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Interactive comment on "Simulation of black carbon in snow and its climate impact in the Canadian Global Climate Model" *by* M. Namazi et al.

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I would like to draw the attention of the authors to our recent study on BC in snow in the Himalayas (Jacobi, H.-W., et al., Black carbon in snow in the upper Himalayan Khumbu Valley, Nepal: Observations and modeling of the impact on snow albedo, melting, and radiative forcing, The Cryosphere 9, 1685-1699, 2015). The observations presented in this paper may also be useful for the evaluation of the performance of the used global model.

Moreover, the authors mention four different positive BC-snow albedo feedback mech-

anisms in the intriduction. I was wondering if the authors were able to analyze, which of these specific feedback mechanisms were most important. I imagine that the importance of the different mechanisms may vary among different regions. For example, in our local simulation for the Khumbu valley we found with a detailed snowpack model an important increase in the snow grain size in the presence of BC compared to the clean snow.

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