

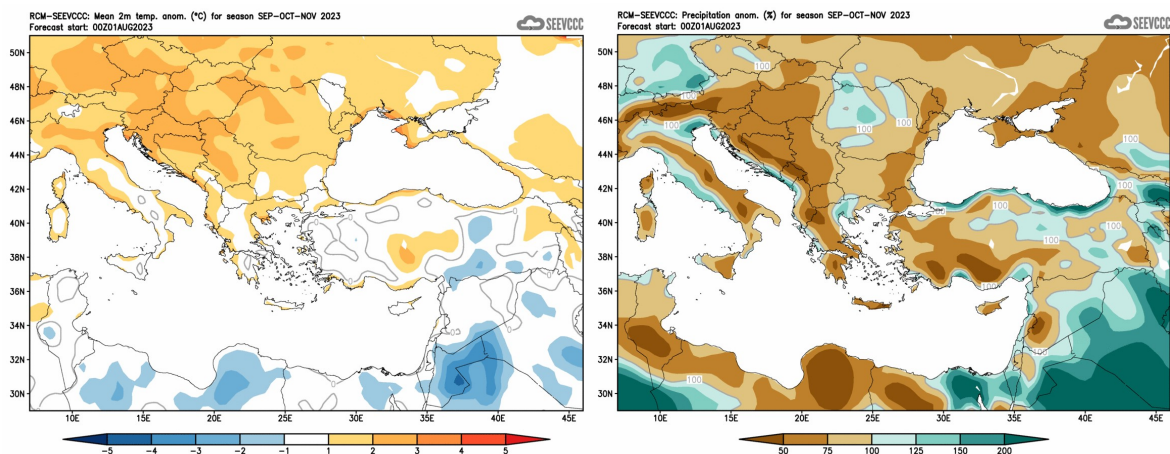
## Seasonal weather forecast for the months of September, October and November 2023

### General overview of the weather expected to prevail for September, October and November

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

During the period in focus normal temperatures (both maximum and minimum) are declining, suggesting **September** as the hottest month of the period and **November** the period's coldest month. The accumulated precipitation is at its lowest values during September, but it rises well during the period. During September, the seasonal low shrinks eastwards with a further shrinkage during October until dissipation. The first month of the period is likely to be climatologically characterized by outbreaks of thunderstorms, initiated from thermal causes over the main plain area or over the mountainous range from orographic uplift. During **October** and mainly during **November** the frequency of baroclinic depressions affecting the area increases significantly, resulting in higher accumulated precipitation. During **November**, the first snow fall may be noted over the highest peaks of Troodos range, as in the past.

Specifically, regarding the seasonal forecast for the period of **September, October and November 2023**, the temperature will be generally normal over Cyprus. Normal to a bit warmer than normal are the expected temperature over Greece and Asia Minor, while over the Near and Middle East temperature is expected to be normal to lower than normal. The amount of the accumulated precipitation over Cyprus is expected to generally range below 50% of normal, except from the western and the northwestern part that is expected to range between 50% and 75% of normal. Increased amounts of precipitation are expected only over some coastal areas of Egypt (\*).

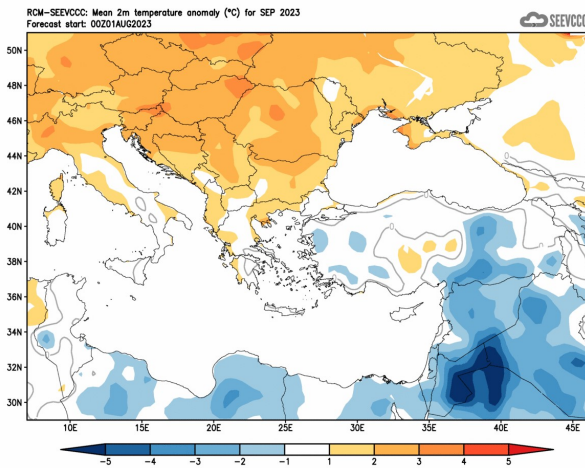


Divergence of temperature from normal from the mean seasonal temperature (°C) for September, October and November

