

Long term statistical Analysis of meteor characteristics using a meteor radar

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Apart from providing valuable information on the wind structure in the mesospheric lower thermospheric region, meteor radars also yield round the clock data on the meteor characteristics which could be useful in the meteor astronomy. The SKiYMET meteor radar at low latitude station, Trivandrum (8.5°N, 77°E) is all sky interferometric radar operating at VHF frequency of 35.25 MHz with a peak power of 40 kW. This radar provides information on the meteor fluxes entrance speeds, radial drift speeds as well as decay times. The meteors enter the atmosphere can also be determined. in the present study, using more than ten years of observations from meteor radar statistical analysis on the meteors characteristics such as decay time, peak occurrence height, inter and intra annual variations in the meteor counts are studied. The detail of the study will be presented in detail.