

## Operational space weather service in future Asia-Oceania

\*Mamoru Ishii<sup>1</sup>

1. National Institute of Information and Communications Technology

The social necessity of Space Weather information service is recognized to be more important than ever. The ICAO, International Civil Aviation Organization, will start to use global space weather information service on November 2018. Many of GNSS data providers are learning the importance of ionospheric information for servicing stable and precise positioning with GNSS.

It is well known that the high latitude area is fragile against space weather disturbance. HF telecommunication is affected by ionospheric disturbances with polar cap absorption (PCA) and/or auroral activities. In addition, now people are realizing that the equator region is also affected by space weather disturbances, for example plasma bubbles, equatorial GIC.

Several South-East Asian countries are interested in operational space weather information services. LAPAN Indonesia already started to provide space weather service and join ISES on 2015. KMILT Thailand and ANKGASA Malaysia also prepare the operation.

We need to solve the following issues for improving the quality of space weather information services in Asia-Oceania region.

Sharing real time data of regional space weather information e.g., GNSS, ionosondes, and magnetometer.  
Robustness of information network Outreach for spreading the recognition of importance of space weather information

We would like to discuss these topics in the session.

Keywords: space weather, Asia-Oceania, operational service