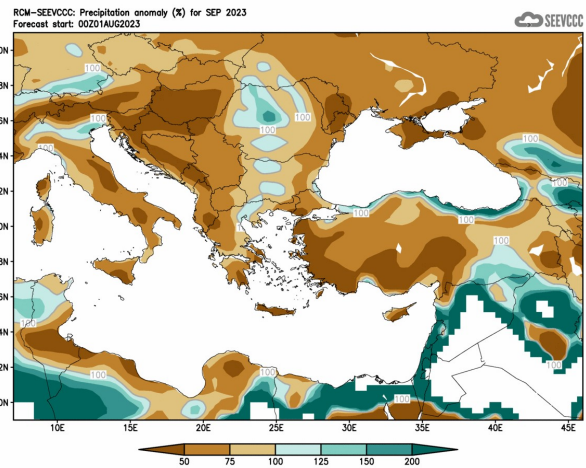
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for September, October and November

## The seasonal monthly forecast in detail

The seasonal forecast suggests that **September's** temperature will be generally normal. Greece and Asia Minor seem to have similar temperature characteristics. Concerning the amount of the accumulated precipitation, this will generally range below 50% of normal for Cyprus, while over the coastal areas of Middle East this will reach even the 200% of the normal precipitation (\*).

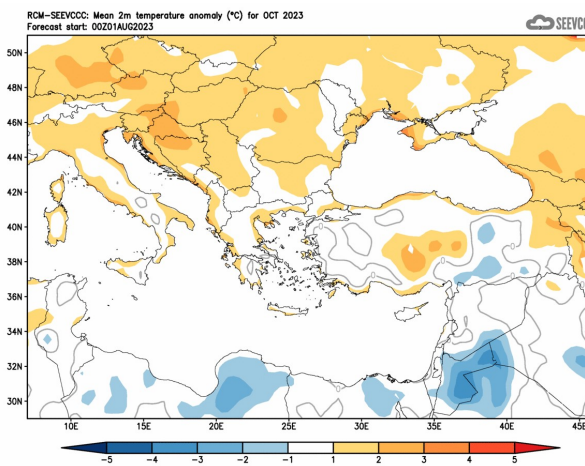


Divergence of the mean monthly temperature (°C) from normal during September

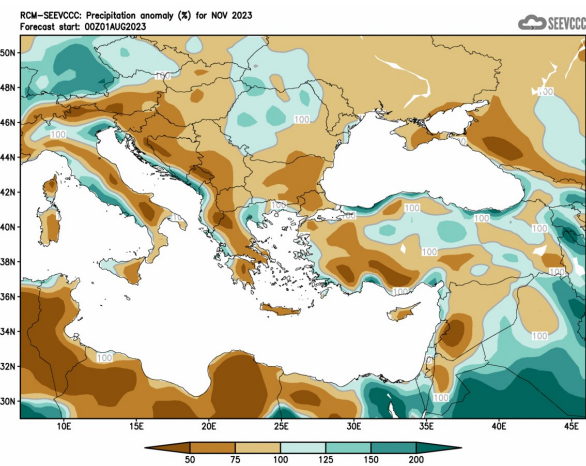


Percentage of the mean monthly precipitation (%) compared with the normal of September

The seasonal forecast for **October** suggests that temperature will generally be normal, while the accumulated precipitation of Cyprus will be below 50% of normal all over Cyprus, especially over the southeastern part of the island (\*).



