



KMA Report on Climate Characteristics (4 pages total)

Division	Meteorological Resources Division
Contact	Yong-Han Leem
Phone/email	+82-2-2181-0882/ yonghan@korea.kr
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June 2010, Climate

- ◇ The mean maximum temperature was the highest value on record since 1973 and the mean temperature the second highest on record. The mean minimum temperature for Seoul was the highest on record since 1908.
- ◇ The precipitation amount was the third lowest value on record since 1973.

□ The climate characteristics of June 2010 and their long-term trends are analyzed based on data from 60 meteorological stations in Korea (national values) for the period of 1973-2010 (1908-2010 for Seoul).

□ **The climatological characteristics of June 2010 were as follows:**

o For Korea (national values):

- The mean maximum temperature (27.8°C) was 1.7°C higher than normal, making it the highest value on record since 1973, and the mean temperature (22.2°C) was 1.2°C higher than normal, making it the second highest value on record (the highest value of 22.3°C was recorded in 2005). The minimum temperature (17.4°C) was 0.9°C higher than normal.
- The precipitation amount (71.7 mm) was 41.9% of the normal value, making it the third lowest value on record since 1973 (1st: 34.5 mm in 1982; 2nd: 44.6 mm in 1992), and the average number of rainfall days (9.4 days) decreased by 1.0 day compared to normal.

o For Seoul:

- The mean minimum temperature (19.3°C) was 1.5°C higher than normal, making it the highest value on record (tied with 2004) since 1908, the mean temperature (23.4°C) was 1.5°C higher than normal, making it the second highest value on record (the highest value of 23.7°C was recorded in 2000) tied with 1997, and the mean maximum temperature (28.2°C) was 1.3°C higher than normal.
- The precipitation amount (127.6 mm) was 95.7% of the normal value, and the average number of rainfall days (10.0 days) was identical to normal.

□ **Long-term climate trend for June**

- o Korea's mean, mean maximum, and mean minimum temperatures for June from 2001 to 2010 were 0.6°C, 0.8°C, and 0.5°C higher than those of the 1970s, respectively, exhibiting an upward trend. The precipitation amount and the average number of rainfall days, on the other hand, declined by 15.2 mm and 1.5 days, respectively.
- o For Seoul, the mean, mean maximum, and mean minimum temperatures for June from 2001 to 2010 were 1.6°C, 0.4°C, and 2.5°C higher than those of the 1910s, respectively, showing an overall upward trend. The precipitation amount and the average number of rainfall days, on the other hand, decreased by 19.8 mm and 1.1 days, respectively.

※ Normal: 30-year (1971-2000) average.

※ National average: Average of values collected from 60 meteorological stations since 1973.

※ The analyzed data for Seoul date back to 1908.

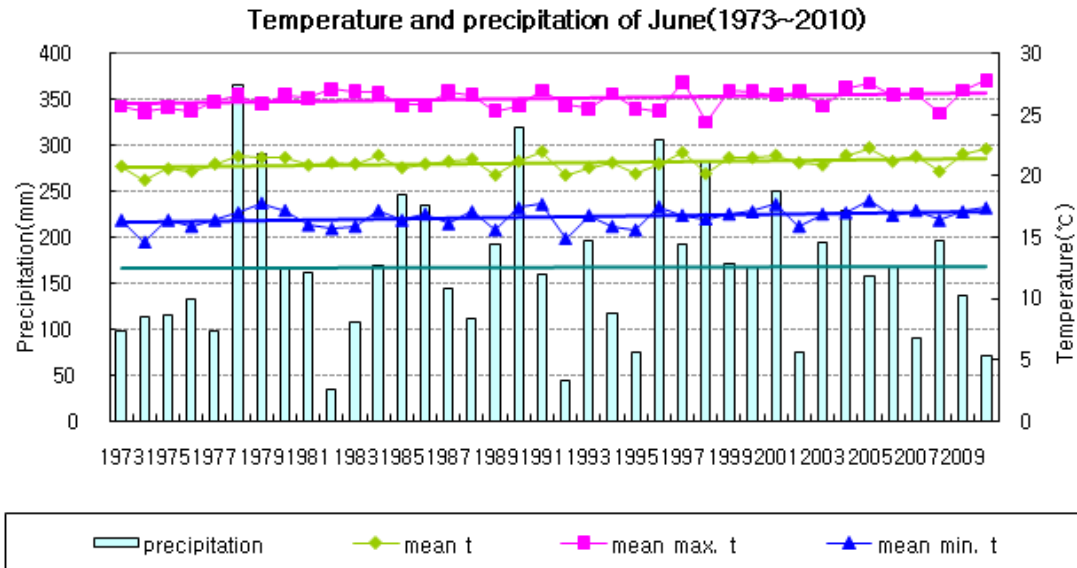
※ 1920s: Average from 1921 to 1930

※ 1970s: Average from 1973 to 1980

※ 2000s: Average from 2001 to 2009

Appendix 1. June Climate Trends

Fig. 1. Temperatures (mean, mean maximum, and mean minimum) and precipitation for the Republic of Korea for June (1973-2010)



