

Interactive comment on “A low-cost acoustic permeameter” by S. A. Drake et al.

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I still think this is an interesting paper that demonstrates a low-cost acoustic permeameter, and I would like to see it published in this journal.

I initially believed that the permeameter had been tested on snow, and that snow data had been removed from an early draft. That is why I asked for clarification, and for snow data to be included. Some of the lines in the paper led me to believe that it had been tested on snow. A good example of this is a line in the abstract: "The permeameter can be operated with a microphone either internally mounted or buried [at] a known depth in the medium."

I think that testing the paper on some natural geomaterial would be worthwhile. Even if one or two example tests on snow would be included, that would be a good addition to the paper. A large number of snow samples with great variability may not be appro-

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ropriate or within the scope of this paper, but a brief test on some natural geomaterial would be appropriate to add.

I ask the Editor to comment on this. Should the paper be published without a test on a natural geomaterial? Can a paper with only foam sample tests be included in this journal?

If the paper should be published without any further revisions, I strongly believe that the paper is interesting and the physics is reasonable.

The authors write that "Our conundrum is that on one hand, validated snow permeability measurements over the full parameter space of snow type and condition are beyond the scope of this paper and on the other hand additional measurements would improve the manuscript."

I believe that a simple test on a natural geomaterial (such as snow) would be worthwhile to add to the paper. A few sample measurements (even one sample measurement of snow permeability) would demonstrate that the permeameter can be used for a natural geomaterial such as snow, as suggested by the authors.

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