## Seasonal weather forecast for the months of

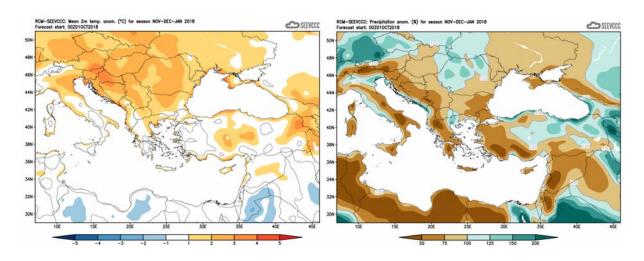
### November, December 2018 and January 2019

General over view of the weather expected to prevail during November, December 2018 and January 2019.

The weather for the following three months, namely **November**, **December 2018** and **January 2019** 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 2018** and **January 2019**, 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,

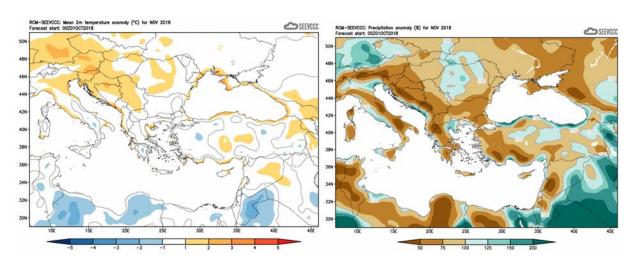
December and January

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

#### The seasonal monthly forecast in detail

#### Seasonal forecast in detail

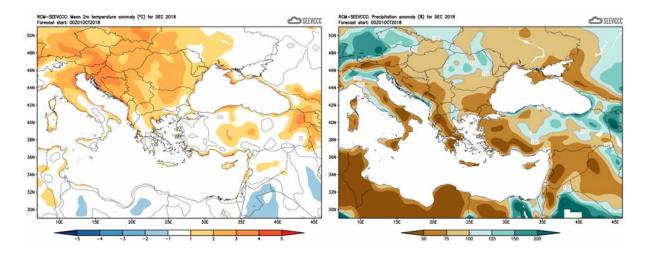
The seasonal forecast for **November** suggests that temperature of the island will be generally normal, such as the mean monthly temperature of the surrounding area. The amount of the accumulated precipitation over the southeast coast of Cyprus is expected to range generally from 50% to 75% of normal 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

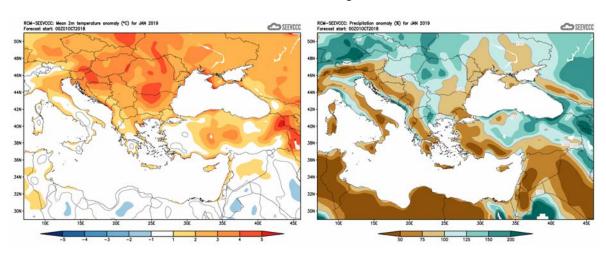
The seasonal forecast for **December** suggests that temperature will be generally normal to above normal. The amount of the accumulated precipitation all over the island is expected to range from 50% to 75% of normal, except over the west and north coast where is expected to range from 75% of normal 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 2019** suggests that temperature will be above normal (by 2°C). 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. 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 2018 and January 2019

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.

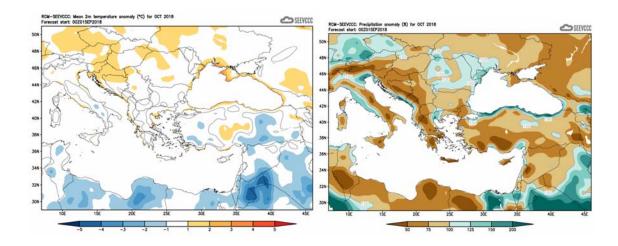
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)		MEAN MONTHLY TOTAL PRECIPITATION (mm)			
Area Name	November	December	January	November	December	January	November	December	January
NORTH COAST	21.7	18.0	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

<sup>\*</sup> West Coast and Inland Values cover the period 1983-2010

#### 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.

<sup>\*\*</sup> East Coast Temperature Values cover the period 1981-2007



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 that was slightly below normal.

