

International Climate Change Experts Gathered in Hong Kong

Tong Hang-wai



The Director of the Hong Kong Observatory, Mr Shun Chi-ming (left); with Professor Zhai Panmao (middle), Co-Chair of the Working Group I, and Professor Hans-Otto Pörtner (right), Co-Chairman of Working Group II of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations, with the three IPCC special reports.

Mr Shun Chi-ming, Director of the Observatory, hosted an academic session on 17 October, together with Professor Zhai Panmao, Co-Chair of the Working Group I, and Professor Hans-Otto Pörtner (right), Co-Chair of Working Group II of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations. The session attracted about 80 local academics and government engineers to discuss the salient points in the Special Report on Global Warming of 1.5°C, the Special Report on Climate Change and Land and the Special Report on the Ocean and Cryosphere in a Changing Climate, published by IPCC in the past year. Participants had an opportunity to discuss and exchange views on the latest scientific findings on climate change, and its relevance to Hong Kong.

The three special reports summarised the impacts of climate change on land, ocean, the cryosphere and ecosystems, and pointed out that if global carbon emissions show no signs of abating, the global mean sea level rise by 2100 is projected to be 10 centimetres higher than previous assessment, representing an increase of 14%. Considering Hong Kong, Mr Shun took Super Typhoon Hato in 2017 and Super Typhoon Mangkhut in 2018 as examples to illustrate the destructive power of storm surges brought by super typhoons, and that Hong Kong had to tackle climate change with substantive actions as it cannot make itself immune to the impact of climate change. He added that the Observatory would continue to provide scientific input to support the work of relevant bureaux and departments, as well as to raise public awareness regarding and preparation for climate change, and strengthen the community's resilience through outreach and educational activities.



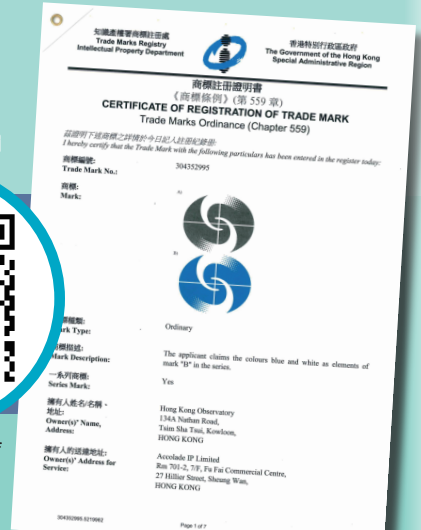
Hong Kong Observatory Trademark Registered

Lee Yiu-fai

The Hong Kong Observatory (HKO) has registered its logo as a trademark, and has received the Certificate of Registration issued by the Trade Marks Registry of the Intellectual Property Department. This means the HKO, as the owner of the registered trademark, has the exclusive right to use the trade mark in relation to the goods and services for which the mark is registered in Hong Kong.



Logo and trademark of the Observatory

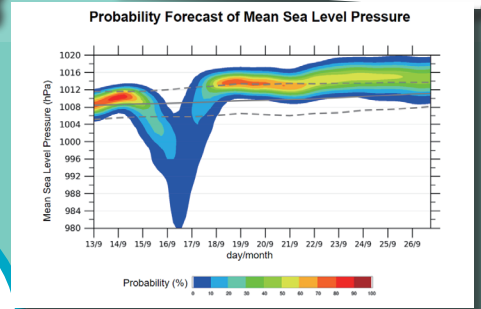


Observatory Launches Trial of "Mean-Sea-Level Pressure" Extended Forecast

Lee Kwok-lun

In July last year, the Observatory launched a new trial service of the "Mean-sea-level Pressure" extended forecast on the Extended Outlook (Beta version) webpage. Displaying the forecast mean-sea-level pressure for the next 14 days as a time series chart, the new service allows the public to easily keep track of forecast trends in sea level pressure, and make necessary preparations as early as possible. The new product can be accessed from the Observatory's homepage, and MyObservatory mobile app.

