



AGROMETEOROLOGICAL BULLETIN

April 2022
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



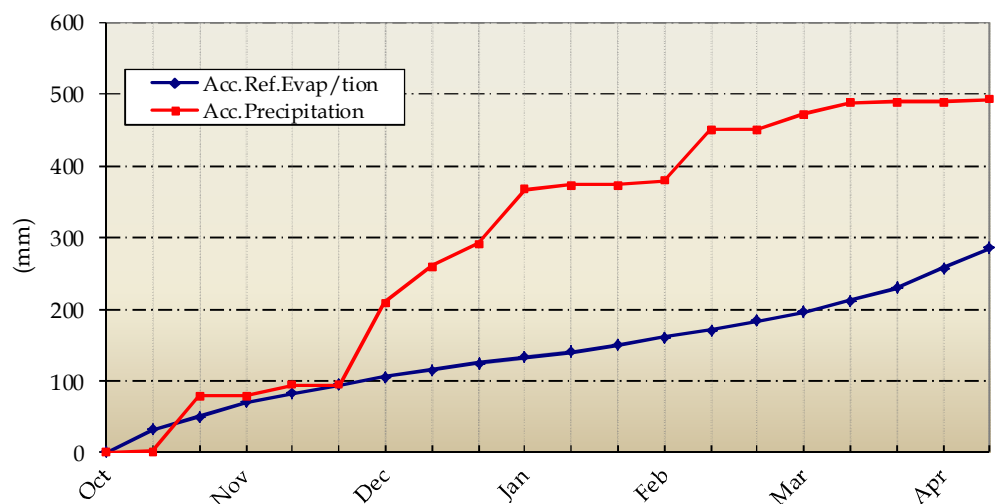
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www.emy.gr
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1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	19.6	18.6	16.4	15.0	14.4	19.0	18.0	19.0	17.8	18.2	17.6	14.9	16.2
	Min	10.8	13.0	12.4	6.0	8.4	2.2	5.8	7.0	8.8	11.0	8.5	4.8	6.4
Relative Humidity	Max	91	82	84	93	97	97	92	94	91	93	91	89	87
	Min	40	52	52	38	65	46	43	55	67	66	52	52	49
Soil Temperature at 10 cm	06 UTC	12.8	13.0	13.8	12.4	11.8	10.2	11.2	13.4	12.8	13.8	12.5	9.9	11.1
	12 UTC	13.8	15.0	16.0	14.6	14.6	14.4	14.2	14.0	14.2	16.0	14.7	12.2	14.0
Sunshine Duration		3.7	9.6	10.8	4.7	3.1	11.6	5.3	10.8	11.1	9.1	8.0	7.0	6.5
Precipitation				0.2		3.7					0.0	3.9	19.6	11.7
Evaporation		3.4	6.2	4.0	3.6	0.7	2.4	3.0	4.0	4.9	2.3	34.5	29.0	41.9
Growing Degrees	5	10.2	10.8	9.4	5.5	6.4	5.6	6.9	8.0	8.3	9.6	80.7	48.8	58.0
	10	5.2	5.8	4.4	0.5	1.4	0.6	1.9	3.0	3.3	4.6	30.7	11.8	18.0

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	28.0	24.7	20.5
Precipitation - Reference Evapotranspiration	-24.1	-5.1	-8.8
Number of Rainy Days	2.0	5.0	2.0
Number of Dry Days	16.0	8.0	-

