

**Bracknell Harmans Water
Berkshire**

**Climatological Data
2005**



**1971-2005
Celebrating 35 Years of Weather Recording at
Bracknell (Harmanswater)**

**Observer Paul Fishwick
3 Whistley Close
Harmans Water
Bracknell**

Bracknell Harmans Water Meteorological Data 2005

Altitude 71m Grid Ref. SU882685 Climatological Observers Link Station B Category

Cover photograph – A ‘summers day’? No, 20.5c was recorded on the 27th October 2005, the highest late October maxima since local records began in 1904 (equal with 26th October 1969)

Climatological records began at this site on 20 April 2000, with records used from the following sites for comparison and used in averages:

Bracknell Bullbrook (Vincent Rise) (Paul Fishwick) 1/1971 to 7/1983 (12 years 7 months)

Bracknell Harmans Water (Uffington Drive) (Paul Fishwick) 8/1983 to 4/2000 (16 years 9 mths.)

Therefore, on the 31st December 2005, 35 years of weather have been recorded in Bracknell Harmanswater at three sites within 300 metres of each other and are therefore considered comparable as a continuous record. A ‘Bracknell’ record can be extended back to July 1962, using the data from the former Bracknell Met Office HQ site (7/1962 to 12/1971), this site being 1 km to the NW of the Bracknell Harmanswater sites. Other ‘local’ records can be used, but all outside of Bracknell to extend the record back to 1904.

On the 31st December 2005 the station instrumentation was as follows:

- Davis Vantage Pro AWS installed on 27 December 2002
Includes Temperature (Maximum and Minimum), Rainfall (amount and rate), Relative Humidity, Wind (direction, speed, highest gust and direction), barometric pressure. (Console pictured on front cover).
- Grass Minimum Sheathed thermometer
- Snowdon pattern raingauge
- R & D Instruments Sunshine Recorder installed on 8 November 2003. Also, R & D Instruments Sunshine Recorder installed on 8th April 2004 at Vincent Rise Harmanswater which has a more exposed site than at Whsitley Close, especially at sunrise and sunset. The Vincent rise data is used as the official record for Harmanswater.

Temperature (c)

Table 1

| Month | Mean Max | Mean Min | Mean | High Max | Date | Low Max | Date | High Min | Date | Low Min | Date | Mean G Min | Low G Min | Date |
|-------|-------------|-------------|------|-------------|------|------------|-------|-------------|-------|------------|------|---------------|--------------|-------|
| Jan | 9.1 | 3.1 | 6.1 | 13.5 | 7 | 4.3 | 24,26 | 7.3 | 10 | -1.6 | 14 | 1.5 | -4.6 | 14,22 |
| Feb | 6.8 | 1.4 | 4.1 | 13.0 | 12 | 2.0 | 24 | 7.6 | 10 | -6.9 | 28 | -0.6 | -10.8 | 28 |
| Mar | 11.4 | 3.8 | 7.6 | 21.1 | 19 | 3.1 | 2 | 10.7 | 17,22 | -4.7 | 4 | 2.0 | -8.9 | 4 |
| Apr | 14.6 | 5.3 | 10.0 | 21.9 | 30 | 6.9 | 8 | 12.8 | 30 | -2.8 | 9 | 3.0 | -5.8 | 9 |
| May | 17.7 | 7.4 | 12.5 | 29.9 | 27 | 11.3 | 4 | 14.4 | 26 | -0.3 | 11 | 5.1 | -2.7 | 11 |
| Jun | 22.6 | 11.6 | 17.1 | 31.0 | 19 | 16.1 | 1 | 18.6 | 20 | 3.3 | 7 | 9.4 | 0.4 | 7 |
| Jul | 23.0 | 13.0 | 18.0 | 31.8 | 13 | 16.7 | 25 | 16.2 | 11 | 8.6 | 5 | 10.8 | 6.8 | 5,21 |
| Aug | 23.1 | 11.3 | 17.2 | 29.4 | 21 | 17.3 | 24 | 15.3 | 31 | 7.6 | 8 | 8.6 | 4.6 | 8 |
| Sept | 21.0 | 11.5 | 16.2 | 28.3 | 4 | 15.0 | 28 | 17.5 | 5 | 2.9 | 17 | 9.2 | -0.1 | 17 |
| Oct | 17.3 | 10.3 | 13.8 | 22.1 | 10 | 12.8 | 18 | 15.8 | 12 | 4.2 | 3 | 8.4 | 1.7 | 9 |
| Nov | 10.0 | 2.1 | 6.1 | 16.7 | 2 | 3.1 | 25 | 12.6 | 3 | -5.3 | 18 | 0.1 | -8.1 | 18 |
| Dec | 7.3 | 0.7 | 4.0 | 11.8 | 16 | 1.2 | 28 | 6.6 | 2 | -5.9 | 18 | -1.0 | -8.0 | 18 |
| Year | 15.3 | 6.8 | 11.1 | | | | | | | | | 4.7 | | |
| D.F.A | +1.0 | +0.9 | +1.0 | | | | | | | | | | | |

