Poster paper

REAL TIME VARIATIONS OF IONOSPHERIC TEC (TOTAL ELECTRON CONTENT) DURING SOLAR X-RAY FLARES

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The total number of electrons integrated along a tube of unit cross section or the electron columnar density is called TEC (Total Electron Content) and, in this paper, our attention is focused on its changes during the occurrence of solar X-ray flares.

This research is concentrated primarily to the D-region of the ionosphere and its contribution to changes of TEC. As examples for quantitative calculations of D-region reactions to solar X-ray flares we chose events that occurred on May 5th, 2010, February 18th, 2011, and March 24th, 2011.

The ionospheric modelling is based on experimental data obtained by the low ionosphere observations using the 23.4 kHz VLF (the very low frequency) radio signal emitted in Germany and received in Serbia (also used in Nina *et al.* 2011, 2013 and Bajčetić *et al.* in press) while GPS was used to determine the vertical TEC.

References

Bajčetić, J., Nina, A., Čadež, V. M., Todorović, B. M.: *Thermal Science,* in press, doi:10.2298/TSCI141223084B.

Nina, A., Čadež, V. M., Srećković, V., Šulić, D.: 2011, *Baltic Astronomy,* **20**, 609.

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