



Spectral analysis of a micro-two-ribbon flare

C. Fang, R.L. Jiang, and Y.H. Tang

Department of Astronomy, Nanjing University, Nanjing 210093, PR China

Using high resolution H α , CaII 8542 Å and FeI 6302.5 Å Stokes spectral data obtained simultaneously with THEMIS, we analyze the spectra of the micro-two-ribbon flare (MTRF) on 5th September 2002. The intensity, velocity and longitudinal magnetic field maps are obtained. The hard X-ray emission observed by RHESSI provides evidence of non-thermal particle acceleration in the MTRF. Using the H α and CaII 8542 Å line profiles and the non-LTE calculation, we obtain the semi-empirical atmospheric models for two brightest kernels of the MTRF. The result indicates that the temperature enhancement in the chromosphere is more than 2500 K. The kinetic and radiative energy of the MTRF are estimated.