Mobile Webpage

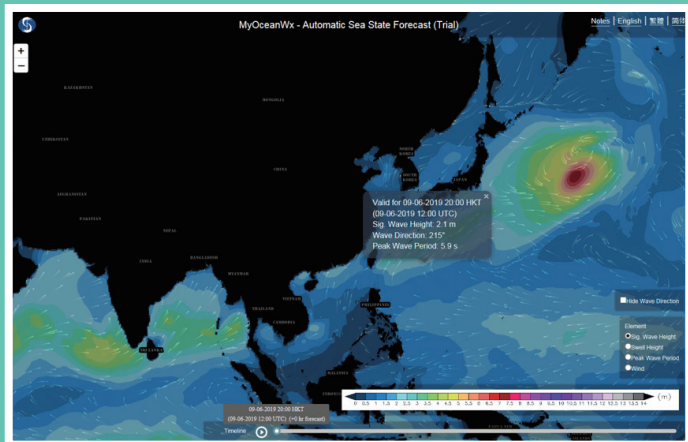


The picture above is the pressure forecast chart associated with Super Typhoon Mangkhut in September 2018, which showed that the pressure would drop drastically on 16 September, when Mangkhut was closest to Hong Kong.

"My Ocean Weather - Automatic Sea State Forecasts" Webpage

Lau Dick-shum

A new "MyOceanWx – Automatic Sea State Forecast" webpage dedicated for the shipping community has been launched. Based on the outputs of a high-resolution numerical wave prediction model suite operated by the Observatory, the new webpage provides detailed forecast of significant wave height, peak wave period and swell for the next four days over the western Pacific Ocean, South China Sea and the Indian Ocean.



"MyOceanWx – Automatic Sea State Forecast" webpage

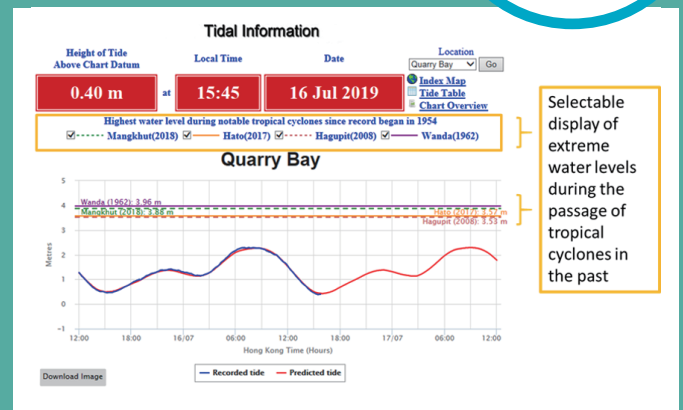
Strengthened Content for "Tidal Information" Webpage

Lau Dick-shum

The "Tidal Information" webpage has been strengthened with addition of selectable display of extreme water levels recorded during the passage of tropical cyclones in the past for ease of comparison with the current situation by the public. The available tropical cyclone records include those from Mangkhut in 2018, Hato in 2017, Hagupit in 2008 and Wanda in 1962.



"Tidal information" webpage



Selectable display of extreme water levels during the passage of tropical cyclones in the past

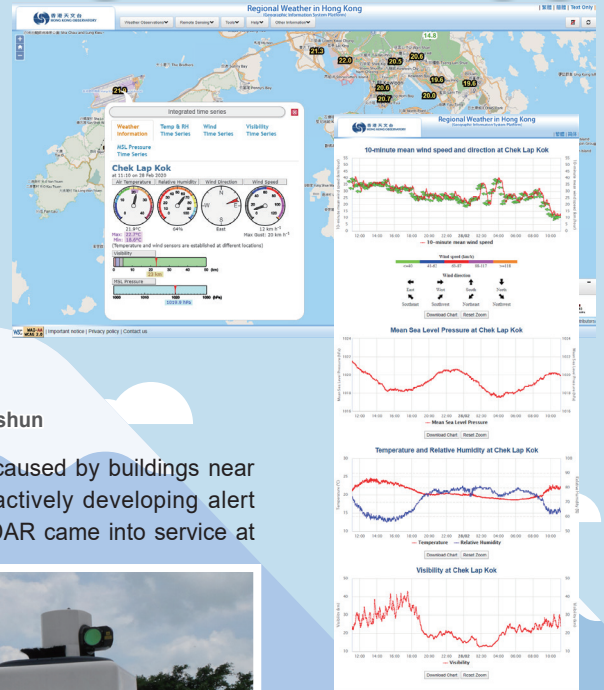
Enhanced version of the time series chart of tidal information



