This manuscript presents VOC measurements in Nanjing China and corresponding PMF, PCSF, OFP, SOAP, EKMA, RIR, tracer/tracer ratio, and LOH analyses. The primary improvement over previous investigations in this area are (1) additional inclusion of halocarbons and a limited set of OVOCs (2) a multi-season dataset. While the dataset seems valuable and list of analysis techniques is exhaustive, it is not clear what substantial new results are presented. As discussed below, some analysis methods and/or their results are not well-described.

1. PMF analysis-

- PMF was performed separately on each season. Was there enough data in during 2020 to draw meaningful conclusions? It is difficult to tell the duration of measurements from figure 1.
- Do the PMF results indicate that there is seasonality in source sector emissions, or are the fingerprints consistent?
- Why was an 8 factor solution chosen (v. 7 v. 6 factors, etc)?
- The supplemental figures are difficult to read due to the number of species included in the figure. It should be noted which axis should be read with each dataset.
- As noted by reviewer 2, the results are odd (e.g., biogenic isopentane; propane from solvents). The revised and trimmed-down PMF submitted in response to the reviewer still has these oddities.

2. PSCF analysis-

- I do not think this method is ubiquitous enough to merit the brevity of explanation. For example, what do the colors mean in figure 5? What does the impact of a 24 v. 48 v. 72 h back-trajectory have on the analysis? Does this assume that VOCs have the same lifetime as the back-trajectory?
- It is not clear what useful/new information is derived from this analysis. The main results of this analysis (line 428-430) seems to be that the VOCs measured at the site come primarily come from industries located near the site. Would there be a reason to think otherwise?

3. OFP/EKMA/RIR

- Discussion of wintertime OFP seems unusual, as photochemical ozone production in the winter is not a primary concern.
- There are not enough details in the description of the F0AM model. For example: Which VOCs were constrained (not all are in MCM)?

Other comments-

- I find the title “High Contributions of Halohydrocarbon and Aromatic Compounds to Emissions and Chemistry of Atmospheric VOCs in Industrial Area” to be misleading. Halocarbons do not contribute significantly to either SOA or ozone chemistry. Neither halocarbons nor aromatics dominate calculated OFP in the summer (Figure 5).
- It seems a major conclusion (line 431) is that industries and vehicles should have the most priority in reducing emissions. Nearly all anthropogenic VOCs in this area could

be classified as industry/vehicles, so this conclusion seems too vague to be meaningful. Is it a new finding?

- It is unusual to see the notation K^{OH} (typically lowercase/supscripts are for kinetics, uppercase for equilibrium reactions).
- There are no units in supplemental tables.
- It is not clear how to interpret numbers given in lines 272 (e.g., 0.9-2 (1.4 +/- 0.3))