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Atmospheric Measurement Techniques Discussions

Interactive comment on "Detection of ground fog in mountainous areas from MODIS day-time data using a statistical approach" *by* H. M. Schulz et al.

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This paper try to retrieve ground fog in mountainous areas based on MODIS data in day-time. The appoach judge the fog by comparing the cloud base height with DEM height. Ganerally, the cloud base height is difficult to get, while the authors invent a statistical method to get the cloud base height over mountainous areas, the validation shows it work well. So this apporach could have bright application prospect. While towards to the paper aims and content, there are still some minor questions.

1. Aims of this paper is somwhat fuzzy. The paper indicate that it purposes to get cloud forest distribution of Taiwan using a map of ground fog frequence. To get the fog frequency, it should use long time satellite data, but from the long time scale, is

there big difference between low stratus frequency and fog frequency? Because the low stratus frequence should be easier to get, such as Thies et al. (2015).

2. Besides, the night time cloud forest frequence should be similar with day time cloud forest frequence, but the night time fog/stratus frequence is still similar with day time fog/stratus frequence? Then, can day time fog/stratus frequence present the day time cloud forest frequence? if yes, you should give some proof or potential usage cases. In my opinon, the fog/stratus frequences in day time and night time may be different.

3. Page 4, "Cermak and Bendix(2008)" should be "Cermak and Bendix(2011)"? also in table 2.

4. The Sobrino(2008)'s method was applied to land sruface, could it be appropriate to fog/stratus?

5. In "Validation results and disscussion" and table 6, what's the meaning from author to compare this paper's result over Taiwan area to Cermak and Bendix's result over European area? In different places, I can't see much comparisons between two results.

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