

Republic Hydrometeorological Service of Serbia

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MONTHLY BULLETIN FOR SERBIA

MARCH 2025

Belgrade, the 4th of April 2025

Division for Climate Monitoring and Climate Forecast
Department of National Center for Climate Change, Climate Model Development and Disaster
Risk Assessment

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Contents

AIR TEMPERATURE	1
Mean monthly air temperature	1
Maximum air temperature	5
Minimum air temperature.....	7
PRECIPITATION	9
CLOUD COVER, BRIGHT AND CLOUDY DAYS	14
SUNSHINE DURATION (INSOLATION)	16
OVERVIEW OF THE SYNOPTIC SITUATION*	17
APPENDIX	18
Ranks of the warmest March.....	18
Ranks of the highest precipitation in March	22
Mean air temperature	27
Maximum air temperature	31
Minimum air temperature.....	35
Precipitation	39

- ❖ *The 3rd warmest and 9th wettest March for Serbia in the period since 1951*
- ❖ *The wettest for Crni Vrh, 2nd wettest for Dimitrovgrad, Cuprija, Leskovac and Kopaonik*
- ❖ *Record-breaking mean maximum air temperature at Crni Vrh, Cuprija and Dimitrovgrad*
- ❖ *Tropical day was recorded for the 2nd time in history in Krusevac*
- ❖ *Heat wave was recorded at all stations apart from Loznica*
- ❖ *Crni Vrh observed the highest mean minimum air temperature since record-keeping began*
- ❖ *Record low number of frost days at Crni Vrh and Kopaonik*
- ❖ *The driest March at Crni Vrh*
- ❖ *Absolute daily March maximum precipitation sum was recorded at Kopaonik*

AIR TEMPERATURE

Mean monthly air temperature

March 2025 ranks as **the 3rd warmest** for Serbia in the period from 1951 to 2025 (*Figure 1*) with the mean air temperature of 9,2 °C only behind March 2024 with the mean air temperature of 9,7 °C and March 2001 with the mean air temperature of 9,6 °C. March 2025 was **the warmest** for Crni Vrh since the record-keeping at this station began with the mean air temperature of 5,9 °C thereby breaking the previous record of 5,6 °C set in 1990. Dimitrovgrad, Kopaonik, Cuprija and Leskovac had their **2nd warmest** March since the record-keeping at these stations began, while for most of the country March 2025 was among the warmest in the history (*Table 1*).

In [appendix](#) are graphs depicting 15 warmest years since the measurements for the stations began: Crni Vrh, Dimitrovgrad, Kopaonik, Cuprija, Zlatibor, Beograd and Krusevac.

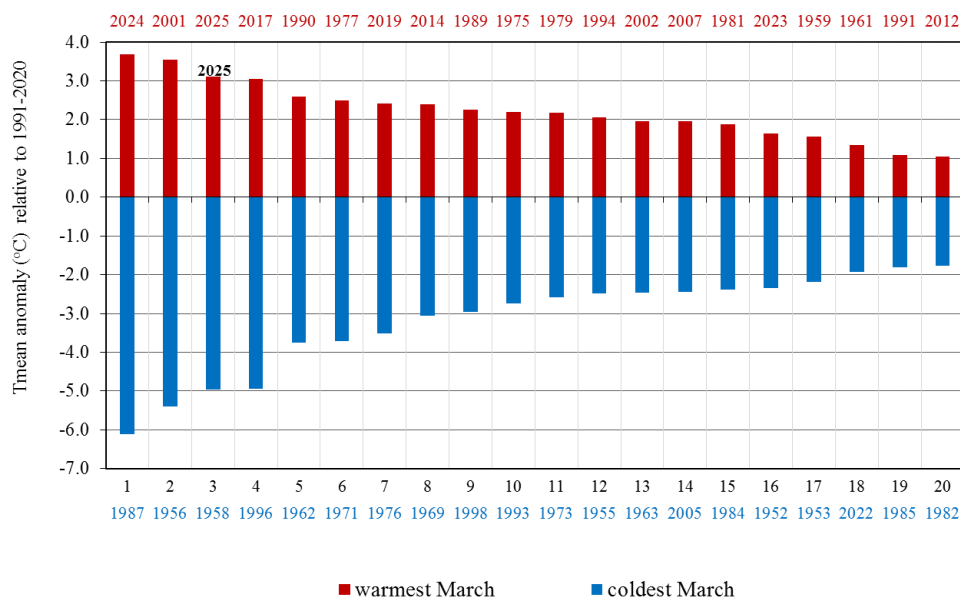


Figure 1. Rank of the warmest and coldest March in Serbia for the period from 1951 to 2025

Table 1. Ranking of March 2025 with mean air temperature, average and departure from the normal 1991-2020

STATION	historical period	Tmean (°C) - March 2025	1991-2020 base period for March	temperature anomaly (°C)	ranking for March 2025
CRNI VRH	1967-2024	5.9	1.4	4.5	1
DIMITROVGRAD	1945-2024	9.5	5.4	4.0	2
KOPAONIK	1950-2024	1.9	-1.8	3.7	2
CUPRIJA	1948-2024	10.3	6.7	3.6	2
LESKOVAC	1948-2024	9.7	6.8	2.9	2
KURSUMLIJA	1952-2024	9.6	6.0	3.7	3
ZLATIBOR	1951-2024	6.5	2.9	3.6	3
BELGRADE	1888-2024	11.8	8.3	3.5	3
S.PALANKA	1939-2024	10.5	7.1	3.4	3
POZEGA	1952-2024	8.6	5.7	2.9	3
KRUSEVAC	1927-2024	10.8	7.1	3.7	4
KRALJEVO	1926-2024	10.8	7.2	3.6	4
SJENICA	1947-2024	5.6	2.2	3.4	4
KRAGUJEVAC	1925-2024	10.5	7.1	3.3	4
VRANJE	1926-2024	9.9	6.7	3.1	4
B.KARLOVAC	1986-2024	9.6	6.8	2.8	4
LOZNICA	1952-2024	10.2	7.5	2.6	4
NIS	1925-2024	10.8	7.5	3.3	5
VALJEVO	1927-2024	10.3	7.2	3.1	5
V.GRADISTE	1926-2024	9.8	6.8	3.0	5
NOVI SAD	1948-2024	9.7	7.0	2.7	6
ZRENJANIN	1944-2024	9.6	7.0	2.6	6
KIKINDA	1948-2024	9.4	6.8	2.6	7
S.MITROVICA	1925-2024	9.4	6.9	2.6	8
NEGOTIN	1927-2024	9.9	7.3	2.5	8
PALIC	1945-2024	8.7	6.6	2.2	9
ZAJECAR	1927-2024	8.9	6.4	2.6	10
SOMBOR	1942-2024	8.7	6.7	2.0	12

Mean air temperature in Serbia ranged from 8,6 °C in Pozega to 11,8 °C in Belgrade, and on the mountains from 1,9 °C at Kopaonik to 6,5 °C at Zlatibor (*Figure 2*).

Departure of the mean air temperature from the normal ¹ for the 1991–2020 base period ranged from +2,0 °C in Sombor to +4,5 °C at Crni Vrh (*Figure 3*).

Mean March air temperature, based on the percentile method², was in the categories of very warm and extremely warm in most of the country, warm category on Palic, Sombor, Novi Sad, Zrenjanin, Kikinda and Zajecar (*Figure 4*).

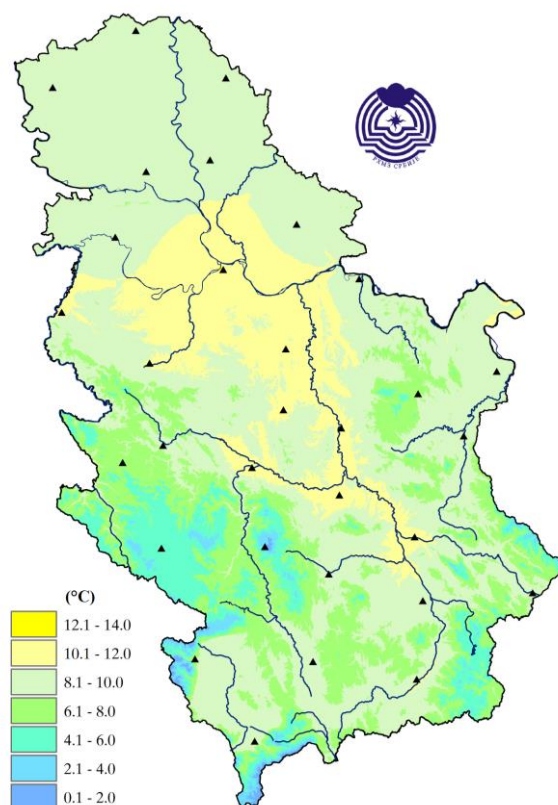


Figure 2. Spatial distribution of mean monthly air temperature (°C)

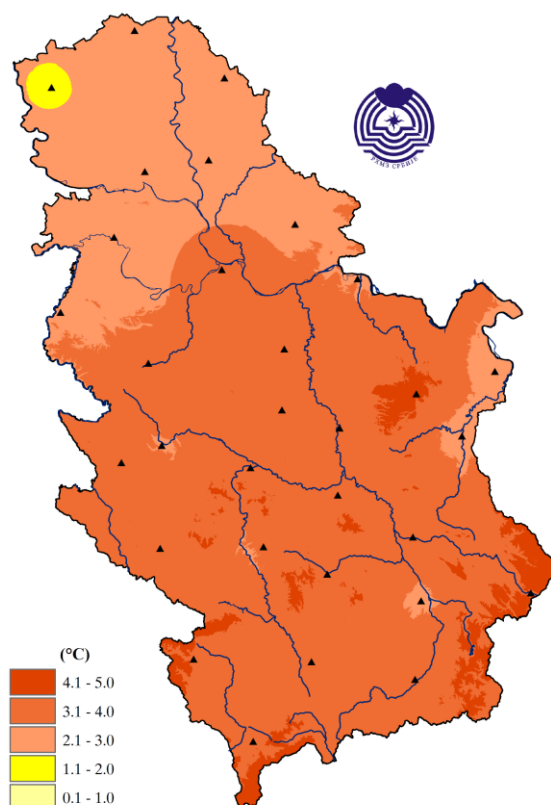


Figure 3. Spatial distribution of mean monthly air temperature anomaly (°C)

¹ Term **normal** refers to **climatological standard normal**, that is, the average value of a particular climate element, calculated for the period from January 1, 1991 to December 31, 2020

² **n**th percentile of a variable refers to the value of the observed variable below which there is n percent of data previously arranged in an ascending order

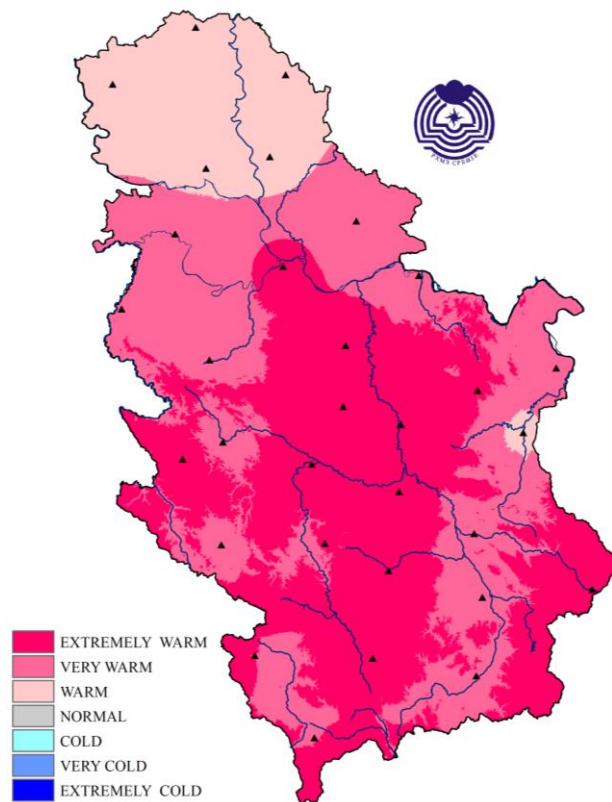


Figure 4. Spatial distribution of the mean monthly air temperature using percentile method

Mean daily air temperature in Belgrade, based on the percentile method, was in the categories of very warm and extremely warm at the end of the first and most of the second decade, in the very cold category in the middle of the month, and in the warm category at the beginning of the third decade (*Figure 5*). Daily course of the mean daily air temperature and the accompanying percentiles for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the [Appendix](#).

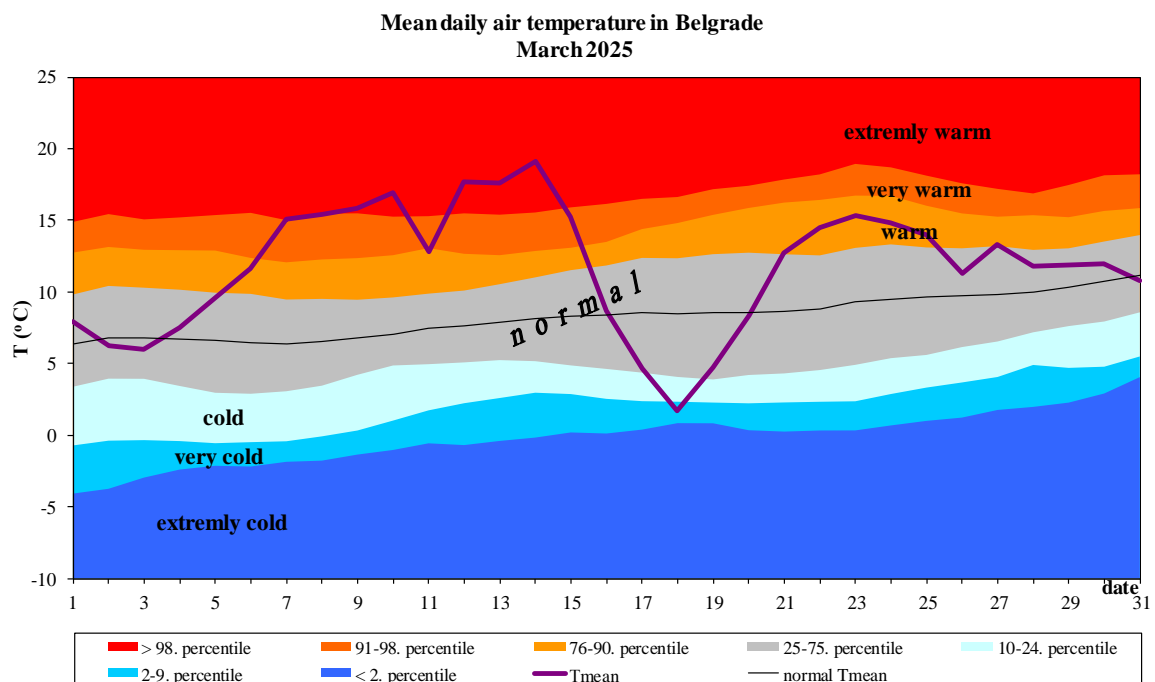


Figure 5. Daily course of the mean daily air temperature and accompanying percentiles for Belgrade

Maximum air temperature

Mean maximum air temperature ranged from 14,9 °C on Palic to 17,9 °C in Cupriji, and 16,9 °C in Belgrade. On the mountains, mean maximum March air temperature ranged from 6,1 °C at Kopaonik to 12,3 °C in Sjenica.

Based on the percentile method, mean maximum monthly air temperature was in the categories of very warm and extremely warm in most of Serbia, warm category in Sombor, Loznica and Sremska Mitrovica.

Mean maximum air temperature at Crni Vrh, Cuprija and Dimitrovgrad is the highest ever recorded (*Table 2*).

Table 2. The surpassed values of mean maximum air temperature

MMS	Tmeanmax March 2025	Previous record Tmeanmax entire set	Year of previous record Tmeanmax
CUPRIJA	17.9	17.6	2001
DIMITROVGRAD	17.4	16.9	1947
CRNI VRH	10.8	10.3	1990

In Serbia, the highest maximum daily air temperature of 30,0 °C was measured in Krusevac on March 15. On the same day, Belgrade observed the highest air temperature of 24,3 °C.

Number of ice days³ was as follows: Kopaonik – 2 days, Crni Vrh, Zlatibor and Sjenica – 1 day.

Number of summer days⁴ was as follows: Čuprija – 3 days, Kragujevac and Nis – 2 days, Banatski Karlovac, Valjevo, Smederevska Palanka, Veliko Gradisite, Pozega Kraljevo, Kuršumlja, Krusevac, Leskovac, Zajecar, Dimitrovgrad and Vranje – 1 day.

One tropical day⁵ was recorded in Krusevac, which happened only once in 1952.

One heat wave⁶ was recorded in all of Serbia, apart from Loznica, lasting from middle of the first until the middle of the second decade of March at most stations (*Table 3*). The longest lasting heat wave, total of 12 days, was registered at Crni Vrh, Vranje and Dimitrovgrad.

³ Ice day is defined as the day with maximum air temperature lower than 0 °C

⁴ Summer day refers to a day with maximum daily air temperature 25 °C and above

⁵ Tropical day refers to a day with maximum daily air temperature 30 °C and above

⁶ Heat wave is, according to the percentile method, is a period during which maximum daily air temperature is in the very warm and extremely warm categories for 5 consecutive days or longer

Table 3. Heat waves in Serbia

HEAT WAVES IN SERBIA - MARCH 2025																															
(relative to the 1991-2020 period)																															
MARCH																															
station/day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
PALIC					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
SOMBOR					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KIKINDA					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
ZRENJANIN					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
NOVI SAD					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
SR.MITROVICA					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
BELGRADE					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
LOZNICA																															
VALJEVO					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
V.GRADISTE					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
SM.PALANKA					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KRAGUJEVAC					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KRALJEVO					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
POZEGA					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
ZLATIBOR					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
CUPRIJA					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KRUSEVAC					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
NEGOTIN					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
ZAJECAR					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
CRNI VRH					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KOPAONIK					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
SJENICA					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
NIS					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
VRANJE					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
DIMITROVGRAD					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
LESKOVAC					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
KURSUMLIJA					EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW
B.KARLOVAC					VW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW

EW	EXTREMELY WARM
VW	VERY WARM

Figure 6 shows daily course of the maximum daily air temperature and the accompanying percentiles for Belgrade in March 2025 and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the [Appendix](#).

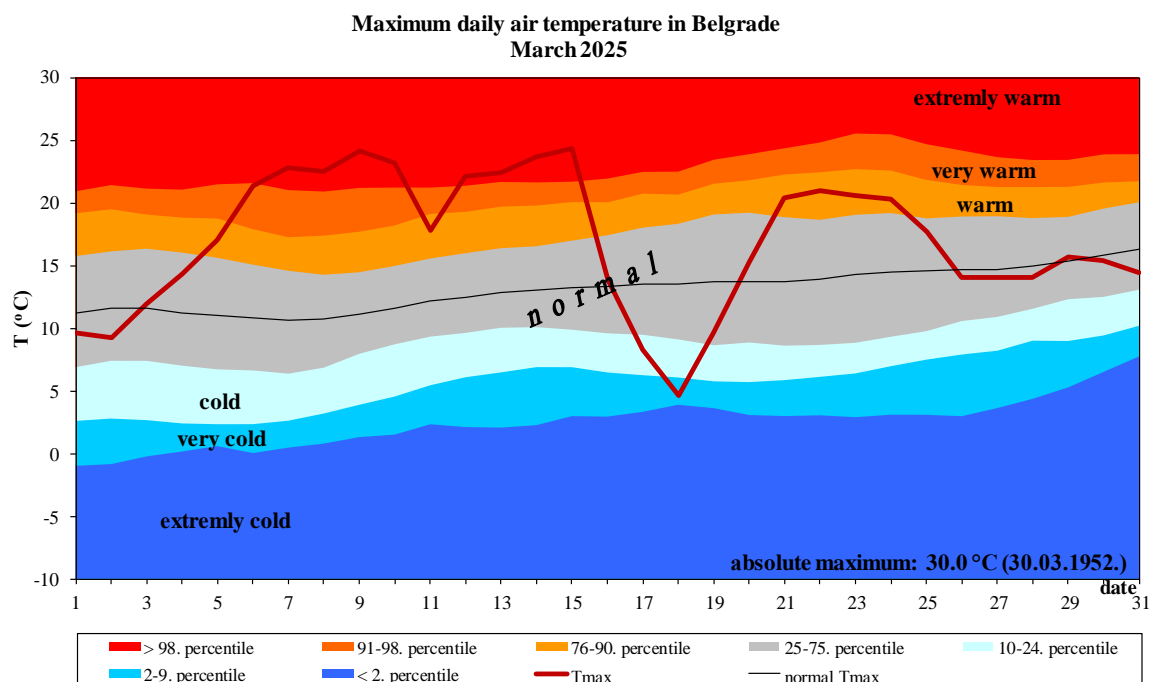


Figure 6. Daily course of the maximum daily air temperature and accompanying percentiles for Belgrade

Minimum air temperature

Mean minimum air temperature in March ranged from 1,8 °C in Zajecar to 7,5 °C in Belgrade. On the mountains, mean minimum air temperature ranged from -1,0 °C at Kopaonik to 2,8 °C at Zlatibor.

Based on the percentile method, mean minimum monthly air temperature was in the categories of very warm and extremely warm in most of the country, warm on Palic, Sombor, Novi Sad and Zajecar.

Crni Vrh observed **the highest mean minimum air temperature since the record-keeping at this station began**, amounting to 2,7 °C, compared to the previous record of 1,7 °C set in 2001.

The lowest minimum daily air temperature of -13,0 °C was measured at Kopaonik on March 18. In the lowland, the lowest daily air temperature of -8,0 °C was recorded in Zajecar on March 19. On the same day, Belgrade observed the lowest monthly air temperature of -2,9 °C.

Number of frost days⁷ ranged from 2 in Belgrade to 13 days in Zajecar. On the mountains, number of frost days ranged from 8 at Crni Vrh to 15 in Sjenica. The recorded number of frost days was 7 to 14 days below March average for the mountains, and around the average in the low-lying areas.

Crni Vrh observed 8 frost days which is **the record low number of frost days** during March ever registered at this station. The previous record of 9 days was set in March 1981. Similarly, Kopaonik observed record low number of frost days, total of 12, thereby breaking the previous record of 16 days set in March 2001.

Kopaonik recorded 2 days with severe frost⁸.

Figure 7 shows assessment of the minimum and maximum air temperature in Serbia for March based on the tercile distribution relative to the 1991-2020 base period. It can be noted that the mean maximum and mean minimum air temperature are above the upper tercile threshold (the third warmest).

