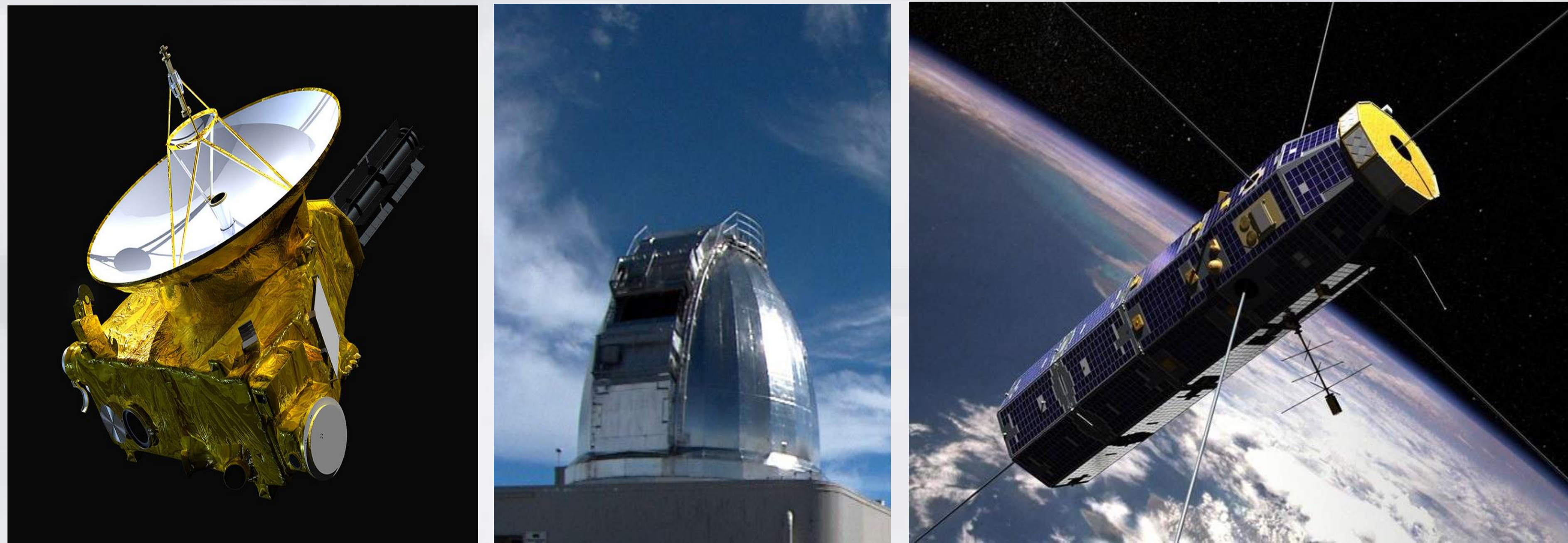


OpenSpace is a new open source interactive data visualization software designed to visualize the entire known universe and portray our ongoing efforts to investigate the cosmos

