



# March 2020

## ***Cool and sunny, dry in the East***

Storm Jorge, brought both February's strongest wind gusts on the 29th and March's strongest wind gusts on the 1st, as the storm filled and pulled away to the northeast. This left Ireland in a cool and showery westerly airflow for most of the first week of March. A series of low pressure systems to the north of Ireland dominated our weather between the 7th and 17th, bringing weather fronts across the country from west to east, interspersed with periods of cool showery weather as the winds remained mostly from the west. This included the strongest sustained winds of the month on the 12th. The remainder of the month was dominated by high pressure, however between the 21st and 25th, several weather fronts encroached and stalled in the western half of the country, giving some dull wet days there, but staying mostly dry further east. As one area of high pressure moved away to the east on the 25th, an Atlantic high pressure system intensified, reaching a high of 1055hPa by the 29th, while centred between Iceland and Ireland. This was close enough for record high pressure for March to be recorded in the northwest of Ireland on the 29th. Between the 26th and the end of the month, the weather stayed mostly dry everywhere, but it became progressively cooler as an arctic air mass moved in over Ireland from the north-east around the same intense high pressure system that stalled to the northwest of Ireland.

### **Rainfall: Below average in most places**

The majority of monthly rainfall totals across the country were below their Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 56% (monthly rainfall total of 47.9 mm) at Moore Park, Co Cork to 126% (the month's highest monthly rainfall total of 178.0 mm) at Newport, Co Mayo. Monthly rainfall totals for the month were lowest at Phoenix Park, Co Dublin with 30.7 mm (57% of its LTA). The highest daily rainfall total was 31.0 mm at Shannon Airport, Co Clare (39% of its monthly LTA) on the 9th. The number of rain days ranged from 13 days at three stations to 24 days at Newport, Co Mayo. The number of wet days<sup>1</sup> ranged from 7 days at Casement Aerodrome, Co Dublin to 20 days at four stations in counties Mayo and Kerry. The number of very wet days<sup>3</sup> ranged from zero days at Phoenix Park, Co Dublin to 5 days at four stations in counties Mayo and Donegal.

### **Temperature: Below average nearly everywhere**

Nearly all mean air temperatures were below their Long-Term Average (LTA) for the month. Deviations from mean air temperature ranged from -1.1 °C (5.9 °C mean temperature) at Markree, Co Sligo to 0.0 °C (6.6 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the month ranged from 5.1 °C (0.5 °C below its LTA) at Knock Airport, Co Mayo to 7.8 °C (0.6 °C below its LTA) at Sherkin Island, Co Cork. The month's highest temperature was reported at Casement Aerodrome, Co Dublin on the 25th with a temperature of 16.5 °C (6.3°C above its LTA). The month's lowest air minimum was recorded on the 5th at Dunsany, Co Meath with -4.2 °C (6.7°C below its LTA), while the lowest grass minimum was -10.1 °C reported at Mount Dillon, Co Roscommon on the 20th. All stations reported ground frost during the month. The number of days with ground frost ranged from 4 days at Sherkin Island, Co Cork to 23 days at Markree, Co Sligo. More than half of stations reported air frost. The number of days with air frost ranged from zero days at a few stations to 13 days at Mount Dillon, Co Roscommon.

### **Sunshine: Above average everywhere, highest in Leinster**

All sunshine totals were above their monthly average. Percentage of monthly sunshine values ranged from 120% (the month's lowest monthly sunshine total of 109.0 hours) at Knock Airport, Co Mayo to 155 % (the month's highest monthly sunshine total of 161.9 hours) at Johnstown Castle\*, Co Wexford. The highest number of daily sunshine hours recorded this month was 11.6 hours at Johnstown Castle\*, Co Wexford on Friday the 27th. The number of dull days<sup>2</sup> ranged from 4 days at Dublin Airport to 10 days at Knock Airport, Co Mayo. Monday the 9th was sunless at all sunshine stations.