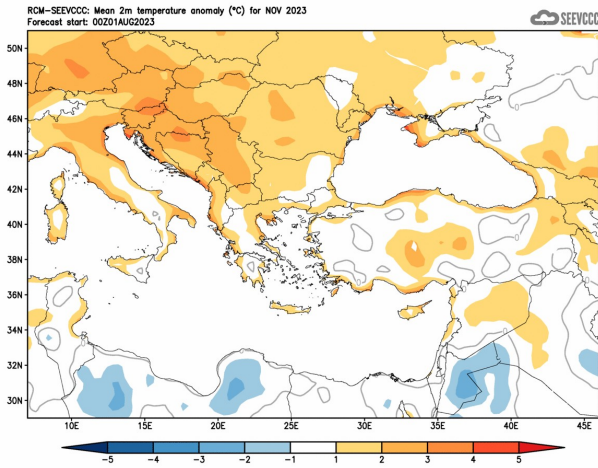
Divergence of the mean monthly temperature (°C) from normal during October



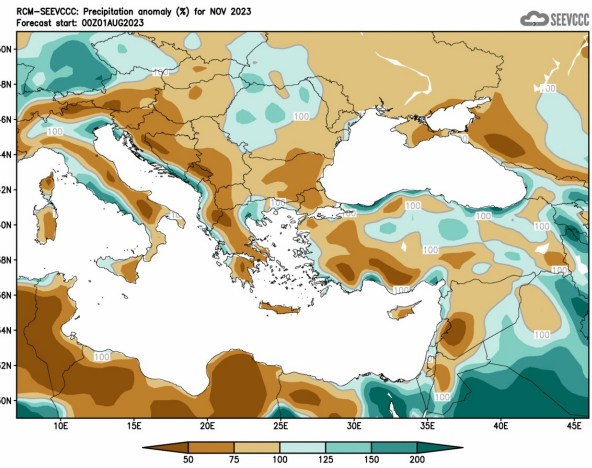
Percentage of the mean monthly precipitation (%) compared with the normal of October

The seasonal forecast for **November** suggests that mountainous areas while locally over the coastal areas will be slightly above normal. The expected

accumulated precipitation of November will range between 50% and 75% of normal all over Cyprus, except from the east part over which will be below 50% of normal (\*).



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



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

### Normal values of temperature and accumulated precipitation for September, October and November

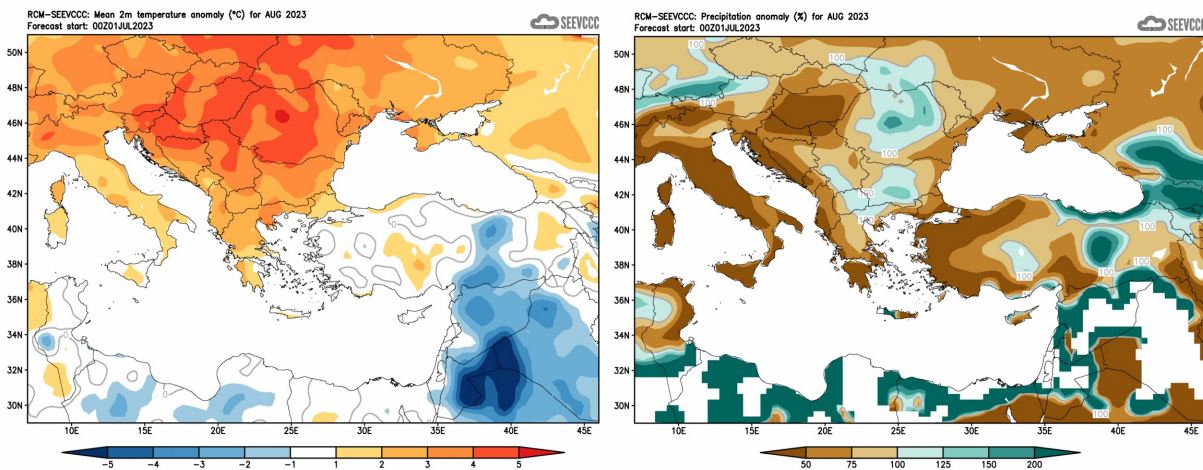
The normal values of mean maximum, mean minimum temperature and the accumulated precipitation concerning the three months the period of forecast is covering, are presented below in order to gain a better view of the normal seasonal climate. The temperature, both maximum and minimum, is on the fall suggesting **September** as the warmest month of the period and **November** as the coldest. On the other hand, the accumulated precipitation is increasing significantly from **September** towards **November**, as presented by the climatological data shown on the table below. It is worth noting that **October's** and mainly **November's** accumulated precipitation is significantly higher than **September's** because of the reoccurrence/redeveloping of depressions over the area of the east Mediterranean.

