Republic Hydrometeorological Service of Serbia
Kneza Viseslava 66
11000 Belgrade
Republic of Serbia

MONTHLY BULLETIN FOR SERBIA

MAY 2026

Belgrade, the 5th of June 2026

Division for Climate Monitoring and Climate Forecast
Department of National Center for Climate Change, Climate Model Development and Disaster Risk Assessment
web: http://www.hidmet.gov.rs
mail: office@hidmet.gov.rs

Contents

AIR TEMPERATURE 1
Mean monthly air temperature 1
Maximum air temperature 3
Minimum air temperature 5
PRECIPITATION 8
CLOUD COVER, BRIGHT AND CLOUDY DAYS 13
SUNSHINE DURATION (INSOLATION) 15
OVERVIEW OF THE SYNOPTIC SITUATION* 16
APPENDIX 17
Ranks of the driest May 17
Mean air temperature 21
Maximum air temperature 25
Minimum air temperature 29
Precipitation 33

- ***The 11th driest and averagely warm May in most of Serbia***
- ***Record low air temperature for Zrenjanin, Kikinda and Banatsku Karlovac***
- ***The driest May for Zlatibor, and 3rd driest for Crni Vrh***
- ***Record-breaking number of insolation hours for Kikinda***

AIR TEMPERATURE

Mean monthly air temperature

Mean May air temperature ranged from 14,4 ℃ in Dimitrovgrad to 19,2 ℃ in Belgrade, and on the mountains from 7,2 ℃ at Kopaonik to 12,7 ℃ at Zlatibor (*Figure 1).*

Departure of the mean monthly air temperature from the normal[1] for the 1991–2020 base period ranged from -0,7 ℃ in Zaječaru to +1,0 ℃ in Novi Sad and Belgrade (*Figure 2*).

Mean air temperature, based on the percentile method[2] was in the normal category in most of the country, and warm category in Novi Sad (*Figure 3).*

[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

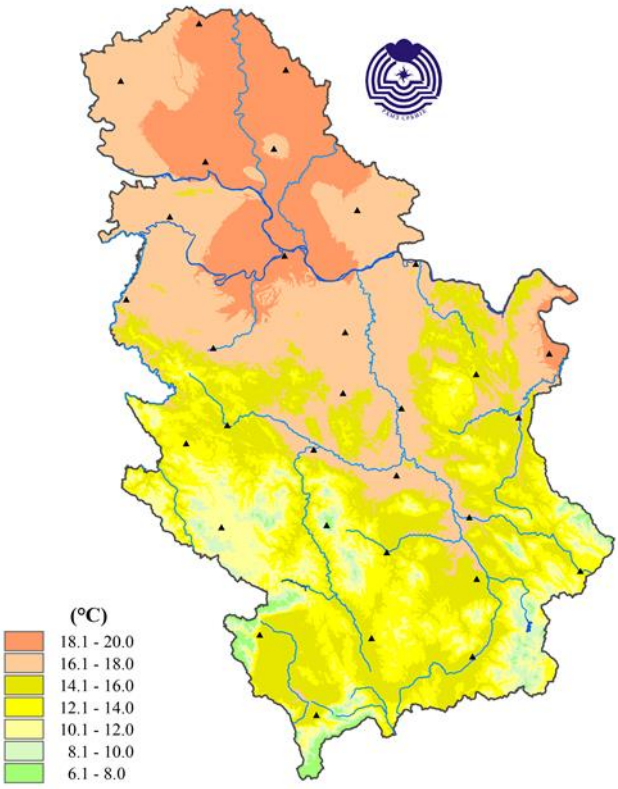


Figure 1. Spatial distribution of mean monthly air temperature (ºC)

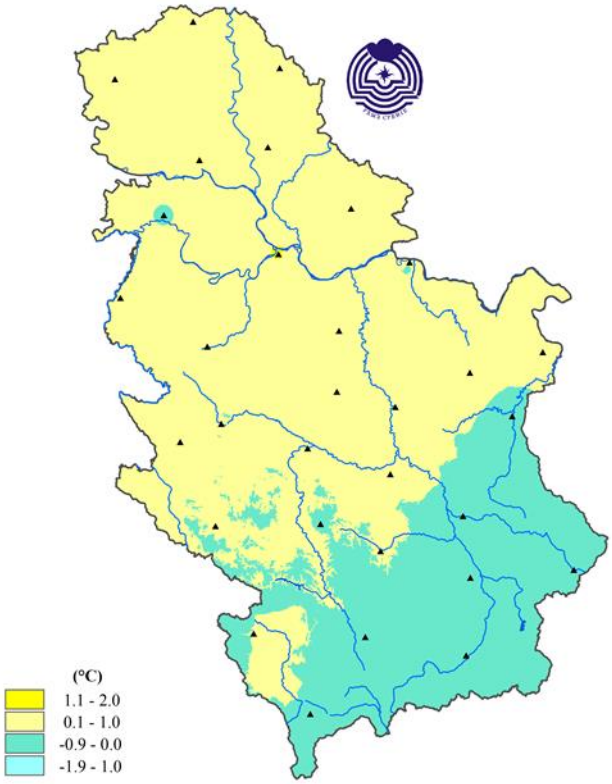


Figure 2. Spatial distribution of mean monthly air temperature anomaly (ºC)

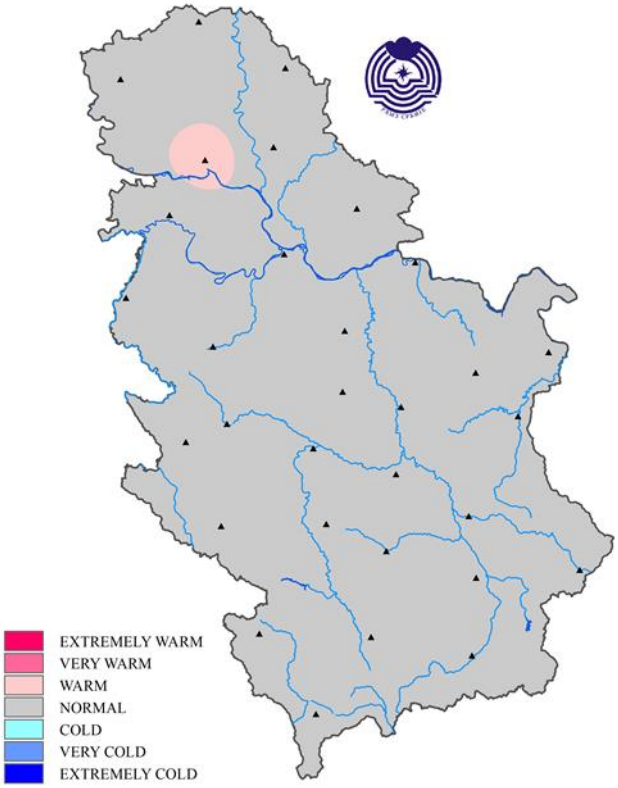


Figure 3. Spatial distribution of the mean monthly air temperature using percentile method

Based on the percentile method, mean daily air temperature in Belgrade, was in the normal category most of the month, warm category in mid-May, and extremely warm during the third decade. During the first decade it was in the cold category, as well as at the beginning and middle of the second decade of May (*Figure 4).* 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.

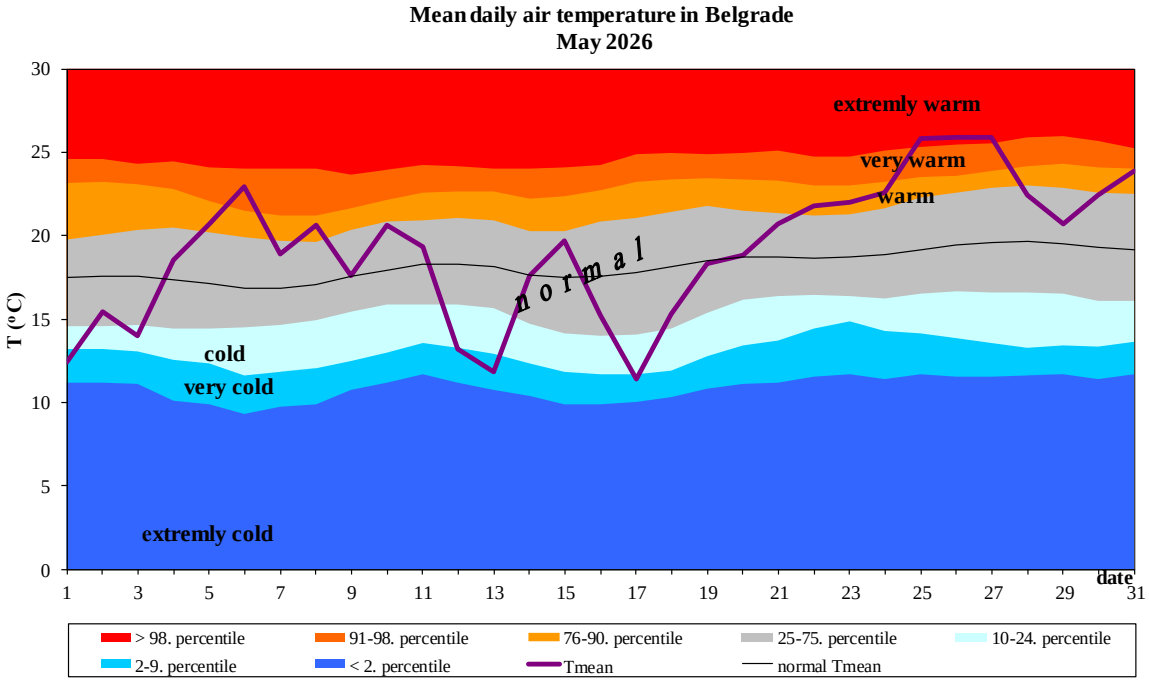


Figure 4. Daily course of the mean daily air temperature and accompanying percentiles for Belgrade

Maximum air temperature

Mean maximum air temperature ranged from 21,9 °C in Dimitrovgrad to 25,2 °C in Novi Sad, while in Belgrade it was 24,5 °C. On the mountains, mean maximum air temperature ranged from 11,6 °C at Kopaonik to 18,0 °C in Sjenica.

Based on the percentile method, mean maximum monthly air temperature was in the following categories: normal in most of the country, warm on Palic, Crni Vrh, Sombor, Novi Sad, Kikinda, Banatski Karlovac, Smederevaka Palanka, Veliko Gradiste and Cuprija.

The highest maximum daily air temperature of 33,7 °C was measured in Kikinda on May 27, while in Belgrade, the air temperature of 31,5 °C was measured on May 26.

Number of summer days[3] ranged from 9 in Dimitrovgrad to 19 in Veliko Gradiste, while Belgrade saw 15 summer days. On the mountains, only 1 day was recorded in Sjenica.

[3] Summer day refers to a day with maximum daily air temperature 25 °C and above

The recorded number of summer days was up to 6 days above the May average.

Tropical days[4] were recorded in most of Serbia, apart from the mountains, Pozega, Kursumlija and Dimitrovgrad. The recorded number of tropical days ranged from 1 in Loznica, Kragujevac, Kraljevo, Nis and Vranje up to 4 days in Veliko Gradiste. The number of tropical days was around the average.

Heat wave[5] was recorded in Novi Sad in the period from 23 to 27 May.

Figure 5 shows daily course of the maximum daily air temperature and the accompanying percentiles for Belgrade in May 2026 and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the Appendix.

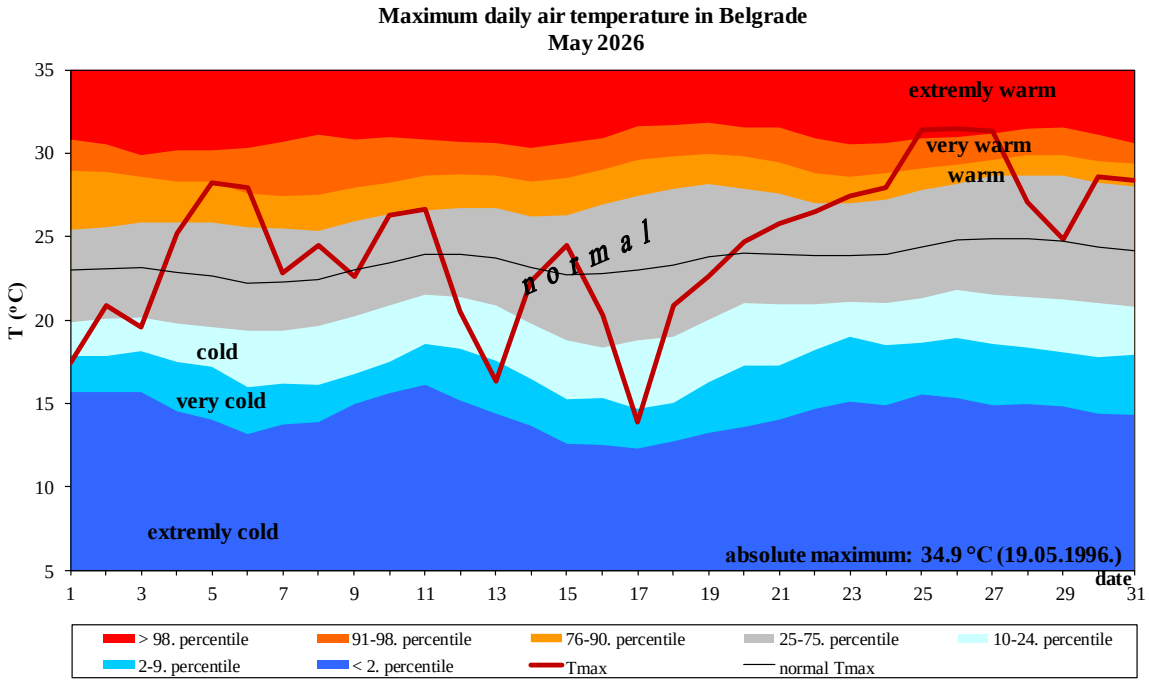


Figure 5. Daily course of the maximum daily air temperature and accompanying percentiles for Belgrade

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

Minimum air temperature

Mean minimum air temperature ranged from 6,8 ℃ in Dimitrovgrad to 12,8 ℃ in Belgrade. On the mountains, mean minimum air temperature ranged from 3,6 ℃ at Kopaonik to 7,9 ℃ at Crni vrh.

Based on the percentile method, mean minimum monthly air temperature was in the categories from normal to very cold.

The lowest minimum air temperature of -4,2 ℃ was measured at Kopaonik on May 1. On the same day, in the lowland, Zrenjanin recorded the lowest air temperature of -2,2 ℃. On May 1, Belgrade recorded the lowest air temperature of 5,5 ℃.

Record low May air temperatures were registered in Zrenjanin, Kikinda and Banatsku Karlovac (*Chart 1*)**.**

Table 1. The exceeded absolute minimum air temperature for May

STATION	historical period	2026		exceeded Aps Tmin	Date Aps Tmin
		Tmin May	date Tmin		
ZRENjANIN	1943-2025	**-2.2**	1	**-0.5**	2. V 2007.
KIKINDA	1949-2025	**-1.7**	1	**-0.5**	12. V 1978.
B.KARLOVAC	1986-2025	**0.4**	2	**0.5**	6. V 2011.

The highest number of frost days[6] was recorded in Dimitrovgrad – 3 days, Pozega and Leskovac - 2 frost days, Zrenjanin, Kikinda, Sremska Mitrovica, Veliko Gradiste, Kursumlija and Zajecar – 1 day. On the mountains, number of frost days ranged from 2 at Crni vrh to 7 days at Kopaonik, whilst Zlatibor didn't observe any. The recorded number of frost days was around the May average.

One tropical night[7] was recorded in Negotin.

Cold wave[8] was recorded between April 27 to May 4 in Kikinda, from April 30 to May 4 on Palic, Sombor, Zrenjanin, Sremska Mitrovica, Belgrade and Banatski Karlvoac, and from May 1 to 5 in Valjevo, Pozega, Nis and Dimitrovgrad (*Table 2).*

[6] Frost day is defined as the day with minimum air temperature lower than 0 °C
[7] Tropical night refers to a day with minimum daily air temperature 20 °C and above
[8] Cold wave is, according to the percentile method, is a period during which minimum daily air temperature is in the very cold and extremely cold categories for 5 consecutive days or longer

Table 2. Cold waves in Serbia

COLD WAVES IN SERBIA - MAY 2026

(relative to the 1991-2020 base period)

	APRIL				MAY																													
station/day	27	28	29	30	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				VC	EC	VC	VC	VC																											
SOMBOR				EC	EC	VC	VC	EC																											
KIKINDA	EC	EC	VC	VC	EC	EC	VC	VC																											
ZRENJANIN				VC	EC	EC	VC	VC																											
NOVI SAD																																			
SR.MITROVICA				VC	EC	EC	VC	VC																											
BELGRADE				VC	EC	EC	VC	VC																											
LOZNICA																																			
VALJEVO					EC	EC	VC	EC	VC																										
V.GRADISTE																																			
SM.PALANKA																																			
KRAGUJEVAC																																			
KRALJEVO																																			
POZEGA					EC	EC	VC	EC	VC																										
ZLATIBOR																																			
CUPRIJA																																			
KRUSEVAC																																			
NEGOTIN																																			
ZAJECAR																																			
CRNI VRH																																			
KOPAONIK																																			
SJENICA																																			
NIS					EC	VC	VC	EC	VC																										
VRANJE																																			
DIMITROVGRAD					EC	EC	VC	EC	VC																										
LESKOVAC																																			
KURSUMLIJA																																			
B.KARLOVAC				VC	EC	EC	VC	VC																											

Figure 6 shows assessment of the minimum and maximum air temperature in Serbia for May based on the tercile distribution relative to the 1991-2020 base period. It can be noted that the mean minimum air temperature was below the lower tercile threshold, whilst the mean maximum air temperature was at the upper tercile threshold.

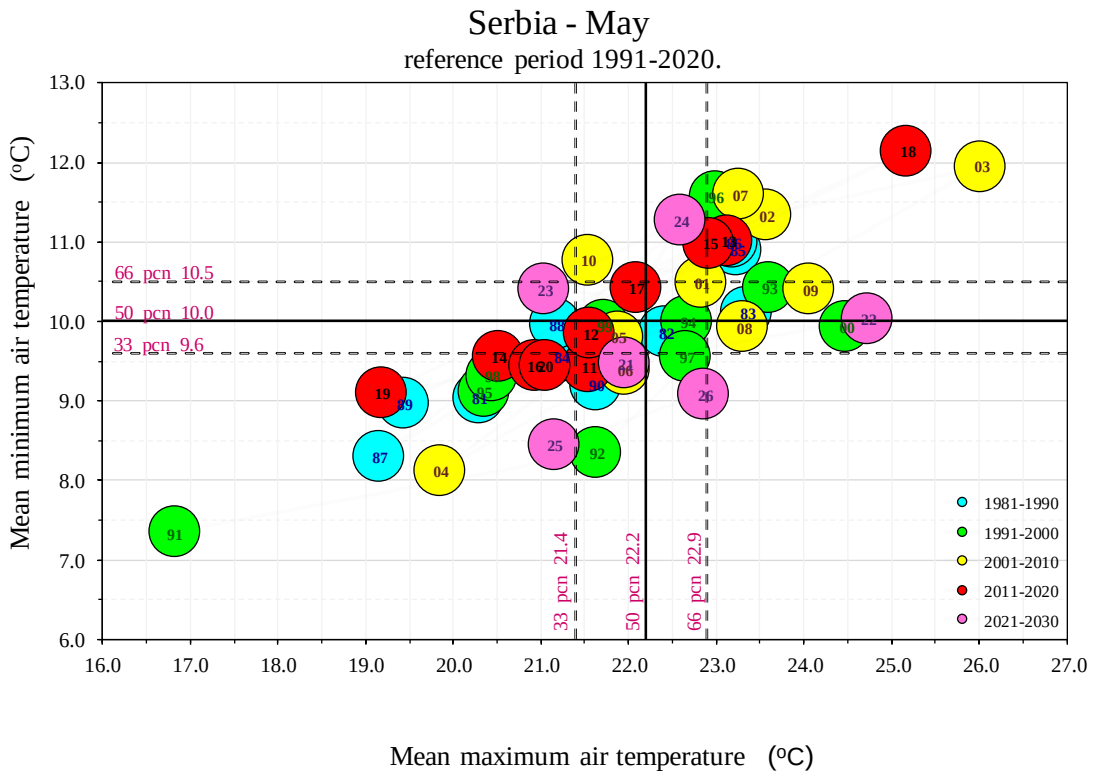


Figure 6. Assessment of minimum and maximum air temperature for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 7 shows daily course of the minimum daily air temperature and the accompanying percentiles for Belgrade in May 2026, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the Appendix.

