## Annual Weather Summary over Thailand in 2017

The average rainfall over Thailand from 1 January to 31 December 2017 was 2017.1 mm or about 27 \% above normal which was wettest since records began in 1951. Figure 1 showed that monthly rainfall in January, during March to August and during October to December was above the 1981-2010 normal especially in January, which was 130.3 mm or $767 \%$ above normal over the whole areas. These affected from the prevailing of the southeasterly wind over upper Thailand and the passage of the westerly trough through the northern part causing unusual rainfall in upper Thailand during the first half of January while in southern Thailand, under the influence of the northeast monsoon prevailing over the Gulf of Thailand and southern part was active during early and late January coupled with the covering of the low pressure cell over Malaysia and lower southern part and over the Andaman Sea for few days resulted in plentiful of rain nearly the whole January especially along the east coast that experienced successive of very heavy rainfall in several areas inducing flash flooding in many areas during early and late January. During summer season from March to mid-May unseasonable rain occasionally occurred with thundershower, gusty wind and hail in some areas of upper Thailand due to the influence of the high pressure area from China extending its ridge to cover upper Thailand, the passage of the westerly trough over the northern and northeastern parts accompanied with the prevailing of the southerly and southeasterly wind for few days. Rainy season was started as normal on May 16 and the southwest monsoon which prevailed over the Andaman Sea, Thailand and the Gulf of Thailand was periodically strengthened in addition with the monsoon through lay across Thailand in some period and the influence of low pressure cell near Thailand causing above normal rainfall in most areas of Thailand nearly the whole season. However rainfall in upper Thailand was below normal in February and September resulted in 30\% and $3 \%$ below normal over Thailand, respectively.

Monthly temperature of Thailand during 1 January to 31 December 2017 was dominated by warmer and wetter conditions in most of the regions. Mean temperature over Thailand was above the 1981-2010 normal nearly the whole period mainly in January which was $1.1^{\circ} \mathrm{C}$ above normal with the mean temperature rising to $1.8^{\circ} \mathrm{C}$ above normal in northeastern part. Temperature over Thailand and mean temperature in February, April and July was below normal especially in April which was $0.2^{\circ} \mathrm{C}$ below normal with the mean temperature dropping to $0.6^{\circ} \mathrm{C}$ below normal in west coast of southern part. Thailand's monthly temperature is shown as Figure 3.


Figure1: The monthly rainfall in Thailand departure from normal (1981-2010)


Figure2: The mean annual rainfall in Thailand departure from normal (1981-2010) in percent


Figure3: The monthly mean temperature of Thailand departure from normal
(1981-2010)
Three tropical cyclones directly affected Thailand during 1 January to 31 December 2017, equal to the long- term (1951-2016) average in a year. They were Tropical Storm Talas (1704) in middle July, Tropical Storm Sonca (1708) in late July and Typhoon Doksuri (1719) in middle September. Talas was the first tropical cyclone entered Thailand in this year. It form as a tropical depression over the central part of the South China Sea in the evening of July 14 and intensified into a tropical storm in the following afternoon and moved west-northwestwards then made landfall over southern Hanoi, Vietnam in the morning of July 17 and passing Laos before entering Thailand at Nan province in the afternoon of 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. Under the influence of Talas, rainfall was relatively increased with widespread rain and heavy to very heavy rainfall in upper Thailand during 15-18 July with the highest daily rainfall was 145.0 mm at Amphoe Phu Phiang in Nan Province on July 17. For the track of Talas and accumulated amount of rainfalls are as in figure 4 and 5 respectively.


Figure4: Tracks of the three tropical cyclones entering Thailand in 2017


Figure5: Accumulated amount of during 15-18 July 2017


Figure6: Accumulated amount of Rainfalls Rainfalls during 25-28 July 2017

Sonca was the second tropical cyclone entered Thailand. It formed as a tropical depression over the upper of the South China Sea ( $18.0^{\circ} \mathrm{N}, 112.5^{\circ} \mathrm{E}$ ) at 18.00 UTC on July 21. This depression moved generally westwards and intensified into a tropical storm at 06.00 UTC 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 18.00 UTC on July 25. 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 experienced plentiful rainfall during 2528 July 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 with heavy to very heavy rainfall in some areas. The heaviest daily rainfall in upper Thailand was 250.8 mm at Amphoe Phang Khon in Sakon Nakhon province on July 28 with floods occurred in Phichit, Mae Hong Son, Ubon Ratchathani, Maha Sarakham, Burirum, Si Sa Ket, Khon Kean, Sakon Nakhon, Nakhon Ratchasima and Lop Buri provinces during 25-26 July and at Uttaradit, Sukhothai, Phitsanulok and Kalasin provinces on July 27. The Sonca 's accumulated amount of rainfalls are as in figure 6.

