



AGROMETEOROLOGICAL BULLETIN

*January 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



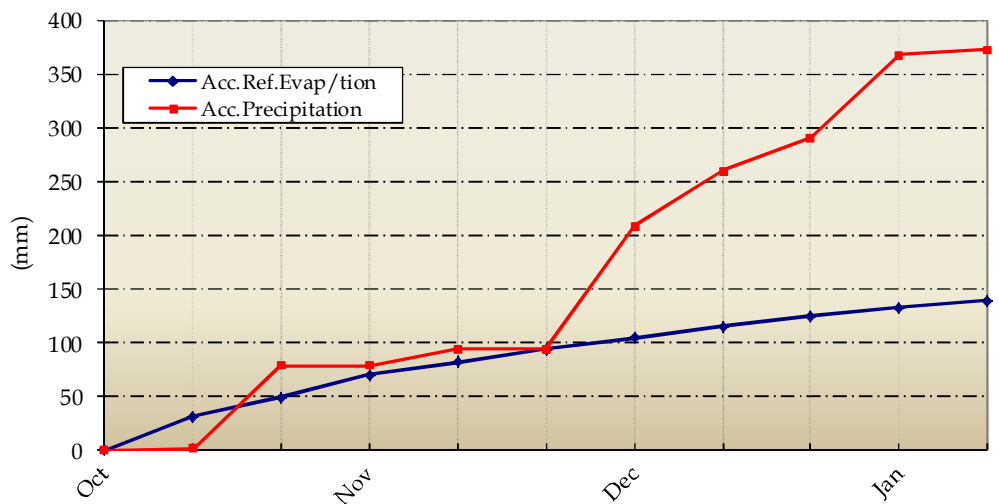
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1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	13.4	14.0	16.0	12.0	15.6	17.4	14.8	10.0	12.0	10.6	13.6	15.2	8.8
	Min	2.0	4.0	4.6	4.0	8.6	13.8	7.8	6.0	6.2	6.6	6.4	7.8	1.4
Relative Humidity	Max	96	97	97	97	93	87	95	92	94	92	94	92	90
	Min	79	69	69	90	71	72	82	82	73	82	77	68	62
Soil Temperature at 10 cm	06 UTC	6.6	7.2	7.6	8.2	9.2	12.2	11.2	8.4	9.4	8.8	8.9	11.0	5.2
	12 UTC	8.4	8.4	10.2	10.4	11.6	13.8	11.4	9.6	10.6	9.6	10.4	12.1	6.3
Sunshine Duration		3.4	7.2	6.4	2.5	6.5	5.9	0.0	0.0	0.0	0.0	3.2	3.3	3.5
Precipitation								4.2	0.0	0.3	0.8	5.3	45.2	19.7
Evaporation		0.7	0.6	1.0	1.6	0.3	1.0	0.4	0.5	3.2	0.6	9.9	17.7	5.3
Growing Degrees	5	2.7	4.0	5.3	3.0	7.1	10.6	6.3	3.0	4.1	3.6	49.7	64.6	16.8
	10	0.0	0.0	0.3	0.0	2.1	5.6	1.3	0.0	0.0	0.0	9.3	18.8	2.6

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	6.9	9.3	7.8
Precipitation - Reference Evapotranspiration	-1.6	35.9	11.9
Number of Rainy Days	3.0	4.0	2.4
Number of Dry Days	7.0	3.0	-

