



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

3-month Climate Prediction of Thailand

During June – August 2021

Issued on 31 May 2021

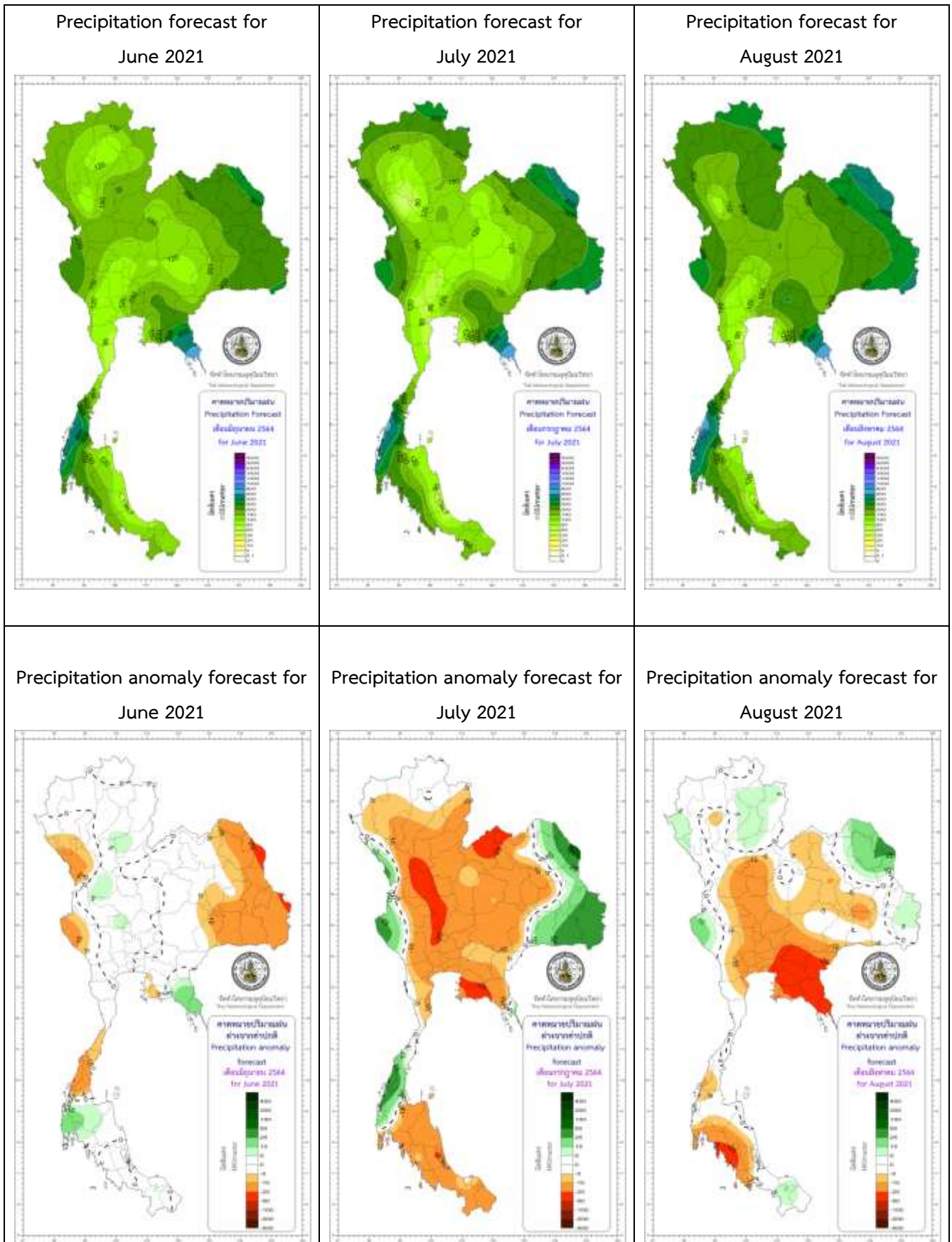
Thailand climate for June – July – August from 30-year normal (A.D. 1981 - 2010 or B.E. 2524 - 2553 baseline average)

June 2021: Usually, rainfall is abundant during the 1st half of this month from the influential Southwest Monsoon prevailing over Thailand together with the low-pressure trough placing over the central portion of Thailand. Afterward, rain will reduce and dry spell may occur for 1 - 2 weeks especially around the Upper Thailand due to the low-pressure trough moving upward to place over the southern portion of China including with the prevailing Southwest Monsoon over Thailand weakening. Additionally, some tropical cyclones from the Pacific Ocean or the South China Sea may feasibly move near or toward Thailand, specifically at the eastern portion of Thailand.

