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STUDY OF THE PERFORMANCE OF DIRECTION FINDING STATIONS PRIOR TO THE IMPLEMENTATION OF A LIGHTNING LOCATING SYSTEM IN SRI LANKA

I.M.K. FERNANDO, D.U.J. SONNADARA, 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

Two direction finding stations placed in close proximity are used to monitor lightning ground flashes occurred in several thunderstorms during the monsoon season (April to July 1998). From the data collected by both stations, about 90% of the coincidence signal recordings selected on the criteria based on the time of occurrence and the multiplicity are found to be in good agreement with respect to amplitude and direction. It is shown that the angular accuracy of $\pm 0.5^\circ$ and a signal resolution of 1.5% can be achieved only after a careful study since the data are highly influenced by site errors. Percentage of positive ground flashes was found to be in the range of 2% - 20%.