Geophysical Research Abstracts
Vol. 14, EGU2012-13940, 2012
EGU General Assembly 2012

Laser disdrometer tools for local and climatological characterization of hydrometeors

M. Erpicum (1), X. Fettweis (1), N. Jorion (1), X. Pirard (1), J. Van Campenhout (2), and A. Sougnez (1)

(1) Université de Liège, Geography, Climatology and Topoclimatology, LIEGE, Belgium (michel.erpicum@ulg.ac.be), (2) Université de Liège, Geography, Fluvial Geomorphology, LIEGE, Belgium

Measurements from two laser disdrometers (THIES) and two weighing pluviographs (OTT) have been used for WMO hydrometeors synoptic codes (HSC), intensities (mm/h) and accumulated rainfall acquisition based on 1-min sampling. It was done to perform hydro-climatologic comparisons between two automatic weather stations with a lot of other classical meteorological captors in Liège - Sart Tilman - ULg and Mont-Rigi (SSHF-ULg, IRM and SPW), southern Belgium. The comparisons were focus on three principal parameters: simultaneous rainfall intensity (mm/h), HSC and rainfall depth (mm), R.

Time series comparisons show different characterization between months and seasons. These analysis was conducted in Liège (alt : 240 m) from March 2005 to December 2011 and in Mont-Rigi (alt : 674m) from September 2010 to December 2011. The two automatic stations are separated by37 km and the climate is oceanic and temperate.