

RAINFALL CHARACTERISTICS OVER THE WESTERN
PROVINCE OF SRI LANKA

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Monthly rainfall data during the 50 year period 1931-1980 of nine selected stations in the Western Province of the island were analysed.

It was found that the Southwest Monsoon (May - September) and Northeast Monsoon (December - February) rainfall contributed about 45% and 14% respectively to the mean annual rainfall over this region.

The contributions from the first intermonsoon (March - April) and second intermonsoon (October - November) rainfall are about 16% and 25% respectively. Southwest Monsoon rainfall was less variable (CV = 21%) than the Northeast Monsoon rainfall (CV = 35%).

A correlation analysis revealed that the Southwest Monsoon rainfall and Northeast Monsoon rainfall for the same year was negatively correlated ($r = -0.20$) whereas the Northeast Monsoon rainfall for the current year was positively correlated ($r = +0.26$) with the Southwest Monsoon rainfall of the following year. A Chi-squared test of dependance, however, showed that there is no evidence of any significant association between these two rainfall series.

It was also found that the first intermonsoon rainfall was negatively correlated ($r = -0.23$) with the second intermonsoon rainfall of the same year. A Chi-squared test of dependance in this case indicated that the rainfalls in the two intermonsoons are not independent of each other.

References

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