



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

3-month Climate Prediction of Thailand

During March – May 2021

Issued on 25 February 2021

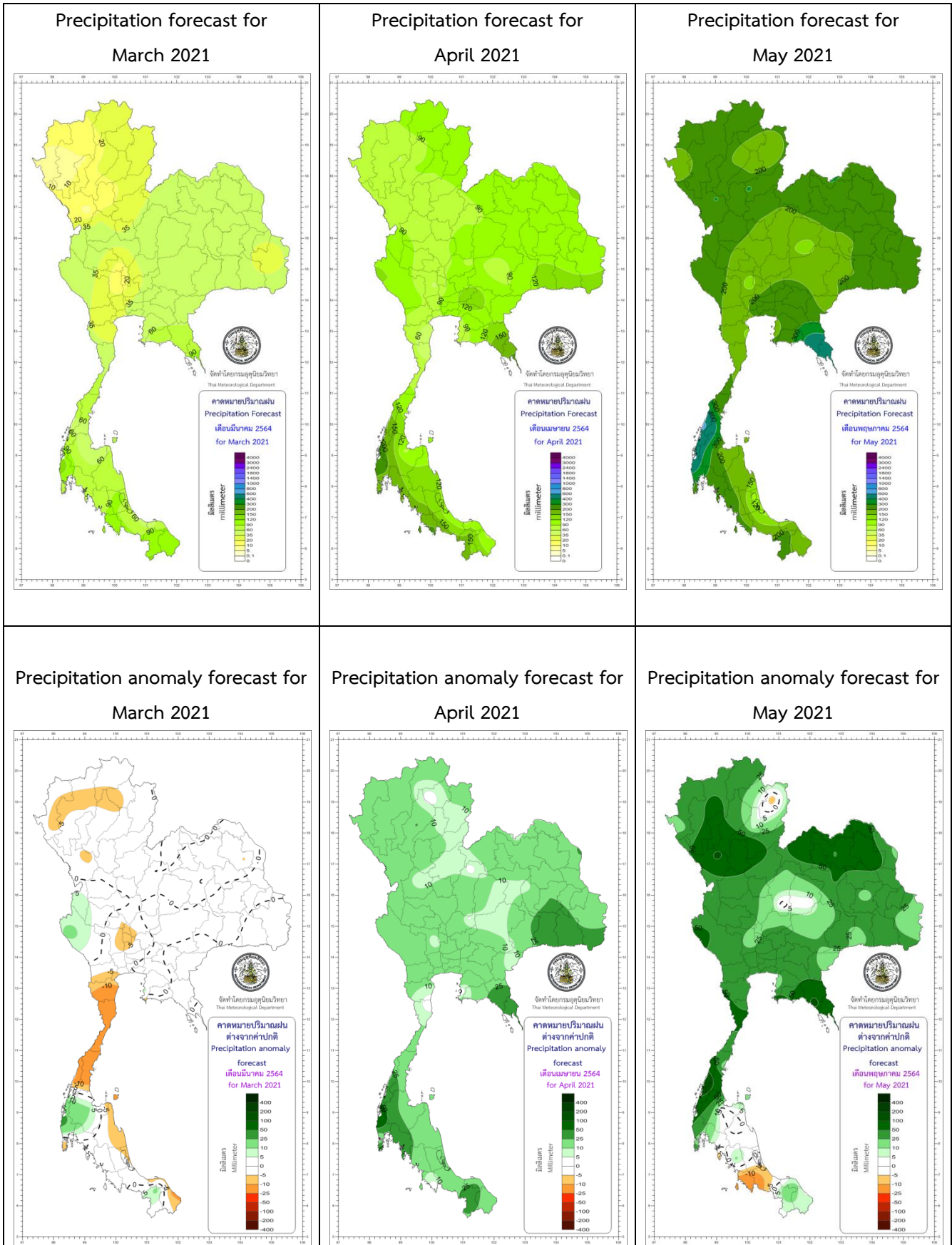
Thailand climate for March – April - May from 30-year normal (A.D. 1981 - 2010 or B.E. 2524 - 2553 baseline average)

March Sweltering and dry weather with little humidity appears along with very hot weather on some days, specifically at the Upper Thailand due to mostly prevailing southerly wind over Thailand. However, at some periods, coldly high-pressure air masses from China will meet hot air masses already prevailing over Thailand. This brings about summer thunderstorms, specifically around the Upper Thailand. The summer thunderstorms often occur during short duration and at narrow areas. Commonly, severely gusty wind often appears too and feasibly causes damages to life and property.

