

3-month Climate Prediction of Thailand

During July - September 2024

Issued on 28 June 2024

MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

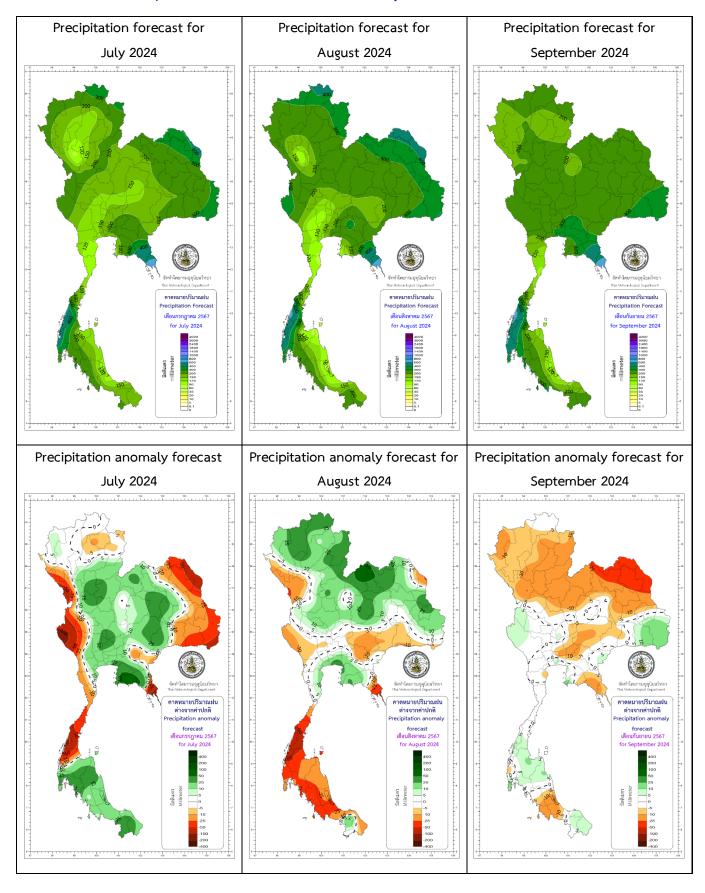
<u>Thailand climate for February - March - April from 30-year normal (A.D. 1991 - 2020 or B.E. 2534 - 2563 baseline average)</u>

July: During the 1st half of this month, the dry spell will often occur continuously from late June because the low-pressure trough still prevails over the southern portion of China along with the Southwest Monsoon prevailing over Thailand mostly weakens. As a result, many areas will meet little or no rain continuously for many days. Later during the 2nd half of this month, abundant rainfall will happen again because of the coming back low-pressure trough moving downward to place over the Upper Thailand together with the Southwest Monsoon prevailing over Thailand becoming more active periodically. Additionally, some tropical cyclones may move near or toward Thailand along the eastern portion of Thailand.

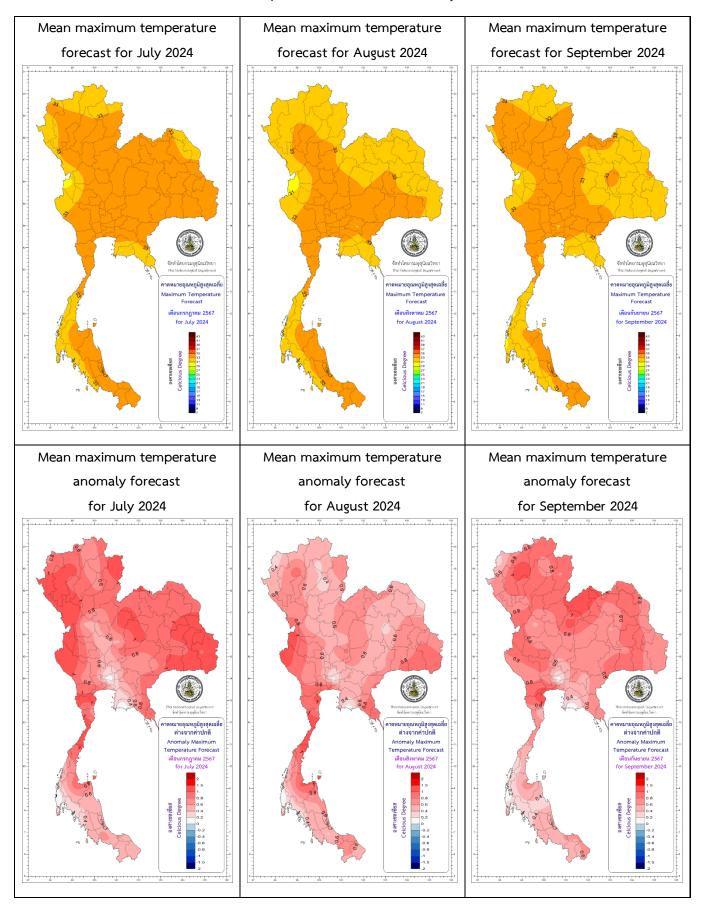
August: Commonly, densely abundant rainfall often occurs in this month with more monthly rain amount than previous months each year. The reason is that the low-pressure trough places over the northern and northeastern parts of Thailand along with the active Southwest Monsoon prevail over Thailand periodically. Additionally, some tropical cyclones may move closer or toward the upper portion of both of the northern and northeastern parts more than other parts.

