



Climate Outlook

1. During the next 3 months, total rain of northern and central parts will be 5% below normal or about 360 millimeters (Normal 380 millimeters) and 470 millimeters (Normal 490 millimeters) consecutively.

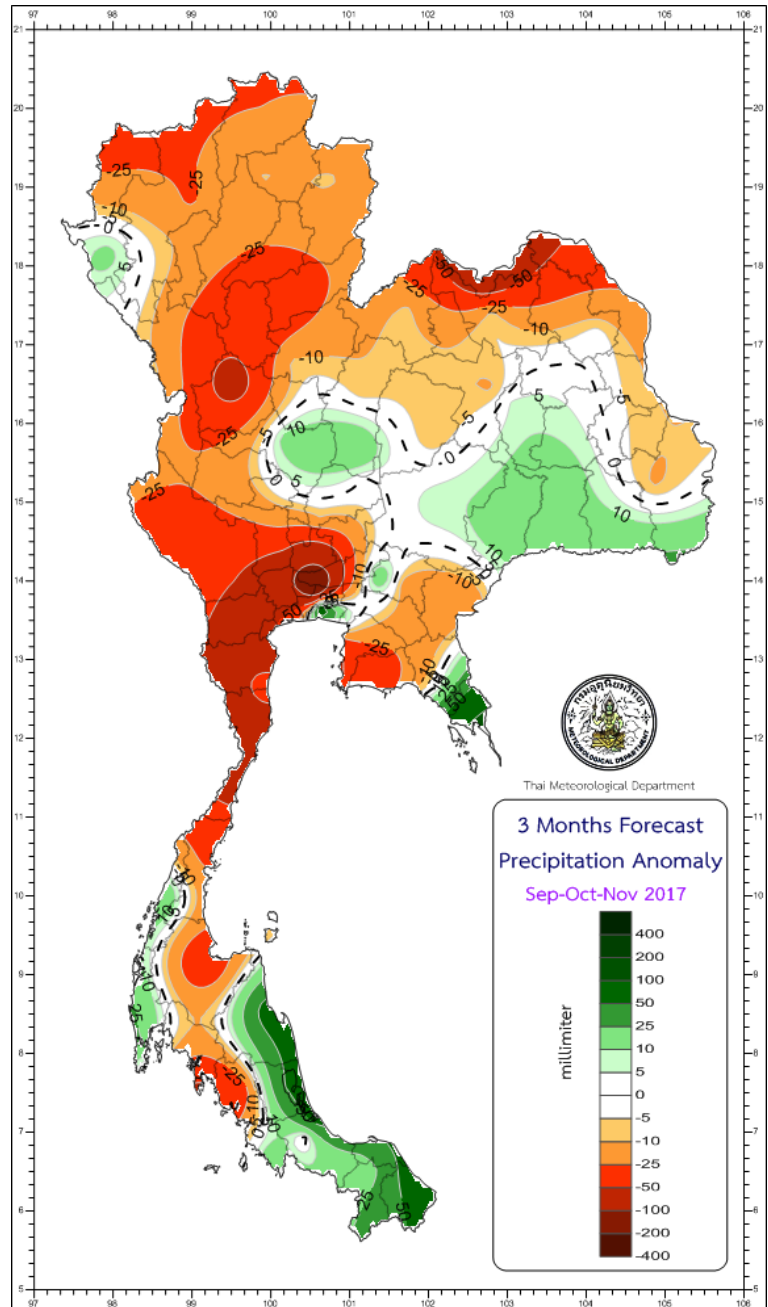
On the other hand, rain of the upper portion of northeastern, eastern and the Southern Thailand (East Coast) will be below normal whereas that of the lower portion will be above normal. As a result, total rain will be near normal or about 380, 610 and 770 millimeters respectively.

But total rain of the Southern Thailand (west coast) will be near normal or about 980 millimeters while mean temperature is about to be near normal for the whole country for this 3-month period.

2. The total rain of the Upper Thailand in September is expected to be above normal about 10-15% whereas that of the Southern Thailand (East and West Coasts) will be below normal about 5-10%.

3. Especially in October, the rain of the northern, northeastern and central parts are expected to be 15- 20% below normal and eastern part will be 5 % below normal whereas that of the Southern Thailand (both coasts) will be 5-10% above normal.

4. Later in November, the total rain for the whole country will be 10-50% below normal, except for the rain of the Southern Thailand (east coast) is about to be near normal.



