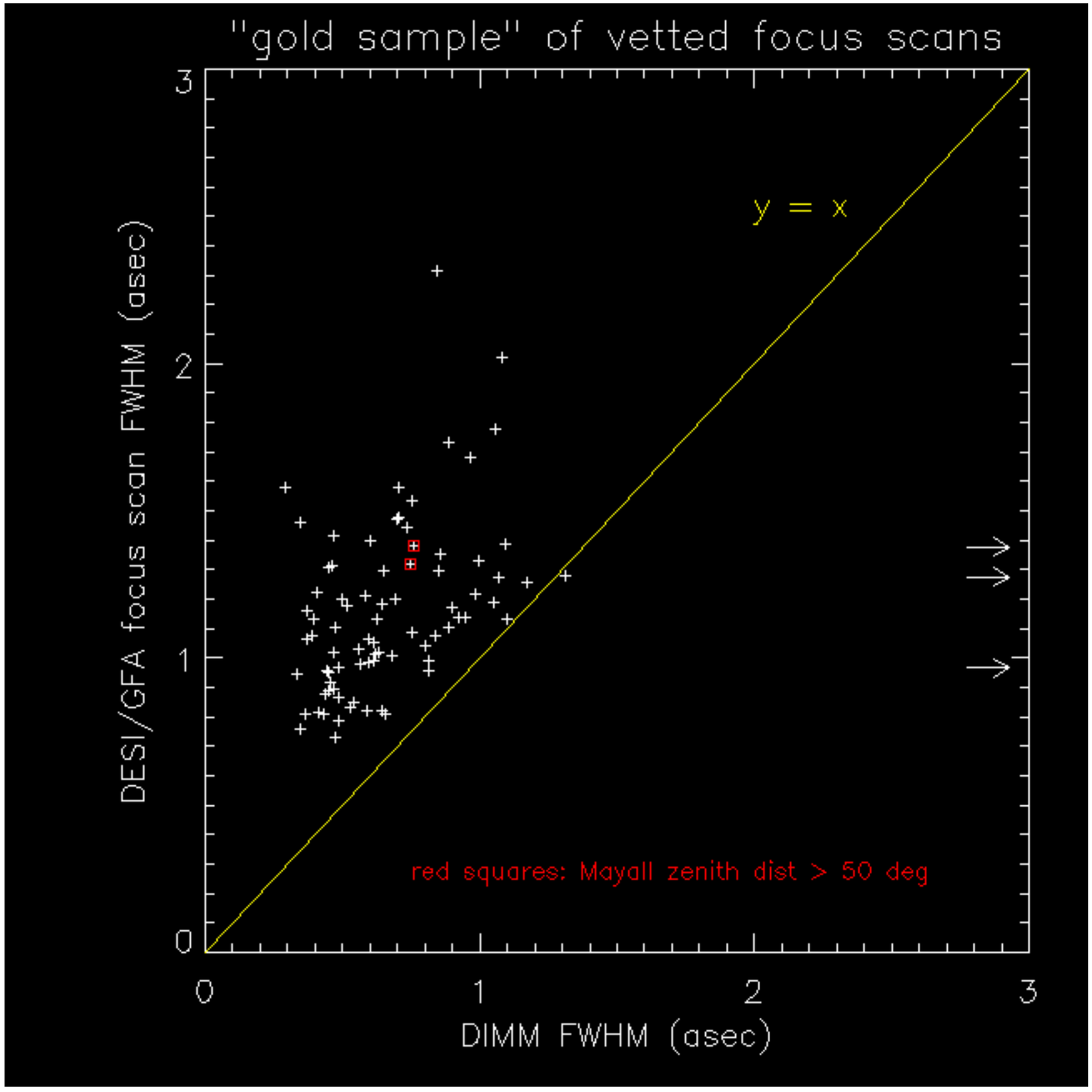
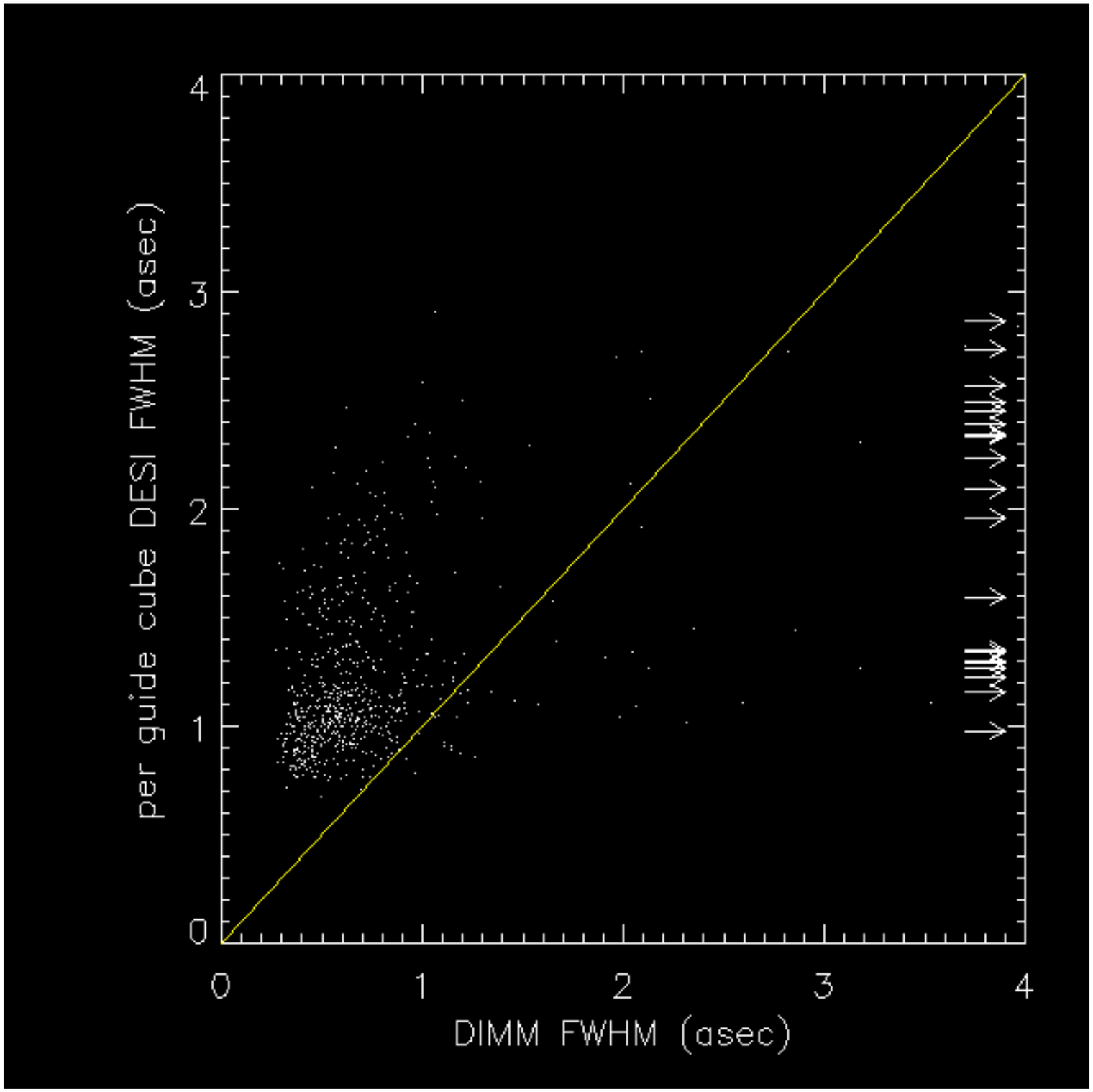
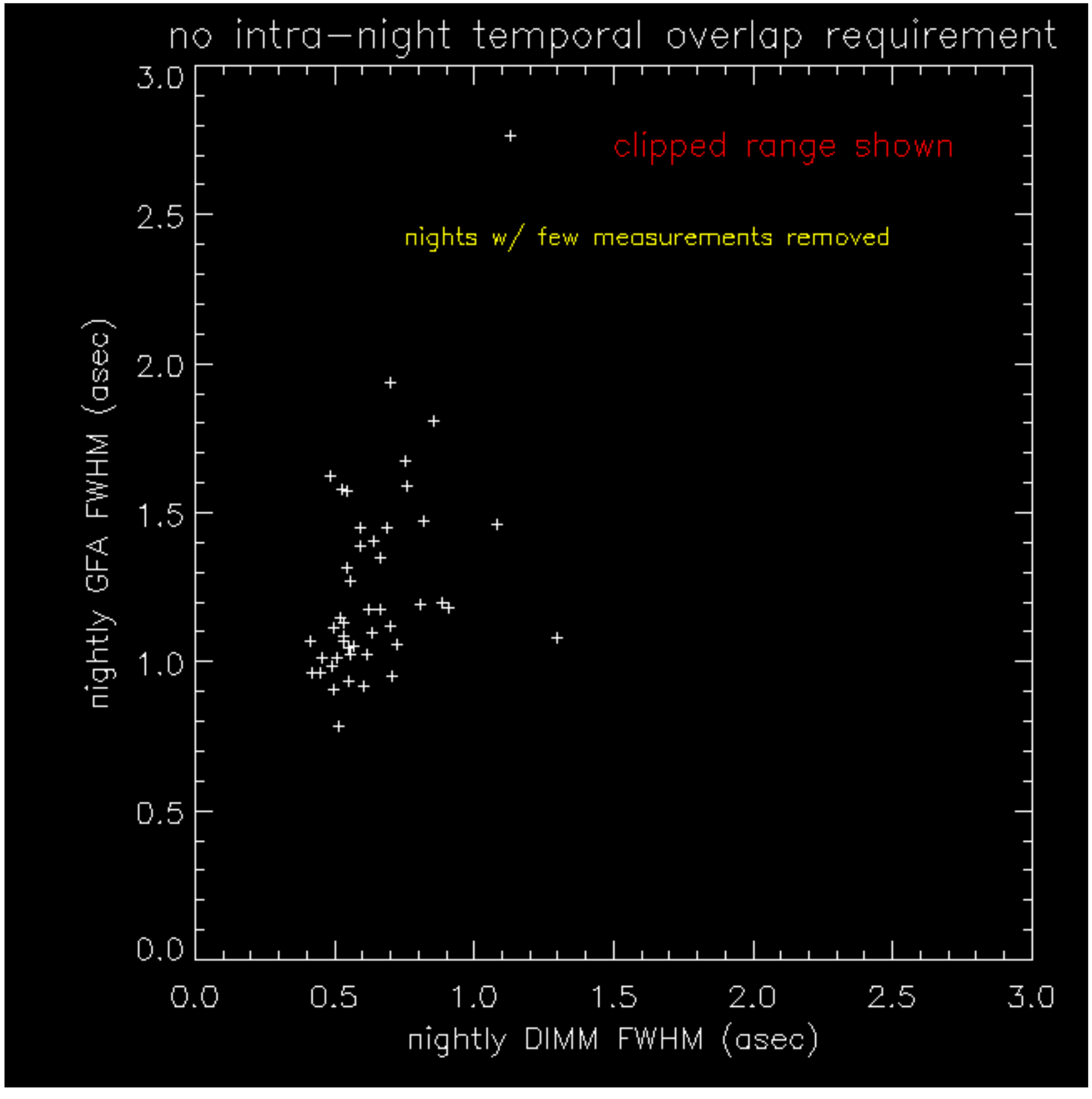


