

# Weather Front.

## April 2022/1922

## April 2022.

### **Observers Notes.**

**Derby:** A surprisingly mild month overall given the rather cool early, and late, parts of the month. Mid-month was however 3.5 C warmer than normal!

**Mountsorrel:** Another very dry April. Seven out of the last ten Aprils have been dry here. Another sunny April, which continues a recent trend. After an unsettled week the remainder of the month was mostly settled, and totally dry from the 14<sup>th</sup>onwards. A Meteorological drought!

Mickleover: The seventh driest April since 1995. Mean temperatures close to the average.

**Coton-in-the-Elms:** Overall the mean temperatures were close to the average, but nights were cold, and days were mostly warm. It was often frosty due to clear nights and dry ground. Rainfall was well below average, though not as dry as April 2021. Seven of the last ten years have seen drier than average Aprils. No significant rain recorded between the 14<sup>th</sup> and 30<sup>th</sup>, thus producing official drought conditions.

**Middleton:** The twelfth warmest, and eleventh driest, April in the last 45 years. Sunshine was above average, but it was still the dullest April since 2018. No lying snow at 0900 GMT, but there was a thin cover early on the 1<sup>st</sup> and 2<sup>nd</sup>.

**Desford:** Dry and warmer than average with plenty of sunshine.

**Ely:** Fourth consecutive 'dry' April, and third consecutive April when NE wind most prevalent (11 days). Mean maximum temperature about 1 C above average, but mean minimum about 1 C below average. This is the sixth year in the last ten when the mean minimum temperature has been below average.

Lowdham: 177.5 hours (119%) of sunshine recorded at Radcliffe-on-Trent.<sup>i</sup>

**Pitsford:** Generally, very dry and settled. Occasionally very warm, but with cooler spells at the start and during the final week.

## Weather impacts<sup>ii</sup>

Largely settled weather patterns prevailed for much of April, with severe weather warning activity limited to the first week. Arctic air produced a few impacts as the month began, with localised accumulations of snow reported on several roads in Grampian. Further south, strong winds and slight snowfall affected parts of eastern and south-east England, with several road traffic accidents attributed to the weather, and cross-Channel ferries struggling to dock at Calais due to the winds. Arctic air made a brief return to the northern half of Scotland around the 7th, with reports of several vehicles stuck in snow on the A9. Strong winds were the main hazard further south as a deepening Atlantic low transferred eastwards across Scotland, with fallen trees impacting rail travel on Merseyside and the M48 Severn crossing closed on the morning of the 7th. Thereafter, the weather remained generally settled, with no further impacts noted.

#### From the Press.

An unprecedented heat wave has caused considerable suffering in India and Pakistan. Temperatures have repeatedly hit almost 50 C. Locals have been unable to work except during the cooler nights. North-west and Central India have experienced the hottest April in 122 years, while, on Saturday[30<sup>th</sup>], Jacobabad, in Pakistan's Sindh province, the temperature reached 49 C, one of the highest April temperatures recorded anywhere in the world. A temperature of 47.2 C was also reached at Banda, in India, on the same day. The heatwave has had a devastating impact on crops, including wheat, fruit, and vegetables. In India the wheat yield has dropped by up to 50% in areas worst hit by extreme temperatures, adding to fears of global shortages due to the problems in eastern Europe. A heat wave is declared when maximum temperatures are more than 40 C, and satellite imagery has shown surface land temperatures above 60 C in parts of north-west India, and 65 C to the south-east and south-west of Ahmedabad.<sup>iii</sup>

#### April 1922.

**Observers Notes.**<sup>iv</sup>

Worksop (Nottingham): A wet and cold month.

**Meltham (Yorkshire):** Temperatures almost as low as in 1917, and with that exception it was the coldest in 4 years.

**Tenbury (Worcester):** Cold and unsettled month. Trees and vegetation generally very backward.

Raunds (Northampton): Vegetation extraordinarily backward.

**Bolton (Lancashire):** The month was certainly the coldest, and most uncongenial April we have had since 1887.

Leyland (Lancashire): Rainfall above the average. A very cold month.

Redruth (Cornwall): Mean temperature [about 1.3 C] below [the] average of 20 years.

**Carrigoran (Co. Clare):** The nights have been cold throughout the month, and the thermometer has fallen to freezing point, or below, on eleven nights.

