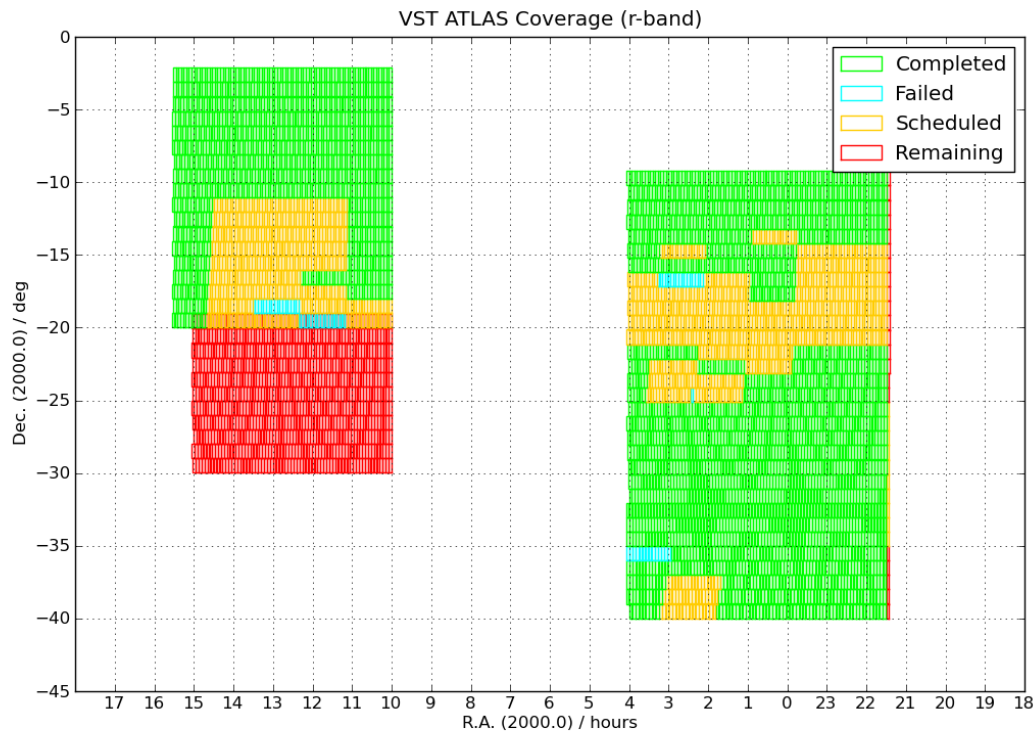


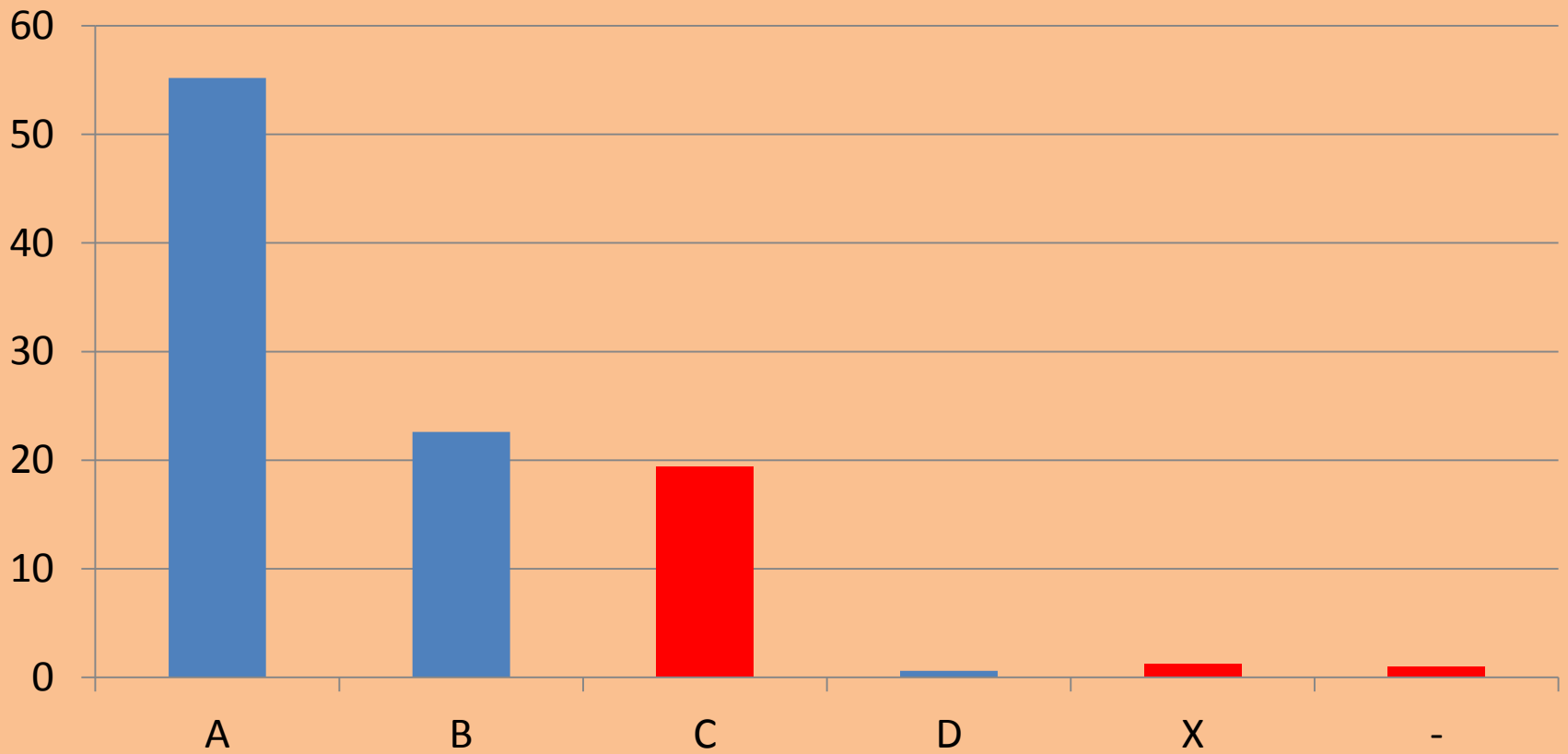
VST ATLAS Data Quality

- Overlap with Pan-STARRS (g,r,i,z), Dec > -30
- Some overlap with SDSS (u,g,r,i,z) Dec > -10



ESO OB Quality

Statistics for Run C OBs (%)



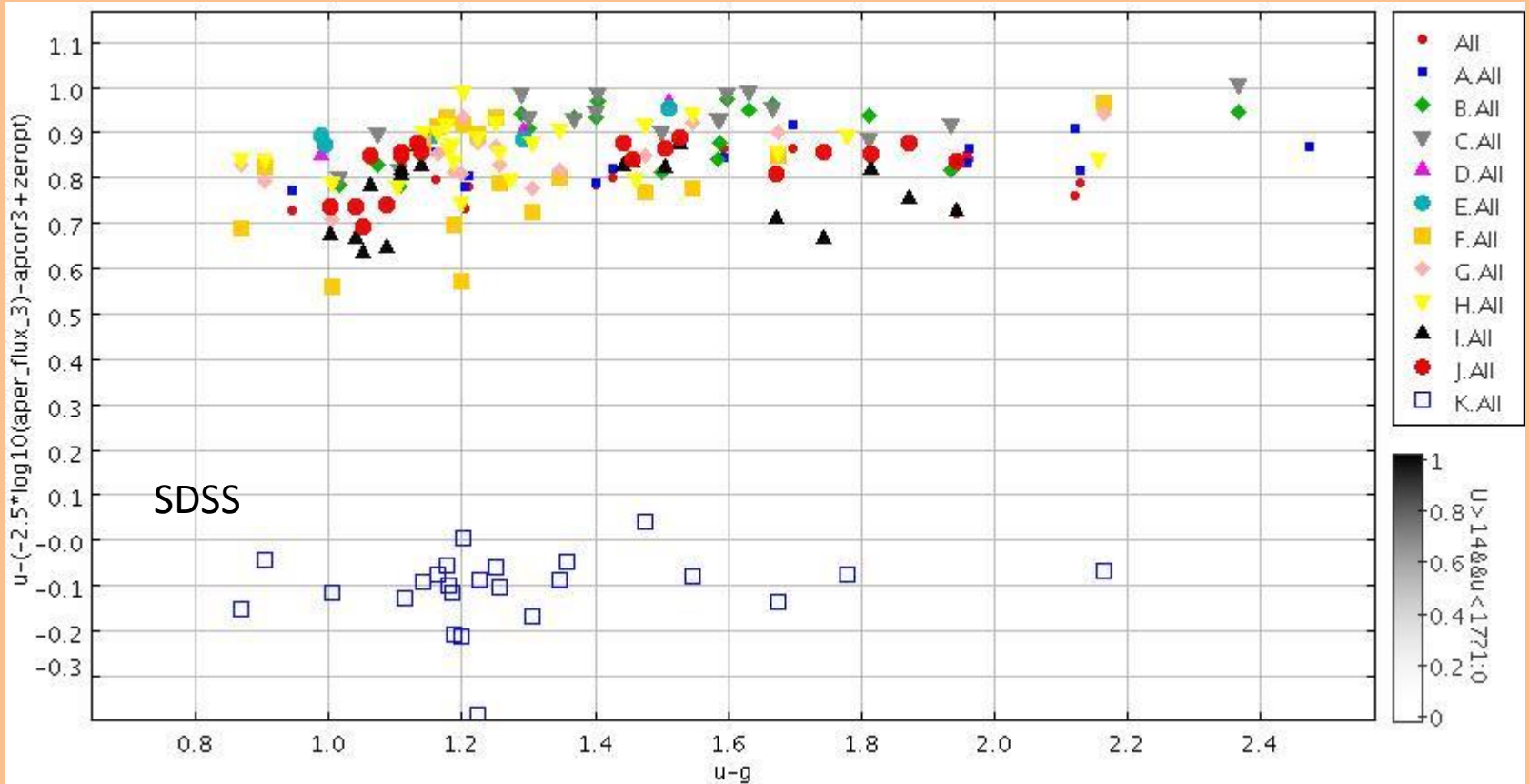
Standard stars fields

(NOAO Southern Standard Stars for ugriz)

