

## Seasonal weather forecast for the months of

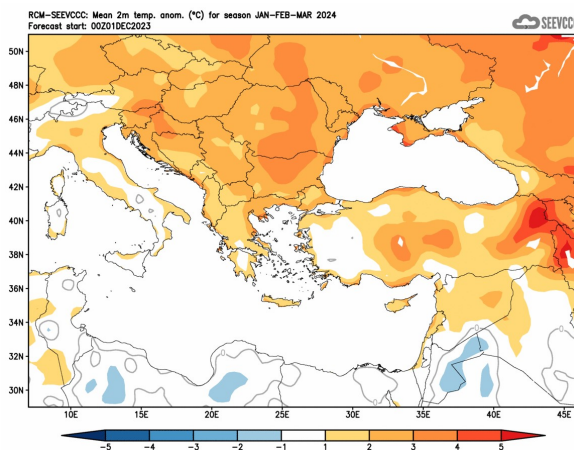
### January, February and March 2024

#### General overview of the weather expected to prevail during January, February and March 2024

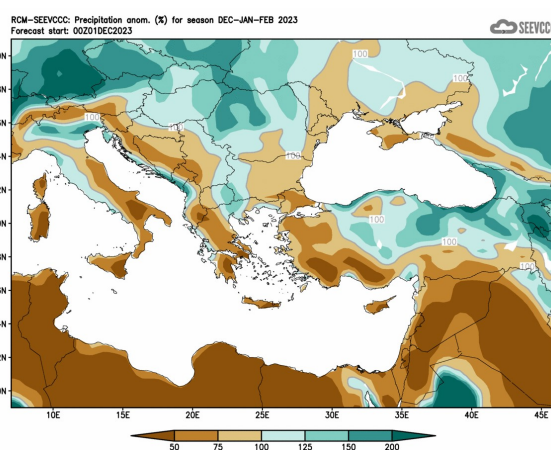
The weather for the following period consists of a part of the traditional winter (January and February), where most of the annual accumulated precipitation is climatologically expected, while in the period in focus normal temperatures (both the maximum and the minimum) are significantly lower than the other months of the year and the first month of the traditional Spring (March), which is also a part of the period of forecast. During this period, the frequency of baroclinic depressions affecting the area is at its most resulting in higher accumulated precipitation amounts.

#### Seasonal forecast for the next three months

Regarding the seasonal forecast for the period of the three first months of the year (**January, February, and March 2024**), the temperature is expected to generally be above normal, by 1 to 2°C all over the island. The amount of the accumulated precipitation is relatively disappointing, as it will range between 50% to 75% of normal all over Cyprus, except from the southeastern coasts where the accumulated precipitation is expected to be below 50% of normal. The greater surrounding area is forecasted with almost the same characteristics as Cyprus (\*).



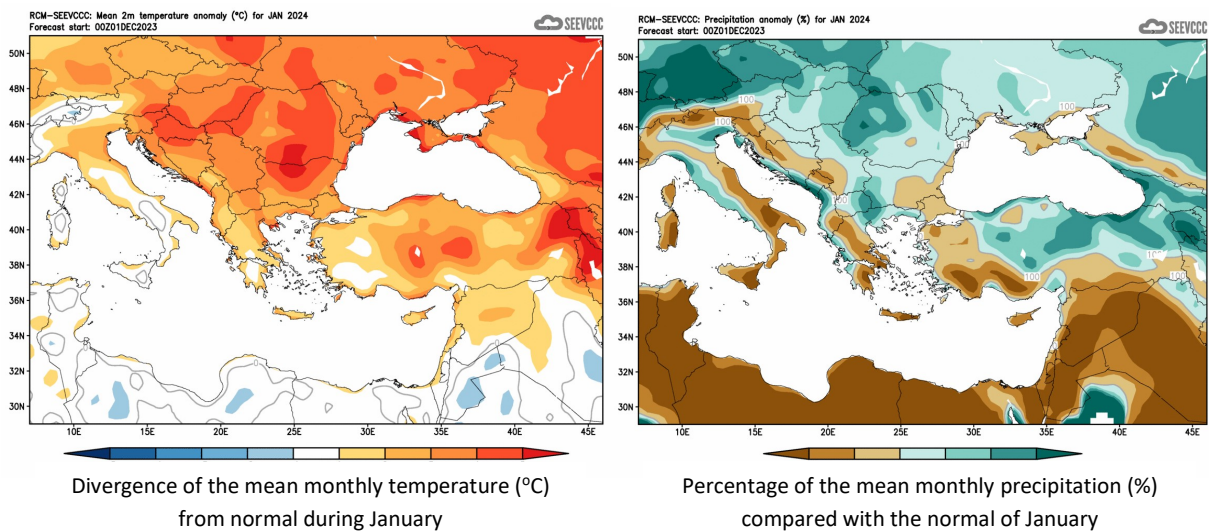
Divergence of temperature from normal from the mean seasonal temperature (°C) for January, February and March



