

FORS2 atlas : Giraud et al, arXiv:1011.1947

Redshift and flux distribution of 654 galaxies obtained with the FORS2 instrument (VLT UT1)

Redshifts : $0.275 < z < 1.05$ down to $R=23$

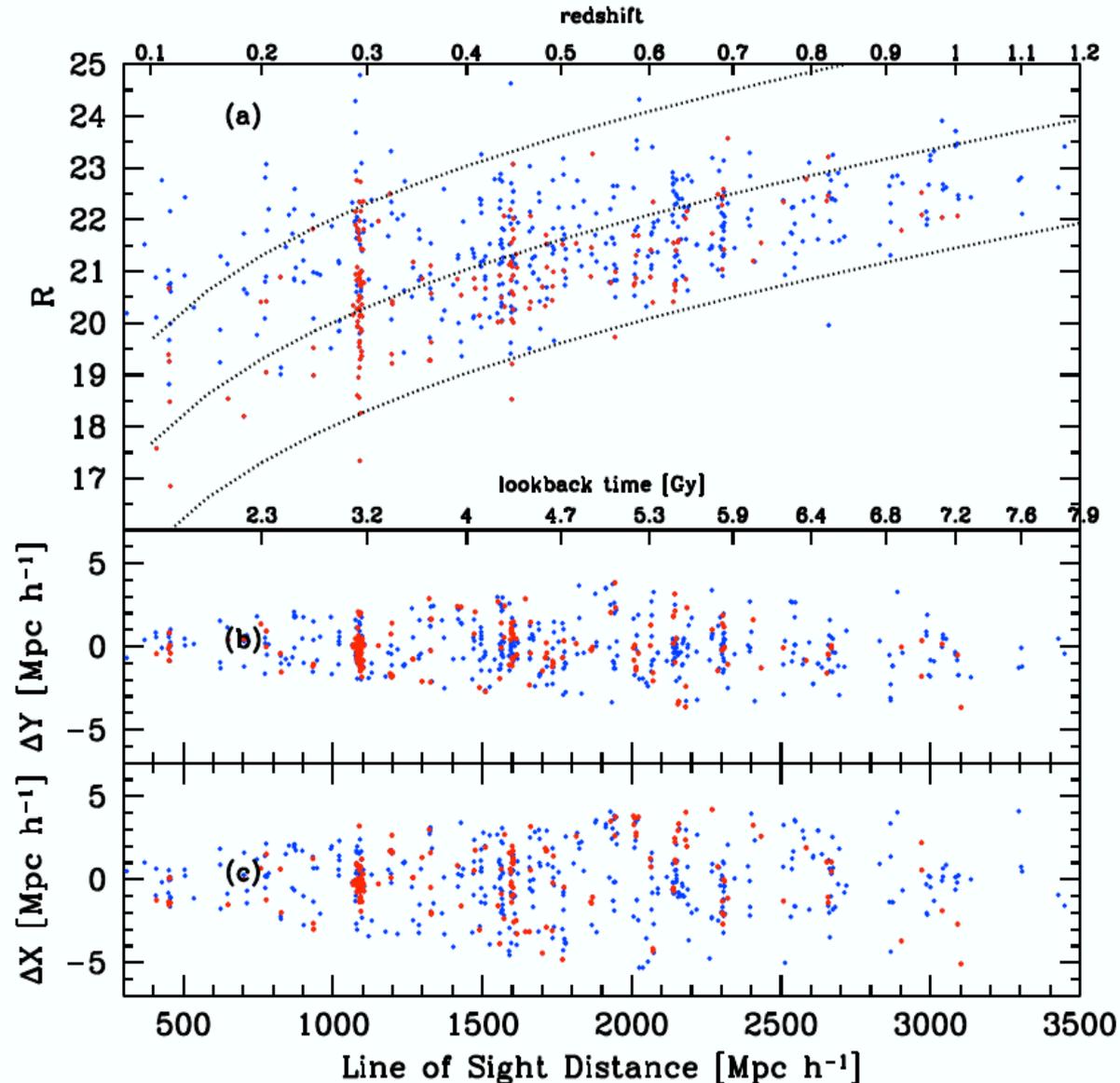
Rest frame window : $3000 \text{ \AA} < \lambda < 6000 \text{ \AA}$

Averaged spectra divided in 4 classes :
blue or red SED;
absorption or emission lines
and 5 redshift bins from $z=0.3$ to $z=1$

→ 69 averaged spectra

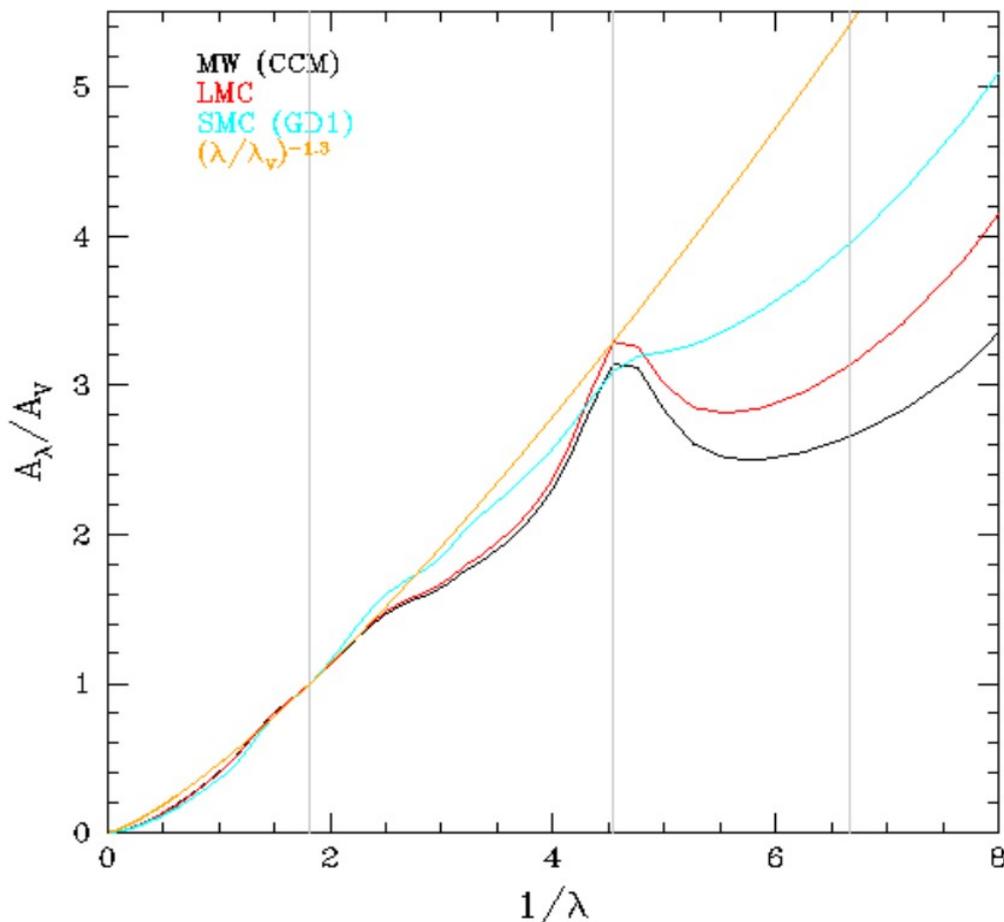
Stellar mixing and synthetic spectra
derived from SED using STARLIGHTV04
→ model continuum spectra extended to
the range : $700 \text{ \AA} < \lambda < 100000 \text{ \AA}$

Selection → 41 spectra (HZ5 extinction)



The question of the extinction models in the UV

The UV ban extrapolation strongly depends on the extinction modeling ... and there are lots of models :



STARLIGHTV04 :

CCM - Cardelli, Clayton & Mathis (1989)

