

Dynamics of the Antarctic lower stratosphere observed during the Vorcore campaign

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In September and October 2005, 27 superpressure balloons (SPB) were launched from McMurdo (167 E, 78 S), a station in Antarctica. SPBs are able to drift for months in the lower stratosphere at a constant density level. The mean flight duration is greater than 2 months and the longest flight lasted 109 days. More than 150000 meteorological measurements were made from early September until end of January. These measurements, made every 15 minutes, allow studying the dynamics of the Antarctic polar region and its evolution from a well-formed vortex to a well-established summer circulation.

The collected data set will be presented and the first results obtained will be presented. We will particularly focus on gravity wave activity observed during the campaign.