

CLIMATOLOGICAL ANALYSIS

SEASON

SUMMER 2020



BOSNIA AND HERZEGOVINA
FEDERATION OF BOSNIA AND HERZEGOVINA
FEDERAL HYDROMETEOROLOGICAL INSTITUTE

CLIMATOLOGICAL ANALYSIS SEASONE SUMMER 2020.

Sarajevo, September 2020.

Mean air temperatures during the climatological summer 2020 (1st June – 31st August 2020.) ranged between 20,6 °C in Bugojno and 26,7°C in Mostar. On the mountain areas air temperatures were in the range of 10,0 °C on Bjelasnica to 16,2 °C on Ivan-sedlo. Temperature deviations from the normal values during the summer, which covers the period (1961.-1990.) were above normal. Deviation of the mean temperature than the average winter temperature ranged from 0,7 °C on Ivan-sedlo to 2,0 °C in Bugojno, Drvar and Gradacac. By percentage temperature values are classified into the category of very warm and extremely warm.

STATION	DEVIATION (°C)				PERCENTILES
	JUNE	JULY	AUGUST	SUMMER	
Bihać	1,5	1,1	2,9	1,8	100
Bjelašnica	0,4	0,8	2,3	1,2	91
Bugojno	1,5	1,6	2,8	2,0	98
Drvar	1,0	1,5	3,2	2,0	100
Gradacac	1,2	1,6	3,2	2,0	100
Ivan-sedlo	0,2	0,1	1,7	0,7	90
Livno	0,6	1,6	3,0	1,8	99
Mostar	0,4	1,8	2,2	1,5	96
Neum	0,4	1,2	3,2	1,6	100
Sarajevo	1,1	1,2	2,6	1,6	97
Sanski Most	1,1	1,0	3,2	1,4	99
Tuzla	0,8	1,1	2,5	1,5	98
Zenica	1,5	1,5	1,9	1,6	97

Table 1 Deviation middle of winter air temperatures in relation to cli standard normal and the corresponding percentiles

STATION	MOUNTH			STANICA	MOUNTH		
	June	July	August		June	July	August
Bihać				Livno			
Bjelašnica				Mostar			
Bugojno				Neum			
Drvar				Sarajevo			
Gradacac				Sanski Most			
Ivan-sedlo				Tuzla			
Jajce				Zenica			

	extremely warm	very warm	warm	normal	cold	very cold	extremely cold
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Table 2 Overview of marks mean temperature during the winter months by the method of percentiles

