

# The Large Data Set



Five UK weather stations:

- Camborne
- Heathrow
- Hurn
- Leeming
- Leuchars

Three overseas weather stations:

- Beijing
- Jacksonville
- Perth (In the southern hemisphere, so winter is June to August)

Time periods: May to October 1987 and May to October 2015.



**Daily Mean Temperature** Degrees Celsius (°C)

**Daily Total Rainfall** Millimetres (mm)

A 'trace or tr' of rain is an amount less than 0.05mm. When cleaning data these should be changed to 0.

**Daily Total Sunshine** Hours (hrs)

The amount of bright sunshine recorded on the day of entry.

**Daily Maximum Relative Humidity** (%)

The relative humidity is a measure of how close the air is to being saturated with water vapour. Relative humidities of above 95% are associated with mist and fog.

**Daily Mean Windspeed and Daily Maximum Gust** Knots (kn)

1 knot = 1.15mph

The speed of the wind is also categorised according to the **Beaufort scale**: a discrete 13 point scale from 0 (Calm) to 12 (Hurricane). In the data set we have: Light (Beaufort Scale 1 – 3), Moderate (Beaufort Scale 4) and Fresh (Beaufort Scale 5).

**Daily Mean Wind Direction and Daily Maximum Gust Direction**

degrees from true north (°)

Direction of 180 degrees means the wind is blowing from the south. These are also listed as cardinal directions (eg. NE).

**Cloud cover** measured in eighths (Oktas).

Discrete 9 point scale from 0 (completely clear) to 8 (completely overcast).

**Pressure** Hectopascals (hPa)

1 hPa = 100 Pa

**Visibility** Decametres (Dm)

1 Dm = 10 m

Visibility is defined as the greatest distance at which an object can be seen and recognized in daylight.

A dash indicates data not available. When cleaning data these should be removed.

**A reading which is not available is listed as 'n/a'. When cleaning data these should be removed.**