

**Dial-a-Weather: 187 8200** 

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

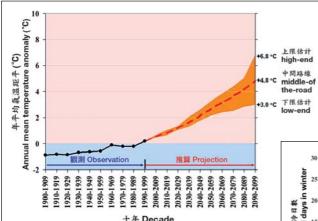


## **Updated Projections for Temperature in Hong Kong in the 21st Century**

#### **LEUNG Wai-hung**

In the past few years, the Observatory has carried out a series of studies on climate change in Hong Kong. One of the studies is the temperature projections for Hong Kong in the 21st century carried out for the first time in 2004, based on the projections presented in the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). In 2007, the Observatory updated its temperature projections for Hong Kong in the 21st century, in the light of the revised global projections in the Fourth Assessment Report of the IPCC.

In the study, various global greenhouse gases emission scenarios as well as the urbanization effect in Hong Kong were taken into account. The "high-end" situation refers to a high level greenhouse gas emission scenario and continued urbanization, while the "low-end" situation refers to a low level emission scenario and frozen urbanization. The "middle-of-the-road"



Past and projected annual mean temperature anomaly for Hong Kong

Past and projected annual number of cold days in winter for Hong Kong

Editorial Board: LEUNG Wing-mo TAI Sai-choi WONG Mei-shing MA Lap-yin

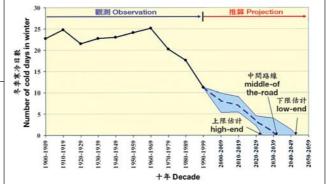
situation is the average of computation results based on a combination of all emission scenarios as well as frozen and continued urbanization.

Projection result shows that by the end of this century (i.e. 2090-2099), a temperature increase of  $3.0^{\circ}\text{C}$  for the low-end situation,  $6.8^{\circ}\text{C}$  for the high-end situation, and  $4.8^{\circ}\text{C}$  for the middle-of-the-road situation are expected.

As for extreme weather, more hot nights (i.e. nights with a minimum temperature of 28°C or above) in the summer are expected. For the middle-of-the-road projection, the annual number of hot nights is expected to increase from the average of 15 nights at the end of the last century (i.e. 1980-1999) to 41 nights by the end of this century. The corresponding low-end and high-end estimates are 30 and 54 nights respectively. Similarly, the annual number of very hot days (i.e. days with a maximum temperature of 33°C or above) is also expected to increase. By the end of this century, the middle-of-the-road figure is 15 per year. The high-end and low-end figures are 19 and 12 respectively. These figures are higher than that (7 days) at the end of the last century.

The middle-of-the-road calculation shows that by the decade 2030-2039, the average annual number of cold days (i.e. days with a minimum temperature of 12°C or below) in winter is expected to drop below one, meaning that for some winters, there will not be any cold day at all. For the

high-end and lowend situations, the time for this to occur will be 2020-2029 and 2040-2049 respectively. We shall all have the chance to witness the disappearance of winter in Hong Kong!



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## Celebrating the 125th Anniversary of Hong Kong Observatory

#### **TAI Sai-choi, WONG Mei-shing**

On 2 March, 1883, Dr William Doberck was appointed the first Director of the Hong Kong Observatory. To celebrate its 125th anniversary, the Observatory has organised the following activities:

### **Group Photo Taking:**



Staff of 2008 taking photo at 1883 Building

## Past staff photos can be found at http://www.weather.gov.hk/abouthko/history/group\_e.htm

### **The 125th Anniversary Logo Design Competition:**

The Champion goes to Miss CHENG Hsi, a 'Friends of the Observatory' member, for her colourful and elegantly shaped design. The champion design after minor modifications has been posted on various Observatory webpages. It is also attached in emails delivered by Observatory staff and used in outreach activities organized by the Observatory this year.

The second and third prizes are awarded to Mrs Mirinna NG CHAN Kam-chu and Miss WONG Ying-chi. The winning designs can be found at <a href="http://www.weather.gov.hk/education/friends\_hko/125anniv\_logo\_competition\_result\_e.htm">http://www.weather.gov.hk/education/friends\_hko/125anniv\_logo\_competition\_result\_e.htm</a>

#### Open Day:

To commemorate this special Open Day, a booklet was specially prepared and distributed to each visitor. Apart from giving a brief history of the Observatory, the booklet also explains the latest temperature projections for Hong Kong taking into account both global warming and urbanization. Before leaving, many visitors had their booklet stamped with the 125th anniversary logo and signed to pledge fighting against global warming.

Every year, the Observatory organizes an open day to celebrate the World Meteorological Day on 23 March. This year, the theme of the World Meteorological Day is 'Observing our planet for a better future'. In the past decades, humankind has made substantial progress in weather observations which laid a firm foundation for climate research and weather forecasting.

The Open Day this year showcased to the public how the Observatory maked use of various advanced observational equipment in

Director of the Hong Kong Observatory Mr LAM Chiu-ying taking photos with visitors





Heavy responsibility at a tender age - a small girl signing to pledge fighting against global warming. Can you find the signature of our Director?

serving the community. The Observatory's core activities as well as its support to the Olympic Games this year were also introduced through other exhibits. As in past years, the visitors were very interested in the simulated forecasting office with scientific officers explaining the science of weather forecasting, a mock-up TV studio for posing as a TV weather presenter, the game booth as well as the eco-tour.

One of the visitors, Miss Ho, said, 'The Open Day this year is freshened up with new ideas. The exhibits are all very educational.' Ming, young boy, was most happy to be able to pose as a TV weather presenter. Mr Ian McKirdy, a geography teacher of South Island School, was very impressed with the historical building. He said, 'It feels good to be in such a photogenic environment.'

Forthcoming celebration events include the 'Hong Kong Observatory - Weathering the Storms for 125 Years' exhibition to be held at the Hong Kong Museum of History this summer, and publication of a collection of essays written by staff of the Observatory from a human angle. Details will follow in the next issue of 'Weather on Wings'.



## The Hong Kong Observatory Website WIN! WIN! WIN!

#### TAM Cheuk-ming and LI Sun-wai

### **Yahoo! BUZZ Award (Government Department)**

The Hong Kong Observatory (HKO) won the Yahoo! BUZZ Award 2007 in the "Government Department" category. This award was presented by Yahoo! Hong Kong to the most frequently searched websites by Internet users using its search engine. The prize presentation ceremony was held on 19 December 2007 and officiated by Mr Alfred Tsoi, Managing Director of Yahoo! Hong Kong Limited. Apart from HKO, winners in other categories included the Ocean Park and the Football Team of South China Athletic Association.

### **Best Public Service Application Gold Award**

On 21 January 2008, the HKO was presented with another trophy: the Gold Award in the Best Public Service Application category of the 2007 Hong Kong Information and Communications Technology (ICT) Award competition. The Best Public Service Application category, one of the seven

in the 2007 competition, was organised by the IT Division of the Hong Kong Institute of Engineers. The judging panel offered



Mr H G Wai, Assistant Director of the Hong Kong Observatory (left) receiving the Best Public Service Application Gold Award from Dr Samson Tam, Chairman of Information Technology Division, the Hong Kong Institution of Engineers.

the following comments on the HKO website: "With its well developed website, the Observatory addresses the need of the public for more comprehensive, accurate and timely weather information. This website continues to improve, educational materials are available to the public to raise their weather awareness." Besides, the Lightning Location Information Service of the HKO was also awarded a Certificate of Merit in the Small Scale Project group.

