

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

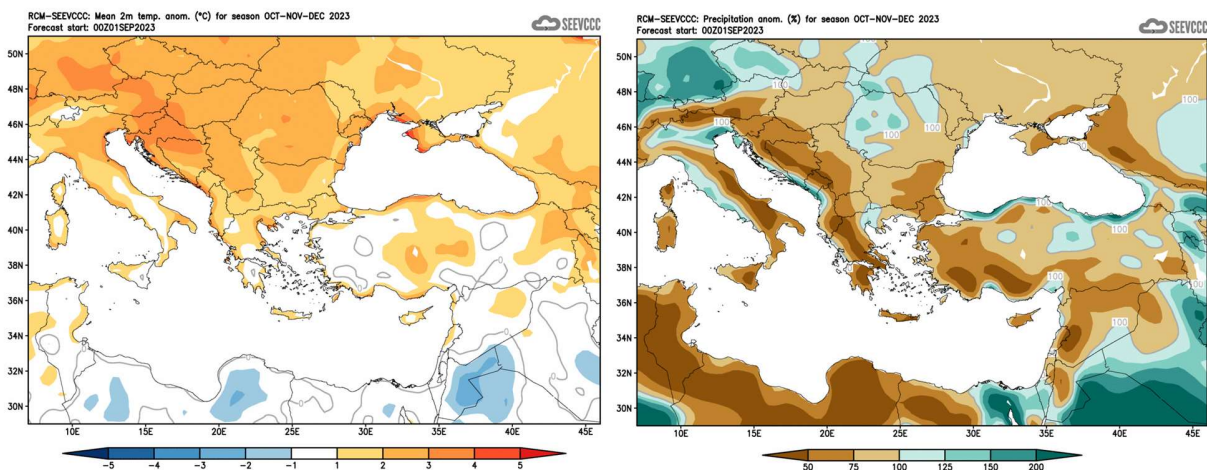
General over view of the weather expected to prevail during October, November and December

Bearing in mind the limitations the seasonal models are introducing in seasonal forecast, the weather for the following three months, namely **October, November** and **December 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 significantly declining. The accumulated precipitation is increasing at accumulations almost double the accumulations of the previous month, since during the period the frequency of baroclinic depressions affecting the area is increasing significantly, resulting in higher accumulated precipitation amounts.

Specifically, regarding the seasonal forecast for the period of **October, November** and **December 2023** the temperature is expected to be normal and slightly, over the coastal areas, higher than normal.

Normal to slightly above normal temperatures also characterizes the entire region of Asia Minor, Greece and the Near and Middle East. The amount of the accumulated precipitation is expected to range between 50% and 75% of normal all over the island, as well as over the neighboring regions of Asia Minor, Greece and the Near and Middle East (*).



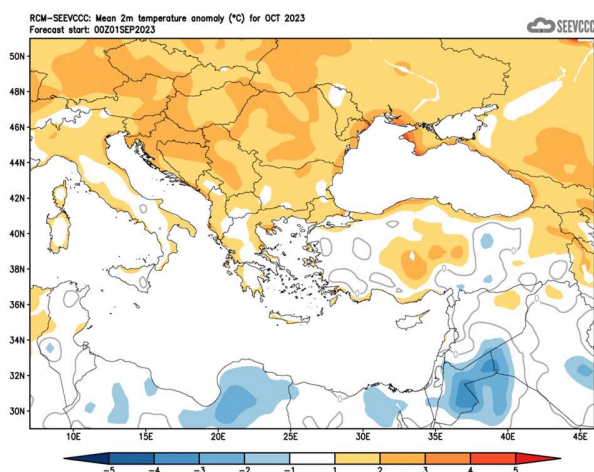
Divergence of temperature from normal from the mean seasonal temperature (°C) for October, November and December

