



Supplement of

Measuring rainfall using microwave links: the influence of temporal sampling

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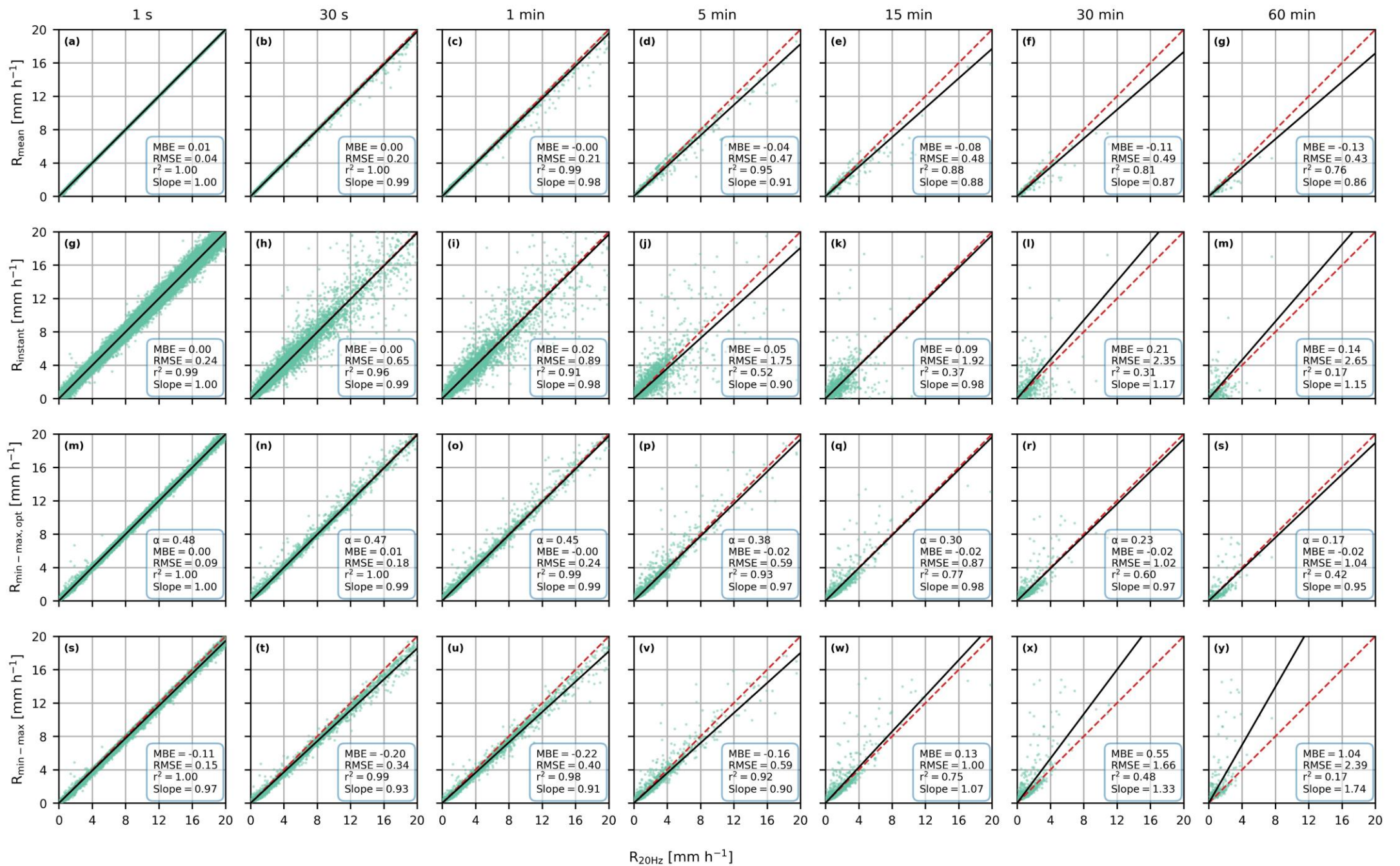


Figure S1. Comparison of rainfall intensities derived for the various time intervals (columns) and methods (rows) versus time-averaged rainfall intensities computed with the 20 Hz data for the Nokia Flexihopper microwave link. Optimization of α is similar as in Overeem et al. (2011). The red dashed line is the 1:1 line and the black line represents the linear regression line.

