



AGROMETEOROLOGICAL BULLETIN

*August 2021
1st 10-day period*

- Temperature
- Relative Humidity
- Soil Temperature
- Sunshine Duration
- Precipitation
- Evaporation
- Growing Degrees
- Reference Evapotranspiration
- Accumulated Rainfall from the beginning of wet period
- Accumulated Reference Evapotranspiration
- Number of dry days



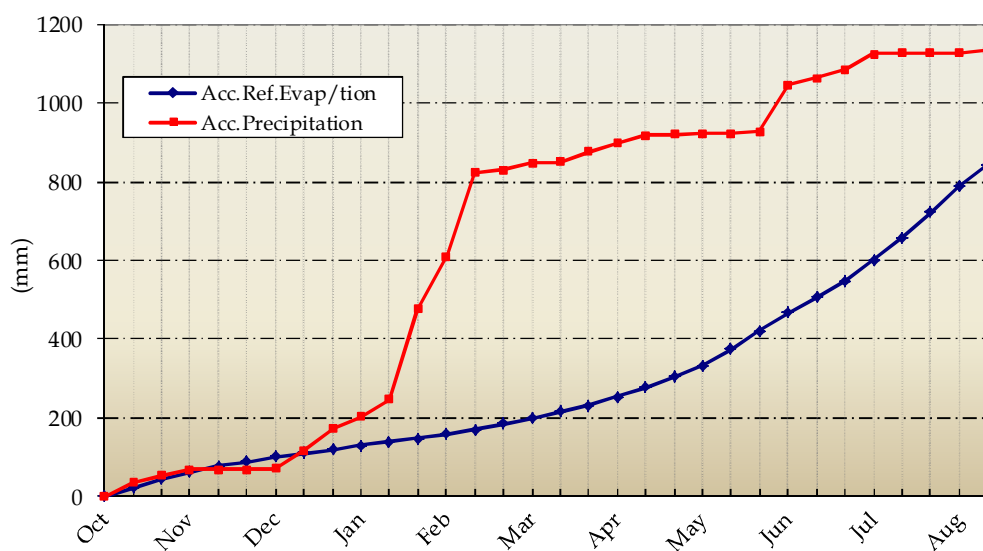
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1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	38.4	33.2	38.0	38.6	36.0	34.0	33.4	32.2	32.6	33.4	35.0	34.1	31.3
	Min	23.8	21.8	21.2	23.8	20.8	21.6	20.0	21.0	18.0	19.8	21.2	21.7	17.9
Relative Humidity	Max	70	69	78	77	80	78	66	69	83	85	76	73	-
	Min	23	43	28	36	36	41	26	26	31	36	33	34	-
Soil Temperature at 10 cm	06 UTC	28.4	27.4	27.6	28.8	27.8	27.2	25.4	25.0	26.4	26.8	27.1	25.3	24.7
	12 UTC	31.6	30.2	30.4	32.8	30.6	30.0	29.2	28.0	30.0	30.6	30.3	28.8	29.0
Sunshine Duration		12.2	12.4	12.4	12.2	12.4	3.7	12.7	13.0	12.1	13.4	11.6	11.4	10.7
Precipitation							5.0					5.0	0.8	4.0
Evaporation		11.6	10.4	7.7	10.8	10.4	11.5	6.0	10.6	10.7	4.3	94.0	104.9	96.8
Growing Degrees	5	26.1	22.5	24.6	26.2	23.4	22.8	21.7	21.6	20.3	21.6	230.8	229.1	195.9
	10	21.1	17.5	19.6	21.2	18.4	17.8	16.7	16.6	15.3	16.6	180.8	179.1	145.9

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	55.4	63.8	58.5
Precipitation - Reference Evapotranspiration	-50.4	-63.0	-54.5
Number of Rainy Days	1.0	2.0	0.7
Number of Dry Days	33.0	40.0	-

