

A hot and cloudier June

June 2024 was characterised by generally cloudier and showery weather during the first half of the month. With the subtropical ridge over the western North Pacific extending westwards and covering southeastern China, local weather became generally fine with high temperatures in the second half of the month, including nine consecutive very hot days from June 20 to 28, one of the longest on record for June. Overall, the month was cloudier than usual. The mean amount of cloud in the month was 86 per cent, 9 per cent above the normal of 77 per cent. The duration of bright sunshine in the month was 116.3 hours, about 19 per cent below the normal figure of 144.3 hours. The month was also hotter than usual with the mean temperature of 28.8 degrees, 0.5 degrees above the normal of 28.3 degrees. With five out of the six months warmer than usual, the first half of 2024 was abnormally warm. The mean minimum temperature of 21.4 degrees, the mean temperature of 23.3 degrees and the mean maximum temperature of 25.8 degrees were respectively the highest, one of the highest and the second highest on record for the same period. Despite the generally cloudier and showery conditions for the first half of June, the monthly rainfall was 281.3 millimetres, about 43 per cent below the normal of 491.5 millimetres in June. The accumulated rainfall recorded in the first six months of the year was 863.4 millimetres, about 20 per cent below the normal figure of 1 082.5 millimetres for the same period.

Tropical storm Maliksi made landfall over Yangjiang, Guangdong, on the early morning of June 1. It then moved across inland Guangdong and weakened progressively into an area of low pressure in the evening. The outer rainbands of Maliksi brought heavy squally showers to Hong Kong on June 1. More than 30 millimetres of rainfall were generally recorded over the territory and rainfall even exceeded 80 millimetres over Tsuen Wan and Sha Tin. Affected by a southwesterly airstream, there were sunny periods and a few showers on June 2.

A trough of low pressure lingering over the northwestern part of the South China Sea brought a few showers to Hong Kong from June 3 to 7. It was also windier on June 3 and 4 under the influence of a strong easterly airstream. Under the rain, temperatures at the Observatory dropped to a minimum of 22.9 degrees on June 4, the lowest of the month. With the trough of low pressure edging closer to the Pearl River Estuary, the showers over Hong Kong became heavier with a few thunderstorms on June 8 and 9. More than 50 millimetres of rainfall were generally recorded over most parts of the territory, and rainfall even exceeded 100 millimetres over parts of Kwai Tsing, Tsuen Wan and Sai Kung Districts on these two days.

Under the influence of a southerly airstream, the weather of Hong Kong was a mixture of sunny intervals, showers and thunderstorms from June 10 to 13. There were heavy showers over Tsuen Wan and Kwai Tsing Districts on the morning of June 11 and more than 70 millimetres of rainfall were recorded over these districts. With the settling in of an active southwest monsoon, the weather deteriorated with heavy rain episodes from June 14 to 16. More

than 80 millimetres of rainfall were generally recorded over most parts of the territory, and rainfall even exceeded 200 millimetres over parts of North, Tai Po and Tsuen Wan Districts on these three days. The heavy rain on June 14 necessitated the issuance of the Red Rainstorm Warning. More than 4 000 strokes of cloud-to-ground lightning were recorded within Hong Kong on that day. The Observatory issued the Amber Rainstorm Warning three times on June 15. Violent gusts exceeding 110 kilometres per hour were once recorded at Lau Fau Shan in that afternoon.

With the subtropical ridge over the western North Pacific gradually extending westwards, the weather improved from June 17 to 19 with sunny intervals. Meanwhile, there were still a few showers and isolated thunderstorms over Hong Kong under the influence of a southerly airstream. Under the dominance of a subtropical ridge, apart from a few showers and isolated thunderstorms, local weather was very hot with sunny periods during the day from June 20 to 28. The daily maximum temperature of 34.0 degrees and daily mean temperature of 30.8 degrees on June 21 were both one of the highest on record for the Summer Solstice. Moreover, the daily minimum temperature of 29.5 degrees on June 22 was one of the highest on record for June. With plenty of sunshine, the temperatures at the Observatory rose to a maximum of 34.4 degrees on the afternoon of June 27, the highest of the month. A waterspout was also spotted over the seas west of Hong Kong Island on the afternoon of June 28. Affected by the tropical disturbance over the northeastern part of the South China Sea and the subsequent southwesterly airstream, local weather was a mixture of sunny intervals, showers and squally thunderstorms on the last two days of the month. The showers were particularly heavy over parts of Tsuen Wan and Sai Kung Districts, with more than 60 millimetres of rainfall recorded on these two days.

One tropical cyclone occurred over the South China Sea and the western North Pacific in June 2024.

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