



AGROMETEOROLOGICAL BULLETIN

June 2022
2nd 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



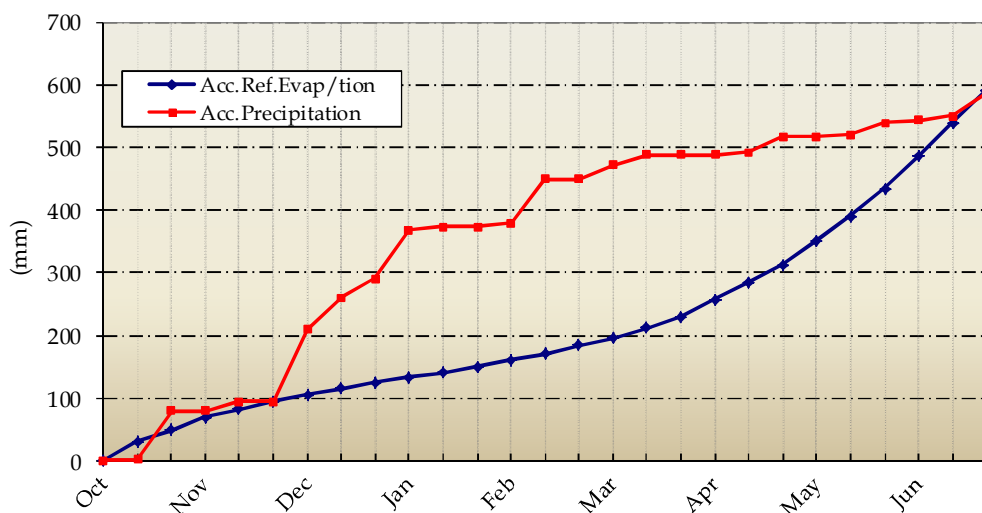
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2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	28.2	24.4	29.6	28.6	29.2	29.0	29.4	29.4	28.6	29.6	28.6	25.6	28.9
	Min	19.0	17.6	20.8	16.2	18.0	18.0	14.8	17.0	19.4	16.0	17.7	16.1	16.9
Relative Humidity	Max	84	81	84	91	88	80	90	92	76	85	85	89	84
	Min	52	52	35	48	45	35	30	43	37	33	41	49	44
Soil Temperature at 10 cm	06 UTC	24.8	24.4	23.4	24.0	22.0	22.2	21.6	22.9	23.6	23.2	23.2	21.2	23.6
	12 UTC	27.0	24.8	27.4	27.6	26.8	25.0	25.4	26.0	27.0	27.4	26.4	23.1	27.6
Sunshine Duration		6.5	0.2	10.2	7.7	9.6	13.9	13.6	13.2	13.6	12.6	10.1	7.4	10.6
Precipitation			0.4		35.1							35.5	22.1	10.5
Evaporation		6.2	6.4	7.5	10.6	7.6	7.9	12.5	9.0	9.6	8.2	85.5	49.2	81.3
Growing Degrees	5	18.6	16.0	20.2	17.4	18.6	18.5	17.1	18.2	19.0	17.8	181.4	158.4	163.3
	10	13.6	11.0	15.2	12.4	13.6	13.5	12.1	13.2	14.0	12.8	131.4	108.4	117.7

2nd 10-day period (11-20/06/2022)	Previous Year Value	Past Years Mean Value	
Reference Evapotranspiration	53.3	40.3	45.7
Precipitation - Reference Evapotranspiration	-17.8	-18.2	-35.2
Number of Rainy Days	2.0	7.0	1.4
Number of Dry Days	1.0	4.0	-

