



MONTHLY CLIMATE REVIEW OVER KOREA (total 5 pages)

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July 2014 Monthly Climate Summary

- ◇ The nationwide mean temperature (25.1 °C) in July 2014 was above normal.
- ◇ The monthly amount of precipitation (152.7 mm) was 52.7% of normal.
 - The mean precipitation was the fourth lowest on record since 1973.
- Climate features and long-term trends in July 2014 were analyzed with the data collected at the 45 meteorological stations throughout Korea (national average) from 1973 to 2014 (1908-2014 for Seoul).
 - ※ Normal : Average value of climatic element data collected from 1981 to 2010
- **The climatic characteristics in July 2014**
 - o Korea (as a whole),
 - The mean temperature (25.1 °C), the mean maximum temperature (29.7 °C) and the mean minimum temperature (21.4 °C) were 0.6 °C, 0.9 °C, 0.3 °C above normal, respectively.
 - The nationally-averaged precipitation was 152.7 mm, which was 52.7% of normal. The number of rainy days was 15.3, which was 0.9 days more than normal.
 - The nationally-averaged precipitation was the fourth lowest on record since 1973.
 - The total number of hours of sunshine was 181.4, which was 122.7% of normal.
 - o Seoul,
 - The mean temperature (26.1 °C), the mean maximum temperature (30.6 °C), the mean minimum temperature (22.9 °C) were 1.2 °C, 2.0 °C, 1.0 °C above normal, respectively.
 - The amount of precipitation was 207.9 mm, which was 52.7% of normal.
 - The number of rainy days was 12.0, which was 4.3 days less than normal.
 - The total number of hours of sunshine was 172.7, which was 143.9% of normal.

□ **Long-term¹⁾ trend in July 2014 climate**

o Korea (as a whole),

- The national mean temperatures in July in the 2000s (2001-2010) was 0.1 °C less than that of in the 1970s (1973-1980).
- The nationally-averaged precipitation in July in the 2000s was 111.7 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 day 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.

□ **Remarks**

	temperature difference between the normal temperature (°C)		precipitation ratio of the normal precipitation (%)	
	ten-day	month	ten-day	month
above(more)	>0.7	>0.5	>130	>120
nearly	-0.7~0.7	-0.5~0.5	50~130	70~120
below(less)	<-0.7	<-0.5	<50	<70

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

Appendix 1 Climate features of July 2014 (Nationwide)

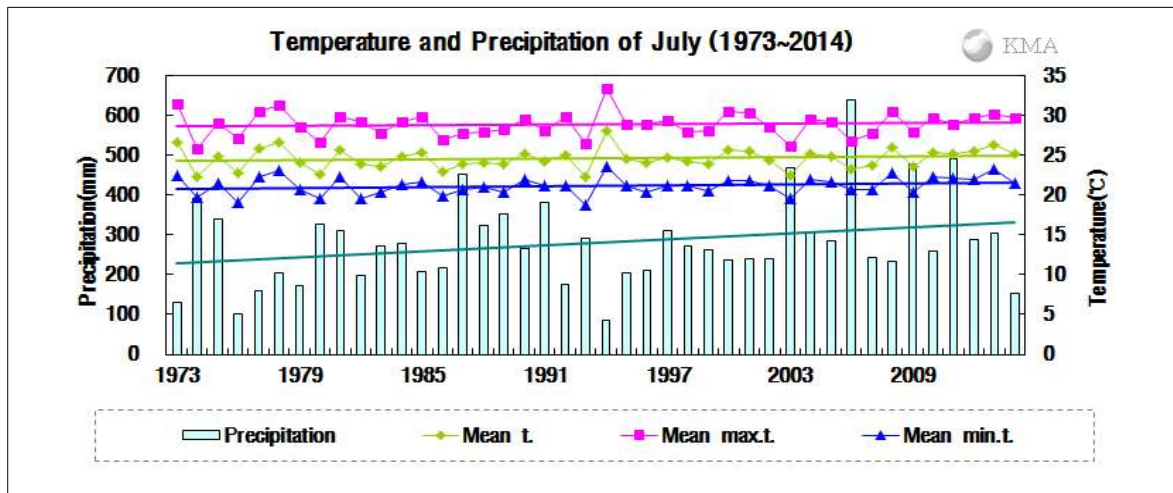


Fig 1. Temperatures (mean, mean maximum and mean minimum) and precipitation in South Korea during July (1973-2014).

