



# AGROMETEOROLOGICAL BULLETIN

*February 2022*  
*3rd 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



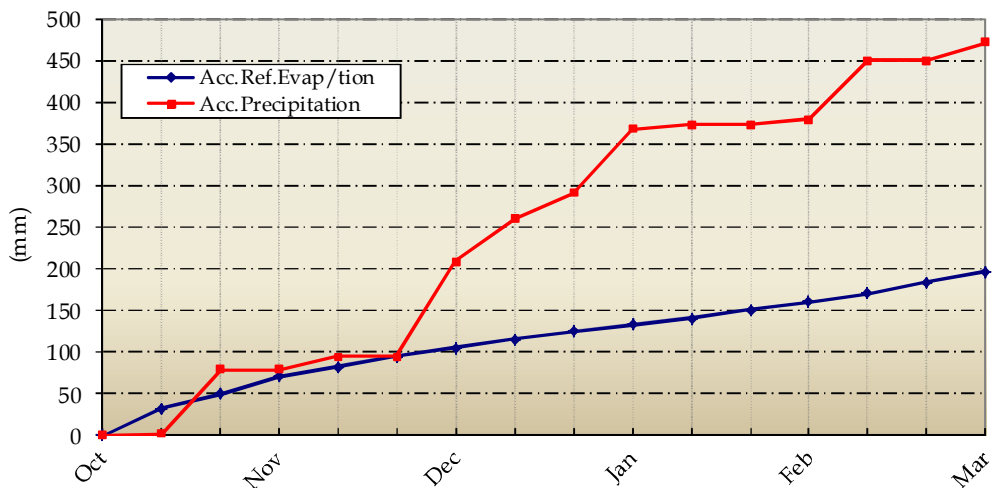
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3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	14.8	16.6	12.6	10.6	12.4	14.2	10.0	6.4	12.2	14.4	11.2
	Min	6.6	7.0	7.6	6.4	2.6	-2.0	4.6	3.0	4.5	2.0	3.1
Relative Humidity	Max	97	93	82	85	83	93	94	84	89	90	91
	Min	70	75	54	62	40	40	59	56	57	48	61
Soil Temperature at 10 cm	06 UTC	9.0	10.2	10.2	8.4	6.2	6.0	7.6	6.4	8.0	6.8	6.7
	12 UTC	11.3	13.0	13.2	10.2	10.4	10.4	8.6	6.6	10.5	9.7	8.4
Sunshine Duration		4.9	4.4	0.5	4.6	9.8	8.6	0.0	0.5	4.2	8.5	4.1
Precipitation			3.4		0.0			17.2	1.5	22.1		16.3
Evaporation		0.4	2.0	2.0	1.0	0.0	3.2	0.5	0.0	9.1	9.7	10.7
Growing Degrees	5	5.7	6.8	5.1	3.5	2.5	1.1	2.3	0.0	27.0	25.8	21.8
	10	0.7	1.8	0.1	0.0	0.0	0.0	0.0	0.0	2.6	0.5	3.4

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	12.3	13.6	9.6
Precipitation - Reference Evapotranspiration	9.8	-13.6	6.7
Number of Rainy Days	3.0	0.0	2.0
Number of Dry Days	13.0	10.0	-