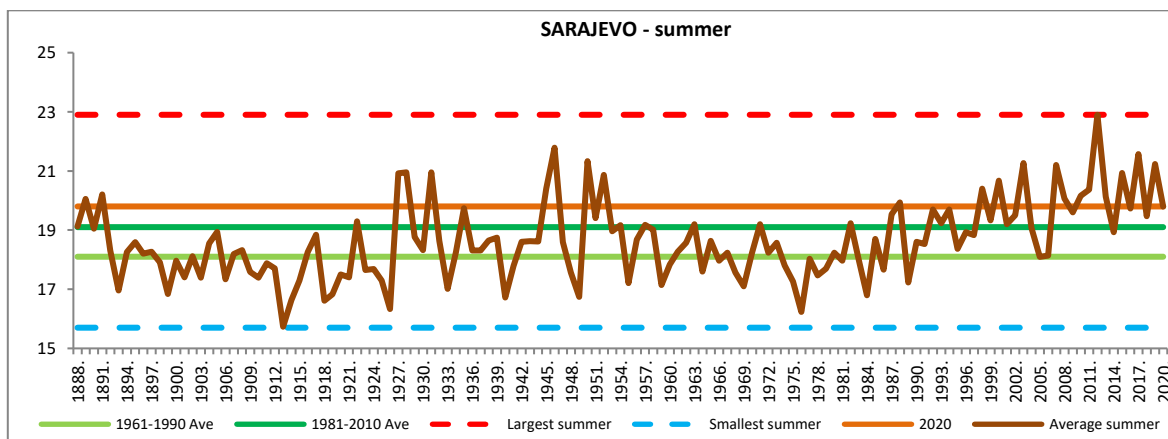
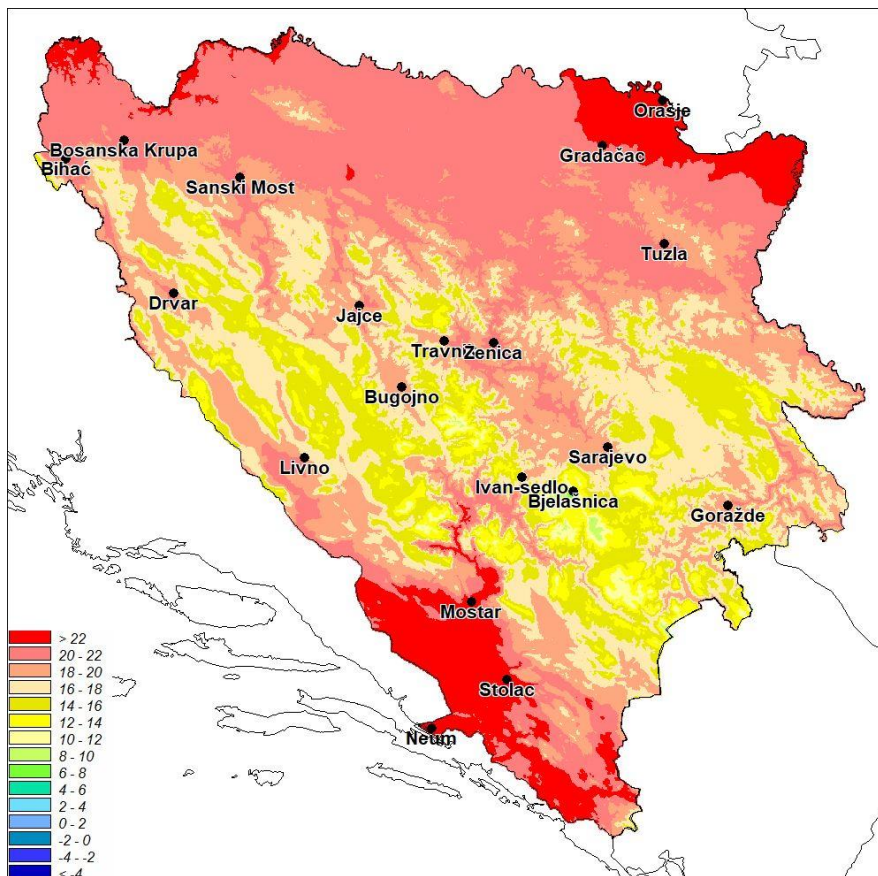
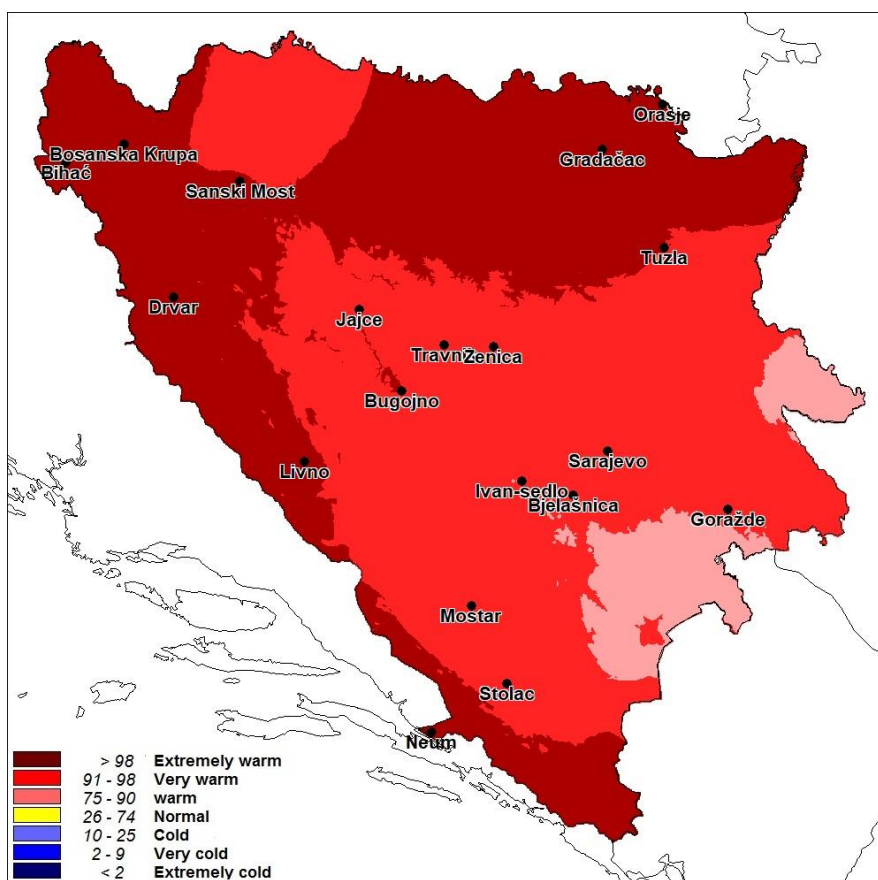


