

Merging weather radar fields with data from commercial microwave links using mergeplg

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Quantitative precipitation estimates are important for monitoring the water balance. Consequently, there exists a wide range of rainfall measurement methods. Weather radar has good spatial coverage, but the estimates can be biased. Ground observations, like rain gauges and commercial microwave links (CMLs), provide more accurate estimates, but have less good spatial coverage. Adjusting the weather radar field to fit the ground observations (merging) can provide more accurate rainfall precipitation fields.

Within OPENSENSE we have developed a python package, *mergeplg*, that implements different methods for merging weather radar fields to ground observations. In this work we provide results and insights from merging weather radar data to ground observations, with a focus on CML data, using two open access datasets OpenMRG and OpenRainER. In general, CMLs improve the raw radar estimates for both datasets.

Are you an Early Career Scientist ?

Yes

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