



Climatological Analysis of Season DJF 2011/12 in Serbia

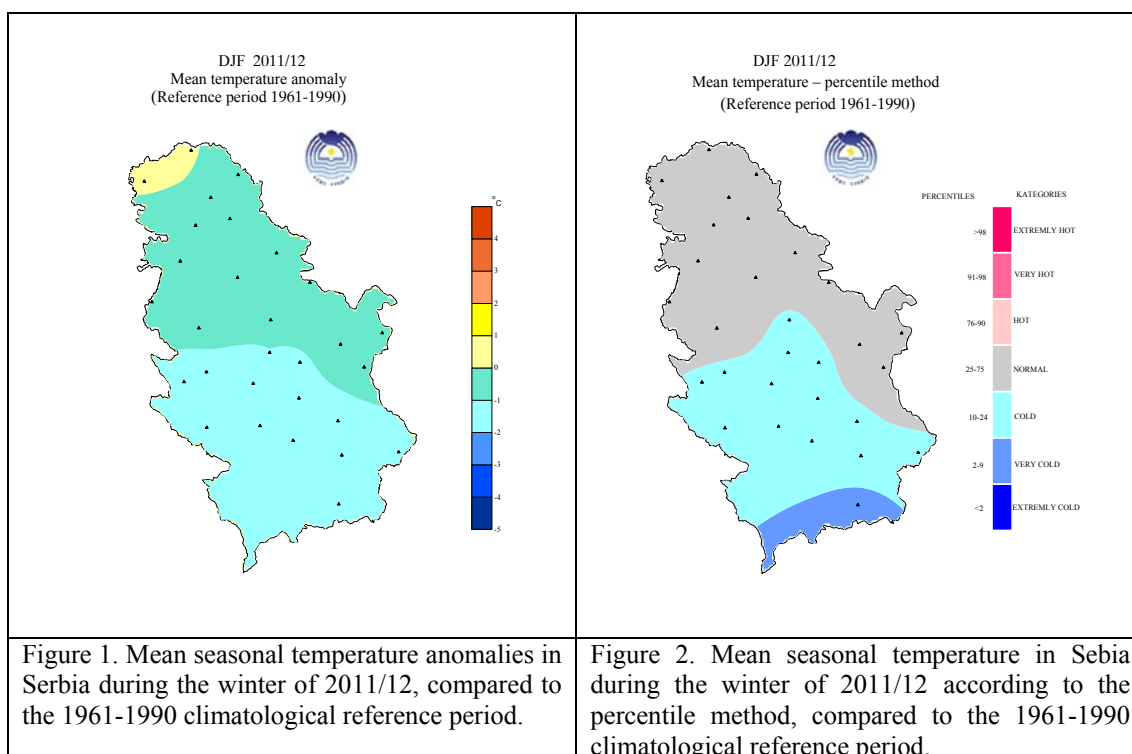
During winter season 2011/2012, measured air temperature was within normal limits in northern, western and eastern Serbia, while it was in the cold and very cold category in the rest of the country. A surplus of precipitation was recorded, i.e. the precipitation quantity was significantly below normal values.

Analysis of the 2011/12 winter season in Serbia compared to the 1961-1990 climatological reference period

Temperature

Mean winter temperature anomaly (compared to the 1961-1990 reference period) is ranged from -1.9°C in Vranje up to $+0.1^{\circ}\text{C}$ in Sombor and Palic (*Figure 1*).

According to the percentile method, mean winter air temperature was in the normal category in northern, western and eastern Serbia, while it was in the cold category in southeastern and southwestern Serbia and in the very cold category in southern Serbia (*Figure 2*).



According to the tercile method, mean winter air temperature was below normal in most part of Serbia, except in the north of the country and in Negotin, where it was within the range of normal values (Figure 3).

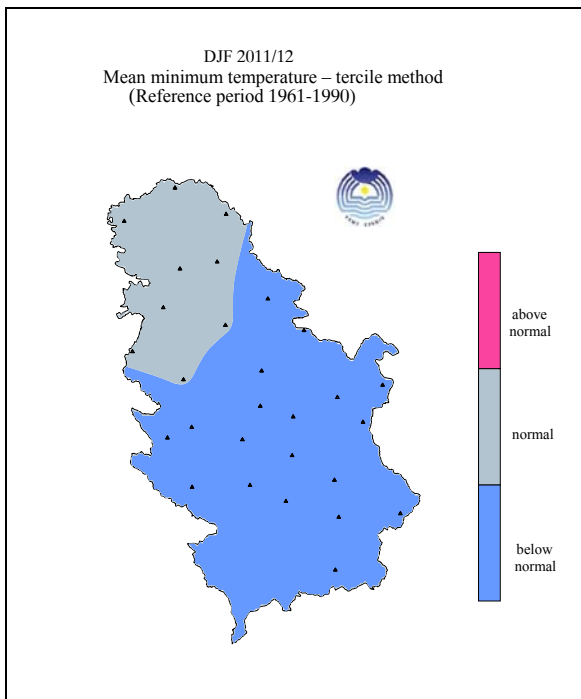
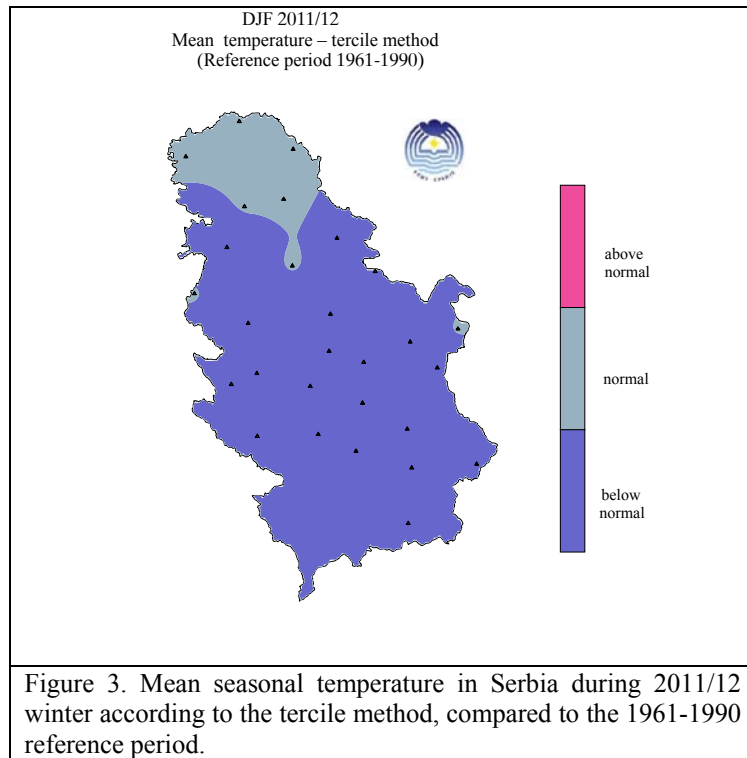


Figure 4. Mean minimum seasonal temperature in Serbia during 2011/12 winter according to the tercile method, compared to the 1961-1990 reference period.

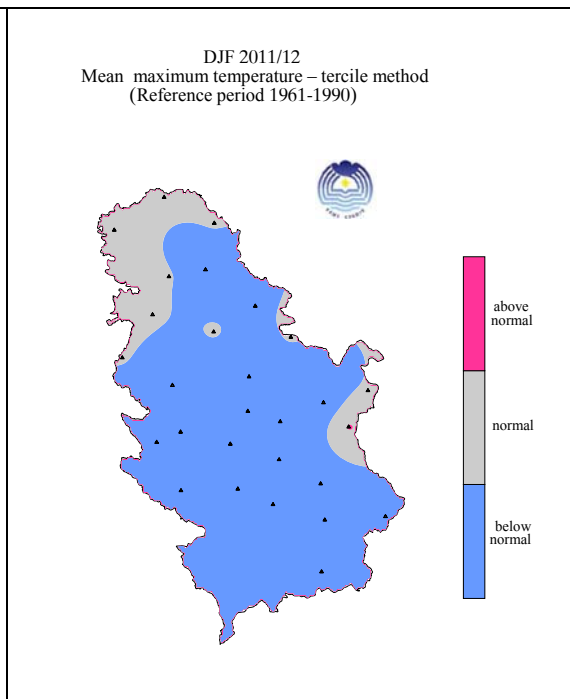


Figure 5. Mean maximum seasonal temperature in Serbia during 2011/12 winter according to the tercile method, compared to the 1961-1990 reference period.

According to the tercile method, mean minimum air temperature was below normal in most part of the country, except in Vojvodina and in a part of western Serbia, where it was within the range of normal values (*Figure 4*).

According to the tercile method, mean maximum air temperature was below normal in most part of the country, except in Backa, Srem and eastern Serbia, where it was within the range of normal values (*Figure 5*).

The maximum daily air temperature of 19.6°C was measured in Valjevo on December 4, 2011, while the lowest daily temperature of -28.9°C was measured in Sjenica on January 31, 2012.

Mean, maximum and minimum daily air temperature in Serbia in the period from January 28 to February 15 were significantly below the average values for the 1961-1990 period (*Figure 6, 7, 8, 9 and 10*).

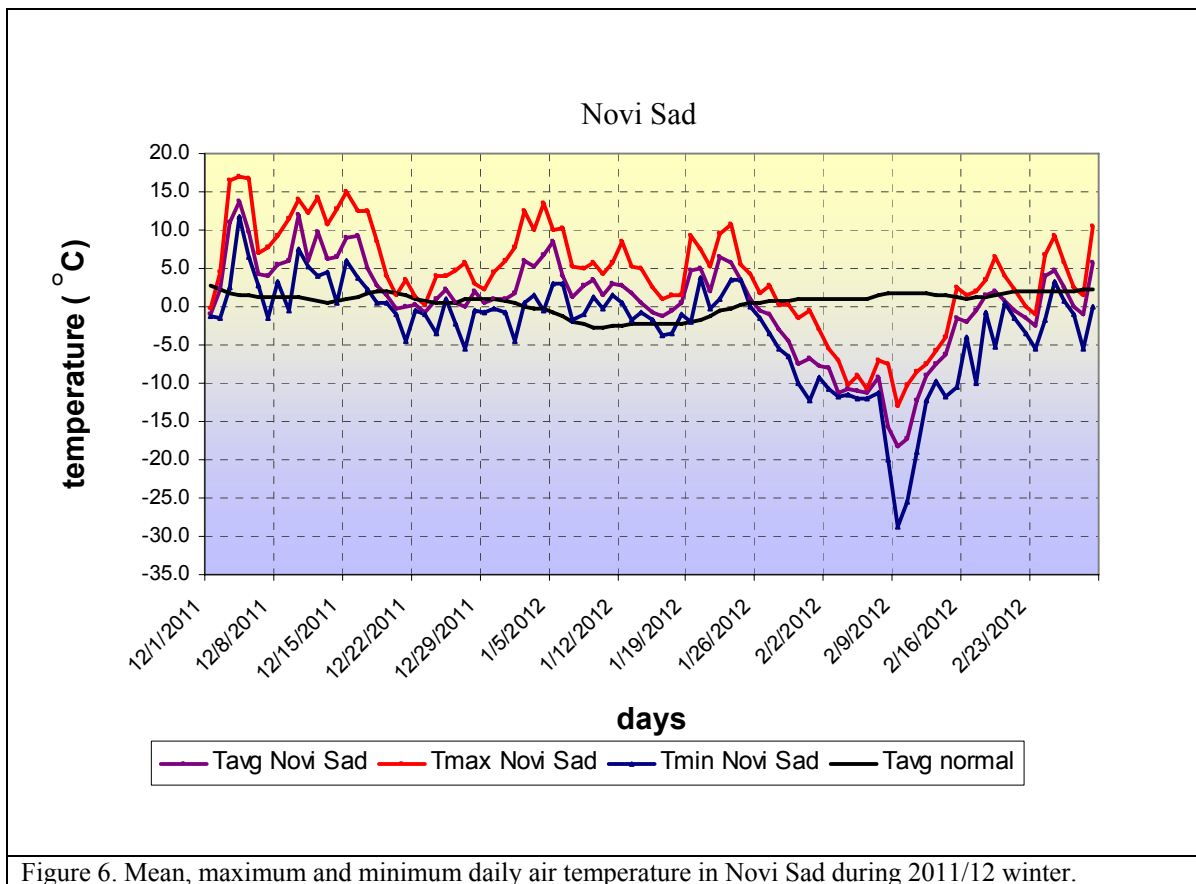


Figure 6. Mean, maximum and minimum daily air temperature in Novi Sad during 2011/12 winter.

