

11. Glacial landforms

In cold climates, frozen water – *ice* and *snow* – influence relief the most => in *mountainous areas* are:

- Avalanches (the most known **nivation process**) = downslope movement of huge snow mass ⇔ gravitation and partially melted snow.

In *polar areas*, **glacial processes** form the relief, i.e. the influence of a glacier moving downslopes, down the valley. By this motion, it creates:

- U-shaped valley.

Corrie = result of glacier melting. It has been formed by glacier which remained at the head of valley, in the place of glacier formation.

Tarn (corrie lake) = formed by thawed glacier whose water remained and created a lake.

Moraine = weathered material/rocks (regolith) brought to the bottom of a valley by glacier.

Examples of mountains formed also by glacial processes:

- High Tatras
- Alps
- Rocky Mountains
- Himalayas

In polar areas (Siberia, Northern Territories in Canada), the soil type is called *permafrost* there (permanently frozen soil into the depth of 1-2 m).

During short summer season (3 months), upper part of this soil thaws and starts to move down the slope = solifluction = slow, downward movement of waterlogged soil.

Keywords

ice, snow, mountainous/polar areas, avalanches, nivation/glacial processes, corrie, tarn, moraine, U-shaped valley, Siberia, Northern Territories, permafrost, solifluction

