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Channel morphology at the Late Pleistocene - Holocene transition an the southern East-European Plain

High-amplitude changes in the river channels at southern East-European Plain were studied at two key sites located within the present-day forest-steppe characterised by moderate continental climate. **Site 1** is situated at the middle course of the Seim River (the Dnieper River Basin) valley and at its tributaries - Svapa R. and Prutische R. Here Valdai alluvial plain makes a low terrace 10-15-m high and up to 5-6 km wide, marked with abundant relic thermokarst depressions. Floodplain is 50-200 times as wide as river channels. A meandering channel formed the most part of the floodplain by an order as large as the recent river. Clay and silt (3-4 m) covered by a peat layer up to 2 m thick fill palaeochannels. Radiocarbon dates from the base of palaeochannel fill (for the Seim R.: 13800±85, Ki-6984; for the Svapa R.: 14030±70, Ki-6997; for the Prutische R: 13510±85, Ki-6991) show that large meanders were abandoned approximately 14 Ka BP. Palaeomeanders on the next floodplain generation are similar to the recent channel. The oldest small meanders were abandoned in Preboreal or by the beginning of the Boreal (Seim: 9240±80, Ki-6993; Svapa: 9830±70, Ki-7004). Flow reduction and transformation from large to small meanders occurred at least by the beginning of the Holocene.

Site 2 is situated at the in the middle section of the Khoper River valley (the Don River Basin). Valley floor includes an 8-15 m Valdai terrace and floodplain that broadens downstream from 1 up to 10-12 km. Similar to the above case, floodplain contains both large and small palaeochannels. The period of large meander activity is estimated as 14,5(?) - 11,5 Ka BP (14430 ± 110 , Ki-7694; 11325 ± 120 , Ki-7680). During the period 11-10 Ka BP the river formed meanders with half-wavelength 1000-1500 m and channel width 150-200 m, still exceeding the recent channel parameters. These meanders were abandoned by the end of Preboreal (9420 ± 90 , Ki-7693). The Holocene palaeochannels are similar to the present-day river.