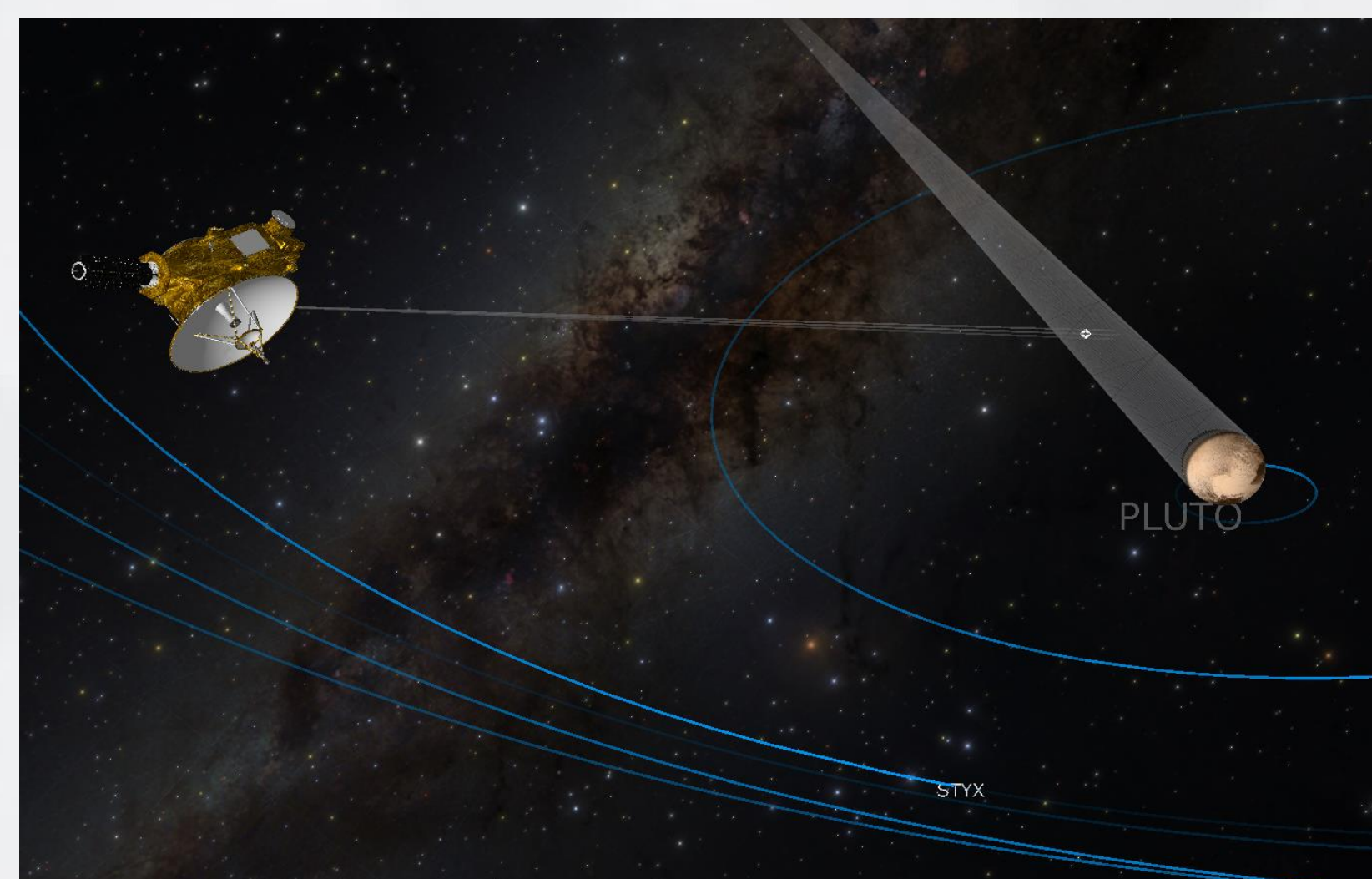
