## JANUARY 1998.

The month began with deep areas of low pressure both over and approaching the UK. One such low between NW Scotland and Iceland had a central pressure of 940hPa around 1200h on the  $1^{\rm st}$  and this led to widespread gales over much of the western parts of the country. Here the day dawned bright and clear with a widespread ground frost of minus 2.2 by dawn. Around noon a spell of light rain occurred, becoming heavier and more prolonged later, several gale force gusts being recorded, the highest to 36 knots. This rain continued into the  $2^{\rm nd}$  giving a fall of 12.1mm by the 0900h observation on the  $2^{\rm nd}$ .

A low pressure centre of 936hPa midday on the 2<sup>nd</sup> was reinforced by two others, one over Plymouth and another Atlantic low approaching NW Scotland. The overnight rain continued well into the afternoon, then clearing to give sunny spells and a light NE wind which later backed NW. With the whole country and much of the adjacent Continent dominated by areas of low pressure the unsettled weather continued into the 3<sup>rd</sup> which was a day of intermittent rain and strong to gale force winds with only brief sunny spells, temperatures failing to reach 10C during the period.

On the 4<sup>th</sup> and intense Atlantic low was approaching central England bringing heavy rain during the afternoon and increasing winds. Gale force gusts were soon common over the area, the maximum recorded being 52 knots. Widespread structural damage was reported with trees and isolated power lines down. The stormy weather continued to abate on the 5<sup>th</sup> winds peaking at only 17 knots as a transient ridge of high pressure moved into the area during the small hours. This gave a widespread, though only slight, ground frost grass temperatures falling to minus 0.1C.

South easterly winds became established leading to the incursion of colder Continental air and this brought the first snowfall of the winter. Sleet occurred briefly at 1015 turning to snow by 1100. By mid afternoon a cover of some 2cm was common in the area, the Staffordshire hills seeing a more substantial covering. However, further bands of sleet, then rain spread into the Midlands late evening and the snow rapidly thawed, leading to much surface water and local flooding.

The evening of the  $5^{th}$  saw a weak ridge crossing the area leading to a ground frost as low as minus 4.6C, air temperatures falling to 0.3C early on the  $6^{th}$ . Winds returned to a more westerly quarter and further fronts crossed the Midlands bringing spells of rain throughout the day. This unsettled, wet weather, continued into the morning of the  $7^{th}$  giving a further fall of 10.4mm of rain by 0900. The  $7^{th}$  was a day of blustery showers as a further area of low pressure pushed fronts across the region. Winds picked up from the SW peaking at 31 knots dying down in the late evening to allow a slight ground frost to occur under clearing skies.

The 8<sup>th</sup> was another dismal day with low pressure and frontal systems dominating the weather patterns. The leaden skies did not lift at all with a mean radiation level of only 4.4 watts per square metre over the 24 hours and an additional 2.8mm of rain. Winds became more southerly on the 9<sup>th</sup> bringing much milder air in from the Iberian peninsula and North Africa. The led to some quite exceptional January maximum temperatures during the afternoon, many places breaking their January records. The maximum temperature reached 13.3C during the day with 3 hours of sunshine recorded.

The 10<sup>th</sup> was another fairly mild day, temperatures reaching 11.8C, and with prolonged sunshine totalling 6.3 hours. Low pressure was, however, still the dominant feature though it remained dry from the 9<sup>th</sup> to the 11<sup>th</sup>. Further depressions approached the UK from the Atlantic late on the 11<sup>th</sup> which was a cloudy and rather misty day. The 12<sup>th</sup> was a dull and damp day as low pressure to the west became established before moving away to the north east towards Scandinavia.

By the  $13^{\rm th}$  a deepening depression was moving from Iberia across the Bay of Biscay towards the south of England, its associated fronts sweeping an area of rain, some heavy across the Midlands during the morning finally clearing around 10.30 am. Further bands of rain crossed the region during the evening of the  $13^{\rm th}$  and early morning of the  $14^{\rm th}$  giving a total of 10 mm of rain by 09.00 am and maximum daytime temperatures a little below 10C.

In the wake of this depression a showery airstream became established, lasting over both the 15<sup>th</sup> and 16<sup>th</sup> giving days of fairly frequent showers and sunny spells and maximum daytime temperatures from 7.8C to 8.8C, not at all cool for mid January. Late on the 17<sup>th</sup> a fairly complex and deep area of low pressure was approaching the west of the UK from the Atlantic.