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

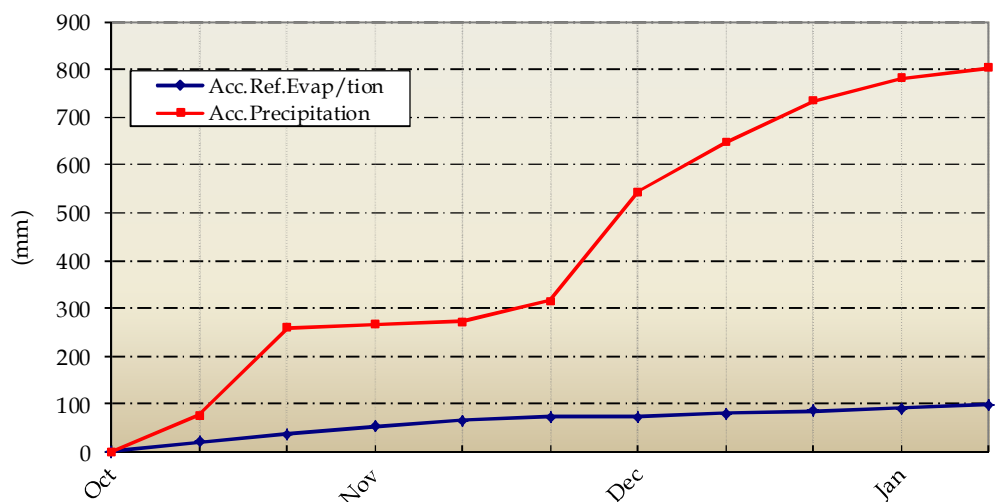


1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	17.6	18.9	17.4	16.6	18.1	18.1	16.9	15.6	15.8	13.0	16.8	18.2	14.0
	Min	4.6	3.5	7.4	10.8	10.4	10.9	9.0	10.2	9.7	7.0	8.4	10.3	5.4
Relative Humidity	Max	96	99	94	93	90	93	93	90	93	98	94	95	90
	Min	49	49	65	56	63	52	60	60	68	66	59	60	55
Soil Temperature at 10 cm	06 UTC	11.0	10.2	11.0	11.2	12.7	12.4	12.4	12.2	11.0	10.2	11.4	12.8	9.0
	12 UTC	11.2	11.4	11.5	13.2	13.2	12.8	12.8	12.2	12.5	12.4	12.3	13.7	10.8
Sunshine Duration		6.5	6.2	5.2	1.2	3.5	6.5	0.3	1.5	3.6	1.9	3.6	3.2	4.5
Precipitation								0.1	10.4		11.5	22.0	72.2	29.4
Evaporation		2.5	1.0	0.8	1.0	0.5	1.0	0.4	2.0	0.2	0.3	9.7	14.8	39.2
Growing Degrees	5	6.1	6.2	7.4	8.7	9.3	9.5	8.0	7.9	7.8	5.0	75.8	92.5	41.6
	10	1.1	1.2	2.4	3.7	4.3	4.5	3.0	2.9	2.8	0.0	25.8	42.9	9.5

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	6.3	-	9.2
Precipitation - Reference Evapotranspiration	15.7	-	20.2
Number of Rainy Days	3.0	8.0	3.0
Number of Dry Days	7.0	1.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



