E1-02: El Nino event of 1997-1998

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This paper discusses the synoptic features and the distribution of rainfall and temperature over Sri Lanka during the 4-month period January to April 1998.

During the period 1st to 9th January 1998, with the exception of January 5th and 6th, the rainfall received over most parts of the country was much more than the average (expected) rainfall during this period. During the period 10th January to 30th April 1998, most parts of the dry zone received less than 20% of the expected rainfall, while most parts of the intermediate zone received less than

normal year. High convective activity occurs over the central Indian ocean in the Southern Hemisphere. In May, the high convection area gradually moves in the North-East direction towards the Northern Hemisphere during the El-Nino year. Convective activity increases over the Indian subcontinent and maritime continent from May to August and low convective activity occurs over the Arabian sea and Northern Australia during the El-Nino year. During a normal year, elongated narrow band of low convective activity forms in the north-south direction in the western Indian ocean. In November, it gradually increases in the same location. September to December high convective areas begin to propagate towards the maritime continent and low convective area spreads from the Arabian sea in the northwest direction.

Fluctuation of Northern Hemisphere convective activity is significant as compared to Southern Hemisphere during the El-Nino year.