

Presentation Manual



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Science On a Sphere comes with a large collection of datasets that are grouped by category. Sites typically find that the most convenient way to present the datasets is by creating presentation playlists. A **presentation playlist** is an ordered list of datasets that are generally related to one another in some way. For more information on datasets, see the [Dataset Manual](#).

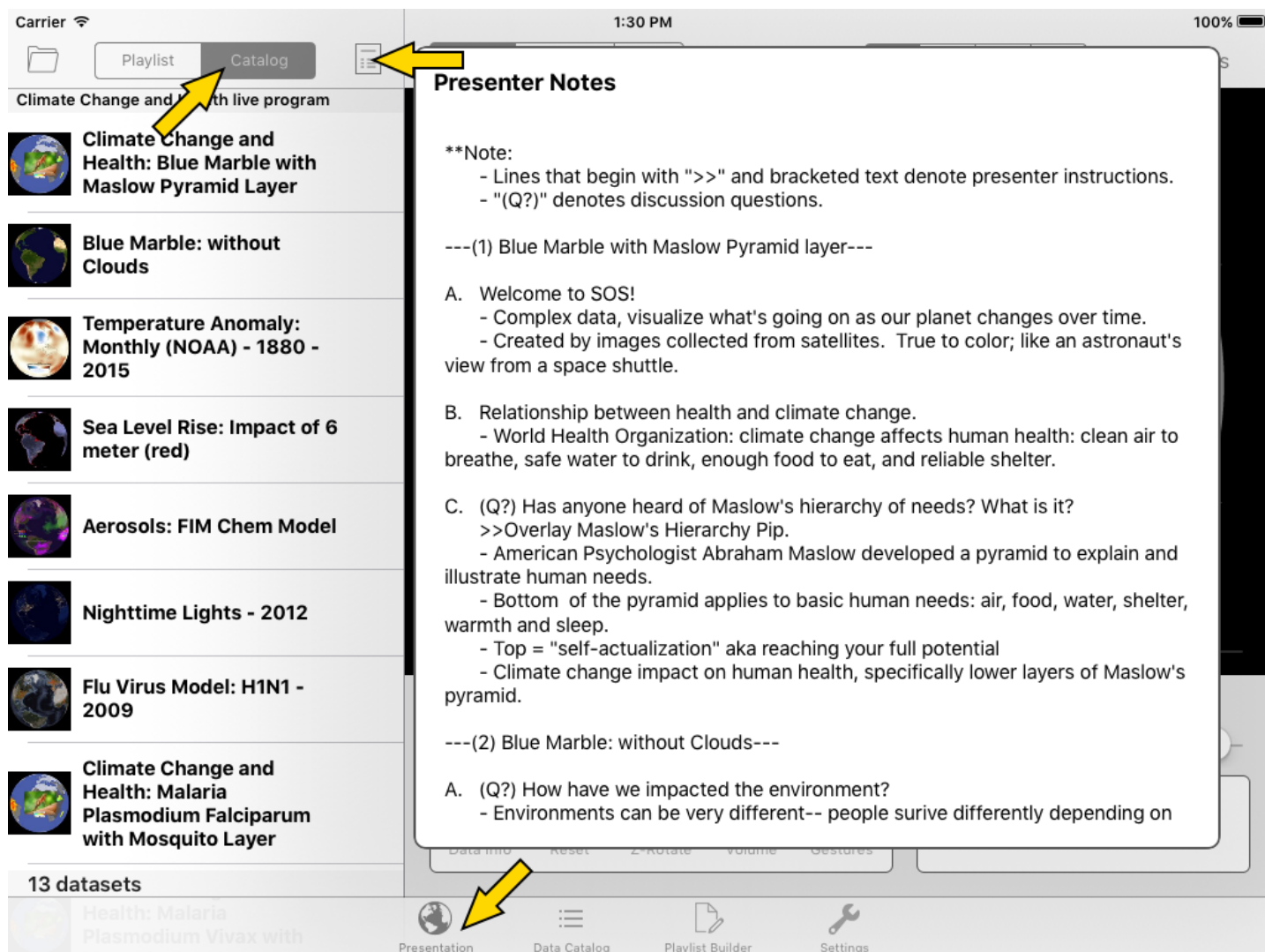
It is often helpful to think of a SOS playlist as a music playlist in iTunes. Playlists can be saved and repeatedly used. Different playlists can be made for different presentations or shows. Also, docents can have their own playlists. All playlist file names have to end with the extension .sos and are stored in either `/home/sos/sosrc` or `/home/sosdemo/sosrc` depending on the user.

