

CORRESPONDENCE

Comments on "Need for Requirement that Details of Seeding Operations Be Adequately Specified"

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Huggins and Rodi (1985) deserve to be commended for their detailed observations of the meteorological conditions both before and after their seeding experiments over the Sierra Nevada. It is disappointing to note, however, that the seeding operation with dry ice is not described in sufficient detail to enable others to evaluate the seeding procedure or, if they desired, to repeat the experiments. The only description is the statement that ". . . the single curtain of CO₂ pellets dropped at a rate of 100–200 g km⁻¹ near cloud top creates a curtain of ice crystals. . . ."

This fails to provide information on an important factor that could influence the outcome of the experiment—the size of the CO₂ pellets that are used in the seeding. This is of importance for the following reasons. Large pellets fall much farther before they disappear by evaporation than small ones (Vonnegut, 1950). Therefore, the pellet size will determine the depth of the curtain of ice crystals that is created within the cloud. In addition, since the number and concentration of the ice crystals produced is a function of the pellet

terminal velocity (Badié and Mee, 1963), these variables as well will be influenced by the size of the pellets. It is therefore evident that a more detailed description of the seeding operation will add greatly to the value of the Huggins and Rodi paper.

Furthermore, as has previously been suggested (Vonnegut, 1966), it is desirable that editors and reviewers of JCAM manuscripts insist that papers describing seeding experiments include all relevant details of the seeding procedure.

REFERENCES

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