



Germany's heat map 2026: Freiburg leads as temperatures rise fastest in the Rhine-Ruhr region

Connected vehicle fleet shows local heat distribution in summer 2026.

- **Southwest in the lead:** Anonymized vehicle data from CARIAD, the Volkswagen Group's automotive software company, shows that the highest summer temperatures in Germany in 2026 were measured in the southwest. Freiburg im Breisgau, Mannheim and Karlsruhe lead the ranking.
- **Rhine-Ruhr region is getting warmer:** However, the strongest temperature increase since 2022 has been recorded in Cologne, Leverkusen, Mülheim and other Rhine-Ruhr cities.
- **Considerable temperature differences:** On an average summer day in 2026, the temperature gap between Freiburg im Breisgau and Bremerhaven is almost 6 °C.
- **Fleet data makes heat more locally visible:** More than two million connected vehicles from the Volkswagen Group provide a precise picture of road conditions and temperatures – and complement traditional weather data.

The summer of 2026 has been hot, but it affects German cities differently. An analysis of anonymized vehicle data by CARIAD, the software company of the Volkswagen Group and its Swedish subsidiary NIRA Dynamics shows:

The highest average summer daytime temperatures were measured in southwestern Germany in 2026. Freiburg im Breisgau is at the top with 27.30 °C, followed by Mannheim

with 27.10 °C and Karlsruhe with 26.97 °C. Ludwigshafen am Rhein, Heidelberg and Heilbronn are also well above the average of major German cities.

As expected, cities in northern Germany and on the coast are at the lower end of the temperature ranking. Bremerhaven has a temperature of 21.33 °C, Kiel 21.43 °C and Rostock 21.48 °C. The gap between the hottest and the coolest city is thus just under 6 °C.

Connected vehicle data offers new insights

Established weather providers already offer high-quality measurements and forecasts. Anonymized sensor data from connected vehicles complement them as they can capture small-scale temperature variations directly on individual roads, or in urban heat pockets. More than two million connected vehicles from the Volkswagen Group provide anonymized data on road conditions and temperatures.

"Sensor data from connected vehicles forms an important basis for us to develop future driving functions. But it also helps us to understand conditions on and around the road more precisely. In summer, for example, it shows where heat is particularly intense. This improves mobility and can help us better assess local risks related to road conditions," says Sebastian Franke, Product Owner Chassis & Road Conditions at CARIAD.

In western Germany, the summer temperature has risen the most

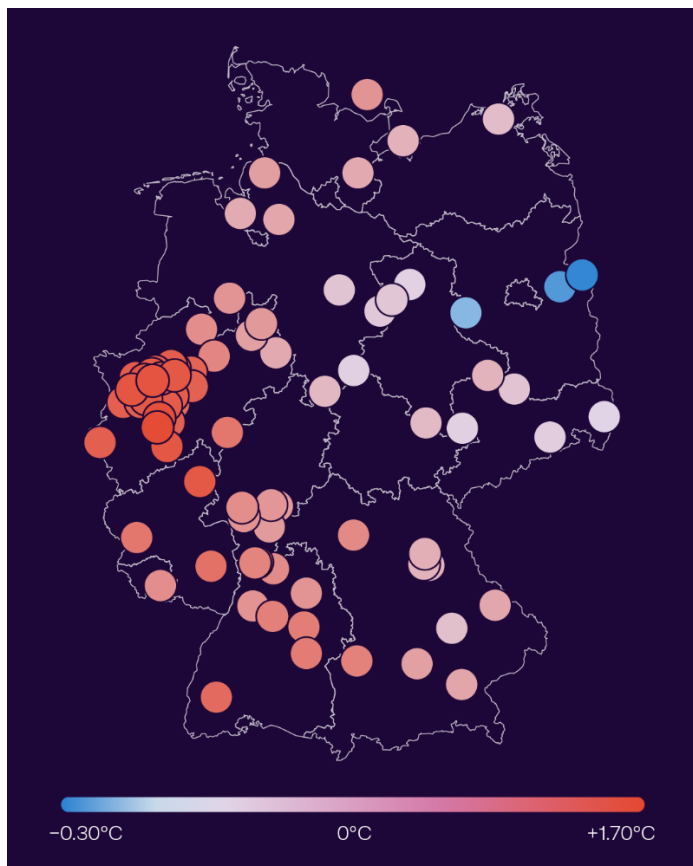
While the highest summer temperatures are measured in the southwest in 2026, the strongest increases over the past four years are found mainly in cities in the Rhine and in the Ruhr region. Cologne is at the top with an increase of 1.66 °C, followed by Leverkusen with +1.61 °C and Mülheim an der Ruhr with +1.56 °C.

