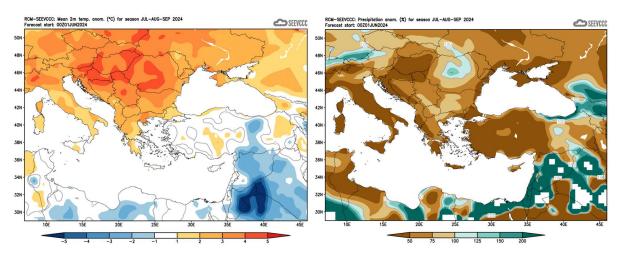
## Seasonal weather forecast for the months of July, August and September 2024

#### General over view of the weather expected to prevail for July, August and September

The weather for the following three months, namely **July**, **August** and **September 2024**, will be presented, with respect to the anomalies of temperature and accumulated precipitation. Normal temperatures (both the maximum and the minimum), are on the rise suggesting **August** as the hottest month of the year. The accumulated precipitation is at its lowest values. The period of the following three months (mainly July and August) is likely to be characterized by outbreaks of thunderstorms initiated from thermal causes over the main plain area and mainly from orographic uplift over the mountainous range.

Specifically, regarding the seasonal forecast for the period of **July, August** and **September 2024**, the mean temperature will generally be normal, as also in the greater part of Asia Minor. The Balkans and Greece will be warmer than normal, while the Middle and Near East will be lower than normal. The amount of the accumulated precipitation over Cyprus is expected to be below 50% of normal mainly in the southern part of the island, while over the rest of the island is expected to range between 50% and 75% of 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 images 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.



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

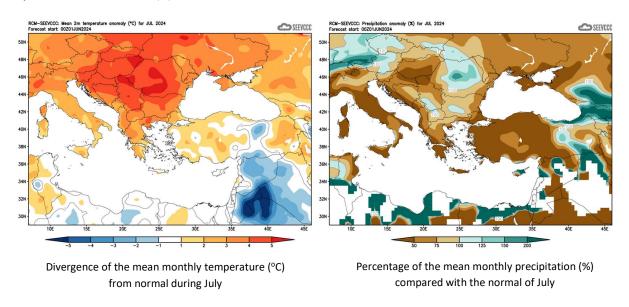
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for July,

August and September

#### The seasonal monthly forecast in detail

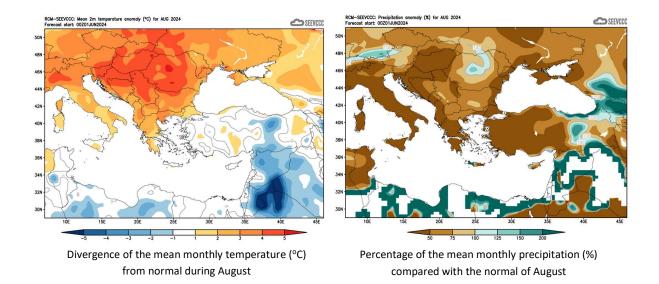
#### July

The seasonal forecast suggests that **July's** temperature will be normal. Asia Minor is expected to be by up to 2°C warmer than normal, Greece and the Balkans are expected to be even by up to 5°C warmer than normal, while the Near and Middle East is expected to be colder than normal. Regarding the accumulated precipitation, Cyprus' southwestern half is expected to be below 50% of normal but over the northeastern half the accumulated precipitation is expected to range even up to 200% of normal (\*).



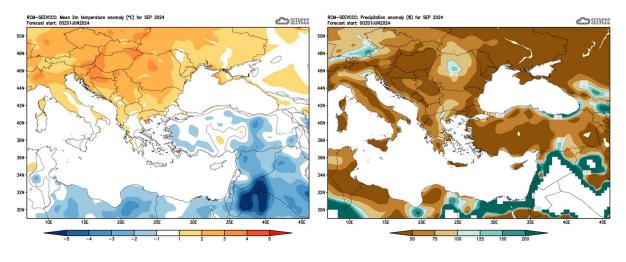
#### **August**

**August's** seasonal forecast suggests that the temperature will generally be normal, as in Asia Minor. Greece and the Balkans are expected to be well above, while the Near and Middle East is expected to be below normal. Regarding the accumulated precipitation, it will range below 75% of normal except from the northwestern most coastal areas where it will be near normal (\*).



### September

The seasonal forecast suggests that **September's** temperature will be normal for Cyprus, the Greek area and Asia Minor, while the Balkans are expected to be warmer than normal. The Near and Middle East is expected to be colder than normal. Regarding the accumulated precipitation, this will be lower than 50% of normal except from the northwestern coastal areas where is expected to range between 50% and 75% of normal. Dry characteristics also has the entire area of Asia Minor, Greece and the Balkans, while the Near and Middle East is expected to be significantly above normal (\*).



