# Monthly Weather Summary in Thailand October 2021

October 2021 was dominated by the monsoon trough which lay across upper Thailand during the beginning and the middle of the month and it occasionally moved southwards to lie over the upper southern and eastern parts coupled with the active southwest monsoon prevailed over the Andaman Sea, Southern part and the Gulf of Thailand during the same period. Moreover there were 2 tropical cyclones having some effects of rainfall on Thailand, the first the tropical storm "LIONROCK (2117)" made landfall over the upper Vietnam on October 10, it respectively downgraded into the low pressure cell covering northeastern part of Thailand on October 11 and the second was tropical cyclone "KOMPASU (2118)" which dissipated over Vietnam on October 14. These conditions brought abundant rainfall in majority areas of Thailand and flash floods was reported in several places. Monthly rainfall was above normal in most parts of Thailand i.e. northern part 65.8 mm (53%) and northeastern part 70.3 mm (60%), central part 21.2 mm (11%), eastern part 104.5 mm (46%) and southern part (west coast) 48.2 mm (13%) while below normal was found in southern part (east coast) 46.8 mm (18%). The average rainfall over the whole area of Thailand was 26 percent higher than normal. Meanwhile the high pressure area from China extended its ridge to cover upper Thailand and replenishment of the easterly and southeasterly winds prevailed over Thailand. These caused decreasing temperature in several areas and cool weather mainly in northern and northeastern parts. More details on the weather are as follow:

1 - 10 October: The southwest monsoon which prevailed over the Andaman Sea, Southern part and the Gulf of Thailand was active since mid-period associated with the monsoon trough lay across the central, lower northeastern, eastern and southern parts toward a low pressure cell over the central South China Sea. The mention low pressure intensified into the tropical depression on October 6 and reached to the tropical storm "LIONROCK (2117)" on October 8. Then it moved through Hainan Island into the Gulf of Tonkin on October 9 and made landfall over the upper Vietnam in the afternoon of October 10 and downgraded into a tropical depression on the same time. These condition caused isolated to scattered rain in most areas of northern and northeastern parts almost the period while scattered to fairly widespread rain observed in central and eastern parts mainly during the first half of the period with heavy to very heavy rainfall in some areas. The highest daily rainfall was 146.0 millimeters at Amphoe Phrao in Chinag Mai province on October 10. Flash floods were report in Kamphaeng Phet and Kanchanaburi provinces on October 1 and Ratchaburi province on October 6. Gusty wind was reported in Chiang Mai, Lamphon and Kanchanaburi provinces on October 1, Ang Thong province on October 6 and land slide was reported at Chiang Mai province on October 3. In southern part, scattered to fairly widespread rain almost the period with heavy to very heavy rainfall in some areas. The maximum daily rainfall in southern part was 181.8 millimeters at Amphoe Suk Samran in Ranong province on October 6.

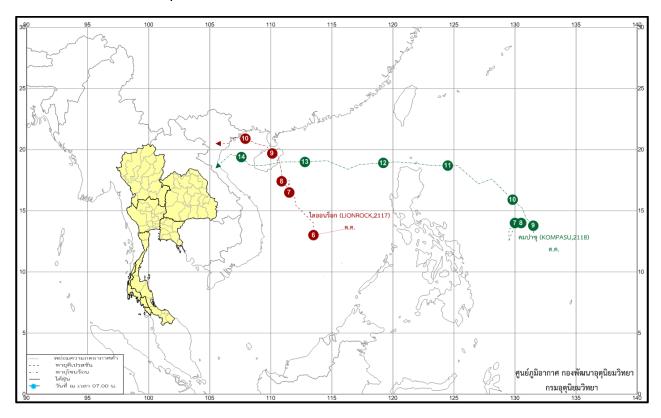
11 – 20 October: The monsoon trough lay across lower northern, upper central and lay toward the low pressure cell which downgraded from the tropical storm "LIONROCK (2117)" covering northeastern part on the first day of the period. After that, the monsoon trough moved southward to lie across the contral, eastern and lower northeastern parts toward a tropical storm "KOMPASU (2118)" over upper South China Sea. It moved westward through Hainan Island, China in the evening of October 13 before making landfall over the north of Vinh, upper Vietnam on October 14 and later downgraded into

