November 2020

Mild, wet in the West, drier in the East

November 2020 was a mild, Atlantic dominated month, with a wind flow mostly between southerly and westerly. The very active weather from the end of October continued for the first few days of November, with deep Atlantic low-pressure systems bringing active weather fronts across the country from the west. High pressure developed from the south for the second half of the first week, keeping it mostly dry for several days. A trough of low-pressure moved up from the south at the end of the first week, pushing the high pressure away. For the following two weeks, low pressure to the north dominated once again bringing bands of rain and showers from the west on most days, up to the 24th. Active weather fronts brought widespread and sometimes heavy rain across the country on the 8th, 10th, 11th and 24th, with the western half of the country receiving the bulk of the rain. High pressure dominated for the final week of the month, which kept the active weather fronts away from Ireland. There was a lot of dry weather with slack winds but it became cooler with frost and fog more of a feature. Some weak weather fronts traversed the country at times, which brought cloudy, murky conditions.

Rainfall: Above average in most places, highest in the West and Northwest

The majority of monthly rainfall totals were above their Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 66% (the month's lowest monthly rainfall total of 48.1 mm) at Dublin Airport to 138% (monthly rainfall total of 168.8 mm) at Claremorris, Co Mayo. Monthly rainfall totals were as much as 206.6 mm (121% of its LTA) at Newport, Co Mayo. The highest daily rainfall total was 34.8 mm at Cork Airport on Wednesday 11th. The number of rain days ranged from 18 days at Casement Aerodrome, Co Dublin to 26 days at both Newport, Co Mayo and Malin Head, Co Donegal. The number of wet days[1] ranged from 13 days at Dublin Airport to 22 days at both Newport, Co Mayo and Belmullet, Co Mayo. The number of very wet days[3] ranged from no days at both Phoenix Park, Co Dublin and Dublin Airport to 9 days at Newport, Co Mayo.

Temperature: Above average everywhere

All mean air temperatures across the country were above their Long-Term Average (LTA) for the month. Deviations from mean air temperature for the month ranged from 0.4 °C (7.7 °C, 9.9 °C mean temperature) at Markree, Co Sligo and Sherkin Island, Co Cork respectively to 1.5 °C (8.7 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the month ranged from 7.2 °C (1.0 °C above its LTA) at Knock Airport, Co Mayo to 9.9 °C (0.4 °C above its LTA) at Sherkin Island, Co Cork. The month's highest temperature was reported at Casement Aerodrome, Co Dublin on Sunday 8th with a temperature of 16.3 °C. Both the month's lowest air and grass minimum temperatures were recorded on Saturday 28th at Mount Dillon, Co Roscommon. The lowest air minimum was -2.8 °C while the lowest grass minimum was -6.9 °C. All stations reported ground frost during the month. The number of days with ground frost ranged from 2 days at Mace Head, Co Galway to 15 days at both Markree, Co Sligo and Mount Dillon, Co Roscommon. Less than half of stations reported air frost. The number of days with air frost ranged from zero days at Mace Head, Co Galway to 5 days at both Moore Park, Co Cork and Mullingar, Co Westmeath.

Sunshine: Above average in the South and East

Nearly all available sunshine totals were above their Long-Term Average (LTA). Percentage of monthly sunshine values ranged from 87% (monthly sunshine total of 51.8 hours) at Shannon Airport, Co Clare to 112% (monthly sunshine total of 73.0 hours) at Casement Aerodrome, Co Dublin. Monthly sunshine totals ranges from 38.7 hours (No LTA comparison*) at Malin Head, Co Donegal to 77.5 hours at Johnstown Castle, Co Wexford (No LTA comparison*) . The highest number of daily sunshine hours recorded this month was 8.5 hours at Cork Airport on Thursday 5th. The number of dull days[2] ranged from 8 days at Casement Aerodrome, Co Dublin to 16 days at Belmullet, Co Mayo.

Wind: Strong gales reported

Monthly mean wind speeds ranged from 6.4 knots (11.9 km/h) at Moore Park, Co Cork to 16.4 knots (30.4 km/h) at Mace Head, Co Galway. Gales were reported on 9 days during the month, with strong gales reported on Monday 2nd and Friday 18th. 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 at most stations to 2 days at Mace Head, Co Galway. The month's highest gust was reported at Belmullet, Co Mayo on Sunday 1st with 58 knots (107 km/h). The month's highest 10-minute mean wind speed was 44 knots (82 km/h) at Mace Head, Co Galway on both Monday 2nd and Wednesday 18th.