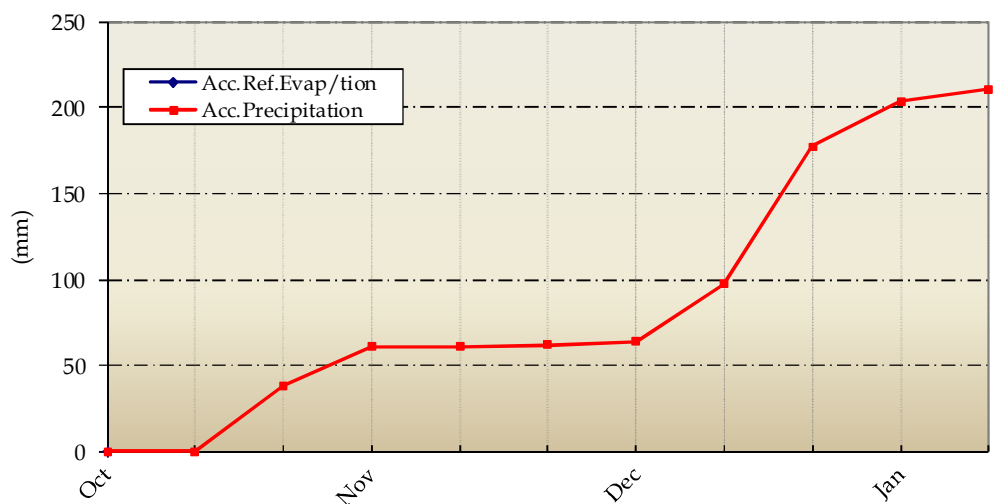
Iraklio

1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.4	17.2	17.2	17.4	17.8	19.4	17.2	18.6	14.2	16.0	17.1	20.0	15.4
	Min	14.4	12.4	12.2	10.8	10.6	13.2	11.4	10.4	11.2	9.6	11.6	12.9	9.2
Relative Humidity	Max	89	93	90	88	92	81	90	88	93	90	89	86	86
	Min	75	72	59	69	70	52	61	57	69	60	64	59	60
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		4.3	6.5	8.0	4.1	8.0	7.6	5.8	1.2	0.0	2.4	4.8	6.2	3.6
Precipitation		0.0								5.0	2.0	7.0	0.1	31.8
Evaporation		2.5	0.9	0.7	0.0	1.3	0.4	2.9	1.5	0.0	0.6	10.8	26.7	32.4
Growing Degrees	5	10.4	9.8	9.7	9.1	9.2	11.3	9.3	9.5	7.7	7.8	93.8	114.5	64.4
	10	5.4	4.8	4.7	4.1	4.2	6.3	4.3	4.5	2.7	2.8	43.8	64.5	23.4

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	
Precipitation - Reference Evapotranspiration	-	-	
Number of Rainy Days	2.0	1.0	4.1
Number of Dry Days	8.0	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

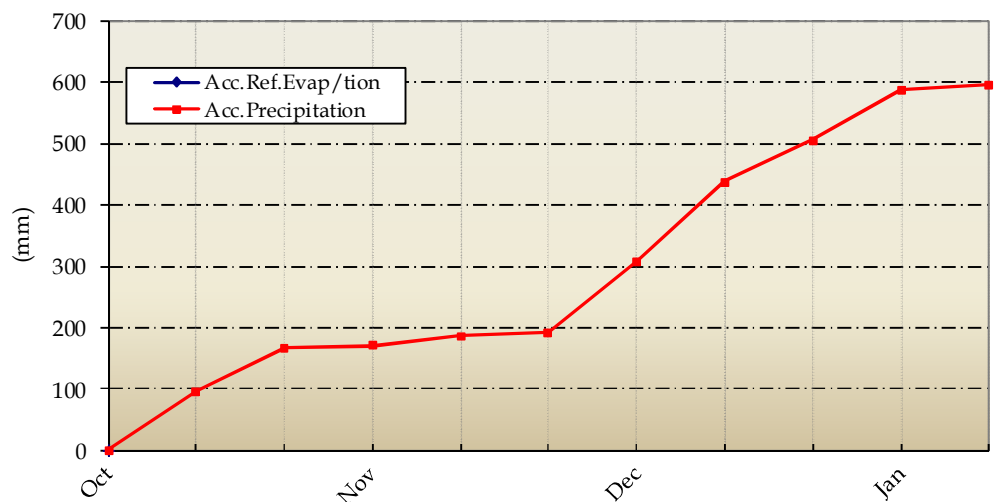


1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.6	17.9	13.6	12.4	13.8	14.4	9.9	12.2	9.2	7.7	12.8	12.8	9.1
	Min	-1.0	1.4	-1.9	6.6	3.8	8.3	6.0	6.2	3.4	2.3	3.5	6.3	-0.1
Relative Humidity	Max	99	99	100	97	100	97	100	100	100	100	99	99	94
	Min	47	41	56	68	62	64	90	64	90	74	66	72	61
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	4.1
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	4.5
Sunshine Duration		6.7	7.9	6.1	1.2	2.9	4.0	0.0	0.0	0.0	0.9	3.0	1.4	2.9
Precipitation								2.6	1.8	1.9	1.2	7.5	96.2	28.0
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	
Growing Degrees	5	2.8	4.7	0.9	4.5	3.8	6.4	3.0	4.2	1.3	0.0	31.4	45.7	10.0
	10	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	1.4	11.4	0.7

