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The TRISTAN detector - 2018-2019 latitudinal survey of cosmic rays

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In 2018-2019 a latitudinal survey of the rate of cosmic rays at sea level was performed by the TRISTAN detector, an autonomous system composed by three planes of RPCs ($120 \times 150 \text{ cm}^2$). The detector made a two-way journey on board of the Spanish Sarmiento de Gamboa vessel between Vigo (Spain) and Punta Arenas (Chile), measuring continually the cosmic ray rate throughout the Atlantic crossing. In this work, we present the results of the first way journey, correlating the obtained variation of the cosmic ray rate with the vertical cutoff rigidity, as well as presenting some details of the autonomous system used during this campaign.

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