

New Services from the Observatory



Editorial Board

At a press conference held on 17 March 2014, the Director of the Hong Kong Observatory, Mr SHUN Chi-ming, introduced a number of new services that will soon be launched (see below) and presented a forecast of the annual rainfall that would affect Hong Kong and the number of tropical cyclones that would come within 500 km of the territory this year. He also explained the impact of climate change on Hong Kong. The Director took the opportunity to remind the public to remain vigilant against inclement weather, enhance their awareness of disaster prevention and take appropriate precautions against climate change.

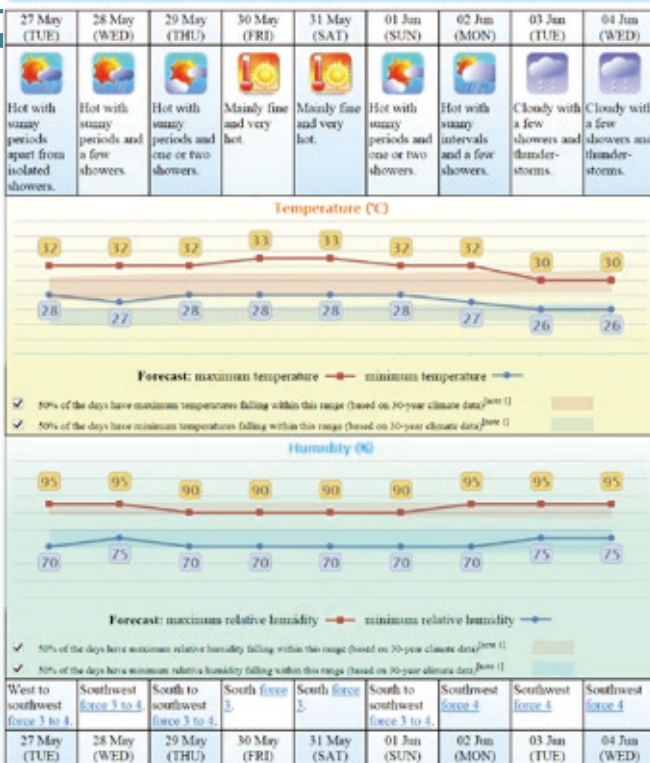
One Week and Beyond Weather Forecast Extended to 9 Days

LEE Kwok-lun

With effect from 1 April 2014, the Hong Kong Observatory has extended its weather forecasts from 7 to 9 days, which will give the public earlier warning of changes in the weather and enable them to plan their activities and make proper preparations well in advance. What's more, the use of chart presentation in the enhanced service will give users a clearer picture of weather trends. Mr CHUNG Kin-man, the first Hong Kong mountaineer to conquer the Seven Summits, welcomed the news: "The extended forecast will allow people who engage in outdoor activities to plan their routes days ahead and make sure they are properly equipped for the different weather conditions they may encounter, ensuring that their activities proceed smoothly and safely." Renowned photographer Will CHO commented: "With a longer-range weather forecast, photographers can envisage the subject matter of their photo shoots, such as views of clouds or fog, at an earlier time. This will help us choose the best location for the shoot and assemble the proper equipment in advance."

General Situation:

The trough of low pressure now bringing showers over the coast of Guangdong and the northeastern part of the South China Sea will weaken gradually in the next couple of days. The subtropical ridge is expected to strengthen again towards weekend, bringing fine and very hot weather to the coastal areas of Guangdong.



New 9-day weather forecast webpage



New Services from the Observatory

Weather Information for Astronomical Observation

Dickson LAU

The Hong Kong Observatory teamed up with the Hong Kong Space Museum and the Department of Physics of the University of Hong Kong (Figure 1) to launch trial operations of the "Weather Information for Astronomical Observation" webpage in March earlier this year. Providing stargazers with a platform for researching the weather at astronomical observation hot spots in Hong Kong so that they can better plan their astronomical activities, the webpage includes brightness measurements of the night sky, weather observation information, digital weather forecasts and images of the sky at popular places such as Cape D'Aguilar, Shek Pik, the Hong Kong Space Museum in Tsim Sha Tsui and the Astropark and iObservatory in Sai Kung. In addition, it offers real-time star maps and other useful astronomical information (Figure 2) for amateur astronomers.



