The Lunar perturbation of the parameters of The F2-layer at Low-MID latitudes

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The lunar atmosphere tide is quite small to solar atmosphere tide, but the predominantly semidiurnal tide (M2) of lunar is propagates into the E region of the ionosphere where it generates electric currents by dynamo action. These currents give rise to a perturbation of the geomagnetic field on the ground and the horizontal component .The lunar E region dynamo also generates electrostatic fields and it is these fields, when transmitted along magnetic field lines to the F region, which gives rise to the lunar periodicities in the F region ionization density. Diurnal, seasonal and year-to-year variations in the lunar tide of the F2 region parameters (f_oF2, hmF2, M(3000)F2, h'F2 and NmF2) have been determined for a number of low-mid latitude stations. In the parameters of F region, there were obvious semidiurnal variations at most months. The lunar tides in F2 region are strong during summer and winter and they showed year-to-year variations. And we compared the variations of diurnal and seasonal in parameter of F2 region and H at Wuhan(31^oNčň114^oE).