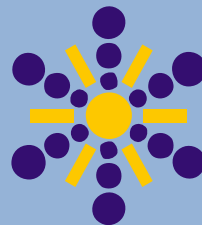


Mountaines around Sarajevo in January<sup>1</sup>



<http://fhmzbih.gov.ba>

Average air temperatures during climatological winter 2013th – 2014 years (1 December 2013 th year - 28 February 2014th year) ranged from 3.9°C to 9.6°C to Drvar in Stolac. In the mountainous areas, average temperatures were in the range of -2.8°C on Mt to 2.8°C at John saddle. Temperature departures from normal values during the winter, which refers to the period (1961-1990) were positive at all stations and ranged from 3.1°C on Mt to 4.6°C in Bugojno. By percentage temperature values into the category of extremely warm.

Mean monthly temperature in December 2013th year were observed in most parts of the territory just above or within the limits of long-term averages. Temperature deviations from the average values ranged from 0.3°C to 2.0°C to Stolac on Mt. January of 2014. Year was much hotter compared to the October perennial medium temperature related to the period (1961-1990). Deviations in January 2014th year ranged up to 6.3°C in Bugojno and Zenica. Mean monthly temperatures during February were higher than the average temperature. The maximum deviation compared to the average monthly values were recorded in Bugojno of 6.6°C. Extremely hot in January of 2014. Registered at all stations, and in February the MS Bugojno, Drvar, Ivan Sedlo, Livno, Mostar, Stolac and Zenica.

STATION	DEVIATIONS (°C)				PERCENTILES
	DECEMBER	JANUARY	FEBRUARY	WINTER 2013 -14	
Bihać	1,9	6,1	3,7	3,9	100
Bjelašnica	2,0	3,7	3,8	3,1	100
Bugojno	1,0	6,3	6,6	4,6	100
Drvar	1,1	5,5	4,8	3,8	100
Gradačac	1,5	5,6	4,2	3,7	100
Ivan Sedlo	1,8	5,8	4,7	4,4	100
Livno	1,1	4,8	5,3	3,7	100
Mostar	1,3	3,7	3,7	2,8	100
Sarajevo	0,4	5,9	6,3	4,2	100
Sanski Most	0,7	6,0	4,5	3,7	100
Stolac	0,3	3,8	4,1	3,8	100
Tuzla	0,5	6,1	5,0	3,8	100
Zenica	0,5	6,3	5,8	4,2	100

Table 1 Deviation medium winter temperatures compared to the climactic standard normal and the corresponding percentiles

STATION	MONTH			STATION	MONTH		
	December	January	February		December	January	February
Bihać	Extremely warm	Extremely warm	Extremely warm	Mostar	Extremely warm	Extremely warm	Extremely warm
Bjelašnica	Extremely warm	Extremely warm	Extremely warm	Sarajevo	Extremely warm	Extremely warm	Extremely warm
Bugojno	Extremely warm	Extremely warm	Extremely warm	Sanski Most	Extremely warm	Extremely warm	Extremely warm
Drvar	Extremely warm	Extremely warm	Extremely warm	Stolac	Extremely warm	Extremely warm	Extremely warm
Gradačac	Extremely warm	Extremely warm	Extremely warm	Tuzla	Extremely warm	Extremely warm	Extremely warm
Ivan Sedlo	Extremely warm	Extremely warm	Extremely warm	Zenica	Extremely warm	Extremely warm	Extremely warm
Livno	Extremely warm	Extremely warm	Extremely warm				

Extremely warm	Very warm	warm	normaly	cold	Very cold	Extremely cold
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Table 2 Overview of marks mean temperature during the winter months by using percentile

Absolute maximum and minimum in the winter are not exceeded.

