Nat. Hazards Earth Syst. Sci. Discuss.,
doi:10.5194/nhess-2016-109-AC1, 2016

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Evaluation of the Search and Rescue Leeway model into the Tyrrhenian sea: a new point of view" *by* A. Di Maio et al.

A. Di Maio et al.

antonia.dimaio@cnr.it

Received and published: 15 June 2016

The authors should thank the referee #1 for his constructive comments. We agree with him about the opportunity of improving the Results discussion, commenting the outcomes in the frame of surface dynamic structures. This part of the discussion, infact, is useful both to highlight the advection role in the particles dispersion and to improve the calculation of the probability of containment (POC). We are working, infact, to delimite the principal hydrodynamci strucutres in the seeding area so as to correlate them quantitatively with the particles distribution. This part of the research is not included here because it needs of insights that are being; we hope to show interesting results in a next paper. The strong correlation between the surface dynamics and the particles distribution besides underlines the importance to have an efficient operational ocean prediction system for the SAR activities. A 2nd (but not for its importance) improvment

of the paper, following the comments of the referee, consists in the discussion about the use of the HF radar for marine safety and SAR activities. The HF radar, infact, allows both to measure the surface currents on real time/high resolution and to locate the origine of the accident; for this reason we think it should be included in an coastal integrated system for SAR activities.

The pdf supplement file added here is the new version of the manuscript where the improvements proposed by the referee #1 and two additional figures are included.

Please also note the supplement to this comment:
http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2016-109/nhess-2016-109-AC1-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-109, 2016.