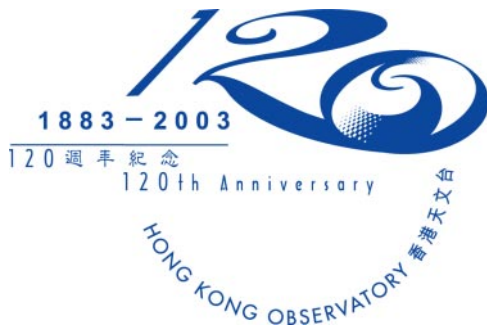


香港志願觀測船舶通訊

Newsletter For Hong Kong Voluntary Observing Ships

服務香港航運界一百二十年



二零零三年是香港天文台成立一百二十週年誌慶。在中國曆法中，一百二十年正好是『雙甲子』兩個天干地支循環，寓意吉祥圓滿。

香港天文台早於一八八四年便以一套「圓柱形、球形和圓錐形」信號向船隻提供南海出現熱帶氣旋的警告。為了協助遠洋商船準確測定航向，香港天文台利用一具直徑六吋的赤道儀確定本地時間，並幫助船長調校船上的航行表。

在海洋氣象服務的發展初期，商船的天氣觀測報告差不多是用來評估海上熱帶氣旋的位置和強度的僅有信息。一八九二年香港天文台聘用安妮杜伯克女士聯絡船公司及收集航海日誌，為數目不斷增加的到港船舶提供服務，杜女士可算是香港的首位海港氣象主任。

香港天文台於一九四九年已開展志願觀測船舶計劃。一直以來，志願觀測船舶的天氣報告對制定海洋及公眾天氣預報及警告，尤其是熱帶氣旋警告服務都十分重要。



香港天文台慶祝成立一百二十週年的開放日。
The Hong Kong Observatory celebrates its 120th anniversary at its Open Day.

雖然氣象衛星和雷達等遙感技術的出現大大改善了天氣預報的準確度，但是船舶天氣報告仍有重要價值，提供了海面上的實況給預報員和電腦天氣預報模式使用。

香港天文台一直保持其優良傳統，與社會同步發展，提供優質的天氣服務。在二十一世紀，香港天文台會繼續與志願觀測船舶及其他團體合作，致力改善天氣預報及警告服務，最終目標是減少天氣帶來的人命和財產損失，為社會的美好將來作出貢獻。



120 Years of Service for the Hong Kong Marine Community

Year 2003 marks the 120th anniversary of the Hong Kong Observatory (HKO). The figure of 120 years carries a special meaning in Chinese calendar and time keeping as it equals two cycles of the "Heavenly Stems and Earthly Branches", a sign of blessed completeness.


As early as 1884, HKO employed a system of drum, ball and cone to warn mariners of tropical cyclone on the South China Sea. To serve the needs of ocean-going merchant ships for accurate sea navigation, HKO made use of a six-inch Lee Equatorial telescope to determine the local time accurately and helped shipmasters calibrate their ship chronometers.

In the early development of marine meteorological services, weather observations taken by merchant ships were nearly the only information available to assess the location and intensity of tropical cyclones on the sea. To collect logbook data and serve the increasing number of vessels entering the harbour, HKO appointed Ms. Annie Doberck in 1892 to liaise with shipping companies and to extract meteorological reports from navigation logs, who could be considered as the first port meteorological officer in Hong Kong.

The Voluntary Observing Ships (VOS) scheme in Hong Kong dates back to 1949. Through the years, weather observations taken by VOS have played an important part in the preparation of weather forecasts and warnings for shipping and the local community, particularly in the provision of tropical cyclone warning services.

Although the emergence of remote sensing technologies such as meteorological satellites and radars have brought about leap improvements in weather forecasting, ship weather observations remain among the most crucial information as these are "ground" truth data presented to the forecasters and computer weather prediction models.

In line with its fine tradition of providing quality weather service in steps with the development of the community, HKO will continue to work with the VOS fleet and other partners to improve its weather forecast and warning services in the 21st century. The

ultimate goal is the reduction of loss of life and property in inclement weather, and the betterment of the community. 



