

**Information**  
**about the features and adverse weather conditions**  
**in the Republic of Moldova in 2018**  
**(normal period 1981-2010)**

The year 2018 in the Republic of Moldova was characterized by a high temperature regime and with annual precipitation close to norm. The average annual air temperature on the territory was +9.8..+11.7°C, which is 0.7–1.6°C higher than the multiyear average and is observed on average once every 10–15 years from the entire observation period, and over the past 10 years - on average once every 2 years. According to Meteorological Station Chisinau (observation period 125 years), the average air temperature for the year was +11.2°C (1.1°C higher than normal) and took the 4th place in the ranked series of high average annual temperatures (Fig. 1, 2).

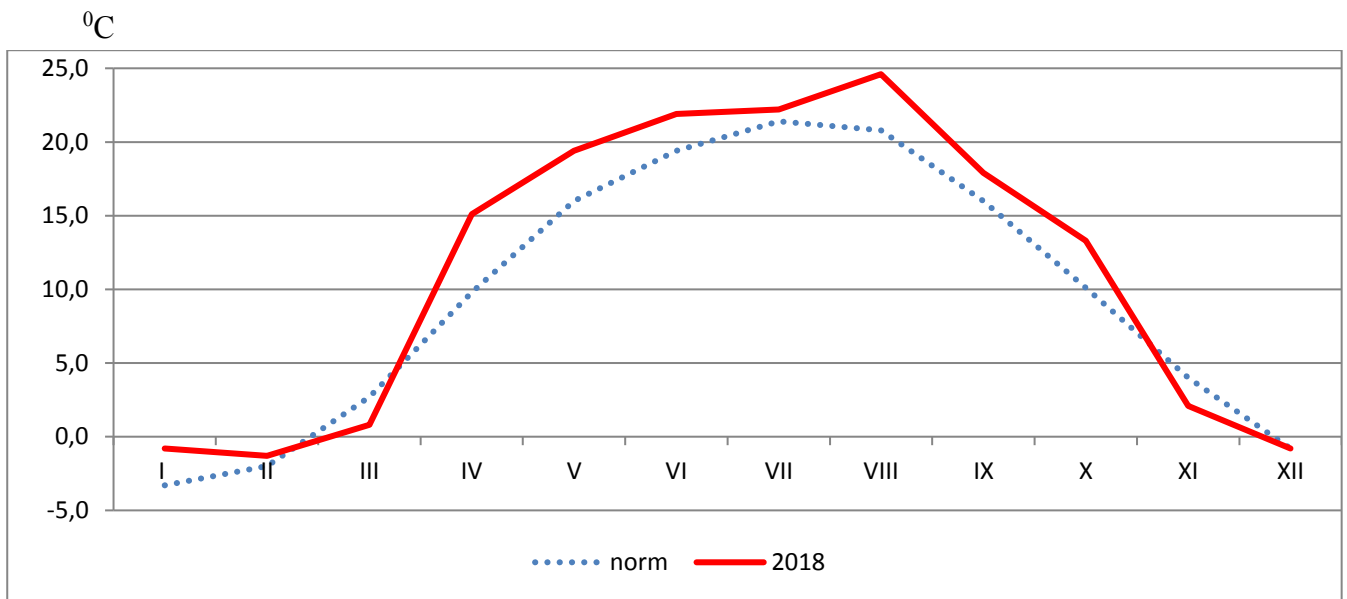


Fig.1 Monthly mean temperature in Chisinau, 2018

