Met Office

Extremes

National Meteorological Library and Archive
Fact sheet 9 — Weather extremes

(version 01)

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Introduction

Have you ever wondered about the weather around the United Kingdom and perhaps the world? Would you like to know where the wettest place in the world can be found? Or the hottest place? Maybe the coldest place?

This Weather extremes fact sheet has been designed to answer all of those questions. To help you find the information, we have listed each element as follows: temperature, rainfall, bright sunshine, wind, snow, air pressure and tornadoes.

Note, unless otherwise stated, the source of all the overseas data used in this fact sheet is the World Meteorological Organisation. Data for the United Kingdom is from the Met Office.

Extremes of temperature

Temperature: the degree or intensity of heat present in a substance or object.

Temperature is measured by a thermometer. There are many types; perhaps the most familiar are thermometers using mercury or alcohol. For more information on thermometers, please see Fact sheet 17 – Observations on Land.

The scale of temperature used by the Met Office for measuring air temperature is Celsius. This was adopted by the World Meteorological Organisation as the standard unit of temperature measurement and formally adopted by the Met Office on 1 January 1961. Therefore all temperatures listed within this fact sheet will be in degrees Celsius (°C).

As the United Kingdom has several mountain ranges, it should be noted that temperature decreases by about 0.5 °C for each 100m increase in height above mean sea level. In terms of the annual average temperature, the warmest parts of the United Kingdom are Jersey and the Isles of Scilly with a mean temperature of 11.6 °C. Braemar, in Aberdeenshire, is the coldest low-level place in the United Kingdom, in terms of annual average temperature, with a mean value of 6.5 °C.

	UK		England		Wales		Scotland		Northern Ireland	
Month	Max temp (°C)	Min temp (°C)	Max temp (°C)	Min temp (°C)	Max temp (°C)	Min temp (°C)	Max temp (°C)	Min temp (°C)	Max temp (°C)	Min temp (°C)
Jan	6.1	0.7	6.6	1.1	6.5	1.3	5.0	–0.2	6.7	1.2
Feb	6.3	0.6	6.9	1.0	6.6	1.1	5.2	–0.1	7.1	1.2
Mar	8.5	1.9	9.3	2.4	8.6	2.4	6.9	0.9	8.9	2.3
Apr	10.8	3.1	11.7	3.6	11.0	3.4	9.3	2.1	11.1	3.3
May	14.4	5.7	15.4	6.3	14.5	6.0	12.8	4.5	14.2	5.6
Jun	16.9	8.4	18.1	9.1	16.8	8.6	14.9	7.2	16.5	8.3
Jul	19.2	10.6	20.6	11.4	19.1	10.9	16.9	9.3	18.4	10.6
Aug	18.9	10.5	20.5	11.2	18.8	10.7	16.6	9.2	18.1	10.2
Sep	16.1	8.5	17.5	9.3	16.2	8.8	13.9	7.2	15.7	8.3
Oct	12.5	6.0	13.6	6.6	12.8	6.5	10.8	4.9	12.5	6.1
Nov	8.8	3.0	9.5	3.5	9.3	3.7	7.4	2.0	9.2	3.1
Dec	6.9	1.5	7.4	2.0	7.4	2.2	5.7	0.5	7.5	2.0
Year	12.1	5.1	13.1	5.6	12.3	5.5	10.5	4.0	12.2	5.2

Table 1. 1971–2000 mean maximum/minimum temperature values for the United Kingdom.

Maximum temperature – Daily maximum temperature is the highest temperature reached at a particular location between two fixed times 24-hours apart, usually 0900 GMT to 0900 GMT.

Month	Value	Location (England)	Date
January	17.6 °C	Eynsford (Kent)	27 January 2003
February	19.7 °C	Greenwich Observatory (London)	13 February 1998
March	25.0 °C	Santon Downham (Norfolk) East Dereham (Norfolk) Cromer (Norfolk) Sutton Bridge (Lincolnshire)	29 March 1968
April	29.4 °C	Camden Square (London)	16 April 1949
May	32.8 °C	Camden Square (London) Horsham (West Sussex) Tunbridge Wells (Kent) Regent's Park (London)	22 May 1922 29 May 1944
June	35.6 °C	Mayflower Park, Southampton (Hampshire)	28 June 1976
July	36.5 °C	Wisley (Surrey)	19 July 2006
August	**38.5 °C**	**Brogdale, Faversham (Kent)**	**10 August 2003**
September	35.6 °C	Bawtry – Hesley Hall (South Yorkshire)	2 September 1906
October	29.4 °C	March (Cambridgeshire)	1 October 1985
November	21.1 °C	Chelmsford (Essex) Clacton (Essex) Cambridge (Cambridgeshire) Mildenhall (Suffolk)	2 November 1938
December	17.7 °C	Chivenor (Devon) Penkridge (Staffordshire)	2 December 1985 11 December 1994

Table 2. Monthly extreme maximum temperature values for England.

Month	Value	Location (Wales)	Date
January	18.3 °C	Aber (Gwynedd)	10 January 1971 27 January 1958
February	18.6 °C	Velindre (Powys)	23 February 1990
March	23.9 °C	Prestatyn (Denbignshire) Ceinws (Powys)	29 March 1965
April	26.2 °C	Gogerddan (Ceredigion)	16 April 2003
May	29.2 °C	Towy Castle (Carmarthenshire)	21 May 1989
June	33.5 °C	Usk (Monmouthshire)	28 June 1976
July	34.6 °C	Gogerddan (Ceredigion)	19 July 2006
August	**35.2 °C**	**Hawarden Bridge (Flintshire)**	**2 August 1990**
September	31.1 °C	Gogerddan (Ceredigion)	1 September 1961
October	26.4 °C	Ruthin (Denbighshire)	1 October 1985
November	21.7 °C	Prestatyn (Denbighshire)	4 November 1946
December	18.0 °C	Aber (Gwynedd)	18 December 1972

Table 3. Monthly extreme maximum temperature values for Wales.

Month	Value	Location (Scotland)	Date
January	18.3 °C	Aboyne (Aberdeenshire) Inchmarlo (Kincardineshire)	26 January 2003
February	17.9 °C	Aberdeen (Aberdeenshire)	22 February 1897
March	22.2 °C	Strachan (Kincardineshire)	29 March 1965
April	27.2 °C	Inverailort (Highland)	17 April 2003
May	29.0 °C	Edinburgh, Royal Botanic Garden (Midlothian)	14 May 1992
June	32.2 °C	Ochtertyre (Perth and Kinross)	18 June 1893
July	32.4 °C	Wauchope (Scottish Borders)	2 July 1976
August	**32.9 °C**	**Greycrook (Scottish Borders)**	**9 August 2003**
September	28.0 °C	Creebridge (Wigtownshire) Ballater (Aberdeenshire)	2 September 1991 21 September 1998
October	25.0 °C	Falkirk (Stirling)	3 October 1959
November	20.2 °C	Lochcarron (Ross and Cromarty)	7 November 2003
December	18.3 °C	Achnashellach (Highland)	2 December 1948

Table 4. Monthly extreme maximum temperature values for Scotland.