加強為船舶提供的 熱帶氣旋警告服務

由二零零三年五月三十日開始，香港天文台為船舶提供的熱帶氣旋警告(只以英文編制)中的熱帶氣旋路徑預測，由原先的 48 小時伸延至 72 小時。這個改善有賴於近年數值天氣預報模式的改進。

當在北緯 10 度至 30 度，東經 105 度至 125 度範圍內有熱帶氣旋出現時，香港天文台會每隔 3 小時發出為船舶提供的熱帶氣旋警告，時間約在 0200, 0500, 0800, 1100, 1400, 1700, 2000 和 2300 UTC。香港海岸電台會以中頻航行專用電報廣播這些警告，並會在下一個廣播時間重播一次。廣播時間是在 0150, 0550, 0950, 1350, 1750 和 2150 UTC。



香港天文台網頁也載有上述警告以及熱帶氣旋位置及路徑圖，網址如下：

www.hko.gov.hk/informtc/informcc.htm



Enhancement of Tropical Cyclone Warnings for Shipping

From 30 May 2003 onwards, HKO's tropical cyclone track forecasts given in the tropical cyclone warnings for shipping cover a period up to 72 hours ahead, providing more information than the original 48 hours forecast. Such enhancement has become possible because of advances in numerical weather prediction models in recent years.

HKO issues tropical cyclone warnings for shipping every three hours at around 0200, 0500, 0800, 1100, 1400, 1700, 2000 and 2300 UTC when a tropical cyclone is located within the area bound by latitudes 10N and 30N, and longitudes 105E and 125E. The warnings are broadcast to ships by the Hong Kong coast radio station via NAVTEX. Repeat messages are broadcast at 0150, 0550, 0950, 1350, 1750 and 2150 UTC.

Warnings, track and positions of tropical cyclones are also available on HKO's web site:

www.hko.gov.hk/informtc/informtc.htm



香港志願觀測船隊的新船舶

自二零零三年五月起，載重量約 100,000 噸的貨櫃輪「OOCL Shenzhen」加入了香港志願觀測船隊。我們非常感謝「OOCL Shenzhen」的林船長對香港志願觀測船舶計劃的支持。

另外，我們亦歡迎其他定期停泊香港的船舶參加香港志願觀測船隊。請聯絡我們的海港氣象主任查詢詳情，或填妥及交回可在我們網頁上取得的參加表格。

www.hko.gov.hk/wservice/tsheet/pms/images/HKVOS_recruit_c.pdf



Ship joining the fleet of HKVOS

A container named "OOCL Shenzhen" of about 100,000 DWT has joined the fleet of HKVOS since May 2003. We are grateful to Captain C. F. Lum for his support to the HKVOS scheme.

Other ships calling at Hong Kong on a regular basis are welcome to join the HKVOS fleet. Please contact our PMO for more information or return the completed recruitment form which is available on the following website :

www.hko.gov.hk/wservice/tsheet/pms/images/HKVOS_recruit_e.pdf



國際海洋氣象 訓練課程

香港天文台在二零零二年在世界氣象組織的志願合作計劃下，為11名海外學員舉辦了兩個海洋氣象訓練課程，以幫助他們提高其國家的海洋天氣服務。

這兩個訓練課程內容包括志願觀測船舶計劃、海港氣象服務、海洋物理學、公眾天氣服務、以及衛星和雷達氣象學。

這些訓練課程是世界氣象組織提升各個國家氣象局能力的策略的一部份。



International Training Courses in Marine Meteorology

Under the Voluntary Cooperation Programme of the World Meteorological Organization (WMO), HKO hosted two international training courses in marine meteorology for 11 overseas trainees in 2002 to help them enhance the marine weather services in their home countries.

Topics covered in these courses included the VOS scheme, port meteorological services, physical oceanography, public weather services, and satellite and radar meteorology.

These courses form part of the strategy of the WMO in enhancing the capacity of National Meteorological Services.



海外訓練學員參觀香港天文台總部。
Overseas trainees visit the Hong Kong Observatory Headquarters.

