

VERTICAL CHARACTERISTICS OF MIDLATITUDE E AND F REGION IONOSPHERIC DRIFTS.

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New digisonde drifts measurements with DPS 4 equipment started at Průhonice observatory in January 2004. In standard autodrifts measurements, the velocity of F region drifts is usually determined near the peak of electron concentration profile. From 2005 we started measurements of ionospheric drifts in E region of the ionosphere, by using four fixed frequencies in the height interval 90 – 150 km also. This new experimental arrangement makes possible to study vertical changes and profiles of the ionospheric drifts. In our paper we deal with winter time significant changes of the drift velocity height profiles in the E region of the ionosphere (90 – 150 km) during geomagnetic quiet conditions. More dramatic vertical changes of all drift velocities components in the height interval 90 – 130 km (with effects of acoustic gravity waves) was observed during geomagnetic storms 14 – 16.12.2006.

In second part of this paper we report an observed night time changes of the vertical drift velocity profiles in the F region of the ionosphere during quiet and disturbed conditions at midlatitude station Pruhonice.

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