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

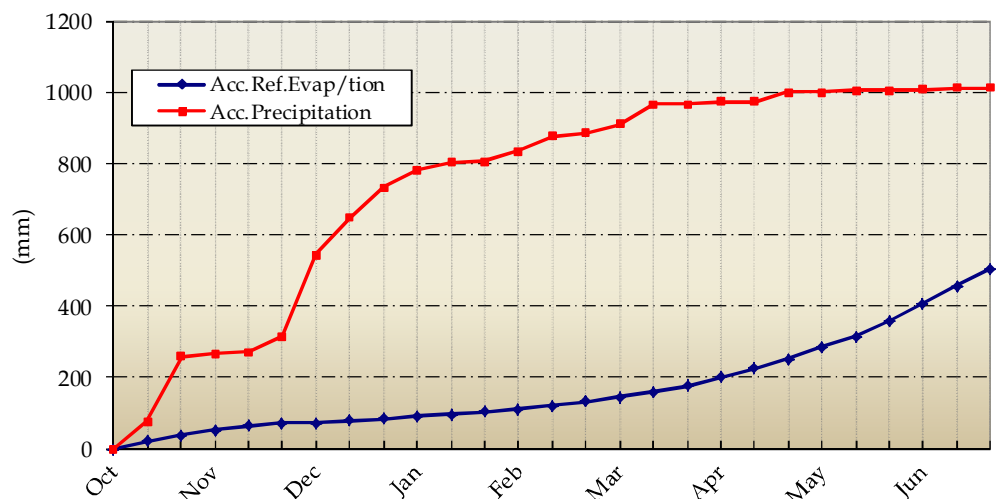


2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	26.8	29.0	31.0	30.8	30.4	31.4	30.0	31.8	30.0	28.4	30.0	28.2	28.9
	Min	18.1	17.4	17.4	17.6	18.4	18.0	17.3	20.4	19.7	18.0	18.2	16.4	17.2
Relative Humidity	Max	94	95	93	93	92	90	91	93	87	88	92	93	91
	Min	48	42	39	40	43	42	48	39	34	44	42	40	41
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	26.0	25.7
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	28.9	31.2
Sunshine Duration		11.2	13.5	8.7	12.8	9.6	9.6	13.0	11.3	9.4	13.7	11.3	13.0	11.3
Precipitation														2.4
Evaporation		-	-	-	-	-	-	-	-	-	-	-	90.8	74.6
Growing Degrees	5	17.5	18.2	19.2	19.2	19.4	19.7	18.7	21.1	19.9	18.2	191.0	173.3	149.4
	10	12.5	13.2	14.2	14.2	14.4	14.7	13.7	16.1	14.9	13.2	141.0	123.3	107.9

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	47.9	49.7	45.2
Precipitation - Reference Evapotranspiration	-47.9	-49.7	-42.8
Number of Rainy Days	0.0	0.0	0.4
Number of Dry Days	10.0	10.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

