



## **The FLARECAST Project and What Lies Beyond**

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Solar eruptions exhibit three different legs, namely flares, coronal mass ejections, and solar energetic particle (SEP) events. All these eruptive manifestations entail an impact in heliospheric space weather, at different spatial and temporal scales. Therefore, these eruptive manifestations should be ideally predicted to shield humanity and its assets in space and, in some cases, on Earth's surface. The EC has endorsed this need, calling for and funding projects targeted on the forecasting of aspects of the near-Earth space environment. The Flare Likelihood And Region Eruption foreCASTing (FLARECAST) is one of them, with an objective to develop a definitive, openly accessible solar-flare prediction facility. We will focus on the main attributes of this facility, namely its ability to expand by reconciling new flare predictors and its setup, that is intended to couple tactical understanding of the flare phenomenon with a consolidated view on how this understanding can be turned into a deliverable with practical, operational face value. A third component of the FLARECAST project, namely its exploratory part, aims to bridge flare prediction with prediction of CMEs and, hopefully, SPE events, touching the other two areas of space-weather forecasting. Fragmented but very significant work exists in these areas that prompts one to envision a future, EC-funded unified prediction platform that could address all forecasting needs of the Sun-generated space weather.

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