1.1

$u_std - u_VST$

-0.3

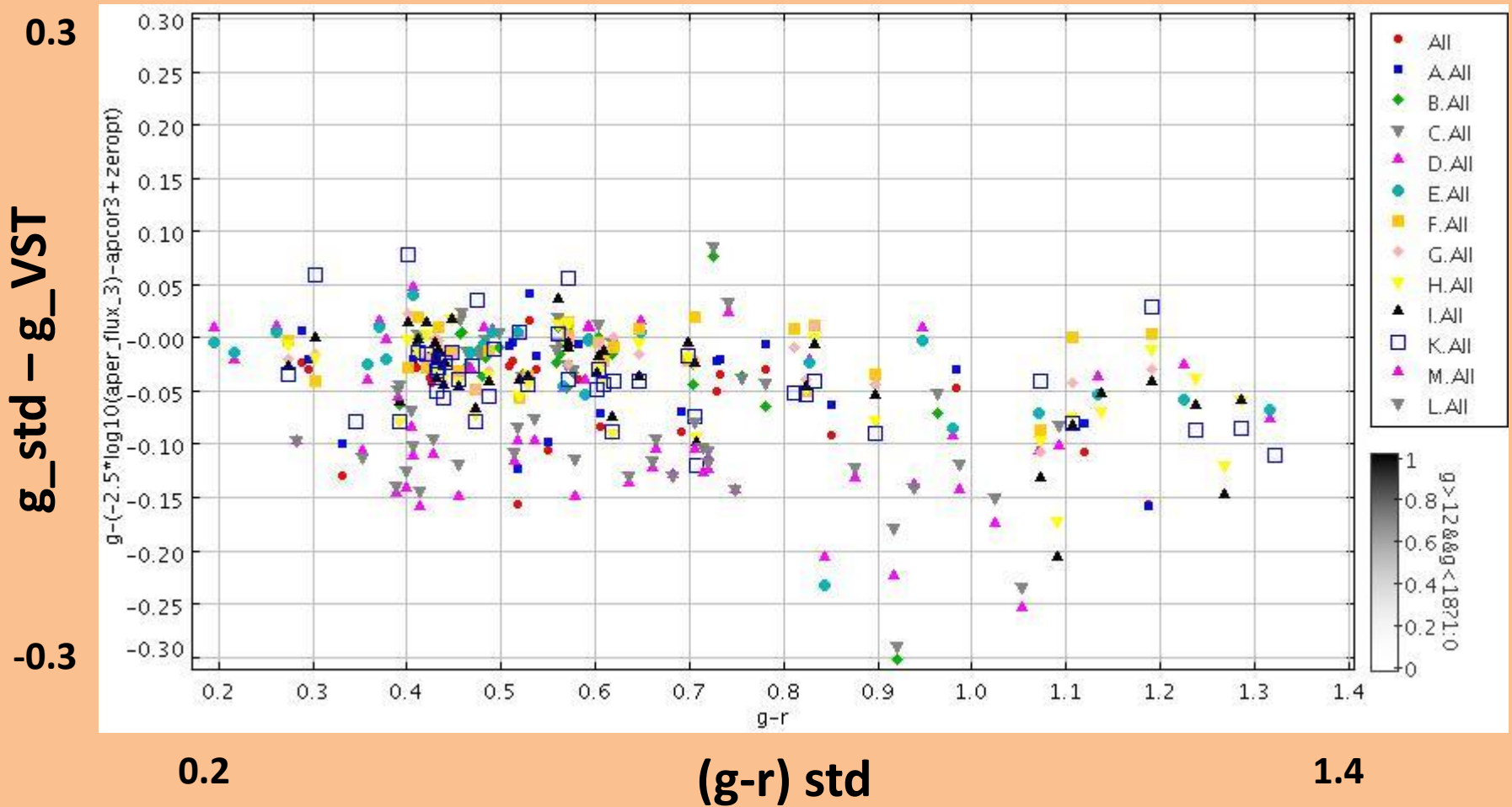


0.8

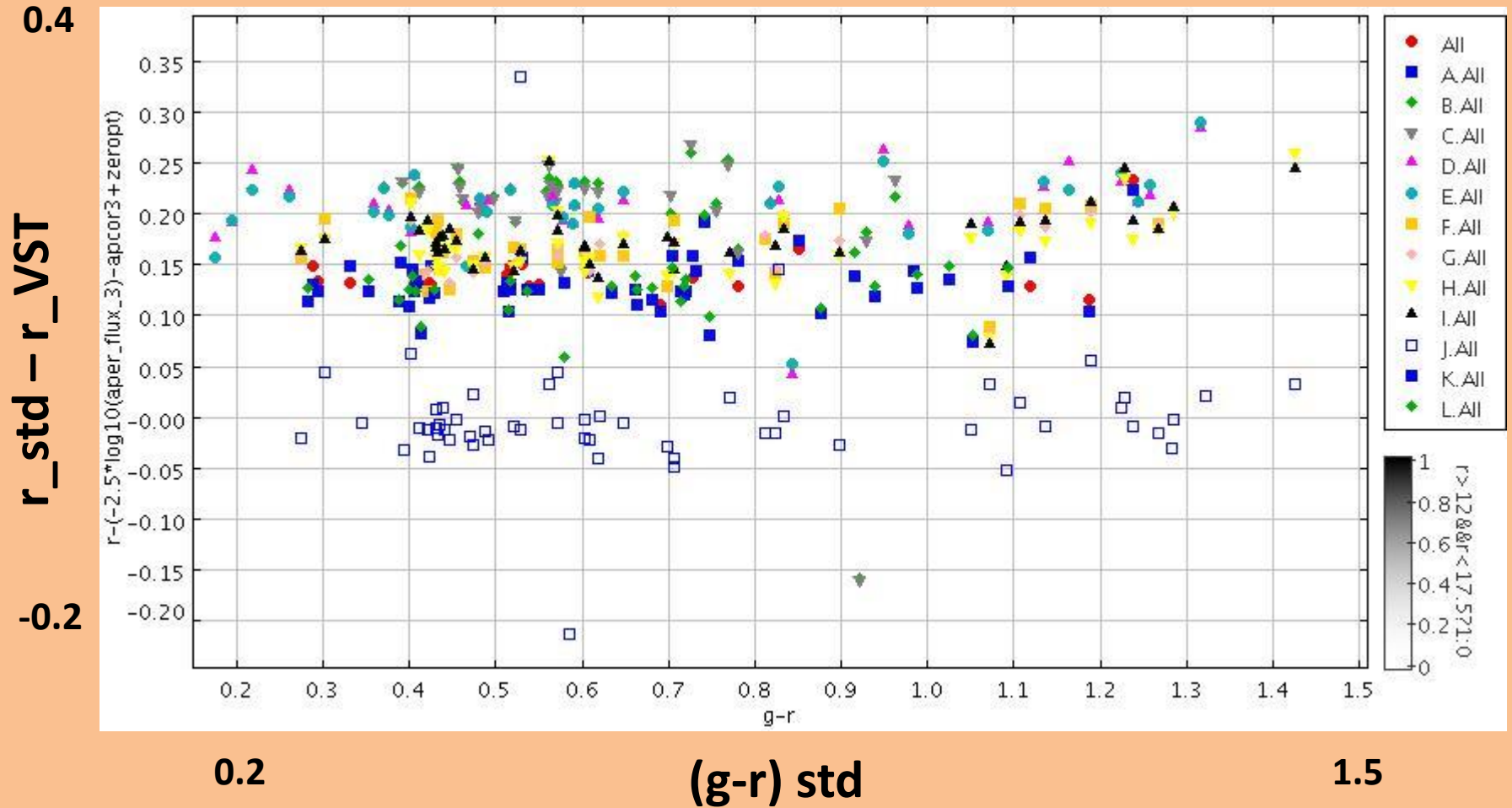
$(u-g)_{std}$

2.4

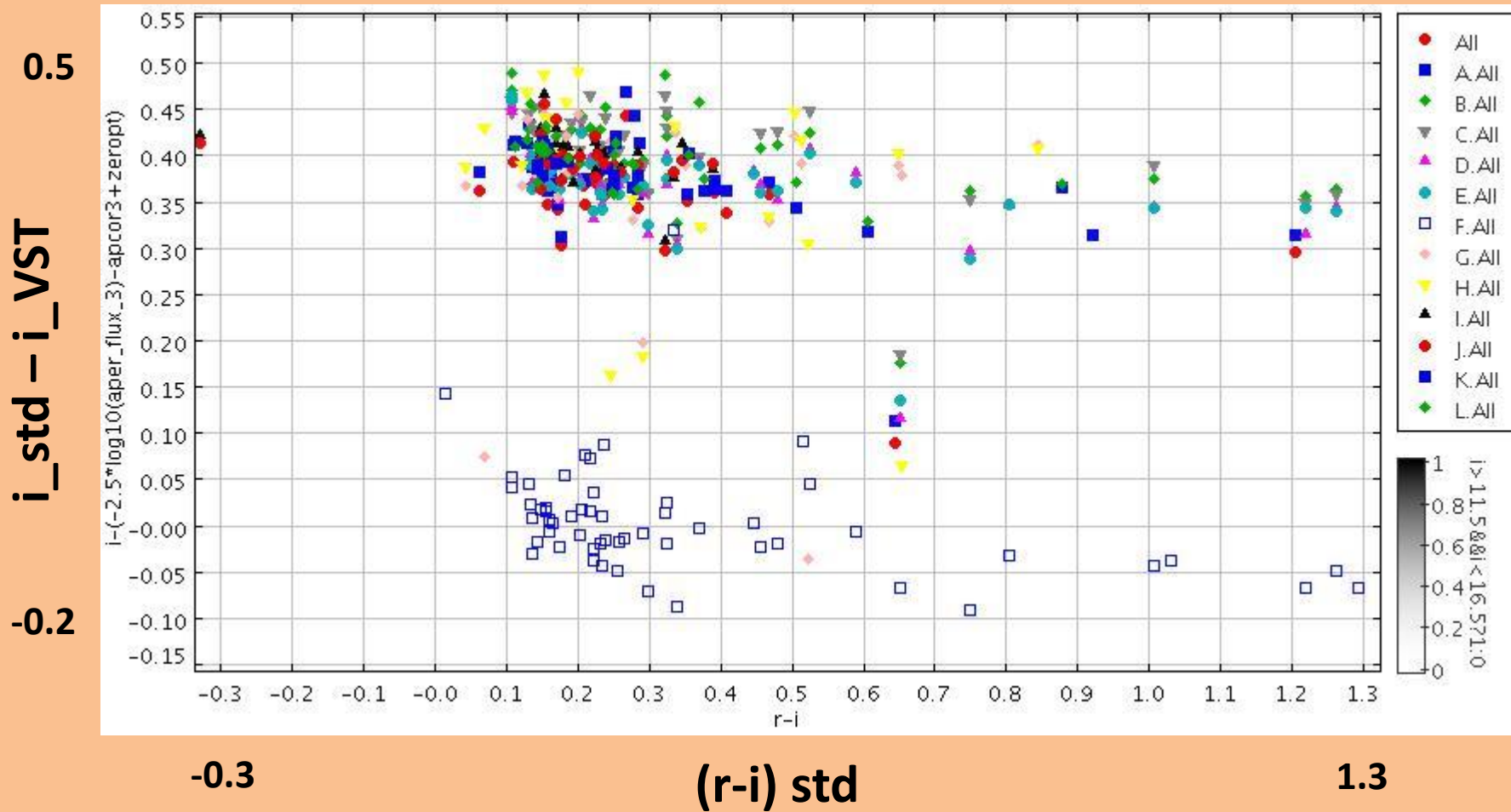
Standard star fields



