

ABSTRACT

Present days are characterized by raising awareness of natural hazards, especially the risk of flood events. Extreme floods are connected with large - scale material damage and also endanger human lives. That's why the issue of flood formation and its possibility of forecasting has become discussed topic these days. Research of passed floods provides principles of effective flood protection in specific area.

The main aim of this thesis is to analyse flood events that passed in the upper Opava river basin, concretely the source area containing the Černá, Střední and Bílá Opava river basins. This analysis refers about the flood frequency, different seasonal regime of floods occurrence and looks for the relationship between atmospheric conditions and origin of flood events in the period of 1963 to 1997. Part of this thesis also summarizes main types of floods raised in the source area and compares different flood threat of the Černá, Střední and Bílá Opava rivers. There is also mentioned some basic differences of drainage formation, natural conditions and rainfall distribution in specific catchment area.