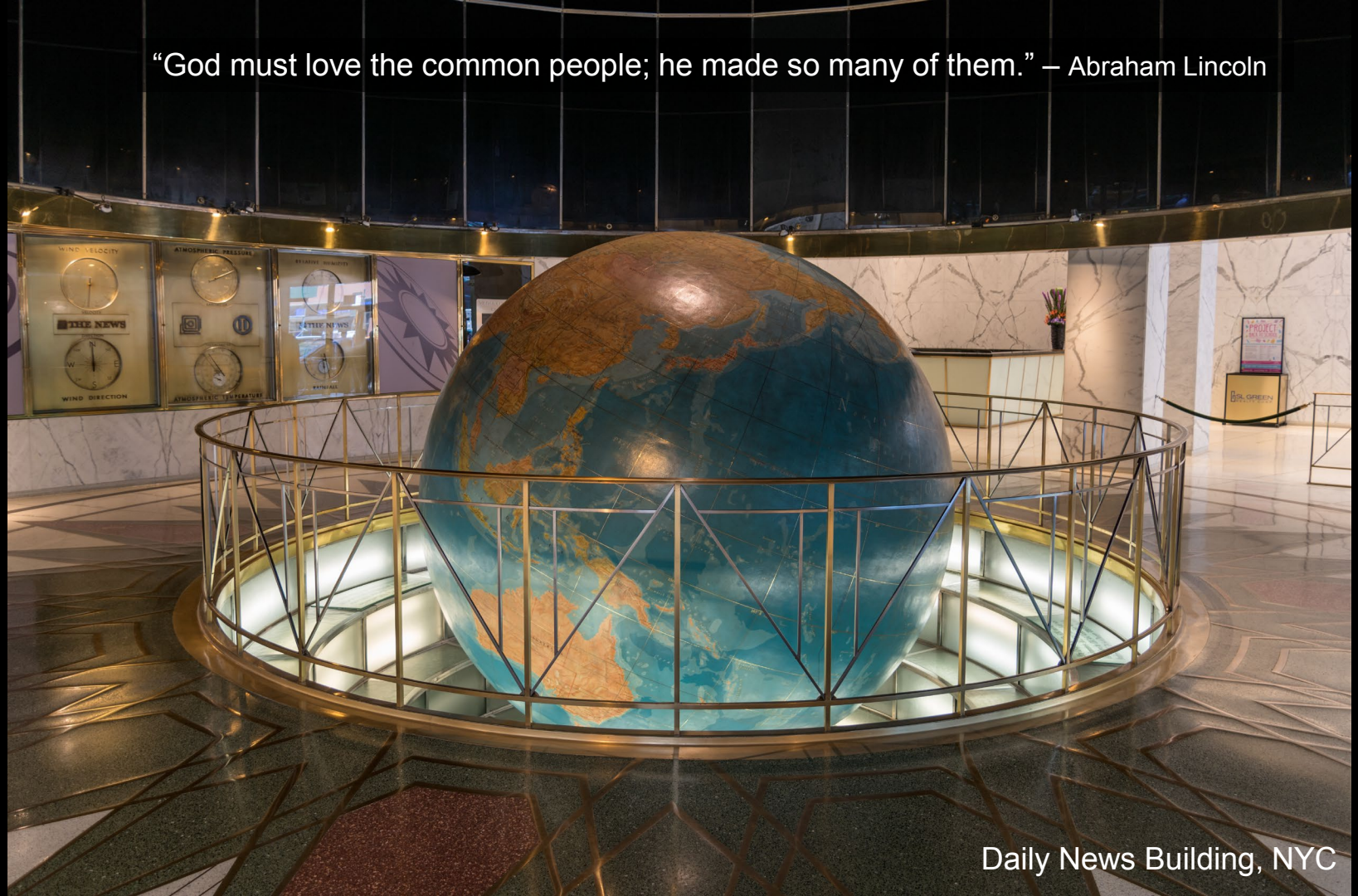
Updates from Boulder

NOAA Boulder SOS Team

November 27, 2018
SOS Users Collaborative Workshop

Science City
Kansas City, MO


“God must love the common people; he made so many of them.” – Abraham Lincoln
WIND VELOCITY
ATMOSPHERIC PRESSURE
THE NEWS
WIND DIRECTION
ATMOSPHERIC TEMPERATURE
Daily News Building, NYC

NOAA's SOS and SOS Explorer Teams

Informatics, Visualization and Outreach Section

Jebb Stewart *- Section Lead

SOS Development Team

Keith Searight *– SOS System Dev Lead

Beth Russell *– SOS Operations Manager
Alex Kirst * – New – SOS Field Support and Dev
Ian McGinnis * – SOS Field Support and Dev
Hilary Peddicord * – SOS and SOSX Education Lead

Shilpi Gupta * – SOS Dev and Lead Ipad Dev
Evan Sheehan * – New – Web Dev and Support
Tony Liao – Kiosk and Asian Support

SOS Explorer Development Team

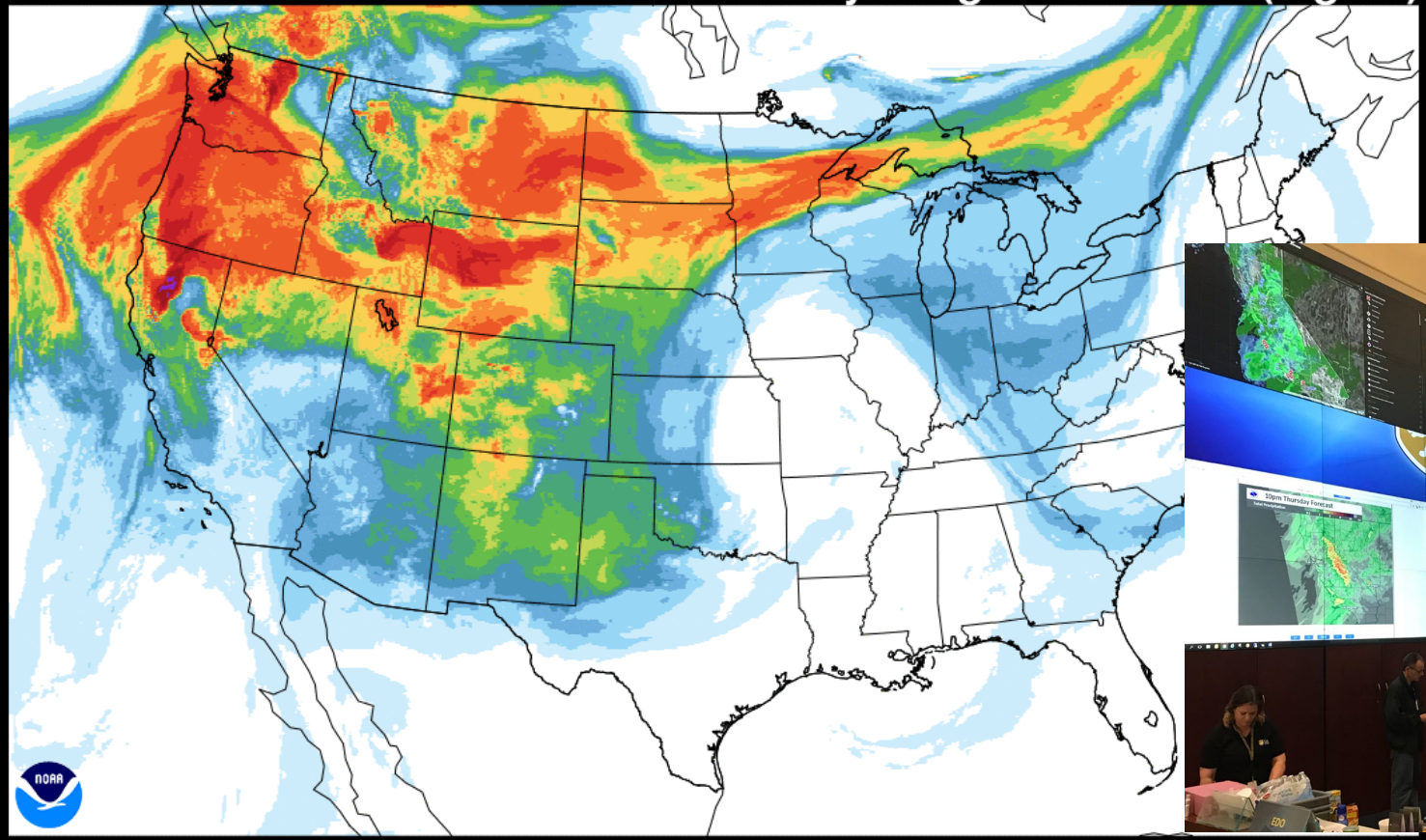
Eric Hackathorn * – SOSX Dev Lead
Jeff Smith – SOSX Dev
Jonathan Joyce – SOSX Dev

