CFHTLenS X spectroscopic catalogs

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Cross catalog with CFHT data

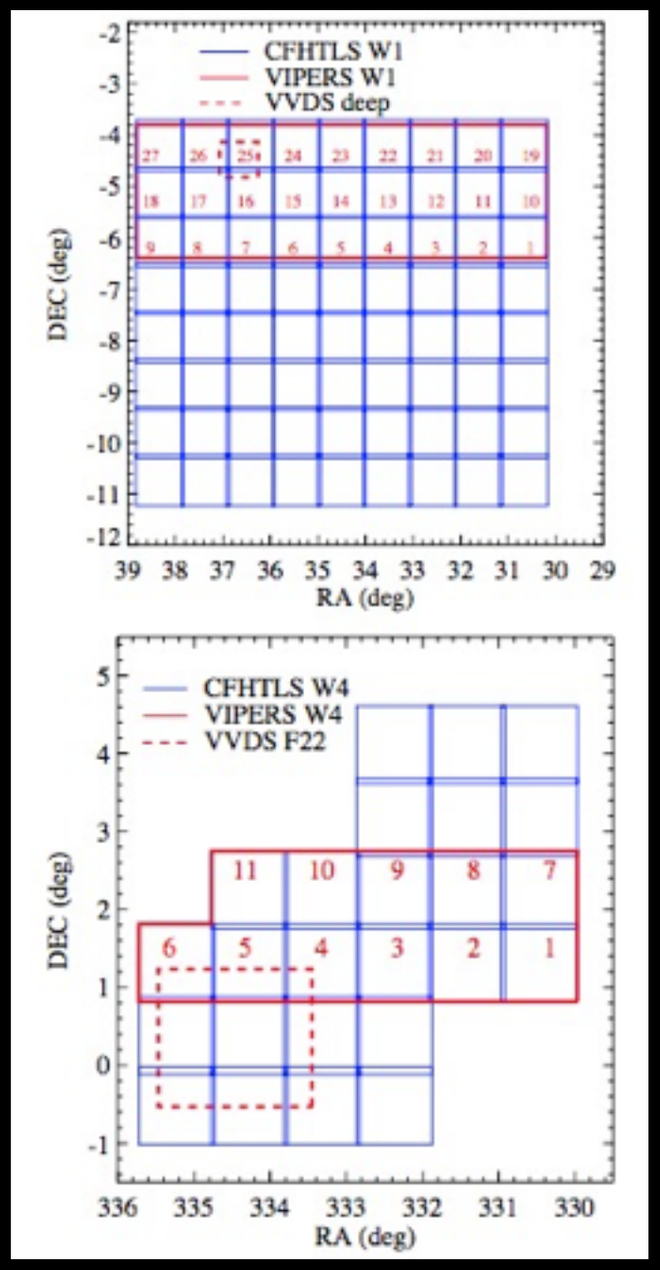
- A framework to check & improve SED current parametrization :
    - Validity of current empirical/synthetic template ?

- Bonus : with the CFHT reprocessing WG eyes essential to enter debug and train with LSST pipeline : this catalog gives a L3 benchmark with spectro data.

➡ Get to check integration of photo-z algorithms & assess quality/choice of methods from the image level up to the reconstruction.

CFHTLenS / Vipers/ VVDS-deep

Common fields CFHTLS - VVDS/Vipers :



Corresponding CFHTLenS patches :
Galaxy selection on CFHTLS i mag
~23,1 deg^2 total

W1/vipers :

p4p3,p4p2,p4p1
p3p3,p3p2,p3p1
p2p3,p2p2,p2p1
p1p3,p1p2,p1p1
m0p3,m0p2,m0p1
m1p3,m1p2,m1p1
m2p3,m2p2,m2p1
m3p3,m3p2,m3p1
m4p3,m4p2,m4p1

W4/vipers :

p2m0,
p1m0, p1p1
m0m0, m0p1
m1m0, m1p1
m2m0, m2p1
m3m0, m3p1
m4m0, m4p1

W1/deep f02 :

p2p3 p2p2 p3p3 p3p2

W4/deep f22 :