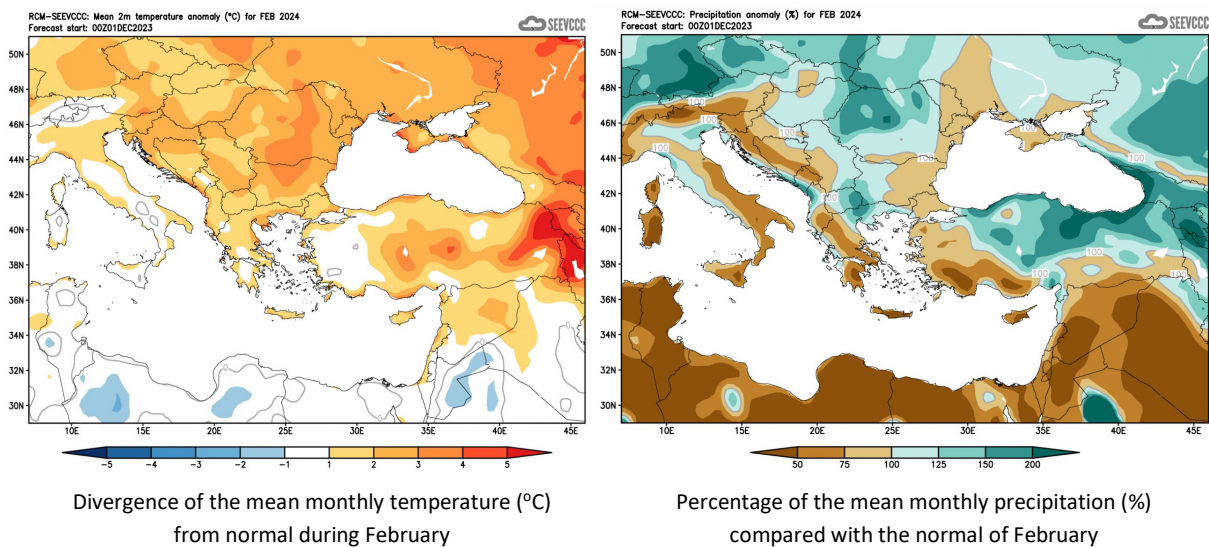
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for January, February and March

## The seasonal monthly forecast in detail

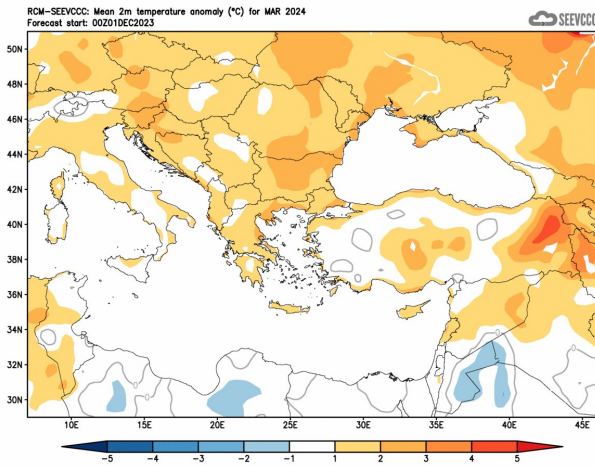
The seasonal forecast for **January** suggests that temperature will be above normal, by 1°C to 2°C. The accumulated precipitation of **January** is again disappointing, since the forecast suggests a mainly dry month with accumulation ranging between 50% to 75% of normal. Low accumulations are characterizing all the surrounding area, as well (\*).



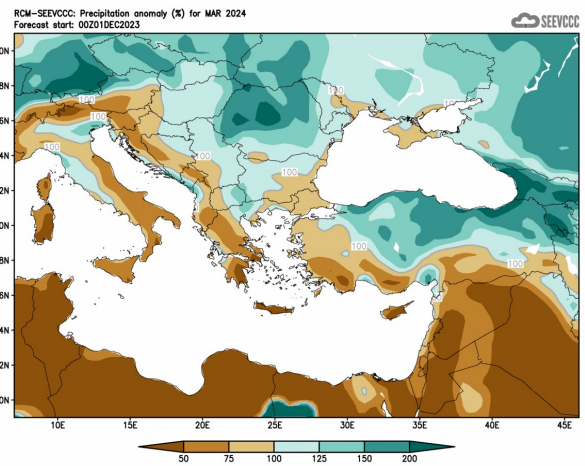
The seasonal forecast for **February** suggests that temperature will be above normal by 1°C to 2°C in almost all over the island. The accumulated precipitation of **February** is again disappointing, since the southeastern part of the island will not exceed 50% and over the rest of the areas will range between 50% and 75% of normal. The above accumulated precipitation characteristics apply also for the surrounding area (\*).



