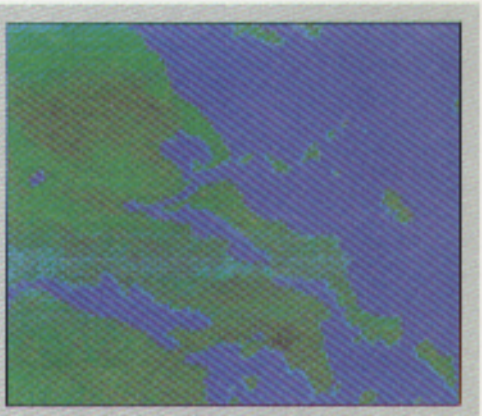
COST 77

THE APPLICATION OF REMOTE SENSING IN AGROMETEOROLOGY

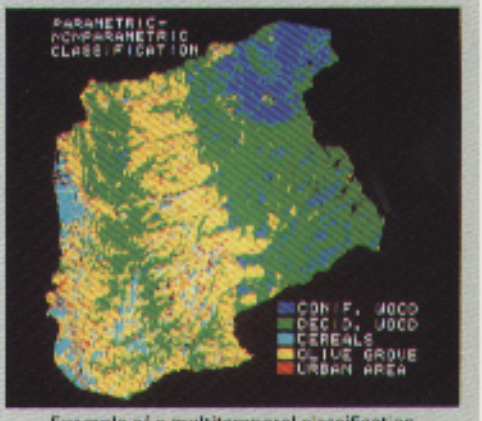
Evaluating different sensors and platforms

Assessing the potentialities of several sensors with different wavelengths and platforms to improve their capability for land classification, measurement of physical parameters of surfaces, and detection of plant stress conditions.

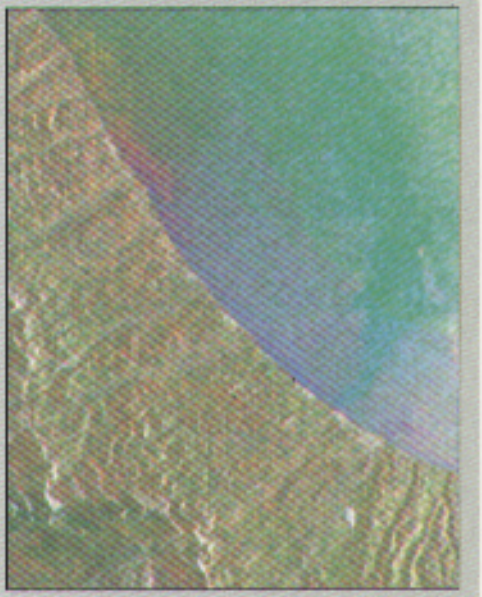
European mosaic of vegetation performance derived from daily satellite data.
(Courtesy of CEC-JRC MARS Project, Ispra)



NDVI image of central Greece obtained from NOAA/AVHRR data.
(Courtesy of Univ. of Thessaly, Lab. of Agrometeorology)



Example of a multitemporal classification of the land use of an area of Tuscany.



False colour radar image.
(Courtesy of Cesia, Florence)

Monitoring ground surface temperature and soil moisture

Computing regional evapotranspiration and soil-water balance from remotely sensed data. Definition of methods for spatial interpolation of ground temperature.

Assessing regional evapotranspiration

Producing methodologies for computing evaporation and evapotranspiration at regional scale combining satellite derived data with information from ground meteorological networks.

Monitoring and forecasting hazards

Frost and forest fires warning based on spatial distribution of temperature, water status of the vegetation and soil moisture. Mapping of soil erosion probability based on vegetation status and cover derived from NDVI data.