

Discrimination between Rain and Snow with a Polarimetric Radar

A.V.Ryzhkov and D.S.Zrnich
J. Applied Meteorology, 1998

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Overview

- Motivation and Goals
- Background – (terms used and the Cimarron 10cm radar)
- Characteristics of snowstorms
- Polarimetric characteristics of snow
- Polarimetric comparison of pure snow and pure rain
- Transition between rain and snow
- Conclusions

Motivation

1. The two precipitation types have vastly different effects on the population.
2. Need to understand precipitation types to accurately determine the precipitation amounts

Objectives

1. Examine radar polarimetric signatures of snowfall and to contrast then with those of rainfall.
2. Investigating methods to recognize the rain-snow transition boundary.