Monthly Weather Summary in Thailand July 2017

In July 2017, the southwest monsoon prevailing over the Andaman Sea and Thailand was active during the middle and the end of the month associated with the influence of the two tropical storms, the first tropical storm namely "TALAS" (1704) entering Thailand at Nan province on July 17 and the second was tropical depression which weakened from tropical storm "SONCA" (1708) entering Nakhon Phanom province on July 26 and the low pressure cell periodically covered upper Vietnam. These conditions brought plentiful of rain in upper Thailand throughout the month especially during late month that the northeastern part received successive downpour of rain with flash flooding in many places. For southern Thailand, abundant rainfall was periodically observed for this month. The average total rainfall over Thailand in this month was 41% above normal and the new highest records of daily and monthly rainfall was established in some areas. Monthly rainfall was above normal i.e. northern part 61.1 mm (35%), northeastern part (east coast) 10.0 mm (8%) while it was below normal in southern part (west coast) 46.3 mm (14%). Mean temperatures in upper Thailand were below normal whereas southern parts were above normal.

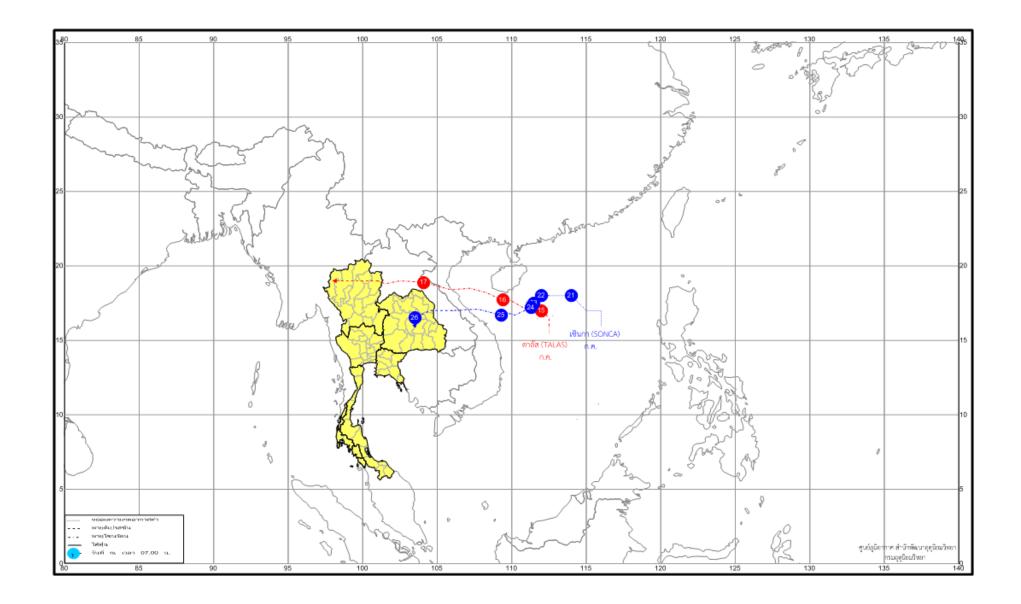
1 – 10 July: The southwest monsoon prevailing over the Andaman Sea and Thailand was strengthened during the second half of the period coupled with the low pressure cell covered upper Vietnam during the first half of the period. These caused fairly widespread to widespread rain nearly the whole period in upper Thailand with heavy to very heavy rainfall in some areas. The maximum daily rainfall of 278.6 mm was found at Tha Mai in Chanthaburi province on July 7. In southern part, scattered to fairly widespread rain with heavy rainfall in some areas occurred along the east coast while fairly widespread to widespread rain mainly during the middle and the end of the period was found along the west coast. The highest rainfall amount was 159.0 mm at Amphoe Muang in Ranong province on July 7.

