

Simultaneous optical and radar observations of eastward drifting auroral forms

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In the 2011 JpGU meeting, we presented eastward drifting auroral forms in the post-midnight sector, observed with all-sky camera in Iceland on 21 September 2009. The observed auroral forms had similar features to omega bands, although the spatial scale was relatively small. During the same interval, the SuperDARN radar at Pykkvibaer simultaneously observed the ionospheric convection flows behind the eastward drifting auroral forms. We will show the relationship between the optical aurora and radar signatures, and discuss meso-scale electrodynamics of the auroral forms.