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

MONTHLY BULLETIN FOR SERBIA

JANUARY 2026

Belgrade, the 5th of February 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 14
SUNSHINE DURATION (INSOLATION) 16
OVERVIEW OF THE SYNOPTIC SITUATION* 17
APPENDIX 19
Ranks of the wettest January 19
Mean air temperature 26
Maximum air temperature 30
Minimum air temperature 34
Precipitation 38

- ***The 4th wettest January for Serbia since 1951***
- ***The wettest January for Smederevska Palanka and Veliko Gradiste since the record-keeping at these stations began***
- ***January 2026 was among the 8 wettest at 20 stations***
- ***Absolute daily precipitation maximum was exceeded in Sombor on January 3***

AIR TEMPERATURE

Mean monthly air temperature

Mean January air temperature ranged from -0,6 ℃ in Sombor to 2,7 ℃ in Loznica, while Belgrade observed air temperature of 2,4 ℃. On the mountains, mean January air temperature ranged from -3,6 ℃ at Crni Vrh to -0,5 ℃ at Zlatibor (*Figure 1*).

Departure of the mean monthly air temperature from the normal[1] for the 1991-2020 base period ranged from -1,2 ℃ in Sombor to +2,8 ℃ in Sjenica (*Figure 2*).

Mean January air temperature, based on the percentile method[2], was in the normal category in most of the country, warm category in Sjenica, Kursumlija, Cuprija, Nis, Leskovac, Dimitrovgrad and Vranje (*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

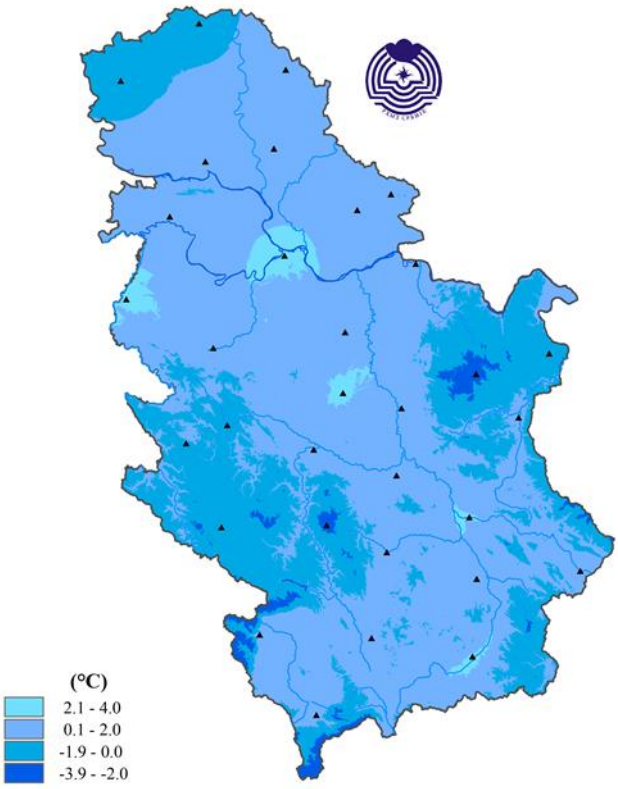


Figure 1. Spatial distribution of mean monthly air temperature (ºC)

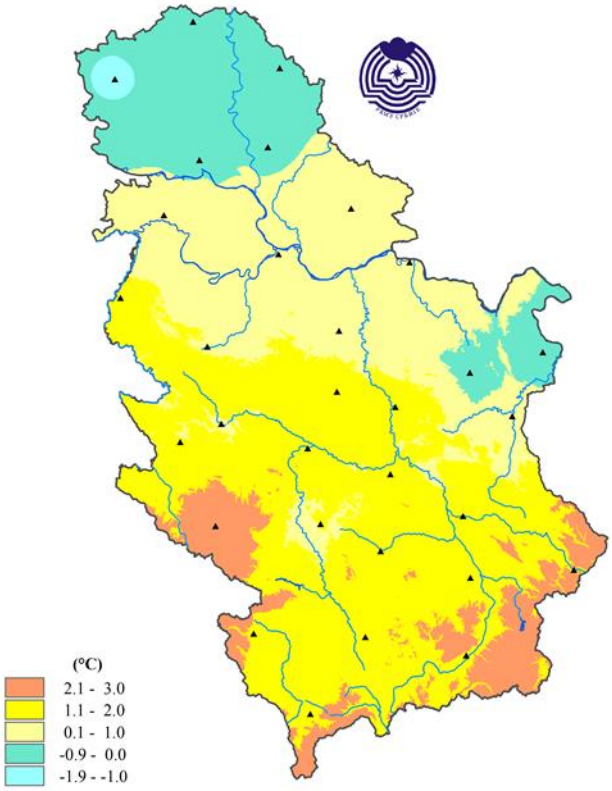


Figure 2. Spatial distribution of mean monthly air temperature anomaly (ºC)

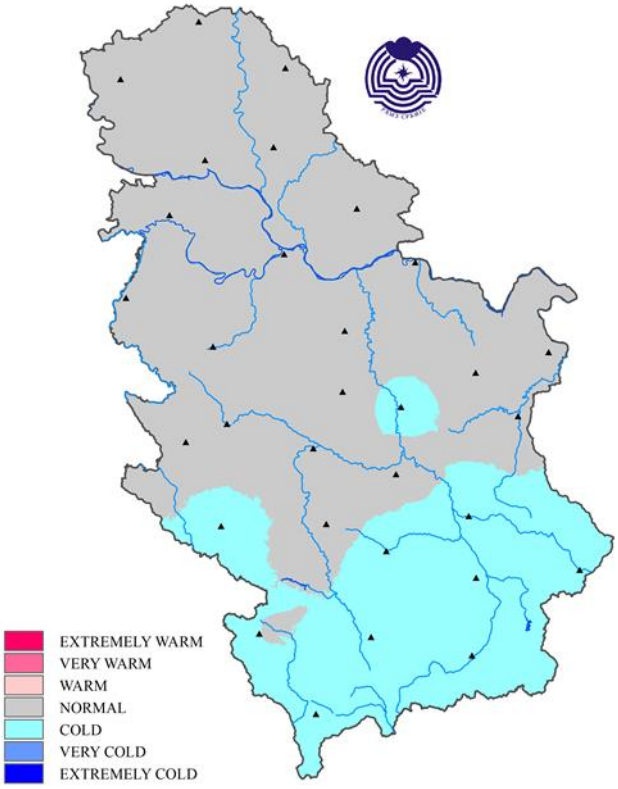


Figure 3. Spatial distribution of the mean monthly air temperature using percentile method

Mean daily air temperature in Belgrade, based on the percentile method, was in the categories of warm and very warm at the beginning and middle of the month, in the cold and very category during at the end of the first and second decade (*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.

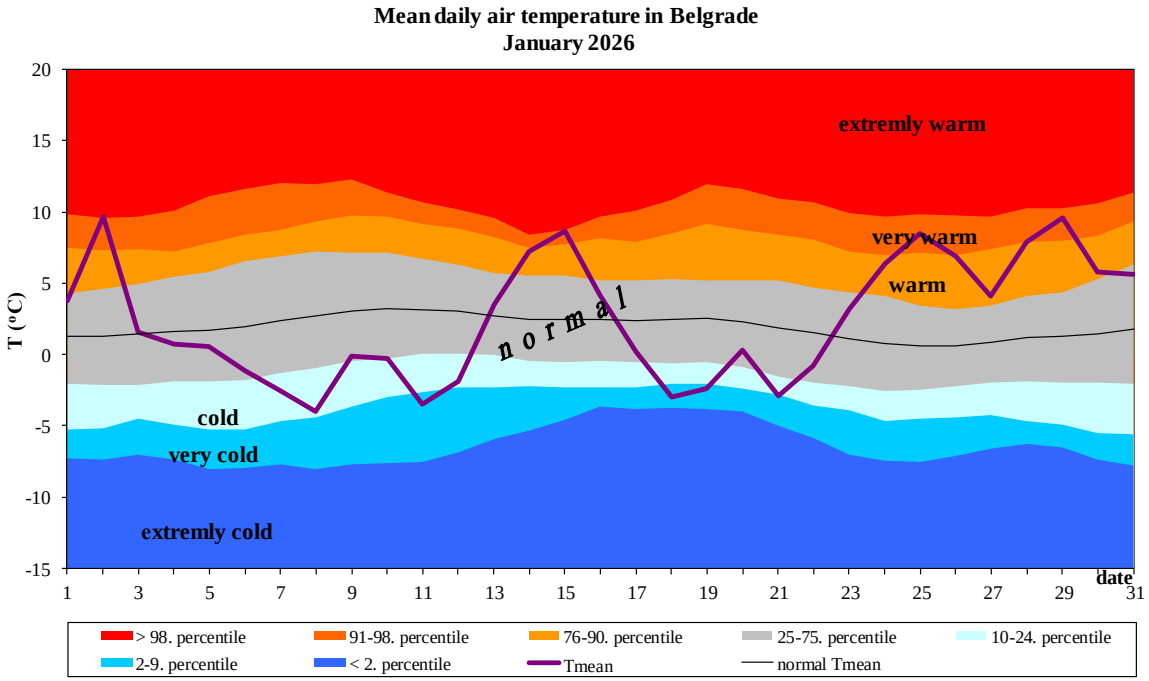


Figure 4. Daily course of the mean daily air temperature and accompanying percentiles for Belgrade

Maximum air temperature

Mean maximum air temperature in January ranged from 2,1 °C on Palic to 6,8 °C in Kursumlija, while Belgrade observed 6,0 °C. On the mountains, mean maximum January air temperature ranged from -0,4 °C at Kopaonik to 4,9 °C in Sjenica.

Based on the percentile method, mean maximum monthly air temperature was in the following categories: normal in most of Serbia, warm in Pozega, Kraljevo, Kursumlija, Leskovac, Dimitrovgrad and Vranje, and very warm in Sjenica.

The highest maximum daily air temperature of 17,5 °C was registered in Loznica on January 25, while Belgrade observed 15,8 on January 29.

Number of ice days[3] ranged from 1 in Kragujevac, Kursumlija and Cuprija to 10 on Palic and Sombor. On the mountains, their number ranged from 4 in Sjenica to 18 at Kopaonik (*Figure 5).* The recorded number of ice days was 2 to 5 days below January average (*Figure 6).*

Heat wave[4] was recorded in Kikinda and Kraljevo from 25 to 29 January.

[3] Ice day refers to a day with maximum daily air temperature lower than 0 °C
[4] 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

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

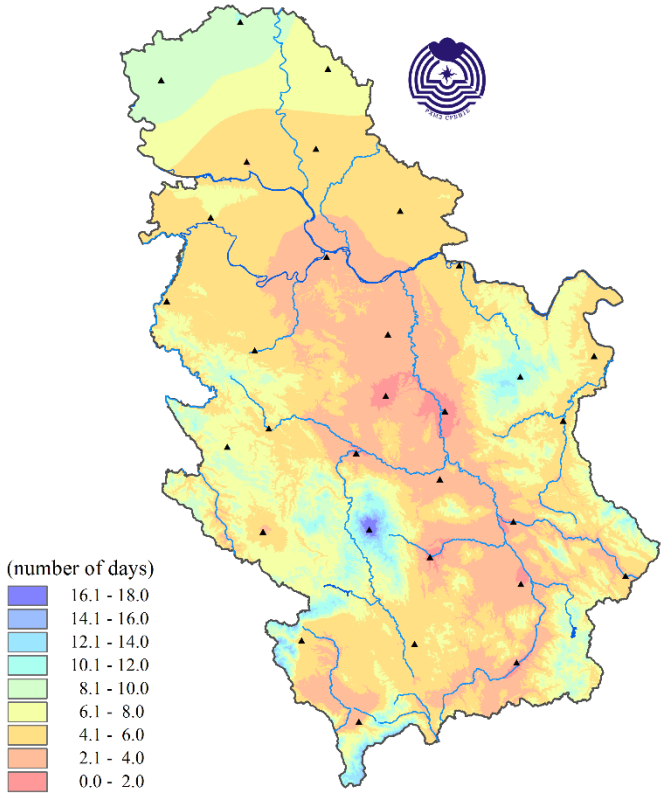


Figure 5. Spatial distribution of the number of ice days

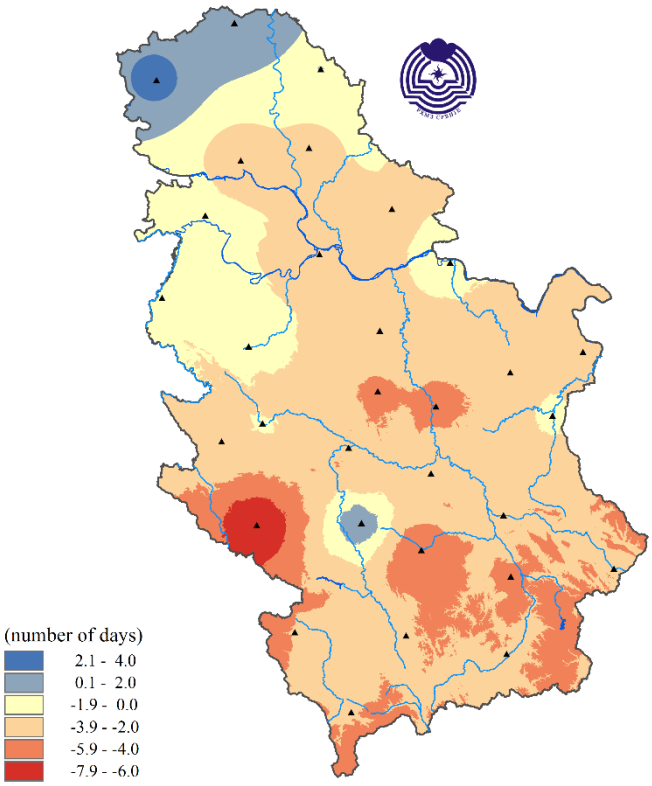


Figure 6. Spatial distribution of deviations in the number of ice days

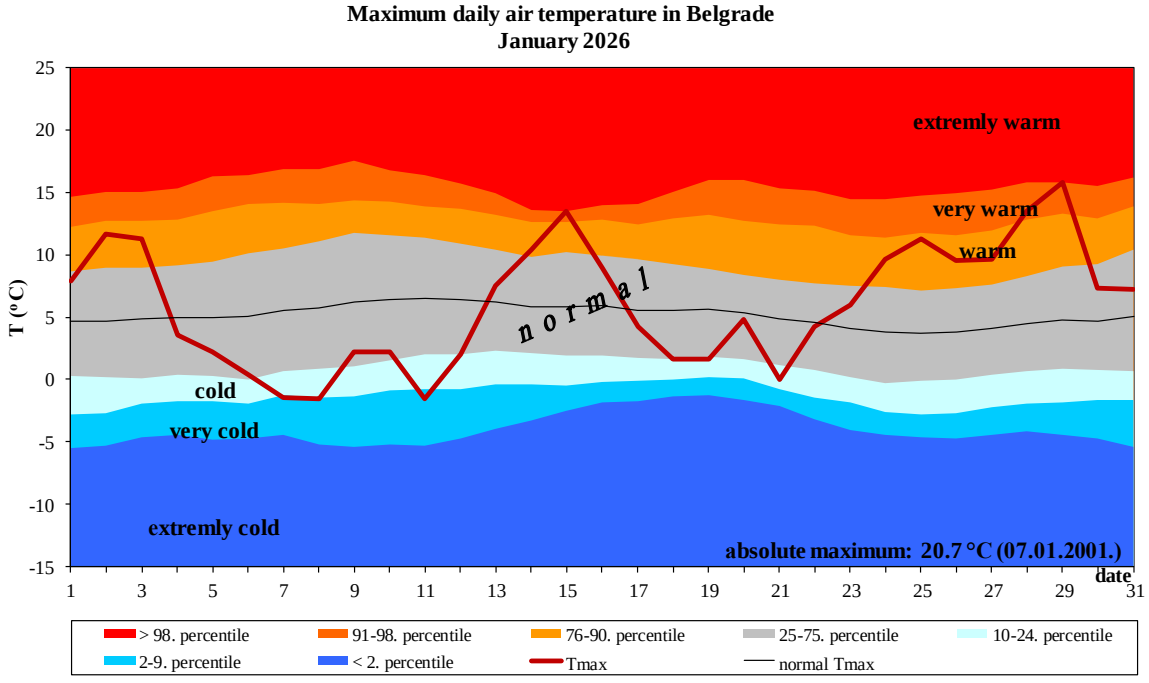


Figure 7. Daily course of the maximum daily air temperature and accompanying percentiles for Belgrade

Minimum air temperature

Mean minimum air temperature in January ranged from -4,3 ℃ in Pozega to -0,4 ℃ in Belgrade. On the mountains, mean minimum air temperature ranged from -6,5 ℃ at Crni Vrh to -3,6 ℃ at Zlatibor.

Based on the percentile method, mean minimum monthly air temperature was in the normal category in most of Serbia, warm category in Sjenica, Kursumlija, Dimitrovgrad, Vranje and Kopaonik.

The lowest minimum daily air temperature of -17,8 ℃ was measured in Pozega on January 9, -17,3 ℃ in Smederevska Palanka and -17,5 ℃ in Sjenica. On the same day, Belgrade observed the lowest air temperature of -6,2 ℃.

The lowest minimum daily air temperatures were registered on January 9 in most of Serbia. On that day, the minimum daily air temperature ranged from -4,5 °C in Negotin to -17,5 °C in Sjenica, while anomaly was -1,6 °C in Negotin up to even -15,2 °C in Smederevska Palanka (*Figures 8 and 9).*

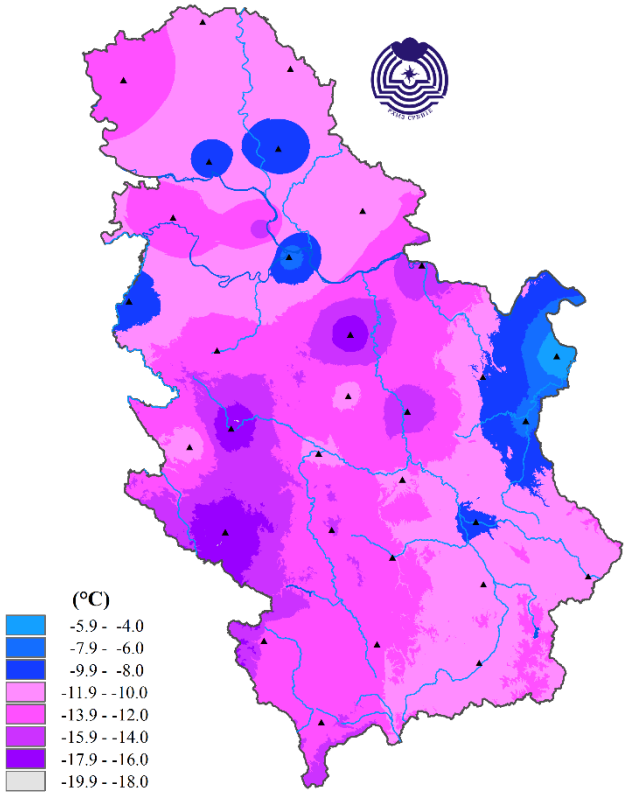


Figure 8. Spatial distribution of minimum daily air temperature on January 9

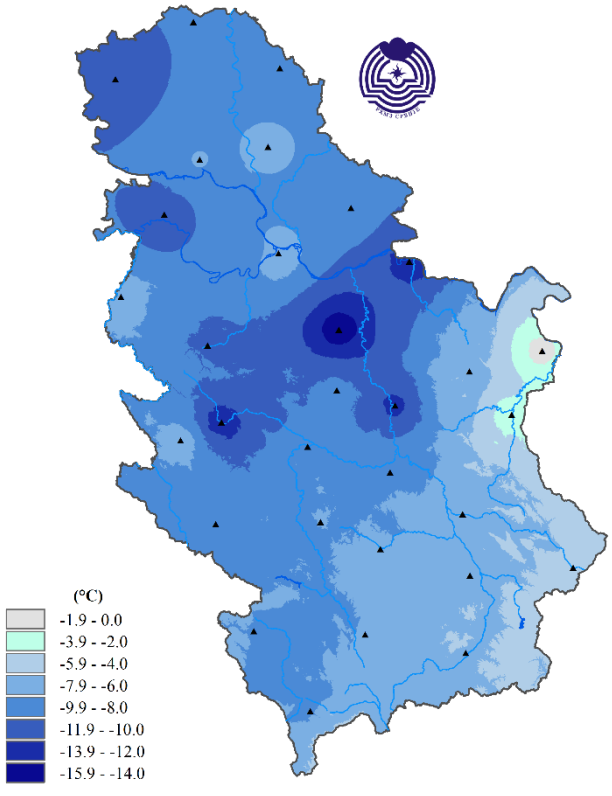


Figure 9. Anomalies of the minimum daily air temperature on January 9

Frost days[5] were recorded in entire Serbia, and their number ranged from 16 in Nis to 27 in Pozega, On the mountains, their number ranged from 20 at Zlatibor to 30 at Crni Vrh and Kopaonik (*Figure 10).* The observed number of frost days ranged from 2 to 6 days below January average in the south and parts of central Serbia, and from 1 to 4 days above the average in the east and north of the country (*Figure 11).*

Days with severe frost[6] were recorded in most places ranging from 1 to 4. There weren't any in Novi Sad, Loznica, Belgrade and Nis, and on the mountains, their number ranged from 5 to 10 days with severe frost. Number of days with severe frost was in most of the country around or slightly below the January average.

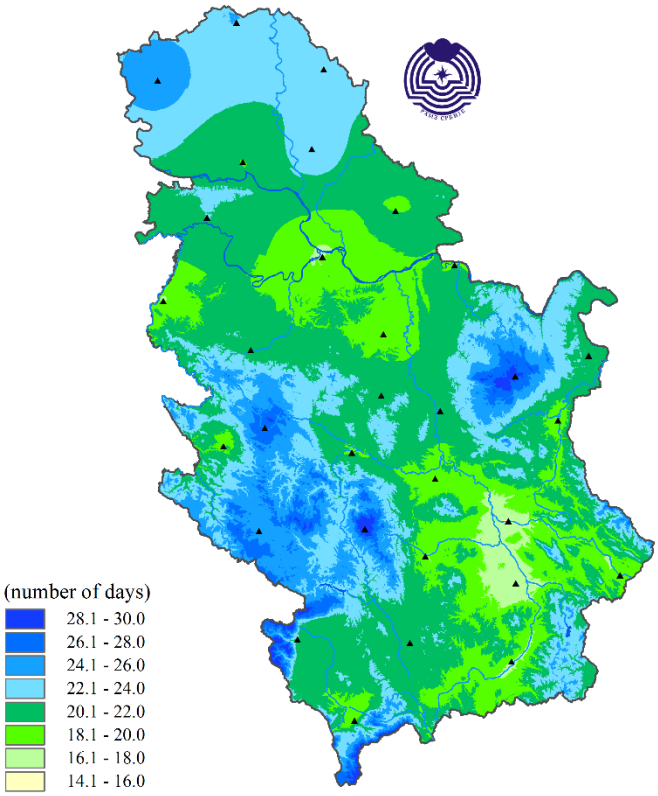


Figure 10. Spatial distribution of the number of frost days

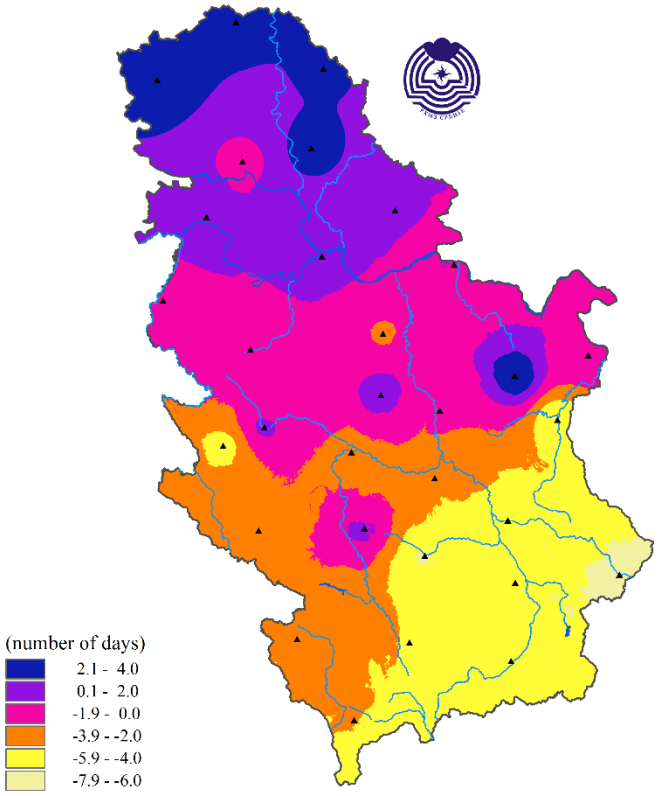


Figure 11. Spatial distribution of deviations in the number of frost days

Figure 12 shows assessment of the minimum and maximum air temperature in Serbia for January based on the tercile distribution relative to the 1991-2020 base period. It can be noted that mean minimum and mean maximum air temperature was around or slightly below upper tercile.