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

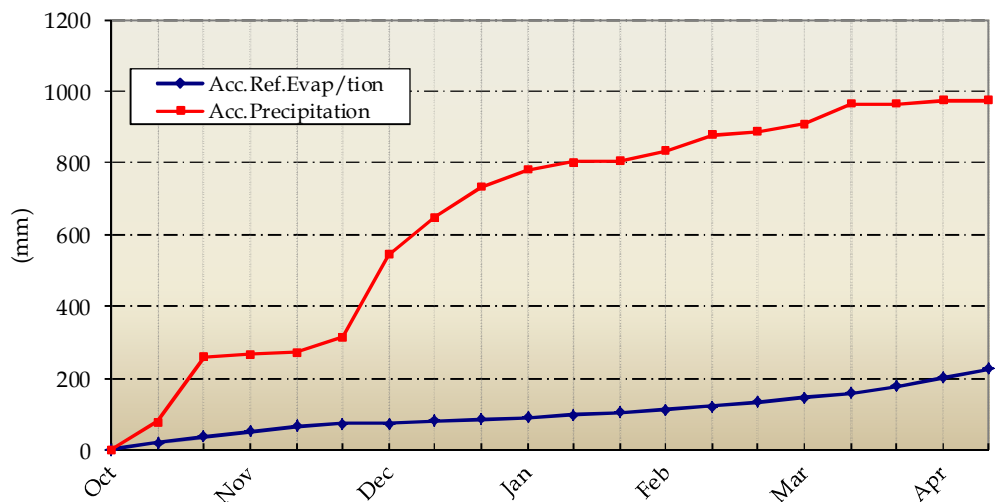


1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	18.8	17.4	17.0	19.2	21.8	20.6	19.6	20.1	20.4	19.3	19.4	18.8	18.4
	Min	17.0	12.6	9.2	6.6	11.4	7.7	14.0	9.6	8.9	10.0	10.7	7.4	8.7
Relative Humidity	Max	94	93	87	93	90	94	96	94	95	94	93	93	91
	Min	57	66	51	43	45	54	50	52	59	42	52	44	48
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	14.5	13.6
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	16.1	17.2
Sunshine Duration		0.0	6.0	7.9	5.0	8.6	7.4	5.2	10.2	0.0	8.5	5.9	9.1	7.6
Precipitation								0.7				0.7	3.6	12.7
Evaporation		-	-	-	-	-	-	-	-	-	-	-	42.8	51.4
Growing Degrees	5	12.9	10.0	8.1	7.9	11.6	9.2	11.8	9.9	9.7	9.7	100.6	81.4	73.0
	10	7.9	5.0	3.1	2.9	6.6	4.2	6.8	4.9	4.7	4.7	50.6	35.1	31.0

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	23.8	26.4	18.9
Precipitation - Reference Evapotranspiration	-23.1	-22.8	-6.2
Number of Rainy Days	1.0	2.0	2.4
Number of Dry Days	8.0	11.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

