Proceedings of the Technical Session of Institute of Physics, Sri Lanka 14 (1998) 12-19

Variation of Rainfall of Sri Lanka in Relation to El Ninio

W. L. Sumathipala and N. D. P. Punyadeva
Department of Physics, The Open University of Sri Lanka, Nawala, Nugegoda

Fluctuation of rainfall over Sri Lanka in relation to El Nino events is examined by using monthly rainfall composite during El Nino year and normal year. Rainfalls of 12 principal meteorological stations for a period of 97 years are used and during that period there were 23 El Ninos. Percentage departure for every month is plotted using an index computed for each station. It is obvious that during an EI Nino there is a reduction in rainfall over the northern part of the island. The most affected region is the north and east of the country mainly because over these regions strong negative percentages are found during the North East Monsoon (NEM0. During February the northeast region received greater than 60% below normal rainfall. As a whole even the First Inter Monsoon (FIM) recorded less than normal rainfall. However, during the Second Inter Monsoon (SIM) months of October and November rainfalls were above normal. It is interesting to note that the two months which start the two monsoons namely May and December recorded above normal rainfall. However the regions of the country where above rainfall is received are unusual. During may/December central and northern/southwestern part receives more rain.