



*Preparation for GBAS
Ionospheric Study in
Asia and Pacific
Regions*

*Hong Kong, China
27 February 2012*





Challenges in GBAS Implementation

Low latitude/Equatorial region:

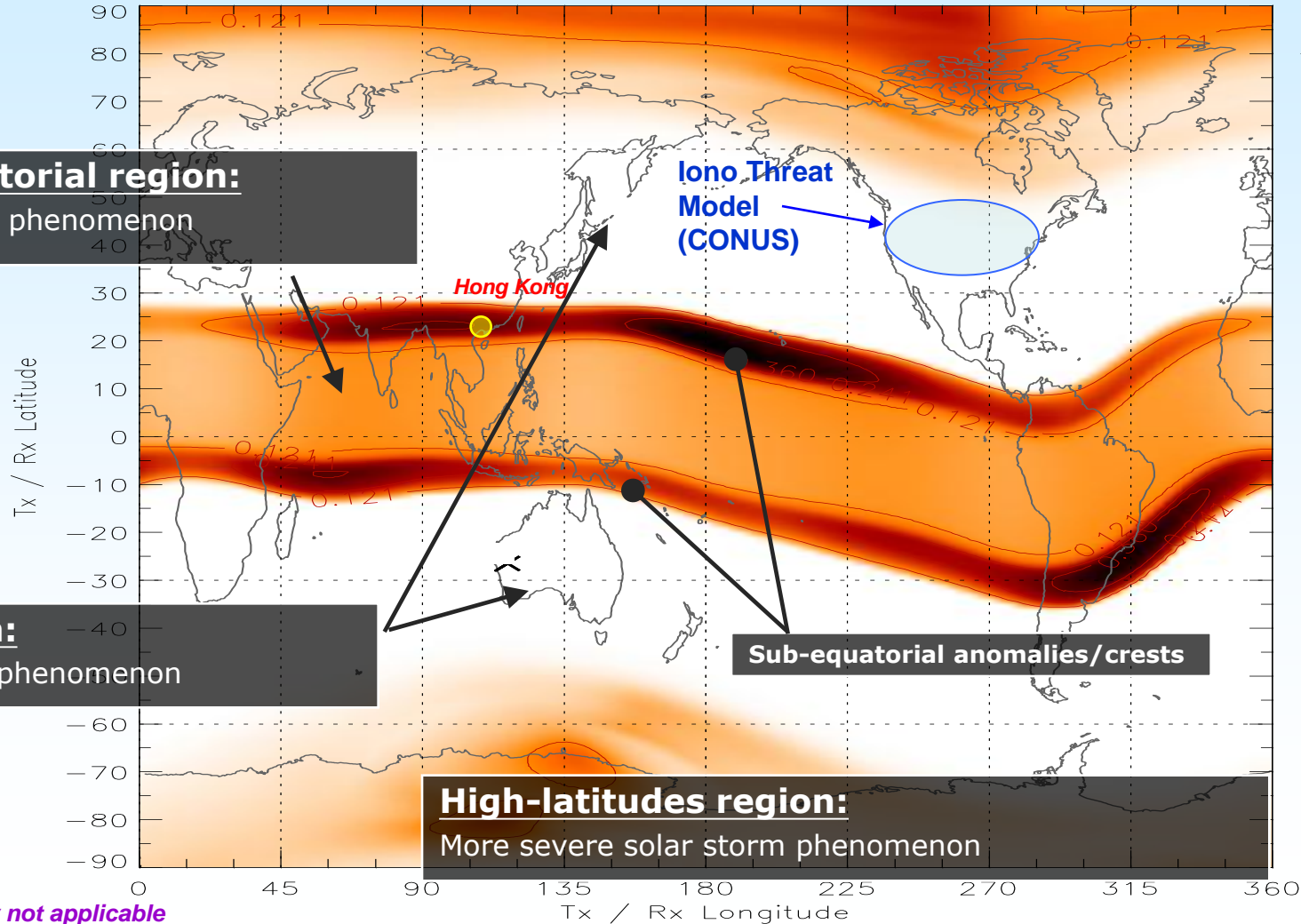
More severe solar storm phenomenon

Mid-latitude region:

Less severe solar storm phenomenon

High-latitudes region:

More severe solar storm phenomenon



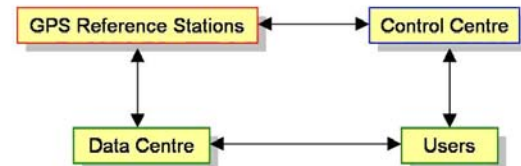
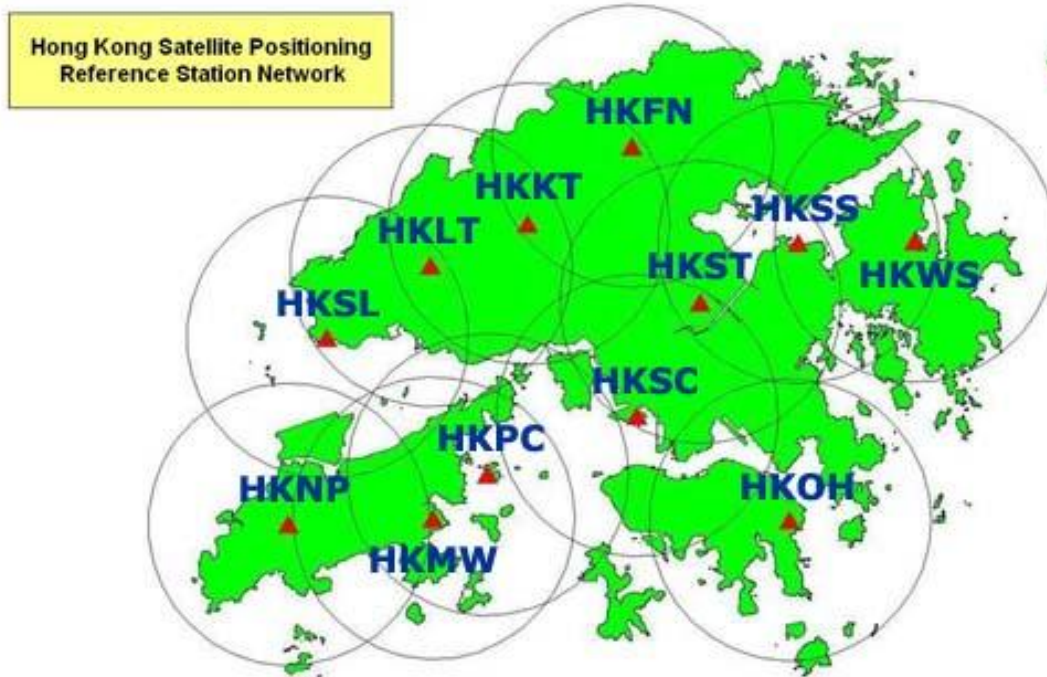
> CONUS Iono Threat Model may not applicable to Low Latitude/Equatorial Region



Preparation in Hong Kong, China

- **CAD GPS Monitoring System at Hong Kong International Airport (HKIA) set up by Civil Aviation Department in December 2010**
- **Liaison and coordination with Lands Department of Hong Kong Special Administrative Region for sharing of GPS observation data from Hong Kong Satellite Positioning Reference Station Network**
- **Participation in ICAO Ionospheric Studies Task Force for study and development of regional ionospheric model**

