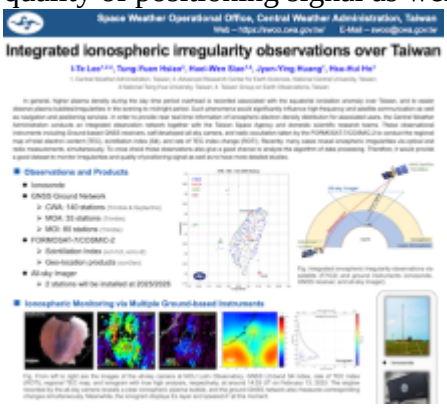
I-Te
Lee
Central Weather Administration, Taiwan
Tung-Yuan Hsiao, National Tsing Hua University, Taiwan
Hui-Wen Hsiao, Central Weather Administration, Taiwan
Jyun-Ying Huang, Central Weather Administration, Taiwan
Hsu-Hui Ho, Central Weather Administration, Taiwan
Poster
In general, higher plasma density during the day time period overhead is recorded associated with the equatorial ionization anomaly over Taiwan, and to easier observe plasma bubbles/irregularities in the evening to midnight period. Such phenomena would significantly influence high-frequency and satellite communication as well as navigation and positioning services. In order to provide near real-time information of ionospheric electron density distribution for associated users, the Central Weather Administration conducts an integrated observation network together with the Taiwan Space Agency and domestic scientific research teams. These observational instruments including Ground-based GNSS receivers, self-developed all-sky camera, and radio occultation taken by the FORMOSAT-7/COSMIC-2 to conduct the regional map of total electron content (TEC), scintillation index (S4), and rate of TEC index change (ROTI). Recently, many cases reveal ionospheric irregularities via optical and radio measurements, simultaneously. To cross check those observations also give a good chance to analyze the algorithm of data processing. Therefore, it would provide a good dataset to monitor irregularities and quality of positioning signal as well as to have more detailed studies.


Poster PDF
Lee-I-Te.pdf
Poster session day
Wednesday, April 17, 2024
Poster location
13
Meeting homepage
Space Weather Workshop 2024
Download to PDF