Interactive comment on “Snow observations in Mount-Lebanon (2011–2016)” by Abbas Fayad et al.

Anonymous Referee #2

Received and published: 18 April 2017

The paper presents in a very adequate way interesting meteorological, snow and remote sensing data in high elevated sites of Lebanon Mountains. The data may be very useful for many studies and helps to fill a big gap of knowledge on snow processes in key Mediterranean mountains. These areas deserve scientific attention as they are considered hot-spots in terms of likely climate change effects and because snow plays a major role in environmental and socioeconomic processes.

The paper is very well written and I think it suits very well in the on going special issue. I only have very minor comments that authors may consider for preparing a revised version of the manuscript.

- The manuscript states that treeline is at 1550 m a.s.l. I think this is due to very heavy human impact on vegetation and this is not the natural or climatic tree line, it can be simply remarked.
- In study are some information on temperature in the area or the location of annual and winter 0°C isotherm may be added.
- A little more discussion on how precipitation data can be affected by under-catch might be added. Perhaps with a simple statement relating the average wind speeds in the different sites with available literature. This could be added following the sentence finishing in line 188.
- In line 286 you provide data from November to June and this is considered as "snow season". Afterwards, it is seen that snow normally lasts until March-April as the latest. Perhaps the provided data for the "snow period" should be reconsidered.
- Line 306: Change m amsl by m a.s.l.
- Line 338: Better to say the 25th and 75th percentiles.
- Line 378: Snow height, not high.
- Line 424-426: What does mean the range of percentages? Is it the interannual variability (2011-2016) of the average SCA?

Looking forward to see the published manuscript.