

Second review of “Measurement report: Quantifying source contribution and radiative forcing of fossil fuel and biomass burning black carbon aerosol in the southeastern margin of Tibetan Plateau” (ACPD-2020-408, Liu et al)

General comment

The authors have significantly improved the manuscript. The different sections are easier to follow. Also, they have highlighted the novelty and contribution of this work. In other words, authors have turned this study into a relevant as it provides data and results that are important for improved understanding of anthropogenic influences on the cryosphere of the Tibetan Plateau. Thus, except for minor changes, I recommend acceptance.

Minor changes to be introduced

- The text should be revised in terms of punctuation. There are several places that need correction. For instance, on line 17 of the abstract it says “apportionments..”, should say “apportionments.” In other places, references are quoted as Alberts et al., (YEAR). It should say Alberts et al. (YEAR). All in all, check the text for typos.
- In the introduction, the authors cite Bond et al (2013) and Ming et al (2009) as references indicating the role played by BC in accelerating cryosphere retreat. I urge the authors to, in addition, review more up to date references. Consider for instance:
 - Zhang, R., Wang, H., Qian, Y., Rasch, P. J., Easter, R. C., Ma, P. L., et al. (2015). Quantifying sources, transport, deposition, and radiative forcing of black carbon over the Himalayas and Tibetan Plateau. *Atmos. Chem. Phys.* 15, 6205–6223. doi:10.5194/acp-15-6205-2015.
 - Xu, Y., Ramanathan, V., and Washington, W. M. (2016). Observed high-altitude warming and snow cover retreat over Tibet and the Himalayas enhanced by black carbon aerosols. *Atmos. Chem. Phys.* 16, 1303–1315. doi:10.5194/acp-16-1303-2016.
 - Gertler, C. G., Puppala, S. P., Panday, A., Stumm, D., and Shea, J. (2016). Black carbon and the Himalayan cryosphere: A review. *Atmos. Environ.* 125, 404–417. doi:10.1016/j.atmosenv.2015.08.078.
 - Kang, S., Zhang, Y., Qian, Y., and Wang, H. (2020). A review of black carbon in snow and ice and its impact on the cryosphere. *Earth-Science Rev.* 210. doi:10.1016/j.earscirev.2020.103346.
 - Yoshida, A., Moteki, N., Ohata, S., Mori, T., Koike, M., Kondo, Y., et al. (2020). Abundances and Microphysical Properties of Light-Absorbing Iron Oxide and Black Carbon Aerosols Over East Asia and the Arctic. *J. Geophys. Res. Atmos.* 125. doi:10.1029/2019JD032301.
- Introduction, line 22. You state “numerous” studies but you refer to just a few. I suggest you replace “numerous” by “several”.