Table 2. Days with temperature at or above 25 (c)

| Mth | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Days | 0 | 0 | 0 | 0 | 1 | 9 | 10 | 9 | 5 | 0 | 0 | 0 | 34 |

Table 3 Temperature Extremes 2005

| Rank | Highest Maximum | Date | Lowest Minimum | Date |
|------|-----------------|---|----------------|---------------------------|
| 1 | 31.8 | 13 th July | -6.9 | 28 th February |
| 2 | 31.0 | 19 th June | -5.9 | 18 th December |
| 3 | 30.4 | 23 rd June | -5.3 | 18 th November |
| 4 | 30.2 | 14 th July | -5.1 | 19 th December |
| 5 | 29.9 | 27 th May | -4.7 | 4 th March |
| 6 | 29.5 | 22 nd June | -4.4 | 20 th November |
| 7 | 29.4 | 10 th & 17 th July, 21 st August | -4.3 | 19 th November |
| 8 | 29.1 | 18 th June | -4.1 | 21 st November |
| 9 | 28.3 | 11 th & 12 th July, 4 th September | -3.4 | 30 th November |
| 10 | 28.0 | 18 th August | -3.3 | 17 th November |

Table 4 Rainfall

| Month | Total | Ave. % (1971-2000) | Highest Daily total | Rain Days 0.2 or more | Wet Days 1.0 or more | Heavy Falls >25mm |
|--------|-------|-----------------------|----------------------------|--------------------------|-------------------------|----------------------|
| Jan | 23.0 | 66% | 5.6 (10) | 14 | 6 | 0 |
| Feb | 20.0 | 47% | 4.4 (10) | 10 | 6 | 0 |
| Mar | 49.1 | 93% | 19.1 (29) | 14 | 11 | 0 |
| Apr | 56.9 | 112% | 16.0 (24) | 19 | 11 | 0 |
| May | 21.5 | 40% | 7.6 (21) | 15 | 6 | 0 |
| Jun | 26.2 | 47% | 8.3 (24) | 9 | 5 | 0 |
| Jul | 58.6 | 130% | 19.2 (30) | 13 | 11 | 0 |
| Aug | 65.0 | 123% | 14.1 (22) | 12 | 12 | 0 |
| Sept | 52.9 | 87% | 15.0 (04) | 12 | 9 | 0 |
| Oct | 72.8 | 100% | 20.9 (24) | 16 | 9 | 0 |
| Nov | 56.7 | 87% | 25.5 (02) | 13 | 6 | 1 |
| Dec | 65.0 | 94% | 25.3 (01) | 15 | 4 | 1 |
| Year | 567.7 | 82% | 25.5 (2 nd Nov) | 162 | 96 | 2 |
| D.F.A. | 82% | | | -3 | -21 | 0 |

Table 5 Days with.

| Month | Air Frosts | Frost Duration | Ground Frosts | Snow Falling | Snow Lying @ 09h | Thunder | Hail < 5mm | Hail > 5mm | Fog @ 09h |
|---------|---------------|-------------------|------------------|-----------------|------------------------|---------|---------------|---------------|--------------|
| Jan | 4 | 19.8 | 14 | 4 | 0 | 0 | 0 | 0 | 0 |
| Feb | 10 | 65.1 | 18 | 10 | 3 | 0 | 1 | 0 | 1 |
| Mar | 8 | 52.7 | 13 | 6 | 1 | 0 | 2 | 0 | 3 |
| Apr | 2 | 10.7 | 9 | 0 | 0 | 2 | 0 | 0 | 0 |
| May | 1 | 1.9 | 5 | 0 | 0 | 2 | 2 | 0 | 0 |
| Jun | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Jul | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Aug | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 1 | 0 |
| Sept | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 |
| Oct | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Nov | 13 | 125.3 | 16 | 1 | 0 | 0 | 1 | 0 | 2 |
| Dec | 16 | 125.2 | 19 | 4 | 0 | 1 | 0 | 0 | 1 |
| Year | 54 | 400.7 | 95 | 25 | 4 | 17 | 7 | 1 | 8 |
| D.F.Ave | +2 | | -4 | +9 | -3 | +2 | +3 | | -3 |

Table 6 Rainfall Wettest to Driest months (mm)

| Wettest | | | | | | | | | | Driest | |
|---------|------|------|------|------|------|------|------|------|------|--------|------|
| Oct | Aug | Dec | July | Apr | Nov | Sept | Mar | Jun | Jan | May | Feb |
| 72.8 | 65.0 | 65.0 | 58.6 | 56.9 | 56.7 | 52.9 | 49.1 | 26.2 | 23.0 | 21.5 | 20.0 |

Table 7 Rainfall Wettest to Driest months (%)

| Wettest | | | | | | | | | | Driest | |
|---------|------|------|------|-----|-----|------|-----|-----|-----|--------|-----|
| July | Aug | Apr | Oct | Dec | Mar | Sept | Nov | Jan | Feb | Jun | May |
| 130% | 123% | 112% | 100% | 94% | 93% | 93% | 93% | 66% | 47% | 47% | 40% |

Table 8 Top Five Daily Rainfall Totals

| Rank | Daily Total | Date | Rank | Hourly Total | Date |
|------|-------------|-----------------------|------|--------------|-----------------------|
| 1 | 25.5 | 2 nd Nov | 1 | 10.2 | 30 th July |
| 2 | 25.3 | 1 st Dec | 2 | 9.3 | 4 th Aug |
| 3 | 20.9 | 24 th Oct | 3 | 9.0 | 2 nd Nov |
| 4 | 19.2 | 30 th July | 4 | 6.5 | 3 rd Jun |
| 5 | 19.1 | 29 th Mar | 5 | 5.4 | 24 th Oct |

Table 9 Top Five Hourly Rainfall Totals

None of the highest hourly falls are included within the top-ten highest hourly falls since records began in 1984.