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)		
	September	October	November	September	October	November	September	October	November
NORTH COAST	30.1	26.4	21.7	19.2	16.1	12.2	4.0	30.3	58.6
WEST COAST*	29.0	26.4	22.4	19.1	16.4	12.9	3.6	27.4	52.6
MOUNTAINOUS AREAS	24.6	19.2	12.8	14.9	10.9	6.1	10.7	34.4	93.8
INLAND*	33.6	28.4	22.1	18.8	15.2	10.4	12.2	20.7	43.2
SOUTH COAST	30.9	27.8	22.6	19.8	16.7	12.4	4.3	16.0	46.8
EAST COAST**	31.9	28.5	22.4	19.6	16.7	11.8	2.9	19.9	44.0

\* West Coast and Inland Values cover the period 1983-2010  
 \*\* East Coast Temperature Values cover the period 1981-2007

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

**August's** seasonal forecast suggested that temperature over Cyprus would generally be normal. Normal temperature would also characterize Asia Minor, while Greece and the Balkans would have been warmer than normal and Middle East would have been lower than normal. The amount of the accumulated precipitation over inland areas was expected to be around normal, while over the northern and the western part was expected to range above normal and over the southern and eastern part to range below normal.



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

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

From the initial data, as recorded by the Department of Meteorology and presented in the table below for the selected reference stations, it appears that the seasonal model for **August** did not behave well with respect to the seasonal temperature forecast. All average daily maximum and minimum temperatures were above normal, while the positive deviation from normal of both the average daily maximum and average daily minimum temperature is notable for the forest station at Prodrornos, which is located at an altitude of 1736 meters. Especially, for the cumulative amount of rain during the summer months it must be mentioned that during summer months, precipitation is resulted mainly from thundery activity which has very localised characteristics and that a quantitative judgment is very difficult due to model's limitations. However, the seasonal model for **August** showed that the expected amount of rain inland would be around normal, in the north and west would be above normal and in the south and east it would be below normal. However, at all reference stations this was close to normal, except from the station at Prodrornos where it was below normal and the station at Athalassa where it was well above normal. At this point it is worth mentioning that the largest contribution to the total August 2023 rainfall amounts, particularly over the inland and the southeastern areas of the island, is not only due to isolated thunderstorms of thermal instability during noon and early afternoon, but also due to a disturbance which affected the island late in the evening of the 28<sup>th</sup> of August. Such

disturbances, of dynamic causes, the result of which is rainfall accompanied by intense thundery activity during the evening hours, is something that does not happen often in Cyprus, especially during the month of August.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR AUGUST 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	33.5	33.3	0.2	37.4	31.2	23.0	21.5	1.5	20.7	25.2	0.0
82*	PAFOS (AIRPORT)	31.9	30.5	1.4	32.5	30.8	23.7	21.2	2.5	21.3	25.6	0.0	0.0	0.0
225	PRODROMOS (C.F.C.)	31.4	28.0	3.4	38.4	25.2	20.7	18.1	2.6	15.2	29.5	0.0	12.0	-12.0
666*	ATHALASSA (RADIOSONDE)	38.9	37.0	1.9	45.3	35.2	22.2	21.9	0.3	19.3	25.2	13.0	1.8	11.2
731	LARNAKA (AIRPORT)	34.0	32.9	1.1	35.7	32.7	24.6	22.3	2.3	21.8	27.2	0.4	0.3	0.1
800**	ACHNA (DASAKI)	34.6	33.5	1.1	38.4	32.2	23.8	22.0	1.8	21.4	25.8	0.2	0.1	0.1

