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Testing different physiografic databases in HIRLAM

- T. Fernández-Gómez (1) and E. Rodríguez-Camino (1)
- (1) Spanish Meteorological Institute (INM), P.O. Box 275, 28070 Madrid, Spain (tfernandez@inm.es)

The atmospheric models at all scales describe land surface processes with an increasing level of complexity. The exchange of water and energy between land and atmosphere is very much conditioned by vegetation parameters. In fact, surface heat fluxes show a big sensitivity to changes in some crucial parameters, like vegetation cover, leaf area index, albedo, etc. A few global datasets of surface parameters have been used so far for climate and NWP models. Recently, efforts have been addressed to increase the resolution of vegetation datasets over Europa and to make also use of satellite information. The ECOCLIMAP database is becoming a common standard among NWP models. This presentation documents the testing conducted with the HIRLAM model when the new ECOCLIMAP database is used. Special emphasis has been put on the impact on screen variables and on soil water.