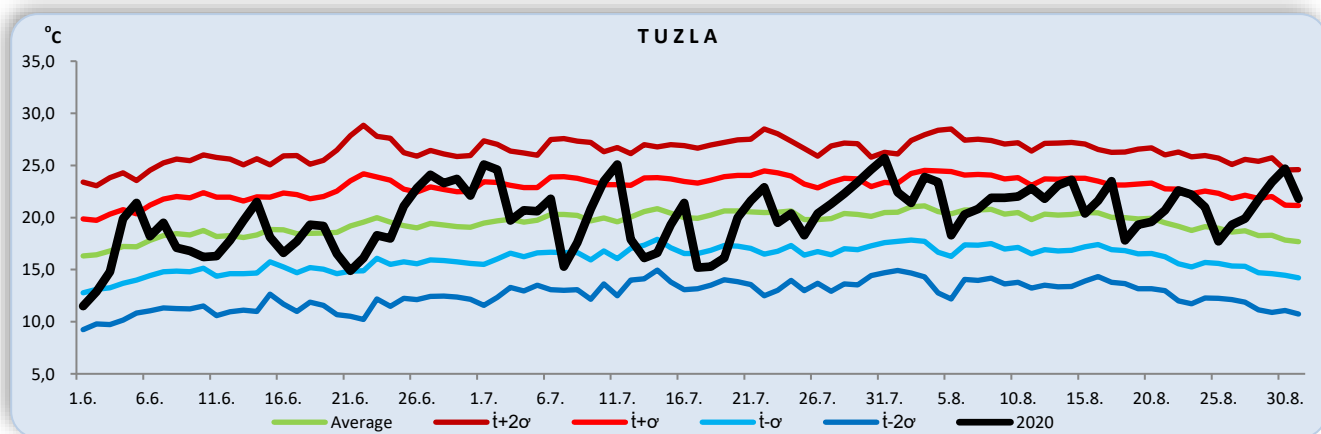
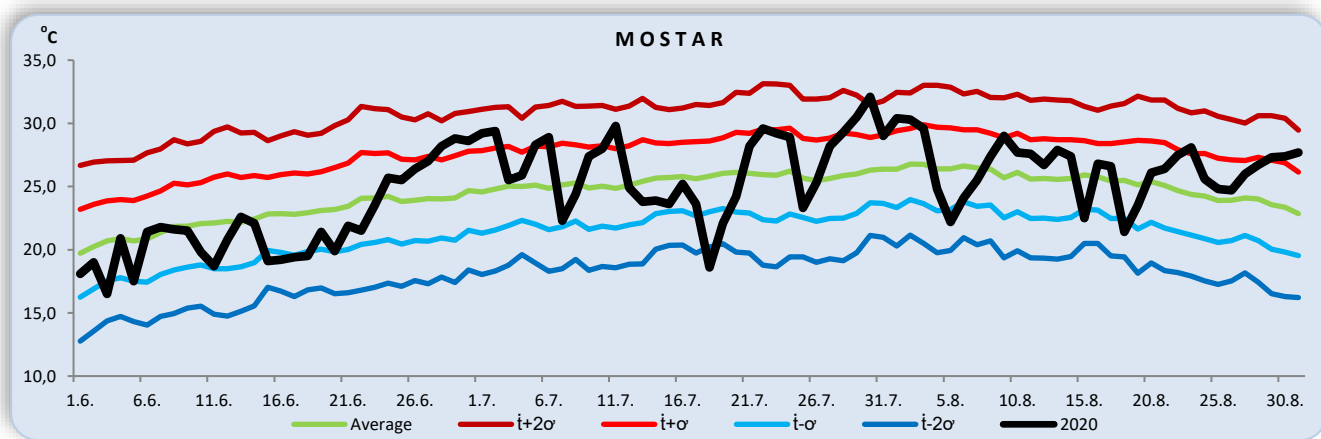
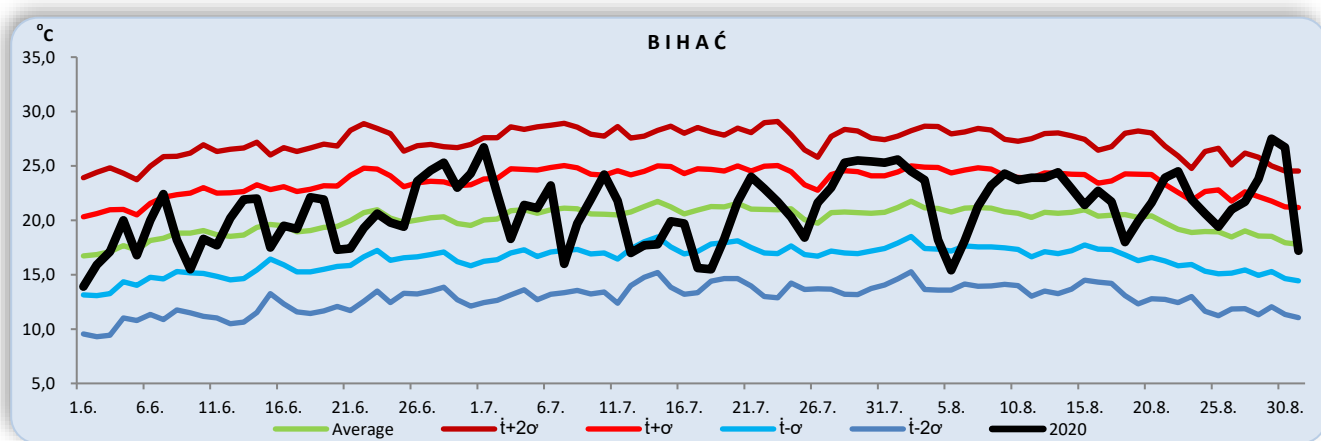
