Monthly Weather Summary in Thailand November 2022

In November 2022, the high pressure area from China extended its ridge to cover upper Thailand and upper southern part in the beginning of the month. After that, it was weakened and mainly extended eastward to dominate the South China Sea which inducing the easterly and southeasterly wind prevailed over upper Thailand. These conditions caused generally cool weather with cold weather in some areas in the northern and northeastern parts in the early month, while cool weather also observed in many areas for the rest parts. After that, temperature relatively increased nationwide resulting in above normal temperature especially the northern and northeastern parts that were clearly higher than normal. For rainfall, due to the prevailing of the easterly and southeasterly winds over upper Thailand in the middle and the end of the month, unseasonable rain was observed at those times which induced higher than normal rainfall in most areas of upper Thailand especially in the central and eastern parts where much above normal. In southern part, with the prevailing of the northeast monsoon over the Gulf of Thailand and the southern part in the early month and then the easterly and southeasterly winds blowing over the mentioned areas. In addition, the monsoon trough lay across lower southern almost the whole month and a low pressure cell covered the lower southern region and the coast of Malaysia for few days. These caused intermittent abundant rainfall in southern part with flooding in some areas. Monthly rainfall was higher than normal in most parts i.e. northern part 40.7 mm (51%), northeastern part 35.9 mm (195%), central 52.7 mm (166%), eastern part 59.2 mm (123%) and southern part (west coast) 71.7 mm (37%) while it was inversely lower than normal in southern part (east coast) 25.1 mm (7%).

1-10 November: The high pressure area from China extended its ridge to cover upper Thailand throughout the period and the easterly wind prevailed over lower northeastern, lower central and eastern parts in the middle period. These caused cool weather in the morning in upper Thailand in particularly the northern and northeastern parts where experienced generally cool weather with cold weather in some areas. The minimum temperature of the period was 13.5°C, Umphang in Tak province on November 10 and 3.5 °C in the area of mountain top at Kiew Mae Pan, Doi Inthanon, Chom Thong in Chiang Mai province on November 10. For rainfall, there was almost no rainfall in upper Thailand except for isolated rain for few days with the maximum daily rainfall of 45.0 mm at Laem Ngop in Trat province on November 7. In southern part, the low pressure trough lay across lower southern part throughout the period and it lay into the low pressure cell over the coastal Malaysia and the low pressure in the lower Andaman Sea and the Malacca Strait in the middle of period. Besides, the northeast monsoon and the easterly wind prevailed over the Gulf of Thailand, southern part and the Andaman Sea throughout the period. These caused fairly widespread rain with heavy rainfall in many areas and very heavy rainfall in some areas in the middle of period. Scattered rain with heavy to very heavy rainfall was found at the beginning and the end of period. The highest daily rainfall was 175.0 mm at Wang in Narathiwat province on November 10. Flooding was reported in Yala province on November 3-4, in Songkhla, Narathiwat, Satun provinces on November 5, in Songkhla and Trang provinces on November 6, with gusty wind reported in Chumphon province on November 5 and Narathiwat province on November 6.

11-20 November: The high pressure area which covered upper Thailand was weakened and it propagated eastward to dominate the South China Sea inducing the easterly and southeasterly wind prevailed over the lower northern, lower northeastern, central and eastern parts. These caused cool weather in upper Thailand in the beginning of the period after that temperature relatively increased but the weather remained cool in the morning in upper portion of the northern and northeastern parts. The lowest minimum temperature of 13.0 $^{\circ}$ C was measured at Chiang Rai Agrometeorological Station in Chaing Rai province on November 12 and 4.6 $^{\circ}\mathrm{C}$ over the area of mountaintop at Kiew Mae Pan, Doi Inthanin, Chom Thong in Chiang Mai province on November 11. For rainfall, isolated rain was observed in the northern, lower northeastern, central and eastern parts mainly in the middle and the end of the period. The highest daily rainfall was 92.0 mm at Chiang Saen Post Office in Chiang Rai province on November 15. In southern part, the influenced of the monsoon trough lying across the lower southern part throughout the period, the easterly wind prevailing over the Gulf of Thailand and the southern part, the low pressure cell covering the Malacca Strait and the lower southern part in the middle of period. These caused abundant rainfall in southern part with scattered to fairly widespread rain almost throughout the period and heavy to very heavy rainfall in many areas mainly along the east coast. The highest daily rainfall of 146.4 mm was measured at Southern Meteorological Center (West Coast) in Phuket province on November 15. Flooding was reported in Yala and Narathiwat provinces on November 11-14, in Songkhla and Pattani provinces on November 11-17 and in Phatthalung province on November 15.

