An unseasonably warm and dry March

With the northeast monsoon over southern China being generally weaker than normal for most of the time in the month, March 2020 was much warmer than usual in Hong Kong. The monthly mean temperature of 21.3 degrees and the mean minimum temperature of 19.7 degrees were 2.2 degrees and 2.5 degrees above their corresponding normal figures respectively. Both were the joint second highest on record for March. The monthly mean maximum temperature was 23.8 degrees, 2.4 degrees above the normal figure and the fifth highest on record for March. The month was drier than usual with a total rainfall of 41.3 millimetres, about half of the normal figure of 82.2 millimetres. The accumulated rainfall recorded in the first three months of the year was 135.9 millimetres, about 16 per cent below the normal figure of 161.3 millimetres for the same period.

Under the influence of a maritime airstream, the weather of Hong Kong was sunny and warm with relatively low visibility on March 1. With the setting in of a fresh to strong easterly airstream over the coast of Guangdong, the weather became slightly cooler and cloudier with some rain patches in the next two days. A cold front over southern China moved across the coastal areas of Guangdong in the afternoon on March 4, bringing more rain to Hong Kong. With the strengthening of the northeast monsoon, the weather became cooler. The temperature at the Hong Kong Observatory fell to a minimum of 16.5 degrees on March 5, the lowest of the month. This is the highest monthly absolute minimum temperature on record for March.

Affected by a warm and humid maritime airstream over the coast of Guangdong, the weather in Hong Kong became warm and foggy from March 7 to 9. The visibility at Waglan Island fell to around 100 metres on March 8 and 9. A cold front moved across the south China coast in the small hours of March 10. Under the influence of the dry northerly winds, local weather became dry with sunny periods during the day. With the setting in of a cloud band, the weather turned cloudy and cooler with a few rain patches on March 11 and 12.

A warm and humid maritime airstream brought foggy weather to Hong Kong on March 13 and the visibility at Waglan Island once fell below 100 metres. A trough of low pressure moved across the south China coastal areas and brought some showers to Hong Kong in the morning on March 14. Under the influence of a relatively dry northeast monsoon, local weather became dry with sunny periods during the day and the weather remained so in the next two days. With the moderation of the northeast monsoon, the weather of Hong Kong turned mainly cloudy on March 17.

Another trough of low pressure lingering over Guangdong brought showers and thunderstorms to Hong Kong on March 18, with 10 to 20 millimetres of rainfall recorded over most parts of the territory. Under the influence of a maritime airstream, the weather was humid and misty in the next few days. With plenty of sunshine on March 22 and 23, the maximum temperature at the Hong Kong Observatory soared to 28.5 degrees on both days, the highest of the

month.

The weather was rather warm with sunny periods and a few showers on March 24 and 25. An upper air disturbance brought a few thundery showers in the morning on March 26. As the showers subsided, there were sunny intervals in the afternoon and the next day. A cold front moved across the south China coastal areas in the morning on March 28 and brought thundery showers to the territory. Affected by a northeast monsoon, local weather was windy and slightly cooler with a few rain patches in the next two days. It was humid with some rain patches and coastal fog on the last day of the month. The visibility at Waglan Island stayed around 100 metres in the afternoon.

There was no tropical cyclone over the South China Sea and the western North Pacific in March 2020.

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