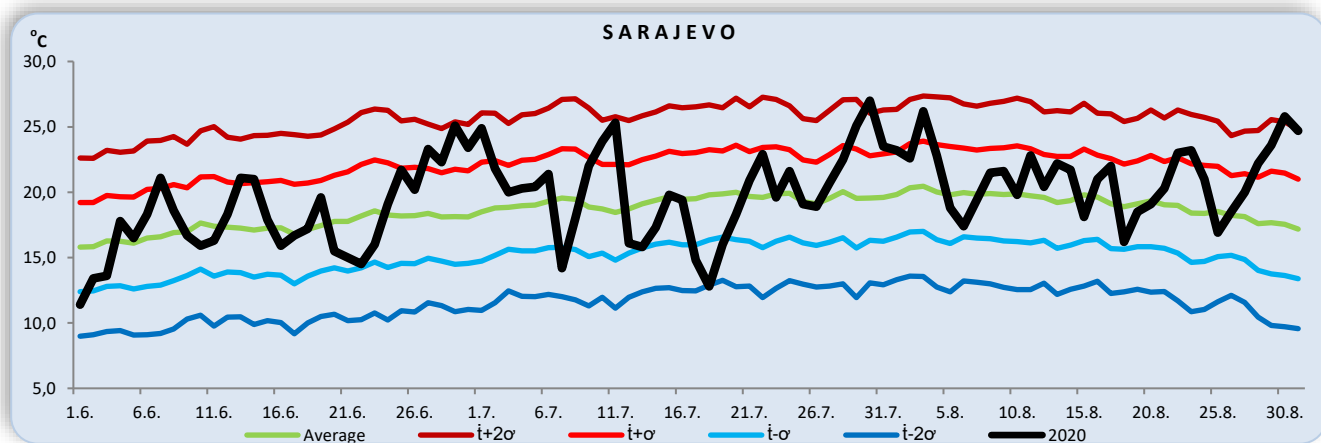
Table 3 Summer temperature in Sarajevo



