Value Adding the ARM Precipitation Radars

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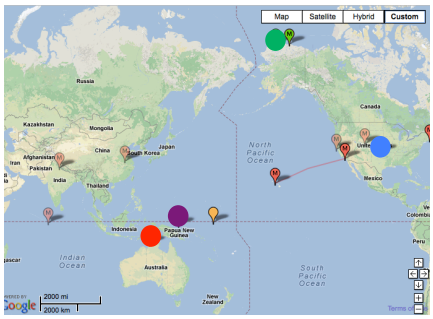
The ARM Radar products team

The ARM radar products team is responsible for implementing *best practice* algorithms to produce quality controlled and corrected moments as well as geophysical retrievals from the remotely sensed information the scanning X and C band radars provide.

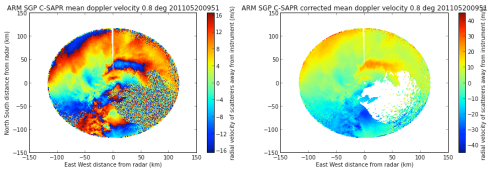
X-SAPR

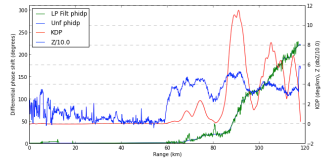
C-SAPR



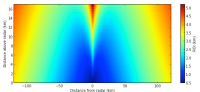
Released to evaluation

Corrected Moments In Antenna Coordinates

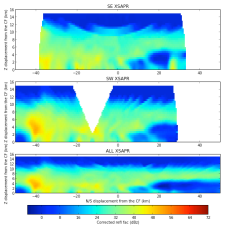




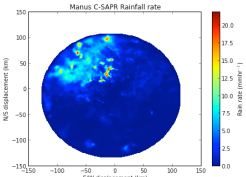
Moments Mapped to A Cartesian Grid

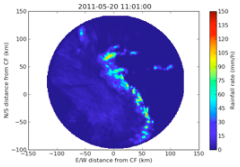


$$r_i = \sqrt{x_i^2 + y_i^2}\tan\left(\frac{\theta 1.5\sigma}{180.0}\right) + \frac{1000}{z_{max}} z_i \left(\frac{\theta}{45}\right)^2 + 500$$



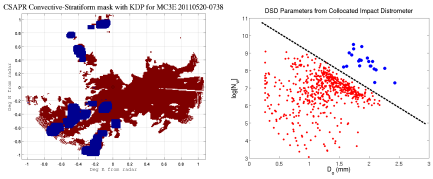
Quantitative Precipitation Estimates





In active development

Convective/Stratiform Masking

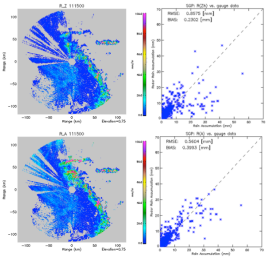


Py-ART

Fork me on GitHub

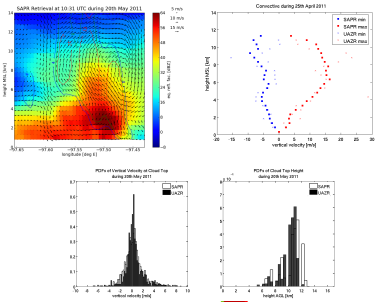
https://github.com/ARM-DOE/pyart

Ensemble QPE

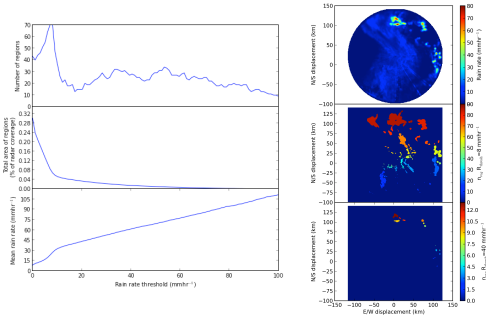


Advanced products

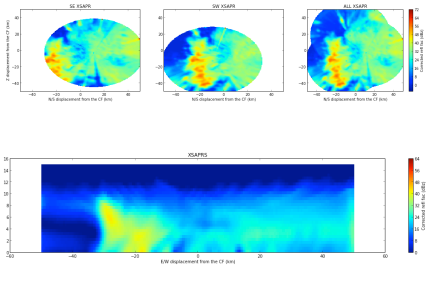
Convective Vertical Velocities



Morphological analyses



Network Map



archive.arm.gov and radar.arm.gov

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