

Here are guidelines and some information to help you produce an effective review with a reasonable level of effort. Each of the three data sets is a single volume containing multiple occultation profiles (RSS 68, UVIS 58, VIMS 156) obtained during the Cassini prime mission.

Review Guidelines.

There are three general areas in which an archive is reviewed:

- Compliance with PDS Standards
- Scientific merit of data (are these the proper data to be archived?)
- Usability of the data (appropriate formats; completeness of data set, including ancillary data; comprehensive documentation)

If you are not one of the panel members with a direct affiliation with the PDS, you do not need to address the first bullet above.

Reviewers should review the AAREADME.TXT and the ERRATA.TXT files at the root level of each data set. The AAREADME.TXT describes the data set organization and naming conventions, and the ERRATA.TXT lists the known issues for that data set. You will need to reference the occultation keywords white paper for definitions of many of the fields in the labels and data files. **These definitions have not yet been incorporated into the PDS global dictionary!**

Evaluate the documentation provided in individual image labels, files in the DOCUMENT subdirectory, and referenced journal articles (especially for UVIS and RSS). Much of the information contained in the referenced articles is not duplicated in the data sets.

While it is not realistic for you to look analyze every occultation profile, please check enough from each data set to convince yourself of the quality and consistency of the data and of any errors that you encounter.

In the CATALOG subdirectory, only the DATASET.CAT files are new; all others have been previously submitted to PDS and need not be reviewed.

Tables in the INDEX subdirectory of each dataset contain separate entries for each occultation profile, summarizing many of the key aspects of the observation. You may wish to refer to these indices when selecting specific products to review.

Questions to ask are does the documentation

- a. explain the data and how they were produced,
- b. explain how to use the data, and
- c. is the documentation (including referenced journal articles) sufficient to ensure the data will be intelligible to a scientist 10, 20, or 50 years in the future?

The review panel submits written reviews by email and then participates in a teleconference (date TBD) to discuss the reviews including strengths and weaknesses of the data set. Specific shortcomings and errors will be identified as “liens” which need to be corrected.

The review panel is responsible for making a recommendation on whether:

- The volumes passed peer review and can be archived once a set of panel identified liens have been resolved.
- The material did not pass peer review and must undergo an incremental (delta) review in certain specified areas.
- The material did not pass peer review and must undergo another full peer review.
- The material did not pass peer review and does not merit a second peer review.

In addition to an overall recommendation, the chair (Mitch) will compile a list of "liens" — questions about or requests for change in the archive design or sample products/volumes. The liens must be resolved before the associated data set can be archived.