

Seasonal weather forecast for the months of

February, March and April 2018

General over view of the weather expected to prevail during February, March and April.

The weather for the following period consists of a part (**February**) of the traditional winter, where the 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 (except **January**) and the first two months (**March** and **April**) 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.

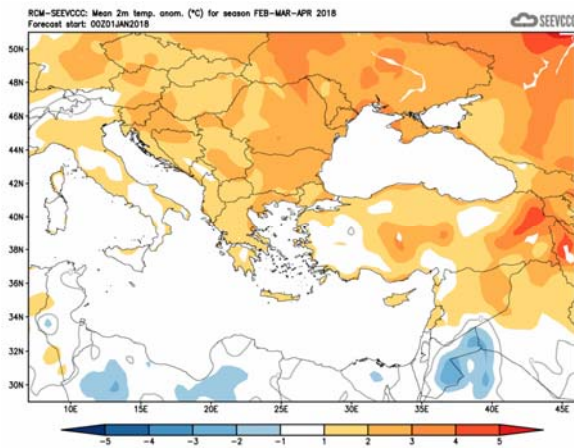
From the climatological data base kept by the Department of Meteorology **February** results in a mean of 11 snow days with the 1990 **February** resulting in 16 days. During **March** 8 days of fresh snow are climatologically expected while during 1987 **March** resulted in 21 snow days. And during **April** 2 days of fresh snow are climatologically expected while during 1984 **April** resulted in 6 snow days.

It is significant to be mentioned that dust events are frequent during the last two months of the period, as a result of strong Saharan depressions, and that **March** and **April** may be considered as months with increased thunderstorms activity mainly over the mountains and inland due to temperature increase.

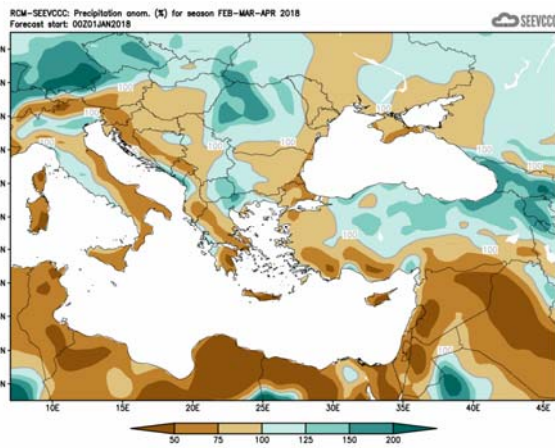
Seasonal forecast for the next three months

Regarding the seasonal forecast for the period of the last winter season month (**February**) and the first two spring season months (**March** and **April**) the temperature is expected to be generally above normal by 1 to 2°C. The amount of the accumulated precipitation is disappointing. The accumulated precipitation will range over the greater part of the island between 50% and 75% and over south and east Cyprus below 50% of normal. Similar characteristics are also applicable for the surrounding area.

Bearing in mind the model's suggestion (the results of which are presented in graphical form in the following charts) and also the long climatology of the area of Cyprus during **February** days with snow and cold outbreaks cannot be excluded while also isolated high accumulations may be recorded during the period.

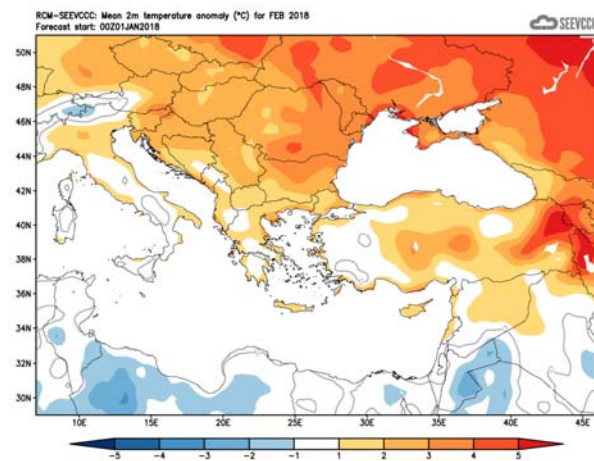


Divergence of temperature from normal from the mean seasonal temperature ($^{\circ}\text{C}$) for February, March and April

