



Weather Front.

July 2022/1922

July 2022

Observers Notes.

Derby: July 2022 was the third warmest July on the station record (1952). A new maximum of 37.1 C was attained on the 18th (previously 35.3 C in 2019), but this was beaten only twenty-two hours later with 29.8 C on the 19th. The minimum of 20.6 C was the third highest minimum on record. Two other minima above 20 C were recorded during the month; Three instances of 20 C+ in the same month is unprecedented on this record. The mid-month period (11th-20th) had a mean temperature 5 C above normal.

Bablake: It has been the driest July since 1976. The first seven months of 2022 have recorded an average temperature of 11.1 C, making this the warmest January to July period in Coventry in over 130 Years, beating the previous high of 11.0 C in 1990. Both the 18th and 19th July were the hottest days on record, in Coventry, at 37.0 C and 38.9 C respectively, on records dating back to 1892.

Mickleover: The maximum of 39.2 C on the 19th is the highest for any month on record. It was the fourth warmest July on record, locally since 1952. The highest minimum of 20.5 C was the second highest on the July record (1981). The diurnal range of 19.2 C on the 18th was the second highest for July on the station record. It was the fourth driest Jull since 1982, while 38% of the months total rain fell on one day. It was the third July since 1987 without thunder being recorded.

Pitsford: A mostly dry and very warm month with record breaking temperatures reached on the 18th and 19th. Thereafter, the month remained cooler and rather cloudy, yet without appreciable rainfall.ⁱ

Desford: Very dry with record breaking temperatures. The highest maximum temperature, set in July 2019, was 35.0 C. This was broken on the 18th with a maximum of 35.2 C. However, this was superseded on the 19th with a maximum of 38.7 C and was held for approximately an hour despite a fairly breezy day. Ac Cas, the remnants of an active trough, gave a trace of rain that evening; the estimated cloud base was 12,000 ft.

Ely: Maximum temperature on the 18th was 38.4 C. Despite the maximum records the mean daily minimum temperature only reached the average during the last couple of days. It was the driest July on the station record. The fall of rain of 3.0 mm, on the 30th, accounted for 77% of the months rain.

Lowdham: A minimum temperature of 19.9 C, on the 20th, was the highest minimum for July on the station record, and in the local area since 1949. The 19-day dry spell was the second since March, with no measurable rainfall between the 3rd and 12st July. 181.2 hours of sunshine (97% of average) were recorded at Radcliffe-on-Trent. Only 22.6 hours were noted during the last 12 days.ⁱⁱ

Middleton: The maximum temperature on the 18th was 33.3 C but was superseded on the 20th with 36.6 C. This is 4.1 C higher than the old record set on 3rd August 1990. The minimum of 22.6 C, on the 19th, was also the highest on record by a margin of 2.3 C over 3rd August 1990. It was the driest July since 1996. There were 18 consecutive days, from 2nd to 19th, which is the longest such spell since local records began in 1963.

Mountsorrel: The driest July on the twenty-year record, the driest in Hinckley (Leicestershire) since 1995, and in Cosby since 1999. The 19th was the hottest day in Leicestershire since 1836. It was also the first time the temperature had reached 100 F in Leicester!

Coton-in-the-Elms: The mean temperature of the month was similar to last year, although with warmer days and cooler nights. The 18th and 19th saw the hottest days on record at this station; both the 36.6 C and 38.7 C logged on these days beat the previous maximum of 34.3 C. Rainfall was very low, especially compared to recent Julys. This was the fourth driest July since records began here in 1991.

July 1922

Observers Notes.ⁱⁱⁱ

Meltham (Yorkshire): The coldest July since 1888.

Skegness (Lincolnshire): This was the wettest July on record [July 1922–107.7 mm] with the exception of July 1880.

Totland Bay (Isle of Wight): For the month as a whole the mean readings are colder than any previous July for the past 36 years.

Southport (Lancashire): The coldest July during the 51 years existence of the Fernley Observatory, and very wet.

Torquay (Devonshire): The mean maximum temperature for the month was 64 F [17.8 C], which is the lowest recorded in July for 27 years. Rainfall was much above the average. The

outstanding features were the consistently low day and night temperatures, the abnormally heavy rain during the first tendays of the month, and the absence of long periods of bright sunshine.

Dublin: It was not until the 20th that the thermometer in the screen touched 70 F [21 C], and on only two days in the month was that figure reached, in contrast to July 1921 with 18 days of temperatures above 70 F. As July 1921 established a record for warmth, so July 1922 has done likewise for coolness.

