



## **Reconstruction of Climate in Southeastern Part of Russian Plain during Bronze Age (Paleosol Data)**

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Paleosols of different ages buried under four kurgan mounds as well as modern background soils in the Southeastern part of the Russian Plain have been studied. According to calibrated  $^{14}\text{C}$  data, the kurgans were constructed during the following periods of Bronze Age: 3970-3800 cal yr B.C. (Maykop culture); 3493-2881 cal yr B.C. (Yamnaya culture); 3300-2910 cal yr B.C.; 3020-2630 cal yr B.C.; 2870-2510 cal yr B.C.; 2490-2410 cal yr B.C. (the Early Catacomb and Catacomb cultures) and 1800-1700 yr BC (Srub culture). Results of the comparative analysis of chemical and morphological properties of paleosols and modern soils indicate that there was a strong climate aridization during the second half of the third millennium BC followed by rather humid climate 4<sup>th</sup> Millennium BC. The heaviest droughts occurred at 2400 cal yr B.C., resulting in disastrous wind erosions, increase in the concentration salts and deflation of the upper horizon of the soils of the watershed areas. But period of extremely drought climate conditions was not long. At the beginning of 2<sup>nd</sup> Millennium BC environmental conditions of the area under investigation were similar to those of modern one.