11 – 20 July: During this period, rainfall was relatively increased with widespread rain and heavy to very heavy rainfall in upper Thailand as a resulted of the low pressure cell covering Laos and upper Vietnam during early period coupled with more active southwest monsoon during mid-period. Besides, the monsoon trough lay across the northern and upper northeastern parts towards the active low pressure cell in the middle South China Sea which later intensified into the tropical depression on July 14 and tropical storm "TALAS" on July 15 making landfall over southern Hanoi, Vietnam in the morning of July 17 and passing Laos before entering Thailand at Nan province in the afternoon on the same day. After that, it later downgraded into the tropical depression and active low pressure cell covering upper northern part and Myanmar on the following day. The maximum daily rainfall in upper Thailand was 148.6 mm at Ko Kut in Trat province on July 19 with flash flooding at Phichit province on July 12. In southern part, fairly widespread rain with heavy to very heavy rainfall in some areas was reported along the east coast while widespread rain was found along the west coast during early period after that decreasing in rainfall to isolated rain. The highest daily rainfall amount was 135.0 mm at Saba Yoi in Songkhla province on July 13.

21 - 31 July: During early period, the monsoon trough lying over Myanmar, Laos and Vietnam towards the active low pressure cell in upper South China Sea which later intensified into the tropical depression and the tropical storm "SONCA" on July 23 before making landfall over Dong Hoi, Vietnam in the afternoon of July 25 and weakening into a tropical depression passing Laos and moving further into Thailand at Nakhon Phanom province at 01.00 A.M. of July 26. After weakening into the active low pressure cell, the remnant of "SONCA" persisted in upper northeastern part and finally dissipated in the evening of July 28. Under these influences, the northern and northeastern parts still experienced plentiful rainfall from the previous period especially during the middle of the period when many areas of the northeastern part obtained consecutive days of heavy to very heavy rainfall inducing inundation in many places. For central and eastern parts, fairly widespread to widespread rain was found during the middle of the period with heavy to very heavy rainfall in some areas. The heaviest daily rainfall in upper Thailand was 250.8 mm at Phang Khon in Sakon Nakhon province on July 28 with flooding occurred at Phichit, Mae Hong Son, Ubon Ratchathani, Maha Sarakham, Burirum, Si Sa Ket, Khon Kean, Sakon Nakhon, Nakhon Ratchasima and Lop Buri provinces during the middle of the period and at Uttaradit, Sukhothai, Phitsanulok and Kalasin provinces on July 27 and at Phetchabun and Roi Et provinces on July 29 and at Phichit and Nong Khai provinces on July 30. In southern part, rainfall was mainly observed during the middle and the end of the period with fairy widespread to widespread rain and heavy to very heavy rainfall in some areas. The highest daily rainfall was 125.3 mm at Takua Pa in Phang-nga provinces on July 31.

- Note : 1) Rainfall, temperatures and natural disasters in this report were updated up to August 3, 2017.
 - 2) "TALAS" mean sharpness or acuteness contributed by Philippines.
 - 3) "SONCA" mean a singing bird contributed by Vietnam.

Climatological Center Meteorological Development Bureau Meteorological Department



Track of tropical storm entering Thailand in July 2017

| | New Reco | rd 2017 | Previous | Start | |
|------------------------------|-------------------|---------|-------------------|----------------|-------|
| Station | Rainfall (mm.) | Date | Rainfall (mm.) | Date / Year | since |
| Kosum Phisai (Maha Sarakham) | 132.1 | 26 | 124.5 | 26/1992 | 1970 |
| Roi Et | 159.0 | 26 | 140.6 | 1/1978 | 1955 |
| Roi Et Agromet Stn. | 193.0 | 26 | 114.4 | 26/2004 | 1983 |
| Burirum | 101.2 | 26 | 83.3 | 21/2007 | 2003 |
| Sawi (Chumphon) | 65.8 | 26 | 65.4 | 2/2006 | 1969 |