Month	Value	Location (Northern Ireland)	Date
January	16.4 °C	Knockarevan (Co. Fermanagh)	26 January 2003
February	17.8 °C	Bryansford (Co. Down)	13 February 1998
March	21.7 °C	Armagh (Co. Armagh)	28 March 1965 29 March 1965
April	24.5 °C	Boom Hall (Co. Londonderry)	26 April 1984
May	26.3 °C	St Angelo (Co. Fermanagh)	31 May 1997
June	**30.8 °C**	**Knockarevan (Co. Fermanagh)**	**30 June 1976**
July	**30.8 °C**	**Shaw's Bridge, Belfast (Co. Antrim)**	**12 July 1983**
August	29.9 °C	Knockarevan (Co. Fermanagh)	17 August 1995
September	26.7 °C	Armagh (Co. Armagh)	11 September 1959
October	22.2 °C	Ballykelly (Co. Londonderry) Hillsborough (Co. Down) Portadown (Co. Armagh) Lurgan Cemetery (Co. Armagh) Moyola (Co. Londonderry)	4 October 1959 10 October 1969 8 October 1995
November	18.6 °C	Peatlands (Co. Armagh)	2 November 2007
December	16.0 °C	Murlough (Co. Down)	11 December 1994

Table 5. Monthly extreme maximum temperature values for Northern Ireland.

Minimum temperature – The lowest temperature attained at a particular location between two fixed times 24-hours apart, usually 0900 GMT to 0900 GMT.

The lowest recorded temperature ever recorded in the United Kingdom was –27.2 °C at Braemar (Aberdeenshire) on 11 February 1895 and 10 January 1982 and at Altnaharra (Highland) on 30 December 1995.

Month	Value	Location (England)	Date
January	**–26.1 °C**	**Newport (Shropshire)**	**10 January 1982**
February	–20.6 °C	Woburn (Bedfordshire)	25 February 1947
March	–21.1 °C	Houghall (Co. Durham)	4 March 1947
April	–15.0 °C	Newton Rigg (Cumbria)	2 April 1917
May	–9.4 °C	Lynford (Norfolk)	4 May 1941 11 May 1941
June	–5.6 °C	Santon Downham (Norfolk)	1 June 1962 3 June 1962
July	–1.7 °C	Kielder Castle (Northumberland)	17 July 1965
August	–2.0 °C	Moor House (Cumbria)	28 August 1977
September	–5.6 °C	Santon Downham (Norfolk) Grendon Underwood (Buckinghamshire)	30 September 1969
October	–10.6 °C	Wark (Northumberland)	17 October 1993
November	–15.5 °C	Wycliffe Hall (North Yorkshire)	24 November 1993
December	–25.2 °C	Shawbury (Shropshire)	13 December 1981

Table 6. Monthly extreme minimum temperature values for England.

Month	Value	Location (Wales)	Date
January	**–23.3 °C**	**Rhayader (Powys)**	**21 January 1940**
February	–20.0 °C	Welshpool (Powys)	2 February 1954
March	–21.7 °C	Corwen (Denbighshire)	3 March 1965
April	–11.2 °C	Corwen (Denbighshire)	11 April 1978
May	–6.1 °C	Alwen (Conwy) St Harmon (Powys)	3 May 1967 14 May 1984
June	–3.2 °C	Bala (Gwynedd)	1 June 1975
July	–2.5 °C	St Harmon (Powys)	9 July 1986
August	–1.3 °C	Cenarth (Powys)	1 August 1976
September	–5.5 °C	St Harmon (Powys)	19 September 1986
October	–8.5 °C	St Harmon (Powys)	31 October 1988
November	–18.0 °C	Llysdinam (Powys)	28 November 2010
December	–22.7 °C	Corwen (Denbighshire)	13 December 1981

Table 7. Monthly extreme minimum temperature values for Wales.

Month	Value	Location (Scotland)	Date
January	**–27.2 °C**	**Braemar (Aberdeenshire)**	**10 January 1982**
February	**–27.2 °C**	**Braemar (Aberdeenshire)**	**11 February 1895**
March	–22.8 °C	Logie Coldstone (Aberdeenshire)	14 March 1958
April	–13.3 °C	Braemar (Aberdeenshire)	11 April 1917
May	–9.4 °C	Fort Augustus (Inverness-shire)	15 May 1941
June	–5.6 °C	Dalwhinnie (Inverness-shire)	9 June 1955
July	–2.5 °C	Lagganlia (Inverness-shire)	15 July 1977
August	–4.5 °C	Lagganlia (Inverness-shire)	21 August 1973
September	–6.7 °C	Dalwhinnie (Inverness-shire)	26 September 1942
October	–11.7 °C	Dalwhinnie (Inverness-shire)	28 October 1948
November	–23.3 °C	Braemar (Aberdeenshire)	14 November 1919
December	**–27.2 °C**	**Altnaharra (Highland)**	**30 December 1995**

Table 8. Monthly extreme minimum temperature values for Scotland.

Month	Value	Location (Northern Ireland)	Date
January	–17.5 °C	Magherally (Co. Down)	1 January 1979
February	–13.3 °C	Lisnafillan and Greenmount (both Co. Antrim)	16 February 1969
March	–14.8 °C	Katesbridge (Co. Down)	2 March 2001
April	–8.5 °C	Killylane (Co. Antrim)	10 April 1998
May	–6.5 °C	Moydamlaght (Co. Londonderry)	7 May 1982
June	–2.4 °C	Lough Navar Forest (Co. Fermanagh)	4 June 1991
July	–1.1 °C	Lislap Forest (Co. Tyrone)	17 July 1971
August	–1.1 °C	Loughermore Forest (Co. Londonderry)	21 August 1964
September	–3.2 °C	Magherally (Co. Down)	30 September 1991
October	–7.2 °C	Lough Navar Forest (Co. Fermanagh)	18 October 1993
November	–12.2 °C	Lisburn (Co. Antrim)	15 November 1919
December	**–18.7 °C**	**Castlederg (Co. Tyrone)**	**23 December 2010**

Table 9. Monthly extreme minimum temperature values for Northern Ireland.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	9.7	1916	9.2	1916	8.3	1989	9.4	1916
February	10.4	1998	9.8	1998	8.7	1998	10.3	1998
March	13.3	1938	12.3	1948	10.2	1948	11.9	1948
April	16.9	2011	15.7	2011	13.5	2011	15.4	2011
May	18.2	1992	17.2	2008	15.3	2008	17.3	2008
June	22.0	1976	20.4	1940	18.8	1940	19.6	1940
July	25.2	2006	23.1	1983	20.3	2006	21.7	2006
August	24.3	1995	23.4	1995	20.7	1947	22.1	1995
September	20.8	1929	19.3	1959	16.9	2006	18.0	1959
October	17.3	1921	16.3	1921	13.6	1959	15.1	1969
November	12.1	1994	11.8	1994	9.9	1994	11.7	1994
December	9.9	1974	9.5	1934	8.3	1988	9.5	1988

