Chit Chat Weather

香港天文台
HONG KONG OBSERVATORY

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Observatory Director in "Weather Chit Chat with Young People"

Ken WONG

Continuing its focus on "Weather and Climate: Engaging Youth", the theme of World Meteorological Day 2014, the Hong Kong Observatory held a special session of "Weather Chit Chat with Young People" on 10 May that attracted over 200, mainly student, participants. In their fascinating interactive presentations, Mr SHUN Chi-ming, Director of the Observatory, and media veteran Mr LI Chan-wing debunked a number of myths that have grown up around various climate change and extreme weather phenomena, including the peculiar-to-Hong-Kong conspiracy theory "Li's Force Field" (which satirizes the issuance of tropical cyclone warning signals as based on economic rather than meteorological reasons), and the misconception of strangely shaped hailstones as several photos online suggested. Agreeing that weather forecasts may not be 100% accurate, but emphasising the need to respect scientific data, Mr Shun advised the youngsters to seek the truth, look beyond the surface and be more discerning about rumours. Last but not least, the Director encouraged them to get involved in weather observation themselves and to share their photos of the weather and their own observation reports on the webpage (www.co-win.org), mobile phone app (iCWeatherOS) and social network page (www.facebook.com/icwos) of the Community Weather Observing Scheme. The participants in the event all agreed that they had learned a great deal from the session and gained a better understanding of the topics that had been discussed.

Mr SHUN Chi-ming (left), Director of the Observatory, and Mr LI Chan-wing (right), media veteran, debunk weather myths at the special session of "Weather Chit Chat with Young People".

Weather and Climate: Engaging Youth

Weather Observation and Weather Photos Competition

TAM Kwong-hung

The officiating guests, adjudicators and winning teams pose for a group photo at the award presentation ceremony.

The award presentation ceremony for the Weather Observation and Weather Photos Competition was held on 10 May. Jointly organised by Ho Koon Nature Education cum Astronomical Centre, the Hong Kong Observatory, the Hong Kong Meteorological Society and the Community Weather Information Network (Co-WIN), the competition focused on topics relating to the weather in the spring of 2014 and required entrants to compile an investigative study report and to produce a one-minute video as they contended for a number of different awards.

A Note from the Students

Mr Eric C.P. LEE, Principal of Ho Koon Nature Education cum Astronomical Centre (first from right), presents the first prize to the winner of the Investigative Study Report category.

South Tuen Mun Government Secondary School: Winner of the Investigative Study Report Category

By carrying out this investigative study, we not only learned about the characteristics of spring weather, but were also able to reinforce what we have learned in class. By taking part in the competition, we earned valuable experience that we could not have found in our textbooks. And at the award presentation ceremony, we gained new insights from the inspiring explanation on climate change by the Director of the Observatory.

Community Weather Observation

Weather Observation Ambassador Scheme

Maintaining the momentum generated by the Weather Observation and Weather Photos Competition, the Observatory launched the Weather Observation Ambassador Scheme to encourage more young people to get involved in weather observation activities. The first phase of the scheme will see the student winners of the competition appointed as ambassadors to promote the scheme to their schoolmates, friends and relatives on behalf of the Observatory. They will also conduct weather observations from time to time and share the photos and videos they take on the scheme's various online platforms. At the same time, the Observatory will organise a series of activities for the ambassadors to enhance their knowledge of the weather and climate. What's more, the ambassadors will be awarded gold, silver and bronze medals as both reward and further encouragement for their participation in the Community Weather Observing Scheme.

If you would like to take part in the scheme, please visit https://goo.gl/zWqPNJ and join the group.

天氣觀測大使 Ambassador of Weather Observation

Join group + Create Group

Debunking Myths

Unfolding the Mysteries of Weather Warnings

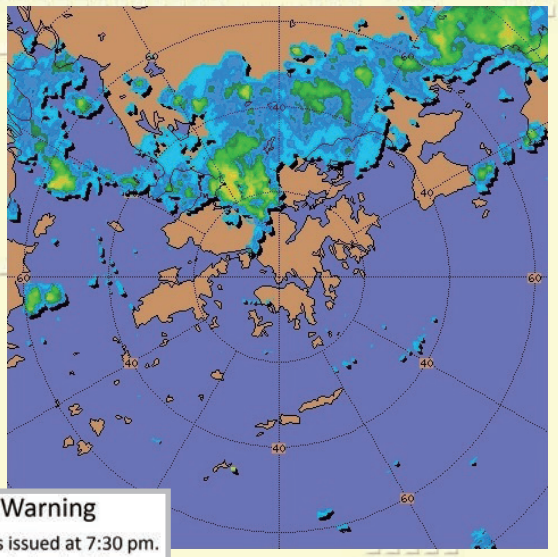
LEE Lap-shun

Every summer, the Central Forecasting Office receives enquires on thunderstorms and heavy rain. Here are the answers to three frequently asked questions as well as some useful tips.

