

3-month Climate Prediction of Thailand

During July - September 2021

Issued on 24 June 2021

MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

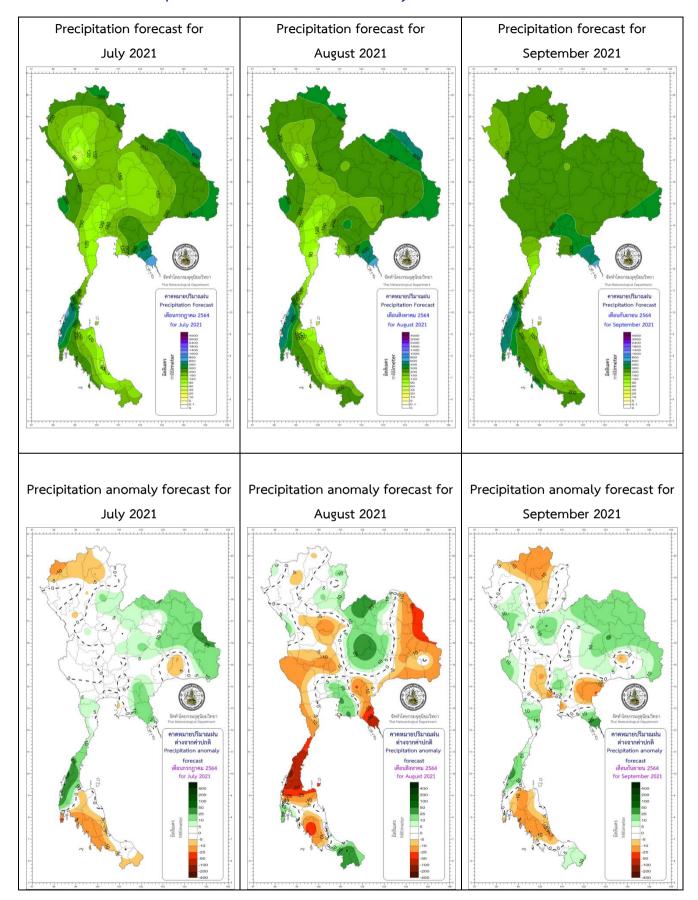
<u>Thailand climate for July – August - September from 30-year normal (A.D. 1981 - 2010 or B.E. 2524 - 2553 baseline average)</u>

July 2021: 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.

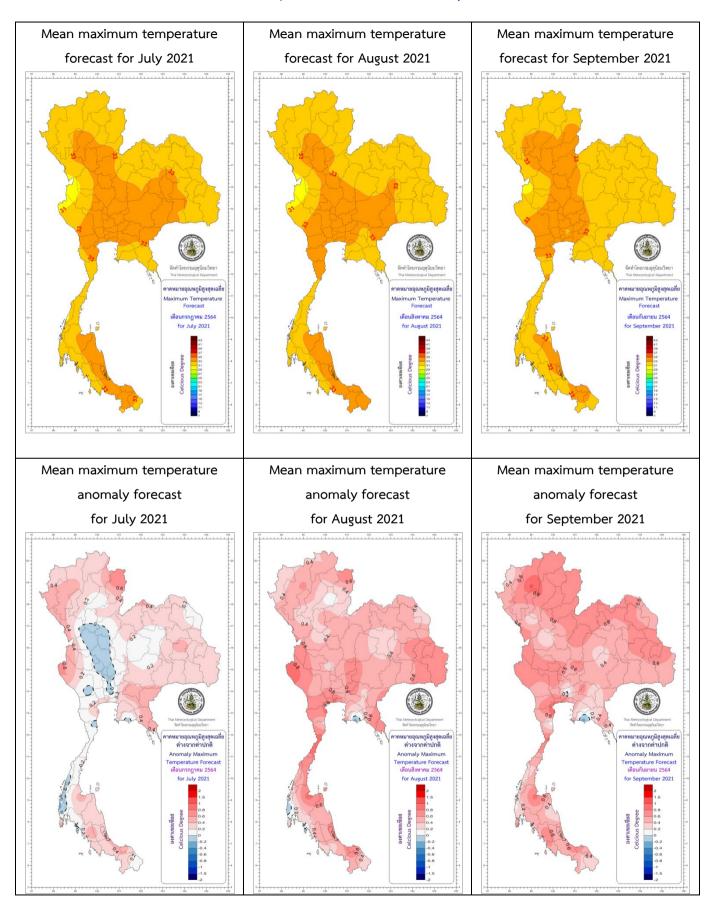
August 2021: Commonly, densely abundant rainfall often occurs in this month with more monthly rain amount than previous months each year. The reason is that the low-pressure trough places over the northern and northeastern parts of Thailand along with the active Southwest Monsoon prevail over Thailand 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.

