

Interactive comment on “Evaluation of improved land use and canopy representation in BEIS v3.61 with biogenic VOC measurements in California” by J. O. Bash et al.

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Bash et al. presents interesting developments in BEIS emission modeling and BELD landcover data for California and conclude that BEIS emission estimates for California are better than MEGAN. The authors reference Misztal et al. (2014) to support their conclusion that MEGAN 2.1 significantly overestimates emissions in California on p 8136, line 8 : "The MEGAN 2.1 model generally captures the gradient in observations between sites for isoprene and monoterpenes, but predicts much higher isoprene concentrations at each site compared to observations (see Fig. 6). This is consistent with other studies comparing MEGAN 2.1 isoprene flux with measurements in the Sierra

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Nevada of northern California (Misztal et al., 2014)".

This is a misinterpretation of the Misztal et al., 2014 results and should be corrected in the revised version of the Bash et al. manuscript. Misztal et al. 2014 focused on the observed aircraft fluxes and gave only a brief qualitative comparison with MEGAN that shows very good agreement between MEGANv2.1 and observations with only occasional discrepancies (both overestimation and underestimation) due to the landcover. A companion paper to Misztal et al. 2014 is currently in review that gives a detailed comparison that clearly shows the good agreement between MEGANv2.1 and the Misztal et al. 2014 observations.

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