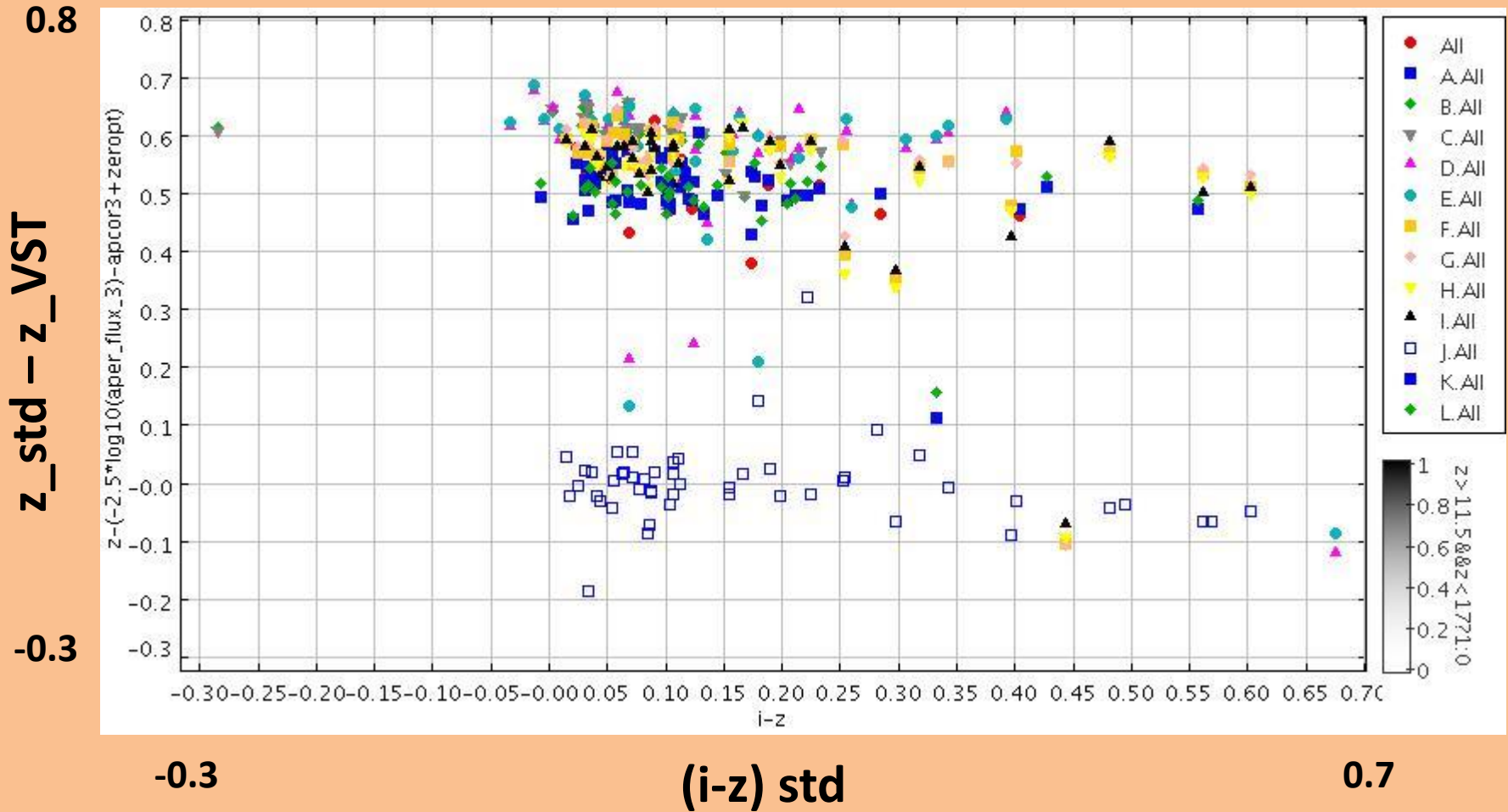
Standard star fields



Standard fields

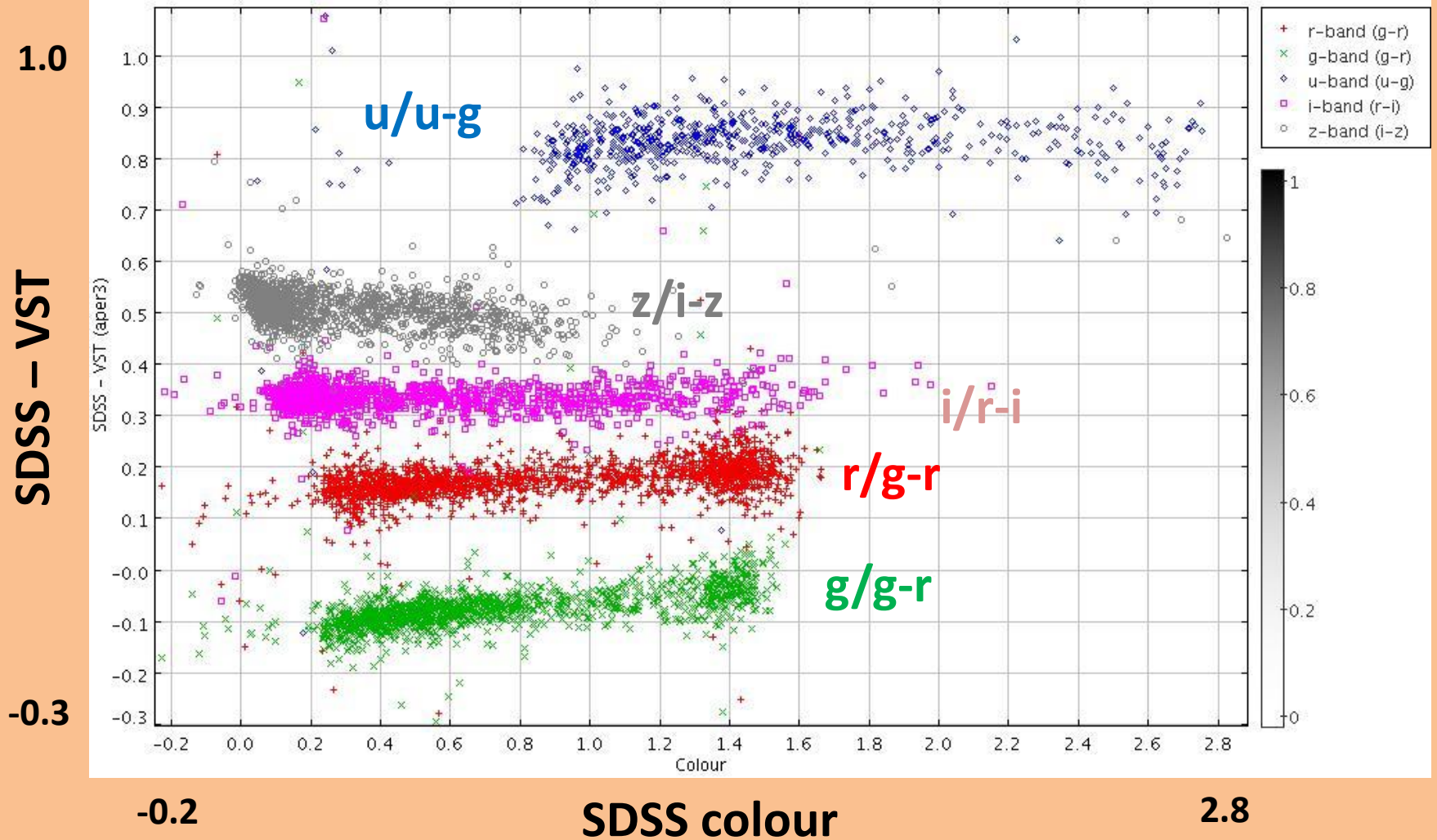


Standard star fields



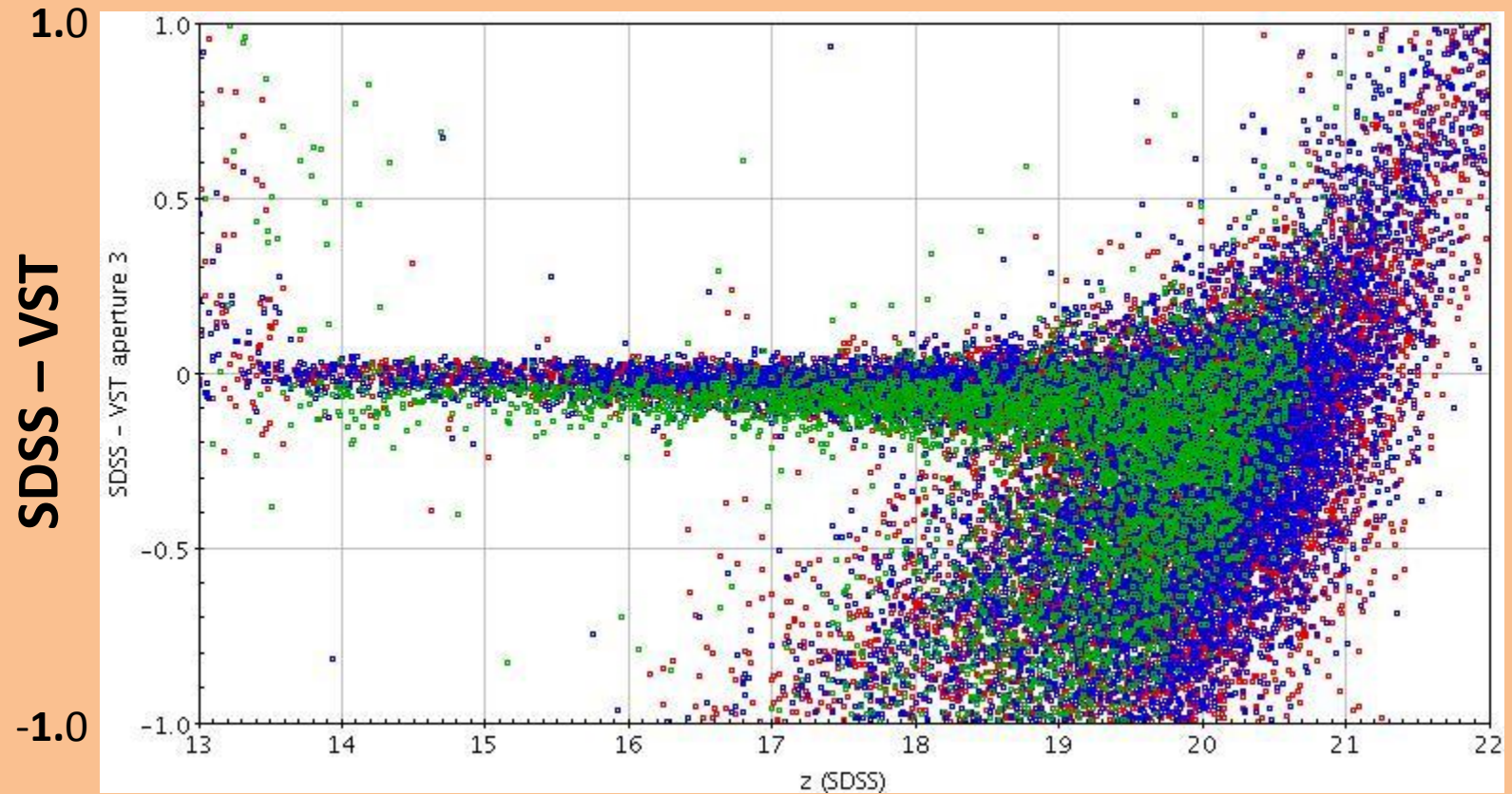
SDSS colour terms

(Stars)



