



The total precipitation in the warm half of the year in Poland in the relation to the water vapor transport

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This study presents the relation between the amount of water vapor transport over Poland and the total precipitation in selected meteorological stations in Poland in the warm half of the year. Moisture conditions based on gridded data from the NCEP-DOE Reanalysis 2 data base were analyzed. The same data source was used to define the atmospheric circulation conditions. The water vapor transport and atmospheric circulation conditions for the seven pressure levels: 925, 850, 700, 600, 500, 300 and 200 mb were considered. The circulation types related to the high total precipitation in warm half of the year were distinguished on the basis of the atmospheric circulation conditions and water vapor transport. For these types, the spatial distribution of the perceptible water over Central Europe was checked. Moreover, the spatial distribution of precipitation in Poland and the amount of the water vapor transport in correlation to atmospheric circulation types were defined for selected pressure levels.