Q: Sometimes when the Observatory issues a thunderstorm warning, the weather is perfectly fine where I am. Why is that?

A: This happens more commonly in the summer. On a sunny day, the temperature in the New Territories rises more quickly than it does in the rest of Hong Kong. The relatively active convective air movement triggers isolated thunderstorms, which will prompt the Observatory to issue a thunderstorm warning.

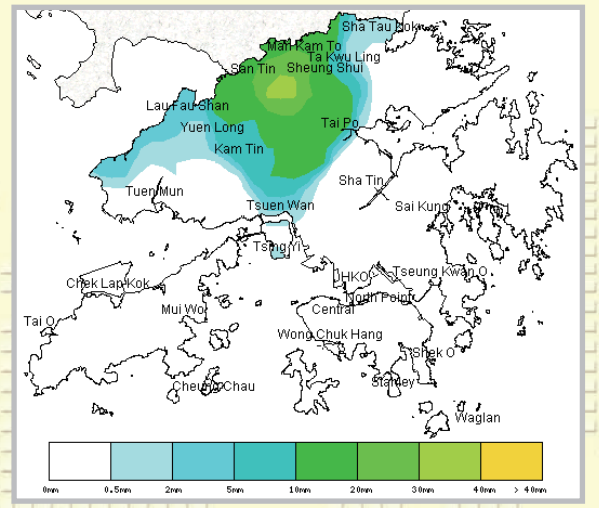
Useful tip: We suggest that you pay attention to the affected areas that are mentioned in the thunderstorm warning and also check the Lightning Location Map on the Observatory's website to get a better idea of the distribution of thunderstorms in Hong Kong.



Radar picture showing thunderstorms occurring mostly in the northern part of the New Territories.

Thunderstorm Warning

Thunderstorm Warning was issued at 7:30 pm. It will be valid until 8:30 pm today. Isolated thunderstorms are expected to occur over the northern part of New Territories.



The uneven distribution of rainfall is highlighted in this rainfall distribution map, which shows over 30 mm of rain in some areas in the New Territories, but none at all recorded in Kowloon, Hong Kong and Lantau.

Q: Sometimes it can be pouring with rain where I am, but the Observatory hasn't issued a rainstorm warning. Why is that?

A: The intensity of rainfall can vary greatly across different parts of Hong Kong. When it issues a rainstorm warning signal, the Observatory mainly takes into consideration the rainfall over a wide expanse of Hong Kong, and it will not issue a warning if heavy rain is falling only in small, isolated areas.

Useful tip: We suggest that you check the Observatory's Special Weather Tips and the latest weather forecast for information on isolated downpours.

Special Weather Tips

Thundery showers are affecting Hong Kong. Showers are heavy over parts of the territory.
In the past hour, more than 30 millimetres of rainfall were recorded over Sheung Shui.
Members of the public should be on the alert.

Q: Why is there sometimes a sudden heavy shower, even though the Observatory did not mention rain in its forecast from just a few days ago?

A: Currently, the Observatory mainly refers to the output from numerical weather prediction models when it formulates its weather forecast for the next few days, and the accuracy of the forecast will generally decrease as the forecast range increases. In addition, heavy rain is caused by a number of factors that are not always easy to predict accurately a few days in advance. Most importantly, Hong Kong is a small place and slight changes in the location and movement of rain bands can bring completely different amounts of rainfall.

Useful tip: When you refer to the 9-day Weather Forecast, be aware of the uncertainty involved. And pay close attention to the Observatory's forecast updates. Generally speaking, the closer the date of forecast, the more accurate it will be.

