



MONTHLY CLIMATE REVIEW OVER KOREA (total 4 pages)

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July 2015 Monthly Climate Summary

- ◇ The nationwide mean temperature (24.4 °C) in July 2015 was 0.1 °C below normal.
 - ◇ The nationally-averaged precipitation (180.0 mm) was 62.2 % of normal.
- Climate features and long-term trends in July 2015 were analyzed with the data collected at the 45 meteorological stations throughout Korea (national average) from 1973 to 2015 (1908-2015 for Seoul).
- ※ Normal : Average value of climatic element data collected from 1981 to 2010

□ The climatic characteristics in July 2015

o Korea (as a whole),

- The mean temperature (24.4 °C), the mean maximum temperature (28.7 °C) and the mean minimum temperature (20.9 °C) were 0.1 °C, 0.1 °C, 0.2 °C below normal, respectively.
- The nationally-averaged precipitation was 180.0 mm, which was 62.2 % of normal. The number of rainy days was 14.2, which was 0.2 days less than normal.
- The total number of hours of sunshine was 174.0, which was 117.6 % of normal.

o Seoul,

- The mean temperature (25.8 °C), the mean maximum temperature (30.0 °C) and the mean minimum temperature (22.6 °C) were 0.9 °C, 1.4 °C, 0.7 °C above normal, respectively.
- The amount of precipitation was 226.0 mm, which was 57.3 % of normal.
- The number of rainy days was 14.0, which was 2.3 days less than normal.
- The total number of hours of sunshine was 176.1, which was 146.8 % of normal.

□ **Long-term¹⁾ trend in July 2015 climate**

o Korea (as a whole),

- The national mean temperatures in July in the 2000s (2001-2010) was 0.1 °C below that of in the 1970s (1973-1980).
- The nationally-averaged precipitation in July in the 2000s was 111.1 mm more than that of in the 1970s.
- The number of rainy days in July in the 2000s was 2.2 days more than that of in the 1970s.
- The total sunshine hours in July in the 2000s was 41.5 hours less than that of in the 1970s.

o Seoul,

- The mean temperatures in July in the 2000s (2001-2010) was 0.1 °C above that of in the 1970s (1971-1980).
- The precipitation in July in the 2000s was 200.4 mm more than that of in the 1970s.
- The number of rainy days in July in the 2000s was 2.4 days more than that of in the 1970s.
- The total sunshine hours in July in the 2000s was 31.9 hours less than that of in the 1970s.

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

Appendix 1 Climate features of July 2015 (Nationwide)

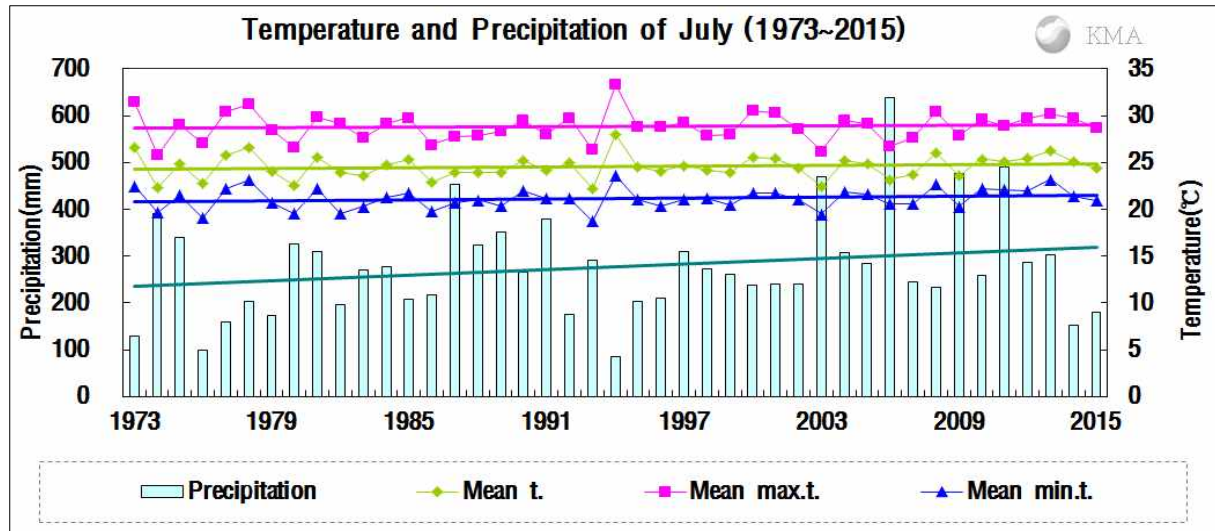


Fig 1. Temperatures (mean, mean maximum and mean minimum) and precipitation in South Korea during July (1973–2015).

