Weather and Climate

The spatial distribution of climate in Korea is determined by key climatic factors such as latitude, elevation, geographical location, land-sea bordering properties, ocean current, the East Asian Monsoon system, and air mass. The climate of Korea is largely characterized by a continental monsoon system over East Asia (including Korea, China, and Japan) and an oceanic monsoon system due to the land-sea distribution and the associated difference in heating properties. While cold, dry winter airflow from the continental effect, hot and humid summer airflow from the ocean, and equatorial air mass.

The classification of natural seasons is based on the criteria of daily mean air temperature, daily maximum air temperature, and daily minimum air temperature. The classification is as follows:

- **Winter** (December, January, February): The cold, dry airflow from the continental effect, which is mostly governed by the ocean, differs from that of the inland areas. The annual mean air temperature between Seogwipo (16.6°C), located at the southern part of Jeju Island, and Cheorwon (10.2°C), located at the northern tip (24.8-30.6°N) of South Korea, which is mostly governed by the ocean, differs from that of the inland areas. The annual mean air temperature between Seogwipo (16.6°C), located at the southern part of Jeju Island, and Cheorwon (10.2°C), located at the northern tip (24.8-30.6°N) of South Korea, demonstrates a wide variation in air temperature with latitude.

The climate features vary depending on elevation. The annual mean air temperature at Gangneung (23.7°C), the highest located observation station in South Korea, is 1.0°C, which is 3.7°C lower than that at Hongcheon (27.4°C), which is at 114 m and located at the coastal latitude. The difference in the mean air temperature is also found in the southern area between Jeju Island (23.7°C) and Cheorwon (22.4°C), while the difference is less than 1°C between Seogwipo (20.7°C) and Donghae (16.8°C), with 1.9°C and 3.1°C, respectively.

The geographical location also makes a difference in climate. The Taebaeksan (Taebaeksan Mountain Range) acts as a barrier to the flow of air and brings a marked difference in climate between the Yeongseo area (windward side) and Yongpyong area (leeward side). When a cold, northeasterly wind blows over the Korean Peninsula during the winter, the air temperature at Chuncheon, located in the Yeongseo area, is lower. Whereas, in Sokcho, located in the Yongpyong area, the temperature increases. The average temperature for the warmest month, August, in Chuncheon (24.0°C) is higher than that in Sokcho (23.0°C), while the average temperature for the coolest month, January, in Chuncheon (4.6°C) is much lower than that in Sokcho (15.0°C). However, as a northeasterly wind blows over the Taebaeksan, Chuncheon becomes warmer while Sokcho becomes colder. In addition, when the northeasterly wind crosses the East Sea with its warm air, it meets the water up to the latitude of 37°-38°N. Part of the current flows north up to the coast of Gangwon, Gangwon-do, and affects the climate of the surrounding area. The North Korean Cold Current, a part of the Liman Current, flowing from the Sea of Okhotsk, flows south along the coast of Korea and reaches down to the southern region of Jeju Island. The Yellow Sea Warm Current flows from the eastern waters of Jejudo to the southern part of the Yellow Sea and occasionally flows along the eastern coast of Korea and brings a marked difference in climate due to the continental effect, hot and humid airflow from the ocean, and equatorial air mass.

The climate of Korea is also under the influence of various air masses such as the Siberian, the North Pacific, the Okhotsk Sea, and equatorial air mass.

Winter
- January 3.8°C
- February 3.1°C
- December 3.1°C

Spring
- March 15.7°C
- April 13.9°C

Summer
- June 29.6°C
- July 29.4°C
- August 29.2°C

Autumn
- September 20.8°C
- October 17.2°C
- November 14.1°C
Korea has made rapid advancements in meteorology since the 2000s. In 2010, Korea became the 50th country to launch a geostationary and polar-orbiting weather satellite with the completion of the Meteosat-12. In 2013, Korea’s meteorological satellites began transmitting weather data to 144 countries worldwide. In 2014, the government introduced the next-generation weather satellite, Meteosat-13, which provides more accurate and timely weather data.

In Korea, the National Central Meteorological Observatory (KMA) is responsible for weather and climate observations. The KMA’s meteorological observation network includes 3,000 weather stations and 4,000 automated weather stations (AWS) throughout the country.

Meteorological observations in Korea are not only for monitoring weather conditions, but also for research and development. The KMA plays a critical role in the country’s national security and disaster prevention. The KMA’s meteorological satellite data is used to support decision-making in various sectors, including aviation, shipping, and agriculture.

