

The PSWS Space Weather VOEvent alerts service of the CDPP

M. Gangloff(1), N. André(1), V. Génot(1), Baptiste Cecconi(2), Pierre Le Sidaner(3), Antoine Goutenoir(1), Myriam Bouchemit(1), Elena Budnik(1)

(1) IRAP, Université de Toulouse, CNRS, CNES, UPS, (Toulouse), France

(2) LESIA, Observatoire de Paris, PSL Research University, Meudon, France

(3) DIO, Observatoire de Paris, CNRS, UMS2201, PSL Research University, Meudon, France

Abstract

The CDPP (Centre de Données de la Physique des Plasmas, [\(http://cdpp.eu/\)](http://cdpp.eu/)), the French data center for plasma physics, is engaged for two decades in the archiving and dissemination of plasma data products from space missions and ground observatories. Under Horizon 2020, the Europlanet Research Infrastructure includes PSWS (Planetary Space Weather Services), a set of new services that extend the concepts of space weather and space situation awareness to other planets of our solar system. One of these services is an Alert service associated with solar wind prediction made using the CDPP *HelioPropa* service (<http://helioPropa.irap.omp.eu>), and detection of meteor shower, lunar flash and cometary tail crossing. This Alert service, is based on VOEvent, an international standard proposed by the IVOA and widely used by the astronomy community. The VOEvent standard provides a means of describing transient celestial events in a machine-readable format. VOEvent is associated with VTP, the VOEvent Transfer Protocol that defines the system by which VOEvents may be disseminated to the community. VTP is managed with Comet, a freely available and open source software. Comet is used by PSWS for its Alert service and several partners of PSWS, including the CDPP and Observatoire de Paris.

This presentation will focus on the latest version of the alert system (<https://alerts-psws.irap.omp.eu>) implemented with the current version of the VOEvent standard.

Acknowledgements

EuropaNet 2020 RI has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 654208.