Derby/Burton-on-Trent: The area endured a very cool and wet July. It was the coolest July since 1888, and there has not been another quite so cool since. The Central England Temperature index shows 13.7 C for the month, a value equalled on the Burton-on-Trent record. This was 2 C below the normal at the time. Minimum temperatures were around 6 C on the 10th, 15th, and 16th, with many others under 10 C. The warmest days barely exceeded 20 C; the highest values were between 23 and 25 C on the 12th and 19th. The rainfall amounts were in the 95-100 mm range in the Derby area, and 105-125 mm for Burton-on-Trent and district. One station had a 24 hour fall of approximately 40 mm on the 6th.^{iv}

Overview of July 1922.

July 1922 was a generally unsettled month, apart from the extreme north of the country. Rainfall was well above average over the whole of the British Isles, while temperatures were well below. Two depressions, which crossed England in a north-easterly direction on the 5th and 9th, were notable for the gales in the English Channel. R A Watson noted, "*The Weather of the British Coasts*, showed how rare gales were recorded in the English Channel in July".

At the start of the month a depression lay between Iceland and Norway with a weak ridge stretching from Spain, through France, into North Germany, while another depression was beginning to produce local gales and rain to the west of the British Isles. This latter depression moved slowly north-east on the 2nd and 3rd, bringing rain and strong winds to the whole of north-west Europe. Another depression, this time to the south-west of Ireland, moved across England, on the 5th and 6th, producing more general rain, which exceeded one inch in places, and locally approached 3 inches. Gales were reported in the English Channel during the passage of this depression. By the morning of the 9th, the depression was off the coast of Norway and, better but locally heavy showery, weather was noted in Britain and France. On the evening of the 7th another depression was reported in the south-west approaches, which followed a similar track to its predecessor, once again producing gales and heavy rain generally. Watson noted a paragraph from *The Yachting World*, which stated, "During this gale the L&SW. Rly. Co's^v Steamer *Vera* took 18 hours to make the crossing from Southampton to Jersey. Her captain says the gale was the worst in his experience extending over sixteen years; many of the seas were 30 feet in height or 60 feet from summit to trough".^{vi} On the 19th, the weather over Britain improved, but there was

significant rain over Norway, as the depression had moved into the North Sea. That same evening another depression appeared to the south-west of Ireland and seemed likely to give a repeat performance of the previous bad weather. However, it filled rapidly without crossing the country, and pressure rose during the following day, establishing an anticyclone over the British Isles and Northern Germany by the 11th, which gave fair weather generally but, over Central Europe, heavy rain was associated with a depression over Austria. On the 12th the anticyclone declined ahead of a depression over Iceland, bringing rain to the British Isles and Northern France by the 13th. The depression remained stationary near the Hebrides and slowly filled, but a secondary developed over the country, and was accompanied by heavy rain and thunderstorms over south-east England and northern France. The secondary moved into the North Sea and deepened, while pressure rose rapidly behind it and brought improving weather. The depression moved slowly across into the Baltic giving north-westerlies and showers behind. The temperature rose considerably in France and Central Europe and sea fogs were reported in the English Channel. This resulted in a collision between the *Remuera* and the *Marengo* on the 21st. Another depression remained stationary off Western Ireland, but developed a small secondary over London, which produced rain over England, locally very heavy, in the Midlands.

Pressure rose during the 24th and 25th forming a ridge with, generally, pleasant weather. On the 26th another depression, off the Hebrides, affected western and northern areas. However, it moved north without affecting the south. During the 27th and 28th warm air, associated with the Azores anticyclone, passing over the colder waters of the Atlantic, produced fog patches over the main Atlantic shipping routes. The rest of the month was unsettled, with depressions passing between Iceland and Scotland.

The rainfall for the month was interesting over England and Wales in that it was unusually heavy and reached as much as 150% of average. The main areas of excess lay along the west coast and the south-east corner of England. Twice the average occurred in Hampshire, Lincolnshire, and Norfolk, and 283% was recorded in the Norwich area. Considerable areas, including the Thames Valley, reported 125 mm, and as much as 150 mm in places. In the mountains of the Lake District and Glamorgan 250 mm fell. Watson notes that although the rainfall totals were well above average, it was not unusual, and it was less than the greater general rainfall of July 1920.