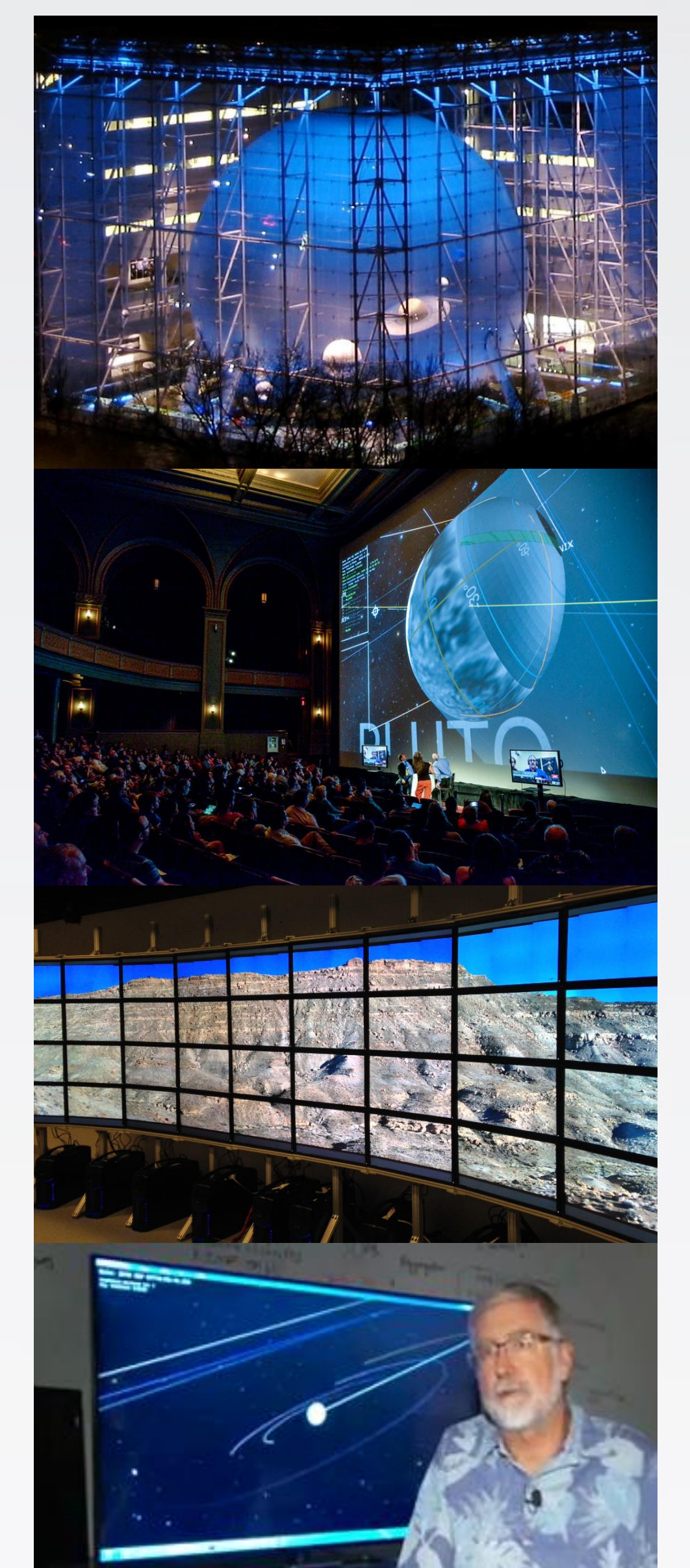
Data Sources → **SPICE Ephemeris**