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

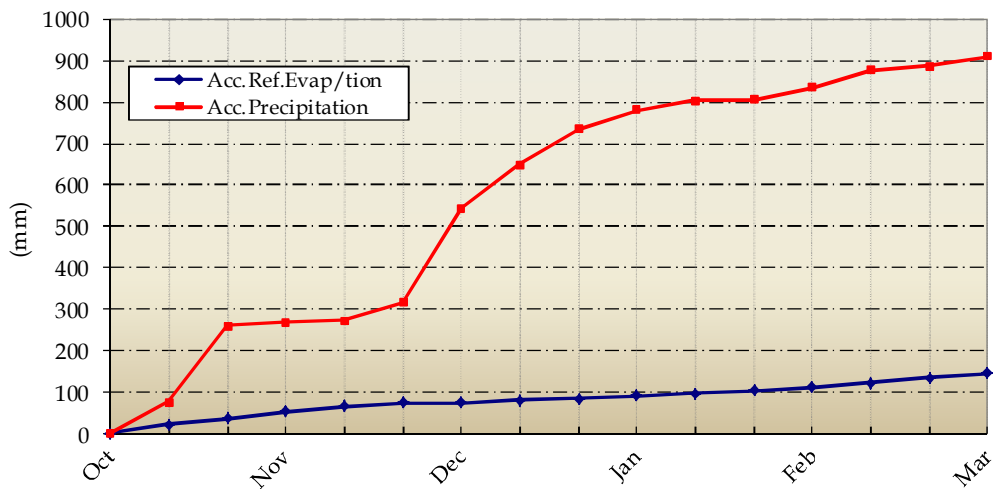


3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	18.8	15.9	17.3	15.0	15.7	15.9	15.6	14.0	16.0	19.0	15.2
	Min	9.1	9.9	3.5	6.8	1.2	5.7	9.5	6.4	6.5	4.0	6.2
Relative Humidity	Max	96	95	98	88	87	91	98	97	94	96	91
	Min	68	64	52	28	34	60	51	64	53	44	54
Soil Temperature at 10 cm	06 UTC	12.2	12.8	11.3	11.4	9.8	10.4	10.5	10.2	11.1	10.8	10.1
	12 UTC	13.0	13.4	12.1	11.8	10.8	10.6	12.8	13.0	12.2	12.2	12.3
Sunshine Duration		8.3	3.2	8.0	9.9	9.8	1.3	3.8	3.7	6.0	9.4	5.4
Precipitation							1.7	16.2	5.7	23.6	0.1	10.8
Evaporation		1.2	0.2	0.4	0.6	0.3	0.7	0.2	-	-	20.2	24.9
Growing Degrees	5	9.0	7.9	5.4	5.9	3.5	5.8	7.6	5.2	50.2	52.4	35.8
	10	4.0	2.9	0.4	0.9	0.0	0.8	2.6	0.2	11.7	13.5	9.0

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	11.1	12.8	8.4
Precipitation - Reference Evapotranspiration	12.5	-12.7	2.4
Number of Rainy Days	3.0	1.0	2.1
Number of Dry Days	8.0	9.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



