

New Observatory Initiatives

Partnership and Tailored Weather Information Service

This year, the Observatory will use dropsondes – expendable weather reconnaissance devices – deployed from a Government Flying Service aircraft to collect meteorological data on tropical cyclones (see page 2). We are also introducing several new services (see pages 2, 4 and 5), including the “Automatic Regional Weather Forecast” and “Real-Time Weather Photos of Victoria Peak” webpages, and enhance the “Weather Satellite Imagery” webpage service. Plus, the MyObservatory app will be available in versions for wearable devices.

From 7 April, the frequency of the morning weather program has increased from one to two sessions. These sessions – which are in Chinese – provide the latest weather news during the time many people are heading to school or work, and can be seen at around 7am and 8am from Mondays to Saturdays on TV and the Observatory website.



我的天文台
將支援Apple Watch

MyObservatory will also be available in versions for wearable devices. An updated version for Apple Watch is expected to be launched in July.



Daniel YEUNG

SHUN Chi-ming, Director of the Observatory (middle), and four Assistant Directors introduced the future trends and new services of the Observatory during a press briefing on 15 March.



TV and online weather program schedule

Administrator of the State Oceanic Administration Visits the Observatory

LUI Wing-hong



Mr Wang Hong (third from left) and Mr Shi Qingfeng (second from right) from SOA pictured with Mr Shun Chi-ming (third from right) and other colleagues at the Observatory's Central Forecasting Office.

Mr Wang Hong, Administrator of the State Oceanic Administration (SOA), visited the Observatory on 22 March as part of a Hong Kong SAR Government sponsored visit programme.

Since the signing of the Arrangement on Cooperation on Oceanography in early 2007, SOA and the Observatory have been working closely together on storm surge warnings for the Pearl River Delta Region, and tsunami warning and mitigation systems as well as marine meteorological observations in the South China Sea. The visit will further strengthen the ties between the two organizations through continuing collaborative effort to mitigate against the potential impact caused by maritime hazards along the coastal waters of Guangdong and the South China Sea.



Observatory Open Day

Editorial Board

The Hong Kong Observatory Open Day 2016 was one of the highlights of the "Appreciate Hong Kong" campaign. It took place on 19 and 20 March and attended by over 17,300 people. The theme was identical to World Meteorological Day 2016: "Hotter, Drier, Wetter - Face the Future". During the Open Day, Director of the Observatory SHUN Chi-ming attended an autograph session and enjoyed taking "selfies" with visitors. In addition to the Observatory staff, volunteers from "Friends of the Observatory" offered support and assistance as goodwill ambassadors in warmly greeting and guiding the visitors.



Observatory staff explained the functions of meteorological instruments.



Milestone

Queenie LAM

Cooperation Plan Signed with Shanghai Meteorological Service



On 29 February, Mr SHUN Chi-ming (on right in front row), Director of the Hong Kong Observatory and Mr CHEN Zhenlin (on left in front row), Director of Shanghai Meteorological Service, signed a Cooperation Plan in Beijing, to enhance technical co-operation and exchange between both parties. Dr ZHENG Guoguang (back row, third from left), Administrator of China Meteorological Administration, witnessed the signing ceremony.



The Observatory website was awarded one of the ten most meritorious websites in 2015. This was the third time for the Observatory website to win this award after the 2008 and 2009 contests. The winning websites were elected by online voting by the public as well as judged by an adjudication panel.

TONG Yu-fai

The Observatory Website Won the 2015 Meritorious Websites Contest



MyObservatory App Provides Regional Weather Forecast

OR Ming-keung

An Automatic Regional Weather Forecast service has been added to the MyObservatory mobile app. This provides nine-day forecasts for different regions of Hong Kong at three-hourly intervals – including regional weather forecast, temperature and daily rainfall probability forecasts. To facilitate quick checking of weather, a new Android feature allows users to predefine multiple locations.

New Corporate Video on the Observatory

Editorial Board



A new version of the Observatory corporate video has been launched. Jointly produced by the Observatory and Radio Television Hong Kong, it introduces the Observatory's development and services to the public through the core values of the Observatory which are represented by the seven letters that make up the word "SCIENCE".



