

3_1_1_General_characteristics_of_the_palaeo-environment

The local basement geology consists of Pre-Cambrian granite and gabbro (URL:

http://geoinf.kiev.ua/wp/w/Viewer.php?pr=1&ump=m36-33&fmp=kv_m36-33_1.pdf). This bedrock is deeply incised by valleys, including all tributaries to the local stream network. The study is focused in the valley of an unnamed tributary with steep transportational slopes (c30°) on the eastern edge of the megasite. Interfluves are draped with Pleistocene loess of variable thickness – typically 1.5 m but deeper in gulley fills. Carbonate-rich soils, including chernozems, developed out of the loess at various points in the Holocene ([ADS LINK TO 3_1_2_soil_map_of_ukraine](#)). Climate is temperate and moderately continental, with mean July temperature of 20° C and a mean January temperature of -6° C, mean annual precipitation being c550 mm.

Vegetation in the study region is classified as forest-steppe, although steppe taxa are azonal in distribution, with *Stipa capillata* (feather grass) being limited to Southern exposures of steep slopes of stream and river valleys. The interfluves today are largely cultivated with a variety of non-cereal crops, with forested boundaries of large fields also consisting of many introduced species. Primary mixed-oak woodland with *Tilia cordata* elements is found at the South-eastern edges of the Nebelivka Cooperative Farm in the direction of Borschova village.