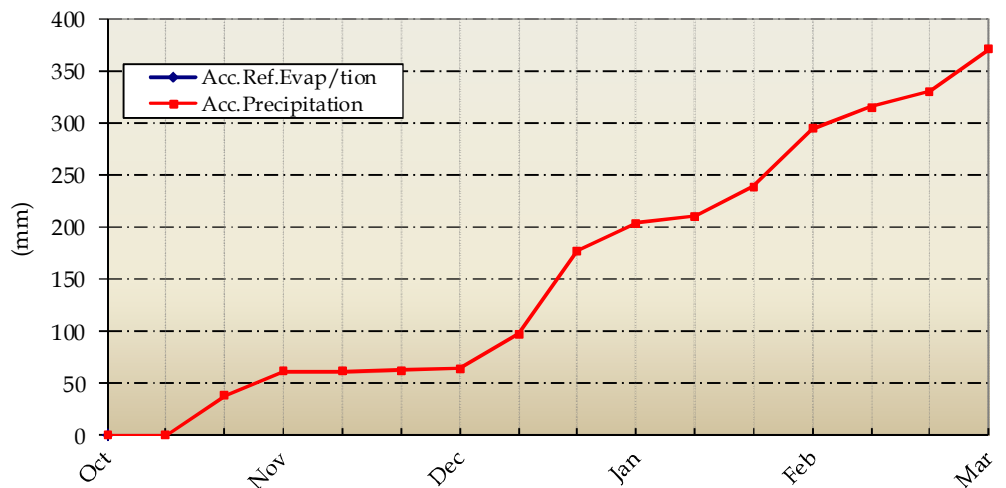
Iraklio

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	21.2	18.2	13.8	13.2	13.2	15.6	16.8	16.0	16.0	16.0	16.1
	Min	12.4	11.6	11.4	11.4	9.8	5.4	8.4	9.0	9.9	10.2	9.5
Relative Humidity	Max	79	93	95	95	87	85	89	90	89	90	86
	Min	47	53	75	67	50	49	53	53	56	67	57
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		9.2	6.3	0.4	0.0	2.7	6.7	5.2	3.9	4.3	5.9	5.6
Precipitation				15.7	21.9	3.4		0.1		41.1	17.5	16.4
Evaporation		0.9	1.0	1.3	1.4	1.8	1.0	2.2	2.6	12.2	20.3	22.2
Growing Degrees	5	11.8	9.9	7.6	7.3	6.5	5.5	7.6	7.5	63.7	64.5	56.4
	10	6.8	4.9	2.6	2.3	1.5	0.5	2.6	2.5	23.7	24.5	21.5

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	-
Precipitation - Reference Evapotranspiration	-	-	-
Number of Rainy Days	4.0	2.0	2.6
Number of Dry Days	5.0	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



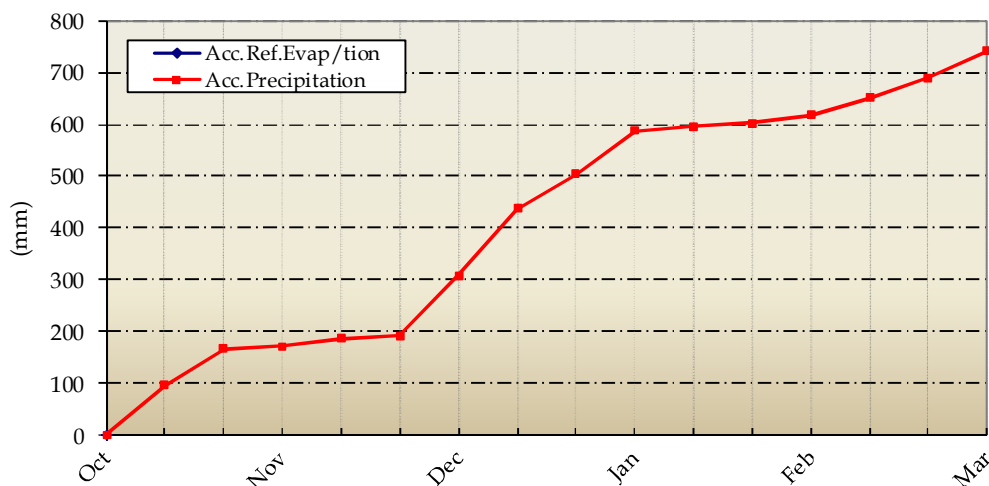
Ioannina

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	15.1	10.2	15.8	12.6	14.7	14.0	6.3	10.0	12.3	19.3	11.9
	Min	2.2	7.9	2.9	5.6	-4.5	-1.3	2.7	3.0	2.3	0.1	1.6
Relative Humidity	Max	100	98	91	81	97	99	97	98	95	96	93
	Min	58	73	40	15	21	45	81	48	48	36	53
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	5.0
	12 UTC	-	-	-	-	-	-	-	-	-	-	5.6
Sunshine Duration		1.7	0.3	8.2	9.8	9.8	5.6	0.6	2.4	4.8	8.2	3.5
Precipitation		0.1	14.7				0.0	32.3	3.4	50.5		24.2
Evaporation		-	-	-	-	-	-	-	-	-	-	
Growing Degrees	5	3.7	4.1	4.4	4.1	0.1	1.4	0.0	1.5	19.1	37.4	14.3
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.6