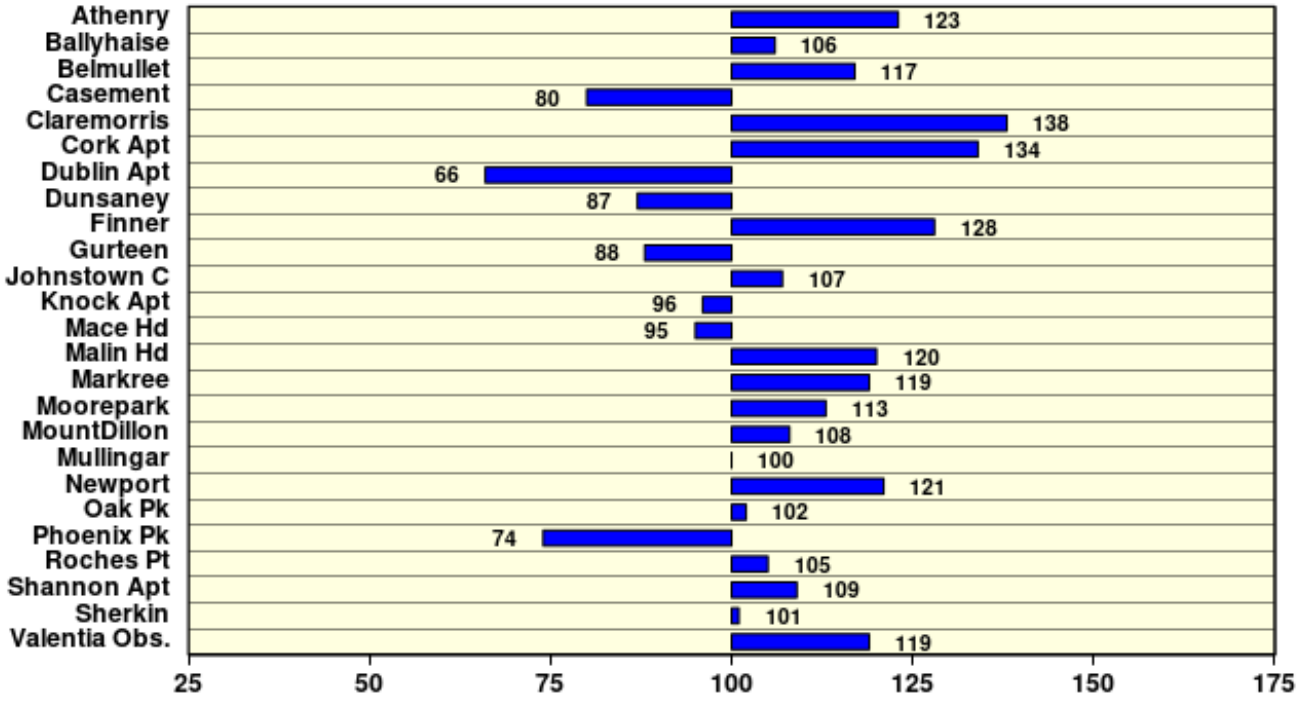
EXTREME VALUES AT SYNOPTIC STATIONS

Rainfall	Highest total: 206.6 mm at Newport, Co Mayo (121% of its LTA)
	Lowest total: 48.1 mm at Dublin Airport, Co Dublin (66% of its LTA)
	Highest daily rainfall: 34.8 mm at Cork Airport, Co Cork (29% of its monthly LTA) on Wed 11th
Temperature	Highest mean monthly temperature: 9.9°C at Sherkin Island, Co Cork (0.4°C above its LTA)
	Lowest mean monthly temperature: 7.2°C at Knock Airport, Co Mayo (1.0°C above its LTA)
	Highest Air temperature: 16.3°C at Casement Aerodrome, Co Dublin (6.1 °C above its LTA) on Sun 8th
	Lowest air temperature: -2.8°C at Mount Dillon, Co Roscommon (6.6 °C below its LTA) on Sat 28th
	Lowest grass minimum: -6.9°C at Mount Dillon, Co Roscommon on Sat 28th
Sunshine	Highest monthly total: 77.5 hrs (daily mean 2.58 hrs/day) at Johnstown Castle*, Co Wexford
	Lowest monthly total: 38.7 hrs (daily mean 1.29 hrs/day) at Malin Head*, Co Donegal
	Highest daily sunshine: 8.5 hours at Cork Airport, Co Cork on Thu 5th