Deviations medium temperature days period in December compared to the average values were negative at a number of stations during the second week. In January the average temperature deviations days period temperatures were extremely high in the first and second decade of the month. The largest deviations were recorded in the second decade of the month. MS Bihać second decade of January was 11.8°C warmer compared to the average for the same period. In February, the largest deviations were recorded in the second decade of the month.

	december			january			february		
<b>Bihać</b>	0,4	-1,7	6,4	9,1	11,8	-2,3	1,5	5,6	3,8
<b>Gradačac</b>	0,4	-2,2	6,2	6,9	11,6	-1,2	1,5	6,5	5,0
<b>Livno</b>	0,2	0,6	2,4	6,4	7,1	1,4	4,6	7,0	3,9
<b>Mostar</b>	0,5	1,4	1,8	6,3	5,7	0,5	2,5	5,3	3,0
<b>Sarajevo</b>	-0,9	-1,5	3,5	7,8	9,4	1,3	5,5	8,7	4,3
<b>Tuzla</b>	-1,8	-2,5	5,4	7,8	10,0	1,1	3,6	6,6	4,5

Table 3 Deviations days period of secondary value in relation to the long term average

STANICA	Extremely warm days			Extremely cold days		
	september	oktober	november	september	oktober	november
<b>Bihać</b>	0	4	1	0	0	0
<b>Bjelašnica</b>	0	0	1	0	2	2
<b>Livno</b>	0	1	1	0	1	0
<b>Mostar</b>	0	0	0	0	1	0
<b>Sarajevo</b>	0	3	0	0	0	0
<b>Sanski Most</b>	0	0	1	0	2	1
<b>Tuzla</b>	0	1	1	0	3	0

Table 4 Extremely warm and extremely cold days<sup>2</sup> per month during the fall 2013.

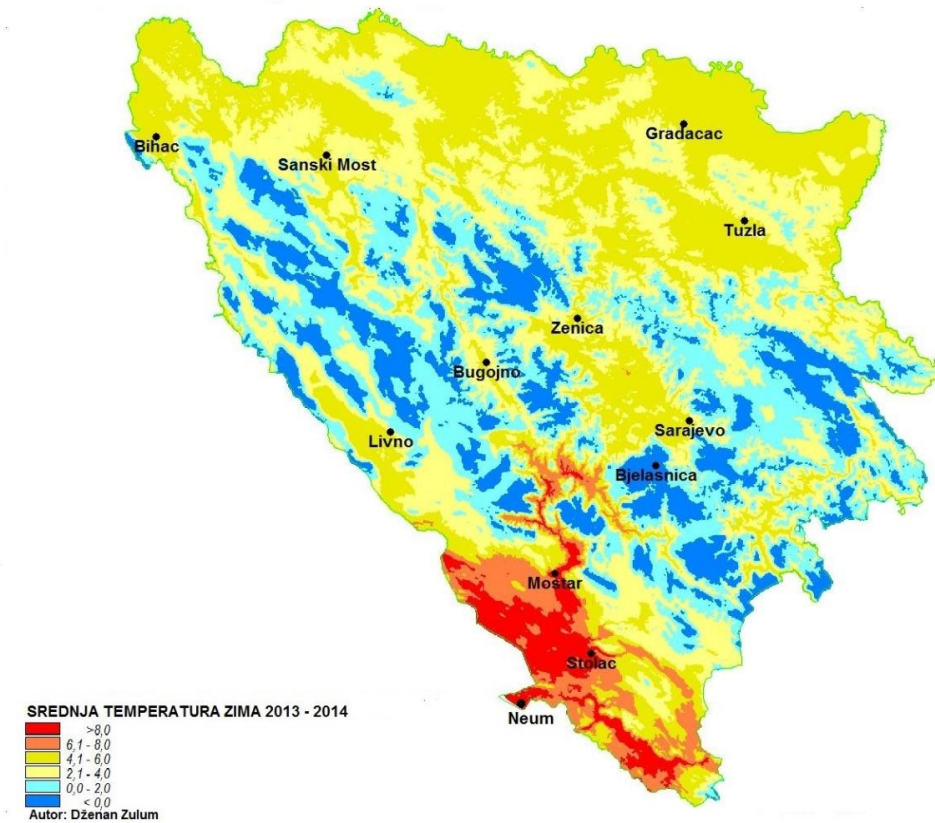


Fig.1 The spatial distribution of mean temperatures during winter 2013-2014. Year (oC)

