



The detection of sleet using dual-frequency microwave links

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Sleet results results in attenuation of microwave links that is out of proportion to the attenuation that would have been caused by a corresponding amount of rainfall. For well-chosen pairs of frequencies, excellent estimates of path-averaged rainfall are generally obtained. However, in the presence of sleet these estimates may be considerably inflated. The question therefore arises as to whether it is possible to distinguish between dual-frequency estimates of heavy rainfall that are genuine and those that arise from sleet. The answer is that one can, and that the solution relies on the single-frequency rainfall estimates.