

East-west band poleward moving long period ($T \sim 2-10$ min) auroral pulsations

*Natsuo Sato^{1,2}, Akira S Yukimatu^{1,2}, Yoshimasa Tanaka^{1,2}, Tomoaki Hori,^{3,4} Akira Kadokura^{1,2}

1. National Institute of Polar Research, 2. SOKENDAI, 3. Institute for Space-Earth Environment Research, Nagoya University, 4. Department of Earth and Planetary Science, Graduate School of Science, The University of Tokyo

Using the ground-based all-sky imagers we examined the long period ($T \sim 2-10$ min) east-west band type auroral pulsations which are completely different from well-known pulsating auroras with period of ~ 10 second. Fundamental characteristics of this type of auroral pulsations are as follows: 1) East-west band auroras extending more than 3000km in some cases, 2) Recurrently poleward moving auroral forms, 3) Recurrent periods are $\sim 2-10$ min, 4) Auroral intensity enhancement, not intensity modulation, 5) Occurrence region is just poleward side of common pulsating aurora, 6) Occurrence local time is post-midnight sector, 7) Aurora luminosity is rather high, sometimes comparable to discrete auroral arcs in the evening sector. We will examine the generation characteristics and mechanisms of this type of auroral pulsations using the multi-instrument ground-based observations and also the data simultaneously observed with instruments onboard spacecraft.

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