

STUDIES ON BLOWING SNOW

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A field and analytical investigation of snow transport and deposition in mountainous terrain is described. During the winter of 1981-82, data on ridge mass flux, precipitation and lee side deposition was accumulated. This data is to be used as a data base for calibrating a mathematical model for predicting deposition patterns. At the same time a mathematical formulation based on turbulent mixture theory was developed. This formulation was first used to study the simpler problem of precipitating snow in turbulent boundary layer over a flat plane. These results are discussed. Finally, the more complicated problem of snow deposition on the lee side of a mountain is discussed.