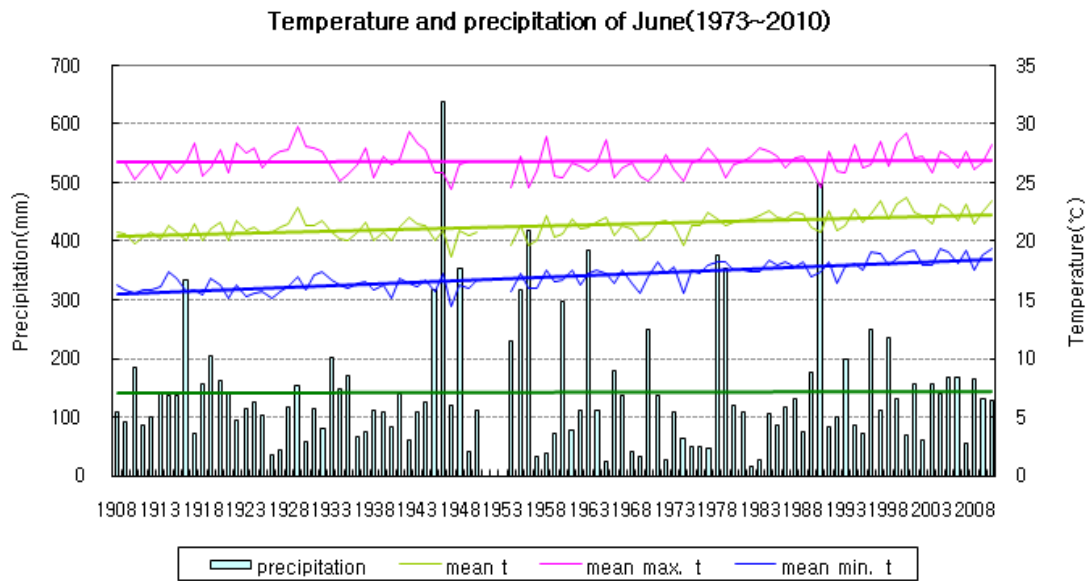
□ June average values of meteorological elements across Korea (1973~2010)

Elements (National)	June 2010 (a)	Normals for June (1971-2000) (b)	a-b	Ranking since 1973 (~5th only)
Mean temperature (°C)	22.2	21.0	1.2	2nd highest
Mean maximum t (°C)	27.8	26.1	1.7	highest
Mean minimum t (°C)	17.4	16.5	0.9	-
Precipitation amount (mm)	71.7	171.3	-99.6(41.9%)	3rd lowest
Rainfall days	9.4	10.4	-1.0	-
Precipitation intensity (mm/day)	7.7	16.5	-8.8	3rd lowest

□ June average values of meteorological elements across Korea by decade (1973-2010)

Decade	Mean t (°C)	Mean max. t. (°C)	Mean min. t.(°C)	PPT(mm)	Rainfall days	Precipitation rate (mm/day)
1973-1980년(a)	20.9	25.9	16.5	171.9	11.4	15.1
1981-1990년(b)	21.0	26.3	16.4	172.2	9.9	17.5
1991-2000년(c)	21.0	26.2	16.6	171.0	10.1	16.9
2001-2010년(d)	21.5	26.7	17.0	156.7	10.0	15.7
d-a	0.6	0.8	0.5	-15.2	-1.4	0.6
d-b	0.5	0.4	0.6	-15.5	0.1	-1.8
d-c	0.5	0.5	0.4	-14.3	-0.1	-1.2

Fig. 2. June temperatures (mean, mean maximum, and mean minimum) and precipitation for Seoul (1908-2010)



□ June average of meteorological elements for Seoul (1908-2010)

Elements(Seoul)	June 2010 (a)	Normals for June (1971-2000)(b)	a-b	Ranking since 1973 (~5th only)
Mean temperature (°C)	23.4	21.9	1.5	2nd highest
Mean maximum t (°C)	28.2	26.9	1.3	-
Mean minimum t (°C)	19.3	17.8	1.5	highest
Precipitation amount (mm)	127.6	133.3	-5.7(95.7%)	-
Rainfall days	10.0	10.0	0.0	-
Precipitation intensity (mm/day)	12.8	13.3	-0.5	-

□ June average values of meteorological elements for Seoul by decade (1973-2010)

Decade	Mean t. (°C)	Mean max. t. (°C)	Mean min. t. (°C)	PPT (mm)	Rainfall days	Precipitation rate (mm/day)
1911-1920년(a)	20.8	26.6	16.2	152.7	11.7	13.1
1921-1930년	21.2	27.7	15.8	98.3	8.1	12.1
1931-1940년	20.7	26.6	16.4	116.0	10	11.6
1941-1950년(b)	20.8	26.9	16.2	201.5	11.6	17.4
1954-1960년	20.6	26.1	16.5	200.5	12	16.7
1961-1970년	21.1	26.3	16.9	134.6	11.1	12.1
1971-1980년(c)	21.5	26.5	17.5	133.0	10.9	12.2
1981-1990년	21.9	26.9	17.7	133.9	9.6	13.9
1991-2000년	22.4	27.3	18.2	132.9	9.5	14.0
2001-2010년(d)	22.4	27.0	18.7	132.9	10.6	12.5
d-a	1.6	0.4	2.5	-19.8	-1.1	-0.3
d-b	1.6	0.1	2.5	-68.6	-1.0	-4.6
d-c	0.9	0.5	1.2	-0.1	-0.3	0.6