

## On the semidiurnal tides in the polar lower thermosphere

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It is found that westward propagating semidiurnal tides with zonal wave number 1 dominate in the antarctic lower thermosphere in the summer season, and a nonlinear forcing mechanism between stationary planetary waves with zonal wave number 1 and migrating semidiurnal tides is proposed(Forbes et al. 1998).

Output data by the middle atmosphere circulation model at Kyushu University are analyzed and similar nonmigrating semidiurnal tides are found in the polar lower thermosphere. This result suggest that the nonmigrating semidiurnal tides in the polar lower thermosphere are generated by the nonlinear interactions between stationary planetary waves with zonal wave number 1 and migrating semidiurnal tides.