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

△ dew

Extreme maximum temperatures with positive deviations of more than 4°C were recorded, as at Prodromos station where the highest daily temperature 38.4°C was 10.4°C above the normal (28°C), that is the highest daily maximum temperature ever recorded at this station since its operation date. Also, at the station at Athalassa the extreme maximum (45.3°C) was 8.3°C above normal.

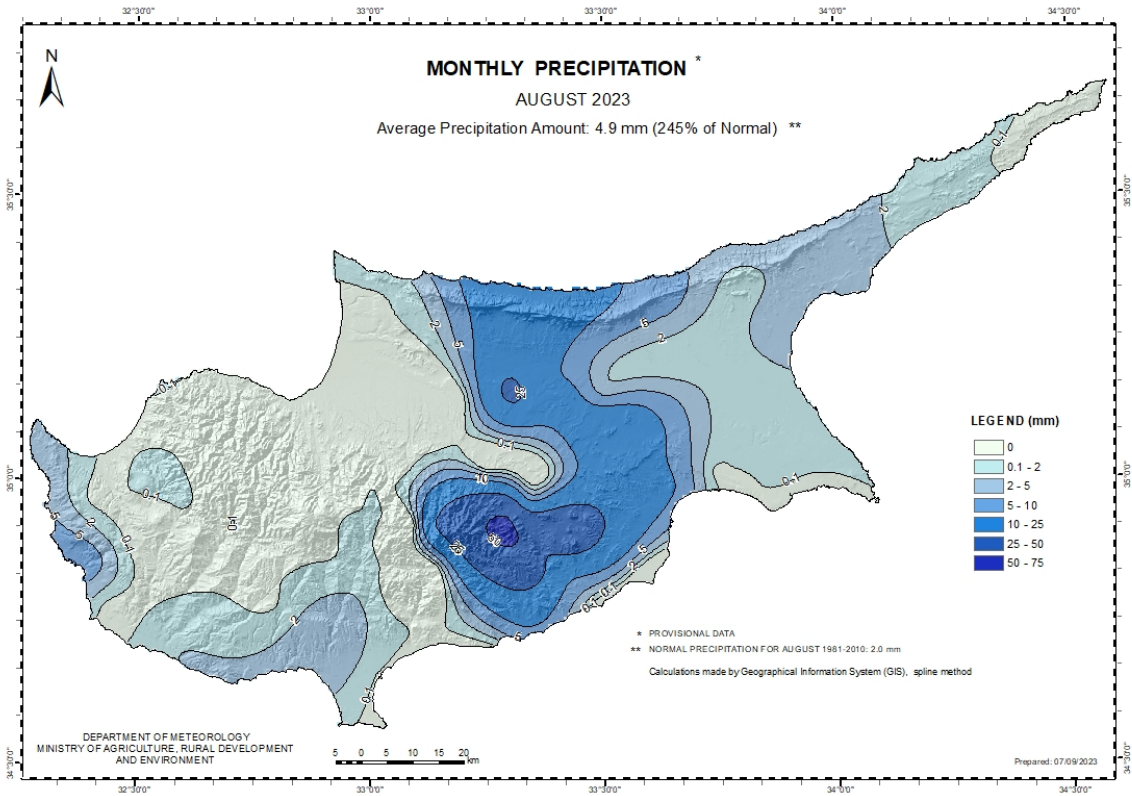
Extreme minimum temperatures with positive departures of more than 4°C were also recorded. The extreme minimum (29.5°C) at Prodormos station was 11.4°C above normal which is also a record regarding the highest daily minimum temperature ever recorded at this station. At Larnaka airport the extreme minimum (27.2) was 4.9°C above normal.

