

National Climate Bulletin and the assessment of the SEECOF-22

Climate outlook for NHMS for previous season (summer 2019)

Highlights:

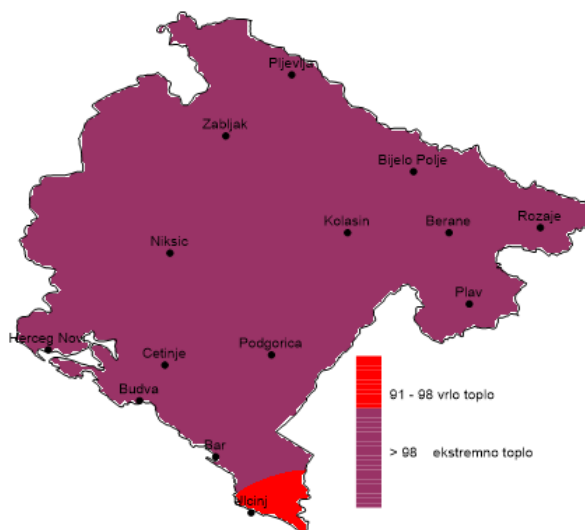
(prepared by Slavica Micev)

Assessment were done with respect to two periods 1961-1990 (by percentiles) and 1981-2010 (by terciles).

According to the percentiles and with respect to the 1961-1990 period the average air temperature in the summer 2019 was in category **very warm and extremely warm** (figure 1, left). The total precipitation amount was in category **normal, dry and wet** (figure 1, right).

- The average air temperature was in the range from the 16.1 °C in Zabljak (mountainous region) to the 27.8 °C in Podgorica (southern part of the central region).
- The temperature anomalies with respect to climatological mean 1961-1990 were positive and in the range from the 1.7 °C in Ulcinj (southern coastal region) to the 4.2 °C in Rozaje (eastern mountainous region). Podgorica – the capital town had for 2.9 °C higher average temperature than normal.
- The tropical days were in the range from the 3 in Zabljak to the 83 in Podgorica. The number of tropical nights were in the range from the 3 in Niksic to the 72 days in Podgorica and Budva;
- The amount of summer precipitation was in the range from the 137 mm in Budva (southern coastal region) to the 319 mm in Cetinje (central region). Podgorica had the 176 mm of rain what is for the 9% higher than normal.
- The percentage from the climatological mean 1961-1990 was from the 62% in Niksic to the 172% in Ulcinj.

Raspodjela percentila temperature vazduha za ljeto 2019.godine



Raspodjela percentila kolicine padavina za ljeto 2019.godine

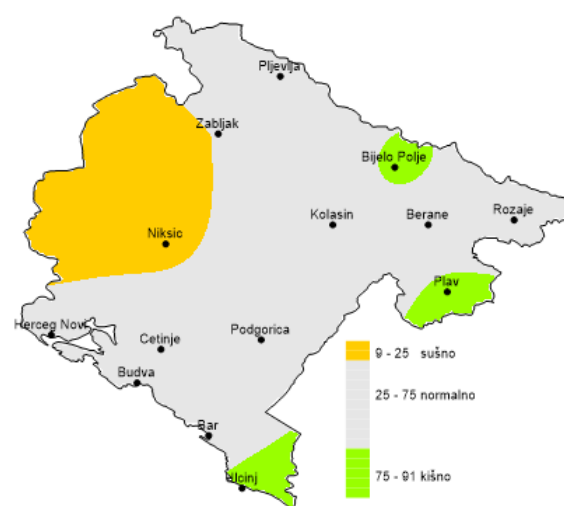


Figure 2. Summer - Percentile distribution of temperature anomalies (left) and precipitation (right) in Montenegro with respect to the 1961-1990 climatological mean

