# Monthly Weather Summary in Thailand February 2019

In February 2019, the high pressure area from China periodically extended its ridge to cover upper Thailand in addition with the prevailing of the northeast monsoon over southern Thailand and the Gulf of Thailand during the first half of the month and southeasterly wind prevailed over upper Thailand almost the month. Moreover, the westerly trough moved through the northern part for few days. These caused cool weather in the morning over Thailand and cold weather in upper northern part whereas cool weather in some areas for the central and eastern parts. During late month, the heat low pressure cell covered upper Thailand accompanied with the monsoon have changed to the easterly and southeasterly wind over Thailand caused temperature increasing over Thailand and continuously hot weather in several areas that considered as the beginning of the 2019 hot season on February 21. Monthly mean temperature over Thailand was 1.5 °C, above normal. For rainfall, most parts of the country got less rain than normal whereas northern and northeastern parts was higher than normal 26% and 15%, respectively affected by thunderstorm with heavy to very heavy rainfall was reported during the middle and the end of the month. Monthly rainfall was above normal i.e. northern part 2.7 mm (26%) and northeastern part 2.7 mm (15%) while it was below normal in central parts 5.7 mm (46%), eastern part 11.4 mm (39%), southern part (east coast) 19.1 mm (55%) and southern part (west coast) 19.4 mm (71%). The details are as follows:

1–10 February: Under the ridge of moderate high pressure area covered northern part, northeastern part and the South China Sea on the first day of the period and later weakened associated with westerly wind blew into the northern and upper northeastern parts and southeasterly wind prevailed over lower northeastern, central and eastern parts during the middle and the end of the period. Moreover, the weak northeast monsoon prevailed over the Gulf of Thailand and the south throughout the period. These caused cold weather nearly the whole areas in the upper northern part whereas general cool weather with cold weather in some areas of northeastern part during the first half of the period after that temperature increased while cool weather was present in several areas for the rest parts. The minimum temperature of the period was 9.5 °C at Thung Chang in Nan province on February 9. In the mountainous areas and mountaintops, the weather was cold to very cold and temperature climbed down to 3.1 °C at Doi Inthanon in Chiang Mai province on February 9. For rainfall, there was rainfall in some areas of upper Thailand for few days except for isolated rain in eastern part with heavy rainfall in some areas mainly in the lower coastal areas and the maximum daily rainfall of 98.4 millimeter at Amphoe Ko Kut in Trat procvince on February 4. While isolated to scattered rain was found in southern part with heavy rainfall in some areas during the first half of the period. The highest daily rainfall was 88.4 millimeter at Amphoe Bacho in Narathiwat province on February 2.

11-20 February: The moderate high pressure area from China extended its ridge to cover upper Thailand and the South China Sea during early period and later weakened coupled with the prevailing of the southerly and southeasterly wind over upper Thailand and westerly trough moved through the northern and upper northeastern parts during mid-period. The weather in the northern and northeastern parts remained cool in the morning with cold in some areas of upper northern part and cool in some areas in central and eastern parts. The lowest minimum temperature was 12.1 °C at Amphoe Thung Chang in Nan province on February 12 and dropped to 3.4 °C in areas of mountain top at Kew Mae Pan, Chom Thong in Chiang Mai province on February 11. During daytime, temperature was increased nearly the whole areas. For rainfall, scanty rainfall was found in upper Thailand with heavy rainfall in some areas except for during mid-period that scattered to fairly widespread rain with heavy rainfall in some areas of

northern and northeastern parts. The highest daily rainfall was 84.7 millimeter at Amphoe Lan Drabue in Kamphaeng Phet province on February 11. For southern Thailand, generally cool weather nearly the whole period and isolated to scattered rain was found during early period and last period that effected by the prevailing of the northeast monsoon over the Gulf of Thailand and southern part during the first half of the period after that the easterly wind prevailed over the mentioned areas. The maximum daily rainfall was 50.0 millimeter at Amphoe Mai Kaen in Pattani province on February 19.

