

The year 2025 is characterised by high temperatures, despite less sunshine than in previous years. It also has a rainfall deficit, regardless of a higher number of rainy days.

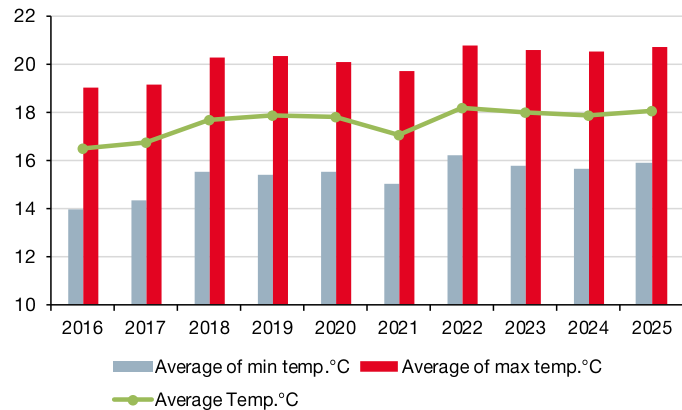
2025: another very hot year marked by two heatwaves

1. Ten-year temperature record

	Average	Average of minimums	Average of maximums	Minimum absolute value	Maximum absolute value
1971-1980	15.7 °C	12.8 °C	18.7 °C	n.a.	n.a.
1981-1990	16.2 °C	13.4 °C	19.1 °C	n.a.	n.a.
1991-2000	16.4 °C	13.5 °C	19.3 °C	-1.5 °C	33.7 °C
2001-2010	16.8 °C	14.0 °C	19.6 °C	-1.5 °C	34.5 °C
2011-2020	17.2 °C	14.7 °C	19.7 °C	-0.8 °C	34.7 °C
2021-2025	17.9 °C	15.7 °C	20.5 °C	4.1 °C	35.7 °C
2025	18.1 °C	15.9 °C	20.7 °C	6.4 °C	35.7 °C

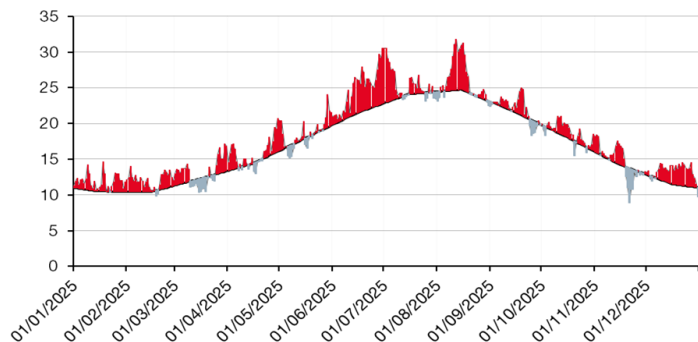
Sources: Department of the Environment, IMSEE

2. Change in average temperatures since 2016



Sources: Department of the Environment, IMSEE

3. Average daily temperature variation for 2025 compared with the 1991–2020 normal



Unit: degree Celsius

Sources: Department of the Environment, IMSEE

Definitions

- (1) Climate normals are average temperature and rainfall values calculated over a continuous thirty-year period at the end of each decade. The latest normal is based on the period 1991–2020.
- (2) The heatwave threshold is triggered in the region when daytime temperatures exceed 31°C for three consecutive days and nighttime temperatures do not fall below 24°C.

Since the early 1970s, each decade has recorded a higher average temperature than the previous one. Readings taken over the period 2021-2025 confirm that this warming trend is continuing.

With an average annual temperature of 18.1°C, which is 1.3°C above the climate normal⁽¹⁾ (16.8°C), 2025 ranks as the second warmest year since meteorological observations began in 1969, behind 2022.

In 2025, temperatures were generally higher than seasonal normals throughout the year, despite a few isolated episodes below reference values.

The winter was marked by exceptionally high temperatures, with monthly minimum temperature records in January and February (up to 8.5 °C).

The summer of 2025 ranked third among the hottest summers since records began, behind 2022 and 2003. It started with the warmest month of June ever recorded, with an average temperature of 24.8°C (+3.3°C above the normal). Two prolonged heatwaves⁽²⁾ were then observed: the first, which occurred early, lasted from 28 June to 4 July; the second, from 9 to 17 August, was particularly intense, peaking at 35.7 °C on 16 August and setting a new all-time record, surpassing that of August 2024.

This trend continued in autumn, with temperatures close to or slightly above normal. The first winter-like spell did not arrive until mid-November.

Finally, December was marked by unusually mild weather, confirming the predominance of above-normal temperatures throughout the year.

A year marked by low rainfall despite a high frequency of rainy days

Following a year of above-average rainfall in 2024, the cumulative rainfall for 2025 was 644.1 mm, representing a deficit of 23% compared to the reference normal (-150.4 mm). The number of days with precipitation (≥ 1 mm) reached 67, which is slightly above the normal (+4 days). This contrast between the frequency of rainy days and the annual rainfall deficit reflects patterns characterised by a predominance of low-intensity episodes interspersed with occasional more intense events.

