

The forest microclimate is different from the conditions measured at meteorological stations. Conditions in the herbaceous layer are influenced by both the surrounding vegetation and macroclimatic factors. In this thesis, we investigate the relationship between the temperature difference at 2 m and near the ground surface in a forest and meteorological conditions. Microclimatic data are measured using temperature sensors in the national parks Šumava and Bavarian Forest. We build on studies investigating the influence of vegetation on temperatures in forest stands to complete the picture of how forest microclimate functions. This knowledge is crucial for understanding the impact of climate change and for further research using advanced modelling and generalisation to other habitats. For selected meteorological conditions measured at the stations, a statistically significant relationship was found for the temperature difference, which is strongest for snow depth and weakest for precipitation.