Monthly Weather Summary in Thailand December 2019

The continuation of high pressure areas from China which extended to cover upper Thailand throughout the month caused cool and cold weather, particularly during 6-11 which was the lowest temperature of the month with cold weather in almost of upper Thailand and very cold weather in several areas of the northern and northeastern parts. In the mountainous areas and mountain top, the weather was cold to very cold and reporting in some frost areas. However, mean monthly temperatures were above normal in all regions. For rainfall, the average total rainfall over Thailand was about 62% below normal and the monthly rainfall was above normal in all parts especially scanty rain was observed throughout the month with monthly rainfall was 100% higher than normal over northeastern and central parts. However, unusual rainfall was reported in northern and northeastern parts during the end of the month due to the passage of the westerly trough to the upper of northern and northeastern Thailand during at that time. In southern Thailand, the active northeast monsoon prevailed over the Gulf of Thailand and southern part during the beginning and the middle of the month caused plentiful rainfall occurring along the east coast and flash floods in some places.

Monthly rainfall was below normal in every parts of Thailand i.e. northern part 4.2 mm (51%), northeastern part 3.5 mm (100%), central 5.2 mm (100%), eastern 7.0 mm (86%), southern part (east coast) 151.0 mm (64%) and southern part (west coast) 36.9 mm (49%).

1 - 10 December: Under a ridge of high pressure area from China covered the upper Thailand and South China Sea throughout the period associated with the active northeast monsoon prevailed over the Gulf of Thailand and southern part. The weather over Thailand became cool and cold in some place of northern and northeastern parts during early period after that temperature decreased to cool and cold weather especially very cold weather in several areas of upper portion of the northern and northeastern parts. The minimum temperature was 5.1 [°]C at Agrometeorological station in Chiang Rai province on December 9. In the mountainous areas and mountain tops, temperature climbed down to -1.5 $^{\circ}\mathrm{C}$ at Kew Mae Pan, Doi Inthanon in Chiang Mai province on December 10. Frost occurred at Doi Intanon in Chiang Mai province on December 6 and 10, at Doi Angkhang in Chiang Mai province on December 9 and at Phu Chi Fa Forest Park in Chiang Rai province on December 9 and 10. For rainfall, scanty rainfall was found in upper Thailand with the maximum daily rainfall of 4.6 mm at Khao Krayang Forest Plantation in Phitsanulok province on December 1. In southern part, fairly widespread rain with heavy to very heavy rainfall during the first half of the period after that scattered rain along east coast with flood occurred at Phatthalung province on December 2. The maximum daily rainfall was 166.8 mm at Amphoe Sukhirin in Narathiwat province on December 1.

11 – 20 December: The weak high pressure area covered upper Thailand throughout the period. In addition, the northeast monsoon prevailed over the Gulf of Thailand and southern part almost the period as well as the prevailing of easterly wind on December 18 – 19. These conditions caused cool and cold weather over Thailand especially very cold weather in

some places of northern part during the first half of the period after that increasing temperature but still cool weather nearly the whole areas with cold weather in the upper portion of northern and northeastern parts. The lowest minimum temperature was $8.1\,^{\circ}\text{C}$ at Agrometeorological station in Chiang Rai province on December 12 and $3.4\,^{\circ}\text{C}$ over the area of mountain tops at Doi Angkhang in Chiang Mai province on December 16. For rainfall, scanty rainfall was found in upper Thailand with the maximum daily rainfall of $3.2\,$ mm in Pattaya at Chon Buri povince on December 20. In southern Thailand, scattered to fairly widespread rain with heavy rainfall in some areas almost the period along east coast whereas isolated to scattered rain except for fairly widespread rain on December 15 was found along west coast. The highest daily rainfall was 250.2 mm at Amphoe Sukhirin in Narathiwat province on December 15 with floods occurred at Yala and Narathiwat province on December 17.