21-28 February: Affected by the heat low pressure cell covered upper Thailand since midperiod. In addition, the southerly and southeasterly wind prevailed over upper Thailand throughout the period and the westerly wind effected over the upper northern part during early period and mid-period furthermore the easterly wind prevailed over the Gulf of Thailand and southern part almost the period. By the way, the high pressure areas from China extended it ridge to cover upper northeastern part and the South China Sea on February 25 and 26. The weather in the northern and northeastern parts remained cool in the morning with cold in some areas of upper northern part. The lowest minimum temperature was 11.8 °C at Amphoe Mae Sariang in Mae Hong Son province on February 21 and dropped to 3.0 °C in areas of mountain top at Kew Mae Pan, Chom Thong in Chiang Mai province on February 21. During daytime, hot weather nearly the whole areas of the upper Thailand and the highest maximum temperature was 39.7 °C at Amphoe Thoen in Lampang province on February 24. For rainfall, there was rainfall in upper Thailand during the second half of the period especially northern and northeastern parts that isolated to scattered rain. The maximum daily rainfall in upper Thailand was 97.0 millimeter at Amphoe Phu Wiang in Khon Kaen province on February 26. Thundershower occurred at Kamphaeng Phet, Phetchabun, Ubon Ratchathani, Nong Khai, Chatyaphum and Lop Buri provinces and hail was reported at Loei, Nakhon Phanom, Udon Thani and Khon Kaen provinces on February 25. In southern part, isolated light rain for few days along east coast. The highest daily rainfall was 11.4 millimeter at Amphoe Waeng in Narathiwat province on February 21.

Note: Rainfall, temperatures and natural disasters in this report were updated up to March 5, 2019.

Climate Center Meteorological Development Division Meteorological Department

#### Monthly Current Report Rainfall and Accumulative Rainfall February 2019

#### Northern Thailand

|                | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|----------------|------------------|----------|---------------|----------|--|----------|
| Station        |                  | Above    |               | Above    |  | Above    |
|                | Mean             | or below | Actual        | or below | Actual                                     | or below |
|                |                  | normal   |               | normal   |  | normal   |
| Chiang Rai     | 23.2             | 1.6      | 0.0           | -13.8    | 65.1                                       | 43.8     |
| Mae Hong Son   | 22.9             | 0.3      | 0.0           | -6.0     | 55.4                                       | 43.0     |
| Phayao         | 23.3             | 0.5      | 0.0           | -9.2     | 30.8                                       | 15.9     |
| Chiang Mai     | 25.3             | 1.4      | 0.0           | -8.9     | 67.8                                       | 54.7     |
| Tha Wang Pha   | 23.8             | 1.3      | 2.6           | -6.4     | 25.9                                       | 9.9      |
| Nan            | 25.1             | 1.5      | 3.3           | -8.6     | 92.5                                       | 76.2     |
| Lamphun        | 24.7             | 0.4      | 0.0           | -4.9     | 38.6                                       | 30.9     |
| Lampang        | 25.9             | 1.2      | 9.6           | 0.8      | 36.5                                       | 24.9     |
| Mae Sariang    | 22.7             | 0.5      | 0.0           | -6.5     | 46.7                                       | 38.7     |
| Phrae          | 26.0             | 1.4      | 6.9           | -1.9     | 39.6                                       | 25.0     |
| Uttaradit      | 27.5             | 1.4      | 5.4           | -9.1     | 11.0                                       | -9.0     |
| Bhumibol Dam   | 28.0             | 1.3      | 0.0           | -6.9     | 8.5  | -1.0     |
| Tak            | 28.6             | 1.3      | 0.0           | -8.7     | 14.3                                       | 3.5      |
| Mae Sot        | 26.0             | 1.5      | 0.0           | -8.2     | 32.0                                       | 22.1     |
| Umphang        | 23.2             | 1.6      | 15.9          | 6.8      | 18.2                                       | 2.3      |
| Phitsanulok    | 27.5             | 0.5      | 94.5          | 81.0     | 114.7                                      | 97.3     |
| Lom Sak        | 27.5             | 1.6      | 42.9          | 25.8     | 42.9                                       | 21.0     |
| Phetchabun     | 28.2             | 1.7      | 33.6          | 17.5     | 33.6                                       | 11.9     |
| Wichian Buri   | 29.2             | 1.7      | 17.2          | 4.6      | 17.2                                       | -3.1     |
| Kamphaeng Phet | 28.3             | 1.5      | 30.3          | 17.2     | 33.0                                       | 17.6     |
| Over the area  | 25.8             | 1.2      | 13.1          | 2.7      | 41.2                                       | 26.2     |
|                |                  |          |               | 26%      |  | 175%     |

