EMS Annual Meeting Abstracts,
Vol. 6, EMS2009-414, 2009
9th EMS / 9th ECAM

9th EMS Annual Meeting
9th European Conference on Applications of Meteorology
High resolution meteorology
- applications and services

Comparison of evaporimeters in field experiments in Austria

T. Gerersdorfer (1), J. Eitzinger (1), F. Holawe (2), and W. Laube (1)

(1) Institute of Meteorology, University of Natural Resources and Applied Life Sciences, Vienna, Austria (thomas.gerersdorfer@boku.ac.at/+43 47654 5610), (2) Dept.of Geography and Regional Research, University of Vienna, Austria (franz.holawe@univie.ac.at/+43 4277 48671)

An accurate estimation of evapotranspiration is crucial for many applications in agrometeorology. However, through the involvement of many influencing parameters in this complex process of mass flux makes it difficult to establish a robust method for the estimation of representative values of potential and actual evapotranspiration. Especially the influence of different spatial and temporal scales applied does not always allow a direct comparison between equations and even measurement methods.
In order to compare direct measurement methods of potential evapotranspiration by different types of evaporimeters for further comparison with indirect calculation methods from hourly to daily ET0 estimation, an experiment was established in the Marchfeld region of Austria. The results should highlight the respective application potential of the different methods regarding their accuracy and response to different weather conditions.