

## Seasonal weather forecast for the months of March, April and May 2023

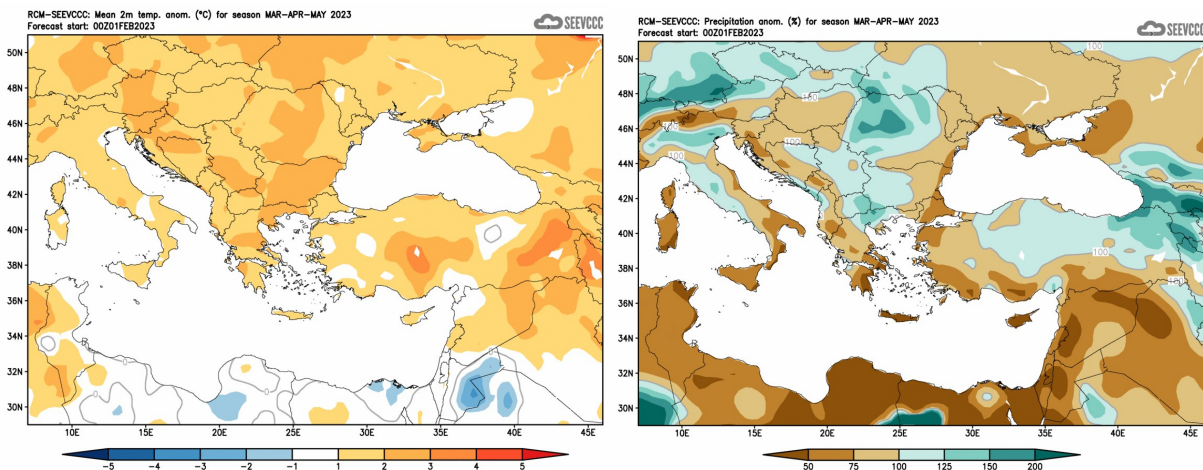
### General overview of the weather expected to prevail for March, April, and May.

The weather for the following three months, namely **March, April, and May 2023**, will be presented, with respect to the anomalies of temperature, and accumulated precipitation. Normal temperatures (both maximum and minimum), after noting their lower annual values during **February** (relevant data not presented), will start rising during **March**, followed by a further significant rise in **April and May**. Nevertheless, cold outbreaks, even not frequent, are not rare during **March**. The accumulated precipitation starts declining, since barometric systems resulting in from dynamic causes, are not frequent during **March, April, and May**.

The period of the following three months (**March, April, and May**) is likely to be characterized as a series of unstable months, with outbreaks of thunderstorms, initiated either from dynamic or mainly thermal causes (with varying weight). Also, the period is characterized by dust incidents, which sometimes are severe.

### Seasonal forecast for the next three months

Specifically, regarding the seasonal forecast for the period **March, April and May 2023**, the temperature will be generally slightly above normal (normal to slightly above normal temperature characterizes the greater part of the continental area surrounding eastern Mediterranean). The amount of the seasonal accumulated precipitation is expected to be below 50% of normal. The mainly dry climate is also a characteristic for most of the surrounding areas for the upcoming period (\*).



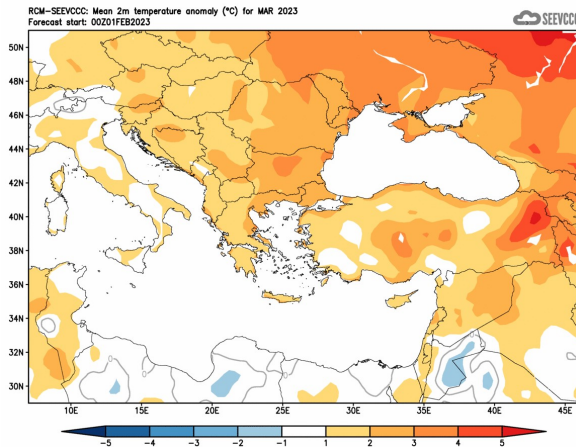
Divergence of temperature from normal from the mean seasonal temperature (°C) for March, April, and May

