

WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

Lat/Long 51°25'N 00°51'W NGR (SU)800699 Altitude 44m ASL.

Monthly Means and Totals

AUGUST 2003

Temperature (°C / °F)	Anomaly		Rank	
Mean maximum	26.0	78.8	+3.8	2 nd highest in 122 years
Mean minimum	13.5	56.3	+1.5	2 nd highest in 122 years
Daily mean	19.8	67.6	+2.7	3 rd highest in 122 years
Highest maximum	36.9	98.4	on 10 th	Lowest maximum 17.7 63.9 on 28 th
Highest minimum	18.9	66.0	on 11 th	Lowest minimum 5.8 42.4 on 31 st
Mean grass minimum	10.3	50.5		Lowest grass minimum 2.5 36.5 on 31 st
Mean earth @30 cm	20.1	68.2	+1.7	Earth @100 cm 18.5 65.3 +1.3
Frost duration (hrs)	0.0			Rain duration (hrs) 9.8
Rainfall total (mm / in)	18.2	0.72	36 %	10 th lowest in 122 years
Highest daily fall	12.6	0.50	on 28 th	
Number of: Dry days (<0.2mm)	26	Wet days (>0.9mm)	2	days ≥5mm 1
Sunshine total (hrs) 257.1	Daily mean 8.29	128 %		Sunniest day 14.9 on 2 nd
N ^o days with: Air frost 0	Ground frost 0	Snow falling 0	Snow lying 0	
Thunder 0	Hail ≥5mm 0	Small hail/ice 0	Fog @09 0	Nil sun 1
Air pressure MSL : Mean @09 GMT (mbar/in)	1019.1	+2.0	30.09	
Absolute highest	1024.3		30.25	on 5 th
Absolute lowest	1004.6		29.67	on 29 th

Anomaly = departure from 1971 to 2000 average.

Notes: **Very Warm, Very Dry, Very Sunny.** New all time highest temperature occurred on the 10th.

Temperature. This August is a month for the record books, with a notable heat wave in the first half, during which the air temperature exceeded 30° on 7 days, and set a new all time record of 36.9° on the 10th. The mean maximum is equal 2nd highest with 1947 after 1995 in the past 122 years. Similarly the mean minimum is 2nd highest after 1997 in the same period. The mean temperature, 19.8°, ranks 3rd highest after 1995 (19.9°) and 1997 (20.0°) since 1882, and is 3.6° above the long-term median, although only 2.7° above the 1971-2000 climatological average. The highest maximum, 36.9° on the 10th, is a new all time highest, 1.3° above the previous highest set in August 1911, and 9.1° above the median August highest. Record temperatures occurred both nationally and at most places locally in southern England on the 10th. Conversely, the lowest minimum, 5.8° on the 31st, is lowest since 1998, and 0.3° below the median. The lowest maximum is 0.9° above the median, while the highest minimum is 2.7° above the median and 4th highest in 91 years. Mean earth temperatures at 30cm and 1 metre are both highest since 1995, but the highest daily value of 22.2° at 30cm is a new record, exceeding the previous highest in 1983 by 0.2°. **Rainfall.** A predominantly dry month, driest since 1995, with 26 dry days and 2 dry spells, the first of 13 days ended on the 17th and the second of 9 days ended on the 27th. The rainfall on the 28th alone accounted for 69 % of the month's total. There was a notable absence of thunder, the first August since 1993 to have none. **Sunshine.** A very sunny month, sunniest since 1995. Daily values during the heatwave were consistently and notable high, with the period 2nd to 15th clocking up 175.5 hours, a daily mean of 12.5 hours, almost twice the normal, and only 2 days having less than 11 hours sunshine. Overall there were 5 days with <3 hours, 19 with ≥6 hours, 15 with ≥9 hours and 11 with ≥12 hours. **Wind.** The mean speed of 4.6 mph is 1.2 mph below average. The 22nd was the windiest day, mean 8.2 mph, and the 3rd the least windy, 2.1 mph. The month's highest gusts of 25 mph were on the 21st and 22nd, a value equal lowest with 2002 in the past 16 years. There were 43 hours with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,5 NE,5 E,7 SE,1 S,2 SW,4 W,4 NW,3. **Humidity.** The overall mean relative humidity this August was 67.7 %, the lowest monthly mean for any month since before 1998. A minimum value of 18 % was recorded on the 10th, the lowest value since the 17th June 2000. **Commentary.** From the 1st to the 10th, a cool dull start on the 1st with the maximum temperature 5° below normal was to prove an exception, as this 10 days was dominated by a notable heat wave that saw a daily anomaly of +14° for the maximum on the 10th, and a 10 day mean anomaly of +7.4° for the maximum. Each day from the 4th to the 10th, except the 7th, had maxima above 30°, and the 10th saw a value higher than any ever recorded in this area, 36.9°. Daily anomalies for the minimum ranged from -3° on the 3rd to +4° on the 5th. A little rain fell on the 1st and 4th, otherwise this period was dry. Apart from a sunless day on the 1st, this period was exceptionally sunny with a 10 day mean 181 % of normal. Winds were light or moderate, SW'ly at first, becoming E'ly by the 4th, W'ly on 6th, N'ly on 7th, S'ly on 9th and NE'ly on 10th. From the 11th to the 20th, daily maxima gradually declined from an anomaly of +11° on the 11th to close to normal from the 14th onwards, as the heatwave ended. Anomalies for daily minima were +6° on the 11th down to -5° on the 20th, with 10 day mean anomalies of +3.2° and +1.1° for max and min resp. 3.7 mm of rain on the 18th in an otherwise dry period. Very sunny still up to the 15th, and again on the 20th, otherwise somewhat below normal, though the 10 day mean was 138 % of normal. Winds were mostly light, between N'ly and E'ly until the 17th, then W'ly. From the 21st to the 31st temperature anomalies ranged from +5° on the 24th to -4° on the 28th for daily maxima, and +7° on the 24th to -5° on the 31st for minima, with the 11 day mean anomalies of +0.9° and +1.7° for max and min resp. Dry until the 27th then a wet day giving 12.6 mm, over twice as much as had fallen up to that date. Then a return to dry conditions. Sunshine was mostly poor, only 3 days having more than normal, and an 11 day mean of 4.4 hours per day, 68 % of normal. Light or moderate winds were W'ly until the 22nd, veering E'ly by 24th, backing NW'ly after the 28th.