

Atmos. Chem. Phys. Discuss., community comment CC1  
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## Note bias in emissions data over western USA

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Community comment on "Evaluation of  $\text{SO}_2$ ,  $\text{SO}_4^{2-}$  and an updated  $\text{SO}_2$  dry deposition parameterization in the United Kingdom Earth System Model" by Catherine Hardacre et al., Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2021-238-CC1>, 2021

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Note that the emissions data has a known bias, with  $\text{SO}_2$  emissions too high over the Western USA. This may be because the proxy data used to spatially distribute emissions does not take into account lower sulfur coal used in power plants and industry in the western USA. This will likely impact results there. (This has smaller relative impact eastern US emissions since values are much larger overall in the east.)

<https://github.com/JGCRI/CEDS/issues/2>