



KMA'S BRIEFING ON CLIMATE CHARACTERISTICS

(total 4 pages)

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Release	May 14, 2012

Monthly (April 2012) Climate Summary

- ◇ Near normal in mean temperature and sunshine duration, above normal in precipitation for April 2012 nationwide
- ◇ The average monthly days of asian dust (0.1 day) was less than 2.3 days of normal.
- ◇ Higher temperature, shorter days of asian dust in April of 2012 than those of 2011

- Climate features of April 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 April 2012 can be described as follows:**

- o For Korea (whole nation),

- The mean temperature (12.6°C) and the mean maximum temperature (18.8°C) were near-normal, respectively. The mean minimum temperature (6.7°C) was 1.7°C above-normal. However, all temperatures at April 2012 are 1.4-1.5°C higher than those at this time last year.
- The nationally averaged precipitation (131.3 mm) was 166% of normal, the days of rain (9.6 days) was 1.8 days above-normal. In addition, precipitation at April 2012 are 20.4 mm larger than those at this time last year. However, the days of rain are 0.8 days shorter than those at this time last year.
- The total of sunshine duration (215.7 hours) was 101% of normal. However, sunshine duration at April 2012 are 2.5 hours longer than those at this time last year.
- The average monthly days of asian dust (0.1 day) was less than 2.3 days of normal. In addition, days of asian dust at April 2012 are 0.2 day less than those at this time last year.

o For Seoul,

- The mean temperature (12.3°C), the mean maximum temperature (17.9°C), and the mean minimum (7.8°C) were near-normal, respectively.

However, all temperatures at April 2012 are 1.0-2.3°C higher than those at this time last year.

- The monthly amount of precipitation (157.0 mm) and the days of rain (8.0 days) was 245% and 105% of normal.

In addition, precipitation at April 2012 are 46.9 mm larger than those at this time last year. The days of rain at April 2012 are 1 day less than those at this time last year.

- The total of sunshine duration (212.5 hours) was 105% of normal. However, sunshine duration at April 2012 are 10.4 hours longer than those at this time last year.
- The number of asian dust days (0 day) was less than 3.3 days of normal. and days of asian dust at April 2011 was 0 day

□ **Long-term trend of April climate**

- o National mean, mean maximum, and mean minimum temperatures of April 2000s (2001-2010) were 0.5°C, 1.0°C, and 0.3°C higher than those of the 1970s, respectively.

National mean, mean maximum, mean minimum temperatures of April 2012 were higher than those of the 2000s.

- o Nationally averaged precipitation, and days of rain in April 2000s were 46.9mm and 1.2 days decreased than those of the 1970s, respectively.

Nationally averaged precipitation, and days of rain in April 2012 were 45.7mm and 1.6 days higher than those of the 2000s.

- o Nationally total of sunshine duration of April 2000s was 13 hours less than those of the 1970s

Nationally total of sunshine duration of April 2012 was 2.7 hours longer than those of the 2000s.

- o Nationally total of asian dust days of April 2000s was 1.3 days higher than those of the 1970s
Nationally total of asian dust days of April 2012 was 2.7 days less than those of the 2000s.

Appendix 1. Climate features in April 2012

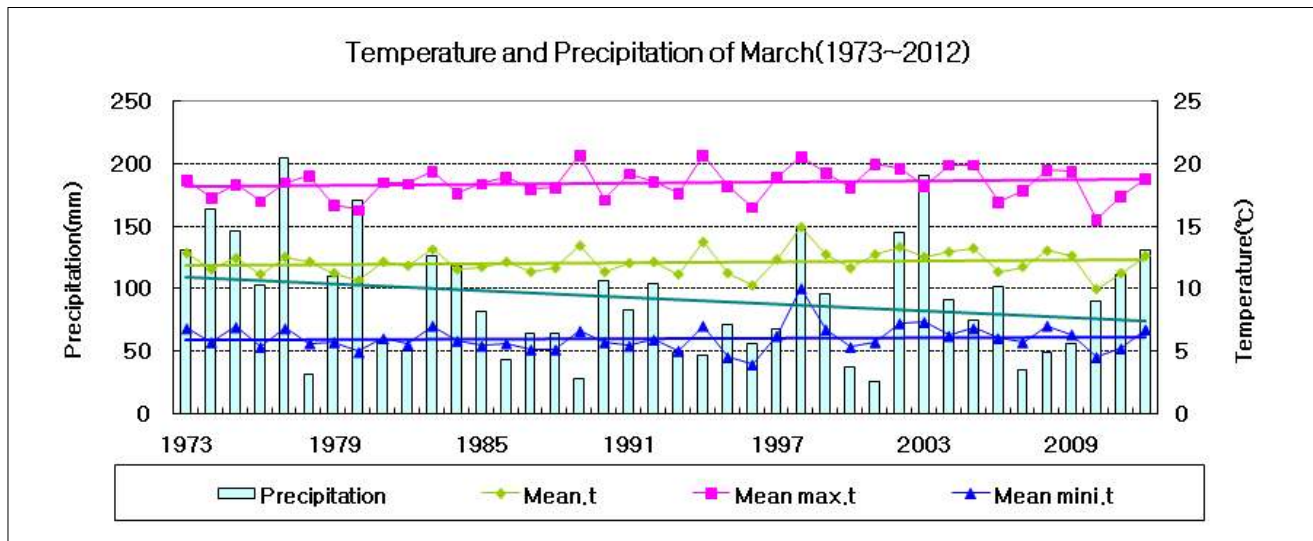


Fig. 1. Temperatures (mean, mean maximum, and mean minimum), and precipitation in South Korea during April 1973-2012.