a tropical depression and an active low pressure cell, respectively. The mentioned monsoon trough moved southward to lie across eastern and upper southern parts toward the low pressured cell over central Vietnam on October 17-18. In addition, the active southwest monsoon which prevailed over the Andaman Sea, Southern Past and the Gulf of Thailand was weak during the second half of the period. These resulted in fairly widespread rain with heavy rainfall in several areas and very heavy rainfall in some areas during beginning and the end of the periods. The highest daily rainfall in upper Thailand was 351.6 millimeters at Amphoe Tha Mai at Chanthaburi province on October 12. Floods were reported at Chiang Mai, Sukhothai, Phitsanulok, Lamphang, Phetchabun, Tak, Loei, Chaiyaphum, Si Saket, Burirum, Nakhon Sawan, Lopburi, Saraburi, Singburi, Ang Thong, Phra Nakhon Si Ayutthaya, Suphanburi, Kanchanaburi, Pathum Thani, Samut Prakan, Nakhon Pathom, Chantaburi, Trat, Nakhon Nayok, Prachinbrui, Sa Kaeo, and Chonburi provinces and landslide occurred at Saraburi province on October 13 and 14. In southern part, scattered to fairly widespread rain was found in most the period with heavy to very heavy rainfall in some areas. The maximum daily rainfall in southern part was 130.0 millimeters at Hat Yai Agriculture Office in Songkhla province on October 17. Flood occurred at Ranong province on October 12 with flash flood and landslide at Surat Thani province on October 19.

21 – 31 October: The ridge of high pressure areas from China covered to upper Thailand during the first half of the period after that another high pressure extended its ridge to cover the mentioned areas. In addition, the easterly and northeasterly winds prevailed over Thailand and the Gulf of Thailand throughout the period. Besides, the low pressure cell which covered lower Vietnam moved to cover Cambodia on October 27 and covered the eastern part of Thailand on October 28. These conditions caused cool weather in several areas of northern and northeastern parts while scattered to fairly widespread rain remained in upper Thailand during beginning and the end of the periods. The highest daily rainfall in upper Thailand was 160.0 millimeters at Amphoe Sri Thep at Phetchabun province on October 29. Floods occurred at Lamphang, Uttaradit, Phayao, Phetchabun, Chiang Rai, Chiang Mai, Loei, Khon Khen, Nong Bua Lam Phu, Lopburi, Singburi, Ang Thong, Phra Nakhon Si Ayuttaya, Uthai Thani, Suphanburi, Kanchanaburi, Sa Kaeo and Prachinburi provinces. In southern part, scattered to fairly widespread rain in most areas with heavy to very heavy rainfall in some areas. The maximum daily rainfall in southern part was 134.9 millimeters at Amphoe Huai Yot in Trang province on October 24. Floods were reported at Surat Thani province on October 25 and 30, at Nakhon Si Thammarat province on 25, 26 and 28 and at Chumphon province on October 26 with flash floods at Trang province on October 25 and 26.

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Track of tropical storm that affected Thailand rainfall in October 2021



Note: 1) Rainfall, temperatures and natural disasters in this report were updated up to November 4, 2021.

- 2) "LIONROCK" mean the name of peak in Hong Kong, the historical place contributed by Hong Kong.
- 3) "KOMPASU" mean Circinus; V-shaped device for describing circles or circular arcs contributed by Japan.

Climatological Center Meteorological Development Division Meteorological Department

#### Monthly Current Report Rainfall and Accumulative Rainfall October 2021

#### Northern Thailand

	Tempera	ature (°c)	Rainfa	ll (mm)		rainfall (mm) January
Station		Above		Above		Above
2 milen	Mean	or below	Actual	or below	Actual	or below
		normal		normal		normal
Chiang Rai	25.9	0.8	230.9	106.0	1667.8	50.5
Mae Hong Son	27.0	0.6	147.2	32.7	1039.1	-198.0
Phayao	26.1	0.8	202.9	80.3	1270.5	181.7
Chiang Mai	27.3	1.2	165.0	47.4	1061.0	0.2
Tha Wang Pha	26.8	1.0	80.6	-2.8	1359.5	-10.0
Nan	27.1	0.7	147.6	77.3	1115.1	-92.3
Lamphun	26.8	0.7	114.2	4.1	1065.4	113.1
Lampang	26.8	0.5	178.9	80.6	1103.6	94.6
Mae Sariang	26.9	0.8	104.3	-10.9	1262.7	156.6
Phrae	27.0	0.5	100.5	11.7	1238.3	156.9
Uttaradit	27.9	0.2	170.5	59.5	1228.0	-111.9
Bhumibol Dam	26.7	0.3	546.3	342.0	2147.4	1156.0
Tak	27.2	0.4	361.7	162.5	2040.2	1038.8
Mae Sot	27.1	1.0	84.5	-17.6	1895.3	457.3
Umphang	25.1	1.2	197.9	42.1	1779.6	348.6
Phitsanulok	27.7	-0.1	174.9	12.4	1239.2	-33.3
Lom Sak	27.1	0.3	200.6	112.1	1172.9	148.2
Phetchabun	27.3	0.5	112.6	22.2	1065.3	-48.7
Wichian Buri	27.8	0.1	222.7	91.1	1512.8	316.8
Kamphaeng Phet	27.7	0.5	255.0	63.3	1260.8	4.9
Over the area	27.0	0.6	189.9	65.8	1376.2	186.4
				53%		16%

