

National Climate Bulletin and the assessment of the SEECOF-32

Climate outlook for **CYPRUS** for winter season DJF 2024-2025

Cyprus Department of Meteorology prepares regular seasonal climate outlooks, based on the products of SEECOF seasonal forecasts. The present outlook concerns the outlook for the three winter months of December 2024, January and February 2025, which is based on the means of the climatological period 1981-2010.

Generally, and based on the records of climatology, the area of the east Mediterranean, but specially the area of Cyprus, during winter is characterized by the low mean maximum and minimum normal (1981-2010) temperatures. Normal accumulated precipitation is reaching maximum as a result of the frequent barometric systems which are affecting the area.

The assessment for the area of Cyprus is performed bearing in mind the consensus statement of SEECOF 32 which was stating that:

1. Temperature (the mean) was likely to range below normal with a probability of 10%, around normal with a probability of 30% and above normal with again a probability of 60% (Figure 1) and,
2. Accumulated precipitation probabilities were 50% below normal, 40% around normal and 10% above normal (Figure 2).

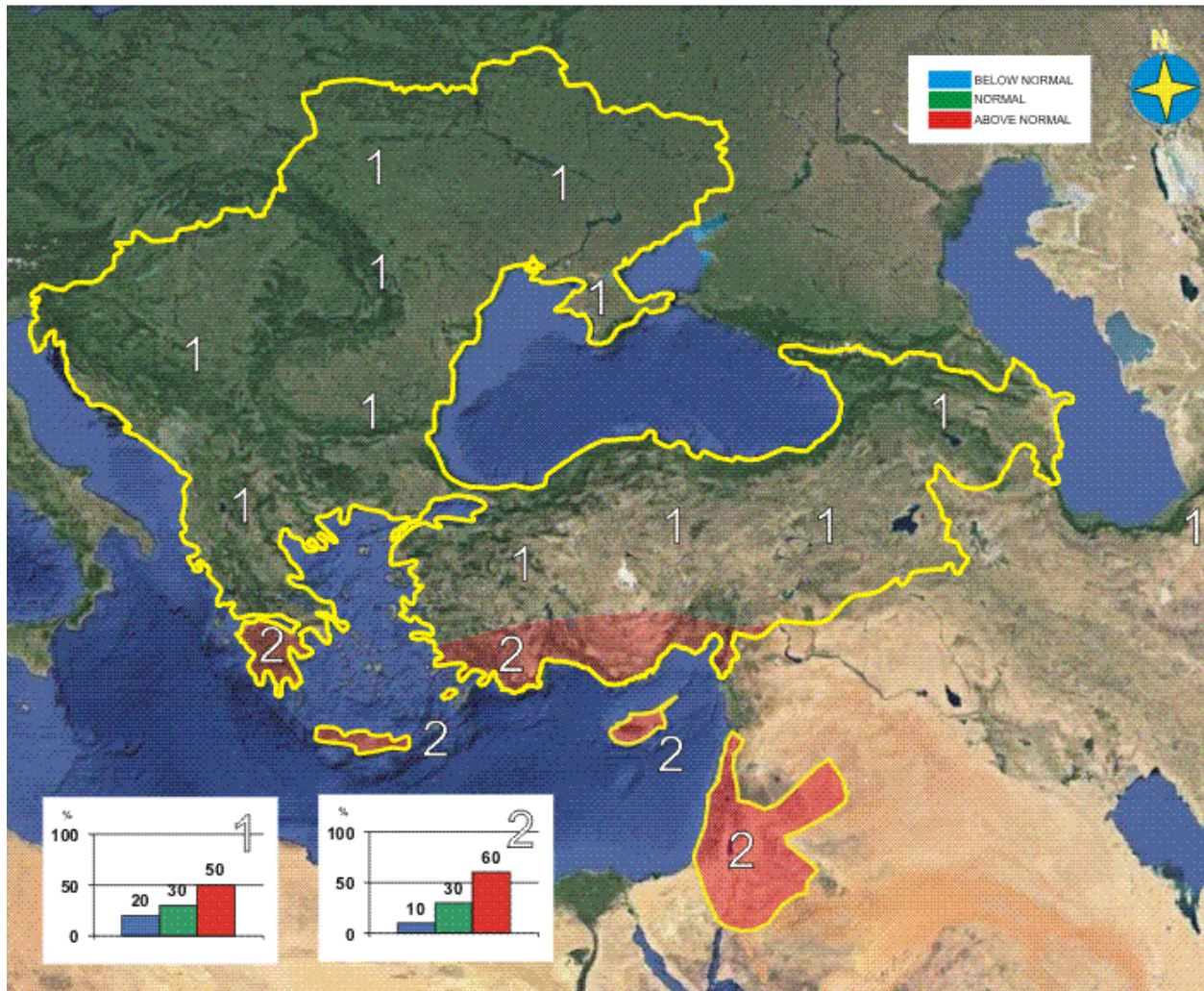


Figure1: Graphical presentation of the 2024/25 winter temperature outlook

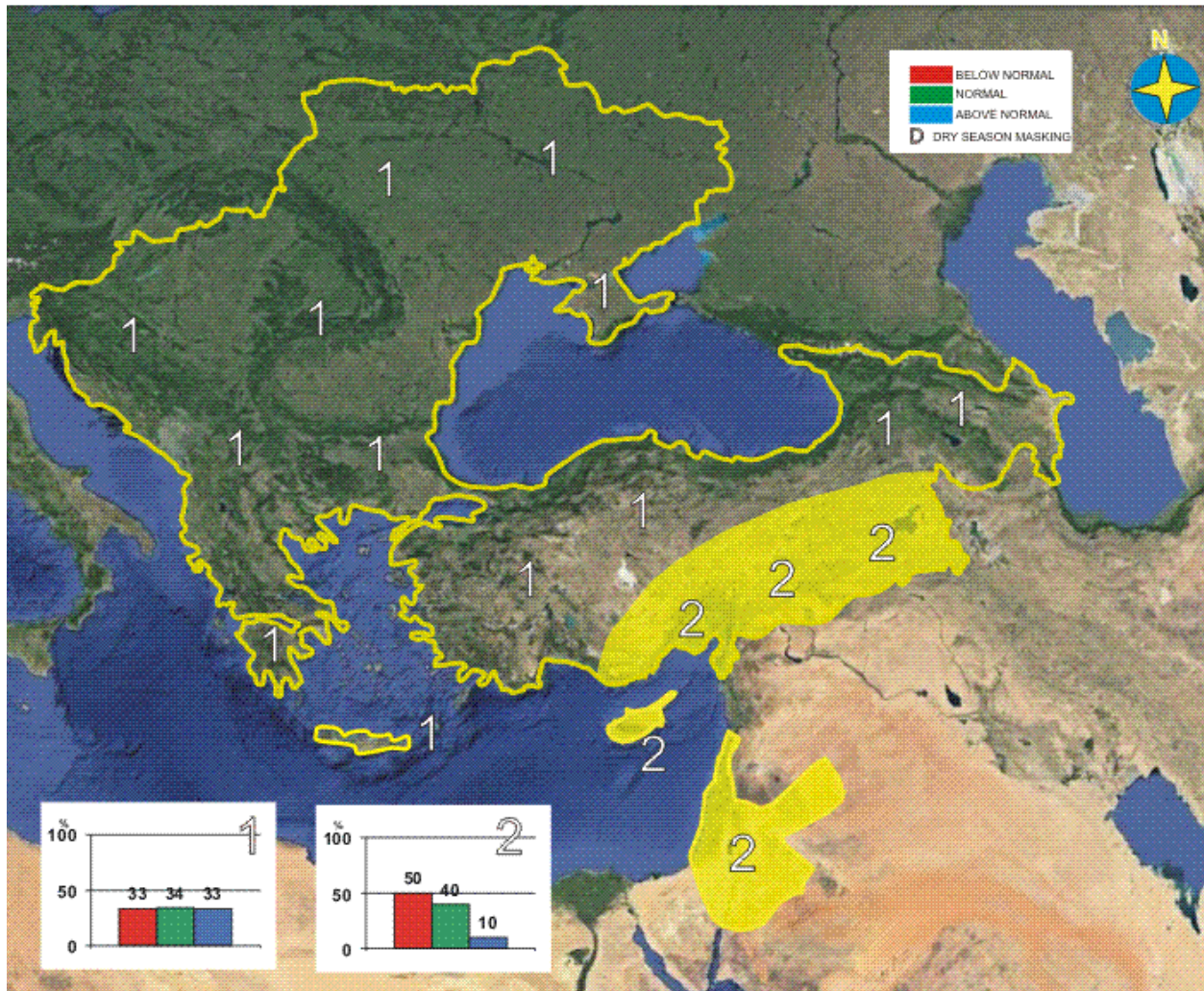


Figure2: Graphical presentation of the 2022/23 winter precipitation outlook

Find also below a table presenting the general anomalies of SEECOF products and extreme events of the recorded winter weather.

Country	Seasonal temperature (DJF)		Seasonal precipitation (DJF)		High Impact Events
	Observed	SEECOF-32 climate outlook for temperature	Observed	SEECOF-32 climate outlook for precipitation	
