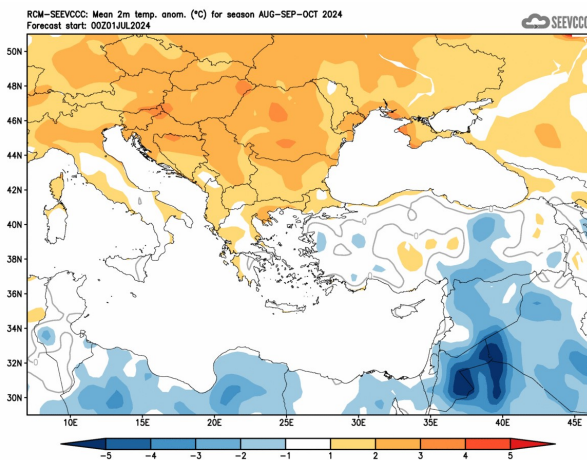


Seasonal weather forecast for the months of August, September, and October 2024

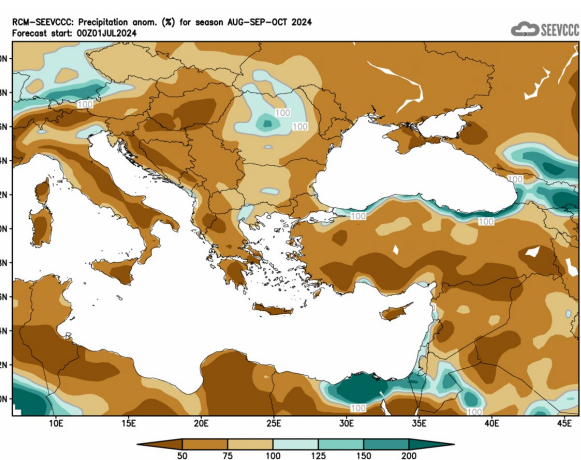
General overview of the weather expected to prevail for August, September and October

The weather for the following three months, namely **August, September, and October 2024**, will be presented, with respect to the anomalies of temperature, and accumulated precipitation. Normal temperatures (both the maximum and the minimum) are on the rise suggesting **August** as the hottest month of the year. The accumulated precipitation is at its lowest values. The period of the following three months (mainly July and August) is likely to be characterized by outbreaks of thunderstorms, initiated from thermal causes over the main plain area or over the mountainous range from orographic uplift.

Specifically, regarding the seasonal forecast for the period of **August, September and October 2024**, the temperature will be generally normal. Normal temperature also characterizes the greater part of Asia Minor and Greece. The Balkans are expected to be warmer than normal while Middle East will be lower than normal. The amount of the accumulated precipitation over most areas of Cyprus is expected to range below 75%. The amount of the accumulated precipitation all of the neighbouring countries is expected to range below 75% of normal (*).



Divergence of temperature from normal from the mean seasonal temperature (°C) for August, September, and October

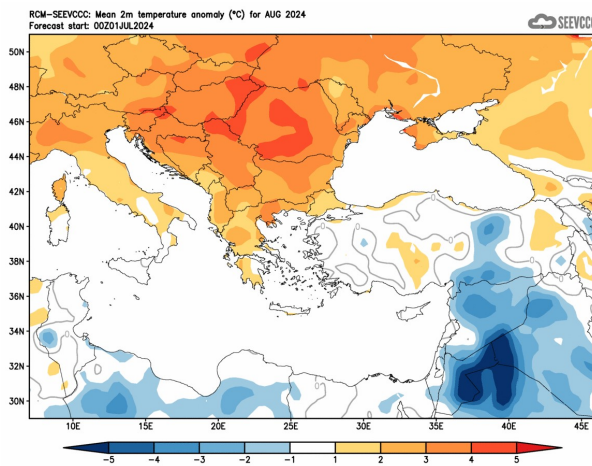


Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for August, September, and October

