

National Climate Bulletin and the assessment of the SEECOF-31

Climate outlook for NHMS for summer 2024

Highlights

(Analysis prepared by Slavica Micev; Source: IHMS, www.meteo.co.me)

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

- According to the percentiles, average temperature for summer 2024 across Montenegro was in category **extremely warm**.
- The summer 2024 was the hottest in Montenegro since the beginning of measurements.
- The record numbers of tropical days in north mountainous region after 2007 and 2012 y.

Summer precipitation was in category very dry, dry and normal.

Air temperature anomalies

Average temperature was in range from the 18 °C in Žabljak to the 29.6 °C in Podgorica (i.e. +2.7°C higher than normal for 1991-2020). Temperature anomalies were positive and in range from the +2.4 °C in Ulcinj to + 3.6 °C in Bijelo Polje (northern mountainous region).

The number of tropical days ($T_x \geq 30$ °C) was from the 8 days in Žabljak (1450 m asl, northern mountainous region), 79 in capital town Podgorica, to the 80 days in Ulcinj (24 m asl, coastal region).

The number of tropical nights ($T_n \geq 20$ °C) was from the 12 days in Nikšić, 58 in Ulcinj, 65 in Herceg Novi, 73 in Bar and the 80 in Podgorica.

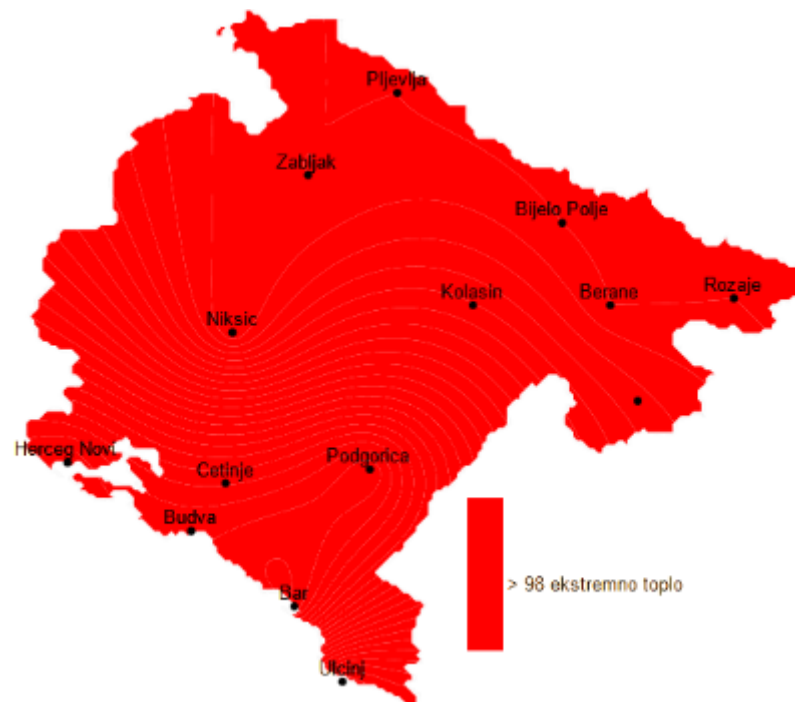


Figure 1. Spatial distribution of percentile for summer temperature anomalies with respect to the 1991-2020 climatological mean

Anomalies of precipitation

The total amount of precipitation was in range from the 56 mm in Ulcinj to the 236 mm in Cetinje. The amount of precipitation was 176 mm in capital town Podgorica (i.e. +15% more than climatological normal for 1991-2020). Anomalies of precipitation were in range from the 43% in Ulcinj to the 125% in Herceg Novi.

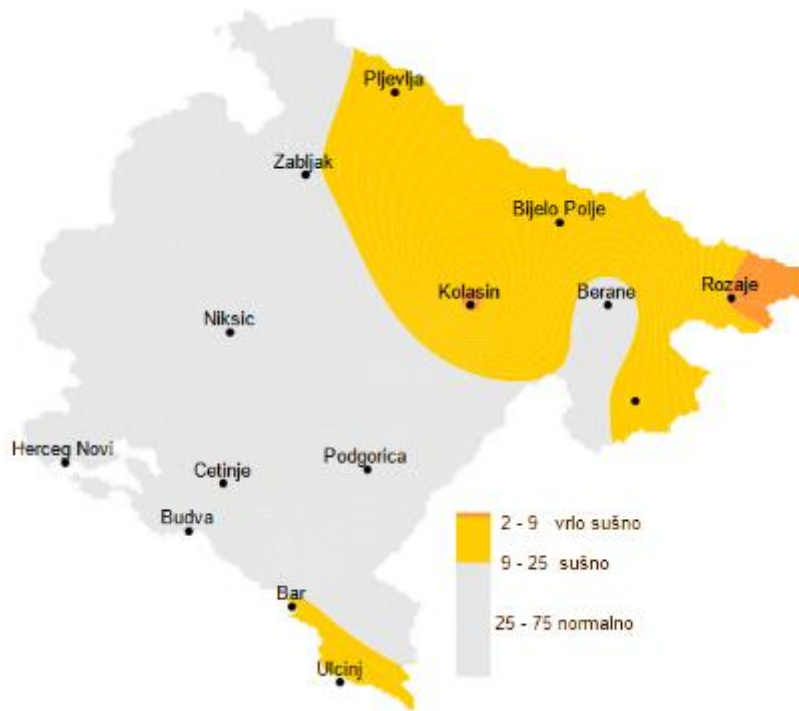


Figure 2. Spatial distribution of percentile for the summer precipitation anomalies with respect to the 1991-2020 climatological mean (gray-normal, orange-dry, dark orange-very dry)

