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Low frequency geomagnetic field fluctuations in Antarctica: comparison between two polar cap stations

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We present a statistical analysis of low frequency geomagnetic field fluctuations observed during two years (2001 and 2002) at the two Antarctic stations Terra Nova Bay and Scott Base; the two stations are located in the polar cap at the same corrected geomagnetic latitude (about 80S) but with one hour difference in magnetic local time. In particular, this study is focused on the pulsations in the Pc5 frequency band and on their coherence and propagation characteristics between the two stations. The dependence on local time and season is also shown.