



May 2020

Very dry and sunny

Continuing from April, May was another very dry and settled month with high pressure dominating once again. The first half of the month was cool overall, with high pressure positioned to the northwest of Ireland, which kept the winds mostly between easterly and northerly. It warmed up briefly towards the end of the first week, with some thunderstorm activity on the 9th, followed by an arctic maritime air mass moving South over the country on Sunday the 10th, cooling it down again for several days. There was some rain during this period, especially in the Southwest, as Atlantic weather fronts encroached, but it stayed mostly dry elsewhere. The second half of the month was milder overall with high pressure positioned to the south or east of the country, which brought a milder air-flow from the southwest or south. The weather did break down between the 21st and 23rd, when a deep area of low pressure, containing remnants of post-tropical storm Arthur (named by the National Hurricane Centre), came close to the west coast of Ireland, while moving northeast towards the north of Scotland. This brought widespread rain, heaviest in the Southwest, and the strongest winds of the month. It settled down again from the 24th with high-pressure building from the south and drifting over Ireland towards Scandinavia, which brought a tropical continental air mass over Ireland from the southeast, keeping it mostly dry and very warm up to the end of the month.

Rainfall: Below average everywhere, drier in the eastern half of the country

All monthly rainfall totals across the country were below their Long-Term Average (LTA). Five stations had dry spells⁶ between the 1st and the 20th, including Oak Park, Co Carlow, Shannon Airport, Co Clare, Dunsany, Co Meath, Mullingar, Co Westmeath and Johnstown Castle, Co Wexford. Percentage of monthly rainfall values ranged from 14% (the month's lowest monthly rainfall total of 8.3 mm) at Phoenix Park, Co Dublin (*its driest May since 1991*) to 85% (monthly rainfall total of 53.5 mm) at Roche's Point, Co Cork. Monthly rainfall totals were as much as 68.8 mm (84% of its LTA) at Cork Airport, Co Cork. The highest daily rainfall total was 24.2 mm at Roche's Point, Co Cork on Thursday the 21st May. The number of rain days ranged from 5 days at Oak Park, Co Carlow to 14 days at both Malin Head, Co Donegal and Valentia Observatory, Co Kerry. The number of wet days¹ ranged from 3 days at a few stations to 11 days at Valentia Observatory, Co Kerry. The number of very wet days³ ranged from zero days at most stations to 3 days at Cork Airport.

Temperature: Above average everywhere, very warm finish

All mean air temperatures were above their Long-Term Average (LTA). Deviations from mean air temperature for the month ranged from 0.0 °C (11.7 °C mean temperature) at Sherkin Island, Co Cork to 1.5 °C (12.3 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the month ranged from 10.9 °C (0.2 °C above its LTA) at Dublin Airport, Co Dublin to 13.0 °C (1.0 °C above its LTA) at Shannon Airport, Co Clare. The month's highest temperature was reported at Mount Dillon, Co Roscommon on the 30th with a temperature of 26.8 °C (11.0°C above its LTA). The month's lowest air temperature was reported at both Mount Dillon, Co Roscommon on the 14th and Mullingar, Co Westmeath on the 12th with -3.2 °C (*Mullingar's lowest May temperature on record (record length 70 years)*). The month's lowest grass temperature was -9.6 °C at Mount Dillon, Co Roscommon, also on the 14th. All stations reported ground frost during the month. The number of days with ground frost ranged from 1 day at both Sherkin Island, Co Cork and Newport, Co Mayo to 12 days at Mount Dillon, Co Roscommon. More than half of stations reported air frost. The number of days with air frost ranged from zero days at Mace Head, Co Galway to 4 days at a few stations. Four stations had their highest May temperature on record, including Mullingar, Co Westmeath with 25.6 °C on the 28th (record length 70 years), Mount Dillon, Co Roscommon with 26.8 °C on the 30th (record length 9 years), Claremorris, Co Mayo with 26.3 °C on the 28th (record length 71 years) and Casement Aerodrome, Co Dublin with 25.7 °C on the 28th (record length 56 years).