### The Most Popular Government Website in Hong Kong

The HKO website has been providing the public with relevant and reliable weather information since its launch in 1996. Its clientele has been growing steadily with time. In 2007, the number of page visits surpassed the one billion mark which was equivalent to almost three million visits per day on average, making the HKO website the most popular Government website in Hong Kong. With over 35,000 webpages, the HKO website is

> packed with information. Weather is closely related to daily lives of the general public, who can now obtain the latest weather information from the HKO website at any time and from anywhere. Apart from the pages on the latest weather forecasts, one-stop portals are also offered to serve senior citizens, schools and other

> These awards reaffirmed the value of the HKO website as a convenient means for the public to obtain weather information. They are the driving force for us

to improve the quality of our services further. In 2008, one of HKO's objectives is to enhance our service to mobile platforms so that people on the move can maintain contact with the HKO website and obtain the latest weather information using PDAs or smartphones.



|勢時間:5月中的午夜時分

## Monthly Star Maps on the Observatory's Website

Mr H G Wai, Assistant Director of the Hong

Kong Observatory (left) receiving the

Yahoo! BUZZ Award 2007 from Mr Alfred

Tsoi, Managing Director of Yahoo! Hong

Kong Limited

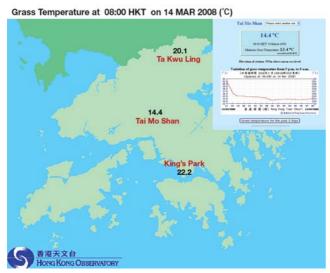
### **WOO Wang-chun**

Monthly star maps have been available on the Observatory's website since 1 January 2008. Marked on the maps are stars normally visible with the naked eye, names of constellations, and positions of planets in that month. Reference time is midnight mid-month.

The monthly star maps for 2008 are accessible via the following hyperlink: http://www.weather.gov.hk/gts/astron2008/skye1.htm

# More grass temperature information from Hong Kong Observatory

**YEUNG Siu-wai** 



In order to enhance the regional weather information for the public, in February 2008, the grass temperatures at Tai Mo Shan and King's Park Meteorological Station were added to the Observatory's "Regional Weather" webpage, in addition to the grass temperature information at Ta Kwu Ling. Between 5pm and 8am the following morning, real-time readings from the automatic grass temperature measurement systems are available on the following webpage:

#### http://www.weather.gov.hk/wxinfo/ts/index\_e\_grass.htm

The webpage will be updated every 10 minutes.

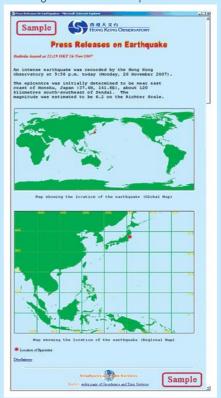
Grass temperature is the temperature recorded at the ground surface just above short grass. On cold clear winter nights, hoar frost forms by direct sublimation of water vapour onto the grass surface when the surface is cooled below zero degrees Celsius by radiating heat off to space. Since the temperature is generally colder in open terrain and on high ground, frost occurs more frequently over these places.

Low temperature and frost can damage vegetation. It is hoped that by providing more grass temperature information to farmers, they can more easily determine if precautionary measures are required to protect the crops on cold winter nights.

# Maps showing earthquake epicentre on Earthquake Press Release Webpage

### **WOO Wang-chun**

With effect from 19 December 2007, maps indicating the location of earthquake epicentre are shown on the earthquake press release web pages. The location of epicentre is marked with a red star-shaped symbol on a global map and a regional map. (Please refer to the attached screenshot.) This would help readers get a better understanding of where the earthquake has occurred.



Press release web page with maps showing the location of earthquake epicentre

# Launching of regional temperature forecast in Hong Kong on the Observatory's website LEUNG YIN-KONG and SHUM Kit-ying

Although Hong Kong is a small place, the temperature in urban areas and the New Territories can sometimes differ significantly. To enhance its weather services, the Hong Kong Observatory (HKO) has launched its regional temperature forecast on a trial basis in late March to provide maximum/minimum temperature forecast in various parts of Hong Kong (see figure) through the Observatory's website http://www.weather.gov.hk/wxinfo/frt/frt.htm. The maximum temperature forecasts for the locations for the day will be issued daily at 5 a.m. while the maximum/minimum temperature forecasts for the next day will be issued at 5 p.m.

In formulating the regional temperature forecasts, the HKO makes reference to the computer outputs of the numerical model and utilizes statistical methods to assess the relationship between temperatures and weather parameters such as the relative humidity, rainfall, cloud amount, wind speed/direction and etc.

Sample of Regional Temperature Forecast (beta version)



## King's Park Meteorological Station Open Day

#### **YU Mei-fung**

On 20 January 2008, the Hong Kong Observatory opened the gates of the King's Park Meteorological Station to the public for its first ever Open Day in more than 50 years. Under the banner of "Science in the Public" campaign, the event was organised with much enthusiasm by colleagues, especially those from the Graphic Design Unit who also provided much of the ideas into the preparations that made the event successful.

Blessed with fine weather, colleagues and volunteers from the Friends of the Observatory arrived early that day to begin their final preparations. After the gates were opened at 10 o'clock, the station began to fill with people from all walks of life, including scouts, students, teenagers, family groups and even morning exercisers. Much interest was given to the various instruments at the station, including the radiation monitoring equipment, evaporation pans, sunshine recorders, and the Automatic Upper-air Sounding System. One visitor who recalled seeing the model of the Sounding System during the Observatory Open Day was excited to have seen the real system, and also expressed appreciation to the professionalism of the Observatory. Apart from the display boards with detailed information on the individual

instruments, many instruments were put on display for close examination and even handling by the public. Some visitors took turn to be photographed with a real weather balloon. Others were totally absorbed in the "Rainstorm Sniper" computer game, and were awarded the "Members of the Weather Family" key rings as souvenirs.

The event allowed colleagues to interact with the public and also gave visitors the opportunity to know more about the work of the Observatory in meteorology and radiation monitoring. Colleagues found the event quite

worthwhile and rewarding.



Scientific Officer Mr CHAN Kai-wing demonstrating the sunshine duration recorder



Scouts making notes after being given a brief on the Upper-air Sounding System

## "One District One Station" -

**Kowloon City** 

SIN Kau-chuen



The Director of Hong Kong Observatory Mr LAM Chiuying (right) explaining the operation of the Kowloon City District automatic weather station to Chairman of the Kowloon City District Council, Ir WONG Kwok-keung (middle) and Acting District Officer of the Kowloon City District, Ms KWAN Hiu-yeung (left). The automatic weather station for the Kowloon City District entered into operation on 11 April. This is the first automatic weather station established in Kowloon under the Observatory's "One District One Station" programme following the opening of the weather stations for the Central and Western District and the Eastern District of the Hong Kong Island in September last year. Ir Wong Kwok-keung, the Chairman of the Kowloon City District Council and Ms Kwan Hiu-yeung, Acting District Officer of the Kowloon City District officiated at the opening of the station.

The automatic weather station for the Kowloon City District is located adjacent to the Lok Fu Service Reservoir Garden. It was used previously to provide wind direction and wind speed data for the Kai Tak airport for wind shear monitoring. The Observatory has recently customized the station to provide temperature measurements. The public can access the information from the Observatory's "Regional Weather" webpage at: <a href="http://www.hko.gov.hk/wxinfo/ts/display\_graph\_e.htm?klt&menu=otherwxi&rwx&addbar">http://www.hko.gov.hk/wxinfo/ts/display\_graph\_e.htm?klt&menu=otherwxi&rwx&addbar</a> or PDA webpage at: <a href="http://pda.hko.gov.hk/regione\_knc.htm">http://pda.hko.gov.hk/regione\_knc.htm</a>. It is also available at the Observatory's Dial-a-Weather service at 187 8200.