p2m0, p1m0, m0m0
p2m1, p1m1, m0m1
p2m2, p1m2, m0m2

Guzzo e

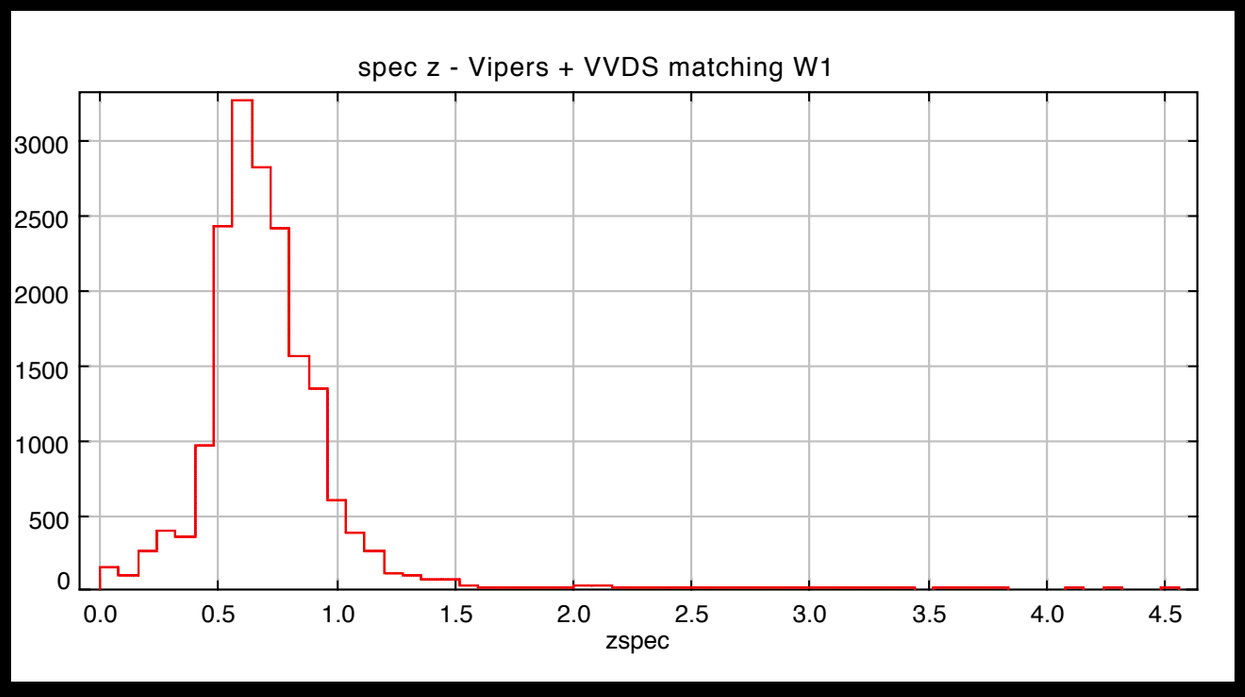
depth ?
CFHTLenS : pour i<22

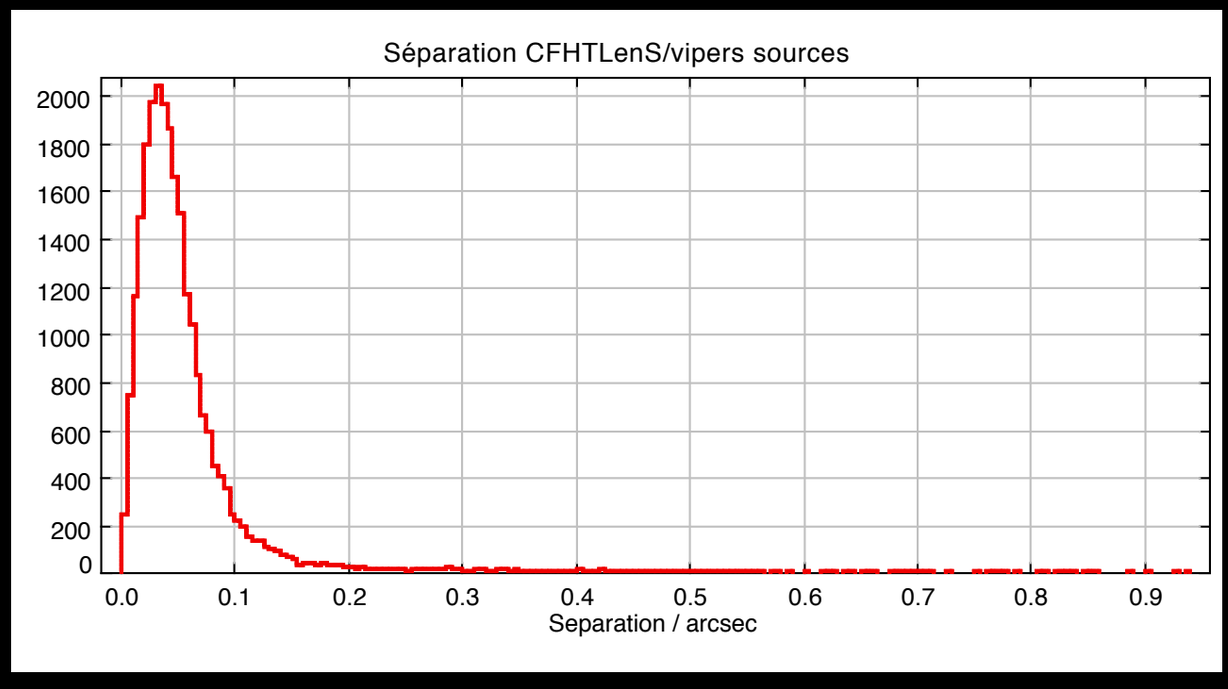
reprendre les numéros de patches pour le wiki

Characteristics

Format fits
2 catalogs matching vipers + 1 W1 matching VVDS deep f02
index; selection mag; error on selection mag;
mmee (CFHTLens); mmee (CFHT T07);
position info; spec z ; zflag; starflag; separation

number of objects :
W1-Vipers : 12538 obj
W1 - VVDS deep : 4854 obj
W4 - Vipers : 8396 obj





Selection

galaxies only :
- identification with the spectro survey
+ starflag CFHT (2% mistag from the original release)

- spectro z flag with high confidence in Vipers or VVDS (flags 4.x)

- spectro catalogs incomplete for faint (i > 22) objects
    !! effects of completeness to assess

Verification of these catalogs; further tests :

Running LePhare on these photometries :
- Check catalogs & LePhare configurations with spectro-z from VVDS

- Compare to results in Guzzo et al. (T0006/T0005 photometry) for Vipers.
[- Compare with other reconstruction codes like pyraeus]
- Basis for benchmark with different galaxy templates
  => compare a subset of spectra to best-fit templates.

- Other sub-catalog adding Galex (NUV 10,8 deg^2 W1; 1,9 deg^2 W4 & 10 FUV pointings in W1) for the cross-check of extracted spectra ?