

A mild December

With the northeast monsoon over southern China weaker than normal for most of the time in the month, December 2019 was much warmer than usual in Hong Kong. The monthly mean maximum temperature was 21.9 degrees, 1.7 degrees above the normal figure of 20.2 degrees and the joint fourth highest on record for December. The monthly mean temperature of 19.1 degrees was 1.2 degrees above the normal figure of 17.9 degrees. Moreover, 2019 was an extremely warm year in Hong Kong. The annual mean temperature of 24.5 degrees, annual mean maximum temperature of 27.1 degrees and annual mean minimum temperature of 22.6 degrees were all the highest since records began in 1884. The month was drier than usual with a total rainfall of 13.5 millimetres, about 50 per cent below the normal figure of 26.8 millimetres. The annual total rainfall in 2019 was 2396.2 millimetres, near the annual normal figure of 2398.5 millimetres.

Affected by the northeast monsoon over southern China, it was fine and dry in Hong Kong on the first day of the month. With the arrival of an intense replenishment of the northeast monsoon that night, winds strengthened from the north and local weather became appreciably cooler and very dry from December 2 to 4. Meanwhile, Tropical Cyclone Kammuri moved across the central part of the South China Sea and weakened gradually from December 4 to 5. Under the combined effect of the northeast monsoon over the coast of Guangdong and the rain-bearing cloud band associated with Kammuri, local weather became windy with a few rain patches on December 5. With rain patches overnight, temperatures at the Hong Kong Observatory fell to 12.7 degrees on the morning of December 6, the lowest of the month. As the clouds covering the coast of Guangdong thinned out gradually during the day, the weather in Hong Kong turned fine and very dry again on December 6. Dominated by the dry northeast monsoon, apart from some cloudy interludes on December 12 and 13, local weather remained generally fine and dry until December 14.

Under the influence of a relatively warm and humid easterly airstream, the weather in Hong Kong became mainly cloudy on December 15 and 16. With the clouds thinning out gradually, it was warm with sunny periods during the day on December 17 and 18. The maximum temperature at the Hong Kong Observatory rose to 27.3 degrees on the afternoon of December 18, the highest of the month.

With the northeast monsoon arriving at the coast of Guangdong later on December 18, the weather in Hong Kong became mainly cloudy and cooler with a few rain patches from December 19 to 21. While sunny intervals emerged gradually on December 22 and 23, the visibility was rather low in many areas. With the northeast monsoon moderating gradually, the weather turned generally fine and warm from December 24 to 26. A cold front formed over central China and moved across the coast of Guangdong on the evening of December 26. Affected by the intense northeast monsoon behind the cold front, local weather became windy and fine with cool mornings on December 27 and 28.

Typhoon Phanfone moved across the Philippines on Christmas day and tracked northwestwards entering the central part of the South China Sea on the next two days. Affected by the dry northeast monsoon, Phanfone weakened rapidly on December 28 and eventually became an area of low pressure over the waters off the coast of central Vietnam on December 29. Under the combined effect of the northeast monsoon and the outer rainbands associated with the remnants of Phanfone, local weather became cloudy with rain on December 29. The weather remained cloudy with a few rain patches and rather low visibility on December 30. With a replenishment of the northeast monsoon reaching southern China, it was windy with a few light rain patches on the last day of the month.

Two tropical cyclones occurred over the South China Sea and the western North Pacific in December 2019.

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