



State-of-the-art Space Weather Forecast with AFFECTS and HELCATS

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The space weather projects fostered through the European Union FP7 and Horizon 2020 programs have opened up new horizons in the field of space weather research and have facilitated state-of-the-art-forecasts. Here we present an overview on the services and space weather forecasts the EU FP7 project AFFECTS (Advanced Forecast For Ensuring Communications Through Space) is providing and how the precision of the forecast is qualitatively greatly enhanced by new results derived from the EU FP7 project HELCATS (Heliospheric Cataloguing, Analysis, and Techniques Services). The forecast techniques base on near-real time multipoint analysis of coronal mass ejections observed by SOHO and STEREO and simulations of their Sun to Earth evolution.