Table 10. Highest average monthly maximum temperatures across the United Kingdom.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	–4.9	1963	–5.2	1963	–4.1	1945	–3.0	1963
February	–4.0	1947	–4.4	1947	–4.9	1947	–2.5	1947
March	–1.6	1962	–1.7	1962	–3.1	1947	–1.2	1919
April	0.5	1917	0.9	1922	–0.8	1922	–0.3	1922
May	4.1	1941	3.9	1996	2.5	1915	3.6	1923
June	7.1	1916	6.7	1972	5.1	1927	5.9	1927
July	9.2	1919	8.9	1922	7.2	1922	8.2	1922
August	8.9	1912	8.5	1912	7.0	1912	7.2	1912
September	6.3	1986	5.9	1986	4.5	1918	6.0	1918
October	2.8	1919	3.9	1912	1.9	1981	3.1	1917
November	–0.5	1915	–0.8	1915	–1.6	1919	–0.6	1919
December	–3.5	2010	–3.8	2010	–5.1	2010	–4.2	2010

Table 11. Lowest average monthly minimum temperatures across the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	10.61 °C	2006	9.95 °C	2006	8.23 °C	2006	9.77 °C	2007
2	10.38 °C	2007	9.89 °C	2007	8.21 °C	2003	9.64 °C	2006
3	10.32 °C	2002	9.84 °C	1949	8.18 °C	2007	9.58 °C	2005
4	10.32 °C	1990	9.79 °C	1990	8.12 °C	2004	9.57 °C	1949
5	10.29 °C	1999	9.73 °C	1999	8.09 °C	2005	9.53 °C	1997
6	10.27 °C	2003	9.72 °C	2005	8.04 °C	1997	9.47 °C	1945
7	10.25 °C	2004	9.71 °C	1959	8.02 °C	2002	9.43 °C	2004
8	10.21 °C	2005	9.70 °C	2004	7.95 °C	1949	9.40 °C	2003
9	10.21 °C	1989	9.68 °C	1921	7.93 °C	1953	9.40 °C	2002
10	10.16 °C	1997	9.67 °C	1997	7.93 °C	1945	9.35 °C	1921

Table 12. Ten highest annual mean temperatures across the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	8.01 °C	1963	7.64 °C	1963	6.18 °C	1919	7.65 °C	1979
2	8.14 °C	1919	7.77 °C	1917	6.20 °C	1979	7.66 °C	1919
3	8.16 °C	1962	7.79 °C	1919	6.40 °C	1963	7.72 °C	1986
4	8.18 °C	1917	7.87 °C	1962	6.41 °C	1917	7.82 °C	1917
5	8.33 °C	1922	7.90 °C	1979	6.42 °C	1986	7.82 °C	1963
6	8.42 °C	1986	7.90 °C	1986	6.43 °C	1922	7.87 °C	1915
7	8.43 °C	1979	7.96 °C	1922	6.44 °C	1965	7.91 °C	1922
8	8.46 °C	1956	8.15 °C	1985	6.48 °C	1915	7.95 °C	1965
9	8.53 °C	1965	8.15 °C	2010	6.51 °C	1985	7.95 °C	1985
10	8.56 °C	1985	8.16 °C	1965	6.52 °C	2010	7.95 °C	2010

Table 13. Ten lowest annual mean temperatures across the United Kingdom.

Note: These tables of monthly and annual temperature averages above have been compiled using the Met Office temperature series which started in 1910.

Extreme maximum and minimum temperatures around the world

Continent	Value	Location	Date
Europe:	48.0 °C	Athens (Greece) and Elefsina (Greece)	10 July 1977
North America:	56.7 °C	Furnace Creek Ranch, California (USA)	10 July 1913
South America:	49.1 °C	Villa de María del Río Seco (Argentina)	2 January 1920[#]
Asia:	53.9 °C	Tirat Tsvi (Israel)	21 June 1942
Africa:	**57.8 °C**	**El Azizia (Libya)**	**13 September 1922**
Australia:	50.7 °C	Oodnadatta, South Australia	2 January 1960
Antarctica:	15.0 °C	Vanda Station	5 January 1974
[#]Source: Servicio Meteorólogico Nacional (Argentina)			

Table 14. Extreme maximum temperatures around the world.

Continent	Value	Location	Date
Europe:	–58.1 °C	Ust'Schugor (Russia)	31 December 1978
North America:	–63.0 °C	Snag, Yukon Territory (Canada)	3 February 1947
South America:	–32.8 °C	Sarmiento (Argentina)	1 June 1907
Asia:	–67.8 °C	Verkhoyansk (Russia) Oimekon (Russia)	5 February 1892 7 February 1892 6 February 1933
Africa:	–23.9 °C	Ifrane (Morocco)	11 February 1935
Australia:	–23.0 °C	Charlotte Pass, New South Wales	29 June 1994
Antarctica:	**–89.2 °C**	**Vostok**	**21 July 1983**

Table 15. Extreme minimum temperatures around the world.

Extremes of rainfall

Rain: the total liquid product of precipitation and condensation from the atmosphere, as received and measured in a rain-gauge.

The total amount of precipitation which reaches the ground in a stated period at any place is expressed as the depth to which it would cover a horizontal surface at that place if there were no loss by evaporation, percolation or run-off. The precipitation may be liquid (rain or drizzle) or frozen (snow, snow-pellets, snow grains, hail, small hail, ice pellets, diamond dust) or a mixture (rain and snow, drizzle and snow, rain and melting snow). Precipitation is described as freezing rain or freezing drizzle when the drops of rain or drizzle have temperatures below 0 °C and freeze on impact with the ground or with objects on the earth's surface.

The Met Office uses the millimetre as the official measurement of rainfall. This was adopted by the International Meteorological Organisation (forerunner of the WMO) as the standard unit of rainfall measurement and formally adopted by the Met Office on 1 May 1914*. Therefore all rainfall amounts listed within this fact sheet are in millimetres (mm).

*Tenth Annual Report of the Meteorological Committee – year ending 31 March 1915.

Classification of rainfall

Rainfall is classified into three general types:

- **Orographic** – rain which is caused or enhanced by the presence of high ground.
- **Cyclonic** – rain that is caused by the large-scale vertical motion associated with synoptic features such as depressions and weather fronts.
- **Convective** – rain that is caused by the vertical motion of an ascending mass of air which is warmer than its environment, the horizontal dimension of such an air mass is generally of the order of 15 km or less and forms a typical cumulonimbus cloud.

Convective rain is generally of a greater intensity than either of the two main classes (orographic or cyclonic) and is sometimes accompanied by thunder.

Note: These tables of extreme rainfall have been compiled using the Met Office rainfall series which started in 1910.

