



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

3-month Climate Prediction of Thailand

During April – June 2021

Issued on 31 March 2021

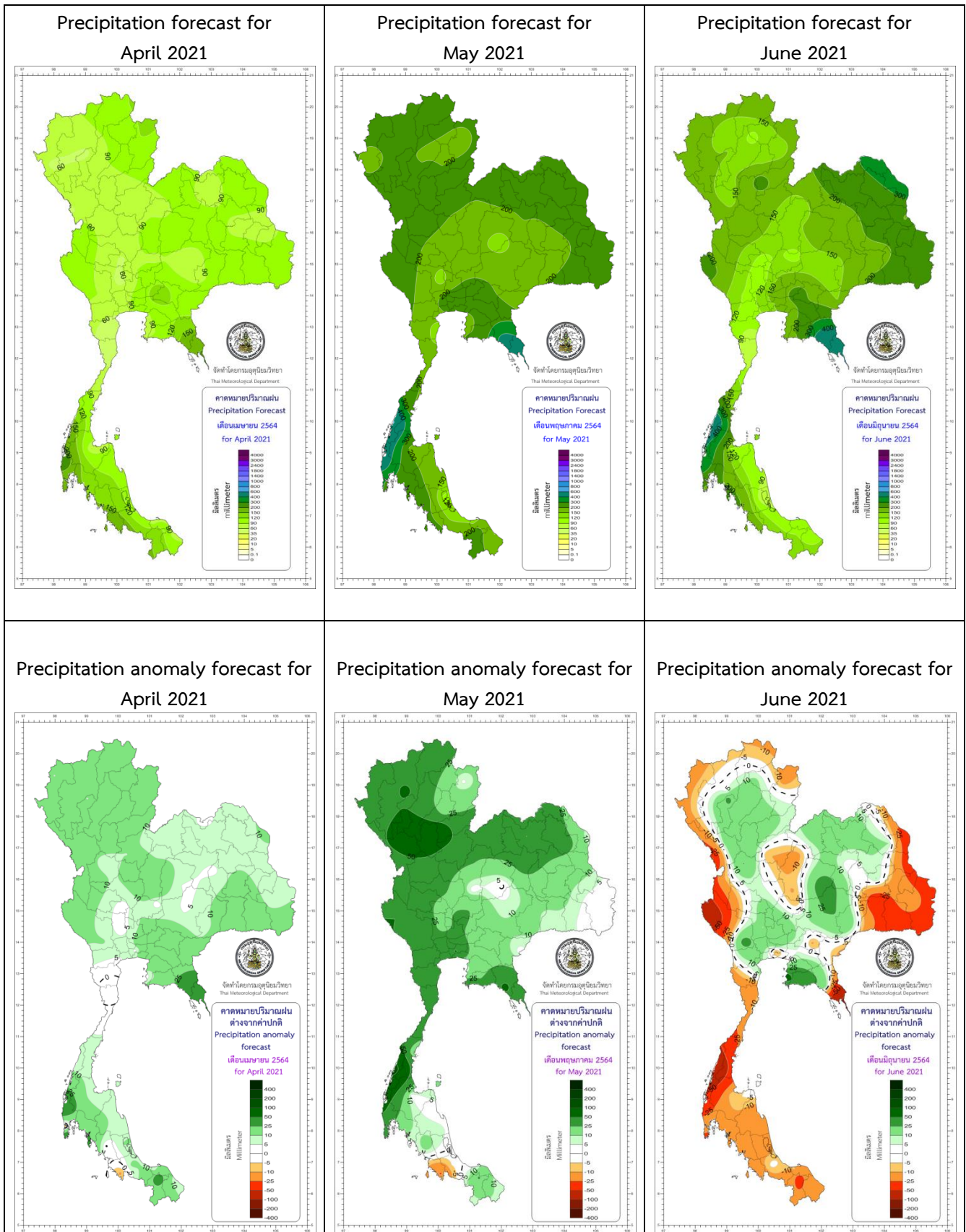
Thailand climate for April - May - June from 30-year normal (A.D. 1981 - 2010 or B.E. 2524 - 2553 baseline average)

April This is the most sweltering month for the whole year, especially around the Upper Thailand. Often, hot to very hot weather occurs together with low-pressure air mass cells along with more heat prevailing over the Upper Thailand. The reason is that this month is at the duration of the Sun radiates perpendicularly to the plane of Thailand. As a result, summer thunderstorms occur influencing the rain amount of this month to increase more than that of the past month in every part of Thailand.

