

**Review comments** on tc-2019-142 manuscript, entitled, "Towards a webcam-based snow cover monitoring network: methodology and evaluation".

**General comments:**

The tc-2019-142 manuscript, entitled, "Towards a webcam-based snow cover monitoring network: methodology and evaluation" presents a semi-automatic approach procedure to derive snow cover maps. The semi-automatic approach procedure is consist of (1) automatic image to image alignment and (2) automatic image to DEM registration which are the contributions of the manuscript. In addition a snow classification method (two existing methods in literature presented) and a manual user input (for estimation webcam's location) are needed for estimating snow cover from a webcam image.

The purpose of the work is clearly articulated and the methodology and results are adequately presented.

**Minor Comments:**

**Comment 1:** I would recommend adding following references optional which I believe useful to audiences:

**Page 1:** for in-situ measurements:

Pirazzini, R.; Leppänen, L.; Picard, G.; Lopez-Moreno, J.I.; Marty, C.; Macelloni, G.; Kontu, A.; Von Lerber, A.; Tanis, C.M.; Schneebeli, M.; De Rosnay, P.; Arslan, A.N. European In-Situ Snow Measurements: Practices and Purposes. Sensors 2018, 18, 2016.

Page 21: "In addition, our webcam-based snow cover product can be used to validate Sentinel-2 and Landsat based snow cover products"

It would be good to list earlier studies on webcam-based snow cover product which were used for validation satellite-derived products like Sentinel-2 and Landsat. There is one given below

Piazzini, G.; Tanis, C.; Kuter, S.; Simsek, B.; Puca, S.; Toniazzo, A.; Takala, M.; Akyürek, Z.; Gabellani, S.; Arslan, A. Cross-Country Assessment of H-SAF Snow Products by Sentinel-2 Imagery Validated against In-Situ Observations and Webcam Photography. Geosciences 2019, 9, 129.

**Comment 2:**

**Page 3, Line 13:** "They propose to apply the blue band classification by Salvatorietal. (2011) and subsequently use principal component analysis (PCA) to separate shaded snow cover from sunlit rock surfaces.."

This sentence is not linked to previous one and I believe should be rewritten like what is "they".. NOT CLEAR!