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	15.2
Precipitation - Reference Evapotranspiration	-	-	12.8
Number of Rainy Days	4.0	9.0	2.9
Number of Dry Days	8.0	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

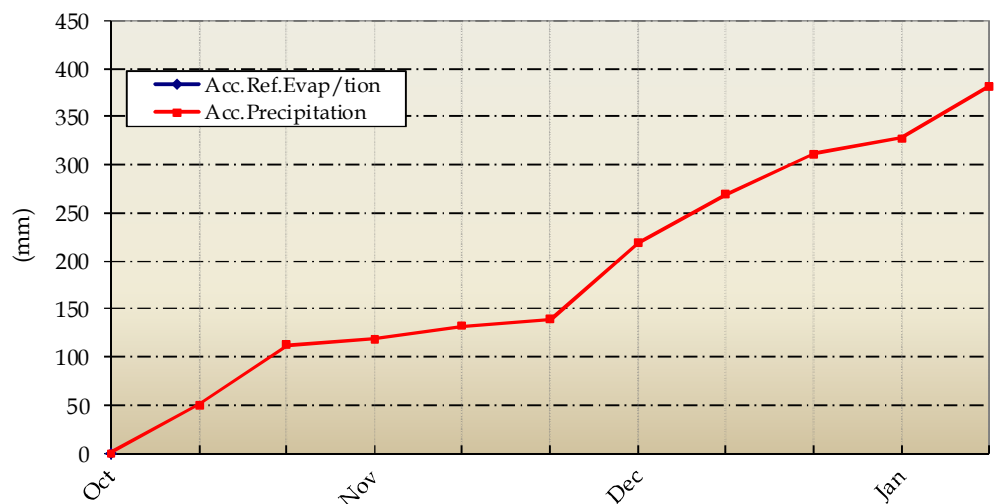


1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	18.5	19.2	18.9	17.5	18.9	18.6	17.6	15.0	16.4	12.6	17.3	18.0	15.1
	Min	4.2	3.5	6.2	9.9	10.4	5.9	8.6	9.7	8.4	5.5	7.2	8.7	5.3
Relative Humidity	Max	97	96	96	91	98	86	95	98	98	98	95	100	90
	Min	46	93	55	55	54	76	62	61	64	75	64	64	52
Soil Temperature at 10 cm	06 UTC	-	-	11.0	12.5	12.4	-	12.8	-	-	12.0	12.1	11.8	9.8
	12 UTC	-	-	11.6	13.2	13.2	-	12.8	-	-	12.0	12.6	13.0	10.7
Sunshine Duration		8.1	8.5	7.8	2.9	5.1	4.9	1.6	1.7	4.5	0.3	4.5	4.5	5.0
Precipitation							0.0	10.1	17.6	8.6	17.7	54.0	42.7	31.7
Evaporation		-	-	-	-	-	-	-	-	-	-	-	5.6	21.9
Growing Degrees	5	6.4	6.4	7.6	8.7	9.7	7.3	8.1	7.4	7.4	4.1	72.8	83.4	48.1
	10	1.4	1.4	2.6	3.7	4.7	2.3	3.1	2.4	2.4	0.0	23.7	33.8	10.6

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	9.4
Precipitation - Reference Evapotranspiration	-	-	22.3
Number of Rainy Days	4.0	6.0	3.2
Number of Dry Days	7.0	1.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