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

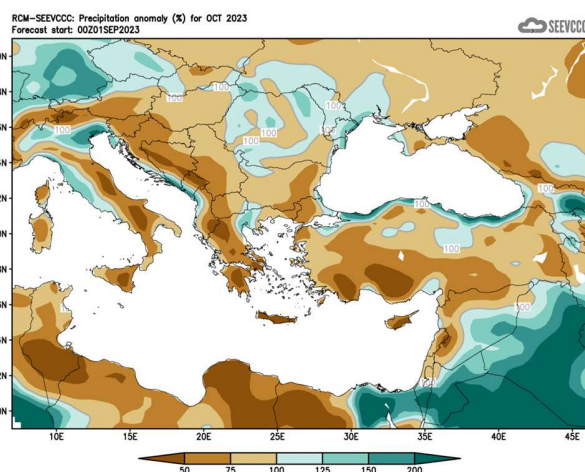
The seasonal monthly forecast in detail

Seasonal forecast in detail

The seasonal forecast suggests that **October's** temperature will generally be normal. Greece and Asia Minor are expected to have normal to slightly above normal temperatures, while the Near and Middle East's temperatures are expected to be normal in the north and slightly below normal in the south. Regarding the accumulated precipitation, this is expected to be below 75% of normal over the entire island but over the southeastern part it is expected to range between 50% and 75% of normal. Similar dry conditions are also expected for the Balkans and Asia Minor, while Egypt and the Near and Middle East are expected to experienced even more drier conditions with the expected accumulated precipitation ranging below 50% of normal (*).

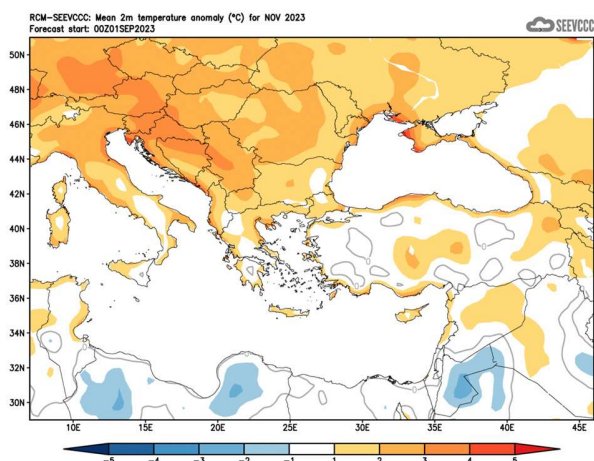


Divergence of the mean monthly temperature ($^{\circ}\text{C}$)
from normal during October

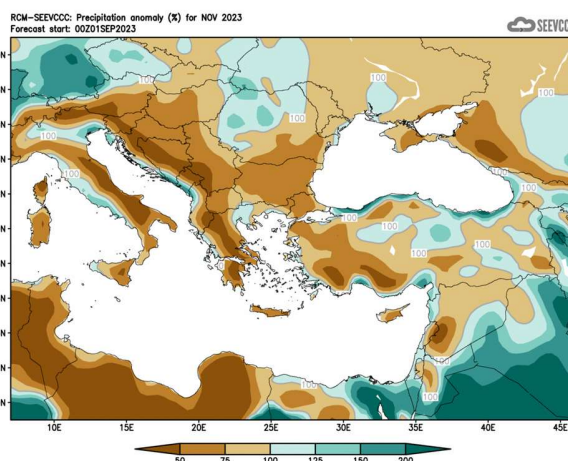


Percentage of the mean monthly precipitation (%)
compared with the normal of October

The seasonal forecast for **November** suggests that temperature will be slightly above normal. The accumulated precipitation for Cyprus will generally range between 50% and 75% of normal, except from the north and west part over which it will range between 75% and 100%. The Balkans are expected to be above normal concerning the expected temperature conditions for November, while Greece, Asia Minor and the Near and Middle East are expected to be normal or slightly above normal. Drought conditions are expected in the Balkans and Greece as well as in the rest of the neighboring areas, with the percentages of precipitation limited between 50% and 75% while in some of those areas it will be below 50% of normal (*).

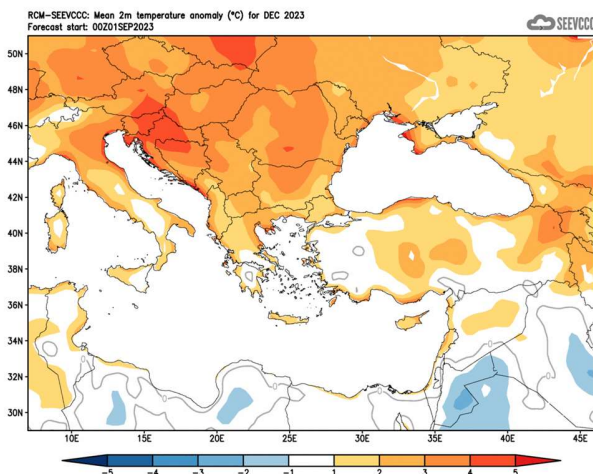


Divergence of the mean monthly temperature ($^{\circ}\text{C}$) from normal during November

