

Interactive comment on “The Alberta Smoke Plume Observation Study” by Kerry Anderson et al.

Anonymous Referee #1

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This manuscript reports some simple hand-held inclinometer measurements and photos taken at lookout towers about the equilibrium and maximum plume heights in Alberta, Canada. The authors collected about 200 tower measurements and did data analyses for the forest smoke. The topic is useful for atmospheric aerosol study. The presentation quality is good. The data and results are unique. However, this paper lacks insightful study on the observed parameters, i.e. their significance on atmospheric aerosol processes. The data look weak in a scientific view. The conclusion is not clear for why they do this and what they get from these data. The significance of this study is not well presented in Abstract either. Tables and figures do not show sufficient results for a high-quality publication. This work should be further done to address science beyond the data to answer why these data are important, what effect of these

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data can have on atmospheric science, what are behind the equilibrium and maximum plume heights in atmospheric dynamics/physics.

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