

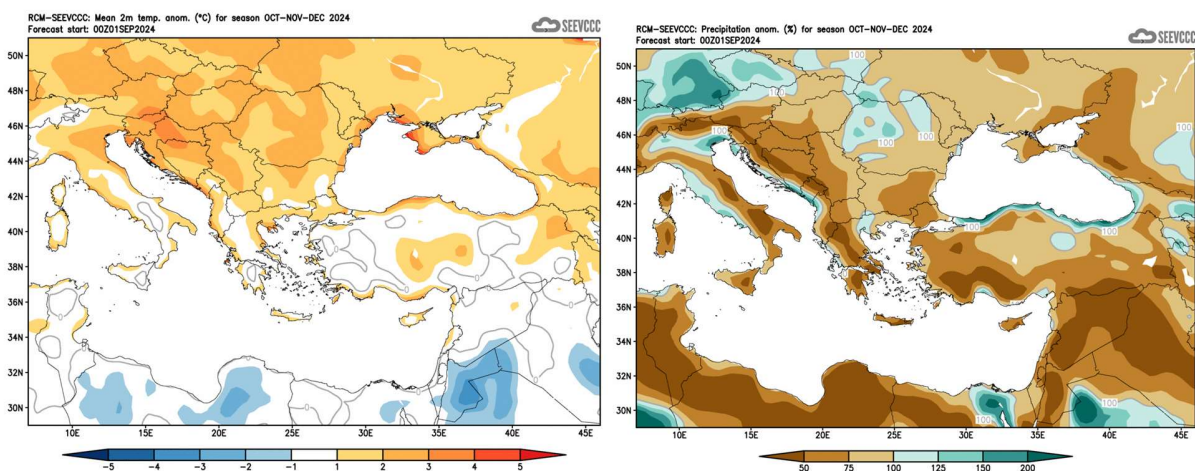
# Seasonal weather forecast for the months of October, November and December 2024

## General overview of the weather expected to prevail during October, November and December

Bearing in mind the limitations the seasonal models introduce in seasonal forecasts, the weather for the following three months, namely **October, November and December 2024**, will be presented with respect to the anomalies of temperature and accumulated precipitation. The period which will be analyzed climatically below, concerns, for the most part, the last two months of the traditional Autumn (that is, the transitional period from Summer to Winter) and the first month of the traditional Winter.

During the period in focus normal temperatures (both maximum and minimum) are significantly declining. The frequency of baroclinic depressions affecting the area is increasing significantly, resulting in higher accumulated precipitation amounts.

Specifically, regarding the seasonal forecast for the period of **October, November and December 2024**, the temperature is expected to be normal and slightly, over the coastal areas, higher than normal. Normal to slightly above normal temperatures also characterizes the entire region of Asia Minor, Greece and the Near and Middle East. The amount of the accumulated precipitation is expected to range between 50% and 75% of normal in most of the island, as well as over the neighboring regions of Asia Minor, Greece and the Near and Middle East (\*).