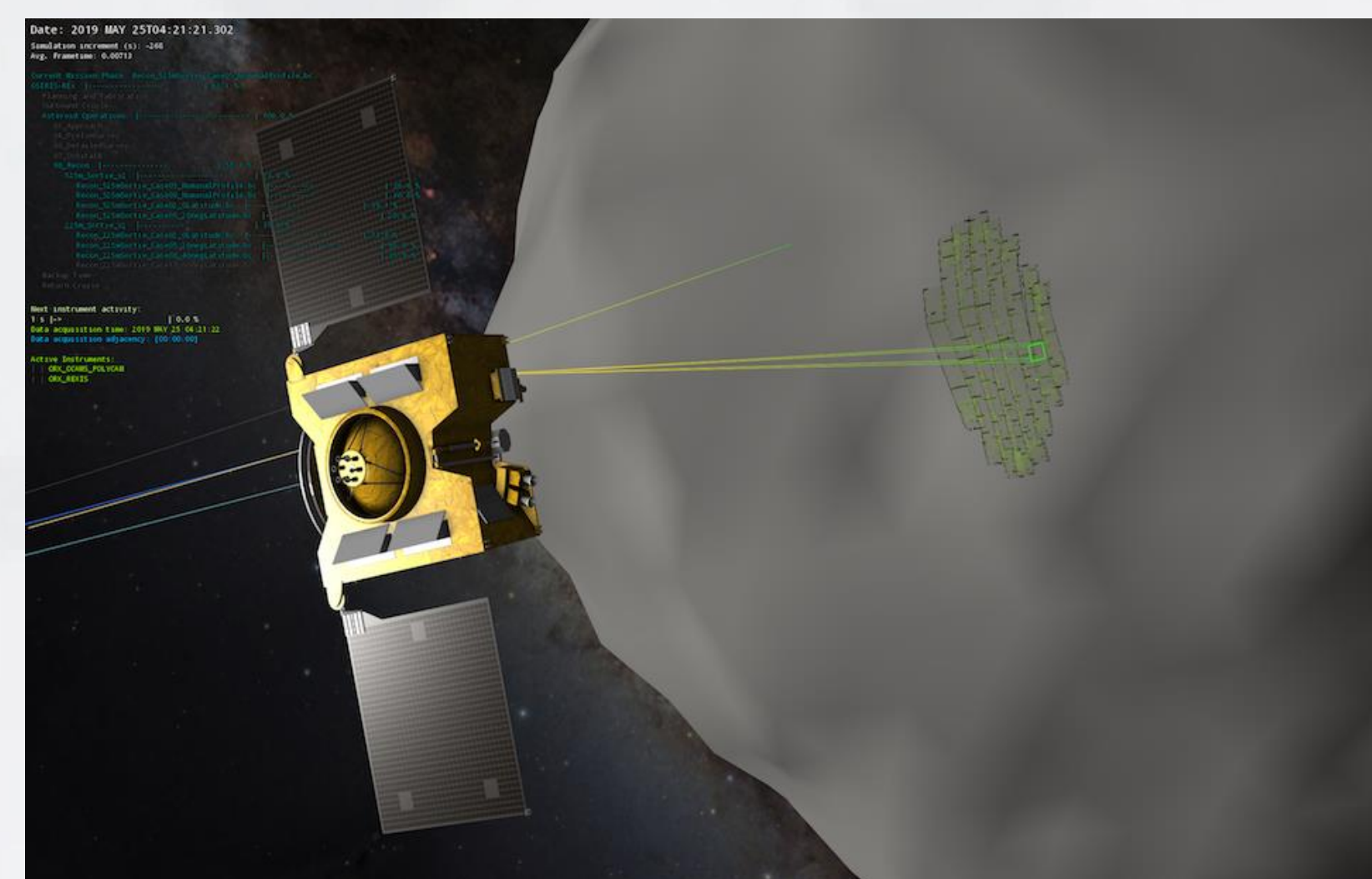
OpenSpace uses NASA SPICE computational kernels which provide the most accurate positions available for astronomical objects and are used for NASA mission planning

