

Seasonal weather forecast for the months of

June, July and August 2023

General over view of the weather expected to prevail for June, July and August.

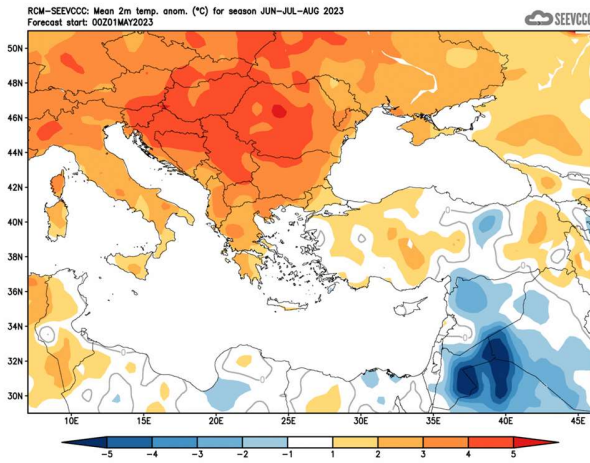
The weather for the following three months, namely **June, July and August 2023** will be presented, with respect to the anomalies of temperature and accumulated precipitation.

Normal temperatures (both maximum and minimum), are on the rise suggesting the second half of the period as the hottest period of the year. The accumulated precipitation is at its lowest values. The period of the following three months is likely to be characterized by outbreaks of thunderstorms, initiated from thermal causes over the main plain area or over the mountainous range from orographic uplift.

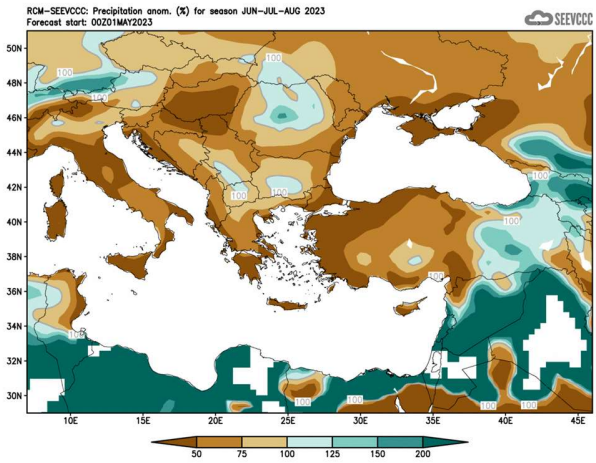
Specifically, regarding the seasonal forecast for the period of **June, July and August 2023**, the temperature will be generally normal. That means that the mean temperature will be around normal and does not exclude days with temperatures well above normal. Normal temperature also characterizes the greater part of Asia Minor, while the Balkans will be warmer than normal and near East will be lower than normal.

Regarding the seasonal forecast, based on the climatology of the island, the accumulated precipitation is expected to be below normal (as shown in the tables below). Any precipitation in Cyprus will be a result of thermal instability, in the form of a thunderstorm, with very local and temporal characteristics. For the above reason, but also due to the inability of the seasonal model to estimate precipitation for the region of Cyprus due to thermal instability, no extended comment will be made (*).

However, it is worth mentioning the fact that during the last three months of March, April and May a particular baroclinicity is being recorded in the atmosphere in the Mediterranean and especially in the Eastern Mediterranean, with periods of rain and temperature fluctuations at levels even below normal for each month and each area. Due to the intense baroclinicity in the Mediterranean and the change from La Nina period to El Nino period, there is a strong opinion of having a mild and intermittently rainy summer over the area of Cyprus, as well.



