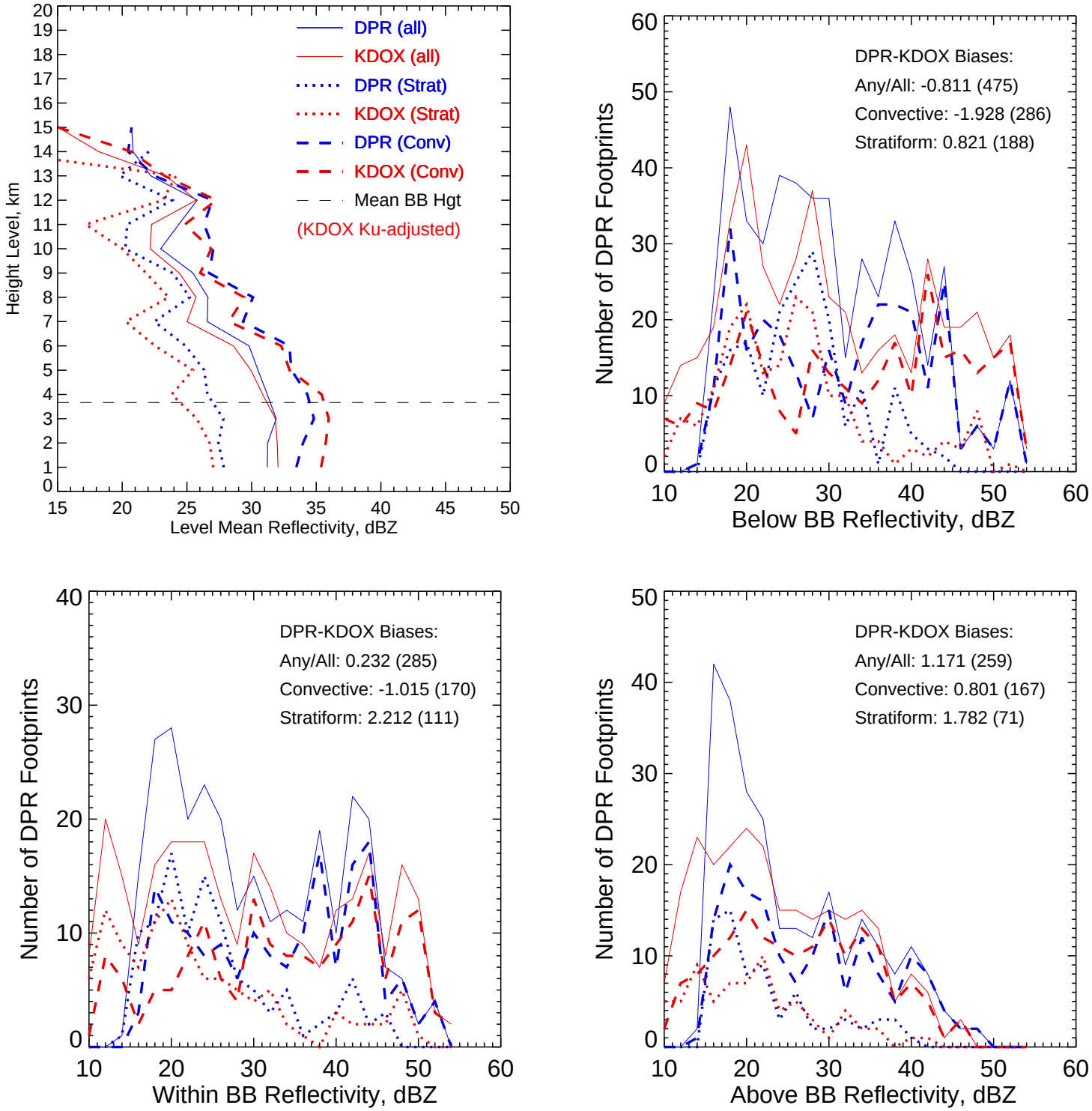


KDOX Ku-adjusted Zc vs. DPR 2ADPR/NS/V05A -- All non-missing pairs

Orbit: 7143 -- GR Start Time: 2015-06-01 18:44:18

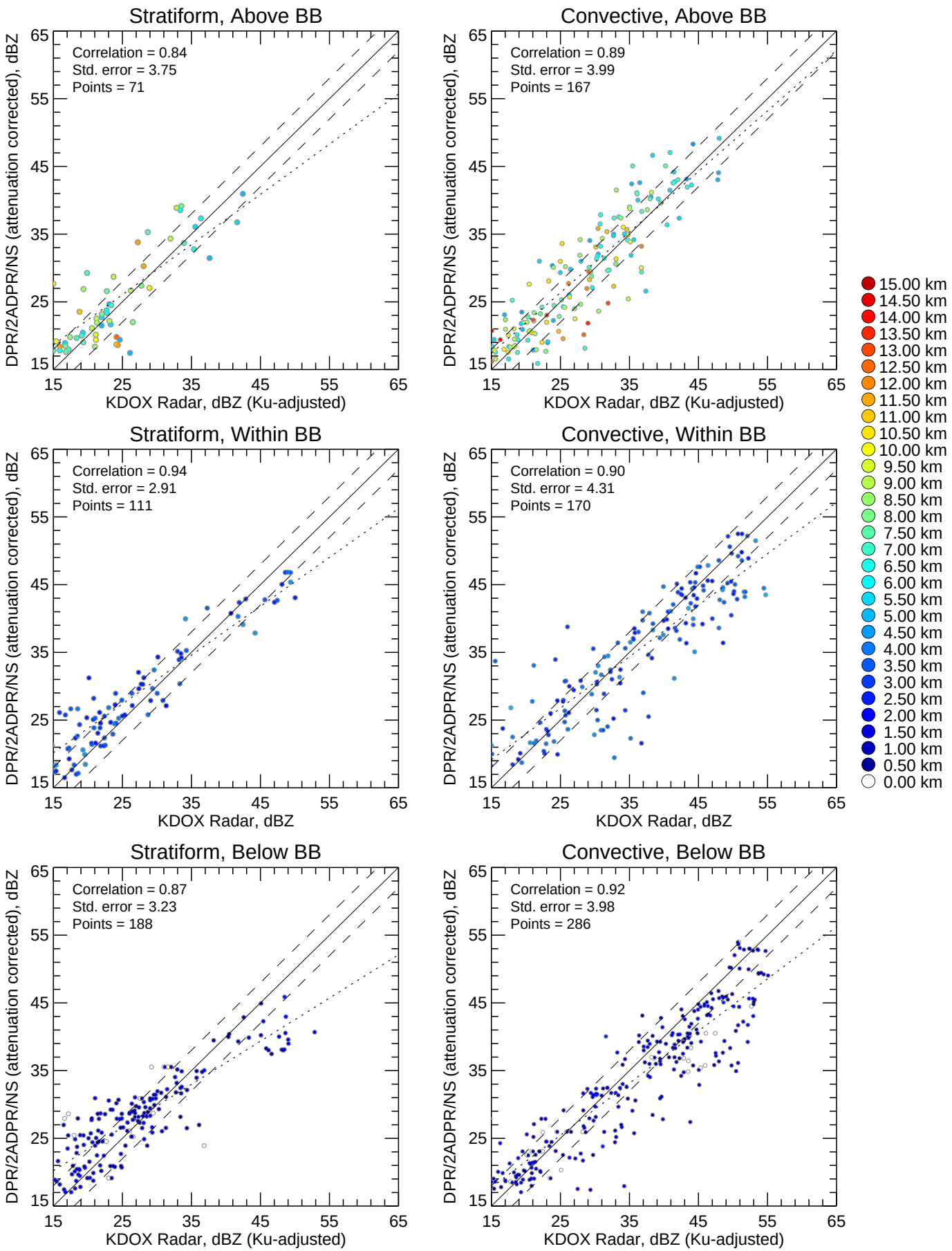
DPR 2ADPR-GR Reflectivity difference statistics (dBZ) - GR Site: KDOX
Orbit: 7143 Version: V05A Swath Type: NS
DPR time = 2015-06-01 18:45:13 GR start time = 2015-06-01 18:44:18
Required percent of above-threshold DPR and GR bins in matched volumes >= 0%
GR reflectivity has S-to-Ku frequency adjustments applied.

