

**Read and Browse Tools for PDS4 Data for IDL Users** E.J. Shaya<sup>1</sup>, <sup>1</sup>Astronomy Dept., University of Maryland, eshaya@umd.edu.

**Abstract:** Staff at the Small Bodies Node are developing tools in the IDL environment to read and browse PDS4 formatted data. The tools include **read\_pds** which extracts relevant information on the data structures and their formats from the PDS4 XML document, and then reads all described data into an IDL structure. A key dependency of this procedure is our utility function **read\_xml** which can read an arbitrary XML document into an IDL data structure.

The **browse\_pds** tool depends on **read\_pds** to read in all of the data of a PDS4 dataset and then opens a widget for browsing by mouse clicks. It allows users to quickly search/browse through the tree-structures of both the metadata and the data, view images and tables in a quick-browse graphics window, and it outputs any branch of the data that the user selects.

For users with IDL Version 8.3 and above, we have written another version of these tools which returns IDL Orderedhashes rather than IDL Structures.

A website at U. of MD links to descriptions and usages for each routine and a tar file holds all required procedures other than those in the Goddard Astronomy Library and built in procedures.

[http://pdssbn.astro.umd.edu/tools/tools\\_readPDS.shtml](http://pdssbn.astro.umd.edu/tools/tools_readPDS.shtml)

BROWSE\_PDS tool in action

