

1 **Quantifying global terrestrial methanol emissions using**
2 **observations from the TES satellite sensor**

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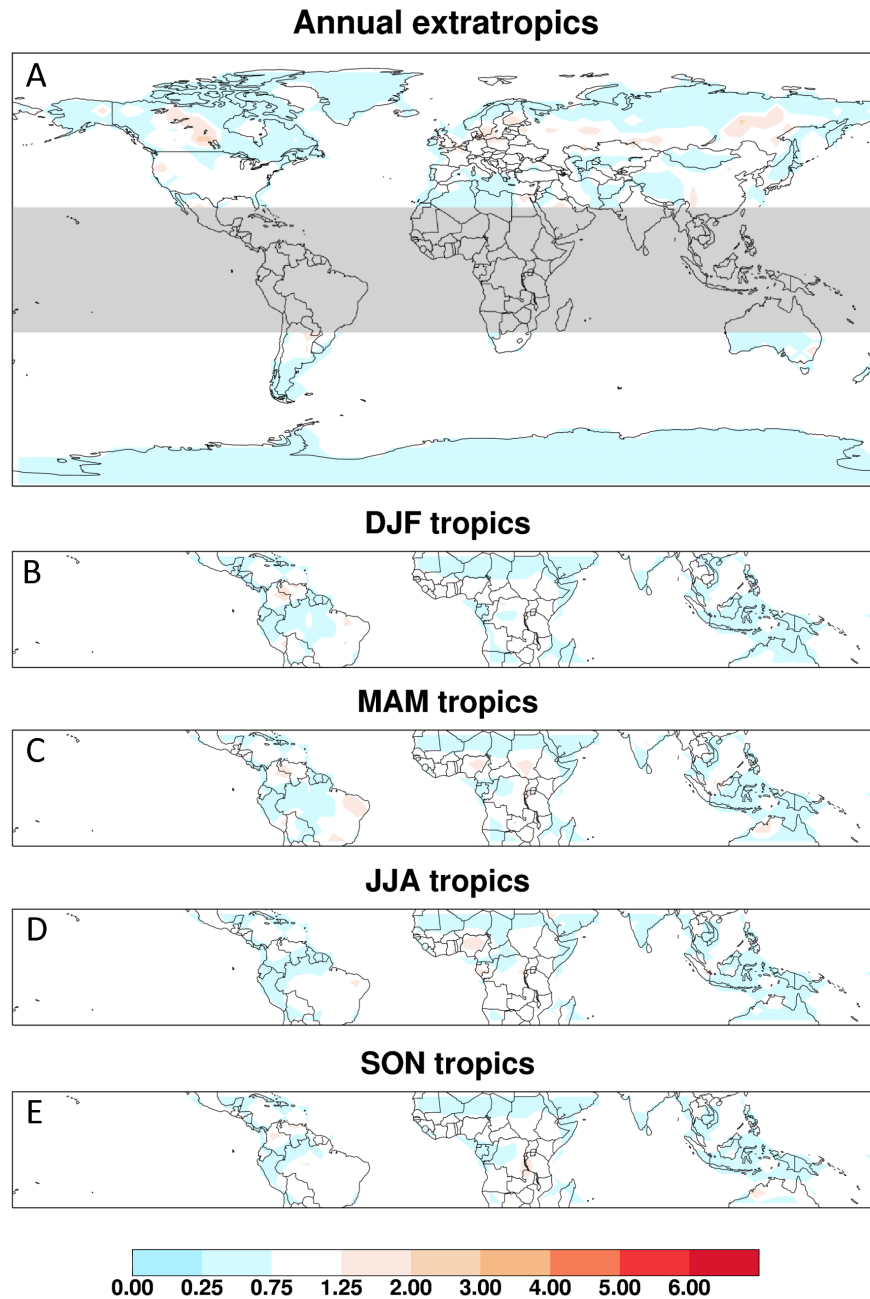
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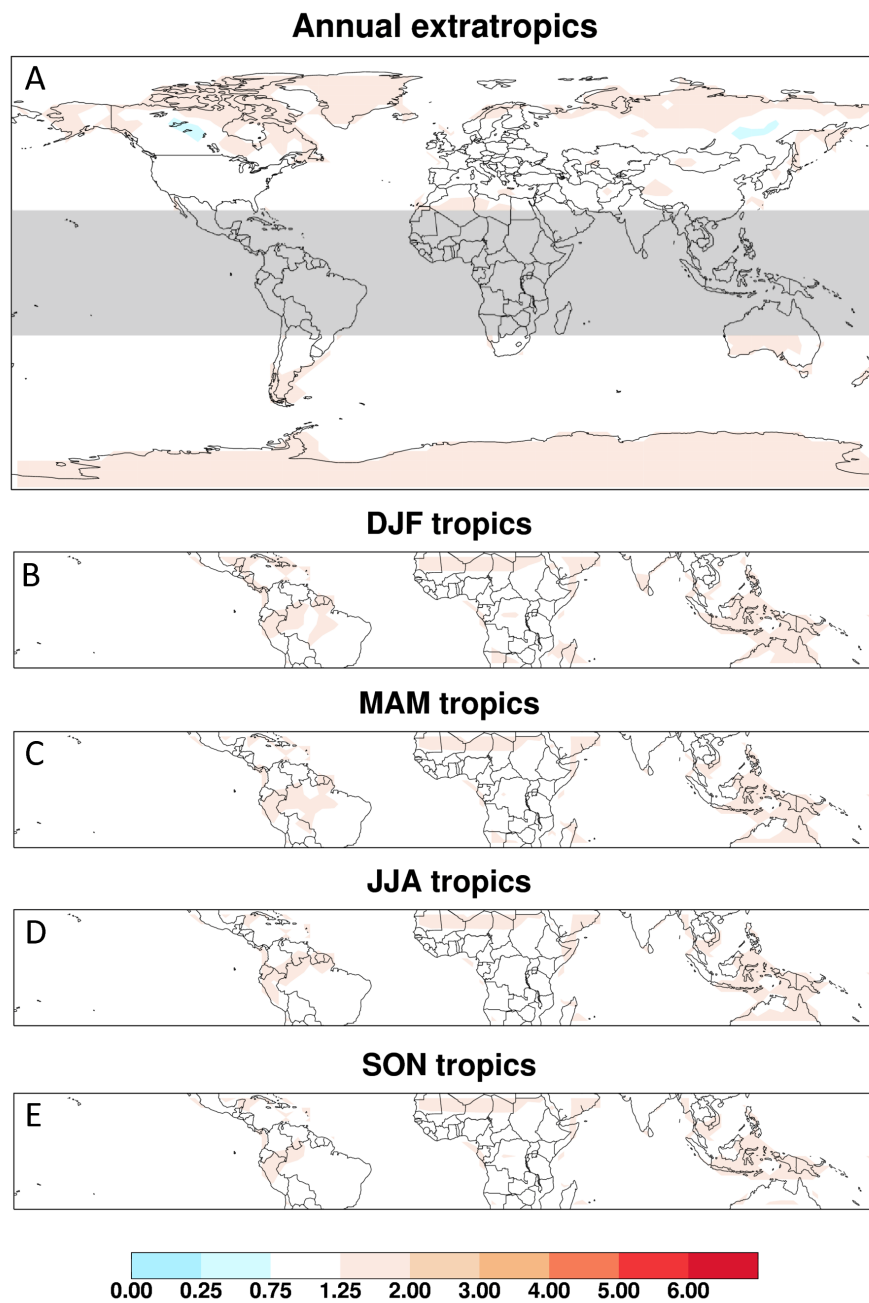
16 [9] {NASA Ames Research Center, Moffett Field, California, USA}

