E014-017 Room: C501 Time: May 30 14:30-14:45

Growth processes of reconnection jets accompanied with finite neutral lines(2)

Jun-ya Nakabayashi[1]

[1] ISAS

Magnetic reconnection process plays an important role in the release of stored

magnetic energy and the particle acceleration in the Magnetotail. We carried out a three dimensional electromagnetic hybrid simulation to understand growth processes of reconnection jets accompanied with finite neutral lines. To realize a spontaneous magnetic reconnection, we added a localized anomalous resistivity to

the neutral sheet of the initial Harris solution and the diffusion region has finite length on y-direction. It was unremarkable that reconnection jet expand to

dusk direction. On the other hand, main stream of reconnection jets moved to dawn side of diffusion region. This effects were not occurred by momentum transport from jets to stationary plasma. We will discuss kinetic effects in the development process of reconnection jets and dependence on the length of neutral lines.