COMESEP: a new type of space weather alert system

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Tools for forecasting geomagnetic storms and solar energetic particle (SEP) radiation storms are and have been developed under the three-year EU FP7 COMESEP (COronal Mass Ejections and Solar Energetic Particles) collaborative project. In its final year, the validation and implementation of the produced tools into an operational space weather alert system is now underway. Geomagnetic and SEP radiation storm alerts are being based on the COMESEP definition of risk. The COMESEP alert system will provide notifications for the space weather community. To achieve this the system relies on both models and data, the latter including near real-time data as well as historical data. One of the important outcomes of the scientific analysis has been to identify key ingredients that lead to magnetic storms and SEP events. COMESEP is a unique cross-collaboration effort and bridges the gap between the SEP, coronal mass ejection and terrestrial effects scientific communities. For more information see the project website (http://www.comesep.eu/). This work has received funding from the European Commission FP7 Project COMESEP (263252).