Live Programs

If you are just getting started and want to use presentations created by others or if you're looking to mix up your usual presentation, Live Programs are a great place to look. Live programs are SOS presentations that have been created by users of SOS, including scientists, educators, museum staff and student interns. They are carefully crafted presentations that use SOS datasets to tell a story and teach audiences about a specific topic such as ocean currents or extreme weather events. Included in each Live Program is an SOS presentation playlist (i.e. a collection of datasets) and a script with notes for presenters and sometimes supplementary educational materials (i.e. clicker questions and classroom lesson plans). A description of each Live Program can be found on the [SOS Data Catalog Live Programs](#) page along with a copy of the script for presenters.

The Live Program presentation playlists can be easily accessed through the [iPad SOS Remote App](#). As indicated in the screenshots below, simply go to the Data Catalog tab and select the Live Programs button at the top of the page. Then, select a Major Category and a Live Program to show the datasets in that Live Program. Many of the Live Programs also have Presenter Notes associated with them. To view these on the iPad, simply go to the Presentation tab, make sure the Catalog button at the top of the page is selected, and then press the Presenter Notes button, also located at the top of the page.

The screenshot shows the iPad SOS Remote App interface. At the top, the status bar displays 'Carrier', signal strength, '1:30 PM', and '100%' battery. The app header includes 'Data Catalog' with 'A-Z' and 'Date' filters, a 'DATASETS' button, a highlighted 'LIVE PROGRAMS' button (indicated by a yellow arrow), and a 'CLEAR' button. Below the header, the 'Climate Change and Health live program' is selected. A search bar and filter options (MOVIES, REALTIME, YEAR, THEMES, FILTERS) are visible. The 'MAJOR CATEGORIES' list includes Air (25), Extras (2), Land (4), People (8), Site-Custom (0), Snow and Ice (1), Space (8), and Water (33). The 'LIVE PROGRAMS' list includes 'Climate Change and Health' (highlighted), 'Deciphering Uncertainty in a Changing Climate', 'Energy On a Sphere', 'Feats and Footprints: Our Relationship with Earth', 'Milestones in Meteorology', 'Mitigation or Adaptation: You Decide', 'Seeking Common Ground on Climate', and 'Solar Energy'. The bottom navigation bar shows 'Presentation', 'Data Catalog' (highlighted with a yellow arrow), 'Playlist Builder', and 'Settings'. The left sidebar lists various datasets, including 'Climate Change and Health: Blue Marble with Maslow Pyramid Layer', 'Blue Marble: without Clouds', 'Temperature Anomaly: Monthly (NOAA) - 1880 - 2015', 'Sea Level Rise: Impact of 6 meter (red)', 'Aerosols: FIM Chem Model', 'Nighttime Lights - 2012', 'Flu Virus Model: H1N1 - 2009', and 'Climate Change and Health: Malaria Plasmodium Falciparum with Mosquito Layer'. A '13 datasets' summary is shown at the bottom of the list.



If you've created a SOS presentation that you would like to share with other SOS users as a Live Program through the SOS Data Catalog, please email sos.gsd@noaa.gov.

Check out the available [Live Programs!](#)

Making a Presentation Playlist

If you would like to create your own presentation playlist, there are four ways to do so:

1. Use the [Visual Playlist Editor](#) on the SOS computer
2. Use the Playlist Builder in the [SOS Remote App](#)
3. Use the Playlist Builder on the SOS website
4. Write it out by hand

Each of these options has different pros and cons, which are discussed below.