## Joining hands in fighting the cold spell

**MOK Hing-yim, TAM Cheuk-ming** 

Hong Kong experienced the longest cold spell in the past 40 years and the Hong Kong Observatory issued cold weather warnings from 24 January to 16 February, which was the longest on record. Several days before the cold spell, the Observatory communicated the message of falling temperature trend to the public through the 7-day weather forecast to alert the public to take measures against the cold weather. In response, the Senior Citizen Home Safety Association (SCHSA) took proactive action before the cold spell to broadcast the recorded message of the Director of the Hong Kong Observatory, Mr LAM Chiuying, to remind users of the "Caring



Mr H G Wai (right), Acting Director of the Hong Kong Observatory and Mr K W Ma (left), Executive Director of the SCHSA, in the press conference on 28 January

Message Service" to get ready for the cold weather. When it was expected that the cold weather would continue to affect Hong Kong during the Lunar New Year, the Observatory and SCHSA held a joint press conference on 28 January to announce the message and ask the public to care for and help the elderly or persons with chronic medical conditions. Furthermore, the

SCHSA conducted four major winter clothing distribution exercises for those in need during the cold spell.

On the other hand, the Observatory's Weather Information for Senior Citizens Webpage (http://www.weather.gov.hk/ sports/socare.shtml), which was launched last November, registered about 6,000 hits during the cold spell. The webpage contains the latest weather forecasts, including forecasts for minimum and maximum temperatures, and the cold and very hot warnings if issued. The webpage also provides hyper links to the websites of the Social Welfare Department, Department of Health and other subsidised organisations such as the SCHSA to

facilitate the senior citizens, their family members as well as social workers to obtain other related information and to contact the relevant organisations.

With full cooperation among the Observatory, relevant social organisations and the media, the society reacted in a planned manner in this cold spell to assure the safety of the elderly and those in need.

# Hong Kong Observatory Participating in Asia-Pacific Satellite Data Re-transmission Services

#### **CHENG Cho-ming**

Figure 1: The polar-orbiting satellite collects meteorological data while revolving around the Earth.

The Hong Kong Observatory joined the Asia-Pacific satellite data re-transmission services in March 2008, sharing satellite data with other meteorological services in the region. Satellite data is one of the important sources of data for numerical weather prediction models.

The Observatory implements a satellite reception system to directly receive weather data collected by polar-orbiting satellites (Figure 1). The area of coverage of these data is the region where the satellite 'sees' while flying overhead Hong Kong (Figure 2). Usually, polar-orbiting satellites distribute data collected after circling around the

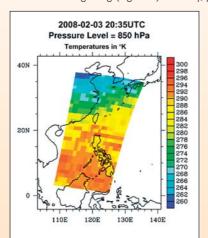


Figure 2: Temperature data received from NOAA-16 polar-orbiting satellite.

globe. Since it takes some time for the satellite to complete its cycle, the satellite data is received a few hours later. To shorten this time delay, the World Meteorological Organization establishes the regional satellite data re-transmission services in the Asia-Pacific Region. This facilitates prompt exchange of satellite data collected at locations with direct reception of the satellite data, obviating the need to wait for the satellite data after the satellite completes its orbit around the globe. The re-transmission services provide a means for weather services in the Region to get quick access to satellite data from different areas.

The satellite data re-transmitted by the Observatory to other meteorological services in the region include the temperature data at various altitudes collected by the United States NOAA-series of polar-orbiting satellites (Figure 2). As compared with upper air weather data collected by balloons, the satellite data has higher spatial resolution and covers the vast oceanic areas. This helps improve the performance of numerical weather prediction models.



# International Guidance Written by Observatory's Officer Published

**CHOY Boon-leung** 



Mr S T Chan holding the Manual published by ICAO (white) and the Guide published by WMO (green)

The "Manual on the Quality Management System for the Provision of Meteorological Service to International Air Navigation" written by Mr S T Chan, Scientific Officer of the Hong Kong Observatory, was recently published by the International Civil Aviation Organization (ICAO). Mr Chan was appointed consultant to ICAO to develop the Manual back in 2004.

The Manual provides guidance on the implementation of quality management system for aviation meteorological service providers around the world. Its publication is very timely as there is plan to upgrade the recommended practices to international standards in 2010 for ICAO Contracting States to establish such ISO 9000-compliant quality management systems.

In collaboration with ICAO, the Manual has also been published by the World Meteorological Organization (WMO) as the "Guide on the Quality Management System for the Provision of Meteorological Service for International Air Navigation" so that meteorological services around the world could prepare for the upcoming change.

## 29th Meeting of the Liaison Group on Aviation Weather Services

**SONG Man-kuen, Sandy** 

The 29th Meeting of the Liaison Group on Aviation Weather Services was held at the Hong Kong Observatory Headquarters on 22 February 2008. The meeting discussed the Observatory's plan to support the rapid air traffic growth as well as to dovetail with the replacement of the air traffic control (ATC) system of the Civil Aviation Department (CAD). This includes the upgrading of the aviation meteorological facilities, the development of additional terminal weather products and route-specific weather forecast, etc. In addition, the Terminal Doppler Weather Radar has been serving the airport for over 10 years and is approaching the end of its designed life. There is a need to acquire a new radar as backup and replacement-in-line. The participants welcomed these plans to further strengthen Hong Kong's aviation meteorological services.



Acting Assistant Director of Hong Kong Observatory Mr C M Shun (holding microphone) welcomed the airline representatives at the 29th Meeting of the Liaison Group on Aviation Weather Services.

## World-first uplink of LIDAR wind shear alerts to the aircraft cockpit

**SONG Man-kuen, Sandy** 



Observatory's officers Sandy Song (front left) and BL Choy (front right), and NWA's Chief Pilot Steve Smith (back left) and Meteorologist Tom Fahey (back right) photographed in the cockpit of an NWA aircraft during the media briefing.

A trial of uplinking wind shear alerts generated by the LIght Detection And Ranging (LIDAR) system to the aircraft cockpit - the first of its kind in the world - has recently been extended to become an ongoing programme at the Hong Kong International Airport (HKIA). This is the result of collaboration between the Hong Kong Observatory (HKO) and the Northwest Airlines (NWA). In early March 2008, a media briefing was held to promulgate this successful story.

Currently, wind shear alerts are passed to pilots in flight via air traffic controllers or the Automatic Terminal Information Service through radio communications. With direct uplink of the alerts to the cockpit, the pilots are able to receive up-to-date wind shear information right in front of them when their aircraft is within some 30 minutes before landing or take-off.

The collaboration started in 2006 when HKO tested an available technology to uplink wind shear alerts from the Terminal Doppler Weather Radar (TDWR) directly to NWA aircraft operating at HKIA. This was the first uplink of wind shear alerts in the Asia/Pacific Region. In 2007, wind shear alerts from the LIDAR were added to the uplink and HKIA became the first airport providing this new service to the aviation community. As the TDWR works best in rainy weather and the LIDAR detects wind shear in dry and fine weather, comprehensive wind shear information could now be provided to pilots via the HKIA weather uplink in all weather conditions.

## LIDAR relocated to south runway

**CHAN Pak-wai** 

In mid-March this year, the LIght Detection And Ranging (LIDAR) system at the Air Traffic Control Complex (ATCX) was moved to the southern fire station of the Hong Kong International Airport (HKIA). Compared to ATCX, the southern fire station is closer to the south runway. The laser beam of the LIDAR is better aligned with the south runway, thus enhancing the precision in monitoring windshear over the south runway. After the relocation, each runway of HKIA has a dedicated LIDAR for windshear detection - the LIDAR at the northern fire station focuses on the north runway, and the one at the southern fire station focuses on the south runway. This "Dual LIDAR Windshear Alerting System" is the first of its kind in the world.