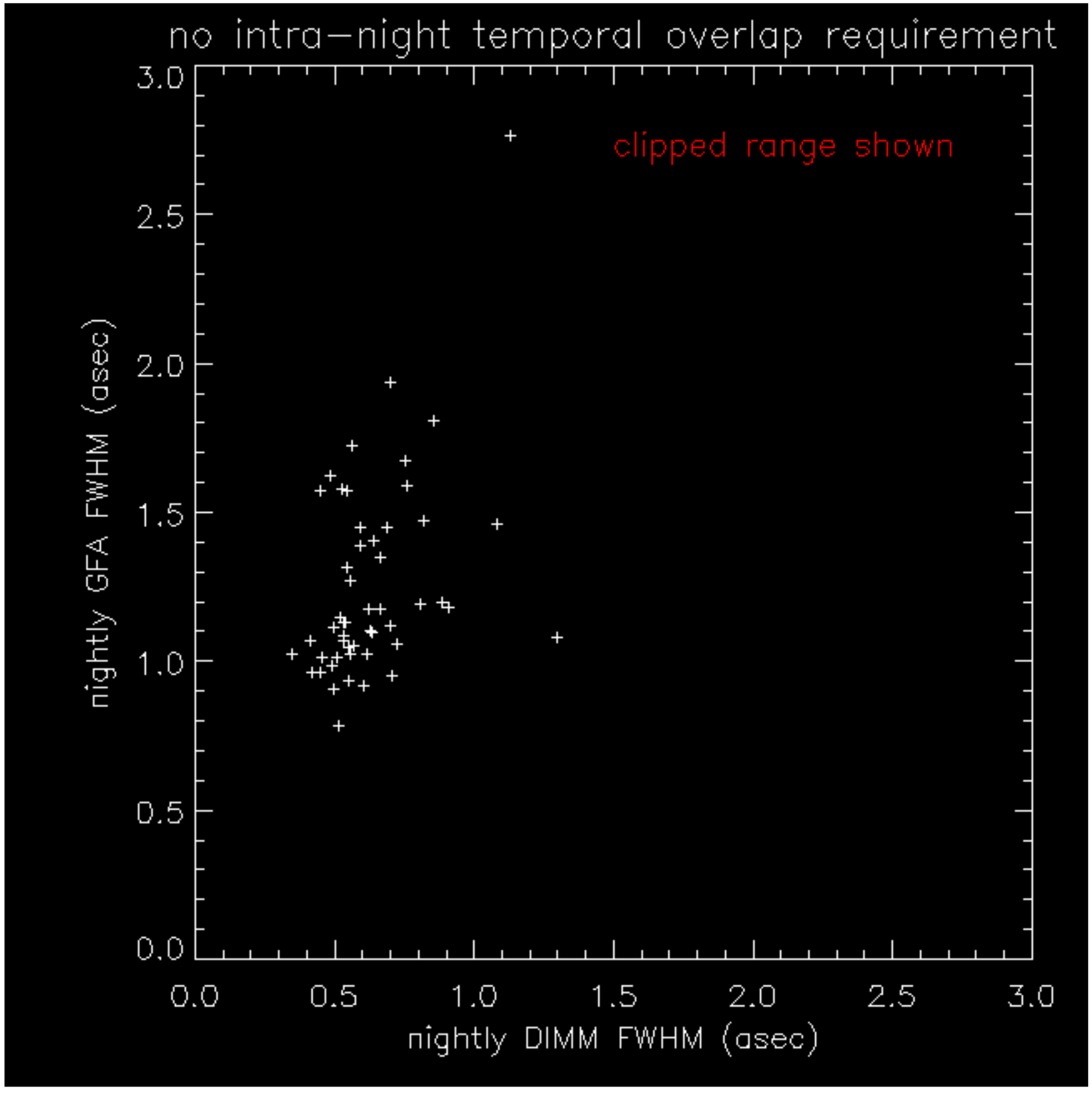
interpretation: the DIMM FWHM generally seems to provide a lower bound on the Mayall/DESI FWHM, except for some large DIMM FWHM outliers

