

Photocell timing systems are used routinely to measure running speeds. In this study the accuracy of such systems was evaluated using centre of mass speed estimates from three dimensional video analysis as criteria. One subject ran at five nominal speeds (m s⁻¹) for each of five separations (m) between consecutive photocells. Running speeds were calculated from the photocell data using single beam and double beam systems. For single beam systems the start of the first break of a beam and the start of the longest break of a beam were used as trigger criteria. For double beam systems the first occurrence of both beams being broken and the start of the longest double break were used as trigger criteria. Root mean square speed errors were smaller for the double beam systems. The longe