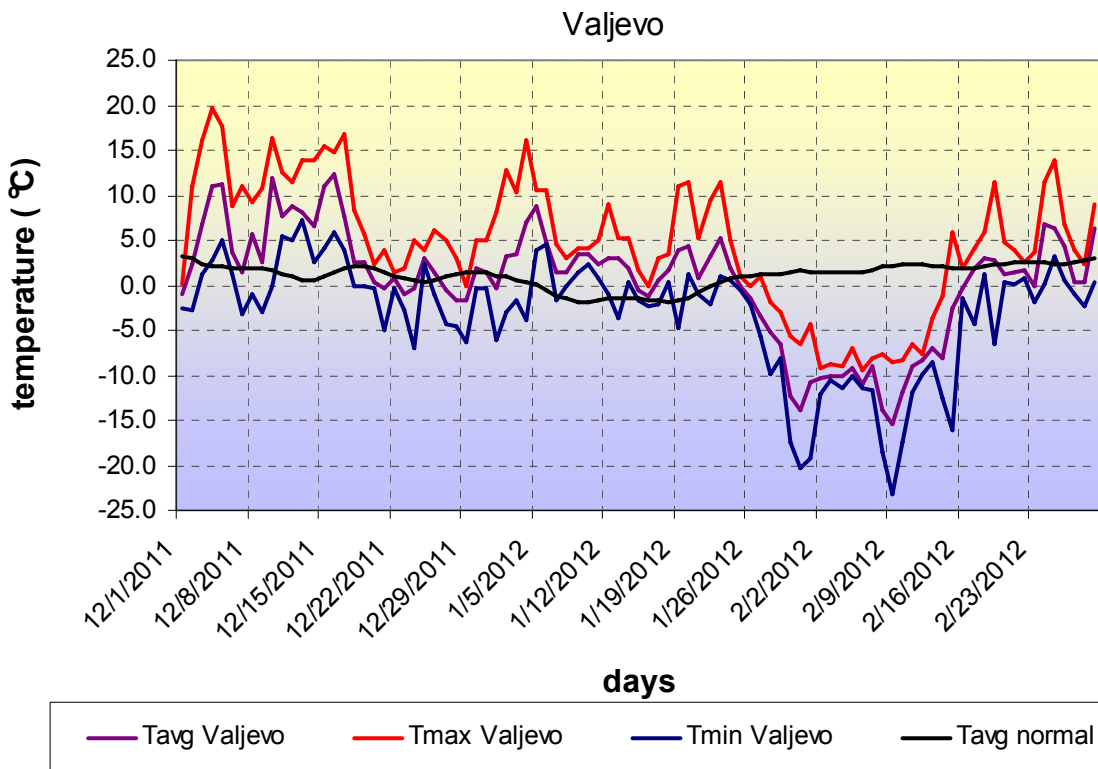


Figure 7. Mean, maximum and minimum daily air temperature in Valjevo during 2011/12 winter.

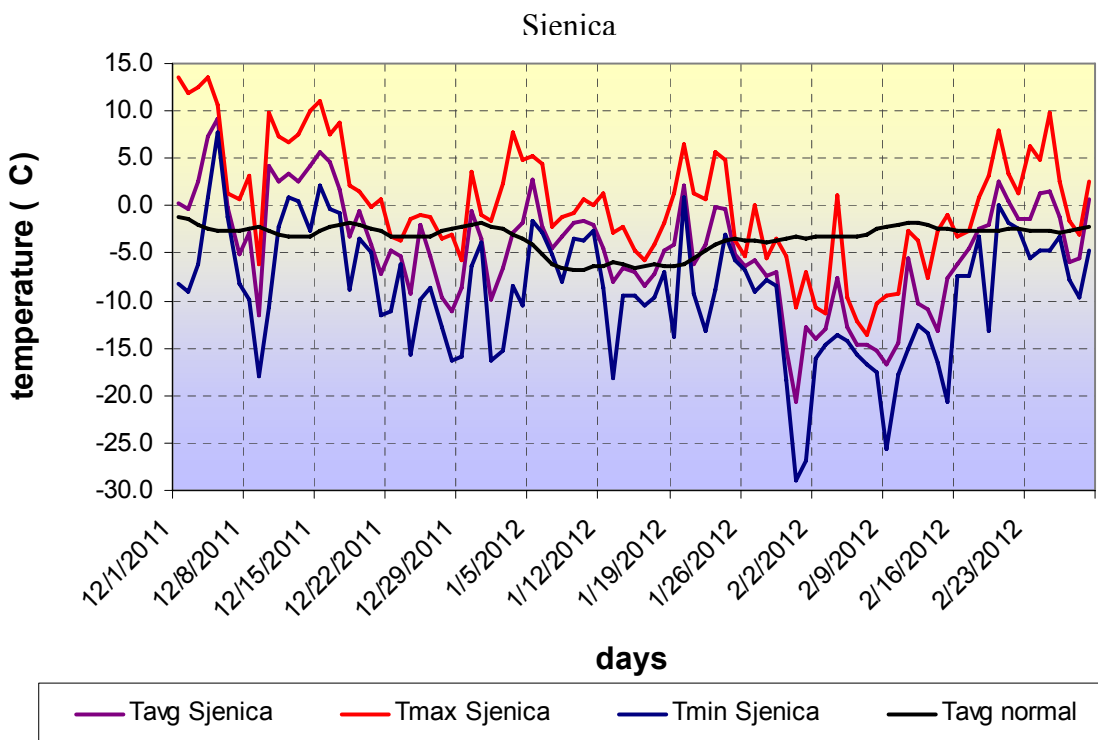


Figure 8. Mean, maximum and minimum daily air temperature in Sjenica during 2011/12 winter.

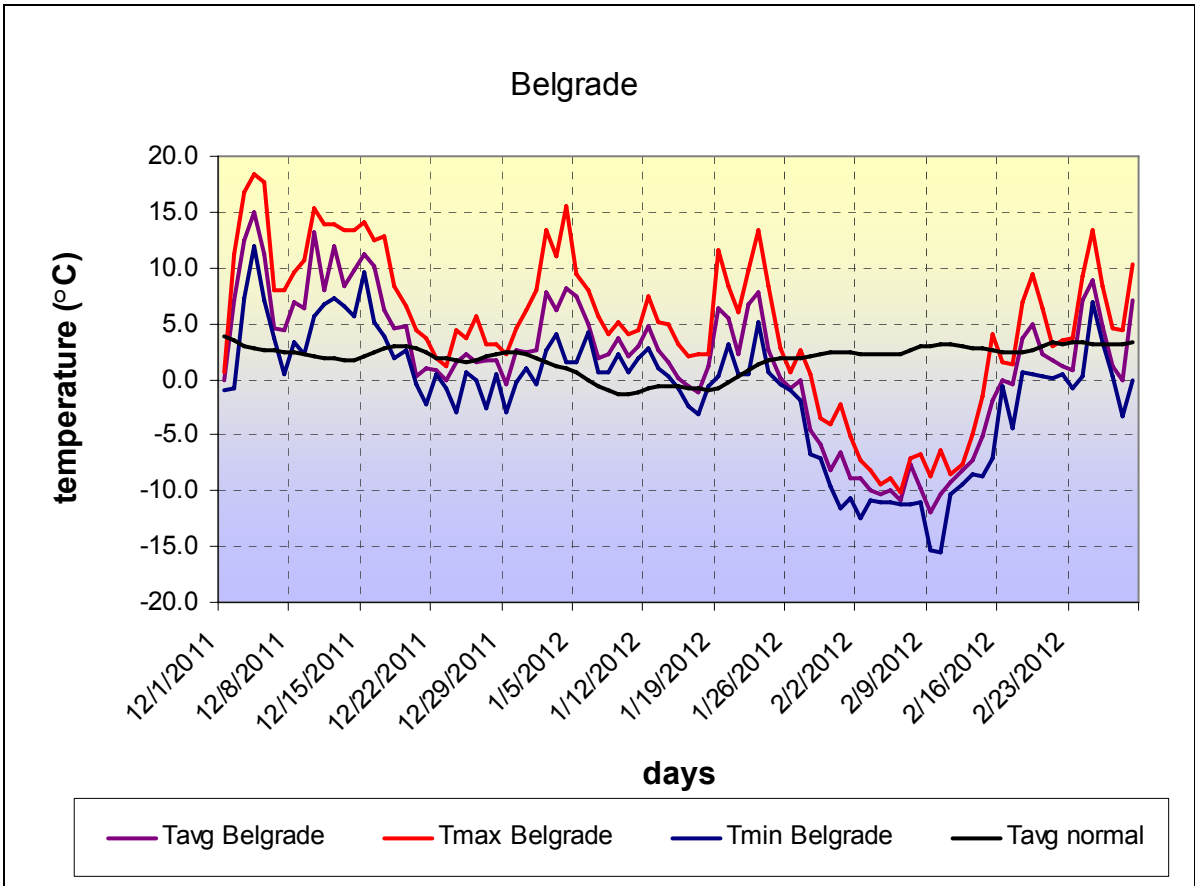


Figure 9. Mean, maximum and minimum daily air temperature in Belgrade during 2011/12 winter.

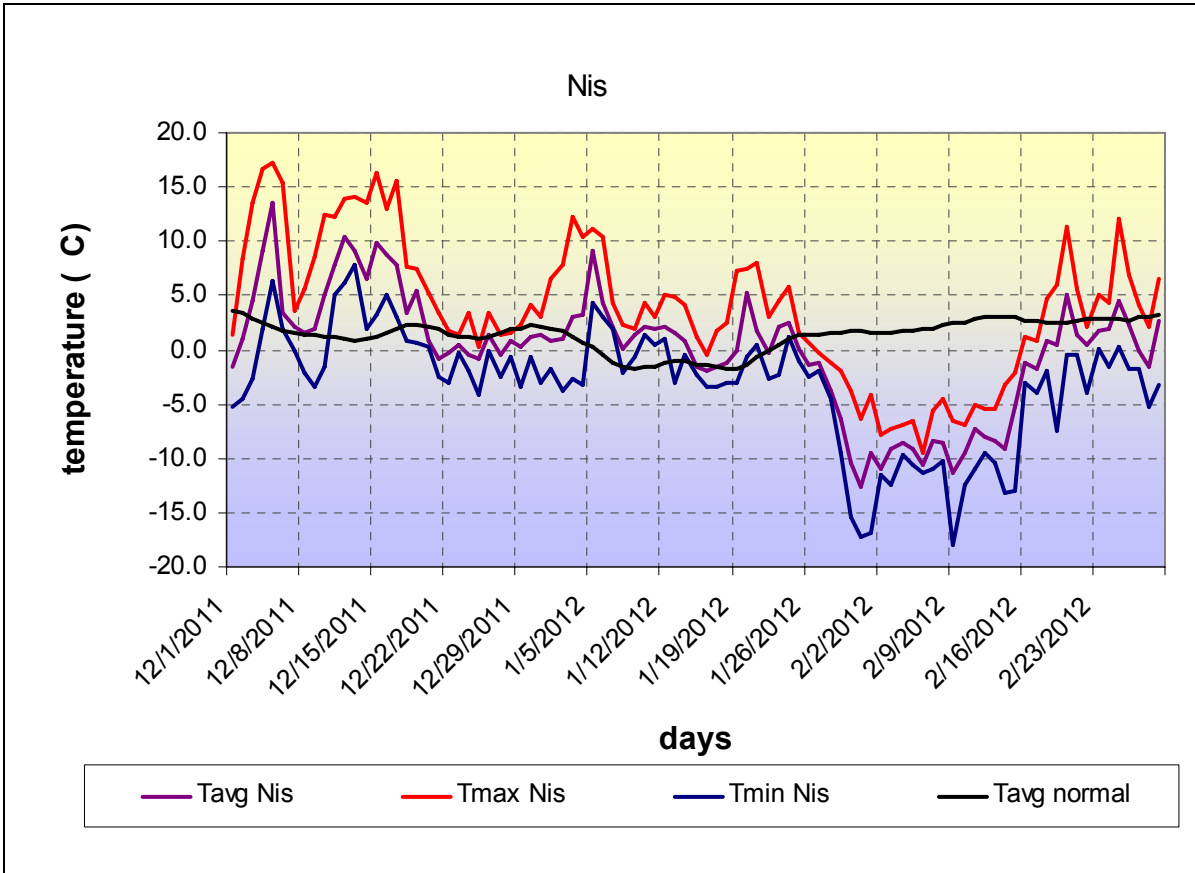
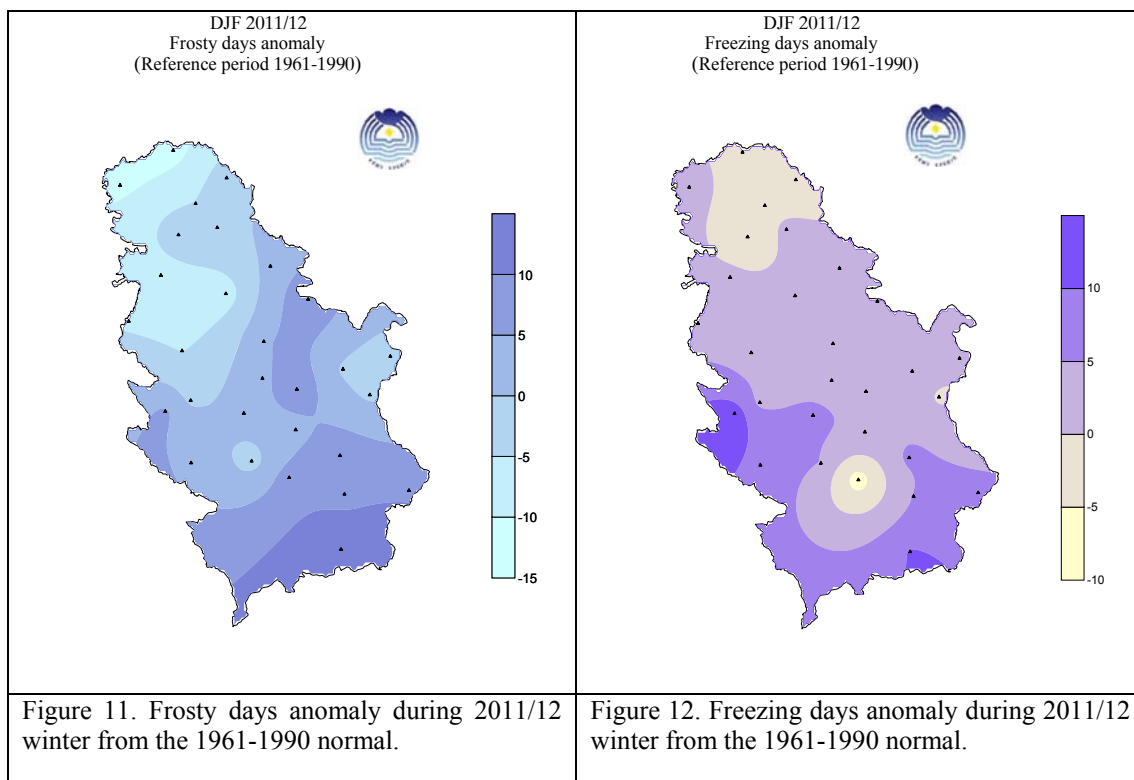


