Detection of Lightning Events by Time Of Group Arrival(TOGA) Technique

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The stochastic behaviour of lightning events has compelled scientists to study the various aspects related to this form of atmospheric electricity. Severe lightning and thunderstorm activities inflict extensive loss to mankind and property. Hence, one becomes greatly interested to investigate the occurrence of lightning events. This paper discusses about the lightning strokes detected near low latitudinal region using the Time Of Group Arrival (TOGA) technique. Bhopal (23.2° N, 77.4° E) is chosen as one of the multiple stations involved in recording the lightning activity because of its congenial geographic location. We present some results for the month of July 2004 that indicates enhanced lightning activities recorded around the low latitude region. The time period between June and August is most suitable for making such studies as chances for occurrence of lightning events is maximum. It is believed that the paper reflects on the location of this atmospheric phenomena and can be used for suitable studies in future beneficial to the field of global atmospheric sciences.