Milestone of Observatory Wind Measurement — Dropsondes

CHAN Pak-wai



The Observatory has collaborated with the Government Flying Service (GFS) to bring the task of wind measuring by fixed-wing aircraft into a new era this year. A new fixed-wing aircraft will be equipped with dropsondes. These are expendable devices that can be dropped from high altitude; each has a small parachute, and as it drops it transmits weather data. Compared with the conventional fixed-point observations as monitored from aircraft, the dropsondes will greatly enhance data gathering, which will in turn benefit tropical cyclone monitoring and forecasts.

Top left: Observatory Director Mr SHUN Chi-ming introduces one of the dropsondes that will be deployed from the GFS aircraft this year.

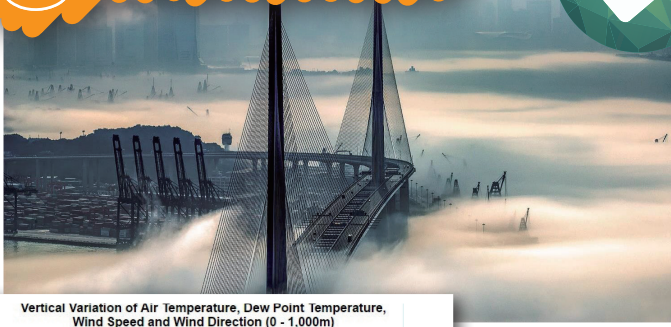
Bottom right: A ground test of the dropsonde system prior to actual operations. The inlay shows a dropsonde being ejected from the aircraft.

Caring for the Community

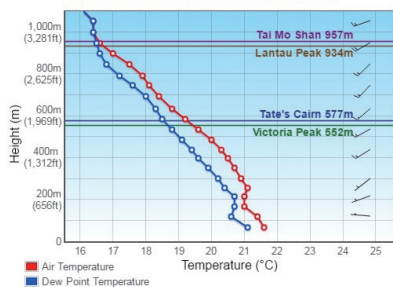


"Weather Information for Outdoor Photography" Webpage

CHAN Ying-wa



Vertical Variation of Air Temperature, Dew Point Temperature, Wind Speed and Wind Direction (0 - 1,000m)



Weather Information for Outdoor Photography Webpage

In March, the Hong Kong Observatory launched the beta version of the "Weather Information for Outdoor Photography Webpage" to provide members of the public with the latest weather information relevant to outdoor photography. In particular, upper-air observations are provided, to show the vertical variations of air temperature, dew point temperature, wind speed and wind direction in the lower atmosphere. This is useful for identifying the existence of relatively moist air or temperature inversions (See page 6 for "Ask Dr Tin") etc. in the atmosphere, to assess the possibility of the formation of clouds, frost, fog or haze etc.

The webpage also features some fascinating photos of clouds or special weather events taken by the public, as well as scientific information on some of the photos, to foster public education on meteorology.

In the morning of 14 February 2016, sea fog affected western Victoria Harbour and Stonecutters Bridge (top). High-altitude observations showed that an inversion layer appeared at about 200 metres in the lower atmosphere layer, indicating that the atmosphere was stable and conducive to the formation of sea fog (chart).

Director Shares Personal Growth Story with Students Supported by Child Development Fund

Editorial Board



On 29 March, Mr SHUN Chi-ming, the Observatory Director, shared his thoughts regarding personal growth with 80 students supported by the "Child Development Fund" of the Labour and Welfare Bureau.

He suffered from eye disease while studying in high school, which affected his studies. Students admired his positive attitude in face of adversity, and asked many interesting questions. In addition to talking with the Director, the students benefited considerably by visiting the weather forecasting office, the TV studio and exhibition hall, and seeing various meteorological instruments.

Business Environment Council Visits HKO

Sandy SONG



A delegation from the Business Environment Council visited the Observatory on 22 January, to gain an understanding of the latest situation with climate change, and the latest developments in the Observatory's public meteorological services and public education.

"CLAP for Youth" Supports Students Visit to Observatory

HUI Kin-chung

The Observatory participated in a scheme organised through the "CLAP for Youth" Program of the Hong Kong Jockey Club, in which young people visit government departments. About 70 students from different schools visited the Observatory. In addition to visiting the weather forecasting office, TV studio and meteorological facilities, they chatted joyfully and shared information with Observatory team members of different ranks. The students said the visit helped them to better understand the Observatory's work, as well as think about their own goals and plan for the future.