In September the third tropical cyclone entered northern and northeastern Thailand namely Doksuri. It formed as a tropical depression over the eastern of Luzon, Philippines in the afternoon of September 11 and moved across center of Luzon Island to the middle South China Sea on the next day. It intensified into the tropical storm Doksuri in the evening of the same day then moved into upper South China Sea and further intensified into a typhoon in the evening of September 14. Doksuri made landfall over the Southern Vinh, Vietnam at 0300 UTC on September 15 then moved pass Laos and weakening into the tropical storm before entering Thailand at Bung Kan province at 1500 UTC on the same day. After that, it moved through Laos and downgraded into tropical depression then moved further into Nan province in the morning of September 16 with its track same as Talas. It weakened gradually while moving pass upper northern Thailand and finally degenerated into


Figure7: Accumulated amount of Rainfalls during 14-17 September the active low pressure cell over northern Thailand before moved to cover the coastal Myanmar and Gulf of Bengal on September 17. Accompanied with the southwest
monsoon which prevailed over the Andaman Sea and Thailand was strengthened during 15-17 September. Doksuri brought torrential rain and flooding to several areas of the northern and northeastern parts of Thailand during its passage. Accumulated amount of rainfalls are as in figure 7.


Annual Rainfall (mm.) in 2017


Annual Rainfall Anomalies(mm.) in 2017


Annual Mean Temperature ( ${ }^{\circ} \mathrm{C}$ ) in 2017


Annual Mean Temperature anomalies ( ${ }^{\circ} \mathrm{C}$ ) in 2017

## Breaking records of daily rainfall in Thailand

| Station | New Record 2017 |  | Previous Record |  | Start <br> since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Date | Rainfall (mm.) | Date / Year |  |
| January |  |  |  |  |  |
| Pichit Agromet.Stn. | 34.1 | 9 | 29.5 | 6/2010 | 1992 |
| Buriram | 37.0 | 9 | 35.8 | 27/2013 | 2001 |
| Ratchaburi Agromet.Stn. | 34.3 | 9 | 12.1 | 30/2012 | 1992 |
| Bangkok Pilot. Samut Prakan | 52.1 | 9 | 36.2 | 8/2016 | 1981 |
| Phetchaburi | 99.1 | 9 | 74.7 | 28/1989 | 1981 |
| Nong Plub Agromet.Stn. Hua Hin. Prachuap Khiri Khan | 160.3 | 9 | 80.0 | 12/2004 | 1974 |
| Hua Hin. Prachuap Khiri Khan | 181.5 | 9 | 110.3 | 16/1970 | 1951 |
| Prachuap Khiri Khan | 244.7 | 9 | 231.5 | 16/1970 | 1951 |
| Nakhon Si Thammarat Agromet.Stn. | 615.6 | 5 | 206.4 | 1/2012 | 1984 |
| Phatthalung Agromet.Stn. | 195.4 | 5 | 176.1 | 2/2009 | 1981 |
| Songkhla | 215.3 | 20 | 182.0 | 7/2007 | 1951 |
| Pattani | 195.8 | 20 | 191.0 | 4/1975 | 1965 |
| Yala Agromet.Stn. | 140.0 | 19 | 112.6 | 7/2007 | 1982 |
| Ranong | 176.3 | 8 | 95.5 | 2/2012 | 1951 |
| Phuket | 83.2 | 7 | 77.9 | 27/1953 | 1951 |
| Ko Lanta. Krabi | 98.0 | 7 | 93.7 | 14/2001 | 1981 |
| Krabi | 125.1 | 8 | 93.0 | 1/2012 | 1994 |