#### Northeastern Thailand

	Tempera	nture (°c)	Rainfa	ll (mm)		rainfall (mm) January
Station		Above		Above		Above
	Mean	or below	Actual	or below	Actual	or below
		normal		normal		normal
Nong Khai	27.8	1.1	134.4	43.5	1666.6	77.9
Loei	26.3	0.7	234.7	111.4	1512.6	300.4
Udon Thani	27.3	0.4	92.4	2.3	1236.4	-168.8
Nakhon Phanom	26.9	0.5	158.8	61.8	2135.0	-197.3
Sakon Nakhon	26.5	0.1	175.8	98.9	1428.4	-199.1
Mukdahan	26.7	0.4	140.5	39.9	1641.1	177.0
Khon Kaen	26.9	0.4	136.7	19.0	1132.4	-94.4
Kosum Phisai	27.4	0.3	123.9	12.5	1288.9	46.4
Roi Et	27.2	0.5	148.4	41.1	1297.3	-27.4
Chaiyaphum	27.3	0.3	199.6	62.6	1331.4	217.3
Ubon Ratchathani	26.9	0.1	231.3	108.2	1753.6	195.5
Tha Tum	27.3	0.3	124.1	-2.2	1208.4	-157.5
Surin	26.9	0.2	318.4	190.2	1493.7	92.1
Nakhon Ratchasima	27.2	0.5	242.2	95.9	1178.9	134.0
Chok Chai	27.1	0.5	254.7	90.4	1289.4	247.2
Nang Rong	26.7	0.2	282.8	148.9	1556.8	403.5
Over the area	27.0	0.4	187.4	70.3	1446.9	65.4
				60%		5%

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

- 2) "T" is trace, rainfall amount less than 0.1 mm.
- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.

# Monthly Current Report Rainfall and Accumulative Rainfal October 2021

### Central Thailand

	Temperature ( °c)		Rainfa	11 (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Nakhon Sawan	28.3	0.6	155.5	2.1	1275.9	158.2	
Bua Chum	27.9	0.7	139.2	11.9	1234.0	173.3	
Lop Buri	28.2	0.4	233.9	80.2	1225.3	137.8	
Suphan Buri	28.6	0.6	109.1	-87.6	1144.7	220.1	
Thong Pha Phum	26.9	0.3	333.4	161.1	2064.0	307.8	
Kanchanaburi	28.0	0.7	273.6	64.4	1122.7	131.1	
Bangkok Airport	28.0	-0.2	151.4	-40.5	1091.0	-240.8	
Bangkok Metropolis	28.5	0.4	270.4	-21.7	1651.1	58.7	
Over the area	28.1	0.5	208.3	21.2	1351.1	118.3	
				11%		10%	

## Eastern Thailand

	Temperature ( °c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Prachin Buri	28.5	0.4	240.0	79.1	1611.2	-175.4	
Kabin Buri	27.6	0.1	192.4	37.9	1657.8	94.0	
Aranyaprathet	27.5	0.0	162.1	-12.1	1490.7	186.2	
Chon Buri	28.5	0.6	155.0	-53.9	1282.4	41.1	
Ko Sichang	27.6	0.1	332.0	124.9	1302.4	152.6	
Pattaya	27.4	0.4	255.8	39.7	1628.9	598.6	
Sattahip	27.8	0.5	279.4	19.6	2329.6	1149.6	
Rayong	27.9	0.3	275.2	80.8	1705.1	378.6	
Chanthaburi	27.3	0.3	710.4	412.8	3855.4	922.5	
Khlong Ya	27.0	0.2	693.6	316.2	4889.8	138.9	
Over the area	27.7	0.3	329.6	104.5	2175.3	348.5	
				46%		19%	

- NOTES: 1) Mean temperature is the average of daily dry-bulb temperature
  - 2) "T" is trace, rainfall amount less than 0.1 mm.
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  - 4) Temperature and rainfall are preliminary data.

