

## Abstract

Combined anisotropy of magnetic susceptibility (AMS) and crystallographic studies were applied on a neogene lava flow, for which we know the supposed flow path. Samples were studied under microscope, the minerals were analysed on microprobe, the orientation of olivine crystals was determined via EBSD and magnetic properties were studied. AMS data acquired from samples collected from representative outcrops of lava flow show weak preferred orientation of magnetite-ulvöspinel. EBSD analysis suggests only slight orientation of plagioclase in one sample. Analysed composition of olivine corresponds with mathematical model for eruption temperature and crystallization succession. Rootless cone (disorderly breccia cone) in lava body was found and described in the abandoned Machův lom quarry.