Support Services

Vivian Lefevbre – IT Support
Tanja Braunagel - Admin
Angie Scheck - Budget

HRRR-SMOKE 2018-08-15 06 UTC 0h fcst - EXPERIMENTAL Valid 08/15/2018 06:00 UTC

Vertically Integrated Smoke (mg/m^2)



2 5 8 11 15 20 25 30 40 50 75 150 250 500

GSD Web products in use in California EOC

Feedback

Augmented Reality on the SOS
Content Building for SOS
SOS Explorer Mobile


“God must love the common people;
he made so many of them.”
– Abraham Lincoln
Liberty Science Center, Jersey City, NJ

New and Upcoming Installs

New Installs since last workshop (April 2017)

- 15 New Installations →
- Five Countries
  - Australia!
- 7 Completed by Distributors*

Climate Planet, Aarhus, Denmark
Morristown-Beard School, Morristown, NJ
KSBB Biodiversity Museum, Trivandrum, Kerala, India*
National Center for Weather and Climate Prediction, MD
Raman Science Center, Nagpur, India*
The Regional Science Centre, Guwahati, Guwahati, India*
Liberty Science Center, Jersey City, NJ
Shrikrishna Science Centre, Patna, India*
MOD. at the University of South Australia, Adelaide, Australia
Second Institute of Oceanography, Hangzhou, PRC*
Marine Education Center, Ocean Springs, MS
Zhongdiantou Power Engineering Co., Ltd, Shanghai, PRC*
American Airlines C.R. Smith Museum*
Queensland Museum, Brisbane, Australia
Plantation Key School, Tavernier, FL

Upcoming Installs

- Orange Coast College
- Michigan State University
- Distributors busy at work around the globe!

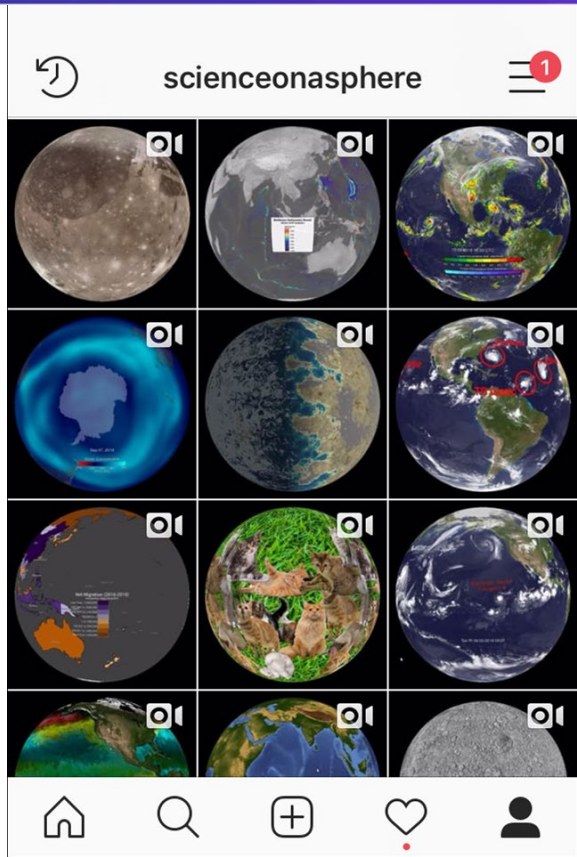
Supersize SOS

Climate Planet

A touring SOS in Europe!

SOS in Social Media

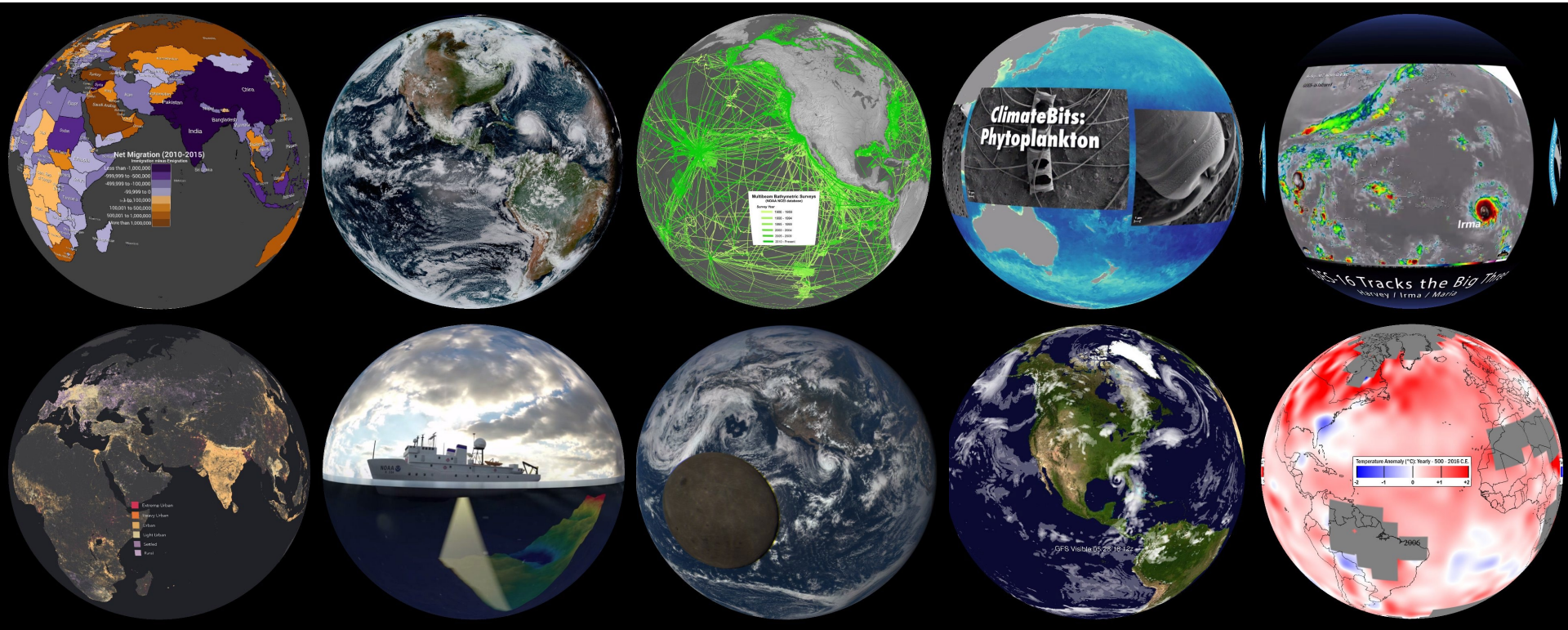
Follow us on Instagram and Facebook for announcements about new and timely datasets!



