



KMA'S BRIEFING ON CLIMATE CHARACTERISTICS

(total 4 pages)

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March, 2010 climate

- ◇ The mean temperature for March was equal to normal.
- ◇ The mean precipitation for March accounted for 163% compared to normal.

- Climate characteristics of March 2010 and its long-term trends are analyzed based on 60 meteorological stations across Korea (national average) for the period of 1973-2010 (1908-2010 for Seoul).
- **The climatological characteristics in March 2010 can be described as follows:**
 - o For Korea (whole nation),
 - The mean temperature (5.6°C) was equal to normal. The mean maximum temperature (10.0°C) was 1.5°C lower than normal, while the mean minimum temperature (1.2°C) was 0.8°C higher than normal. Days with minimum temperature below 0°C (11.8 days) were 2.7 days less than normal.
 - The amount of precipitation (99.5mm) was 163% of normal.
 - The average number of rainy days (14.3 days) had 6.3 more day compared to normal, making it the highest days on record since 1973.
 - The amount of sunshine duration (125.1 hours) was 61% of normal, making it the lowest on record since 1973.
 - The asian dust days (5 days) was 4.3 more day compared to normal.
 - o For Seoul,
 - The mean temperature (4.3°C), mean maximum (8.1°C), and mean minimum (0.5°C) temperatures were 0.9°C, 2.1°C, and 0.6°C lower than normal, respectively. Days with minimum temperature below 0°C (14 days) had 3.3 more day compared to normal.
 - The amount of precipitation (82.5mm) accounted for 180% of the normal precipitation.
 - The number of rainy days (12 days) had 5.2 more day compared to normal.
 - The amount of sunshine duration (133 hours) was 67% of normal
 - The asian dust days (4 days) was 3.3 more day compared to normal.

□ **Long-term trend of March 2010 climate**

- o Korea's mean, mean maximum, and mean minimum temperatures from 2001 to 2010 were 1.1°C, 1.2°C, and 0.9°C higher than those of the 1970s, respectively.
- o For Seoul, days with minimum temperature below 0°C (8.9 days) during 2000s were 3.5 days and 10.6 days less than those of the 1970s and 1930s, respectively.
- o The amount of sunshine duration both for Korea and for Seoul during 2000s decreased than those of the 1970s.
- o The number of rainy days both for Korea and for Seoul during 2000s increased than those of the 1970s.
- o The asian dust days both for Korea and for Seoul during 2000s increased than those of the 1970s.

※ Normal: average from 1971 to 2000.

※ National average is used average values of 60 meteorological stations starting from 1973.

※ In Seoul, data are analyzed from 1908.

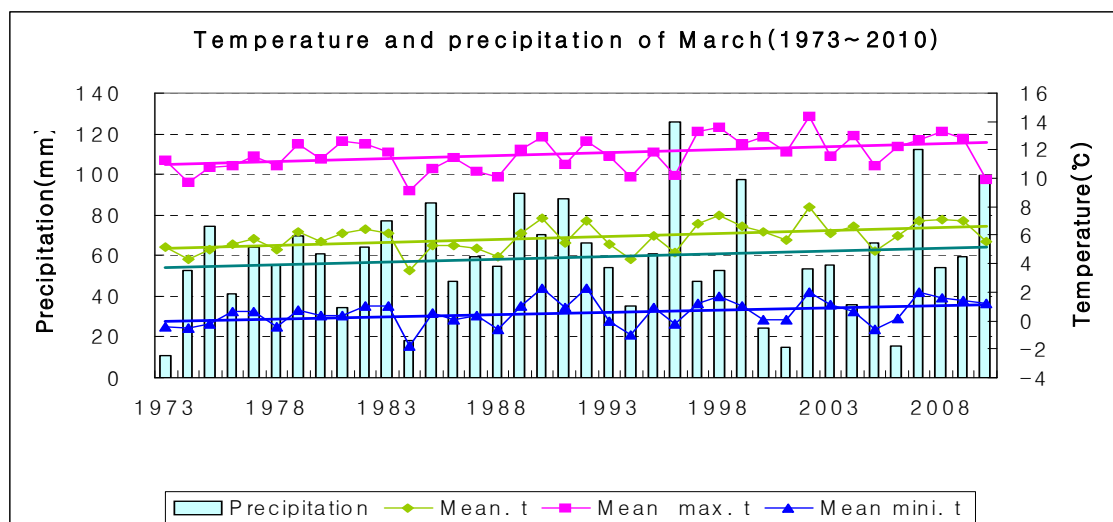
※ 1930s: average from 1931 to 1940

※ 1970s: average from 1973 to 1980

※ 2000s: average from 2001 to 2010

Appendix March, 2010 climate

Fig. 1. Temperatures (mean, mean maximum, and mean minimum), and precipitation across South Korea during March (1973-2010)



