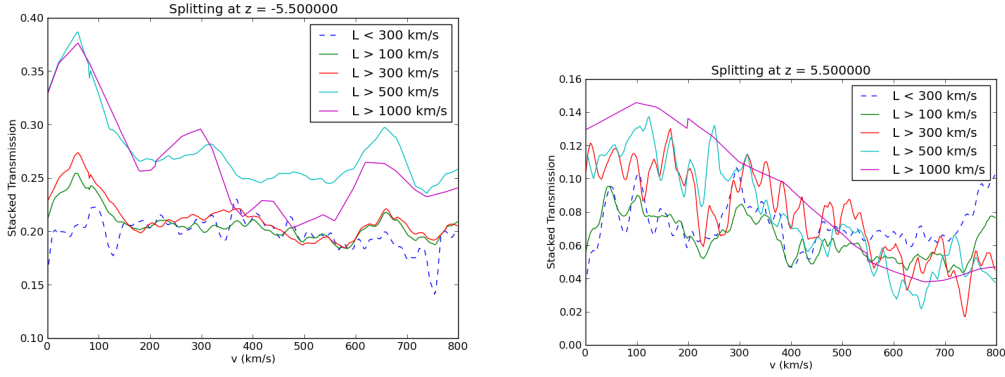# Update for the Week of December 10, 2014

Figure 1: The above plots show the results of stacking outside of dark gaps located at $z \leq 5.5$ (left) and $z \geq 5.5$ (right). The first thing we notice is that the $z \geq 5.5$ plot is noisier but does not show a hint of a damping-wing feature. Additionally, we see that $\langle F \rangle_{z \leq 5.5} \approx 0.2$, while $\langle F \rangle_{z \geq 5.5} \approx 0.07$, somewhat consistent with what we'd expect.
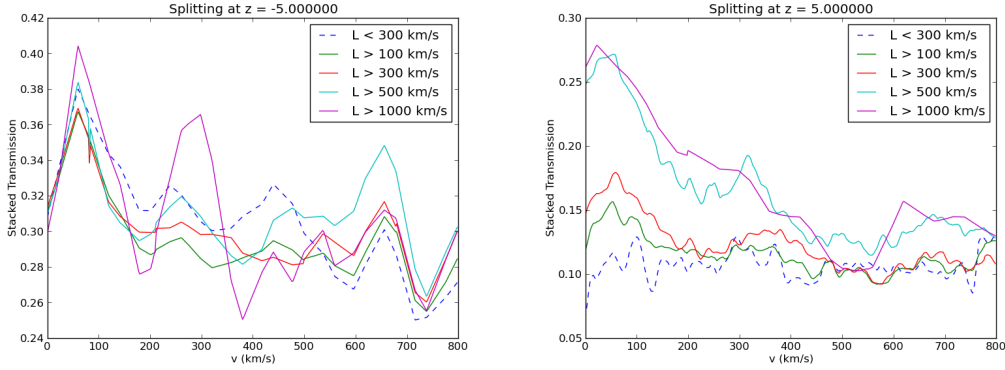

Figure 2: This figure is identical to Fig. 1 except that we split the stacking at $z_{\mathrm{cut}} = 5$ instead of $z_{\mathrm{cut}} = 5.5$. By doing so, we see that we get $\langle F \rangle_{z > 5} \approx 0.1$, somewhat matching what we would expect. It seems the curiously high mean transmission in the left-hand plot of Fig 1 may be due to spectra at $z < 5$.
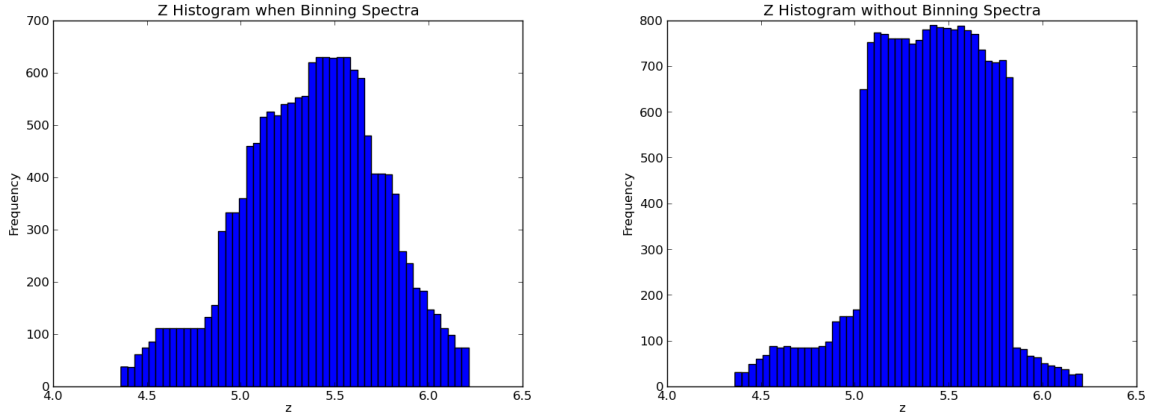
1

