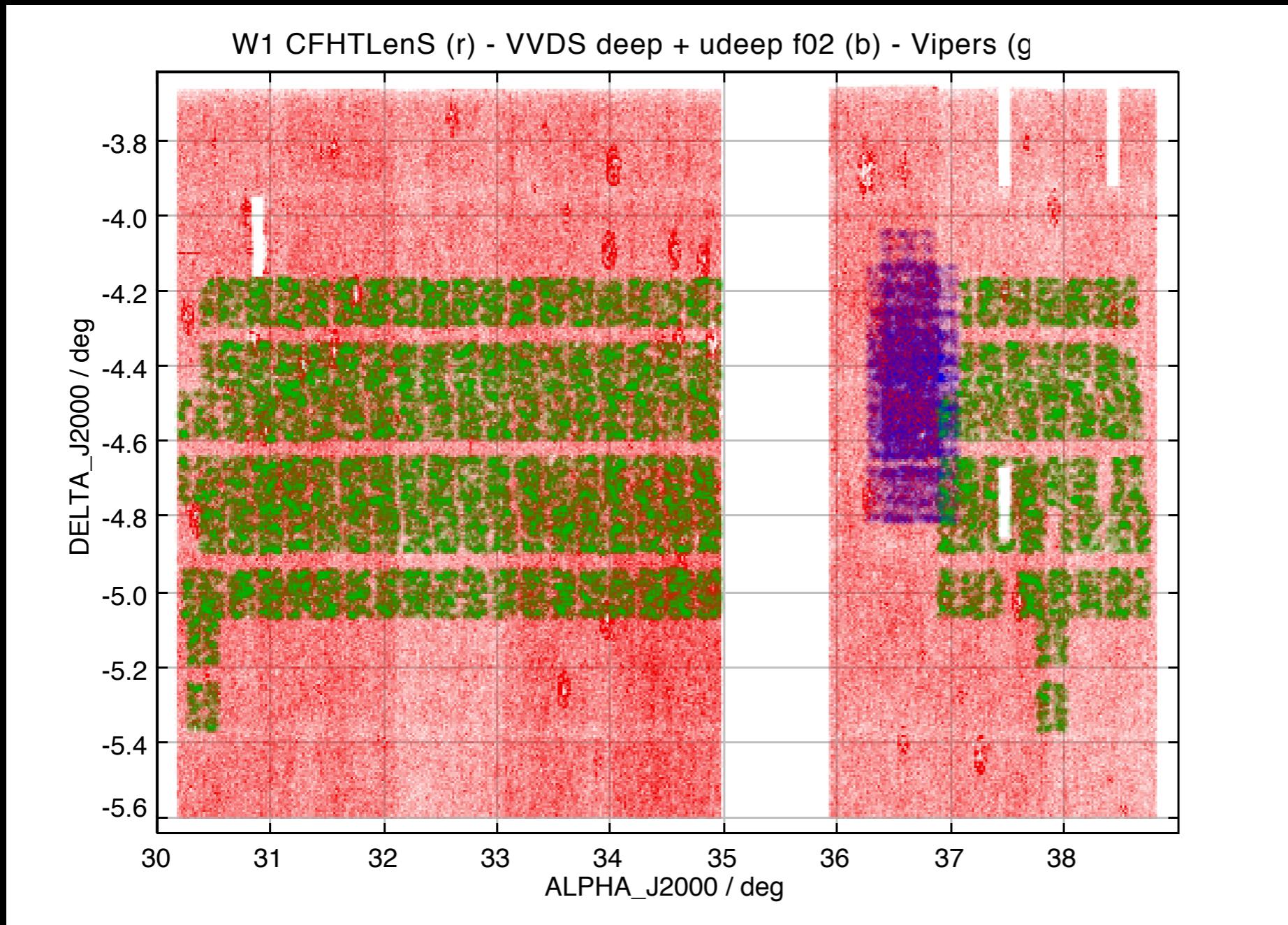


Catalog for photo-z reconstruction benchmarking with CFHTLenS data

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CFHTLenS / Vipers/VVDS / DEEP2 WI & W4 CFHTLS