The seasonal forecast for **March** is suggesting that temperature will be above normal by 1°C to 2°C, as the other two months. The accumulated precipitation of **March** is also disappointing since the forecast suggests that the accumulated precipitation will be below 50% of normal in almost all over the island except from the northwest part of the island over which the accumulated precipitation is expected to range between 50% and 75% of normal. The above temperature and accumulated precipitation characteristics also apply for many parts of 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

**Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for January, February and March**

In order to gain a better view of the normal seasonal climate concerning the three months the period of forecast is covering, the normal values of the mean maximum and the mean minimum temperature and also the accumulated precipitation are presented in the table below, for sample stations. The temperatures, both the maximum and the minimum, of **January** and **February** are the lowest climatological temperatures of the year, while the accumulated precipitation has the greater amount of the year during **January**, because of the increased frequency of reoccurrence/redeveloping of depressions over the area of the eastern Mediterranean. During **March**, a transitional month from winter to spring, an increase of both the mean maximum and the mean minimum temperature is noted with a simultaneous drop of the accumulated precipitation over all sample stations.

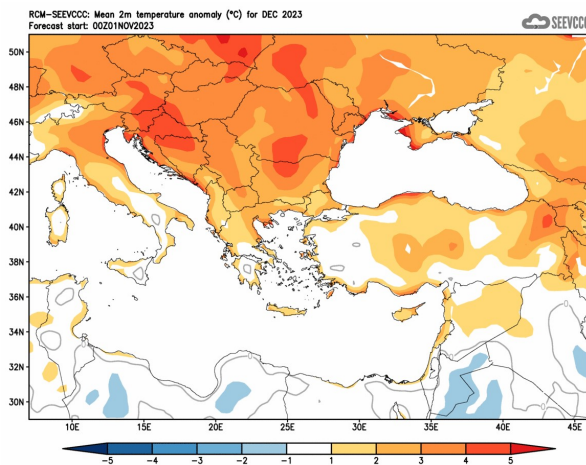
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	January	February	March	January	February	March	January	February	March
NORTH COAST	16.3	16.3	18.3	7.6	7.3	8.3	85.3	68.5	45.7
WEST COAST*	17.1	17.1	18.6	8.3	8.1	8.9	78.8	59.8	34.4
MOUNTAINOUS AREAS	6.3	6.7	10.4	0.7	0.5	2.8	150.0	128.7	92.1
INLAND*	15.5	16.0	19.2	5.4	5.3	6.9	48.8	44.5	31.9
SOUTH COAST	16.8	17.0	19.3	7.5	7.1	8.6	73.7	50.3	35.8
EAST COAST**	16.3	16.5	19.1	6.6	6.3	7.8	67.3	50.7	35.2

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

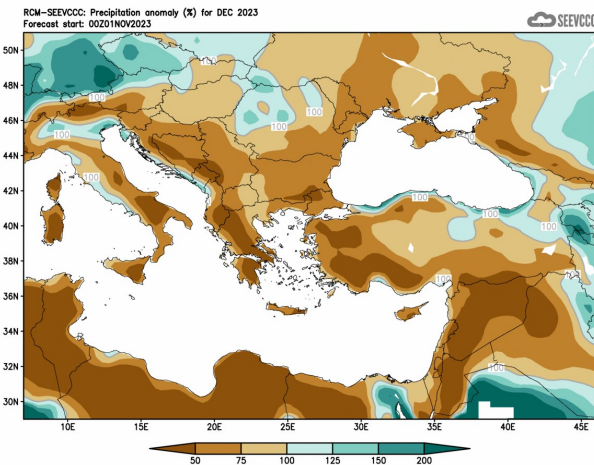
\*\* East Coast Temperature Values cover the period 1981-2007

## Evaluation of December's 2023 seasonal forecast for the area of Cyprus

The seasonal forecast for **December 2023** suggested that temperature would be above normal, by 1°C to 2°C. The accumulated precipitation of **December** was forecasted to be disappointing, since the model suggested a mainly dry month with accumulation ranging only from 50% to 75% of normal. Similar conditions, with low accumulations of precipitation characterized all the surrounding area.



