



# Science On A Sphere System Capabilities

## New Feature Overview

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# Quick Overview

- Picture in Picture Enhancements
- Simple Layering Capability
- Data Reorganization
- New Rotation Options
- Speed Enhancement For MPEG4 Playback
- New and Updated Scripts
- New Play List Editor
- Audio Control
- Redhat 5.0 Support
- Various Enhancements
- Bug fixes



# Picture In Picture

- Full Control
  - Location, size, shape, timing, transparency
- Integrated With Automation Interface
- Basic Movie Playing Support
  - The PIP Can Be A Movie
  - The PIP Can Contain Audio



# Data Reorganization

- Data Organized Around Categories
  - Oceans, Atmosphere, Astronomy, Land, Models, Extras
- Play List Entries Stored With Data
- Use "Include" Option For User Play Lists
- Allows For Easier Packaging and Data Management



# Simple Layering Capability

- Static Background With Image Sequence Overlay
- Saves Disk Space And Easier To Create



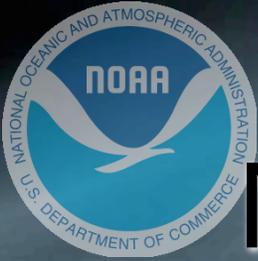
# New Rotation Option

- Basic Support For Two Types Of Rotation
  - Rotation Of Planet Around An Axis
  - Rotation Of Camera View Around The Room
  - Example: Animate Satellite Data Through Time While Rotating Planet Geography Around The Room



# MPEG4 Playback Speed

- Improved MPEG4 Playback Speed By 2x
- Full Support For 2048x1024 MP4's At 30 Frames Per Second
- Improvement Only On MPEG's
- No Increase In JPEG Animation Speed
- Encourage Move To MPEG4



# New And Updated Scripts

- Real Time Data
  - Self Updating For New Data Types
- Create MPEG4 From Image Sequence
- Automation Interface Demonstration
  - Load Play List, Navigate Around, Create PIP, Move PIP, Rotate Sphere



# Play List Editor

- New Application To Edit Play Lists
- Run's On SOS Machine
- Edit Existing Play Lists
  - Drag and Drop Between Play Lists
  - Reorder Play Lists Via Drag and Drop



# Play List Editor

The screenshot displays the 'Science on a Sphere Playlist Editor' software interface. It features several overlapping windows:

- Main Playlist Editor:** Shows a list of clips with columns for 'No.' and 'Clip'. The list includes items like 'Test SOS Promo With Some Full Sphere Data', 'NOAA In Five Minutes', and 'NOAA Logo over EC'.
- Clip Info Window:** Displays details for a selected clip, 'Topography and Bathymetry with Nighttime Lights (Hot T...'. It includes fields for 'Clip Name', 'Tags' (land, sea), and 'Sphere Display' options like 'Slide Display', 'Audio', and 'Text Captions'. A color picker is visible with a color name of '#AA5840'.
- Clip Library Window:** Shows a search bar and a list of clips with tags (air, land, sea) and titles such as 'Black Carbon (Stub)', 'Blue Marble (23 degree tilt)', and 'NOAA Logo over EC'.



# Audio Controls

- Enhanced Audio Support
- Remote Control Access For
  - Volume + / -
  - Mute
  - Pause With Resynchronization Of Video
- Audio Can Be Embedded In MPEG4



# Redhat 5.0 Support

- Installed And Tested SOS On Redhat 5
- About 20% Faster For SOS Frame rates
- Encourage Site Systems Administrators To Upgrade
  - Redhat Maintenance Includes RH4 to RH5 Update



# Various Enhancements

- More Complete Automation Interface
- Some Menu Improvements
- Beginning Support For New Data Organization
- Support For ATI Remote Wonder Plus
  - Older Remote Wonder II Still Supported, but unavailable



# Bug Fixes

- A Few Sundry Bug Fixes
- System Overall Still Very Stable



# Future Development Ideas

- Alternate Hardware - Projectors And CPU
- Web-casting
- Additional Layer Capability
- Geo-Referenced Sprites
- University of Colorado Enhancements
- More Performance Improvements
- Data Subscription Service
- Web Map Service - Internet Data Access



# The End

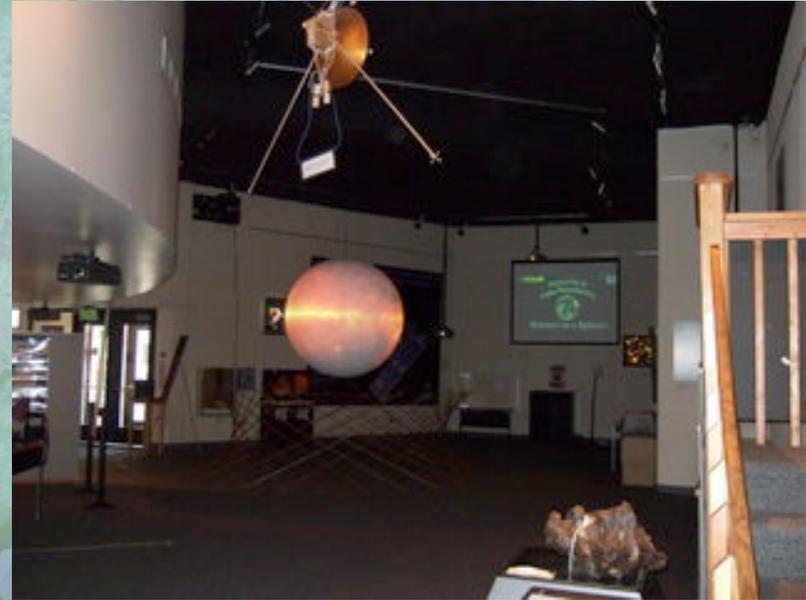
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# University of Colorado

- Fiske Sphere Room





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- Control Console





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- Tablet Interface





# University of Colorado

- Lifting System





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- Lift System Control





# University of Colorado

- Collapsible Barrier





The End

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