



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

3-month Climate Prediction of Thailand

During January – March 2021

Issued on 28 December 2021

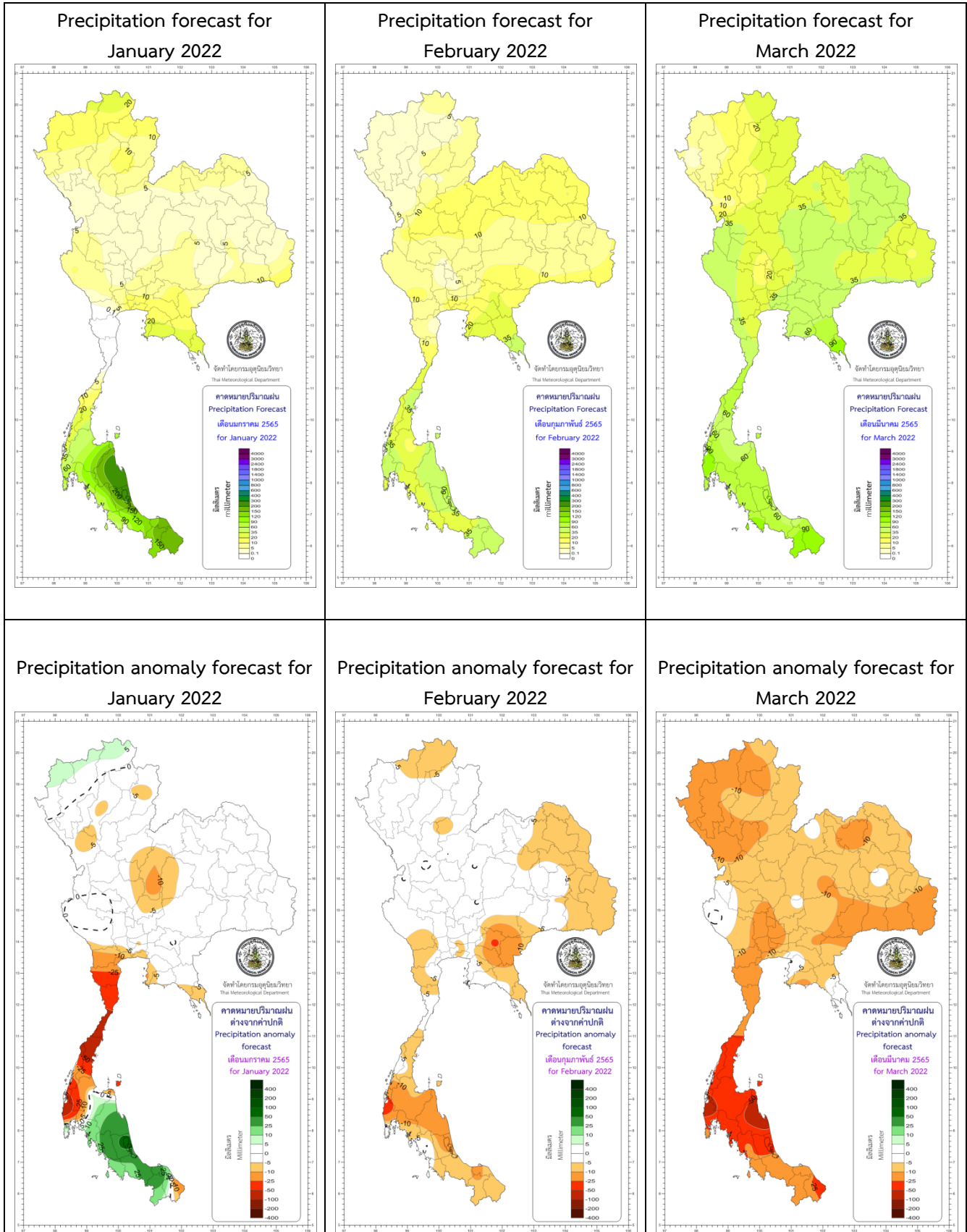
Thailand climate for January – February - March from 30-year normal (A.D. 1991 - 2020 or B.E. 2534 - 2563 baseline average)

January Cold weather appears because the influentially high-pressure air mass areas prevailing over Thailand for the whole month. In fact, most of Thailand will meet the lowest reducing temperature in this month appearing as commonly chilly weather, specifically at the northern and northeastern parts including with high mount tops. Additionally, morning fog occurs while the central and eastern parts will meet cool weather. Furthermore, the Southern Thailand will not meet much chilly weather except at the upper portion because of surrounding seas at both sides.

