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Climatology of dew in Poland

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It is known from earlier studies that locally in Poland dew consists a considerable component of water flux from atmosphere to the ground. The maximum reported values reach more than 50 mm annually which is around 10% of water delivered via non-wintertime precipitation. Within the present project dew collectors were installed in 12 sites representing different geographic regions of Poland and, on the other hand, different types of landuse. Samples are collected with the use of unified equipment and methodology. The deposited volume of dew/hoarfrost and accompanying weather conditions as well as ionic composition is controlled and will be controlled over one year at these sites until the end of the ongoing winter.

On the basis of daily values of water volume deposited via dew/hoarfrost, basic statistical indices will be calculated. Weather conditions that control the intensity of dew/hoarfrost deposition will be examined as well as atmospheric circulation patterns which favor dew/hoarfrost will be quantitatively characterized. Additionally local relief and landuse will be discussed as potential controls of dew/hoarfrost deposition.