Nov 2019 Ireland

Cool everywhere, very wet and dull in the East

Most of November was unsettled with low pressure dominating. Frontal depressions developed over Ireland as they moved in from the Atlantic on numerous occasions throughout the month. Several of them became slow moving, giving large amounts of rainfall, especially in the East. The first four days of the month saw a complex area of low pressure positioned directly over the country with bands of rain or showers circulating around it. There was a gap on the 5th, before low pressure moved in again on the 6th. This was the constant theme throughout the month; all the while, the East of the country bore the brunt of the rain in a cyclonic easterly flow off the Irish Sea. There were a few relatively dry periods in between the low pressure systems, especially between the 15th and 18th and again for the last few days of the month as high pressure moved in. The track of the frontal depressions lead to the South and especially the East receiving the bulk of the rain while the Northwest had a relatively drier month.

Rainfall: Wettest in the East

The majority of monthly rainfall totals were above their Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 64% (the lowest monthly rainfall total of 81.9 mm) at Finner, Co Donegal to 237 % (the highest monthly rainfall total of 173.0 mm) at Dublin Airport (*its wettest November since 2002)*. The highest daily rainfall total was 33.7 mm (28% of its monthly LTA) at Cork Airport on the 20th. The number of rain days ranged from 19 days at both Dunsany, Co Meath and Athenry, Co Galway to 27 days at Valentia Observatory, Co Kerry. The number of wet days[1] ranged from 14 days at Dunsany, Co Meath to 21 days at both Newport, Co Mayo and Belmullet, Co Mayo. The number of very wet days[3] ranged from 1 day at Knock Airport, Co Mayo to 7 days at five stations.

Temperature: Below average everywhere

All mean air temperatures across the country were below their Long-Term Average for the month. Deviations from mean air temperature for the month ranged from -1.6 °C at Gurteen, Co Tipperary (5.7 °C mean temperature), Athenry, Co Galway (5.9 °C mean temperature) and Shannon Airport, Co Clare (6.7 °C mean temperature) to -0.6 °C (6.6 °C mean temperature) at Dublin (Phoenix Park). Mean temperatures for the month ranged from 5.5 °C (0.7 °C below its LTA) at Knock Airport, Co Mayo to 8.7 °C (0.8 °C below its LTA) at Sherkin Island, Co Cork. The month's highest temperature was reported at Moore Park, Co Cork on the 1st with a temperature of 14.9 °C. Both the month's lowest air and grass minimum temperature were recorded on the 18th at Mount Dillon, Co Roscommon. The lowest air minimum was -5.5 °C while the lowest grass minimum was -10.6 °C. All stations reported ground frost during the month. The number of days with ground frost ranged from 1 day at Roche's Point, Co Cork to 19 days at Oak Park, Co Carlow. More than half of stations reported air frost. The number of days with air frost ranged from zero days at a few stations to 10 days at Mount Dillon, Co Roscommon.

Sunshine: Dull in the East and North

Sunshine totals across the country were mixed. Percentage of monthly sunshine values ranged from 58% (monthly sunshine total of 41.3 hours) at Dublin Airport*, Co Dublin *(its dullest November since 1983)* to 121% (monthly sunshine total of 61.7 hours) at Knock Airport, Co Mayo. Monthly sunshine totals ranged from 31.4 hours (No LTA comparison*) at Malin Head, Co Donegal (*its dullest November since 2007)* to 73.3 hours (108% of LTA) at Johnstown Castle*, Co Wexford. The highest number of daily sunshine hours recorded this month was 8.1 hours at Cork Airport on the 15th. The number of dull days ranged from 8 days at Valentia Observatory, Co Kerry to 17 days at both Gurteen, Co Tipperary and Malin Head, Co Donegal.

Wind: Strong gales reported

Monthly mean wind speeds ranged from 5.1 knots (9.5 km/h) at Ballyhaise, Co Cavan to 15.0 knots (27.8 km/h) at Malin Head, Co Donegal. Gales were reported on 5 days or more during the month with strong gales reported on the 11th and 12th. The number of days with gales ranged from zero days at a few stations to 4 days at both Mace Head, Co Galway and Malin Head, Co Donegal. There was strong gales on the 12th at both Mace Head, Co Galway and Malin Head, Co Donegal. Both the month's highest gust and 10-minute mean wind speed was reported at Malin Head, Co Donegal on the 12th. The highest gust was 55 knots (102 km/h) while the month's highest 10-minute mean wind speed was 43 knots (80 km/h).

