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## *Interactive comment on* "The detection of cloud free snow covered areas using AATSR measurements" *by* L. G. Istomina et al.

L. G. Istomina et al.

lora@iup.physik.uni-bremen.de

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We do realize that inversions might be able to introduce a bias in measured brightness temperatures in thermal IR; however, we assume this bias to be corresponding to the temperature of the inversion layer and therefore constant within the discussed channels. So, the reflectance part of 3.7  $\mu$ m channel, which is the key of cloud detection, stays unchanged and allows the algorithm to perform as described in the manuscript. Obviously, cloud free cases are also not affected by a constant bias, due to relative thresholds analysis.

Interactive comment on Atmos. Meas. Tech. Discuss., 3, 1099, 2010.

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