CYPRUS	DEC Above Normal	DEC Around Normal	DEC Well Above Normal	DEC Well Below Normal	<p>DEC: Extremes (deviating by 4°C or more from normal) were recorded in all of the selected meteorological stations. As an example, note the recorded maximum of Polis Chrysochous that was 23.9°C (with a normal of 18.0°C), Pafos that was 22.9°C (normal of 18.9°C), Prodromos 12.9°C (normal of 8.3°C) and Larnaca 22.6°C (normal of 18.6°C). Concerning the mean daily minimum temperatures note the recorded minimum of Paphos that was 17.3°C (with a normal of 10.0°C), Polis Chrysochous 13.9°C (normal of 9.3°C), Prodromos 7.0°C (normal of 2.6°C), Athalassa 11.7°C (normal of 7.0°C), Larnaca 14.4°C (normal of 9.2°C) and Achna Άχνα 13.0°C (normal of 8.3°C). From the distribution (provisional accumulated precipitation chart) of the accumulated precipitation of December is evident that the surface distribution was well above normal reaching 113.7mm or 121% of normal.</p> <p>During the periods 2-5, 7, 9-11, 16 and 20-31 of December local showers and isolated thunderstorms were recorded. For the 3-4, 21-24 and 30-31 of December, yellow EMMA warning was issued concerning thunderstorms and for the 25-26 yellow EMMA warning for showers.</p> <p>Based on the provisional data, hail recorded on the 28th and the 30th of the month while there was snow on the 25-26 and 31 of December.</p> <p>JAN: Extreme maximum temperatures with positive deviations of more than 4°C were recorded at all stations, such as at Prodromos station where the highest daily maximum temperature (13.4°C) was 7.1°C above normal. Also, the highest daily maximum temperature at</p>
	JAN Well Above Normal	JAN Above Normal	JAN Well Below Normal	JAN Below Normal	
	FEB Below Normal	FEB Above Normal	FEB Well Below Normal	FEB Well Below Normal	