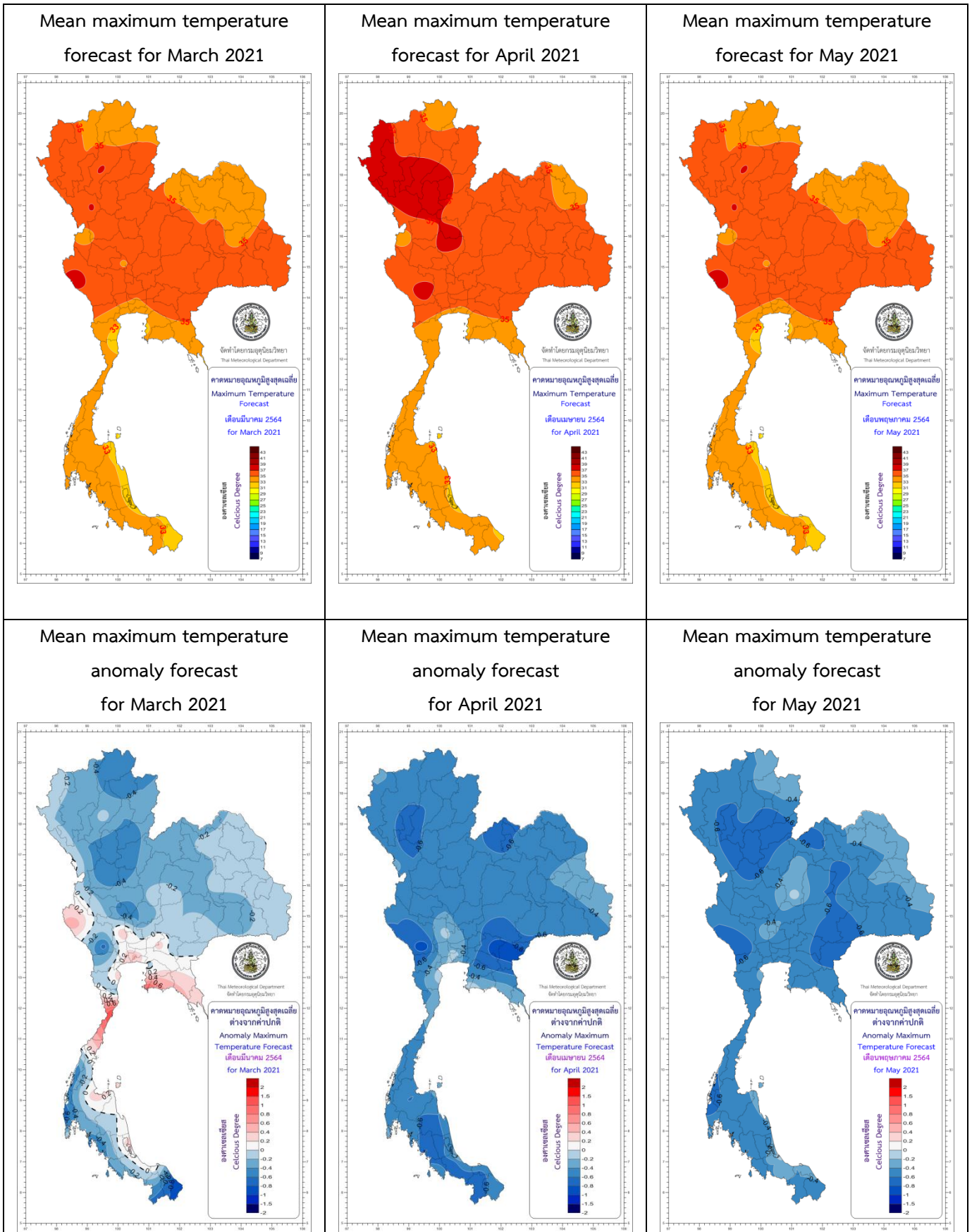
April This is the most sweltering month for the whole year, especially around the Upper Thailand. Often, hot to very hot weather occurs together with low-pressure air mass cells along with more heat prevailing over the Upper Thailand. The reason is that this month is at the duration of the Sun radiates 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.