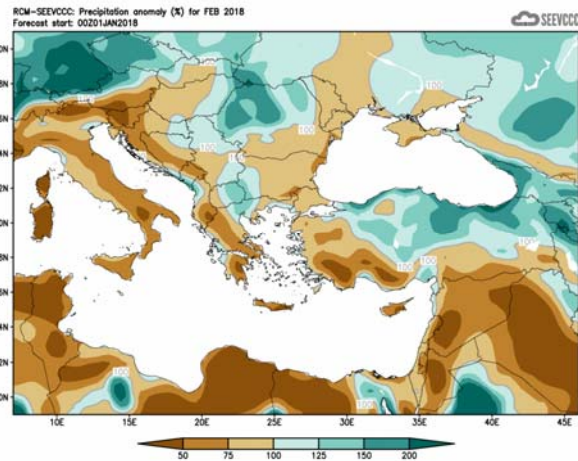


Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for February, March and April

The seasonal forecast for **February** suggests a warmer and drier than normal month. **February** will be warmer than normal by 1°C to 2°C , while the accumulated precipitation is again disappointing since the forecast suggests a mainly dry month with accumulation ranging between 50% and 75% of normal over the greater part of the island and over southeast coast below 50% of normal. The above temperature and accumulated precipitation characteristics apply also for the surrounding area.



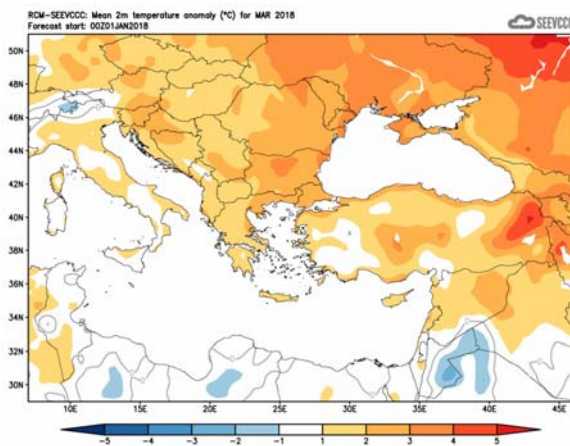
Divergence of the mean monthly temperature ($^{\circ}\text{C}$) from normal during February



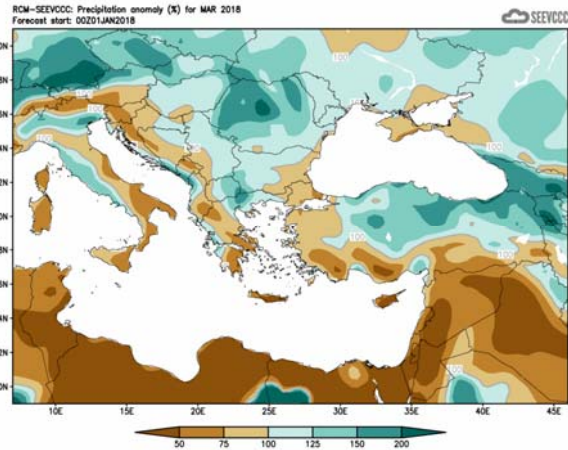
Percentage of the mean monthly precipitation (%) compared with the normal of February

The seasonal forecast for **March** is almost similar to the one of the previous month suggesting that **March** will be warmer than normal by 1°C to 2°C . The accumulated precipitation of **March** is again

disappointing since the forecast suggests that over the greater part of the island the accumulated precipitation will range below 50% of normal and over north and west Cyprus will range between 50% and 75% of normal. The above temperature and accumulated precipitation characteristics apply also for great parts of the surrounding area.

