

**M18a      Automatic Detection of Dynamic H $\alpha$  Dark Features from Hida/FMT  
Four-wavelength Images**

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We present a fast program for automatic identification of dynamic chromospheric dark features from time series of full-disk solar images at three H $\alpha$  wavelengths (center, and  $\pm 0.8\text{\AA}$ ). It is a natural requirement for making such an automatic program since daily data is very huge in quantity (at least 1fpm). The simultaneous observations made in different positions in H $\alpha$  line are obtained by the six-channel Flare Monitoring Telescope (FMT) at Hida Observatory. For a seven-day observation, the program results in a larger catalog containing 70% dark events recognized by personnel and, particularly, 80% surges events in the personnel-made catalog are identified with more precise starting and ending times. It should be noted that the events missed in the program are mainly due to our restrict definition for surging of a real dark feature. Further statistic study on surges or other activities can be carried out based on the machine-producing database. Moreover, the completion of the program is also stimulated by the recent installation of a new four-channel telescope, Solar Magnetic Activity Research Telescope (SMART), at Hida Observatory. With some modifications the program can be applied to monitor on-disk dynamic features, including flare ribbons, for high-resolution data by SMART.