					<p>Achna station (22.5°C) was 6.2°C above normal.</p> <p>Extreme minimum temperatures with positive deviations of more than 4°C were also observed. Examples include the station at Larnaca Airport, where the highest daily minimum temperature (12.6°C) was 5.1°C above normal, while at Achna station it was 5.2°C above the corresponding normal.</p> <p>From the initial data, as recorded by the Department of Meteorology, it appears that, for January, with regard to accumulated precipitation, the seasonal model did not behave well at all, since the rainfall amount was much less than the expected over the entire island.</p> <p>The average cumulative precipitation for the entire area of the island reached 12.8 millimetres or 15% of the normal for the month, ranking it as one of the driest Januarys since measurements have been made.</p> <p>During the periods 4-5, 10, 12, 16, 21-26 and 31 of January local showers and thunderstorms were reported.</p> <p>Also, for the 25th and the 26th of January, EMMA yellow level warnings for thunderstorms were issued.</p> <p>It is worth mentioning that based on the provisional data, snowfall was reported on the 22nd and 23rd of January.</p> <p>FEB: Extremely low maximum temperatures were recorded at all stations, such as at Prodromos with a lowest daily maximum temperature of -3.4°C (with the normal being 6.7°C) and at Athalassa with a lowest daily maximum temperature of 7.5°C (with the normal being 16°C). Many extremely low minimum temperatures were also observed. Indicative are the minimum temperatures at Prodromos with a lowest daily minimum temperature of -9°C (with the normal being 0.5°C) and at Athalassa with a lowest daily minimum temperature of -3.7°C (with the normal being 5.3°C). Regarding the cumulative rain, it seems that February recorded a disappointing rainfall as it was only 49% of the month's normal. As can be seen from the distribution map of the provisional accumulated precipitation for February</p>
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					<p>below, the average surface distribution reached only 33.8mm.</p> <p>During the periods 4-6, 9-13, 16-24, and 26-28 of February local showers and thunderstorms were recorded.</p> <p>Based on the provisional data, hail was recorded on the 12th and the 15th of the month, while snow was recorded during the periods 4-6, 9-12, 16-18, 21-23, 25-26 and 28 of February.</p> <p>A yellow EMMA warning was issued for February 28th, regarding showers and thunderstorms, while an orange EMMA warning was issued for February 22nd, 23rd, and 24th, regarding extremely low temperatures. A yellow EMMA warning was also issued for February 24th and 25th, regarding extremely low temperatures.</p>
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Evaluation of December seasonal forecast for the area of Cyprus

The seasonal forecast for **December 2024** suggested that temperature would be around normal levels. The accumulated precipitation of **December** was forecasted to be disappointing, since the model suggested a mainly dry month with accumulation ranging below 50% of normal. Similar conditions, with low accumulations of precipitation characterized all the surrounding area (*).

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 partly behaved well with respect to temperature. This is because the mean daily maximum and minimum temperatures were indeed higher than expected (besides Athalassa station which had 0.1°C lower mean daily minimum temperature than normal), however they were only higher by 1-2°C than normal.

The seasonal forecast for **December** suggested that the accumulated precipitation would be below normal, ranging only from 50% to 75% of normal, but from the recorded data is shown that in all of the selected meteorological stations the precipitation was well above normal therefore the model did not behave well in this aspect.

Extremes (deviating by 4°C or more from normal) were also recorded in all of the selected meteorological stations.

As an example, note the recorded maximum of Polis Chrysochous that was 23.9°C (with a normal of 18.0°C), Pafos that was 22.9°C (normal of 18.9°C), Prodromos 12.9°C (normal of 8.3°C) and Larnaca 22.6°C (normal of 18.6°C). Concerning the mean daily minimum temperatures note the recorded minimum of Paphos that was 17.3°C (with a normal of 10.0°C), Polis Chrysochous 13.9°C (normal of 9.3°C), Prodromos 7.0°C (normal of 2.6°C), Athalassa 11.7°C (normal of 7.0°C), Larnaca 14.4°C (normal of 9.2°C) and Achna Άχνα 13.0°C (normal of 8.3°C).

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR DECEMBER 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	20.3	18.0	2.3	23.9	14.4	10.8	9.3	1.5	7.1	13.9	130.2	93.6	36.6
82*	PAFOS (AIRPORT)	20.0	18.9	1.1	22.9	14.6	11.1	10.0	1.1	6.9	17.3	158.3	90.2	68.1
225	PRODROMOS (C.F.C.)	8.5	8.3	0.2	12.9	2.1	2.8	2.6	0.2	-1.0	7.0	149.3	157.3	-8.0
666*	ATHALASSA (RADIOSONDE)	18.1	17.3	0.8	21.1	13.7	6.9	7.0	-0.1	3.1	11.7	71.4	55.8	15.6
731	LARNAKA (AIRPORT)	19.7	18.6	1.1	22.6	15.7	10.6	9.2	1.4	7.2	14.4	91.8	79.1	12.7
800**	ACHNA (DASAKI)	19.4	18.0	1.4	21.9	14.8	9.5	8.3	1.2	6.0	13.0	110.4	76.8	33.6

* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010

** Achna's Temperature Normal Values cover the period 1981-2007

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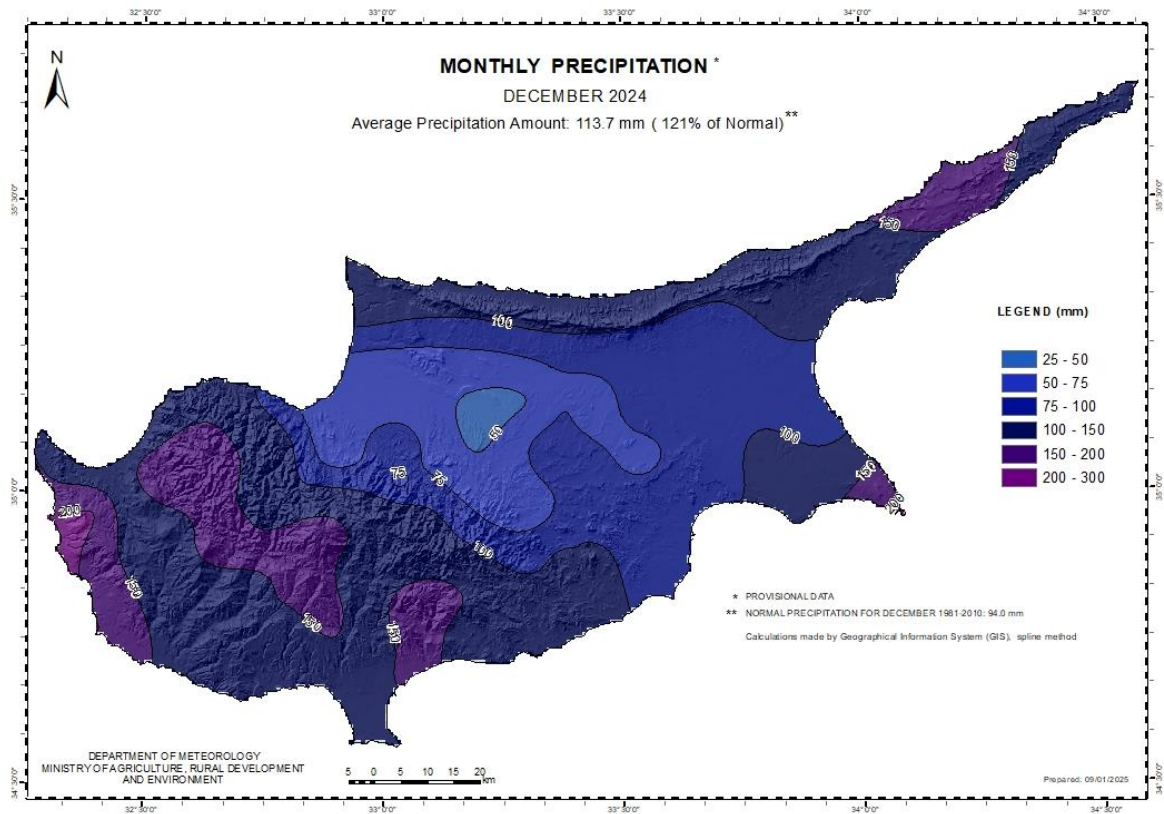
From the distribution (provisional accumulated precipitation chart) of the accumulated precipitation of **December** is evident that the surface distribution was well above normal reaching 113.7mm or 121% of normal.

During the periods 2-5, 7, 9-11, 16 and 20-31 of **December** local showers and isolated thunderstorms were recorded.

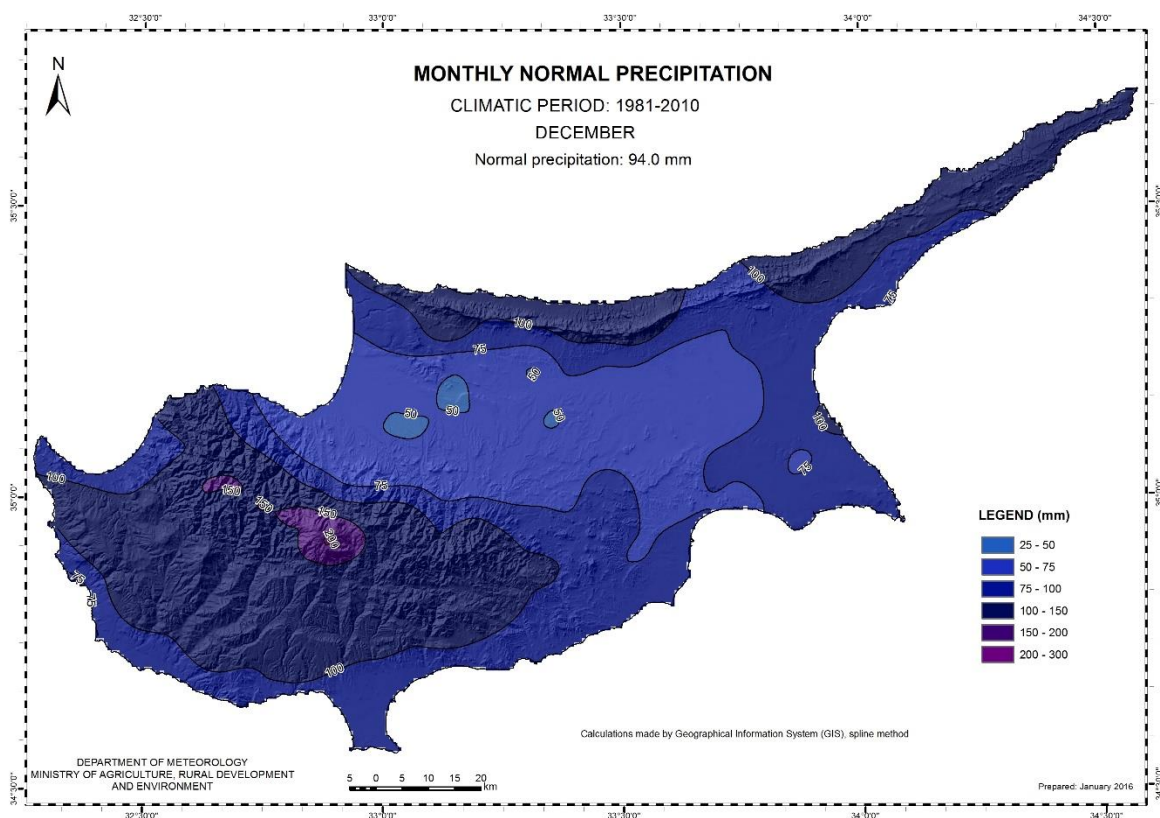
For the 3-4, 21-24 and 30-31 of **December**, yellow EMMA warning was issued concerning thunderstorms and for the 25-26 yellow EMMA warning for showers.

