

### **3.1-P16. Multi-parameter stations: electric, magnetic, seismic, radon gas and GNSS data measurements, as a comprehensive method for identifying the anthropogenic effect on triggering seismicity on the central region of Colombia**

The tectonic convergence process, which takes place in the north-west part of South America, due to Nazca, Cocos, South American and Caribbean Plates interaction has been aim of study with different methods; however, most of them have been applied one after another, but not simultaneously, resulting on an extended in time set of data, but, which includes contributions from different methods applied in different time periods. Such methods have been applied in the central region of Colombia, particularly in the Piedmont of the Eastern Cordillera. A number of multi-parameter stations are being deployed in the central region of Colombia. The measurements are beginning to provide electric, magnetic, seismic, radon gas, and GNSS data. The registered data will be processed and analyzed with the aim of getting a better understanding of the seismic sources physics in this region, and in order to determine how significant is the effect of anthropogenic activities (including nuclear tests) on triggering seismicity. Here we will show the preliminary results of instrumental deployment, as well as, we will discuss the repercussion of the anthropogenic activities developed nowadays in the Piedmont of the Eastern Cordillera in Colombia. This work is supported by COLCIENCIAS (project No. 0361-2013).

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