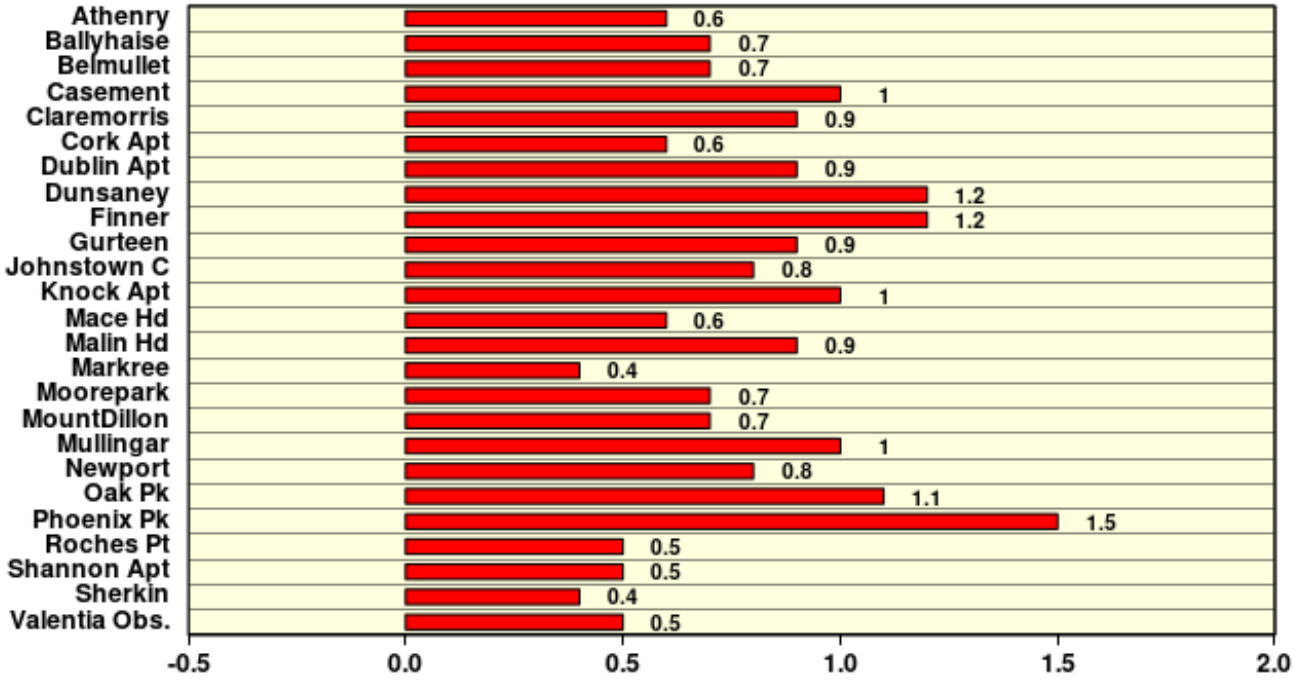
November 2020

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

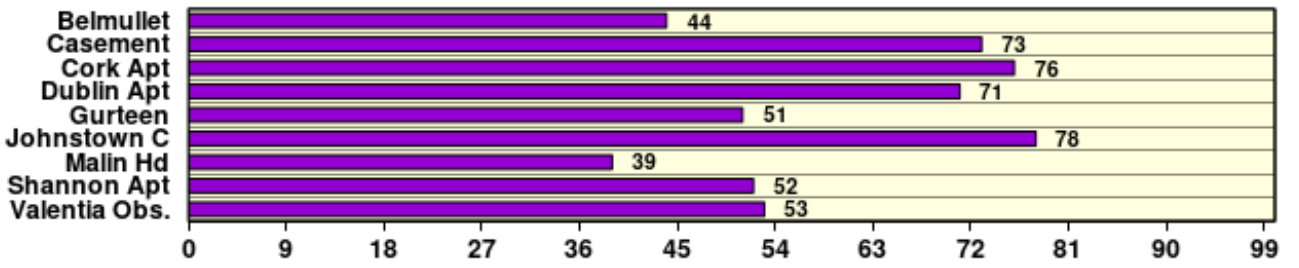
Rainfall *(% of average for period 1981-2010) on whole month basis*



