

## ***Interactive comment on “Multifractal characteristic-based comparison of elements in soils within the Daxing and Yicheng areas of Hefei, Anhui Province, China” by X. Li et al.***

**X. Li et al.**

yf\_hfut@163.com

Received and published: 26 May 2016

RC1: Anonymous Referee #1 This small note describes a good experimental dataset collected in two contracted landuse areas. The manuscript has to be amended with hypothetical explanation of processes causing the observed multifractal properties. Otherwise it is purely descriptive narrative that does add to science. The recommendations of soil reclamation have to be substantiated with suggestions of reclamation techniques and purposes of reclamation, otherwise these recommendations are superfluous. Note that references are mostly old, all older than 5 years.

We thank the reviewer for their suggestions. Our analysis indicates that different clean-up and remediation approaches are needed to resolve the issues relating to the dif-

C1

fering heavy metal pollution in these areas, rather than a single approach to resolving heavy metal pollution. We have amended the text to reflect this as follows: "A significant amount of different remediation approaches can be used to resolve the issues of heavy metal soil contamination (e.g., Bech et al., 2014; Koptsik, 2014). The results presented in this study suggest that physical and chemical approaches (soil removal, soil vitrification, soil consolidation, electroremediation, soil washing) are more appropriate for the remediation of heavy metal contaminated soil in the Daxing area, especially in areas with significant heavy metal pollution, whereas the differing type of soil contamination in the Yicheng area could be more efficiently treated using microremediation and phytoremediation, primarily as the agriculture in this area requires a rapid reduction in the mobility and biological availability of heavy metals in the soils in this area (Mulligan et al., 2001; Wang et al., 2006)".

Please find the revised manuscript in the supplement.

Please also note the supplement to this comment:

<http://www.nonlin-processes-geophys-discuss.net/npg-2016-15/npg-2016-15-AC1-supplement.pdf>

---

Interactive comment on Nonlin. Processes Geophys. Discuss., doi:10.5194/npg-2016-15, 2016.