

Readme for Wind Data from Armagh Observatory

Armagh Observatory has a considerable archive of wind data from the Robinson Anemometer that was developed there by Thomas Romney Robinson in the 1840s. See Jim Bennet's book and references therein to various papers by T.R. Robinson.

The long series of hourly measurements of wind strength and direction are compiled in many volumes housed in the Observatory Archives and the Public Record Office for Northern Ireland (PRONI). This dataset, which is very extensive and probably one of the earliest from a single site in existence, has never been analysed to my knowledge.

The, more limited, storm records, from the earliest meteorological record books kept at the Observatory (circa 1795) until the 20th century, have been compiled and published by Kieran Hickey.

The data listed here is much more restricted and concerns only the wind estimates recorded by the meteorological observer at the times of his routine measurements. These data have never been properly verified and are as typed in by Aidan Grant with correction only where obvious errors were present. They are likely to contain many additional errors. However, they may be useful for statistical studies, e.g. for wind direction.

The basic files are: 1900-1964-in.dat and 1965-2000-in.dat. The former has morning and evening estimates of wind strength and direction, with compass directions NE, SE etc converted to the new scale in tens of degrees from North via East. Up until the end of 1958, the wind strength is given in the Beaufort Scale and, from the beginning of 1959, in knots, estimated from the Beaufort Scale. From 1900-1964, morning and evening values are available but, from 1965 on, morning values only.

Files:

/wind/daily/1900-1964-in 1965-2000-in Initial files, partly corrected
/wind/daily/wind-dir-force wind direction and force 1900-1964
/wind/daily/wind-dir-for-B wind direction and force 1965-2000

References:

M123, Eleven Anemometer Record Books, 1852-1907 (c. 9000pp), Butler, J. and Hoskin, M. (1987) The Archives of Armagh Observatory, J. Hist. Astron.18, 295-307.

PRONI, Additional Anemometer Record Books, 1908-circa. 1964. Ref. unknown.

Bennet, J. A. (1990) Church, State and Astronomy in Ireland- 200 years of Armagh Observatory, Armagh Observatory

Hickey, K.R. (2006), The storminess record from Armagh Observatory, Northern Ireland, 1796-1999. Weather 58, 28-35.

Archive References:

ARM/MET/001112