Based on the provisional data, hail was recorded on the 28th and the 30th of the month, while there was snow on the 25-26 and 30-31 of December.

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

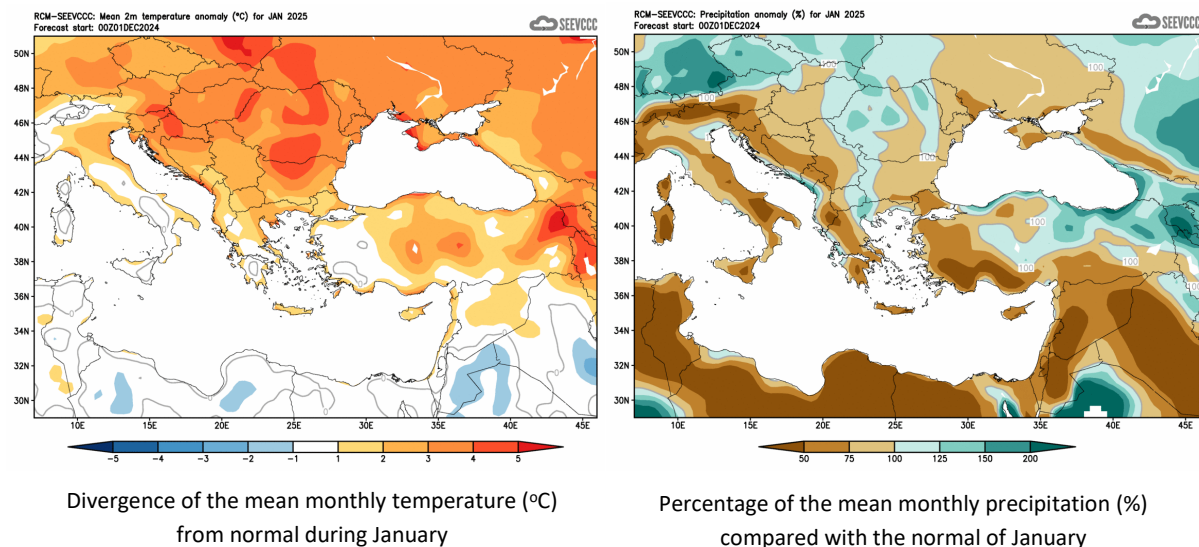


A Cyprus chart with the normal (period 1981 to 2010) accumulated precipitation for the month of **December** is also presented.



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

The seasonal forecast for **January** suggested that temperature would be above normal, by 1°C to 2°C. The accumulated precipitation of **January** was to be again disappointing, since the forecast suggested a mainly dry month with accumulation ranging between 50% to 75% of normal. Low accumulations were characterizing all the surrounding area, as well.



From the initial data, as recorded by the Department of Meteorology and which are presented in the table below for the selected reference stations, it appears that the seasonal model for January did not perform well in relation to the expected temperatures, since the seasonal model did not correctly estimate how much warmer this month would be. The estimate was that January would be 1 to 2°C warmer than normal, however January was for all stations by 2.8-3.6°C warmer than normal in relation to the average daily maximum temperature, while in relation to the average daily minimum temperature it was by 0.8-2.8°C warmer than normal.

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR JANUARY 2025												
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)
41	POLIS CHRYSOCHOUS	19.5	16.3	3.2	21.5	15.4	9.4	7.6	1.8	7.1	11.6	28.8
82*	PAFOS (AIRPORT)	19.9	17.1	2.8	21.9	15.7	9.7	8.3	1.4	7.7	12.9	30.6
225	PRODROMOS (C.F.C.)	9.4	6.3	3.1	13.4	4.9	2.6	0.7	1.9	-0.3	5.2	24.1
666*	ATHALASSA (RADIOSONDE)	18.4	15.5	2.9	20.9	14.8	6.2	5.4	0.8	2.7	9.2	9.7
731	LARNAKA (AIRPORT)	19.9	16.8	3.1	22.2	16.8	10.0	7.5	2.5	7.3	12.6	8.6
800**	ACHNA (DASAKI)	19.9	16.3	3.6	22.5	16.1	9.4	6.6	2.8	3.8	11.8	3.1

* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010

** Achna's Temperature Normal Values cover the period 1981-2007

dew

Extreme maximum temperatures with positive deviations of more than 4°C were recorded at all stations, such as at Prodromos station where the highest daily maximum temperature (13.4°C) was 7.1°C above normal. Also, the highest daily maximum temperature at Achna station (22.5°C) was 6.2°C above normal.