### **Wind: Strong gales reported**

Monthly mean wind speeds ranged from 6.9 knots (12.8 km/h) at Moore Park, Co Cork to 16.7 knots (30.9 km/h) at Mace Head, Co Galway. Gales were reported on numerous days with up to strong gales reported on the 1st and 12th. The number of days with gales ranged from zero days at a few stations to 7 days at Mace Head, Co Galway. The number of days with up to strong gales ranged from zero days at most stations to 2 days at Mace Head, Co Galway. The month's highest gust was reported at both Mace Head, Co Galway and Malin Head, Co Donegal both on the 1st with 63 knots (117 km/h). The highest 10-minute wind speed was 45 knots (83 km/h) reported at Mace Head, Co Galway on the morning of the 12th.

### **Atmospheric Pressure: Record March mean sea level pressure (MSLP)**

On the first day of the month, Malin Head recorded the month's lowest MSLP of 978.1 hPa. High pressure weather dominated from Wednesday 18th. By Sunday 29th March, a MSLP of 1051.2 hPa was observed at Malin Head, Co Donegal (over 29 days the pressure rose 73.1 hPa) and an atmospheric pressure of 1051.9 hPa was recorded at the M4 62093 Donegal buoy. These are new provisional March and buoy records. The previous highest March MSLP at a land station was 1047.1 hPa, which occurred on Tuesday 13th March 1900 at Valentia Observatory in County Kerry.

## **EXTREME VALUES AT SYNOPTIC STATIONS**

### **Rainfall**

Highest total: 178.0 mm at Newport, Co Mayo (126% of its LTA)  
Lowest total: 30.7 mm at Phoenix Park, Co Dublin (57% of its LTA)  
Highest daily rainfall: 31.0 mm at Shannon Airport, Co Clare (39% of its monthly LTA) on Mon 9th

### **Temperature**

Highest mean monthly temperature: 7.8°C at Sherkin Island, Co Cork (0.6°C below its LTA)  
Lowest mean monthly temperature: 5.1°C at Knock Airport, Co Mayo (0.5°C below its LTA)  
Highest Air temperature: 16.5°C at Casement, Co Dublin (6.3°C above its LTA) on Wed 25th  
Lowest air temperature: -4.2°C at Dunsany, Co Meath (6.7°C below its LTA) on Thu 5th  
Lowest grass minimum: -10.1°C at Mount Dillon, Co Roscommon on Fri 20th