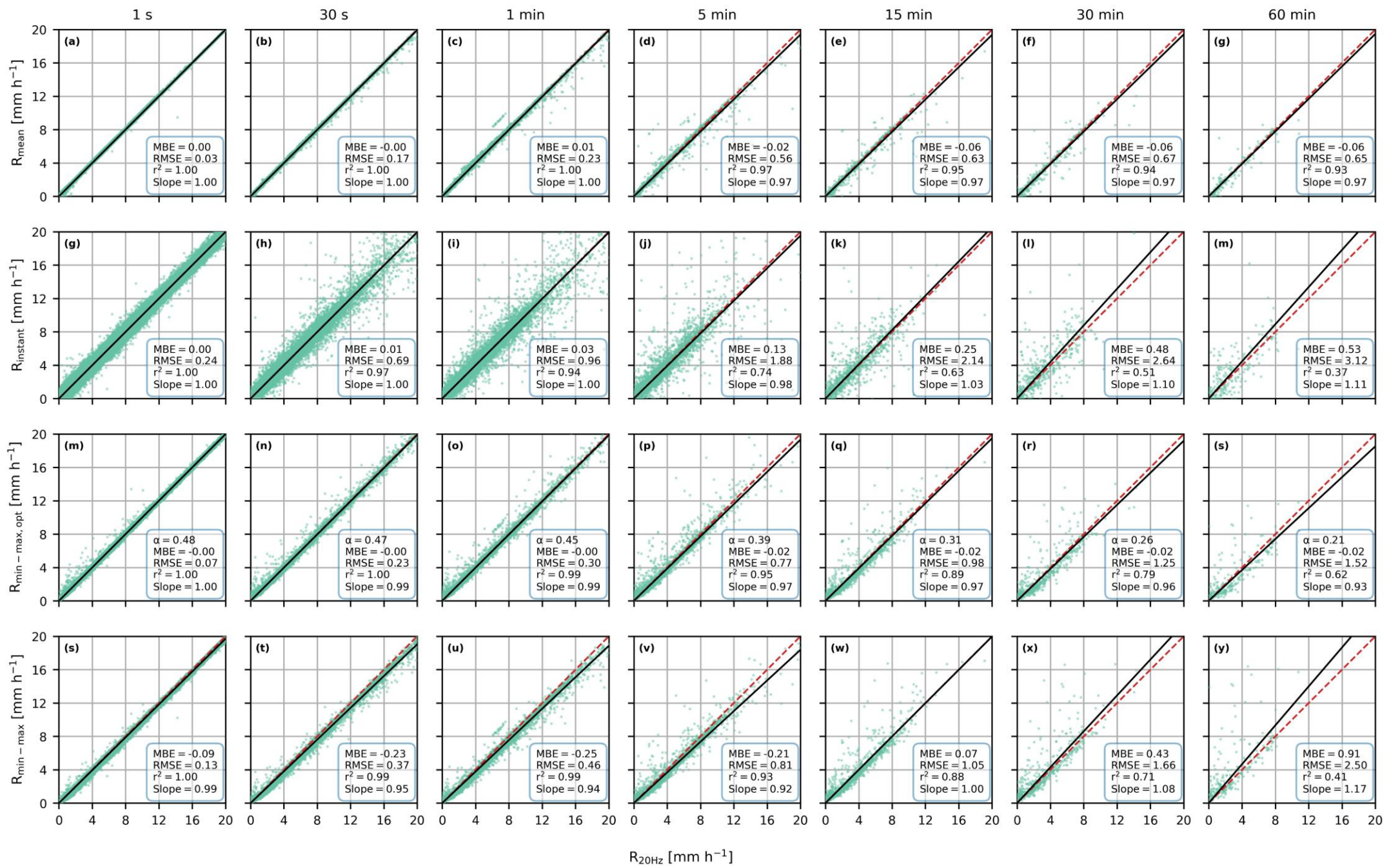


Figure S2. Comparison of rainfall intensities derived for the various time intervals (columns) and methods (rows) versus time-averaged rainfall intensities computed with the 20 Hz data for the RAL 38 GHz horizontally polarized microwave link. Optimization of α is similar as in Overeem et al. (2011). The red dashed line is the 1:1 line and the black line represents the linear regression line.

