Serving the global community online

HONG KONG OBSERVATORY

Whether they have Western names like Wanda, Elsie or Hope, or since recently, Asian names like Shan Shan (a name that reminds people of Lee Lai-shan, Hong Kong's windsurfing Olympic gold medalist), Durian (Asia's king of fruits) or Yutu (China's legendary character, Jade Rabbit), typhoons and their power of destruction will be familiar to people in many parts of the world who live around the oceans.

Yet, gone are the days when their fury would inevitably lead to hundreds or even thousands of casualties and severe damage to property. Advancement in meteorological science and technology have enabled forecasts of the movement and intensity of typhoons to be made with significant confidence, at least by the more advanced weather centres, for the protection of lives and property. The challenge now is delivering these forecasts and warnings to the people who need them – even across national boundaries.

More than 700 squatter and rooftop huts were destroyed by Typhoon Wanda in 1962.

The demand for the latest weather information and forecasts is ever-increasing as people search for instant information on the Internet or via their WAP-enabled mobile phones before making travel plans. Without a weather forecast, an aircraft does not take off and an ocean-going ship does not leave port.

"Weather information is a much sought-after commodity by the travelling public and the international media," the Director of the Hong Kong Observatory, Mr Lam Chiu-ying said.

Foreseeing the need for an authoritative source of weather forecasts and warnings by people around the world, the Hong Kong Observatory took the initiative to set up two websites, under the auspices of the United Nations World Meteorological Organization (WMO), one offering information on severe weather conditions around the world and the other providing world city forecasts and climatological information.

Observatory wins global plaudits

Hong Kong Observatory's efforts in developing and running the Severe Weather Information Centre (SWIC) website (http://severe.worldweather.org) for the benefit of the global community was recognised by the Economic and Social Commission for Asia and the Pacific (ESCAP) as well as the WMO. The observatory was awarded "The 2001 Typhoon Committee Natural Disaster Prevention Award"

for its "distinguished services" in "taking the initiative and providing resources to develop the SWIC website for WMO". The award also recognised the observatory's success in developing a list of indigenous names for typhoons, leading to a commitment from other countries to do the same.

"It is a great honour for us to receive this award from the ESCAP/WMO Typhoon Committee, for our international contribution, not for just doing a good job at home," Dr Yeung King-kay, the Hong Kong Observatory's Senior Scientific Officer, said.

Internet surfers from all corners of the globe can now access the SWIC website providing official information from national meteorological services and regional meteorological centres on the latest tropical cyclone positions, intensity, forecast tracks, warnings, satellite images and severe weather reports.

The 2001 Typhoon Committee Natural Disaster Prevention Award.

Protection of lives and property against weather hazards begins with timely and accurate forecasts and warnings. With official weather information widely available to counteract the many unofficial and often amateurish sources of weather information, communities under the threat of severe weather can put preventive measures in place, drastically reducing any human and economic losses that may arise.

World's first global weather website

Following the success of the SWIC website and in recognition of the Hong Kong Observatory's expertise in developing internet weather services, the WMO invited the observatory to design and host the World Weather Information Service (WWIS) website (http://www.worldweather.org) to provide official weather forecasts for cities around the world.

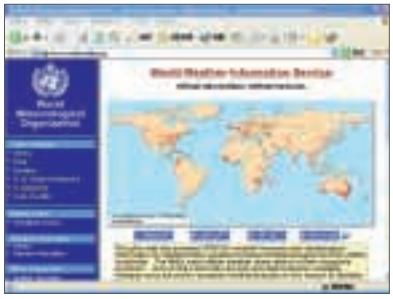
Professor Godwin OP Obasi, then Secretary-General of the WMO, said during the launch of WWIS in December 2002 that international co-operation was the key to a truly global meteorological information network at the service of the international community.

Professor Obasi said the website, offering up-to-date weather information with two-way links to the WMO website is of great importance to all national meteorological and hydrological services.

