

## **SAVNET: CURRENT DEVELOPMENTS AND RESULTS**

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Important results have been acquired using the measurements of VLF amplitude and phase signals from the South America VLF Network (SAVNET) stations. This network, which is an international project lead by Brazil in cooperation with Peru and Argentina, started operating in April 2006, and now counts on eight stations (Atibaia, Palmas, Santa Maria and Estação Antártica Comandante Ferraz in Brazil; Piura, Punta-Lobos and Ica, in Peru; CASLEO, in Argentina). Researches, through the last decades, have been demonstrated the versatility of the VLF technique for many scientific and technological purposes. In this work, we summarize some recent relevant results with SAVNET data bases. Studying the daily C-region post sunrise hump (PSRH) parameter time series, two periods with distinct behavior patterns were observed: one, from March to October, which is characterized by a slow variability well related to the mean solar illumination over the VLF propagation paths; and another period with more variability possibly related to the temperature and Nitric Oxide concentration variations as by space instruments, between October and March. Furthermore, the analysis of phase and amplitude daily variations show seasonal effects which were removed and the remaining signals compared to the incident solar Lyman- $\alpha$  radiation. These results along with future initiatives using SAVNET will be outlined in this presentation.

Ionosphere-Thermosphere system, solar activity, VLF

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