

Study of ionosphere-thermosphere coupling using the SuperDARN Hokkaido radar and Asian sector ground-based network

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The SuperDARN Hokkaido radar, one of the mid-latitude SuperDARN radars and the only one in the Asian sector, is a powerful tool for studying ionosphere-thermosphere coupling ranging from 40 to 80 geomagnetic latitudes. Several topics of ionosphere-thermosphere coupling using the SuperDARN Hokkaido radar together with other Asian ground-based instrument, such as traveling ionospheric disturbances and coseismic ionospheric disturbances, will be presented.

Keywords: thermosphere, ionosphere, SuperDARN, Hokkaido radar, large-scale traveling ionospheric disturbance, coseismic ionospheric disturbance