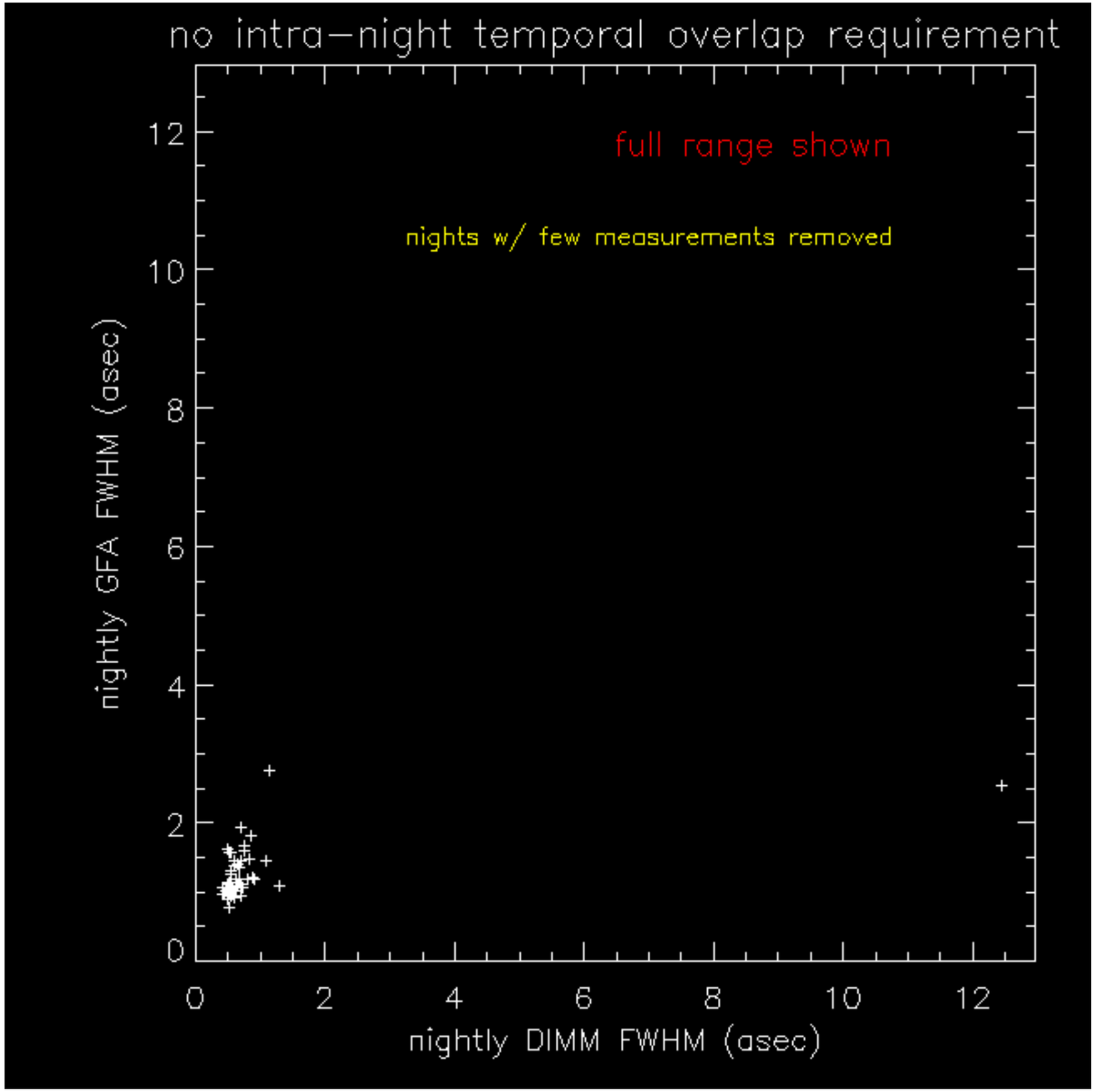


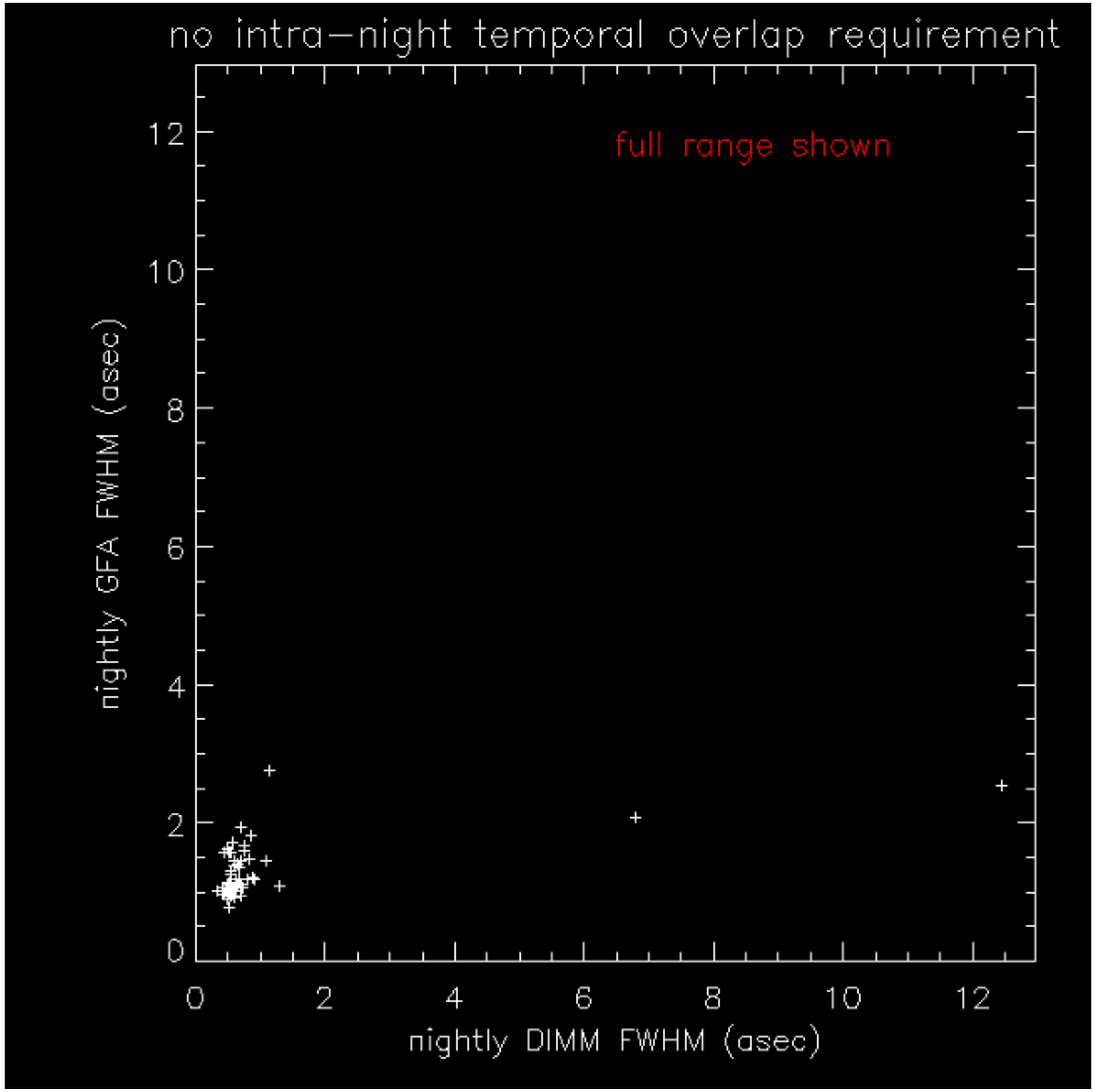
interpretation: similar to previous plot, but with more data points (hence more DIMM outliers) and perhaps somewhat rattier