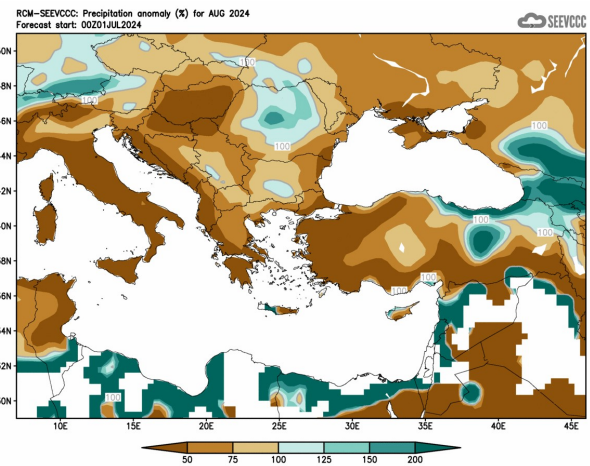
The seasonal monthly forecast in detail

August

August's seasonal forecast suggests that temperature over Cyprus will be generally normal. Normal temperatures also characterize Greece and Asia Minor, while Middle East will be lower than normal and the Balkans warmer than normal. The amount of the accumulated precipitation over inland areas of the island is expected to be around normal, while over the northern and the western part is expected to range above normal and over the southern and eastern part is expected to range below normal (*).



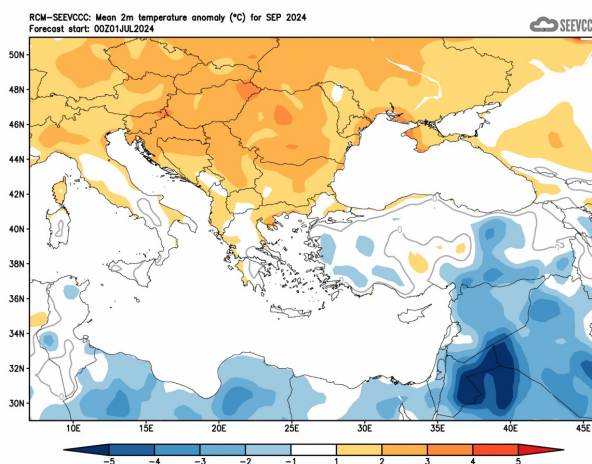
Divergence of the mean monthly temperature (°C) from normal during August



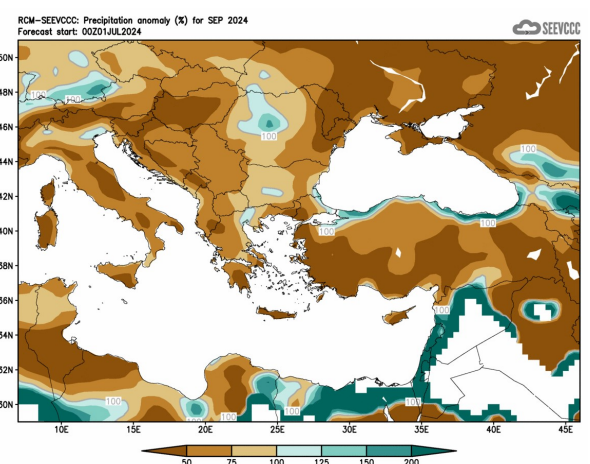
Percentage of the mean monthly precipitation (%) compared with the normal of August

September

The seasonal forecast suggests that **September's** temperature will be normal. Greece and Asia Minor seem to also have similar characteristics. The Balkans however seem to be warmer than normal while Middle East will have below normal temperatures. The amount of the accumulated precipitation over the southern and eastern part of Cyprus is expected to be below 50% of normal, while over northern and western part of the island is expected to range between 50% and 75% of normal (*).