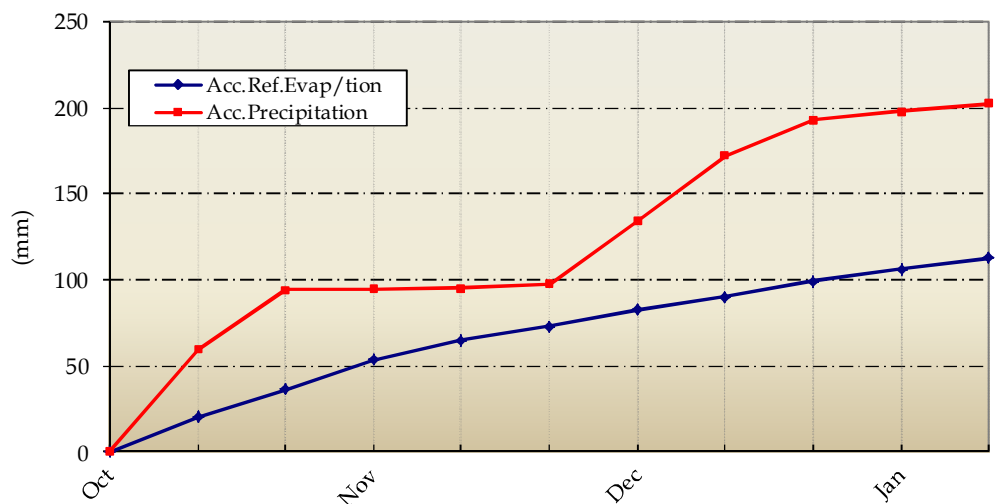
Larisa

1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	14.8	18.2	15.0	15.4	16.2	17.0	13.2	12.2	12.6	12.2	14.7	15.5	10.0
	Min	0.4	2.0	0.6	0.4	-0.2	1.2	1.0	7.8	6.8	7.8	2.8	5.5	0.2
Relative Humidity	Max	99	97	99	100	99	100	97	100	100	100	99	97	95
	Min	61	45	59	53	49	45	68	78	76	82	62	66	58
Soil Temperature at 10 cm	06 UTC	7.4	7.8	7.4	7.0	6.8	5.8	7.2	8.8	9.6	9.8	7.8	-	6.0
	12 UTC	9.6	8.4	7.8	7.8	8.0	7.8	8.0	9.0	9.6	10.0	8.6	-	6.6
Sunshine Duration		7.1	8.5	7.8	7.0	7.7	6.9	2.2	1.2	0.2	1.0	5.0		3.7
Precipitation									1.6		2.8	4.4	45.9	13.3
Evaporation		0.5	1.0	2.2	1.2	2.2	0.2	0.7	2.1	0.3	0.0	10.4	-	8.7
Growing Degrees	5	2.6	5.1	2.8	2.9	3.0	4.1	2.1	5.0	4.7	5.0	37.3	55.1	13.0
	10	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	14.2	1.3

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	6.4	-	8.2
Precipitation - Reference Evapotranspiration	-2.0	-	5.1
Number of Rainy Days	2.0	3.0	2.2
Number of Dry Days	8.0	2.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