New Datasets

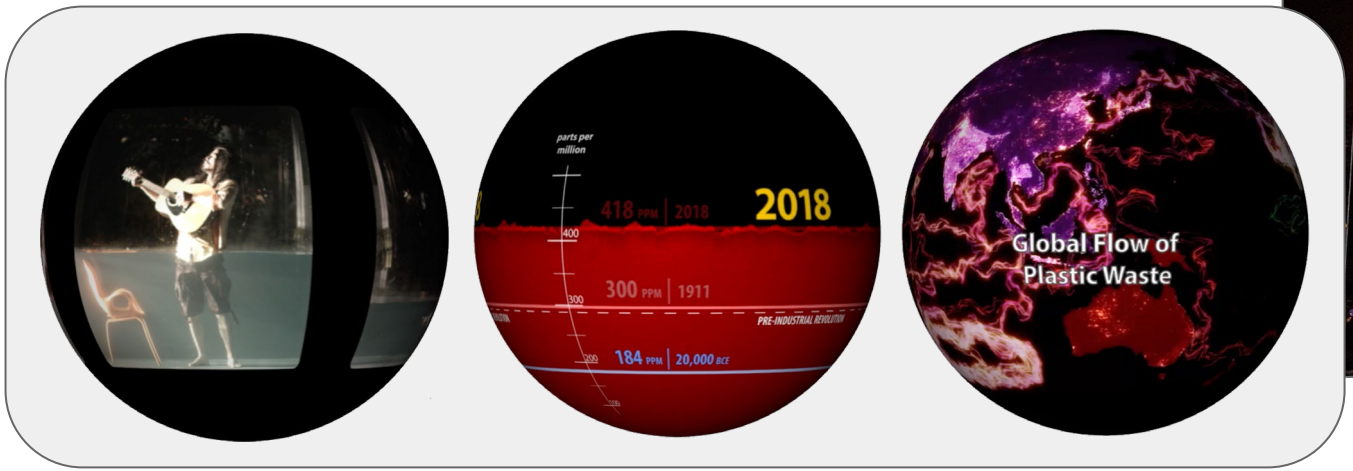
Check them out Thursday afternoon!

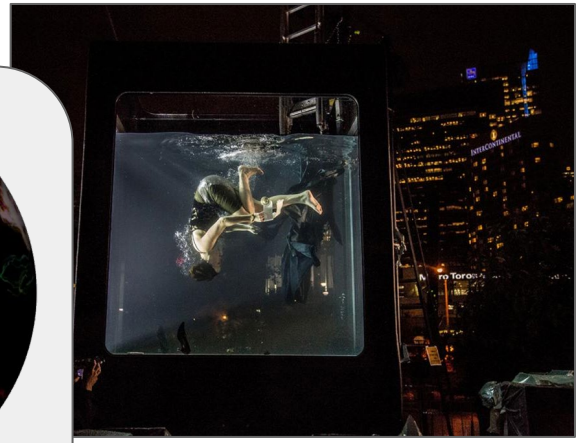
26 New Datasets since the April 2017 Workshop



Upcoming Dataset

- Collaboration between EcoArts Connections and NOAA SOS (Boulder)
- Grant through National Endowment for the Arts (NEA)
- Feb 2019: 5-min SOS film by artist **Lars Jans**, based on his work ***Holoscenes***

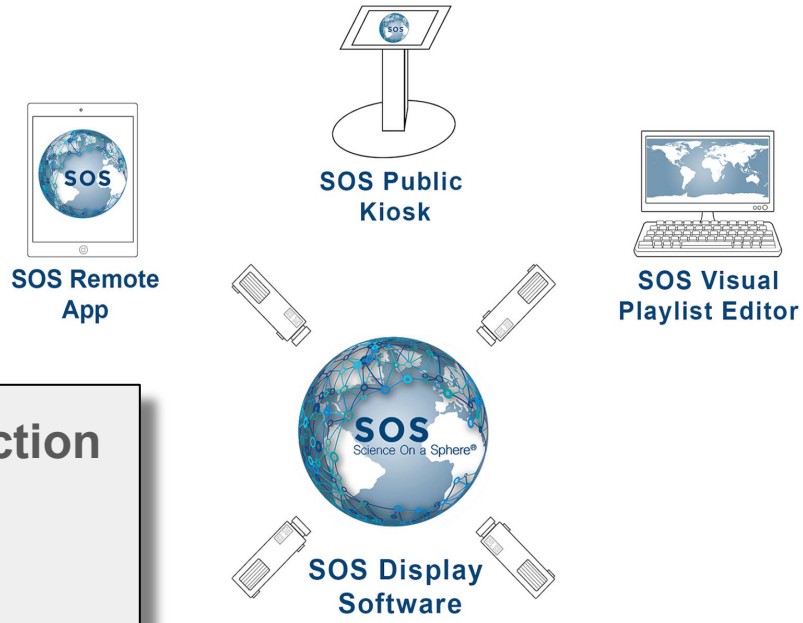




Update from SOS Dev Team

What's new in Science On a Sphere®

- Overview in this presentation
- Live demos, details, and discussion in later sessions



SOS Product Suite: Feedback and Future Direction

Thurs @ 1:30pm in Arthur Stillwell Room

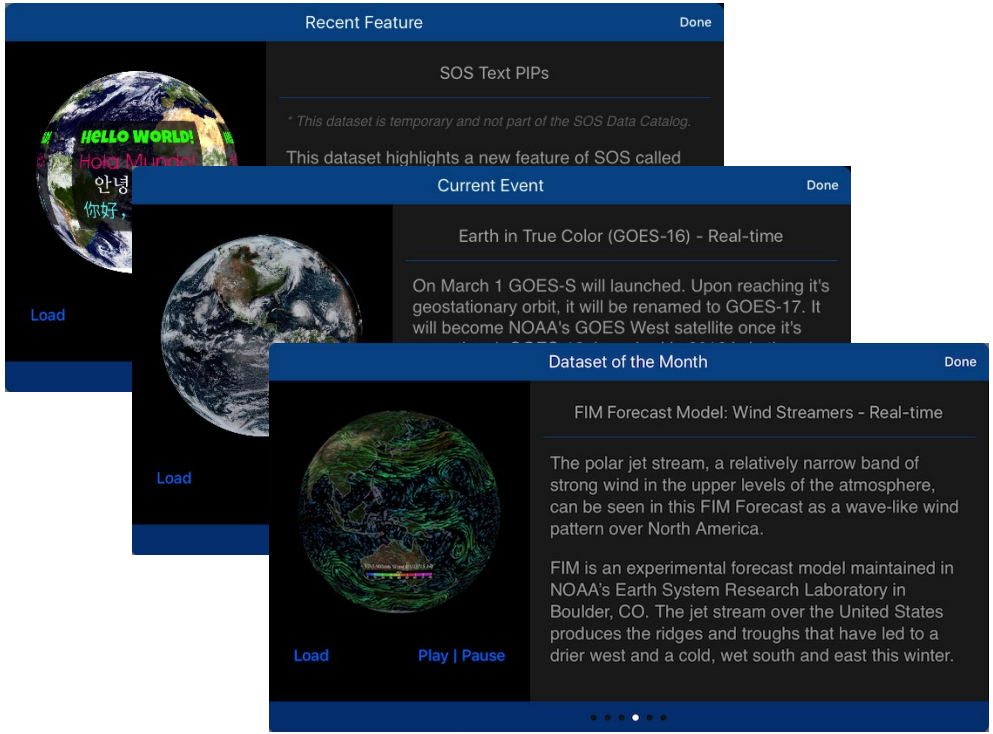
Join us and bring your wish list!

