

Recent Development of Location-based and Spatial Weather Information Services by the Hong Kong Observatory

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The Hong Kong Observatory (HKO) has recently developed and enhanced location-based and spatial weather information services for the public and special users with a view to supporting their decision-making in relation to weather-sensitive activities.

A new location-based weather service named “MyObservatory” was launched by HKO in 2010. It has since become very popular with the cumulative number of page visits exceeding 650 million in the first half of 2011. By employing positioning software to estimate the user's location, the “MyObservatory” automatically displays the latest weather information, including temperature, relative humidity, rainfall, wind direction, wind speed and weather photo from weather stations nearby the user. The “MyObservatory” is available on popular smartphone platforms like iPhone and Android, and has recently been further enhanced with “push notification” service for weather warnings and other new features. Recognizing the leading expertise of HKO in delivering weather services on mobile platforms, the World Meteorological Organization (WMO) has entrusted HKO to implement a project called “MyWeather” to develop a mobile weather app for dissemination of official and authoritative weather information provided by weather services around the world.

HKO has also implemented a spatial weather information service called “Digital Weather Forecast”. It is an innovative application on Internet that presents weather forecast in fine spatial and temporal resolution. The webpage has recently been enhanced by adding forecast time charts showing in graphical form the time variation of various weather elements out to three days. Data from the “Digital Weather Forecast” could also be imported into the Google Earth, which allows users to overlay with other geographic information to better appreciate the weather conditions.

It has been widely recognized that the Internet and GIS technology are very useful for promoting public awareness on natural disasters. A good example is a recent collaboration among HKO, WMO and Google with which the official tropical cyclone information is made available and shown on such popular platform as the Google Earth. This serves as an effort to meet the increasing demand of the public for authoritative weather information.

The Hong Kong Observatory will continue its effort to make better use of GIS technologies in enriching and enhancing its weather services for the public and special users.