

## Importance of EISCAT 3D as space weather research

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These days, importance of space weather is significantly realized by international community, such as ICAO, WMO etc. NICT has been responsible for national space weather forecast in Japan for a long time. Since NICT's space weather forecast center belongs to the International Space Environment Service (ISES) as the Regional Warning Center (RWC) Japan, our operational activities are supported by international cooperation. To understand the current conditions of "space weather", monitoring networks of space weather observations are operated and used. For future objective and advanced space weather monitoring, we have been developing a space weather numerical simulation codes, too. These activities are strongly related to the space weather research for improving space weather forecasting.

EISCAT 3D is a quite unique facility to measure many kinds of physical parameters which cannot be obtained from other instruments. Therefore, it is expected that the EISCAT 3D can contribute to the evaluation and improvement of space weather models. The future perspective of space weather research and our expectation to EISCAT 3D are introduced in our presentation.

Keywords: Space Weather, EISCAT 3D, Ground-Based Observation