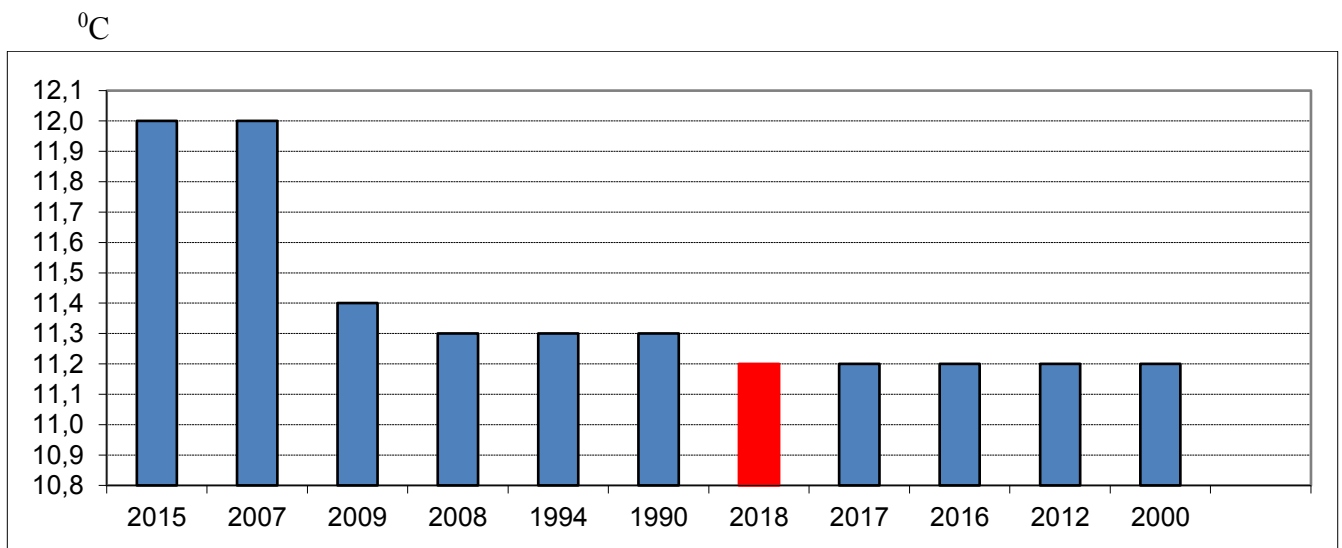


Fig.2 The ranked list of the highest annual average temperatures, Chisinau

The absolute maximum air temperature for the year reached +37°C (August). The absolute minimum was -23°C (January) on the territory, which is marked on average once every 3 years in winter.

The amount of precipitation for the year was mainly 400-650 mm on the territory, or 80-120% of the norm. However, precipitation during the year was irregularly (Fig. 3).

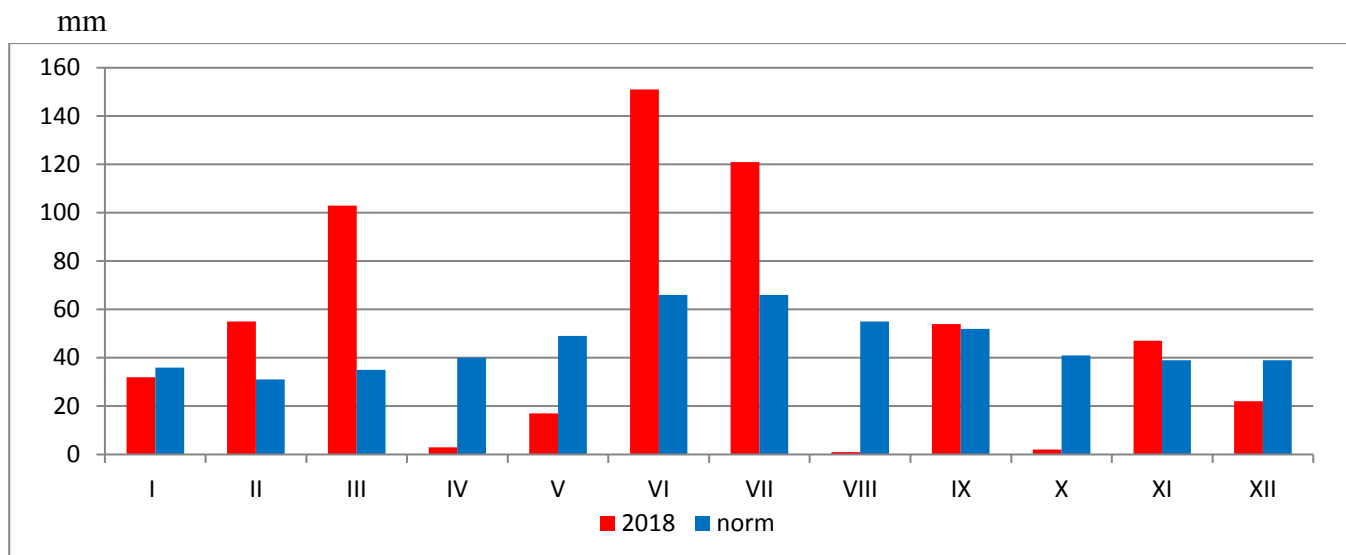


Fig.3 Monthly precipitation totals in Chisinau, 2018

During the year, were observed extreme meteorological phenomena in the form of heavy snowfalls with amount of precipitation to 21-30 mm in 12 hours (17th-18th of January, 15th February, 18th and 23th March), heavy rains (June, July), glazed ice with a diameter of up to 51 mm (November 20).

