

#### 3-month Climate Prediction of Thailand

During July - September 2022

Issued on 29 June 2022

MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

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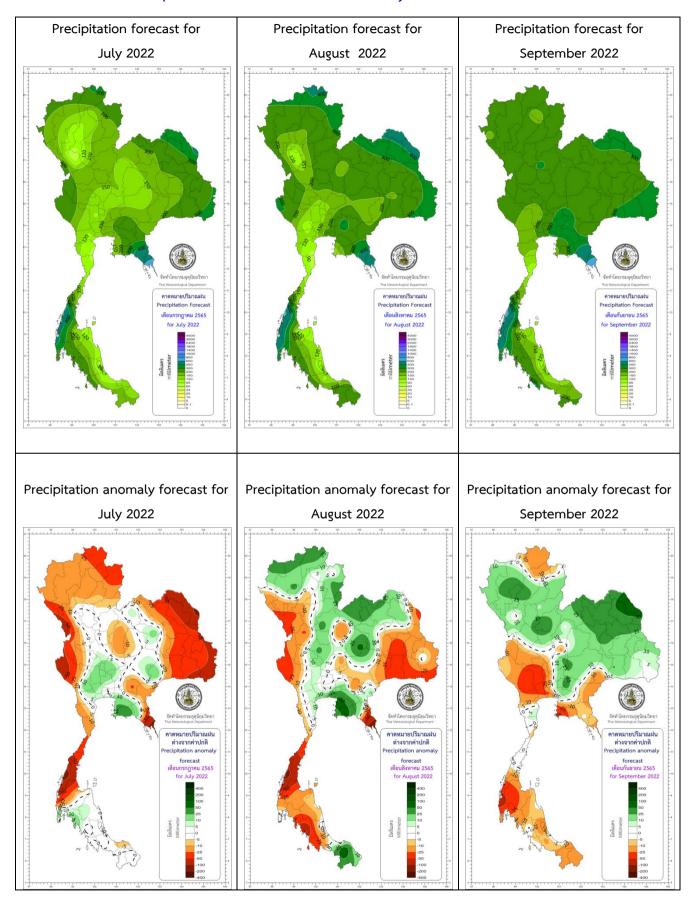
<u>Thailand climate for July – August - September from 30-year normal (A.D. 1991 - 2020 or B.E. 2534 - 2563 baseline average)</u>

July 2022: During the 1<sup>st</sup> 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 2<sup>nd</sup> 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.

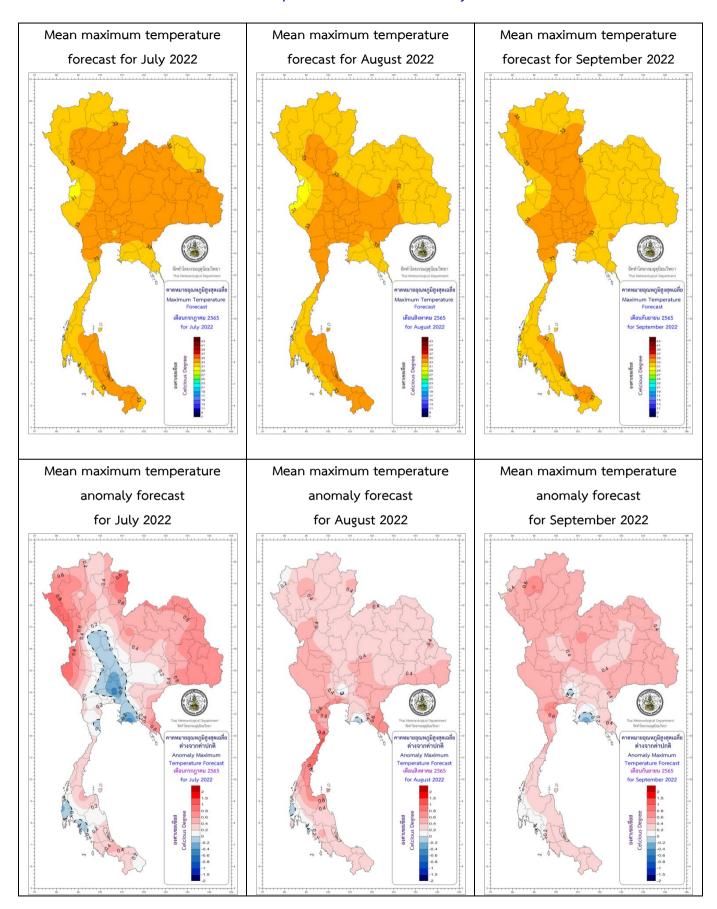
August 2022: Commonly, densely abundant rainfall often occurs in this month with more monthly rain amount than previous months each year. The reason is that the low-pressure trough places over the northern and northeastern parts of Thailand along with the active Southwest Monsoon prevail over Thailand 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 2022:</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.