Magnitude comparisons

VST aperture magnitudes, all objects



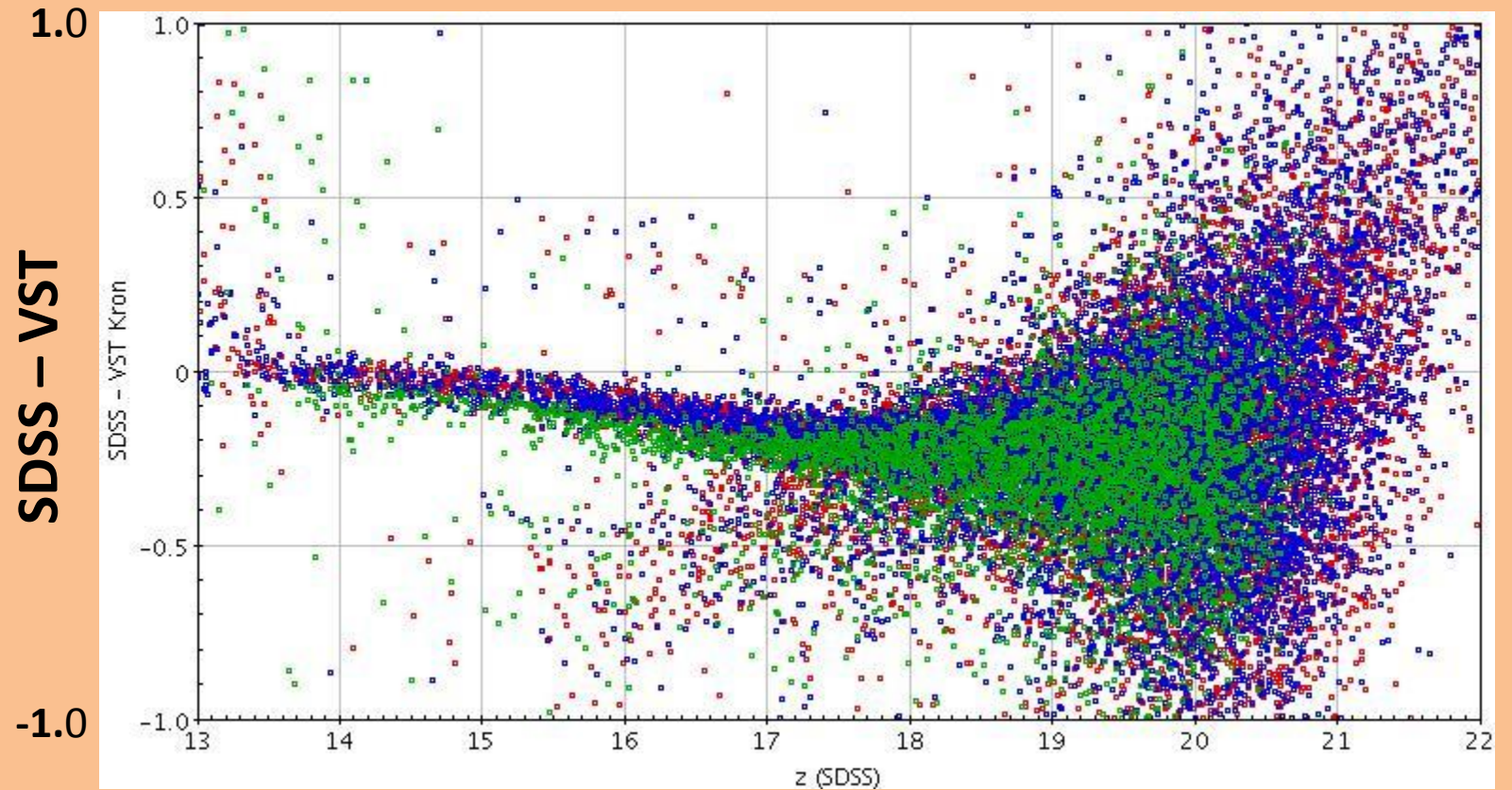
13

z-band

22

Magnitude comparisons

VST Kron magnitudes, all objects



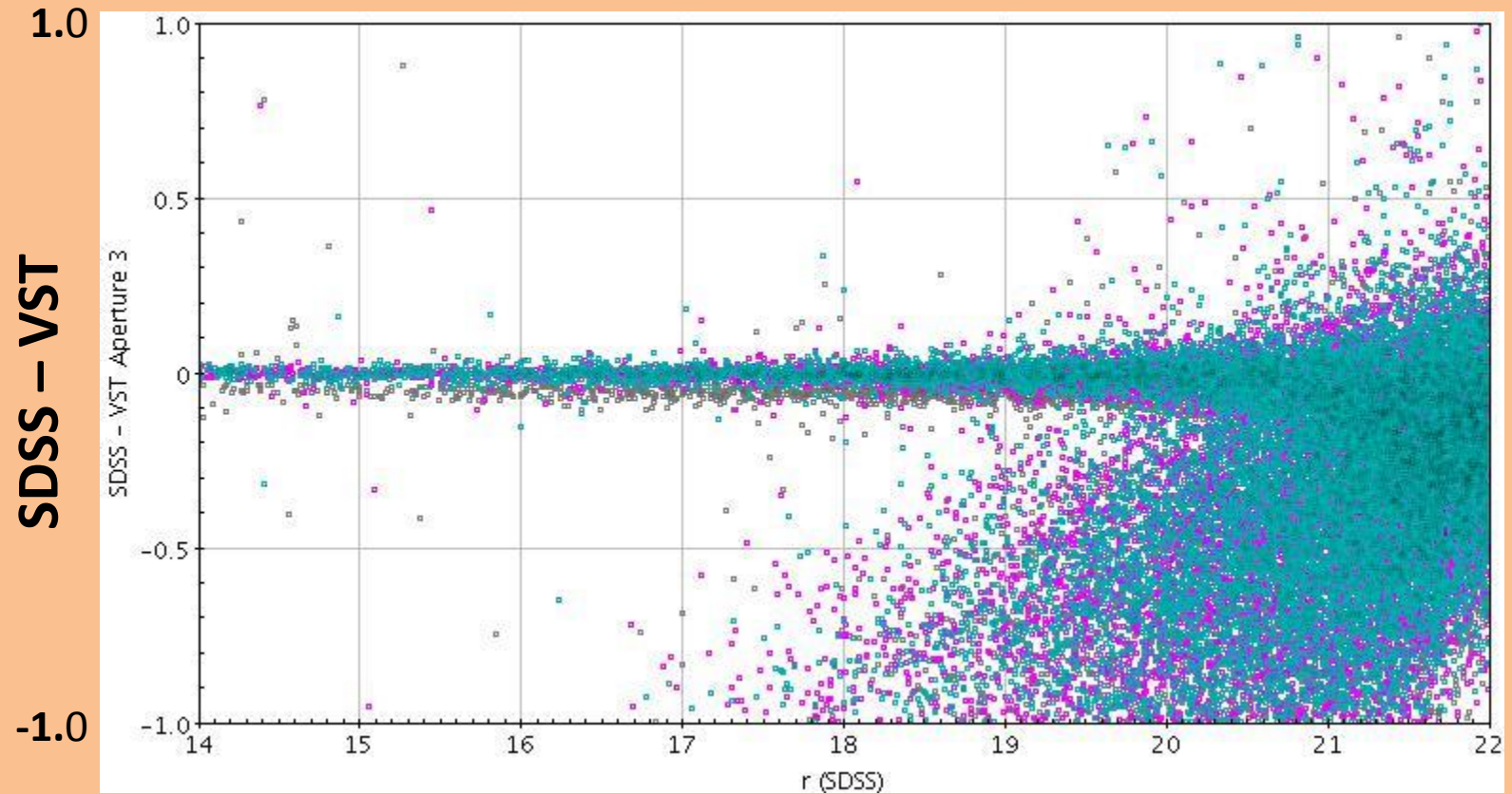
13

z-band

22

Magnitude comparisons

Aperture magnitudes, all objects



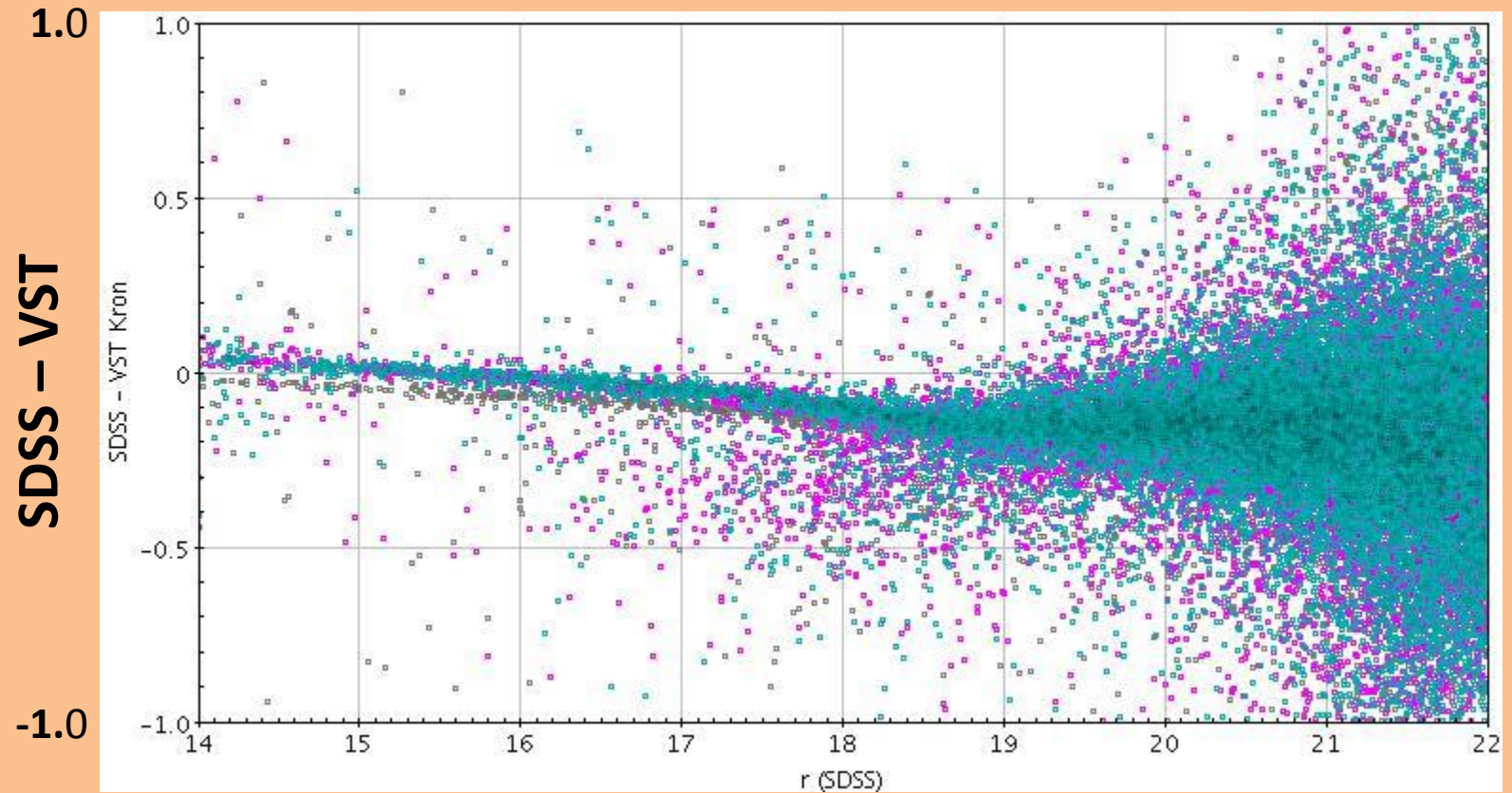
14

r-band

22

Magnitude comparisons

Kron magnitudes, all objects



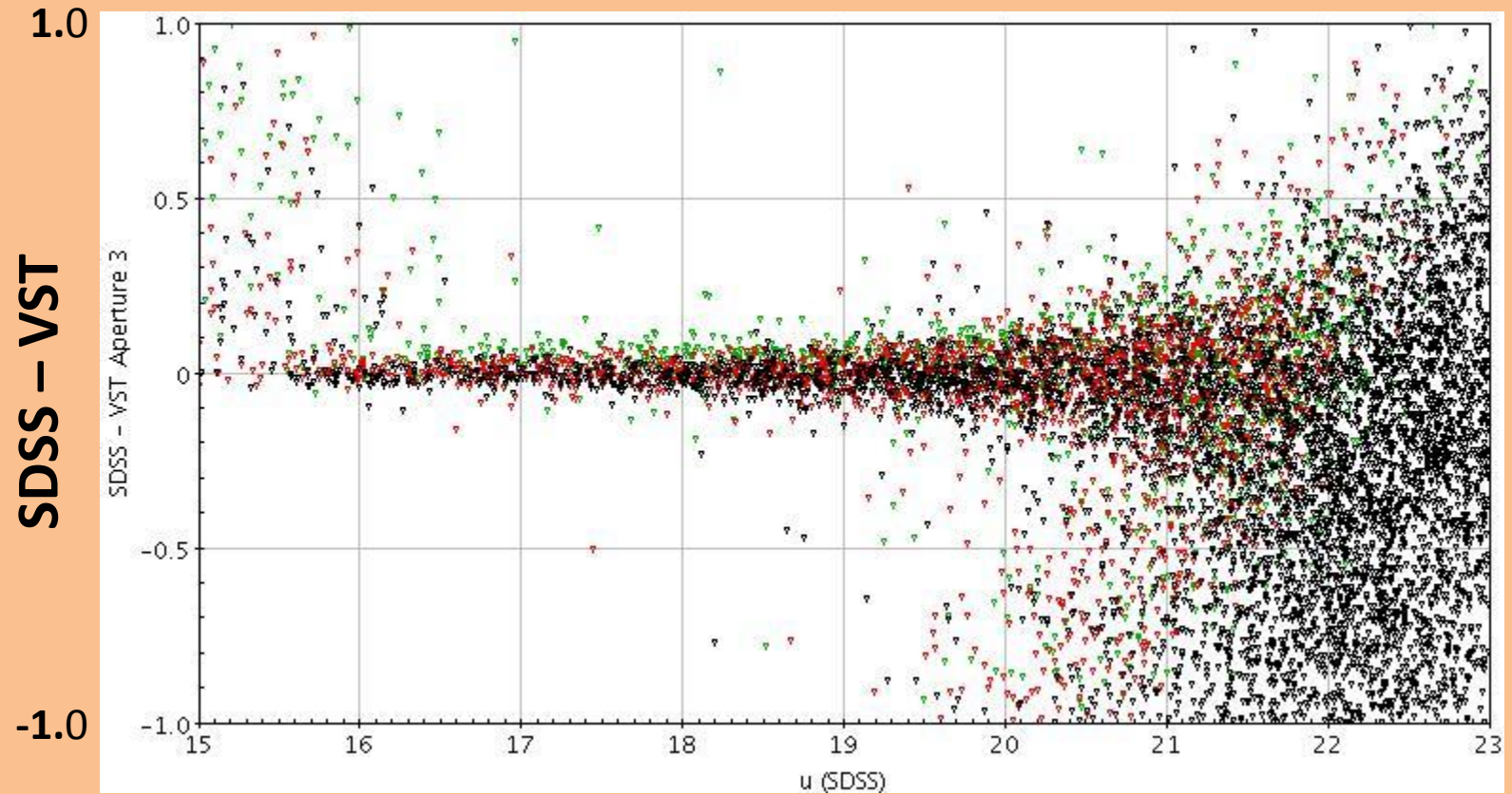
14

r-band

22

Magnitude comparisons

Aperture magnitudes, all objects



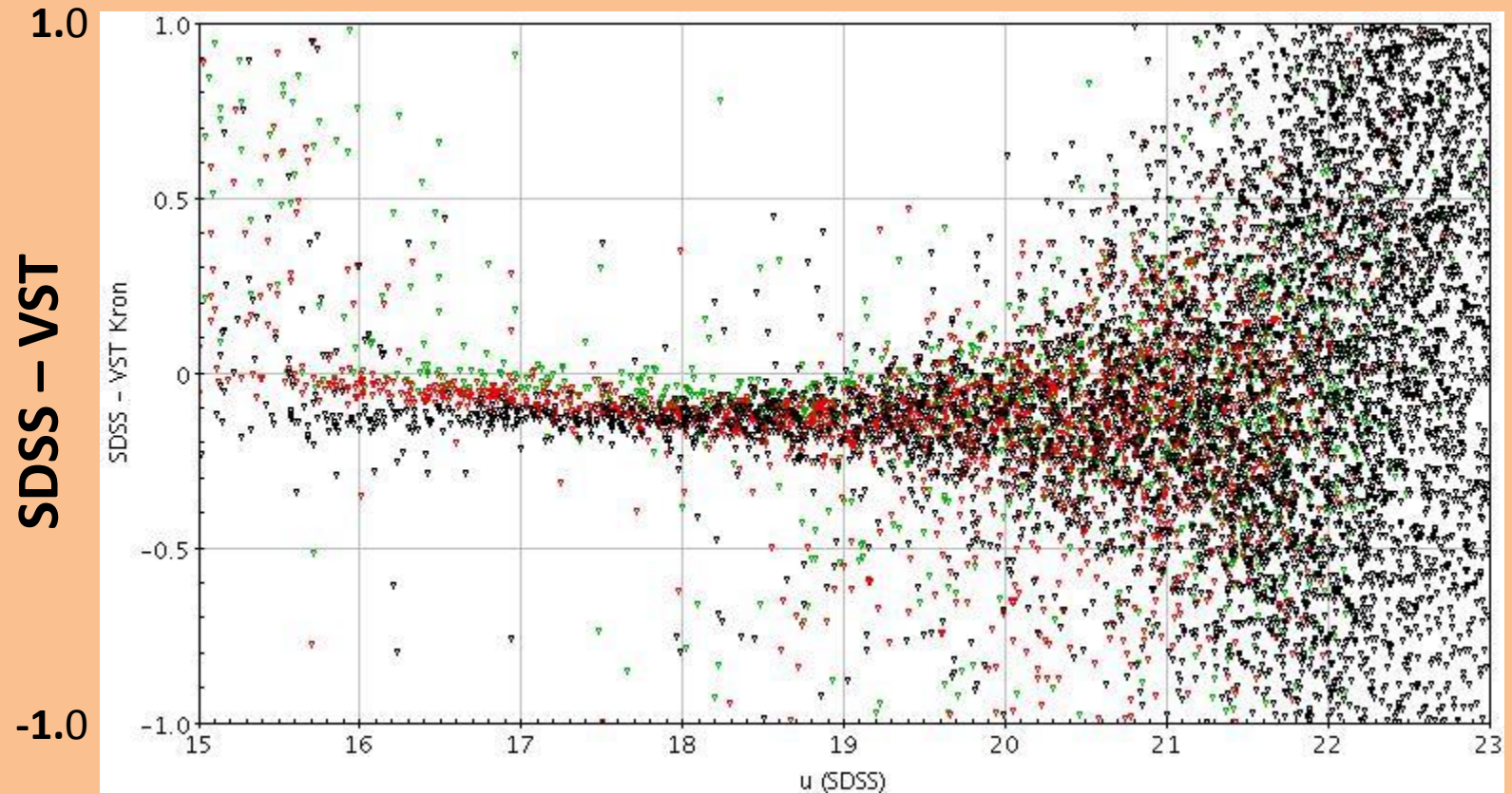
15

u-band (black points forced)

