Monthly Weather Summary in Thailand January 2021

In January 2021, high pressure area from China occasionally extended its ridge to cover upper Thailand and the northeast monsoon prevailed over the Gulf of Thailand and the southern part throughout the month especially during the beginning and the middle of the month that active high pressure areas continuously covered upper Thailand and the northeast monsoon was strengthened. These caused cool and cold weather in Thailand in particularly the northern and northeastern parts that experienced successive cold weather periodically with very cold weather in some places. There was generally cool weather with cold weather in many areas for the rest parts. However, during the end of the month, the high pressure area which covered Thailand and the northeast monsoon which prevailed over the Gulf of Thailand and the southern part was weakened. These caused increasing in temperature in majority areas but the weather in the northern and northeastern parts remained cool and cold weather in several areas. Cold to very cold weather was observed in mountainous areas and mountain tops. The mean temperature in January 2021 were below normal in almost regions especially in the northeastern part where lower than normal temperature by more than 1.5 °C, resulting in the average monthly temperature over Thailand in this month was 0.5 °C lower than normal. For rainfall, there was scanty rainfall in upper Thailand except for isolated slightly rainfall in the lower coastal areas of the eastern part on January 5, 24 and 25. Besides, due to the westerly trough moved through the upper northern region during January 29-30 resulted in unusual rainfall in the northern part. For southern part, abundant rainfall was observed during early month mainly along the east coast due to the active northeast monsoon that prevailed over the Gulf of Thailand and the southern part and the low pressure cell covered the Coastal of Malaysia during January 5-6. However, the average total rainfall over Thailand in this month was 13% lower than normal. The monthly rainfall was below normal in almost parts i.e. northern part 1.6 mm (35%), northeastern part 4.8 mm (100%), central 6.7 mm (100%), eastern part 15.5 mm (96%), and southern part (west coast) 3.9 mm (15%) while there was higher than normal in the southern part (east coast) 16.5 mm (28%).

1-10 January: The active high pressure areas from China extended its ridge to cover upper Thailand during early period and later weakened and another active high pressure areas extended its ridge to cover the mentioned areas during late period. In addition, the rather active northeast monsoon prevailed over the Gulf of Thailand and southern parts. These conditions caused generally cool and cold weather in the northern and northeastern parts especially during early period that experienced cold to very cold weather in some areas of the northeastern and northeastern parts and also generally cold weather in the northeastern part during late period. In central and eastern parts, the weather was cool in general during early period with cold weather in many areas of the central part after that temperature was relatively increased but cool weather remained in almost areas. Temperature dropped to cool weather in general again during late period. The lowest temperature of 7.0 $^{\circ}$ C was measured at Umphang in Tak province on January 2 and dropped to 2.7 $^{\circ}$ C at Kew Mae Pan, Doi Inthanon in Chiang Mai province on the same day. For rainfall, there was no rain in upper Thailand except for isolated slightly rainfall of 0.1 mm at Khlong Yai in Trat province on January 5. In southern part, due to the prevailing of the northeast monsoon over the Gulf of Thailand and southern part coupled with the low pressure cell covering the coastal areas of Malaysia during January 5-6, cool weather was observed in many areas with abundant rainfall almost the whole period especially along the east coast that received scattered to fairly widespread rain with heavy to very heavy rainfall in some areas while fairly widespread rain was found along the west coast mainly during the middle of the period. The highest daily rainfall was 290.2 mm at Sukhirin in Narathiwat province on January 5.

11-20 January: Under the ridge of active high pressure areas extending to dominate upper Thailand accompanied with the prevailing of active northeast monsoon over the Gulf of Thailand and southern part. The temperature was obviously decreased with generally cool and cold weather over Thailand in particularly the northern and northeastern parts where cold weather was observed in general almost the whole period with very cold weather in some areas and also cold weather in several areas in the central and eastern parts and in some areas of upper southern part. The lowest temperature of 6.5 °C was measured at Agrometeorological station in Nakhon Phanom province on January 13 and dropped to 1.2 °C at Kew Mae Pan, Doi Inthanon in Chiang Mai province on January 17. There was slightly rainfall in some areas of upper northern and northeastern parts for few days with the maximum daily rainfall of 5.0 mm at Phu Kradung National Park in Loei province on January 12. In southern part, rainfall relative decreased from the previous period with scattered rain and heavy rainfall in some areas along the east coast during early period then isolated rain with heavy rainfall in some areas while isolated rain was found for few days along the west coast. The highest daily rainfall was 40.0 mm at Sathing Phra in Songkhla province on January 11.