Existing work
from G. Blanc &
C. Robert
with CFHTLS

Plots on WI

CFHTLenS reprocessing

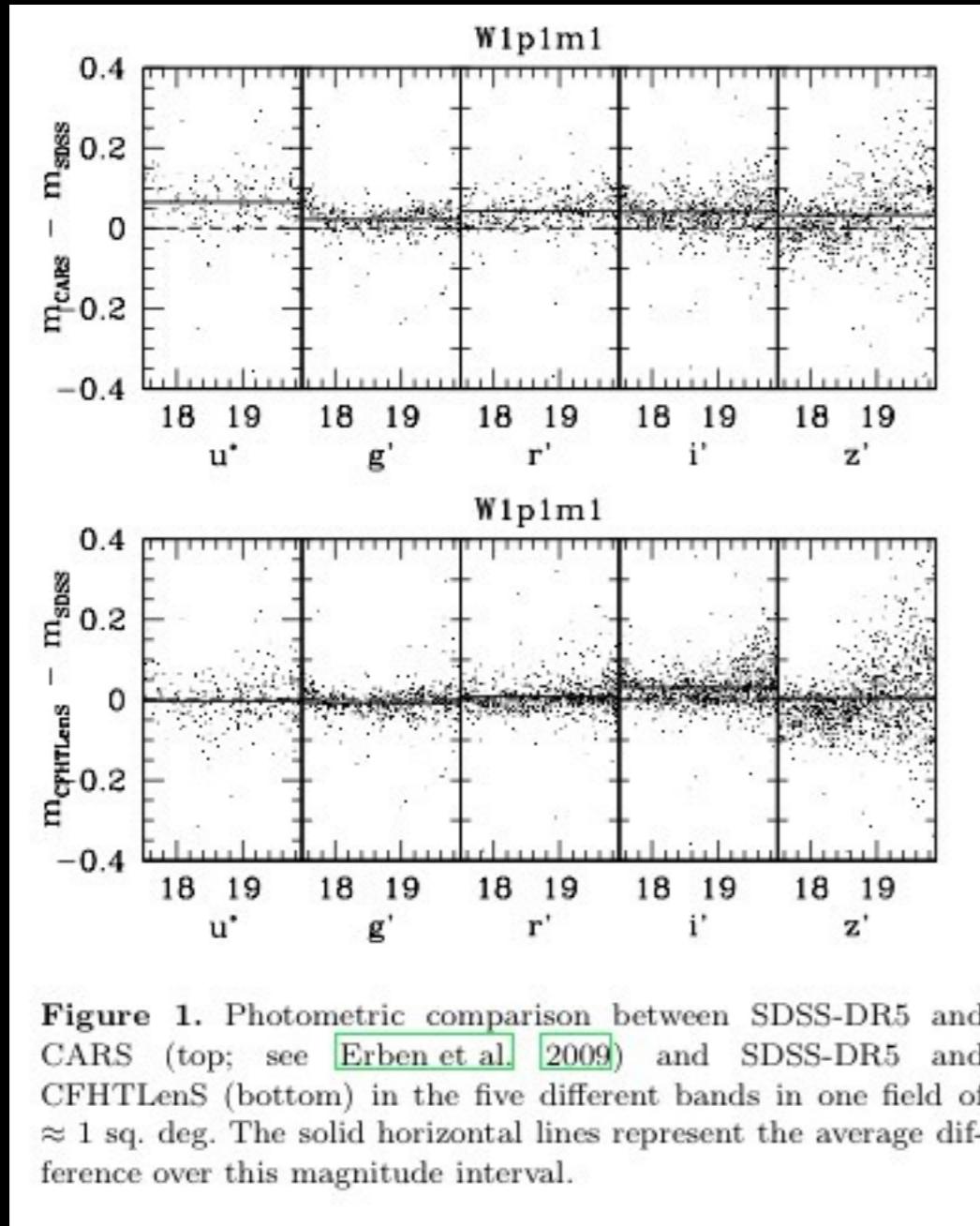


Figure 1. Photometric comparison between SDSS-DR5 and CARS (top; see Erben et al. 2009) and SDSS-DR5 and CFHTLenS (bottom) in the five different bands in one field of ≈ 1 sq. deg. The solid horizontal lines represent the average difference over this magnitude interval.