Divergence of temperature from normal from the mean seasonal temperature (°C) for June, July and August

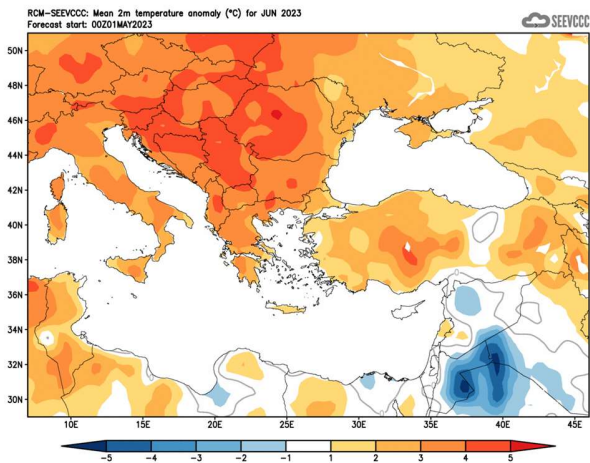


Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for June, July and August

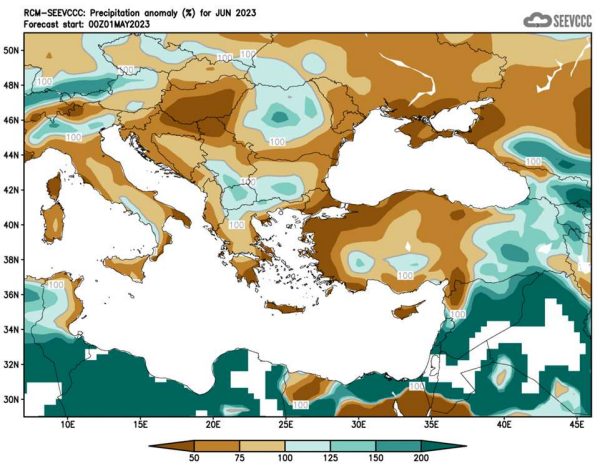
The seasonal monthly forecast in detail

June

The seasonal forecast suggests that **June's** temperature will be generally normal while the Balkans and Middle East will be warmer than normal. Regarding the accumulated precipitation Cyprus is expected to be dry without the occurrence of dynamic barometric weather systems (*).



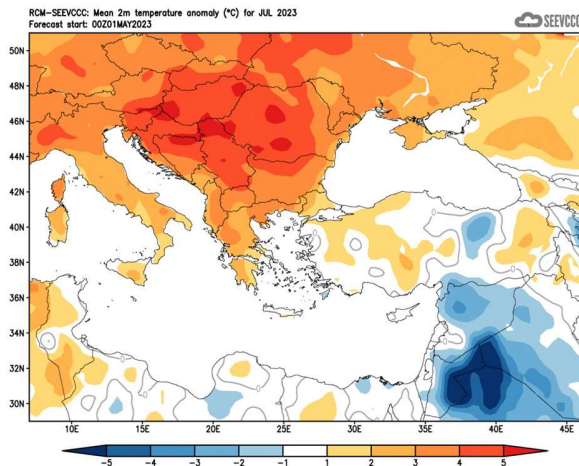
Divergence of the mean monthly temperature (°C) from normal during June



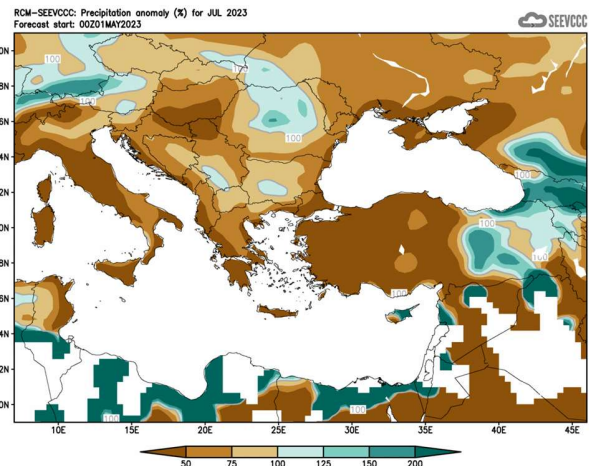
Percentage of the mean monthly precipitation (%) compared with the normal of June

July

The seasonal forecast suggests that **July's** temperature will be again normal. The accumulated precipitation over the west part of Cyprus is expected to be below normal but over inland and the east part the accumulated precipitation is expected to be normal and higher than normal, respectively. Bearing always in mind that the normal accumulation for July is very low especially for the main plain and coastal areas (*).



