

Asian Aviation Weather Centre Co-operation Marks New Milestone for Aviation Weather Service

CHEUNG Ping



Mr. SHUN Chi-ming (left, front row), Director of the Hong Kong Observatory; Mr WANG Zhiqing (centre, front row), Deputy Administrator of the Civil Aviation Administration of China (CAAC); and Ms JIAO Meiyan (right, front row), Deputy Administrator of the China Meteorological Administration (CMA), signed the agreement in Beijing.

The Hong Kong Observatory, the Civil Aviation Administration of China (CAAC) and the China Meteorological Administration (CMA) signed a co-operation agreement on the establishment of Asian Aviation Weather Centre (AAWC) in Beijing on 28 October 2016.

Mr SHUN Chi-ming, Director of the Hong Kong Observatory, said at the signing ceremony that with continuing growth of air traffic in Asia, there had been an increasing demand from aviation users for more and better weather services, to enhance flight safety as well as efficiency, and also an international trend towards regionalised, globalised, digitised and automated aviation weather services, providing unprecedented opportunities for enhancing the provision of services.

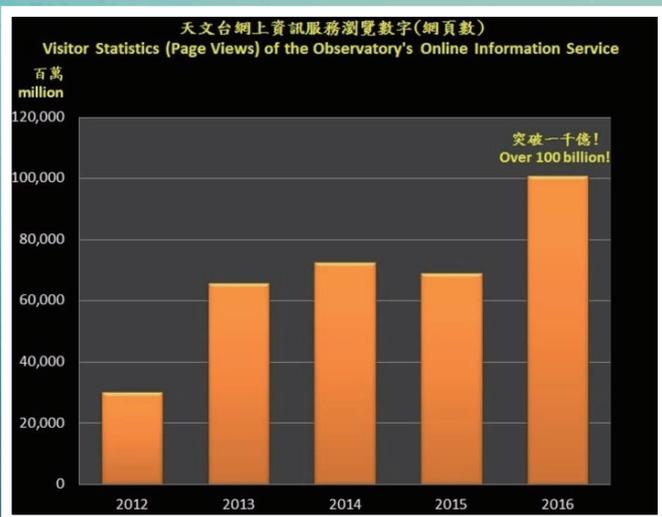
Mr WANG Zhiqing, Deputy Administrator of CAAC, and Ms JIAO Meiyan, Deputy Administrator of the China Meteorological Administration (CMA), were present to sign the cooperation document. They said the establishment of the AAWC was a milestone in international aviation weather services, and would enhance their capability to provide aviation weather services in the region.

Observatory's Online Information Services Receive

More than 100 Billion Page Views

CHENG Yuen-chung

The Observatory's online information services (including the Observatory website and the MyObservatory mobile app) have always been very popular. In 2016, they received a total of over **100 billion** page visits, nearly 50% more than that in 2015 and with around 80% of all visits attributed to the MyObservatory app.



In the past year, MyObservatory launched the "Automatic Regional Weather Forecast in Hong Kong" service, providing location-based weather forecasts in Hong Kong for up to nine days. Also, the iOS platform began supporting Apple Watch. With new services such as "Weather Notes" and "Post of the Day" launched in 2016, users can browse and share messages on social networking websites through MyObservatory.



Director Holds Lunch Reception for Media

Editorial Board



Mr SHUN Chi-ming, Director of the Hong Kong Observatory, invited media representatives to a lunch reception on 30 November 2016, attended by over 30 journalists. He pointed out that as a result of global warming, Hong Kong's temperatures had registered record-breaking highs in recent years, with many records broken in 2016 (for details, please see below).

Also, a meeting of the Liaison Group for Broadcast Media was held on 15 November to exchange views with media representatives on how to further enhance public weather services.