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



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

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, is evident that the model partly behaved well with respect to temperature. This is because the average daily maximum and minimum temperatures were indeed higher than expected, however they were not higher by 1-2°C than normal but the mean daily maximum were by 2.7-4.5°C above normal and the mean daily minimum were by 2-3.3°C above normal. The seasonal forecast for **December** suggested that the accumulated precipitation would be below normal, ranging only from 50% to 75% of normal, but from the recorded data is shown that in all of the selected meteorological stations the precipitation was well below normal.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR DECEMBER 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	22.5	18.0	4.5	26.0	18.7	12.0	9.3	2.7	8.2	15.2	67.9
82*	PAFOS (AIRPORT)	21.6	18.9	2.7	23.7	19.3	12.3	10.0	2.3	9.4	16.1	44.2	90.2	-46.0
225	PRODROMOS (C.F.C.)	11.4	8.3	3.1	17.1	6.0	5.1	2.6	2.5	1.8	9.3	96.3	157.3	-61.0
666*	ATHALASSA (RADIOSONDE)	21.1	17.3	3.8	25.3	17.3	9.0	7.0	2.0	5.9	12.6	38.8	55.8	-17.0
731	LARNAKA (AIRPORT)	22.1	18.6	3.5	24.8	20.1	12.5	9.2	3.3	7.5	16.8	36.0	79.1	-43.1
800**	ACHNA (DASAKI)	22.2	18.0	4.2	25.4	18.2	11.3	8.3	3.0	8.3	14.9	28.6	76.8	-48.2

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

Extremes (deviating by 4°C or more from normal) were also recorded in all of the selected meteorological stations. As an example, note the recorded maximum of Prodromos that was 17.1°C (with a normal of 8.3°C) and the maximum of Polis Chrysochous and Athalassa that was 26°C (with a normal of 18°C) and 25.3°C (with a normal of 17.3°C). Concerning the mean daily minimum temperatures note the recorded minimum of Larnaca airport that was 16.8°C (with a normal of 9.2°C) and the minimum of Prodromos that was 9.3°C (with a normal of 2.6°C).

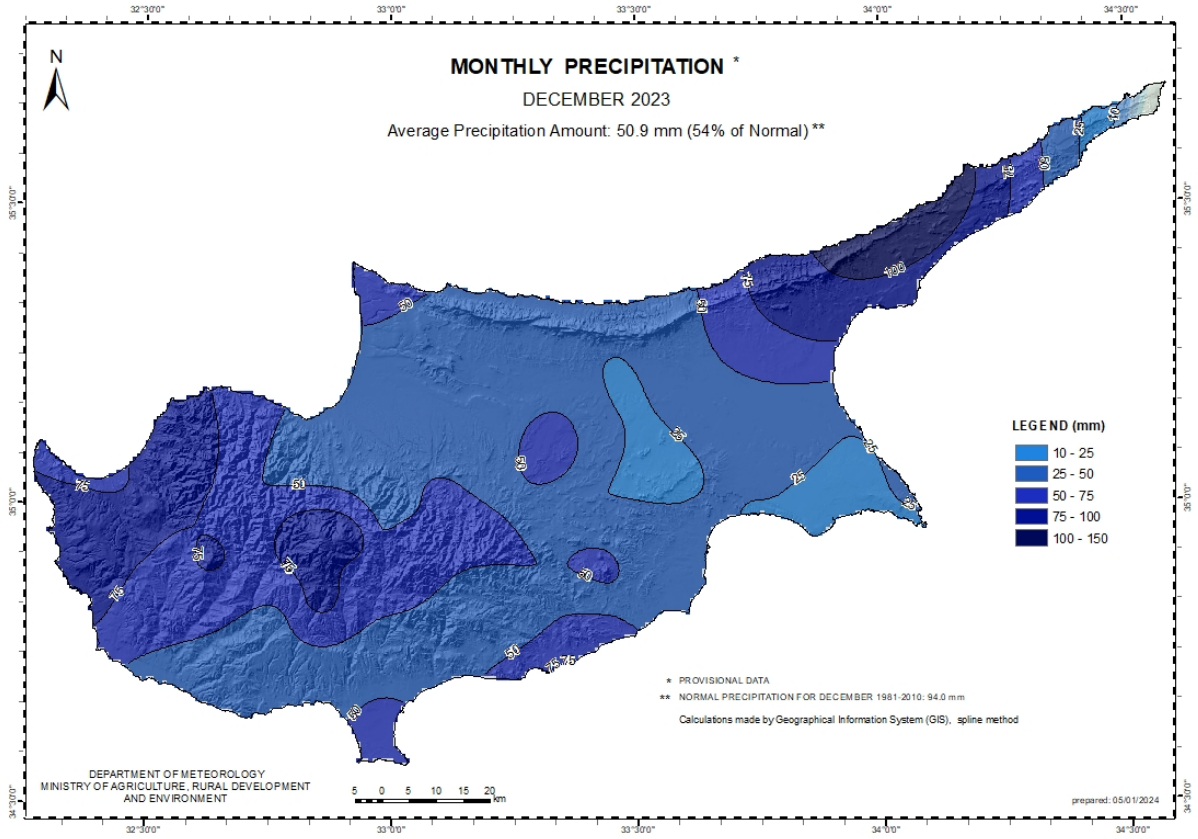
From the distribution (provisional accumulated precipitation chart) of the accumulated precipitation of **December** is evident that the surface distribution was well below normal reaching 50.9mm or 54% of normal. During the periods 6-12, 16 and 21-23 of **December** local showers and isolated thunderstorms were recorded.

