Revision note:

Dear Cornelia,

Thank you for the valuable suggestions. Below we explain how we responded to the three suggestions.

1) We identified density fraction locations of major metal phases and OM using.... could be: we identified the allocation of major metal phases and OM to density fractions....

➔ We changed accordingly.

2) These results led to a hypothesis which involves two distinct levels of organo-metal interaction – the formation of OM-rich, mixed metal phases having relatively fixed OM:metal stoichiometry and subsequent development of meso-density microaggregates via "gluing" action of these organo-metallic phases by entraining other organic and mineral particles such as phyllosilicate clays. - could be replaced by We hypothesised that there are two distict levels of organo-metal interations (1) OM-rich mixed metal phases with fixed OM:metal stoichiometry followed by (2) development by development of meso-density microaggregates via "gluing action of the OM-metallic phases with orther organic and mineral particles such as phyllosilicate clays.

➔ We largely followed your suggestion. In revised version, we wrote as follows (changes in red):

These results led to a hypothesis which involves two distinct levels of organo-metal interaction: (1) the formation of OM-rich, mixed metal phases with ~~relatively~~ fixed OM:metal stoichiometry followed by (2) the development of meso-density microaggregates via "gluing"action of these organo-metallic phases by entraining other organic and mineral particles such as phyllosilicate clays.

3) I suggest that you explain in material and methods why not the same number of density fractions was separated from all soils

In section 2.2 (line 175-177), we now explained the reason as follows (changes in red):

Most soil samples were separated into 6-7 fractions (n=18) while the other 5 samples (A-6, A-7, A-8, A-9, C-1) examined at a later stage were fractionated into only 4 fractions (Table 1, also see Table A1) because we learned that the main allocation pattern can be captured by four density fractions.