GD1 - Gordon et al. (2003) SMC Bar

GD2 - Gordon et al. (2003) LMC2 Super-Shell

GD3 - Gordon et al. (2003) LMC Average

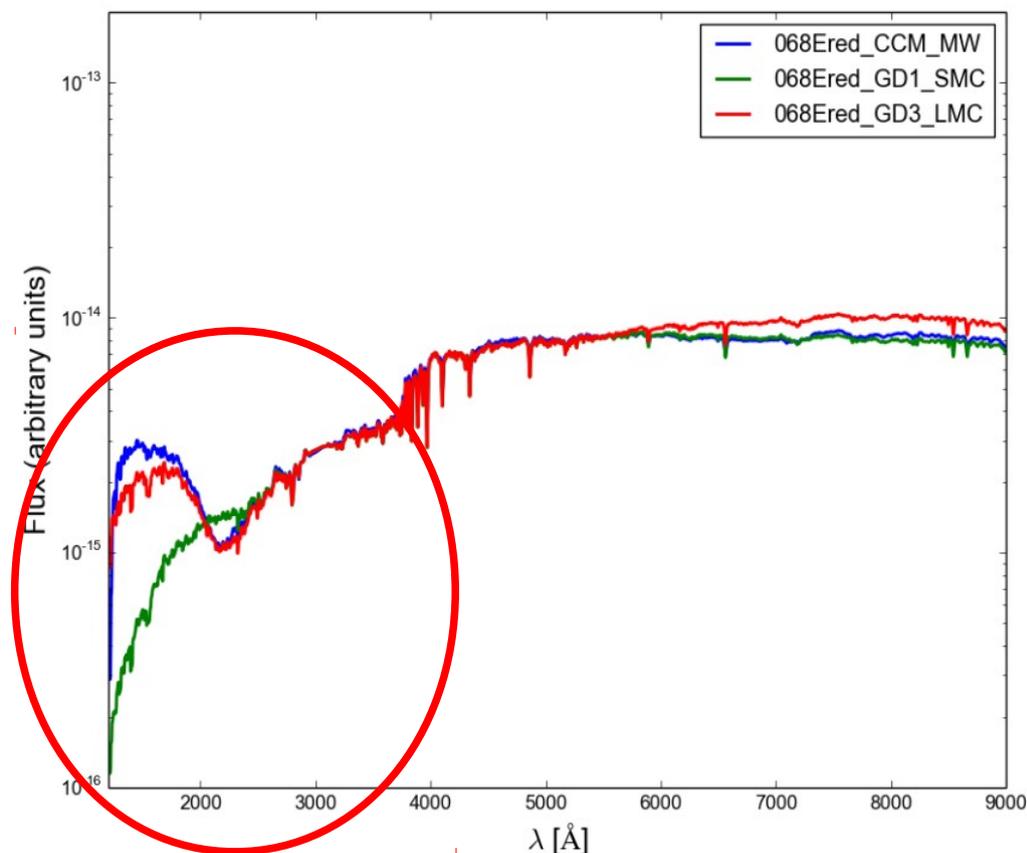
HZ1 - HYPERZ = Allen (1976), from HyperZ

HZ2 - HYPERZ = Seaton (1979), from HyperZ

HZ3 - HYPERZ = Fitzpatrick (1986) LMC, from HyperZ

HZ4 - HYPERZ = for Prevot et al. (1984) and Bouchet et al. (1985) SMC, from HyperZ

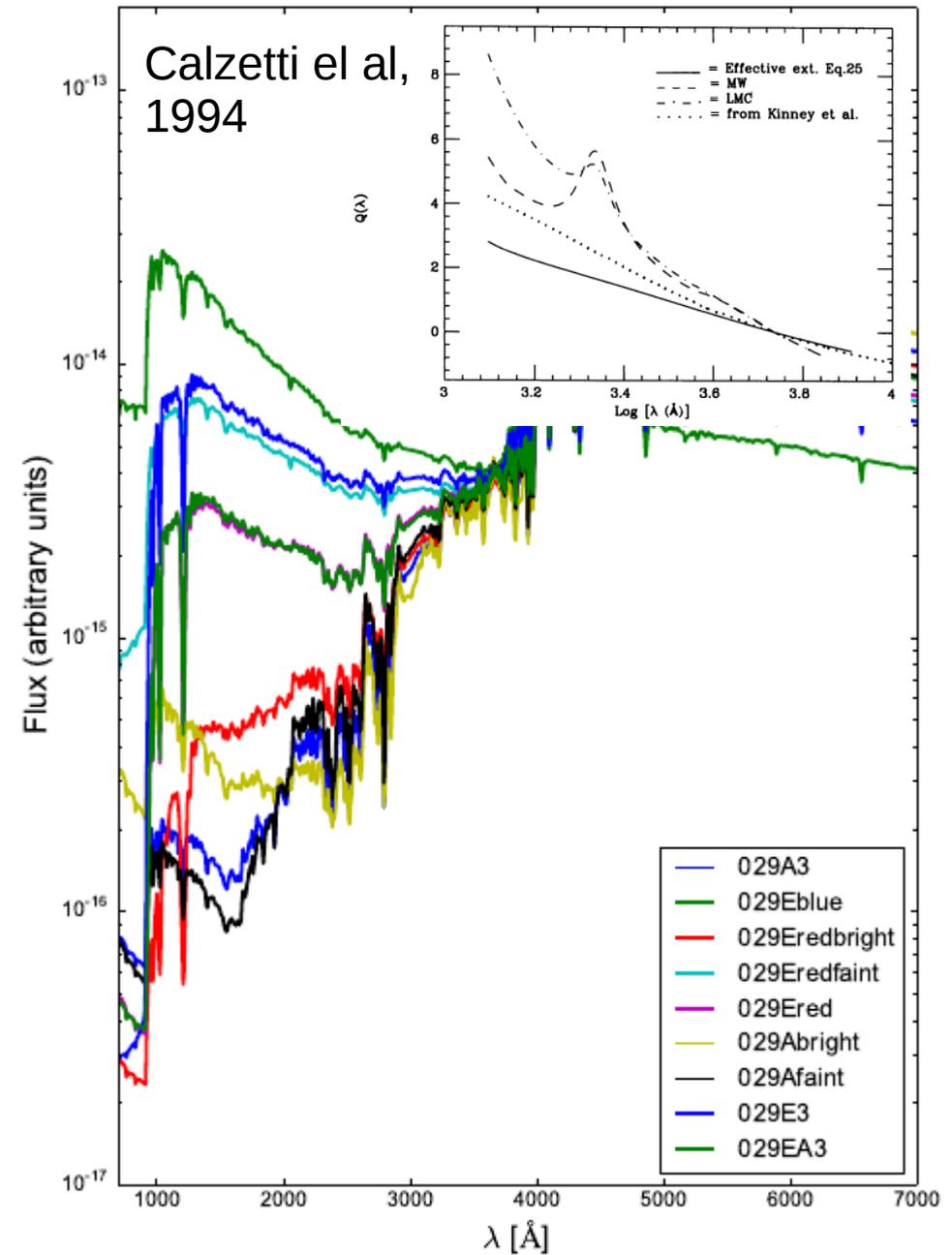
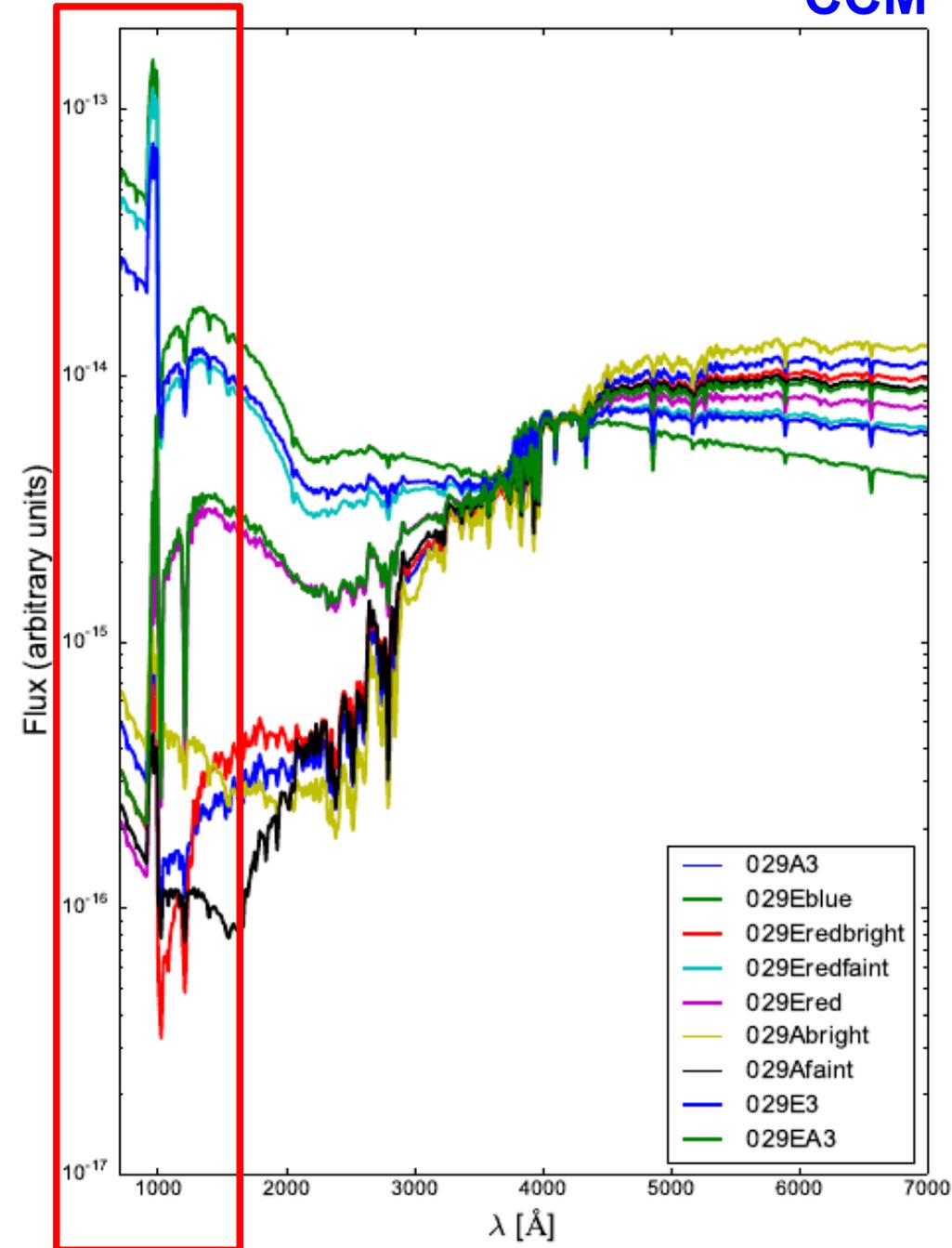
HZ5 - HYPERZ = Calzetti (astro-ph/9911459), from HyperZ