September: Thailand will meet densely abundant rainfall. In fact, most areas will be affected by the most densely abundant monthly rainfall for the whole year. The reason is that the influential low-pressure trough places on the central portion of Thailand along with some tropical cyclones move to dissipate near or toward Thailand directly, specifically at the eastern portion of the country.

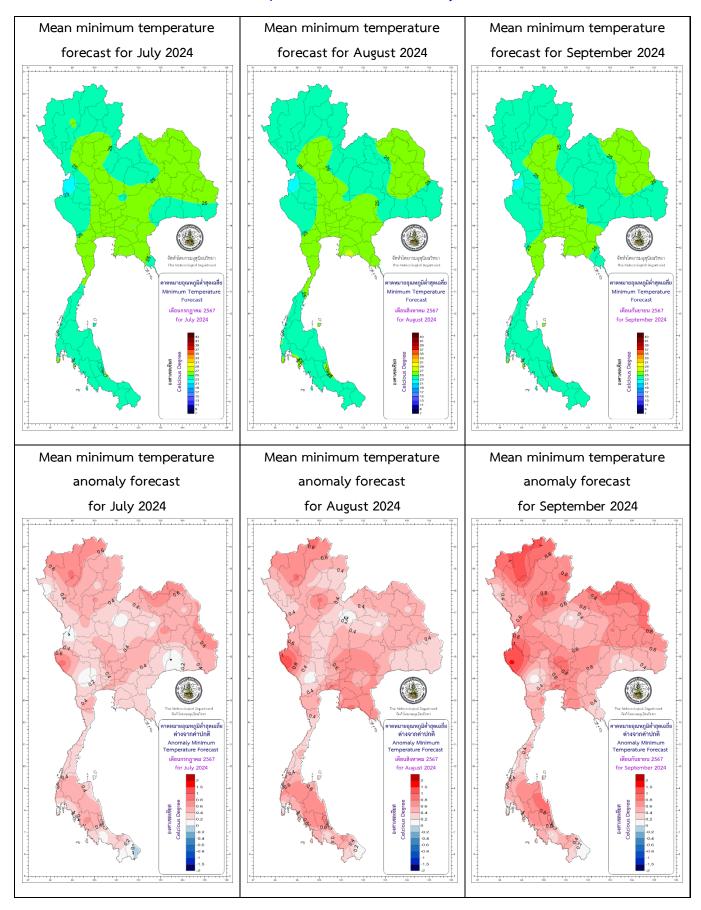
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



Mean Maximum Temperature (°C) and Anomaly (°C) Forecast:



Mean Minimum Temperature (°C) and Anomaly (°C) Forecast:



*** Caution: ***

July: Some tropical cyclones may develop at the western side of the northern Pacific Ocean and move pass the Philippines toward the South China Sea. Then, they may move northwesterly pass the Gulf of Tonkin and influence the Southwest Monsoon prevailing over Thailand and the Gulf of Thailand to strengthen. Consequently, Thailand will meet more rainfall, especially at the eastern part and the Southern Thailand (west coast).

August and September: Some tropical cyclones may develop at the western side of the northern Pacific Ocean and move northwesterly pass the South China Sea. They favor a high chance to pass the Upper Thailand causing Thailand to meet dense rainfall with heavy to very heavy rain amount at many areas, especially around the areas where the tropical cyclones move trough. Consequently, flash and forest flood with overflow will inundate at many areas. Thus, the public should follow the weather forecast news and tropical cyclone warnings from the Thai Meteorological Department further.