23

Magnitude comparisons

Kron magnitudes, all objects



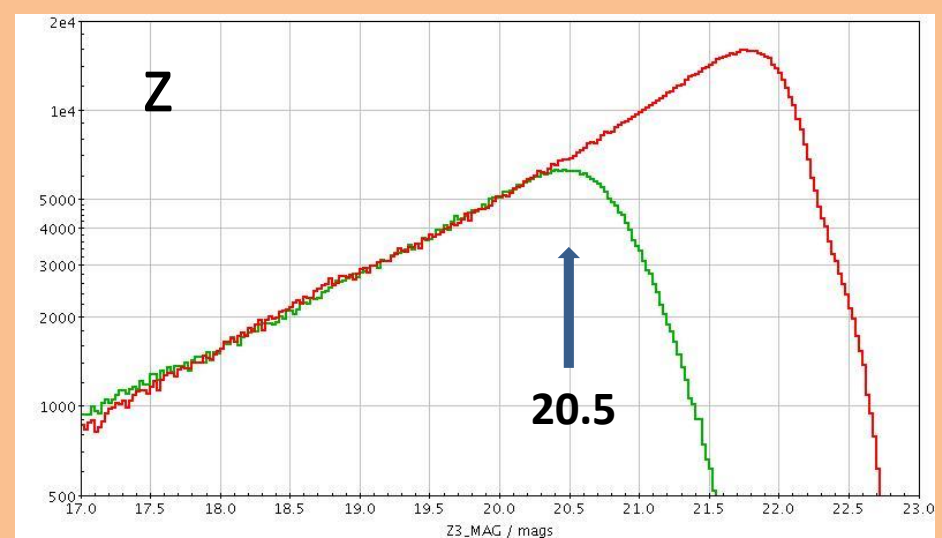
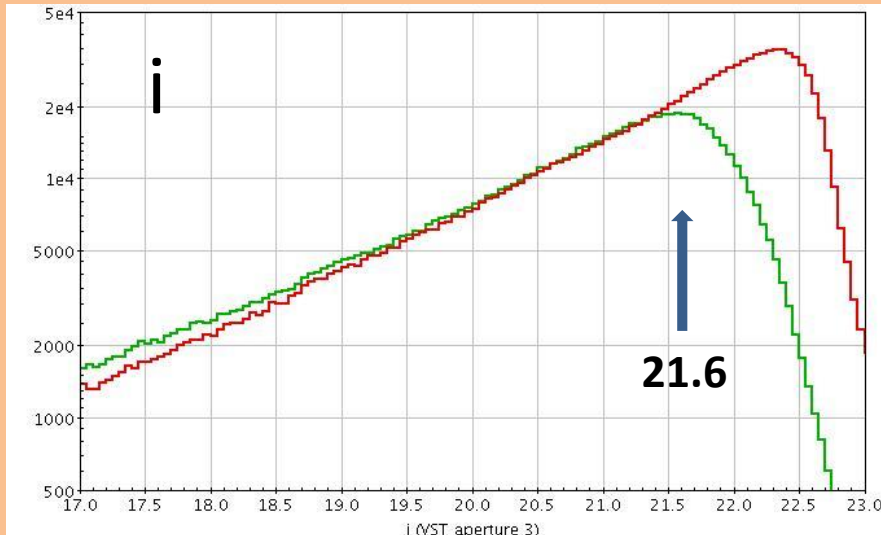
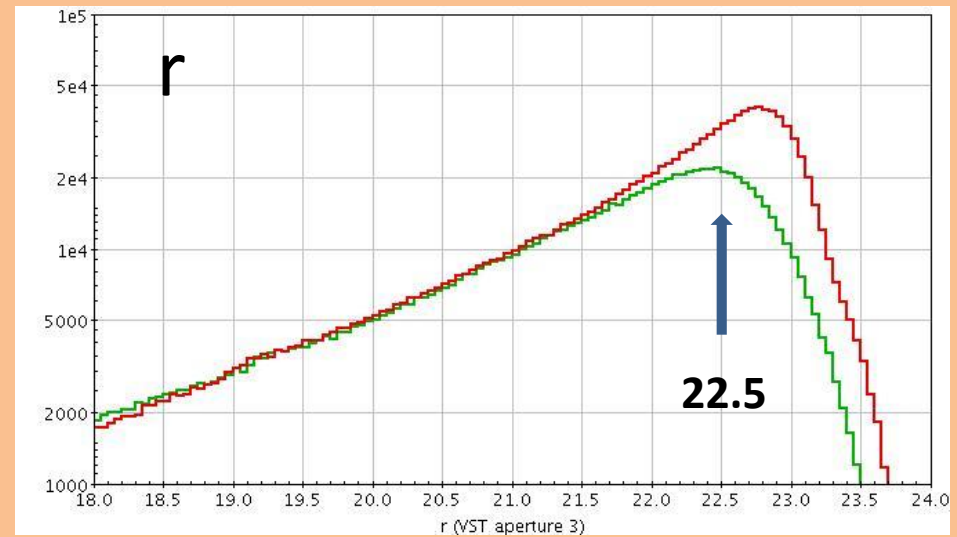
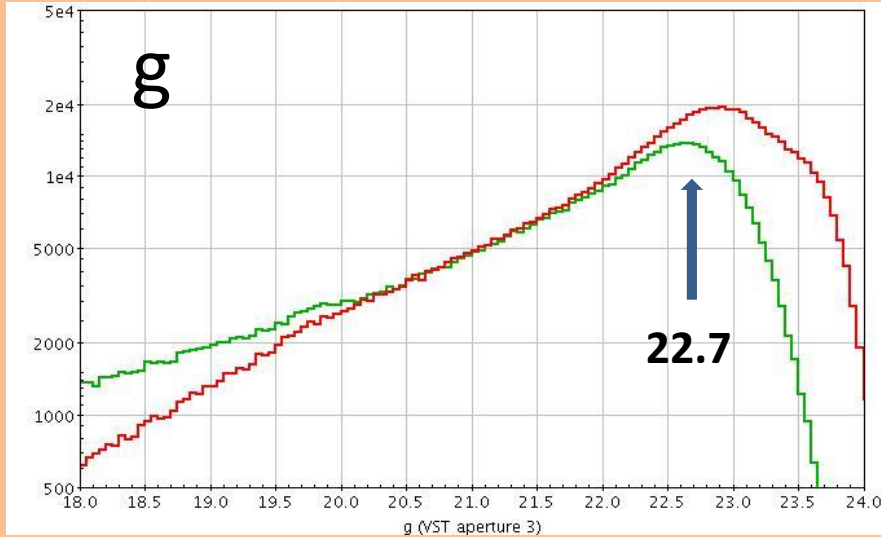
15

u-band (black points forced)

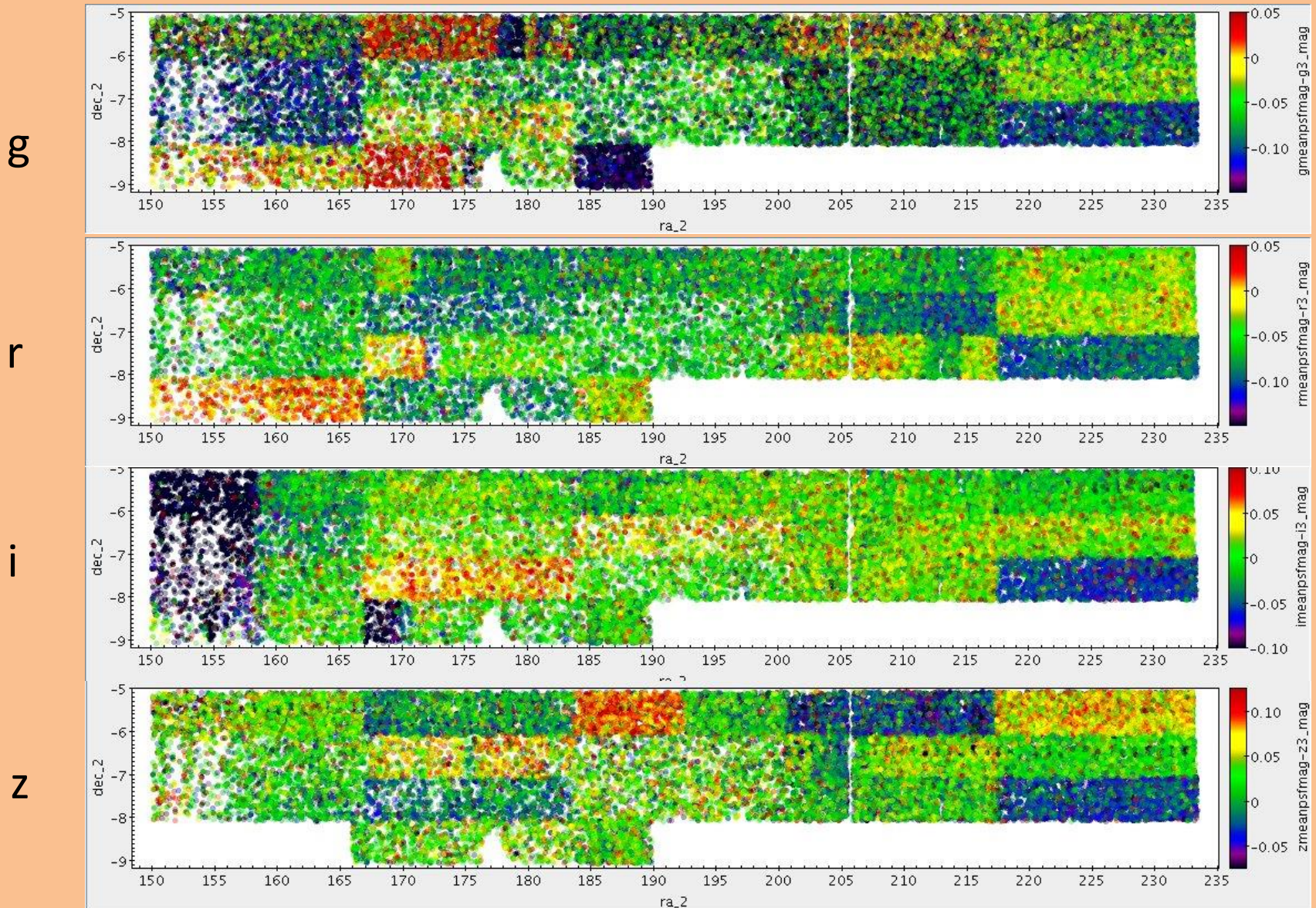
23

Magnitude limits

Green – VST , matched to Pan-STARRS (AB, point source)



Calibration: VST v PS1



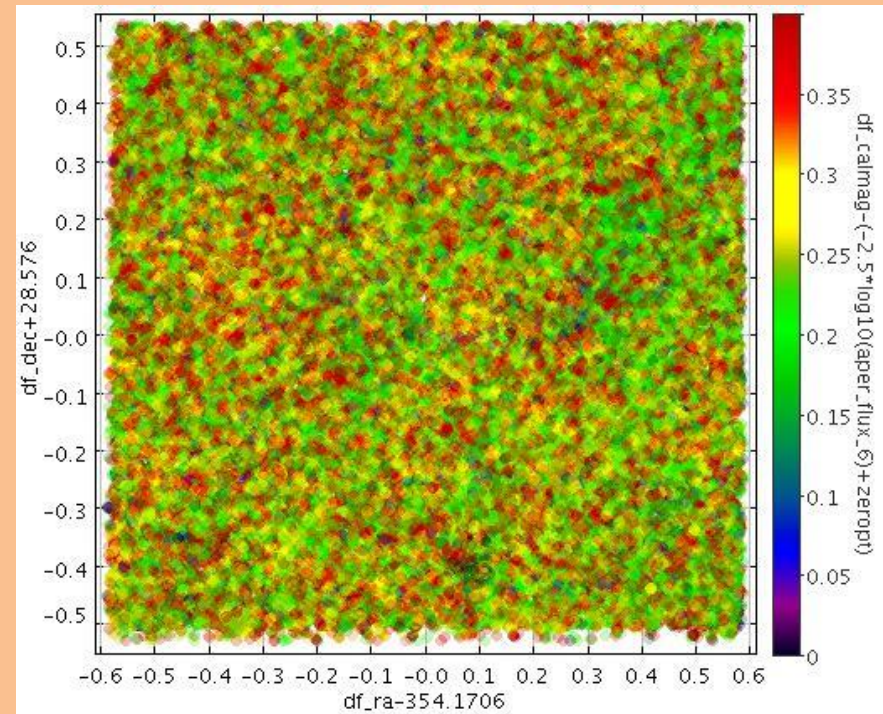
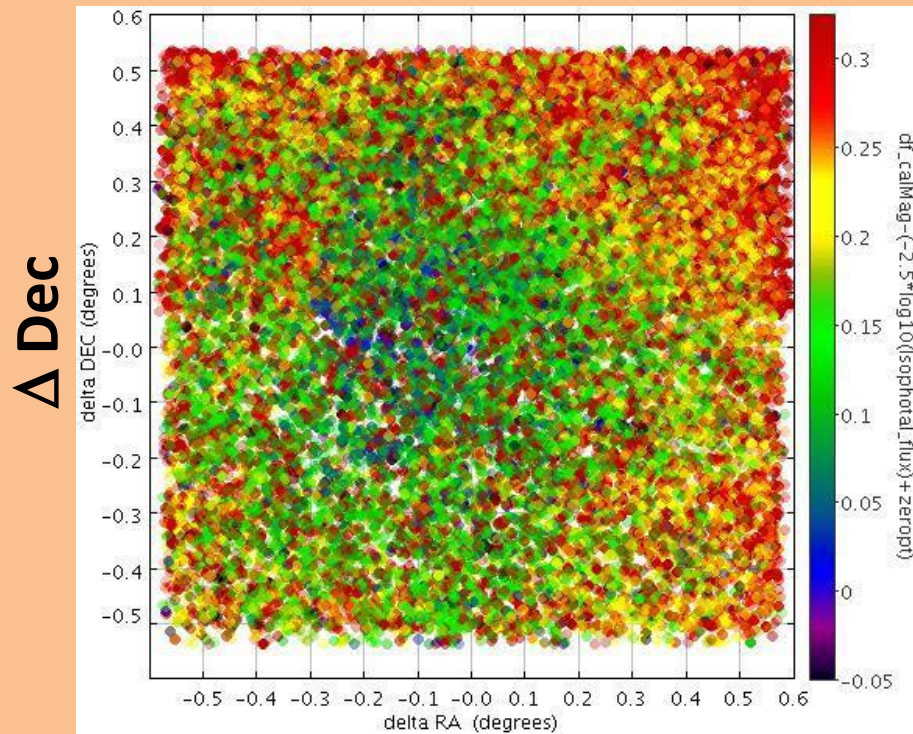
Colours span 0.2 mag

