Abstract: Loess-paleosol sequences preserve information that can be used to reconstruct paleoenvironement, specifically the climatic conditions and the vegetation present at the time of their formation. A dense network of reliably analyzed sequences from different geographic locations is crucial for representation of ecological and climatic trends during the Pleistocene (Frechen, 2011). The aim of this thesis is to fill the gap in the geographical distribution of well described loess-paleosol sequences in Central Europe. Therefore, it focuses on a loess-paleosol sequence in Bůhzdař, situated 9 km NW of Prague, Czech Republic. This profile was last studied in 1952 by naturalist Vojen Ložek. This thesis uses a number of analyses in order to get a multi-proxy record of local paleoenvironmental changes archived in a sequence of alternating loess sediments and paleosols in Bůhzdař. Geochemical approaches are combined with grain size distribution to define climatic conditions at the time of formation of the strata.

Key words: loess/paleosol sequences, Bůhzdař, Czech Republic, particle size distribution, total organic carbon, XRF, XRD, stable isotopes ^{13}C and ^{18}O