

IDIS Concept and scope

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Abstract

Europlanet RI is a Research and Infrastructure project funded under the seventh European Community framework program (FP7). It officially started on January 1, 2009 and will last for four years. The Integrated and Distributed Information Service (IDIS) is at the heart of Europlanet. It is a remote service facility infrastructure dedicated to the archiving, manipulation and modeling of data collected from past and future planetary missions, as well as the remote access to all data produced by the different types of activities in the Europlanet project.

The IDIS service capitalizes on the on-line services and portal already developed by Europlanet under its preceding contract (6th Framework Program) and will progressively evolve into an information access system providing interoperability of a wide range of different information and data sources and access tools, located in different data centers, including virtual observatory like access services to data sets suitable for this approach. A continuous enhancement of the on-line capabilities offered will take place, thanks to the work of a set of supporting research activities. One of them (JRA-4) will in particular directly develop the tools necessary for this expansion, developing the necessary functionalities to access, analyze, manipulate, assimilate into models etc., data of Planetary Science relevance.

IDIS is structured into a Service Activity and a Research Activity. The IDIS Service Activity (IDIS SA) is organized in 5 thematic scientific Nodes and a technical Node. The Research Activity (JRA-4) plays a pivotal role in transforming the current IDIS service activity into a Planetary Virtual Observatory, preparing essential tools so that the Planetary Science

community can interrogate the relevant datasets and visualize the results in ways that allow them to make use of data from a variety of sources in a simpler way. The key objectives of this JRA are:

1. To produce “data models” that will allow planetary scientists to make use of them in coordinated fashion.
2. To define the standards required to enable the services provided by SA IDIS to work in an interoperable fashion.
3. To provide “added value” services to users that go beyond the provision of raw datasets, bringing the interrogation process much closer to the actual scientific aims of European planetary scientists.