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

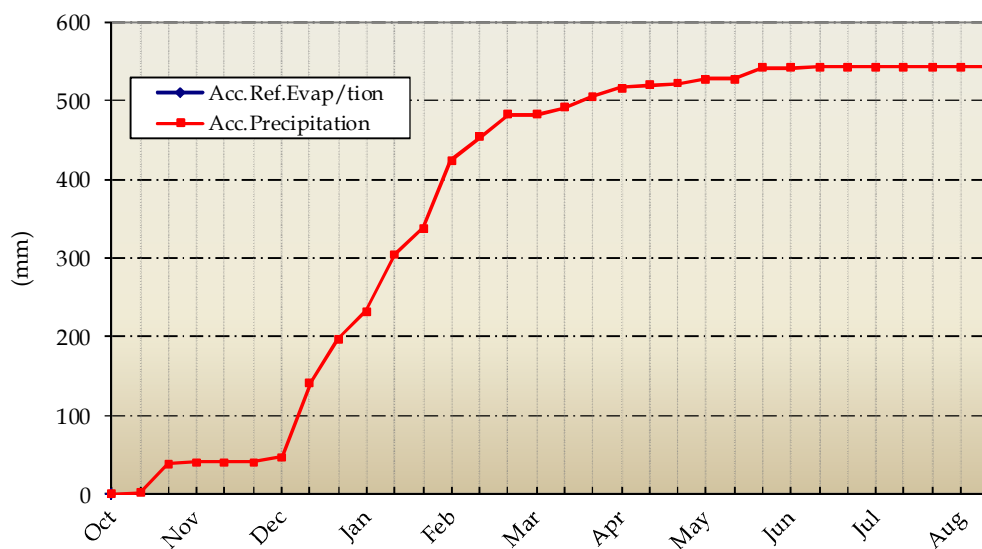


1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	38.5	38.4	37.9	38.4	37.6	32.0	32.8	34.6	34.2	36.6	36.1	33.1	31.3
	Min	18.7	21.0	19.9	20.7	20.7	23.6	20.6	19.7	19.2	21.0	20.5	20.7	18.8
Relative Humidity	Max	84	87	88	75	87	94	89	94	95	95	89	93	-
	Min	31	20	29	27	17	44	36	28	31	32	30	40	-
Soil Temperature at 10 cm	06 UTC	30.2	30.6	30.8	30.6	30.6	31.8	31.0	30.0	30.6	30.6	30.7	29.9	27.8
	12 UTC	32.6	33.0	33.6	33.4	33.6	33.8	33.0	33.4	32.6	33.2	33.2	32.3	32.1
Sunshine Duration		12.2	11.9	12.1	12.9	11.9	12.3	12.8	12.2	11.5	11.5	12.1	10.8	11.6
Precipitation													0.2	0.2
Evaporation		10.0	11.0	13.6	14.0	8.4	8.2	6.2	6.0	9.0	11.0	97.4	94.2	74.9
Growing Degrees	5	23.6	24.7	23.9	24.6	24.2	22.8	21.7	22.2	21.7	23.8	233.1	218.9	200.3
	10	18.6	19.7	18.9	19.6	19.2	17.8	16.7	17.2	16.7	18.8	183.1	168.9	150.3

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	49.3	-	52.3
Precipitation - Reference Evapotranspiration	-49.3	-	-52.1
Number of Rainy Days	0.0	1.0	0.1
Number of Dry Days	61.0	32.0	-

The missing info in the tables and the graph are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