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

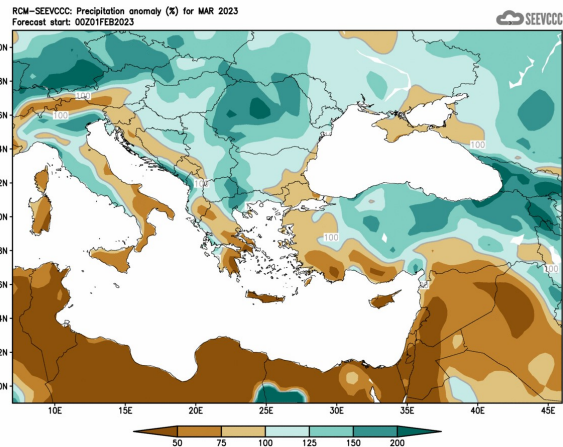
## The seasonal monthly forecast in detail

### March

The seasonal forecast suggests that **March's** temperature will be above normal. The temperature over the surrounding area will be normal to slightly above normal. Regarding the accumulated precipitation Cyprus is expected to be below 50% of normal. Similar characteristics apply to the surrounding area (\*).



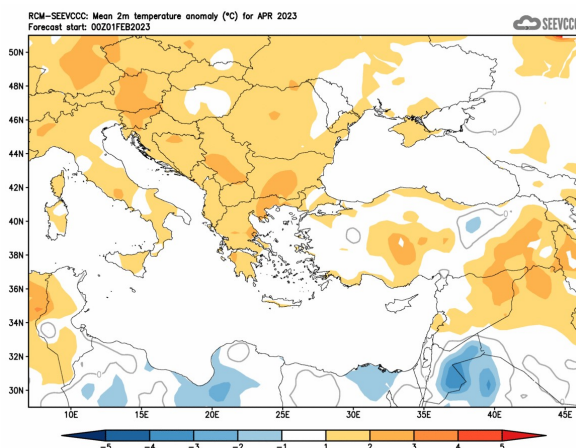
Divergence of the mean monthly temperature (°C) from normal during March



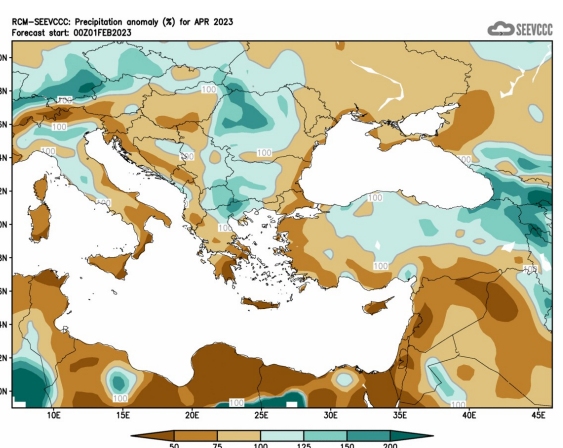
Percentage of the mean monthly precipitation (%) compared with the normal of March

### April

The seasonal forecast suggests that **April's** temperature will be generally normal as this characterizes a great part of the surrounding area. Regarding the accumulated precipitation Cyprus is expected to be below 50% of normal. Similar characteristics apply to the surrounding area (\*).



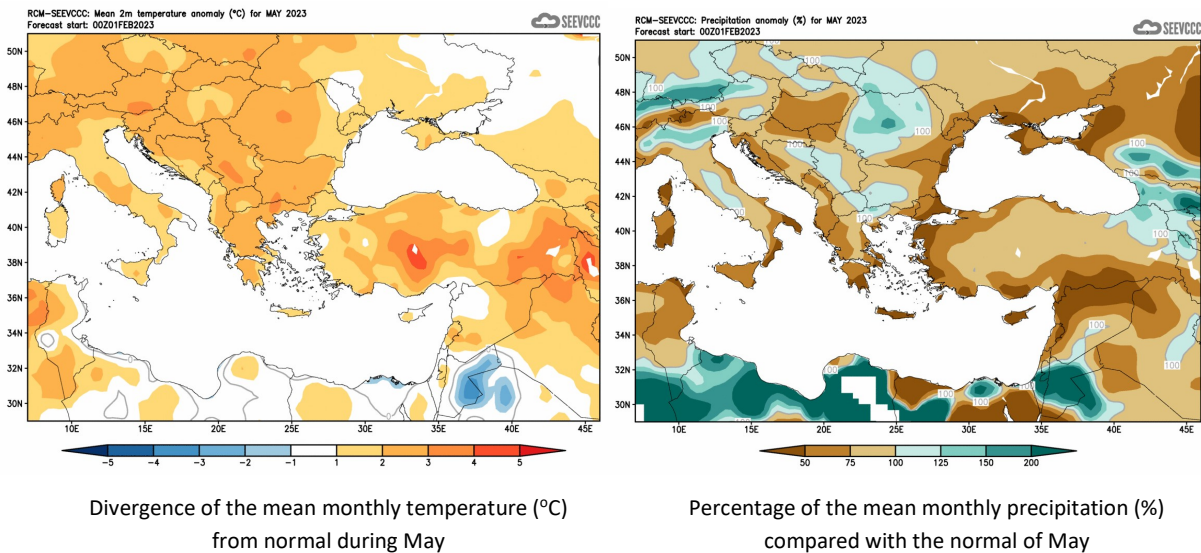
Divergence of the mean monthly temperature (°C) from normal during April



