



NATIONAL CLIMATE REVIEW IN KMA

(total 5 pages)

Division	Meteorological Resources Division
Contact	LEE Jae-Won
Phone/email	+82-2-2181-0882/ 2seun@korea.kr
Release	April 10, 2012

Monthly (March) 2013 Climate Summary

◇ The mean temperature (6.6 °C) for March 2013 nationwide was higher than normal and the nationally-averaged precipitation (59.7 mm) was nearly normal

※ Updated in the highest monthly temperature extremes

- Daily maximum temp. : Jeonju (first, 28.2 °C), Geumsan (first, 27.1 °C) and so on
- Daily averaged temp. : Jindo (first, 14.3 °C)

□ Climate features and long-term trends of March 2013 are analyzed by using 45 meteorological stations in Korea (the national average) from 1973 to 2012 (1908-2012 for Seoul).

※ Normal : average from 1981 to 2010.

□ The climatological characteristics in March 2013 can be described as follows:

o For Korea (whole nation),

- The mean temperature (6.6 °C) and the mean maximum temperature (13.5 °C) were 0.7 °C, 1.7 °C higher than normals and the mean minimum temperature (0.2 °C) was nearly normal. The days of daily minimum temperature less than 0 °C were 15.8 days, which are 1.8 days above normal.

※ Updated in daily temperature extremes during March (5th highest ranked)

- The averaged temperature : Jindo (first, 14.3 °C), Pohang (second, 19.3 °C) and so on 15 stations
- The maximum temperature : Jeonju (first, 28.2 °C), Jeju (first, 28.1 °C) and so on 60 stations
- The minimum temperature : Geoje (fourth, 11.8 °C), Jindo (fourth, 9.6 °C)
- The nationally-averaged precipitation was 59.7 mm, which is 105% nearly normal. The days of rain (7.4 days) were the nearly normal.
- Total hours of sunshine were 240.9 hours, which is 124% above normal and the third largest in a record extending back to 1973.
- Asian dust days were 1.4 days, which are nearly normal.

o For Seoul,

- The mean temperature (5.1 °C) and the mean minimum temperature (0.7 °C) were lower than normals, 0.6 °C, 0.9 °C, respectively. And the mean maximum temperature (10.8 °C) was nearly normal.

The days of daily minimum temperature less than 0 °C were 12.0 days, which are 2.5 days above normal.

- The amount of precipitation was 27.3 mm, which is 58% lower than normal. The days of rain were 8.0 days, which are 0.6 days above normal.
- Total hours of sunshine were 256.3 hours, which is 136% above normal.
- Asian dust days were 3.0 days, which are 1.1 days above normal.

Long-term trend of March 2013 climate

o For Korea (whole nation),

- National mean temperature of March 2000s (2001-2010) was higher than 1.1 °C that of the 1970s. The days of daily minimum temperature less than 0 °C in March 2000s were lower than 2.6 days those of the 1970s.
- The Nationally-averaged precipitation in March 2000s was larger than 1.8 mm that of the 1970s. And the days of rain in March 2000s were larger than 1.2 days those of 1970s.
- Total hours of sunshine in March 2000s were less than 15.5 hours those of the 1970s.

o For Seoul,

- The mean temperature of March 2000s (2001-2010) was higher than 1.2 °C that of the 1970s. The days of daily minimum temperature less than 0 °C in March 2000s were lower than 3.5 days those of the 1970s.
- The amount of precipitation in March 2000s were larger than 4.1 mm those of the 1970s and the days of rain in March 2000s were larger than 1.9 days those of 1970s.
- Total hours of sunshine in March 2000s were less than 25.6 hours those of the 1970s.

