



# AGROMETEOROLOGICAL BULLETIN

*April 2013*  
*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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*Web addresses of HNMS*  
[www.hnms.gr](http://www.hnms.gr)  
[www.emy.gov.gr](http://www.emy.gov.gr)  
[www.meteo.gov.gr](http://www.meteo.gov.gr)  
[www.meteohellas.gr](http://www.meteohellas.gr)

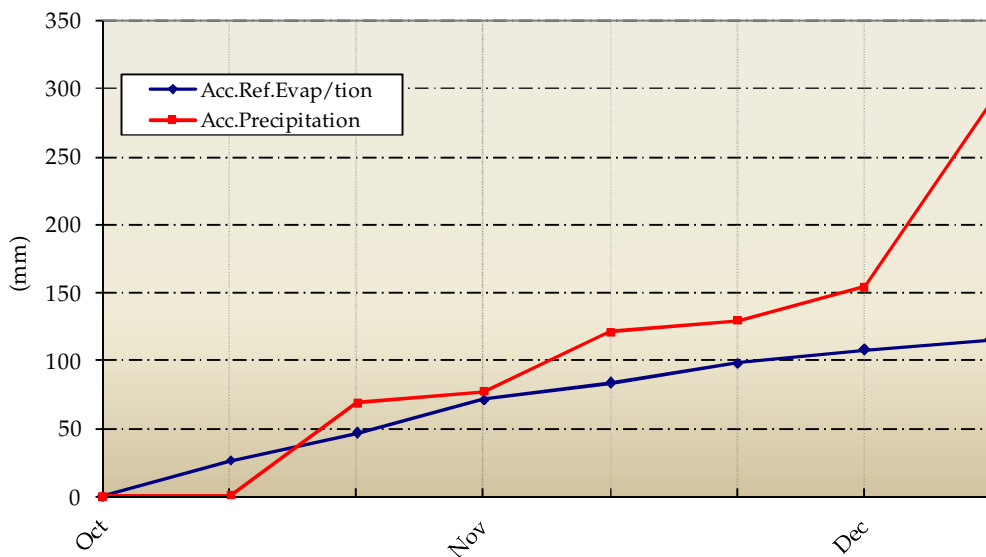
Agrinio

| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6 | 7   | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|---|-----|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | -    | -    | -    | -    | -    | - | -   | -    | -    | -    |                      | 20.6                   | 19.9                     |
|                                     | Min    | 7.8  | 11.0 | 9.6  | 10.0 | 7.0  | - | -   | 11.8 | 6.2  | 6.8  | 8.8                  | 9.6                    | 7.2                      |
| Relative Humidity                   | Max    | 100  | 91   | 97   | 97   | -    | - | 98  | 95   | 97   | 97   | 96                   | 90                     | -                        |
|                                     | Min    | 52   | 47   | 73   | 59   | -    | - | 82  | 77   | 64   | 63   | 65                   | 50                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 13.4 | 14.6 | 14.0 | 14.2 | 14.0 | - | -   | 15.4 | 12.6 | 12.8 | 13.9                 | 15.5                   | 11.8                     |
|                                     | 12 UTC | 15.4 | -    | -    | 15.8 | -    | - | -   | -    | 14.2 | -    | 15.1                 | 17.9                   | 16.3                     |
| Sunshine Duration                   |        | 8.6  | 2.2  | 4.6  | 9.6  | -    | - | -   | 0.4  | 8.4  | 10.7 | 6.4                  | 6.6                    | 6.3                      |
| Precipitation                       |        |      |      | 15.0 | 0.8  |      |   |     | 2.7  |      |      | -                    | 21.9                   | 20.5                     |
| Evaporation                         |        | 3.1  | 5.7  | 1.8  | 2.4  | -    | - | 2.4 | 2.0  | 3.2  | 4.0  | -                    | 42.4                   | 35.8                     |
| Growing Degrees                     | 5      | -    | -    | -    | -    | -    | - | -   | -    | -    | -    | -                    | 101.1                  | 85.7                     |
|                                     | 10     | -    | -    | -    | -    | -    | - | -   | -    | -    | -    | -                    | 51.6                   | 36.8                     |

| 1st 10-day period<br>(1-10/04/2013)          |     | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-----|------------------------|--------------------------|
| Reference Evapotranspiration                 | -   | 29.1                   | 26.6                     |
| Precipitation - Reference Evapotranspiration | -   | -7.2                   | -6.1                     |
| Number of Rainy Days                         | 3.0 | 6.0                    | 3.3                      |
| Number of Dry Days                           | 5.0 | 8.0                    | -                        |