21-31 January: High pressure that covered upper Thailand was weakened from the previous period and covering upper northern, upper northeastern and the Southern China Sea during the middle of the period after that the moderate high pressure areas from China extended to cover the northeastern, central and eastern parts. In addition, the northeast monsoon that prevailed over the Gulf of Thailand and southern part was weak almost the whole period. These caused increasing in temperature in majority areas but cool and cold weather remained during early period in the northern and northeastern parts with generally cool and cold weather in some areas of the central part and also cold weather in some areas of the eastern and southern parts. After that, temperature relatively increased but cool weather persisted in the northern and northeastern parts with cold weather in many areas. The lowest temperature 7.8 °C was measured at Umphang in Tak province on January 21. The minimum temperature dropped to 2.0 °C at Doi Inthanon, Chom Thong in Chiang Mai province on January 21. For rainfall, due to the passage of the westerly trough through the upper northern part during January 29-30 caused unusual rainfall in the northern part during that time and isolated slightly rain was observed along the lower coastal areas of the eastern part on January 24 and 25. The maximum daily rainfall of 23.1 mm at Northern Meteorological Center in Chiang Mai province on January 30. The weak northeast monsoon prevailed over the Gulf of Thailand and the southern part during early and mid-period and strengthened during late period. These caused decreasing in rainfall from the previous period with isolate to scattered rain almost the whole period with heavy rainfall in some areas along the east coast while isolated slightly rain was observed along the west coast nearly the whole period except for scattered to fairly widespread rain during January 24-27. The highest daily rainfall was 39.8 mm at Sukhirin in Narathiwat province on January 22.

<u>Note</u>: 1. Rainfall, temperatures and natural disasters in this report were updated up to February 3, 2021.

Climate Center Meteorological Development Division Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfall January 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	20.6	0.9	19.4	11.9	19.4	11.9
Mae Hong Son	22.1	1.5	0.7	-5.7	0.7	-5.7
Phayao	21.3	0.7	2.6	-3.1	2.6	-3.1
Chiang Mai	22.9	1.4	24.4	20.2	24.4	20.2
Tha Wang Pha	20.7	0.1	2.8	-4.2	2.8	-4.2
Nan	21.6	0.2	0.2	-4.2	0.2	-4.2
Lamphun	22.4	0.7	2.2	-0.6	2.2	-0.6
Lampang	22.5	0.3	0.6	-2.2	0.6	-2.2
Mae Sariang	22.6	2.2	1.8	0.3	1.8	0.3
Phrae	22.2	-0.1	0.0	-5.8	0.0	-5.8
Uttaradit	23.8	-0.3	0.0	-5.5	0.0	-5.5
Bhumibol Dam	23.6	-0.1	0.0	-2.6	0.0	-2.6
Tak	23.9	-0.2	6.0	3.9	6.0	3.9
Mae Sot	23.7	1.3	0.0	-1.7	0.0	-1.7
Umphang	20.8	0.6	0.0	-6.8	0.0	-6.8
Phitsanulok	23.8	-1.0	0.0	-3.9	0.0	-3.9
Lom Sak	23.5	-0.8	0.0	-4.8	0.0	-4.8
Phetchabun	24.1	0.0	0.0	-5.6	0.0	-5.6
Wichian Buri	23.9	-1.4	0.0	-7.7	0.0	-7.7
Kamphaeng Phet	24.2	-0.6	0.2	-2.1	0.2	-2.1
Over the area	22.7	0.3	3.0	-1.6	3.0	-1.6
				-35%		-35%

