EPSC
European Planetary Science Congress

EuroPlaNet VO use case: Giant planet HST auroral emissions

N. André(1,2), B. Cecconi(4), B. Renard(1,2), E. Budnik(3), V. Génot(1,2), C. Jacquey(1,2), A. Fedorov(1,2), R. Hitier(5), N. Bourrel(1,2), M. Gangloff(1,2), E. Pallier(1,2), M. Bouchemit(1,2), B. Besson(6), F. Topf(7), W. Baumjohann(7), M. Khodachenko(7), H. Rucker(7), T. Zhang(7)

[1]IRAP, CNRS, 9 avenue du colonel Roche, 31068 Toulouse, France (*amda@irap.omp.eu*), [2]Université Paul Sabatier, IRAP, 9 avenue du colonel Roche, 31068 Toulouse, France, [3]Noveltis, 2 Avenue Europe, 31520 Ramonville Saint Agne, France, [4]LESIA, Observatoire de Paris, Section de Meudon, 92195 Meudon cedex, France , [5]Co-Libri, Cremefer 11300 Pauligne, France, [6]CNES, Centre spatial de Toulouse, 18 avenue Edouard Belin, 31401 Toulouse, France , [7]Space Research Institute, Austrian Academy of Sciences, Graz, Austria

Abstract

The field of planetary sciences has greatly expanded in recent years with space missions orbiting around most of the planets of our Solar System. The growing amount and wealth of data available make it difficult for scientists to exploit data coming from many sources that can initially be heterogeneous in their organization, description and format. It is an important objective of the Europlanet-RI and IMPEx projects (supported by EU within FP7) to add value to space missions by significantly contributing to the effective scientific exploitation of collected data; to enable space researchers to take full advantage of the potential value of data sets. To this end and to enhance the science return from space missions, innovative tools have to be developed and offered to the community. AMDA (Automated Multi-Dataset Analysis, http://cdpp-amda.cesr.fr/) is a web-based facility developed at CDPP Toulouse in France (http://cdpp.cesr.fr) for on line analysis of space physics data (heliosphere, magnetospheres, planetary environments) coming from either its local database or distant ones. AMDA has been recently integrated as a service to the scientific community for the Plasma Physics thematic node of the Europlanet-RI IDIS (Integrated and Distributed Information Service, http://www.europlanet-idis.fi/) activities, in close cooperation with IWF Graz (http://europlanet-plasmanode.oeaw.ac.at/index.php?id=9).

We will present our prototype Virtual Observatory activities to connect the AMDA tool to the IVOA Aladin astrophysical tool to enable pluridisciplinary studies of giant planet auroral emissions.