Summary

This study was focused on fluvial sedimentary records in the southern part of Morava River - all studied profiles are situated in the study area called Strážnické Pomoraví. Geochemical dating methods and analysis, which were applied on river sedimentary records in profiles in this part of Morava River, were performed to show that fluvial sedimentary records are useful environmental archives for determination of anthropogenic contamination in the last 100 - 200 years. Determination of depth dependence of heavy metals – especially Pb, Zn and Cu and other methods such as determination of Pb isotopic ratios and magnetic susceptibility were used for chemostratigraphic correlation of studied profiles. Cation exchange capacity, lithological description of profiles and elementary analysis using EDXRF were used for facial description of profiles. Possibility of using the ^{137}Cs method for geochemical dating of sedimentary profiles was also investigated.