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## Balloon-borne estimation of gravity-wave momentum flux in the Antarctic polar vortex

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27 long-duration superpressure balloons were flown in the southern-hemisphere high latitudes from August 2005 to February 2006 in the framework of the Vorcore campaign. Continuous observations of wind and pressure along the flight are used to characterize gravity waves in the lower stratosphere. A particular emphasis is put on the estimation of gravity-wave momentum fluxes for which the geographical distribution is still essentially unknown. The Vorcore dataset reveals the primary importance of the Antarctica Peninsula area in the generation of gravity waves, but significant wave flux is also observed away from any orographic sources, in particular above the Austral ocean.