PyPDS Documentation

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ABOUT THE PROJECT

From the Planetary Data System's Quick-Start Introduction to PDS Archiving

> PDS labels are written in the Object Description Language (ODL), as are all PDS catalog files. ODL consists of a series of lines of the form "keyword = value", with certain keywords (for example,OBJECT) being used to delimit structures within the label. PDS prefers to use non-cryptic keywords, so that the data labels are more easily interpreted by users browsing through them.

This library provides a python interface to PDS files. It parses a data product's attached labels into a parse tree of dictionaries which maintain structure. It also provides convenient methods to extract image data from a data product with attached labels.

The *[pds.core.reader]* module is the lowest level software stack. It generates a tuple for all (keyword, value) pairs. This module preforms some preprocessing on the data by stripping blank lines and comments.

The *pds.core.parser* module consumes these tuples and adds information the parse tree. It is within this module that type conversion should performed, as well as any other transformation on the labels.

The *pds.imageextractor* module provides a convenient way to extract images from PDS data products. Use of this module keeps the parsing details and knowledge of the PDS specification under the hood.

REFERENCES & FOOTNOTES