

## Occurrence characteristics of Broadband Electrostatic Noise (BEN) observed by the AKEBONO satellite

Hiroyuki Miyamoto[1], # Akira Morioka[2], Hiroaki Misawa[1], Fuminori Tsuchiya[3], Toshifumi Mukai[4]

[1] Planet. Plasma and Atmos. Res. Cent., Tohoku Univ., [2] Planet. Plasma and Atmos. Res. Cent., Tohoku Univ., [3] Planet. Plasma Atmos. Res. Cent., Tohoku Univ., [4] ISAS

Polar orbiting satellites have often observed Broadband Electrostatic Noise (BEN) all over the polar region. Using the data set from the AKEBONO satellite, we could categorize BEN phenomena into three types that have a close relation with particle precipitation.

And we statistically analyzed BEN data during the period from Jun.1989 to Dec.1993. As a result, it is disclosed that each BEN appears in distinct regions, that is, cusp/cleft, afternoon oval and polar cap regions.

Moreover, we analyzed the relationship between BEN and other phenomena originated in the magnetosphere.