

Administration

MONTHLY CLIMATE REVIEW OVER KOREA

(total 4 pages)

Division	National Climate
	Data Center
Contact	LEE, Jae-Won
DI / 11	+82-2-2181-0891/
Phone/email	hyunmj@korea.kr
Release	April 01, 2016

March 2016 Climate Summary

- \diamondsuit The nationwide mean temperature (7.2°C) in March 2016 was 1.3°C above normal.
- ♦ The nationwide-average of precipitation (56.2 mm) was 98.9% of normal.
- ☐ Climate features and long-term trends in March 2016 were analyzed 45 meteorological stations throughout Korea (national average) during 1973-2016 (1908-2016 for Seoul).
 - * Normal: Average value of climatic element data collected from 1981 to 2010

☐ The climatic characteristics in March 2016

- o Korea (as a whole),
 - The mean temperature $(7.2\,^{\circ}\text{C})$, the mean maximum temperature $(13.3\,^{\circ}\text{C})$ and the mean minimum temperature $(1.6\,^{\circ}\text{C})$ were $1.3\,^{\circ}\text{C}$, $1.5\,^{\circ}\text{C}$, $1.0\,^{\circ}\text{C}$ above normal, respectively.
- A nationally-averaged precipitation was 56.2 mm, which was 98.9% of normal. The number of rainy days was 5.3, which was 2.8 days less than normal.
- The total number of hours of sunshine was 223.0, which was 114.9% of normal.

o Seoul.

- The mean temperature $(7.0\,^{\circ}\text{C})$, the mean maximum temperature $(12.6\,^{\circ}\text{C})$ and the mean minimum temperature $(2.4\,^{\circ}\text{C})$ were $1.3\,^{\circ}\text{C}$, $2.2\,^{\circ}\text{C}$, $0.8\,^{\circ}\text{C}$ above normal, respectively.
- The amount of precipitation was 40.5 mm, which was 85.8% of normal.
- The number of rainy days was 5.0, which was 2.4 days less than normal.
- The total number of hours of sunshine was 253.7, which was 134.2% of normal.

☐ Long-term¹) trend in March 2016 climate

- o Korea (as a whole),
 - The national mean temperatures in March during the 2000s (2001-2010) was 1.1° C above that of in the 1970s (1973-1980).
 - The nationwide-average of precipitation in March during the 2000s was 1.8 mm more than that of in the 1970s.
 - The number of rainy days in March during the 2000s was 1.2 days more than that of in the 1970s.
- The total sunshine hours in March during the 2000s was 15.5 hours less than that of in the 1970s.

o Seoul,

- The mean temperatures in March during the 2000s (2001-2010) was 1.2° C above that of in the 1970s (1971-1980).
- The precipitation in March during the 2000s was 4.1 mm more than that of in the 1970s.
- The number of rainy days in March during the 2000s was 1.9 days more than that of in the 1970s.
- The total sunshine hours in March during the 2000s was 25.6 hours less than that of in the 1970s.

^{1) 2000}s: 2001~2010 / 1970s of Korea(Seoul): 1973~1980(1971~1980)

Appendix 1 Climate features of March 2016 (Nationwide)

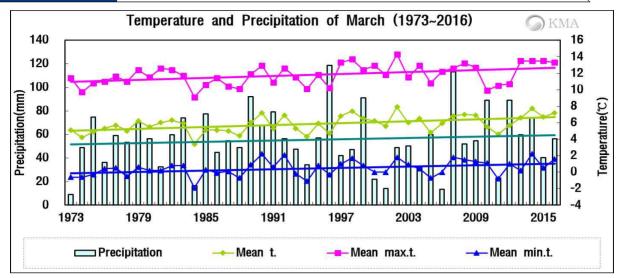


Fig 1. Temperatures (mean, mean maximum and mean minimum) and precipitation in South Korea during March (1973–2016).

☐ The nationwide average value of meteorological element during March (1973-2016)

Elements (whole country)	March 2016(a)	March 2015(b)	Normals of March (1981-2010)(c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature ($^{\circ}$ C)	7.2	6.7	5.9	0.5	1.3	the 4th highest
Mean maximum temp. (°C)	13.3	13.5	11.8	-0.2	1.5	
Mean minimum temp. (°C)	1.6	0.5	0.6	1.1	1.0	
Precipitation (mm)	56.2	40.5	56.4	15.7 (194.0%)	-0.2 (98.9%)	
Days of rain (day)	5.3	5.1	8.1	0.2	-2.8	the 5th lowest
Sunshine duration (hour)	223.0	263.5	194.0	-40.5 (84.6%)	29.0 (114.9%)	
Mean cloud amount (1/10)	4.1	3.2	4.8	0.9	-0.7	
Days of minimum temperature less than $0^{\circ}C(day)$	10.9	16.2	14.0	-5.3	-3.1	the 5th lowest
Days of maximum temperature more than $10^{\circ}\text{C}(\text{day})$	23.3	22.6	20.3	0.7	3.0	
Asian dust days (day)	0.6	5.5	1.8	-4.9	-1.2	

☐ The nationwide average value of meteorological element during March in each decade (1973–2010)