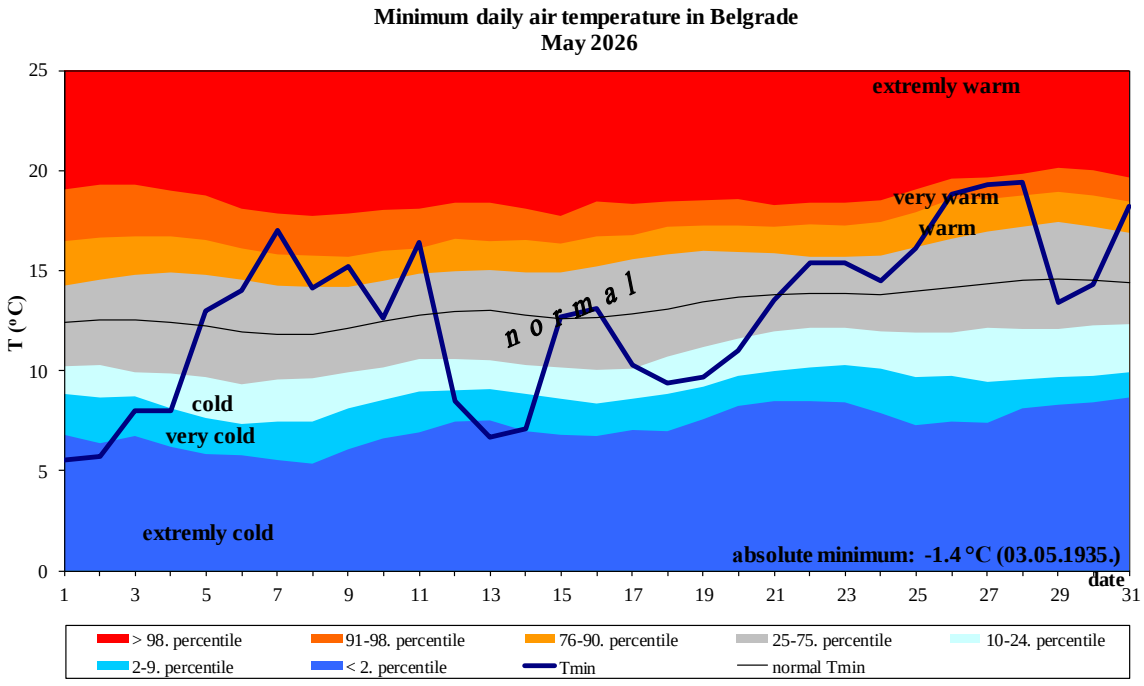


Figure 7. Daily course of the minimum daily air temperature and accompanying percentiles for Belgrade

PRECIPITATION

May 2026 ranks as **the 11th driest** for Serbia since 1951 (Figure 8) and **the driest on record for Zlatibor,** the 3rd driest for Crni vrh, the 5th driest for Pozega, the 9th driest for Kopaonik, and 10th driest for Kursumlija and Sjenica (*Table 3).*

In the appendix are graphs showing 15 driest years since the record-keeping began for the stations: Zlatibor, Crni Vrh, Pozega, Kopaonik, Kursumlija, Sjenica, Valjevo and Loznica.

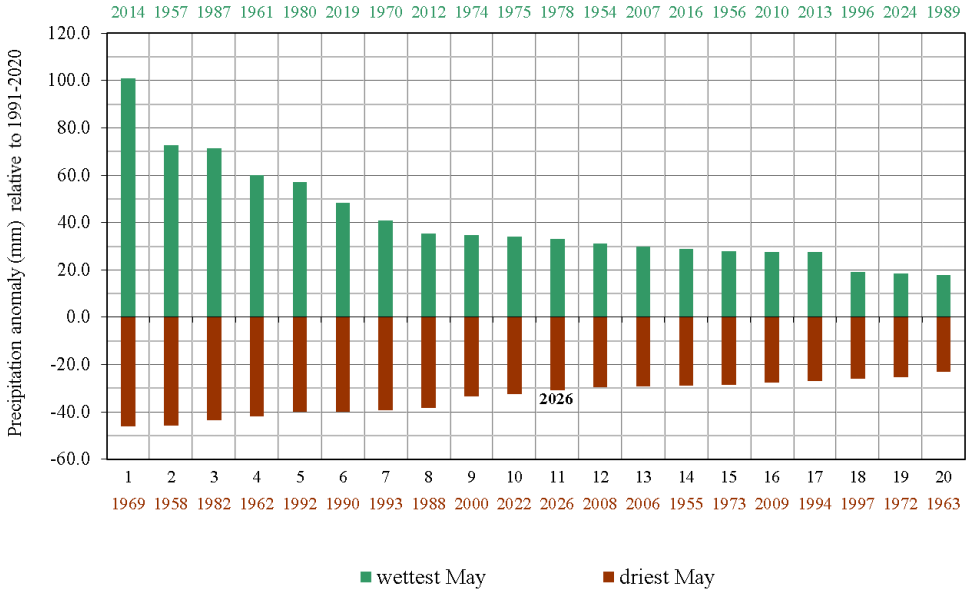


Figure 8. Rank of the wettest and driest Mays in Serbia for the period from 1951 to 2026

Table 3. The ranking of May 2026 in terms of precipitation, average, and percentage of the 1991-2020 normal

STATION	historical period	∑RR for May 2026 (mm)	normal for May 1991-2020	percentage (%) from normal	ranking for May 2026 (ascending RR)
ZLATIBOR	1950-2025	29.8	105.1	28	**1**
CRNI VRH	1966-2025	36.7	87.2	42	**3**
POZEGA	1925-2025	28.5	82.2	35	**5**
KOPAONIK	1950-2025	66.9	120.9	55	**9**
KURSUMLIJA	1925-2025	34.8	71.9	48	**10**
SJENICA	1925-2025	39.9	82.6	48	**10**

May precipitation sums ranged from 22,5 mm in Kikinda to 66,9 mm at Kopaonik, while Belgrade recorded 45,4 mm (*Figure 9*).

Precipitation totals compared to the normal for the 1991-2020 base period ranged from 28% at Zlatibor to 103% in Sombor (*Figure 10).*

Based on the percentile method, precipitation sums were in the following categories: normal category in the northern and parts of eastern and central Serbia, elsewhere they fell under the dry and very dry category, and at Crni vrh, Zlatibor and Pozega they were in the extremely dry category (*Figure 11).*

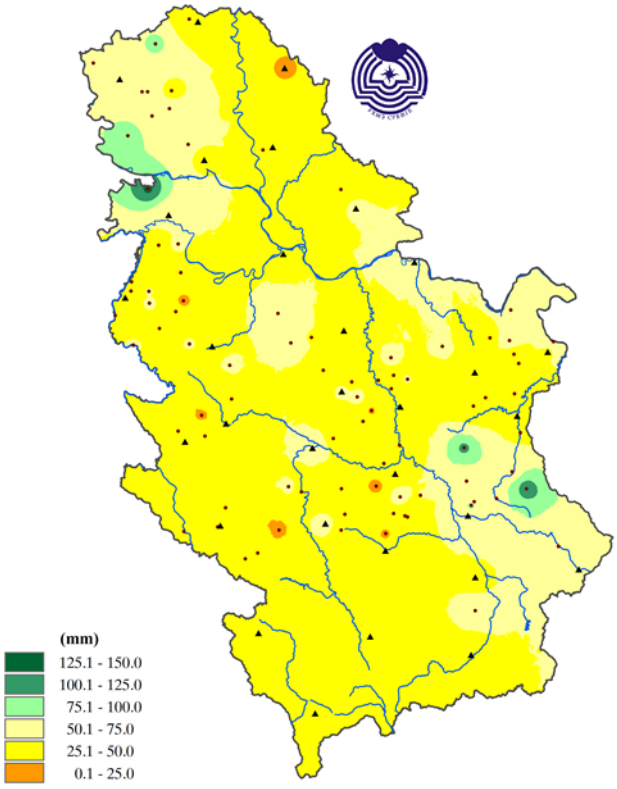


Figure 9. Spatial distribution of the monthly precipitation sums (mm) according to data from 28 major meteorological, 17 climatological and 68 rain gauge stations

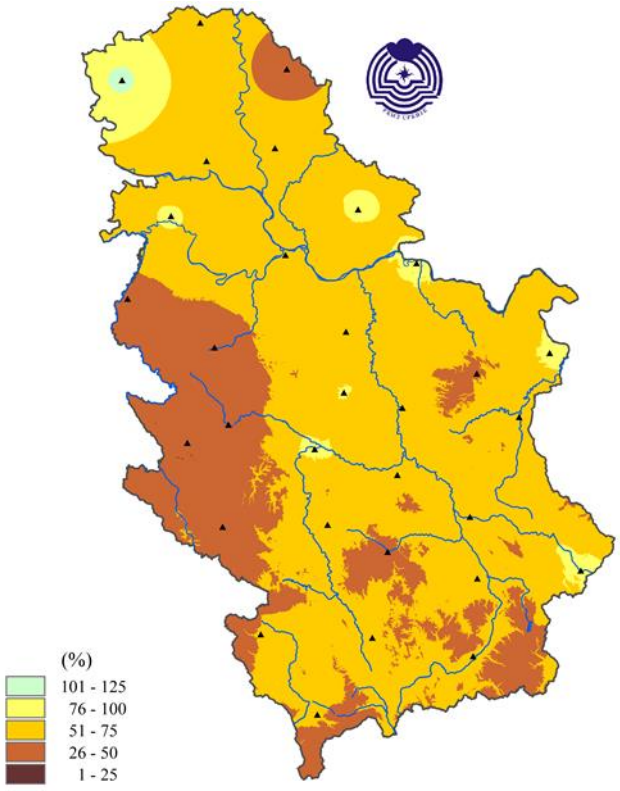


Figure 10. Spatial distribution of the monthly precipitation sums in the percentages of normal for the 1991–2020 base period

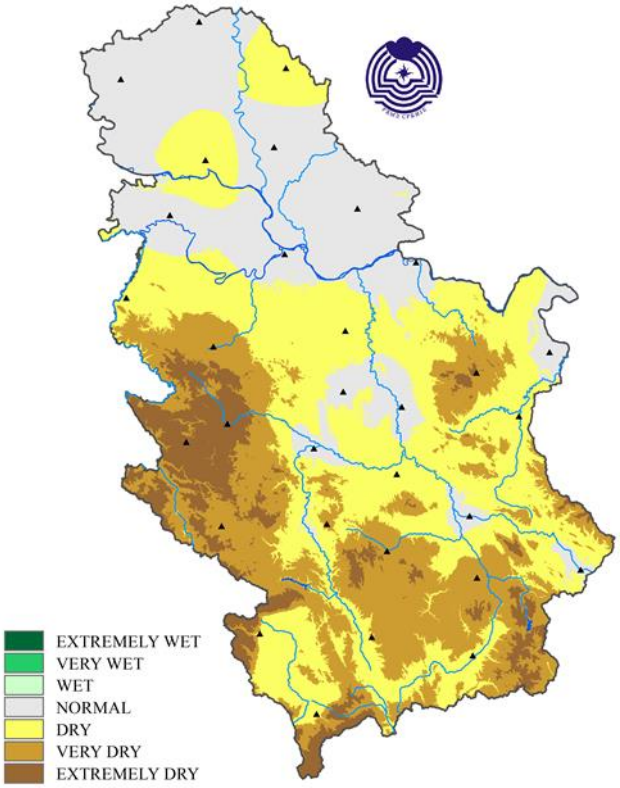


Figure 11. Monthly precipitation sums according to the percentile method

The highest daily precipitation sum of 41,8 mm was measured in Sombor on May 17. On the same day, Belgrade observed the highest daily precipitation sum of 16,0 mm.

On May 9, Zlatibor recorded the highest daily precipitation sum of 8,5 mm. This was the lowest daily precipitation maximum for Zlatibor for May. The same amount was observed on May 1, 1958.

The number of days with precipitation ranged from 7 on Palic, Sombor, Novi Sad, Zrenjanin, Banatski Karlovac, Belgrade and Smederevska Palanka to 18 at Kopaonik. The recorded number of days with precipitation was from 1 to 6 days below the May average (*Figures 12* and *13).*

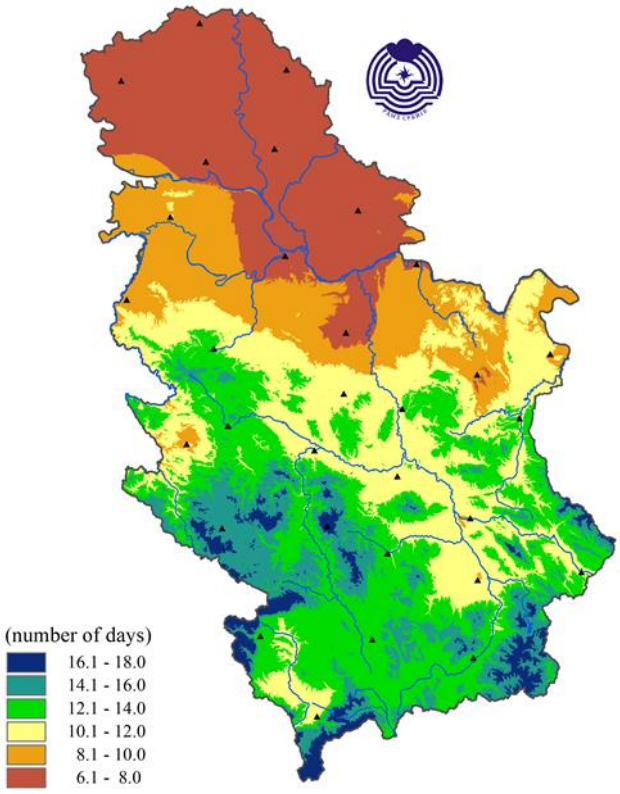


Figure 12. Spatial distribution of number of days with precipitation

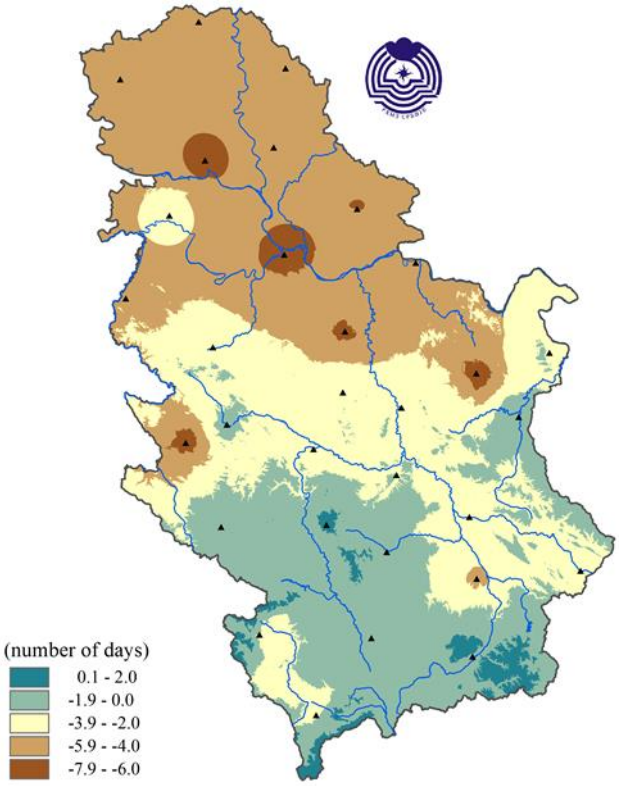


Figure 13. Spatial distribution of deviation of number of days with precipitation

On May 17, snow cover of 1 cm was recorded at Kopaonik.

Figure 14 shows assessment of air temperature and precipitation sums for Serbia for May based on the tercile distribution relative to the 1991 – 2020 base period. It can be noted that May 2026 was marked by air temperature within the average and precipitation sums below the lower tercile threshold.

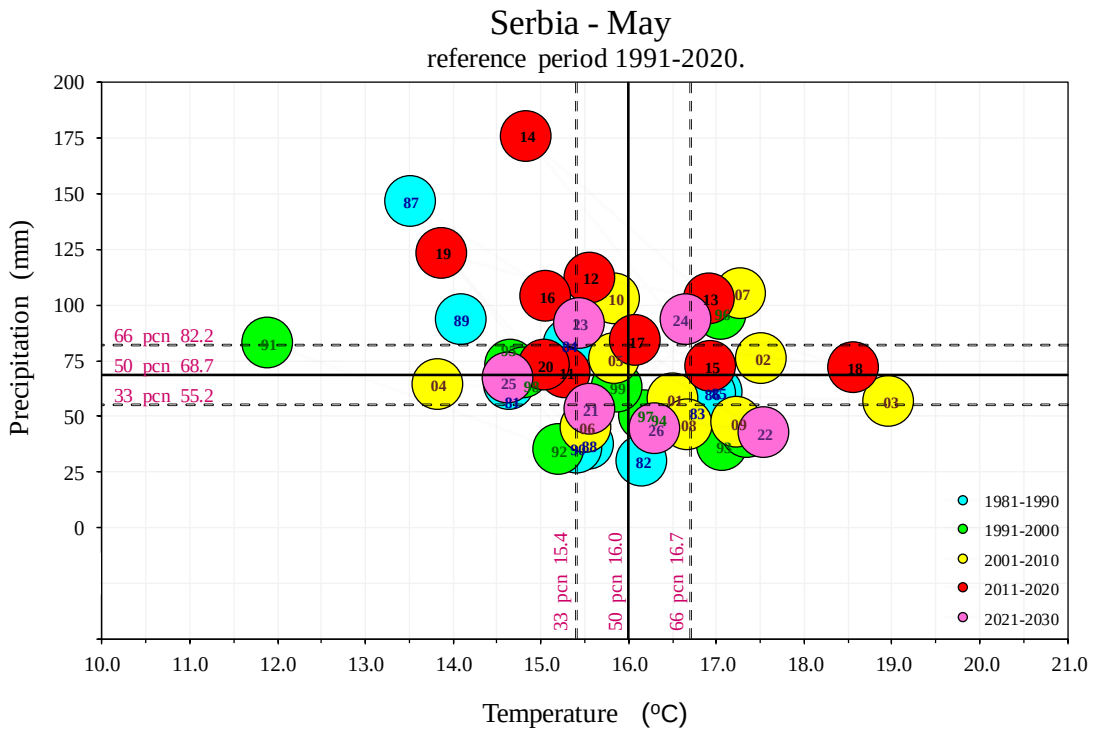


Figure 14. Assessment of air temperature and precipitation for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 15 show daily and cumulative precipitations sums with averaged normal 1991-2020 for May in Belgrade, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje precipitation sums are given in Appendix.

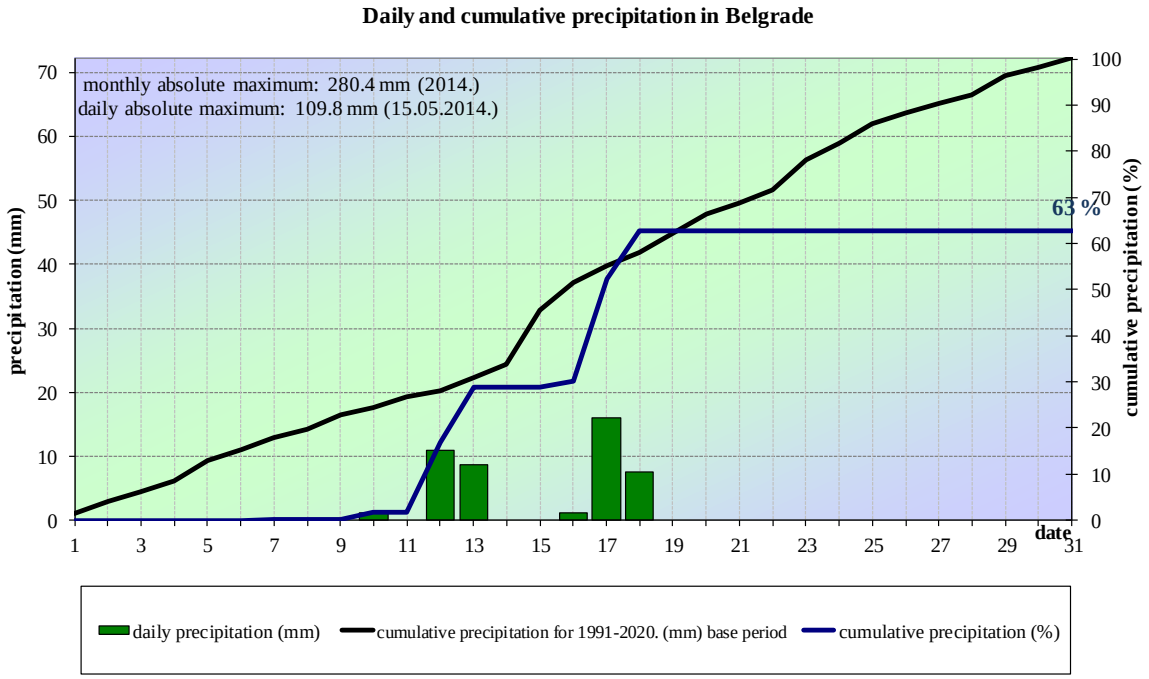


Figure 15. Daily and cumulative precipitation in Belgrade

CLOUD COVER, BRIGHT AND CLOUDY DAYS

Mean May cloud cover was slightly below the average, ranging from 4/10 to 6/10. Figures 16, 17 and 18 show the average daily cloud cover in Belgrade, Kopaonik and Banatski Karlovac.