Newest Software Releases

Since Detroit Zoo Workshop in April 2017

Version	Date	Highlights
5.3	Feb. 2018	Spotlights, formatted labels, better security
5.3.1	Apr. 2018	Stability fixes for SOS display software
5.4	Nov. 2018	Moving PIPs, captions

Spotlights

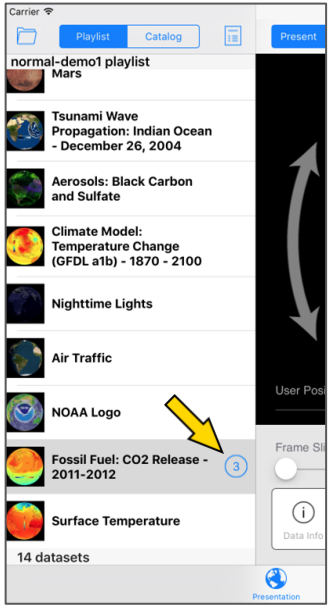


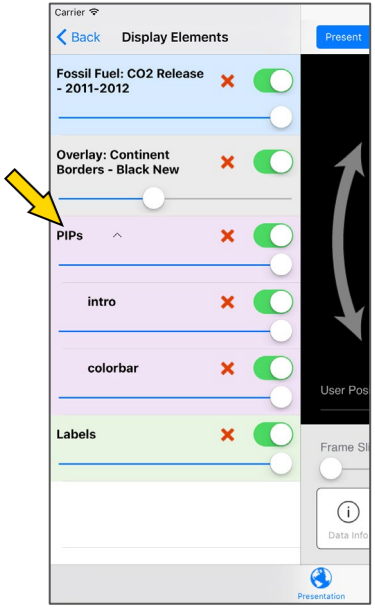
Spotlighting the Spotlight

Wed @ 11:00am in SOS Room

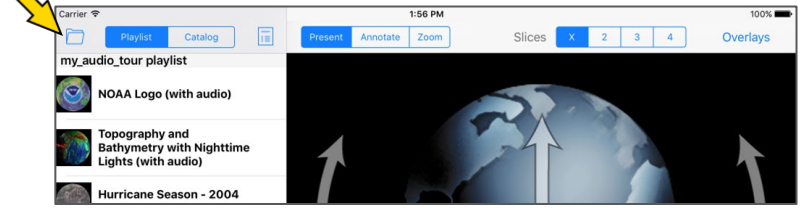
Remote App (iPad)

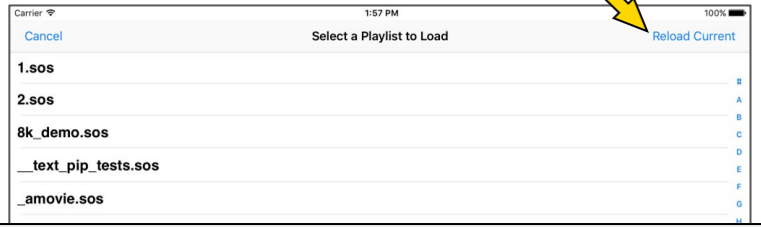
- Individual control of PIPs
- PIP and Overlay groups





- Quick reload of current presentation

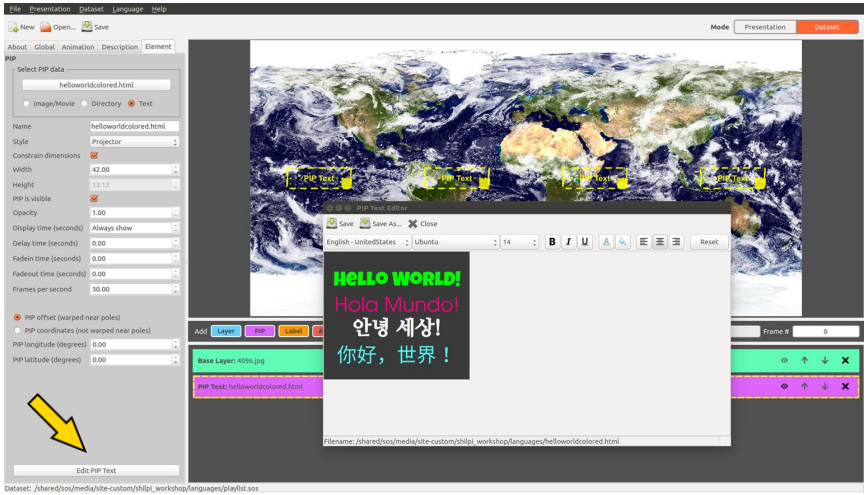




Become a power presenter using the iPad

Tues @ 4:30pm in SOS Room

Text PIPs

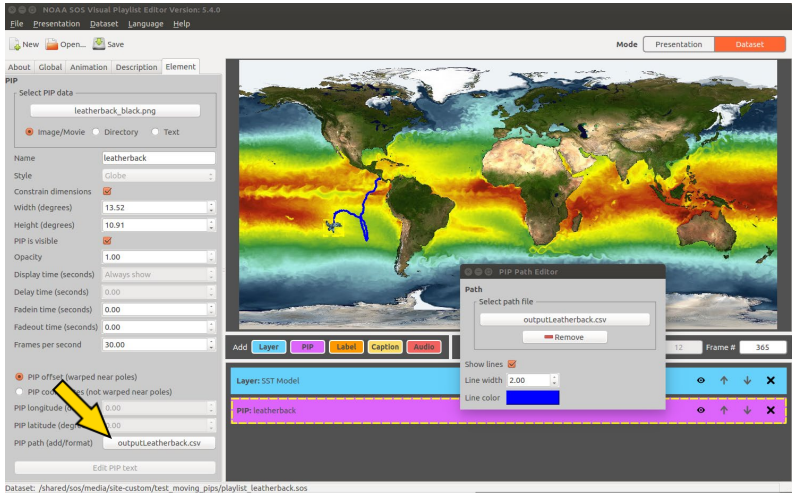


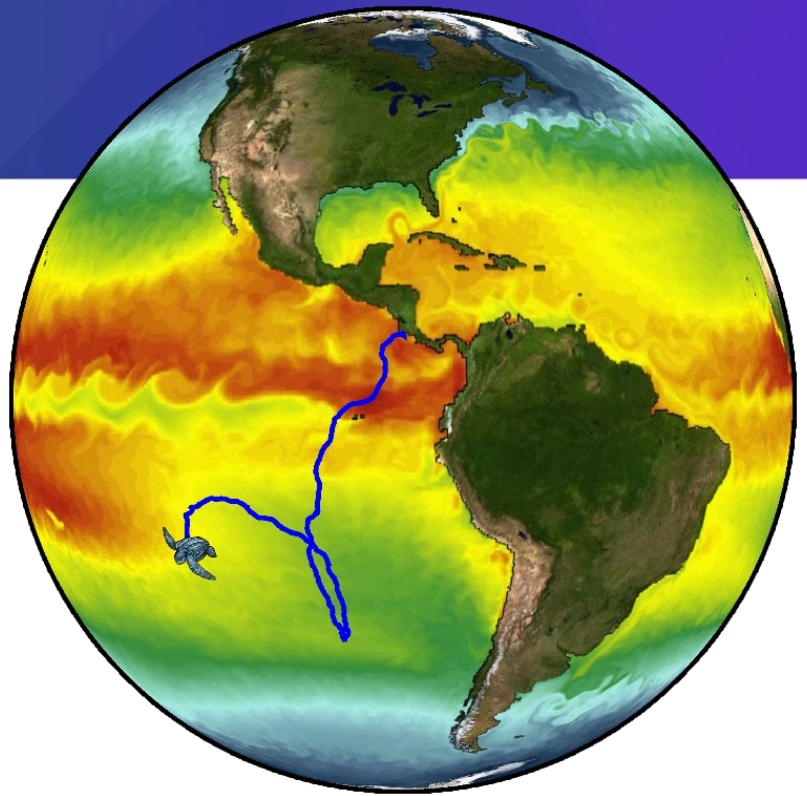
- Create text for SOS using simple text editor
- Text auto-scales for optimal resolution
- Same functionality as normal PIPs
- Support for multiple languages

Getting the most out of PIPs

Wed @ 1:00pm in SOS Room

Moving PIPs





- Animal migrations, hurricane/ship tracking, etc
- Avoids embedding moving data into video
- Simple csv file format (frame #, lat, lon)
- Option to draw path and specify path attributes

Getting the most out of PIPs

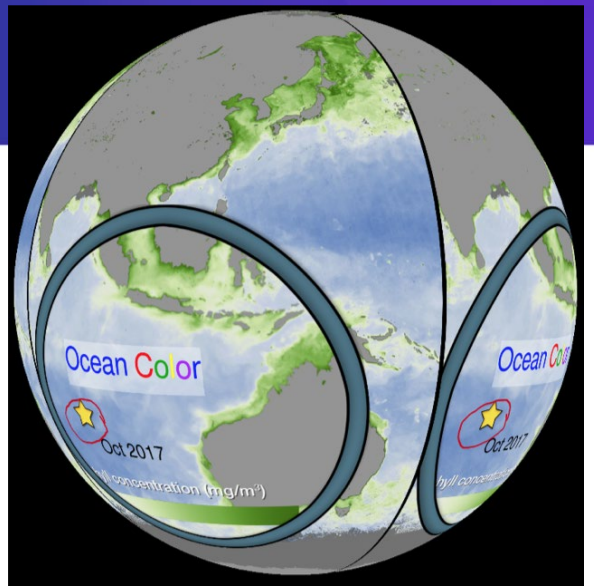
Wed @ 1:00pm in SOS Room

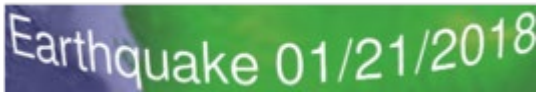
Display Software

Continued improving our core display software.