Appendix 1 Climate features in March 2013

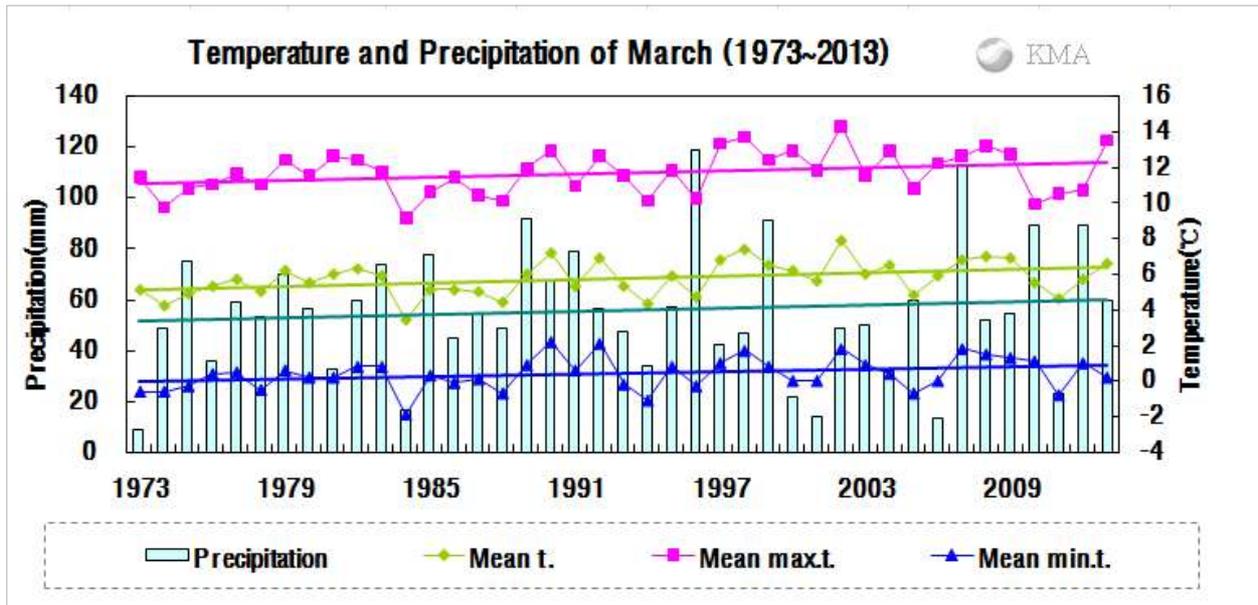


Fig 1. Temperatures (mean, mean maximum, and mean minimum), and precipitation in South Korea during March (1973~2012).

□ Average values of meteorological elements across Korea during March (1973~2012)

Elements (National average)	March 2013(a)	March 2012(b)	Nomals of March (1981-2010)(c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	6.6	5.7	5.9	0.9	0.7	-
Mean maximum temp. (°C)	13.5	10.7	11.8	2.8	1.7	the third highest
Mean minimum temp. (°C)	0.2	1.0	0.6	-0.8	-0.4	-
Amount of precipitation (mm)	59.7	89.0	56.4	-29.3(75%)	3.3(105%)	-
Days of rain (day)	7.4	10.8	8.1	-3.4	-0.7	-
Sunshine duration (hour)	240.9	179.8	194.0	61.1(134%)	46.9(124%)	the second largest
Mean cloud amount (1/10)	3.6	5.3	4.8	-1.7	-1.2	the second least
Days of minimum temperature less than 0°C (day)	15.8	11.8	14.0	4.0	1.8	-
Asian dust days(day)	1.4	0.3	1.8	1.1	-0.4	-

□ Average values of meteorological elements across Korea during March for each decade (1973~2010)

Year	Mean temp. (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Amount of precipitation (mm)	Days of rain (day)	Sunshine duration (hour)	Mean cloud amount (1/10)	Days of minimum temperature less than 0°C (day)	Asian dust days(day)
1973-1980(a)	5.2	11.2	0.0	51.0	7.2	206.3	4.7	15.9	0.6
1981-1990(b)	5.5	11.3	0.3	56.9	8.2	201.9	5.0	14.7	0.5
1991-2000(c)	5.9	11.9	0.6	59.5	7.7	189.2	4.9	14.0	1.0
2001-2010(d)	6.3	12.2	0.8	52.8	8.4	190.8	4.6	13.3	3.8
2012(e)	6.6	13.5	0.2	59.7	7.4	240.9	3.6	15.8	1.4
d-a	1.1	1.0	0.8	1.8	1.2	-15.5	-0.1	-2.6	3.2
d-b	0.8	0.9	0.5	-4.1	0.2	-11.1	-0.4	-1.4	3.3
d-c	0.4	0.3	0.2	-6.7	0.7	1.6	-0.3	-0.7	2.8
e-d	0.3	1.3	-0.6	6.9	-1.0	50.1	-1.0	2.5	-2.4