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



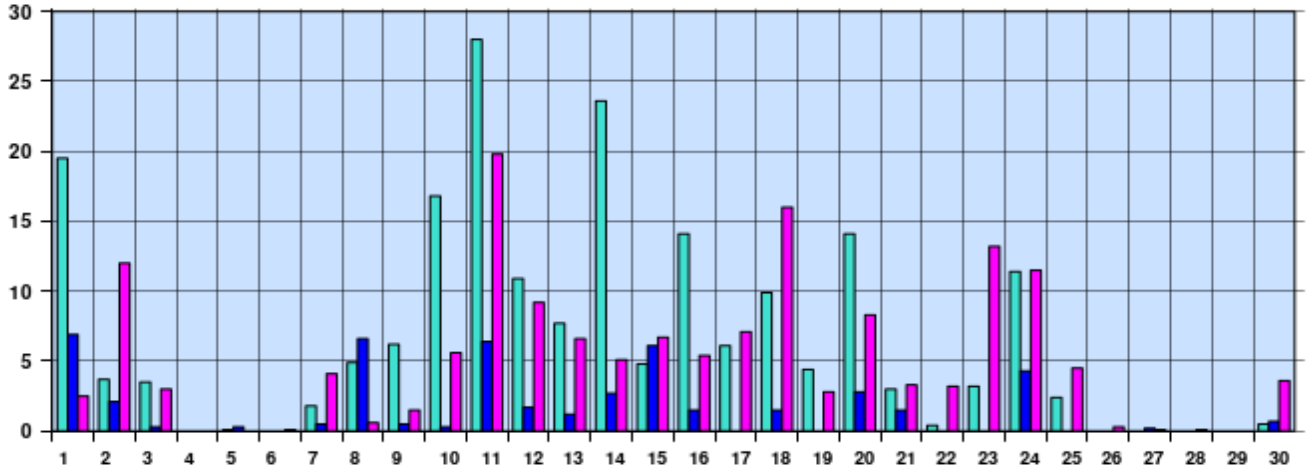
Sunshine *(Number of monthly sunshine hours)*



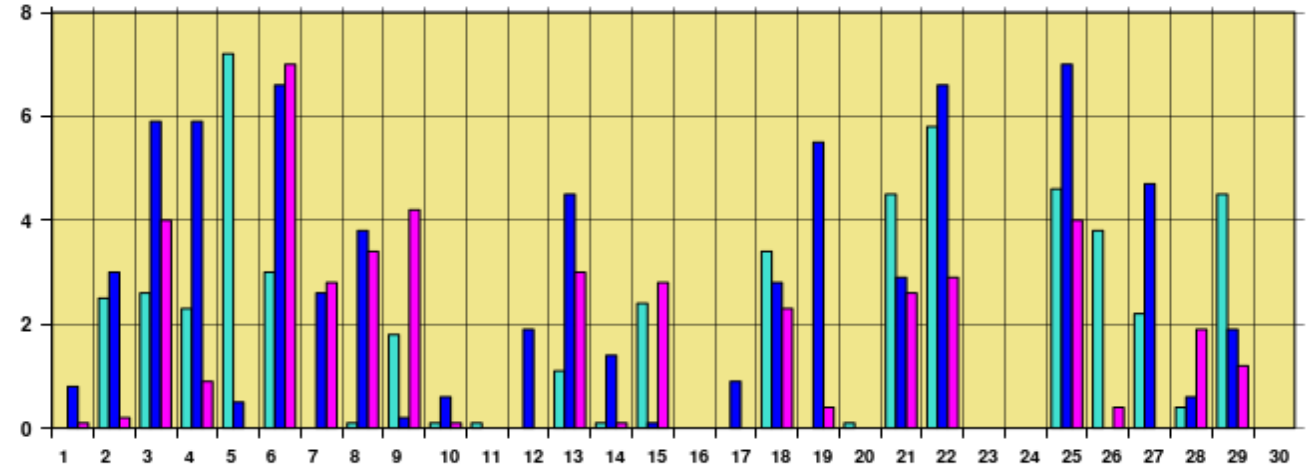
November2020 Daily Values at selected synoptic stations

