



Summer 2021

(June, July, August)

Warm and relatively dry

Summer 2021 was warm everywhere and relatively dry overall, especially in the South and East. There was widespread heatwaves during July and dry spells recorded during June and July. June (provisionally the third driest June on record) was a very dry month with the Jetstream staying mostly to the north of the country. This allowed high pressure to stay in control. It was driest, warmest and sunniest in the Midlands, South and East, with the West and North cooler and cloudier as weak Atlantic weather fronts encroached from the west on numerous occasions. After a dry start, July saw Atlantic low-pressure systems take control for most of the first two weeks, which brought widespread heavy and thundery rain at times. During the third and fourth weeks, blocking high-pressure dominated as the Jetstream moved north, allowing a very warm or hot air mass to move up from the south, culminated in heatwave conditions in many places. The end of July saw the Jetstream returning, bringing Atlantic westerlies with widespread rain at times. The Jetstream stayed to the south during the first three weeks of August keeping Atlantic low-pressure systems in control. This brought widespread heavy and thundery rain at times, especially towards the end of the first and third weeks. The final third of August saw the Jetstream weaken and move to the north again, allowing blocking high pressure to dominate and bring mostly dry conditions with some pleasant late summer sunshine at times.

Rainfall: Below average in most places

Nearly all rainfall totals were below their Long-Term Average (LTA) for the season. Percentage of seasonal rainfall values ranged from 52% (the season's lowest rainfall total of 126.4 mm) at Sherkin Island, Co Cork to 118 % (the season's highest rainfall total of 327.7 mm) at Markree, Co Sligo. The highest daily rainfall total was 71.1 mm at Mullingar, Co Westmeath on Thursday 5th Aug (*its highest daily fall on record (length 71 years)*). The number of rain days ranged from 30 days at Phoenix Park, Co Dublin to 53 days at Knock Airport, Co Mayo. The number of wet days¹ ranged from 19 days at Dublin Airport, Co Dublin to 39 days at Knock Airport, Co Mayo. The number of very wet days³ ranged from 1 day at Sherkin Island, Co Cork to 10 days at both Markree, Co Sligo and Finner, Co Donegal. Five stations had dry spells⁶ between the Saturday 29th May and Tuesday 22nd June. These were Dublin Airport, Co Dublin (lasting 26 days), Casement Aerodrome, Co Dublin, Phoenix Park, Co Dublin, Dunsany, Co Meath (all lasting 19 days), and Oak Park, Co Carlow (lasting 17 days). Six stations had dry spells⁶ between Monday 5th and Monday 26th July. These were Malin Head, Co Donegal (lasting 22 days), Casement Aerodrome, Co Dublin, Phoenix Park, Co Dublin, Claremorris, Co Mayo, Mount Dillon, Co Roscommon and Mullingar, Co Westmeath (all lasting 15 days). Two stations had absolute droughts⁴ between Saturday 29th May and Sunday 13th June. These were Dublin Airport, Co Dublin and Phoenix Park, Co Dublin (both lasting 16 days).

Temperature: Above average everywhere

All mean air temperatures across the country were above their Long-Term Average (LTA) for the season. Deviations from mean air temperature for the season ranged from 0.2 °C (14.8 °C mean temperature) at Dublin Airport, Co Dublin to 1.1 °C (14.4 °C mean temperature) at Knock Airport, Co Mayo. Mean temperatures for the season ranged from 14.2 °C (0.4 °C above its LTA) at Malin Head, Co Donegal to 16.1 °C (0.5 °C above its LTA) at Shannon Airport, Co Clare. All the highest and lowest seasonal temperatures were recorded at Mount Dillon, Co Roscommon with both lowest air and grass minimum reported on Tuesday 22nd Jun with a air minimum temperature of 1.3 °C while the lowest grass minimum was -5.1 °C. The high maximum was reported on Wednesday 21st Jul with a temperature of 30.8 °C (*its highest maximum temperature on record (length 13 years)*). There was no air frost reported this season. Less than half of stations reported ground frost. The number of days with ground frost ranged from zero days at a few stations to 10 days at Mount Dillon, Co Roscommon. Mount Dillon, Co Roscommon had its warmest summer on record with a mean temperature of 15.4 °C (0.8 °C above its LTA) (length 13 years). Ballyhaise, Co Cavan also has its highest maximum temperature on record on Wednesday 21st July with 28.9 °C (length 28 years). Heatwaves⁷ were reported at 14 stations between Fri 16th and Sun 25th July.