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

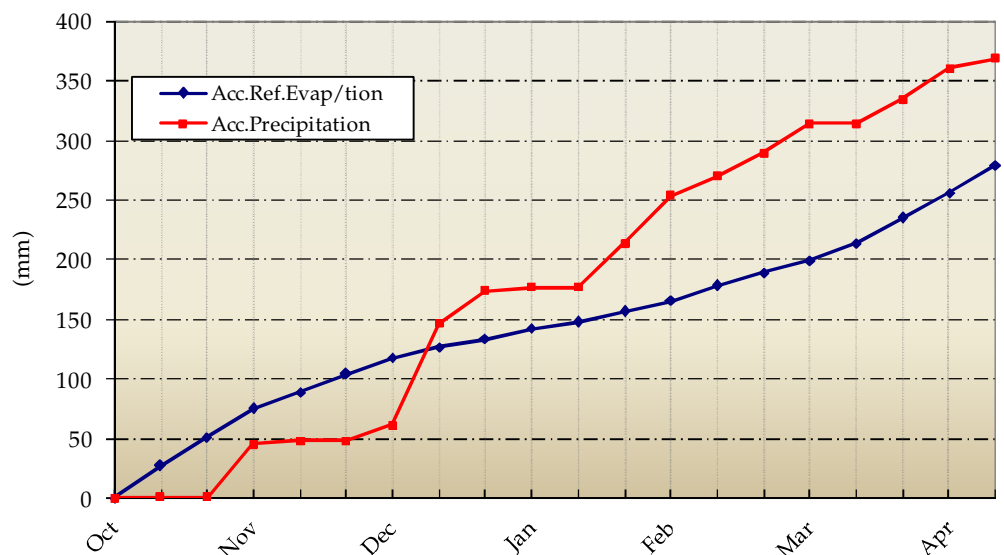
This station is not fully operated



| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 18.4 | 19.8 | 17.2 | 17.6 | 19.0 | 19.8 | 17.6 | 12.6 | 14.2 | 16.0 | 17.2                 | 16.5                   | 16.7                     |
|                                     | Min    | 11.6 | 7.8  | 13.0 | 11.0 | 8.8  | 12.8 | 12.4 | 6.6  | 6.0  | 6.4  | 9.6                  | 7.3                    | 6.5                      |
| Relative Humidity                   | Max    | 93   | 91   | 95   | 93   | 95   | 87   | 89   | 87   | 88   | 90   | 91                   | 92                     | -                        |
|                                     | Min    | 62   | 48   | 56   | 64   | 49   | 57   | 55   | 68   | 56   | 68   | 58                   | 59                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 13.2 | 12.8 | 14.8 | 13.0 | 13.0 | 14.0 | 16.0 | 12.6 | 9.0  | 11.4 | 13.0                 | 12.5                   | 10.4                     |
|                                     | 12 UTC | 17.6 | 17.0 | 15.0 | 16.2 | 16.4 | 19.4 | 17.0 | 12.0 | 12.8 | 14.0 | 15.7                 | 15.0                   | 13.5                     |
| Sunshine Duration                   |        | 10.9 | 7.7  | 0.0  | 9.1  | 6.0  | 8.4  | 0.5  | 0.0  | 3.7  | 6.4  | 5.3                  | 7.8                    | 6.1                      |
| Precipitation                       |        |      |      | 5.0  |      |      |      | 0.0  | 3.2  |      |      | 8.2                  | 19.4                   | 11.5                     |
| Evaporation                         |        | 4.9  | 3.3  | 0.0  | 2.9  | 3.6  | 4.5  | 2.2  | 2.5  | 1.4  | 1.6  | 26.9                 | 30.3                   | 34.0                     |
| Growing Degrees                     | 5      | 10.0 | 8.8  | 10.1 | 9.3  | 8.9  | 11.3 | 10.0 | 4.6  | 5.1  | 6.2  | 84.3                 | 69.1                   | 66.0                     |
|                                     | 10     | 5.0  | 3.8  | 5.1  | 4.3  | 3.9  | 6.3  | 5.0  | 0.0  | 0.1  | 1.2  | 34.7                 | 24.7                   | 21.0                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 23.3  | 25.7                   | 24.4                     |
| Precipitation - Reference Evapotranspiration | -15.1 | -6.3                   | -12.9                    |
| Number of Rainy Days                         | 2.0   | 4.0                    | 2.6                      |
| Number of Dry Days                           | 6.0   | 2.0                    | -                        |