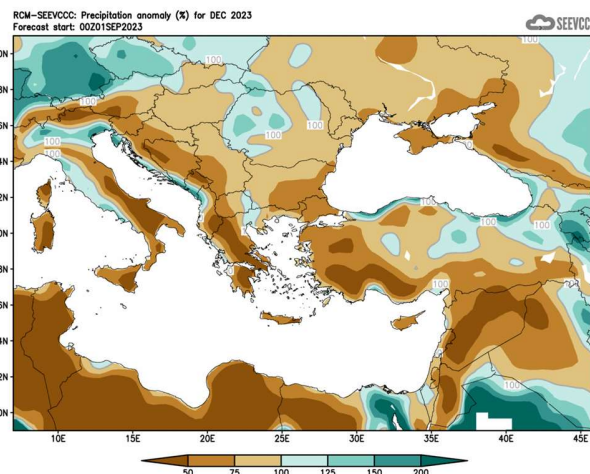


Percentage of the mean monthly precipitation (%) compared with the normal of November

The seasonal forecast for **December** suggests that temperature will be above normal. The accumulated precipitation for Cyprus will range between 50% and 75% of normal for the entire island. The region of Asia Minor, the Balkans as well as the Near and Middle East will be normal to slightly warmer than normal concerning the temperature conditions. The accumulated precipitation is expected to range between 50% and 75% in most of the neighboring regions (*).



Divergence of the mean monthly temperature ($^{\circ}\text{C}$) from normal during December



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

Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for October, November and December

The normal values of the mean maximum and the 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 temperature, both maximum and minimum, is on the fall suggesting **December** as the coldest month of the period. On the other hand, the accumulated precipitation is increasing significantly towards December, as presented by the climatological data shown on the table below. It is worth noting that the score of the accumulated precipitation is almost double every next month for each station if compared to the score of the previous month, and this as a result of the reoccurrence/redeveloping of depressions over the area of east Mediterranean.

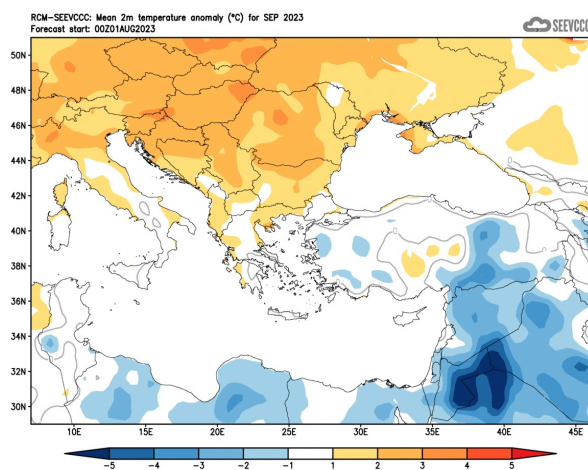
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	October	November	December	October	November	December	October	November	December
NORTH COAST	26.4	21.7	18.0	16.1	12.2	9.3	30.3	58.6	93.6
WEST COAST*	26.4	22.4	18.9	16.4	12.9	10.0	27.4	52.6	90.1
MOUNTAINOUS AREAS	19.2	12.8	8.3	10.9	6.1	2.6	34.4	93.8	157.3
INLAND*	28.4	22.1	17.3	15.2	10.4	7.0	20.7	43.2	57.2
SOUTH COAST	27.8	22.6	18.6	16.7	12.4	9.2	16.0	46.8	79.0
EAST COAST**	28.5	22.4	18.0	16.7	11.8	8.3	19.9	44.0	76.8

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

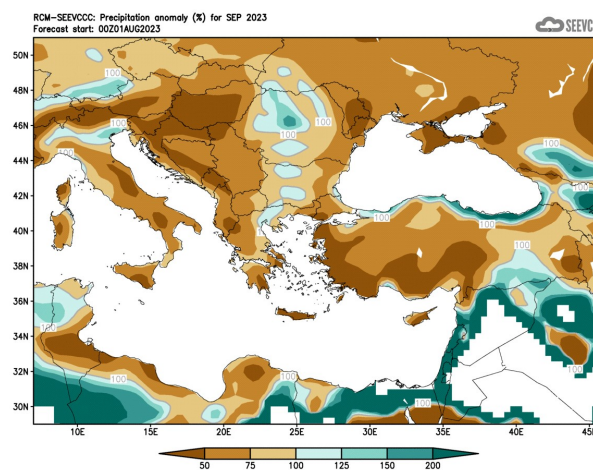
** East Coast Temperature Values cover the period 1981-2007

