



## **Quiet and stormy time variations in the height of the ionospheric F2-peak above middle latitudes**

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This paper presents results of the analysis of the ionospheric F2 layer peak height hmF2 variation for quiet and disturbed conditions over middle latitudes. The analysis was carried out using hourly hmF2 values derived from electron density profiles obtained at selected ionospheric stations of the Northern (NH) and Southern hemisphere (SH) under different solar activity conditions. We studied daily, semiannual and annual variation of hmF2 and the latitudinal and longitudinal dependence of the variation. The strong-to-severe geomagnetic activity effect on the regular variation of hmF2 has been also analysed. Our results indicate an importance of fully understanding the local patterns of hmF2 variations for the development of ionospheric models.