



# June 2020

## **Changeable, dull and windy**

After a couple of warm, sunny days at the beginning of June, a change in the overall pattern led to low pressure dominating the rest of the month. As high pressure pulled away to the west at the beginning of the first week, a northerly airflow brought weak weather fronts and showers southwards across the country. An upper level trough of low pressure moved south during the second week and became cut off over the Bay of Biscay. This drew up an unstable warm and humid air mass from the southeast, which culminated in intense thunderstorm activity between the 13th and 16th. The thunderstorms were widespread over the four days but some places escaped, especially along the east coast. A slack airflow followed for a few days before a deep area of low pressure in the Atlantic sent several active weather fronts across the country in a south-westerly airflow between the 20th and 23th, with widespread rain. A weather front stalled across the Midlands and West on the 23rd, before fizzling out and pushing back west on the 24th. A warm and humid air mass moved in over the country once again from the southeast on the 25th as a trough of low pressure approached from the west. This led to another round of intense thunderstorms late on the 25th and through the 26th, mostly affecting the Southeast and Northwest. The remainder of the month saw low pressure developing to the north of Ireland, which brought unseasonably strong winds along with some heavy and prolonged rainfall, especially in the Northwest.

## **Rainfall: Above average for most, highest in the Northwest**

The majority of monthly rainfall totals were above their Long-Term Average (LTA). Seven stations had dry spells<sup>6</sup> between the 23rd May and the 13th June, including Mace Head, Co Galway, Moore Park, Co Cork, Sherkin Island, Co Cork, Roches Point, Co Cork, Cork Airport, Co Cork, Shannon Airport, Co Clare and Athenry, Co Galway. Percentage of monthly rainfall values ranged from 62% (monthly rainfall total of 51.2 mm) at Mace Head, Co Galway to 236% (the month's highest monthly rainfall total of 170.3 mm) at Finner, Co Donegal. Monthly rainfall totals for the month were lowest at Oak Park, Co Carlow with 40.5 mm (67% of its LTA). The highest daily rainfall total was 53.6 mm at Newport, Co Mayo on the 28th (*its wettest June day on record (length 60 years)*). The number of rain days ranged from 14 days at both Mace Head, Co Galway and Cork Airport to 25 days at Casement Aerodrome, Co Dublin. The number of wet days<sup>1</sup> ranged from 7 days at Mace Head, Co Galway to 17 days at three stations in Counties Sligo and Donegal. The number of very wet days<sup>3</sup> ranged from 1 day at Phoenix Park, Co Dublin to 5 days at a few stations.

## **Temperature: Near average at most places**

The majority of mean air temperatures were close to their Long-Term Average (LTA) for the month. Deviations from mean air temperature ranged from -0.3 °C at both Shannon Airport, Co Clare (14.2 °C mean temperature) and Markree, Co Sligo (13.1 °C mean temperature) to 0.6 °C at both Dunsany, Co Meath (13.7 °C mean temperature) and Phoenix Park, Co Dublin (14.2 °C mean temperature). Mean temperatures for the month ranged from 12.3 °C (0.1 °C above its LTA) at Knock Airport, Co Mayo to 14.3 °C (0.5 °C above its LTA) at Oak Park, Co Carlow. The month's highest temperature was reported at Newport, Co Mayo on the 1st with a temperature of 27.1 °C. The number of days with air temperatures above 25.0 °C ranged from 1 day at eight stations to 2 days at Phoenix Park, Co Dublin, Oak Park, Co Carlow and Mount Dillon, Co Roscommon. Both the month's lowest air and grass minimum temperature were recorded on the 8th at Mount Dillon, Co Roscommon. The lowest air minimum was 2.5 °C while the lowest grass minimum was -1.6 °C. There was no air frost reported this month. Less than half of stations reported ground frost. The number of days with ground frost ranged from zero days at a few stations to 2 days at Mount Dillon, Co Roscommon.

