Armenian Service of the Hydrometeorology and Active Influence on Atmospheric Phenomena

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Verification of the the SEECOF-14 and the MedCOF-5 winter 2015/2016 seasonal forecast for the territory of Armenia.

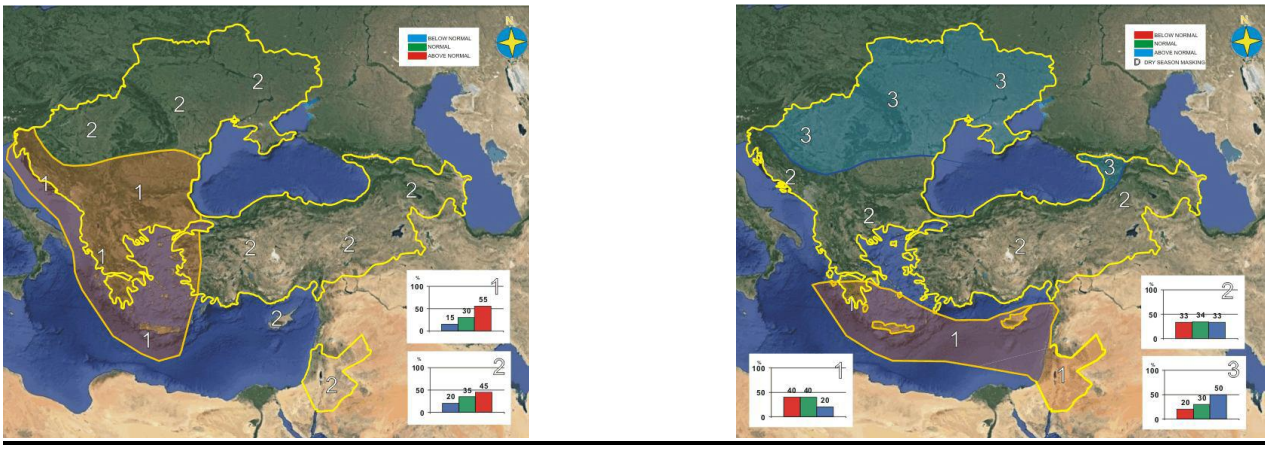


Figure 1. 2015/2016 climate outlook

SEECOF-14, MedCOF-5 Temperature outlook
The Medcof-5, SEECOF-14 temperature outlook for the winter of 2015/2016 in Armenia above-normal Temperature indicated (above-normal with 45% probability, near-normal with 35% probability and below-normal with 20% probability).

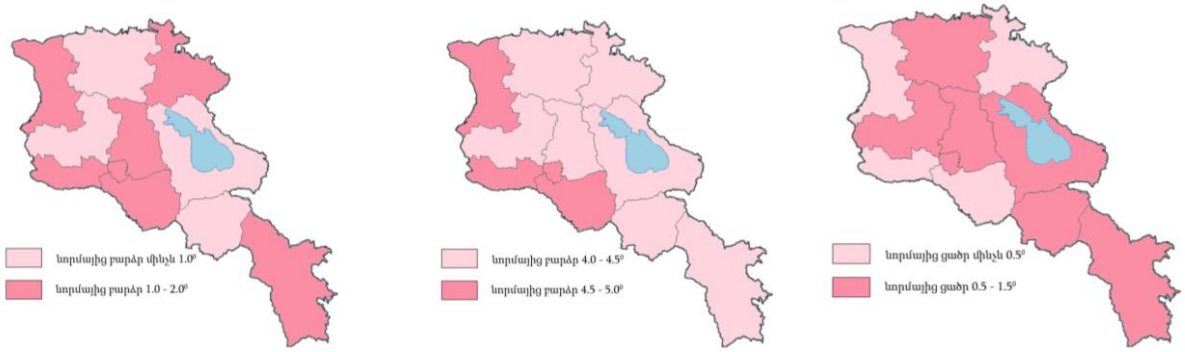
SEECOF-14, MedCOF-5 Precipitation outlook
For the winter 2015/2016 Climate outlook didn't show any clear signal for Armenia (below normal with 33% probability, normal with 34% probability and above normal with 33% probability). Anyway the wet winter was predicted based on statistical analyses.