# Sharing of Weather Observations in Collaboration with General Aviation Partners

#### **SONG Man-kuen, Sandy**



Internet-based platform developed by the Observatory for sharing of pilot reports and weather observations within the general aviation community in Hong Kong.



Hong Kong Aviation Club's President Mr Danny Patterson (first right), Chief Flying Instructor Captain Gupta (second left), Flying Instructor Mr Kenny Choi (first left) and Ms Sandy Song of the Observatory (second right) introduced the internet-based platform to the media.

The Observatory launched an internet-based platform to facilitate sharing of weather observations and pilot reports within the general aviation community in Hong Kong. A briefing was held on 3 March to introduce this collaborative initiative to the media.

Pilots of general aviation have all long provided reports to their respective organizations for assessing the weather conditions impacting on their flights. These weather conditions include visibility, cloud base, and turbulence, among others. Using the internet-based platform developed by the Observatory, each participating organization is able to provide pilot reports of significant weather for integrated display on a webpage so that the information could be shared among all general aviation users with access to the platform. Apart from pilot weather reports, weather observations at the Hong Kong Observatory Headquarters, Shun Tak Heliport, Hong Kong International Airport and Macao International Airport, as well as weather photos around Hong Kong are also displayed.



Capt. Marcus Chan of the Government Flying Service demonstrated to the media on using HKO's internet-based platform to input pilot reports. (Courtesy Hong Kong Economic Times)

Since the webpage was put into trial use in 2007, participating organizations including the Government Flying Service, Hong Kong Aviation Club and local helicopter companies have shown great appreciation to the collaborative efforts and provided valuable feedback to further enhance the platform.

# Airport Thunderstorm and Lightning Alerting System Goes Operational

#### LI Ping-wah

As a collaboration with the Airport Authority Hong Kong (AAHK), the Hong Kong Observatory (HKO) has commissioned a new-generation Airport Thunderstorm and Lightning Alerting System (ATLAS in short) since March 2008. The system is used to detect and forecast lightning activities over the Hong Kong International Airport (HKIA) with a view to protecting personnel on the ground and aircraft passengers from being hurt by lightning strikes. Developed by the Observatory, ATLAS detects cloud-to-ground lightning strikes over and in the immediate vicinity of the airport island captured by Observatory's Lightning Location Information System (LLIS). The System also uses HKO's nowcasting system SWIRLS (Short-range Warning of Intense Rainstorm in Localized System), one of the most sophisticated nowcasting systems in the world, to predict in short-term the future movements of these lightning strikes. SWIRLS is also one of the systems selected by the World

Meteorological Organization to participate in the Forecast Demonstration Project to be held in Beijing during the 2008 Olympic Games. Based on the detected or predicted locations of the cloud-to-ground lightning strikes, ATLAS automatically generates Amber or Red lightning alerts via AAHK's warning lights installed at the apron. Furthermore, ATLAS alerts are also issued through the Observatory's AMIDS (Aviation Meteorological Information Dissemination System) webpage in support of the operations of airport services units and airlines.



Hong Kong Observatory's Dr LI Ping-wah (standing) introduced to AAHK, operators of airport services units, and airlines prior to the commissioning of ATLAS.

## Hong Kong Observatory co-sponsoring the "Dragonair Aviation Certificate Programme"

#### **CHOY Boon-leung**



Hong Kong Observatory's Acting Assistant Director Mr C M Shun and Senior Scientific Officer Ms Sandy Song attended the 2008 Dragonair Aviation Certificate Programme launch ceremony and photographed with Dragonair's CEO Mr Kenny Tang, Wing Commander Fred Lui of the Hong Kong Air Cadet Corps and 14 cadets who join the Programme.

For the third year in a row, the Hong Kong Observatory coorganizes the "Dragonair Aviation Certificate Programme" and provides meteorological training courses to selected cadets of the Hong Kong Air Cadet Corps. The programme aims to inspire interests in aviation and to nurture future talents for the aviation community. A number of graduates from previous programmes are already forging careers in the aviation business. The cadets will undergo an eight-month mentorship programme to receive trainings from different aviation-related organizations, including the host Dragonair and the co-sponsors Hong Kong Observatory, Civil Aviation Department, Government Flying Services, Aviation Security Company, Hong Kong International Airport Services and Hong Kong Aircraft Engineering Company. The Observatory will offer, in the second half of this year, basic training on weather observation and aviation weather forecasting, opportunities to visit the Airport Meteorological Office and practice at the bench for the cadets to experience themselves the partnership between the weatherman and the aviation community.

## A new paradigm for World Area Forecast System

#### **SHUN Chi-ming**

I attended the 4th Meeting of the World Area Forecast System Operations Group of the International Civil Aviation Organization (ICAO) in Cairo, Egypt during 26th to 28th February 2008. The World Area Forecast System (WAFS) is a global system of aviation meteorological service set up by ICAO and the World Meteorological Organization (WMO). It aims to provide every aircraft with Flight Document to enable pilots to plan their flight routes, the flight time, the fuel needed and the maximum aircraft loading.

Hitherto, the High Level Significant Weather Chart provided by WAFS (Figure 1) has been indispensable for pilots in flight planning. Significant weather such as tropical cyclone, volcanic ash, jet stream and turbulence are clearly depicted on the chart. In the meeting in Cairo, ICAO proposed to replace the weather chart prepared by forecasters with the three

dimensional gridded data (such as probability of clear air turbulence, Figure 2) generated by numerical weather prediction model from computer. While the reform has the benefit of allowing airlines to make use of the weather forecast generated by the more objective and sophisticated computer to enable automatic flight planning and to gain cost-effectiveness, there are still many problems to solve. For example, how to present the large volume of computer-generated data to pilots to aid their pre-flight and in-flight decision arising from change in weather to ensure flight safety? This proposed change will have a great and long-term impact on aviation weather service. In Cairo, representative from China and I, together with other state members have put forward suggestions that hopefully after detailed study and review will gain recognition and support from other members and will ultimately result in a more effective and safe aviation meteorological service.



Figure 1: The High Level Significant Weather Chart currently provided to airlines and pilots.

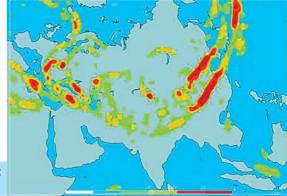


Figure 2: A newly developed forecast of clear air turbulence at 30,000 feet based on computer-generated weather model.

# Atmosphere & Environment

## The longest cold spell in 40 years

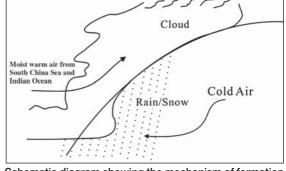
#### LI Kin-wai

Under the influence of an intense northeast monsoon, the weather in Hong Kong was persistently cold since 24 January. The minimum temperatures recorded at the Hong Kong Observatory ranged from 8 to 12 degrees during the period. Lasting for a total of 24 days, the cold weather came to an end on 16 February. This is the longest cold spell in Hong Kong in the past 40 years. The Cold Weather Warning issued by the Hong Kong Observatory on this occasion was in force consecutively for 594.5 hours, the longest since the Warning was put into operation in 1999.

This exceptionally long cold spell was a result of the cold air from Siberia moving southwards to reach central and southern China incessantly, while moist air was transported northwards from the South China Sea and even as far as the Indian Ocean. The rendezvous

of the cold and moist air brought continuous rainy and snowy conditions to the region.

Concurrently, sea surface temperatures over the central and eastern tropical Pacific have been persistently cooler than normal since last autumn. This phenomenon is known as La Niña. Past studies showed that in the winter season of a La Niña year, the northeast monsoon affecting mainland China would be stronger and more frequent than normal and Hong Kong would also have a higher chance of below normal winter temperatures.