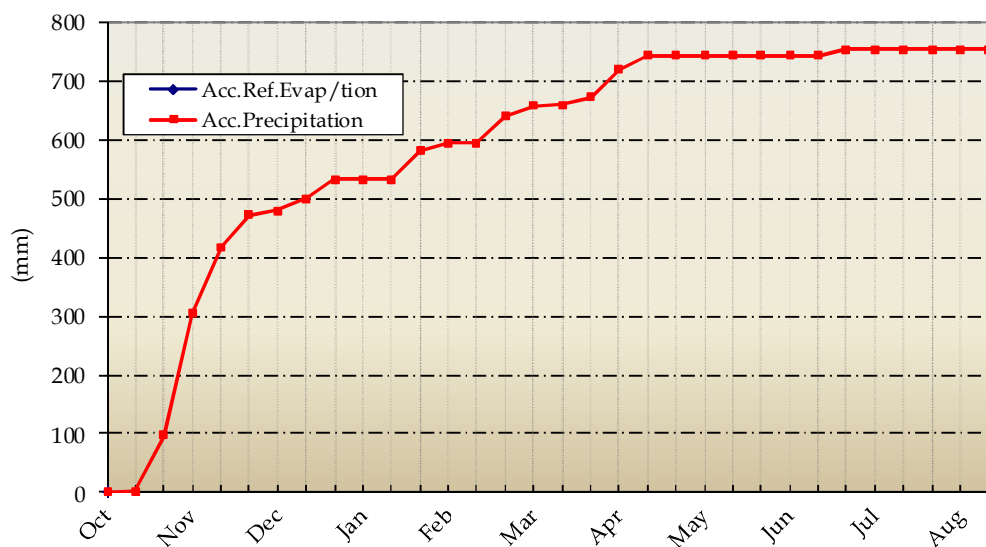
Iraklio

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	33.0	33.8	37.0	35.8	35.8	40.4	31.4	30.2	31.0	32.0	34.0	29.9	28.6
	Min	25.0	26.4	29.2	27.0	26.2	27.8	27.0	26.0	26.6	24.6	26.6	23.3	22.4
Relative Humidity	Max	89	89	83	83	84	75	91	84	83	85	85	80	-
	Min	67	64	49	61	55	47	69	71	70	69	62	53	-
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		12.3	12.4	12.1	12.0	12.0	12.2	12.1	12.7	12.6	12.6	12.3	12.3	11.6
Precipitation														0.0
Evaporation		7.1	11.2	9.7	6.3	13.0	10.3	6.7	8.2	0.5	8.1	81.1	69.5	88.8
Growing Degrees	5	24.0	25.1	28.1	26.4	26.0	29.1	24.2	23.1	23.8	23.3	253.1	215.9	205.0
	10	19.0	20.1	23.1	21.4	21.0	24.1	19.2	18.1	18.8	18.3	203.1	165.9	155.0

1st 10-day period (1-10/08/2021)	Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-
Precipitation - Reference Evapotranspiration	-	0.0
Number of Rainy Days	0.0	0.0
Number of Dry Days	55.0	69.0

The missing info in the tables and the graph are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

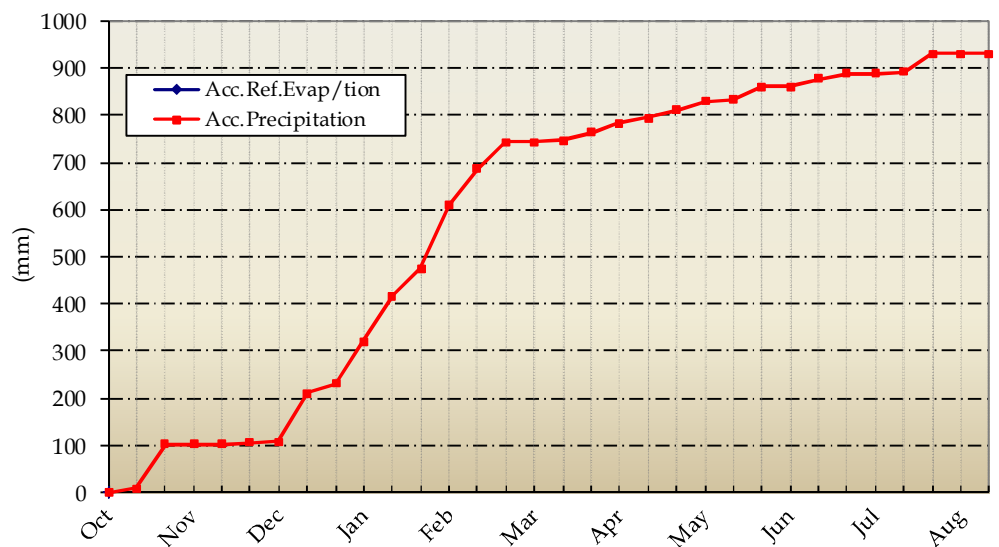


1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	38.4	40.1	39.0	38.8	39.6	32.0	34.7	36.6	39.6	41.3	38.0	31.5	31.8
	Min	14.4	16.7	15.9	15.4	15.4	16.9	12.6	13.9	15.4	15.8	15.2	16.4	15.9
Relative Humidity	Max	85	80	86	78	83	90	87	87	88	88	85	91	-
	Min	13	16	14	18	12	35	20	14	22	19	18	41	-
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	24.0
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	28.0
Sunshine Duration		12.2	11.5	12.1	11.7	10.4	10.4	12.4	12.2	12.0	11.6	11.6	8.0	10.1
Precipitation													28.0	5.8
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	79.9
Growing Degrees	5	21.4	23.4	22.5	22.1	22.5	19.5	18.7	20.3	22.5	23.6	216.3	189.1	183.5
	10	16.4	18.4	17.5	17.1	17.5	14.5	13.7	15.3	17.5	18.6	166.3	139.1	134.7