□ The nationwide average value of meteorological element during July (1973–2015)

Elements (whole country)	July 2015(a)	July 2014(b)	Normals of July (1981-2010)(c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	24.4	25.1	24.5	-0.7	-0.1	-
Mean maximum temp. (°C)	28.7	29.7	28.8	-1.0	-0.1	-
Mean minimum temp. (°C)	20.9	21.4	21.1	-0.5	-0.2	-
Precipitation (mm)	180.0	152.6	289.7	27.4 (131.6%)	-109.7 (62.2%)	-
Days of rain (day)	14.2	15.3	14.4	-1.1	-0.2	-
Sunshine duration (hour)	174.0	181.5	147.9	-7.5 (95.9%)	26.1 (117.6%)	-
Mean cloud amount (1/10)	7.0	7.1	7.1	-0.1	-0.1	-
Precipitation more than 80mm/day(day)	0.3	0.1	0.7	0.2	-0.4	-
Days of maximum temperature more than 33°C(day)	3.2	4.9	3.9	-1.7	-0.7	-

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

Year	Mean temp. (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Prep. (mm)	Days of rain (day)	Sunshine duration (hour)	Mean cloud amount (1/10)	Precipitation more than 80mm/day (day)	Days of maximum temperature more than 33°C (day)
1973-1980(a)	24.5	28.8	21.0	228.0	13.7	165.3	7.0	0.4	4.1
1981-1990(b)	24.3	28.6	20.9	287.5	14.3	157.1	7.2	0.6	3.6
1991-2000(c)	24.7	29.1	21.1	242.5	12.9	163.0	6.8	0.6	4.7
2001-2010(d)	24.4	28.6	21.2	339.1	15.9	123.8	7.3	0.9	3.4
2015(e)	24.4	28.7	20.9	180.0	14.2	174.0	7.0	0.3	3.2
d-a	-0.1	-0.2	0.2	111.1	2.2	-41.5	0.3	0.5	-0.7
d-b	0.1	0.0	0.3	51.6	1.6	-33.3	0.1	0.3	-0.2
d-c	-0.3	-0.5	0.1	96.6	3.0	-39.2	0.5	0.3	-1.3
e-d	0.0	0.1	-0.3	-159.1	-1.7	50.2	-0.3	-0.6	-0.2

Appendix 2 Climate features of July 2015 (Seoul)

