

COMESEP: bridging the gap between the SEP, CME, and terrestrial effects scientific communities

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In the past there has been a tendency for the geomagnetic storm and solar energetic particle (SEP) communities to work in parallel rather than to apply a cross-disciplinary work approach specifically in regard to space weather forecasting. To provide more awareness on the existing links between these communities, as well as further bridge this gap, the three-year EU FP7 COMESEP (COronal Mass Ejections and Solar Energetic Particles: forecasting the space weather impact) project emphasized cross-collaboration between the SEP, coronal mass ejection, and terrestrial effects scientific communities. COMESEP went from basic solar-terrestrial physics research to space weather operations by developing, validating and implementing multi-purpose tools into an operational 24/7 alert service. Launched in November 2013, the COMESEP alert system provides space weather stakeholders geomagnetic storm alerts ("Event based" and "Next 24 hours") and SEP (proton) storm alerts (E > 10 MeV and E > 60 MeV) without human intervention based on the COMESEP definition of risk. COMESEP alerts and forecasts are freely available on the COMESEP alert website (http://www.comesep.eu/alert), as well as disseminated by email to registered users. Acknowledgement: This work has received funding from the European Commission FP7 Project COMESEP (263252).