## **Sunshine: Below average everywhere**

All available monthly sunshine totals were below their Long-Term Average (LTA). Percentage of monthly sunshine values ranged from 72% (monthly sunshine total of 112.4 hours) at Shannon Airport, Co Clare to 79% (monthly sunshine total of 126.7 hours) at Casement Aerodrome, Co Dublin. Monthly sunshine totals were highest at Johnstown Castle\*, Co Wexford with 146.9 hours (No LTA comparison\*). Monthly sunshine totals were lowest at Gurteen, Co Tipperary with 75.7 hours (No LTA comparison\*). The highest number of daily sunshine hours recorded this month was 15.6 at Johnstown Castle, Co Wexford on the 1st. The number of dull days<sup>2</sup> ranged from 5 days at Johnstown Castle, Co Wexford to 11 days at a few stations. Dublin Airport, Co Dublin had its dullest June for 27 years with 129.0 hours.

## **Wind: Gales reported**

Monthly mean wind speeds ranged from 5.8 knots (10.7 km/h) at Ballyhaise, Co Cavan to 13.1 knots (24.3 km/h) at Mace Head, Co Galway. Gales were reported on the 5th, 6th, 20th and 28th. The number of days with gale force winds ranged from zero days at Phoenix Park, Co Dublin to 2 days at both Roche's Point, Co Cork and Malin Head, Co Donegal. There were no strong gales or storms reported this month. The month's highest 10-minute mean wind speed of 37 knots (69 km/h) was reported at Malin head, Co Donegal on the 5th, both Malin Head, Co Donegal and Roches Point, Co Cork on the 6th, Sherkin Island, Co Cork on the 20th and Mace Head, Co Galway on the 28th. The highest gust was 49 knots (91 km/h) reported at Mace Head, Co Galway on the 28th. Two stations had their highest mean wind for June on record. These included Oak Park, Co Carlow with 7.8 knots (14.5 km/h) (record length 13 years) and Moore Park, Co Cork with 6.6 knots (12.2 km/h) (record length 12 years). Roches Point, Co Cork had its highest June mean wind for 23 years with 12.5 knots (23.2 km/h). Shannon Airport, Co Clare had its highest June mean wind for 16 years with 9.8 knots (18.2 km/h) and Cork Airport, Co Cork had its highest June mean wind for 30 years with 10.8 knots (20.0 km/h).

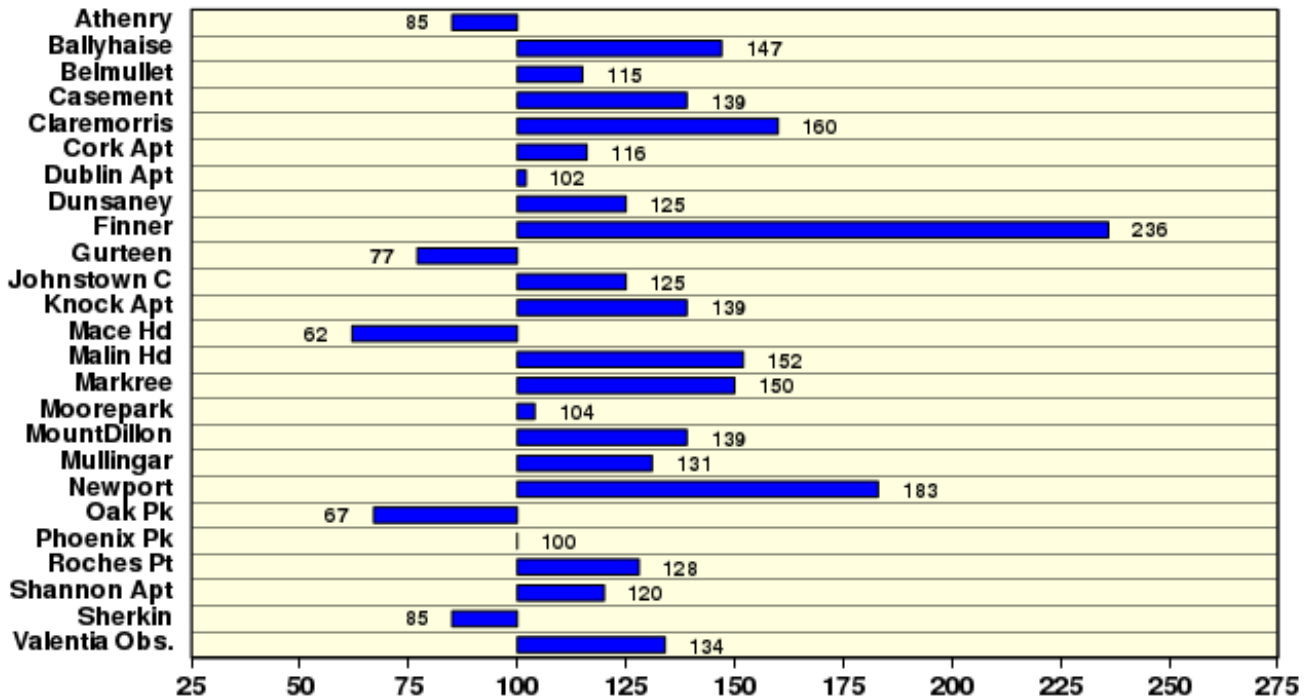
## **EXTREME VALUES AT SYNOPTIC STATIONS**