Residual Gradients

Stacked tiles – comparison with Pan-STARRS

Before illumination correction

After

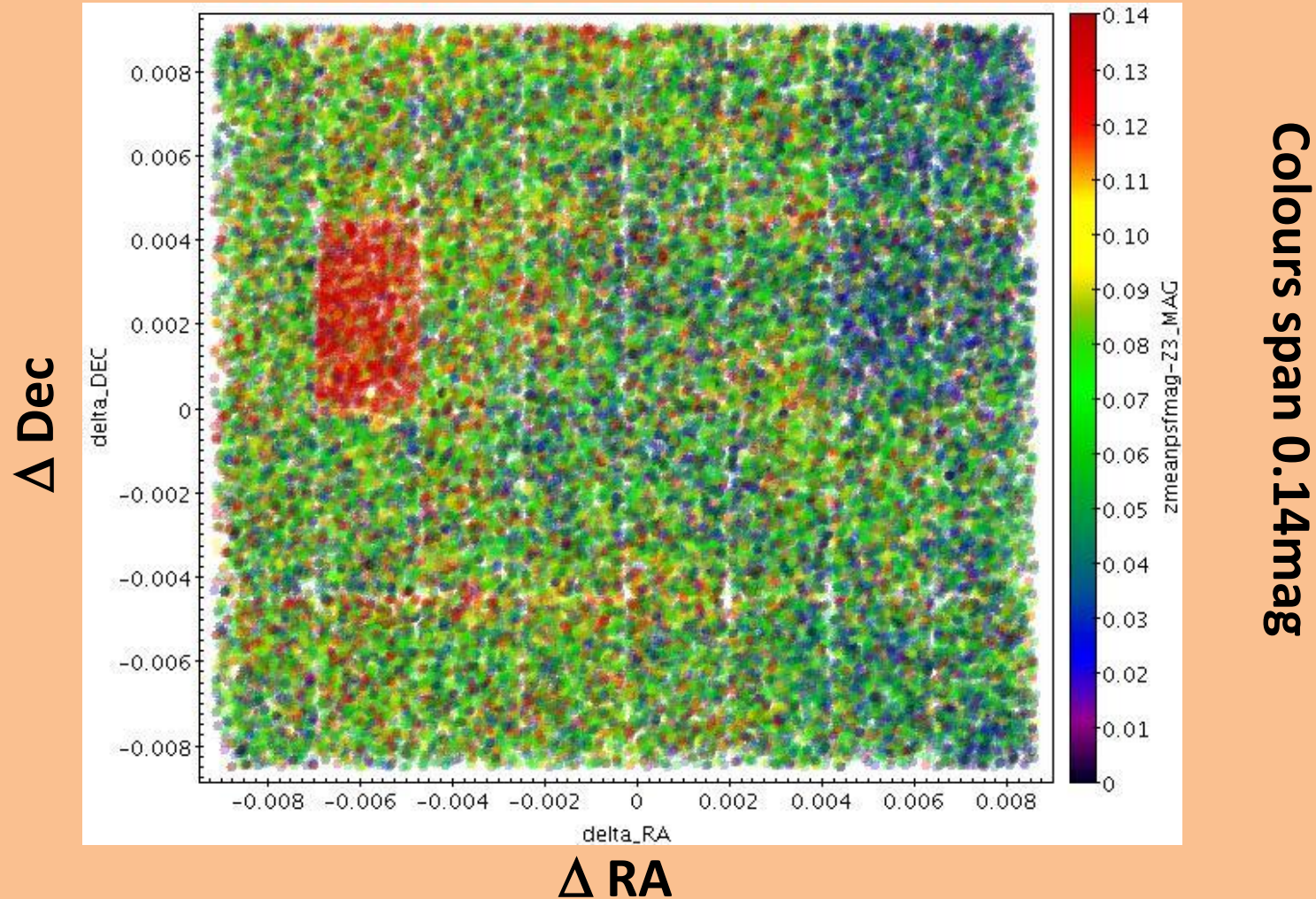


Δ RA

Colours span 0.4 mags

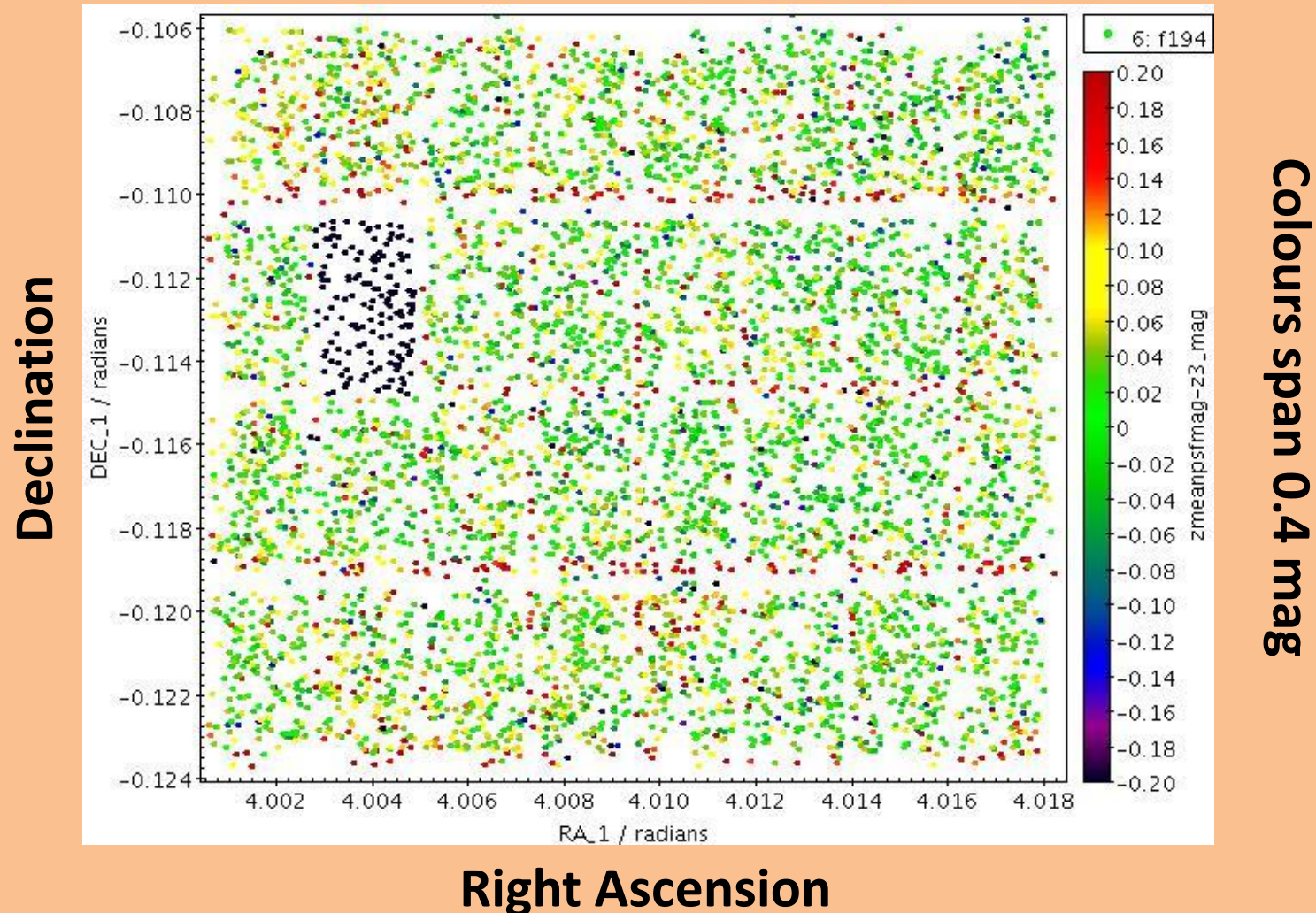
Residual Gradients

~10 z-band stacks from May 2012 after correction



Variable seeing

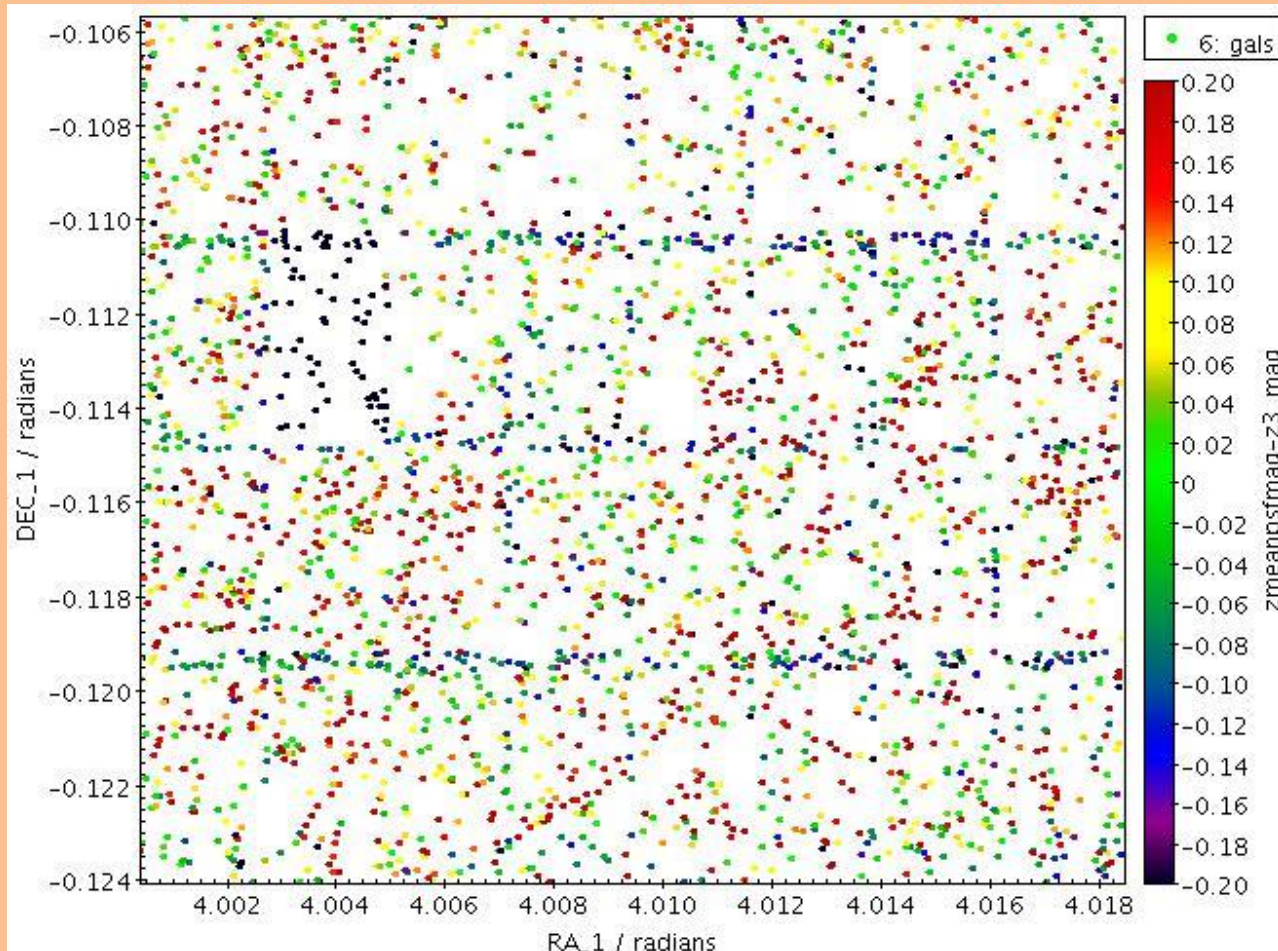
Single A-grade z stack: stars only – aper magnitude offsets



