

EVOLUTION OF RAINDROP SIZE DISTRIBUTIONS DURING A STRATIFORM PRECIPITATION EVENT IN THE CITY OF LEON (SPAIN)

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During the sampling campaign carried out from July to the end of October 2015 in the city of León (Spain), an episode of light rain was recorded on 13 September with a duration of four hours and an accumulated precipitation of only 2.3 mm. Rainfall occurred softly and continuously, with a maximum rainfall intensity of 0.45 mm in 10 min. The raindrop size distribution was recorded every minute with a laser disdrometer Thies LPM (which registered drops with diameters between 0.125 and 8 mm in 20 channels).

Besides the meteorological and synoptic analysis of the day, a study on the evolution of precipitation has been made every minute, including rainfall intensity, amount of precipitation, raindrop mean size and the parameters of the gamma distribution. The eventual relationships between these variables and the meteorological parameters from a weather station have also been checked. This type of studies may be useful for the analysis of the scavenging of aerosol particles by rain.