Comprehensive Tool to Display Time Series Added to Regional Weather Webpage

Chan Siu-wai

The Regional Weather Webpage (Geographic Information System Platform) has been enhanced with a comprehensive tool to display time series of various meteorological elements measured at any weather station. Using the tool, members of the public can easily view the variations of meteorological elements at the selected station in the past 24 hours, for an overview of how the weather is evolving at that location.



A New Milestone for Turbulence Warnings

Lee Lap-shun

With the continuous development of the airport, the turbulence that may be caused by buildings near runways has gained attention. In this regard, the Observatory has been actively developing alert technology, and set up a short-range LIDAR near the north runway. This LIDAR came into service at the end of July and can perform finer and more frequent scans to capture turbulence features of smaller spatial and temporal scales induced by nearby buildings, to improve the warning service and assure aviation safety.



Short-range LIDAR near the north runway of the airport

More Observatory Data Sets on Government Public Sector Information Portal



Lee Yiu-fai

PSI Portal

With a view to opening up more data for free use by the public, the Observatory released six new datasets on the Public Sector Information (PSI) Portal (data.gov.hk), covering:

- Daily maximum, mean and minimum temperatures
- Visibility
- Lightning locations
- Tropical cyclone tracks
- Almanac information
- Special Weather Tips

Meanwhile, all RSS datasets have also been migrated to JSON, a more common machine readable format. All datasets and can be found on the HKO website.

Name of Dataset	Frequency of Update (e.g. real-time, daily, weekly, monthly...)	Description
9-day Weather Forecast	Twice daily and as necessary	Provide 9-day weather forecast of Hong Kong
Current Weather Report	Hourly and as necessary	Provide current weather report of Hong Kong
Local Weather Forecast	Hourly and as necessary	Provide local weather forecast for today and/or tomorrow
Weather Warning Information	As and when necessary	Provide detailed information of weather warning(s) in force
Weather Warning Summary	As and	
Special Weather Tips	As and	
Quick Earthquake Messages	As and	
Locally Felt Earth Tremor Report	As and	
Data on daily maximum, mean and minimum temperatures	Monthly	
Regional Weather in Hong Kong - the latest 10-minute mean visibility	Real-time	
Lightning count over Hong Kong territory in the past hour	Real-time	



Cooperation

Cooperation Involving 'AI Data Wizard'

Lee Shuk-ming

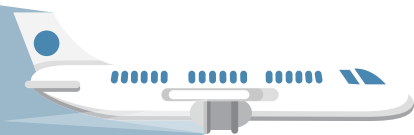


The Observatory again joined hands with Hong Kong Education City, Microsoft Hong Kong, the Civil Engineering and Development Department and Hong Kong Meteorological Society to organise the 'AI Data Wizard - How Many Landslides?' competition last year. Participants from secondary schools estimated the number of landslides in a selected time period, by utilising various data and machine learning platforms. The competition was one of the Master Code 2019 activities.

For details, please visit the website: https://www.hkedcity.net/coding/zh-hant/AI_data_wizard