21-30 November: The high pressure area which covered upper Thailand was weakened and mainly covered the South China Sea in addition with the southeasterly wind prevailed over the lower northeastern, central and eastern parts in the middle and the end of the period. These caused mild winter in upper Thailand but cool weather remained in upper northern and some areas of the northeastern part. The lowest minimum temperature of 16.4 °C was measured at Chiang Rai Agrometeorological Station in Chaing Rai province on November 23 and 6.9 °C over the area of mountaintop at Doi Inthanon, Chom Thong in Chiang Mai province on November 23. During this period, rainfall relatively in upper Thailand especially in the northeastern, central and eastern parts that received scattered to fairy widespread rain with heavy to very heavy rainfall in some areas in the middle of period. The heaviest daily rainfall was 147.5 mm at Amphoe Muang in Rayong province on November 23. Flooding occurred in Rayong province on November 24, Suphan Buri province on November 25 and 26 with gusty wind in Ang Thong, Sing Buri, Uthai Thani and Suphan Buri provinces on November 30. In southern part, the monsoon trough lay across the southern part throughout the period. In addition, the low pressure cell which covered the coastal lower Vietnam and Cambodia moved to cover upper Gulf of Thailand and the eastern part on November 23 and

covering upper southern part on November 24. These caused plentiful rainfall especially at the first half of the period. The heaviest daily rainfall of 224.1 mm was measured at Khao Chong Botanical Garden, Na Yong in Trang province on November 23. Flooding was reported in Nakhon Si Thammarat province on November 22, in Trang province on November 23 and in Surat Thani province on November 23 and 26.

<u>Note</u>: Rainfall, temperatures and natural disasters in this report were updated up to December 7, 2022.

Climate Center
Meteorological Development Division
Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfall November 2022

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 | 24.6 | 1.7 | 73.6 | 28.8 | 2007.8 | 304.9 |
| Mae Hong Son | 25.1 | 0.9 | 15.2 | -24.4 | 1488.2 | 202.1 |
| Phayao | 24.8 | 1.6 | 11.0 | -24.4 | 1589.9 | 456.0 |
| Chiang Mai | 26.3 | 1.7 | 16.0 | -24.9 | 1831.2 | 706.1 |
| Tha Wang Pha | 25.4 | 1.7 | 25.8 | 2.7 | 1738.3 | 293.3 |
| Nan | 25.8 | 1.3 | 41.4 | 25.6 | 1483.9 | 232.5 |
| Lamphun | 25.7 | 1.3 | 37.3 | 1.1 | 1424.8 | 371.9 |
| Lampang | 25.6 | 0.9 | 25.8 | 4.5 | 1256.3 | 160.0 |
| Mae Sariang | 25.4 | 0.9 | 73.1 | 50.9 | 1393.5 | 231.1 |
| Phrae | 26.1 | 1.2 | 3.1 | -19.6 | 1256.2 | 94.9 |
| Uttaradit | 27.4 | 1.0 | 1.7 | -17.6 | 1361.6 | -5.1 |
| Bhumibol Dam | 25.9 | 0.7 | 67.5 | 39.5 | 1336.2 | 298.4 |
| Tak | 26.4 | 0.6 | 95.8 | 61.7 | 1537.9 | 495.1 |
| Mae Sot | 26.0 | 0.9 | 6.8 | -12.6 | 1509.0 | -4.8 |
| Umphang | 23.5 | 1.0 | 16.7 | -9.3 | 1777.6 | 299.8 |
| Phitsanulok | 27.2 | 0.3 | 52.5 | 20.8 | 1627.6 | 321.4 |
| Lom Sak | 26.8 | 0.9 | 32.8 | 19.5 | 1081.5 | 51.0 |
| Phetchabun | 27.1 | 1.0 | 44.3 | 32.3 | 1192.3 | 54.1 |
| Wichian Buri | 27.5 | 0.8 | 97.0 | 73.1 | 1810.8 | 561.3 |
| Kamphaeng Phet | 27.1 | 0.7 | 76.7 | 49.2 | 1822.4 | 541.5 |
| Over the area | 26.0 | 1.1 | 40.7 | 13.8 | 1526.4 | 283.2 |
| | | | | 51% | | 23% |

