

# WEATHER ON WINGS



Dial-a-Weather : 187 8200

Home page : <http://www.hko.gov.hk>, <http://www.weather.gov.hk>



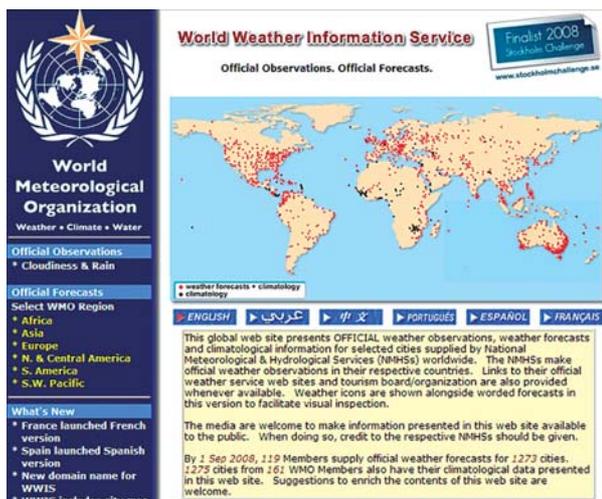
## The World Weather Information Service Website

### wins a prestigious international award

TAM Cheuk-ming

The World Weather Information Service (WWIS) website (<http://worldweather.wmo.int/>) operated by the Hong Kong Observatory (HKO) for the United Nations World Meteorological Organization (WMO) has won the prestigious Stockholm Challenge Award in the Environment category. This competition is a significant event in the Information Technology sector and is often referred to as the "Nobel Prize" or "Oscar Award" in the IT profession. On 22 May, I was privileged to represent WMO and HKO to receive the award at the Stockholm Blue Hall, the venue for holding the Nobel Prize ceremony and banquet every December.

The Stockholm Challenge (<http://www.stockholmchallenge.se/>) is an international competition held once every two years since 1994. Its objective is to promote the use of information and communication technology applications to help counteract social and economic disadvantage.



The World Weather Information Service webpage

The WWIS website is an international cooperation project of the WMO. It serves as a central portal of official weather forecasts and climatological data provided by the National Meteorological Services of countries and territories around the world. Also, it helps to increase the international visibility of developing countries, including the Least Developed Countries by making their forecasts readily available to the international community. The Stockholm Challenge judging panel commended the project as follows: "They have a strong vision, global objectives, a robust sustainability model and demonstrate information exchange between national and international organizations sharing weather data."



Dr Tam Cheuk-ming of the Hong Kong Observatory receiving the Stockholm Challenge Award at the Blue Hall

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# Hong Kong Observatory Renders Full Support to Beijing Olympics

LEUNG Yin-kong; LI Sun-wai; WONG Wai-kin & CHAN Pak-wai

The 2008 Beijing Olympic Games was a spectacular event, attracting attention worldwide. Hong Kong and Qingdao also co-hosted the event. The Observatory supported the Olympic Events in the three places by providing accurate and effective meteorological services.

## Weather Services for Torch Relay and Equestrian Events

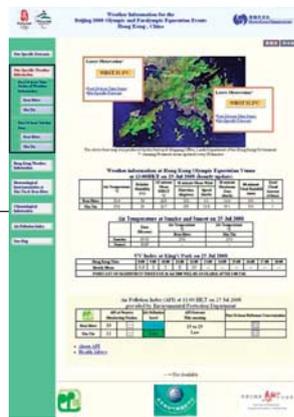
The Olympic torch relay in Hong Kong was held on 2 May. To support the smooth running of the historic event, the Observatory closely liaised with the hosting organizations, provided accurate weather forecasts to them and assisted in contingency planning to deal with various weather situations.

August in Hong Kong is hot and humid with occasional showers and thunderstorms. It is also a month Hong Kong is likely to be affected by tropical cyclones. These weather conditions may have impact on the scheduling of the Equestrian competitions as well as venue operations. The Observatory was responsible for providing weather observations, forecasts and warnings for the competitions. Our professional observers monitored closely the weather condition at the venues. A specially designed instrument was installed to constantly assess the heat stress on horses. A ceilometer was installed at Beas River in late May to determine automatically the cloud amount and cloud-base height using sophisticated algorithms. All the weather data were telemetered to the Observatory headquarters for forecasters' reference. Venue-specific weather forecasts at three-hourly intervals for the next three days and the 7-day weather forecasts for Hong Kong were provided. The Observatory launched a special website to provide weather information to the event personnel and the public. The Observatory also maintained close liaison with the Equestrian Company and FEI Veterinary Delegate through telephone to provide timely advice on the weather to support their decision making in respect of scheduling of competitions and venue operations.

The Observatory's special weather website launched for the Olympic and Paralympic Equestrian Events



Senior Scientific Officer Dr. Tam Cheuk-ming with Equestrian venue weather observer Mr. Leung Kwai-kong.



Forecasters in Beijing operating the Observatory's nowcasting system SWIRLS.

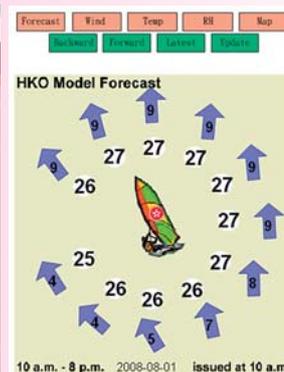
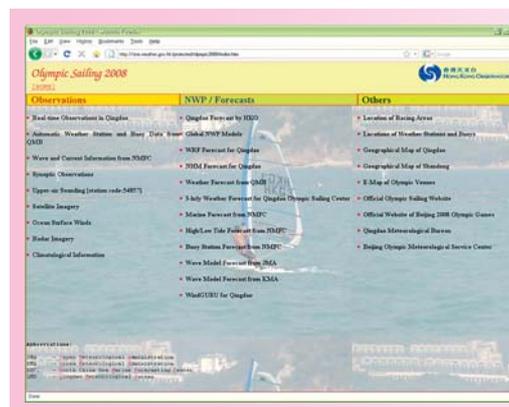
## SWIRLS ready for Beijing Olympics

The Observatory's nowcasting system SWIRLS was invited to participate in the Beijing 2008 Olympic Forecast Demonstration Project (B08FDP). The primary goal of B08FDP was to test the world advanced nowcasting systems in forecasting severe weather such as rainstorms, hails and lightning. All participants came from top-notch international nowcasting operation centres or research institutes.

After trial operations in July-August in the last two years, considerable upgrades were made in SWIRLS. The official verification results of the 2007 trial operation showed that SWIRLS had outstanding performance in precipitation forecasts and tracking of storms in rainstorm cases. It was therefore considered one of the most important systems that contributed to the high-quality forecast services during the Beijing 2008 Olympic Games.

## Forecast Support to the Hong Kong Windsurfing Team

Like in the Athens Olympics, the Observatory again rendered full support to the Hong Kong Windsurfing Team in the Qingdao races. Site-specific forecasts and meteorological data were provided to the team. During a training conducted in Qingdao in June, the Observatory provided forecasts to the team twice a day. The opportunity was taken to test the website, transmission of weather data and forecast data of numerical weather prediction models. As a result, accurate and effective meteorological services were provided to the team during the Olympic races in August.



Website provided to the Windsurfing Team (left), and forecasts of wind direction, wind speed and temperature over the race area displayed on a PDA (right).

## Weathering the Storms for 125 Years



The Director of the Hong Kong Observatory, Mr LAM Chiu-ying (left), chatted with a retired colleague, Mr LO Gun, in the opening ceremony on 22 July.

To celebrate the 125th anniversary of the Hong Kong Observatory, an exhibition "Hong Kong Observatory - Weathering the Storms for 125 Years" was staged at the Hong Kong Museum of History from 23 July to 22 September.

The exhibition introduced how the Observatory has evolved in the past century to cope with societal changes, from having only a couple of staff and a handful of simple instruments when it was established, to become one of the leading meteorological services in the world nowadays. This path has been peppered with countless storms. For example, among the exhibits were the weather records scribbled by the imprisoned Observatory staff during World War II, fully reflecting their perseverance and professionalism. Other precious exhibits included a hundred-year-old weather chart, the earliest literature on the climate of the South China Sea, seismometer used in the 1950s and the typhoon signals in the old days.



The weather map of 1909, the earliest extant weather map drawn by the Hong Kong Observatory

The exhibition also reviewed the natural disasters that have devastated Hong Kong, such as Typhoons Wanda and Rose in the 60s and the rainstorms that caused the collapsed of a building at Cotewall Road in the 70s, which would probably bring back memories of many citizens.

More about the exhibition is on the Observatory website [http://www.weather.gov.hk/125thAnniversary/launch\\_125yr-exhibition\\_e.htm](http://www.weather.gov.hk/125thAnniversary/launch_125yr-exhibition_e.htm)



## Opening of Solar Radiation Station at Kau Sai Chau

YU Mei-fung, Wendy

The Observatory's second solar radiation station at the Kau Sai Chau Public Golf Course in Sai Kung was officially opened on 3 July.

Over recent years, the King's Park Meteorological Station located in the urban area has been increasingly affected by nearby buildings. As a result, King's Park is no longer an ideal place for measuring solar radiation and there is a need to look for a new site. Kau Sai Chau was eventually selected after rounds of investigation. As the new site is located in rural area and well exposed, it is very suitable for long-term measurement of solar radiation. The successful setting up of the new solar radiation station was a result of the teamwork and professionalism of our colleagues, and the kind cooperation of the staff of the Golf Course.

