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# 数値シミュレーションにより導出した地震発生後の中性大気波動のスペクトル分布
# Spectrum of the neutral atmospheric waces derived from a numerical simulation of an earthquake

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In this simulation, two dimensional model is used. The atmospheric perturbation is created by a vertical velocity assuming an upward motion of the sea surface or ground surface. Calculating the temporal variations of neutral density, we derived their spectra.

As a result, it is shown that behavior of atmospheric waves is different for the frequency. For a notable example, variations around 1 mHz propagate to high altitudes 450 km ˜500 km and long distance 800 km. On the other hand, variations around 10 mHz propagate almost the same distance in lower altitude of 300 km or less. In addition, variation at 4 mHz are located above the epicenter at 350 km. This causes the variation of GPS-TEC at 4 mHz associated with earthquakes that have ever been reported.

キーワード: 電離圏, 地震, 音波, 重力波
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