Sunshine: Above average everywhere - Sunniest May on record in Dublin

All available sunshine totals were above their Long-Term Average (LTA). Percentage of monthly sunshine values ranged from 127% (monthly sunshine total of 244.1 hours) at Cork Airport to 158% (monthly sunshine total of 294.8 hours) at Casement Aerodrome, Co Dublin (*its sunniest May on record (length 56 years)*). Monthly sunshine totals were highest at Dublin Airport*, Co Dublin with 295.0 hours (no LTA comparison*). Monthly sunshine totals were lowest at Belmullet, Co Mayo with 220.9 hours (no LTA comparison*). The highest number of daily sunshine hours recorded this month was 15.3 hours at Johnstown Castle, Co Wexford on the 31st. The number of dull days³ ranged from zero days at Shannon Airport, Co Clare to 3 days at a few stations.

Wind: Gales and strong gales reported

Monthly mean wind speeds ranged from 5.9 knots (10.9 km/h) at Ballyhaise, Co Cavan to 13.3 knots (24.6 km/h) at Malin Head, Co Donegal. There were two days, the 22nd and 23rd, that had both gales and strong gales reported, caused by the storm system containing remnants of post-tropical storm Arthur. There were zero days with storm force winds. Both the month's highest gust and 10-minute mean wind speed were reported on the 22nd. The highest gust was 64 knots (118 km/h) reported at Newport, Co Mayo while the month's highest 10-minute mean wind speed was 47 knots (87 km/h) at Malin Head, Co Donegal.

EXTREME VALUES AT SYNOPTIC STATIONS

Rainfall

Highest total: 68.8 mm at Cork Airport, Co Cork (84% of its LTA)
Lowest total: 8.3 mm at Phoenix Park, Co Dublin (14% of its LTA) (*its driest May since 1991*)
Highest daily rainfall: 24.2 mm at Roches Point, Co Cork (38% of its monthly LTA) on Thu 21st

Temperature

Highest mean monthly temperature: 13.0°C at Shannon Airport, Co Clare (1.0°C above its LTA)
Lowest mean monthly temperature: 10.9°C at Dublin Airport, Co Dublin (0.2°C above its LTA)
Highest Air temperature: 26.8°C at Mount Dillon, Co Roscommon (11.0°C above its LTA) on Sat 30th
Lowest air temperature: -3.2°C at both Mount Dillon, Co Roscommon on Thu 14th and Mullingar, Co Westmeath on Tue 12th (*Mullingar's lowest May temperature on record (record length 70 years)*)
Lowest grass minimum: -8.9°C at Mount Dillon, Co Roscommon on Thu 14th