# Monthly Current Report Rainfall and Accumulative Rainfal October 2021

## Southern Thailand, east coast

	Temperature (°c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Phetchaburi	27.9	0.2	353.5	75.1	988.7	106.8	
Hua Hin	28.0	0.6	168.5	-77.7	908.2	62.2	
Prachuap Khiri Khan	27.7	0.6	179.6	-48.2	721.8	-200.5	
Chumphon	26.8	0.2	430.9	179.3	1456.8	-4.7	
Surat Thani	26.8	0.4	180.7	-55.7	877.0	-285.7	
Ko Samui	28.0	0.8	97.0	-212.8	829.1	-414.1	
Nakhon Si Thammarat	27.6	0.9	244.8	-58.2	1195.4	-218.2	
Songkhla	28.2	0.9	194.7	-62.4	1096.4	20.3	
Hat Yai Airport	27.2	0.7	126.6	-101.2	1009.1	-132.4	
Pattani Airport	27.7	0.8	139.9	-76.3	1107.7	27.5	
Narathiwat	27.8	0.9	177.5	-76.9	1245.4	-94.8	
Over the area	27.6	0.6	208.5	-46.8	1039.6	-103.2	
				-18%		-9%	

## Southern Thailand, west coast

	Temperature ( °c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Ranong	26.8	0.4	959.0	534.5	4942.7	1072.1	
Takua Pa	27.2	0.7	515.2	-2.6	3899.2	544.2	
Phuket	28.6	1.2	266.8	-53.3	1630.8	-338.9	
Phuket Airport	28.0	1.0	322.2	-31.2	2417.4	217.6	
Ko Lanta	27.9	0.6	281.2	-44.2	2184.3	210.4	
Trang Airport	27.6	1.2	209.5	-76.0	1845.1	25.9	
Satun	27.6	0.8	349.3	10.3	2473.8	504.7	
Over the area	27.7	0.9	414.7	48.2	2770.5	319.5	
				13%		13%	

- NOTES: 1) Mean temperature is the average of daily dry-bulb temperature
  - 2) "T" is trace, rainfall amount less than 0.1 mm.
  - 3) "blank" is incomplete data.
  - 4) Temperature and rainfall are preliminary data.