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	21.7	-0.8	0.0	-8.3	0.0	-8.3
Loei	20.8	-0.9	0.0	-6.2	0.0	-6.2
Udon Thani	21.1	-1.7	0.0	-6.3	0.0	-6.3
Nakhon Phanom	20.9	-1.3	0.0	-3.0	0.0	-3.0
Sakon Nakhon	20.3	-1.8	0.0	-4.7	0.0	-4.7
Mukdahan	20.9	-1.7	0.0	-3.7	0.0	-3.7
Khon Kaen	21.9	-1.5	0.0	-4.0	0.0	-4.0
Kosum Phisai	22.0	-1.7	0.0	-3.5	0.0	-3.5
Roi Et	22.1	-1.2	0.0	-3.6	0.0	-3.6
Chaiyaphum	22.9	-1.3	0.0	-4.5	0.0	-4.5
Ubon Ratchathani	22.7	-1.5	0.0	-2.0	0.0	-2.0
Tha Tum	22.5	-1.5	0.0	-5.1	0.0	-5.1
Surin	22.8	-1.3	0.0	-5.6	0.0	-5.6
Nakhon Ratchasima	22.9	-1.4	0.0	-8.2	0.0	-8.2
Chok Chai	23.0	-1.4	0.0	-4.0	0.0	-4.0
Nang Rong	22.0	-2.3	0.0	-4.7	0.0	-4.7
Over the area	21.9	-1.5	0.0	-4.8	0.0	-4.8
				-100%		-100%

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 January 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	24.9	-0.6	0.0	-4.3	0.0	-4.3
Bua Chum	23.6	-1.4	0.0	-6.7	0.0	-6.7
Lop Buri	25.6	-0.8	0.0	-5.7	0.0	-5.7
Suphan Buri	24.9	-0.8	0.0	-3.7	0.0	-3.7
Thong Pha Phum	23.9	-0.9	0.0	-5.4	0.0	-5.4
Kanchanaburi	25.3	-0.7	0.0	-3.3	0.0	-3.3
Bangkok Airport	25.7	-1.3	0.0	-11.4	0.0	-11.4
Bangkok Metropolis	26.4	-0.6	0.0	-13.3	0.0	-13.3
Over the area	25.0	-0.9	0.0	-6.7	0.0	-6.7
				-100%		-100%

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	25.7	-1.1	0.0	-7.7	0.0	-7.7
Kabin Buri	24.3	-2.0	0.0	-9.0	0.0	-9.0
Aranyaprathet	25.3	-0.8	0.0	-5.4	0.0	-5.4
Chon Buri	26.1	-0.8	0.0	-9.9	0.0	-9.9
Ko Sichang	26.0	-0.5	0.0	-10.9	0.0	-10.9
Pattaya	25.6	-0.7	0.0	-15.6	0.0	-15.6
Sattahip	24.9	-1.3	0.0	-25.6	0.0	-25.6
Rayong	25.2	-1.0	0.0	-20.7	0.0	-20.7
Chanthaburi	25.9	-0.5	0.0	-18.7	0.0	-18.7
Khlong Yai	26.7	0.2	5.8	-31.4	5.8	-31.4
Over the area	25.6	-0.8	0.6	-15.5	0.6	-15.5
				-96%		-96%

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 January 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	24.9	-0.9	0.0	-11.4	0.0	-11.4
Hua Hin	25.5	-0.5	0.0	-11.8	0.0	-11.8
Prachuap Khiri Khan	25.2	-0.2	14.2	-10.2	14.2	-10.2
Chumphon	25.4	-0.3	29.6	-29.8	29.6	-29.8
Surat Thani	25.5	-0.1	20.3	-16.5	20.3	-16.5
Ko Samui	26.7	-0.1	50.6	-35.6	50.6	-35.6
Nakhon Si Thammarat	25.9	-0.1	118.5	-26.9	118.5	-26.9
Songkhla	26.9	-0.2	113.9	39.1	113.9	39.1
Hat Yai Airport	26.1	0.1	158.0	104.2	158.0	104.2
Pattani Airport	26.2	0.2	127.6	76.7	127.6	76.7
Narathiwat	26.1	0.0	205.4	103.8	205.4	103.8
Over the area	25.9	-0.1	76.2	16.5	76.2	16.5
				28%		28%

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	26.7	0.0	2.5	-7.5	2.5	-7.5
Takua Pa	27.0	0.6	38.8	-0.6	38.8	-0.6
Phuket	28.3	0.2	18.2	-12.1	18.2	-12.1
Phuket Airport	27.4	0.4	12.2	-24.0	12.2	-24.0
Ko Lanta	27.3	-0.3	15.1	0.2	15.1	0.2
Trang Airport	26.8	0.0	43.8	11.3	43.8	11.3
Satun	27.5	0.0	26.6	5.4	26.6	5.4
Over the area	27.3	0.1	22.5	-3.9	22.5	-3.9
				-15%		-15%

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.
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