

### 5.7 : Quick Reductions: Identifying Variable QSOs for Immediate Spectroscopy

Generally, imaging (Lick 1 meter) nights are scheduled both prior to and after spectral (Lick 3 meter) nights. The preceding nights concentrated on BALQSOs with the highest chances of BAL variability. Quick reductions were done on the mountain (time permitting) with relatively crude flat-field corrections and the imaging software available at Lick. These reductions were capable of detecting changes  $\gtrsim 0.15$  magnitudes fairly reliably.

Only a few definite cases of continuum changes were identified immediately prior to an observing run, and in only one case were we able to obtain spectra on the following nights (H 0856+1540, see chapter 8). In this case, concurrent spectral variations were detected.

### 5.8 : Secondary Standard Stars

During photometric or nearly photometric conditions, standard star observations were made at several times during the night. Observing the same standard star on the same night at various airmasses enabled us to establish values for the atmospheric transmission for each filter band as well as a calibration from observed flux to magnitudes. Although, not used in the differential photometry, these calibrations allowed us to obtain accurate magnitudes ( $\sim \pm 0.03$  magnitudes) for most of our sample.