Monthly Weather Summary in Thailand November 2021

In November 2021, the high pressure area from China periodically extended its ridge to cover upper Thailand causing cool weather in most areas of the northern and northeastern parts mainly during the middle and the end of the month with cold weather in some areas in the upper portion during late month, whereas other parts experienced cool weather in some areas. However, the high pressure that covered upper Thailand was weak and the easterly and southeasterly winds prevailed over upper Thailand for few days, unseasonable rain was observed in upper Thailand with increasing in temperature at times. As a result, the average temperature of this month was above normal in every regions especially in the northern part where the temperature was 2.0 °C above normal. The monthly total rainfall in most areas of upper Thailand was below normal except for in the eastern part that received above normal rainfall. For southern part, the northeast monsoon prevailed over the Gulf of Thailand and the south part throughout the month, the low pressure cell covered Malaysia during early month, the monsoon trough lay across the lower southern region and Malaysia during late month and the active low pressure cell periodically covered the middle of the southern part. These caused plentiful rainfall in southern parts almost the month, especially along the east coast that experienced heavy to very heavy rainfall in many areas during the middle and the end of the month resulting in flooding in some areas. Monthly total rainfall was below normal in the northern part 6.9 mm (21%), northeastern part 16.2 mm (83%) and central part 3.3 mm (9%) while it was inversely above normal rainfall in the eastern part 25.9 mm (46%), southern part (east coast) 189.9 mm (83%) and southern part (west coast) 149.0 mm (77%). More details on the weather were as follow:

1 – 10 November: During early period, the ridge of high pressure area from China extended to cover northeastern part and the South China Sea coupled with the easterly and the southeasterly winds prevailing over upper Thailand after that the high pressure area was weak and the another active high pressure areas extended to dominate upper Thailand during late period. These caused unseasonable rainfall in upper Thailand with cool weather in several areas in the northern and northeastern parts during early and mid-period after that temperature was relatively decreased with generally cool weather in the northeastern part. The lowest minimum temperature was 16.6 °C at Agrometeorological station in Nakhon Phanom province on November 10. Cold weather was found in the mountainous areas and mountaintop with lowest minimum temperature of 9.4 °C Doi Inthanon, Chom Thong in Chiang Mai province on November 9. For rainfall, upper Thailand experienced unseasonable rainfall mainly in the central and eastern parts with scattered to fairly widespread rain almost the period and heavy to very heavy rainfall in some areas, whereas rainfall was mainly observed during the early period in the northern part with scattered to fairly widespread rain and heavy rainfall in some areas. Isolated rain was found in the northeastern part for few days. The maximum daily rainfall in upper Thailand was 192.0 mm at Pachee River Wildlife Sanctuary in Ratchaburi province on November 8. In southern part, the northeast monsoon which prevailed over the Gulf of Thailand and southern part almost the period was active during late period and the easterly wind prevailed over the mentioned areas accompanied with the low pressure cell covered Malaysia during 2-5 November. These conditions caused abundant rainfall especially along the east coast that received fairly widespread rain with heavy to very heavy rainfall throughout the period. The highest daily rainfall was 160.0 mm at Amphoe Bang Khan in Nakhon Si Thammarat province on November 6. Flash floods occurred at Surat Thani nad Nakhon Si Thammarat provinces on November 6, at Phatthalung province on November 7, at Krabi province on November 5-7 and at Trang province on November 6 and 7.

11 - 20 November: The active high pressure area from China extended its ridge to cover upper Thailand during early period and later weakened and the another ridge of high pressure area extending to cover upper Thailand and the South China Sea during late period which inducing the easterly wind prevailed over lower northeastern, central and eastern parts during that time. Under theses influences, cool weather in most areas of the northern part almost the period and generally cool weather with cold weather in some areas in the northeastern part during early and mid-period after that temperature relatively increased in many places whereas, central and eastern parts experienced cool weather in some areas during early and mid-period. The lowest minimum temperature was 15.7 °C at Agrometeorological Station in Nakhon Phanom province on November 11. Cold and very cold weather in mountainous areas and mountain tops with the lowest temperature of 8.5 °C at Kew Mae Pan, Doi Inthanon, Chom Thong in Chiang Mai province on November 14. For rainfall, rainfall was mainly observed in eastern part with isolated to scattered rain and heavy rainfall in some areas, whereas isolated rain with heavy rainfall in some areas was observed in the northern, northeastern and central parts almost the period. The maximum daily rainfall was 74.0 mm at Rayong Provincial Agricultural Extension Office on November 18. In southern part, the active northeast monsoon which prevailed over the Gulf of Thailand and southern part during the first half of the period was weakened and the active low pressure cell which covered the middle of southern part moved into the Andaman Sea during November 12-14 accompanied with the low pressure cell covering the middle of the southern part during November 17-18. These caused abundant rainfall almost the period with fairly widespread rain and isolated heavy to very heavy along the east coast especially during early period that received heavy to very heavy rainfall in many areas while fairly widespread rain with heavy to very heavy rainfall in some areas was observed along the west coast. The maximum daily rainfall was 165.5 mm at Khuan Don in Satun province on November 17 with reports of flooding in Phetchaburi, Surat Thani, Nakhon Si Thammarat provinces during November 10-14, at Songkhla and Chumphon provinces during November 12-14, at Ranong province during November 12-14 and at Phang-nga province on November 13 and at Trang and Phuket provinces on November 13 and 18.