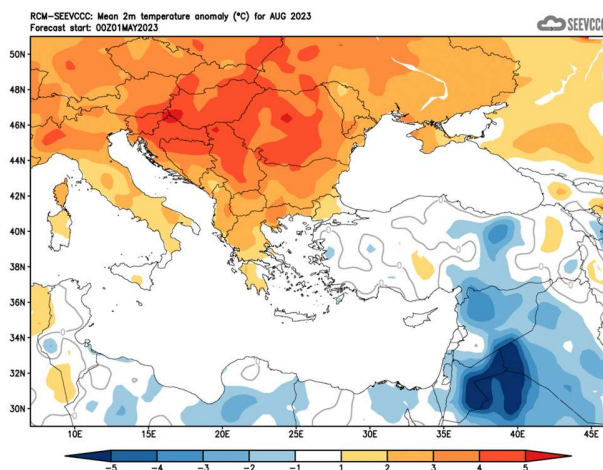
Divergence of the mean monthly temperature (°C) from normal during July



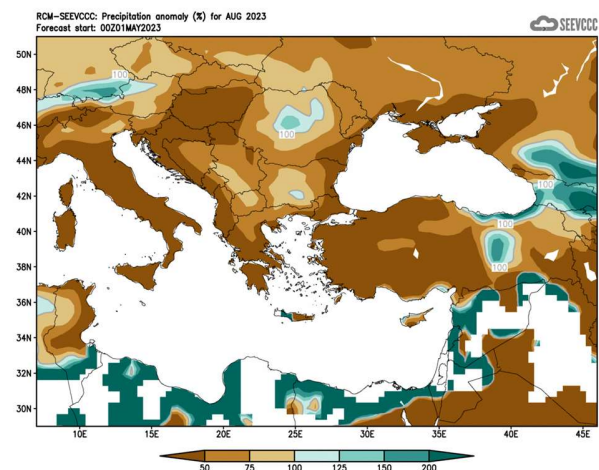
Percentage of the mean monthly precipitation (%) compared with the normal of July

August

The seasonal forecast suggests that **August's** temperature will be generally normal. The accumulated precipitation is generally expected to be low, with northwest coastal areas being the exception of this pattern since the accumulated precipitation over those areas is expected to be near normal (*). Once again, bear in mind that the normal accumulation for August is very low especially for the main plain areas.



Divergence of the mean monthly temperature (°C) from normal during August



Percentage of the mean monthly precipitation (%) compared with the normal of August

Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for June, July and August

The normal values of mean maximum, mean minimum temperature and the accumulated precipitation are presented below concerning the three months the period of forecast is covering, in order to gain a better view of the normal seasonal climate. The period of forecast is the transitional summer. The temperature, both maximum and minimum, is on the rise with **July's** temperature being significantly higher. Climatologically extreme high temperatures are recorded during **July** and over some areas during **August**. On the other hand, the accumulated precipitation is declining, as presented by the climatological data shown on the table below. Thundery activity is likely during the afternoon hours, mainly inland and over the mountains, which is also noted from the table below. Note the cause of the mountainous area of Troodos range over the accumulated precipitation, mainly because of thundery activity, which is affecting primarily the mountainous ranges of the island. The accumulated precipitation over Prodromos station, although declining towards **August**, is always significantly higher if compared to the accumulated precipitation of the other selected stations.

TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	June	July	August	June	July	August	June	July	August
NORTH COAST	30.3	33.4	33.3	18.5	21.1	21.5	1.8	0.1	0.0
WEST COAST*	27.6	29.9	30.5	18.0	20.6	21.1	1.3	0.2	0.0
MOUNTAINOUS AREAS	25.0	27.9	28.0	15.0	18.2	18.1	27.2	16.4	12.0
INLAND*	34.0	37.1	36.9	19.1	22.1	21.9	11.6	4.2	1.8
SOUTH COAST	30.2	32.5	32.9	19.4	22.0	22.3	2.0	0.5	0.3
EAST COAST**	31.0	33.2	33.5	18.9	21.8	22.0	1.8	0.1	0.1

