

IAF SPACE EXPLORATION SYMPOSIUM (A3)  
Interactive Presentations - IAF SPACE EXPLORATION SYMPOSIUM (IP)

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INTERACTIVE PLANETARY VISUALIZATION AND ANALYSIS WITH NASA'S SOLAR SYSTEM  
TREKS PORTALS

**Abstract**

NASA's Solar System Trek (<https://trek.nasa.gov>) online portals provide web-based suites of interactive visualization and analysis tools enabling mission planners, planetary scientists, students, and the general public to explore planetary surfaces as seen through the eyes of many different instruments aboard a wide range of spacecraft. The portals present a vast collection of mapped data products from past and current missions for a growing number of planetary bodies. Publicly available portals enable exploration of the surface of the Moon (<https://trek.nasa.gov/moon>), Mars (<https://trek.nasa.gov/mars>), Vesta (<https://trek.nasa.gov/vesta>), Ceres (<https://trek.nasa.gov/ceres>), Titan (<https://trek.nasa.gov/titan>), and IcyMoons (<https://trek.nasa.gov/icymoons>).

As web-based tool sets, the portals do not require users to purchase or install any software beyond current web browsers. The interactive and immersive capabilities of these portals are being used for site selection and analysis by NASA and a number of its international partners, supporting upcoming missions. They are also being used by formal and informal educators, students from elementary through university levels of study, and members of the public who are engaged in the excitement of solar system exploration. This presentation will provide an overview of the Solar System Treks and highlight many of the exciting new additions to the project implemented this past year.