[5] Frost day is defined as the day with minimum air temperature lower than 0 °C
[6] Day with severe frost is defined as the day with the minimum air temperature -10 °C and below

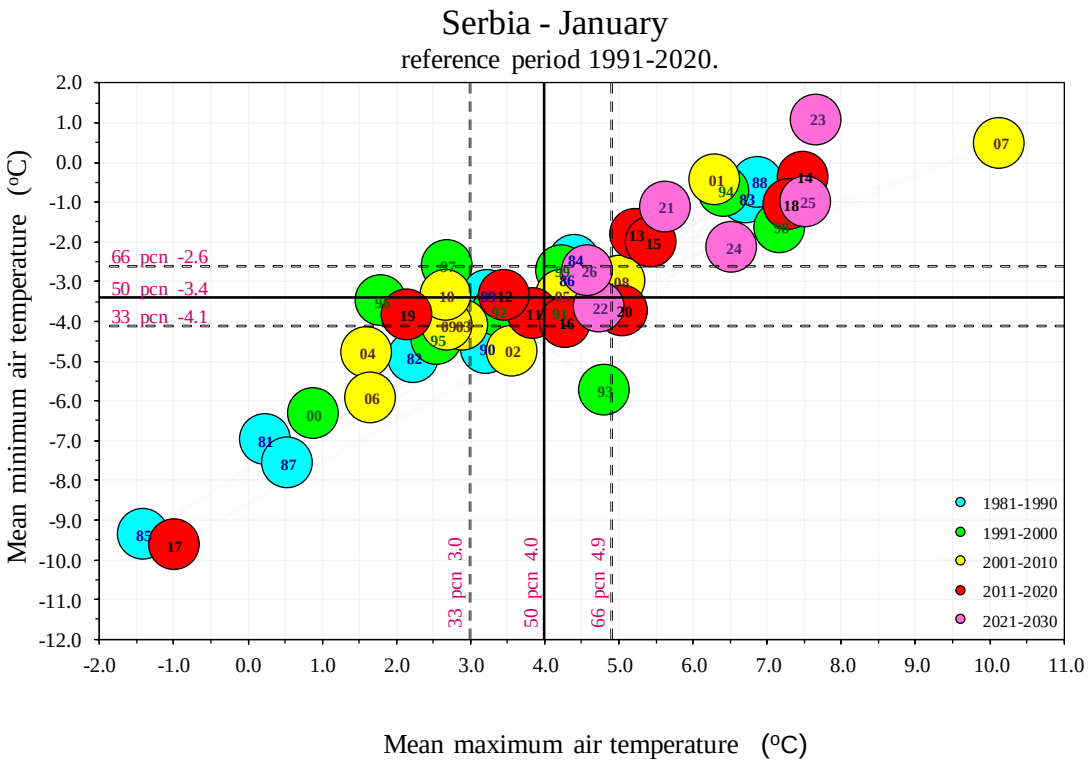


Figure 12. Assessment of minimum and maximum air temperature for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 13 shows daily course of the minimum daily air temperature and the accompanying percentiles for Belgrade in January 2026, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje are given in the Appendix.

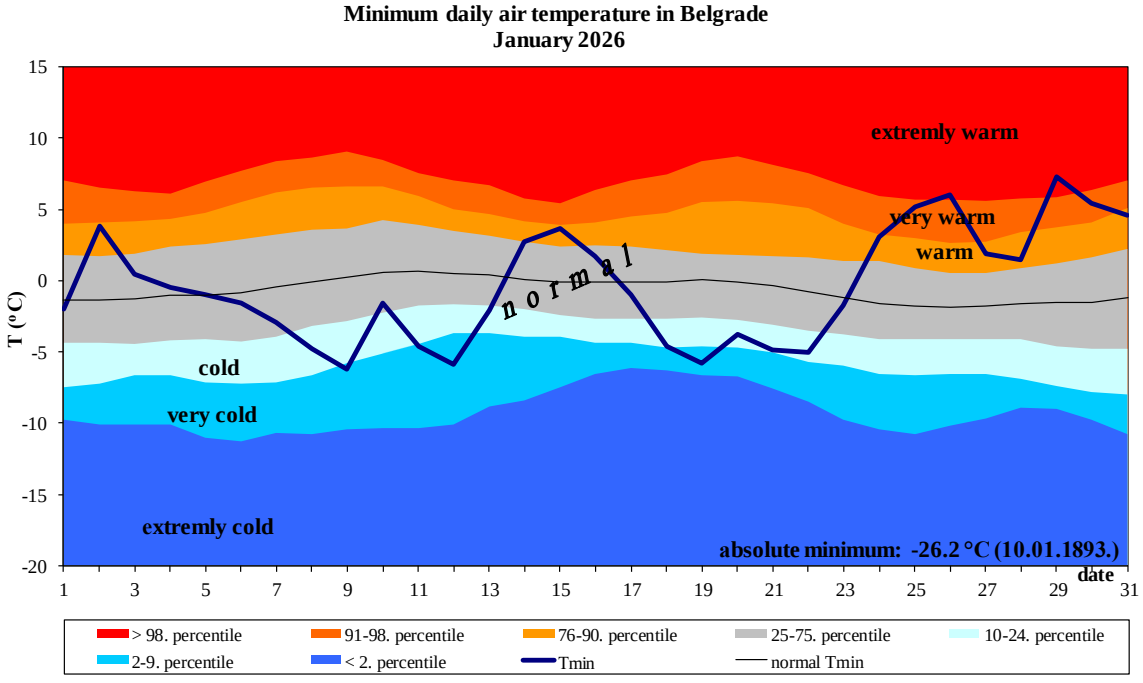


Figure 13. Daily course of the minimum daily air temperature and accompanying percentiles for Belgrade

PRECIPITATION

January 2026 marks as **the 4th wettest** for Serbia since 1951 (*Figure 14)*, while at 20 stations it was among the 8th wettest Januaries since the record-keeping began (*Table 1).* **Smederevska Palanka** received precipitation sum of 124,6 mm thereby **exceeding the absolute January precipitation sum** of 96,5 mm which was registered in January 1987. Absolute January precipitation sum was surpassed with 124,6 mm in **Veliko Gradiste** thereby breaking the previous record of 109,6 mm set in January 1976.

In the appendix are graphs showing 15 wettest years since the record-keeping began for the stations: Smederevska Palanka, Veliko Gradiste, Negotin, Zajecar, Crni Vrh, Kragujevac, Valjevo, Sombor, Novi Sad, Kursumlija, Leskovac, Vranje, Palic and Belgrade.

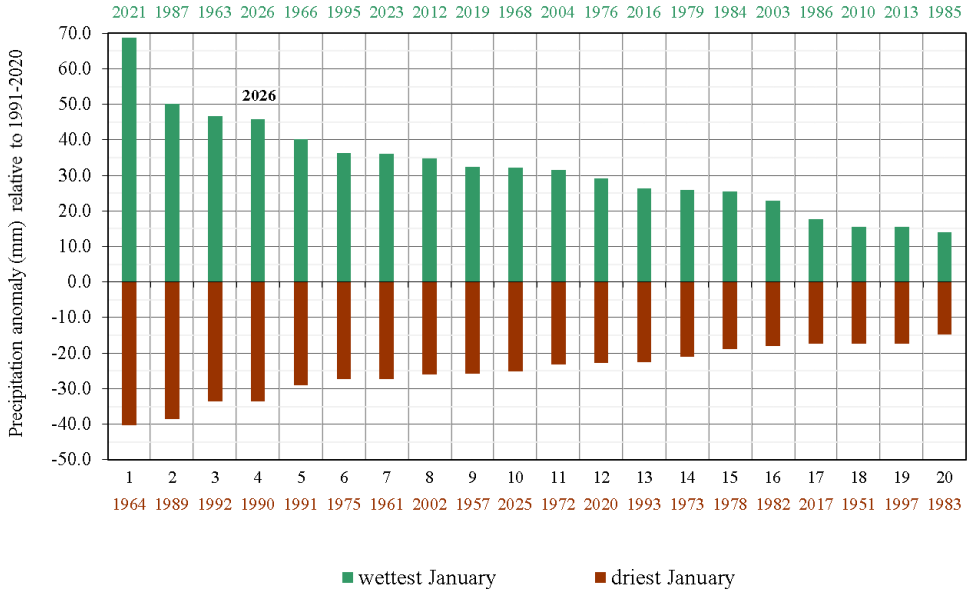


Figure 14. Rank of the wettest and driest January in Serbia for the period from 1951 to 2026

Table 1. The ranking of January 2026 in terms of precipitation, average, and percentage of the 1991-2020 normal

STATION	historical period	∑RR for January 2026 (mm)	normal for January 1991-2020	percentage (%) from normal	ranking for January 2026 (descending RR)
S.PALANKA	1926-2024	**124.6**	44.0	283. 5	**1**
V.GRADISTE	1926-2024	110.7	44.6	248. 2	**1**
NEGOTIN	1941-2024	118.3	47.9	247. 2	2
ZAJECAR	1925-2024	113.7	43.6	261. 1	2
CRNI VRH	1967-2024	102.8	49.2	208. 8	2
KRAGUJEVAC	1925-2024	95.8	42.1	227. 5	2
VALJEVO	1926-2024	96.8	49.3	196. 5	3
SOMBOR	1931-2024	88.6	37.1	238. 7	3
NOVI SAD	1945-2024	78.2	39.0	200. 7	4
KURSUMLIJA	1925-2024	100.7	44.7	225. 5	5
LESKOVAC	1925-2024	95.9	46.2	207. 5	5
VRANJE	1926-2024	90.5	39.9	226. 8	5
PALIC	1936-2024	70.4	33.0	213. 3	5
SJENICA	1925-2024	103.0	48.3	213. 3	6
B.KARLOVAC	1946-2024	85.6	37.4	228. 8	6
CUPRIJA	1926-2024	99.3	50.5	196. 5	7
ZRENJANIN	1925-2024	71.5	36.6	195. 3	7
KIKINDA	1925-2024	67.4	34.6	194. 9	7
KOPAONIK	1950-2024	116.9	67.1	174. 3	8
NIS	1925-2024	80.3	42.9	187. 1	8

January precipitation sums ranged from 66,3 mm in Sremska Mitrovica to 124,6 mm in Smederevska Palanka, while Belgrade recorded 86,6 mm (*Figure 15).*

Precipitation totals compared to the normal for the 1991-2020 base period ranged from 139% in Loznica to 283% in Smederevska Palanka (*Figure 16*).

Based on the percentile method, precipitation sums were in the categories of very rainy and extremely rainy in most of Serbia, and rainy in Pozega, Kraljevo, Krusevac, Cuprija, Dimitrovgrad, Zlatibor and Kopaonik (*Figure 17).*

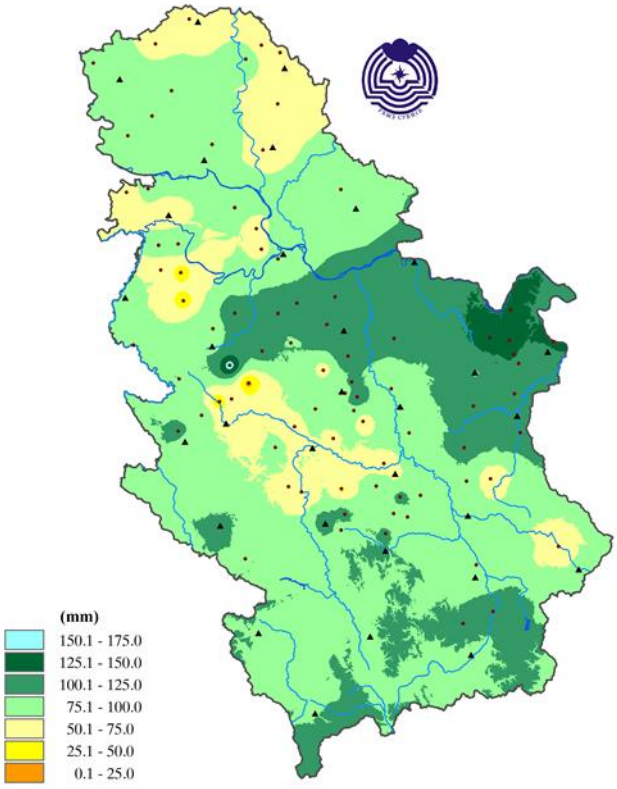


Figure 15. Spatial distribution of the monthly precipitation sums (mm) according to data from 28 major meteorological, 19 climatological and 62 rain gauge stations

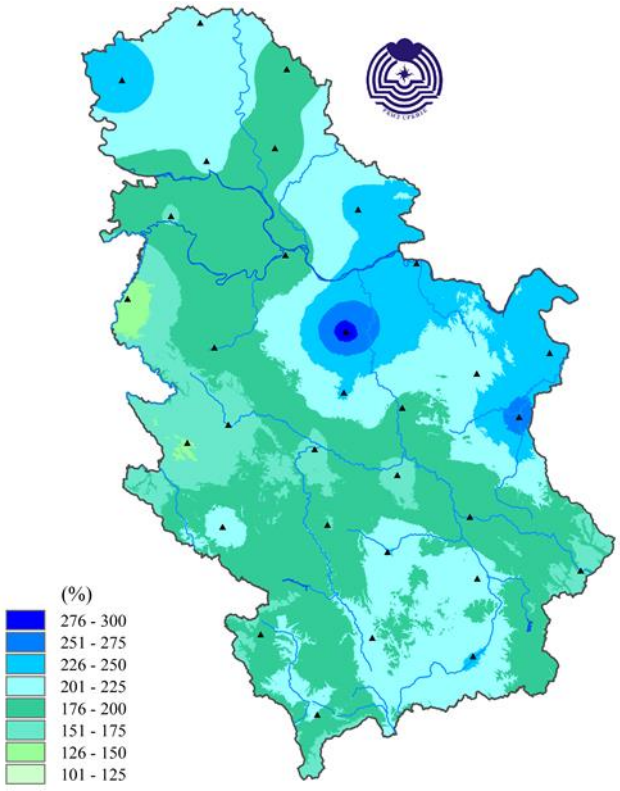


Figure 16. Spatial distribution of the monthly precipitation sums in the percentages of normal for the 1991–2020 base period

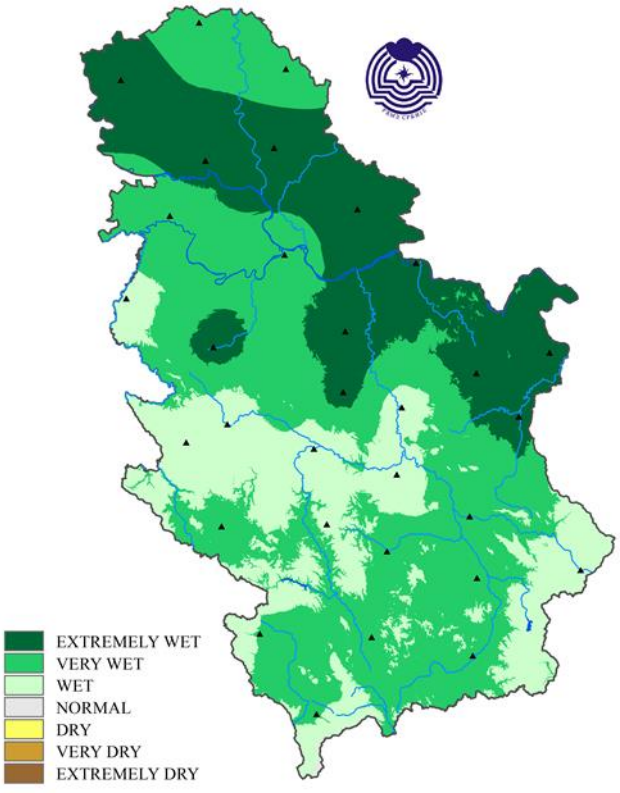


Figure 17. Monthly precipitation sums according to the percentile method

The highest daily precipitation sum of 45,2 mm was measured in Loznica on January 5. On the same day, Belgrade recorded the highest daily precipitation sum of 31,2 mm.

Absolute daily January maximum precipitation sum of 37,5 mm was surpassed in Sombor on January 3 thereby breaking the previous record of 30,5 mm from January 21, 1998.

Number of days with precipitation was around January average in most places, ranging from 12 in Sremska Mitrovica, Sjenica and Kraljevo to 21 in Veliko Gradiste (*Figures 18 and 19*).

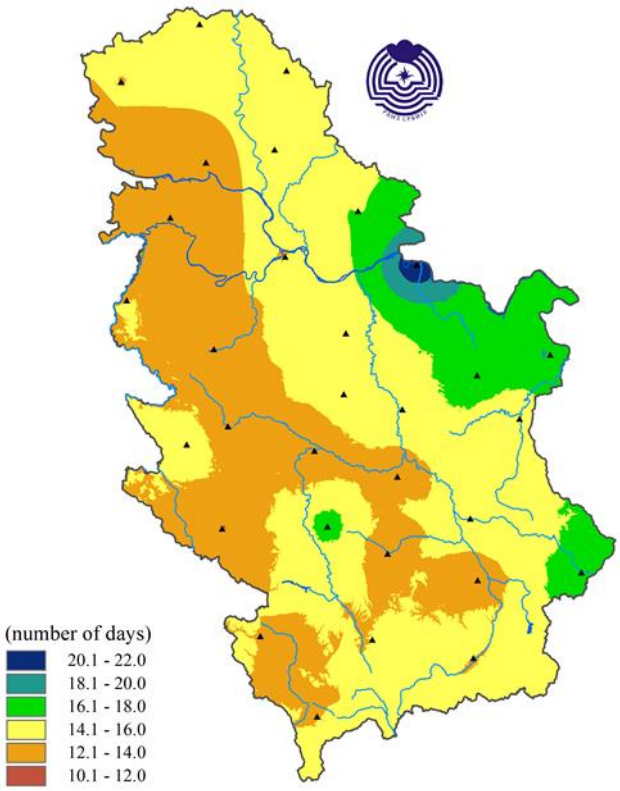


Figure 18. Spatial distribution of number of days with precipitation

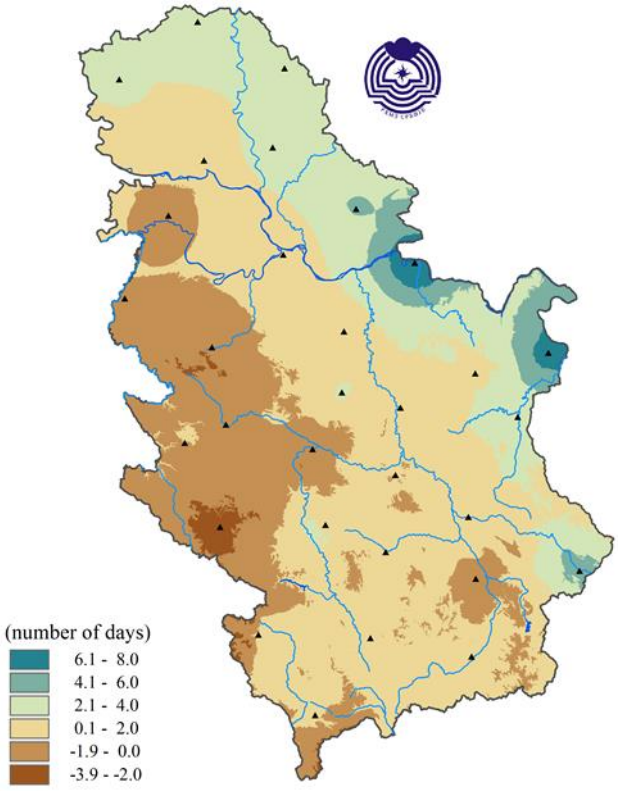


Figure 19. Spatial distribution of deviation of number of days with precipitation

During the entire period, snow cover was registered at Kopaonik and Crni Vrh, as of January 3 in the north of the country, as of January 5 in most of the country apart from the south where it was observed since January 8. The highest snow cover of 40 cm was registered at MMS on January 11 in Sjenica and January 12 at Kopaonik, while in the lowland, the highest snow cover of 38 cm was registered in Sremska Mitrovica on January 5. The snow cover depth was as follows: on January 11, CS RC Sjenica (MMS Sjenica) recorded 51 cm, CS Karajukica Bunari (MMS Sjenica) also recorded 51 cm on January 12, and PS Miroc (MMS Negotin) recorded 50 cm on January 6.

Number of days with the snow cover ranged from 4 in Zajecar to 25 in Sombor, and in the upland from 22 at Zlatibor to 31 at Crni Vrh and Kopaonik. Number of days with the snow cover was above the average in the north of the country, from 3 to 15 in Sombor, and in the south and east below the average from 3 to 8, in Zajecar and Dimitrovgrad up to 11 days (*Figures 21 and 22).*

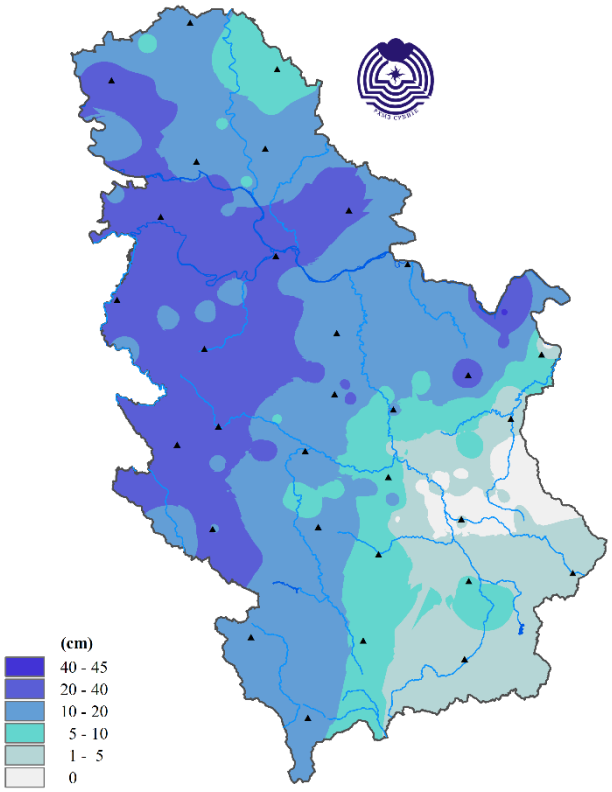


Figure 20. Spatial distribution of snow cover depth (in cm) in Serbia at 8 a.m. on January 8, 2026

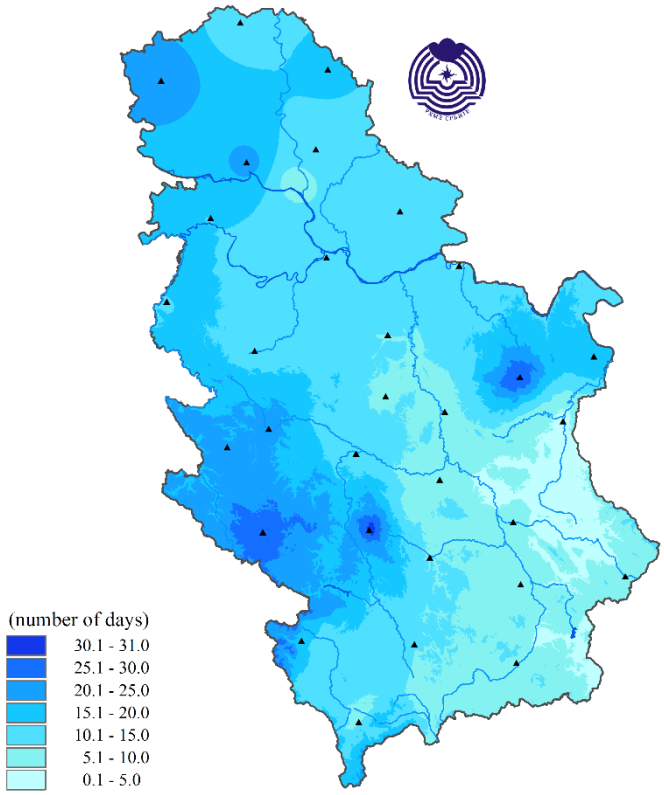


Figure 21. Spatial distribution of the number of days with snow cover

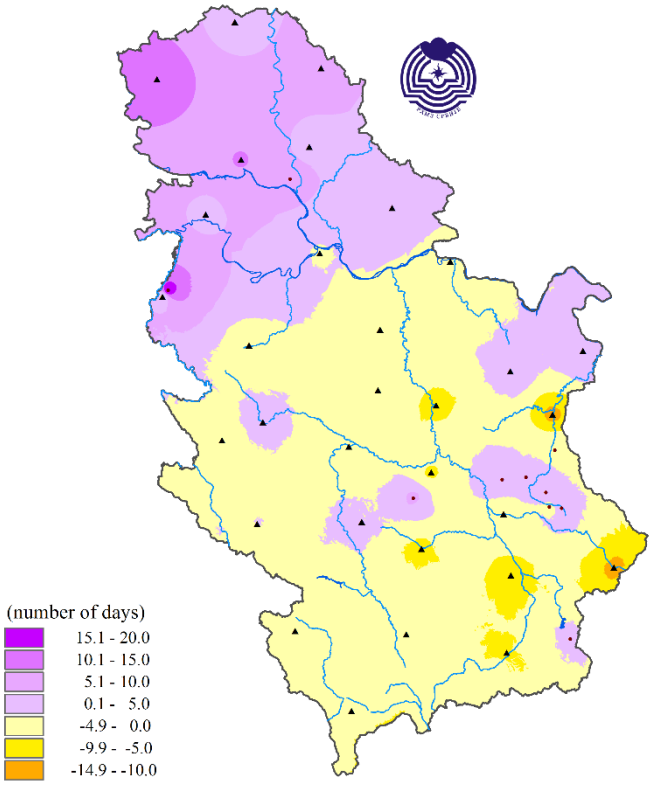


Figure 22. Spatial distribution of deviations in the number of days with snow cover

Figure 23 shows assessment of air temperature and precipitation sums for Serbia for January based on the tercile distribution relative to the 1991 – 2020 base period. It can be noted that January 2026 was marked by air temperature at the upper tercile threshold and precipitation sums significantly above upper tercile threshold.

