

Extremes of temperature, March and April 2021

The UK experienced a brief spell of unusual warmth at the end of March with temperatures across England and Wales widely reaching 20 to 22°C. 24.5°C was recorded at Kew Gardens, Greater London on 30th March, only the third day on record with a UK March temperature exceeding 24°C. Many long-running stations recorded their warmest March day on record, while Scotland recorded its equal-highest March daily minimum temperature.

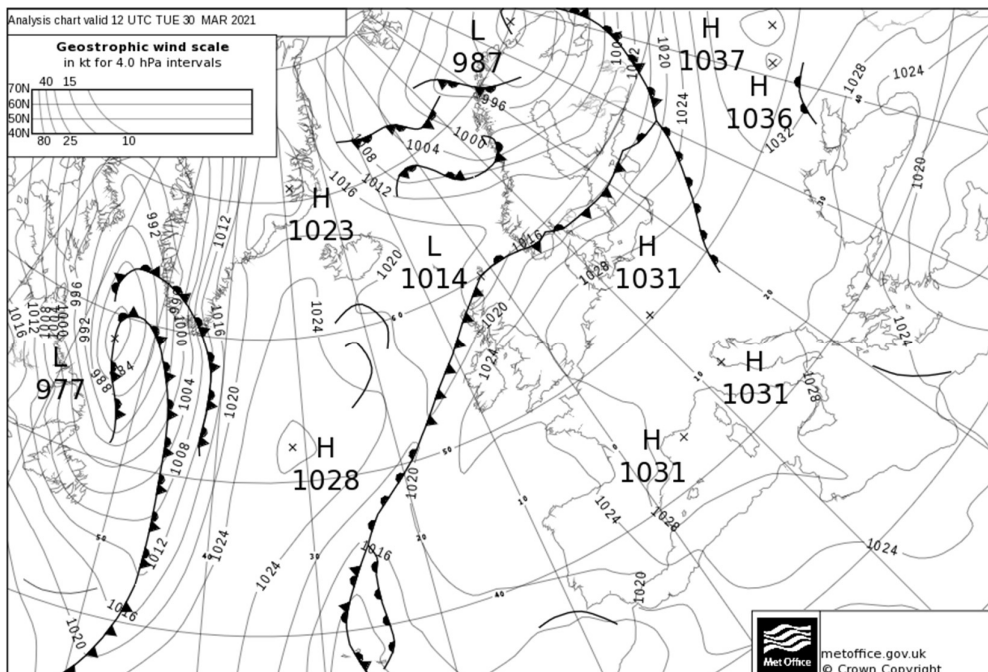
The warmth of late March was followed by a cold plunge in early April as a brisk northerly airstream brought a cold Arctic Maritime air mass across the UK, accompanied by wintry showers. Daily maximum temperatures were 6 or 7°C across much of the UK (in places a fall of 15°C in the space of a week) and only 2 or 3°C across northern Scotland. A strong northerly wind also brought significant windchill to exposed coastal areas. There were some widespread hard frosts with temperatures falling below -5°C and several stations recording their lowest April temperature for over 40 years. There was also lying snow across much of northern Scotland, with snow depths of several cm as far south as the Peak Districts and some snow reported across parts of southern England.

