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Using MSG/SEVIRI data for detection and monitoring of fire events over the Iberian Peninsula

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Biomass burning is extremely important at the global, the regional and the local scales, and has dramatic impacts at the atmospheric, the climatic, the environmental and the socio-economical levels. Mediterranean regions are some of the most affected by wildfires, which have become a major source of concern for environmental security. This is the case of the Iberian Peninsula, where the extent and severity of wildfires points to the need for an accurate and timely monitoring of fire activity. In this respect, the potential of the SEVIRI instrument on-board the MSG series for applications related to fire detection and monitoring has long been recognized. We begin by presenting an operational procedure that allows active fire detection in near real time, based on information from Meteosat-8/SEVIRI. The procedure is currently being developed within the framework of EUMETSAT's Satellite Application Facility on Land Surface Analysis (LSA SAF). We will then describe a second procedure that aims at identifying burned areas associated to fires identified by the previous procedure.
Results from the two procedures will be cross-validated by comparing times of occurrence and location of identified active fires with the location and extent of identified burned scars. Finally, an analysis will be performed of the meteorological conditions and meteorological risk associated to the identified fire events.