

Interactive comment on “Cloud fraction determined by thermal infrared and visible all-sky cameras” by Christine Aebi et al.

Anonymous Referee #3

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This manuscript introduces a new infrared sky camera and an applied cloud detection algorithm and a comparison with visible sky cameras. It represents a substantial contribution to scientific progress within the scope of AMT. The image processing method, based on down-welling longwave radiation, to estimate the amount of cloud cover is a unique approach, as is the determination of cloud type. I recommend that the manuscript be published, with consideration of the following comments.

1. Page 2, Line 33: The TSI is indeed probably the most common all-sky camera but the Solmirus ASIVA or Reuniwatt Sky InSight may currently be more common than the WSI.

2. Page 6, Line 23: A better description is needed for "IRCCAM frame". Does this include the camera, arm, and wire ropes?

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3. Page 6, Line 20, Page 8, Line 2, and Page 8, Line 20: The horizon mask appears to be independently defined for each image and for each of the three cameras. Using the same horizon mask for all images would yield a better comparison.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-68, 2018.