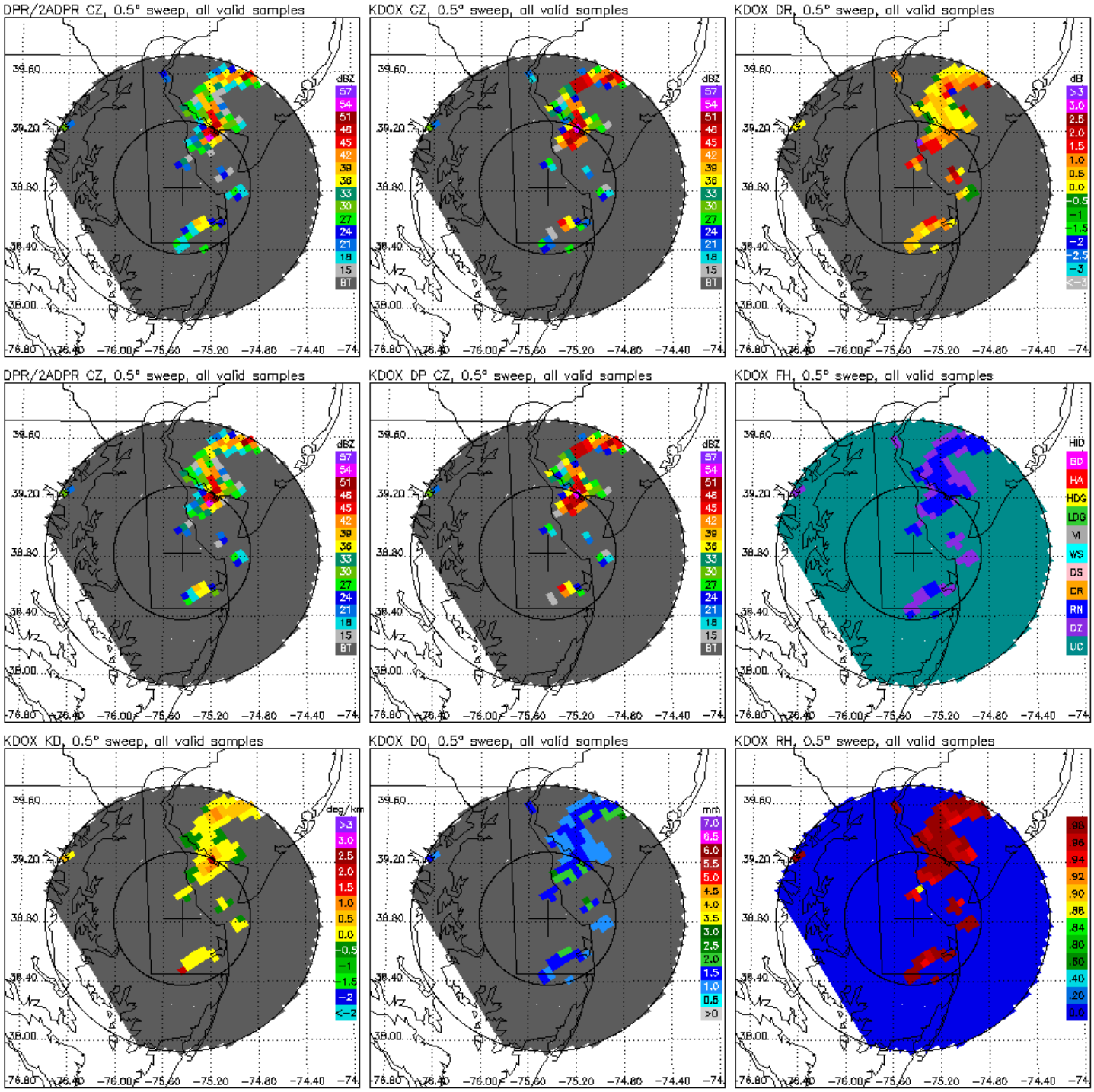
Mean Reflectivity Statistics grouped by fixed height levels (km):