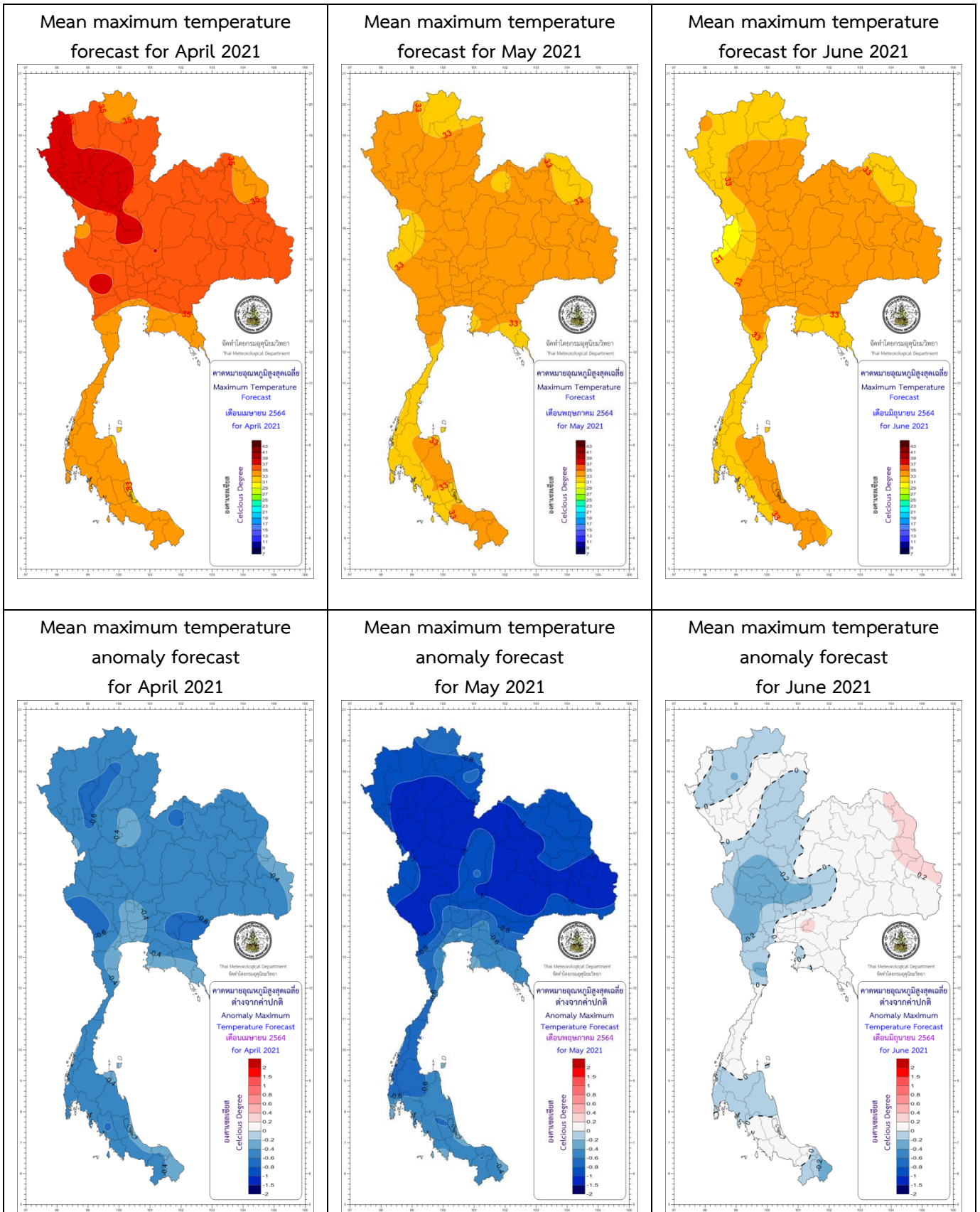
May As being the transitional period from the summer to the rainy seasons, the common weather during the 1st half of this month is usually sweltering. Also, thunder rain storms and summer thunderstorms occur often. Sometimes, hail happens too. And from the influential heat low-pressure air mass cells, mostly at the 2nd half of this month as the start of the rainy season, temperature will reduce with increasing rain. In other words, the prevailing wind over Thailand will start to transform into southwest monsoon while the low-pressure trough placing over Malaysia moves upward to place over the Southern Thailand and the central part of Thailand consecutively. Besides, some tropical cyclones developing in the Andaman Sea and the Bay of Bengal may move near or toward the western side of Thailand further.