Figure 10. Mean, maximum and minimum daily air temperature in Nis during 2011/12 winter.

During 2011/12 winter, the number of frosty days with minimum daily temperature below 0 °C mostly deviated from normal in Pomoravlje and in southwestern, southeastern and southern Serbia, while the deviation was lowest in Backa and Srem (*Figure 11*).

The number of freezing days with maximum daily temperature below 0 °C was 13 days above normal at Mount Zlatibor, while it was 8 days below normal in Kursumlija (*Figure 12*).



According to the percentile method, mean daily air temperature in Belgrade and Vranje during the first half of December was in the extremely warm category, while in the second half of December it was in the normal category. During the first two decades of January, mean daily air temperature was in the warm category, while it was in the very cold category during the third decade of the same month. In the first half of February, mean daily temperature was in the extremely cold category, while it was in the normal category at the end of February (*Figure 13 and Figure 14*).

Mean daily air temperature in Sombor during December and the first two decades of January, according to the percentile method, was in the very warm and normal category. During the third decade of January, mean daily temperature was in the very cold category, while it was in the extremely cold category during the first half of February. At the end of February mean daily temperature was in the normal and in the warm category (*Figure 15*).

According to the percentile method, mean daily air temperature in Sjenica during the first decade of December was in the extremely warm category, and later on in the cold category. During the second decade of December mean daily air temperature was in the warm category, while it was in the normal and in the cold category during the third decade of the same month. Temperature was in the normal category during most part of January, and it was in the extremely cold category at the end of the month. In the first half of February, temperature was in the cold category, while it was in the normal category at the end of the same month (*Figure 16*).

Mean daily air temperature at Mount Zlatibor during December and the first half of January was in the very warm and in normal category. At the end of January and in the first half of February temperature was in the extremely cold category, while at the end of February it was in the normal category (Figure 17).

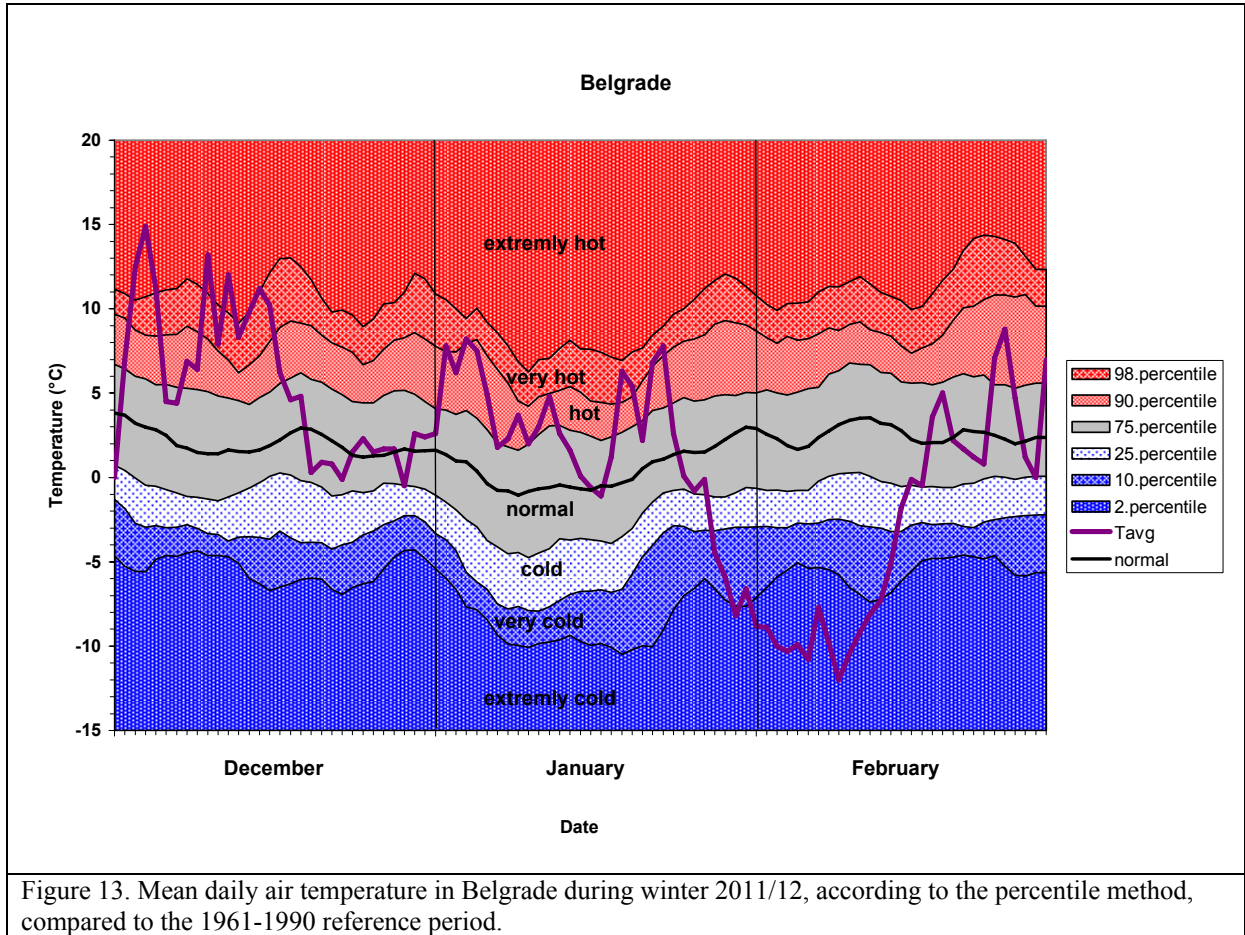


Figure 13. Mean daily air temperature in Belgrade during winter 2011/12, according to the percentile method, compared to the 1961-1990 reference period.

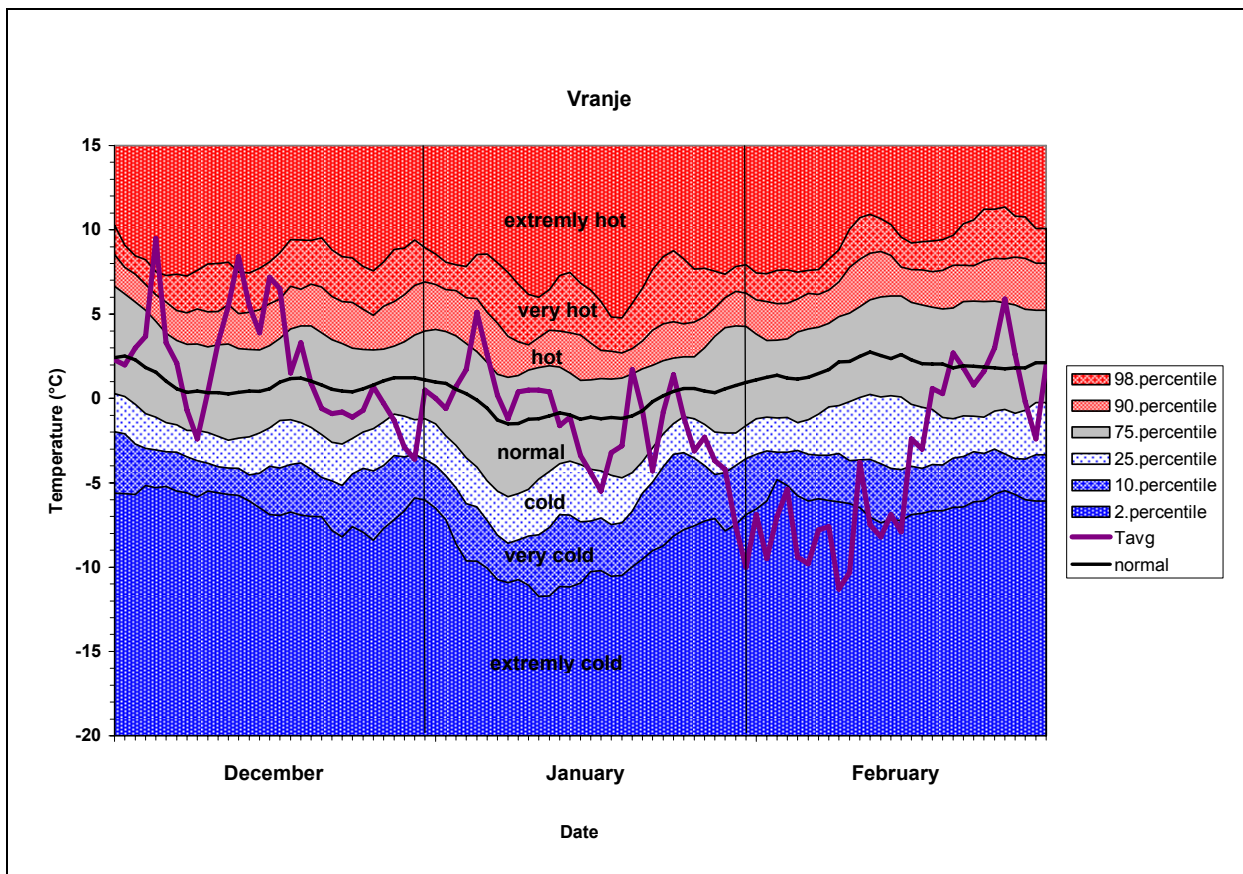


Figure 14. Mean daily air temperature in Vranje during winter 2011/12, according to the percentile method, compared to the 1961-1990 reference period.