⁷ Frost day is defined as the day with minimum air temperature lower than 0°C

⁸ Day with severe frost is defined as the day with the minimum air temperature -10 °C and below

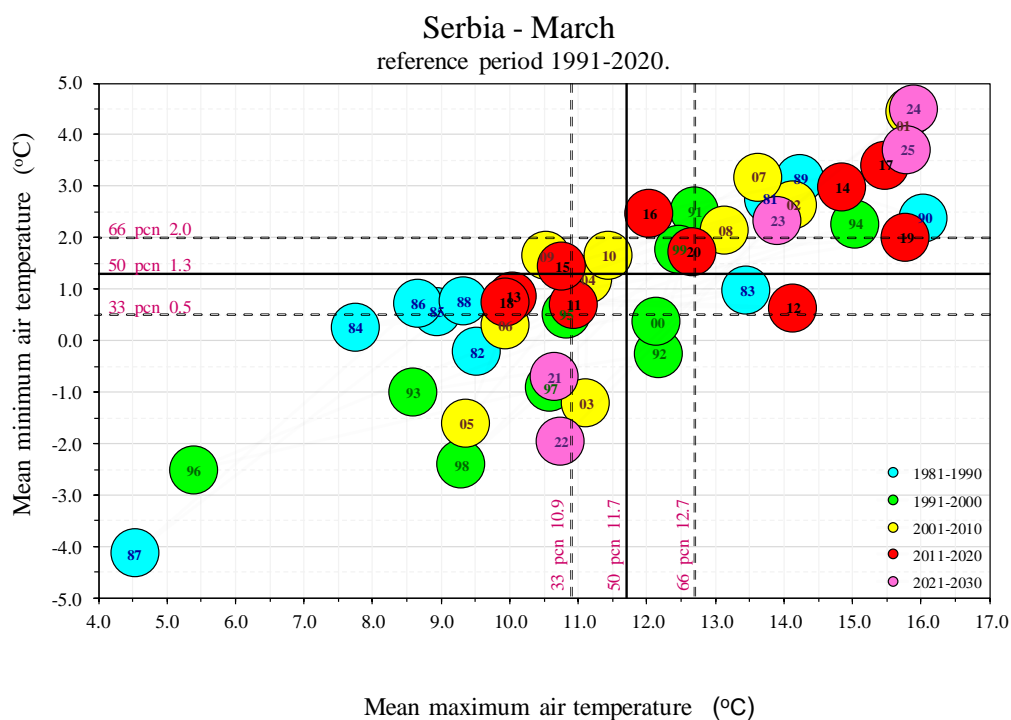


Figure 7. Assessment of minimum and maximum air temperature for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 8 shows daily course of the minimum daily air temperature and the accompanying percentiles for Belgrade in March 2025, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the [Appendix](#).

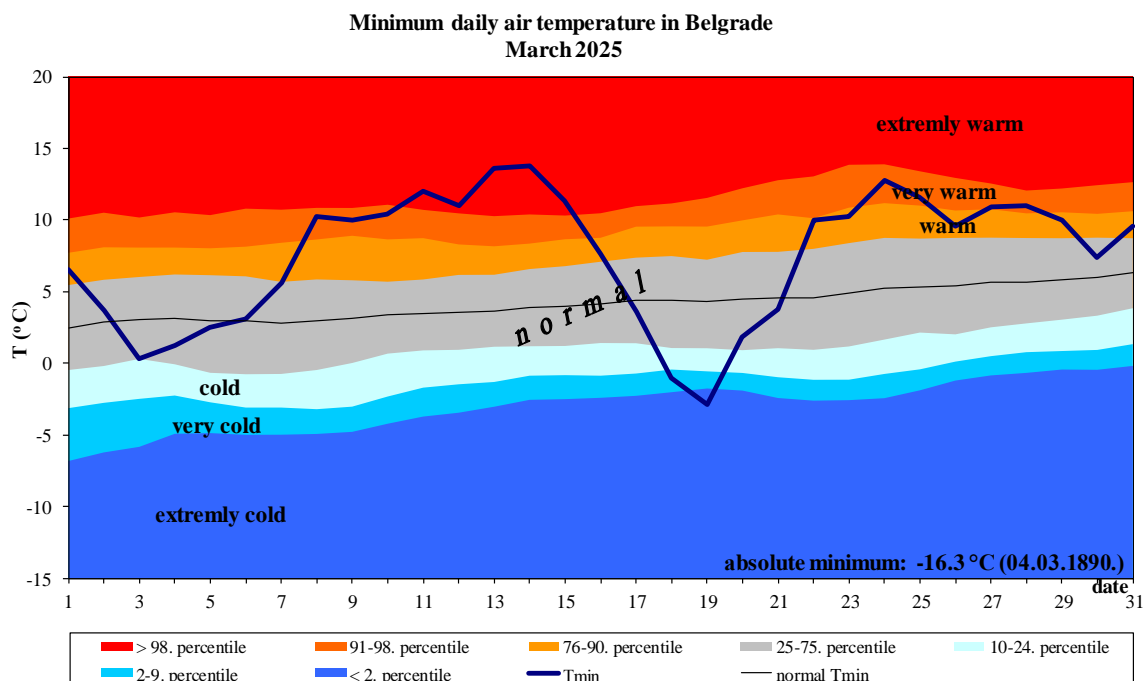


Figure 8. Daily course of the minimum daily air temperature and accompanying percentiles for Belgrade

PRECIPITATION

March ranks as the 9th wettest for Serbia since 1951 (*Figure 9*). March 2025 was **the wettest** at Crni Vrh, the 3rd wettest for Zlatibor, Palic and Pozega since record-keeping began (*Table 4*).

In the [appendix](#) are graphs showing 15 wettest years since the record keeping began for the stations Crni Vrh, Zlatibor, Pozega, Palic, Kragujevac, Sombor, Sjenica, Kikinda and Novi Sad.

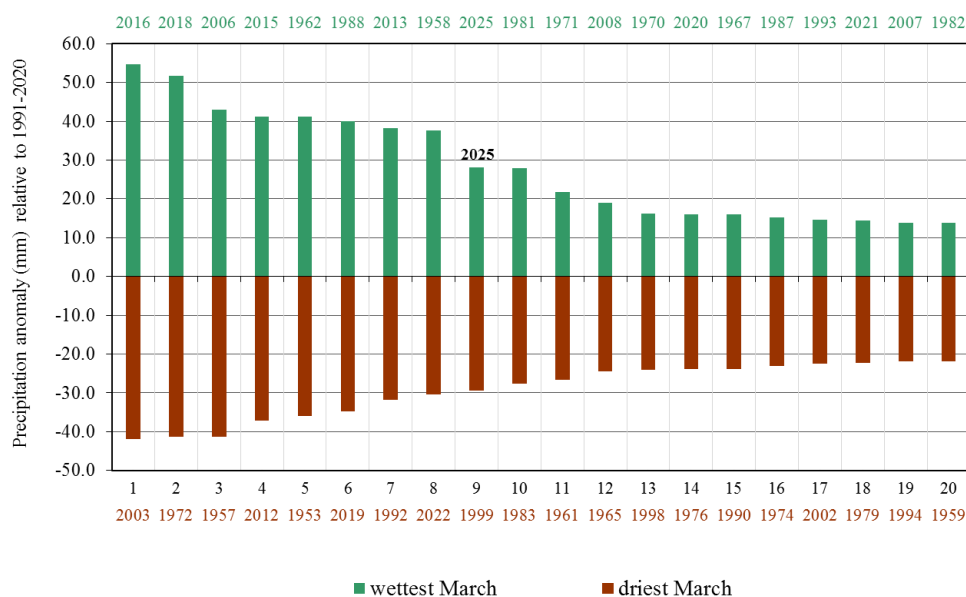


Figure 9. Rank of the wettest and driest Marches in Serbia for the period from 1951 to 2025

Table 4. The ranking of March 2025 in terms of precipitation, average and percentage of the 1991-2020 normal

STATION	historical period	Σ RR for March 2025 (mm)	normal for March 1991-2020	percentage (%) from normal	ranking for March 2025 (descending RR)
CRNI VRH	1967-2024	107.4	52.7	204	1
ZLATIBOR	1950-2024	184.9	81.0	228	3
POZEGA	1925-2024	113.2	52.7	215	3
PALIC	1936-2024	83.3	34.7	240	3
KRAGUJEVAC	1925-2024	106.2	46.6	228	5
SOMBOR	1931-2024	86.4	35.4	244	5
SJENICA	1925-2024	89.4	56.6	158	6
KIKINDA	1925-2024	75.2	34.8	216	6
NOVI SAD	1945-2024	73.7	38.7	191	6
LOZNICA	1925-2024	117.7	65.0	181	8
KOPAONIK	1950-2024	117.6	84.6	139	9
VALJEVO	1926-2024	102.9	58.6	176	10

March precipitation sums ranged from 29,4 mm in Zajecar to 184,9 mm at Zlatibor, while Belgrade recorded 64,8 mm (*Figure 10*).

Precipitation totals compared to the normal for the 1991-2020 base period ranged from 65% in Zajecar to 244% in Sombor (*Figure 11*).

Based on the percentile method, precipitation sums were in the categories of rainy and very rainy in most of Serbia, extremely rainy in Sombor and Crni Vrh, and normal in Belgrade, Veliko Gradiste, Negotin, Kursumlija, Krusevac, Cuprija, Nis, Leskovac and Zajecar (*Figure 12*).

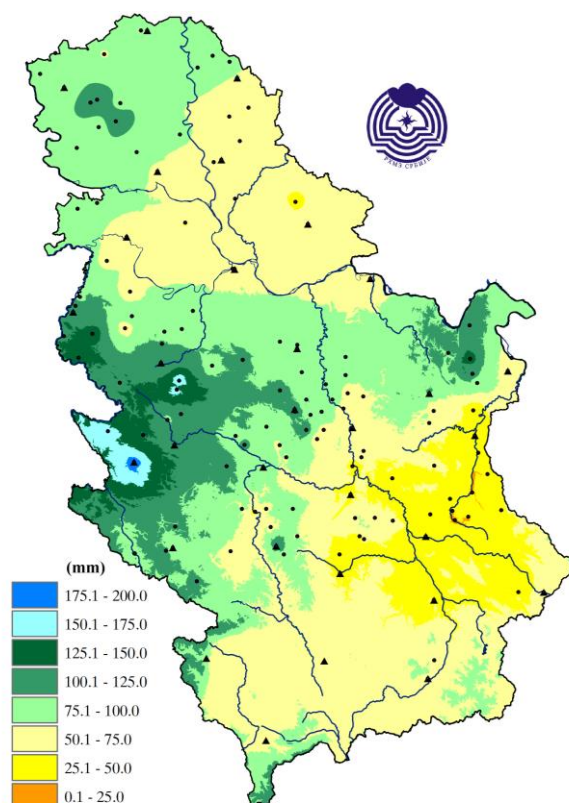


Figure 10. Spatial distribution of the monthly precipitation sums (mm) according to data from 28 major meteorological, 23 climatological and 91 rain gauge stations

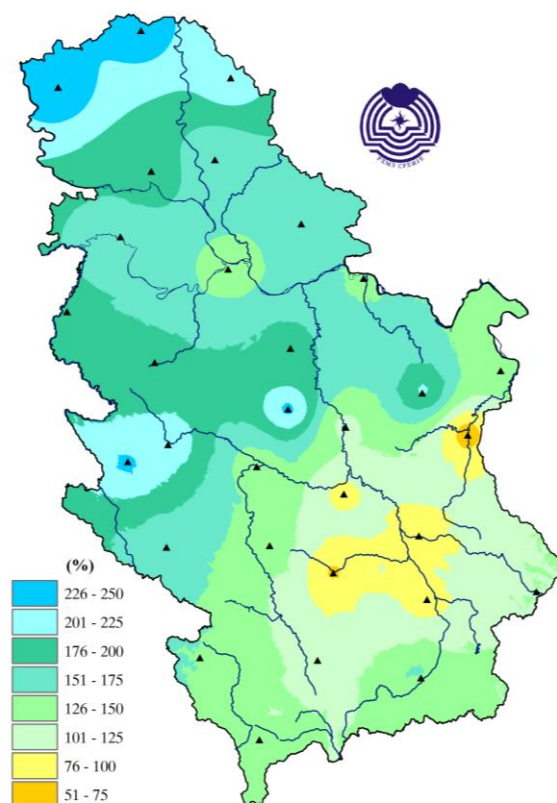


Figure 11. Spatial distribution of the monthly precipitation sums in the percentages of normal for the 1991–2020 base period

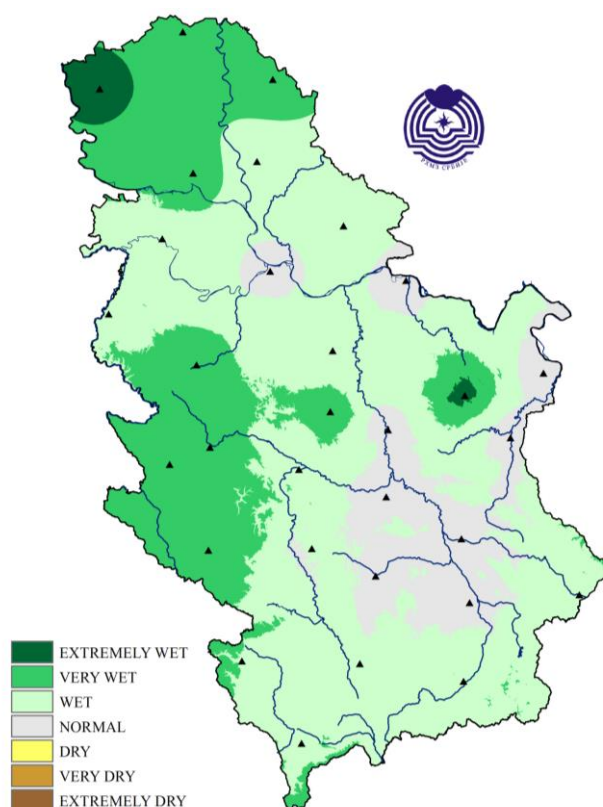


Figure 12. Monthly precipitation sums according to the percentile method

The highest daily precipitation sum of 47,9 mm was measured at Kopaonik on March 28 thereby **surpassing the absolute daily precipitation maximum** for Kopaonik of 47,0 mm measured on March 31, 1967. On March 27, the highest daily precipitation sum of 22,7 mm was recorded in Belgrade.

Number of days with precipitation during March ranged from 12 in Negotin to 19 in Kraljevo (*Figure 13*). The recorded number of days with precipitation was 2 to 6 days above March average in most of Serbia (*Figure 14*).

Crni Vrh recorded 2 days with precipitation above 20 mm which is the highest ever recorded sum at this station. The previous maximum of 1 day was recorded during March 1982, 1987, 1996 and 2001. In Kragujevac (2 days) and Zlatibor (3 days) these maximum values equal the previous records.

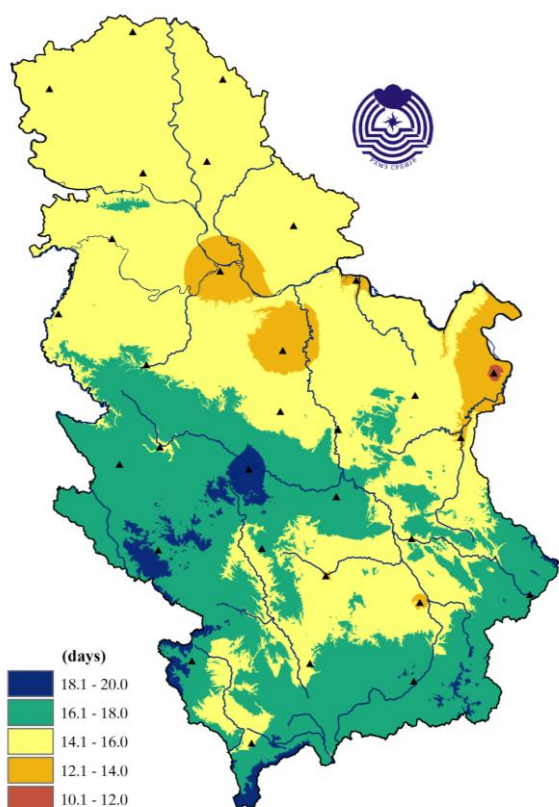


Figure 13. Spatial distribution of number of days with precipitation

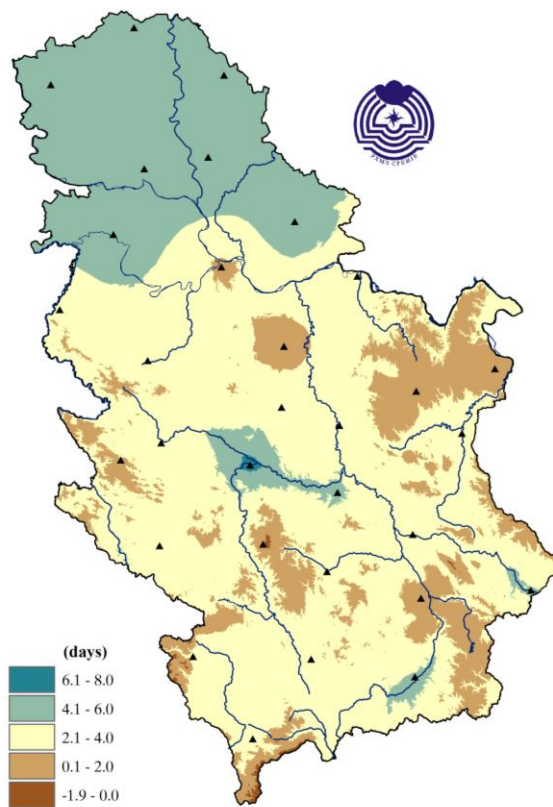


Figure 14. Spatial distribution of deviation of number of days with precipitation

Snow cover was recorded on the mountains. The highest snow cover depth of 36 cm was measured at Kopaonik on March 2 and 3.

Number of days with snow cover was as follows: Kopaonik – 17 days, Zlatibor – 6 days, Crni Vrh – 3 days, Sjenica – 2 days. The recorded number of days with snow cover was 2 to 5 days below March average, and on the mountains from 13 to 17 days below March average.

Fog was recorded in certain parts of Serbia. In the north, as well as parts of central and southern Serbia, 1 to 2 days were recorded, and on the mountains 10 to 19 days.

Figure 15 shows assessment of air temperature and precipitation sums for Serbia for March based on the tercile distribution relative to the 1991 – 2020 base period. It can be noted that March 2025 was marked by air temperature and precipitation sums above the upper tercile threshold.

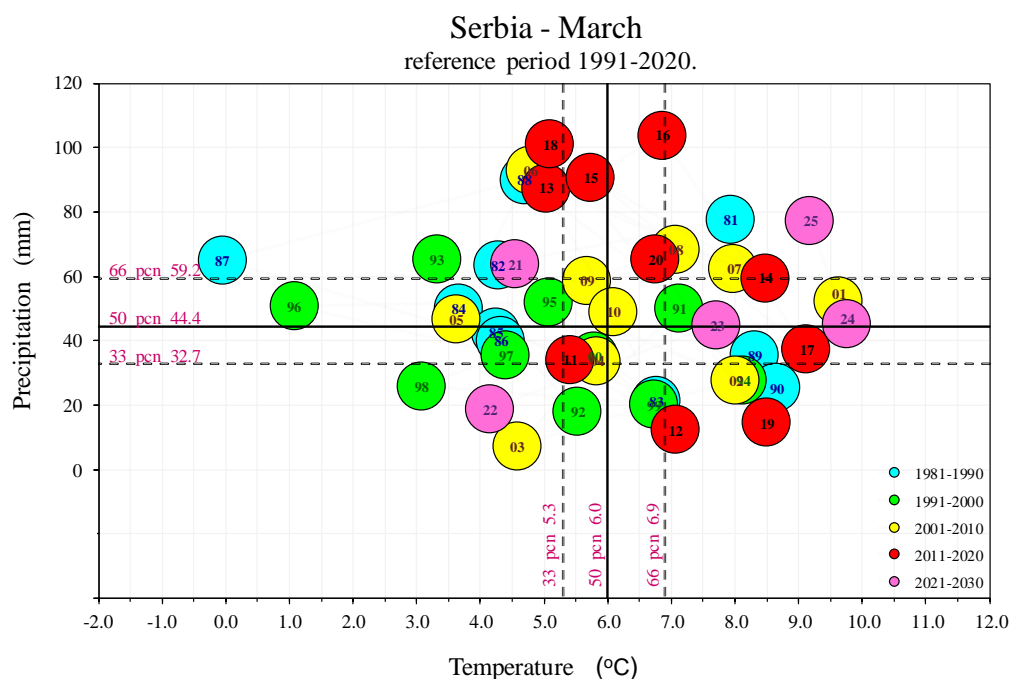


Figure 15. Assessment of air temperature and precipitation for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 16 show daily and cumulative precipitations sums with averaged normal 1991-2020 for March in Belgrade, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje precipitation sums are given in [Appendix](#).

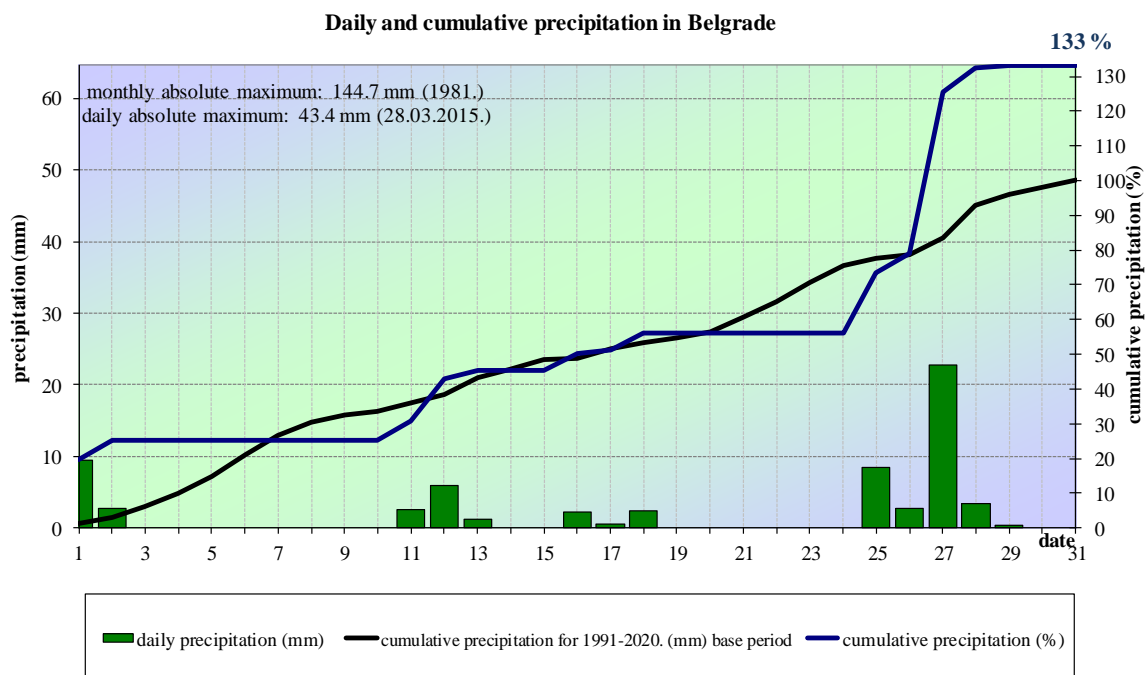


Figure 16. Daily and cumulative precipitation in Belgrade

CLOUD COVER, BRIGHT AND CLOUDY DAYS

Mean March cloud cover in Serbia was around the average, ranging from 5/10 to 7/10. Figures 17, 18 and 19 show average daily cloud cover in March for Belgrade, Kopaonik and Loznica.