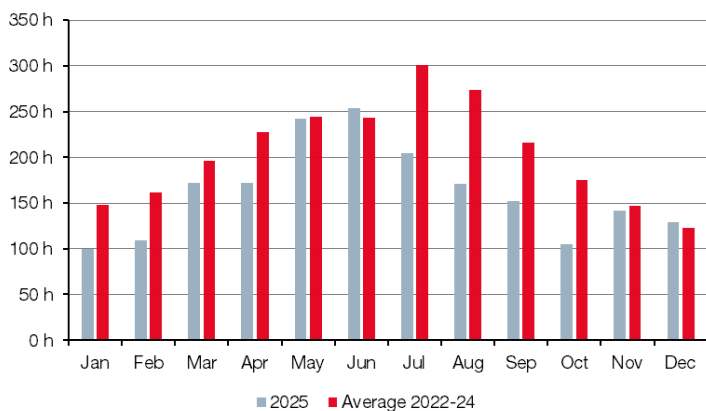
The beginning of 2025 was marked by heavy rainfall, particularly in January (129.6 mm) and March (127.4 mm). From the end of the first quarter onwards, a rainfall deficit set in.

The summer period was in line with the usual dry season, with particularly low rainfall in June and July.

However, it was the autumn period, which is generally decisive in determining annual totals, that proved to be deficient, particularly in October. This situation in the last quarter is the main contributor to the deficit observed in the year-end balance sheet.

A significantly less sunny 2025

6. Monthly number of hours of sunshine in 2024 and 2025



Sources: Direction de l'Environnement, IMSEE

34 days in the year when gusts reached and exceeded 60km/h

In 2025, wind gusts exceeded 60 km/h on 34 days. The strongest gust recorded during 2025 was measured at 95.8 km/h on 21 March at the Oceanographic Museum weather station.

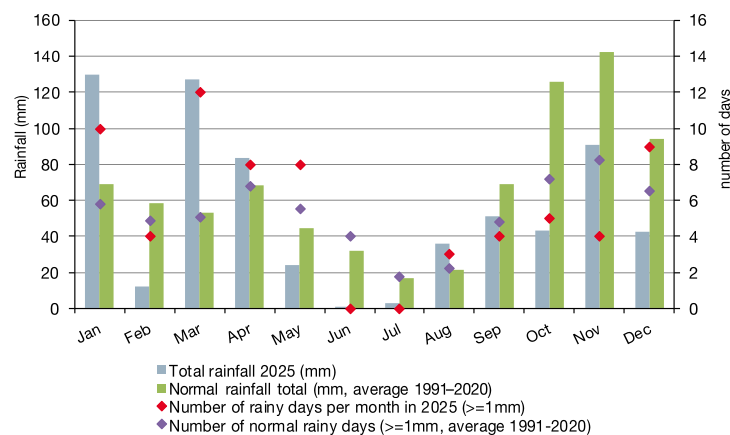
Since 2012, Weather Focus has been analysing the Principality's weather and climate conditions. This study is based on data collected by the Jardin Exotique weather station, supplemented by sunshine and wind data collected by the Department of the Environment at the Oceanographic Museum.

4. Ten-year rainfall record

Yearly rainfall average (mm)	Max observed in a year (mm)	Date	Number of days of rain (≥ 1 mm)	Absolute max in a day (mm)	Date
1971-1980	848.5	1,217.0	in 1979	n.d.	n.a.
1981-1990	706.0	1,113.8	in 1984	n.d.	n.a.
1991-2000	805.1	1,115.8	in 2000	64	115.2 the 25/10/1999
2001-2010	695.1	1,134.0	in 2008	62	110.0 the 05/11/2008
2011-2020	883.2	1,485.1	in 2014	64	148.4 the 04/10/2015
2021-2025	613.7	1,016.1	in 2024	57	69.4 the 25/02/2024
2025	644.1	-	-	67	39.0 the 16/04/2025

Sources: Department of the Environment, IMSEE

5. Annual variations in rainfall and number of rainy days in 2025, and comparison with the normal

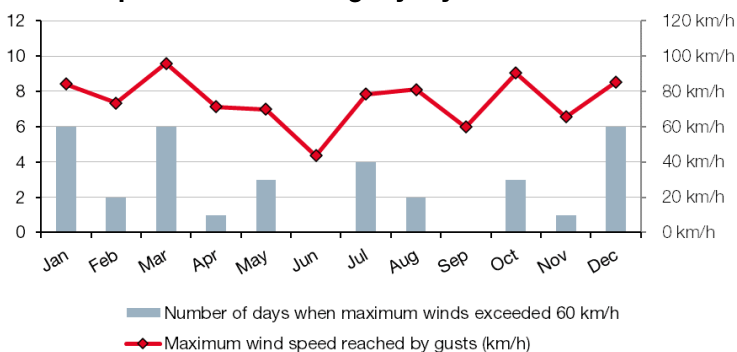


Sources: Department of the Environment, IMSEE

The year 2025 stands out for its particularly low levels of sunshine in Monaco, with 1,953 hours recorded, significantly below the usual climate averages of around or above 2,500 hours (2,456 hours on average over the period 2022-24). This situation is a continuation of that observed in 2024, a year which already had a limited total of 2,059 hours of sunshine.

The decrease in sunshine affects almost the entire year, but is particularly marked in July and August, with a reduction of more than 60% in the duration of direct sunlight compared to the values usually observed during these two months.

7. Wind speed and number of gusty days in 2025



Sources: Department of the Environment, IMSEE