* For data supporting this 3-month climate outlook are at the following pages.

Thailand Climate for September-October-November from 1981 – 2010

September: Being the most densely abundant rainy month for the entire year of Thailand as influenced by some low-pressure air mass troughs placing around the central part together with the southwest monsoon prevailing over Thailand. Besides, some tropical cyclones may move closer to dissipate near Thailand directly, specifically around the eastern portion of the country.

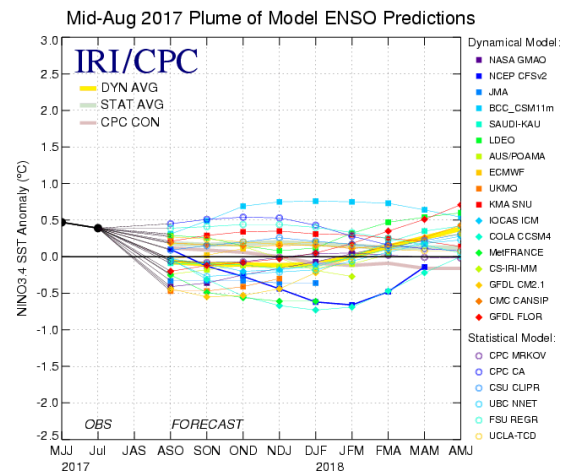
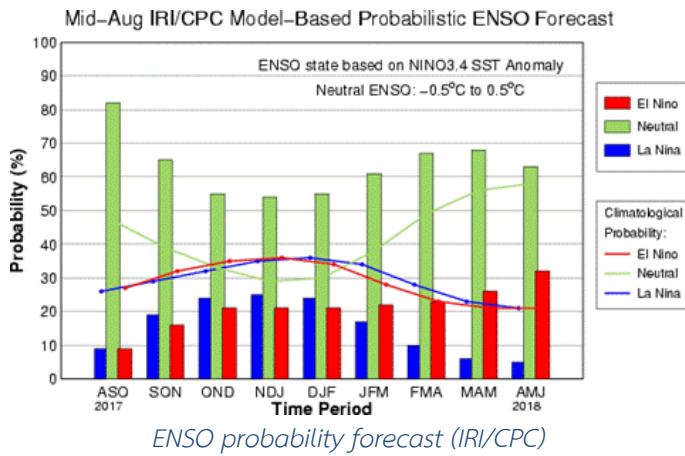
October: Being the transition month from rainy to winter seasons, the rain and temperature of the Upper Thailand will reduce; cool weather starts to happen since the middle of this month onward. The reason is that the southwest monsoon prevailing over Thailand starts to transform to be northeastern monsoon. Moreover, high-pressure air mass areas from China will prevail over the Upper Thailand periodically whereas low-pressure air mass cells prevailing over the central and eastern parts are going to move downward to place over the Southern Thailand and the Gulf of Thailand during the 2nd half of this month. Consequently, the Southern Thailand will still face up with densely abundant rain. Furthermore, some tropical cyclones may move closer or toward Thailand from the eastern side of the country and continuously downward to the upper portion of the Gulf of Thailand and the Southern Thailand further.

November: The Upper Thailand will experience little rain and cool weather for the whole month. As being influenced by active high-pressure air mass areas from China prevailing over the Upper Thailand periodically, temperature will lessen to become cold weather at some areas, specifically at the northern and northeastern parts. However, the Southern Thailand will still experience abundant rain, specifically at the Southern Thailand (east coast) as influenced by the northeastern monsoon and some low air-mass pressure troughs placing over the Southern Thailand and the Gulf of Thailand.