Observatory staff shared stories about working in the Observatory and job hunting experiences with students



Public Information and Education

Notable Astronomical Phenomena in Early 2016

HUI Tai-wai



Review of the partial solar eclipse



In the first quarter of 2016, two notable astronomical phenomena were observed in Hong Kong. Venus, Jupiter, Mercury, Mars and Saturn appeared together in the sky for several weeks from mid-January – forming spectacular "Parade of the Five Planets". Also, there was a partial solar eclipse on 9 March. The next "Parade of the Five Planets" will occur from July to September this year. For more details, please refer to the Observatory's Blog.



Observatory's Blog

Revamp of "Weather Satellite Imagery" Webpage

KONG Wai



The Observatory enhanced its Internet satellite imagery services on 15 March, providing more diversified, detailed and timely regional and global satellite imagery for the general public. The update frequency of satellite images covering eastern Asia increased from every 30 minutes to every 10 minutes. Black and white visible satellite imagery was upgraded to true colour.

Furthermore, new global mosaic of satellite imagery (left) and new high resolution satellite imagery covering southern China and the South China Sea have been added to show clearly the weather conditions over Hong Kong and its vicinity, or even around the world.

Apart from the satellite imagery webpage, various types of satellite imagery are introduced on the Geographic Information System (GIS)-powered "Met on Map" webpage, which is useful for users to get hold of the latest weather development when combining with other weather information.



Weather Satellite Imagery



Met on Map

Global mosaic of satellite imagery

The Observatory Launches Real-time Weather Photos of the Victoria Peak

CHAN Ying-wah



The webcam at the Victoria Peak captured sea fog affecting Victoria Harbour in the afternoon of 6 April



"Regional Weather in Hong Kong" Webpage

On 15 March, the Observatory introduced real-time weather photos of the Victoria Peak on the website, to further strengthen regional weather information. Weather photos help monitor weather conditions in the Victoria Harbour, Kowloon Peninsula, the north shore of Hong Kong Island and other regions.

Climate Change

Urgent Response to Climate Change

The World Meteorological Organization has ranked 2015 the hottest year since records began in 1880. There is an obvious trend towards more extreme weather under the influence of climate change. The Observatory will actively participate in the work of the Steering Committee on Climate Change, led by the Chief Secretary of Administration, to enhance awareness of and preparedness against climate change impacts and extreme weather affecting all sectors of society.



Icing phenomenon at the top of Tai Mo Shan on 24 January 2016

Extreme Weather Review

LI Kin-wai

In January 2016, Hong Kong suffered bitterly cold and extremely rainy weather. On 24 January, affected by an intense cold surge, the temperature at the Observatory fell to 3.1 degrees, making this the coldest day over the last 60 years. Meanwhile, affected by a surge of high pressure, the mean sea level pressure rose to a record-high 1037.7 hPa.

Also during this period, an upper-air disturbance brought outbreaks of heavy rain to Hong Kong. The total rainfall at the Hong Kong Observatory in January was 266.9 mm, setting a new record for January. The 37.0 mm of rainfall recorded from 1pm to 2pm on 5 January also broke the hourly rainfall record for January.

Public Seminar on "Climate Change"



Hands up from the participants at the climate change seminar showing support for low-carbon actions



The Observatory's colleagues dressed as "Men In Black" promoting "Minimum In Burning" to combat climate change

A seminar on climate change was held on 19 March at Tsim Sha Tsui Kai Fong Welfare Association, with the theme of "Paris Climate Agreement" and extreme weather. Over 400 people attended the event, mostly young people from youth uniformed groups, youth organisations over the 18 districts, the Child Development Fund, Friends of the Observatory, Hong Kong Meteorological Society and the Community Weather Observing Scheme.

New Version of Climate Change Webpage

SHUM Fu-cheung

The Observatory has launched a revamped webpage on climate change. In addition to a summary of past climate trends and future projections, a new "Do you know ..." feature has been added to provide some essential or little-known facts about climate change. The webpage will also provide updates on the latest developments with climate change issues, such as carbon dioxide concentration, global average temperature, global sea level, and Arctic sea ice extent.