Breaking records of daily rainfall in Thailand (Continue)

| Station | New Record 2017 |  | Previous Record |  | Start <br> since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Date | Rainfall (mm.) | Date / Year |  |
| March <br> Lampang <br> Nakhon Phanom Agromet.Stn. <br> Sakon Nakhon Agromet.Stn. <br> Pak Chong Agromet.Stn. Nakhon Ratchasima Sadao. Songkhla | $\begin{gathered} 105.3 \\ 83.0 \\ 96.7 \\ 80.4 \\ 103.2 \end{gathered}$ | $\begin{gathered} 26 \\ 31 \\ 7 \\ 16 \\ 19 \end{gathered}$ | $\begin{aligned} & 59.7 \\ & 82.6 \\ & 87.3 \\ & 70.0 \\ & 76.4 \end{aligned}$ | $\begin{aligned} & 27 / 1996 \\ & 30 / 2006 \\ & 27 / 1982 \\ & 18 / 1973 \\ & 25 / 2003 \end{aligned}$ | $\begin{aligned} & 1951 \\ & 1983 \\ & 1967 \\ & 1969 \\ & 1999 \end{aligned}$ |
| April <br> Phra Saeng. Surat Thani <br> Nakhon Si Thammarat Agromet.Stn. <br> Narathiwat | $\begin{gathered} 79.3 \\ 187.5 \\ 143.2 \end{gathered}$ | $\begin{gathered} 24 \\ 5 \\ 3 \end{gathered}$ | $\begin{gathered} 58.2 \\ 118.1 \\ 109.9 \end{gathered}$ | $\begin{gathered} 3 / 2000 \\ 12 / 1989 \\ 23 / 1979 \end{gathered}$ | $\begin{aligned} & 1998 \\ & 1984 \\ & 1956 \end{aligned}$ |
| May <br> Phayao <br> Chiang Mai <br> Si Samrong Agromet.Stn. Sukhothai <br> Sukhothai <br> Lom Sak.Phetchabun <br> Phetchabun <br> Kamphaeng Phet <br> Phichit Agromet.Stn. <br> Loei <br> Nakhon Phanom <br> Takfa Agromet.Stn. Nakhon Sawan <br> Kabin Buri <br> Pluei Agromet.Stn. Chanthaburi <br> Takau Pa | $\begin{aligned} & 145.6 \\ & 124.8 \\ & 176.7 \\ & 180.7 \\ & 132.3 \\ & 170.4 \\ & 248.9 \\ & 133.6 \\ & 164.1 \\ & 165.4 \\ & 116.7 \\ & 125.4 \\ & 204.8 \\ & 221.0 \end{aligned}$ | $\begin{gathered} 16 \\ 18 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 24 \\ 6 \\ 26 \\ 17 \\ 30 \end{gathered}$ | $\begin{gathered} 114.8 \\ 113.8 \\ 136.3 \\ 90.4 \\ 102.6 \\ 142.0 \\ 171.8 \\ 101.5 \\ 163.8 \\ 152.9 \\ 102.7 \\ 82.2 \\ 178.7 \\ 195.0 \end{gathered}$ | $\begin{gathered} 15 / 1988 \\ 5 / 2004 \\ 27 / 1994 \\ 18 / 2014 \\ 29 / 2016 \\ 26 / 1989 \\ 9 / 1986 \\ 10 / 1994 \\ 15 / 1988 \\ 25 / 1993 \\ 25 / 2011 \\ 18 / 1996 \\ 27 / 2009 \\ 25 / 2013 \end{gathered}$ | $\begin{aligned} & 1981 \\ & 1951 \\ & 1969 \\ & 2000 \\ & 1970 \\ & 1951 \\ & 1981 \\ & 1992 \\ & 1992 \\ & 1953 \\ & 1969 \\ & 1965 \\ & 1969 \\ & 1981 \end{aligned}$ |
| June <br> Doi Angkhlang. Chiang Mai | 63.4 | 27 | 49.7 |  | 2006 |
| July <br> Doi Angkhlang. Chiang Mai Kosum Phisai. Mahasarakam <br> Roi Et <br> Roi Et Agromet.Stn. <br> Buriram <br> Sawee Agromet.Stn. | $\begin{gathered} 96.9 \\ 132.1 \\ 159.0 \\ 193.0 \\ 101.2 \\ 65.8 \end{gathered}$ | $\begin{aligned} & 17 \\ & 26 \\ & 26 \\ & 26 \\ & 26 \\ & 26 \end{aligned}$ | $\begin{gathered} 90.2 \\ 124.5 \\ 140.6 \\ 114.4 \\ 83.3 \\ 65.4 \end{gathered}$ | $\begin{gathered} 26 / 1992 \\ 1 / 1978 \\ 26 / 2004 \\ 2 / 2006 \end{gathered}$ | $\begin{aligned} & 2006 \\ & 1970 \\ & 1955 \\ & 1983 \\ & 2001 \\ & 1969 \end{aligned}$ |
| August <br> Chok Chai.Nakhon Ratchasima <br> Suphan Buri <br> Bangkok Metropolis <br> Bangkok Port <br> Narathiwat | $\begin{gathered} 56.5 \\ 108.6 \\ 130.7 \\ 113.8 \\ 111.3 \end{gathered}$ | $\begin{gathered} 28 \\ 5 \\ 26 \\ 26 \\ 11 \end{gathered}$ | $\begin{gathered} 81.6 \\ 100.7 \\ 128.9 \\ 94.5 \\ 109.2 \end{gathered}$ | $\begin{gathered} 22 / 2000 \\ 22 / 2005 \\ 4 / 1995 \\ 4 / 1995 \\ 30 / 1998 \end{gathered}$ | $\begin{aligned} & 1970 \\ & 1955 \\ & 1951 \\ & 1994 \\ & 1956 \end{aligned}$ |
| September <br> Satun | 192.6 | 21 | 140.7 | 26/1996 | 1978 |

