

## ***Interactive comment on “Daily black carbon emissions from fires in Northern Eurasia from 2002 to 2013” by Wei Min Hao et al.***

### **Anonymous Referee #2**

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This manuscript develops a new data set of BC emissions from fires over Northern Eurasia from 2002 to 2013, which is useful for the atmospheric modeling of BC. I recommend that this paper can be accepted for publication after making data available for the community. Please also see some comments below. Comments: 1) Line 1-3/Page 2: Please cite the latest IPCC report for the role of BC among all climate forcers, rather than only one literature studying BC only. Black carbon should not be the second most important species for climate forcing after CO<sub>2</sub> in our latest understanding. 2) Line 7-9: Please review the literature estimating the emissions of BC, rather than citing just one literature on this. There are many recent important studies developing global emission inventories of BC, which are not noticed by the authors. Please improve this part. In addition, "an average of 7.5 Tg yr<sup>-1</sup>" is not clear. Please clarify it. 3) Introduction: Please provide a summary of previous studies estimating the black carbon emissions

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from fires and summarize the differences with the present work. 4) Figure 2. This figure does not well illustrate the differences between FEI-NE and the other products cited. Please show the geographic distributions of the differences of burned areas between FEI-NE and GFED4 and between FEI-NE and MCD45. 5) Figure 7: This figure does not well illustrate the differences between FEI-NE and the other products cited. Please show the geographic distributions of the differences of BC emissions between FEI-NE and GFED3 and between FEI-NE and GFED4.

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