

Interactive comment on “The effect of increased resolution of geostationary satellite imageries on predictability of tropical thunderstorms over Southeast Asia” by Kwonmin Lee et al.

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This paper provides interesting information on predicting thunderstorms by brightness temperature based on geostationary satellite. The importance of time and space resolution is also discussed in detail.

I have some short comments and questions related to this paper:

L15, page 3. How did you convert and smooth data by the time dimension? Is it the average of four 2 km pixels and 30 min?

L26, page 3. Why did you convert brightness temperature to integer?

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L4, page 4. The definition of lead time is from initial point to mature point. The initial point is the moment thunder pixels (BT11 decreases more than 5 K in 10 min) are detected. Since the region is 5°-20°N and 100°-110°E, if the thunderstorm like MCS happens near this area and moves in, this method maybe not work. It's better to filter out these examples and expand the data to three months (JJA).

For Figure 2(a), it's better to add longitude and latitude lines. The colorbar looks superfluous at both ends. Maybe you use the colorbar for all examples. But, for the specific one, it's better to set it close to the maximum and minimum of data.

I can't figure out why the lead time of 4 km and 30 min imager is 0 for No. 2. Do you plot the figure of that? Because from 05:00 UTC to 05:40 UTC, many pixels are thunderstorm pixels which should be captured by 4 km and 30 min imager.

Some reference format looks wrong:

L22, page 3: (Schmit et al., 2005). L15, page 4: (Houze, 204).

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