

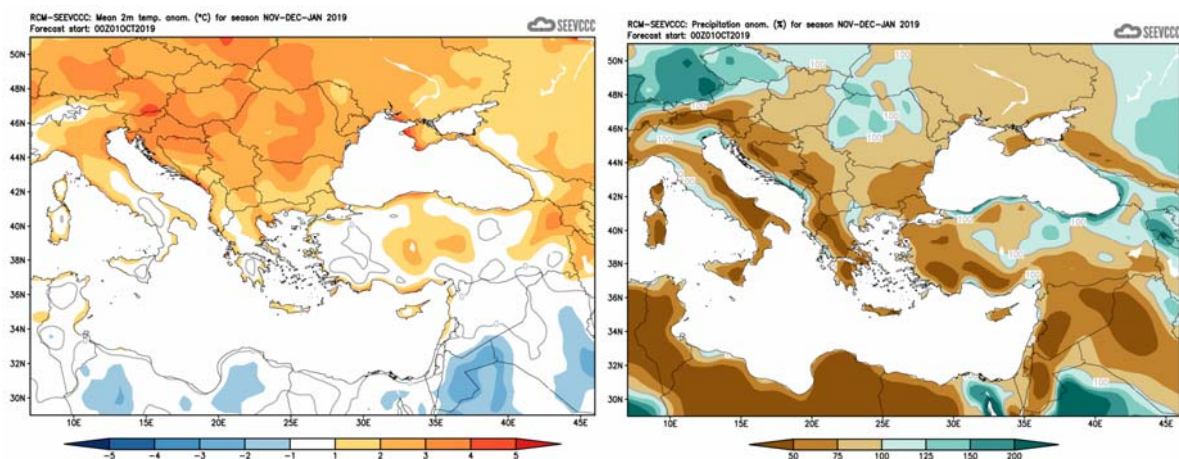
## Seasonal weather forecast for the months of November, December 2019 and January 2020

### General over view of the weather expected to prevail during November, December 2019 and January 2020.

The weather for the following three months, namely **November, December 2019** and **January 2020** 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 2019** and **January 2020**, the temperature is expected to be generally normal or slightly above normal. Normal to above normal temperature characterizes also Asia Minor and the Balkans. The amount of the accumulated precipitation inland and over the southern and eastern part of Cyprus is expected to range generally from 50% to 75% of normal while over the west and north part will range from 75% of normal to normal. As it is generally viewed from the charts parts of the coastal zone of the wider area will experience moderate to high rainfall accumulations.

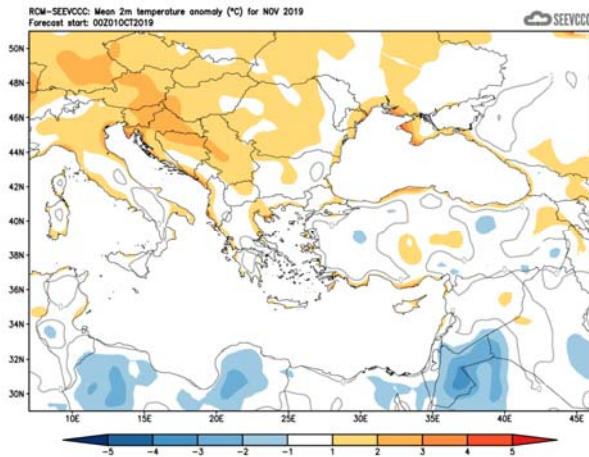


Divergence of temperature from normal from the mean seasonal temperature (°C) for November, December and January

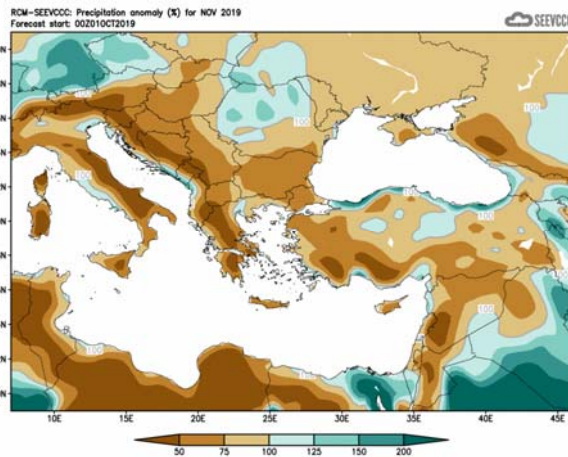
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for November, December and January

### Seasonal forecast in detail

The seasonal forecast for **November** suggests that temperature of the island will be generally normal, such as the mean monthly temperature of the surrounding area. The amount of the accumulated precipitation over inland and the southeast coast of Cyprus is expected to range generally from 50% to 75% of normal while over the rest of the island is expected to range from 75% of normal to normal. Parts of the coastal zone of the surrounding area will receive again high precipitation accumulation.

