Biogeosciences Discuss., 11, C904–C904, 2014 www.biogeosciences-discuss.net/11/C904/2014/

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## Interactive comment on "Technical Note: Simple formulations and solutions of the dual-phase diffusive transport for biogeochemical modeling" by J. Y. Tang and W. J. Riley

## **Anonymous Referee #1**

Received and published: 9 April 2014

This paper introduces an efficient scheme for dual-phase diffusive transport simulation. This approach has the advantage of being easily integrated in large-scale distributed environmental models. The paper is well written, and I recommend publication as is. The case studies are carefully designed, the math is well developed and clear, and the numerical simulations and benchmark experiments against analytic solutions are convincing. Of course, one can request additional benchmark tests involving transport in two or three-dimensions - yet this is beyond the scope and method of solution of most climate models.

Interactive comment on Biogeosciences Discuss., 11, 1587, 2014.

C904