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 | 27.3 | 2.0 | 43.6 | 28.0 | 2086.4 | 403.8 |
| Loei | 25.5 | 1.3 | 28.2 | 6.9 | 1630.6 | 386.0 |
| Udon Thani | 26.7 | 1.4 | 32.4 | 18.4 | 1448.4 | 9.3 |
| Nakhon Phanom | 26.8 | 1.7 | 29.7 | 22.2 | 1877.8 | -454.8 |
| Sakon Nakhon | 26.5 | 1.6 | 22.9 | 9.4 | 1317.2 | -334.1 |
| Mukdahan | 26.8 | 1.7 | 51.4 | 41.5 | 1562.2 | 75.6 |
| Khon Kaen | 26.8 | 1.3 | 47.0 | 25.5 | 1765.4 | 539.1 |
| Kosum Phisai | 27.4 | 1.6 | 26.4 | 11.2 | 1537.5 | 224.8 |
| Roi Et | 27.4 | 1.9 | 56.9 | 42.0 | 1663.5 | 306.9 |
| Chaiyaphum | 27.2 | 1.1 | 94.8 | 78.8 | 1716.8 | 571.9 |
| Ubon Ratchathani | 27.2 | 1.2 | 25.6 | 3.8 | 2450.5 | 831.5 |
| Tha Tum | 27.0 | 1.0 | 37.1 | 18.1 | 1202.0 | -131.0 |
| Surin | 27.3 | 1.5 | 43.6 | 13.9 | 2256.2 | 825.8 |
| Nakhon Ratchasima | 27.0 | 1.0 | 63.8 | 44.2 | 1357.0 | 236.7 |
| Chok Chai | 26.7 | 1.1 | 171.7 | 147.8 | 1355.2 | 303.8 |
| Nang Rong | 26.2 | 0.8 | 94.4 | 63.2 | 2052.1 | 828.4 |
| Over the area | 26.9 | 1.4 | 54.3 | 35.9 | 1704.9 | 289.0 |
| | | | | 195% | | 20% |

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 November 2022

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 | 27.7 | 0.7 | 111.0 | 89.0 | 1692.6 | 538.8 |
| Bua Chum | 27.0 | 0.9 | 31.8 | 16.2 | 1339.6 | 240.6 |
| Lop Buri | 28.0 | 0.4 | 124.8 | 94.7 | 1300.5 | 212.5 |
| Suphan Buri | 28.5 | 1.2 | 104.9 | 61.7 | 1359.2 | 387.8 |
| Thong Pha Phum | 26.4 | 0.6 | 32.1 | 11.4 | 1690.1 | -66.3 |
| Kanchanaburi | 27.8 | 0.9 | 51.2 | 6.6 | 1553.3 | 506.8 |
| Bangkok Airport | 28.4 | 0.2 | 102.6 | 69.3 | 1671.3 | 208.6 |
| Bangkok Metropolis | 28.7 | 0.3 | 117.9 | 73.3 | 2544.5 | 853.9 |
| Over the area | 27.8 | 0.6 | 84.5 | 52.7 | 1643.9 | 360.1 |
| | | | | 166% | | 28% |