For the 8<sup>th</sup>, 11<sup>th</sup> and 21<sup>st</sup> of **December**, yellow EMMA warning was issued concerning showers and thunderstorms.

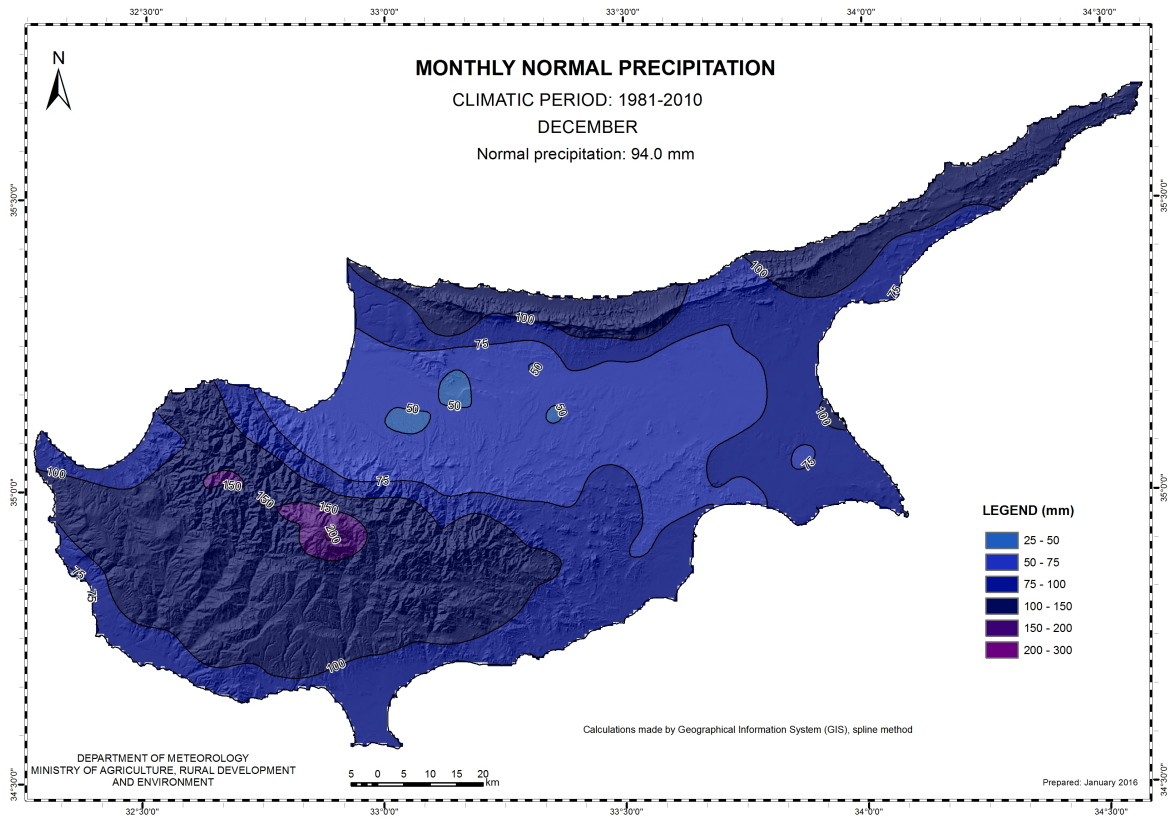
Based on the provisional data, hail was recorded on the 6<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> and in the 20<sup>th</sup> of the month, while there was no report for snow over Troodos.



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



(\*) It is stated that due to the failure of the seasonal model to correctly forecast the expected precipitation (sometimes) the seasonal forecast for precipitation is provided with a reserve.