For the periods 1-4, 13-19 and 22-23 of **August** EMMA yellow warnings were issued, concerning high temperatures. At the same time, for the period 14-17 **August** EMMA orange warnings, once again concerning high temperatures, were also issued.

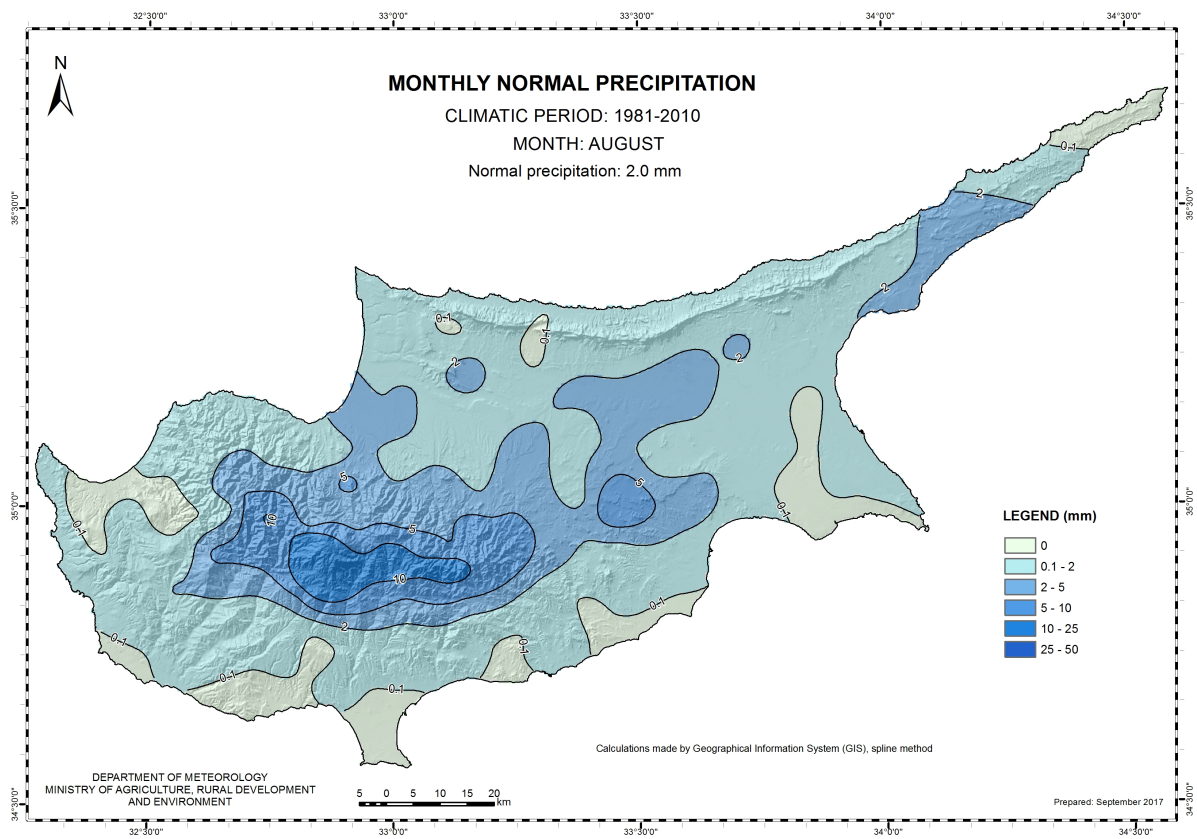
For the periods 22 and 27-28 of **August** local showers accompanied sometimes with thunderstorms were recorded, resulting in accumulated precipitation of 4.9mm (or 245% of normal).

On the 28<sup>th</sup> of **August** EMMA yellow warning was issued concerning thundery activity.

For the purpose of better visualization of **August** 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 **August** 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.