

**Comments on paper entitled “Impact of urban land use on mean and heavy rainfall during the Indian Summer Monsoon” Atmospheric Chemistry and Physics Journal of egosphere-2023-1445.**

This is an excellent work on urban meteorology and precipitation. It gives a detailed overview of initiation, movement, and mechanism of a storm over both urban and no-urban simulations using Meso-NH model. I am having the following minor corrections before its acceptance in the journal.

1. How have you calculated anomaly of equivalent potential temperature and TKE (Fig. 7 and 9)? Please describe it in detail like how many days or years you have considered for calculating anomaly?
2. Indicate proper equations for calculating both thermal and dynamic TKE.
3. In line number 412, “Therefore, we have conducted an additional set of two....”. Please clearly mention the word ‘two’.
4. Provide color bar for Fig. 6.
5. Replace the word “four different time steps:” to “three different time steps:” in Fig 7 caption.
6. Provide X-axis label as latitude and longitude values in Fig. 7 and Fig. 9 respectively. It will be easier to understand the figure.
7. Please cite one more recent paper on observational study on urbanization and increased precipitation in the Bhubaneswar region located in Northeastern India by Swain et al. 2023.
  - Swain, M., Nadimpalli, R.R., Mohanty, U.C., Guhathakurta, P., Gupta, A., Kaginalkar, A., Chen, F. and Niyogi, D., (2023) Delay in timing and spatial reorganization of rainfall due to urbanization-analysis over India’s smart city Bhubaneswar. *Computational Urban Science*, 3(1),.8.