

Observations of conjugate aurora at Syowa and Iceland with the pair of all-sky imagers

Takuhiro Asozu[1]; Makoto Taguchi[2]; Natsuo Sato[2]; Takeshi Sakanoi[3]; Shoichi Okano[4]

[1] Planet. Plasma Atmos. Res. Cent., Tohoku Univ; [2] NIPR; [3] PPARC, Grad. School of Sci., Tohoku Univ.; [4] PPARC, Tohoku Univ.

Spatial and temporal variations of auroral shape and emission intensity are expected to be affected by conditions in the magnetosphere and the acceleration regions, as well as those of the ionosphere and the upper atmosphere. Therefore, comparison between auroras simultaneously observed at conjugate points in the northern and southern hemispheres can provide us with information on physical parameters along a field line. In order to study conjugacy of aurora with improved quantitative nature, two identical digital all-sky imagers (Conjugate Aurora Imager: CAI) were newly developed. One of them has been installed at Syowa Station in Antarctica since March 2005, and the other has been installed at its conjugate point, Husafell, Iceland since August 2005. Simultaneous observation at a wavelength of OI 557.7nm was started in September 2005. The initial results will be presented.