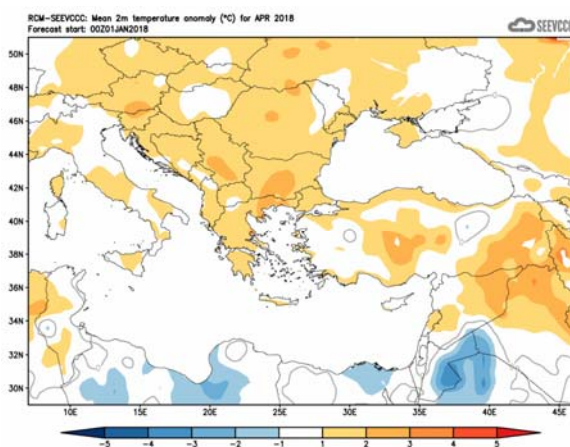


Divergence of the mean monthly temperature ($^{\circ}\text{C}$) from normal during March

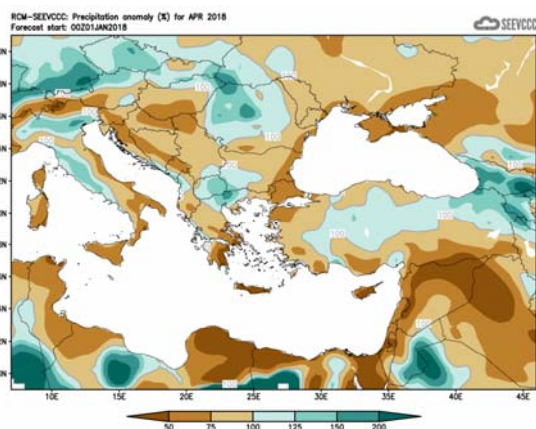


Percentage of the mean monthly precipitation (%) compared with the normal of March

The seasonal forecast for **April** is it concerns temperature, suggests a normal month while the accumulated precipitation is suggested to be again lower than the month's normal. The accumulated precipitation of **March** over the greater part of the island will range below 50% of normal and over north and west Cyprus will range between 50% and 75% of normal. The above temperature mainly and accumulated precipitation characteristics apply also for the surrounding area.



Divergence of the mean monthly temperature ($^{\circ}\text{C}$) from normal during April



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

Normal values of temperature (mean maximum and mean minimum) and accumulated precipitation for February, March and April

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, in order to gain a better view of the normal seasonal climate. The temperatures, both maximum and minimum, of **February** are the lowest climatological temperatures of the period while **February's** accumulated precipitation has the greater value of the period, as a result of the increased frequency of reoccurrence/redeveloping of depressions over the area of the east Mediterranean. During **March**, a transitional month from winter to summer, an increase of mean maximum and mean minimum temperature is noted with a simultaneous drop of the accumulated precipitation over all sample stations. A further temperature increase and accumulated precipitation significant decline is observed during **April**.

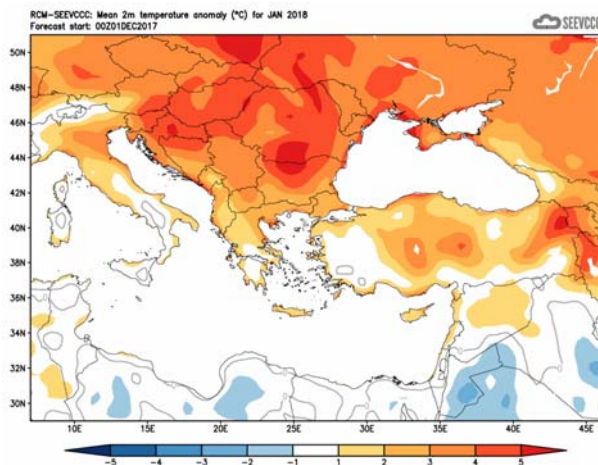
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	Feb	Mar	Apr	Feb	Mar	Apr	Feb	Mar	Apr
NORTH COAST	16.3	18.3	21.6	7.3	8.3	10.8	68.5	45.7	21.8
WEST COAST*	17.1	18.6	21.5	8.1	8.9	11.5	59.8	34.4	15.2
MOUNTAINOUS AREAS	6.7	10.4	15.5	0.5	2.8	6.6	128.7	92.1	47.2
INLAND*	16.0	19.2	24.4	5.3	6.9	10.4	44.5	31.9	19.1
SOUTH COAST	17.0	19.3	22.7	7.1	8.6	11.8	50.3	35.8	14.2
EAST COAST**	16.5	19.1	23.2	6.3	7.8	10.9	50.7	35.2	19.7