Schematic diagram showing the mechanism of formation of rain/snow in Southern China

Daily Minimum Temperature at the Hong Kong Observatory from 24 Jan to 16 Feb 2008

## Regional variations in visibility over Hong Kong

#### **MOK Hing-yim, HUI Tai-wai**

Visibility, in meteorology, is defined as the maximum distance that an object can be identified by un-aided eyes. It drops when light rays are absorbed or scattered by tiny water droplets, dust or other particulates suspended in the air. Hong Kong, though small in size, may occasionally see large regional variations in visibility due to localized geographic and atmospheric conditions. This can be demonstrated by the following two cases.

On 17 February 2005, southerly winds prevailed over the coastal areas of Guangdong. When this moist air encountered the underlying relatively cool sea surface, the moisture condensed into tiny droplets, giving rise to fog. In the early morning, the atmosphere in the vicinity of Waglan Island was saturated with relative humidity of 100%. Under the influence of the sea fog, the visibility over the region fell to around 300 m. In contrast to the foggy situation near Waglan Island, the visibility at Chek Lap

Kok stayed above 10 km with relative humidity varying between 75% and 80%, an unfavorable condition for fog formation. The regional contrast was even greater at 8:00 am when Waglan Island and Chek Lap Kok recorded visibility of 100 m and 15 km respectively (Figure 1).

Another case occurred on 1 January 2007 when the dry northeast monsoon brought fine weather to southern China. In the afternoon, moderate east to northeasterly winds generally prevailed over Hong Kong; the visibility at the Observatory Headquarters was up to 30 km. Over the western part of the territory, near Chek Lap Kok, winds were light northwesterlies. The convergence of the localized northwesterlies and the prevailing easterlies, plus the stable atmospheric conditions associated with the inversion layer at 1 km aloft, made the suspended particulates difficult to disperse. Consequently, the visibility at Chek Lap Kok was reduced to 3100 m (Figure 2).

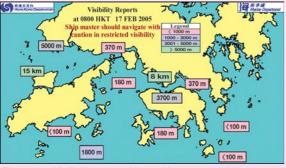


Figure 1: Visibility over Hong Kong at 8:00am on 17 February 2005 (The mountain range of Lantau Island blocked the moist southerly winds, creating unfavorable conditions for fog formation at Chek Lap Kok.)

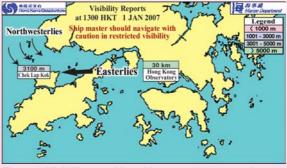


Figure 2: Visibility over Hong Kong at 1:00pm on 1 January 2007 (In the vicinity of Chek Lap Kok, the light northwesterlies converged with the prevailing easterly winds, giving rise to reduced visibility.)

Real time visibility readings at various districts can be obtained from the Observatory's web page at http://www.weather.gov.hk/wxinfo/ts/index\_e\_vis.htm.

### Windy and Rainy Neoguri

The Director of the Hong Kong Observatory Mr Lam Chiu-ying forecast at the press conference on 12 March that "On the basis that the La Niña event will continue into the spring of 2008, the most likely number of tropical cyclones coming within 500 kilometres of Hong Kong this year is six to eight ....". While these words were still fresh in one's memory, Typhoon Neoguri started the 2008 typhoon season on 17 April.

Neoguri first developed into a tropical depression over the central part of the South China Sea and then rapidly intensified into a typhoon moving generally northwards towards the South China coast. It finally made landfall at Yang Jiang, about 210 kilometres west of Hong Kong, and moved further inland Guangdong. The Hong Kong Observatory issued the Standby Signal No. 1 and the Strong Wind Signal No. 3 at 4:15 p.m. on 17 April and 8:40 p.m. on 18 April respectively. As Neoguri passed to the west of Hong Kong, winds over the southwestern part of the territory were generally stronger than other parts of Hong Kong. Among the eight reference wind stations of the new tropical cyclone warning system which commenced operation last year, Chek Lap Kok and Cheung Chau were the first two that recorded strong winds, followed by Kai Tak and Sai Kung.



Figure 1: The maximum wind speeds recorded at the eight reference wind stations from 3:41 p.m. to 4:40 p.m. on 19 April. Among them, Chek Lap Kok, Cheung Chau, Kai Tak and Sai Kung recorded strong or higher wind strength. (Wind speed in kilometre/hour)

#### **MOK Hing-yim**

Shortly after 4:30 p.m. on 19 April, four stations recorded strong or higher wind strength within one hour (Figure 1). During the passage of Neoguri, only Chek Lap Kok and Cheung Chau at the southwestern part of the territory recorded gale force winds, justifying the decision of issuing No. 3 but not No. 8.

Besides giving rise to the earliest No. 3 signal in Hong Kong after the Second World War, Neoguri also brought the earliest Black Rainstorm Warning to Hong Kong. The total daily rainfall recorded at the Hong Kong Observatory on that day was 237.4 millimetres, the highest daily rainfall recorded in April since records began. When Neoguri approached the coast of western Guangdong, the warm southerly winds associated with Neoguri met the relatively cooler northeast monsoon which was still affecting the coast of Guangdong by that time and formed a warm front with severe convective activities. The regional weather distribution map at 7 p.m. on 19 April (Figure 2) clearly shows the significant difference in wind direction and air temperature between the southern and northern parts of the territory under the influence of the warm front. After the warm front moved north and passed Hong Kong, together with the weakening of Neoguri, heavy rain started to dissipate that night. There were only a few isolated showers over the territory the next day.

Neoguri provided a good warm-up for the 2008 typhoon season, a busy one that we have to stay alert for.

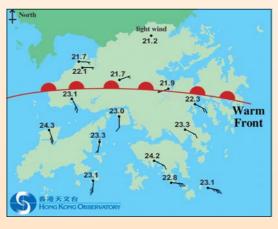


Figure 2: Position of the warm front (red) at 7 p.m. on 19 April (The number represent air temperatures in °C, the symbols next to it represent wind speed and direction.)

## Online Educational Package on Climate Change

**CHENG Yuen-yuen** 

To promote awareness of climate change to school children in Hong Kong, the Hong Kong Observatory produced an educational package on climate change in mid 2007. Copies of the package have been distributed to primary and secondary schools.

Since the publication of the package, the Observatory has received many positive feedback showing appreciation from various sectors of the community. Many government departments, green groups and academic institutions also requested copies of the package.

Hitherto nearly 2,000 copies have been distributed. To facilitate easy access of the package by the public, the Observatory has put the package materials online. The online package consists of an animated cartoon, a cartoon booklet, PowerPoint presentations and a collection of publications and press release on climate change. The package is available at the following website:

http://www.weather.gov.hk/climate\_change/ed\_package/ start.htm





The Director of the Hong Kong Observatory Mr LAM Chiu-ying presented a souvenir to Professor LAU Ka-ming.

# Aerosols and Climate Change Talk by the Observatory Scientific Advisor Professor LAU Ka-ming

#### **WU Man-chi**

Do you know that aerosols in the atmosphere play a significant role in climate change? Professor LAU Ka-ming delivered a lecture on this interesting topic at the Hong Kong Observatory on 9 January.

Professor Lau has been appointed as a scientific advisor of the Hong Kong Observatory since 1996. He is now the Chief of the Laboratory for Atmosphere, NASA's Goddard Space Flight Center. Professor Lau, an internationally renowned meteorologist, has been actively involved in the research of monsoon and climate. He has organized and participated in numerous international research projects such as the

South China Monsoon Experiment. Professor Lau has published nearly 200 scientific papers.

