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Interactive comment on "All-sky photogrammetry techniques to georeference a cloud field" *by* Pierre Crispel and Gregory Roberts

Anonymous Referee #2

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This article presents a method for geolocalizing clouds and extracting cloud base heights and horizontal velocity fields by use of a pair of all-sky cameras at zenith angle. The idea of using stereo cameras in cloud field observation is not novel, but the authors of this work eliminates the external calibration overhead by setting cameras at zenith angle and using leveling instruments. External calibration introduces extra constraints for stereo setup, hence eliminating- or simplifying- this step enables portability. Another contribution introduced in this work is the estimation of velocity fields by cloud segmentation followed by block search/matching. This method enables automatic extraction of vertical velocity fields at the cloud height.

The authors discuss the benefits and limitations of their setup and methods in comparison with ceilometer observations. An additional limitation of the proposed setup might

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Discussion paper

be in extracting vertical profiles of clouds, since cameras cannot see through clouds and all sky cameras work at zenith angle. The authors may consider discussing the impact of this limitation in investigating cloud's life cycle.

Page 2, line 24, "an" needs to be "a" Table 3, replace "significative" with "significant" Figure 8/9, center/rightmost panel in the bottom row, are the numbers missing, what is "//"?