

Climate Report on the territory of Armenia for Winter 2012/13

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23.04. 2013, Armenia

Air temperature anomalies for Armenia in Winter 2012/2013

December: The monthly thermal regime (or temperature conditions) on the most territory of Armenia was close to the norm, with positive deviation. The average monthly temperature fluctuated within: in mountainous areas $-1...-5^{\circ}\text{C}$, in foothills $-1...+2^{\circ}\text{C}$, in valleys $+1...+3$, and in Syunik valleys $+3...+6^{\circ}\text{C}$.

The first half of the first decade was registered as fair with some cloud, without precipitation. The maximal daily (diurnal) amplitude of air temperature was noticed. It was around 12-19 degrees, and in some stations located in the mountains reached 20 degrees. The highest maximal air temperatures were registered during that period: in mountainous regions up to $+8...+13^{\circ}\text{C}$, in foothills $+11...+18^{\circ}\text{C}$, in valleys $+13...+18^{\circ}\text{C}$.

The lowest minimal air temperature was registered in the second half of the third decade. In mountainous areas the temperature decreased at night to $-15...-23^{\circ}\text{C}$, in foothills $-10...-14^{\circ}\text{C}$, in valleys $-7...-10^{\circ}\text{C}$.

Average daily air temperature passed the mark of 0 degrees in mountainous areas and foothills at the end of the first decade, and in valleys – in the second half of the third decade.

January: The average monthly air temperature conditions of the month on the most territory of Armenia was above the norm by 1-3 degrees, in some places around the norm and fluctuated within $+2...+4^{\circ}\text{C}$ in the northern parts of the valleys, in the southern parts $+3...+4^{\circ}\text{C}$, in the Ararat valley and foothills $-2...-3^{\circ}\text{C}$, in the mountainous areas $-3...-11^{\circ}\text{C}$.

The coldest days were registered in the first half of the first decade and almost during the whole second decade. The negative anomaly of average daily air temperature of that period comprised 2-6, in some parts 8-11 degrees. At night temperature sharply decreased in mountainous areas till $-22...-27^{\circ}\text{C}$ (in Ashotsk $-28...-33^{\circ}\text{C}$), in foothills $-11...-18^{\circ}\text{C}$, in northern valleys $-8...-10^{\circ}\text{C}$, and in Ararat valley $-11...-19^{\circ}\text{C}$. In the second half of the first decade cyclones became active over the Eastern parts of Turkey and the Mediterranean with the further pass to the Caucasus. The Southern cyclones brought warm humid air to Armenia.

February The average monthly air temperature was above the norm by 2-5 degrees, and fluctuated within: in mountainous areas $-2...-5^{\circ}\text{C}$, in foothills $0...+3^{\circ}\text{C}$, in valleys $+4...+7^{\circ}\text{C}$.

During almost the whole month warm air diffused (penetrated) to Armenia from Southern latitudes, as on the heights the South-West flows were prevailing. The average daily air temperature was above 0°C in the Northern valleys, in Syunik valley, in Ararat valley, and in foothills it was below 0°C (during some days). The highest air temperature was registered in the second half of the third decade. The temperature during the day comprised $+3...+7^{\circ}\text{C}$ in mountainous areas, $+8...+11^{\circ}\text{C}$ in foothills, $+13...+16^{\circ}\text{C}$ in valleys (in Syunik valley up to $+16...+19^{\circ}\text{C}$). The average daily air temperature during that period exceeded the average air degree of several years by 4-8 degrees. The warm air penetrated to Armenia from the Arabian Peninsula.

Precipitation amounts for Armenia in Winter 2012/2013

December: Unstable weather regime prevailed during the month. The precipitation was more a result of the southern cyclones, and rarer - of cold fronts.

A monthly quantity of precipitation was above the norm on the most territory and comprised 109-300 %, only in some areas it has not reached the norm and was within 56-98. %.

January: The level of precipitation was high in the most parts of the Republic, sometimes too high. It was snowing in mountainous areas and foothills, and raining in valleys.

The volume of precipitation in January was above the monthly norm countrywide and comprised 115-256% (compared to the monthly norm).

February The monthly level of precipitation was below the norm (on most parts of the Republic) and comprised 21-97% from the norm. However the monthly level of precipitation was above the norm in Ararat and Syunik valleys and comprised 108-159% (from the norm).

Qualitative verification of seasonal climate outlook

Seasonal forecast of air temperature and precipitation anomalies for winter 2012/13 for Armenia has been successful in forecasting a normal season with mostly positive temperature and precipitation anomalies.

Country		Seasonal temperature		Seasonal precipitation	
		Observed	climate outlook	Observed	climate outlook
Armenia(1)	December	above normal by 0.5-1 °C	normal to above normal	above normal: 170-220 % of normal	above to the normal
	January	above normal 2-3 °C	above normal by 1-2 °C	above normal: 150-200 % of normal	near to the normal
	February	above normal by 3-4 °C	above normal by 1-2 °C	near to normal	near to the normal