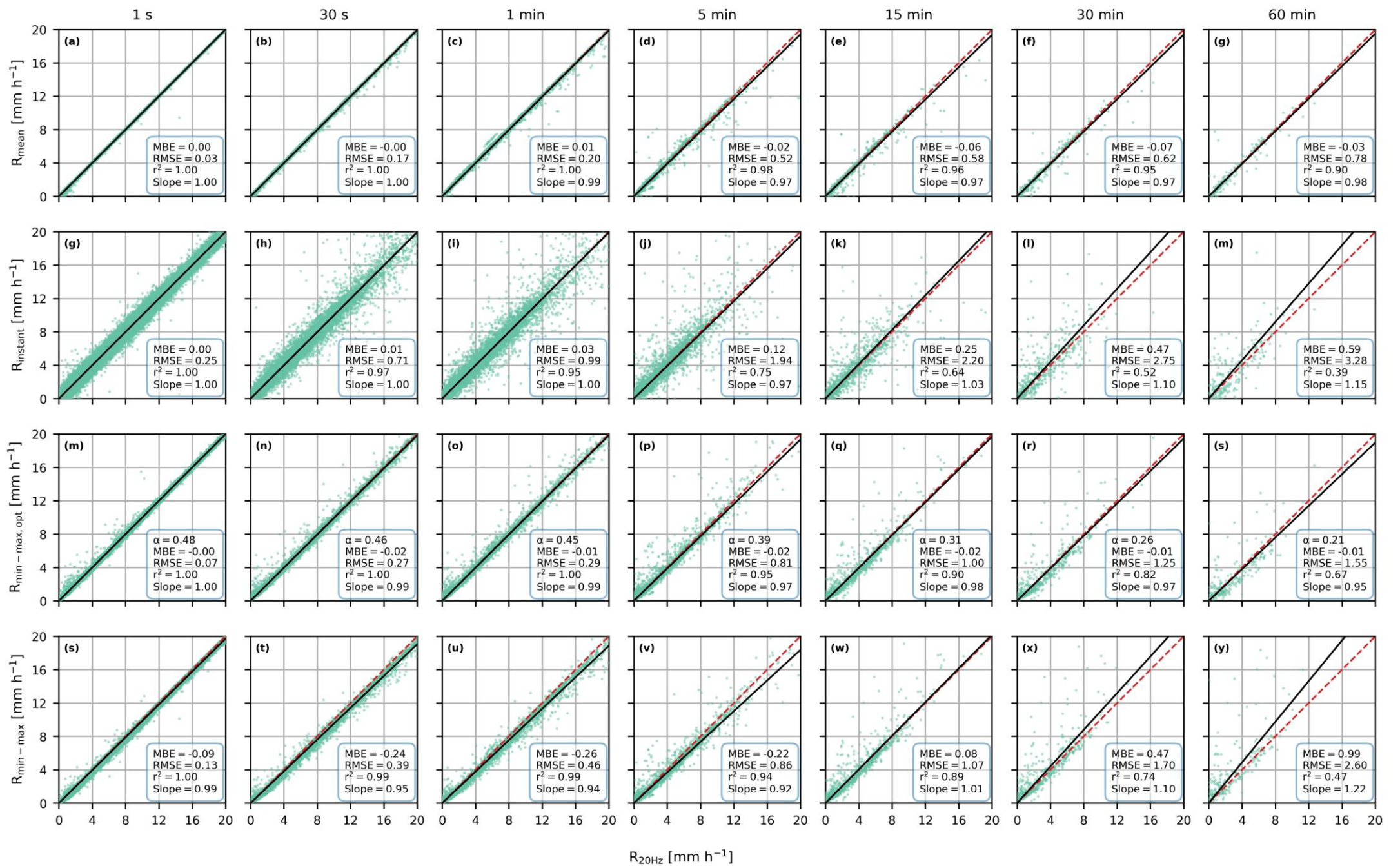


Figure S3. Comparison of rainfall intensities derived for the various time intervals (columns) and methods (rows) versus time-averaged rainfall intensities computed with the 20 Hz data for the RAL 38 GHz vertically polarized microwave link. Optimization of α is similar as in Overeem et al. (2011). The red dashed line is the 1:1 line and the black line represents the linear regression line.

