

## Presentation Training: Part 1

Updated for SOS 5.0

1. Before you begin: (Blue Marble with Nightlights)
  - a. Make a playlist
    - i. Add extras at the end you may want to talk about
    - ii. Add presenter notes if you like
  - b. Familiarize yourself with the dataset library
    - i. In case you get requests, the iPad library interface can be difficult to skim through currently (Global Epidemic H1N1, Red Mars)
  - c. Consider length and theme
    - i. Make a presentation with a clear take-away message that can be finished in allotted time (providing example in Part 2)
  - d. Know your audience and content of presentation is age appropriate
    - i. Example: 2<sup>nd</sup> graders may not be ready for a talk on energy usage or climate models
  - e. Practice with the iPad remote
  - f. Know the technology and history of SOS
    - i. It was invented and is patented by NOAA
    - ii. It consists of 1 linux-based computer, 4 projectors and a 55 lb. carbon fiber sphere
    - iii. It's in over 130 museums worldwide, making a strong network of informal educators spreading scientific literacy
2. When you walk in the room:
  - a. Turn on projectors - on iPad or SOS computer
  - b. Select your playlist on iPad or GUI
  - c. Pick up the iPad and a laser pointer, set user position
  - d. Walk around the sphere to make sure all projectors are on
3. Consider where your audience will view the sphere (ETOPO1)
  - a. Ask your group to sit close together
    - i. It's easiest to view one hemisphere (1/2 of Earth) at once
  - b. Stand in between projectors
    - i. If you stand right in front you may cause a shadow
  - c. Clearest image is directly in front of projector
    - i. If you have a very small group you may be able to position them for best image
  - d. **Slowly** rotate, tilt and replay video sections as necessary
    - i. If you group is large, especially, make sure everyone sees the same
  - e. Consider using the image splitter for single image datasets with a large crowd
4. Be careful of assumptions and language
  - a. Use a laser pointer to point to geography and phenomena
  - b. Use Overlays to help with geography and context (Overlay: Country borders, Cities, Lat/Lon, Railroads, Roads)
  - c. Explain colorbars and legends before moving on to describe the dataset

- d. Explicitly distinguish between observations : 1<sup>st</sup>: ground-based (**Shark Migration, Floods Events**) or satellite data (**Mars: Mars Orbiter Laser Altimeter**) or both (**Hurricane Isaac Radar over IR**), and 2<sup>nd</sup>: models (**Aurora by SWPC**)
  - e. Define scientific terms
  - f. Try to avoid using acronyms
5. Know your audience and their level of understanding
- a. Assess background knowledge by asking clever questions (**Hurricane Sandy – SST Anomaly**)
    - i. What could you say about the Gulf Stream before and during Hurricane Sandy? Can you take it further adding more descriptors to your explanation?
      - 1. This will help you assess whether they know where the Gulf Stream is and whether they can read and understand a color bar and an anomaly map.
6. Know and utilize current events on real-time datasets
- a. Recent earthquakes and hurricanes -within a month- are easily shown and a big hit (**Real-Time Earthquakes**)
7. Use good education practices
- a. Build on background knowledge
    - i. Use local geographical and age-appropriate references
  - b. Engage the audience as much as possible by establishing dialogue and asking LOTS of questions
  - c. Use positive reinforcement by redirecting wrong answers
  - d. Practice good, long wait time for answer processing and don't allow the same people to answer every question
8. Feel free to promote the SOS for personal computers and schools - SOS Explorer - allowing your visitors to take the experience away with them!  
[sos.noaa.gov/SOS\\_Explorer](http://sos.noaa.gov/SOS_Explorer)

## Part 2 – Live Program Example

We will provide a presentation that has a theme, with a take-home message and demonstrates good practices.