The manuscript by Zhang et al. presents a detailed chemical characterization of PM_1 at a remote and high-altitude site in the northern Himalayas during pre-monsoon season by using HR-ToF-AMS measurements. Although the transport of biomass burning aerosol from the South Asia to the Tibet Plateau was reported previously, this study is unique in terms of real-time characterization and organic aerosol source apportionment. This study showed that organic aerosol (OA) was the dominant species in PM_1 and was highly aged during the long-range transport. Consistently, PMF of OA spectra showed that BBOA and OOA are two dominant OA factors. In addition, a detailed analysis of biomass burning plume was used to illustrate the impacts and chemical evolution of biomass burning aerosols. This manuscript is generally well written and I recommend it for publication after minor revisions.

Comments:

1. The BC contribution is unexpectedly high, up to 25% in this study. It is also much higher than that measured at another site in Tibetan Plateau, e.g. 8% by the same group. Any more explanation for the high BC contribution? For example, the absorption coefficient was measured at 405 nm which can be significantly affected by brown carbon from biomass burning emissions. Are there additional measurements to verify the BC data?
2. Line 426-428: Can the authors show some plots of FTICR-MS results to support the conclusions here?
3. The high resolution mass spectra in the figures appear to miss *m/z* 13 (CH^+) and 14 (CH_2^+), any explanations?
4. Line 342: "...whereas carbon and $C_xH_y^+$ ions had relative higher contributions". "higher" should to be "lower".
5. The distribution of average aerosol optical depth (AOD) derived from MODIS is mentioned in Section 2.4 and presented in Fig. 1d in this study, however, no analysis or usage for this information in current version of this paper.

6. Figure 12, “polume” is a typo
7. Line 28, change “transportation” to “transport”
8. Figures 7g – 7i : m/z 28 was buried behind the OA names
9. Line 141: the size of critical orifice is 130 µm or 120 µm?