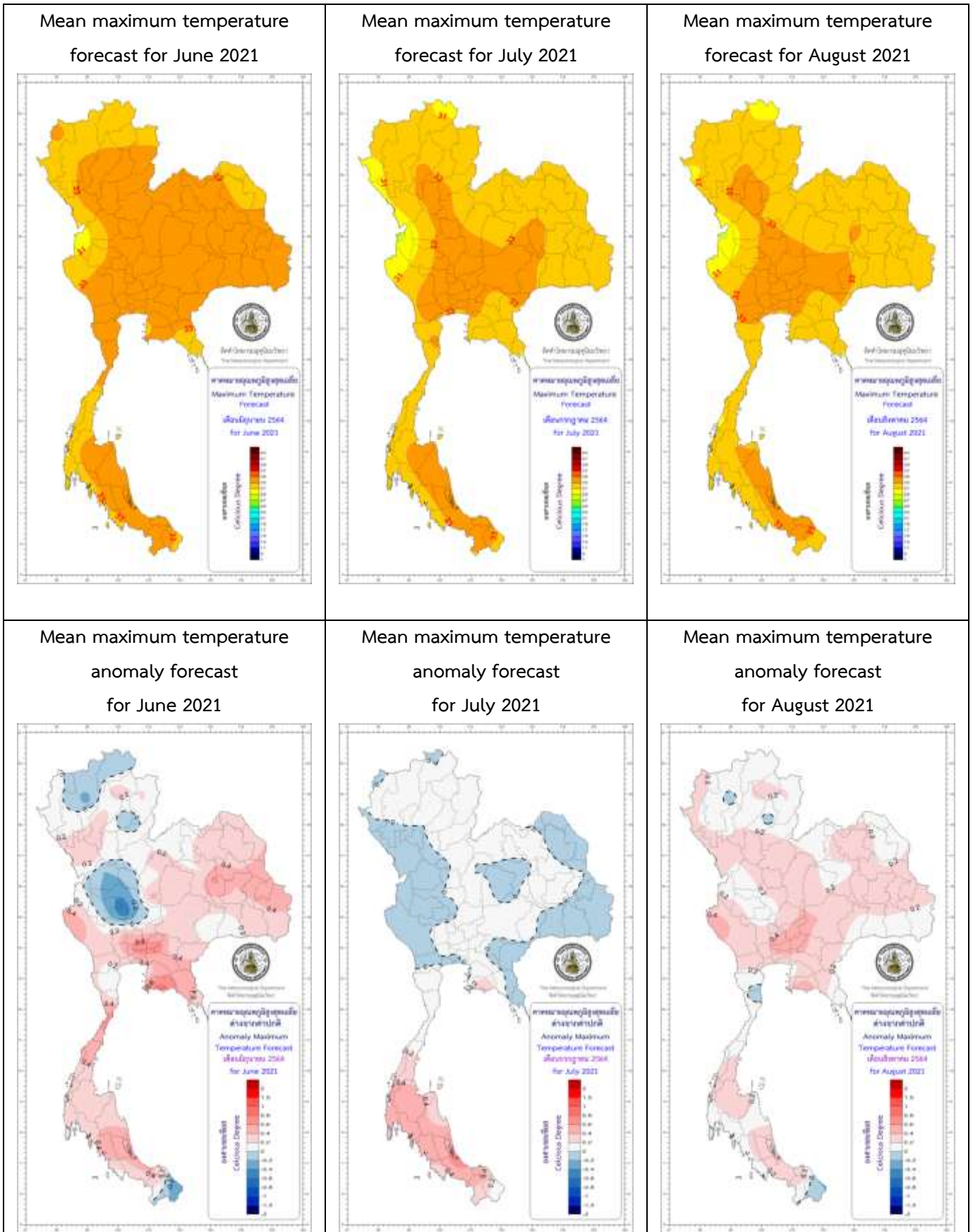
July 2021: During the 1st half of this month, the dry spell will often occur continuously from late June because the low-pressure trough still prevails over the southern portion of China along with the Southwest Monsoon prevailing over Thailand mostly weakens. As a result, many areas will meet little 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.