The Observatory and Government Flying Service

Work Closely in Data Collection



Editorial Board



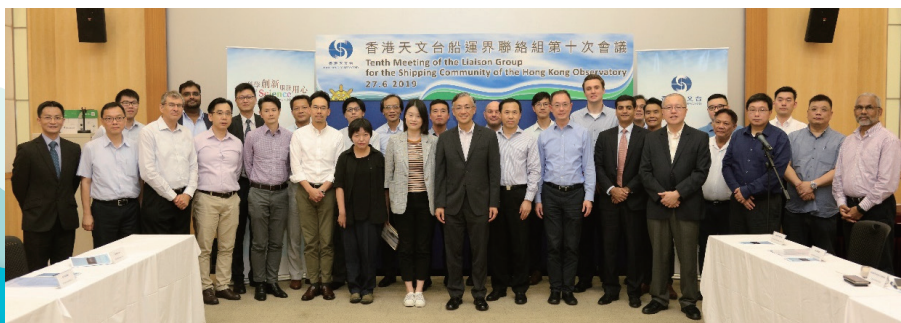
The Hong Kong Observatory collaborates closely with the Government Flying Service (GFS) in various ways, including the arrangement of two to three surveys per week, to collect data on wind shear and turbulence on the runway. The Observatory also provides weather information to facilitate GFS's search and rescue operations. Whenever a tropical cyclone enters the South China Sea and may affect Hong Kong, the Observatory and GFS collaborate in launching dropsondes to collect weather data within the storm. They also conduct monthly "radiation inspections", to collect data on environmental radiation levels.

Review Cool Met Stuff "Flying Mission"

Tenth Meeting of the Liaison Group for the Shipping Community

Lau Dick-shum

Members of the Hong Kong Observatory Liaison Group for the Shipping Community met for the tenth time at the annual meeting on 27 June. A total of 27 representatives from cruise and shipping companies, container terminal operators, the Hong Kong Shipowners Association, the Hong Kong Pilots Association Ltd. and the Marine Department attended the meeting. The Director, Mr Shun Chi-ming, presented awards to a number of outstanding Hong Kong voluntary observing ships, in recognition of their efforts in taking weather observations at seas.



Participants of the 10th meeting of the Liaison Group for the Shipping Community

The Observatory's Continuous Support to "Life Buddies" Mentoring Scheme

Terence Kung Wing-hang

In the "Life Buddies" Mentoring Scheme organised by the Commission on Poverty, guided by the Observatory's mentors, 10 Secondary students experienced the work of various posts of the Observatory. The students said the job sampling activity inspired them to think about their future career development, and enhanced their understanding of the Observatory's various work areas.

Secondary students participating in the "Life Buddies" Mentoring Scheme experienced the Observatory's work at King's Park Meteorological Station, with their mentors.



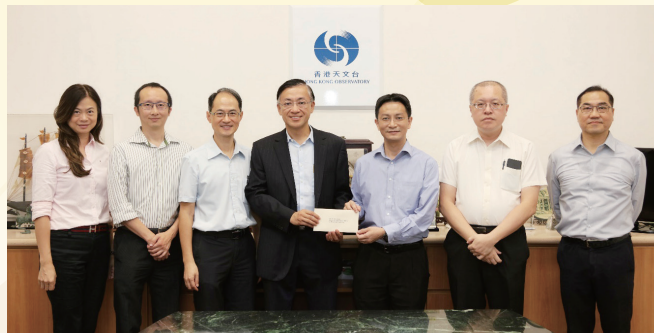
Staff Retirement and Promotions



Senior Scientific Officer, Mr Li Sun-wai, retired



Senior Radar Mechanic, Mr Chan Ka-wah (right) retired and pictured here with Assistant Director Dr Cheng Cho-ming (left).



Mr Lau Dick-shum (third from right) was promoted to Chief Experimental Officer and was pictured here with the Director, Mr Shun Chi-ming (fourth from left) and colleagues.

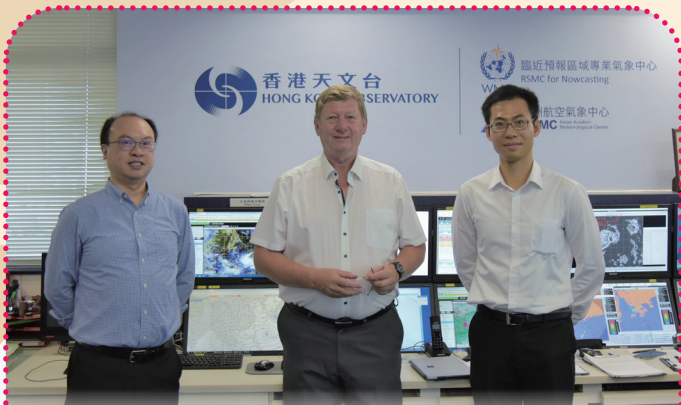
HKO Updates



Mr Kelvin Lo Kwok-wah, JP, Director of Drainage Services (third from right on the front row) led a delegation to visit the Observatory



