Gravity wave measurements using spaced antenna and meteor radar techniques: A review

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The two most widely used techniques to study the dynamics of the mesosphere/lower thermosphere (~60-100 km) are the spaced antenna method using radars operating in the 2-3 MHz band and all-sky meteor systems operating in the lower VHF range (~30-50 MHz). Each technique has advantages and disadvantages for measuring important gravity wave parameters such as wavelength, kinetic energy fluxes. Here we review the strengths and weaknesses of each technique, including the impact of diurnal variations of ionospheric scatter for the MF radar method and meteor rates for the meteor technique.