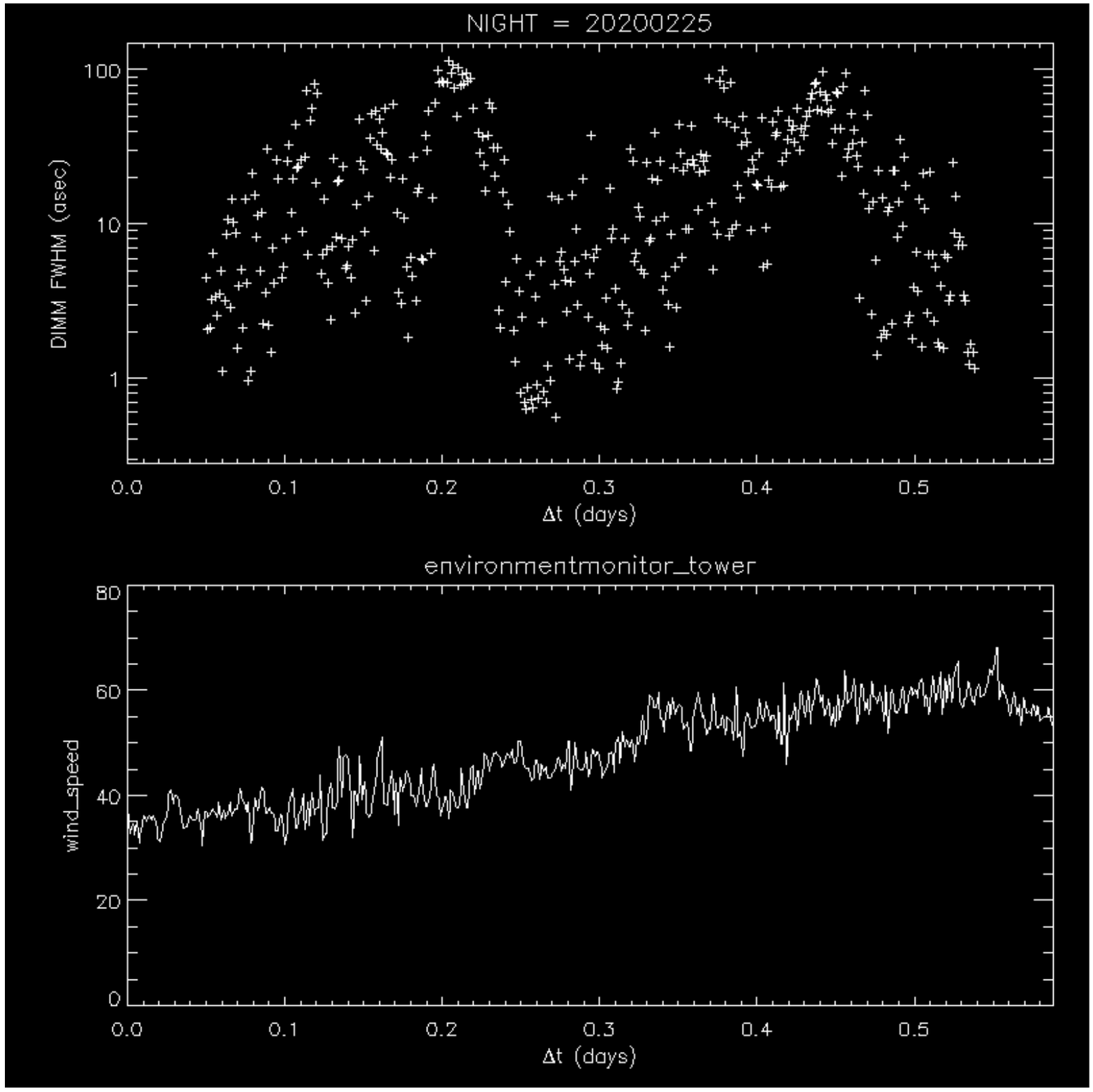


interpretation: binning on a nightly basis does not show much correlation between DIMM and DESI guider FWHM values