Breaking records of daily rainfall in Thailand (Continue)


Breaking records of monthly rainfall in Thailand

| Station | New Record 2017 | Previous Record |  | Start since |
| :--- | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| January |  |  |  |  |
| Chiang Rai Agromet.Stn. | 72.4 | 69.5 | 2003 | 1979 |
| Lampang Agromet.Stn. | 88.3 | 87.8 | 2015 | 1982 |
| Phichit Agromet.Stn. | 69.9 | 58.9 | 2004 | 1992 |
| Buriram | 37.0 | 35.8 | 2013 | 2001 |
| Ratchaburi Agromet.Stn. | 168.8 | 81.8 | 2012 | 1992 |
| Phetchaburi | 266.6 | 117.8 | 2004 | 1974 |
| Nong Plub Agromet.Stn. Prachuap | 239.2 | 170.8 | 1953 | 1981 |
| Khiri Khan | 441.2 | 301.9 | 1953 | 1951 |
| Hua Hin. Prachuap Khiri Khan | 735.0 | 589.3 | 1975 | 1969 |
| Prachuap Khiri Khan | 749.4 | 462.6 | 2012 | 1969 |
| Sawee Agromet.Stn. |  |  |  | 192 |
| Surat Thani Agromet.Stn. |  |  |  |  |

Breaking records of monthly rainfall in Thailand (Continue)

| Station | New Record 2017 | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| January (Cont.) |  |  |  |  |
| Chawang. Nakhon Si Thammarat | 469.9 | 200.6 | 2011 | 1998 |
| Nakhon Si Thammarat | 1772.7 | 1239.5 | 1975 | 1951 |
| Nakhon Si Thammarat Agromet.Stn. | 1784.6 | 792.3 | 2012 | 1984 |
| Phatthalung Agromet.Stn. | 1076.3 | 435.1 | 2012 | 1981 |
| Songkhla | 682.2 | 410.1 | 1966 | 1951 |
| Hat Yai. Songkhla | 415.0 | 368.9 | 1975 | 1973 |
| Pattani | 597.9 | 522.3 | 1975 | 1965 |
| Yala Agromet.Stn. | 695.7 | 364.8 | 2011 | 1982 |
| Narathiwat | 1271.4 | 1010.8 | 1967 | 1951 |
| Ranong | 472.8 | 240.5 | 2012 | 1951 |
| Phuket | 324.4 | 136.7 | 1967 | 1951 |
| Phuket Airport | 200.9 | 189.0 | 2001 | 1952 |
| Ko Lanta. Krabi | 250.7 | 144.2 | 2001 | 1981 |
| March |  |  |  |  |
| Lampang | 109.4 | 98.4 | 2001 | 1951 |
| Nakhon Phanom Agromet.Stn. | 168.0 | 147.1 | 2006 | 1983 |
| Sakhon Nakhon | 191.6 | 155.0 | 1996 | 1951 |
| Sakon Nakhon Agromet.Stn. | 243.3 | 167.6 | 1996 | 1967 |
| Kamalasai. Kalasin | 140.5 | 121.5 | 2002 | 1996 |
| Nakhon Ratchasima | 248.1 | 139.1 | 1974 | 1951 |
| Pak Chong Agromet.Stn. Nakhon |  |  |  | 1971 |
| Ratchasima | 196.9 | 196.6 | 1972 |  |
| Sadao. Songkhla | 199.4 | 151.2 | 2011 | 1998 |
| April |  |  |  |  |
| Thung Chang. Nan | 208.5 | 179.6 | 2012 | 1998 |
| Pattani | 278.2 | 270.9 | 2012 | 1964 |
| Narathiwat | 330.8 | 271.0 | 1999 | 1951 |