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

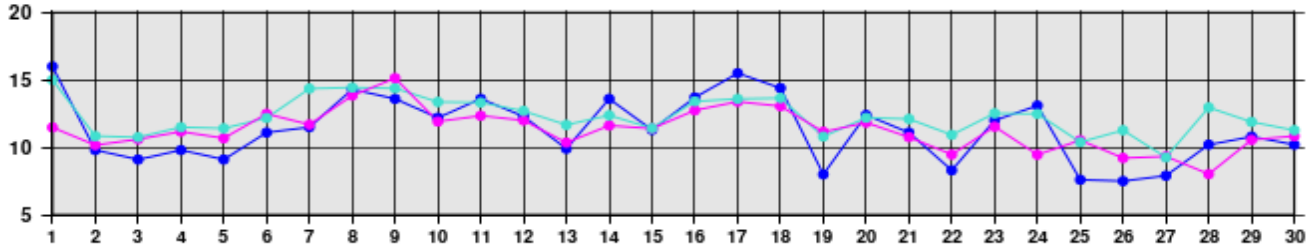
Daily 00-24h rainfall values(mm)



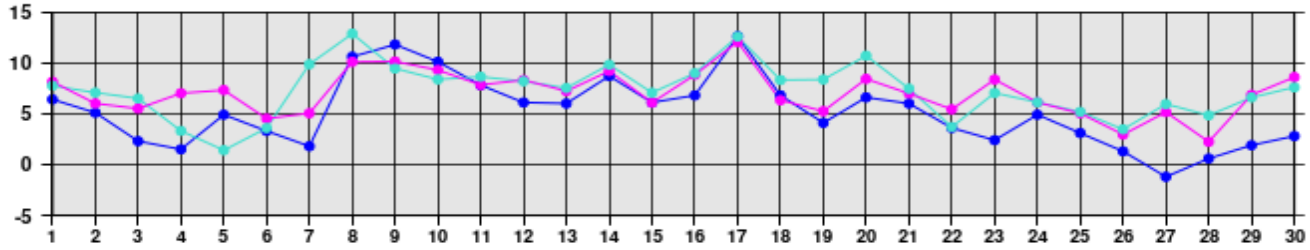
Daily sunshine values(hours)



Daily 00-24h maximum temperature (°C)



Daily 00-24h minimum temperature (°C)



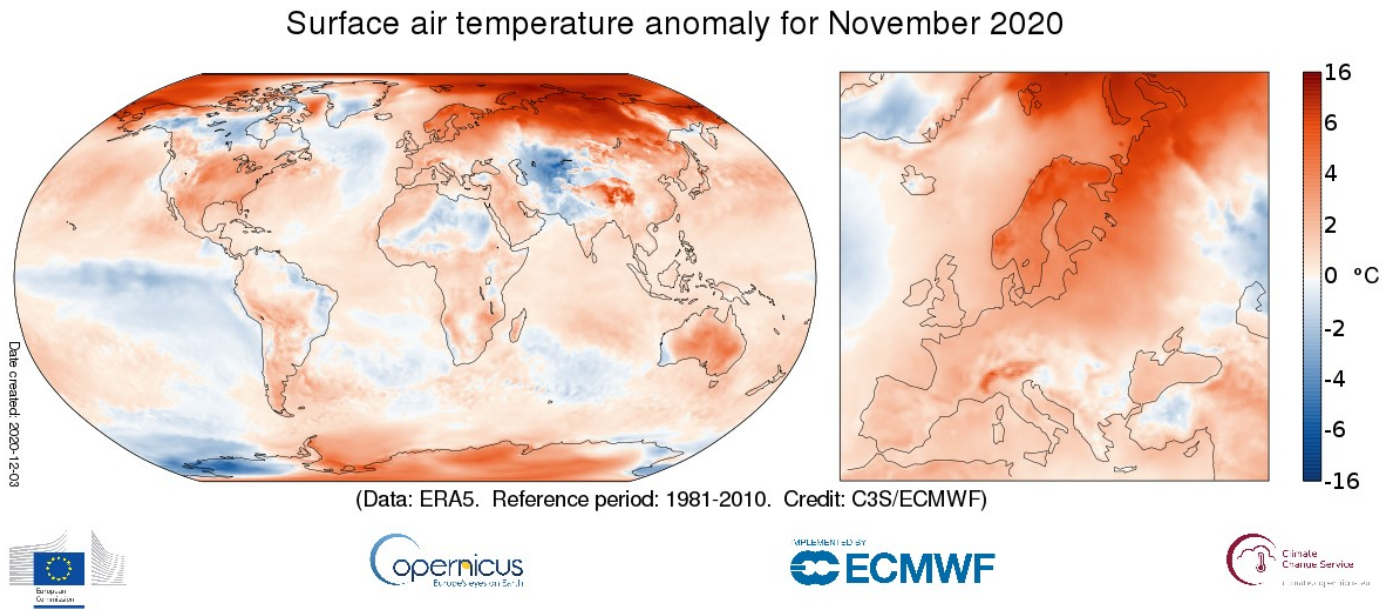
- Valentia Observatory - Dublin Airport - Belmullet

