

## SUMMARY

Weathering is a natural process which is occurring on the Earth's surface. Its effect on minerals and other materials is significant. Besides mechanical alteration, the result of weathering can reach the chemical reactions, which can lead to contamination of the environment (e.g. ground water and soils). Not only for this reason has weathering become an object of intensive studies. In situ weathering experiments are one way of research. The aim of this bachelor thesis is to review the advantages and disadvantages of these experiments, to describe their course and the complications which can happen during the experiments, and how to use knowledge of these observations. Attention is also focused on several concrete experiments which were concerned with the weathering of sulphides and silicates, and where it is possible to observe these things on them.