9-day Weather Forecast — Updated at 11:30 HKT

Date	20 Jun Fri	21 Jun Sat	22 Jun Sun	23 Jun Mon	24 Jun Tue	25 Jun Wed	26 Jun Thu	27 Jun Fri	28 Jun Sat
Weather									
Temp (°C)	27 - 31	27 - 30	27 - 30	27 - 31	28 - 32	28 - 32	28 - 33	28 - 32	28 - 32
RH (%)	75 - 95	80 - 95	80 - 95	75 - 95	70 - 95	70 - 95	65 - 95	75 - 95	75 - 95

Climate Change Q&A

LEE Sai-ming

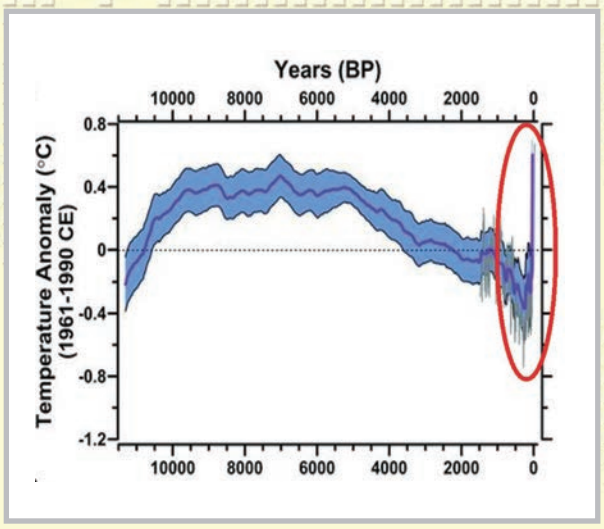
Brief Notes on the Latest Developments in Climate Change

Q: It was so cold last winter, and there were even severe snowstorms in North America. Has global warming stopped?

A: Last winter was colder than normal in the eastern and central parts of North America, but warmer than normal in the western part. What's more, Australia registered record high annual temperatures in 2013 and was still being affected by heatwaves early this year. We cannot just focus on short-term fluctuations and ignore the long-term trend. If we look at the long-term variation in global temperature data, the warming trend is loud and clear.

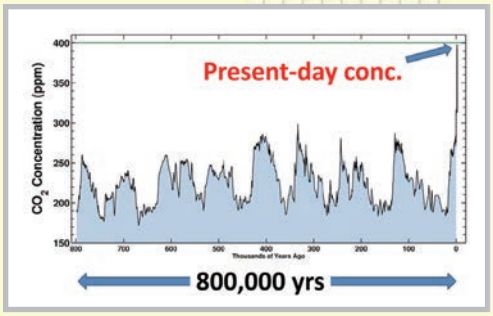
Q: The climate has been changing since the beginning of time, so isn't that just due to natural factors?

A: In the distant past, global climate changes were indeed caused by natural factors, and the gradual decline of the earth's temperature over the last 5,000 years was also a natural phenomenon. But the global temperature has risen sharply over the past century or so, reversing the trend of the preceding five millennia. In the past, the concentration of carbon dioxide in the atmosphere changed regularly, but never exceeded 300 ppm. It has increased consistently since the Industrial Revolution, however, and is now over 400 ppm, the highest concentration in the past 800,000 years. These drastic changes cannot be simply explained by natural factors.



Reconstructed global temperature anomalies regarding the 1961-1990 average for the past 11,300 years (purple line with uncertainty in blue band). A previous reconstruction by another study is shown by the grey line. Years (BP) refer to years before 1950.

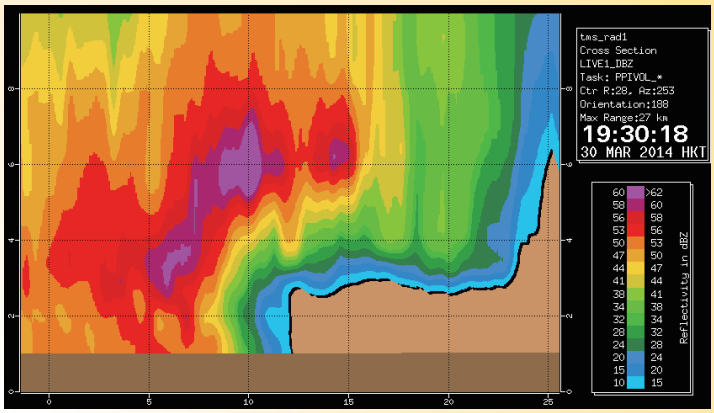
(From: A Reconstruction of Regional and Global Temperature for the Past 11,300 Years. Shaun A. Marcott et al. Science 339, 1198 (2013); DOI: 10.1126/science.1228026. Reprinted with permission from the American Association for the Advancement of Science. Note: This image may not be further reproduced, distributed, transmitted, modified, adapted, performed, displayed, published, or sold in whole or in part without prior written permission from the publisher.)