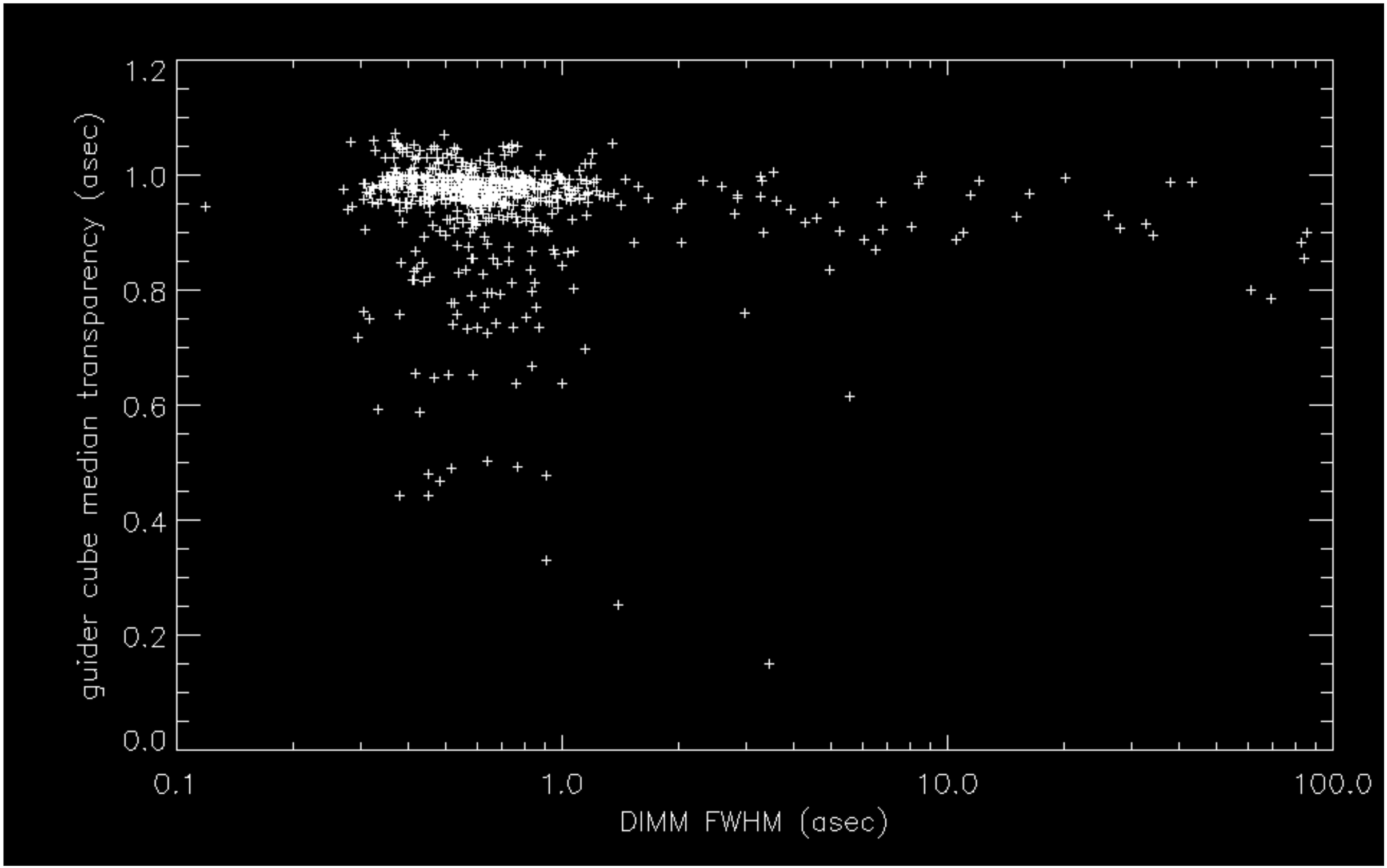

no intra-night temporal overlap requirement
clipped range shown
nightly GFA FWHM (asec)
nightly DIMM FWHM (asec)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0


no intra−night temporal overlap requirement
full range shown
nights w/ few measurements removed
nightly GFA FWHM (asec)
nightly DIMM FWHM (asec)
0
2
4
6
8
10
12

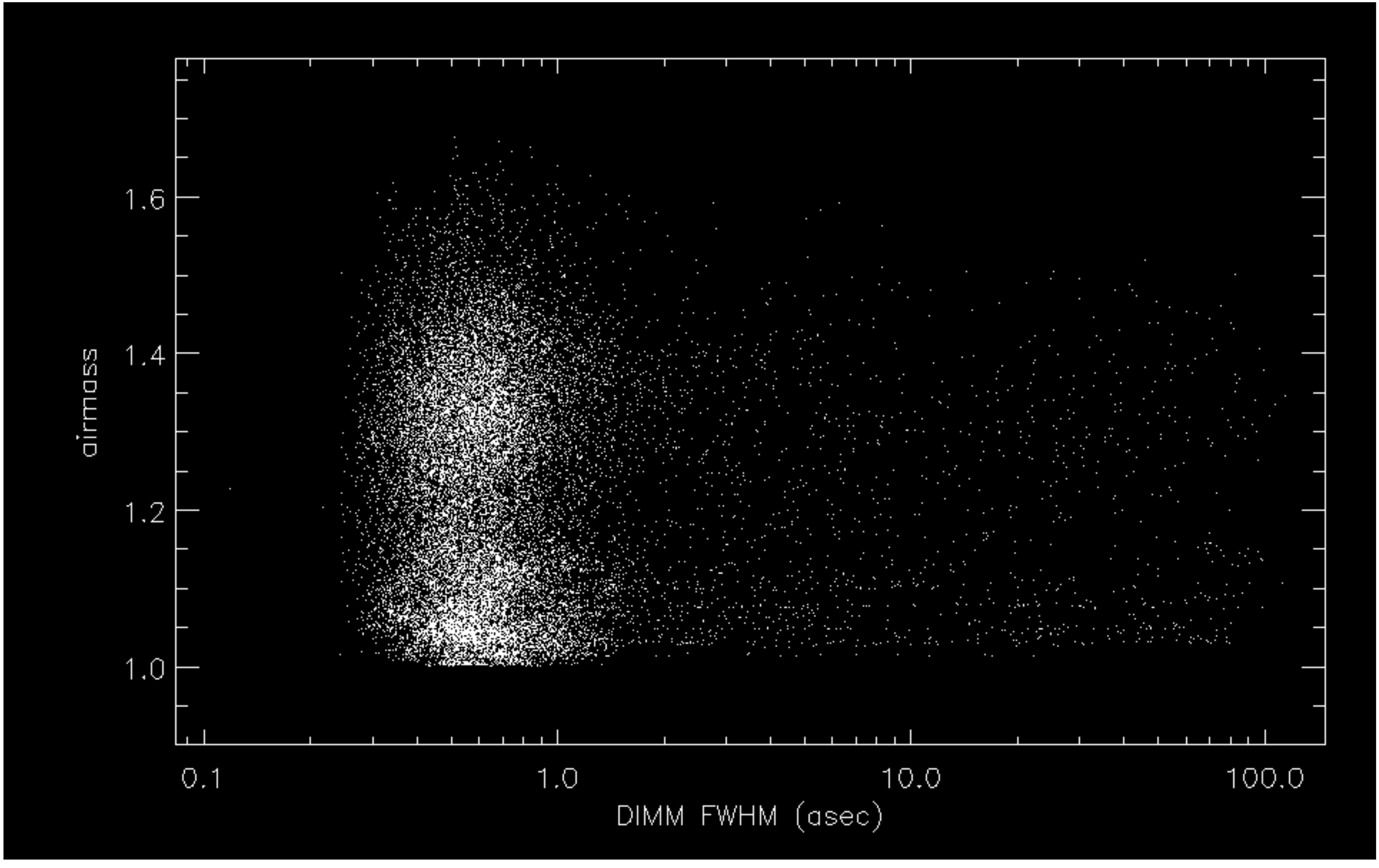

no intra-night temporal overlap requirement
full range shown
nightly GFA FWHM (asec)
nightly DIMM FWHM (asec)
0
2
4
6
8
10
12



