National Climate Bulletin and the assessment of the SEECOF-24

Climate outlook for NHMS for previous season (winter 2020/21)

Highlights:

(prepared by Slavica Micev)

Assessment were done with respect to 1961-1990 (by percentiles)

According to the percentiles and with respect to the 1961-1990 period the average air temperature for the winter 20/21 was in category “very warm” and “extremely warm”. Its values were from the 0.2°C in Žabljak to the 11.7°C in Bar. In capital town Podgorica it was 9.1 °C i.e + 2.6 °C warmer than normal. The anomalies were in range from the +2.1 °C in Nikšić to the 4.8 °C in Rožaje, figure 1.

The winter temperature is ranked as the 1st warmest in Cetinje. The average winter temperature in Cetinje was 5.1 °C, what presents the highest value since 2014 when it was 5.0 °C. The 2nd warmest winter temperature was in Bar 11.7 °C, i.e. for +0.3 °C lower from highest value in 2014. The same situation was for the northeastern parts of the country where the winter temperature was the 2nd highest after the 2014. For example: in Bijelo Polje 3.7 °C (2014, 4.6 °C), in Berane 3.8 °C (2014, 4.1 °C) and in Rožaje 2.6 °C (2014, 2.9).

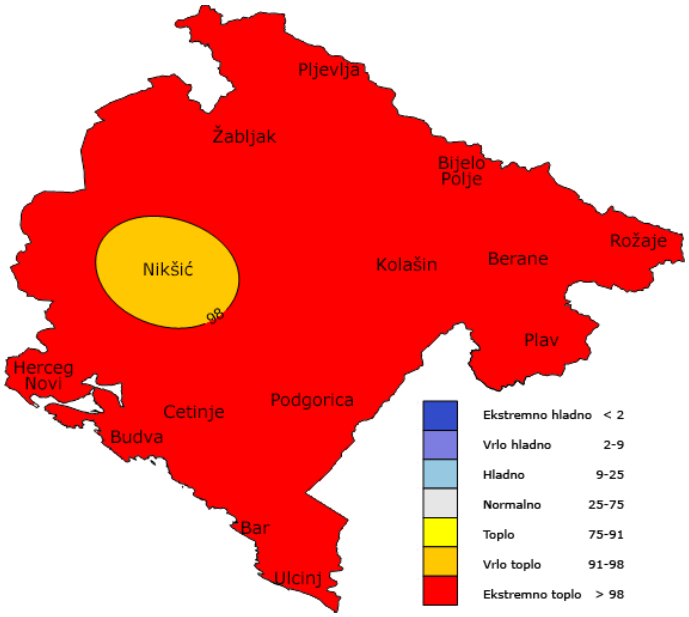

Figure 1. Spatial distribution of percentile for the winter temperature anomalies with respect to the 1961-1990 climatological mean

Precipitation was in category “normal” in Budva, “wet” in Herceg Novi and Bar, “very wet” in Cetinje, Pljevlja and Plav, and “extremely wet” in Ulcinj, Zabljak, Kolasin, Bijelo Polje and Rozaje, figure 2.

The amount of winter precipitation was in range from the 278 mm in Pljevlja to the 2130 mm in Cetinje. In the capital town Podgorica was 1064 mm, i.e. 84 % higher than normal. The amount of precipitation

with respect to climatological normal 1961-1990 was in range from the 94% in Budva to the 233% in Berane.

The winter precipitation 20/21 is ranked as the highest in Podgorica, Kolasin, Bijelo Polje, Berane, Plav and Rozaje, the 2nd highest in Niksic, while in the rest of the country it was among 10 highest winter precipitation.