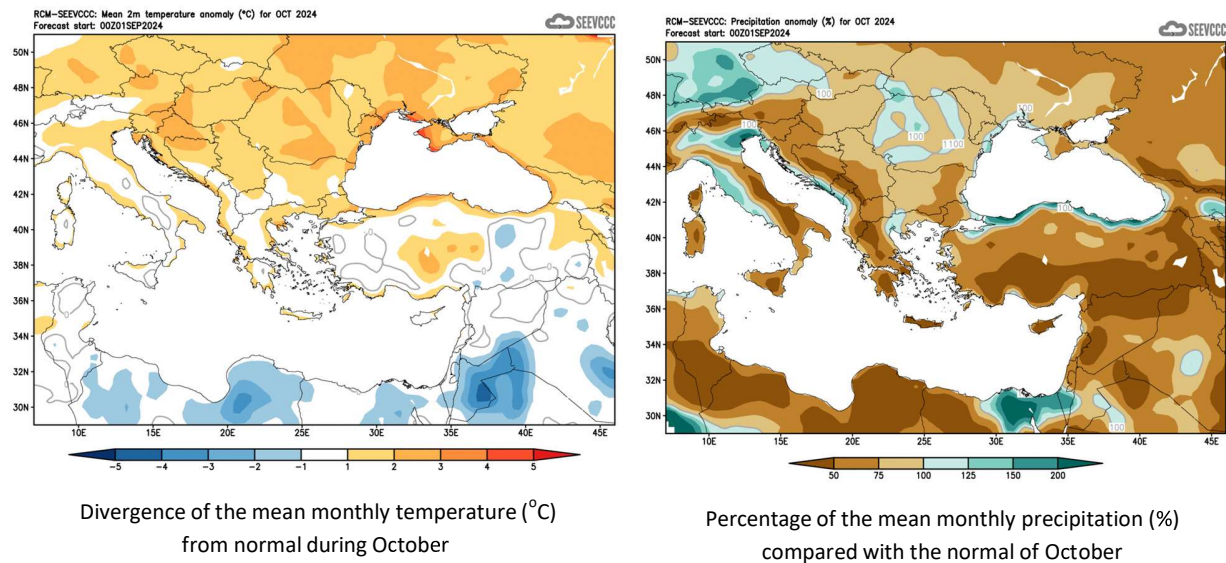


Divergence of the mean seasonal temperature (°C) from normal for the period of October, November and December

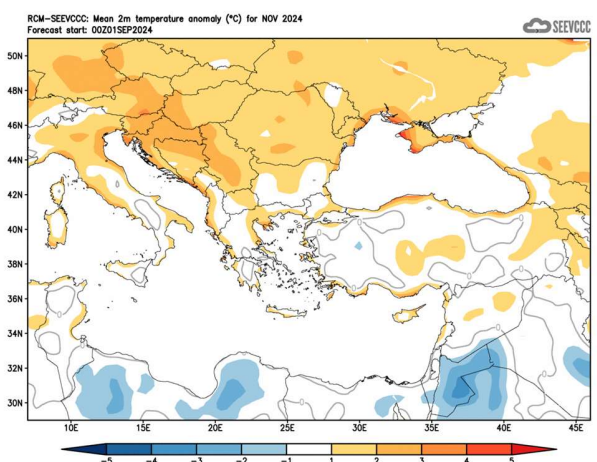
Percentage (%) of the mean seasonal accumulated precipitation compared to the mean normal for October, November and December

## The seasonal forecast in detail

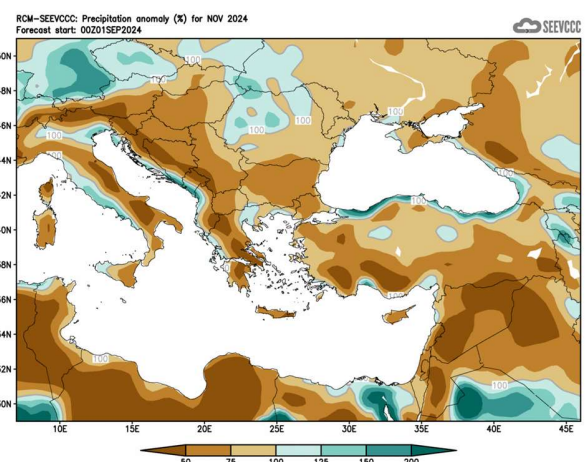
The seasonal forecast suggests that **October's** temperature will generally be normal. Greece and Asia Minor are expected to have normal to slightly above normal temperatures, while the Near and Middle East's temperatures are expected to be normal in the north and below normal in the south. Regarding the accumulated precipitation, this is expected to be below 50% of normal over the entire island. Similar dry conditions are also expected for Greece, Asia Minor, and the Near and Middle East (\*).