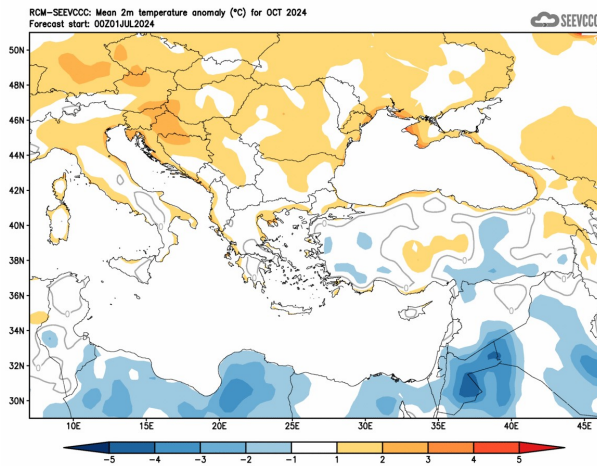
Divergence of the mean monthly temperature (°C) from normal during September



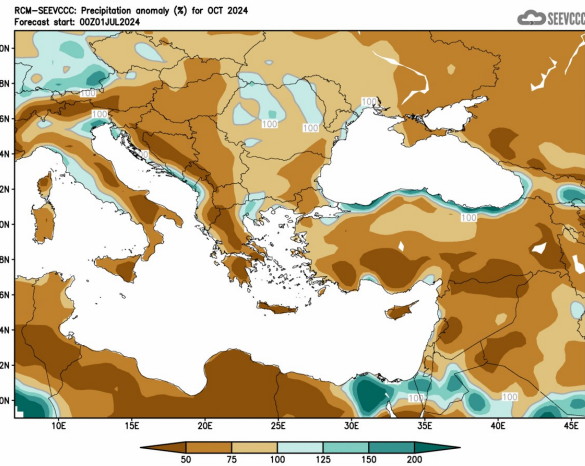
Percentage of the mean monthly precipitation (%) compared with the normal of September

October

The seasonal forecast for **October** suggests that temperature will be normal. Normal temperature is also a characteristic over most areas of the neighboring countries. The amount of the accumulated precipitation of the island is expected to be below 50% of normal. Over the neighbouring countries is generally expected to range between 50% and 75% of normal, excepted from some areas over which is expected to below 50% of normal (*).



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



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

Normal values of temperature and accumulated precipitation for August, September and October

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 rise suggesting **August** as the warmest month of not only the period but also the year. On the other hand, the accumulated precipitation is increasing significantly from **August** towards **October**, as presented by the climatological data shown in the table below. It is worth noting that **October's** precipitation is significantly higher than **August's** because of the reoccurrence/redeveloping of depressions over the area of east Mediterranean (during October).

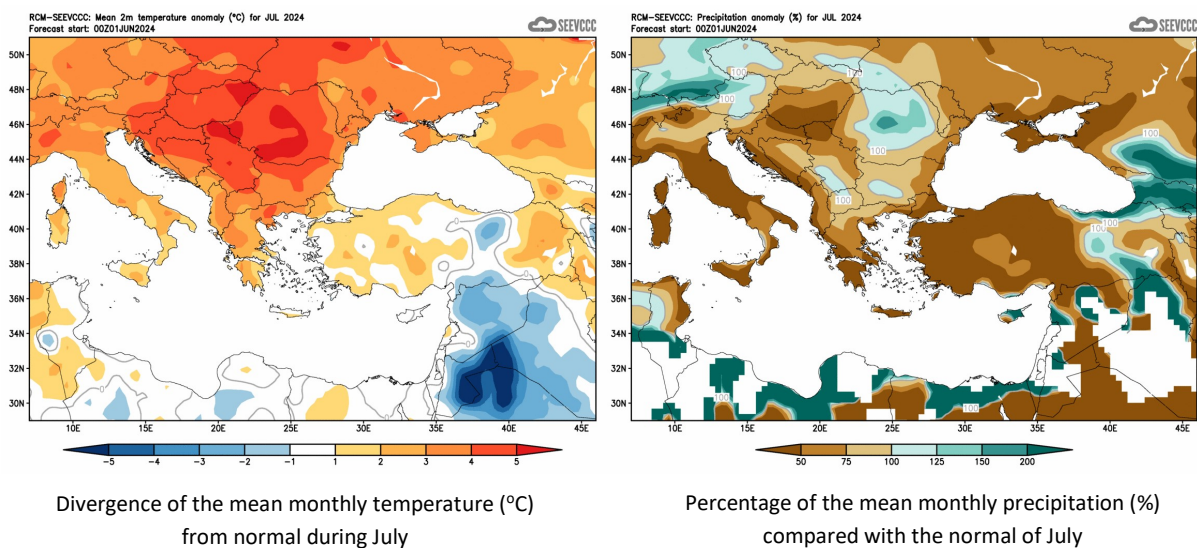
TEMPERATURE AND PRECIPITATION NORMAL VALUES FOR THE PERIOD 1981-2010									
Area Name	MEAN DAILY MAXIMUM TEMPERATURE (°C)			MEAN DAILY MINIMUM TEMPERATURE (°C)			MEAN MONTHLY TOTAL PRECIPITATION (mm)		
	August	September	October	August	September	October	August	September	October
NORTH COAST	33.3	30.1	26.4	21.5	19.2	16.1	0.0	4.0	30.3
WEST COAST*	30.5	29.0	26.4	21.1	19.1	16.4	0.0	3.6	27.4
MOUNTAINOUS AREAS	28.0	24.6	19.2	18.1	14.9	10.9	12.0	10.7	34.4
INLAND*	36.9	33.6	28.4	21.9	18.8	15.2	1.8	12.2	20.7
SOUTH COAST	32.9	30.9	27.8	22.3	19.8	16.7	0.3	4.3	16.0
EAST COAST**	33.5	31.9	28.5	22.0	19.6	16.7	0.1	2.9	19.9

