

Abstract

This bachelor thesis deals with compound hydrometeorological events and provides overview of recent knowledge of this significant natural phenomena. There have risen several definitions of compound hydrometeorological events in recent years. All of these definitions are connected with condition of simultaneous occurrence of two, possibly more dangerous meteorological or hydrological threats. Examples are simultaneous occurrence of drought and heatwave. One of the aims of the study was to attempt classification of compound hydrometeorological events. Based on recent knowledge, it is possible to look at this type of threat from two main perspectives. The first perspective could be a description of a compound event as a random combination of dangerous threats, while the second perspective illustrates the dangerous phenomena as interdependent events. The practical part outlines some examples of associated hydrometeorological events that occurred in the Czech Republic with the help of brief case studies.

Key words: compound hydrometeorological events, simultaneous occurrence, storm surge, heavy precipitation, drought, heatwave