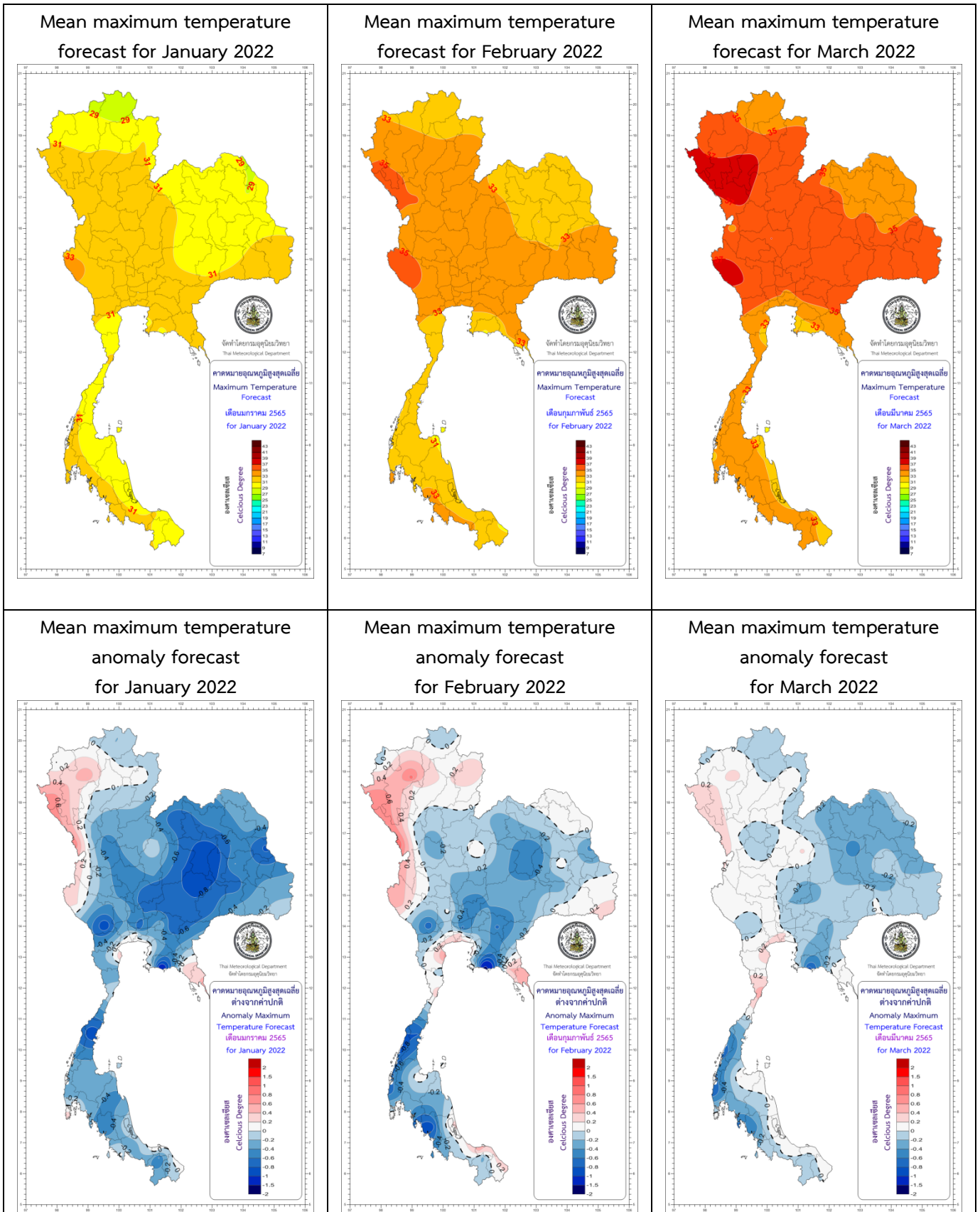
February Normally, this month is during the transition period from the winter to the summer. In other words, the high-pressure air mass areas prevailing over Thailand will start to weaken. Still, common weather of Thailand is still to be cool with morning fog whereas that of the northern and northeastern parts is still cold to very cold at some areas, mostly during the 1st half of this month. Afterward, rising temperature occurs due to prevailing hotly southerly wind replacing the northeastern monsoon. Thus, the start of the summer appears since the middle of this month onward. Furthermore, rain at the Southern Thailand will be less than that of the past month, especially at the East Coast.

