

The master thesis deals with evaluating of moraine accumulations age in Łomnica and Łomniczka valley, Poland, and Obří důl valley, Czechia. The aim of thesis is obtained the set of weathering characteristics of moraine accumulations. Weathering characteristics will be used to correlation of moraines in the study area.

It was set preliminary position of moraine accumulations according to maps of glacial relief, which were collected for studied area. Subsequently, moraine accumulations were precisely mapped in terrain and suitable locations were chosen for measuring of weathering characteristics. Schmidt-hammer measurement was used for determination of weathering degree of boulders located on moraine accumulations. Proportions of weathering pits and thickness of weathering rind were measured for supplementary data, which characterize state of boulder weathering. Acquired data of moraine accumulations were statistically evaluated using correlation analysis, ANOVA, and cluster analysis.

On basis of measured data and using statistical processing, it was confirmed that observed moraine accumulations of three studied locations don't exhibit distinctive differences according to surface weathering. Correlation of moraine accumulations showed congruent relative age of moraines lying in lowest altitudes in the study area. There are moraines which were formed of maximal extent of glacier in Łomnica valley, the lateral moraine in Łomniczka valley and two moraines lying in the lowest altitudes of Obří důl valley. On basis of measured weathering characteristics isn't unambiguous the correlation of three moraine accumulations lying between 910 and 930 m a.s.l. in Obří důl valley and moraine accumulations in Łomnica valley.

Results of thesis confirm that preserved moraine accumulations of studied areas originated in the same phase of glaciation.