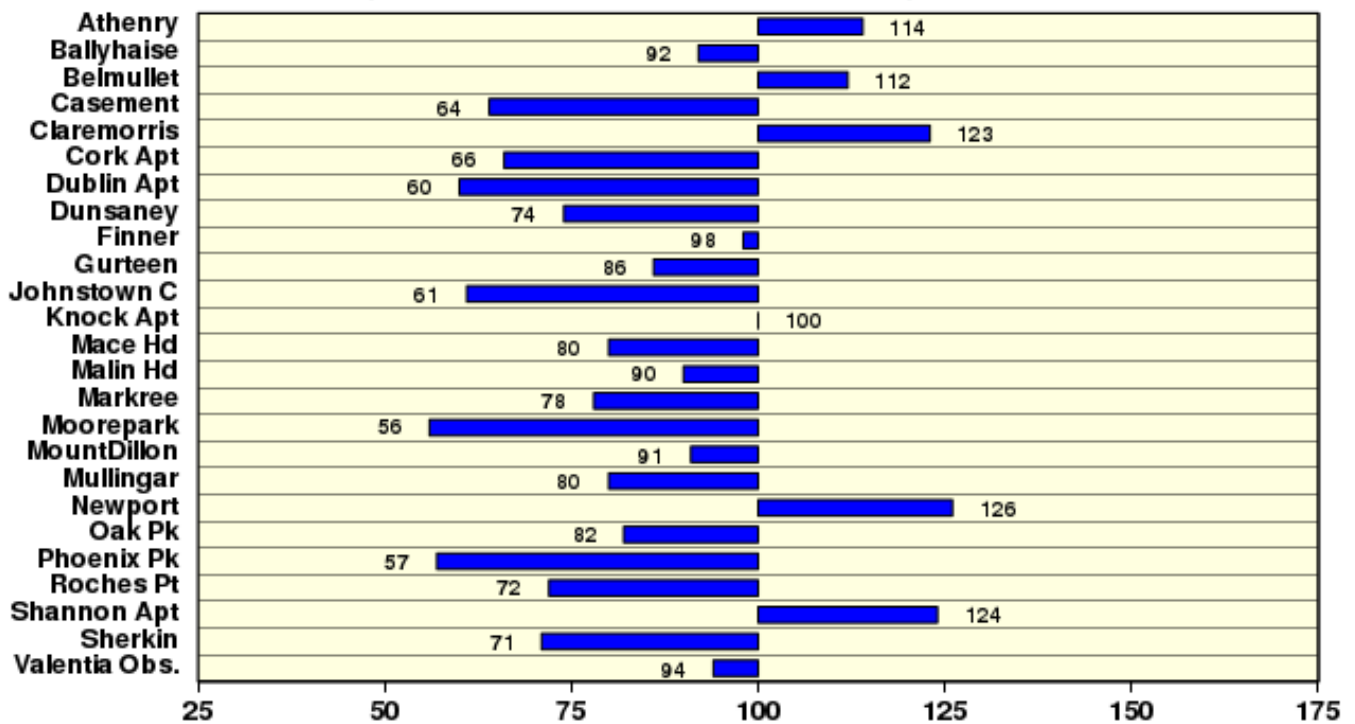
### **Sunshine**

Highest monthly total: 161.9 hrs (daily mean 5.22 hrs/day) at Johnstown Castle\*, Co Wexford  
Lowest monthly total: 109.0 hrs (daily mean 3.52 hrs/day) at Knock Airport, Co Mayo  
Highest daily sunshine: 11.6 hours at Johnstown Castle, Co Wexford on Fri 27th

