

Figure 1: Example of a CME observed by both STEREO A (top row) and B (bottom row). From left to right, the columns show images taken 6, 12 and 18 hours after the CME entered the HI-1A field of view.

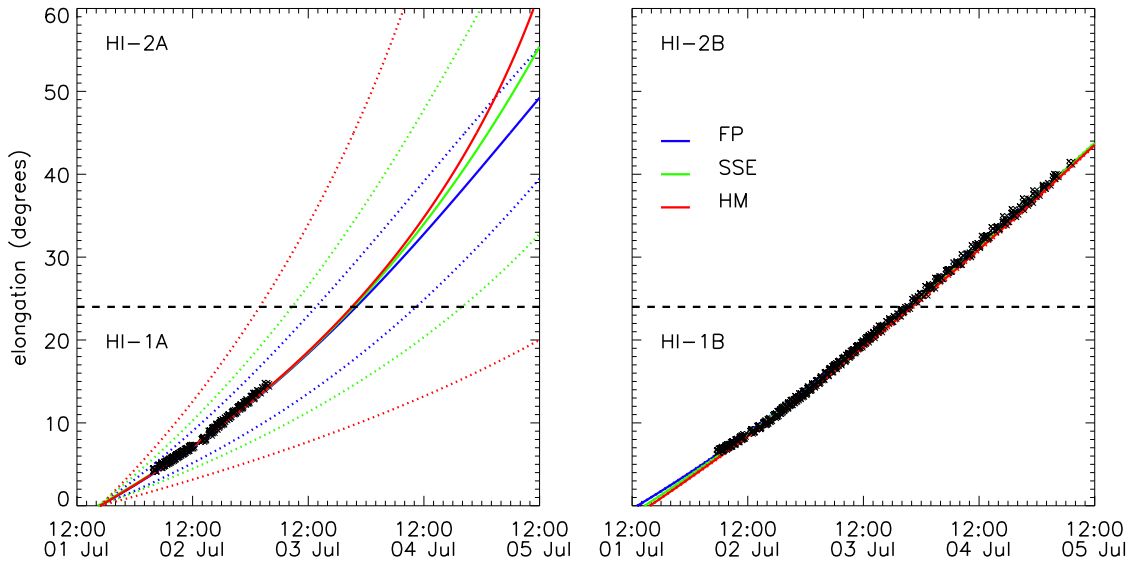


Figure 2: Time elongation plot for the CME in figure 1, as observed using both STEREO A and B. Each of the three fits and their uncertainties are over-plotted.