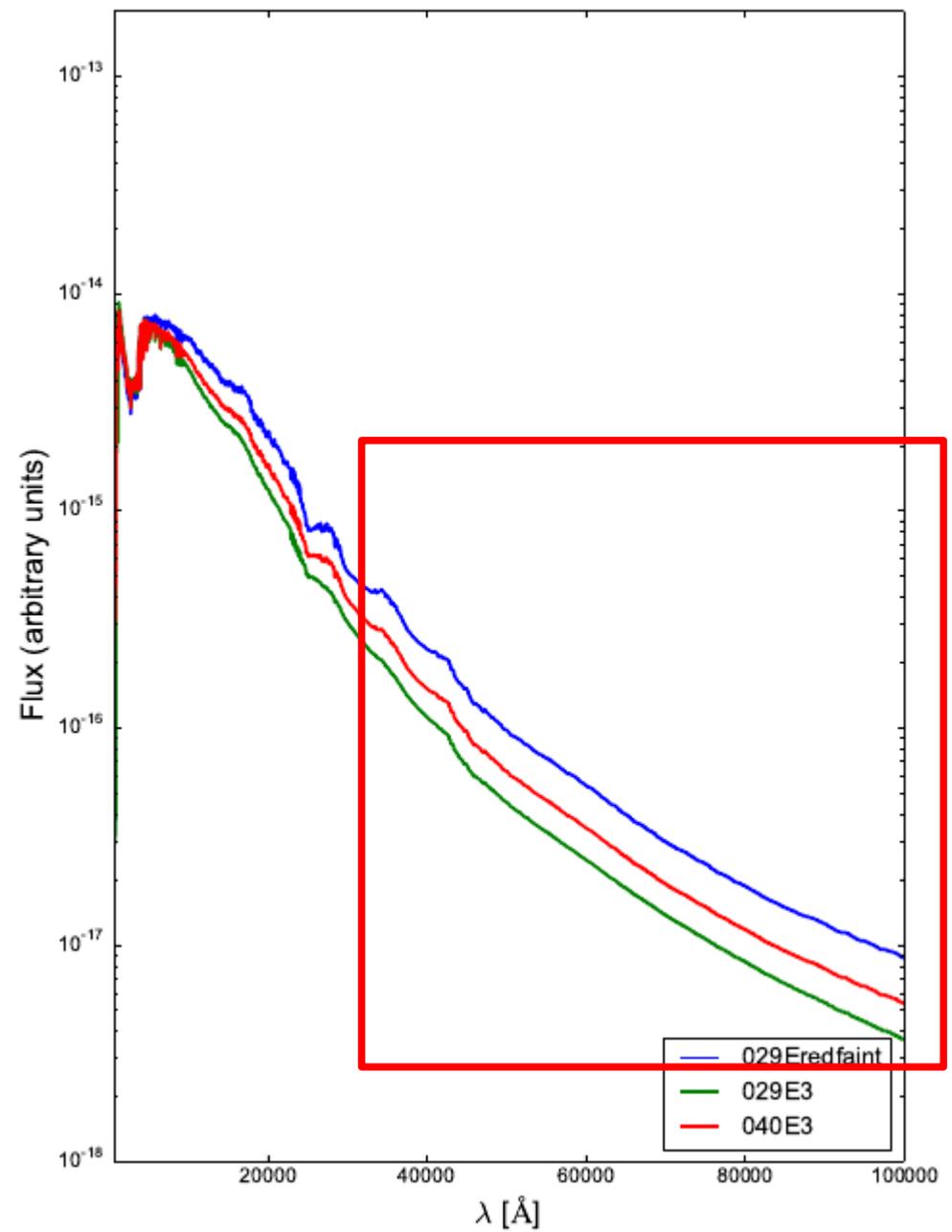
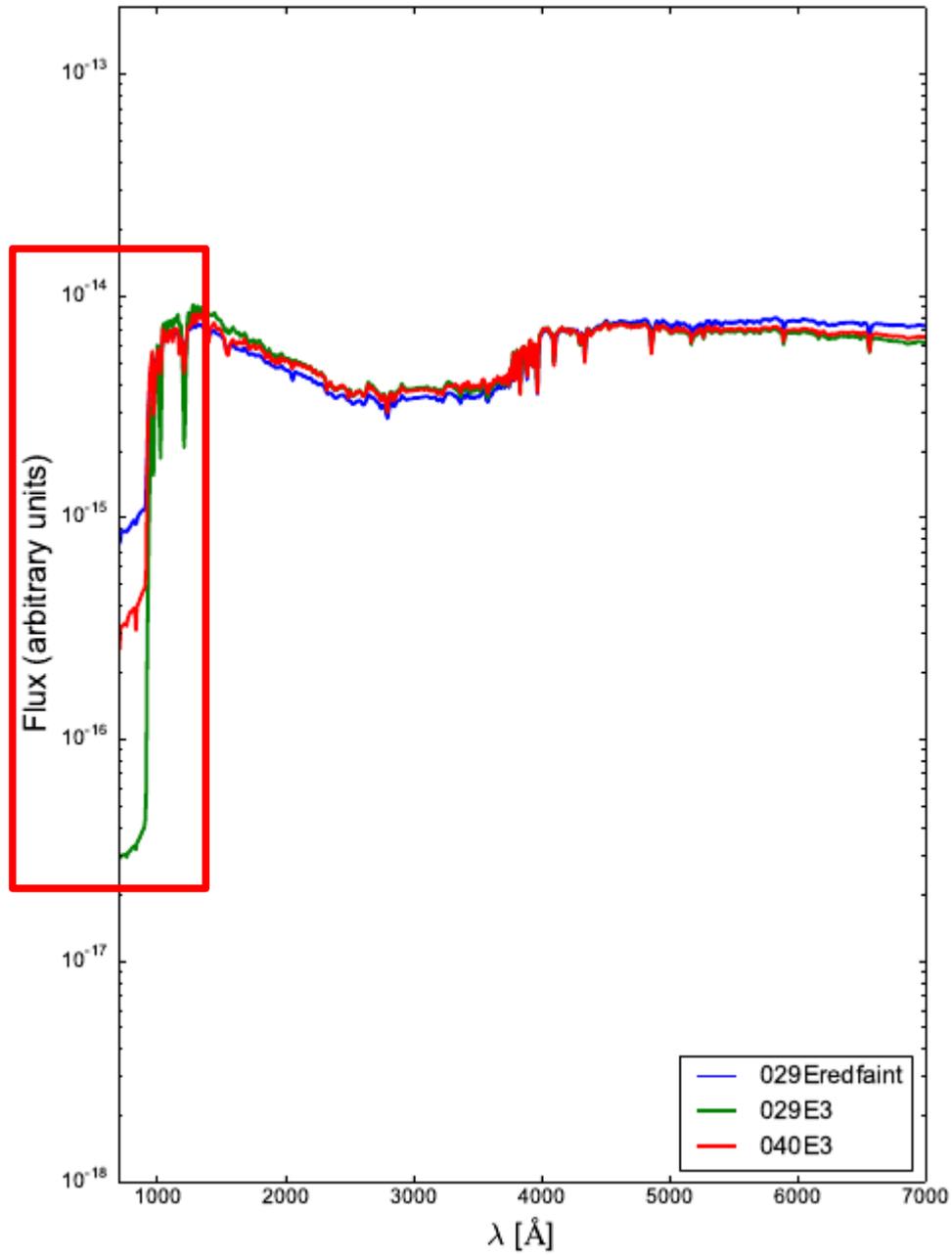
Extrapolation with extinction might be problematic down to $\sim 1000 \text{ \AA}$