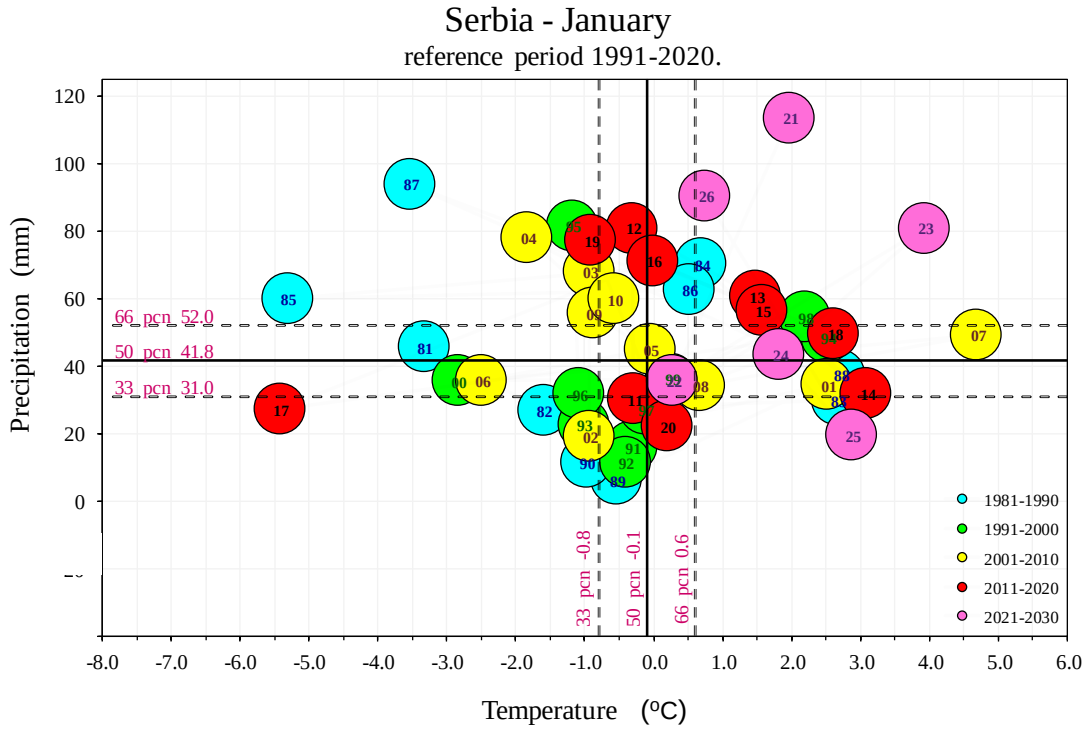


Figure 23. Assessment of air temperature and precipitation for Serbia with the accompanying terciles in relation to the 1991-2020 base period

Figure 24 show daily and cumulative precipitations sums with averaged normal 1991-2020 for January in Belgrade, and for the stations Sombor, Novi Sad, Loznica, Negotin, Kragujevac, Zlatibor, Nis and Vranje precipitation sums are given in Appendix.

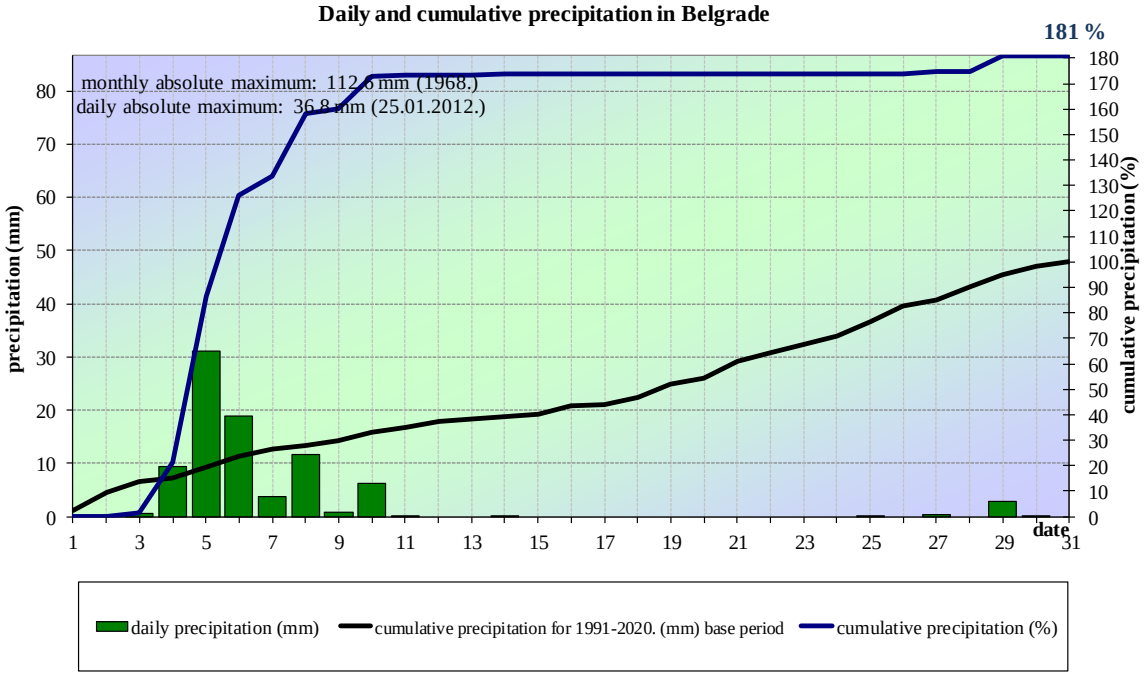


Figure 24. Daily and cumulative precipitation in Belgrade

CLOUD COVER, BRIGHT AND CLOUDY DAYS

Mean January cloud cover in Serbia was around the average, ranging from 7/10 to 8/10. Figures 25, 26 and 27 show average daily cloud cover in January for Belgrade, Crni Vrh and Kragujevac.

Bright days[7] were not recorded in Pozega. The highest number of bright days, total of 5, were recorded in Kragujevac, Veliko Gradiste and Nis. In Belgrade, there were 4 bright days. The recorded number of bright days was around and slight below January average in most of the country.

Number of cloudy days[8] ranged from 14 in Lozncia and Sjenica to 22 in Zajecar. Belgrade observed 18 cloudy days. Number of cloudy days was around 5 days above January average.

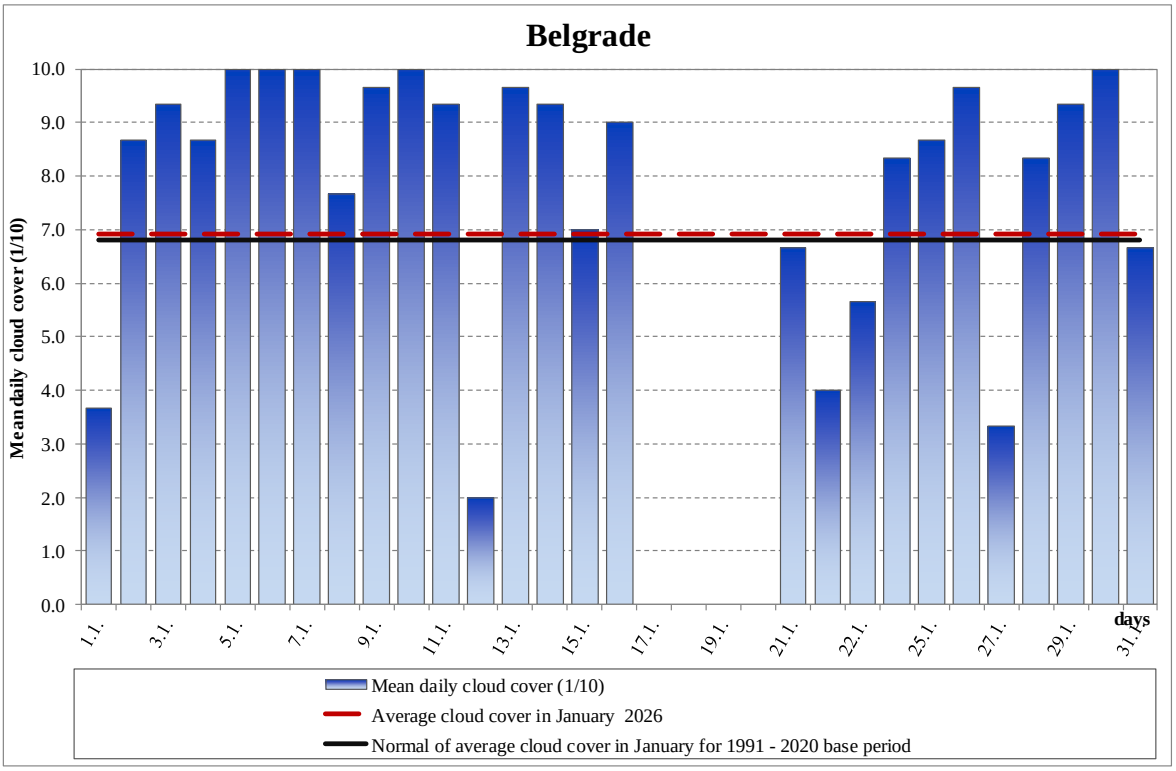


Figure 25. Mean daily cloud cover in Belgrade

[7] Bright day refers to a day with cloud cover less than 2/10
[8] Cloudy day refers to a day with cloud cover over 8/10

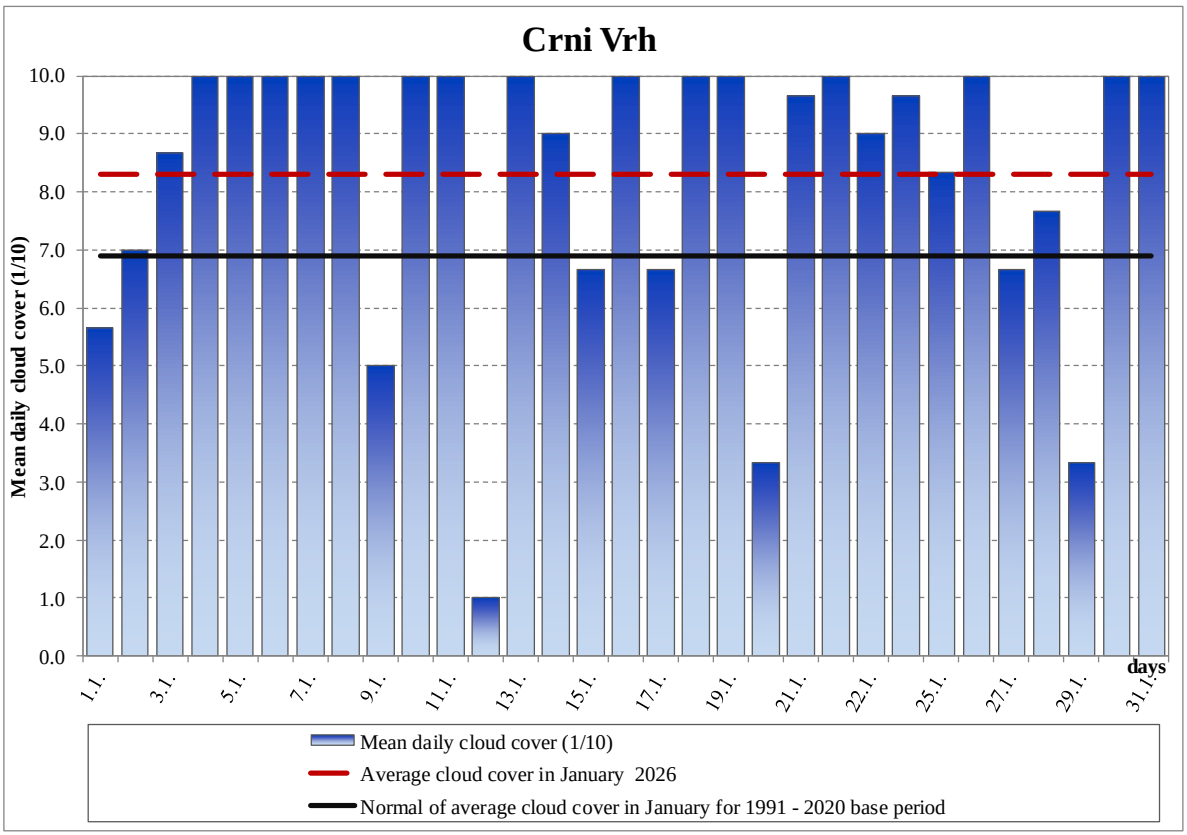


Figure 26. Mean daily cloud cover on Crni Vrh

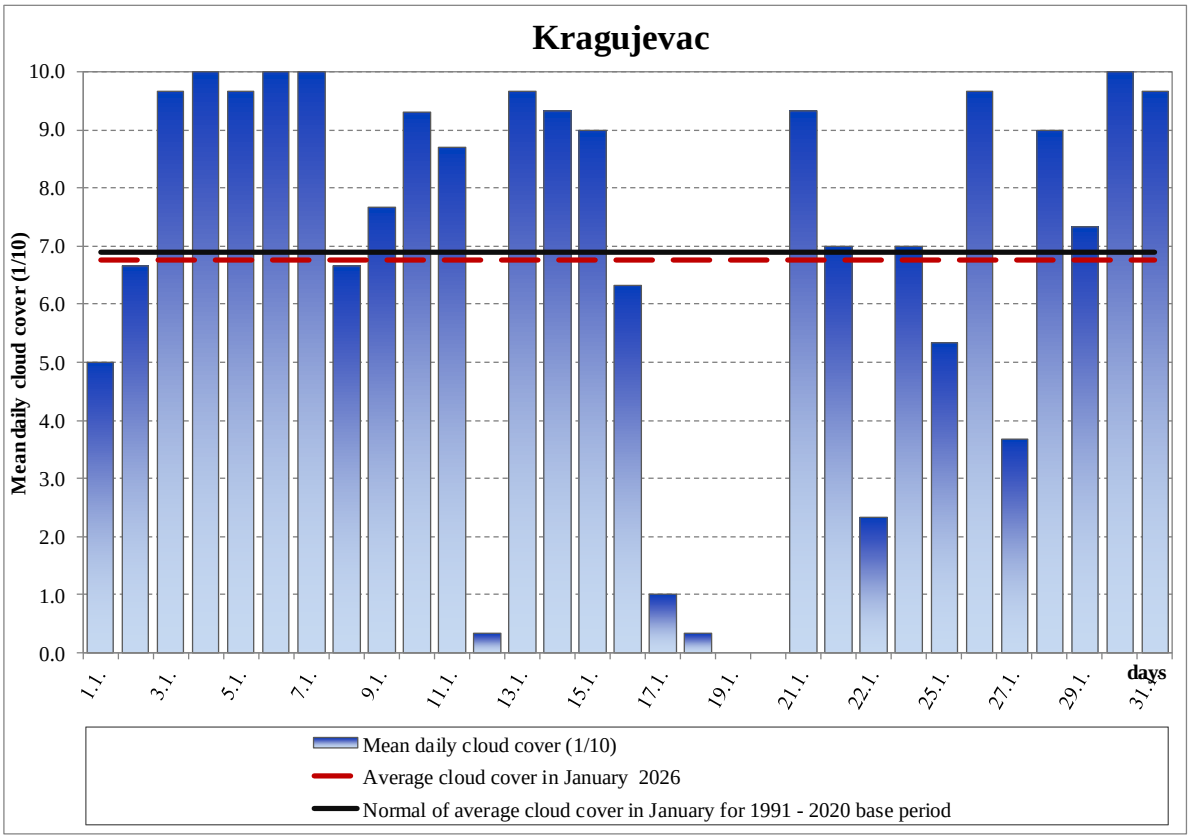


Figure 27. Mean daily cloud cover in Kragujevac

SUNSHINE DURATION (INSOLATION)

January sunshine duration ranged from 37,8 hours in Zajecar to 85,2 hours in Sremska Mitrovica (*Figure 28*).

January insolation ranged from 52% at Crni Vrh to 134% in Sremska Mitrovica compared to the normal for the 1991- 2020 base period (*Figure 29).*

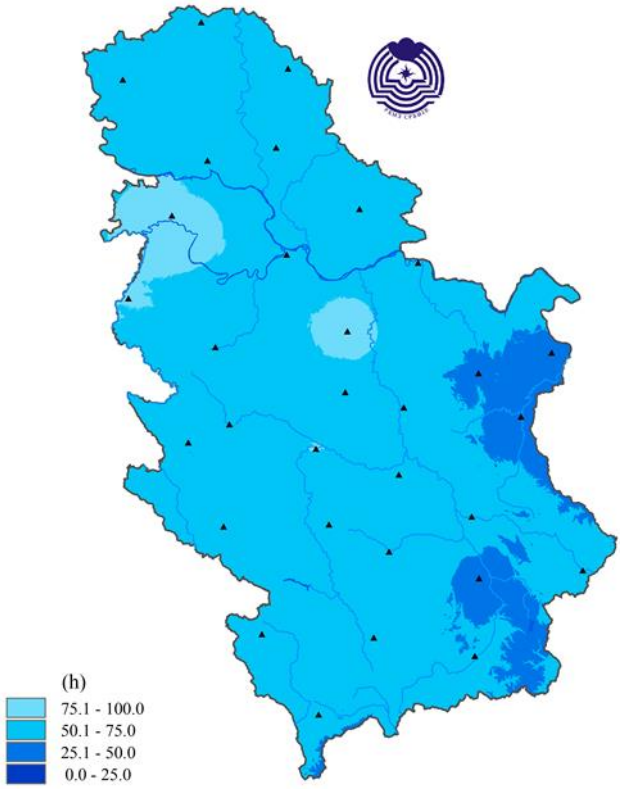


Figure 28. Insolation, expressed in hours

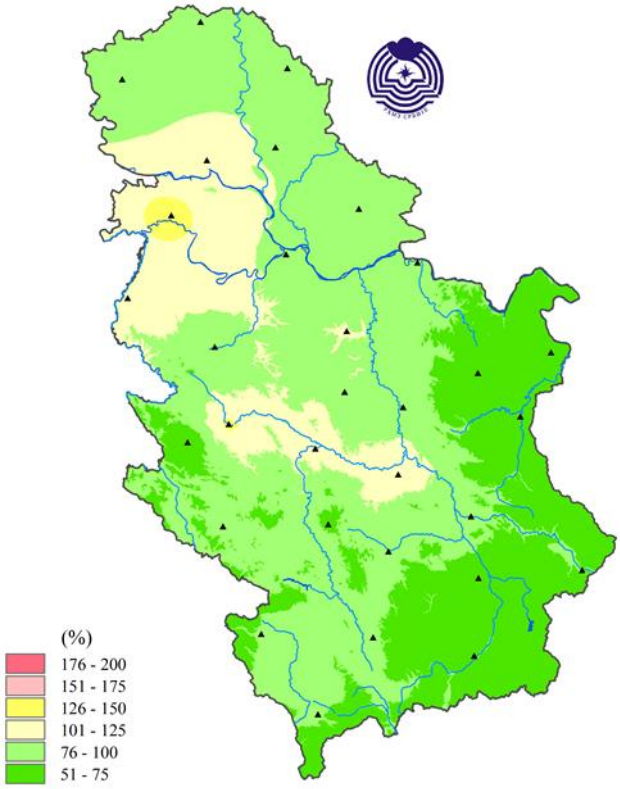


Figure 29. Insolation expressed in the percentages of normal

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

OVERVIEW OF THE SYNOPTIC SITUATION*

First, a cooling with snowfall and the formation of a snow cover in most areas, especially in the west and in the Pomoravlje region, due to a low pressure field from the west and southwest and cold air from the north; periods of dry weather, briefly and locally also warmer, followed by very cold conditions, strengthening of the anticyclone over the east and across our area, with low pressure fields in the Mediterranean, windy conditions in the Košava region. The third decade was warmer, mostly with light precipitation and in most areas warmer due to a series of passing low pressure fields and waves of moist air from the Mediterranean.

At the beginning of the year, a surface anticyclone and the periphery of a vast low pressure field from the north caused stable, relatively warm, and mostly dry weather. Then, within just a few days, a change in the weather followed. Namely, the low pressure field over the northern part of the continent continued to strenghten, while low pressure field system also developed over the Mediterranean, in the Gulf of Genoa, over North Africa, and in central regions. As these systems moved across the Apennine Peninsula and the Adriatic Sea, and from the south of the Balkans toward the east and the Black Sea, cloudiness with rain and a cooling were first observed in the north, west, and southwest, and by the middle of the first decade spread to the entire country. Rain in the northern areas, and especially in the western and central regions, very quickly turned into snow, with the persistence and formation of a snow cover. Pronounced wind shear in the upper-air over our area, advection of cold air from the north and northeast, and advection of a warm air mass from the south and southwest brought the heaviest precipitation to Srem and the upper Pomoravlje. In addition, the period was marked by the slow movement of the mentioned low pressure field system and waves of moist air across the Balkans, together with the occasional regeneration and persistence of a vast cold upper-air depression extending from the north across much of Europe to the southern Balkans, and at times even the central Mediterranean. It was cold, in some places occasionally with snow, and in most regions from the middle of the first decade until the beginning or middle of the second decade temperatures were around and slightly below zero degree.

