

Interactive comment on “Source apportionment of fine PM and sub-micron particle number concentrations at a regional background site in the western Mediterranean: a 2.5 yr study” by M. Cusack et al.

Anonymous Referee #2

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This is a very well written paper, and a well structured work, it provide useful information about PM₁ sources along with sub micron number concentrations. After the apportionement of SOA source was argued and clarified, i don't have any major comments. I do have a few minor comments which are going to be highlighted in the following paragraph.

P 3922 : Please provide correlation coefficients (R²) for PM₁, OC, Sulfate and Nitrate between modelled and measured concentrations.

C285

P 3924 : For Nitrate, it would be important to highlights sampling artifacts which results in higher nitrate concentrations in winter compared to summer

P 3927 : For the fuel oil combustion source chracterized by V and Ni, in the source profile we can see also non negligible contribution for Na and Mg. Can the authors of this article give more informations about the influence of shipping emissions at MSY. Maybe giving some information about the meteorology and the marine aerosols influence in order to be more specific

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C286