EXTREME VALUES AT SYNOPTIC STATIONS

Rainfall

Highest total: 173.0 mm (237% of its LTA) at Dublin Airport, Co Dublin (*its wettest November since 2002)*
Lowest total: 81.9 mm (64% of its LTA) at Finner, Co Donegal
Highest daily rainfall: 33.7 mm at Cork Airport, Co Cork on the 20th (28% of its monthly LTA)

Temperature

Highest mean monthly temperature: 8.7°C at Sherkin Island, Co Cork (0.8°C below its LTA)
Lowest mean monthly temperature: 5.5°C at Knock Airport, Co Mayo (0.7°C below its LTA)
Highest Air temperature: 14.9°C at Moore Park, Co Cork on the 1st
Lowest air temperature: -5.5°C at Mount Dillon. Co Roscommon on the 18th
Lowest grass minimum: -10.6°C at Mount Dillon, Co Roscommon on the 18th

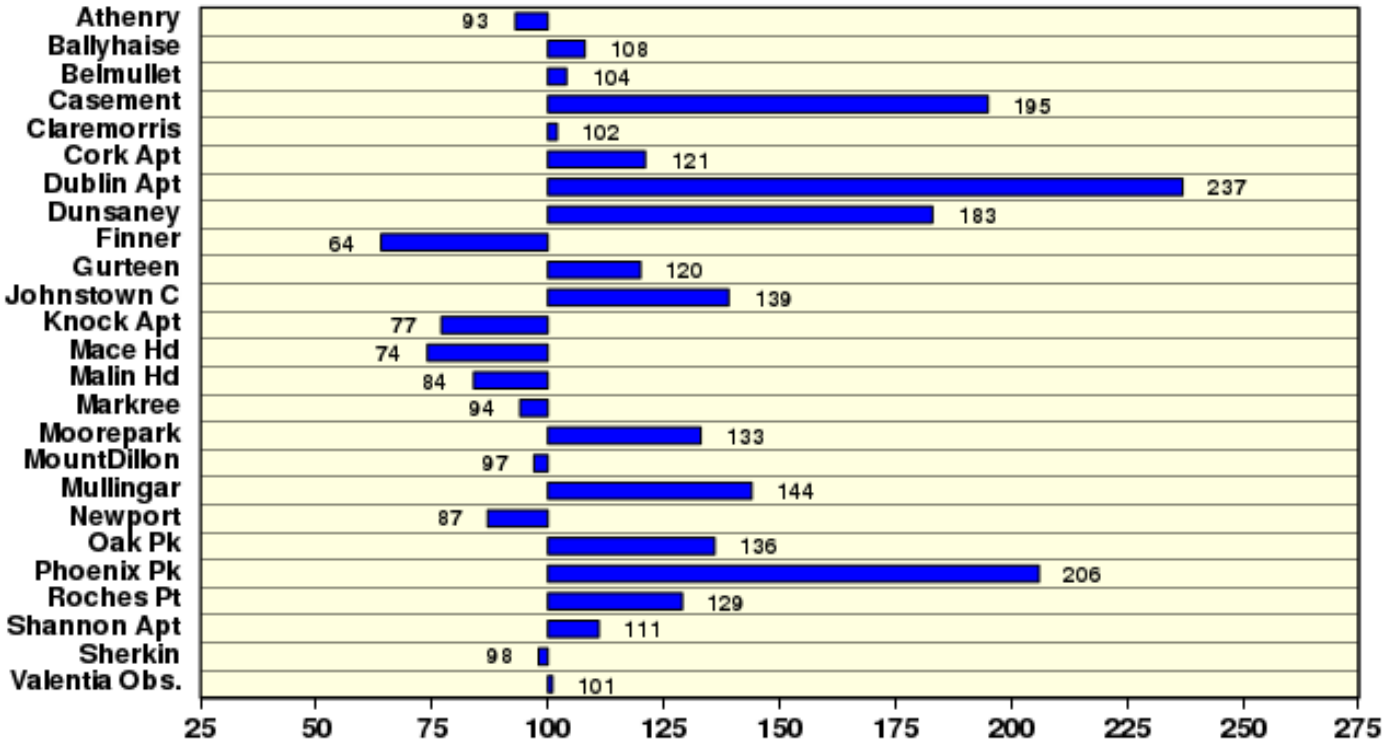
Sunshine

Highest monthly total: 73.3 hrs (daily mean 2.44 hrs/day) at Johnstown Castle*, Co Wexford
Lowest monthly total: 31.4 hrs (daily mean 1.05 hrs/day) at Malin Head*, Co Donegal (*its dullest November since 2007)*
Highest daily sunshine: 8.1 hrs at Cork Airport, Co Cork on the 15th

