Data Catalog Overhaul

We are retiring/archiving many datasets soon.
This means, If you see a dataset that says "(archived date)":

- We plan to remove it from the website and the FTP
- We do not remove datasets from your local SOS
- If you have to do a fresh full install of SOS, you may lose it
- You may want to back it up
- We have a copy and can always send it to you again

To see the list
To check - Go to https://sos.noaa.gov/catalog/datasets/
TYPE: " Archived "

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SOS Version 6.0.0

Support and QA

Why Upgrade?

- Ubuntu 18 (previous latest version) is **End of Life**.
  - Maintenance and Security updates will no longer be provided
- While we haven't implemented any new features to the SOS software for this release, advantages to upgrading to the latest LTS version of Ubuntu include:
  - 4 years worth of Ubuntu feature additions and bug fixes since version 18.04
  - Receiving security patches and application updates from Ubuntu through April 2027
  - Getting new SOS software updates going forward

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The Upgrade Process

- Follow the steps linked on our release notes:
  - https://sos.noaa.gov/support/sos/release-notes/science-on-a-sphere-6-0/
- Send us an email!
  - Sos.support@noaa.gov

Final Thoughts

- Please have a member of your IT team available on the day of the installation in case of issues.
- The process will take about 1-2 hours per machine, if everything goes smoothly.
- Please have your backup hard drive available during the installation.

Questions?

Science On a Sphere

WHAT IS SOS? SOS EXPLORER EDUCATION CATALOGS SUPPORT

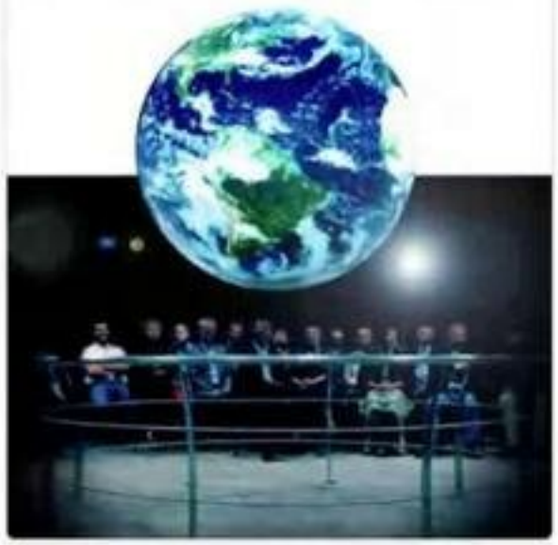
Science On a Sphere® is a room-sized, global display system that projects visualizations of planetary data onto a six foot diameter sphere to help

In this section you'll find technical documentation related to using and maintaining the products belonging to the Science On a Sphere® (SOS) product suite, SOS Explorer® (SOSx), and SOSx Mobile (Mobile).

Updates and new releases are available periodically, so be sure to check here and keep your system up to date! For any questions, or to request help upgrading your system, email us.

Science On a Sphere®

Manuals • How To • Video Tutorials • Release Notes



SOS Explorer®

Manuals • Video Tutorials • Release Notes

Search

Requirements
Release Summary
How to Get the Latest Update
Compatibility

Software Manual.

Release Dates

Version 6.0.0
May 31, 2023

Requirements

- **Wibu CodeMeter security USB dongle**: Starting with SOS version 5.3, we increased our software security measures by requiring each site to have a licensed Wibu CodeMeter security USB dongle before you can do a software upgrade. If your site is running SOS version 5.2.x or below, you will need to request a WIBu dongle using the online SOS Version 5.3.0+ Upgrade Request form. Once SOS Support has received your request, a dongle will be mailed to your site. If you run into any problems using the request form, you can email sos.support@noaa.gov. Follow the version instructions to check your SOS version.

Release Summary

Upgraded the SOS software to work on the latest long-term supported (LTS) version of the Ubuntu operating system, version 22.04. This includes the main SOS software, the Visual Playlist Editor (see release notes), and a few other supporting applications that reside on the SOS computer.

Each SOS site has two computers (a primary and a backup) that run the main SOS application and other supporting applications. Each of these computers are installed with the Ubuntu operating system. Most SOS sites are on Ubuntu 18.04 LTS, and a few sites are on even earlier versions. In this release, we have updated the SOS software to run on the Ubuntu 22.04 LTS operating system.

While we haven't implemented any new features to the SOS software for this release, advantages to upgrading to the latest LTS version of Ubuntu include:

- 4 years worth of Ubuntu feature additions and bug fixes since version 18.04
- Receiving security patches and application updates from Ubuntu through April 2027
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How to Get the Latest Update

Because this SOS release includes not only an update of the SOS software but also an upgrade of the Ubuntu operating system, it is a lengthier process that will require sites to do some pre-update tasks as well set up a time slot with the SOS Tech Support team to perform the rest of the update.