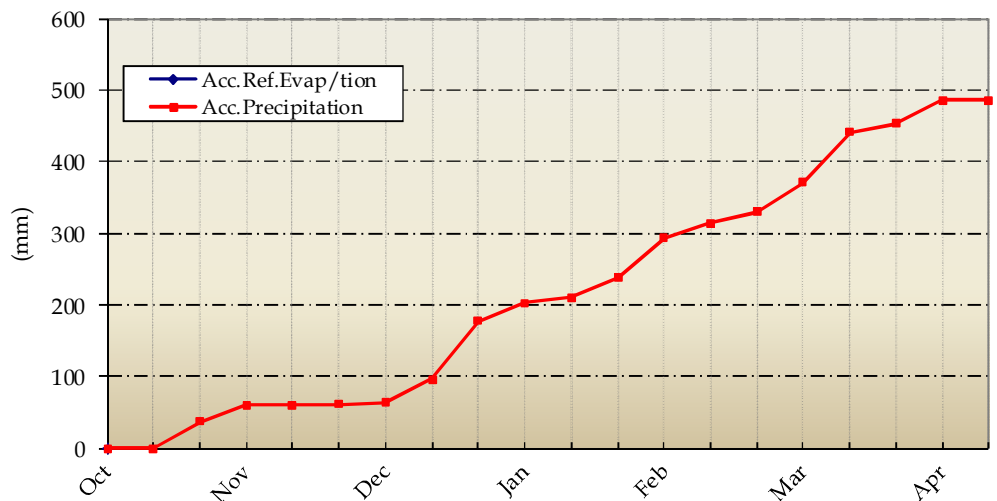


1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	24.6	20.4	20.0	21.6	24.0	18.6	28.0	19.0	19.6	23.6	21.9	19.6	19.1
	Min	19.8	14.0	12.4	10.6	14.8	14.8	14.2	15.4	11.8	12.4	14.0	13.1	11.3
Relative Humidity	Max	67	86	77	72	89	89	89	88	90	83	83	82	85
	Min	25	43	40	17	67	66	19	53	49	34	41	49	54
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		4.9	8.2	9.5	9.2	4.9	9.7	4.9	11.5	7.7	11.8	8.2	8.3	7.1
Precipitation													24.1	11.0
Evaporation		8.0	3.0	3.0	5.7	4.1	3.4	6.5	3.4	2.5	4.5	44.1	56.1	36.6
Growing Degrees	5	17.2	12.2	11.2	11.1	14.4	11.7	16.1	12.2	10.7	13.0	129.8	113.6	91.8
	10	12.2	7.2	6.2	6.1	9.4	6.7	11.1	7.2	5.7	8.0	79.8	63.6	46.7

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	-
Precipitation - Reference Evapotranspiration	-	-	-
Number of Rainy Days	0.0	2.0	2.6
Number of Dry Days	17.0	0.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

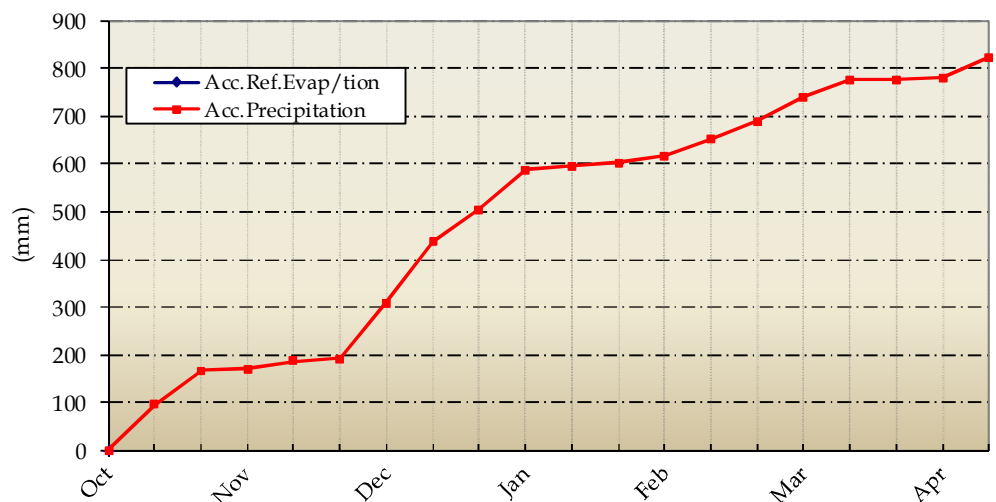


1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	17.9	12.9	10.9	11.9	20.1	21.4	15.0	18.8	21.1	13.0	16.3	17.2	16.6
	Min	12.1	8.6	3.6	4.3	4.5	4.1	8.5	4.1	2.6	7.0	5.9	3.6	5.0
Relative Humidity	Max	96	90	98	99	100	100	97	100	100	93	97	94	93
	Min	55	64	65	48	40	33	76	44	38	60	52	33	45
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	9.3
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	10.8
Sunshine Duration		3.0	1.4	3.2	1.2	7.8	5.8	1.1	9.7	8.3	4.6	4.6	7.6	5.4
Precipitation		11.0	6.2	14.7	1.1			9.1			1.5	43.6	10.7	19.5
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	
Growing Degrees	5	10.0	5.8	2.3	3.1	7.3	7.8	6.8	6.5	6.9	5.0	61.2	-	45.5
	10	5.0	0.8	0.0	0.0	2.3	2.8	1.8	1.5	1.9	0.0	15.9	-	12.0

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	24.0
Precipitation - Reference Evapotranspiration	-	-	-4.5
Number of Rainy Days	6.0	4.0	2.8
Number of Dry Days	0.0	12.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

