

Abstract

The diploma thesis provides special studies from the human bioclimatology sector. Ten year sequences (2001-2010) of many meteorological components are processed here. The meteorological components are as follows: average daily air temperature, average daily wind speed, time of sunshine per day, duration of rainfalls, fogs and fumes and also monthly aggregate rainfall. The main study aims attention to evaluation of complex effects of selected elements on humans. The most and the least suitable season of the year for performing outdoor activities for a human were found, including optimal definition of summer holidays. Further studies concern the problems of air pollution related with synoptic situation. Sufficient space has been also given to more studies relating to wind chill or relations among individual meteorological elements, which can be helpful while forecasting the weather. With the help of particular data provided by Liberec hospital, the correlation between amounts of patients with particular diseases and changes of selected meteorological elements has been discovered.