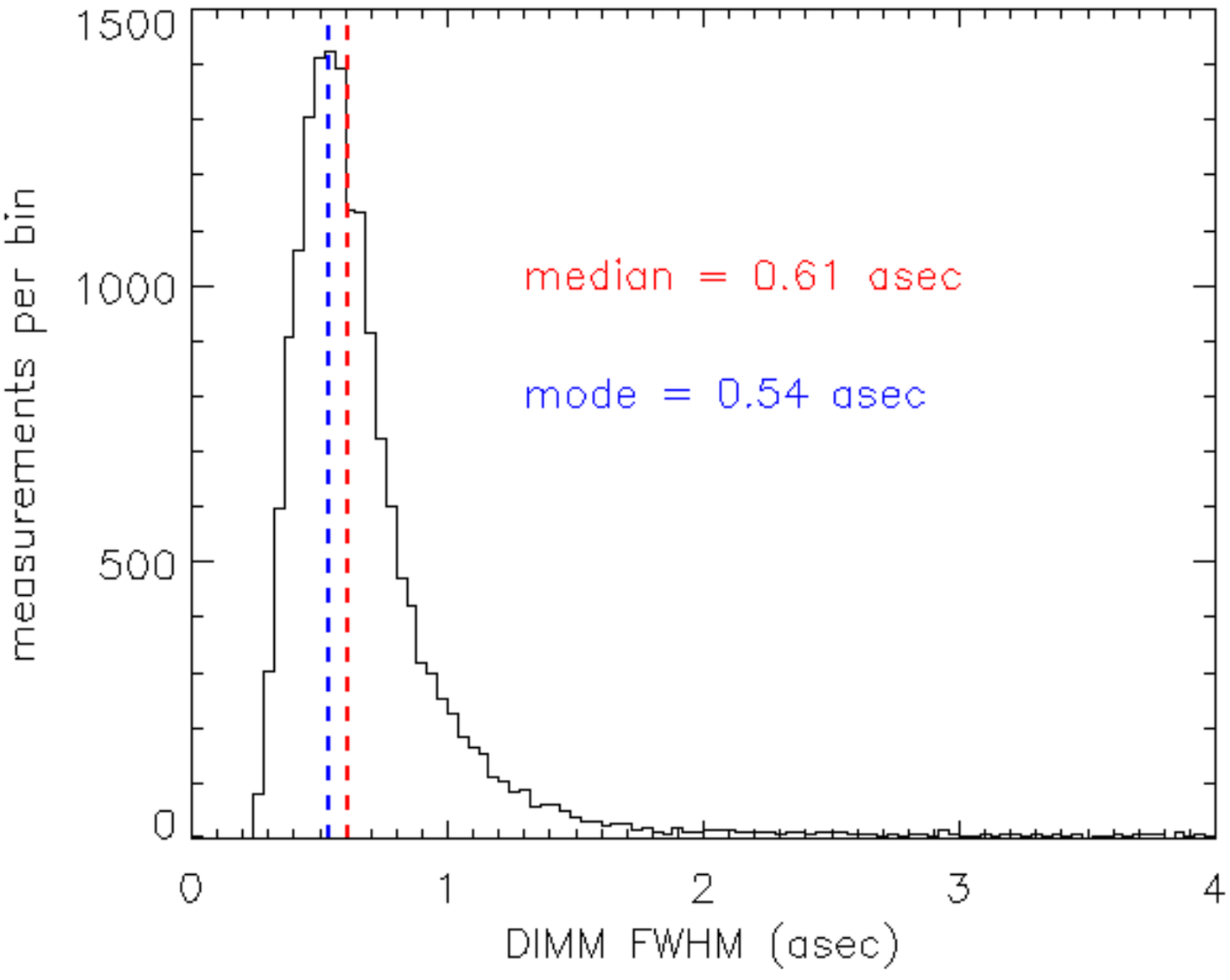
interpretation: Bob suggested that high wind may cause large DIMM FWHM outliers, and NIGHT = 20200225 (which has the highest nightly median DIMM FWHM among well-sampled nights) did indeed have very strong winds

