VERIFICATION OF THE SEECOF-33 SUMMER 2025 CLIMATE OUTLOOK AND CLIMATE REPORT FOR CROATIA FOR

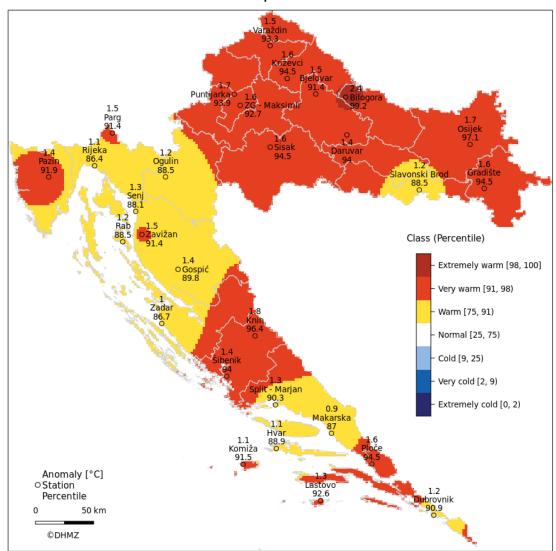
SUMMER 2025

Air temperature anomalies for Croatia in summer 2025

Anomalies of the mean air temperature for summer 2025 with respect to the normal 1991 - 2020 are in the range from 0,9 °C (Makarska) to 2,4 °C (Bilogora).

According to the percentile ranks and classification ratings, temperature conditions are described in more detail in the following categories: **warm** in Slavonski Brod, mountainous Croatia, most of the northern Croatian coast and part of the southern Croatian coast; **very warm** in most of continental Croatia, in the area of Parg and Zavižan (mountainous part of Gorski Kotar), in the interior of Istria and in the rest of southern Croatian coast and **extremely warm** at Bilogora.

Summer 2025 Mean air temperature Percentiles with respect to 1991-2020 normal

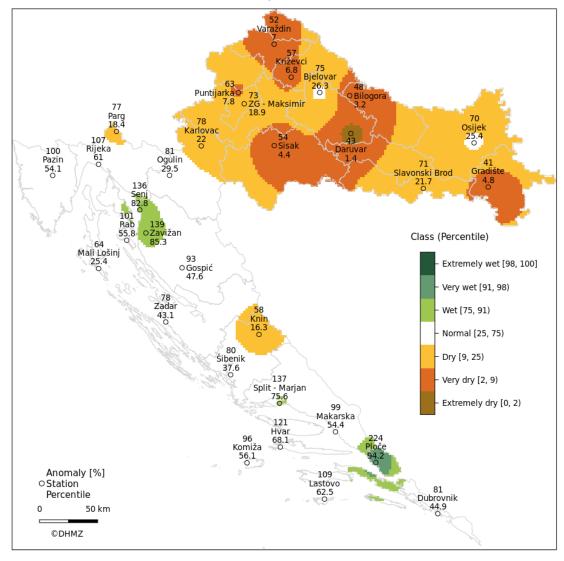


Precipitation amounts for Croatia in summer 2025

The anomalies of the precipitation amount in summer 2025 compared to the normal 1991-2020 are in the range from 41 % of the multi-year average in Gradište (84,7 mm) to 225 % in Ploče (282,6 mm).

Precipitation conditions are described in more detail in the following categories: **extremely dry** in Daruvar, **very dry** in surrounding of Gradište and in the part of continental Croatia, **dry** in the part of eastern and central Croatia, sourrounding of Parg and Knin, **normal** in sourrunding of Osijek and Bjelovar, in the most of mountainous Croatia and in the most of coastal Croatia, **wet** in the sourrounding of Senj, Zavižan and Split-Marjan and **very wet** in Ploče.





Air temperature anomalies for Croatia in June 2025

The anomalies of the mean air temperature in June 2025 with respect to the normal 1991 - 2020 were within the range from 2,4 °C (Dubrovnik, Zadar) to 3,9 °C (Bilogora). At all stations air temperature values were significantly higher than the respective multi-annual average. Absolute maximum temperatures were recorded at seven stations in June.