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	50.7
Precipitation - Reference Evapotranspiration	-	-	-44.9
Number of Rainy Days	0.0	5.0	1.3
Number of Dry Days	21.0	18.0	-

The missing info in the tables and the graph are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



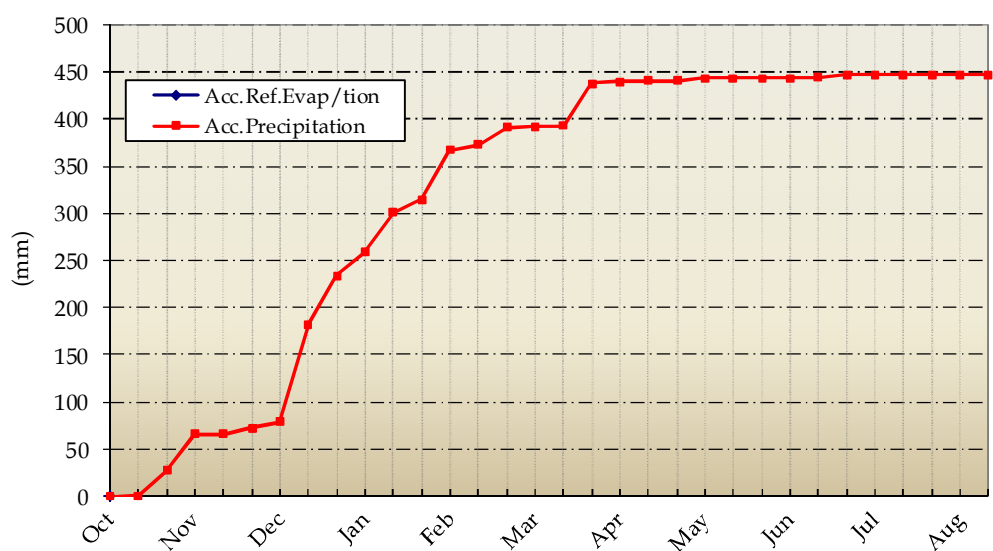
Kalamata

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	35.4	38.0	42.8	42.0	43.6	35.2	33.1	31.9	32.8	34.4	36.9	32.8	31.8
	Min	21.7	21.7	24.1	20.8	24.2	20.0	24.6	19.8	19.8	21.4	21.8	20.2	18.3
Relative Humidity	Max	69	76	65	54	46	59	71	84	82	87	69	89	-
	Min	23	26	15	17	12	28	35	32	40	41	27	33	-
Soil Temperature at 10 cm	06 UTC	29.2	29.2	29.5	29.8	30.0	28.0	29.4	29.0	27.2	29.0	29.0	28.9	26.3
	12 UTC	33.2	33.4	35.0	35.0	35.4	34.8	33.8	32.6	33.4	33.6	34.0	32.3	30.4
Sunshine Duration		12.3	11.8	11.5	11.5	11.7	11.9	9.6	9.8	11.9	8.8	11.1	10.2	11.0
Precipitation													1.1	3.9
Evaporation		-	-	-	-	-	-	-	-	-	-	-	90.3	84.1
Growing Degrees	5	23.6	24.9	28.5	26.4	28.9	22.6	23.9	20.9	21.3	22.9	243.7	215.2	200.7
	10	18.6	19.9	23.5	21.4	23.9	17.6	18.9	15.9	16.3	17.9	193.7	165.2	150.7

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	56.0
Precipitation - Reference Evapotranspiration	-	-	-52.1
Number of Rainy Days	0.0	1.0	0.5
Number of Dry Days	56.0	18.0	-

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Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



