

Characteristics of ionospheric convection during May 10-13, 1999

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Ionospheric convection during May 10-13, 1999 has been studied by using the HF radars, when the solar wind density is very low (up to <0.1 /cc). The echo regions observed by Syowa East/South SuperDARN radars are located several degrees poleward of the averaged location. In contrast, the radars observed very high (>1000 m/s) plasma flows directed from the nightside toward the dayside. This signature is consistent with the result by Paschmann et al. (1986), who showed that there is a strong negative correlation between the reconnection speed in the magnetosheath and the plasma beta value.