Number of bright days⁹ ranged from 5 at Zlatibor to 10 at Crni Vrh and Nis, while Belgrade observed 9 bright days. The observed number of bright days was 2 to 4 days above the March average.

Number of cloudy days¹⁰ ranged from 9 in Loznica and Sremska Mitrovica to 18 at Crni Vrh and Kopaonik, while Belgrade observed 10 cloudy days. Number of cloudy days was 1 to 6 days above March average.

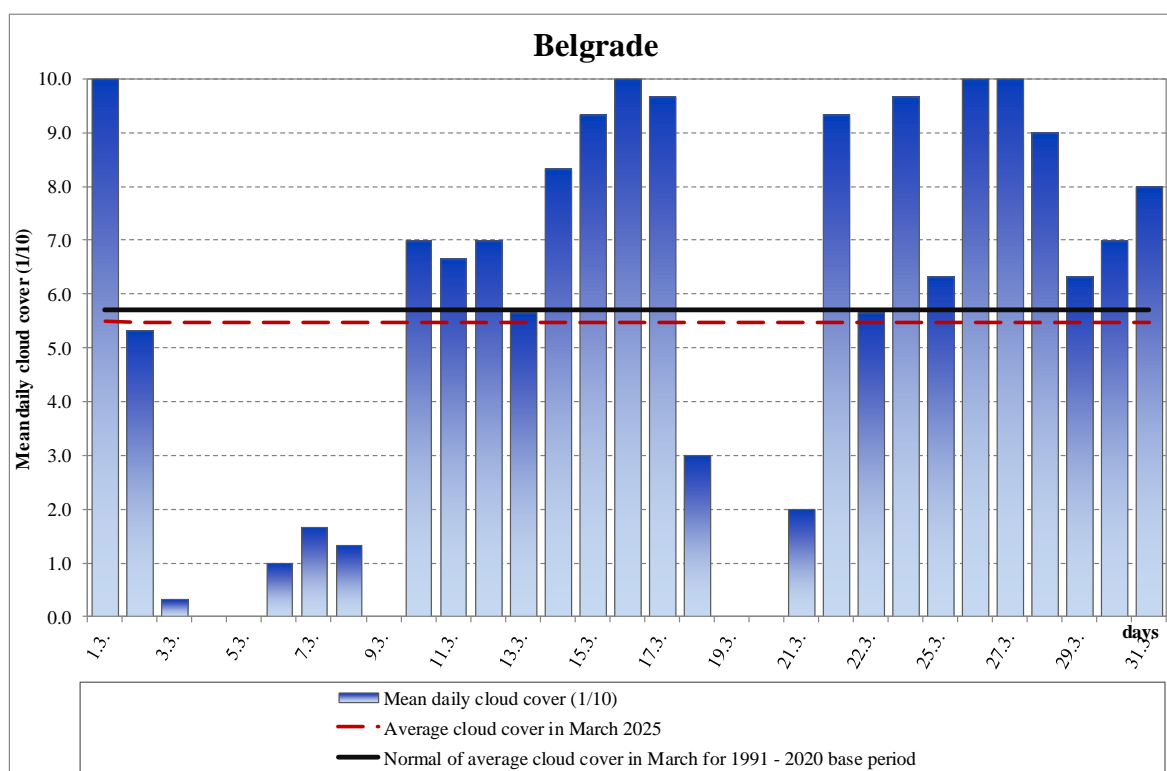


Figure 17. Mean daily cloud cover in Belgrade

⁹ Bright day refers to a day with cloud cover less than 2/10

¹⁰ Cloudy day refers to a day with cloud cover over 8/10

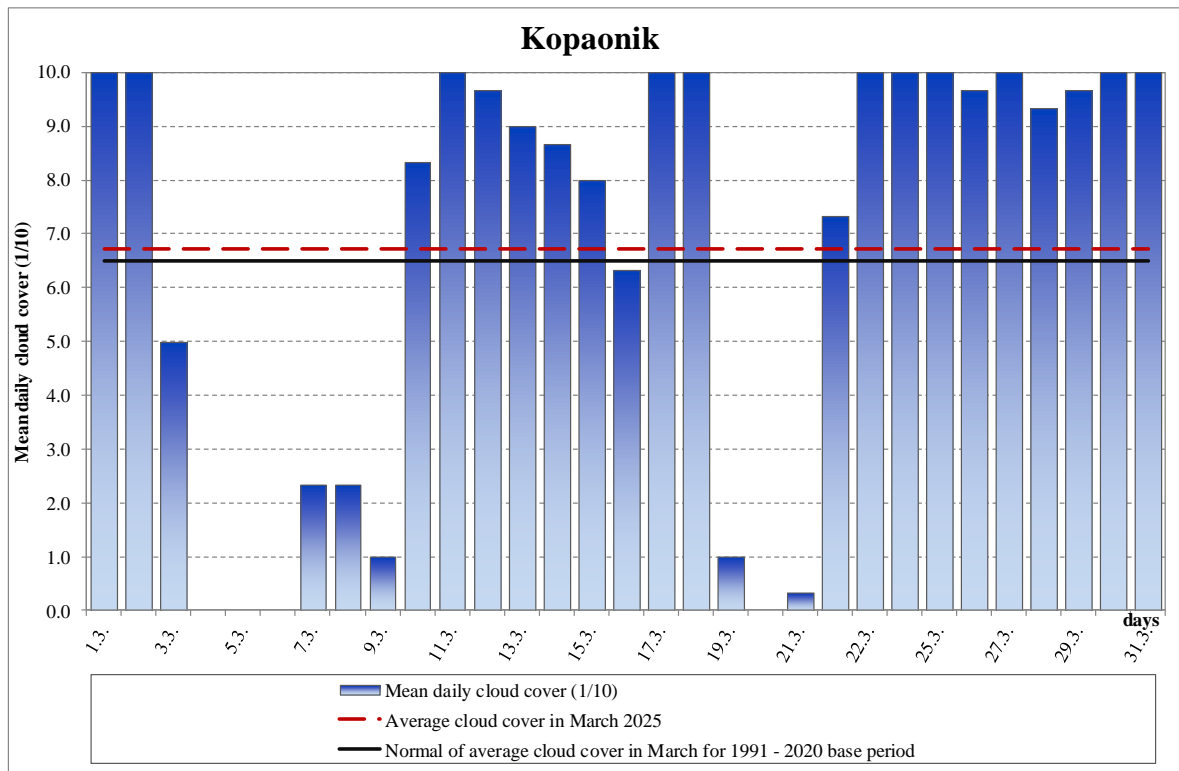


Figure 18. Mean daily cloud cover on Kopaonik

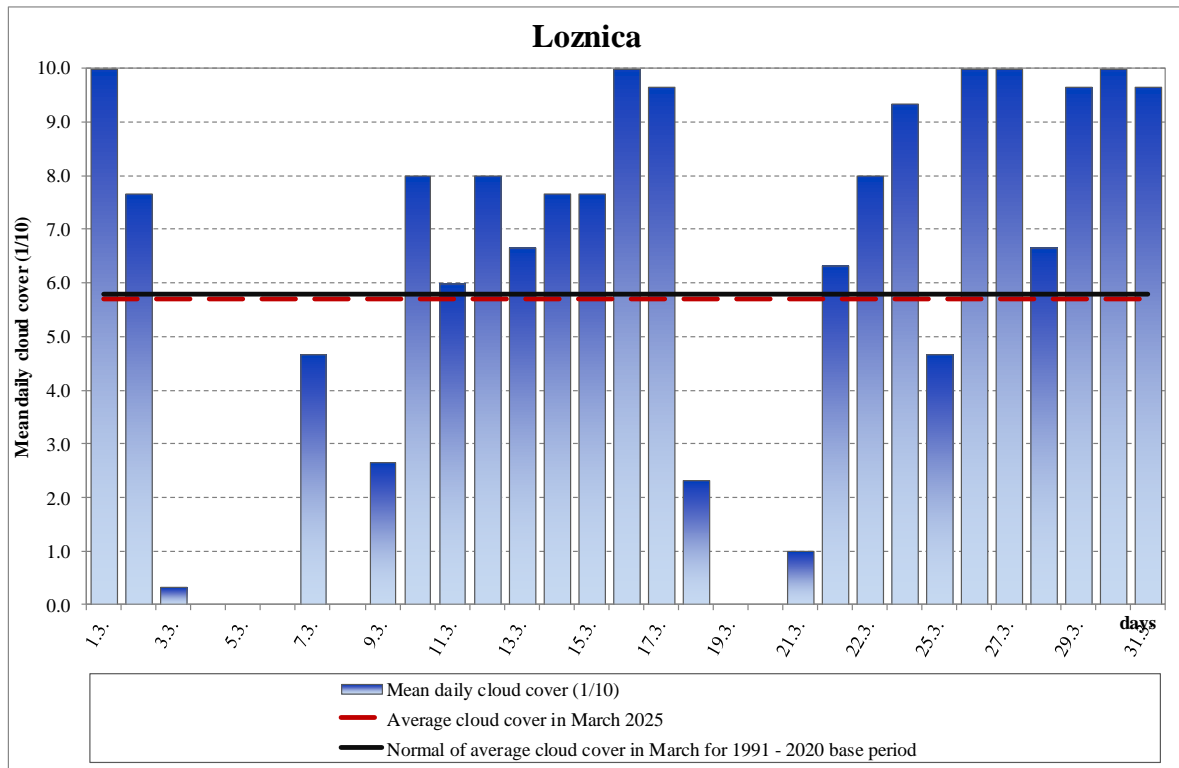


Figure 19. Mean daily cloud cover in Loznica

SUNSHINE DURATION (INSOLATION)

March insolation ranged from 110,7 hours in Leskovac to 169,8 hours in Kikinda (*Figure 20*).

March insolation ranged from 76% in Leskovac to 120% in Pozega compared to the normal for the 1991-2020 base period (*Figure 21*).

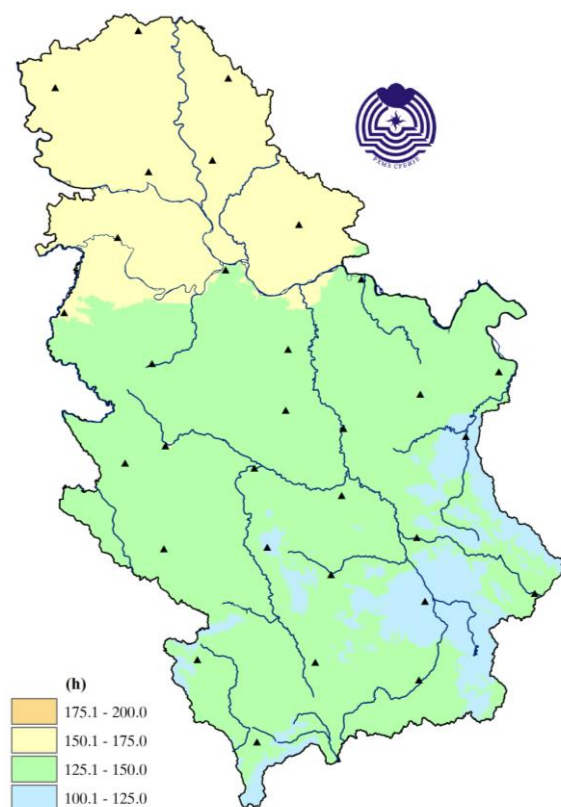


Figure 20. Insolation, expressed in hours

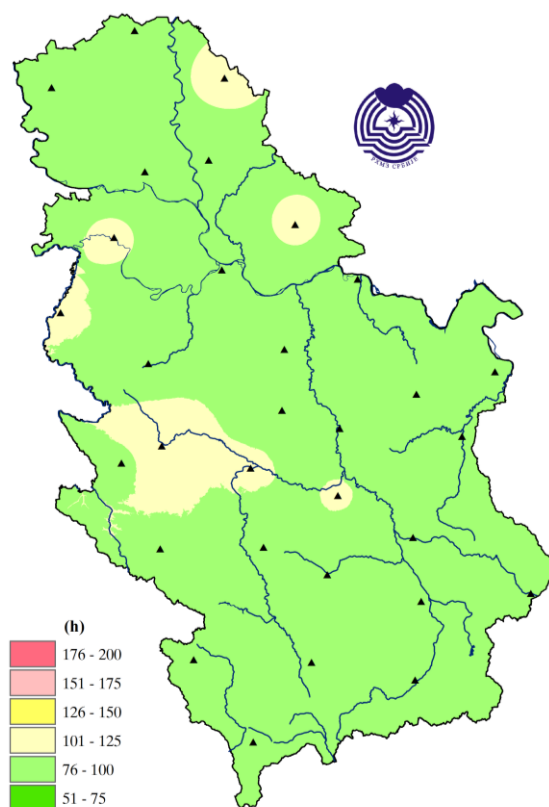


Figure 21. Insolation expressed in the percentages of normal

* **Note:** Climate analysis of meteorological elements was done based on the preliminary data obtained from 28 main meteorological stations

OVERVIEW OF THE SYNOPTIC SITUATION*

Periods of warm weather, a warm air mass, ridges in the geopotential and temperature field until mid-month, as well as at the end of the second and beginning of the third decade. At the beginning of the second decade and during most of the third, waves of wet air in a southwesterly and southerly circulation, along with a broad depression over the central Mediterranean; unsettled and rainy weather. At the beginning of the second half of the month, a rapid cold front brought a sudden and short-lived drop in temperature accompanied by snowfall and snow cover in lower areas.

At the beginning of the month, some rain persisted in central and southern regions, while in other areas it was dry with rising daytime temperatures. Until the end of the first decade, the weather was mostly sunny with warm days. The central and southern regions were initially influenced by an upper-air trough and a frontal wave, which moved from the western Mediterranean across our area to the eastern Balkans and the Mediterranean at the beginning of the month, gradually weakening. Then, marked cyclonic activity developed over the eastern Atlantic and the north of Scandinavia and Russia, while over most of Europe and our region there was a rise in geopotential, strengthening of a ridge both in the temperature field along with pronounced anticyclone.

Until the middle of the second decade, the weather remained relatively warm but cloudy, with occasional rain. Shallow disturbances and the incursion of wet air in the southwesterly upper-air circulation from the western and central Mediterranean caused more frequent precipitation affecting eastern and southwestern parts of the country. Consequently, a low pressure and the rapid passage of a cold atmospheric front brought a sudden drop in temperature from the north, with snow cover forming in some areas and in the lowland.

A brief period of settled weather followed at the end of the second and the beginning of the third decade; it was mostly dry and partly sunny during the day with rise in daytime temperatures following the establishment of a ridge, warm air advection, and the persistence of a surface anticyclone.

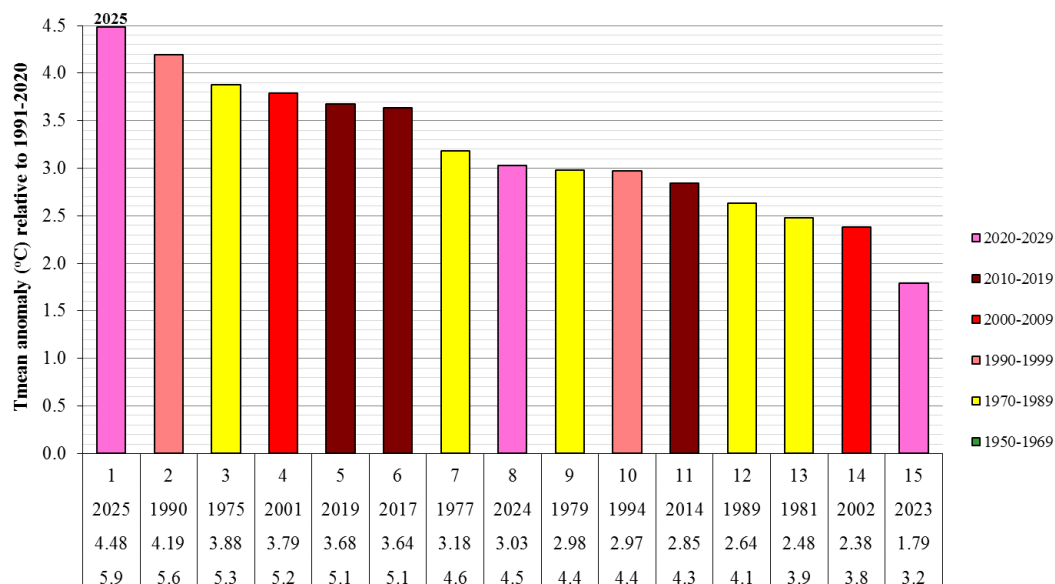
In a subsequent period, the deepening of the trough, that is, an increase in the meridional wave amplitude over the eastern Atlantic, southwestern and western Europe, led to the weakening of the ridge and strengthening of the southwesterly upper-air circulation over the western and central Mediterranean as well as the Balkan Peninsula. Later, toward the end of the month, a broad depression over the central Mediterranean and south to southeasterly upper-air circulation extending across the Balkans and Central Europe. The weather was relatively warm but cloudy, with occasional rain and wind.

* National Center for Hydrometeorological Early Warning System

APPENDIX

Ranks of the warmest March

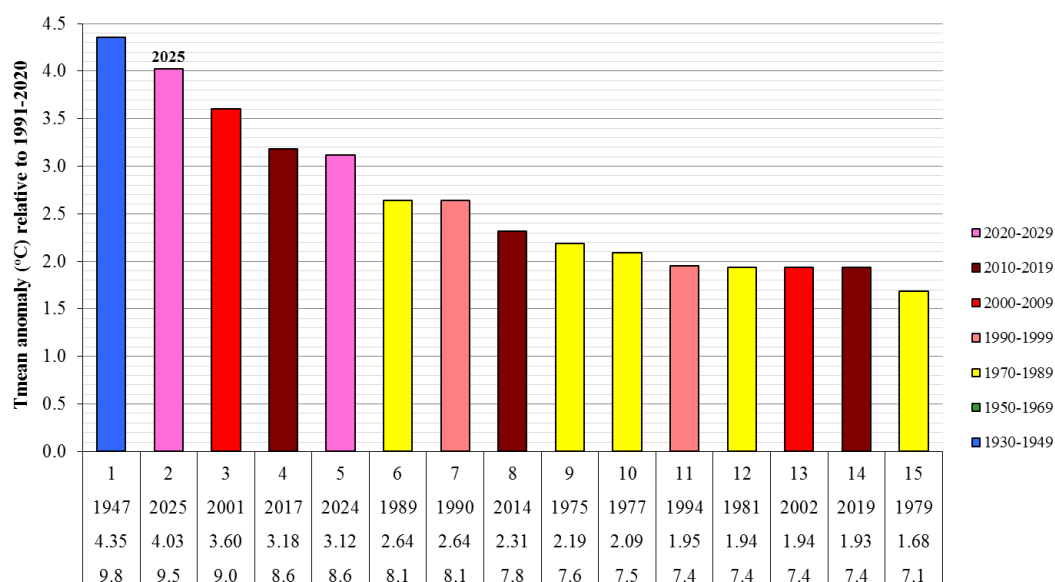
Anomaly of mean March temperature relative to 1991-2020 base period
Crni Vrh - 1967-2025 period



ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean

Appendix 1. Rank of the warmest March on Crni Vrh

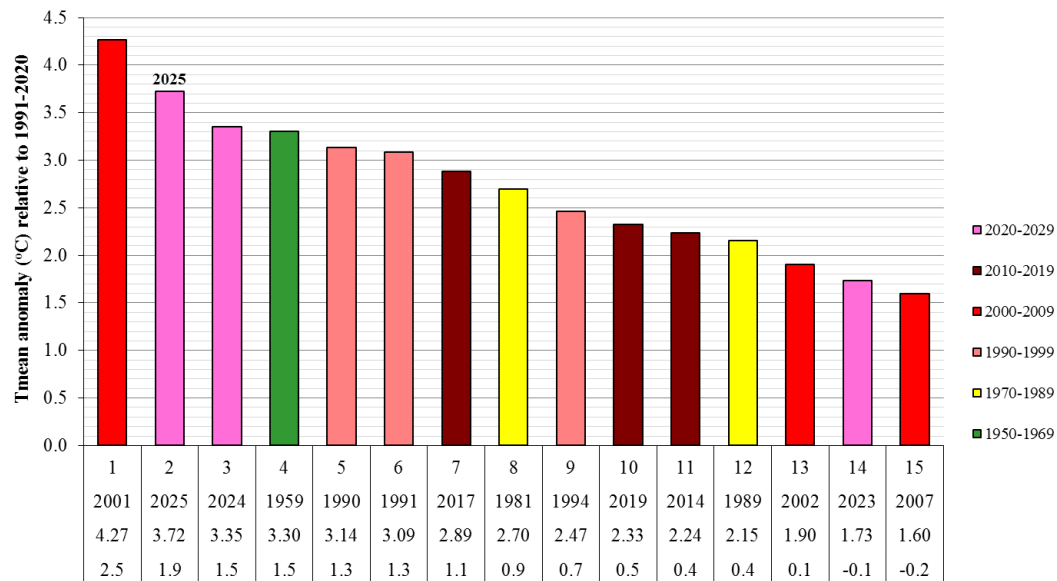
Anomaly of mean March temperature relative to 1991-2020 base period
Dimitrovgrad - 1945-2025 period



ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean

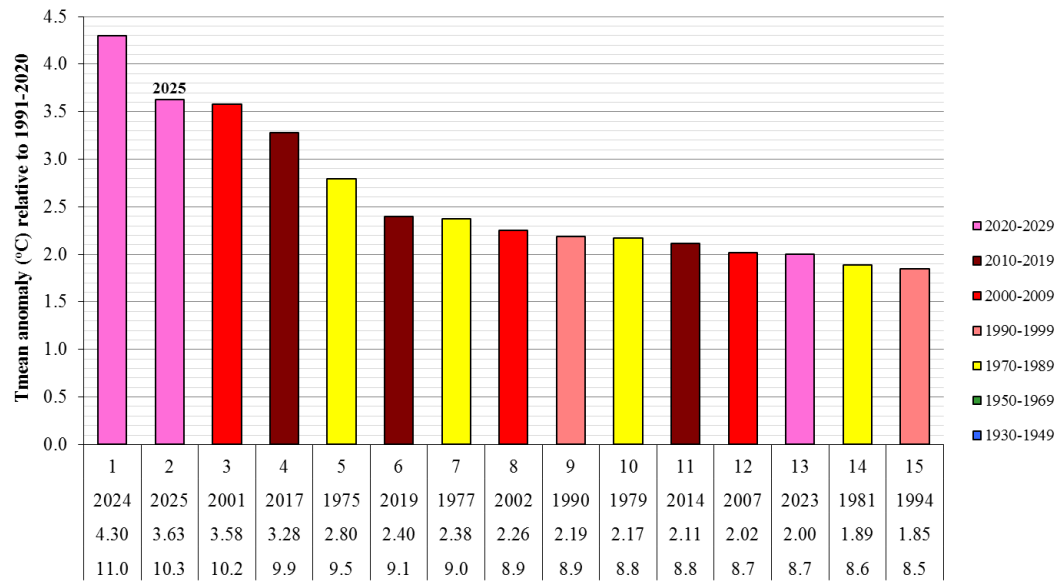
Appendix 2. Rank of the warmest March in Dimitrovgrad

