

Accuracy of the bistatic meteor radar for wind observations

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We present a method and its accuracy to measure wind velocity at about 90km high by bistatic CW meteor radar with Pseudo-Noise(PN) Modulation. This radar can reduce the peak power compared with pulse radar, which is generally using meteor wind observation. And the power spectrum density is spreaded with PN modulation. For these reasons this radar can reduce interferences with other communication devices. We show the system design, evaluations of the accuracy of estimated wind velocity and height by computational simulation, and the meteor echo receiving experiment.