Variable seeing

Same stack: now the bright galaxies only

Declination



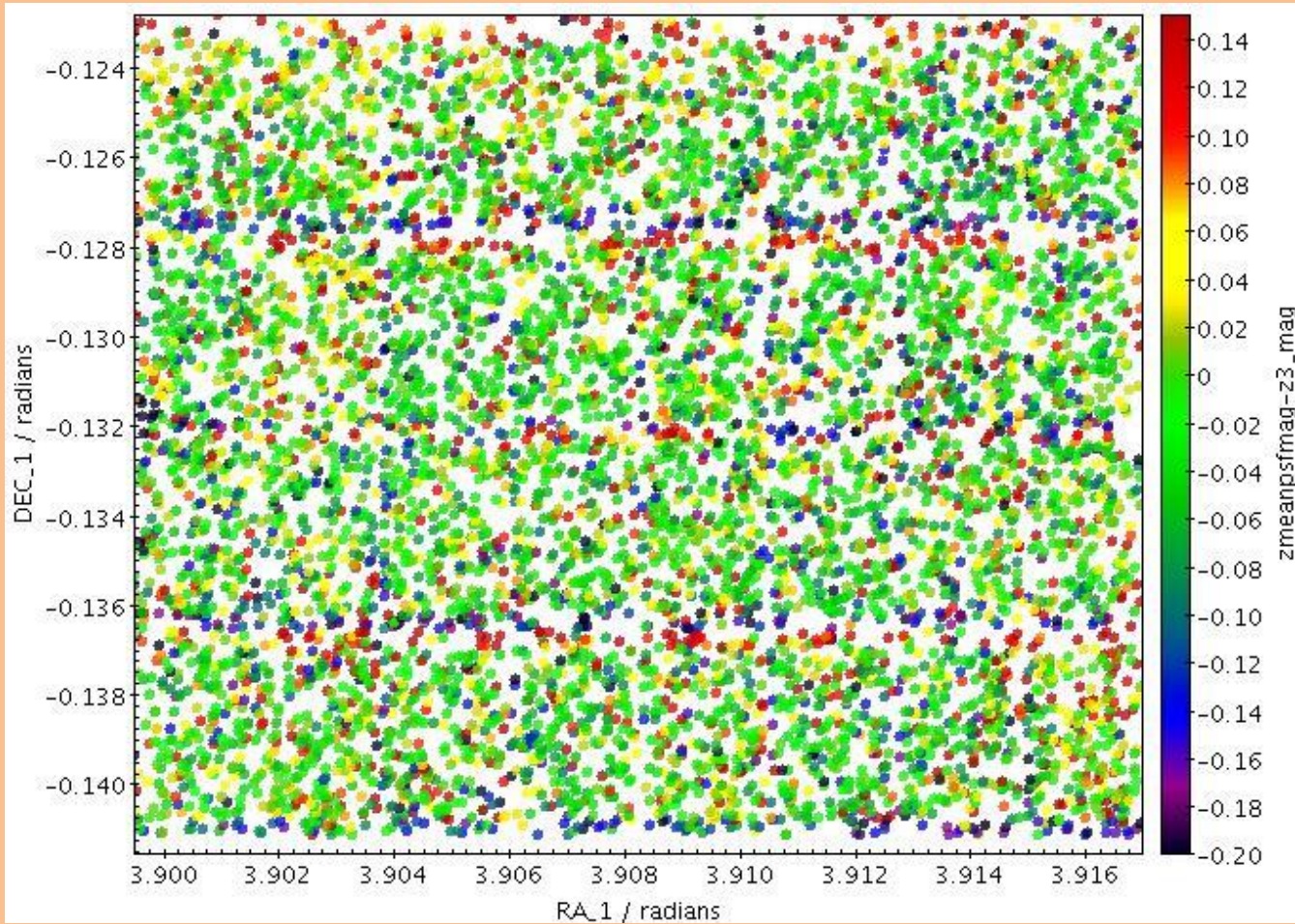
Colours span 0.4 mag

Right Ascension

Variable seeing

Different A-grade z stack: all objects

Declination

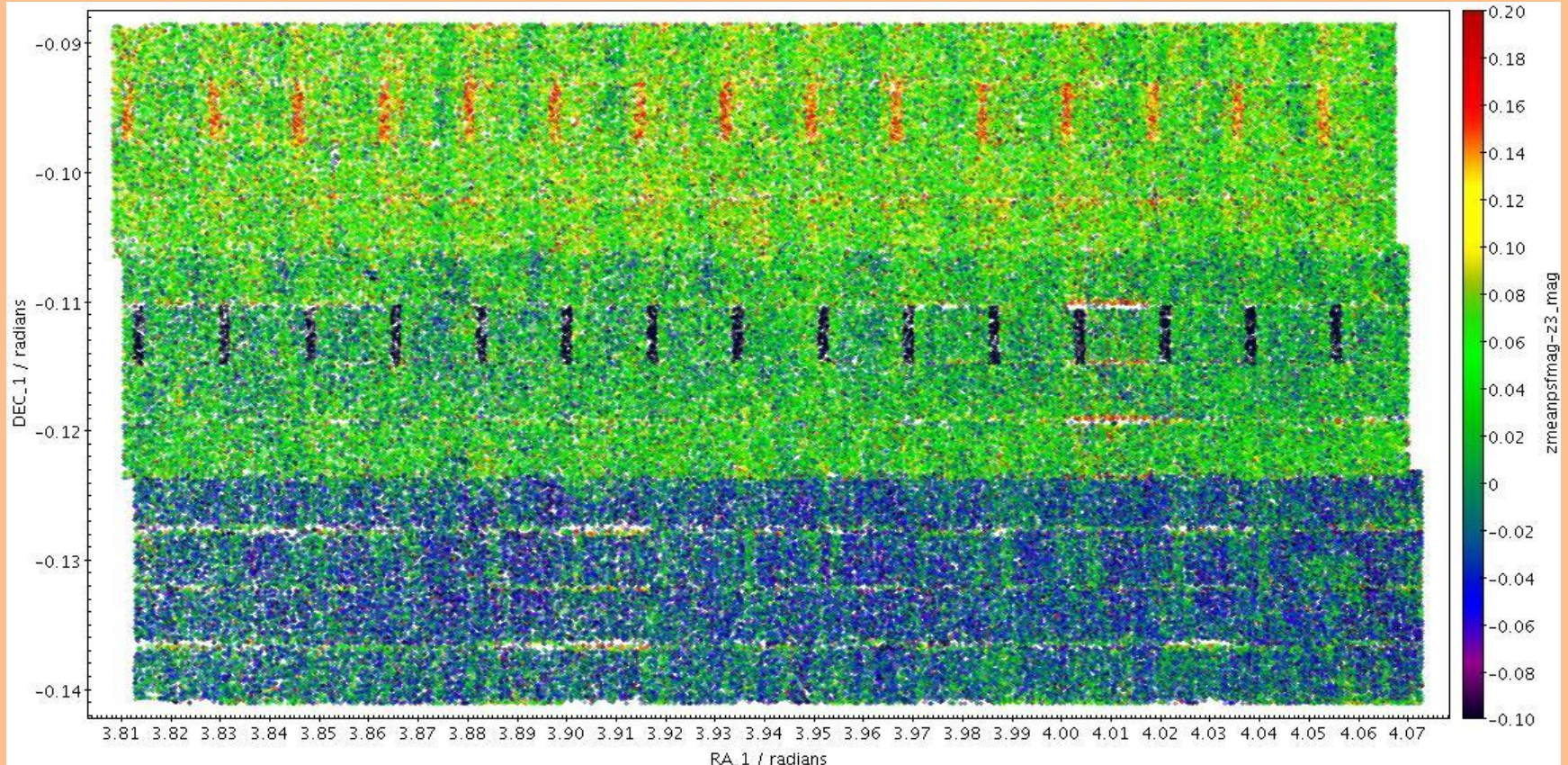


Colours span 0.35 mag

Right Ascension

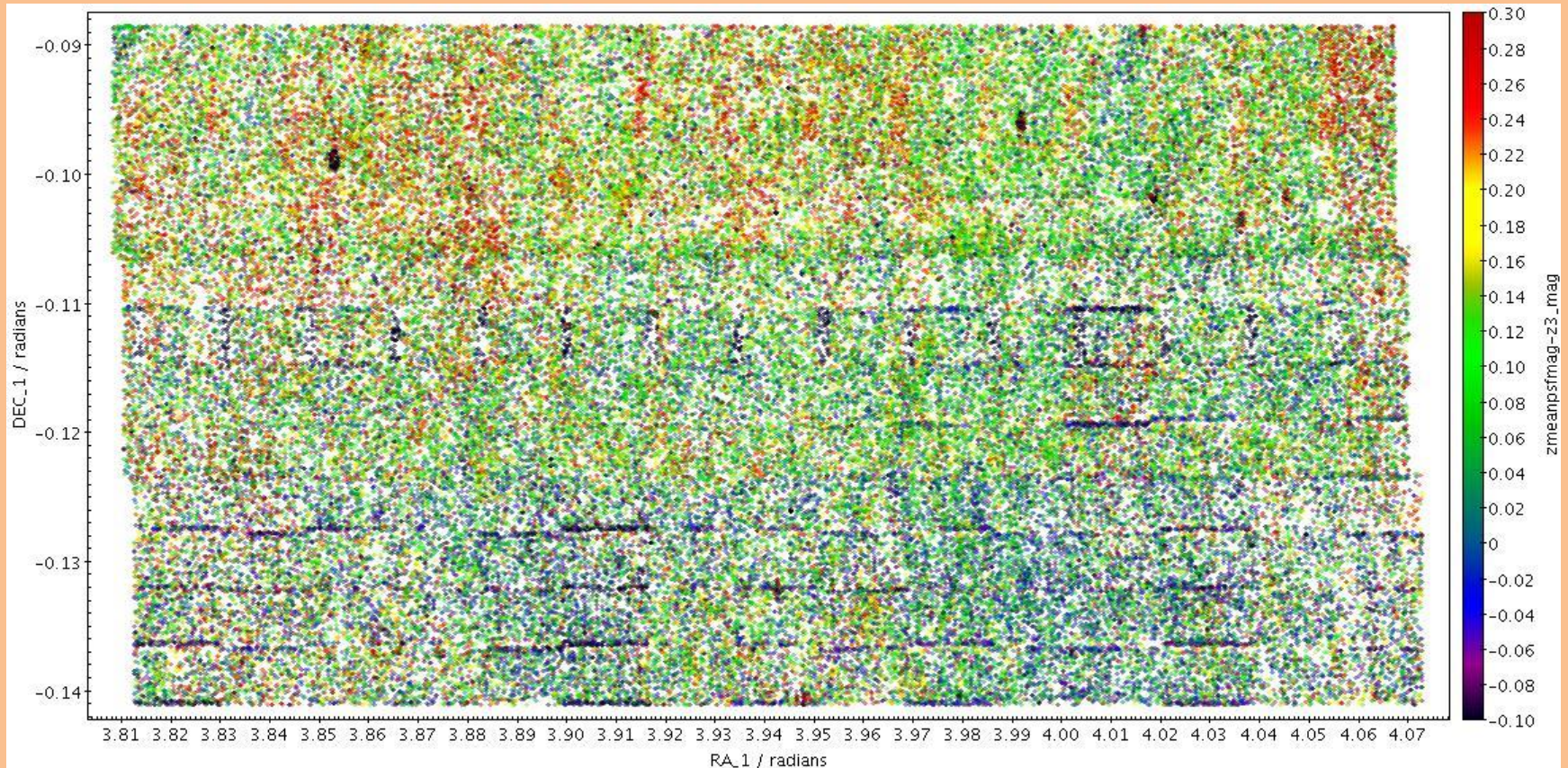
Variable seeing

z-band aper mag offsets over 40 square degrees



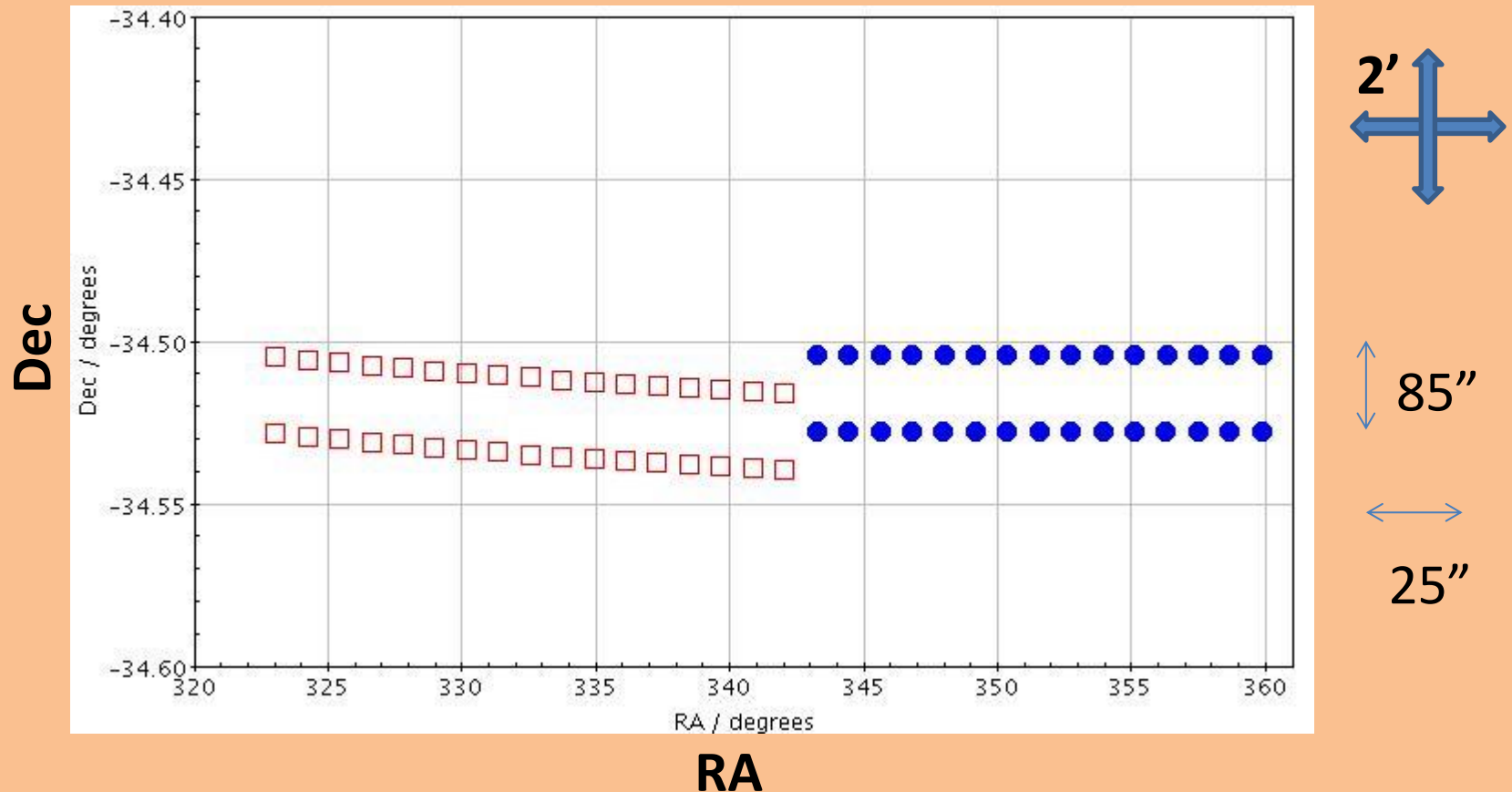
← One concatenation (17 OBs) →

Variable seeing



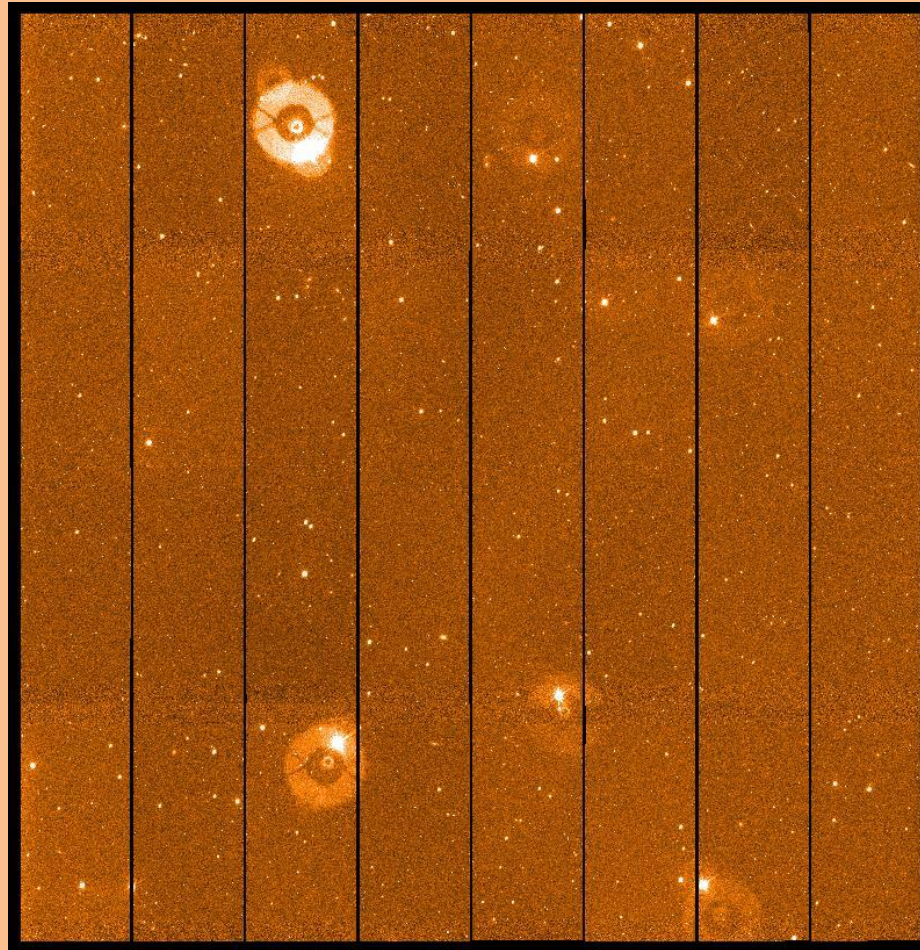
Pointing (lack of!)