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

The seasonal forecast suggested that **September's** temperature would generally be normal. Greece and Asia Minor seemed to have similar temperature characteristics. Concerning the amount of the accumulated precipitation, this would generally range below 50% of normal for Cyprus, while over the coastal areas of Near and Middle East this would 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

Concerning the model's evaluation for **September** 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 a general judgment is that the model did not perform well concerning the temperature. All of the mean daily maximum and daily minimum temperatures were above normal.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR SEPTEMBER 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	32.1	30.1	2.0	35.5	29.9	21.3	19.2	2.1	19.2	23.3	6.5	4.0	2.5
82*	PAFOS (AIRPORT)	31.1	29.0	2.1	33.0	28.6	21.8	19.2	2.6	20.2	25.3	7.5	3.6	3.9
225	PRODROMOS (C.F.C.)	26.2	24.6	1.6	32.5	19.3	15.9	14.9	1.0	12.3	21.0	44.7	10.7	34.0
666*	ATHALASSA (RADIOSONDE)	36.1	33.6	2.5	39.6	31.6	19.8	18.8	1.0	17.1	23.0	0.4	12.2	-11.8
731	LARNAKA (AIRPORT)	32.7	30.9	1.8	34.5	30.9	21.8	19.8	2.0	19.4	25.3	0.2	4.3	-4.1
800**	ACHNA (DASAKI)	33.5	31.9	1.6	36.3	30.9	21.1	19.6	1.5	17.4	24.6	1.4	2.9	-1.5

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

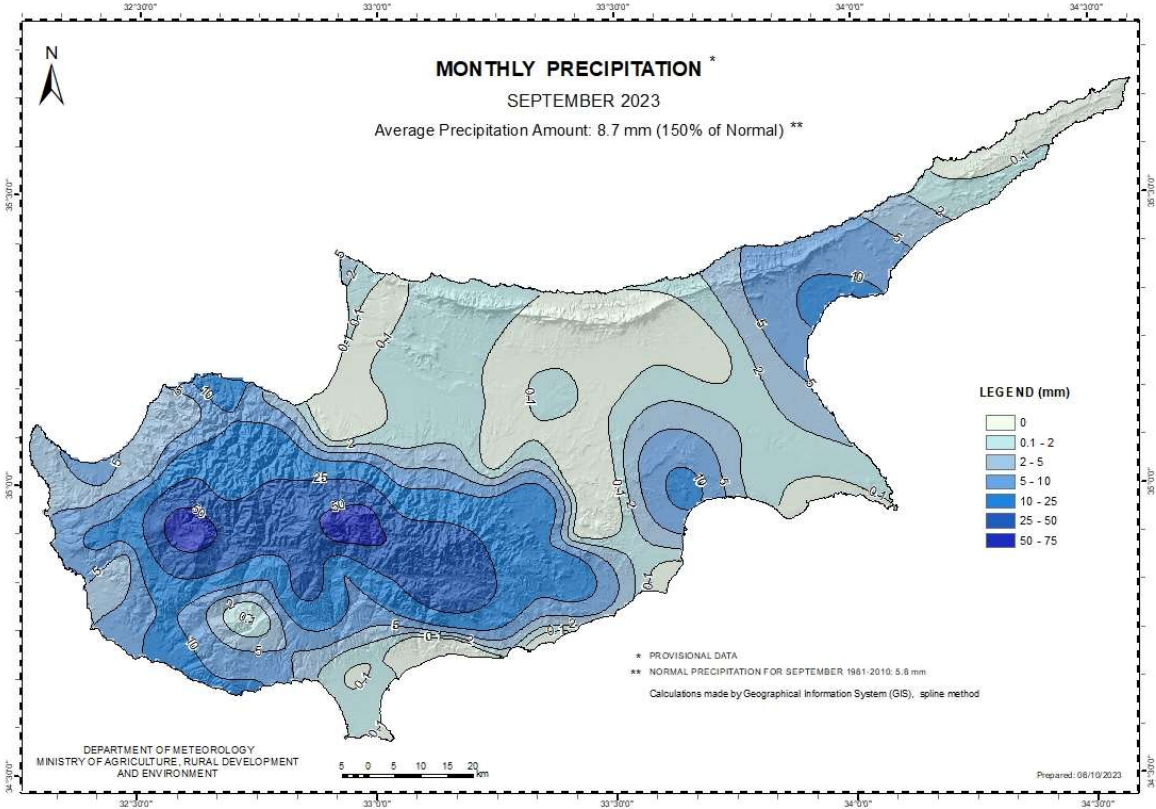
Daily maximum temperatures were recorded with positive departures greater than 4°C, like Prodromos station where the highest daily maximum temperature (32.5°C) was 7.9°C greater than normal (24.6°C) and Athalassa station, where the highest daily maximum temperature (39.6°C) was 6°C greater than normal (33.6°C).

