

551-596(54)  
SIGNIFICANCE AND FREQUENCY OF  
OCCURRENCE OF THUNDERSTORMS  
AT COIMBATORE

In a recent paper Balasubramanian and Dorairaj (1958) presented the results of their preliminary attempt to assess the significance and frequency of occurrence of thunderstorms at Coimbatore. They have observed that the average annual number of 47 thunderstorm days at Coimbatore is significant since it is roughly twice the average of 25 days for India mentioned by Kendrew (1949). It may be pointed out that based on recent data published by the World Meteorological Organisation (WMO 1953), the average annual thunderstorm days in India works out to 37, *i.e.*, one and a half times the average mentioned by Kendrew. Kendrew's average is thus found to be too unrepresentative for India, and therefore, the assessment made by the authors on the basis of this low average is misleading. Possibly Kendrew's average of 25 thunderstorm days for India, appearing also in his earlier work published in 1938 (Kendrew 1938) refers to India including Pakistan.

Further the conclusion derived by the authors from the correlation between total rainfall and number of days of thunderstorm is curious when stated that thunderstorms are sure to be preceded or followed by rain at

Coimbatore. This conclusion is not supported by their own statistics given in Table 1 which shows large number of days of thunderstorms preceded or followed by no rain.

Moreover, the thunderstorm data they have studied comprise not only of the thunderstorms that occurred overhead at the station but also of those which occurred elsewhere and heard at the station. Therefore, finding a significant correlation between the number of days of thunderstorm that occurred anywhere and the total rainfall recorded at Coimbatore does not constitute a detailed examination, as the authors have claimed, of Geddes's statement, *viz.*, rain does not fall continuously during thunderstorms, but generally in very heavy showers. However, to students of statistics the correlation they have established may be as much interesting as the correlation between the membership of the International Machinists Union and the death rate of the State of Hyderabad (Cohen 1944). To verify Geddes's statement of the well known fact in meteorology, one should at least compare the amount of rainfall which occurred at the station during the passage of thunderstorms there, with the amount of rain that fell when no thunderstorms occurred at the station.

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## REFERENCES

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