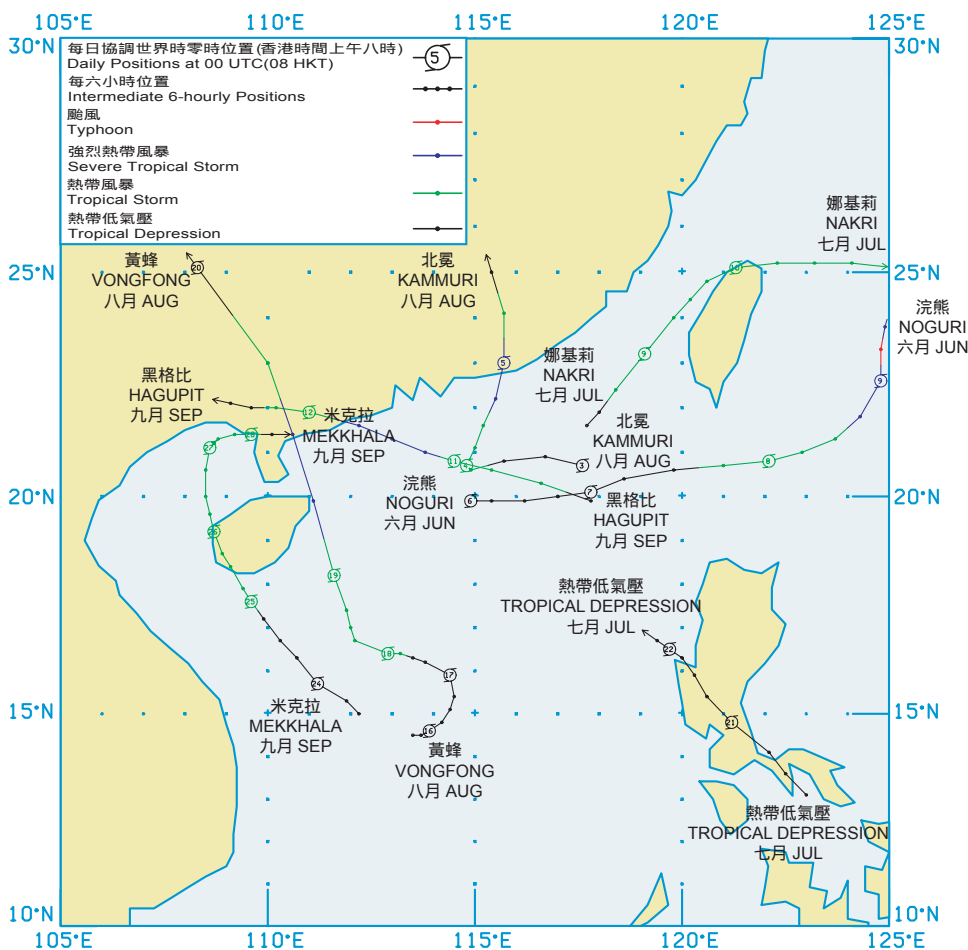
二零零二年南海區域內熱帶氣旋摘要

二零零二年共有 7 個熱帶氣旋影響南海區域（即北緯 10 至 25 度、東經 105 至 120 度所包括的地區），明顯比年平均的 12 個為少。這 7 個熱帶氣旋都是在南海或菲律賓附近形成的。二零零二年所有在西北太平洋形成的熱帶氣旋都沒有移入南海，相信跟厄爾尼諾現象令大氣環流改變有關。以下介紹在二零零二年令繁忙的南海航道上出現烈風或以上的風力的 4 個熱帶氣旋的概要。

娜基莉於二零零二年七月八日在南海北部東沙島東北面約 150 公里處形成為熱帶低氣壓。它向東北緩慢移動，並於次日增強為熱帶風暴。它沿著台灣西岸推進，於七月十日在台北附近登陸。其後娜基莉向東移離台灣，並於七月十二日在琉球群島附近轉向北移，次日在東海轉變成溫帶氣旋。

北冕於八月三日在南海北部發展成熱帶低氣壓，當時它的位置是在香港東南偏東約 400 公里。

北冕初時向西移動，並於次日增強為熱帶風暴。其後它減速及突然轉向東北偏北移動，直趨廣東東部地區。北冕於八月五日增強為強烈熱帶風暴並在汕尾附近登陸。其後北冕繼續向北移動，於當晚在江西省逐漸減弱為低壓區。




二零零二年影響南海的熱帶氣旋路徑圖。

The map showing the tracks of tropical cyclones over the South China Sea in 2002.





