

Global MHD Simulation of the geomagnetic storm

Kyungsun Park[1], Tatsuki Ogino[2]

[1] STE Lab, Nagoya Univ, [2] STEL, Nagoya Univ.

The response of the earth's magnetosphere to variation of the solar wind parameters and interplanetary magnetic field (IMF) has been studied by using a high-resolution, three dimensional, global magnetohydrodynamic (MHD) simulation, when the WIND data of velocity V_x , plasma density, dynamic pressure every 1 minute were used as input. We have studied the energy transfer and tail reconnection in association with geomagnetic storms.