



Investigation of the IMF By influence on magnetotail By outside the neutral sheet using Cluster data

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We investigate Cluster magnetotail measurements and OMNI interplanetary magnetic field (IMF) data from 2001-2009 to study IMF By influence on the Earth's magnetotail. A few previous studies have focused on what is the tail By component induced by IMF By at the neutral sheet. This statistical investigation pursue how induced tail By is distributed and depends on the IMF outside the neutral sheet. The investigation will provide information how efficiently the additional tail By component is induced at different tail regions during various IMF conditions.