

KABR Ku-adjusted DSD vs. DPR 2ADPR/NS/V05A $\geq 50\%$ bins above threshold
 Orbit: 22815 -- GR Start Time: 2018-03-05 04:54:26

DPR 2ADPR-GR Reflectivity difference statistics (dBZ) - GR Site: KABR

Orbit: 22815 Version: V05A Swath Type: NS

DPR time = 2018-03-05 04:56:33 GR start time = 2018-03-05 04:54:26

Required percent of above-threshold DPR and GR bins in matched volumes >= 50%

Thresholding by reflectivity cutoffs only.

GR reflectivity has S-to-Ku frequency adjustments applied.

Mean Reflectivity Statistics grouped by fixed height levels (km):

| Vert. Layer | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|-------------|---------------|--------|------------|--------|------------|--------|--------------------|---------|-------------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxZ | GRMaxZ |
| 1.0 | 1.960 | 41 | 1.455 | 21 | 2.511 | 20 | 85.852 | 40.649 | 36.659 |
| 2.0 | 2.037 | 41 | 1.852 | 20 | 2.218 | 21 | 86.728 | 38.084 | 34.192 @ BB |
| 3.0 | 2.090 | 24 | 1.921 | 11 | 2.236 | 13 | 89.737 | 33.016 | 30.339 @ BB |
| 4.0 | 2.642 | 10 | 2.185 | 3 | 2.861 | 7 | 85.516 | 29.665 | 26.391 |
| 5.0 | 3.051 | 5 | 1.572 | 1 | 3.440 | 4 | 94.269 | 27.957 | 24.461 |

Mean Reflectivity Statistics grouped by proximity to Bright Band:

| Surface type | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|--------------|---------------|--------|------------|--------|------------|--------|--------------------|---------|--------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxZ | GRMaxZ |
| Below | 2.495 | 11 | 3.348 | 4 | 2.020 | 7 | 79.149 | 37.733 | 35.143 |

GR Dm field is being directly compared to DPR Dm.

Mean Drop Diameter (Dm, in mm) Statistics grouped by fixed height levels (km):

| Vert. Layer | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|-------------|---------------|--------|------------|--------|------------|--------|--------------------|----------|---------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxDm | GRMaxDm |
| 1.0 | 0.364 | 11 | 0.278 | 4 | 0.412 | 7 | 79.149 | 2.372 | 1.685 |

No above-threshold points at height 2.000

No above-threshold points at height 3.000

No above-threshold points at height 4.000

No above-threshold points at height 5.000

Mean Drop Diameter (Dm, in mm) Statistics grouped by proximity to Bright Band:

| Surface type | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|--------------|---------------|--------|------------|--------|------------|--------|--------------------|----------|---------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxDm | GRMaxDm |
| Below | 0.364 | 11 | 0.278 | 4 | 0.412 | 7 | 79.149 | 2.372 | 1.685 |

GR NW field is being directly compared to DPR Nw.

Mean Normalized Intercept Parameter (log10(Nw)) Statistics grouped by fixed height levels (km):

| Vert. Layer | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|-------------|---------------|--------|------------|--------|------------|--------|--------------------|----------|---------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxNw | GRMaxNw |
| 1.0 | -0.122 | 11 | -0.026 | 4 | -0.175 | 7 | 79.149 | 4.113 | 3.493 |

