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Interactive comment on "57 years (1960–2017) of snow and meteorological observations from a mid-altitude mountain site (Col de Porte, France, 1325 m alt.)" *by* Yves Lejeune et al.

C. Fierz (Referee)

fierz@slf.ch

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General comments The authors present an important addition to the dataset described by Morin et al. in 2012. Not only is the hourly 2012 data set prolonged to 2017, but they also compiled all data available at Col de Porte in a daily dataset starting in 1960. The data are conveniently described and presented clearly and concise-ly without loosing on clarity, except for soil temperatures (see Section 3.4 in annotated manuscript). The estimation of uncertainties of the various measurements is an important asset of the paper as these are rarely given for other data sets. In conclusion, the paper is a welcomed contribution to long term, well described data sets for snow studies. Thus I

recommend to accept the paper provided the authors address the points raised above and below as well as in the annotated version of their manuscript.

Specific comments âĂć Regarding uncertainties on the water equivalent of snow cover (SWE), I have two questions: 1) Would it not be more interesting to compare the bulk density of the snow cover given by SWE/HS (where HS is snow depth) rather than SWE itself ? Indeed, I assume that the spatial varia-bility of SWE is mostly given by the spatial variability of HS while measurement errors of the snow mass may dominate the uncertainty on bulk density. I am aware that the cosmic-ray sensor does not fully fit this approach, but I assume from Figure 2 that snow depth is quite well known at its loca-tion. 2) If comparing SWE, I would prefer to see the differences expressed as a percentage of SWEref. But at least the mean maximum SWE should be indicated. âĂć Regarding Fig., Tab., etc, I would suggest to use the same style throughout the paper. Myself I would tend to use Figure, Table, Section, etc. âĂć The reader often needs to navigate back to Figure 2 (and other Tables). I hope this can be made eas-ier by linking any Location N to Figure 2 as well as referrals to tables to their respective Entries. That way the multiple repetition of '(Figure 2)' could be avoided in the text. Anyway, whatever you decide, make it consistent throughout the paper (currently not the case). Moreover, I hope the final layout will also help with that respect. Currently, some Figures and Ta-bles seem badly misplaced.

Please also note the supplement to this comment:
https://www.earth-syst-sci-data-discuss.net/essd-2018-84/essd-2018-84-RC3-supplement.pdf