Weather of 2016

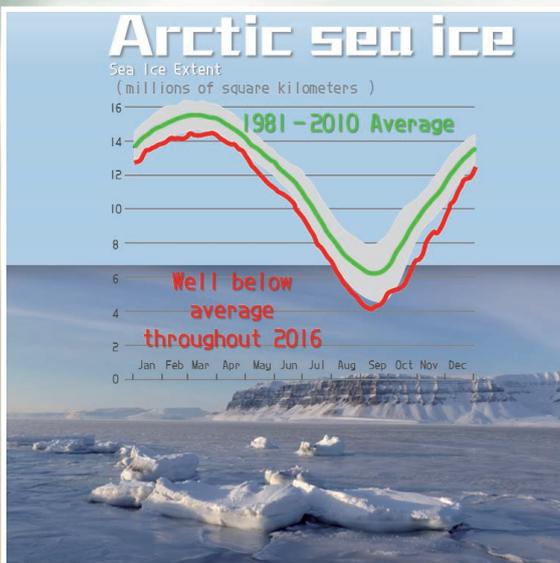
LI Kin-wai

In 2016, the weather was relatively warm and rainy in Hong Kong. Despite an intense cold surge that brought a few days of extremely low temperatures in late January, Hong Kong experienced the third hottest summer – from June to August – since records began in 1884. The annual mean temperature was 23.6°C, 0.3°C above normal, making 2016 the seventh warmest year since records began.

The annual total rainfall was 3026.8 millimetres, 26 percent above normal and ranking the ninth highest on record. The seasonal rainfall for autumn (September to November) totalled 1078.8 millimetres. Super typhoons Sarika and Haima affected Hong Kong in quick succession during mid-October. The heavy rain brought by Sarika set a new record high for hourly rainfall in October, while the No. 8 Gale or Storm Signal was raised for Haima. The monthly rainfall recorded in October was 624.4 millimetres – the second highest on record for October.

SUMMARY OF RECORD-BREAKING EXTREME WEATHER EVENTS IN 2016

Record-breaking Events (since records began in 1884)	New Record
1. Highest Pressure (24 January)	1037.7 hPa
2. Highest Monthly Total Rainfall for January	266.9 mm
3. Highest 1-Hour Total Rainfall for January	37.0 mm
4. Highest Monthly Mean Maximum Temperature for June	32.4 °C
5. The Longest Consecutive Days of Highest Daily Maximum Temperature above 35.0°C	4 consecutive days (24-27 June)
6. Highest Monthly Mean Temperature for July	29.8 °C
7. Highest Annual Number of Very Hot Days	38
8. Highest Monthly Mean Maximum Temperature for October	29.1 °C
9. Highest Monthly Mean Temperature for October	26.8 °C
10. Highest Monthly Mean Minimum Temperature for October	25.0 °C
11. Highest 1-Hour Total Rainfall for October	78.7 mm
12. Highest Total Rainfall for Autumn (September to November)	1078.8 mm



Arctic sea ice volumes were below normal throughout 2016 (source of photo: NOAA; source of chart: National Snow and Ice Data Center)

A New Era for Climate Records

SHAM Fu-cheung

The World Meteorological Organization published the Annual Greenhouse Gas Bulletin in October 2016. The report indicated that the concentration of carbon dioxide in the atmosphere reached 400 ppm in 2015, setting a new record high. It was predicted that the concentration of carbon dioxide would remain above this level for some time. A study also suggested that the current pace of carbon dioxide emissions due to human activities was unprecedented in the past 66 million years.

With greenhouse gas levels rising, the evidences and consequences of global warming have become increasingly clear. Global monthly average temperature records were broken for 16 consecutive months from May 2015 to August 2016. The World Meteorological Organization confirmed that 2016 was the hottest year since instrumental records began, making it the third consecutive year that the record for global annual average temperature was broken. In addition, the volume of Arctic sea ice was lower than normal throughout 2016, and for seven months during the year reported the lowest monthly levels since satellite records began.

