

## Monthly Weather Summary in Thailand

### February 2024

In February 2024, a high-pressure area from China extended its influence over upper Thailand for the entire month. Its effects began particularly pronounced in the middle of the month, when a moderate to active high-pressure area covered the mentioned regions. Additionally, the westerly winds at upper levels shifted to cover the northern and northeastern parts at the beginning of the month. This led to cooler weather in various parts of Thailand, especially in the northern and northeastern regions, where most areas experienced cool conditions and several areas encountered cold weather. Towards the end of the month, a heat-induced low-pressure cell enveloped upper Thailand, resulting in a relative increase in temperatures and widespread hot conditions across most areas of the country. The monthly mean temperature in Thailand was 1.6°C above the norm, with some stations recording new highest maximum temperatures (see Table 1). In terms of precipitation, upper Thailand experienced intermittent rain, while the southern region received rainfall mainly along the east coast, particularly in the middle of the month. This was influenced by an active northeast monsoon that prevailed over the Gulf of Thailand and the southern part, coupled with southerly winds prevailing throughout the month. The average total rainfall in Thailand for this month was approximately 63% below the norm, with all regions reporting below-normal monthly rainfall: the northern region received 8.8 mm (90% of the norm), the northeastern region 13.7 mm (88%), the central region 8.7 mm (71%), the eastern region 4.5 mm (16%), the southern region (east coast) 23.6 mm (59%), and the southern region (west coast) 23.9 mm (79%).

**1-10 February:** a weak high-pressure area dominated upper Thailand for almost the entire period, in conjunction with westerly winds at higher altitudes covering the northern and northeastern parts. This resulted in cool weather across most of Thailand, with notably colder conditions in several areas of the upper northern and northeastern regions. The lowest minimum temperature recorded was 9.7°C at Amphoe Umpang in Tak province on 7 February. In mountainous areas and on mountaintops, temperatures dropped to very cold levels, with a significant decrease to 4.0°C at the Kew Mae Pan area on the mountaintop in Chom Thong, Chiang Mai province on 6 February. Additionally, hail was reported in Chiang Mai province from 4 to 6 February. Regarding rainfall, the influence of southerly winds, which prevailed over Thailand throughout this period, combined with a strengthening northeast monsoon over the Gulf of Thailand and the southern region towards the period's end, led to isolated light to moderate rain in upper Thailand. Moreover, the eastern region experienced heavy rainfall in some areas around the middle of the period. The maximum daily rainfall reached 67.2 mm at the Pluei Agromet station in Amphoe Khlung, Chanthaburi province, on 6 February, and gusty winds were reported in Nong Bua Lam Phu and Yasothorn provinces on 3 February. Southern Thailand saw isolated to scattered rain with heavy rainfall in some areas during the latter half of the period, with the highest daily rainfall of 47.0 mm recorded at Amphoe Ao Luek in Krabi province on 9 February.

**11-20 February:** a relatively active high-pressure area from China covered upper Thailand in the first half of this period before weakening. Initially, this brought cool weather across upper Thailand and cold conditions in several areas of the northern and northeastern regions. In the latter half, temperatures rose slightly but remained cool in most areas of the upper northern part, while some areas of the rest of the parts experienced cool weather. The lowest minimum temperature recorded was 11.0°C at the Chiang Rai Agromet Station in Chiang Rai province on 19 February. Mountainous areas and mountaintops reported cold to very cold weather, with temperatures dropping to 4.0°C at Doi Inthanon in Chiang Mai province on 16 and 18 February. Regarding precipitation, the first half of the period saw the dominance of a rather active northeast monsoon over the Gulf of Thailand and the southern region. In the second half, southerly winds prevailed over Thailand, and the passage of a westerly trough over the northern region on 17 and 18 February led to isolated to scattered rain in upper Thailand, with heavy rainfall in some places during this period. The highest daily rainfall reached 120.0 millimeters at Erawan National Park in Si Sawat, Kanchanaburi province, on 17 February. Gusty winds and hail were reported in Kamphaeng Phet province on 17 and 18 February, with gusty winds also reported in Nakhon Sawan province on 17 February and in Nong Bua Lam Phu and Udon Thani provinces on 18 February. In the southern region, isolated to scattered rain was observed for most of the period, with heavy rainfall in some places, especially along the east coast. The maximum daily rainfall was 49.0 millimeters at Amphoe Chaiburi in Surat Thani province on 20 February.

**21-29 February:** a heat-induced low-pressure cell enveloped upper Thailand, complemented by prevailing southerly winds across the region. Additionally, a high-pressure system from China extended its ridge to cover the northeastern part and the South China Sea on 25 and 26 February. In the northern and northeastern regions, cool weather persisted in the mornings, with some areas of the upper northern part experiencing cold conditions. The lowest minimum temperature recorded was 11.0°C at Amphoe Mae Sariang in Mae Hong Son province on 22 February. In the mountainous regions and atop mountains, cold to very cold weather was reported, with temperatures dropping to 3.0°C in the Kew Mae Pan area, Chom Thong, Chiang Mai province, on 22 February. During the daytime, hot weather prevailed across almost all areas of upper Thailand, with some places experiencing very hot conditions. The highest maximum temperature reached 40.5°C at Amphoe Mueang in Loei province on 23 February. Regarding rainfall, unseasonable precipitation was noted in upper Thailand, with heavy rainfall in some areas of the northeastern and eastern regions. The maximum daily rainfall was 41.3 millimeters at Amphoe Klaeng in Rayong province on 28 February. Gusty winds were reported in Ratchaburi province on 24 February, in Loei province on 27 February, and in Nong Bua Lam Phu province on 29 February. The southern region experienced isolated to scattered rain, primarily along the east coast, with the highest daily rainfall of 20.2 millimeters recorded at Amphoe Takua Pa in Phangnga province on 22 February.

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Table 1: Breaking record of daily maximum temperature over Thailand in February 2024

Station	New Record 2024		Previous Record		Stat Year
	Temperature(°C)	Date	Temperature(°C)	Date	
Mae Hong Son	38.5	29	38.0	24/2541	2498
Chiang Rai Agromet Stn.	36.7	28	36.5	25/2541 21,22/2552	2522
Payao	37.2	29	37.1	18/2548	2524
Chinag Mai	37.8	29	37.7	26/2541	2495
Tha Wang Pha (Nan)	37.8	24	37.6	24/2552	2313
Lamphon	38.8	29	38.5	19/2548 26/2550 22/2552	2524
Mae Sot (Tak)	38.7	26	38.5	19/2548	2494
Loei	40.5	23	39.5	24/2541	2498
Loei Agromet Stn.	39.5	23	39.0	17/2539	2513
Suvarnabhumi Airport	36.4	26	36.2	13/2552	2551
Laem Chabang	38.2	11	38.0	5/2558	2537
Phra Saeng Agromet Stn.	38.5	22	38.2	27/2548	2541
Phuket	38.5	15,27	37.2	26/2563	2495

**Note** : Rainfall, temperatures and natural disasters in this report were updated up to March 8, 2024.

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