

Interactive comment on “Effect of changing NO_x lifetime on the seasonality and long-term trends of satellite-observed tropospheric NO₂ columns over China” by Viral Shah et al.

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Dear authors, congratulations on this nice piece of work. In support of your discussion, I would like to bring your attention to a recent study on satellite-based tropospheric NO₂ trends and trend reversals (1996-2017). The sharp decline over eastern China after 2011 is clearly shown on Fig. 4a and 5b. Similar results appear on more regional studies (e.g. Wang et al., 2019) and also in recent PM_{2.5} studies (Ma et al., 2019).

Georgoulas, A. K., van der A, R. J., Stammes, P., Boersma, K. F., and Eskes, H. J.: Trends and trend reversal detection in 2 decades of tropospheric NO₂ satellite observations, *Atmos. Chem. Phys.*, 19, 6269-6294, doi:10.5194/acp-19-6269-2019,

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2019.

Ma, Z., Liu, R., Liu, Y., and Bi, J.: Effects of air pollution control policies on PM_{2.5} pollution improvement in China from 2005 to 2017: a satellite-based perspective, *Atmos. Chem. Phys.*, 19, 6861-6877, doi:10.5194/acp-19-6861-2019, 2019.

Wang, C., Wang, T., and Wang, P.: The Spatial-Temporal Variation of Tropospheric NO₂ over China during 2005 to 2018, *Atmosphere*, 10, 444, doi:10.3390/atmos10080444, 2019.

Interactive comment on *Atmos. Chem. Phys. Discuss.*, <https://doi.org/10.5194/acp-2019-670>, 2019.

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