

## Response to Associate Editor

L118-122: insert bullet points, the reviewer means add a bullet point like below, which makes the text better to be understood

- CO<sub>2</sub>, CH<sub>4</sub>, and H<sub>2</sub>O - G2301-m operating based on the technology of cavity ring-down spectroscopy (CRDS, Picarro Inc., USA);
- O<sub>3</sub> – Model 49C UV photometric gas analyzer (Thermo Environmental Instruments 120 Inc., USA);
- CO – Model 48C non-dispersive infrared (NDIR) correlation gas-filter analyzer (Thermo Electron Corp., USA);
- NO and NO<sub>2</sub> (NOX) – Model 42i-TL chemiluminescence gas analyzer (Thermo Fisher Scientific Inc, USA).

**Response: Markers inserted. In the corrected version of line 103-108**

L181: black carbon not in capital letters

Please check, it seems that they are still in capital letters in title of section 2.2.2 Equipment for measurement of Black Carbon and aerosol scattering

**Response: Fixed: In the corrected version of line 168.**

F9: revise this figure, make it easier to read, include flight pattern or interested region.

The reviewer suggested an update of the figure (not referred to the reduction of total number of the figures in the paper), please make update. The numbers in current figure are not readable (font too small), and the important patterns are not highlighted.

**Response: Fig. 9, in the corrected version, Figure 6 represents fragments of standard synoptic maps. We cannot increase the size of the numbers on it. We propose to reduce the number of cards and increase the drawing itself.**

F10: adjust margin and size of the panels

The reviewer suggested an update of the figure, by reducing the margin of each figure and increasing the font size in each figure, thus better for reading, please update accordingly

**Response: Fig. 10, in the corrected version of Figure 7, corrected.**

**Also corrected Fig. 11 (Fig. 8) as they are similar.**