

## 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 2020 and elaborate on the weather outlook for Hong Kong this year as well as the HKO's latest developments.

Dr Cheng pointed out that 2020 was one of the three warmest years on record globally, according to the preliminary assessment of the World Meteorological Organization (WMO). Various extreme weather events continued to affect different parts of the world. The decade from 2011 to 2020 was also the warmest on record.

Locally, the annual mean temperature in 2020 was 24.4 degrees, the second warmest on record in Hong Kong since 1884, with eleven months being warmer than usual. The summer from June to August last year was the hottest on record, with the mean temperature, mean maximum temperature and mean minimum temperature reaching 29.6 degrees, 32.6 degrees and 27.7 degrees respectively, all the highest on record. Additionally, there were 50 Hot Nights (with a daily minimum temperature at 28.0 degrees or above) and 47 Very Hot Days (with a daily maximum temperature at 33.0 degrees or above) in 2020, both hitting record highs. As a result of the cold surges affecting Hong Kong, it was relatively cold in January this year, while it was much warmer and sunnier than usual in February due to the generally weaker northeast monsoon over southern China most of the time.

On the weather outlook for 2021, the HKO predicted that the tropical cyclone season may start in June or earlier in Hong Kong. It is expected that there will be five to eight tropical cyclones coming within 500 kilometres of Hong Kong during the year, which is normal to above 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 in 2021. However, Hong Kong may still be affected by heavy rain and members of the public should make proper preparations for the rain and typhoon seasons.

Dr Cheng also highlighted the latest developments in the HKO's work. In February this year, the HKO collated meteorological data collected at the HKO Headquarters and other key meteorological stations, and updated the 30-year climatological normals for Hong Kong from 1981-2010 to 1991-2020, in accordance with the relevant WMO guidelines. The HKO compared the two sets of climatological normals and observed statistically significant increases in the annual mean temperature, annual mean maximum temperature and annual mean minimum temperature in Hong Kong, suggesting that Hong Kong was getting warmer due to global warming and local urbanisation. Dr Cheng emphasised that climate change trends warrant the public's continuous attention.

As announced in "The Chief Executive's 2020 Policy Address", the HKO will, starting from the second quarter of 2021, provide basic weather information on its website in eight ethnic minority languages. A new "Personalised Website" will be launched to provide weather information in eight ethnic minority languages including Hindi, Bahasa Indonesia, Nepali, Urdu, Tagalog, Thai, Punjabi and Vietnamese, and users may customise their display languages.

With the rain season approaching, the HKO plans to launch the "Localised Heavy Rain Advisory" service in the second quarter of 2021 to replace the existing "Announcement on Localised Heavy Rain" service which provides actual rainfall recorded in different locations. Under the new service, the HKO will issue advisories with reference to recorded rainfall and rainfall forecasts from its nowcasting system to advise members of the public of localised heavy rain as early as possible and assist with their early preparation.

The HKO will also incorporate a "Probability of Significant Rain" forecast into its nine-day weather forecast beginning from this afternoon to provide the predicted probability of cumulative rainfall reaching 10 millimetres or above generally over Hong Kong. The public may plan their activities ahead with reference to the forecast and make better preparations.

In addition, the HKO will roll out a trial feature called "My Weather Observation" on the mobile application "MyObservatory" to enable the public to report special weather phenomena such as rainbows and hail. Users may also join the Community Weather Observing Scheme (CWOS) through "MyObservatory". CWOS members can upload weather photos or video clips onto the CWOS Facebook public group using the "My Weather Observation" feature. The Scheme aims to use such crowdsourced meteorological information to enhance the public's awareness and knowledge of different weather conditions.

On public education, the HKO will launch an interactive e-book titled "A Tour of Tropical Cyclones" for children to enhance their understanding of tropical cyclones and awareness of disaster prevention. The e-book will cover topics such as classification and naming of tropical cyclones, their structures and tracks, their impacts on Hong Kong as well as the related precautionary measures.

In respect of upper-air meteorological measurements, the HKO has been using weather balloons to measure wind direction, wind speed, air temperature, humidity and air pressure in the upper atmosphere on a daily basis, and began to measure water vapour content every month since late last year. The year 2021 also marks the 100th anniversary of upper-air meteorological measurements by the HKO. The HKO will set up a thematic webpage to introduce the related history.

Dr Cheng announced in the briefing that the HKO Open Day held annually in March would be held online this year in view of the latest development of the COVID-19 epidemic. Although in-person visits to the HKO Headquarters are not possible, the public may visit various parts of the HKO Headquarters through virtual tours and videos on the new "Hong Kong Observatory Open Day 2021" webpage to be launched on March 26. The HKO will also host a live-

streaming event on the webpage and its Facebook page on March 27 afternoon, which will feature a sand-painting performance to bring out messages on climate change and extreme weather. Results of the online polling campaign "2016-2020 Top 10 Mind-boggling Weather and Climate Events Selection", which attracted over 5 000 voters, will also be announced.

Dr Cheng's speech at the press briefing is available on the HKO's website at: [www.weather.gov.hk/en/dhko/voice/files/speech20210323e.pdf](http://www.weather.gov.hk/en/dhko/voice/files/speech20210323e.pdf)