June 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.

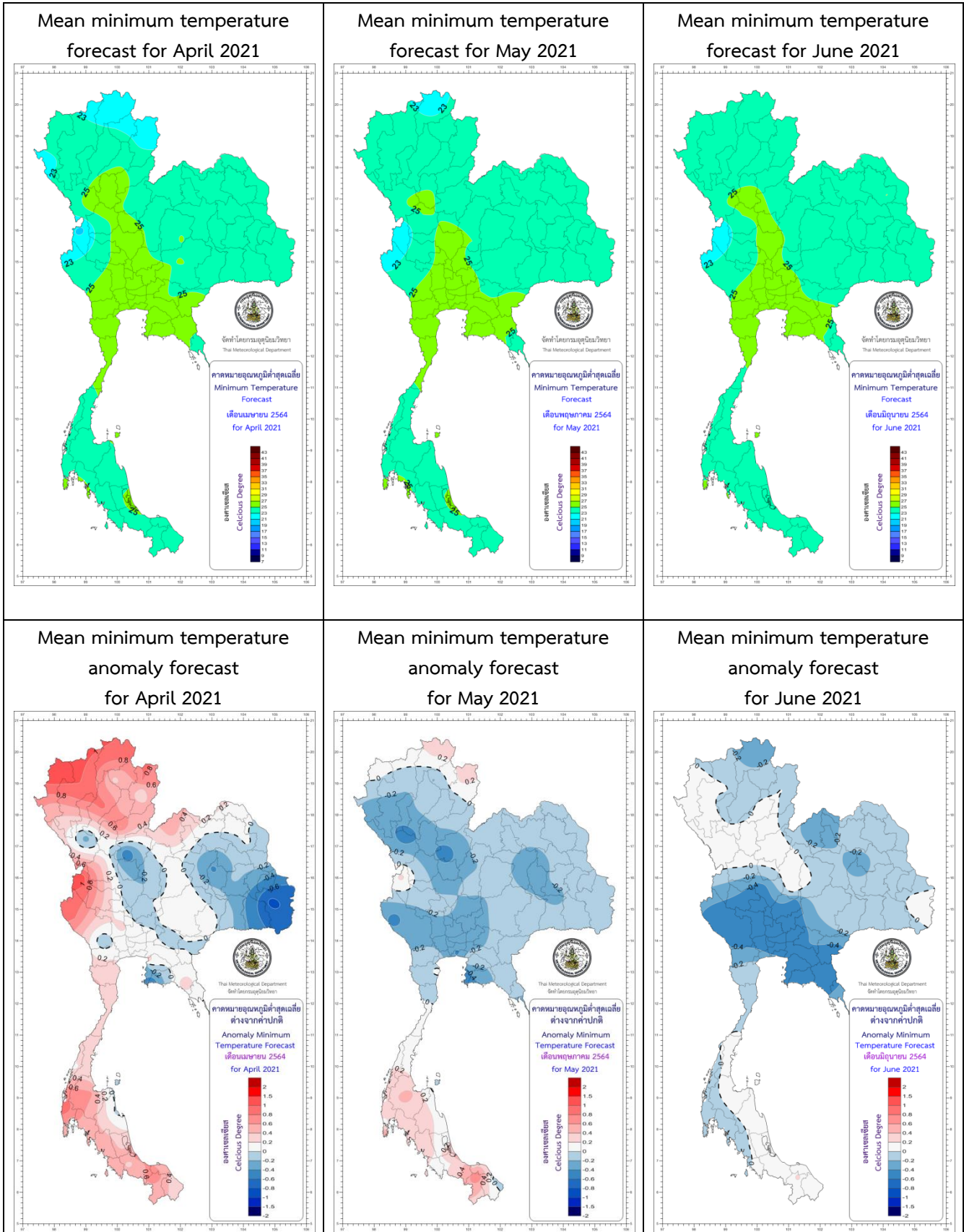
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



*** Caution: ***

April 2021: Often, summer thunderstorms happen as thunder rain storms, gusty wind and possibly falling hail at some areas. As a result, property and crop damages may occur.

During late April and May 2021: Probably, some low-pressure air mass cells develop around the Andaman Sea. These may strengthen to become depressions and tropical cyclones further. Their movements are toward the western side of Thailand. Thus, the western portions of both of the northern and central parts including with that of the Southern Thailand will meet more rain.

