Resonant Interaction of AGWs in the Lower Thermosphere

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Atmospheric gravity waves (AGWs) are believed to play an important role in the transportation and redistribution processes of excess energy in the upper atmosphere. Owing to vertical stratification of the atmosphere, AGWs will grow exponentially with height. As a result the non-linearities may become a key factor in the AGW system of the thermosphere. We investigate the possibility of resonant interaction of AGWs in the high-latitude thermosphere by making the bispectrum analysis on the ionospheric fluctuation data observed with EISCAT.