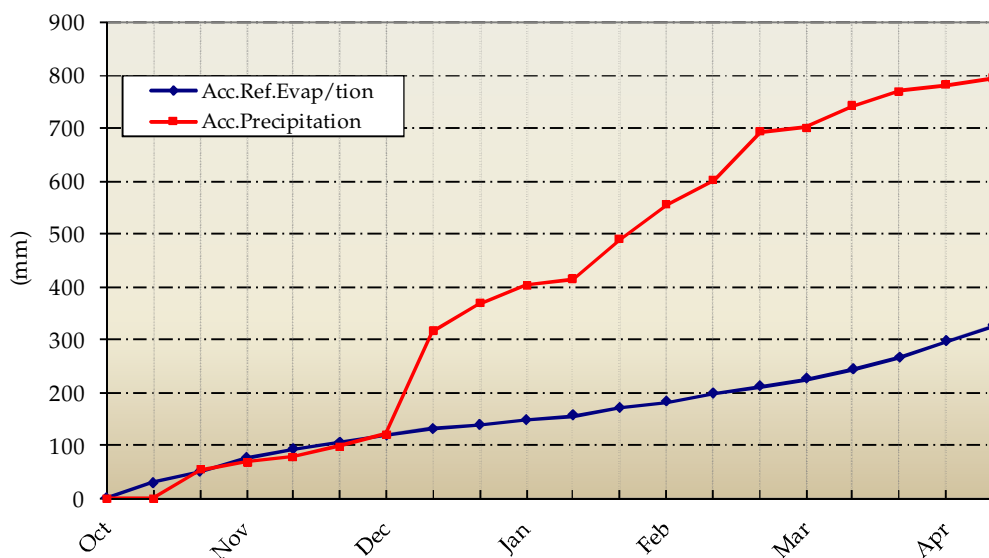
Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 20.0 | 24.3 | 18.8 | 18.4 | 24.7 | 20.0 | 19.7 | 16.9 | 18.6 | 19.6 | 20.1                 | 20.1                   | 18.6                     |
|                                     | Min    | 9.8  | 10.3 | 10.8 | 10.6 | 8.8  | 9.6  | 13.3 | 13.0 | 8.9  | 10.2 | 10.5                 | 10.9                   | 8.6                      |
| Relative Humidity                   | Max    | 92   | 89   | 90   | 89   | 87   | 84   | 92   | 84   | 90   | 91   | 89                   | 98                     | -                        |
|                                     | Min    | 48   | 32   | 59   | 53   | 17   | 60   | 55   | 59   | 59   | 53   | 50                   | 60                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 14.2 | 15.6 | 16.0 | 15.6 | 15.6 | 15.0 | 16.4 | 15.2 | 14.4 | 14.5 | 15.2                 | 15.6                   | 12.9                     |
|                                     | 12 UTC | 18.0 | 18.0 | 18.0 | 20.0 | 17.4 | 18.4 | 17.4 | 19.4 | 17.6 | 18.6 | 18.3                 | 18.8                   | 15.7                     |
| Sunshine Duration                   |        | 9.6  | 4.3  | 8.5  | 9.5  | 5.7  | 3.2  | 0.0  | 5.2  | 8.8  | 10.7 | 6.6                  | 7.1                    | 6.9                      |
| Precipitation                       |        |      | 0.1  | 1.4  |      |      |      | 3.4  | 8.6  |      |      | 13.5                 | 19.8                   | 14.7                     |
| Evaporation                         |        | 11.7 | 10.3 | 4.5  | 9.3  | 6.2  | 4.0  | -    | 2.0  | 1.2  | 4.2  | -                    | 27.4                   | 34.4                     |
| Growing Degrees                     | 5      | 9.9  | 12.3 | 9.8  | 9.5  | 11.8 | 9.8  | 11.5 | 10.0 | 8.8  | 9.9  | 103.2                | 105.2                  | 86.1                     |
|                                     | 10     | 4.9  | 7.3  | 4.8  | 4.5  | 6.8  | 4.8  | 6.5  | 5.0  | 3.8  | 4.9  | 53.2                 | 55.2                   | 36.7                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 29.7  | 28.0                   | 26.7                     |
| Precipitation - Reference Evapotranspiration | -16.2 | -8.2                   | -12.0                    |
| Number of Rainy Days                         | 4.0   | 5.0                    | 2.8                      |
| Number of Dry Days                           | 1.0   | 22.0                   | -                        |

