

**IONOSPHERIC ABSORPTION COSMIC NOISE
OBSERVATIONS IN ANTARCTIC**

by

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ABSTRACT

Two 30 MHz riometers with Yagi-Uda antenna type, pointing one to the zenith (vertical) and the other to the south, inclined with 50° of elevation angle, were operated during December 27, 1987 through March 8, 1988 at the Brazilian Antarctic station Comandante Ferraz (52°S mag. latitude, $L = 2.19$). Some distinct absorption events of few hours duration, typical of energetic electron precipitation from magnetospheric origin, were observed. Most of events did not correspond to high K_p values, which are widely accepted as indicators of geomagnetic activity. The observed sidereal diurnal variation of the cosmic noise during quiet periods was fairly coincident with that expected from published sky maps of the same frequency for the case of the vertical antenna. Comparison of individual observed on the antennas suggests enhanced equatorward extension of auroral region absorption on the oblique antenna.