**Anomaly of mean March temperature relative to 1991-2020 base period
Kopaonik - 1950-2025 period**



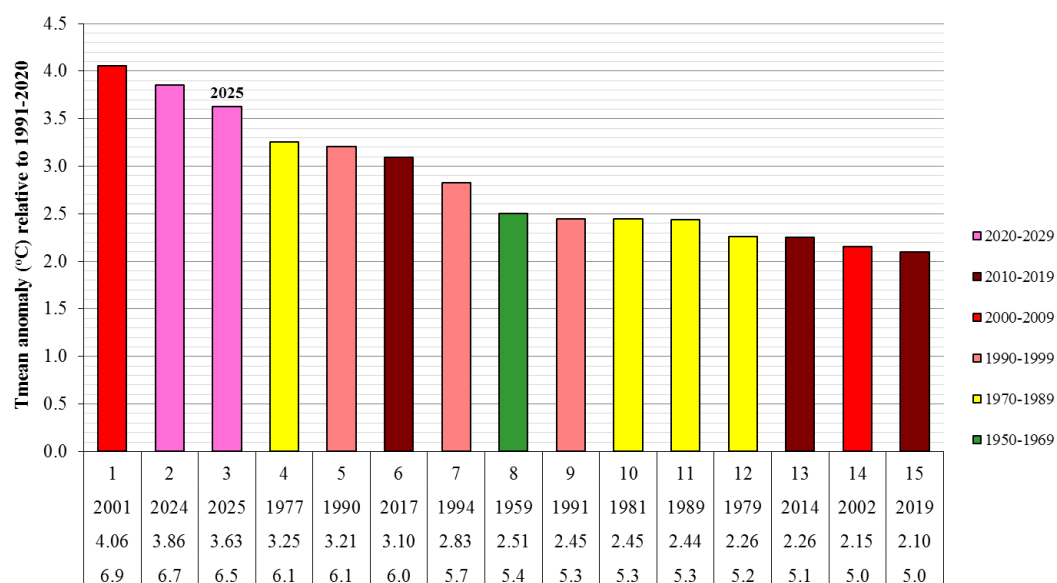
ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean
Appendix 3. Rank of the warmest March on Kopaonik

**Anomaly of mean March temperature relative to 1991-2020 base period
Cuprija - 1948-2025 period**



ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean
Appendix 4. Rank of the warmest March in Cuprija

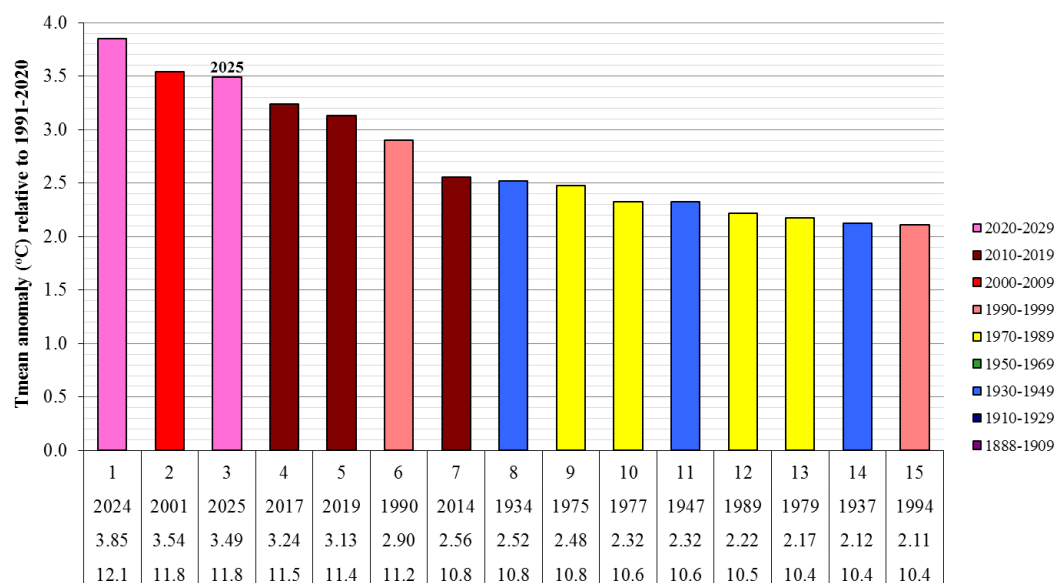
**Anomaly of mean March temperature relative to 1991-2020 base period
Zlatibor - 1951-2025 period**



ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean

Appendix 5. Rank of the warmest March on Zlatibor

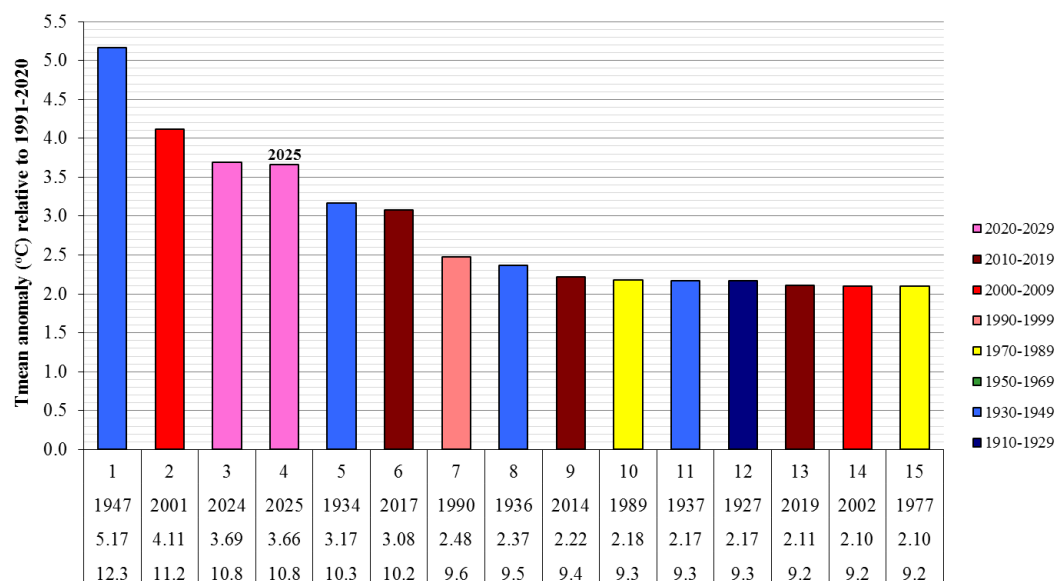
**Anomaly of mean March temperature relative to 1991-2020 base period
Belgrade - 1888-2025 period**



ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean

Appendix 6. Rank of the warmest March in Belgrade

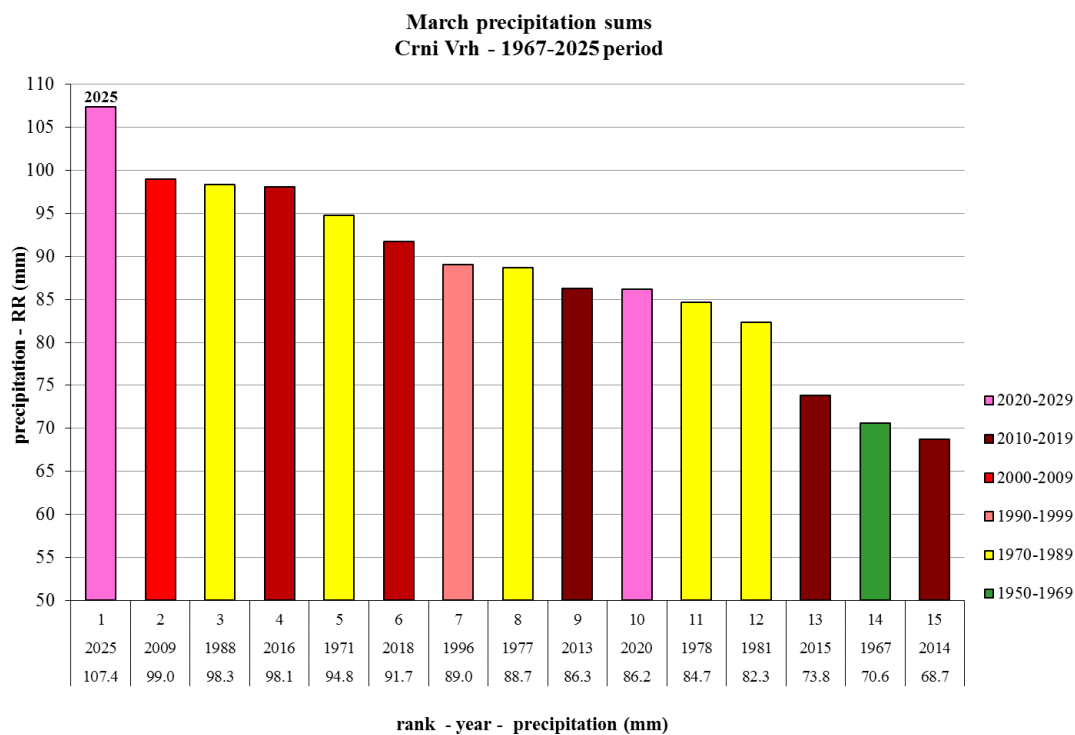
**Anomaly of mean March temperature relative to 1991-2020 base period
Krusevac - 1927-2025 period**



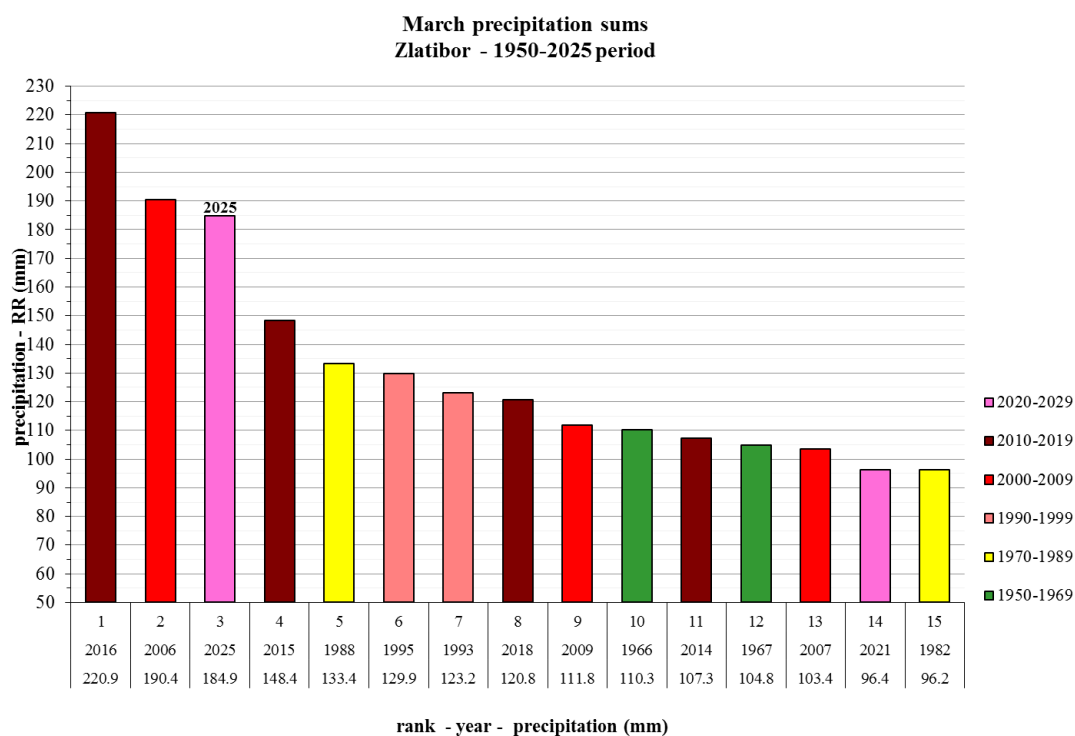
ranking - year - Tmean anomaly (°C) relative to 1991-2020 - Tmean

Appendix 7. Rank of the warmest March in Krusevac

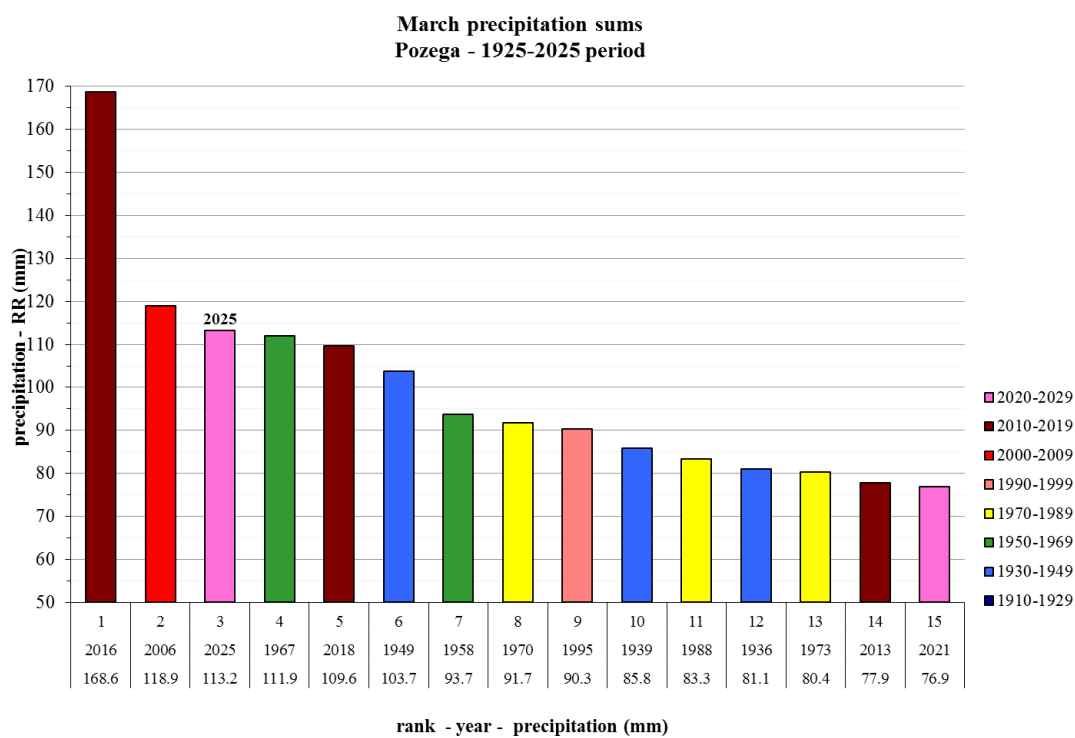
Ranks of the highest precipitation in March



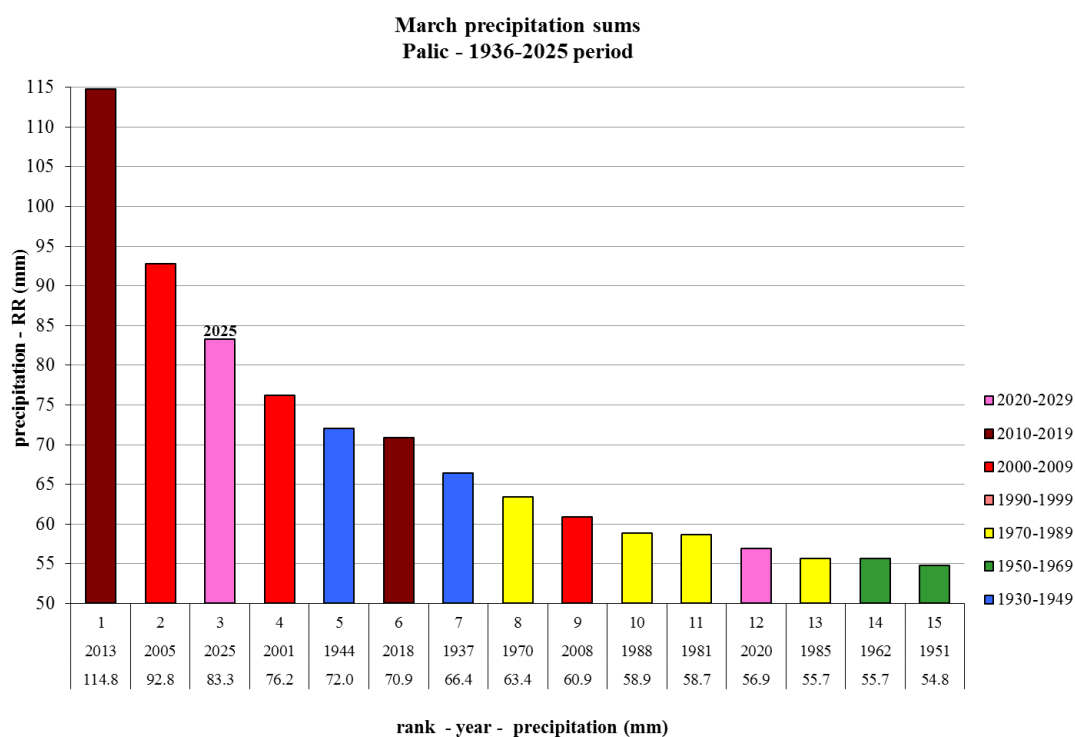
Appendix 8. Rank of the highest precipitation on Crni Vrh



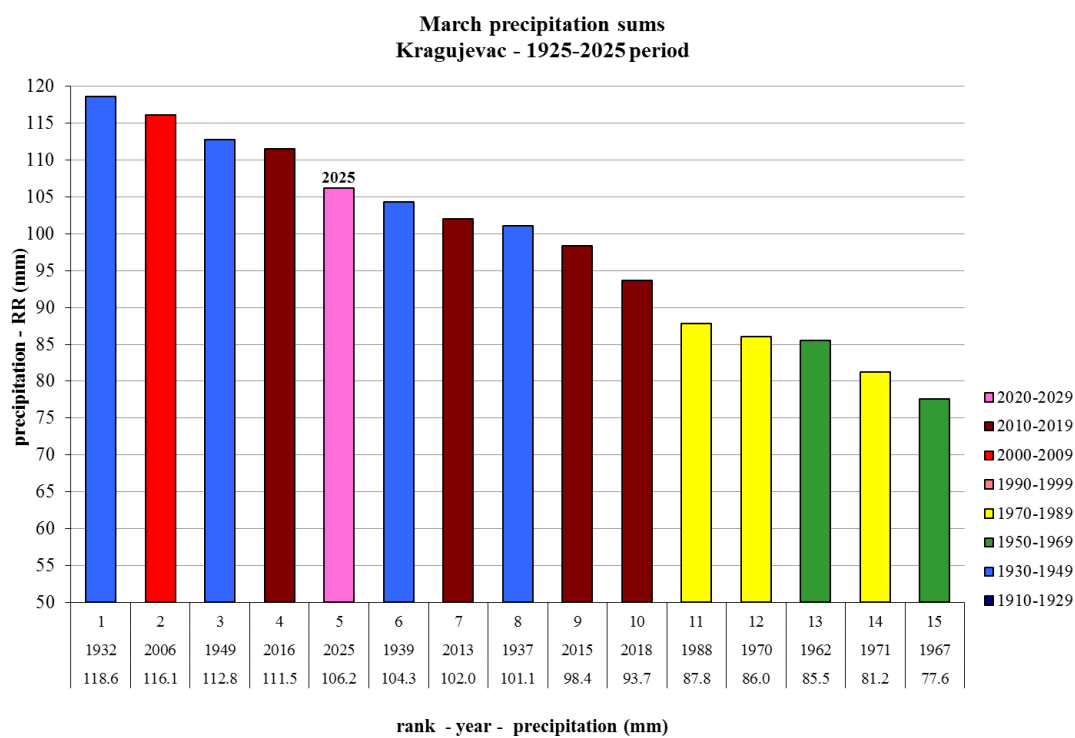
Appendix 9. Rank of the highest precipitation on Zlatibor



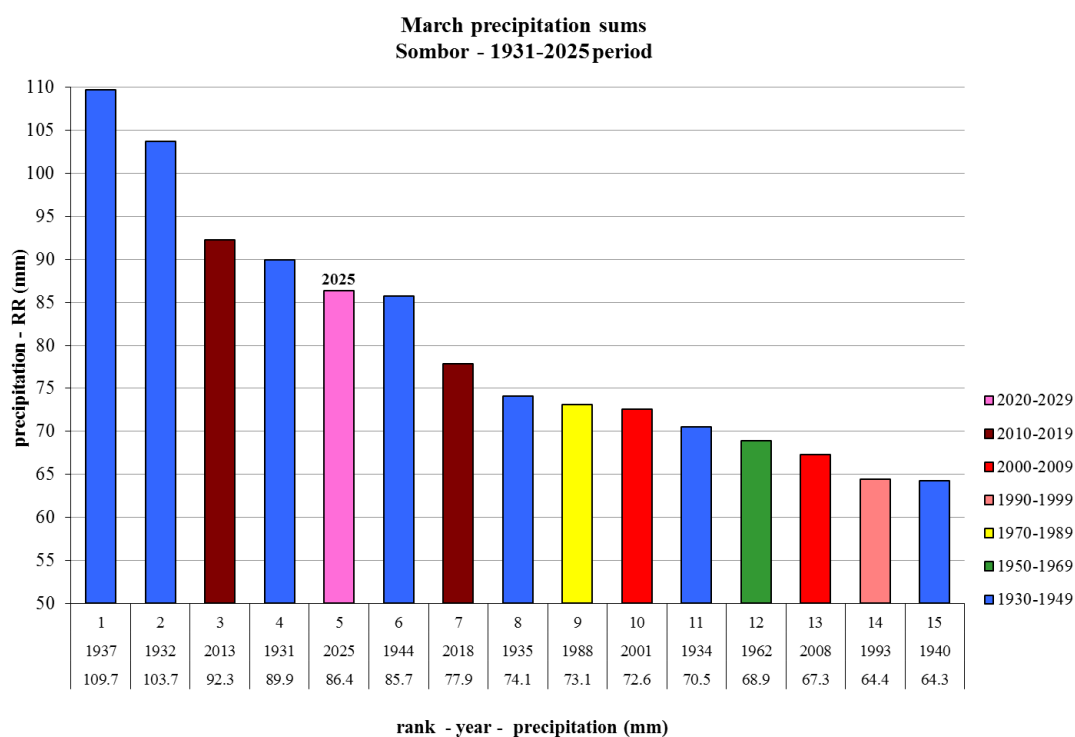
Appendix 10. Rank of the highest precipitation in Pozega