According to the percentile ranks and classification ratings, thermal conditions in Croatia for June 2025 are described in the following categories: **extremely warm** (almost in whole Croatia) and **very warm** (in Zadar and Dubrovnik).

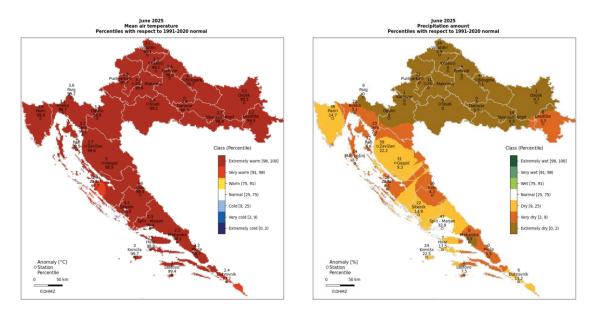
Absolute maximum temperature in June 2025 and comparison with available series of measurement (these stations are included in the analysis of climate anomalies in Croatia)

station	year since data are available	the highest temperature (°C) in June (till 2024) in period when data are available	the date when maximum was reached	the highest temperature measured in June 2025	the date of maximum in June 2025
Gradište	1981.	38,3	24. 6. 2021.	37,7	26. 6.
Osijek	1899.	39,6	20. 6. 1908.	37,9	26. 6.
Slavonski Brod	1963.	37,6	24. 6. 2021.	38,2	26, 6,
Daruvar	1978.	37,0	29. 6. 2022.	36,8	26. 6.
Križevci	1961.	35,1	23. 6. 2003.	35,5	26. 6.
Bjelovar	1949.	36,7	24. 6. 2003.	36,6	26. 6.
Bilogora	1981.	35,9	30. 6. 2012., 19. 6. 2013., 20. 6. 2013.	37,2	26. 6.
Varaždin	1949.	36,0	23. 6. 2003.	37,0	26. 6.
Puntijarka	1959.	29,6	27. 6. 2019.	30,0	26. 6.
Zagreb-Maksimir	1949.	37,6	30. 6. 1950.	36,8	26. 6.
Sisak	1949.	38,1	30. 6. 1950.	37,8	26. 6.
Ogulin	1949.	35,6	30. 6. 1950.	37,0	26. 6.
Gospić	1873.	35,8	28. 6. 2022.	32,6	26. 6., 30. 6.
Parg	1951.	32,4	27. 6. 2019.	31,7	26. 6.
Pazin	1961.	36,8	28. 6. 2022.	34,8	30. 6.
Rijeka	1948.	38,4	28. 6. 2022.	36,0	29. 6.
Mali Lošinj	1961.	35,6	12. 6. 1996., 12. 6. 2003.	35,5	29. 6.
Senj	1948.	37,6	28. 6. 2022.	36,8	29. 6.
Zavižan	1954.	26,4	14. 6. 2019.	25,1	15. 6.
Rab	1978.	36,2	26. 6. 2019.	35,5	29. 6.
Zadar	1961.	35,1	28. 6. 2019.	35,4	30. 6.
Šibenik	1949.	37,6	25. 6. 2007.	37,6	29. 6.
Knin	1949.	40,4	28. 6. 2022.	36,0	30. 6.
Makarska	1981.	38,2	29. 6. 2006.	35,7	30. 6.
Split-Marjan	1948.	38,5	20. 6. 2024.	36,9	27. 6.
Hvar	1858.	38,0	28. 6. 2019.	36,1	28. 6.
Ploče	1978.	37,0	26. 6. 2019.	34,6	28. 6.
Komiža	1981.	37,2	29. 6. 2006.	34,0	27. 6.
Lastovo	1948.	37,3	28. 6. 2022.	35,1	28. 6.
Dubrovnik	1961.	37.5	28. 6. 2019.	36.3	28. 6.

