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Drivers of soil moisture at the global scale

Nadine Nicolai-Shaw, Martin Hirschi, Heidi Mittelbach, and Sonia Seneviratne ETH Zurich, Institute for Atmospheric and Climate Science, Land-Climate Dynamics, Zurich, Switzerland (nadine.nicolai@env.ethz.ch)

With this research we aim to identify the large-scale drivers of soil moisture at the global scale. In order to determine these drivers, one needs access to a global soil moisture data set. The satellite derived ESA CCI ECV-SM soil moisture data set provides global soil moisture data dating back to 1978, allowing for insight into the long-term temporal variability of soil moisture. As the ECV-SM data set represents the surface layer, additionally land-surface model soil moisture estimates from ERA Interim/Land are used to determine possible differences in drivers of root zone and surface soil moisture. The main drivers of soil moisture variability for a region are determined by identifying the amount of variability attributable to these drivers.