# Seasonal weather forecast for the months of

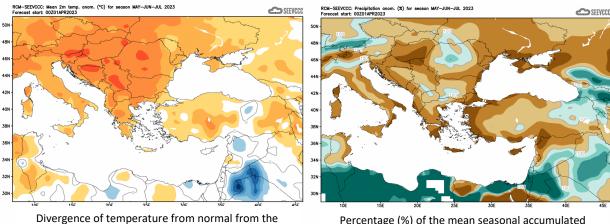
## May, June and July 2023

## General overview of the weather expected to prevail for May, June and July.

The weather for the following three months, namely **May**, **June** and **July 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 July as the hottest month of the year. The accumulated precipitation is at its lowest values. The period of the following three months is likely to be characterized as a series of unstable months, with outbreaks of thunderstorms, initiated from thermal (mainly) causes or over the mountainous range from orographic lifting.

Specifically, regarding the seasonal forecast for the period of **May, June** and **July 2023**, the temperature will be generally normal. The amount of the accumulated precipitation is expected to range below 50% of normal over the entire island (\*).

It must be mentioned that the over all normal precipitation of the months in discussion is not of that amount to contribute significantly to the annual normal precipitation.



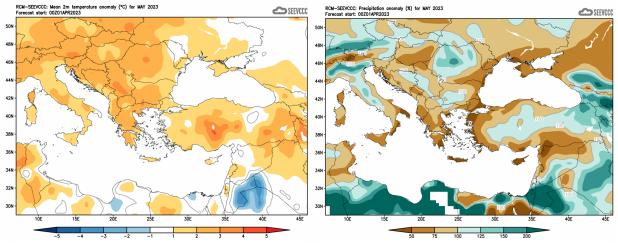
mean seasonal temperature (°C) for May, June and July

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

#### The seasonal monthly forecast in detail

#### May

The seasonal forecast suggests that **May's** temperature will be warmer by 1° to 2°C than normal over the west part of the island and near normal over the east part of the island, while above normal is suggested to be over most parts of the surrounding area. Regarding the accumulated precipitation is expected to range below 50% of normal over the island (\*). However, form the provisional data of **May** the month's accumulated precipitation for the first 7 days of the month has already reached 9.2mm or the 47% of the month's normal, over the non-occupied areas of Cyprus. So, it is evident that the model's seasonal forecast concerning precipitation must be taken into account with a reserve due to the uncertainty of the model's forecast.

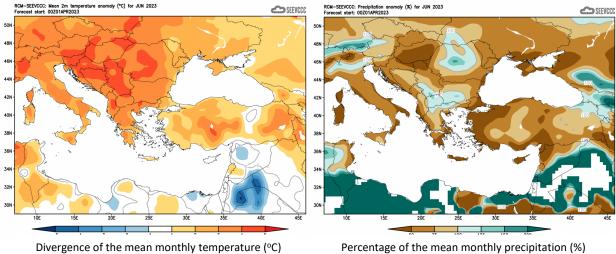


Divergence of the mean monthly temperature (°C) from normal during May

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

#### June

The seasonal forecast suggests that **June's** temperature will be generally normal. The surrounding area will be mostly characterized with normal to above normal temperatures. Regarding the accumulated precipitation is expected to range again below 50% of normal (\*).

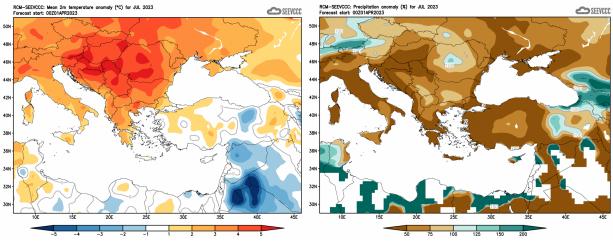


from normal during June

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

#### July

The seasonal forecast suggests that **July's** temperature will be generally normal. Over the Balkans temperatures are expected to locally be well above the monthly normals (up to 3-5°C), while over Turkey normal and or above normal temperatures are expected. Over the nearby eastern areas normal and or below normal temperatures are expected. Regarding the accumulated precipitation, over the west part is expected to range below 50% of normal but over the east part, as suggested by the seasonal forecast, the accumulated precipitation is expected to be significantly above normal (locally up to 200%) (\*).