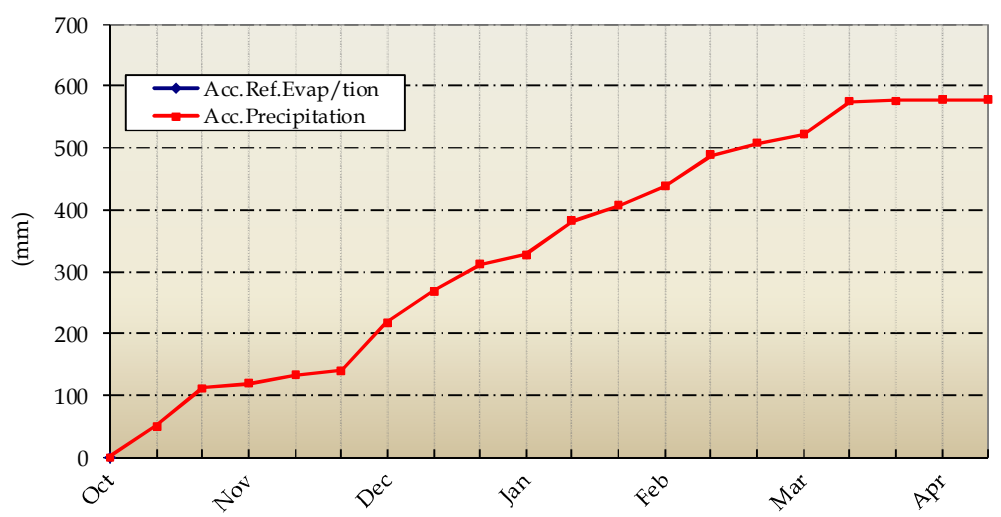


1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	20.6	20.4	20.6	22.9	25.2	18.8	21.7	23.4	21.8	22.5	21.8	20.1	19.1
	Min	13.8	8.7	7.4	8.6	11.0	8.6	14.4	12.2	8.7	7.7	10.1	7.9	7.9
Relative Humidity	Max	94	97	94	74	91	94	95	87	95	97	92	88	91
	Min	55	41	38	22	37	68	48	33	44	45	43	40	45
Soil Temperature at 10 cm	06 UTC	14.6	15.0	15.0	14.4	15.0	15.4	16.6	16.0	16.0	15.6	15.4	13.8	13.4
	12 UTC	16.6	16.6	17.0	16.2	17.0	17.6	17.0	18.0	18.2	17.8	17.2	16.5	15.6
Sunshine Duration		7.9	8.9	9.4	6.9	9.4	8.8	4.7	11.7	11.4	9.6	8.9	8.2	7.7
Precipitation								0.0	0.0		0.0	0.0	0.5	17.6
Evaporation		-	-	-	-	-	-	-	-	-	-	-	52.8	35.1
Growing Degrees	5	12.2	9.6	9.0	10.8	13.1	8.7	13.1	12.8	10.3	10.1	109.5	89.7	77.4
	10	7.2	4.6	4.0	5.8	8.1	3.7	8.1	7.8	5.3	5.1	59.5	39.7	32.3

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	26.1
Precipitation - Reference Evapotranspiration	-	-	-8.5
Number of Rainy Days	0.0	1.0	2.7
Number of Dry Days	11.0	4.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