|                    |  |
|--------------------|--|
| <b>Rainfall</b>    | Highest total: 170.3 mm at Finner, Co Donegal (236% of its LTA)<br>Lowest total: 40.5 mm at Oak Park, Co Carlow (67% of its LTA)<br>Highest daily rainfall: 53.6 mm at Newport, Co Mayo (60% of its monthly LTA) on Sun 28th ( <i>its wettest June day on record (length 60 years)</i> )   |
| <b>Temperature</b> | Highest mean monthly temperature: 14.3°C at Oak Park, Co Carlow (0.5°C above its LTA)<br>Lowest mean monthly temperature: 12.3°C at Knock Airport, Co Mayo (0.1°C above its LTA)<br>Highest Air temperature: 27.1°C at Newport, Co Mayo (10.0°C above its LTA) on Mon 1st<br>Lowest air temperature: 2.5°C at Mount Dillon, Co Roscommon on Mon 8th<br>Lowest grass minimum: -1.6°C at Mount Dillon, Co Roscommon on Mon 8th |
| <b>Sunshine</b>    | Highest monthly total: 146.9 hrs (daily mean 4.90 hrs/day) at Johnstown Castle*, Co Wexford<br>Lowest monthly total: 75.7 hrs (daily mean 2.52 hrs/day) at Gurteen*, Co Tipperary<br>Highest daily sunshine: 15.6 hours at Johnstown Castle*, Co Wexford on Mon 1st  |

