View Abstract

CONTROL ID: 3048429

TITLE: Outer Planets Unified Search (OPUS): Status and Future Plans

ABSTRACT BODY:

Abstract (2,250 Maximum Characters): Outer Planets Unified Search (OPUS) is a comprehensive search tool provided by the PDS Ring-Moon Systems node of NASA's Planetary Data System. It currently hosts 1.5 million images and spectra from Cassini, Voyager 1 and 2, Galileo, New Horizons, and the Hubble Space Telescope and provides a sophisticated, web-based user interface that allows cross-mission and cross-instrument searches. In addition to the standard metadata provided by the instrument teams, OPUS adds searchable metadata describing surface geometry and lighting of all planets and satellites in the field of view as well as ring plane geometry and lighting where applicable. We will report on the current status of OPUS, including the recent addition of new Hubble cameras, updates to Cassini and New Horizons data, and refinements to the user interface, as well as plans for the near future, including the addition of ring occultation profiles from the Cassini VIMS, UVIS, and RSS instruments.

Category: Other

Sub-Category: None

AUTHORS (FIRST NAME, LAST NAME): Robert S. French[1], Mark R. Showalter[1], Debra J. Stopp[1], Mitch K. Gordon[1], Matt S. Tiscareno[1]

INSTITUTIONS (ALL): 1. SETI Institute, Mountain View, CA, United States.

Abstract (2,250 Maximum Characters): Outer Planets Unified Search (OPUS) is a comprehensive search tool provided by the PDS Ring-Moon Systems node of NASA's Planetary Data System. It currently hosts 1.5 million images and spectra from Cassini, Voyager 1 and 2, Galileo, New Horizons, and the Hubble Space Telescope and provides a sophisticated, web-based user interface that allows cross-mission and cross-instrument searches. In addition to the standard metadata provided by the instrument teams, OPUS adds searchable metadata describing surface geometry and lighting of all planets and satellites in the field of view as well as ring plane geometry and lighting where applicable. We will report on the current status of OPUS, including the recent addition of new Hubble cameras, updates to Cassini and New Horizons data, and refinements to the user interface, as well as plans for the near future, including the addition of ring occultation profiles from the Cassini VIMS, UVIS, and RSS instruments.

Area of Expertise 1 (RC): (none)

Area of Expertise 2 (RC): (none)

Area of Expertise 3 (RC): (none)

Contributing Teams: (none)

Disclosure: Yes, I have read and accepted this agreement

Embargo Lift Date: (none)

Embargoed? : No

Last Year's Presentation Type: Poster

Name of Institution/Mission officer: (none)

Newsworthy?: No

PhD Talk: (none)

Plain-Language Abstract Synopsis: OPUS is a sophisticated web-based search tool allowing researchers and members of the public to access NASA mission data related to the outer planets. We are reporting on recent improvements and future plans.

Presentation at DPS49: Yes

Press Officer Email Address: (none)

Press Officer Phone Number: (none)

Published to?: (none)

Session Chair Volunteer Reg: No

Special Requests: Unable to attend on Friday.

Student Status (RC): Not a Student