Below right Image source: https://www.researchgate.net/figure/Study-area-the-Indochina-Peninsula-in-Monsoon-Southeast-Asia fig5 296329477 The below Image illustrates 7 parts of Thailand with seasons and Monsoons or wind: The Northeast Monsoon The (dry & cold season) Southwest Monsoon NORTHERN during middle October (wet or rainy - middle February season) NORTHEASTERN Pacific Ocean CENTRAL The summer season during middle February - middle May during middle May - middle influenced by Andaman October southern wind from BANGKOK METROPOLIS the Gulf of Thailand The South AND VICINITY

1. The Upper Thailand means parts above the Gulf of Thailand.

the northern, northeastern, central and eastern parts with Bangkok Metropolis and

2. The Southern Thailand includes the southern part (east-coast) and the southern

Notes:

Vicinity.

part (west coast),

SOUTHERN (EAST COAST)

(COAST)

SOUTHERN (WES

China Sea

Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction											Normal (Baseline period: 1991-2020)					
	July 2023			August 2023			September 2023			July		August		September			
	Rain	Rainy	Comparing	Rain	Rainy	Comparing	Rain	Rainy	Comparing	Rain	Rainy	Rain	Rainy	Rain	Rainy		
	(mm)	Days	with normal	(mm)	Days	with normal	(mm)	Days	with normal	(mm)	Days	(mm)	Days	(mm)	Days		
Northern	170-210	19-22	Near normal	220-270	20-23	5 % Above	190-230	17-20	5% Below	189.6	19.6	237.8	21.1	222.0	18.3		
	170 210	17-22	rical Horriac	220 210	20 23	normal	170 230	11-20	normal	107.0	17.0	251.0	21,1	222.0	10.5		
Northeastern						5 %			5%								
	220-270	17-20	Near normal	260-310	19-22	Above normal	220-270	17-20	Below normal	242.8	17.9	277.5	19.4	256.6	17.9		
Central	130-170	16-19	Near normal	150-190	17-20	Near normal	210-260	18-21	Near normal	152.1	16.9	172.9	18.4	238.1	19.3		
Eastern	260-310	16-19	Near normal	260-310	15-18	Near normal	330-380	18-21	Near normal	289.0	17.6	285.6	18.3	351.7	19.9		
Southern			10 %			10%											
Thailand	110-150	14-17	Above	100-140	14-17	Below	130-170	15-18	Near normal	119.6	14.8	130.6	15.3	147.0	16.2		
(East Coast)			normal			normal											
Southern						10%											
Thailand	320-370	19-22	Near normal	350-400	18-21	Below	380-430	21-24	Near normal	349.4	19.6	419.2	20.4	429.2	21.8		
(West Coast)						normal											
Bangkok			10 %			10 %											
Metropolis	180-220	17-20	Above	210-260	17-20	Above	320-370	19-22	Near normal	183.4	17.2	211.7	19.1	325.8	21.4		
and Vicinity			normal			normal											

Table 2: Prediction of Mean Maximum Temperature (Tmax) and Mean Minimum Temperature (Tmin) (°C) comparing with normal:

				Normal (Baseline period: 1991-2020)*											
Part	July 2024			August 2024			September 2024			July		August		September	
	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Mean	Mean	Mean	Mean
	Tmax	Tmin	with Normal	Tmax	Tmin	with Normal	Tmax	Tmin	with Normal	Tmax	Tmin	Tmax	Tmin	Tmax	Tmin
Northern	32-34	24-26	Above	32-34	24-26	Above	32-34	24-26	Above	32.4	24.2	31.9	24.0	32.4	23.6
			normal			normal			normal						
Northeastern 33	33-35	24-26	Above	32-34	24-26	Above	32-34	24-26	Above	32.8	24.7	32.3	24.5	32.1	24.2
	33-33		normal			normal			normal						
Central 33-35	22 25	24-26	Above	33-35	25-27	Above	33-35	24-26	Above	33.6	24.8	33.3	24.6	33.1	24.4
	33-33	24-20	normal			normal			normal						
Eastern	32-34	4 25-27	Near	32-34	25-27	Above	32-34	25-27	Near	32.4	25.5	32.2	25.4	32.0	24.9
32 .	32 3 1	23 21	normal			normal			normal						
Southern (East	33-35	24-26	Above	33-35	24-26	Above	32-34	24-26	Above	33.0	24.4	33.0	24.3	32.6	24.2
Coast)			normal			normal			normal						
Southern	21 22	31-33 24-26	Near	31-33 2	24-26	Near	31-33	24-26	Near	31.8	24.5	31.6	24.5	31.3	24.1
(West Coast)	31-33		normal		24-20	normal			normal						
Bangkok and Vicinity	33-35	26-28	Near normal	33-35	26-28	Above normal	33-35	25-27	Above normal	33.4	26.1	33.3	25.8	33.1	25.4

Remarks: - * Normal means average during the 30-year period (A.D. 1991 – 2020 or B.E. 2534 – 2563).

- This long-range climate forecast is created by applying some climate models and statistical methods, the public then should follow the daily weather forecast news from the Thai Meteorological Department for more accuracy further.
- The next 3-month climate forecast will be published online before the end of December 2024.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662)-398-9929 or Fax: (662)-383-8827

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