

**Characterization of the Jucar River Basin Hydrological Climatology with ERA-Land Reanalysis. Consistency with In-situ and SMOS Soil Moisture Products.**

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A climatology using soil moisture estimates from ERA-Interim/Land (referred to as ERA-Land) Reanalysis is carried out over the Jucar River Basin within the period 1980-2012. ERA-Land product consistency is evaluated with SMOS level-3 soil moisture retrievals, previously validated at pixel scale using soil moisture measurements from the *Valencia Anchor Station* (VAS) network, for the period October 2011 to December 2013. Moreover, three different terms are distinguished according to the SMOS level-3 product generation (nominal or reprocessed mode) and the dielectric model (Dobson or Mironov). A quality control of in-situ data is conducted using precipitation measurements, as well as the operational soil moisture analysis from the *European Centre for Medium-range Weather Forecast* (ECMWF).