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## **LOCATING CLOUD-TO-GROUND LIGHTNING FLASHES WITH SIMULTANEOUS TWO-STATION MEASUREMENTS**

**D.U.J. SONNADARA, A.B. WEERASEKERA, I.M.K. FERNANDO, R. LELWALA, K.P.S.C.  
JAYARATNE, T.R. ARIYARATNE**

Department of Physics, University of Colombo, Colombo 3

**S. NAMASIVAYAM**

*Electro-Technology Unit, CISIR, Colombo 7*

**K.R.A. BANDARA**

Department of Meteorology, Colombo 7

### **ABSTRACT**

The position reconstruction of the point of strike of cloud-to-ground lightning flashes in several thunderstorms recorded by two-wideband magnetic direction finding stations is presented. Lightning activity data show a clear peak around 18.00 hours, which is a characteristic feature of the Northeast monsoon thunderstorms in Sri Lanka. It is shown that the accuracy of the position reconstruction with two stations is heavily dependent on the difference in the angles measured by the stations. A technique that utilizes the measured strength of the flashes was introduced to improve the accuracy of the position reconstruction. With this technique, the point of strike of ground flashes can be localized with an accuracy of better than  $\pm 5$  km within a 100 km radius around Colombo (6.90N, 79.86E), except in the vicinity of the line joining the two stations.