Number of bright days[9] ranged from 3 in Sjenica to 10 in Banatsku Karlovac and Belgrade. The observed number of bright days was above the May average from 1 to 4 days in most of the country.

Number of cloudy days[10] ranged from 2 in Veliko Gradiste to 9 in Leskovac and Kopaonik. Belgrade recorded 5 cloudy days. Number of cloudy days was 1 to 4 days below the May average in most of the country.

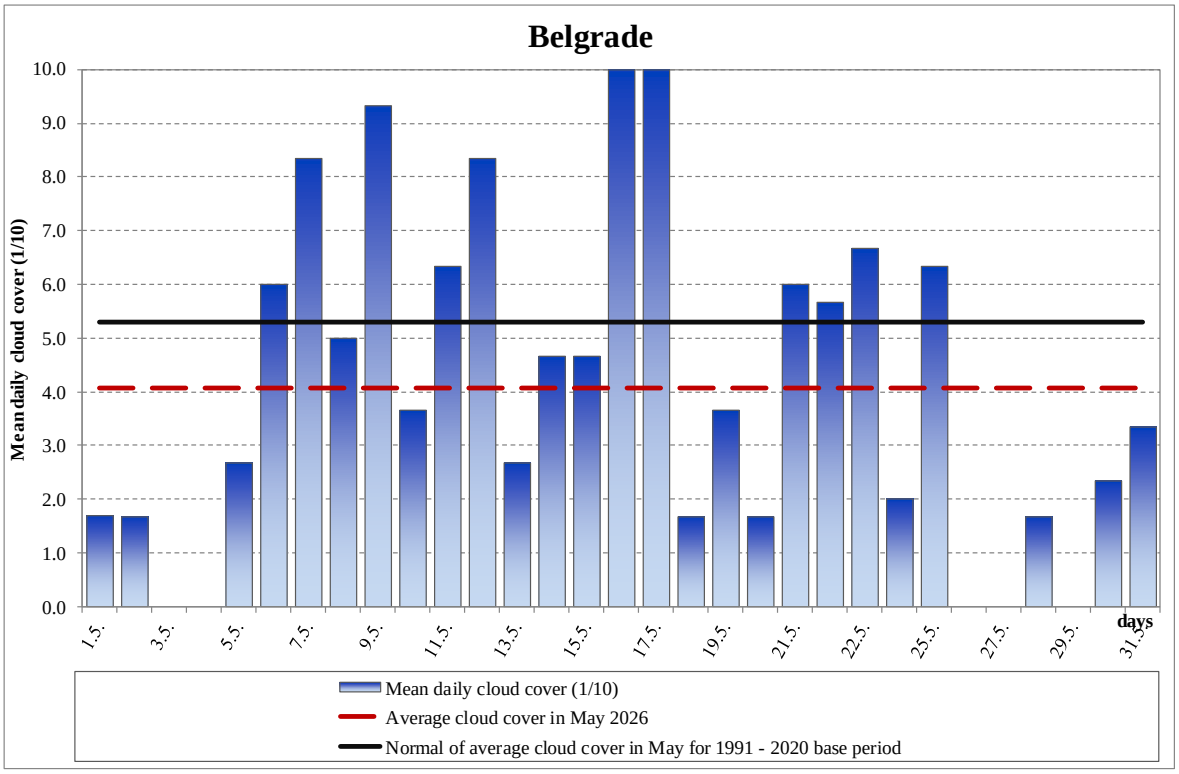


Figure 16. Mean daily cloud cover in Belgrade

[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

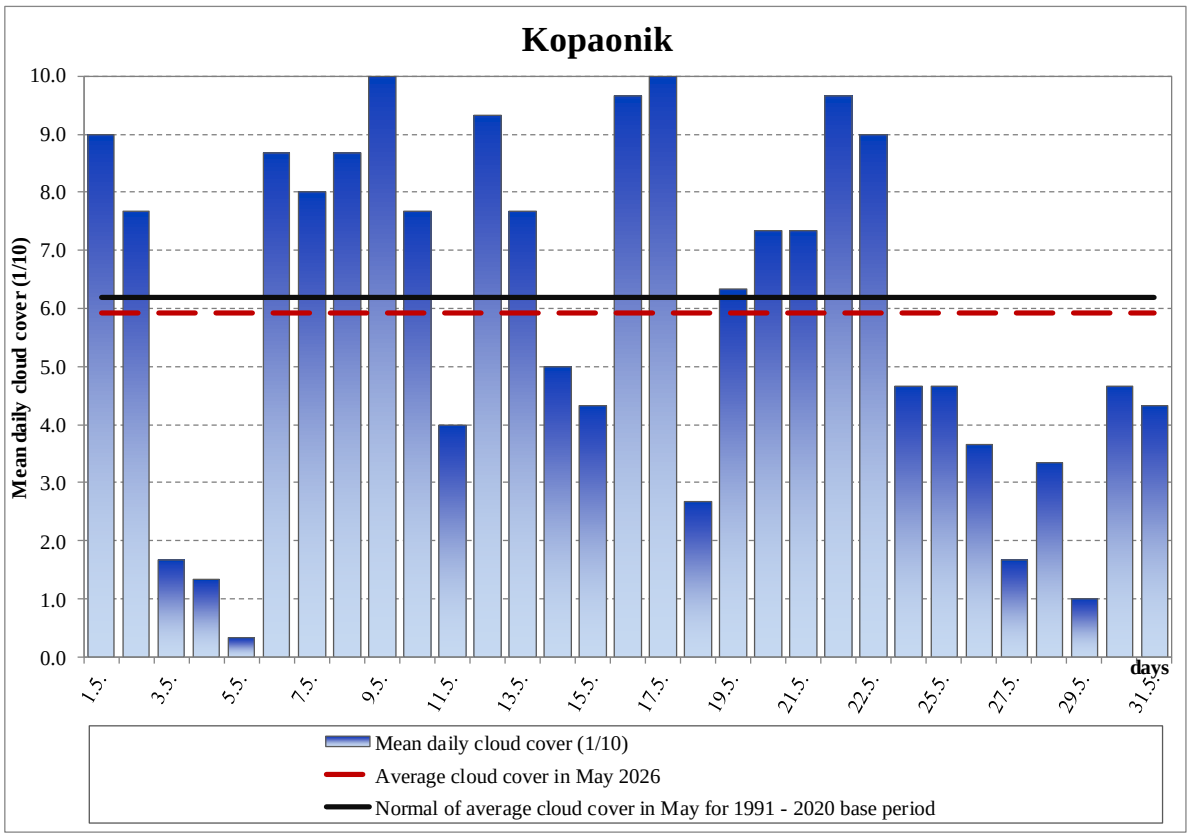


Figure 17. Mean daily cloud cover on Kopaonik

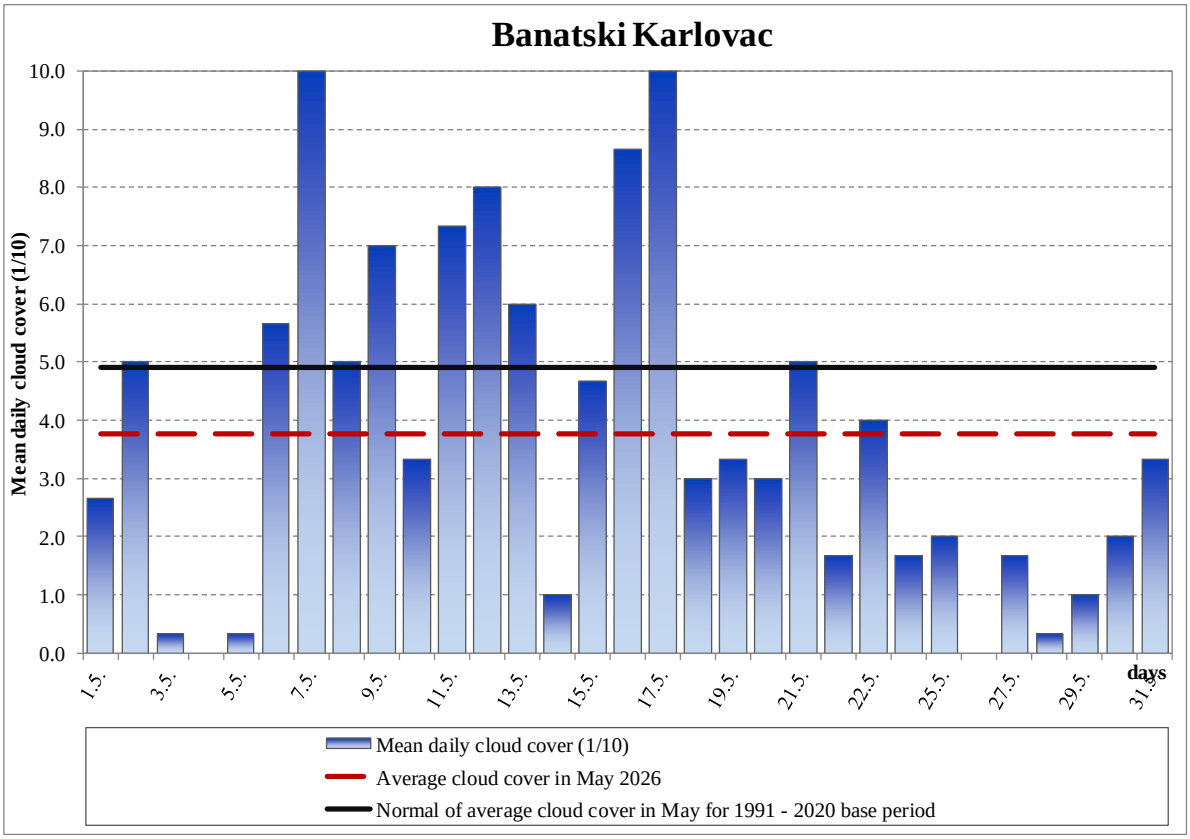


Figure 18. Mean daily cloud cover in Banatski Karlovac

SUNSHINE DURATION (INSOLATION)

Sunshine duration in May ranged from 216,5 hours at Zlatibor to 336,2 hours in Kikinda (*Figure 19*).

Kikinda saw **record-breaking May insolation hours**. The previous May maximum of 332,0 hours was observed in May 2000.

May insolation ranged from 103% at Zlatibor to 146% in Pozega compared to the normal for the 1991-2020 base period *(Figure 20*).

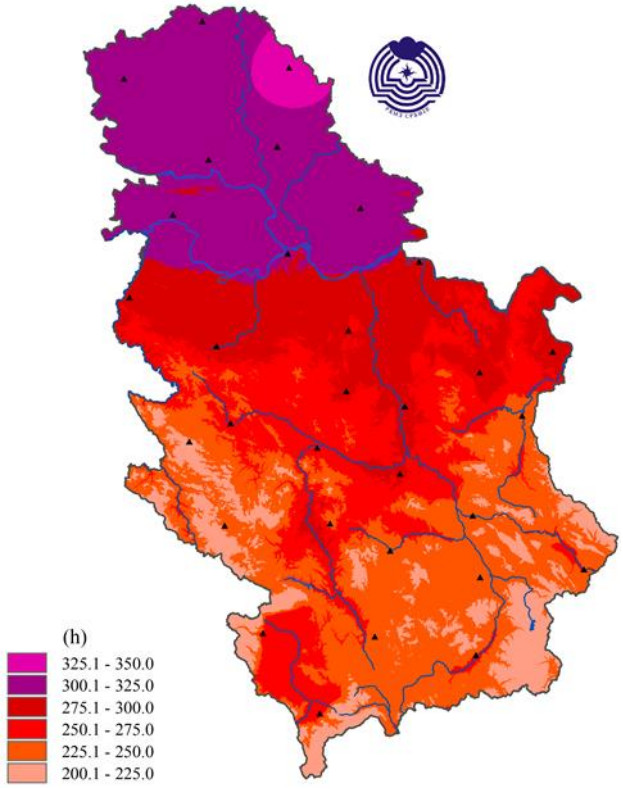


Figure 19. Insolation, expressed in hours

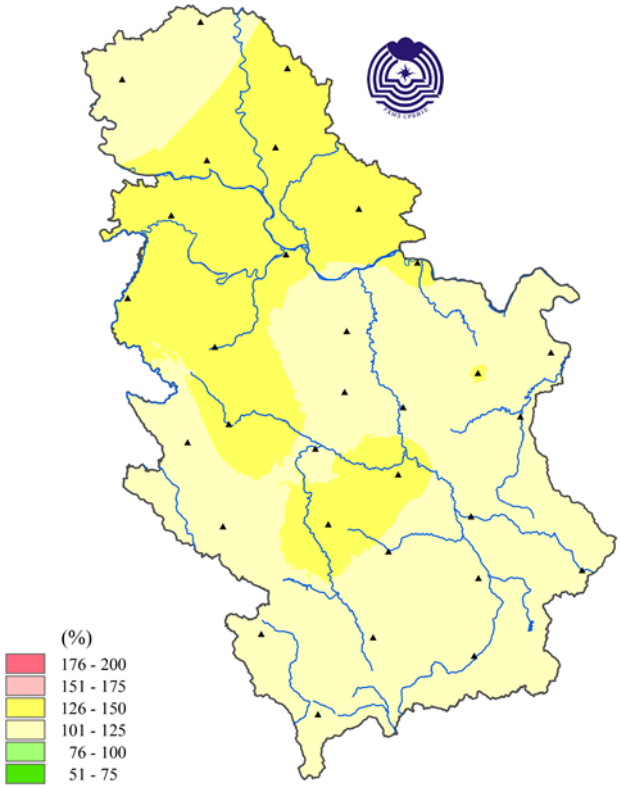


Figure 20. Insolation expressed in the percentages of normal

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

OVERVIEW OF THE SYNOPTIC SITUATION*

At the beginning and end of the month, stable and mostly dry, during the third decade very warm. Periods of stable and dry weather, anticyclones and ridges, as well as periods of unstable weather due to low pressure system activities over the western and central Mediterranean, the Adriatic Sea, and the east; a noticeable drop in temperature mid-month, that is, influence of low pressure activity from the east and north and a colder air mass.

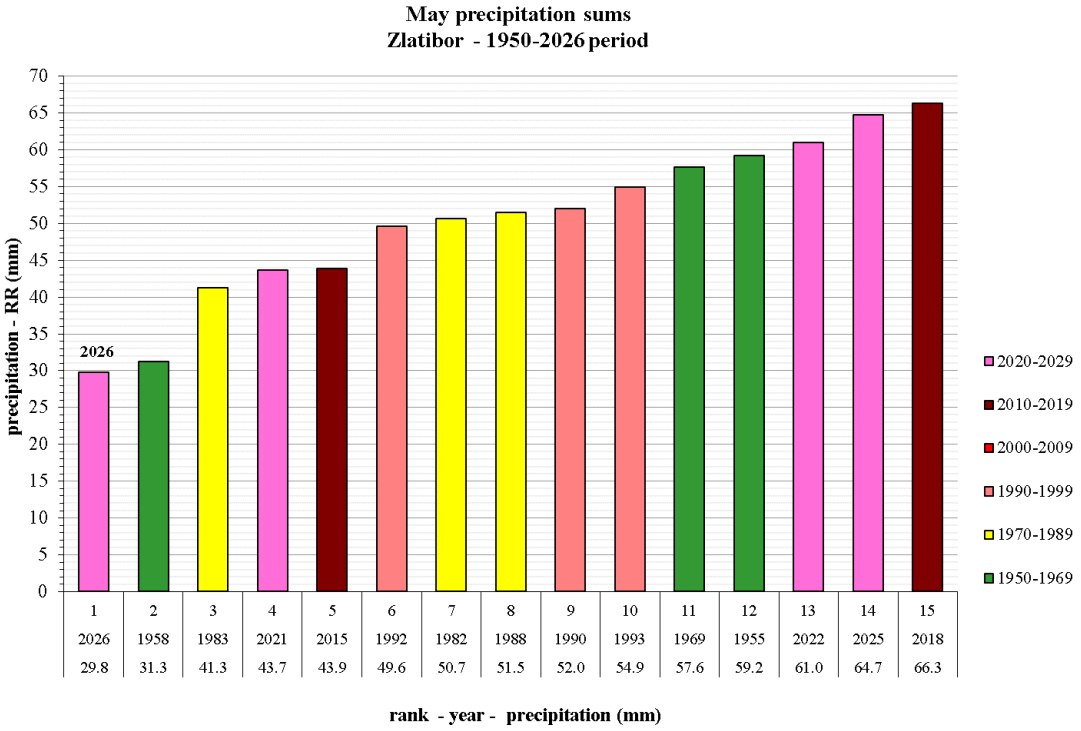
Period at the beginning of the month was characterized by predominantly dry and stable weather, with a gradual rise in temperature due to the presence of an anticyclone, the strengthening of a ridge in the geopotential field, along with the advection of a warmer air mass from the southwest over much of the Balkan Peninsula. A low pressure system persisted over the far eastern regions. Towards the end of the first decade, shallow disturbances within a low pressure system over the western Mediterranean, along with a series of weakly pronounced fronts moved across the central parts of the continent and the Pannonian Plain, producing more changeable and unsettled weather, more pronounced in the western, central, and southeastern parts of Serbia.
Period around mid-month was marked by a more noticeable change in the weather producing occasional rain and local showers with thunderstorms in addition to cooler condition. Short-lived snowfall was observed on the mountains. A low pressure system and its frontal waves from the western Mediterranean and the Adriatic moved across the Balkan Peninsula and our country eastward, accompanied by the advection of colder air within an upperair depression extending from the northern Europe.

In a subsequent period, during most of the third decade, prevailed an anticyclone along with the gradual advection of a warm air mass from the west. A thermal ridge was established extending from the western Mediterranean, western Europe and the Alps, further toward the northeast of the continent. Meanwhile, a low pressure system persisted over the southeastern parts of the Balkans and the eastern Mediterranean. Until the end of May, it was dry and warm, especially in the northern regions. At the end of the month, within the low pressure system from the north and northeast, weakly pronounced cold front in the passage across Serbia brought scattered precipitation, local showers with thunder, mostly in the western, eastern, parts of central and southern areas with the slight drop in temperature.

