## Seasonal weather forecast for the months of

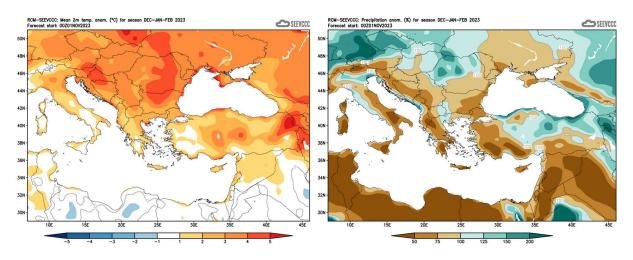
### December 2023 and January and February 2024

## General overview of the weather expected to prevail during December 2023 and January and February 2024

The following period consists of the season of the traditional winter, 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. During the 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

Specifically, regarding the seasonal forecast for the temperature for the period of **December 2023**, **January** and **February 2024**, it is expected to be above the normal temperatures for the season. Similar temperature characteristics are also expected for the entire region of the Balkans, the Greek area and Asia Minor, as well as the Near and Middle East, i.e. these areas are expected to have above normal temperatures. For the accumulated amount of precipitation, the seasonal forecast appears to be disappointing, since this will range in almost the entire island between 50% to 75% of normal. The scene for the rest of the island's neighbouring areas is also disappointing (\*).

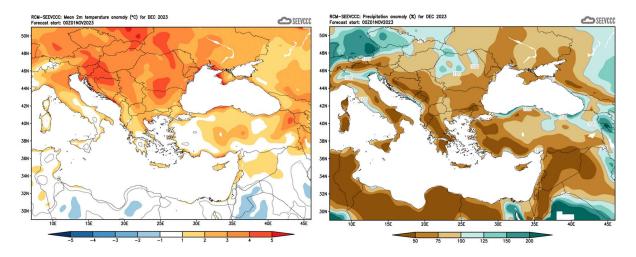


Divergence of temperature from normal from the mean seasonal temperature (°C) for December 2023, January and February 2024

Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for December 2023, January and February 2024

#### Seasonal forecast in detail

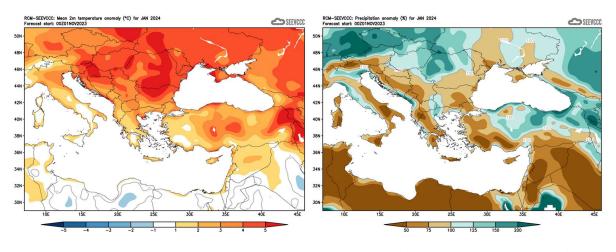
The seasonal forecast for **December 2023** suggests that temperature will be above normal, by 1°C to 2°C. The accumulated precipitation of **December** is forecasted to be disappointing, since the model suggests a mainly dry month with accumulation ranging only from 50% to 75% of normal. Similar conditions,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



Divergence of the mean monthly temperature (°C) from normal during December 2023

Percentage of the mean monthly precipitation (%) compared with the normal of December 2023

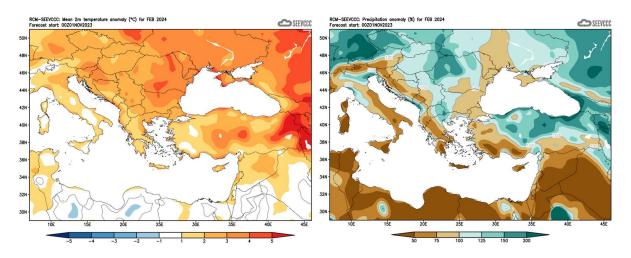
The seasonal forecast for **January 2024** suggests that temperature will be above normal by 1°C to 2°C, while the temperature of the coastal areas is likely to be even higher by 2°C to 3°C of the normal temperature. The expected amount of precipitation for the month is expected to be below normal, ranging between 50% to 75% of normal across the island. Also, almost the entire area of the Eastern Mediterranean, the Balkans and a large part of Asia Minor, as well as the Near and Middle East, have similar dry characteristics (\*).