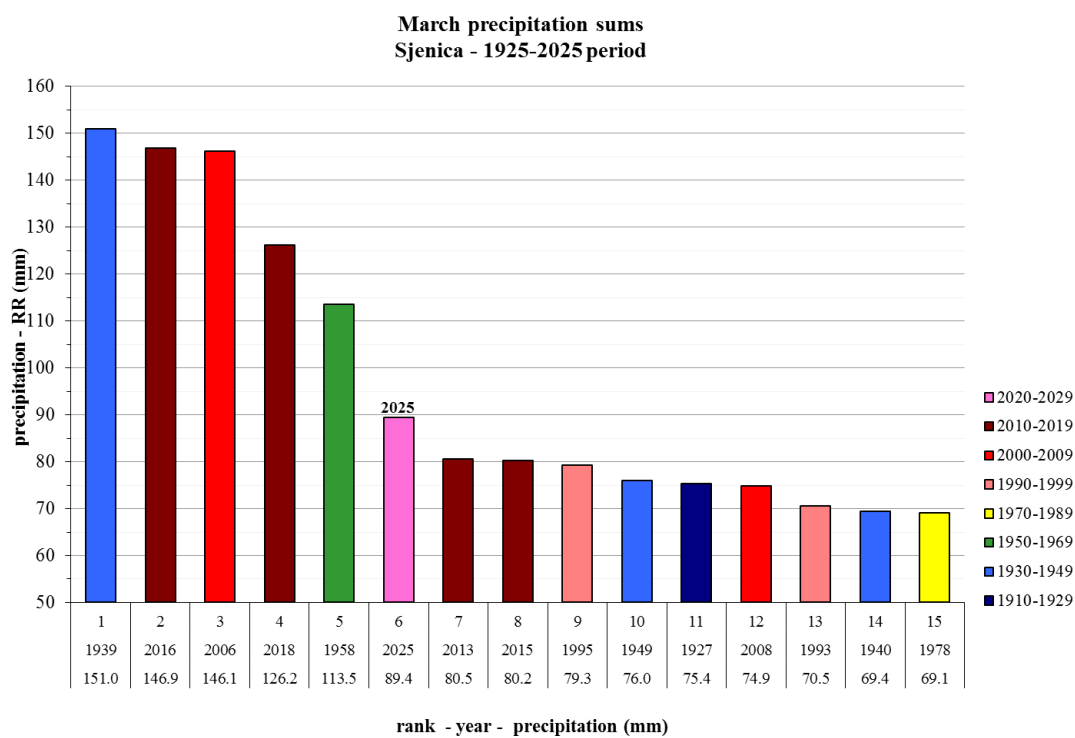
Appendix 11. Rank of the highest precipitation on Palic



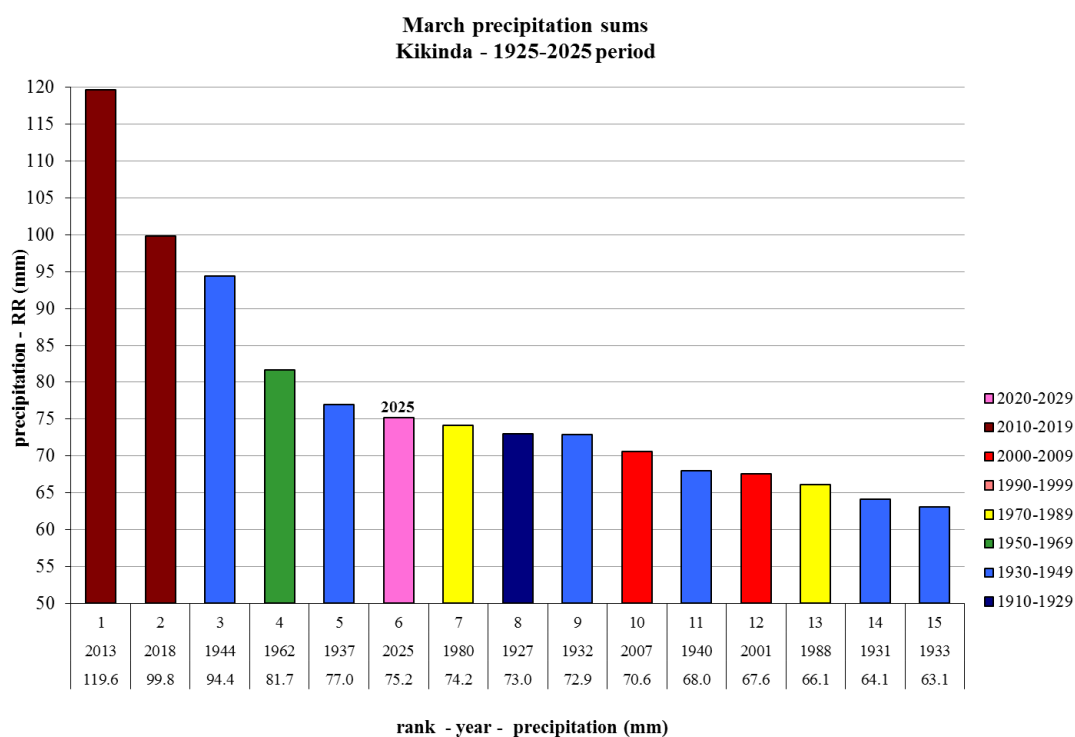
Appendix 12. Rank of the highest precipitation in Kragujevac



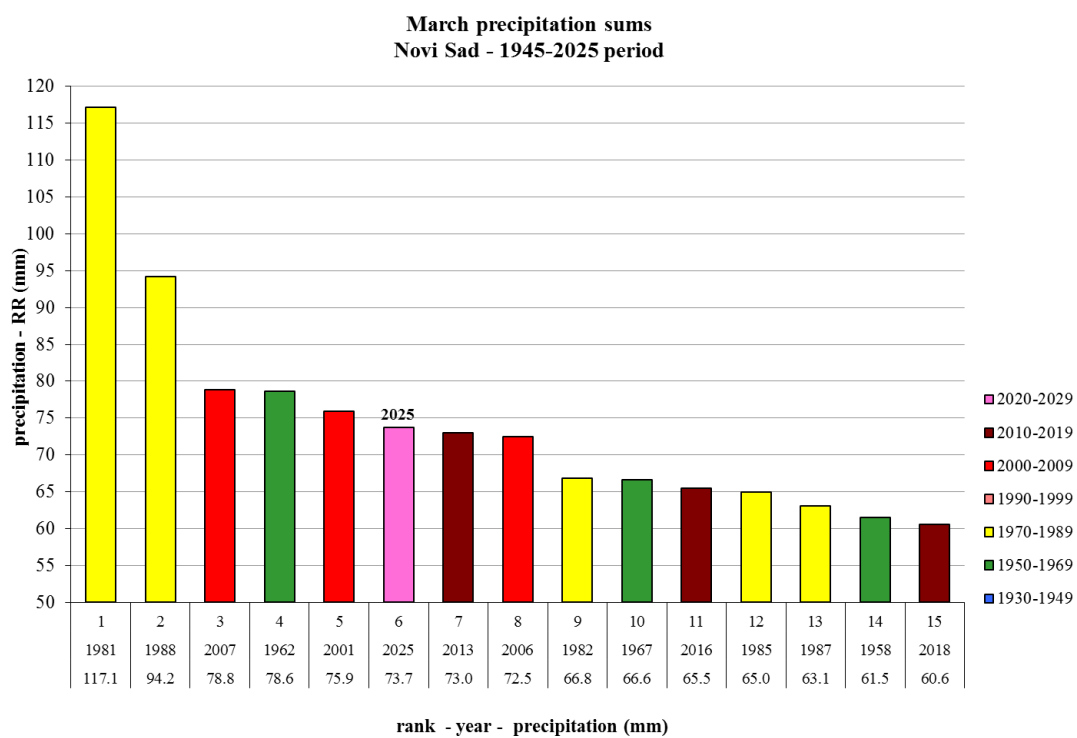
Appendix 13. Rank of the highest precipitation in Sombor



Appendix 14. Rank of the highest precipitation in Sjenica

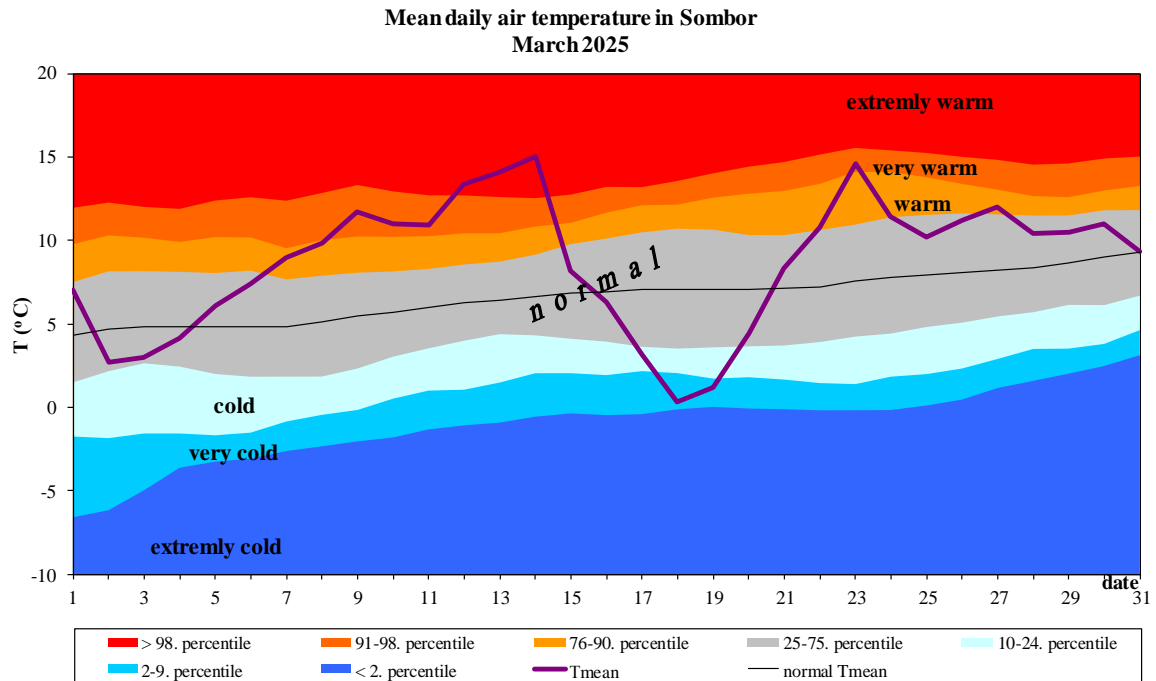


Appendix 15. Rank of the highest precipitation in Kikinda

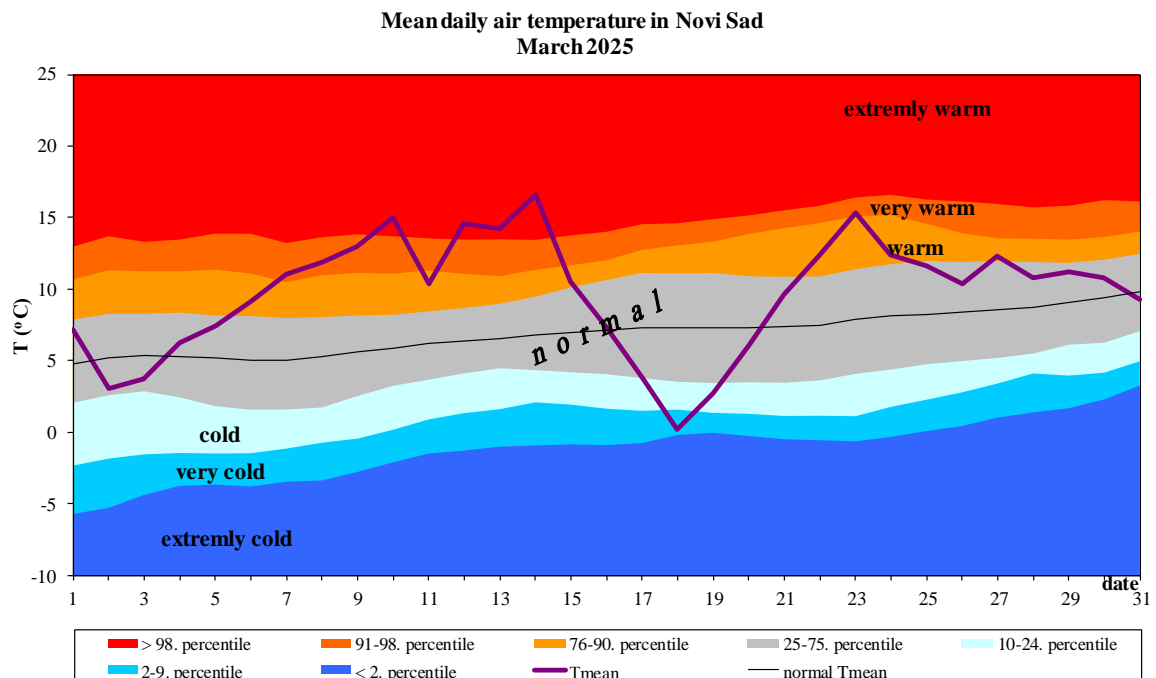


Appendix 16. Rank of the highest precipitation in Novi Sad

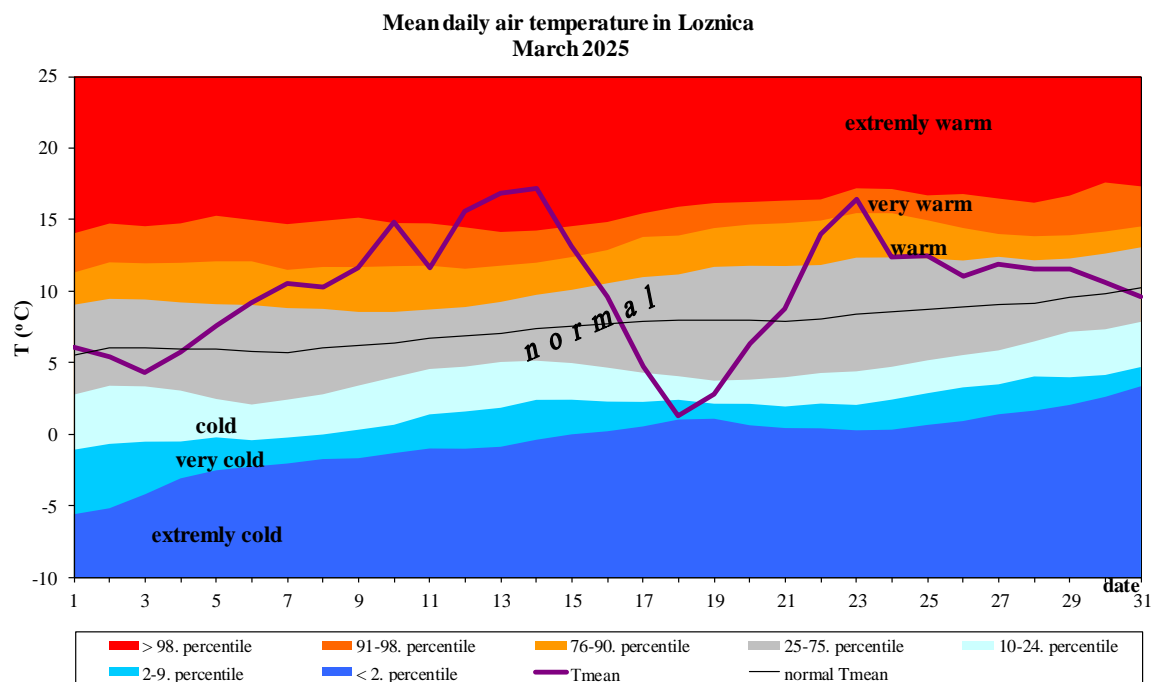
Mean air temperature



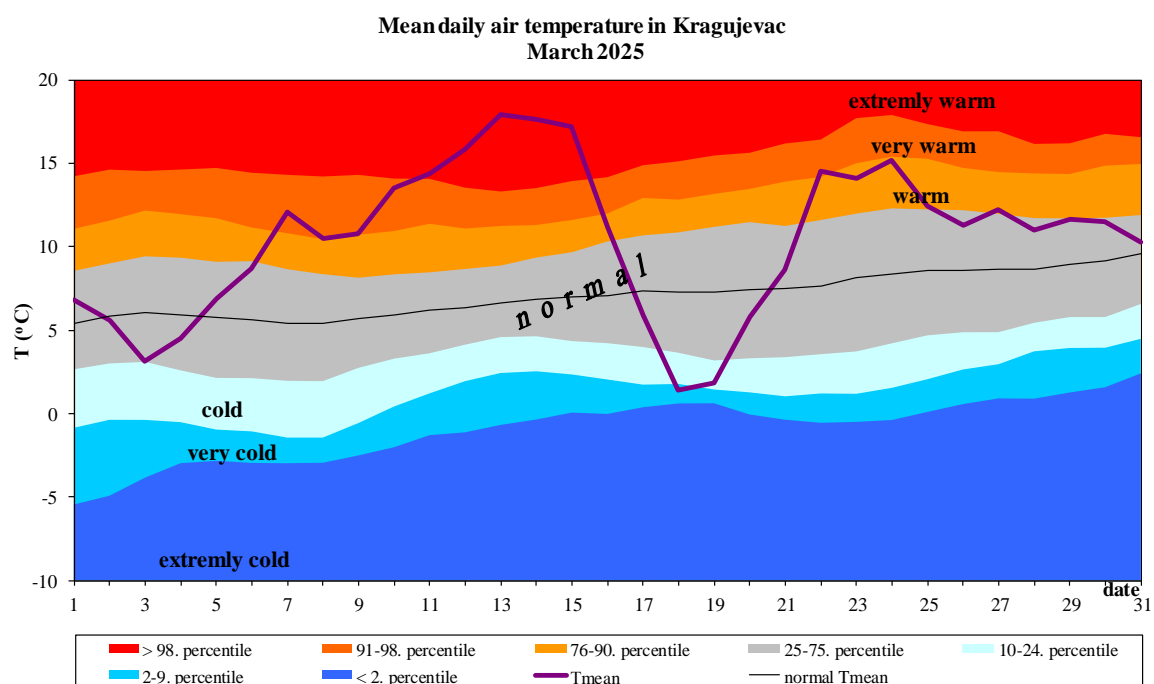
Appendix 17. Daily course of the mean daily air temperature and accompanying percentile for Sombor



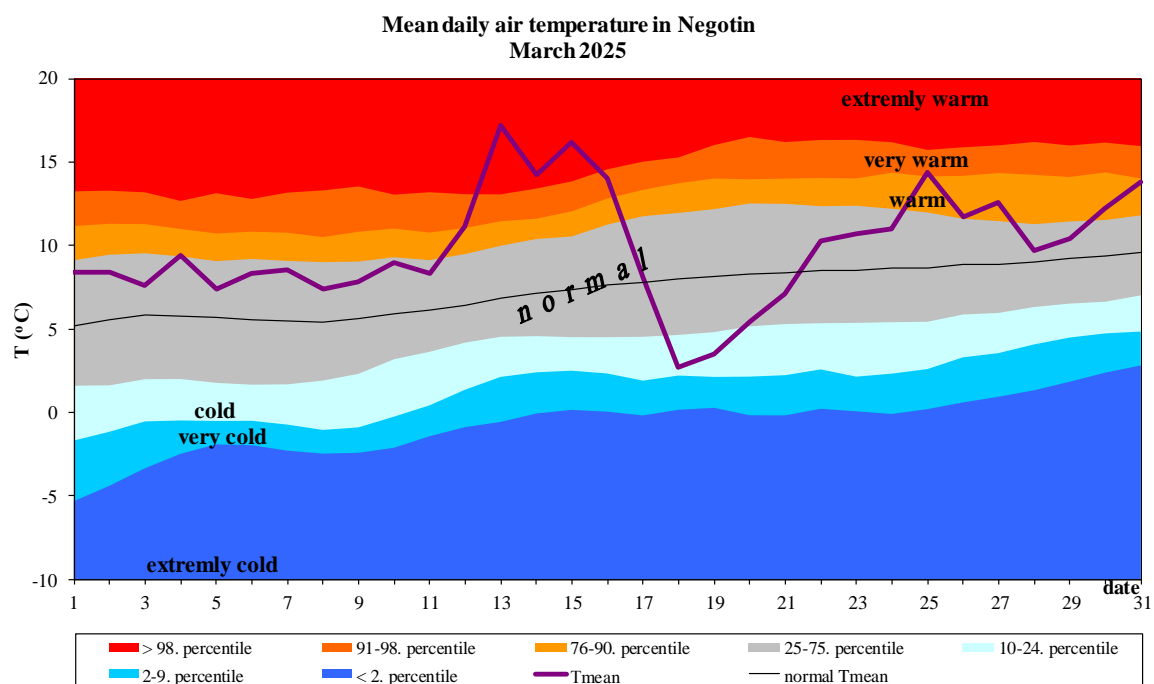
Appendix 18. Daily course of the mean daily air temperature and accompanying percentile for Novi Sad



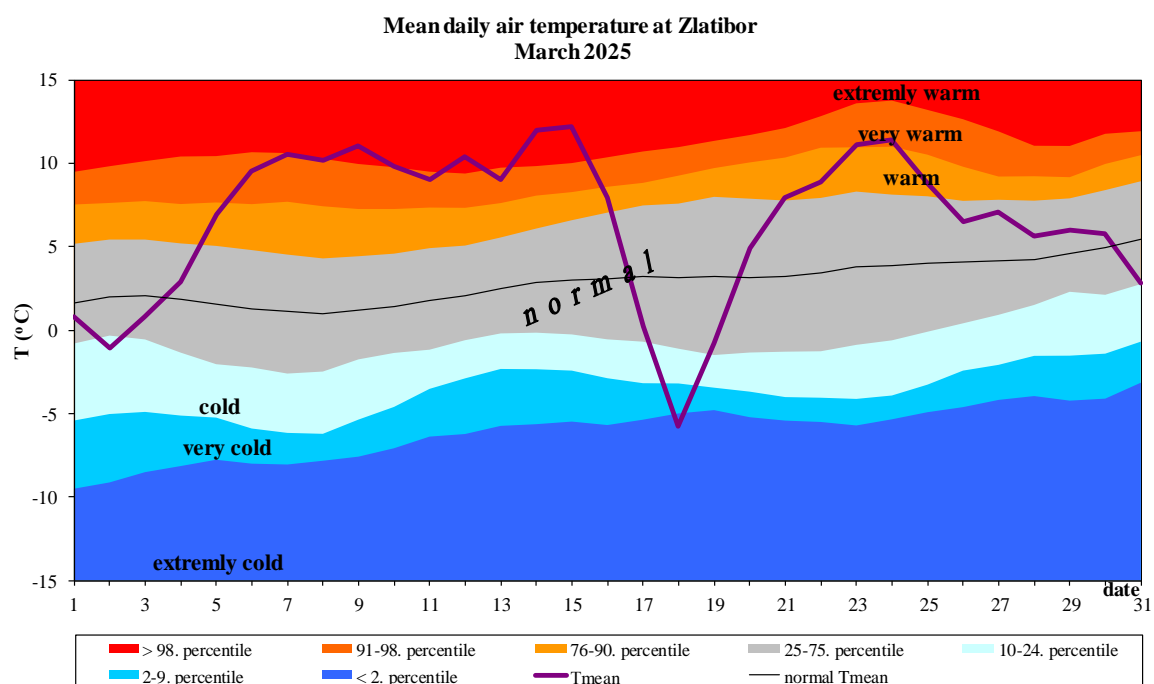
Appendix 19. Daily course of the mean daily air temperature and accompanying percentile for Loznica