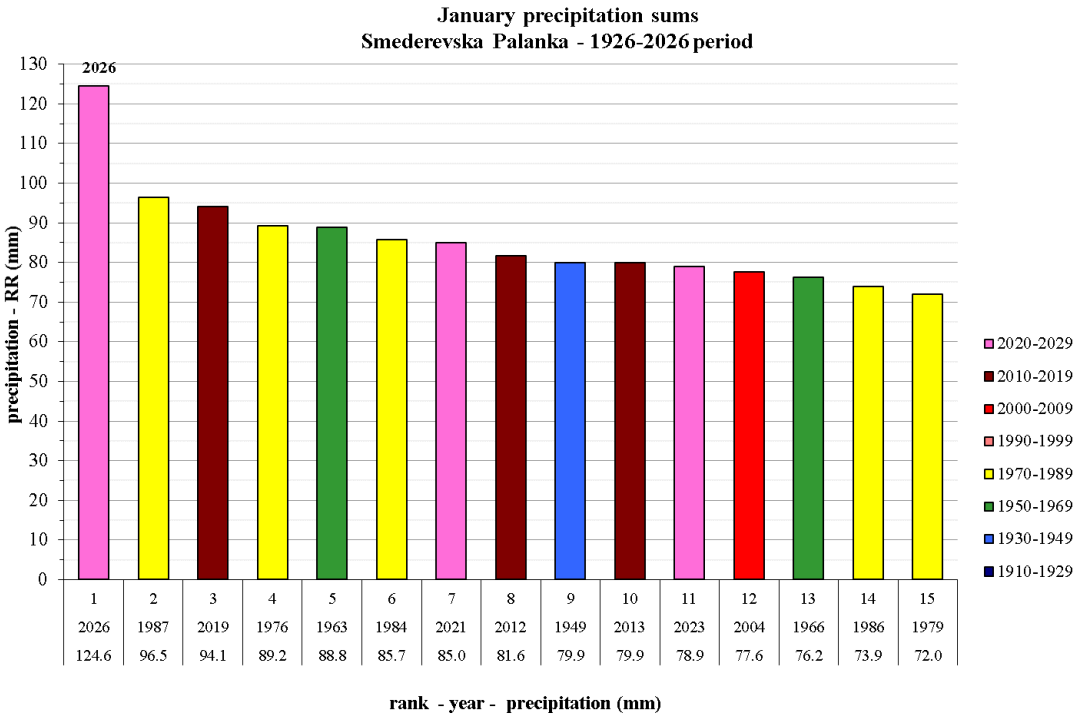
At the beginning and in the middle of the second decade, there was a gradual weakening of the northwesterly upper-air circulation, with the establishment of a ridge over central and southern Europe as well as a weak surface anticyclone. This was followed by the advection of a warm air mass from North Africa toward the Mediterranean and a rise in geopotential. The weather became slightly warmer and stable, mostly dry. Then, after the middle of the month when it was locally very warm in the east and in the Pomoravlje region, there was a strengthening of the anticyclone over eastern Europe and, in the lower layers over the Carpathians and along the Danube delta, advection of cold air, that is, the intrusion of a cold front into our region. In the Košava region, especially in the lower Danube area and in southern Banat, a moderate to strong easterly and southeasterly wind was blowing. Until the end of the second decade, the anticyclone over the east gradually strengthened, while at the same time low pressure field system developed over the northwest and west. Across our country, the pressure gradient increased, particularly in the Košava region, bringing strong winds along with mostly dry and stable weather. In the eastern parts of the country, as well as in some areas of western and northwestern Serbia, due to the cold conditions the snow cover persisted and occasionally increased slightly, and at the beginning of the third decade there was locally also strong morning frost.

Then, an inflow of warm air from North Africa followed, along with the development of a low pressure field system over Tunisia and the central Mediterranean, as well as the formation of a low pressure field in the west, in the Gulf of Genoa area, with associated waves of moist and warmer air. Over our region as well, a series of low pressure fields and waves of moist air from the Mediterranean continued until the end of the month, with persistent west–northwesterly and at times west–southwesterly upper-air circulation on the periphery of a vast depression over the northern part of the continent. The weather gradually became warmer, except in eastern Serbia; it was changeable, with occasional precipitation, mostly light rain. In the middle of the third decade, a southerly and southeasterly wind was blowing, moderate to strong in the Košava region and in the mountains.

* National Center for Hydrometeorlogical Early Warning System

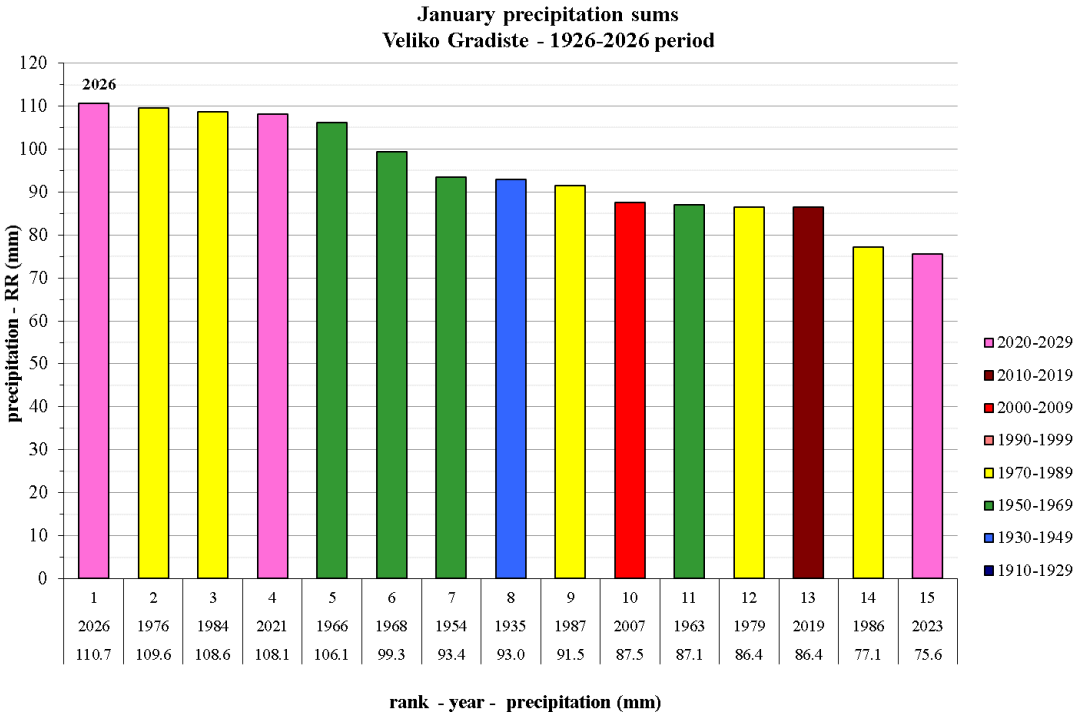
APPENDIX

Ranks of the wettest January



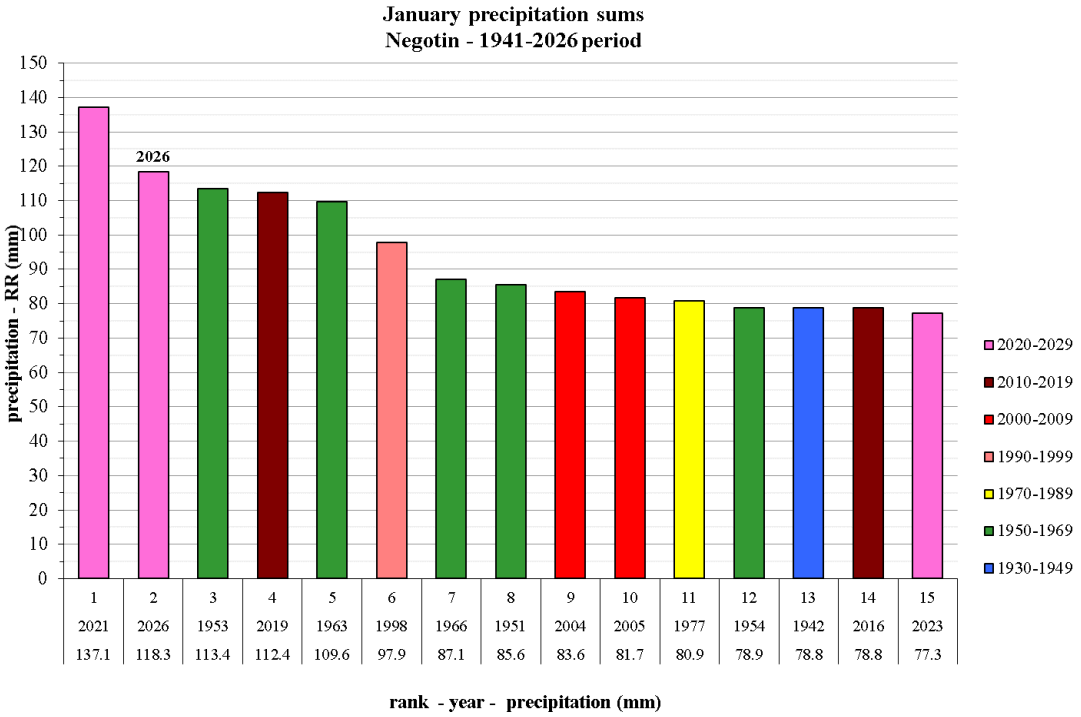
rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
year	2026	1987	2019	1976	1963	1984	2021	2012	1949	2013	2023	2004	1966	1986	1979
precipitation (mm)	124.6	96.5	94.1	89.2	88.8	85.7	85.0	81.6	79.9	79.9	78.9	77.6	76.2	73.9	72.0

Appendix 1. Rank of the highest precipitation in Smederevska Palanka

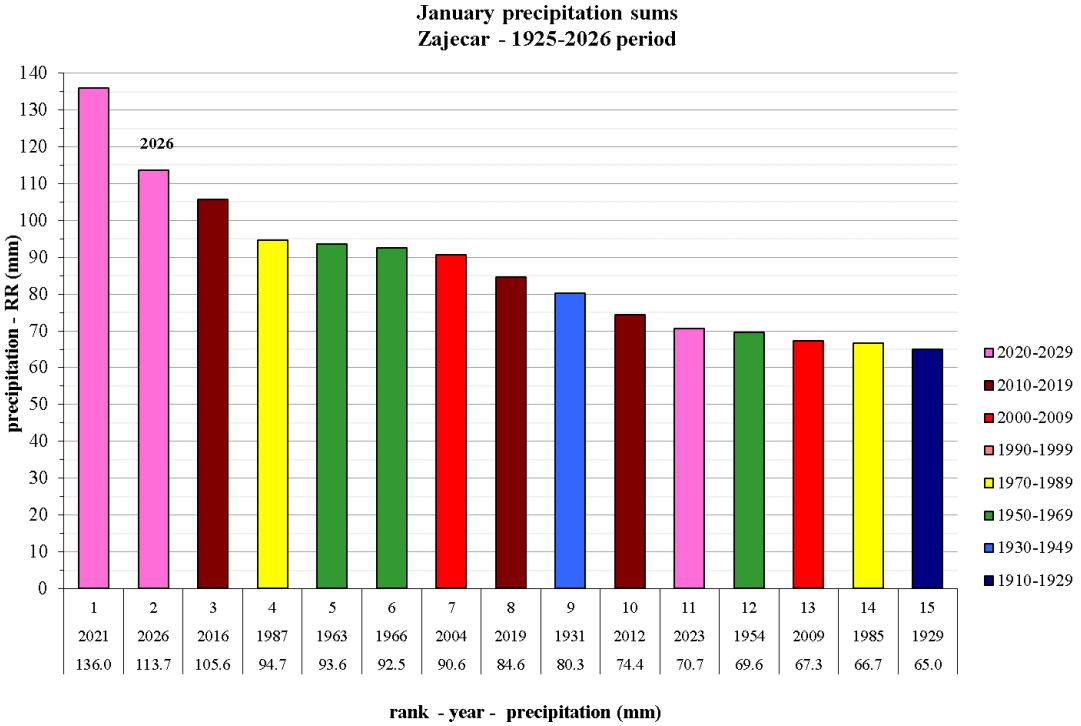


rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
year	2026	1976	1984	2021	1966	1968	1954	1935	1987	2007	1963	1979	2019	1986	2023
precipitation (mm)	110.7	109.6	108.6	108.1	106.1	99.3	93.4	93.0	91.5	87.5	87.1	86.4	86.4	77.1	75.6

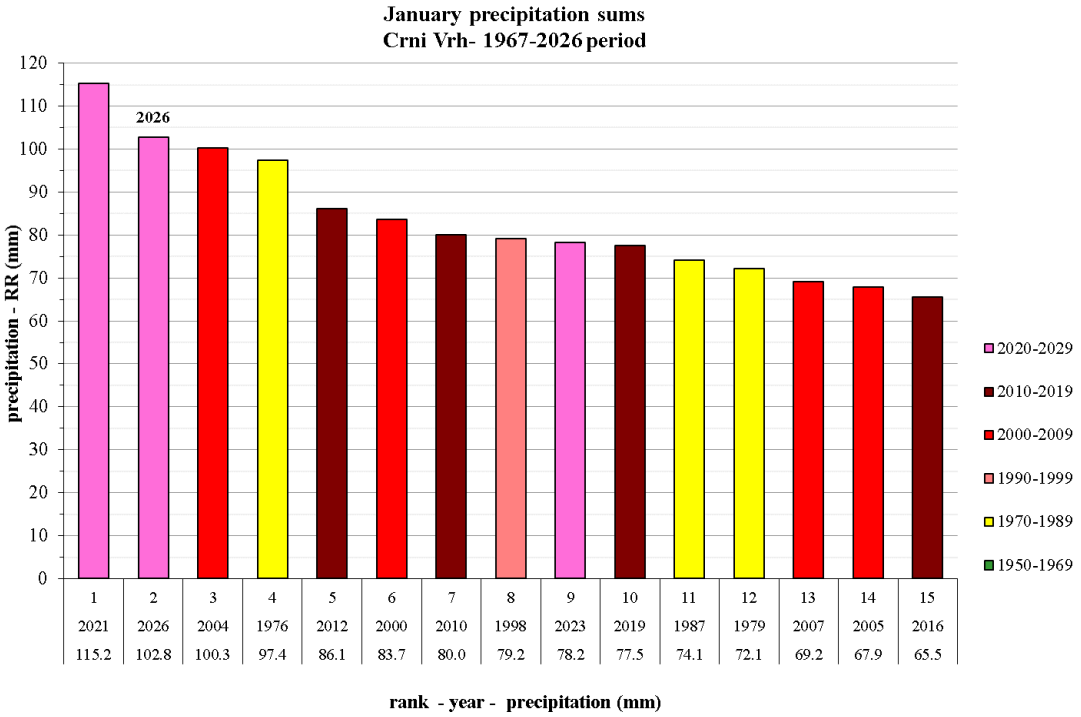
Appendix 2. Rank of the highest precipitation in Veliko Gradiste



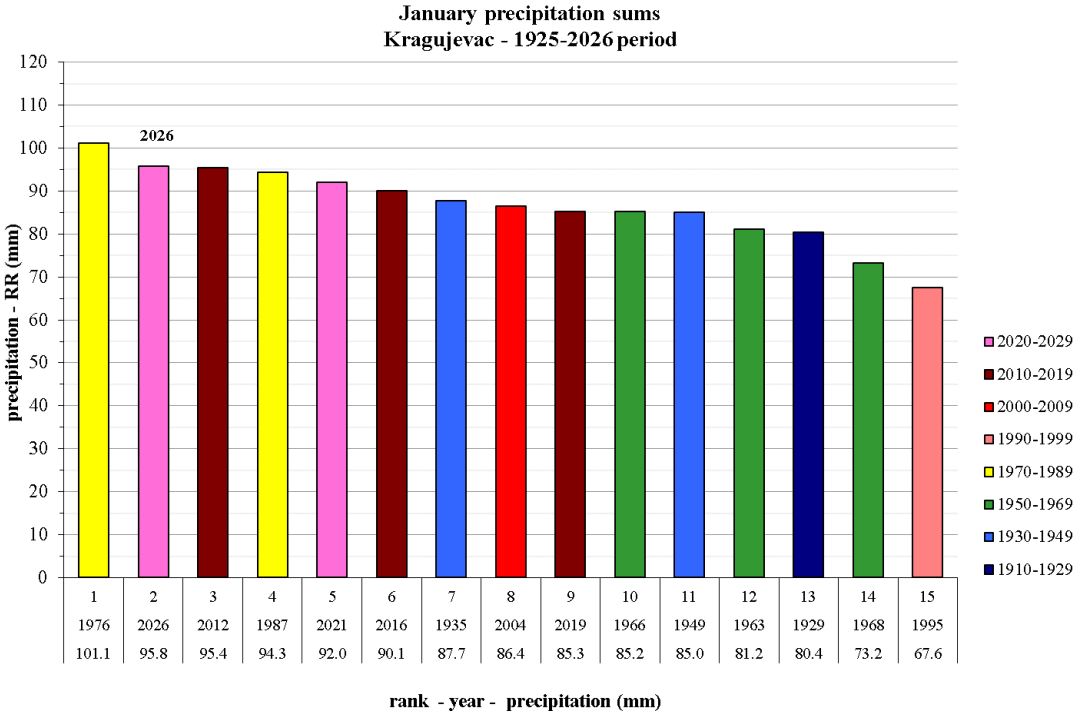
Appendix 3. Rank of the highest precipitation in Negotin



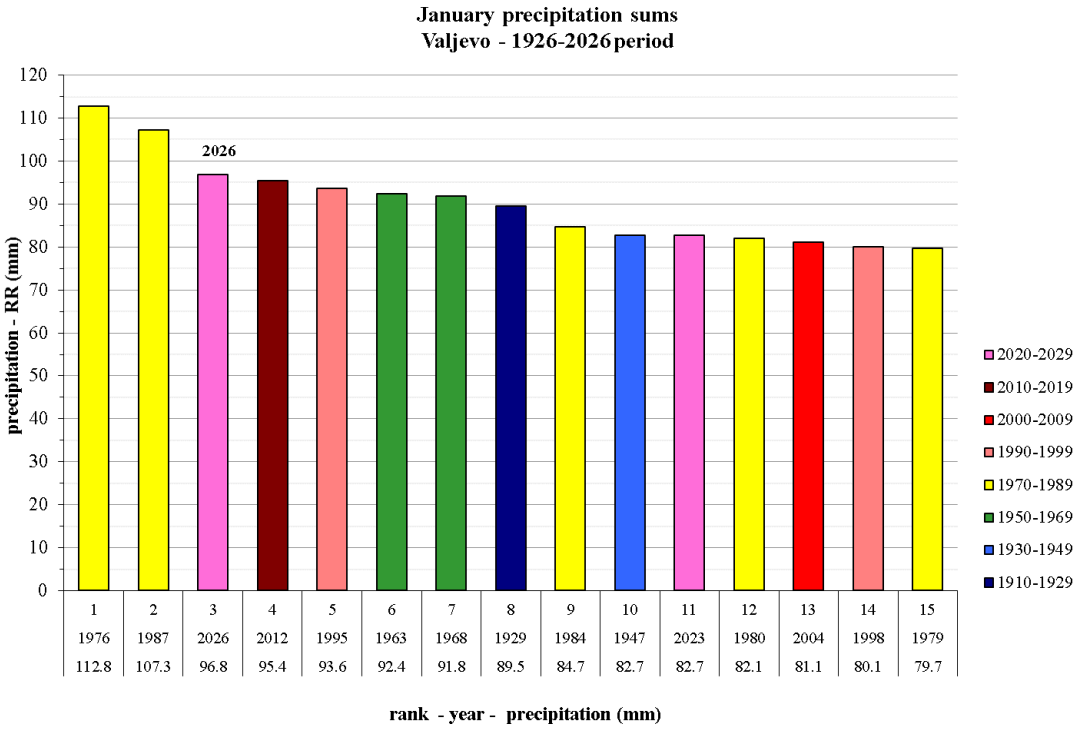
Appendix 4. Rank of the highest precipitation in Zajecar



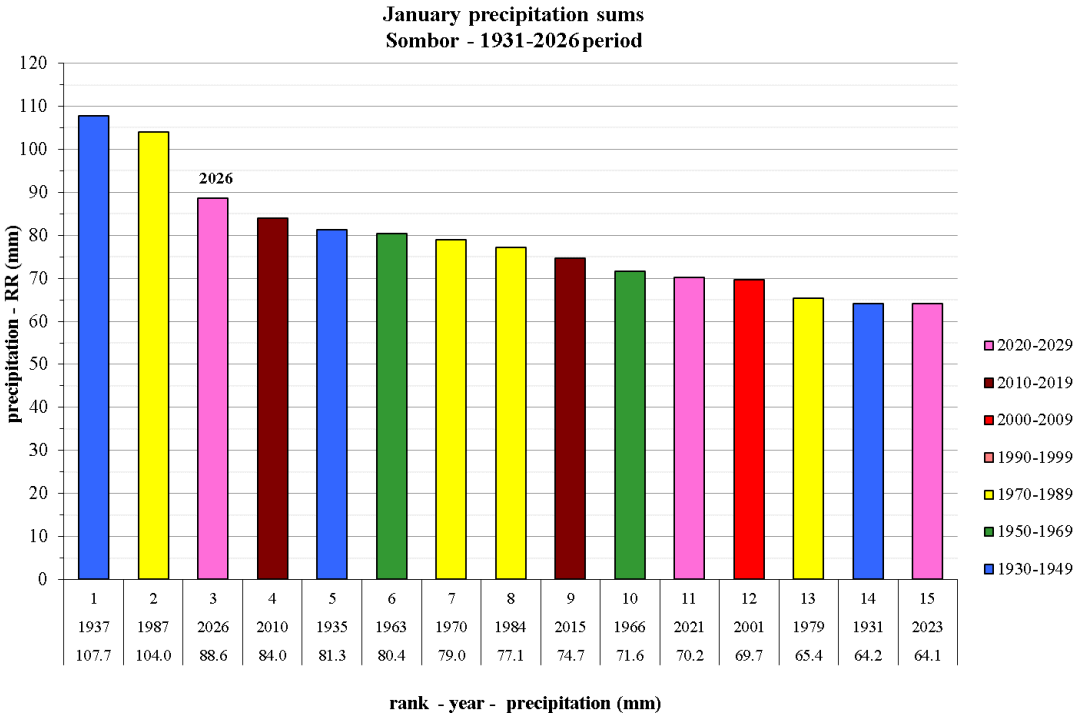
Appendix 5. Rank of the highest precipitation on Crni Vrh



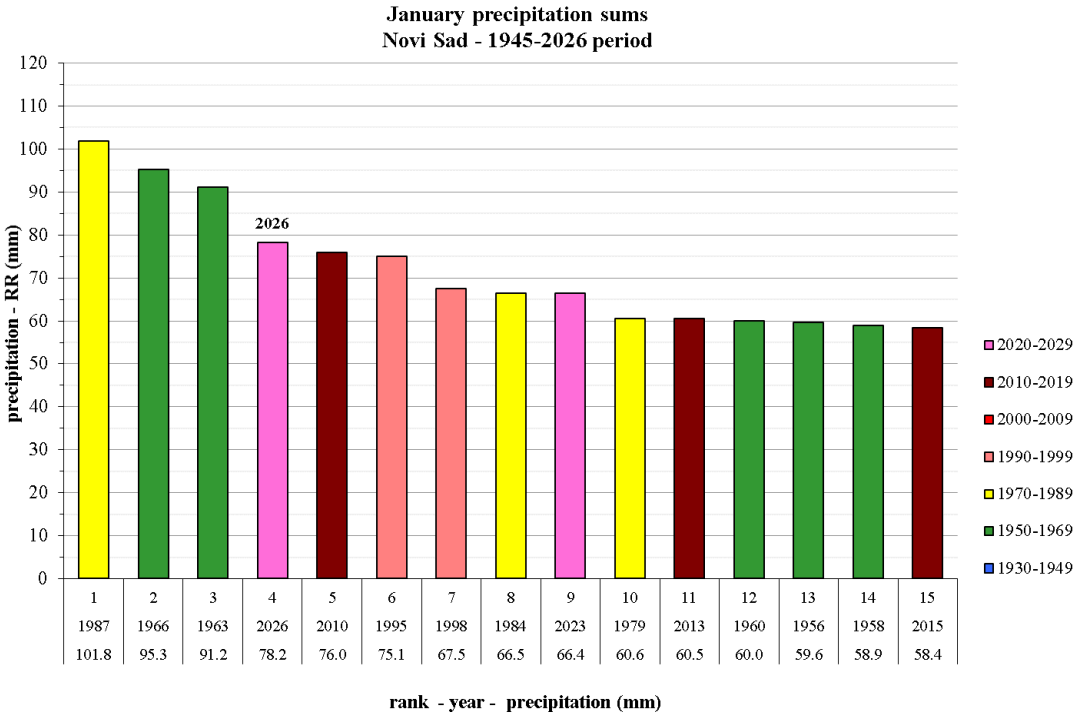
Appendix 6. Rank of the highest precipitation in Kragujevac