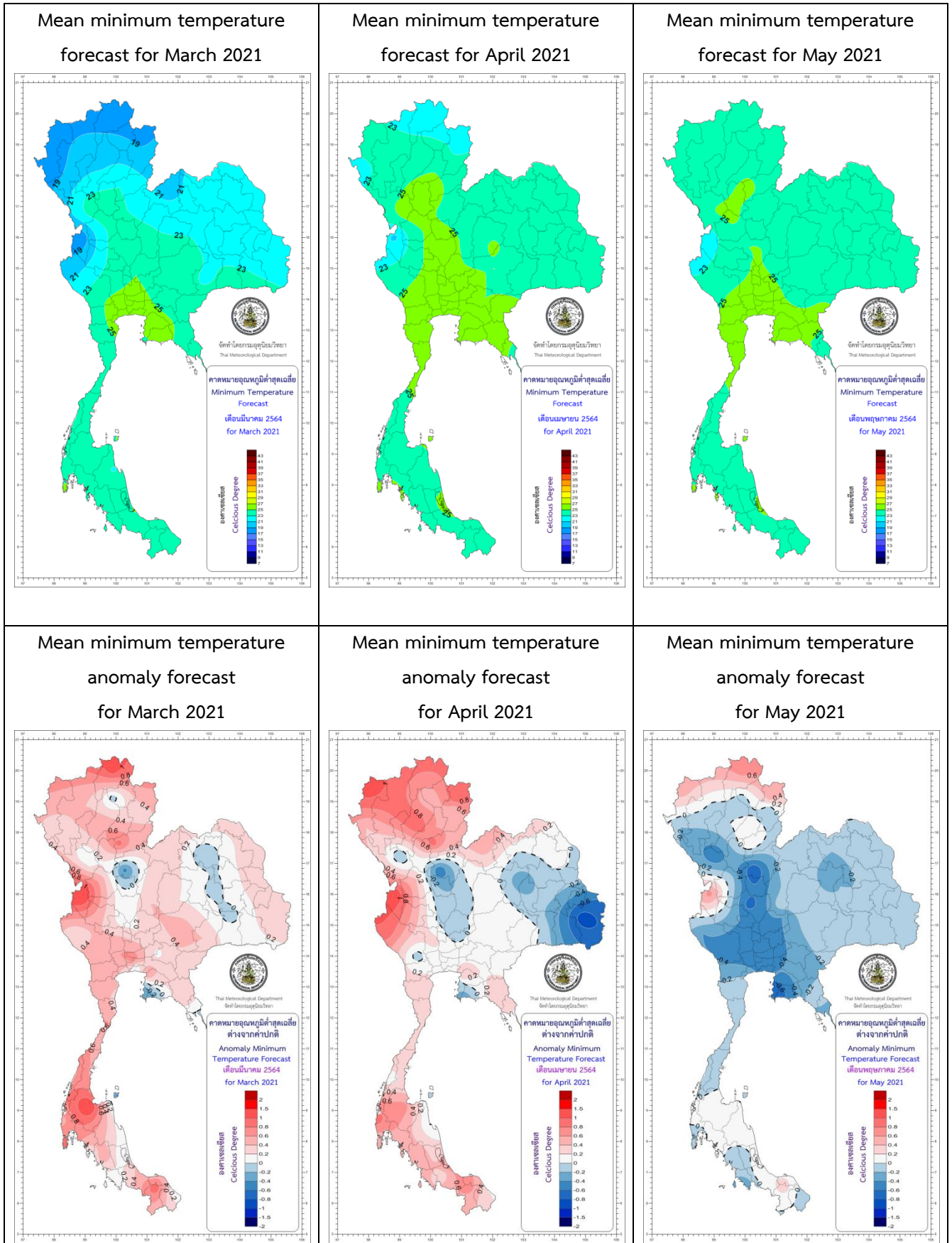
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



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

March and 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 2020: 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 northerly to easterly and may move closely 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.