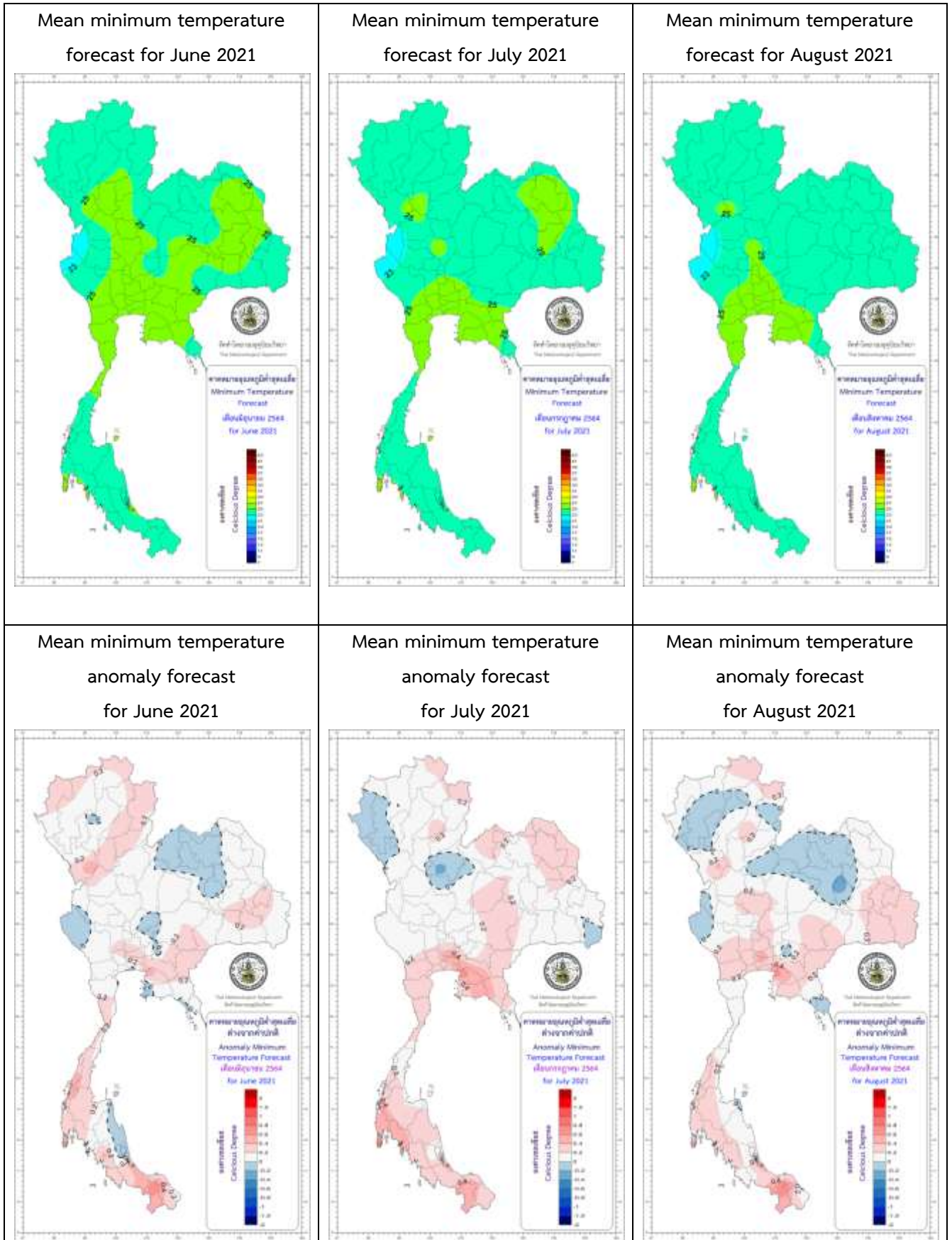
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



***** Caution: *****

During June & July 2021: Frequently, some tropical cyclones will develop at the Western Pacific and move pass the Philippines toward the South China Sea. This influences the Southwest Monsoon prevailing over Thailand and the Gulf of Thailand to strengthen causing Thailand to meet more rainfall, specifically around the coastal areas of the eastern part and the Southern Thailand (west coast).

During late June until early July 2021: Often, dry spell will occur as the amount and distribution of rainfall reduces immensely. Consequently, water shortage for agricultural utilization may happen at many areas, specifically at repeated drought areas outside irrigation zones.