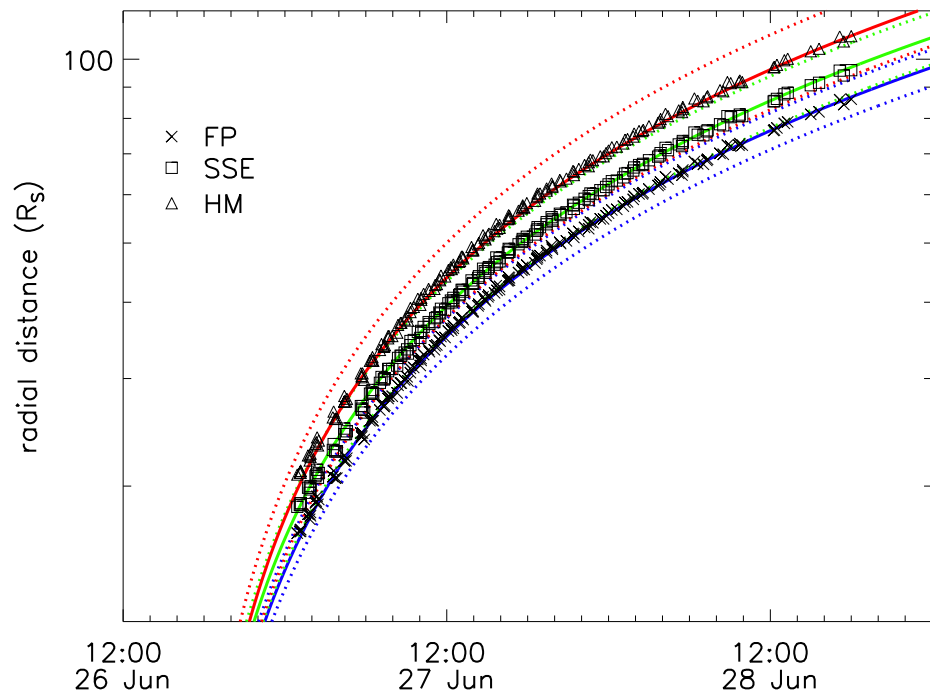


Figure 3: Height time profile for HCME_A_20090626_01 for each of the three fitting methods.

