



An Assessment of the IPDA/PDAP protocol to access Planetary Data

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Abstract

In EuroPlaNet-RI, JRA4 must prepare essential tools allowing the planetary science community to interrogate some selected data centres, access and process data and visualize the results.

The first requirement for enabling access to different data centres is to use a standard protocol.

This protocol, PDAP (Planetary Data Access Protocol) has been defined by an international consortium the IPDA (International Planetary Data Alliance) to enable standard access to PDS (Planetary Data system, NASA) and PSA (Planetary Science Archive, ESA) data archives.

In this paper, we present an assessment of this protocol, conducted jointly by the CDPP and VO-Paris Data Center, and a proposal for improvements and extensions to the current version, in order to fulfill the user requirements gathered by members of the Europlanet-RI JRA4 Team. We also demonstrate that other protocols like TAP (Table Access Protocol), issued by astronomers in the frame of the IVOA (International Virtual Observatory Alliance) may be used instead of PDAP for some queries in the Solar System domain that cannot be fully taken into account within PDAP.