Interactive comment on “Predictions for oil slicks detected from satellite images using MyOcean forecasting data” by G. Zodiatis et al.

Anonymous Referee #1

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My thanks to the authors for addressing my criticisms. The paper is quite satisfactory now, in my view. The figures in particular are much easier to read.

My only remaining issue is the semantic one concerning the use of the word "hindcast" to denote a prediction of the path of the oil spill backwards in time. In my review, I was concerned that this use of the word "hindcast" would be confusing to reader, at least to the oceanographic modelling community. The authors’ rebuttal states that "hindcast" has been used in the oil spill modelling community to this end for years. That may be the case, but in the larger oceanographic and atmospheric modelling communities, "hindcast" means something else: a forward (in time) simulation of an historical period. That’s not what the authors are talking about, unless they really mean that they use forward model simulations in order to predict the slick position backward in time.
"Backtracking" is certainly a commonly used word for backward-in-time prediction, both in ocean and atmospheric trajectory modelling. Common alternatives are "backward trajectories" and "reverse modelling."

I will make the concession that "backtracking" should be used as the noun form, and my previous suggestions should be corrected to "forecast and backtracking." This shouldn’t be controversial inasmuch as the lead authors’ own website (http://www.oceanography.ucy.ac.cy/cycofos/oil-spill-predictions.php) uses exactly those words. Furthermore, in their rebuttal, they state that "the word ‘backtrack’ is a verb and means literally ‘to retrace ones steps’...." To me, that is exactly the aim of making a prediction backward in time: to retrace the steps of the slick, or, in the words of the manuscript (previous version, p. 1977, line 22), "to trace its path backwards in time." Thus, "backtrack" is the correct verb to use.

While the authors may wish to revise the jargon of oceanographers and meteorologists, I don’t believe that an article in Ocean Science is the place to do it. I still recommend to the Editor that "backtrack" (verb) and "backtracking" (noun) be used instead of "hind-cast."