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Since 1990, the Ceylon Electricity Board has been collecting wind data to assess wind energy potential, principally in Southern Sri Lanka. Based on these measurements, we characterize the wind behaviour at Sevanagala which is located 30 km interior from the Southern coast and compare it with that at the nearby coastal location of Hambantota. The hourly average and maximum wind speed was obtained at heights of 10, 15 and 20 m from January to December 1991.

The wind direction was available from January to April. Wind speeds are high between 10 and 20 hours with the maximum at 15 hours. The wind speeds in July is 50% higher than during other months. The peak wind speeds are around 50% higher than the average wind speeds. The wind direction shows an abrupt increase between 9 and 10 hours providing evidence for the onset of the sea breeze. The wind in January is westerly at night and easterly during the day. The wind direction in April is westerly during the night and southerly during the day. In January, the wind is predominantly from the North-North-East. In April, the wind is from all directions in the South-West quadrant. The wind speeds in Sevanagala and Hambantota have a correlation of 0.3 during the night and 0.6 from 10.00 to 14.00h. The magnitudes terrain has not significantly decelerated the winds at Sevanagala. Overall, the seasonal variation of wind velocities at Sevanagala is as expected in a monsoon regime.