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

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

# Normal values of temperature and accumulated precipitation for July, August and September 2024

The normal values of the mean maximum and the mean minimum temperature and also 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 temperature, both the maximum and the minimum, is on the rise with July's and August's temperature being significantly higher than September's. On the other hand, the accumulated precipitation is declining during July and August, 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 noted also from the table below. Note the cause of the mountainous area of Troodos range over the accumulated precipitation, mainly as a result of thundery activity, which is affecting primarily the mountainous ranges of the island. The accumulated precipitation over Prodromos station although declining towards September is always significantly higher, if compared to the accumulated precipitation of the other selected stations. It is worth noting that during September the accumulated precipitation starts a rise in all selected stations.

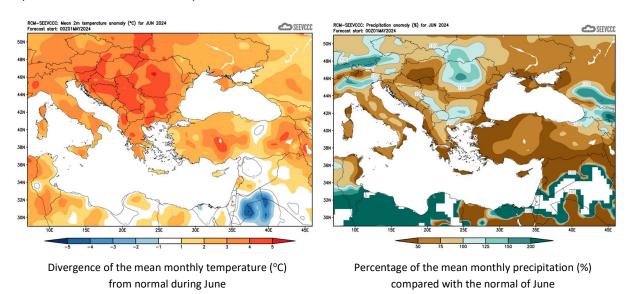
	TEM	IPERATURE	AND PREC	I NOITATIQI	NORMAL V	ALUES FOR	THE PERIO	D 1981-20	10	
	MEAN DAILY MAXIMUM TEMPERATURE (°C)				DAILY MINI 1PERATURE	-	MEAN MONTHLY TOTAL PRECIPITATION (mm)			
Area Name	July	August	September	July	August	September	July	August	September	
NORTH COAST	33.4	33.3	30.1	21.1	21.5	19.2	0.1	0.0	4.0	
WEST COAST*	29.9	30.5	29.0	20.6	21.1	19.1	0.2	0.0	3.6	
MOUNTAINOUS AREAS	27.9	28.0	24.6	18.2	18.1	14.9	16.4	12.0	10.7	
INLAND*	37.1	36.9	33.6	22.1	21.9	18.8	4.2	1.8	12.2	
SOUTH COAST	32.5	32.9	30.9	22.0	22.3	19.8	0.5	0.3	4.3	
EAST COAST**	33.2	33.5	31.9	21.8	22.0	19.6	0.1	0.1	2.9	

<sup>\*</sup> West Coast and Inland Values cover the period 1983-2010

<sup>\*\*</sup> East Coast Temperature Values cover the period 1981-2007

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

The seasonal forecast suggested that **June** would be warmer than normal by 1 to 2 °C in most of the island, except for the eastern and southeastern parts where it was expected to be normal. Asia Minor was expected to be warmer than normal, while the Balkans and Greece would be well above normal (3-5°C). Regarding the accumulated precipitation Cyprus was expected to be dry without the occurrence of dynamic barometric weather systems.



Concerning the models' evaluation for **June**, a general judgment is that the model did not perform well at all concerning temperature. It must be mentioned that during summer months, precipitation is resulted mainly from thundery activity which has very localised characteristics and that judging is very difficult due to models' limitations. Never the less, June recorded 1.9mm of accumulated precipitation resulting to 29% of the climatological precipitation (6.6mm), which ranks it as a very dry month relative to its normal value. So, we notice that the model did not behave well enough at all with respect to the seasonal forecast of the mean monthly precipitation, as well.

