Seasonal weather forecast for the months of

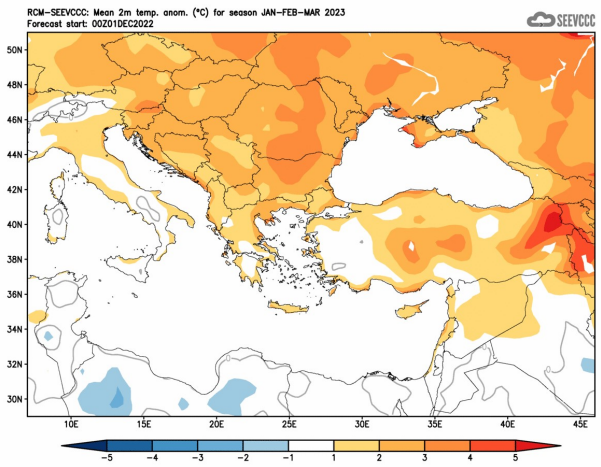
January, February and March 2023

General overview of the weather expected to prevail during January, February and March 2023.

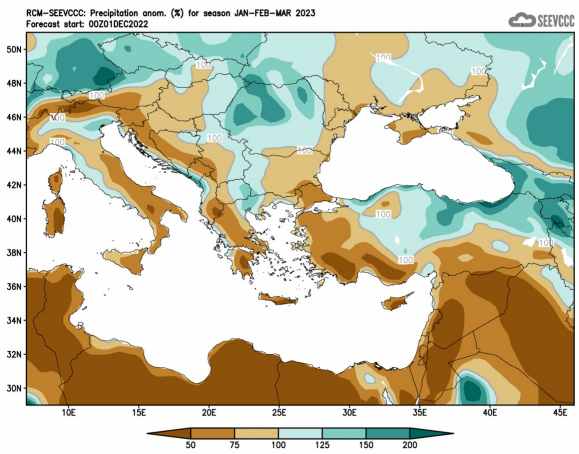
The weather for the following period consists of a part (January and February) of the traditional winter, where most of the annual accumulated precipitation is climatologically expected, while in the period in focus normal temperatures (both maximum and minimum) are significantly lower than the other months of the year and the first month (March) of the traditional Spring, which is also a part of the period of forecast. 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 period of the three first months of the year (**January, February,** and **March 2023)**, the temperature is expected to be generally above normal by 1 to 2° 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 the southwestern 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 (*).



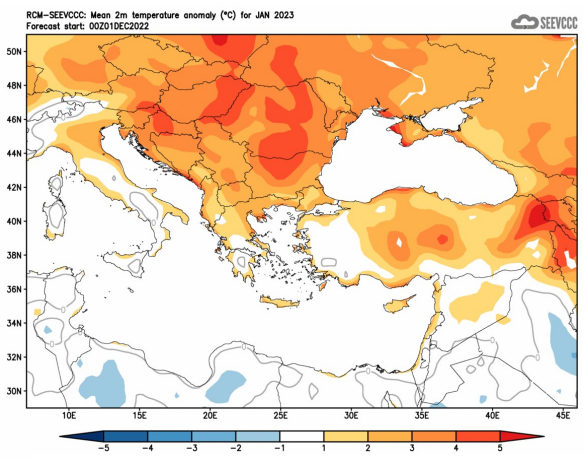
Divergence of temperature from normal from the mean seasonal temperature (°C) for January, February and March



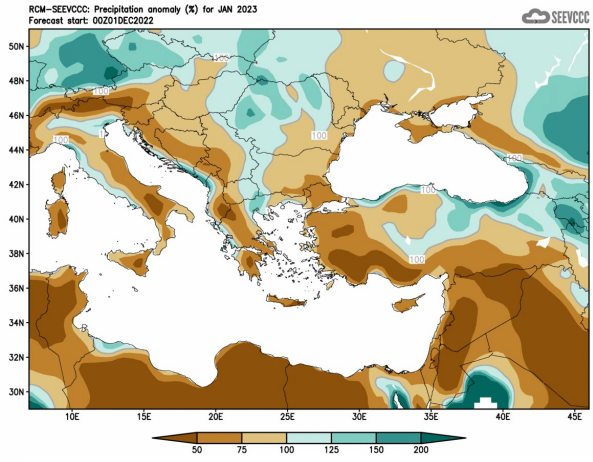
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for January, February and March

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 (*).

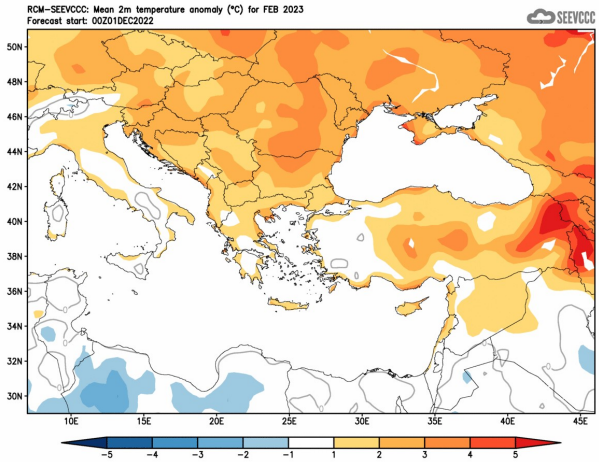


Divergence of the mean monthly temperature (°C) from normal during January

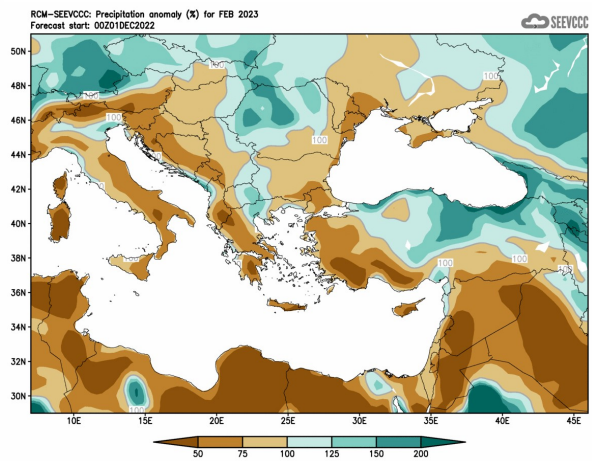


Percentage of the mean monthly precipitation (%) compared with the normal of January

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 southern and eastern 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 (*).

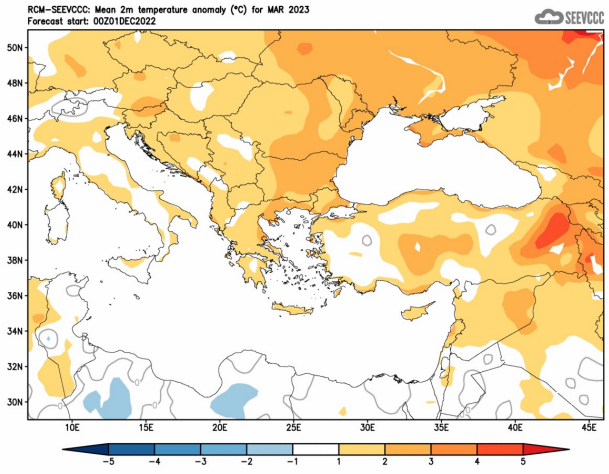


Divergence of the mean monthly temperature (°C) from normal during February

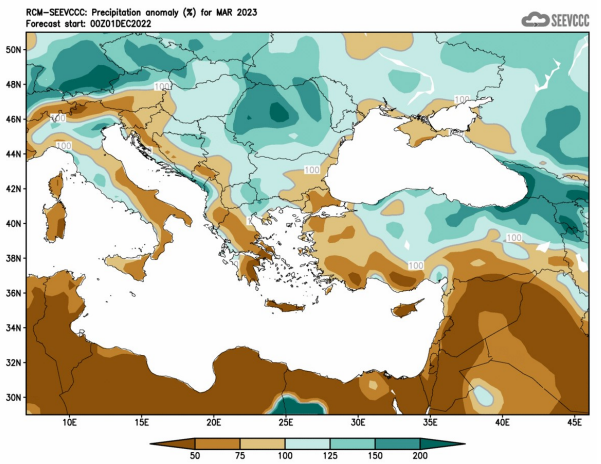


Percentage of the mean monthly precipitation (%) compared with the normal of February

The seasonal forecast for **March** is suggesting that temperature will be above normal by 1°C to 2°C. The accumulated precipitation of **March** is again relatively disappointing since the forecast suggests that the accumulated precipitation will be below 50% of normal in almost all over the island. The above temperature and accumulated precipitation characteristics apply also for 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

The normal values of mean maximum, mean minimum temperature and accumulated precipitation are presented below for sample stations, concerning the three months the period of forecast is covering, to gain a better view of the normal seasonal climate. The temperatures, both maximum and 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 east Mediterranean. During **March,** a transitional month from winter to spring, an increase of both mean maximum and mean minimum temperature is noted with a simultaneous drop of the accumulated precipitation over all sample stations.

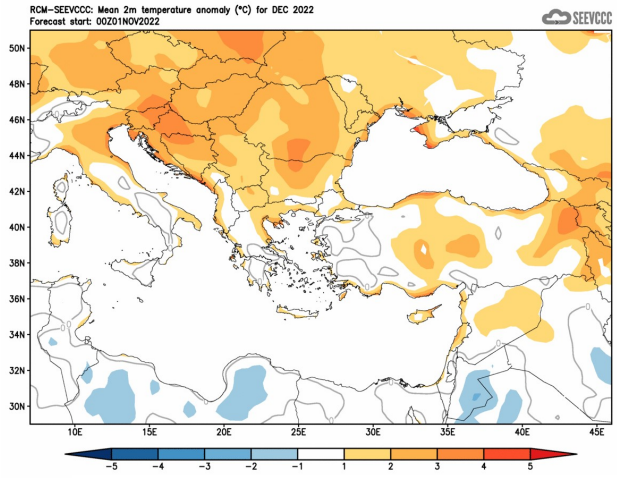
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
Area Name	**January**	**February**	**March**	**January**	**February**	**March**	**January**	**February**	**March**
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

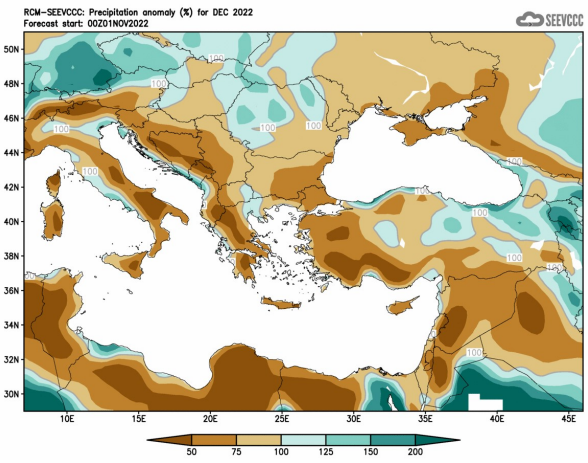
** East Coast Temperature Values cover the period 1981-2007

Evaluation of Decembers seasonal forecast for the area of Cyprus

The seasonal forecast for **December 2022** suggested that temperature would be above normal (by 1°C to 2°C) mainly over coastal areas. The accumulated precipitation of **December** was forecasted to be disappointing since it suggested a mainly dry month with accumulation ranging only from 50% to 75% of normal. Low accumulations 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,

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR DECEMBER 2022

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	22,7	18,0	4,7	25,5	19,4	12,1	9,3	2,8	8,4	15,2	33,1	93,6	-60,5
82*	PAFOS (AIRPORT)	21,2	18,9	2,3	22,9	17,3	12,1	10,0	2,1	7,0	15,1	35,8	90,1	-54,3
225	PRODROMOS (C.F.C.)	12,0	8,3	3,7	16,1	5,5	5,7	2,6	3,1	1,8	9,2	52,5	157,3	-104,8
666*	ATHALASSA (RADIOSONDE)	21,4	17,3	4,1	24,7	16,2	8,4	7,0	1,4	3,5	11,8	17,8	57,2	-39,4
731	LARNAKA (AIRPORT)	21,2	18,6	2,6	23,0	16,0	12,2	9,2	3,0	6,2	16,0	19,8	79,0	-59,2
800**	ACHNA (DASAKI)	21,9	18,0	3,9	24,6	15,3	11,2	8,3	2,9	4,2	13,9	25,0	76,8	-51,8

* 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

is evident that the model did not perform well, either in relation with the temperature, as all of the mean daily max and min temperatures above the suggested and neither with the precipitation. The seasonal forecast for **December** suggested that accumulated precipitation would be below normal, but from the recorded data is shown that in all of the selected meteorological stations the precipitation was very well below normal.

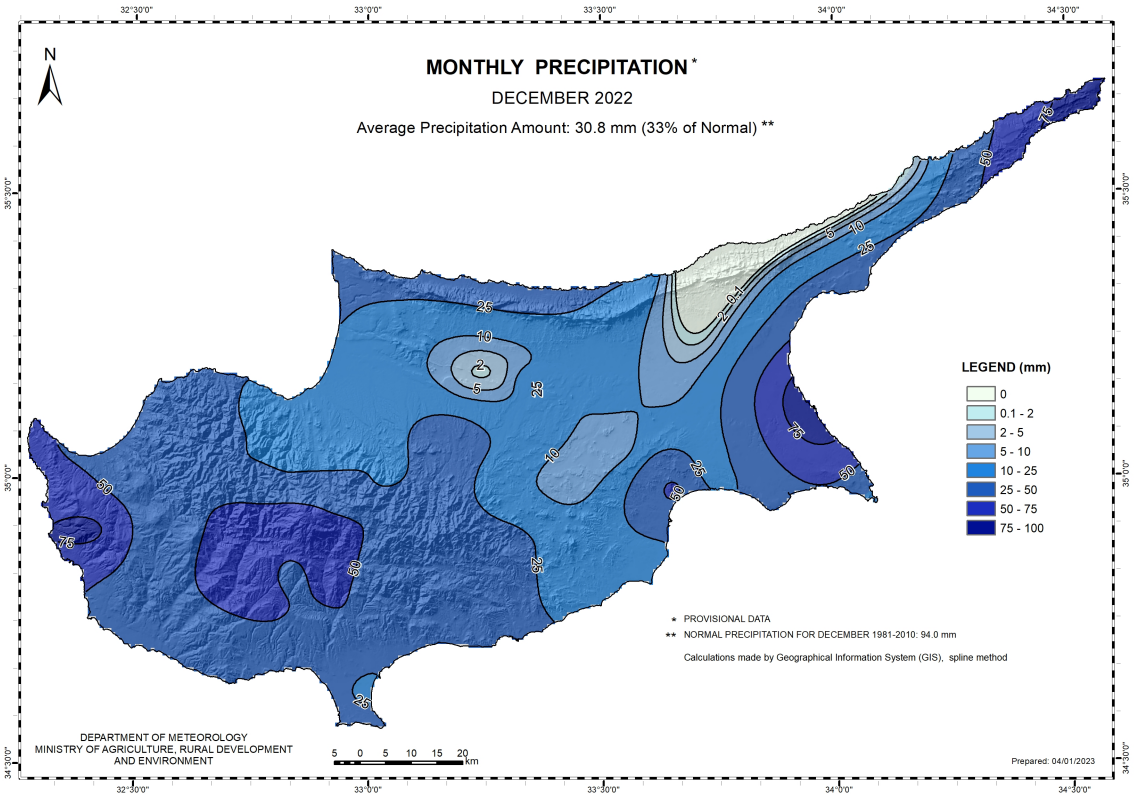
Extremes (deviating by 4°C or more from normal) were also recorded in all of the selected meteorological stations. As an example, note the recorded maximum of Prodromos that was 16.1°C (with a normal of 8.3°C) and the maximum of Polis Chrysochous that was 25.5°C (with a normal of 18°C). Concerning the mean daily minimum temperatures note the recorded minimum of Larnaca airport that was 16°C (with a normal of 9.2°C) and the minimum of Prodromos that was 9.2°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 30.8mm or 33% of normal. During the dates 2, 6-8, 11-16, 20-21, 23-26 and 29 of **December** local showers and isolated thunderstorms were recorded.

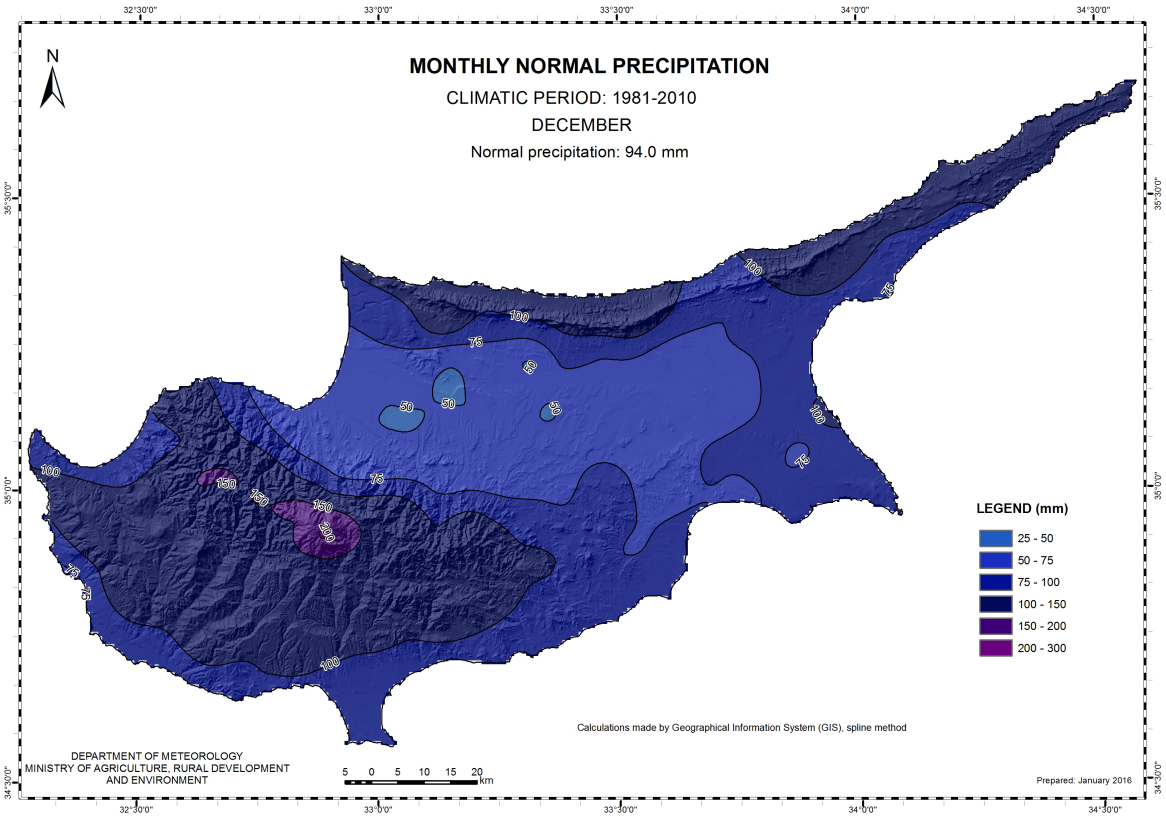
For the 14th of **December,** yellow EMMA warning was issued concerning showers and thunderstorms.

Based on the provisional data, hail was recorded on the 6th and 11th of the month. Snow was recorded on the 15th of the month at 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.