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

## May

The seasonal forecast suggests that **May's** temperature will be normal to slightly above normal. Regarding the accumulated precipitation the distribution is disappointing since it will not exceed 50% of normal. The accumulation precipitation is expected to be disappointing in the surrounding areas also (\*).



### Normal values of temperature and accumulated precipitation for March, April, and May

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 May's temperature significantly higher than March temperature.

On the other hand, the accumulated precipitation is declining, as presented by the climatological data shown on the table below. During **March**, the accumulated precipitation notes a significant decline (if compared to **February** (not presented) which suggests that the frequency of the approaching barometric lows declines. A further decline of the accumulated precipitation is observed in **April** and **May**.

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

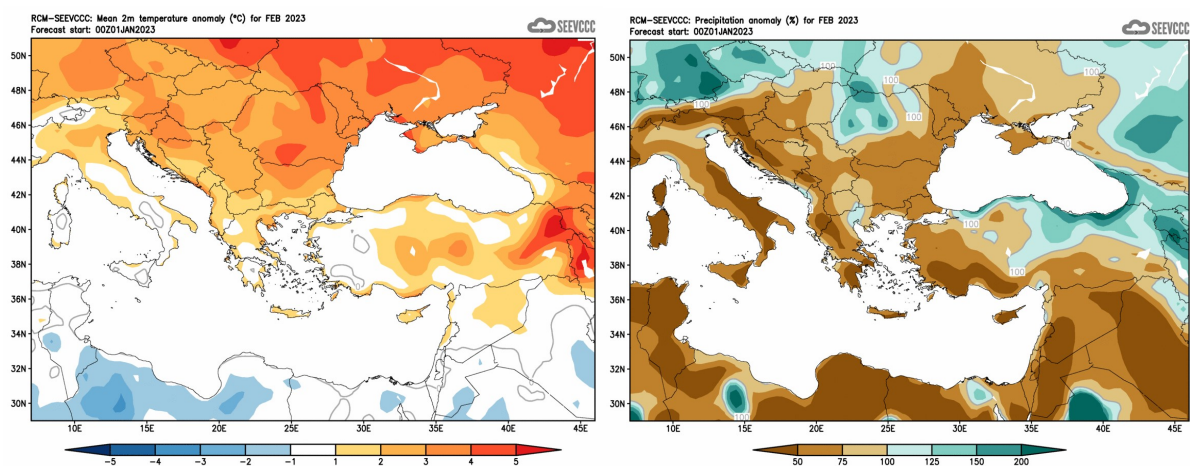
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	Mar	Apr	May	Mar	Apr	May	Mar	Apr	May
NORTH COAST	18.3	21.6	25.8	8.3	10.8	14.3	45.7	21.8	7.6
WEST COAST*	18.6	21.5	24.5	8.9	11.5	14.7	34.4	15.2	6.1
MOUNTAINOUS AREAS	10.4	15.5	20.4	2.8	6.6	10.8	92.1	47.2	32.0
INLAND*	19.2	24.4	29.6	6.9	10.4	14.8	31.9	19.1	24.6
SOUTH COAST	19.3	22.7	26.4	8.6	11.8	15.7	35.8	14.2	9.8
EAST COAST**	19.1	23.2	27.4	7.8	10.9	14.9	35.2	19.7	10.7

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

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

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

The seasonal forecast for **February** suggested a warmer and drier than normal month. **February** would be warmer than normal by 1°C to 2°C, while it must be added that in the first 10 days of the February 2023 a cold outbreak had been encountered over Cyprus as a result of the storm "BARBARA". The accumulated precipitation as resulted from the seasonal forecast was again disappointing since the forecast suggested a mainly dry month with accumulation below normal, while the encountered already accumulated precipitation had been above 70% of normal. All the above regarding temperature and or accumulated precipitation characteristics applied also for the surrounding area.



