

Connecting CDPP/AMDA, an interoperable web-based service, to remote data centers

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Abstract

These last years, CDPP has developed a new service, AMDA (Automated Multi-Dataset Analysis, <http://cdpp-amda.cesr.fr/>), which is a web-based facility for on line analysis of space physics data (heliosphere, magnetospheres, planetary environments). This tool allows the user to perform on line classical manipulations such as data visualization, parameter computation or data extraction. AMDA also offers innovative functionalities such as event search on the content of the data in either visual or automated way. These functionalities extendable for automated recognition of specific signatures can be used for performing classification of events and for generating time-tables and catalogues.

In collaboration with CESR, LESIA, IWF Graz and CDAweb, CDPP has set up an interoperable connection between AMDA and remote data centers such as the Cassini MAPSKP, the Cassini SKR, the VEX-MAG databases and CDAweb. This experiment served in particular as a demonstrator for the Europlanet/IDIS (Integrated and Distributed Information System) and is now an operational service of the IDIS/Plasma Node.

In this paper, we will describe the technical requirements and solutions that have been implemented with the various data centers in order to set up these interoperable connections.