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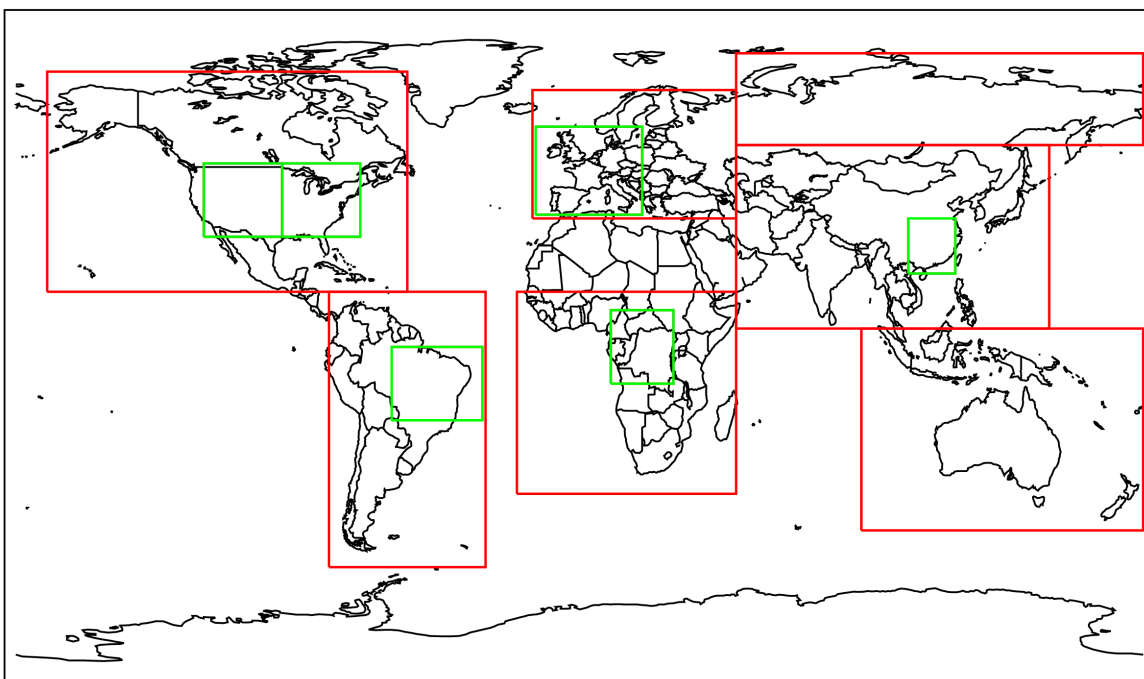
1 **Supplemental information**



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3 Figure S1. Test inversion using pseudo observations, in which the a priori emissions are set to
4 $0.5\times$ their actual values. Shown are the a posteriori emission scale factors resulting from the test
5 inversion. The optimization is performed (A) annually in the extratropics and (B)-(D) seasonally
6 in the tropics. The color bar scale is selected to match that in Fig. 5.



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 2 Figure S2. Test inversion using pseudo observations, in which the a priori emissions are set to
 3 $1.5\times$ their actual values. Shown are the a posteriori emission scale factors resulting from the test
 4 inversion. The optimization is performed (A) annually in the extratropics and (B)-(D) seasonally
 5 in the tropics. The color bar scale is selected to match that in Fig. 5.
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2 Figure S3. Regions employed for quantifying terrestrial methanol fluxes (red) and for
3 investigating TES methanol:CO correlations and the seasonality of tropical emissions (green).
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