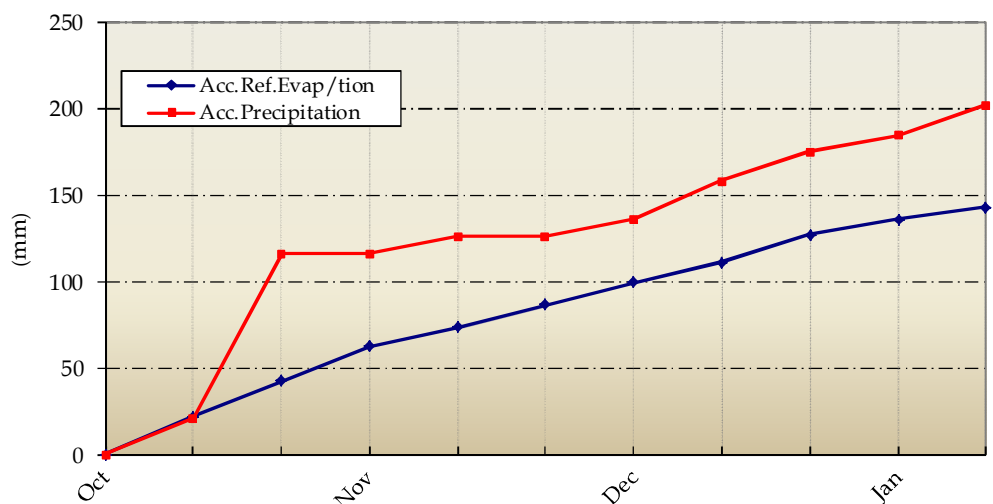
Mikra

1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.6	16.8	14.2	14.4	13.6	13.3	13.0	11.8	11.0	12.0	13.7	15.6	9.5
	Min	3.1	6.4	2.8	3.0	3.2	4.6	4.8	5.4	7.1	8.4	4.9	7.9	2.0
Relative Humidity	Max	98	90	99	99	100	100	100	100	100	100	99	96	86
	Min	53	52	63	50	70	80	67	89	97	71	69	62	56
Soil Temperature at 10 cm	06 UTC	8.4	9.6	6.6	8.2	8.4	8.8	9.0	10.0	10.2	10.4	9.0	11.0	5.3
	12 UTC	9.0	10.0	10.0	9.8	8.8	8.8	9.8	8.0	10.6	10.4	9.5	11.6	6.8
Sunshine Duration		5.0	8.2	7.4	6.8	3.6	5.9	2.4	0.5	0.0	0.0	4.0	3.6	4.1
Precipitation									1.0	5.7	10.9	17.6	48.0	9.8
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	12.1
Growing Degrees	5	4.9	6.6	3.5	3.7	3.4	4.0	3.9	3.6	4.1	5.2	42.8	67.4	17.3
	10	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8	19.8	2.0

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	7.2	10.1	7.0
Precipitation - Reference Evapotranspiration	10.4	37.9	2.8
Number of Rainy Days	3.0	4.0	2.2
Number of Dry Days	9.0	2.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



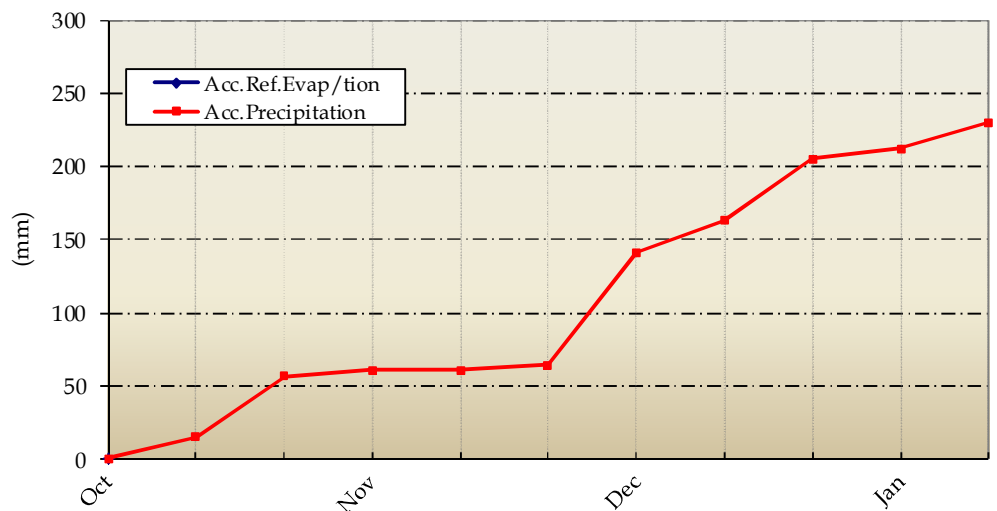
Tanagra

1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.6	16.8	18.3	17.4	18.6	18.9	16.6	12.8	11.9	12.5	16.0	17.7	11.8
	Min	3.6	5.0	2.8	5.4	6.9	5.5	9.6	6.8	6.7	4.6	5.7	8.8	3.3
Relative Humidity	Max	96	97	100	97	79	95	100	100	100	100	96	93	92
	Min	51	48	43	40	45	37	62	90	85	80	58	50	54
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		6.3	6.6	7.6	7.3	7.5	7.6	3.6	0.5	0.8	1.2	4.9	4.4	3.4
Precipitation								0.1	6.6	11.3	0.0	18.0	14.9	13.1
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	19.5
Growing Degrees	5	5.1	5.9	5.6	6.4	7.8	7.2	8.1	4.8	4.3	3.6	58.7	82.5	28.5
	10	0.1	0.9	0.6	1.4	2.8	2.2	3.1	0.0	0.0	0.0	11.0	34.9	5.0