Assuming you have completed the pre-update tasks outlined below in steps #1 through #3, the estimated time to set aside with SOS Tech Support for one computer update is two hours. During this time, if you are not comfortable with navigating the SOS system hardware and the Linux operating system, please make sure you have an IT support technician available during your time slot who can assist.

Please follow the steps below to start the update process. If your site has two SOS computers, start with your backup SOS computer first and only once that is completed and working, you can start the update on the primary SOS computer:

1. Write down the current version of SOS that you are running. Follow the version instructions to check your SOS version.
2. **IMPORTANT**: Follow the SOS Backups Guide to backup all SOS data that is specific to your site. Because the update involves doing a fresh install of the operating system, if you do not make a backup of this data, you will lose all of your custom SOS site measurements, alignment files, custom content, etc.
3. Create a USB stick with Ubuntu 22.04 on it and install the Ubuntu 22.04 on your SOS computer. Follow the SOS Ubuntu Installation Guide to do this step. If you run into any issues after trying this, please just proceed to Step 4.
4. Email sos.support@noaa.gov to set up an update time slot.
    - In the email subject line, please write "SOS Ubuntu 22.04 Upgrade Request".
    - In the email body, include the version of SOS that you wrote down in Step 1.
5. Go to the TeamViewer website and download TeamViewer. This application allows us to remotely log in to your SOS computer.
6. On the day of your time slot, start up TeamViewer and write down the ID and Password shown on the interface, and email the ID and Password to sos.support@noaa.gov.
7. We will then install the SOS software, copy over your backup data and make sure SOS is in working order.

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Compatibility

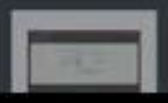
- The iPad SOS Remote App (version 5.7.0) and the SOS Kiosk (version 5.5.0) do not need to be updated.
- Some SOS sites running SOS off of significantly old hardware or graphics cards might not be able to update to Ubuntu 22.04 due to graphics drivers issues. If this is the case, we do have SOS running on Ubuntu 20.04 and we can upgrade your computer to Ubuntu 20.04 and SOS 5.6. Ubuntu 20.04 LTS is officially supported by Ubuntu until April 2025. Alternatively, the site may elect to buy new hardware at this point and we can provide recommendations.

1

2

3

4



SOS Ubuntu Installation Guide

Updated May 31st, 2023

Step 1: Create a Ubuntu 22.04 Installer

Download the Ubuntu .iso file

The currently supported operating system is Ubuntu 22.04 Desktop and can be obtained here: http://releases.ubuntu.com/jammy/

It is necessary to download the ".iso" file that is the 64-bit version from the link labeled "64-bit PC (AMD64) desktop image" and NOT the 32-bit version. Ubuntu installation media are known "liveUSB's".

Create a Live USB Stick

On Ubuntu: http://www.ubuntu.com/download/desktop/create-a-usb-stick-on-ubuntu
On Windows: http://www.ubuntu.com/download/desktop/create-a-usb-stick-on-windows
On Mac: http://www.ubuntu.com/download/desktop/create-a-usb-stick-on-mac-osx

Step 2: Install Ubuntu on the SOS Computer

Ubuntu 22.04 Installation

Insert the Ubuntu 22.04 installation disk (a liveUSB) and restart the computer. You may need to press F12 to get the Boot Menu to appear and select to boot from the Flash Drive. The installation disk will automatically be started and you will see an Ubuntu loading screen for a few minutes. You will then see the below screens. For more information on what each screen means, you can look here: https://help.ubuntu.com/community/GraphicalInstall

1. Select "Install Ubuntu"

- Receiving security patches and application updates from Ubuntu through April 2027
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Loaded datasets

Carbon Tracker: Fixed Scale CO2 - 2000 - 2015

2007 . 09 . 09 23 : 59 GMT

Playback Speed (FPS) 10

Analyze - Probe

Press on world to see data values

Carbon Tracker: Fixed Scale CO2 - 2000 - 2015

381.9 ppm

CO2 Monitoring

CO2 Interactive Plot

Carbon Dioxide (parts per million)