Appendix 2 Climate features in March 2013

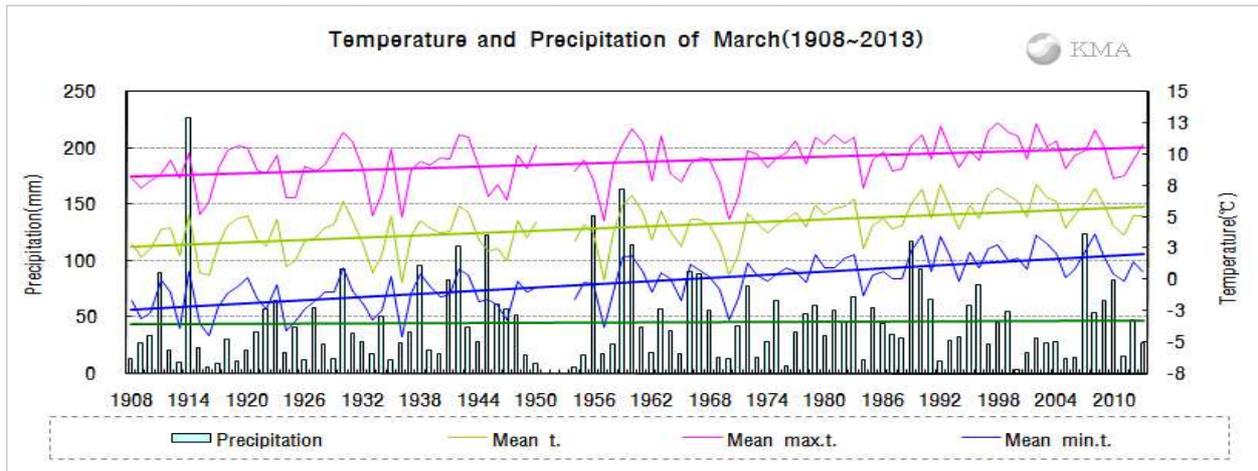


Fig 2. Temperatures (mean, mean maximum, and mean minimum), and precipitation in Seoul during March (1908-2012).

□ Average values of meteorological elements across Seoul during March (1908-2012)

Elements (Seoul) average	March 2013(a)	March 2012(b)	Nomals of March (1981-2010)(c)	a-b	a-c	Rank since 1908 (within 5th)
Mean temperature (°C)	5.1	5.1	5.7	0.0	-0.6	-
Mean maximum temp. (°C)	10.8	9.5	10.4	1.3	0.4	-
Mean minimum temp. (°C)	0.7	1.5	1.6	-0.8	-0.9	-
Amount of precipitation (mm)	27.3	47.4	47.2	-20.1(58%)	-19.9(58%)	-
Days of rain (day)	8.0	8.0	7.4	0.0	0.6	-
Sunshine duration (hour)	256.3	191.8	189	64.5(134%)	67.3(136%)	the second largest
Mean cloud amount (1/10)	3.3	5.2	4.6	-1.9	-1.3	the second least
Days of minimum temperature less than 0°C (day)	12.0	11.0	9.5	1.0	2.5	-
Asian dust days(day)	3.0	0.0	1.9	3.0	1.1	-

□ Average values of meteorological elements across Seoul during March for each decade (1911-2012)

Year	Mean temp. (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Amount of precipitation (mm)	Days of rain (day)	Sunshine duration (hour)	Mean cloud amount (1/10)	Days of minimum temperature less than 0°C (day)	Asian dust days(day)
1911-1920(a)	3.3	8.8	-1.6	44.2	7.6	216.3	5.2	20.6	0.3
1921-1930	3.5	8.9	-1.7	41.8	7.6	210.0	5.0	21.1	0.2
1931-1940(b)	3.1	8.4	-1.5	34.0	8.7	214.4	4.8	19.5	0.0
1941-1949	3.6	8.9	-1.1	63.5	9.0	214.6	5.2	18.7	0.0
1954-1960	3.9	9.0	-0.4	68.5	8.6	190.1	5.1	16.0	0.3
1961-1970	3.8	8.8	-0.3	43.2	6.7	208.4	5.0	16.7	0.3
1971-1980(c)	4.6	9.8	0.5	41.3	6.3	195.5	4.7	12.4	0.5
1981-1990	5.1	10.0	1.1	55.7	7.3	208.1	4.8	11.4	0.7
1991-2000	6.0	10.8	1.8	40.5	6.8	188.9	4.5	8.3	0.9
2001-2010(d)	5.8	10.3	1.9	45.4	8.2	169.9	4.6	8.9	4.0
2012(e)	5.1	10.8	0.7	27.3	8.0	256.3	3.3	12.0	3.0
d-a	2.5	1.5	3.5	1.2	0.6	-46.4	-0.6	-11.7	3.7
d-b	2.7	1.9	3.4	11.4	-0.5	-44.5	-0.2	-10.6	4.0
d-c	1.2	0.5	1.4	4.1	1.9	-25.6	-0.1	-3.5	3.5
e-d	-0.7	0.5	-1.2	-18.1	-0.2	86.4	-1.3	3.1	-1.0

