

Climate Monitoring from North-Africa

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RA I North African RCC Network

| | | Highly | | | | |
|----------|---------|-----------------------|------------------|-----------------------------|--|--|
| | LRF | Climate Monitoring | Data Services | Training | d functions | |
| Lead | Morocco | Algeria | Libya | Egypt and Tunisia | Morocco | |
| Co- Lead | Egypt | Tunisia | Morocco | Algeria | Algeria, Egypt, Libya, Tunisia | |



RCC _Climate Monitoring (Products)

- The National Institute of meteorology of Tunisia (NIM) as a co-lead of the function of Climate Monitoring for Regional Climate Centre Region I (North Africa) is called to perform climate diagnostics including analysis of climate variability and extremes.

- The first products which will be further developed in the years to come are available on the website : <u>http://www.meteo.tn/htmlen/donnees/climatemonitoring.php</u>

Products are based on the following data:

- Temperature and precipitation: observed data of 81 stations available in the area from the National Climatic Data Center (NCDC).





Climate Monitoring Monthly bulletin (October 2014)

Temperature

- •In October 2014, it was warmer than normal over the most of North African region.
- •Monthly mean total precipitation was below normal over most of the region.
- •Maps of the Standardized Precipitation Index (SPI) (SPI October 2014
- (1month and 3 months)) show the region was around normal over the month.



Climate Monitoring Monthly bulletin (October 2014)

Precipitation

The negative anomalies, ranging between 0-95%, were observed in Libya, the south of Tunisia, the major part of Algeria and in all of Morocco. It was above normal in the eastern Egypt, the north of Tunisia, and the extreme northeast of Algeria.



Climate Monitoring Monthly bulletin (October 2014)



Drought

The drought in the region during the month of October 2014 was noticed using the Standardized Precipitation Index (SPI) for scales 1 month and 3 months.

Maps of the Standardized Precipitation Index (SPI October 2014 scales 1 month and 3 months) show that the complete region was near normal over the month.

Climate Monitoring

Extremes Values

The following indices are given for many stations of region:

- **PX**: highest 24 hours total (in mm)
- **D0.5:** No. of days with precipitation >0.5mm/day(in days)
- **Pxcdd**: No. of successive days with precipitation <0.5mm/day
- TN: lowest mean minimum temperature (° C)
- TNN: lowest absolute minimum temperature (°C),
- TX: highest mean maximum temperature (°C)
- TXX: highest absolute maximum temperature (°C)

Climate Monitoring

Extremes Values (Summer 2014)

| WMO | | | | | - | PYIA | DV54 | PP10 | DD20 |
|--------|--------------------|---------|----------|---------|----------|------|------|--------|--------|
| Nº Nº | Station | TX (°C) | TXX (°C) | TN (°C) | TNN (°C) | (mm) | (mm) | (days) | (days) |
| 60710 | TABARKA | 30.7 | 43.4 | 19.1 | 12.0 | 6 | 7 | 0 | 0 |
| 607140 | BIZERTE | 31.8 | 41.3 | 19.5 | 12.3 | 1 | 1 | 0 | 0 |
| 60715 | TUNIS-CARTHAGE | 33.8 | 42.8 | 21.3 | 14.5 | 4 | 4 | 0 | 0 |
| 607200 | KELIBIA | 30.1 | 34.0 | 21.7 | 16.8 | 2 | 3 | 0 | 0 |
| 60725 | JENDOUBA | 35.3 | 44.8 | 20.1 | 11.2 | 9 | 9 | Ð | 0 |
| 60735 | KAIROUAN | 36.5 | 46.1 | 22.2 | 15.5 | 20 | 21 | 2 | 0 |
| 607380 | THALA | 30.4 | 39.0 | 17.9 | 11.5 | 21 | 24 | 2 | 1 |
| 607400 | MONASTIR-SKANES | 31.8 | 44.7 | 22.9 | 15.9 | 22 | 24 | 1 | 1 |
| 60745 | GAFSA | 37.5 | 45.6 | 22.2 | 13.8 | 7 | 7 | 0 | 0 |
| 60748 | SIDI BOUZID | 36.6 | 43.7 | 20.2 | 14.8 | 20 | 20 | 1 | 1 |
| 60760 | TOZEUR | 38.1 | 45.4 | 25.4 | 17.5 | 58 | 58 | 1 | 1 |
| 607690 | DJERBA MELLITA | 32.5 | 42.8 | 23.6 | 18.0 | 12 | 12 | 1 | 0 |
| 60780 | EL BORMA | 41.6 | 48.4 | 25.5 | 15.3 | 2 | 2 | 0 | 0 |
| 601010 | TANGER (AERODROME) | 27.5 | 36.3 | 17.3 | 4.0 | 8 | 11 | 0 | 0 |
| 60105 | LARACHE | 26.9 | 39.8 | 18.1 | 13.2 | 9 | 18 | 0 | 0 |
| 601070 | AL HOCEIMA | 28.5 | 36.5 | 19.7 | 13.4 | 17 | 19 | 1 | 0 |
| 601150 | OUJDA | 32.9 | 43.0 | 17.9 | 12.3 | 8 | 8 | 0 | 0 |
| 601270 | TAZA | 35.2 | 43.7 | 20.4 | 15.5 | 7 | 7 | 0 | 0 |
| 601350 | RABAT-SALE | 26.0 | 31.2 | 15.7 | 9.7 | 1 | 1 | 0 | 0 |
| 601410 | FES-SAIS | 33.0 | 42.1 | 16.5 | 11.5 | 6 | 6 | θ | 0 |
| 601500 | MEKNES | 31.4 | 40.3 | 16.0 | 9.0 | 2 | 2 | θ | 0 |
| 60155 | CASABLANCA | 25,5 | 30.5 | 19.8 | 15.6 | 3 | 4 | 0 | 0 |
| 60156 | NOUASSEUR | 28.6 | 38.0 | 17.7 | 11.7 | 1 | 1 | 0 | 0 |
| 605490 | MECHERIA | 35.4 | 41.1 | 19.2 | 6.5 | 5 | 5 | | 0 |
| 60555 | TOUGGOURT | 41.3 | 48.8 | 26.2 | 20.8 | 0 | 0 | 0 | 0 |
| 605590 | EL-OUED | 40.4 | 48.0 | 25.5 | 16.0 | 1 | 1 | 0 | 0 |
| 605600 | AIN-SEFRA | 36.8 | 41.7 | 21.1 | 10.3 | 10 | 10 | 0 | 0 |
| 605666 | GHARDAIA | 40.4 | 46.6 | 27.0 | 15.8 | 1 | 2 | 0 | 0 |
| 605710 | BECHAR | 39.2 | 44.3 | 25.8 | 14.0 | 0 | 0 | 0 | 0 |
| 605800 | OUARGLA | 42.9 | 50,4 | 27.0 | 17.0 | 2 | 2 | 0 | 0 |
| 605810 | HASSI-MESSAOUD | 42.5 | 49.9 | 27.4 | 16.5 | 0 | 1 | 0 | 0 |
| 605900 | EL-GOLEA | 41.5 | 47.0 | 25.9 | 15.5 | 3 | 3 | 0 | 0 |