



KMA'S BRIEFING ON CLIMATE CHARACTERISTICS

(total 4 pages)

Division	Meteorological Resources Division
Contact	LEE Jae-Won
Phone/email	+82-2-2181-0882/ 2seun@korea.kr
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Monthly (June) 2012 Climate Summary

◇ Above normal in mean temperature, below normal in precipitation for June 2012 nationwide

- The mean minimum temperature (18.0 °C) for June 2012 was the highest and the mean temperature (22.1 °C) was the third highest in a record extending back to 1973.

- Climate features of June 2012 and their long-term trends are analyzed using 45 meteorological stations in Korea (the national average) during 1973-2012 (1908-2012 for Seoul).

※ Normal : average from 1981 to 2010.

□ The climatological characteristics in June 2012 can be described as follows:

- o For Korea (whole nation),
 - The mean temperature (22.1 °C) and the mean maximum temperature (27.3 °C) and the mean minimum temperature (18.0 °C) were above-normal, respectively. In addition all temperatures at June 2012 are near those at this time last year.
 - The nationally averaged precipitation (74.7 mm) was 50% of normal, the days of rain (8.0 days) was 1.7 days below-normal. In addition, nationally averaged precipitation, and days of rain in June 2012 were 204.9 mm and 3.4 days smaller than those at this time last year.
 - The total of sunshine duration (185.2 hours) was 102% of normal. And, sunshine duration at June 2012 are 11.3 hours longer than those at this time last year.
- o For Seoul,
 - The mean temperature (24.1 °C), the mean maximum temperature (29.7 °C), and the mean minimum (20.0 °C) were Above-normal, respectively. Also, all temperatures at June 2012 are 1.6-3.1 °C higher than those at this time last year.
 - ※ The mean temperature and the mean minimum temperature were the highest in a record extending back to 1908. and, The maximum temperature was the second highest for the same period.

- The monthly amount of precipitation (91.9 mm) was 69% of normal, the days of rain (4.0 days) was 5.9 days below-normal. In addition, the monthly amount of precipitation, and days of rain in June 2012 were 312.6 mm and 10.0 days significantly smaller than those at this time last year.
 - ※ The days of rain was the lowest in a record extending back to 1908.
- The total of sunshine duration (232.0 hours) was 127.0% of normal. And, sunshine duration at June 2012 are 61.2 hours longer than those at this time last year.

□ Long-term trend of May climate

- o For Korea (whole nation),
 - National mean, mean maximum, and mean minimum temperatures of June 2000s (2001-2010) were 0.7 °C, 0.9 °C, and 0.5 °C higher than those of the 1970s, respectively. National mean, mean maximum, mean minimum temperatures of June 2012 were higher than those of the 2000s.
 - Nationally averaged precipitation, and days of rain in June 2000s were 15.7 mm and 1.4 day smaller than those of the 1970s, respectively. But, nationally averaged precipitation, and days of rain in June 2012 were 76.0 mm and 1.8 day shorter than those of the 2000s.
 - Nationally total of sunshine duration of June 2000s was 25.3 hours less than those of the 1970s. Nationally total of sunshine duration of June 2012 was 4.0 hours shorter than those of the 2000s.
- o For Seoul,
 - The mean, mean maximum, and mean minimum temperatures of June 2000s (2001-2010) were 1.6 °C, 0.4 °C, and 2.5 °C higher than those of the 1910s, respectively. The mean, mean maximum, mean minimum temperatures of June 2012 were higher than those of the 2000s.
 - The monthly amount of precipitation, and days of rain in June 2000s were 19.8 mm and 1.1 day smaller than those of the 1910s, respectively. And, the monthly amount of precipitation, and days of rain in June 2012 were 41.0 mm and 6.6 day shorter than those of the 2000s.
 - The total of sunshine duration of June 2000s was 73.9 hours less than those of the 1910s. The total of sunshine duration of June 2012 was 77.6 hours longer than those of the 2000s.