**The winter of 2017-18** was warm and with precipitation. Its beginning (e.g., a steady transition of the average daily air temperature through 0°C downward) was noted mainly on January 13, which is a month later than usual periods. The average temperature during the season (December- February) was on the territory -0.9..+1.8°C, which is 1.1-1.7°C above the norm and is observed on average once every 5 years. The amount of precipitation during the season was 95–190 mm (100–200% of the norm).

Snow cover was established everywhere on January 18 and lasted until the end of the month, and also it was observed most of the February. Its maximum height at meteorological sites reached 37 cm (January).

**In January** the weather on the territory was inhomogeneous on temperature regime and with precipitation. The average monthly air temperature was -0.1..-1.9°C, which is 0.7-1.8°C above the norm and is registered on average once every 3-5 years. The maximum air temperature reached +13°C, which is observed on average once every 5-10 years. The minimum air temperature dropped to -23°C, which is observed on average once every 5 years in January.

Abnormally warm weather was observed in the first decade of January, when the average air temperature per decade was 5-6°C above the norm, which is registered on average once every 10-15 years for the entire observation period, and for the last 20 years - on average once every 5 years.

The amount of precipitation of the month on 75% of the territory was 30-52 mm (90-160% of the norm), the rest of the territory was 15-25 mm (50-75% of the norm).

**In February** the weather on the territory was inhomogeneous on temperature regime and with precipitation. The average monthly air temperature was mostly close to normal and was -3.0.+0.1°C. The maximum air temperature increased over the territory to +14°C. The minimum air temperature dropped to -23°C, which is registered on average once every 5 years.

Abnormally cold weather was registered in the third decade of February. The average air temperature per decade was 4-6°C below normal, which is registered on average once every 5-10 years.

The amount of precipitation of the month was mainly 25–60 mm (120–200% of the norm), only in the extreme southern regions - 65–80 mm (240–320% of the norm).

**Spring** was warm and short. The average air temperature during the season (March-May) was +10.7..+12.3°C, which is 1.0-2.0°C higher than normal and is registered on average once every 5-10 years. The amount of precipitations on the season in most of the territory was 95-165 mm (80-140% of the norm). Isolated in the northern and southern regions fell 80-90 mm (70-75% of the norm).

**In March** the weather was inhomogeneous in temperature and precipitation.

The average monthly air temperature was -0.5..+2.3°C, which is 2.1-2.9°C below normal. The maximum air temperature reached +21°C. The minimum air temperature dropped to -21°C, which is registered on average once every 15 years.

Abnormally cold weather was established on the territory of the country from March 18 to March 23. The average daily air temperature on these days was -3..-8°C, which is 7-11°C below normal and in the second half of March it is noted on average once every 10-20 years.

The amount of precipitation of the month at 65% of the territory was 75-120 mm (270-400% of the norm), which is observed on average once in 20-30 years in March, and isolated - for the first time over the entire observation period. The rest of the territory fell 45-70 mm (150-260% of the norm).

Most of the month (March 1-8 and March 18-28), snow cover remained, its maximum depth at meteorological sites reached 33 cm.

**In April** the weather on the territory was abnormally warm and with a shortage of precipitation. The average monthly air temperature was +14.0..+15.5°C, which is 4-5°C above normal and is observed for the first time over the entire observation period. The maximum air temperature increased over the territory to +30°C, which is observed on average once every 20 years. The minimum air temperature dropped to -2°C.

A stable transition of the average daily air temperature through 15°C, which determined the beginning of the meteorological summer, occurred in most of the republic's territory on April 9-11, which is a month ahead of normal periods and is observed on average once every 30 years.

The amount of precipitation of the month for 80% of the territory did not exceed 1-7 mm (5-15% of the norm) or they did not fall out. Only in some places in the northern regions fell 15-33 mm (35-70% of the norm).

**In May** the weather continued to remain very warm and mostly with a shortage of precipitation. The average monthly air temperature was +18.0..+19.5°C, which exceeded the norm by 2-3°C and is registered on average once every 10-15 years. The maximum air temperature reached +33°C, the minimum dropped to +4°C.

The amount of precipitation of the month for 75% of the territory of the republic did not exceed 10-35 mm (20-75% of the norm), in the rest of the territory fell 40-60 mm (80-120% of the norm).