The seasonal forecast for **November** suggests that the temperature is expected to be normal and slightly, over the coastal areas, higher than normal. The accumulated precipitation for Cyprus will generally range between 50% and 75% of normal, except from the west part over which it will range between 75% and 100%. Concerning the expected temperature conditions for November, the Balkans are expected to be above normal, while Greece, Asia Minor and the Near and Middle East are expected to be normal or slightly above normal. Drought conditions are expected in the Balkans and Greece as well as in the rest of the neighboring areas, with the percentages of precipitation limited between 50% and 75%, while in some of those areas it will be below 50% of normal (\*).

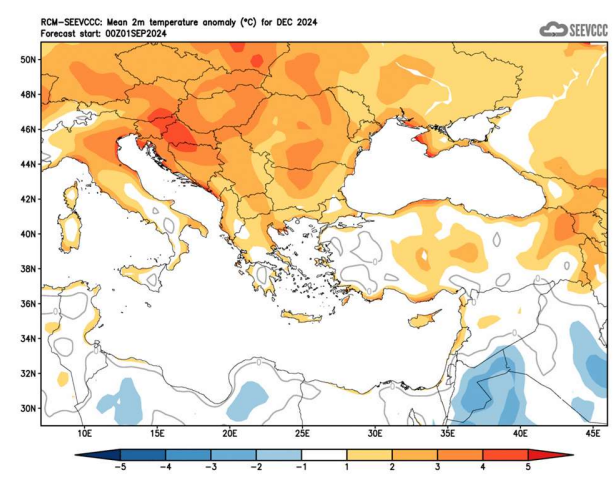


Divergence of the mean monthly temperature ( $^{\circ}\text{C}$ ) from normal during November

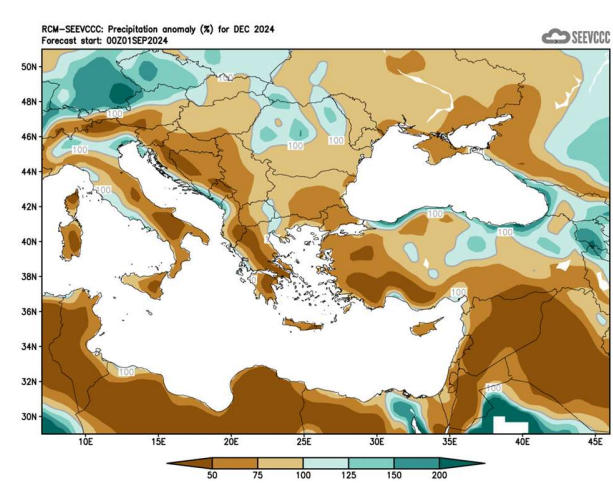


Percentage of the mean monthly precipitation (%) compared with the normal of November

The seasonal forecast for **December** suggests that temperature will be above normal. The accumulated precipitation for Cyprus will range between 50% and 75% of normal for the entire island. The region of Greece, Asia Minor as well as the Near and Middle East will be normal to slightly warmer than normal concerning the temperature conditions. The accumulated precipitation is expected to range between 50% and 75% in most of the neighboring regions, while in some of these areas it will fluctuate below 50% of normal (\*).



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



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

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

The normal values of the mean maximum and the mean minimum temperature and the 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 **December** as the coldest month of the period. On the other hand, the accumulated precipitation is increasing significantly towards December, 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 every next month for each station if compared to the score of the previous month, and this as a result of the increase in the frequency of barometric lows in the eastern Mediterranean region

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)		
	October	November	December	October	November	December	October	November	December
NORTH COAST	26.4	21.7	18.0	16.1	12.2	9.3	30.3	58.6	93.6
WEST COAST*	26.4	22.4	18.9	16.4	12.9	10.0	27.4	52.6	90.1
MOUNTAINOUS AREAS	19.2	12.8	8.3	10.9	6.1	2.6	34.4	93.8	157.3
INLAND*	28.4	22.1	17.3	15.2	10.4	7.0	20.7	43.2	57.2
SOUTH COAST	27.8	22.6	18.6	16.7	12.4	9.2	16.0	46.8	79.0
EAST COAST**	28.5	22.4	18.0	16.7	11.8	8.3	19.9	44.0	76.8