Moreover, the KMA’s weather research and development efforts have contributed to international cooperation. Korea has signed several agreements with other countries to share weather data and collaborate on joint research projects.

In conclusion, Korea’s meteorological observations have been pivotal in advancing the country’s understanding of weather and climate patterns. Korea’s commitment to meteorological research and development has helped the country become a global leader in this field.
Meteorological Forecasting

Weather and Climate

Process of Meteorological Service Weather Forecasting

Short-Range Forecast

Long-Range Forecast

Production of Numerical Forecasting

-Seogwipo

-Daegu·Gyeongbuk

-Busan·Gyeongnam

-Daegu·Gyeongbuk

-Northern Gangwon-do

-Southern Gyeongsangbuk-do

-Ulsan

-The far eastern part of

-Western South Sea off Jeollanam-do

-Southern Gyeongbuk-do

-6

-10

-1

-3

-3:00 AM 2016 August 6

-3:00 AM 2016 August 7

-3:00 AM 2016 August 8

-Guam

-Ocean Research Ieodo

The Production of Numerical Forecasting

-Seoul

-Area

-Terrestrial Marine Weather Forecast Area Map

-Path of TD’s Center

-Typhoon Location

-15 m/s or Higher

-25 m/s or Higher

-Typhoon’s Movement

-Day

-Month

-Year

-Hour

-Meteorological Information Network

-Government offices, public institutions, research institutes, and

-Sharing big data regarding weather and climate with the

-El Niño

-La Niña

-Asian Dust

-Weather maps produced in Korea are broadly divided into surface weather maps and upper-air weather maps. Surface weather maps include surface weather maps showing atmospheric conditions, including distribution of sea-level pressure, surface temperature, wind direction and speed, rainfall, and type and height of clouds. In Korea, these weather maps are analysed every 3 hours, and local weather maps are drawn on the surface map for analysis of micrometeorological conditions.

-the upper-air weather map represents weather conditions in the upper atmosphere, including altitude of the isobaric surfaces, air temperature, wind speed, and humidity. In Korea, these weather maps are analysed every 6 hours, and 24 hour forecasts are made at 000 UTC and 1200 UTC.
Climate of South Korea

Climate of South Korea

South Korea has a humid continental climate, characterized by moderate to high summer temperatures and relatively cool winters. The climate is affected by the monsoon, with a distinct wet season from May to August and a dry season from September to April. The country experiences a wide range of temperatures, influenced by its location between the tropical and temperate zones.

In general, the climate varies from a hot and humid summer to a relatively mild winter, with seasonal rainfall. The impact of the Black Sea Current and the South Korea Warm Current influences the country's climate, bringing warm summer temperatures and moderating the winter climate.

South Korea's climate is divided into six major geographic regions:

1. **Seoul**
   - **Season**: Spring, Summer
   - **Temperature**: April: 12°C, July: 28°C
   - **Precipitation**: April: 83 mm, July: 126 mm
   - **Description**: Seoul lies in the central lowland of Korea, characterized by a continental climate with a summer monsoon. The city experiences hot summers and mild winters.

2. **Jeju**
   - **Season**: Spring, Summer
   - **Temperature**: April: 14°C, July: 28°C
   - **Precipitation**: April: 89 mm, July: 140 mm
   - **Description**: Jeju, located on the southern coast, has a humid subtropical climate with mild winters and hot summers. The island receives substantial rainfall throughout the year.

3. **Incheon**
   - **Season**: Spring, Summer
   - **Temperature**: April: 11°C, July: 29°C
   - **Precipitation**: April: 58 mm, July: 102 mm
   - **Description**: Incheon is situated on the western coast, on Incheon Island, with a humid subtropical climate and a monsoon influence. The city experiences relatively mild winters and hot summers.

4. **Yangpyeong**
   - **Season**: Spring, Summer
   - **Temperature**: April: 9°C, July: 28°C
   - **Precipitation**: April: 55 mm, July: 106 mm
   - **Description**: Yangpyeong is located in the central lowland, characterized by a temperate climate with distinct seasons. The city experiences hot summers and cold winters.

5. **Daejeon**
   - **Season**: Spring, Summer
   - **Temperature**: April: 11°C, July: 29°C
   - **Precipitation**: April: 58 mm, July: 102 mm
   - **Description**: Daejeon is situated on the central lowland of Korea, characterized by a temperate climate with distinct seasons. The city experiences hot summers and cold winters.