黃蜂於八月十五日在西沙島東南偏南約280公里處發展為熱帶低氣壓。最初兩天它向東北緩慢移動，在八月十七日轉向西北偏西推進。在八月十八日黃蜂增強為熱帶風暴後再轉向西北偏北移動。黃蜂在八月十九日加速移向廣東西部海岸。當日下午黃蜂增強為強烈熱帶風暴，隨後掠過海南島東北岸，於同日晚上在湛江附近登陸。登陸後黃蜂迅速減弱，於八月二十日在廣西消散。

黑格比於九月十日在東沙島東南約140公里處發展為熱帶低氣壓，並穩定地在南海北部向西北偏西移動。它於當晚增強為熱帶風暴，並在九月十一日進一步增強為強烈熱帶風暴。當日0000 UTC，一艘香港志願觀測船舶「00CL Chicago」(呼號VRWQ2)於黑格比之西約75公里處，報告西北風30海里。黑格比於九月十二日在廣東西部陽江附近登陸，之後減弱為熱帶風暴及轉向西移，晚上進一步減弱為熱帶低氣壓。九月十三日清晨，黑格比在廣西沿岸減弱為低壓區。 



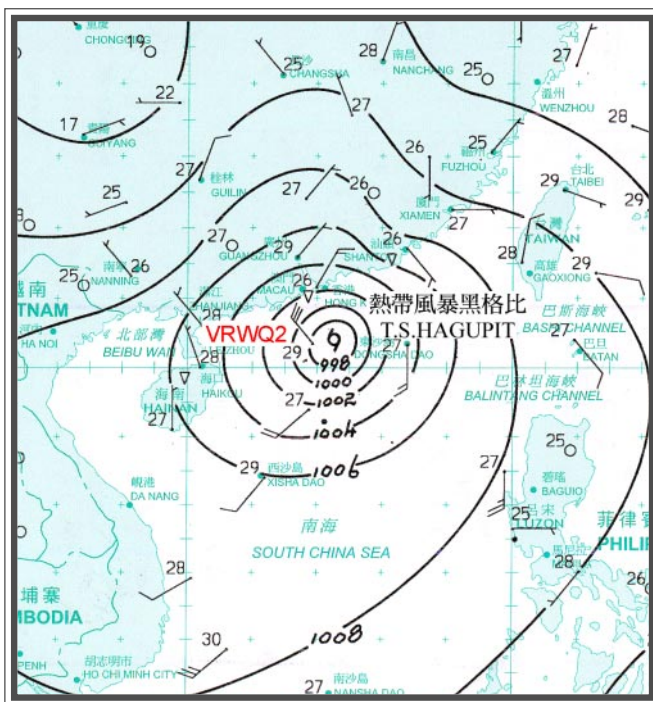
二零零二年影響南海的熱帶氣旋 List of tropical cyclones affecting the South China Sea in 2002				
熱帶氣旋名稱 Name of tropical cyclone	形成 Formation	消散 Dissipation	中心附近最高風力 (公里每小時) Maximum sustained wind speed near the centre (km/h)	最低氣壓 (百帕斯卡) Minimum sea-level pressure (hPa)
颱風浣熊 Typhoon Noguri	6 / 6	11 / 6	120	970
熱帶風暴娜基莉 Tropical Storm Nakri	8 / 7	13 / 7	75	985
熱帶低氣壓 Tropical Depression	20 / 7	22 / 7	55	1000
強烈熱帶風暴北冕 Severe Tropical Storm Kammuri	3 / 8	5 / 8	100	975
強烈熱帶風暴黃蜂 Severe Tropical Storm Vongfong	15 / 8	20 / 8	90	980
強烈熱帶風暴黑格比 Severe Tropical Storm Hagupit	10 / 9	12 / 9	110	980
熱帶風暴米克拉 Tropical Storm Mekkhala	23 / 9	28 / 9	75	992

