

Monthly Weather Summary in Thailand

December 2023

In December 2023, Thailand experienced varied weather conditions due to the influence of a moderate to active high-pressure system. This system was particularly influential towards the end of the month, extending its ridge over upper Thailand. As a result, the early and middle parts of the month saw cool weather across most areas, with northern and northeastern regions experiencing colder conditions. Subsequently, temperatures across upper Thailand decreased further, leading to predominantly cool and cold weather, especially in the northern and northeastern parts. The mountainous regions and peaks experienced even colder weather, ranging from cold to very cold, with some areas reporting frost. Regarding rainfall, it was generally scarce in upper Thailand. However, the central and eastern parts received some rainfall at the beginning of the month. In contrast, the southern part of Thailand, influenced by a moderate northeast monsoon over the Gulf of Thailand and the presence of a low-pressure cell over Malaysia and the Strait of Malacca from the 23rd to the 25th, experienced significant rainfall. This was particularly true along the east coast, where heavy to very heavy rainfall led to flooding in many areas. Overall, the average rainfall in Thailand for December was about 20% below the normal levels. Specifically, the northern part received 7.8 mm (74% of the normal), the northeastern part 7.3 mm (88%), the eastern part 0.9 mm (9%), the southern part on the east coast 35.6 mm (13%), and the southern part on the west coast 25.5 mm (28%). Interestingly, the central part experienced slightly above normal rainfall at 0.3 mm (104%). Temperature-wise, the average for the month was 1.7°C higher than the usual for this time of year, reflecting an overall warmer December across Thailand.

1 - 10 December: During this period, upper Thailand and the South China Sea were covered by a moderate high-pressure area, accompanied by easterly winds in the early and middle parts. This led to cool weather in most areas, with northern and northeastern regions experiencing colder temperatures. The lowest recorded temperature was 15.4°C at Nakhon Phanom Agrometeorological Station in Nakhon Phanom province on December 8. In the mountainous areas and on mountain tops, the weather was cold to very cold, with temperatures dropping to 9.2°C at Doi Inthanon, Chom Thong in Chiang Mai province on December 2. Rainfall was minimal in the northern and northeastern regions, while the central and eastern parts experienced isolated to scattered rains, including heavy rainfall in some areas. The highest daily rainfall recorded was 41.2 mm at Bang Sai District Agricultural Extension Office in Phra Nakhon Si Ayutthaya province on December 6. In the south, influenced by the moderate northeast monsoon over the Gulf of Thailand, scattered to fairly widespread rain was observed along the east coast with heavy to very heavy rainfall in some areas, leading to flooding in Songkhla, Nakhon Si Thammarat, Pattalung, Yala, and Narathiwat provinces.

11 - 20 December: A high-pressure area covered the northern and northeastern parts in the first half of this period, followed by a rather active high-pressure ridge extending over these areas. This resulted in cool weather throughout most regions, with colder conditions in the northern and northeastern parts. The lowest temperature was 14.4°C at Amphoe Umphang in Tak

province on December 20. Mountainous areas and mountain tops experienced cold to very cold weather, with a temperature drop to 4.5°C at Doi Inthanon on December 20. Upper Thailand saw unseasonable rainfall, with a maximum daily rainfall of 20.8 mm at Amphoe Mae Chan in Chiang Rai province on December 11. In the southern part, the moderate northeast monsoon brought scattered to fairly widespread rain, with heavy to very heavy rainfall in some eastern coastal areas. The highest daily rainfall recorded was 170.4 mm at Amphoe Sukhirin in Narathiwat province on December 14, causing floods in Narathiwat on December 14 and in Yala province from December 15 to 17.

21 - 31 December: During this period, an active high-pressure area extended its ridge over upper Thailand, particularly in the first half. This led to cool and cold weather across upper Thailand, with particularly cold conditions in the northern regions. The lowest temperature recorded was 7.9°C at Nakhon Phanom Agrometeorological Station in Nakhon Phanom province on December 23. In the mountainous areas, the weather was cold to very cold, with temperatures dropping to 4.5°C at Doi Inthanon on December 24 and 30, and hail reported on December 23, 24, and 30. Upper Thailand experienced unseasonable rainfall, with a maximum daily rainfall of 20.0 mm at Doi Ang Khang in Chiang Mai province on December 21. In the southern part, enhanced by the strengthened northeast monsoon over the Gulf of Thailand, scattered to fairly widespread rain was observed, with heavy rainfall in several areas along the east coast. The highest daily rainfall was 631.2 mm at Amphoe Ra-ngae in Narathiwat province on December 24, leading to floods in Pattani, Narathiwat, Yala, and Song Khla provinces in the latter half of the period.