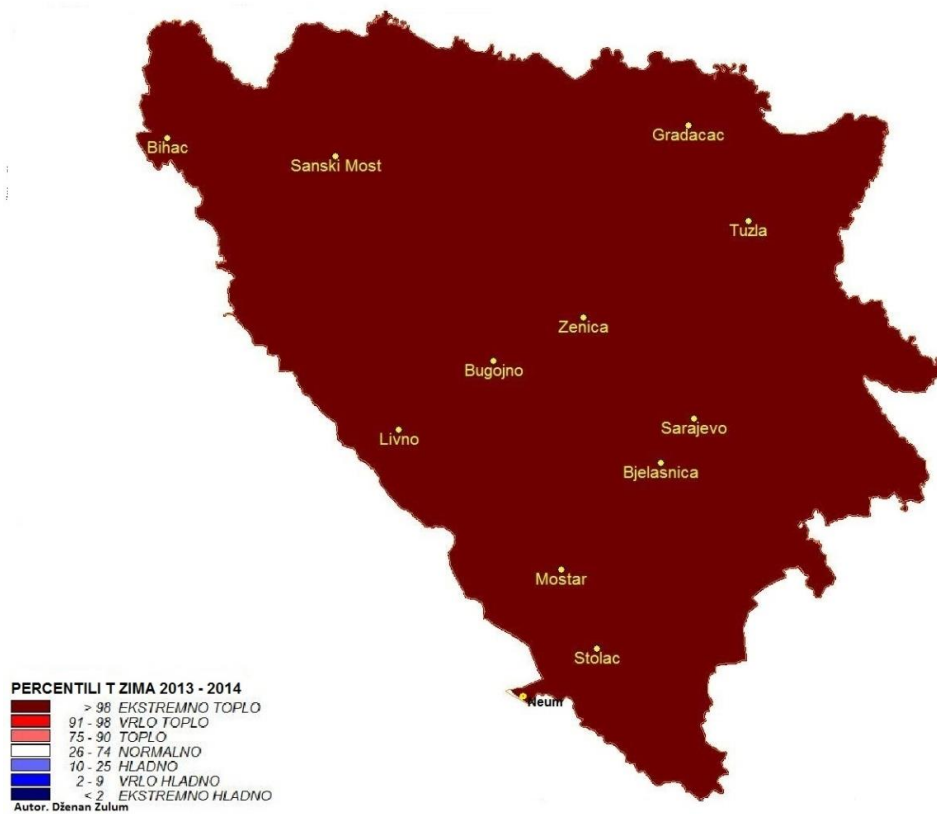
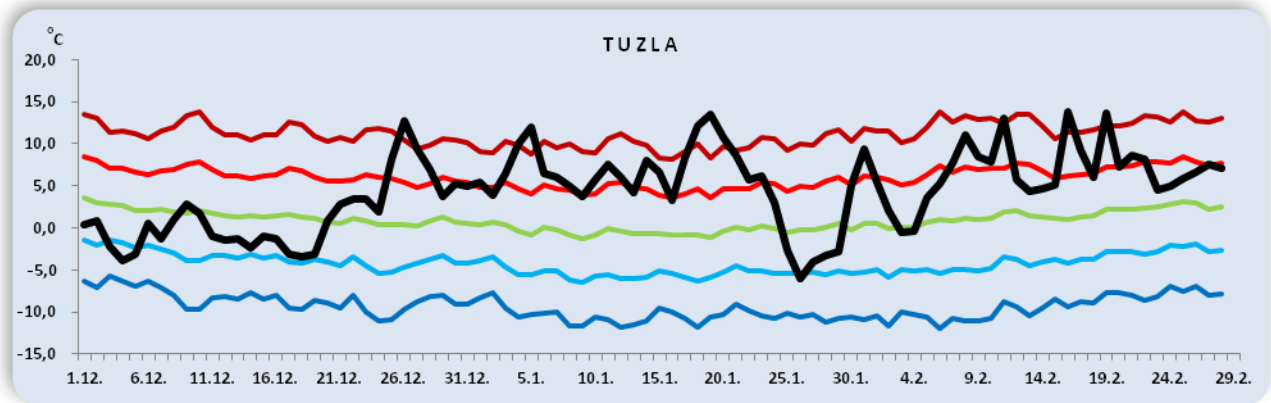
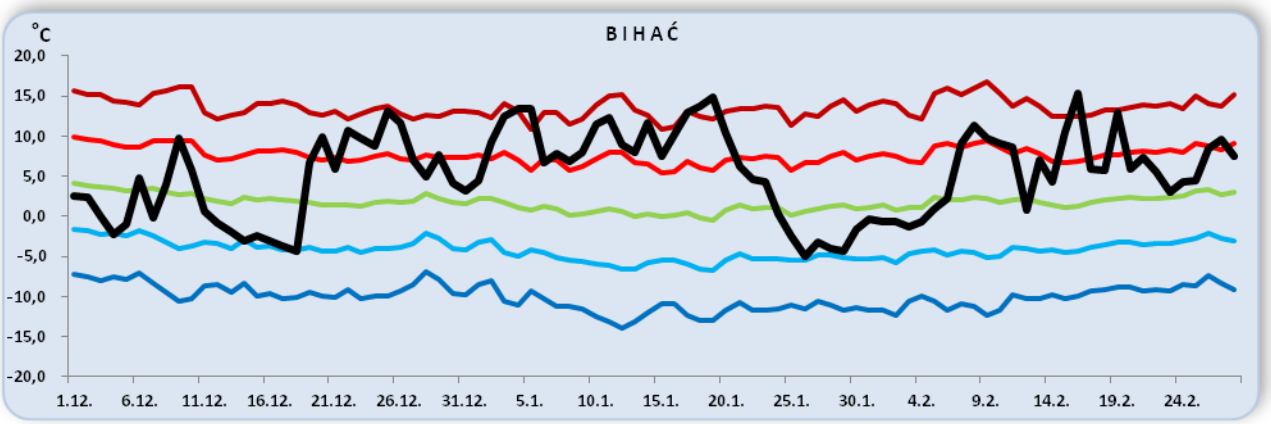
