

Meteor echo observations by a large atmospheric radar

NAKAMURA, Takuji^{1*}, TSUTSUMI, Masaki¹

¹National Institute of Polar Research

Meteor scatter echo of VHF radio wave from 80 - 120 km altitude has been used over 60 - 70 years for wind velocity measurement for atmospheric dynamics studies and meteor flux/orbit studies for interplanetary dust studies. More recently, high power large aperture (HPLA) radars for atmospheric studies, i.e., large atmospheric radars have extensively been used to detect more faint meteor echoes, and precision of measurement, for both atmospheric and meteor science studies, has been improved significantly. In this paper, we introduce the progress of the radar meteor echo observation, and discusses possible application to the future equatorial radar system.

Keywords: radar, meteor, equator, mesosphere, atmospheric wave, atmospheric radar