Preparation for the opening ceremony also required dedication and good planning. For instance, the ceremony would be held at an exposed area on top of a small hill close to the station. To cope with the windy condition, colleagues came up with an idea of using A-frame structures to support the display panels and the backdrop, which turned out rather successful. On the day of the opening, weather was fine with plenty of sunshine, which perfectly matched the theme - solar radiation. The ceremony



Director of the Hong Kong Observatory and colleagues at the opening ceremony.

went smoothly. Guests were not only intrigued by the instruments installed at the station, but also amazed by the beautiful scenery of the site. After the ceremony, the team once again worked in unison to tidy up the site and pack things up quickly.

The opening of the new solar radiation station was widely reported by the media, reflecting the close tie between weather and human life. We are proud of providing new services and promoting science knowledge to the public.

The Kau Sai Chau solar radiation station is equipped with instruments to measure solar radiation (including global, direct and diffuse solar radiations), temperature, relative humidity and rainfall. To save energy, the station operates on solar power. It also employs wireless communication technology (GPRS) for real-time transmission of data back to the Observatory headquarters. You can access the relevant solar radiation and weather information from the Observatory's "Regional Weather" webpage at:

[http://www.weather.gov.hk/wxinfo/ts/display\\_graph\\_e.htm?ksc&menu=otherwxi&rxw&addbar](http://www.weather.gov.hk/wxinfo/ts/display_graph_e.htm?ksc&menu=otherwxi&rxw&addbar)



Meteorological instruments at the Kau Sai Chau Solar Radiation Station

# The Director's Blog

LI Sun-wai

# The Director's Blog



Want to know more about us and what we do at the Hong Kong Observatory?

Mr Lam Chiu-ying, Director of the Hong Kong Observatory launched the Director's Blog (<http://www.weather.gov.hk/blog/en/index.htm>) on the Observatory website on 15 May. Through this blog, Mr. Lam shares his views on current affairs with the public from time to time. Up to September, the blog has already covered a wide range of topics like the Sichuan earthquake in May, the black rainstorm in June, Typhoon Fengshen, the worries of frontline forecasters, "Lamchiuying" star, the exhibition "Weathering the Storms for 125 Years", typhoon eyes etc.

The Director's Blog

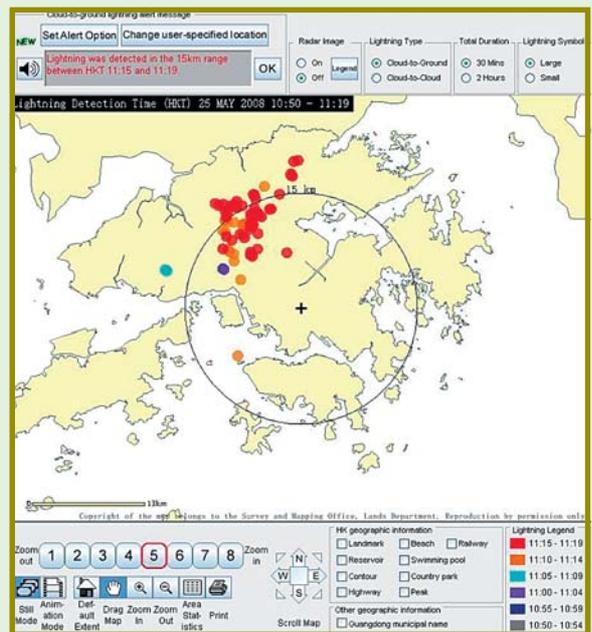
## Lightning alert service is now location specific

I believe you have the experience of hearing a thunder but having no idea of where it comes from, whether it is nearby or far away. Now you may easily get the answer by using the Observatory's new lightning alert service.

The Observatory launched a new Internet lightning alert service in May. People can specify their place of concern, either by choosing from a list of popular places, entering the name of a building, estate or street, or clicking directly on the lightning map. An alert will automatically be provided when there is lightning within 15 km of the specified location. This helps the public assess the risk of lightning during outdoor activities.

The new service allows the user to screen from a large quantity of lightning data the useful information for individual users according to their choice and help them decide whether or not to proceed with planned outdoor activities. The new lightning alert webpage is at <http://www.weather.gov.hk/wxinfo/llis/index.htm>. Since its inception in May till the end of July, the webpage attracted more than 860,000 visits, an increase of over 50 percent compared with the same period last year.

LEUNG Man-ye



The webpage automatically sends out an alert when lightning is detected within 15 km of the user-specified location

# Seminars on

## "Weather and Everyday Life"

**YEUNG Pui-yi**

In June and July, the Observatory organized six seminars on "Weather and Everyday Life" at Tuen Mun, Yuen Long, Sha Tin, Tsim Sha Tsui, Central and Kwai Fong respectively. The seminars aimed to foster public understanding of how the weather is related to daily lives and to promote disaster preparedness in severe weather situations.

Participants were of all ages from children of 4 years old to seniors of over sixty. Families of four or five were aplenty in the seminars. The seminars triggered active response and experience sharing from the audience. One senior participant, Mrs Ho even came twice from Kowloon to attend the seminars at Tuen Mun and Yuen Long.

The seminars were highly rated by the participants. On a scale of 0 to 5, an overall mark of 4.45 was given. Most participants indicated the seminars effectively promoted their disaster preparedness and wished the Observatory could hold more similar activities in the future.



A participant Mrs Ho (middle) taking photo with Observatory staff Mr David Hui (right) and Ms Yeung Pui-yi (left) at Yuen Long Theatre.



A group of primary students listening attentively in a seminar.

## Schools Talks on Climate Change - Online Application now available

**LEUNG Wai-hung**

In order to promote Hong Kong students' awareness of climate change, a team of the Observatory's professional meteorologists has been delivering talks on climate change for primary and secondary school children. The topics covered include the scientific basis and impacts of climate change as well as the role of individuals in combating climate change. Responses from schools have been very positive. Over 70 talks were conducted during the past twelve months.

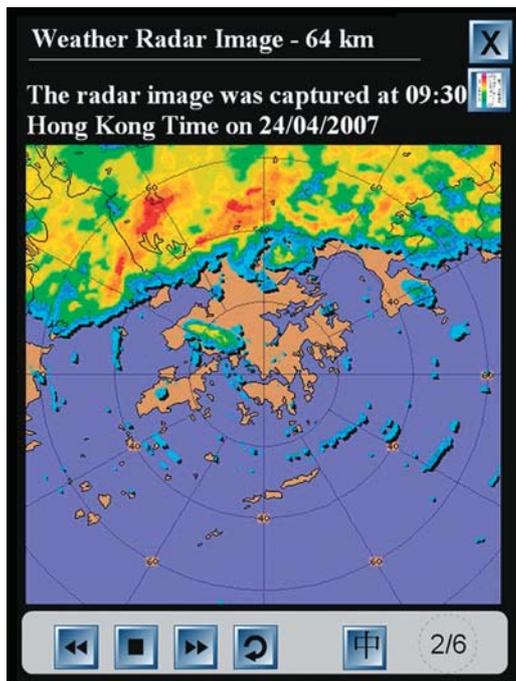
Recently, the Observatory launched a web page on "Talks on Climate Change for Schools" to allow schools to apply for the talk online. For details, please visit the web page at [http://www.weather.gov.hk/climate\\_change/talk\\_on\\_climate\\_change\\_e.htm](http://www.weather.gov.hk/climate_change/talk_on_climate_change_e.htm).



Scientific Officer Mr. LEE Lap-shun giving a talk on climate change for students

# Weather service anytime, anywhere -

## New weather tools for mobile phones



LI Sun-wai

Say you are hiking in Hong Kong's country parks or taking a bus to work, you may wish to know when the rain will stop or if any weather warnings are in force. Two new weather tools, the "Satellite and Radar Animation Sequences" and "Weather Banner", launched by the Observatory on 5 June would be able to help. These tools are tailored for Personal Digital Assistants (PDA) and smartphones with multimedia capabilities and connected to Internet, enabling people on the move to obtain the latest weather information anytime and anywhere.

The satellite and Radar animation sequences (<http://pda.hko.gov.hk/fy2ce.htm> and <http://pda.hko.gov.hk/rade.htm>) would allow one to check cloud and rain band movements. They enable users to decide whether to continue or stop any weather sensitive business or leisure activities.

The "Weather Banner" (<http://www.weather.gov.hk/wxinfo/wxbanner/wxbanner.htm>) is a handy software plug-in for PDAs and smartphones to display the latest air temperature and relative humidity, weather warnings, local area forecast and five-day weather forecast.