Month	UK Monthly rainfall	England Monthly rainfall	Wales Monthly rainfall	Scotland Monthly rainfall	N. Ireland Monthly rainfall
January	120.5 mm	84.3 mm	158.6 mm	170.6 mm	119.1 mm
February	86.8 mm	60.1 mm	114.0 mm	123.6 mm	86.6 mm
March	95.9 mm	66.6 mm	118.8 mm	138.7 mm	93.5 mm
April	69.6 mm	56.9 mm	85.9 mm	86.3 mm	70.6 mm
May	66.2 mm	55.9 mm	80.7 mm	79.1 mm	68.1 mm
June	72.6 mm	62.9 mm	86.2 mm	85.2 mm	72.1 mm
July	69.6 mm	54.2 mm	78.4 mm	92.2 mm	73.3 mm
August	84.6 mm	66.8 mm	106.0 mm	107.5 mm	90.9 mm
September	100.4 mm	73.4 mm	124.0 mm	139.8 mm	94.5 mm
October	117.0 mm	83.7 mm	153.2 mm	162.8 mm	114.6 mm
November	118.0 mm	83.5 mm	156.8 mm	166.0 mm	110.6 mm
December	124.8 mm	90.5 mm	173.3 mm	169.7 mm	118.5 mm
Year	1126.1 mm	838.7 mm	1435.9 mm	1521.4 mm	1112.4 mm

Table 16. 1971–2000 mean monthly/annual rainfall values for the United Kingdom.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	156.9 mm	1948	301.4 mm	1948	293.8 mm	1993	192.3 mm	1928
February	134.8 mm	1923	271.4 mm	1923	278.1 mm	1990	193.6 mm	1990
March	149.3 mm	1947	278.7 mm	1981	238.5 mm	1994	146.8 mm	1992
April	130.2 mm	2000	193.9 mm	1920	191.1 mm	1947	144.2 mm	1961
May	126.5 mm	1967	179.2 mm	1967	168.7 mm	1986	156.1 mm	1916
June	146.0 mm	2007	183.1 mm	1998	155.0 mm	1938	152.6 mm	1912
July	128.6 mm	2009	241.4 mm	1939	185.6 mm	1940	186.2 mm	1936
August	170.5 mm	1912	274.5 mm	1917	216.5 mm	1985	201.4 mm	2008
September	169.3 mm	1918	293.1 mm	1918	267.6 mm	1950	193.9 mm	1950
October	164.8 mm	2000	303.5 mm	1967	258.1 mm	1935	208.5 mm	1990
November	174.5 mm	1929	336.9 mm	1929	262.0 mm	2009	220.0 mm	2009
December	179.0 mm	1914	311.3 mm	1965	268.5 mm	1986	224.1 mm	1919

Table 17. Highest monthly rainfall amounts for the United Kingdom.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	14.2 mm	1997	11.7 mm	1997	38.6 mm	1963	31.6 mm	1997
February	8.5 mm	1921	3.5 mm	1932	10.3 mm	1932	4.8 mm	1932
March	7.8 mm	1929	21.0 mm	1944	28.7 mm	1929	16.4 mm	1953
April	6.7 mm	1938	8.8 mm	1938	14.0 mm	1974	8.2 mm	1938
May	13.6 mm	1991	15.5 mm	1991	22.5 mm	1984	11.3 mm	1991
June	4.3 mm	1925	2.1 mm	1925	30.1 mm	1988	11.5 mm	1921
July	13.2 mm	1911	20.7 mm	1911	32.7 mm	1913	19.7 mm	1919
August	9.6 mm	1995	14.7 mm	1995	5.1 mm	1947	12.4 mm	1947
September	7.9 mm	1959	11.7 mm	1959	31.7 mm	1972	9.7 mm	1986
October	15.9 mm	1969	30.8 mm	1947	19.4 mm	1946	34.2 mm	1951
November	17.0 mm	1945	23.1 mm	1945	28.8 mm	1945	29.4 mm	1942
December	21.5 mm	1933	34.0 mm	1926	40.2 mm	1933	29.1 mm	1963

Table 18. Lowest monthly rainfall amounts for the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	1093.3 mm	2000	1828.6 mm	2000	1828.1 mm	1990	1411.0 mm	2002
2	1070.9 mm	1960	1768.2 mm	1954	1735.8 mm	1938	1362.5 mm	1928
3	1017.7 mm	1912	1699.4 mm	1960	1720.0 mm	2008	1303.3 mm	1923
4	1006.6 mm	2002	1680.4 mm	1928	1716.5 mm	1954	1276.6 mm	1954
5	993.8 mm	1951	1663.9 mm	2008	1696.7 mm	2004	1276.1 mm	1966
6	992.3 mm	1954	1654.3 mm	1998	1692.9 mm	1948	1270.7 mm	2008
7	989.9 mm	1927	1647.7 mm	1920	1690.4 mm	2009	1270.3 mm	1990
8	982.1 mm	2008	1626.6 mm	2002	1686.1 mm	1928	1260.1 mm	2009
9	965.1 mm	1924	1597.6 mm	1924	1683.6 mm	1998	1259.1 mm	1998
10	962.9 mm	1946	1596.7 mm	1927	1672.8 mm	1999	1254.3 mm	1988

Table 19. Ten highest annual rainfall amounts across the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	567.0 mm	1921	1015.0 mm	1933	1091.2 mm	1933	784.6 mm	1933
2	645.3 mm	1964	1084.7 mm	1964	1138.2 mm	1955	843.4 mm	1953
3	657.5 mm	1933	1088.4 mm	1975	1158.2 mm	1972	851.2 mm	1975
4	657.8 mm	1973	1088.7 mm	1976	1166.0 mm	1971	899.0 mm	2001
5	670.3 mm	1996	1096.7 mm	1921	1168.8 mm	1941	901.1 mm	1971
6	675.8 mm	2003	1108.5 mm	1973	1174.1 mm	1937	938.6 mm	2003
7	679.3 mm	1975	1127.7 mm	2010	1189.4 mm	1969	942.5 mm	1952
8	684.9 mm	1953	1130.7 mm	1941	1214.2 mm	2003	953.9 mm	1911
9	702.8 mm	1955	1139.5 mm	2003	1219.3 mm	1963	964.1 mm	1973
10	707.3 mm	1991	1156.4 mm	1971	1220.0 mm	1968	964.7 mm	1959

Table 20. Ten lowest annual rainfall amounts across the United Kingdom.

Extreme rainfall events in the United Kingdom

Criteria	Amount	Location	Date
Highest 5-minute total:	32 mm	Preston (Lancashire)	10 August 1893
Highest 30-minute total:	80 mm	Eskdalemuir (Dumfriesshire)	26 June 1953
Highest 60-minute total:	92 mm	Maidenhead (Berkshire)	12 July 1901
Highest 90-minute total:	117 mm	Dunsop Valley (Lancashire)	8 August 1967
Highest 120-minute total:	155 mm	Hewenden Reservoir (Yorkshire)	11 June 1956
Highest 180-minute total:	178 mm	Horncastle (Lincolnshire)	7 October 1960
[#]**Highest 24-hour total:** (0900 GMT to 0900 GMT)	279 mm	Winterbourne St Martin/Martinstown (Dorset)	18 July 1955

[#]The highest 24-hour rainfall amount based on the synoptic hourly period 0000 GMT to 2359 GMT was 316.4 mm at Seathwaite, Cumbria on 19 November 2009. However, Martinstown is credited with the highest daily rainfall amount because the standard recording period for climatological purposes is the 24-hour period ending at 0900 GMT.