<u>September 2021:</u> 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.

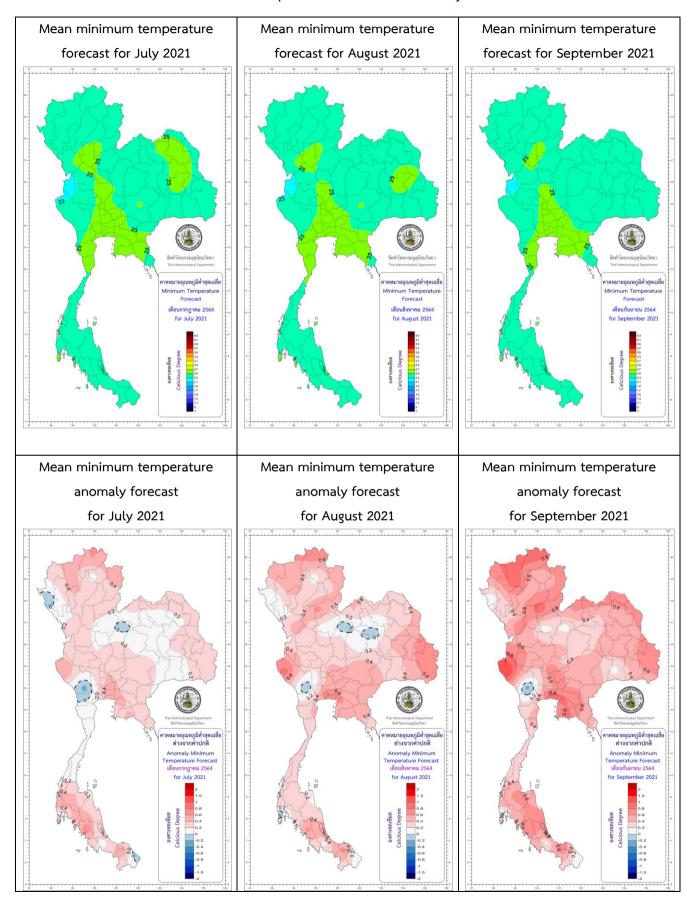
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



*** Caution: ***

July 2020: 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 2020: 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 The Monsoon Southwest (dry & cold season) Monsoon NORTHERN during middle October (wet or rain) - middle February NORTHEASTERN Pacific CENTRAL The summer season during middle ASTERN February - middle May during middle The influenced by Gulf of May - middle Andaman Thailand southern wind from October Sea BANGKOK METROPOLIS the Gulf of Thailand AND VICINITY The South China Sea SOUTHERN (EAST COAST) 1. The Upper Thailand means parts above the Gulf of Thailand , which include SOUTHERN (WEST COAST) the northern, northeastern, central and eastern parts with Bangkok Metropolis and

part (west coast),

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

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

	Prediction											Normal (Baseline period: 1981-2010)					
Part	July 2021			August 2021			September 2021			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	150-200	18-20	Near normal	200-250	20-22	Near normal	200-250	18-22	Near normal	176.0	19.4	223.0	21.0	218.3	18.3		
Northeastern	210-270	16-18	5% Above normal	240-300	19-21	Near normal	230-290	17-19	5% Above normal	217.6	17.4	266.2	19.4	242.0	17.7		
Central	130-170	15-17	Near normal	140-180	18-20	5% Below normal	230-290	19-21	Near normal	147.1	16.4	181.1	18.2	257.3	19.2		
Eastern	250-310	16-18	Near normal	260-320	18-20	5% Below normal	290-360	19-21	Near normal	277.5	17.2	302.5	18.4	330.1	19.9		
Southern Thailand (East Coast)	100-140	13-15	Near normal	100-140	15-17	5% Below normal	130-170	16-18	Near normal	119.6	14.5	124.1	15.4	149.8	16.7		
Southern Thailand (West Coast)	300-380	19-21	Near normal	340-420	20-22	5% Below normal	380-460	22-24	Near normal	336.5	19.8	398.5	20.5	423.7	22.4		
Bangkok Metropolis and Vicinity	150-200	16-18	Near normal	190-240	19-21	5% Above normal	300-370	21-23	Near normal	167.2	17.1	203.8	19.1	334.3	21.1		