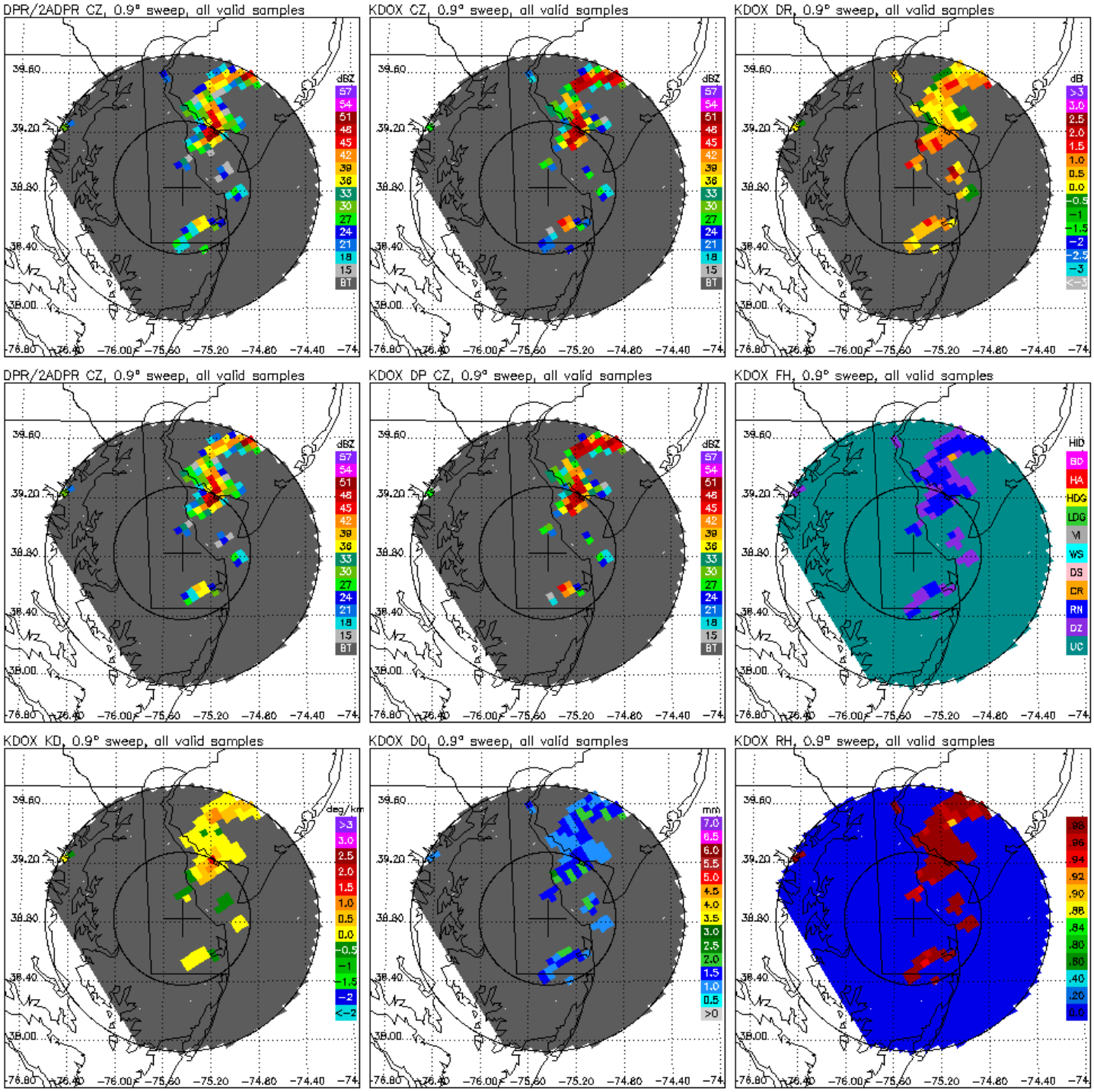
Vert.	Any Rain Type		Stratiform		Convective		Dataset Statistics			
Layer	DPR-GR	NumPts	DPR-GR	NumPts	DPR-GR	NumPts	AvgDist	DPRMaxZ	GRMaxZ	
1.0	-0.825	241	0.807	98	-1.910	143	49.877	53.955	54.079	
2.0	-0.742	195	0.689	77	-1.759	117	54.888	53.107	55.079	
3.0	0.068	142	2.056	55	-1.142	85	58.890	52.502	52.223	@ BB
4.0	0.350	107	2.760	43	-1.106	63	59.154	52.196	54.472	@ BB
5.0	0.553	61	0.870	19	0.148	41	66.679	51.485	54.741	
6.0	1.213	46	2.355	13	0.625	31	67.576	49.150	47.994	
7.0	1.563	44	2.215	13	1.097	28	71.820	45.063	43.378	
8.0	0.920	33	1.636	9	0.690	18	67.999	45.075	40.225	
9.0	1.053	40	2.044	13	0.681	25	70.998	41.510	37.592	
10.0	0.821	24	0.237	5	0.167	13	67.208	41.161	38.187	
11.0	2.096	23	3.197	5	1.493	16	74.409	35.676	34.626	
12.0	0.072	10	0.727	4	-0.320	6	71.229	35.833	36.742	
13.0	-1.154	8	-4.353	1	-0.782	7	68.108	29.462	31.905	
14.0	2.666	4	11.786	1	-0.254	3	79.337	22.052	28.990	
15.0	5.683	1	-99.999	0	5.683	1	80.725	20.725	15.042	

