Country: Republic of Moldova

Institute: State Hydrometeorological Service

Name: Lidia Trescilo

E-mail: lidia.trescilo@meteo.gov.md

Climatological reference period: 1991-2020.

1. SEECOF-30 Climate outlook for Winter Season 2023/24 for the Moldova



Above normal

Above normal

2. Analysis of the Winter Season 2023/24 in Moldova

The winter of 2023-24 in the Republic of Moldova was very warm and in some places with a significant lack of precipitation. The stable passage of the average daily air temperature through 0°C, that is, the beginning and end of the meteorological winter, was not observed in this season.

The average air temperature for the season constituted in the territory $+1,6..+3,9^{\circ}$ C, being 3.4-4.0°C higher than the norm, and observed for the second time in the entire observation period (Fig.1,2).

According to the Chisinau MS data (observation period 131 years), the average air temperature for the season was +2.9°C (3.6°C higher than the norm) and took 2nd place in the ranked series of high average temperatures for the winter season (Fig. 3).

The absolute minimum air temperature during the season was -18.6°C across the country (January 10, Bravica MS), the absolute maximum reached +19.0°C (February 11, Tiraspol MS).



Fig.1. Mean Temperature in Winter, °C

Fig.2. Temperature Anomalies in Winterr, °C



Fig.3. The series of years with high average annual temperatures, °C, SM Chisinau

Very warm weather was observed for most of December (Fig. 4). The average air temperature for the month was +1.3..+3.8°C, which is 3.0-3.5°C above normal and is observed on average once every 7-10 years. The average air temperature for the third ten-day period was +2.7..+5.6°C, which is 3.9-6.3°C above the norm and is observed on average once every 10-30 years. The maximum air temperature on December 26 increased to +18.5°C (MS Ceadir-Lunga), which was observed for the first time in this decade in the entire observation period.



Fig. 4. Average decadal air temperature, °C, MS Chisinau

The average air temperature for the period January 1-7 was +3.0..+6.5°C, which is 6.0-8.5°C above normal and occurs on average once every 10-30 years. The maximum air temperature on January 4 increased to +16.0°C (MS Tiraspol), which during this period is observed on average once every 40 years.

It was abnormally warm in February as well. The average air temperature for the month was +5.2..+7.2°C, which is 6.5-8.5°C above the norm and was observed for the first time in the entire observation period. The maximum air temperature on February 11 increased to +19.0°C (MS Baltata), which during this period is observed on average once every 40 years.

The amount of precipitation during the season on 65% of the territory was 75-105 mm (80-100% of the norm), on 25% of the territory, mainly in the southern regions, 60 mm fell (60% of the norm). In some places (MS Ceadir-Lunga, Cahul, AMP Vulcanesti) their sum did not exceed 31-36 mm (40-45% of the norm), which is observed on average once every 15 years in winter (Fig. 5, 6).



Fig.5. Amount of precipitation in Winter, mm

Fig.6. Precipitation Anomalies in Winter, %

According to the regions of the country, the amount of precipitation was distributed as follows:

- in the north of the country deep 75-95 mm (80-100% of the norm), isolated 65-70 mm (65-70% of the norm);
- in the centre of the country deep 75-105 mm (80-100% from the norm, at the Baltata MS 65 mm (70% of the norm));



- in the south of the country -31-70 mm (40-70 % of the norm). (Fig.7).

Fig. 7. The amount of precipitation per decade, mm, MS Cahul

Compared to the winter of 2022-23, the average air temperature for this season was 1°C higher. The winter of 2019/20 is similar in temperature conditions.

Weather conditions for the wintering of autumn crops, fruit trees and vines in the winter period 2023/24 were satisfactory.

Country	Seasonal temperature		Seasonal precipitation		
	Observed	SEECOF-30 climate outlook for temperature	Observed	SEECOF-30 climate outlook for precipitation	High Impact Events
Republic of Moldova	Above normal	Above normal	Near normal (65% of the territory) Below normal (35% of the territory)	Above normal	During the period January 7-10, complicated weather conditions were observed in most parts of the country in the form of wet snow and snow, increased wind up to 12-17 m/s and a decrease in the average daily air temperature (January 9-10) to -913°C.The amount of precipitation during these days on 60% of the territory reached 30-58 mm (100- 170% of the monthly norm). In the

3. Assessment of the SEECOF-30 Climate outlook for 2023/24 Winter season

		rest of the territory, in some places in
		the northern and southern regions, 15-
		25 mm fell.
		On January 8, extreme
		meteorological phenomena in the
		form of heavy snowfall with a
		precipitation amount of 23-26 mm in
		12 hours were registered at the
		Cornecti and Chicinau stations The
		maximum height of snow cover at
		maximum height of show cover at
		the Belti Compacti Province Codmit
		the Balti, Cornesti, Bravica, Codrii,
		Chisinau and Leova stations – 18-26
		cm. Also, during this period, ice
		deposits with a diameter of 1-6 mm
		were observed almost everywhere.
		Difficult weather conditions led to
		snow drifts and icy roads, traffic
		difficulties, and power outages.