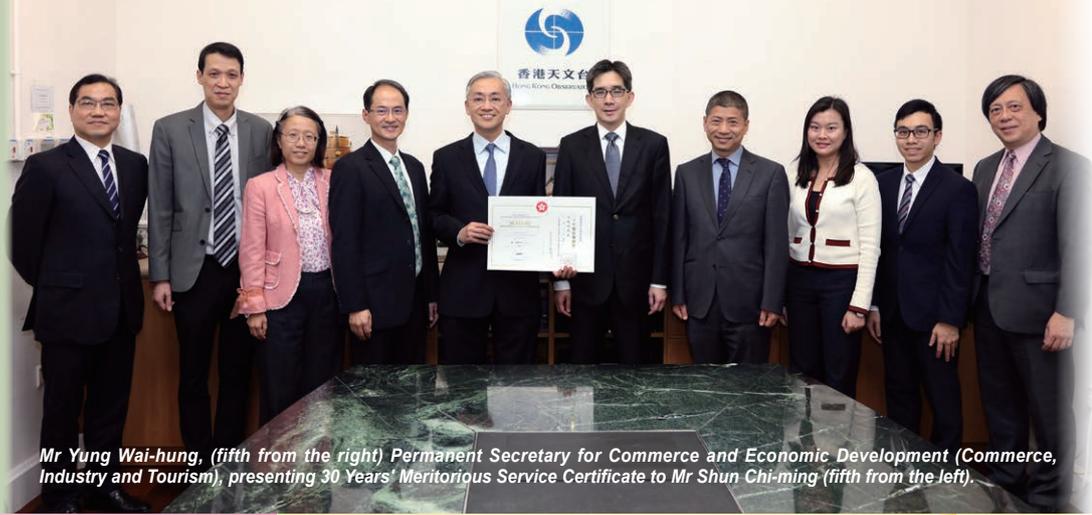


Outstanding Performance

CHEUNG Ka-chun

Mr Yung Wai-hung, Permanent Secretary for Commerce and Economic Development (Commerce, Industry and Tourism), visited the Observatory on 7 December 2016, and presented the 30 Years' Meritorious Service Certificate to Mr Shun Chi-ming, Director of the Hong Kong Observatory, for his dedicated services over the past 30 years. Mr Shun joined the Observatory in February 1986 as a Scientific Officer, and was appointed as Director of the Hong Kong Observatory in April 2011.

Director of the Hong Kong Observatory Receives the 30 Years' Meritorious Service Certificate



Mr Yung Wai-hung, (fifth from the right) Permanent Secretary for Commerce and Economic Development (Commerce, Industry and Tourism), presenting 30 Years' Meritorious Service Certificate to Mr Shun Chi-ming (fifth from the left).

Female Meteorological Personnel in Hong Kong



Editorial Board



The history of women undertaking meteorological work at the Hong Kong Observatory dates back more than 100 years. The number of female meteorological personnel at the Observatory continues to rise today. They perform important duties in a variety of positions. Some photos of them at work are featured in a 2016 album prepared by the World Meteorological Organization, titled "Women in Action" (<https://goo.gl/s8OdOA>).



Two Observatory Staff Members Win Civil Servant Awards



Two colleagues – Mr CHEUNG For-kwong and Mr LEUNG Wai-yeung – have consistently provided excellent logistic support to the Observatory for many years. In recognition of their contributions, they were recently presented the Civil Servant Awards.

CHEUNG Ka-chun

2016年公務員事務局局長嘉許狀頒發典禮 The Secretary for the Civil Service's Commendation Awards Presentation Ceremony 2016



Mr CHEUNG For-kwong (second from right), Workman II, received the Secretary for the Civil Service's Commendation

政府物流服務署 2016年安全駕駛獎頒獎典禮



Mr LEUNG Wai-yeung (right), Driver, received the Twenty Years' Safe Driving Award



Cooperation

Sidelights of "Friends of the Observatory" 20th Anniversary

Editorial Board

To celebrate the 20th anniversary of "Friends of the Observatory", various events were held in 2016 – including a Celebration Party for the occasion, Stargazing Evening Camp, launching a new version of the website, and publication of the 20th Anniversary Special Booklet. To view the Booklet (in Chinese only) as well as photos from the events, please visit the following link: <http://url.hko.hk/FoOb>



Happy moment during the 20th Anniversary Celebration Party.



Friends of the Observatory committee members discussing event arrangements and preparations.



Participants preparing the weather report for the group games at the Stargazing Evening Camp.



