

A hot August

Due to the warmer than normal sea surface temperature over the northern part of the South China Sea, August 2020 was hotter than usual in Hong Kong. The monthly mean temperature of 29.0 degrees was 0.4 degrees above the normal figure of 28.6 degrees. Together with the extremely hot weather in June and July, Hong Kong experienced the hottest summer on record from June to August 2020. The mean temperature of 29.6 degrees, the mean minimum temperature of 27.7 degrees and the mean maximum temperature of 32.6 degrees from June to August 2020 were all the highest on record for the same period. There were 16 very hot days in August 2020, the highest number on record for August. Moreover, up to August, the number of very hot days this year has already reached 43, which is 32.8 days above the annual normal, breaking the previous highest record of 38 days set in 2016. The number of hot nights up to August 2020 is 46, which is on par with the highest record in 2019. The monthly rainfall was 448.4 millimetres, about 4 per cent above the normal figure of 432.2mm. The accumulated rainfall recorded in the first eight months of the year was 1 537.2mm, about 19 per cent below the normal figure of 1 905.5mm for the same period.

Tropical depression Sinlaku over the northern part of the South China Sea moved generally west-northwestward and skirted past the southern coast of Hainan Island on August 1. Sinlaku made landfall over the northern part of Vietnam and weakened gradually into an area of low pressure over inland the next day. Affected by Sinlaku, it was windy in Hong Kong on August 1. The outer rainbands of Sinlaku also brought occasional heavy squally showers to the territory from August 1 to 2. More than 50mm of rainfall were generally recorded over Hong Kong on these two days and the rainfall even exceeded 90mm in the northern part of the New Territories.

Under the influence of a broad trough of low pressure, local weather remained unsettled with occasional heavy showers on August 3. More than 30mm of rainfall were recorded over Kowloon and the eastern part of Hong Kong Island, and the rainfall even exceeded 70mm over Tuen Mun. With the weakening of the broad trough of low pressure, there were fewer showers, with sunny intervals on August 4. An active southerly airstream brought more showers and thunderstorms to Hong Kong again on August 5. Showers were heavy in the morning and during night time. More than 50mm of rainfall were recorded over most parts of the territory, and the rainfall even exceeded 100mm over Tai Po and Sha Tin on that day. Under the rain, the temperature at the Hong Kong Observatory dropped to a minimum of 24.9 degrees on the night of August 5, the lowest of the month.

With the establishment of a subtropical ridge and the subsequent anticyclone aloft, apart from a few showers, the weather of Hong Kong became generally fine and very hot from August 6 to 10. With plenty of sunshine, the maximum temperature at the Hong Kong Observatory soared to 34.4 degrees on August 8, the highest of the month. With the setting in of a southerly airstream, showers became more frequent with a few thunderstorms from August

11 to 13. The showers were heavier on August 12 with more than 20mm of rainfall over most parts of the territory.

Under the influence of an anticyclone aloft, apart from a few showers and isolated thunderstorms, it was generally fine and very hot in Hong Kong from August 14 to 16. The high temperature also triggered isolated heavy thundery showers over the western part of the New Territories on August 16. Local weather was a mixture of sunshine, a few showers and thunderstorms on August 17.

Meanwhile, an area of low pressure gradually developed into a tropical depression over the northeastern part of the South China Sea in the small hours of August 18 and was later named as Higos. It moved generally northwestward across the northern part of the South China Sea during the day and intensified rapidly on its course towards the coast of Guangdong. Higos made landfall over Zhuhai of Guangdong Province with typhoon strength on the early morning of August 19 and weakened gradually into an area of low pressure over inland that night.

The strike of Higos necessitated the issuance of the Gale or Storm Signal No. 8 on the night of August 18 and the Increasing Gale or Storm Signal No. 9 in the small hours of August 19. As Higos strengthened on August 18, winds became much stronger locally on that night and on the early morning of August 19, with storm force winds at offshore and hurricane force winds on high ground. Heavy squally showers and thunderstorms associated with the rainbands of Higos also brought more than 100mm of rainfall to most parts of the territory and the rainfall even exceeded 200mm over parts of Hong Kong Island in these two days. In the midst of the downpour, the temperature at the Hong Kong Observatory dropped to the month's lowest of 24.9 degrees again on the morning of August 19.

Affected by an anticyclone aloft, apart from some isolated showers, the weather of Hong Kong turned generally fine and very hot from August 20 to 25. Under the influence of an upper-air disturbance, local weather became cloudier with more showers and thunderstorms later on August 26 and August 27. With the departure of the upper-air disturbance and under the influence of a continental airstream, apart from isolated showers, the weather turned generally fine and very hot again towards the end of the month.

Eight tropical cyclones occurred over the South China Sea and the western North Pacific in August 2020.

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.