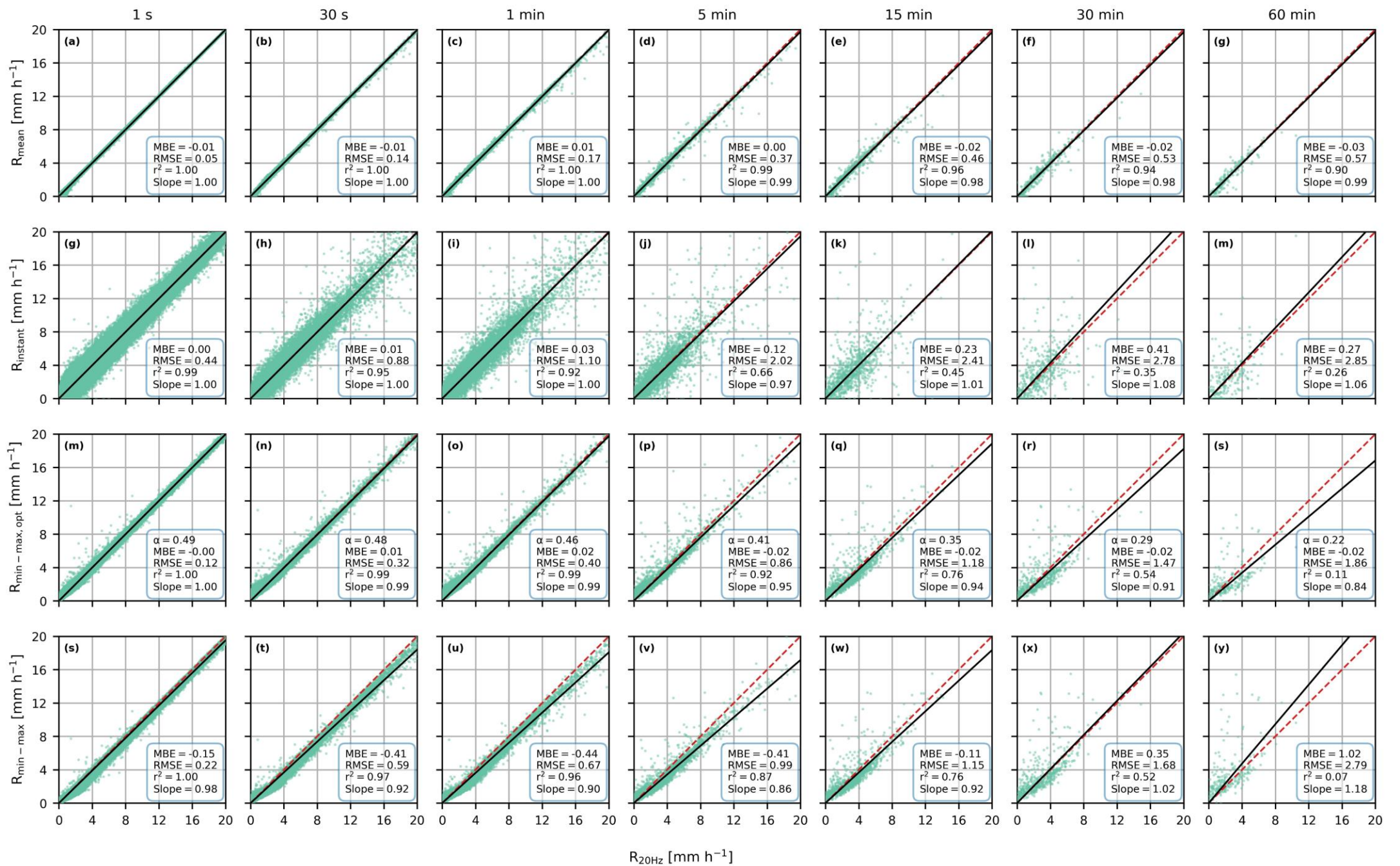


Figure S4. Comparison of rainfall intensities derived for the various time intervals (columns) and methods (rows) versus time-averaged rainfall intensities computed with the 20 Hz data for the RAL 26 GHz horizontally polarized microwave link. Optimization of α is similar as in Overeem et al. (2011). The red dashed line is the 1:1 line and the black line represents the linear regression line.