Table 21. Extreme rainfall events across the United Kingdom.

Highest 24-hour (0900 GMT-0900 GMT) rainfall totals across the United Kingdom

Country	Amount	Location	Date
England:	279 mm	Winterbourne St Martin/Martinstown (Dorset)	18 July 1955
Wales:	211 mm	Lluest Wen Reservoir (Mid Glamorgan)	11 November 1929
Scotland:	238 mm	Sloy Main Adit (Argyll and Bute)	17 January 1974
Northern Ireland:	159 mm	Tollymore Forest (Co. Down)	31 October 1968

Table 22. Highest 24-hour rainfall totals across the United Kingdom.

Other rainfall statistics for the United Kingdom

- The highest rainfall total in one year in the United Kingdom was 6,528 mm recorded at Sprinkling Tarn (Cumbria) in 1954.
- In terms of annual average rainfall, the driest recorded place in the United Kingdom is St. Osyth (Essex) with just 513 mm of rainfall per year.

Extreme global rainfall events

Criteria	Amount	Location	Date
Highest 1-minute total:	31.2 mm	Unionville, Maryland (USA)	4 July 1956
***Highest 60-minute total:** (*duration was actually 42 minutes)	305 mm	Holt, Missouri (USA)	22 June 1947
Highest 12-hour total:	1144 mm	Foc-Foc, La Réunion (Indian Ocean)	7–8 Jan. 1966
Highest 24-hour total:	1825 mm	Foc-Foc, La Réunion (Indian Ocean)	7-8 Jan. 1966
Highest 48-hour total:	2467 mm	Aurère, La Réunion (Indian Ocean)	8-10 Jan. 1958
Highest 72-hour total:	3929 mm	Cratère Commerson, La Réunion	24-26 Feb. 2007
Highest 96-hour total:	4869 mm	Cratère Commerson, La Réunion	24-27 Feb. 2007
Highest 1-year total:	26470 mm	Cherrapunji (India)	August 1860 to July 1861

Table 23. Extreme rainfall events around the world.

Highest and lowest average annual rainfall amounts around the world

	Highest average rainfall		Lowest average rainfall	
Continent	Value	Location	Value	Location
Europe:	4648 mm	Crkvica (Bosnia-Hercegovina)	162.6 mm	Astrakhan (Russia)
North America:	7000 mm	Henderson Lake, British Columbia (Canada)	30.5 mm	Batagues (Mexico)
South America:	8990 mm	Quibdo (Columbia)	0.76 mm	Arica (Chile)
Asia:	11872 mm	Mawsynram (India)	45.7 mm	Aden (Yemen)
Africa:	10287 mm	Debundscha (Cameroon)	1.0 mm	Wadi Halfa (Sudan)
Australia:	8034 mm	Bellenden Ker, Queensland	102.9 mm	Troudaninna, South Australia
Oceania:	11640 mm	Mount Waialeale, Kauai, Hawaii (USA)	188.0 mm	Mauna Kea Observatory, Hawaii, (USA)
Antarctica:	>800 mm	along the coast of East and West Antarctica, and over the Antarctic Peninsula	2.0 mm	Amundsen-Scott South Pole Station

Table 24. Highest and lowest average annual rainfall by continent.

Extremes of sunshine

Sunshine: the routine measurements of the duration of sunshine which are made for climatological purposes refer, in the British Isles, as in most other countries, to so-called 'bright' sunshine.

Mean daily sunshine figures reach a maximum in May or June, and are at their lowest in December. The key factor is, of course, the variation in the length of the day through the year, but wind and cloud play their part as well.

Month	UK Monthly sunshine	England Monthly sunshine	Wales Monthly sunshine	Scotland Monthly sunshine	N. Ireland Monthly sunshine
January	44.6 hours	50.9 hours	45.7 hours	34.4 hours	42.7 hours
February	65.0 hours	67.9 hours	64.8 hours	60.8 hours	61.3 hours
March	97.0 hours	102.3 hours	97.8 hours	88.8 hours	91.9 hours
April	141.3 hours	146.1 hours	150.6 hours	130.6 hours	141.9 hours
May	184.6 hours	190.2 hours	189.1 hours	175.3 hours	176.5 hours
June	169.4 hours	179.5 hours	169.8 hours	155.3 hours	152.4 hours
July	174.3 hours	193.4 hours	183.3 hours	145.9 hours	142.8 hours
August	166.5 hours	184.6 hours	172.0 hours	139.6 hours	140.3 hours
September	123.6 hours	135.1 hours	127.4 hours	105.3 hours	113.5 hours
October	91.6 hours	101.6 hours	91.7 hours	75.9 hours	86.8 hours
November	58.7 hours	65.7 hours	57.9 hours	48.1 hours	55.3 hours
December	38.4 hours	44.6 hours	38.5 hours	28.9 hours	33.9 hours
Year	1354.9 hours	1461.8 hours	1388.7 hours	1188.9 hours	1239.4 hours

Table 25. 1971–2000 mean monthly/annual sunshine values for the United Kingdom.

Extreme monthly sunshine totals across the United Kingdom

Country	Amount	Location	Month
England	383.9 hours	Eastbourne (Sussex)	July 1911
Wales	354.3 hours	Dale Fort (Pembrokeshire)	July 1955
Scotland	329.1 hours	Tiree (Argyll & Bute)	May 1975
Northern Ireland	298.0 hours	Mount Stewart (Co. Down)	June 1940

Table 26. Highest monthly sunshine totals for locations in the United Kingdom.

Country	Amount	Location	Month
England	0.0 hours	Westminster (London)	December 1890
Wales	2.7 hours	Llwyn-on Reservoir (Breconshire)	January 1962
Scotland	0.5 hours	Cape Wrath (Sutherland)	January 1983
Northern Ireland	8.3 hours	Silent Valley (Co. Down)	January 1996

Table 27. Lowest monthly sunshine totals for locations in the United Kingdom.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	77.3 hours	1959	82.5 hours	1933	57.2 hours	1959	77.1 hours	1959
February	119.6 hours	2008	109.1 hours	2008	91.7 hours	2003	101.1 hours	2004
March	172.8 hours	1929	209.4 hours	1929	153.0 hours	1929	172.8 hours	1929
April	224.2 hours	2011	222.4 hours	2007	202.1 hours	1942	206.3 hours	1962
May	268.9 hours	1989	265.4 hours	1948	229.3 hours	2000	277.9 hours	1946
June	284.3 hours	1957	286.2 hours	1957	240.1 hours	1940	258.9 hours	1940
July	291.9 hours	2006	297.6 hours	1955	239.8 hours	1955	247.6 hours	1955
August	269.0 hours	1995	270.8 hours	1947	239.3 hours	1947	261.4 hours	1947
September	191.6 hours	1959	197.3 hours	1959	141.6 hours	1959	164.4 hours	1991
October	138.4 hours	1959	119.5 hours	2010	106.4 hours	2003	114.7 hours	1939
November	95.1 hours	2006	80.7 hours	2006	60.6 hours	1989	80.2 hours	1950
December	75.7 hours	2001	73.5 hours	2001	48.2 hours	2010	78.7 hours	2010

Table 28. Highest monthly sunshine amounts for the United Kingdom.

