README for Rainfall Data

The rainfall data from Armagh Observatory were obtained with a variety of rain guages, some square and others round. A list of the guages used is given in Table 1 of the two publications listed in /rain/publications, along with the period of their use and location. The sensitivity (conversion factor) of these guages was determined from overlapping periods of use and is given in Table 1 relative to the 8-inch round guage and subsequent 5-inch guages. The daily rainfall readings for the early guages were recorded in inches and for later guages in millimetres. The raw (verified) readings in these units are given in the subdirectory /rain/daily/raw-verif. The heading of each file mentions the guage to which the readings refer.

In the subdirectory /rain/daily/calibrated the daily rainfall has been converted to millimetres and corrected for the sensitivity and location of the guage using the conversion factors listed in Table 1.

In the subdirectory /rain/monthly/ two files are given: rrtotal_1838-2001_annual which gives the total rainfall in the month and year, and rrmonthlymeans_1838_2001 which gives the mean daily rainfall per month, taking into account the number of days in each month.

Seasonal and annual means of these data are given in the subdirectory rain/seas-ann.

Two publications which describe the guages used and data calibration are given in **rain/publications**. Please reference these if you use the data.

Persons who have contributed to the compilation, calibration and processing of the data include: David Fee, David Cardwell, Alan Coughlin, Brenda Morrow, Ann Donnelly, Theresa Taylor, David Lennox, Ana Garcia-Suarez and myself. Many more people have contributed to the daily recording of rainfall data at Armagh Observatory since readings began in 1838.

References:

ARM/MET/001988, ARM/MET/001087, ARM/MET/001085

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