

National Climate Bulletin and the assessment of the SEECOF-30

Climate outlook for NHMS of Montenegro for winter 2023/24

Highlights

(prepared by Slavica Micev)

Assessments were done with respect to climatological normal 1991-2020.

According to the percentiles average temperature for winter 2023/2024 was in category “**extremely warm**”. Winter precipitation was in category “**normal**”, “**dry**”, “**very dry**”, figure 1.

Air temperature and precipitation anomalies

(prepared by Slavica Micev)

Average temperature was in range from +1.3 °C in Žabljak, Podgorica 10.2°C to 12.7 °C in Budva. Temperature anomalies were positive and in range from + 1.9 °C in Herceg Novi (coastal region) to +4°C in Rožaje (northern mountainous region) and in capital town Podgorica +2.8 °C higher than climatological normal for the winter.

The winter 2023/24 was the warmest winter since the measurements started. Only in Žabljak it is ranked as the second hottest year.

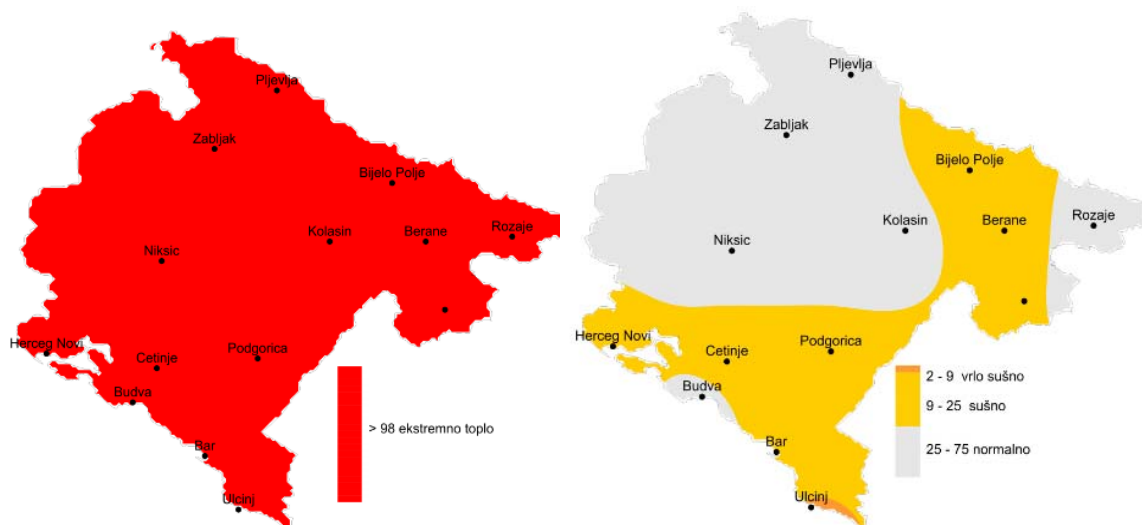


Figure 1. Spatial distribution of percentile for winter temperature anomalies (left) and precipitation anomalies (right) with respect to the climatological mean 1991-2020

Total amount of precipitation was in range from 119 mm in Bijelo Polje (northern mountainous region) to 865 mm in Cetinje (central region), and in capital town Podgorica it was 376 mm. Anomalies of precipitation were in the range from 45% in Ulcinj (coastal region), Podgorica 68% to 91% in Rožaje of 1991-2020 normal.

Maximum snow height of 34 cm was recorded in Rožaje on the 21st January.

SEECOF – 30 Climate outlook validation

(prepared by Mirjana Ivanov)

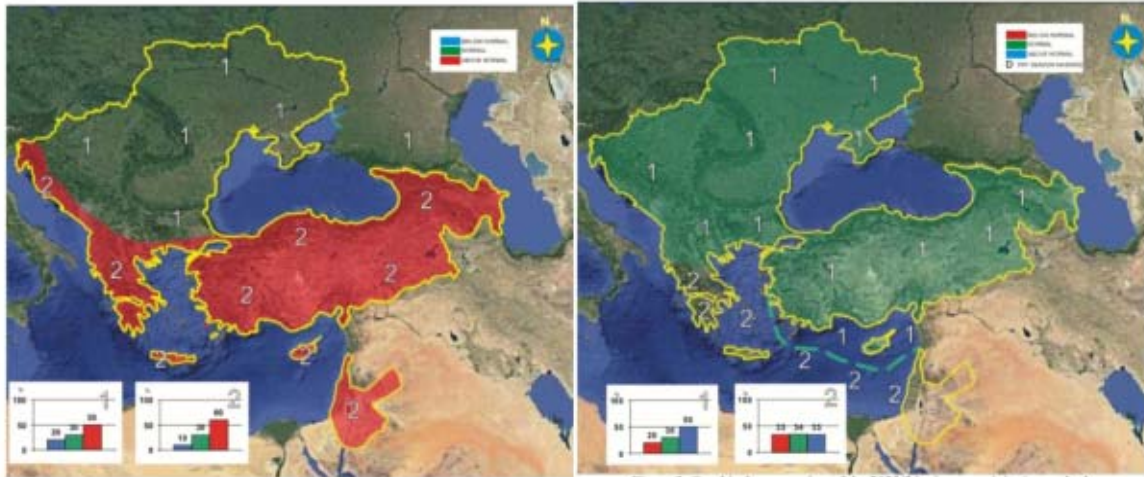


Figure 1: Graphical presentation of the climate outlook for the 2023-2024 winter season for the SEECOF region; Temperature outlook (left), Precipitation outlook (right)

Figure 2. Graphical presentation of the climate outlook for the 2023/24 winter season for the SEECOF region; Temperature outlook (left) and precipitation outlook (right)

Climate outlook for the winter temperature shows higher probability for the temperature above normal. That matches with observed temperature in some parts of the coastal region, figure 1, while in the most of the country temperature was around the normal.

Climate outlook for winter precipitation shows no privileged scenario. Considering that observed precipitation amount was normal in whole Montenegro, climate outlook matches with observed precipitation.

Country	Seasonal temperature (DJF)		Seasonal precipitation DJF		High Impact Events
	Observed	SEECOF-30 climate outlook for temperature	Observed	SEECOF-20 climate outlook for precipitation	
Montenegro	Above normal	60% above normal 30% normal 10% below normal	Normal (central and northern mountainous region) Dry (northeastern mountainous region and southern region)	50% above normal 30% normal 20% below normal	Storm: on the 27th February due to the storm, railway traffic from Belgrade to Bar was interrupted in some of its parts. Contact network and railway infrastructure was damaged.