

Performance of Multi-Parameter Borehole Instrumentation System (Marsite)

We present two year results obtained from the integrated multiparameter borehole system at Marsite. The very broad band (VBB) system have been operating since installation in November 2014; one year in a water filled borehole and one year in a dry Borehole. from January 2016. The real time data has been available to the community. The two Borehole environments are compared showing the superior performance of dry borehole environment compared to water filled for a very broad band (VBB) seismometer. The practical considerations applied in both borehole installations are compared and the best borehole practical installation techniques are presented and discussed. The data is also compared with a surface 120 second broad band sensor and the seismic arrays with in MarSite region. The very long term performance, (one year data in a dry hole) of the VBB Borehole seismometer and the Dilatometer will be presented. The high frequency performance of the VBB seismometer which extends to 150 Hz and the dilatometer are compared characterising the results from the dilatometer.

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