EISCAT database in NIPR

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We introduce European incoherent scatter (EISCAT) database in NIPR (http://pc115.seg20.nipr.ac.jp /www/eiscatdata/) which contains ionospheric parameters (electron density, electron and ion temperatures, and ion velocity) measured with EISCAT radars located in northern Scandinavia and Svalbard. The EISCAT database provides valuable information for studies on upper atmospheric physics in the polar region. In addition, combinations of the EISCAT database and other in-situ and ground-based databases are essential to understand dynamics of the interaction between polar mesosphere, thermosphere, ionosphere, and magnetosphere. The EISCAT database is therefore archived as Common Data Format (CDF) files and used on the integrated data analysis software such as the Space Physics Environment Data Analysis Software (SPEDAS). In this presentation, we explain the current status of data analysis and visualization of the EISCAT database, and discuss their application to a next generation imaging radar project named EISCAT_3D.

Reference:

Ogawa, Y., S. Nozawa, I. Haggstrom, S. Oyama, T. Motoba, T. Tsuda, A. Saito, Y. Miyashita, Y. Tanaka, G. Ueno, H. Miyaoka, and R. Fujii, Large-scale data processing and visualization of the European incoherent scatter (EISCAT) radar system, Journal of Space Science Informatics Japan, vol. 1, 83-89, 2012.