#### **Monthly Current Report**

#### October 2021

		Temper	ature (°c)	Rainfa	ıll (mm)	Accumulative Since 1	
Region	Station		Above		Above		Above
		Mean	or below	Actual	or below	Actual	or belov
			normal		normal		norma
	Chiang Rai	25.9	0.8	230.9	106.0	1667.8	50.5
]	Mae Hong Son	27.0	0.6	147.2	32.7	1039.1	-198.0
	Phayao	26.1	0.8	202.9	80.3	1270.5	181.7
	Chiang Mai	27.3	1.2	165.0	47.4	1061.0	0.2
	Tha Wang Pha	26.8	1.0	80.6	-2.8	1359.5	-10.0
	Nan	27.1	0.7	147.6	77.3	1115.1	-92.3
	Lamphun	26.8	0.7	114.2	4.1	1065.4	113.1
	Lampang	26.8	0.5	178.9	80.6	1103.6	94.6
	Mae Sariang Phrae	26.9 27.0	0.8 0.5	104.3 100.5	-10.9 11.7	1262.7 1238.3	156.6 156.9
North	Uttaradit	27.0	0.3	170.5	59.5	1238.3	-111.9
	Bhumibol Dam	26.7	0.2	546.3	342.0	2147.4	1156.0
	Tak	27.2	0.4	361.7	162.5	2040.2	1038.8
	Mae Sot	27.1	1.0	84.5	-17.6	1895.3	457.3
	Umphang	25.1	1.2	197.9	42.1	1779.6	348.6
	Phitsanulok	27.7	-0.1	174.9	12.4	1239.2	-33.3
	Lom Sak	27.1	0.3	200.6	112.1	1172.9	148.2
	Phetchabun	27.3	0.5	112.6	22.2	1065.3	-48.7
	Wichian Buri	27.8	0.1	222.7	91.1	1512.8	316.8
	Kamphaeng Phet	27.7	0.5	255.0	63.3	1260.8	4.9
	Nong Khai	27.8	1.1	134.4	43.5	1666.6	77.9
	Loei	26.3	0.7	234.7	111.4	1512.6	300.4
	Udon Thani	27.3	0.4	92.4	2.3	1236.4	-168.8
	Nakhon Phanom	26.9	0.5	158.8	61.8	2135.0	-197.3
	Sakon Nakhon Mukdahan	26.5 26.7	0.1 0.4	175.8 140.5	98.9 39.9	1428.4 1641.1	-199.1 177.0
	Mukdanan Khon Kaen	26.7	0.4	136.7	39.9 19.0	1132.4	-94.4
	Kosum Phisai	27.4	0.4	123.9	12.5	1288.9	-94.4 46.4
Northeast	Roi Et	27.4	0.5	148.4	41.1	1297.3	-27.4
	Chaiyaphum	27.3	0.3	199.6	62.6	1331.4	217.3
	Ubon Ratchathani	26.9	0.1	231.3	108.2	1753.6	195.5
	Tha Tum	27.3	0.3	124.1	-2.2	1208.4	-157.5
	Surin	26.9	0.2	318.4	190.2	1493.7	92.1
	Nakhon Ratchasima	27.2	0.5	242.2	95.9	1178.9	134.0
	Chok Chai	27.1	0.5	254.7	90.4	1289.4	247.2
	Nang Rong	26.7	0.2	282.8	148.9	1556.8	403.5
	Nakhon Sawan	28.3	0.6	155.5	2.1	1275.9	158.2
	Bua Chum	27.9	0.7	139.2	11.9	1234.0	173.3
	Lop Buri	28.2	0.4	233.9	80.2	1225.3	137.8
Central	Suphan Buri	28.6	0.6	109.1	-87.6	1144.7	220.1
	Thong Pha Phum	26.9	0.3	333.4	161.1	2064.0	307.8
	Kanchanaburi	28.0	0.7	273.6	64.4	1122.7	131.1
	Bangkok Airport	28.0	-0.2	151.4	-40.5	1091.0	-240.8
	Bangkok Metropolis Prachin Buri	28.5 28.5	0.4	270.4 240.0	-21.7 79.1	1651.1	58.7
	Kabin Buri	28.5 27.6	0.4	240.0 192.4	79.1 37.9	1611.2 1657.8	-175.4 94.0
	Aranyaprathet	27.5	0.1	162.1	-12.1	1490.7	186.2
	Chon Buri	28.5	0.6	155.0	-53.9	1282.4	41.1
-	Ko Sichang	27.6	0.0	332.0	124.9	1302.4	152.6
East	Pattaya	27.4	0.4	255.8	39.7	1628.9	598.6
	Sattahip	27.8	0.5	279.4	19.6	2329.6	1149.6
	Rayong	27.9	0.3	275.2	80.8	1705.1	378.6
	Chanthaburi	27.3	0.3	710.4	412.8	3855.4	922.5
	Khlong Yai	27.0	0.2	693.6	316.2	4889.8	138.9
	Phetchaburi	27.9	0.2	353.5	75.1	988.7	106.8
	Hua Hin	28.0	0.6	168.5	-77.7	908.2	62.2
	Prachuap Khiri Khan	27.7	0.6	179.6	-48.2	721.8	-200.5
	Chumphon	26.8	0.2	430.9	179.3	1456.8	-4.7
South	Surat Thani	26.8	0.4	180.7	-55.7	877.0	-285.7
(East Coast)	Ko Samui	28.0	0.8	97.0	-212.8	829.1	-414.1
	Nakhon Si Thammarat	27.6	0.9	244.8	-58.2	1195.4	-218.2
	Songkhla	28.2	0.9	194.7	-62.4	1096.4	20.3
	Hat Yai Airport	27.2	0.7	126.6	-101.2	1009.1	-132.4
	Pattani Airport Narathiwat	27.7 27.8	0.8 0.9	139.9 177.5	-76.3 -76.9	1107.7 1245.4	27.5 -94.8
	Ranong	26.8	0.9	959.0	534.5	4942.7	1072.1
	Takua Pa	26.8	0.4	515.2	-2.6	3899.2	544.2
	Phuket	28.6	1.2	266.8	-53.3	1630.8	-338.9
South	Phuket Airport	28.0	1.0	322.2	-33.3	2417.4	217.6
(West Coast)	Ko Lanta	27.9	0.6	281.2	-31.2 -44.2	2184.3	217.0
	Trang Airport	27.6	1.2	209.5	-76.0	1845.1	25.9
	Satun	27.6	0.8	349.3	10.3	2473.8	504.7
	Over the area	27.4	0.6	235.5	48.3	1584.3	143.2
	Over the area	27.4	0.0	۷.55	+0.5	1304.3	143.2

NOTES: 1) Mean temperature is the average of daily dry-bulb temperatur
2) "T" is trace, rainfall amount less than 0.1 mm.
3) "blank" is incomplete data
4) Temperature and rainfall are preliminary data