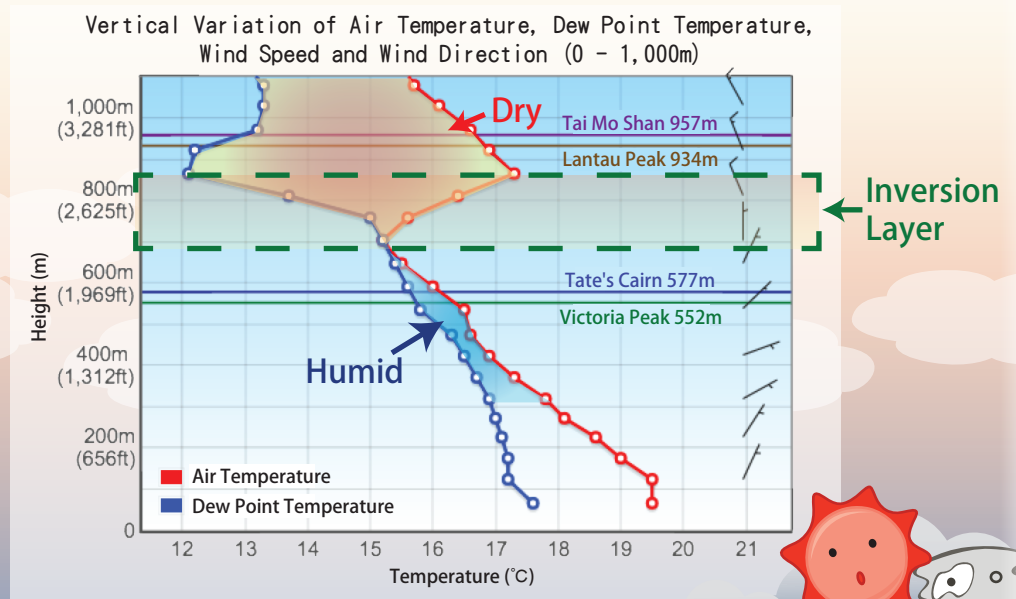


Ask Dr Tin

Temperature generally falls with height. "Temperature inversion layer" refers to the rise of air temperature with respect to the increase of height, while atmosphere is relatively stable and vertical motion is suppressed. With moist air and weak wind, stratus cloud or fog near the inversion layer is likely to be formed.



Inversion Layer



HKO Sidelights

Observatory Staff Commented by the Public

Observatory team members who received words of thanks and commendation from the public or organisations during January to March:

Mr LEE Kwok-lun
(Scientific Officer)

Mr FUNG Kwok-chu
(Senior Scientific Assistant)

Ms CHAN Yuk-hing
(Experimental Officer)

Ms MOK Wai-ling
(Scientific Assistant)

Staff Promotions



Mr HO Pak-sing was promoted to Chief Experimental Officer



Mr CHOW Chi-kin was promoted to Senior Experimental Officer



Mr CHENG Tsz-lo was promoted to Senior Experimental Officer



Mr CHAN Man-ye was promoted to Senior Experimental Officer



Ms YU Mei-fung was promoted to Chief Scientific Assistant



On 23 January, Observatory staff visited the Chenzhou National Basic Meteorological station in Hunan Province, and participated in a match with the station's basketball team.



On 27 February, a retirement party was held to celebrate Mr WAT Kam-shing, Chief Scientific Assistant, for working nearly 40 years at the Observatory. Mr WAT shared reminiscences of his time at the Observatory. We wish him a happy retirement.



On 2 March, Mr SHAM Fu-cheung, Chief Experimental Officer of the Observatory, and Ms CHAN Ching-han, Country Parks Ranger Services Officer of the Agriculture, Fisheries and Conservation Department, jointly delivered a talk on climate change at Buddhist Sum Heung Lam Memorial College.



On 7 March, delegates of the Central and Southern Region of Air Traffic Management Bureau of the Civil Aviation Administration of China visited the Hong Kong Observatory to exchange information.



From 8 to 9 March, Dr Neil GORDON of the Meteorological Service of New Zealand – and a Scientific Advisor to the Observatory, gave a talk to share his views on meteorological services with staff.



From 7 to 8 April, more than 40 earthquake experts and researchers attended the "7th Guangdong - Hong Kong - Macao Seminar on Earthquake Science and Technology" hosted by the Hong Kong Observatory



On 29 March, athletes and coaches of the Windsurfing Association of Hong Kong visited the Hong Kong Observatory, to participate in a weather observation course.



For details of the activities, please visit:
<http://www.hko.gov.hk/wisnew.htm>
<http://www.hko.gov.hk/hknews/indexe.htm>