PrePEP - Conference: Precipitation Processes - Estimation and Prediction



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# Developing early warning systems for Greek Prefectures and Municipalities

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With the aim to develop early warning systems that meet the needs of prefectures and local communities, the METEO Unit of the National Observatory of Athens has started, during the last two years, to build early warning systems that envelop a multitude of datasets on a web interface that permit to the users to easily assess the current and future weather conditions. These systems are developed in close collaboration with the local authorities to meet their specific needs.

The system includes the installation and operation of a network of meteorological stations as well as the installation and operation of level meters in selected rivers/streams. Satellite data (e.g. precipitation probability) as well as lightning data are also included. Moreover, the early warning system provides high-resolution meteorological forecasts as well as high-resolution fire weather forecasts, and expected conditions on the roads. An automatic generation of warnings sent to the authorities is also implemented, based on predefined thresholds for each category of hazard. The totality of observations and forecasts are provided through a web service. The web service is modular, so additional layers of information can be added in the future. The system is, by definition, a powerful tool for the better information of the authorities and the public before and during a severe weather event. However, the information shown in the early warning system can be used for other activities, such as agriculture, transportation and tourism.

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