Monthly Weather Summary in Thailand December 2021

Affected by the high pressure area from China continuously extended its ridge to cover upper Thailand throughout the month and it was occasionally rather active, the weather of December 2021 was cold weather in most the month of northern and northeastern parts whereas central and eastern parts experienced cool in most areas almost the month with cold weather in some areas during the beginning of the month. Cold to very cold weather reported in mountainous areas and mountain tops. However mean monthly temperature of this December were above normal in all region. For rainfall, there was scanty rainfall in upper Thailand during 23-26 due to the passage of the westerly trough to the northern, upper northeastern and upper central parts and the southeasterly wind prevailed over the lower northeastern, lower central and eastern parts during at that time. In southern Thailand, the rather active northeast monsoon prevailed over southern part accompanied with the low pressure cell covered Malaysia during the middle of the month. These brought plentiful rainfall especially along east coast that flood occurred in several areas during the mentioned period. The average total rainfall over Thailand in this month was about 26% below normal and monthly rainfall was below normal in most part i.e. northern part 7.7 mm (94%), central part 2.4 mm (46%), eastern part 0.1 mm (1%), southern part (east coast) 64.3 mm (27%) and southern part (west coast) 13.6 mm (18%) while it was inversely above normal 3.8 mm (109%) in northeastern part. More details on the weather were as follow:

1 – 10 December: The active high pressure area form China over extended to cover Thailand during the early and mid-period and later weakened. These caused cool and cold weather over upper Thailand especially cold weather in most areas of northern and northeastern parts almost the period. The lowest minimum temperature was 8.1 °C at Amphoe Umphang in Tak province on December 6. Cold to very cold weather was found in the mountainous areas and mountaintop with lowest minimum temperature of 2.6 °C at Kiew Mar Pan, Doi Inthanon in Chiang Mai province on December 5. For rainfall, there was scanty rainfall in upper Thailand while southern part was affected by northeast monsoon over the Gulf of Thailand and southern part almost the period was rather active during early period causing fairly widespread rain with heavy to very heavy rainfall in several place during early period then isolated to scattered rain mainly along early coast. The highest daily rainfall was 274.4 mm at Amphoe Mueang in Nakhon Si Thammarat province on December 1. Flash floods occurred at Songkhla, Trang and Narathiwat provinces on December 2, at Phatthalung province on December 1-6 and at Surat Thani province on December 3-9. Landslide at Phathalung province on December 2.

11 – 20 December: The weak high pressure area over Thailand during early period after that the another ridge of rather active high pressure area extending to cover upper Thailand associated with another rather active high pressure area extending to cover the mentioned area during late period. These caused cold weather in most areas of northern part since mid-period while northeastern part received cold weather in several areas of the upper portion especially the temperature dropped with cold weather in most areas on the last day of the period as well as cool weather in most areas of central and eastern parts almost the period. The lowest minimum temperature was 10.0 °C at Agrometeorological Station in Chiang Rai province on December 20. Cold and very cold weather in mountainous areas and mountain tops with the

lowest temperature of 2.0 °C at Kew Mae Pan, Doi Inthanon, Chom Thong in Chiang Mai province on December 16. For rainfall, there was scanty rainfall in upper Thailand while southern part was affected by northeast monsoon over the Gulf of Thailand and southern part was rather active on December 13-14 coupled with the low pressure cell covered Malaysia during the second half of the period causing isolated to scattered rain with heavy rainfall in some areas along the east coast during the first half the period. After that, increasing rainfall with scattered to fairly widespread rain and heavy rainfall in several places with very heavy rainfall in some areas. The highest daily rainfall was 128.0 mm at Amphoe Pak Phanang in Nakhon Si Thammarat province on December 19, and flooding at Yala province on December 17-19, at Narathiwat province on December 17-20 and at Songkhla province on December 18-19. Gusty wind occurred at Songkhla province on December 17.

