

R006-29

A 会場 : 9/27 AM1 (9:00-10:30)

9:00~9:15

#三好 由純¹⁾, 齊藤 慎司²⁾, 栗田 怜³⁾, 松田 昇也⁴⁾, 加藤 雄人⁵⁾, 片岡 龍峰⁶⁾, 今城 峻⁷⁾, 堀 智昭⁸⁾, 中村 紗都子⁹⁾, 三谷 烈史¹⁰⁾, 篠原 育¹¹⁾, 笠原 慧¹²⁾, 横田 勝一郎¹³⁾, 桂華 邦裕¹⁴⁾, 浅村 和史¹⁵⁾, 松岡 彩子¹⁶⁾, 土屋 史紀¹⁷⁾, 熊本 篤志⁵⁾, 笠原 禎也¹⁸⁾

(¹⁾名大 ISEE, (²⁾情報通信研究機構, (³⁾京都大学 生存研, (⁴⁾金沢大学, (⁵⁾東北大・理・地球物理, (⁶⁾極地研, (⁷⁾京大・地磁気センター, (⁸⁾名大 ISEE, (⁹⁾IAR&ISEE, (¹⁰⁾宇宙研, (¹¹⁾宇宙研/宇宙機構, (¹²⁾東京大学, (¹³⁾大阪大, (¹⁴⁾東大・理, (¹⁵⁾宇宙研, (¹⁶⁾京都大学, (¹⁷⁾東北大・理・惑星プラズマ大気, (¹⁸⁾金沢大

Evolution of energy spectrum during electron accelerations in the outer radiation belt

#Yoshizumi Miyoshi¹⁾, Shinji Saito²⁾, Satoshi Kurita³⁾, Shoya Matsuda⁴⁾, Yuto Katoh⁵⁾, Ryuho Kataoka⁶⁾, Shun Imajo⁷⁾, Tomoaki Hori⁸⁾, Satoko Nakamura⁹⁾, Takefumi Mitani¹⁰⁾, Iku Shinohara¹¹⁾, Satoshi Kasahara¹²⁾, Shoichiro Yokota¹³⁾, Kunihiro Keika¹⁴⁾, Kazushi Asamura¹⁵⁾, Ayako Matsuoka¹⁶⁾, Fuminori Tsuchiya¹⁷⁾, Atsushi Kumamoto⁵⁾, Yoshiya Kasahara¹⁸⁾

(¹⁾Institute for Space-Earth Environment Research, Nagoya University, (²⁾National Institute of Information and Communications Technology, (³⁾Research Institute for Sustainable Humanosphere, Kyoto University, (⁴⁾Kanazawa University, (⁵⁾Department of Geophysics, Graduate School of Science, Tohoku University, (⁶⁾National Institute of Polar Research, (⁷⁾Graduate School of Science, Kyoto University, (⁸⁾Institute for Space-Earth Environmental Research, Nagoya University, (⁹⁾Nagoya University, (¹⁰⁾Japan Aerospace Exploration Agency, Institute of Space and Astronautical Science, (¹¹⁾Japan Aerospace Exploration Agency/Institute of Space and Astronautical Science, (¹²⁾The University of Tokyo, (¹³⁾Osaka University, (¹⁴⁾Department of Earth and Planetary Science, Graduate School of Science, The University of Tokyo, (¹⁵⁾Japan Aerospace Exploration Agency, (¹⁶⁾Graduate School of Science, Kyoto University, (¹⁷⁾Planetary Plasma and Atmospheric Research Center, Graduate School of Science, Tohoku University, (¹⁸⁾Emerging Media Initiative, Kanazawa University

The Arase satellite has observed the inner magnetosphere since 2017 and thereby provided long-term data of plasma/particles and field/waves. Our previous investigations have revealed the presence of glowing peaks in the phase space density located just outside the plasmopause, indicating that non-adiabatic acceleration takes place in the small fp/fc region. In this study, we investigate the evolution of the energy spectrum during electron accelerations outside the plasmopause. We evaluated the time scales associated with the spectrum hardening, and the result shows that the equivalent temperature increase of the energy spectrum is a few tens keV/day. We compare them with a simulation of electron accelerations driven by wave-particle interactions and discuss possible acceleration mechanisms for electrons just outside the plasmopause.