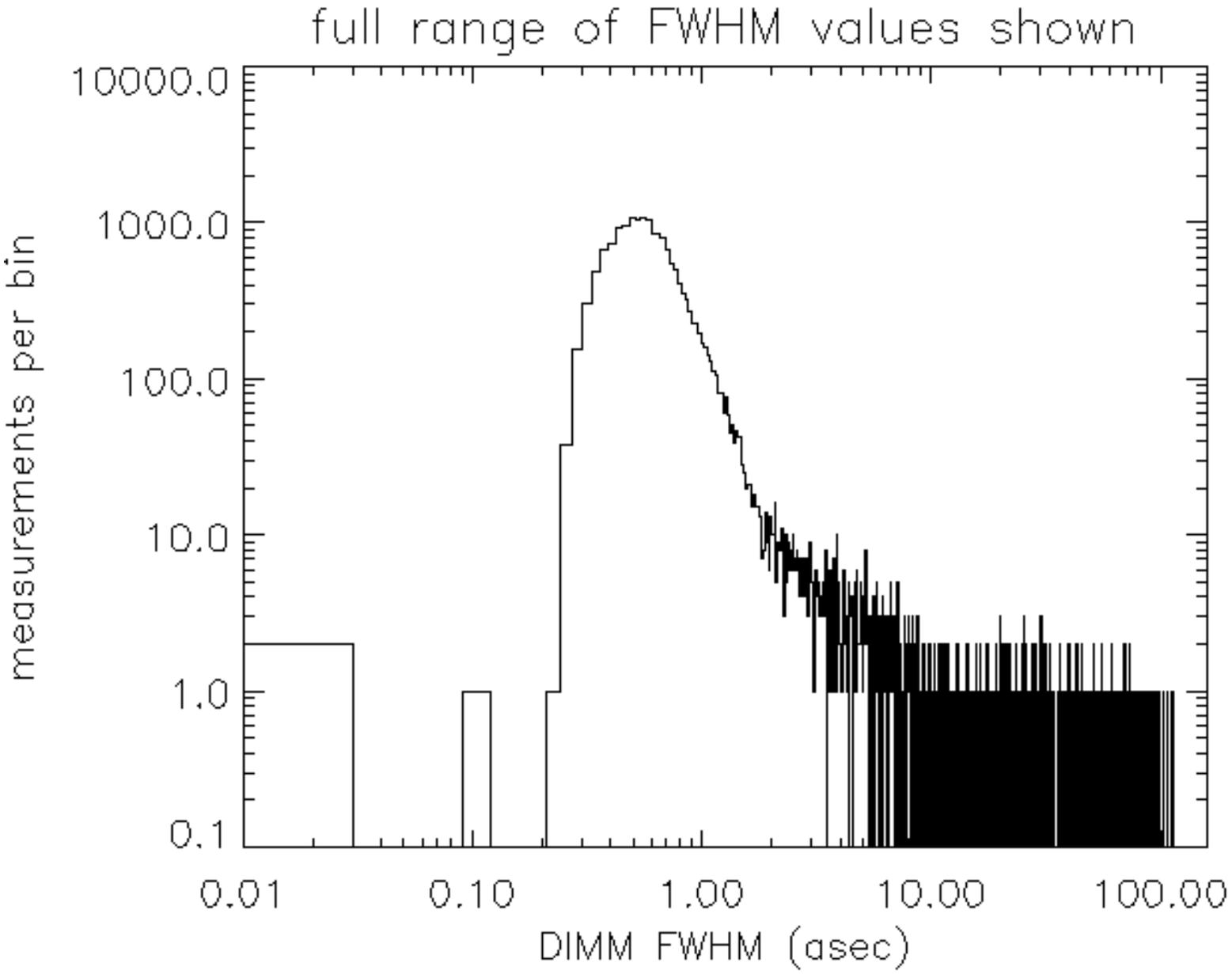


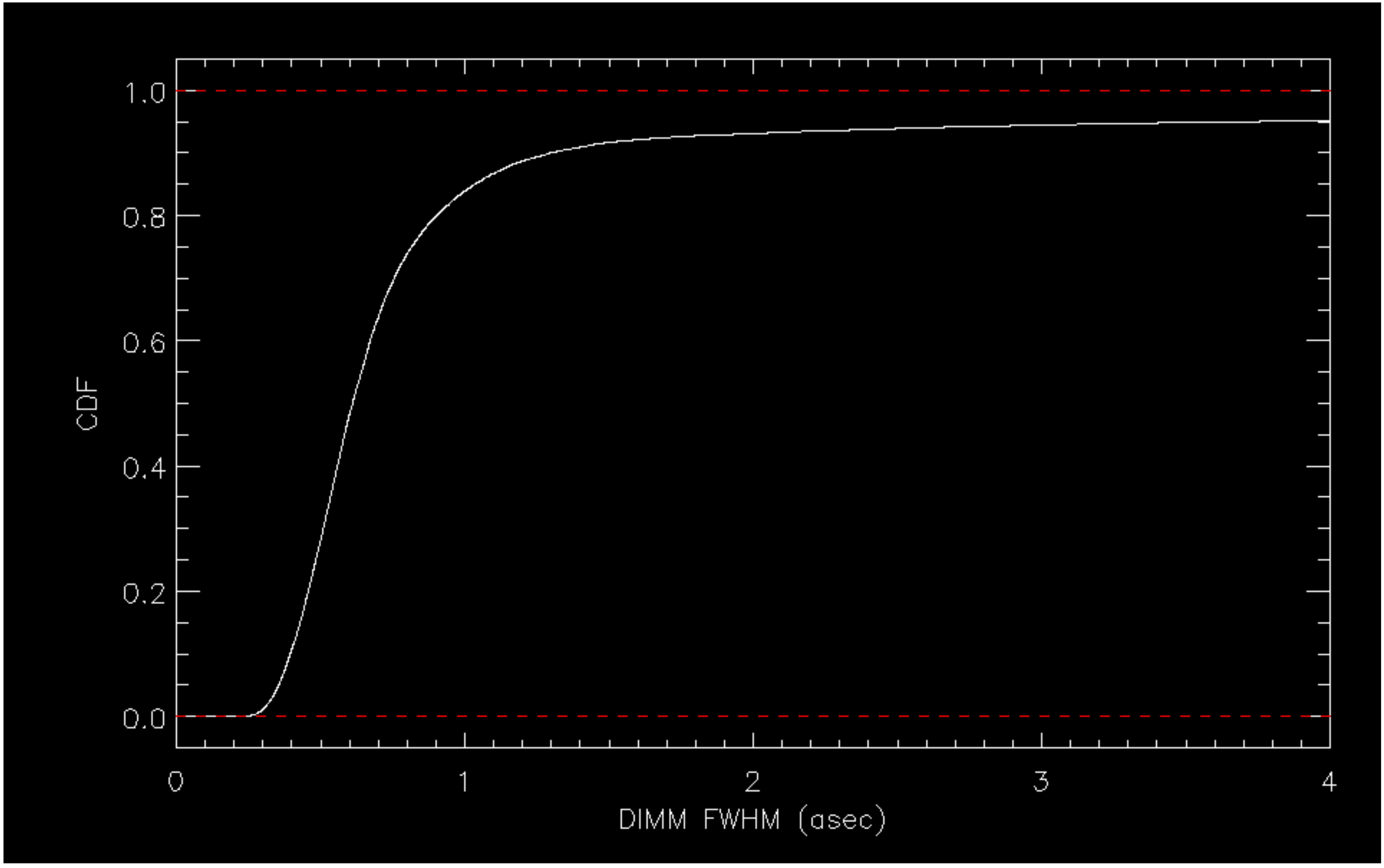
interpretation: large DIMM FWHM outliers do not appear to preferentially coincide with low transparency (as measured by the DESI guiders)