3rd 10-day period (21-28/02/2022)	Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	7.0
Precipitation - Reference Evapotranspiration	-	17.2
Number of Rainy Days	4.0	2.5
Number of Dry Days	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



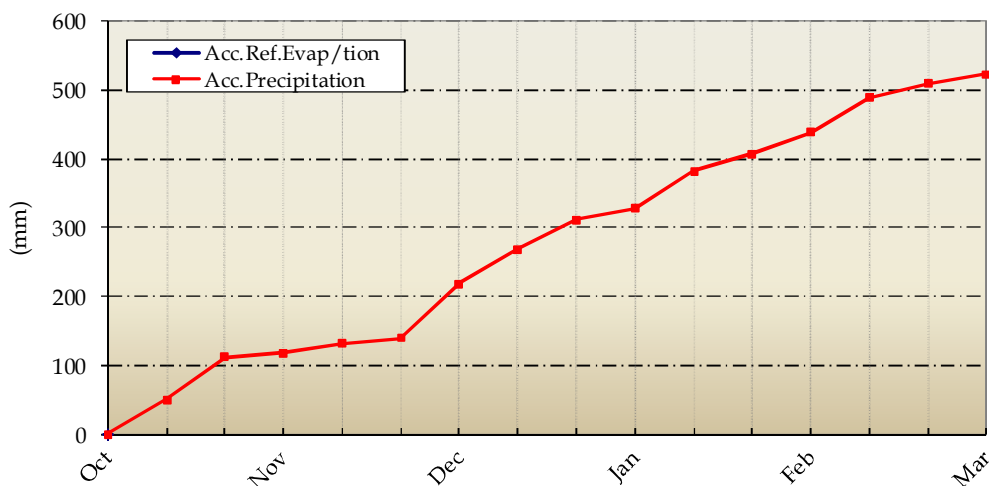
Kalamata

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	18.5	17.1	18.3	18.5	17.5	13.8	16.3	15.1	16.9	18.8	15.9
	Min	7.5	7.3	6.2	9.1	0.1	3.1	10.5	6.2	6.2	4.6	5.8
Relative Humidity	Max	97	98	93	78	93	98	97	98	94	88	92
	Min	69	54	42	27	35	65	47	54	49	36	50
Soil Temperature at 10 cm	06 UTC	12.0	12.0	11.8	11.4	10.0	10.2	11.4	11.0	11.2	10.2	10.4
	12 UTC	12.8	12.6	12.0	12.6	10.8	10.8	12.2	11.6	11.9	13.3	11.7
Sunshine Duration		6.0	5.6	4.6	9.1	10.1	2.8	5.8	2.6	5.8	9.5	4.8
Precipitation		0.0	1.1	0.1			4.7	4.7	3.2	13.8	0.3	20.5
Evaporation		-	-	-	-	-	-	-	-	-	26.2	20.5
Growing Degrees	5	8.0	7.2	7.3	8.8	3.8	3.5	8.4	5.7	52.6	53.6	42.6
	10	3.0	2.2	2.3	3.8	0.0	0.0	3.4	0.7	15.3	14.0	10.7

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	12.2
Precipitation - Reference Evapotranspiration	-	-	8.3
Number of Rainy Days	5.0	1.0	3.0
Number of Dry Days	4.0	12.0	-

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Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