Breaking records of monthly rainfall in Thailand (Continue)

| Station | New Record 2017 | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| May |  |  |  |  |
| Chiang Mai | 411.4 | 393.5 | 2007 | 1951 |
| Lamphun | 356.9 | 296.7 | 2011 | 1981 |
| Sukhothai | 359.8 | 322.5 | 2007 | 2003 |
| Kamphaeng Phet | 595.9 | 551.7 | 1986 | 1981 |
| Tha Pra Agromet.Stn. Khon Kaen | 391.0 | 371.3 | 1975 | 1967 |
| Buriram | 373.5 | 286.9 | 2011 | 2001 |
| Nakhon Sawan | 383.2 | 345.0 | 1999 | 1951 |
| Pathum Thani Agromet.Stn. | 441.4 | 437.3 | 1999 | 1999 |
| Bang Na Agromet.Stn. | 474.6 | 452.3 | 1986 | 1967 |
| Kabin Buri | 382.0 | 339.1 | 1984 | 1970 |
| Chachoengsao Agromet.Stn. | 413.4 | 262.6 | 2011 | 1989 |
| Pluei Agromet.Stn. Chanthaburi | 775.5 | 752.2 | 2002 | 1967 |
| Takau Pa | 901.9 | 875.8 | 2016 | 1981 |
| June |  |  |  |  |
| Nakhon Ratchasima | 280.4 | 251.4 | 1980 | 1951 |
| Buriram | 254.2 | 237.9 | 2008 | 2001 |
| July |  |  |  |  |
| Lampang Agromet.Stn. | 291.7 | 248.5 | 2011 | 1982 |
| Thoen Lampang | 202.5 | 200.4 | 2007 | 2006 |
| Kamphaeng Phet | 346.6 | 338.8 | 2014 | 1981 |
| Sakhon Nakhon | 796.6 | 615.5 | 2013 | 1951 |
| Sakon Nakhon Agromet.Stn. | 799.1 | 482.8 | 2013 | 1967 |
| Mukdahan | 630.7 | 492.3 | 2005 | 1951 |
| Kosum Phisai. Mahasarakam | 452.9 | 375.9 | 2011 | 1970 |
| Roi Et Agromet.Stn. | 433.7 | 381.6 | 2004 | 1983 |
| Nakhon Sawan | 330.4 | 262.8 | 1998 | 1951 |
| Takfa Agromet.Stn. Nakhon Sawan | 288.7 | 274.3 | 1967 | 1967 |
| Bua Chum. Lop Buri | 336.5 | 212.0 | 1978 | 1970 |
| Kabin Buri | 518.5 | 515.1 | 1976 | 1970 |
| Laem Chabang. Chon Buri | 275.9 | 247.3 | 2003 | 1992 |
| Narathiwat | 273.5 | 244.4 | 1973 | 1951 |
| August |  |  |  |  |
| Suphan Buri | 320.2 | 282.8 | 1957 | 1951 |
| Narathiwat | 401.8 | 357.8 | 1995 | 1951 |
| September |  |  |  |  |
| Hat Yai. Songkhla | 303.4 | 301.1 | 2000 | 1973 |

Breaking records of monthly rainfall in Thailand (Continue)

| Station | New Record 2017 | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| September(Cont.) <br> Sadao. Songkhla <br> Satun | $\begin{aligned} & 224.8 \\ & 674.0 \end{aligned}$ | $\begin{gathered} 181.7 \\ 588.2 \end{gathered}$ | $\begin{aligned} & 2002 \\ & 1983 \end{aligned}$ | $\begin{aligned} & 1998 \\ & 1978 \end{aligned}$ |
| October <br> Doi Angkhang. Chiang Mai Lamphun <br> Thoen Lampang <br> Kosum Phisai. Mahasarakam <br> Bangkok Metropolis | 440.7 <br> 254.6 <br> 412.4 <br> 343.1 <br> 561.3 | $\begin{aligned} & 352.0 \\ & 236.1 \\ & 250.7 \\ & 249.1 \\ & 490.1 \end{aligned}$ | $\begin{aligned} & 2006 \\ & 2008 \\ & 2008 \\ & 1988 \\ & 1957 \end{aligned}$ | $\begin{aligned} & 2006 \\ & 1981 \\ & 2006 \\ & 1970 \\ & 1951 \end{aligned}$ |
| November <br> Chawang <br> Phatthalung Agromet.Stn. <br> Songkhla <br> Pattani <br> Yala Agromet.Stn. <br> Trang | $\begin{gathered} 373.9 \\ 1063.0 \\ 1353.7 \\ 981.2 \\ 905.3 \\ 608.3 \end{gathered}$ | $\begin{gathered} 344.0 \\ 981.5 \\ 1333.6 \\ 943.4 \\ 798.2 \\ 544.6 \end{gathered}$ | $\begin{aligned} & 2010 \\ & 1988 \\ & 1969 \\ & 1976 \\ & 2000 \\ & 2010 \end{aligned}$ | $\begin{aligned} & 1998 \\ & 1981 \\ & 1951 \\ & 1964 \\ & 1982 \\ & 1951 \end{aligned}$ |
| December <br> Chai Nat | 49.6 | 45.0 | 1998 | 1970 |