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	-
Precipitation - Reference Evapotranspiration	-	-	-
Number of Rainy Days	3.0	2.0	2.8
Number of Dry Days	6.0	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



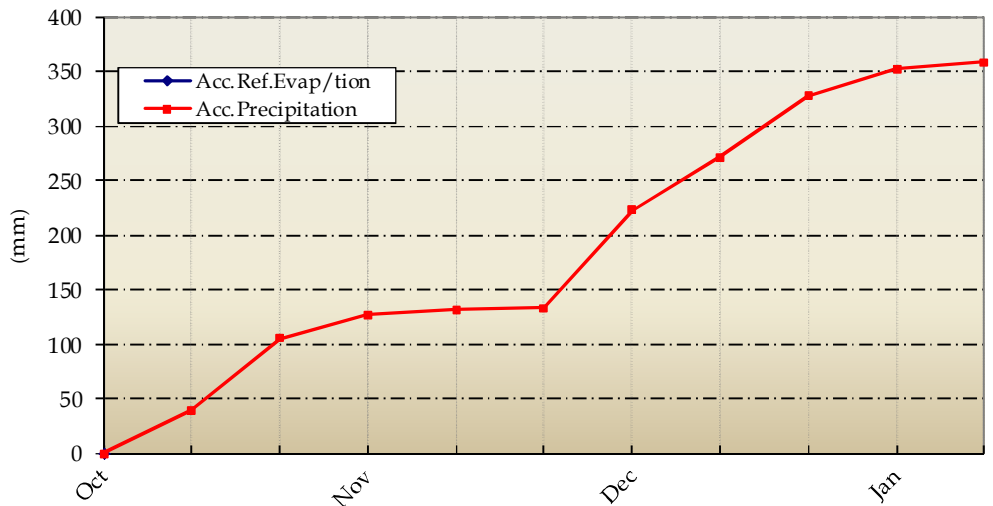
Tripoli

1st 10-day period (1-10/01/2022)		1	2	3	4	5	6	7	8	9	10	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.1	15.1	15.1	14.6	15.1	14.5	13.7	9.8	11.8	7.7	13.4	14.0	10.1
	Min	-2.1	0.2	-1.0	0.6	0.8	0.6	4.8	4.8	5.3	1.7	1.6	5.6	-0.3
Relative Humidity	Max	100	99	100	99	100	100	97	99	98	97	99	96	95
	Min	36	45	53	53	48	53	40	68	63	72	53	57	57
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	4.7
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	5.8
Sunshine Duration		6.5	5.7	7.0	7.1	7.1	5.3	3.9	3.3	3.0	0.2	4.9	3.1	4.0
Precipitation			0.0					0.2	1.3	4.3	0.3	6.1	25.2	21.0
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	5.5
Growing Degrees	5	2.0	2.7	2.1	2.6	3.0	2.6	4.3	2.3	3.6	0.0	24.9	49.4	11.9
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.9

1st 10-day period (1-10/01/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	5.4
Precipitation - Reference Evapotranspiration	-	-	15.6
Number of Rainy Days	4.0	7.0	2.6
Number of Dry Days	6.0	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





◆ List of Symbols and Abbreviations

Reference Evapotranspiration E_{T0} (mm):

Calculated by the FAO Penman-Montieth equation

$$E_{T0} = \frac{0.408 * \Delta * (R_n - G) + \gamma * \frac{900}{T + 273} * u_2 * (e_s - e_a)}{\Delta + \gamma * (1 + 0.34 * u_2)}$$

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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