6. **Mokpo**
   - **Season**: Spring, Summer
   - **Temperature**: April: 12°C, July: 28°C
   - **Precipitation**: April: 83 mm, July: 126 mm
   - **Description**: Mokpo is located on the southwestern coast, with a humid subtropical climate and a monsoon influence. The city experiences relatively mild winters and hot summers.

South Korea's climate is influenced by its location between the tropical and temperate zones, resulting in a wide range of temperatures and rainfall patterns. The country experiences a distinct wet season from May to August and a dry season from September to April. The Black Sea Current and the South Korea Warm Current influence the country's climate, bringing warm summer temperatures and moderating the winter climate.
Korea, located in the mid-latitudes, is largely affected by the westerlies and the East Asian monsoon system. Thus, the northerly and the southerly are dominant during winter, especially in January, while the southeast and the northeasterly are the southerly and the wind direction prevail in summer, especially in August. However, the wind direction is not as prevalent as in winter. Although there is no prevailing wind in spring (April) and autumn (October), the northeast and the southwesterly often blow into the east coast areas. Moreover, the wind direction can vary on a local scale with the geographical location of weather stations and its surrounding topography. Wind speed is generally much greater in coastal weather stations and its surrounding topography. Therefore, the wind speed is not as prevalent as in winter. Although there is no prevailing wind in spring (April) and autumn (October), the northeast and the southwesterly often blow into the east coast areas. Moreover, the wind direction can vary on a local scale with the geographical location of weather stations and its surrounding topography. Wind speed is generally much greater in coastal weather stations and its surrounding topography.
The annual mean sunshine duration is short in island areas such as Jeju (1,262.1 hrs), Ulleungdo (1,224.8 hrs), and Baengnyeongdo (1,261.9 hrs). On the other hand, the annual mean sunshine duration is long in the Yeongnam inland areas, the southeastern coastal areas, and the southcentral parts of the Taebaeksan. Uijeongbu (2,572.2 hrs) has the longest annual mean sunshine duration, followed by Yeoju (2,494.3 hrs), Busan (2,373.3 hrs), Dangju (2,360.1 hrs), and Anseong (2,358.4 hrs). In terms of amount of precipitation, Yeosu (1,377.6 mm) has the largest while Ganghwa (934.8 mm) has the lowest.

Annual mean cloud cover in Korea varies from 47% to 61%. Gunsan, Jeju, and Ulleungdo have the highest cloud cover with 61%, Busan, and Suncheon have a high cloud cover. Cheongsando and Ganghwa have the lowest cloud cover at 43%, followed by Jeongseong, Mungyeong, Yeonje, and Pohang. Annual mean relative humidity varies from 60.5% to 77.4%. The highest relative humidity appears in Jeongseon (77.4%), Seoul, Gunsan, and Jeonju, and Ulleungdo also have high relative humidity. The lowest relative humidity appears in Gyeonggi (63.4%), followed by Daejeon, Pohang, Gyeong, and Changwon.

Korea Meteorological Administration
Annual Mean Number of Frost Days and Ice Days (1981 – 2010)

The annual mean number of days with frost occurs in Chuncheon (111 days), followed by Suwon (98 days) and Seoul (97 days). The maximum annual mean number of days with frost occurs in Chuncheon (111 days), followed by Suwon (98 days) and Seoul (97 days). The annual mean number of days with ice occurs in Baengnyeongdo (0.6 days) while Ulleungdo has the fewest (3.4 days).

Annual Mean Number of Foggy Days and Asian Dust Days (1981 – 2010)

The annual mean number of foggy days decreases from the west coast (6.8 days), and so forth. The annual mean number of days with daily maximum and minimum temperature below 0˚C occurs in Daegwallyeong (56.7 days) while the fewest number of days is found in Daejeon (7.7 days) and Daegu (6.8 days).

Annual Mean Number of Days with Daily Maximum and Minimum Temperature below 0˚C (1981 – 2010)

The annual mean number of days with a maximum temperature above 30˚C occurs in Daegwallyeong (0.0 days) while the fewest number of days is found in Incheon, Daejeon, Jeonju, and Seogwipo (0.0 days).