Visual Playlist Editor

The Visual Playlist Editor (VPLE) is an incredibly powerful tool for SOS users. It can be used to create both datasets and presentation playlists. In addition to creating presentation playlists and adding presenter notes, the VPLE also allows you to modify the datasets in your presentation playlists by extending them or overriding preset attributes. This is something that you are not able to do with either of the Playlist Builders. The downside of the VPLE is that it must be run on the SOS computer. You can get to it from the VPLE icon on the SOS computer desktop.

Because the VPLE is such a robust and powerful tool, a separate Visual Playlist Editor Manual has been written that you can find [here](#).

Playlist Builder in the SOS Remote App

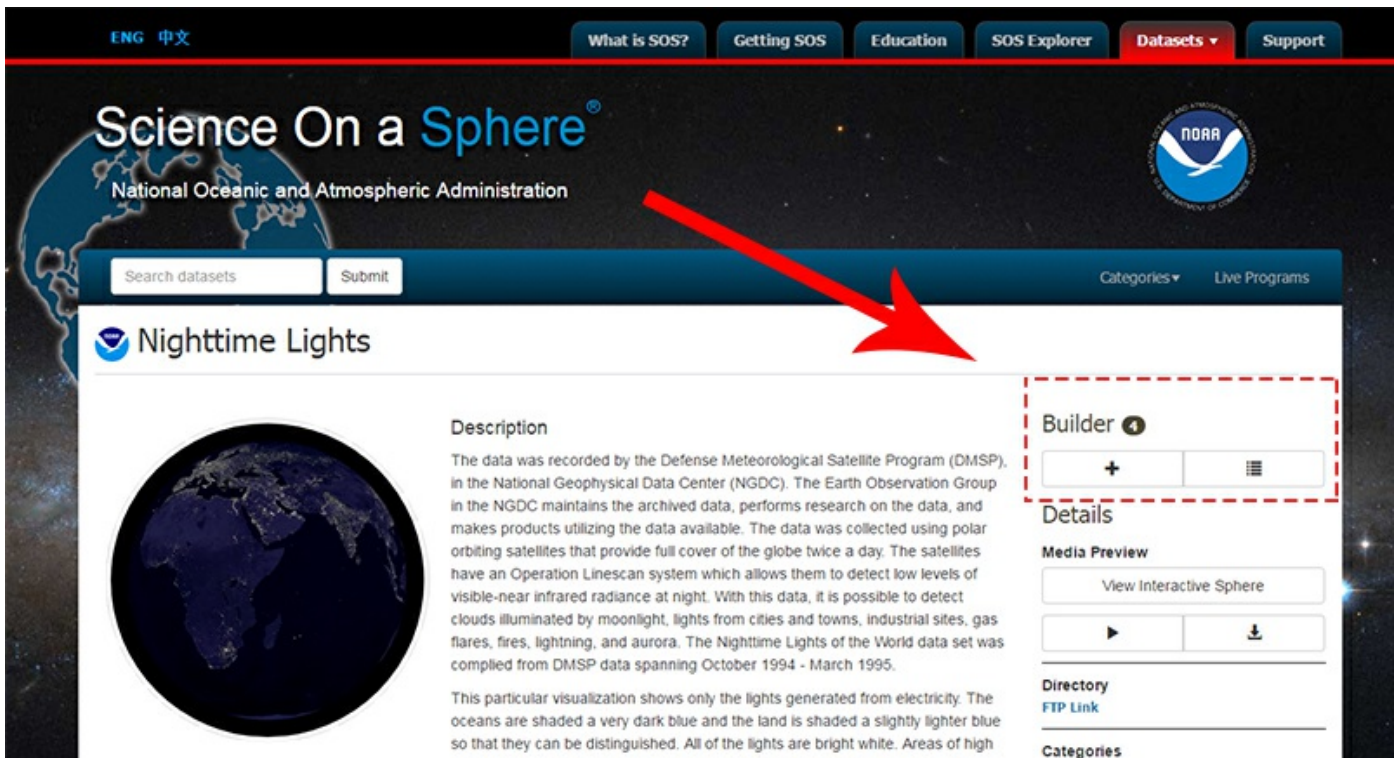
The Playlist Builder in the SOS Remote App is a convenient way to create a presentation playlist. It allows you to add datasets to a playlist and add presenter notes, but you're not able to modify the datasets in the presentation. A benefit of using the Playlist Builder

in the SOS Remote App is that it's easy to load datasets on the sphere while you're building your playlist, giving you a good preview of what you're including in your presentation. If a site has multiple iPads connected to the SOS computer, it's possible for one person to be creating a presentation playlist with the Playlist Builder while another gives a presentation at the same time. You can read more about the Playlist Builder and how to use it [here](#).

