



Studying rain rate from space, ground and underwater observations: Present and future

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The distribution of rain rates is of great interest in many fields. Probability distribution functions (pdf) of rain rate can now be obtained from spaceborne radar observations. Effort to evaluate these pdfs using ground observations will be presented. We will discuss opportunities and challenges to determine and reduce the uncertainties in space-based and ground-based radar estimates of rain rate distributions during GPM era. We will conclude by presenting the potential of studying rain rate properties using underwater sound measurements.