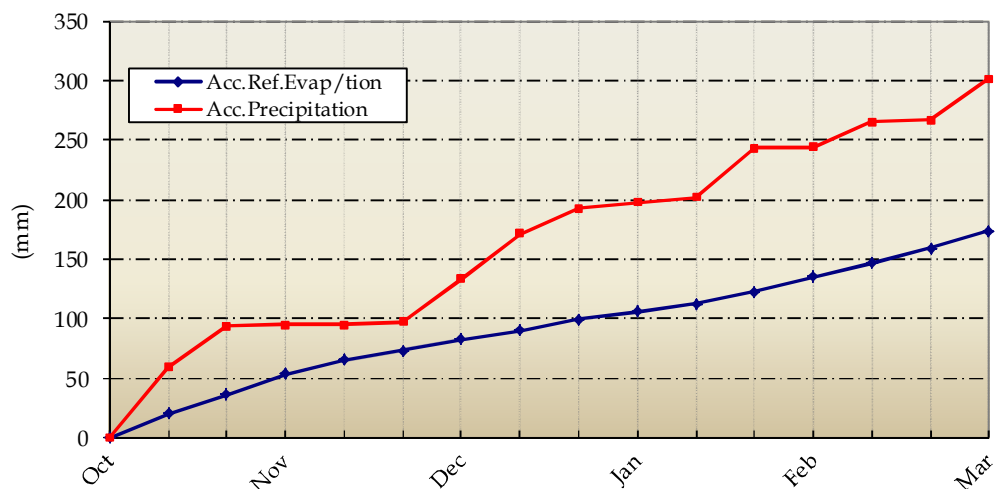
Larisa

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	20.8	17.6	13.2	13.2	14.2	14.0	11.4	9.2	14.2	15.8	13.9
	Min	2.8	6.2	7.6	3.2	-1.8	-0.6	5.8	3.6	3.4	1.8	2.7
Relative Humidity	Max	99	100	83	83	89	95	99	94	93	99	94
	Min	37	46	54	30	31	54	60	55	46	52	52
Soil Temperature at 10 cm	06 UTC	8.0	9.2	10.2	9.1	7.8	8.0	9.4	8.7	8.8	-	7.8
	12 UTC	9.8	10.8	10.2	9.2	8.2	7.8	9.6	9.0	9.3	-	8.6
Sunshine Duration		8.8	3.1	2.7	9.8	9.8	7.4	3.1	0.1	5.6	5.8	4.3
Precipitation			8.1	3.7				22.6		34.4	3.0	6.2
Evaporation		3.2	0.0	3.8	0.0	0.0	1.2	0.0	0.0	8.2	11.7	18.4
Growing Degrees	5	6.8	6.9	5.4	3.2	1.2	1.7	3.6	1.4	30.2	30.4	25.8
	10	1.8	1.9	0.4	0.0	0.0	0.0	0.0	0.0	4.1	0.7	3.7

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	14.6	11.9	12.4
Precipitation - Reference Evapotranspiration	19.8	-8.9	-6.2
Number of Rainy Days	3.0	1.0	2.2
Number of Dry Days	4.0	6.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