21 - 31 December: The moderate to rather active high pressure area covered upper Thailand and the south China Sea during early period and later weakened. During late period, another rather active high pressure area from China extended its ridge to cover the mentioned area. Moreover, the westerly trough moved through the northern, upper northeastern and upper central parts during mid-period coupled with the southeasterly wind prevailed over the lower northeastern, lower central and eastern parts on December 23-26. These conditions caused cool weather in general of northern and northeastern parts with cold weather in several places was of the upper portion while cool weather was present in several areas of central and eastern parts. The lowest temperature of 9.8 °C was measured at Agrometeorological Station in Chiang Rai province and Amphoe Umphang on December 21. Cold to very cold weather in the mountainous areas and mountain tops, the lowest temperature was 4.2 °C at Doi Inthanon, Chom Thong, Chiang Mai province on December 21. For rainfall, there was isolated to scattered rain was found in upper Thailand with heavy rainfall in some place during mid-period and maximum daily rainfall of 50.9 mm at Amphoe Khlong Yai in Trat province on December 24. In southern part obtained increasing rainfall during late period affected by the northeast monsoon which prevailed over the Gulf of Thailand strengthened during that time. These caused scattered to fairly widespread rain with heavy to very heavy rainfall in some areas except for isolated to scattered rain mainly along east coast on December 22-27. The highest daily rainfall was 100.1 mm at Amphoe Noppitum in Nakhon Si Thammarat on December 29. Flash flood occurred at Nakhon Si Thammarat province with gusty wind at Pattani province on December 30.

Note: Rainfall, temperatures and natural disasters in this report were updated up to January 6, 2022.

Climate Center Meteorological Development Division Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfal December 2021

Northern Thailand

	Tempera	ature (°c)	Rainfa	ll (mm)		rainfall (mm) January
Station		Above		Above		Above
	Mean	or below	Actual	or below	Actual	or below
		normal		normal		normal
Chiang Rai	20.3	0.9	0.0	-14.0	1732.0	41.5
Mae Hong Son	21.5	0.6	0.0	-10.4	1092.5	-199.9
Phayao	20.9	0.9	7.6	-3.3	1286.7	149.7
Chiang Mai	22.9	1.5	0.0	-15.9	1105.4	-25.2
Tha Wang Pha	21.2	0.7	0.0	-11.0	1393.6	-14.5
Nan	22.4	1.4	0.0	-8.6	1121.5	-112.6
Lamphun	22.3	1.0	0.0	-7.4	1070.6	66.8
Lampang	22.3	0.7	0.0	-7.0	1112.6	67.1
Mae Sariang	21.7	0.8	0.0	-7.6	1347.4	211.6
Phrae	22.6	0.8	2.3	-5.5	1242.9	128.1
Uttaradit	24.2	0.5	0.0	-5.0	1265.2	-106.4
Bhumibol Dam	22.9	0.2	0.0	-7.2	2172.6	1129.2
Tak	23.4	0.4	0.0	-5.1	2074.0	1012.9
Mae Sot	23.1	1.1	0.0	-5.9	1909.2	441.6
Umphang	20.4	0.6	0.0	-5.1	1811.5	350.2
Phitsanulok	24.3	0.0	0.3	-10.8	1251.1	-65.9
Lom Sak	23.8	0.0	0.0	-4.5	1172.9	129.8
Phetchabun	24.4	0.9	0.0	-7.8	1080.7	-52.7
Wichian Buri	24.8	0.0	0.6	-3.7	1526.4	305.8
Kamphaeng Phet	24.0	-0.1	0.0	-6.7	1286.4	-18.2
Over the area	22.7	0.7	0.5	-7.7	1402.8	171.9
				-94%		14%