Global conditions and Outlook for September to November 2017

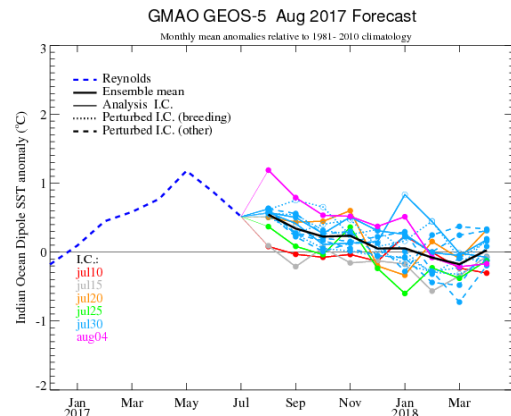
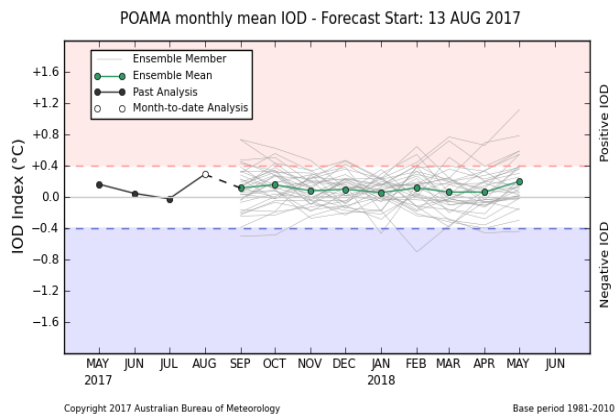
1. El Niño Southern Oscillation (ENSO)

During July to August, ENSO is still neutral (Nino 3.4 = 0.3). And from El Niño/Southern Oscillation (ENSO) Diagnostic Discussion, ENSO probability forecast, and sea surface temperature prediction at the Northwest Pacific, ENSO-neutral conditions will persist for the whole period (September to November 2017) and not influencing the total rain and mean temperature of Thailand.



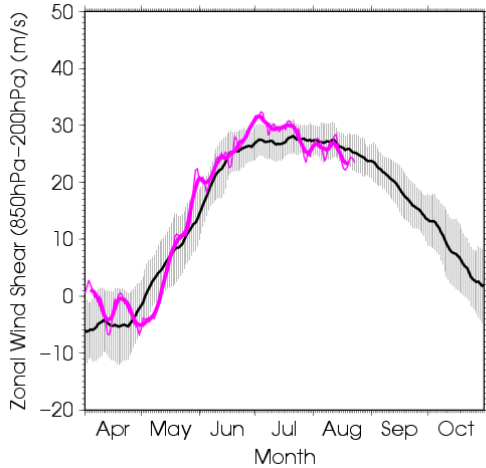
2. Indian Ocean Dipole (IOD)

During the past July until August, IOD was still neutral. And from IOD forecast models, IOD probability forecast, and sea surface temperature forecast at the Indian Ocean, they predict that IOD will still be neutral during September until November 2017. Thus, IOD will not influence for the total rain and mean temperature of Thailand for the next three months.

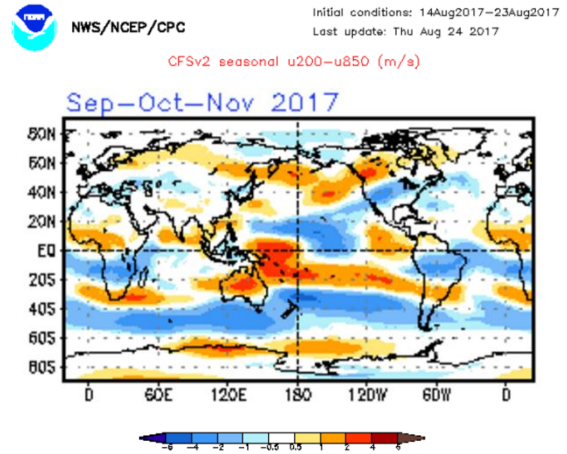


3. Southwest Monsoon

During the past July till August, the southwest monsoon was weakening. Together with wind forecast analyses at the 850-hPa and 200-hPa levels including with Outgoing Long Wave Radiation (OLR), the southwest monsoon is expected to be near normal for the entire period from September until November 2017. Thus, the total rain and mean temperature of Thailand will not differ from normal obviously.



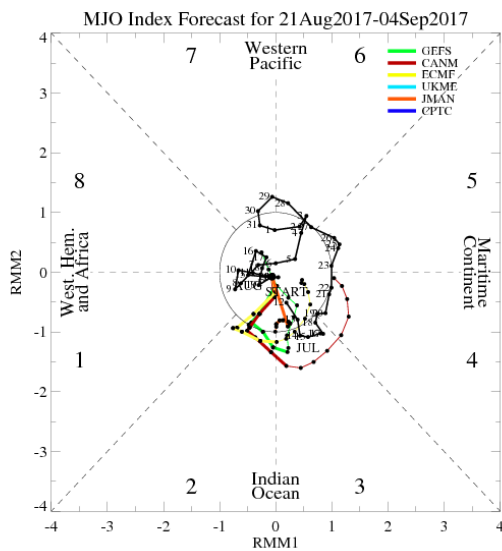
Mean zonal wind shear graph around the Indian Ocean and the Southeast Asia at the 850-hPa and 200-hPa levels



