

Wind Shield Evaluation at NCAR/Marshall Test Site in Boulder, Colorado, During 1998–1999 Winter

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ABSTRACT

Measurement of real-time solid precipitation is complicated by many factors, including snow density, wind effects, and gauge design characteristics. NCAR has been testing various precip gauges and wind shield configurations over the past several winter seasons and has collected an extensive data set for evaluation of these devices. The focus of the 1998–99 winter season was an extensive evaluation of various wind shields and their effectiveness towards producing an accurate real-time measurement of solid precipitation. The NCAR/Marshall test site was used for this evaluation, which gets approximately 80+ in. of snow and strong downslope wind events that occur several times per month. Data from the gauges and various wind shield configurations will be presented for an overall comparison of the instrumentation.

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