



Diurnal precipitation cycle in the Baltic Sea area - the link to large-scale atmospheric circulation patterns

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Here we study the diurnal precipitation characteristics in the Baltic Sea area and the link to large-scale atmospheric circulation. Hourly precipitation observations from Sweden, Norway and Estonia are used to analyze the diurnal cycles of precipitation amount and frequency. Distinct spatial patterns for summer (JJA) and winter (DJF) are found. A catalogue of circulation classifications, collected and standardized by COST action 733, are utilized to classify the large-atmospheric circulation over the Baltic Sea domain in order to investigate the link between large-scale circulation and precipitation patterns. Both precipitation climatology and precipitation extremes are considered.