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## Analysis of flare ribbon fine structures using high-resolution observations

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The mechanism of energy release from solar flares are still not fully understood and the study of small-scale features is an important aspect toward this understanding. Flare ribbons act as the footpoints of a flare and are crucial to know the process of flare reconnection. We present here a study about the fine structures of flare ribbons using a high resolution observations using the Swedish 1-m Solar Telescope (SST), the Atmospheric Imaging Assembly (AIA), and the Interface Region Imaging Spectrograph (IRIS). The high-resolution SST observations offer spectroscopic data in  $H\alpha$ , Ca II 8542 Å and  $H\beta$  lines, which we use to analyze plasma blobs along the flare ribbon. Within the eastern flare ribbon, chromospheric blobs were detected in the red wing of Ca II 8542 Å,  $H\alpha$ , and  $H\beta$ . A comparison of plasma blobs in  $H\beta$  observations and Si IV 1400 Å has also been performed. These plasma blobs are observed as circular structures having widths from 150 km - 180 km. Intensity profiles at these blob locations show a red wing asymmetry. We conclude that the chromospheric plasma blobs in the flare ribbon are likely formed due to a fractured reconnection process within the flare current sheet, supporting the theory of a direct link between fine-structure flare ribbons and flare current sheet tearing. We believe our observations represent the highest resolution evidence of fine-structure flare ribbons to date.

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