Playlist Builder on the SOS Website

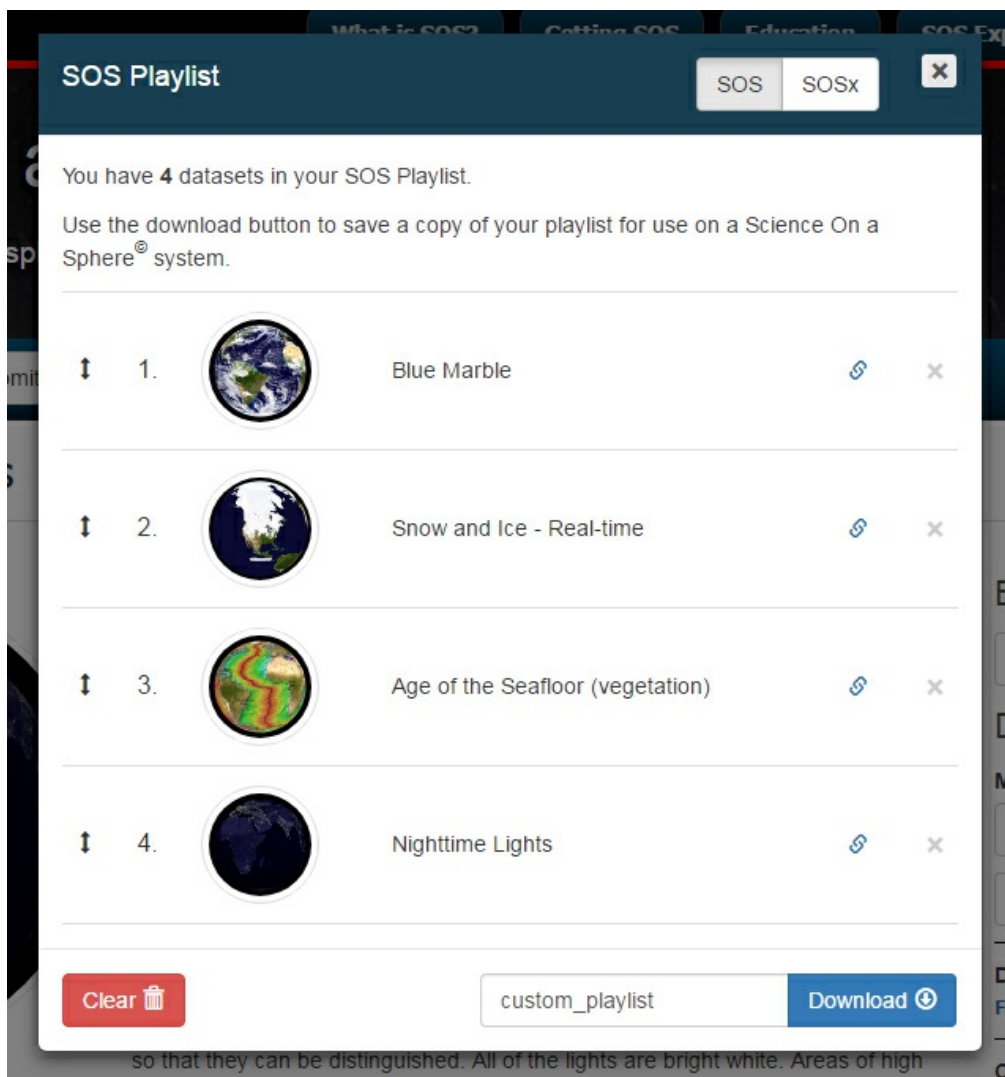
There is also a simplified Playlist Builder available on the SOS website in the Data Catalog that allows you to put datasets into a playlist. The benefit of this Playlist Builder is that it can be used on any computer that has an internet connection. Because it is a simplified version, you cannot add presenter notes and you cannot modify the datasets.