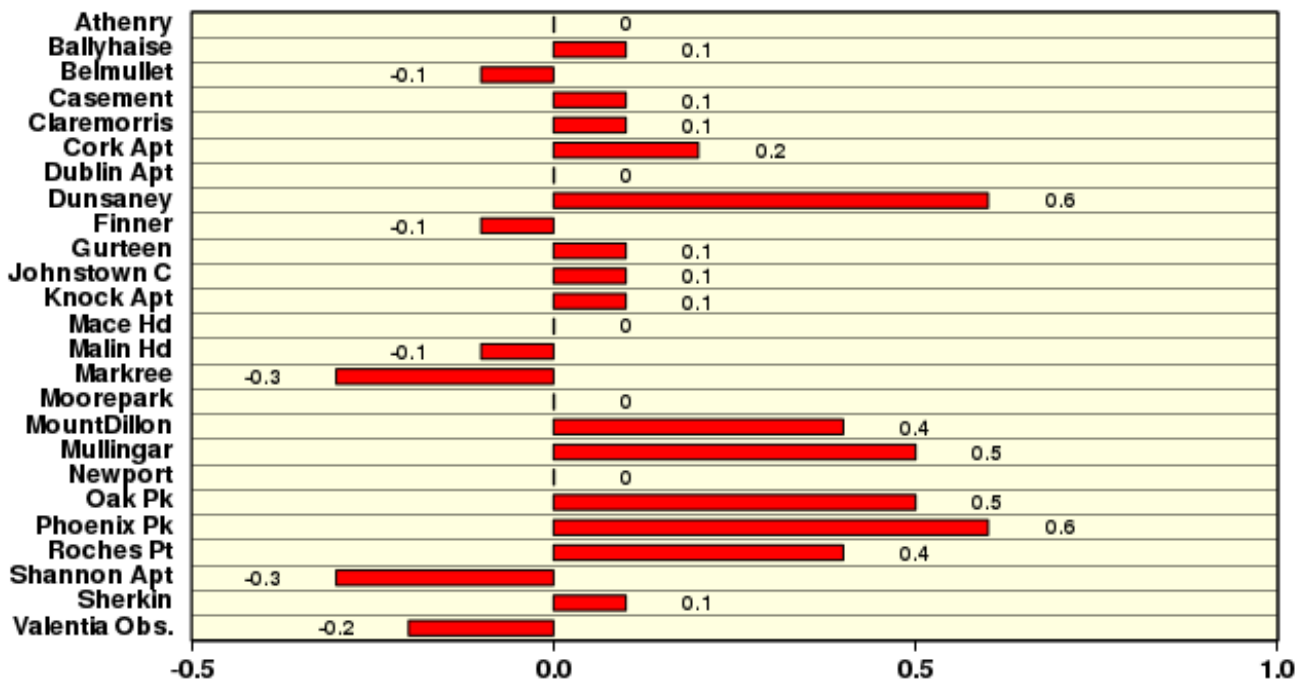
# June 2020

Based on Data from 1-30 June 2020 on whole month basis

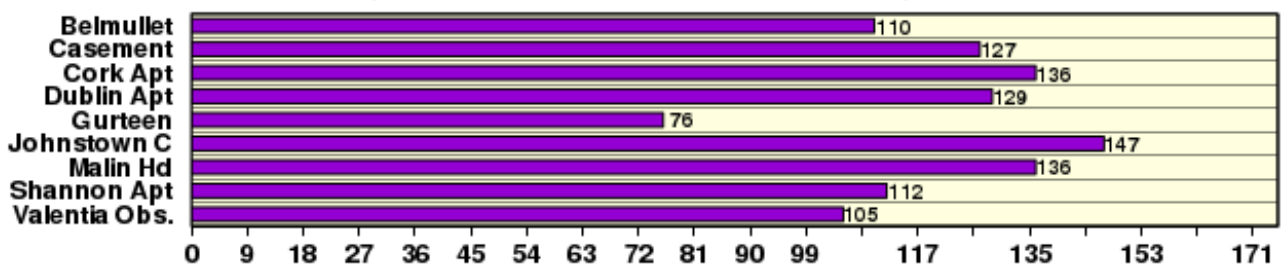
## Rainfall (% of average for period 1981-2010) on whole month basis



