plastic in Mariana Trench

Tons of plastic are put into the ocean every year and accumulate in patches; the largest of which is twice the size of Texas. Over time it breaks down and makes its way to the seafloor.



Sailing Stones

Combine rainfall in Death Valley with its wild temperature swings, throw in some rocks and a little surface wind, and you have a recipe for locomotion.











For more information about the datasets, go to SOS Data Catalog Contact us: sos.explorer@noaa.gov sos.noaa.gov