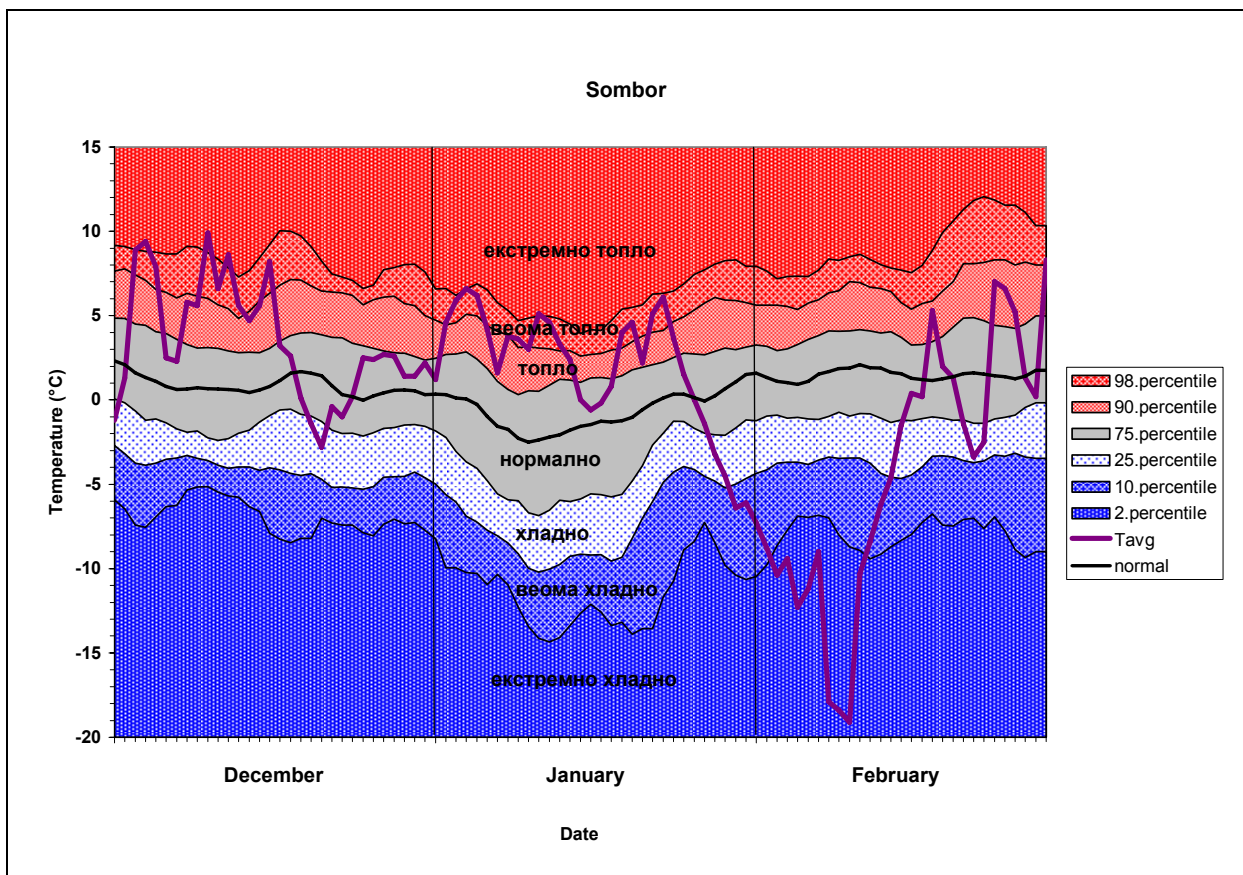


Figure 15. Mean daily air temperature in Sombor during winter 2011/12, according to the percentile method, compared to the 1961-1990 reference period.

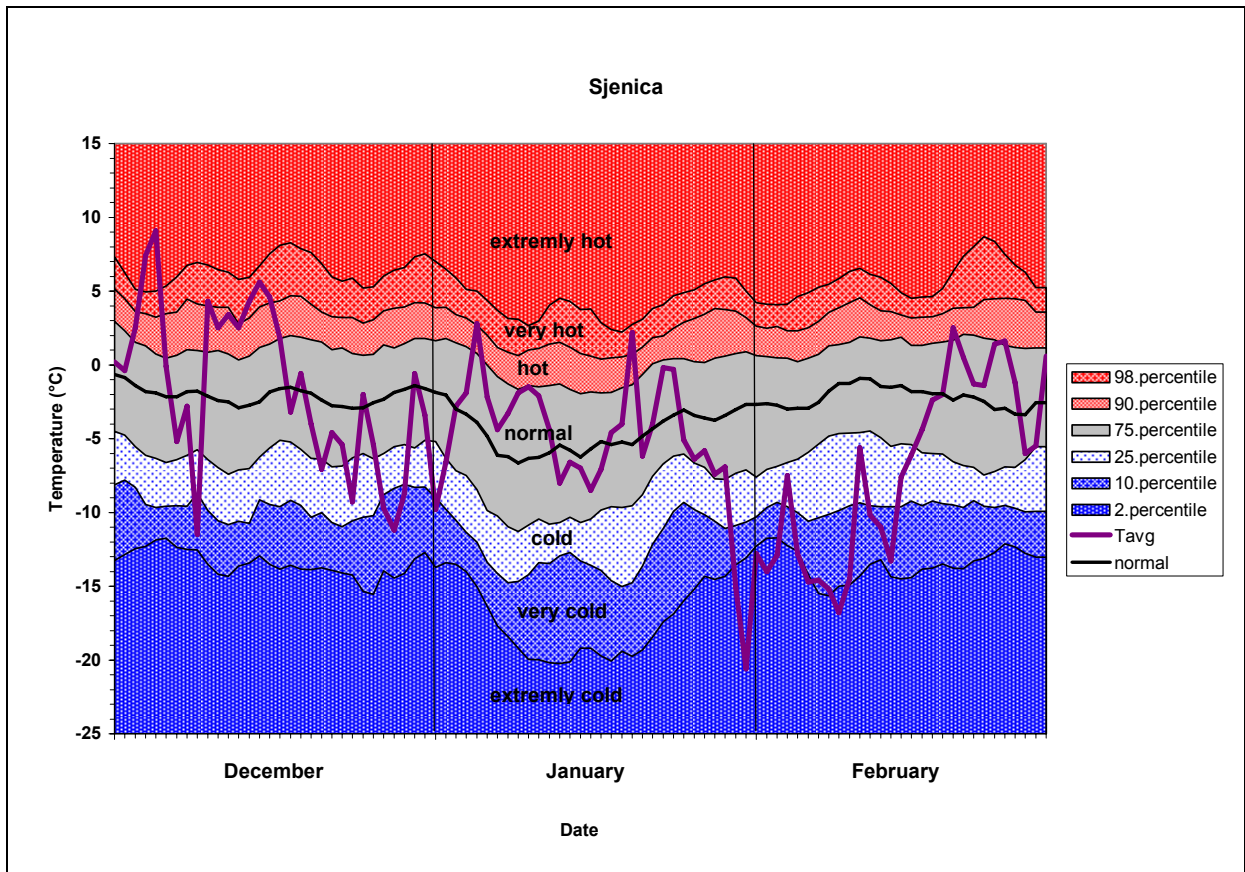


Figure 16. Mean daily air temperature in Sjenica during winter 2011/12, according to the percentile method, compared to the 1961-1990 reference period.

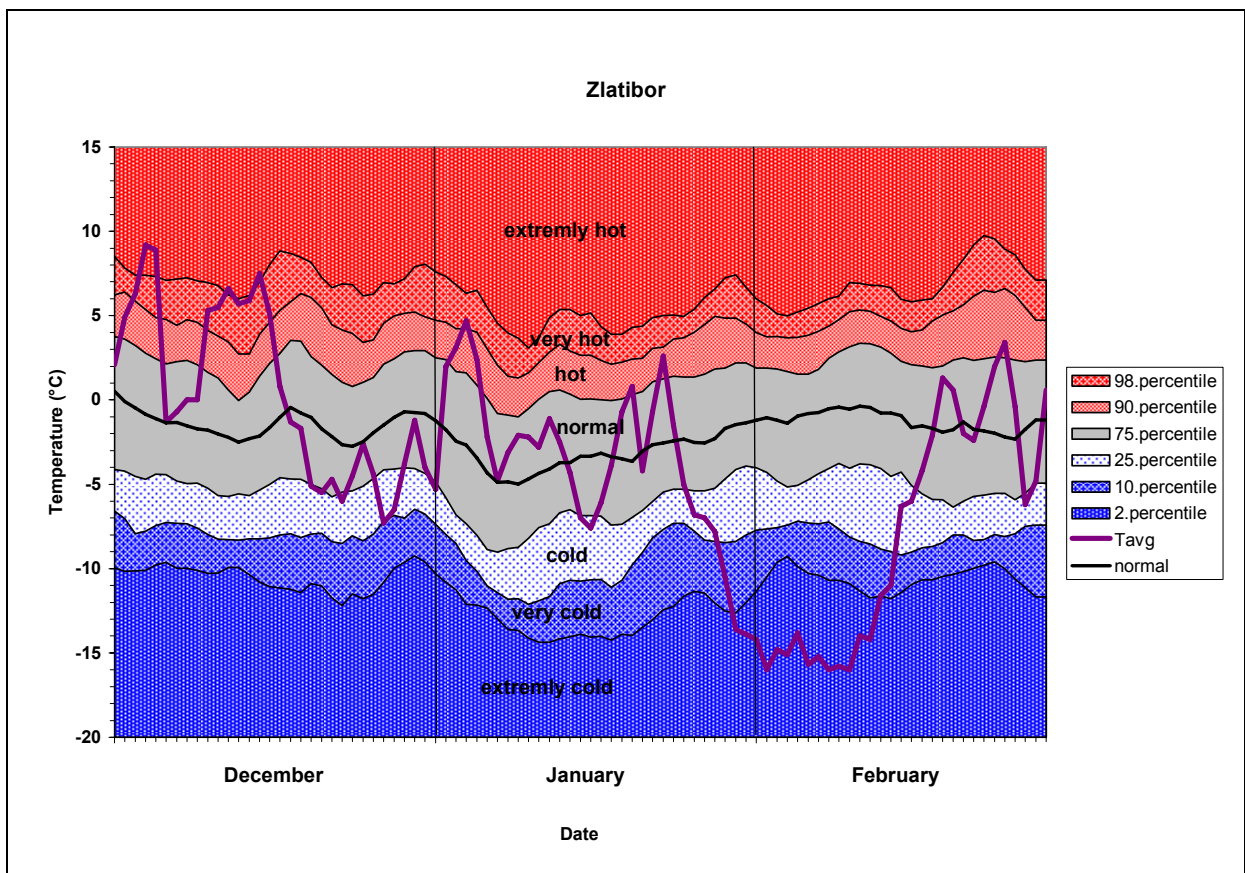


Figure 17. Mean daily air temperature at Mount Zlatibor during winter 2011/12, according to the percentile method, compared to the 1961-1990 reference period.

While observing the 1949-2012 period, it could be noted that winter 2011/12 in most places in Serbia was among the top ten years according to the number of days with heavy frost (with minimum daily temperature below -10°C) (Figure 18).

STATION	2012	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PALIC	11	1954	1985	1964	1963	2003	1956	1960	1993	1987	1949	2012	1969	2002	1991	1981	1979	1967	1950	2005	1999
SOMBOR	16	1954	1985	1963	1956	2003	1964	1993	1960	1969	1967	1950	1991	1987	1981	1971	2012	2003	1979	2010	2005
KIKINDA	8	1954	1985	1964	1963	1956	2003	1960	2012	1950	1993	1987	1958	1979	1967	1999	1969	2005	2002	1965	1982
BECEJ	9	1985	1963	1956	1960	2003	1981	1965	1950	2012	1969	1967	1993	1987	2002	1991	1968	1999	1979	2010	2005
NOVISAD	10	1954	1963	1985	1964	1956	1981	2003	1969	1960	2012	1967	1965	1950	1987	1968	1993	1958	1991	2011	2002
ZRENJANIN	8	1954	1985	1963	1964	1956	2003	1993	2012	1969	1950	1967	1960	1981	1987	1968	1979	1965	1958	1949	1999
VRSAC	11	1985	1954	1963	1993	1964	1949	1956	2011	2003	1968	2012	2009	1987	1965	1958	1950	1981	1969	2005	1999
LOZNICA	5	1954	1963	1985	1956	2012	1964	1967	1993	1968	1960	2002	1958	1987	1979	1978	2005	1959	2010	2006	1997
S MITROVICA	5	1954	1963	1985	1956	2012	2002	1964	2003	1987	1969	1968	1960	1991	1950	1958	1999	2005	2000	1993	1967
VALJEVO	6	1954	1963	1985	1956	1964	2012	1950	1993	1968	1967	1987	1960	2002	1959	2010	1979	1969	2006	1999	1997
BEOGRAD	5	1954	1963	1985	1956	2012	1964	1950	1968	1960	1993	1987	1967	1958	2006	2005	1997	1991	1965	2002	2000
KRAGUJEVAC	5	1954	1963	1985	1958	2012	1956	1968	1967	1993	1960	1950	1999	1981	1979	1964	2011	1990	1987	2010	2006
SMPALANKA	7	1954	1963	1985	1968	1956	1967	2012	1993	1969	1964	1960	1950	1999	1959	2002	1990	2011	2004	2003	1981
V GRADISTE	7	1954	1985	1963	2011	1956	1993	2012	1981	1968	1964	1960	2003	1992	1950	2009	1990	1987	1980	1949	2004
NEGOTIN	6	1954	1985	1963	1956	1950	2012	1978	1969	1959	1980	1972	2009	1998	1993	1967	2011	2010	1990	1964	2008
ZLATIBOR	19	1954	1963	1985	1964	1969	1993	1987	1978	1962	1956	2003	2002	1981	1967	1965	1958	2011	1959	2012	1992
SIENICA	25	1967	1975	1965	1992	1964	1950	1985	1963	1954	1993	1999	1987	1981	1968	1959	1982	1957	2000	1991	1978
POZEGA	13	1954	1963	1985	1981	1967	1956	1968	1982	2002	1990	1964	1958	2012	2011	1959	1993	1992	1960	2000	1978
KRALJEVO	5	1954	1963	1985	1956	2012	1960	1993	1987	1950	1990	1967	1964	1949	1981	1968	2010	2006	2002	1979	1966
KURSUMLIJA	8	1954	1963	1985	1993	1956	2000	1967	2012	2002	1990	1968	2006	1987	1981	1960	1964	1999	2009	1991	1979
KRUSEVAC	7	1954	1963	1985	1967	1981	1956	2012	1968	1993	1990	1964	1960	1987	2002	1999	1969	1962	2000	1992	1979
CUPRIJA	5	1954	1985	1963	1993	2012	1956	1968	1967	1990	1965	2003	1981	1964	1950	1992	1987	1960	2009	2006	1999
NIŠ	4	1954	1985	1963	2012	1990	1950	1956	1949	1993	1987	1967	2006	1968	1965	1964	2002	1999	1991	1979	1960
LESKOVAC	9	1954	1985	1963	1968	1967	1990	1950	1956	2012	1993	1987	1981	1992	1960	2002	2011	2009	2006	2000	1999
ZAJECAR	11	1954	1985	1963	1956	1978	1950	1993	1959	1967	1969	2012	1999	1990	2011	2009	2003	1991	1987	1964	1960
DIMITROVGRAD	13	1954	1985	1963	1949	2002	1990	1950	1993	2006	1987	1968	1967	2012	2000	1979	1969	1999	1992	1965	1956
VRANJE	10	1954	1985	1963	1990	1950	2002	1993	1967	1956	2012	2006	1968	1991	1964	2009	1992	1979	1999	1987	1981

