Natural Hazards
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Discussions

Interactive comment on "Towards predictive data-driven simulations of wildfire spread – Part I: Reduced-cost Ensemble Kalman Filter based on a Polynomial Chaos surrogate model for parameter estimation" *by* M. C. Rochoux et al.

Anonymous Referee #3

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The data assimilation technique presented in this paper is very interesting and constitutes a substantial contribution to improve the predictive capacity of wildland fire models.

The presentation of the data assimilation technique is very clear and well presented. What is unclear to me is why use Firefly as a new way to expand the model of Rothermel to a two-dimensional setting? Farsite is already doing a good job and I am unsure that the assumptions used for Firefly will fare better. Some discussion should be added

in the Firefly section to motivate this choice.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 3289, 2014.