EMS Annual Meeting Abstracts Vol. 12, EMS2015-282, 2015 15th EMS / 12th ECAM © Author(s) 2015. CC Attribution 3.0 License.



Recent developments in the use of Numerical Weather Outputs for agrometeorological services in Spain (Agroasesor project)

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In this presentation we describe the current activities oriented to the development of agricultural services that make use of weather model outputs and are being carried out in the framework of the sigAGRoasesor project. This project started in September 2012 and will end in January 2016. SigAGRoasesor is being carried out with the contribution of the LIFE financial instrument of the European Community (LIFE+11 programs), aimed at developing and putting in operation a set of decision-support tools (DST) for extensive agriculture in Spain based on remote sensing information, weather and climate data and NWP outputs. The partners involved in the project are agricultural research entities from regional administrations in Spain as well as the Spanish National Meteorological Service (AEMET). Their goal is to include this new tool in the services provided to the agricultural sector to booster growth and innovation. AEMET is involved in this project as technological partner and provides meteorological and climate support and data, including NWP outputs, to the project in GIS format. It is also in charge of developing agro-climatic and biotic risk maps.

The most recent version of the sigAGROasesor web platform is a webGIS application, focused on the precision advice at the level of individual plots in five different applications: fertilization, irrigation, pest and diseases, varieties and sustainability indicators. AEMET provides geo-referenced climatic information to allow the identification of the different agro-climatic zones in order to modulate the different parameters concerning each crop. The Decision Support Tools are fed with real time weather information of all relevant parameters and also with the 0.05° resolution gridded outputs from the AEMET Forecasting Digital Database for the following variables: 24-H Precipitation, Maximum and Minimum Temperature and Relative Humidity. ETo predictions up to D+7 are also generated and introduced in the system.