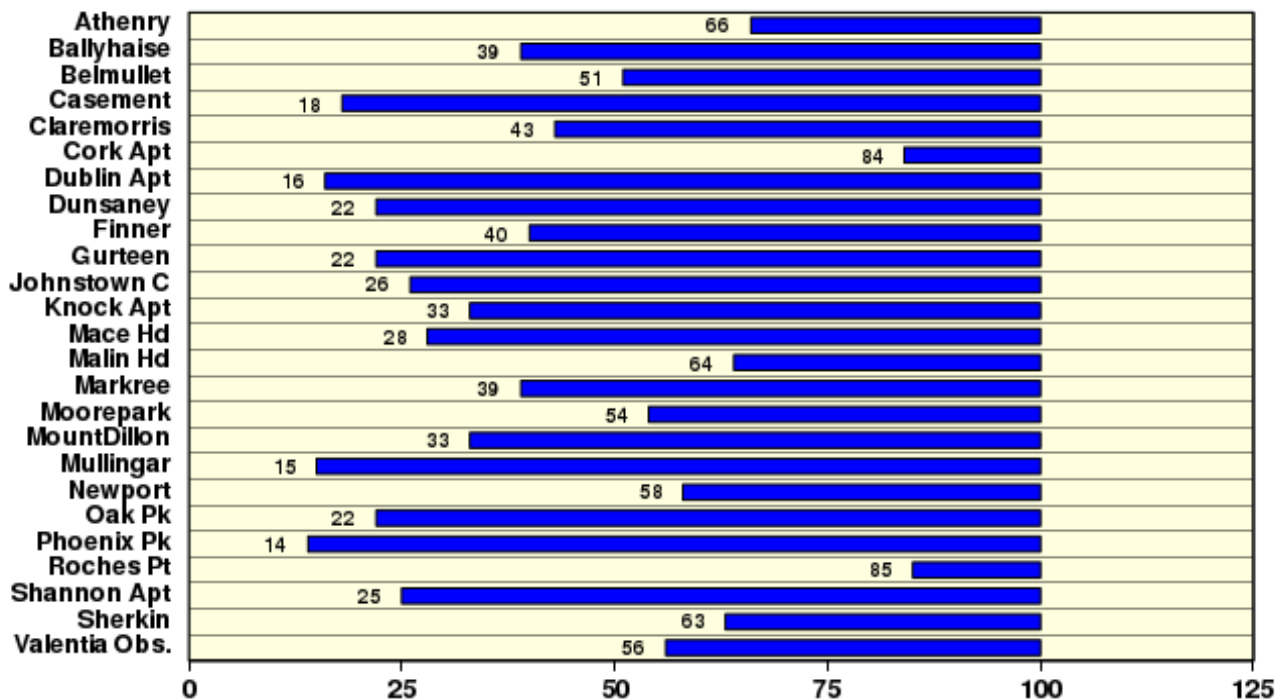
Sunshine

Highest monthly total: 295.0 hrs (daily mean 9.52 hrs/day) at Dublin Airport*, Co Dublin
Lowest monthly total: 220.9 hrs (daily mean 7.13 hrs/day) at Belmullet*, Co Mayo
Highest daily sunshine: 15.3 hours at Johnstown Castle*, Co Wexford on Sun 31st

