

Abstract

The diploma thesis aims to determine the threat of archaeological site Bylany by soil erosion. Soil erosion was detected using a combination of field research and modeling in the WaTEM/SEDEM program. The results of the diploma thesis are beneficial to the knowledge of the rate of erosion and at the same time can be helpful in research and preservation of archaeological monuments.

Based on a combination of erosion modeling and field investigation, the rate of erosion and accumulation in the locality was determined. Soil erosion was demonstrated at five studied sites out of a total of eight sites. Two sites showed questionable results and only one site showed accumulation of material with an average annual accumulation of 2,14 mm. The average annual value of soil erosion varied between 0,46 and 26,9 mm. A high intensity of soil erosion was demonstrated on the erosion model of water erosion also in the southern part of the slope, where the smaller roundel is located, but this could not be confirmed by field investigation as this roundel has not been studied and described by archaeologists. The ongoing soil erosion in the locality thus represents a significant threat to the Neolithic roundels in Bylany.