■ 1949
 ■ 1950-1969
 ■ 1970-1989
 ■ 1990-1999
 ■ 2000-2009
 ■ 2010-2012

Figure 18. A descending order of the number of days with heavy frost in a 1949-2012 period measured at stations in Serbia.

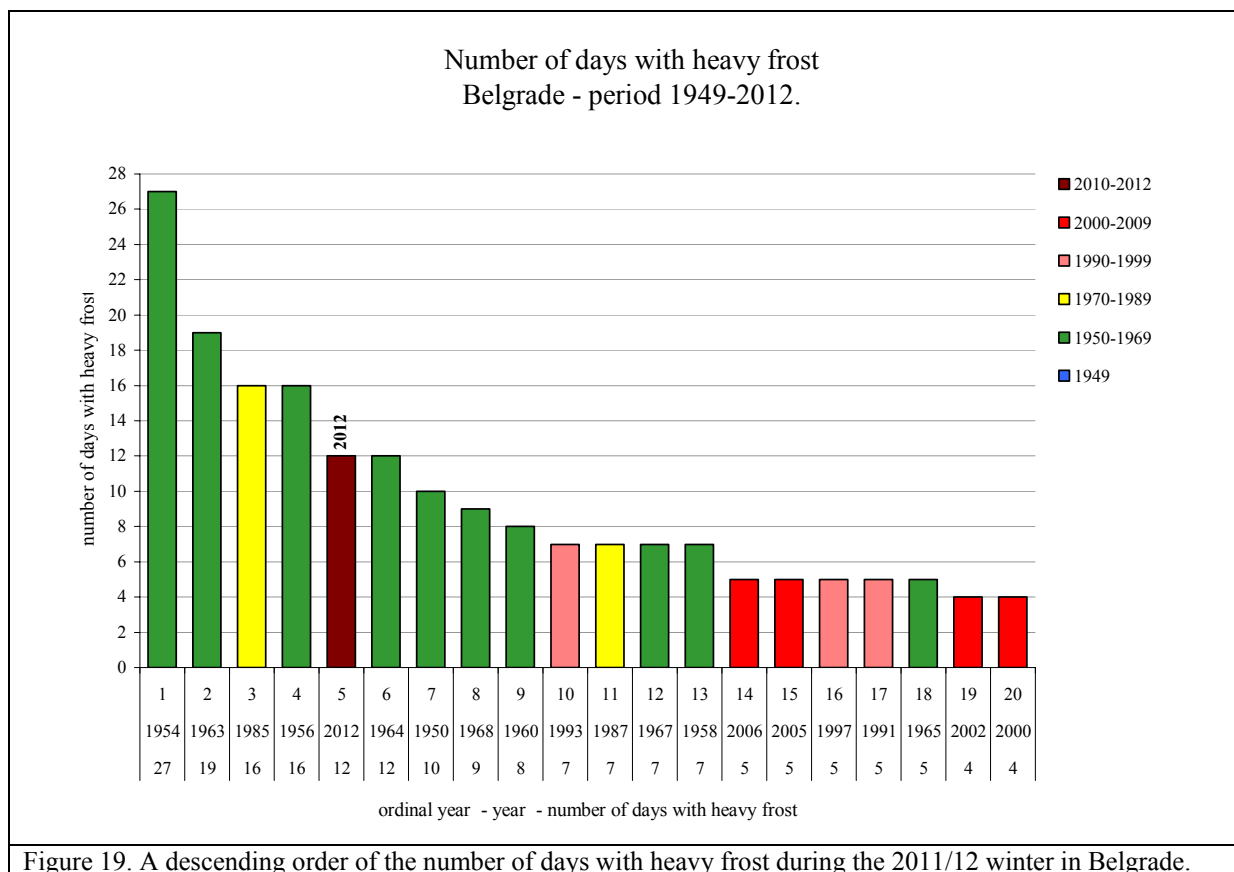


Figure 19. A descending order of the number of days with heavy frost during the 2011/12 winter in Belgrade.

Minimum daily temperature was recorded in Novi Sad and Banatski Karlovac on February 9th, and it measured -28.7 °C and -28.1 °C respectively (*Table 1*). Those values surpassed previous February minimums of -28.1 °C for Novi Sad, measured on February 17th 1956, -22.6 °C for Banatski Karlovac, measured on February 9th 2005, and -20.7 °C for Surcin, measured on February 10th, 2005. Previous absolute yearly temperature minimum for Banatski Karlovac, that had been measured on January 31st 1987 and reached -23.7 °C, was also surpassed.

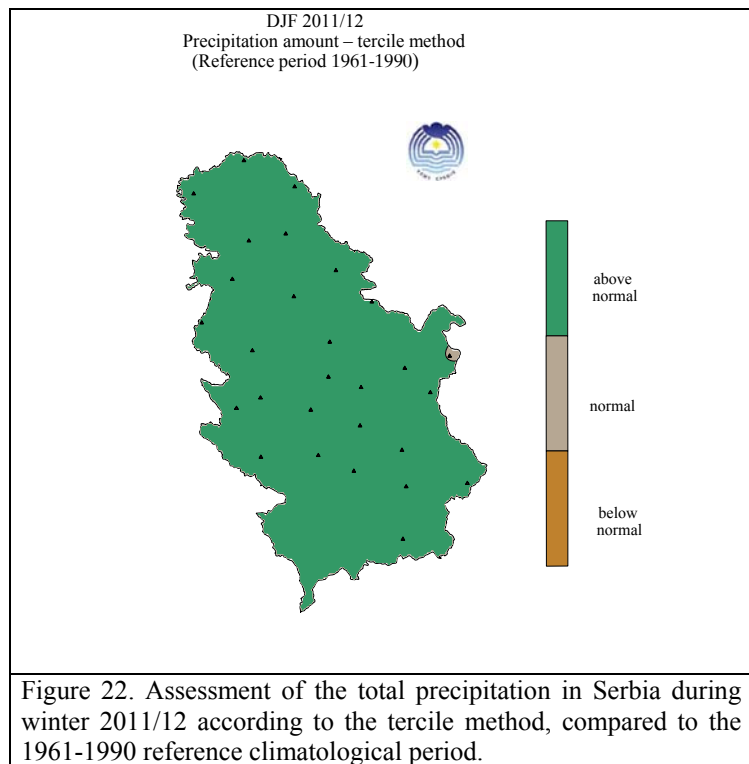
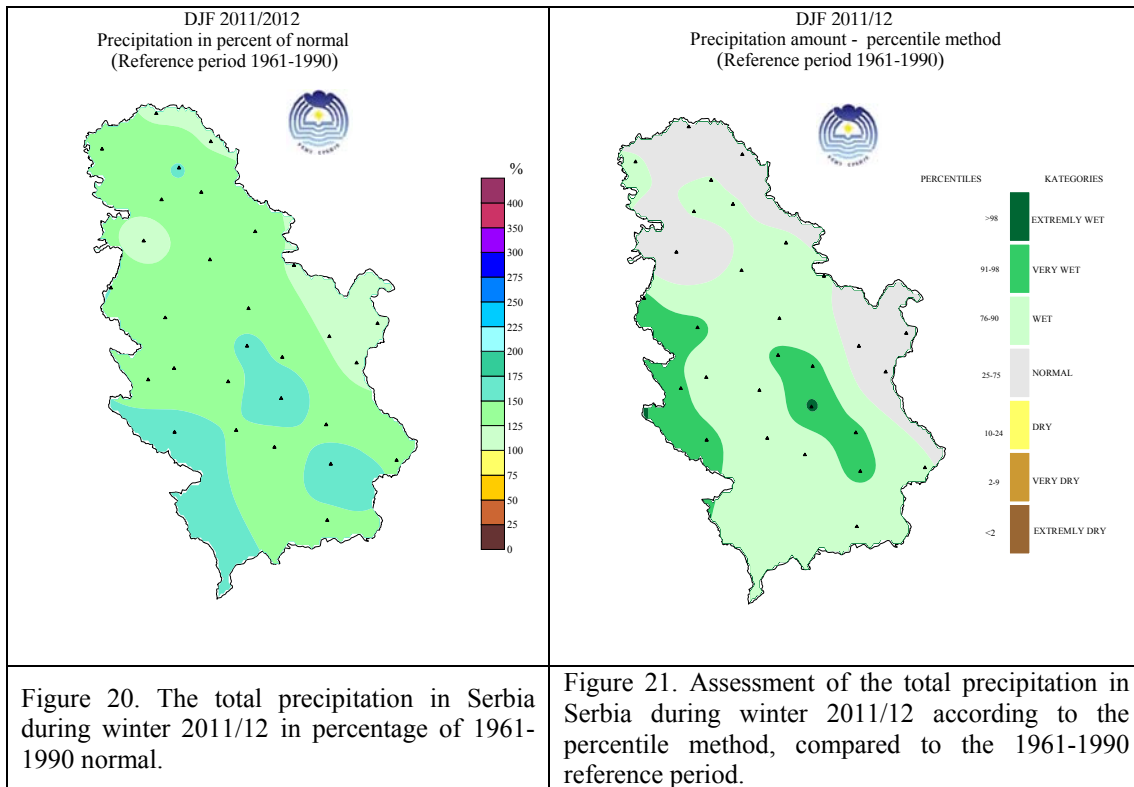
Table 1: Absolute February and yearly air temperature minimum recorded at meteorological stations in Serbia.