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.

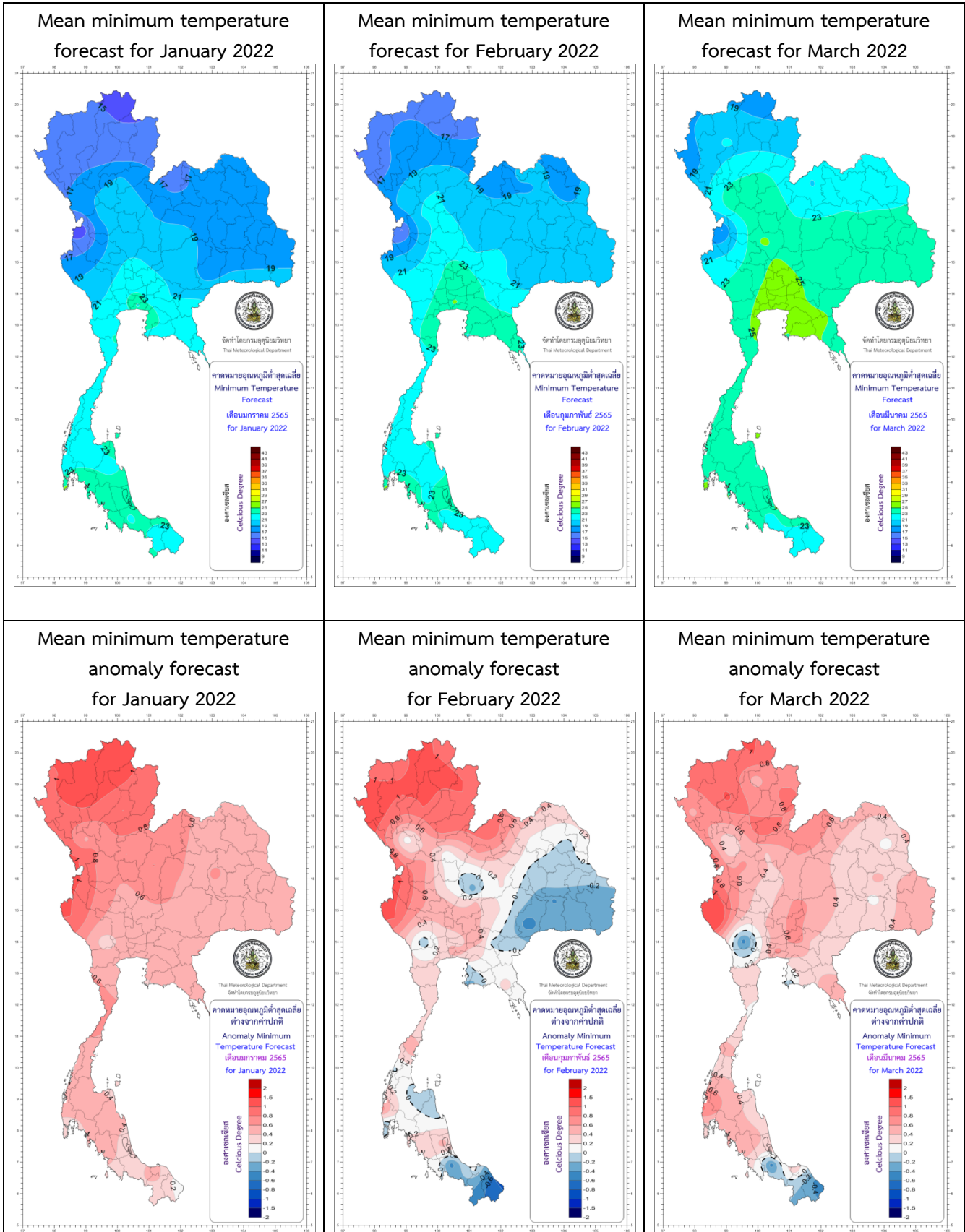
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



*** Caution: ***

January 2022: Some tropical cyclones favor a high chance to move near Thailand or pass the Southern Thailand through the tip of the Indochina Peninsula toward the Gulf of Thailand. This will influence the Southern Thailand (east coast) to meet increasing rain. Also, overflowing flash or forest flood may inundate at some areas.

February 2022: Some upper-air westerly wind waves moving easterly from the Myanmar direction may pass the Upper Thailand and the western portion of Thailand causing the area to meet thunder rain with gusty wind at some areas and possibly falling hail.