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

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

From the provisional data recorded by the Department of Meteorology, for the selected portion of the meteorological stations, which are presented in the table below, it seems that the model performed moderately. **February** was normal concerning the temperatures. Extreme high temperatures were of course recorded at all the selected meteorological stations, like Prodromos that recorded a highest daily maximum of 17.7°C (with the normal being 6.7°C) and Athalassa that recorded a highest daily maximum



of 26.3°C (with the normal being 16°C). Extremes low temperatures (deviating by 4°C or more from normal) were also recorded. As an example, note the highest daily minimum temperatures of Larnaka airport and Prodromos that was 13°C (with a normal of 7.1°C) and 10.5°C (with a normal of 0.5°C) respectively.

From the distribution (provisional accumulated precipitation chart) of the accumulated precipitation of the month is evident that the mean surface distribution was just below normal (reaching only 58.7mm or 85% of normal).

During the periods 1-7, 10-13 and 24-25 of **February** local showers and thunderstorms were recorded.

Based on the provisional data, hail was recorded on the 6<sup>th</sup> of the month, while snow was recorded during the period 1-5 of the month.

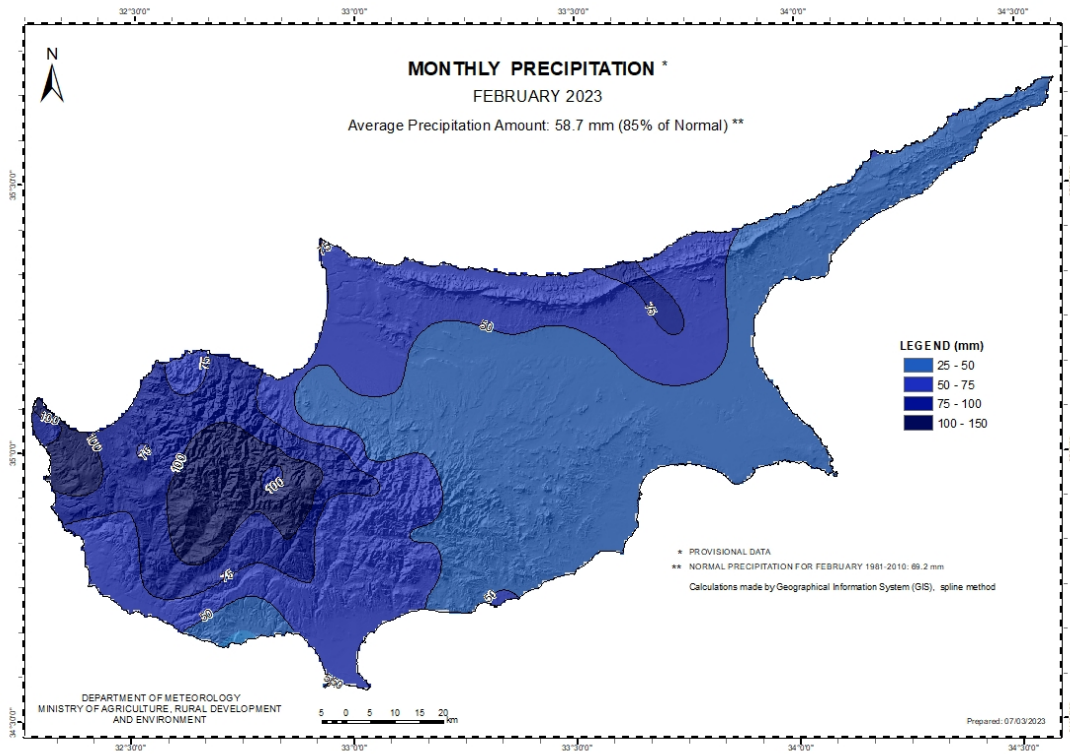
For the dates 1 and 3-6 of **February**, yellow EMMA warning was issued concerning showers and thunderstorms, whereas for the dates 8-9 of **February**, yellow EMMA warning was issued concerning low temperatures over Troodos area.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR FEBRUARY 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	17,3	16,3	1,0	22,8	13,4	6,5	7,3	-0,8	2,1	9,8	96,3	68,5	27,8
82*	PAFOS (AIRPORT)	17,0	17,1	-0,1	25,4	13,4	7,4	8,1	-0,7	2,5	12,3	69,9	59,8	10,1
225	PRODROMOS (C.F.C.)	6,6	6,7	-0,1	17,7	-1,4	-0,7	0,5	-1,2	-6,9	10,5	96,7	128,7	-32,0
666*	ATHALASSA (RADIOSONDE)	16,5	16,0	0,5	26,3	8,3	3,3	5,3	-2,0	-1,9	7,1	44,1	44,5	-0,4
731	LARNAKA (AIRPORT)	16,8	17,0	-0,2	24,8	12,1	6,6	7,1	-0,5	1,8	13,0	37,8	50,3	-12,5
800**	ACHNA (DASAKI)	17,1	16,5	0,6	26,5	9,8	5,7	6,3	-0,6	1,2	12,0	32,4	50,7	-18,3