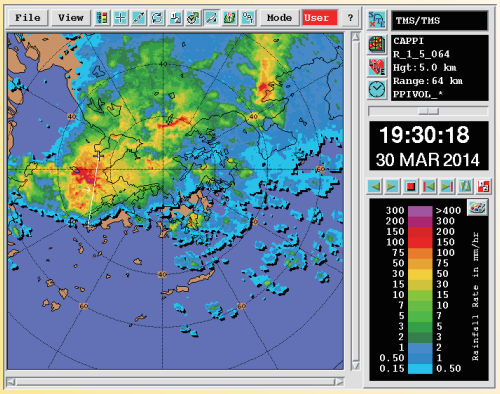


Ask Dr Tin

Why is there hail when the temperature is over 20 degrees?

The airflow that causes hail is tilted. The vertical cross section of this radar picture taken during the hailstorm on 30 March clearly shows the over-hang feature of this phenomenon.





Generally speaking, hail is caused by intense thunderstorms or severe convective weather. Imagine a refrigerator with a big fan installed at the bottom that constantly blows water vapour from the bottom to the freezer compartment at the top. The water vapour will turn into small ice droplets, which then roll in the updraft produced by the fan, getting bigger and bigger. When the updraft can no longer support the weight of the ice droplets, they fall to the ground as hail.

For more information on hail, please see:

www.weather.gov.hk/education/edu01met/wxphe/ele_hailstorm.htm (Chinese only).

Partnership

The Observatory Actively Promotes Aviation Meteorology Education

CHEUNG Ping

From March to May this year, the Hong Kong Observatory introduced the Observatory's aviation meteorological services to members of the Hong Kong Youth Aviation Academy (HKYAA) and the Scout Association of Hong Kong and provided them with training on aviation meteorology. The youngsters all reported back that the talks and visits had given them a far better understanding of this important subject.

Hong Kong Observatory Helps Boost Co-operation between IMO and WMO

MOK Hing-yim

The Director of the Hong Kong Observatory (left) introduces the history of the Observatory to Mr Koji SEKIMIZU

Mr Koji Sekimizu, Secretary-General of the International Maritime Organization (IMO), visited the Observatory on 4 March as part of a Hong Kong Government-sponsored programme. During his visit, he was introduced to the recent efforts of the Observatory to enhance weather observation at sea in support of public and marine weather services, which have included the installation of automatic weather stations on board the Observatory's Voluntary Observing Ships as well as international co-operation under the umbrella of the World Meteorological Organization (WMO). Mr Sekimizu was most interested in the WMO's new initiatives to study the Arctic region and recognised the importance of weather observation and forecasting for global shipping. Following his visit to the Observatory, he wrote to the Secretary-General of the WMO seeking to strengthen the co-operation between the two organisations for the benefit of marine safety.

Meteorology Series IV Finale

David HUI, Ken WONG

The last episode of Meteorology Series IV, a joint effort between the Hong Kong Observatory and Radio Television Hong Kong, was broadcast in the evening of 17 May.

You can watch the programme online at http://programme.rthk.hk/rthk/tv/programme.php?name=tv/meteorology2014.

Our programme received enthusiastic response, with members of the public sending us some wonderfully positive messages: "A major production indeed!", "The contents are really inspiring" and "I felt deeply moved" were just some of the comments we heard. They gave the production team immense encouragement and spur us on as we strive for excellence in our weather services. We are indebted to a number of government departments and organisations for the successful production and broadcast of the programme, and our heartfelt gratitude goes to Radio Television Hong Kong, the Geotechnical Engineering Office, the Drainage Services Department, the Water Supplies Department and the Hong Kong University of Science and Technology.

New Services

Observatory Adds New Advisory to Help Prevent Heatstroke

Joanne CHAN

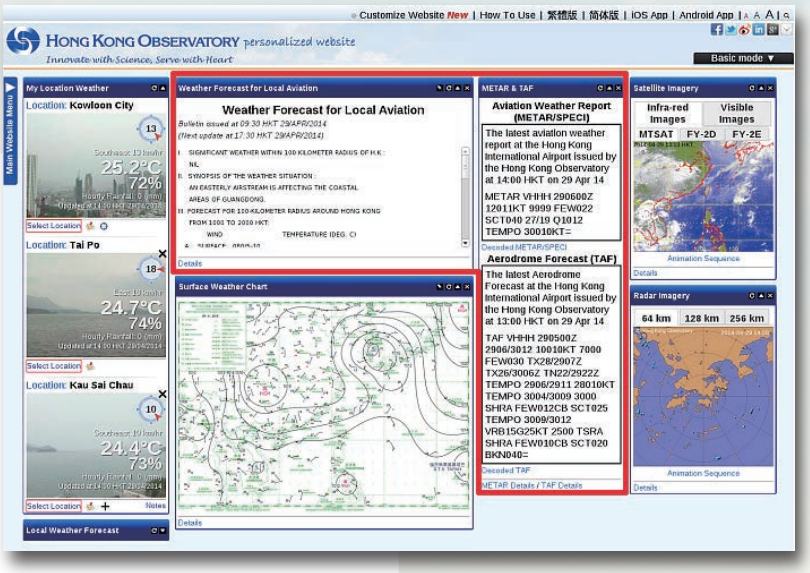
To raise public awareness of the impact that hot weather can have, the Hong Kong Observatory launched a “Hot Weather Special Advisory” this summer on its website and MyObservatory mobile app. Even though the level defined for the Very Hot Weather Warning has not been reached, people can still be exposed to the risk of heatstroke in conditions marked by high temperatures, high humidity and light winds, if they do not take appropriate precautions.

