Pre-regulation planform of the Körös/Criş River system (Hungary/Romania) in the maps of the Second Military Survey of the Habsburg Empire (1857-61)

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The Körös/Criş River system is a part of the Tisza catchment in the central/eastern part of the Pannonian Basin, covering the western slopes of the Apuseni Mts. and the central/eastern part of the Great Hungarian Plain. Its converging rivers (from north to south the Berettyó/Barcăul, Sebes-Körös/Crişul Repede, Fekete-Körös/Crişul Negru and the Fehér-Körös/Crişul Alb) confluence into one trunk river, reaching the Tisza in its middle section. After the era of the Turkish occupation (1552-1687) and the river-course modifications with respect to the fortification purposes, the regulation of these rivers were taken in two phases, first from the end of the 18th to the beginning of the 19th centuries, then in the second part of the 19th century. These works resulted in drying up the connecting backswamps and annihilating the very interesting anastomosing river planforms, mainly along the present Hungarian-Romanian border. These original landforms can be investigated in the 1:28,800 scale sheets of the Second Military Survey of the Habsburg Empire, mapped in this region between 1857 and 1861. The lowland part of the rivers are meandering, and the sinuosity analysis based on their digitized pre-regulation thalwegs can reveal some neotectonically active zones crossing them, around Szarvas and Gyomaendrőd.