

OBSERVED CHARACTERISTICS OF 4 DAY AND 15 DAY WAVE MODES DURING AUTUMN EQUINOX OVER INDIA

Surendra K. Dhaka [1], Preveen Kumar D. [2], O. P. Nagpal [2], Mamoru Yamamoto [1], Shoichiro Fukao [1]

[1] RASC, Kyoto Univ., [2] Department of Physics and Astrophysics, University of Delhi

Cross spectral method using FFT applied to daily radiosonde wind data, collected at ten stations over India, to investigate the direction and phase speed of dominant wave mode of synoptic scale at different altitude of troposphere and lower stratosphere. Prominent period of 4 day and 15 day have been identified showing, later one, westward direction of propagation of phase speed 10-15 m/s preferably in upper troposphere, where as the direction reversed to eastward below 10 km. The rate of equatorward shift of 15 day wave was found to be 5 degree/day.