Figure 3: The above figure shows the distribution of z values that the pixels in our spectra take. The left-hand plot show the results when all spectra are binned to a common resolution, such that high-resolution spectra don't dominate the histogram, and the right-hand plot does not perform such a binning.
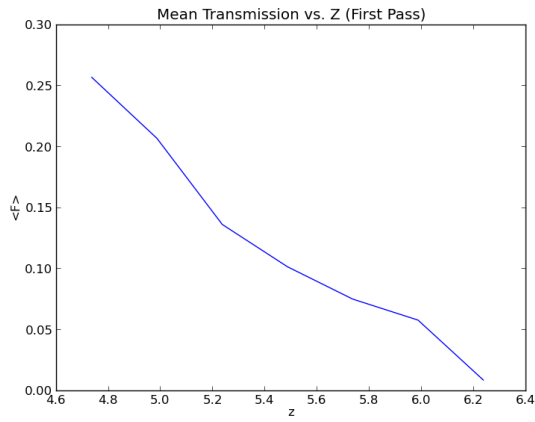

Figure 4: Mean transmission in Lyα as a function of redshift for the spectra. Here we have bins in redshift of width $\Delta z = 0.25$ centered at z.
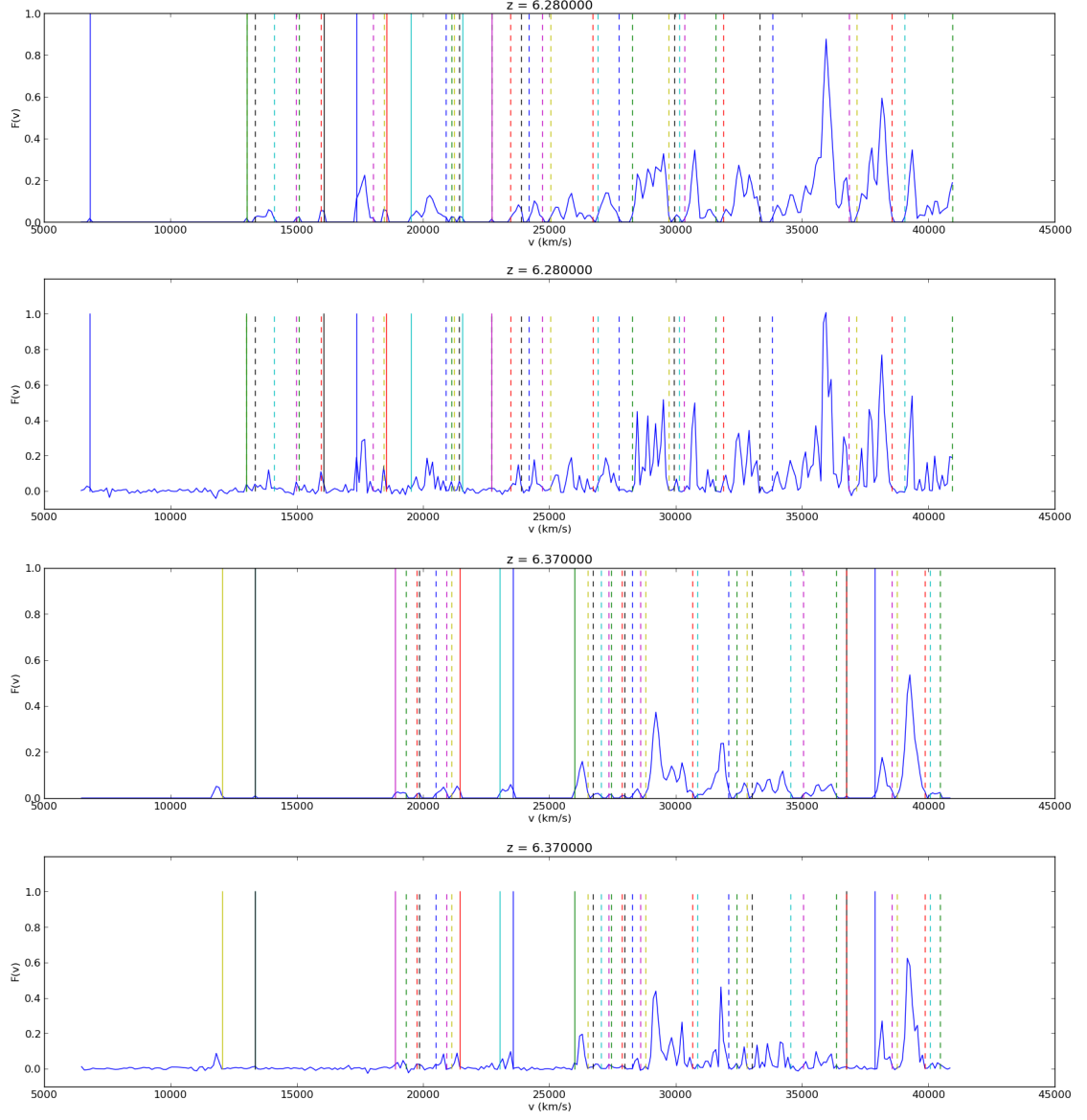
Figure 5: The above figures show the stacking locations overplotted on the smoothed (first and third) and unsmoothed (second and fourth) spectra. These are shown for $L_{\mathrm{small}} < 700$ km/s and $L_{\mathrm{large}} > 700$ km/s. Solid lines indicate the edges of the large dark gaps used while the dashed lines indicate the edges of the small dark gaps used.
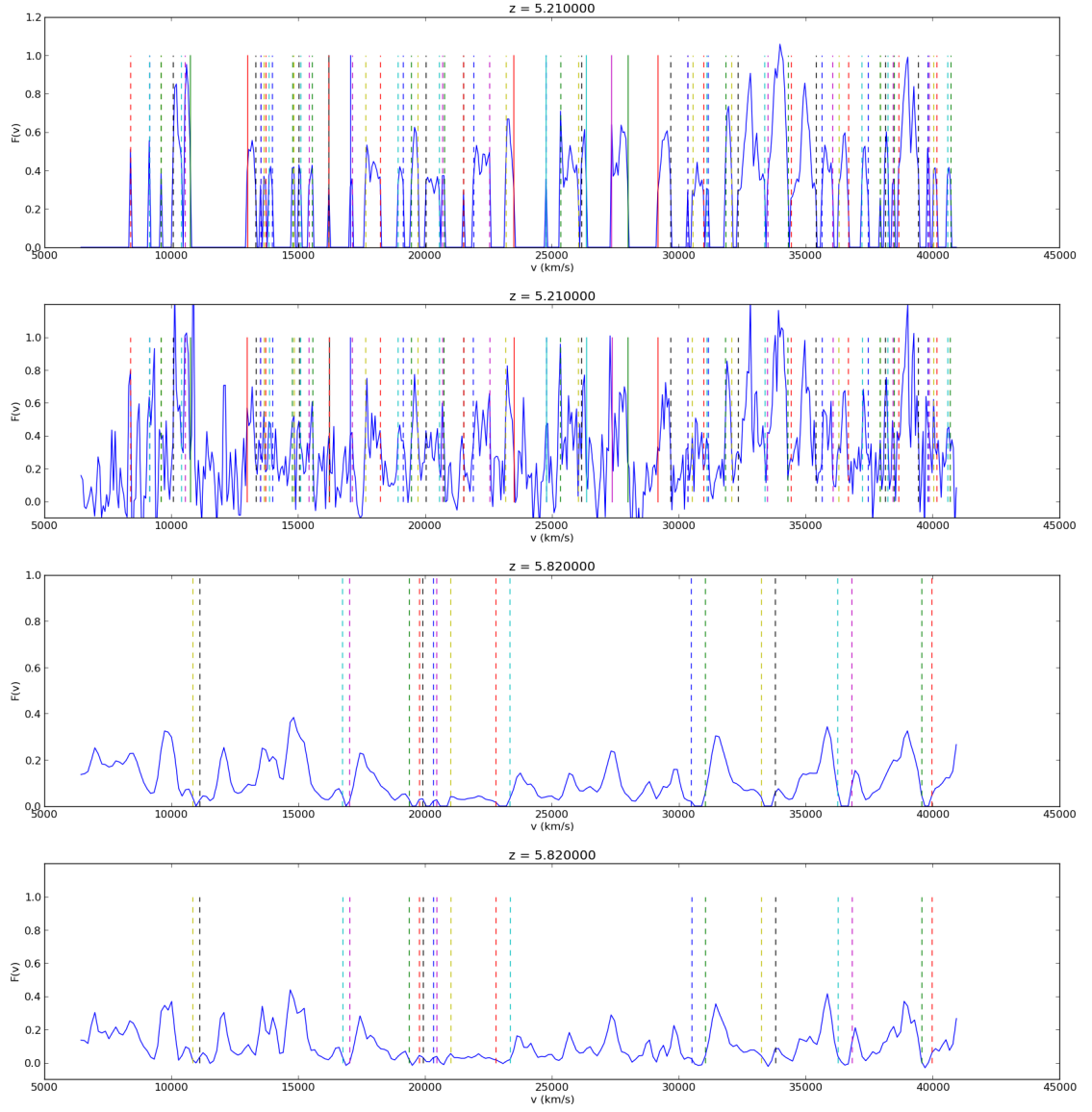
3

