## JULY DATA.

The new month began in a very unsettled vein with showery, generally dull and decidedly cool weather. This was brought about by a collapse in the Azores ridge that allowed Atlantic lows to push their associated fronts across the country with a mainly north west to north air flow flooding Polar air across all regions and well into Continental Europe. The Wimbledon Championships were badly affected with heavy showers, or longer periods of rain on most days during their second week. Temperatures remained depressed, daytime maxima reaching only into the mid or upper-teens generally. The highest maximum attained was 21.1°C/70.0°F on the 7<sup>th</sup> with the coldest day being the 1<sup>st</sup> with a maximum of just 14.6°C/58.3°F. The lowest night minimum ended at 8.4°C/47.1°F on the 4<sup>th</sup> that also saw the lowest temperature over grass of 5.1°C/41.2°F, very poor temperatures for high summer!

Rain fell every day totalling 20.7mm/0.81in, the maximum daily fall of 9.8mm/0.39in occurring on the 4<sup>th</sup>. Over the week two days saw falls exceeding 10 hours, the 2<sup>nd</sup> and 4<sup>th</sup>, the latter date seeing the longest spell of wet weather lasting for 10.91 hours. Over the same period sunshine managed just 28.1 hours with 7.3 hours of this coming on the 7<sup>th</sup>. Radiation levels peaked at over 1 kilowatt per square metre every day due to the exceptional clarity of the atmosphere, the prolonged spells of rain having "washed" much of the pollutants from the air, the highest level of 1.213 kilowatts per square metre occurring on July 2<sup>nd</sup>. Winds were generally from a WSW direction peaking at 26 knots/31mph on the 1<sup>st</sup>. In general a very unsettled week of weather in what has been, to date, a poor summer.

The generally unsettled conditions prevailed into the second week with very heavy showers, thunder and cool weather being the norm. It was to be the 13<sup>th</sup> before any mention was made in forecasts, of more settled conditions and high pressure. For the first time this year temperatures did begin to reflect the season with a maximum of 25.2°C/77.4°F on the 14<sup>th</sup>, the first time that temperatures had breached the 25°C mark since July 30<sup>th</sup> last year. The absolute air minimum for the week was 6.1°C/43°F, recorded overnight on the 13<sup>th</sup> that also saw the lowest temperature on grass of 4.1°C.39.4°F.

Radiation temperatures peaked at 59.1°C/138.4°F on July 13<sup>th</sup> whereas the global radiation maximum of 1.096 kilowatts per square metre occurred on the 10<sup>th</sup>. Only one day during the week [the 14<sup>th</sup>] saw radiation levels below 1 kilowatt per square metre. Rainfall totalled 12.5mm/0.49in, the maximum daily fall of 4mm/0.16in occurring on the 9<sup>th</sup> with rain falling over 4 days for a total of just 9.6 hours. Set against this sunshine totalled 57.7 hours, no day being sunless and two very sunny with over 12 hours daily. Summer did at last appear to be with us, a feeling reinforced by a gradual rise in pressure from 1003.1 hPa on the 9<sup>th</sup> to 1027.6 hPa on the 14<sup>th</sup> as the Azores high began to make its presence felt over the UK and near Continent.

High pressure dominated the weather of the third week with sun every day totalling 47.7 hours with a maximum daily total of 11.4 hours on the 15<sup>th</sup>. Some rain did fall, however, with 13.5mm/0.53in being registered over the week, the maximum fall of 12.4mm/0.49in occurring on the 19<sup>th</sup>. There was also one report of thunder on the 19<sup>th</sup> when a short storm occurred on a cold front at 0607 UTC. Maximum temperatures ranged from a high of 25.7°C/78.3°F on the 15<sup>th</sup> to 17.5°C/63.5°F on the 20<sup>th</sup>, the absolute night minimum of 10.2°C/50.4°F occurring on the 17<sup>th</sup>. The morning of the 21<sup>st</sup> also saw the lowest grass temperature when a minimum of 8.0°C/46.4°F was recorded.

Radiation levels continued high with a peak black bulb maximum of 62.0°C/143.6°F on the afternoon of the 15<sup>th</sup>, though the peak radiation level of 1.115 kilowatts per square metre did not occur until the 17<sup>th</sup>, with 4 days during the week recording above 1 kilowatt per square metre. Winds were generally north westerly and light, maximum gusts of 19 knots/23mph being registered on 3 days. In general, a much better week in terms of weather.

Pressure remained high at the start of the fourth week with a strong ridge from the Azores high dominating our weather. Maximum air temperatures ranged from a high of 27.3°C/81.1°F on the 26<sup>th</sup> to a low of 18.5°C/65.3°F on the 24<sup>th</sup>. The lowest night minimum of 6.7°C/44.1°F was recorded on the 22<sup>nd</sup>, as was the lowest over grass at 3.7°C/38.7°F. Black bulb radiation temperatures remained high with a maximum of 60.5°C/140.9°F recorded on July 26<sup>th</sup>. However, the peak radiation level reached was 1.175 kilowatts per square metre on the 22<sup>nd</sup>. By the end of the week radiation levels had dropped as the ridge began to fade under the influence of Atlantic lows.

Winds were generally light and from the SW, a maximum gust of 22 knots/26mph being recorded on the 23<sup>rd</sup>. Rainfall was very sparse with a total of just 0.6mm/0.02in, the maximum daily fall on the 22<sup>rd</sup> being just 0.5mm/0.02in. Over the same period sunshine totalled 46.1 hours, no day being sunless and with a maximum daily total of 14.0 hours recorded on July 28<sup>th</sup>. Pressure over the week ranged from 1020.2hPa on the 22<sup>rd</sup> to 998.2hPa on the 25<sup>th</sup>. Truly a touch of summer at last!

The final few days of the month were extremely unsettled with heavy rain, thunderstorms and humid and oppressive conditions. Both the wettest and hottest days of the month occurred during this spell with an air maximum of 28.6°C/83.5°F on the 29<sup>th</sup> and a fall of 26.5mm/1.04ins of rain on the 30<sup>th</sup>, the latter day seeing heavy thunderstorms in many areas of the country.