

43) POSTER

The distribution of convective systems detected by satellite in the Tropics of South America and some relationships with the precipitation and the general circulation

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Abstract

The distribution of convective systems (CS) identified in images of the satellite GOES 8 it was implemented by a simple method of classification of high top and deep clouds based on the information of the water vapor and thermal infrared channels. Images of the period from 1998 to 2000 were processed on the tropical strip of South America. In this work it is presented: the) the classification methodology and identification of SC; b) some aspects of the annual and seasonal average distribution of the frequency and dimensions of these systems and its relationship with the vertical movement and the precipitation; c) the monthly evolution of SC in the area of the intertropical convergence zone (ITCZ) and relationships with the circulation and the vertical movement. In a general way that areas of intense annual and seasonal precipitation are associated to a larger covering of convective clouds. The annual march of ITCZ and the continental convection present phase differences that exercise it influences in the vertical movement of the atmosphere of the coast north of Brazil.