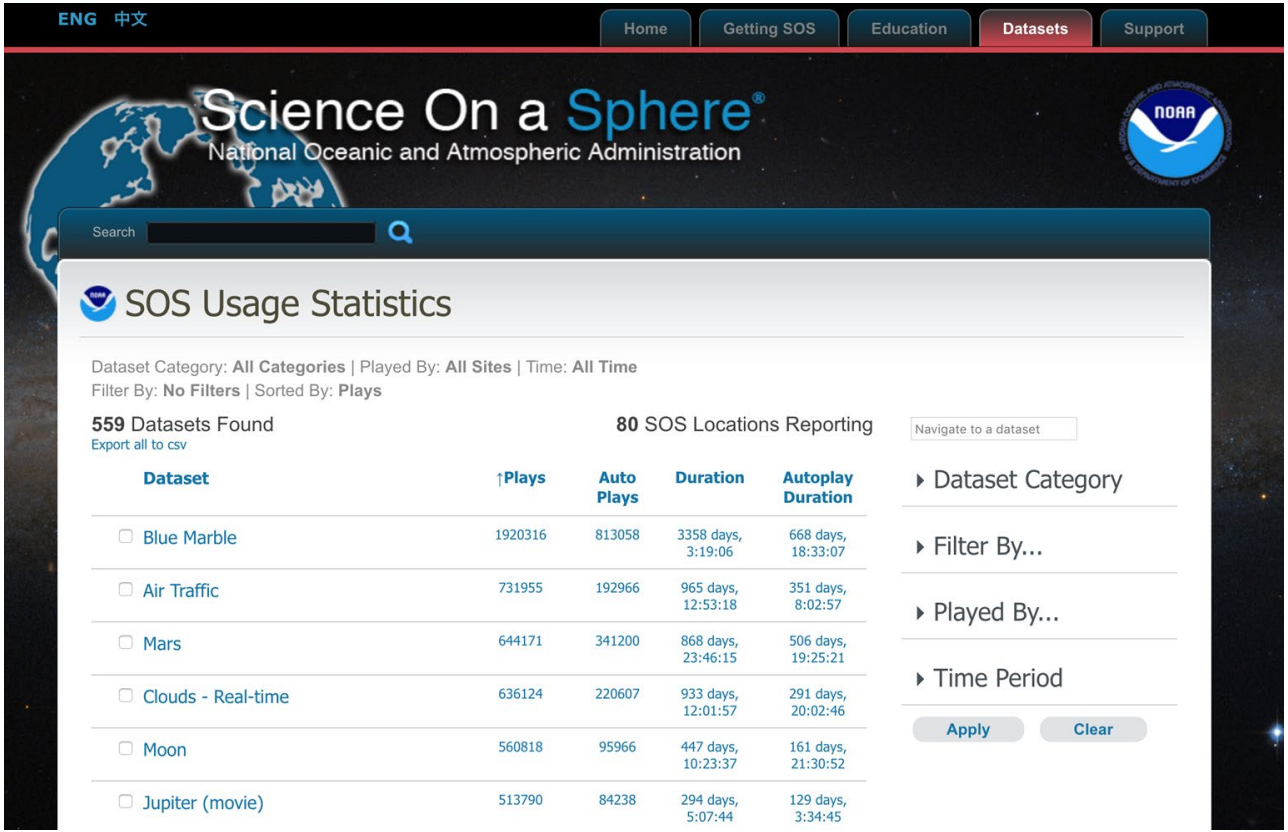
- Splitter & Magnifier
- Label formatting
- Wibu dongles are now required.

Ubuntu 12.04 - now End of Life and no longer getting security updates. Please upgrade to Ubuntu 16.04 & SOS 5.4 if possible.





Usage Statistics



Captions

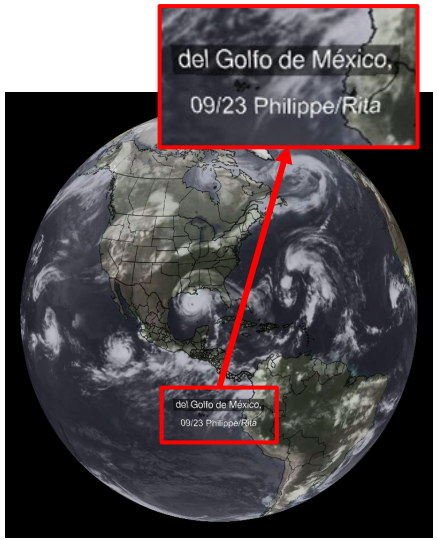
Displaying captions on SOS

- Show Labels and/or Captions
- Directly uses standard SRT files
- Convert from audio with YouTube
- Translations for non-English speakers
- Show on muted movies with AutoRun
- Edit text formatting in Playlist Editor
- Dozens of NOAA narrated movies getting SRT captions after workshop