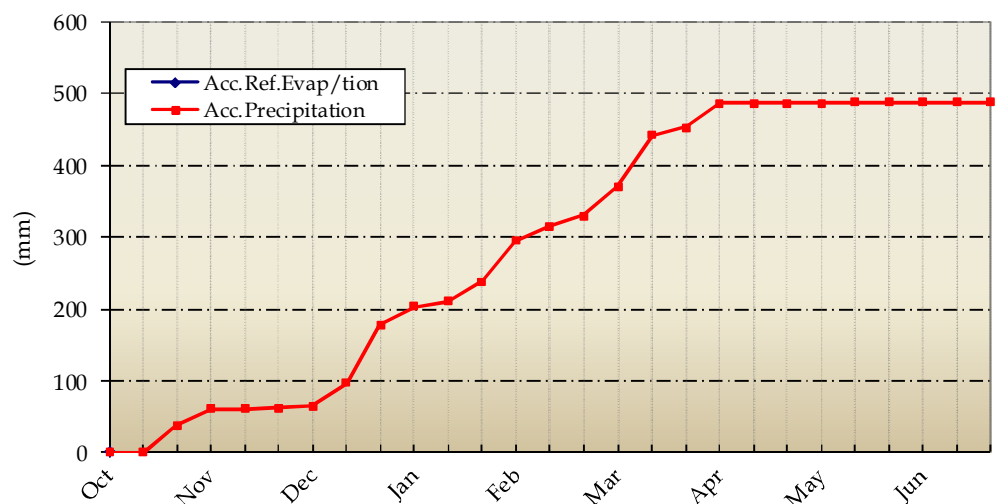


2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	26.0	25.6	26.2	27.4	26.8	26.6	26.8	27.2	25.4	26.2	26.4	25.8	27.7
	Min	22.6	20.2	22.4	23.4	21.2	20.4	19.0	19.0	22.4	18.0	20.9	17.7	20.0
Relative Humidity	Max	88	83	84	82	83	86	82	76	73	80	82	91	79
	Min	54	63	62	58	51	61	46	46	59	44	54	62	51
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		6.3	10.9	9.7	13.1	12.9	12.7	12.9	13.2	12.7	12.9	11.7	11.6	12.1
Precipitation		0.1	0.4									0.5	9.8	0.3
Evaporation		6.0	4.9	2.5	7.0	6.8	0.9	12.6	8.9	6.4	7.2	63.2	46.9	62.2
Growing Degrees	5	19.3	17.9	19.3	20.4	19.0	18.5	17.9	18.1	18.9	17.1	186.4	167.7	177.2
	10	14.3	12.9	14.3	15.4	14.0	13.5	12.9	13.1	13.9	12.1	136.4	117.7	130.1

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	
Precipitation - Reference Evapotranspiration	-	-	
Number of Rainy Days	2.0	2.0	0.2
Number of Dry Days	19.0	15.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

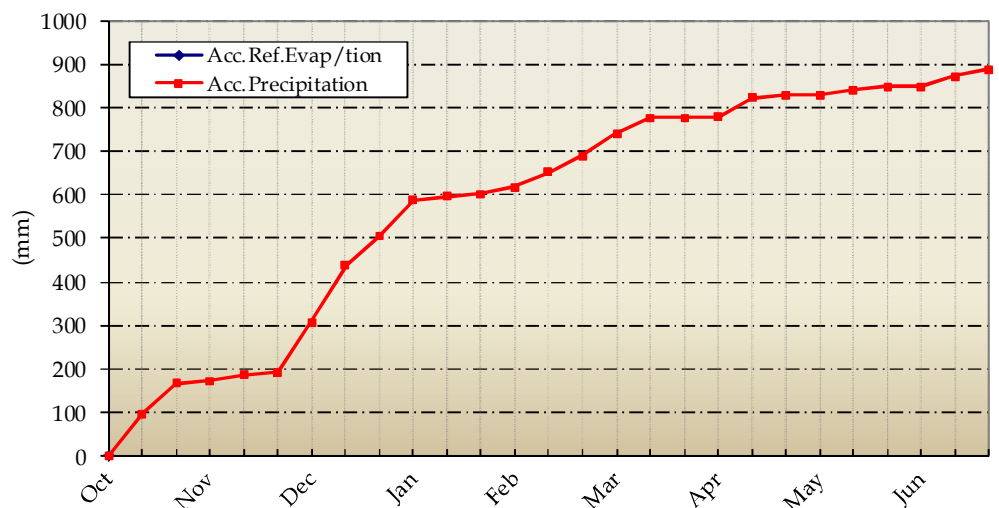


2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	23.7	29.3	29.6	29.6	28.8	28.3	29.4	29.3	27.9	28.2	28.4	26.8	28.6
	Min	12.7	12.5	17.4	13.7	10.9	14.2	12.3	14.1	20.1	10.5	13.8	11.5	13.9
Relative Humidity	Max	84	80	68	93	100	100	100	93	93	98	91	94	91
	Min	55	38	35	50	35	44	39	32	26	35	39	38	41
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	20.0
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	22.5
Sunshine Duration		5.1	9.4	7.7	6.2	6.4	5.5	5.8	9.0	9.1	13.0	7.7	9.3	9.7
Precipitation		3.0	0.1		13.1		0.0					16.2	11.2	11.4
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	
Growing Degrees	5	13.2	15.9	18.5	16.7	14.9	16.3	15.9	16.7	19.0	14.4	161.3	141.2	136.0
	10	8.2	10.9	13.5	11.7	9.9	11.3	10.9	11.7	14.0	9.4	111.3	91.2	94.1

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	39.6
Precipitation - Reference Evapotranspiration	-	-	-28.2
Number of Rainy Days	3.0	5.0	2.0
Number of Dry Days	0.0	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