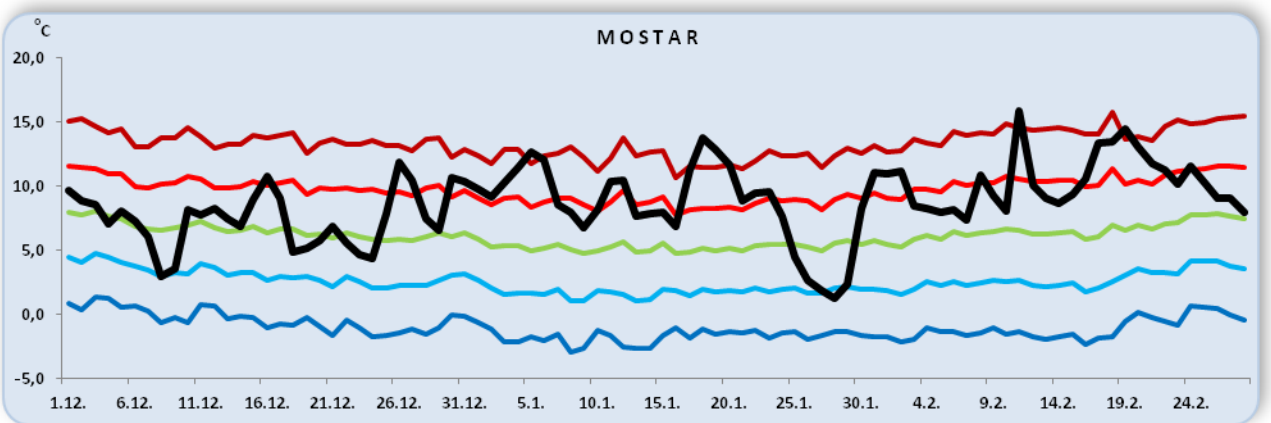
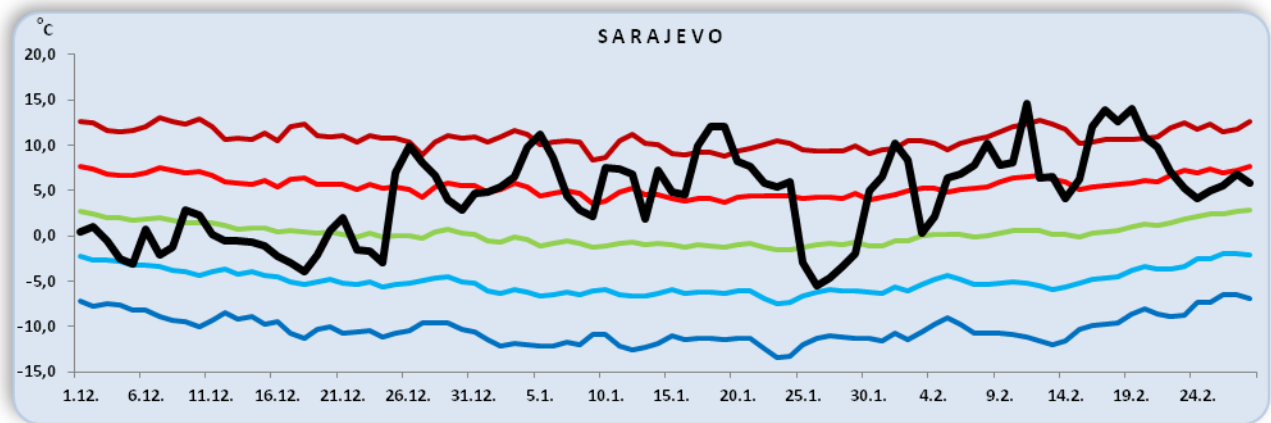


