

## **PULSATING AURORAS OBSERVED BY A 30-Hz ALL SKY IMAGER DURING THE THEMIS-GROUND CAMPAIGN**

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We had an auroral observation campaign at Gillam (56.4N, 265.4E) and Fort Smith (60.0N, 248.1E), Canada on January 2-15, 2008, using all-sky imagers (ASIs) (180 degree field of view (FOV)) with a sampling rate of 30 Hz and narrow FOV cameras (~50 degree FOV) with a sampling rate of ~1 s. At ~1100 UT on 14 January, a weak auroral breakup took place at the westside in the FOV of the white-light ASI at Gillam. After the breakup, active pulsating auroras were observed over the FOV of ASI during 1100-1150 UT. Time period of the pulsation was shorter than 1 s. The narrow FOV camera observed fine structures of the pulsating aurora nearly along the magnetic field line. During this pulsating aurora event, the THEMIS-P2 satellite was located near the conjugate points at 5 Re altitude in the plasma sheet. Similar THEMIS-ground conjunction event of pulsating aurora was obtained on 12 January at Gillam, during which the ASI observed active pulsating aurora lasted for 1 h. In this presentation, we show overview of ground and satellite observations for the pulsating auroras and discuss formation process of the pulsating aurora.

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