

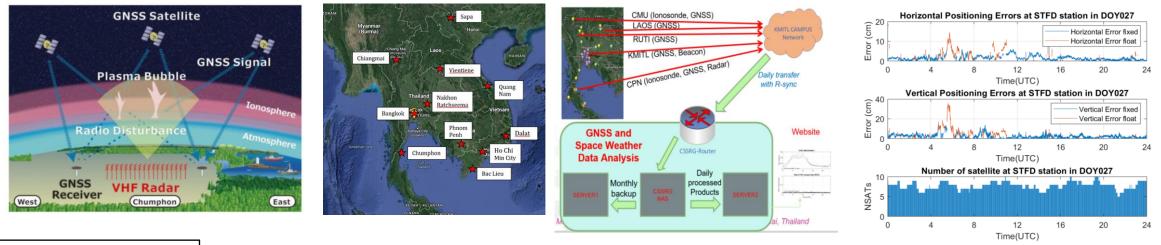
Project Title: Research and development for precise positioning with Artificial Intelligence



(AI) during ionospheric disturbances in low-latitude region in ASEAN

Introduction :

Ionospheric irregularities such as equatorial plasma bubbles (EPB) in low-latitude regions in ASEAN countries often lead to degradation in precise positioning and navigation. To detect irregularity various sensors and data are typically utilized such as ionosonde, GNSS receivers, VHF (Very High Frequency) radar and LEO (Low Earth Orbit) satellite data. In addition, forecasting and mitigation of EPB effects on modern technology is needed for society at large. Importantly, as Solar cycle 25 is ongoing and will reach the solar maximum in 2024 or 2025, it is imperative to acquire more data and develop the warning capability.



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