#### Northeastern Thailand

|                   | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|-------------------|------------------|----------|---------------|----------|--|----------|
| Station           |                  | Above    |               | Above    |  | Above    |
|                   | Mean             | or below | Actual        | or below | Actual                                     | or below |
|                   |                  | normal   |               | normal   |  | normal   |
| Nong Khai         | 27.6             | 2.7      | 64.6          | 47.3     | 64.6                                       | 39.0     |
| Loei              | 26.0             | 1.8      | 27.5          | 11.4     | 27.5                                       | 5.2      |
| Udon Thani        | 27.3             | 2.0      | 55.2          | 33.2     | 55.2                                       | 26.9     |
| Nakhon Phanom     | 27.5             | 3.1      | 20.8          | -10.2    | 20.8                                       | -13.2    |
| Sakon Nakhon      | 27.3             | 2.9      | 19.7          | -9.6     | 19.7                                       | -14.3    |
| Mukdahan          | 28.4             | 3.5      | 70.1          | 52.7     | 70.1                                       | 49.0     |
| Khon Kaen         | 28.7             | 2.8      | 13.9          | -7.5     | 13.9                                       | -11.5    |
| Kosum Phisai      | 28.9             | 3.1      | 26.9          | 11.9     | 26.9                                       | 8.4      |
| Roi Et            | 29.1             | 3.4      | 10.8          | -8.4     | 10.8                                       | -12.0    |
| Chaiyaphum        | 29.6             | 2.9      | 1.5           | -12.8    | 1.5  | -17.3    |
| Ubon Ratchathani  | 29.4             | 2.9      | 0.0           | -15.4    | 0.0  | -17.4    |
| Tha Tum           | 28.8             | 2.6      | 2.1           | -14.0    | 2.1  | -19.1    |
| Surin             | 29.6             | 3.0      | 7.5           | -4.0     | 7.5  | -9.6     |
| Nakhon Ratchasima | 29.8             | 2.9      | 13.3          | -2.8     | 13.3                                       | -11.0    |
| Chok Chai         | 29.4             | 2.9      | 1.0           | -13.8    | 1.0  | -17.8    |
| Nang Rong         | 29.0             | 2.6      | 3.8           | -15.8    | 3.8  | -20.5    |
| Over the area     | 28.5             | 2.8      | 21.2          | 2.7      | 21.2                                       | -2.1     |
|                   |                  |          |               | 15%      |  | -9%      |

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

2) "T" is trace, rainfall amount less than 0.1 mm.

3) "blank" is incomplete data.

4) Temperature and rainfall are preliminary data.

## Monthly Current Report Rainfall and Accumulative Rainfall February 2019

#### Central Thailand

|                    | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|--------------------|------------------|----------|---------------|----------|--|----------|
| Station            |                  | Above    |               | Above    |  | Above    |
|                    | Mean             | or below | Actual        | or below | Actual                                     | or below |
|                    |                  | normal   |               | normal   |  | normal   |
| Nakhon Sawan       | 29.6             | 1.5      | 41.7          | 29.8     | 41.7                                       | 25.5     |
| Bua Chum           | 29.4             | 2.0      | 4.2           | -4.9     | 4.2  | -11.6    |
| Lop Buri           | 29.4             | 1.3      | 2.5           | -4.4     | 2.5  | -10.1    |
| Suphan Buri        | 29.2             | 1.8      | 0.0           | -6.9     | 0.8  | -9.8     |
| Thong Pha Phum     | 28.5             | 1.7      | 0.2           | -16.2    | 1.6  | -20.2    |
| Kanchanaburi       | 29.8             | 1.8      | 4.2           | -14.0    | 13.3                                       | -8.2     |
| Bangkok Airport    | 29.7             | 1.4      | 0.0           | -9.0     | 0.8  | -19.6    |
| Bangkok Metropolis | 29.5             | 1.2      | 0.0           | -20.0    | 1.1  | -32.2    |
| Over the area      | 29.4             | 1.6      | 6.6           | -5.7     | 8.3  | -10.7    |
|                    |                  |          |               | -46%     |  | -56%     |