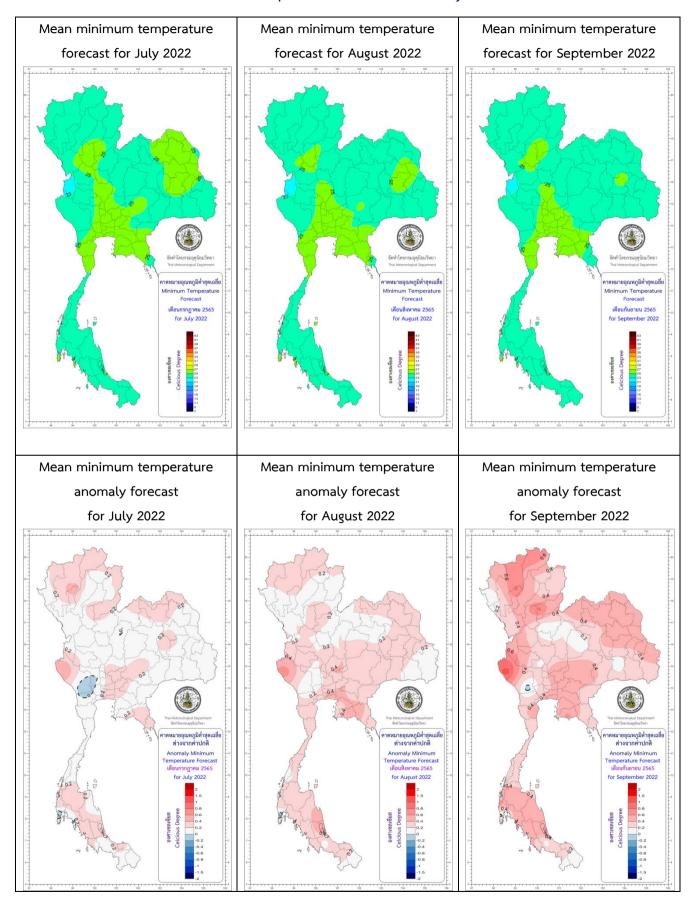
# Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



# \*\*\* Caution: \*\*\*

July 2022: 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 2022: 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.

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#### 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 rain) middle February season) NORTHEASTERN Pacific Ocean CENTRAL The summer season during middle ASTERN February - middle May during middle The influenced by May - middle Gulf of Andaman October southern wind from BANGKOK METROPOLIS the Gulf of Thailand AND VICINITY The South Notes: SOUTHERN (EAST COAST) 1. The Upper Thailand means parts above the Gulf of Thailand SOUTHERN (WEST) COAST) the northern, northeastern, central and eastern parts with Bangkok Metropolis and Vicinity. 2. The Southern Thailand includes the southern part (east coast) and the southern part (west coast).

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

	Prediction											Normal (Baseline period: 1991-2020)*					
Part	July 2022			August 2022			September 2022			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	150-190	18-20	10% Below normal	220-260	20-22	Near normal	210-250	17-19	5% Above normal	189.2	19.4	237.0	21.0	221.7	18.3		
Northeastern	200-240	16-18	10% Below normal	230-280	19-21	Near normal	260-310	17-19	10% Above normal	241.9	17.4	276.1	19.4	255.8	17.7		
Central	140-170	15-17	Near normal	150-190	18-20	Near normal	200-250	18-20	5% Below normal	151.8	16.4	172.8	18.2	237.7	19.2		
Eastern	260-310	16-18	5% Below normal	240-290	18-20	Near normal	310-360	19-21	5% Below normal	287.4	17.2	284.6	18.4	353.3	19.9		
Southern Thailand (East Coast)	110-140	13-15	5% Below normal	120-150	15-17	Near normal	120-150	16-18	5% Below normal	119.8	14.5	130.6	15.4	147.3	16.7		
Southern Thailand (West Coast)	330-380	19-21	5% Below normal	350-410	20-22	10% Below normal	380-430	21-23	5% Below normal	351.6	19.8	418.7	20.5	426.4	22.4		
Bangkok Metropolis and Vicinity	160-200	16-18	Near normal	210-250	19-21	5% Above normal	290-330	20-22	5% Below normal	183.3	17.1	211.6	19.1	325.6	21.1		

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

	Prediction										Normal (Baseline period: 1991-2020)*						
Part .	July 2022			August 2022			September 2022			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	23-25	Above	31-33	23-25	Above	32-34	23-25	Near	32.4	24.2	31.9	24.0	32.4	24.1		
			normal			normal			normal	32.4	24,2	31.9	24.0	J2.4	24.1		
Northeastern 32-3	22 24	2-34 24-26	Above	32-34	24-26	Above	32-34	24-26	Near	32.8	24.7	32.3	24.5	32.1	24.6		
	32-34		normal			normal			normal								
Central	33-35	24-26	Near	33-35 2	24-26	Above	33-35	24-26	Above	33.6	24.8	33.3	24.6	33.1	24.8		
			normal		24-20	normal			normal		24.0						
Eastern 31-	31-33	25-27	Near	31-33	25-27	Above	31-33	24-26	Above	32.4	25.5	32.2	25.4	32.0	25.2		
	31 33	25 21	normal			normal			normal								
Southern (East	32-34	24-26	Near	32-34	24-26	Near	32-34	24-26	Near	33.0	24.4	33.0	24.3	32.6	24.4		
Coast)			normal			normal			normal								
Southern	31-33	3 24-26	Near	31-33 24-26	24-26	Near	31-33	24-26	Near	31.8	24.5	31.6	24.5	31.3	24.3		
(West Coast)			normal		normal	21-22	24-20	normal	31.0	24,3	31.0	24.3	31.3	24.5			
Bangkok and Vicinity	32-34	25-27	Near normal	33-35	25-27	Above normal	32-34	25-27	Above normal	33.4	26.1	33.3	25.8	33.1	25.9		

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

- 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,

<sup>-</sup> 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.