

PERIODICITIES IN THE ATMOSPHERIC ELECTRIC FIELD MEASURED
AT THE SOUTH ATLANTIC GEOMAGNETIC ANOMALY

by

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ABSTRACT

Preliminary results of balloon borne detector measurements of the horizontal atmospheric electric field shows fluctuations in its magnitude. The data obtained during fair weather period, at balloon height around 40km, were studied by means of a power spectrum analysis. These data were sampled at 30sec time intervals. For the overall data some significant peaks appeared near 5.5, 6.7, 10.2 and 11.5 mHz frequencies. A spectrogram was constructed using shorter intervals with results showing different features and large variations in the magnitudes of the peaks along the time interval studied.