Heights of Cb clouds around Chhatrapati Shivaji International (C.S.I.) airport, Mumbai - Diurnal and seasonal variations

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ABSTRACT. Based on radar data collected at the Meteorological Office, Chhatrapati Shivaji International (C.S.I.) airport, Mumbai during the years 1990-99, a study has been made on cumulonimbus (Cb) clouds with their height of top 6 km or more over an area having a radius of 200 km around the airport. The seasonal, monthly and hourly distribution of the total number of Cb cells and their heights, number of days with Cb, Cb cells that reached tropopause height, the preferred places of formation of large Cb clouds and their movement have been examined and discussed. The synoptic situation(s) responsible for the development of Cb clouds around C.S.I. airport, Mumbai have also been identified and discussed.

Key words – Cumulonimbus, Frequency distribution, Monsoon, Tropopause, Synoptic situation, Tropospheric level.