

## Interactive comment on "Urban anomalies in response to rainstorms based on smartphone location data: a case study of eight cities in China" by Jiawei Yi et al.

Jiawei Yi et al.

yijw@lreis.ac.cn

Received and published: 1 August 2019

The revised manuscript is attached in supplement file.

Specific responses are as follows:

1, Why did the author choose Tencent Big Data portal? The author need to briefly introduce the difference between Tencent big data platform and other platforms.

Response: Thanks for the comment. Tencent has the largest social community in China. The 2018 annual report of Tencent wrote they have more than one billion monthly active users, which we believe the location request data generated by such

C1

a large group of users can provide good proxy for understanding human responses to rainstorms. Another reason for which we used this data source is that, the location request data are generated by users from multiple mobile apps (e.g. WeChat, QQ, DiDi, Meituan-Dianping, etc.). Such a large app ecosystem can capture more comprehensive user activities than any single social platform. Please find our specific revision on page 5 line 7-12, and the Table 2 that listed the common apps.

2, There are many advantages to using the NLR data. Meanwhile, is s there a disadvantage to using the NLR data? The author need to briefly introduce the disadvantage, and to trigger readers' thinking.

Response: Yes, indeed. We added a short discussion on the limitation of the data on page 21 line 19-25.

Please also note the supplement to this comment: https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2019-136/nhess-2019-136-AC2-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2019-136, 2019.