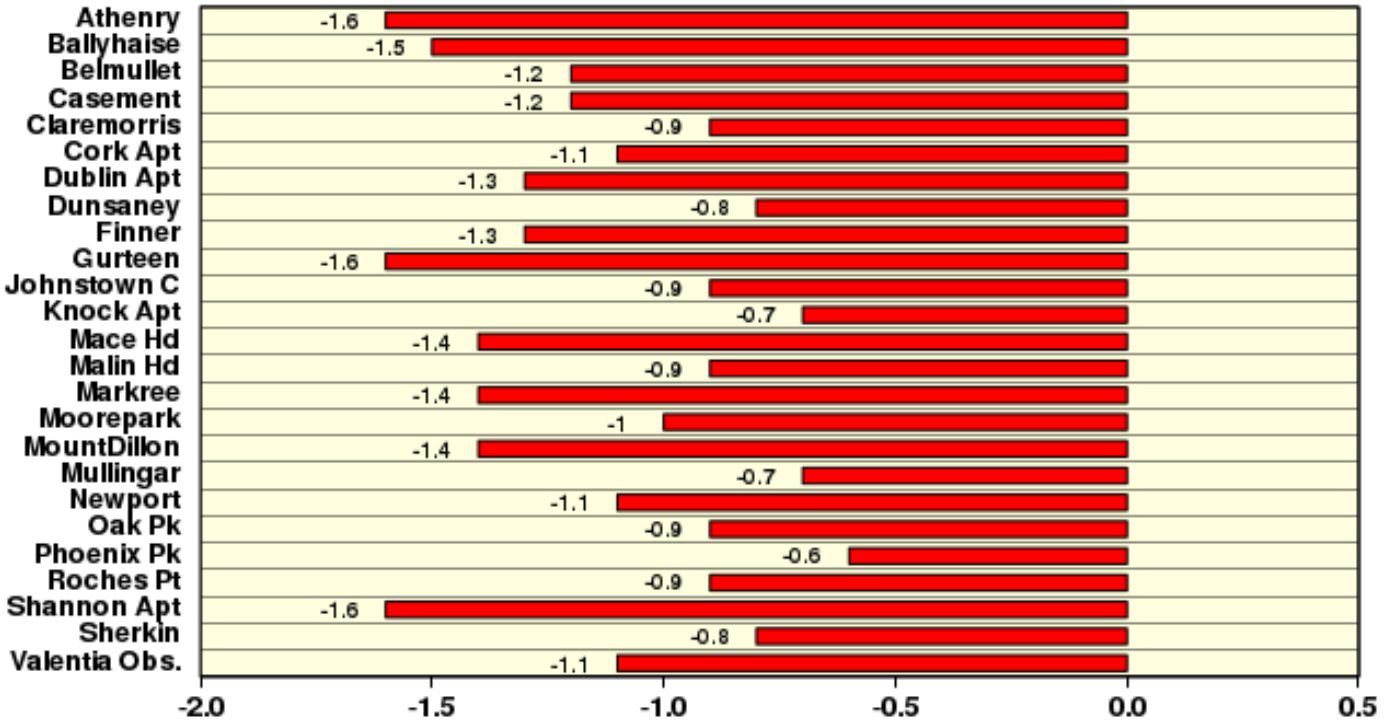
November 2019

Based on Data from 1- 30 November 2019 on whole month basis

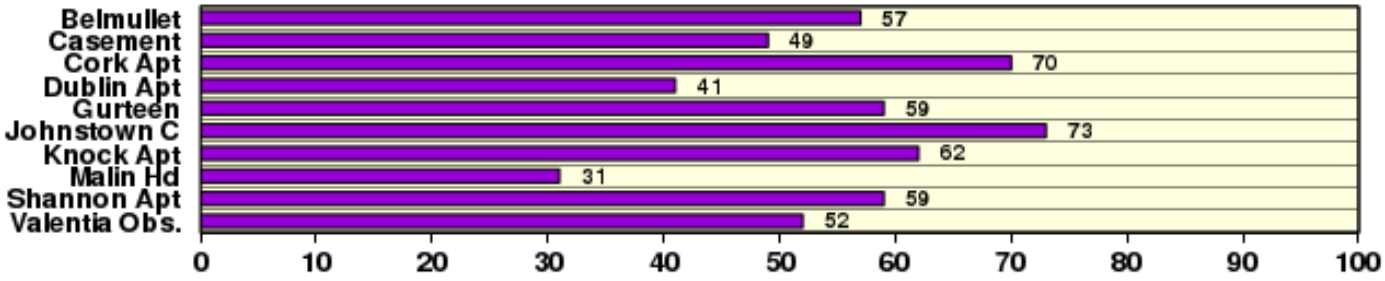
Rainfall *(% of average for period 1981-2010) on whole month basis*