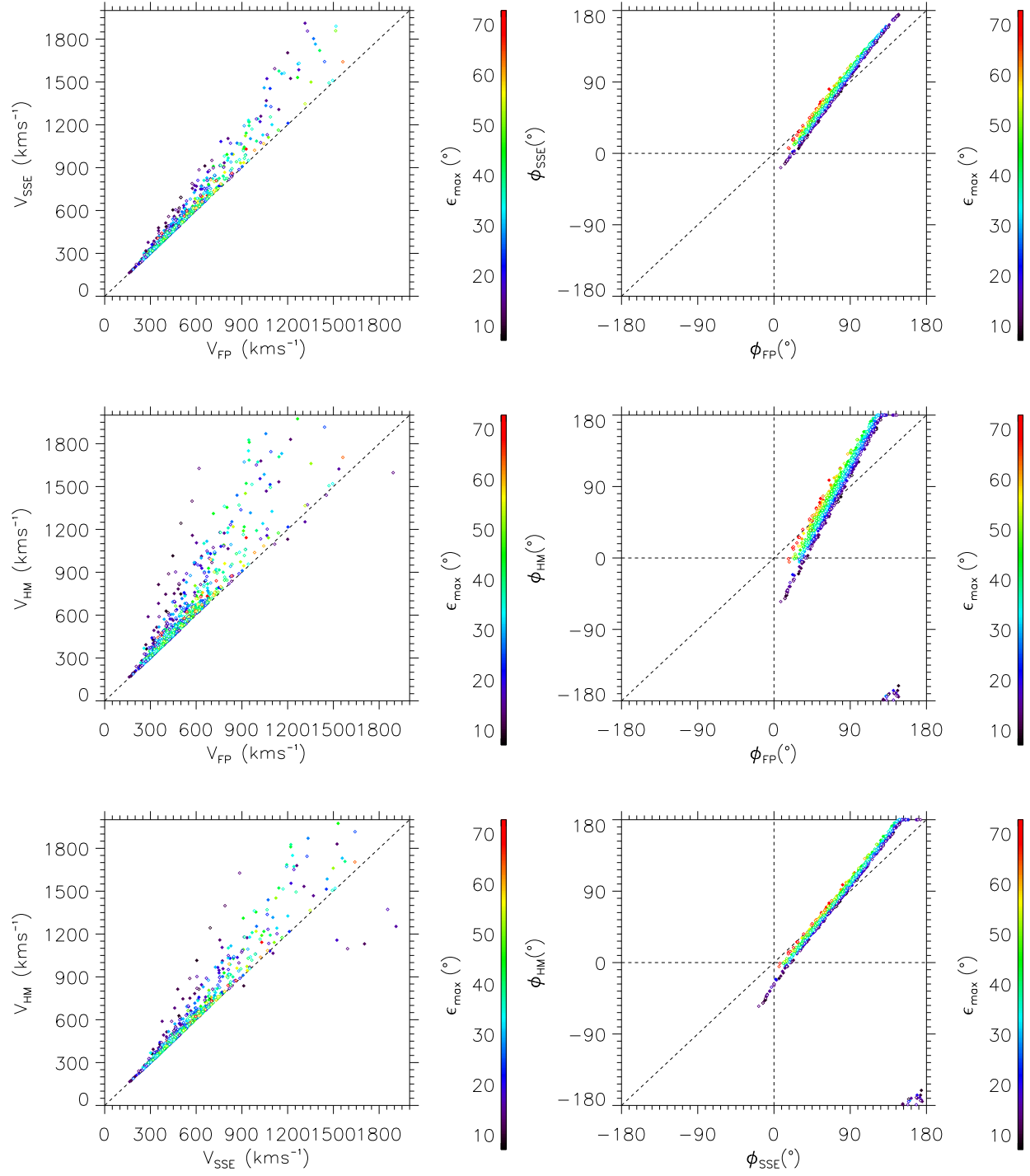


Figure 4: Comparison between each of the three fitting methods for speeds and directions.