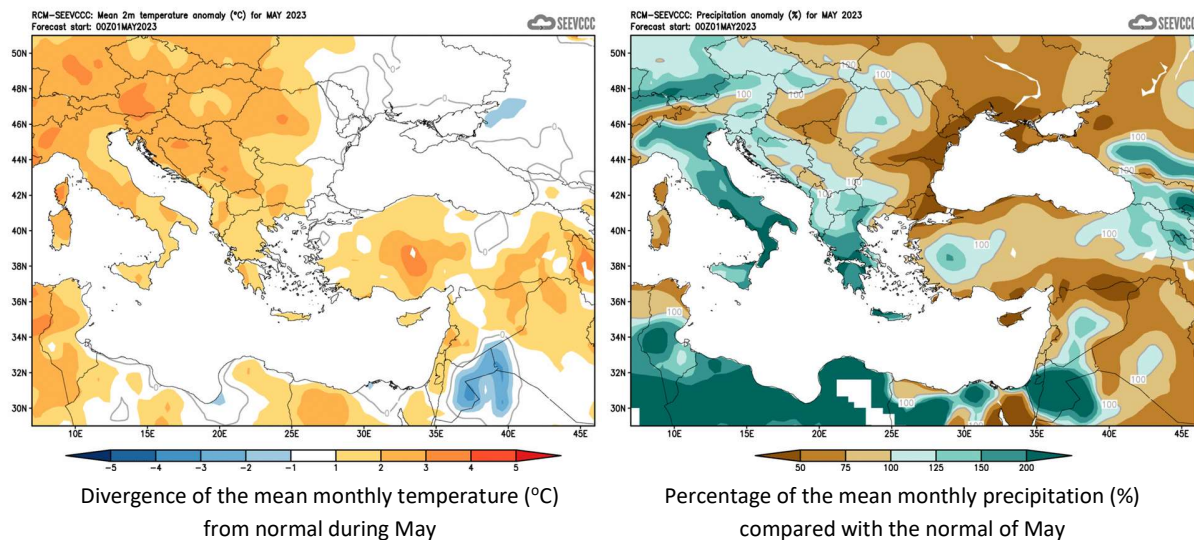
* West Coast and Inland Values cover the period 1983-2010

** East Coast Temperature Values cover the period 1981-2007

Evaluation of May's seasonal forecast for the area of Cyprus

May

The seasonal forecast suggested that **May's** temperature would be warmer by 1° to 2°C than normal, while above normal was suggested to be over most parts of the surrounding area. Regarding the accumulated precipitation this was expected to range below 50% of normal over the island.



Concerning the models' evaluation for **May**, a general judgment is that it performed relative well regarding the mean monthly temperature. However, regarding the accumulated precipitation the model did not perform well since it underestimated the expected accumulated monthly precipitation.

In a more detailed evaluation of the recorded temperatures both mean daily maximum and minimum temperatures (table below) were in some of the stations above normal. As an example, note the recorded maximum of Paphos Airport and Polis Chrysochou stations that were 35.3°C and 36.1°C respectively, with a normal of 24.5°C and 25.8°C respectively. Concerning the mean daily minimum note the recorded minimum once again at Paphos Airport and Polis Chrysochou which was 21.9°C and 21.4°C respectively, with the normal temperatures being 14.7°C and 14.3°C respectively for each of the aforementioned stations.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR MAY 2023														
St. No.	Station Name	Mean Daily Maximum Temperature (°C)	Normal Value (1981-2010)	Difference from Normal Value	Highest Daily Maximum Temperature (°C)	Lowest Daily Maximum Temperature (°C)	Mean Daily Minimum Temperature (°C)	Normal Value (1981-2010)	Difference from Normal Value	Lowest Daily Minimum Temperature (°C)	Highest Daily Minimum Temperature (°C)	Monthly Total Precipitation (mm)	Normal Value (1981-2010)	Difference from Normal Value
		41	POLIS CHRYSOCHOUS	26,3	25,8	0,5	36,1	22,0	15,1	14,3	0,8	10,1	21,4	19,1
82*	PAFOS (AIRPORT)	25,5	24,5	1,0	35,3	21,7	16,8	14,7	2,1	11,3	21,9	5,4	6,1	-0,7
225	PRODROMOS (C.F.C.)	19,6	20,4	-0,8	26,4	12,9	9,4	10,8	-1,4	4,4	15,3	17,1	32,0	-14,9
666*	ATHALASSA (RADIOSONDE)	29,0	29,6	-0,6	35,5	24,4	14,2	14,8	-0,6	9,2	18,1	43,9	24,6	19,3
731	LARNAKA (AIRPORT)	27,1	26,4	0,7	33,5	22,8	17,3	15,7	1,6	10,7	21,6	0,8	9,8	-9,0
800**	ACHNA (DASAKI)	28,0	27,4	0,6	36,2	22,1	15,9	14,9	1,0	9,1	21,5	1,4	10,7	-9,3

* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010
** Achna's Temperature Normal Values cover the period 1981-2007

= VALUES FROM AUTOMATIC WEATHER STATION

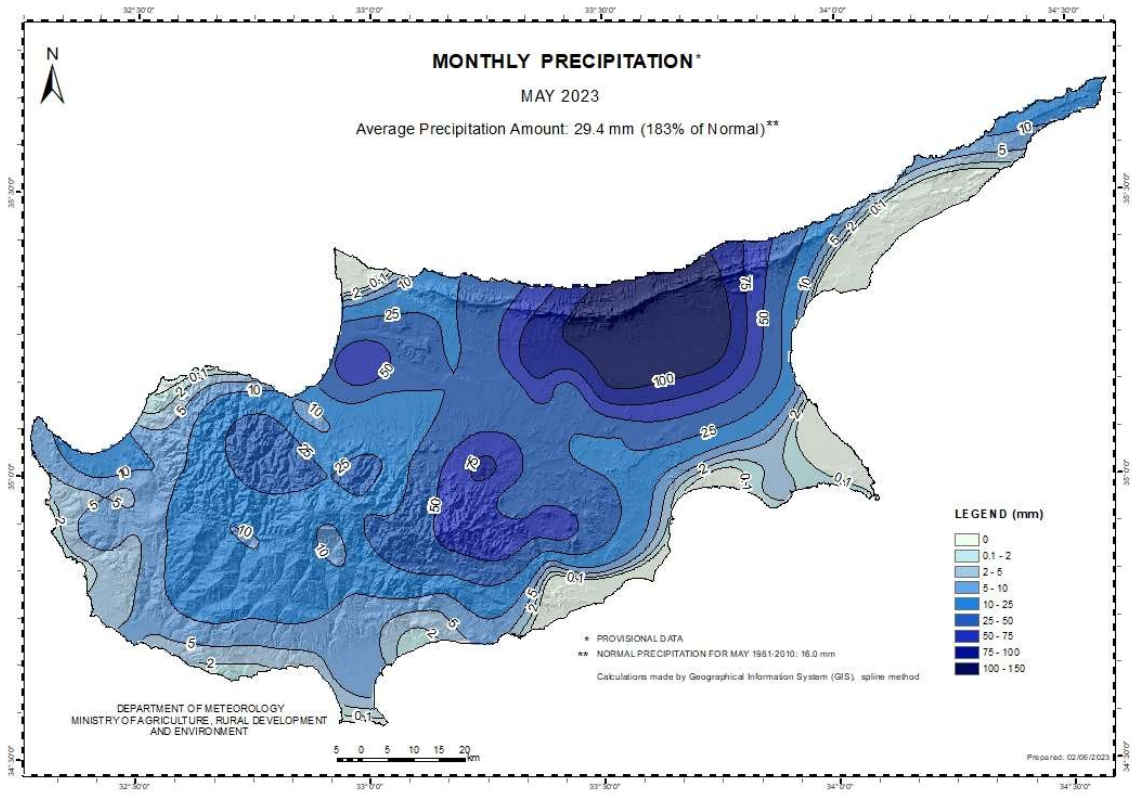
From the distribution of the accumulated precipitation of May, as is shown in the provisional chart that follows, is evident that the surface distribution was well above normal reaching 29.4mm or 183% of normal, something that shows us the uncertainty of the seasonal forecast model which must always be taken into account with a reserve.

