



## **Small intensity precipitation effect on wind induced loss of liquid precipitation measurement**

B. Chvíla (1) and B. Sevruc (2)

(1) Slovak Hydrometeorological Institute, Jeséniova 17, 833 15 Bratislava, Slovakia (branislav.chvila@shmu.sk / Fax: +421 2 5477 4419), (2) Former: Institute of Atmosphere and Climate Science, Swiss Federal Institute of Technology ETH, Winterthurerstr.190, CH-8057 Zurich, Switzerland (boris.sevruc@env.ethz.ch / Fax: +41 1 362 5197)

The effect of small intensity precipitation, defined as the portion  $P$  of the small intensities  $i \leq 1.8$  mm/h in the total amount of precipitation, was analyzed for the hourly wind induced loss of precipitation measurement. The total number of 2200 hourly intervals during the 5-year period in Jaslovské Bohunice, Slovakia, was considered. About 1/8 of intervals was indicated as a convective precipitation. Results show that there are only negligible differences between the hourly values of the wind induced loss of non-convective and convective rains if the portion  $P$  is preferred as the structure parameter instead of the intensity of precipitation. The two variables, the portion  $P$  of small intensities and the wind speed can be used to assess the hourly values of the wind induced loss of precipitation measurement. Therefore there is no further need to separate the non-convective and convective precipitation as was suggested in previous studies by Chvila et al (2002 and 2005).