Dynamics of High-latitude Dayside Aurora Observed by the AGO Network in Antarctica

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Dayside auroral dynamics in the high magnetic latitude region from 70 to 85 degrees has been studied using all-sky auroral imager data obtained at Automatic Geophysical Observatories (AGOs) and solar wind data observed by the WIND satellite. It was found that in the noon sector auroral patches or rayed bands with short durations move eastward or westward depending on the direction of IMF By. The relationship between the source region of these short-lived auroras and the cusp/cleft region has been investigated using the AGO-AKEBONO satellite conjunction data.

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