Red boxes – offset OB; Blue circles – 17 OB concatenation
Centre positions of each tile



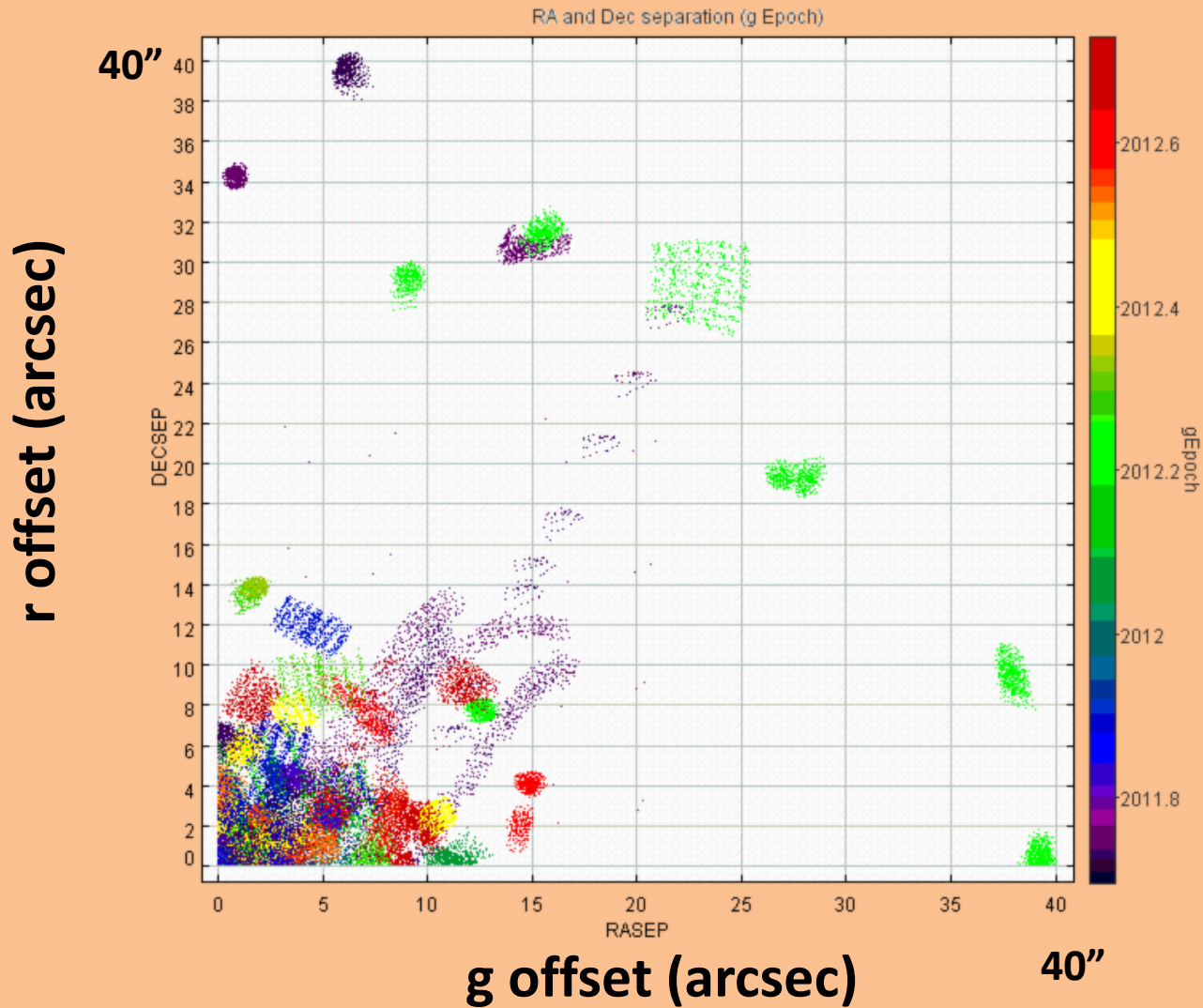
Pointing

Result was gaps between the CCDs in the tiles at the end in the OB



Pointing

Offset from requested centre



Pointing

r-band

12:36:48.2

-07:35:02.3

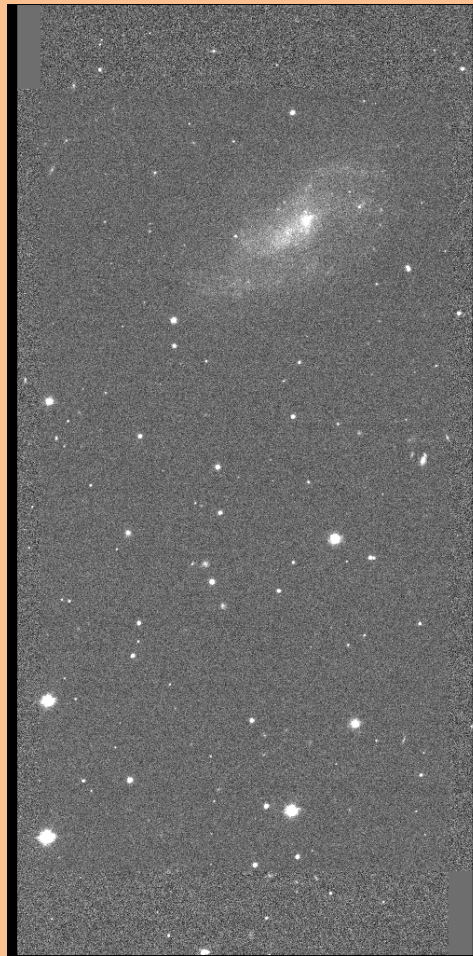


Pointing

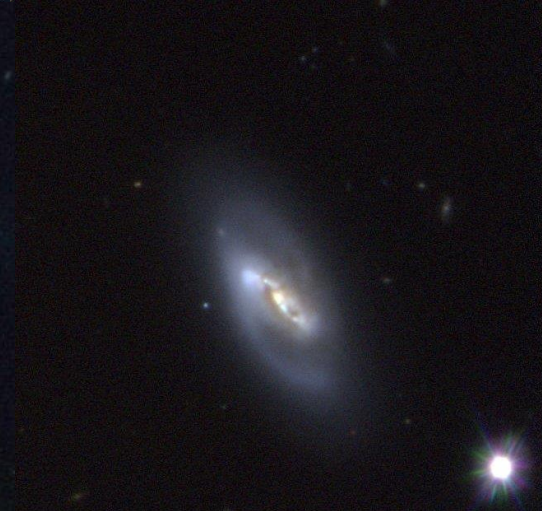
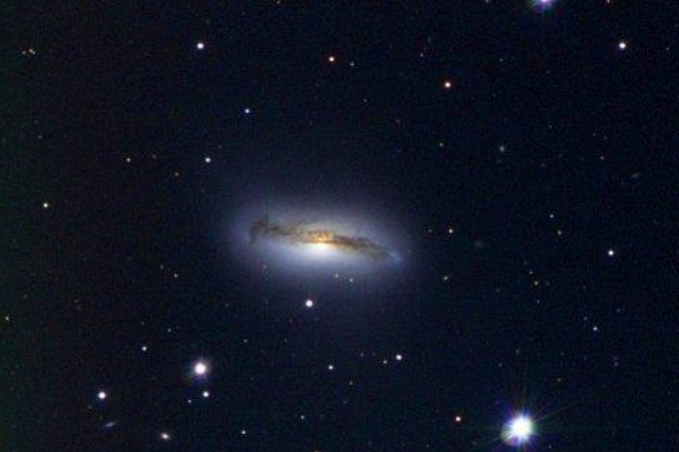
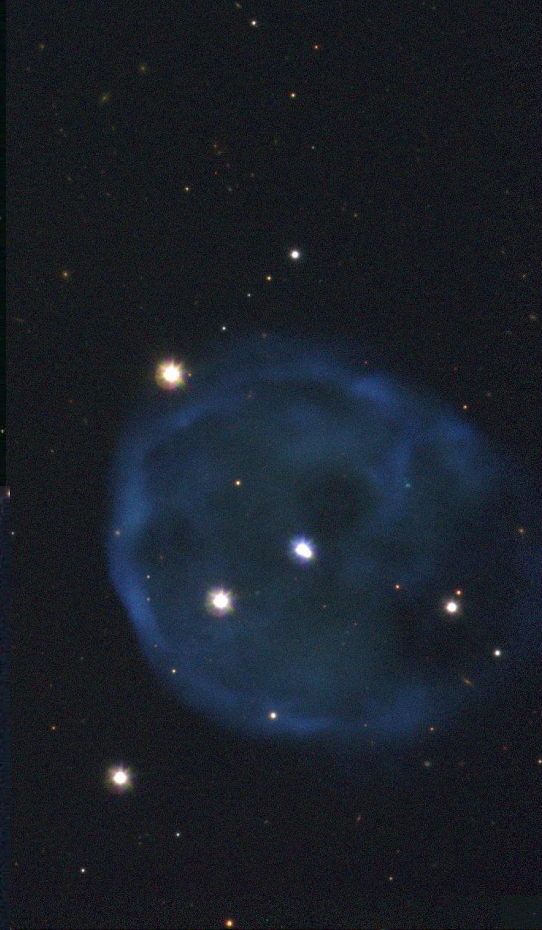
g-band

12:36:48.2

-07:35:02.3



Shift is around 20" in
both RA and Dec
(one of the worst
examples)



Spot the Survey!

