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Ocean Science Discussions

Interactive comment on "The Aegean Sea marine security decision support system" *by* L. Perivoliotis et al.

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1. General Comments

This paper describes the Aegean Sea Marine Security Decision Support System (Aegean DeSS) based on three modules :

- the modelling system with an atmospheric model (SKIRON/ETA model coupled to GFS/NCEP global forecasts), an hydrodynamic model (Poseidon model coupled to MFS) and a sea state model (WAM)

- the oil spill model

- a web interface allowing a user to set up, submit his own drift simulation and visualize

the results

The development needed to make the oil spill model of the Aegean DeSS interoperable with other European DeSS are then presented. They allowed to build :

- the capability to use atmospheric and oceanic input data coming from different sources (in NetCDF format)

- the capability to handle the common oil spill input (to set up a drift simulation) and output files (to exchange the results) whose formats have been defined in the ECOOP project.

The Aegean DeSS efficiency is finally demonstrated on a real case (June 2009) and on a common oil spill input and output files exchange with Météo France.

The main interest of this paper is to present the technical difficulties encountered to make the Aegean DeSS interoperable and the solutions that have been brought. This paper details also the HCMR oil spill forecast system and its interface to use it by external clients : this is especially useful for the other organisms that propose already or want to develop this kind of service.

2. Specific comments

The capability to use atmospheric and oceanic input data coming from different sources seems not to be demonstrated in this paper (the real case simulation uses HCMR forcing data). Such a validation should have been done and the paper could include some words and figures on it (for example, rerun the real case (June 2009) with MyOcean data (even if the best oceanic forcing data were the HCMR ones) and show the results).

The capacity to use the common oil spill input and output files is a great step toward interoperability between oil spill systems and this paper seems to be the first one to describe the work done to take them into account. It is so important to give clearly the sources of this specific files format : deliverable no D9.2.4.2 of the ECOOP project (FP6-2005-Global-4) “EuroDeSS Iberian Coast and Western Mediterranean Sea Ma-

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rine Security Applications : the V1 system and interoperability tests" D. Paradis, J. Negre, R. Madrigal, M. Espino, L. Ferrer, R. Fernandes, L. Perivoliotis.

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