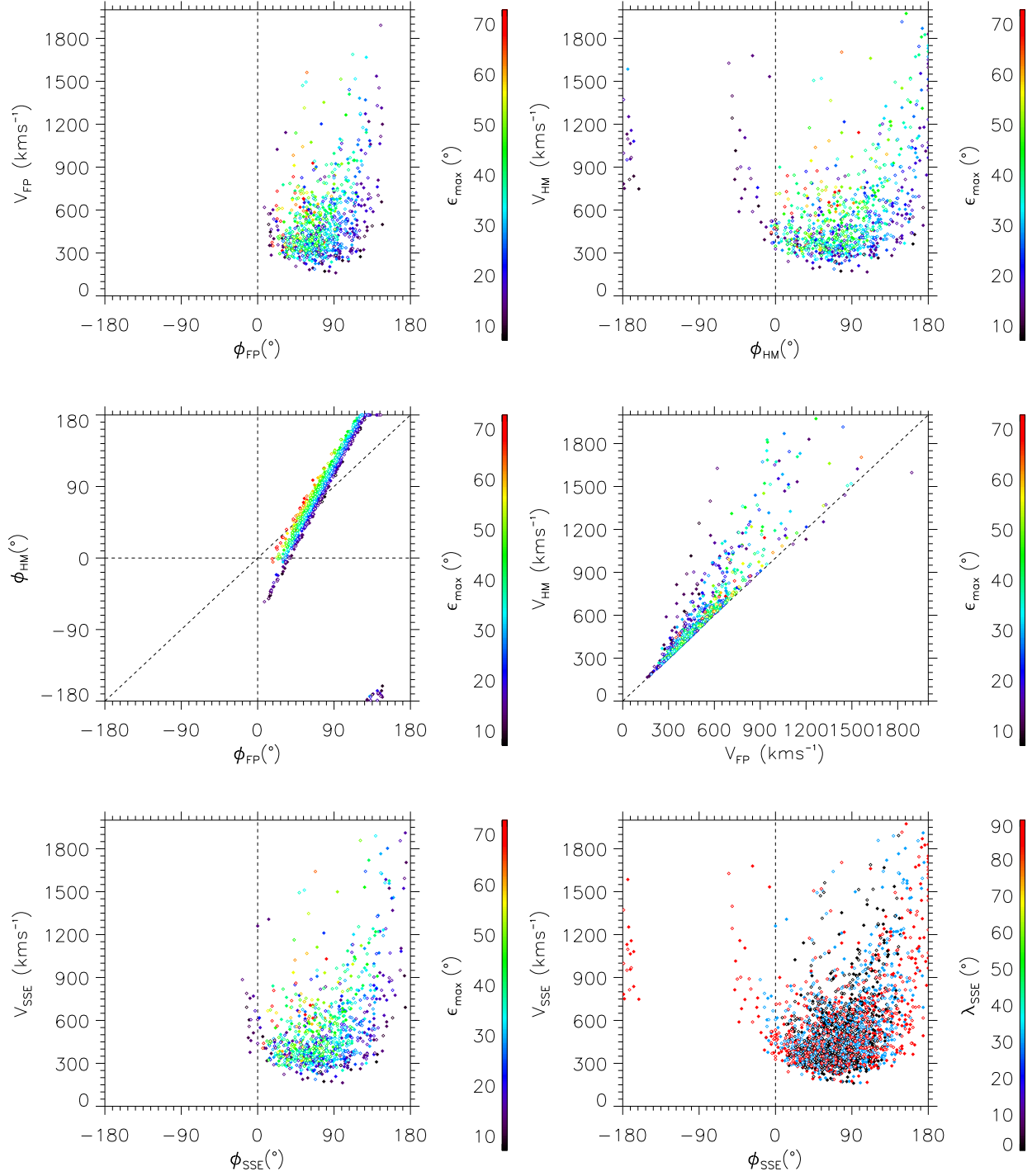


Figure 5: Reproduced plots from figure 3 in [Davies et al., 2012] using the new catalogue.

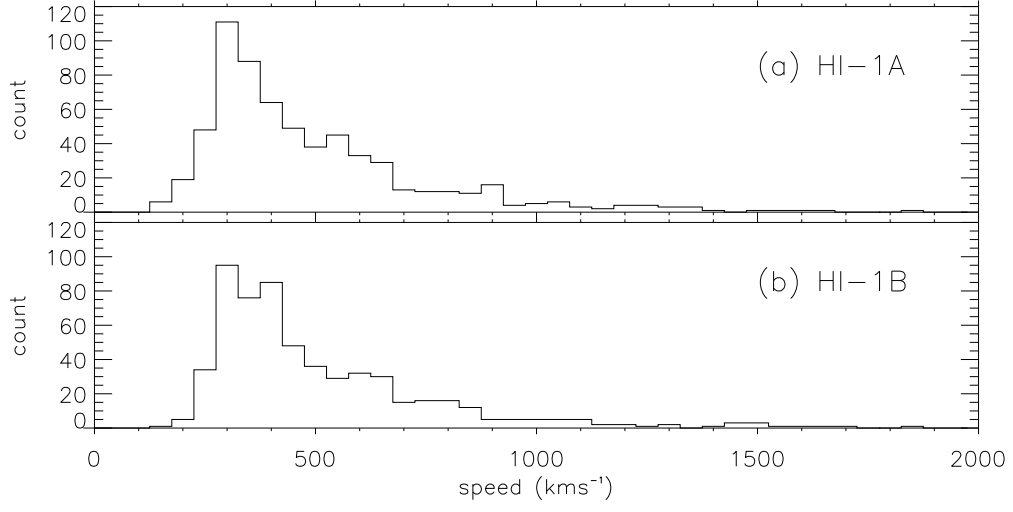


Figure 6: Distribution of CME speeds determined from STEREO A and B using SSE fitting.