21 - 31 December: Under the influence of weak high pressure area covering upper Thailand during the first half of the period and then another ridge of rather active high pressure area from China extending to cover northeastern part and the South China. In addition, the upper-level westerly wind blew into northern and northeastern parts during the first half of the period. These conditions caused generally cool weather with cold weather in the upper portion of northern and northeastern parts as well as cool weather in several areas for the rest parts. The lowest minimum temperature was 11.3 °C at Agrometeorological station in Chiang Rai province on December 24 and it dropped to 3.8 °C in mountain areas at Kew Mae Pan, Doi Inthanon in Chiang Mai province on December 27. For rainfall, with the prevailing of easterly wind over the Gulf of Thailand and southern part almost the period coupled with the passage of the westerly trough to the upper northern and upper northeastern Thailand during the second half of the period. These caused isolated rain over upper Thailand mainly in the upper northern part during the same period. The maximum daily rainfall of 33.3 mm at Amphoe Thoeng in Chiang Rai province on December 28 with gusty wind and hail were reported at Lamphang province on December 28, Chiang Mai province on December 29 and Chiang Rai and Mae Hong Son provinces on December 28 and 29. Southern part obtained isolated rain almost the period and the maximum daily rainfall was 45.0 mm at Amphoe Chai Buri in Surat Thani province on December 25.

Note: Rainfall, temperatures and natural disasters in this report was updated up to January 6, 2020.

Climatological Center Meteorological Development Division Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfall December 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	19.9	0.5	17.8	3.8	1011.4	-679.1
Mae Hong Son	20.3	-0.6	7.8	-2.6	1135.4	-157.0
Phayao	19.8	-0.2	17.2	6.3	740.6	-396.4
Chiang Mai	22.3	0.9	9.1	-6.8	972.1	-158.5
Tha Wang Pha	20.8	0.3	0.0	-11.0	1337.7	-70.4
Nan	21.5	0.5	0.0	-8.6	1275.0	40.9
Lamphun	21.6	0.3	19.9	12.5	923.5	-80.3
Lampang	22.1	0.5	8.0	1.0	1238.9	193.4
Mae Sariang	20.9	0.0	0.0	-7.6	912.3	-223.5
Phrae	22.3	0.5	0.0	-7.8	999.9	-114.9
Uttaradit	24.6	0.9	0.0	-5.0	842.8	-528.8
Bhumibol Dam	23.9	1.2	0.0	-7.2	742.7	-300.7
Tak	23.7	0.7	0.0	-5.1	873.2	-187.9
Mae Sot	23.3	1.3	0.0	-5.9	1650.6	183.0
Umphang	20.5	0.7	0.0	-5.1	1326.8	-134.5
Phitsanulok	24.4	0.1	0.0	-11.1	867.6	-449.4
Lom Sak	24.6	0.8	0.0	-4.5	814.3	-228.8
Phetchabun	24.8	1.3	0.0	-7.8	881.0	-252.4
Wichian Buri	25.0	0.2	0.0	-4.3	1134.8	-85.8
Kamphaeng Phet	24.6	0.5	0.1	-6.6	1041.7	-262.9
Over the area	22.5	0.5	4.0	-4.2	1036.1	-194.8
				-51%		-16%

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	23.5	1.4	0.0	-4.3	1607.9	-0.3
Loei	22.0	0.9	0.0	-8.7	625.9	-615.0
Udon Thani	22.6	0.2	0.0	-2.9	1285.7	-132.7
Nakhon Phanom	23.5	1.5	0.0	-4.8	2178.1	-168.7
Sakon Nakhon	22.7	0.8	0.0	-5.6	1213.0	-432.0
Mukdahan	23.4	1.2	0.0	-2.6	1587.0	107.0
Khon Kaen	24.2	1.2	0.0	-4.1	1068.6	-178.2
Kosum Phisai	23.8	0.3	0.0	-3.1	1258.6	-5.1
Roi Et	24.0	1.1	0.0	-2.1	1530.7	188.7
Chaiyaphum	24.8	1.0	0.0	-4.1	778.8	-358.4
Ubon Ratchathani	24.6	0.9	0.0	-1.0	1697.7	116.0
Tha Tum	24.3	0.6	0.0	-1.0	1188.0	-199.9
Surin	24.6	1.0	0.0	-1.9	1174.2	-258.0
Nakhon Ratchasima	24.6	1.0	0.0	-2.7	650.1	-421.4
Chok Chai	24.2	0.6	0.0	-3.2	573.9	-500.9
Nang Rong	23.8	0.2	0.0	-3.4	829.3	-364.6
Over the area	23.8	0.9	0.0	-3.5	1203.0	-201.5
				-100%		-14%