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



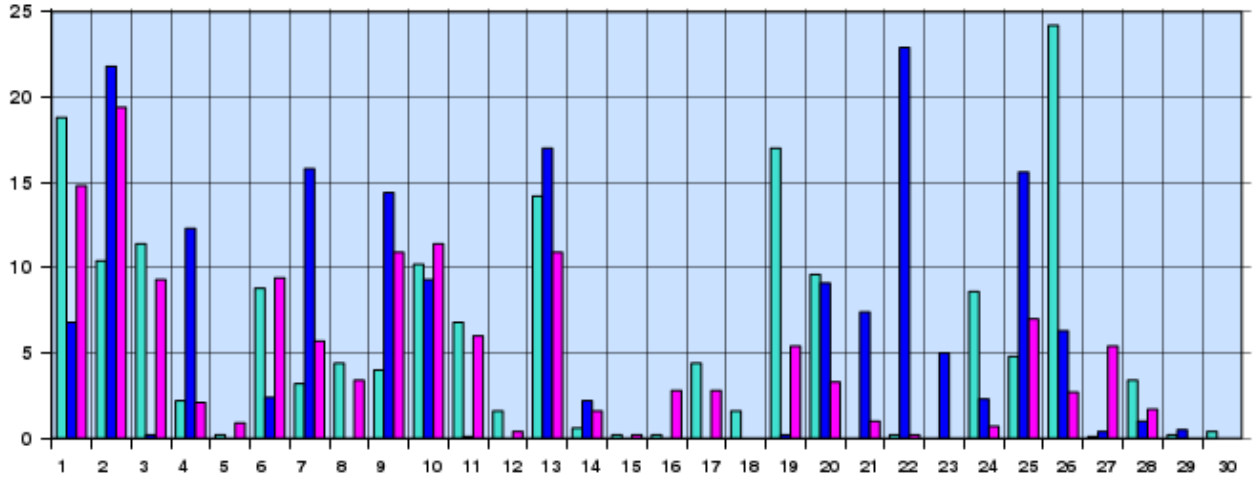
Sunshine *(Number of monthly sunshine hours)*



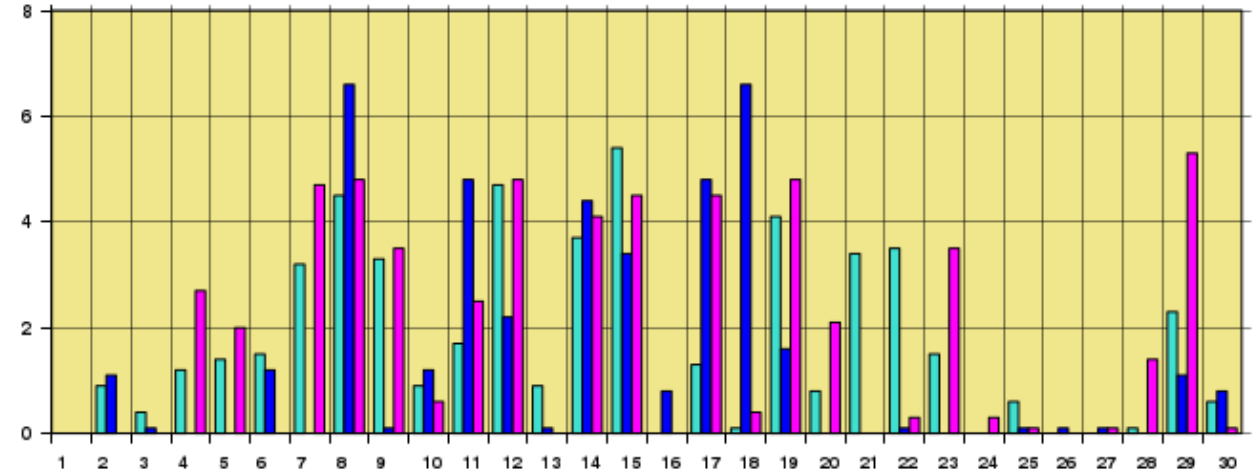
November2019 Daily Values at selected synoptic stations

