

Hottest May in Hong Kong

Due to the stronger than usual subtropical ridge over southern China, May 2021 was the hottest May in Hong Kong on record. The monthly mean temperature of 29.0 degrees and the monthly mean minimum temperature of 27.0 degrees were 2.7 degrees and 2.5 degrees above their corresponding normal figures (or 3.1 degrees and 2.9 degrees above their corresponding 1981-2010 normal figures), making both the highest on record for May. The mean maximum temperature of 32.1 degrees was 3.3 degrees above the normal figure (or 3.7 degrees above the 1981-2010 normal figure), making it the second highest on record for May. Together with the exceptionally warm weather in March and April 2021, Hong Kong experienced the warmest spring on record from March to May 2021. The mean temperature of 25.0 degrees, the mean minimum temperature of 23.2 degrees and the mean maximum temperature of 28.0 degrees from March to May 2021 were all the highest on record for the same period. There were 14 hot nights in the month, the highest number on record for May. The six consecutive hot nights that started from May 16 also set a record in terms of the number of consecutive hot nights for May. The month was much drier than usual with a total rainfall of only 65.0 millimetres, about 22 per cent of the normal of 290.6mm (or about 21 per cent of the 1981-2010 normal of 304.7mm). The accumulated rainfall recorded in the first five months of the year was 163.1mm, a decrease of about 72 per cent compared to the corresponding normal of 590.9mm (or about 75 per cent below the 1981-2010 normal of 640.8mm), making it the second lowest on record for the same period.

After a generally fine day on May 1, an upper-air disturbance brought a few showers and isolated thunderstorms to Hong Kong the next day. With the strengthening of an easterly airstream, local weather was mainly cloudy with a few showers on May 3. Affected by a southerly airstream, the weather became hot with sunny periods during the day on May 4. A thundery rainband associated with a trough of low pressure moved across the coastal areas of Guangdong that night and brought heavy showers and thunderstorms to Hong Kong. More than 30mm of rainfall were recorded over many places of the territory. The temperature recorded at the Hong Kong Observatory dropped to a minimum of 23.1 degrees under the rain, the lowest of the month.

With the departure of the trough of low pressure, weather improved during the day on May 5 with sunny periods. An easterly airstream picked up that night and local weather turned cloudy with a few rain patches. With the moderation of the easterly airstream and the thinning out of the cloud band over the coast of Guangdong, the weather of Hong Kong became generally fine during the day on May 6. Dominated by an anticyclone aloft, local weather remained generally fine and hot from May 7 to 10. Under the influence of a southerly airstream, the weather of Hong Kong was hot with sunny periods apart from some showers from May 11 to 14. There were also isolated thunderstorms from May 13 to 14. Showers were particularly heavy on the morning of May 14. More than 10mm of rainfall were recorded over many places in the western part of the territory, and rainfall even exceeded 70mm over

Tuen Mun District.

Under the influence of the subtropical ridge, it was sunny and very hot in Hong Kong from May 15 to 16. Affected by a southerly airstream and an anticyclone aloft, apart from a few showers, fine and very hot weather persisted from May 17 to 23. The daily minimum temperature of 28.8 degrees on May 19 was the highest on record for the Buddha's Birthday. The daily minimum temperature on May 21 was 29.5 degrees, the highest on record for May. With plenty of sunshine, the temperature recorded at the Hong Kong Observatory soared to a maximum of 36.1 degrees on the afternoon of May 23, the highest of the month, breaking the record of the highest maximum temperature for May. The daily mean temperature of 31.4 degrees on that day was also the highest on record for May. Moreover, a waterspout was reported near Lamma Island on the morning of May 20.

Affected by a trough of low pressure, the weather of Hong Kong became unsettled with more showers and thunderstorms from May 24 to 25. Showers were heavier in some areas of the territory on the morning of May 25. More than 70mm of rainfall were recorded over the northern part of the New Territories and Sai Kung. Under the influence of the anticyclone aloft over the northern part of the South China Sea, apart from isolated thunderstorms and a few showers on May 26, local weather turned generally fine and very hot again from May 26 to 28. Affected by a trough of low pressure over the coastal area of southern China, local weather turned cloudier with a few showers towards the end of the month. The weather of Hong Kong was more showery with a few thunderstorms on May 31. More than 10mm of rainfall were recorded over many places on that day.

Two tropical cyclones occurred over the South China Sea and the western North Pacific in May 2021.

Details of the issuance and cancellation of various warnings/signals in May are summarised in Table 1. Monthly meteorological figures and departures from normal for May are tabulated in Table 2.