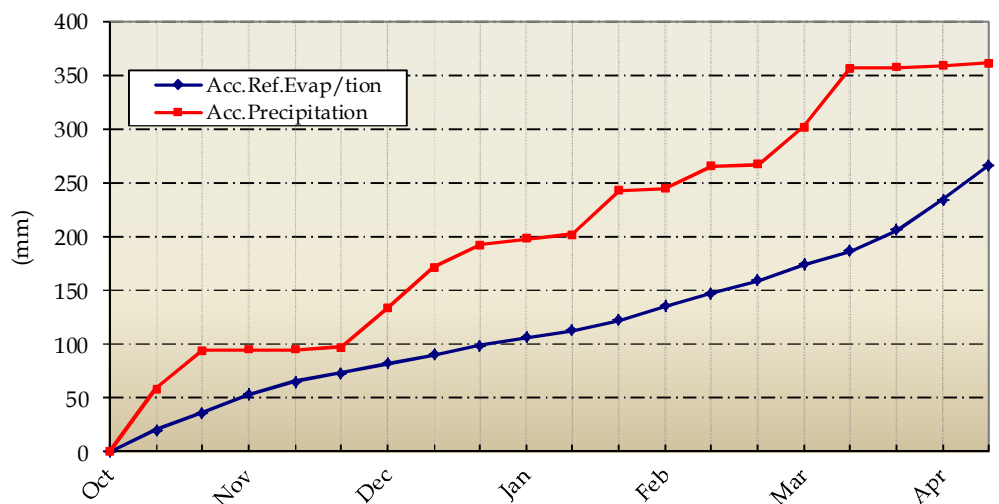
Larisa

1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	25.2	19.6	17.2	15.2	14.6	19.6	19.8	25.0	27.0	21.6	20.5	18.2	18.7
	Min	8.2	7.4	6.4	3.2	7.6	5.0	7.0	10.4	7.8	8.0	7.1	4.3	6.0
Relative Humidity	Max	98	91	89	89	95	100	93	89	86	78	91	90	93
	Min	31	42	32	43	59	47	49	32	29	40	40	42	44
Soil Temperature at 10 cm	06 UTC	11.6	12.0	12.8	12.2	12.2	12.2	13.2	13.2	14.0	14.8	12.8	-	12.0
	12 UTC	14.8	15.0	13.6	13.0	13.0	13.6	13.4	14.8	15.2	15.0	14.1	-	13.2
Sunshine Duration		8.8	9.7	10.6	0.0	0.0	7.5	6.5	10.7	11.1	3.4	6.8	7.3	6.5
Precipitation				0.1	0.2			2.2				2.5	2.7	12.1
Evaporation		8.6	5.0	5.5	2.8	1.8	4.8	2.3	7.3	3.0	3.2	44.3	33.6	36.3
Growing Degrees	5	11.7	8.5	6.8	4.2	6.1	7.3	8.4	12.7	12.4	9.8	87.9	62.8	66.3
	10	6.7	3.5	1.8	0.0	1.1	2.3	3.4	7.7	7.4	4.8	38.7	19.7	23.9

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	31.8	28.4	50.3
Precipitation - Reference Evapotranspiration	-29.3	-25.7	-38.2
Number of Rainy Days	3.0	2.0	2.8
Number of Dry Days	2.0	4.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



