

Toward cutting edge of geospace and atmospheric sciences with EISCAT and EISCAT_3D

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The European Incoherent Scatter(EISCAT) radar system in northern Scandinavia and Svalbard has been playing a pivotal role in advancing cutting edge sciences in various areas including atmospheric, ionospheric and geospace studies, space weather and global change. Affiliated in the EISCAT scientific association in 1996, Japanese science community has jointly contributed to achieve further understanding of the magnetosphere-ionosphere-thermosphere coupling processes using the integrated ground-based instruments and rocket/satellite simultaneous observations with EISCAT radars. In this paper, an overview on several key scientific issues will be presented in order to stimulate further discussions for the new EISCAT_3D project more productive.

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