Become a power presenter using the iPad, Tues @ 4:30pm in SOS Room

Closed Captioning CC

Subtitles



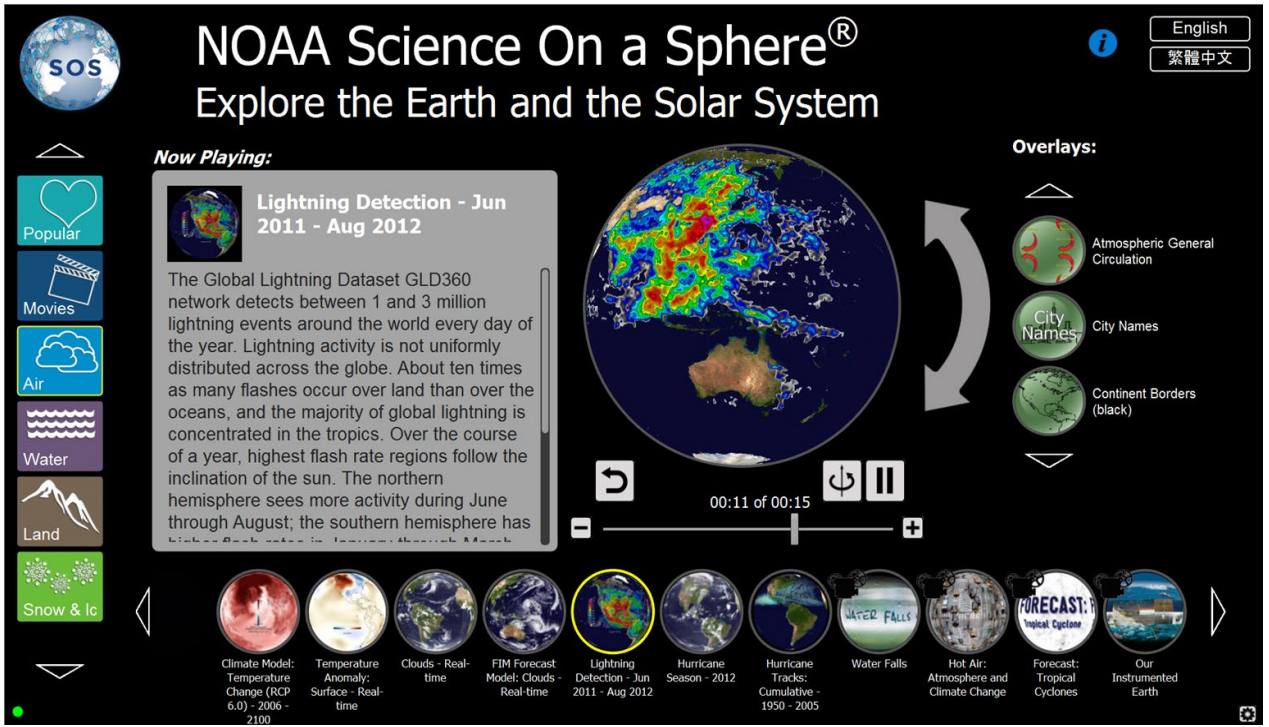
Public Kiosk

Overview

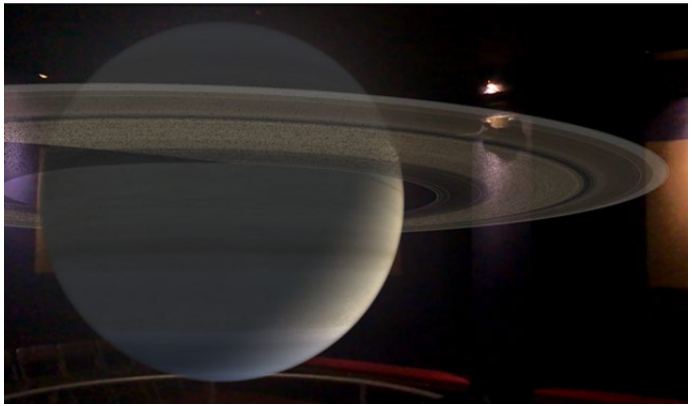
- 1st version: Nov. ‘15
- 4 major releases
- Free to SOS sites

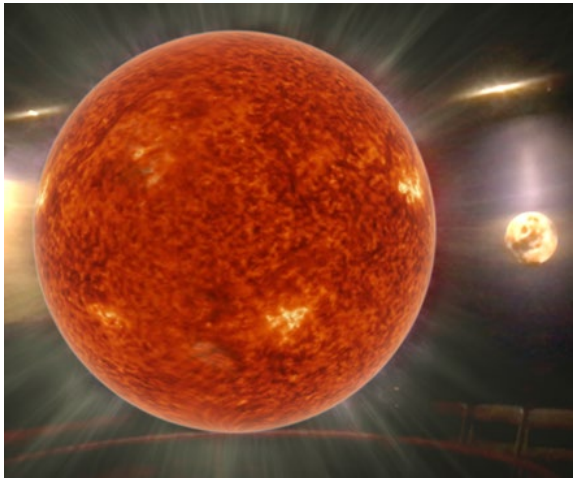
Key Features

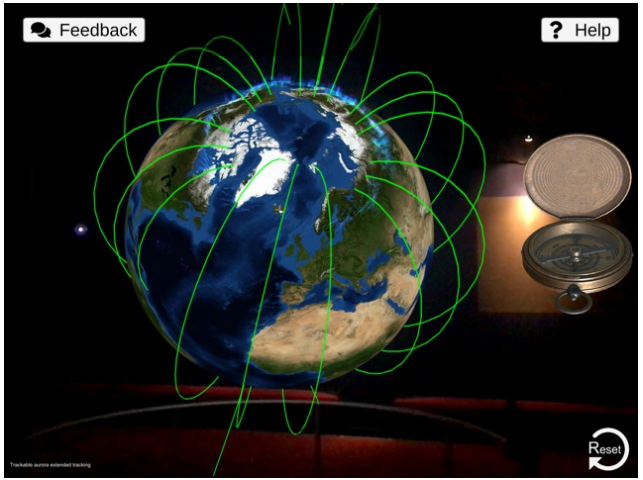
- Simpler than iPad
- Datasets in Groups
- Trackball controller
- Flexible customizing
- Multiple languages

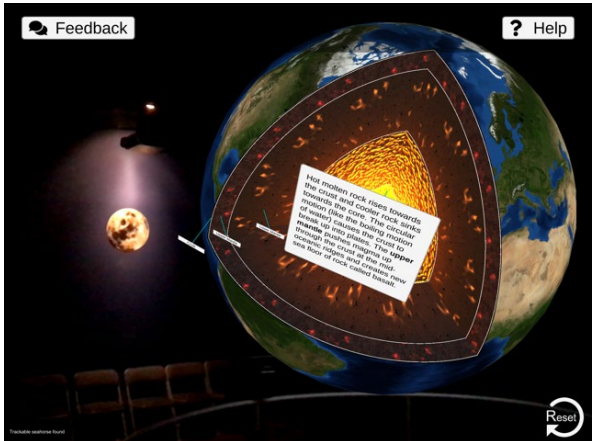


Augmented Reality







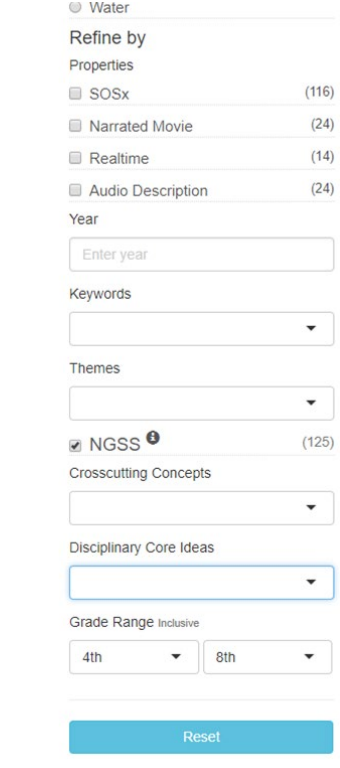


Bring SOS visualizations inside or outside the sphere using your iPad!

Augmented Reality on the Sphere
Tuesday @ 4:00 on Science City's SOS

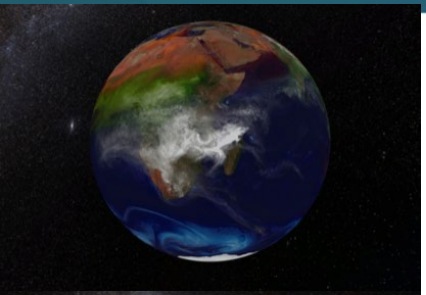
SOS Website

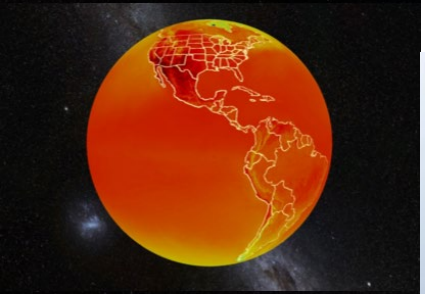
NGSS Pairing

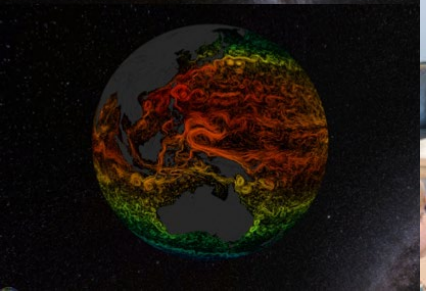


Phenomena-based Learning Modules

SOS Explorer







SOS Explorer™ (SOSx) is a flat screen, interactive, and portable version Science On a Sphere (SOS).

