

## ***Interactive comment on “Primary marine aerosol physical and chemical emissions during a nutrient enrichment experiment in mesocosms in the Mediterranean Sea” by Allison N. Schwier et al.***

### **Anonymous Referee #2**

Received and published: 1 August 2017

Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2017-320> Manuscript under review for journal Atmos. Chem. Phys.

Primary marine aerosol physical and chemical emissions during a nutrient enrichment experiment in mesocosms in the Mediterranean Sea

The paper is well written, suitable for ACP, and should be accepted with minor revision.

I found the paper particularly interesting for the effort in the really large array of interdisciplinary measurements made. It is unfortunate that the results are not sticking, but

C1

well worth a publication.

Briefly, I think the paper could be improved by:

- Abstract.

I would number the main conclusion of the paper, the abstract now is too general and I would state what the main results are such as (1) SMPS (2) CCN (3) chemistry (4) correlations (poor) with biology.

- I would stress the correlation with biology (Figure 8) were poor. - I would add a paragraph on the discussion on the time resolution of the filters used (which could not find it on the paper) and if these types of measurements can be useful, or if we need to move to new types of instruments (on line such as ATOFMS, HR AMS, etc) to actually see any valuable variation over time. - I would also stress over the text more the importance of the regionality (point well made) where the Mediterranean oligotrophic waters need more attention, and other mode studied marine aerosol areas may be different.

---

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2017-320>, 2017.

C2