

MHD WAVES IN THE LOWER TERRESTRIAL IONOSPHERE

Vladimir M. Čadež¹ and Aleksandra Nina²

¹*Astronomical Observatory of Belgrade, Belgrade, Serbia*

²*Institute of Physics, University of Belgrade, Belgrade, Serbia*

E-mail: vcadez@aob.rs

Hydrodynamic waves in the ionosphere influence reflection properties of radio waves emitted and received at the ground of the Earth. The resulting time variations in recorded amplitude of the very low frequency (VLF) radio signal obtained in our earlier investigations indicate the existence of such waves in lower parts of the ionosphere assuming negligible effects of the geomagnetic field (Nina and Čadež 2013).

In this presentation we generalize this issue by inclusion of the geomagnetic field and estimation of its contribution in amplitude time variations of the reflected VLF wave as recorded by the Belgrade station in Institute of Physics in Belgrade, Serbia.

References

Nina A., Čadež V. M.: 2013, *Geophysical Research Letters*, **40** (18), 4803.