CCM

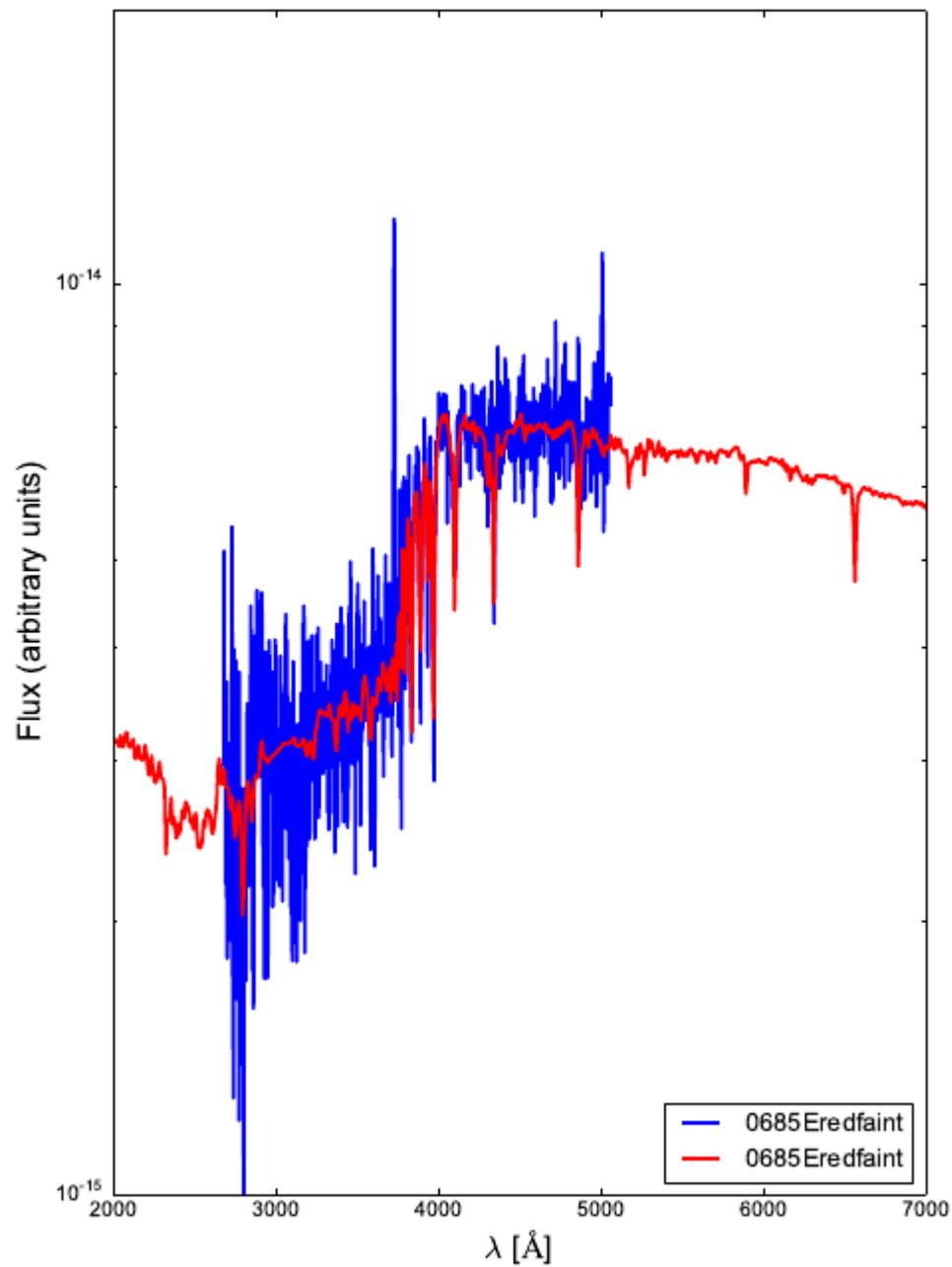
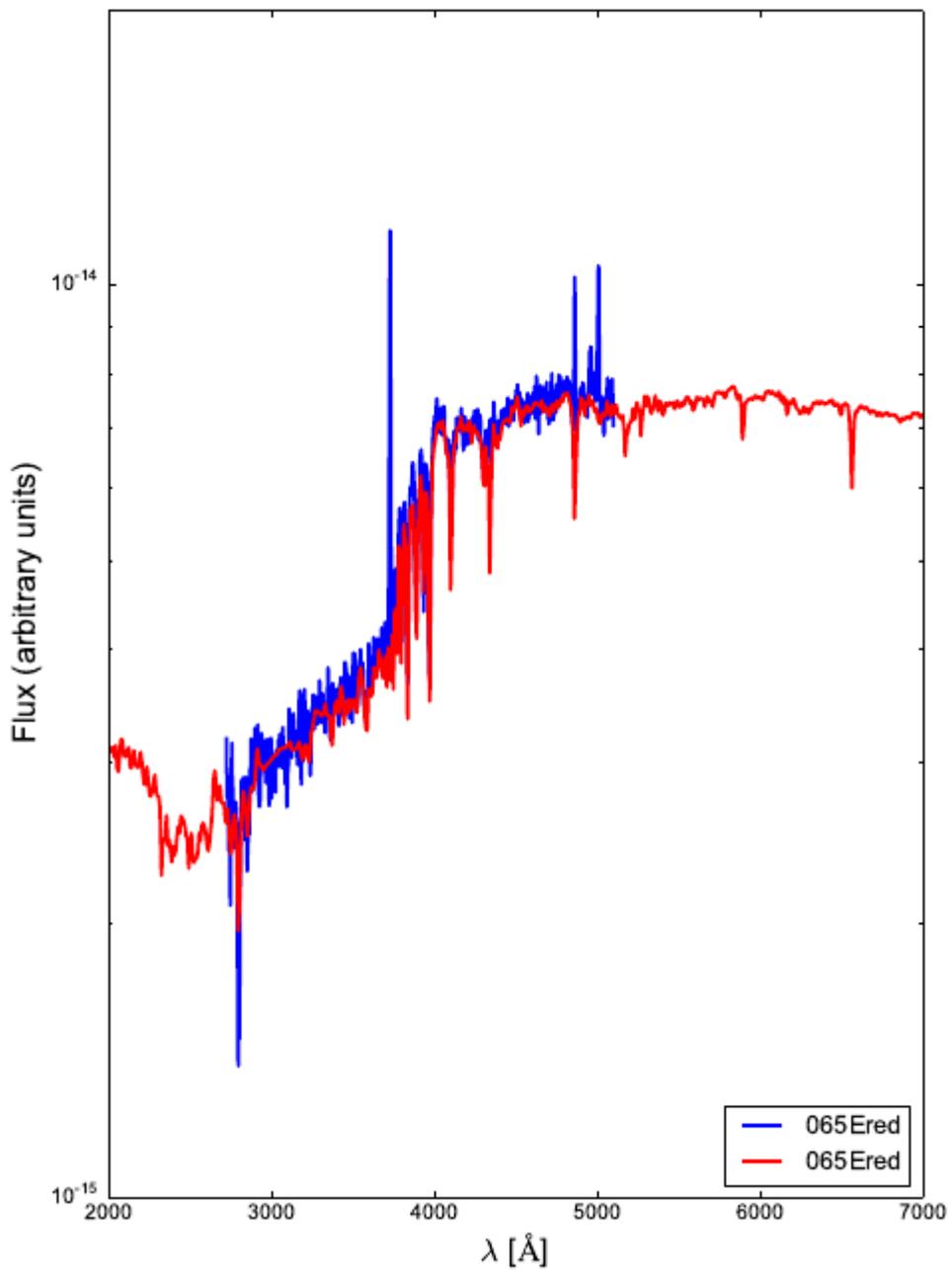
HZ5