To monitor hot weather conditions, the Observatory has adopted a "Hong Kong Heat Index" on a trial basis that reflects the combined effect of temperature, humidity, wind speed and solar radiation. The Observatory will monitor the atmospheric environment as well as the weather conditions in different places across Hong Kong and also refer to this trial index when issuing the Hot Weather Special Advisory and the Very Hot Weather Warning.

More Personalised Contents on “my.weather.gov.hk”

LI Ping-wah

The aviation weather category of the Hong Kong Observatory Personalised website has now been enhanced with the addition of a surface weather chart and a new set of widgets including weather reports and forecasts for Hong Kong International Airport and the Weather Forecast for Local Aviation. What’s more, the improved My Location Weather widget allows up to five windows to be displayed simultaneously, allowing users to gain a clearer picture of the regional weather situation over the territory.



New Real-Time Weather Photos Taken on Lamma Island

CHAN Ying-wa

The Hong Kong Observatory has enhanced its regional weather information service by adding real-time weather photos taken on Lamma Island to its website. A new camera has been set up at Yung Shue Wan Pier overlooking the West Lamma Channel to the east of Lantau Island. Members of the public can access the weather photos on the Observatory's Regional Weather in Hong Kong webpage (www.hko.gov.hk/wxinfo/ts/index_e_webcam.htm) and mobile platform webpage (m.hko.gov.hk/wxreport/wxphoto.htm).

Sea fog (indicated by an arrow) near Hei Ling Chau to the east of Lantau Island captured by the weather camera facing northwest from Yung Shue Wan Pier on Lamma Island in the afternoon of 19 March.

HKO Side Lights

Mr LEE Sai-ming, Senior Scientific Officer of the Observatory, illustrates the latest developments in climate change to science teachers in the talk “Evidence and Consequences of Warming Climate” jointly organised by the Observatory and the Education Bureau.

The Hong Kong Observatory (HKO) website won gold prize in the "Government departments" category in the 2013 Top 10 ".hk" Website Competition. Mr Stephen K.M. LAU (right), JP, Vice President of the Hong Kong Computer Society, presents the award to the Observatory's Scientific Officer Mr TONG Yu-fai (second from right).

The Director of the Hong Kong Observatory (second row, fifth from left) with participants at the Director’s Cup Table Tennis Tournament 2014.

The Director (second row, centre) hosts a dinner for around 60 volunteers from the Friends of the Observatory to thank them for their immense help they provided during the 2014 Open Day. The Outstanding Docent Award and Outstanding Volunteer Award 2013 were also presented at the dinner.

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

Happy Business

Director’s Letter of Commendation Presentation Ceremony

On 24 April, the Director presented letters of commendation to a number of colleagues in recognition of their outstanding service and performance in: (a) dissemination of weather messages as they willingly returned to Central Forecasting Office on days of inclement weather; and (b) a well-received revamp of the Hong Kong Observatory Calendar: Ms Sandy SONG, Mr TAM Kwong-hung, Dr HO Chun-kit, Mr WOO Wang-chun, Dr Daniel YEUNG, Mr KWONG Ching-kan, Mr LAU Chi-ho, Mr LO Wai-hung, Mr LUI Wing-hong, Ms Karen SHUM, Ms WONG Hiu-kam, Ms WONG Tin-yan, Ms KONG Tsz-yan and Mrs NG CHAN Kam-chu.

Commendation

Staff of the Observatory who received words of thanks and commendation from the public or organisations in the second quarter of 2014:

Mr HUI Tai-wai (Scientific Officer), Dr Daniel YEUNG (Scientific Officer)
Mr CHENG Tsz-lo (Experimental Officer), Mr Ken WONG (Experimental Officer)
Mr CHEN Yung (Scientific Assistant)