March 2022: Frequently, summer thunderstorms occur as thunder rain with gusty wind and perhaps falling hail at some areas causing life and property damages. Consequently, the public should follow weather forecast news from the Thai Meteorological Department closely 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:

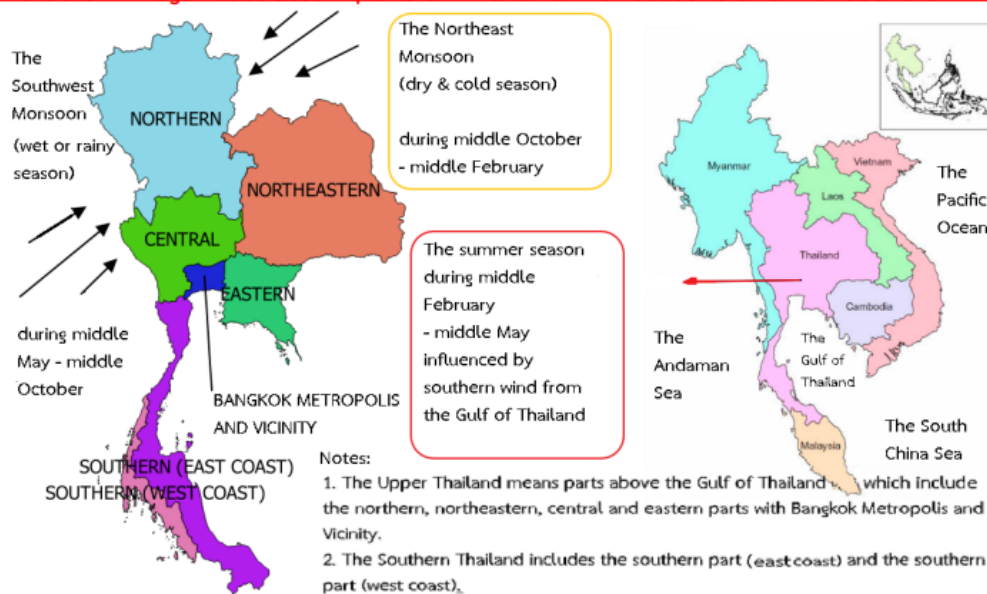


Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1991-2020)					
	January 2022			February 2022			March 2022			January		February		March	
	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	Less than 10	0-2	30% Below normal	Less than 10	0-2	30% Below normal	10-30	1-3	30% Below normal	10.6	1.0	9.8	1.4	31.8	3.1
Northeastern	Less than 10	0-2	30% Below normal	10-20	1-3	30% Below normal	30-50	3-5	20% Below normal	6.5	1.1	15.6	2.5	45.1	4.8
Central	Less than 10	0-2	30% Below normal	Less than 10	0-2	30% Below normal	20-40	2-4	20% Below normal	7.1	1.1	10.5	1.6	37.0	3.4
Eastern	10-30	0-2	20% Below normal	20-40	2-4	20% Below normal	40-70	4-6	10% Below normal	26.1	1.8	32.0	3.1	64.5	5.4
Southern Thailand (East Coast)	90-130	6-8	Near normal	30-50	2-4	20% Below normal	50-80	4-6	30% Below normal	111.0	7.2	43.8	3.7	87.3	5.4
Southern Thailand (West Coast)	40-70	3-5	10% Below normal	30-50	2-4	20% Below normal	60-100	6-8	30% Below normal	59.1	4.2	39.1	3.6	113.5	7.6
Bangkok Metropolis and Vicinity	10-30	1-3	20% Below normal	10-20	1-3	30% Below normal	30-60	2-4	20% Below normal	21.9	1.7	17.8	2.5	48.3	3.6