**The summer** was warmer than usual and with precipitation. The average air temperature during the season (June-August) on the territory was +20.7..+23.3°C, which is mainly 1.4-2.4°C above the norm and is observed on average once every 5-15 years for the whole observation period, and the last 20 years is on average once every 3-5 years.

The amount of precipitation on the season for 65% of the territory was 165-230 mm (85-120% of the norm). On 25% of the territory, their sum reached 245-325 mm (125-180% of the norm). Only in some areas fell 120-130 mm (65-75% of the norm).

**In June** the weather was mostly hot and with precipitation. The average monthly air temperature was +19.7..+22.3°C, which is 1.5-2.0°C above normal and is noted on average once every 5-10 years. The maximum air temperature reached +35°C, the minimum dropped to +6°C.

The amount of precipitation of the month was mainly 55-165 mm (100-200% of the norm), only isolated fell 35-50 mm (45-70% of the norm).

**In July** there was a little warmer than usual and mostly with precipitation. The average monthly air temperature was +20.6..+22.8°C, which is 0.5-1.5°C higher than normal. The maximum air temperature increased over the territory to +34°C, the minimum dropped to +8°C.

The amount of precipitation in most of the territory was 55-150 mm (100-270% of the norm). Only in certain areas 35-50 mm fell (40-75% of the norm).

**In August** the weather remained hot and with a significant shortage of precipitation. The average monthly air temperature was +21.8..+24.7 °C, which is 2.5-3.5 °C above the norm and is registered on average once every 10-20 years. The maximum air temperature reached +37°C, the minimum dropped to +9°C.

The number of days with the maximum air temperature  $\geq +30^{\circ}\text{C}$  in August was on the territory mainly 15-25 days (norm of 3-10), which in most of the territory is observed on average once every 10-30 years. Isolated their number reached 27-30 days, which in August was registered for the **first** time from the entire period of instrumental observations.

The amount of precipitation of the month in 70% of the territory was 1-10 mm (2-20% of the norm), and in the rest of the territory - 15-30 mm (25-55% of the norm).

**Autumn** was warm and mostly with a shortage of precipitation. The average air temperature during the season (September-November) was +10.6..+12.9°C, which is mainly 1.5-2.4°C above the norm and is registered on average once every 7-10 years. The amount of precipitation on 60% of the territory was 50-90 mm (40-75% of the norm), while the rest of the territory was 100-130 mm (80-100% of the norm).

**In September** the weather on the territory was inhomogeneous on temperature regime. The average monthly air temperature was +16.5..+18.5°C, which is 1.0-2.5°C above normal. The maximum air temperature reached +35°C, which is possible on average once every 20 years.

The first air frosts were observed on September 27 (with an intensity of -2°C), which is observed on average once every 10 years during this period.

The amount of precipitation of the month on 55% of the territory was 20-35 mm (35-70% of the norm). The rest of the territory fell 45-80 mm (85-165% of the norm).

**In October** the weather was mostly very warm and with a significant shortage of precipitation. The average monthly air temperature was +11.5..+13.5°C, which is 2-4°C above the norm and is noted on average once every 10-15 years. The maximum air temperature reached +27°C, the minimum dropped to -3°C.

Abnormally warm weather was maintained from October 28-31. The average daily air temperature on these days by 8-10°C exceeded the norm, which is noted on average once every 15-20 years. The maximum air temperature increased over the territory up to +24..+27°C, which is observed on 50% of the territory of the republic for the **first** time from the entire observation period, and on average once every 20-30 years in the rest of the territory.

The amount of precipitation of the month is mainly 1–10 mm (5–30% of the norm), which is possible on average once every 5–10 years this month. Only in some areas fell 15-20 mm (40-60% of the norm).

**In November** the weather was inhomogeneous on temperature regime and with precipitation. The average monthly air temperature was +1.4..+3.8°C, which is 0.7-1.7°C below normal. The maximum air temperature reached +19°C. The minimum air temperature dropped to -16°C, which is registered on average once every 10-15 years.

The amount of precipitation per month was mainly 30-60 mm (80-160% of the monthly norm).

Snow cover was established on the territory on 17-20 of November and remained in the northern half of the republic until the end of the month. Its depth at meteorological sites reached 21 cm.

**In December** the weather was typical for temperature and precipitation. The average monthly air temperature was close to normal and was -0.1..-1.8°C. The maximum air temperature reached +8°C, the minimum dropped to -17°C.

The amount of precipitation in 60% of the territory was 28-52 mm (80-130% of the norm), in the rest of the territory - 10-25 mm (25-70% of the norm).