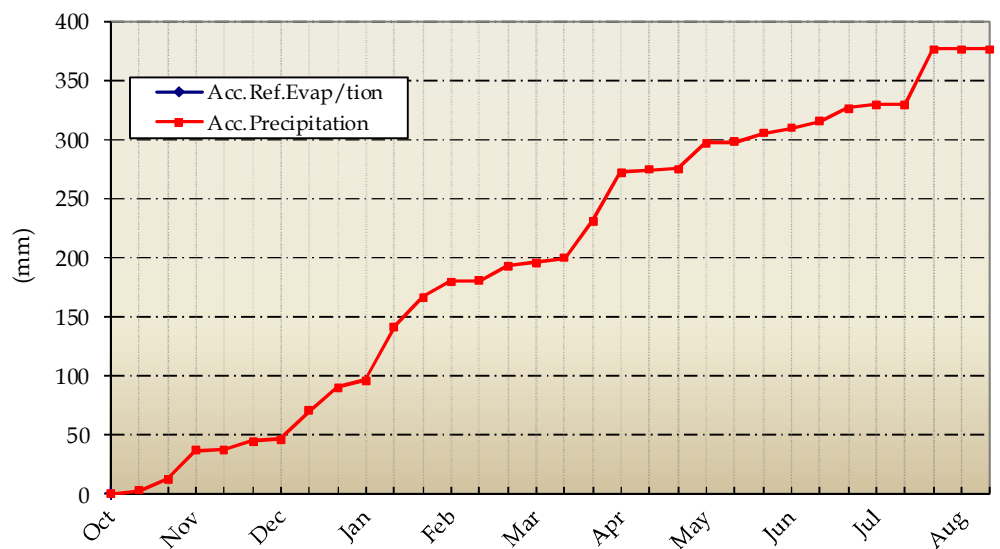
Larisa

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	39.8	44.0	43.2	41.4	43.6	37.6	37.0	33.8	37.6	39.8	39.8	32.7	33.2
	Min	19.8	20.8	22.0	20.6	20.8	23.8	23.2	18.0	18.6	21.8	20.9	20.5	18.0
Relative Humidity	Max	68	78	58	53	64	53	72	79	87	84	70	87	-
	Min	43	12	11	19	8	18	22	32	31	23	22	37	-
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	27.1
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	29.4
Sunshine Duration		11.5	9.7	11.4	10.5	9.3	11.3	12.1	7.2	8.8	11.0	10.3	7.8	10.5
Precipitation													23.1	4.2
Evaporation		14.7	11.4	12.8	6.1	15.2	13.0	10.6	7.2	12.1	11.4	114.5	75.2	91.8
Growing Degrees	5	24.8	27.4	27.6	26.0	27.2	25.7	25.1	20.9	23.1	25.8	253.6	216.1	206.1
	10	19.8	22.4	22.6	21.0	22.2	20.7	20.1	15.9	18.1	20.8	203.6	166.1	156.1

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	66.7	51.7	58.6
Precipitation - Reference Evapotranspiration	-66.7	-28.6	-54.4
Number of Rainy Days	0.0	4.0	1.1
Number of Dry Days	21.0	14.0	-

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Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