21 – 30 November: The weak high pressure area covered upper Thailand during early period and the easterly wind prevailed over the lower northeast, central and eastern parts during that time and the another high pressure area from China extended its ridge to cover upper Thailand during the middle and the end of the periods. These conditions caused cool weather in most areas of the northern and northeastern parts during early period then the temperature dropped and generally cool weather with cold weather in some areas was found in the upper portion. In central and eastern parts, the temperature decreases and cool weather was found during the middle and the end of the periods. The lowest temperature of 13.9 °C was measured at Agrometeorological Station in Nakhon Phanom province on November 28. Cold to very cold weather in the mountainous areas and mountain tops, the lowest temperature was 4.7 °C at Kew Mae Pan, Doi Inthanon, Chom Thong, Chiang Mai province on November 22. For rainfall, there was scanty rain in the northeastern part whereas isolated rain was found in the northern part during the first half of the period mostly in the upper portion. Rainfall in he central and eastern

parts was mainly observed during early period with isolated to scattered rain and heavy rainfall in some areas. The highest daily rainfall in upper Thailand was 59.4 mm at Suwan Phlapphla Phitthayakom school, Khet Taling Chan, Bangkok Metropolis on November 21. For southern part, the rather active northeast monsoon prevailing over the Gulf of Thailand and the southern part almost the period, the monsoon trough lying across the lower southern part and Malaysia during the second half of the period and lay toward the low pressure cell in the lower South China Sea. Subsequently, this low pressure cell moved to cover the middle of the southern part during late period. These caused plentiful rainfall in southern part throughout the period especially along the east coast that received fairly widespread rain with heavy rainfall in many areas in particular during late period The highest daily rainfall was 369.0 mm at Lang Suan Provincial Agricultural Extension Office, Chumphon province on November 30. Gusty wind were reported in Nakhon Si Thammarat province on November 22, and flooding at Phetchaburi and Prachuap Khiri Khan provinces on November 23-25, at Surat Thani province on November 23-28, at Phatthalung province on November 24, at Chumphon and Nakhon Si Thammarat provinces on November 25-28, at Songkhla province on November 28-30, and at Phatthalung and Krabi provinces on November 29. Landslides were reported at Chumphon province on November 30.

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

December 3, 2021.

Climate Center Meteorological Development Division Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfall November 2021

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	24.7	2.5	64.2	5.0	1732.0	55.5
Mae Hong Son	25.8	1.8	53.4	8.5	1092.5	-189.5
Phayao	25.5	2.8	8.6	-28.7	1279.1	153.0
Chiang Mai	26.7	2.7	44.4	-9.5	1105.4	-9.3
Tha Wang Pha	25.7	2.6	34.1	6.5	1393.6	-3.5
Nan	26.4	2.5	6.4	-11.7	1121.5	-104.0
Lamphun	26.1	2.2	5.2	-38.9	1070.6	74.2
Lampang	26.2	2.0	9.0	-20.5	1112.6	74.1
Mae Sariang	26.1	2.2	84.7	62.6	1347.4	219.2
Phrae	26.6	2.2	2.3	-23.3	1240.6	133.6
Uttaradit	27.7	1.8	37.2	10.5	1265.2	-101.4
Bhumibol Dam	26.1	1.3	25.2	-19.6	2172.6	1136.4
Tak	26.7	1.5	33.8	-20.8	2074.0	1018.0
Mae Sot	26.5	2.1	13.9	-9.8	1909.2	447.5
Umphang	24.1	2.1	31.9	6.7	1811.5	355.3
Phitsanulok	27.6	1.1	11.6	-21.8	1250.8	-55.1
Lom Sak	27.2	1.8	0.0	-13.9	1172.9	134.3
Phetchabun	27.5	2.1	15.4	3.8	1080.7	-44.9
Wichian Buri	27.7	1.4	13.0	-7.3	1525.8	309.5
Kamphaeng Phet	27.4	1.5	25.6	-16.4	1286.4	-11.5
Over the area	26.4	2.0	26.0	-6.9	1402.2	179.5
				-21%		15%

