



## **Europlanet Integrated and Distributed Information Service**

W. Schmidt (1), M. T. Capria (2), and G. Chanteur (3)

(1) Finnish Meteorological Institute, Earth Observation, Helsinki, Finland (walter.schmidt@fmi.fi, +358 91929 3146), (2) Istituto di Astrofisica Spaziale e Fisica Cosmica, Rome, Italy (mariateresa.capria@iasf-roma.inaf.it), (3) Centre d'Etude des Environnements Terrestre et Planétaires, Jussieu Paris, France (gerard.chanteur@cetp.ipsl.fr)

During the past decades the various disciplines in planetary sciences have developed to a very high international standard. But the collaboration between the different fields should be improved. To overcome the current fragmentation of the EU Planetary Science community and thereby to increase the scientific return of the related investment, the EU commission is funding via its Framework Program 7 the development of the “Europlanet Research Infrastructure -Europlanet RI”. The Europlanet RI will consolidate the integration of the European Planetary Science community which started with Europlanet’s FP6 project and will integrate major parts of the related distributed European infrastructure to be shared, fed and expanded by all planetary scientists. This infrastructure encompasses as diverse components as space exploration, ground-based observations, laboratory experiments and numerical modeling teams.

Europlanet RI aims at bringing scientists from Europe and beyond together who are working in these fields, support the exchange of experts and ideas and make as many resources and data as possible available to the research community. A central part of Europlanet RI is the “Integrated and Distributed Information Service” or Europlanet-IDIS. The task of IDIS as central part of Europlanet is to provide an easy-to-use Web-based platform to locate teams and laboratories with special knowledge needed to support the own research activities, give access to the wealth of already available data, initiate new research activities needed to interpret accumulated data or to solve open questions, and to exploit synergies between space-based missions and capabilities of ground based observatories. It also offers to a wide range of teams and laboratories the possibility to share their data, advertise their capabilities and increase the scientific return by cooperation.

IDIS is organized as an EU FP7 Support Activity, consisting of different access nodes which are connected by integrated search facilities, compatible structures and a common management. Each of these nodes concentrates on a special field of planetary sciences, has its own team of related international experts and is responsible for the access to information and data centres related to its area of competence. Integrated keyword-based search-possibilities direct inquiries to those node(s), most likely to return the wanted information. These nodes are hosted by the following organizations:

- The Finnish Meteorological Institute (FMI) in Helsinki, Finland, hosts the Technical Node for a wide range of support activities and provides the network management.
- The Institute of Planetary Research (IPR) of DLR in Berlin, Germany, hosts the Planetary Surfaces and Interiors Node, concentrating on internal structure, formation and evolution of the planets, their moons, asteroids and comets.
- The Institut für Weltraumforschung, IWF (Space Research Institute) of the Austrian Academy of Sciences (OeAW) in Graz hosts the Planetary Plasma Node in close cooperation with the French space plasma data center CDPP in Toulouse.
- The Institut Pierre-Simon Laplace in Paris hosts the Planetary Atmospheres Node.
- The Paris Observatory hosts the Virtual Observatory Paris Data Center providing among others access to a wide range of atomic and molecular spectral databases.
- The Istituto di Fisica dello Spazio Interplanetario (IFSI) in Rome hosts the Small Bodies and Dust Node, in cooperation with the ESA/ESTECs Virtual Meteor Observatory in Noordwijk, The Netherlands, concentrating on research and observations related to solar system asteroids, comets, meteors and interplanetary dust.

During the next four years a set of tools for describing, accessing and combining information and data from different sources will be developed, offering finally a Virtual Observatory like access to many data essential for planetary research from European and None-European sources.

Web access via any of the mentioned nodes, e.g. the Technical Node at <http://www.europlanet-idis.fi/>