UV Spectra of Chromospherically Active V711 Tau and SW Lac

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Solar like magnetic activity indicators such as photospheric spots, chromospheric emission, coronal X-ray and radio emission and flare activity are commonplace in many cool stars. Stars with the highest levels of the activity are close binary systems composed of cool stars, i.e., the chromospherically active binaries such as RS CVn, BY Dra, W UMa and related systems. RS CVn type binaries, V711 Tau and SW Lac, have been selected to show correlation between photospheric spot and chromospheric activity. The IUE spectra of both systems are used for ultraviolet photometry and for a variation study of chromospheric activity. For V711 Tau Mg II emission lines in the IUE high dispersion spectra have been analyzed to investigate the chromospheric activity. The relationship between intensity variation of Mg II emission line and light variation has been derived by comparing optical light curves, UV light curves and intensities of Mg II k emission lines. For SW Lac the IUE low dispersion spectra were used as an evidence of chromospheric activity by identifying chromosphric emission lines. Both systems show that the chromospheric activity is correlated with the light curve variation and depends on the orbital phase.