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

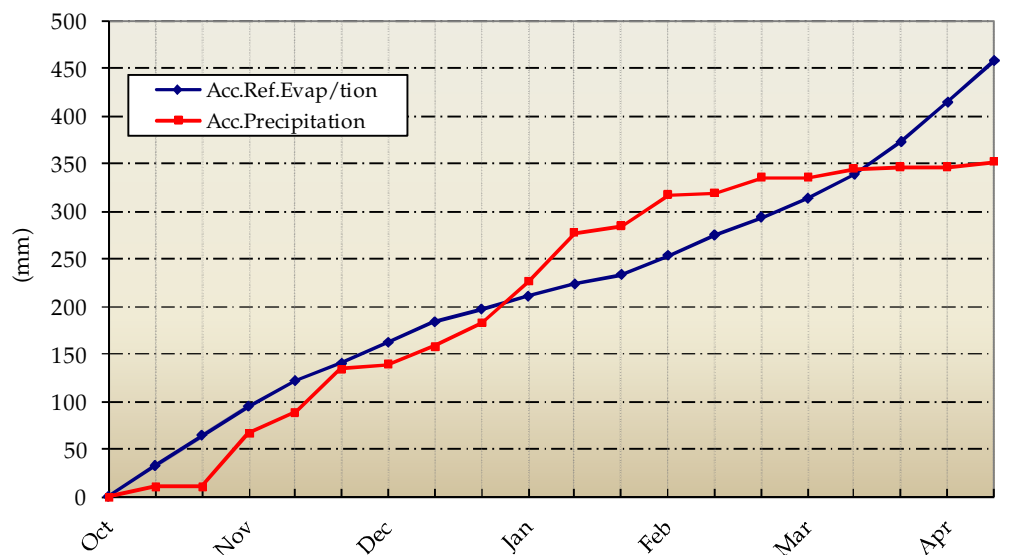


Iraklio

| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 19.0 | 24.6 | 19.0 | 20.2 | 29.0 | 30.4 | 24.6 | 19.2 | 19.2 | 19.8 | 22.5                 | -                      | 19.4                     |
|                                     | Min    | 13.8 | 11.4 | 17.4 | 13.4 | 9.0  | 19.6 | 22.6 | 13.8 | 13.8 | 11.0 | 14.6                 | -                      | 11.6                     |
| Relative Humidity                   | Max    | 89   | 72   | 88   | 69   | 87   | 37   | 82   | 82   | 77   | 87   | 77                   | -                      | -                        |
|                                     | Min    | 68   | 23   | 44   | 44   | 18   | 18   | 19   | 56   | 58   | 56   | 40                   | -                      | -                        |
| Soil Temperature at 10 cm           | 06 UTC | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -                    | -                      | -                        |
|                                     | 12 UTC | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -                    | -                      | -                        |
| Sunshine Duration                   |        | 9.5  | 5.7  | 2.7  | 10.6 | 10.2 | 7.3  | 8.7  | 3.4  | 10.3 | 11.5 | 8.0                  | -                      | 7.0                      |
| Precipitation                       |        |      |      | 4.5  |      |      |      |      | 0.9  |      |      | 5.4                  | -                      | 8.6                      |
| Evaporation                         |        | 2.0  | 7.0  | 4.1  | 3.8  | 9.9  | 13.5 | 6.7  | 3.6  | 3.1  | 2.7  | 56.4                 | -                      | 45.2                     |
| Growing Degrees                     | 5      | 11.4 | 13.0 | 13.2 | 11.8 | 14.0 | 20.0 | 18.6 | 11.5 | 11.5 | 10.4 | 135.4                | -                      | 105.0                    |
|                                     | 10     | 6.4  | 8.0  | 8.2  | 6.8  | 9.0  | 15.0 | 13.6 | 6.5  | 6.5  | 5.4  | 85.4                 | -                      | 55.0                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 43.9  | -                      | -                        |
| Precipitation - Reference Evapotranspiration | -38.5 | -                      | 8.6                      |
| Number of Rainy Days                         | 2.0   | -                      | 1.8                      |
| Number of Dry Days                           | 16.0  | -                      | -                        |

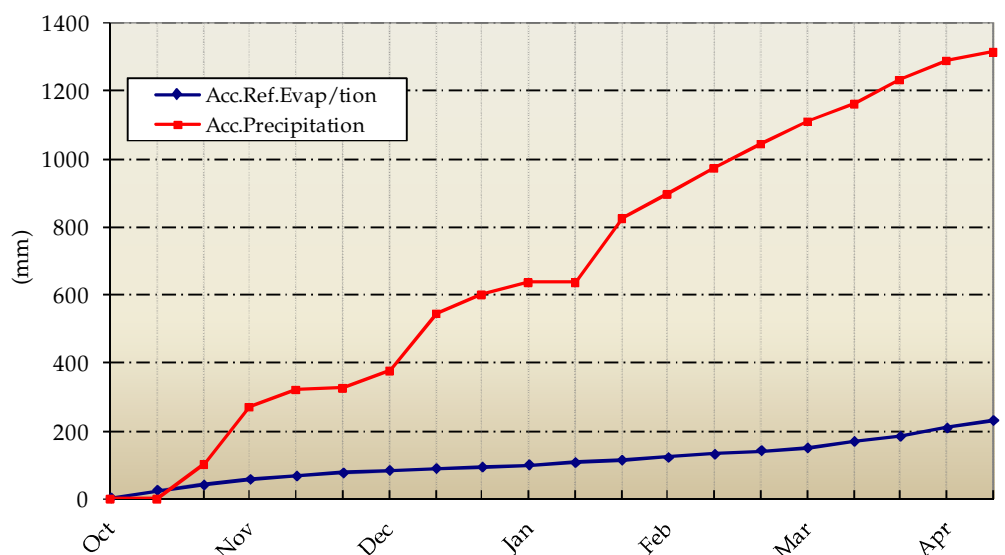
Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



| 1st 10-day period (1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value or Sum | Previous Year Value | Past Years Mean Value |
|----------------------------------|--------|------|------|------|------|------|------|------|------|------|------|-------------------|---------------------|-----------------------|
| Temperature                      | Max    | 17.2 | 15.3 | 12.2 | 17.0 | 20.0 | 21.9 | 17.0 | 14.0 | 13.0 | 14.0 | 16.2              | 16.9                | 16.8                  |
|                                  | Min    | 7.5  | 11.0 | 7.0  | 5.5  | 11.0 | 11.5 | 14.0 | 9.2  | 5.2  | 8.6  | 9.0               | 6.5                 | 5.4                   |
| Relative Humidity                | Max    | 92   | 88   | 92   | 94   | 74   | 86   | 66   | 92   | 92   | 92   | 87                | 95                  | -                     |
|                                  | Min    | 35   | 52   | 78   | 41   | 26   | 47   | 43   | 72   | 66   | 57   | 52                | 51                  | -                     |
| Soil Temperature at 10 cm        | 06 UTC | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -                 | -                   | 9.2                   |
|                                  | 12 UTC | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -                 | -                   | 12.3                  |
| Sunshine Duration                |        | 7.3  | 0.0  | 0.7  | 7.4  | 1.6  | 7.2  | 0.0  | 0.0  | 1.0  | 2.6  | 2.8               | 4.1                 | 5.1                   |
| Precipitation                    |        |      | 2.4  | 21.9 | 0.1  |      |      |      | 0.5  |      |      | 24.9              | 56.9                | 25.7                  |
| Evaporation                      |        | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -                 | -                   | 24.5                  |
| Growing Degrees                  | 5      | 7.4  | 8.2  | 4.6  | 6.3  | 10.5 | 11.7 | 10.5 | 6.6  | 4.1  | 6.3  | 76.1              | 67.1                | 60.9                  |
|                                  | 10     | 2.4  | 3.2  | 0.0  | 1.3  | 5.5  | 6.7  | 5.5  | 1.6  | 0.0  | 1.3  | 27.4              | 20.2                | 17.6                  |