Dr Yeung said the invitation from the WMO meant a great deal to the Hong Kong Observatory. "Hosting the two specialised websites on behalf of the WMO is an important milestone in our endeavour to provide world-class services in meteorology," he said.

Popularity speaks for success of WWIS

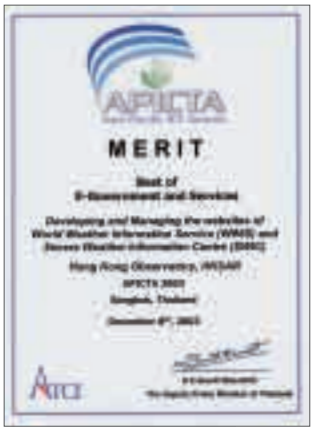
The observatory's success in leading the development of the WWIS is evident in the rapid increase in the number of WMO member countries and territories participating in this global project. Since July 2002, the number of cities submitting climatological information has increased 50%, while the number of cities submitting weather forecasts has doubled. At January 2004, climatological information on 1,002 cities from 153 of the 187 WMO members was being delivered via the WWIS website. Weather forecasts for 858 cities from 90 members are also carried on the website.



The WWIS website hosted by the Hong Kong Observatory.

"The WWIS website has gained in popularity among users," Dr Yeung said. "The yearly page visits in 2002 and 2003 were 2 million and 92 million respectively. The 45-fold increase in page visits between the two years is very encouraging indeed."

"This assures us that the global community does benefit from our services. The sustained effort we have been making is all worthwhile."



The certificate of merit – "Best of E-Government and Services" in the Asia Pacific Information and Communication Technology Awards 2003.

The two WMO pilot projects (WWIS and SWIC) have also won a certificate of merit "Best of E-Government and Services" in the Asia Pacific Information and Communication Technology Awards 2003 held in Bangkok, Thailand in December 2003. Dr Yeung said the projects were not only acclaimed in the international meteorological community, but also in the international IT community, demonstrating the competency of the Hong Kong Observatory in the IT field.

Technology gap between members bridged

The participation of WMO member countries and territories was the key to the success of the two websites on world weather. The large number of countries and territories providing official weather information to the Hong Kong Observatory for presentation on the websites was made possible by the flexible technical design adopted by the observatory, which allows members with a wide range of technological capabilities to communicate weather information to the website. They can submit city forecasts through the Global Telecommunication System (an integrated network of multi-point circuits interconnecting meteorological telecommunication centres of different countries), via File Transfer Protocol, by email or in web form (direct uploading of information to the website). These methods, in particular the last two, have enabled the UN-listed least developed countries to join the project providing the world for the first time with official weather forecasts from those countries.

"We are delighted that our efforts have enabled the technologically less equipped countries to participate on an equal footing as the more advanced ones," said Dr Yeung. "By bridging the technology gap, a more amicable relationship prevails."

Striving for excellence

To improve the user-friendliness of the two websites, the Hong Kong Observatory constantly enhances them to expand the base and the range of users. For instance, eye-catching icons representing different weather conditions are used alongside written weather forecasts on the WWIS website, making the information accessible to all, regardless of educational opportunities. In view of the close relationship between weather and tourism, city location maps and photographs will be provided alongside the city forecasts in the near future.

Bright, Sunny, Fair

Thunderstorms, Lightning

Heavy Snow, Snowfall

Windy, Stormy, Chilly

Eye-catching icons representing different weather conditions.

The Observatory will expand the scope of the two websites in both coverage and content to better serve the needs of the global community. For instance, the Hong Kong Observatory actively provides assistance and technological support to other WMO members for setting up non-English versions of the World Meteorological Information Services (WWIS) website. In May 2003 and February 2004 respectively, Oman and China launched the Arabic and Chinese versions of the WWIS, with data fed from the English version managed by the Hong Kong Observatory. Similarly, Macau and Portugal also jointly launched the Portuguese version of WWIS in March 2004. “With more language versions, more people around the world benefit from our efforts,” Dr Yeung said.