# Interactive comment on "Using crowdsourced web content for informing water systems operations in snow-dominated catchments" *by* Matteo Giuliani et al.

## Anonymous Referee #1

Received and published: 3 October 2016

This is an interesting paper that ultimately I would like to see published in Hydrology and Earth System Sciences journal. This manuscript proposes a procedure for automatically extracting snow-related information from heterogeneous sources. I really enjoyed reading the paper, which deal with the important and timely issue of notable interest and modernity especially for the HESS readership. The paper accurately presents the methods and results. I have just a couple of minor comments/suggestions for the authors to consider.

From the introduction and methods sections, the authors mainly focused in the description of the approach used to derive VSI information from webcams and people pictures. However, in the results sections only a figure is reported to discuss the benefits of such

approach. I would like to see more analysis regarding the results achieved using the method reported in sections 2.1, 2.2 and 2.3. For example, it would be interesting to discuss issues in define skyline or to show a comparison between snow information extractions (of a certain point) using both web camera and user generated picture (if possible).

It is not clear to me how the information of VSI was used to estimate physical variable like ht in eq(10). Did the authors used any hydrological models? If yes, I think it would be appropriate to give a brief description in the methods section.

Finally, I believe authors should clearly define the limitations of this study (e.g. computational time of the imagine process and availability of public photo from people) in the conclusion section