

Effects of induction electric field on ionospheric current system (2)- Dst field -

Masahiko Takeda[1]

[1] Data Analysis Center for Geomag. and Space Mag., Kyoto Univ.

Effects of the induction field on the ionospheric current system were examined by a simulational study for the Dst field of 1 min. to 1 hour period. It was found that the effects are effective for the period less than 2 min. P10 form of the Dst field tends to flow zonal currents including night ionosphere where conductivity is low, and thus the induction effect is relatively weak. This is similar to the induction by the ocean.