

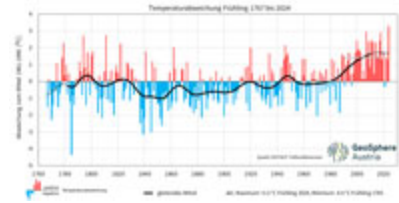


31.05.2024

Warmest spring in measurement history

Relatively high rainfall (20 percent above average) and fewer hours of sunshine (9 percent below average)

The meteorological spring (March, April, May) in 2024 brought only one phase that was significantly too cold, that was in the second half of April. For the most part, spring 2024 was warmer than average, especially in March and even extremely warm in the first half of April.



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1st place in the lowlands, 3rd place in the summit regions

"In the preliminary evaluation, spring 2024 in the lowlands of Austria will be 1.9 degrees above the average for the climate period 1991 to 2020, and 1.6 degrees above the average for the 1991-2020 climate period," says climatologist Alexander Orlik from GeoSphere Austria. "This puts Austria's lowlands in first place in the series of the warmest springs in the 258-year history of measurements, and in the mountains in third place in the 174-year mountain measurement series. Across the entire area of Austria, it was the warmest spring in the history of measurements."

Compared to the climate period 1961-1990, which was not yet so severely affected by global warming, spring 2024 was 3.3 degrees above average in the lowlands and 3.1 degrees in the mountains.

Spring 2024 was thus the third extremely warm season in a row (autumn 2023 1st place, winter 2023/24 2nd place, spring 2024 1st place)

Among the top 10 almost only springs of the recent past

The ten warmest springs in the lowland measurement series (HISTALP dataset) dating back to 1767 were almost all in the recent past: 2024, 2007, 2018, 1811, 1794, 2011, 2000, 2017, 2009, 2014.

"Since the 1990s, we have almost only experienced springs that are significantly too warm and hardly ever too cool," says climatologist Orlik. "In 1794 and 1811 there were also very warm springs, but these were extreme outliers. Back then there were also many years with springs that were significantly too cool and the temperature level in one spring was overall about two degrees cooler than today."

Mostly moist

The three spring months of March, April and May brought above-average rainfall this year. In total, the meteorological spring of 2024 recorded around 20 percent more rainfall than the long-term average in the Austria-wide evaluation. Spring 2024 was thus the fifth above-average wet season in a row (since spring 2023).

The regional evaluation of spring 2024 shows average to slightly dry conditions in the area from the Tyrolean lowlands via Salzburg and Upper Austria to the Weinviertel (+15 to -25 percent). It was significantly too humid mostly in the west and south of Austria (+15 to +75 percent, in Upper Carinthia partly at +90 percent).

Tornados in Styria and Burgenland

In the wake of strong thunderstorms, a tornado occurred in Graz-Eggenberg (Styria) and Schattendorf (Burgenland) on May 21, 2024. In both cases, wind speeds of around 120 km/h caused some damage, such as uprooted trees and partially blown off roofs.

Tornadoes are not as rare in Austria as is generally assumed. Largely complete data have existed since 1998, when systematic analyses of storm damage suspected of being tornadoes began. Since then, there have been an average of four tornadoes per year in Austria. The annual fluctuations are large, ranging from no known cases (2008) to seven known cases (2004 and 2023).

Very early development of plants

The unusual warmth in February and March accelerated the development of the plants to such an extent that some had their earliest flowering date since the beginning of the observation period in 1946. For example, the apricot blossom was the earliest of the entire observation period, with a lead of about three weeks over the 1991-2020 average and four weeks over the 1961-1990 average. The flowering of apple, lilac and black elderberry also reached their earliest onset date since 1946 this year.

The winter weather in the second half of April slowed the development of the plants and caused frost damage to, for example, wine and apricot crops.

Now, at the end of May, the development of the plants is still about three weeks ahead of the long-term average.

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