Review of the manuscript:

"An Overview of the Western United States Dynamically Downscaled Dataset (WUS-D3)"

by *Stefan Rahimi, Lei Huang, Jesse Norris, Alex Hall, Naomi Goldenson, Will Krantz, Benjamin Bass, Chad Thackeray, Henry Lin, Di Chen, Eli Dennis, Ethan Collins, Zachary J. Lebo, Emily Slinskey, and the UCLA Center for Climate Science Team*

In this manuscript, the authors investigated the performance of dynamically downscaled simulations of climate conditions over the western U.S. from 1980 to 2100. The simulations were conducted using the WRF model driven by sixteen selected CMIP6 GCMs for various SSP scenarios. The WRF model was run on two nested domains with resolutions of 45 km and 9 km, yearly initiated with a one-month spin-up for the land surface, spanning from August 1 to September 1 of the next year. The authors have addressed many aspects related to the dynamical downscaling technique applied in climate change projection. The manuscript is very interesting, and it's worth publishing in the Geoscientific Model Development. However, I would like to request the authors clarify the following points.

1) Since the WRF model was initiated yearly, soil moisture data for the land model were provided by GCMs. These soil moisture data may be significant differences compared to those in case continuous running of the model. Have the authors conducted tests to assess the impact of this difference on the model outputs?
2) Why did the authors used one-way nesting from the parent domain (45-km) to the inner domain (9-km) instead of employing two-way nesting to gather feedback on local features that could benefit from a finer resolution?
3) I'm uncertain about the method the authors used to determine the projected changes in temperature ($K\ K^{-1}$) and precipitation ($mm\ d^{-1}\ K^{-1}$) per degree of global warming in Figure 7. Just to clarify, are these changes being calculated only for the end of the 21st century? Please let me know if I understood correctly. If so, is the calculation of "global warming" based on the ensemble mean derived from all sixteen GCMs for the entire globe?