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Characteristics of suspended sediment grain size in winter events of lowland river

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The grain size of suspended sediment transport and its changeability with the river flows is an important issue for modeling of suspended sediment transport and reservoir siltation as well. Suspended sediment transport during snowmelt floods in small, rural catchment (23 km2, Mazowian Lowlands, central Poland) has been investigated. The basic hydrological and meteorological data and turbidity of water were measured on Zagożdżonka Rivier in Czarna Gauging station. The paper presents the results of suspended sediment grain sizes distribution for samples, which have been collected during snowmelt or rainfall-snowmelt events in winter time. The grain size of suspended sediment shows high variability during the flood events. Mean values of the d50 of suspended sediment contained in the range 48.35-98.25 μm, with standard deviation of 19.42. Average values of d10, d50 and d90 for the event were 16.13 μm , 71.61 μm and 220.87 μm, respectively