several strong night-sky lines it provides a reference point for observations by other workers and it provides a check on the R_s data. When both filters were used, the R_s total exposure time was almost always longer since it was assumed that it will provide the most accurate continuum measure.

For QSOs with small or moderate emission-line redshifts ($z_e \lesssim 2.9$), which make up most of our sample (see table 4-1), the R_s filter bandpass avoids any strong BALs or resonance emission lines. This bandpass represents mostly QSO continuum with only negligible contributions from emission lines such as C III] λ1909 and weak, broad emission from excited levels in Fe^{+1}. Therefore, we will not need to introduce corrections for any large changes in the BALs and BELs.

The V2 filter avoids the strong BALs/BELs for $z_e \lesssim 2.2$. Also, since most optically selected QSOs tend to be blue, (typically $f_\nu \propto \nu^{-0.8}$, *cf.* Francis *et al.* 1992), this filter covers a brighter portion of the QSO spectrum than the R_s filter. This means that although it covers a brighter portion of the night-sky spectrum, for the brighter QSOs $V \lesssim 17$ the V2 filter will yield a higher signal-to-noise.

At the Kitt Peak #1-36″ telescope we used the "Mould System" UBVRI filter set available at KPNO for multicolor photometry in order to help identify the spectral types of the comparison stars (see chapter 7). We also used our own gunn-r (r1 = 3mm RG610 + 2mm KG1 + Rolyn 66.2475 Heat Reflecting Interference) and red filter (R2 = 3mm RG610 + 2mm KG3) as approximations to the R_s filter used at Lick. The KPNO data were included into the final light curves separately (see chapter 7) and are indicated as open symbols in the light curve plots (see chapter 8).

5.3 : Comparison Stars

Ideally, we want the errors to be dominated by the number of photons detected from the QSO and not the errors in the comparison stars. For this reason, we would like to use comparison stars which are brighter than the QSO, $V \lesssim 17$, but not so bright, $V \lesssim 15$, that the star saturate the CCD pixel wells in a short time (which would require allocating an