Breaking records of the highest daily rainfall in July

Breaking records of the highest monthly rainfall in July

| | New Record | Previous Re | | |
|------------------------------|----------------|----------------|------|-------------|
| Station | Rainfall (mm.) | Rainfall (mm.) | Year | Start since |
| Lampang Agromet. Stn. | 291.7 | 248.5 | 2011 | 1982 |
| Thoen (Lampang) | 202.5 | 200.4 | 2007 | 2004 |
| Kamphaeng Phet | 346.6 | 338.8 | 2014 | 1981 |
| Sakon Nakhon | 796.6 | 615.5 | 2013 | 1951 |
| Sakon Nakhon Agromet. Stn. | 799.1 | 482.8 | 2013 | 1969 |
| Mukdahan | 630.7 | 492.3 | 2005 | 1953 |
| Kosum Phisai (Maha Sarakham) | 452.9 | 375.9 | 2011 | 1970 |
| Roi Et Agromet Stn. | 433.7 | 381.6 | 2004 | 1955 |
| Nakhn Sawan | 330.4 | 262.8 | 1998 | 1951 |
| Takfa (Nakhon Sawan) | 288.7 | 274.3 | 1967 | 1969 |
| Bua Chum (Lop Buri) | 336.5 | 212.0 | 1978 | 1970 |
| Kabin Buri (Prachin Buri) | 518.5 | 515.1 | 1976 | 1970 |
| Laem Chabang (Chon Buri) | 275.9 | 247.3 | 2013 | 1994 |
| Narathiwat | 273.5 | 244.4 | 1973 | 1956 |

Monthly Current Report Rainfall and Accumulative Rainfall July 2017

Northern Thailand

| | Tempera | ture (°c) | Rainfall (mm) | | Accumulative rainfall (mm) Since 1 January | |
|----------------|---------|-----------------------------|---------------|-----------------------------|---|-----------------------------|
| Station | Mean | Above or below normal | Actual | Above or below normal | Actual | Above or below normal |
| Chiang Rai | 26.8 | 0.1 | 473.8 | 162.9 | 1269.8 | 419.7 |
| Mae Hong Son | 20.8 | 0.1 | 162.8 | -64.1 | 456.9 | -227.4 |
| Phayao | 27.4 | -0.1 | 102.8 | 6.8 | 645.8 | 87.2 |
| Chiang Mai | 20.9 | 0.4 | 146.8 | -13.4 | 853.2 | 338.3 |
| Tha Wang Pha | 27.2 | 0.4 | 405.8 | 137.4 | 861.6 | 84.8 |
| Nan | 27.6 | -0.1 | 301.2 | 100.5 | 653.3 | -7.1 |
| Lamphun | 27.7 | -0.1 | 193.7 | 76.7 | 824.4 | 363.1 |
| Lampang | 27.5 | -0.3 | 141.3 | 6.7 | 810.9 | 298.1 |
| Mae Sariang | 26.4 | 0.2 | 230.2 | 49.0 | 634.3 | 40.9 |
| Phrae | 27.5 | -0.2 | 302.5 | 148.3 | 838.0 | 242.6 |
| Uttaradit | 27.8 | -0.6 | 169.8 | 3.4 | 785.1 | 67.9 |
| Bhumibol Dam | 28.3 | 0.1 | 54.7 | -12.0 | 600.6 | 133.1 |
| Tak | 28.1 | 0.0 | 81.9 | -5.8 | 544.7 | 73.8 |
| Mae Sot | 25.9 | 0.1 | 267.0 | -62.0 | 626.5 | -202.3 |
| Umphang | 24.6 | 0.1 | 285.8 | 54.2 | 808.8 | 29.6 |
| Phitsanulok | 27.8 | -0.7 | 282.4 | 103.0 | 898.8 | 283.0 |
| Lom Sak | 27.3 | -0.3 | 216.7 | 88.1 | 696.5 | 152.0 |
| Phetchabun | 27.4 | -0.3 | 195.0 | 46.2 | 853.9 | 235.0 |
| Wichian Buri | 28.0 | -0.6 | 355.6 | 209.7 | 859.0 | 249.9 |
| Kamphaeng Phet | 27.6 | -0.5 | 346.6 | 187.2 | 1248.5 | 623.6 |
| Over the area | 27.3 | -0.1 | 237.1 | 61.1 | 788.5 | 164.1 |
| | | | | 35% | | 26% |