SEECOF – 29 Climate outlook validation for the summer

(prepared by Mirjana Ivanov)

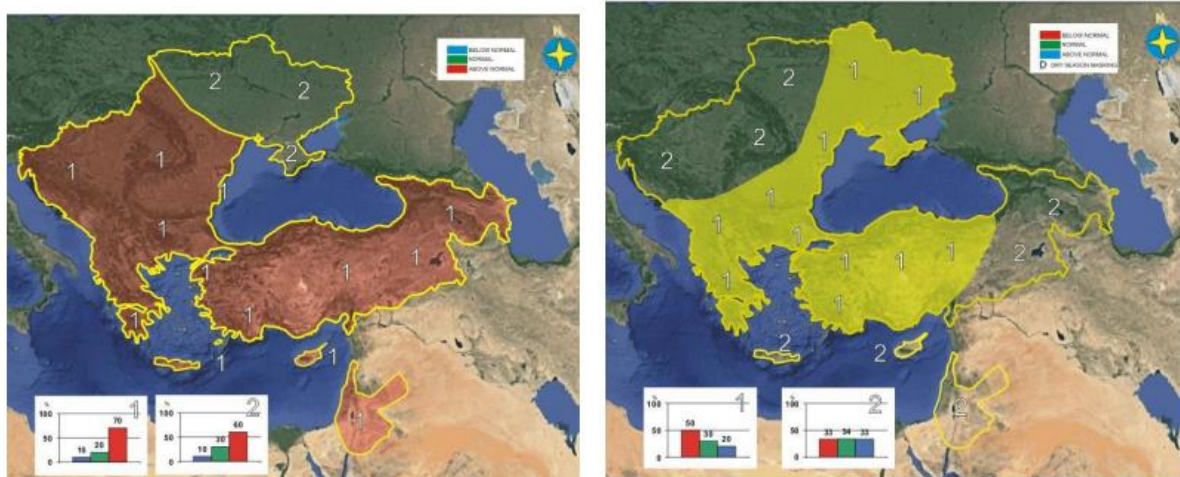



Figure 3. Graphical presentation of the climate outlook for the summer 2024 for the SEECOF region; Temperature outlook (left) and precipitation outlook (right)

Climate outlook for the summer temperature shows 70% probability for the temperature above normal and 10% probability below normal. That matches with observed temperature in whole country was very good.

Climate outlook for the summer precipitation shows 50% probability for the precipitation below normal what is matching with the northeastern part of northern region and southern part of the coastal region (figure 2), but not for the largest part of the country where observed precipitation was in normal category.

Country	Seasonal temperature (JJA)		Seasonal precipitation (JJA)		High Impact Events
	Observed	SEECOF-29 climate outlook for temperature	Observed	SEECOF-28 climate outlook for precipitation	
Montenegro	Above normal	70% above normal 20% normal 10% below normal	Normal in the largest part of the country Dry in the north-eastern part of northern region and southern coastal region Very dry eastern part of northern region	50% below normal 30% normal 10% above normal	<p>02.07.2024: strong wind and precipitation – 2 person died (when a crane collapsed during a heavy storm, while one person died from lightning strike on the Luštica peninsula in the Bay of Kotor);</p> <ul style="list-style-type: none"> - the strong wind in Nikšić caused material damage. On the coast, beach furniture was demolished, and several cars were destroyed by fallen trees; - In Podgorica and its surroundings, a large number of streets were under water, trees and electric poles were downed.  <p>(Podgorica, the 2nd July; Source:Radio slobodna Evropa)</p> <ul style="list-style-type: none"> - The wind in Bar uprooted parts of trees, damaged cars, as well as several vessels in the marina. - The Port of Bar suffered a lot of material damage due to the strong

storm that hit Montenegro today, said the Minister of Transport and Maritime Affairs, Filip Radulović, and announced financial assistance from the Government.

- Due to the strong storm, there was a problem with the electrical network in several municipalities;

-the wind was up to 200 km/h (reported by IHMS).



(Budva, coastal region, 02.07.2024, source Vijesti daily newspaper)

- the center of Budva was under water, because the new atmospheric channel did not solve the problem.

-04.-0.5.08.2024: lightning strike:

-caused in Kotor forest fires, while in the village near Pljevlja house was burnt.



(source:RINA)