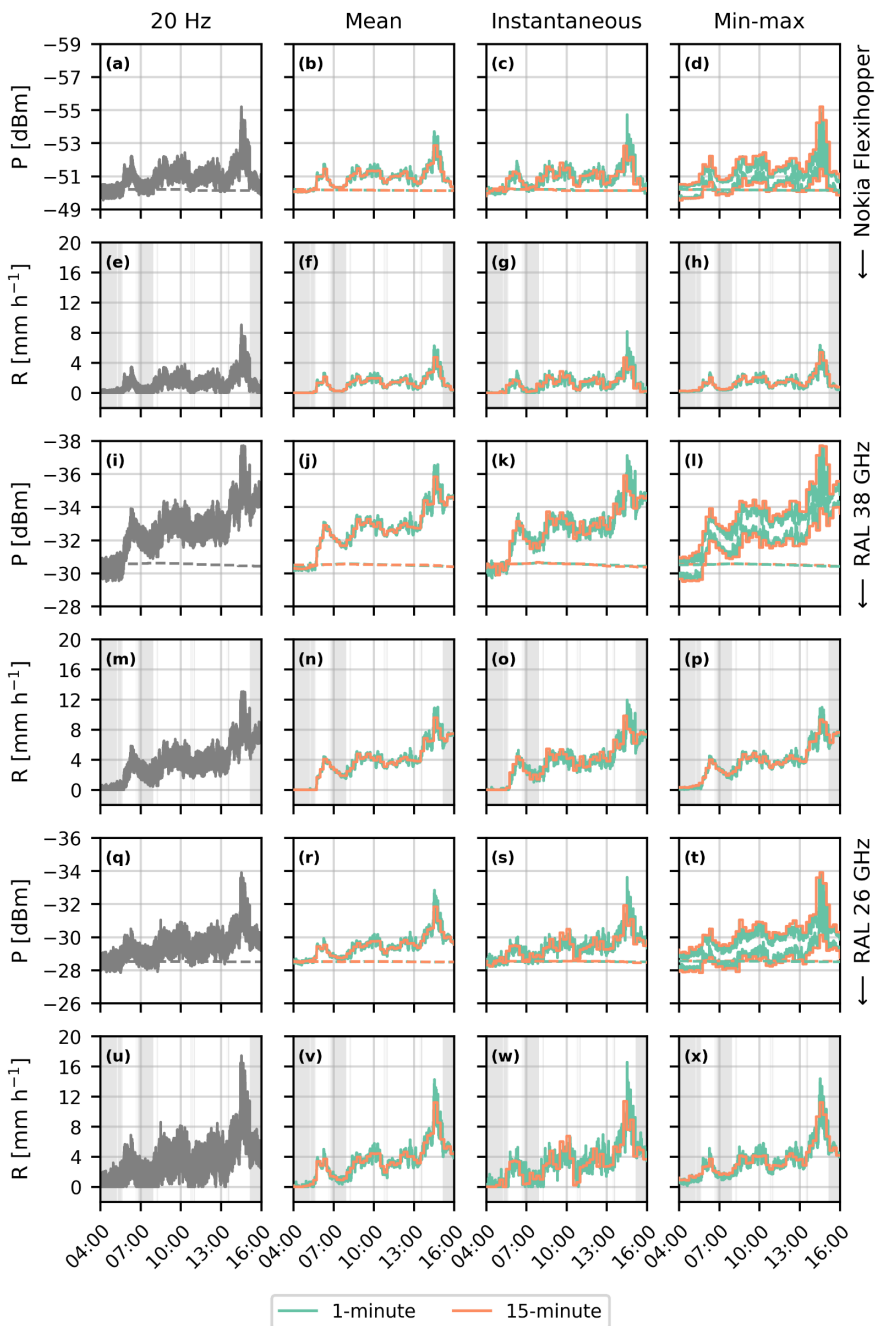


Figure S5. Comparison of received (solid) and baseline (dashed) power levels (a-d, i-l, q-t) and retrieved rainfall intensities (e-h, m-p, u-x) during a high-intensity precipitation event on 24 November 2015 obtained with the Nokia (a-h), RAL 38 GHz (i-p) and RAL 26 GHz (q-x) microwave links for all sampled variables and the 1-minute and 15-minute time intervals. Grey areas indicate dry periods based on disdrometer data.