Mr Lyu Erxue (fourth from left), Deputy Director of the Civil Aviation Administration of China, led a delegation to visit the Observatory



Captain Klaus Sievers (centre), Expert Consultant of the Observatory, visited the Observatory

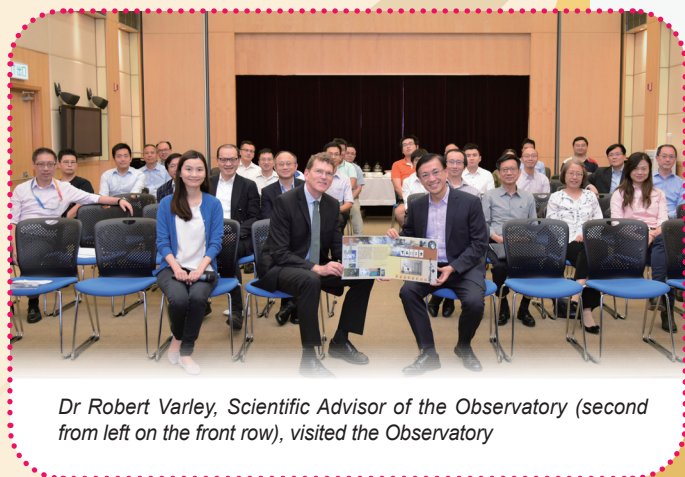
香港天文台
HONG KONG OBSERVATORY

第五十一次航空氣象服務聯絡組會議
51st Meeting of the Liaison Group on Aviation Weather Services
27. 8. 2019

The 51st meeting of the Liaison Group on Aviation Weather Services



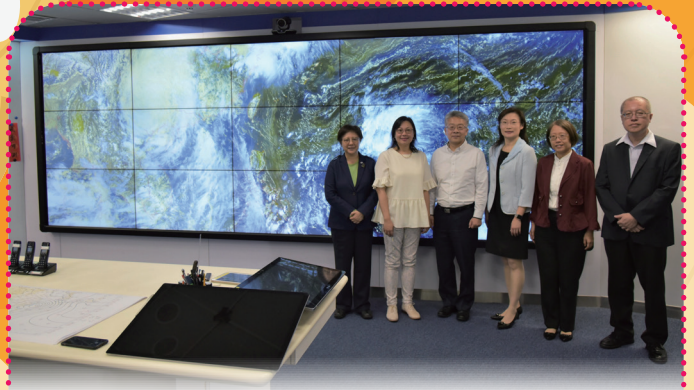
On 1 August, Real Admiral Patricio Carrasco (third from left on the front row), Director of the Hydrographic and Oceanographic Service of the Chilean Navy, visited the Observatory, to exchange information on technology for advanced warnings of tsunamis



Dr Robert Varley, Scientific Advisor of the Observatory (second from left on the front row), visited the Observatory



Senior Marketing Specialist, Mr Vincent Tsui, gave the Observatory staff a presentation on content marketing



A delegation from Hong Kong-Shenzhen Innovation and Technology Park visited the Observatory.



Members of the Hong Kong Air Cadet Corps visited the Observatory.



A delegation from the Hong Kong Sports Institute visited the Observatory.

Observatory Staff and FoOb Volunteer Docents Commended by the Public or Organisations

Observatory staff and FoOb volunteer docents who received words of thanks and commendation for their positive as well as sincere and polite service from the public or organisations from August to October 2019:

Mr Shum Chi-tai (Scientific Officer),
Dr Cheng Chung-choi (Experimental Officer),
Mr Au-Yeung Kin-chung (Experimental Officer),
Mr Leung Man-kit (Volunteer Docent of the FoOb)



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