

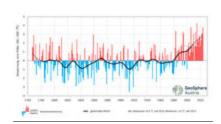


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Second warmest July in measurement history

Fourteenth above-average warm month in a row

"July 2024 was extremely warm and was 2.1 degrees above the average for the 1991-2020 climate period in the lowlands of Austria and 2.0 degrees above the average in the summit regions," says climatologist Alexander Orlik from GeoSphere Austria, "which puts the lowlands in second place in the series of the warmest July months in the 258-year history of measurements and the mountains



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in fifth place in the 174-year mountain measurement series. It is also noteworthy that July is the fourteenth month in a row that is above average. The last relatively cool month was May 2023."

Compared to the climate period 1961-1990, which was not yet so severely affected by global warming, July 2024 was 3.8 degrees above average in the lowlands and 3.6 degrees in the mountains.

The first ten in the series of the warmest Julys in the history of measurements since 1767 are: 2015, then tied 2006 and 2024, then 1983, then tied 2013 and 1994, then tied 2022, 2010 and 1995, then 2023. (HISTALP lowland dataset)

Many hot days

The number of hot days (at least 30 degrees) in July 2024 was significantly higher than an average July. In the state capitals, for example, there were (including the forecast for July 31st) 17 hot days at the Vienna Inner City weather station this July (average in the period 1991-2020: 11), in Eisenstadt 16 (average 9), St. Pölten 12 (average 7), Linz 12 (average 6), Salzburg Freisaal 8 (average 6), Innsbruck University 11 (average 8), Bregenz 5 (average 4), Graz University 14 (average 6), Klagenfurt Airport 14 (average 7). (Note: all values including forecast for July 31st, 2024)

Some records for night temperatures

The nights in July 2024 had an extremely high temperature level in some regions. "For example, at the Vienna Innere Stadt weather station, the average of all low temperatures this July is 20.7 degrees. This is the highest value here since measurements began in 1985. At the Vienna Hohe Warte weather station, 18.9 degrees was the highest value since measurements began in 1872," says climatologist Alexander Orlik. "New records for the average low temperatures for a July were also set in Mariazell (ST), Weyer (O), Litschau and Zwettl (N) as well as in St. Jakob im Defereggental (T)."

There were also a few new records for July in terms of the number of tropical nights (lowest temperature not below 20 degrees): Eisenstadt recorded 13 tropical nights this July (old July record 10 in 2015), and the weather station in Vienna Hohe Warte also recorded 13 tropical nights (old July record 11 in 2015). The weather station in Vienna Innere Stadt recorded 19 tropical nights, exactly the same as the record in 2006. In St. Pölten, 5 tropical nights were also recorded, the same as the record in July 2007.

In Linz there were 6 tropical nights this July (record 6 in July 2015), Salzburg Freisaal 0 (record 2 in July 2007 and 2010), Innsbruck University 0 (record 3 in July 2015), Bregenz 0 (record 8 in July 2015), Graz University 4 (record 5 in July 2015) and at the Klagenfurt Airport weather station there were 0 tropical nights this July (record 2 in July 2015).

Partly very dry, partly very much rain in a short time

In the Austria-wide evaluation, July 2024 brought 23 percent less precipitation than an average July. In the east in particular, it was extremely dry in places (-50 to -95 percent). At the Hohenau an der March weather station, in the Weinviertel in Lower Austria, it rained only four liters per square meter (= 4 millimeters) in the whole of July. This made it the driest July in Hohenau since measurements began in 1923.

In many regions, however, July 2024 brought a lot of rain in a short period of time with heavy thunderstorms. In Aflenz in Upper Styria, for example, it rained 95 liters per square meter (= 95 millimeters) in four hours on the night of July 16 to 17. This corresponds to an event with a statistical recurrence period of about 50 years.

Once again extremely early snow clearing at Sonnblick

At the Sonnblick Observatory, at around 3,100 meters above sea level, the last remnants of winter snow melted as early as July, similar to 2023 and 2022. "No snow on the Sonnblick summit is extremely unusual in July. Before 2022, the lowest snow depth in a July on the Sonnblick was 30 centimeters and the snow cover disappeared, if at all, only for a short time at the end of August or beginning of September," says climatologist Alexander Orlik from GeoSphere Austria.

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