

PEM006-22

Room:101

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## NICT's Space Weather Observation Networks -Next 5 Years-

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We are operating space weather monitoring networks (NICT-SWM) as a research project for measurements of solar-terrestrial environment and space weather prediction. The magnetometer and HF radar networks are running in the arctic region and Japanese meridional sector for monitoring energy flow from the magnetosphere to the polar ionosphere, and propagation of disturbances from the polar to the equator. Solar and solar wind activity, and ionospheric activity over Japan is monitored by domestic ground-based observatories and satellite data receiving facilities. Equatorial ionospheric disturbances are observed by South East Low Latitude Ionosonde Network (SEALION). From April 2011, NICT newly start the 3rd medium-term plan. In this period, our capabilities of space weather monitoring will be expanded based on the international collaborations around Asia-Oceania region. We plan to construct an early warning system of equatorial plasma bubbles, and plan to construct a prediction model of space environment around geosynchronous orbit based on the collaborations with simulations and informatics. We will introduce current status and next 5 years perspective of NICT's space weather monitoring networks.