**Dublin:** The coldest April experienced in Dublin for over half a century. The mean temperature was [about 2.5 C] below the average for 35 years. On many occasions during the month the Wicklow mountains were covered with snow to a considerable depth.

**Derby/Burton-on-Trent:**<sup>v</sup> Most rainfall sites received 60-69 mm, one at 54.4 mm, which would be rather above normal. It was a very cold April, so it may be that some precipitation fell as snow, but no details are known. The mean temperature locally was 5.7 C, which was a degree and a half below normal for the time. Extremes were, a minimum of -5 C on the 1<sup>st</sup> and 2<sup>nd</sup>, and a maximum around 16/17 C on the 14<sup>th</sup>. There were twelve air frosts in Burton-on-Trent. There has not been an April month as cold as this since 1922.

#### Summary of April 1922.

Much of April 1922 was cold and unsettled. At the beginning of the month there were two large areas of high pressure, one between Iceland and Spitsbergen, the other over Madera, and Southern Spain. These continued for the first fortnight while a series of depressions crossed the British Isles, or their vicinity, and produced very unsettled weather over northern Europe.

On the 3<sup>rd</sup> a deep depression moved up the English Channel producing easterly gales, heavy precipitation, and low temperatures on the northern flank, particularly in southern England and the Midlands. There was continuous rain, sleet, or snow in most localities; Kew reported 14 mm of rain, and Croydon 18 mm, in 24 hours, while on the continent, Den Helder and Flushing each had 73 mm. Maxima for the day were, [0.8 C] at Malvern, [1 C] at Ross-on-wye, [2 C] at Hampstead, and [ 4 C] at Brocklesby. By the 4<sup>th</sup> the depression had moved into Germany producing rain, or snow, both in Germany and southern Scandinavia. Unsettled weather continued over Britain until the 14<sup>th</sup>. It was the warmest day of the month in the south of England. The temperature at Kew was [19 C]. This was due to a warm airstream on the south side of a depression, which had deepened as it passed to the north of Ireland and into the North Sea, producing strong winds, gales, and heavy rain over the British Isles and southern Norway. Shipping was affected, and much structural damage was done along the English Channel.

On the 15<sup>th</sup> the warm air had reached Germany, with Berlin having a maximum temperature of [27 C]. To the rear of the depression a northerly airstream set in, and maximum temperatures fell markedly, Kew having a maximum of only [10 C] on the 16<sup>th</sup>. Squally northerlies persisted over western Europe for a day or two, with rain and hail showers over a wide area. On the 17<sup>th</sup> temperatures failed to exceed [7 C] in Denmark, Scotland, and parts of France, but reached [21 C] at Vienna, [24 C] at Warsaw, and [25 C] at Posen.

By the 18<sup>th</sup>, a ridge of high pressure had become established and extended from the Azores to Scandinavia and continued for three or four days. This gave generally fair weather over the British Isles and western Europe, with some sharp frosts at night in many places. On the 20<sup>th</sup> Renfrew recorded a maximum of [16 C], and Eskdalemuir [15 C]. A shallow depression over south-east England brought this fine weather to an end.

On the 23<sup>rd</sup>, a depression over Iceland, deepened, moved south-east, and by the 24<sup>th</sup> was over the North Sea and producing rain in most parts of western Europe.

By the 25<sup>th</sup>/26<sup>th</sup> a large low-pressure system, with several well-marked centres, covered the area around, and over, British Isles. There were considerable variations in temperature. For example, at 1800 on the 25<sup>th</sup> St Ann's Head, in the warm sector, saw a temperature of [9 C], while Holyhead, on the cold side, had a temperature of only [5 C]. Buy the following morning there was snow lying on the hills of Shropshire and Central Wales, but only a sprinkling on the peaks of the Black Mountains of Breconshire. By the morning of the 26<sup>th</sup> the low had moved into the North Sea and into Denmark. The northerly airstream in its rear continued to the end of the month, accompanied by hail, or rain showers, and local thunder.

### Europe and the Rest of the World, April 1922.<sup>vi</sup>

At the beginning of the month there were heavy rains in Switzerland which caused serious landslides in the Rhone Valley; one village was partially buried. Floods were reported from all parts of the country, as well as in the French part of the Rhone Valley; at Lyon the lower part of the town was under water. There was much minor damage from avalanches and landslides owing to the continued rainfall.