#### Eastern Thailand

|               | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|---------------|------------------|----------|---------------|----------|--|----------|
| Station       |                  | Above    |               | Above    |  | Above    |
|               | Mean             | or below | Actual        | or below | Actual                                     | or below |
|               |                  | normal   |               | normal   |  | normal   |
| Prachin Buri  | 30.1             | 1.9      | 0.8           | -15.0    | 0.8  | -22.7    |
| Kabin Buri    | 29.3             | 1.5      | 13.4          | -11.5    | 13.4                                       | -20.5    |
| Aranyaprathet | 30.2             | 2.0      | 0.1           | -27.5    | 0.1  | -32.9    |
| Chon Buri     | 29.1             | 1.1      | 40.7          | 26.4     | 44.3                                       | 20.1     |
| Ko Sichang    | 28.8             | 1.2      | 2.6           | -13.1    | 2.6  | -24.0    |
| Pattaya       | 28.1             | 0.8      | 50.3          | 36.0     | 58.0                                       | 28.1     |
| Sattahip      | 28.3             | 0.8      | 4.3           | -15.1    | 48.4                                       | 3.4      |
| Rayong        | 28.7             | 0.8      | 6.3           | -30.2    | 11.2                                       | -46.0    |
| Chanthaburi   | 28.8             | 1.5      | 12.1          | -24.3    | 12.1                                       | -43.0    |
| Khlong Yai    | 28.4             | 1.2      | 46.7          | -39.3    | 48.1                                       | -75.1    |
| Over the area | 29.0             | 1.3      | 17.7          | -11.4    | 23.9                                       | -21.3    |
|               |                  |          |               | -39%     |  | -47%     |

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

- 2) "T" is trace, rainfall amount less than 0.1 mm.
- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.

## Monthly Current Report Rainfall and Accumulative Rainfall February 2019

### Southern Thailand, east coast

|                     | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|---------------------|------------------|----------|---------------|----------|--|----------|
| Station             |                  | Above    |               | Above    |  | Above    |
|                     | Mean             | or below | Actual        | or below | Actual                                     | or below |
|                     |                  | normal   |               | normal   |  | normal   |
| Phetchaburi         | 29.1             | 1.9      | 0.0           | -3.9     | 8.8  | -6.5     |
| Hua Hin             | 28.2             | 1.0      | 0.1           | -15.2    | 11.8                                       | -15.3    |
| Prachuap Khiri Khan | 27.8             | 1.2      | 0.0           | -21.8    | 117.2                                      | 71.0     |
| Chumphon            | 27.2             | 0.5      | 27.2          | -17.5    | 268.7                                      | 164.6    |
| Surat Thani         | 26.9             | 0.5      | 0.0           | -12.3    | 109.3                                      | 60.2     |
| Ko Samui            | 28.0             | 0.6      | 12.0          | -42.4    | 234.6                                      | 94.0     |
| Nakhon Si Thammarat | 27.0             | 0.5      | 16.6          | -51.6    | 434.7                                      | 221.1    |
| Songkhla            | 28.1             | 0.6      | 14.7          | -33.9    | 185.9                                      | 62.5     |
| Hat Yai Airport     | 27.4             | 0.7      | 1.8           | -22.6    | 114.0                                      | 35.8     |
| Pattani Airport     | 27.4             | 0.9      | 27.2          | -4.8     | 274.1                                      | 191.2    |
| Narathiwat          | 27.0             | 0.4      | 69.5          | 15.8     | 309.4                                      | 154.1    |
| Over the area       | 27.6             | 0.8      | 15.4          | -19.1    | 188.0                                      | 93.8     |
|                     |                  |          |               | -55%     |  | 100%     |

### Southern Thailand, west coast

|                | Temperature (°c) |          | Rainfall (mm) |          | Accumulative rainfall (mm) Since 1 January |          |
|----------------|------------------|----------|---------------|----------|--|----------|
| Station        |                  | Above    |               | Above    |  | Above    |
|                | Mean             | or below | Actual        | or below | Actual                                     | or below |
|                |                  | normal   |               | normal   |  | normal   |
| Ranong         | 27.8             | 0.3      | 46.7          | 30.7     | 107.9                                      | 81.9     |
| Takua Pa       | 27.8             | 0.8      | 1.1           | -40.0    | 109.7                                      | 29.2     |
| Phuket         | 30.0             | 1.3      | 0.4           | -23.5    | 50.6                                       | -3.6     |
| Phuket Airport | 28.7             | 1.0      | 1.5           | -25.7    | 182.1                                      | 118.7    |
| Ko Lanta       | 28.7             | 0.5      | 0.8           | -17.2    | 12.0                                       | -20.9    |
| Trang Airport  | 28.4             | 0.9      | 4.0           | -16.8    | 60.7                                       | 7.4      |
| Satun          | 28.9             | 0.8      | 2.5           | -43.3    | 47.0                                       | -20.0    |
| Over the area  | 28.6             | 0.8      | 8.1           | -19.4    | 81.4                                       | 27.5     |
|                |                  |          |               | -71%     |  | 51%      |

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

- 2) "T" is trace, rainfall amount less than 0.1 mm.
- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.