CFHTLS vs CFHTLenS

median stacks vs mean stacks
elliptical apertures vs isophotal apertures

PSF homogeneisation for CFHTLenS :
more homogeneous photometry across
the survey

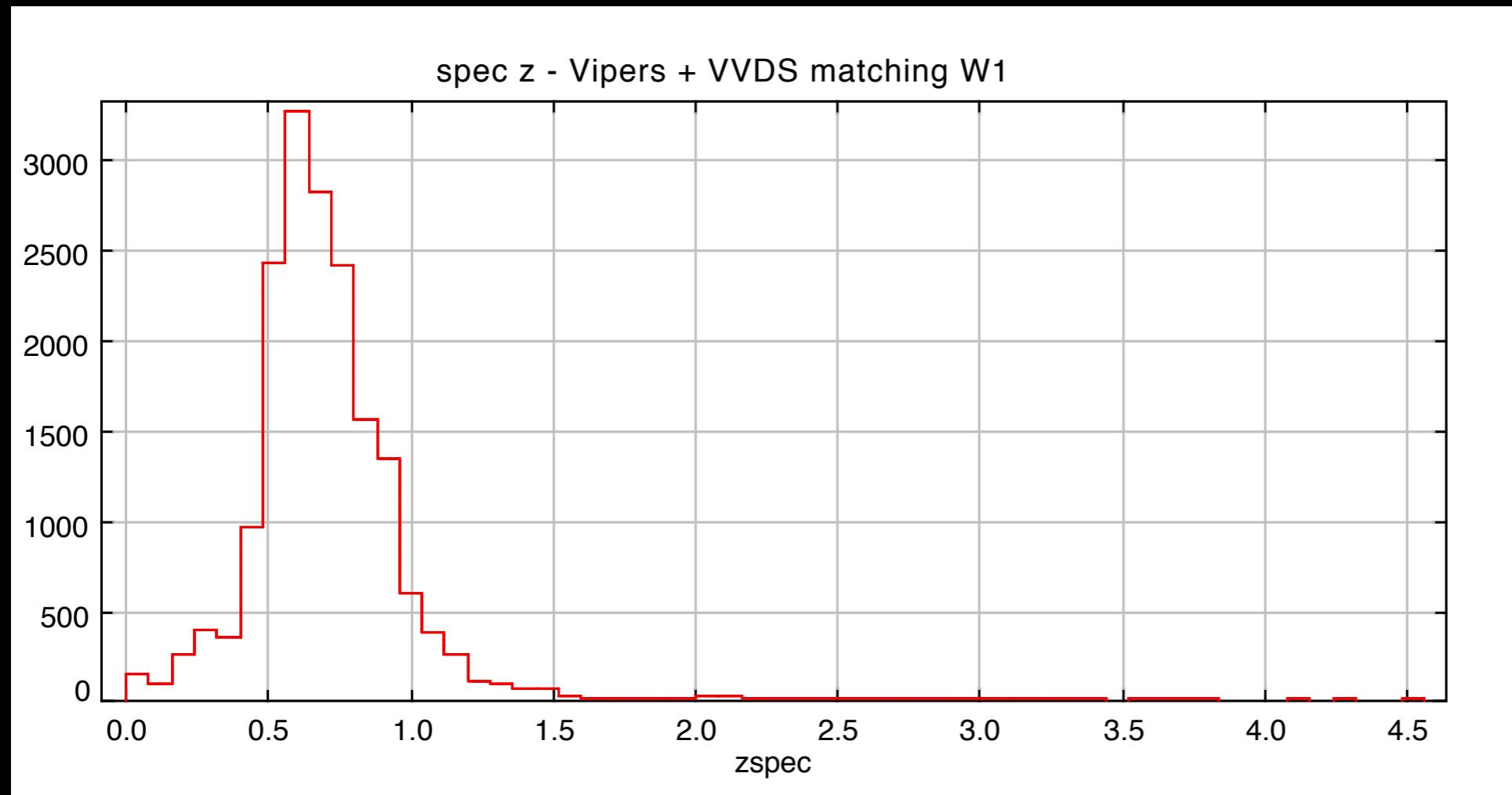
Photometric zeropoints are recalibrated
with a spectro-z subsample

Data selection

galaxies only :