To get to the Playlist Builder on the SOS website, go to the [Data Catalog](#) and find a dataset that you're interested in adding to your presentation playlist. On the description page for the dataset, you will see a section in the right-hand column titled Builder, shown in the picture below.



The screenshot shows the Science On a Sphere website interface. At the top, there are navigation links for 'What is SOS?', 'Getting SOS', 'Education', 'SOS Explorer', 'Datasets', and 'Support'. The main header includes the 'Science On a Sphere' logo and the NOAA logo. Below the header is a search bar with 'Search datasets' and 'Submit' buttons, and a 'Categories' dropdown menu. The main content area displays the 'Nighttime Lights' dataset page. On the left is a circular image of Earth at night. To the right of the image is a 'Description' section. On the far right, there is a 'Builder' section enclosed in a red dashed box. This section contains a plus sign (+) button and a list icon button. Below the Builder section is a 'Details' section with a 'Media Preview' area containing a 'View Interactive Sphere' button and a download icon. At the bottom of the Builder section, there are links for 'Directory' and 'FTP Link', and a 'Categories' section.

Clicking on the plus (+) button will add the current dataset to your presentation playlist and you will see the number in the circle increment by one. This number represents the total number of datasets in your presentation playlist. To see what you've added and edit and download the presentation playlist, click the button with the lines on it. This will bring up a pop up window, as pictured below.



All the datasets you added will be shown in the pop up window in the order you added them. If you clicked the plus button multiple times for a single dataset then you will see that dataset was added multiple times. To remove any unwanted datasets, click the "X" to the far right in each dataset row. The link button will open the description page for the selected dataset. To reorder the datasets, simply click and hold anywhere in the dataset row and then drag it to where you want it and release.

The "X" button in the upper right hand corner will close the pop up window, but it will not clear out your datasets. This allows you to add more datasets to your presentation playlist without losing your work. If you want to clear your presentation playlist, you have to press the "Clear" button in the lower left hand corner.

For all of this, make sure that SOS and not SOSx is selected from the toggle in the upper right hand corner. The text at the top of the window will tell you the total number of datasets in your SOS Playlist. If it says anything about SOSx Data Selection, then you're in the wrong tab.

Once you are happy with your presentation playlist, put a name in the input box next to the Download button in the lower right hand corner. The name must have NO SPACES and NO SPECIAL CHARACTERS! You can download the file to any location you want on your computer. In order to use the presentation playlist that you downloaded, it will need to be put in the sosrc directory in the home folder of the SOS computer. You can get it on the SOS computer with a thumbdrive, or by emailing it to yourself, or by using cloud storage, or however you prefer. The important part is that it ends up in `/home/sos/sosrc` or `/home/sosdemo/sosrc`.

Writing a Playlist by Hand

If you prefer to do things by hand and don't want to use one of the three options above, a presentation playlist can always be written by hand in a simple text editor. To do this, you must know the location of all the datasets that you want to use and be familiar with all the [playlist attributes](#). You can also choose to use one of the three options above and then modify the resulting presentation playlist by hand. This is only recommended if you are comfortable with the playlist format and datasets.