Divergence of the mean monthly temperature (°C) from normal during January 2024

Percentage of the mean monthly precipitation (%) compared with the normal of January 2024

The seasonal forecast for **February 2024** is almost similar to the one of January 2024 and it will generally be warmer than normal by 1°C to 2°C, with the coastal areas likely to be even warmer by up to 2°C to 3°C. The accumulated precipitation of **February** forecast suggests that the accumulation will range between 50% and 75% of normal all over the island, except from the southeastern area over which will be below 50% of normal. Similar temperature and dry conditions are also characterizing great parts of 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

# Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for December 2023, January and February 2024

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 temperatures, both the maximum and the minimum, are the lowest climatological temperatures of the year while the accumulated precipitation has the greater amount of the year, because of the increased frequency of reoccurrence/redeveloping of depressions over the area of East Mediterranean. During the period of forecast, snow is likely to occur over the Troodos range while, in the event of the likely synoptic situation snow may occur above 300m, a phenomenon not that frequent.

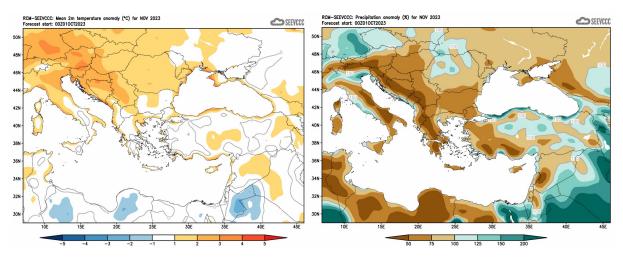
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010												
		DAILY MAX IPERATURE			DAILY MINI IPERATURE		MEAN MONTHLY TOTAL PRECIPITATION (mm)					
Area Name	December	January	February	December	January	February	December	January	February			
NORTH COAST	18.0	16.3	16.3	9.3	7.6	7.3	93.6	85.3	68.5			
WEST COAST*	18.9	17.1	17.1	10.0	8.3	8.1	90.1	78.8	59.8			
MOUNTAINOUS AREAS	8.3	6.3	6.7	2.6	0.7	0.5	157.3	150.0	128.7			
INLAND*	17.3	15.5	16.0	7.0	5.4	5.3	57.2	48.8	44.5			
SOUTH COAST	18.6	16.8	17.0	9.2	7.5	7.1	79.0	73.7	50.3			
EAST COAST**	18.0	16.3	16.5	8.3	6.6	6.3	76.8	67.3	50.7			

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

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

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

The seasonal forecast for **November** suggested that the mean temperature of the island would generally be normal to above normal, mainly over the coastal areas. The amount of the accumulated precipitation was expected to range between 50% to 75% of normal all over the island, except from the northwestern part of the island over which was expected to range above 75% of normal. The wider area was characterized by normal temperatures and drought, since the expected amount of rain would range between 50% to 75%, and in some of these areas it would even range below 50% of normal.



Divergence of the mean monthly temperature (°C) from normal during November 2023

Percentage of the mean monthly precipitation (%) compared with the normal of November 2023

From the provisional data as recorded by the Department of Meteorology and which are presented in the table below, for the selected reference meteorological stations, it is evident that the seasonal model did not performed well at all in terms of temperature anomalies. The model was forecasting normal or slightly above normal temperatures, especially for the coastal areas. However, from the data recorded, it appears that all the average temperatures, both the maximum and the minimum, were well above normal.

St. No.	Station Name	Mean Daily Maximum Temperature (°C )	Normal Value (1981- 2010)	Difference from Normal Value	ECIPITAT Highest Daily Maximum Temperature (°C )	Lowest Daily Maximum Temperature (°C )	Mean Daily Minimum Temperature (°C )		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	25.6	21.7	3.9	30.9	16.7	15.2	12.2	3.0	9.9	19.2	38.6	58.6	-20.0
82*	PAFOS (AIRPORT)	24.7	22.4	2.3	29.4	18.7	15.9	12.9	3.0	10.5	20.3	19.2	52.6	-33.4
225	PRODROMOS (C.F.C.)	16.2	12.8	3.4	23.0	5.8	7.8	6.1	1.7	0.1	13.8	105.3	93.8	11.5
666*	ATHALASSA (RADIOSONDE)	25.6	22.1	3.5	31.0	18.0	12.7	10.4	2.3	5.0	18.8	11.9	42.4	-30.5
731	LARNAKA (AIRPORT)	25.4	22.6	2.8	30.3	19.8	15.5	12.4	3.1	7.6	21.6	16.4	46.8	-30.4
800**	ACHNA (DASAKI)	25.7	22.3	3.4	31.6	19.1	14.9	11.9	3.0	8.0	21.3	12.3	44.0	-31.7
	* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010 ** Achna's Temperature Normal Values cover the period 1981-2007													