Ideal for Variety of Settings

User Interface: Single-screen, multi-screen, touchscreen

Display: Projector, video wall, touchscreen, 4k display

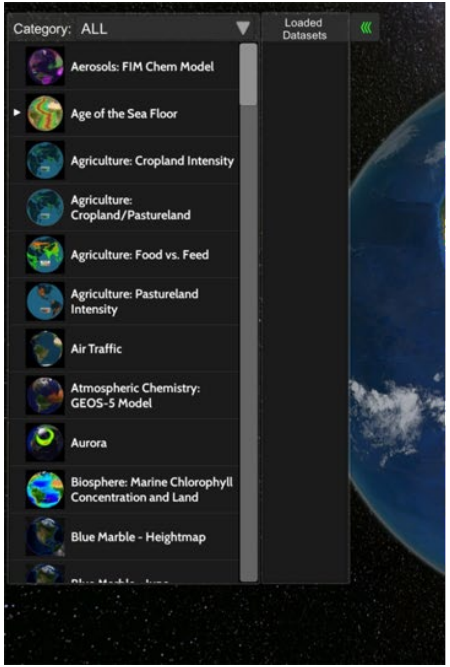
Server: Laptop or desktop

Settings: Museums, conferences, schools

Locations: 25 total sites

11 museums including Nurture Nature Center, 8 schools including one elementary school, 6 NOAA facilities

Methods of Interaction



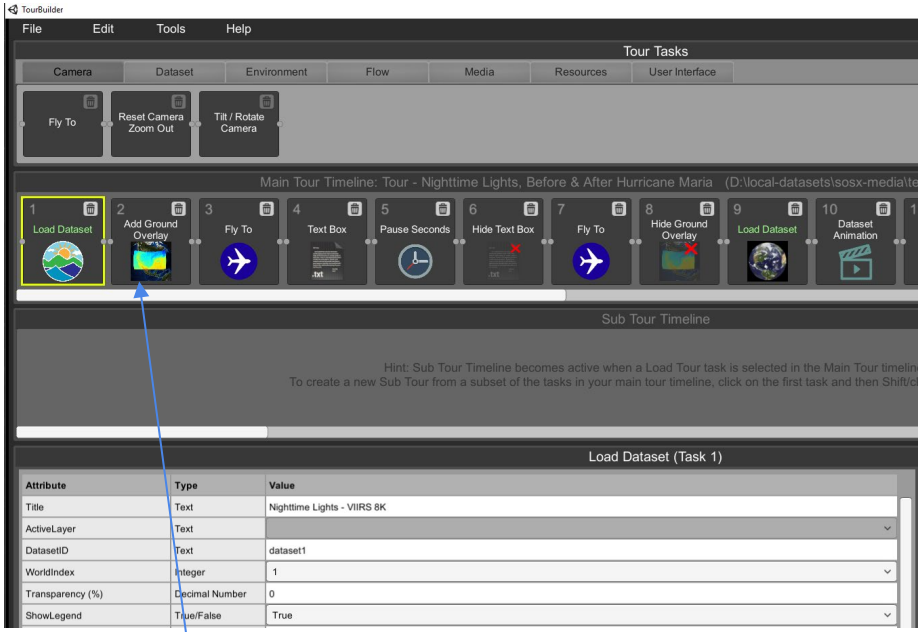
Catalog Browsing

Self-Guided Tours

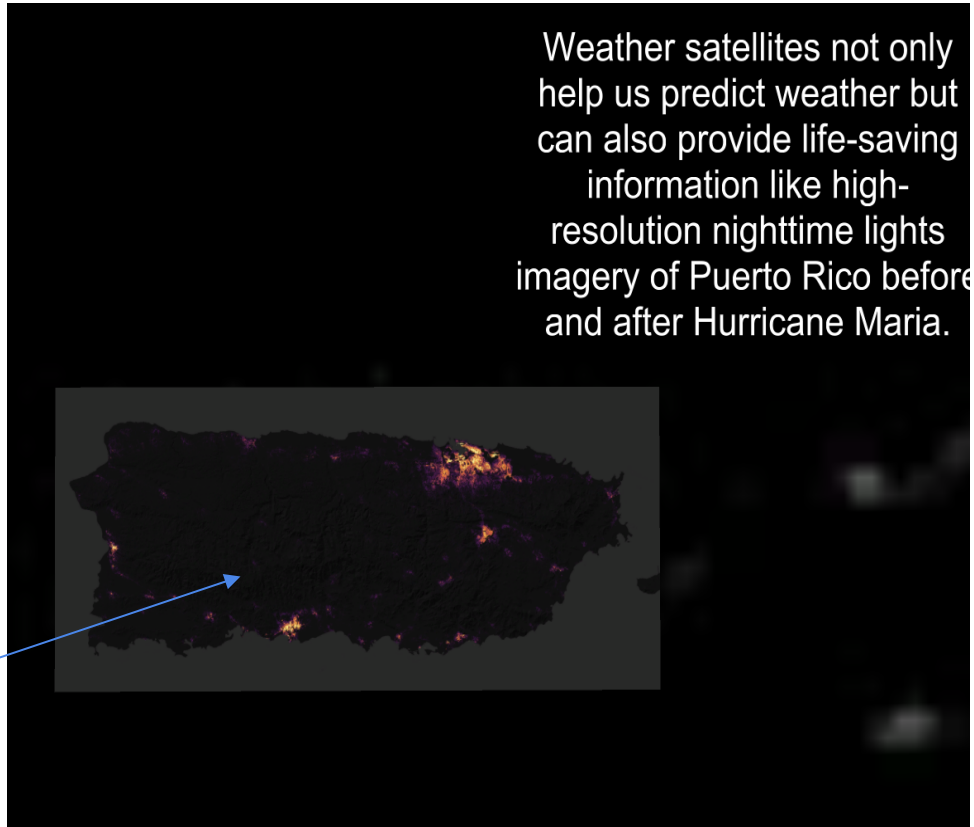
First Person Experiences

Virtual Reality

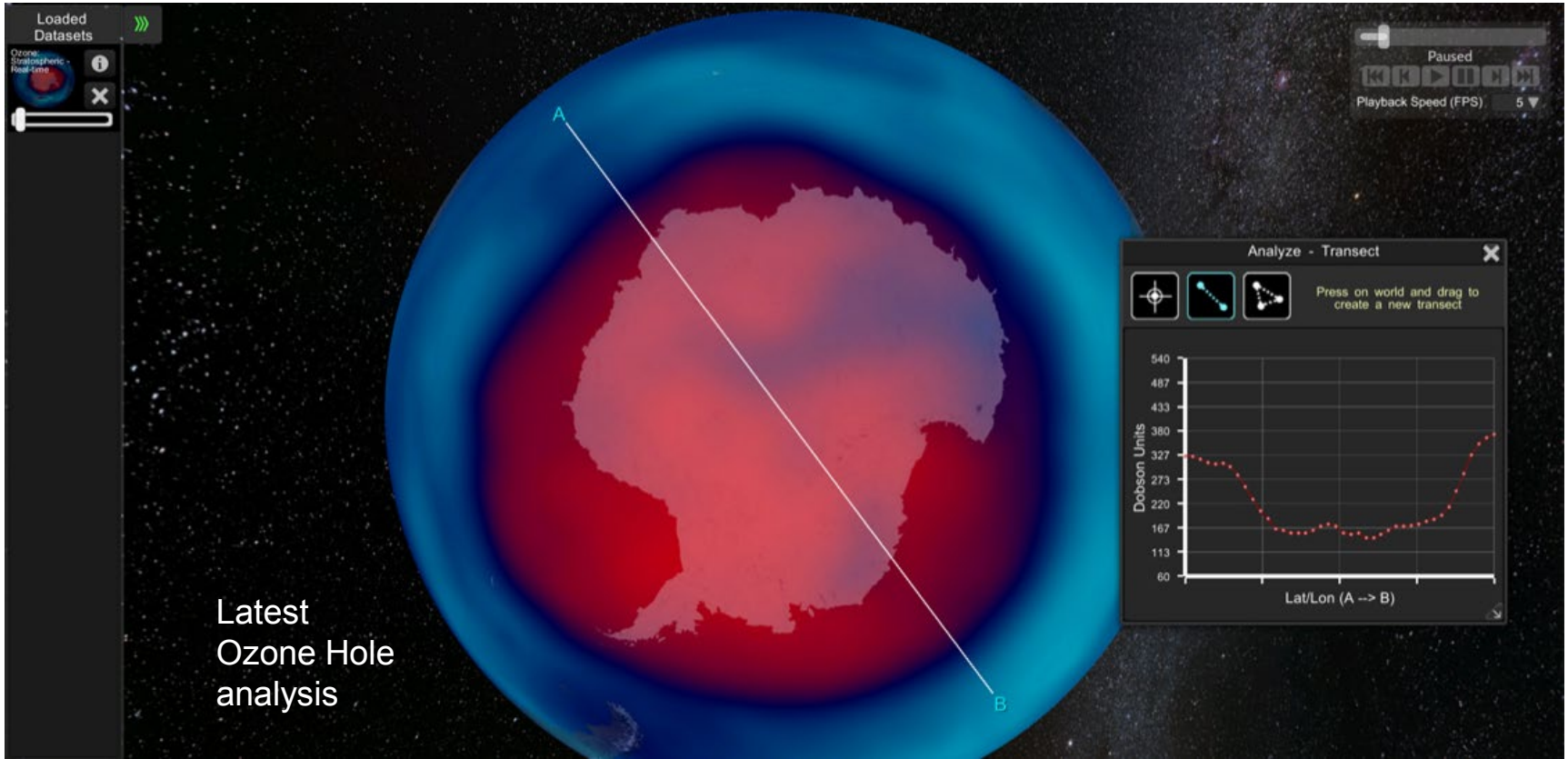
Make it local with the Tour Builder



Add high resolution local maps as “ground overlays”