Appendix 1. Climate features in June 2012

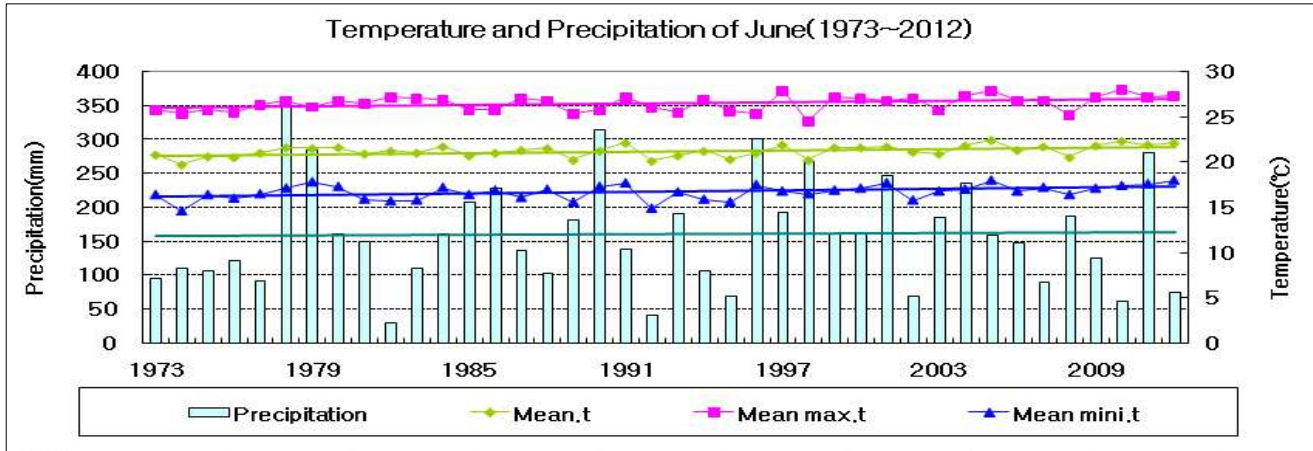


Fig. 1. Temperatures (mean, mean maximum, and mean minimum), and precipitation in South Korea during June 1973-2012.

□ Average values of meteorological elements across Korea (1973-2011)

Elements (National) average	June 2012 (a)	June 2011 (b)	Normals of June (1981-2010) (c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	22.1	21.9	21.2	0.2	0.9	3th highest
Mean maximum t (°C)	27.3	27.1	26.5	0.2	0.8	4th highest
Mean minimum t (°C)	18.0	17.6	16.7	0.4	1.3	the highest
Amount of precipitation(mm)	74.7	279.6	158.6	-204.9	-83.9(50%)	
Days of rain(day)	8.0	11.4	9.7	-3.4	-1.7	
Sunshine duration(hour)	185.2	173.9	181.4	11.3	3.8	
Days of maximum temperature greater than 30°C(day)	5.6	6.9	5.1	-1.3	0.5	
Days of amount of precipitation greater than 30mm/hour(day)	0.0	0.3	0.1	-0.3	-0.1	
Days of amount of precipitation greater than 80mm/day(day)	0.1	0.9	0.3	-0.8	-0.2	

□ Average values of meteorological elements across Korea for each decade (1973-2010)

Year	Mean temp (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Amount of rain (mm)	Days of rain (day)	Sunshine duration (hour)	Days of maximum temperature greater than 30°C (day)	Days of amount of precipitation greater than 30mm/hour (day)	Days of amount of precipitation greater than 80mm/day (day)
1973-1980(a)	20.9	26.0	16.5	166.4	11.2	214.5	3.5	0.1	0.3
1981-1990(b)	21.1	26.4	16.4	162.0	9.6	212.7	4.8	0.1	0.3
1991-2000(c)	21.1	26.3	16.6	163.2	9.8	181.8	4.7	0.2	0.4
2001-2010(d)	21.6	26.9	17.0	150.7	9.8	189.2	5.8	0.2	0.3
2012(e)	22.1	27.3	18.0	74.7	8.0	185.2	5.6	0.0	0.1
d-a	0.7	0.9	0.5	-15.7	-1.4	-25.3	2.3	0.1	0.0
d-b	0.5	0.5	0.6	-11.3	0.2	-23.5	1	0.1	0.0
d-c	0.5	0.6	0.4	-12.5	0	7.4	1.1	0.0	-0.1
e-d	0.5	0.4	1.0	-76	-1.8	-4.0	-0.2	-0.2	-0.2