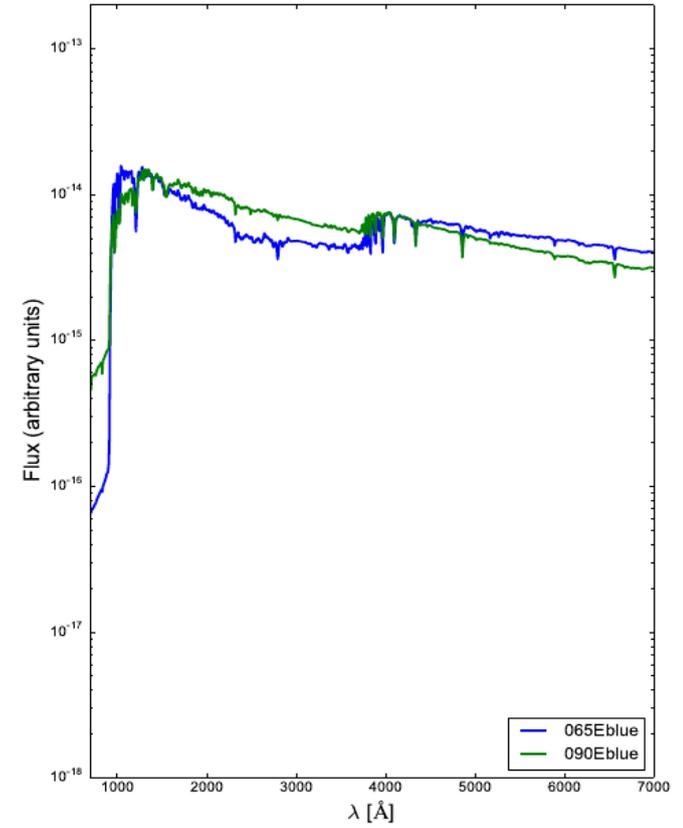
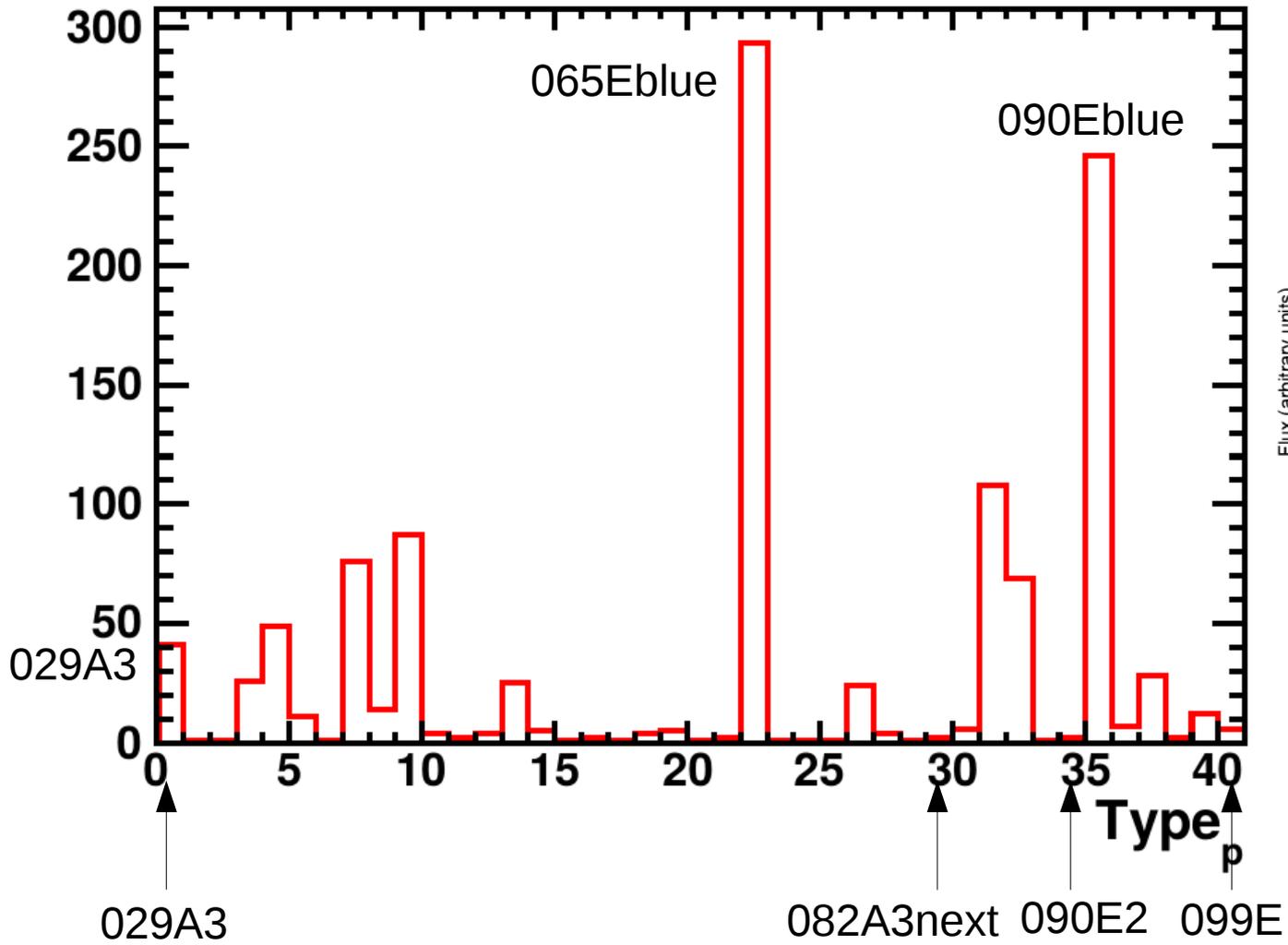
Search for similar spectra : spectral shape



