

Mass Balance of Potanin Glacier, Mongolia Altai

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It is reported that Potanin glacier in western Mongolia is retreating. However, there were few glaciological observations. Furthermore, meteorological observations around the glacier have not been done yet. For mass balance analysis, we conducted observation of surface height change in ablation area and net balance estimation using pollen analysis at accumulation area. It revealed that ablation rate in summer is large in ablation area and accumulation occurred in winter. We estimated the specific mass balance from the data. Mass balance of Potanin glacier in year 2007/08 was estimated to extensive negative which was comparable to Russian Altai glaciers. Naturally, cumulative mass balance of glaciers in Altai show different tendency from world average. Annual air temperature shows warming trend whereas precipitation does not show the significant increase/decrease. Therefore, it is probable that precipitation as snow or rain had an influence on mass balance.