Average global zonal wind shear forecast (u200-u850) m/s For SON 2017

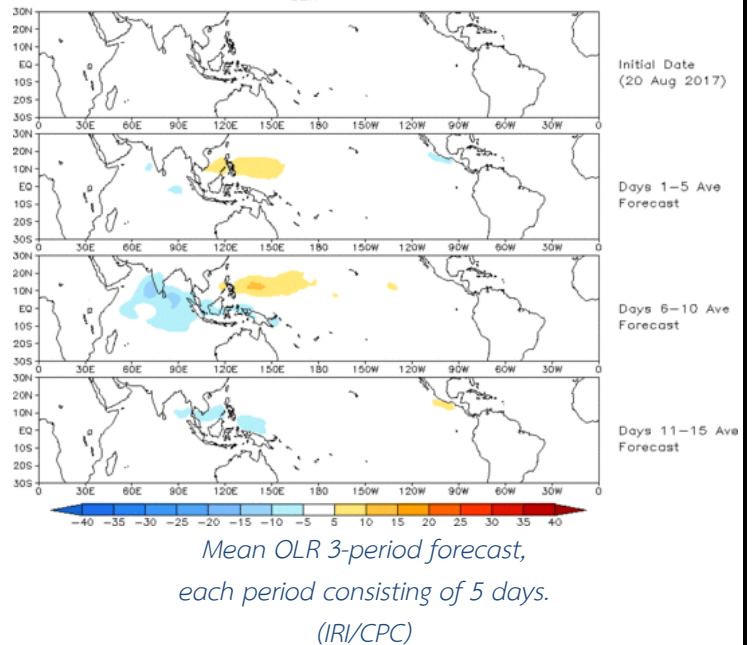
4. Madden Julian Oscillation (MJO)

During the past August 2017, MJO mostly weakened. And from MJO index and Outgoing Long Wave Radiation (OLR) forecast models, they predict that MJO will weaken during early September 2017 and not influence the rain of Thailand.



MJO Index and MJO Phase forecast graph from world climate centers (IRI/CPC)

Prediction of MJO-related anomalies using GEFS operational forecast Initial date: 20 Aug 2017 OLR

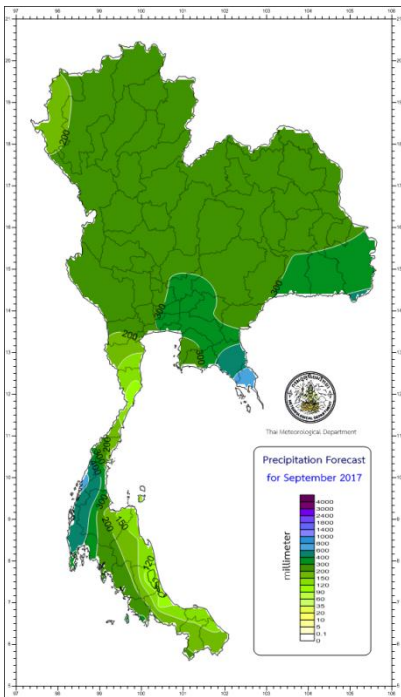


Mean OLR 3-period forecast, each period consisting of 5 days. (IRI/CPC)

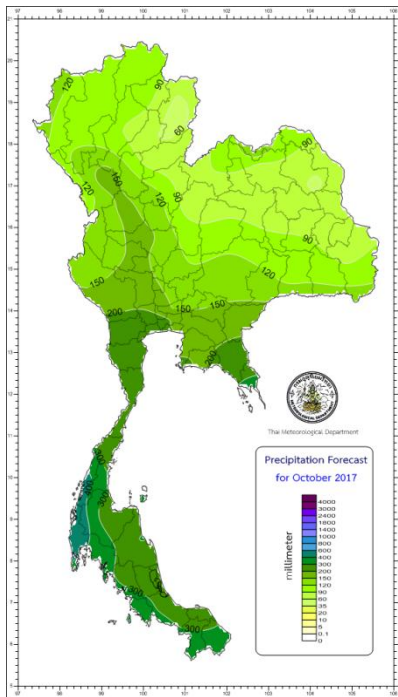
**For further information, please visit www.tmd.go.th/en **

