

## Revision notes

Manuscript: *essd-2021-280*

Title: A multi-dimensional dataset of Ordovician to Silurian graptolite specimens for virtual examination, global correlation and shale gas exploration

Author(s): Hong-He Xu et al.

MS type: Data description paper

Correspondence: H.-H. Xu (E-mail: [hhxu@nigpas.ac.cn](mailto:hhxu@nigpas.ac.cn))

Reviewer and/or editor reports:

Public justification (visible to the public if the article is accepted and published):

Dear Honghe,

Happy new year!!

I am pleased to have received the new review report of Peter Sadler. The main point is that still needs to be addressed, before I can finally accept the paper, is to make the dissertation of Ma (2020) available for the general public. This step is crucial, because you refer to this (unpublished) thesis various times in the manuscript as reference for taxonomical changes. The reader must be able to access this thesis to understand the reason for the change of the known taxonomy. Do you see any chance to make the thesis available? Technically, you will need to get the approval of the university at which the thesis was done. Then I would suggest to publish the thesis either at the respective university or at an alternative text repository. If you need guidance for this, please don't hesitate to contact me.

best regards,

Kirsten Elger

### Revision Reply (by H.H Xu):

The manuscript *ESSD-2021-280* has been prepared since the mid of 2019 and the first version was finished at the end of 2020. During our preparing Ma Xuan was also in my Institute and doing her dissertation, that is why she is in our author list. The reference we cited as '(Ma, 2020)', actually, has been published formally. It is in Chinese with English summary (long summary, meeting the normal academic paper requirements). The part of mentioning 'unpublished' was changed accordingly. I understand that it might be difficult to search the dissertation to some authors who are outside China, for the index is in Chinese. One can't find it through Google scholar either. I believe that it will easily findable soon, after all, the dissertation has been published for 3 years. Alternately, a note after the reference list is added as '[for formal publication of academic using, please contact the present author H.-H. Xu]' (lines 260-261).

I noted that synonym information of our dataset seems readily causing misunderstanding. Naming and synonyms are really beyond the present dataset study. we here emphasize the using tagged name of specimens for searching, and that revisions represent experts comments and might need formal study (lines 165-169).

Some spelling mistakes are corrected, in lines 53, 81, 121, 125, 193, 309, 355.

Some parts are re-worded, 'who is interested in fossils' to 'who is interested in

palaeontology' (line 142)

Reference 'Xu et al., in press', changed to '2022' (line 152). And its full citation is given in line 277.

In reference part, add 'and' before the last author's name. Use 'et al.' after the third name, instead of listing all authors (see lines 244-292).