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# Vertical dipoles to detect self potential signals in a seismic area of Southern Italy: Tito station

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Since 2000 the Institute of Methodologies for the Environmental Analysis (National Council of Research, Potenza, Italy) installed a geophysical monitoring network able to detect geoelectric, geochemic and seismometric parameters in seismic areas of southern Italy. During this period a very large data-base geophysical time series has been organized and it is actually available to assess robust statistical methodologies to identify geophysical anomalous pattern linked with local seismicity. To better understand the dynamic of rain and cultural noise on geoelectrical signals (Self Potential), during May 2004 we drilled in Tito station a hole of 20m to measure the SP vertical component. The array is characterized by five Pb-PbCl2 electrodes putted at different depth. The common electrode is fixed at 20m to detect the SP signals on different dipoles with different length. In this work we presents several electrical anomalies, that could be correlated with local seismic activity on vertical dipoles recorded in Tito station.