Impacts

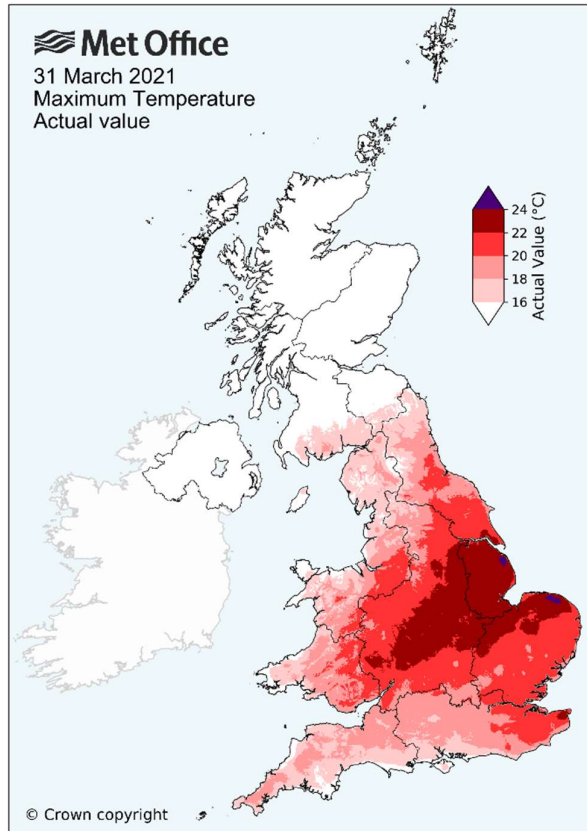
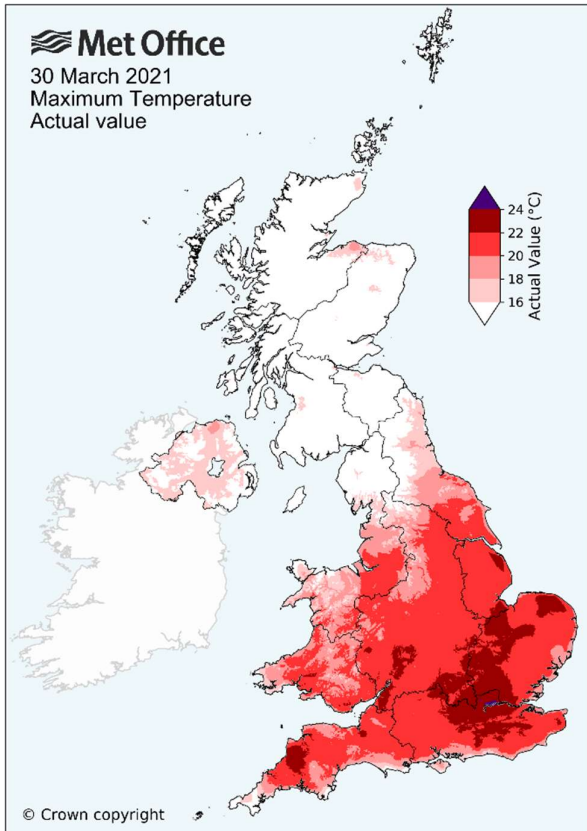
The warmth and sunshine coincided with the government ending its 'stay at home' guidance across England. Many people gathered in parks and beaches where there were reminders to people to maintain social distancing due to the ongoing coronavirus pandemic. Lying snow caused some disruption to motorists in early April in parts of North Yorkshire and Teeside and there was also some travel disruption from the wintry weather across Scotland including ferry cancellations.

Weather data

The analysis chart at 1200UTC 30 March 2021 shows the UK in a light southerly airflow from the near continent accompanied by clear skies and warm sunshine.



The maps below show daily maximum temperatures on 30 and 31 March 2021. 20°C was exceeded widely across England and Wales with 22°C reached across some areas – approximately 12°C above the 1981-2010 long-term average for March. The highest temperature was 24.5°C at Kew Gardens (Greater London) on the 30th. This was only the third day in March in UK climate station records where a temperature of 24°C has been reached in the UK. The previous dates were 29 March 1965 and 29 March 1968 – with the March record of 25.6°C set at Mepal, Cambridgeshire on 29 March 1968.

