

fractional ionic abundances for relevant elements as a function of the ionization parameter. We also discuss the nature of time-dependent photoionization/recombination, which could be important in the temporal response of the BAL gas to changes in the ionizing flux.

In chapter 4, we present a catalog of BALQSOs for later reference.

In chapters 5-7, we discuss the methods and error analysis involved in the broadband imaging, which was used to monitor the continuum level of the BALQSOs.

In chapter 8, we summarize the results of the broadband variability studies. This addresses the question of whether there are differences between the continuum variability of BALQSO and non-BALQSOs. We discuss the frequency, timescales, and amplitude of the QSO continuum variations, and compare our results to other studies of QSO continuum variability.

In chapters 9-11, we discuss the methods of spectral observations, reductions, and analysis. Chapter 9 includes a search list of absorption lines based on the expected relative ionic abundances, and oscillator strengths.

In chapter 12, we summarize the general results from the spectral observations including the search for BAL changes.

In chapter 13, we discuss the variations and characteristics of individual BALQSOs.

In chapter 14, we give a brief summary and discussion of the results in this thesis.