Figure 1

The "Weather Information for Astronomical Observation" webpage can be found at http://www.weather.gov.hk/gts/astronomy/astro_portal.html

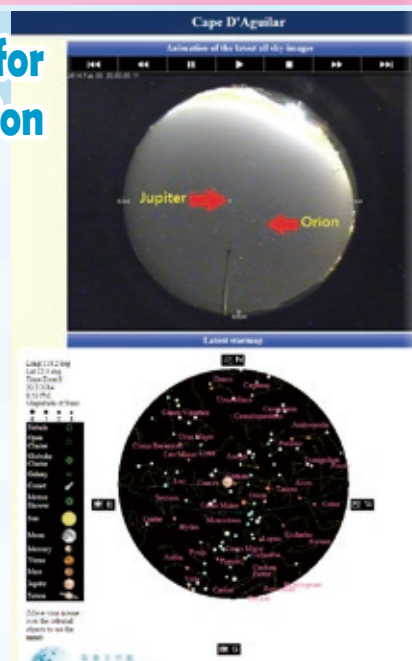


Figure 2



Virtual Tour of the Hong Kong Observatory – Under the Same Sky 130 Years Exhibition

Daniel YEUNG

Jointly organised with the Hong Kong Museum of History and held between 10 July and 2 September last year (2013), the Hong Kong Observatory – Under the Same Sky 130 Years exhibition proved hugely popular, attracting over 140,000 visitors in total.

In March 2014, the Observatory launched a virtual tour of the exhibition so that members of the public who did not have an opportunity to see it last year or who would like the chance to re-visit it could view the exhibits online.

http://www.weather.gov.hk/hko_virtualtour/vtour/vtour_e/index.html

Cool Met Stuff

Linus YEUNG

Can you tell the difference between fog and cloud? Under what weather conditions will you be able to see a magnificent sea of clouds? How are the seasons divided? Why would pilots encounter "CAT" in the sky – is it cold wind or a cold front? Where in Hong Kong will you experience the lowest temperatures and be most likely to see frost? Why is it much colder in the New Territories than in the urban areas under a clear sky at night? Why does it feel much colder when it is windy, or is that just an illusion? The Observatory's brand new TV programme "Cool Met Stuff" has answered all these questions over the past few months.

Broadcast every Friday since it premiered on 3 January 2014, Cool Met Stuff provides viewers with a wealth of information as the programme's presenters take a break from run-of-the-mill weather programmes. Stepping out of the Observatory studio, they have filmed special weather conditions "up on the mountain (Tai Mo Shan) and down in the village (Ta Kwu Ling)", visiting the airport and various communities for feature stories along the way. The popular programme has received wide acclaim from the public, and as of early April Cool Met Stuff has attracted some 110,000 views on YouTube – that's over 8,000 for each episode. The most popular episode has recorded more than 15,000 hits!

In addition to watching Cool Met Stuff live on TV, members of the public can also view the programme on the "MyObservatory" mobile app, the "Cool Met Stuff" channel on the Observatory's website or the Observatory's YouTube channel. For the TV schedule of Cool Met Stuff, please visit

<http://www.hko.gov.hk/video/weatheronair.htm>



Partnership

The Observatory and Hongkong Post Jointly Promote "Weather Phenomenon" Special Stamps

Daniel YEUNG



At the 2014 Hong Kong Observatory Open Day, the Observatory's director Mr SHUN Chi-ming joined hands with Hong Kong's Postmaster General Mrs Jessie TING to promote the territory's first ever set of special stamps featuring a "weather phenomenon" theme, autographing philatelic products for the enthusiastic members of the public who packed the venue.



Mr SHUN Chi-ming (2nd from left) and Mrs Jessie TING (3rd from left) autograph philatelic products for members of the public at the Hong Kong Observatory Open Day.