For the periods 1, 5-8, 11-12, 19-21, 23-25 and 27-31 of **May** local showers accompanied sometimes with thunderstorms, were recorded.

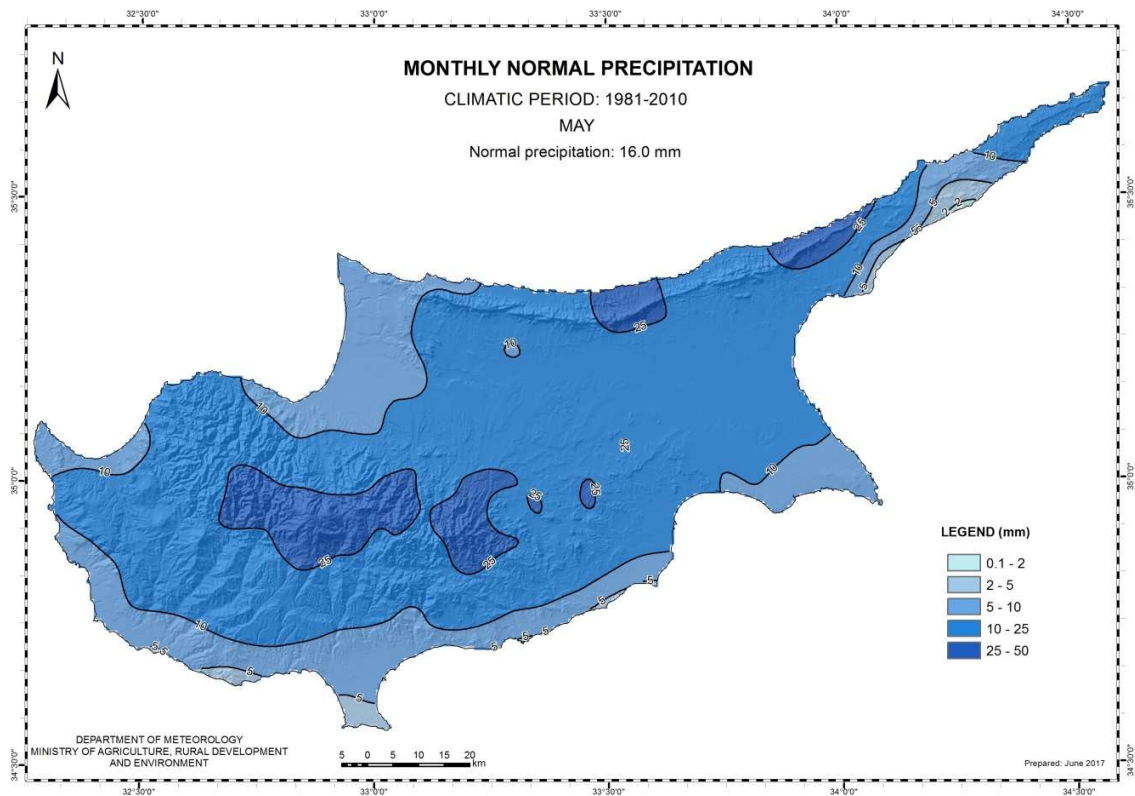
It is worth mentioning that on the 6th and the 30th of **May** hail was reported.

Also, on the 6th, 7th, 24th and 30th of **May** EMMA yellow warnings were issued concerning thunderstorms.

For the purpose of better visualization of **May** accumulated precipitation, a chart of Cyprus with the total preliminary accumulated precipitation is presented.



A Cyprus chart with the normal (period 1981 to 2010) accumulated precipitation for the month of **May** is also presented.



(*) It is stated that due to the uncertainty of the seasonal model to correctly forecast the expected precipitation (sometimes) the seasonal forecast for precipitation is given with a reserve.