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

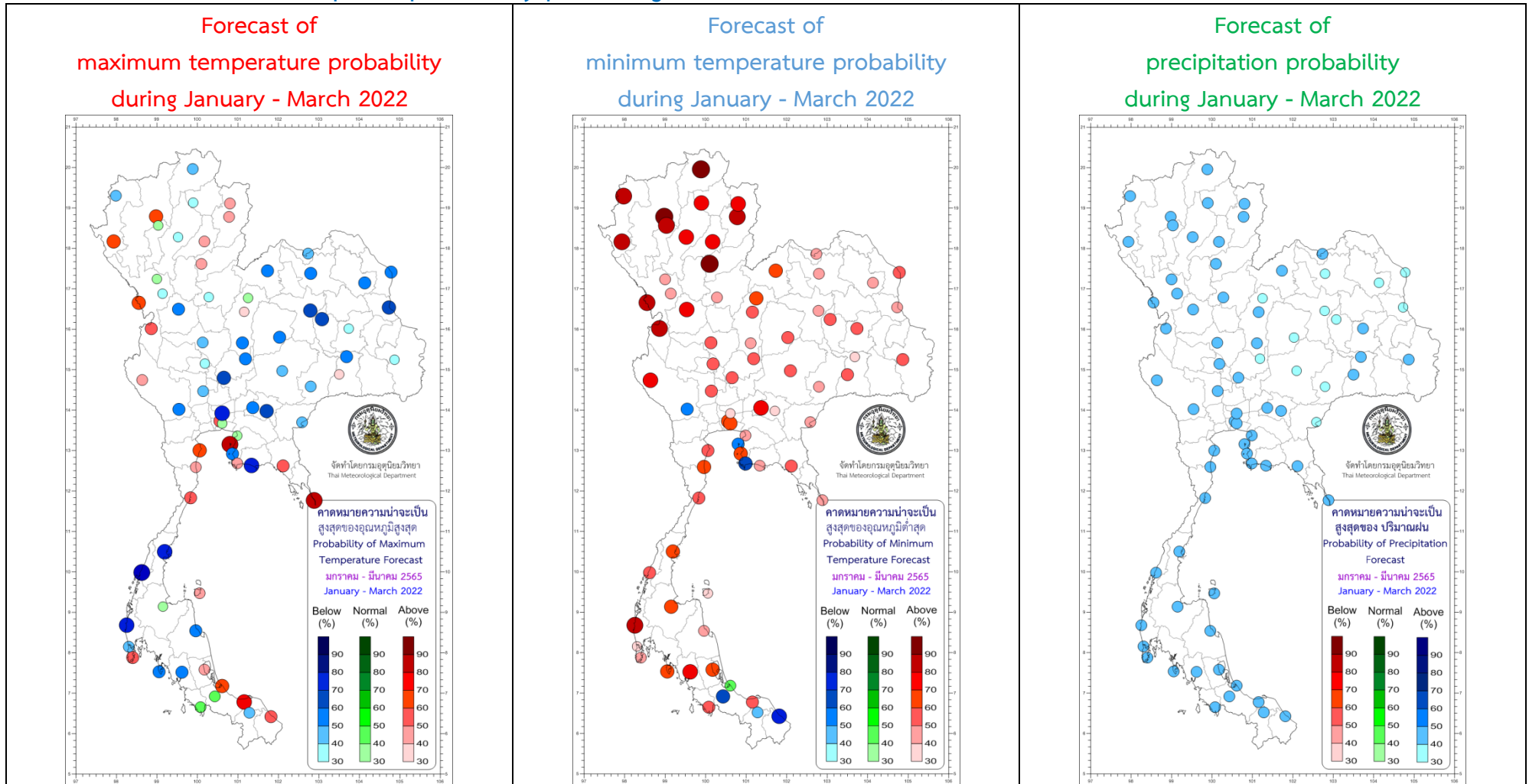
Part	Prediction									Normal (Baseline period: 1991-2020)*					
	January 2022			February 2022			March 2022			January		February		March	
	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	30-32	16-18	Above normal	33-35	17-19	Above normal	35-37	20-22	Above normal	31.2	16.2	33.8	17.4	36.1	20.6
Northeastern	29-31	17-19	Near normal	32-34	18-20	Near normal	34-36	22-24	Near normal	30.7	17.6	33.0	19.5	35.2	22.7
Central	31-33	19-21	Near normal	33-35	21-23	Near normal	35-37	23-25	Near normal	32.7	19.8	34.8	21.7	36.5	23.9
Eastern	31-33	21-23	Near normal	32-34	22-24	Near normal	33-35	24-26	Near normal	32.2	22.0	33.0	23.4	33.9	25.0
Southern (East Coast)	29-31	22-24	Near normal	30-32	22-24	Near normal	32-34	23-25	Near normal	30.5	22.7	31.6	22.9	32.8	23.7
Southern (West Coast)	31-33	22-24	Near normal	32-34	22-24	Near normal	33-35	23-25	Near normal	32.6	23.2	33.7	23.3	34.3	23.9
Bangkok and Vicinity	31-33	22-24	Near normal	32-34	23-25	Near normal	34-36	25-27	Above normal	32.3	22.8	33.5	24.3	34.6	26.0

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

- 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 December 2021.
- 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.