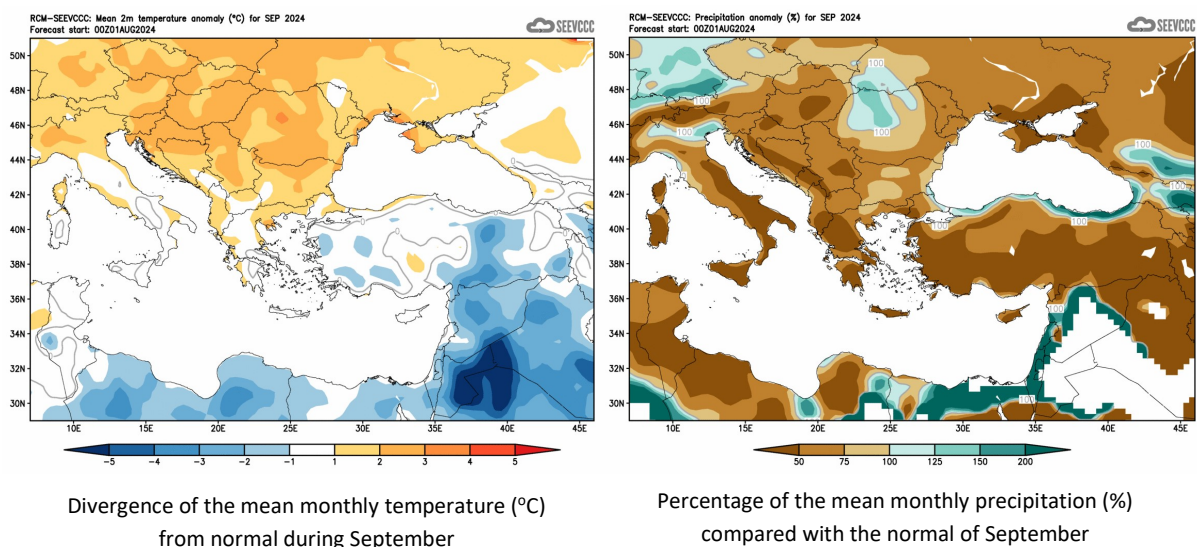
\* West Coast and Inland Values cover the period 1983-2010

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



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

**September** was expected to be normal in terms of temperature. The region of Asia Minor and Greece would have similar temperature characteristics, while the Balkans were expected to be a little warmer than normal and the Near and Middle East colder than normal. In relation to the expected amount of rain in Cyprus, this would range between 50% and 75% of normal in the northwestern half of the island, while in the southeastern half of the island it would range below 50% of normal. All neighboring regions showed similar characteristics with the exception of the Near and Middle East, where the expected amount of rain would range up to 200% of normal (\*).



From the initial data, as recorded by the Department of Meteorology and presented in the table below for the selected reference stations, it appears that the seasonal model for the month of **September** did not behave very well in relation to the seasonal temperature forecast. All average daily maximum and daily minimum temperatures were above normal, up to 1.5°C for the average daily maximum and up to 3.1°C for the average daily minimum temperatures.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR SEPTEMBER 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	31.6	30.1	1.5	37.0	28.3	21.3	19.2	2.1	18.4	24.5	0.1
82*	PAFOS (AIRPORT)	30.3	29.0	1.3	32.5	28.2	22.3	19.2	3.1	18.2	26.3	0.0	3.6	-3.6
225	PRODROMOS (C.F.C.)	25.2	24.6	0.6	28.3	19.4	14.9	14.9	0.0	11.2	19.5	29.5	10.7	18.8
666*	ATHALASSA (RADIOSONDE)	34.1	33.6	0.5	38.5	29.0	19.9	18.8	1.1	16.4	23.8	33.6	12.2	21.4
731	LARNAKA (AIRPORT)	32.3	30.9	1.4	34.5	29.0	21.7	19.8	1.9	19.1	24.4	8.6	4.3	4.3
800**	ACHNA (DASAKI)	32.7	31.9	0.8	35.3	29.8	21.0	19.6	1.4	15.6	24.4	6.4	2.9	3.5

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

Extreme maximum temperatures with positive deviations of more than 4°C were also recorded, such as at the station of Polis Chrysochous, where the extreme maximum (37°C) was 6.9°C above the normal (30.1°C), but also at the station of Athalassa, where the extreme maximum (38.5°C) was 4.9°C above normal (33.6°C).