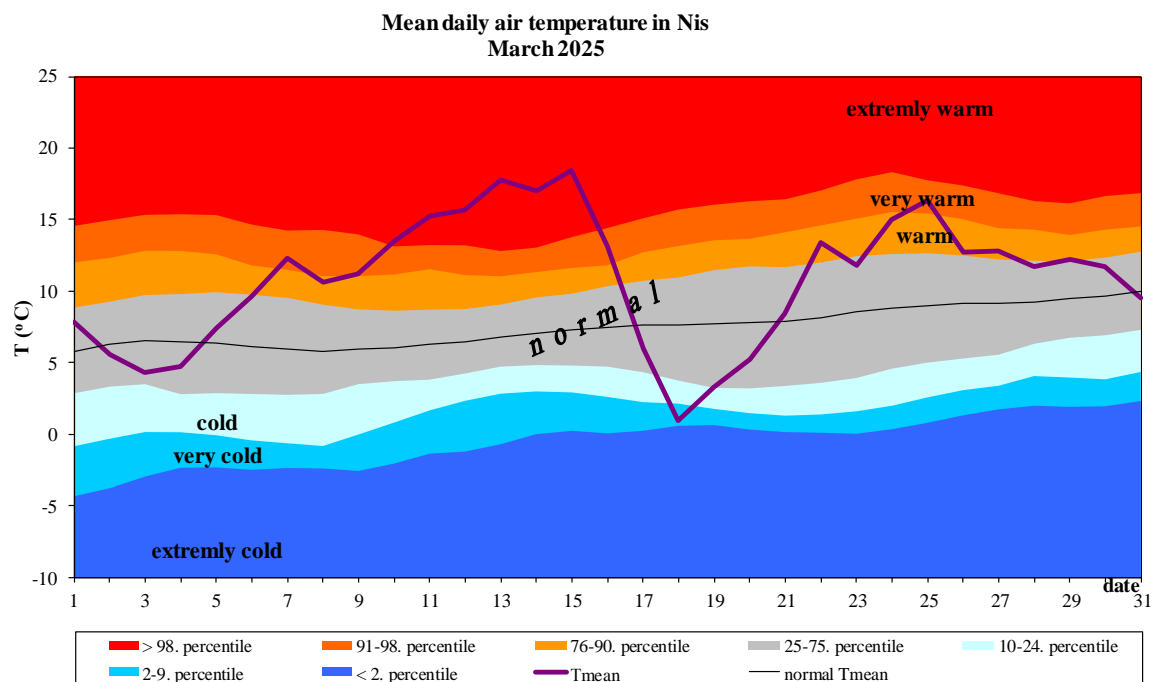
Appendix 20. Daily course of the mean daily air temperature and accompanying percentile for Kragujevac



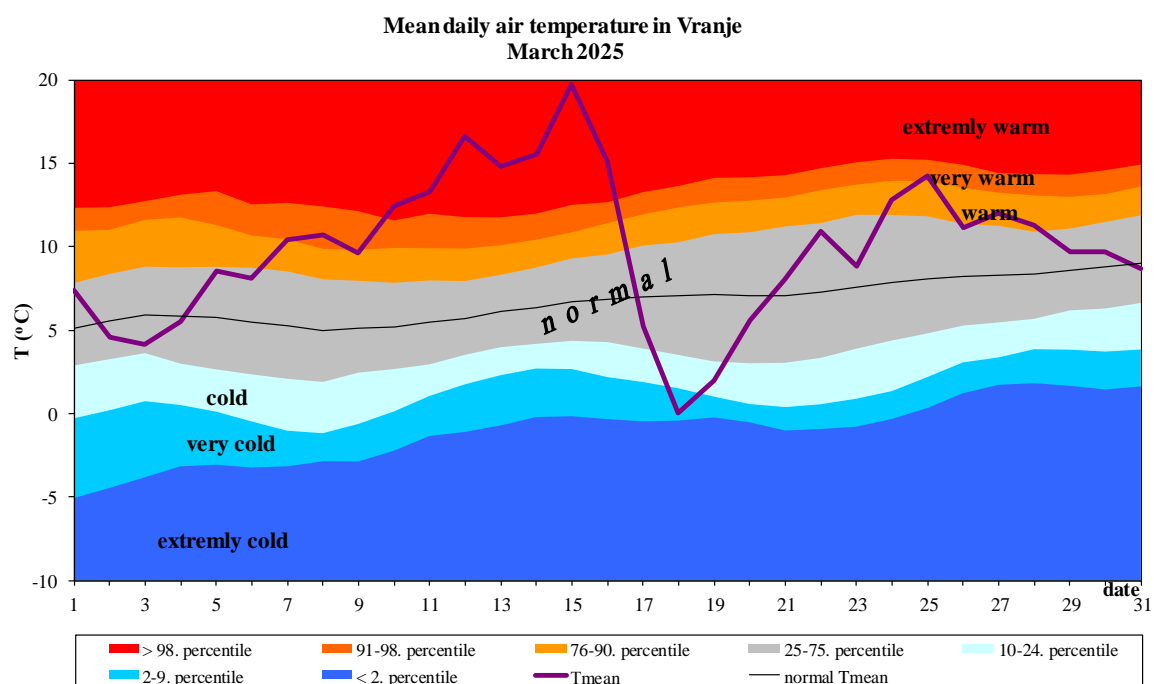
Appendix 21. Daily course of the mean daily air temperature and accompanying percentile for Negotin



Appendix 22. Daily course of the mean daily air temperature and accompanying percentile on Zlatiboru

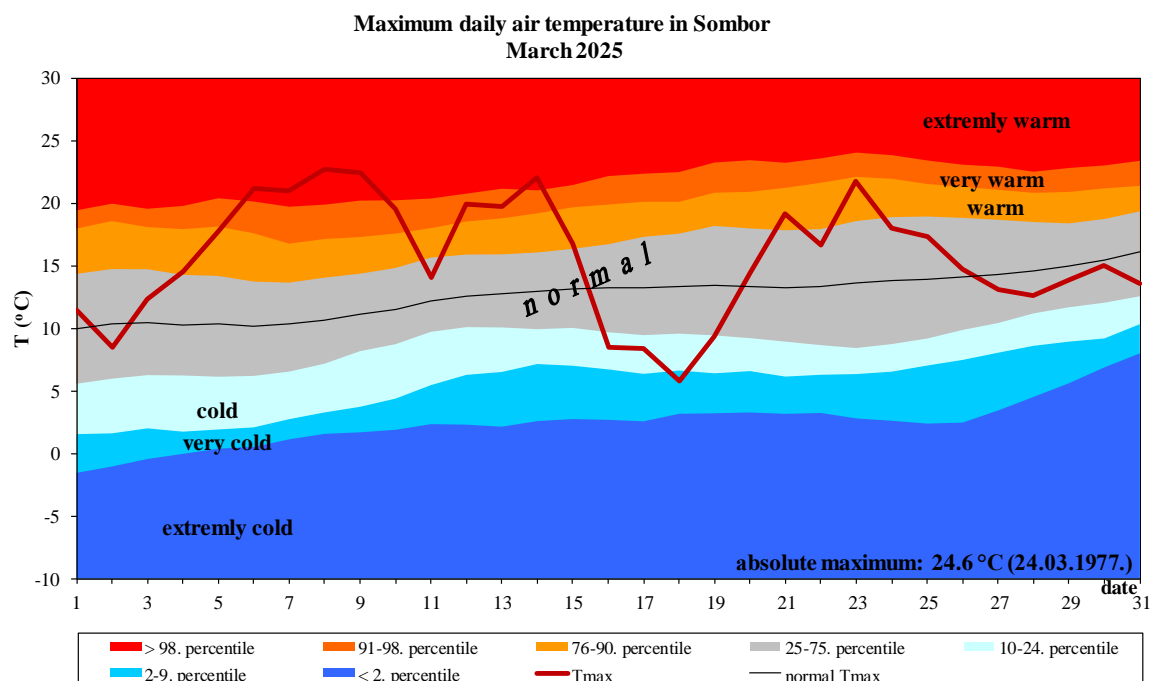


Appendix 23. Daily course of the mean daily air temperature and accompanying percentile for Nis

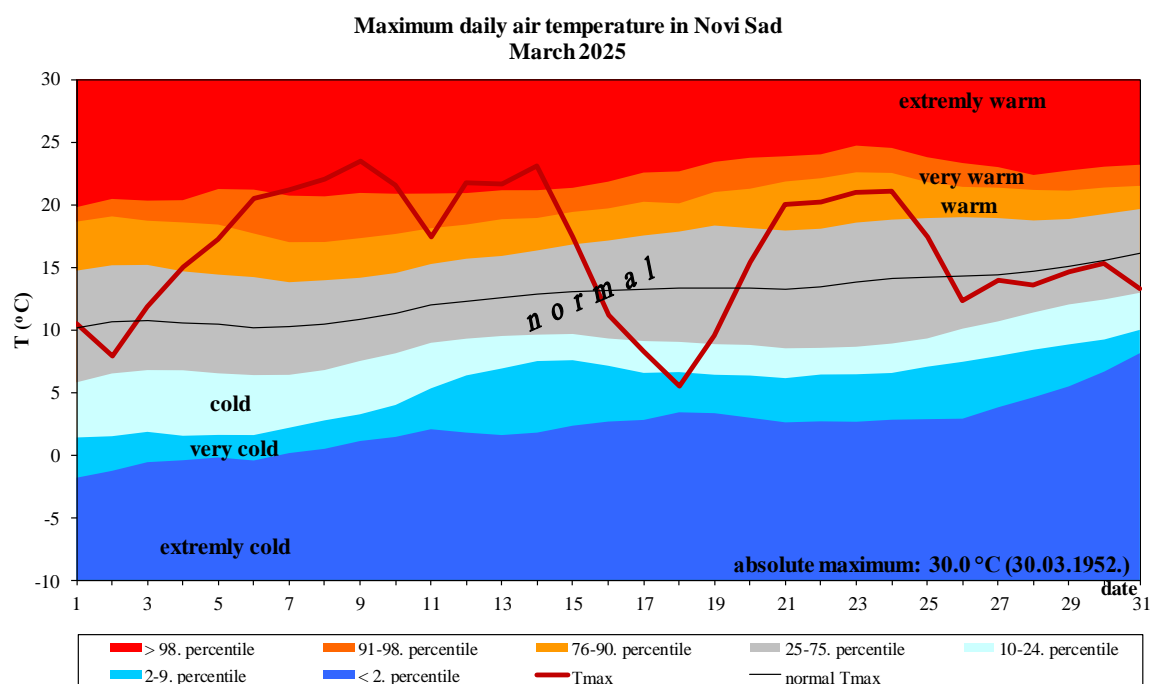


Appendix 24. Daily course of the mean daily air temperature and accompanying percentile for Vranje

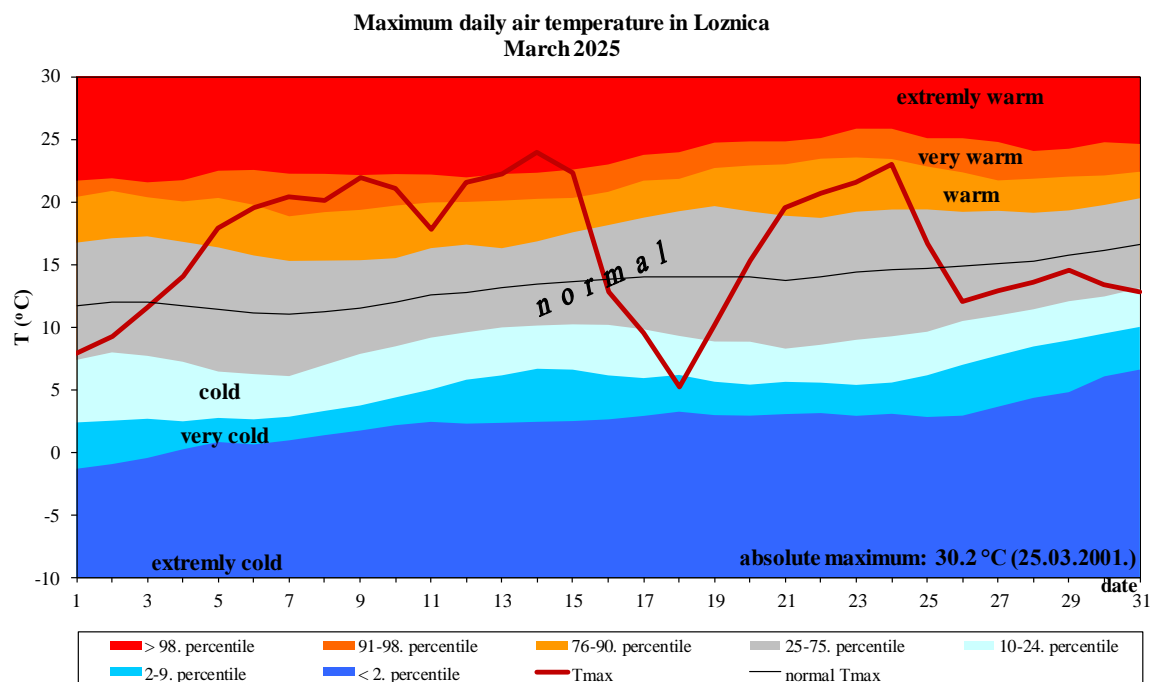
Maximum air temperature



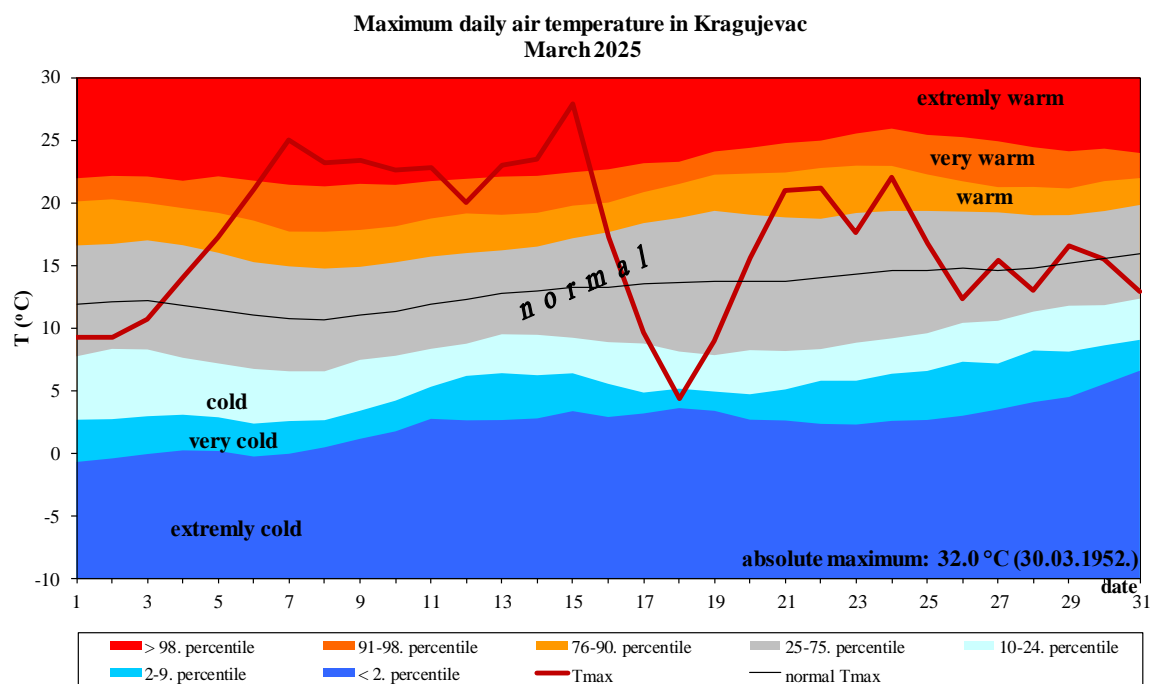
Appendix 25. Daily course of the maximum daily air temperature and the accompanying percentile for Sombor



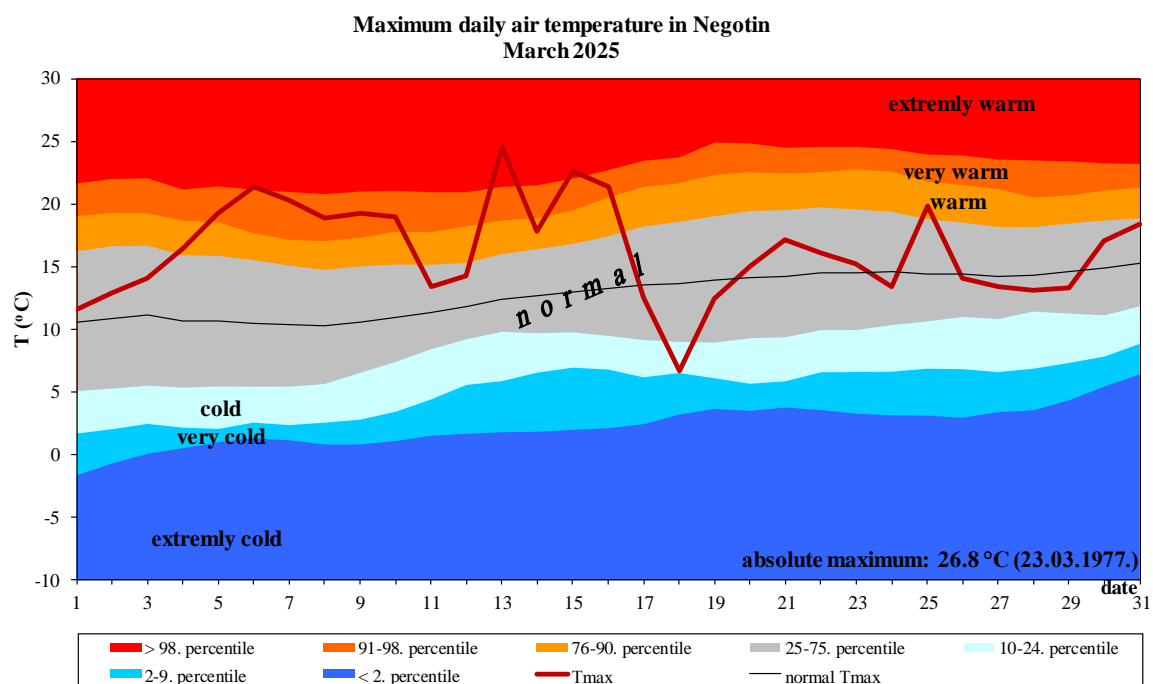
Appendix 26. Daily course of the maximum daily air temperature and the accompanying percentile for Novi Sad



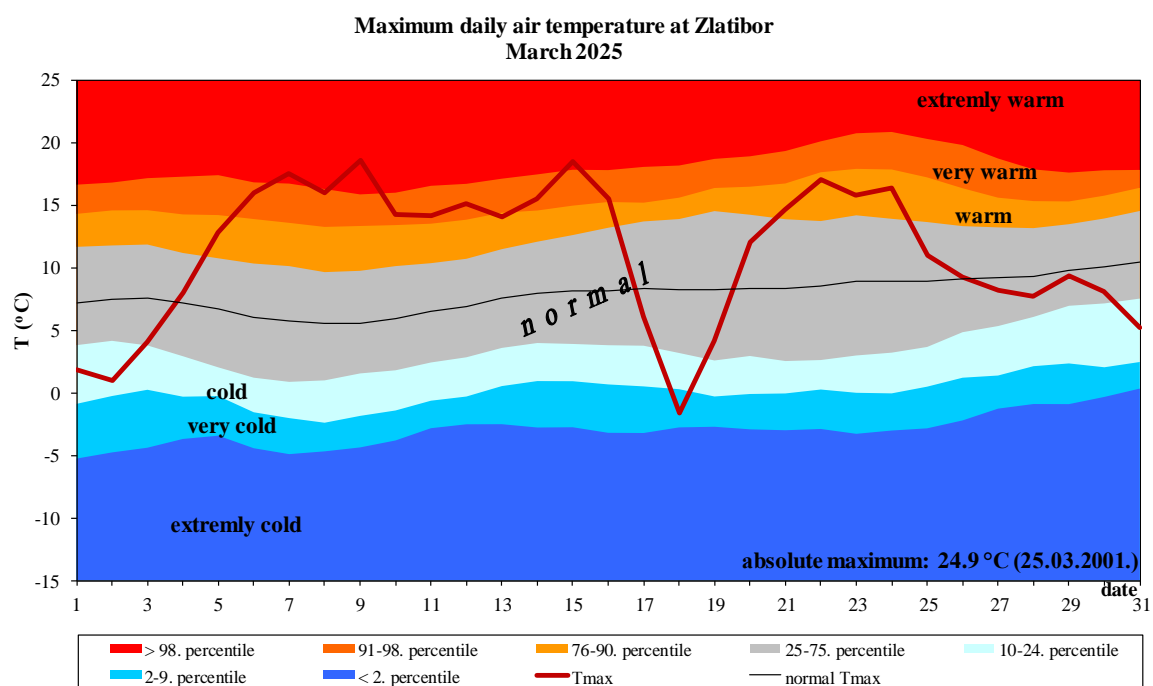
Appendix 27. Daily course of the maximum daily air temperature and the accompanying percentile for Loznica



