

# **STUDIES OF THE SPACE WEATHER EFFECTS ON THE IONOSPHERIC ENVIRONMENT AT THE BRAZILIAN SECTOR DURING DISTURBED PERIODS AS SEEN IN THE E-REGION PARAMETERS**

LAYSA C. A. RESENDE<sup>1</sup>; Clezio M. Denardini <sup>1</sup>; Lais M. Guizelli <sup>1, 2</sup>;  
Pedro S. C. Almeida <sup>1</sup>; Henrique C. Aveiro <sup>1, 2</sup>

<sup>1</sup> Instituto Nacional de Pesquisas Espaciais, S. J. Campos, SP, Brazil,  
email: laysa@dae.inpe.br,

<sup>2</sup> Universidade de Taubaté, Taubaté, SP, Brazil, email: lais@dae.inpe.br

In the present paper we show some new results on the ionospheric E-region density variability related to sporadic E-layers occurrence over São Luís (2°31' S, 44°16' W), Brazil. Possible evidences of the reaction of the magnetosphere-ionosphere system to strong magnetic storms are discussed in terms of the E-region ionospheric parameters obtained from ionograms. We analyze the behavior of the q-type sporadic-E layers (Esq) during and after the magnetic storm of April, 2000 in order to check the geomagnetic storms effects.

Aeronomy, ionosphere, magnetic storms

Laysa C.A.Resende, Av dos Astronautas, 1.758 Jd. Granja - CEP: 12227-010  
São José dos Campos – SP, Brazil, tel: 55 (12) 3945-6000, e-mail: www.inpe.br/