MINISTRY OF AGRICULTURE, RURAL DEVELOPMENT AND ENVIRONMENT DEPARTMENT OF METEOROLOGY CY-1418 NICOSIA

18 September 2023

MONTHLY WEATHER REPORT

THE WEATHER IN AUGUST 2023

<u>General Weather Conditions</u>: The weather in August was hot. Regarding the rainfall, the rain that recorded on the 27th and 28th of the month, in some areas of Cyprus, covered 197% of the normal rainfall of the month. Unstable weather conditions prevailed on the 22nd, 27th and 28th of the month and caused local showers and thurstorms and strong winds mainly in all the provinces of Cyprus. The average temperature for the month was about 2.0°C above normal and the average rainfall was 5.7mm or 197% of normal.

Severe weather Conditions: On August 2, a tornado observed in Geri, but no damage was reported. On August 28, heavy showers and thunderstorms occurred locally in many areas in all provinces and caused damages mainly in premises. On the 28th of the month, a waterspout was recorded in Paphos. In Larnaca district, in Kellia, Livadia and Oroklini, a tornado caused significant damages to photovoltaic systems, solar water heaters, uprooting of trees and. Due to the bad weather, poles of the Electricity Authority were brought down resulting in significant power outages in many areas. Very high temperatures were experienced throughout the island and for long, especially inland-Nicosia and over the mountainous areas-Prodromos. The daily maximum temperature of 45.3°C recorded at Athalassa on the 14th of the month is the 2nd highest daily maximum recorded at this station since 1983 when the station started to operate. Record temperatures have been recorded at Prodromos again on the 14th of the month, with daily maximum and daily minimum temperatures reaching 38.4°C and 29.5°C respectively, the highest daily maximum and highest daily minimum temperatures ever recorded in the specific station since it opened in 1959.

August 2023 is one of the warmest Augusts in Cyprus, where several temperature records have been broken, particularly, in the mountainous and inland areas in terms of the daily maximum temperatures and mainly in the coastal areas in terms of the daily minimum temperatures.

It is important to mention the high daily precipitation amounts that recorded on August 28. For instance, the 24-hours precipitation amount of 51.3mm at the Lefkara Dam and 46.6mm at Kornos are the highest daily precipitation amounts recorded for the month of August at the specific stations since they started to operate, in 1972 and 1916 respectively. Also on the same day, and specifically during the first evening hours, the island was affected by a disturbance of dynamic causes, again giving relatively large amounts of rain accompanied by a large number of electrometeors. This kind of nocturnal storm activity, during the month of August, is very rare and a similar phenomenon has been recorded again in Cyprus in August 1999.

<u>Precipitation (normal period: 1961-1990):</u> According to preliminary estimates, the area average precipitation in August was 5.7mm i.e. 197% of normal. Monthly precipitation ranged from 0% to 9500% (Kalavasos Dam) of normal.

The cumulative area average precipitation during the period October 2022 - August 2023 was about 454.8mm, i.e 91% of normal. The cumulative precipitation was below normal in all areas, generally ranging from 66% (Prodrimos) to 128% (Athalassa) of normal.

Temperature (normal period: 1981-2010): The mean air temperature for the month was about 2.0° C above normal. Mean daily temperatures were below normal on the 3rd, 7th, 9th and 28-29th of the month, while the rest of the month were above or around normal. Heatwave conditions (maximum daily temperature over 40°C, for Nicosia and over 31°C for Prodromos) prevailed on the 1st, 13-14th and 17-18th of the month inland-Nicosia and on the 1st, 4-7th, 13-20th and on the 25th of the month in Prodromos, where the maximum temperatures were about 5-10 °C above normal. The maximum temperatures in Athalassa exceeded 37 °C in 27 cases, in Larnaca they exceeded 33°C in 27 cases, while in Prodromos they exceeded 28°C in 29 cases (throughout the month).