During June 2021: Frequently, some tropical cyclones develop in the Western Pacific and may move pass the Philippines toward the South China Sea. This influences the southwestern 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). The public then should follow weather forecast news from the Thai Meteorological Department closely.

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:

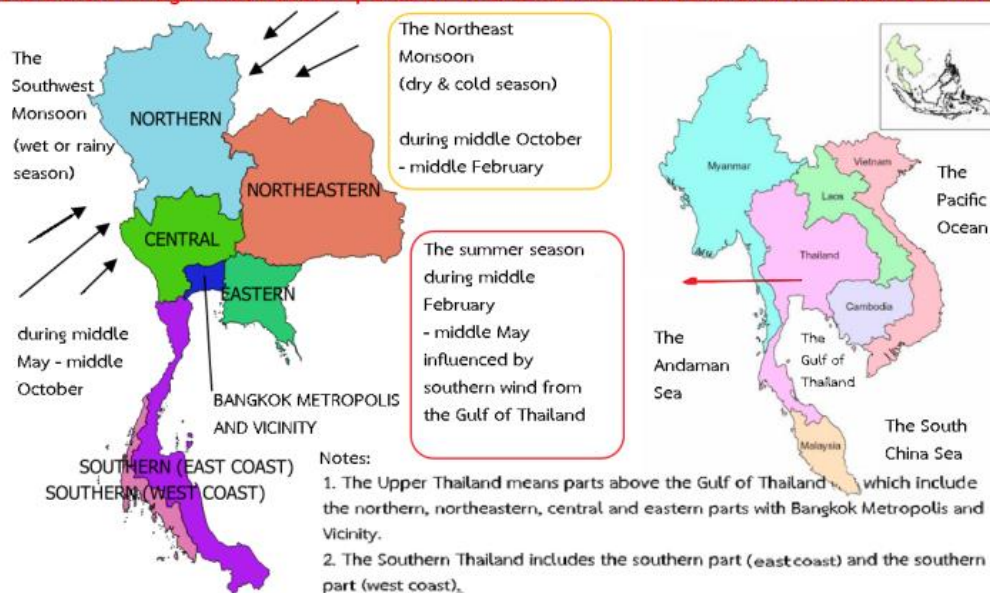


Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1981-2010)					
	April 2021			May 2021			June 2021			April		May		June	
	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	70-100	7-9	20% Above normal	190-230	16-18	20% Above normal	140-180	17-19	Near normal	71.3	7.0	177.8	15.5	156.2	17.8
Northeastern	80-110	8-10	10% Above normal	180-220	15-17	10% Above normal	190-230	15-17	Near normal	86.6	8.0	189.7	15.3	209.8	16.1
Central	60-90	6-8	10% Above normal	150-190	14-16	20% Above normal	110-150	14-16	Near normal	72.9	6.4	150.8	14.3	133.1	15.4
Eastern	90-120	8-10	20% Above normal	210-260	15-17	10% Above normal	230-280	16-18	Near normal	98.9	8.3	223.9	15.8	261.5	16.7
Southern Thailand (East Coast)	70-100	7-9	10% Above normal	130-170	14-16	10% Above normal	90-120	12-14	10 % Below normal	81.3	7.3	145.7	14.3	113.4	13.7
Southern Thailand (West Coast)	150-190	12-14	10% Above normal	300-370	20-22	10% Above normal	260-310	17-19	10 % Below normal	160.6	12.7	310.1	19.9	312.4	18.9
Bangkok Metropolis and Vicinity	90-120	7-9	10% Above normal	240-290	16-18	20% Above normal	140-180	15-17	Near normal	92.0	6.5	221.6	16.2	164.8	16.2