Carbon Tracker: Fixed Scale

CO2 - 2000 - 2015

381.9 ppm

Loaded datasets

Carbon Tracker: Fixed Scale CO2 - 2000 - 2015

2010.07.10 23:59 GMT

Playback Speed (FPS) 10

Analyze - Probe

Press on world to see data values

Carbon Tracker: Fixed Scale CO2 - 2000 - 2015

382.0 ppm

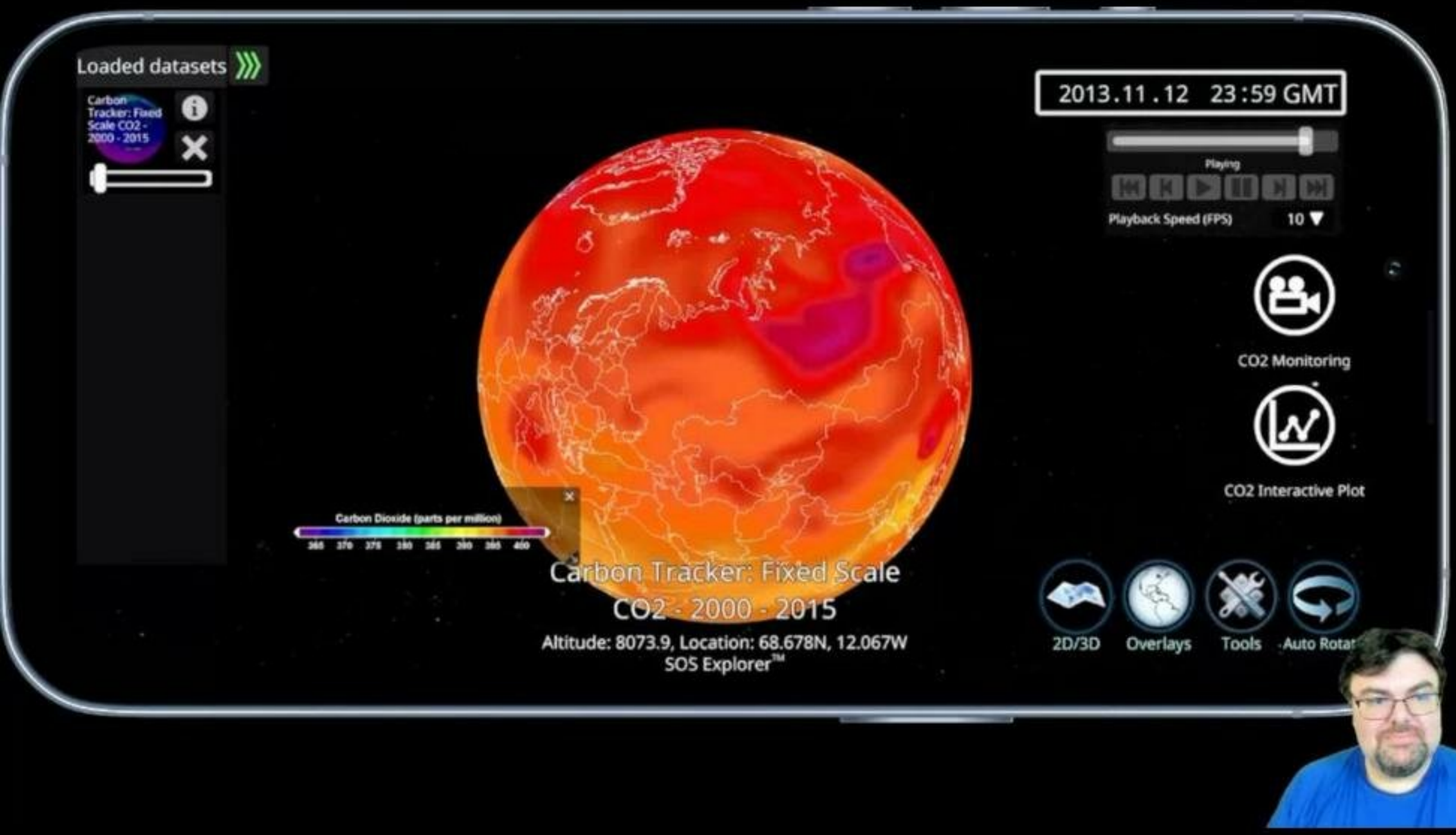
382.0 ppm

Carbon Dioxide (parts per million)

Carbon Tracker: Fixed Scale

CO2 - 2000 - 2015

2D/3D Overlays Tools


Loaded datasets
Carbon Tracker: Fixed Scale CO2 - 2000 - 2015
2013.11.12 23:59 GMT
Playing
Playback Speed (FPS) 10
CO2 Monitoring
CO2 Interactive Plot
Carbon Dioxide (parts per million)
Carbon Tracker: Fixed Scale
CO2 - 2000 - 2015
Altitude: 8073.9, Location: 68.678N, 12.067W
SOS Explorer™
2D/3D
Overlays
Tools
Auto Rotat