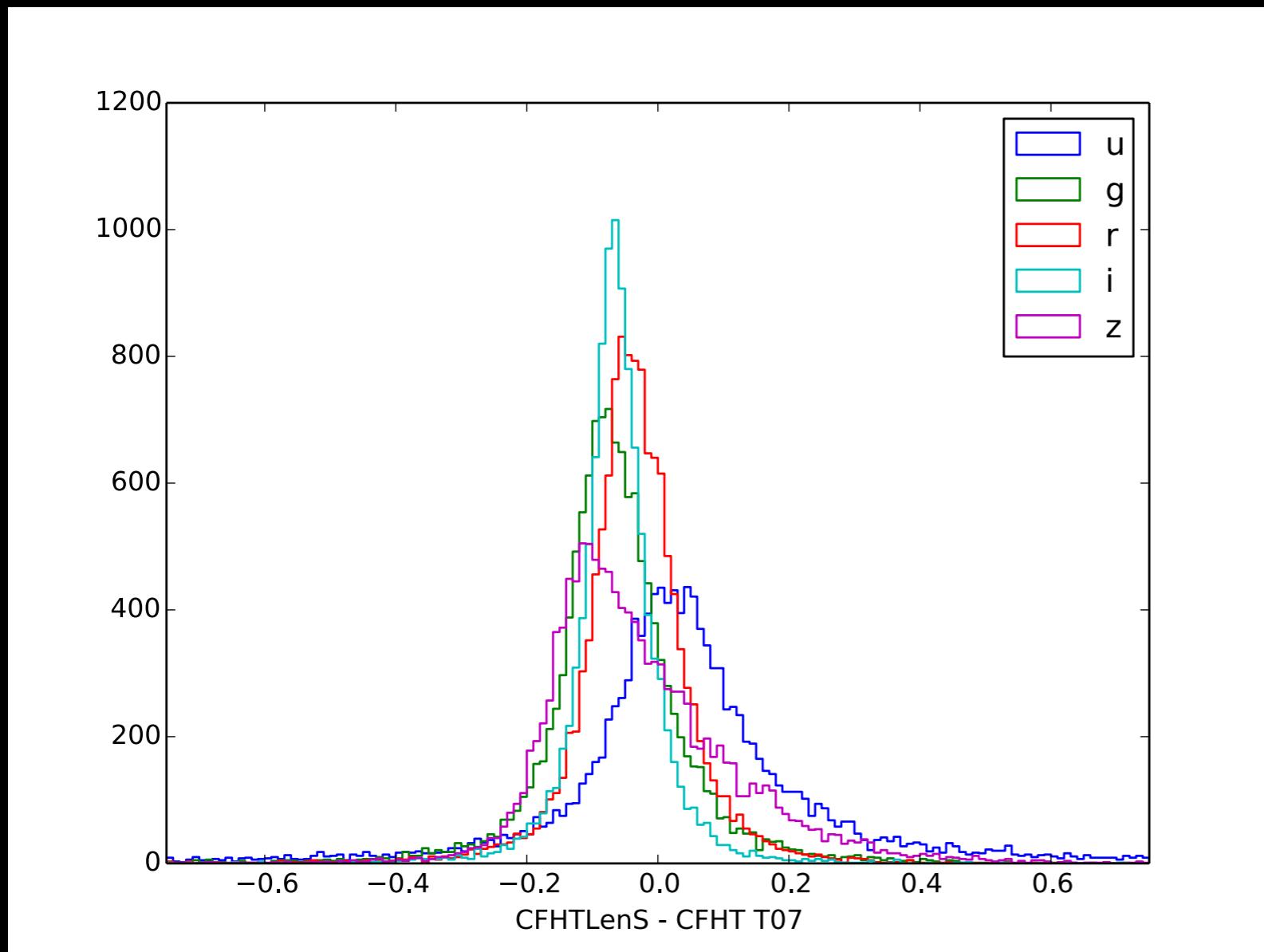
- identification with the spectro survey
- + starflag CFHT (2% mistag ?)
- spectro z flag with high confidence in Vipers or VVDS
- spectro catalogs incomplete for faint ($i > 22$) objects
!! benchmarking with this catalogue

WI CFHTLenS/Vipers/VVDS



match Vipers+VVDS and WI at 0.5 arcsec :
12997+4854 objects (after cuts)

