

EuroPlaNet/HELIO VO use case: Planets as Space-Weather Probes (2)

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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.

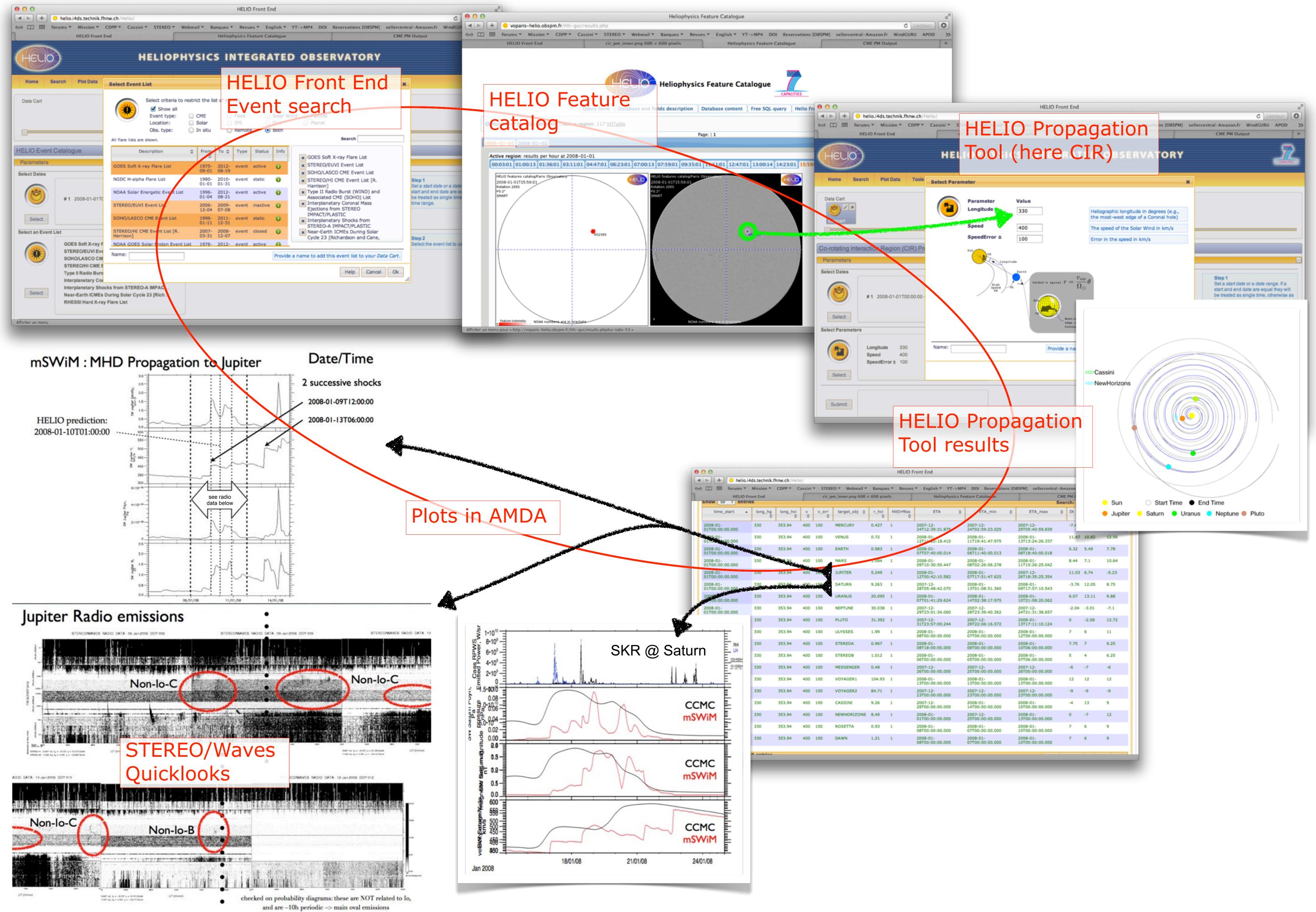
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Tools

- 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).



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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 outer solar system part of this study, concentrating on the auroral radio emissions as a remote probing tool.

- A second poster for the inner planets 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: <u>http://cdpp-amda.cesr.fr/</u> SPASE: http://www.spase-group.org/ HELIO: <u>http://www.helio-vo.eu/</u> mSWiM: <u>http://mswim.engin.umich.edu</u> CCMC: http://ccmc.gsfc.nasa.gov/