



## **Using archived data for identification of change of soil hydrologic function**

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Soil properties have been changed by various impacts such as using heavy technology in agriculture or loss of an organic matter in soil. This project is focused on the comparison of soil properties affecting their hydrologic functions during last fifty years. Data was obtained from soil database of first soil survey of the Czechoslovakia and new sampled and measured soil data at the same position of a former probe at arable land in the Czech Republic. 170 probes were excavated and at each probe six samples were taken from two depths (10 and 40 cm). Samples were then analyzed in a laboratory for bulk density, porosity, Ks coefficient and Cox. Results from the laboratory and archived data were compared and analyzed statistically. Data proved soil compaction and slightly losing of soil organic matter. This study was supported by project: NAZV QJ1520026.