Large Area Observations of Soil Moisture by the Ground-Based Water Cycle Stations in the Mongolian Plateau

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In order to grasp the soil moisture change on a large scale (tens - hundreds km) in Mongolia and surrounding countries, integrated observations by AQUA AMSR-E and ground-based water cycle stations (AWS: Automatic Weather station, ASSH: Automatic Station for Soil Hydrology) have been successfully carrying out since 2000. AMSR-E soil moisture measurement overestimated a little and the soil moisture estimation distribution in Mongolia was similar to that of precipitation. AMSR-E soil moisture observation can be considered to be useful. We obtained a lot of the valuable data of soil moisture and meteorological and hydrological monitoring data from 2000. According to the ground-based station monitoring results, soils of the Mongolian plateau have been beginning to become slightly drier since 2002. The AMSR-E observation results showed the similar results.