Breaking records of annual rainfall in Thailand

| Station | New Record 2017 | Previous Record |  | Start since |
| :--- | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| Chiang Rai Agromet.Stn. | $2,107.9$ | $2,082.6$ | 1994 | 1979 |
| Thoen Lampang | $1,676.3$ | $1,493.4$ | 2014 | 2006 |
| Kamphaeng Phet | $1,863.9$ | $1,704.6$ | 2008 | 1981 |
| Sakon Nakhon | $2,422.9$ | $2,142.1$ | 2008 | 1951 |
| Sakon Nakhon Agromet.Stn. | $2,314.4$ | $2,081.4$ | 2011 | 1967 |
| Nong Bua Lam Phu | $1,608.2$ | $1,541.8$ | 2016 | 2015 |
| Kosum Phisai. Mahasarakam | $1,890.9$ | $1,812.0$ | 2008 | 1970 |
| Nakhon Ratchasima | $1,652.9$ | $1,446.5$ | 1988 | 1951 |
| Buriram | $1,873.8$ | $1,799.8$ | 2011 | 2001 |
| Nakhon Sawan | $1,760.5$ | $1,618.3$ | 1988 | 1951 |
| Uthai Thani | $1,275.0$ | $1,068.9$ | 2016 | 2016 |
| Bangkok Metropolis | $2,675.8$ | $2,272.0$ | 2009 | 1951 |
| Bangkok Port | $2,238.6$ | $2,191.7$ | 2011 | 1994 |

Breaking records of annual rainfall in Thailand (Continue)

| Station | New Record 2017 | Previous Record |  | Start since |
| :--- | :---: | :---: | :---: | :---: |
|  | Rainfall (mm.) | Rainfall (mm.) | Year |  |
| Phetchaburi | $1,500.1$ | $1,332.1$ | 1985 | 1981 |
| Chawang | $2,602.4$ | $2,395.0$ | 2016 | 1998 |
| Nakhon Si Thammarat | $4,478.3$ | $4,201.6$ | 2011 | 1951 |
| Nakhon Si Thammarat Agromet.Stn. | $4,447.8$ | $4,126.4$ | 2011 | 1984 |
| Phatthalung Agromet.Stn. | $3,596.1$ | $3,543.8$ | 2011 | 1981 |
| Songkhla | $3,424.9$ | $3,353.8$ | 1966 | 1951 |
| Pattani | $3,093.8$ | $2,650.1$ | 1975 | 1964 |
| Yala Agromet.Stn. | $3,667.0$ | $3,337.2$ | 2011 | 2001 |
| Narathiwat | $4,802.4$ | $4,100.2$ | 2011 | 1951 |
| Trang | $3,221.6$ | $3,217.9$ | 1951 | 1951 |
| Satun | $3,039.0$ | $2,803.8$ | 1980 | 1978 |