Precipitation (millimeters) and anomaly percentage (%) forecast:

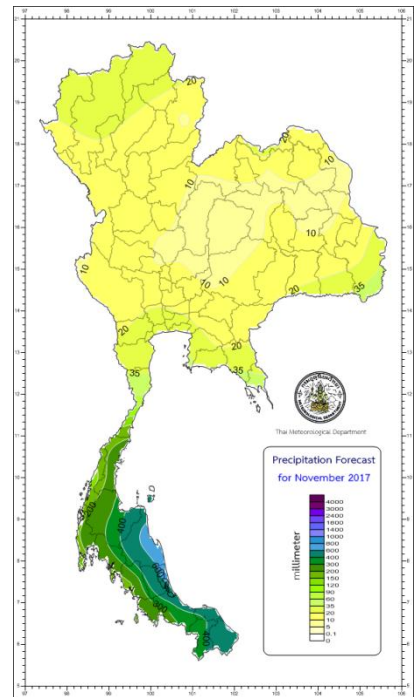
Precipitation forecast for September 2017



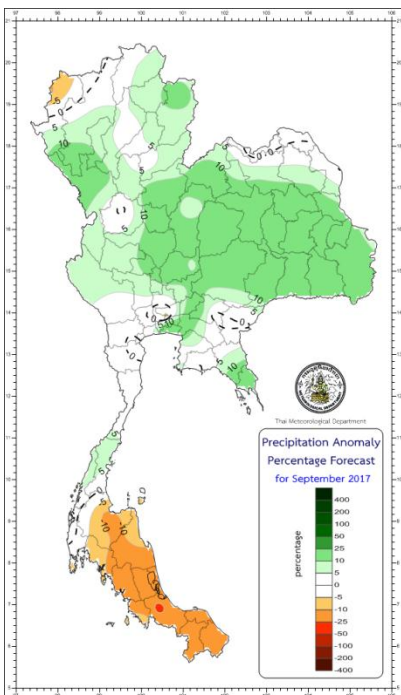
Precipitation forecast for October 2017



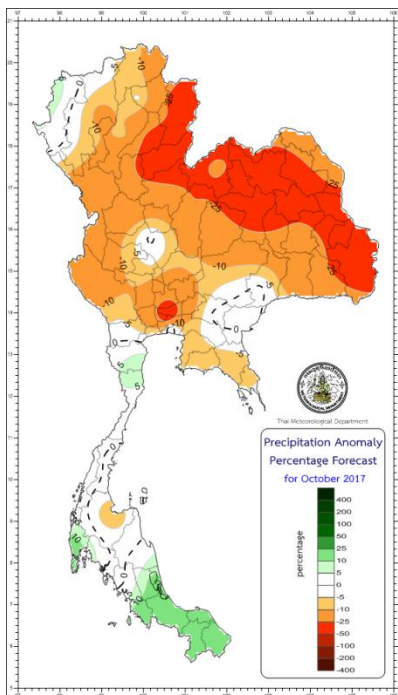
Precipitation forecast for November 2017



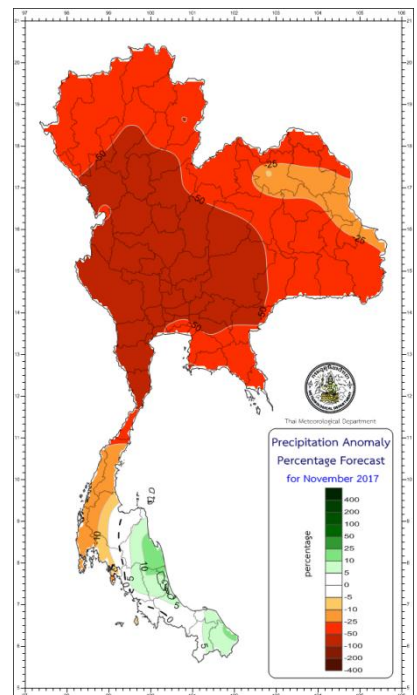
Anomaly percentage forecast for September 2017



Anomaly percentage forecast for October 2017



Anomaly percentage forecast for November 2017



***** Cautions *****

September: Some tropical cyclones often develop in the Northwest Pacific and move northwesterly pass the South China Sea. As a result, Thailand will experience dense rainfall with heavy to very heavy rain at some areas.