Fig 2 The spatial distribution of mean temperatures during winter 2013-2014 using the percentile



Graph 1-4 average diurnal air temperature during winter 2013-2014 year

The total amount of rainfall during the winter 2013-2014 year were within the limits of long-term averages in the southern, western and southwestern areas of Bosnia and Herzegovina. On the northern and northeastern regions of precipitation were below the average of the sum of the considered period. Total precipitation ranged from 63.9 l/m<sup>2</sup> Gradačac to 514.2 l/m<sup>2</sup> in Mostar. Deviations from the average amount of precipitation ranged from 34.1% in Gradačac to 118.6% in Livno. By percentage amount of precipitation classify the categories of extremely dry, very dry, dry and normal. Precipitation during December were well below long-term averages in most parts of the country. In January and February rainfall amounts were mostly within the limits of the sum of the average for the reference period.

STATION	DEVIATIONS (%)				PERCENTILES
	DECEMBER	JANUARY	FEBRUARY	WINTER 2013 -14	
<b>Bihać</b>	18,1	107,1	193,3	100,4	41
<b>Bjelašnica</b>	14,4	116,9	94,3	74,8	39
<b>Bugojno</b>	6,6	138,3	73,1	62,7	21
<b>Drvar</b>	13,2	164,2	23,7	126,7	77
<b>Gradačac</b>	3,9	47,0	54,4	34,1	1
<b>Ivan Sedlo</b>	19,8	141,7	55,5	107,0	63
<b>Livno</b>	35,3	208,4	143,1	118,6	67
<b>Mostar</b>	15,8	173,0	133,0	103,7	56
<b>Sarajevo</b>	7,0	77,4	29,7	36,5	3
<b>Sanski Most</b>	3,7	77,4	138,5	65,9	13
<b>Stolac</b>	33,6	175,2	97,3	97,0	45
<b>Tuzla</b>	2,8	48,9	71,0	37,9	1
<b>Zenica</b>	5,8	52,7	61,3	36,1	3

Table 5 Deviation autumn rainfall amounts in relation to the climactic standard normal and the corresponding percentiles

STATION	MONTH			STATION	MONTH		
	December	January	February		December	January	February
<b>Bihać</b>				<b>Mostar</b>			
<b>Bjelašnica</b>				<b>Sarajevo</b>			
<b>Bugojno</b>				<b>Sanski Most</b>			
<b>Drvar</b>				<b>Stolac</b>			
<b>Gradačac</b>				<b>Tuzla</b>			
<b>Ivan Sedlo</b>				<b>Zenica</b>			
<b>Livno</b>							

	Ekstremely dry		Very dry		Dry		normaly		Rainy		Very rainy		Ekstremely rainy
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Table 6 Overview of assessment the amount of precipitation during the winter months by using percentile

