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## **Operational assessment of the skill and consistency of ECMWF and COSMO numerical weather models – The case of severe weather in Greece on 16 and 17 July 2017**

Nowadays there is a profound increase in the number of natural disasters attributed to extreme weather events which is significantly impeding progress towards sustainable development. In dealing with a risk of an emergency threatening life or property, a weather-forecast office would use a range of forecast tools to assess the threat and provide the necessary forecasts and warnings. In this paper, using as case study the severe weather occurred in Greece on 16 and 17 July 2017, we discuss the capability of the ECMWF/EPS and the COSMO-LEPS forecasts as also the ECMWF/HRES and COSMO.GR7 deterministic forecasts to provide forecasters with reliable prognostic guidance. To do so we used these models' consecutive runs from Friday 14-7-2017 (two days before the event) until Monday 17-7-2017 (last day of the event). The effectiveness of these forecasts (rainfall spatiotemporal distribution and intensity) was then evaluated with the accumulated precipitation at ground (H-SAF/PR-OBS-5), with MSG products (RGB Airmass, Cloud Top Height) provided by EUMETSAT, with lightning / metar data and also with weather radar products.

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