Lower temperature increases were seen mainly in eastern Germany. Even there, however, the summer has become cooler since 2022 in only three cities, and only slightly: Berlin (-0.28 °C), Potsdam (-0.21 °C) and Magdeburg (-0.08 °C). Higher temperatures were measured in the 77 other German cities.

In 77 out of 80 major German cities, the summer of 2026 has become hotter

Average summer daytime temperature 2026 compared to 2022

Increase from -0.28 °C (Berlin, blue) to +1.66 °C (Cologne, red)



What the data shows

Heat is increasingly not just a southwestern issue. While the hottest cities in 2026 are primarily located in Baden-Württemberg, Rhineland-Palatinate, and Hesse, the strongest temperature increase compared with 2022 is notably concentrated in western Germany, especially along the rivers Rhine and Ruhr.

Cities near the coast remain cooler, as expected. Bremerhaven, Kiel, Rostock, Lübeck, and Hamburg are all among the ten coolest major cities in Germany.

The differences between the cities are considerable. On an average summer day in 2026, there is a temperature gap of almost 6 °C between Freiburg im Breisgau and Bremerhaven. Looking at the temperature increase compared with 2022, the range is almost 2 °C: from a summer that was 0.28 °C cooler in Berlin to one that was 1.66 °C hotter in Cologne.

The 10 hottest cities in Germany

Average summer daytime temperature in 2026

Rank	City	Summer day temperature
1	Freiburg im Breisgau	27.30 °C
2	Mannheim	27.10 °C
3	Karlsruhe	26.97 °C
4	Ludwigshafen am Rhein	26.87 °C
5	Heidelberg	26.86 °C
6	Heilbronn	26.67 °C
7	Frankfurt am Main	26.37 °C
8	Offenbach am Main	26.35 °C
9	Darmstadt	26.35 °C
10	Würzburg	26.24 °C

The 10 coolest cities in Germany

Average summer daytime temperature in 2026

Rank	City	Summer day temperature
1	Bremerhaven	21.33 °C
2	Kiel	21.43 °C
3	Rostock	21.48 °C
4	Lübeck	21.87 °C
5	Oldenburg	22.04 °C
6	Hamburg	22.19 °C
7	Bremen	22.45 °C
8	Remscheid	22.71 °C
9	Chemnitz	22.85 °C
10	Salzgitter	22.90 °C

The 10 cities with the highest temperature increase

Average summer daytime temperature 2026 compared to 2022

Rank	City	Increase in summer day temperature
1	Cologne	+1.66 °C
2	Leverkusen	+1.61 °C
3	Mülheim an der Ruhr	+1.56 °C
4	Krefeld	+1.55 °C
5	Duisburg	+1.53 °C
6	Bonn	+1.52 °C
7	Bochum	+1.50 °C

8	Koblenz	+1.50 °C
9	Essen	+1.50 °C
10	Dusseldorf	+1.49 °C

The 10 cities with the lowest temperature increase

Average summer daytime temperature 2026 compared to 2022

Rank	City	Increase in summer day temperature
1	Berlin	-0.28 °C
2	Potsdam	-0.21 °C
3	Magdeburg	-0.08 °C
4	Dresden	+0.02 °C
5	Wolfsburg	+0.04 °C
6	Goettingen	+0.06 °C
7	Jena	+0.07 °C
8	Chemnitz	+0.10 °C
9	Salzgitter	+0.15 °C
10	Brunswick	+0.18 °C

About the database

The evaluation covers German cities with at least 100,000 inhabitants. It is based on measured summer air temperatures in the area surrounding the vehicles, for June and July of each year, during daytime hours from 8 a.m. to 8 p.m.