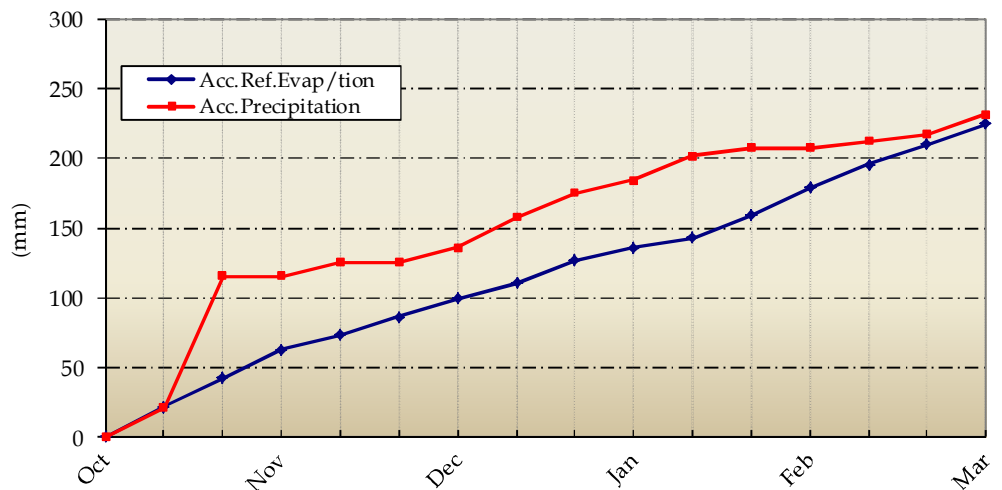
Mikra

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	17.8	15.4	12.0	14.3	13.4	12.6	9.2	9.4	13.0	16.8	12.7
	Min	3.4	6.0	8.0	7.6	0.2	2.1	4.0	5.2	4.6	4.4	4.2
Relative Humidity	Max	100	100	84	79	87	90	100	100	92	92	88
	Min	57	74	47	33	38	55	60	55	52	48	53
Soil Temperature at 10 cm	06 UTC	9.0	10.0	9.8	8.6	8.0	7.8	9.0	7.2	8.7	9.1	7.7
	12 UTC	10.4	12.0	9.8	9.6	9.2	9.2	8.0	8.2	9.6	11.2	9.9
Sunshine Duration		9.0	1.9	0.0	10.5	9.6	8.4	0.0	0.3	5.0	7.3	4.3
Precipitation			0.0	1.5				11.9	0.7	14.1	0.1	8.2
Evaporation		-	-	-	-	-	-	-	-	-	-	16.9
Growing Degrees	5	5.6	5.7	5.0	6.0	1.8	2.4	1.6	2.3	30.3	45.1	26.7
	10	0.6	0.7	0.0	1.0	0.0	0.0	0.0	0.0	2.3	6.4	3.8

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	15.1	15.8	10.4
Precipitation - Reference Evapotranspiration	-1.0	-15.7	-2.2
Number of Rainy Days	3.0	1.0	2.3
Number of Dry Days	5.0	6.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration





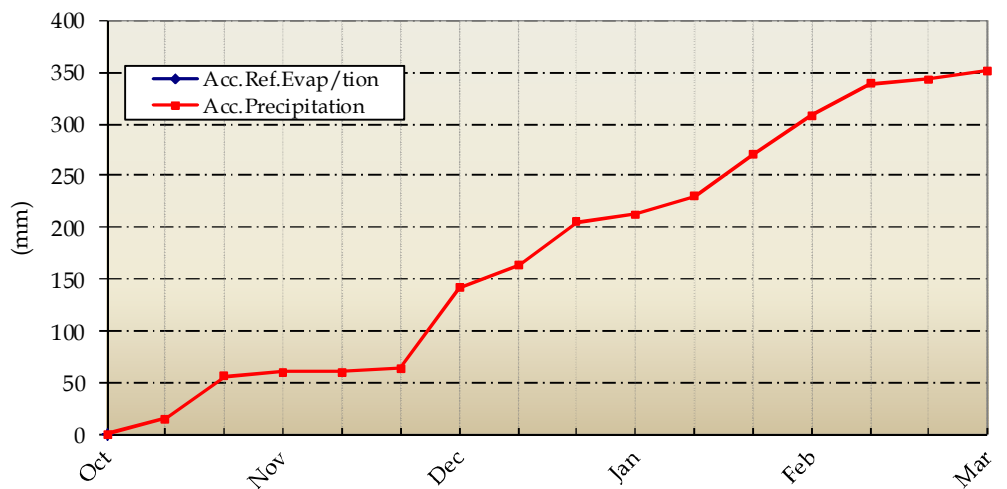
Tanagra

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	21.0	19.5	11.2	11.2	13.7	14.1	15.4	7.8	14.2	15.8	13.7
	Min	5.1	10.7	8.9	8.7	5.6	-0.1	8.4	6.8	6.8	2.9	4.3
Relative Humidity	Max	96	87	95	77	98	100	96	98	93	95	95
	Min	35	36	68	45	37	45	45	77	48	44	52
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		8.1	6.1	0.0	3.6	9.0	7.1	4.0	0.0	4.7	7.1	4.7
Precipitation			0.0	0.6	0.2			4.2	3.2	8.2	8.2	15.6
Evaporation		-	-	-	-	-	-	-	-	-	-	19.9
Growing Degrees	5	8.1	10.1	5.1	5.0	4.7	2.0	6.9	2.3	44.0	35.0	29.3
	10	3.1	5.1	0.1	0.0	0.0	0.0	1.9	0.0	10.1	2.9	6.0

