

## KMA'S BRIEFING ON CLIMATE CHARACTERISTICS

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## Monthly (June 2011) Climate Summary

- Temperatures and precipitation anomalies for June 2011 were above-normal.
- $\diamondsuit$  The average monthly days of rain for June 2011 was above-normal.

Climate f	features	in	June	2011	and	their	long-term	trends	are	analyzed	using	47
meteorolog	gical	statio	ons	over	Korea	a (the	e national	avera	ge)	during	1973-2	011
(1908-201	1 for S	Seou	1).									

#### ☐ The climatological features in June 2011 can be described as follows:

- o Korea (whole nation)
- The mean temperature (21.9 °C), the mean minimum temperature (17.6 °C) were 0.6 °C and 0.8 °C above normal respectively, making it the fifth highest value on record since 1973. the mean maximum temperature (27.0 °C) was 0.6 °C above normal
- The monthly amount of precipitation (288.6 mm) was 190 % of normal, making it the fourth highest value on record since 1973.
- The average monthly days of rain (11.5 days) had more than 1.7 days of normal.

#### o Seoul

- The mean temperature (22.0  $^{\circ}$ C), the mean maximum temperature (26.6  $^{\circ}$ C) were 0.2  $^{\circ}$ C and 0.5  $^{\circ}$ C below normal, respectively. the mean minimum temperature (18.4  $^{\circ}$ C) was 0.2  $^{\circ}$ C above normal.
- The monthly amount of precipitation (404.5 mm) was 304 % of normal, making it the fourth highest value on record since 1908.
- The number of rainy days (14 days) was more than 3.4 days of normal.

#### ☐ Long-term trend of April climate

- o National mean, mean maximum, and mean minimum temperatures of June 2000s (2001-2010) were 0.7 °C, 0.8 °C, and 0.6 °C higher than those of the 1970s, respectively.
- o The amount of precipitation and the number of rainy days both for Korea and for Seoul during 2000s decreased than those of the 1970s.
- \* Normal: average from 1981 to 2010.
- \* National average is used average values of 47 meteorological stations starting from 1973.
- ₩ In Seoul, data are analyzed from 1908.
- **※** 1920s: average from 1921 to 1930
- **※** 1970s: average from 1973 to 1980
- **※** 2000s: average from 2001 to 2010

## Appendix. June 2011 climate

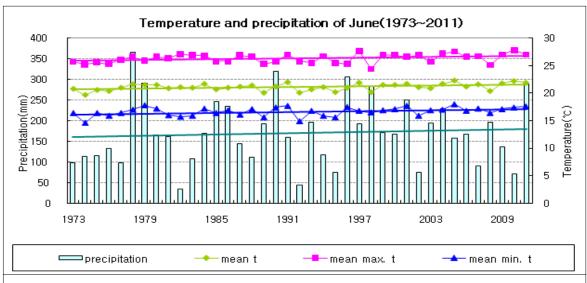


Fig. 1. Temperatures (mean, mean maximum, and mean minimum), and precipitation in South Korea during June 1973-2011.

## ☐ Average values of meteorological elements in Korea during June (1973-2011)

statistics for climate elements (national)	June 2011 (a)	normals of June (1981-2010) (b)	a-b	rank since 1973 (within 5th)
mean temperature ( $^{\circ}$ C)	21.9	21.3	0.6	the fifth
mean maximum t (°C)	27.0	26.4	0.6	
mean minimum t (℃)	17.6	16.8	0.8	the fifth
amount of precipitation (mm)	288.6	161.6	127.0(190%)	the fourth
days of rain	11.5	9.8	1.7	
days with precip. greater than 30nm/hour	0.3	0.1	0.2	the third
days with precip. greater than 80mm/day	0.9	0.3	0.6	the second

# Average values of meteorological elements in Korea during June for each decade (1973-2010)

year	mean temp	mean maximum temp. (°C)	mean minimum temp. (°C)	amount of rain(mm)	days of rain(≥ 0.1mm)	days with precip. ≥ 30mm/h	days with precip. ≥ 80mm/d
1973-1980 (a)	20.9	26.0	16.5	168.3	11.3	0.8	19.8
1981-1990 (b)	21.0	26.3	16.5	166.3	9.8	0.6	29.7
1991-2000 (c)	21.0	26.2	16.7	165.3	9.9	0.6	28.3
2001-2010 (d)	21.6	26.8	17.1	153.4	9.9	0.6	24.3
d-a	0.7	0.8	0.6	-14.9	-1.4	-0.2	4.5
d-b	0.6	0.5	0.6	-12.9	0.1	0.0	-5.4
d-c	0.6	0.6	0.4	-11.9	0.0	0.0	-4.0

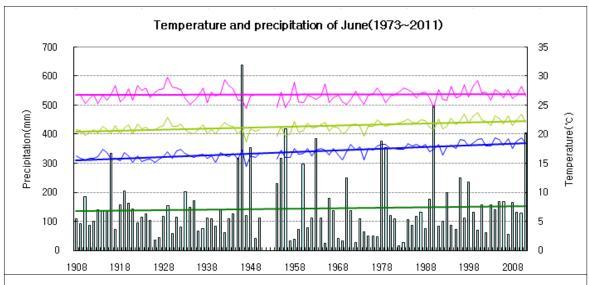


Fig. 2. Temperatures (mean, mean maximum, and mean minimum), and precipitation in Seoul during June 1908-2011

#### Average values of meteorological elements in Seoul during June (1908-2011)

statistics for climate elements (Seoul)	June 2011 (a)	normals of June (1981-2010) (b)	a-b	rank since 1908 (within 5th)
mean temperature (°C)	22.0	22.2	-0.2	
mean maximum t (℃)	26.6	27.1	-0.5	
mean minimum $t$ ( $\mathbb{C}$ )	18.4	18.2	0.2	
amount of precipitation (mm)	404.5	133.2	271.3(304%)	the fourth
days of rain	14	9.9	4.1	
days with precip. greater than 30nm/hour	1	0.2	0.8	
days with precip. greater than 80mm/day	1	0.2	0.8	

## ☐ Meteorological elements in Seoul during June for each decade (1911-2010)

year	mean temp. $(^{\circ}C)$	mean maximum temp. (℃)	mean minimum temp. (℃)	amount of rain (mm)	days of rain(≥ 0.1mm)	days with precip. ≥ 30mm/h	days with precip. ≥ 80mm/d
1911-1920	20.8	26.6	16.2	152.7	11.7		0.2
1921-1930	21.2	27.7	15.8	98.3	8.1		0.2
1931-1940 (a)	20.7	26.6	16.4	116.0	10.0	0.1	0.0
1941-1950	20.8	26.9	16.2	200.3	11.6	0.0	0.6
1954-1960	20.6	26.1	16.5	200.5	12.0	0.1	0.4
1961-1970	21.1	26.3	16.9	134.6	11.1	0.2	0.3
1971-1980 (b)	21.5	26.5	17.5	133.0	10.9	0.0	0.1
1981-1990	21.9	26.9	17.7	133.9	9.6	0.1	0.3
1991-2000	22.4	27.3	18.2	132.9	9.5	0.1	0.2
2001-2010 (c)	22.4	<b>27</b> .0	18.7	132.9	10.6	0.3	0.2
c-a	1.7	0.5	2.5	-19.8	-1.1		0.0
c-b	1.6	0.2	2.4	-67.4	-1.0	0.3	-0.4