

Plasma wave phenomena observed in the magnetosphere associated with SSC and Si .

Atsuki Shinbori[1], Hiroshi Oya[2], Takayuki Ono[3]

[1] Geophys. and Astron., Tohoku Univ., [2] Geophysical Ist. Tohoku Univ., [3] Department of Astronomy and Geophysics, Tohoku Univ.

Generation of plasma waves being coincided with impulsive variation of geomagnetic field associated with SSC is studied in detail by using the long term archived data of the Akebono satellite. In each case of SSC, whistler mode plasma waves are generated with intensification of spectra starting from the LHR frequency; the starts of phenomena are almost simultaneous with raising of SSC phenomena but sometimes there are leading periods within about 1 minutes before the start of SSC's. The observation by the Geotail satellite shows that the LHR wave generation occurs also in the magnetosphere simultaneously with SSC.