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



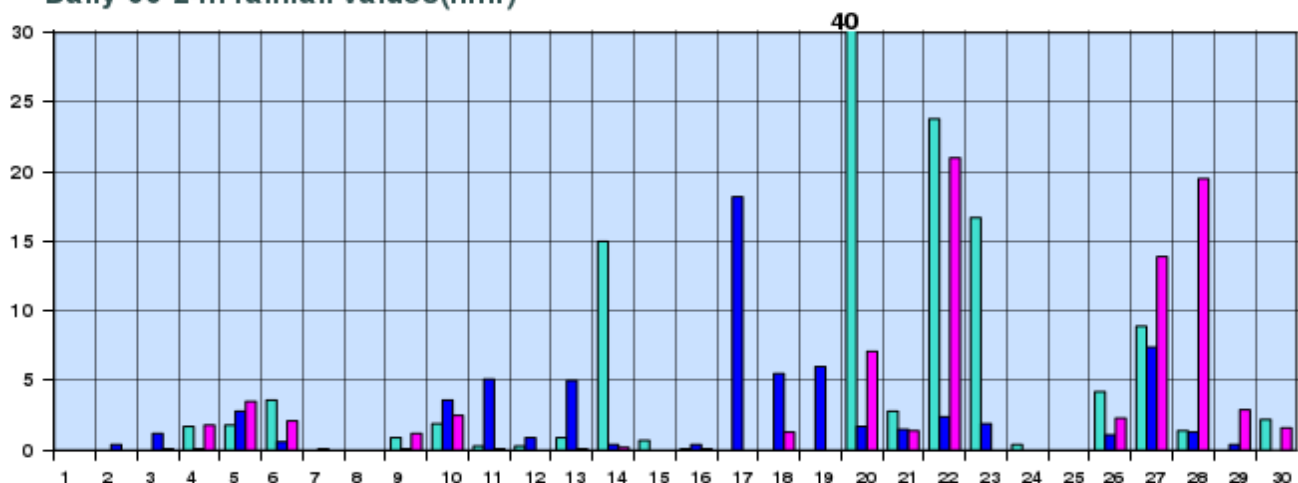
## Sunshine (Number of monthly sunshine hours)



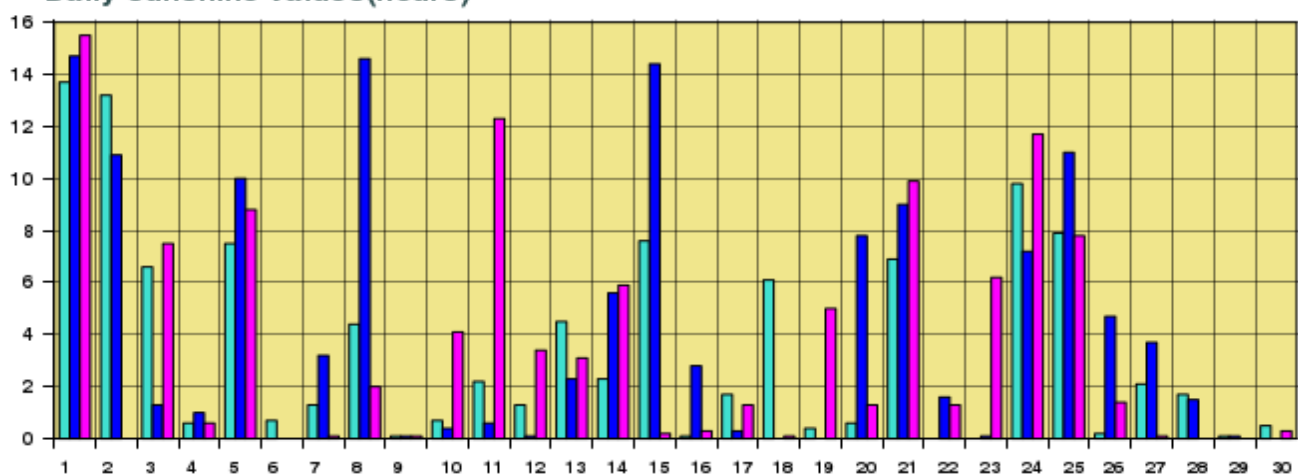
## June 2020 Daily Values at selected synoptic stations

