Atmos. Meas. Tech. Discuss., 7, C1331–C1332, 2014
www.atmos-meas-tech-discuss.net/7/C1331/2014/

Atmospheric Measurement Techniques Discussions

Interactive comment on "New algorithm for integration between wireless microwave sensor network and radar for improved rainfall measurement and mapping" *by* Y. Liberman et al.

Y. Liberman et al.

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Dear Liat,
Thank you very much for your comments.

Regarding your question, as indicated in the discussion paper on **Page - 8, Line - 21**: "each rain gauge provides ground truth (accumulated) rain measurements in mm, which is equivalent to water volume per m^2 ". This means that each rain gauge provides rain measures only in specific coordinates in space, which of course implies that their spatial resolution is very limited (this fact is also indicated in text on **Page - 3, Line**

- 6). Another way to look at it is to model each rain gauge as some sort of $2d$ Dirac delta function (or in the discrete form - the Kronecker delta function), which is defined as follows:

$$\delta(x - Lon, y - Lat) = \begin{cases} 1 \ , & x \triangleq Lon \ \& \ y \triangleq Lat \\ 0 \ , & O.W. \end{cases}$$

Where Lat, Lon indicates the Latitude, Longitude rain gauge coordinate in space.

Sincerely,

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 4481, 2014.