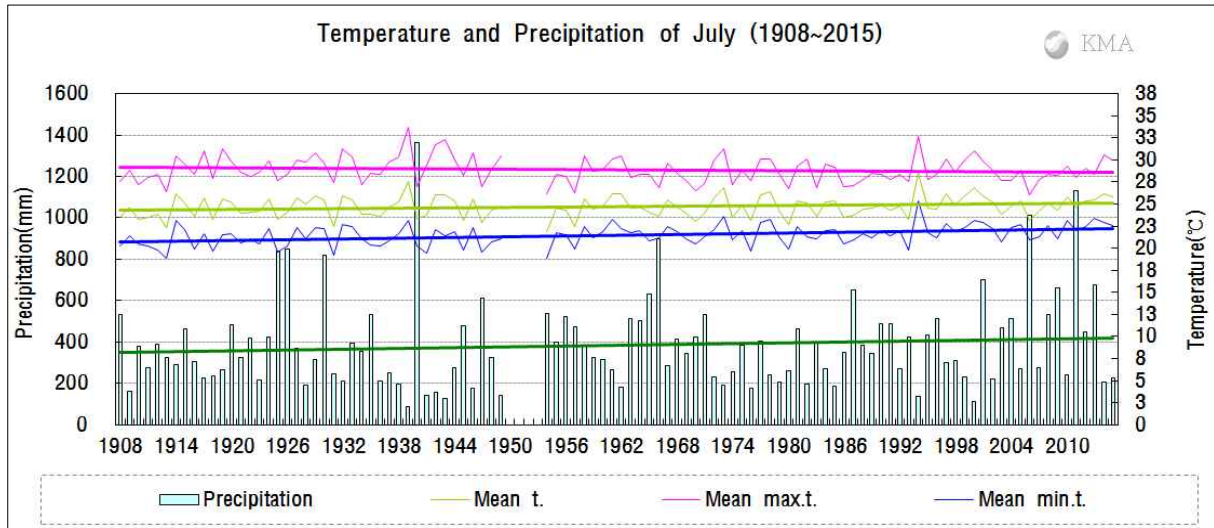


Fig 2. Temperatures (mean, mean maximum and mean minimum) and precipitation in Seoul during July (1908–2015).

□ The average value of meteorological element during July in Seoul (1908–2015)

Elements (Seoul)	July 2015(a)	July 2014(b)	Normals of July (1981-2010)(c)	a-b	a-c	Rank since 1908 (within 5th)
Mean temperature (°C)	25.8	26.1	24.9	-0.3	0.9	-
Mean maximum temp. (°C)	30.0	30.6	28.6	-0.6	1.4	-
Mean minimum temp. (°C)	22.6	22.9	21.9	-0.3	0.7	-
Precipitation (mm)	226.0	207.9	394.7	18.1 (108.7%)	-168.7 (57.3%)	-
Days of rain (day)	14.0	12.0	16.3	2.0	-2.3	-
Sunshine duration (hour)	176.1	172.7	120.0	3.4 (102.0%)	56.1 (146.8%)	-
Mean cloud amount (1/10)	7.0	6.8	7.4	0.2	-0.4	-
Precipitation more than 80mm/day(day)	1.0	0.0	1.2	1.0	-0.2	-
Days of maximum temperature more than 33°C(day)	4.0	7.0	2.2	-3.0	1.8	-

□ The average value of meteorological element during July in Seoul in each decade (1911–2010)

Year	Mean temp. (°C)	Mean max. temp. (°C)	Mean min. temp. (°C)	Prep. (mm)	Days of rain (day)	Sunshine duration (hour)	Mean cloud amount (1/10)	Precipitation more than 80mm/day (day)	Days of maximum temperature more than 33°C(day)
1911-1920(a)	24.4	29.1	20.8	326.2	14.9	203.6	7.3	0.9	3.7
1921-1930	24.7	29.2	21.2	477.0	17.4	169.0	8.0	1.5	3.3
1931-1940(b)	24.6	29.4	21.2	385.0	16.3	182.2	7.8	1.1	5.0
1941-1949	24.6	29.9	20.9	269.9	15.9	210.4	7.5	0.2	5.3
1954-1960	24.0	28.2	21.1	422.0	19.1	138.7	7.9	1.0	1.7
1961-1970	24.6	28.4	21.7	446.3	18.1	114.0	8.2	1.4	2.6
1971-1980(c)	24.7	28.8	21.7	288.2	15.2	114.7	7.5	0.5	2.8
1981-1990	24.6	28.4	21.5	372.8	16.5	135.0	7.6	1.1	1.8
1991-2000	25.4	29.2	22.2	322.7	14.7	142.3	7.0	0.9	3.8
2001-2010(d)	24.8	28.3	22.0	488.6	17.6	82.8	7.6	1.7	1.0
2015(e)	25.8	30.0	22.6	226.0	14.0	176.1	7.0	1.0	4.0
d-a	0.4	-0.8	1.2	162.4	2.7	-120.8	0.3	0.8	-2.7
d-b	0.2	-1.1	0.8	103.6	1.3	-99.4	-0.2	0.6	-4.0
d-c	0.1	-0.5	0.3	200.4	2.4	-31.9	0.1	1.2	-1.8
e-d	1.0	1.7	0.6	-262.6	-3.6	93.3	-0.6	-0.7	3.0