



Ionospheric variability over Grocka during low activity conditions

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The variability of the critical frequency of F2 layer, foF2, over ionospheric station Grocka (44.48 N, 20.31 E) has been studied during the declining phase of solar cycle 23 from 2004 to 2006. The variability index was introduced to identify the daily and seasonal patterns characterizing the local mid-latitude ionosphere during quiet and disturbed geomagnetic conditions. In addition, the behaviour of the vertical total electron content values, vTEC, obtained from GPS measurements in surrounding area under these conditions is reported. The analysis shows a number of interesting features representative of the ionospheric variability relevant for ionospheric modelling as well as ionospheric propagation applications based on a single station approach.