Recent activity of HF-START

Kornyanat Hozumi[1]; Takashi Maruyama[2]; Susumu Saito[3]; Hiroyuki Nakata[4]; Sebastien Rougerie[5]; Tatsuhiro Yokoyama[2]; Hidekatsu Jin[2]; Takuya Tsugawa[2]; Mamoru Ishii[2]

[1] NICT; [2] NICT; [3] NAV Department, ENRI; [4] Grad. School of Eng., Chiba Univ.; [5] CNES

HF-START (HF Simulator Targeting for All-users' Regional Telecommunications) is a user-friendly simulator developed to meet the needs of space weather users. Prediction of communications failure due to space weather disturbances is of high priority. HF-START is originally developed for radio propagation in HF band (3-30 MHz). It is the first approach to utilize regional ionospheric data, especially in Japan and southeast Asia, as a propagation medium. The evaluation campaign of HF-START for Japan region is planed to be launched by the end of fiscal year 2017. If the evaluation campaign successes, it will be expanded to southeast Asia region hopefully in the next fiscal year. Even though the HF-START is developed for the HF band, we plan to expand the frequency coverage up to L band under the collaboration with Centre National D' Etudes Spatiales (CNES), France. GAIA will be the priority model employed as a global ionospheric input. The final goal of the project is to provide the near-realtime necessary radio parameters as well as the warning message of radio communications failure to the radio and space weather users.