Review of "Contribution of Asian emissions to upper tropospheric CO over the remote Pacific" by Smoydzin and Hoor

Smoydzin and Hoor presented a well-written paper which I enjoyed reviewing. Overall, the quality of the content is high. The authors analyzed space-borne MOPITT CO data in an innovative way, which leads to multiple new and interesting results. The study period covers 20 years (2000-2019) (the backward trajectory simulation covers 2000-2018) so this is a large undertaking. With analysis based on daily CO values for this long period, the statistic results are robust. I recommend this paper to be accepted.

I have some minor comments for the authors to consider, mostly for clarification.

L56, “LRT events” is defined as “This AOD distribution is log-normal and Luan and Jaegl é (2013) choose the top 20% days in the frequency distribution as LRT events”. It is unclear how the days are connected to the events.
L75, the authors selected 400 hPa, a level at the middle to upper troposphere where MOPITT CO data are less biased than at the other levels. Nevertheless, the signal at this level may still be contaminated by signals at the other levels. It is informative to show some information on the vertical sensitivity of MOPITT data over the NH-Pacific, in the main manuscript or Supplement, for example, in term of the vertical distribution of the average kernels over the NH-Pacific. Are both daytime data and nighttime data used in the analysis?
L80, “A global coverage” can be changed to “A near-complete global coverage”.
L139, “Though, the linearity (and therefore the trend) of the data set is rather weak.”? The trend appears statistically significant. Please check.
L155, which ENSO index is used? When correlate the ENSO index with CO mixing ratios, is the lag set as 0?
L171, “16 days” would be too long and the data from the last few days may not be reliable. Please provide an justification for this selection
L176 and 254, please change “850hpa” to “850 hPa”. Please leave a space between a value and its unit throughout the text.
L302, “We identified”? To be consistent with the rest of the sentences, “We identify” is better.
Fig. 8a. There are two areas in white. Change one of them in a different color.