CLIMATOLOGICAL FEATURES AND NUMERICAL MODELLING OF PRECIPIPATION DURING WINTERTIME STORMS IN THE SNOW MOUNTAINS.

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Orographic precipitation presents a number of challenges to the meteorological community, as basic equations about the formation of precipitation become far more difficult under the complex dynamics brought about by mountainous terrain. Orographic precipitation is a major source of precipitation to mountainous regions like the Snowy Mountains in southeast Australia, whose catchments ultimately feed into the Murray-Darling Basin. The accurate estimate of orographic precipitation totals is central to water management efforts.

One aspect of water management policy in this region is the legislation for a new cloud seeding research project in the Snowy Mountains. The infrastructure for this project includes a new network of modern precipitation gauges and a mountain top remote sensing facility providing a range of meteorological and microphysical measurements.

This poster presents the results of a climatological study of precipitation patterns in the region, as well as some preliminary numerical model results for two wintertime storms.