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Fall Speed (m/s)

Instrument Development: PVI Version II



Precipitation/SNOW Video Imager II

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GPM will measure Global Water Flux.

PVI-II is a new instrument for GPM Cal-Val Field Projects. Its high-frame-rate records of grey-scale images Produce particle-size and fall-speed measurements For Water Flux Studies.

PVI2 Composite Image. 64x48 mm. 0.1 mm Resolution. 380 fps. Trajectories.

Cold Front Passage Shows

Fall-speed Variability.

Tracking
Particles
Provides
Reliable
Velocity
Estimates.

Stratiform Rain Event.

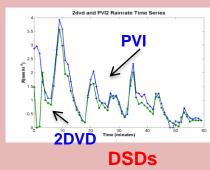
PVI

Favorable comparisons to 2DVD data and V(D) models.

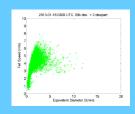
Fall Speeds PVI-2 at WFF. 2012-11-27 2200 UTC. 42k obs.

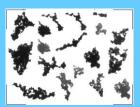
Atlas and Ulbrich V(D) models.





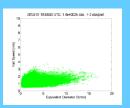
Wintery Mix



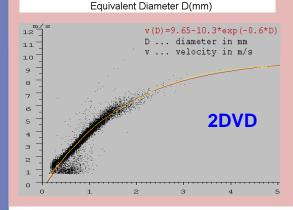


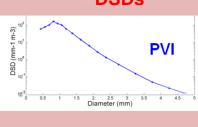
Images are 64x48 mm. L's are 10x10 mm.











2DVD