E1-01 : EL-NINO/SOUTHERN OSCILLATION (ENSO) EVENTS AND THE RAINFALL IN THE DISTRICTS OF COLOMBO, NUWARA ELIYA AND BADULLA

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The purpose of this study was to investigate the relationship between the Southern Oscillation Index (SOI) during ENSO events (Warm episodes) and the rainfall during three different seasons in the Colombo, Nuwara Eliya and Badulla districts, and discuss the forecasting implications.

23 ENSO events during the period 1884 - 1987 were considered. The correlation coefficients between the mean SOI for March and the rainfall (a) during the Southwest Monsoon (SWM) of the same year (b) during the Second Intermonsoon (SIM) of the same year and (c) during the First Intermonsoon (FIM) of the following year, as well as the probabilities of occurrence of above/below normal rainfalls were calculated.

The results reveal a tendency for (i) above normal SWM rainfall in the Colombo district with a probability of occurrence of 0.61 and (ii) below normal rainfall in the Nuwara Eliya and Badulla districts with probabilities of 0.48 and 0.43 respectively.

In the case of SIM, tendencies for below normal rainfall are indicated in all 3 districts, the probabilities of occurrence being 0.65 (Colombo), 0.57 (Nuwara Eliya) and 0.57 (Badulla). There is however, a tendency for above normal FIM rainfall during the following year in all 3 districts with probabilities of occurrence of 0.61 (Colombo), 0.57 (Nuwara Eliya) and 0.61 (Badulla).