Sunshine: Highest in the South and Southeast

All available sunshine totals were above their Long-Term Average (LTA) for the season. Percentage of seasonal sunshine values ranged from 105% (seasonal sunshine total of 457.8 hours) at Shannon Airport, Co Clare to 110% (seasonal sunshine total of 509.5 hours) at Casement Aerodrome, Co Dublin. Seasonal sunshine totals ranged from 380.2 hours at Belmullet, Co Mayo (No LTA comparison*) to 568.2 hours at Johnstown Castle, Co Wexford (No LTA comparison*). The highest number of daily sunshine hours recorded this season was 15.3 hours at both Johnstown Castle, Co Wexford and Valentia Observatory, Co Kerry on Saturday 17th Jul and Wednesday 30th Jun. The number of dull days² ranged from 9 days at both Dublin Airport, Co Dublin and Johnstown Castle, Co Wexford to 26 days at both Valentia Observatory, Co Kerry and Belmullet, Co Mayo.

Wind: Not significantly strong

Seasonal mean wind speeds ranged from 4.4 knots (8.1 km/h) at Ballyhaise, Co Cavan to 10.3 knots (19.1 km/h) at Mace Head, Co Galway. Gales were reported on Thursday 12th Aug. The number of days with gale force winds ranged from zero days at most stations to 1 day at both Mace Head, Co Galway and Belmullet, Co Mayo. There were no strong gales or storms reported this season. Both the season's highest gust and 10-minute mean wind speed was reported at Belmullet, Co Mayo on Thursday 12th Aug. The highest gust was 51 knots (95 km/h) while the season's highest 10-minute mean wind speed was 37 knots (69 km/h).

EXTREME VALUES FOR SUMMER AT SYNOPTIC STATIONS

Rainfall

Highest seasonal total: 327.7 mm at Markree, Co Sligo (118% of its LTA)
Lowest seasonal total: 126.4 mm at Sherkin Island, Co Cork (52% of its LTA) (*its driest summer since 2006*)
Highest daily rainfall: 71.1 mm at Mullingar, Co Westmeath (83% of its monthly LTA) on Thu 5th Aug (*its highest daily fall on record (length 71 years)*)

Temperature

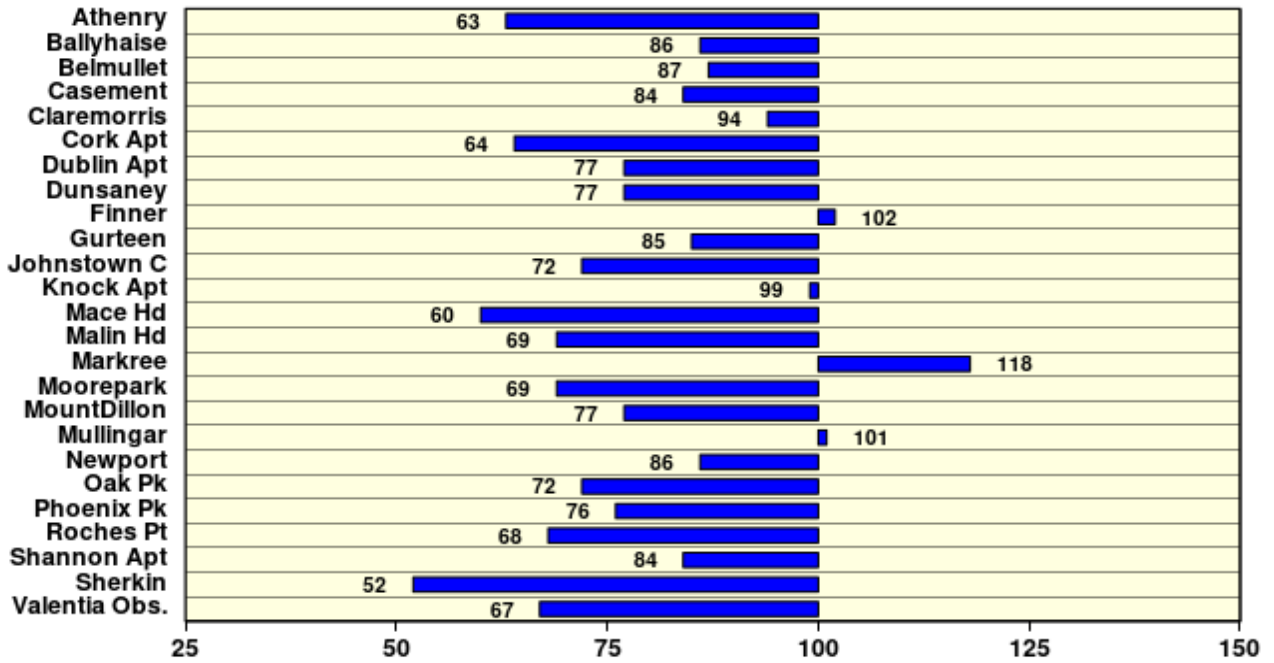
Highest mean seasonal temperature: 16.2°C at Shannon Airport, Co Clare (0.5°C above its LTA)
Lowest mean seasonal temperature: 14.2°C at Malin Head, Co Donegal (0.4 above its LTA)
Highest air temperature for the season: 30.8°C at Mount Dillon, Co Roscommon (11.1°C above its monthly LTA) on Wed 21st Jul (*its highest maximum temperature on record (length 13 years)*)
Lowest air temperature for the season: 1.3°C at Mount Dillon, Co Roscommon on Tue 22nd Jun (7.6°C below its monthly LTA)
Lowest grass minimum for the season: -5.1°C at Mount Dillon, Co Roscommon on Tue 22nd Jun

