

Cloudiness and solar radiation affect the Earth's energy and water cycle and spatial distribution of these parameters is also connected to the atmospheric pressure field and atmospheric circulation. This thesis starts with a short overview of remote sensing of the atmosphere, the EUMETSAT organisation and its section CM SAF which focuses on the uses of satellite data for climate monitoring. Next is a description of cloud and radiation products used in this thesis. Daily means of these products in the Czech Republic are then used to calculate mean values, trends and anomalies for the whole time series. Obtained values are compared based on the weather circulation type using the Brádka classification.