HUI Kin-chung

"Climate Change – Our Response"

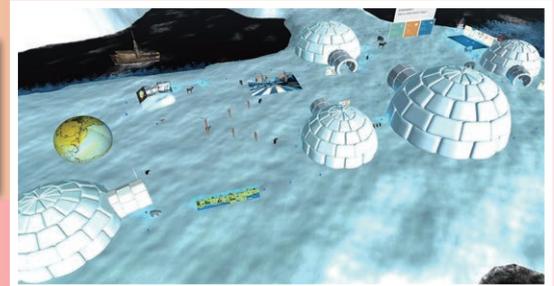
The "Science in the Public Service" Campaign (SIPS) Roving Exhibition, "Climate Change – Our Response", was held from June to November last year at more than ten different venues, attracting more than 100,000 visitors. In all, over 23,000 selfies were taken for making commitments to reducing greenhouse gas emissions. Although the exhibition has ended, a virtual tour of the exhibition is now available on the SIPS Campaign webpage to continue the public education effort on climate change.

Roving Exhibition Done But Not Dusted



<https://goo.gl/hujIU1>

Virtual tour of "Climate Change – Our Response"



HKO and SCHSA Remind Public of Precautions Against Cold Weather

LEE Tsz-cheung

Dr CHENG Cho-ming (right), Assistant Director of the Observatory, and Ms LEUNG Shuk-yeet, Chief Executive Officer of the Senior Citizen Home Safety Association (SCHSA), held a joint press conference on 27 December 2016, urging the public to get prepared for the winter and to take precautions against the colder weather in Hong Kong, including the provision of proper care and assistance for elderly people in need.



Hong Kong Observatory Calendar 2017

2017 Understanding Clouds



For this year's calendar, apart from collecting weather photos through social media, the Observatory has included winning entries from the first-ever "Sky of Silver Age" photo competition – jointly organised by the Observatory and the SCHSA – under the 2017 World Meteorological Day theme of "Understanding Clouds". Promoting an appreciation and understanding of the fascinating and ever-changing clouds in all their forms and shapes, the calendar is available through the online Government Bookstore at www.bookstore.gov.hk.



Ask Dr Tin



The state of sky is mainly defined according to the proportion of cloud cover, and can be basically divided into "Fine", "Cloudy" and "Overcast". More detailed descriptions can be added by making further reference to the duration of sunshine.

"State of Sky" Jargon Explained



Fine

Clouds covering no more than 3/4 of the sky

- Sunny
- Clear
- Mainly fine
- Bright



Cloudy

Clouds covering over 3/4 of the sky, but not completely overcast

- Mainly cloudy
- Sunny periods/intervals
- Bright periods/intervals
- Cloudy to overcast



Overcast

Sky covered by an extensive and thick cloud layer



HKO Sidelights

Staff Retirement



Mr LEUNG Ka-man (above) and Mr TSE Wai-ming (below) retired on 1 November and 22 December 2016 respectively.

Observatory Staff and "Friends of the Observatory" Commended by the Public

Observatory staff and "Friends of the Observatory" who received words of thanks and commendation from the public or organisations from October to December:

Mr LI Luen-on
(Chief Experimental Officer)

Mr YUNG Chung-hoi, Mr WONG Tak-kan and Mr CHAN Wing-hang
(Experimental Officer)

Ms YU Mei-fung
(Chief Scientific Assistant)

Ms MAK Man-ye
(Senior Scientific Assistant)

Mr CHEE Shiu-chung and Mr LAU Ying-hong
(Scientific Assistant)

Mr KWONG Wai-lung and Mr WONG Kwok-kit
(Friends of the Observatory)



Mr WONG Chi-cho (centre, photo on the left), Director of Information Services, and Ms LEUNG Ka-lai (photo on the right), Director of Intellectual Property, visited the Hong Kong Observatory on 16 November and 9 December 2016 respectively.



Representatives of Islands District Council (photo on the left) and Eastern District Council (photo on the right) visited the Hong Kong Observatory on 2 December and 9 December 2016 respectively, to learn more about the Observatory's work.



Young people taking part in the Observatory's interactive game at the "Water Conservation Week 2016" event, organised by the Water Supplies Department.



The Director of the Hong Kong Observatory and colleagues from the Aviation Weather Services branch celebrating the moving of the Airport Meteorological Office to its new location at the North Air Traffic Control Tower. The move took place on 29 November 2016.

The Director of the Hong Kong Observatory participating in the 25th Silver Jubilee Hiking Festival (at Cheung Sheung) with staff and Friends of the Observatory volunteers on 1 January 2017.



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