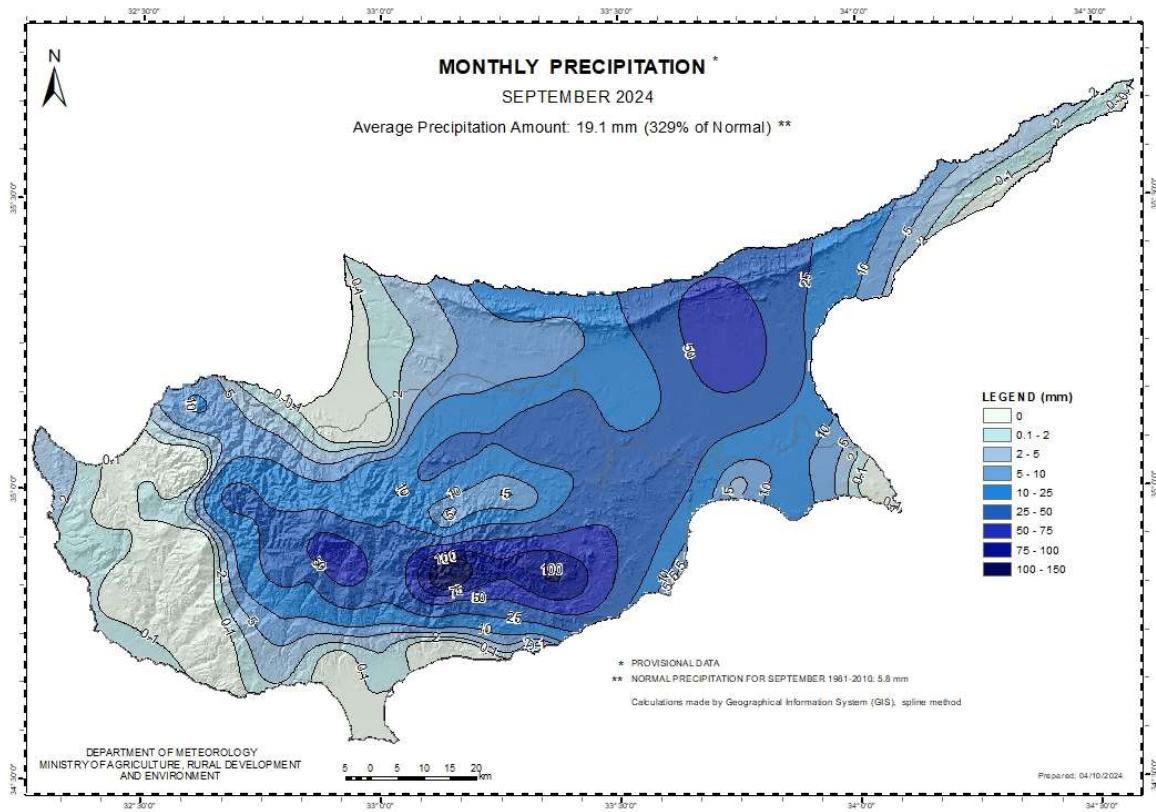
Extreme minimum temperatures with positive deviations of more than 4°C were also recorded, such as at Pafos station and Polis Chrysochous, where the extreme minimum temperatures of 26.3°C and 24.5°C, respectively, were 7.1°C and 5.3°C above the corresponding normal ones.

Regarding the seasonal forecast of cumulative rainfall, it seems that the seasonal model did not behave well at all. And that's because although **September's** cumulative rainfall was expected to range between 50% and 75% of normal in the northwestern half of the island and below 50% of normal in the southeastern half, the final results gave an average rainfall of the order of 329% of normal, with the highest rainfall levels located in the Troodos massif and in the eastern half of the island.

