



Land use and morphology effects on soil moisture in the Western Alps

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Land use patterns follow the spatial variability of morphology characteristics like aspect and slope. In the western Alps there is a finer scale variability of those characteristics, in comparison with other mountain zones. Therefore the soil moisture variability shows a marked spatial variability.

In this work, soil moisture data were collected in different watersheds, in order to have also different lithology and soil thickness situations. The effect of the variability of soil moisture on evaporation fluxes is modeled, and different spatial resolution values are compared, also taking into account the net radiation spatial variability.