The "Weather Phenomenon" stamp series consists of seven designs featuring rainbow, frost, clouds, lightning, fog, rain and typhoons, while a special typhoon-themed stamp sheetlet features satellite images of Typhoon Vicente as it approached Hong Kong in July 2012. According to Mr Shun, the special stamps are a dream come true for weather fans, who can now appreciate the beauty of meteorological conditions through stamps; at the same time, they represent a valuable contribution to the efforts to promote a better understanding of weather among the public.

Whether you are a collector or not, these stamps are not to be missed!



"Weather Phenomenon" stamps, first day cover, presentation pack and booklet.

Meteorology Series IV: A Joint Effort with RTHK

Editorial Board



The Director of the Observatory, Mr SHUN Chi-ming, and the Controller (TV) of Radio Television Hong Kong, Ms CHAN Man-kuen, officiate at the launch ceremony of "Meteorology Series IV".

To increase public awareness of inclement weather and climate change as we face up to the challenges of the future, the Observatory teamed up with Radio Television Hong Kong (RTHK) to produce Meteorology Series IV, which was broadcast simultaneously on TVB Jade and RTHK TV31 from **7:30 to 8:30 p.m.** on four consecutive **Saturdays starting on 26 April.**

Set against the climate change triggered by modern civilisation, the four episodes of Meteorology Series IV looked into the underlying causes of the changes in intensity and frequency of extreme weather phenomena, such as rainstorms, droughts and typhoons, brought about by climate change and their associated impact on mankind. Filming extreme weather conditions at first hand in places ranging from our hometown of Hong Kong, our close neighbours the Philippines and Vietnam, to distant countries such as Greenland and Lesotho in southern Africa, the series offered expert meteorological analysis and invited the public to reflect on the relationship between the development of human civilisation and its impact on Mother Nature.



Engaging the Public

Editorial Board

The annual Hong Kong Observatory Open Day was held on 29 and 30 March, when over 18,000 people visited the Observatory's headquarters despite the showery weather. Visitors generally thought that the Observatory staff's hospitality, the well-presented exhibits, the game booths and ecological tours helped increase their knowledge of meteorology and science and enhance their understanding of how the Observatory applies science and technology to serve the public. Scientific Officers who presented the weather live at the event and Dr Tin, the Observatory's mascot, were especially popular among the young visitors: they were kept



Uniformed aviation youth groups visit the Observatory during the Open Day.

Fun with the Public Open Day 2014



Mr KONG Wai, Scientific Officer of the Observatory, presents the weather at the Open Day.

busy by never-ending requests to be photographed with their new fans! Alongside the Observatory staff on duty, some 80 volunteers from Friends of the Observatory served as ambassadors at the Open Day, helping to welcome visitors during the event while also enjoying the great weather-themed fun.

In celebration of World Meteorological Day on 23 March (<http://www.wmo.int/worldmetday/>), this year's Open Day was organised on the theme of "Weather and Climate: Engaging the Youth", and a number of uniformed youth groups, including the Scouts Association, the Air Scouts, the Sea Scouts, the Air Cadets, the Hong Kong Youth Aviation Academy, the Sea Cadets, the CAS Cadet Corps and the AMS Cadet Corps, were invited to the event. Their knowledge of meteorological work and climate change was much enriched by their close encounters with meteorological equipment and conversations with Observatory staff. The young people came to the realisation that with climate change intricately related to their future, a positive and proactive response would be essential.

Meteorology Series IV: Behind the Scenes

LEUNG Wing-mo

With time passing by ever so slowly after retirement and life began to get a bit boring. So when RTHK invited me to host another Observatory-RTHK joint production of "Meteorology Series IV", it was a proposal too exciting to miss. At the first production meeting, the producer mentioned his expectation of me. He half jokingly said that it would be just fine if I could be as natural and persuasive as Sir David Attenborough. That was quite a challenge for a stoic guy like me. All I could mutter at the time were some weak pleas for patient guidance from the directors.

The production took me to Tianshan in one of its first snow in September, to an inundated Vietnam in October, to the typhoon-stricken Philippines in November and a bone-dry Australia in February. What impressed me most was what a Queensland farmer said of the drought there: "It could not be worse as this is already the 18th straight month without significant rain." Indeed, the best way to deal with adversity was to be optimistic, like what Oscar Wilde said, "We are all in the gutter, but some of us are looking at the stars."

