## Chemical characterization and sources of submicron aerosols in the northeastern Qinghai-Tibet Plateau: insights from high-resolution mass spectrometry

## Xinghua Zhang et al.

We appreciate the Co-Editor for your technical comments to our manuscript. The manuscript has been revised accordingly and our point-by-point responses are presented below. The comments are in black, followed by responses in blue and revised manuscript in <u>red</u> with changes marked by underline.

## **Technical Corrections:**

(1) Use nitrogen oxides instead of nitric oxides to define NOx

Agree.

"Nitrate, oxidized from the nitrogen oxides (NOx), was also an important component..."

(2) Replace "with diameter less than 10  $\mu$ m" with "with aerodynamic diameter less than 10  $\mu$ m" (I assume this is aerodynamic diameter...)

Corrected.

"...measurements of PM2.5 (particulate matter with aerodynamic diameter less than 2.5 µm)"

"...PM<sub>10</sub> (particulate matter with <u>aerodynamic</u> diameter less than 10  $\mu$ m)"

(3) Add ratios in: "higher O/C and OM/OC ratios during"

Agree.

"The relatively higher O/C and OM/OC ratios during afternoon ... "

(4) Add a verb in "Besides the significant impacts by anthropogenic emissions from the northwestern China or Indian subcontinent, air pollutants to the northeastern QTP could also come(?) from the central Eurasian continent (Xue et al., 2013)."

Agree.

"...air pollutants to the northeastern QTP could also <u>come</u> from the central Eurasian continent..."

(5) Correct as follows: "Studies focusing on the atmospheric aerosol chemical compositions in the northeastern QTP using the high-time-resolution real-time measurements are still relatively rare until now."

Corrected.

"Studies <u>focusing</u> on the atmospheric aerosol chemical compositions in the northeastern QTP..."

(6) Correct "while BBOA correlated slightly weak with..." . I assume you mean correlated slightly with..." or "correlated weakly with...".

Corrected.

"...while BBOA correlated slightly with ... "

(7) Rephrase as: "...QTP except a study reporting measurements using Aerodyne aerosol chemical speciation monitor (ACSM) at Menyuan (Du et al., 2015)."

Corrected.

"...conducted in the northern QTP except a study reporting measurement using ... "