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## **TRAGALDABAS: first results on cosmic ray studies and their relation with the solar activity, the Earth's magnetic field and the atmosphere properties.**

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At the end of March 2016, the TRAGALDABAS detector, located at the Univ. of Santiago de Compostela (42.876298,-8.560372), has completed its first year of life taking data regularly, at a duty efficiency close to 95% of the time. TRAGALDABAS (acronym of "TRAsGo for the Analysis of the nuclear matter Decay, the Atmosphere, the earth's B\_field And the Solar Activity) is a cosmic ray detector based on the RPC (Resistive Plate Chamber) technology. In its present layout it has four RPC planes of  $1.2 \times 1.5 \text{ m}^2$ , with 120 cells read-out by pads and around 300 ps time resolution, offering an angular resolution better than  $3^\circ$ , a detection efficiency close to 95% and a zenith angle acceptance near  $50^\circ$ . The first results will be presented related with cosmic rays properties and their correlations with the solar activity, the Earth's magnetic field and the atmosphere.

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