Northeastern Thailand

	Tempera	nture (°c)	Rainfa	ll (mm)		rainfall (mm) January
Station		Above		Above		Above
	Mean	or below	Actual	or below	Actual	or below
		normal		normal		normal
Nong Khai	23.0	0.9	0.0	-4.3	1666.6	58.4
Loei	21.6	0.5	0.0	-8.7	1516.8	275.9
Udon Thani	22.3	-0.1	0.0	-2.9	1236.4	-182.0
Nakhon Phanom	22.3	0.3	0.0	-4.8	2135.0	-211.8
Sakon Nakhon	22.0	0.1	0.0	-5.6	1428.7	-216.3
Mukdahan	22.6	0.4	0.0	-2.6	1641.1	161.1
Khon Kaen	23.3	0.3	0.0	-4.1	1132.4	-114.4
Kosum Phisai	23.8	0.3	0.0	-3.1	1288.9	25.2
Roi Et	23.6	0.7	0.0	-2.1	1297.3	-44.7
Chaiyaphum	24.1	0.3	5.8	1.7	1338.8	201.6
Ubon Ratchathani	23.9	0.2	4.7	3.7	1758.3	176.6
Tha Tum	24.0	0.3	0.0	-1.0	1208.4	-179.5
Surin	24.0	0.4	0.0	-1.9	1527.1	94.9
Nakhon Ratchasima	24.2	0.6	38.1	35.4	1217.0	145.5
Chok Chai	24.0	0.4	68.7	65.5	1363.9	289.1
Nang Rong	23.4	-0.2	0.0	-3.4	1564.2	370.3
Over the area	23.3	0.4	7.3	3.8	1457.6	53.1
				109%		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 Rainfal December 2021

Central Thailand

	Temperature (°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	
Nakhon Sawan	25.2	0.6	0.0	-4.6	1288.3	138.6	
Bua Chum	24.6	0.3	6.8	4.3	1283.3	198.0	
Lop Buri	26.1	0.3	0.0	-4.5	1282.6	157.5	
Suphan Buri	25.6	0.6	14.7	8.0	1177.1	201.7	
Thong Pha Phum	23.7	-0.2	0.0	-4.7	2093.6	307.1	
Kanchanaburi	25.8	0.9	1.1	-5.1	1144.1	87.7	
Bangkok Airport	26.6	0.2	0.0	-6.1	1093.7	-281.2	
Bangkok Metropolis	27.4	0.9	0.0	-6.3	1740.1	91.9	
Over the area	25.6	0.4	2.8	-2.4	1387.9	112.7	
				-46%		9%	

Eastern Thailand

	Temperature (°c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal	
Prachin Buri	26.0		0.0		1619.0		
	26.8	0.6	0.0	-5.0		-204.3	
Kabin Buri	25.4	-0.2	0.0 -3.9		1678.6	81.8	
Aranyaprathet	26.1	0.8	0.0	-4.8	1528.6	183.8	
Chon Buri	27.1	0.6	5.3	-0.2	1326.5	30.9	
Ko Sichang	26.3	0.1	4.8	-3.7	1385.3	166.4	
Pattaya	26.3	0.4	4.4	-3.9	1741.2	630.5	
Sattahip	25.9	-0.1	5.6	-4.9	2508.4	1241.8	
Rayong	26.4	0.4	5.4	-0.5	1783.6	400.4	
Chanthaburi	26.5	0.5	1.9	-4.9	3921.4	927.2	
Khlong Ya	27.2	0.4	52.2	30.9	5124.8	279.0	
Over the area	26.4	0.3	8.0	-0.1	2261.7	373.5	
				-1%		20%	

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

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- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.

Monthly Current Report Rainfall and Accumulative Rainfal December 2021

Southern Thailand, east coast

	Tempera	ture (°c)	Rainfa	ll (mm)	Accumulative Since 1	rainfall (mm January
Station		Above		Above		Above
	Mean	or below	Actual	or below	Actual	or below
		normal		normal		normal
Phetchaburi	25.8	0.4	2.6	-9.0	1042.4	55.1
Hua Hin	26.3	0.5	0.0	-7.9	1053.9	98.8
Prachuap Khiri Khan	26.5	1.0	16.6	1.6	969.5	-122.3
Chumphon	25.9	0.6	26.4	-96.9	2136.5	263.8
Surat Thani	25.8	0.3	126.8	-2.6	1394.6	-227.4
Ko Samui	26.9	0.3	177.5	-32.8	2090.3	130.2
Nakhon Si Thammarat	26.2	0.5	488.5	36.8	2718.5	222.0
Songkhla	27.3	0.5	295.9	-148.8	2439.9	373.2
Hat Yai Airport	26.2	0.6	167.2	-100.5	1597.4	-128.9
Pattani Airport	26.5	0.6	197.3	-181.0	1606.8	-258.3
Narathiwat	26.5	0.6	399.6	-166.0	2301.0	-159.7
Over the area	26.4	0.6	172.6	-64.3	1759.2	22.3
<u></u>				-27%		1%