Note: This report includes updated information on rainfall, temperatures, and natural disasters, current as of January 4, 2024.

Climate Center
Meteorological Development Division
Thai Meteorological Department

Monthly Current Report
Rainfall and Accumulative Rainfall
December 2023

Northern Thailand

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Chiang Rai	23.3	3.1	6.3	-14.3	1289.0	-434.5
Mae Hong Son	23.9	2.5	7.3	-3.6	1262.4	-34.6
Phayao	23.5	2.9	25.3	9.5	1145.6	-4.1
Chiang Mai	25.2	3.0	2.6	-11.5	1187.8	48.6
Tha Wang Pha	23.6	2.7	0.0	-18.0	1257.0	-206.0
Nan	24.3	2.5	3.9	-8.2	1051.4	-212.1
Lamphun	24.8	2.7	0.4	-8.6	1027.9	-34.0
Lampang	24.8	2.4	0.1	-10.8	1242.8	135.6
Mae Sariang	24.6	2.9	1.5	-6.9	1250.7	79.9
Phrae	25.0	2.5	0.0	-10.8	1180.1	8.0
Uttaradit	26.7	2.3	0.1	-7.4	1208.4	-165.8
Bhumibol Dam	24.8	1.6	0.2	-8.5	1278.3	231.8
Tak	25.6	1.8	0.4	-5.8	1088.7	39.7
Mae Sot	25.6	2.5	0.0	-6.7	1633.1	112.6
Umphang	22.6	2.2	0.7	-7.4	1337.0	-148.9
Phitsanulok	26.5	1.6	0.0	-12.9	1222.9	-96.2
Lom Sak	26.2	2.0	0.0	-6.3	1006.5	-30.3
Phetchabun	26.7	2.3	0.0	-8.9	1100.8	-46.3
Wichian Buri	27.0	1.9	0.0	-7.7	977.7	-279.5
Kamphaeng Phet	26.3	1.7	6.2	-2.5	1127.5	-162.1
Over the area	25.1	2.4	2.8	-7.8 -74%	1193.8	-60.0 -5%

Northeastern Thailand

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Nong Khai	25.5	2.6	0.1	-8.1	1616.4	-74.4
Loei	23.9	2.0	0.0	-11.4	1226.1	-29.9
Udon Thani	24.8	1.9	0.5	-5.3	1249.6	-195.3
Nakhon Phanom	24.2	1.5	0.0	-5.3	2567.7	229.8
Sakon Nakhon	24.1	1.6	0.0	-6.9	1968.3	310.1
Mukdahan	24.5	1.7	0.0	-4.3	1635.6	144.7
Khon Kaen	25.3	1.6	0.0	-5.1	1220.3	-11.1
Kosum Phisai	25.6	1.8	0.0	-3.0	1221.2	-94.5
Roi Et	25.6	2.0	0.0	-2.5	1453.6	94.5
Chaiyaphum	26.1	1.7	0.0	-5.6	1059.8	-90.7
Ubon Ratchathani	26.0	1.7	0.0	-5.0	2203.5	579.5
Tha Tum	25.6	1.6	0.0	-1.6	1021.3	-313.3
Surin	26.1	1.9	0.0	-3.0	1426.2	-7.2
Nakhon Ratchasima	26.0	1.6	5.2	2.6	976.0	-146.9
Chok Chai	25.8	1.8	1.0	-2.9	1024.4	-30.9
Nang Rong	25.4	1.6	2.8	-1.0	1110.3	-117.2
Over the area	25.3	1.8	0.6	-4.3 -88%	1436.3	15.5 1%

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 2023

Central Thailand

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Nakhon Sawan	27.3	2.1	0.4	-6.1	706.8	-453.5
Bua Chum	26.2	1.6	0.0	-6.0	1052.9	-52.1
Lop Buri	28.0	1.6	0.0	-7.8	904.4	-191.4
Suphan Buri	27.5	1.8	6.9	-0.1	554.0	-424.4
Thong Pha Phum	26.0	1.7	0.0	-5.4	1565.2	-196.6
Kanchanaburi	27.6	1.9	21.8	14.6	1146.9	93.2
Bangkok Airport	28.2	1.2	24.6	13.0	840.5	-633.8
Bangkok Metropolis	28.9	1.6	11.9	0.3	1410.7	-291.5
Over the area	27.5	1.7	8.2	0.3 4%	1022.7	-269.0 -21%