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

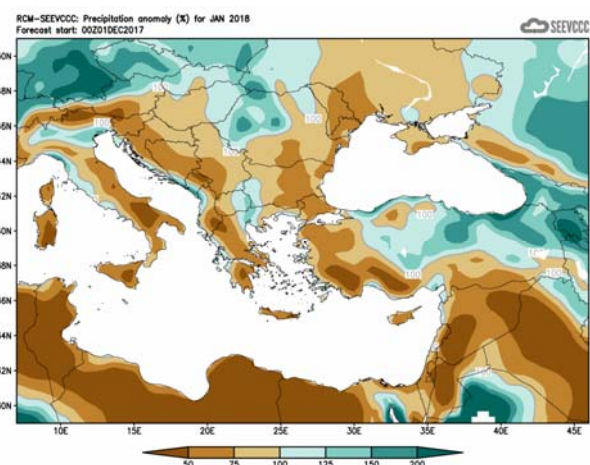
** East Coast Temperature Values cover the period 1981-2007

Evaluation of January seasonal forecast for the area of Cyprus

The seasonal forecast for **January 2018** suggested that temperature would be slightly above normal (by 1°C to 2°C). The forecast for the accumulated precipitation of **January** was again disappointing since it was suggesting a mainly dry month with accumulation ranging only from 50% to 75% of normal, except the western part where the accumulation would range almost up to normal. Low accumulations were 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

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 JANUARY 2018														
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	18.1	16.3	1.8	20.4	13.0	8.8	7.6	1.2	4.7	13.1	130.1
82*	PAFOS (AIRPORT)	18.1	17.1	1.0	20.2	15.0	9.6	8.3	1.3	5.3	14.6	100.3	78.8	21.5
225	PRODROMOS (C.F.C.)	8.5	6.3	2.2	15.5	2.7	1.0	0.7	0.3	-3.2	6.9	279.7	150.0	129.7
666*	ATHALASSA (RADIOSONDE)	18.3	15.5	2.8	21.5	13.2	6.7	5.4	1.3	2.6	9.9	67.6	48.8	18.8
731	LARNAKA (AIRPORT)	18.3	16.8	1.5	21.1	14.0	8.7	7.5	1.2	5.6	12.6	98.1	73.7	24.4
800**	ACHNA (DASAKI)	17.3	16.3	1.0	19.8	13.2	7.2	6.6	0.6	1.6	10.7	61.4	67.3	-5.9

* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010
** Achna's Temperature Normal Values cover the period 1981-2007

