



## **BeRTISS project - Balkan-Mediterranean real time severe weather service**

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This work aims to present the newly-funded research project BeRTISS (Balkan-Mediterranean Real Time Severe weather Service) under the frame of the European Territorial Cooperation Programme “Interreg V-B Balkan-Mediterranean 2014-2020” as well as its very preliminary results. The main objective of BeRTISS is to develop and establish a pilot transnational severe weather service by exploiting Global Navigation Satellite Systems (GNSS) tropospheric products to enhance the quality and safety of life in the Balkan-Mediterranean region. This monitoring service will provide continuous and uninterrupted information for nowcasting, forecasting and early warning for Precipitable Water Vapor (PWV) using the GNSS derived tropospheric products and WRF (Weather Research and Forecasting) model, that will be tangible and visible to the public through a dedicated web-platform. In detail, the aims of the project are: 1) Integration of national networks of GNSS stations located in the three countries in a unified system, 2) Collection, processing and analysis of GNSS observations and tropospheric products, 3) Calculation of the meteorological parameter PWV for more accurate short-term prediction of severe weather events and 4) Creation of a dedicated website to provide in real-time the National Meteorological Services and the public with PWV data and warnings of severe weather events. BeRTISS comprises the continuation of ongoing actions, such as the EU-COST Action “GNSS4SWEC” in particular with respect to the expansion of the existing GNSS network of tropospheric products in one of the Europe’s most remote region and vulnerable to climate change.