Eastern Thailand

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Prachin Buri	28.2	1.4	9.1	5.7	1620.3	-144.4
Kabin Buri	27.0	1.3	13.8	8.8	1363.1	-198.3
Aranyaprathet	27.5	1.5	8.5	3.1	1276.5	-48.6
Chon Buri	28.8	1.6	11.9	4.7	1083.8	-208.9
Ko Sichang	28.0	1.3	14.7	6.1	853.4	-301.6
Pattaya	27.9	1.5	8.8	-2.9	689.2	-416.6
Sattahip	27.8	1.5	15.1	2.4	989.9	-350.4
Rayong	27.8	1.4	5.0	-2.5	1182.5	-224.2
Chanthaburi	28.2	1.7	0.0	-8.4	3029.0	37.4
Khlong Yai	28.6	1.5	1.7	-26.1	3523.8	-1402.7
Over the area	28.0	1.5	8.9	-0.9 -9%	1561.2	-325.9 -17%

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 2023

Southern Thailand, east coast

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Phetchaburi	27.7	1.7	0.0	-10.3	452.4	-523.1
Hua Hin	28.2	1.8	0.5	-11.4	469.6	-466.3
Prachuap Khiri Khan	27.6	1.6	84.3	59.9	602.7	-511.1
Chumphon	27.0	1.3	209.6	37.0	1691.7	-245.7
Surat Thani	26.6	0.8	109.1	-61.2	1446.0	-156.0
Ko Samui	27.7	0.9	134.3	-128.8	1723.0	-271.3
Nakhon Si Thammarat	26.9	1.0	311.9	-199.2	2750.0	42.4
Songkhla	28.1	1.2	270.0	-198.3	2325.5	76.6
Hat Yai Airport	26.8	0.9	307.4	32.4	2063.6	307.6
Pattani Airport	27.2	1.0	336.7	-56.1	2499.8	547.8
Narathiwat	27.2	1.1	791.3	144.1	3480.0	706.4
Over the area	27.4	1.2	232.3	-35.6 -13%	1773.1	-44.9 -2%

Southern Thailand, west coast

Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Ranong	27.7	1.1	11.8	-46.7	3861.0	-322.1
Takua Pa	27.6	0.9	98.1	19.7	4312.7	440.2
Phuket	29.2	1.3	62.3	-19.7	2022.9	-248.6
Phuket Airport	28.1	1.0	56.5	-29.9	2372.0	-292.3
Ko Lanta	28.1	1.0	37.8	-26.8	1585.7	-633.8
Trang Airport	27.8	1.3	108.0	-44.2	2429.0	175.0
Satun	28.3	1.1	87.2	-31.2	2754.1	384.9
Over the area	28.1	1.1	66.0	-25.5 -28%	2762.5	-71.0 -3%