Extreme minimum temperatures with positive deviations of more than 4°C were also observed. Examples include the station at Larnaca Airport, where the highest daily minimum temperature (12.6°C) was 5.1°C above normal, while at Achna station it was 5.2°C above the corresponding normal.

From the initial data, as recorded by the Department of Meteorology, it appears that, for January, with regard to accumulated precipitation, the seasonal model did not behave well at all, since the rainfall amount was much less than the expected over the entire island.

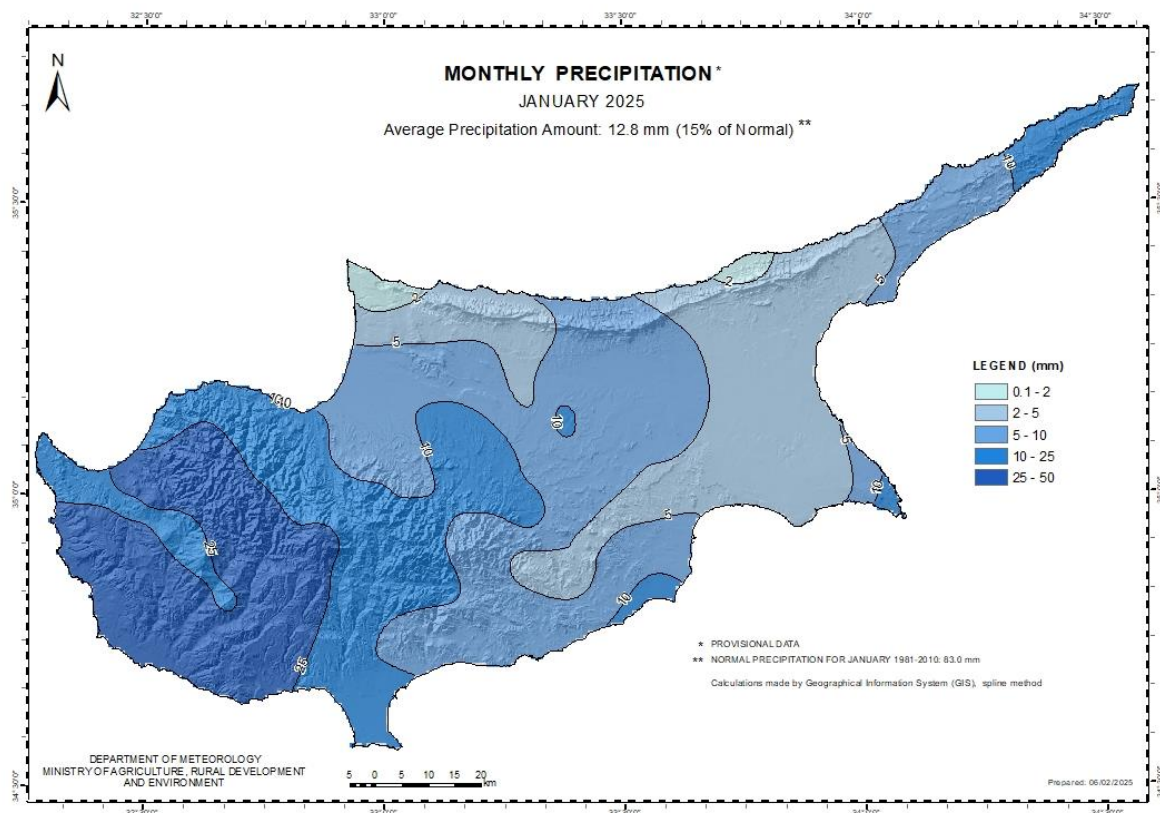
The average cumulative precipitation for the entire area of the island reached 12.8 millimetres or 15% of the normal for the month, ranking it as one of the driest Januarys since measurements have been made.

During the periods 4-5, 10, 12, 16, 21-26 and 31 of **January** local showers and thunderstorms were reported.

