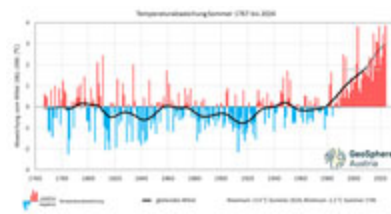




29.08.2024

## One of the warmest summers in recorded history

**GeoSphere Austria's preliminary assessment of the meteorological summer of 2024: Across the entire area of Austria, it was the second warmest summer in the history of measurements. In the lowlands, it was the warmest summer in the 258-year series of measurements.**



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Summer 2024 is the fourth extremely warm season in a row in Austria. Autumn 2023, winter 2023/24 and spring 2024 were also among the top 3 in the respective series of measurements.

"The summer of 2024 was the second warmest summer in the history of measurements across the entire area of Austria, behind the summer of 2003," says climatologist Alexander Orlik from GeoSphere Austria. "In the lowlands of Austria, 2024 is the warmest summer in the 258-year history of measurements, according to the preliminary evaluation, just ahead of the summers of 2003 and 2019. In the mountains of Austria, it was the second warmest summer, behind 2003 and on a par with 2019."

According to the preliminary evaluation, the meteorological summer of 2024 in the lowlands of Austria will be 2.1 degrees above the average summer of the 1991-2020 climate period and 3.9 degrees above the average of 1961-1990. In the summit regions, the summer of 2024 will be 2.2 degrees above the average of the 1991-2020 climate period and 3.9 degrees above the 1961-2020 climate period.

### Among the top 20 almost only summers of the recent past

The summer of 2024 thus confirms the trend towards an ever warmer climate. Austria's measurement series, which has existed since 1767, includes 258 summers and the 20 warmest are almost exclusively summers of the recent past: 2024, 2003, 2019, 2015, 2022, 2017, 2018, 2023, 1992, 1811, 1994, 2012, 2021, 2013, 1807, 2002, 1834, 2020, 2016, 2010 (HISTALP lowland dataset).

### Hot days significantly above average, occasional records

The summer of 2024, for example, brought about twice as many hot days (at least 30 degrees) in the state capitals as an average summer in the period 1991-2020 and about three to four times as many hot days as the average for the climate period 1961-1990.

"If you take into account the forecast for the last days of August, you can see that there are also some records for the number of hot days," says climatologist Orlik, "for example at the weather

station in Vienna's inner city with 45 and in Eisenstadt with 41 hot days."

## Extremely warm nights

Another striking feature of the summer of 2024 was the largely consistently high temperature level throughout the day and night.

In several regions there were new records for the average minimum temperatures (average of all minimum temperatures of the nights this summer), for example in Zwettl with 12.8 degrees, Vienna Hohe Warte with 18.0 degrees, Mariazell with 12.9 degrees and Kremsmünster with 16.3 degrees.

In addition, some GeoSphere Austria weather stations recorded new records for the number of tropical nights (minimum temperature not below 20 degrees), for example Vienna Inner City with 44 tropical nights, Eisenstadt with 25, Graz University with 11, Linz with 15 and St. Pölten with 11 tropical nights. (*Evaluation up to and including August 29, 2024*)

*For tables on hot days and tropical nights in the country's capital cities, see the linked PDF.*

## Rainfall amounts distributed very differently

In the Austria-wide evaluation, the meteorological summer of 2024 brought 13 percent less precipitation than an average summer.

The regional analysis shows roughly average amounts of rainfall in most of the mountainous region. The regions that were significantly drier this summer (15 to 45 percent less rainfall than average) were mainly East Tyrol, Upper Carinthia, Lungau, parts of Upper Austria, Lower Austria and Burgenland, as well as Vienna and southeast Styria.

Several heavy rain events caused mudslides and floods this summer. For example, on August 17, 2024, it rained 94 liters per square meter in just one hour at the Vienna Hohe Warte weather station. That was the highest amount of rain ever measured here in one hour.

In the Austria-wide evaluation, the duration of sunshine in summer 2024 was almost exactly in the range of an average summer (3 percent below average) .

**[-> PDF download of the entire climate balance including graphics and state analysis](#)**