

# ***Interactive comment on “Spatiotemporal dynamics of soil phosphorus and crop uptake in global cropland during the twentieth century” by Jie Zhang et al.***

**Jie Zhang et al.**

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Spatiotemporal dynamics of soil phosphorus and crop uptake in global cropland during the twentieth century

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### Response to the reviewers

We are very grateful to the two reviewers for their constructive feedback. The suggestions definitely led to significant improvements of our text, particularly where the reviewers found sections that were not clear enough. The concerns have been addressed below and in the revised manuscript. Below are the reviewer comments, our response in bold in the uploaded supplement.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/bg-2016-543/bg-2016-543-AC1-supplement.pdf>

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Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2016-543, 2017.

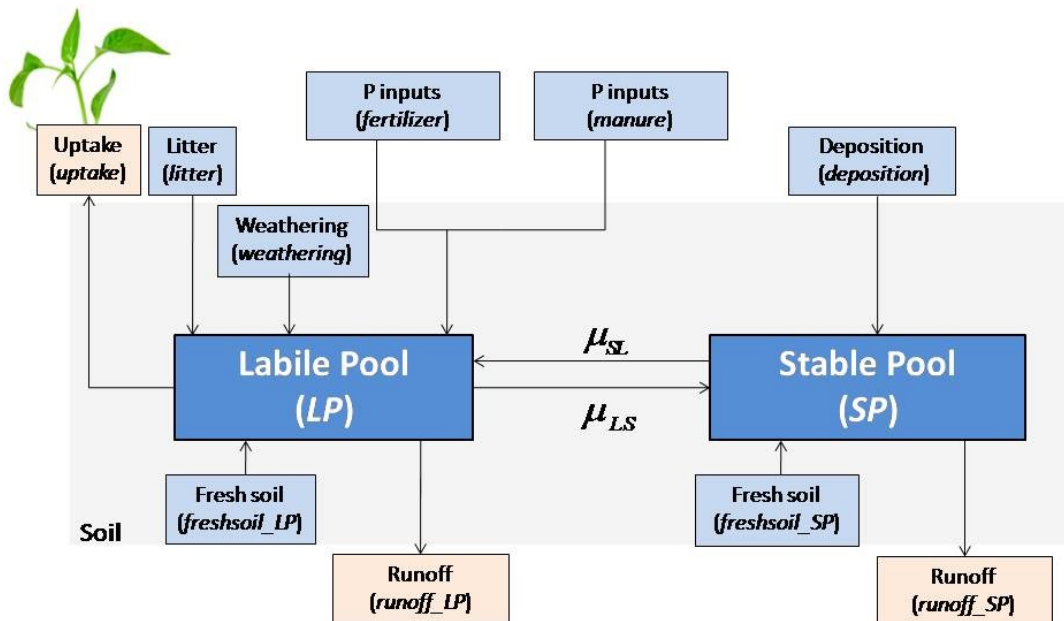
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● Improvement of the spatially explicit DPPS model:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Spatially explicit calculation</li> <li>3. Dynamic transfer between different soil P pools</li> <li>5. Dynamic P loss by runoff</li> <li>7. Time-variant maximum uptake parameter</li> </ol> | <ol style="list-style-type: none"> <li>2. Incorporation of land use change</li> <li>4. Initialization P pools with global observation</li> <li>6. Dynamic calculation of crop P uptake</li> </ol> |
|--|---|

Fig. 1.

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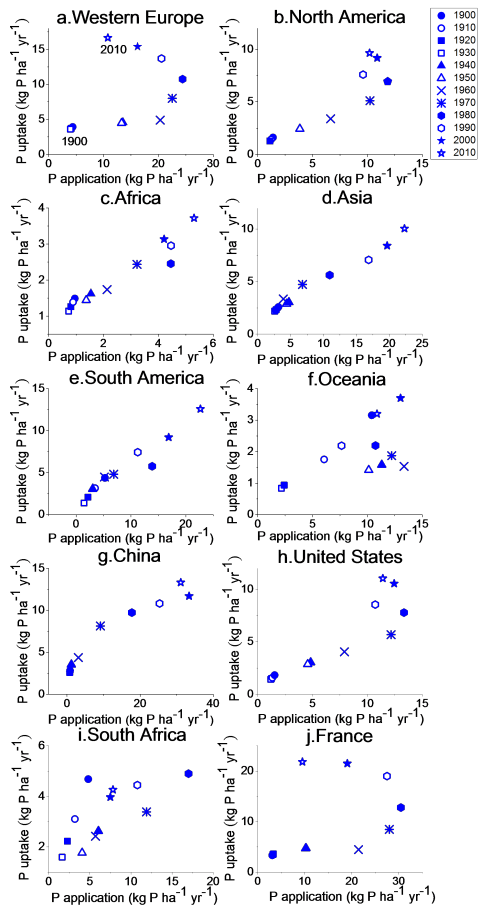


Fig. 2.