Spatial distribution of mountain permafrost in northern Tien Shan, Central Asia

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To clarify the current state of mountain permafrost, we researched the distribution, classification, and movement of rock glaciers as an indicator of mountain permafrost in the Kyrgyz Ala-Too Range using field survey, GIS/RS techniques and aerial photograph interpretation. At the examined site, MAAT is -4.62 and MAGST is -1.47 on rock glacier (3500 m asl.) showing environment of mountain permafrost. The distribution of rock glaciers shows the discontinuous permafrost zones are located above 2800 m a.s.l. on the north part and above 3200 m on the south part of the Kyrgyz Ala-Too Range.

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