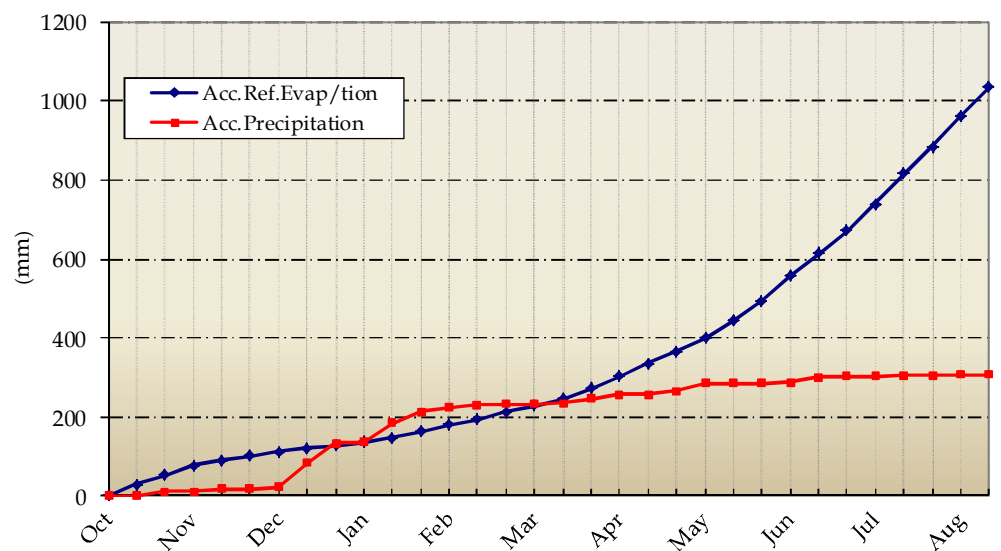
Mikra

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	37.4	40.0	40.5	39.2	39.4	35.2	34.2	33.4	35.4	37.0	37.2	31.3	31.9
	Min	22.6	23.2	22.5	23.0	23.3	25.8	25.4	20.0	21.5	23.4	23.1	20.2	19.4
Relative Humidity	Max	70	75	63	58	72	84	65	74	76	79	72	88	-
	Min	37	33	18	21	24	29	25	33	41	31	29	47	-
Soil Temperature at 10 cm	06 UTC	31.0	31.2	31.0	31.2	31.4	32.0	31.2	30.2	30.4	31.2	31.1	27.5	26.9
	12 UTC	33.6	33.6	36.0	36.0	35.8	33.6	33.2	33.2	33.0	33.4	34.1	29.6	31.6
Sunshine Duration		12.2	11.7	13.0	11.8	9.9	10.5	12.5	13.3	12.2	12.5	12.0	9.6	10.2
Precipitation													89.0	5.3
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	88.0
Growing Degrees	5	25.0	26.6	26.5	26.1	26.4	25.5	24.8	21.7	23.5	25.2	251.2	207.9	206.4
	10	20.0	21.6	21.5	21.1	21.4	20.5	19.8	16.7	18.5	20.2	201.2	157.9	156.4

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	73.8	54.8	56.6
Precipitation - Reference Evapotranspiration	-73.8	34.2	-51.3
Number of Rainy Days	0.0	5.0	1.3
Number of Dry Days	17.0	16.0	-

The missing info in the tables are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



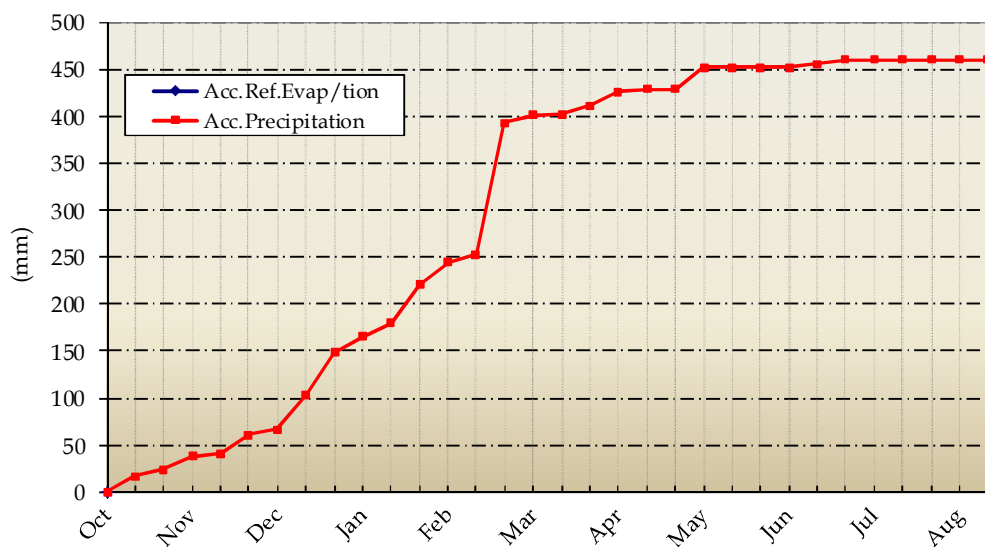
Tanagra

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	40.1	42.3	42.8	41.0	41.5	37.2	32.1	33.6	34.8	37.4	38.3	31.8	32.1
	Min	22.8	21.2	22.9	23.2	23.0	25.2	24.7	16.7	18.1	21.0	21.9	20.3	18.7
Relative Humidity	Max	51	55	48	41	48	42	59	57	64	62	53	75	-
	Min	11	11	7	10	10	13	19	22	25	16	14	30	-
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		12.5	11.9	12.3	11.0	9.7	7.0	11.6	9.9	11.1	11.3	10.8	10.9	
Precipitation													16.2	0.7
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	-
Growing Degrees	5	26.5	26.8	27.9	27.1	27.3	26.2	23.4	20.2	21.5	24.2	250.8	210.4	
	10	21.5	21.8	22.9	22.1	22.3	21.2	18.4	15.2	16.5	19.2	200.8	160.4	

1st 10-day period (1-10/08/2021)	Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-
Precipitation - Reference Evapotranspiration	-	0.7
Number of Rainy Days	0.0	1.0
Number of Dry Days	56.0	47.0

The missing info in the tables and the graph are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



