



## **Latitudinal and temporal distribution of geomagnetic pulsation occurrences registered in South America by the Embrace Magnetometer Network during 2014**

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In the present study we show the distribution of occurrence of magnetic pulsation PC2, 3, 4 and 5 according to the magnetic latitude and local time over the South American continent during 2014. The pulsations were obtained from the geomagnetic data collected by the Embrace Magnetometer Network currently installed over Brazil and Argentina covering most of the eastern portion of the South America. Therefore, it covers regions under influence of the Equatorial Electrojet (EEJ) and the South American Magnetic Anomaly (SAMA). A wavelet based method of analysis was developed and applied to filter the magnetic data and to provide the dynamic spectra of the magnetic pulsation in order to allow the analysis of non-stationary signals. Among the results we observed that the PC5 and PC3 have agreed with the current literature with higher occurrence rates at higher latitudes and around local noon.