

# Overview and Basic System Use

## 1. Turning the system on/off

- Turning the System On
  - The system turns on like any other computer, simply press the power button
  - Turn on all of the projectors using the provided remote control
  - Log into the desired user account
    - The system will automatically log into a preset account
    - Make sure to always log out and not use the switch user option
- Turning the System Off – there are several methods:
  - Press the power button on the computer (*recommended method*)
  - Click Actions from the upper panel and select Log out. This will give you the choices of Log out, Shut down, or Restart
  - Type "sudo shutdown -h now" to shutdown or "sudo reboot" to reboot in a terminal
  - **As a last resort only**, you can press and hold the power button for 5 seconds to cut the power

## 2. Using the SOS software

- Starting the SOS Software – SOS Stream GUI
  - Once the control computer is up, find the SOS Start icon on the desktop
  - Double-clicking this will start SOS Stream GUI
  - A generic playlist called normal-demo.sos is automatically loaded when the program is started
- Changing Playlists
  - To change playlists click Open Playlist... under the File menu
  - All playlists are stored in the /home/sos/sosrc directory (/home/sosdemo/sosrc for some sites)
  - If a playlist is edited while its open, you must refresh the playlist by clicking Reload current playlist
- Using a Playlist
  - Once a playlist is opened in SOS Stream GUI, click on a dataset to make the system load it on the sphere
  - The current dataset is colored to indicate if it is loading, loaded or has an error
- Controls for the Keyboard and GUI
  - Many of the keyboard commands are listed under the Controls menu
  - Others commands:
    - Next dataset: down arrow
    - Previous dataset: up arrow

## 3. Using the Wii Remote

- Connecting the Wii Remote

- The remote is connected when a single light is on at the bottom of the remote
- If the remote is disconnected, or unresponsive, press any button on the remote to connect it.
- If the remote is still unresponsive, close the SOS Stream GUI and re-open it and try again
- Using a New Wii Remote
  - New remotes must be paired with the system before they will connect
  - To pair a remote, click on the globe in the tool bar at the top of the screen and then click on “Pair a Remote” from the list.
  - A window will appear to let you know the system is scanning for remotes.
  - On the new remote, press the red button on the back to connect it.
  - Remotes should only have to be paired once
- Layout of the Wii Remote
  - To view the layout of the Wii Remote, click the globe in the tool bar at the top of the screen and then select “layout” from the bottom corner of the window that opens.

#### **4. Data Organization**

- Data is in 5 Main Categories (matches the data catalog online)
  - Astronomy
  - Atmosphere
  - Land
  - Models and Simulations
  - Oceans
- There is a sixth category for “Extras”
- Each dataset is in it’s own directory with:
  - Texture file (if still image)
  - Folder with raw images
  - Data in equatorial cylindrical equidistant video (.mp4)
  - Text file labeled labels.txt
  - Text file labeled playlist.sos
  - Color bars and other supporting images
  - Media folder with thumbnails, videos, and supporting documents

#### **5. Creating playlists**

- Playlist.sos
  - playlist.sos is a text file that specifies how the dataset is shown on the sphere
  - In it you set parameters such as rotation rate, tilt, start frame, audio, labels, pip...
  - There is a fairly strict format that must be followed in the playlist.sos file
  - The playlists that are available in the SOS Stream GUI are a collection of playlist.sos files

- Playlists for Presentations
  - A playlist is an ordered list of datasets, much like an iTunes playlist is a list of songs
  - The playlists use all of the information that is stored in the individual playlist.sos files
  - The playlists can be saved and used repeatedly
  - Different playlists can be generated for different topics or different presenters
  - All playlist have to end with the extension .sos and are stored in the /home/sos/sosrc directory
- Making a Playlist
  - There are two main ways to make a playlist
    1. Manually type of the playlist
      - Can do this in any text editor
      - File needs to end with .sos
      - Must know the locations of the playlist.sos files
    2. Use the playlist editor
      - Drop and drag program
      - Has an interface, so you don't need to know locations

## 6. Giving presentations

- Auto Run Presentations
  - Auto run automatically cycles through a playlist, displaying each dataset for 180 seconds if not otherwise specified
  - This is a good option when a docent is not available
  - It is helpful to have audio or supporting slides to clarify what the audience is looking at
- Docent Led Presentations
  - Typically, docents will use the remote control to lead groups through a playlist
  - The length of a presentation can vary depending on topic and audience
  - A standard presentation at the Planet Theater at NOAA in Boulder, CO is 30 – 45 minutes and includes 10 datasets on average.
  - This format allows the audience to interact and ask questions

## 7. SOS Users Group

- The SOS Users Group works together to share ideas, ask questions, and brainstorm
- It is currently organized as a Yahoo Group, noaosos
- If members of your site would like to be added to the group, please provide your email addresses
- There is also a yearly Users Group Meeting

