

## ***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.***

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The availability of such a long, comprehensive, well-maintained and well-documented dataset is important for snow modelling, and I am keen to see this paper published. I have only a few questions:

page 2, line 14

It might be appropriate here to mention the important contribution of Col de Porte data to SnowMIP (doi:10.3189/172756404781814825) and ESM-SnowMIP (https://doi.org/10.5194/gmd-2018-153).

C1

page 2, line 20

The underlined text only covers instrument types and periods in tables. I do not think that the underlining is necessary.

Section 2.1

It would be interesting to know a bit more about how the elevations and  $p_{occ}$  are measured.

Figure 2

Some symbol indicating the direction of view would be preferable to the emoticons for camera locations.

Figure 3

It is a little deceptive having the centre of the masks at 60 degrees elevation rather than 90 degrees.

page 8, line 3

Is “available in that study” intended, i.e. Morin et al. (2012)?

page 8, line 23

Equation (2) will simplify a bit; is there a reason why this is not done? Does it always have one and only one solution for  $\eta$  in reasonable ranges of epsilon and  $e_{air}$ ?

page 9, line 7

The signs of the corrections are the wrong way round, aren't they?

Figure 6

The red temperature line is impossible to see on the red hardness bars.

page 14, line 6

C2

I think that this means “mitigating the impact of undercatch”, not the impact of the undercatch correction.

page 16, line 22

“mask measured in 2018”

page 16, line 26

The location of the total and diffuse radiation measurements is given as 2 here and 5 in the Figure 7 caption.

Figure 9

The (a) legend should be “Pit – reference”

page 20, line 9

References to the first and second columns of Table 7 do not seem to make sense.

The writing is always clear, but I have sent the authors some minor corrections directly.

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Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2018-84>, 2018.