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

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

### Normal values of temperature and accumulated precipitation for May, June and July

The normal values of mean maximum mean minimum temperature and 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 period in which the atmosphere switches from its winter pattern to the summer one. The temperature, both maximum and minimum, is on the rise with **July's** temperature significantly higher. Climatologically extreme high temperatures are recorded during **July**.

On the other hand, the accumulated precipitation is declining, as presented by the climatological data shown on the table below.

**May**, **June and July** are climatologically suggested to be unstable months with thundery activity initiated mainly by thermal causes or orographic uplift. From the table below, note also the effect 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 **July**, is always significantly higher if compared to the accumulated precipitation of the other selected stations.

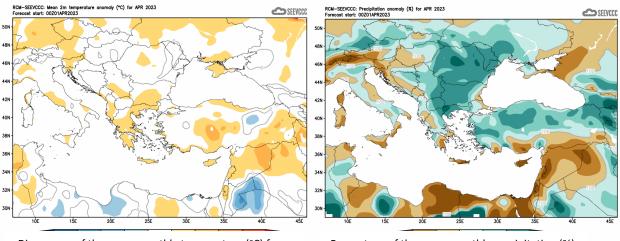
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010												
	MEAN DAILY MAXIMUM TEMPERATURE (°C)				DAILY MINI IPERATURE		MEAN MONTHLY TOTAL PRECIPITATION (mm)					
Area Name	May	June	July	May	June	July	May	June	July			
NORTH COAST	25.8	30.3	33.4	14.3	18.5	21.1	7.6	1.8	0.1			
WEST COAST*	24.5	27.6	29.9	14.7	18.0	20.6	6.1	1.3	0.2			
MOUNTAINOUS AREAS	20.4	25.0	27.9	10.8	15.0	18.2	32.0	27.2	16.4			
INLAND*	29.6	34.0	37.1	14.8	19.1	22.1	24.6	11.6	4.2			
SOUTH COAST	26.4	30.2	32.5	15.7	19.4	22.0	9.8	2.0	0.5			
EAST COAST**	27.4	31.0	33.2	14.9	18.9	21.8	10.7	1.8	0.1			

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

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

#### Evaluation of April's seasonal forecast for the area of Cyprus

The seasonal forecast suggested that **April's** temperature would be above normal, as in the surrounded areas as well. Regarding the accumulated precipitation Cyprus was expected to be again in a dry zone extending mainly from the Southern Balkans, the southern parts of Italy and the southern coastal areas of Asia Minor towards the Near and Middle East. Thus, the accumulated precipitation was expected to range below 50% of normal all over the island (\*).



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

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

Concerning the model's evaluation for **April**, a general judgment is that the model did not perform well concerning, both the mean daily temperatures and even more concerning the accumulated monthly precipitation.

The recorded data is shown that the mean daily maximum and mean daily minimum temperatures were relatively near the normal monthly values, something that the model did not adopted well. However, extremes (deviating by 4°C or more from normal) were recorded in all of the selected meteorological stations. As an example, note the recorded maximum of Prodromos that was 24.2°C with a normal of 15.5°C and the maximum of Athalassa that was 34.5°C with a normal of 24.4°C. Concerning the mean daily minimum note the recorded minimum of Prodromos again, that was 13.8°C with a normal of 6.6°C and the minimum of Paphos that was 17.3°C with a normal of 11.5°C.

