



The Upper Danube soil moisture validation site: measurements and activities

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The validation of SMOS L2 soil moisture data requires the maintenance of long term soil moisture monitoring sites. The paper will give an overview about the infrastructure and ongoing activities in the Upper Danube SMOS validation site, situated in Southern Germany, which has a size of 77.000 km².

Since 2007, the University of Munich collects routinely in situ soil moisture data within the test site in preparation for the SMOS commissioning phase. An operational framework has been built up to compare SMOS soil moisture products against in situ measurements, land surface model simulations and ancillary satellite data.

The airborne SMOS rehearsal campaign 2008 was conducted within spring 2008 in the Upper Danube catchment. Two airborne radiometers (EMIRAD, HUT2D) were flown within a multi-week period. Comprehensive ground data was collected during this campaign.

The paper will give an overview about the existing data sets, the developed infrastructure in the Upper Danube test site and will show results from the SMOS rehearsal 2008 campaign.