Land Surveying Division
Sr Koo Tak Ming LSD Council Chairman

Free Geospatial Data for Public

April 2021 has been an exciting month for land surveyors. Since the middle of the month, the Government has made free to the public useful geospatial data including:

(a) Digital Topographic Maps
(b) Digital Land Boundary Maps
(c) Geo-Reference Databases
(d) Digital Orthophotos
(e) Digital Aerial Photos (300 dpi resolution)
(f) GeoCommunity Database
(g) 3D Spatial Data

These free geospatial data will support the public, academics, and businesses in their research and application developments. The LSD believes that they will also facilitate the development of a digital economy and help Hong Kong realise its vision of a Hong Kong 2.0 smart city and benefit society as a whole.

The open geospatial data are available for browsing at and downloading from the (1) Hong Kong Map Service 2.0 website (www.hkmapservice.gov.hk), (2) Hong Kong GeoData Store (geodata.gov.hk), and (3) Public Sector Information Portal (data.gov.hk).

Hong Kong Public Sector Information Portal (data.gov.hk)

Hong Kong GeoData Store

Open Data Available at the HKMS 2.0 Website

GeoSpatialTech Challenge

The Government is organising a GeoSpatialTech Challenge for students and local and overseas practitioners to propose solutions that would utilise spatial data to benefit Hong Kong. The theme of the Challenge is "Building a Smart City with Spatial Data – Promoting Smart Living and a Healthy Lifestyle in Hong Kong". The Challenge aims to provide insights into the use of spatial data to promote smart living and healthier lifestyles in different applications under the Hong Kong Smart City Blueprint 2.0. The link to the Challenge is below:

https://www.landsd.gov.hk/tc/resources/publicity-materials/gstc.html

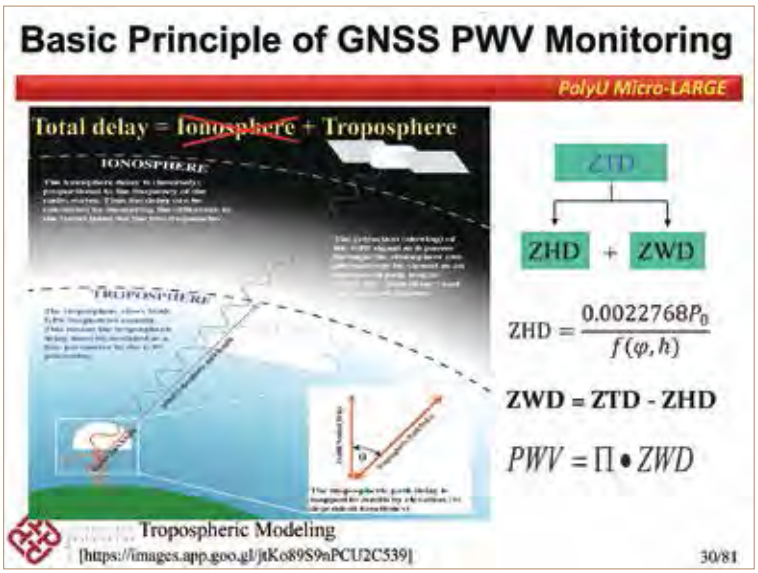
Poster for the GeoSpatialTech Challenge

CPD on Weather Observations and Global Climate Change (29 April 2021)

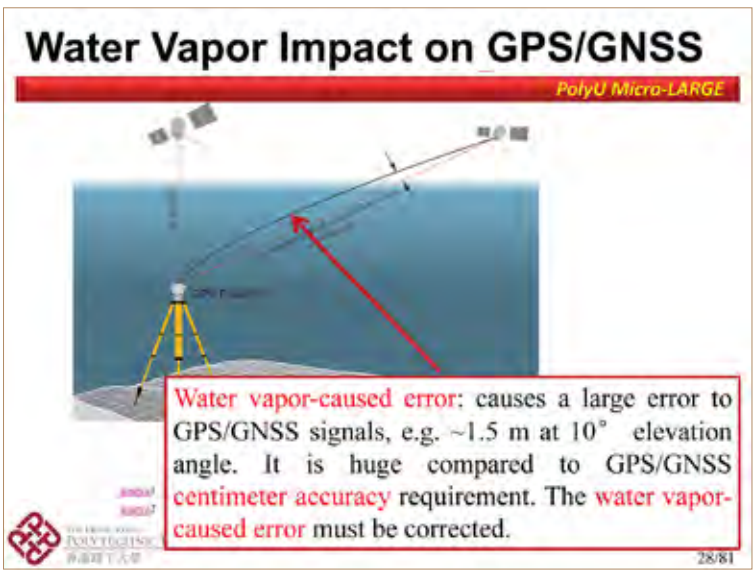
"Global Navigation Satellite System" (GNSS) is the standard generic term for satellite navigation systems that provide autonomous geo-spatial positioning with global coverage. This term includes GPS, GLONASS, Galileo, Beidou, and other regional systems. These are the tools that land surveyors use in various capacities to achieve precise positioning.

Dr George Zhizhao LIU is a professor in the Department of Land Surveying and Geo-Informatics, the Hong Kong Polytechnic University (PolyU). His work focuses on new algorithm developments for precise global positioning and global navigation satellite systems (GPS and GNSS), GPS/GNSS precise point positioning (PPP), ionosphere modelling and scintillation monitoring, atmospheric water vapour remote-sensing and modelling, and GPS/GNSS meteorology.

Dr LIU uses GNSS because it is a very powerful tool for earth observation, which includes daily weather observations. Incidents of extreme weather have become increasingly frequent in this era of global climate change. Reliable observations and monitoring of extreme weather events are essential for mitigating weather-induced disasters. Using GNSS, land surveyors can play a significant role in weather observation and monitoring.



GNSS PWV Monitoring



Impact of Water Vapour on GNSS Measurements

Presentation of Appreciation Souvenir to Dr LIU