		<u>TEMPEI</u>	RATUR	RE AND	PRECIPIT	ATION PR		L DAT	A FOR A	APRIL 202	3			
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	23,1	21,6	1,5	29,5	19,9	11,7	10,8	0,9	8,1	15,1	35,9	21,8	14,1
82*	PAFOS (AIRPORT)	21,8	21,5	0,3	26,2	19,3	13,0	11,5	1,5	9,9	17,3	18,1	15,2	2,9
225	PRODROMOS (C.F.C.)	15,5	15,5	0,0	24,2	8,8	5,5	6,6	-1,1	0,4	13,8	67,2	47,2	20,0
666*	ATHALASSA (RADIOSONDE)	24,6	24,4	0,2	34,5	19,8	9,4	10,4	-1,0	4,1	14,0	51,0	19,1	31,9
731	LARNAKA (AIRPORT)	23,3	22,7	0,6	29,7	20,4	12,5	11,8	0,7	7,1	16,3	16,0	14,2	1,8
800**	ACHNA (DASAKI)	24,0	23,2	0,8	32,1	19,9	11,1	10,9	0,2	4,8	15,2	33,9	19,7	14,2
	* 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														

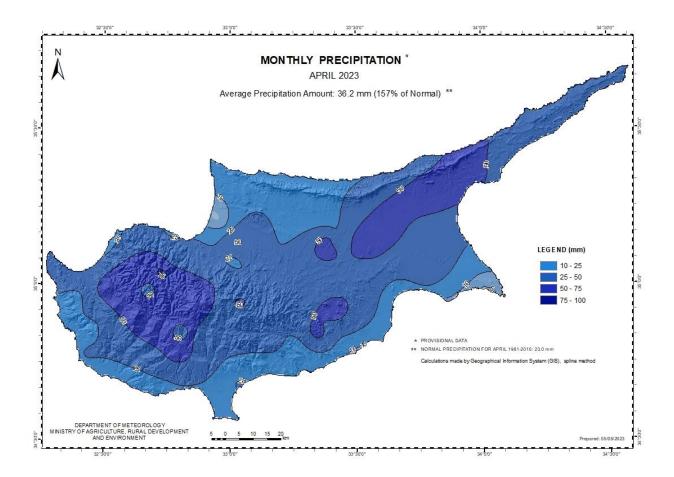
From the distribution of the accumulated precipitation of **April**, as is shown in the provisional accumulated chart that follows, is evident that the surface distribution was above normal reaching 32.6mm or 157% of normal, something that shows us the uncertainty of the seasonal forecast model which must always be taken into account with a reserve.

For the periods 4-5, 9-13, 18-19, 21-22 and 27-30 of **April** local showers accompanied sometimes with thunderstorms, were recorded.

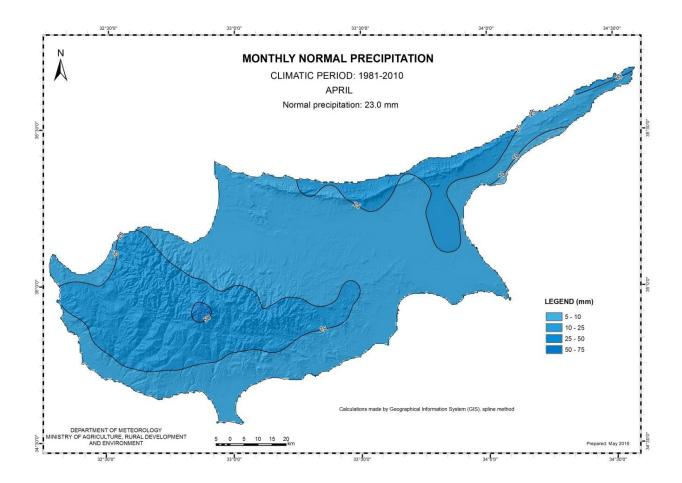
It is worth mentioning that on the 12<sup>th</sup>, 13<sup>th</sup>, 28<sup>th</sup> and 29<sup>th</sup> of **April** hail was reported, while on the 11<sup>th</sup>, 12<sup>th</sup> and 29<sup>th</sup> of **April** snow was also reported over Troodos area.

Also, on the 12<sup>th</sup>, 13<sup>th</sup>, 28<sup>th</sup> and 29<sup>th</sup> of **April** EMMA yellow warnings were issued concerning thunderstorms.

For better visualization of **April's** accumulated precipitation, a chart of Cyprus with the total preliminary accumulated precipitation is presented, below



while a Cyprus chart with the normal (period 1981 to 2010) accumulated precipitation for the month of **April** is also presented below.



(\*) 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.