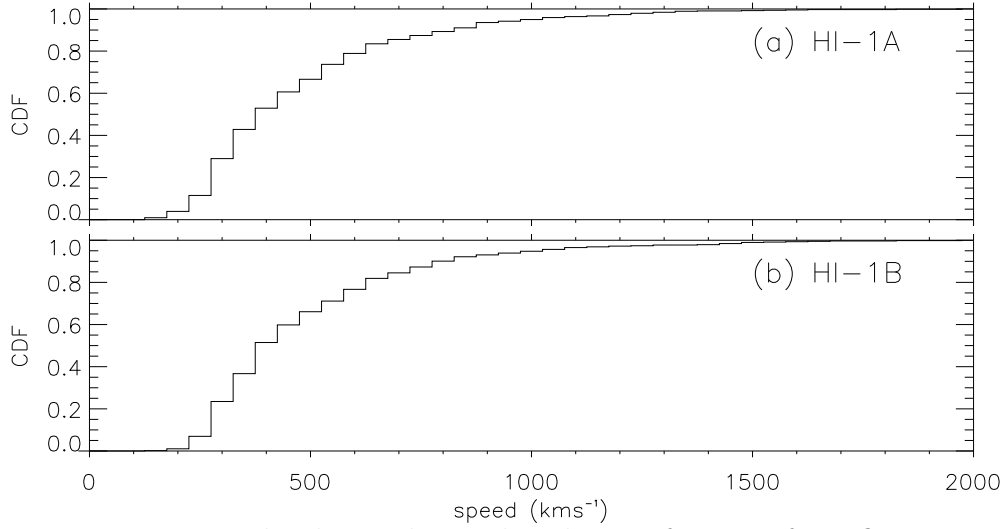


Figure 7: Normalised cumulative distribution function from figure 6.

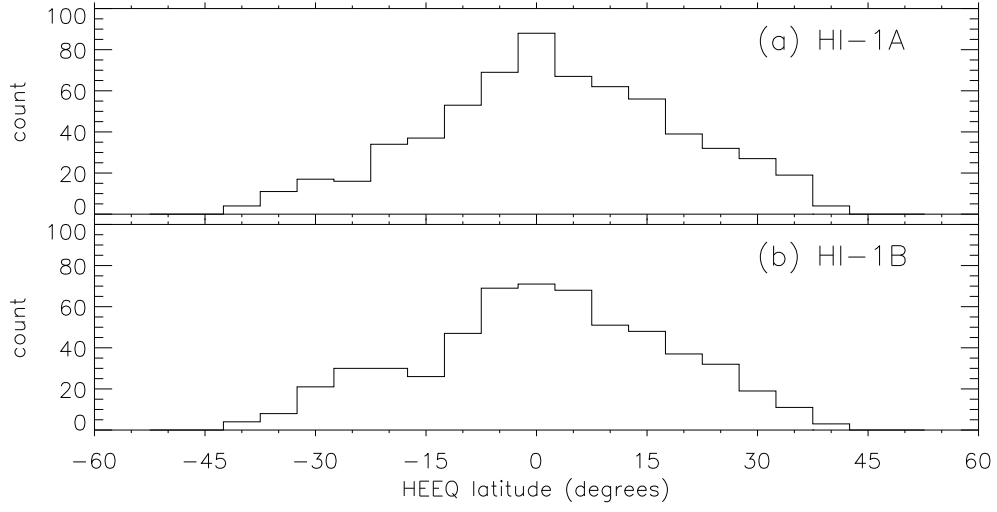


Figure 8: Distribution of CME latitudes from SSE fitting.