The large falls for the month were attributed, in part, to the heavy rainfall of the 5th when, with the exception of small coastal strips, more than 25 mm fell. As much as 100 mm was recorded in a large area of the south of England, mainly around Reading and Haslemere in the north-east to Crewkerne and Wareham in the south-west. At Selborne in Hampshire 72 mm was recorded on the 5th. Heavy falls occurred on other days; 67 mm at Keresley Grange near Coventry on the 23rd, and 72 mm at Frankfort Manor near Norwich on the 14th. In Scotland and Ireland rainfall was much near normal.

Europe and the Rest of the World

During a violent thunderstorm, on the 5th, in the Dijon area, the ninth century church of Premiens was struck by lightning and severely damaged. On the same night torrential rain, and high winds, were recorded in Paris.

On the 17th snow was noted on the Swiss Alps at a height of 5000 ft AMSL. Heavy rain in the lower lying regions resulted in flooding in many parts of Switzerland during the third week. Heavy snowstorms on the 23rd, on the Wildelsig ridge resulted in the deaths of two members of the managing committee of the Swiss Alpine Club.

Very heavy rain was recorded in Brandenburg and western Germany around the middle of the month. Severe cold was also experienced in the Bavarian mountains during the third week, resulting in the deaths of five tourists who were climbing the Zugspitze.

The Indian monsoon was slightly stronger than normal and suggested promise of a good harvest. Rain had fallen over the greater part of the country but, Kathiawar, Cutch, and parts of Punjab required further rainfall. It was noted that some parts of the Deccan had received around 1,000 mm of rain and the sun had hardly been seen for weeks! Two cyclones were recorded in the Bay of Bengal.

At the beginning of the month the temperature in Melbourne fell to 32 F [0 C] and snow was recorded in places along the Murray River far to the north-east. A message, dated 31 July, stated that flood water, which was the highest recorded in twenty years, was moving down the Murrumbidgee River and had inundated the town of Wagga Wagga. The Burrinjuck dam, which was the sixth highest in the world and was situated at the head of the Murrumbidgee irrigation scheme, had, to that date, remained standing, although it had not been finished.

A message from Seattle, Alaska, on the 6th, stated that Amundsen's ship *Maud* had been held back by adverse ice in the Bering Sea. By the 15th the ship was stuck fast in the ice near Good Hope Bay, Kotzbue Sound. Amundsen's arrival at Point Barrow, and his first flight over the Polar Basin, was consequently delayed.

The USA had an unusually wet summer and the practice, originating in Britain, of insuring against rain [pluvial insurance] had been adopted; insurance companies suffered considerable losses!

A stationary depression over the province of Entre Rios, Argentina, at the beginning of the month produced heavy rain and gales. As this followed a period of six weeks almost continuous rain, the area around Buenos Aires was extensively flooded and many parts of the capital were under water. A few buildings collapsed and transport and industry severely impeded. The week ending the 12th was abnormally warm generally, with several days being well above the seasonal normal.^{vii}

Central England Data.^{viii} (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 17.4 C. Average: 20.7 C.

Mean Minimum Temperature: 10.1 C. Average: 11.4 C.

Mean Temperature: 13.7 C. Average: 15.7 C.

England and Wales Rainfall: 126.3 mm. Average: 72.6 mm.

Midlands Data. (Averaging period is 1911 to 1920).

Midlands Mean Maximum Temperature: 17.3 C. Average: 19.7 C.

Midlands Mean Minimum Temperature: 8.8 C. Average: 10.2 C.

Midlands Mean Temperature: 13.0 C. Average: 14.9 C.

Midlands Rainfall: 113.9 mm. Average: 75.6 mm.

2022 (Provisional)**Central England (Averaging period is 1991-2020).**

Mean Maximum Temperature: 23.4 C. Average: 21.4 C.

Mean Minimum Temperature: 12.9 C. Average: 12.2 C.

Mean Temperature: 18.2 C. Average: 16.8 C.

England and Wales Rainfall: 22.5 mm. Average: 72.0 mm. (31%)

ⁱ Pitsford Monthly Weather Report, July 2022, Pitsford Weather Centre, August 2022, headline, p. 5.

ⁱⁱ Reported as an addition to the Lowdham statistics. T Scholey observer.

ⁱⁱⁱ Monthly Weather Report, July 1922, Meteorological Office, HMSO, August 1922, p. 86.

^{iv} D J Stanier, by email, 1 August 2022.

^v London and South West Railway Company.

^{vi} Meteorological Magazine, August 1922, Meteorological Office, HMSO, September 1922, p. 196.

^{vii} Meteorological Magazine, August 1922, Meteorological Office, HMSO, September 1922, p.197 and 202.

^{viii} Hadley Centre, Central England and Midlands, Meteorological Office.