

E116-013

Room: 304

Time: May 30 15:30-15:45

Initial Results from the THEMIS-ground campaign using 30-Hz all-sky cameras in Canada

Kazuo Shiokawa[1]; Akimasa Ieda[2]; Akimitsu Nakajima[1]; Kaori Sakaguchi[1]; Reiko Nomura[1]; Erick Donovan[3]

[1] STELAB, Nagoya Univ.; [2] STEL, Nagoya Univ.; [3] Astronomy and Physics, University of Calgary

We have conducted a campaign observation of auroras at Gillam (56.4N, 265.4E) and Fort Smith (60.0N, 248.1E), Canada, for January 2-15, 2008, during the tail-aligned phase of the THEMIS satellites. The observation was carried out using two all-sky cameras (180 degree field of view (FOV)) with a sampling rate of 30 Hz and two narrow FOV cameras (~50 degree FOV) with a sampling rate of ~1 s. Characteristic auroral breakups were observed on January 7, 8, 10, 14, and 15 at these stations. Intense pulsating patches were observed on January 12, 13, and 14. The THEMIS P3 and P4 satellites were near the conjugate point at ~10 Re in the post-midnight plasma sheet during some of these breakups and pulsations. In this presentation, we show overview of these observations and discuss azimuthal expansion of breakup auroras and formation processes of patchy auroras.

Additional Coauthors: Mike Greffen, Torsten Aslaksen (University of Calgary)