

Interactive comment on “Monitoring spatial and temporal variations of surface albedo on Saint Sorlin Glacier (French Alps) using terrestrial photography” by M. Dumont et al.

Anonymous Referee #2

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The 1st review pointed out already the problem with the EL and TSL. Maybe it would be good to describe their relationship and if that has any affect to this study. In case a photograph exist from the day in question (Jul 3) that would also explain the circumstances on the glacier. Now there are two photographs included (Jun 13 and Aug 4). The first one shows almost the whole glacier snow covered. On Aug 4 the snow has melted away from almost everywhere. Only high up on the right there is still fresh snow and then a few patches of old snow here and there. Continuous old snow is perhaps visible high up in the middle indicating that the EL is located really high up which is, of course, very bad to the glacier. Its mass balance seems to be negative; is this in line with your measurements? I miss some concrete examples using this method in mass

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balance measurements even though I understand this paper just shows the development work. Anyway, it would be good to have a picture from the "mixed" situation when both snow and ice are clearly present - as it should be on Jul 3. Related to this: the text of the table 3 also mentioned equilibrium line. Is it now the EL or TSL?

I could add one more thing. On p. 279 the authors write: " Although the cameras were fixed, a slight tilt and/or translation may occur." I would say that depending on how the "fixing" was done there will most likely be tilting/translation. It requires special equipment to avoid those, so I suppose that would have been mentioned in the text. This did not come out when looking for the identified ground control points? Maybe the photographing details could be explained a little more.

Interactive comment on The Cryosphere Discuss., 5, 271, 2011.

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