Photometry comparison CFHTLenS/CFHTLS(I)



objects detected in bands +
usable photometry

u

m 0.04 mag std 0.19 mag

g

m -0.06 mag std 0.11 mag

r

m -0.03 mag std 0.09 mag

i

m -0.06 mag std 0.07 mag

z

m -0.03 mag std 0.14 mag

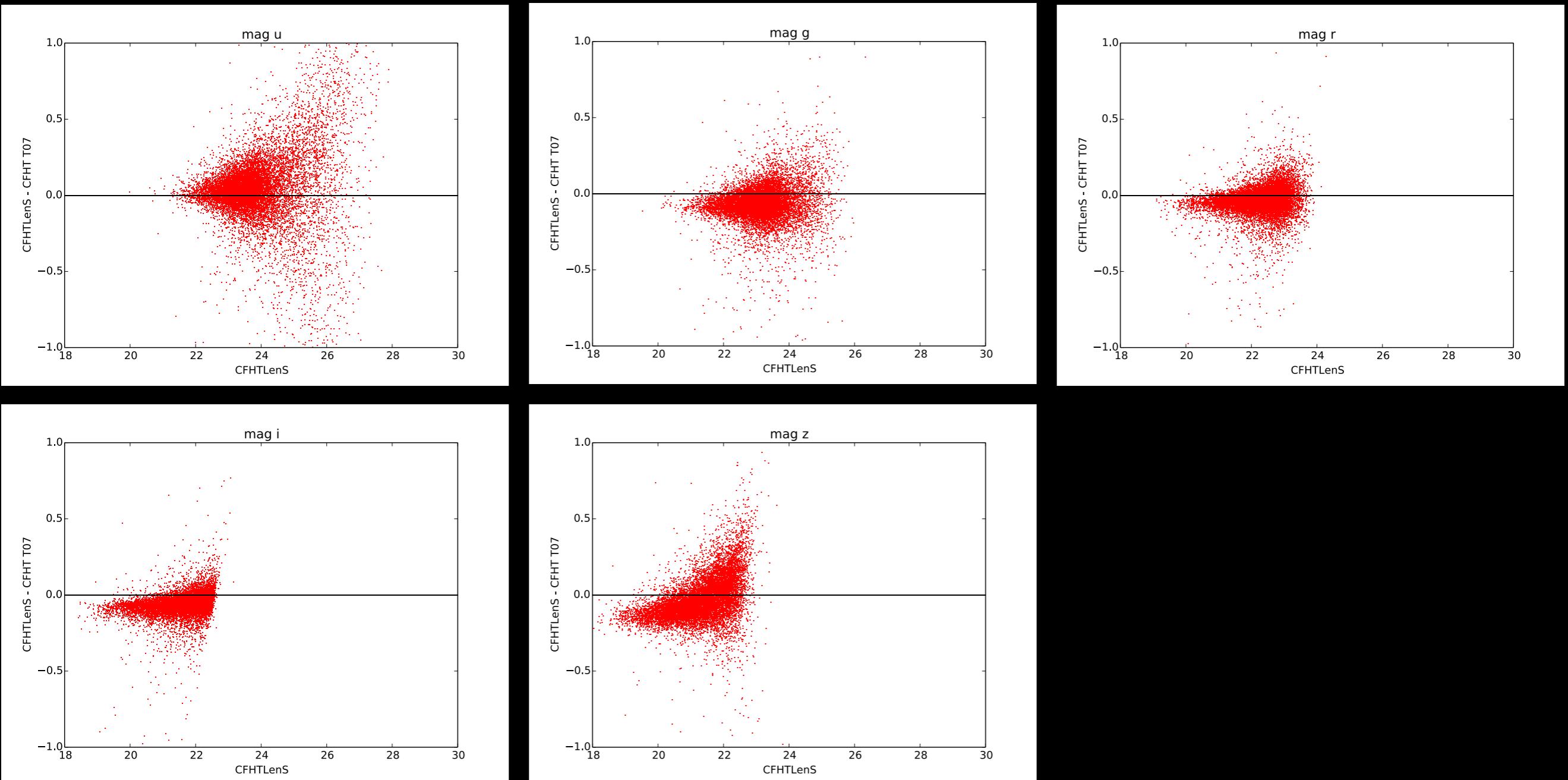
CFHTLS photometry precision :

$$\sigma_{\text{abs, gri}} = 0.01 \text{--} 0.04 \text{ mag}$$

$$\sigma_{\text{abs, u}} = 0.15$$

$$\sigma_{\text{abs, z}} = 0.03 \text{ -- } 0.05 \text{ mag}$$

Photometry comparison (2)



Conclusion

Different photometry with CFHTLenS

Catalog available with WI

W4/Vipers will be added to the available dataset

photometry + zspec + quality flags

other parameters needed for photo-z studies ?

Challenge for photo-z reconstruction ?

Challenge on other data ?

Photometry comparison (3)