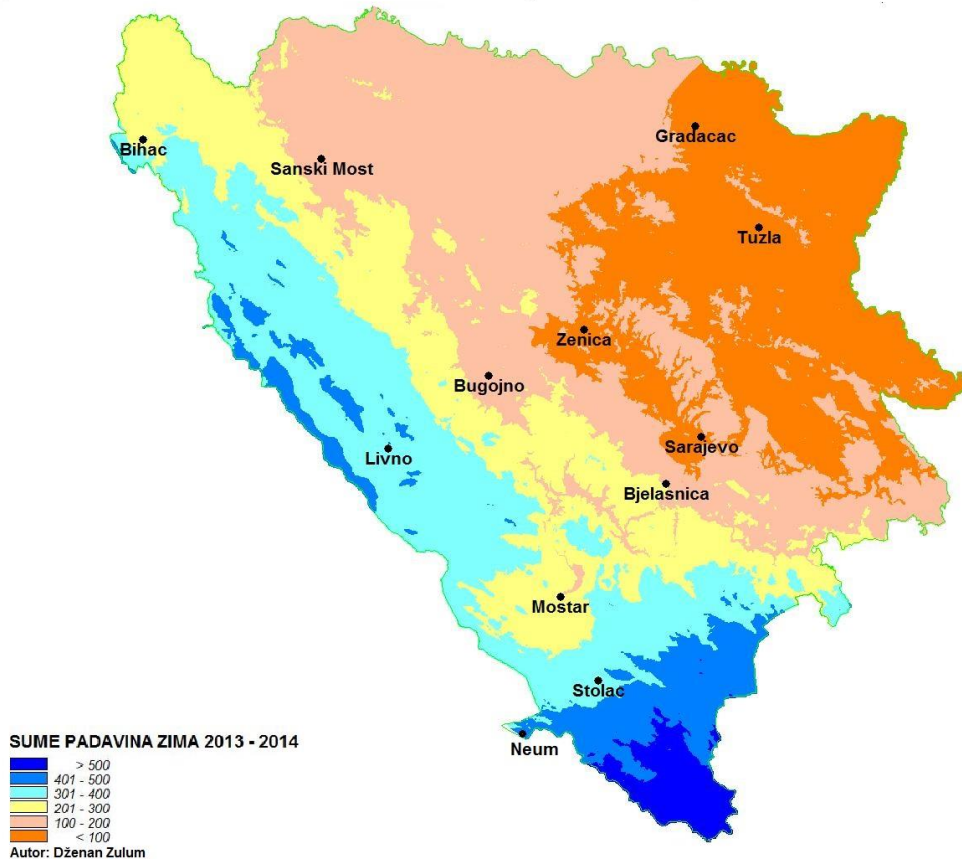


Fig 3 Spatial distribution of precipitation in the winter 2013-2014 year(l/m<sup>2</sup>)

