maximum deviations. It is also possible that if variability decreases with rest wavelength, our r band observations are sampling a "quieter" portion of the continuum (see section 8.5.1). However, our range of redshift of 1.5 to 3.0 in r would correspond to the same rest wavelengths in B at redshifts of 0.7 to 1.7, which is not all that dissimilar to the other studies.

The difference in variation timescales may have to do with the different sampling rates, observing timespans, and errors (*i.e.* low S/N data selects only the largest variations). Our more frequent sampling and smaller errors probably provide a good lower limit on Δv of $\sim$0.3 years, although the actual timescale may be much longer. It is possible that QSOs exhibit short timescale variations on a baseline which is slowly changing over long periods of time, or that large variations occur very infrequently. We note that QSOs probably exhibit a wide range of variability characteristics which are all "superimposed". We will not know the true range of variations until frequent, high S/N data are available for a large selection of QSOs over a long period of time.

Note that two groups claimed a decrease in variability with redshift, while one other claimed an increase in variability with redshift. The discrepancy between whether variability increases or decreases with redshift (or luminosity) should be considered in light of the following:

(a) Is variability defined by the amplitude or the frequency (*i.e.* probability) of the variations?

(b) Time dilation, $\Delta t\ /(1+z_e)$, will distort the observation timespan as a function of redshift.

(c) If the variability is a function of rest wavelength, then a fixed observed wavelength band will be sampling different rest wavelengths (as a function of redshift) and thus different levels of variability.

(d) A wide range of variability phenomena means we may be observing different effects depending on observation details.