Month	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
January	20.2 hours	1996	22.6 hours	1996	20.3 hours	1996	21.3 hours	1973
February	28.1 hours	1940	35.7 hours	1966	34.8 hours	1993	24.4 hours	1993
March	57.2 hours	1984	60.5 hours	1936	58.2 hours	1936	50.2 hours	1996
April	88.9 hours	1966	97.4 hours	1961	85.3 hours	1937	50.1 hours	1937
May	108.3 hours	1932	113.3 hours	1932	99.3 hours	1983	119.6 hours	1970
June	117.1 hours	1987	110.7 hours	1987	99.0 hours	1966	94.1 hours	1980
July	113.1 hours	1944	99.0 hours	1944	83.8 hours	1931	82.2 hours	1986
August	116.0 hours	2008	92.5 hours	2008	78.6 hours	1942	70.7 hours	2008
September	90.4 hours	1945	76.4 hours	1956	67.9 hours	1965	72.5 hours	1962
October	60.5 hours	1968	49.6 hours	1968	49.1 hours	1935	57.1 hours	1940
November	37.3 hours	1934	33.3 hours	1944	28.8 hours	1997	31.1 hours	1962
December	20.0 hours	1956	22.3 hours	1988	15.6 hours	1934	18.1 hours	1931

Table 29. Lowest monthly sunshine amounts for the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	1746.6 hours	2003	1684.3 hours	1929	1456.3 hours	1955	1456.2 hours	1955
2	1720.2 hours	1995	1653.6 hours	1955	1377.2 hours	2003	1453.0 hours	1975
3	1715.1 hours	1989	1647.7 hours	1949	1331.1 hours	1995	1431.7 hours	2010
4	1696.9 hours	1949	1602.1 hours	1959	1302.9 hours	2009	1422.4 hours	1959
5	1693.0 hours	1959	1598.5 hours	1995	1298.1 hours	1975	1399.4 hours	1995
6	1668.7 hours	1990	1584.8 hours	1933	1291.6 hours	2006	1386.2 hours	1935
7	1636.4 hours	1929	1572.9 hours	2010	1285.5 hours	1989	1385.0 hours	2006
8	1626.0 hours	2006	1569.5 hours	1989	1272.0 hours	1949	1369.8 hours	1960
9	1612.2 hours	1955	1559.8 hours	1975	1270.4 hours	1959	1365.6 hours	1977
10	1611.6 hours	1933	1536.1 hours	2003	1266.0 hours	1929	1363.3 hours	1989

Table 30. Ten highest annual sunshine amounts across the United Kingdom.

Ranked	England		Wales		Scotland		Northern Ireland	
	Value	Year	Value	Year	Value	Year	Value	Year
1	1255.7 hours	1968	1167.9 hours	1981	988.4 hours	1993	1013.9 hours	1993
2	1268.9 hours	1932	1185.2 hours	1958	1010.9 hours	1944	1096.5 hours	1983
3	1271.7 hours	1937	1230.4 hours	1978	1042.0 hours	1983	1106.8 hours	1992
4	1278.8 hours	1958	1232.4 hours	1993	1046.1 hours	1980	1107.1 hours	1981
5	1282.6 hours	1954	1252.7 hours	1931	1059.7 hours	1978	1109.7 hours	1998
6	1296.6 hours	1981	1254.7 hours	1980	1061.2 hours	1998	1111.4 hours	1964
7	1300.6 hours	1966	1262.0 hours	1964	1065.6 hours	1985	1120.0 hours	1980
8	1307.1 hours	1931	1277.9 hours	1954	1070.1 hours	1966	1124.7 hours	1954
9	1307.2 hours	1978	1278.6 hours	1992	1078.1 hours	1964	1125.7 hours	1985
10	1312.3 hours	1972	1279.7 hours	1972	1083.8 hours	1941	1129.4 hours	1978

Table 31. Ten lowest annual sunshine amounts across the United Kingdom.

Note: The above extreme sunshine tables have been compiled using the Met Office's sunshine series which started in 1929.

Other sunshine statistics for the United Kingdom

- The sunniest town in the United Kingdom is Bognor Regis (West Sussex) with an average of 1902.9 hours of sunshine per year.
- Ben Nevis, near Fort William, is the least sunniest place in the United Kingdom with an average of 736 hours of sunshine per year, that's just 16% of the total amount possible.

Sunshine statistics around the world

	Highest average sunshine		Lowest average sunshine	
Continent	**Value**	**Location**	**Value**	**Location**
Europe:	3036.0 hours	Faro (Portugal)	595.0 hours	Bjornoya (Norway)
North America:	4015.3 hours	Yuma, Arizona (USA)	1211.8 hours	Prince Rupert, British Columbia (Canada)
South America:	3189.7 hours	Coro (Venezuela)	967.9 hours	Rio Negro (Brazil)
Asia:	3609.4 hours	Abu Dhabi (UAE)	914.0 hours	Ostrov Vize (Russia)
Africa:	3862.8 hours	Aswan (Egypt)	1258.2 hours	Tchibanga (Gabon)
Australia:	3569.4 hours	Tennant Creek, Northern Territory	806.5 hours	Macquarie Island, Tasmania

Note: world sunshine extremes are based on the WMO Climatological Normals (CLINO) for the period 1961–1990.

Table 32. Extreme highest and lowest sunshine averages by continent.

Other sunshine statistics around the world

- The South Pole has no sunshine for 182 days per year.
- St Petersburg in Florida, USA, recorded 768 consecutive sunny days from 9 February 1967 to 17 March 1969.

St Petersburg in Florida, USA.

Extremes of wind

Wind: the (horizontal) movement of air relative to the rotating surface of the earth.

The Met Office measures the wind speed in knots. The knot is defined as a speed of one nautical mile per hour.

1 knot = 0.51444 m s^{-1} = 1.15078 mile h^{-1} = 1.853 km h^{-1} = 1.689 ft s^{-1}

There is a close relationship between surface isobars (line joining points of equal pressure) and wind speed and direction over open level terrain. However, in mountain and moorland areas such as the Pennines, local topography has a very significant effect with winds tending to be aligned along well-defined valleys.

The most common direction from which the wind blows in the United Kingdom is from the south-west, but in a climate which is extremely variable from day-to-day, winds from other directions are quite frequent, and long spells of easterly or north-easterly winds are not unusual.