In the lecture, Professor Lau presented the relationship between aerosols in the atmosphere and the hydrological cycle, explained the possible effects of aerosols on the formation of tropical cyclones and the Asian monsoon circulation, and showed the new findings from satellites observations of the changing characteristics in tropical rainfall and clouds.

Colleagues of the Observatory benefited greatly from the lecture and gained an in-depth understanding of climate change. This invaluable experience will help us prepare for future challenges in our works.



Professor LAU Ka-ming delivered a lecture to the Observatory staff.

## La Niña

La Niña may not be as well-known as its opposite phase, El Niño. La Niña means "the little girl" in Spanish. It refers to the event of sea surface temperature in the central and eastern equatorial Pacific falling below normal for a prolonged period of time (about five to six months).

La Niña happens once every several years with no definite interval of recurrence. The duration of each event varies, normally from 9 to 12 months. The previous La Niña event started to develop at the end of 1998 and lasted until early 2000. The current event commenced development

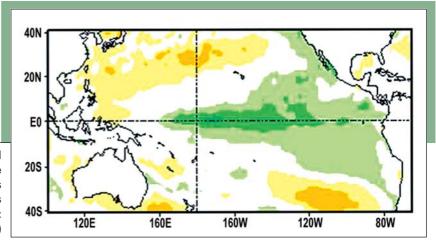
in the second half of 2007 and is predicted to persist to late spring or early summer in 2008. Research studies reveal that China would see stronger and more frequent winter monsoon in La Niña years. Generally speaking, under the influence of La Niña, rainfall will be above normal in western Pacific, northern Australia and Indonesia but central Pacific will receive less rainfall than usual.

Sea surface temperature anomaly in January 2008. Cool water (green) in the equatorial Pacific extended from the west coast of South America all the way west across the International Date Line. Deep green area indicates sea temperature of 1 to 2°C below normal. (Source: National Oceanic and Atmospheric Administration, USA)

#### **MA Hok-man**

Temperature-wise, the northwestern part of North America and the west coast of South America will experience colder-than-normal winters.

Regarding the local impact in Hong Kong, seasonal temperatures will generally be normal or below normal during the course of a La Niña and the chance for above-normal seasonal temperature is rather low. La Niña's effect on Hong Kong's rainfall is not significant. Yet, the number of tropical cyclones affecting Hong Kong will normally be above average in La Niña years.



## Hill Fire Observations by Weather Radars

**LEE Shuk-ming** 

The weather radar is primarily used to detect raindrops in the air to enable observation of the movement and development of rain areas. On occasions, weather radar can also capture other phenomenon. An example is the hill fire near Castle Peak in the afternoon of 1 January 2008. Under very dry weather conditions, the hill fire was widespread. A plume of smoke was seen emerging from the hill and spreading towards Chek Lap Kok under the northeasterly wind (Figure 1).

While there was no rain in the vicinity of Hong Kong that day, the airport weather radar at Tai Lam Chung detected rather strong signals which resembled rain signals. On the radar display (Figure 2), the radar signals appeared as a wedge shape area between Castle Peak and Chek Lap Kok.

The weather radar could detect the hill fire because the smoke was dense and widespread. The smoke particles reflected the microwave emitted by the radar in the same fashion as raindrops. It is usually difficult for weather radars to detect such phenomenon. The observation this time was indeed rare and special.



Figure 1: Smoke seen to emerge from Castle Peak at about 4:35 p.m. on 1 January 2008. The photo was captured by Mr C H Chow, duty Weather Observer at Chek Lap Kok.

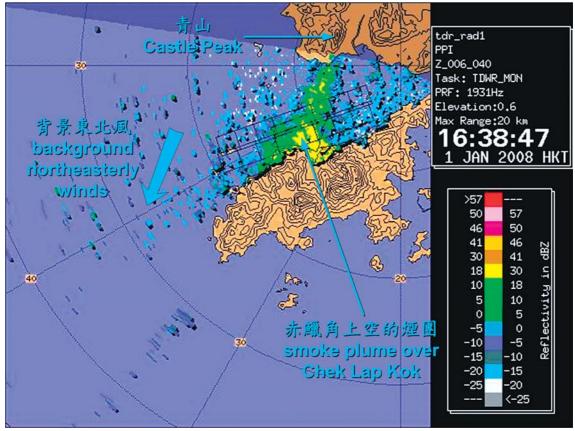


Figure 2: Radar image of the airport weather radar showing smoke plume emerging from Castle Peak at 4:38 p.m. on 1 January 2008.



## Scaling New Heights in the New Year -

# **Guangdong, Hong Kong and Macao Experts fostering cooperation and exchange**

**Editorial Board** 



Mr C Y Lam (2nd left), Director of the Hong Kong Observatory, took part in the Guangdong - Hong Kong - Macao Meteorological Cooperation Meeting to discuss 3-party collaboration.

Weather systems do not stop at the border. Meteorological experts in Guangdong, Hong Kong and Macao know that only too well. That is why cross-border cooperation is top of the agenda for the three sister meteorological services. This year, the annual Guangdong - Hong Kong - Macao Meteorological Cooperation Meeting was convened for the 13th time. The host was Guangdong Meteorological Bureau, and the meeting was held in Zhongshan, Guangdong on 21 January 2008. The 6-member Hong Kong delegation was led by the Director of the Hong Kong Observatory, Mr C Y Lam. The meeting focused on the items of cooperation carried out in the past year as well as new developments in the future. A lot of topics were discussed, ranging from automatic weather observing stations, study of haze,

exchange of data and information, data communication links, telephone weather conference, exchange of visits, as well as climate change studies and climate forecasting. The whole idea was to enhance our capability to provide quality weather service to the public in the Pearl River Delta.

The Cooperation Meeting was followed by a 2-day seminar on meteorological science and technology. A further 11 Observatory staff joined the seminar. A total of 22 scientific papers were discussed, 12 of which authored and presented by Observatory staff. This was an interesting forum whereby colleagues in the region understood more about the scientific and technological accomplishment of their neighbours, and paved the way for closer collaboration.

After the seminar, colleagues of the Zhongshan Meteorological Bureau took us to a tour of their facilities. We were all impressed not just by the blooming economy but also the burgeoning weather services to meet the demand of the thriving city.



Hong Kong and Macao colleagues were impressed by the weather services of Zhongshan Meteorological Bureau.

### **FRIENDLY VISITS**

#### **Editorial board**





"Science in the Public Service" All-Partners Meeting was held at the Hong Kong Observatory Headquarters in mid-January. Partners discussed the arrangement of "Science Carnival" to be held at the Victoria Park at the end of this year.



Mr FUNG Hing-wang, Commissioner for Census and Statistics, shared his management experience with the Observatory colleagues on 11 January.







Mr LUO-ou (front row, 3rd left), Deputy General Secretary of Guangdong Provincial Government and his colleagues paid a visit to the Observatory on 28 February.



Delegates of National Meteorological Centre, China Meteorological Administration visited the Observatory on 4-7 March to know more about our forecasting operations. (3rd right: Mr HU-xin, Deputy Director-General of National Meteorological Centre; 3rd left: Mr WAI Hon-gor, Assistant Director of the Observatory)



### **FRIENDLY VISITS**

#### **Editorial board**





On 24 January, Senior Scientific Officer Mrs Hilda Lam (1st left) introduced our weather forecasting procedures and operations to our counterparts from Shenzhen



Members of the Hong Kong Institution of Engineers (Nuclear Division) visited the Observatory on 1 March to learn more about environmental radiation monitoring in Hong Kong.