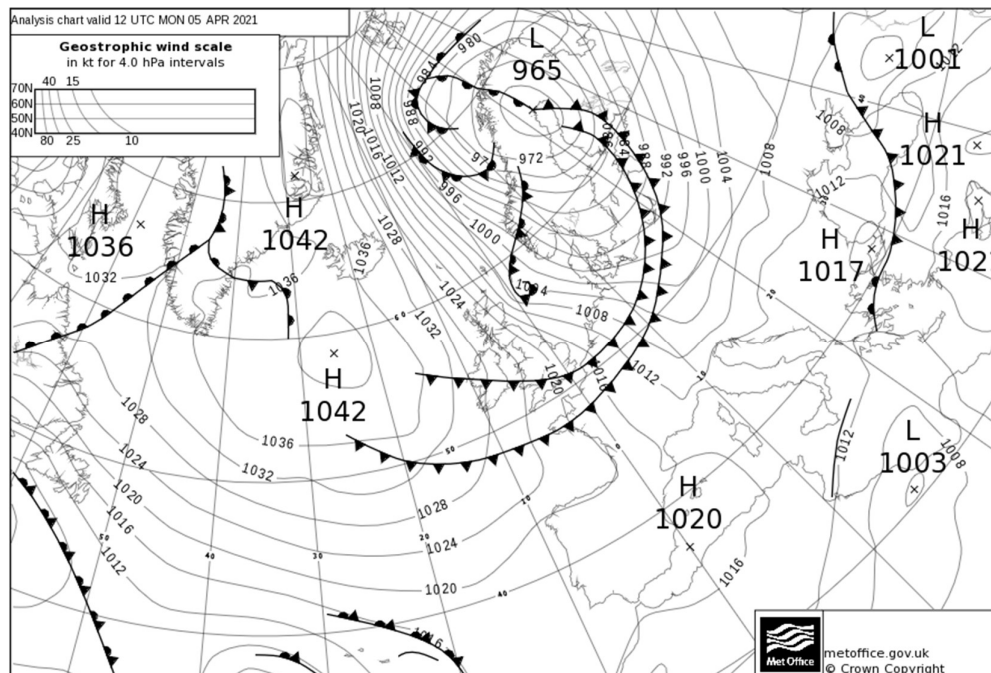


The table below lists long-running stations which recorded their highest March temperature on record (including several with 100+ year record lengths). Many other stations with 50+ year records also recorded their highest March temperature.

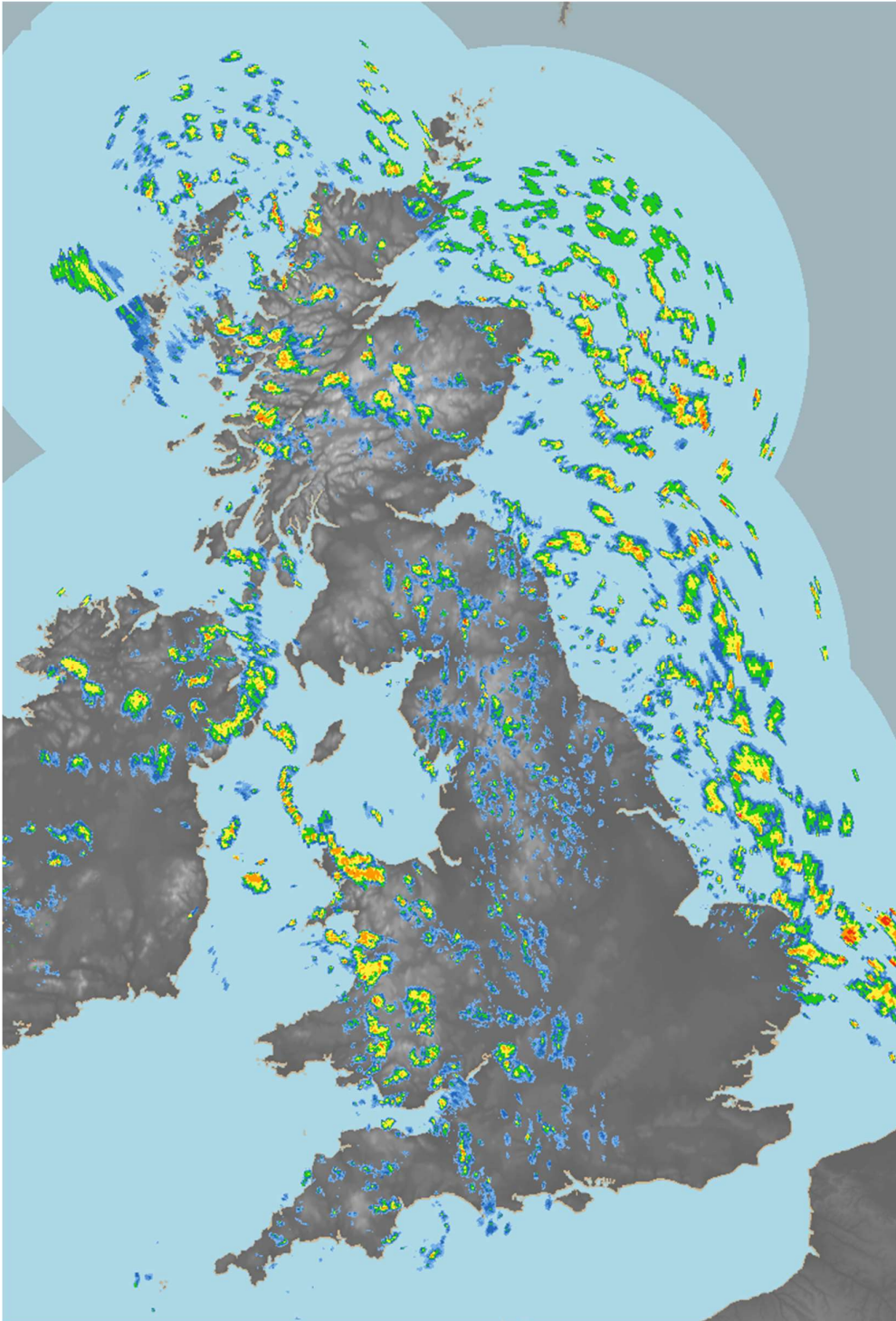
Station	Daily maxtemp (°C)	Date	Previous record (°C)	Previous date	Record length (years)
Oxford	22.6°C	30th	22.2°C	29-03-1965	168
Wisley, Surrey	23.5°C	30th	22.8°C	29-03-1965	107
Rothamsted, Hertfordshire	22.3°C	30th	22.2°C	29-03-1968	107
Cranwell, Lincolnshire	23.2°C	31st	22.2°C	28-03-1965	105
Bude, Cornwall	23.4°C	30th	21.1°C	28-03-1968	93
Sutton Bonington, Nottinghamshire	22.9°C	31st	22.7°C	13-03-2008	92