Radar animation sequence showing a band of heavy rain approaching Hong Kong

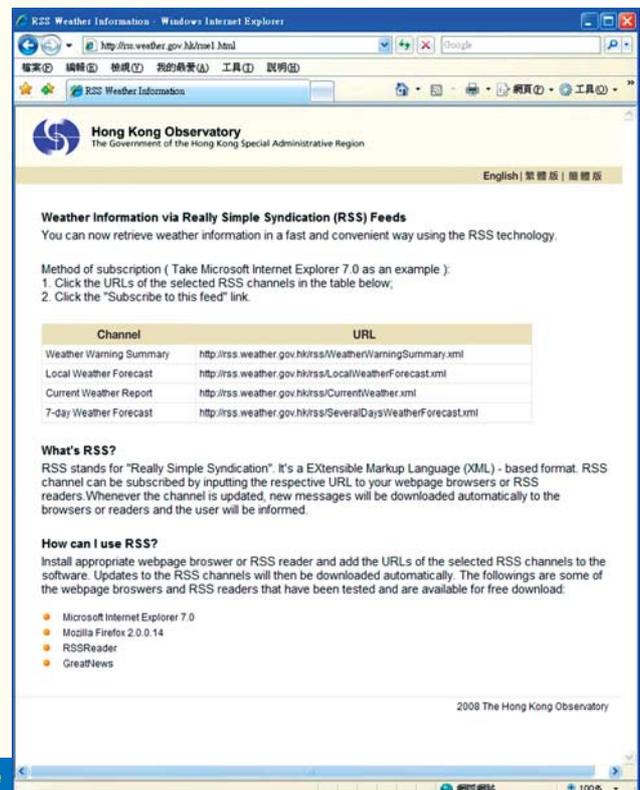
## New tools on Observatory website - Really Simple Syndication (RSS) and Weather Wizard

LI Sun-wai

On 6 May, two new tools, the Hong Kong Observatory (HKO) RSS and Weather Wizard, were launched on the HKO website to conveniently provide the latest weather information to the public. Some users commented that the tools helped them keep track of the latest weather changes and were very useful for planning their work and leisure activities.

The RSS server (<http://rss.weather.gov.hk/rsse.html>) responds to the user selection and delivers the required weather information to the user's PC automatically via Internet. This enables the user to focus on their work without worrying missing out any important weather updates.

The Weather Wizard (<http://www.weather.gov.hk/wxinfo/wxwizard/wxwizard.htm>) is a plug-in package for PCs. When installed, a HKO logo and symbols of weather warnings in force will appear on the "Taskbar" at the bottom of the computer screen. When moused over, the latest hourly temperature and relative humidity, as well as brief descriptions of the weather warnings will be displayed. When the weather warning status changes, a dialogue box will fly out and audio alerts will be triggered to remind users.



The HKO RSS website

# New era in reception of weather satellite data

SO Chi-kuen

The Hong Kong Observatory installed a 'FengyunCast' system early this year. Through a single satellite antenna at the Observatory headquarters (Figure 1), images from a number of weather satellites can be received. This symbolizes that the reception of weather satellite data at the Observatory has entered a new era.

'FengyunCast' is developed by the Chinese Meteorological Administration as an integral part of a global earth observational data sharing network called 'GEONetCast'. 'FengyunCast' re-broadcasts data from various weather satellites over the Asia-Pacific region, including the Fengyun-1 and Fengyun-2 series of satellites of China, the Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan, as well as the National Oceanic and Atmospheric Administration (NOAA) series and the Earth Observing System series of satellites of the USA.



Figure 1: Satellite antenna for receiving broadcast from the 'FengyunCast' system at the Hong Kong Observatory Headquarters

The latest weather satellite in the Chinese Fengyun-2 series, viz. FY-2D, and the existing FY-2C satellite are both geostationary weather satellites located above the equator at 86.5°E and 105°E respectively. They are capable of capturing images over the Asia-Pacific region round the clock. During the rainy season, each of the two satellites increases the frequency of observation from once an hour to twice an hour. The two satellites together provide one satellite image every 15 minutes. This is very useful for monitoring such hazardous weather as tropical cyclones and rainstorms, contributing towards the prevention and mitigation of disasters.

The Observatory launched a new webpage (Figure 2) of images from the FY2D satellite on 12 June 2008:

[http://www.weather.gov.hk/wxinfo/intersat/fy2d/satpic\\_s.shtml](http://www.weather.gov.hk/wxinfo/intersat/fy2d/satpic_s.shtml)

With the advances of weather satellite technology, a number of weather satellites will be launched by various countries in the next few years. Our country has just launched the Fengyun-3A (FY-3A) weather satellite in end of May this year. When it begins the broadcast, the Observatory will be able to receive its images via the 'FengyunCast' receiving station, further enhancing weather monitoring in the region.



Figure 2: Webpage of images captured by the FY-2D weather satellite

## More Weather Information for

Editorial Board

## Middle East Cities

To meet the demand of the public and media, forecasts for four cities in the Middle East were added to the "Weather Information of Other Cities" bulletin commencing 20 May. The cities include Ankara of Turkey, Jerusalem of Israel, Muscat of Oman and Tehran of Iran. The bulletin provides weather information including maximum and minimum air temperatures as well as weather forecasts for a total of 88 cities worldwide, covering Asia, America, Europe, Africa, Australia and the southern Pacific.

The "Weather Information of Other Cities" bulletins are issued to the mass media four times daily by the Hong Kong Observatory to facilitate their preparation of weather programmes and news columns. These bulletins are based on official forecasts issued by the national weather services of the cities. The information is also available on the Observatory website <http://www.weather.gov.hk/wxinfo/worldwx/majorcities.htm>.

# The Observatory enhances the **Ultraviolet** Index information service

LEUNG Man-ye

In a hot summer day, people engaging in outdoor activities usually pay more attention to the UV intensity and take necessary protective measures. In July 2008, the Observatory enhanced its UV Index information service. When the index is forecast to be 11 or above, a message will be added to the Observatory's hourly weather report, advising the public to avoid prolonged exposure to the sun and preventing eye and skin damage.

When UV intensity reaches a high level (UV Index of 6 to 7), people should take precautions against UV radiation. If the UV level goes up further, they should step up the protective measures. Information on UV Index can be obtained through radio, television, the Dial-a-Weather system (1878200), the Observatory website (<http://www.weather.gov.hk/wxinfo/currwx/current.htm>) and Personal Digital Assistant (PDA) website (<http://pda.hko.gov.hk/wxreporte.htm>).



A member of the Weather Family called 'Violet' that stands for high UV Index



## 10th Anniversary of Airport Meteorological Office at Chek Lap Kok

SONG Man-kuen, Sandy

Hong Kong Observatory staff celebrated the 10th anniversary of the Airport Meteorological Office (AMO) at Chek Lap Kok (CLK) on 7 July.

Looking back the history of aviation weather services for Chek Lap Kok, the Observatory staff actually started to station at the remote Chek Lap Kok island as early as 1979 to operate meteorological instruments and make weather observations. The collected data were the building block for the meteorological studies for the new airport.

The transition of the Airport Meteorological Office from Kai Tak to Chek Lap Kok went smoothly overnight on 6 July 1998 and started a new era in aviation weather services. Over the past decade, Hong Kong Observatory's aviation weather services achieved new heights with international recognition and awards ([http://www.weather.gov.hk/aviat/amt\\_e/Annex\\_1998-now.pdf](http://www.weather.gov.hk/aviat/amt_e/Annex_1998-now.pdf)).

Staff who have contributed to the development and operation of the Airport Meteorological Office at Chek Lap Kok, including those who were on duty on the day of opening of the airport, gathered at the ceremony. Mr. C.Y. Lam, Director of the Hong Kong Observatory, paid tribute to staff who have contributed to the aviation weather services in Hong Kong.



The Director of the Hong Kong Observatory, Mr. C.Y. Lam (1<sup>st</sup> left, front row) shared joyful moments with staff at the Chek Lap Kok Airport Meteorological Office to celebrate its 10th anniversary.

# Observatory launches the new Airport Thunderstorm and Lightning Alerting Service



From left, Messrs Victor Ho, CM Shun, CK Ng and Simon Li joined hands to officiate at the launching ceremony.

LI Ping-wah

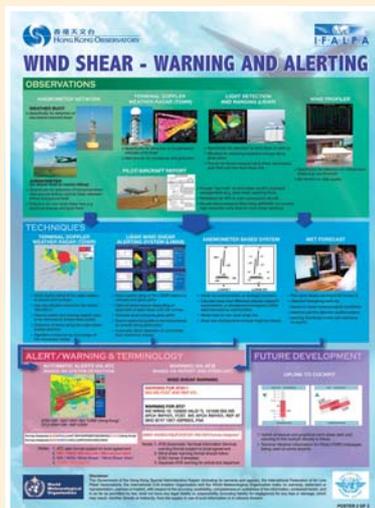
The Observatory launched a new Airport Thunderstorm and Lightning Alerting Service (ATLAS) in collaboration with the Airport Authority on 17 July. The Acting Assistant Director of the Observatory, Mr CM Shun, together with the Airfield General Manager of the Airport Authority, Mr CK Ng; the Acting Assistant Director-General of Civil Aviation, Mr Simon Li; and the Chairman of the Airline Operators Committee, Mr Victor Ho, officiated at the launching ceremony.

Mr Shun said, "The Observatory developed the ATLAS for detection and alerting of thunderstorms and lightning. It delivers graphical displays and alerts of lightning to enable the Airport Authority to issue Amber and Red lightning warning signals at the airport. It is one of the most sophisticated automatic lightning alerting systems operating at airports in the world." Mr Ng said, "As HKIA always puts safety as its first priority, we are delighted to collaborate with HKO to enhance the airport thunderstorm and lightning alerting service by improving detection efficiency and shortening duration time for issuing lightning warning signals. The new system also helps us provide passengers and airport staff with a safe and pleasant environment."