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

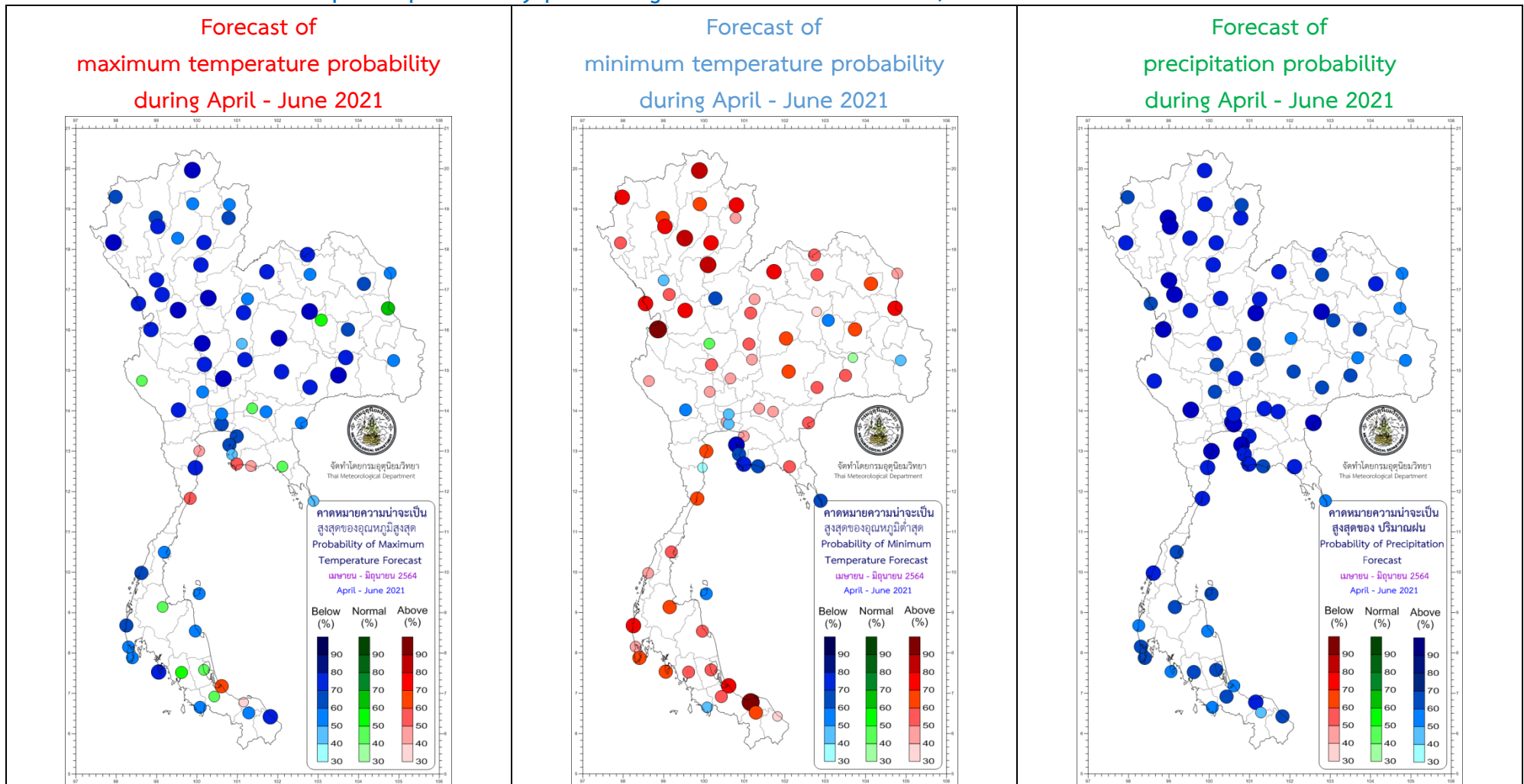
Part	Prediction									Normal (Baseline period: 1981-2010)					
	April 2021			May 2021			June 2021			April		May		June	
	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	36-38	23-25	Below normal	33-35	24-26	Below normal	32-34	23-25	Near normal	37.1	23.4	34.7	24.2	33.0	24.3
Northeastern	35-37	24-26	Below normal	32-34	24-26	Below normal	32-34	24-26	Near normal	36.1	24.5	34.4	24.8	33.3	24.9
Central	36-38	24-26	Below normal	34-36	24-26	Below normal	33-35	24-26	Below normal	37.3	25.2	35.4	25.2	34.1	25.0
Eastern	33-35	25-27	Below normal	32-34	25-27	Below normal	32-34	25-27	Below normal	34.7	25.9	33.7	25.8	32.8	25.7
Southern (East Coast)	32-34	24-26	Below normal	32-34	24-26	Below normal	32-34	24-26	Near normal	33.8	24.5	33.6	24.8	33.2	24.6
Southern (West Coast)	33-35	24-26	Below normal	31-33	24-26	Below normal	31-33	24-26	Near normal	34.2	24.4	32.7	24.6	32.0	24.6
Bangkok and Vicinity	34-36	26-28	Below normal	33-35	25-27	Below normal	33-35	25-27	Near normal	35.4	26.6	34.5	26.2	33.6	26.1

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,
 Ministry of Digital Economy and Society

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.