VESPA: a community-driven Virtual Observatory in Planetary Science

Stéphane Erard1, *Baptiste Cecconi1, Pierre Lesidaner2, Angelo P Rossi3, Maria Teresa Capria4, Bernard Schmitt5, vincent genot6, Nicolas Andre6, Ann Carine Vandeaele7, Manuel Scheff8, Ricardo Hueso9, Anni Määttänen10, William Thuillot11, Benoît Carry11, Nicholas Achilleos12, Chiara Marmo13, Ondrej Santolik14, Kevin Benson12, Pierre Fernique15, Laurent Beigbeder16, Ehouarn Millour17, Batiste Rousseau1, Francois Andrieu1, Cyril Chauvin2, Mikhail Minin3, Stavro Ivanovski4, Andrea Longobardo4, Philippe Bollard5, Damien Albert6, Michel Gangloff6, Nathanael Jourdane6, Myriam Bouchemit6, Jean-Michel Glorian6, Loïc Trompet7, Tarek Al-Ubaidi8, Jon Juaristi Campillo9, Josselin Desmars11, Patrick Guio12, Omar Delaa13, Anthony Lagain13, Jan Soucek14, David Pisa14


The VESPA data access system is intended to apply Virtual Observatory standards and tools to Planetary Science. Building on a previous EU-funded Europlanet program, it has reached maturity during the first year of a new Europlanet 2020 program (started in 2015 for 4 years). The infrastructure has been upgraded to handle many fields of Solar System studies, with a focus both on users and data providers. This paper describes the broad lines of the current VESPA infrastructure as seen by a potential user, and provides examples of real use cases in several thematic areas, together with hints for future developments.

Keywords: Virtual Observatory, Solar System, GIS