Wave-particle interactions around the bow shock

Hiroshi Matsumoto [1], Hirotsugu Kojima [1], Shinji Arakawa [1], Kenji Nakao [1]

[1] RASC, Kyoto Univ.

http://www.kurasc.kyoto-u.ac.jp

The Geotail waveform observations have revealed that variable electrostatic waves can be observed in the bow shock region. We perform computer experiments in order to study the detailed microscopic phenomena in the bow shock. In the present paper, we report the initial results of computer experiments using the full particle simulation code focusing waveparticle interactions around the bow shocks.