Based on data from 1- 30 November 2019 on a pro rata basis

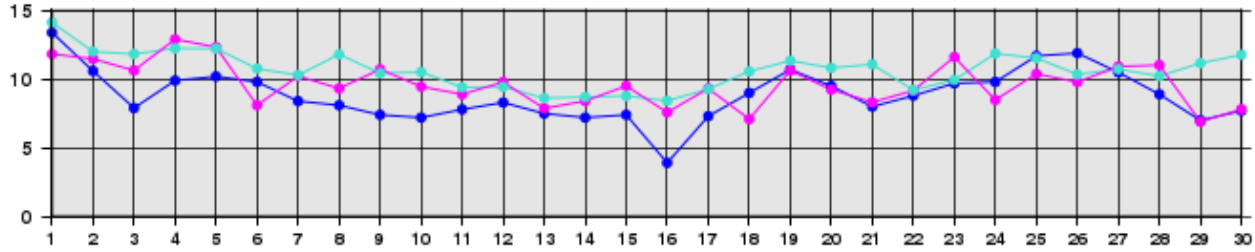
Daily 00-24h rainfall values(mm)



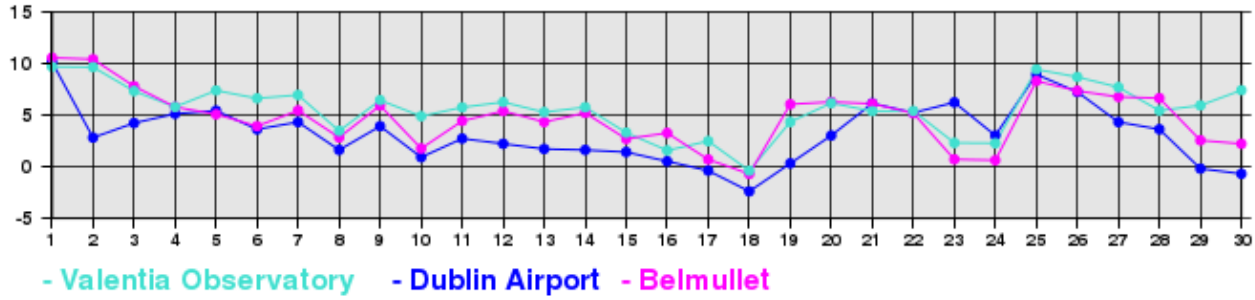
Daily sunshine values(hours)



Daily 00-24h maximum temperature (°C)



Daily 00-24h minimum temperature (°C)

