

Radiosonde observations of gravity waves in the stratosphere close to 60°S

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The 60°S region is known to be where “missing” gravity-wave momentum flux in Global Circulation Models gives rise to the significant stratospheric “cold-pole” problem and one where wave fluxes, sources and variability are poorly known [e.g. McLandress et al. 2012 and Garcia et al. 2017]. As part of the NERC funded project: DRAGON-WEX (the DRake pAssaGe and sOuthern oceanN – Wave EXperiment) a detailed study of radiosonde data since 2002 from Antarctica and sub-Antarctic islands has been undertaken. These data are used to determine the gravity wave climatology and fluxes that are found close to the 60°S region.

Key words: stratospheric gravity waves, radiosondes

References

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