## The Observatory Collaborates with International Organizations to Publish New Wind Shear Posters

LI Ping-wah

The set of three new wind shear posters jointly developed by HKO, IFALPA, WMO and ICAO



The Observatory collaborated with the International Federation of Air Line Pilots' Associations (IFALPA), World Meteorological Organization (WMO) and International Civil Aviation Organization (ICAO) to publish a set of three new wind shear posters and distributed them to all ICAO Contracting States on behalf of ICAO. The three posters, entitled "Wind Shear - Their Causes", "Wind Shear - Warning and Alerting", and "Wind Shear - Pilot's Rules", replace the old posters published by ICAO between 1982 and 1990. The new posters aim to promulgate the most up-to-date educational material on windshear for enhancement of aviation safety worldwide.

The wind shear posters are available on the Observatory website at : [http://www.hko.gov.hk/aviat/ws\\_poster/ws\\_poster.htm](http://www.hko.gov.hk/aviat/ws_poster/ws_poster.htm). They are also available on the websites of IFALPA, WMO and ICAO to facilitate their widest promulgation in the aviation community:

- IFALPA website : <http://www.ifalpa.org/>
- WMO website : <http://www.caem.wmo.int/moodle/>
- ICAO website : <http://www.icao.int/anb/sg/metwsg/windshearposters.htm>

# Microwave radiometer working at the airport

CHAN Pak-wai



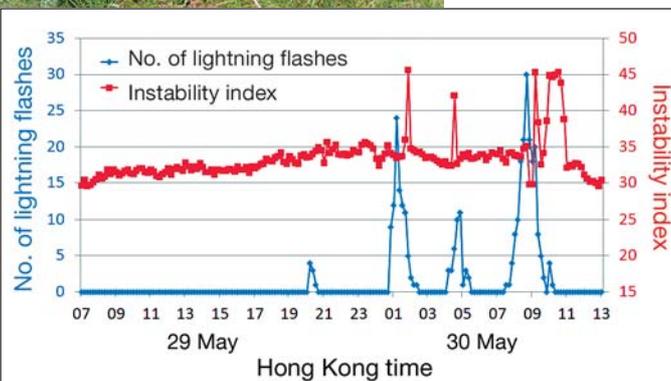
Figure 1: The microwave radiometer operating at the airport.

A newly acquired microwave radiometer (Figure 1) began its operation at the airport in late May this year. The instrument measures the microwave radiations emitted from the oxygen molecules and water vapour in the air and, with the help of statistical methods, determines the temperature and humidity profiles of the atmosphere from the ground up to 10 km aloft. Such profiles are also obtainable from conventional upper-air measurements using balloons, but only available a few times a day. For the radiometer, measurements are made once every several minutes. This greatly enhances the monitoring of the upper-air temperature and humidity, and facilitates the forecasting of thunderstorms and low-visibility weather.

Figure 2 shows an example where atmospheric instability index (K index) is derived from the radiometer data for forecasting the occurrence of thunderstorms. During the daytime of 29 May 2008, the atmosphere became more humid and unstable. This was indicated by an increase in the instability

index (red dots) derived from the data that rose to relatively high level (about 35). This favours the development of thunderstorms. In fact, lightning activity appeared that night (blue dots) and persisted until the morning of the next day. In this period, the instability index remained at rather high level. It is not until around noon time of 30 May that the instability index dropped to lower values (about 30) and the lightning activity stopped.

Figure 2: The time sequences of instability index (K index) as derived from the radiometer, and the number of lightning flashes recorded within 20 km from the radiometer.



## Weather Briefing for Hong Kong Helicopter Club

SONG Man-kuen, Sandy

Invited by the Hong Kong Helicopter Club - a non-profit organization to promote general aviation in Hong Kong, Ms. Sandy Song of the Hong Kong Observatory gave a briefing on "Weather Information for General Aviation" at their dinner gathering on 6 June. About 25 members of the Club attended. This is the first time that the Observatory gave a briefing to members of the Hong Kong Helicopter Club.

The briefing focused on the means for local aviators to obtain aviation weather information and services from the Observatory websites before flying. Effective use of weather information is conducive to flight safety, which is always the major concern of aviators.

The Vice-President of the Hong Kong Helicopter Club, Dr. Lily Fenn said, "The briefing is very informative and interesting and also meets our needs. We look forward to more exchanges in the future."



President (Mr. Michael Wong, left) and Vice-President (Dr. Lily Fenn, right) of the Hong Kong Helicopter Club presenting a souvenir to Ms. Sandy Song after the briefing.

# The Observatory Launched WMO Website for Development of New Terminal Forecast

SONG Man-kuen, Sandy

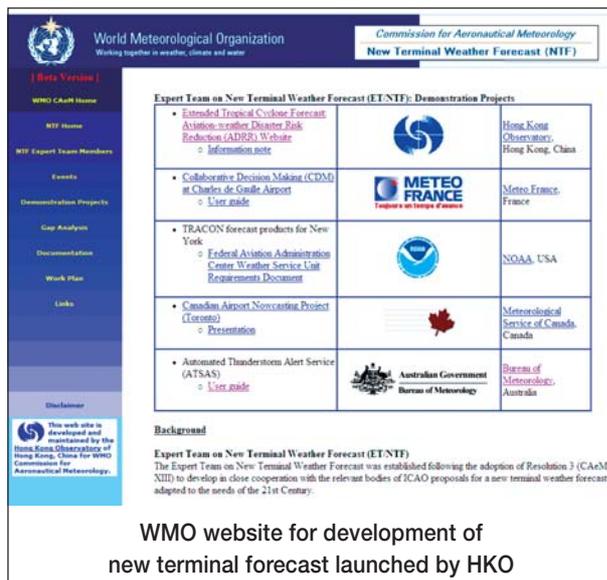
The Hong Kong Observatory (HKO) launched a website (<http://www.ntf.weather.gov.hk>) for the World Meteorological Organization (WMO) on 17 July to promulgate the work of an expert team under WMO to develop the new terminal forecast. It introduces prototype products to aviation users and collects users' feedback.

This expert team was set up by the Commission for Aeronautical Meteorology of WMO to develop proposals for a new terminal weather forecast based on recent advances in meteorological science, with a view to supplementing the existing conventional aerodrome forecast. It is expected that the new terminal forecast will facilitate airport and air traffic management authorities in effectively mitigating the impact of weather to flights, thereby enhancing aviation safety and efficiency. The Observatory, representing Hong Kong, China, is one of the core members of the expert team. Other core members include Australia, Canada, China, France and USA.

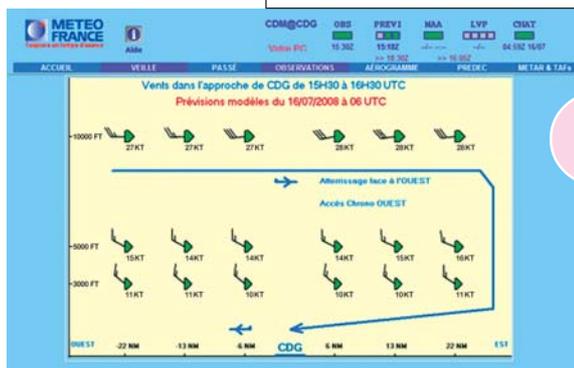
Based on airlines' feedback during a survey on the new terminal forecast, the website is set up to provide prototype products, currently including:

- (a) the Aviation-weather Disaster Risk Reduction (ADRR) product, as a demonstration of extended tropical cyclone forecast for aviation application developed by HKO; and
- (b) Collaborative Decision Making (CDM) products for the Paris Charles de Gaulle Airport developed by Meteo France, as a demonstration of tailored weather forecasts for airport operation and air traffic management.

Further prototype products are expected to be launched by the other expert team members on the website.



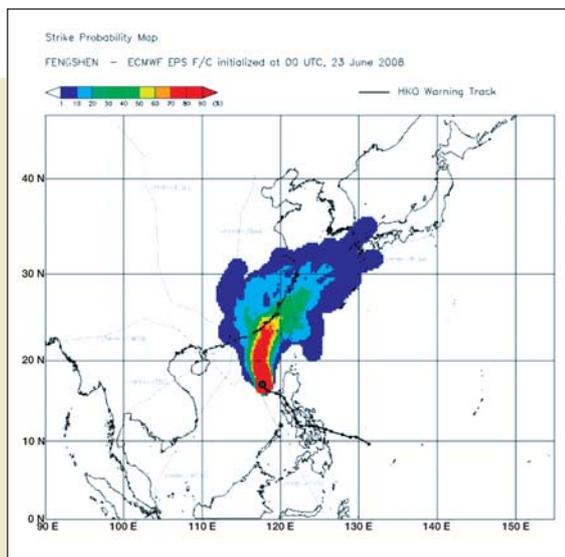
WMO website for development of new terminal forecast launched by HKO



A Collaborative Decision Making (CDM) product for the Paris Charles de Gaulle Airport developed by Meteo France

## The Observatory collaborates with WMO to Conduct Survey on Aviation Weather Website

SONG Man-kuen, Sandy



Entrusted by the World Meteorological Organization (WMO), the Hong Kong Observatory launched a pilot website on "Aviation-weather Disaster Risk Reduction" (ADRR) (<http://addr.weather.gov.hk>) in September 2007, focusing on tropical cyclones over the South China Sea and the Western North Pacific Ocean. The website is made available to members of WMO in the regions and aviation stakeholders in Hong Kong. Since its launch, the website has captured a number of tropical cyclones and positive feedback has been received from airlines and pilots. In coordination with WMO, the Observatory has conducted a survey to systematically collect and analyze user feedback for further development of the project.