Extremes with positive departures greater than 4°C were recorded in regard of the daily maximum temperatures, such as at the mountainous station at the Forest College in Prodromos its extreme daily maximum temperature (23.0°C) was by 10.2°C greater than the normal (12.8°C) and like Achna station, where the highest daily maximum temperature (31.6°C) was by 9.3°C higher than the normal (22.3°C).

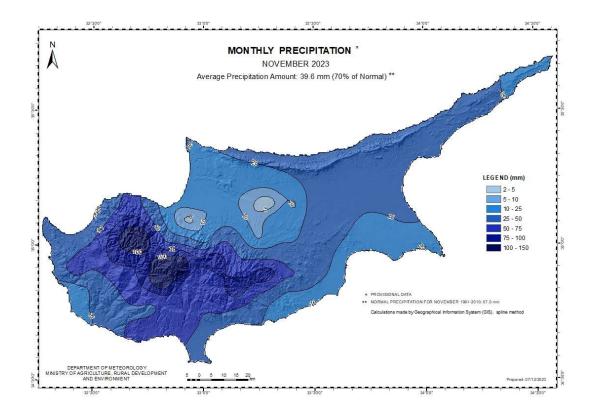
Extremes with positive departures greater than 4°C were also recorded in regard of the daily minimum temperatures, like at Achna station where the highest daily minimum temperature (21.3°C) was by 9.4°C greater than normal (11.9°C). Also, at Larnaka airport station the highest daily minimum temperature (21.6°C) was by 9.2°C greater than normal (12.4°C).

As regarding **November's** accumulated precipitation, it seems that the seasonal model behaved relatively well, since the amount of precipitation would range close to the normal in the northwestern part of the island, while throughout the rest of the island it was expected to range between 50% to 75% of normal. November, however, recorded below normal precipitation totals, which as can be seen from the map below of the preliminary precipitation totals for November the average area distribution reached 70% of normal, with the major amounts of precipitation falling over Troodos mountain and also over the northwestern parts of the island.

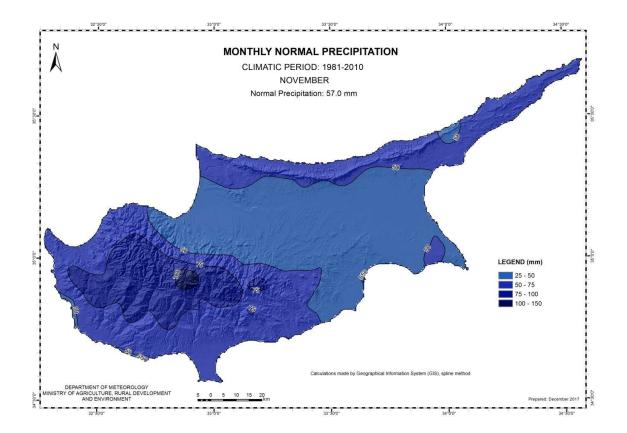
During the periods of 1<sup>st</sup>, 13-14<sup>th</sup>, 16<sup>th</sup>, 18-19<sup>th</sup> and the 25-27<sup>th</sup> of **November** local showers and thunderstorms resulted in accumulated precipitation of 70% of normal. It is worth mentioning that on the 27<sup>th</sup> of **November** trace of snowflakes were reported on Troodos mountain highest peaks.

Also, on the 14<sup>th</sup>, 18-19<sup>th</sup> and on the 26<sup>th</sup> of **November** EMMA yellow warnings for thunderstorms were issued.

For the purpose of better visualization of **November** 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 **November** 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 given with a reserve.