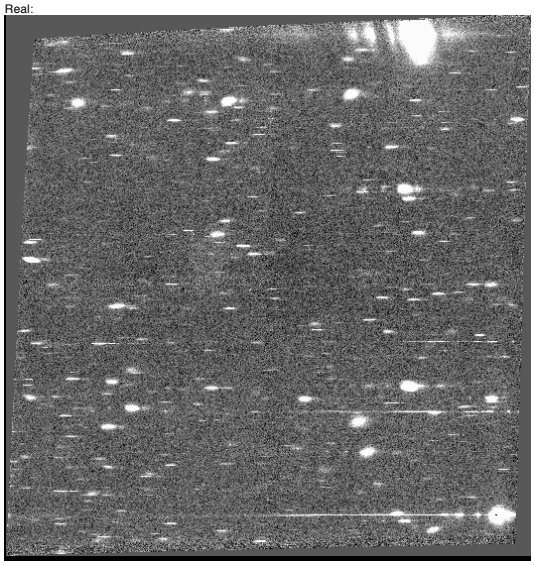
2D Emission line status:

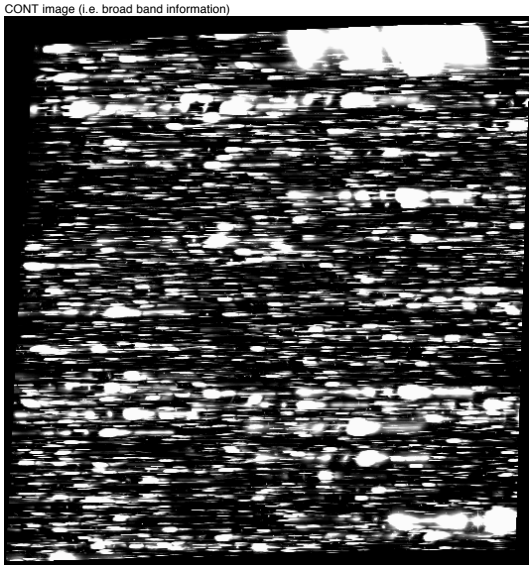
- All fields are reduced using the 2D detection method.
  Number of knots:
    cdf-n-pears-1: 482
    cdf-n-pears-2: 236
    cdf-n-pears-3: 318
    cdf-n-pears-4: 362
    cdf-south-udf: 686
    cdf-s-pears-1: 283
    cdf-s-pears-2: 292
    cdf-s-pears-3: 349
    cdf-s-pears-4: 342

- Completeness simulations done using two simulated fields: cdf-south-udf and cdf-s-pears-1
  Realistic ACS flt images. using emission lines added to the observed grism continuum (contamination derived) data.
  Simulations ran through the full 2D extraction pipeline: data combination, 2D knot detection, re-extractions of knots with aXe

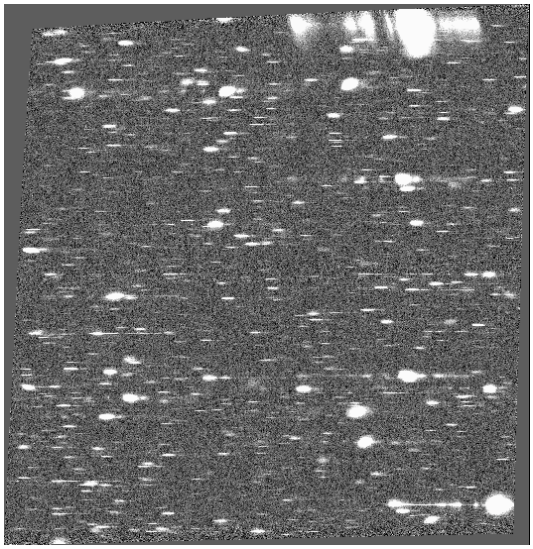
Real:



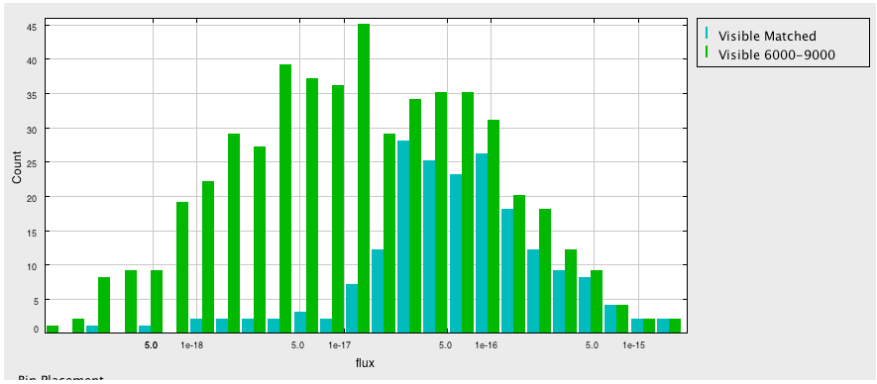
CONT image (i.e. broad band information)



Simulated:

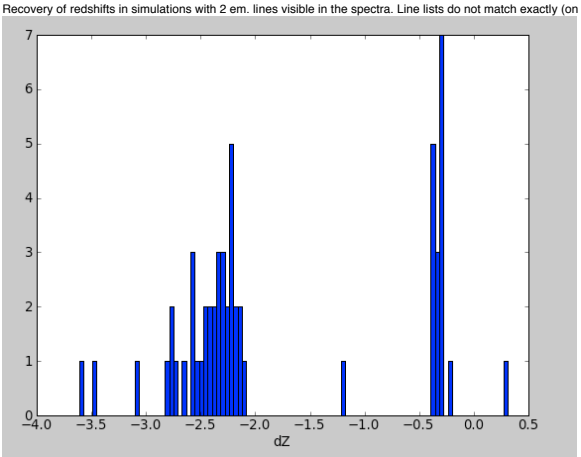


Good detection of lines down to fluxes of ~2e-17 erg/s/cm^2 and EW<-50 or so. Shown below: cdf-south-udf simulations.



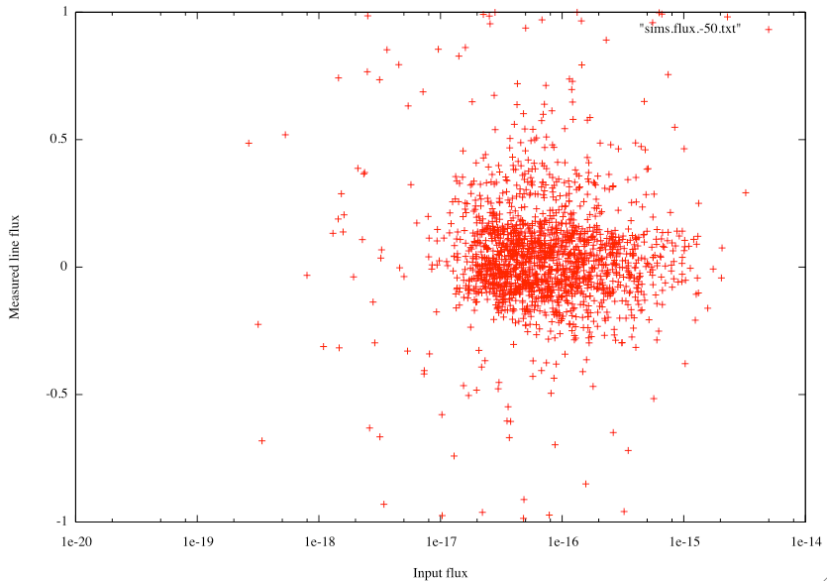
- Work on line identification:
  Trying to come up with a set of emission lines that makes sense. There is a lot of degeneracy otherwise, even in cases of spectra with 2+ emission lines.
  Cannot through all known lines for HII, ELG, and AGN in one go. Better try to see which set of lines works better.

  Recovery of redshifts in simulations with 2 em. lines visible in the spectra. Line lists do not match exactly (on purpose).



Current problem is how to reliably tie down the redshift of single emission line objects. Photoz are not reliable for these objects.
Comparing double line spectra z estimates to the ones published by MUSIC show a low level of agreement, at the 30% level or so.
This is word in progress and will require some fine tuning.

We should look into trying to get better photoz estimates for the emm. line objects (and only them) by correcting the observed broad band magnitudes by the measured flux levels of the known lines.
Simulations show that we seem to be able to recover the flux in these objects reasonably well so that, unlike for GRAPES, we should be ok using these.


"sims.flux.-50.txt"
Measured line flux
Input flux
1
0.5
0
-0.5
-1
1e-20
1e-19
1e-18
1e-17
1e-16
1e-15
1e-14