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33rd COSPAR SCIENTIFIC ASSEMBLY

WARSAW

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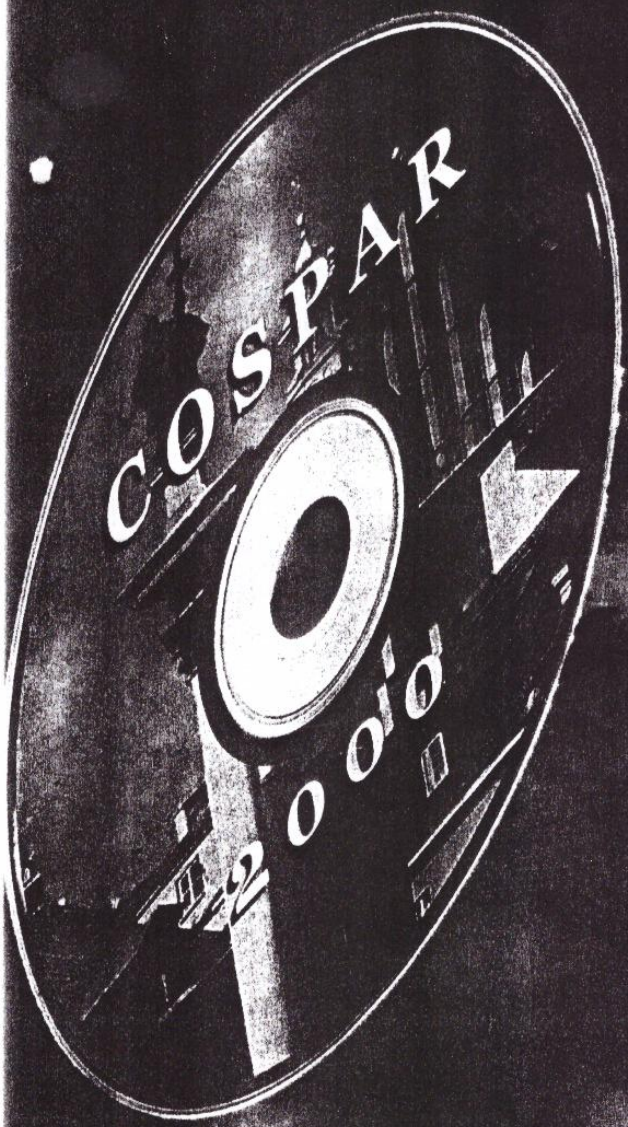
16-23 July

2000



COSPAR Abstract for Warshaw, 2000

THE MIDLATITUDINAL IONOSPHERIC D-REGION RESPONSE TO SOME EVENTS ON THE SUN

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We investigated reactions of the middle latitude ionospheric D-region to two SSCs; to 10 optical solar flares and to 10 bursts of radio frequency radiation. Height-time changes in the partial reflection amplitudes of signals, the radio noise, and in the D-region parameters were analyzed. Such events are, as a rule,accompanied by precitipations of the high energy electrons and protons, leading to short-time (of the order of units-tens of minutes) increases by about 50-200% (sometime more) of the electron density both in the lower ($z < 75$ km) and in the upper ($z > 75$ km) middle latitude D-region. Such processes in this height range are accompanied by generating and enhancing of acoustic-gravitational waves with periods of about units of minutes and characteristic duration of 10-30 min. At the same time, the electron density increases by 50-200%, quasi-harmonic changes in the height-time $N(z,t)$ variations being observed as well.

Abstracts to be submitted on or before January 7, 2000 to Copernicus Office with copy to appropriate Main Scientific Organizer:

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