The aim of my work is to clarify the meteorological conditions which lead to forest fires and create a formula that would assessed the fire hazard on the basis of forecast of meteorological parameters. Main parts of this work are: definition and conditions of the emergence of forest fires, division of forest fires, methods of disposal of fires, methods and ways of predicting and detecting forest fires and the occurrence and areal extent of forest fires in the world and in our country, influence of drought and global warming.
I evaluated forest fires in terms of meteorological factors (average daily temperature, total daily precipitation - processed by method of effective precipitation and wind speed) in the Chomutov distrikt (from 3 climatological stations) from 1998 to 2008. First I analyzed impact of individual meteorological parameters on the occurrence of forest fires during last 11 years. I drew up several formulas for calculating the hazard of fires. The formula with the best results I have named Fire Hazard Index and set the limits, i.e. the degree of harard. The Fire Hazard Index is meteorological index and it does not work with the factors of vegetation, infrastructure and topography. Therefore Fire Hazard Index would be a suitable part of the overall General Hazard Index, which would take into account other factors.