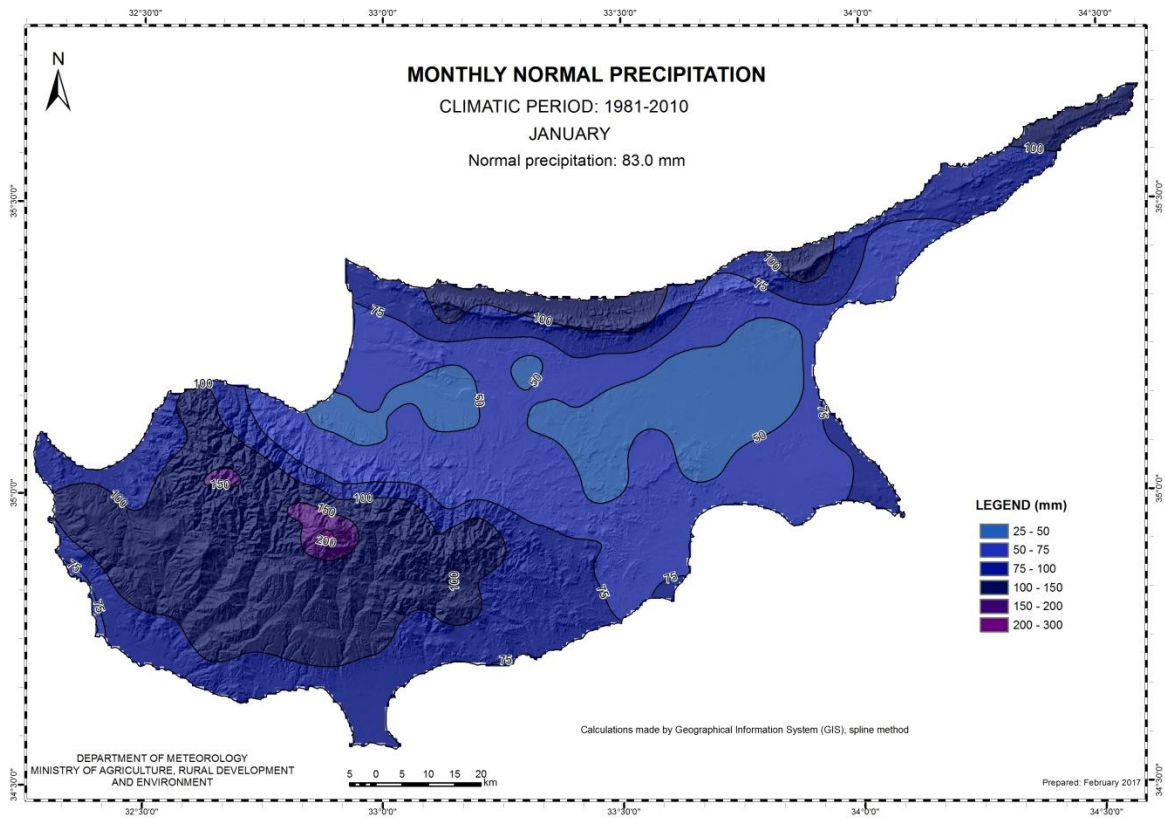
Also, for the 25th and the 26th of **January**, EMMA yellow level warnings for thunderstorms were issued.

It is worth mentioning that based on the provisional data, snowfall was reported on the 22nd and 23rd of **January**.

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

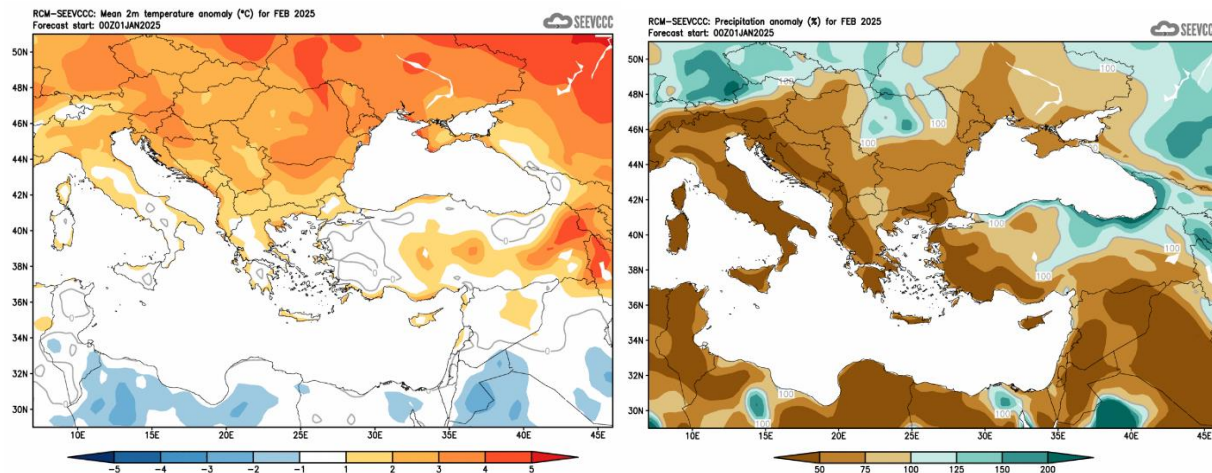


A Cyprus chart with the normal (period 1981 to 2010) accumulated precipitation for the month of **January** is also presented.



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

The seasonal forecast for **February** suggested a warmer and drier than normal month. **February** would have been warmer than normal by 1°C to 2°C. The accumulated precipitation, as resulted from the seasonal forecast, was to be again disappointing since the forecast suggested a mainly dry month with accumulation ranging below 50% of normal. All the above, regarding temperature and accumulated precipitation characteristics, would also apply for the surrounding area.



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

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

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, it seems that the model did not perform well at all regarding temperature. **February** was below normal, in contrast to the seasonal forecast that suggested a warmer than normal month by 1 to 2°C.

Extremely low maximum temperatures were recorded at all stations, such as at Prodomos with a lowest daily maximum temperature of -3.4°C (with the normal being 6.7°C) and at Athalassa with a lowest daily maximum temperature of 7.5°C (with the normal being 16°C). Many extremely low minimum temperatures were also observed. Indicative are the minimum temperatures at Prodomos with a lowest daily minimum temperature of -9°C (with the normal being 0.5°C) and at Athalassa with a lowest daily minimum temperature of -3.7°C (with the normal being 5.3°C).