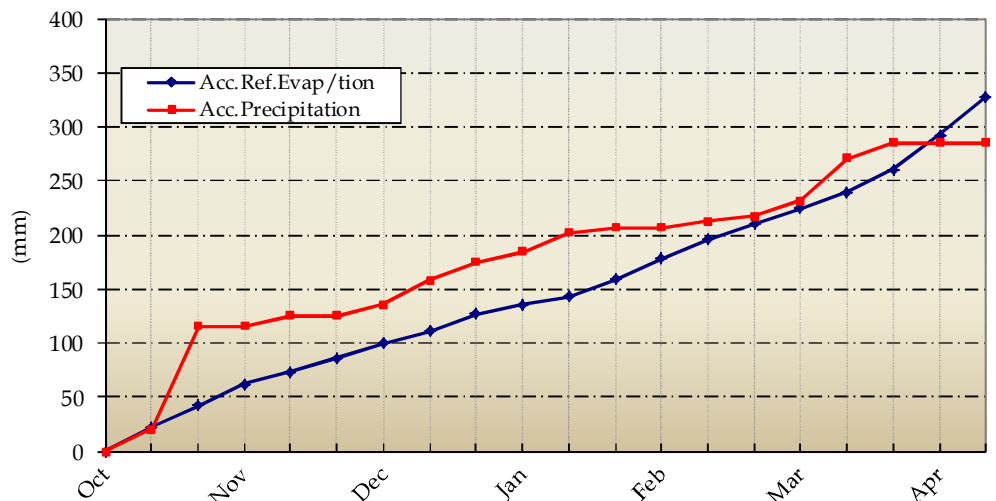
Mikra

1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	24.3	22.2	18.4	15.0	14.8	19.0	17.2	22.8	25.4	23.4	20.2	17.1	17.6
	Min	14.4	10.0	9.6	4.0	8.4	4.8	8.0	6.2	8.2	9.8	8.3	6.2	7.7
Relative Humidity	Max	81	75	73	100	100	98	96	100	86	85	89	87	85
	Min	38	30	29	45	53	47	43	30	34	30	38	43	46
Soil Temperature at 10 cm	06 UTC	13.0	13.4	12.9	12.0	12.0	11.6	12.4	12.2	13.4	14.8	12.8	11.7	12.1
	12 UTC	13.6	15.0	14.2	15.0	13.2	13.4	13.6	15.0	15.3	15.8	14.4	14.4	15.4
Sunshine Duration		9.2	9.6	11.6	0.0	4.2	10.8	4.0	12.0	11.8	3.8	7.7	7.1	6.4
Precipitation			0.0		0.0	0.0		0.0			0.0	0.0	1.2	13.8
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	36.3
Growing Degrees	5	14.4	11.1	9.0	4.5	6.6	6.9	7.6	9.5	11.8	11.6	93.0	66.7	66.9
	10	9.4	6.1	4.0	0.0	1.6	1.9	2.6	4.5	6.8	6.6	43.5	20.2	25.0

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	35.6	32.7	22.1
Precipitation - Reference Evapotranspiration	-35.6	-31.5	-8.3
Number of Rainy Days	0.0	2.0	2.3
Number of Dry Days	10.0	12.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



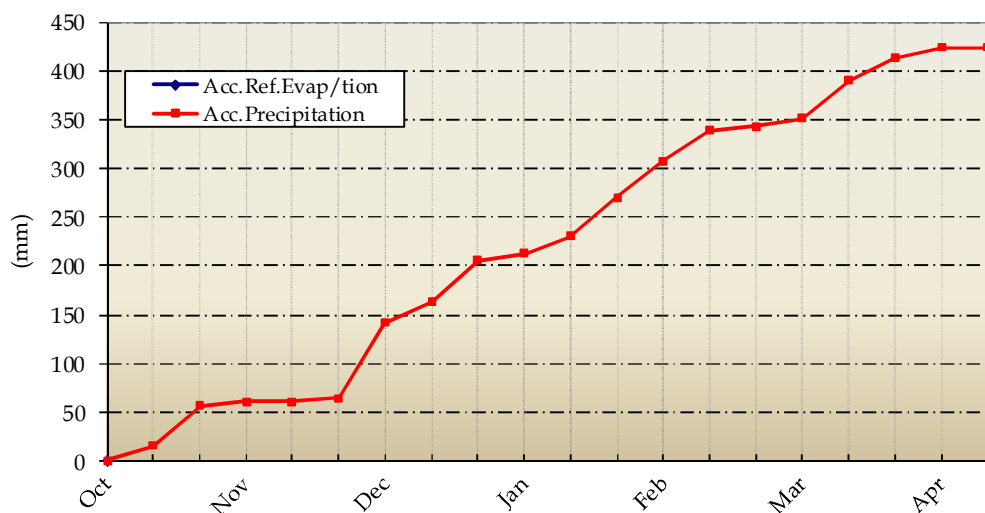
Tanagra

1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	24.6	21.4	19.3	17.0	16.8	18.9	23.2	24.8	25.1	22.8	21.4	17.4	17.6
	Min	12.4	12.2	11.7	6.4	6.8	5.9	11.1	10.2	10.5	11.0	9.8	6.3	6.8
Relative Humidity	Max	71	56	62	89	96	96	96	68	79	68	78	92	90
	Min	35	32	28	38	49	50	29	22	24	25	33	36	43
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		7.7	11.1	12.2	5.7	8.8	9.0	8.3	11.6	12.4	11.0	9.8	6.8	6.9
Precipitation								0.6				0.6	2.8	14.3
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	33.6
Growing Degrees	5	13.5	11.8	10.5	6.7	6.8	7.4	12.2	12.5	12.8	11.9	106.1	68.3	64.3
	10	8.5	6.8	5.5	1.7	1.8	2.4	7.2	7.5	7.8	6.9	56.1	25.4	22.8