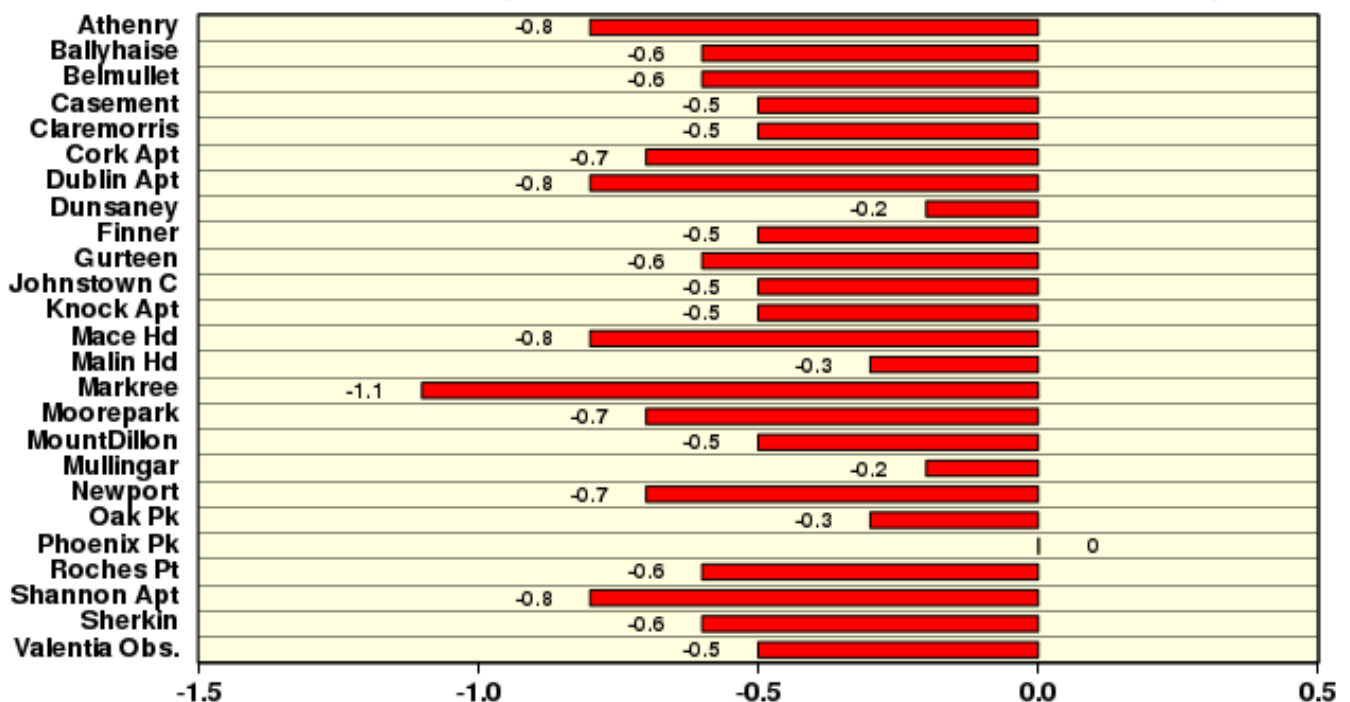
# March 2020

Based on Data from 1-31 March 2020 on whole month basis

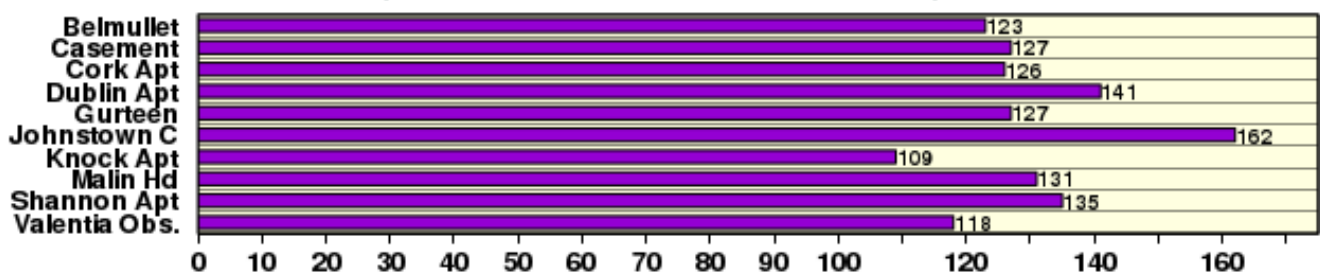
## Rainfall (% of average for period 1981-2010) on whole month basis



## Temperature (°C) difference from average for period 1981-2010)



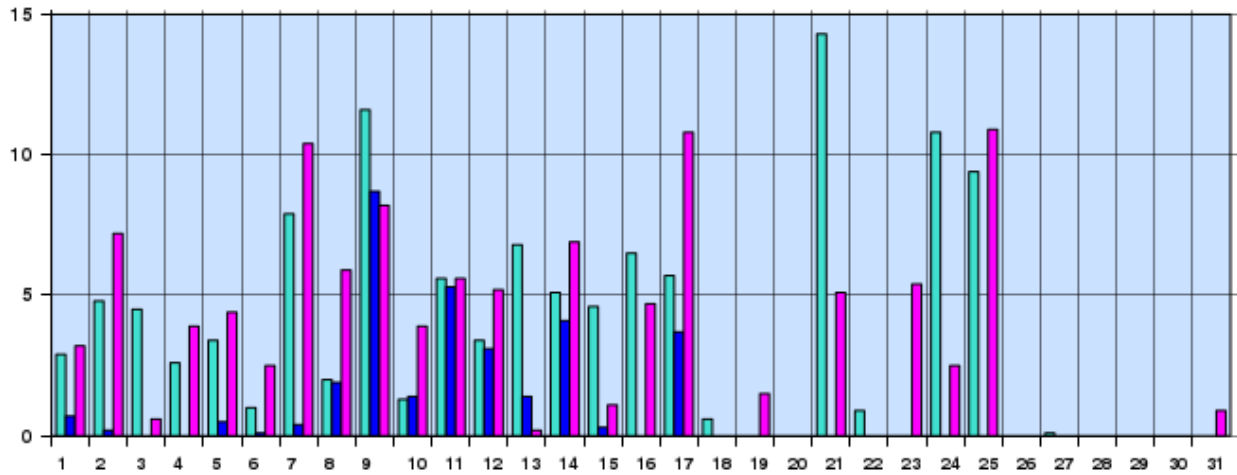
## Sunshine (Number of monthly sunshine hours)