No above-threshold points at height 2.000

No above-threshold points at height 3.000

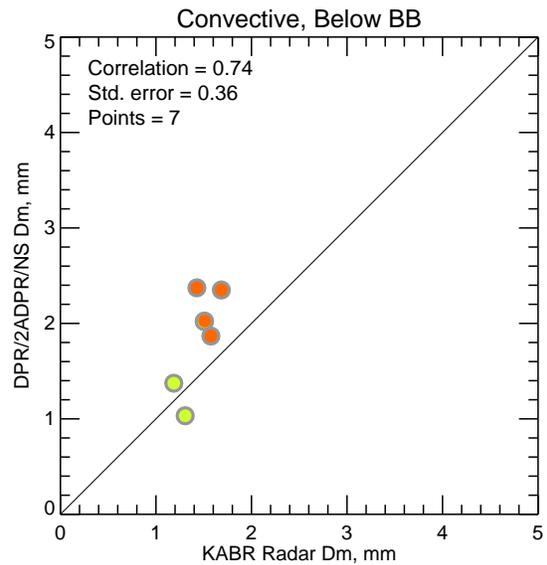
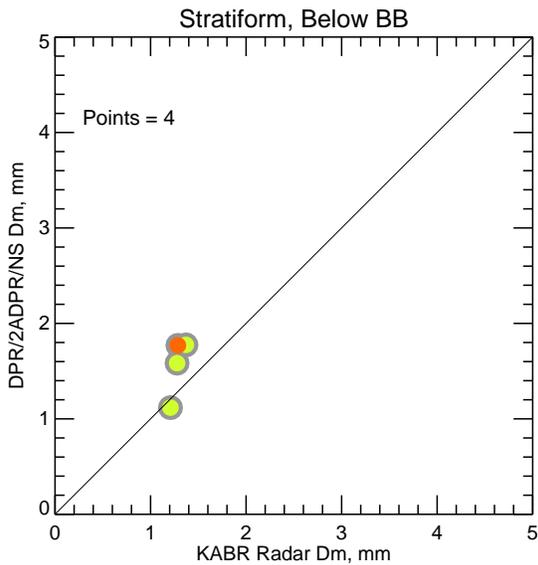
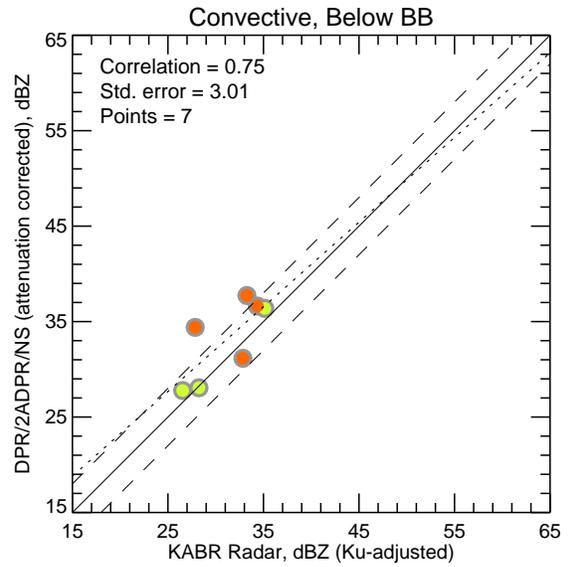
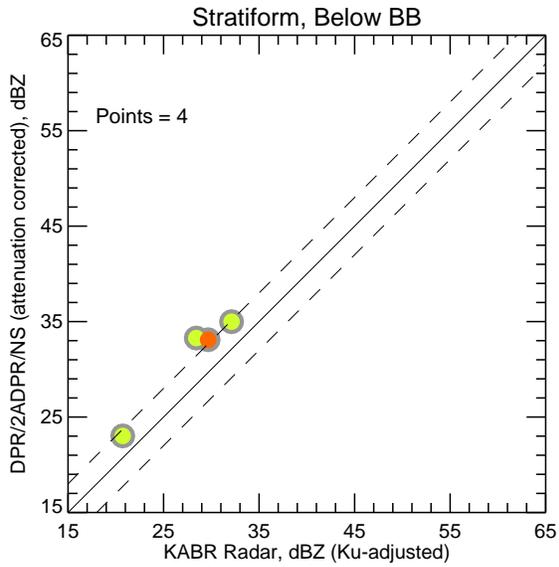
No above-threshold points at height 4.000

