Simulation study of the asymmetric magnetic reconnection in the shear flow

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Asymmetric magnetic reconnection is studied using MHD simulations on the basis of the spontaneous fast reconnection model. Assymetric magnetic reconnection with shear flow and shear field commonly occurs at planetary magnetopause. It is believed that these shear field and shear flow prevent reconnection process. In this study, particularly, the effect of the shear flow is studied in detail.