S001-07
Zoom meeting A ：11/2 AM2 (10:45-12:30)
11:45-12:00

Current EISCAT and next EISCAT_3D database

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We report the European Incoherent SCATter (EISCAT) database which contains ionospheric parameters (electron density, electron and ion temperatures, and ion velocity) measured with EISCAT radars located in northern Scandinavia and Svalbard. Their original raw data have been archived in the EISCAT Headquarters in Kiruna, Sweden, and distributed to the EISCAT Associate countries and Affiliate institutes. In Japan, the EISCAT National Promotion Office in NIPR has developed the EISCAT database with several data formats (ASCII, CDF, Matlab binary, etc.) and provided them for both national and international user communities via webpages. The database includes second-order physical parameters such as ionospheric conductivities and electric fields and is available on the SPEDAS data analysis tool as part of the IUGONET project.
The EISCAT Scientific Association promotes a next-generation imaging radar project, named EISCAT_3D, which will give a dramatic change on the construction of the EISCAT database. The EISCAT_3D radar system will be in operation at the end of 2022 and accumulate approximately 2 petabytes of data every year. Thus, automation of the data process at several stages is essential. With the help of the Nordic e-Infrastructure Collaboration (NeIC), EISCAT_3D data product repository and publishing are currently discussed and documented.
In this paper, we explain the current status of the EISCAT database and discuss future EISCAT_3D data management, publication, and sharing.