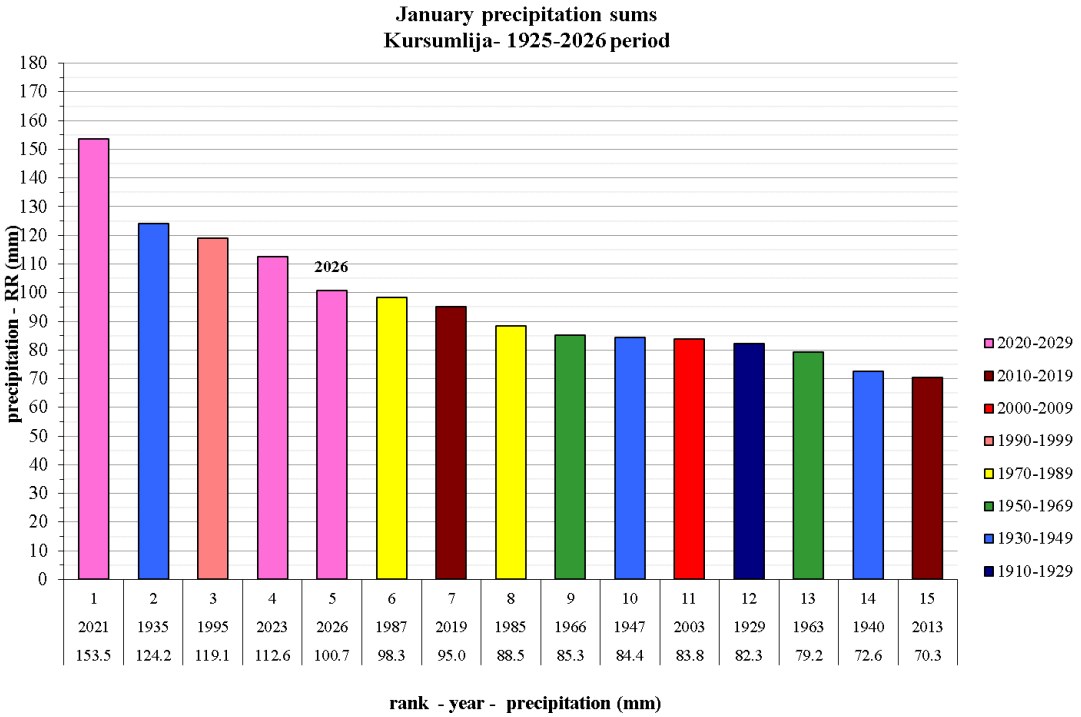
Appendix 7. Rank of the highest precipitation in Valjevo



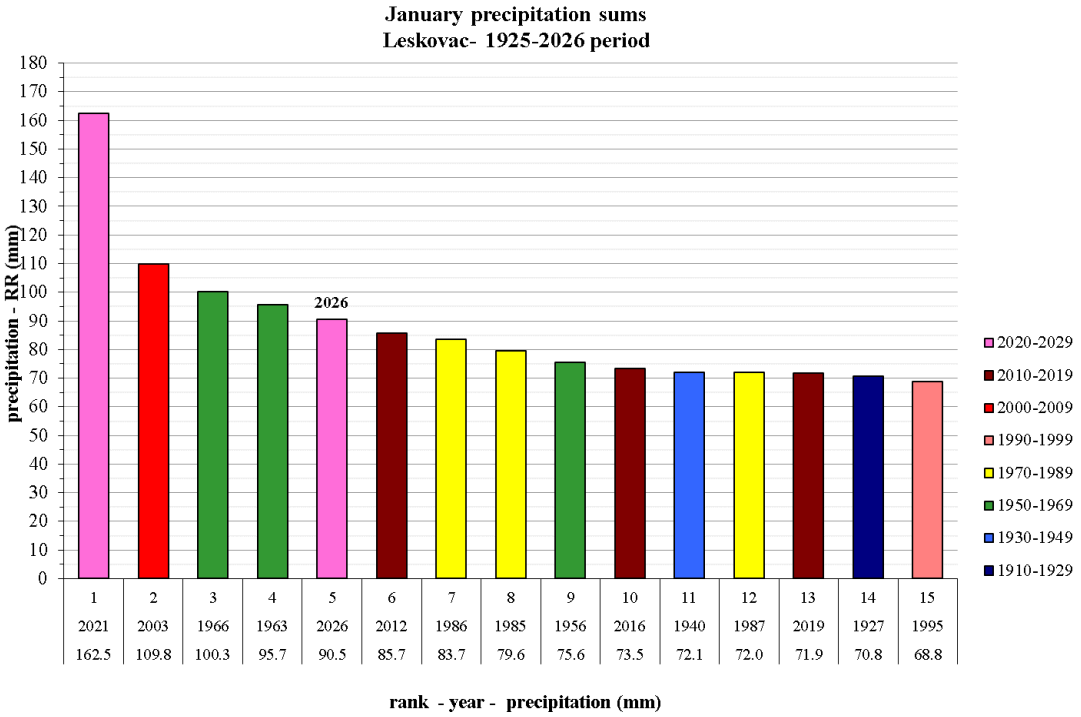
Appendix 8. Rank of the highest precipitation in Sombor



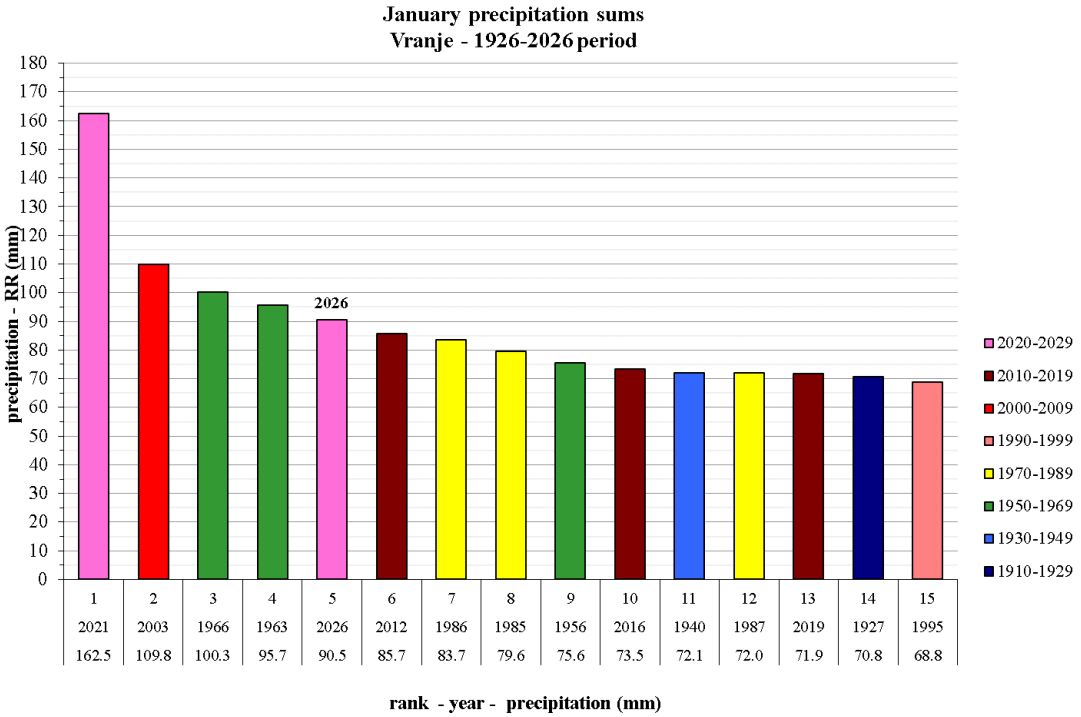
Appendix 9. Rank of the highest precipitation in Novi Sad



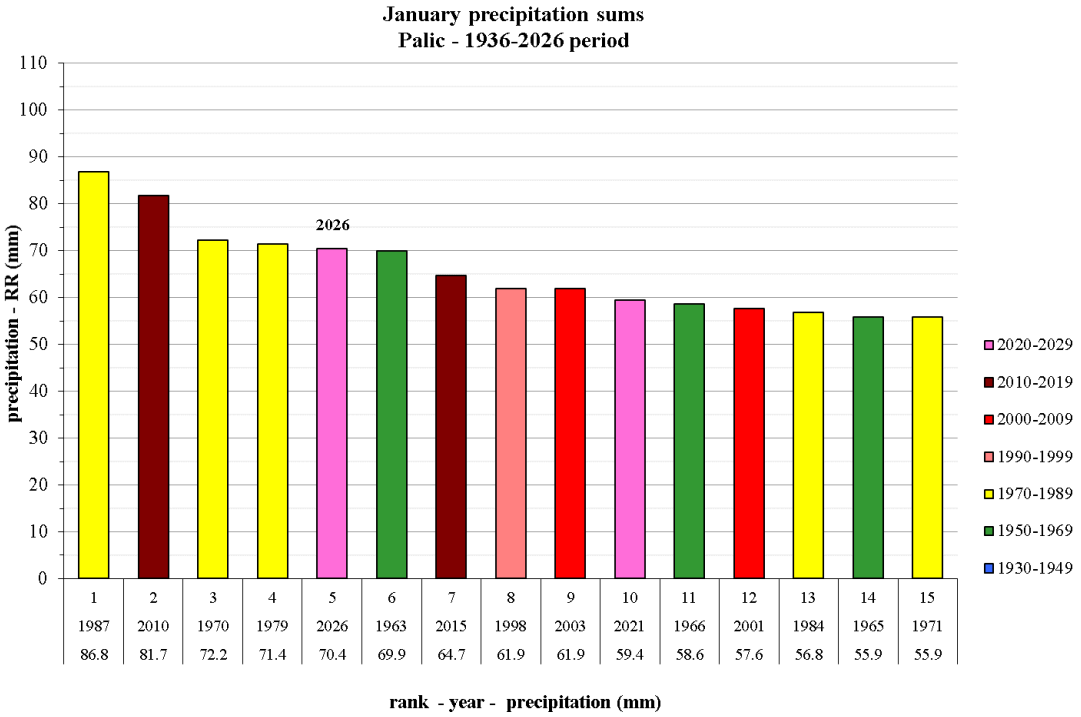
Appendix 10. Rank of the highest precipitation in Kursumlija



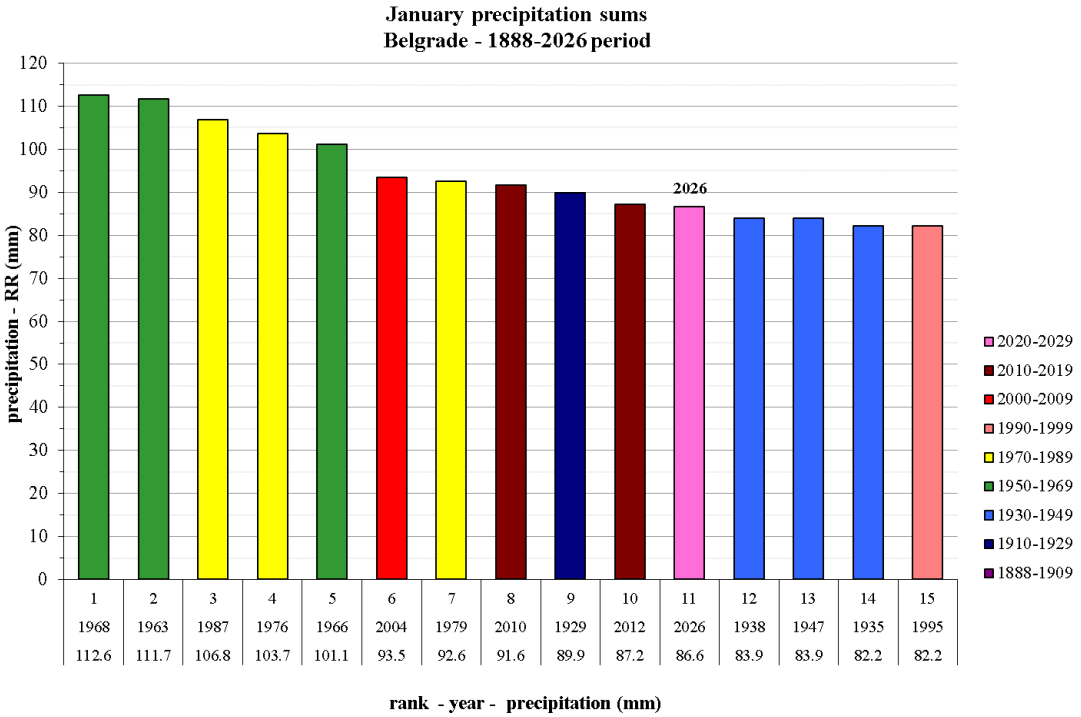
Appendix 11. Rank of the highest precipitation in Leskovac



Appendix 12. Rank of the highest precipitation in Vranje

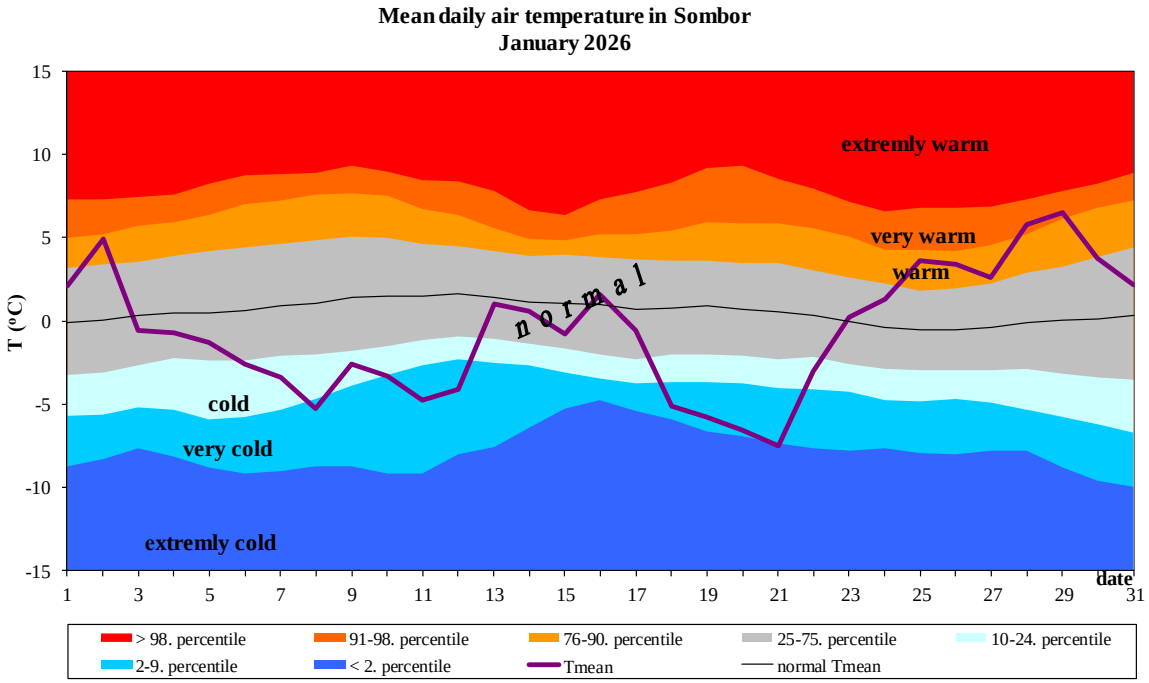


Appendix 13. Rank of the highest precipitation on Palic

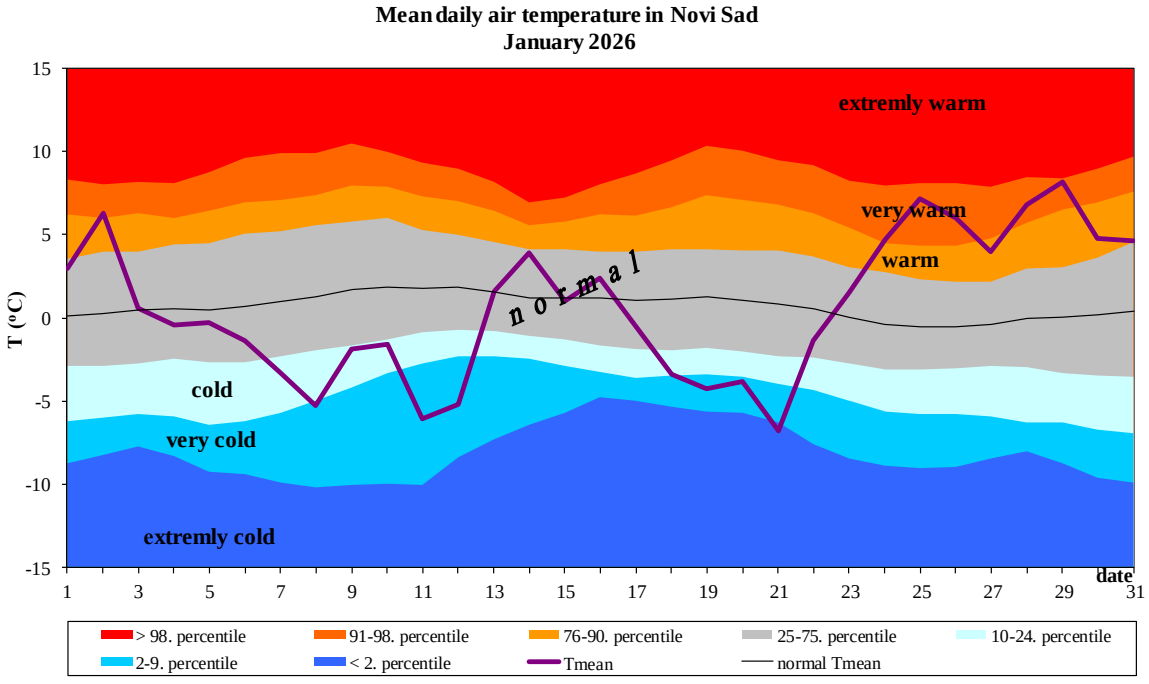


Appendix 14. Rank of the highest precipitation in Belgrade

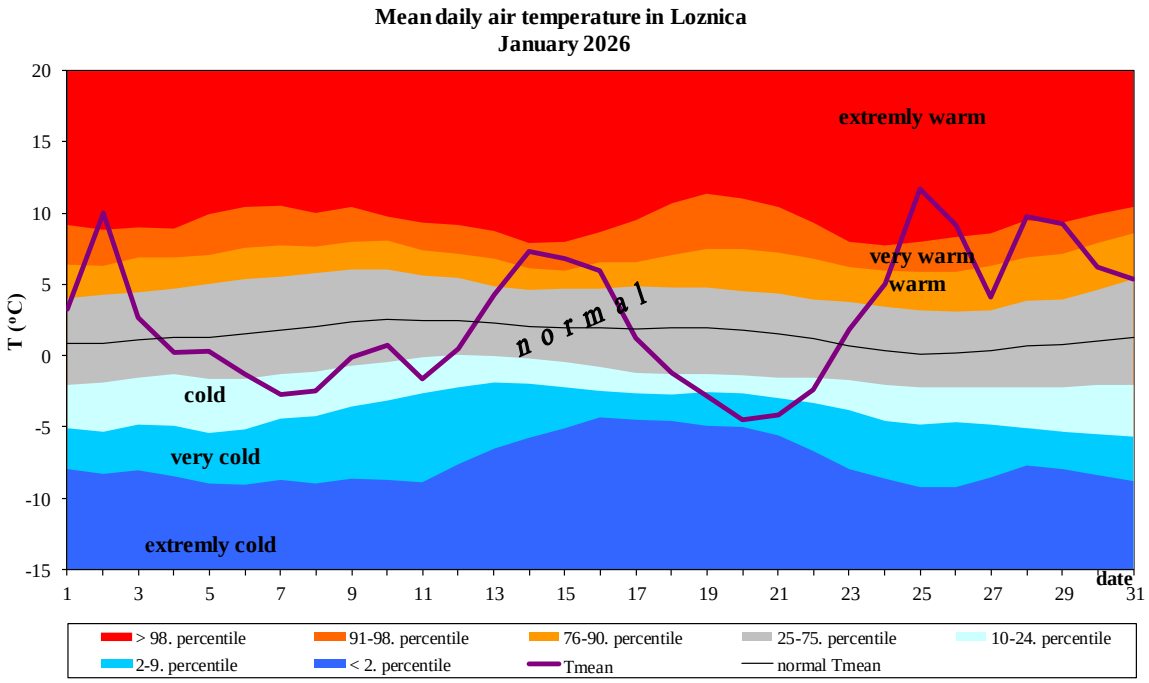
Mean air temperature



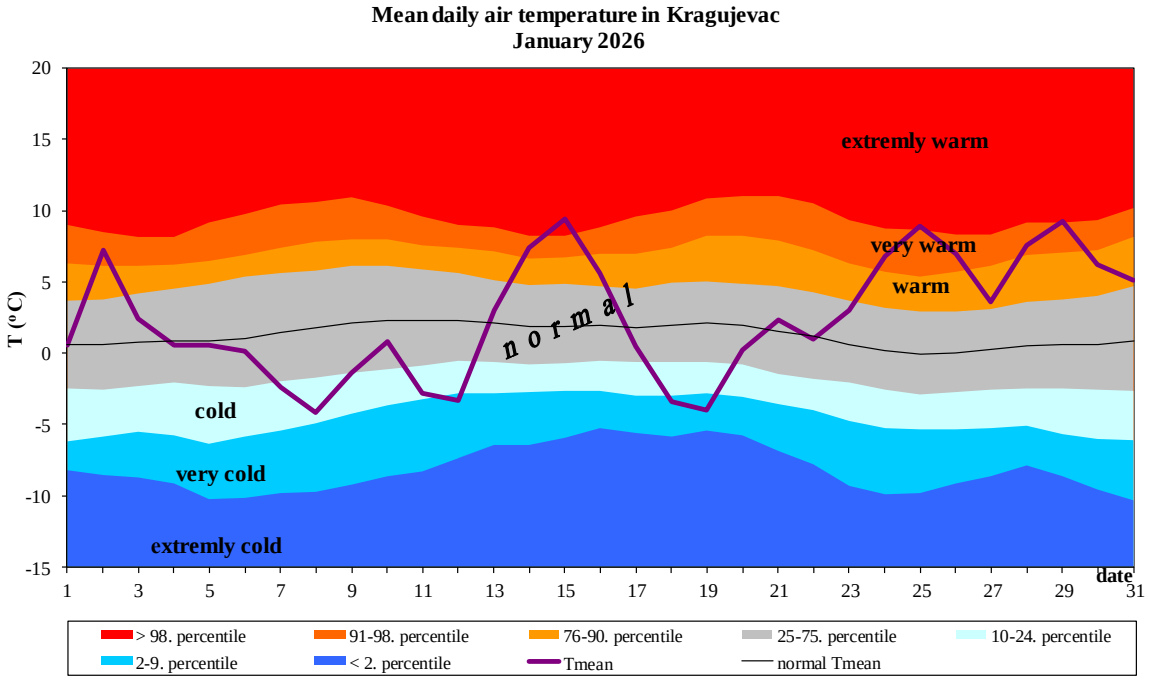
Appendix 15. Daily course of the mean daily air temperature and accompanying percentile for Sombor