Breaking records of Maximum Temperature in Thailand

| Station | New Record 2017 |  | Previous Record |  | Start <br> since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temperature $\left({ }^{\circ} \mathrm{C} .\right)$ $\qquad$ | Date | Temperature $\left({ }^{\circ} \mathrm{C} .\right)$ | Date / Year |  |
| March Laem Chabang | 38.0 | 1 | 37.5 | 18/2010 | 1993 |
| July <br> Phra Saeng. Surat Thani | 35.0 | 23 | 35.0 | 6,10,11/2011, | 1998 |
| Trang | 35.8 | 18 | 35.6 | 26/1999,31/2003 | 1951 |
| August <br> Doi Angkhang Chiang Mai | 26.9 | 23 | 26.9 | 23/2013 | 2006 |
| Sakon Nakhon Agromet.Stn. | 36.7 | 13 | 36.3 | 20/2015 | 2006 |
| Kosum Phisai. Mahasarakam | 37.0 | 13 | 37.0 | 14/2007 | 1970 |
| Si Sa Ket Agromet.Stn. | 35.5 | 23 | 35.5 | 19/2015 | 2006 |
| Ayutthaya Agromet.Stn. | 37.5 | 14 | 37.3 | 26/2009 | 2006 |
| Bua Chum. Lop Buri | 38.3 | 13 | 37.5 | 22/1990, 3/1991, 20/2015 | 1970 |
| Ratchaburi Agromet.Stn. | 37.0 | 2 | 36.9 | 24/2006, 22/2016 | 2006 |
| Bangkok Metropolis | 38.2 | 13 | 37.3 | 19/2015 | 1951 |
| Prachin Buri | 36.7 | 14 | 36.2 | 25,26/2005 | 1951 |
| September <br> Doi Angkhang. Chiang Mai | 27.2 | 4 | 26.9 | 15/2014 | 2006 |
| Thung Chang. Nan | 35.2 | 14 | 35.2 | 9/2014 | 1998 |

Breaking records of Maximum Temperature in Thailand (Cont.)

| Station | New Record 2017 |  | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temperature <br> ( ${ }^{\circ} \mathrm{C}$.) | Date | Temperature <br> $\left({ }^{\circ} \mathrm{C}.\right)$ | Date / Year |  |
| September (Cont.) <br> Lamphun | 35.8 | 15,25 | 35.6 | 8/2014 | 1981 |
| Tak | 37.2 | 13 | 37.1 | 18/2001 | 1954 |
| Lom Sak.Phetchabun | 36.5 | 13 | 36.5 | 29/2015 | 1970 |
| Phetchabun | 37.0 | 13 | 36.3 | 13/1972 | 1951 |
| Kamphaeng Phet | 36.5 | 14 | 36.2 | 6/1994 | 1981 |
| Phichit Agromet.Stn. | 37.6 | 14 | 35.7 | 9,10/2015 | 2006 |
| Udon Thani | 35.8 | 9 | 35.8 | 12/1951, 2/1954 | 1951 |
| Nakhon Phanom Agromet.Stn. | 35.2 | 27 | 35.1 | 9/2014 | 2006 |
| Ubon Ratchathani Agromet.Stn. | 35.9 | 11 | 35.7 | 8/2007 | 2006 |
| Chok Chai.Nakhon Ratchasima | 36.2 | 5 | 35.6 | 7/2015 | 1970 |
| Nakhon Sawan | 36.6 | 14 | 36.3 | 14,15/1951 | 1951 |
| Chai Nat | 37.0 | 13 | 37.0 | 8/2007 | 1970 |
| Thong Pha Phum. Kanchanaburi | 36.4 | 9 | 36.3 | 28/1977 | 1970 |
| Ratchaburi Agromet.Stn. | 36.5 | 13,14 | 35.9 | 6/2006 | 2006 |
| Pathum Thani Agromet.Stn. | 37.5 | 13,22 | 37.0 | 30/2015 | 2006 |
| Bang Na Agromet.Stn. | 37.1 | 14 | 36.9 | 21/2015 | 2006 |
| Prachin Buri | 36.1 | 13 | 36.0 | 9/2006, 7/2007 | 1951 |
| Aranyaprathet. Sa Kaeo | 36.5 | 13 | 35.9 | 4/1988 | 1952 |
| Chon Buri | 37.2 | 21 | 36.5 | 21/2015 | 1951 |
| Phetchaburi | 38.5 | 14 | 37.5 | 4/1987 | 1981 |
| Nong Plub Agromet.Stn. Prachuap Khiri | 38.6 | 14 | 36.5 | 14/2014 | 1974 |
| Sawee Agromet.Stn. Chumphon | 35.8 | 6 | 35.2 | 4/2013, 7/2015 | 1969 |
| Chawang | 35.8 | 5 | 35.8 | 21/2015 | 1998 |
| Phuket | 35.7 | 3 | 35.1 | 18/2012 | 1951 |
| October <br> Mae Hong Son | 36.6 | 10 | 36.6 | 2/2010 | 1954 |
| Nakhon Ratchasima | 35.3 | 12 | 35.3 | 18/1969 | 1951 |
| Phetchaburi | 36.1 | 21 | 35.7 | 1/1989 | 1981 |
| Surat Thani | 36.0 | 18,21 | 36.0 | 10/2014 | 1951 |
| Surat Thani Agromet.Stn. | 35.2 | 18 | 34.3 | 20/2015 | 1993 |
| Ko Samui. Surat Thani | 34.9 | 17 | 34.6 | 7/2016 | 1968 |
| Phra Saeng. Surat Thani | 35.0 | 19,21 | 34.5 | 15/2008, 23/2010, 16/2011, 17/2013, 10/2014 | 1998 |