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	-
Precipitation - Reference Evapotranspiration	-	-	-
Number of Rainy Days	4.0	1.0	2.7
Number of Dry Days	5.0	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



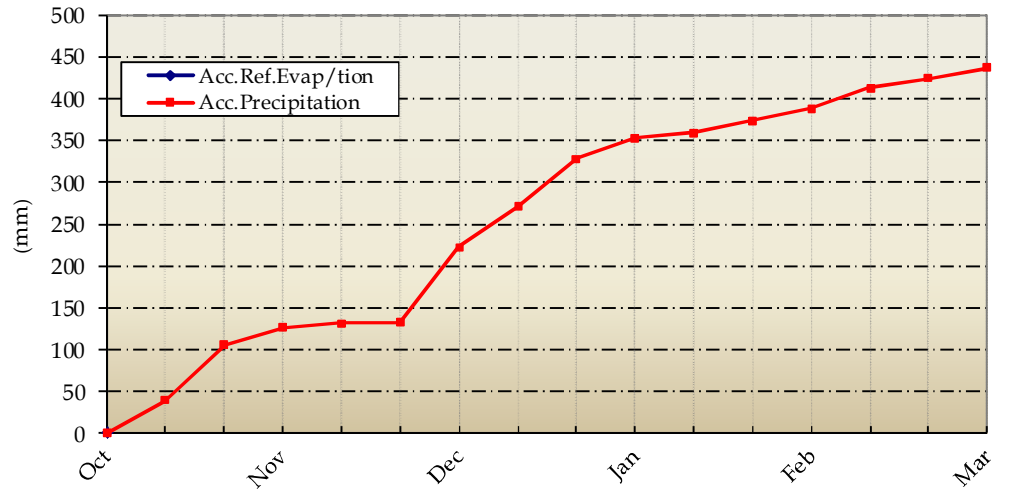
Tripoli

3rd 10-day period (21-28/02/2022)		21	22	23	24	25	26	27	28	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	16.1	12.1	11.4	10.5	14.0	11.4	9.5	8.8	11.7	16.5	11.9
	Min	4.7	8.6	3.2	1.9	-4.4	-3.2	6.2	3.2	2.5	-0.6	1.3
Relative Humidity	Max	91	96	96	92	97	98	97	95	95	90	94
	Min	41	56	60	31	28	48	58	63	48	29	51
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	5.8
	12 UTC	-	-	-	-	-	-	-	-	-	-	7.5
Sunshine Duration		7.4	5.7	5.2	8.8	9.7	3.6	4.7	1.5	5.8	8.4	5.2
Precipitation			1.6	2.0			0.2	8.5	0.5	12.8	0.2	18.2
Evaporation		-	-	-	-	-	-	-	-	-	-	22.0
Growing Degrees	5	5.4	5.4	2.3	1.2	0.0	0.0	2.9	1.0	18.1	23.7	15.9
	10	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.6	1.3

3rd 10-day period (21-28/02/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	12.4	12.1	6.3
Precipitation - Reference Evapotranspiration	0.4	-11.9	11.9
Number of Rainy Days	5.0	1.0	2.6
Number of Dry Days	4.0	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





◆ **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<sub>n</sub> 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)

**UTC (Universal Time coordinates) in Greece**

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

**Mesurements Units**

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

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ΜΕΤΕΩΡΟΛΟΓΙΚΗ  
ΥΠΗΡΕΣΙΑ

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