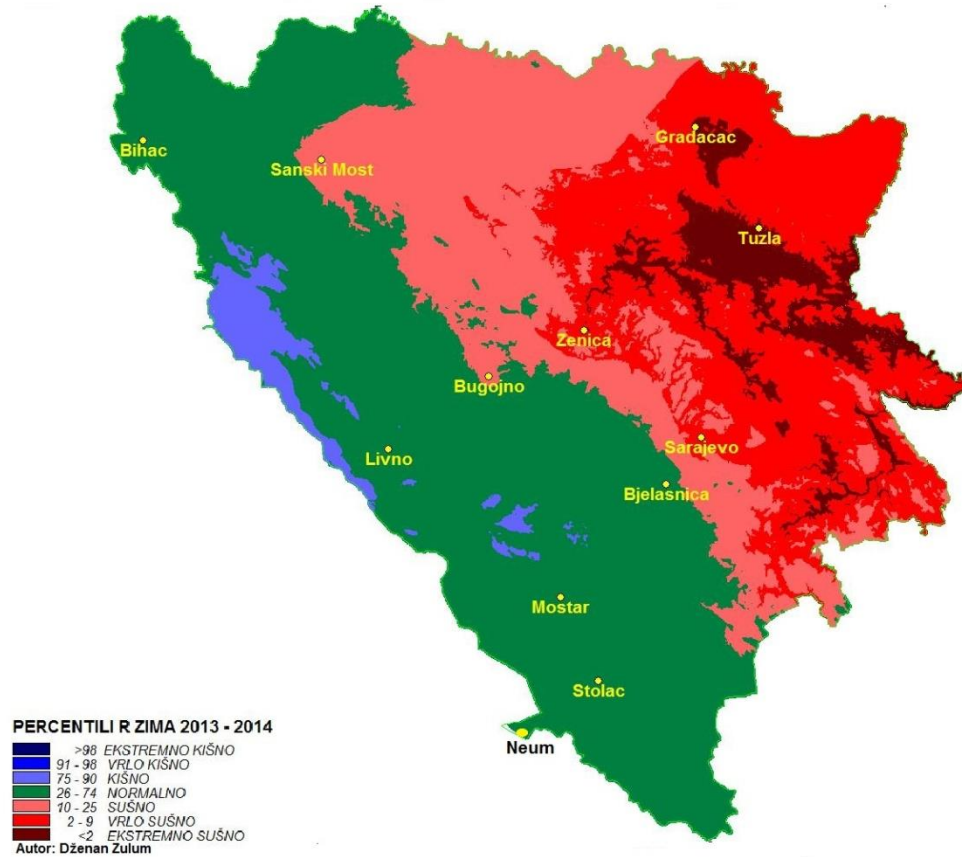
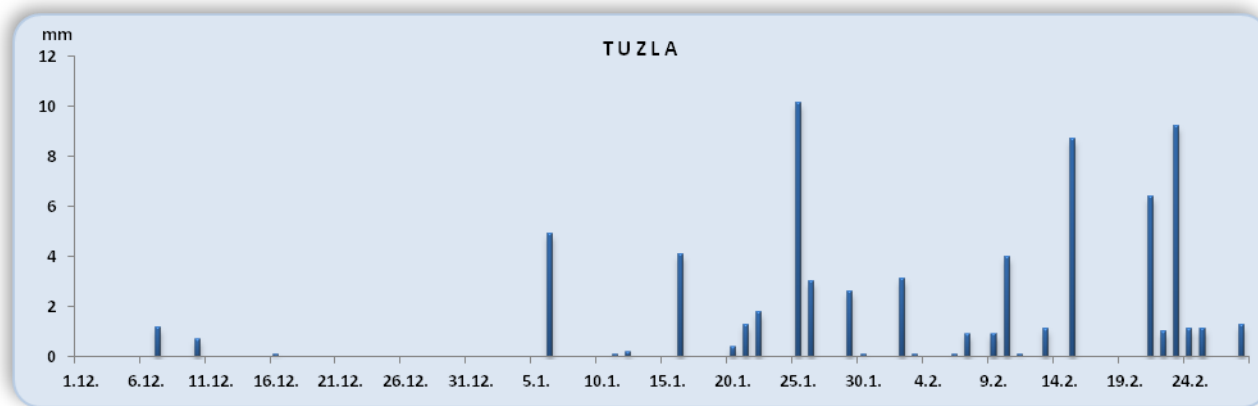
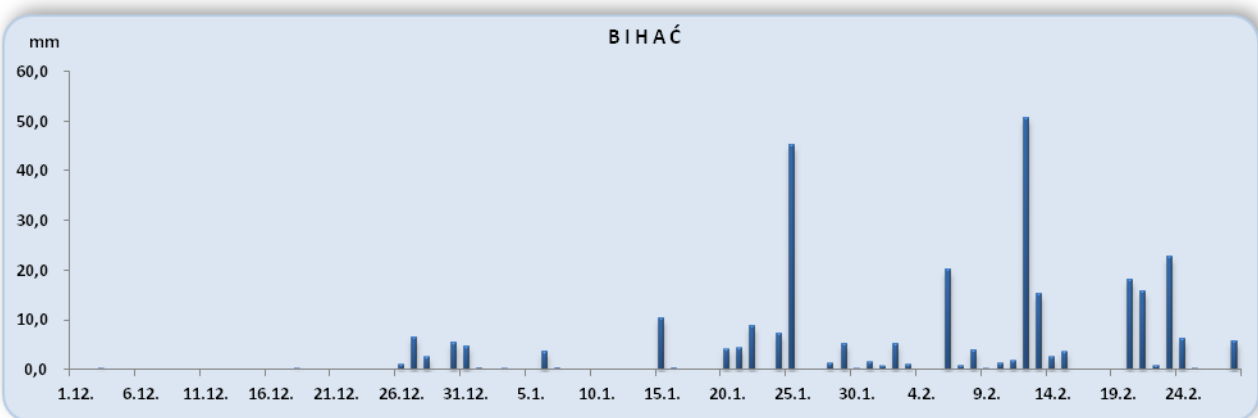
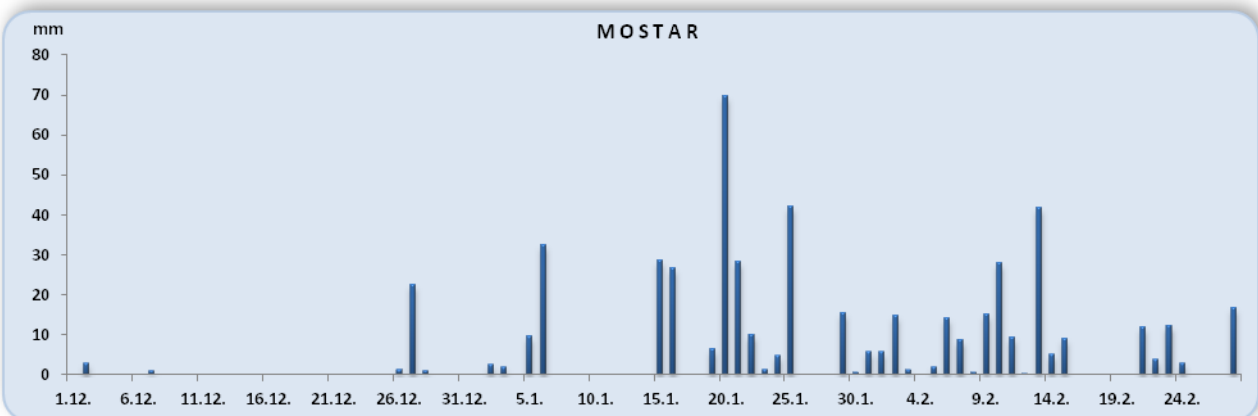
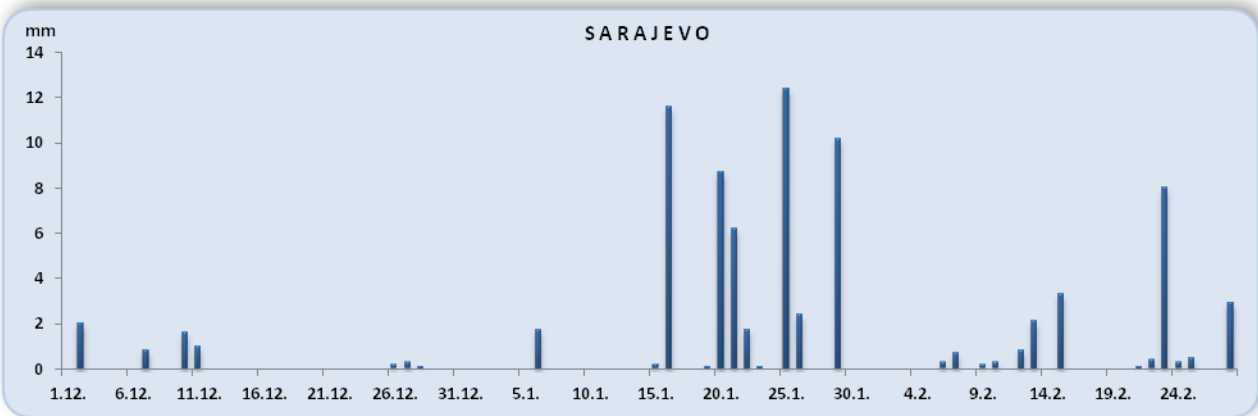


Fig 4 Spatial distribution of the total amount of precipitation during the winter of 2013-2014 using the percentile



Graph 5-8 daily precipitation during the winter 2013-2014 year



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<sup>1</sup>Foto: Dženan Zulum

<sup>2</sup> Analysis of the mean daily temperatures for the meteorological station in Sarajevo, Mostar, Tuzla, Bihać, Livno, Sanski Most and Bjelašnica refers to multi-year budget temperature and standard deviation. According to the criteria exceptionally warm day is considered to be one in which the average daily temperature is greater than the average years of temperature plus two standard deviations, a very cold day is considered to be one in which the average daily temperature is less than the middle years of the temperature minus two standard deviations.