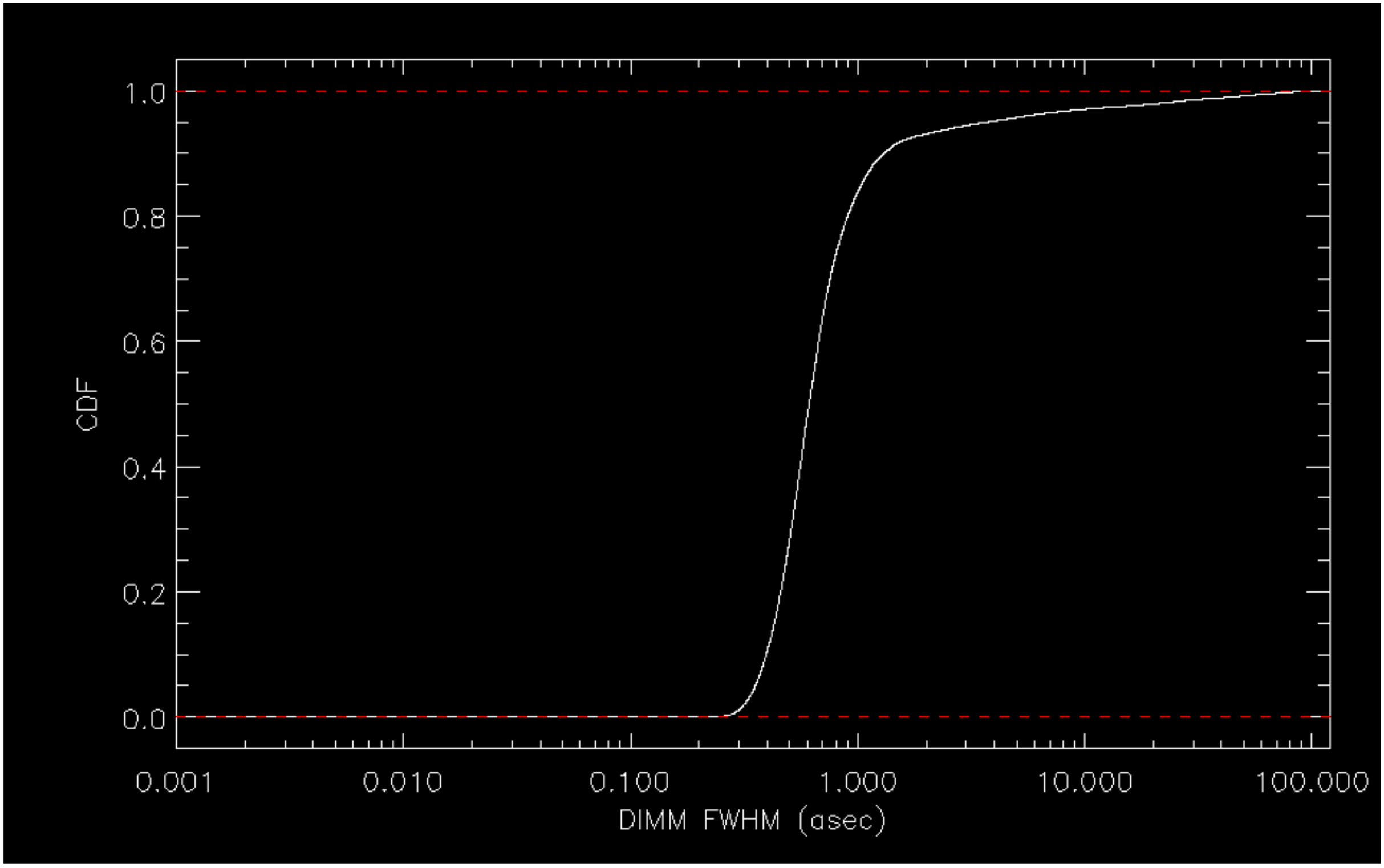


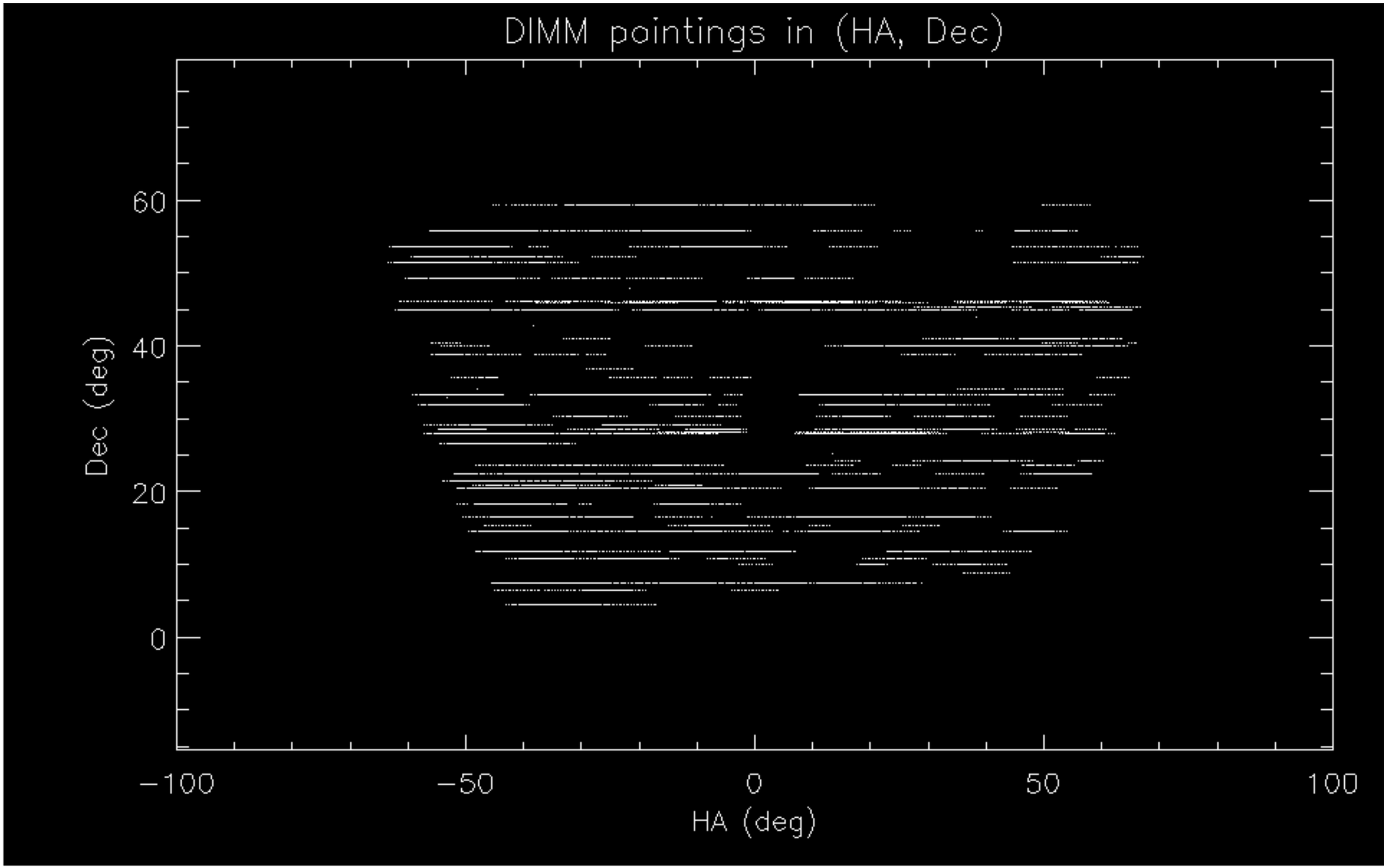
interpretation: large DIMM FWHM outliers do not appear to preferentially coincide with high airmass

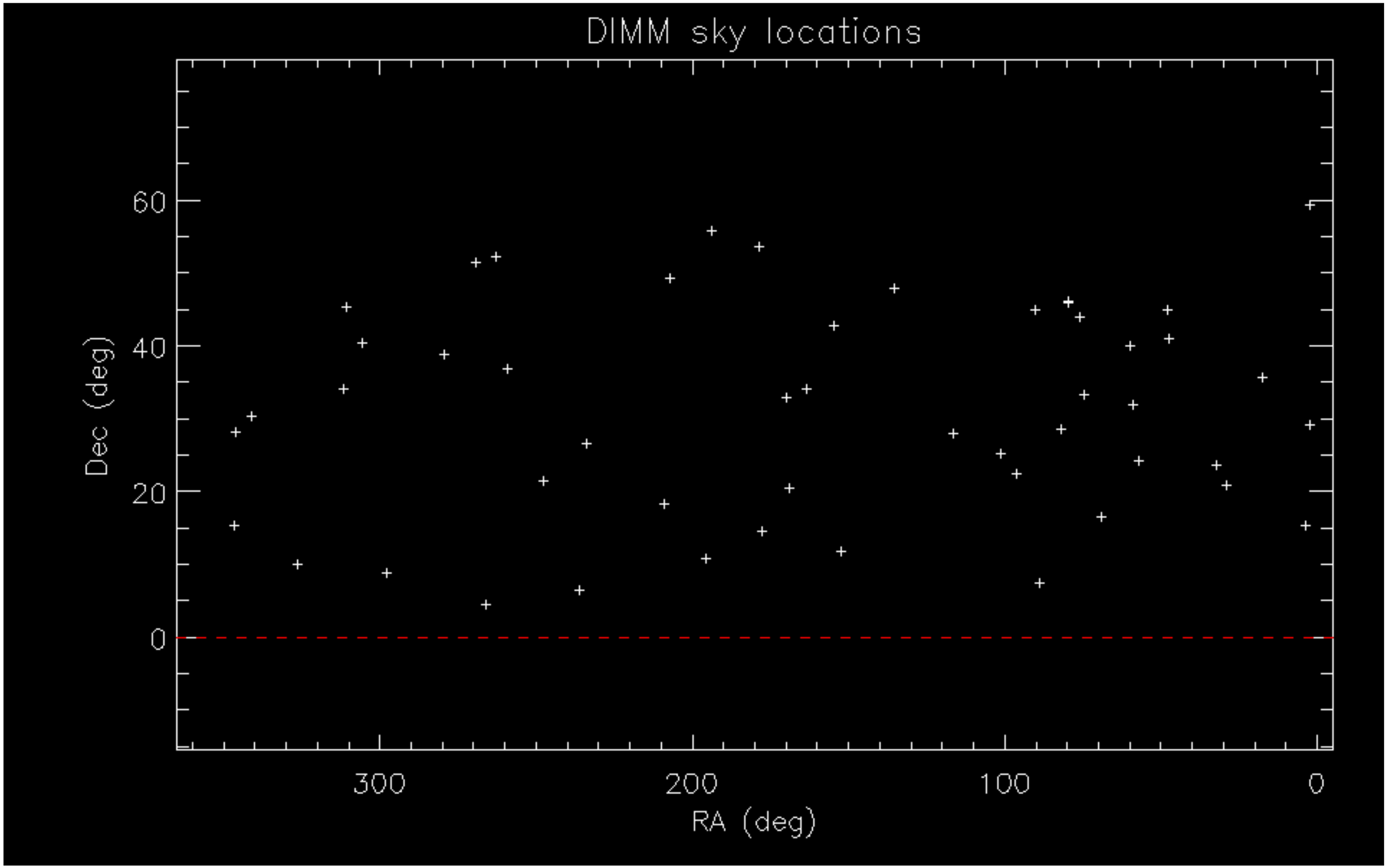

1500
1000
500
0
measurements per bin
median = 0.61 asec
mode = 0.54 asec
0
1
2
3
4
DIMM FWHM (asec)


full range of FWHM values shown
10000.0
1000.0
100.0
10.0
1.0
0.1
measurements per bin
0.01
0.10
1.00
10.00
100.00
DIMM FWHM (asec)


1.0
0.8
0.6
0.4
0.2
0.0
CDF
0
1
2
3
4
DIMM FWHM (asec)


1.0
0.8
0.6
0.4
0.2
0.0
CDF
0.001
0.010
0.100
1.000
10.000
100.000
DIMM FWHM (asec)


DIMM pointings in (HA, Dec)
60
40
20
0
Dec (deg)
−100
−50
0
50
100
HA (deg)


DIMM sky locations
60
40
20
0
Dec (deg)
300
200
100
0
RA (deg)