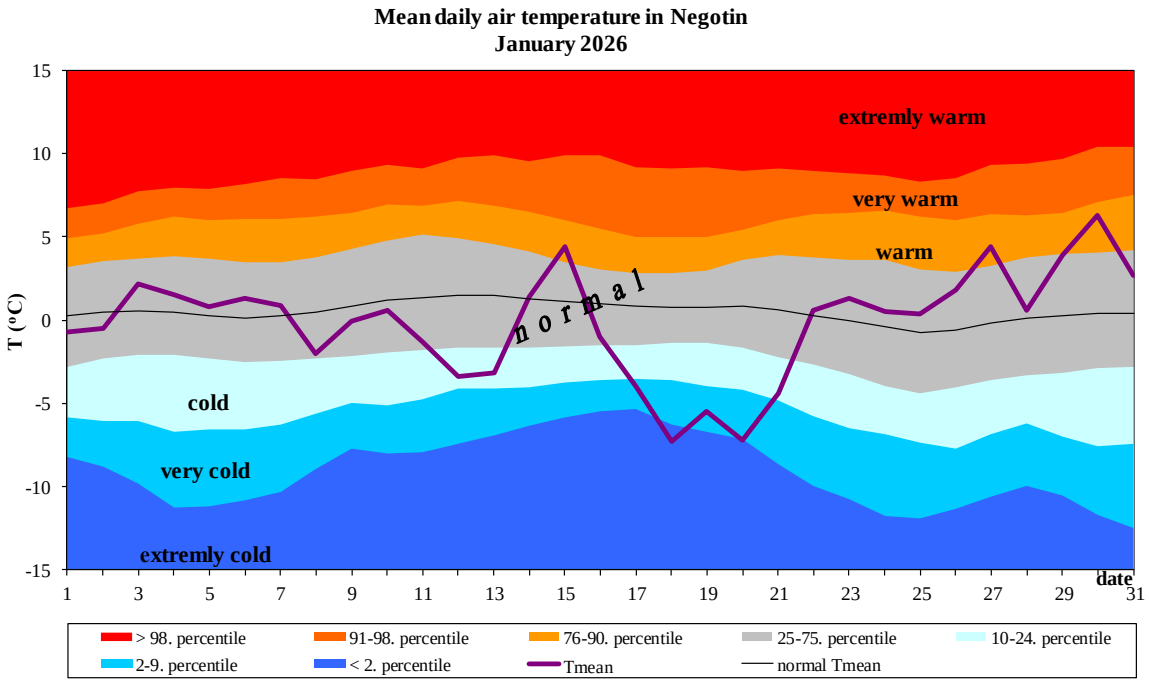
Appendix16. Daily course of the mean daily air temperature and accompanying percentile for Novi Sad



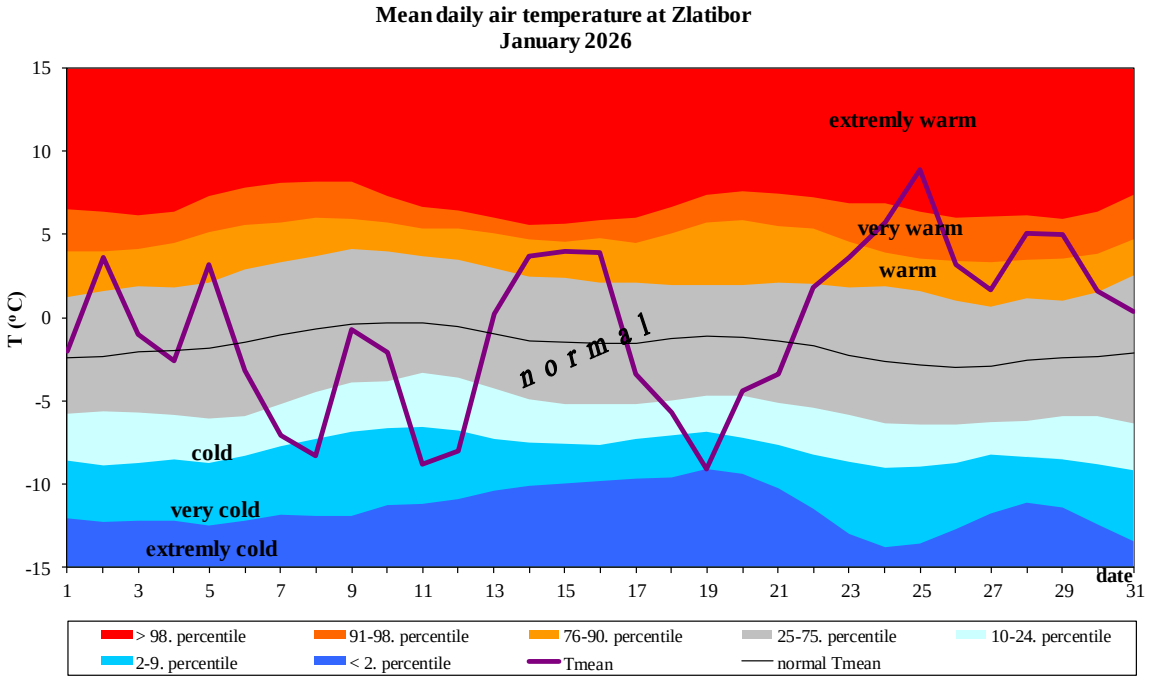
Appendix 17. Daily course of the mean daily air temperature and accompanying percentile for Loznica



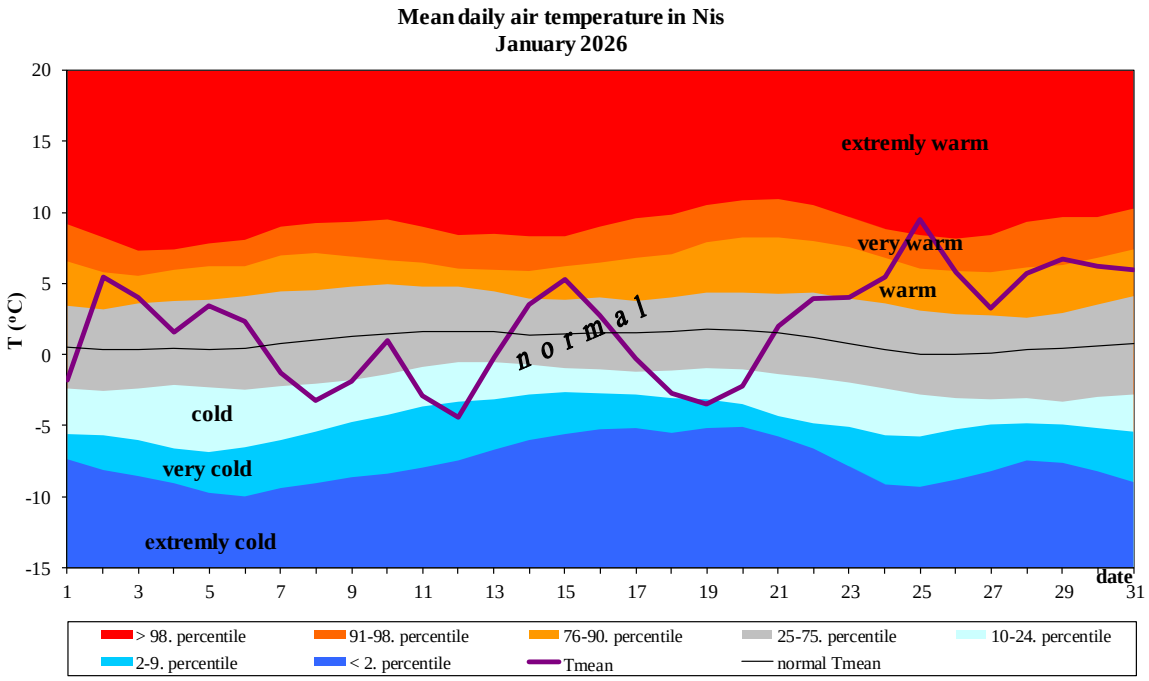
Appendix 18. Daily course of the mean daily air temperature and accompanying percentile for Kragujevac



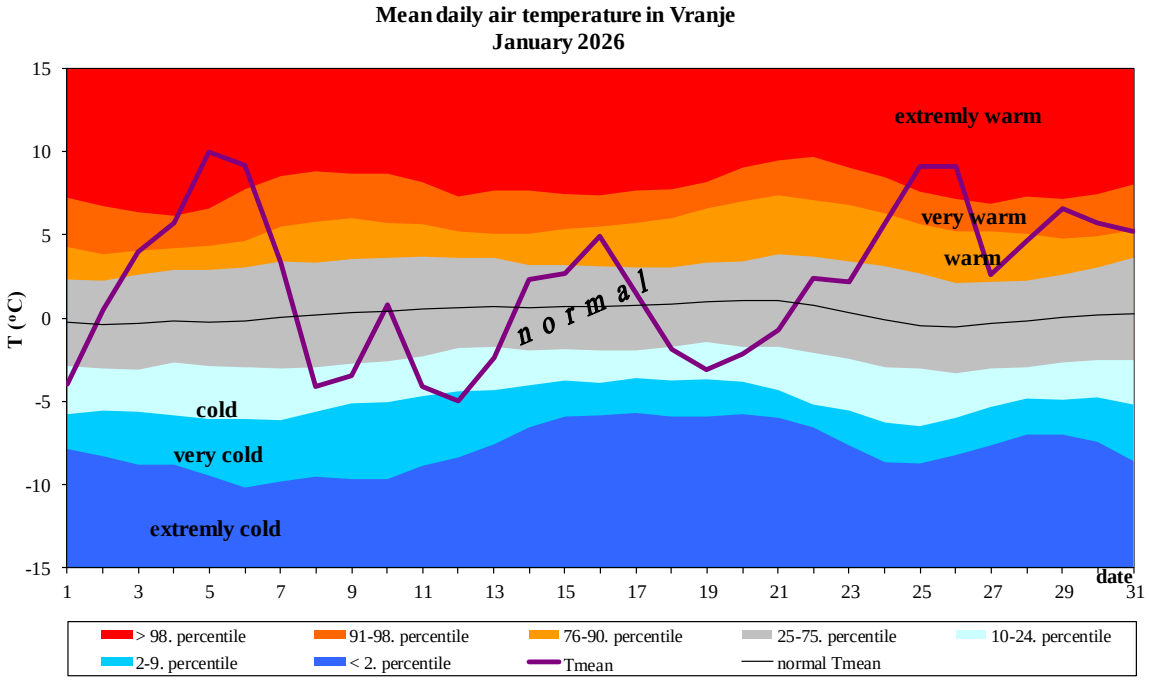
Appendix 19. Daily course of the mean daily air temperature and accompanying percentile for Negotin



Appendix 20. Daily course of the mean daily air temperature and accompanying percentile on Zlatiboru

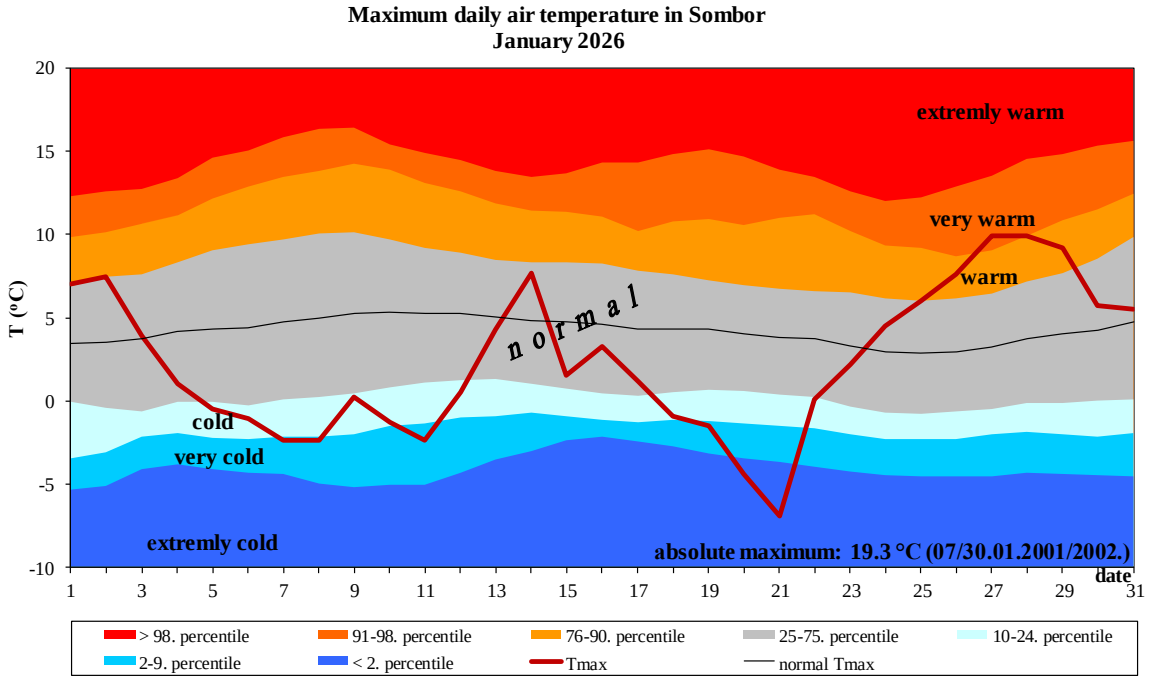


Appendix 21. Daily course of the mean daily air temperature and accompanying percentile for Nis

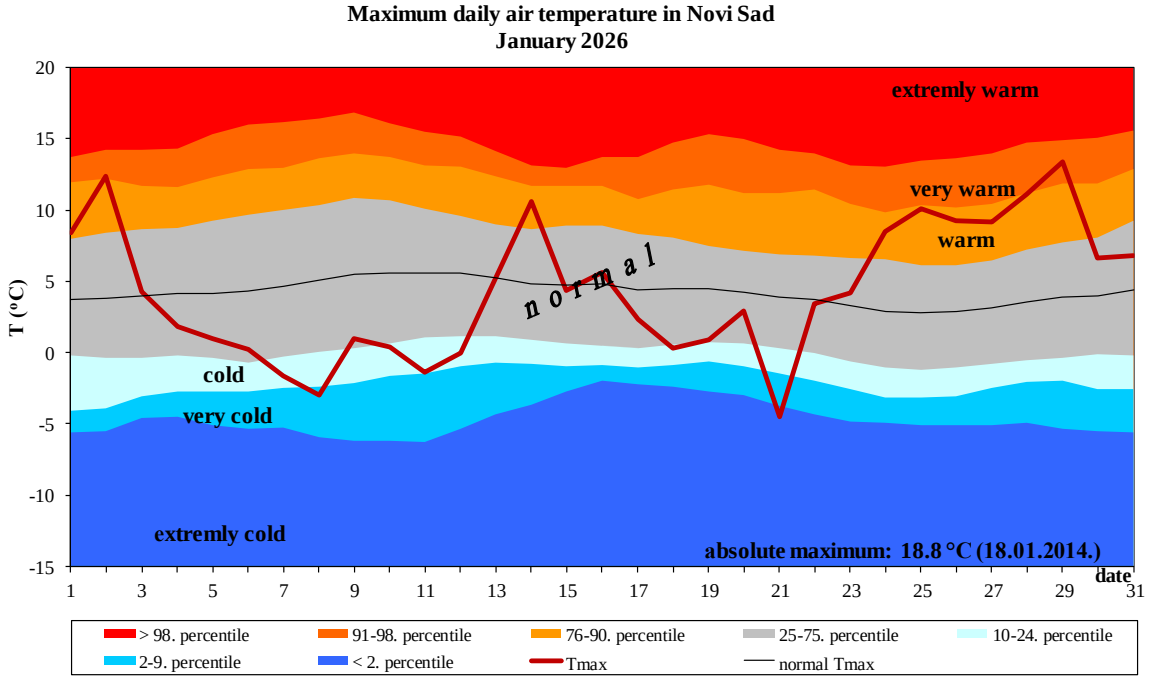


Appendix 22. Daily course of the mean daily air temperature and accompanying percentile for Vranje

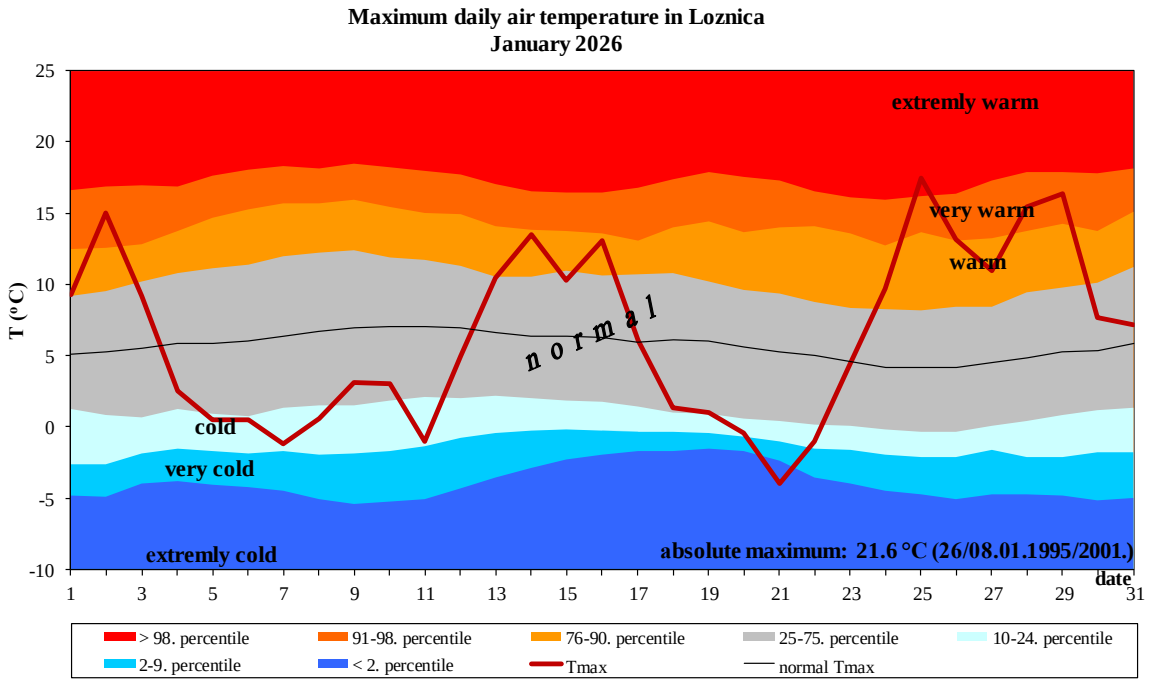
Maximum air temperature



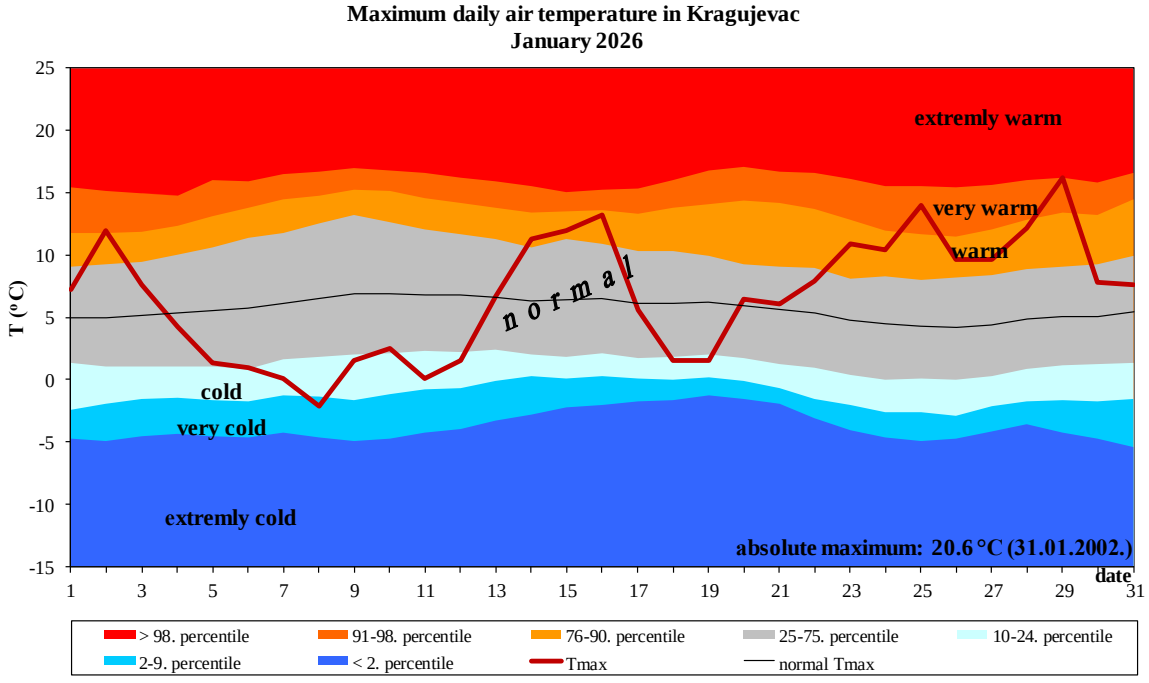
Appendix 23. Daily course of the maximum daily air temeperature and the accompanying percentile for Sombor



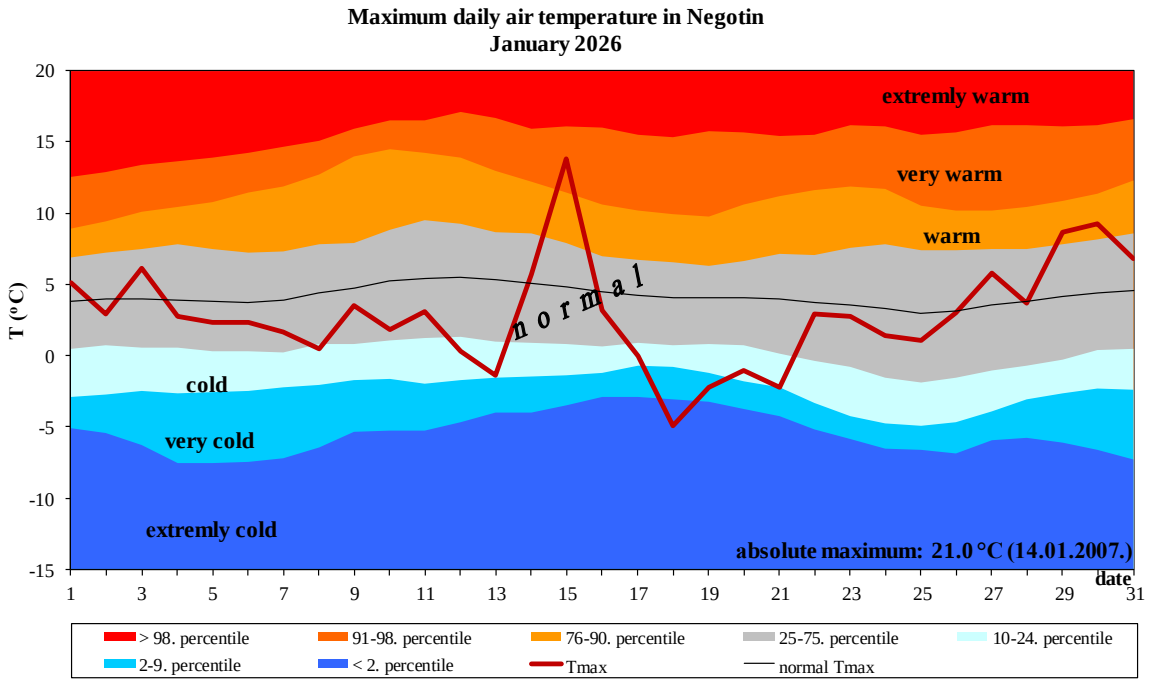
Appendix 24. Daily course of the maximum daily air temeperature and the accompanying percentile for Novi Sad