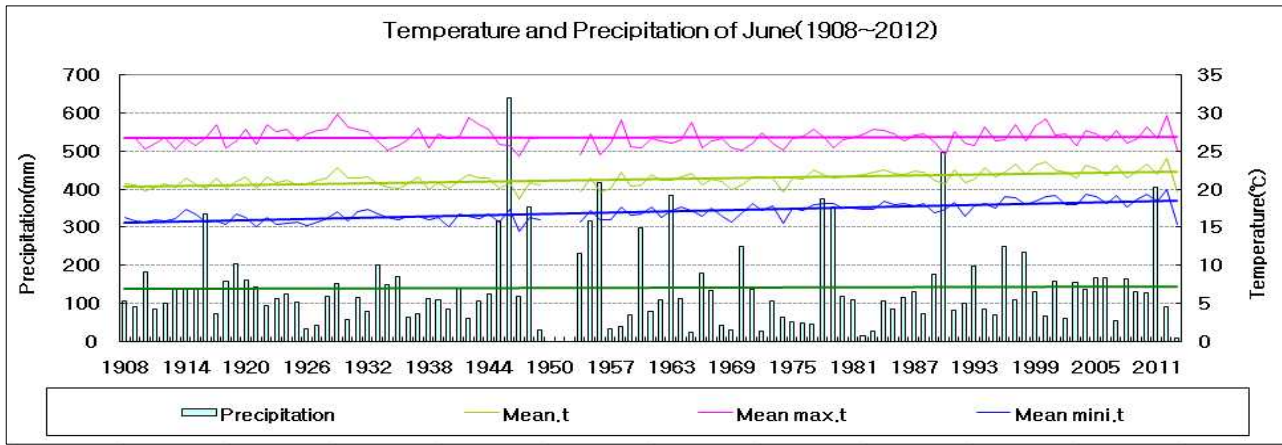


Fig. 2. Temperatures (mean, mean maximum, and mean minimum) and precipitation in Seoul during June 1908-2012

□ Meteorological elements across Seoul during June (1908-2012)

Elements (National) average	June 2012 (a)	June 2011 (b)	Normals of June (1981-2010) (c)	a-b	a-c	Rank since 1908 (within 5th)
Mean temperature (°C)	24.1	22.0	22.2	2.1	1.9	the highest
Mean maximum t (°C)	29.7	26.6	27.1	3.1	2.6	2nd highest
Mean minimum t (°C)	20.0	18.4	18.2	1.6	1.8	the highest
Amount of precipitation(mm)	91.9	404.5	133.2	-312.6	-41.3(69%)	
Days of rain(day)	4.0	14.0	9.9	-10	-5.9	the lowest
Sunshine duration(hour)	232.0	170.8	182.0	61.2	50	
Days of maximum temperature greater than 30°C(day)	11.0	6.0	4.9	5	6.1	4th highest
Days of amount of precipitation greater than 30mm/hour(day)	0.0	1.0	0.2	-1	-0.2	
Days of amount of precipitation greater than 80mm/day(day)	0.0	1.0	0.2	-1	-0.2	

□ Meteorological elements across Seoul during May for each decade (1911-2012)

Year	Mean temp (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Amount of rain (mm)	Days of rain (day)	Sunshine duration (hour)	Days of maximum temperature greater than 30°C (day)	Days of amount of precipitation greater than 30mm/hour (day)	Days of amount of precipitation greater than 80mm/day (day)
1911-1920(a)	20.8	26.6	16.2	152.7	11.7	228.3	3.5	0.0	0.2
1921-1930	21.2	27.7	15.8	98.3	8.1	258.8	7.2	0.0	0.2
1931-1940(b)	20.7	26.6	16.4	116.0	10.0	221.6	4.9	0.1	0.0
1941-1949	20.8	26.9	16.2	210.3	11.4	233.7	6.2	0.0	0.7
1954-1960	20.6	26.1	16.5	200.5	12.0	179.8	4.0	0.1	0.4
1961-1970	21.1	26.3	16.9	134.6	11.1	193.8	4.0	0.2	0.3
1971-1980(b)	21.5	26.5	17.5	133.0	10.9	171.8	2.7	0.0	0.1
1981-1990	21.9	26.9	17.7	133.9	9.6	205.1	3.6	0.1	0.3
1991-2000	22.4	27.3	18.2	132.9	9.5	186.6	5.6	0.1	0.2
2001-2010(d)	22.4	27.0	18.7	132.9	10.6	154.4	5.6	0.3	0.2
2012(e)	24.1	29.7	20.0	91.9	4.0	232	11.0	0.0	0.0
d-a	1.6	0.4	2.5	-19.8	-1.1	-73.9	2.1	0.3	0.0
d-b	1.7	0.4	2.3	16.9	0.6	-67.2	0.7	0.2	0.2
d-c	0.9	0.5	1.2	-0.1	-0.3	-17.4	2.9	0.3	0.1
e-d	1.7	2.7	1.3	-41	-6.6	77.6	5.4	-0.3	-0.2