

Issued on 30 April 2019

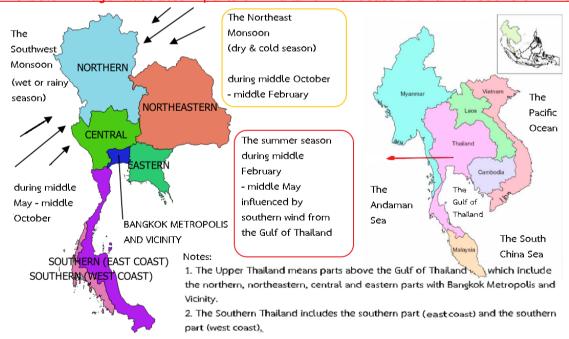
Thai Meteorological Department, 4353 Sukhumvit Road, Bangna, Bangkok 10260.

The 2019 rainy season overview

The rainy season of Thailand this year is expected to begin at about the end of the 3rd week of May 2019 and will finish at around middle October. The total rain of the whole country this year will be 5-10% below normal and less than that of last year which was 3% below normal. For the start of the rainy season (about middle May till June), the total rain is to be below normal. However, during the middle of the rainy season (July until August) and the end of the rainy season (September till middle October), the total rain will mostly become near normal.

During August and September as being the most densely abundant rainfall months, they favor a high chance to meet tropical cyclones passing through the Upper Thailand. As a result, heavy to very heavy rain amount will occur at many areas. Furthermore, flash and forest flood with overflow may inundate at some areas.

The below Image illustrates 7 parts of Thailand with seasons and Monsoons or wind:



Tropical cyclones (depressions, tropical storms and typhoons): For the rainy season of this year, 1 tropical cyclone is expected to move toward Thailand. It favors a high chance to move pass the northeastern and northern parts in August or September.

Seasonal Outlook

During late May until late June, Thailand will meet abundant rainfall continuously. Mostly, the rainfall occurs at 40-60% of the area with heavy rain amount at some areas. Except the eastern part and the Southern Thailand (west coast), the rainfall occurs at 60-80% of the area with heavy rain amount at many areas and very heavy rain at some areas. The reason is that the rather active Southwest Monsoon will prevail over the Andaman Sea and Thailand from time to time. Moreover, some active low-pressure air mass cells often develop around the Andaman Sea and strengthen to become depressions or tropical cyclones, they then move toward the western side of Thailand. Additionally, a monsoon trough sometimes prevails over the Upper Thailand.

Afterward during late June till middle July, the amount and distribution of rainfall will reduce. Thus, dry spell may occur causing water shortage for agricultural usage at many areas, specifically at repeated drought areas outside irrigation zones. The reason is that the Southwest Monsoon prevailing over the Andaman Sea and Thailand will weaken whereas the monsoon trough is about to move up to prevail over the southern portion of China.

Then during middle July until September, densely abundant rainfall will come back. The rainfall will be mostly 60-80% of the area along with heavy rain amount at many areas and very heavy rain amount at some areas, especially in August and September. Consequently, flash and forest flood together with overflow would feasibly appear at many areas. The reason is that the Southwest Monsoon prevailing over the Andaman Sea and Thailand comes back actively and continuously. The Monsoon will become active periodically while the monsoon trough is to prevail over the Upper Thailand occasionally.

And in October, the northern and northeastern parts will meet less rainfall and start to meet morning chilly weather, especially at the upper portion of these parts. Nevertheless, the central and eastern parts and the Southern Thailand will still meet densely abundant rainfall further together with heavy rain amount at many areas and very heavy rain amount at some areas. The reason is that high-pressure air mass areas from China will begin to prevail over the upper portion of both of the northern and northeastern parts. In addition, the Southwest Monsoon trough will move downward to prevail over the lower portion of the central part, the upper portion of the Southern Thailand and the eastern part. Moreover, the former prevailing Southwest Monsoon over Thailand will transform to become the prevailing Northeast Monsoon instead.

Details for each part are as the following:

The Northern part: During May, the total rain amount is expected to be 20% below normal (normal: 178 mm: millimeters). Then in June, the total rain amount is to be near normal (normal: 156 mm). While in July, the total rain amount will be about 5% above normal (normal: 176 mm) whereas the total rain amount is to be near normal during August until October (normal: 223, 218 and 124 mm consecutively).