Southern Thailand, west coast

	Tempera	ture (°c)	Rainfa	ll (mm)	Accumulative rainfall (m Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Ranong	26.8	0.5	60.6	15.1	5529.9	1461.5	
Takua Pa	27.1	0.7	43.5	-18.2	4310.0	652.4	
Phuket	28.2	0.6	65.7	-6.7	1952.0	-267.5	
Phuket Airport	27.5	0.8	90.1	22.7	2874.7	399.7	
Ko Lanta	27.5	0.6	35.9	-19.7	2401.1	224.5	
Trang Airport	27.0	0.8	104.0	-21.4	2301.8	153.3	
Satun	27.5	0.5	30.3	-66.6	2850.5	560.6	
Over the area	27.4	0.7	61.4	-13.6	3174.3	455.0	
				-18%		17%	

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

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- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.

Monthly Current Report

December 2021

		Temper	ature (°c)	Rainfall (mm)		Accumulative rainfall (mm Since 1 January	
Region	Station		Above		Above		Above
		Mean	or below	Actual	or below	Actual	or below
			normal		normal		norma
	Chiang Rai	20.3	0.9	0.0	-14.0	1732.0	41.5
	Mae Hong Son	21.5	0.6	0.0	-10.4	1092.5	-199.9
	Phayao	20.9	0.9	7.6	-3.3	1286.7	149.7
	Chiang Mai	22.9	1.5	0.0	-15.9	1105.4	-25.2
	Tha Wang Pha	21.2	0.7	0.0	-11.0	1393.6	-14.5
	Nan	22.4	1.4	0.0	-8.6	1121.5	-112.6
	Lamphun	22.3	1.0	0.0	-7.4	1070.6	66.8
	Lampang	22.3	0.7	0.0	-7.0	1112.6	67.1
	Mae Sariang Phrae	21.7 22.6	0.8 0.8	0.0 2.3	-7.6	1347.4 1242.9	211.6 128.1
North	Uttaradit	24.2	0.8	0.0	-5.5 -5.0	1242.9	-106.4
	Bhumibol Dam	22.9	0.3	0.0	-7.2	2172.6	1129.2
	Tak	23.4	0.4	0.0	-5.1	2074.0	1012.9
	Mae Sot	23.1	1.1	0.0	-5.9	1909.2	441.6
	Umphang	20.4	0.6	0.0	-5.1	1811.5	350.2
	Phitsanulok	24.3	0.0	0.3	-10.8	1251.1	-65.9
	Lom Sak	23.8	0.0	0.0	-4.5	1172.9	129.8
	Phetchabun	24.4	0.9	0.0	-7.8	1080.7	-52.7
	Wichian Buri	24.8	0.0	0.6	-3.7	1526.4	305.8
	Kamphaeng Phet	24.0	-0.1	0.0	-6.7	1286.4	-18.2
	Nong Khai	23.0	0.9	0.0	-4.3	1666.6	58.4
	Loei	21.6	0.5	0.0	-8.7	1516.8	275.9
	Udon Thani	22.3	-0.1	0.0	-2.9	1236.4	-182.0
	Nakhon Phanom	22.3	0.3	0.0	-4.8	2135.0	-211.8
	Sakon Nakhon	22.0	0.1	0.0	-5.6	1428.7	-216.3
	Mukdahan	22.6	0.4	0.0	-2.6	1641.1	161.1
	Khon Kaen	23.3	0.3	0.0	-4.1	1132.4	-114.4
Northeast	Kosum Phisai	23.8	0.3	0.0	-3.1	1288.9	25.2
Normeast	Roi Et	23.6	0.7	0.0	-2.1	1297.3	-44.7
	Chaiyaphum	24.1	0.3	5.8	1.7	1338.8	201.6
	Ubon Ratchathani	23.9	0.2	4.7	3.7	1758.3	176.6