The public then should follow the 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:

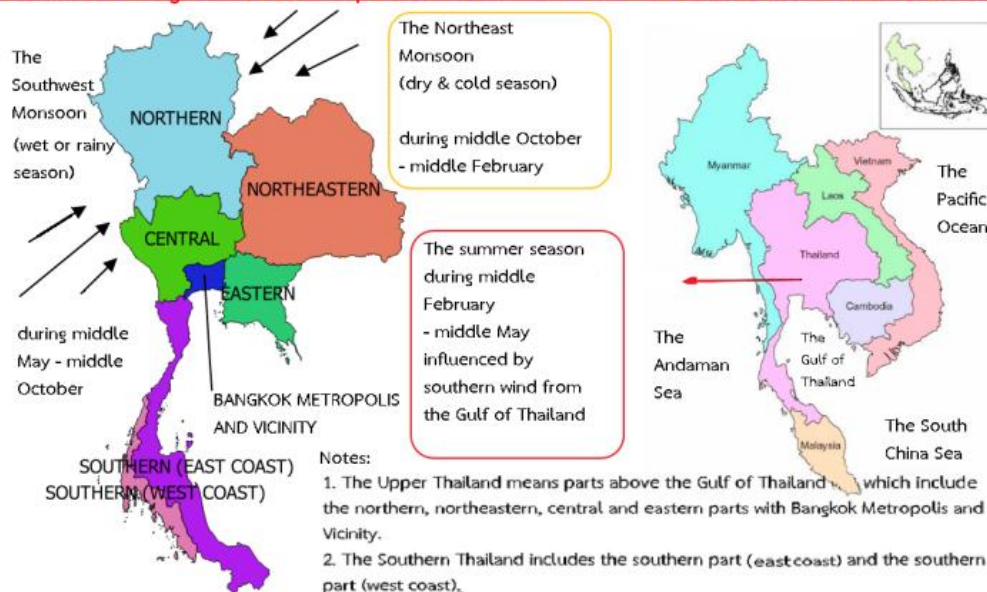


Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1981-2010)					
	March 2021			April 2021			May 2021			March		April		May	
	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	20-30	3-5	10 % Below normal	70-100	7-9	20% Above normal	190-230	16-18	20% Above normal	28.1	3.1	71.3	7.0	177.8	15.5
Northeastern	30-50	4-6	Near normal	90-120	8-10	20% Above normal	200-250	15-17	20% Above normal	44.7	4.8	86.3	8.0	187.1	15.3
Central	20-40	3-5	Near normal	70-100	7-9	20% Above normal	160-200	14-16	20% Above normal	36.0	3.4	79.5	6.4	172.1	14.3
Eastern	50-80	5-7	Near normal	100-140	8-10	20% Above normal	240-290	16-18	20% Above normal	62.1	5.4	98.9	8.3	223.9	15.8
Southern Thailand (East Coast)	50-80	5-7	10 % Below normal	70-100	7-9	20% Above normal	140-180	14-16	10% Above normal	68.4	5.4	75.4	7.3	143.7	14.3
Southern Thailand (West Coast)	80-100	7-9	Near normal	170-210	12-14	20% Above normal	300-370	20-22	10% Above normal	88.8	7.6	160.6	12.7	310.1	19.9
Bangkok Metropolis and Vicinity	30-50	4-6	Near normal	90-120	7-9	20% Above normal	240-290	16-18	20% Above normal	42.1	3.6	91.4	6.5	247.7	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)					
	March 2021			April 2021			May 2021			March		April		May	
	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	35-37	20-22	Near normal	36-38	23-25	Below normal	34-36	23-25	Below normal	36.1	20.4	37.1	23.4	34.7	24.2
Northeastern	34-36	22-24	Near normal	35-37	24-26	Below normal	33-35	24-26	Below normal	35.1	22.4	36.1	24.5	34.4	24.8
Central	35-37	23-25	Near normal	36-38	24-26	Below normal	34-36	24-26	Below normal	36.1	24.4	37.0	25.5	35.2	25.5
Eastern	33-35	24-26	Near normal	33-35	25-27	Below normal	32-34	24-26	Below normal	33.8	24.9	34.7	25.9	33.7	25.8
Southern (East Coast)	32-34	23-25	Near normal	32-34	24-26	Below normal	32-34	24-26	Below normal	32.6	23.7	33.7	24.6	33.5	24.8
Southern (West Coast)	33-35	23-25	Near normal	33-35	24-26	Below normal	31-33	24-26	Below normal	34.4	23.7	34.2	24.4	32.7	24.6
Bangkok and Vicinity	34-36	25-27	Near normal	34-36	26-28	Below normal	33-35	25-27	Below normal	34.3	25.9	35.4	26.6	34.5	26.2

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.

