INTENSIVE FIELD CAMPAIGNS IN THE FRAMEWORK OF DEMETER PROJECT

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Objective of the study
In the framework of the Demeter project, three field campaigns were carried out: First in spring-summer on 2001 over maize, second in winter-spring on year 2003 over wheat and third during year 2004 over alfalfa. The objective of them was to monitor the phenology and other agronomic parameters from remote sensing.

The field campaigns were carried out during year 2001 with maize (Zea mays L., variety Dracma 700), sited on the ITAP (Instituto Técnico Agronómico Provincial) facilities, at Barrax site in Albacete (Spain). In the same site during year 2003 wheat (Triticum aestum, variety Estero) was monitored. The crops were in a weighting lysimeter that estimates the evapotranspiration. At the same time, a reference crop (Fastuca arundinacea shreb, cv Asterix) is in a near lysimeter that allows to measure reference evapotranspiration. The third field campaign was carried out over alfalfa in La Felipa (Albacete) along the spring-summer on year 2004. During the field campaigns was also measured the green fraction cover, the leaf area index, biomass and spectral reflectance in the range of 0.4-2.5µm. In the area of field work there are two agrometeorological stations that allows to estimate the reference evapotranspiration, thus the crop coefficients have been measured.

Results show the evolution of reference evapotranspiration during crop development, crop coefficients measured on site in coincidence to FAO56 methodology, vegetation indices, and the referred agronomic parameters.