	Tha Tum	24.0	0.3	0.0	-1.0	1208.4	-179.5
	Surin	24.0	0.4	0.0	-1.9	1527.1	94.9
	Nakhon Ratchasima	24.2	0.6	38.1	35.4	1217.0	145.5
	Chok Chai	24.0	0.4	68.7	65.5	1363.9	289.1
	Nang Rong	23.4	-0.2	0.0	-3.4	1564.2	370.3
	Nakhon Sawan	25.2	0.6	0.0	-4.6	1288.3	138.6
	Bua Chum	24.6	0.3	6.8	4.3	1283.3	198.0
	Lop Buri	26.1	0.3	0.0	-4.5	1282.6	157.5
Central	Suphan Buri	25.6	0.6	14.7	8.0	1177.1	201.7
Centrar	Thong Pha Phum	23.7	-0.2	0.0	-4.7	2093.6	307.1
	Kanchanaburi	25.8	0.9	1.1	-5.1	1144.1	87.7
	Bangkok Airport	26.6	0.2	0.0	-6.1	1093.7	-281.2
	Bangkok Metropolis	27.4	0.9	0.0	-6.3	1740.1	91.9
	Prachin Buri	26.8	0.6	0.0	-5.0	1619.0	-204.3
	Kabin Buri	25.4	-0.2	0.0	-3.9	1678.6	81.8
	Aranyaprathet	26.1	0.8	0.0	-4.8	1528.6	183.8
	Chon Buri	27.1	0.6	5.3	-0.2	1326.5	30.9
East	Ko Sichang	26.3	0.1	4.8	-3.7	1385.3	166.4
	Pattaya	26.3	0.4	4.4	-3.9	1741.2	630.5
	Sattahip	25.9	-0.1	5.6	-4.9	2508.4	1241.8
	Rayong	26.4	0.4	5.4	-0.5	1783.6	400.4
	Chanthaburi	26.5	0.5	1.9	-4.9 20.0	3921.4	927.2
	Khlong Yai	27.2	0.4	52.2	30.9	5124.8	279.0
	Phetchaburi	25.8	0.4	2.6	-9.0 7.0	1042.4	55.1
	Hua Hin	26.3	0.5	0.0	-7.9	1053.9	98.8
	Prachuap Khiri Khan	26.5	1.0	16.6	1.6	969.5 2126.5	-122.3
	Chumphon	25.9	0.6	26.4	-96.9	2136.5	263.8
South	Surat Thani	25.8	0.3	126.8	-2.6	1394.6	-227.4
(East Coast)	Ko Samui Nakhon Si Thammarat	26.9	0.3	177.5	-32.8 26.8	2090.3	130.2 222.0
		26.2	0.5	488.5 205.0	36.8	2718.5	
	Songkhla Het Vei Airport	27.3	0.5	295.9	-148.8	2439.9	373.2
	Hat Yai Airport	26.2	0.6	167.2	-100.5	1597.4	-128.9
	Pattani Airport	26.5	0.6	197.3	-181.0	1606.8	-258.3
	Narathiwat	26.5	0.6	399.6	-166.0	2301.0	-159.7
	Ranong	26.8	0.5	60.6	15.1	5529.9	1461.5
	Takua Pa	27.1	0.7	43.5	-18.2	4310.0	652.4
South	Phuket	28.2	0.6	65.7	-6.7	1952.0	-267.5
(West Coast)	Phuket Airport	27.5	0.8	90.1	22.7	2874.7	399.7
,	Ko Lanta	27.5	0.6	35.9	-19.7	2401.1	224.5
	Trang Airport	27.0	0.8	104.0	-21.4	2301.8	153.3
	Satun	27.5	0.5	30.3	-66.6	2850.5	560.6
	Over the area	24.7	0.5	35.5	-12.7	1759.3	171.6

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

^{2) &}quot;T" is trace, rainfall amount less than 0.1 mm.

^{3) &}quot;blank" is incomplete data.

⁴⁾ Temperature and rainfall are preliminary data.



















