

Spatio-temporal Variations of AMSR-E Soil Moisture in Semi-arid Region,China -A Case Study in Shanxi Province-

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Soil moisture plays an important role in earth's water cycle. Soil moisture variations can help us to know earth surface changes and so on, especially in semi-arid regions. AMSR-E(Advanced Microwave Scanning Radiometer of EOS) is a sensor which provides timely, long-term informations on land hydrology. In this study, we use ground-based soil moisture data to validate AMSR-E(Koike Ver5.31) soil moisture data in ShanXi Province in China. We analyze the spatio-temporal variations of soil moisture in this areas. The validation results show that the quality of AMSR-E soil moisture estimation is good. Timing of precipitation event will correspond to AMSR-E soil moisture variation very well.

Keywords: soil moisture, validation, AMSR-E,, ShanXi Province