



## **Scintillation from poleward moving auroral forms in the cusp ionosphere**

Kjellmar Oksavik (1,2), Christer van der Meeren (1), Dag A. Lorentzen (2), and Lisa J. Baddeley (2)

(1) Birkeland Centre for Space Science, Department of Physics and Technology, University of Bergen, Bergen, Norway  
(e-mail: kjellmar.oksavik@uib.no), (2) University Centre in Svalbard, Longyearbyen, Norway.

We present two examples from the cusp ionosphere over Svalbard where poleward moving auroral forms (PMAFs) are observed to be associated with significant phase scintillation. Both events affected signals from both GPS and GLONASS. The data were obtained from a new 50 Hz GNSS receiver that was installed in Svalbard in 2013. The results add further support to the idea that PMAFs are locations of strong ionospheric irregularities, which due to their transient nature and high-speed motion represent a challenge when it comes to making precise space weather forecasts in the polar cap.