

waves observed through measurements of the uncorrelated tropospheric noise between 0.5 and 6 Hz

The coupling between gravity waves and the turbulence-generated atmospheric noise has been studied from the beginning of 1970ies. The uncorrelated atmospheric noise, normally considered as an obstacle when detecting weak infrasonic signals, may be, studying its envelope, used to extract gravity waves passing through the turbulent medium. Dimensions of arrays of the Swedish-Finnish Infrasound Network (SFIN) are too small (75 x 75 meters) to determine the angle of arrival and the phase velocity of detected gravity waves. However, the frequency spectrum of observed gravity waves and its temporal variations may be determined. Examples of gravity wave spectra generated by large meteoroid entries, rocket launch and major explosions are presented.

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