Extremes were also recorded with positive departures greater than 4°C, like Prodromos station where the highest daily maximum temperature (25.7°C) was 6.5°C greater than normal (19.2°C) and Athalassa station, where the highest daily maximum temperature (34.7°C) was 6.3°C greater than normal (28.4°C). Daily minimum temperatures were also recorded, with negative departure greater than 4°C below normal at Prodromos station, where a minimum of 2.3°C was 8.6°C below station's normal (10.9°C) and at Athalassa station, where a minimum of 9.4°C was 5.8°C below station's normal (15.2°C).

From the provisional data recorded by the Department of Meteorology the model did not performed so well over the amount of the accumulated precipitation, as the actual accumulated precipitation was more than the expected. During the periods 7-13 and 15-25 of **October** local showers and isolated thunderstorms resulted in accumulated precipitation of 185% of normal. On the 9<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, during the period 17<sup>th</sup> -20<sup>th</sup> and on the 25<sup>th</sup> of **October** hail was reported.

It is important to mention that a tornado touched ground in the areas of Agios Trimithias and Paliometocho, during the afternoon hours of October 21. There were no reports of injuries, but power lines were cut off by falling trees and homes and buildings were badly damaged. The damages were estimated to a few million euros in the area of distress .

## TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR OCTOBER 2018

St. No.	Station Name		
41	POLIS CHRYSOCHOUS		
82*	PAFOS (AIRPORT)		
225	PRODROMOS (C.F.C.)		
666*	ATHALASSA (RADIOSONDE)		
731	LARNAKA (AIRPORT)		
800**	ACHNA (DASAKI)		

Mean Daily Maximum Femperatur e (°C)	Norma I Value (1981- 2010)	Differenc e from Normal Value	Highest Daily Maximum Temperatur	Lowest Daily Maximum Temperatur	
27.6	26.4	1.2	31.0	21.6	
27.9	26.4	1.5	30.2	23.4	
20.2	19.2	1.0	25.7	12.3	
30.3	28.4	1.9	34.7	21.1	
28.9	27.8	1.1	32.3	23.2	
29.0	28.5	0.5	32.6	20.8	

Mean Daily Minimum Temperatur e (°C)	Norma I Value (1981- 2010)	Differenc e from Normal Value	Lowest Daily Minimum Temperatur	Highest Daily Minimum Temperatur	
17.5	16.1	1.4	11.6	20.6	
17.8	16.4	1.4	12.3	20.5	
10.2	10.9	-0.7	2.3	14.7	
16.4	15.2	1.2	9.4	21.1	
18.7	16.7	2.0	12.2	22.2	
18.4	16.7	1.7	11.4	21.6	

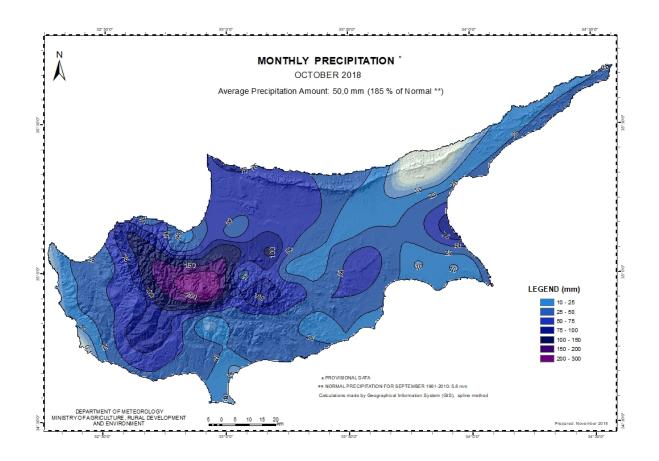
Monthly Total Precipitatio n (mm)	Norma I Value (1981- 2010)	Differenc e from Normal Value
26.6	30.3	-3.7
9.9	27.4	-17.5
223.2	34.4	188.8
31.1	20.7	10.4
22.8	16.0	6.8
9.0	19.9	-10.9

 $<sup>\</sup>ensuremath{^{*}}$  Pafos' and Athalassa's Station Normal Values cover the period 1983-2010

= VALUES FROM AUTOMATIC WEATHER STATION

<sup>\*\*</sup> Achna's Temperature Normal Values cover the period 1981-2007

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.