A tropical cyclone strike probability forecast provided on the website

## An International Experience -

NG Shuk-kiu

# Attending the Aviation Seminar in Oman

On 5-9 July, I attended the "Aviation Seminar" co-organized by the World Meteorological Organization (WMO) and the United Kingdom Meteorological Office (UKMO). The seminar was previously held in UK, but it was organized in developing countries from last year onwards. This year, the Seminar was held in Muscat, the capital of Oman in the Middle East, and was hosted by the Oman Meteorological Department (OMD).

There were 27 participants from 18 countries. Many of them were experienced aviation forecasters or heads of aviation sections. The seminar discussed meteorological factors impacting flight and airport operations including turbulence, icing, thunderstorms, low visibility, sandstorms, etc, as well as the respective forecasting techniques. The advances in aviation meteorological applications and the development of the World Area Forecast System (WAFS) were also introduced. In addition, experts from the UKMO and WMO explained to the participants the future requirements of aviation weather services via real-time connection on the Internet. At the seminar, Head of the Bhutan Aviation Department played a video showing landing of flights at the airport in Bhutan. As the airport is located in a valley, aircrafts have to fly over mountains before touching down. The pilots could only see the runway just a few minutes before touch down, making flight operation extremely challenging and demonstrating the importance of weather information to flight safety.

Overall speaking, the seminar benefited me a lot in aviation weather forecasting. Apart from the theory classes, the seminar also offered me an excellent opportunity to understand better the application of forecasting tools through group discussions and practices. And finally, the most unforgettable experience in Oman was the high temperatures of more than 40 °C !



Miss Ng Shuk-kiu, Senior Experimental Officer (second right in second row) with participants of the Aviation Seminar.

## New Members joining the Liaison Group on Weather Information for General Aviation

CHEUNG Ping

The Fourth Meeting of the Liaison Group on Weather Information for General Aviation was held on 30 July at the Hong Kong Observatory Headquarters. Participants from the local general aviation community include representatives from the Government Flying Service, Hong Kong Aviation Club and helicopter companies. To enhance collaboration within the local aviation community and promote aviation meteorology to the general public, the Hong Kong Air Cadet Corps, Scout Association of Hong Kong and the Hong Kong Helicopter Club were invited to join the Liaison Group.

In the meeting, our colleagues reported results of a recent annual survey on aviation weather services. Respondents of the survey generally considered that the aviation weather services provided by the Observatory were better than a few years ago. The meeting was also informed of the recent enhancements to aviation weather services including sharing of pilot reports and weather



observations among local aviators. The meeting discussed ways to promote the use of the sharing platform in the general aviation community. Through enhanced collaboration, more weather information useful to local aviators can be collected and shared via the platform. The meeting also discussed ideas of promoting education on aviation meteorology in Hong Kong targeting at the youth, and inspiring interests in aviation.

The Liaison Group on Weather Information for General Aviation was established in 2005. Through annual meetings with the users, the

Observatory would better understand the needs and feedback of the local general aviation community, facilitating the development of weather services to suit the needs of local aviators.

Representatives of the local general aviation community in the Fourth Meeting of the Liaison Group on Weather Information for General Aviation.

# 5.12 Wenchuan Earthquake

WONG Wing-tak

12 May was a mournful day for the nation when a magnitude 8 earthquake struck Sichuan, destroying numerous houses and inflicting tremendous calamity. Faults started to rupture near Yingxiu and extended more than 200 kilometres towards the northeast to places beyond Beichuan. It is the most severe earthquake disaster in China since the Tangshan earthquake in 1976.

Saving lives through earthquake prediction has always been a dream of many people. Despite big leaps in understanding the earth's interior in the past century and that earthquake risk assessment is possible through study of past records and geological structures, reliable earthquake prediction particularly short term prediction remains an impossible task. This is mainly a result of impenetrability of the earth and therefore little is known about the conditions underground at any time.

Globally, an average of one earthquake of magnitude 8 or above per year will hit somewhere on the planet while the average number of earthquakes of magnitude 7 or above occurring each year is near twenty. Yet all these earthquakes were not predicted, not even for the US and Japan which had advanced earthquake detection technology and were facing even higher earthquake risks.

In recent years, there was circulation of rumours which advised people not to take cover under a sturdy piece of furniture during an earthquake but find a void in the room called the golden triangle to hide during building collapse. Earthquake and emergency experts warned that such remarks were not in accord with the experience of the majority of earthquake survivors,



**Fault movement in the Wenchuan Earthquake, Bailu Town School, Pengzhou (Photo taken by Dr Wong Wing-tak)**

created confusion among the public, and might lead to more casualties in an earthquake. Indeed, a building that does not collapse in earthquakes is a basic requirement in earthquake disaster mitigation. People residing in unsafe buildings should better move to safe ones as soon as possible. For those caught inside a collapsing building during an earthquake, leaving the building at once may be the best course of action. To hide next to a refrigerator or other

large furniture may not be a good choice as a collapsing building could tilt causing the furniture to topple in an unforeseen direction.

In modern cities, buildings with properly reinforced structures are not likely to collapse in earthquakes while falling objects and stuff scattered on the ground along the escape route are often the major causes of casualty. The longer the route to escape, the chance of getting injured is higher. Experience from developed countries and studies on earthquake disaster indicate that to douse all fire and take cover under a sturdy piece of furniture is the best piece of advice to the general public. After the shaking, one may consider moving to outdoor if safety of the building is at question.

Earthquake is an integral part of earth processes and cannot be eliminated. To build cities on suitable sites far away from active faults and construct buildings that can withstand the shaking are probably the basic mitigation strategy. For preventive measures and the latest information on earthquakes, please refer to the Hong Kong Observatory's website:

[http://www.weather.gov.hk/gts/quake/eq\\_safety\\_e.htm](http://www.weather.gov.hk/gts/quake/eq_safety_e.htm)

## New tropical cyclone names in 2008

LUI Wing-hong

Starting from the year 2000, the Typhoon Committee, under the auspices of the United Nations Economic Commission for Asia and the Far East and the World Meteorological Organization adopted a list for naming the tropical cyclones in the western North Pacific and the South China Sea. The list consists of a total of 140 names with regional characteristics contributed by 14 countries and territories in the region. In 2008, five new names were added to the list. They are "Leepi", "Sanba", "Maliksi", "Mangkhut" and "Son-Tinh", replacing the old names "Xangsane", "Chan Chu", "Bilis", "Durian" and "Saomai" respectively.

"Leepi" is the name proposed by Laos, representing the most beautiful waterfall in southern Lao. "Sanba", the name proposed by Macau, is a tourist resort there. "Maliksi", proposed by the Philippines, means "fast". The name "Mangkhut" proposed by Thailand is a kind of fruit, while "Son-Tinh", the God of mountain, is the name proposed by Vietnam.

According to the convention of the Typhoon Committee, a country

or region may propose to remove the name of the tropical cyclone from the list if it has caused serious human casualties and economic losses to the country or region. In 2006, during Typhoon Chan Chu, Severe Tropical Storm Bilis, Typhoon Saomai, Typhoon Xangsane and Typhoon Durian, over 2,000 people were killed or missing, and there were serious economic losses in the South China Sea, northern part of the Philippines, southeastern China, Vietnam and the central Philippines. These names have become history.

Apart from the five new names mentioned above, the English spelling of five tropical cyclones proposed by Republic of Korea, namely, "Kaemi", "Chebi", "Noguri", "Changmi", and "Koni" are also slightly modified. For example, the English spelling of tropical cyclone "Noguri" that affected Hong Kong in April this year was changed to "Neoguri". The latest list of tropical cyclone names is available at the Observatory website <http://www.weather.gov.hk/informtc/sound/tcname2008e.htm>.

# The Urban Heat Island Effect in Hong Kong

MOK Hing-yim

In a sunny summer day, the radio inside an air-conditioned taxi at Mongkok was broadcasting the latest weather report, "At 2 pm at the Hong Kong Observatory, the air temperature was 32 degrees Celsius and the relative humidity was . . .".

"Oh! It's so hot! Definitely higher than 32 degrees! Why is it so hot in urban districts nowadays?" the passenger roared as he got off the taxi.

That was the experience shared by most Hong Kong people - a significant difference in air temperatures when walking from urban to rural areas. This is the so called Urban Heat Island (UHI) effect.

UHI is one of the typical characteristics of urban climatology, the phenomenon of urban temperatures higher than nearby rural areas. It exists in Hong Kong all the year round. Though more significant in winter, it has higher impact to the population in summer months because the biological activities of human body are highly affected by the ambient temperature and people in general feel uncomfortable in hot environment. Very hot environment can even induce heat strokes and cause a series of diseases, particularly cardiac, cerebrovascular and respiratory diseases.

UHI is highly related to human activities, particularly the heat generated by air conditioners and vehicles. Other major causes include the difference in thermal properties of the surface materials of the urban and rural areas, and the geometric effect of the high-rise buildings in urban areas. Compared to the soil and vegetation in the rural areas, the materials of the crowded buildings and roads in urban areas can be heated up more easily with the same amount of solar radiation due to the smaller specific heat capacities. The heated up materials form huge heat sources which then heats up the surrounding atmosphere and our living environment, not only during day time but also at night. Furthermore, the crowded high-rise buildings hinder the dispersion of heat, resulting in a lower cooling rate at night and higher nighttime temperature in the urban areas. UHI is therefore one of the major reasons for the increasing trend of the annual number of hot nights (night with minimum temperature higher than or equal to 28 degrees) in recent years (Figure 1).