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 December 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	25.1	0.5	0.0	-4.6	975.4	-174.3
Bua Chum	24.7	0.4	0.0	-2.5	908.9	-176.4
Lop Buri	26.8	1.0	0.0	-4.5	790.1	-335.0
Suphan Buri	26.1	1.1	0.0	-6.7	513.2	-462.2
Thong Pha Phum	24.0	0.1	0.0	-4.7	1477.4	-309.1
Kanchanaburi	26.2	1.3	0.0	-6.2	687.4	-369.0
Bangkok Airport	27.0	0.6	0.0	-6.1	998.0	-376.9
Bangkok Metropolis	27.5	1.0	0.0	-6.3	1058.1	-590.1
Over the area	25.9	0.7	0.0	-5.2	926.1	-349.1
				-100%		-27%

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	27.3	1.1	0.0	-5.0	1341.4	-481.9
Kabin Buri	25.2	-0.4	0.0	-3.9	1285.9	-310.9
Aranyaprathet	26.4	1.1	0.0	-4.8	1123.1	-221.7
Chon Buri	27.3	0.8	0.0	-5.5	1083.2	-212.4
Ko Sichang	26.9	0.7	0.0	-8.5	900.3	-318.6
Pattaya	26.7	0.8	3.2	-5.1	852.2	-258.5
Sattahip	26.1	0.1	2.3	-8.2	1246.9	-19.7
Rayong	26.2	0.2	3.5	-2.4	946.0	-437.2
Chanthaburi	27.1	1.1	0.0	-6.8	2545.4	-448.8
Khlong Yai	27.4	0.6	2.2	-19.1	5357.5	511.7
Over the area	26.7	0.6	1.1	-7.0	1668.2	-220.0
				-86%		-12%

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 December 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	26.3	0.9	0.0	-11.6	585.6	-401.7
Hua Hin	26.7	0.9	0.9	-7.0	650.7	-304.4
Prachuap Khiri Khan	26.1	0.6	0.0	-15.0	855.6	-236.2
Chumphon	25.9	0.6	106.2	-17.1	1767.0	-105.7
Surat Thani	25.9	0.4	47.2	-82.2	1236.3	-385.7
Ko Samui	27.2	0.6	161.5	-48.8	1393.9	-566.2
Nakhon Si Thammarat	26.0	0.3	199.8	-251.9	2130.8	-365.7
Songkhla	27.4	0.6	107.9	-336.8	1371.4	-695.3
Hat Yai Airport	26.4	0.8	41.0	-226.7	1354.4	-371.9
Pattani Airport	26.3	0.4	74.9	-303.4	1464.0	-401.1
Narathiwat	26.6	0.7	205.0	-360.6	2367.2	-93.5
Over the area	26.4	0.6	85.9	-151.0	1379.7	-357.2
				-64%		-21%

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	26.8	0.5	12.6	-32.9	3828.7	-239.7
Takua Pa	27.0	0.6	43.0	-18.7	3405.7	-251.9
Phuket	28.6	1.0	45.0	-27.4	1688.8	-530.7
Phuket Airport	27.5	0.8	52.0	-15.4	2487.7	12.7
Ko Lanta	27.8	0.9	19.4	-36.2	2016.6	-160.0
Trang Airport	27.1	0.9	78.3	-47.1	2094.4	-54.1
Satun	28.1	1.1	16.5	-80.4	1968.0	-321.9
Over the area	27.6	0.9	38.1	-36.9	2498.6	-220.7
				-49%		-8%

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.



