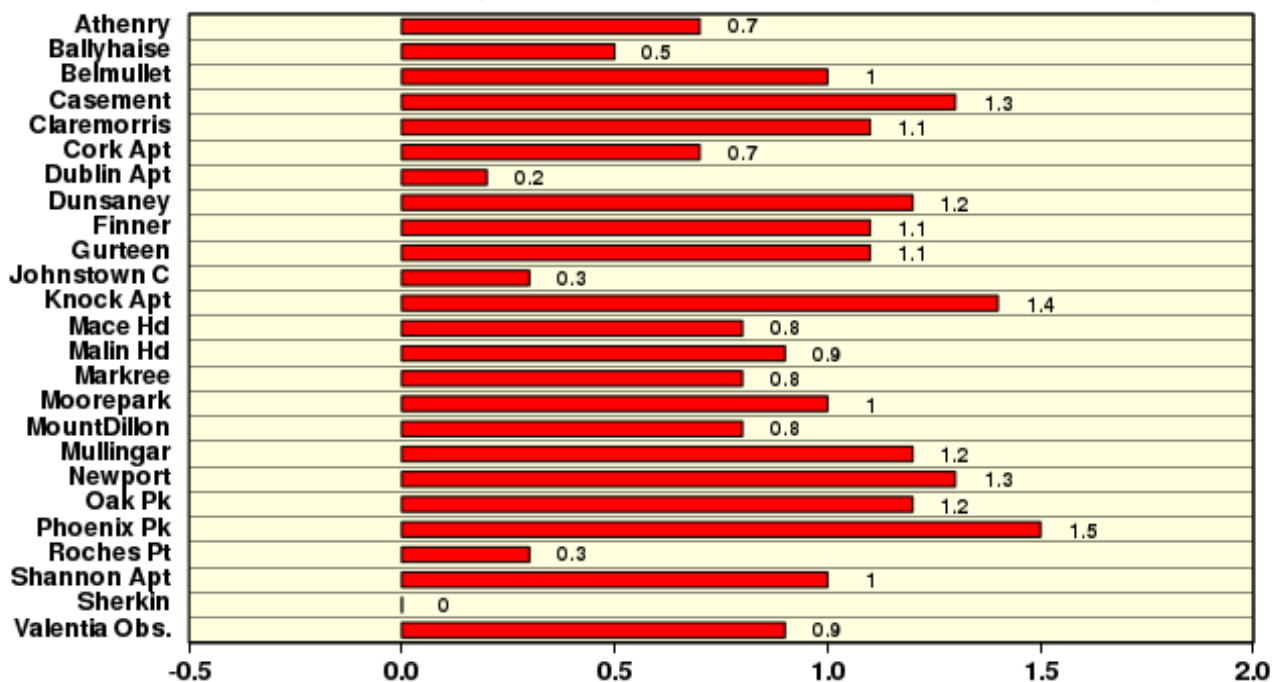
May 2020

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

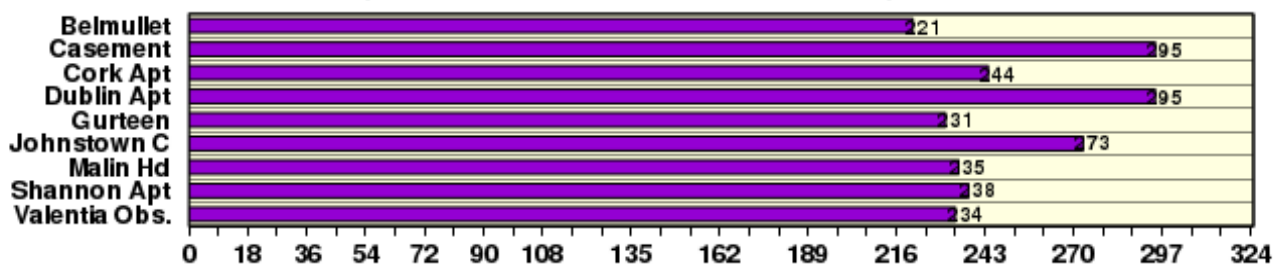
Rainfall (% of average for period 1981-2010) on whole month basis



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



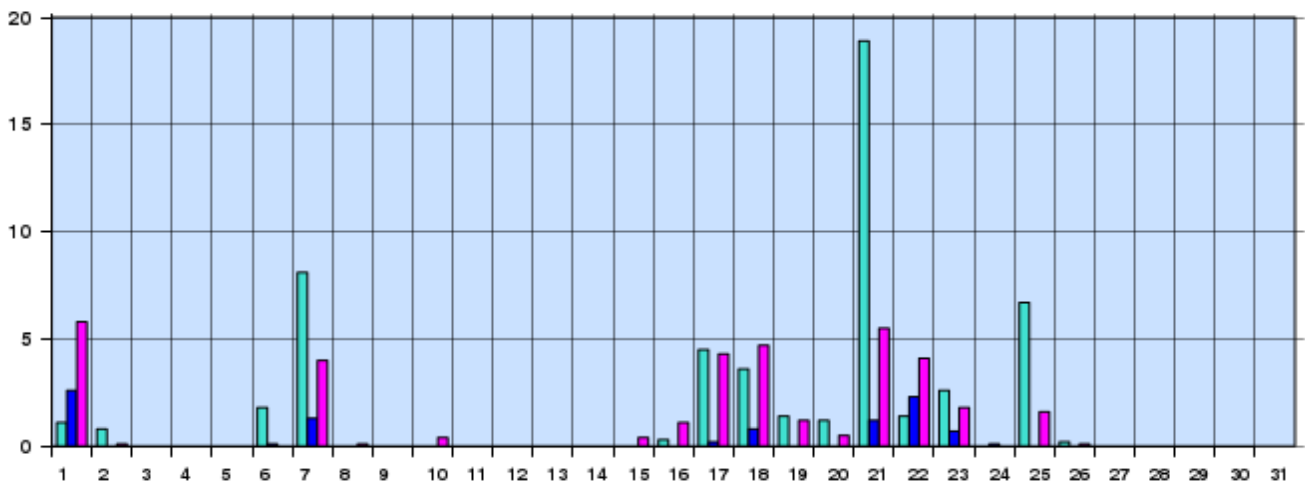
Sunshine (Number of monthly sunshine hours)



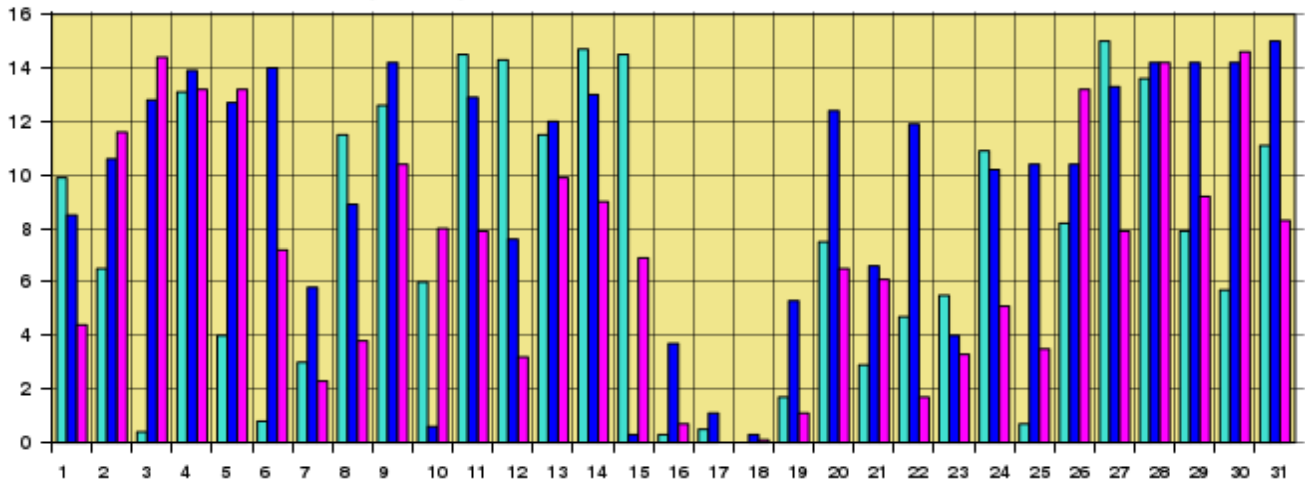
May 2020 Daily Values at selected synoptic stations

