

Panels (P)

Solar Cycle 24: A Cross-Disciplinary View of this Solar Maximum (PSW.2)

Consider for oral presentation.

FIRST STEPS TOWARDS THE DEVELOPMENT OF REGIONAL MAGNETIC INDICES DESIGNED FOR SOUTH AMERICA

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In the present paper we present the first steps towards the development of regional magnetic indices designed for South America, based on data collected by the EMBRACE Magnetometer Network, which so far is planned to cover most of the Eastern Southern American longitudinal sector. Thereafter, we provide details of the development of the region K, named Ksa (K South America), and of the proxy for the Dst Index, obtained in near real-time (1 minute cadence with 5 minutes latency). We also compare the evolution of our indices with the evolution of the Kp and Dst index during geomagnetic storms occurred in 2012 and 2013. We will show some similarities representing the accuracy of our measurements and some dissimilarity that may be attributed the presence of the South American Magnetic Anomaly (SAMA). This, in turn, may reflect in the global models that use such indices for disturbance time estimates during different solar cycles.

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