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## Upward propagation of the electron density depletion associated with flow bursts in the cusp

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Using data from the EISCAT Svalbard radar (ESR), we report on the upward propagation of the electron density depletion associated with flow bursts in the cusp. Results of analyses show that the propagation is identified at altitudes of 200-400 km, and that the propagation speed is 30-40 km/min. We present detailed properties of this temporal variation, and discuss how this depletion occurs.

**Keywords:** Electron density variations, ion temperature enhancements, cusp, plasma flow, current system, ground magnetic perturbations