Extreme gusts recorded at low-level sites across the United Kingdom

District	Speed	Location	Date
Scotland N	118 knots (136 mph)	Kirkwall (Orkney)	7 February 1969
Scotland E	123 knots (142 mph)	Fraserburgh (Aberdeenshire)	13 February 1989
Scotland W	88 knots (101 mph)	Hunterston (Ayrshire)	5 December 1972
England E and NE	95 knots (109 mph)	South Gare (North Yorkshire)	2 June 1975
England NW	88 knots (101 mph)	Sellafield (Cumbria)	13 January 1984 16 January 1984
Wales N	97 knots (112 mph)	Aberdaron (Gwynedd)	24 December 1997
Midlands	91 knots (105 mph)	Wittering (Cambridgeshire)	2 January 1976
East Anglia	87 knots (100 mph)	Shoeburyness (Essex)	16 October 1987
England SW	103 knots (118 mph)	Gwennap Head (Cornwall)	15 December 1979
Wales S	108 knots (124 mph)	Rhoose (Vale of Glamorgan)	28 October 1989
England SE and Cen. S	100 knots (115 mph)	Needles Old Battery (Isle of Wight) Shoreham-by-Sea (West Sussex)	4 January 1998 16 October 1987
Northern Ireland	108 knots (124 mph)	Kilkeel (Co. Down)	12 January 1974

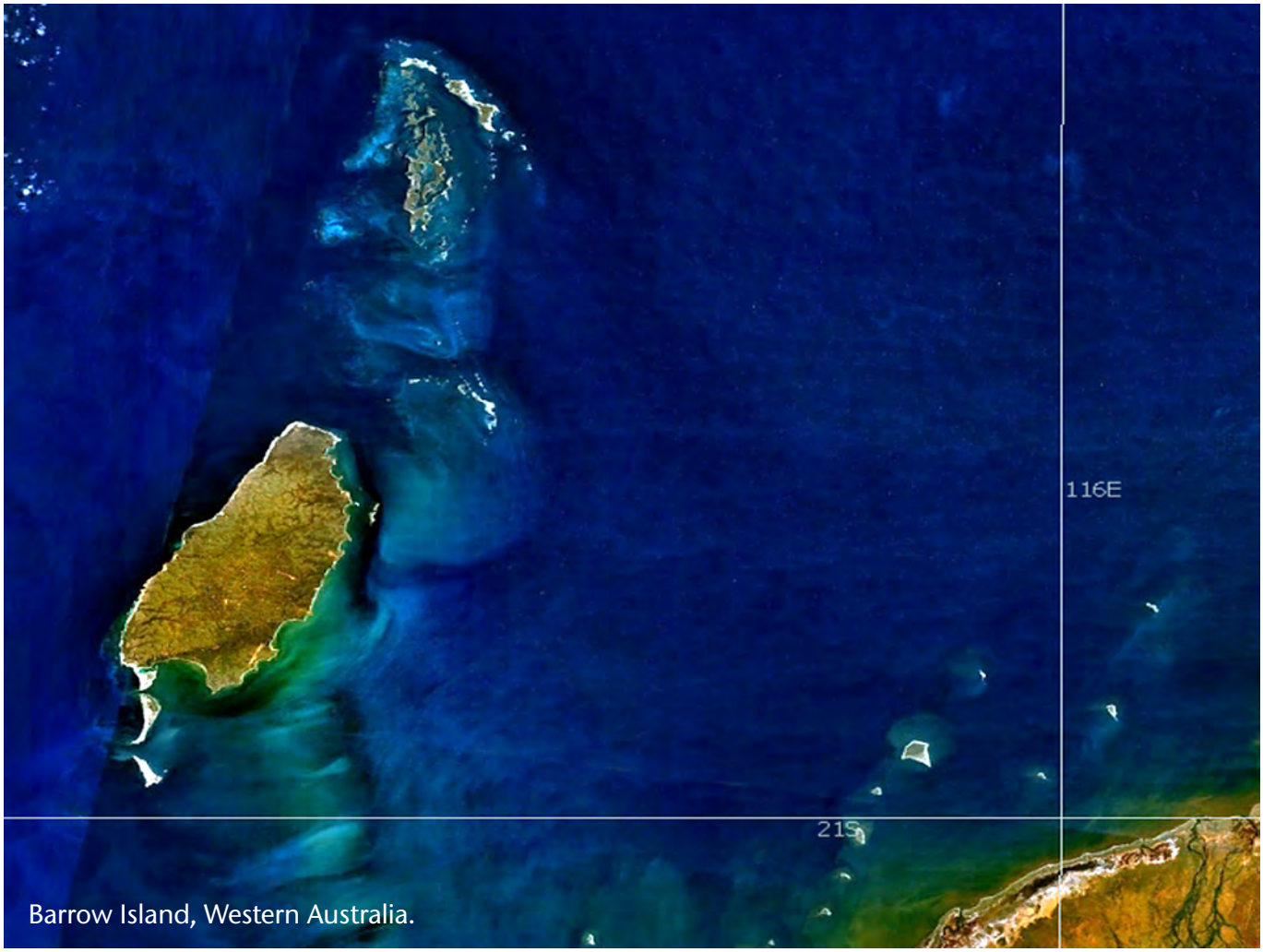
Table 33. Highest gust speed records – by district (low-level sites).

Summary of extreme gusts recorded at low-level sites across the United Kingdom

- **Highest gust speed recorded (England):**
  103 knots (118 mph) at Gwennap Head, Cornwall on 15 December 1979.
- **Highest gust speed recorded (Wales):**
  108 knots (124 mph) at Rhoose, Vale of Glamorgan on 28 October 1989.
- **Highest gust speed recorded (Scotland):**
  123 knots (142 mph) at Fraserburgh, Aberdeenshire on 13 February 1989.
- **Highest gust speed recorded (Northern Ireland):**
  108 knots (124 mph) at Kilkeel, Co. Down on 12 January 1974.
- **Extreme gusts recorded at high-level sites**
- **Highest gust speed recorded (Scotland):**
  150 knots (173 mph) at Cairngorm Automatic Weather Station (on the border of Highland and Moray at an altitude of 1245 metres AMSL) on 20 March 1986.

Global wind extremes

- The highest recorded gust speed is 220 knots (253 mph) at Barrow Island, Western Australia on 10 April 1996.
- The windiest place on Earth with regards to mean wind speed is Port Martin (Antarctica). Here the average annual wind speed is 33 knots (38 mph). This is caused by strong katabatic winds blowing off the vast Antarctic plateau.
- The least windiest place on Earth is at Dome A, an Australian Research Station on Antarctica. Here average wind speeds are less than a few kilometres per hour, making it the calmest place on Earth.



Barrow Island, Western Australia.

Extremes of snow

Snow: solid precipitation which occurs in a variety of minute ice crystals at temperatures well below 0 °C but as larger snowflakes at temperatures near 0 °C.

Snowflakes are aggregates of ice crystals occurring in an infinite variety of shapes and forms. At very low temperatures the flakes are small and their individual structure is simple. At temperatures which are close to freezing-point the individual flakes may be composed of a very large number of ice crystals (predominantly star-shaped) and the flakes may then have a diameter of several inches.