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 | 28.5 | 0.5 | 71.3 | 46.3 | 2017.6 | 256.3 |
| Kabin Buri | 27.2 | 0.3 | 31.0 | 1.0 | 1751.3 | 194.9 |
| Aranyaprathet | 27.9 | 0.7 | 44.2 | 12.0 | 1603.9 | 284.2 |
| Chon Buri | 28.5 | 0.3 | 91.4 | 54.0 | 1465.1 | 179.6 |
| Ko Sichang | 27.2 | -0.3 | 43.4 | 1.9 | 1472.1 | 325.7 |
| Pattaya | 27.3 | 0.2 | 118.7 | 62.1 | 1541.2 | 447.1 |
| Sattahip | 27.2 | 0.0 | 79.0 | 6.9 | 1778.9 | 451.3 |
| Rayong | 27.3 | -0.2 | 292.6 | 248.3 | 1998.9 | 599.7 |
| Chanthaburi | 27.8 | 0.5 | 155.4 | 98.1 | 3299.0 | 315.8 |
| Khlong Yai | 27.5 | -0.2 | 147.1 | 61.9 | 4948.9 | 50.2 |
| Over the area | 27.6 | 0.1 | 107.4 | 59.2 | 2187.7 | 310.4 |
| | | | | 123% | | 17% |

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 November 2022

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 | 27.8 | 0.4 | 67.9 | 3.7 | 1132.0 | 166.8 |
| Hua Hin | 27.7 | 0.3 | 131.4 | 58.6 | 1222.0 | 298.0 |
| Prachuap Khiri Khan | 27.1 | 0.1 | 157.5 | 30.0 | 1691.1 | 601.7 |
| Chumphon | 26.5 | 0.0 | 316.8 | 58.2 | 2523.1 | 758.3 |
| Surat Thani | 26.2 | -0.1 | 147.9 | -106.9 | 1681.3 | 249.6 |
| Ko Samui | 26.7 | -0.4 | 573.7 | 129.1 | 2570.3 | 839.1 |
| Nakhon Si Thammarat | 26.5 | 0.2 | 446.2 | -191.3 | 2963.2 | 766.7 |
| Songkhla | 27.1 | 0.1 | 435.8 | -152.1 | 1936.1 | 155.5 |
| Hat Yai Airport | 26.4 | 0.1 | 360.1 | 35.8 | 1866.7 | 385.7 |
| Pattani Airport | 27.0 | 0.4 | 280.5 | -120.0 | 2043.8 | 484.6 |
| Narathiwat | 26.8 | 0.5 | 569.5 | -20.7 | 2870.2 | 743.8 |
| Over the area | 26.9 | 0.2 | 317.0 | -25.1 | 2045.4 | 495.3 |
| | | | | -7% | | 32% |

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 | 26.6 | -0.3 | 289.9 | 159.8 | 4638.5 | 513.9 |
| Takua Pa | 26.7 | 0.0 | 367.6 | 135.9 | 4405.7 | 611.6 |
| Phuket | 27.9 | -0.1 | 344.1 | 165.9 | 2945.0 | 755.5 |
| Phuket Airport | 27.2 | 0.0 | 232.3 | 13.3 | 3258.3 | 680.4 |
| Ko Lanta | 27.3 | 0.1 | 142.2 | -6.2 | 2701.8 | 546.9 |
| Trang Airport | 26.8 | 0.1 | 193.5 | -32.7 | 2643.2 | 541.4 |
| Satun | 27.2 | 0.0 | 284.3 | 66.5 | 2562.7 | 311.9 |
| Over the area | 27.1 | 0.0 | 264.8 | 71.7 | 3307.9 | 565.9 |
| | | | | 37% | | 21% |

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.



