Daily minimum temperatures also remained unusually high – above 10°C – across Northern Ireland and parts of Scotland on 30th March. Kinloss, Moray recorded a daily minimum temperature of 12.7°C – Scotland’s equal-highest March daily minimum temperature on record (shared with Benmore, Argyll on 9 March 1948).

After the warmth at the end of March, the UK experienced a plunge of bitterly cold arctic air in a strong northerly airstream in early April, accompanied by wintry showers and lying snow across high ground – falling to lower levels across northern Scotland. The analysis chart below at 1200UTC 5 April 2021 shows cold fronts sweeping south across the UK.

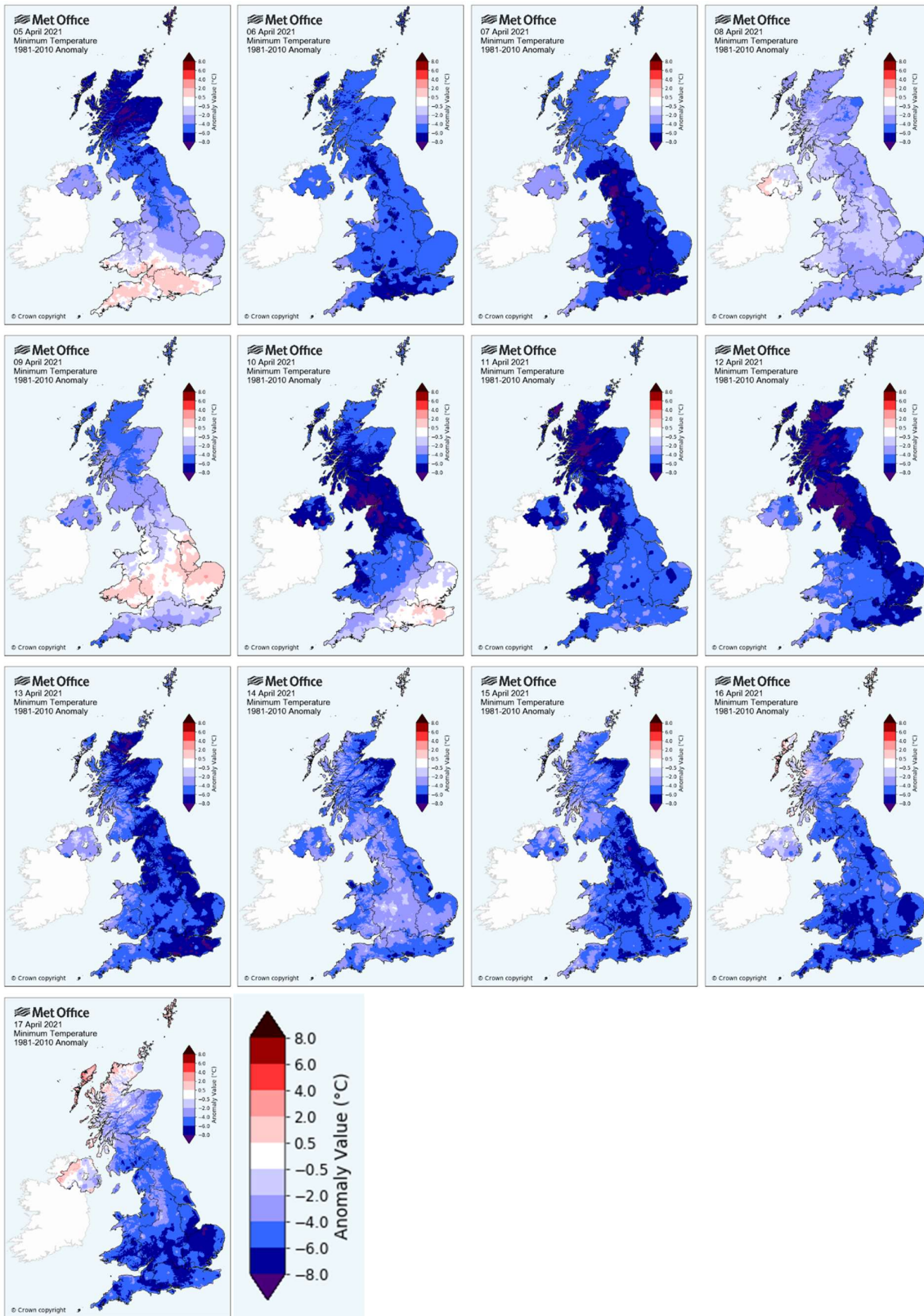


On 5 April lying snow depths included 5cm at Lerwick, Shetland, 7cm at Kirkwall, Orkney, 5cm at Oyne, Aberdeenshire and Loch Glascarnoch, Highland, while on 11 April there was 4cm at Buxton, Derbyshire and 3cm at Leek, Thorncliffe, Staffordshire. The rain-radar image below at 1200UTC on 6 April 2021 shows wintry showers in a northerly airflow affecting Scotland, Northern Ireland, North Sea and Irish Sea coasts, with a run of showers through the North Channel affecting North Wales.



On 5 April, Lerwick, Shetland recorded a daily maximum temperature of 1.1°C, and a daily minimum of -5.2°C, the lowest April daily maximum and minimum temperatures at this station for over 50 years. The low temperatures and snow were accompanied by a northerly wind gusting at over 50Kt (58mph) leading to severe wind-chill. Several other stations recorded their lowest April temperatures for over 40 years.

The maps below show daily minimum temperatures from 5 to 17 April 2021 relative to the 1981-2010 April long-term average – a run of notably cold April nights with widespread hard frosts at times and temperatures locally more than 8°C below average for the time of year.