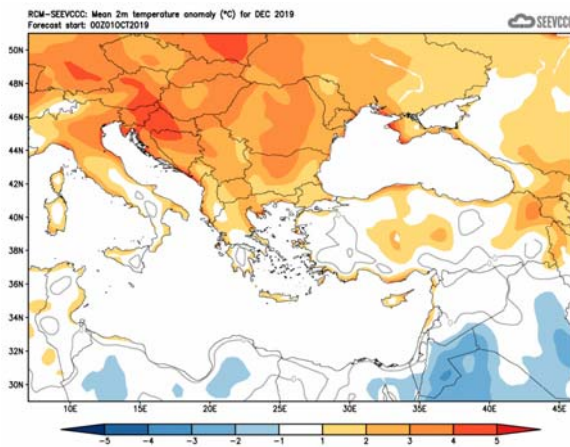


Divergence of the mean monthly temperature (°C) from normal during November

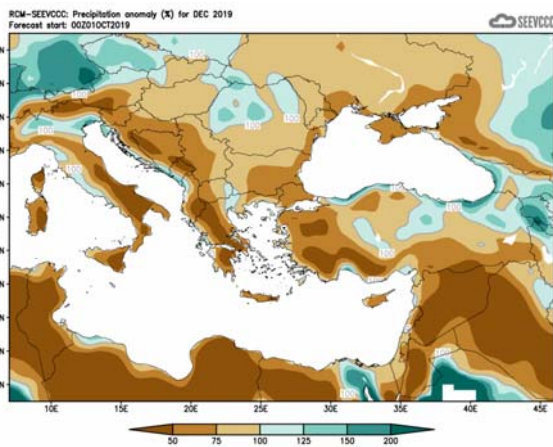


Percentage of the mean monthly precipitation (%) compared with the normal of November

The seasonal forecast for **December** suggests that temperature will be generally normal to above normal. The amount of the accumulated precipitation all over the island is expected to range from 50% to 75% of normal, except over the west and north coast where is expected to range from 75% of normal to normal. Great parts of the coastal zone of the surrounding area will receive again high precipitation accumulation.

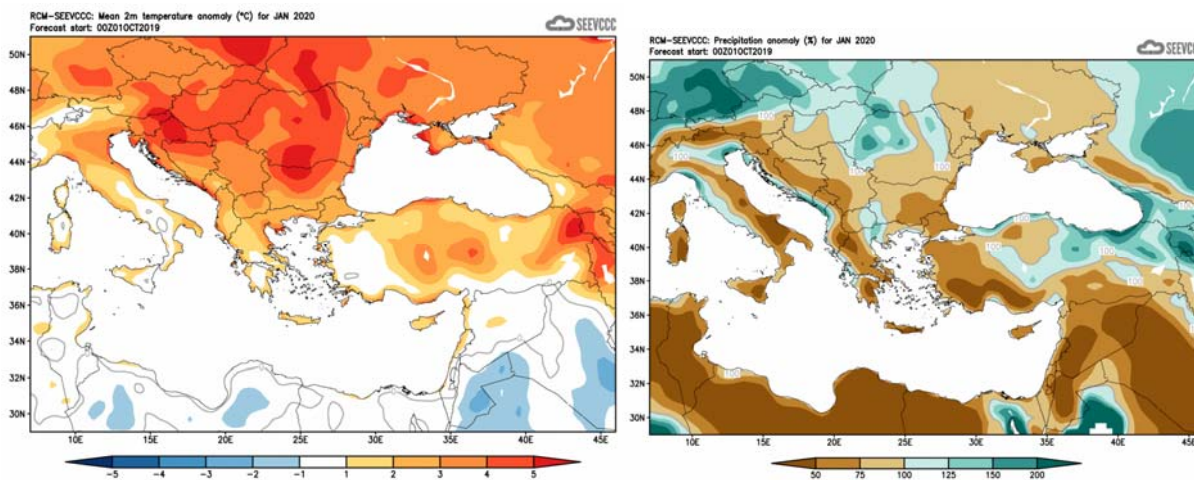


Divergence of the mean monthly temperature (°C) from normal during December



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

The seasonal forecast for **January 2020** suggests that temperature will be above normal (by 1-2°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.



