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A new hydrology in the ECMWF land surface scheme

G. Balsamo (1), P. Viterbo (2), A. Beljaars (1), B. van den Hurk (3), A Betts (4)

(1) ECMWF, (2) IM Portugal, (3) KNMI Netherlands, (4) Atmospheric Research, Pittsfort VT

Since the 7th of November 2007 a new hydrology component is operational at ECMWF for the deterministic 10-day weather forecasts, the Ensemble Prediction System and the Monthly forecasts. The new scheme is based on Van Genuchten (1980) formulation for the soil properties in the unsaturated zone, which are geographically variable according to the FAO Digital Soil Map of the World (FAO DSMW, 2003), and implements a statistical runoff based on Dümenil and Todini (1992). Results from the verification of the new scheme from field-sites, catchments and global experiments will be presented.