The Northeastern part: During May, the total rain amount is expected to be 10% below normal (normal: 187 mm: millimeters). Then in June, the total rain amount is to be near normal (normal: 203 mm). While in July, the total rain amount will be about 5% above normal (normal: 211 mm) whereas the total rain amount is to be near normal during August until October (normal: 226, 242 and 117 mm consecutively).

<u>The central part:</u> During May, the total rain amount is expected to be 5% below normal (normal: 172 mm). Later from June till October, the total rain amount will be near normal (normal: 145, 155, 181, 257 and 187 mm respectively).

The eastern part: During May, the total rain amount is expected to be 20% below normal (normal: 224 mm). Later from June till October, the total rain amount will be near normal (normal: 261, 277, 302, 330 and 225 mm respectively).

The Southern Thailand (east coast: The Gulf of Thailand): During May, the total rain amount is expected to be 20% below normal (normal: 134 mm). Later from June till October, the total rain amount will be near normal (normal: 113, 119, 124, 150 and 255 mm respectively).

The Southern Thailand (west coast: The Andaman Sea): During May, the total rain amount is expected to be 10% below normal (normal: 310 mm). Later from June until July, the total rain amount will be 5% above normal (normal: 312 and 336 mm respectively). Then from August till October, the total rain amount will be near normal (normal: 398, 423 and 366 mm consecutively). Bangkok Metropolis and Vicinity: During May, the total rain amount is expected to be 10% below normal (normal: 248 mm). Later in June, the total rain amount will be near normal (normal: 157 mm). And in July, the total rain amount is to be 5% above normal (normal: 175 mm). Afterward during August till October, the total rain amount will be near normal (normal: 219, 334 and 292 mm respectively).

Caution:

- 1. During May, summer thunderstorms often occur as thunder rain, gusty wind and perhaps falling hail at some areas feasibly causing life and property damages to the public.
- 2. Sometimes, heavy to very heavy rain amounts occur continuously for many days. As a result, flash and forest flood with overflow may inundate, specifically during August until September. Thus, the public should follow the daily weather forecast news closely further.
- 3. During the period of tropical cyclones moving near or pass Thailand, gusty wind and raining at extra hugh areas with heavy to very heavy rain amount will occur at many areas. Furthermore, gusty wind waves will appear at coastal areas; wave height may reach 3 4 meters at some periods. Thus, the public and mariners should be cautious of these natural hazards and follow the news attentively during the tropical cyclone periods further.

The 2019 rain prediction comparing with normal

Part	May	June	July	August	September	October
Northern	20% Below	Near	5% Above	Near	Near	Near
	Normal	Normal	Normal	Normal	Normal	Normal
Northeastern	10% Below	Near	5% Above	Near	Near	Near
	Normal	Normal	Normal	Normal	Normal	Normal
Central	5% Below	Near	Near	Near	Near	Near
	Normal	Normal	Normal	Normal	Normal	Normal
Eastern	20% Below	Near	Near	Near	Near	Near
	Normal	Normal	Normal	Normal	Normal	Normal
Southern (The Gulf	20% Below	Near	Near	Near	Near	Near
of Thailand)	Normal	Normal	Normal	Normal	Normal	Normal
Southern (The	10% Below	5% Above	5% Above	Near	Near	Near
Andaman Sea)	Normal	Normal	Normal	Normal	Normal	Normal
Bangkok Metropolis	10% Below	Near	5% Above	Near	Near	Near
and Vicinity	Normal	Normal	Normal	Normal	Normal	Normal

Rain amount (millimeters) prediction for the 2019 rainy season

Part	May	June	July	August	September	October
Northern	140-180	140-180	170-210	200-250	190-230	100-140
Northeastern	150-190	180-220	200-250	230-280	220-270	100-140
Central	140-180	130-170	140-180	160-200	230-280	160-200
Eastern	190-230	240-290	250-300	280-330	300-350	200-250
Southern (The Gulf of Thailand)	110-150	90-120	100-140	100-140	130-170	230-280
Southern (The Andaman Sea)	280-330	300-350	300-350	350-450	400-500	340-390
Bangkok Metropolis and Vicinity	200-250	140-180	160-200	200-250	300-350	270-320

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, please follow daily weather forecast for more accuracy.
- The next updated seasonal forecast may be published online before the end of May 2019.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662)-398-9929 or Fax: (662)-383-8827 and www.tmd.go.th/en, climate tab.

Climate Center, Meteorological Development Division,
Thai Meteorological Department,
Ministry of Digital Economy and Society.