

Study on poleward moving electron concentration around the dayside cusp

Masaki Kono[1], Ryouichi Fujii[2], Stephan C. Buchert[3], Satonori Nozawa[2], Yasunobu Ogawa[4], Masahiko Sugino[5], Syun-ichi Matsuo[6]

[1] Particle and Astrophysical Sci., Nagoya Univ, [2] STEL, Nagoya Univ, [3] STEL., Nagoya University, [4] STEL., Nagoya Univ., [5] STEL, [6] Particle and Astrophysical Sci., Nagoya Univ

We have determined electrodynamic characteristics of electron concentration that moves recurrently from the dayside cusp into the polar cap. This phenomenon is likely related to the so-called flux transfer event (FTE) and poleward moving auroral form (PMAF). The present study is based on an analysis of data obtained from EISCAT ESR and EISCAT KST VHF radars. We use

data obtained during a rocket and EISCAT collaboration campaign in late 2000. During the campaign, the modes of these two radars were nearly the same, both radars looking poleward with low elevation angles, thus enable us to observe a wide latitudinal range of the ionosphere from 72 deg to 85 deg

N.

We have determined electrodynamic characteristics of electron concentration that moves recurrently from the dayside cusp into the polar cap. This phenomenon is likely related to the so-called flux transfer event (FTE) and poleward moving auroral form (PMAF). The present study is based on an analysis of data obtained from EISCAT ESR and EISCAT KST VHF radars. We use

data obtained during a rocket and EISCAT collaboration campaign in late 2000. During the campaign, the modes of these two radars were nearly the same, both radars looking poleward with low elevation angles, thus enable us to observe a wide latitudinal range of the ionosphere from 72 deg to 85 deg

N.