Scenes are created to visualize a NASA mission or specific subject of interest

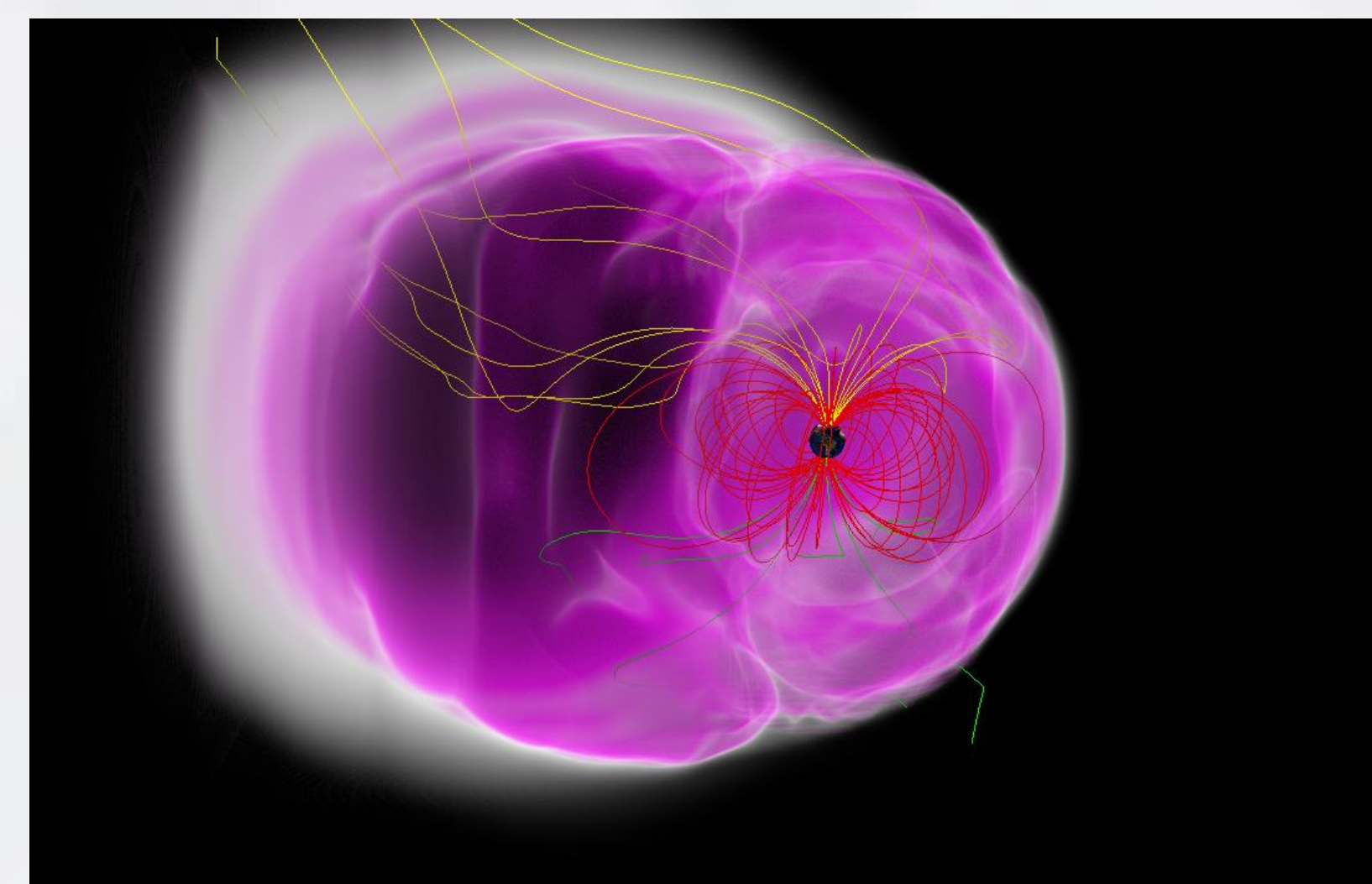
Range of Display Formats



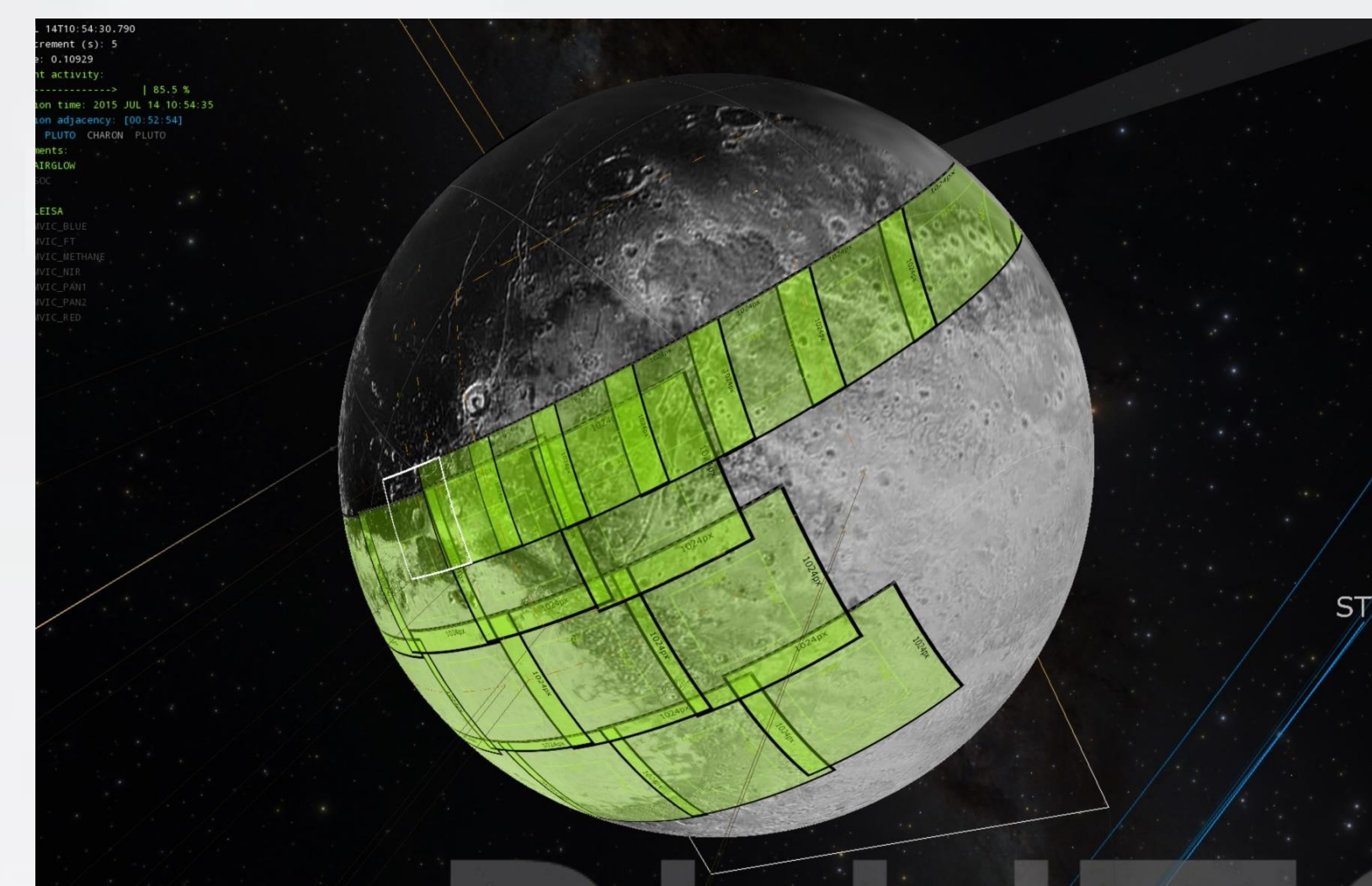
New Horizons Mission to Pluto



OSIRIS-Rex Probe Rendezvous with Asteroid 101955 Bennu



Volumetric Rendering of Solar Weather in Earth's Vicinity



Mapping of Pluto Image Acquisitions by New Horizons Probe

- Presentation may vary from an individual user on a single display to a group viewing a large screen or planetarium dome
- Linked displays across remote sites is possible to produce a synchronized, real-time presentation
- Interactive experience: NASA missions can be interactively described rather than typical planetarium movie playback
- Moving quickly through mission/events timescales is possible

Scientific Outreach

- Enable STEM Education
- Improve U.S. Scientific Literacy
- Advance National Education Goals
- Leverage Efforts through Partnerships

Visualizes a Wide Range of Content

- Digital Universe Atlas
- Visualize NASA missions
- Earth/Planetary Science
- Solar weather
- Satellites

Partnerships

- American Museum of Natural History
- Linköping University, Sweden
- New York University's (NYU) Polytechnic School of Engineering