Breaking records of Maximum Temperature in Thailand (Cont.)

| Station | New Record 2017 |  | Previous Record |  | Start <br> since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temperature <br> $\left({ }^{\circ} \mathrm{C}.\right)$ | Date | Temperature <br> $\left({ }^{\circ} \mathrm{C}.\right)$ | Date / Year |  |
| October(Cont.) <br> Nakhon Si Thammarat | 35.8 | 20 | 35.8 | 7/1981 | 1951 |
| Nakhon Si Thammarat Agromet.Stn. | 35.4 | 17 | 35.4 | 11/2016 | 2006 |
| Sadao. Songkhla | 36.0 | 20 | 35.0 | 17/2013, 1/2014 | 1998 |
| Phuket | 35.9 | 8 | 35.3 | 9/2001 | 1951 |
| Trang | 35.6 | 18 | 35.6 | 22/1990, 9/2006 | 1951 |
| November |  |  |  |  |  |
| Chiang Mai | 35.5 | 18,19 | 34.7 | 12/2009 | 1952 |
| Thung Chang. Nan | 35.2 | 15 | 34.7 | 11/2013 | 1998 |
| Lamphun. Nan | 37.2 | 7 | 35.5 | 11,14/2009 | 1981 |
| Phare | 36.1 | 18 | 35.8 | 16/2015 | 1952 |
| Loei Agromet.Stn. | 36.3 | 18 | 35.7 | 12/2009 | 2006 |
| Ubon Ratchathani Agromet.Stn. | 36.5 | 16 | 36.5 | 10/2012 | 2006 |
| Surin | 36.2 | 18 | 36.2 | 10/1953 | 1951 |
| Surat Thani Agromet.Stn. | 34.2 | 18 | 34.0 | 1,3/2008, 17/2012,30/2014 | 2006 |
| Phra Saeng. Surat Thani | 35.3 | 22 | 34.6 | 30/2014 | 1998 |
| Nakhon Si Thammarat Agromet.Stn. | 34.5 | 18 | 34.1 | 16/2011 | 2006 |
| Krabi | 34.5 | 7 | 34.2 | 28/1997 | 1994 |
| December <br> Chiang Mai | 33.5 | 12 | 33.5 | 12/1959 | 1952 |
| Phra Saeng. Surat Thani | 34.5 | 7,11 | 34.5 | 3/2014 | 1998 |
| Krabi | 34.8 | 15 | 34.3 | 17/1997 | 1994 |

Breaking records of Minimum Temperature in Thailand

| Station | New Record 2017 |  | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temperature $\left({ }^{\circ} \mathrm{C} .\right)$ | Date | Temperature $\left({ }^{\circ} \mathrm{C} .\right)$ | Date / Year |  |
| August |  |  |  |  |  |
| Phayao | 20.0 | 24,30 | 20.5 | 30/2014 | 1981 |
| Ayutthaya Agromet.Stn. | 21.5 | 27 | 21.6 | 29/2016 | 2006 |
| September |  |  |  |  |  |
| Kamphaeng Saen | 19.5 | 1 | 22.0 | 20/2013 | 2006 |

Breaking records of Minimum Temperature in Thailand (Cont.)

| Station | New Record 2017 |  | Previous Record |  | Start since |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temperature $\left({ }^{\circ} \mathrm{C} .\right)$ | Date | Temperature <br> $\left({ }^{\circ} \mathrm{C}.\right)$ | Date / Year |  |
| October Laem Chabang | 18.2 | 22 | 20.0 | 23,25/1994, 26/1996, 8,18/2004 | 1993 |
| December <br> Thoen Lampang <br> Sukhothai <br> Buriram <br> Krabi | $\begin{gathered} 8.2 \\ 11.2 \\ \\ 9.3 \\ 18.0 \\ \hline \end{gathered}$ | 21 <br> 21 <br> 21 <br> 21 | 9.7 <br> 13.0 <br> 10.1 <br> 18.5 | $18 / 2013$ $22 / 2003,9 / 2004$, $23 / 2006,23 / 2013$ $28 / 2013$ $21 / 2015$ | $\begin{aligned} & 2004 \\ & 2000 \\ & 2003 \\ & 1994 \\ & \hline \end{aligned}$ |

## Climate Center

## Meteorological Development Division

Thai Meteorological Department

