Abstract

High resolution orbits with high speed shutters

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This contribution will describe a novel photographic instrument, based on Liquid Crystal shutter technology, which enables the chopping of meteor trails at a rate of 200-400 cycl/sec. Together with a long-focal lens it enables measurement of the apparent velocity and deceleration with high accuracy, resulting in an increase of the sample of precise orbits. The instrument has been in use at several major shower maxima and the obtained results will be presented. An outlook is given for further increase of the performance.