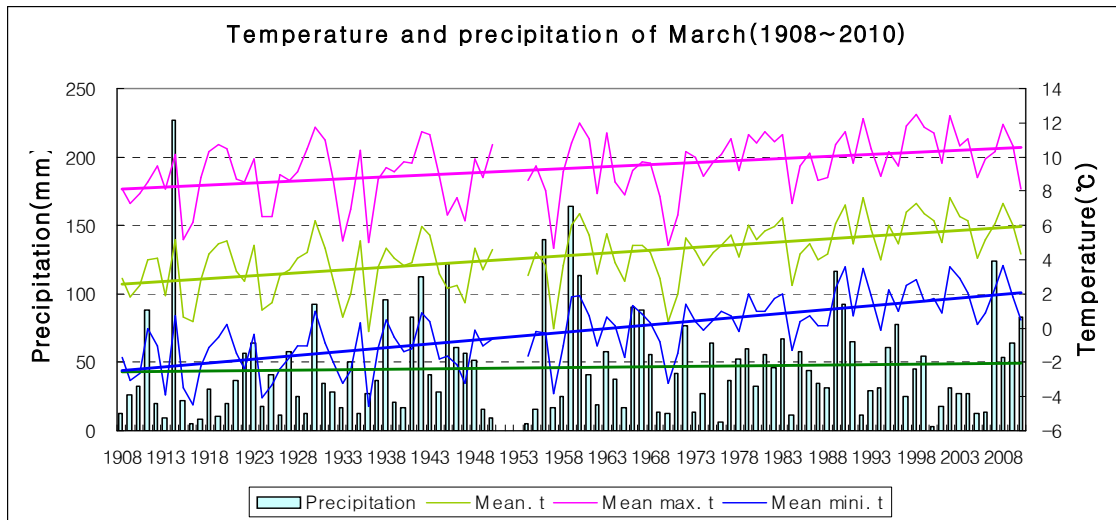
□ Average values of meteorological elements across Korea (1973-2010)

Elements (National) average	March 2010 (a)	Normals of March (1971-2000) (b)	a-b	rank since 1973 (within 5th)
mean temperature (°C)	5.6	5.6	0	-
mean maximum t (°C)	10.0	11.5	-1.5	third lowest
mean minimum t (°C)	1.2	0.4	0.8	-
days with minimum t below 0°C	11.8	14.5	-2.7	-
amount of precipitation (mm)	99.5	61.2	38.3 (162.6%)	third highest
rainy days	14.3	8.0	6.3	highest
sunshine duration (hours)	125.1	206.1	-81.0 (60.7%)	highest
asian dust days	5.0	0.7	4.3	fourth highest

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

Year	Mean t (°C)	Mean Maximum t (°C)	Mean Minimum t (°C)	Days with minimum t below 0°C	Precipit- ation (mm)	rainy days	sunshine duration (hours)	asian dust days
1973-1980 (a)	5.3	11.1	0.1	15.5	53.6	7.4	207.1	0.7
1981-1990 (b)	5.6	11.4	0.4	14.4	60.2	8.5	198.5	0.4
1991-2000 (c)	6.0	12.0	0.7	13.7	65.1	8.0	185.9	1.0
2001-2010 (d)	6.4	12.3	1.0	13.1	56.7	8.6	191.1	3.7
d-a	1.1	1.2	0.9	-2.4	3.1	1.2	-16.0	3.0
d-b	0.8	0.9	0.6	-1.3	-3.5	0.2	-7.4	3.3
d-c	0.4	0.3	0.3	-0.6	-8.4	0.7	5.2	2.7

Fig. 2. Temperatures (mean, mean maximum, and mean minimum), and precipitation across Seoul (1908-2010)



□ Average values of meteorological elements across Seoul during March (1908-2010)

Elements (Seoul) average	March 2010 (a)	Normals of March (1971-2000) (b)	a-b	rank since 1973 (within 5th)
mean temperature (°C)	4.3	5.2	-0.9	-
mean maximum t (°C)	8.1	10.2	-2.1	-
mean minimum t (°C)	0.5	1.1	-0.6	-
days with minimum t below 0°C	14	10.7	3.3	-
amount of precipitation (mm)	82.5	45.8	36.7 (180.1%)	-
rainy days	12	6.8	5.2	-
sunshine duration (hours)	133.0	197.5	-64.5 (67.3%)	fourth lowest
asian dust days	4	0.7	3.3	fourth highest

□ Meteorological elements across Seoul during March for each decade (1911-2010)

Year	Mean t (°C)	Mean Maximum t (°C)	Mean Minimum t (°C)	Days with minimum t below 0°C	Precipit- ation (mm)	rainy days	sunshine duration (hours)	asian dust days
1911-1920	3.3	8.8	-1.6	20.6	44.2	7.6	216.3	-
1921-1930	3.5	8.9	-1.7	21.1	41.8	7.6	210.0	-
1931-1940 (a)	3.1	8.4	-1.5	19.5	34.0	8.7	214.4	-
1941-1950	3.7	9.1	-1.0	18.7	58.1	8.5	218.1	-
1954-1960	3.9	9.0	-0.5	16.0	68.5	8.6	190.1	-
1961-1970	3.8	8.8	-0.3	16.7	43.2	6.7	208.4	-
1971-1980 (b)	4.6	9.8	0.5	12.4	41.3	6.3	195.5	0.5
1981-1990	5.1	10.0	1.1	11.4	55.7	7.3	208.1	0.7
1991-2000	6.0	10.8	1.8	8.3	40.5	6.8	188.9	0.9
2001-2010 (c)	5.8	10.3	1.9	8.9	45.4	8.2	169.9	4.0
c-a	2.7	1.9	3.4	-10.6	11.4	-0.5	-44.5	-
c-b	1.2	0.5	1.4	-3.5	4.1	1.9	-25.6	3.5