UHI intensity varies from place to place as it can be affected by such conditions as building density and dimension, transportation volume, population density, etc. In order to understand the regional variation of UHI

intensity in Hong Kong, the Observatory cooperates with the Geography Department of the University of Hong Kong to measure air temperatures and other weather parameters at different parts of the territory using mobile survey vehicle equipped with Global Positioning System. Figure 2 is the results of a mobile survey in a sunny summer day. The survey vehicle went through Ho Man Tin, Mong Kok and Yau Ma Tei of the Kwoloon Peninsula, then turned south along Canton Road at the edge of western Kowloon and then returned to Tsim Sha Tsui. It was found that the air temperatures at Mong Kok, Yau Ma Tei and Tsim Sha Tsui, where there are more commercial

activities and higher building density, were higher than the residential areas at Ho Man Tin and seashore areas of western Kowloon. The air temperatures at the Hong Kong Observatory were around 32 degrees during the survey period. The Observatory and HKU will conduct more mobile surveys to study the spatial variability of heat stress at different times and different weather conditions in Hong Kong.

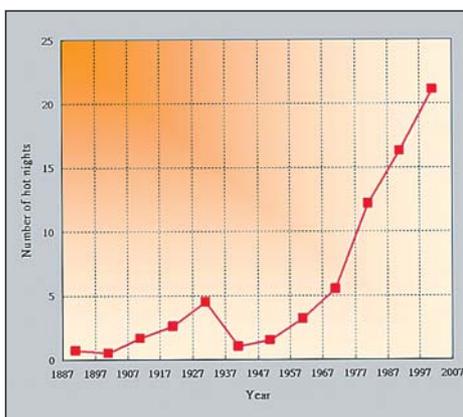


Figure 1. The 10-year average annual number of hot nights recorded at the Hong Kong Observatory

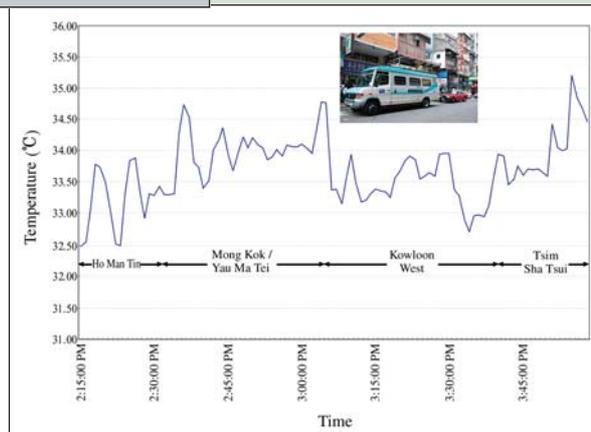
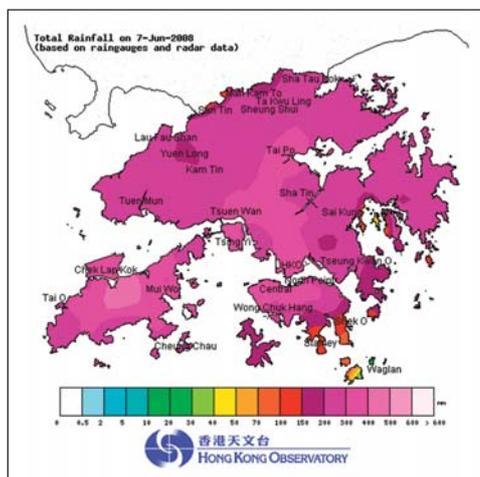


Figure 2. Time series of 1-minute average air temperatures obtained during the mobile survey conducted on the afternoon of 25 July 2008



## Record-breaking Rainfall in June 2008

LEE Sai-ming

Hong Kong received exceptional amount of rain this June. The rainfall recorded at the Hong Kong Observatory was 1346.1 mm, which is not only more than three times the normal value but also the highest in June since 1884. Total rainfall recorded at the Observatory for the first half of this year was 1911.0 mm, which is the second highest for the same period since 1884. Summer rainfall in Hong Kong is closely related to troughs of low pressure, the southwest monsoon and tropical cyclone activities over the south China coastal region. In early and mid June this year, the south China coastal region was affected by active troughs of low pressure for most of the time. Later that month, Typhoon Fengshen made landfall over eastern Shenzhen. Hong Kong could not be spared from the outer rainbands of Fengshen. Worse still, the remnants of Fengshen enhanced the southwest monsoon over the coastal region, bringing heavy rain to the territory.

# Weather Course for Media

## Editorial Board



The Observatory and the media are close partners. Whether the weather information is useful to the public relies heavily on accurate reporting by the media. For this reason, the Observatory offered a course to media workers on 22 April to deepen their understanding of the various types of weather information and the operation of the Observatory. The course comprises a seminar and a guided visit to the Observatory forecasting office. The seminar covered basic meteorological knowledge and points to note for the media in reporting weather information. Around 20 media workers attended the course.

**Scientific officer Mr Tai Sai-choi (middle) explaining the weather map to media workers.**

## The 3rd Guangdong-Hong Kong-Macao Seminar on Earthquake Science and Technology

### LI Kin-wai

The biennial Guangdong-Hong Kong-Macao Seminar on Earthquake Science and Technology was held at Guangzhou on 4-5 March 2008. This was the third of the series hosted by the Hong Kong Observatory, Macao Geophysical and Meteorological Bureau, and the Earthquake Administration of Guangdong Province on a rotary basis. In addition to representatives from the earthquake monitoring authorities at the three places, earthquake experts from the Hong Kong Geotechnical Engineering Office and a number of universities in the region also attended the seminar. The seminar covers a wide range of topics including geological surveys, earthquake analysis, earthquake detection systems, earthquake engineering, disaster mitigation technology and tsunami warning system. It is expected to contribute towards the development on earthquake science and technology in the region.



**The 3rd Guangdong-Hong Kong-Macao Seminar on Earthquake Science and Technology**

## Seminar for Public Transport Operators

### LEUNG Yin-kong, John

**Senior Scientific Officer Mrs Hilda Lam and Scientific Officer Mr. Leung Yin-kong answering questions from public transport managers and operators.**



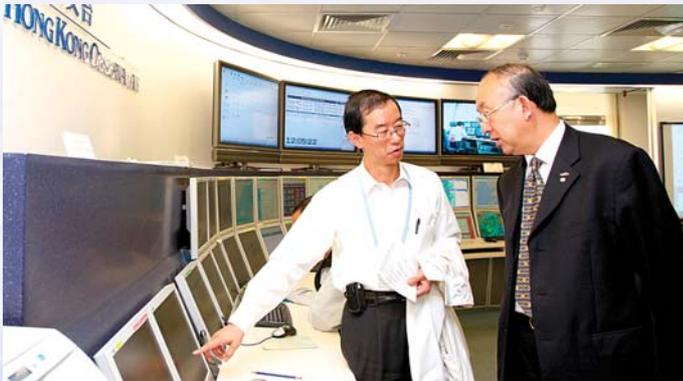
To strengthen communication with public transport sectors, the Observatory collaborates with the Transport Department to hold annual seminars for public transport operators at both managerial and operating levels. The seminar this year was held on 29 May at the Observatory headquarters. Participants were briefed on the meanings of various severe weather warnings and matters of concern. They also visited the central forecasting office to understand how we predict weather.

Participants were very responsive in the seminar and eager to raise questions. They commended that

the seminar gave them a deeper understanding of the weather services and forecasts provided by the Observatory, which would help them make appropriate decisions and arrangements during inclement weather.

# FRIENDLY VISITS

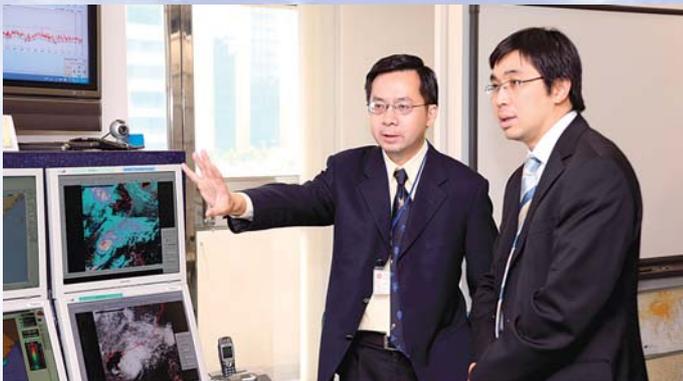
## Editorial board



Director of the Observatory Mr Lam Chiu-ying (left) explaining the work of the forecasting office to Mr Wang Hui, Deputy Head of Economic Affairs Department, Liaison Office of the Central People's Government in the HKSAR when he visited the Observatory on 9 April.



Ms Song Man-kuen (1st right) and Dr Li Ping-wah (2nd right) gave a guided tour of the Airport Meteorological Office and introduced the Observatory's aviation weather services to young members of the Royal Aeronautical Society (Hong Kong Branch) on 12 April.



