

Surface Energy Balance Observation at the Melting Zone of the Kara-Batkak Glacier

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Main source of water resources in Central Asia is glacier/snow melting water from high mountains. The deep understanding of the amount of available water resources together with its timing and variability is crucial for water resources management in this region. Surface energy balance observation system was established at the melting zone of the Kara Batkak Glacier in Kyrgyz Republic. The purpose of this observation system is to measure the snow accumulating and melting process and glacier melting process for better representation of these processes in land surface model. Observed items are 4 components of radiation flux, snow depth, glacier melting depth, wind speed, wind direction, precipitation, air temperature, relative humidity, air pressure, snow (ice) temperature, heat flux into ice. Observation started on 21 July, 2017.

Keywords: Surface Energy Balance, Glacier Melting, Land Surface Model