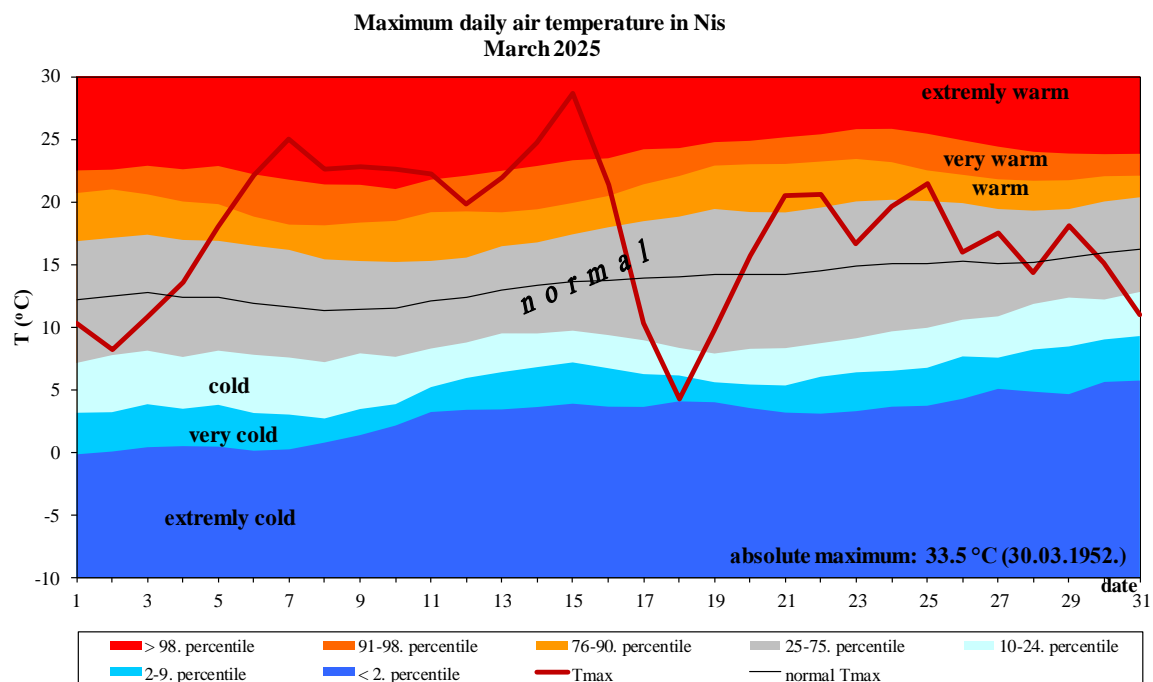
Appendix 28. Daily course of the maximum daily air temperature and the accompanying percentile for Kragujevac



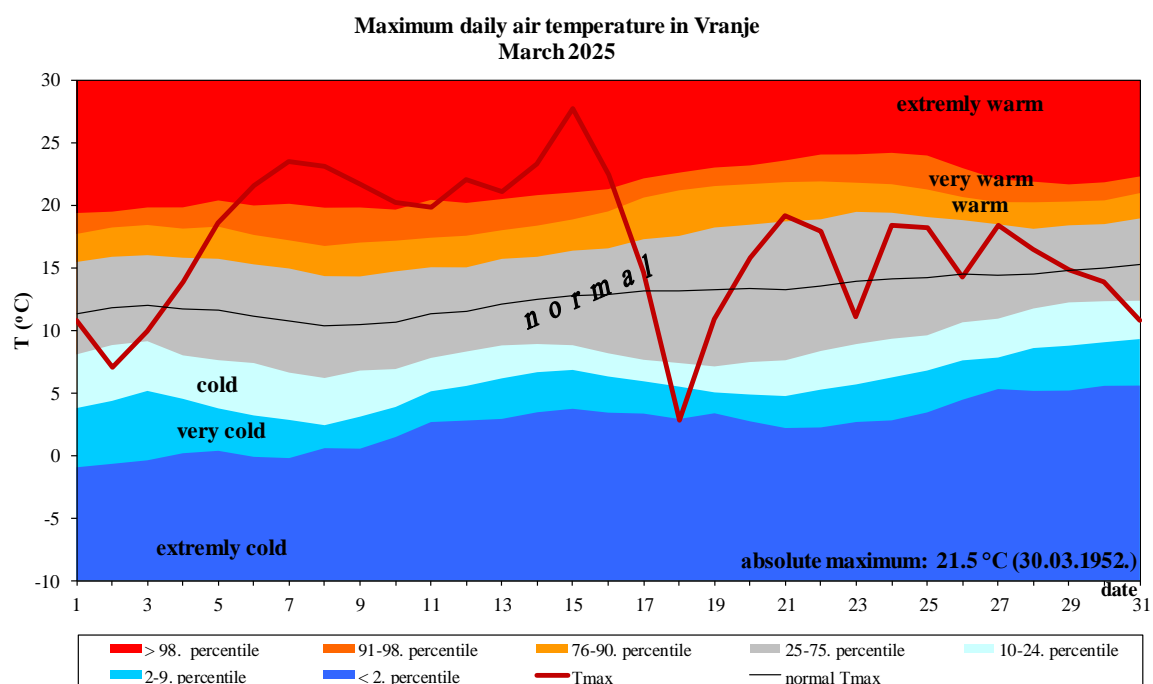
Appendix 29. Daily course of the maximum daily air temperature and the accompanying percentile for Negotin



Appendix 30. Daily course of the maximum daily air temperature and the accompanying percentile on Zlatibor

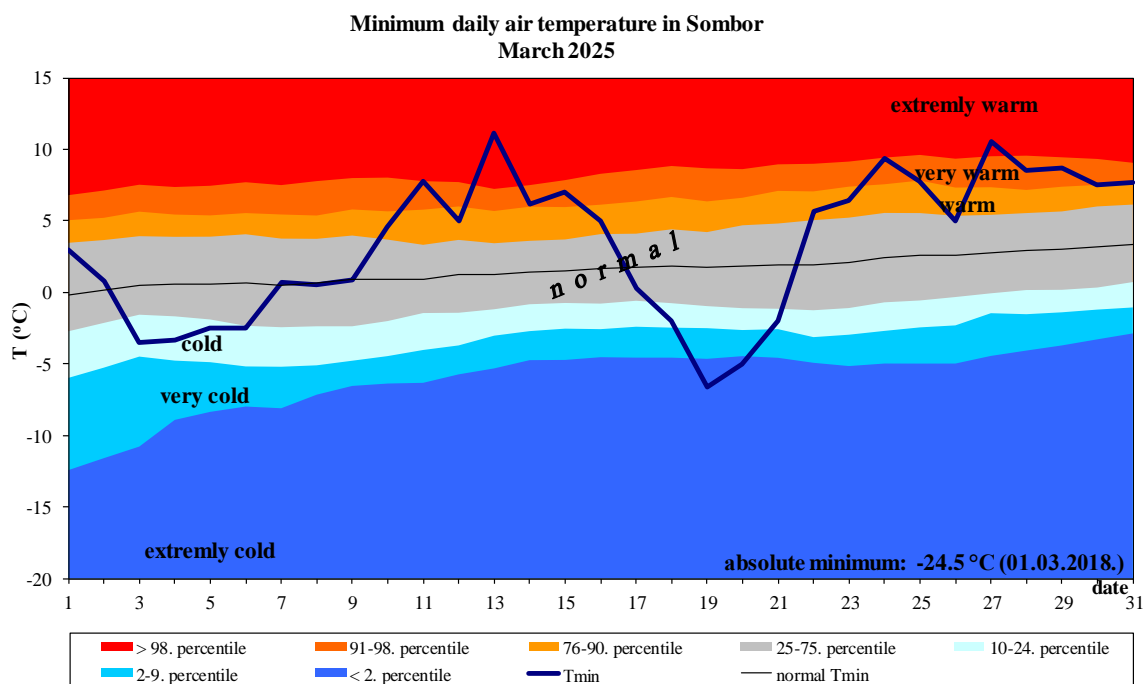


Appendix 31. Daily course of the maximum daily air temperature and the accompanying percentile for Nis

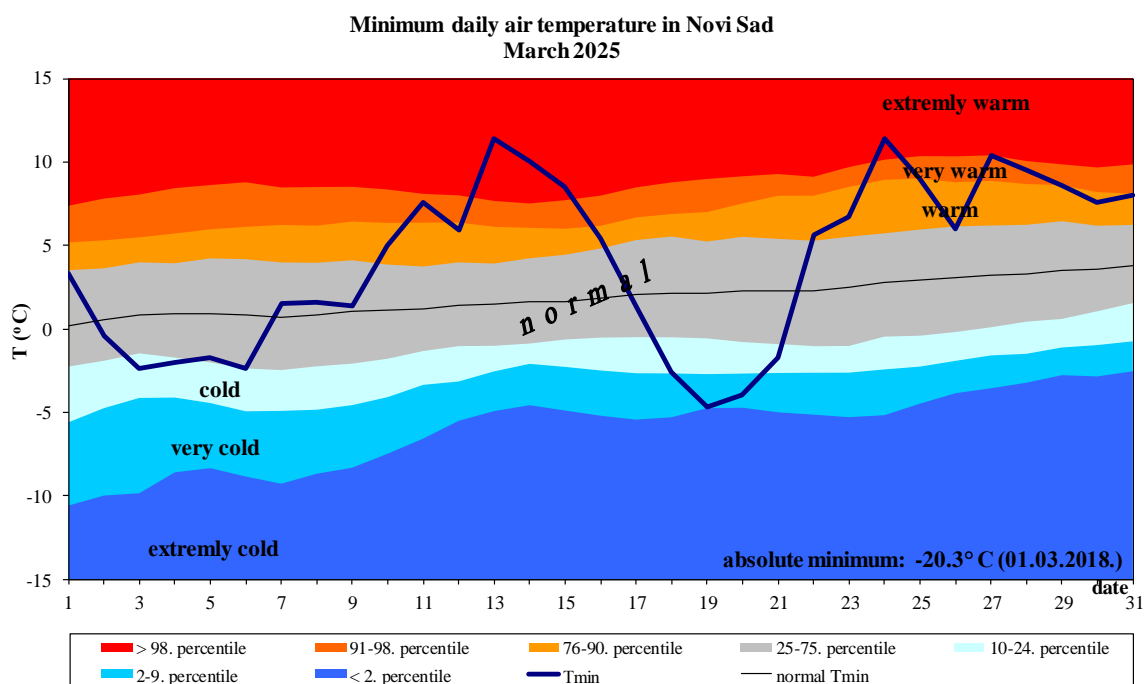


Appendix 32. Daily course of the maximum daily air temperature and the accompanying percentile for Vranje

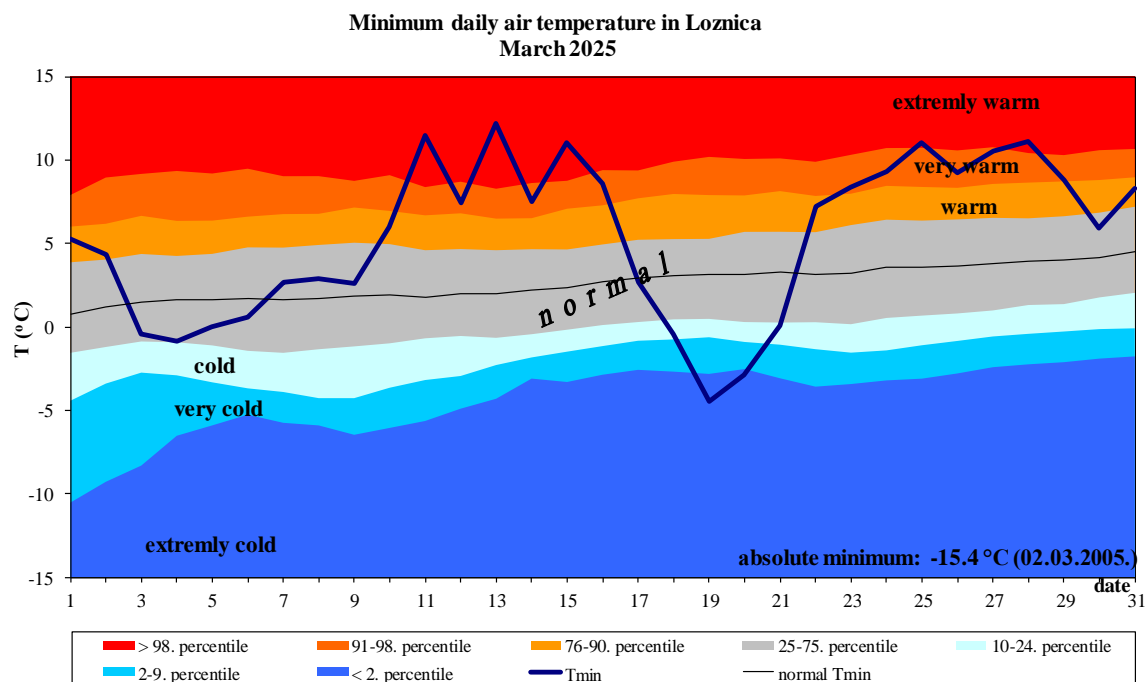
Minimum air temperature



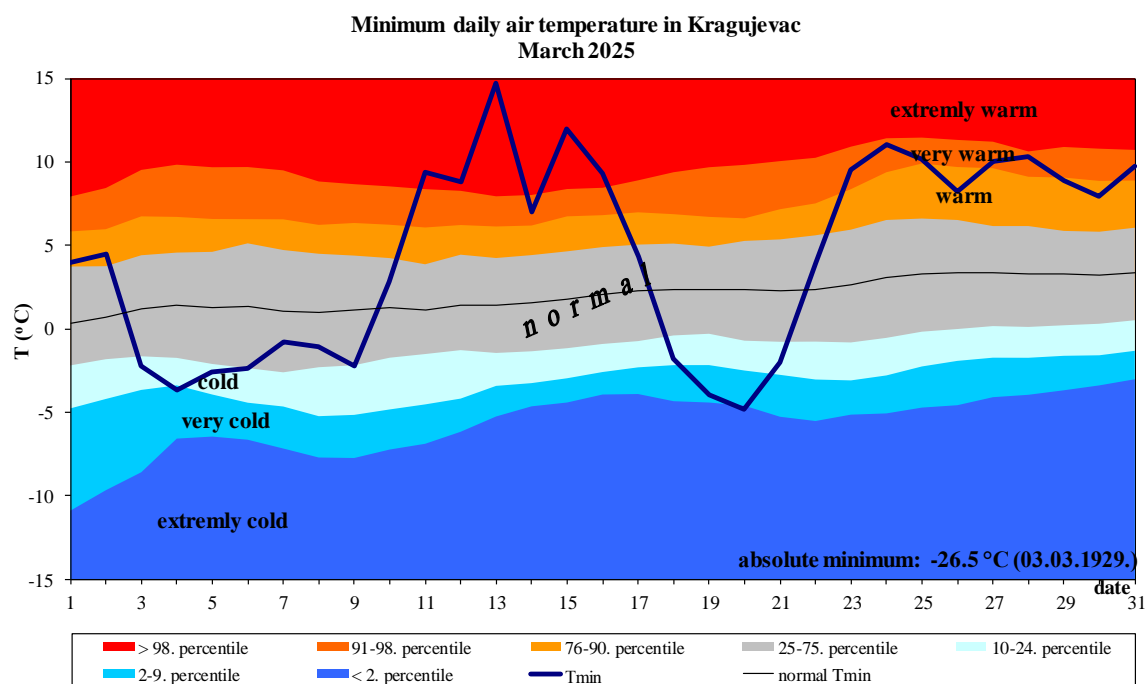
Appendix 33. Daily course of the minimum daily air temperature and the accompanying percentile for Sombor



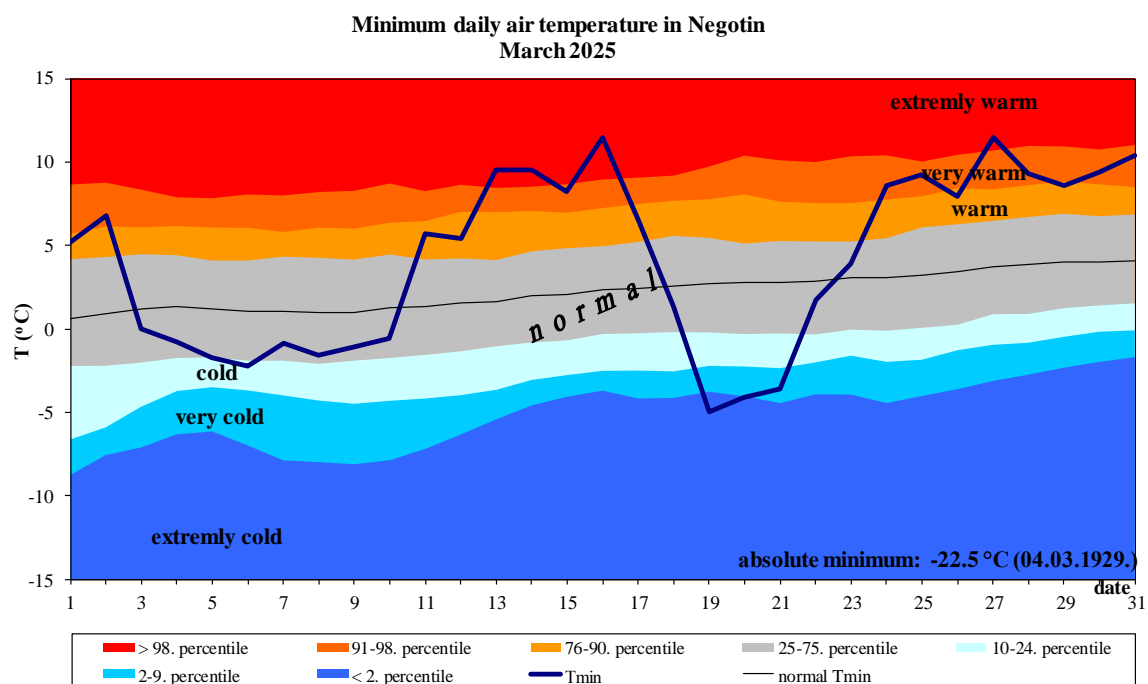
Appendix 34. Daily course of the minimum daily air temperature and the accompanying percentile for Novi Sad



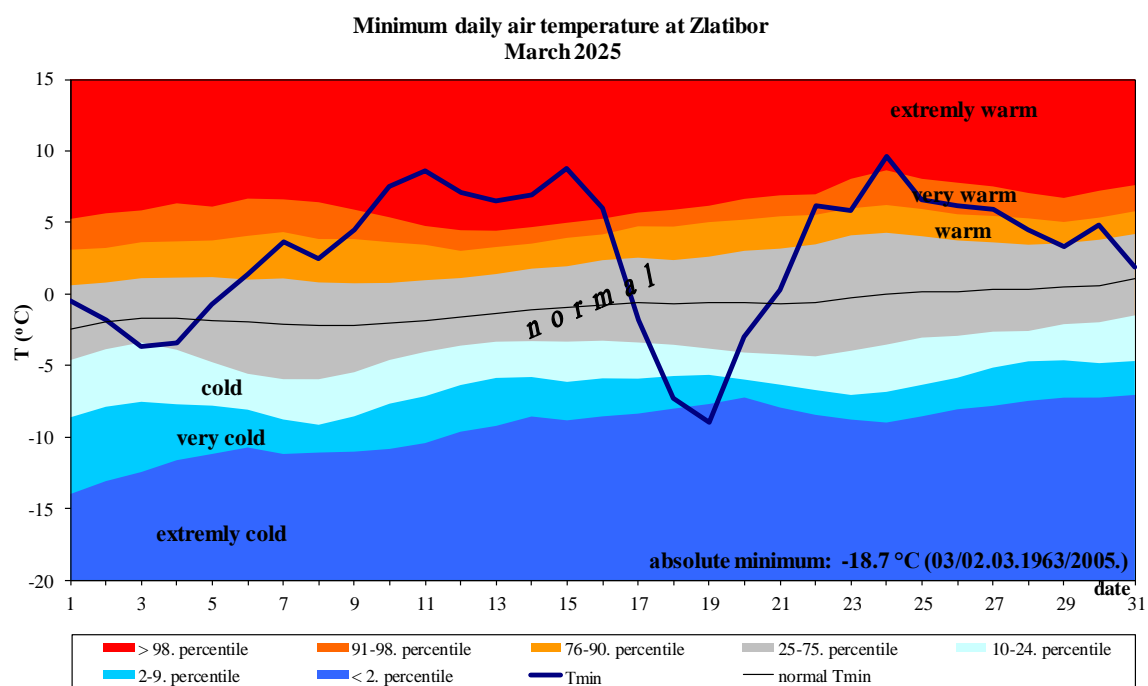
Appendix 35. Daily course of the minimum daily air temperature and the accompanying percentile for Loznica



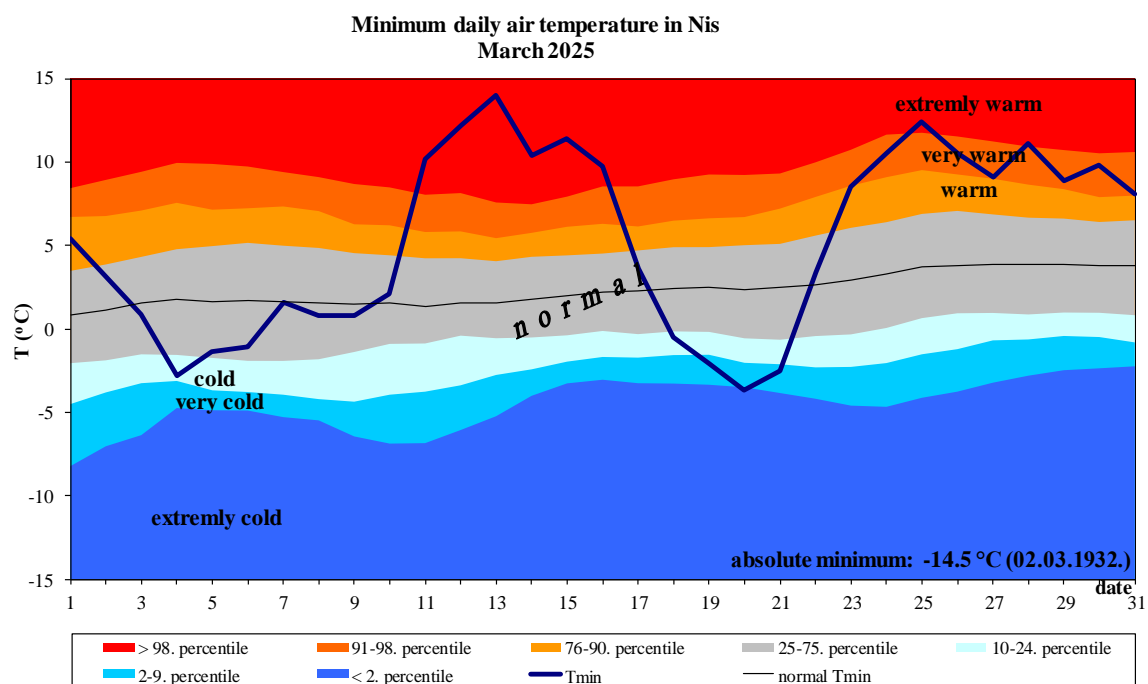
Appendix 36. Daily course of the minimum daily air temperature and the accompanying percentile for Kragujevac



