Thailand Annual Weather Summary, 2008

In 2008, the majority of Thailand was wetter than normal and the annual rainfall averaged over the country was 1,751.4 mm which was 180.5 mm (11 %) above normal. This year, there were 4 tropical cyclones having some effects on rainfall. One among them, "NARGIS" (01B), formed over the Bay of Bengal and moved into Myanmar during early May. The others, namely "KAMMURI", "MEKKHALA" and "NOUL" affected Thailand in August, September and November, respectively. "MEKKHALA", in particular, was only one that moved into northeastern Thailand at Nong Khai province on September 30.

In January and February, the weather over Thailand was generally cool and cold when the surge of rather active high pressure area from China arrived, especially in the northern and northeastern parts where cold weather was reported in several places and very cold weather was found in some places with extreme minimum temperature, 6.0 °C, at Nan province on January 3. Unseasonable rain caused by the effects of the confluence of southerly and southeasterly winds that occasionally prevailed over upper Thailand and the westerly trough that moved through the northern and northeastern parts brought above normal rainfall.

Hot weather started when heat low pressure cell covered upper Thailand from the second week of March. It continued to April and extreme maximum temperature, 42.4 °C, was measured at Muang district in Mae Hong Son province on April 22. However, unseasonable rain with thunderstorms, gusty winds and hails produced by the combined effects of the confluence of southeasterly and southerly winds and the arrival of high pressure ridge from China that was intermittently reported contributed to below normal temperatures.

During early May, Thailand received abundant rainfall for few days when the tropical cyclone "NARGIS" (01B) in the Bay of Bengal moved to Myanmar. From May 10, the onset date of rainy season, Thailand experienced substantial rainfall and flash floods caused mainly by the southwest monsoon, the low pressure trough moving northwards from Malaysia to Thailand, the tropical storm "KAMMURI" making landfall on the northern coast of Vietnam in early August and the tropical depression that weakened from tropical storm "MEKKHALA" and traveled to northeastern Thailand at Nong Khai on September 30. Maximum daily rainfall was 308.4 mm at Khlong Yai district in Trat province on September 15. Rainfall was generally above normal except for August rainfall that was below normal due to the disappearance of low pressure trough and the weakness of southwest monsoon during mid August. Monthly mean temperatures were below normal from May to July and inversely above normal from August to the end of rainy season.

In late 2008, the high pressure areas from China continually extended to cover upper Thailand causing cool and cold weather in most areas of upper Thailand, particularly from the middle of November to the end of December that temperature was generally decreased and very cold weather was found in the upper portion of northern part for few days. Monthly mean temerature was considered to be normal in November while it was slightly below normal in December. In upper Thailand, although rainfall was scanty there was a period of rainfall increase resulted by the tropical storm "NOUL" from the South China Sea that made landfall over Vietnam on November 17 and downgraded to a tropical depression and finally to a low pressure cell in Cambodia on the same day including the westerly trough that moved through the northern and northeastern parts during late December. In southern part, plentiful of rainfall was produced by the influences of the rather active northeast monsoon prevailing over southern part and the Gulf of Thailand almost the period, the low pressure trough lying across southern part during early November and the active low pressure cell occasionally covering coastal Malaysia from late November to mid December. The highest daily rainfall was 399.0 mm at Muang district in Narathiwat province on December 1. Flash flood was reported at Songkhla on December 1 and flood with mudslide occurred at Surat Thani province on December 27. Rainfall was generally above normal except for the west coast of southern part.

Note: 1. NARGIS is the name of the tropical cyclone in the Northern Indian Ocean, assigned by Pakistan

- 2. KAMMURI is the name of the tropical cyclone in the western North Pacific Ocean, assigned by Japan.
- 3. MEKKHALA is the name of the tropical cyclone in the western North Pacific Ocean, assigned by Thailand.
- 4. NOUL is the name of the tropical cyclone in the western North Pacific Ocean, assigned by Republic of Korea.
- 5. Rainfall amount, temperatures and natural disasters are the preliminary information.

