

Abstract

The main goal of the thesis is the evaluation of long-term changes in precipitation type in the Czech Republic. The first part concentrates on the literature review on precipitation, its spatial distribution, and long-term changes in space and amount, mainly for the world and Europe. A part of this chapter is also devoted to variability of snow cover in the Northern Hemisphere and impacts of the North Atlantic oscillation on precipitation and snow cover. The second part analyzes changes in the precipitation type using climatic measurements of daily precipitation amounts and the information of the state of weather in the SYNOP database. In this data, I have analyzed long-term trends of the portion of solid precipitation in total annual precipitation for the whole Czech Republic and for different intervals of altitudes in 1982 – 2007. I have also investigated if there is a change in the portion of days with snow on the total precipitation days in 1982 – 2010. The results show, that the portion of snow precipitation and the portion of days with snow is descending slowly and insignificantly.

Keywords: precipitation, state of precipitation, snow precipitation