TEMPERATURE AND PRECIPITATION PROVISIONAL DATA FOR FEBRUARY 2025												
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)
41	POLIS CHRYSOCHOUS	16.2	16.3	-0.1	19.9	11.0	6.3	7.3	-1.0	0.9	10.3	36.7
82*	PAFOS (AIRPORT)	16.7	17.1	-0.4	19.6	11.6	6.8	8.1	-1.3	1.0	10.5	34.3
225	PRODROMOS (C.F.C.)	5.4	6.7	-1.3	13.0	-3.4	-2.1	0.5	-2.6	-9.0	4.0	53.1
666*	ATHALASSA (RADIOSONDE)	14.8	16.0	-1.2	20.9	7.5	3.9	5.3	-1.4	-3.7	10.0	28.3
731	LARNAKA (AIRPORT)	16.7	17.0	-0.3	20.8	10.0	6.2	7.1	-0.9	-0.4	12.4	13.0
800**	ACHNA (DASAKI)	16.6	16.5	0.1	22.7	9.5	5.1	6.3	-1.2	-0.9	11.6	4.2

* Pafos' and Athalassa's Station Normal Values cover the period 1983-2010

** Achna's Temperature Normal Values cover the period 1981-2007

dew

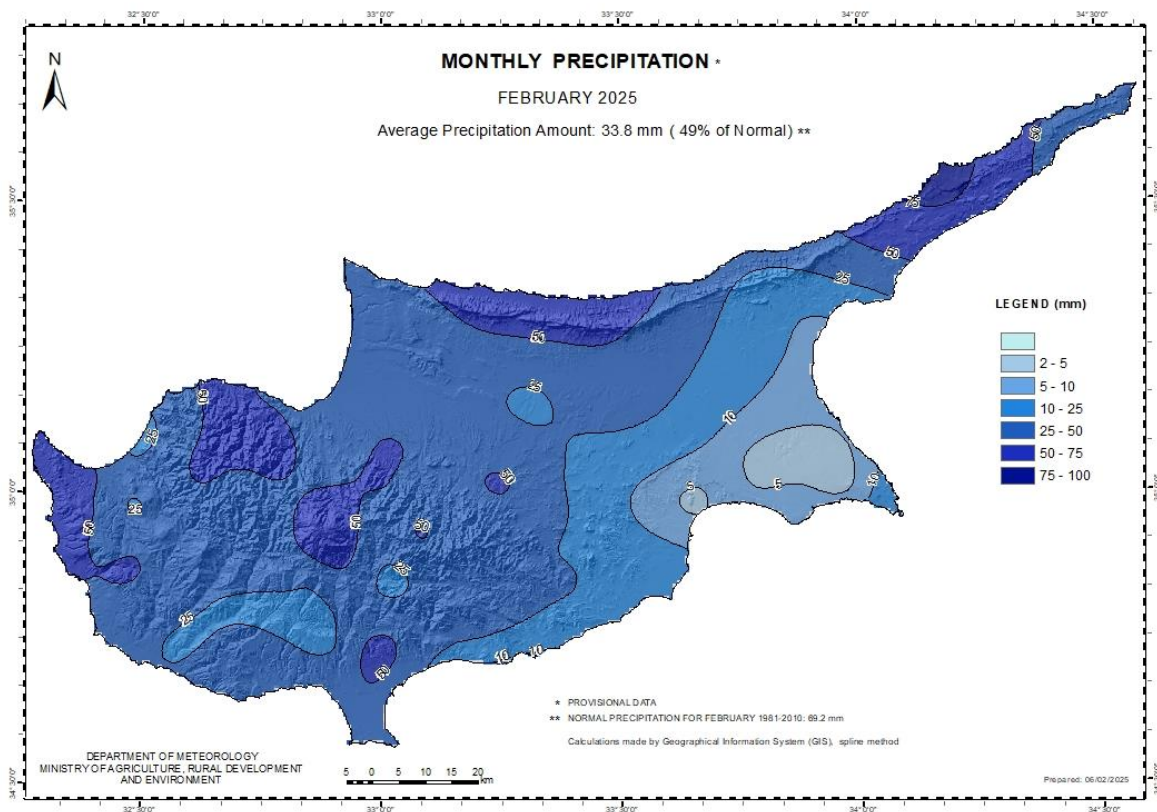
Regarding the cumulative rain, it seems that **February** recorded a disappointing rainfall as it was only 49% of the month's normal. As can be seen from the distribution map of the provisional accumulated precipitation for February below, the average surface distribution reached only 33.8mm.

During the periods 4-6, 9-13, 16-24, and 26-28 of **February** local showers and thunderstorms were recorded.

Based on the provisional data, hail was recorded on the 12th and the 15th of the month, while snow was recorded during the periods 4-6, 9-12, 16-18, 21-23, 25-26 and 28 of **February**.

A yellow EMMA warning was issued for February 28th, regarding showers and thunderstorms, while an orange EMMA warning was issued for February 22nd, 23rd, and 24th, regarding extremely low temperatures. A yellow EMMA warning was also issued for February 24th and 25th, regarding extremely low temperatures.

For the purpose of better visualization of **February's** accumulated precipitation, a chart of Cyprus with the total preliminary accumulated precipitation is presented, below.



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