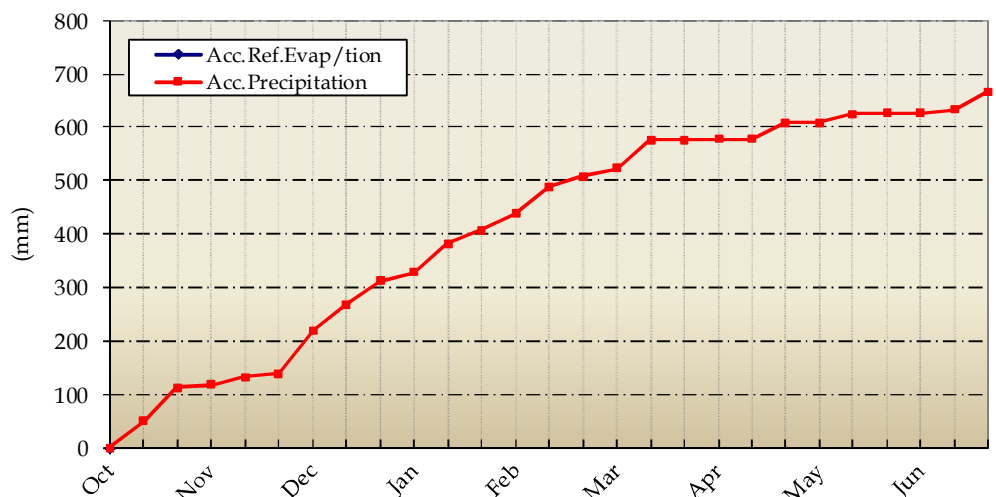


2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	27.2	28.1	27.6	31.3	30.3	30.2	29.5	28.4	30.0	29.3	29.2	27.5	29.9
	Min	15.9	16.8	17.5	18.2	16.7	17.0	16.8	19.3	16.9	15.6	17.1	15.7	16.7
Relative Humidity	Max	97	96	94	87	89	96	96	93	98	96	94	87	88
	Min	55	50	53	33	35	41	42	44	36	39	43	41	36
Soil Temperature at 10 cm	06 UTC	14.5	23.0	24.6	23.8	24.2	16.2	23.8	-	-	-	21.4	24.5	22.9
	12 UTC	26.4	26.5	26.0	27.0	27.2	32.5	-	-	-	-	27.6	27.2	26.1
Sunshine Duration		9.6	10.7	4.3	8.9	8.4	9.9	12.7	9.7	5.3	12.5	9.2	11.3	11.2
Precipitation		3.4	0.0		1.1		1.3		3.0	26.0	0.2	35.0	2.3	4.2
Evaporation		-	-	-	-	-	-	-	-	-	-	-	67.0	68.9
Growing Degrees	5	16.6	17.5	17.6	19.8	18.5	18.6	18.2	18.9	18.5	17.5	181.3	166.3	163.2
	10	11.6	12.5	12.6	14.8	13.5	13.6	13.2	13.9	13.5	12.5	131.3	116.3	118.5

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	50.5
Precipitation - Reference Evapotranspiration	-	-	-46.3
Number of Rainy Days	6.0	1.0	1.0
Number of Dry Days	0.0	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



