

## A wet August

â€‹Mainly attributable to the rainfall associated with the tropical cyclone activity over the northern part of the South China Sea, August 2022 was wetter than usual, with the monthly rainfall being 614.8 millimetres, about 36 per cent more than the normal figure of 453.2mm. The accumulated rainfall recorded in the first eight months of the year was 1 827.8mm, about 5 percent below the normal figure of 1 921.5mm for the same period. The monthly mean temperature of 28.8 degrees was near the normal figure of 28.7 degrees. Owing to the record-breaking high temperature weather in July 2022, the summer of this year from June to August was much hotter than usual. The mean temperature of 29.2 degrees was one of the fourth highest on record for the same period.

Under the influence of an anticyclone aloft, the weather of Hong Kong was fine and very hot on the first day of the month. With plenty of sunshine, the maximum temperature at the Observatory soared to 35.7 degrees in the afternoon, the highest of the month. While it was mainly fine and very hot during the day on August 2, convective activities triggered by high temperatures brought thundery showers to the territory in the evening. Meanwhile, an area of low pressure over the northeastern part of the South China Sea developed into a tropical depression on the night of August 3. It moved generally west-northwestwards towards the east of the Pearl River Estuary. The tropical depression made landfall over the coast of Huidong and weakened into an area of low pressure over inland Guangdong on the afternoon of August 4. Affected by the tropical depression and its remnant low pressure area, local weather was mainly cloudy with occasional heavy showers and squally thunderstorms from August 3 to 5. More than 100mm of rainfall were generally recorded over Hong Kong on these three days, and rainfall even exceeded 200mm over the eastern part of the territory. Under the rain, the temperature at the Observatory dropped to 24.5 degrees on August 5, the lowest of the month.

With the strengthening of the anticyclone aloft, showers abated gradually with sunny intervals on August 6. Apart from isolated showers and squally thunderstorms, the weather was generally fine the next day. Affected by an area of low pressure over the central part of the South China Sea, local weather turned mainly cloudy with occasional showers and squally thunderstorms on August 8. The area of low pressure developed gradually into a tropical depression on the early morning of August 9 and was later named Mulan. It moved generally northwards and intensified into a tropical storm during daytime that day. It turned to move northwestwards afterwards. After skirting past the northeastern part of Hainan Island and southern tip of Leizhou Peninsula, Mulan entered Beibu Wan on the night of August 10. It made landfall over the northern part of Vietnam and weakened into an area of low pressure inland on August 11. Affected by Mulan, it was windy in Hong Kong on August 9 and 10. The outer rainbands of Mulan also brought occasional heavy showers, violent gusts and thunderstorms to the territory on these two days. More than 100mm of rainfall were generally recorded over Hong Kong from

August 9 to 10, and the rainfall even exceeded 200mm over parts of Lantau Island.

Under the influence of a broad trough of low pressure, local weather remained mainly cloudy with showers and a few squally thunderstorms on August 11 and 12. The showers were heavier on the morning of August 12. More than 50mm of rainfall were generally recorded over the territory and rainfall even exceeded 70mm over parts of Hong Kong Island, Kowloon and the northeastern part of the New Territories. Affected by an anticyclone aloft, there were sunny periods, isolated showers and thunderstorms on August 13. Apart from a few isolated showers, the weather turned generally fine and very hot on August 14 and 15.

Affected by an area of low pressure over the northeastern part of the South China Sea and the subsequent broad trough of low pressure, the weather of Hong Kong was a mixture of sunshine, showers and thunderstorms from August 16 to 20. Showers were heavier on August 17 with more than 70mm of rainfall recorded over parts of the New Territories. With an anticyclone aloft gradually covering southeastern China, local weather became mainly fine and very hot during the day on August 21 and remained so during the following two days.

Meanwhile, the area of low pressure over the seas east of Luzon developed into a tropical depression on August 21 and was later named Ma-on. It gradually intensified into a severe tropical storm on the morning of August 23 and moved across the northern part of Luzon. Ma-on entered the northeastern part of the South China Sea on that night and tracked generally northwestwards across the South China Sea towards the coast of western Guangdong on August 24. It made landfall near Maoming and then weakened into a tropical storm the next morning. Ma-on moved across Guangdong and Guangxi, and weakened into an area of low pressure over Indochina Peninsula on August 26.

Under the influence of the subsiding air ahead of Ma-on, the weather of Hong Kong was mainly fine and very hot at first on August 24. With Ma-on edging closer, the weather became cloudy with winds strengthening significantly later that day. The Observatory issued the second No. 8 Gale or Storm Signal this year on that night. Strong to gale force winds generally affected the territory on the night of August 24 and at first on August 25, with occasional storm-force winds offshore and on high ground. With Ma-on departing from Hong Kong and weakening gradually inland, local winds moderated quickly during the day on August 25. The outer rainbands of Ma-on also brought occasional heavy squally showers to Hong Kong that day. More than 50mm of rainfall were recorded over many places.

Affected by an anticyclone aloft, apart from isolated showers, it was generally fine and very hot from August 26 to 28. Under light wind conditions, there were sunny periods and thundery showers triggered by high temperatures over parts of the territory on the last three days of the month.

Seven tropical cyclones occurred over the South China Sea and the western North Pacific in August 2022.

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