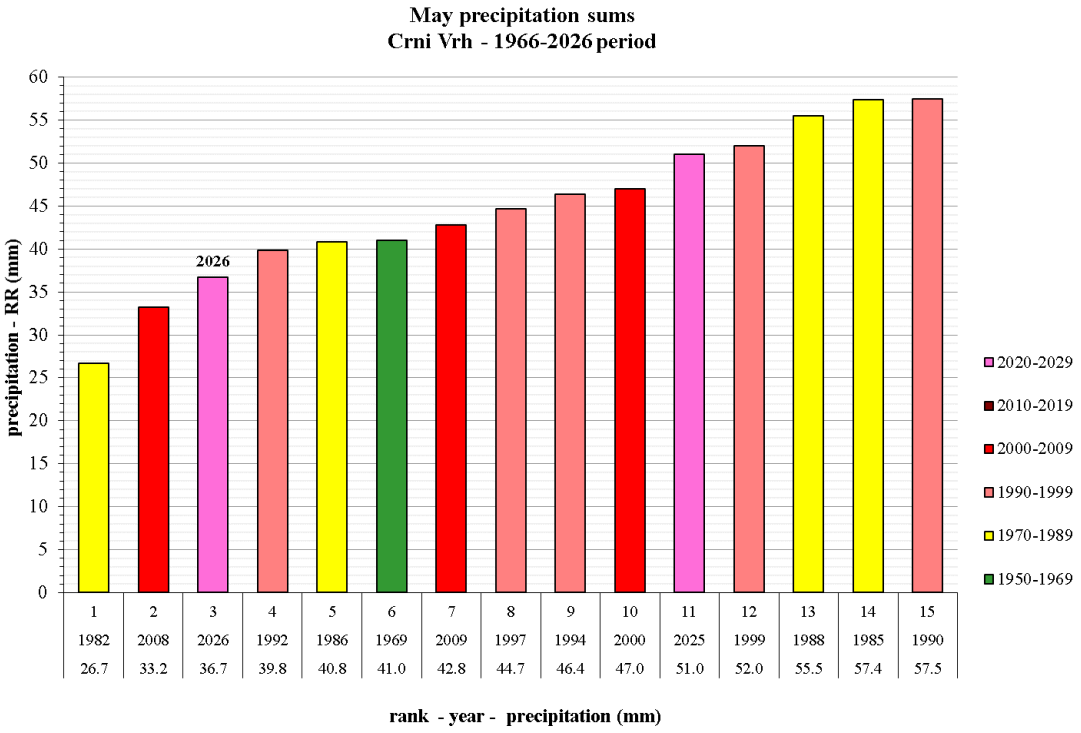
* National Center for Hydrometeorlogical Early Warning System

APPENDIX

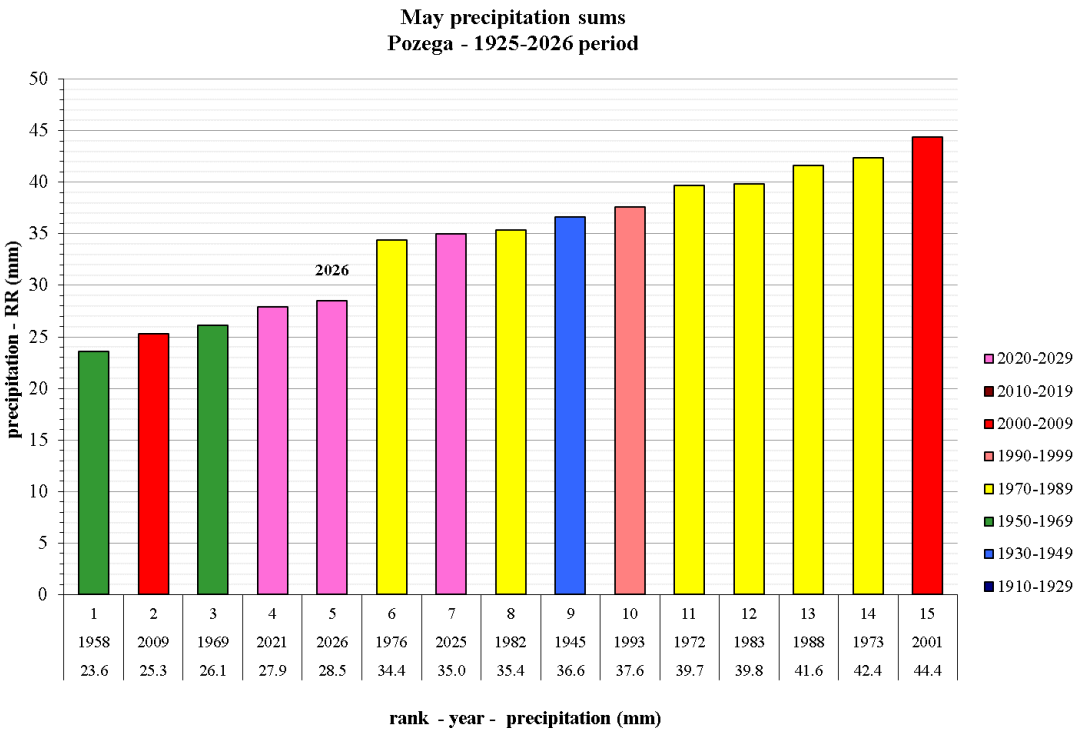
Ranks of the driest May



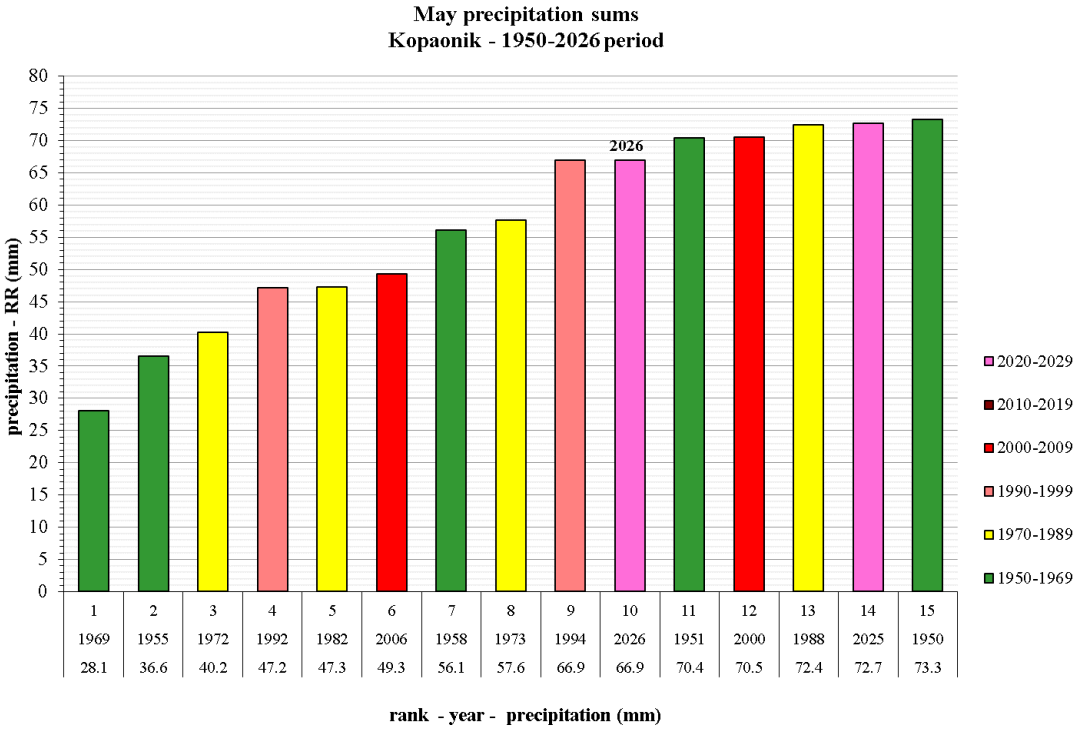
Appendix 1. Rank of the lowest precipitation on Zlatibor



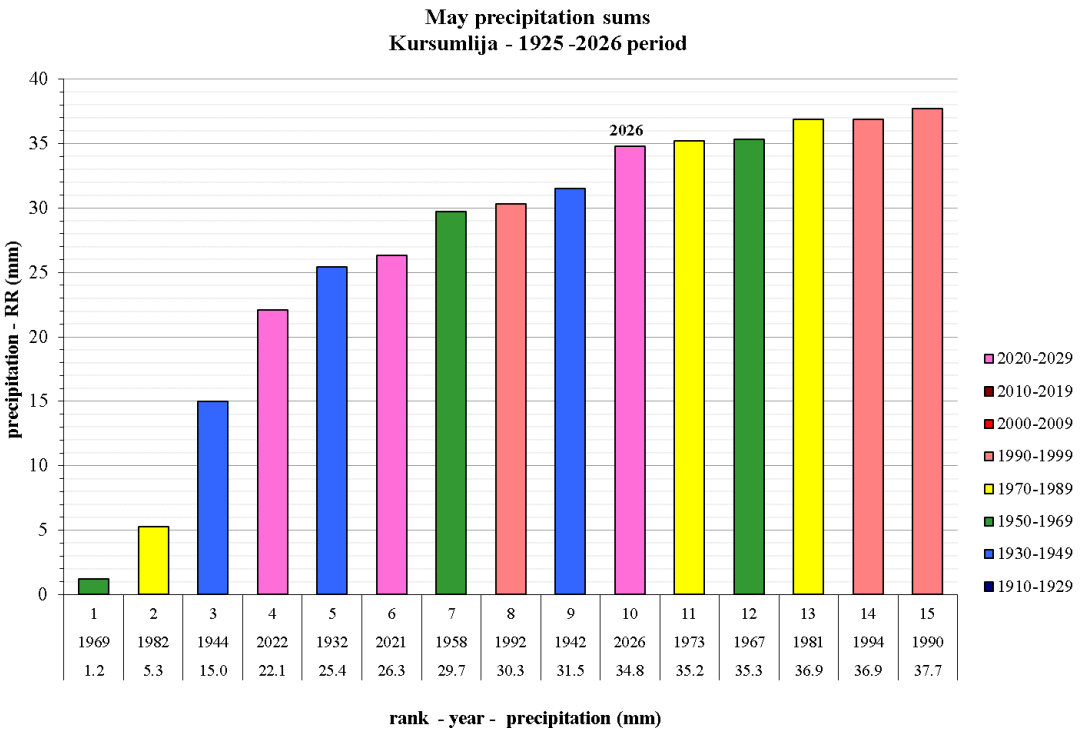
Appendix 2. Rank of the lowest precipitation on Crni Vrh



Appendix 3. Rank of the lowest precipitation in Pozega

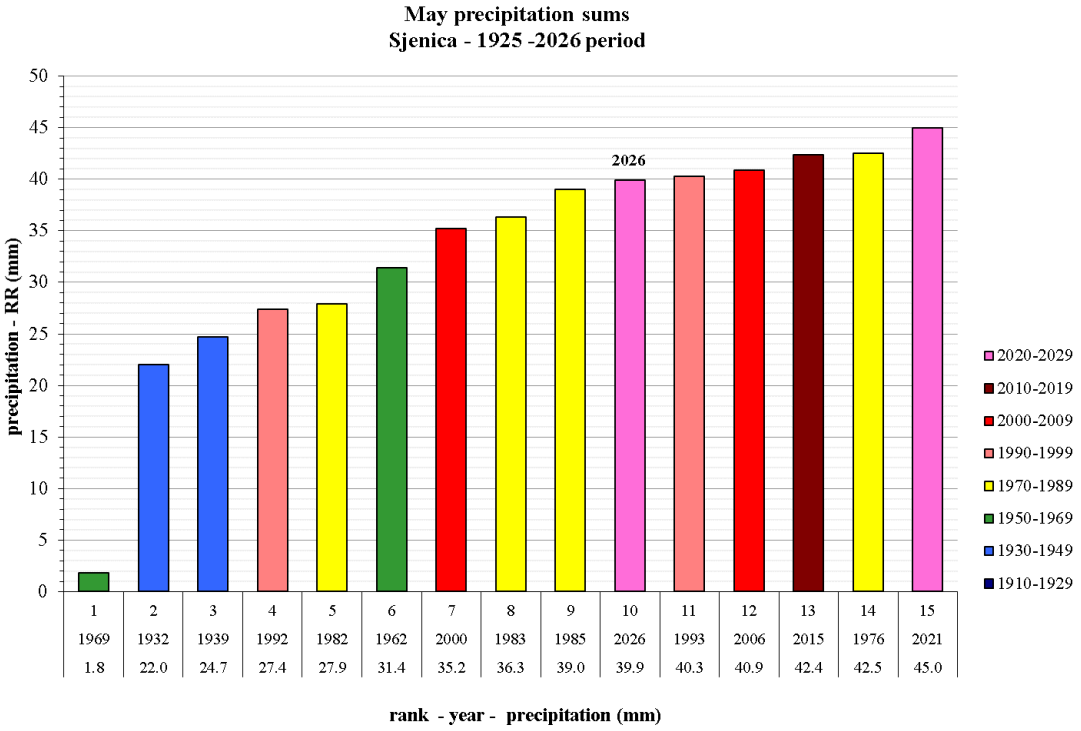


Appendix 4. Rank of the lowest precipitation on Kopaonik



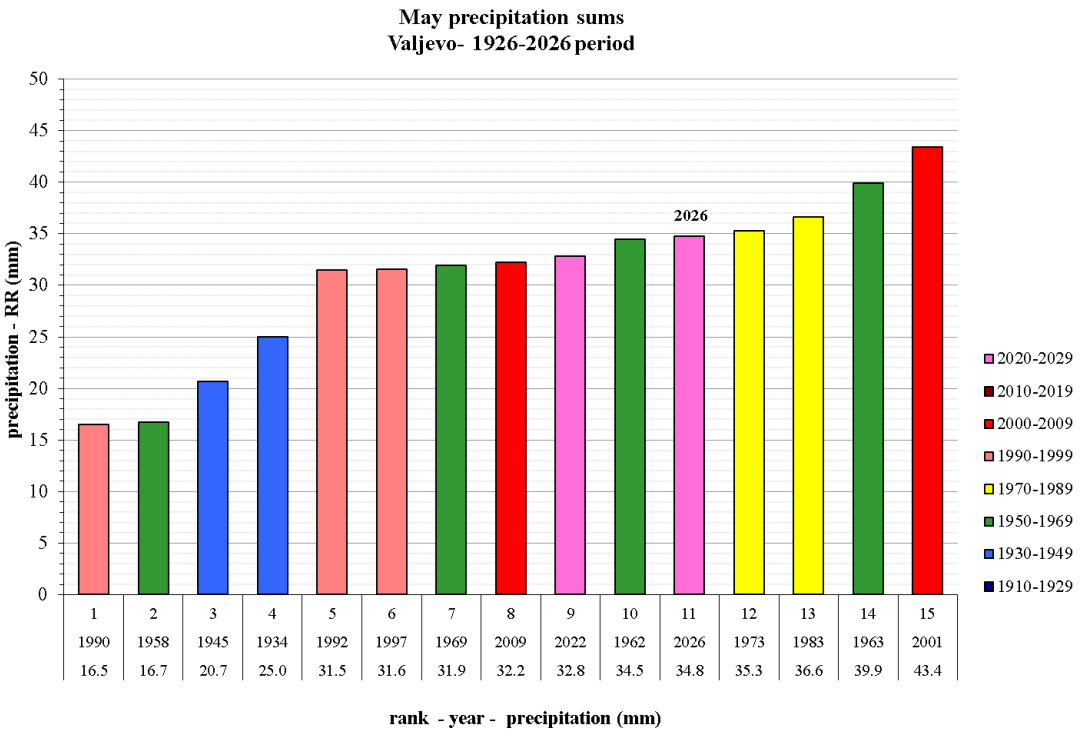
rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
year	1969	1982	1944	2022	1932	2021	1958	1992	1942	2026	1973	1967	1981	1994	1990
precipitation (mm)	1.2	5.3	15.0	22.1	25.4	26.3	29.7	30.3	31.5	34.8	35.2	35.3	36.9	36.9	37.7

Appendix 5. Rank of the lowest precipitation in Kursumlija

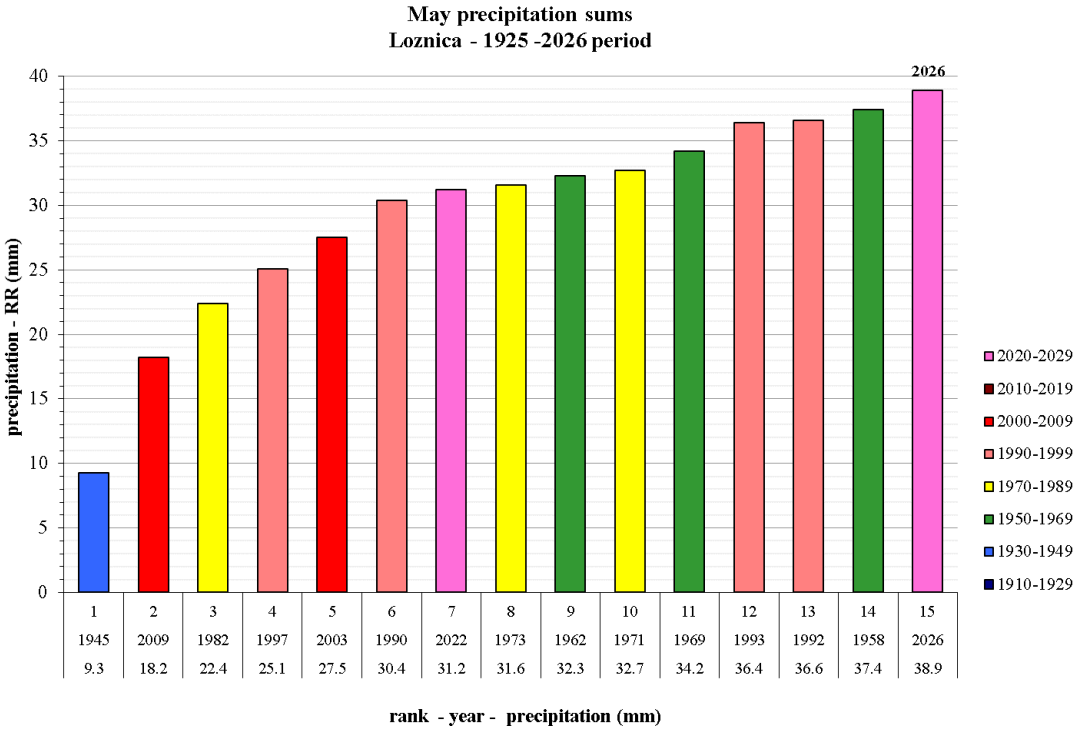


rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
year	1969	1932	1939	1992	1982	1962	2000	1983	1985	2026	1993	2006	2015	1976	2021
precipitation (mm)	1.8	22.0	24.7	27.4	27.9	31.4	35.2	36.3	39.0	39.9	40.3	40.9	42.4	42.5	45.0

