VESPA: Progress on the Planetary Science Virtual Observatory

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The Europlanet-2020 programme, started Sept 1st, 2015 for 4 years, includes an activity called VESPA which focuses on adapting Virtual Observatory (VO) techniques to handle Planetary Science data. The main objectives of VESPA are to facilitate searches both in big archives and in small databases, to enable data analysis by providing simple data access and on-line visualization functions, and to allow research teams to publish derived data in an interoperable environment as easily as possible. VESPA encompasses a wide scope, including surfaces, atmospheres, magnetospheres and planetary plasmas, small bodies, heliophysics, exoplanets, and spectroscopy in solid phase. This system relies in particular on standards and tools developed for the Astronomy VO (IVOA) and extends them where required to handle specificities of Solar System studies. It also aims at making the VO compatible with tools and protocols developed in different contexts, for instance GIS for planetary surfaces, or time series tools for plasma-related measurements. An essential part of the activity is to publish a significant amount of high-quality data in this system, with a focus on derived products resulting from data analysis or simulations

[1] Erard et al 2014, *Astronomy & Computing* **7-8**, 71-80. http://arxiv.org/abs/1407.4886

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