

**December.** The temperature of the month throughout the country was above normal by 5-7 °C, in Ararat valley by 2°C. Average monthly air temperature varied: in the mountains -3 ... +3 °C, in the foothills and lowlands +2...+5°C in the southern lowlands 7...+10°C

During the month was dominated a stable weather, which was formed under High pressure at the sea level. The warmest weather was in the first five days. Maximum air temperature during these days was raised in the mountains up to 13-16 °C in the Ararat valley up to 18°C, in the foothills, valleys, Syunik and Tavush lowland areas up to 24°C. In this period average daily air temperatures exceeded the norm by 5-10 degrees.

The transition of average daily temperature through 0 °C in the mountainous areas was observed at 13 of December, in the foothills of the Ararat valley in 22 of December. Beginning of winter in mountainous areas and the Ararat Valley was delayed for almost a month, compared with long-term data. In the lowland of Syunik and Tavush average daily air temperature during the entire month was recorded above 0°C

Only once from 12, 13 of December on the territory of Armenia penetrated the cyclone from the southwest. In most areas of the country observed a small rainfall, in high mountainous areas snow. Temporary cover was formed at individual stations.

Throughout the country marked a very significant shortfall of precipitation within 1-17% monthly rate, but in Gegharkunik and Syunik regions no precipitation was observed.

On some days in the Ararat valley there was the fog with a visibility of 50-500m.

In the Tavush lowlands region blossomed some fruit trees.

**January.** Average monthly air temperature in most parts of the republic was above normal by 1-3°C in some places near normal and varied: in the northern lowlands -1 ... +3°C in the southern +2 ... +3°C, in Ararat valley -1 ... -2°C, in the foothills of Ararat valley -1 ... -3°C in the mountainous regions -4 ... -8°C.

The air temperature was quite low at 3-5, 12-13 and first half of the third decade of January, a negative anomaly of average daily temperature of 3-4 and 12-13th was 6-7°C. The thermometer dipped in these days in the mountainous regions up to -18 ... -21°C, in the foothills to -13 ... -14 °C, in the northern lowlands to -6 ... -7 °C in the Ararat valley -8...- 10°C.

Pretty cold weather 3-4-th was due to invasion of polar cold air mass in front of High pressure, with center located over northern European Russia, on the Black Sea area, and then from the west, as a result of the passage of a cold front, cold air has penetrated into the Caucasus. In the second decade of January Armenia was under the influence of the south - western periphery of the Siberian High. Cold air penetrated into the territory of Armenia from north east, and east. In the first half of the third decade the weather was conditioned by Azores High, which caused in Armenia overcast weather and relatively low temperatures.

Relatively high temperatures were observed from 25th to 28th. In the north-east and south-east the temperature rose to +16 ... +18°C, in the foothills of the Ararat valley to 8 ... 13°C, in the mountainous regions to +2 ... +6°C, average daily air temperature exceeded the norm by 5-10 degrees. Dry warm air came from the Arabian Peninsula. In these days of Turkey and the eastern half of the Mediterranean Sea has intensified cyclonic activity. Over the South Caucasus at the ground and at altitudes established air flows from the southern part.

Precipitation observed everywhere, were caused by the passage of a cold front from the west with wavy perturbation. On January 1 in most areas formed the first stable snow cover.

Rainfall from 28th to January 31 were associated with the release of the Cyprus cyclone.

The monthly amount of precipitation in most parts of the Armenia exceeded the norm, and was 110-230% of monthly norm, at some stations it reached a monthly rate and was 60-90% of it.

**February.** Average monthly air temperature in most parts of the territory was below normal by 1-3 degrees. Exceeded the norm by 1-2 degrees in Gegharkunik and Ararat valley, and was in the range: in the mountains -4 ... -9 °C, in the foothills -2 ... -6°C, in the lowlands 0 ... +3°C.

The lowest temperature recorded in the first decade of the February. The air temperature was in mountain and northern foothill areas of -20 ... -26°C, in the Ararat valley -12 ... -16°C, in the lowlands of Syunik -4 ... -9°C. Average daily air temperature in those days were below normal by 6-8 °C

Decreasing of the temperature was due to the passage of cold atmospheric fronts and active radiation cooling in High Pressure field and clear sky.

First half of month there was a moderately cold weather mostly dry, second half of month mild weather with precipitation.

The transition of average daily temperature through 0 °C in the southern lowland areas was observed at 20 of February.

Monthly precipitation amount in the entire territory of the republic exceeded the norm, and was 180-300%.

Strong winds were recorded in the first and second decades in separate regions. Wind speed 16-19 m / s with gusts 20-27 m / s (at the Pushkin pass 32 m / sec. with gusts 46 m / s). Strong winds were associated both with the passing cold front, and with significant pressure gradient at the high levels.

In the third decade the fog, with visibility of 200-500m was observed in Lowlands areas.

## High Impact Events observed in Armenia during the Winter 2010- 2011

Data	Stations	Phenomenon	Duration of the phenomenon	Maximum meaning
9* December	Ararat	fog	4 hours 30 min.	visibility 40m
12 December	Stepanakert	strong wind	7 hours	20 m/s, gust 25 m/s
25 December	Ararat	strong( thick) fog	50 min .	visibility 40 m.
1 January	Armavir	strong( thick) fog	7 hours. 30 min.	visibility 50m
2 January	Ararat Armavir	strong( thick) fog	6 hours 3 hours	visibility 40m. visibility 50 m
1 February	Urtsadzor	heavy snowfall	12 hours	25 mm
6 February	Pushkin pass	strong wind	3 hours	32m/s., gust 46 m/s .
13 February	Ijevan	strong wind		15m/s., gust 25 m/s.
15 February	Martuni	strong wind		16 m/s., gust 27 m/s .
15 February	Jermuk	heavy snow	12 hours	20 mm

\* Only one day with precipitation entire territory  
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In the Tavush lowlands region blossomed some fruit trees.

Country		Seasonal temperature	Seasonal Temperature	Seasonal precipitation	
		Observed	climate outlook	Observed	climate outlook
Armenia(1)	Desember	above normal by 5-7 °C	above normal	extrimly below normal: 5-10% of normal	Clos to normal
	January	above normal by 1-3 °C	above normal	above normal: 120-150 % of normal	above normal
	February	below normal by 1-3 °C	Clos to normal	above normal: 180-250 % of normal	Clos to normal

(1) Referred climatological period 1961-1990

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