No above-threshold points at height 5.000

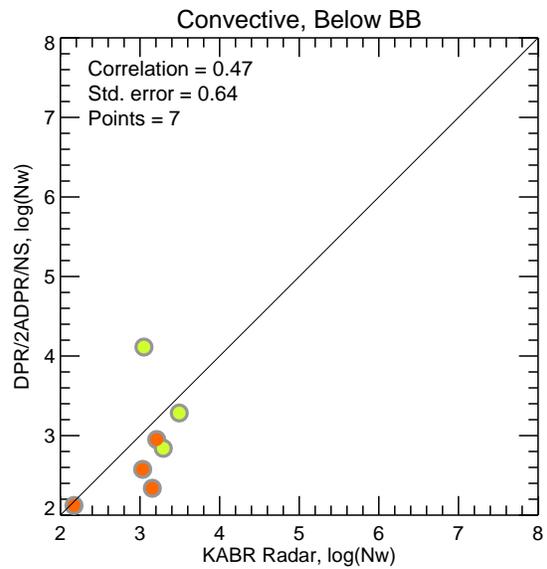
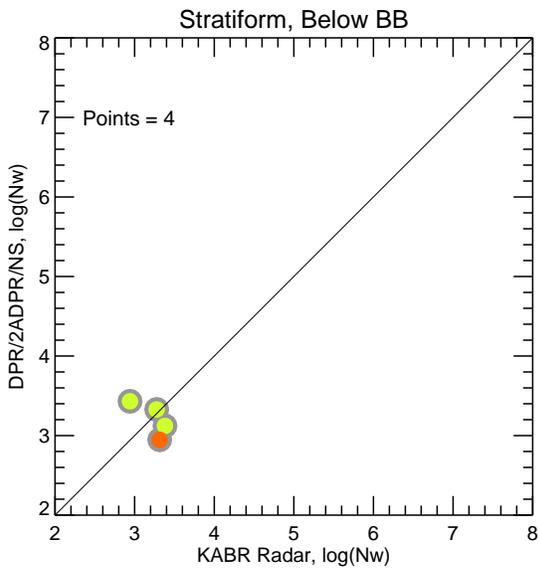
Mean Normalized Intercept Parameter (log10(Nw)) Statistics grouped by proximity to Bright Band:

| Surface type | Any Rain Type | | Stratiform | | Convective | | Dataset Statistics | | |
|--------------|---------------|--------|------------|--------|------------|--------|--------------------|----------|---------|
| | DPR-GR | NumPts | DPR-GR | NumPts | DPR-GR | NumPts | AvgDist | DPRMaxNw | GRMaxNw |
| Below | -0.122 | 11 | -0.026 | 4 | -0.175 | 7 | 79.149 | 4.113 | 3.493 |

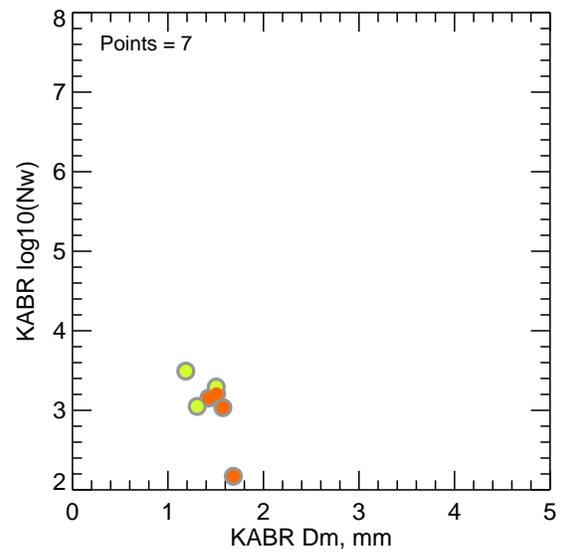
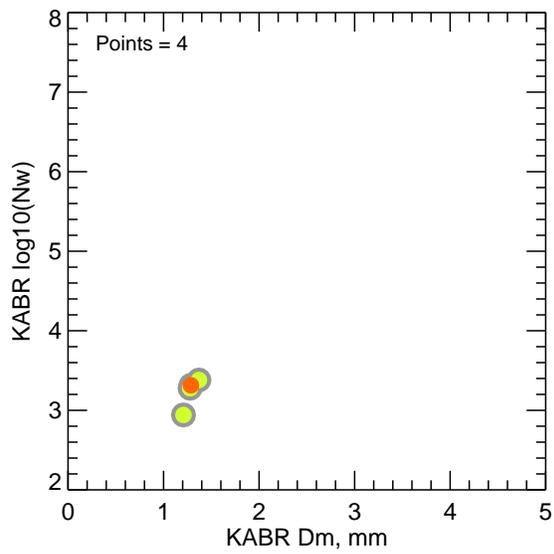
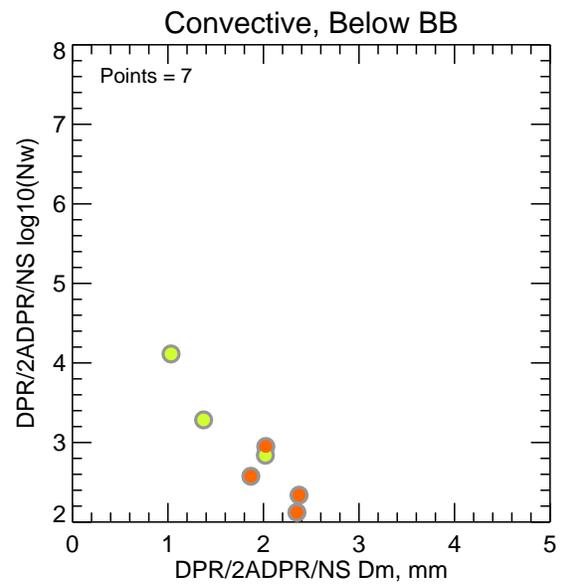
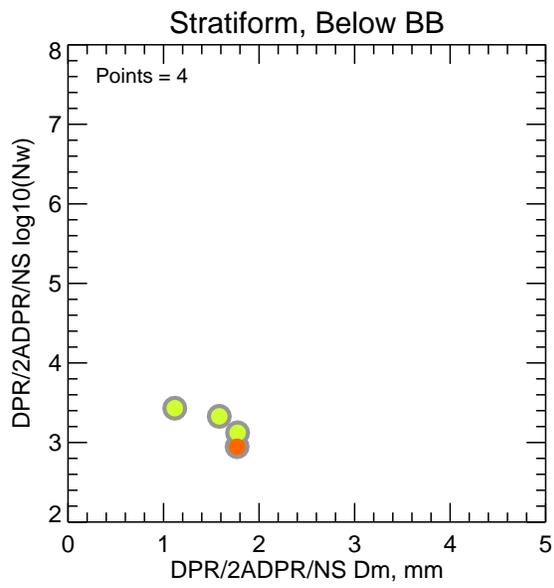
KABR Ku-adjusted DSD vs. DPR 2ADPR/NS/V05A >=50% bins above threshold



