## A gloomy and cooler May

With more than usual moisture content in the lower atmosphere over southern China, May 2019 was gloomier than usual in Hong Kong. The mean amount of cloud in this month was 83 per cent, 7 percentage points above the normal figure of 76 per cent. The duration of bright sunshine in the month was only 83.1 hours, about 41 per cent lower than the normal figure of 140.4 hours and the second lowest on record for May. With less sunshine and the prevalence of the cooler easterlies in early May, the monthly mean temperature was 25.3 degrees, 0.6 degrees below the normal figure of 25.9 degrees. Although the month was cooler than normal, the spring of Hong Kong in 2019 was still much warmer than usual due to the well above normal temperatures in March and April. The mean temperature from March to May was 23.7 degrees, 1.2 degrees above the normal figure and the fifth highest on record for the same period. The monthly rainfall was 234.6 millimetres, about 23 per cent below the normal figure of 304.7 millimetres. The accumulated rainfall recorded in the first five months of the year was 680.3 millimetres, about 6 per cent above the normal figure of 640.8 millimetres for the same period.

With the thinning out of the cloud band covering the coast of Guangdong, the weather in Hong Kong was mainly cloudy with sunny intervals during the day on May 1. The weather became relatively cooler from May 2 to 8 under the showery weather and the influence of a fresh to strong easterly airstream. The weather turned more unsettled with heavy showers and squally thunderstorms on May 7 and 8 due to the passage of an upper-air disturbance over southern China. Over 40 millimetres of rainfall was recorded over parts of the territory on these two days. The temperature at the Hong Kong Observatory dropped to a minimum of 18.9 degrees on May 7, the lowest of the month.

With the departure of the upper-air disturbance, showers lessened with sunny intervals and rising temperatures on May 9 and 10. Under the influence of a drier easterly airstream, local weather became generally fine and hot on May 11 and 12. After a cloudy interlude on May 13, apart from a few isolated showers, it was hot with sunny periods from May 14 to 19 under the prevalence of the southwesterlies. There were also fog patches from May 14 to 16. With plenty of sunshine, the maximum temperature at the Hong Kong Observatory soared to 32.3 degrees in the afternoon on May 18 and 19, the highest of the month. The daily minimum temperature of 29.2 degrees recorded on May 19 at the Hong Kong Observatory was the highest on record for May.

Under the influence of a trough of low pressure lingering over the south China coast, the weather in Hong Kong deteriorated again with occasional heavy showers and squally thunderstorms from May 20 to 23. Affected by an easterly airstream over the coast of Guangdong, it was mainly cloudy with some showers on May 24 and 25.

With an unstable southerly airstream replacing the easterly airstream

over the coast of Guangdong, there were heavy showers and squally thunderstorms in Hong Kong on May 26. Around 20 millimetres of rainfall was recorded over most parts of the territory on that day and the rainfall over the western part of the New Territories even exceeded 40 millimetres. Unsettled weather associated with a trough of low pressure over the coastal areas of Guangdong affected the region on May 27 and 28. Locally, outbreaks of heavy showers and squally thunderstorms brought more than 60 millimetres of rainfall to most parts of the territory on these two days. Rainfall even exceeded 120 millimetres over Tuen Mun, Yuen Long and Lantau Island. With the trough of low pressure lingering over the coastal areas of Guangdong, the weather in Hong Kong remained showery with isolated thunderstorms on the last three days of the month.

There was no tropical cyclone over the South China Sea and the western North Pacific in May 2019.

Details of 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.