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The dynamical properties of blinkers observed in the EUV and $\mathbf{H}\alpha$

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We report the latest results from our on going study of short duration blinkers and their relationship with brightenings in the lower chromosphere (H α). The data come from high cadence observations made during a coordinated campaign between the SOHO Coronal Diagnostic Spectrometer and the Hida Observatory Domeless Solar Telescope in July 2002. In particular, we discuss the velocity field associated with the EUV and H α brightenings. The majority of EUV blinkers appear to be red-shifted and show line broadening, which is indicative of some dynamical characteristics in common with other active phenomena such as explosive events. In addition, preliminary results suggest that a greater percentage of those blinkers which show H α counterparts are red-shifted compared to the dataset as a whole. Furthermore, a red-asymmetry in brightening was previously detected in the H α line for one event. Here we examine the H α events in greater detail to determine whether such asymmetries are a common characteristic. We also present results from a method we developed for an improved velocity calibration of the CDS normal incidence spectrometer (NIS). This method makes a detailed correction for the spectral rotation and line tilt on the detector, which cause a North-South bias in wavelength measurement along the NIS slit. This bias varies with time and is not accounted for in the standard CDS software correction procedures. We therefore discuss the accuracy of blinker velocities derived using the standard CDS software.