The annual mean number of days with a minimum temperature below -10˚C and -12˚C occurs in Daegwallyeong (109.4 days) followed by Cheongju (95 days) and Seosan (94 days). The maximum annual mean number of days with daily maximum temperature above 30˚C is greater in inland areas than in coastal areas, and increases with altitude. Daegwallyeong (35.9 days) has the greatest number of days with a maximum temperature below 0˚C, while Pyongyang (9.3 days) has the lowest. Daegwallyeong (158.2 days) also experiences many snowfall days owing to its high elevation. The annual mean number of days with a minimum temperature below -10˚C and -12˚C occurs in Daegwallyeong (109.4 days) followed by Cheongju (95 days) and Seosan (94 days). The maximum annual mean number of days with daily maximum temperature above 30˚C is greater in inland areas than in coastal areas, and increases with altitude. Daegwallyeong (35.9 days) has the greatest number of days with a maximum temperature below 0˚C, while Pyongyang (9.3 days) has the lowest. Daegwallyeong (158.2 days) also experiences many snowfall days owing to its high elevation. Daegwallyeong (158.2 days) also experiences many snowfall days owing to its high elevation.
Extreme Climate Events

The highest 1-hour maximum precipitation on record was measured in Suncheon (204.6 mm) on August 9, 1998. This is attributed to localized heavy rain resulting from strong ascending air current brought by the combination of the North Pacific High and low pressure associated with the southerly on the windward side of Jeju. The second highest 1-hour maximum precipitation was recorded in Gwangyang (120.5 mm) on August 9, 1998. The highest daily maximum precipitation on record occurred in Gwangyang (67.9 mm) on August 3, 2002, in the aftermath of Typhoon Rusa, followed by Daegwallyeong (712.5 mm) on the same day. Jangheung (547.4 mm) on September 2, 1998, in the aftermath of Typhoon Agnes, and Pohang (516.4 mm) on September 30, 1998 due to Typhoon Nanmadol. The maximum consecutive 2-day and 5-day precipitation are used as extreme climate indices, representing intensity of precipitation. They are high in Daegwallyeong, Jeju Island, the Southern part of Gyeongsangbuk-do, including Ulleungdo, Ulleungdo, and north Gyeonggi-do, while they are low in Gyeongbuk-do, including Changwon, Jeonju, and Daejeon.


The annual mean precipitation intensity is a climate index indicating the severity of dryness. The annual mean precipitation intensity of consecutive dry days is small in Jeju, Daejeon, and Ulsan, while the number is large in inland and mountains central areas of Gyeongsangbuk-do, Gyeongsangnam-do (889.9 mm) has the longest average number of consecutive dry days, followed by Busan (484.4 days), whereas Ulleungdo (214.6 days) has the shortest average number of consecutive dry days. It is followed by Daejeon (22.7 days) and Jeonju (23.7 days). The annual mean number of days with new snowfall follows Incheon (5.3 days), followed by Seogwipo (4.6 days), Seoul (2.0 days) and Daegu (1.4 days). Seogwipo (2.7 days), followed by Daegwallyeong (1.5 days). The annual mean number of days with new snowfall is largest in Seogwipo (2.7 days), followed by Daegwallyeong (1.4 days) and Ulleungdo (1.4 days). The annual mean number of days with new snowfall is largest in Seogwipo (2.7 days), followed by Daegwallyeong (1.4 days) and Ulleungdo (1.4 days).
The first frost of the season occurs during October in most parts of the Korean Peninsula. However, some parts of the coastal areas and the southern region experience frost between November and December, with Jeju, the last in January. The last frost occurs during April in most places. In general, the later the first begins, the earlier the first stops freezing. For instance, the earliest days with the last frost occur around January 27 in Jeongeup, followed by Jeongeup (November 2), Seogwipo (October 2), Jeju (September 3), and Jeju Island (November 3). The latest first frost occurs in Jeongeup (January 30), followed by other southern regions. Tongyeong (January 3), Hongseong (February 11), and Changwon (February 17). In most areas, the last frost of the season is seen around March. The earliest days with last frost occurs in Geoje (February 14), Jeju (March 20). Tongyeong (February 23), and Changwon (February 27). While, Daegwallyeong experiences snow until April 17 on average.

The first day with maximum air temperature above 25˚C occurs on average around April. The maximum air temperature rises to over 25˚C first in Jeju Island (April 13), followed by Jeongeup and Jeongeup (April 14). The latest first occurrence of temperature greater than 25˚C occurs in Jeongeup (June 7) on average. It increases with proximity to inland areas while it decreases with elevation.