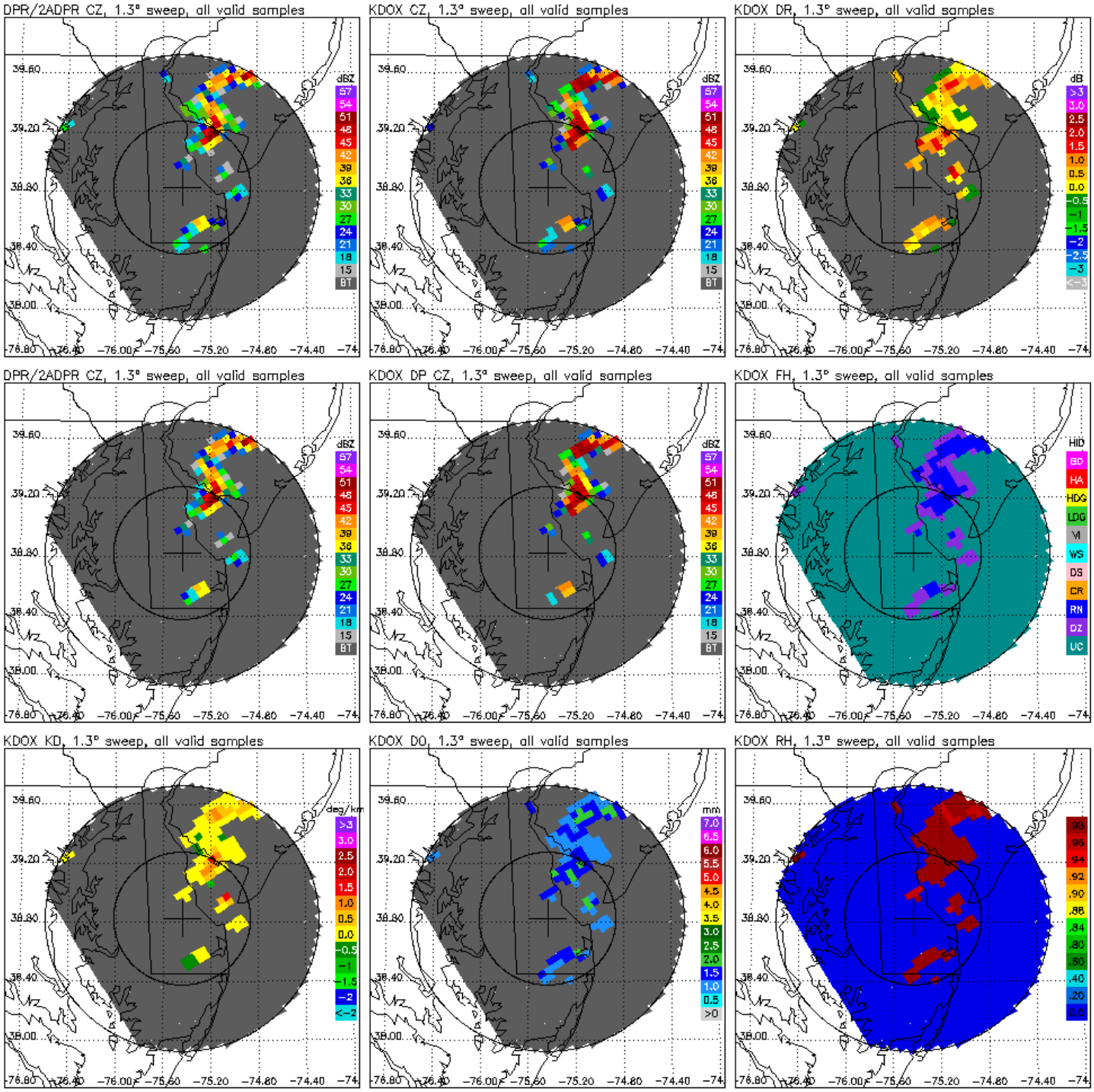
Mean Reflectivity Statistics grouped by proximity to Bright Band:

