

MULTI-EPOCH ABSORPTION LINE VARIABILITY OF APM 08279+5255

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Broad Absorption Line (BAL) variability potentially represents a powerful tool to investigate the physical nature and the structure of gas outflows in active galactic nuclei. Most existing BAL variability studies rely on observations taken at a few epochs for samples of tens of BAL QSOs. In the present study we present the first "monitoring" of a single object, APM 08279+5255, which has been observed with the 2.8 m telescope at the Asiago Observatory more than 20 times since 2003. All available spectra from the literature have also been analysed, including two high resolution spectra, from Keck and HST respectively, extending the time interval from 1998 to 2012. A remarkable stability of the shape of the absorption profile is found. At the same time significant variations of the equivalent width are observed. A correlation of the BAL equivalent width with the QSO luminosity is found for the first time. These results suggest that changes in the ionisation and excitation state of the gas are causing opacity changes.