Interactive comment on “Investigating the regional contributions to air pollution in Beijing: A dispersion modelling study using CO as a tracer” by Marios Panagi et al.

Anonymous Referee #1

Received and published: 12 December 2019

This manuscript is well written. I recommend it be published with a few minor edits.

Section 2.2: Go into more depth how the footprints and the emissions inventory are combined to obtain atmospheric concentrations of CO.

Figure 4: Black box referred to in caption is not visible.

Page 6, line 10: change the time resolution of 1 Hz to an actual time resolution (in hours, minutes, or seconds).

Section 2.3: State how the CNEMC CO and PM2.5 measurements are used in this study.

Table 2: Add a row for “All sectors regional” and another for “All sectors Beijing”

Page 9, lines 14-15; page 9, line 17; page 10, lines 2-3: I assume the concentrations stated here are from the footprint + EI analysis. Explicitly state this.

Figure 10 caption: change “south for each case study” to “south for three case studies” and include the time frame for 10d.

Page 13, line 20: change “total modelled” to “5 day modelled”

Page 14, line 6: change “but didn’t classified” to “but weren’t classified”

Figure 11 caption: Don’t know what “the points representing the time where PM2.5 concentration was over 75ug/m3” are? Don’t see any points.

Page 14, line 15: change “explain well variations” to “explain variations”

Page 15, line 19: change “Volatile” to “volatile”