1st 10-day period (1-10/04/2022)	Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-
Precipitation - Reference Evapotranspiration	-	-
Number of Rainy Days	1.0	2.0
Number of Dry Days	9.0	5.0

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



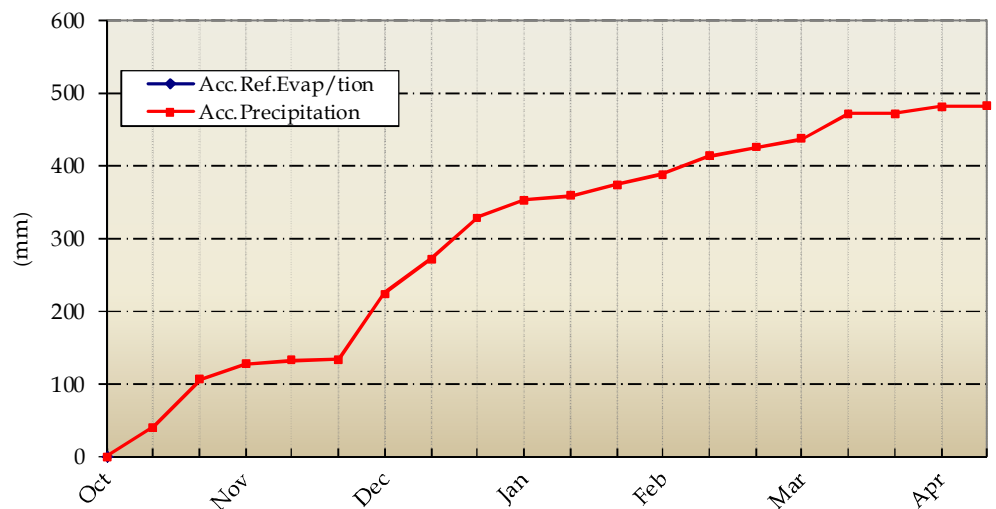
Tripoli

1st 10-day period (1-10/04/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	19.4	15.1	15.1	17.9	19.5	21.5	18.4	21.3	21.3	17.0	18.6	16.1	16.1
	Min	10.3	8.3	7.3	1.9	3.5	3.1	11.3	6.9	3.2	4.0	6.0	3.6	3.7
Relative Humidity	Max	86	83	84	86	92	97	92	92	97	82	89	91	91
	Min	35	40	27	23	40	32	42	29	23	36	33	36	38
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	9.8
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	12.6
Sunshine Duration		8.6	9.5	10.4	5.2	9.7	11.1	6.7	11.5	11.2	10.3	9.4	7.1	6.9
Precipitation			0.9	0.1				0.4			0.0	1.4	3.5	13.8
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	27.7
Growing Degrees	5	9.9	6.7	6.2	4.9	6.5	7.3	9.9	9.1	7.3	5.5	73.2	48.7	41.9
	10	4.9	1.7	1.2	0.0	1.5	2.3	4.9	4.1	2.3	0.5	23.3	12.3	9.6

1st 10-day period (1-10/04/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	30.8	27.2	20.3
Precipitation - Reference Evapotranspiration	-29.4	-23.7	-6.5
Number of Rainy Days	3.0	4.0	2.9
Number of Dry Days	3.0	3.0	-

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.

Past Years Mean Values 1991-2020 (Evaporation, Reference Evapotranspiration, Max and Min Relative Humidity 2005-2020)

Mesurements 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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