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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "A new search-and-rescue service in the Mediterranean Sea: a demonstration of the operational capability and an evaluation of its performance using real case scenarios" *by* G. Coppini et al.

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Font Size: Sections and Figure captions should have larger font sizes.

page 1, Line 5-10, authors' superscripts (1-5) don't match notes: 1,5,3,4,4 of authors' institutions. page 4, lines 15-20; The discussion of the ocean currents, is a bit confusing, as to exactly which ocean currents are used by the OCEAN-SAR. I assume that is due to the production cycle of the model (see http://medforecast.bo.ingv.it/), which rotates throughout the week. Also, used of the term 'employed', is unclear, suggest 'used by' or 'accessed by OCEAN-SAR' Page 6, lines 18- 20; this discussion on SeaOver-

Land and lwseed should be a higher level, instead of referring to these routines or sub modules, state what is accomplished with these routines. SeaOverLand extrapolates data near the coast. What data? sea currents, particles, wind? 'lwseed' is mentioned here and only here, no real need for it at all. Perhaps something along the lines of "The initial positions are randomly generated for LKP before passing to the drift trajectory module of OCEAN-SAR"

page 6 lines 21-22: suggest the following: 'For every step an error management procedure is implemented that may cause the processing to stop, killing the job, and will post an error message with details to the UI.'

page 8, line 9, "LKP(start position, end position, start date, end date)' in the present online version of OCEAN-SAR only LKP (start position and start time) are available. Do the authors have a different version of OCEAN-SAR? If so, perhaps, the paper should include a reference to the version (or date) of OCEAN-SAR they used.

Section 5 Real Case Scenarios Figures or photos of any of the search objects used in the case studies would be useful.

Table 1: Calabria#1 (SAR dummy) is Class 7, when this should have been Class 1, or my recommendation Class 6 PIW deceased. Calabria#2 (raft), switched Class1 with Calabria#1. Should be Class 7. Why is there a Seeding End Time and Position for this? Where both the SAR dummy and the raft deployed at the same time and location? MigrantShip#1, FV Japanese side-stern trawler (#45) (from Suzuki and Sato (1977), was a 62 m vessel, similar in length to Migrant#2 at 60m.

In general, using actual SAR cases are of limited value in validating a SAR trajectory model. Either we have good agreement, or not. If not, then the question are: was LKP correct? Was the correct or most appropriate search object used (are the leeway equations right)? What are the uncertainties in the winds? What are the uncertainties in the currents? The authors should al least recognize that these uncertainties exist.

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