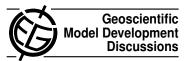
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## Interactive comment on "A generalized tagging method" by V. Grewe

## V. Grewe

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I am grateful for the constructive comments!

Please find enclosed replies to the reviewer's comment, which are highlighted in bold.

Throughout the manuscript, the author uses the word "like", which is of course grammatically correct, but seems overly informal in the context of a scientific paper. Instead, formulation involving "such as" would be more appropriate.

Changed to "such as".

Page 3312, line 18: "how sensitive reacts" -> "the sensitivity of"

Page 3313, line 17: "than chemical species, only" -> "than only chemical species"

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Page 3314, line 11: "on temperature" -> "to temperature"

Page 3315, line 3: "equal" -> "equivalent"

Page 3315, line 4: "what impact has category j" -> "what is the impact of category j"

Page 3319, line 6: "to calculated" -> "for calculating"

Page 3320, line 3: "to small" -> "too small"

Page 3320, line 11: "no reaction occur" -> "no reactions occur" OR "no reaction occurs"

Page 3321, line 12: "allows to calculate" -> "allows the calculation of"

Page 3321, line 12: "contribution" -> "contributions"

Page 3321, line 13: "on state variables" -> "to state variables"

Corrected - thanks!

Also, I don.t see the point of Section 3.2; bimolecular reactions are equivalent to multibody reactions (as presented in Section 3.3) with m=3. I would suggest removing Section 3.2, renaming Section 3.3 "Chemical reactions", and mentioning here that bimolecular reactions and higher-order reactions can be treated similarly.

Good point. And I actually was inclined to combine the two sections and move some parts into the appendix or supplement, which would be a good compromise. However, I realized that either section has a different degree of abstraction. I included the example in 3.2 so that an easy application of the formalism is provided. From my experience, for many people this is much better comprehensible than the more mathematical section 3.3, which is a generalization of 3.2. For that reason, I rather would keep both versions for the sake of a better perceivability.