

**Rainfall fluctuation in wet zone and dry zone of Sri Lanka during the time period of 1900 to 1996**

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The Wet Zone and Dry Zone rainfall stations exhibit different types of fluctuations within the period from 1900 to 1996. In the Wet Zone rainfall stations, six-month oscillation is prominent. In the Dry Zone 12-month oscillation is prominent. It was found the rainfall fluctuation in 90 month, 150 month and 390-month oscillations are significant in Colombo. The Wet Zone and Dry Zone rainfall stations indicate 17-19 month oscillation has a high power density, which arises in every station. The periodic cycles of 36-48 months is clearly observed in the Wet Zone and Dry Zone rainfall stations of Sri Lanka. Spectral analysis clearly indicates an existence of five-year cycle and ten year of rainfall fluctuation in the Dry Zone and Wet zone for the period from 1900 to 1996. It is found that, in the Dry Zone there was a decreasing trend in rainfall during the period of 1918 to 1952 (34 years) and sharp decreasing trend occurred during 1963-1978. In the Wet Zone decreasing trend in rainfall from 1928 to 1961(33 years) was slightly high when compared with the decreasing trend in Dry Zone rainfall. It is found that there is a decreasing trend in rainfall in the Wet Zone from 1961 up to 1985.