

Director of Hong Kong Observatory highlights Observatory's latest developments (with photos)

The Director of the Hong Kong Observatory (HKO), Dr Cheng Cho-ming, hosted a press briefing today (March 23) to recap the weather in 2019 and elaborate on the weather outlook for Hong Kong this year as well as the HKO's latest developments.

Dr Cheng pointed out that the World Meteorological Organization had confirmed 2019 as being the second warmest year on record globally, with the five years from 2015 to 2019 being the five warmest on record.

Locally, with the annual mean temperature reaching 24.5 degrees, 2019 was the warmest year since records began in 1884. In particular, the autumn from September to November 2019 was the warmest on record, with the mean temperature reaching 26.1 degrees. There were 46 Hot Nights (with a daily minimum temperature at 28.0 degrees or above) and 33 Very Hot Days, marking the highest and the fourth highest on record respectively. In contrast, there was only one Cold Day (with a daily minimum temperature at 12.0 degrees or below) last year, the smallest annual number of Cold Days since records began in 1884. The winter from December 2019 to February 2020 was exceptionally warm in Hong Kong because there was relatively lesser cold air reaching the South China coast from the north. The mean maximum temperature of the whole winter was 21.5 degrees, the highest on record for the same period. The mean temperature of 18.7 degrees and the mean minimum temperature of 16.8 degrees were both the second highest on record for the same period. Dr Cheng emphasised that the persistent trend of climate change warrants serious attention from the public.

On the annual weather outlook for Hong Kong in 2020, the HKO predicted that the tropical cyclone season may start in or after June in Hong Kong this year. It is expected that there will be four to seven tropical cyclones coming within 500 kilometres of Hong Kong this year, which is normal. Under the effect of global warming, the annual mean temperature this year is expected to be above normal, with a high chance of reaching the warmest top 10 on record. The annual rainfall is expected to be normal to below normal, but Hong Kong may still be affected by heavy rain. Members of the public should be prepared for the rain and typhoon seasons.

Dr Cheng also highlighted the latest developments of the HKO's work. Starting from this rain season, the HKO will enhance the provision of thunderstorm-related information to alert the public of the high-impact weather induced by severe thunderstorms. Information such as "severe squally thunderstorms" and "violent gusts" will be incorporated in thunderstorm warnings and weather forecasts with regard to the circumstances.

In respect of the tropical cyclone forecast, the HKO will extend the

forecast area of the "Tropical Cyclone Track Probability Forecast" eastward this year, from the current boundary of 140 degrees east longitude to 180 degrees east longitude to cover the Central Pacific. When a tropical cyclone is named in the extended area, the automatic "Tropical Cyclone Track Probability Forecast" webpage will show the probability of the tropical cyclone track in the coming nine days. This will enable the public to appraise the trend of the tropical cyclone movement and be better prepared. Dr Cheng advised the public to make reference to this forecast when preparing to travel abroad in order to evaluate whether their destinations would be affected by tropical cyclones.

On the other hand, to facilitate hikers in planning their hiking routes, the HKO launched the "Hong Kong Hiking Trail Weather Service" webpage today. The new webpage provides automatic seven-day weather forecasts for the major hiking routes in Hong Kong. Upon selecting a specific hiking route, the webpage will show the approximate time required for the trip and the en-route hourly weather forecast. In addition, the HKO is collaborating with the Agriculture, Fisheries and Conservation Department in setting up QR codes on the information boards of some country parks. After scanning the QR codes, hikers can obtain the weather information of nearby hiking routes instantly, including the two-hour rainfall and one-hour lightning nowcast. These QR codes have been on trial at several spots in Sai Kung since January this year and will be progressively extended to other popular hiking routes in the country parks. Dr Cheng appealed to the public to stay tuned to the HKO's latest weather forecast when planning their hiking routes and during the hiking trips. The new services will provide hikers with the latest weather information and forecasts of nearby locations to minimise the impact of adverse weather on the hiking trips.

In respect of the tidal information service, two additional tide stations will be included in the "Tidal Information" webpage jointly operated by the HKO, the Marine Department, the Drainage Services Department and the Airport Authority Hong Kong this year. The two new stations are the one managed by the Marine Department at Sha Kiu Tau in Sai Kung and the one managed by the Airport Authority Hong Kong at the western end of Chek Lap Kok respectively. The additional information will provide ferry operators, coastal engineers, anglers and the general public with a more comprehensive picture of the real-time tide changes in Hong Kong.

To make sharing of weather observations more convenient for the public, Dr Cheng said that the HKO would launch a trial function named "My Weather Observation" on the MyObservatory mobile application so that the public can instantly share observed weather phenomena such as nearby rainbows, thunderstorms and hail. The HKO has also invited about 100 active members of the Community Weather Observing Scheme to become "Met Talent" to share their weather photos and videos with the trial function. This kind of crowdsourced information enables the public to observe weather conditions in different areas and also widen their weather knowledge.

Moreover, the HKO launched the trial version of the "Dr Tin" chatbot on the Chinese version of the MyObservatory mobile application in February this year. The chatbot adopts artificial intelligence technology to provide

information on local weather observations, weather forecasts, weather warnings, tidal information, Hong Kong Standard Time, as well as the weather forecasts and sunrise or sunset times of world cities to the public in text-based dialogues. The HKO will make further enhancements to the chatbot service progressively this year by making the service available via the HKO's Facebook page and the HKO's website, as well as providing climate information and supporting English dialogue.

Lastly, Dr Cheng mentioned that in view of the latest development of the COVID-19 infection, the HKO's Open Day, which is held annually in March, would be postponed this year in order to reduce social contact. Detailed arrangements will be announced in a timely manner.

Dr Cheng's speech at the press briefing is available at www.hko.gov.hk/en/dhko/voice/files/speech20200323e.pdf.