Based on data from 1-30 June 2020 on a pro rata basis

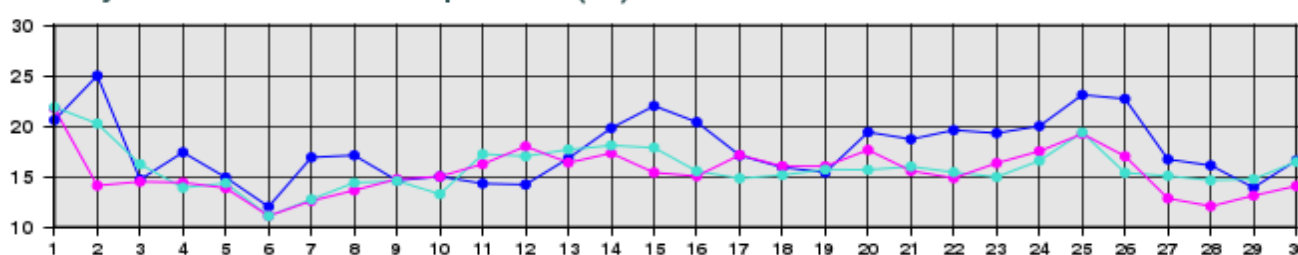
### Daily 00-24h rainfall values(mm)



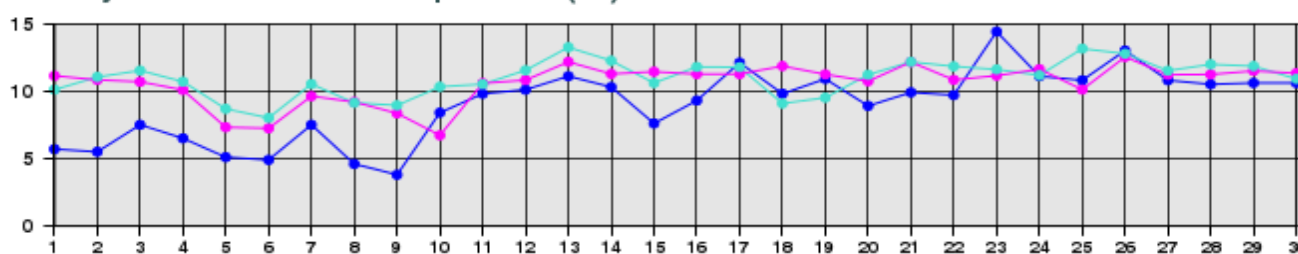
### Daily sunshine values(hours)



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



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



- Valentia Observatory - Dublin Airport - Belmullet

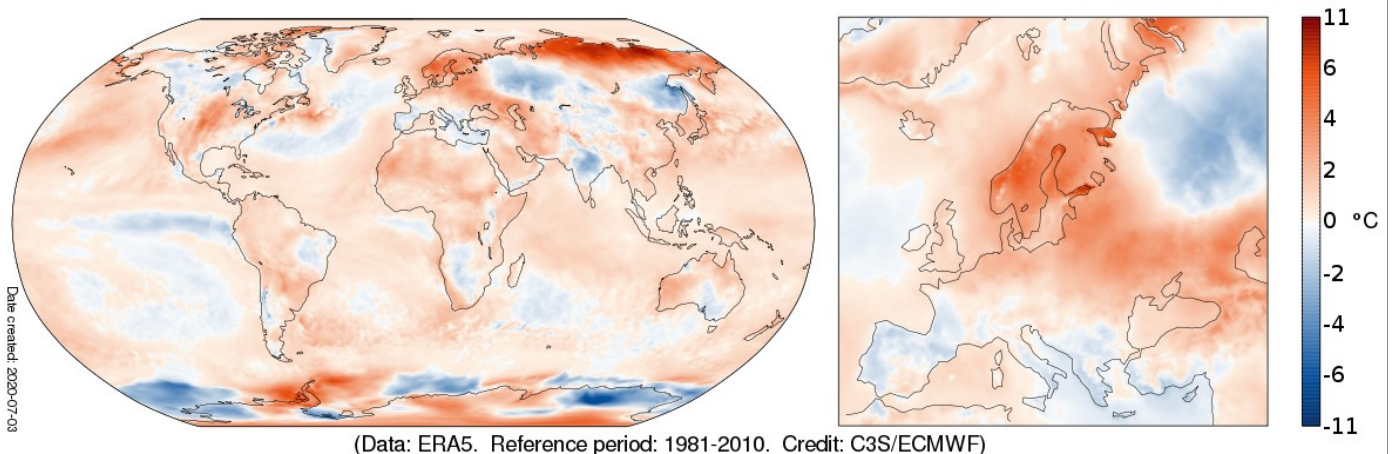
Issued by Met Éireann on Thursday 2nd July 2020. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann. Synoptic station data is midnight to midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. <sup>1</sup>A wet day is a day with 1.0 mm or more of rainfall. <sup>2</sup>A dull day is a day with less than 0.5 hours of sunshine. <sup>3</sup>A very wet day is a day with 10.0 mm or more of rainfall. <sup>4</sup>An absolute drought is a period of 15 or more consecutive days to none of which is credited 0.2 mm or more of precipitation. <sup>5</sup>A partial drought is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0.2 mm. <sup>6</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). \*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