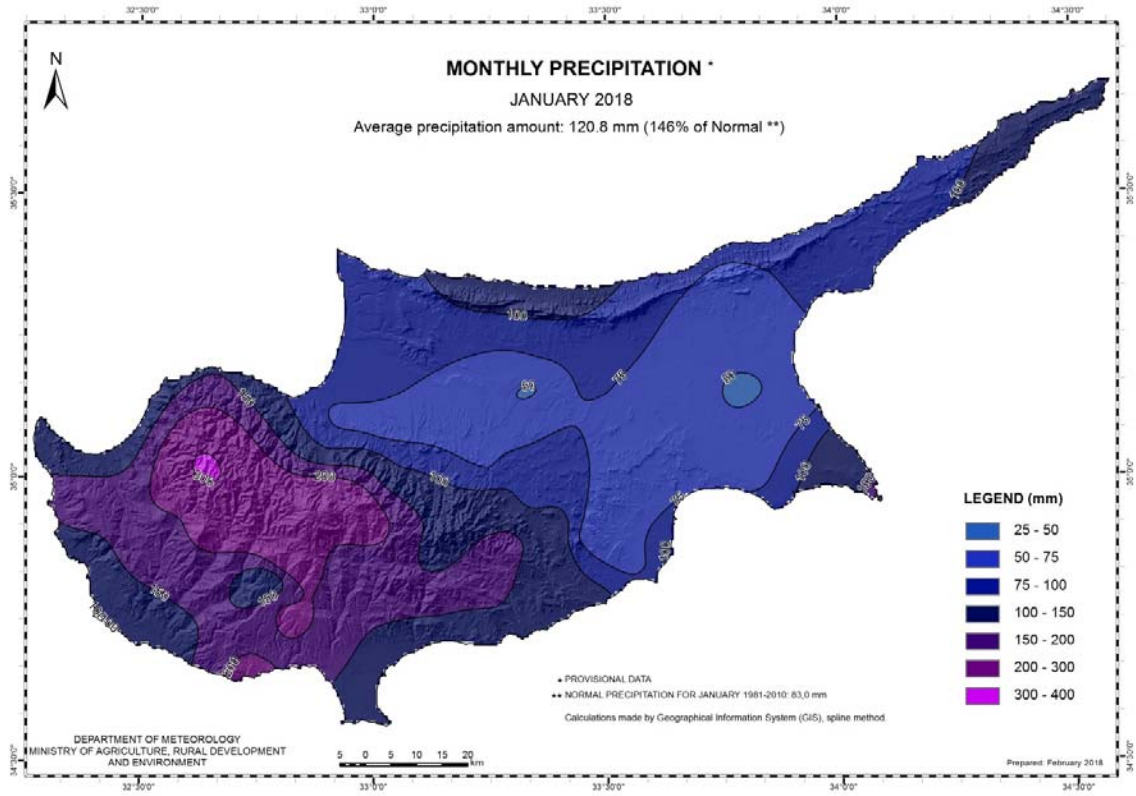
= VALUES FROM AUTOMATIC WEATHER STATION

it seems that the model performed moderately, since it forecast correct the temperature anomalies, but it did not forecast well the accumulated precipitation. **January** was warmer than normal as the model suggested. From the recorded data is shown that the mean daily maximum and the mean daily minimum temperatures were above normal, not only inland but also for the coastal areas. Extreme high temperatures were recorded, as an example Prodrornos recorded a highest daily maximum of 15.5°C (with the normal being 6.3°C) and Athalassa recorded a highest daily maximum of 21.5°C (with the normal being 15.5°C). Extremes low temperatures were also recorded, as an example note the lowest daily minimum temperature of Achna that was 1.6°C (with a normal of 6.6°C).

From the provisional data recorded by the Department of Meteorology the model did not perform well over the amount of the accumulated precipitation, as the actual accumulated precipitation was more than the expected. During the periods 2-5, 12-14, 16-18 and 21-27 of **January** local showers and isolated showers resulted in accumulated precipitation of 120.8mm or 146% of normal. It is worth mentioning that on 4th and 22nd of **January** hail was reported. Also, for the 5th of **January** an EMMA yellow level warning for rainfall and thunderstorms was issued.

It is worth mentioning that based on the provisional data there were 8 days of snow during **January**, having on the 25th of **January**, a 13cm of new snow on Troodos mountains.

For the purpose of better visualization of **January** 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 **January** is also presented.