Search for similar spectra : Fors2 spectra

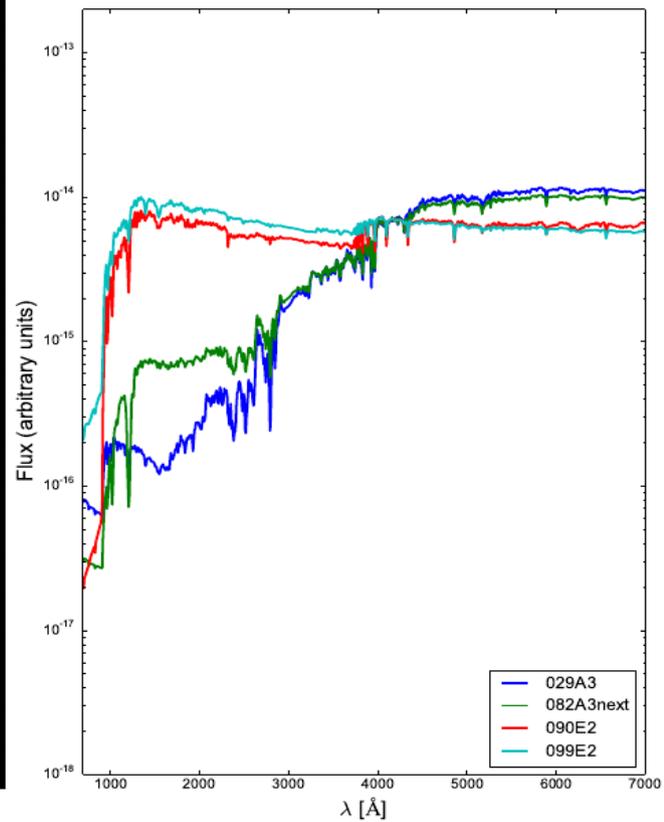
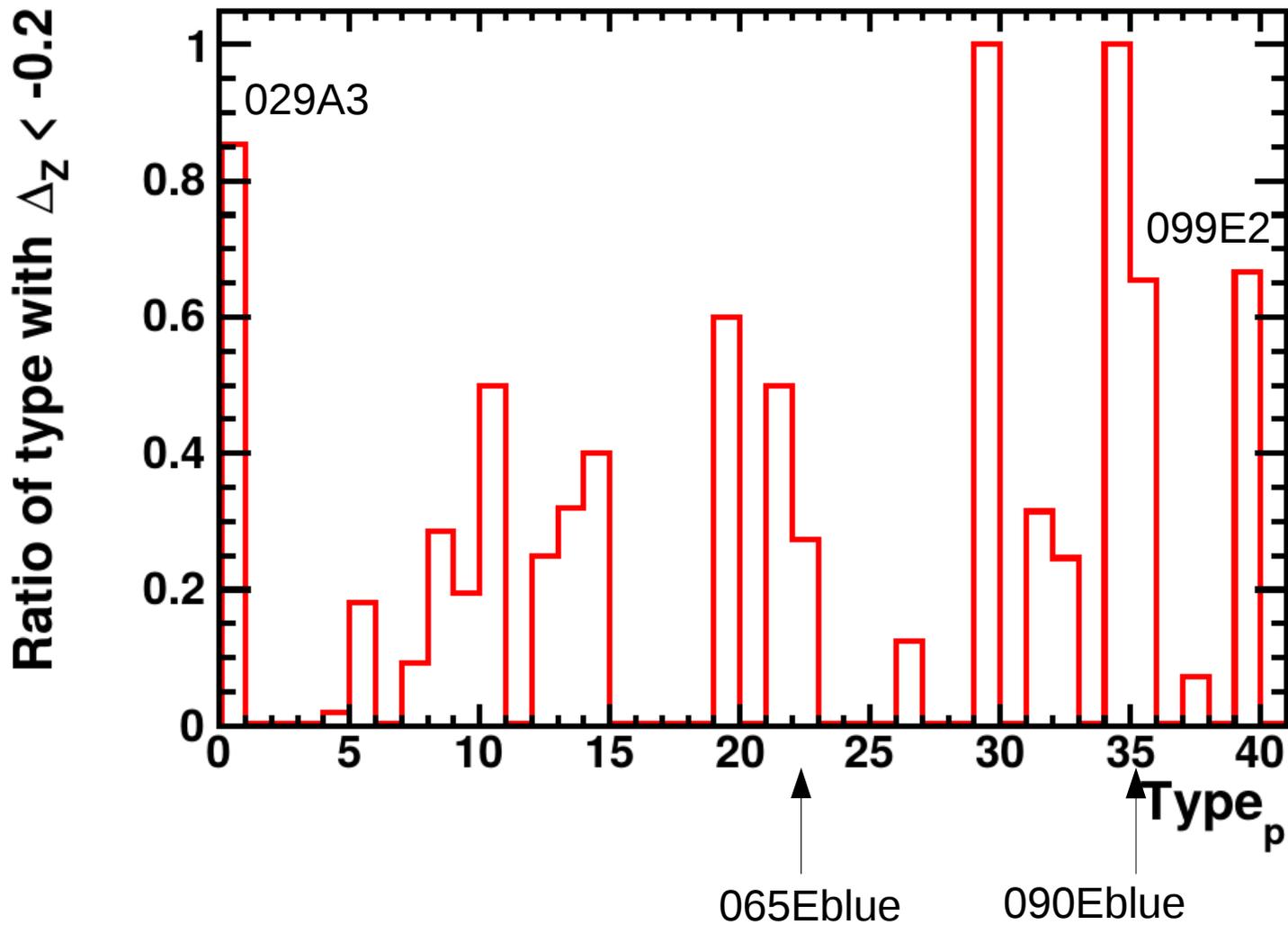


First results HZ5

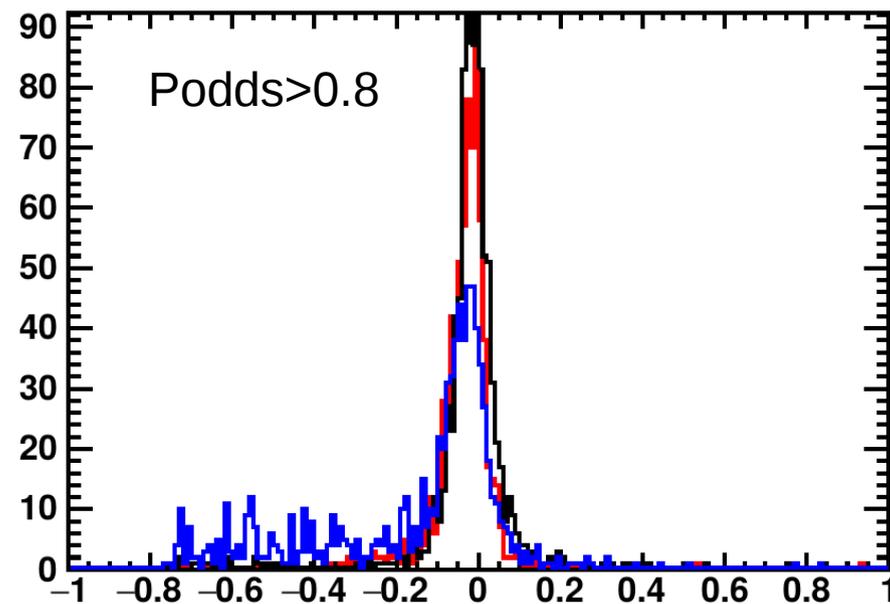
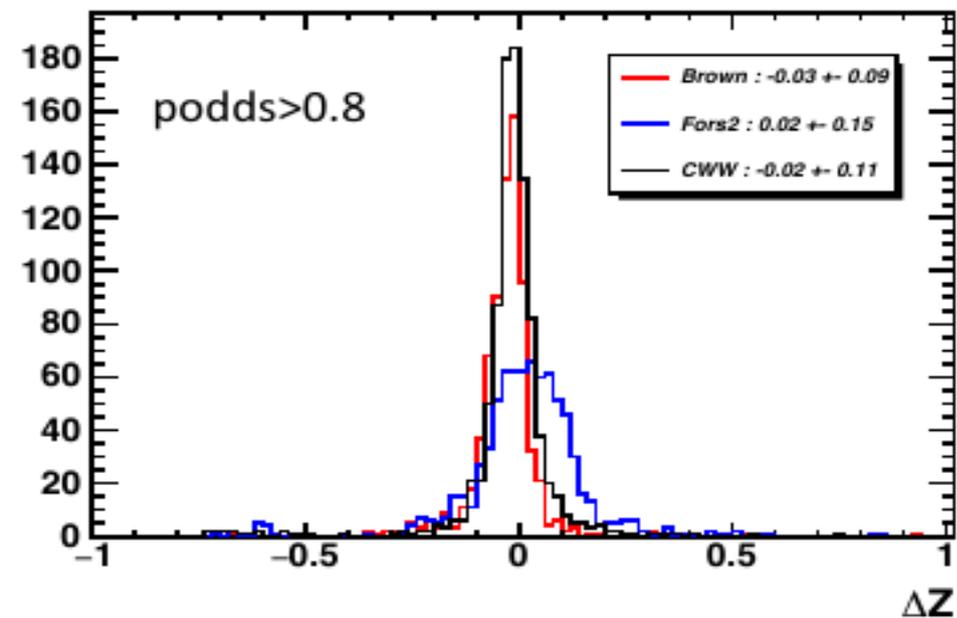
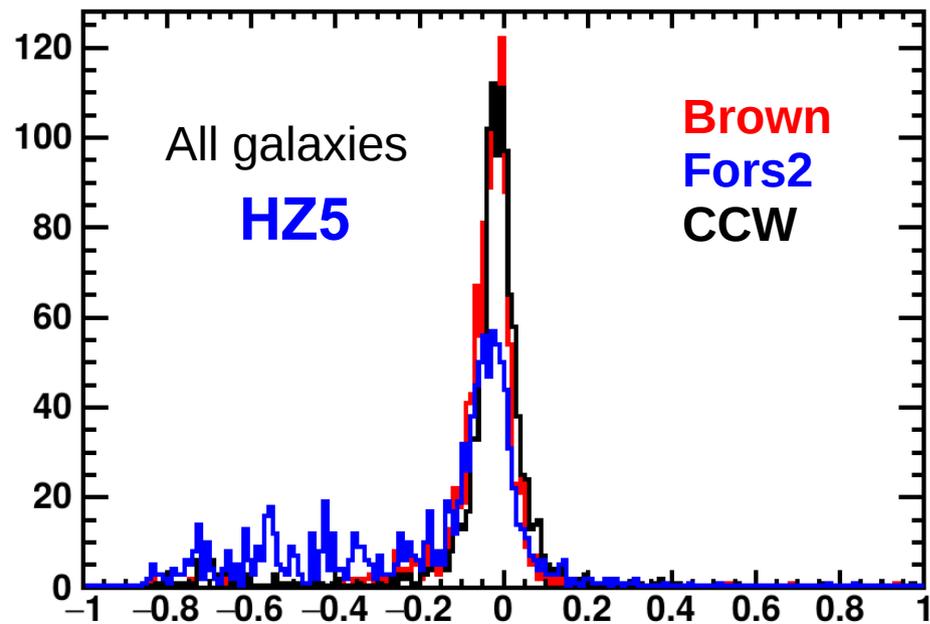
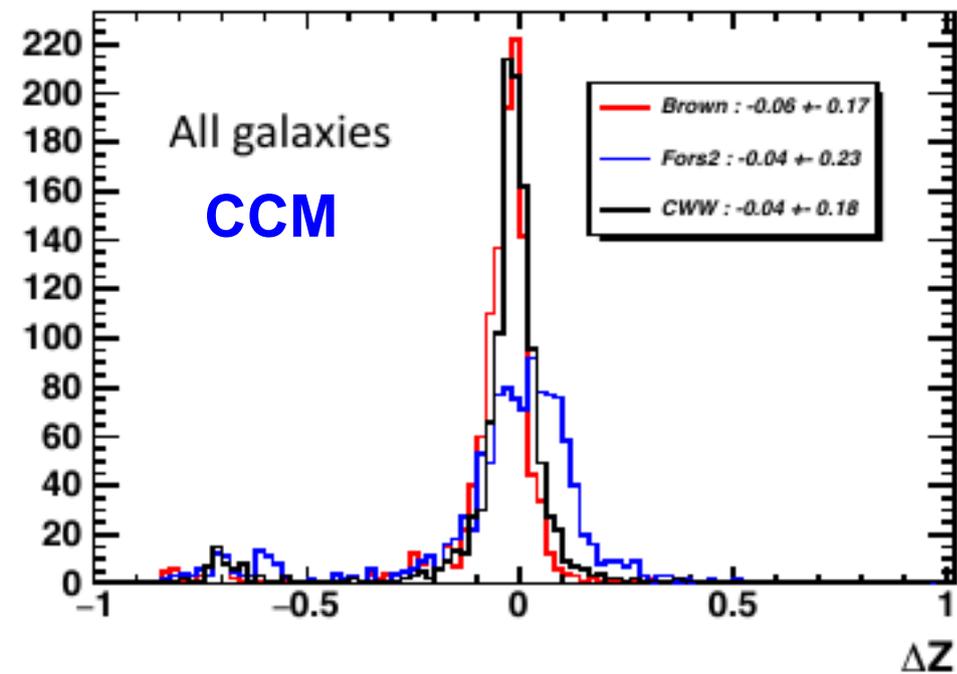