# June 2020 Global

## Surface air temperature for June 2020

Globally, temperatures for June 2020 were 0.53°C warmer than the average June from 1981-2010, almost tied with the warmest June in this data record, 2019, which was 0.1°C warmer. The Siberian Arctic land mass experienced their warmest June on record with temperatures up to 10°C above normal. A weather station in Verkhoyansk reported a record high temperature of 38°C. In Europe, temperatures were far above average in the north but below average in the south, overall tying as the second warmest European June in this data record.

## Surface air temperature anomaly for June 2020

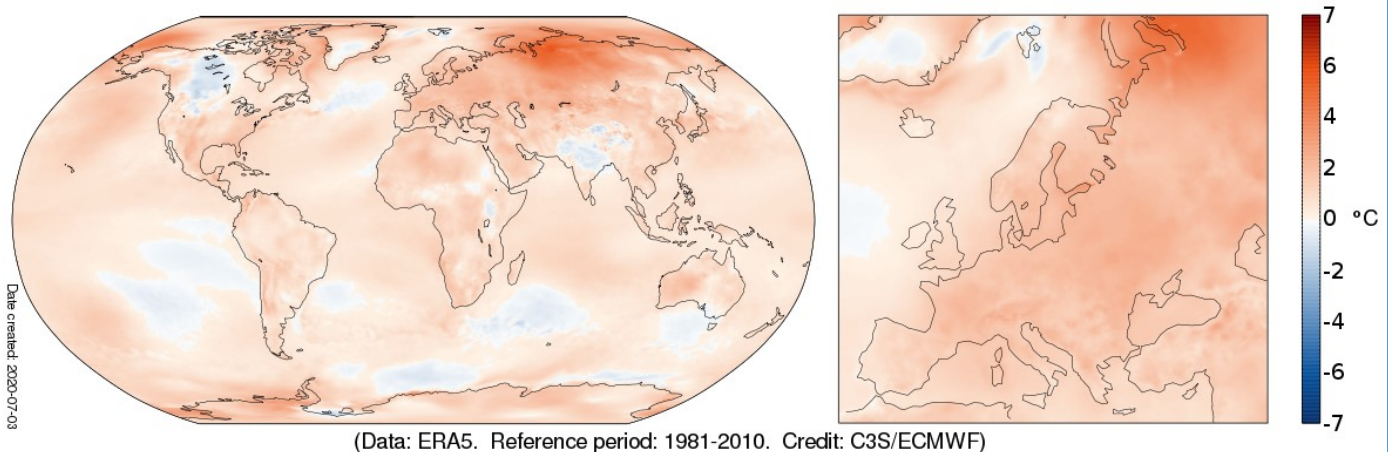


Surface air temperature anomaly for June 2020 relative to the June average for the period 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. <https://climate.copernicus.eu/surface-air-temperature-june-2020>

## The last 12 months - July 2019 to June 2020

The last twelve-month period was close to 0.65°C warmer than average. Temperatures were well above the 1981-2010 average over a large part of Siberia and the Arctic Ocean to the north, also north of Alaska and over parts of West Antarctica. They were above average over virtually all of Europe and over most other areas of land and ocean. They were below average over a few land areas, particularly central Canada, northern India and some oceanic areas, predominantly in the southern hemisphere.

## Surface air temperature anomaly for July 2019 to June 2020



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