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

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

Evaluation of July's seasonal forecast for the area of Cyprus

The seasonal forecast suggested that **July's** temperature would be normal. Asia Minor was expected to be by up to 2°C warmer than normal, Greece and the Balkans were expected to be even by up to 5°C warmer than normal, while the Near and Middle East was expected to be colder than normal. Regarding the accumulated precipitation, Cyprus' southwestern half was expected to be below 50% of normal but over the northeastern half the accumulated precipitation was expected to range even up to 200% of normal.



Concerning the model's evaluation for **July**, a general judgment is that the model did not perform well at all concerning the seasonal temperature, since for the majority of the island July has been recorded as the warmest July since climatological data exist in Cyprus for both the maximum and the minimum temperatures. Regarding the seasonal forecast of the accumulated precipitation, it seems that the model performed relatively well for July. This is because although the accumulated precipitation for July was expected to range below 75% over the southwest part of the island and up to 200% over the northeast part of the island, nevertheless the final result gave an average amount of rain of 163% of normal with the highest amounts of rain located over the Troodos mountain range, some areas in the southeast part of the island but also the northern coast of the island. It is important to mention that during summer months, precipitation is resulted mainly from thundery activity which has very localised characteristics and that judging accumulated precipitation is very difficult due to models' limitations.

In a more detailed evaluation of the recorded temperatures, the mean maximum and minimum temperatures (table below), were above normal in all of the selected stations. Daily maximum temperatures above normal (deviating by 4°C or more from normal) were recorded, like the highest daily maximum temperature of Achna and Polis Chrysochous that was 40.1°C and 40.3°C respectively (with a normal of 33.2°C and 33.4°C respectively) and the highest daily maximum temperature of

Prodromos that was 34.2°C (with a normal of 27.9°C). Highest daily minimum temperatures were also recorded, with positive departures greater than 4°C, like the station of Achna and Athalassa where a minimum of 28.9°C and 29.2°C respectively were by 7.1°C above stations' normal for both stations.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR JULY 2024														
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	36.1	33.4	2.7	40.3	32.1	24.3	21.1	3.2	22.4	26.7	0.0	0.1	-0.1
82*	PAFOS (AIRPORT)	32.4	29.9	2.5	34.0	30.1	24.4	20.6	3.8	22.4	26.2	0.0	0.2	-0.2
225	PRODROMOS (C.F.C.)	30.1	27.9	2.2	34.2	26.8	19.2	18.2	1.0	14.7	23.0	40.2	16.4	23.8
666*	ATHALASSA (RA DIOSONDE)	39.5	37.1	2.4	43.0	35.3	25.2	22.1	3.1	22.5	29.2	0.1	4.2	-4.1
731	LARNAKA (AIRPORT)	35.4	32.5	2.9	38.6	32.6	25.0	22.0	3.0	22.2	27.6	0.6	0.5	0.1
800*	ACHNA (DASAKI)	36.2	33.2	3.0	40.1	32.0	24.7	21.8	2.9	21.3	28.9	0.1	0.1	0.0