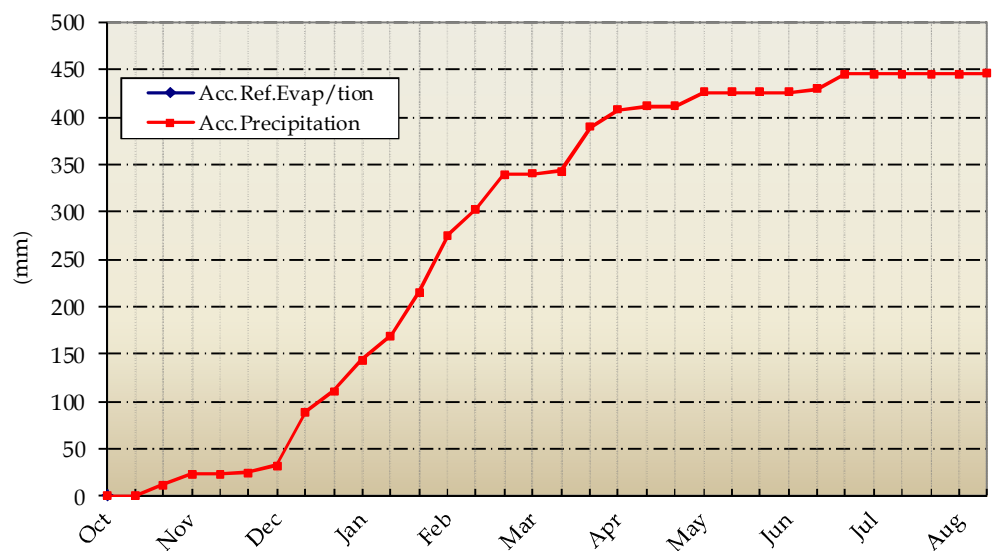
Tripoli

1st 10-day period (1-10/08/2021)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	38.0	40.0	40.8	39.5	39.7	31.8	32.9	33.4	36.8	38.0	37.1	30.9	30.8
	Min	16.1	17.6	18.8	16.2	17.8	19.6	14.7	15.0	15.2	17.3	16.8	15.9	14.8
Relative Humidity	Max	67	65	68	78	78	71	86	95	86	76	77	94	-
	Min	11	10	7	9	7	18	22	19	17	15	14	27	-
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	25.8
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	28.5
Sunshine Duration		12.5	10.6	7.9	10.9	10.3	11.1	7.6	8.6	11.8	11.7	10.3	9.9	10.5
Precipitation				0.4	0.3							0.7	12.5	6.7
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	66.4
Growing Degrees	5	22.1	23.8	24.8	22.9	23.8	20.7	18.8	19.2	21.0	22.7	219.6	184.1	178.4
	10	17.1	18.8	19.8	17.9	18.8	15.7	13.8	14.2	16.0	17.7	169.6	134.1	128.4

1st 10-day period (1-10/08/2021)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	50.6	46.9	53.5
Precipitation - Reference Evapotranspiration	-49.9	-34.4	-46.8
Number of Rainy Days	2.0	5.0	1.1
Number of Dry Days	43.0	6.0	-

The missing info in the tables and the graph are due to the absence of data.

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration





◆ **List of Symbols and Abbreviations**

Reference Evapotranspiration ETo (mm):

Calculated by the FAO Penman-Montieth equation

$$ET_0 = \frac{0.408 * \Delta * (R_n - G) + \gamma * \frac{900}{T + 273} * u_2 * (e_s - e_a)}{\Delta + \gamma * (1 + 0.34 * u_2)}$$

using 10-day step.

R_n is estimated from sunshine measurements and G assumed to be zero.

Growing Degrees: Degrees with mean temperature exceeding the base of 5 or 10 °C.

Number of Rainy Days: Number of days with precipitation of at least 0.1 mm.

Number of Dry Days: Number of dry days recorded since the last rainy day.

Measurements Units

- ◆ Temperature : °C
- ◆ Relative Humidity : %
- ◆ Soil Temperature : °C
- ◆ Sunshine Duration : Hours
- ◆ Precipitation : mm
- ◆ Evaporation (Pan) : mm
- ◆ Growing Degrees : °C

UTC (Universal Time coordinates) in Greece

- ◆ Winter : Time(UTC) = Local time - 2
- ◆ Summer : Time(UTC) = Local time - 3

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