

IONOSPHERIC DISTURBANCES DUE TO SOLAR FLARES RECORDED BY VLF RECEIVER LOCATED IN TUNIS

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The study of the sun and its effects on the ionosphere is one of the many themes studied by the United Nation's International Space Weather Initiative (ISWI). In this context, new and cheap receivers are shared all over the world. These receivers SID/SuperSID are tuned in the VLF (Very Low Frequency) range allowing the detection of Sudden Ionospheric Disturbances (SID). These SIDs are caused by the solar flares and affect the VLF radio waves propagation in the earth-ionosphere waveguide. We will show a number of results that we found using a new useful and convivial numerical application SIDLab1.0, developed under IgorPro environment at the LSAMA laboratory and dedicated to a fast: detection, identification and classification of these ionospheric disturbances from raw VLF signals.