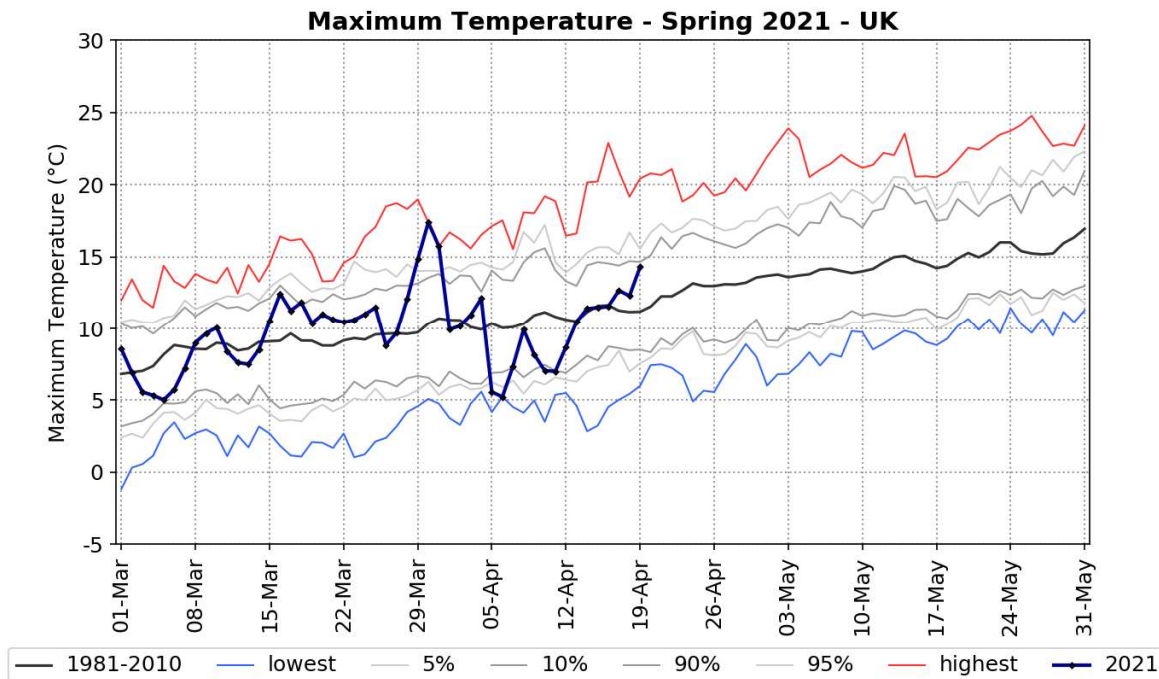


The time-series below shows UK area-average daily maximum and minimum temperatures for spring 2021, illustrating the contrast between the unusually high temperatures for the time of year in late March followed by unusually low temperatures in early April – a fall of almost 10°C in the UK area-average daily values in the space of a only a week.



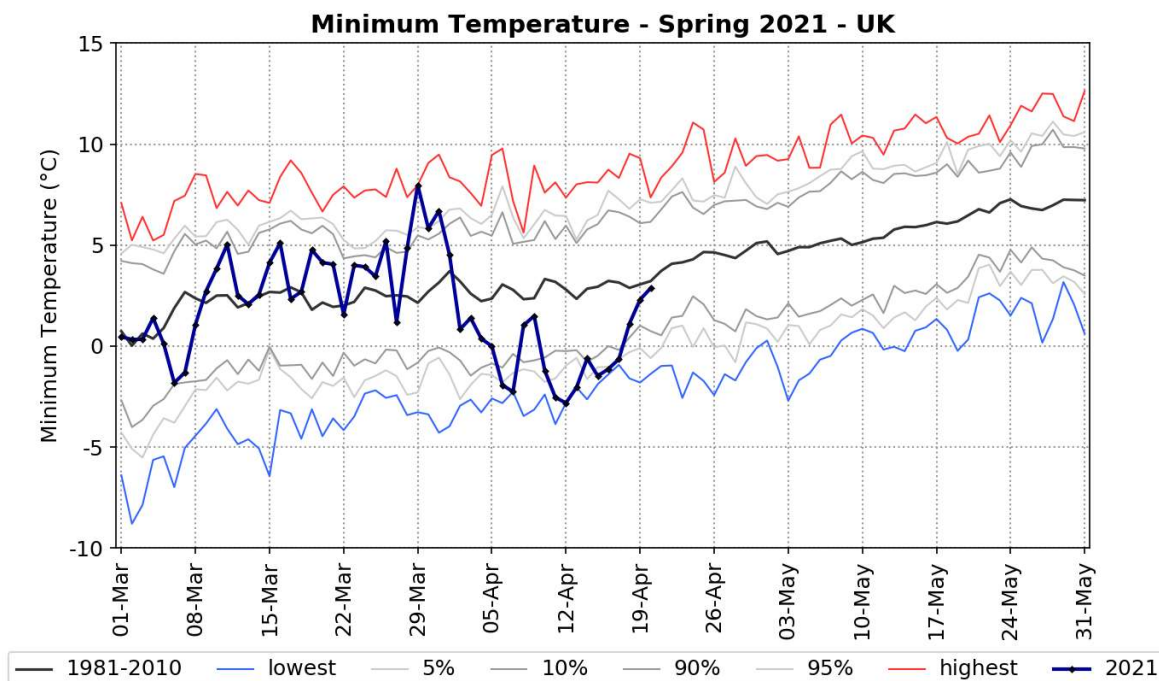
Source: HadUK-Grid 20/04/2021 11:08

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