



Atmosphere-Ionosphere Coupling via Atmospheric Waves

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The Earth atmosphere and ionosphere is complicated and highly variable system which displays oscillations on wide range scales. The most important factor influencing the ionosphere is certainly the solar and geomagnetic activity. However, the processes even in distant regions in the neutral atmosphere cannot be simply neglected. This contribution reviews aspects of ionospheric variability originating in the lower laying atmosphere. It focuses especially on the generation and propagation of the atmospheric waves from their source region up to the heights of the ionosphere. We will show the role of infrasound, gravity waves, tides and planetary waves in the atmosphere-ionosphere coupling. Particularly gravity waves are of high importance for the ionosphere. Recent theoretical and experimental results will briefly be reviewed.