The greatest challenge in filming the forsaken farmland in Australia was not the near 40-degree heat and the ultra strong UV rays, but to prevent the flies in their thousands swarming into my mouth when I (left in the photograph below) tried to talk like Sir David Attenborough!



Not quite a leisure boat ride, but an inspection of the inundated rice field of a Vietnamese farmer (the old man on the left). On the way back, the boat carrying the director and the camera man capsized. Fortunately, everyone was unharmed.



Months of dry weather have rendered Queensland practically grassless. The shepherd had to spend nearly A\$100,000 a year to buy feed for his 2,000 sheep - a significant increase in costs.



Had it really snowed in Hong Kong?

Linus YEUNG

Since the Second World War, the Observatory has received four reports of snow – on 2 February and 13 December 1967, 29 January 1971 and 14 December 1975. All of these incidents happened many years ago when instruments and observations were not as sophisticated and comprehensive as today's. Apart from surface air temperature, little was known about the meteorological conditions that could trigger such rare phenomena or the

timing and location of their occurrence. The snow reports in those days were based mainly on eye witness accounts and weather data around the times of the reports. The three cases from 1967 and 1971 were all reported when air temperatures were above freezing, but under 8 degrees Celsius. Were they bona fide cases of snowfall? Could some of them be melting snowflakes, or light sleet, or other types of precipitation?



In purely physical terms, snow cannot stay in a solid state for long if the ambient temperature is well above freezing. But when the air temperature is just slightly above zero and the ambient air is sufficiently dry, snowflakes may still occur in a partially melted or even unmelted state. The upper air sounding taken on 13 December 1967 reflected this dry condition. For the two cases on 2 February 1967 and 29 January 1971, the ambient conditions were not so dry and were thus less favourable for preserving snowflakes in a solid state. So the possibility that the precipitation observed is related to melting snowflakes or slight sleet cannot be dismissed. But the only way we can know for sure is if there were time machines that could send today's advanced equipment back to the days when the snow was reported.

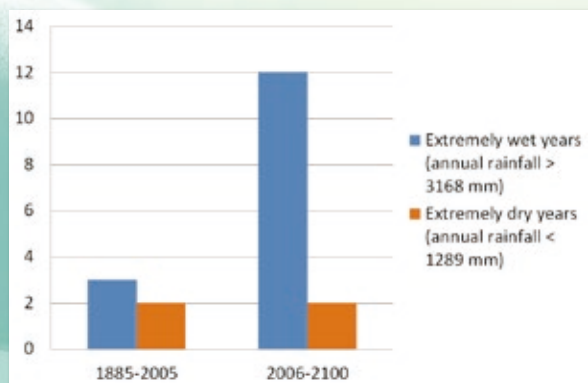
Talk on Climate Change

TONG Hang-wai

Climate change has become a major challenge of our time. Over the years, the Observatory has conducted ongoing research into the effects of climate change on Hong Kong and organised public education programmes on the topic. Following the release of the Fifth Assessment Report by Working Group I of the United Nations Intergovernmental Panel on Climate Change (IPCC) in September 2013, the Observatory held a series



Mr LEE Sai-ming, Senior Scientific Officer of the Observatory, introduces the Fifth Assessment Report of IPCC Working Group I to government officials.