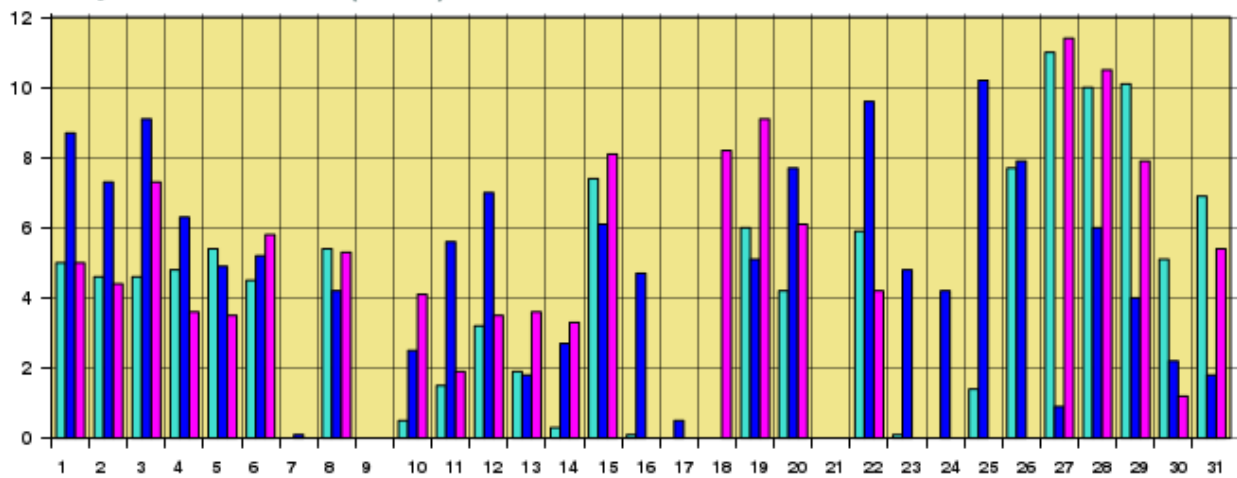
# March 2020 Daily Values at selected synoptic stations

Based on data from 1-31 March 2020 on a pro rata basis

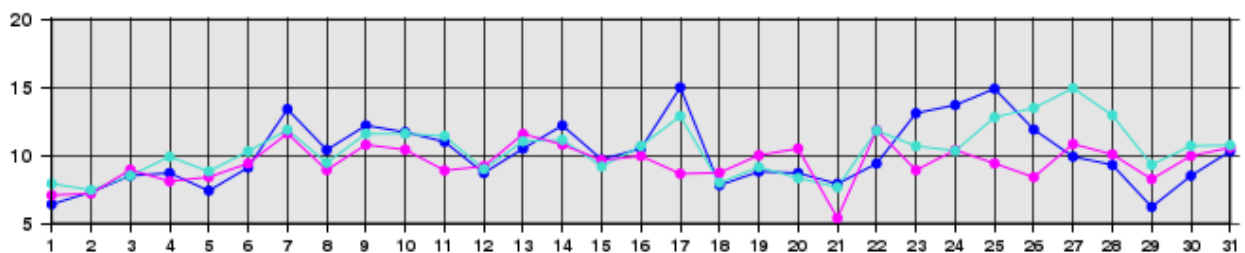
## Daily 00-24h rainfall values(mm)



