

# ABSTRACT

Submitted Bachelor thesis is focused on thermal regime of the morain covering, which is one of the main indicators of the extension in periglacial and glacial zone in the mountain environment. Introductory part is concluded from themed literature and is primarily focused on the characteristics of the thermal regime of sediments and their relationship to the boundaries of the mountain permafrost, position of equilibrium snow line and temperature-based mountain glaciers.

The following sections of this work are describing physical and geographic conditions of the valley of Adygine in Kyrgyz Range area (northern Tien-Shan) as well as the methodology of the used work. The main part of this document is the evaluation of measured temperature in the morain cover in the area of interest. At first from general point of view, then in terms of freeze-thaw characteristics and finally relate these findings to the local conditions of the glacial environment. According to the measured results, it is clear that there are many factors influencing the soil temperature regime. Among the most fundamental, the most important include air temperature, local circulation conditions, snow cover and local habitat conditions. Knowledge gained from the practical part shows that the measurement localities are characterized by relatively weak activity, located outside the area of permanent mountain permafrost or the area of strong active layer and the front-bases glacier can be described as temperature.

**Key words:** soil thermal regime, freeze-thaw characteristics, glacial zone, Adygine valley