Summary of Tropical Cyclones over the South China Sea in 2002

Seven tropical cyclones affected the South China Sea, the area bounded by 10N and 25N, 105E and 120E, in 2002, which is significantly less than the normal figure of 12 a year. All these tropical cyclones formed either in the South China Sea or over the Philippines. No tropical cyclones from the northwest Pacific moved into the South China Sea. This was probably due to a change in the atmospheric circulation pattern in connection with the El Niño in 2002. The following is a brief summary of four tropical cyclones that brought gale force wind or above to the busy shipping lanes over the South China Sea in 2002:

Nakri formed as a tropical depression (TD) about 150 km northeast of Dongsha Dao over the northern part of the South China Sea on 8 July 2002. It moved slowly northeastwards and strengthened into a tropical storm (TS) the next day. After traversing the west coast of Taiwan, it made landfall near Taipei on 10 July. Nakri then moved east away from Taiwan. It changed its course towards north near the Ryukyu Islands on 12 July

and became an extratropical cyclone over the East China Sea the following day.



二零零二年九月十一日 0000 UTC 的天氣圖。

A daily weather map at 0000 UTC on 11 September 2002.

Kammuri developed as a TD over the northern part of the South China Sea, about 400 km east-southeast of Hong Kong on 3 August. It tracked westwards and strengthened into a TS the next day. Kammuri then slowed down and abruptly turned to

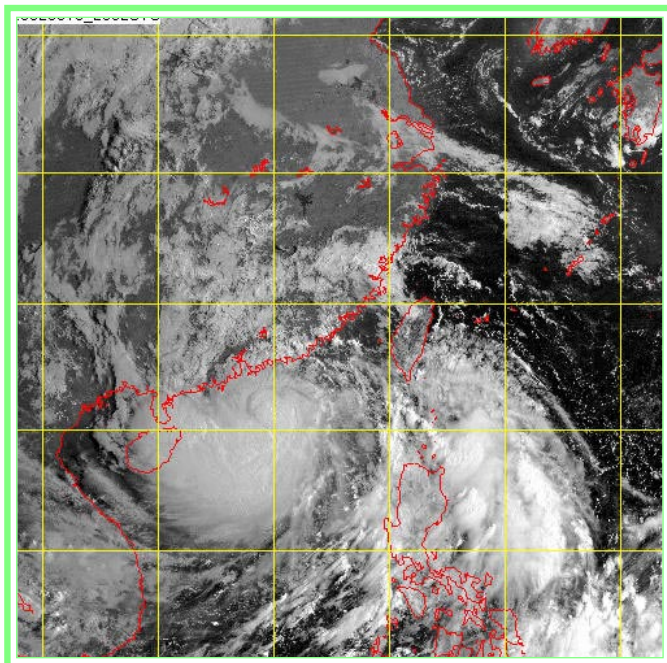




the north-northeast towards the eastern part of Guangdong. On 5 August, it intensified into a severe tropical storm (STS). After making landfall near Shanwei, Kammuri moved northwards and weakened gradually into an area of low pressure over Jiangxi Province that night.

Vongfong developed as a TD about 280 km south-southeast of Xisha Dao on 15 August. It moved slowly to the northeast in the first two days and turned to the west-northwest on 17 August. Vongfong intensified into a TS and moved towards the north-northwest on 18 August. It accelerated towards the west coast of Guangdong on 19 August and intensified into an STS that afternoon. Vongfong skirted the northeastern coast of Hainan and then made landfall near Zhangjiang the same night. After landfall, it weakened rapidly and dissipated over Guangxi on 20 August.

Hagupit developed as a TD about 140 km southeast of Dongsha Dao on 10 September and moved steadily west-northwest over the northern part of the South China



二零零二年九月十一日 0000 UTC 的可見光衛星圖 (日本氣象廳提供)。

A visible satellite imagery captured at 0000 UTC on 11 September 2002 (courtesy of the Japan Meteorological Agency).

Sea. It intensified rapidly into a TS the same night and became an STS on 11 September. At 0000 UTC the same day, the HKVOS "OOCL Chicago" (call sign VRWQ2) reported 30 knots northwesterly winds about 75 km west of Hagupit. On 12 September, Hagupit made landfall near Yangjiang in western Guangdong and weakened into a TS. It then turned west and weakened further into a TD that night. On 13 September morning, Hagupit weakened into an area of low pressure over the coastal areas of Guangxi. 