Map 1 Mean air temperature summer 2020. year (°C)



Map 2 Air temperature during summer 2020. using percentile method compared to the 1961-1990 base period



Graph 1-4 Mean daily air temperatures during summer 2020. Year

Analysis of the monthly amount of precipitation expressed in % of average values shows that during the summer 2020, deviations from normal precipitation amounts ranged from 49,9 % in Drvar, to 150,0 % in Tuzla. By percentage amounts of precipitation are classified into categories of normal, rain and very rain.

The measured amounts of precipitation were in the range of 130,4 mm in Drvar to 432,9 mm in Tuzla.

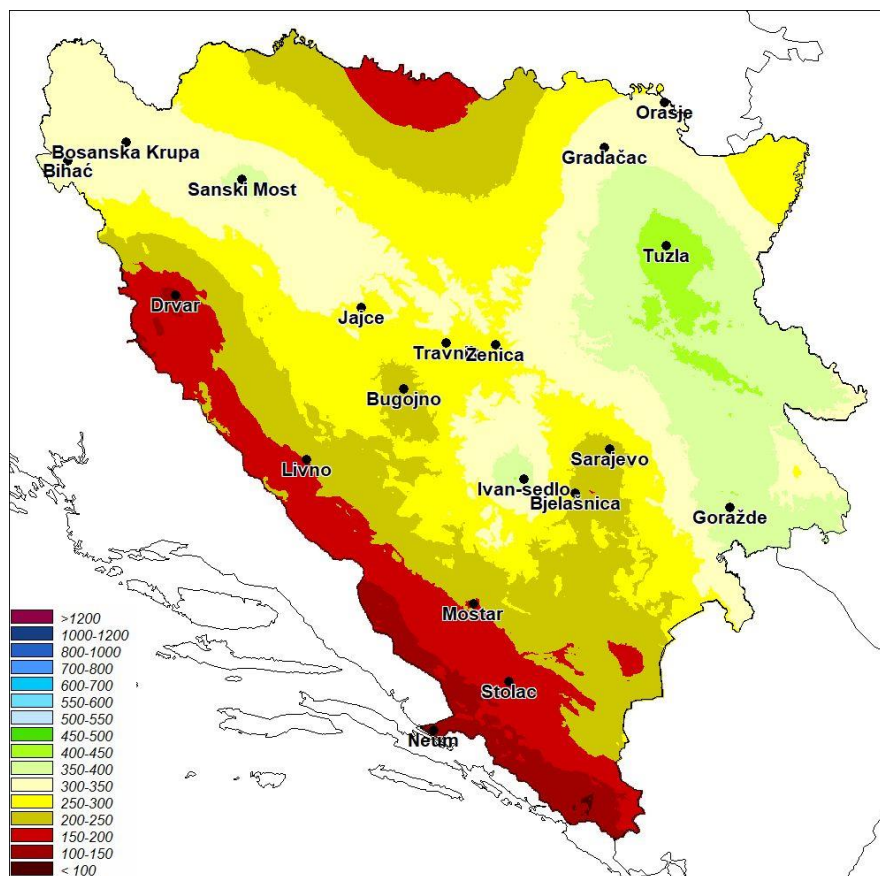
STATION	DEVIATION (%)				PERCENTILES
	JUNE	JULY	AUGUST	SUMMER ¹	
Bihać	86,2	107,9	108,4	100,8	48
Bjelašnica	81,3	78,1	66,7	75,8	21
Bugojno	57,5	139,1	134,9	106,9	58
Drvar	76,0	29,7	37,9	49,9	3
Gradačac	171,2	117,1	99,9	132,5	86
Ivan-sedlo	106,7	98,1	205,7	138,2	84
Livno	63,9	110,2	115,1	92,4	44
Mostar	110,2	75,3	109,1	102,1	50
Neum	113,0	138,3	56,1	92,8	50
Sarajevo	101,2	61,0	105,2	89,0	40
Sanski Most	121,8	91,9	170,9	127,4	84
Tuzla	144,8	135,2	173,4	150,0	95
Zenica	87,1	110,8	205,9	132,0	86

Table 5 Deviation summer precipitation in relation to the climatological standard normal and the corresponding percentiles

