Comments on the "Idealized Simulations of Mei-yu Rainfall in Taiwan under Uniform Southwesterly Flow using A Cloud-Resolving Model by Wang et al."

In this study, the authors have conducted idealized simulations using a cloud-resolving model with a horizontally uniform, southwesterly flow to investigate rainfall characteristics, moist flow regimes, and the role of the complex topography in Taiwan during the Mei-yu season in the absence of Mei-Yu fronts or other weather systems. The design of idealized simulations on testing different moist flow regimes is excellent and the paper is well-written. Thus, except for the minor comments described below, I would recommend this paper be accepted with minor revision.

Minor Comments:

Line 59: What kind of thermodynamic effects of the topography? The authors need to clarify it.

Line 90: "The long-term climatology (1981-2010) reveals abundant Mei-yu 90 rainfall in the two-month period of May-June, with three maxima: two on the windward side of the Central Mountain Range (CMR) in southern and central Taiwan, respectively, and the third, less distinct center in northern Taiwan, roughly along the northern slope of the Snow Mountain Range (SMR)" – I would prefer to justify this sentence with the reference.

Line 118: "Shown in Figs. 3a-d, the averaged thermodynamic, moisture, and wind profiles in the vertical from these data indicate a rather uniform south-southwesterly flow (8-13 m s^{-1}) that veers slightly with a height from the lower to middle troposphere" This sentence is not clear (see highlighted in blue), which needs to be reworded.

Line 164-165: What about high wind with speeds more than 22.5 ms^{-1}? Do you have any point/explanation about if there is a high wind speed, e.g., 25, 30, 35 ms^{-1}…..etc.?

Line 172: Why did the authors choose these specific wind directions (210^{o}, 240^{o}, and 270^{o}) and wind speeds (10, 15, and 20 m s^{-1}) to examine the moisture effects? Why not rest of others' direction and speeds? Are there any specific reasons? If there are any, it is better to explain here.

Lines 219 to 222: Authors mentioned that the CTL case produced poor results compared to the observation. However, the c050_210 case produced better results than the CTL case when compared with Obs. Why does c050_210 produce better results? I tend to think CTL should produce better results than other cases.

Table 1: Is there any specific reason to use Lambert conformal projection instead of Mercator projection, which is considered to be better for this region? Any reason needs to be mentioned/explained in the model and experimental part of the manuscript.

Table 3: Why are the values of moist Froude number for the case with 195^{o} direction almost constant (~0.01) for all varying wind speeds (5 to 22.5 m s^{-1}) cases?

Table 4: Authors found the moist Froude number for the case with 195^{o} direction almost constant (~0.01); however, the mean daily rainfall decreased; why?

Table 6: What does S, P, and M stands for needs to be mentioned in the caption.

Line 441: Do you think about the sensitivity of the terrain played on other factors? For example, what about removing the whole mountain and/or removing the mountain sequentially?