Daily minimum temperatures were recorded with positive departures greater than 4°C like Pafos and Prodromos stations, where the highest daily minimum temperature 25.3°C and 21.0°C were 6.1°C greater than normal (19.2°C and 14.9°C, respectively), in both cases.

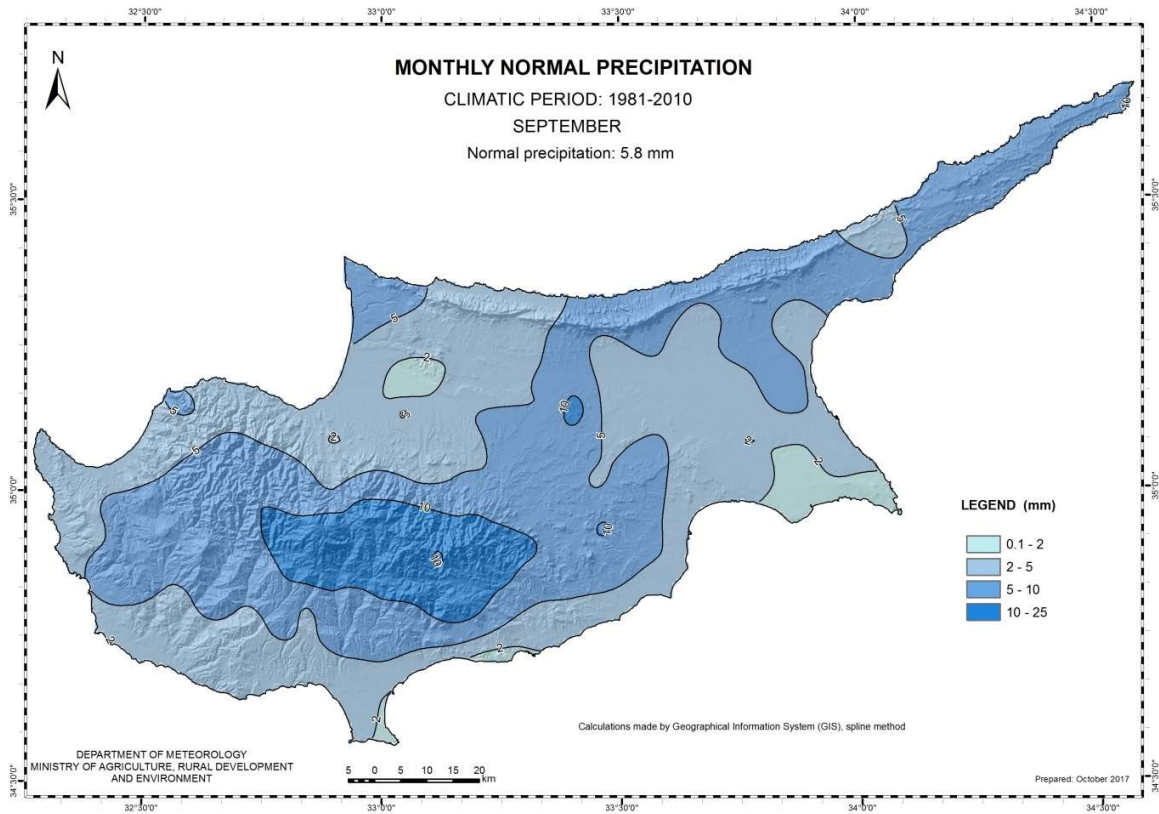
During **September** a thunderstorm EMMA warning was issued with orange awareness level, on the 11th of September.

From the provisional data recorded by the Department of Meteorology during the periods 3, 10-12, 19-20, 27, 29 and 30 of **September** isolated showers and thunderstorms resulted in accumulated precipitation of 150% of normal.

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