

## Source of Gravity Waves in the Polar Middle Atmosphere (Extended Abstract)

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Gravity waves are considered to be important for dynamics and chemistry in the polar middle atmosphere. However, there have been only a limited number of studies of gravity waves in the polar region mostly because of difficulty of their observation. One of the significant issues on gravity waves is their sources, because wave parameters such as wavelengths and phase velocities which are essential to consider the gravity wave effects on the large-scale field are highly dependent on the sources. In this paper, we discuss dominant sources of gravity waves in the polar regions, namely topography, the polar-night jet, and tropical convection, by reviewing results from recent studies.

## References

Kaoru Sato, 2000: Sources of gravity waves in the polar middle atmosphere, Advances in Polar Upper Atmosphere Research, 14, 233-240.