## Climate outlook for summer season 2012 in Armenia

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- El /Niño/La Niña conditions:
  - Experts from World Meteorological Organization have stated that the 2011-2012 La Niña has ended. La Niña conditions in the tropical Pacific transitioned to neutral (neither El Niño nor La Niña) conditions in early April 2012. Model forecasts and expert opinion suggest that neutral conditions are likely to continue into the Northern Hemisphere summer. For the second half of 2012 a return of La Niña is unlikely, while neutral or El Niño conditions are currently considered to have equal chances of occurring.

Due to El Nino neutral conditions, the large scale potential predictability becomes lower for the next season which raises the uncertainties of the outlooks.

## **Outlook suggestions based on analog states**

The analog years for winter (having the smallest distance from winter 2012 wear 1985, 1992, 2002.

For territory of Armenia the composites of winter analogs have suggested a warm spring and a normal precipitation regime. The spring observations up to now suggest a warm spring of 2012 with normal precipitation regime (reference period 1961-1990).

The Winter and Spring of year 1985 was the most closest analog for 2012.

**June:** it was characterized by high temperature and insufficient precipitation in the territory of Armenia. In the first 2 decades of June it was observed unsteady weather regime in the whole republic: the territory of Armenia was under the impact of high-altitude cyclone, from time to time cold fronts came, causing unsteady weather regimes, heavy rains, thunderstorms, hails.

**July:** July was distinguished by lower temperature and above normal precipitations in most parts of the country. During the month penetration of more cold and wet air masses were repeatedly noted from the Caspian sea regions to eastern parts of the country, the weather was cloudy, short widespread rains and reduced temperature (on some days 5-8C below the norm). Average July temperature was 5-8C below the norm, in some areas - 3-4C. The highest temperature was observed at the beginning of the month (on 5-7 July).

**August:** It was characterized by higher temperature and insufficient precipitation. The most part of the republic was under the impact of high thermo baric field dominated by dry weather. The daily mean temperature was 2-3C above the norm. Only in separate periods, on 4-8, 19-23 August the penetration of cold fronts to the territory of Transcaucasia established unsteady weather, short heavy rains, hails.

## **Comments:**

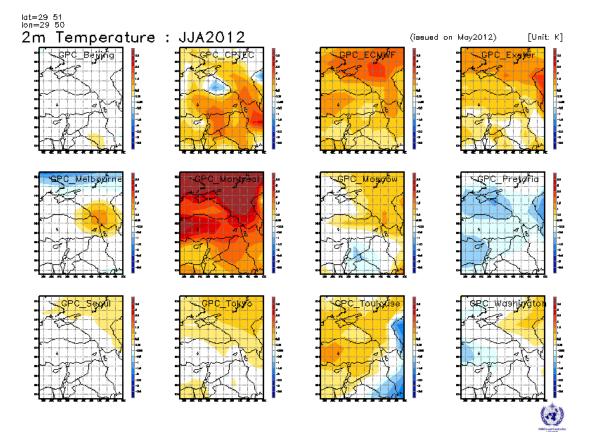
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There are no strong signals for the air pressure forecast: it is expected to be around average with moderate probability.

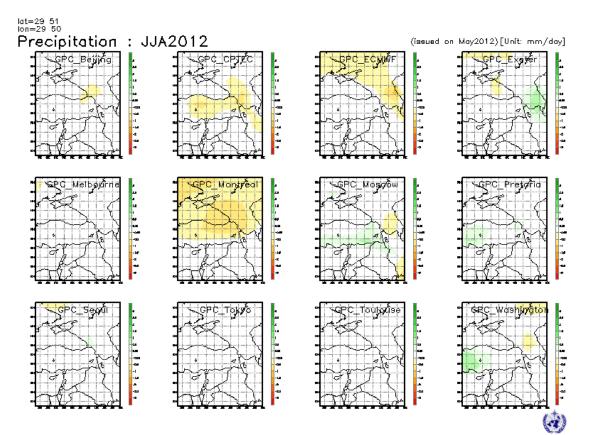
The composites of spring analogs suggest above normal temperature for all Armenia territory and normal and wet conditions.

Most of the global models give hot summer for Armenia.

Total precipitation amount suggested be near the normal: it is expected to be less to climatology in July, it is more likely to be dryer than average in August.



Probability for summer season precipitation (%)



Analyzing the global model outputs for the temperature and precipitation for Armenia and taking in to account analog years for summer 2012 in Armenia we are expected:

	Seasonal Temperature	Seasonal precipitation
Jun	Above normal	Normal (Ararat valley below normal)
July	Below normal	Above normal
August	Above normal	Below normal

The summer season temperature in Armenia will be **Above normal to normal**, The summer season precipitation in Armenia will **be Near to normal conditions**.