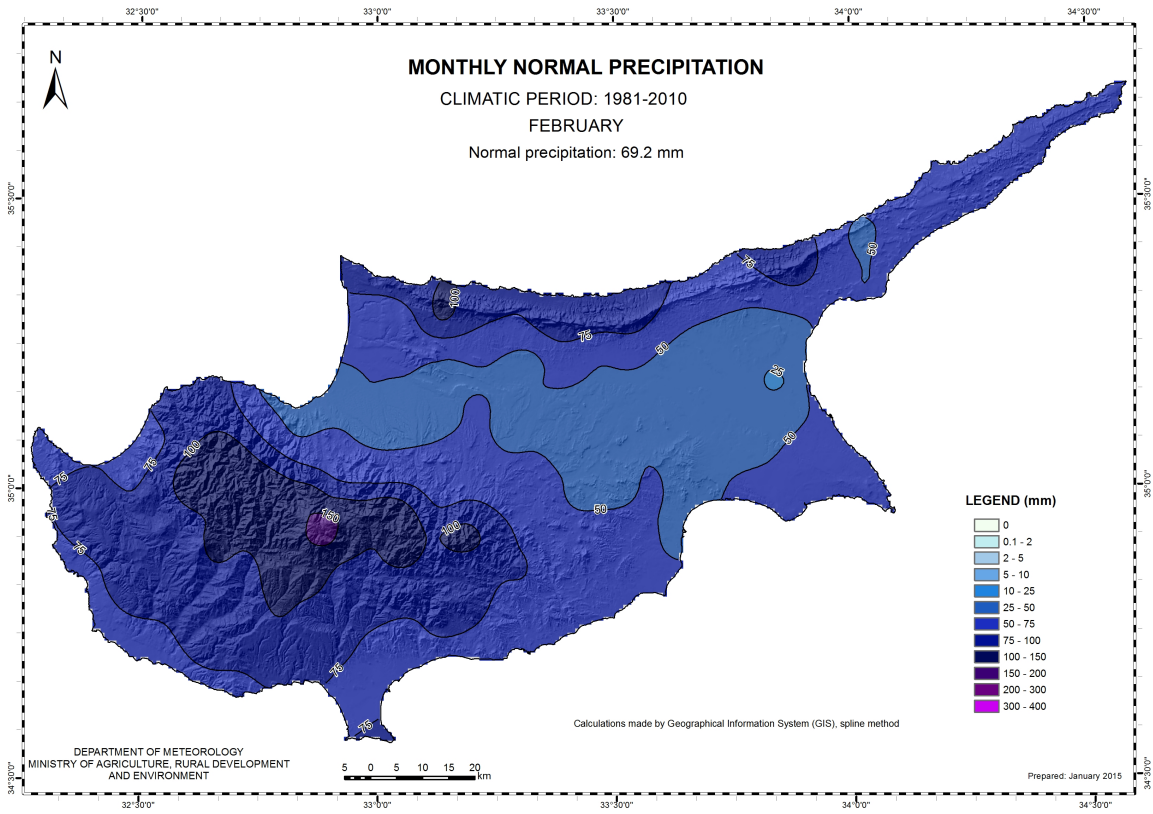
\* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010  
\*\* Achna's Temperature Normal Values cover the period 1981-2007

= VALUES FROM AUTOMATIC WEATHER STATION

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