

moves) in the future may help reduce some of the residual non-formal errors (*i.e.* those errors not derivable from photon counting statistics, see chapter 7).

### 5.5 : FOS/HST Target QSOs

During the last two years of BALQSO monitoring, QSO targets for the Faint Object Spectrograph (FOS) on the Hubble Space Telescope (HST) were also monitored during the same observing runs. Separate observing proposals for BALQSOs and FOS QSOs requested adjacent nights. Although excluded from most of the final analysis and summaries, the imaging data for the FOS QSOs were reduced in the same manner as for the BALQSOs and the data were used to help estimate non-formal errors.

### 5.6 : Object Selection and Biases

On any given night, the QSOs observed are biased by the time of year and weather conditions. More importantly, those BALQSOs are selected are objects for which there is a higher probability of detecting BAL spectral variability. This probability depends on redshift, magnitude, and the depth and extent of the BALs (see chapter 9). We are also biased towards observing BALQSOs for which there are contemporaneous spectral observations. Imaging observations have concentrated on BALQSOs for which BAL variability has been detected. On observing runs where weather permitted only short periods of observing, a few BALQSOs were selected above all others. This causes an unevenness in the sampling rate in the light curves among the objects (see chapter 8).

Although even sampling on a large sample is preferable for statistics on broadband variability, our principle objective was to identify new cases of BAL variability and obtain simultaneous accurate continuum levels. This strategy was due to our estimate that BAL variability may be very rare, since prior to this work there were only a few cases of small or marginal BAL changes.