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

☁ dew

During **July** extremely high temperature warnings, **EMMA** warnings, have been issued at both the yellow and the orange risk level, for both the maximum and the minimum temperatures. Specifically, a total of 16 EMMA warnings for extremely high temperatures were issued; 15 of which were at the yellow risk level during the periods 7-8/7, 14/7, 17-19/7, 21-24/7 and 27-31/7, while 1 of them was at the orange risk level and was concerning the 20th of July.

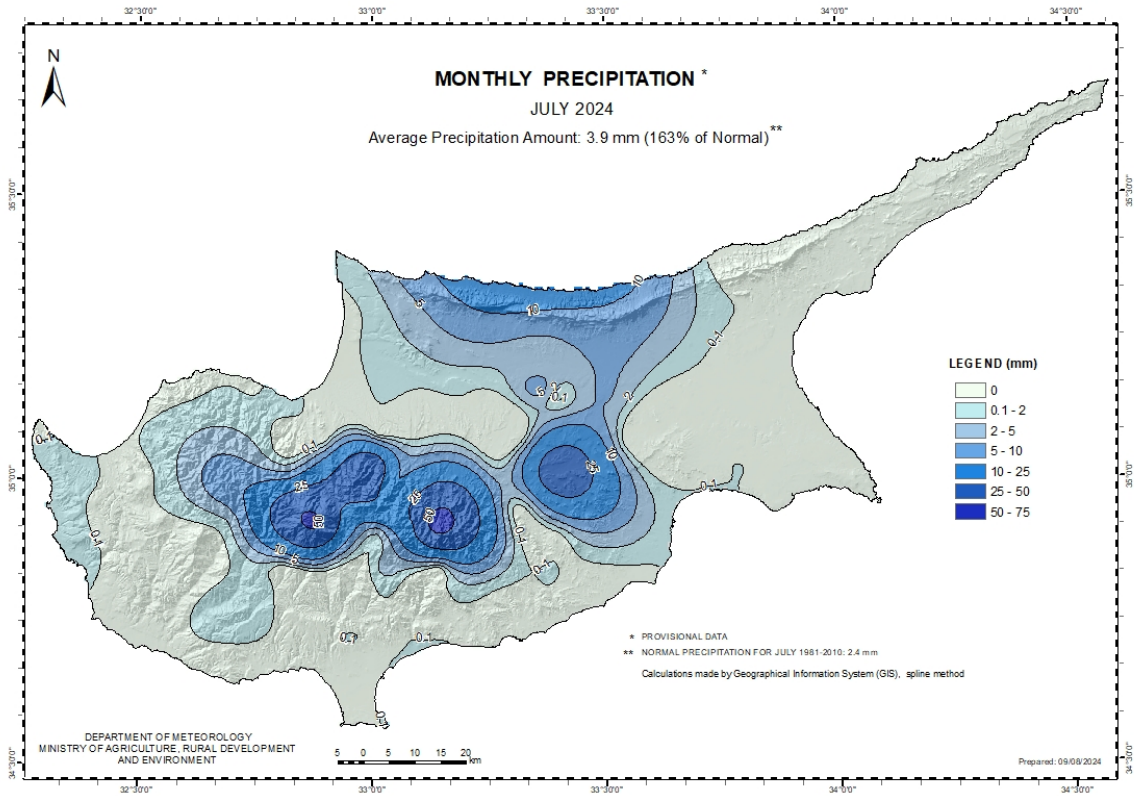
At this point and after a first evaluation if the preliminary data available to us for July 2024, it is worth noting that **July 2024** is, for the island, one of the warmest Julys during which several temperature records have either been re-recorded or surpassed, especially concerning the daily minimum temperatures. Particularly, all coastal reference stations as well as the Department's inland reference station, the station at Athalassa, have been recorded as the warmest Julys for their period of operation. However, apart from that, what is important to mention is the parameter which has contributed the most to their emergence as the warmest Julys. This parameter is not the mean daily maximum temperature but is the mean daily minimum temperature! In all of the reference stations of the Department, with the exception of the mountainous station of Prodromos, the mean daily minimum temperature holds the lead and has a positive deviation from the corresponding normal, with this deviation ranging from 2.7 – 4.2°C.

