

ENVIRONMENTAL EFFECTS ON DIFFERENT TYPES OF RADOMES

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Radomes are important in various domains of engineering and science, as it offers protection to the electronic devices used for different types of communication, from adverse environmental factors. Considering the extended period of usage, exposure to adverse weather conditions has significant impact on radomes. This paper reviews the types of radomes, the effect of various environmental factors on them and the mitigation strategies for these effects. In addition, the paper also discusses the maintenance of different types of radomes to protect antenna and other components. Further, it provides an overview of two important effects viz., rainfall and lightning, on ground and airborne radomes, respectively. Results of simulations studies are also presented.

Keywords: *Radome, environmental effect, mitigation, rainfall, lightning, current flow, antenna gain*