Northeastern Thailand

| | Tempera | ture (°c) | Rainfa | ll (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 | 27.5 | -0.3 | 592.8 | 311.4 | 1299.1 | 381.7 |
| Loei | 27.3 | -0.1 | 340.3 | 194.5 | 1071.5 | 402.5 |
| Udon Thani | 27.6 | -0.6 | 384.2 | 173.3 | 1100.4 | 309.9 |
| Nakhon Phanom | 26.8 | -0.5 | 740.8 | 237.8 | 1622.3 | 257.5 |
| Sakon Nakhon | 26.9 | -0.8 | 796.6 | 507.9 | 1852.0 | 884.1 |
| Mukdahan | 27.1 | -0.7 | 630.7 | 398.8 | 1429.8 | 628.7 |
| Khon Kaen | 27.5 | -0.6 | 319.9 | 146.6 | 862.1 | 201.4 |
| Kosum Phisai | 28.1 | -0.5 | 452.9 | 292.9 | 1091.9 | 433.3 |
| Roi Et | 28.0 | -0.3 | 445.6 | 249.7 | 1032.3 | 286.9 |
| Chaiyaphum | 27.6 | -0.4 | 205.0 | 94.6 | 761.8 | 210.9 |
| Ubon Ratchathani | 27.5 | -0.5 | 437.1 | 182.7 | 1212.3 | 374.4 |
| Tha Tum | 28.2 | -0.4 | 358.1 | 139.9 | 813.1 | 64.4 |
| Surin | 27.6 | -0.3 | 342.3 | 121.0 | 955.8 | 194.0 |
| Nakhon Ratchasima | 28.4 | -0.2 | 102.8 | -18.1 | 942.6 | 429.5 |
| Chok Chai | 28.2 | -0.1 | 67.7 | -51.2 | 671.0 | 158.2 |
| Nang Rong | 27.8 | -0.3 | 238.3 | 90.3 | 731.2 | 133.1 |
| Over the area | 27.6 | -0.4 | 403.4 | 192.0 | 1090.6 | 334.4 |
| | | | | 91% | | 44% |

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 July 2017

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 | 28.1 | -0.7 | 330.4 | 182.4 | 1081.9 | 532.9 |
| Bua Chum | 27.9 | -0.6 | 336.5 | 219.5 | 757.4 | 244.9 |
| Lop Buri | 28.3 | -0.3 | 173.7 | 53.6 | 731.6 | 214.2 |
| Suphan Buri | 28.7 | 0.0 | 192.2 | 93.4 | 619.3 | 233.2 |
| Thong Pha Phum | 26.5 | 0.0 | 354.2 | 31.0 | 874.4 | -124.6 |
| Kanchanaburi | 28.7 | 0.1 | 146.6 | 43.7 | 637.9 | 174.3 |
| Bangkok Airport | 28.9 | -0.1 | 170.5 | 11.4 | 1079.9 | 395.8 |
| Bangkok Metropolis | 28.9 | -0.1 | 319.6 | 144.5 | 1195.0 | 448.3 |
| Over the area | 28.3 | -0.2 | 253.0 | 97.5 | 872.2 | 264.9 |
| | | | | 63% | | 44% |