From the distribution of the accumulated precipitation of **July**, as is shown in the provisional chart that follows, is evident that the surface distribution was well above normal reaching 3.9mm or 163% of normal, something that shows us the uncertainty of the seasonal forecast model which must always be taken into account with a reserve.

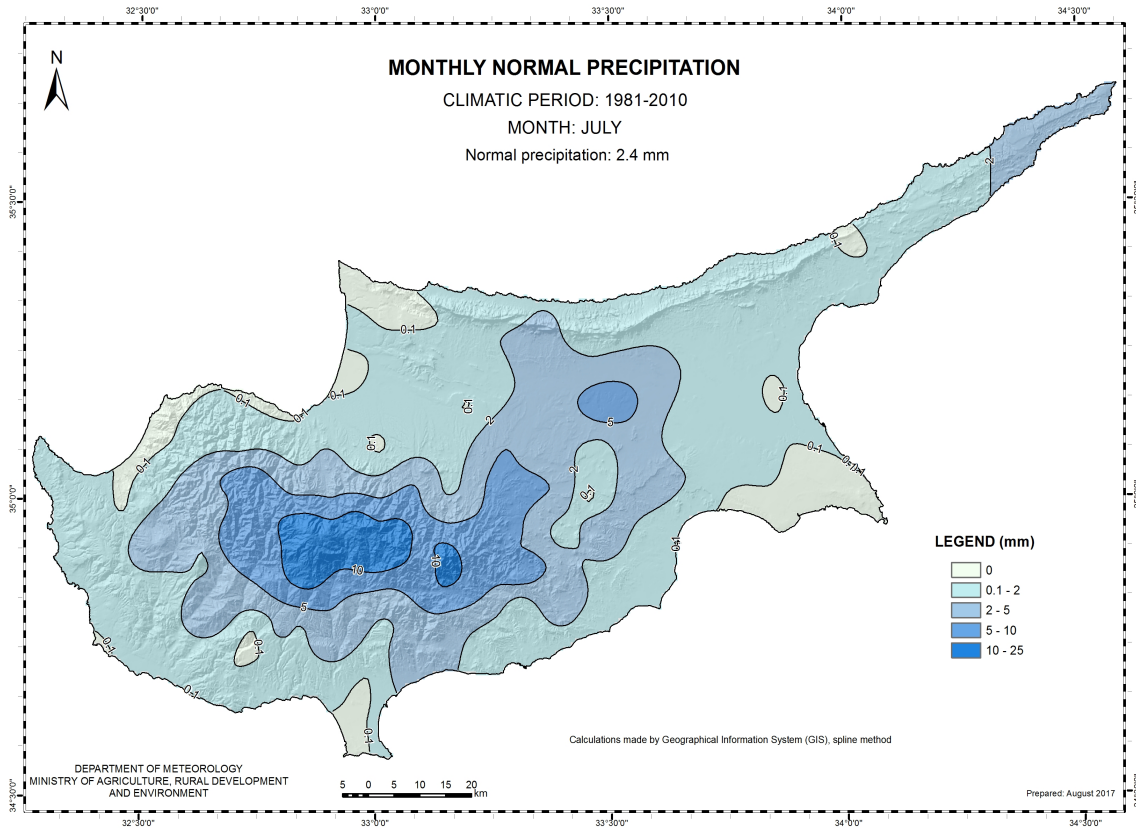
During the periods of 10-11, 15-17, 20 and 25 of **July** local showers and isolated thunderstorms were reported. Hail was also reported for the 10th of July.

Also, during the periods 10-11, 15-16 and the 25th of July EMMA yellow warnings were issued for thunderstorms.

For the purpose of better visualization of **July** 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 **July** is 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.