| 1st 10-day period (1-10/04/2013)             |      | Previous Year Value | Past Years Mean Value |
|--|------|---------------------|-----------------------|
| Reference Evapotranspiration                 | 21.9 | 21.7                | 22.5                  |
| Precipitation - Reference Evapotranspiration | 3.0  | 35.2                | 3.2                   |
| Number of Rainy Days                         | 4.0  | 6.0                 | 4.1                   |
| Number of Dry Days                           | 1.0  | 23.0                | -                     |

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration

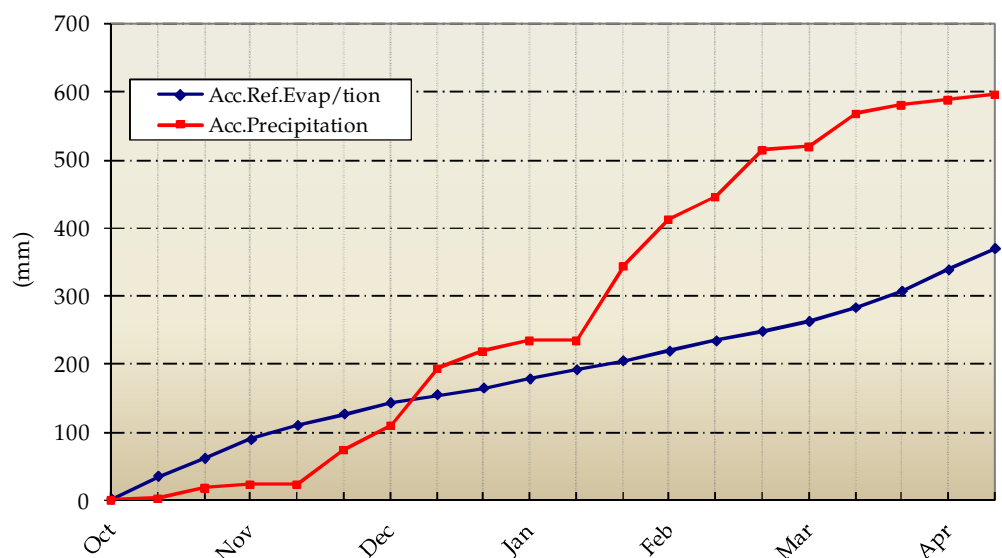


Kalamata

| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 21.2 | 22.0 | 19.3 | 21.2 | 20.8 | 21.2 | 25.0 | 19.2 | 18.8 | 19.4 | 20.8                 | 21.0                   | 19.3                     |
|                                     | Min    | 8.5  | 8.5  | 12.5 | 10.8 | 6.4  | 10.0 | 14.2 | 12.6 | 7.9  | 6.8  | 9.8                  | 9.5                    | 8.0                      |
| Relative Humidity                   | Max    | 94   | 91   | 89   | 91   | 92   | 93   | 93   | 93   | 93   | 94   | 92                   | 91                     | -                        |
|                                     | Min    | 39   | 45   | 47   | 37   | 42   | 38   | 19   | 50   | 52   | 57   | 43                   | 49                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 14.6 | 14.8 | 15.6 | 15.0 | 13.8 | 14.4 | 15.8 | 15.6 | 13.6 | 14.0 | 14.7                 | 14.7                   | 12.9                     |
|                                     | 12 UTC | 16.2 | 15.6 | 16.2 | 16.6 | 16.6 | 16.6 | 17.4 | 16.6 | 17.2 | 17.6 | 16.7                 | 16.7                   | 15.8                     |
| Sunshine Duration                   |        | 10.5 | 4.0  | 4.5  | 10.4 | 6.9  | 0.6  | 3.6  | 4.6  | 8.4  | 11.2 | 6.5                  | 8.6                    | 6.7                      |
| Precipitation                       |        |      |      | 0.3  |      |      |      | 0.1  | 7.2  |      |      | 7.6                  | 32.3                   | 16.3                     |
| Evaporation                         |        | 3.0  | 2.4  | 1.2  | 6.2  | 4.0  | 4.8  | 2.4  | 1.6  | 4.4  | 4.0  | 34.0                 | 46.2                   | 37.8                     |
| Growing Degrees                     | 5      | 9.9  | 10.3 | 10.9 | 11.0 | 8.6  | 10.6 | 14.6 | 10.9 | 8.4  | 8.1  | 103.2                | 102.2                  | 86.4                     |
|                                     | 10     | 4.9  | 5.3  | 5.9  | 6.0  | 3.6  | 5.6  | 9.6  | 5.9  | 3.4  | 3.1  | 53.2                 | 52.2                   | 36.8                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 31.6  | 32.7                   | 28.3                     |
| Precipitation - Reference Evapotranspiration | -24.0 | -0.4                   | -12.0                    |
| Number of Rainy Days                         | 3.0   | 3.0                    | 2.8                      |
| Number of Dry Days                           | 7.0   | 10.0                   | -                        |

