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Effects of geomagnetic activity on the E and F region ionospheric drifts.

J.Boška, D.Kouba, P.Šauli. Institute of Atmospheric Physics AS CR.

14131 Prague 4, Czech republic. boska@ ufa.cas.cz.Boční II/1401.

Digisonde drift measurements with DPS 4 equipment started at Průhonice observatory in January 2004. The paper deals with effects of high solar and geomagnetic activity, which were observed at Průhonice observatory in ionospheric drifts measurements during 2004 - 2006 year.

In standard autodrifts measurements with DPS 4, the velocity of F region drifts is usually determined near peak of electron concentration profile. From 2005 we measure at Průhonice ionospheric drifts at the height interval 90 - 150 km also. In this paper we report the results of measurements of the drifts velocities in E and F regions during disturbed conditions at midlatitude station Pruhonice. Significant changes of the ionospheric drifts in both regions (increasing of the vertical velocity, TID activity in horizontal components) were observed during several periods of a suddenly enhanced solar and geomagnetic activity in both ionospheric regions.