Republic of the Philippines
Department of Science and Technology
Philippine Atmospheric, Geophysical and Astronomical Services Administration Climatology and Agrometeorology Division

CLIMATE AND AGROMET DATA SECTION
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## CLIMATOLOGICAL NORMALS

STATION: PORT AREA (MCO), MANILA
PERIOD: 1991-2020

LATITUDE: $\mathbf{1 4}^{\circ} \mathbf{3 5}{ }^{\prime} 13.10^{\prime \prime} \mathrm{N}$
LONGITUDE: $\mathbf{1 2 0}^{\circ} 58^{\prime} 43.44^{\prime \prime} \mathrm{E}$ ELEVATION: 15m

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16a) | (16b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RAINFALL |  | TEMPERATURE |  |  |  |  |  | VAPOR PRESS. (mbs) | $\begin{aligned} & \text { RH } \\ & \text { (\%) } \end{aligned}$ | $\begin{aligned} & \text { MSLP } \\ & \text { (mbs) } \end{aligned}$ | WIND |  | CLOUD AMT. (okta) | NO. OF DAYS W/ |  |
| MONTH | AMOUNT (mm) | NO. OF RD | MAX <br> ( ${ }^{\circ} \mathrm{C}$ ) | MIN ( $\left.{ }^{\circ} \mathrm{C}\right)$ | MEAN <br> ( $\left.{ }^{\circ} \mathrm{C}\right)$ | DRY BULB ( ${ }^{\circ} \mathrm{C}$ ) | WET BULB ( ${ }^{\circ} \mathrm{C}$ ) | DEW POINT ( ${ }^{\circ} \mathrm{C}$ ) |  |  |  | DIR $(16 \mathrm{pt})$ | $\begin{gathered} \text { SPD } \\ (\mathrm{mps}) \end{gathered}$ |  | TSTM | LTNG |
| JAN | 19.4 | 4 | 29.9 | 23.9 | 26.9 | 26.8 | 22.9 | 21.3 | 25.4 | 72 | 1012.5 | WSW | 2 | 7 | 1 | 0 |
| FEB | 21.9 | 3 | 30.7 | 24.3 | 27.5 | 27.3 | 22.9 | 21.2 | 25.2 | 70 | 1012.5 | WSW | 3 | 6 | 1 | 0 |
| MAR | 21.8 | 3 | 32.1 | 25.3 | 28.7 | 28.5 | 23.7 | 21.8 | 26.2 | 67 | 1011.7 | WSW | 3 | 6 | 1 | 0 |
| APR | 23.4 | 3 | 33.8 | 26.7 | 30.3 | 30.1 | 24.9 | 23.0 | 28.1 | 66 | 1010.4 | WSW | 3 | 6 | 2 | 1 |
| MAY | 159.1 | 9 | 33.6 | 27.0 | 30.3 | 30.2 | 25.9 | 24.5 | 30.7 | 72 | 1008.8 | SW | 3 | 6 | 8 | 5 |
| JUN | 253.3 | 14 | 32.8 | 26.5 | 29.7 | 29.5 | 26.0 | 24.9 | 31.4 | 76 | 1008.3 | SW | 3 | 7 | 10 | 6 |
| JUL | 432.3 | 19 | 31.5 | 25.9 | 28.7 | 28.5 | 25.7 | 24.8 | 31.3 | 80 | 1007.7 | SW | 3 | 7 | 10 | 5 |
| AUG | 476.1 | 19 | 31.0 | 25.9 | 28.5 | 28.3 | 25.8 | 24.9 | 31.5 | 82 | 1007.5 | SW | 3 | 7 | 10 | 5 |
| SEP | 396.4 | 18 | 31.2 | 25.7 | 28.4 | 28.3 | 25.6 | 24.8 | 31.2 | 81 | 1008.2 | SW | 3 | 7 | 10 | 4 |
| OCT | 220.6 | 14 | 31.4 | 25.7 | 28.6 | 28.5 | 25.2 | 24.1 | 30.0 | 77 | 1009.0 | SW | 3 | 7 | 6 | 3 |
| NOV | 119.9 | 10 | 31.3 | 25.3 | 28.3 | 28.2 | 24.6 | 23.3 | 28.6 | 75 | 1010.2 | N | 3 | 7 | 2 | 1 |
| DEC | 98.5 | 8 | 30.3 | 24.6 | 27.4 | 27.3 | 23.7 | 22.4 | 27.1 | 75 | 1011.3 | N | 3 | 7 | 1 | 0 |
| ANNUAL | 2,242.7 | 124 | 31.6 | 25.6 | 28.6 | 28.5 | 24.7 | 23.4 | 28.9 | 74 | 1009.8 | SW | 3 | 7 | 62 | 30 |

Definition of Terms:

## Climatological Normals

- Period averages computed for a uniform and relative long period comprising at least three (3) consecutive10-year period.

Rainfall Amount (column 2)

- The amount of precipitation (rain, hail, etc.) expressed in millimeters depth of the layer of the water which has fallen.

Number of Rainy Days (column 3)

- A rainy day is defined as a period of 24 hours beginning at 8 AM to 8 AM of the next day during which at least 1 mm of rain is recorded

Maximum Temperature (column 4)

- The maximum temperature in ${ }^{\circ} \mathrm{C}$ recorded for the day, usually occurring in the early afternoon.

Minimum Temperature (column 5)

- The minimum temperature in ${ }^{\circ} \mathrm{C}$ recorded for the day, usually occurring during early hours of the morning (before sunrise).

Mean Temperature (column 6)

- The average of the maximum and minimum temperature in ${ }^{\circ} \mathrm{C}$ recorded for the day. Mean Temperature $=$ Maximum + Minimum $/ 2$

Dry Bulb Temperature (column 7)

- It gives the air temperature in ${ }^{\circ} \mathrm{C}$ at the time of observation.

Wet Bulb Temperature (column 8)

- It gives the temperature in ${ }^{\circ} \mathrm{C}$ that an air parcel would have if cooled adiabatically to saturation at constant pressure by evaporating water in it.

Dew Point Temperature (column 9)

- The temperature in ${ }^{\circ} \mathrm{C}$ at a given pressure, to which the air must be cooled to become saturated. It is the temperature when atmospheric moisture begins to condense to liquid forming "dew" upon objects.
Vapor Pressure (column10)
- Denotes the partial pressure of water vapor in atmosphere in millibars (mbs). As the water evaporates, additional water vapor is introduced into space above and pressure increases slightly as the new vapor is added. The increasing pressure is due to an increase in the partial pressure of water vapor.
Relative Humidity (column 11)
- The ratio of the amount of water vapor actually in the air to the maximum amount the air can hold at that temperature.

Mean Sea Level Pressure (column 12)

- The force exerted by the weight of the atmosphere on a unit area at mean sea level. It is also the atmospheric pressure at mean sea level measured in millibars.

Prevailing Winds (column 13 \& 14)

- The prevailing wind direction expressed using the 16 compass points which is most frequently observed during a given period while the average wind speed in meters per second is the arithmetic average of the observed wind speed.
Cloud Amount (column 15)
- The amount of cloud present in the sky, expressed in oktas of the sky cover. Okta is the function used in denoting cloud amount and is equal to $1 / 8$ of the whole sky. Days with Thunderstorm (column 16a)
- A thunderstorm day is defined as an observational day during which thunder is recorded at the station.

Days with Lightning (column 16b)

- A day with lightning is reported whenever lightning is observed.
(SGD.)
MA. ELENA V. TAN
OIC, CADS
(SGD.)
THELMA A. CINCO
Chief, CAD

