

ATMOSPHERIC GRAVITY WAVE ACTIVITY ABOVE HALLEY (76S, 27W) AND ROTHERA (67S, 68W)

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It is known that atmospheric gravity waves propagating up from the stratosphere and troposphere play a critical role in atmospheric circulation. The two British Antarctic Survey research stations of Halley (76S, 26W) and Rothera (67S, 68W) differ in terms of local topography and location with respect to the edge of the wintertime polar vortex, both of which can affect the gravity wave flux. The wintertime gravity wave activity at both sites has been determined in the mesosphere, stratosphere and troposphere. Comparisons of the results at the two sites are discussed along with the vertical propagation effects seen when combining the data and climatological wind data.

Mesosphere, gravity waves

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