Analysis with respect to the reference period 1981-2010

Season	Rank*	Air Temperature (°C)				Observed value	Rank*	Precipitation sums (mm)			
		33	50	66	Observed value			33	50	66	Observed Value
Podgorica	6	25.5	25.9	26.4	28.0	45	101.8	129.3	186.3	191	
Bar	4	22.9	23.3	24.1	26.0	37	95.6	124.9	161.7	129	
Niksic	5	20.0	20.3	20.8	22.3	19	159.5	192.0	225.8	147	
Zabljak	6	13.8	14.3	14.7	15.6	33	194.5	218.5	235.7	225	
Bijelo Polje	5	18.7	19.1	19.4	21.4	57	141.4	192.2	213.9	267	

*Rank – period 1949-2019 period (warmest season and highest seasonal precipitation)

SEECOF – 20 Climate outlook validation

(prepared by Mirjana Ivanov)

Climate outlook statement for the summer 2019 has a close similarity with observed situation for the temperature and precipitation in Montenegro.

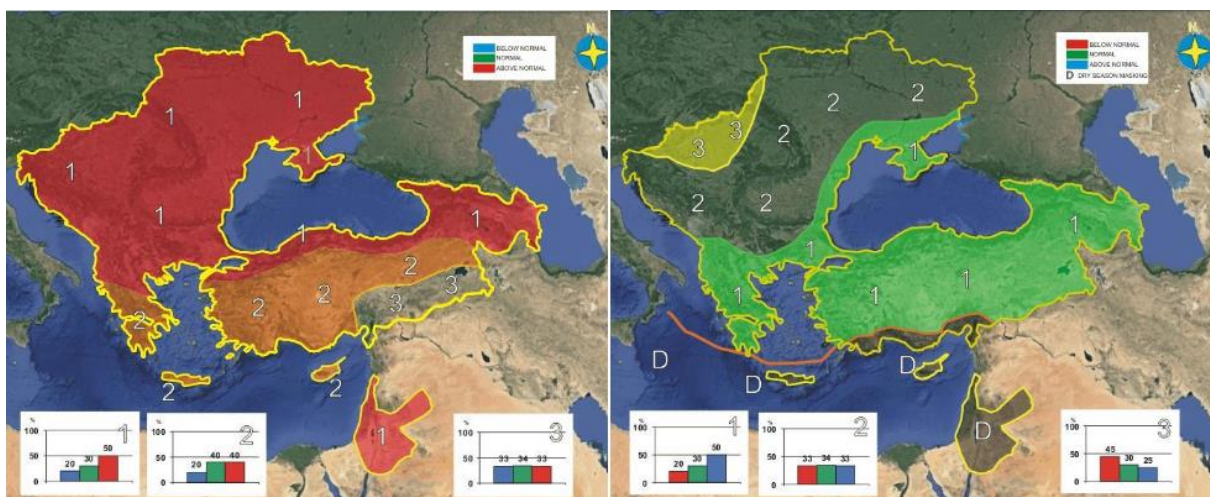




Figure 1. Graphical precipitation of the summer 2019 temperature (left) and precipitation (right) outlook

The outlook was good for Montenegro.

Country	Seasonal temperature (DJF)		Seasonal precipitation DJF		High Impact Events
	Observed	SEECOF-21 climate outlook for temperature	Observed	SEECOF-21 climate outlook for precipitation	
Montenegro	Very watm to	50% above normal	Normal, for the most of	34% above normal	The 4th July : Heavy hail impact in the northern mountainous region;

	<p>extremely warm</p>	<p>30% normal 20% below normal</p>	<p>the country, dry and wet</p>	<p>33% normal 33% above normal</p>	<p>Put Jasenovo polje-Savnik, 4. jul 2019.</p>  <p>https://www.vijesti.me/vijesti/drustvo/pogledajte-video-kad-grad-uhvati-na-putu-jasenovo-polje-savnik</p> <p>The 28th July: The storm surges hit Montenegrin coast as meteorologist forecasted.</p>  <p>Sveti Stefan (Foto: Danijela Lasica)</p> <p>Combination of the storm and surge consequences: https://www.vijesti.me/vijesti/drustvo/video-pogledajte-kako-izgleda-kad-talasi-i-vjetar-udruze-snage</p>
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