

Review ESSD-2020-173

LAPSE data nicely organised on Zenodo, easy to access and download files specific to this manuscript.

Line 213: “50-foot mast” Reading a tower height in US units here seems a bit strange after description of most measurements on most vehicles in metric units up to this point.

Line. 390: “close proximity” Many readers / data users will find the time periods of proximity useful for data intercomparison assessments. As implied by Figure 4 (and perhaps also by Figure 7 but harder to distinguish), vehicle proximity not only of CoMeT-1 to CoMeT-2 but also between NSSL and UNL or among all three could have occurred multiple times per day? I do not see these periods identified in the CoMeT-1 data nor flagged in the NSSL data. User would need to find periods when GPS lat, lon and UTC coincide among two, three or four platforms? These authors will know data quality and utility better than outside reviewers; would an explicit summary of these proximity opportunities represent a useful addition? Eventually, direct intercomparison periods among sUAS and ground-based systems will drive an overall all intercomparison opportunity chart / graphic?

Funding for three CoMeT vehicles mentioned in acknowledgements but only two vehicles used in the deployment described here?

Table 2 & Table 3: response time for RM Young propeller-vane anemometer shown in units of “m” in both tables. But both of those tables also use ‘m’ as a length unit, e.g. m/s. Response time of anemometers in ‘m’ = minutes? E.g. 2.7 minutes for speed, 1.3 minutes for direction? That seems too slow? Check these units? Do not use “m” to designate both length and time?