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

Elements (National) average	April 2012 (a)	April 2011 (b)	Normals of April (1981-2010) (c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	12.6	11.2	12.2	1.4	0.4	-
Mean maximum t (°C)	18.8	17.4	18.6	1.4	0.2	-
Mean minimum t (°C)	6.7	5.2	6	1.5	0.7	-
Amount of precipitation(mm)	131.3	110.9	78.5	20.4	52.9(166%)	-
Days of rain(day)	9.6	10.4	7.8	-0.8	1.8(123%)	-
Sunshine duration(hour)	215.7	213.2	213.6	2.5	2.1(101%)	-
Days of asian dust	0.1	0.3	2.4	-0.2	-2.3(4%)	-

□ 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 asian dust (day)
1973-1980(a)	11.8	17.7	6	132.5	9.2	226	1.5
1981-1990(b)	12	18.5	5.8	73.8	8.1	231.1	1.4
1991-2000(c)	12.2	18.8	6	76	7.4	220.3	3.0
2001-2010(d)	12.3	18.7	6.3	85.6	8	213	2.8
2012(e)	12.6	18.8	6.7	131.3	9.6	215.7	0.1
d-a	0.5	1	0.3	-46.9	-1.2	-13	1.3
d-b	0.3	0.2	0.5	11.8	-0.1	-18.1	1.4
d-c	0.1	-0.1	0.3	9.6	0.6	-7.3	-0.2
e-d	0.3	0.1	0.4	45.7	1.6	2.7	-2.7

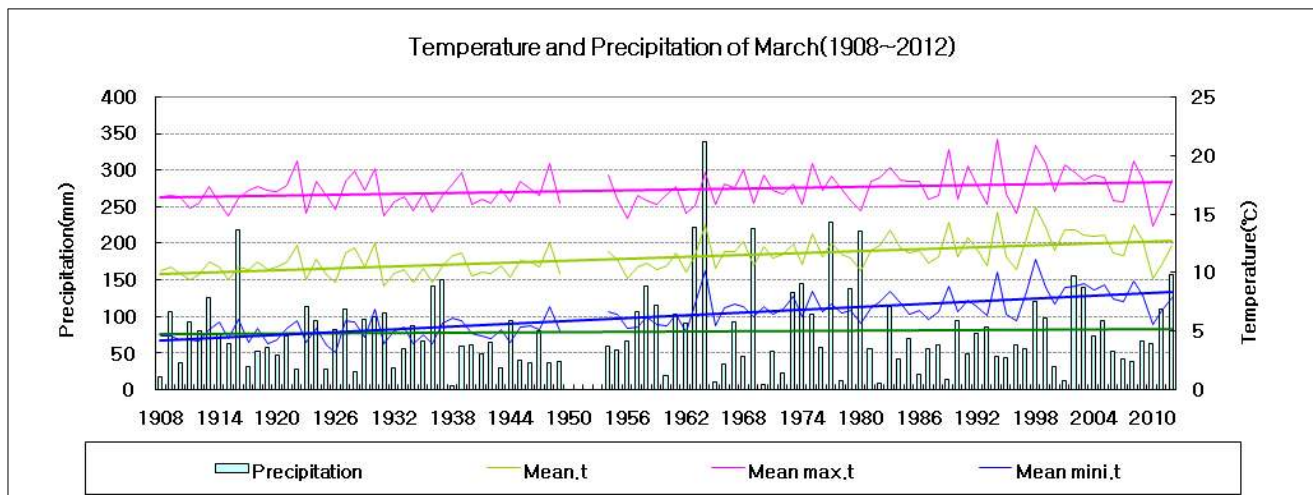


Fig. 2. Temperatures (mean, mean maximum, and mean minimum) and precipitation in Seoul during April 1908-2012

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

Elements (Seoul)	April 2012 (a)	April 2011 (b)	Normals of April (1981-2010) (c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	12.3	10.7	12.5	1.6	-0.2	-
Mean maximum t (°C)	17.9	15.6	17.8	2.3	0.1	-
Mean minimum t (°C)	7.8	6.8	7.8	1	0	-
Amount of precipitation(mm)	157	110.1	64.5	46.9	92.5(243%)	-
Days of rain(day)	8	9	7.8	-1	0.2(103%)	-
Sunshine duration(hour)	212.5	202.1	205	10.4	7.5(104%)	-
Days of asian dust	0	0	3.3	0	-3.3(0%)	-

□ Meteorological elements across Seoul during April 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 asian dust (day)
1911-1920	10.2	16.5	4.8	84.6	9.7	232.1	-
1921-1930	10.9	17.4	5.1	74.9	7.5	227.8	-
1931-1940(a)	10.1	16.3	5	76.1	7.6	226.2	-
1941-1949	10.5	16.9	5.1	51.9	7.6	246	-
1954-1960	10.6	16.4	5.9	80.3	8.9	207.3	-
1961-1970	11.7	17.1	6.9	116.5	9.2	196.9	-
1971-1980(b)	11.6	17	6.9	111.2	9.1	196.1	1.4
1981-1990	12.1	17.8	7.2	53.2	7.2	222.8	1.6
1991-2000	12.7	18.1	7.9	66.6	7.8	213.1	4.5
2001-2010(c)	12.6	17.6	8.2	73.7	8.5	179.3	3.9
2012(d)	12.3	17.9	7.8	157	8	212.5	0
c-a	2.5	1.3	3.2	-2.4	0.9	-46.9	-
c-b	1	0.6	1.3	-37.5	-0.6	-16.8	2.5
d-c	-0.3	0.3	-0.4	83.3	-0.5	33.2	-3.9