October and November: Some tropical cyclones favor a high chance to move pass the tip of the Indochina Peninsula closer to the Southern Thailand. Consequently, the Southern Thailand will face up with densely abundant rain with heavy to very heavy rain at some areas. Thus, the public should follow weather forecast news and warnings about tropical cyclones from the Thai Meteorological Department further.

Prediction of Rain (millimeters), Rainy Days (days) and comparing to normal:

Part	Prediction									Normal					
	September 2017			October 2017			November 2017			September		October		November	
	Rain (mm)	Rainy Days (days)	Comparing To Normal	Rain (mm)	Rainy Days (days)	Comparing To Normal	Rain (mm)	Rainy Days (days)	Comparing To Normal	Rain (mm)	Rainy Days (days)	Rain (mm)	Rainy Days (days)	Rain (mm)	Rainy Days (days)
Northern	200-270	17-20	10% above normal	80-130	10-13	15% below normal	10-30	3-5	45% below normal	218.3	18.3	124.1	12.0	32.9	4.1
Northeastern	230-320	16-19	15% above normal	60-120	8-11	20% below normal	5-20	2-3	35% below normal	242.0	17.7	117.1	10.4	19.5	2.9
Central	250-320	18-21	10% above normal	130-200	12-15	15% below normal	5-30	3-5	50% below normal	257.3	19.2	187.1	14.4	37.2	4.1
Eastern	300-420	18-21	10% above normal	170-260	15-18	5% below normal	15-45	4-6	45% below normal	330.1	19.9	225.1	16.5	53.3	5.6
Southern Thailand (East Coast)	110-160	15-18	10% below normal	220-320	17-20	5% above normal	300-450	15-18	Near normal	149.8	16.7	255.3	18.6	357.2	16.3
Southern Thailand (West Coast)	340-480	20-24	5% below normal	350-450	21-25	10% above normal	140-210	14-17	10% below normal	423.7	22.4	366.5	22.8	193.3	16.2
Bangkok Metropolis and Vicinity	340-410	19-23	15% above normal	170-260	16-19	15% below normal	15-45	5-7	40% below normal	334.3	21.1	292.1	17.5	49.5	5.8

Mean maximum and mean minimum temperatures (C.) and comparing to normal:

Part	Prediction									Normal					
	September 2017			October 2017			November 2017			September		October		November	
	Mean Maximum	Mean Minimum	Comparing to Normal	Mean Maximum	Mean Minimum	Comparing to Normal	Mean Maximum	Mean Minimum	Comparing to Normal	Mean Maximum	Mean Minimum	Mean Maximum	Mean Minimum	Mean Maximum	Mean Minimum
Northern	31-33	23-25	Near normal	31-33	22-24	Above normal	30-32	18-20	Near normal	32.2	23.5	31.9	22.5	31.0	19.5
Northeastern	31-33	23-25	Near normal	31-33	22-24	Above normal	30-32	19-21	Near normal	31.9	24.0	31.4	22.8	30.7	20.3
Central	32-34	24-26	Near normal	32-34	24-26	Above normal	31-33	22-24	Near normal	32.9	24.7	32.4	24.2	31.9	22.6
Eastern	31-33	24-26	Near normal	31-33	23-25	Near normal	31-33	22-24	Near normal	31.9	24.7	32.0	24.1	32.1	23.0
Southern Thailand (East Coast)	31-33	23-25	Near normal	30-32	23-25	Below normal	30-32	23-25	Near normal	32.3	24.1	31.4	23.8	30.3	23.4
Southern Thailand (West Coast)	30-32	23-25	Near normal	30-32	23-25	Near normal	30-32	23-25	Near normal	31.1	23.9	31.2	23.7	31.4	23.5
Bangkok Metropolis and Vicinity	32-34	24-26	Near normal	32-34	24-26	Above normal	32-34	23-25	Near normal	32.8	25.0	32.6	24.8	32.4	23.9

Remarks:

- Normal means average during the 30-year period (A.D. 1981 – 2010 or B.E. 2524 – 2553)
- These long range climate expectation is created by applying some climate models and statistical methods, the public then should follow the daily weather news from the Thai Meteorological Department for more accuracy further.
- The next 3-month climate expectation will be at the last week of August 2017.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: 02-398-9929 or Fax: 02-383-8827.
- Please follow monthly climate, 3-month climate and seasonal forecasts at www.tmd.go.th/en/ at the climate tab.