Precipitation anomalies for Croatia in June 2025

Precipitation anomalies expressed as a percentage of the multi-annual average (1991 - 2020) were in June 2025 within the range from 0 % (Lastovo, Makarska, Ploče, Sisak 0 mm) to 59 % (Zavižan 71,8 mm).

Precipitation conditions in June 2025 are described in more detail in the following categories: **extremely dry** (most of continental Croatia and area around Makarska), **very dry** (Gradište, Rijeka, Kvarner, north part of Lika, Zadar, Knin and southern Croatian coast) and **dry** (Istrian penninsula, Lika – mountainous part of Croatia and south of Dalmatia).



Mean air temperature (left) and precipitation amount (right) - June 2024 - percentiles with respect to 1991-2020 normal

Air temperature anomalies for Croatia in July 2025

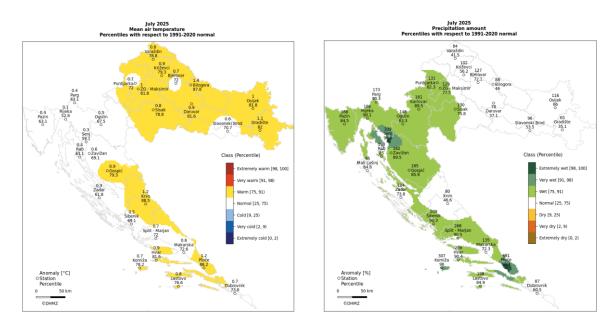
The anomalies of the mean air temperature in July 2025 with respect to the normal 1991 - 2020 were within the range from 0,1 °C (Rijeka) to 1,4 °C (Bilogora).

According to the percentile ranks and classification ratings, thermal conditions in Croatia for July 2025 are described in the following categories: **warm** in most of central and eastern Croatia (except for the area of Slavonski Brod, Bjelovar and Puntijarka), southern part of Lika (Gospić), part of Dalmatia (Hvar, Komiža) and on the south (Ploče, Lastovo). In the rest of Croatia thermal conditions was **normal**.

Precipitation anomalies for Croatia in July 2025

Precipitation anomalies expressed as a percentage of the multi-annual average (1991-2020) were in July 2025 within the range from 65 % (Gradište, 43,9 mm) to 491 % (Ploče, 143,9 mm).

Precipitation conditions in July 2025 are described in more detail in the following categories: **normal** (eastern Croatia, area of Knin, Mali Lošinj, Zadar, Makarska and Dubrovnik), **wet** (western part of Croatia, mountainous part and on the coast), **very wet** - area of Senj, Ploče and Komiža (island Vis) and **extremely wet** in Senj and Ploče.



Mean air temperature (left) and precipitation amount (right) - July 2025 – percentiles with respect to 1991-2020 normal

Air temperature anomalies for Croatia in August 2025

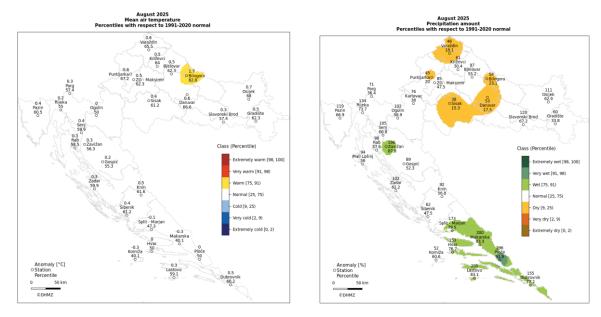
The anomalies of the mean air temperature in August 2025 with respect to the normal 1991 - 2020 were within the range from -0,3 °C (Komiža, Makarska) to 1,7 °C (Bilogora).

According to the percentile ranks and classification ratings, thermal conditions in Croatia for August 2025 are described as **normal**, except in area of Bilogora which is in categorie **warm**.