Month	UK		England		Wales		Scotland		Northern Ireland	
	Days of snow		Days of snow		Days of snow		Days of snow		Days of snow	
	Falling*	Lying#	Falling*	Lying#	Falling*	Lying#	Falling*	Lying#	Falling*	Lying#
Jan	7.6	5.1	5.7	3.6	5.7	4.0	11.4	8.0	6.5	3.7
Feb	6.8	4.2	5.3	3.2	5.2	3.5	9.8	6.5	5.8	2.1
Mar	6.0	2.4	4.2	1.4	4.5	2.0	9.6	4.5	4.8	1.5
Apr	3.5	0.7	2.5	0.4	2.8	0.6	5.5	1.3	2.4	0.4
May	0.7	0.1	0.4	0.0	0.5	0.1	1.4	0.1	0.6	0.0
Jun	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Oct	0.4	0.1	0.2	0.0	0.3	0.0	0.9	0.1	0.2	0.0
Nov	2.7	1.1	1.6	0.6	1.9	0.7	4.9	2.1	2.0	0.6
Dec	5.2	2.9	3.7	1.9	3.8	2.3	8.3	5.2	4.2	1.6
Year	33.1	16.5	23.6	11.0	24.6	13.3	52.0	27.7	26.5	10.1

(*Includes any incidence of snow or sleet falling. #A day of lying snow is counted if the ground is more than 50% covered at 0900 GMT).

Table 34. 1971–2000 mean monthly/annual days of snow falling and snow lying for the United Kingdom.

Extreme snow events across the United Kingdom

- On 25 September 1895 snow was reported to have fallen at London and Wallington (Surrey) making it the earliest fall of snow on the capital.
- The period 7 to 12 July 1888 was particularly cold and snow affected various parts of the country.
- On 2 June 1975 snow showers forced the abandonment of several cricket matches across the country. Most noteworthy were the matches between Essex and Kent at Colchester and between Derbyshire and Lancashire at Buxton.
- The snowiest winter of the twentieth century in the United Kingdom was 1947. Between 22 January and 17 March snow fell every day somewhere in the country.
- The most disastrous avalanche in the United Kingdom occurred in Lewes, East Sussex on 27 December 1836. Eight people were killed and several houses were destroyed.

Extremes of atmospheric pressure

Atmospheric pressure: the force per unit area at any given point on the surface of the Earth by the weight of the atmosphere which lies vertically above it.

The unit of pressure in the International System (SI) is the Newton per metre squared (Nm^{-2}) to which has been given the name Pascal and the symbol Pa. The unit for measuring atmospheric pressure for international meteorological purposes, however, remains the millibar (mb).

1 mb = 100 Pa = 1 hPa = 33.864 inches.

Month	Value	Location	Date
January	1053.6 hPa	Aberdeen Observatory (Aberdeenshire)	31 January 1902
February	1052.9 hPa	Aberdeen Observatory (Aberdeenshire)	1 February 1902
March	1047.9 hPa	St Mary's Airport (Isles of Scilly)	9 March 1953
April	1044.5 hPa	Eskdalemuir (Dumfriesshire)	11 April 1938
May	1042.2 hPa	Dublin Airport (Ireland)	16 May 1943
June	1043.1 hPa	Clones (Co. Monaghan)	14 June 1959
July	1039.2 hPa	Aboyne (Aberdeenshire)	16 July 1996
August	1037.4 hPa	Kirkwall (Orkney)	25 August 1968
September	1042.0 hPa	Ballykelly (Co. Londonderry)	11 September 2009
October	1045.6 hPa	Dyce (Aberdeenshire)	31 October 1956
November	1046.7 hPa	Aviemore (Inverness-shire)	10 November 1999
December	1051.9 hPa	Wick (Caithness)	24 December 1926

Table 35. Highest recorded atmospheric pressure values across the British Isles.

Month	Value	Location	Date
January	925.6 hPa	Ochtertyre (Perthshire)	26 January 1884
February	942.3 hPa	Midleton (Co. Cork)	4 February 1951
March	946.2 hPa	Wick (Caithness)	9 March 1876
April	952.9 hPa	Malin Head (Co. Donegal)	1 April 1948
May	968.0 hPa	Sealand (Cheshire)	8 May 1943
June	968.4 hPa	Lerwick (Shetland)	28 June 1938
July	967.9 hPa	Sule Skerry (Northern Isles)	8 July 1964
August	967.7 hPa	Belmullet (Co. Mayo)	14 August 1959
September	957.1 hPa	Claremorris (Co. Mayo)	21 September 1953
October	946.8 hPa	Cawdor Castle (Nairnshire)	14 October 1891
November	939.7 hPa	Monach Lighthouse (Outer Hebrides)	11 November 1877
December	927.2 hPa	Belfast (Co. Antrim)	8 December 1886

Table 36. Lowest recorded atmospheric pressure values across the British Isles.

Global atmospheric pressure extremes

- The highest barometric pressure reading on record is 1083.3 hPa at Agata, Siberia on 31 December 1968.
- The lowest barometric pressure reading on record is 870 hPa. This was recorded in the eye of Typhoon Tip as it moved across the Pacific Ocean to the east of the Philippines on 12 October 1979.

Extremes of tornadoes and waterspouts in the United Kingdom and globally

- **World's deadliest tornado:**
  1,300 killed and 12,000 injured at Manikganj District, Bangladesh on 26 April 1989. Also in Bangladesh, on the 1 and 2 April 1977 in Madaripur district (80 miles) from Dacca, another deadly tornado killed 500 people and injured 6,000 more.
- **Greatest distance travelled by a single tornado:**
  219 miles (352 km) from Ellington (Missouri) to Princeton (Indiana), USA on 18 March 1925.
- **Greatest distance travelled by a single tornado in the United Kingdom:**
  100 miles (160 km) from Great Missenden (Buckinghamshire) to Blakeney (Norfolk) on 21 May 1950.
- **Most tornadoes in a 24-hour period globally:**
  148 on 3 and 4 April 1974. These occurred across 13 states of the USA. More than 300 people were killed and 4,000 were injured during this period.
- **Most tornadoes in a 24-hour period in the United Kingdom:**
  105 were observed on the 18 November 1981.
- **Most tornadoes in a single calendar month:**
  543 during May 2003 in the USA.
- **Most tornadoes in a single year:**
  899 in 1965 in the USA.

Other facts about tornadoes

- Tornadoes and waterspouts form beneath deep connective clouds such as Cumulus congestus or Cumulonimbus.
- During the period 1970–1984 there were on average 11 days a year in the United Kingdom on which known tornadoes caused damage to buildings, chiefly in the south and east of England. Owing to their local nature most tornadoes are not recorded.
- Tornadoes normally rotate anti-clockwise in the northern hemisphere and clockwise in the southern hemisphere.
- A tornado that occurs over water, whether it is the sea or a lake, is called a **waterspout**.
- A tornado that does not touch the ground is called a **funnel cloud**.
- A **whirlwind** or **dust devil** is not the same as a tornado. These are much smaller in nature and can form when there is no cloud at all. On 30 July 1975, at Warmley, Bristol a dust devil tore the roof off a factory and carried it 120 feet. The weather on this day was warm and cloudless.
- Dust devils are quite common across the desert regions of North Africa, USA and Australia.

A tornado touches down in Colorado.

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