● 1.00 km
● 0.75 km

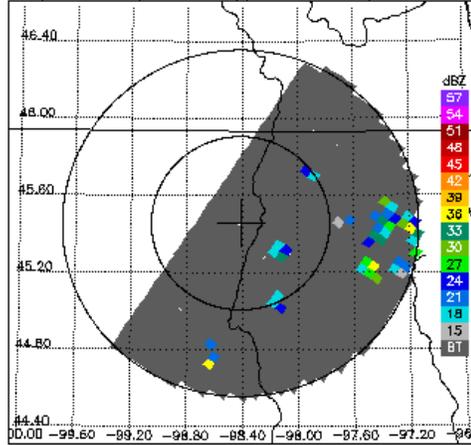


Dm vs. $\log_{10}(N_w)$ for DPR 2ADPR/NS/V05A and KABR $\geq 50\%$ bins above threshold

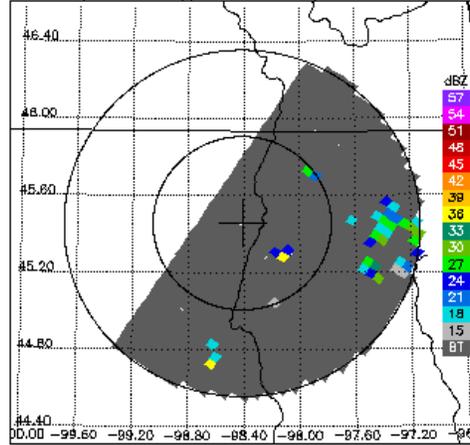


● 1.00 km
● 0.75 km

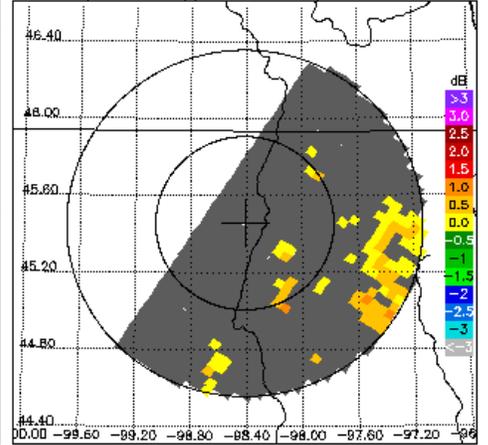
DPR/2ADPR CZ, 0.5° sweep, all valid samples



