

Interactive comment on “The Coupling of Carbon, Nitrogen and Sulphur Transformational Processes in River Sediments Based on Correlation among the Functional Genes” by Mingzhu Zhang et al.

Anonymous Referee #1

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Zhang et al have investigated different functional genes involved in the carbon, nitrogen and sulfur cycle in the river sediments. The study was well designed and the sampling was performed in a large area. The results seem interesting, however, the discussion part should be improved, especially the formulas included in the discussion parts are all from literature, but it has been shown as results in Figure 4. One should be very careful to make conclusions on the reactions without experimental evidence.

There are some specific comments: 1. Page 6 line 104, 'another' should be 'the other'; 2. Page 7 line 112, 'and in sediment' should be 'in sediment' 3. Page 8 line 131,

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'interaction' should be 'interactions' 4. The method used for network analysis and other statistical analysis should be described clearly. 5. Page 8 line 144, 'The pH values' should be 'The pH' 6. Page 9 line 147, '135 sections investigated' should be '135 investigated sections' 7. Page 10 line 177, 'correlated between each other' should be 'correlated with each other' 8. Page 18 line 301, 'previously studies' should be 'previous studies' 9. Page 21 line 357-358, please rewrite the sentence. Simply mention C and N does not make sense, especially in the conclusion part.

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