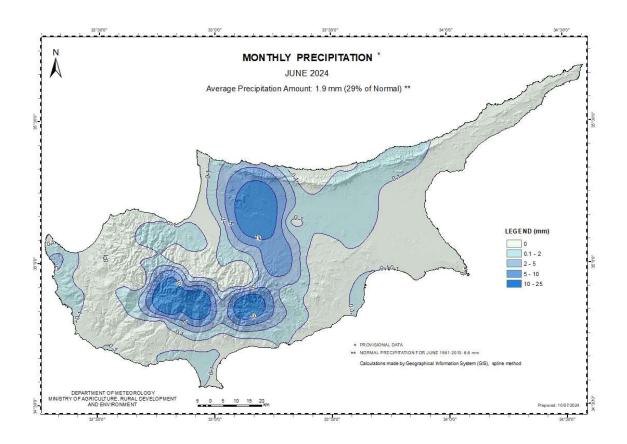
St. No.	Station Name	Mean Daily Maximum Temperature (°C)	Normal Value (1981- 2010)	Difference from Normal Value	Highest Daily Maximum Temperature (°C)	Maximum	Mean Daily Minimum Temperature (°C)	Normal Value (1981- 2010)	Difference from Normal Value	Lowest Daily Minimum Temperature (°C)	Highest Daily Minimum Temperature (°C)	Monthly Total Precipitation (mm)	Normal Value (1981- 2010)	Difference from Normal Value
41	POLIS CHRYSOCHOUS	34.4	30.3	4.1	39.2	28.0	22.6	18.5	4.1	15.6	27.3	0.0	1.8	-1.8
82*	PAFOS (AIRPORT)	31.3	27.7	3.6	38.4	26.5	22.8	18.1	4.7	18.4	25.7	0.0	1.3	-1.3
225	PRODROMOS (C.F.C.)	30.6	25.0	5.6	35.6	24.7	19.7	15.0	4.7	13.6	25.0	9.4	27.2	-17.8
666*	ATHALASSA (RADIOSONDE)	39.8	34.1	5.7	44.6	34.5	23.1	19.2	3.9	15.7	29.1	0.2	11.6	-11.4
731	LARNAKA (AIRPORT)	34.1	30.2	3.9	41.5	28.9	23.5	19.4	4.1	18.1	28.9	0.8	2.0	-1.2
800**	ACHNA (DASAKI)	35.4	30.9	4.5	42.9	29.5	22.6	18.9	3.7	16.1	29.2	0.0	1.8	-1.8

About the evaluation of the recorded temperatures, all of the maximum (table above) were well above normal, contrary to what the model suggested. Extreme daily maximum temperatures were also recorded with great positive deviations, such as at the station of Achna with extreme maximum temperature of 42.9°C, which was 12°C above the normal maximum temperature of the station and also the station of Larnaka airport with extreme maximum temperature of 41.2°C, which was 11.3°C above the normal maximum temperature. At this point it is important to mention that at the mountainous station of Prodromos (with an altitude of 1368m) the highest daily maximum temperature that was recorded (35.6°C) was 10.6°C above the month's normal. Extreme daily minimum temperatures were also recorded with great positive deviations, like the Achna station where the minimum temperature (29.2°C) was 10.3°C higher than the normal one (18.9°C). Also, at the station of Prodromos the recorded minimum temperature (25°C) was 10°C above normal (15°C). The temperatures recorded in Cyprus during June 2024 were extremely high, both the daily maximum and the daily minimum but the mean daily temperatures as well. In fact, they were that much above the month's normal that they rank June 2024 as the warmest June ever recorded on the island, for the month of June, since there are climatic data on the island!

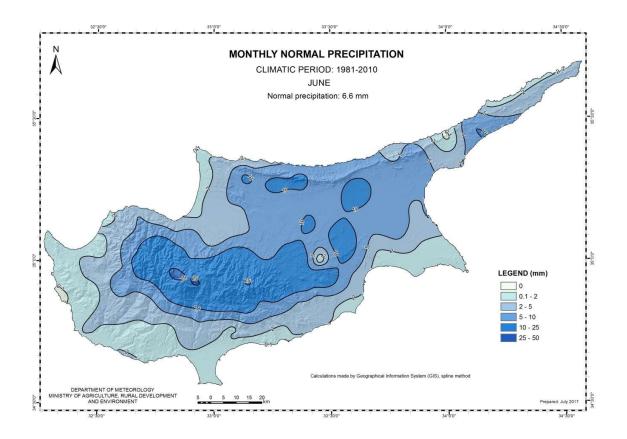
The accumulated precipitation was a result of local rain showers and thunderstorms during the days 8, 9, 22 and during the 30<sup>th</sup> of **June**. Hail was reported for the 8<sup>th</sup> and 9<sup>th</sup> of June.

For the days 3, 4, 7, 8, 12, 13, 15, 19, 20, 26, 27 and 28 of **June** an EMMA yellow warning was issued, concerning extreme high temperature (maximum, minimum or a combination of the two), while on the 5<sup>th</sup>, 7<sup>th</sup> and on the 13<sup>th</sup> of June EMMA orange warning for extreme high temperature was also issued. On the 14<sup>th</sup> of the month EMMA red warning for extreme high temperature was issued. Also, on the 9<sup>th</sup> and on the 22<sup>nd</sup> of the month EMMA yellow warning for thunderstorm was issued.

For the purpose of better visualization of **June** 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 **June** is also presented.



<sup>(\*)</sup> 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.