Eastern Thailand

| | Tempera | ture (°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 | 28.3 | -0.2 | 399.7 | 127.8 | 1033.4 | 115.6 |
| Kabin Buri | 27.4 | -0.5 | 561.1 | 319.9 | 1310.2 | 494.6 |
| Aranyaprathet | 28.1 | 0.0 | 187.3 | 20.9 | 972.9 | 303.5 |
| Chon Buri | 29.1 | -0.1 | 298.7 | 158.1 | 945.5 | 336.1 |
| Ko Sichang | 28.6 | -0.3 | 168.2 | 44.8 | 584.8 | 48.1 |
| Pattaya | 28.5 | 0.0 | 203.3 | 105.9 | 601.3 | 89.4 |
| Sattahip | 28.4 | -0.5 | 138.0 | 30.5 | 870.9 | 278.7 |
| Rayong | 28.6 | -0.4 | 181.3 | 9.5 | 1026.3 | 281.7 |
| Chanthaburi | 27.7 | 0.1 | 812.6 | 329.4 | 2428.0 | 787.5 |
| Khlong Yai | 27.1 | 0.1 | 995.7 | 24.1 | 2688.4 | 36.3 |
| Over the area | 28.2 | -0.2 | 394.6 | 117.1 | 1246.2 | 277.1 |
| | | | | 42% | | 29% |

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 July 2017

Southern Thailand, east coast

| | Tempera | ture (°c) | Rainfa | ll (mm) | Accumulative rainfall (mm) Since 1 January | |
|---------------------|---------|-----------|--------|----------|---|----------|
| Station | | Above | | Above | | Above |
| | Mean | or below | Actual | or below | Actual | or below |
| | | normal | | normal | | normal |
| Phetchaburi | 28.7 | 0.0 | 114.1 | 33.3 | 646.4 | 288.8 |
| Hua Hin | 28.5 | -0.1 | 88.9 | -4.1 | 690.2 | 282.0 |
| Prachuap Khiri Khan | 27.5 | -0.5 | 126.3 | 17.0 | 1066.9 | 571.0 |
| Chumphon | 27.2 | 0.0 | 260.5 | 81.5 | 1519.3 | 695.2 |
| Surat Thani | 27.8 | 0.7 | 69.3 | -79.5 | 798.6 | 200.3 |
| Ko Samui | 28.5 | 0.2 | 141.5 | 25.2 | 1543.0 | 842.2 |
| Nakhon Si Thammarat | 28.2 | 0.3 | 91.6 | -26.2 | 2435.5 | 1616.3 |
| Songkhla | 28.9 | 0.6 | 49.9 | -45.1 | 1269.7 | 697.0 |
| Hat Yai Airport | 28.2 | 0.8 | 22.8 | -81.7 | 1138.8 | 495.4 |
| Pattani Airport | 28.3 | 0.7 | 179.9 | 50.8 | 1390.8 | 807.9 |
| Narathiwat | 27.8 | 0.3 | 273.5 | 139.5 | 2308.7 | 1563.9 |
| Over the area | 28.1 | 0.2 | 128.9 | 10.0 | 1346.2 | 732.6 |
| | | | | 8% | | 119% |

Southern Thailand, west coast

| | Tempera | ture (°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 | 26.9 | 0.0 | 920.0 | 299.3 | 2733.4 | 722.9 |
| Takua Pa | 27.8 | 0.4 | 543.9 | 114.0 | 2413.5 | 716.8 |
| Phuket | 29.2 | 1.0 | 127.8 | -130.4 | 1210.9 | 209.3 |
| Phuket Airport | 29.1 | 1.2 | 101.1 | -160.4 | 1289.9 | 172.4 |
| Ko Lanta | 28.9 | 0.7 | 72.2 | -224.1 | 1230.1 | 216.1 |
| Trang Airport | 28.2 | 1.2 | 109.3 | -149.2 | 1519.7 | 566.2 |
| Satun | 28.2 | 0.8 | 157.2 | -73.4 | 1246.2 | 203.8 |
| Over the area | 28.3 | 0.7 | 290.2 | -46.3 | 1663.4 | 401.1 |
| | | | | -14% | | 32% |

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.