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	26.6	2.0	0.0	-15.2	1666.6	62.7
Loei	25.3	1.7	4.2	-15.8	1516.8	284.6
Udon Thani	26.1	1.2	0.0	-10.3	1236.4	-179.1
Nakhon Phanom	25.3	0.9	0.0	-9.7	2135.0	-207.0
Sakon Nakhon	25.0	0.6	0.3	-11.6	1428.7	-210.7
Mukdahan	25.3	0.9	0.0	-13.3	1641.1	163.7
Khon Kaen	26.0	1.0	0.0	-15.9	1132.4	-110.3
Kosum Phisai	26.4	1.1	0.0	-18.1	1288.9	28.3
Roi Et	26.2	1.3	0.0	-15.2	1297.3	-42.6
Chaiyaphum	26.9	1.3	1.6	-17.4	1333.0	199.9
Ubon Ratchathani	26.1	0.7	0.0	-22.6	1753.6	172.9
Tha Tum	26.2	0.8	0.0	-21.0	1208.4	-178.5
Surin	26.3	1.0	33.4	4.7	1527.1	96.8
Nakhon Ratchasima	26.8	1.4	0.0	-23.9	1178.9	110.1
Chok Chai	26.5	1.4	5.8	-23.6	1295.2	223.6
Nang Rong	25.9	0.9	7.4	-29.8	1564.2	373.7
Over the area	26.1	1.2	3.3	-16.2	1450.2	49.2
				-83%		4%

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 2021

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	28.2	1.7	12.4	-15.0	1288.3	143.2
Bua Chum	27.4	1.7	42.5	20.4	1276.5	193.7
Lop Buri	28.2	1.1	57.3	24.2	1282.6	162.0
Suphan Buri	28.2	1.4	17.7	-26.4	1162.4	193.7
Thong Pha Phum	26.6	1.3	29.6	4.0	2093.6	311.8
Kanchanaburi	27.7	1.3	20.3	-38.3	1143.0	92.8
Bangkok Airport	28.3	0.6	2.7	-34.3	1093.7	-275.1
Bangkok Metropolis	28.6	0.8	89.0	39.5	1740.1	98.2
Over the area	27.9	1.2	33.9	-3.3	1385.0	115.0
				-9%		9%

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	28.6	1.2	7.8	-23.9	1619.0	-199.3
Kabin Buri	27.2	0.5	20.8	-8.3	1678.6	85.7
Aranyaprathet	27.7	1.0	37.9	2.4	1528.6	188.6
Chon Buri	28.5	0.9	38.8	-10.0	1321.2	31.1
Ko Sichang	27.4	0.2	85.1	24.5	1387.5	177.1
Pattaya	27.1	0.4	107.9	35.8	1736.8	634.4
Sattahip	27.4	0.5	173.2	97.1	2502.8	1246.7
Rayong	28.0	0.8	73.1	22.3	1778.2	400.9
Chanthaburi	27.5	0.6	64.1	9.6	3919.5	932.1
Khlong Yai	27.7	0.4	182.8	109.2	5072.6	248.1
Over the area	27.7	0.6	79.2	25.9	2254.5	374.4
				49%		20%

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

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Monthly Current Report Rainfall and Accumulative Rainfall November 2021

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	0.9	51.1	-42.7	1039.8	64.1
Hua Hin	27.8	0.9	145.7	44.5	1053.9	106.7
Prachuap Khiri Khan	27.3	0.7	231.1	76.6	952.9	-123.9
Chumphon	26.3	0.3	653.3	365.4	2110.1	360.7
Surat Thani	26.0	0.1	390.8	60.9	1267.8	-224.8
Ko Samui	26.7	-0.1	1083.7	577.1	1912.8	163.0
Nakhon Si Thammarat	26.2	0.1	1034.6	403.4	2230.0	185.2
Songkhla	26.5	-0.4	1047.6	501.7	2144.0	522.0
Hat Yai Airport	26.0	0.0	421.2	104.1	1430.3	-28.3
Pattani Airport	26.6	0.3	301.8	-104.8	1409.5	-77.3
Narathiwat	26.2	-0.1	656.0	101.1	1901.4	6.3
Over the area	26.7	0.3	547.0	189.8	1586.6	86.6
				53%		6%

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	26.3	-0.2	526.6	374.3	5469.3	1446.4
Takua Pa	26.4	-0.1	367.0	126.1	4266.2	670.3
Phuket	27.7	0.1	255.5	78.1	1886.3	-260.8
Phuket Airport	27.0	0.1	367.2	159.4	2784.6	377.0
Ko Lanta	26.7	-0.4	180.9	33.8	2365.2	244.2
Trang Airport	26.2	-0.2	352.7	148.8	2197.8	174.7
Satun	26.9	0.0	346.4	122.5	2820.2	627.2
Over the area	26.7	-0.1	342.3	149.0	3112.8	468.5
				77%		18%

NOTES:

- 1) Mean temperature is the average of daily dry-bulb temperature
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- 3) "blank" is incomplete data.
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