Dig Deeper with Analysis Tools



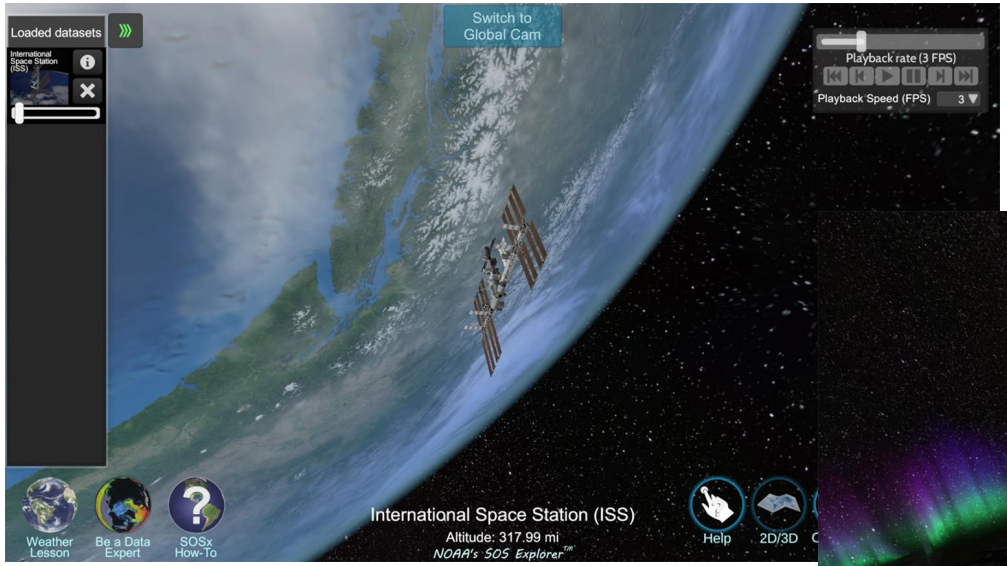
Latest Ozone Hole analysis

Data Catalog

Over 135 datasets including ones you **can't find** on SOS...

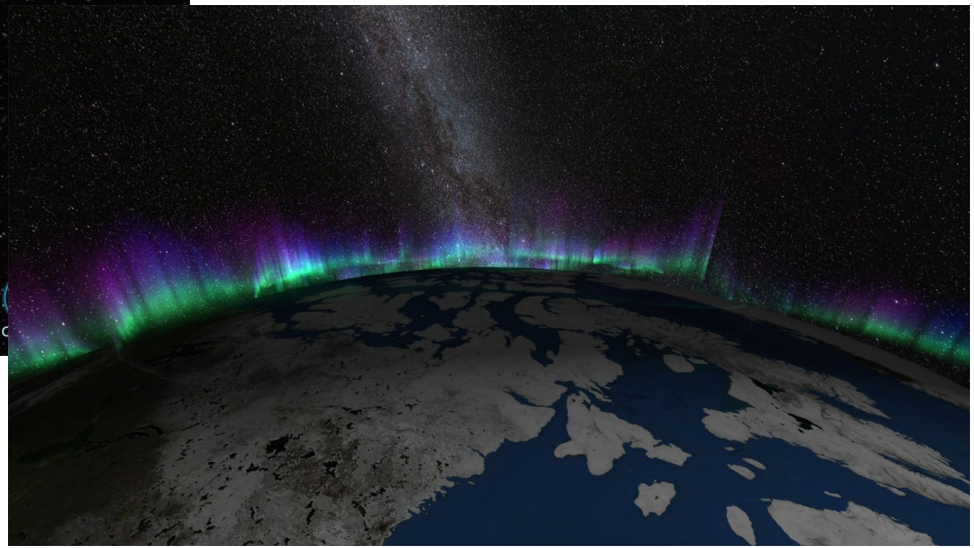
- First Person Experiences: Moon Walk, Underwater Ocean Adventure, Tornado Safety
- Space & Atmosphere: Real-time Satellite Positions, Saturn's Rings, Aurora
- 3-D Models: Animal Migrations, Real-time Satellite Models, Space Junk

Beyond the Surface of the Sphere



The International Space Station in its correct orbit and it's projected location for a few days into the future.

The aurora from space

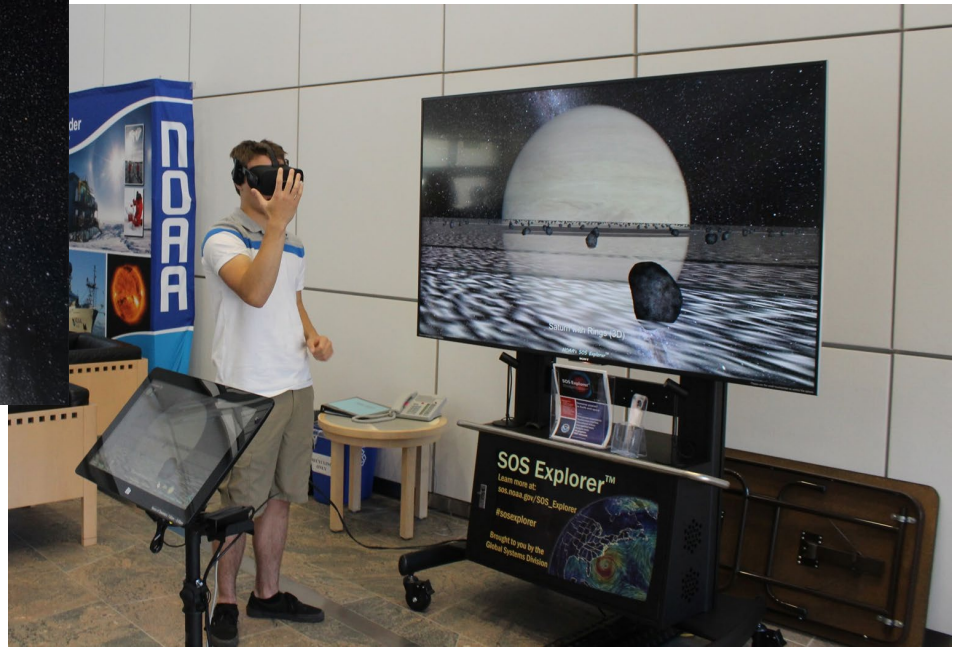


Experiences

Before and after pictures of a tornado's destruction

Virtual Reality

Searching for datasets via a “Minority Report” style hand interface



SOS Explorer Mobile

- NOAA datasets and pre-built tours
- iOS and Android Devices
- Small application size - Netflix meets SOSx
- Prototype available today
- FREE!

Questions??

Content Creation Question

1. Have you created new datasets OR custom playlists with elements like picture-in-pictures (PIPs), videos, text, layers, etc? Circle the answer.

yes often yes sometimes yes once no never

2. Why or why not? Be specific please.

3. What do you need in order to do more dataset and/or playlist creation? Feel free to make a list if you have more than one thing.

4. What tool(s) do you make your datasets and playlist with? Please circle ALL that apply.

Visual Playlist Editor SOS Website iPad Remote Text file by hand