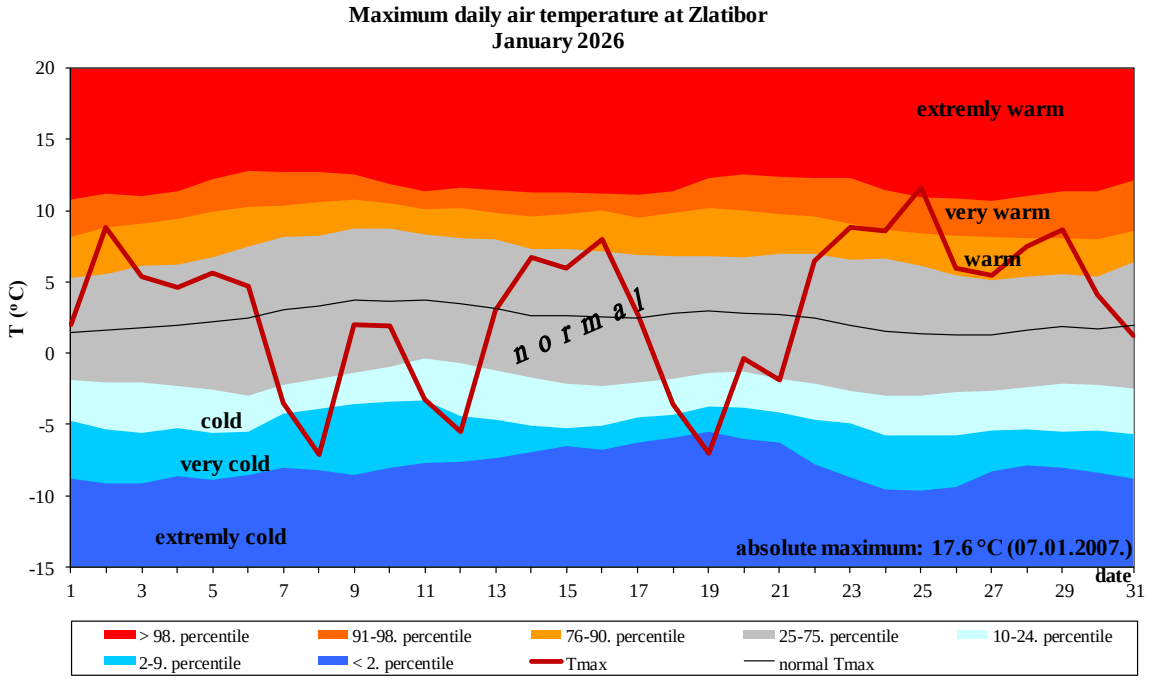
Appendix 25. Daily course of the maximum daily air temeperature and the accompanying percentile for Loznica



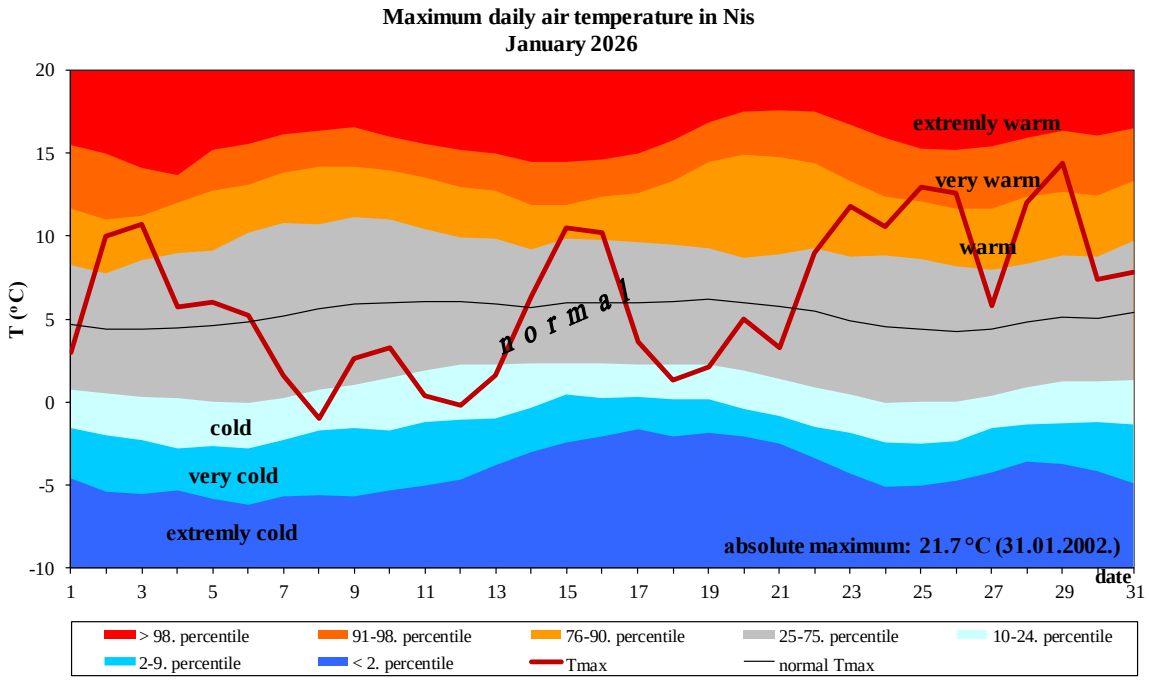
Appendix 26. Daily course of the maximum daily air temeperature and the accompanying percentile for Kragujevac



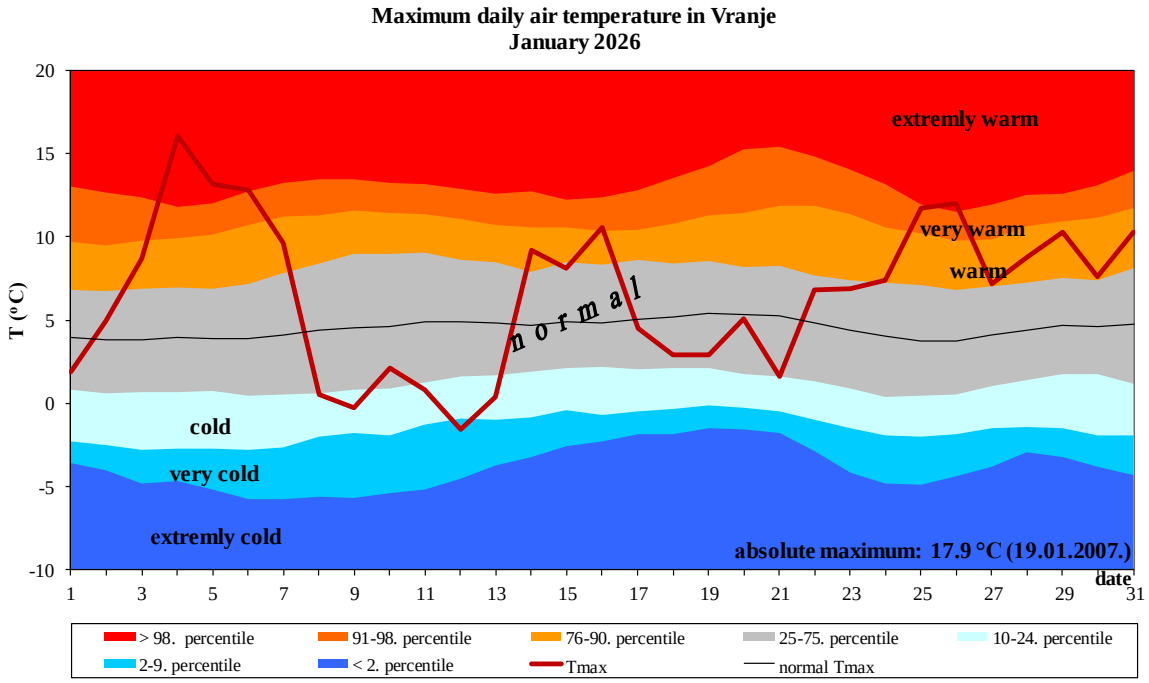
Appendix 27. Daily course of the maximum daily air temeperature and the accompanying percentile for Negotin



Appendix 28. Daily course of the maximum daily air temeperature and the accompanying percentile on Zlatibor

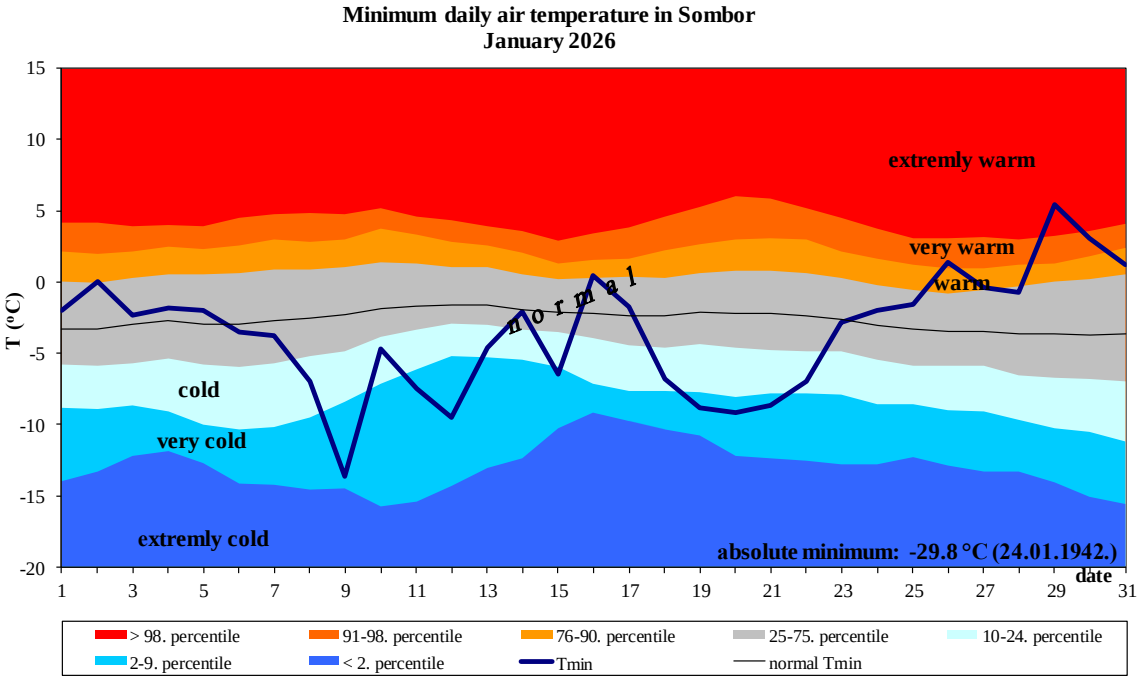


Appendix 29. Daily course of the maximum daily air temeperature and the accompanying percentile for Nis

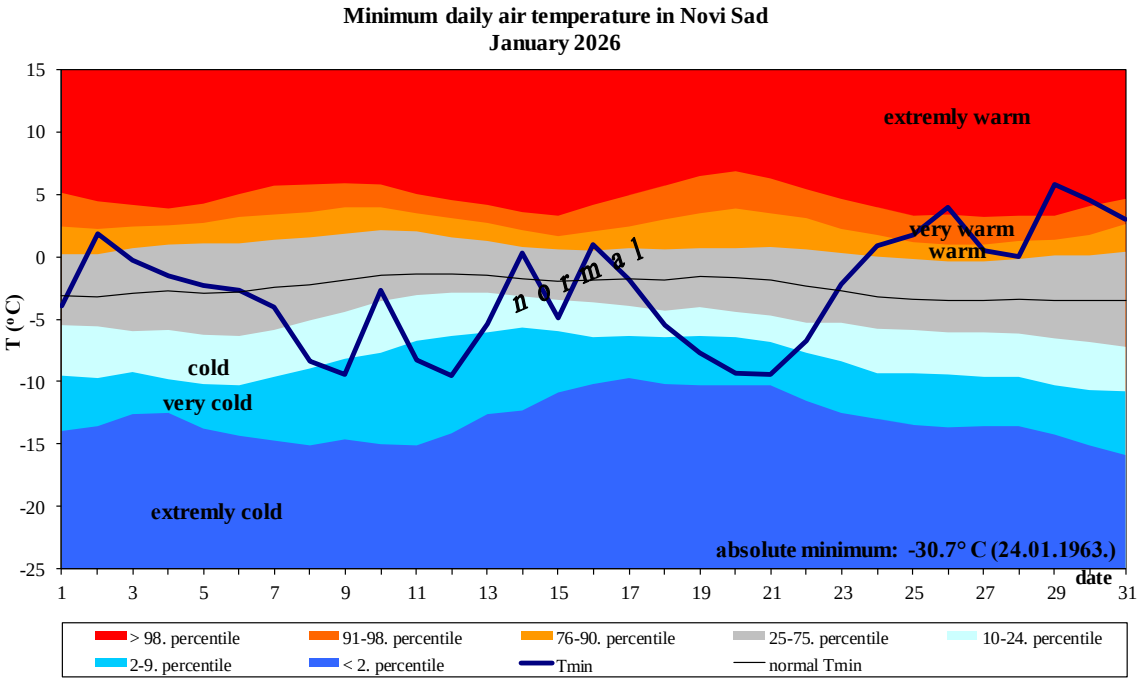


Appendix 30. Daily course of the maximum daily air temeperature and the accompanying percentile for Vranje

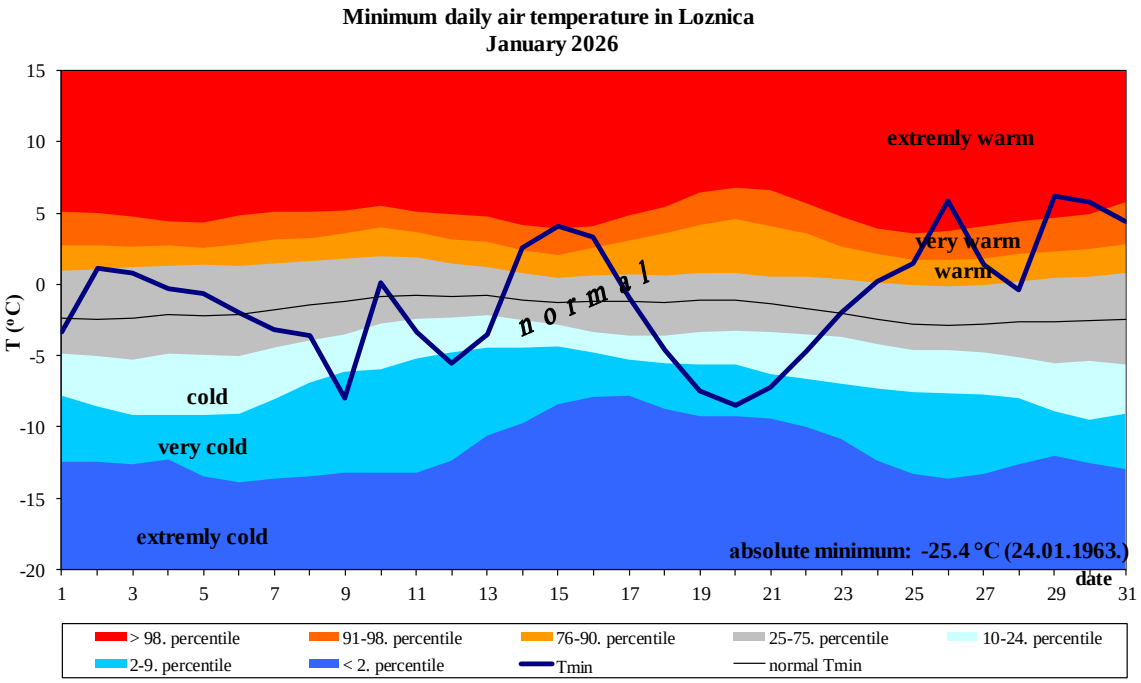
Minimum air temperature



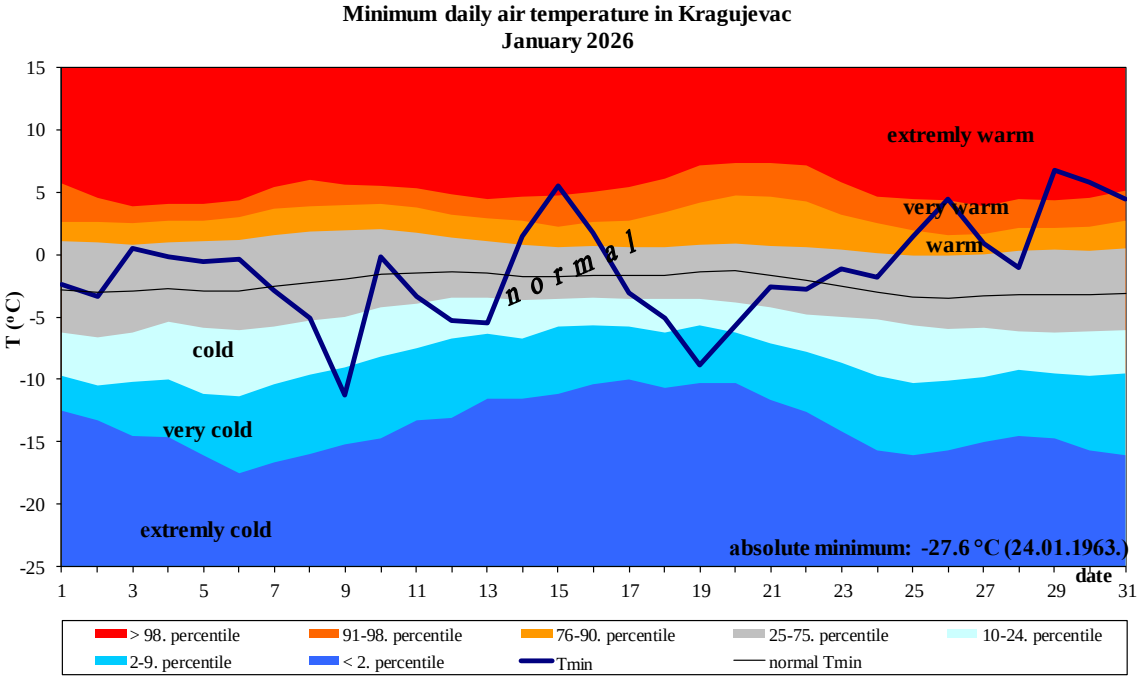
Appendix 31. Daily course of the minimum daily air temperature and the accompanying percentile for Sombor



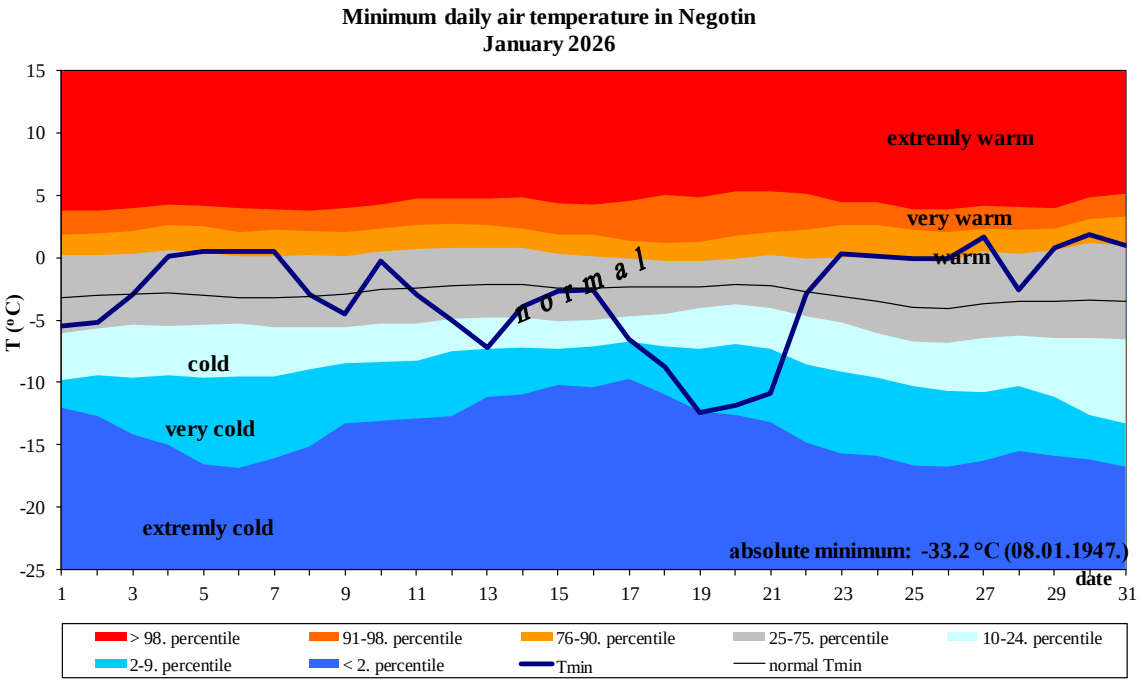
Appendix 32. Daily course of the minimum daily air temperature and the accompanying percentile for Novi Sad



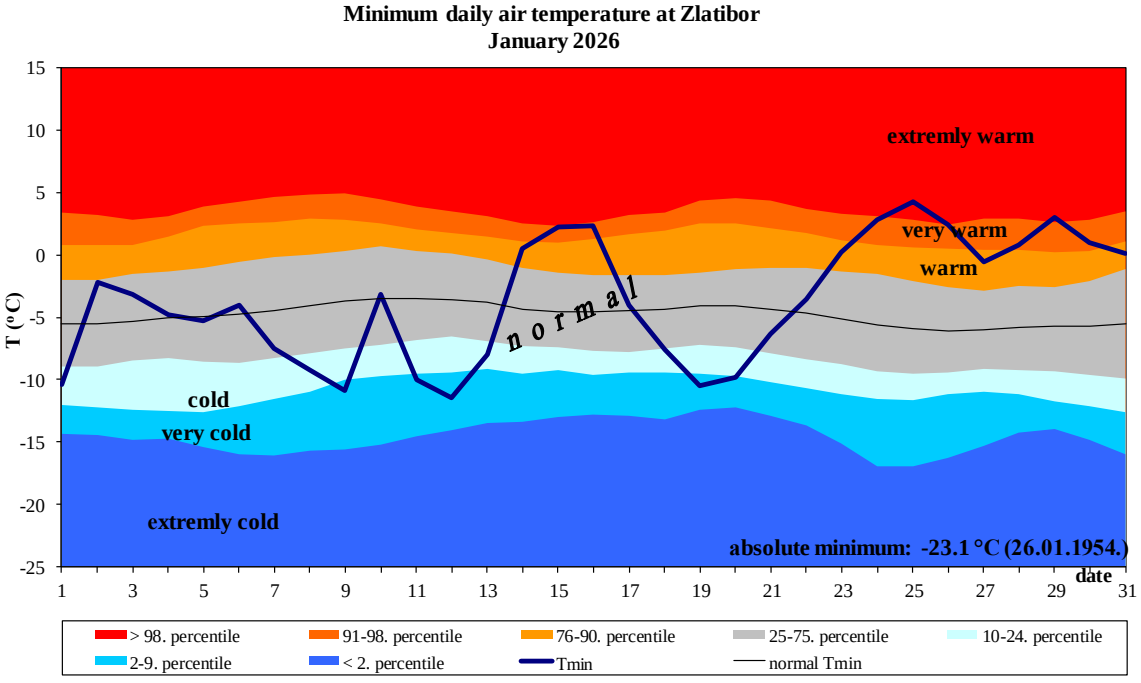
Appendix 33. Daily course of the minimum daily air temperature and the accompanying percentile for Loznica



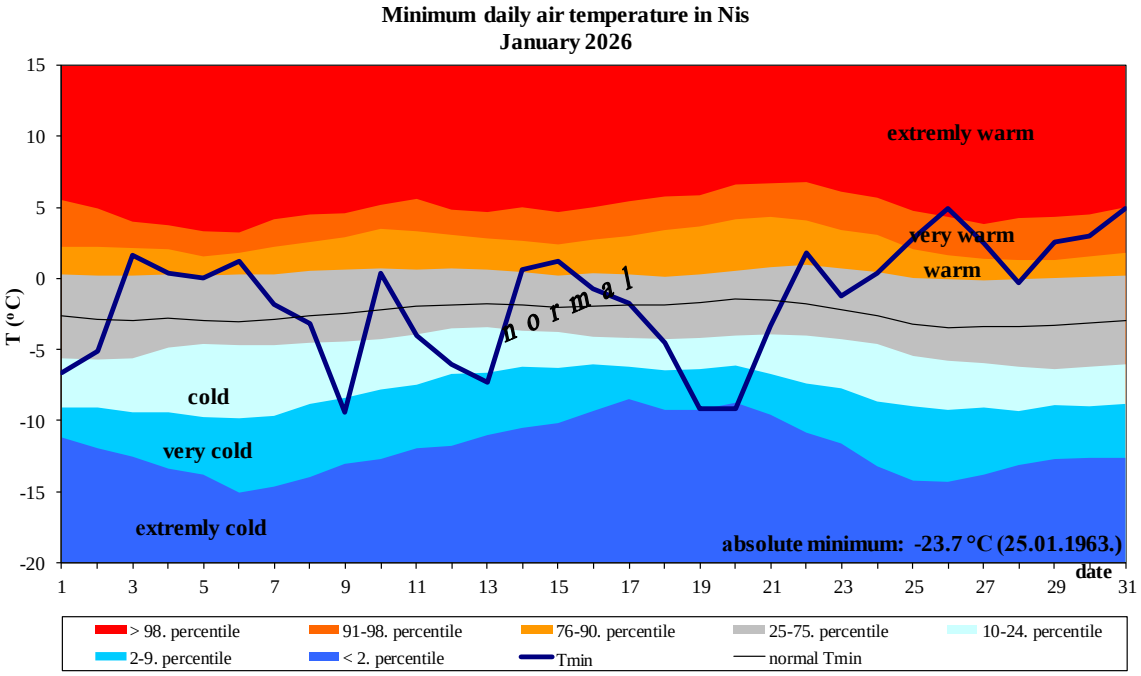
Appendix 34. Daily course of the minimum daily air temperature and the accompanying percentile for Kragujevac