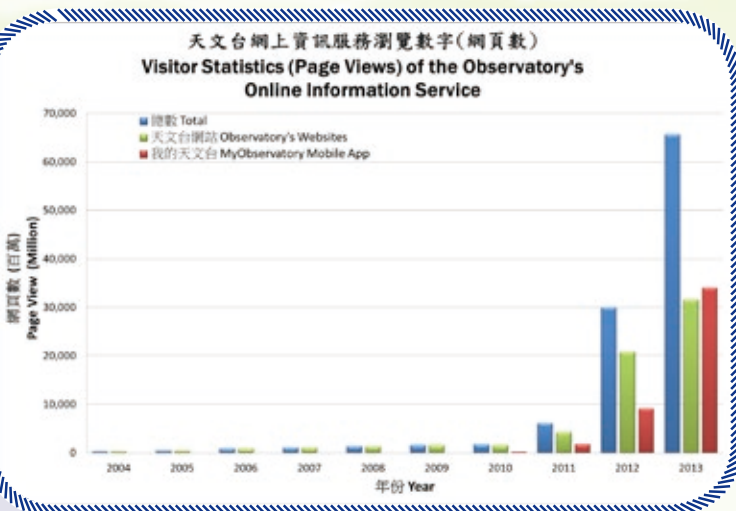
of talks for government officials and the public to present the latest scientific findings from the report as well as climate projections for Hong Kong and the world (see chart to the left). The talks helped to enhance public awareness of climate change, and also gave policy-makers an insight into the latest development.

The Observatory has updated the climate projection for Hong Kong in the 21st century based on the latest data from IPCC. It is predicted that Hong Kong will see a rise in the number of extremely wet years, but drought remains a possibility. For details, please see http://www.hko.gov.hk/climate_change/ClimProj20140317-e.pdf.



People

According to the 2013 Google Search Trends in Hong Kong, "Hong Kong Observatory" ranked among the top ten most-searched keywords on the Internet in the territory. In fact, use of the Observatory's online information service has constantly set new records in recent years. In 2013, the number of total visits exceeded 65 billion, while use of the "MyObservatory" mobile app now surpasses that of the main site.



Some 200 secondary school teachers and students attended the briefing session for the Weather Observation and Weather Photos Competition 2014.



On 8 March, Observatory Director Mr SHUN Chi-ming (5th from left) joined a line-up of collectors and several senior citizens who witnessed the disastrous Typhoon Wanda in 1962 at the opening ceremony of "Hong Kong in the Storm - Hong Kong Typhoon Historical Photo Exhibition" organised by the Conservancy Association Centre for Heritage.



Volunteers from Friends of the Observatory attended a docent training programme on 7, 10 and 18 January. Here, a trainee introduces the operating principle behind the tilting-siphon rain gauge. Participants who successfully completed the programme have now started their practical training and are one step closer to their goal of becoming docents and leading guided tours at the Observatory.



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

Staff Up Close



Staff Promotion

Dr LI Ping-wah was promoted to Senior Scientific Officer on 16 March.



Staff Promotion

Mr TSUI Kit-chi was promoted to Assistant Director spearheading the Radiation Monitoring and Assessment Branch on 17 January.



Staff Promotion

Mr CHOY Boon-leung was promoted to Senior Scientific Officer on 10 March.

Commendations

Staff of the Observatory who received words of thanks and commendations from the public or organisations from January to March 2014:

- Ms Sandy SONG (Senior Scientific Officer)
- Mr LEE Kwok-lun (Scientific Officer)
- Mr Linus YEUNG (Scientific officer)
- Mr YEUNG Wai-lung (Scientific Officer)
- Mr Ken WONG (Experimental Officer)
- Mr CHEN-yung (Scientific Assistant)
- Mr CHIU Chi-man (Photographer II)

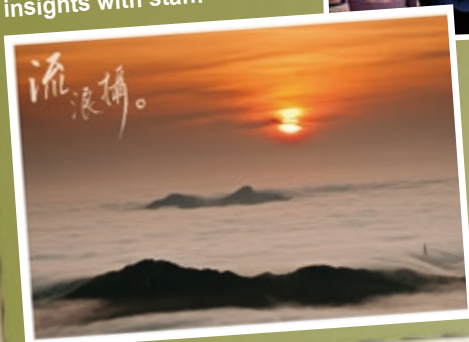


**Best TV Weather
Programme Presenter**

4th Quarter 2013, Dr Daniel YEUNG

Happy Business

The Wandering Photography group visited the Observatory on 7 March to share their photographic insights with staff.



TCM Health Talk

The Staff Association invited registered TCM practitioner Ms LEUNG Yin-ping to give a talk on the basics of pain.