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



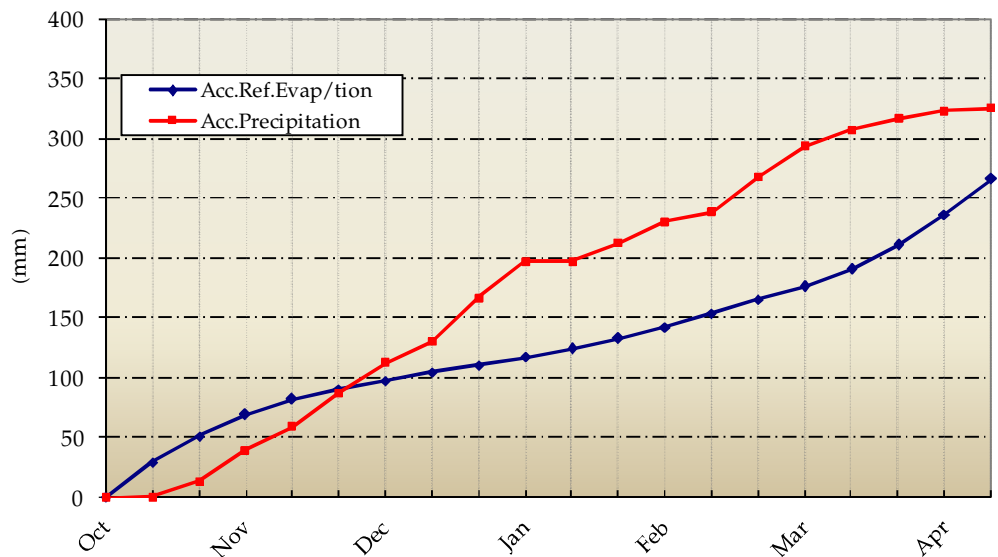


Larisa

| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 21.2 | 19.4 | 20.4 | 22.4 | 22.8 | 24.5 | 17.4 | 14.6 | 18.5 | 21.4 | 20.3                 | 18.5                   | 19.4                     |
|                                     | Min    | 5.1  | 8.1  | 11.2 | 8.4  | 7.4  | 8.0  | 13.8 | 10.3 | 8.1  | 4.6  | 8.5                  | 7.6                    | 5.6                      |
| Relative Humidity                   | Max    | 98   | 88   | 98   | 80   | 90   | 92   | 95   | 98   | 100  | 100  | 94                   | 91                     | -                        |
|                                     | Min    | 29   | 47   | 40   | 26   | 41   | 36   | 58   | 56   | 54   | 35   | 42                   | 48                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 12.0 | 12.8 | 13.6 | 13.8 | 13.2 | 11.6 | 15.0 | 14.0 | 13.4 | 12.4 | 13.2                 | 12.7                   | 11.7                     |
|                                     | 12 UTC | 13.8 | 13.8 | 15.4 | 14.2 | 14.6 | 13.8 | 15.2 | 14.6 | 15.2 | 13.6 | 14.4                 | 14.4                   | 13.1                     |
| Sunshine Duration                   |        | 9.5  | 1.7  | 7.1  | 11.3 | 1.9  | 8.4  | 0.4  | 0.0  | 6.7  | 7.7  | 5.5                  | 6.1                    | 6.6                      |
| Precipitation                       |        |      | 0.3  | 0.5  |      |      |      | 0.4  | 0.6  | 0.3  |      | 2.1                  | 23.3                   | 12.2                     |
| Evaporation                         |        | 5.2  | 1.5  | 1.6  | 10.1 | 1.0  | 6.5  | 3.1  | 2.4  | 3.1  | 3.1  | 37.6                 | 33.0                   | 32.3                     |
| Growing Degrees                     | 5      | 8.2  | 8.8  | 10.8 | 10.4 | 10.1 | 11.3 | 10.6 | 7.5  | 8.3  | 8.0  | 93.8                 | -                      | 75.0                     |
|                                     | 10     | 3.2  | 3.8  | 5.8  | 5.4  | 5.1  | 6.3  | 5.6  | 2.5  | 3.3  | 3.0  | 43.8                 | -                      | 27.5                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 29.4  | 27.1                   | 26.4                     |
| Precipitation - Reference Evapotranspiration | -27.3 | -3.8                   | -14.2                    |
| Number of Rainy Days                         | 5.0   | 4.0                    | 2.6                      |
| Number of Dry Days                           | 1.0   | 21.0                   | -                        |

Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



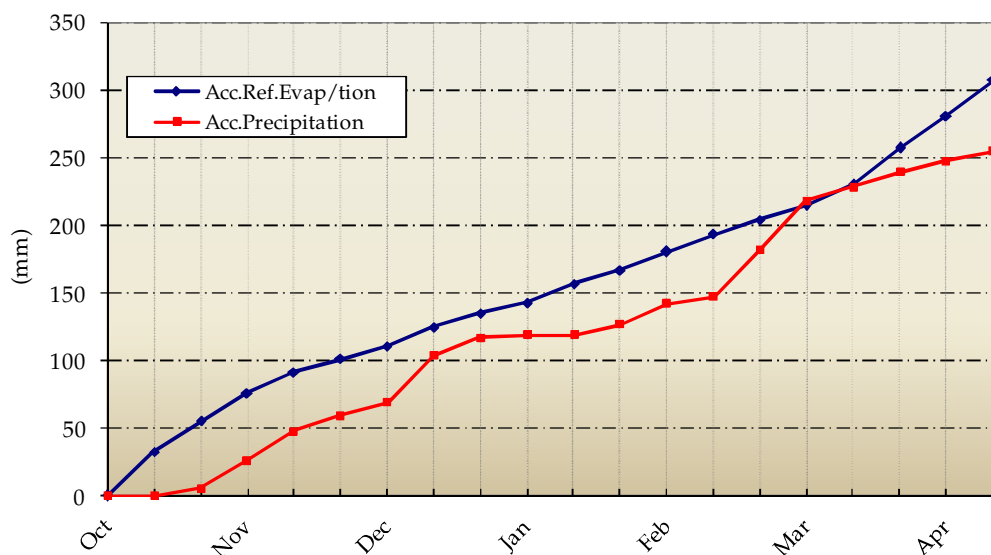


Mikra

| 1st 10-day period<br>(1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value<br>or Sum | Previous Year<br>Value | Past Years<br>Mean Value |
|-------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|----------------------|------------------------|--------------------------|
| Temperature                         | Max    | 20.9 | 15.9 | 18.6 | 21.0 | 21.6 | 21.4 | 17.8 | 15.4 | 16.0 | 17.8 | 18.6                 | 17.2                   | 18.4                     |
|                                     | Min    | 6.7  | 8.0  | 12.8 | 6.3  | 8.6  | 7.5  | 13.0 | 10.2 | 9.0  | 6.9  | 8.9                  | 8.2                    | 7.0                      |
| Relative Humidity                   | Max    | 94   | 89   | 92   | 90   | 89   | 89   | 88   | 90   | 91   | 90   | 90                   | 87                     | -                        |
|                                     | Min    | 30   | 62   | 48   | 33   | 39   | 54   | 54   | 61   | 59   | 56   | 50                   | 52                     | -                        |
| Soil Temperature at 10 cm           | 06 UTC | 12.0 | 12.8 | 13.2 | 13.0 | 13.4 | 13.4 | 14.8 | 13.4 | 12.2 | 13.0 | 13.1                 | 12.6                   | 11.4                     |
|                                     | 12 UTC | 15.8 | 13.8 | 15.0 | 15.0 | 15.2 | 15.8 | 15.4 | 14.2 | 14.4 | 15.5 | 15.0                 | 15.0                   | 15.3                     |
| Sunshine Duration                   |        | 11.0 | 1.4  | 5.7  | 11.3 | 4.0  | 7.7  | 0.0  | 0.0  | 5.2  | 7.5  | 5.4                  | 4.4                    | 6.4                      |
| Precipitation                       |        |      | 0.6  | 1.8  |      |      |      | 1.4  | 1.4  | 1.3  |      | 6.5                  | 30.9                   | 12.7                     |
| Evaporation                         |        | 4.7  | 2.6  | 1.0  | 2.0  | 6.2  | 1.4  | 2.1  | 0.6  | 1.2  | 5.2  | 27.0                 | 23.8                   | 39.9                     |
| Growing Degrees                     | 5      | 8.8  | 7.0  | 10.7 | 8.7  | 10.1 | 9.5  | 10.4 | 7.8  | 7.5  | 7.4  | 87.7                 | 76.8                   | 77.2                     |
|                                     | 10     | 3.8  | 2.0  | 5.7  | 3.7  | 5.1  | 4.5  | 5.4  | 2.8  | 2.5  | 2.4  | 37.7                 | 26.9                   | 28.9                     |

| 1st 10-day period<br>(1-10/04/2013)          |       | Previous Year<br>Value | Past Years<br>Mean Value |
|--|-------|------------------------|--------------------------|
| Reference Evapotranspiration                 | 26.3  | 25.6                   | 26.8                     |
| Precipitation - Reference Evapotranspiration | -19.8 | 5.3                    | -14.1                    |
| Number of Rainy Days                         | 5.0   | 6.0                    | 2.5                      |
| Number of Dry Days                           | 1.0   | 22.0                   | -                        |