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

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

**Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for November, December 2019 and January 2020**

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.

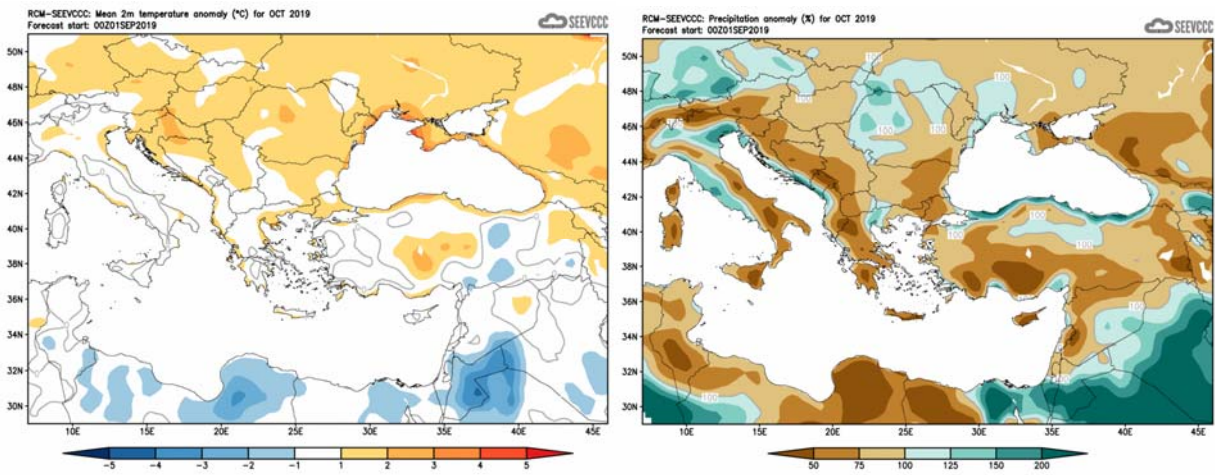
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	November	December	January	November	December	January	November	December	January
NORTH COAST	21.7	18.0	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, the southern and eastern areas would be below 50% of normal, while the rest of the areas would range between 50% and 75% of normal. The coastal surrounding zone of the eastern Mediterranean was expected to have similar conditions except Egypt and Israel.



Divergence of the mean monthly temperature (°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 did not perform well over the anomalies of temperature. All the mean daily temperatures were above normal temperatures for the selected stations for **October**, except the mean daily minimum temperature of Prodromos and the mean daily maximum temperature of Achna that both of them were around normal.

Extremes were also recorded with positive departures greater than 4°C, like Prodromos station where the highest daily maximum temperature (27.6°C) was 8.4°C greater than normal (19.2°C) and Pafos station, where the highest daily maximum temperature (35.6°C) was 9.2°C greater than normal (26.4°C). Daily minimum temperatures were also recorded, with negative departure greater than 4°C below normal, like Prodromos station, where a minimum of 6.4°C was 4.5°C below station's normal (10.9°C).

From the provisional data recorded by the Department of Meteorology the model did not perform well at all over the amount of the accumulated precipitation, as the actual accumulated precipitation was more than the expected. It is also reported that the weaknesses of the seasonal forecast are well-known for appreciating the storm activity, as a result of the high rainfall in Cyprus in October.

On the 8<sup>th</sup> and during the period 14-29 and 15-25 of **October** local showers and isolated thunderstorms resulted in accumulated precipitation of 230% of normal. On the 16<sup>th</sup>, 20<sup>th</sup>, during the period 22 -24 and on the 27<sup>th</sup> of **October** hail was reported.

