

# **EuroPlaNet/HELIO VO use case: Planets as Space-Weather Probes (1)**

B. Cecconi (1), N. André (2), C. Jacquey (2) (1) LESIA, Observatoire de Paris, Meudon, France (2) IRAP, CNRS-Université Paul Sabatier, Toulouse, France contact email: <u>baptiste.cecconi@obspm.fr</u>



#### **About this poster**

This abstract (as well as several accompanying abstracts in this conference) presents a use case of the Virtual Observatory for Planetary Science being defined in JRA4/IDIS. This abstracts also covers the objectives of the HELIO project (Heliophysics Integrated Observatory). The goal is to illustrate possible applications of a VO system in the context of this session.

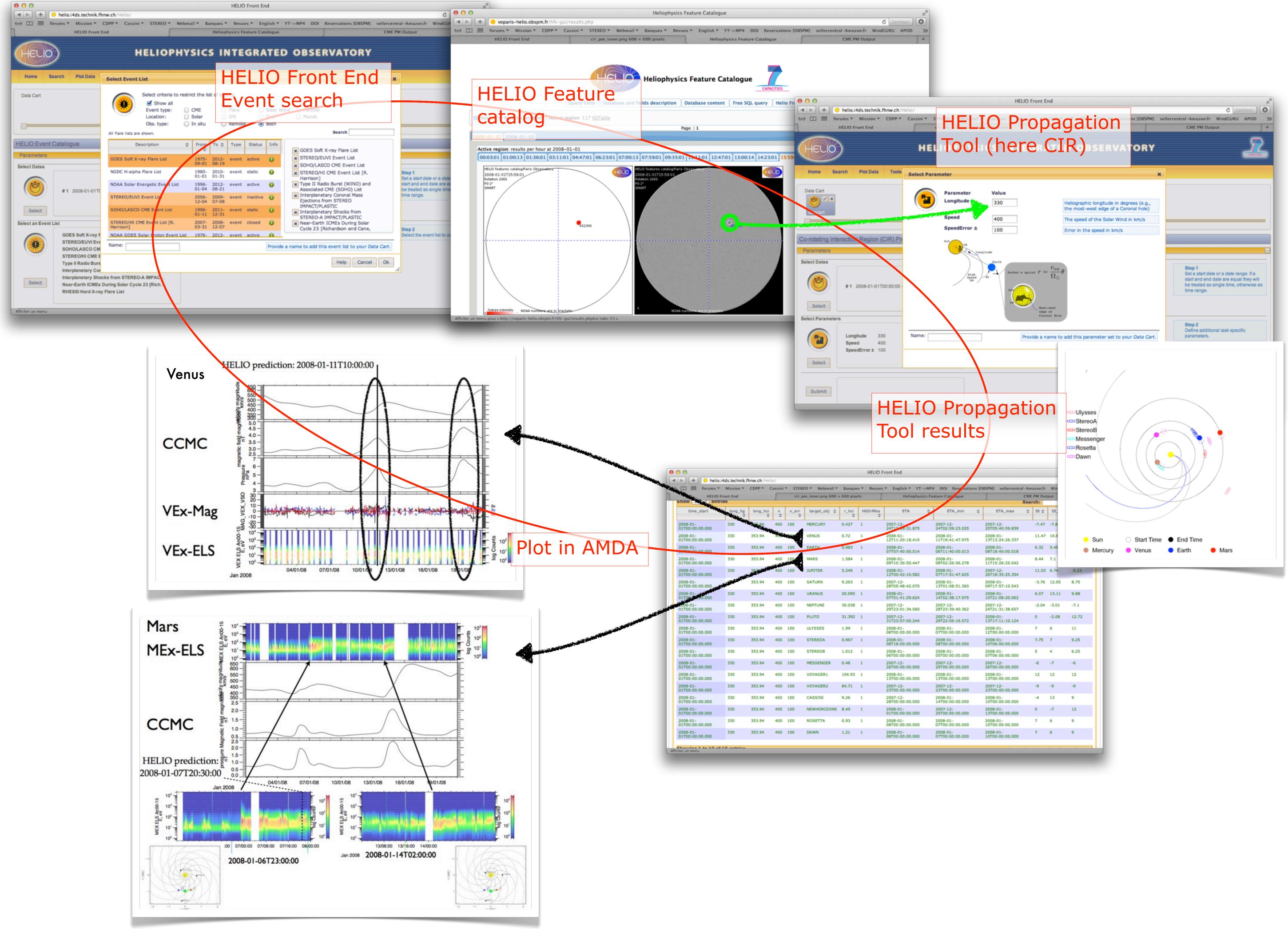
The EuroPlaNet-RI and HELIO project are funded by the European Commission under the 7th Framework Program, grants 228319 and 238969 "Capacities Specific Programme".

## **Tools**

- The AMDA (Automated Multi Dataset Analysis) tool has been developed by the CDPP (french Data Center for Plasma Physics). It is a generic online tool for space physics data that allows the user to do: automated event search and characterization; catalogue generation and exploitation; automated database conditional extraction; access to remote Data Centers. Current remote access is built on SPASE (Space Physics Archive Search and Extract), which a standard in space physics.

- The HELIO Front End (HFE) interface is used to look up for Space Weather related data and events. We also used the HELIO propagation tool available through this interface.

- Solar Wind modeling data has been taken from two projects: mSWiM (University of Michigan) and CCMC (Community Coordinated Modeling Center).



01T00:00:00.000	330	353.94	400	100	NEWHORIZONS	8.49	1	2008-01- 01T00:00:00.000	2007-12- 25T00:00:00.000	2008-01- 13T00:00:00.000	0	-7	12
2008-01- 01T00:00:00.000	330	353.94	400	100	ROSETTA	0.93	1	2008-01- 08T00:00:00.000	2008-01- 07T00:00:00.000	2008-01- 10T00:00:00.000	7	6	9
2008-01- 01T00:00:00.000	330	353.94	400	100	DAWN	1.21	1	2008-01- 08T00:00:00.000	2008-01- 07T00:00:00.000	2008-01- 10T00:00:00.000	7	6	9

### Science case

- We study a corotating interaction region (CIR) observed in early 2008 from Mercury to Saturn, comparing all available data sources (in-situ probes and remote observations) and solar wind propagation models. This poster shows the inner solar system part of this study.

- A second poster for the outer planet part is shown in the MG5 poster session.

#### **Extra information:**

VOParis IDIS node: <u>http://voparis-europlanet.obspm.fr</u> Plasma IDIS node: http://europlanet-plasmanode.oeaw.ac.at CDPP: <u>http://cdpp.cesr.fr</u> AMDA: http://cdpp-amda.cesr.fr/ SPASE: http://www.spase-group.org/ HELIO: http://www.helio-vo.eu/ mSWiM: http://mswim.engin.umich.edu CCMC: http://ccmc.gsfc.nasa.gov/

