

This bachelor's thesis discusses climate classification of the Czech Republic territory, providing an overview of the existing climate classifications used for the area. The concept of satellite data processing is presented, as an alternative approach to climate classification. Based on satellite data of net radiation, incoming solar radiation and fractional cloud cover, new climate classifications for the Czech Republic are created using a hierarchical clustering method. The results show that in all cases, the identified climate units primarily reflect the terrain and increasing continentality of climate in the southwest direction.