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Interactive comment on "How much can we save? Impact of different emission scenarios on future snow cover in the Alps" *by* Christoph Marty et al.

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The authors assessed the future projection of snow depth in the Alps by accounting for future temperature and precipitation change under different emission scenarios. The results are interesting and can advance our understanding in the impact of climate change on mountain snow. Here, I have a short comment. Several recent studies (e.g., Painter et al., 2013; Liou et al., 2014; Lee et al., 2016) found that deposition of light-absorbing aerosols (mainly black carbon and dust) substantially decreases snow albedo, which further reduces snow depth and cover. However, this factor has not been considered by the authors in the future projection, which could play an important role. It would be helpful if the authors could include some discussions on these recent findings and the uncertainty due to this aerosol-snow effect in the projection of snow depth.

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