Issued by Met Éireann on Wednesday the 2nd December 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. [1] A wet day is a day with 1.0 mm or more of rainfall. [2] A dull day is a day with less than 0.5 hours of sunshine. [3] A very wet day is a day with 10.0 mm or more of rainfall. [4] 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. [5] A partial drought is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0.2 mm. [6] 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

November 2020 Global

Surface air temperature for November 2020

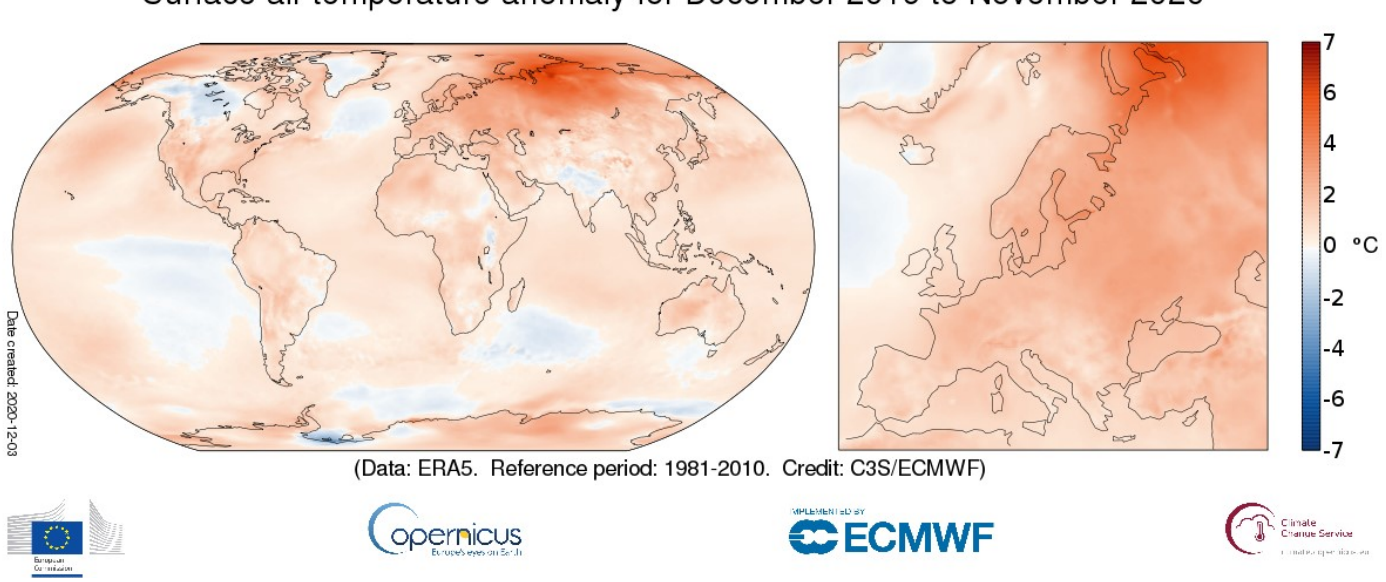
Globally, November 2020 was the warmest November on record, by a clear margin, 0.77°C warmer than the 1981-2010 average. For Europe, the month was the joint second warmest on record, 2.2°C above the 1981-2010 average. Temperatures were most above average over a large region covering much of northern Europe, Siberia and the Arctic Ocean (where sea ice extent for November was the second lowest since satellite measurements began in 1979), while temperatures were most below average over central Asia and West Antarctica.



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

The last 12 months - December 2019 to November 2020

The last twelve-month period was 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 of Siberia and Alaska . They were above average over virtually all of Europe, more so in the north and east and over most other areas of land and ocean. They were below average over a few land areas, particularly parts of western Canada and northern India. Below average over the eastern equatorial Pacific, the North Atlantic west of Ireland and several oceanic areas in the Southern Hemisphere.



Surface air temperature anomaly for December 2019 to November 2020 relative to the average for 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. https://climate.copernicus.eu/surface-air-temperature-november-2020