



Crustal vertical motion in Antarctica using GPS and DORIS : preliminary results concerning variabilities

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GPS and DORIS data analysis centres are now providing rather long series for stations positions. Several points of measurements are now available for Antarctica. The data analysis demonstrates that observed variations are significant over the total time span, these variations being interpreted as isostatic response to secular melting of polar caps. But these vertical motion could also be correlated with phenomena on quicker time scale. Using shorter data set, we attempt to estimate variation rates. If these variations are significant, we search for correlations with other available data as ice thickness and gravity measurements.

Although very preliminary, these first results lead us to have this work going on.