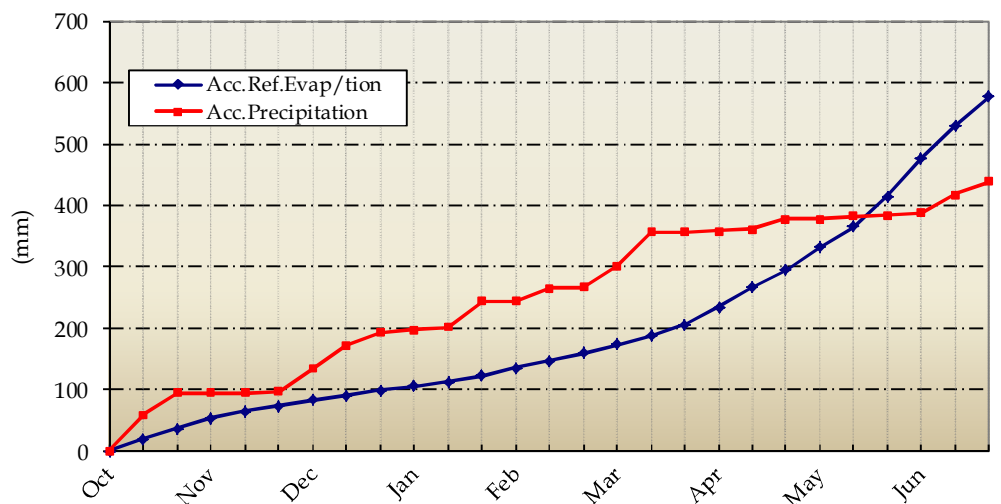
Larisa

2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	26.2	29.8	32.6	31.0	30.6	31.2	30.8	28.8	28.5	32.2	30.2	30.3	32.2
	Min	15.6	17.0	20.0	17.6	18.0	20.0	16.2	18.0	17.6	14.3	17.4	14.7	17.1
Relative Humidity	Max	100	99	90	92	95	96	100	92	94	91	95	94	83
	Min	44	39	27	35	32	56	35	39	29	24	36	29	27
Soil Temperature at 10 cm	06 UTC	22.4	23.0	24.2	24.4	24.4	25.0	23.4	24.2	23.8	23.4	23.8	-	24.4
	12 UTC	24.6	24.6	26.2	26.0	26.2	25.2	25.6	25.6	25.8	25.4	25.5	-	26.4
Sunshine Duration		5.2	7.1	10.1	4.2	9.9	3.7	8.1	3.9	9.8	10.0	7.2	7.6	10.2
Precipitation					4.1		15.3		0.9			20.3	11.2	9.1
Evaporation		2.4	10.0	7.3	9.6	8.8	1.3	10.1	6.2	9.0	9.3	74.0	69.2	95.5
Growing Degrees	5	15.9	18.4	21.3	19.3	19.3	20.6	18.5	18.4	18.1	18.3	188.0	175.1	178.2
	10	10.9	13.4	16.3	14.3	14.3	15.6	13.5	13.4	13.1	13.3	138.0	125.1	132.8

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	47.1	46.9	51.2
Precipitation - Reference Evapotranspiration	-26.8	-35.7	-42.1
Number of Rainy Days	3.0	4.0	1.6
Number of Dry Days	3.0	1.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



