

A March with record-breaking high temperature

While the weather of Hong Kong was cold in early March, with the northeast monsoon over the south China coast much weaker than normal in the second half of the month, March 2024 was overall much warmer than usual in Hong Kong. The monthly mean maximum temperature of 23.9 degrees, monthly mean temperature of 21.1 degrees and monthly mean minimum temperature of 19.1 degrees were 2.0 degrees, 1.6 degrees and 1.5 degrees above their corresponding normals and respectively one of the sixth, the eighth and one of the eighth highest on record for March. Moreover, the maximum temperature recorded at the Observatory reached a record high of 31.5 degrees on March 24, easily breaking the previous record for March set way back in 1973. The month was also drier than usual with a total rainfall of 21.6 millimetres, about 29 per cent of the normal figure of 75.3 millimetres. The accumulated rainfall recorded in the first three months of the year was 32.4 millimetres, about 78 per cent below the normal figure of 147.4 millimetres for the same period.

Under the influence of the northeast monsoon and with a broad band of clouds covering Guangdong, the weather of Hong Kong was cold and mainly cloudy with a few rain patches on the first two days of the month. The temperatures at the Observatory fell to a minimum of 9.6 degrees on the morning of March 2, the lowest of the month. While it was mainly cloudy with a few light rain patches on March 3, the weather turned brighter in that afternoon.

Affected by a humid southerly airstream, the weather was mainly cloudy and misty with a few rain patches and rising temperatures on March 4 and 5. The visibility in the harbour once fell to about 1 000 metres on the morning of March 5. With sunny intervals, it was also rather warm during the day on that day. Under light wind conditions, it was mainly cloudy and foggy with a few rain patches at first on March 6. The visibility at Waglan Island once fell to around 100 metres. With the arrival of the northeast monsoon and a broad band of clouds covering the coast of Guangdong, local weather turned cooler with a few rain patches on that afternoon and remained so on the next day. The weather improved with sunny periods during the day on March 8.

Under the influence of a replenishment of the strong northeast monsoon and a band of clouds covering the coast of Guangdong, local weather turned cloudy and cooler with a few rain patches on March 9 and 10. Affected by upper-air disturbances, it was cloudy with showers on March 11. More than 10 millimetres of rainfall were recorded over many places of the territory. With the departure of the upper-air disturbances and affected by a continental airstream, the weather turned fine that night and the next day. It was mainly fine at first on March 13 and turned mainly cloudy during the day when a fresh to strong easterly airstream arrived. The weather of Hong Kong remained mainly cloudy in the next two days.

With the easterly airstream affecting the coast of Guangdong gradually replaced by a humid maritime airstream, local weather turned misty with a few light rain patches on March 16. It was mainly cloudy and foggy with a few rain patches on March 17 and 18. The visibility in the harbour once fell below 1 000 metres on the morning of March 17 and it was rather warm with sunny periods during the day that day. A cold front moved across the coastal areas of Guangdong on the morning of March 19. Locally, while it was mainly cloudy with a few rain patches in the morning, under the influence of the associated dry northeast monsoon, the weather turned mainly fine and dry on that afternoon and remained so on the next two days.

With the northeast monsoon affecting the coast of Guangdong gradually replaced by a warm and humid southerly airstream, local weather was mainly cloudy with a few rain patches in the morning and became warm with sunny periods during the day on March 22. Under the influence of the southerly airstream, it was hot with sunny periods during the day on March 23 to 26. With plenty of sunshine, the temperatures at the Observatory soared to a maximum of 31.5 degrees on the afternoon of March 24, the highest of the month and also the highest maximum temperature for March on record. The visibility over parts of the territory was also low on the mornings of March 24 to 26. The visibility at Waglan Island once fell below 500 metres on the morning of March 25. Affected by a fresh easterly airstream, the weather turned cooler and cloudier with a few light rain patches on March 27. Under light wind conditions and the subsequent southerly airstream, it was mainly cloudy with a few showers and local temperatures recovered again on the last four days of the month. It was hot during the day on March 29 to 31. The daily mean temperature of 27.1 degrees and daily minimum temperature of 26.0 degrees on March 31 were both the highest on record for March. The visibility over parts of the territory was also low on the mornings of March 29 and 30. The visibility at Waglan Island once fell below 1 000 metres on the morning of March 30.

There was no tropical cyclone over the South China Sea and the western North Pacific in March 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 March are tabulated in Table 2.