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On the Sq current system signatures measured in Latin America

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The present work shows the first results of the study about the seasonal variation of the Solar quiet (Sq) Earth's magnetic field based on magnetic measurements from the Embrace Magnetic Network (MagNet). This is made at several latitudes in South America, covering the equatorial and low latitudinal region. For this study, we used data covering the period from 2010 to 2016, during the ascending phase of the solar cycle 24. Besides being an integrating part of the process to deviate the South American K, known as Ksa, the Sq variations are discussed in terms of their signature in the Quiet Day Curve. In addition, the effect X-Ray solar flares observed in the magnetic data collected by the Embrace MagNet are used to estimate the southern focus of the Sq current system.

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