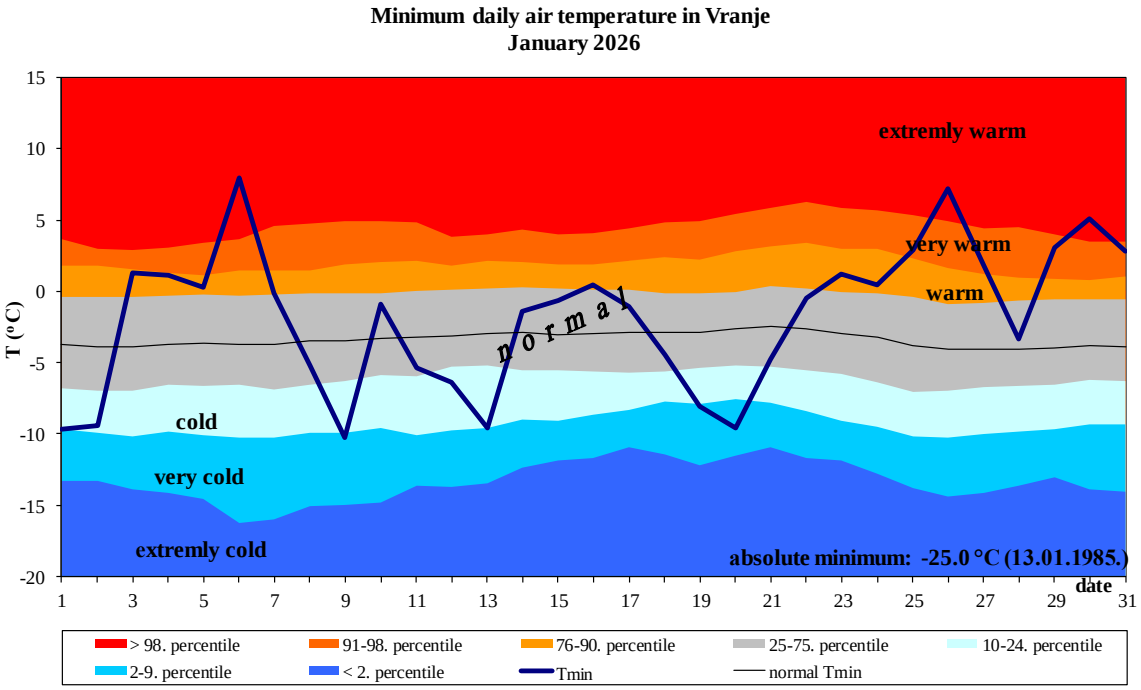
Appendix 35. Daily course of the minimum daily air temperature and the accompanying percentile for Negotin



Appendix 36. Daily course of the minimum daily air temperature and the accompanying percentile on Zlatibor

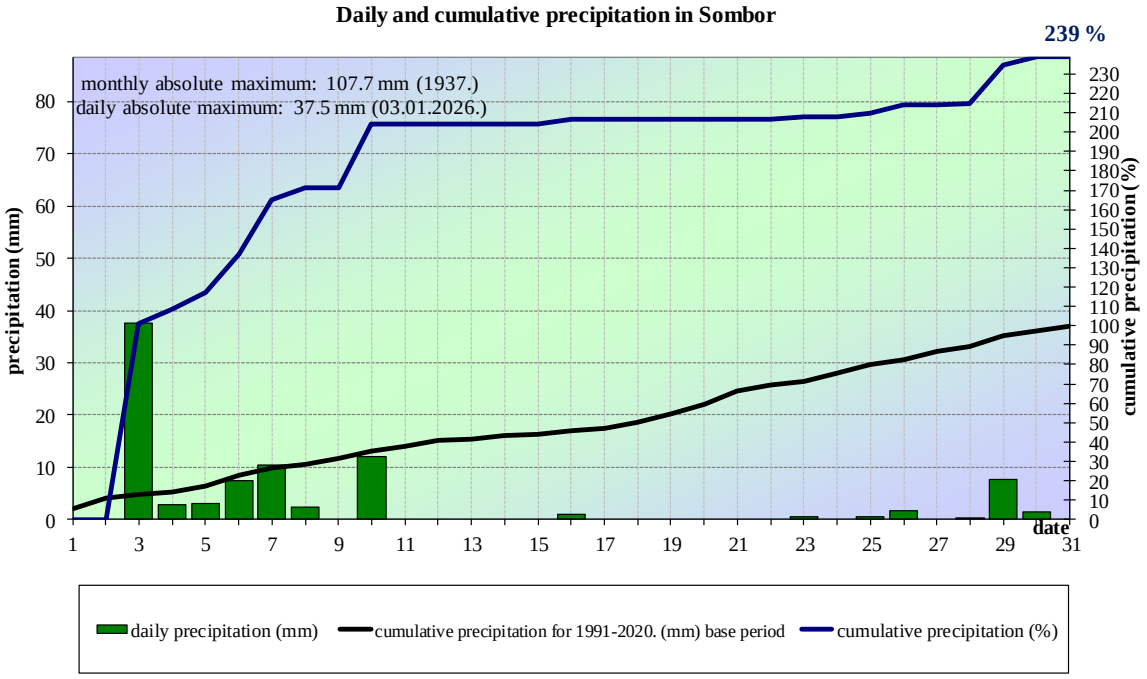


Appendix 37. Daily course of the minimum daily air temperature and the accompanying percentile for Nis

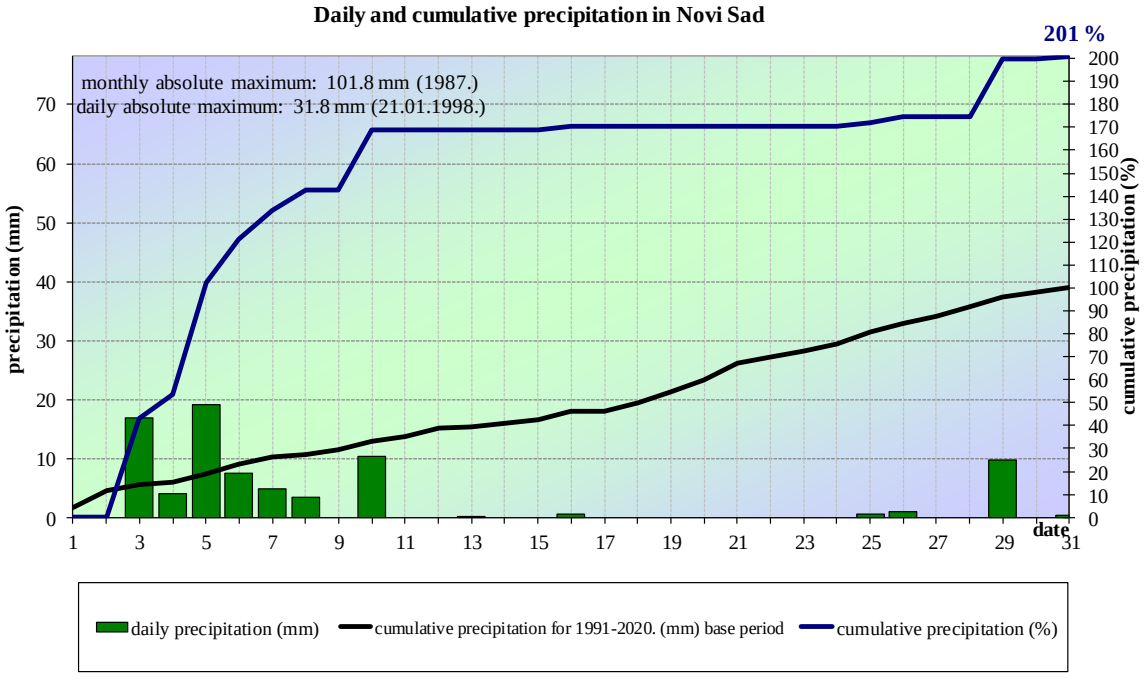


Appendix 38. Daily course of the minimum daily air temperature and the accompanying percentile for Vranje

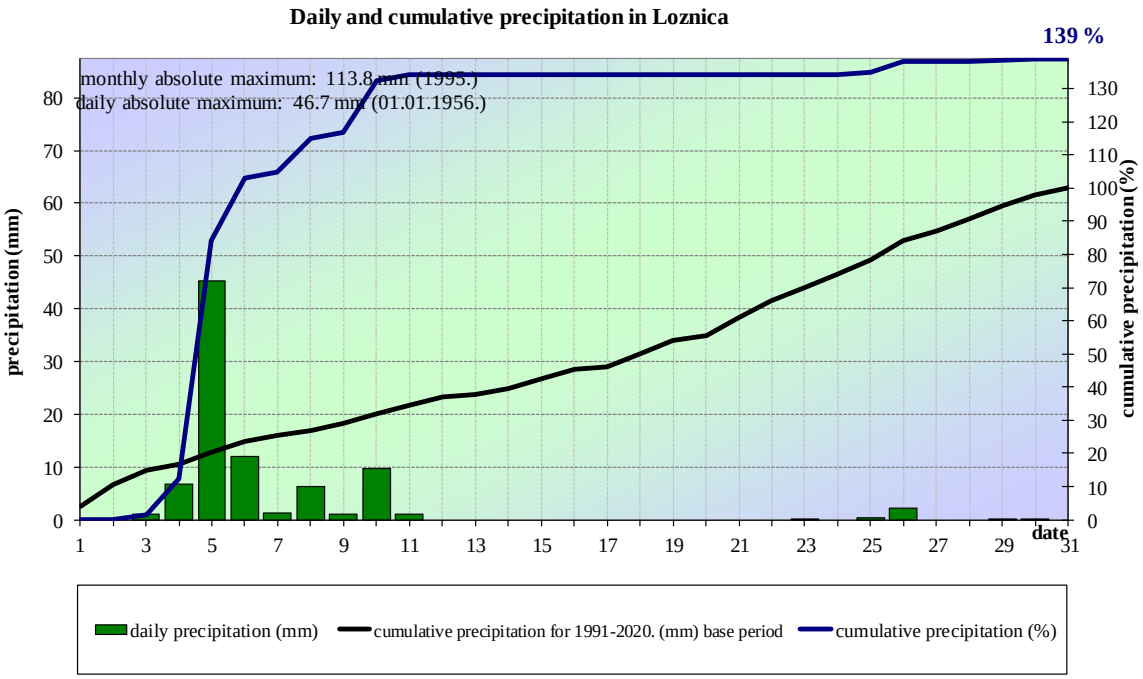
Precipitation



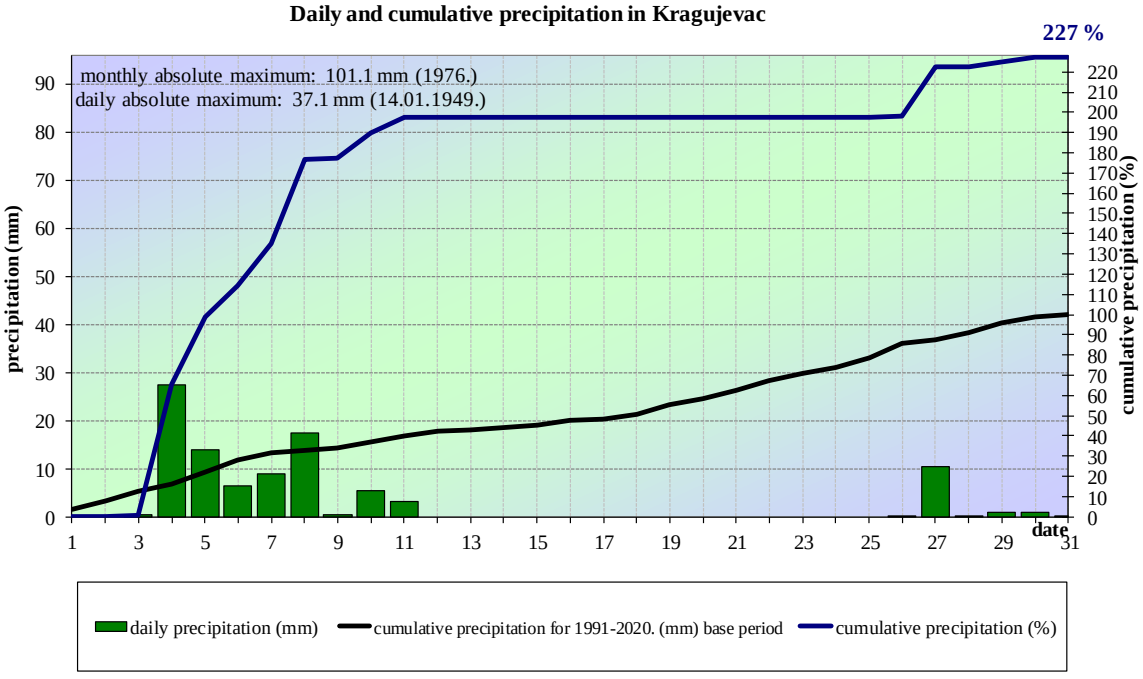
Appendix 39. Daily and cumulative precipitation sums for Sombor



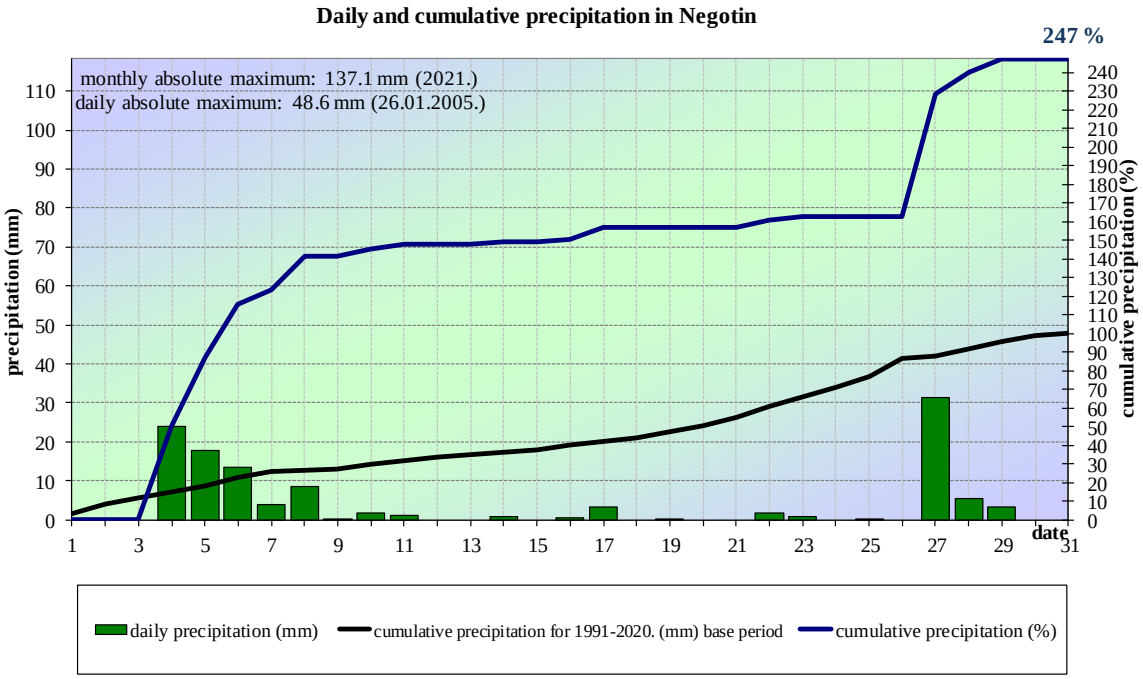
Appendix 40. Daily and cumulative precipitation sums for Novi Sad



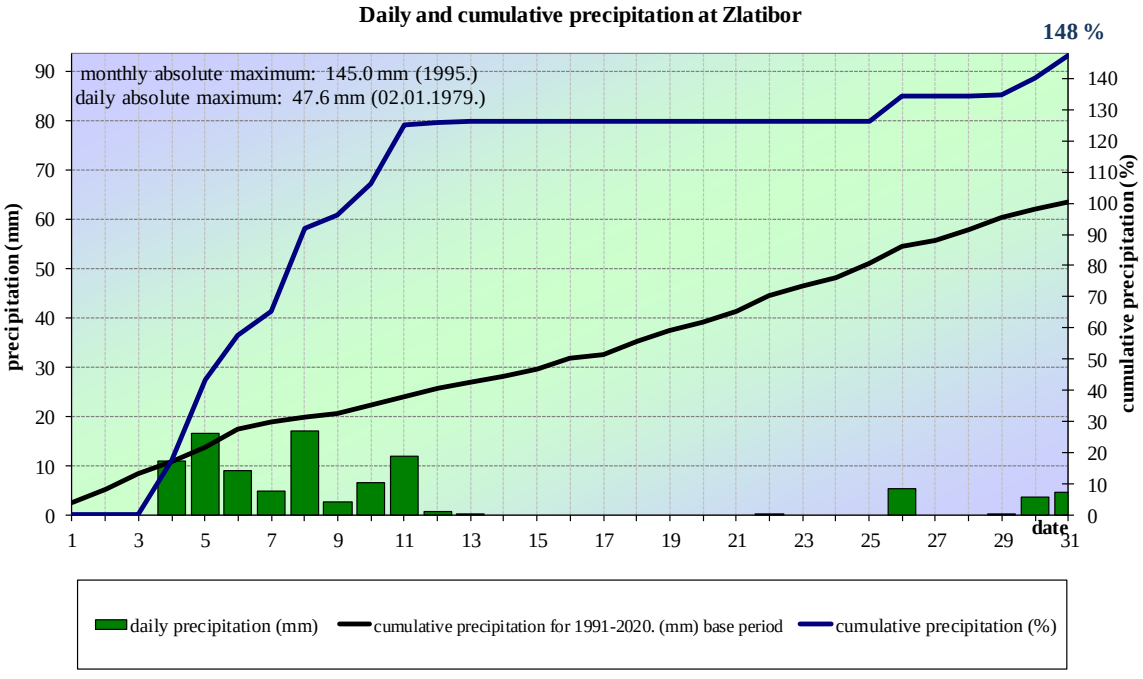
Appendix 41. Daily and cumulative precipitation sums for Loznica



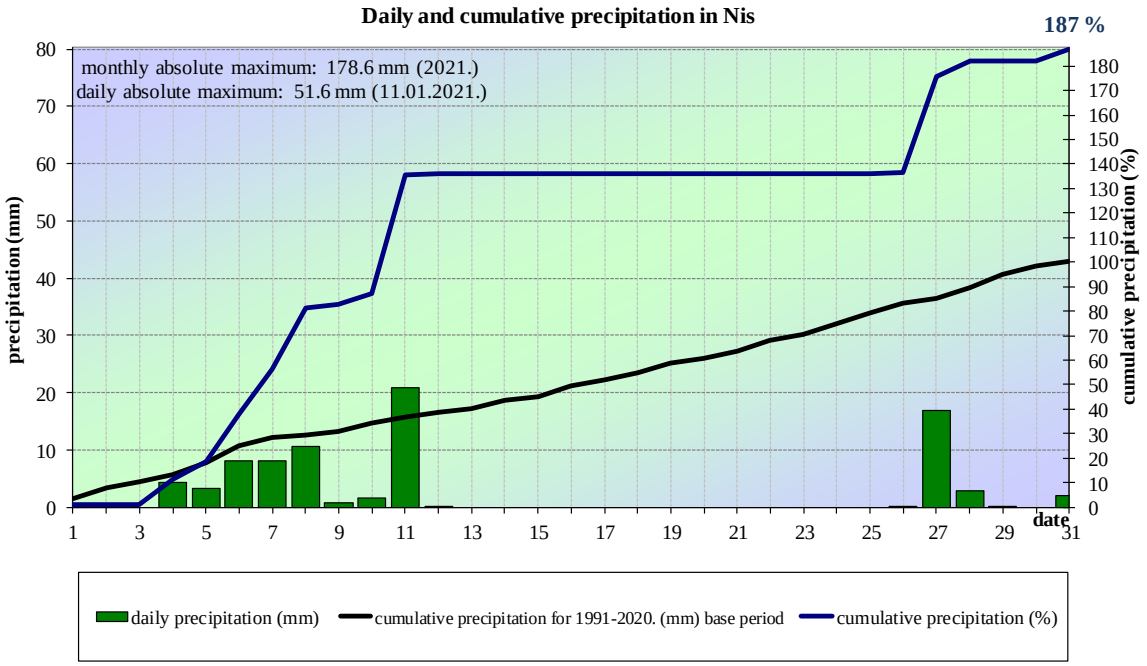
Appendix 42. Daily and cumulative precipitation sums for Kragujevac



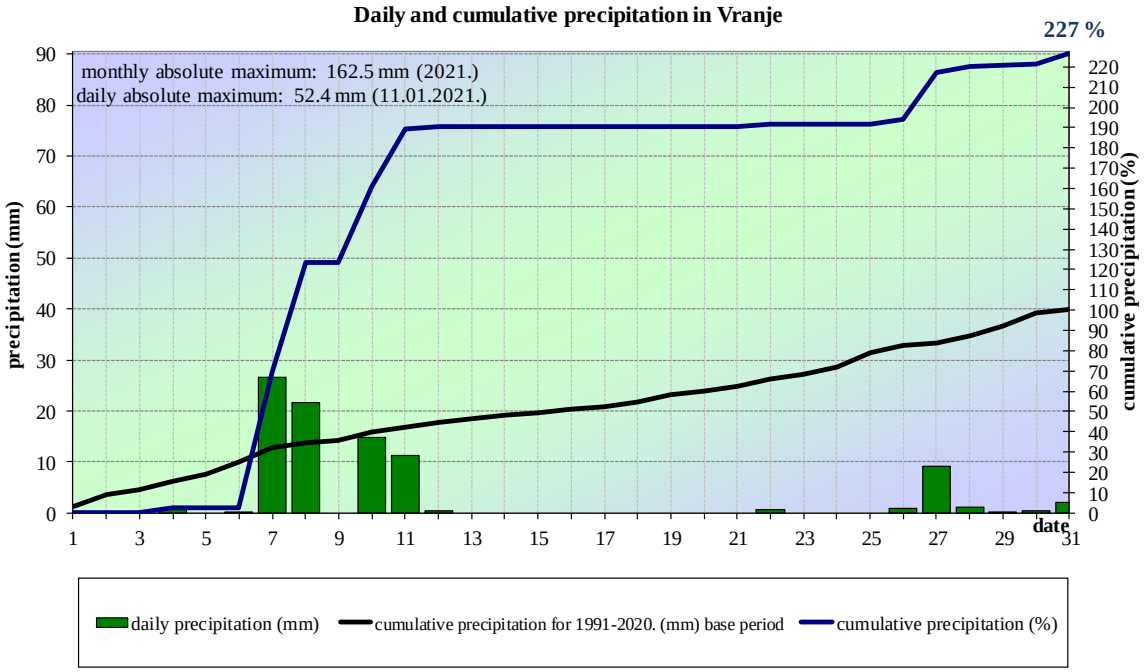
Appendix 43. Daily and cumulative precipitation sums for Negotin



Appendix 44. Daily and cumulative precipitation sums on Zlatibor



Appendix 45. Daily and cumulative precipitation sums for Nis



Appendix 46. Daily and cumulative precipitation sums for Vranje