□ The nationwide average value of meteorological element during July (1973-2014)

Elements (whole country)	July 2014(a)	July 2013(b)	Normals of July (1981-2010) (c)	a-b	a-c	Rank since 1973 (within 5th)
Mean temperature (°C)	25.1	26.3	24.5	-1.2	0.6	
Mean maximum temp. (°C)	29.7	30.2	28.8	-0.5	0.9	
Mean minimum temp. (°C)	21.4	23.2	21.1	-1.8	0.3	
Precipitation (mm)	152.7	302.4	289.7	-149.7 (60.8%)	-137.0 (52.7%)	the forth lowest
Days of rain (day)	15.3	16.3	14.4	-1.0	0.9	
Sunshine duration (hour)	181.4	150.9	147.9	30.5 (120.2%)	33.5 (122.7%)	
Mean cloud amount (1/10)	7.0	7.6	7.1	-0.6	-0.1	
Precipitation more than 80mm/day(day)	0.1	0.6	0.7	-0.5	-0.6	the forth lowest
Days of maximum temperature more than 33°C(day)	4.9	4.9	3.9	0.0	1.0	

□ 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	6.9	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
2014(e)	25.1	29.7	21.4	152.7	15.3	181.4	7.0	0.1	4.9
d-a	-0.1	-0.2	0.2	111.1	2.2	-41.5	0.4	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	0.7	1.1	0.2	-186.4	-0.6	57.6	-0.3	-0.8	1.5

Appendix 2 Climate features of July 2014 (Seoul)

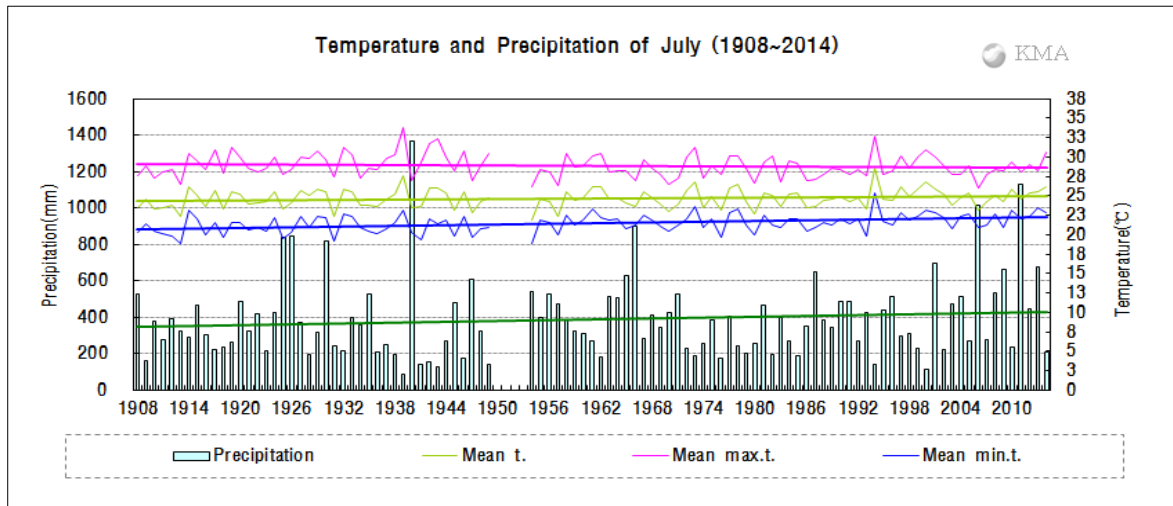


Fig 2. Temperatures (mean, mean maximum and mean minimum) and precipitation in Seoul during July (1908-2014).

□ The average value of meteorological element during July in Seoul(1908-2014)

Elements (Seoul)	July 2014(a)	July 2013(b)	Normals of July (1981-2010) (c)	a-b	a-c	Rank since 1908 (within 5th)
Mean temperature (°C)	26.1	25.5	24.9	0.6	1.2	
Mean maximum temp. (°C)	30.6	28.3	28.6	2.3	2.0	
Mean minimum temp. (°C)	22.9	23.4	21.9	-0.5	1.0	
Precipitation (mm)	207.9	676.2	394.7	-468.3 (30.7%)	-186.8 (52.7%)	
Days of rain (day)	12.0	25.0	16.3	-13.0	-4.3	
Sunshine duration (hour)	172.7	101.0	120.0	71.7 (171.0%)	52.7 (143.9%)	
Mean cloud amount (1/10)	6.8	8.5	7.4	-1.7	-0.6	
Precipitation more than 80mm/day(day)	0.0	2.0	1.2	-2.0	-1.2	
Days of maximum temperature more than 33°C(day)	7.0	0.0	2.2	7.0	4.8	

□ 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
2014(e)	26.1	30.6	22.9	207.9	12.0	172.7	6.8	0.0	7.0
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	1.3	2.3	0.9	-280.7	-5.6	89.9	-0.8	-1.7	6.0