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

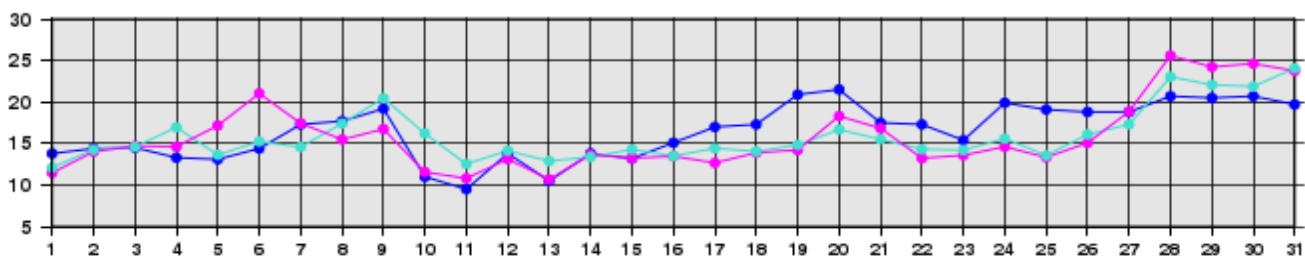
Daily 00-24h rainfall values(mm)



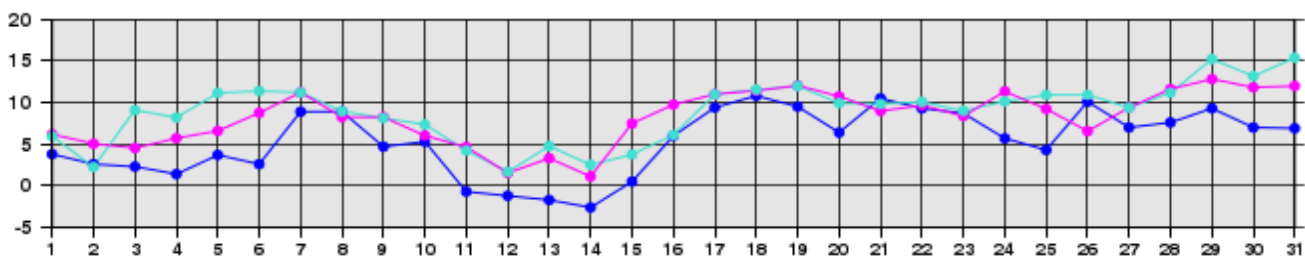
Daily sunshine values(hours)



Daily 00-24h maximum temperature (°C)



Daily 00-24h minimum temperature (°C)



