The work by Haque et al. presents a range of organic compounds in atmospheric aerosols from a year-long campaign in South Korea. The authors used well established analytical techniques for their analysis. The experimental procedure is well designed and in general the data is well presented. My detailed comments are listed below.

First of all, although the work is of relatively good quality (as can be judged from the draft); I felt it is largely of a routine nature (at least the way it is presented). I believe that such type of publications can be useful but if considered for publication at ACP they need to go under the Measurement report’s category.

Major comment:

I would like to know if the authors considered atmospheric stability of the measured organic compounds especially in the light of a long-range transport or/and correlation and statistical analysis of the reported species. For example, it has been demonstrated that levoglucosan can decay in particles exposed to OH. "The extent of decay ranged from 20 to 90% and was strongly correlated to the integrated OH exposure. Increased relative humidity did not enhance or impede reaction. Relative kinetics indicate that levoglucon has an atmospheric lifetime of 0.7–2.2 days when biomass burning particles are exposed to 1 x 10^6 molecules cm^{-3} of OH (typical average summertime conditions). This implies that levoglucon reacts with OH on a timescale similar to that of transport and deposition, which has important implications for the use of levoglucon as a tracer for biomass burning emissions in source apportionment studies" Hennigan et al. 2010.

I trust the above also applies to other measured organic compounds for some of which the information on reactivity is not available. My question to the authors - how does this affect the presented results? The authors present correlation of different organic compounds and discuss their potential similar source based on these correlations and statistical analysis. Does the stability of considered organic compounds can play a role in the observed absence of correlation? The same applies to the discussion on long range transport of the observed organics. I doubt that stability of considered sugars in Figure 4 is the same for all compounds.

Moreover, besides anhydrosugars, the authors state that “Cis-pinonic acid showed poor correlation with pinic acid (r = 0.35, p = 0.12) (Figure 6f), suggesting that they formed from different monoterpenes such as α-pinene, β-pinene, or δ-limonene.” Such assumptions can be made only if the measurements are taken very close to their emission sources and/or assuming that both compounds have similar atmospheric stability or reactivity. Is it the case for all considered compounds in this study? I believe this needs to be considered when discussing correlations or long range transport.

Minor comment:

It is hard to read Figure 2 (especially Figure 2a). Please either split the concentration axis so that all minor compounds can be clearly seen in the plot or move it into the SI and increase the size of the figure.

References: