

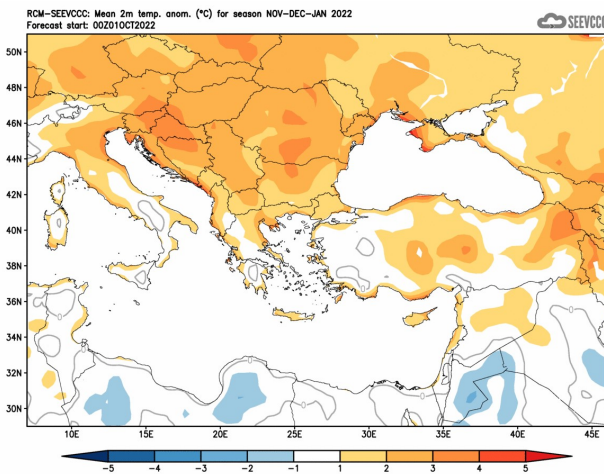
## Seasonal weather forecast for the months of November, December 2022 and January 2023

### General overview of the weather expected to prevail during November, December 2022 and January 2023

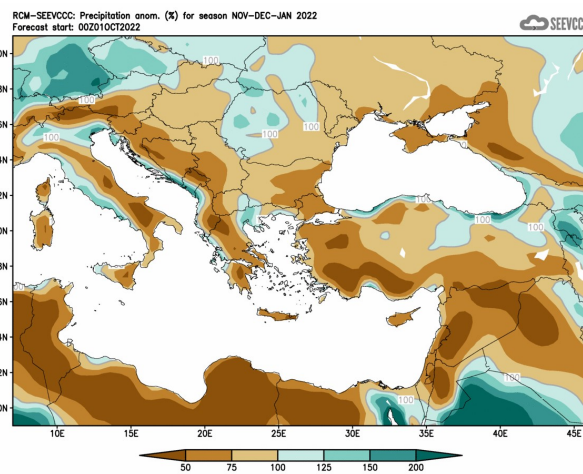
The weather for the following three months, namely **November, December 2022** and **January 2023** will be presented, with respect to the anomalies of temperature, and accumulated precipitation.

During the period in focus normal temperatures (both maximum and minimum) are significantly declining. The accumulated precipitation is increasing with the accumulation of the **December** almost double the accumulations of **November**. During the period the frequency of baroclinic depressions affecting the area is increasing significantly, resulting in higher accumulated precipitation amounts. From historical data **November** may initiate over the highest peaks of Troodos the snow fall period of the year, as a result of cold invasions associated with depressions affecting the area of the East Mediterranean.

Specifically, regarding the seasonal forecast for the period of **November, December 2022** and **January 2023**, the temperature is expected to be generally slightly above normal. Normal to above normal temperature also characterizes Asia Minor and the Balkans with low precipitation accumulation. The amount of the accumulated precipitation is expected to range generally from 75% of normal to normal (\*).



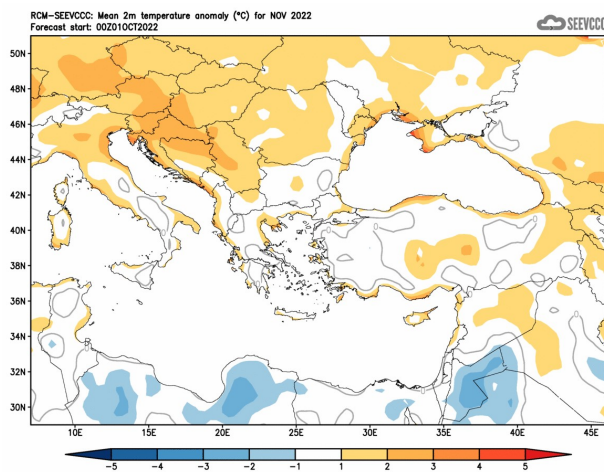
Divergence of temperature from normal from the mean seasonal temperature (°C) for November, December and January



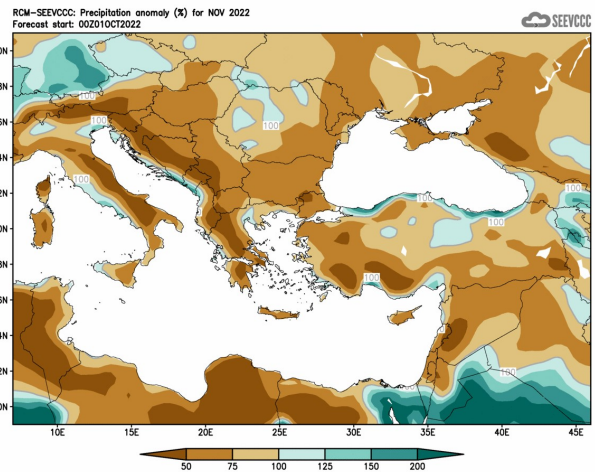
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for November, December and January

### Seasonal forecast in detail

The seasonal forecast for **November** suggests that temperature of the island will be generally normal and above normal, mainly over the coastal areas. The amount of the accumulated precipitation is expected to range between 50% to 75% of normal all over the island, except over northwest area that is expected to range above 75% of normal. Parts of the coastal zone of the surrounding area will receive again high precipitation accumulation (\*).

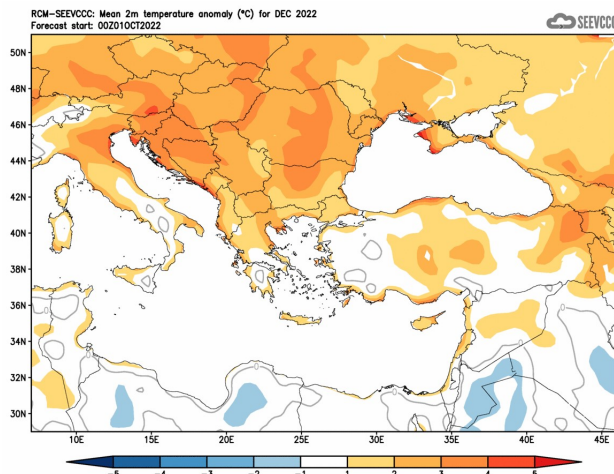


Divergence of the mean monthly temperature (°C) from normal during November

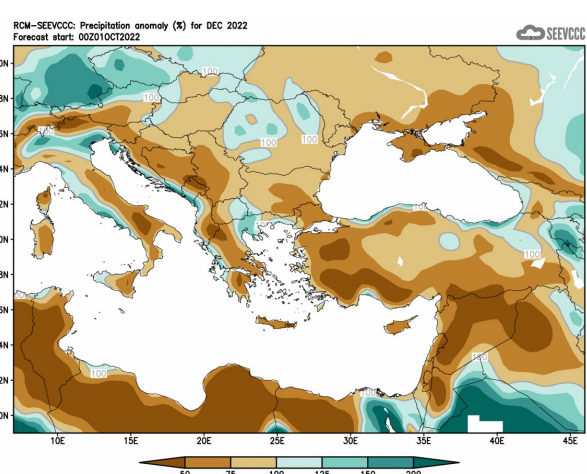


Percentage of the mean monthly precipitation (%) compared with the normal of November

The seasonal forecast for **December** suggests that temperature will be generally above normal. The amount of the accumulated precipitation all over the island is expected to range between 50% to 75% of normal (\*).

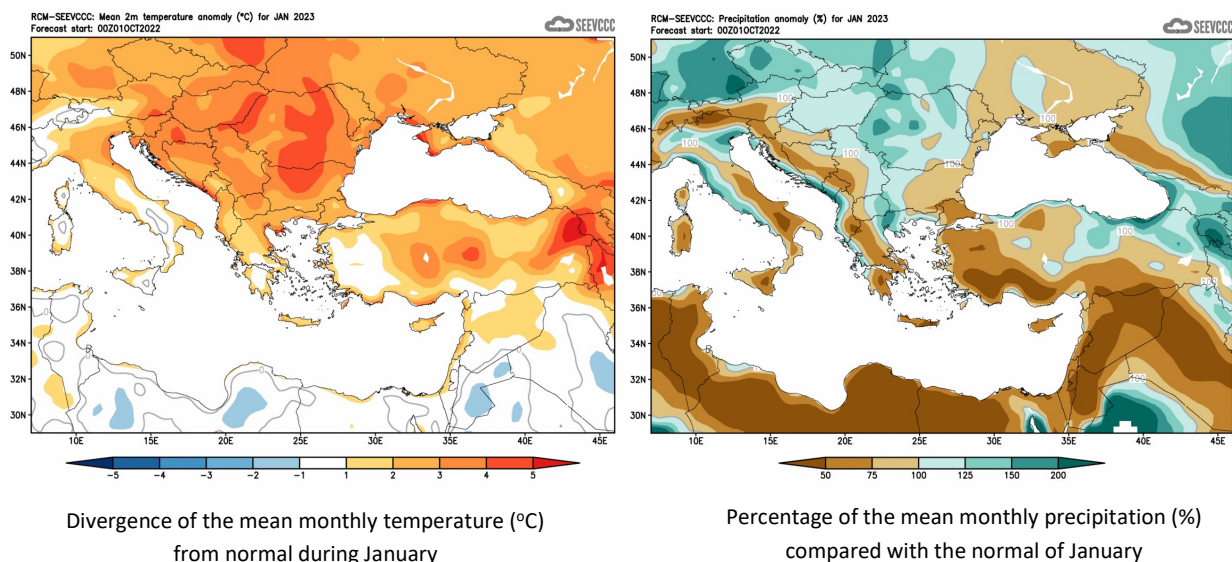


Divergence of the mean monthly temperature (°C) from normal during December



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

The seasonal forecast for **January 2023** suggests that temperature will be above normal (by 1 to 2°C). The amount of the accumulated precipitation for almost all over the island is expected to range from 50% to 75% of normal. Similar conditions characterize all the surrounding area (\*).



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

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 temperature, both maximum and minimum, is on the fall suggesting **January** as the coldest month of the period. On the other hand, the accumulated precipitation is increasing significantly towards **January**, 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 on **December** if compared to **November** remaining almost steady on **January**, and this as a result of the reoccurrence/redeveloping of depressions over the area of the east Mediterranean.

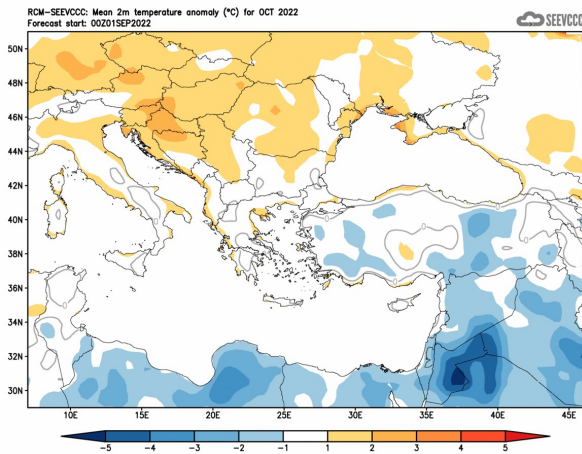
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	November	December	January	November	December	January	November	December	January
NORTH COAST	21.7	18.0	16.3	12.2	9.3	7.6	58.6	93.6	85.3
WEST COAST*	22.4	18.9	17.1	12.9	10.0	8.3	52.6	90.1	78.8
MOUNTAINOUS AREAS	12.8	8.3	6.3	6.1	2.6	0.7	93.8	157.3	150.0
INLAND*	22.1	17.3	15.5	10.4	7.0	5.4	43.2	57.2	48.8
SOUTH COAST	22.6	18.6	16.8	12.4	9.2	7.5	46.8	79.0	73.7
EAST COAST**	22.4	18.0	16.3	11.8	8.3	6.6	44.0	76.8	67.3

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

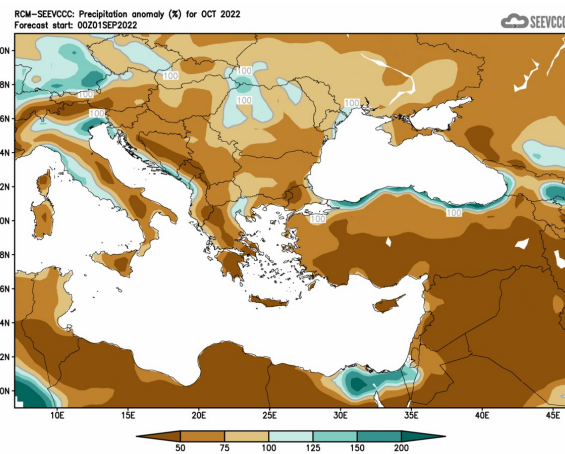
\*\* East Coast Temperature Values cover the period 1981-2007

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

The seasonal forecast suggested that **October's** temperature would be generally normal, just like the greater area. Regarding the accumulated precipitation, almost entire island would be below 50% of normal. The coastal surrounding zone of the eastern Mediterranean was expected to have similar conditions except north Egypt and south Israel.



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



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 performed bad in forecasting the anomalies of temperature, as most of the mean daily temperatures were above normal.

Extremes were also recorded with positive departures greater than 4°C, like Polis Chrysochous station where the highest daily maximum temperature (39.1°C) was 12.7°C greater than normal (26.4°C) and Athalassa station, where the highest daily maximum temperature (40.2°C) was 11.8°C greater than normal (28.4°C).

Daily minimum temperatures were also recorded, with positive departure greater than 4°C above normal, like Prodomos station, where a minimum of 20.1°C was 9.2°C above station's normal (10.9°C) and Athalassa station, where the highest daily minimum temperature (25°C) was 9.8°C greater than normal (15.2°C).

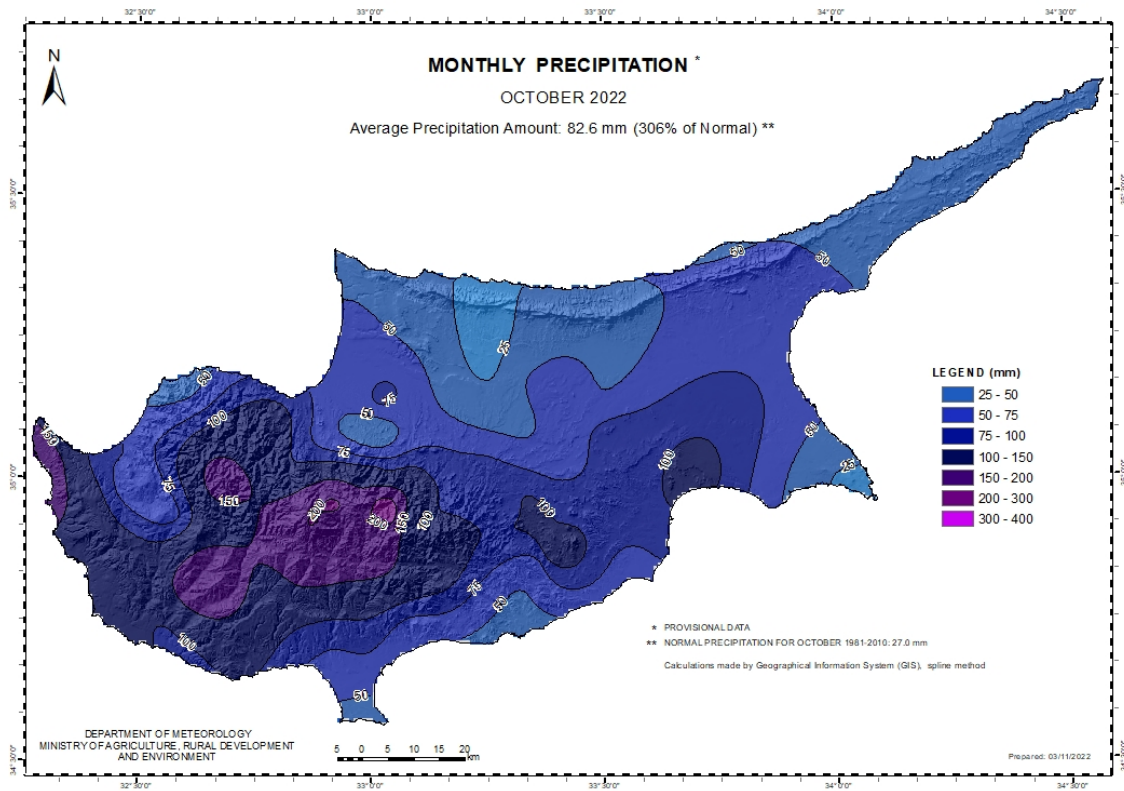
From the provisional data recorded by the Department of Meteorology the model performed bad over the estimation of the amount of the accumulated precipitation.

During the period 3-5, 8<sup>th</sup>, 14-21, 26<sup>th</sup> and 31<sup>st</sup> of **October** local showers and isolated thunderstorms resulted in accumulated precipitation of 306% of normal. On the 16<sup>th</sup>, 21<sup>st</sup> and 26<sup>th</sup> of **October** hail was reported.

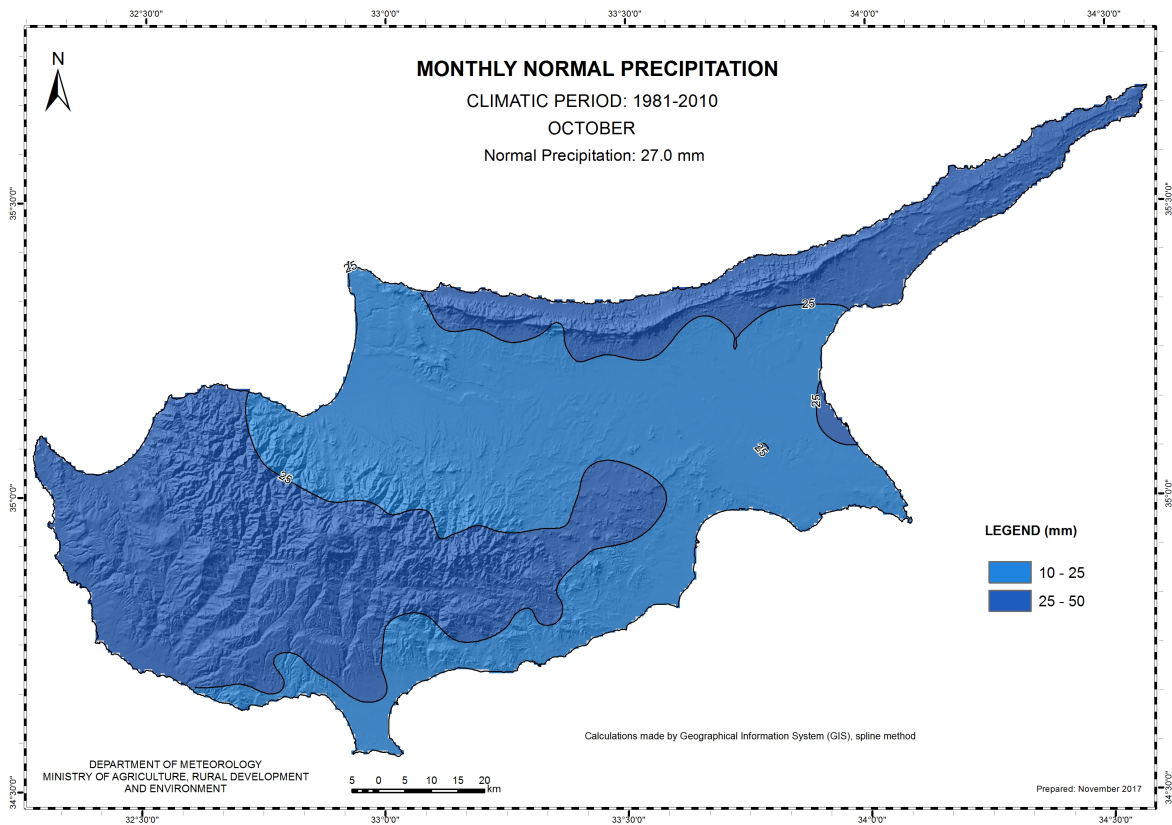
During **October** a thunderstorm EMMA warning with yellow awareness level was issued on 2<sup>nd</sup> of **October** and high temperature EMMA warnings with yellow awareness level were issued during 16-18 of **October**.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR OCTOBER 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	28,6	26,4	2,2	39,1	25,0	18,2	16,1	2,1	14,4	22,9	81,4	30,3	51,1
82*	PAFOS (AIRPORT)	27,2	26,4	0,8	31,7	24,6	18,8	16,4	2,4	16,2	23,7	127,3	27,4	99,9
225	PRODROMOS (C.F.C.)	20,3	19,2	1,1	30,1	15,0	11,6	10,9	0,7	7,9	20,1	166,7	34,4	132,3
666*	ATHALASSA (RADIOSONDE)	29,7	28,4	1,3	40,2	22,0	16,3	15,2	1,1	12,8	25,0	64,2	20,7	43,5
731	LARNAKA (AIRPORT)	28,9	27,8	1,1	34,2	25,1	19,0	16,7	2,3	15,4	24,6	82,6	16,0	66,6
800**	ACHNA (DASAKI)	29,4	28,5	0,9	37,2	25,4	18,7	16,7	2,0	14,5	25,8	91,9	19,9	72,0
<p>* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010</p> <p>** Achna's Temperature Normal Values cover the period 1981-2007</p> <p>= VALUES FROM AUTOMATIC WEATHER STATION</p>														

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