Analysis of spatial distribution and temporal trend of soil moisture over the Tibetan Plateau from 1978 to 2013

Xianhong Meng
Chinese Academy of Science, China

A purely multi-decadal satellite-based soil moisture product that spans over 35 years (from November 1978 to December 2013) on a daily basis and at a spatial resolution of 0.25° globally was generated as part of the European Space Agency’s (ESA) Water Cycle Multi-mission Observation Strategy (WACMOS) and Soil Moisture Climate Change Initiative (CCI) projects. In this work, we firstly evaluate this new product against observations of a soil moisture network on the central Tibetan Plateau. It shows that the soil moisture product agrees well with the observations. Then trend over 35 years of soil moisture was analyzed. It was found that the spatial pattern of the changing trend of soil moisture coincides with the precipitation overall on the Tibetan Plateau.

Biography
Xianhong Meng has completed her PhD from Chinese Academy of Science and Post-doctoral studies from University of New South Wales, Australia. She has published more than 29 papers and was PI of more than 7 research fundings in land-atmosphere interactions in China.

mxh@lzb.ac.cn