

# Occurrence of blue asymmetry in $H\alpha$ profiles of a two-ribbon flare

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We present two-dimensional spectral observations of an X1.2 two-ribbon flare in which blue asymmetry of  $H\alpha$  profiles are seen at one kernel for more than 1 min. It is interesting that this kernel seems to move along a flare loop seen on the *Transition Region and Coronal Explorer (TRACE)* images since its appearance. While on the loop footpoints, the  $H\alpha$  profiles are found to be red shifted. There seems to have counterpart of the kernel on *TRACE* 195 and 1600 Å images. We calculate the moving speed of the kernel by measuring the moving front on *TRACE* Å 1600 images and find that it has good temporal correlation with the line-of-sight velocity calculated from the  $H\alpha$  profiles using a wing bisect method. The maximum speed of the kernel measured from *TRACE* 1600 Å images is  $\sim 200 \text{ km s}^{-1}$  that is similar to the chromospheric evaporation speed calculated from soft X-ray lines. We suppose that this kernel may be resulted from the material evaporated from the chromosphere. If this is true, it will be the first time to see direct evidence that supports the scenario of chromospheric evaporation and condensation in solar flares as we know.