



Hydrodynamic parameters in the braided river reach – the Ochotnica River study in Polish Carpathians

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In the poster, the research on chosen hydrodynamic parameters in gravel braided river is presented. The research was conducted within the chosen, braided reach of the Ochotnica River in the Gorce Mountains – Polish Carpathians. The research reach was located in the place where three and alternatively two bars in the river were created. Along the period 2003 and 2004 measurements were done in several field campaigns. Values of flow velocities (from 0,003 m/s up to 1,472 m/s for all braides) were measured in the river reach and then shear stresses (from 0,00002 N/m up to 4,4182 N/m), dynamic velocities (from 0,0002 m/s up to 0,0665 m/s), Reynolds (from 450 up to 390796) and Froude (from 0,006 up to 1,622) numbers and Shields parameters (from 0 up to 0,003249) were calculated. Analysis of hydrodynamics parameters allowed to check the hydrodynamic conditions in the river channel and analyze the braiding process. Additionally to hydrodynamics parameters the grain size curves of gravel braides was analyzed and presented. The results show that in the Ochotnica River natural braiding processes is taking place despite of anthropological pressure of the river.