Assistant Director Dr Lee Boon-ying (left) introducing the work of the Observatory to Principal Assistant Secretary for Security, Mr Cheng ching-wan, Paul on 18 April.



Ms Cheung Shuk-ting, Wendy (left), Principal Assistant Secretary for Commerce & Economic Development visited the Observatory on 5 May. Senior Scientific Officer Dr Cheng Cho-ming introduced to her the Observatory's services for the aviation community.



# FRIENDLY VISITS

## Editorial board



Assistant Director of Observatory Mr Wai Hon-gor (1st left) welcoming a delegation from the Macao Meteorological and Geophysical Bureau led by Mr Tong Tin-ngai (2nd right), Chief of Meteorological Monitor Centre when they visited the Observatory on 3 June.



Director of the Observatory Mr Lam Chiu-ying (5th left) taking photos with a delegation of the Kowloon City District Council led by the Chairman Ir. Wong Kwok-keung, SBS, JP (6th right) when they visited the Observatory on 18 June.



Ms. Ng Mei-mei, Executive Director of the HK Education City Ltd. (2nd left) visited the Observatory on 11 July. Assistant Director of the Observatory Dr Lee Boon-ying (1st left) introduced to her the precious exhibits in the Observatory's History Room.



Mr Hong Chi-yuen (left), Chief Experimental Officer, gave a guided tour of the Airport Meteorological Office and introduced the Observatory's aviation weather services to a group of 20 Cathay Pacific Airways dispatchers and engineers on 31 July, and received a souvenir from Mr KK Chan of Cathay Pacific.

# Observatory Personnel Gives Lecture on Tsunami Early Warning and Numerical Modelling

NG Moon-chiu



Dr Wong Wing-tak delivering a lecture for the Course on Oceanographic Observation and Prediction Systems.

At the invitation of the State Oceanic Administration (SOA), Dr Wong Wing-tak, Senior Scientific Officer of the Hong Kong Observatory delivered a lecture on tsunami early warning and numerical modelling at the SOA Course on Oceanographic Observation and Prediction Systems at Qingdao, Shandong Province in end of March. Dr Wong's lecture was well received by the participants.

The course was an integral part of SOA's effort to the development of oceanographic observation and prediction systems. The purpose was to strengthen human resource development, and enhance the overall standard of the teams who operate these systems. About 130 officers with a Bachelor's degree or above from forecasting centres of all sea districts of the country attended the course. A total of 17 experts from various parts of the country gave lectures at the course.

In recent years, the Hong Kong Observatory has established good working relationship with SOA. We are pleased to have contributed to SOA's development of oceanographic observation and prediction systems.

## "Science in the Public Service" enhances students' understanding of climate change and the application of science and technology

LAM Hok-yin, David

Climate change has been a subject of hot debate in recent years. The "Science in the Public Service" Campaign organised the student competition "Climate Change - What can we do?" to enhance students' understanding of phenomena such as global warming and the rise in sea level, and their effects. Students completed their reports through data collection and analysis. The process enhanced their initiatives in exploring new subjects and the spirit of investigation.

Participation by schools in the competition was keen with more than 100 entries received. The adjudicators praised the projects for their very high standard. The awards presentation ceremony was held on 28 June 2008 at the Hong Kong Science Museum and was attended by an enthusiastic crowd of about 200. Mr Dominic LEUNG, Acting Commissioner for Census and Statistics, and Dr Rebecca LEE, the polar expert, were the guests of honour.

On the other front, from May 2008, the "Science in the Public Service" Campaign and the Hong Kong Economic Times cooperated in publishing a series of articles covering a wide range of topics to introduce how government bureaus, departments and collaborating organizations employ science and

technology to serve the public.

Each article is followed by a discussion column to stimulate students' thinking and interest.

All published articles are available on the "Science in the Public Service" website at

<http://www.science.gov.hk/eng/liberal-studies-e.htm>.



Guests, adjudicators and the winning teams

# Upgrade of meteorological telecom circuit

NG Kwok-leung



Experts of the Hong Kong Observatory (left) and the Guangdong Meteorological Bureau (right) conducting video conference over the meteorological telecom circuit

The meteorological telecommunication circuit connecting the Hong Kong Observatory (via Guangzhou) and the China Meteorological Administration in Beijing was upgraded 60 times faster to a speed of 4 million bits per second (Mbps) on 22 May. Besides being able to handle a greater volume of data exchange, the new circuit also supports videoconferencing. This facilitates more efficient exchange of information and ideas between meteorologists of the Observatory and the Mainland when analyzing important weather situations.

The circuit was established in 1975 to form one of the main trunks of the World Meteorological Organization's Global Telecommunication System, supporting meteorological data exchange between Hong Kong and the Mainland. The successful upgrade of the circuit marked a closer connection between the Observatory and the China Meteorological Administration. The two parties look forward to further co-operations to provide timely and quality meteorological services to the public.

## Attachment Programme for Thai Meteorological Department

WONG Chi-fai

Weather systems recognize no national boundary. Weather observation, forecasting and development of meteorological technologies all require international cooperation. Cooperation between the Hong Kong Observatory and Thai Meteorological Department (TMD) could date back to the 1970s, when the two organisations worked together on a project to connect to the World Meteorological Organization Global Telecommunication System for exchange of weather information. The Observatory also sent staff to Thailand to help establish the required computer platform.

TMD recently established a marine meteorological centre. As an experienced provider of marine meteorological services in the region, the Observatory offered an attachment programme for TMD staff this April. Two groups of TMD aviation meteorological personnel visited the Observatory's Airport Meteorological Office in June and July for experience sharing with a view to enhancing TMD aviation services. The long-term cooperation between the Observatory and TMD has contributed to the development of meteorological technology in Asia.



Aviation meteorological personnel from Thai Meteorological Department at the Airport Meteorological Office of the Hong Kong Observatory



Staff from Marine Meteorological Centre of Thai Meteorological Department attending an attachment programme at the Hong Kong Observatory

# On-the-job training of Meteorological Technicians from Macao



Miss Chang Sau-wa (3rd left) and Miss Lei Sao-kuan (2nd right), Meteorological Technicians of the Macao Meteorological and Geophysical Bureau, with Mr. Wai Hon-gor, Assistant Director of the Observatory (3rd right) and colleagues, during their training at the Observatory.

## SHUM Kit-ying, LEUNG Yin-kong

Two Meteorological Technicians from the Macao Meteorological and Geophysical Bureau visited the Observatory from 19 to 23 May for an on-the-job training. The purpose of the training is to understand the work flow of the Observatory in weather forecasting, particularly during typhoons and heavy rain situations. The trainees also attended shift duties with the Observatory's forecasters.

The trainees were also given briefings on various topics including public weather services in Hong Kong, warning services on severe weather, meteorological information system, development and application of numerical weather prediction and nowcasting, tropical cyclone information processing system, and tropical cyclone forecasting etc. The trainees showed keen interest in the topics and participated

actively in the discussions.

The trainees said they were obliged to the Observatory's forecasters and colleagues for sharing their experience. Furthermore, the trainees deeply appreciated the user-friendly facilities in the forecasting centre and the efforts of the Observatory in ensuring that the weather forecasts and warning services followed closely to the needs of the public.



## Mr Chiang Kwok-fai promoted to Senior Scientific Assistant

### CHAN Wing-shan, Angel

It is so glad that a HKO colleague got promoted recently! Mr Chiang Kwok-fai, who has been working in HKO for twenty years, was promoted to Senior Scientific Assistant in June.

Mr Chiang is a proactive, courteous and reliable colleague. He is always willing to accept different challenges and often proposes constructive ideas to improve the existing work procedures. He is particularly good at information technology and has developed many programs for Aerodrome Observers to monitor the weather situation, thus enhancing the work efficiency. Moreover, Mr Chiang is very generous in sharing his expertise with others and has assisted many colleagues in solving programming problems. After promotion, he will stay in the Aerodrome Observation and Warnings Division to bring his talent into full play.



## Radar Specialist Mechanic

## Mr Leung Wai-ming

### Retirement

Radar Specialist Mechanic Mr Leung Wai-ming started his retirement in May. Director of the Observatory Mr Lam Chiu-ying and other senior officers bade him farewell and presented him a souvenir on 25 April.

# Meteorology Course for Aviation Forecasters

LI Luen-on

The Observatory has been offering the "Meteorology Course for Aviation Forecasters" to its staff since 2001. The aim of the course is to equip trainees with the necessary knowledge and skills for aviation forecasting in fulfillment of the latest international requirements. After a series of assessments, five participants graduated from the 3rd Meteorology Course for Aviation Forecasters this year. They are Mr. Tse Wai-ming, Mr. Wong Kwun-wa, Ms. Wong Sau-ha, Mr. Chan Kin-yu and Mr. Lau Dick-shum. Apart from mastering the skills in diagnosing and forecasting aviation specific significant weather, the trainees also need to get familiar with the aviation weather related regulations and practices. Aviation users, including Civil Aviation Department and airlines, were invited to deliver lectures on their operations and the significant weather they are concerned with. This gives participants a better appreciation of the impact of their forecasts on aviation operations.



An Aviation Forecaster, Mr. Ho Ka-leong (left), sharing his weather forecasting skills and experience with a trainee.

