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The stuffblock snow stability test: comparability with the rutschblock, usefulness in different snow climates, and repeatability between observers

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ABSTRACT. The stuffblock is a new snow stability test developed by the Gallatin National Forest Avalanche Center and used operationally since 1993. The test involves stressing an isolated column of snow 0.30 m² by dropping a nylon sack filled with 4.5 kg onto the column from 0.10 m increments until weak layer failure occurs. Results over several winters correlate the stuffblock test with the more widely used rutschblock test, and validate the usefulness of the test for evaluating snow stability in several different climates. Further, the test provides results that are consistent between observers, a favorable attribute for regional avalanche forecasting operations that use numerous observers.

Keyword(s): Avalanches; Avalanche forecasting; Snow avalanches; Snow stability

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