First results HZ5

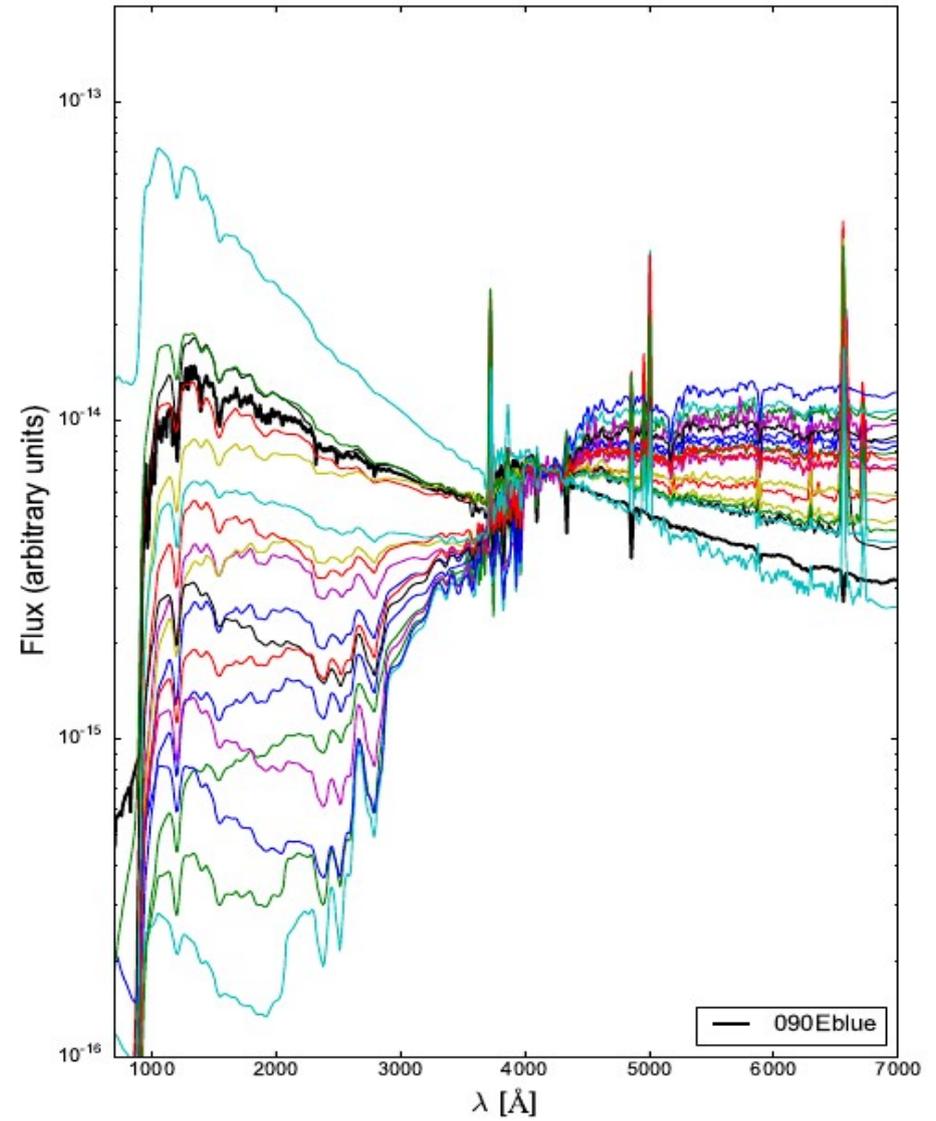
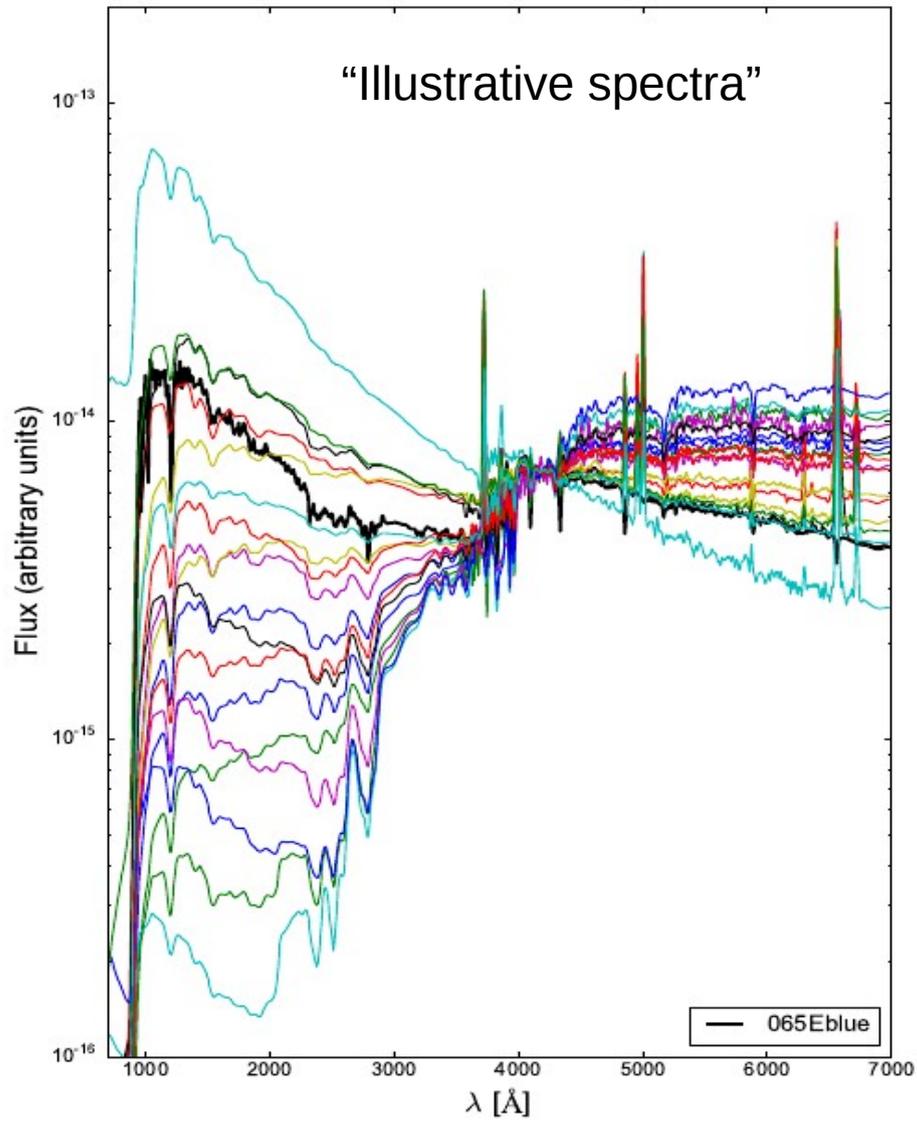
082A3next 090E2



