Cassini and the PDS Ring-Moon Systems Node.
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Introduction: The Ring-Moon Systems Node (RMS Node) hosts the complete sets of data submitted to the PDS by the Cassini remote sensing instruments – more than one million data products from CIRS, ISS, UVIS, and VIMS combined. We also host more than 200 ring occultation profiles (RSS, UVIS, and VIMS) from the prime mission. The last scheduled routine data delivery from Cassini will have been ingested by PDS shortly before this meeting. That will be followed in the next month or two by a substantial delivery from across Cassini as part of the End Of Mission (EOM) closeout.

OPUS Now: The RMS Node hosts OPUS – an accurate, comprehensive search tool for spacecraft remote sensing observations beyond the asteroid belt. For Cassini, OPUS currently supports ISS, UVIS, and VIMS. Search results include preview images for all products returned by a search, and calibrated images for Cassini ISS. We produce and incorporate into OPUS detailed geometric metadata for every object in the instrument field of view for all three instruments for both the Jupiter and Saturn encounters. OPUS also supports New Horizons (LORRI, MVIC), Galileo (SSI), Voyager (ISS), and several HST instruments.

OPUS Soon: We are currently working to incorporate the Cassini ring occultation data sets into OPUS. As part of a project to migrate the Cassini remote sensing datasets from PDS3 to PDS4 we will update our CIRS pipeline to reformat the data into fixed width tables (much more accessible than the current format) and then generate detailed geometric metadata for each CIRS observation and incorporate all of that into OPUS. In addition, we are nearing the completion of a project to automatically navigate most of the Cassini ISS images and generate substantially improved SPICE C-kernels. All of this will be incorporated into OPUS along with the capability to generate backplanes on demand for each of more than thirty relevant geometric parameters.

OPUS and Cassini End of Mission: RMS will receive and add to OPUS:
- RSS, UVIS, and VIMS ring occultations for the entire mission, all available at 1km resolution, and for many of the highest quality occultations also at the finest practical resolution.
- Radial profiles extracted from a subset of ISS main ring images, a false, longitudinally symmetrical 'filter' generated from each profile, and the result of subtracting that filter from the original calibrated image. The result highlights features like propellers.
- Derived spectral profile data from a subset of the VIMS ring observations.
- More than 150 radius vs. longitude, ISS F-Ring Mosaics.

Support during the meeting. I will be available all week to discuss everything PDS – navigating PDS, navigating the RMS Node website, using OPUS, finding data elsewhere in PDS, submitting data to PDS, and topics relating to using PDS4. Contact me via email to setup a meet time: mgordon@seti.org