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ESA-NASA Planetary Archive Interoperability: a lesson in common understanding

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Two of the main Space exploration agencies, the European Space Agency (ESA) and the National Aeronautics and Space Administration (NASA), have given a big step forward in the world of interoperability standards for Planetary Scientific Data.

By giving seamless access to their respective Planetary Data archives through an agreed simple access protocol, both agencies have shown their wish to cooperate making use of state of the art technology in the modern IT world. This access is not only an asset in archived data, but can also serve as an added value to operations planning for future missions, as worldwide distributed data become available at the "click of a button".

In this talk we present an overview of the protocol agreed between the ESA Planetary Science Archive (PSA) and the NASA Planetary Data System (PDS) to implement the aforementioned interoperability. Having as a pre-requisite the existence of both high quality operational archives, the following are the main points of the agreed protocol:

- General approach to interoperability
 - Metadata access query
 - Data retrieval query
 - Compulsory I/O parameters
- Image Access Protocol

• General data access protocol

We will also present the steps followed in achieving such a goal in a minimum time by proper resource handling from the management point of view: setting ESA-NASA teleconfs, writing of a technical note to summarise possible approach to the problem, agreement of approach, writing of White paper by two authors-one from each agency, etc.

As conclusion, we want to stress the fact that cooperation crossing country boundaries is not only possible but even easy. Planetary Space Operations could benefit from seamless access to archived data, by allowing better planning of future missions and diminishing recurrence of already known problems.