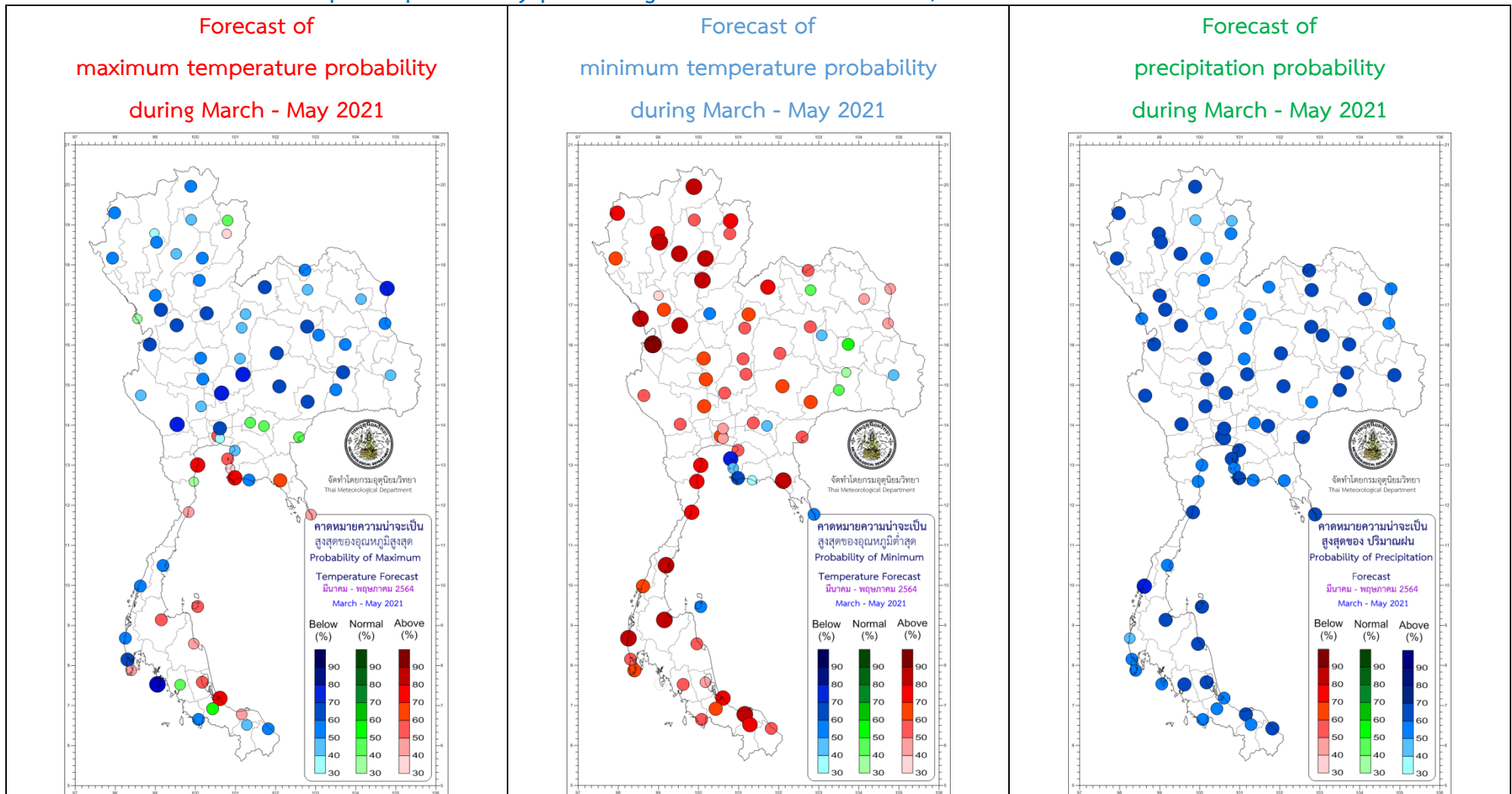
Climate Center, Meteorological Development Division,

Thai Meteorological Department,

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

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.