

Naoto

Nishizuka

National Institute of Information and Communications Technology (NICT)

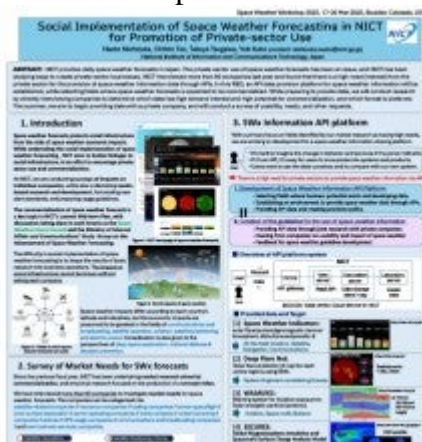
Chihiro Tao, Takuya Tsugawa, Yuki Kubo (NICT)

Poster

NICT provides daily space weather forecasts, develops various forecast models, and discloses the information on its website. At the same time, private-sector use of space weather forecasting and its social implementation have been an issue, and NICT has been studying ways to create private-sector businesses. Over the past year, NICT has interviewed more than 80 companies to investigate their needs for space weather forecasting. As a result, it was found that there is a high need from the private sector for the provision of space weather information data through APIs.

In this R&D, an API data provision platform for space weather information will be established while selecting fields where space weather forecasting is expected to be commercialized, and the foundation for the formation of space weather private-sector services will be developed. There are a wide range of fields where space weather has an impact. While preparing to provide data, we will conduct research by directly interviewing companies to determine which data has high demand interest and high potential for commercialization, and which format is suitable. In addition to (1) the space weather forecast indicator (7 types), we are considering providing the following API data: (2) solar radiation exposure estimation map at aircraft altitude, (3) solar flare AI probability forecast, (4) satellite surface charging risk assessment, (5) aurora forecast map, (6) GEONET GPS total electron count (TEC) map, (7) GEONET GPS ionospheric disturbance index (ROTI) maps.

In addition, this summer, we aim to begin providing data under a joint research agreement with a private company, and will conduct a survey of usability, needs, and other requests. At the same time, the survey results will be used to create guidelines for space weather countermeasures. After this research period, we aim to establish an environment that will lead to license agreements for commercial data use. We will introduce these efforts in this presentation.



Poster PDF

[Nishizuka-Naoto-poster.pdf](#)

Meeting homepage

[Space Weather Workshop 2025](#)

[Download to PDF](#)