## **Ngong Ping 360 personnel visiting AMO**



The Managing Director of Ngong Ping 360, Ir. Morris Cheung, and his four colleagues, visited the Airport Meteorological Office (AMO) to see its operation in aviation weather services on 9 April. During the visit, they shared experience with the Hong Kong Observatory in the operation of wind monitoring systems as well as the measurement of winds in the Lantau area. The visit greatly enhanced mutual understanding and interflow.

Mr C M Shun, Acting Assistant Director of the Hong Kong Observatory (right), explained to Ir Cheung (left) the operation of AMO.



to the Japan Meteorological Agency

**WONG Wai-kin** 

In late November to mid December 2007, Mr Chan Sai-tick, Scientific Officer, and I visited the headquarters of the Japan Meteorological Agency (JMA) in Tokyo, to learn the latest development and applications of the numerical weather prediction (NWP) models. We also took this opportunity to visit the Meteorological Research Institute (MRI) in Tsukuba to have discussions with the NWP experts. Since the Observatory introduced a limited area NWP model from JMA in the 80s of the last century to support the Observatory's forecast activities, close cooperation on the development and applications of NWP models have been made between the two organizations. During this training attachment, we not only learned recent achievements on NWP systems made by JMA, but also got an in-depth understanding of new technologies and their applications through various discussion and practice sessions. These will benefit the development of the next generation NWP model system of the Observatory in the next couple of years. To further enhance sharing of experience and technology in weather forecasts, we also presented our work on NWP model and nowcast activities to the experts in JMA.

## **Observatory Staff invited to report on Climate** Change in Kyoto Protocol Seminar, Macao

### **LEUNG Yin-kong, John**



Mr LAU Si-io, Macao SAR Secretary for Transport and Public Works presented souvenir to Mr LEUNG Yin-kong, Scientific Officer of the Hong Kong Observatory in the Kyoto Protocol seminar, Macao.

The "Seminar on implementation of Kyoto Protocol in Macao" was held at the University of Macao on 17 December 2007. I was invited to give a lecture on climate change in the seminar. In my lecture, the immediate effects of climate change in Hong Kong were illustrated with large amount of scientific data and practical examples. The work of Hong Kong Observatory (HKO) in scientific research and social awareness promotion on climate change conducted in the past few years was also introduced. Participants recognized the contribution of the HKO in enhancing citizens' awareness of climate change and in its promotion of energy conservation. In particular, they highly commended HKO's efforts in popularizing difficult scientific concepts into messages relevant to peoples' daily life.

The seminar was jointly organized by the Macao Meteorological and Geophysical Bureau and the University of Macao, and hosted by the Macao SAR Secretary for Transport and Public Works, Mr LAU Si-io. Apart from HKO, the seminar was attended by over 200 senior officers, experts, academic professionals and university undergraduates from the Office of the Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao SAR, the Macao Meteorological and Geophysical Bureau, the University of Macao, the Beijing Climate Centre and the Guangdong Meteorological Bureau.

# Experience Sharing between Hong Kong Observatory and Guangdong Meteorological Bureau

**LEUNG Yin-kong, John** 



Hong Kong Observatory's Assistant Director, Mr H G. Wai, Scientific Officers, Mr Y K Leung and Dr K C Yeung, visited Guangdong Meteorological Bureau (GMB). Deputy Director of GMB Mr Y Xu (3rd left) introduced the work of the Guangzhou Central Meteorological Observatory.

The Hong Kong Observatory and the Guangdong Meteorological Bureau conducted mutual visits recently with aims to strengthen cooperation in weather forecasting and warning services. Besides understanding the operation of various meteorological facilities, the visits also enhance practical experience exchange on weather forecasting and warning.

Although the forecasting and warning services provided by the two institutions exhibit different characteristics, they share in common the vigorous scientific attitude, humanistic approach and dedication to satisfying the needs of the citizens and the community in providing appropriate meteorological services.

## **Certificates of Appreciation**

## Awarded to Hong Kong Voluntary Observing Ships



**WONG Chi-fai** 

Although the sea covers a larger area of the Earth's surface than land (about 7:3), the number of weather observations taken at sea is far fewer than that on land (about 1:6). Weather observations taken by deck officers are useful for identifying weather systems over the sea and preparation of marine weather forecasts and warnings for shipping. Ship weather reports are also used in climatological, atmospheric and oceanographic studies.

The Hong Kong Observatory participates in the Voluntary Observing (VOS) Ships scheme of the World Meteorological Organization and maintains a fleet of about 40 Hong Kong-based voluntary weather observing vessels. During voyages, the deck officers take weather reports at regular intervals and disseminate them to meteorological centres for reference by weather forecasters. The Observatory is most grateful to these officers for voluntarily taking weather observations which are additional to their routine work aboard. As a token of thanks, the Observatory awarded certificates of appreciation for 2007 to shipmasters of five Hong Kong Voluntary Observing Ships. The names of these ships are listed below:

OOCL Hamburg OOCL Hong Kong OOCL Japan OOCL Long Beach OOCL Tianjin

Captain HUANG Ning-chang of HKVOS "OOCL Hong Kong" receiving the certificate of appreciation

### Visit to

## China Meteorological Administration and Jiangsu Meteorological Bureau

### **CHAN Yuk-hing, Joanne and TSANG Moon-tong, Martin**

Under an agreement between the China Meteorological Administration and the Hong Kong Observatory on technical cooperation, we visited the National Meteorological Centre of the China Meteorological Administration in Beijing and the Jiangsu Meteorological Bureau in Nanjing from 14 to 18 January 2008.

During the visit in Beijing, we exchanged ideas and experiences with our peers on daily meteorological operations and the latest development and applications of forecasting techniques. We also discussed with the Beijing Meteorological Bureau the coordination details for the Olympic Equestrian Events to be held in Hong Kong this year.

We visited the Jiangsu Meteorological Bureau in Nanjing after the Beijing's trip. Among their services, we were most impressed by the first Road Weather Information Monitoring and Forecasting System in China operated by their Transportation and Communication Meteorology Centre. Along the entire Huning Highway, automatic weather stations together with web-cameras and large digital display boards were installed every 10 km. Latest weather warnings and information were prominently displayed on the screens for road users. It is an excellent example of integration of weather and traffic information for the public.

Early this year, China was affected by the worst snowstorms in decades. It so happened that our visit ended when the snowstorm began. On our way to the airport, we experienced the potentially dangerous slippery and low visibility conditions caused by the snowstorm along the highway. The warning messages and weather information on the display screens reminded us of the caring and thoughtful meteorological service provided by the Jiangsu Meteorological Bureau. They walked the talk of their mission of "people-centric, meticulous and service anywhere".

## Government - Wide Pre-Rain Season Seminar LEUNG Yin-kong, John



Scientific Officer Mr LEUNG Yin-kong gave a briefing on the weather information services designed for government departments.

With the aim to strengthening coordination among various government departments for the coming rainy season, the Hong Kong Observatory (HKO) arranged two seminars for all government departments in March. In the seminar, participants were briefed on the meaning of various severe weather warnings, matters of concern as well as the meteorological information provided to government departments. They also visited HKO's central forecasting office and TV studio.

Response to the seminar was overwhelming, about 100 government colleagues from 35 departments

participated. After the seminar, participants expressed that they had a deeper understanding on the weather services and forecasts provided by HKO which would help them make appropriate decisions and arrangements during inclement weather.



## "Friends of the Observatory"

## **Prize Giving Ceremony**

**TAI Sai-choi** 

A prize giving ceremony was held on 22 February to present the following awards to Friends of the Observatory (FoOb) members:

- 1. Appointment Certificates to ten "FoOb Volunteer Committee" members. The Committee was formed late last year to promote team spirit of FoOb volunteers and efficiency in organizing outreach activities.
- 2. Outstanding Docent Awards to five docents of the Observatory Public Guided Tour in 2007.
- 3. Winners of the 125th Anniversary Logo Design Competition, which is one of the events to celebrate the 125th anniversary of the Hong Kong Observatory this year.