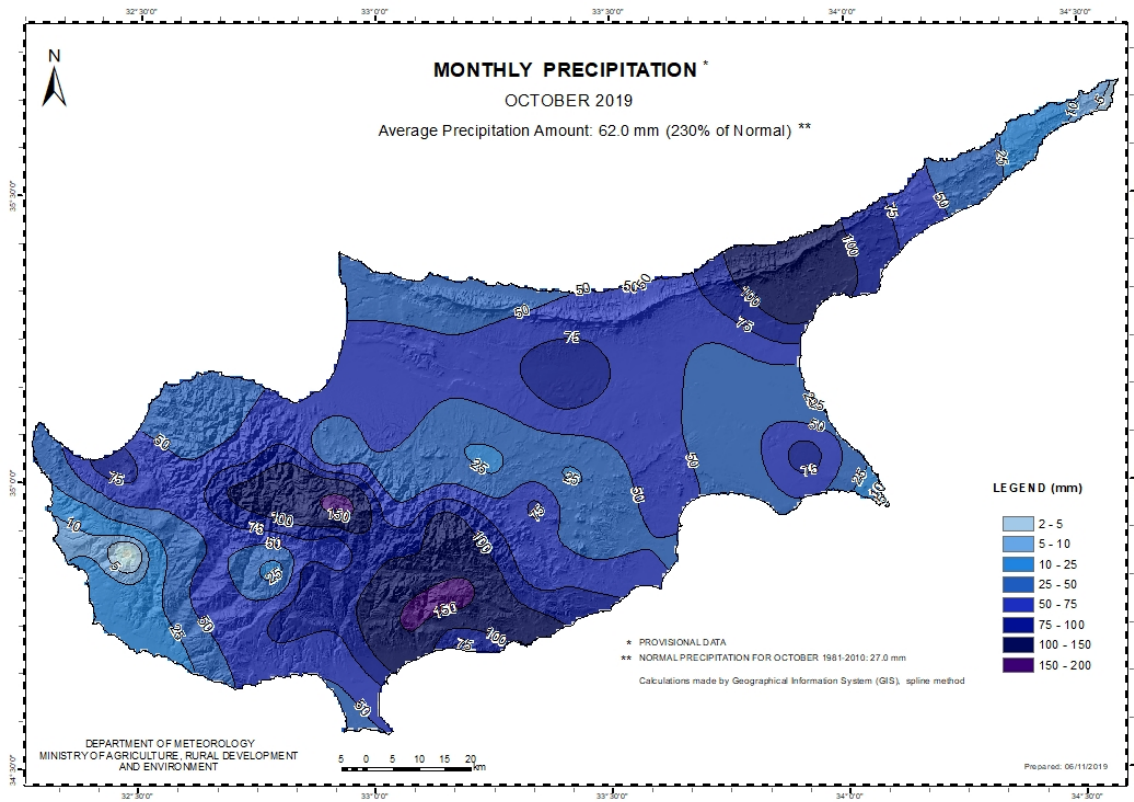
Orange EMMA warning was issued on the 22<sup>nd</sup> of October, while yellow EMMA warnings were issued on the 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup>, 27<sup>th</sup> and 28<sup>th</sup>, always concerning rain and thunderstorms.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR OCTOBER 2019														
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	28.0	26.4	1.6	32.2	25.4	17.8	16.1	1.7	13.6	20.7	86.2	30.3	55.9
82*	PAFOS (AIRPORT)	28.6	26.4	2.2	35.6	24.9	18.3	16.4	1.9	15.1	21.6	12.4	27.4	-15.0
225	PRODROMOS (C.F.C.)	21.8	19.2	2.6	27.6	11.6	11.3	10.9	0.4	6.4	18.0	126.2	34.4	91.8
666*	ATHALASSA (RADIOSONDE)	31.0	28.4	2.6	35.5	22.4	16.7	15.2	1.5	11.8	20.7	80.3	20.7	59.6
731	LARNAKA (AIRPORT)	29.4	27.8	1.6	34.4	23.4	19.5	16.7	2.8	15.0	25.8	47.0	16.0	31.0
800**	ACHNA (DASAKI)	29.2	28.5	0.7	34.9	22.3	17.8	16.7	1.1	13.8	23.7	31.2	19.9	11.3

\* 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 **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.