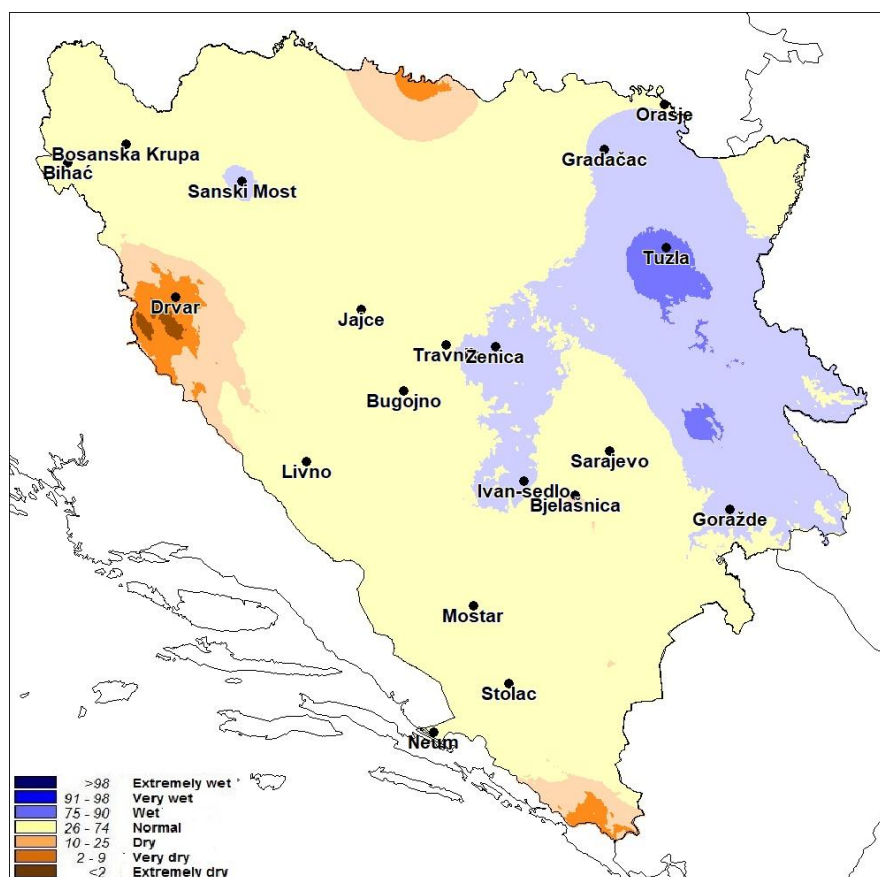
STATION	MOUNTH			STATION	MOUNTH		
	June	July	August		June	July	August
Bihać				Livno			
Bjelašnica				Mostar			
Bugojno				Neum			
Drvar				Sanski Most			
Gradačac				Sarajevo			
Ivan Sedlo				Tuzla			
Jajce				Zenica			