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

December 2023

Region	Station	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
		Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
North	Chiang Rai	23.3	3.1	6.3	-14.3	1289.0	-434.5
	Mae Hong Son	23.9	2.5	7.3	-3.6	1262.4	-34.6
	Phayao	23.5	2.9	25.3	9.5	1145.6	-4.1
	Chiang Mai	25.2	3.0	2.6	-11.5	1187.8	48.6
	Tha Wang Pha	23.6	2.7	0.0	-18.0	1257.0	-206.0
	Nan	24.3	2.5	3.9	-8.2	1051.4	-212.1
	Lamphun	24.8	2.7	0.4	-8.6	1027.9	-34.0
	Lampang	24.8	2.4	0.1	-10.8	1242.8	135.6
	Mae Sariang	24.6	2.9	1.5	-6.9	1250.7	79.9
	Phrae	25.0	2.5	0.0	-10.8	1180.1	8.0
	Uttaradit	26.7	2.3	0.1	-7.4	1208.4	-165.8
	Bhumibol Dam	24.8	1.6	0.2	-8.5	1278.3	231.8
	Tak	25.6	1.8	0.4	-5.8	1088.7	39.7
	Mae Sot	25.6	2.5	0.0	-6.7	1633.1	112.6
	Umphang	22.6	2.2	0.7	-7.4	1337.0	-148.9
	Phitsanulok	26.5	1.6	0.0	-12.9	1222.9	-96.2
	Lom Sak	26.2	2.0	0.0	-6.3	1006.5	-30.3
	Phetchabun	26.7	2.3	0.0	-8.9	1100.8	-46.3
	Wichian Buri	27.0	1.9	0.0	-7.7	977.7	-279.5
	Kamphaeng Phet	26.3	1.7	6.2	-2.5	1127.5	-162.1
Northeast	Nong Khai	25.5	2.6	0.1	-8.1	1616.4	-74.4
	Loei	23.9	2.0	0.0	-11.4	1226.1	-29.9
	Udon Thani	24.8	1.9	0.5	-5.3	1249.6	-195.3
	Nakhon Phanom	24.2	1.5	0.0	-5.3	2567.7	229.8
	Sakon Nakhon	24.1	1.6	0.0	-6.9	1968.3	310.1
	Mukdahan	24.5	1.7	0.0	-4.3	1635.6	144.7
	Khon Kaen	25.3	1.6	0.0	-5.1	1220.3	-11.1
	Kosum Phisai	25.6	1.8	0.0	-3.0	1221.2	-94.5
	Roi Et	25.6	2.0	0.0	-2.5	1453.6	94.5
	Chaiyaphum	26.1	1.7	0.0	-5.6	1059.8	-90.7
	Ubon Ratchathani	26.0	1.7	0.0	-5.0	2203.5	579.5
	Tha Tum	25.6	1.6	0.0	-1.6	1021.3	-313.3
	Surin	26.1	1.9	0.0	-3.0	1426.2	-7.2
	Nakhon Ratchasima	26.0	1.6	5.2	2.6	976.0	-146.9
Central	Chok Chai	25.8	1.8	1.0	-2.9	1024.4	-30.9
	Nang Rong	25.4	1.6	2.8	-1.0	1110.3	-117.2
	Nakhon Sawan	27.3	2.1	0.4	-6.1	706.8	-453.5
	Bua Chum	26.2	1.6	0.0	-6.0	1052.9	-52.1
	Lop Buri	28.0	1.6	0.0	-7.8	904.4	-191.4
	Suphan Buri	27.5	1.8	6.9	-0.1	554.0	-424.4
	Thong Pha Phum	26.0	1.7	0.0	-5.4	1565.2	-196.6
	Kanchanaburi	27.6	1.9	21.8	14.6	1146.9	93.2
East	Bangkok Airport	28.2	1.2	24.6	13.0	840.5	-633.8
	Bangkok Metropolitan	28.9	1.6	11.9	0.3	1410.7	-291.5
	Prachin Buri	28.2	1.4	9.1	5.7	1620.3	-144.4
	Kabin Buri	27.0	1.3	13.8	8.8	1363.1	-198.3
	Aranyaprathet	27.5	1.5	8.5	3.1	1276.5	-48.6
	Chon Buri	28.8	1.6	11.9	4.7	1083.8	-208.9
	Ko Sichang	28.0	1.3	14.7	6.1	853.4	-301.6
	Pattaya	27.9	1.5	8.8	-2.9	689.2	-416.6
	Sattahip	27.8	1.5	15.1	2.4	989.9	-350.4
	Rayong	27.8	1.4	5.0	-2.5	1182.5	-224.2
South (East Coast)	Chanthaburi	28.2	1.7	0.0	-8.4	3029.0	37.4
	Khlong Yai	28.6	1.5	1.7	-26.1	3523.8	-1402.7
	Phetchaburi	27.7	1.7	0.0	-10.3	452.4	-523.1
	Hua Hin	28.2	1.8	0.5	-11.4	469.6	-466.3
	Prachuap Khiri Khan	27.6	1.6	84.3	59.9	602.7	-511.1
	Chumphon	27.0	1.3	209.6	37.0	1691.7	-245.7
	Surat Thani	26.6	0.8	109.1	-61.2	1446.0	-156.0
	Ko Samui	27.7	0.9	134.3	-128.8	1723.0	-271.3
	Nakhon Si Thammarat	26.9	1.0	311.9	-199.2	2750.0	42.4
	Songkhla	28.1	1.2	270.0	-198.3	2325.5	76.6
South (West Coast)	Hat Yai Airport	26.8	0.9	307.4	32.4	2063.6	307.6
	Pattani Airport	27.2	1.0	336.7	-56.1	2499.8	547.8
	Narathiwat	27.2	1.1	791.3	144.1	3480.0	706.4
	Ranong	27.7	1.1	11.8	-46.7	3861.0	-322.1
	Takua Pa	27.6	0.9	98.1	19.7	4312.7	440.2
	Phuket	29.2	1.3	62.3	-19.7	2022.9	-248.6
	Phuket Airport	28.1	1.0	56.5	-29.9	2372.0	-292.3
	Ko Lanta	28.1	1.0	37.8	-26.8	1585.7	-633.8
	Trang Airport	27.8	1.3	108.0	-44.2	2429.0	175.0
	Satun	28.3	1.1	87.2	-31.2	2754.1	384.9
Over the area		26.4	1.7	44.9	-11.2	1520.7	-102.2
					-20%		-6%

- 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.



