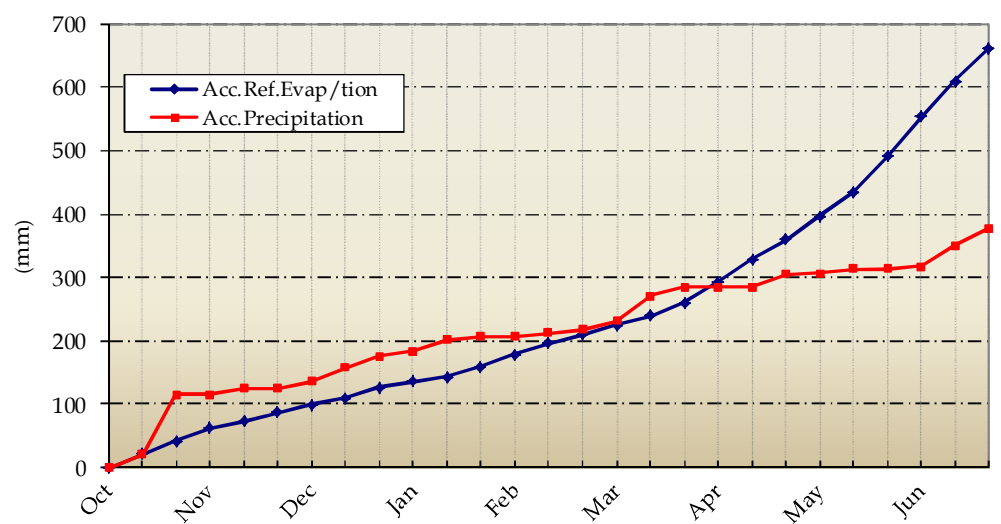
Mikra

2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	25.9	27.8	30.2	30.6	29.9	28.0	29.4	25.4	28.2	30.4	28.6	29.4	30.5
	Min	18.6	22.3	22.8	19.2	18.6	18.5	16.8	19.0	16.2	17.8	19.0	17.6	18.8
Relative Humidity	Max	100	73	94	100	97	100	100	100	95	73	93	84	77
	Min	60	47	45	39	39	51	45	58	32	32	45	38	33
Soil Temperature at 10 cm	06 UTC	23.0	22.8	23.2	23.8	22.2	24.2	23.6	23.8	22.4	22.8	23.2	23.2	25.1
	12 UTC	23.8	23.6	25.4	26.4	25.4	25.8	25.2	23.0	24.6	25.0	24.8	26.2	30.4
Sunshine Duration		7.2	3.5	9.7	7.5	13.3	8.9	13.3	0.3	8.4	13.6	8.6	9.9	10.7
Precipitation			0.2	5.3	9.9				12.6			28.0	1.4	8.1
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	86.7
Growing Degrees	5	17.3	20.1	21.5	19.9	19.3	18.3	18.1	17.2	17.2	19.1	187.8	184.8	175.7
	10	12.3	15.1	16.5	14.9	14.3	13.3	13.1	12.2	12.2	14.1	137.8	134.8	131.2

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	51.8	58.4	45.8
Precipitation - Reference Evapotranspiration	-23.8	-57.0	-37.7
Number of Rainy Days	4.0	5.0	1.5
Number of Dry Days	1.0	1.0	-

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

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



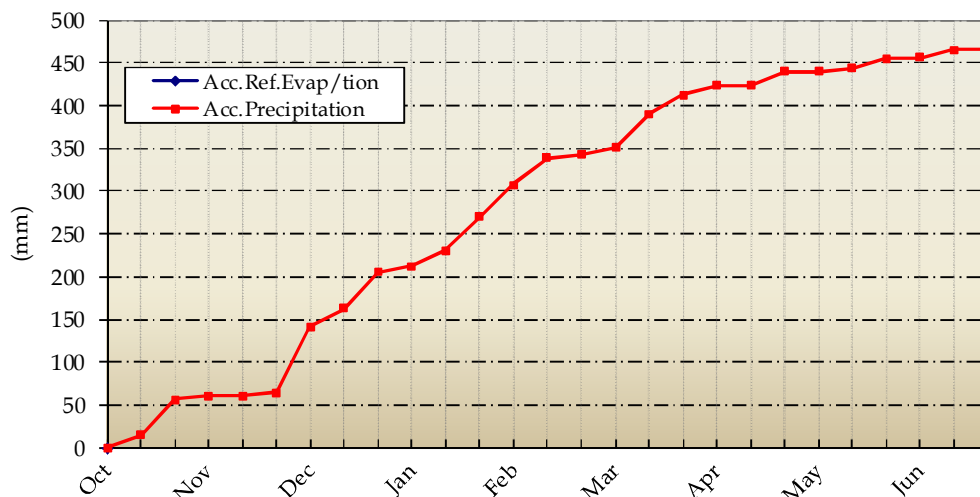
Tanagra

2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	25.8	27.6	29.2	30.9	29.5	28.9	29.4	28.1	26.9	29.4	28.6	29.2	30.7
	Min	16.9	17.8	21.5	18.8	18.6	17.4	15.8	17.6	20.4	16.6	18.1	15.7	17.3
Relative Humidity	Max	100	81	68	71	73	74	73	68	62	62	73	86	77
	Min	46	37	29	25	32	30	28	31	26	22	31	26	28
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunshine Duration		9.3	11.3	9.7	13.2	13.0	12.3	13.5	12.8	12.5	13.7	12.1	10.4	10.5
Precipitation		0.6		0.0								0.6	5.0	2.5
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	80.8
Growing Degrees	5	16.4	17.7	20.4	19.9	19.1	18.2	17.6	17.9	18.7	18.0	183.6	174.3	160.2
	10	11.4	12.7	15.4	14.9	14.1	13.2	12.6	12.9	13.7	13.0	133.6	124.3	118.2