Climatological Group Meteorological Development Bureau Meteorological Department

Monthly and Annual Rainfall of Thailand in 2008

PART	Jan.		Feb.		Mar.		Apr.		May.		Jun.		Jul•		Aug.		Sep.		Oct.		Nov.		Dec.		Annual	
NORTH																										
Rainfall amount (mm.)		16.2		25.5		16.5		125.		177.4		159.8		188.9		199.0		223.0		189.3		45.0		10.0		1375.7
Departure from normal	+	10.3	+	14.1	-	8.1	+	56.8	+	4.0	+	8.3	+	9.1	-	26.3	+	10.7	+	66.2	+	10.9	+	1.9	+	157.9
Departure from normal (%)	+	175	+	124	-	33	+	83	+	2	+	6	+	5	-	12	+	5	+	54	+	32	+	24	+	13
NORTHEAST																										
Rainfall amount (mm.)		6.0		10.1		71.6		160.		230.1		218.6		201.2		220.9		371.0		123.0		60.2		3.8		1677.3
Departure from normal	+	1.9	-	7.6	+	33.9	+	74.7	+	47.8	+	8.7	-	6.7	-	37.9	+	129.1	+	11.7	+	42.3	+	0.3	+	298.2
Departure from normal (%)	+	46	-	43	+	90	+	87	+	26	+	4	-	3	-	15	+	53	+	11	+	236	+	9	+	22
CENTRAL																										
Rainfall amount (mm.)		11.1		36.2		23.5		136.		186.6		154.8		157.3		188.8		303.9		236.9		42.5		0.0		1478.2
Departure from normal	+	4.9	+	23.8	-	7.1	+	62.0	+	26.7	+	16.2	+	4.8	+	4.9	+	42.9	+	56.2	+	5.7	-	5.4	+	235.5
Departure from normal (%)	+	79	+	192	-	23	+	83	+	17	+	12	+	3	+	3	+	16	+	31	+	16	-	100	+	19
EAST																										
Rainfall amount (mm.)		6.9		65.9		48.1		133.		233.4		239.1		313.3		233.8		425.5		200.3		39.4		0.3		1939.4
Departure from normal	-	7.8	+	36.9	-	6.5	+	37.1	+	22.0	-	33.1	+	47.4	-	77.7	+	92.3	-	28.1	-	21.9	-	7.3	+	53.3
Departure from normal (%)	-	53	+	127	-	12	+	39	+	10	-	12	+	18	-	25	+	28	-	12	-	36	-	96	+	3
SOUTH (EAST COAST)																										
Rainfall amount (mm.)		99.7		59.2		60.5		104.		157.8	_	143.9	_	114.8		93.7		97.2		189.1		620.1		259.3		1999.7
Departure from normal	+	39.7	+	23.1	+	10.1	+	31.4	+	20.3	+	34.8	+	1.4	-	34.5	-	46.4	-	63.2	+	242.4	+	30.3	+	289.5
Departure from normal (%)	+	66	+	64	+	20	+	43	+	15	+	32	+	1	-	27	-	32	-	25	+	64	+	13	_+	17
SOUTH (WEST COAST)																										
Rainfall amount (mm.)		40.3		67.1		92.4		155.		390.3		393.6		292.5		223.7		452.4		368.9		133.7		36.8		2647.4
Departure from normal	+	17.4	+	38.4	+	21.9	-	5.3	+	75.3	+	73.4	-	59.9	-	180.4	+	12.2	+	11.2	-	69.0	-	28.5	-	93.4
Departure from normal (%)	+	76	+	134	+	31	-	3	+	24	+	23	-	17	-	45	+	3	+	3	-	34	-	44	-	3
OVER COUNTRY																										
Rainfall amount (mm.)		27.1		38.1		48.0		135.		215.6		203.6		204.2		193.9		296.1		198.8		143.8		46.9		1751.4
Departure from normal	+	10.4	+	17.3	+	7.3	+	48.7	+	28.1	+	13.9	+	2.6	-	48.8	+	43.4	+	14.8	+	40.3	+	0.9	+	178.9
Departure from normal (%)	+	62	+	83	+	18	+	56	+	15	+	7	+	1	-	20	+	17	+	8	+	39	+	2	+	11

Remark: Based on 1971 - 2000 normals