

The paper is devoted to the development of the new technique for the detection of fog/low stratus in 1 km resolution from MSG SEVIRI data. The material of the paper is quite interesting and well-contained. I recommend publication of this paper in AMT taking into account some minor remarks:

The introduction should be expanded. It is advisable to mention other approaches based on the expansion of use of METEOSAT SEVIRI data by combining low-resolution color multispectral images with a high-resolution panchromatic image (e.g., Downscaling of METEOSAT SEVIRI 0.6 and 0.8 $\mu$ m channel radiances utilizing the high-resolution visible channel by H. M. Deneke and R. A. Roebeling, *Atmos. Chem. Phys.*, 10, 9761–9772, 2010)

p. 4413, line 4 - Give the reference(s), where “entities of cloud” is determined

p. 4413, line 10; p.4415, line 7; Fig. 5e - Most likely solar component was excluded in the calculation of BBT in the channel 3.9  $\mu$ m. How was it done?

p. 4420, line 15 – clarify what does it mean “interpolated channels”;

p. 4421, line 4 - Why as a typical cloud thickness of 200 m is chosen?

p. 4421, lines 9-10 - Does it follow that the definition of FLS presense using this technique is only possible in the absence of the middle and high clouds?

p.4425, line 7 - clarify what does it mean DEM;

Fig. 2 - I'm not sure that it is appropriate to compare the radiances in HRV and 10.8  $\mu$ m channels due to significant differences in the range of variation. It may be better to use the BBT for spectral channel 10.8  $\mu$ m;

Fig. 2, Fig.5 - The authors use a very small font.