



## **A comparison between low frequency geomagnetic field fluctuations observed within the polar cap**

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In this work we present a statistical analysis of geomagnetic field fluctuations in the Pc5 frequency band at the three antarctic stations Terra Nova Bay, Scott Base and Dumont D Urville, located at the same corrected geomagnetic latitude (about 80S) but at different magnetic local time (MLT=UT-8, MLT=UT-7 and MLT=UT-13, respectively), and at the Canadian station Cambridge Bay, which has the same magnetic local time and almost opposite corrected geomagnetic latitude as Terra Nova Bay. In particular, the study is focused on the pulsations in the Pc5 frequency band and on their coherence between the different stations. The dependence on local time and season is also shown.