



The Tisza maps of Samuel Lányi and their geodetic basis

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The map of Lányi is the last map which represents the reach of Tisza in the former Heves and Külső-Szolnok counties in central Hungary, before the river control measures. The map was made by surveying with the leading of Sámuel Lányi, qualified engineer, between 1834 and 1843. This map was the base of the river control guided by Pál Vásárhelyi, which shows the importance of it.

The map was drawn on 73*58 cm sheets of paper. Its scale is 1 Wiener inch (2.63 cm) to 400 Wiener fathoms (1,89648384 m) that is in metric system 1: 28800. Its geodetic base is the triangulation of Tisza and Maros rivers surveyed between 1834 and 1836. The coordinates was described in Cassini projection. The central point of the coordinate system was the old observatory of the Gellérthegy in Buda (now Budapest).

This map is useable to ethnographical, urban-geographical, hydrological and agriculture-historical researches. It contains many missing rills and canals which had formed the surface of Great Hungarian Plain in the 19. century. The small altitude variations of the central part of the Great Hungarian Plain are displayed with surprising accuracy in extents.