station	Tmin	date Tmin	February	date	annual	date
	27.01.-17.02.2012.		absolute Tmin	February absolute Tmin	absolute Tmin	annual absolute Tmin
Palić	-21.5	09.02.2012.	-26.7	07.02.1954.	-26.7	07.02.1954.
Sombor	-26.8	09.02.2012.	-29.8	24.02.1942.	-29.8	24.02.1942.
Kikinda	-25.7	09.02.2012.	-27.4	06.02.1954.	-29.8	23.01.1963.
Bečej	-25.0	09.02.2012.	-26.6	21.02.1978.	-30.6	24.01.1963.
Zrenjanin	-27.5	09.02.2012.	-28.7	17.02.1956.	-30.4	24.01.1963.
Novi Sad	-28.7	09.02.2012.	-28.1	17.02.1956	-30.7	24.01.1963.
S.Mitrovica	-26.5	09.02.2012.	-29.4	03.02.1929.	-29.5	31.01.1987.
Zlatibor	-19.9	09.02.2012.	-21.5	05.02.1956.	-23.1	26.01.1954.
B.Karlovac	-28.1	09.02.2012.	-22.6	09.02.2005.	-23.7	31.01.1987.
Beograd	-15.5	10.02.2012.	-25.5	11.02.1929.	-26.2	10.01.1892.
Loznica	-20.6	09.02.2012.	-24.0	02.02.1956.	-25.4	24.01.1963.
Valjevo	-23.2	09.02.2012.	-29.5	11.02.1929.	-29.6	08.01.1947.
V.Gradište	-23.8	09.02.2012.	-27.1	17.02.1956.	-27.1	17.02.1956.
S.Palanka	-28.4	09.02.2012.	-30.0	16.02.1940.	-32.6	07.01.1947.
Kragujevac	-24.4	09.02.2012.	-30.7	11.02.1929.	-30.7	11.02.1929.
Kraljevo	-21.8	09.02.2012.	-27.1	17.02.1956.	-27.1	17.02.1956.
Požega	-26.4	09.02.2012.	-29.2	17.02.1956.	-30.7	13.01.1985.
Čuprija	-24.3	09.02.2012.	-25.8	17.02.1985.	-27.1	31.01.1987.
Kruševac	-24.6	09.02.2012.	-28.5	09.02.1956.	-28.5	09.02.1956.
Negotin	-27.5	09.02.2012.	-28.5	05.02.1950.	-33.2	08.01.1947.
Zaječar	-24.6	09.02.2012.	-27.7	06.02.1950.	-29.0	13.01.1985.
Kopaonik	-19.0	07.02.2012.	-24.2	13.02.2004.	-24.8	13.01.1968.
Sjenica	-28.9	31.01.2012.	-33.0	09.02.1956.	-38.0	26.01.1954.
Crni Vrh	-22.1	02.02.2012.	-22.2	13.02.1985.	-23.2	24.01.2006.
Niš	-18.0	09.02.2012.	-21.6	05.02.1950.	-23.7	25.01.1963.
Vranje	-18.0	15.02.2012.	-22.0	17.02.1985.	-25.0	13.01.1985.
Dimitrovgrad	-21.2	31.01.2012.	-24.0	09.02.1956.	-29.3	18.01.1963.
Leskovac	-23.0	31.01.2012.	-29.5	05.02.1950.	-30.5	25.01.1963.
Kuršumlija	-20.7	31.01.2012.	-22.0	14.02.1985.	-25.6	13.01.1985.
Vršac	-27.7	09.02.2012.	-25.0	09.02.2005.	-25.0	26.01.'00 / 09.02.'05.
Surčin	-24.0	09.02.2012.	-20.7	10.2.2005.	-26.0	31.01.1987.
<div style="background-color: #FFDAB9; border: 1px solid black; padding: 2px; margin-bottom: 5px;"> STATION WITH OVERCOME FEBRUARY ABSOLUTE MINIMUM TEMPERATURE </div> <div style="background-color: #DDA0DD; border: 1px solid black; padding: 2px;"> STATION WITH OVERCOME ANNUALY AND FEBRUARY ABSOLUTE MINIMUM TEMPERATURE </div>						

Precipitation

The total winter precipitation for 2011/12 in most part of Serbia was above average values compared to the 1961-1990 reference period (total precipitation ranged from 125% to 175% of normal). In the east of Serbia, in the north of Banat and in western Srem, the precipitation quantity was within the range of normal values (*Figure 20*).

According to the percentile method, the total winter precipitation was within the rainy and very rainy category in most of Serbia, except in Vojvodina and eastern Serbia, where it was in the normal category (*Figure 21*).



According to the tercile method, the total precipitation was above normal in most part of Serbia, except in Banat, in eastern Serbia and in a part of western and central Serbia, where it was within the range of normal values (*Figure 22*).

Maximum daily precipitation quantity of 38.8 mm was measured in Belgrade on January 25, 2012.

The largest anomaly of the number of days with precipitation of 1 mm and above occurred in central Serbia and it amounted up to 19 days (*Figure 23*).

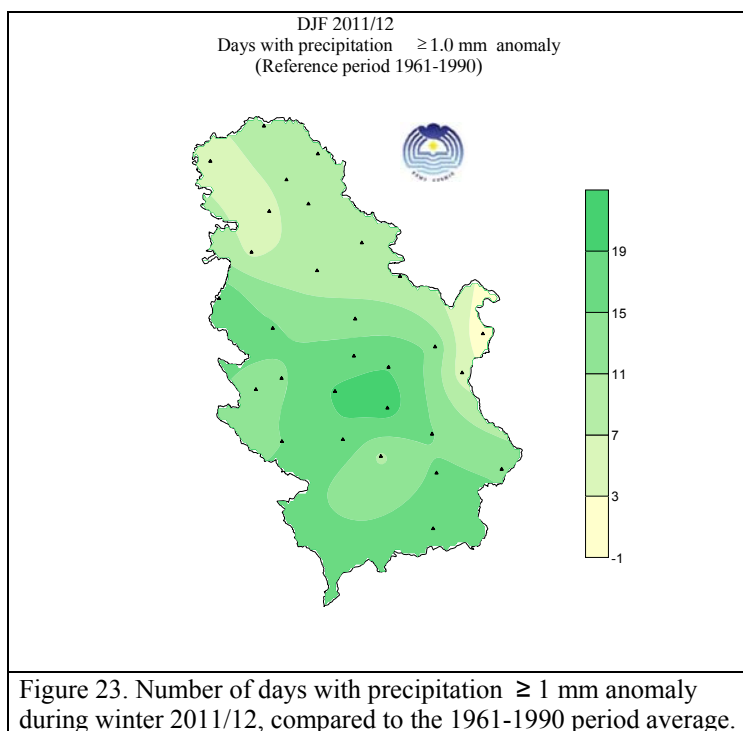


Figure 23. Number of days with precipitation ≥ 1 mm anomaly during winter 2011/12, compared to the 1961-1990 period average.

Snow cover

Snow cover formed on the mountains in December 2011, in the south of the country on January 7, 2012, and in the rest of the country on January 25, with the exception of the farthest north, where it formed on February 3.

Previous historic absolute snow cover height maximum was overcome on January 27, by the height measuring 162 cm at Kukavica mountain, and on February 13, by the height measuring 107 cm in Sjenica, and 100 cm at Zlatibor mountain (*Figure 24*).

Maximum snow cover height measured in Belgrade in February 2012 did not exceed previous historic maximums.

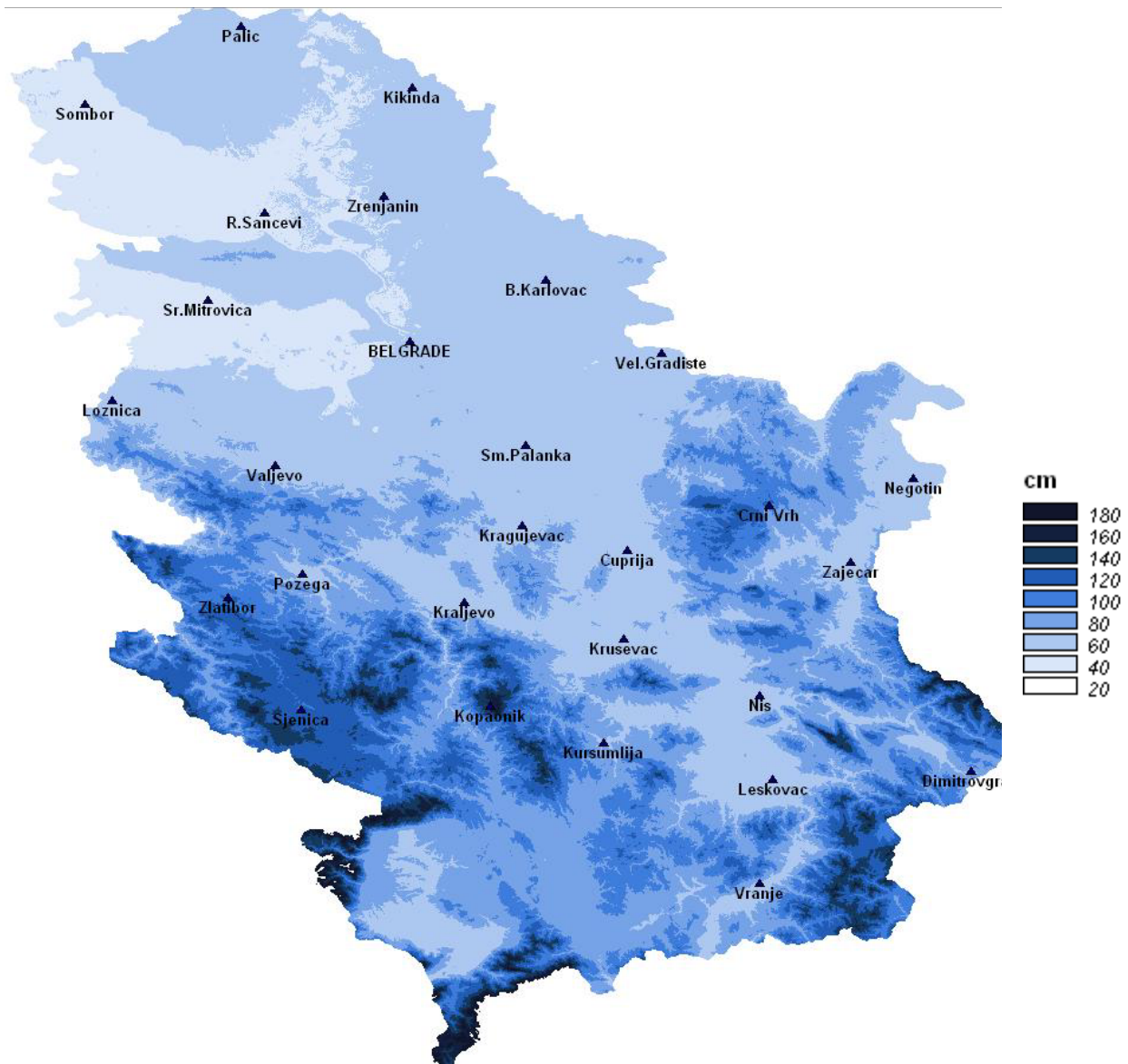
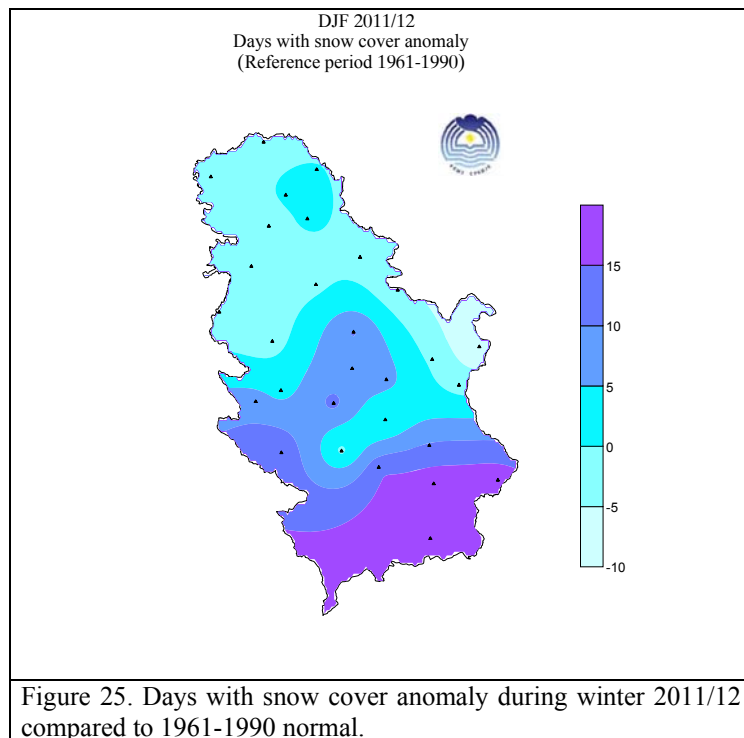


Figure 24. Spatial distribution of snow cover height in Serbia on February 13, 2012

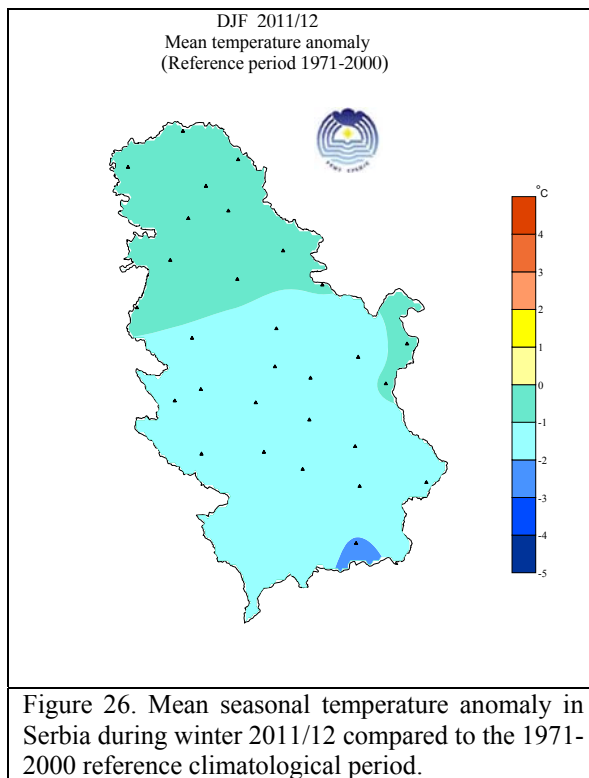


During winter 2011/12, the number of days with snow cover was 15 to 20 days above normal in southern and southeastern Serbia, while it was 5 to 10 days below normal in the eastern Serbia (*Figure 25*).