Surface	Any Rain Type		Stratiform		Convective		Dataset Statistics			
type	DPR-GR	NumPts	DPR-GR	NumPts	DPR-GR	NumPts	AvgDist	DPRMaxZ	GRMaxZ	
Below	-0.811	475	0.821	188	-1.928	286	50.130	54.000	55.079	
Within	0.232	285	2.212	111	-1.015	170	60.952	52.502	54.741	@ BB
Above	1.171	259	1.782	71	0.801	167	69.150	49.150	47.994	


KDOX Ku-adjusted Zc vs. DPR 2ADPR/NS/V05A -- All non-missing pairs
Stratiform, Above BB
Correlation = 0.84
Std. error = 3.75
Points = 71
Convective, Above BB
Correlation = 0.89
Std. error = 3.99
Points = 167
Stratiform, Within BB
Correlation = 0.94
Std. error = 2.91
Points = 111
Convective, Within BB
Correlation = 0.90
Std. error = 4.31
Points = 170
Stratiform, Below BB
Correlation = 0.87
Std. error = 3.23
Points = 188
Convective, Below BB
Correlation = 0.92
Std. error = 3.98
Points = 286
DPR/2ADPR/NS (attenuation corrected), dBZ
KDOX Radar, dBZ (Ku-adjusted)
KDOX Radar, dBZ
15
25
35
45
55
65
15.00 km
14.50 km
14.00 km
13.50 km
13.00 km
12.50 km
12.00 km
11.50 km
11.00 km
10.50 km
10.00 km
9.50 km
9.00 km
8.50 km
8.00 km
7.50 km
7.00 km
6.50 km
6.00 km
5.50 km
5.00 km
4.50 km
4.00 km
3.50 km
3.00 km
2.50 km
2.00 km
1.50 km
1.00 km
0.50 km
0.00 km


DPR/2ADPR CZ, 0.5° sweep, all valid samples
KDOX CZ, 0.5° sweep, all valid samples
KDOX DR, 0.5° sweep, all valid samples
DPR/2ADPR CZ, 0.5° sweep, all valid samples
KDOX DP CZ, 0.5° sweep, all valid samples
KDOX FH, 0.5° sweep, all valid samples
KDOX KD, 0.5° sweep, all valid samples
KDOX DO, 0.5° sweep, all valid samples
KDOX RH, 0.5° sweep, all valid samples
dBZ
57
54
51
48
45
42
39
36
33
30
27
24
21
18
15
BT
dB
>3
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1
-1.5
-2
-2.5
-3
<-3
HID
BD
HA
HDG
LDG
VI
WS
DS
CR
RN
DZ
UC
deg/km
>3
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1
-1.5
-2
<-2
mm
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
>0
.98
.96
.94
.92
.90
.88
.84
.80
.60
.40
.20
0.0
39.60
39.20
38.80
38.40
38.00
-76.80
-76.40
-76.00
-75.60
-75.20
-74.80
-74.40
-74


DPR/2ADPR CZ, 0.9° sweep, all valid samples
KDOX CZ, 0.9° sweep, all valid samples
KDOX DR, 0.9° sweep, all valid samples
DPR/2ADPR CZ, 0.9° sweep, all valid samples
KDOX DP CZ, 0.9° sweep, all valid samples
KDOX FH, 0.9° sweep, all valid samples
KDOX KD, 0.9° sweep, all valid samples
KDOX DO, 0.9° sweep, all valid samples
KDOX RH, 0.9° sweep, all valid samples
dBZ
dB
HID
deg/km
mm
39.60
39.20
38.80
38.40
38.00
-76.80
-76.40
-76.00
-75.60
-75.20
-74.80
-74.40
-74


DPR/2ADPR CZ, 1.3° sweep, all valid samples
KDOX CZ, 1.3° sweep, all valid samples
KDOX DR, 1.3° sweep, all valid samples
DPR/2ADPR CZ, 1.3° sweep, all valid samples
KDOX DP CZ, 1.3° sweep, all valid samples
KDOX FH, 1.3° sweep, all valid samples
KDOX KD, 1.3° sweep, all valid samples
KDOX DO, 1.3° sweep, all valid samples
KDOX RH, 1.3° sweep, all valid samples
dBZ
dB
deg/km
mm
HID
BD
HA
HDG
LDG
VI
WS
DS
CR
RN
DZ
UC
39.60
39.20
38.80
38.40
38.00
-76.80
-76.40
-76.00
-75.60
-75.20
-74.80
-74.40
-74