Sunshine

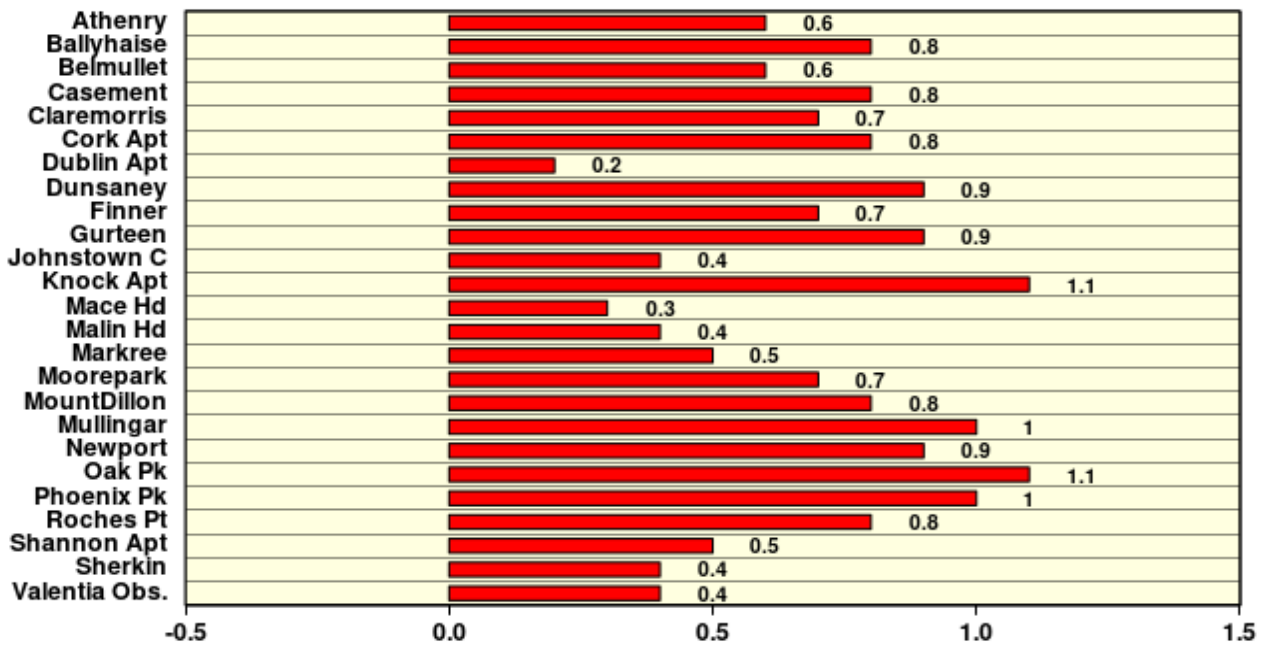
Highest seasonal total: 568.2 hrs (daily mean 6.18 hrs/day) at Johnstown Castle, Co Wexford
Lowest seasonal total: 380.2 hrs (daily mean 4.13 hrs/day) at Belmullet, Co Mayo
Highest daily sunshine for the season: 15.3 hours at both Johnstown Castle, Co Wexford on Sat 17th Jul and Valentia Obs. on Wed 30th Jun

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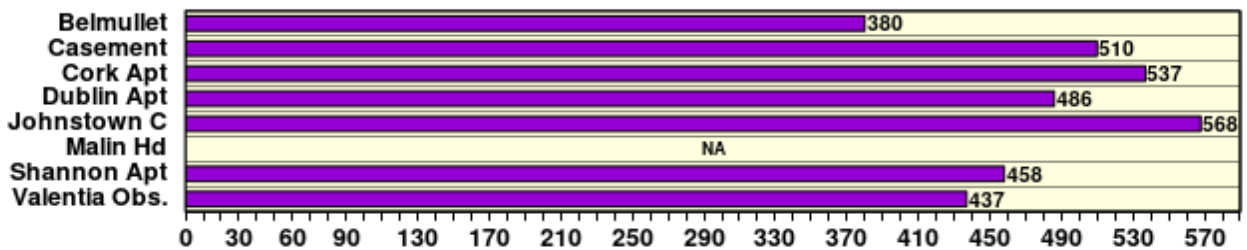
Rainfall (% of average for period 1981-2010) on whole season basis



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



Sunshine (Number of seasonal sunshine hours)



Issued by the Climatology and Observations Division of Met Éireann on Friday 3rd September 2021. 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). 7 A heatwave occurs where there are 5 consecutive days or more with maximum temperature over 25°C (that is, a daily maximum screen air temperature > 25°C). *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