

Interactive comment on “The Guadalfeo Monitoring Network (Sierra Nevada, Spain): 14 years of measurements to understand the complexity of snow dynamics in semiarid regions” by María J. Polo et al.

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The submitted papers deals with an area really interesting as it is one of the best Mediterranean places to study snow and snow hydrology. The manuscript is very well written and it is not only interesting for the dataset offered but also for the section of applications with the data displayed in the manuscript. Definetively, I think this will be a very nice contribution for the special issue. I have only two comments that authors and editor should consider for preparing a final version of the manuscript: 1- The most important is the daily nature of provided data. I think the value of the data

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set would definitively improve if authors provide subdaily data (10 minutes-hourly) as it could permit to be used to run different simulations or to validate atmospheric products at subdaily resolution. This fits much better with the type of experiments aimed in INARCH project, and this is what the majority of the contributing papers to the special issue are doing. 2- I would write a little more about possible uncertainty in the data and which procedure (if any) has been used for quality control and gap filling. I also wonder if the solid precipitation data contains some correction for undercatch. If not some comment (or data) about wind speeds during snowfall events could help to get an idea about the importance of this process in Sierra Nevada.

Other minor comments: P3I28: "This main orientation...." I do not understand very well this sentence" P3L33: It sound to me the sentence a bit awkward.. P4I4-5. HM3..3 as superscript May be Fig 1A and Fig 2 could be merged F6, I would show the full name of the two snow variables. H is not very conventional, may be better HS (height of snow), and make consistent the name with table 5. I would improve the labels of Y-axis in figure 7.

There is only provided data from the camera installed in Poqueira, I wonder if it is worth to explain and show in the manuscript the other two cameras.

Hoping my comments will be useful, Ignacio López

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