UV Line Emissions of W UMa type stars

Dongjoo Han[1,2], Wonyong Han[1], Yonggi Kim[2]
[1] Korea Astronomy Obsevatory, Taejeon, 305-348, Korea
[2] Department of Astronomy and Space Science, Chungbuk National University

We obtained UV light curves of W UMa type stars from the IUE low dispersion spectra. We obtained a phase-dependant variation of 44i Boo more clearly in UV range through reprocessing work, indicating the chromospheric activity of contact binary. We reprocessed the UV line intensities of 44i Boo by a gaussian fitting method which gives more improved result in IUERDAF(IUE Regional Data Facility). CI, CII, CIV, SiIV lines of other W UMa type stars have been measured to find variations of the UV line emissions from chromospheric and transition region. UV light curves of target stars showed maximum at phase around 0.2 and 0.8. Such UV emissions are generally believed to be observed at the active regions and contacting parts of the two stars due to the clear visibility at the phase 0.2 and 0.8. Thus we might interprete that UV light curves of W UMa type stars are influenced by the variations of chromospheric activity.