Analysis of the 2011/12 winter season for Serbia compared to the 1971-2000 climatological reference period

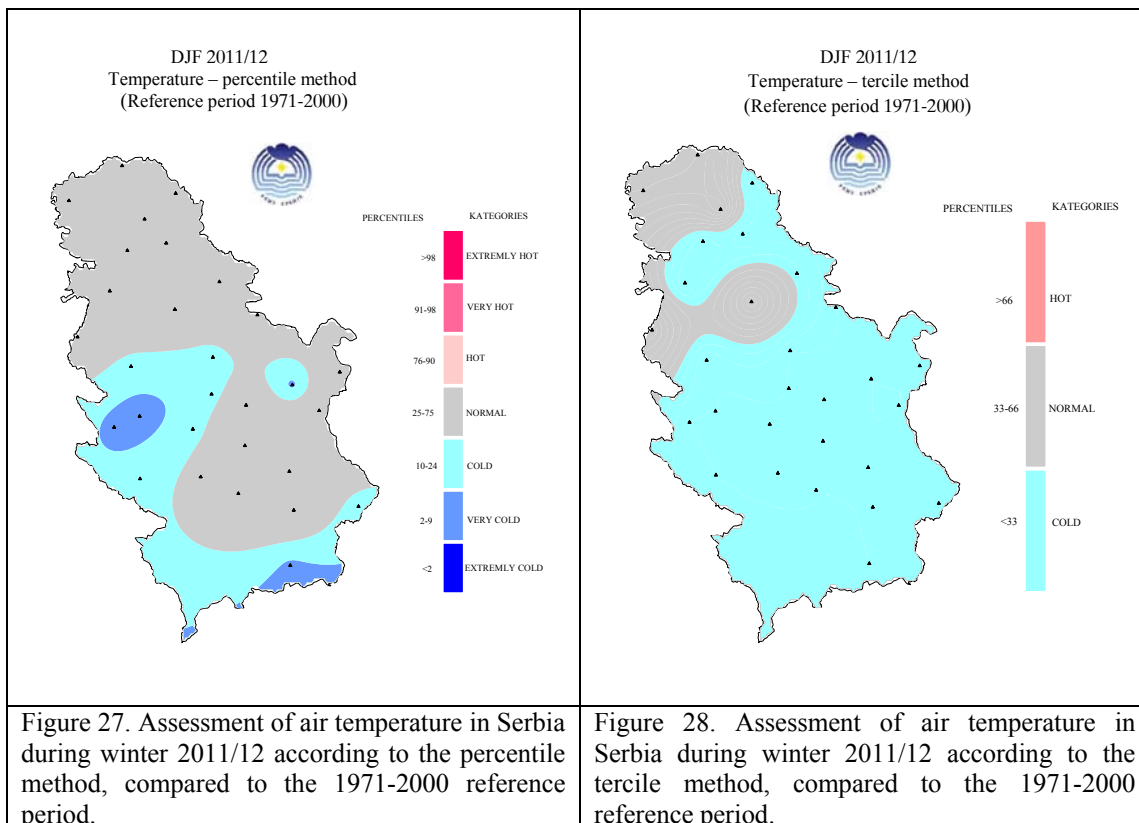
Temperature

Mean winter temperature anomaly (compared to the 1971-2000 reference period) ranged from -0.4°C in Palic and Sombor to -2.1°C in Vranje (*Figure 26*).



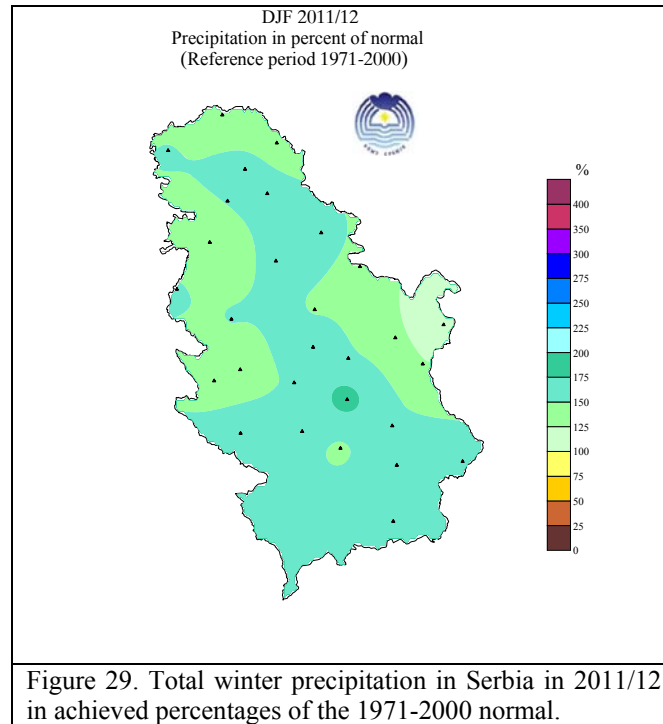
According to the percentile method (in relation to the 1971-2000 reference period), air temperature was in the normal category in most of Serbia, except in the western and southern part of the country, where it was in the cold and very cold category (*Figure 27*).

Air temperature assessment according to the tercile method showed that temperature was in the cold category in most part of Serbia, except in Backa and Srem, where it was in the normal category (*Figure 28*).



Precipitation

In most part of Serbia the total winter precipitation for 2011/12 was above average values in compared to the 1971-2000 reference period (total precipitation ranged from 125% to 175% of normal). Precipitation quantity was within the range of normal values only in the east of Serbia (*Figure 29*).



According to the percentile method, the total precipitation was in the very rainy and extremely rainy category in most part of Serbia. In the east of the country, the total precipitation was in the normal and rainy category, while it was in the rainy category in the country's north (*Figure 30*).

Analysis of winter precipitation by employing the tercile method showed that the total precipitation was in the rainy category in entire Serbia, except in the farthest east of the country, where it was in the normal category (*Figure 31*).

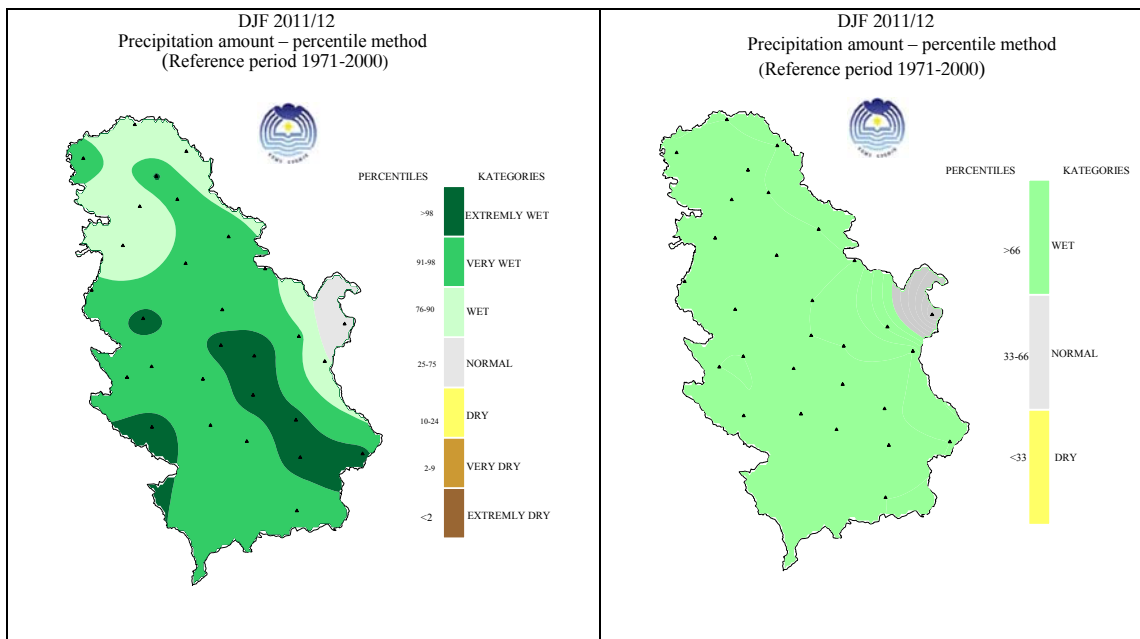


Figure 30. Assessment of total precipitation in Serbia during winter 2011/12 according to the percentile method, compared to the 1971-2000 reference period.

Figure 31. Assessment of total precipitation in Serbia during winter 2011/12 according to the tercile method, compared to the 1971-2000 reference period.

Analysis of the 2011/12 winter season for Serbia compared to the 1981-2010 climatological reference period

Temperature

Mean winter temperature anomaly (compared to the 1981-2010 reference period) ranged from -0.4°C in Palic and Sombor to -2.1°C in Vranje (*Figure 32*).

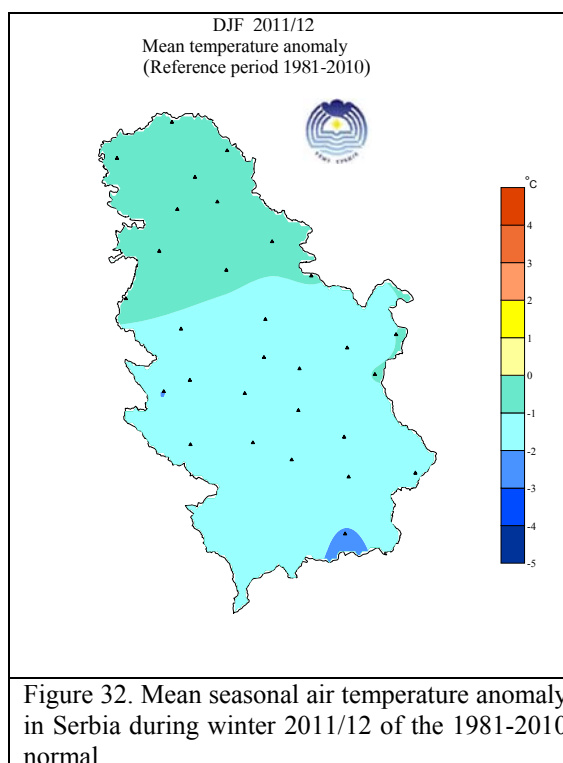
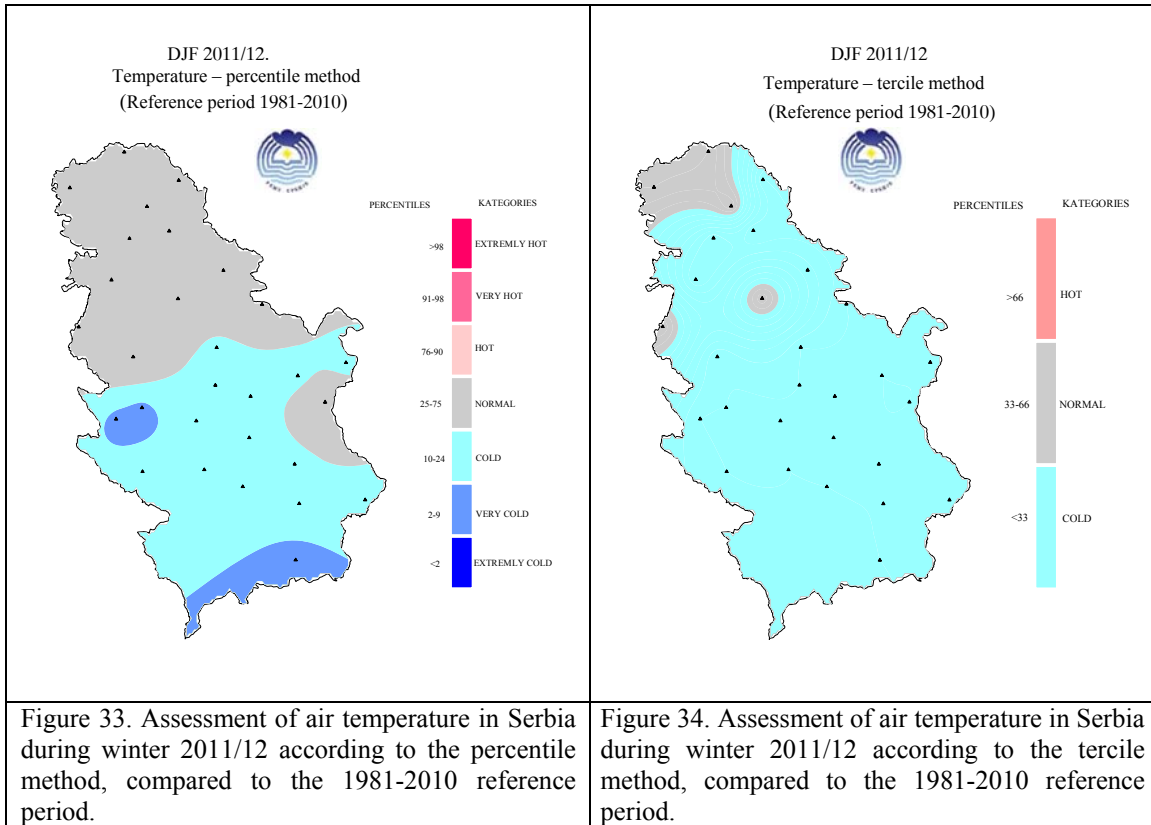


Figure 32. Mean seasonal air temperature anomaly in Serbia during winter 2011/12 of the 1981-2010 normal.