Year	Mean temp.	Mean max. temp. (°C)	Mean min. temp. (°C)	Prep. (mm)		Sunshine duration (hour)	Mean cloud amount (1/10)	Days of minimum temperature less than $0^{\circ}\!$	Days of maximum temperature more than 10°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	19.2	0.6
1981-1990(b)	5.5	11.3	0.3	56.9	8.2	201.9	4.9	14.7	19.2	0.4
1991-2000(c)	5.9	11.9	0.6	59.5	7.7	189.2	4.8	14.0	20.8	1.0
2001-2010(d)	6.3	12.2	0.8	52.8	8.4	190.8	4.8	13.3	21.0	2.0
2016(e)	7.2	13.3	1.6	56.2	5.3	223.0	4.1	10.9	23.3	0.6
d-a	1.1	1.0	0.8	1.8	1.2	-15.5	0.1	-2.6	1.8	1.4
d-b	0.8	0.9	0.5	-4.1	0.2	-11.1	-0.1	-1.4	1.8	1.6
d-c	0.4	0.3	0.2	-6.7	0.7	1.6	0.0	-0.7	0.2	1.0
e-d	0.9	1.1	0.8	3.4	-3.1	32.2	-0.7	-2.4	2.3	-1.4

Appendix 2 Climate features of March 2016 (Seoul)

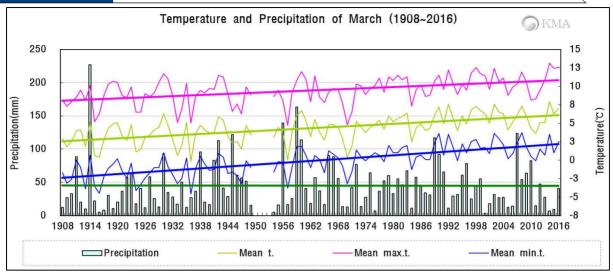


Fig 2. Temperatures (mean, mean maximum and mean minimum) and precipitation in Seoul during March (1908-2016).

☐ The average value of meteorological element during March in Seoul(1908-2016)

Elements (Seoul)	March 2016(a)	March 2015(b)	Normals of March (1981-2010)(c)	a-b	a-c	Rank since 1908 (within 5th)
Mean temperature ($^{\circ}$ C)	7.0	6.3	5.7	0.7	1.3	
Mean maximum temp. (°C)	12.6	12.4	10.4	0.2	2.2	the 2nd highest
Mean minimum temp. (℃)	2.4	1.0	1.6	1.4	0.8	
Precipitation (mm)	40.5	9.6	47.2	30.9 (421.9%)	-6.7 (85.8%)	
Days of rain (day)	5.0	4.0	7.4	1.0	-2.4	
Sunshine duration (hour)	253.7	270.8	189.0	-17.1 (93.7%)	64.7 (134.2%)	
Mean cloud amount (1/10)	3.6	2.8	4.6	0.8	-1.0	
Days of minimum temperature less than $0 ^{\circ}\mathrm{C}(\mathrm{day})$	8.0	13.0	9.5	-5.0	-1.5	
Days of maximum temperature more than $10^{\circ}\mathbb{C}(\text{day})$	22.0	22.0	16.8	0.0	5.2	the 3rd highest
Asian dust days (day)	2.0	8.0	1.9	-6.0	0.1	

☐ The average value of meteorological element during March in Seoul in each decade (1911-2010)

Year	Mean temp.	Mean max. temp.	Mean min. temp. (°C)	Prep. (mm)	Days of rain (day)	Sunshine duration (hour)	Mean cloud amount (1/10)	Days of minimum temperature less than $0^{\circ}\mathrm{C}(\mathrm{day})$	Days of maximum temperature more than $10^{\circ}\mathrm{C}(\mathrm{day})$	Asian dust days (day)
1911-1920(a)	3.3	8.8	-1.6	44.2	7.6	216.3	5.2	20.6	12.2	0.3
1921-1930	3.5	8.9	-1.7	41.8	7.6	210.0	5.0	21.1	11.2	0.2
1931-1940(b)	3.1	8.4	-1.5	34.0	8.7	214.4	4.8	19.5	12.0	0.0
1941-1949	3.6	8.9	-1.1	63.5	9.0	214.6	5.2	18.7	13.4	0.0
1954-1960	3.9	9.0	-0.4	68.5	8.6	190.1	5.1	16.0	13.4	0.3
1961-1970	3.8	8.8	-0.3	43.2	6.7	208.4	5.0	16.7	13.5	0.3
1971-1980(c)	4.6	9.8	0.5	41.3	6.3	195.5	4.7	12.4	15.4	0.5
1981-1990	5.1	10.0	1.1	55.7	7.3	208.1	4.8	11.4	15.4	0.7
1991-2000	6.0	10.8	1.8	40.5	6.8	188.9	4.5	8.3	17.9	0.9
2001-2010(d)	5.8	10.3	1.9	45.4	8.2	169.9	4.6	8.9	17.1	4.0
2016(e)	7.0	12.6	2.4	40.5	5.0	253.7	3.6	8.0	22.0	2.0
d-a	2.5	1.5	3.5	1.2	0.6	-46.4	-0.6	-11.7	4.9	3.7
d-b	2.7	1.9	3.4	11.4	-0.5	-44.5	-0.2	-10.6	5.1	4.0
d-c	1.2	0.5	1.4	4.1	1.9	-25.6	-0.1	-3.5	1.7	3.5
e-d	1.2	2.3	0.5	-4.9	-3.2	83.8	-1.0	-0.9	4.9	-2.0