Appendix 6. Rank of the lowest precipitation in Sjenica

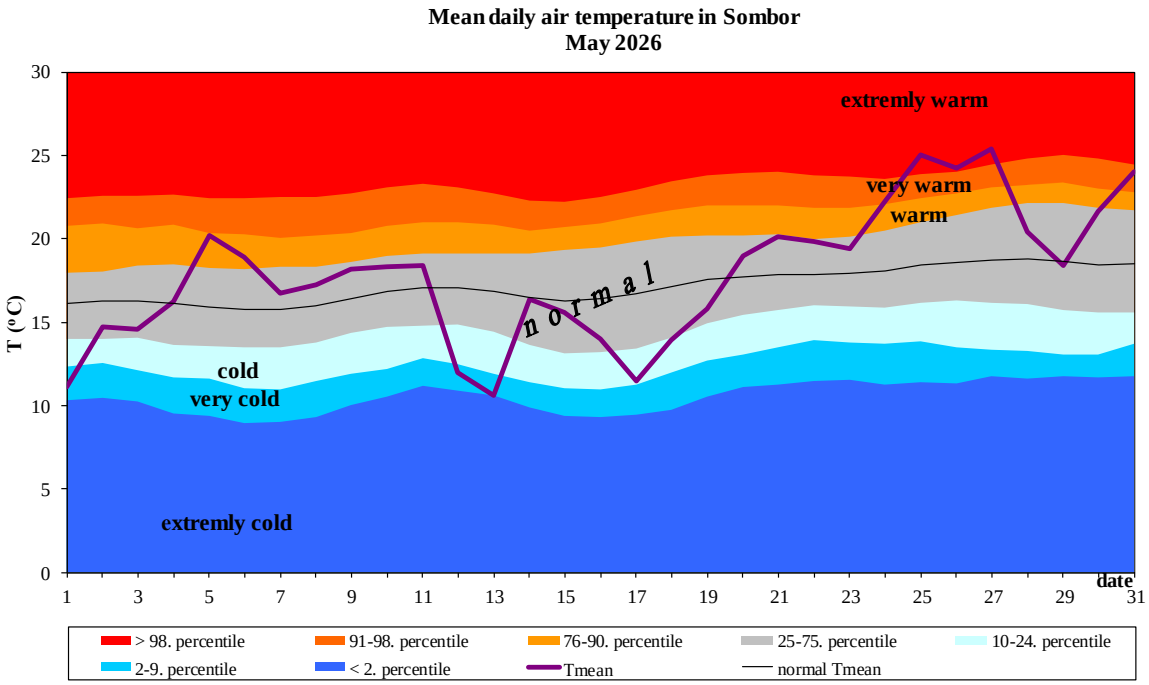


Appendix 7. Rank of the lowest precipitation in Valjevo

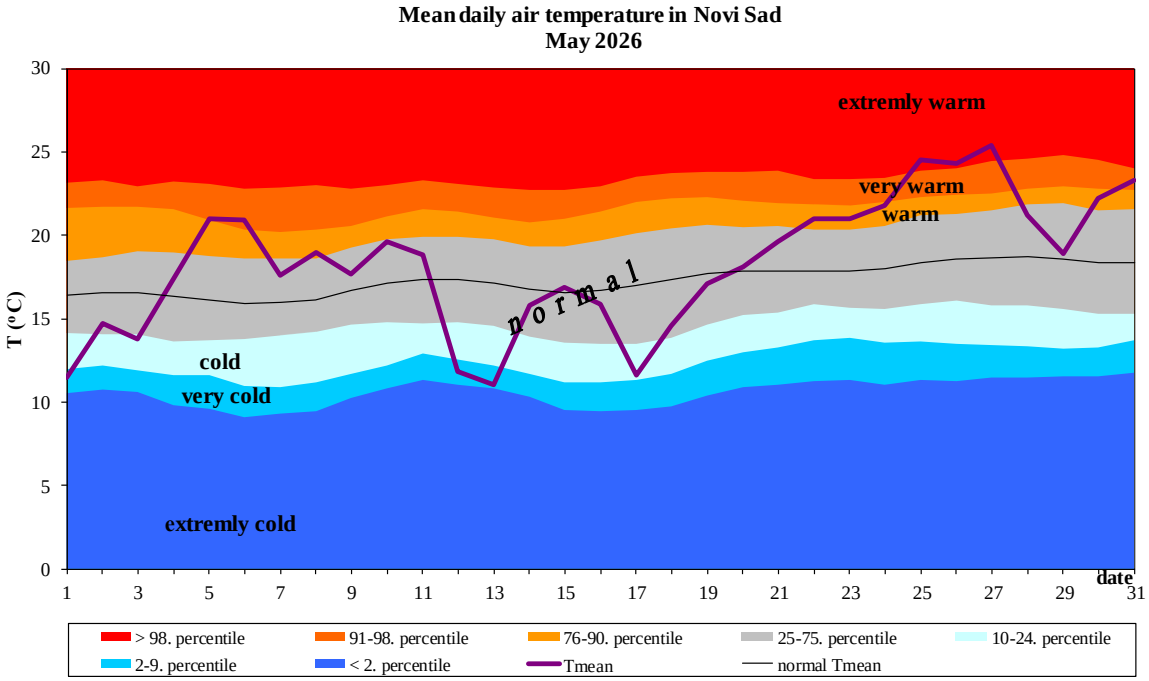


Appendix 8. Rank of the lowest precipitation in Loznica

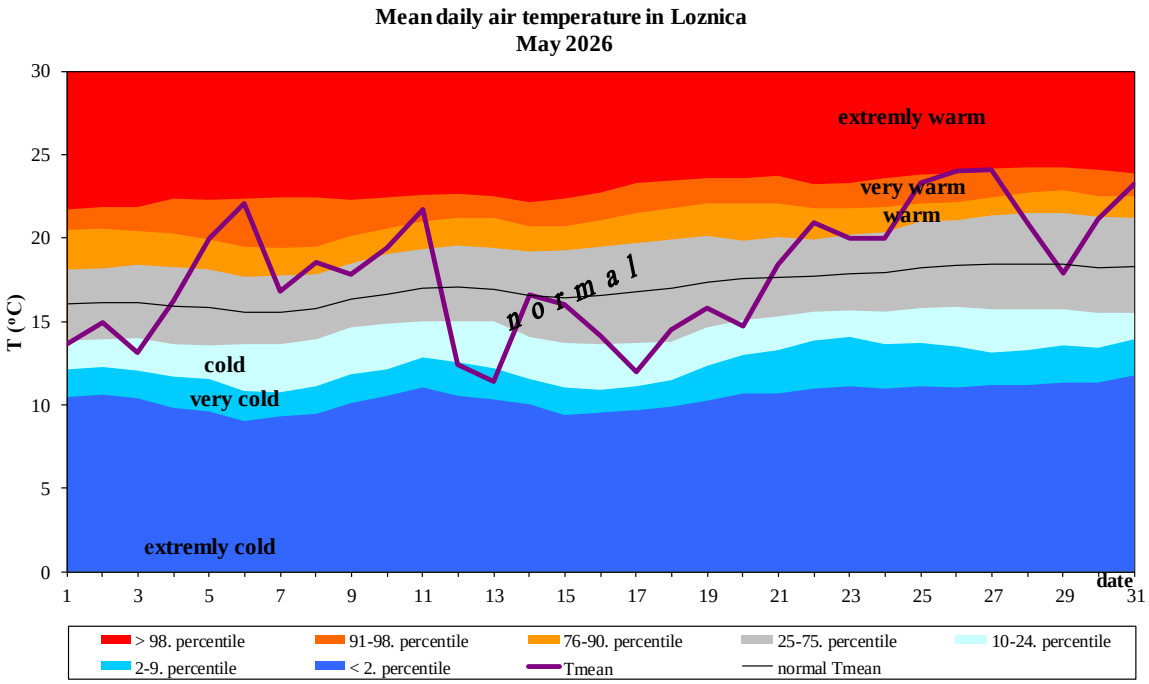
Mean air temperature



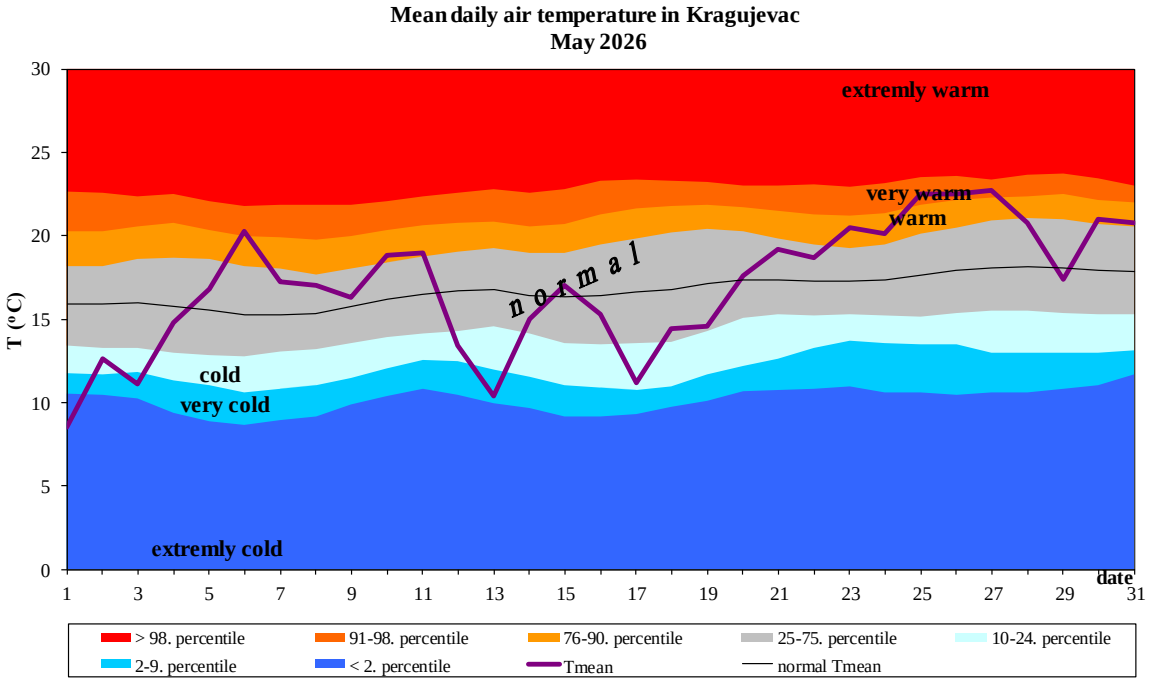
Appendix 9. Daily course of the mean daily air temperature and accompanying percentile for Sombor



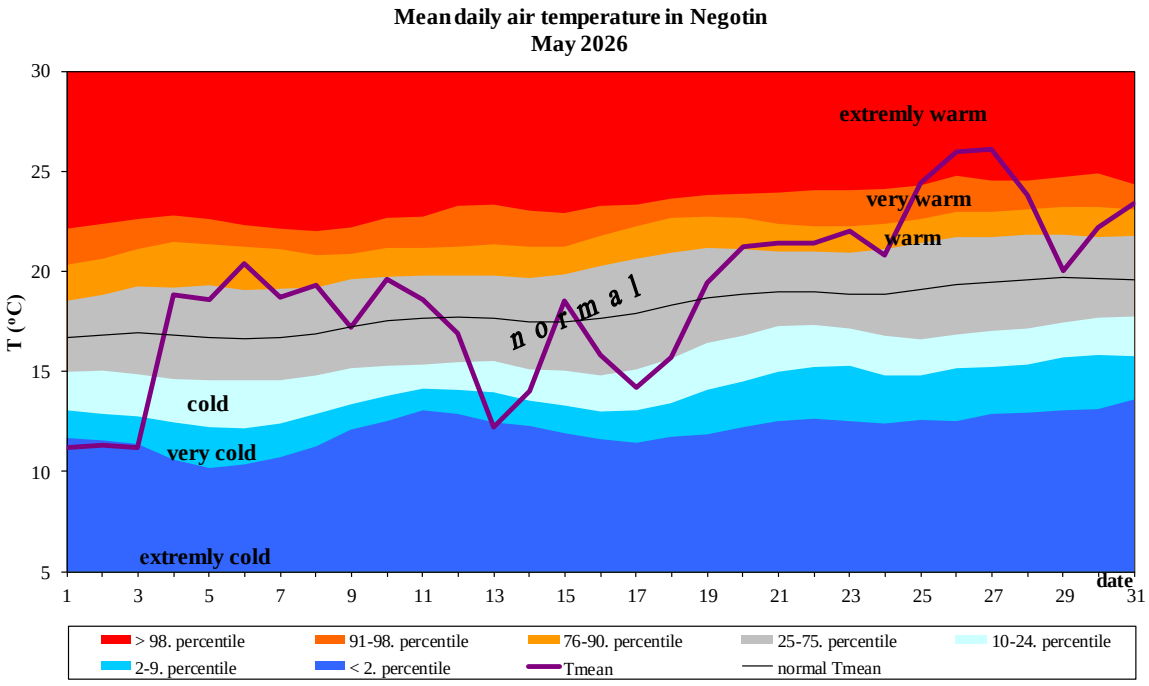
Appendix 10. Daily course of the mean daily air temperature and accompanying percentile for Novi Sad



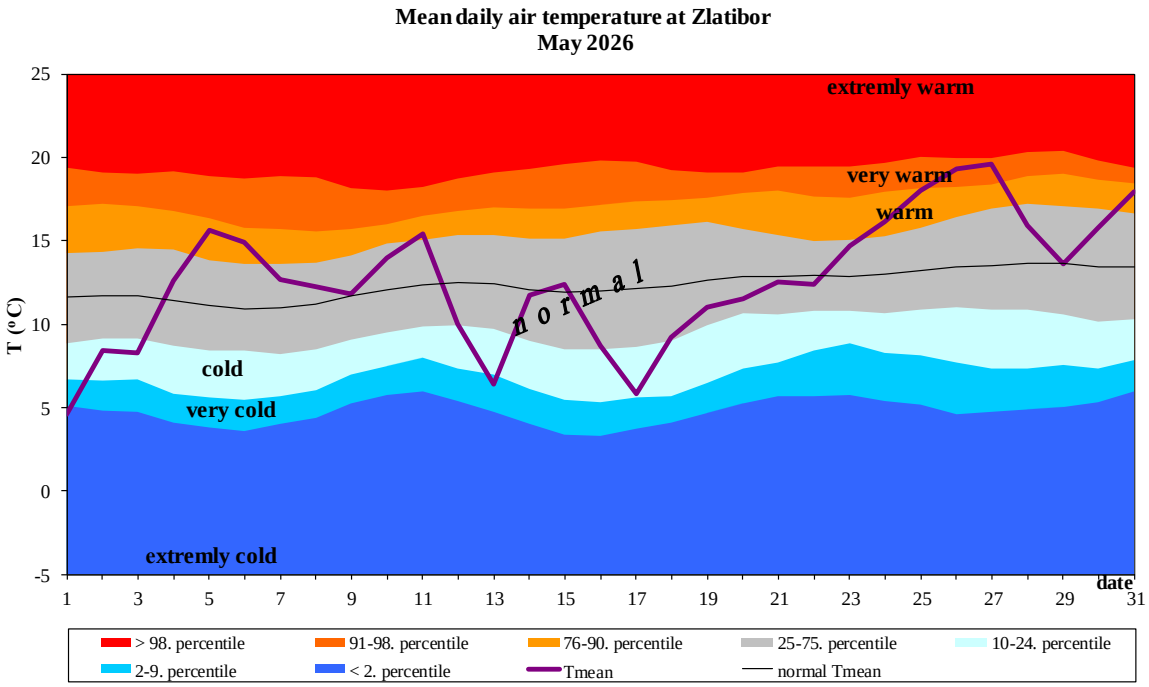
Appendix 11. Daily course of the mean daily air temperature and accompanying percentile for Loznica



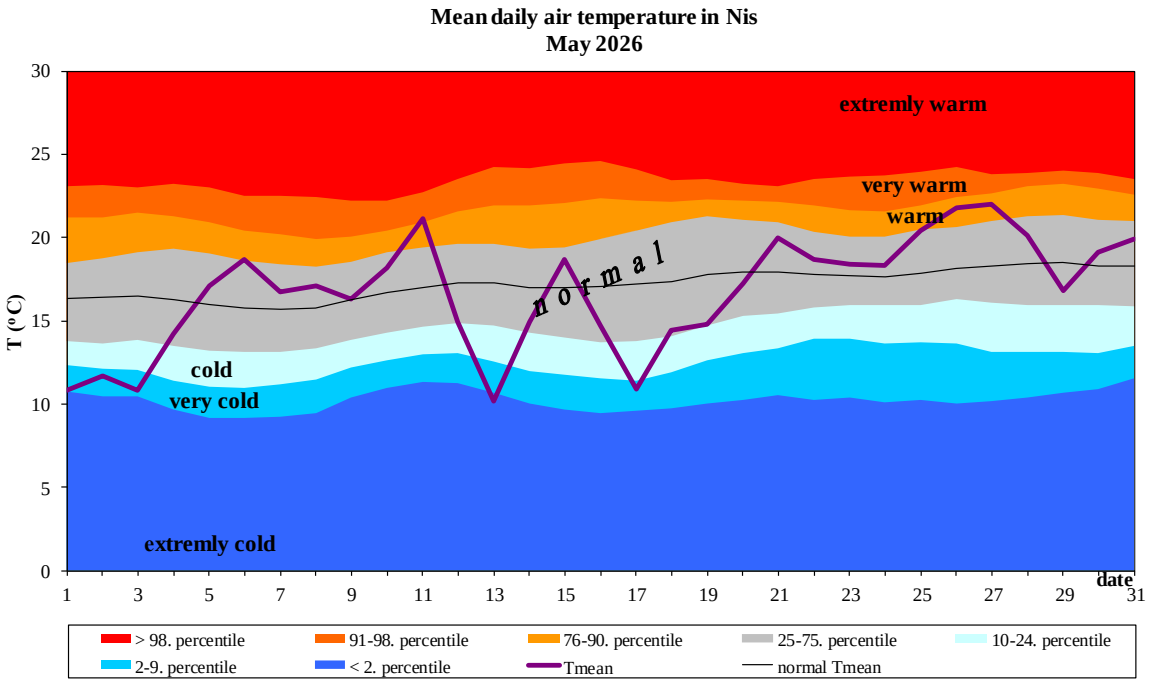
Appendix 12. Daily course of the mean daily air temperature and accompanying percentile for Kragujevac



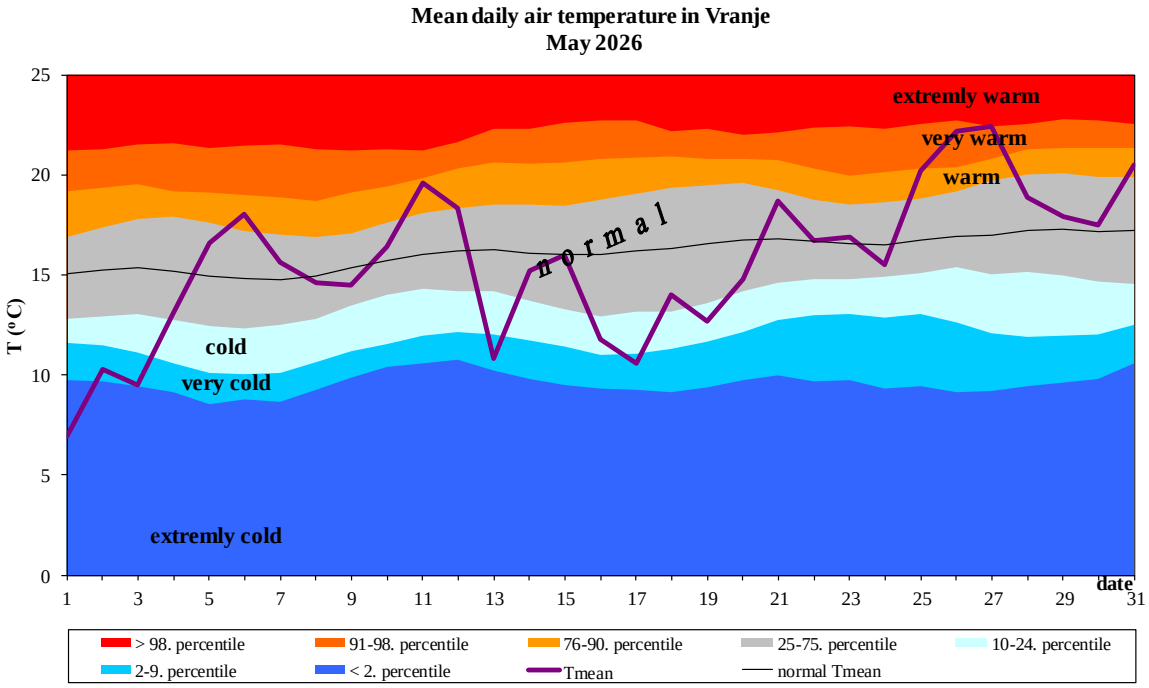
Appendix 13. Daily course of the mean daily air temperature and accompanying percentile for Negotin



Appendix 14. Daily course of the mean daily air temperature and accompanying percentile on Zlatiboru

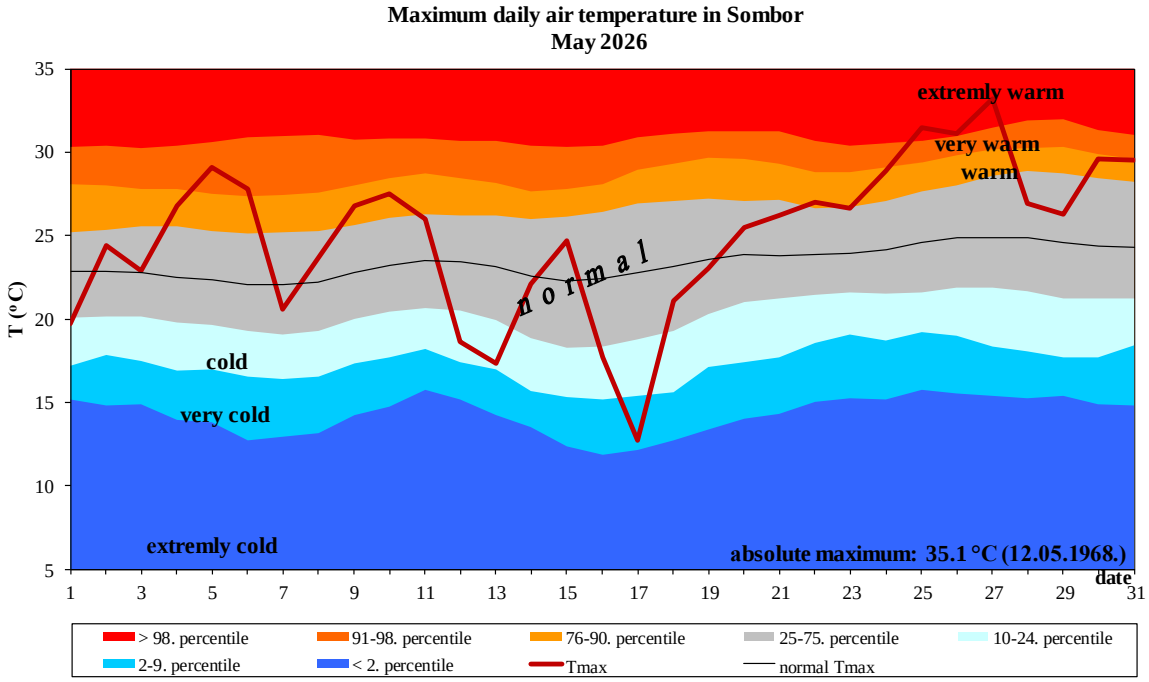


Appendix 15. Daily course of the mean daily air temperature and accompanying percentile for Nis

