

The Cryosphere Discuss., community comment CC1
<https://doi.org/10.5194/tc-2021-292-CC1>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.



Comment on tc-2021-292

Achut Parajuli

Community comment on "A Distributed Temperature Profiling System for Vertically and Laterally Dense Acquisition of Soil and Snow Temperature" by Baptiste Dafflon et al., The Cryosphere Discuss., <https://doi.org/10.5194/tc-2021-292-CC1>, 2021

In this article entitled "A Distributed Temperature Profiling System for Vertically and Laterally Dense Acquisition of Soil and Snow Temperature", the authors have presented an inexpensive DTS system to monitor snowpack temperature profile, soil temperature profile as well as snow depth. However, similar research is presented by Lundquist & Lott (2008) (DOI: :10.1029/2008WR007035) using the exact same DTS device. A similar approach has been adopted in Sodankylä, Finland (see DOI: 10.1029/2020MS002144). More recently, a similar snow temperature profiler has been used for various application: derivation of snowpack cold content (DOI: 10.5194/tc-2021-98) and in temperature index snow model (DOI: 10.3390/w12082284). Also, a similar approach has been adopted to understand the permafrost dynamics (DOI: tc-13-2853-2019). Therefore, the applicability of snow temperature profiler (DTS system) is immense. However, I believe this is not a novel work.