The last day of maximum air temperature above 25˚C, in the earliest last date occurs in Daegwallyeong (July 11) on average. Jeongeup (July 17), followed by Tongyeong (July 22). On the other hand, Jeju Island (August 26), sees the latest date with maximum air temperature above 25˚C, followed by Jeongeup (August 25). The last date of maximum air temperature above 25˚C, generally occurs earlier with increasing latitude and elevation. The regional differences in the first day with maximum air temperature exceeding 25˚C is higher than that in the first date with maximum air temperature above 25˚C. Jeju Island (July 15) experiences the earliest last date of maximum air temperature above 25˚C, followed by Tongyeong (July 22), and the northern inland areas. The latest first date with maximum air temperature greater than 25˚C occurs in Jeongeup (August 25), and Tongyeong (August 25). The last date of maximum air temperature above 25˚C generally occurs earlier with increasing latitude and elevation. The regional differences in the first day with maximum air temperature exceeding 25˚C is higher than that in the first date with maximum air temperature above 25˚C. Jeju Island (July 15) experiences the earliest last date of maximum air temperature above 25˚C, followed by Tongyeong (July 22), and the northern inland areas. The latest first date with maximum air temperature greater than 25˚C occurs in Jeongeup (August 25), followed by the northern inland areas such as Jeongeup (August 25), Tongyeong (July 22), and Jeju Island (July 28). The mean first date of maximum air temperature above 25˚C is earlier in coastal areas than in inland areas.

The last date of maximum air temperature above 25˚C occurs around September in most areas. The earliest first date occurs in Jeongeup (July 25), followed by Jeongeup (August 9) and Jeju Island (August 9, July 25). The latest date for a maximum air temperature greater than 25˚C occurs in Jeongeup (September 6), followed by the northern inland areas such as Jeongeup (August 15), Tongyeong (July 22), and Jeju Island (July 28). The mean first date of maximum air temperature above 25˚C is earlier in coastal areas than in inland areas.
The rate of change in annual mean temperature, 0.27°C/10 yrs, clearly shows a warming trend in Korea. On average, all the areas except Mungyeong have experienced a rise in annual mean temperature between 0.68°C and 0.77°C over 30 years. Cheongju and Seon have experienced the greatest increase in temperature, 0.59°C/10 yrs, followed by the Metropolitan areas than the national average rate of change. The highest rate of change in annual mean temperature occurs in Daejeon and Ieodo (0.59°C/10 yrs). Winter of 0.41°C/10 yrs has experienced the greatest increase in air temperature, while summer (0.1°C/10 yrs) has experienced the least temperature increase.

The rate of change in annual precipitation, 55.45 mm/10 yrs, represents an increasing trend in most areas. Seoul has seen the highest increasing rate of precipitation at 147.16 mm/10 yrs, while Gwangju has experienced a decreasing rate at -18.95 mm/10 yrs. Throughout all seasons, the summer has the highest rate of change 55.20 mm/10 yrs, and this trend is marking rise of annual precipitation. However, the rate of change in annual precipitation is quite low throughout the year except the summer. Also, the concentration rate of precipitation in the summer has increased as a response to rainfall variability in other seasons across large parts of the peninsula.
The rate of change in the annual average number of frost days is not statistically significant in most areas. The increasing trend for the annual average number of Asian dust days is prominent in most areas. The increasing trend for the annual average number of snowfall days is not statistically significant.

For instance, Gangneung has the highest decrease in Suwon (-18 days/10 yrs), and the central region. The annual average number of ice days is decreasing due to the increase of the annual mean temperature. Including Seoqwipo, Jeju, Pohang, Daegu, and Gwangju, the western coastal areas and the central region have shown larger increase in temperature than the southern region. For example, the 1st percentile minimum temperature in Yangpyeong shows the greatest increasing trend of 2.01˚C/10 yrs. The rate of change in the 99th percentile maximum temperature generally varies largely from -0.59˚C/10 yrs to 2.01˚C/10 yrs. The increasing trend in the 1st percentile minimum temperature is statistically significant at 38 observation stations including Yangpyeong, Seoqwipo, Jeju, Pohang, Daegu, and Gwangju. The western coastal areas and the central region have shown larger increase in temperature than the northern region. For example, the 1st percentile minimum temperature in Yangpyeong shows the greatest increasing trend of 2.01˚C/10 yrs.
According to the RCP 8.5 scenario, the increasing daily maximum temperature is smaller than that in the RCP 4.5 scenario. Since the magnitude of the increase in the late 21st century, the increasing trend for the annual mean temperature in the late 21st century is projected to be 16.7˚C, corresponding to the current average temperature in the southern coastal region. According to the RCP 4.5 scenario, the increasing trend in the early 21st century accelerates, the boundary of the subtropical climate region. As global warming grows, which is attributable to the increasing trend for the annual mean number of tropical nights increases. The annual mean number of tropical nights increases in the late 21st century projected in the RCP 4.5 and 8.5 scenarios, are expected to increase constantly. The annual mean number of tropical nights increases in the mid-21st century to the late 21st century. In the Representative Concentration Projection of the 21st Century Air Temperature and Precipitation over the Korean Peninsula under RCP Scenarios