First results HZ5

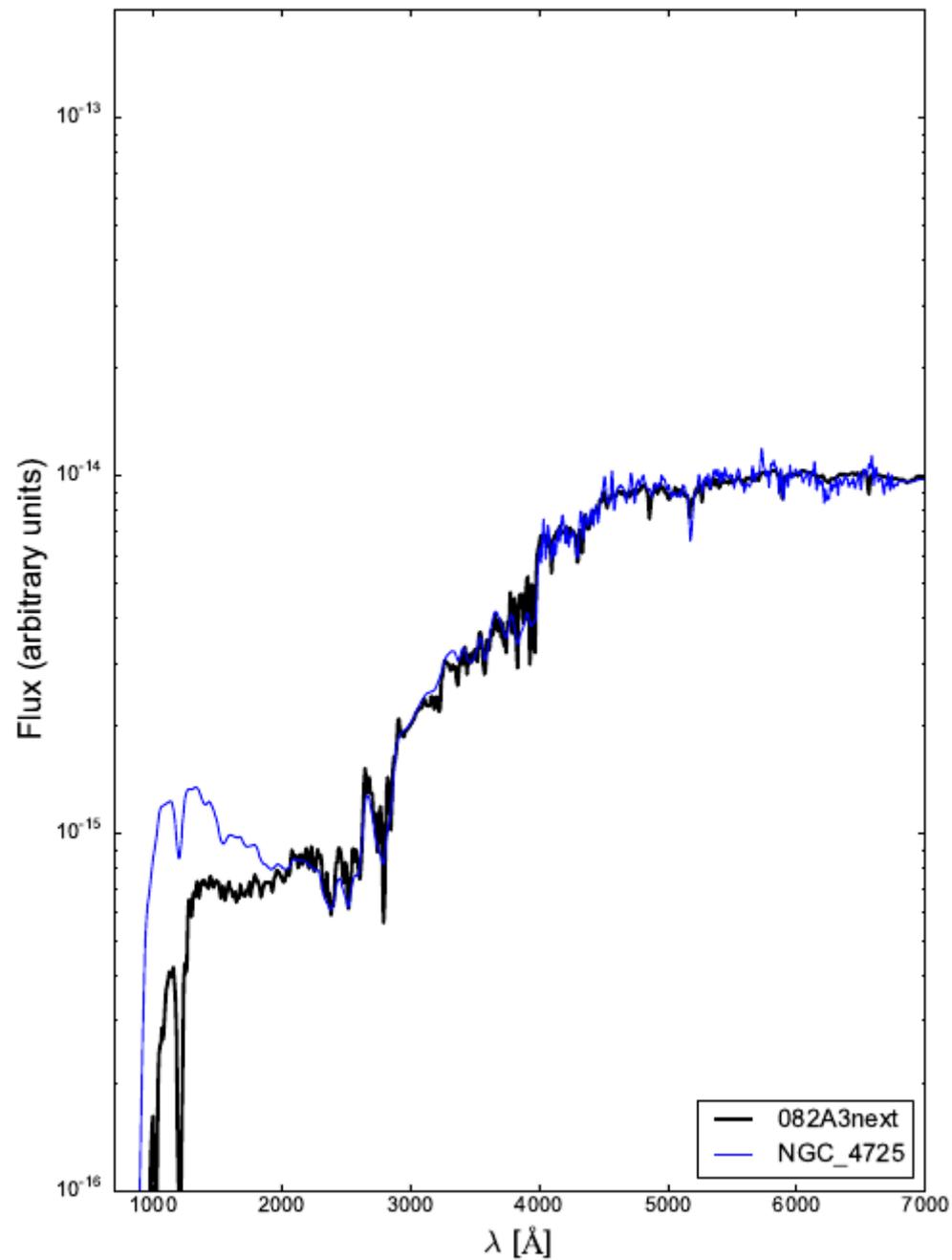
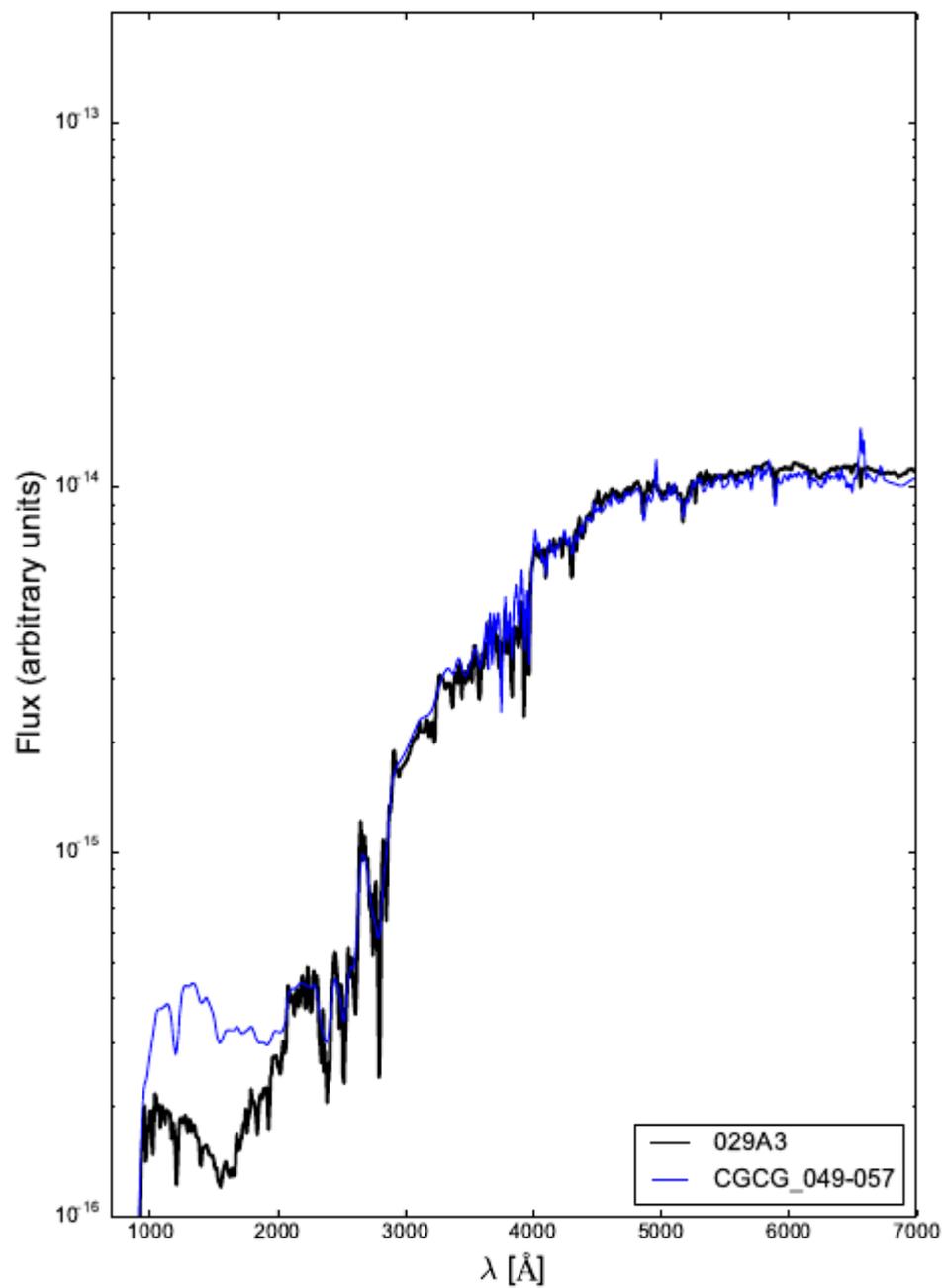


Comparison with Brown spectra



065Eblue and 090Eblue do not have similar spectra in Brown atlas

Comparison with Brown spectra



Comparison with Brown spectra