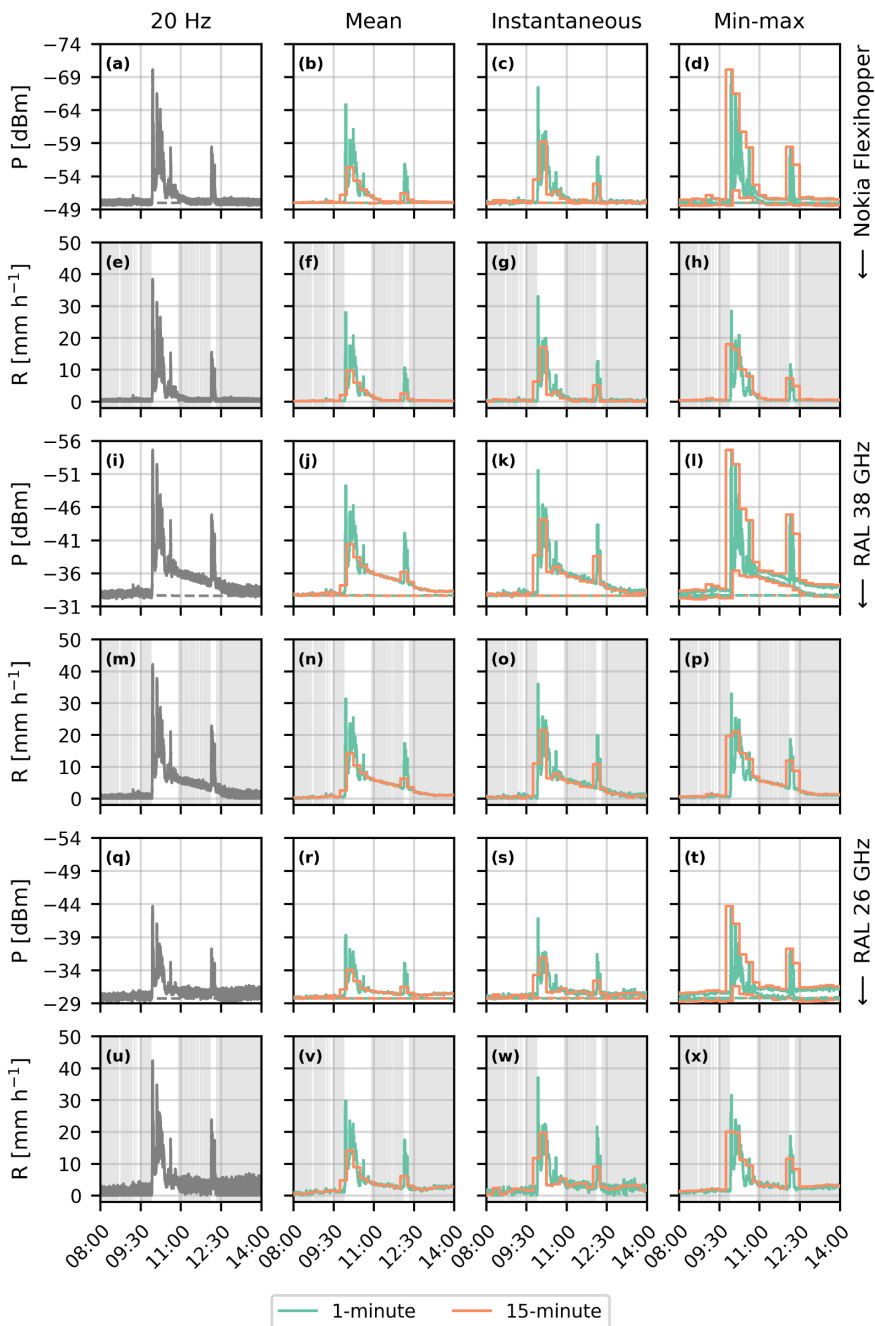


Figure S6. Comparison of received (solid) and baseline (dashed) power levels (a-d, i-l, q-t) and retrieved rainfall intensities (e-h, m-p, u-x) during a high-intensity precipitation event on 21 June 2015 obtained with the Nokia (a-h), RAL 38 GHz (i-p) and RAL 26 GHz (q-x) microwave links for all sampled variables and the 1-minute and 15-minute time intervals. Grey areas indicate dry periods based on disdrometer data.