Interactive comment on “The M3A multi-sensor buoy network of the Mediterranean Sea” by K. Nittis et al.

Anonymous Referee #1

Received and published: 7 December 2006

This manuscript presents new designs for real-time oceanographic observations based on a multidisciplinary moorings array and developed in the framework of the operational oceanography EU project MFSTEP. The authors have set up dedicated novel solutions for the monitoring of physical and biogeochemical oceanographic parameters as well as meteorological data in 3 locations of the Mediterranean Sea. The authors also present quality controls and procedures for real-time data transfer to the forecasting system that have been homogenized.

I suspect this paper will be a good reference. Therefore, it is worth publishing and I encourage the revision of the manuscript subject to my comments below.

Overall, I think the description of the different moorings would need a bit of polishing.
I see the point of the presentation as it is, mooring by mooring. It makes sense but one would like the same kind of information for each mooring in order to compare each design. On other words, there would be another way to present it: one could have made sections like "surface buoys, sensors, on-board computers, positioning, telemetry,..." and detail/compare the 3 moorings in each of these section. I am not sure this would be the right way to write it but the authors may go through the sections 2.1, 2.2, and 2.3 with this in mind in order to improve the manuscript.

The figures (and in particular the labels) are too small. Some letters are so tiny that I cannot read. In addition, I do not really understand the titles on Figure 9.

Then I would have few minor comments:

- p1402, row 22: please refer to wintertime convection.
- p1404, row 4: replace "quality assurance" by "quality controls/checks"
- p1404, row 21: Isn’t it "Medusa"? Is there any reference for that buoy?
- p1405, row 8: replace "dew" by "due"
- p1405, row 13: remove "s" from "fluorometers"
- p1406, row 24: this comment on signals and warnings required by international regulations would be nice if placed in the introduction of section 2. It must apply to all moorings.
- p1408, row 20: it is not clear to me what is a MMI
- p1412, row 19: replace "Correct...tests" by "Data are considered correct when they have successfully passed through all the tests."
- p1414, row 5: replace "send" by "sent".
- p1414, row 11: replace "while since...it ..." by "as it... since september 2005"
- p1415, row 2: replace "to failure" by "to a failure"
- p1415, row 13: replace able by possible.
- p1415, row 14: replace "continue to" by "continue the"
- p1420, row 8: replace "profiles" by "timeseries"
- p1421, row 14: what is kps?
- p1421, row 19: replace "received" by "receive"
- p1422, row 20: replace "assurance" by "control/checks"

Interactive comment on Ocean Sci. Discuss., 3, 1399, 2006.