



Danube's Hydrological Regime Influence upon the Flood Plain Phreatic Aquifer between Giurgiu and Calarasi

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Based on the geological and hydrogeological interpretation performed in Danube's flood plain between Giurgiu and Călărași, the phreatic aquifer level evolution correlated with Danube's level was studied. From lithological point of view, the sedimentary formations crossed by the monitoring wells, represent important elements for making evident hydraulic connections between Danube and its flood plain phreatic aquifer. The statistical correlation analysis were made for the monitoring wells and Danube levels, using the correlation coefficient.

Danube's breadth influence on its flood plain phreatic level was also studied and selecting the wells with correlation coefficients higher than 0.6, it was determined that this influence is manifesting until 240 and 8 000 meters distance from the river.

The results of this study are represented on GIS format maps and charts.