	Extremely dry		Very dry		dry		normal		wet		Very wet		Extremely wet
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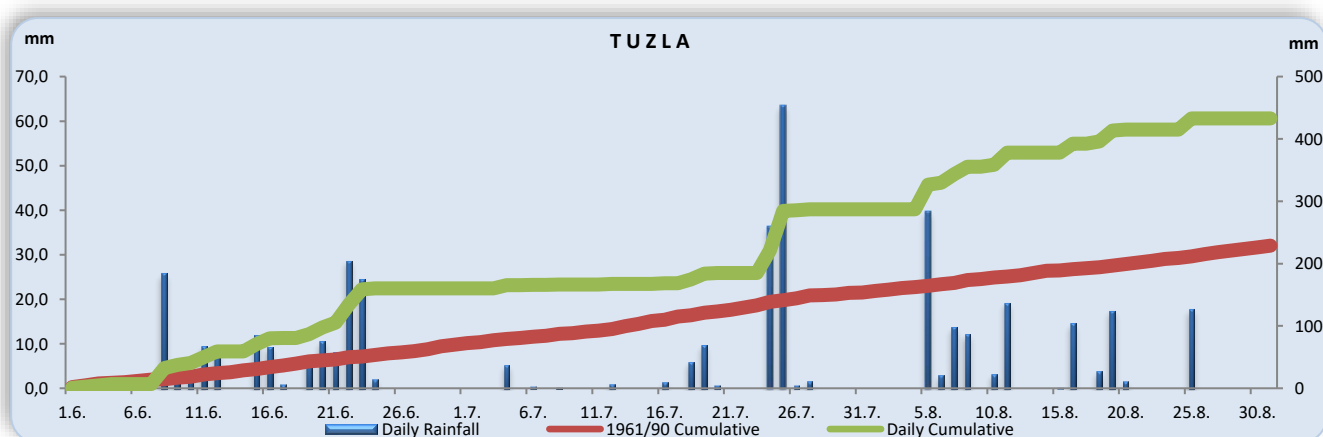
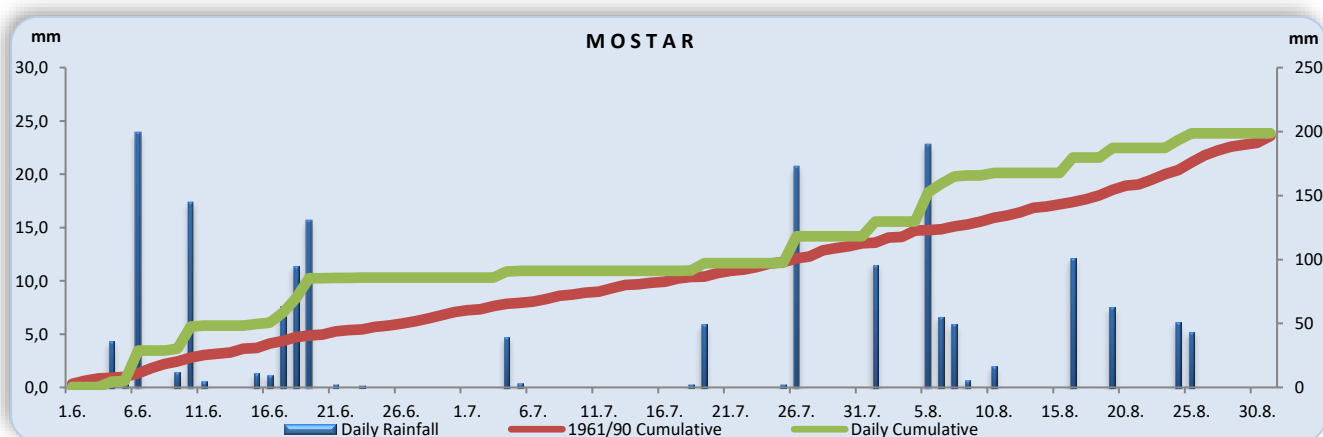
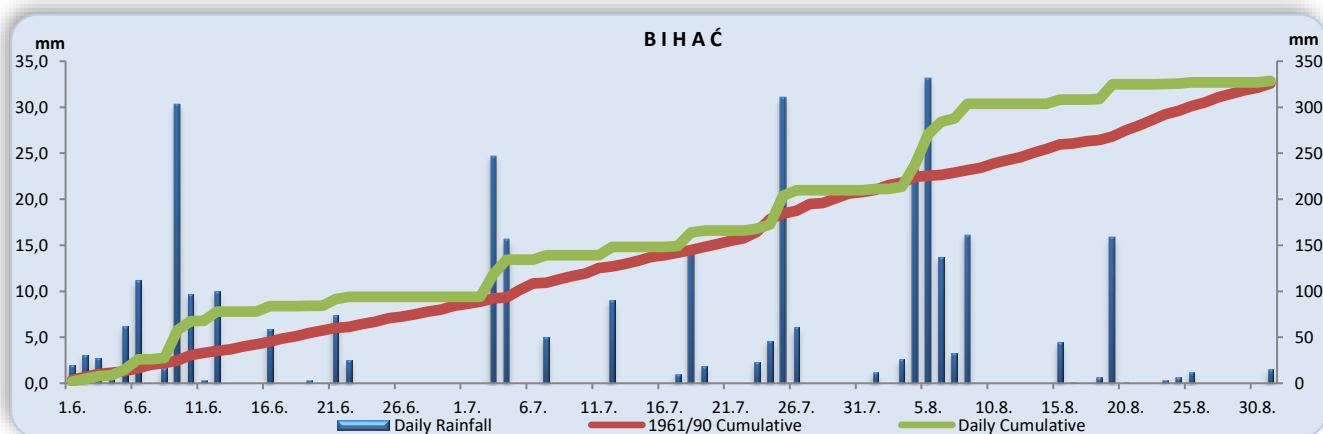
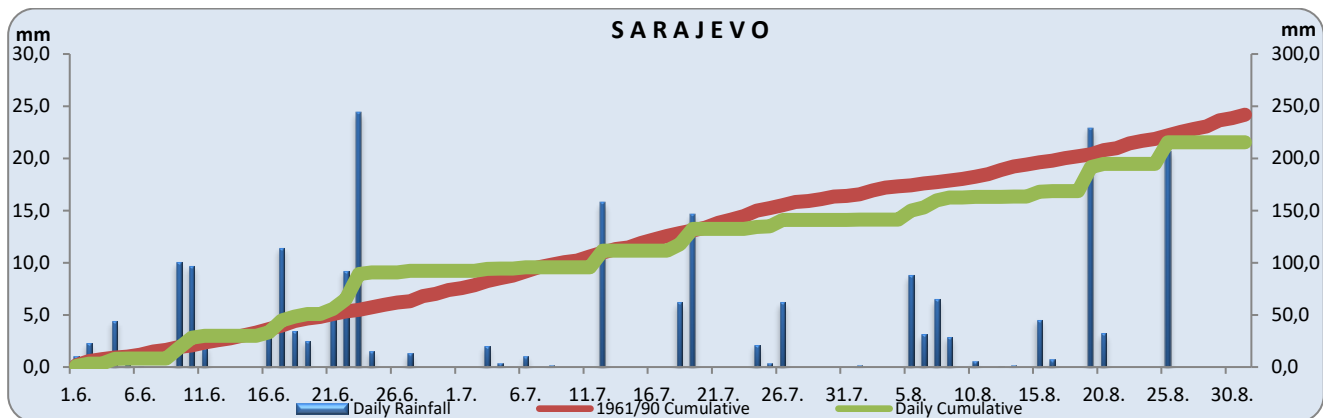
Table 6 Overview of marks on precipitation by month basis percentile