SEECOF-14, MedCOF-5 CLIMATE OUTLOOK VALIDATION

Winter 2015/16 was warm; it was among the 8th warmest winters in Armenia. Record breaking maximum daily air temperatures for February and winter were observed at different meteorological stations. Precipitation sums were within the average in most of the country .Meteorological monitoring showed that the winter 2015/2016 was warm in Armenia with above normal temperature based on the tercile method. Monitoring of precipitation showed normal to wet winter conditions in most part of Armenia. The outlook for a warm winter was correct.
Climate outlook didn't show any clear signal for precipitation in the Armenia (below normal with 33% probability, normal with 34% probability and above normal with 33% probability). Monitoring of precipitation showed normal to wet winter conditions in most part of Armenia. The outlook for a wet winter was correct.

Analysis of the winter 2015/16 for Armenia compared to the 1961-1990 base period

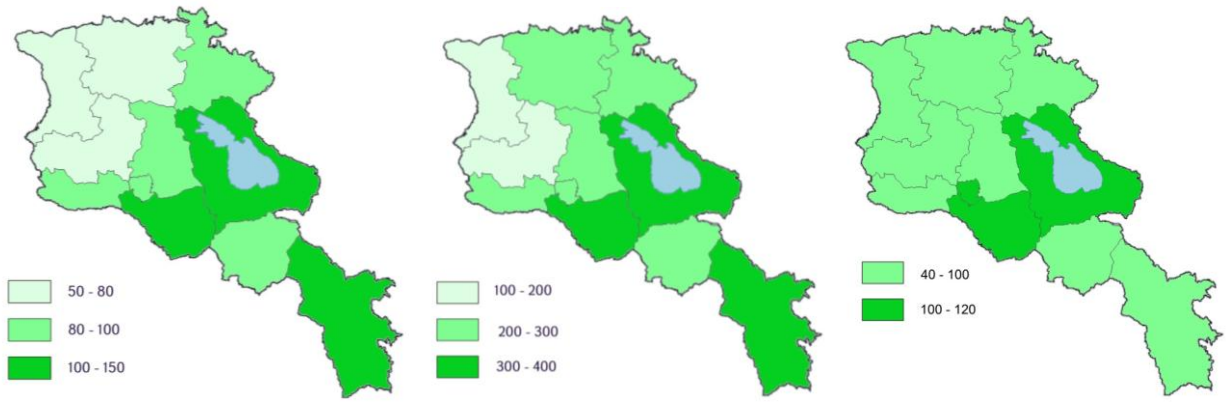
Diviation of the mean montly Temperature



a)Desember b)January c)February

Average monthly temperature in December in the most parts of Armenia were below the normal by1.5^{0}C, In Shirak,Tavush and Ararat Valey by 1.5. In January in the most part it were above the normal by 1.5- 2.0.In February above the normal by 4.0-4.5, in Ararat Valey, and Shirak by 5.0 (fig1).

Diviation of the mean montly Precipitation



a)Desember b)January c)February

The amount of precipitation during the December exceeded the monthly average in Gekharquniq, Ararat and Syunik regions. It was very dry in Nord part of Ararat Valey: 50 -80%. In January it exceeded the norms in the whole territory by 200-300 %, in Gekharquniq, Armavir and Sunik regions by 400-500% .In February it were less than the norms: 40-90 %, in the Gekharquniq and Ararat regions it were near the norms.

Country	*Seasonal Temperature*		*Seasonal Precipitation*		*High Impact Events*
	Observed	SEECOF-14 climate outlook	***Observed***	SEECOF-14 climate outlook	
Armenia(1)	above normal	Above normal (45, 35, 20)	**near the normal with positive deviation**	No redictive signal (33, 34, 33)	December was dry during the I and II decades. Snow was observed in the III decade with heavy snowfall in some places (Martuni, Kapan 20-23 mm/h) Extreme weather conditions in January 2016 were connected to stormy wind and heavy snowfall. Wind speed reached 25-28m/s, with gusts 31m/s.at 6th and14th January Heavy snowfall was observed at 1, 2, 24 in Shirak, Gekharquniq and Sjuniq regions. In February mainly strong wind has been recorded in Lory region with speed 35-37m/s. Also dense fog observed during the winter. **All this events caused a damages and. traffic interruptions**

User Perseptions

Seasonal forecast have been provided to decision makers, individual users and have been presented by TV with corresponding climatic analysis. In case of severe weather conditions explanations and advices were given.
Temporary camps were organized on high mountainous roads in Syuniq and Shirak regions by the Ministry of Emergency Situation based on the short term forecast.
2015-16 winter forecast increased the level of trust on seasonal prediction.