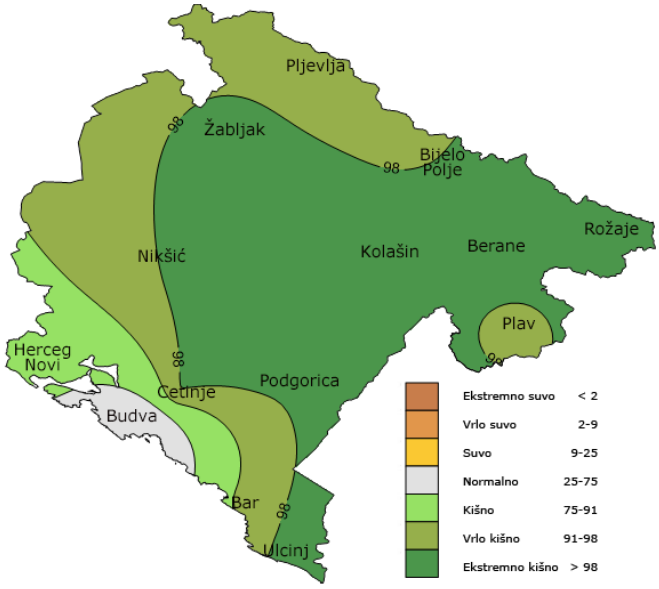

Figure 2. Spatial distribution of percentile for the winter precipitation anomalies with respect to the 1961-1990 climatological mean

Maximum amount of snow height was measured in Žabljak on the 27th January.

SEECOF – 20 Climate outlook validation

(prepared by Mirjana Ivanov)

SEECOF-24 CLIMATE OUTLOOK VALIDATION

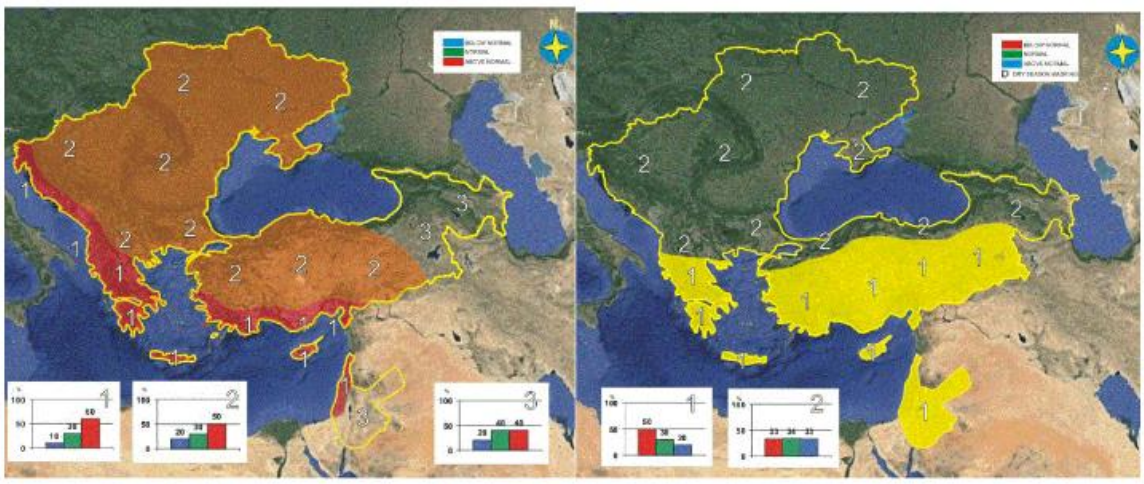

Figure 1: Graphical presentation of the climate outlook for the 2020-2021 winter season for the SEECOF region; Temperature outlook (left), Precipitation outlook (right)

Climate outlook for the winter 2021 shows matching with measured temperature in Montenegro. Distinctions exist for the precipitation, as most of the country had it above normal.

Country	Seasonal temperature (DJF)		Seasonal precipitation DJF		High Impact Events
	Observed	SEECOF-20 climate outlook for temperature	Observed	SEECOF-20 climate outlook for precipitation	
Montenegro	**Above normal**	60% above normal 30% normal 10% below normal	**Above normal** in most of the country **Normal** in Budva and narrow belt around it	No predictive signal (33, 34, 33)	December 2020: Strong storms along the coastal region especially in Ada Bojana and Budva where the impact was highest. Losses of properties near the seaside. February 2021: Strong north wind in Podgorica several days in February affected facades and roovs on buildings, houses, broke trees in parks and boulevards in the centar. Heavy precipitation in Podgorica and Bar. Ekstremely warm in whole country in December, warm in January in most of its

					regions, and very warm in whole country in February.