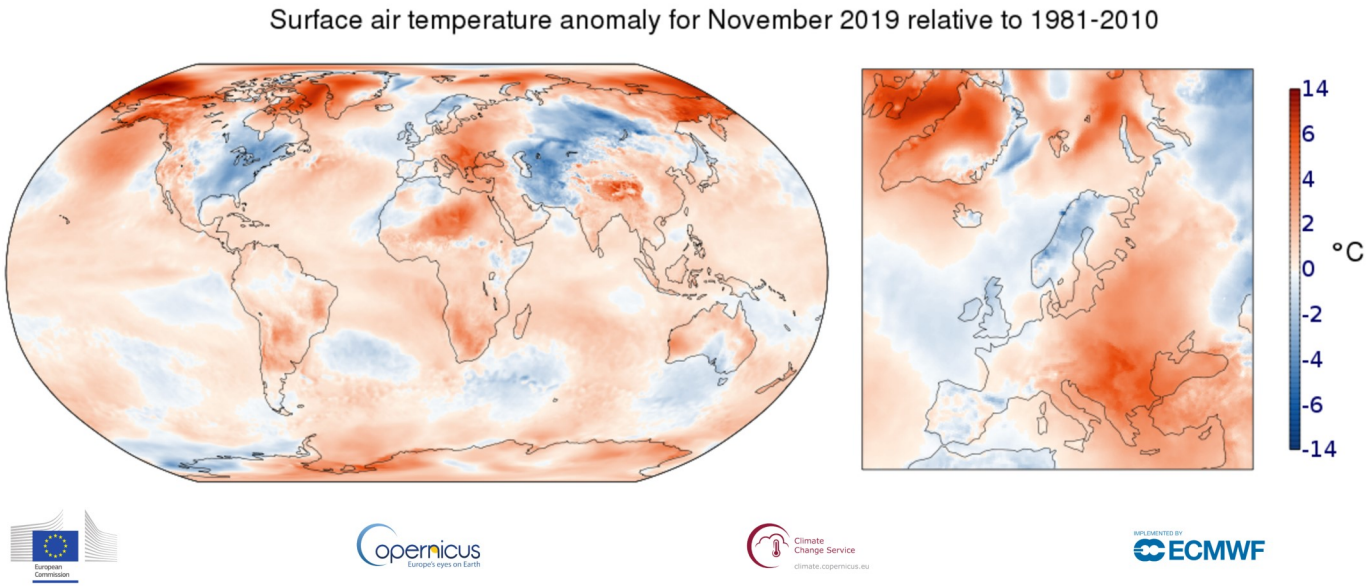


Issued by the Climatology and Observations Division of Met Éireann on Tuesday December 3rd 2019. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann. Synoptic station data is midnight to midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. '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). [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. *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

Nov 2019 Global

Surface air temperature: One of the three warmest Novembers on record

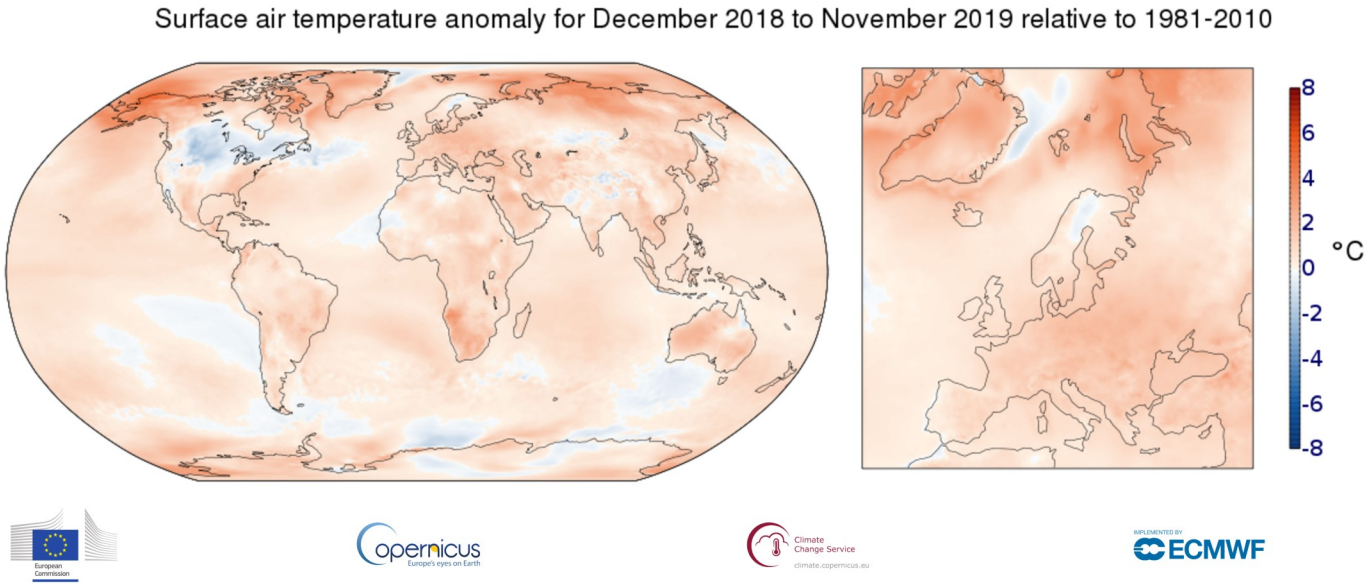
Globally, November 2019 was one of the three warmest Novembers on record, differing only marginally from November 2015 and 2016. Most land areas saw above average temperatures, with the exception of much of the eastern USA and Canada, North-western Europe and a central Asian region extending from Siberia to the Iranian coast.



Surface air temperature anomaly for November 2019 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-2019

Temperature: The last 12 months - December 2018 to November 2019

Temperatures were much above the 1981-2010 average over most of the Arctic, peaking over and near Alaska and over central parts of northern Siberia. Above average over most other areas of land and ocean, especially so over the Middle East, southern Africa, Australia and some parts of the Antarctic . Below average over some land and oceanic areas, most notably over central and south-eastern Canada .



Surface air temperature anomaly for December 2018 to November 2019 relative to the average for 1981-2010. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF. https://climate.copernicus.eu/surface-air-temperature-november-2019