Hong Kong Satellite Positioning Reference Station Network



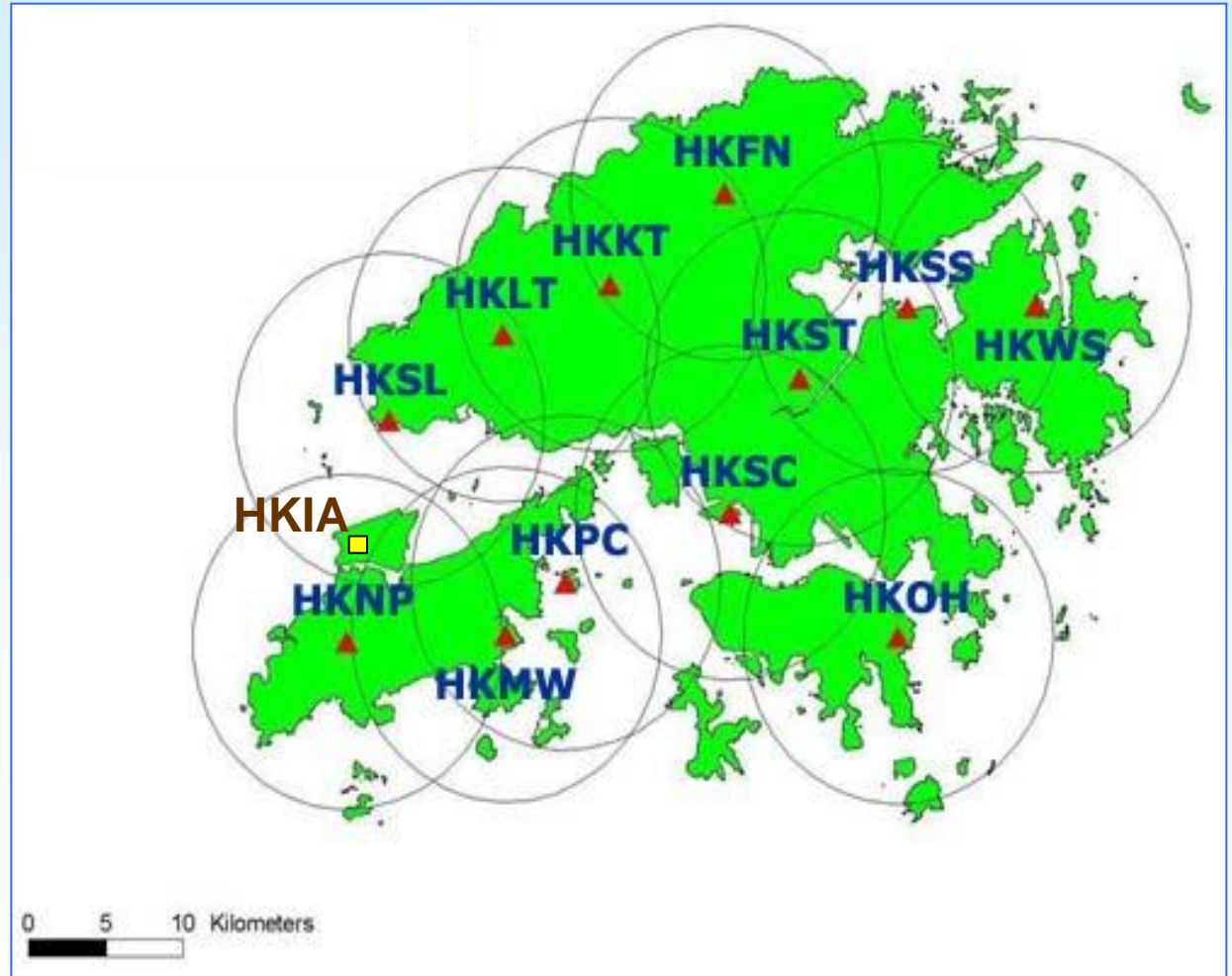
12 Continuously Operating Reference Stations (CORS)
evenly distributed by about 10 km to 15 km in Hong Kong



Synergy On Coverage

▲ 12 Continuously Operating Reference Stations (CORS) evenly distributed by about 10 km to 15 km (Hong Kong Satellite Positioning Reference Station Network)

■ One GPS Monitoring Station in HKIA





Civil Aviation Department, Hong Kong, China

Thank You