

Interactive comment on “Quantification of atmospheric visibility with dual digital cameras during daytime and nighttime” by K. Du et al.

Anonymous Referee #3

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This manuscript presented a new digital photography based method for measuring atmospheric visibility. The manuscript is technically well organized, and the data support the feasibility of their method in field implementation. It could be accepted with additional explanation/information as indicated below.

1. The authors should specify the upper and lower detection limits of visibility that this method can be used to measure. 2. According to the algorithm, the distances between the target and the two cameras are independent of the measured visibility. However, under low visibility conditions, the target may not be detected by the cameras if the distances are larger. So the question is, how does the distance of the target affect the accuracy and/or detection limits of this method, although the actual value of the distance is not a variable in this method? 3. To improve the technical presentation, I

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recommend including details regarding image analysis and camera operation to make it easier to use by other people. For example, what are the appropriate ranges for exposure time, aperture size, etc? 4. What are the limitations of this method, such as weather conditions, color of the target? 5. The authors used both “Eq. (x)” and “Equation (x)” to cite equations. The format should be consistent. For example, change Equation (x) to Eq. (x).

Interactive comment on Atmos. Meas. Tech. Discuss., 6, 43, 2013.