During the ceremony, the Director of the Hong Kong Observatory Mr LAM Chiu-ying thanked the winners for their continual support and enthusiasm in serving the public. Apart from the winners, their friends and families as well as public tour docents in 2006-2007 were also invited. All enjoyed the night with food and games after the ceremony. In fact, most participants have been FoOb volunteers for years, making the party more like a family gathering full of laughter and friendship.



Group photo of the Director of the Observatory, Mr LAM Chiu-ying (front row, 6th left) with the participants in the "Friends of the Observatory" Prize Giving Ceremony

### List of winners and the Friends of the Observatory Volunteer Committee

Friends of the Observatory	TAM Chun-wai, Leo Kwok, Roger Kwan, Colin Leung, Jimmy Kwong,	
Volunteer Committee	Grace Leung, Joel Sun, Edith Tang, Lisa Huen and Planton Ng	
Outstanding Docents	Los Kusek Jimmy Kuseng Crass Loung Joel Cun and Edith Tang	
in 2007	Leo Kwok, Jimmy Kwong, Grace Leung, Joel Sun and Edith Tang	
Winners of the 125 <sup>th</sup>	Champion: Miss CHENG Hsi	
Anniversary Logo Design	First runner-up: Mrs NG CHAN Kam-chu	
Competition	Second runner-up: Miss WONG Ying-chi	

## MA Chi-fai becoming one of the seven Masters of the Observatory



Mr Ma receiving the promotion letter from the Director of the Hong Kong Observatory, Mr LAM Chiu-ying.

### **MOK Hing-yim, WONG Mei-shing**

After working at the Observatory for 28 years, Mr MA Chi-fai was promoted to Chief Scientific Assistant and became one of the seven Masters of the Observatory (Remark: Chief Scientific Assistants are traditionally addressed as Master as a gesture of respect and recognition of their contribution to the Observatory). Master Ma has recently been transferred to the Training Division after working for a few years in the Climatological Services Division. With long working experience, he will certainly take his inherent Mastership to a new level in the current post.

Master Ma is conversant in computer programming and good at optimizing workflow using information technology. He is very helpful and has assisted many colleagues in solving programming problems.

## **An Exceptional Gatekeeper**

#### **TAI Sai-choi**

Mr LO Tak-shing is often intimately called 'Uncle Tak' by his colleagues. He was deployed to the Observatory soon after he started working as a security guard in 2004. At first, he impressed me only as a friendly and diligent gatekeeper. Then we got closer after I joined the 'Corporate Communication' division as I often requested his help to take care of visitors. Though he was nearly 65, he still looked healthy and robust. It therefore seemed a bit too soon when I heard that he would retire in March.

Uncle Tak keeps a full head of enviable dark hair and wears a pair of elegant spectacles. He looks a bit serious when not smiling, but when you talk to him, you would find him a very amiable and voluble person. He likes to talk with a touch of philosophy, occasionally mingled

with a few English words. He always strives to do more and better than you ask. He said he loved to watch weather since he was a boy, and paid particular attention to water current and weather reports issued by the Observatory after he started a career in shipping when he was young. So it seems natural that he worked with exceptional enthusiasm in the Observatory. In his spare time he even planted different types of flowers near the front-gate kiosk where he worked to make himself at home.

When asked about his plan after retirement, he frankly said that he still had to work to make ends meet. 'I will never stop.' He said. He still missed the flowers and colleagues in the Observatory, and wished all colleagues happiness and prosperity. Same to you, Uncle Tak



The Director of the Observatory Mr LAM Chiu-ying presented a souvenir to Uncle Tak.

# Outstanding Observatory Staff Commended by the Director

#### **CHAN Wing-shan, Angel**

Under the Commendation Letter Scheme launched by the Civil Service Bureau, civil servants who have made a substantial contribution towards enhancing the efficiency/image of his own bureau/department/grade; or performed an exceptionally meritorious act which warrants special recognition will qualify for an award.

For the above purpose, an independent departmental committee in the Hong Kong Observatory has been established to carefully assess all nominations of staff with outstanding performance from all divisions before submitting a recommendation to the Director for consideration. The nomination mechanism ensures that the achievements of all colleagues with substantial contribution or exceptionally meritorious performance are duly recognized by the Department.

At the Christmas Party in 2007, the Director presented eight commendation letters and seven appreciation letters to civil service and contract staff colleagues of different grades and ranks achieving exceptionally well performance. The awards in no doubt prove their efforts and contributions during their tenure of services in the Hong Kong Observatory.

Let us applaud and share the success of our outstanding colleagues who won the awards. The full list of these colleagues can be found below:

http://www.weather.gov.hk/outstanding\_officers/ outstand\_2007\_e.htm

# **Observatory Staff Receiving Praise**

Staff of the Observatory receiving words of thank and commendation from the public or organisations during the period January - April 2008:

Ms SONG Man-kuen, Sandy Senior Scientific Officer

> Dr LI Ping-wah Scientific Officer

Mr TAM Kwong-hung Scientific Officer

Mr TAI Sai-choi Scientific Officer

Mr MA Lap-yin Scientific Assistant





## Hong Kong Observatory Staff Association -

## **Visit to Airport Meteorological Office cum** Tai O Ecological Tour

**HONG Chi-yuen and LEUNG Yin-kong, John** 



Staff of the Observatory and their family members visited Airport Meteorological Office

To celebrate the 70th Anniversary of the Observatory's Aviation Weather Services, the Hong Kong Observatory Staff Association and "Happy Business" group organized a one-day trip to the Airport Meteorological Office (AMO) and Tai O on 1 December 2007. This was the first time for AMO to be opened for staff family members since it started operation 10 years ago. There were over 70 participants and they were all excited to have a chance to take a closer look at aircrafts over the glide paths within the airport restricted area. They then had lunch at the heritage village in Tung Chung old town and visits to Tai O (also called "Eastern Venice" with houses built on stilts over the sea), Tian Tan Buddha (the largest seated outdoor bronze Buddha statue in the world) and Po Lin Monastery (Precious Lotus Zen Temple). All felt happy and contented.



Visiting Tai O fishing village



Year's event - Tree Planting Day was held on 6 April to give a helping hand to our Earth.

# The Hong Kong Observatory awarded the "Caring Organisation"

CHOI Siu-chuen, Philip

The Hong Kong Observatory was awarded the "Caring Organisation" again in 2007/08 under the "Caring Organisation Scheme". This is the third consecutive year that the Observatory received the award since its inception in 2005/06.

The "Caring Organisation Scheme" is organized by the Hong Kong Council of Social Service. It aims to draw together voluntary efforts, encourage mutual care, cultivate positive social relationship, facilitate integration of marginal groups and minimize social distress with a view to building caring community spirit and cultivating corporate citizenship. To be eligible for the award, Government departments, statutory organisations, professional bodies, education

institutions, etc. must have met at least two of the six stipulated criteria, viz. volunteering, employee friendly, employing vulnerable, caring for the environment, mentoring and giving.

The Hong Kong Observatory is awarded the "Caring Organisation" in recognition of its achievements in supporting employee volunteering through the HKO Volunteers, providing a family-friendly environment for employees through a series of family-oriented policies and activities, offering employment and vocational training opportunities to the vulnerable groups, promoting awareness and initiatives on environmental protection, and encouraging donation in cash and in kind to social service organisations.

**Best TV Weather Programme Presenter** 

(4th Quarter, 2007)

Miss LEE Shuk-ming

(1st Quarter, 2008)

**Mr YEUNG Hon-yin**