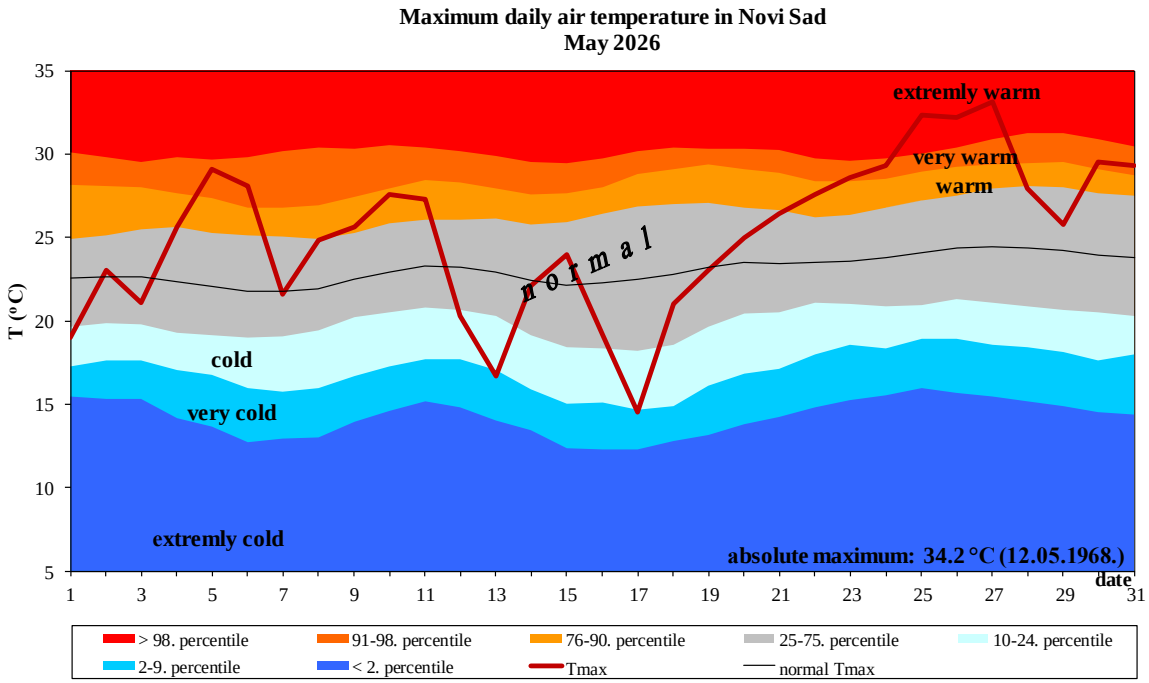


Appendix 16. Daily course of the mean daily air temperature and accompanying percentile for Vranje

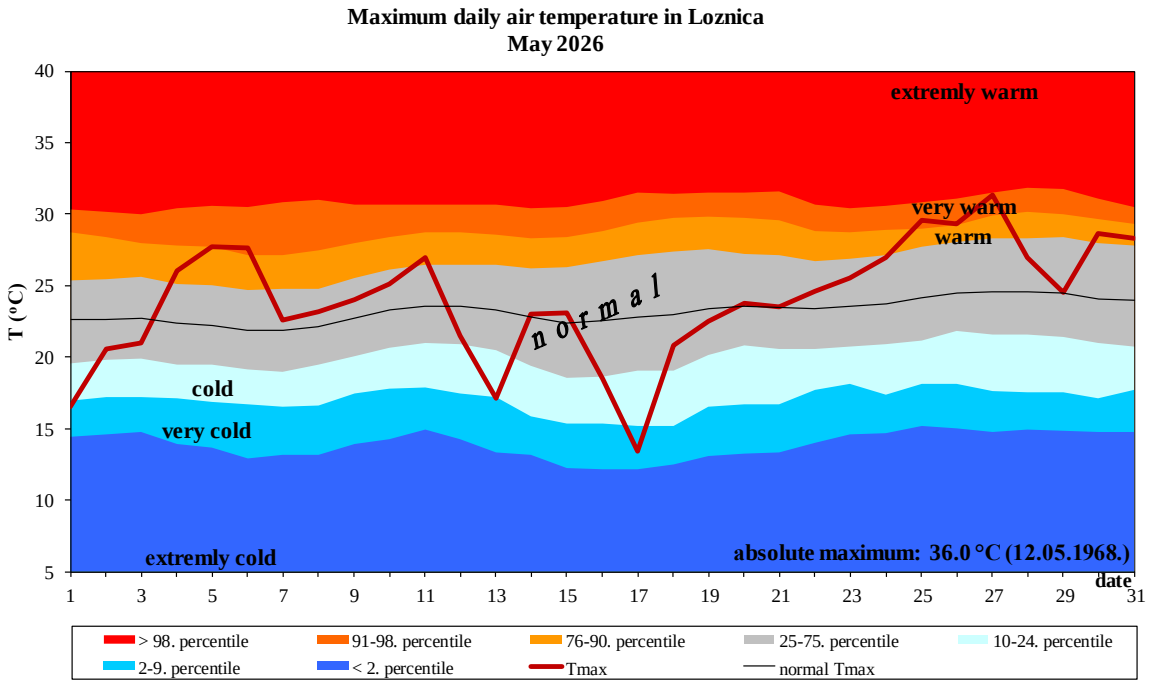
Maximum air temperature



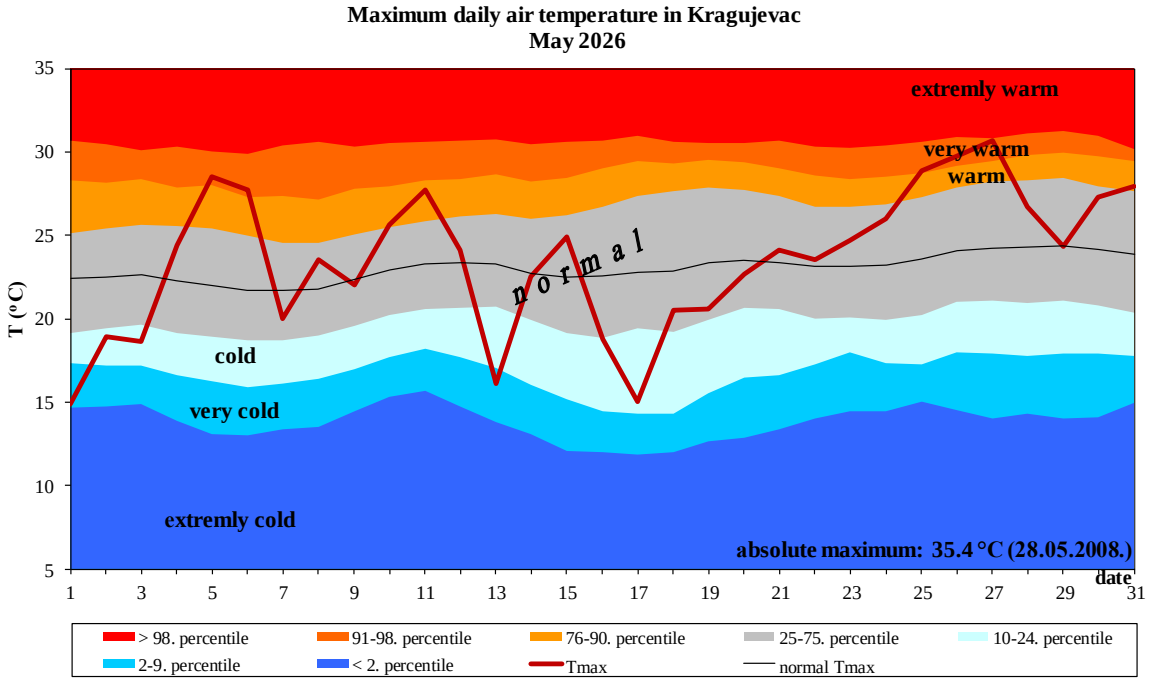
Appendix 17. Daily course of the maximum daily air temeperature and the accompanying percentile for Sombor



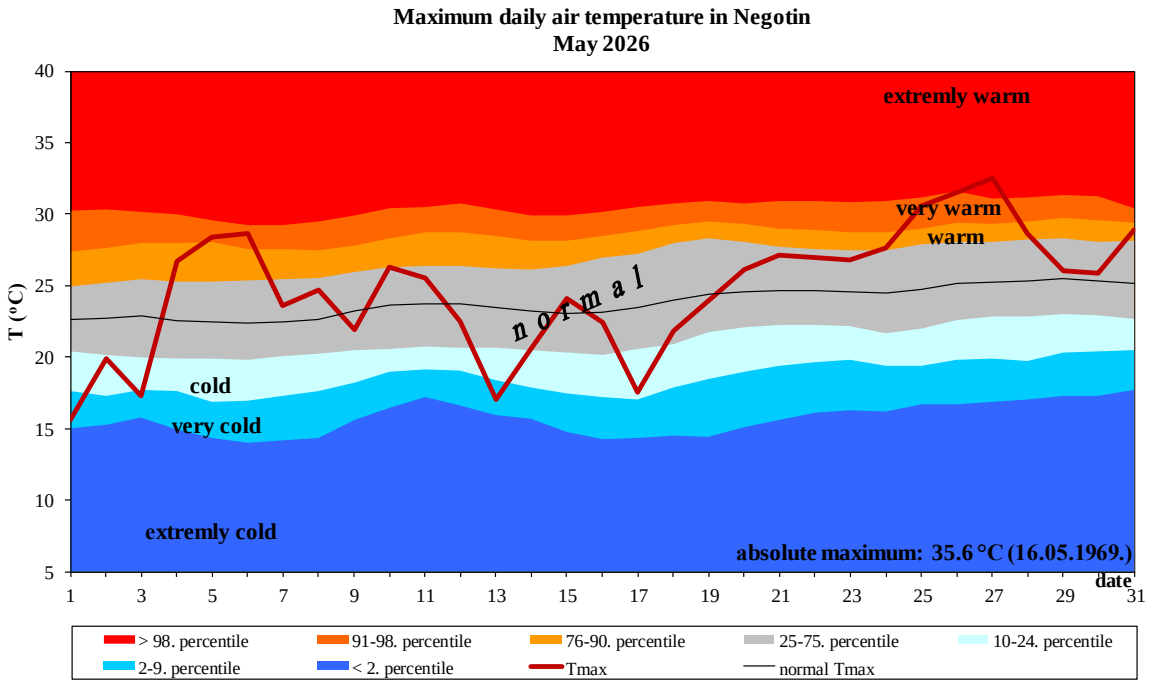
Appendix 18. Daily course of the maximum daily air temeperature and the accompanying percentile for Novi Sad



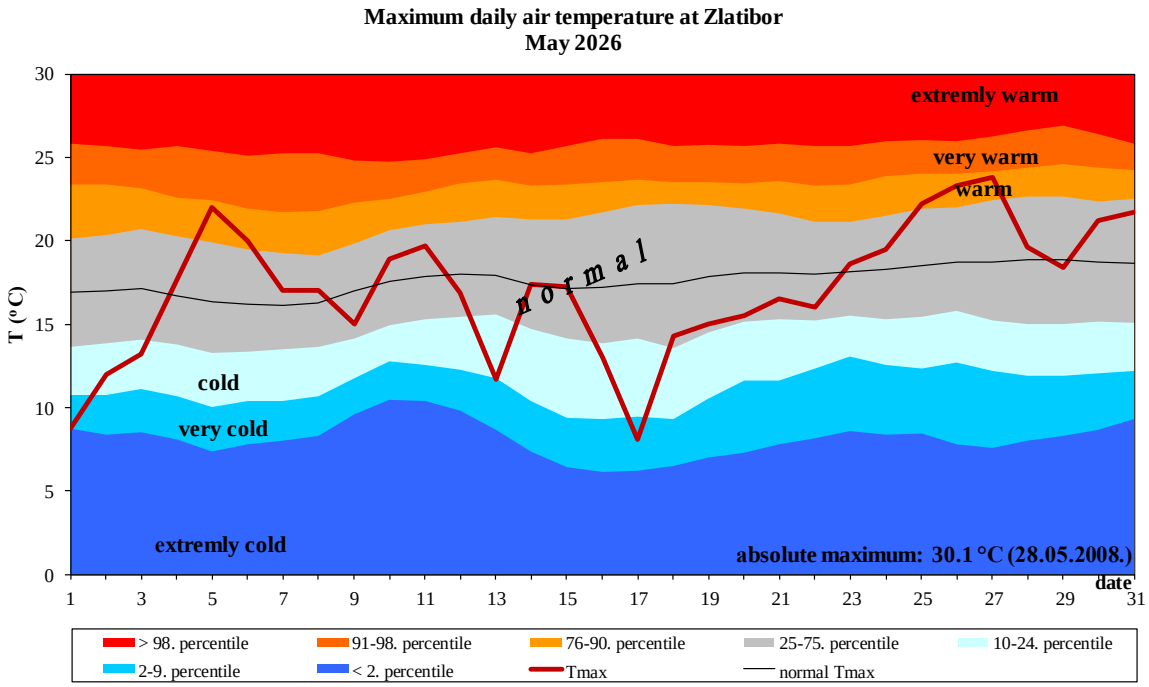
Appendix 19. Daily course of the maximum daily air temeperature and the accompanying percentile for Loznica



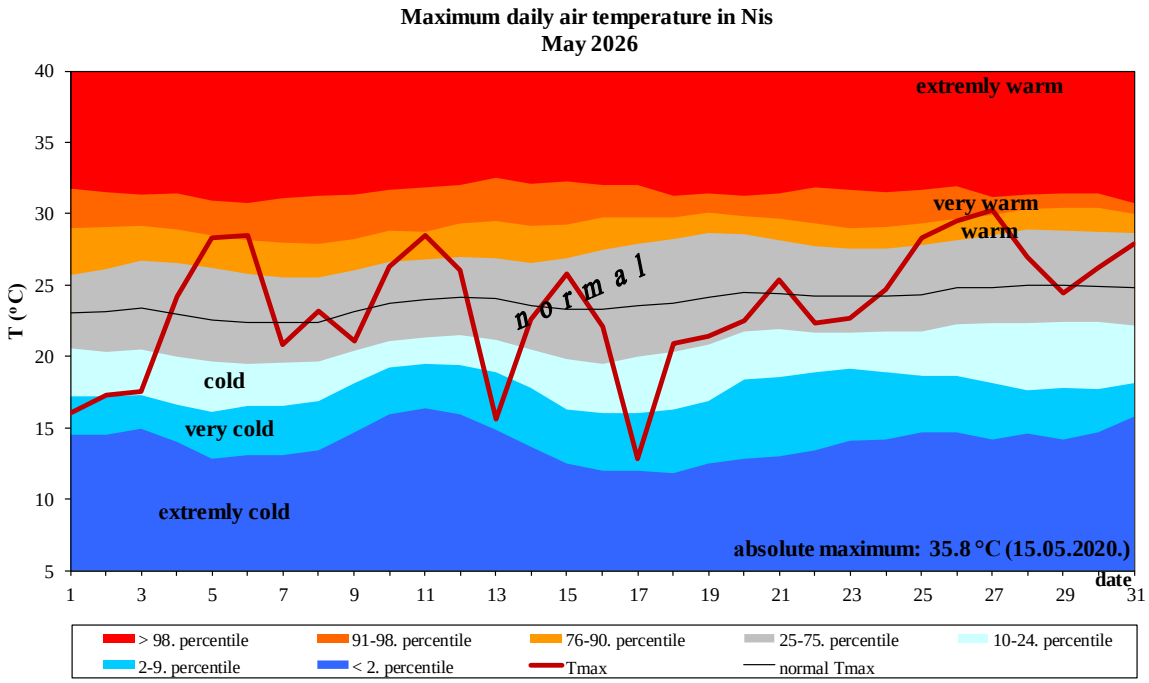
Appendix 20. Daily course of the maximum daily air temeperature and the accompanying percentile for Kragujevac



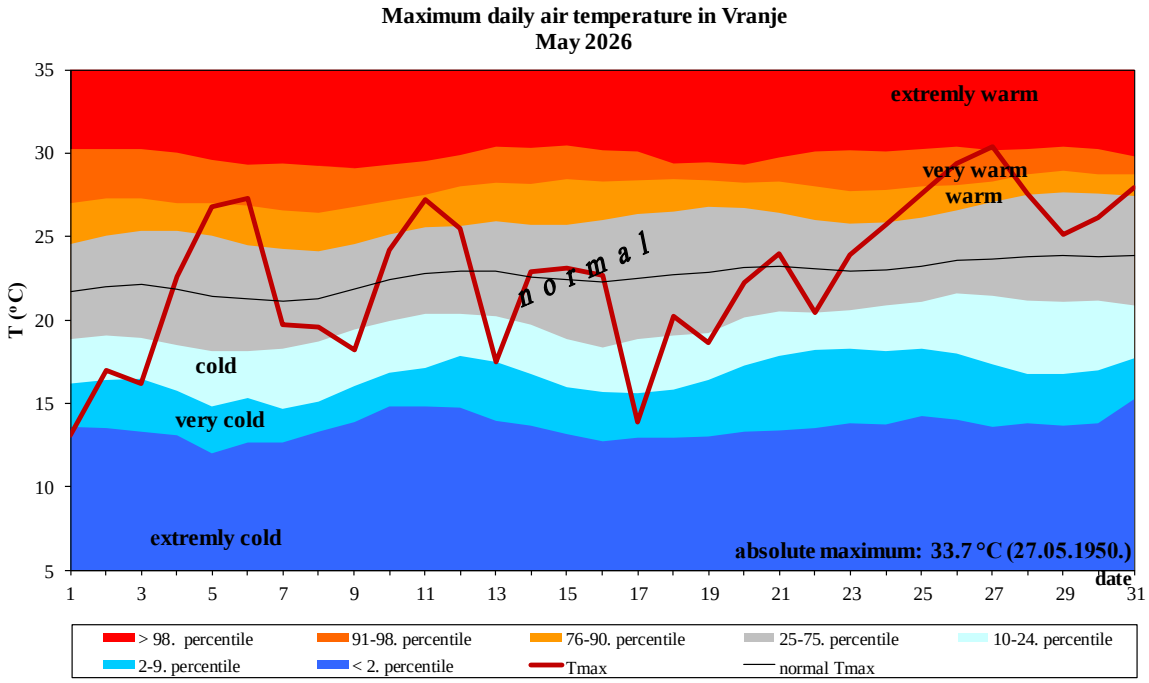
Appendix 21. Daily course of the maximum daily air temeperature and the accompanying percentile for Negotin



Appendix 22. Daily course of the maximum daily air temeperature and the accompanying percentile on Zlatibor

