



BalkanMed real time severe weather service: progress and prospects in Bulgaria

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Main objective of the “BalkanMed real time severe weather service” (BeRTISS, 2017-2019) project is to establish a pilot transnational severe weather service by exploiting Global Navigation Satellite Systems (GNSS) tropospheric products to enhance the safety, the quality of life and environmental protection in the Balkan-Mediterranean region. In Bulgaria severe weather events (intense precipitation, hail and thunderstorms) are common in the summer months and are associated with large economic losses for example in agriculture. The Bulgarian Hail Suppression Agency and the Sofia University are partners in the BeRTISS project with final aim to develop the Bulgarian Integrated NowCasting tool (BINCA). BINCA will use data from the recently deployed ground-based GNSS network of 12 stations in Bulgaria. The GNSS, weather radar as well as surface atmospheric observation will be combined with the Weather Research and Forecast (WRF) model simulations covering Bulgaria. BINCA will provide products in near-real time on a publicly accessible web platform to facilitate the operational tasks in hail suppression in Bulgaria but also other operational and public services. In this work the BeRTISS progress and the future work in Bulgaria are discussed.