FLARECAST : « Flare Likelihood and Region Eruption Forecasting »: a space weather H2020 project

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FLARECAST has been selected as a PROTEC-1 (Space Weather) project in the H2020 EU framework program in 2014. It is aimed at understanding how solar active-region magnetic fields evolve and produce flares and coronal mass ejections. The goal of the project is to develop an advanced flare prediction system based on automatically extracted physical properties of active regions coupled with state-of-the-art flare prediction methods and validated using contemporary forecast verification measures. The project is developed in 8 institutes in Europe (in France LESIA and IAS) and is based on several work packages spanning from the extraction of active region properties as predictors of flare activity, the development of new flare prediction algorithms, the development of data storage, forecasting and validation to explorative research. We present here a general description of the project, that kicked off 6 months ago, and discuss in particular the aspects linked to the characteristics of the predictors of flare activities.