

In situ statistical observations of EMIC waves by Arase satellite

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We present in situ statistical survey of Electromagnetic ion cyclotron (EMIC) waves observed by Arase satellite from 3 March to 16 July 2017. We identified 64 events using the fluxgate magnetometer (MGF) on the satellite. The EMIC wave is the key phenomena to understand the loss dynamics of MeV-energy electrons in the radiation belt, yet it is unclear how important in terms of the global scale of the whole radiation belt. Especially the EMIC waves observed at localized weak background magnetic field will be discussed for the wave excitation mechanism in the deep inner magnetosphere.