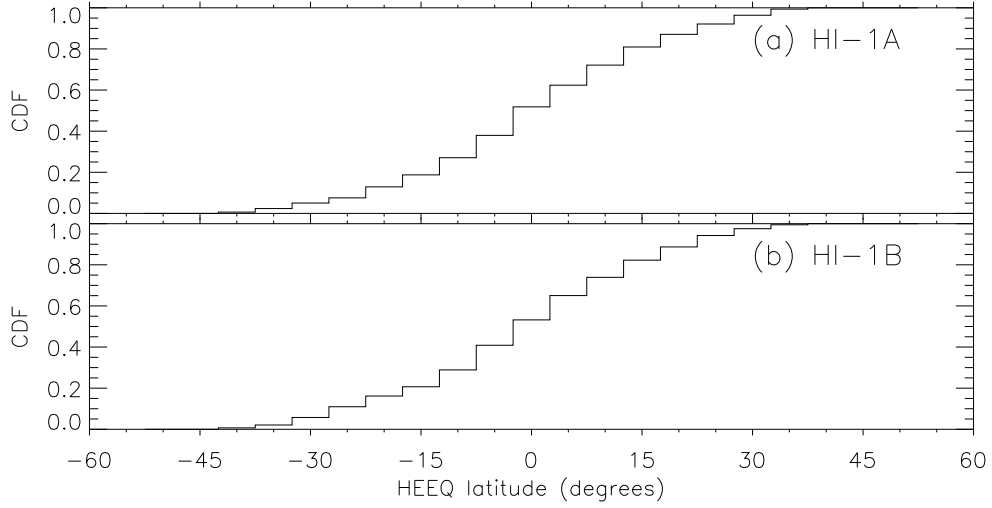


Figure 9: Normalised cumulative distribution function from figure 8.

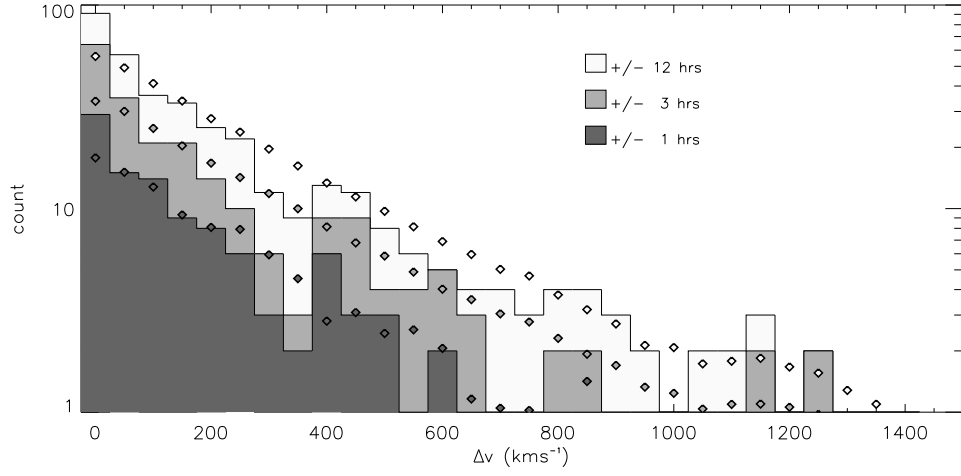


Figure 10: The difference in (SSE) speeds of CMEs coincident in the FOV of both spacecraft. Two CMEs are defined as coincident if they enter the FOV of both HI-1A and HI-1B within a given time-window (1, 3 or 12 hours). The diamonds show the result if CME speeds are compared at random, based on the distributions in figure 6.

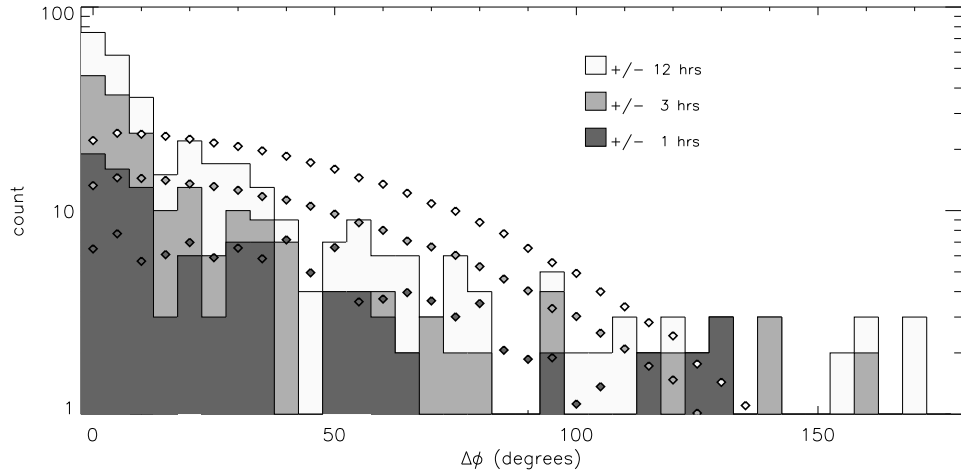


Figure 11: Same format as figure 10, but for the difference in angle, ϕ .