During August 2021: Normally, some tropical cyclones will often develop in the Northwest Pacific or the South China Sea. They favor a high chance to move near or pass the Upper Thailand. This will influence Thailand to meet dense rainfall together with heavy to very heavy rain amount at many areas. As a result, flash or forest flood with overflow will inundate at many areas. Then, the public should follow weather forecast news and warnings of tropical cyclones 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:

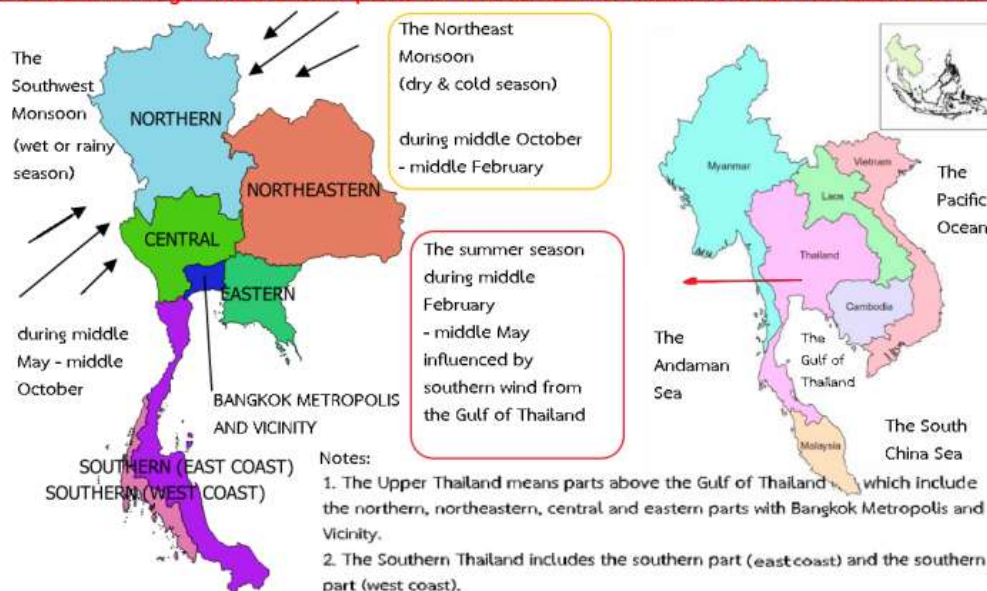


Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1981-2010)					
	June 2021			July 2021			August 2021			June		July		August	
	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Rain (mm)	Rainy Days	Rain (mm)	Rainy Days
Northern	140-180	17-19	Near normal	140-180	18-20	5% Below normal	200-250	20-22	Near normal	156.2	17.8	176.0	19.4	223.0	21.0
Northeastern	180-220	15-17	5% Below normal	200-250	16-18	Near normal	240-300	19-21	Near normal	209.8	16.1	217.6	17.4	266.2	19.4
Central	110-150	14-16	Near normal	110-140	15-17	10% Below normal	140-180	18-20	5% Below normal	133.1	15.4	147.1	16.4	181.1	18.2
Eastern	230-290	16-18	Near normal	230-290	16-18	5% Below normal	240-300	18-20	10% Below normal	261.5	16.7	277.5	17.2	302.5	18.4
Southern Thailand (East Coast)	100-130	13-15	Near normal	90-120	13-15	10% Below normal	110-150	15-17	Near normal	113.4	13.7	119.6	14.5	124.1	15.4
Southern Thailand (West Coast)	280-340	18-20	Near normal	310-370	19-21	Near normal	330-400	20-22	5% Below normal	312.4	18.9	336.5	19.8	398.5	20.5
Bangkok Metropolis and Vicinity	150-190	15-17	Near normal	130-170	16-18	10% Below normal	160-200	19-21	10% Below normal	164.8	16.2	167.2	17.1	203.8	19.1

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

Part	Prediction									Normal (Baseline period: 1981-2010)					
	June 2021			July 2021			August 2021			June		July		August	
	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	32-34	23-25	Near normal	31-33	23-25	Near normal	31-33	23-25	Near normal	33.0	24.3	32.1	24.0	31.8	23.8
Northeastern	33-35	24-26	Near normal	32-34	24-26	Near normal	31-33	24-26	Near normal	33.3	24.9	32.7	24.6	32.2	24.4
Central	33-35	24-26	Near normal	33-35	24-26	Near normal	32-34	24-26	Near normal	34.1	25.0	33.5	24.6	33.1	24.5
Eastern	32-34	25-27	Near normal	31-33	25-27	Near normal	31-33	24-26	Near normal	32.8	25.7	32.2	25.3	32.0	25.3
Southern (East Coast)	32-34	24-26	Near normal	32-34	24-26	Near normal	32-34	24-26	Near normal	33.2	24.6	32.9	24.2	32.8	24.2
Southern (West Coast)	31-33	24-26	Near normal	31-33	24-26	Near normal	31-33	24-26	Near normal	32.0	24.6	31.7	24.3	31.5	24.4
Bangkok and Vicinity	33-35	25-27	Near normal	32-34	25-27	Near normal	32-34	25-27	Near normal	33.6	26.1	33.2	25.7	33.0	25.5

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.

