

**60<sup>th</sup> Session of Scientific and Technical Subcommittee of COPUOS**  
**Thailand's Statement on**  
**Agenda item 10. Space Weather, February 8<sup>th</sup>, 2023**

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*Mr. Chair and Distinguished delegates,*

Thailand acknowledges that space weather can cause malfunction and failure on technologies of orbital systems. It could also affect on human's living and activities on the Earth. Therefore, Thailand has brought research and applications of the space weather to be a priority of the country.

Thailand has provided budgets for installation of many infrastructures to monitor space weather phenomenon. The Global navigation satellite system or GNSS based stations are set in places covering all over the country, to research and monitor the effects of equatorial plasma bubble (EPB) on precise positioning of RTK (Real-time kinematics) systems. This equipment has effectively supported production of RTK positioning error map in Thailand.

Furthermore, Thailand established ground-based detectors of neutron monitors at the summit of Doi Inthanon, the Thailand's highest mountain, and at Mawson station, in Antarctica, to detect relativistic solar particles in so-called Ground Level Enhancement (GLE) events. The GLE have the most intense and severe radiation effects among space weather events, and are the only events of concern for radiation dosage of cabin crews and passengers. For scientific analysis, the data also contribute to mapping out the directional distribution of relativistic solar particles, for characterization and understanding of the radiation patterns in various events, in order to alleviate undesirable effects of the cosmic phenomenon.

In 2022, National Institute of Information and Communications Technology known as NICT, Japan has supported Geo-Informatics and Space Technology Development Agency known as GISTDA, Thailand, to install a magnetometer at southern part of Thailand, to monitor the local magnetic field. In addition, NICT has been supporting GISTDA to develop the space weather forecast system and space weather forecasters. Thailand plans to implement full operations of space weather forecast within 2024. We sincerely appreciate to NICT for the good support.

In addition, Thailand has pushed forward space weather research and products through various universities and government agencies partnering with international colleagues such as Japan. For Thai universities, King Mongkut's Institute of Technology Ladkrabang researches on Global navigation satellite system and space weather, including Space Weather Data for Aviation. Mahidol University is active on space physics and cosmic ray research. These missions have acquired input from facilities distributed in almost all regions of the country. Thailand is eager to support scientists and researchers to participate in space weather and space physics international networks.

***Mr. Chair and Distinguished delegates,***

Thailand is pleased to promote all possible research areas of space weather and looks forward to collaborate with international partners, with the intention to enhance the technology capabilities and capacity building to mitigate space weather risks for humankind.

***Thank you Mr. Chair.***