Precipitation anomalies for Croatia in August 2025

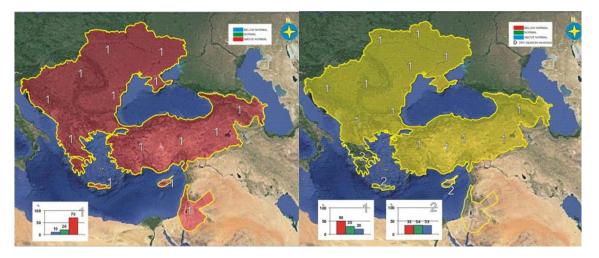
Precipitation anomalies expressed as a percentage of the multi-annual average were in August 2025 within the range from 38 % (Sisak, 31,2 mm) to 296 % (Ploče, 138,7 mm).

Precipitation conditions in August 2025 are described in more detail in the following categories: **normal** (most of Croatia), **wet** (Zavižan, part of Dalmatia), **very wet** (Ploče) and **dry** (part of central Croatia).



Mean air temperature (left) and precipitation amount (right) - August 2025 – percentiles with respect to 1991-2020 normal

VERIFICATION OF SEECOF-33 CLIMATE OUTLOOK FOR THE 2025 SUMMER SEASON



Graphical presentation of the summer 2025 outlook: temperature (left) and precipitation (right)

Air temperature anomalies for Croatia in summer 2025

According to the SEECOF-33 climate outlook, for all Croatian teritory, there were chance for above normal summer temperatures. Probability for exceeding the average summer season temperature was 70 %. Probability of temperature being lower than normal was 10 % and being normal was 20 %.

The summer season in Croatia according to multi-annual average 1991-2020 concerning the temperature for the whole territory was above normal (from 0,9 °C to 2,4 °C).

We can conclude that the outlook for the summer 2025 according the temperature was very good.

Precipitation amounts for Croatia in summer 2025

According to the SEECOF-33 climate outlook, the estimated probabilities for below-, near-, and above-normal precipitation in Croatia were 50 %, 30 %, and 20 %, respectively.

The actual precipitation amounts in the part of Croatia were around average (1991-2020) and in the part of Croatia below average with few exceptions (above average).

We can conclude that the outlook for the summer 2025 according the precipitation was satisfactory.

	Seasonal temperature (JJA)		Seasonal precipitation (JJA)		High Impact Events
Country	Observ ed	SEECOF-33 climate outlook for temperature	Observed	SEECOF-33 climate outlook for precipitation	
Croatia	Above	Above normal (10,20,70)	Normal and below normal (most of Croatia)	Below normal (50,30,20)	In all three months heat waves were observed – one per month (most pronounced at the end of June and in August, longer lasting at the coast). In all three months convective related severe weather phenomena (thunderstorms, hail, heavy rains, flash floods, waterspouts) were observed mostly all over Croatia. In June, severe thunderstorms accomanied with rain, hail and very strong wind hit Istra on June 16, especially Rovinj. Damage from falling trees was recorded in Auto camps and 7 people were injured.

Due to the strong wind, there were some stranded boats. On June 27 severe thunderstorm hit continental part of Croatia - damage on corps due to hail were reported.

In **July** convective activity was very frequent all over Croatia. From July 6th to 8th, the area of several counties was affected by severe thunderstorms accompanied by galeforce winds, heavy rain and hail. There was a lot of material damage from fallen trees and hail on roofs and facades. In Split, on July 8, there was extensive damage to the Marjan Forest Park, where almost 4,000 trees were felled, and the damage is estimated at 3 to 5 million euros. A few dozen people were injured, two seriously. In the port, due to the breaking of the rope with which the ferry was tied, it caused damage to other ships, fortunately only material damage. There were also severe storms that affected a larger area towards the end of the month (July 26 and 27). Material damage was recorded due to stormy winds, flash floods and hail, and there were interruptions in the electricity supply in the continental part of Croatia and in the northern and central Adriatic. In Poreč (Istria), more than 50 mm of rain fell in a short time, causing flash floods. There were no injuries.

August - There were severe thunderstorms in August, but fewer than in July. At the end of the month (August 29th and 30th), a thunderstorm hit the Adriatic coast and areas along the Adriatic, especially the south, with gale-force

		winds and heavy rain. There were floods and landslides in the south, causing traffic disruptions. The daily precipitation amount at the Zavižan (highest mountain station) was 78 mm.