Toward assessment of precipitation climate resource: Bias correction on daily precipitation measurement in Mongolia

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Abstract

The bias correction method suggested by World Meteorological Organization were applied daily precipitation measurement for 63 meteorological stations from 1981 to 2006 period. Annual precipitation amount 1981-2006 was increased by nearly 20% as considering corrected precipitation. Most contribution of bias is related to wind-induced and evaporation loss. Bias is relatively higher in summer compare to any other seasons in terms of its value. This study have suggested that correction would be efficient for studying water and energy balance and cycle in hydrology as well as validation for regional weather and climate model simulation results.