Figure 6: todo

Figure 7: The above figure shows the results of varying the minimum redshift for the dark gaps in our stack (fixed for each column) and the threshold for calling a pixel dark. The σ here refers to the smoothed σ_N.
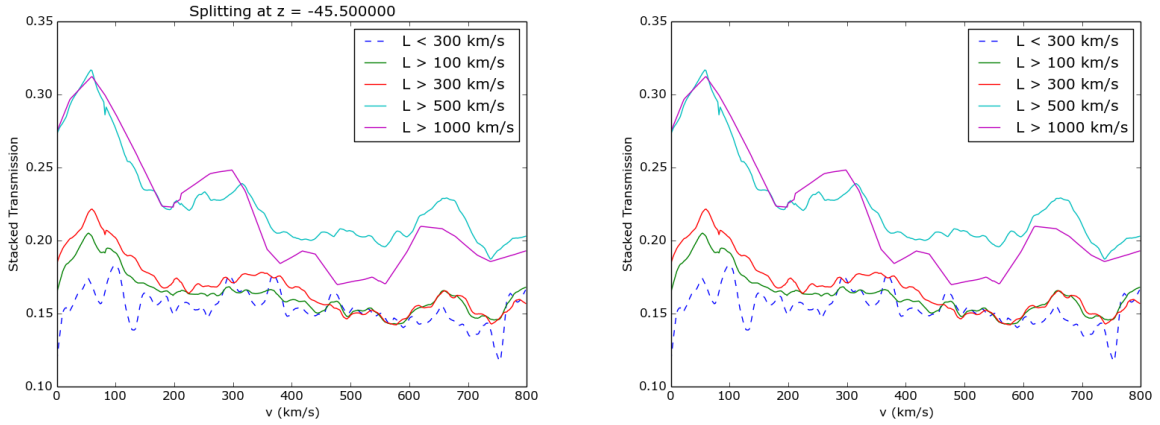

Figure 8: This is a sanity check, the two above plots should be the same.