



## **A Field Study on the Raindrop Fall Velocity**

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Raindrop fall velocity is a critical parameter in various rainfall related applications such as dual-polarization radar rainfall estimation. In such applications, it is typically assumed that raindrops fall at terminal velocity. Recent field observations, however, challenged this assumption of terminal raindrops. In this study, we investigated raindrop fall velocity in rainfall events using a new optical-type disdrometer called the High-speed Optical Disdrometer (HOD). We developed the HOD recently for precipitation microphysical observations, in particular for investigating raindrop dynamics including raindrop fall velocity. Our field observations showed clear deviations of raindrop fall velocities from predicted terminal velocities. These new field observations and our ongoing efforts to elucidate raindrop fall velocity characteristics will be discussed. This material is based upon work supported by the National Science Foundation under Grant No. AGS-1612681.