The 5-day averages of air temperature and their deviations from normal at various places are shown in Table 1 and the extreme temperatures are shown in Table 2.

				AUGUST	2023				
	FIVE-DAY	/ TEMPER	ATURES A	ND DEVIATIO	NS FROM	NORMAL	(oC)		
				Prelimina	y Data				
Table 1									
			ME	AN DAILY	MAXIMUN	1			
STATION	ATHALASSA		LARNAKA AIRPORT		PAFOS AIRPORT		PRODROMOS		MEAN DEV.
DATES	ACTUAL	DEV.	ACTUAL	DEV.	ACTUAL	DEV.	ACTUAL	DEV.	IVICAN DEV.
15	39	2	34	1	32	2	31	3	2
610	37	0	34	1	32	1	30	2	1
1115	41	3	34	2	32	1	34	6	3
1620	40	3	34	3	32	1	34	6	3
2125	39	2	34	1	32	1	31	3	2
26-31	37	1	34	1	32	2	29	2	1
MONTH	39	2	34	1	32	1	31	3	2
			M	EAN DAILY	MINIMUN	1			
STATION ATHALASSA			LARNAKA AIRPORT PAFOS AIRPORT				PRODROMOS		MEAN DEV.
DATES	ACTUAL	DEV.	ACTUAL	DEV.	ACTUAL	DEV.	ACTUAL	DEV.	MILAN DEV.
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15	22	-1	24	1	23	2	21	2	1
15 610	22	-1 0	24 24	1	23 23	2	19	2 1	1
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610	22	0	24	1	23	2	19	1	1
610 1115	22 24	0	24 25	1 3	23 24	2	19 23	1 5	1 3
610 1115 1620	22 24 23	0 2 1	24 25 26	1 3 4	23 24 24	2 3 2	19 23 23	1 5 5	1 3 3
610 1115 1620 2125	22 24 23 22	0 2 1 1	24 25 26 25	1 3 4 3	23 24 24 24 24	2 3 2 3	19 23 23 20	1 5 5 2	1 3 3 2
610 1115 1620 2125 26-31	22 24 23 22 21	0 2 1 1 0	24 25 26 25 24	1 3 4 3 2	23 24 24 24 24 24	2 3 2 3 3	19 23 23 20 18	1 5 5 2	1 3 3 2 2
610 1115 1620 2125 26-31	22 24 23 22 21	0 2 1 1 0 0	24 25 26 25 24 25	1 3 4 3 2	23 24 24 24 24 24 24	2 3 2 3 3 2	19 23 23 20 18 21	1 5 5 2	1 3 3 2 2
610 1115 1620 2125 26-31	22 24 23 22 21	0 2 1 1 0 0	24 25 26 25 24 25	1 3 4 3 2 2	23 24 24 24 24 24 24	2 3 2 3 3 2	19 23 23 20 18 21	1 5 5 2	1 3 3 2 2
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610 1115 1620 2125 26-31 MONTH Table 2	22 24 23 22 21 22	0 2 1 1 0 0 Nor	24 25 26 25 24 25 mal Perio	1 3 4 3 2 2 d for Temp TEMPERA	23 24 24 24 24 24 erature =	2 3 2 3 3 2 1981 - 20	19 23 23 20 18 21	1 5 5 2 1 3	1 3 3 2 2
610 1115 1620 2125 26-31 MONTH Table 2 STATION TEMPERAT. HIGHEST	22 24 23 22 21 22 ATHAL (°C)	0 2 1 0 0 Nor E_ASSA DATE	24 25 26 25 24 25 mal Perio EXTREME LARNAK (°C)	1 3 4 3 2 2 d for Temp TEMPERA AAIRPORT DATE	23 24 24 24 24 24 24 TURES PAFOS A (°C)	2 3 2 3 2 1981 - 20	19 23 20 18 21 10 PRODF (°C)	1 5 5 2 1 3 3 ROMOS DATE	1 3 3 2 2