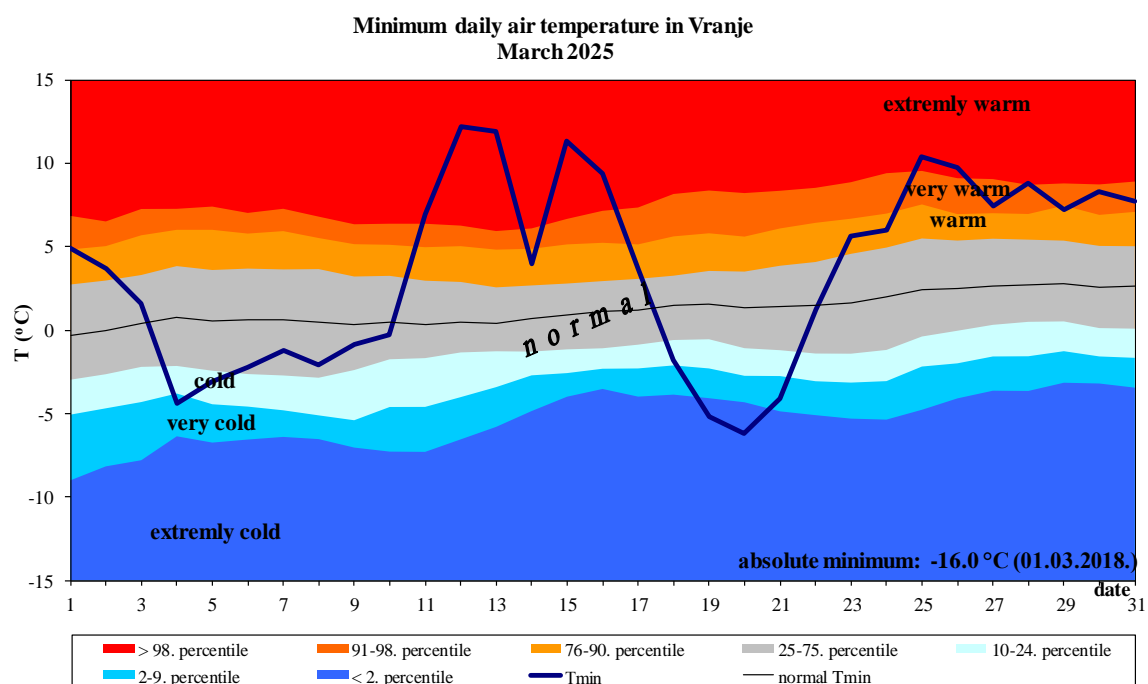
Appendix 37. Daily course of the minimum daily air temperature and the accompanying percentile for Negotin



Appendix 38. Daily course of the minimum daily air temperature and the accompanying percentile on Zlatibor

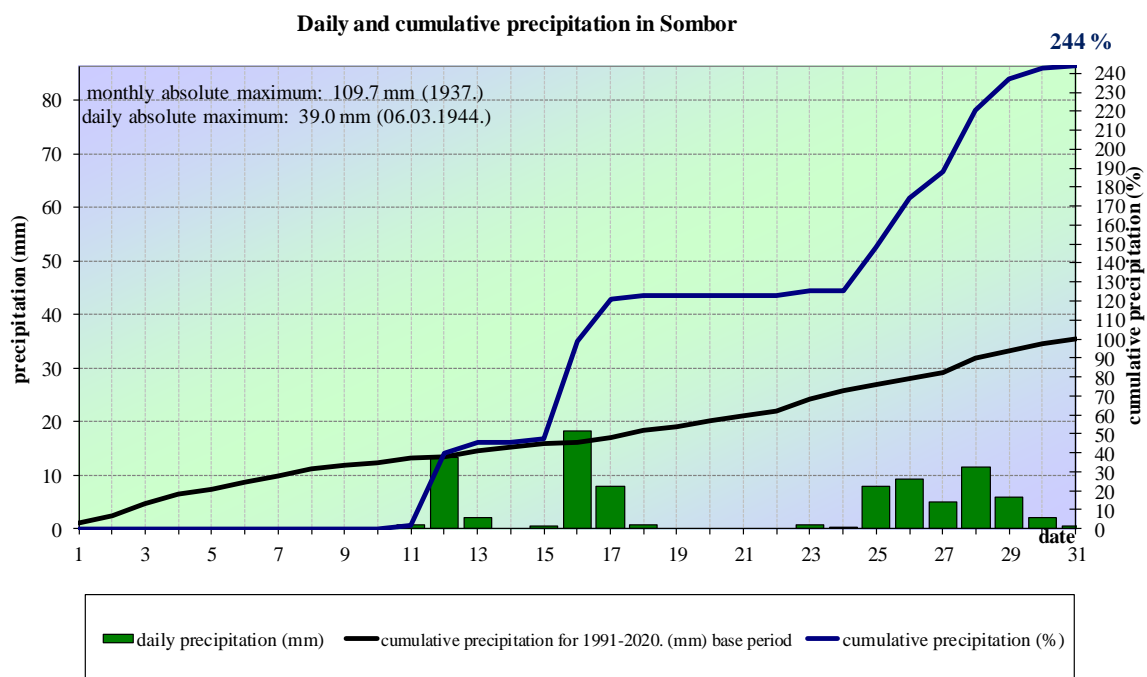


Appendix 39. Daily course of the minimum daily air temperature and the accompanying percentile for Nis

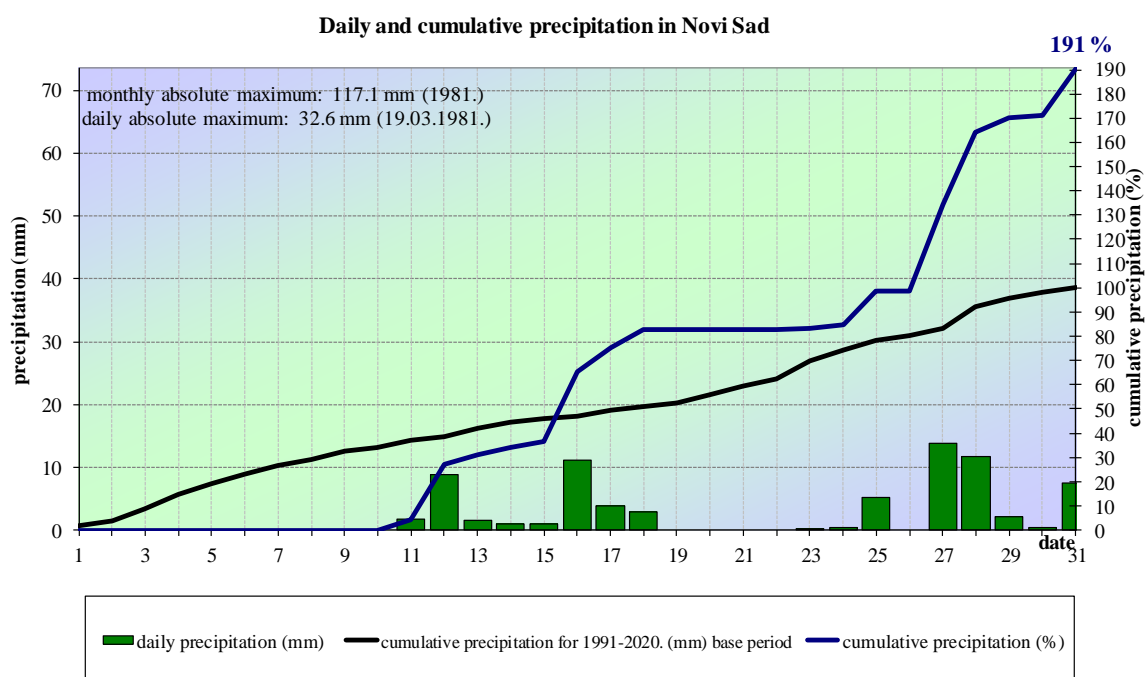


Appendix 40. Daily course of the minimum daily air temperature and the accompanying percentile for Vranje

Precipitation

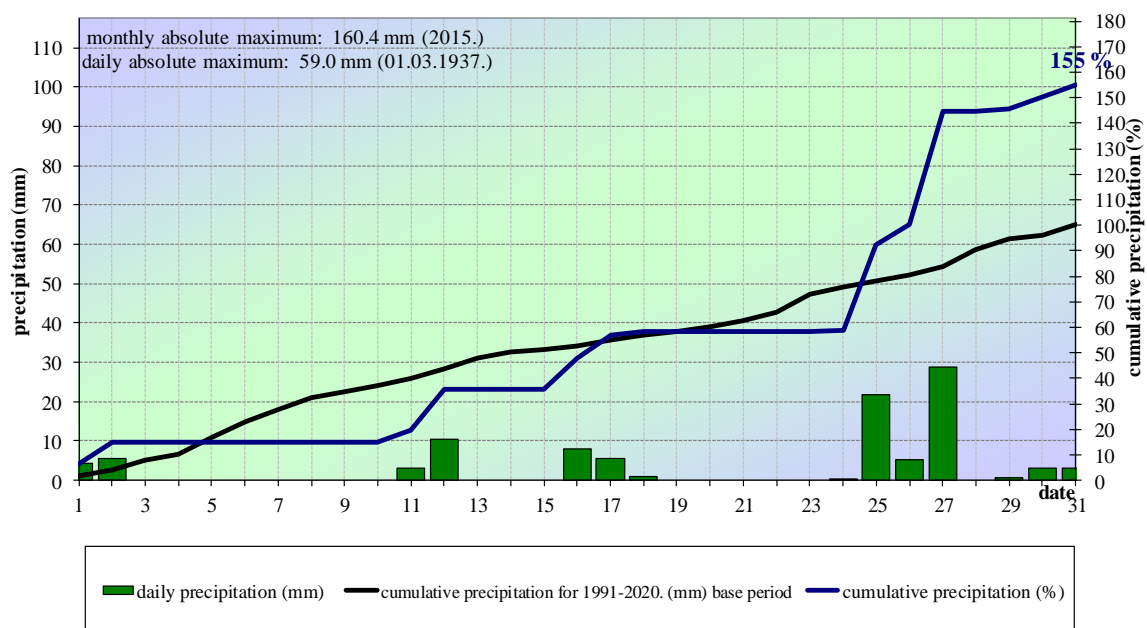


Appendix 41. Daily and cumulative precipitation sums for Sombor



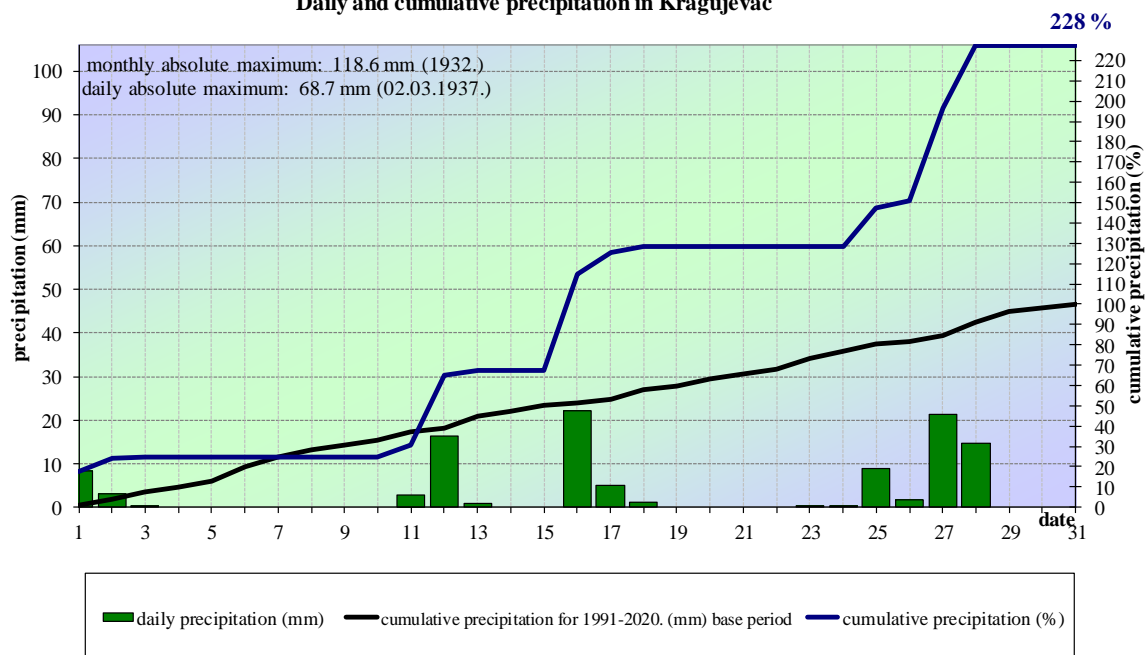
Appendix 42. Daily and cumulative precipitation sums for Novi Sad

Daily and cumulative precipitation in Loznica

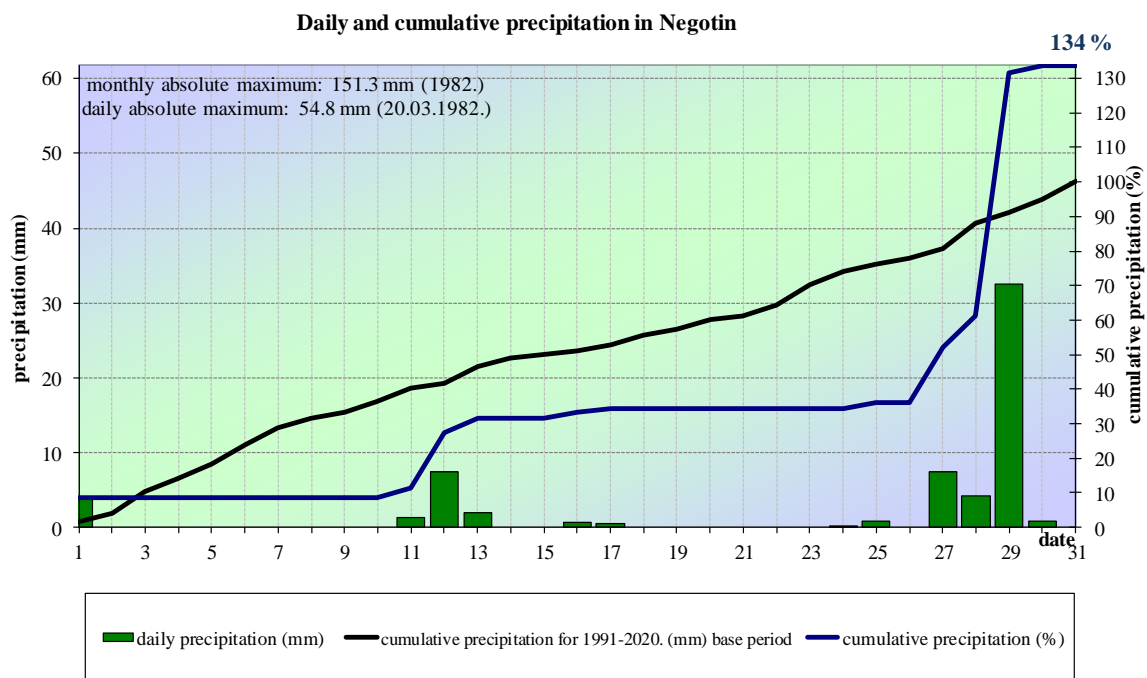


Appendix 43. Daily and cumulative precipitation sums for Loznica

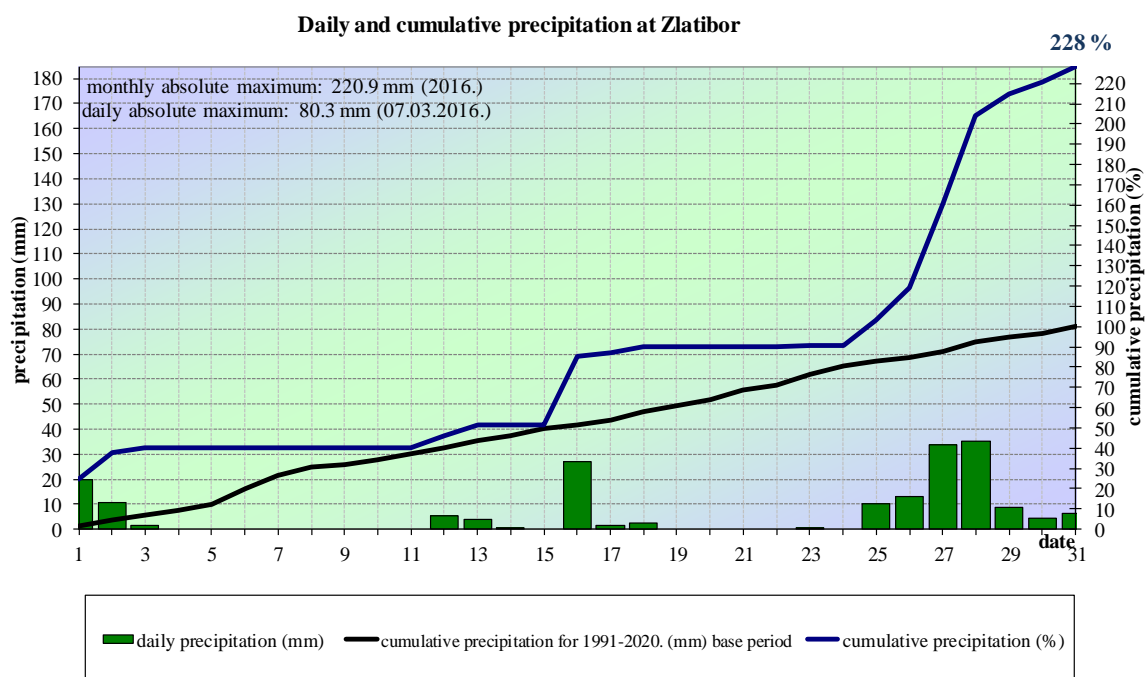
Daily and cumulative precipitation in Kragujevac



Appendix 44. Daily and cumulative precipitation sums for Kragujevac

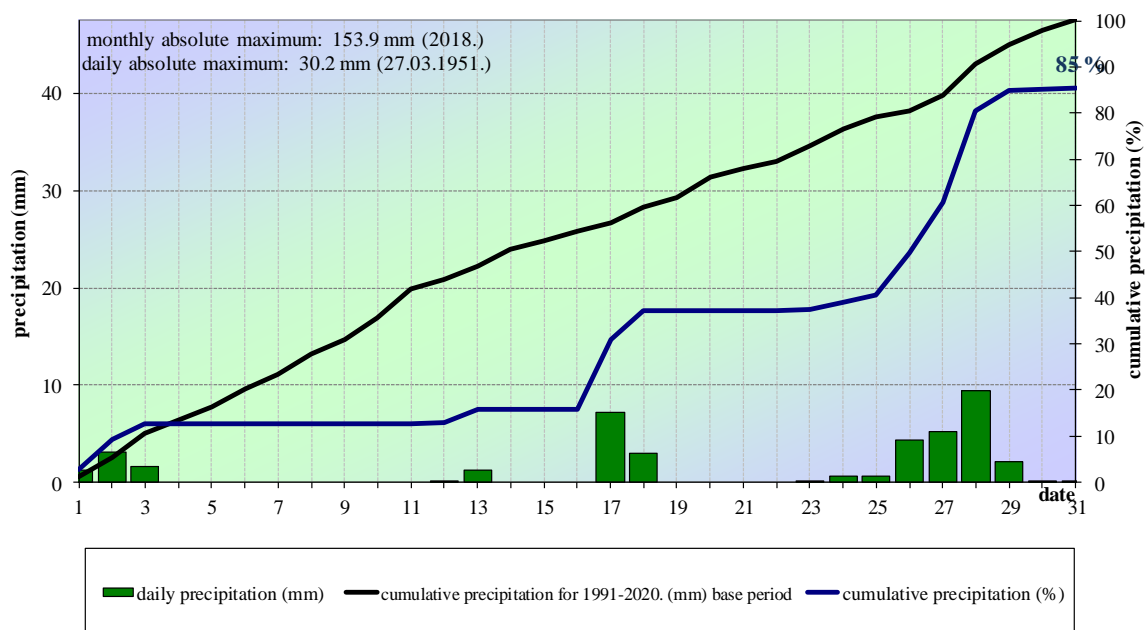


Appendix 45. Daily and cumulative precipitation sums for Negotin

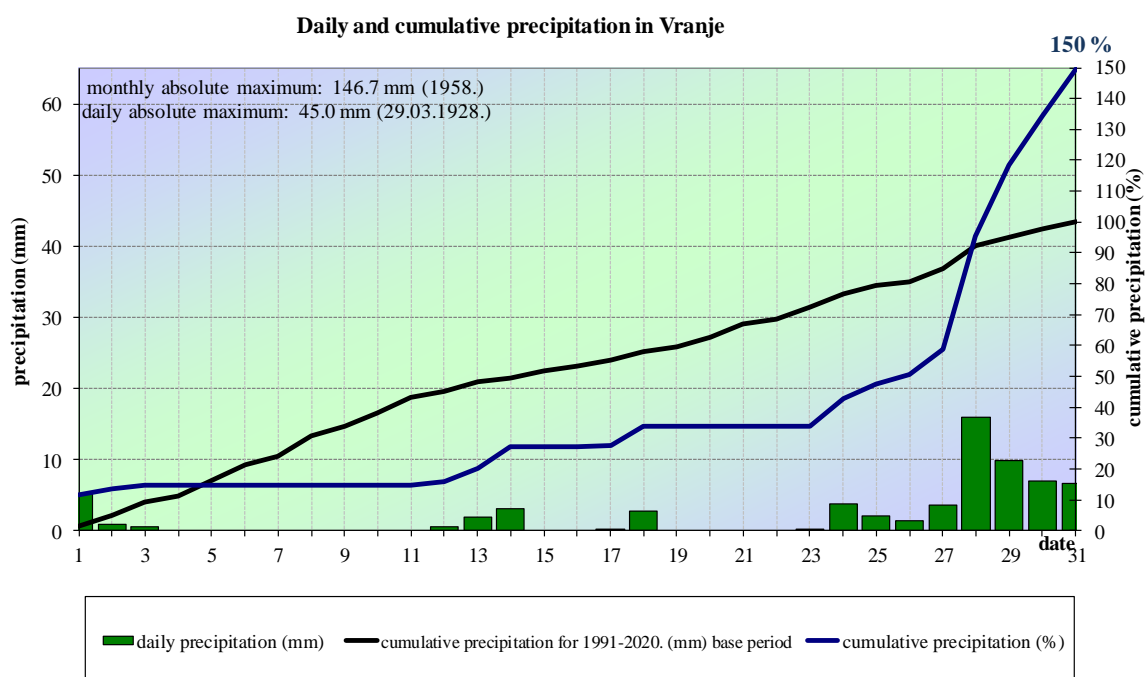


Appendix 46. Daily and cumulative precipitation sums on Zlatibor

Daily and cumulative precipitation in Nis



Appendix 47. Daily and cumulative precipitation sums for Nis



Appendix 48. Daily and cumulative precipitation sums for Vranje