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<td>South Korea (RCP 4.5)</td>
<td>7.7˚C</td>
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<tr>
<td>South Korea (RCP 8.5)</td>
<td>19.5˚C</td>
<td>23.4˚C</td>
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<td>Current Climate Value (1981 – 2010)</td>
<td>11.0˚C</td>
<td>14.0˚C</td>
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The annual mean temperature of the Korean Peninsula is expected to be more stable throughout the 21st century. In the Representative Concentration Pathways (RCPs), the increasing trend projects from the current mean temperature (11˚C) in the early 21st century to be similar to that in the RCP 8.5 Scenario. However, the increasing rate is expected to slow down during the mid-21st century. The annual mean temperature in the late 21st century is projected to be 16.7˚C in the RCP 8.5 scenario, corresponding to the current average temperature in the southern coastal region. According to the RCP 8.5 scenario, the magnitude of the increase in annual mean temperatures, are expected to increase constantly. In the Representative Concentration Projection of the 21st Century Air Temperature and Precipitation over the Korean Peninsula under RCP Scenarios

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<td>South Korea (RCP 4.5)</td>
<td>1.2˚C</td>
<td>2.2˚C</td>
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<td>South Korea (RCP 8.5)</td>
<td>4.2˚C</td>
<td>5.4˚C</td>
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<td>Current Climate Value (1981 – 2010)</td>
<td>-20.0˚C</td>
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The annual mean temperature of the Korean Peninsula is expected to be similar to the late 21st century. The annual mean precipitation for the Korean Peninsula is expected to increase along with the increasing trend for annual mean temperatures of the entire Peninsula. According to the RCP 4.5 scenario, the increasing trend in the early 21st century will have a rate similar to that of the RCP 8.5 scenario, but it will slow down over time. The annual mean temperature in the late 21st century is projected to be 16.7˚C, corresponding to the current average temperature of the southern coastal tip of Jejudo. The annual mean precipitation for Jejudo in the late 21st century is expected to be 16.6˚C, which is attributable to the increasing trend for the annual mean number of tropical nights increases. The number of heavy precipitation events is likely to accelerate. The number of heavy precipitation events is likely to accelerate. The number of heavy precipitation events is likely to accelerate.
International Cooperation

International Cooperation on Climate

Korea carries out multilateral cooperation through international organizations including the World Meteorological Organization (WMO), UNIDO, and others. In 1990, the KMA has cooperated with the WMO in a number of areas, including climate change. In 1994, a memorandum of understanding (MOU) on bilateral cooperation in the field of meteorology was concluded by the KMA and the WMO, which makes Korea one of 68 countries to participate in the WMO. In 2006, the KMA and the WMO signed a bilateral cooperation agreement on the establishment of an international cooperation forum for meteorology. The forum, consisting of 68 countries, has been meeting every year to discuss various issues related to meteorology.

Another noticeable accomplishment is the establishment of a WMO Regional Training Center (RTC) at the Korea Meteorological Administration (KMA). The RTC is located in Seoul and is the 68th country to establish such a center. The RTC provides training courses for meteorological trainees from all over the world. As of 2016, the percentage of Korea's meteorological brands and domestic meteorological enterprises that utilize numerical forecasting has increased to 20.1%, which ranks Korea as 13th among member countries.

In 1994, a memorandum of understanding (MOU) on bilateral cooperation in the field of meteorology was concluded by the KMA and the WMO. The MOU is a framework agreement for cooperation in the field of meteorology. It is signed by two countries and sets out the principles and objectives of cooperation. The MOU covers a wide range of topics, including meteorological research, education, and training.

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