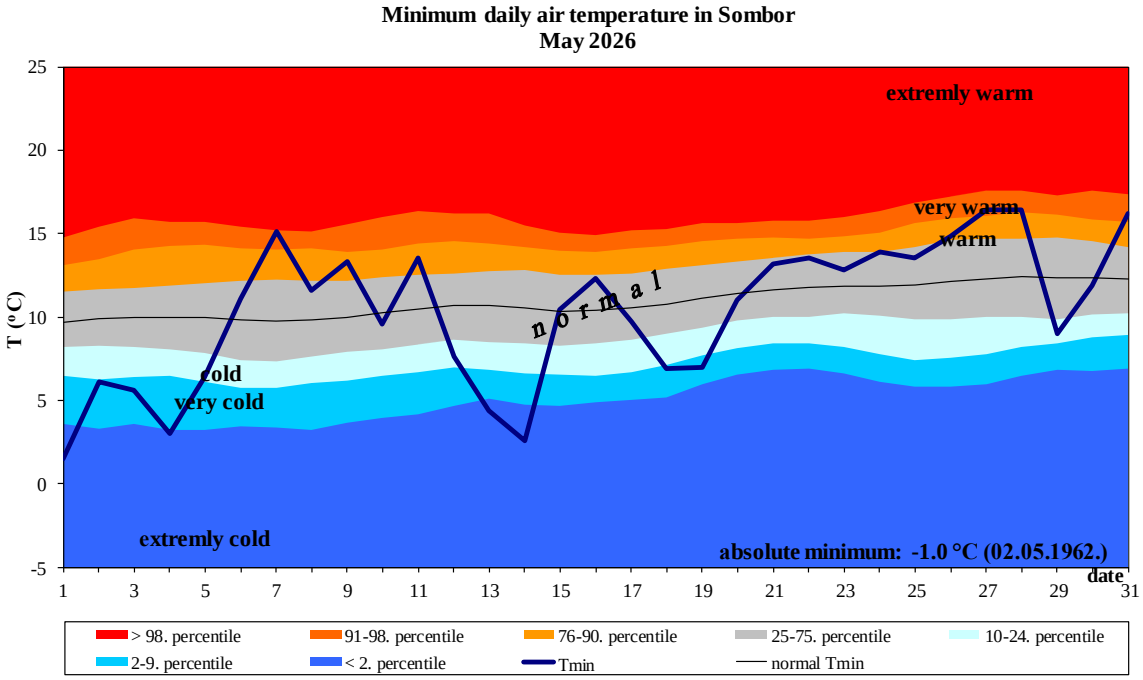


Appendix 23. Daily course of the maximum daily air temeperature and the accompanying percentile for Nis

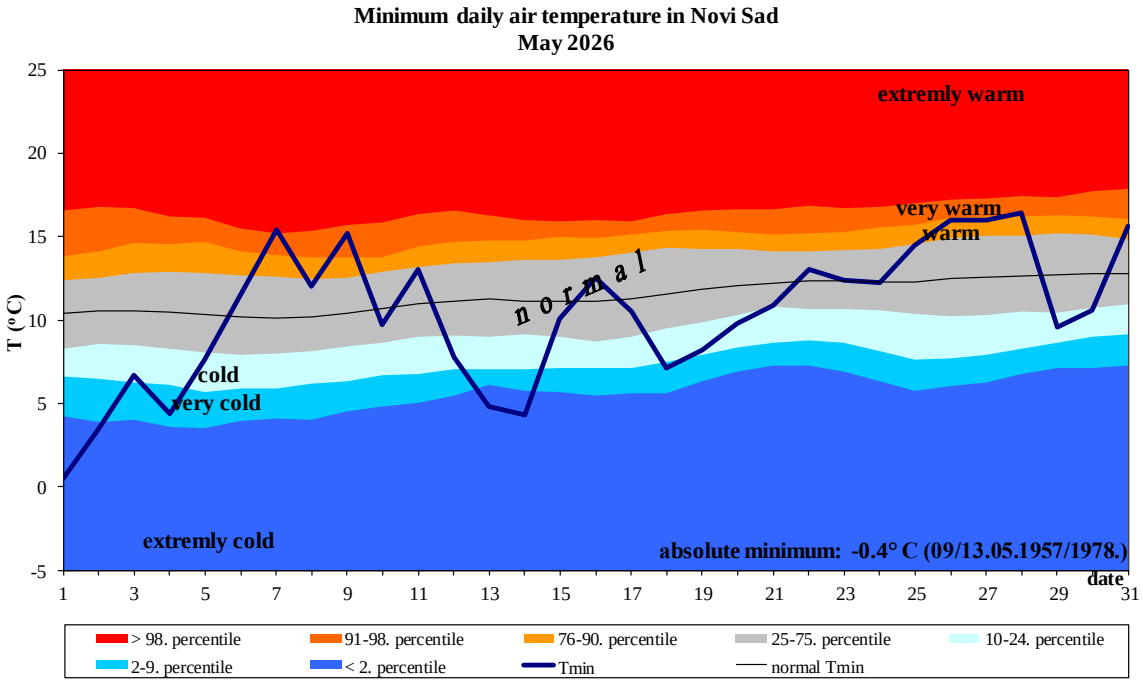


Appendix 24. Daily course of the maximum daily air temeperature and the accompanying percentile for Vranje

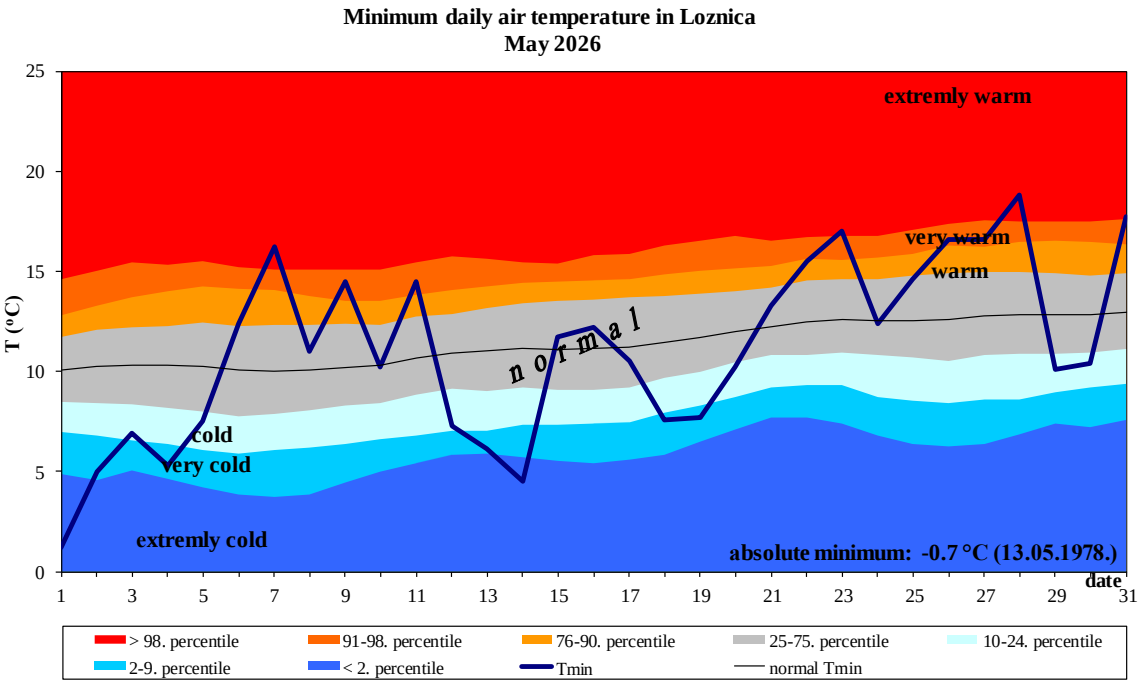
Minimum air temperature



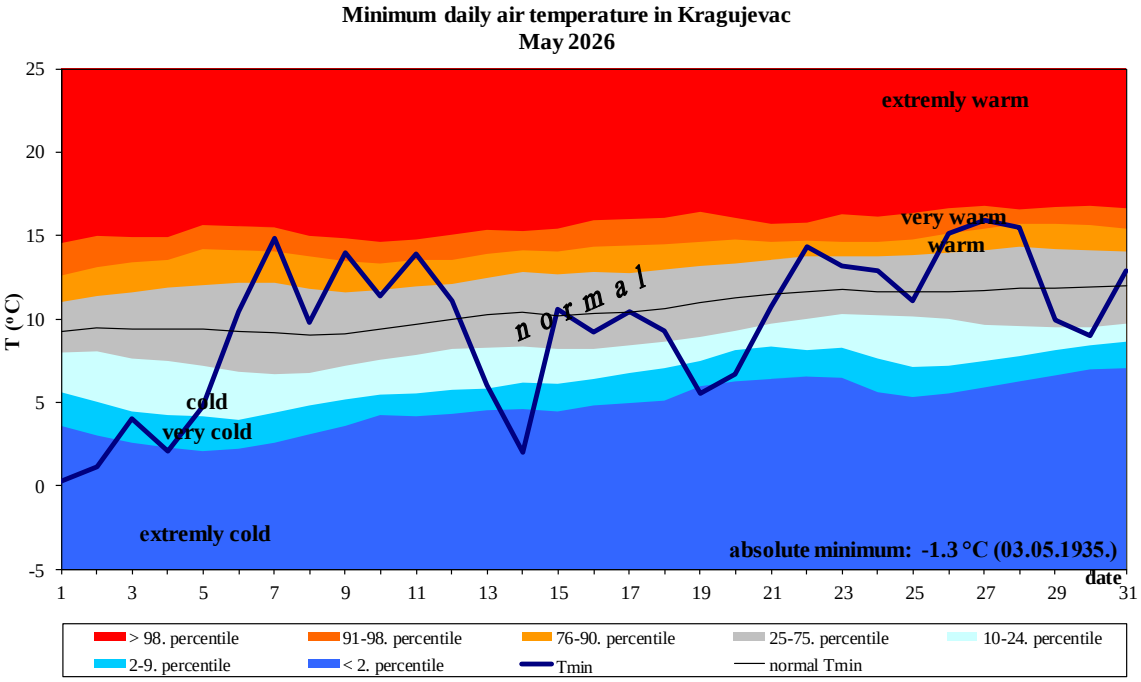
Appendix 25. Daily course of the minimum daily air temperature and the accompanying percentile for Sombor



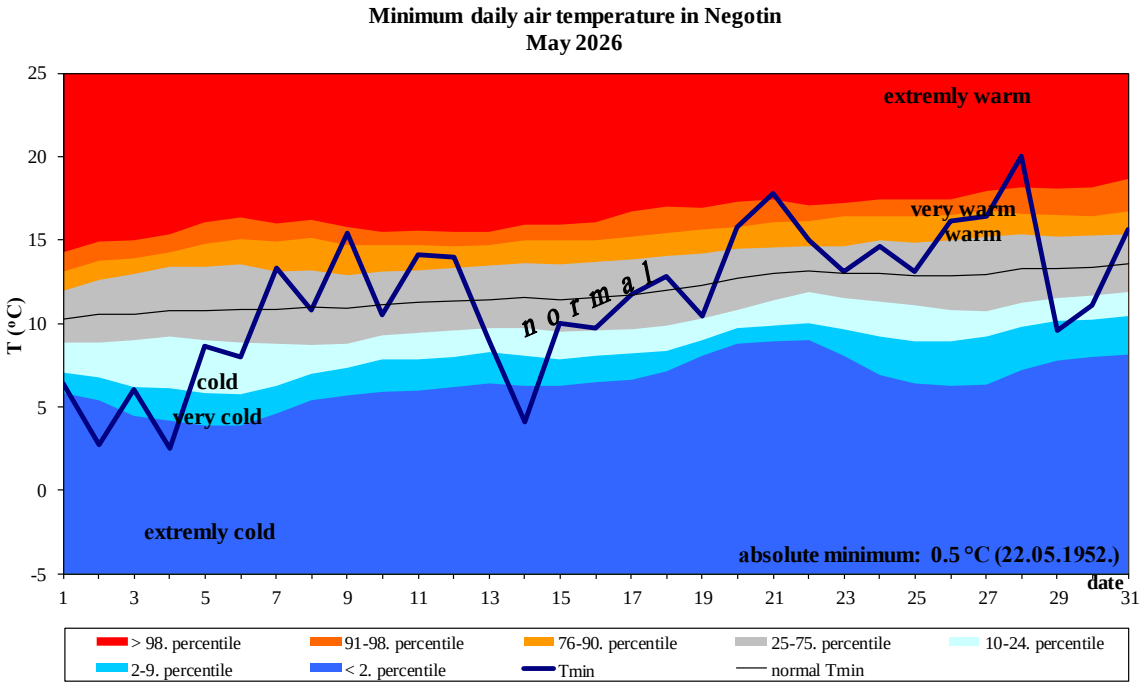
Appendix 26. Daily course of the minimum daily air temperature and the accompanying percentile for Novi Sad



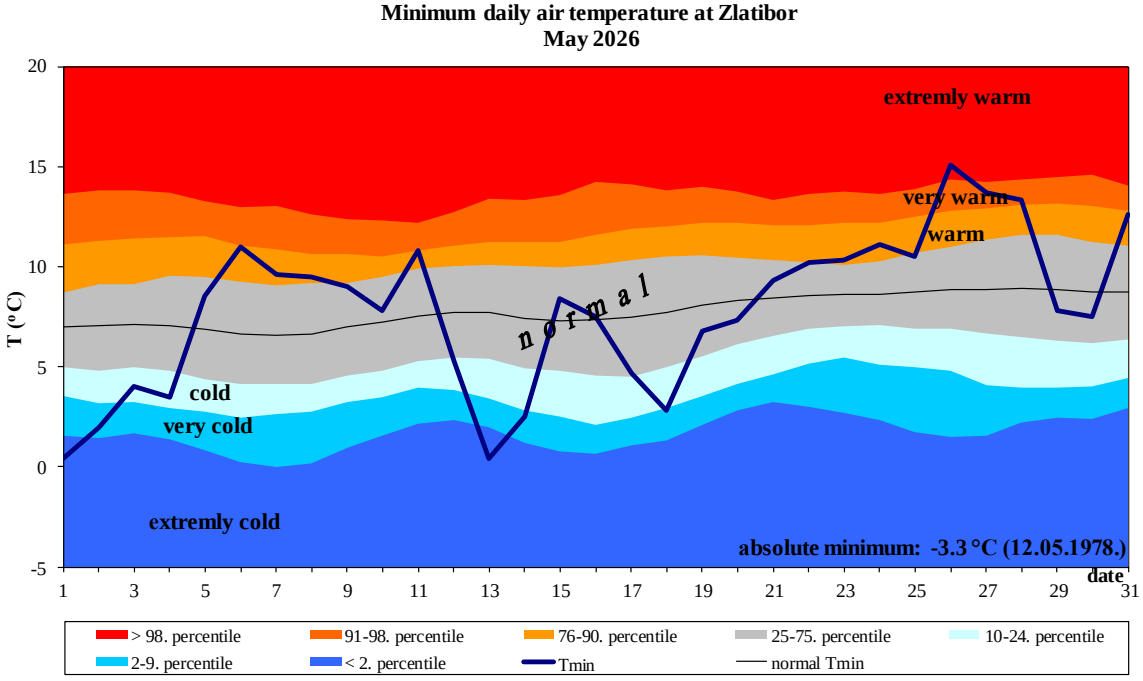
Appendix 27. Daily course of the minimum daily air temperature and the accompanying percentile for Loznica



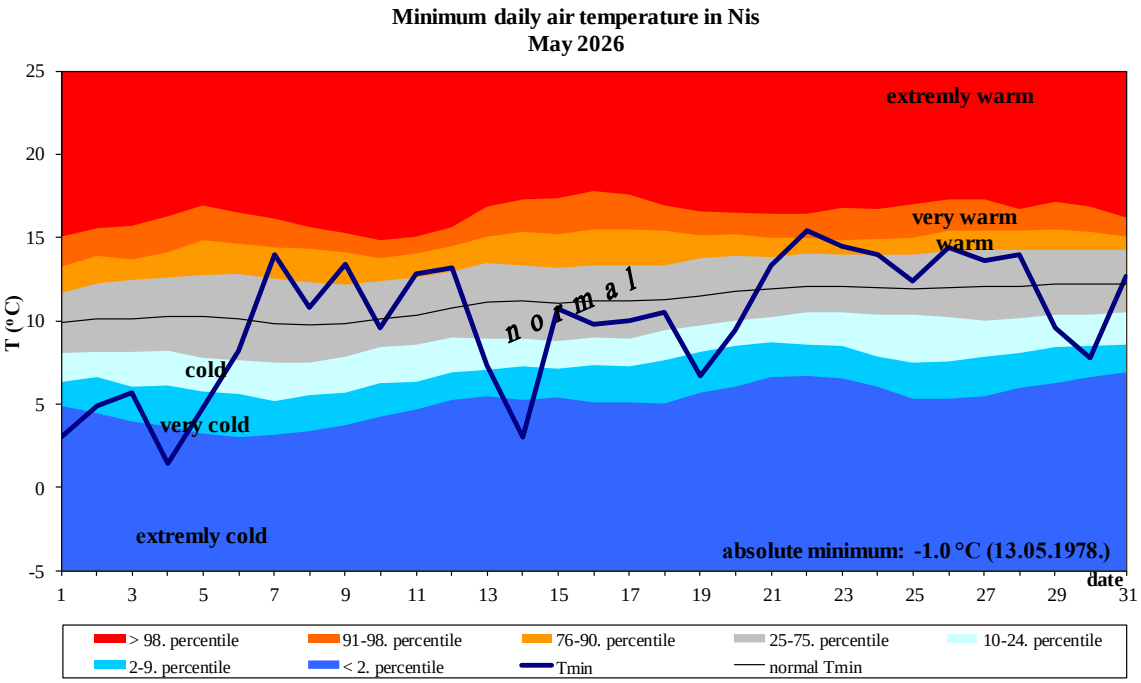
Appendix 28. Daily course of the minimum daily air temperature and the accompanying percentile for Kragujevac



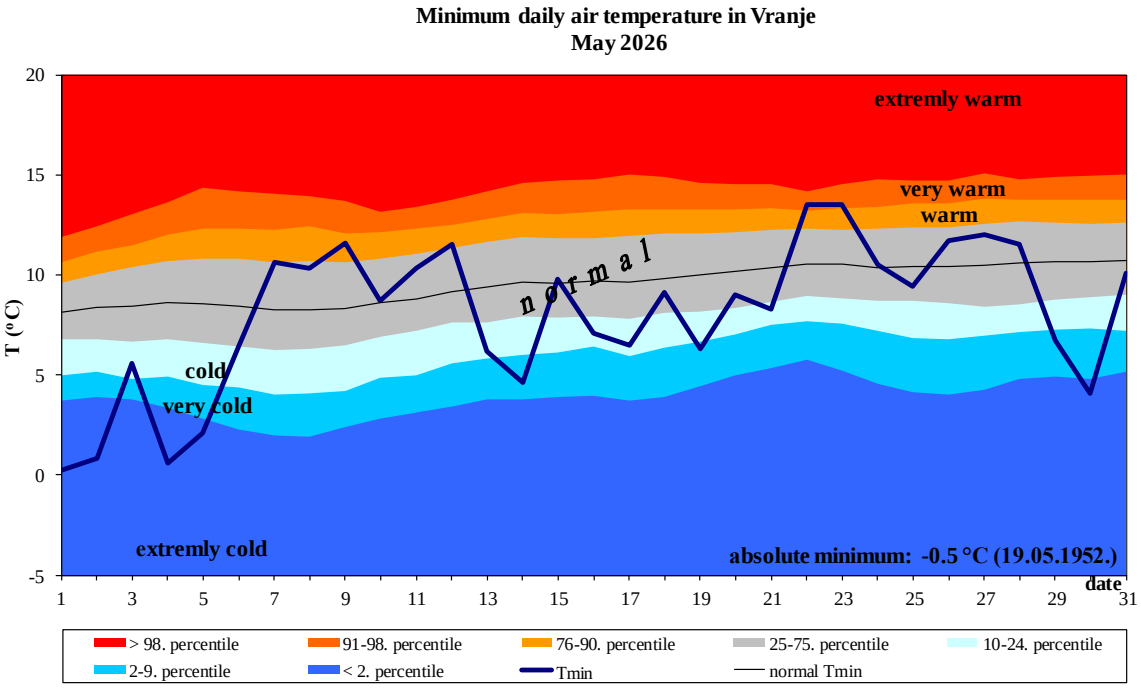
Appendix 29. Daily course of the minimum daily air temperature and the accompanying percentile for Negotin