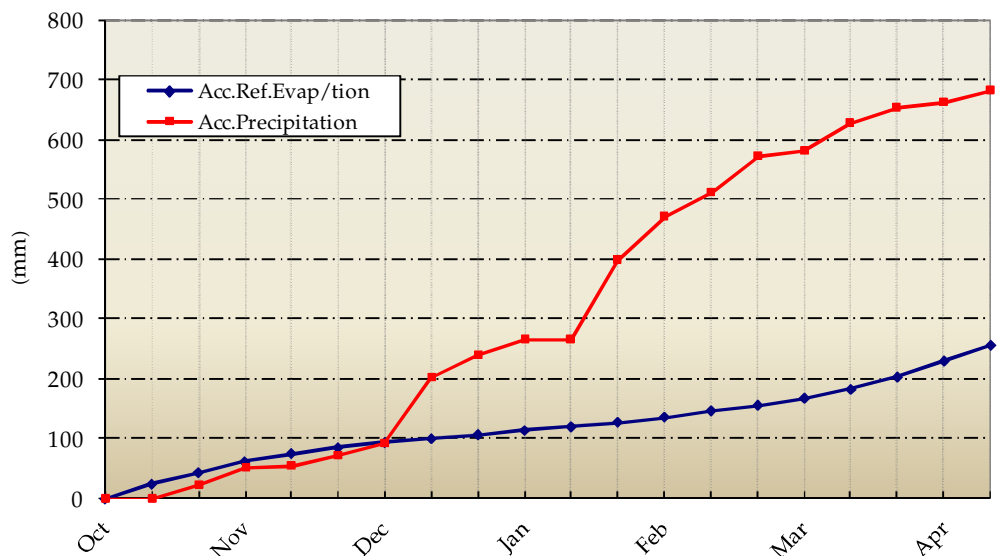
Diagram of Accumulated Precipitation and Accumulated Reference Evapotranspiration



| 1st 10-day period (1-10/04/2013) |        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Mean Value or Sum | Previous Year Value | Past Years Mean Value |
|----------------------------------|--------|------|------|------|------|------|------|------|------|------|------|-------------------|---------------------|-----------------------|
| Temperature                      | Max    | 17.5 | 18.2 | 15.2 | 16.8 | 21.3 | 21.5 | 16.4 | 13.3 | 15.2 | 18.4 | 17.4              | 17.8                | 17.1                  |
|                                  | Min    | 2.9  | 3.6  | 9.2  | 7.9  | 2.0  | 5.3  | 8.6  | 8.6  | 4.2  | 2.5  | 5.5               | 5.7                 | 4.3                   |
| Relative Humidity                | Max    | 92   | 94   | 73   | 68   | 94   | 81   | 95   | 93   | 91   | 95   | 88                | 91                  | -                     |
|                                  | Min    | 27   | 39   | 49   | 38   | 23   | 34   | 62   | 54   | 45   | 33   | 40                | 36                  | -                     |
| Soil Temperature at 10 cm        | 06 UTC | 10.6 | 10.8 | 12.2 | 10.8 | 10.0 | 11.6 | 13.0 | 11.8 | 10.0 | 8.6  | 10.9              | -                   | 9.5                   |
|                                  | 12 UTC | 16.0 | 15.0 | 14.2 | 14.6 | 15.2 | 15.2 | 12.0 | 14.2 | 14.6 | 16.4 | 14.7              | -                   | 11.3                  |
| Sunshine Duration                |        | 10.4 | 7.6  | 3.6  | 11.1 | 5.8  | 3.4  | 3.1  | 3.4  | 4.2  | 11.2 | 6.4               | -                   | 6.6                   |
| Precipitation                    |        |      |      | 3.7  | 0.2  |      |      | 12.4 | 4.3  |      |      | 20.6              | 18.2                | 17.3                  |
| Evaporation                      |        | 3.5  | 3.2  | 1.5  | 2.0  | 3.7  | 2.4  | 4.6  | 1.0  | 2.4  | 2.8  | 27.1              | -                   | 26.4                  |
| Growing Degrees                  | 5      | 5.2  | 5.9  | 7.2  | 7.4  | 6.7  | 8.4  | 7.5  | 6.0  | 4.7  | 5.5  | 64.3              | 67.5                | 57.4                  |
|                                  | 10     | 0.2  | 0.9  | 2.2  | 2.4  | 1.7  | 3.4  | 2.5  | 1.0  | 0.0  | 0.5  | 14.6              | 23.7                | 16.1                  |

| 1st 10-day period (1-10/04/2013)             |      | Previous Year Value | Past Years Mean Value |
|--|------|---------------------|-----------------------|
| Reference Evapotranspiration                 | 26.3 | 29.5                | 26.6                  |
| Precipitation - Reference Evapotranspiration | -5.7 | -11.3               | -9.3                  |
| Number of Rainy Days                         | 4.0  | 3.0                 | 3.3                   |
| Number of Dry Days                           | 6.0  | 8.0                 | -                     |

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.

**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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**ΕΘΝΙΚΗ  
ΜΕΤΕΩΡΟΛΟΓΙΚΗ  
ΥΠΗΡΕΣΙΑ**

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