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

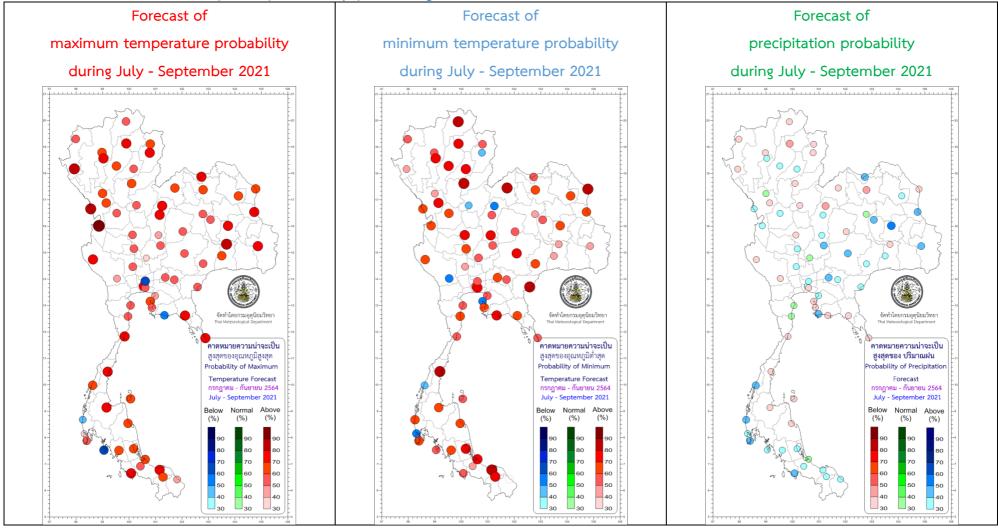
	Prediction										Normal (Baseline period: 1981-2010)						
Part .	July 2021			August 2021			September 2021			July		August		September			
	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Mean	Mean	Mean	Mean		
	Tmax	Tmin	with Normal	Tmax	Tmin	with Normal	Tmax	Tmin	with Normal	Tmax	Tmin	Tmax	Tmin	Tmax	Tmin		
Northern	31-33	23-25	Above	31-33	23-25	Above	32-34	23-25	Above	32.1	24.0	31.8	23.8	32.2	23.5		
			normal			normal			normal	32.1	۷4.0	21.0	23.0	32.2	25.5		
Northeastern 32-	22.24	32-34 24-26	Above	32-34 24	24-26	Above	32-34	24-26	Above	32.7	24.6	32.2	24.4	31.9	24.0		
	32-34		normal		24-20	normal			normal								
Central	33-35	24-26	Above	33-35 24-26	24.26	Above	33-35	24-26	Above	33.5	24.6	33.1	24.5	32.9	24.3		
			normal		24-20	normal			normal								
Eastern 32-3	32-34	32-34 25-27	Above	32-34	25-27	Above	31-33	24-26	Above	32.2	25.3	32.0	25.3	31.9	24.7		
	32-34		normal			normal			normal								
Southern (East	32-34	24-26	Above	32-34	24-26	Above	32-34	24-26	Above	32.9	24.2	32.8	24.2	32.4	24.0		
Coast)			normal			normal			normal								
Southern	31-33	3 24-26	Above	31-33 24-26	24-26	Above	31-32	23-25	Above	31.7	24.3	31.5	24.4	31.1	23.9		
(West Coast)			normal		24-20	normal			normal								
Bangkok and	32-34	34 25-27	Above	33-35	25-27	Above	32-34	25-27	Above	33.2	25.7	33.0	25.5	32.8	25.1		
Vicinity			normal			normal			normal								

Remarks: - Normal means average during the 30-year period (A.D. 1981 – 2010 or B.E. 2524 – 2553).

- 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 May 2020.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662)-398-9929 or Fax: (662)-383-8827.

Climate Center, Meteorological Development Division,

Point probability forecast maps of maximum and minimum temperature, and precipitation (Point maps for probability percentage (%) of: below normal, near normal or above normal)



Note: These maps are mean model forecasts for being included in this three-month climate forecast.