Interactive comment on “Development of a high temporal-spatial resolution vehicle emission inventory based on NRT traffic data and its impact on air pollution in Beijing – Part 1: Development and evaluation of vehicle emission inventory” by B. Y. Jing et al.

Anonymous Referee #1

Received and published: 26 October 2015

The paper describes a methodology to develop a high temporal-spatial resolution vehicle emission inventory for the urban area in Beijing based on the local emission factors and near real time (NRT) traffic data. I do find this paper very interesting and the authors have addressed all the previous comments in the revised copy of the paper. However, the following points need to be clarified, as well, for the benefit of the reader.

1) According to the authors, the Underwood model was used because of the best
fitting effect among the Greenshields, Greenberg, and Underwood models. However, the authors haven’t provided any comparison method and result.

2) I am wondering if the NOx emission rates showed in Fig 6 are for specific road types in Beijing (one specific freeway, one specific artery road, and one specific local road)? or they are average of NOx data on all the freeways, artery roads, and local roads in Beijing?

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 26711, 2015.