Map 3 Amount precipitation – summer 2020, year (mm)



Map 4 Precipitation sums using percentile method during summer 2020 compared to the base period (1961 – 1990)



Graph 5-8 daily and cumulative rainfall in the summer 2020 year.

Season		Air Temperature (°C)					Precipitation sums (mm)			
Station	Rank*	33	50	66	Observed value	Rank**	33	50	66	Observed Value
Sarajevo	8	19,6	19,2	18,7	19,8	20	258	228	202	328
Mostar	13	25,1	4,6	24,3	24,9	10	189	158	141	199
Bihać	14	20,6	20,2	19,8	21,0	9	325	274	232	328
Tuzla	10	20,2	19,5	19,0	20,1	4	332	282	251	433
Zenica	11	20,8	20,0	19,6	20,6	6	265	242	193	285
Bugojno	9	19,2	18,5	18,1	19,3	13	248	201	186	218
Gradačac	7	21,9	21,1	20,8	22,1	4	258	240	227	343
Livno	10	19,3	18,6	18,3	19,3	14	211	185	158	201
San Most	11	20,6	19,9	19,6	20,3	2	299	262	228	373
Bjelašnica	13	10,3	9,8	9,4	10,0	26	336	278	247	222

*Rank – 1981-2010. (period) – warmest season

**Rank – 1981-2010. (period) – highest seasonal precipitation

Country	Seasonal temperature JJA		Seasonal precipitation JJA		High Impact Events
	Observed	SEECOF - 23 climate outlook for temperature	Observed	SEECOF - 23 climate outlook for precipitation	
Bosnia and Herzegovina (FBiH)	Above normal I in almost entire Bosnia and Herzegovina (very warm and extremely warm)	Above normal (10, 30, 60) In Bosnia and Herzegovina	Below normal southwest Bosnia; Normal and above normal Central, West, East and South Bosnia and Herzegovina.	Below normal (50,30,20)	- July 25 th 63 mm – 1 hours. - August Extremely warm for 60-70% territories

¹ The actual amount of precipitation compared to the average sum

Photo: Alen Lošić

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