The basic format of a playlist is a file that points to all of the playlist.sos files for the datasets that you want to show. Read more about playlist.sos files [here](#). For example, here is a playlist that includes three datasets:

```
include = /shared/sos/media/oceans/indian_tsunami/playlist.sos
include = /shared/sos/media/astronomy/xray_sun/playlist.sos
include = /shared/sos/media/models/ipcc_temp/gfdl/playlist.sos
```

Each “include” is used to point to a different dataset. This example playlist includes the Indian Ocean Tsunami, the X-Ray Sun and the GFDL Temperature Change Model. All of the information about the labels, color bars and timing is saved in each of the separate playlist.sos files. The nice thing about this format is that everyone's playlists will be using the same versions of the data. However, if you do want to modify some of the options for a dataset, within only your personal playlist, you can do that by either using the VPLE or by modifying the file by hand. The modifications you make apply only in your presentation playlist and don't impact other's. List any changes you want below each include. For example, if you want a faster rotation rate on the sun and a longer lastdwell for the tsunami in your playlist, you can change it like this:

```
include = /shared/sos/media/oceans/indian_tsunami/playlist.sos
lastdwell = 7000

include = /shared/sos/media/astronomy/xray_sun/playlist.sos
fps = 50

include = /shared/sos/media/models/ipcc_temp/gfdl/playlist.sos
```

Presenter Notes may be added to any presentation playlist file. Presenter notes are accessed from the iPad's [SOS Remote app's](#) Presentation tab, and can be edited either from the app's Playlist Builder tab, the VPLE, or manually using a text editor. If editing a playlist file manually, each line that is to be a presenter note should begin with “#>”. Presenter note lines should go at the very bottom of the presentation playlist. Following is an example.

```
include = /shared/sos/media/land/blue_marble/blue_marble/playlist.sos
include = /shared/sos/media/astronomy/mars/original/playlist.sos

#> Features to note about blue marble:
#> - Vastness of the Sahara Desert
#> - Shading done in true color: gives Earth's appearance from space
#>
#> Features to note about mars:
#> - Olympus Mons: highest point in the solar system at 88,500 feet
```

One thing to note is that if you add presenter notes to a presentation playlist manually and then open them in the iPad app's Playlist Builder and make edits, any normal comment lines (lines that begin with a “#” symbol) that were originally in the playlist will get deleted.

Presentation Tools

There are many tools available for SOS that can help presenters in their presentations, described below.

Presenter Notes

To provide some assistance for presenters, Presenter Notes can be assessed through a simple button press on the iPad in the presentation tab, as described [here](#). Presenter Notes are associated with presentation playlists rather than individual datasets. There are several ways to add Presenter Notes to your playlist:

1. Use the Playlist Builder on the iPad as described [here](#).
2. Use the Visual Playlist Editor in the Summary View window of the [Presentation Mode](#).
3. Manually by hand as described in the section above.

SOS Remote App

The [SOS Remote App](#) allows presenters to load datasets, orient the sphere, and control the datasets from an iPad. This is the main way presenters will be interacting with SOS. The SOS Remote App offers many features for enhancing a live presentation. These include annotation, zooming, layering, and splitting. The [annotation](#) and [zooming](#) tools can be accessed through the Presentation icon. The [layering interface](#) can be accessed through the numbered circle next to loaded dataset. To become familiar with the app, check out the [SOS Remote Manual](#).

Autorun

The simplest presentation mode is Autorun. In the Autorun mode, the system displays each dataset for a default three minutes. This is a good option when a docent is not available to lead a presentation. If this format is used, it's nice to have supporting audio or text so that the audience knows what they are looking at. There are audio tracks available with a limited number of datasets. Many sites give live presentations with the sphere throughout the day, and in between presentations leave the sphere on Autorun. Autorun can be turned on in the Settings tab of the SOS Remote App or in the SOS Stream GUI.

Supplemental Display

Side wall projectors or flat screen televisions can be linked to the Science On a Sphere® software to sync a PowerPoint presentation with a SOS demo. This can be used to display supporting information for each dataset, which can be particularly useful in Autorun mode. You can find more information about the PowerPoint syncing software [here](#).

Usage Statistics

Usage statistics are collected from all participating sites that show how often and how long datasets are displayed across the SOS network. You can access the the usage statistics from the Datasets dropdown menus on the SOS website or by visiting [here](#). These statistics can aid in finding out what the most popular datasets are across the network.

Docent Best Practices

Educators at NOAA along with input from SOS sites have put together the [Docent Best Practices](#) for SOS based on years of experience with SOS. All SOS presenters are encouraged to read it. Feedback is welcome!