Planetary Data System

PDS4: Realizing the Benefits

Anne C. Raugh¹ and John S. Hughes²

¹University of Maryland, College Park, MD

²Jet Propulsion Laboratory, Pasadena, CA

Immediate Benefits Realized

- 1. No More Keyword Arguments
- 2. "Product" is the New Granule
- 3. Predictability

1. No More Keyword Arguments

Data-specific metadata not already in the Information Model can be defined by data preparers using the same tools PDS uses.

- The core namespace provides the common basis for definition
- Other namespaces define localized contexts
- Namespace defines the boundary for delegated governance
- Namespace boundaries isolate development and change

2. "Product" is the New Granule

...And everything is a product.

- Every product has a unique identifier in the system.
- Every product has metadata to describe its form, content, context, and interpretation.
- Products can cross-reference each other directly.
- Search and selection of products is supported universally through the label metadata, *not* physical proximity.

3. Predictability

- Model-driven design ensures that common attributes are named *first* and carried through consistently.
- XML Schema implementation enforces strict ordering in nearly all aspects of product labels.
- Discipline namespaces provide recipes in discipline-specific terminology for field metadata

Questions?

• Answers

Shameless Plug

• See also my posters:

Getting a Handle on PDS4 Labels (#7049)

PDS4: Ask Me Anything! (#7051)