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The lower equatorial ionosphere as the indicator of climatic processes

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On the basis of simultaneous rocket soundings of the middle atmosphere and lower ionosphere from the rocket testing ground at Thumba (8 0N, 770 E, India), and remotely sensed observations for tropical cyclones (performed over North Indian and the West North Pacific Oceans), the possibility of influence of tropical cyclones on processes in middle atmosphere and the lower ionosphere is shown. In turn essential influences on both atmosphere and ionosphere are caused by solar activity. In this paper the different role of solar activity influence on the ionosphere in the presence of tropical cyclones and in days without them is shown. Possible mechanisms of this influence are discussed.