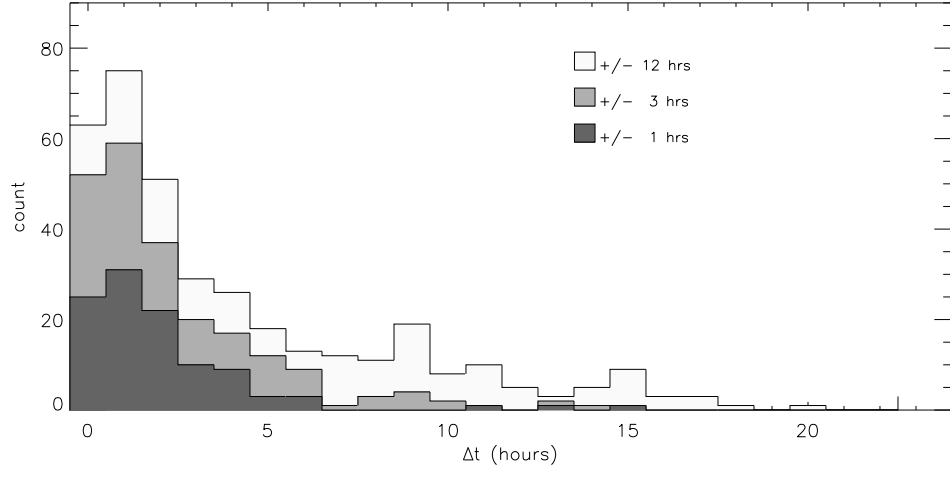


Figure 12: Same format as figure 10, but for the difference in launch times.

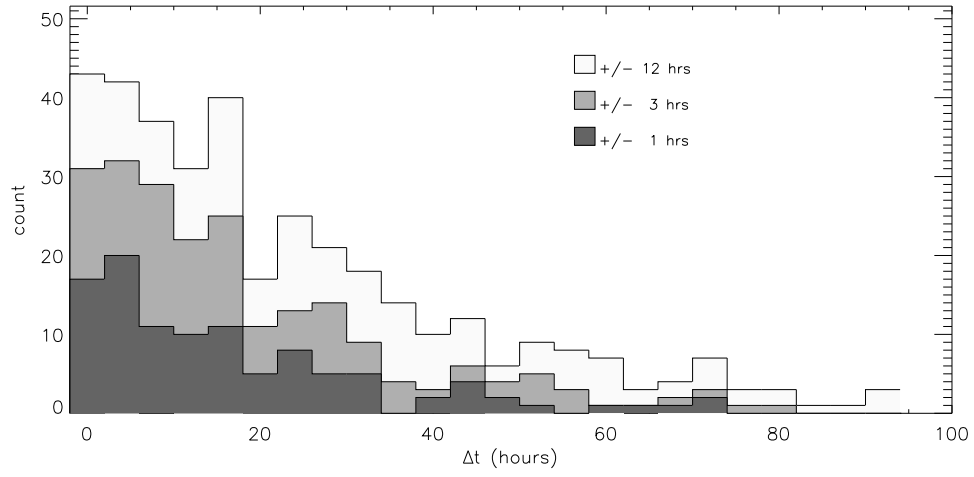


Figure 13: Same format as figure 10, but for the difference in 1AU arrival time.

References

- J. A. Davies, R. A. Harrison, C. H. Perry, C. Mstl, N. Lugaz, T. Rollett, C. J. Davis, S. R. Crothers, M. Temmer, C. J. Eyles, and N. P. Savani. A self-similar expansion model for use in solar wind transient propagation studies. *The Astrophysical Journal*, 750(1):23, 2012. URL <http://stacks.iop.org/0004-637X/750/i=1/a=23>.