

PERIGLACIAL PROCESSES IN HENTEI - MOUNTAINS

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The Hentei mountains are situated near Ulaanbaatar in the northeastern part of Mongolia. They are situated near the southern boundary of permafrost of the northern hemisphere. In these mountains, uplands are characterised by discontinuous to continuous permafrost. The Hentei uplands experienced one to two periods of glaciation during the Pleistocene period. The high mountains of Hentei were subject to past glaciation as evidenced by the presence of cirques, troughs, and till sheets. The cryogenic processes and phenomena in these mountains are determined by altitudinal zonality.

Based upon the intensity of cryogenic processes, these mountains are divided into three zones.

1. The golet zone or tundra, above 2,200masl
2. Mountain Taiga zone, above 1,400masl
3. Forest-steppe zone, above 1,100masl
4. Mountain-steppe zone upto 1,100 masl

In the golet zone, cryoplantation terraces are well-developed. The intensity of frost weathering, frost sorting, and solifluction is very high. In the Taiga zone, the intensity of these processes is moderate but icing is prominent. There is a vast difference in cryogenic processes in the northern and southern slopes in the forest-steppe zone. The northern mountain slopes are covered by the forests (larch, cedar) whereas the southern slopes are naked. The cryogenic processes and phenomena are confined to the northern slopes in this zone. The mountain steppe is different from others, with scanty cryogenic processes.