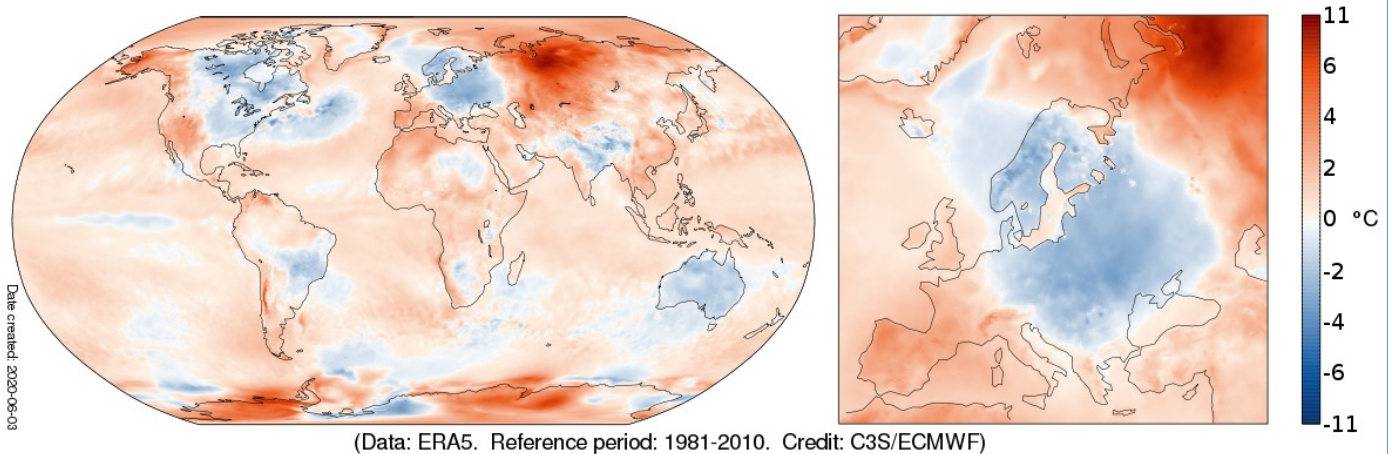
Issued by Met Éireann on Wednesday 3rd June 2020. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann. Synoptic station data is midnight to midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. ¹A wet day is a day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

May 2020 Global

Surface air temperature for May 2020

Globally, May was 0.63°C warmer than the average May from 1981-2010, the warmest May in this data record. Temperatures over Europe ranged from well above average over the south-west and far north-east of the continent, to well below average over a substantial region extending from Scandinavia to the Balkans and the northern coast of the Black Sea. This was associated with a persistent north-westerly flow into central Europe, with higher than average pressure centred over the UK, and lower than average pressure to the north and east.

Surface air temperature anomaly for May 2020

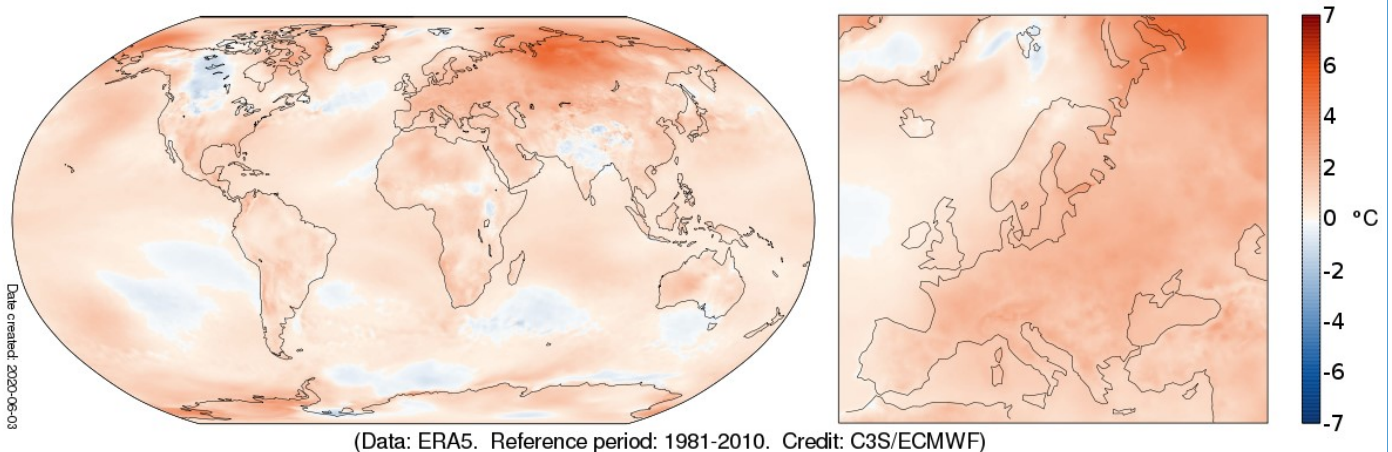


Surface air temperature anomaly for May 2020 relative to the May average for the period 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. <https://climate.copernicus.eu/surface-air-temperature-may-2020>

The last 12 months - June 2019 to May 2020

The last twelve-month period was close to 0.7°C warmer than average, matching the warmest twelve-month period. Temperatures were well above the 1981-2010 average over much of northern Siberia and the Arctic Ocean to the north, to the 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, and some oceanic areas, predominantly in the southern hemisphere.

Surface air temperature anomaly for June 2019 to May 2020



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