Table 10 Sunshine Hours, Atmospheric Pressure and 20cm Soil Temperature

| Month | Sun Hrs | Sun less Days | Atmospheric Pressure 09h | Diff. From ave. | 20cm soil 09h |
|-------|---------|---------------|--------------------------|-----------------|---------------|
| Jan | 66.2 | 7 | 1022.4 | +6.4 | 5.7 |
| Feb | 54.9 | 6 | 1022.2 | +5.5 | 5.2 |
| Mar | 103.3 | 6 | 1016.8 | +1.2 | 6.6 |
| Apr | 130.1 | 1 | 1013.8 | -1.5 | 10.1 |
| May | 197.2 | 0 | 1016.9 | +1.0 | 13.9 |
| Jun | 203.8 | 2 | 1019.2 | +2.2 | 17.8 |
| Jul | 178.9 | 3 | 1015.2 | -1.7 | 19.0 |
| Aug | 219.9 | 2 | 1018.7 | +1.7 | 18.4 |
| Sept | 159.9 | 2 | 1018.9 | +2.4 | 17.5 |
| Oct | 100.9 | 3 | 1015.4 | -0.1 | 14.4 |
| Nov | 102.4 | 4 | 1016.8 | +1.6 | 8.4 |
| Dec | 79.7 | 5 | 1018.3 | +3.2 | 5.0 |
| Year | 1597.2 | 41 | 1017.9 | +1.7 | 11.8 |

Table 11

1971 to 2005 Updated Highest Five Annual Mean Maximum, Mean Minimum and Mean Values (34 Years) at Bracknell Harmanwater.

| Rank | Mean Max | Dates | Mean Min | Dates | Mean | Dates |
|------|----------|-------------|----------|------------|------|-------------------------------|
| 1 | 15.9 | 1989 | 7.3 | 1999 | 11.5 | 1999 |
| 2 | 15.8 | 1990 | 7.2 | 1994, 2002 | 11.4 | 1989, 1990 |
| 3 | 15.7 | 1997 | 7.1 | 1998 | 11.3 | 1995, 1997 |
| 4 | 15.6 | 1995, 1999 | 7.0 | 1995, 2004 | 11.2 | 1998, 2002 |
| 5 | 15.3 | 2005 | 6.9 | 1989, 1990 | 11.1 | 1994, 2003, 2004, 2005 |

Table 12
1971 to 2005 Updated Lowest Five Annual Mean Maximum, Mean Minimum and Mean Values (34 Years)
at Bracknell Harmanswater

| Rank | Mean Max | Dates | Mean Min | Dates | Mean | Dates |
|------|----------|------------------|----------|-----------|------|-------------------|
| 1 | 13.0 | 1979 | 4.9 | 1973,1979 | 9.0 | 1979 |
| 2 | 13.3 | 1971,1985 & 1986 | 5.1 | 1978 | 9.3 | 1978 |
| 3 | 13.4 | 1977,1978 & 1980 | 5.3 | 1975,1980 | 9.4 | 1980, 1985 & 1986 |
| 4 | 13.5 | 1981 | 5.4 | 1986 | 9.5 | 1973 |
| 5 | 13.7 | 1974 , 1987 | 5.5 | 1985 | 9.6 | 1981 |

Table 13
1971 to 2005 Updated , Five Wettest and Driest Years (34 Years)
at Bracknell Harmanswater

| Rank | Wettest Total | Dates | % of average | Driest Total | Dates | % of average |
|------|---------------|-------|--------------|----------------|-------------|--------------|
| 1 | 975.1mm | 2002 | 142% | 523.1mm | 1973 | 76% |
| 2 | 966.6mm | 2000 | 140% | 532.5mm | 1990 | 77% |
| 3 | 874.7mm | 2001 | 127% | 546.1mm | 1976 | 79% |
| 4 | 862.3mm | 1999 | 125% | 562.3mm | 1991 | 82% |
| 5 | 800.7mm | 1986 | 116% | 567.7mm | 2005 | 82% |

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Web sites where additional data can be found are at www.bracknell-berkshire.co.uk/services/weather this site contains daily and monthly data and text daily summary and at www.metlink.org/data where certain daily data can be observed.

Note 30 Years of Weather in Bracknell Harmanswater 1973-2003, which is currently available at the Central Bracknell and Bracknell Harmanswater Libraries will be updated and extended to cover the period 1971-2005 in January 2006 making 35 Years of weather observation in the area.

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