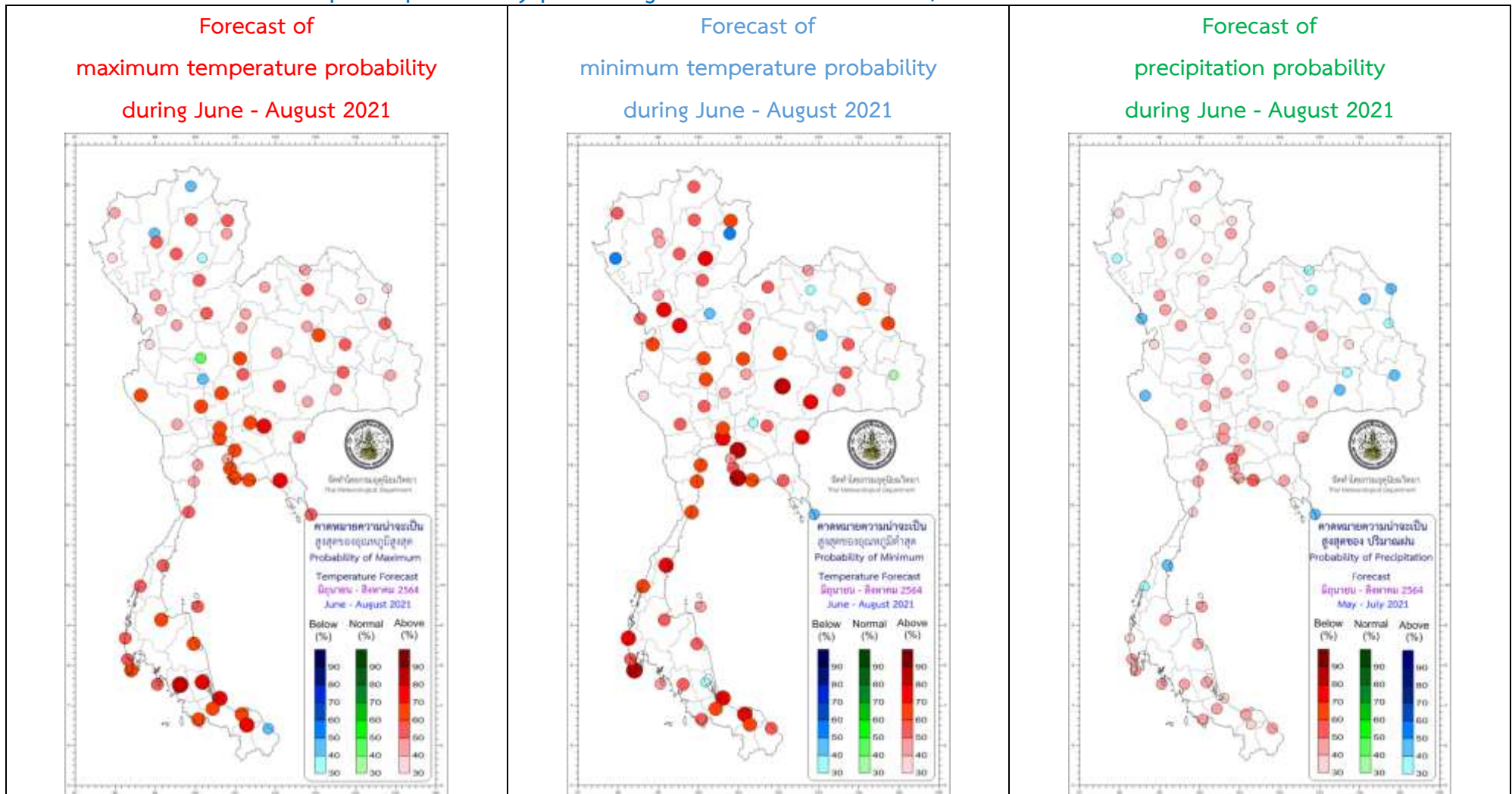
Climate Center, Meteorological Development Division,

Thai Meteorological Department,

Climate Center, Meteorological Development Division, Thai Meteorological Department www.climate.tmd.go.th

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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.