## Observatory Staff Receiving Praise

Staff of the Observatory receiving words of thanks and commendation from the public or organizations during May-August 2008:

Mr LAM Chiu-ying	Director
Mr CHAN Chik-cheung	Senior Scientific Officer
Mrs Hilda LAM	Senior Scientific Officer
Mr MOK Hing-yim	Senior Scientific Officer
Ms SONG Man-kuen	Senior Scientific Officer
Dr WONG Wing-tak	Senior Scientific Officer
Dr LEE Tsz-cheung	Ag. Senior Scientific Officer
Mr CHAN Kai-wing	Scientific Officer
Mr HUI Tai-wai	Scientific Officer
Dr LAM Hok-yin	Scientific Officer
Mr LEE Lap-shun	Scientific Officer
Mr LEUNG Yin-kong	Scientific Officer
Dr LI Ping-wah	Scientific Officer
Mr TAI Sai-choi	Scientific Officer
Mr TAM Kwong-hung	Scientific Officer
Dr YEUNG Kwok-chung	Scientific Officer
Mr NG Moon-chiu	Ag. Chief Experimental Officer
Mr WONG Chi-fai	Senior Experimental Officer

**Best TV Weather Programme Presenter**

(2nd Quarter, 2008)

**Ms LEE Shuk-ming, Olivia**



## Celebration Party

CHENG Chi-tat

The Observatory had a party on 30 June to celebrate the successes of the department in the past few months, praising the hard work and enthusiasm of our colleagues. The Observatory is very vibrant in the past few months, busily launching new services and receiving awards from various organisations. In the field of professional and technical applications, the Observatory's "World Weather Information Service" website won the Environmental Category of the 2008 Stockholm Challenge, which was often referred to as the "I.T. Oscar Award". Locally, it also won one Gold and one Merit in the HK Information Communication Technology (ICT) Awards. In non-professional areas, the Community Chest gave the Observatory a number of awards under the Corporate and Employee Contribution Programme, including the "Highest per Capital Contribution Award" for the sixth year in a row. The HKSAR Government in celebration of its tenth anniversary, awarded the Observatory's Volunteer Team a Certificate of Appreciation. Also for the third consecutive year, the title of "Caring Organisation" was bestowed on the Observatory under the "Caring Organisation Scheme". Surely you would agree there are something for a party, right?



The Director of Hong Kong Observatory encouraging colleagues in the Celebration Party

## Unraveling “leadership” -

CHIU Hung-yu

## a bomb disposal expert's perspective



Mr. Brittain delivering lecture for the management forum of the Observatory

It was a full house at the monthly management forum in July 2008, a monthly gathering where speakers from within and outside of the Hong Kong Observatory share their insights and experience on management with fellow colleagues. Many were intrigued by what Mr. Dominic Brittain from the Hong Kong Police Force had to share with them from a bomb disposal expert's perspective.

The enthusiastic audience was not disappointed and was rewarded by an insightful, thought provoking and witty talk by Mr. Brittain. It was a talk of relish and savour with the interplay between command, leadership and management clearly explained and illustrated by real life examples from the bomb disposal expert.

## A visit to the Hong Kong Productivity Council

MA Chi-fai

Information security has become more and more important in this digital era. A group of 17 staff of the Observatory visited the Hong Kong Productivity Council (HKPC) during the stormy afternoon of 25 June. Experts from the HKPC's Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) briefed us on the latest development in computer and internet security, enhancing further our understanding on the subject.

Apart from HKCERT, we also learned more about open source software and related development platforms in the Hong Kong Open Source Software Centre (HKOSSC). The visit concluded with a guided tour of the Advanced Electronics Processing Technology Centre and the Innovation Gallery. Through the visit, colleagues acquired a better understanding of the diverse range of services provided by the HKPC.



Mr Gordon Lo (right), principal consultant of the HKOSSC, introduced the open source software and related development platforms.

## 2008 Hong Kong Observatory Staff Association Annual General Meeting

WU Man-chi



The new HKOSA committee

Just like a typical spring day, the weather in Hong Kong on 18 March was mainly cloudy with mist patches, trace amount of rainfall was recorded and temperatures ranged between 19.6 and 25.2 degrees. Yet, it was an auspicious day for holding the Hong Kong Observatory Staff Association (HKOSA) Annual General Meeting (AGM) and committee election.

In the AGM, there was a lucky draw to win exciting prizes and yummy but healthy treat apart from a report on HKOSA's services and activities in the past year. And a new committee was elected smoothly.

Having invaluable and continuous support from colleagues over the past years, the objects of HKOSA are to promote a closer relationship and to foster a spirit of mutual help among staff. Looking ahead, we are confident that the new committee will provide more and more healthy and meaningful recreational and environmentally friendly activities to our staff members and their families.

# Visit to HKO Cellar and

WOO Wang-Chun

# Lecture on Astronomical and Time Services

A small department the Hong Kong Observatory may be, it covers a wide variety of specialized functions. Therefore, it is not unusual for some colleagues to be unfamiliar with the work of others. In a tea gathering with the Director early this year, some colleagues said that they had never been to the cellar that accommodates seismological instruments. To enhance colleagues' understanding of the work of the department, we organized two visits to the cellar and the seismological laboratory in June, followed by a happy business lecture on astronomical and time services provided by the Observatory in July. All the events were well received.



Happy Business lecture on astronomical and time services for colleagues



HKO colleagues visiting the cellar that accommodates seismological instruments.

# The Observatory Round-Hill Races

LI Wai-ching

With colleagues' enthusiastic participation, the long-awaited Observatory Round-Hill Races were held on 20 June. Apart from the Inter-Branch four-person relay event, there were five events for individuals, namely, two-, five-, and eight-lap races for men and two- and five-lap races women.

A total of 24 colleagues took part in individual races and 6 teams joined the relay. Several other colleagues watched the exciting events.

This year, the race course was slightly changed so that the return

point was moved to the car park exit in order to avoid possible collisions with cars coming out of the car park.

The Inter-Branch relay was a brand new event. The last runner would face extra physical challenges to finish his round, as he had to run up 176 steps from the ground floor to the Central Forecasting Office on the 7th floor.

The finish point of the two-lap race was originally set near the 'White House', but it was finally set at the front entrance of the 1883 Building to let spectators see the sprint.



Exceptional amount of rain was recorded in early June this year. It had been raining for two weeks after the announcement of the race. Luckily, rain halted on 19 June, just enough to clean the air and in time for the race.

Some might ask why the race was held in June but not in winter. The answer is, the hot weather gave us more challenges. Besides, holding the race in summer would give the summer interns a chance to join the race, and hopefully give them fond memories of the Observatory. It turned out that many interns were good runners.

Lastly, my sincere thanks to all participants for contributing to the success of the races.

# Friendly Table Tennis Matches for retired and serving colleagues

NG Ping-wing



"Wai" against "Tsang"

The Hong Kong Observatory celebrates its 125th anniversary this year. Despite the numerous changes and regular staff turnover, long lasting friendship stays and bonds us together. Retired colleagues often come back to visit us. All would like to extend the happy time together. So, when the Staff Association proposed to hold friendly table tennis matches for retired and serving colleagues, all responded enthusiastically.

The matches were held on the evening of 22 May. It was really an incredible and fierce competition. It was not until literally the last moment did we know who would be the winner. The final duel came between "Wai", the new, and "Tsang", the old. A young energetic tiger tussled with an old cunning wolf. The match went to deuce after the 20 points. Eventually, "Tsang" won with 31 against 29. Well, just like ginger, the old is spicier than the young.

All went to a dinner after the matches. Fond memories of the past were evoked as we exchanged latest news. What a great evening!

## Baby Kites in Observatory

CHENG Chi-tat

Speaking of kites, you may have a picture of a raptor mercilessly zooming down to capture small animals, or a blood-sucking bird standing by the roadside tearing off the flesh of a dead animal. Even the childhood game every Hongkonger played in kindergarten depicts the kite as an evil kidnapper, trying every possible means to make innocent little chicks its dinner.

In reality, kites are as vulnerable as other animals to the greatest natural enemy of earth: Humans. This and last year, a pair of kites chose the mini-forest in the Observatory headquarters to nest and lay their eggs. Unfortunately in last year, we were not aware of the kites' presence and could have possibly scared off the couple with our noise leaving the babies unattended. To our surprise, the kite couple returned this year to the headquarters again with their new babies. We were all excited with joy, and immediately implemented the "Project Saving Baby Kites", which included tiptoeing when walking near the mini-forest. After nearly a month of breeding and nurturing, the baby kites grew up healthily and flew around the headquarters with their parents. Seeing that, we were as

proud as the kite parents.

According to a Taiwanese kite specialist, the kite nest in the mini-forest of the Observatory headquarters is probably the world's nearest one to human homes. Under rapid global urbanisation, we may easily forget we are only one member of the ecosystem on earth, as we are always surrounded by people and man-made environment. Human beings are using up more natural resources, exacerbating our conflicts with nature. Recently, the symptoms of global climate change become more and more apparent, reminding us we must double our efforts to reverse the path to destruction. The baby kites taught us a good lesson: Our earth partners are very forgivable, if we are willing to repent. Last year we hurt the baby kites badly, but this year the kite parents came back to give us a second chance. Similarly, humans have hurt the Earth deeply, but our mother nature is still willing and able to give us chances to make up our past damages. Let's revive our passion to our natural environment, and be friends with our earth partners again in the days to come.

Hungry baby kites waiting to be fed



Baby kites leaning on their parents



Photos courtesy of Ms So Lai-wah