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	-	-	
Precipitation - Reference Evapotranspiration	-	-	
Number of Rainy Days	1.0	4.0	0.8
Number of Dry Days	0.0	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



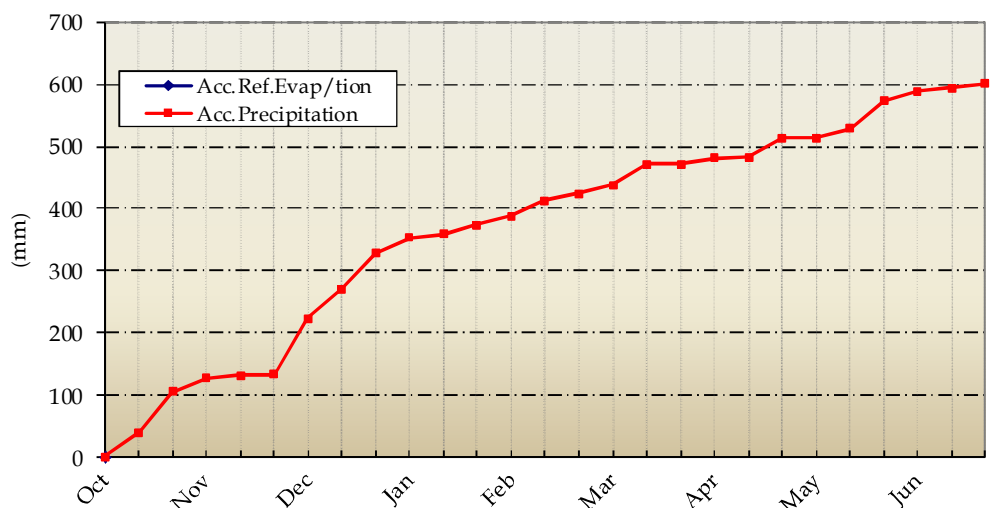
Tripoli

2nd 10-day period (11-20/06/2022)		11	12	13	14	15	16	17	18	19	20	Mean Value or Sum	Previous Year Value	Past Years Mean Value
Temperature	Max	24.4	26.1	27.1	28.7	26.4	27.5	29.5	27.6	25.3	25.9	26.8	26.0	29.0
	Min	11.0	12.5	15.1	11.2	11.5	11.2	11.1	11.7	14.7	11.4	12.1	11.4	12.4
Relative Humidity	Max	95	99	97	97	98	99	97	98	88	89	96	95	86
	Min	39	37	30	29	33	31	23	25	34	27	31	33	28
Soil Temperature at 10 cm	06 UTC	-	-	-	-	-	-	-	-	-	-	-	18.2	22.7
	12 UTC	-	-	-	-	-	-	-	-	-	-	-	27.3	27.6
Sunshine Duration		4.5	5.4	5.7	8.5	5.1	7.4	9.3	8.2	5.5	9.7	6.9	8.3	10.6
Precipitation		0.4			0.4	5.4				0.4		6.6	15.8	10.0
Evaporation		-	-	-	-	-	-	-	-	-	-	-	-	58.9
Growing Degrees	5	12.7	14.3	16.1	15.0	14.0	14.4	15.3	14.7	15.0	13.7	145.0	-	134.2
	10	7.7	9.3	11.1	10.0	9.0	9.4	10.3	9.7	10.0	8.7	95.0	-	91.4

2nd 10-day period (11-20/06/2022)		Previous Year Value	Past Years Mean Value
Reference Evapotranspiration	38.3	39.7	41.4
Precipitation - Reference Evapotranspiration	-31.7	-23.9	-31.4
Number of Rainy Days	4.0	6.0	1.5
Number of Dry Days	0.0	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 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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ΜΕΤΕΩΡΟΛΟΓΙΚΗ
ΥΠΗΡΕΣΙΑ

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The present bulletin was designed and implemented under the support of Water Resources Management Division of Agriculture University of Athens