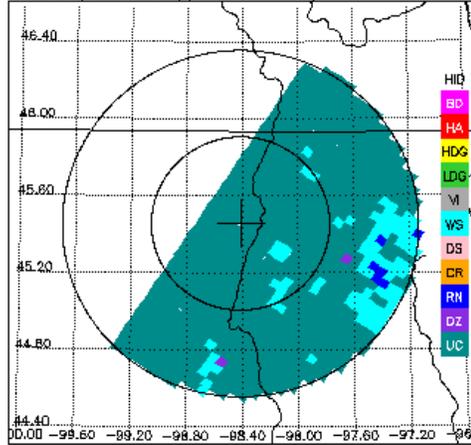
KABR CZ, 0.5° sweep, all valid samples



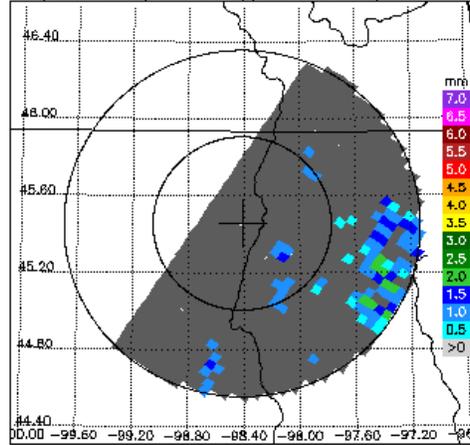
KABR DR, 0.5° sweep, all valid samples



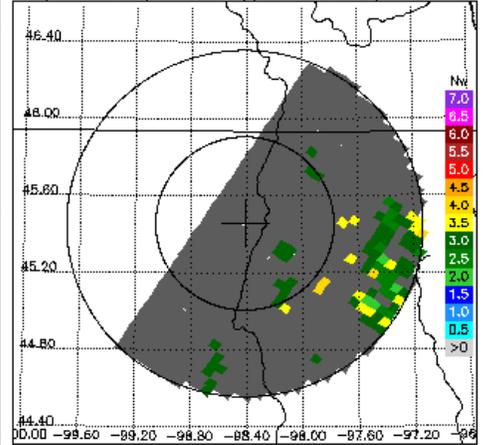
KABR FH, 0.5° sweep, all valid samples



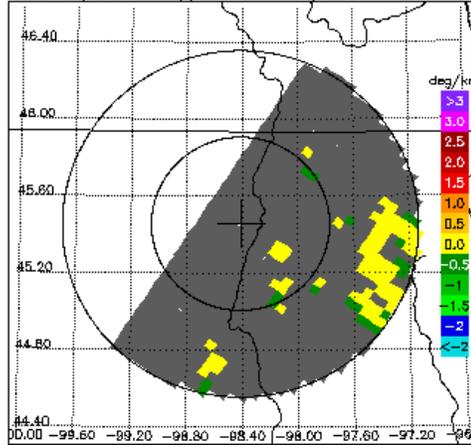
DPR/2ADPR Dm, 0.5° sweep, all valid samples



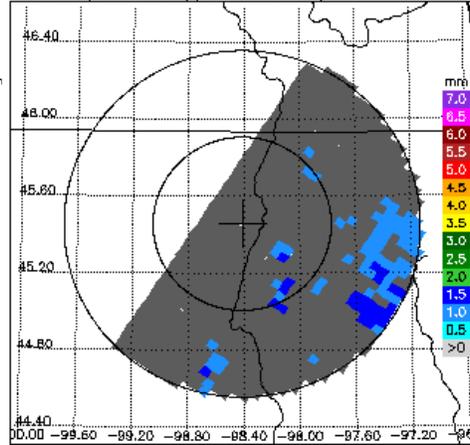
DPR/2ADPR NW, 0.5° sweep, all valid samples



KABR KD, 0.5° sweep, all valid samples



KABR Dm, 0.5° sweep, all valid samples



KABR NW, 0.5° sweep, all valid samples