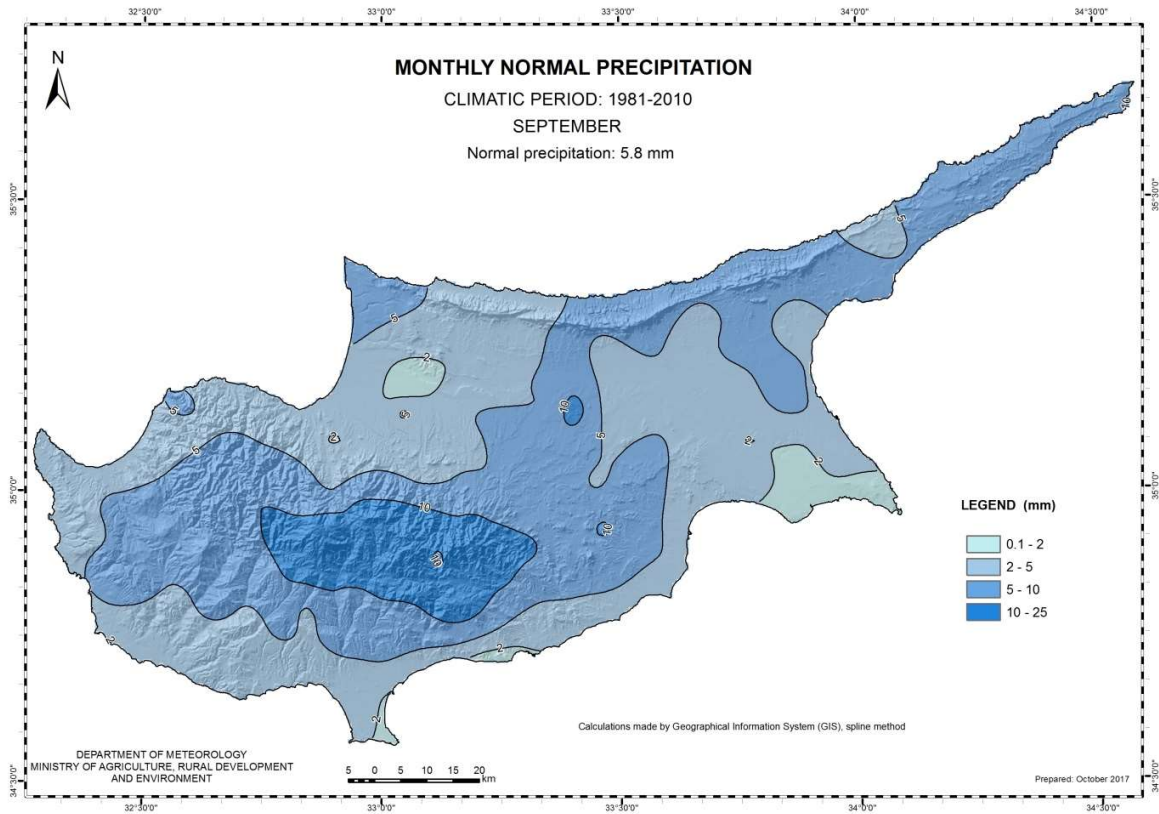
It is worth mentioning that during **September**, a thunderstorm EMMA warning was issued at the yellow awareness level, on the 6<sup>th</sup>, the 21<sup>st</sup>, 22<sup>nd</sup> and on the 23<sup>rd</sup> of September.

From the provisional data recorded by the Department of Meteorology, during the periods 1-8, 21-23 and on the 30<sup>th</sup> of **September** showers and isolated thunderstorms were recorded, resulting in accumulated precipitation of 329% of normal.

For the purpose of better visualization of **September** accumulated precipitation, a chart of Cyprus with the total preliminary accumulated precipitation is presented.



A chart of Cyprus with the normal (period 1981 to 2010) accumulated precipitation for the month of **September** is also presented.



(\*) It is stated that in some cases uncertainty is observed in the forecast of the seasonal model for the expected precipitation, which is why it is presented with a reserve.