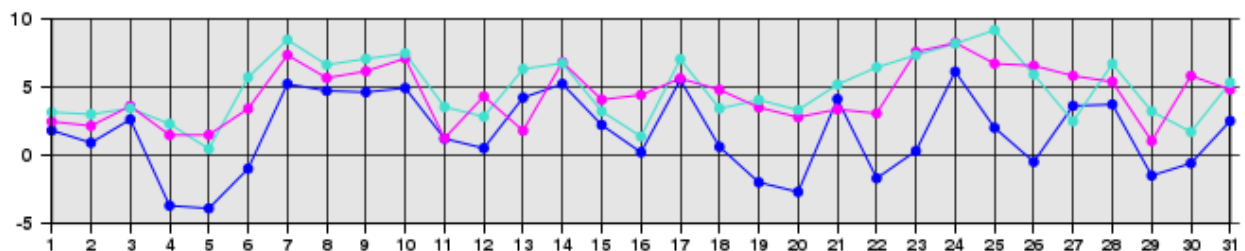
## Daily sunshine values(hours)



## Daily 00-24h maximum temperature (°C)



## Daily 00-24h minimum temperature (°C)



- Valentia Observatory - Dublin Airport - Belmullet

Source: newR/WXBULL/CurrentMonthlyTemp.R Plotted Mon Apr 6 11:06:50 2020

Issued by Met Éireann on Thursday 2nd April 2020. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann.

Synoptic station data is midnight to midnight UTC. Long-Term Averages (LTAs) and “average” refer to the period 1981-2010. <sup>1</sup>A dry spell is a period of 15 or more consecutive days to none of which is credited 1.0 mm or more of precipitation (i.e. daily tot < 1.0 mm). <sup>2</sup>A wet day is a day with 1.0 mm or more of rainfall. <sup>3</sup>A dull day is a day with less than 0.5 hours of sunshine. <sup>4</sup>A very wet day is a day with 10.0 mm or more of rainfall. \*Sunshine data is from the Autosol Network.

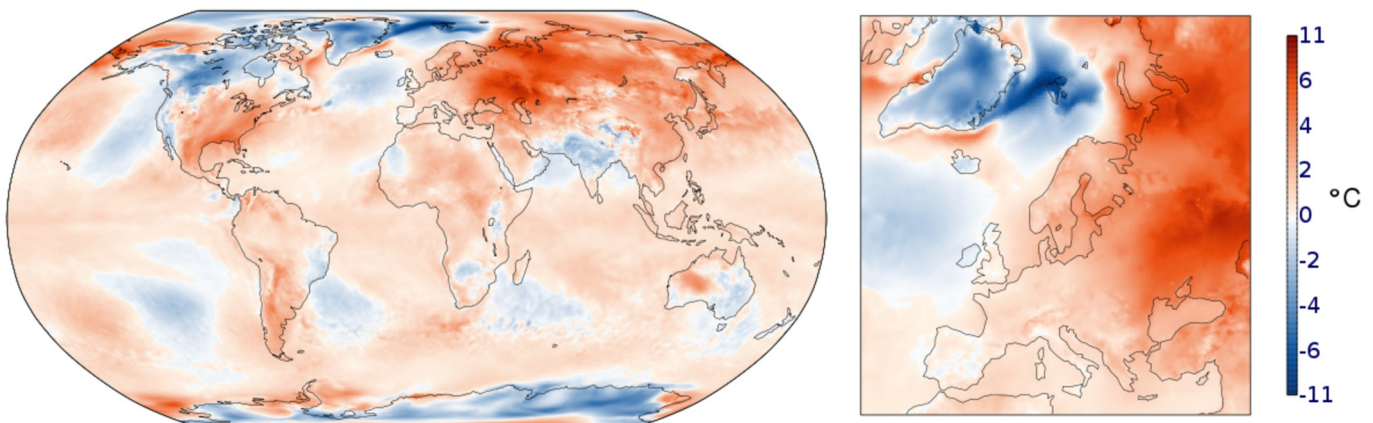
LTAs for these sites are currently not used for comparison purposes. For more information, contact Met Éireann at 01-8064200 or e-mail: enq@met.ie