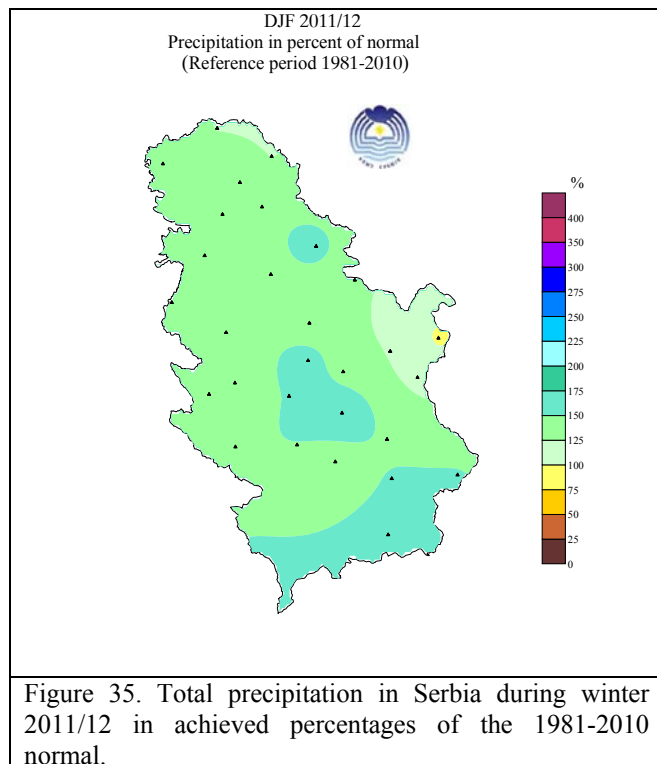
According to the percentile method, air temperature was in the normal category in northern, northeastern and northwestern Serbia (compared to the 1981-2010 reference period). In the rest of the country, temperature was in the cold and very cold category (*Figure 33*).

Air temperature assessment according to the tercile method showed that temperature was in the cold category in almost entire Serbia, except in the farthest north and west, where it was in the normal category (*Figure 34*).



Precipitation

The total winter precipitation for 2011/12 in Serbia was above average values compared to the 1981-2010 reference period (total precipitation ranged from 125% to 175% of normal), except in the east of the country, where it was within the range of normal values (*Figure 35*).



According to the percentile method, the total precipitation was in the very rainy and rainy category in most part of Serbia. In the east of the country, the total precipitation was in the normal category, while it was in the extremely rainy category in a part of the country's southeast (Figure 36).

Analysis of winter precipitation by employing the tercile method showed that the total precipitation was in the rainy category in almost entire Serbia, except in the farthest east of the country, where it was in the normal category (Figure 37).

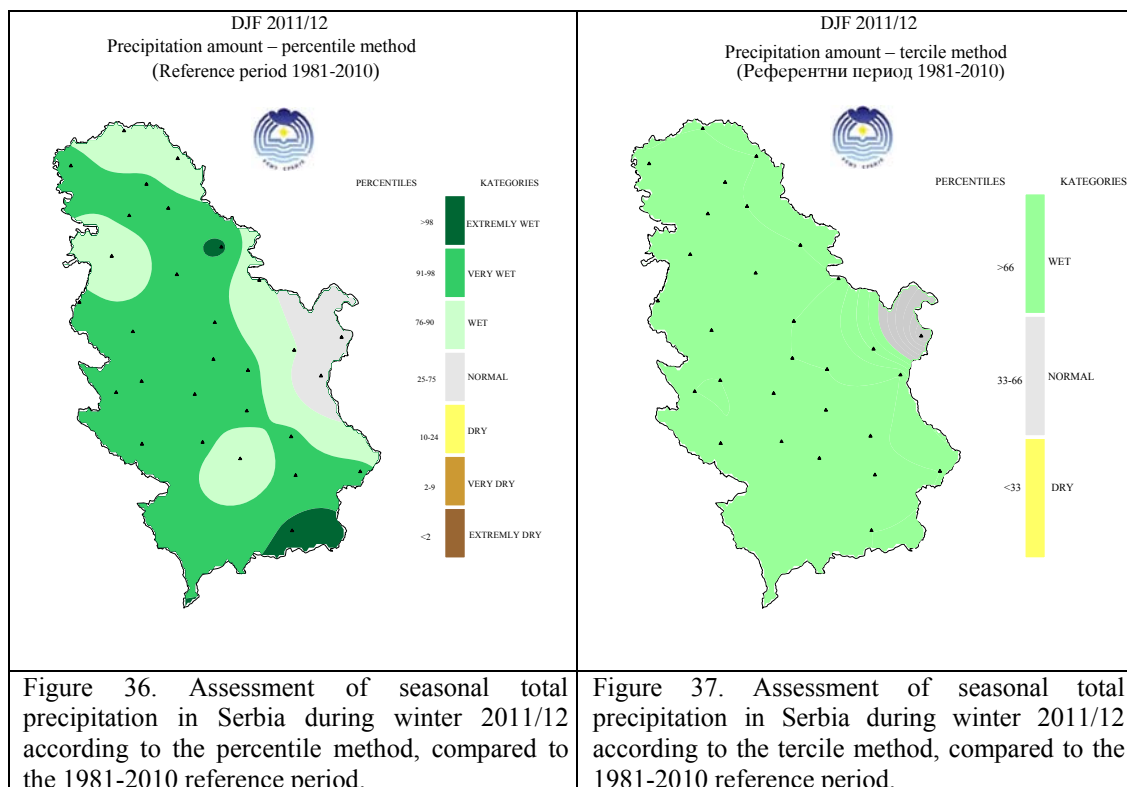


Table 3. Freezing days and cold wave in the period from January 27 to February 19, 2012

Station	Freezing days						Cold wave		
	Continuously			Individual			Number of days	From	Till
	Number of days	From	Till	Number of days	Date	Total			
Palic	17	30.01.	15.02.			17	13	31.01.	12.02.
Sombor	17	29.01.	14.02.			17	16	30.01.	14.02.
Kikinda	17	30.01.	15.02.			17	14	30.01.	12.02.
Becej	16	30.01.	14.02.			16	17	30.01.	15.02.
Zrenjanin	16	30.01.	14.02.	1	28.01.	17	17	30.01.	15.02.
Novi Sad	16	30.01.	14.02.			16	14	02.02.	15.02.
S.Mitrovica	16	30.01.	14.01.	1	28.01.	17	18	29.01.	15.02.
Zlatibor	22	27.01.	17.02.			22	17	30.01.	15.02.
B.Karlovac	18	28.01.	14.02.			18			
Belgrade	17	29.01.	14.02.			17	19	28.01.	15.02.
Loznica	17	29.01.	14.02.			17	17	30.01.	15.02.
Valjevo	18	28.01.	14.02.			18	17	30.01.	15.02.
V.Gradiste	18	28.01.	14.02.			18	17	30.01.	15.02.
S.Palanka	18	28.01.	14.02.			18	17	30.01.	15.02.
Kragujevac	18	28.01.	14.02.			18	18	29.01.	15.02.
Kraljevo	19	28.01.	15.02.			19	17	30.01.	15.02.
Pozega	18	27.01.	13.02.			18	17	30.01.	15.02.
Cuprija	19	28.01.	15.02.			19	17	30.01.	15.02.
Krusevac	20	27.01.	15.02.			20	17	30.01.	15.02.
Negotin	18	27.01.	13.02.			18	9	29.01.	06.02.
							5	08.02.	12.02.
Zajecar	18	27.01.	13.02.			18	10	29.01.	07.02.
							5	09.02.	13.02.
Kopaonik	24	27.01.	19.02.			24	5	07.02.	11.02.
Sjenica	7	28.01.	03.02.			20	6	06.02.	11.02.
	13	05.02.	17.02.						
Crni Vrh	23	27.01.	18.02.			23	18	28.01.	14.02.
Nis	20	27.01.	15.02.			20	18	29.01.	15.02.
Vranje	15	27.01.	10.02.			19	16	31.01.	15.02.
	4	12.02.	15.02.						
Dimitrovgrad	8	27.01.	03.02.			17	5	30.01.	03.02.
	7	05.02.	11.02.				7	05.02.	11.02.
	2	13.02.	14.02.						
Leskovac	19	28.01.	15.02.			19	17	30.01.	15.02.
Kursumlija	19	27.01.	14.02.			19			
Vrsac	15	01.02.	15.02.	1	28.01.	17	10	03.02.	12.02.
				1	30.01.				
Surcin	18	28.01.	14.02.			18	14	30.01.	12.02.

A large number of consecutive freezing days was recorded from January 27 to February 19, 2012. There were 24 of them at Kopaonik mountain, 23 at Crni Vrh mountain, 22 at Zlatibor mountain, 20 in Krusevac and Nis, 19 in Kraljevo, Cuprija, Leskovac and Kursumlija, and 17 in Belgrade. The fewest number of consecutive freezing days during the observed period was recorded in Novi Sad and Becej – 16. During this cold spell around 30 people lost their lives due to freezing.

Brief description of the appearance of ice and floods on the rivers in Serbia during winter 2011/2012

From January 27 to February 17, 2012, cold weather with moderate and heavy morning frosts prevailed in entire Serbia. Maximum daily air temperatures did not exceed 0⁰C. Moderate and strong southeastern wind (the cold kosava wind) blew in Podunavlje and Pomoravlje regions and in mountainous areas. Such weather conditions caused a sudden decrease in water temperature and the appearance of ice on Serbian rivers.

The first appearance of ice was recorded on all minor flows at the end of January, and at the beginning of February on larger rivers such as the Danube, Tisza, Sava and Velika Morava. Partial or complete ice cover with the appearance of ice barriers and ice jams was formed on the mentioned rivers, which caused a disturbance of the natural water flow regime on the rivers.

This cold winter was specific due to the appearance of ice on the entire Danube flow, from Regensburg to the Black Sea.

In order for ice run, partial and complete ice cover to be formed, the sum of negative mean daily air temperatures has to range from $\sum = -150$ ⁰C to $\sum = -180$ ⁰C. During the past winter, the negative mean daily air temperature sums were within that range.

At the end of February, due to an increase of air temperature and snow melt, water levels rose on small and medium sized river catchments in Serbia. The regular flood defense level was during a short period surpassed at Smederevska Palanka, on the Jasenica river, while conditional reporting levels were surpassed on the Ljig river near Bogovadja and on the Kolubara river near Valjevo, and reached on the Tamnava and Ub rivers and on the lower reach of the Kolubara river.

Verification of SEECOF-6 climate outlook for winter season

In most part of Serbia measured air temperature was below normal, except in the northern part of the country, where it was within the range of normal values.

The conclusion of SEECOF-6 is that there is no clear winter season temperatures signal for the region of Serbia, and thus it is impossible to make a verification of the seasonal climate outlook.

In most part of Serbia precipitation quantity was above normal, except at a station located in the farthest east of the country, where it was within the range of normal values.

The SEECOF-6 seasonal precipitation outlook for winter 2011/2012, which forecasted that precipitation quantity would be below normal, is not in accordance with the recorded mean winter precipitation quantity.