1-9) Refer to PART I, II, and III

10) As per the authors, the radar rainfall shows the rainfall in the atmosphere instead of the rainfall reaching the ground. Moreover, as per the authors, the Bureau of Meteorology has found that there are errors in the radar-derived rainfall data, showing unreasonable high rainfall values in some areas. Due to this reason, the authors acknowledge that the hourly rainfall accumulating from radar data was not used in the analysis[LN 146-151].

With the advancement of technology and theoretical development, researchers have been employing ML and AI algorithms to learn from data. Considering this trend, wouldn't ML/AI algorithms improve the development of gridded rainfall surfaces of your interest (i.e., 1 km in spatial and 1 h in temporal)? With the availability of daily rainfall gauges, hourly rainfall gauges, and hourly radar rainfall data, wouldn't it be feasible to develop an ML algorithm to relate the radar data and the existing hourly and daily gauged data to predict the correct values of hourly radar values (i.e., 1 km in spatial and 1 h in temporal)? How would this differ from your methodology?

11) Refer to PART V