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

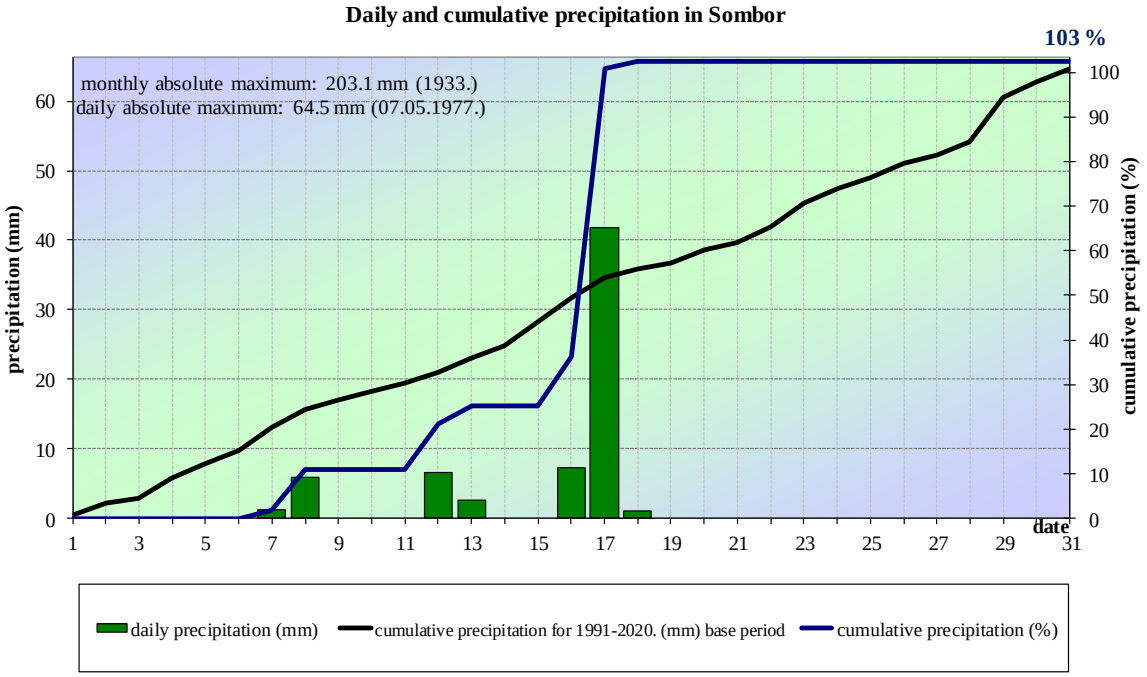


Appendix 31. Daily course of the minimum daily air temperature and the accompanying percentile for Nis

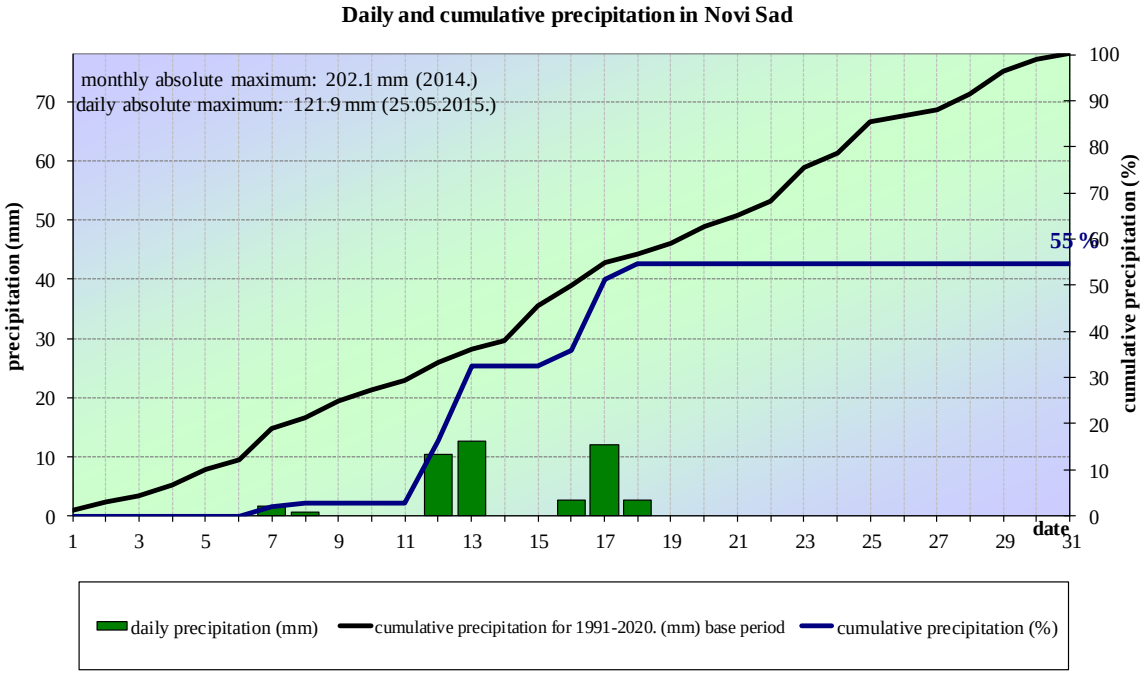


Appendix 32. Daily course of the minimum daily air temperature and the accompanying percentile for Vranje

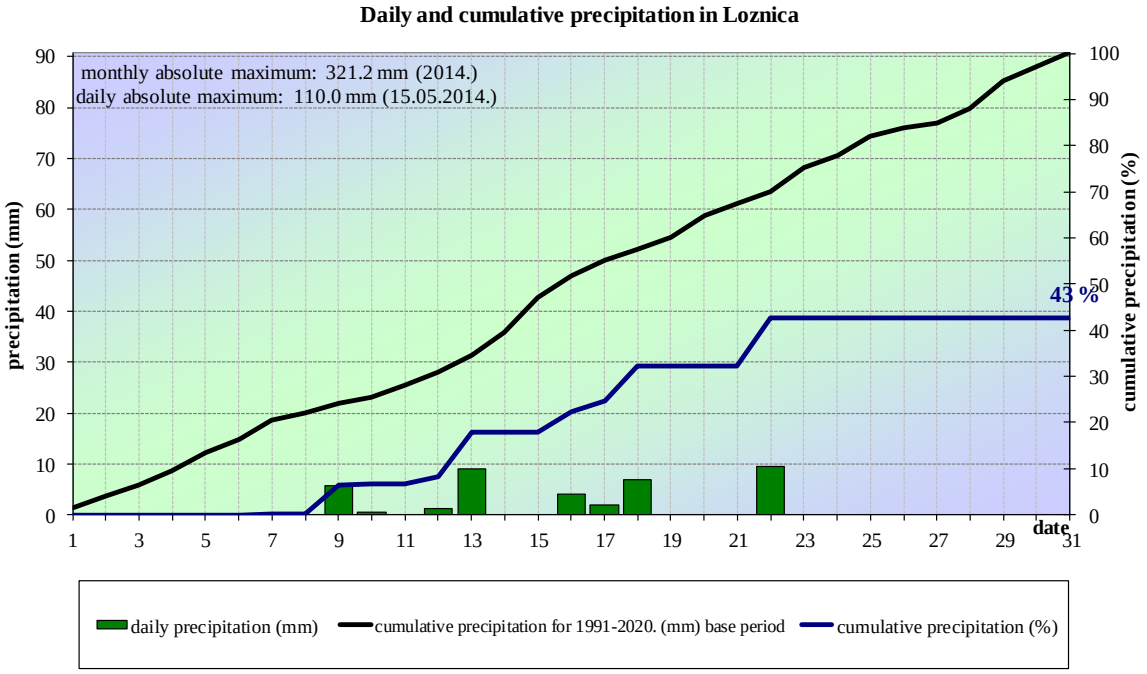
Precipitation



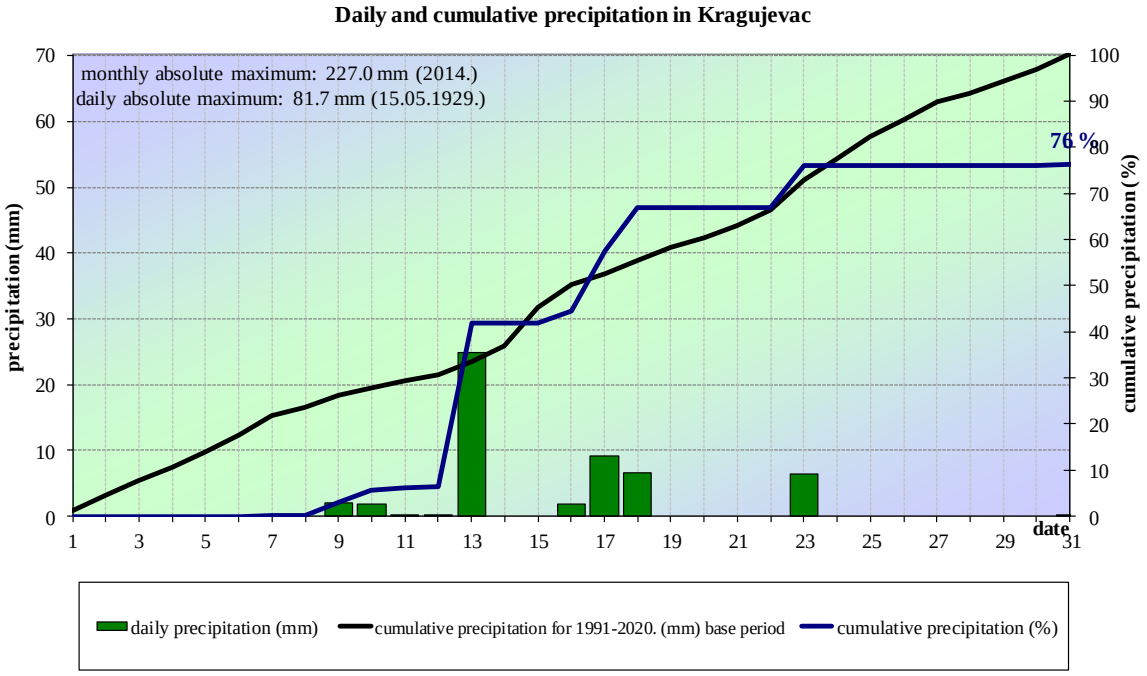
Appendix 33. Daily and cumulative precipitation sums for Sombor



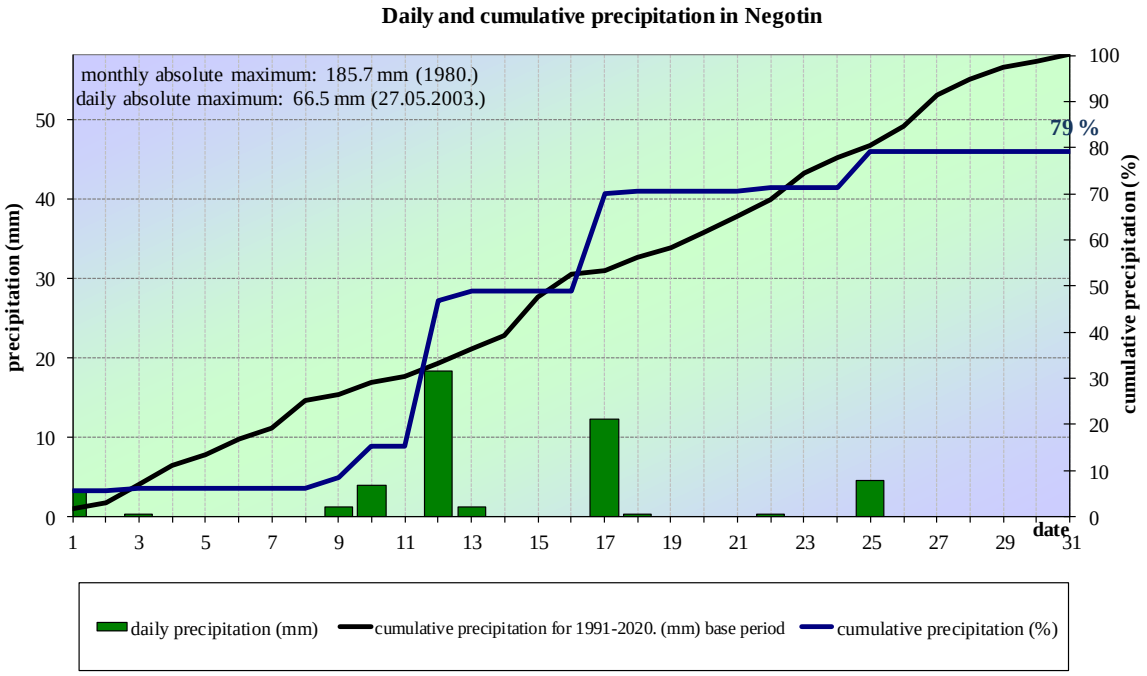
Appendix 34. Daily and cumulative precipitation sums for Novi Sad



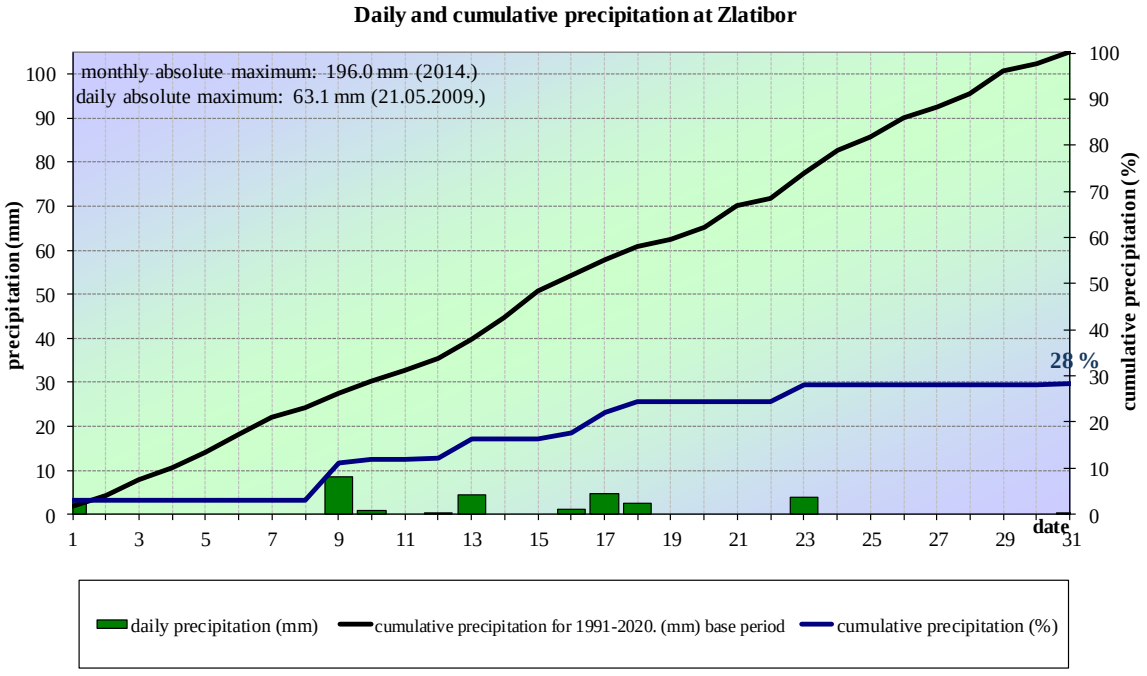
Appendix 35. Daily and cumulative precipitation sums for Loznica



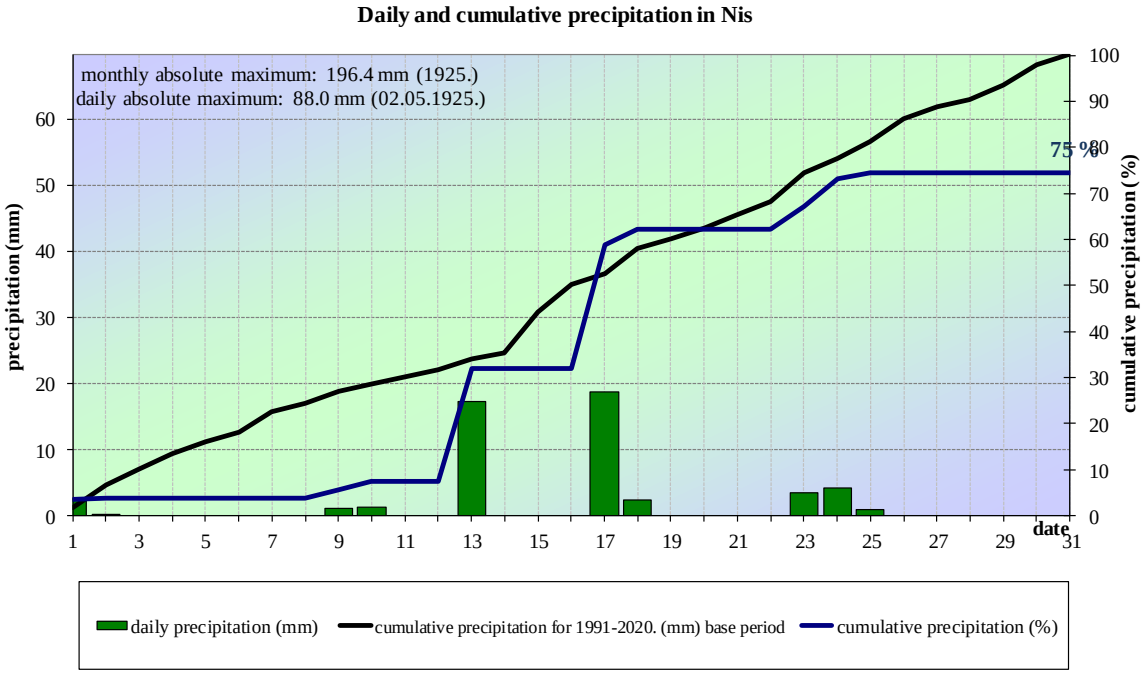
Appendix 36. Daily and cumulative precipitation sums for Kragujevac



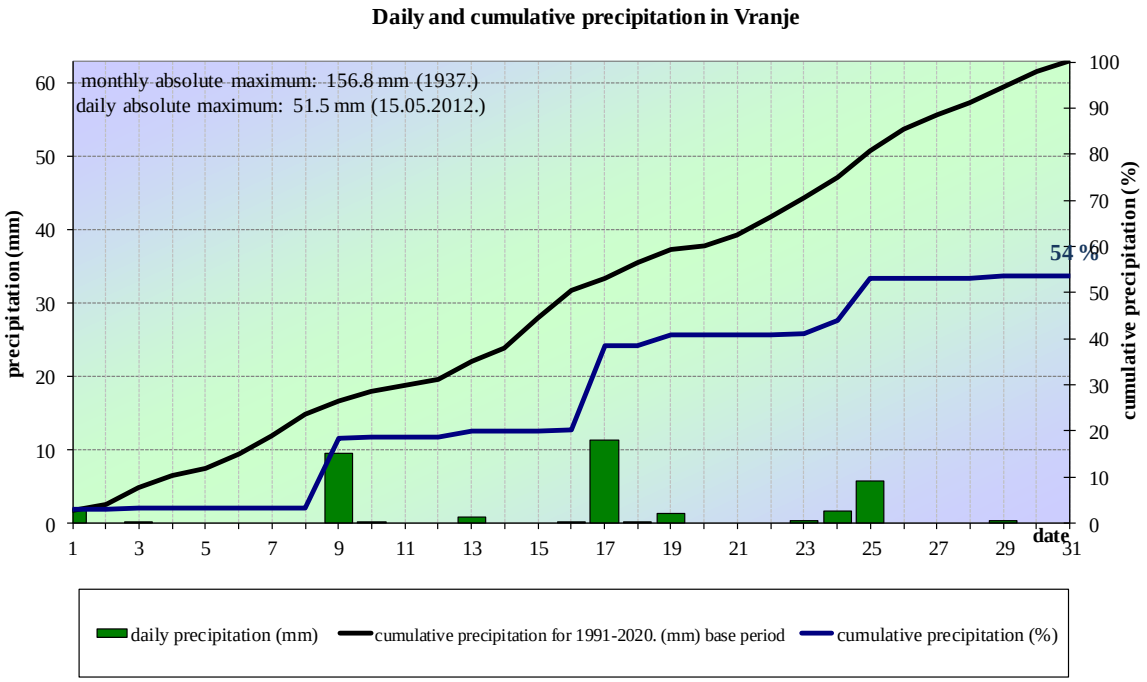
Appendix 37. Daily and cumulative precipitation sums for Negotin



Appendix 38. Daily and cumulative precipitation sums on Zlatibor



Appendix 39. Daily and cumulative precipitation sums for Nis



Appendix 40. Daily and cumulative precipitation sums for Vranje