

Effects of initial B_y component for magnetic reconnection in the magnetotail(2):north-south asymmetry.

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In order to understand effects of initial B_y component, we carried out Hybrid simulation of magnetic reconnection process. We added B_y field uniformly to initial Harris solution and assumed a time independent anomalous resistivity.

In the case of $B_y = 0$, there was no north-south asymmetry in the spatial structures. However, we could find a dependence of north-south asymmetry on initial B_y intensity in the results. In this study, we will discuss the processes of asymmetry generation.