At the end of the month floods were feared in the Toulouse area where torrential rain fell throughout the 29<sup>th</sup>. This was due to a depression, which was centred over the Gulf of Lyon on the 28<sup>th</sup>, moving north-east and producing heavy rain in parts of France, Switzerland, Germany, and Denmark. On the 30<sup>th</sup> the temperature rose to [22 C] at Vienna and [21 C] at Prague.

In southern Europe the weather for the whole month was fine with very little rain, conditions which also prevailed in the eastern Mediterranean. Temperatures exceeding [38 C] were twice recorded at Cairo, [40 C] on the 16<sup>th</sup>, and [39 C] on the 21<sup>st</sup>.

On the 6<sup>th</sup> ice in Reval Harbour, Estonia, had broken up sufficiently to allow shipping movements without the aid of an icebreaker. A catastrophe had occurred, on the 11<sup>th</sup>, at Dvinsk, on the river Dvina. Blocks of ice obstructed the river and allowed the town to be flooded, killing around 1,000 people. The ice was finally destroyed by gunfire. The usual date for the ice to break was about the 29<sup>th</sup> of March. Navigation on the Volga was resumed a few days before the end of the month. [It is assumed that the month referred to is April].

A violent snowstorm was experienced at Hammerfest on the 11<sup>th</sup>.

About 55 mm of rain fell in south-western Alberta during April, and navigation on the St Lawrence was opened, as far as Montreal, on the 12<sup>th</sup>.

A series of tornadoes passed over various parts of Illinois, Indiana, and Arkansas on the 17<sup>th</sup>; 20 people were killed, and a large number injured. During the previous week a tornado struck Texas and Oklahoma; there were numerous casualties. Floods occurred, with loss of life, at Dallas, Texas, while the Mississippi remained at a dangerous level. A sum of \$1,000,000 was earmarked for control of the river.

A violent blizzard overtook the Everest Expedition, on the afternoon of the 8<sup>th</sup>, after the team had just left Phari Dzong. It is understood that there were no casualties.

The dry spell, that had caused concern to farmers in parts of Australia, was broken towards the end of the month, with rain falling in South Australia and New south Wales. Unusually high temperatures, for the time of year, were recorded at Sydney and Melbourne.

In Brazil, rainfall 180 mm above average, but 300 to 600 mm in certain places, was experienced in the northern region. There were floods in Amazonas, Ceara, and Alagoas states, but the rainfall was below average in the centre of the country, and irregular in the south. Rice and cane plantations suffered from the floods.

### **Central England Temperatures and Rainfall**

#### Central England Data,<sup>vii</sup> April 1922 (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 9.5 C. Average: 12.4 C.

Mean Minimum Temperature: 1.5 C. Average: 3.7 C.

Mean Temperature: 5.5 C. Average: 7.9 C.

England and Wales Rainfall: 82.3 mm. Average: 55.8 mm.

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

Midlands Mean Maximum Temperature: 9.4 C. Average: 11.7 C.

Midlands Mean Minimum Temperature: 0.7 C. Average: 2.8 C.

Midlands Mean Temperature: 5.1 C. Average: 7.3 C.

Midlands Rainfall: 75.1 mm. Average: 50.1 mm.

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### Central England, April 2022 (Averaging period is 1991-2020).

Mean Maximum Temperature: 14.0 C. Average: 13.3 C.

Mean Minimum Temperature: 4.1 C. Average: 4.6 C.

Mean Temperature: 9.1 C. Average: 9.0 C.

England and Wales Rainfall: 15.9 mm. Average: 63.2 mm.

<sup>v</sup> D J Stanier, by email, 3 May 2022.

<sup>vii</sup> Hadley Centre, Central England and Midlands, Meteorological Office.

<sup>&</sup>lt;sup>i</sup> J Osborne, by email, 7 May 2022.

<sup>&</sup>lt;sup>ii</sup> Monthly Weather Report, April 2022, Meteorological Office, April 2022.

iii Guardian, 3 May 2022.

<sup>&</sup>lt;sup>iv</sup> Monthly Weather Report, April 1922, Meteorological Office, HMSO, June 1922, p. 45.

<sup>&</sup>lt;sup>vi</sup> Meteorological Magazine, May 1922, Meteorological Office, HMSO, pp. 110-116.

viii Regional Values, April 2022, Meteorological Office Climate Summaries, April 2022.