# March 2020 Global

## Surface air temperature for March 2020

Global temperatures were on a par with the second and third warmest Marches (2017 and 2019). In Europe temperatures were close to or just below average over its westernmost parts, but well above average around the Baltic sea and in the east. Temperatures were much above average in large parts of Russia and many regions in Asia, over much of eastern and southern USA, Mexico, southern South America, central Africa and western Australia, while the most notable below average temperatures were seen in northern and western Canada, Greenland, Svalbard and East Antarctica.

## Surface air temperature anomaly for March 2020 relative to 1981-2010

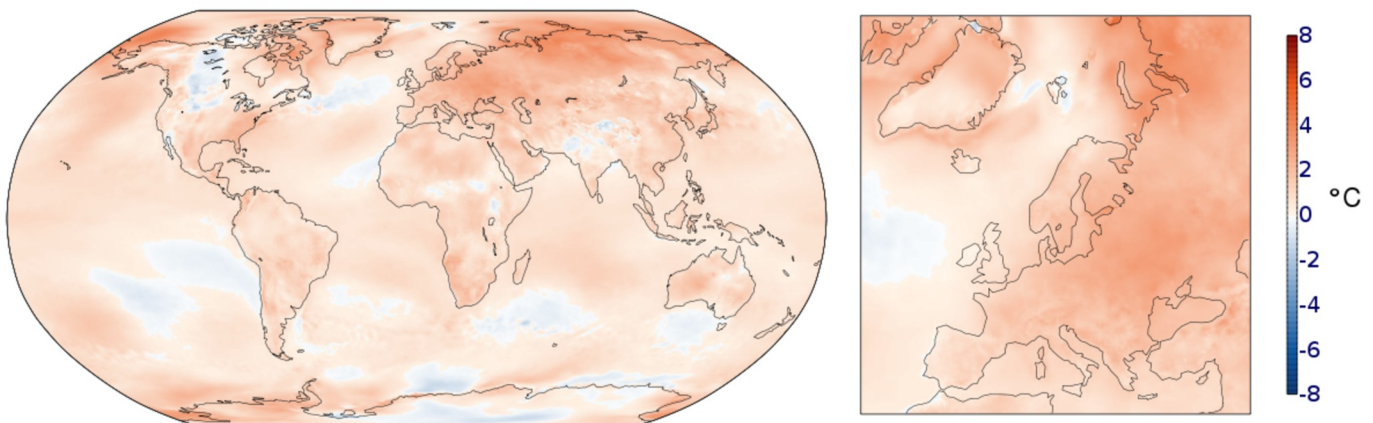


Surface air temperature anomaly for March 2020 relative to the March average for the period 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. <https://climate.copernicus.eu/surface-air-temperature-march-2020>

## The last 12 months - April 2019 to March 2020

Averaging over twelve-month periods smooths out shorter-term variations in regional- and global-average temperatures. Globally, the twelve-month period from April 2019 to March 2020 was 0.64°C warmer than the 1981-2010 average. The warmest twelve-month period was from October 2015 to September 2016, with a temperature 0.66°C above average. 2016 is the warmest calendar year on record, with a global temperature 0.63°C above that for 1981-2010. 2019 is the second warmest calendar year in this data record, with a temperature 0.59°C above average.

## Surface air temperature anomaly for April 2019 to March 2020 relative to 1981-2010



Surface air temperature anomaly for April 2019 to March 2020 relative to the average for 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. <https://climate.copernicus.eu/surface-air-temperature-march-2020>