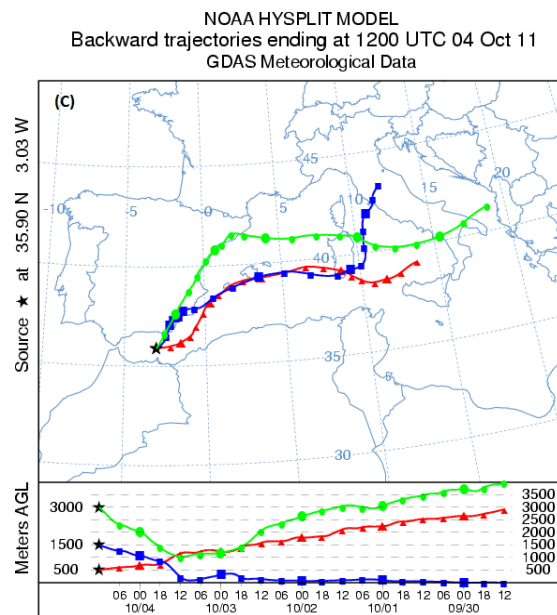


The effort of the authors to improve the quality of the paper, satisfying the reviewer's requests, has been greatly appreciated: the results are now much more clear and defined and the further clarification of the following two points will make the paper, in my opinion, worth publishing.

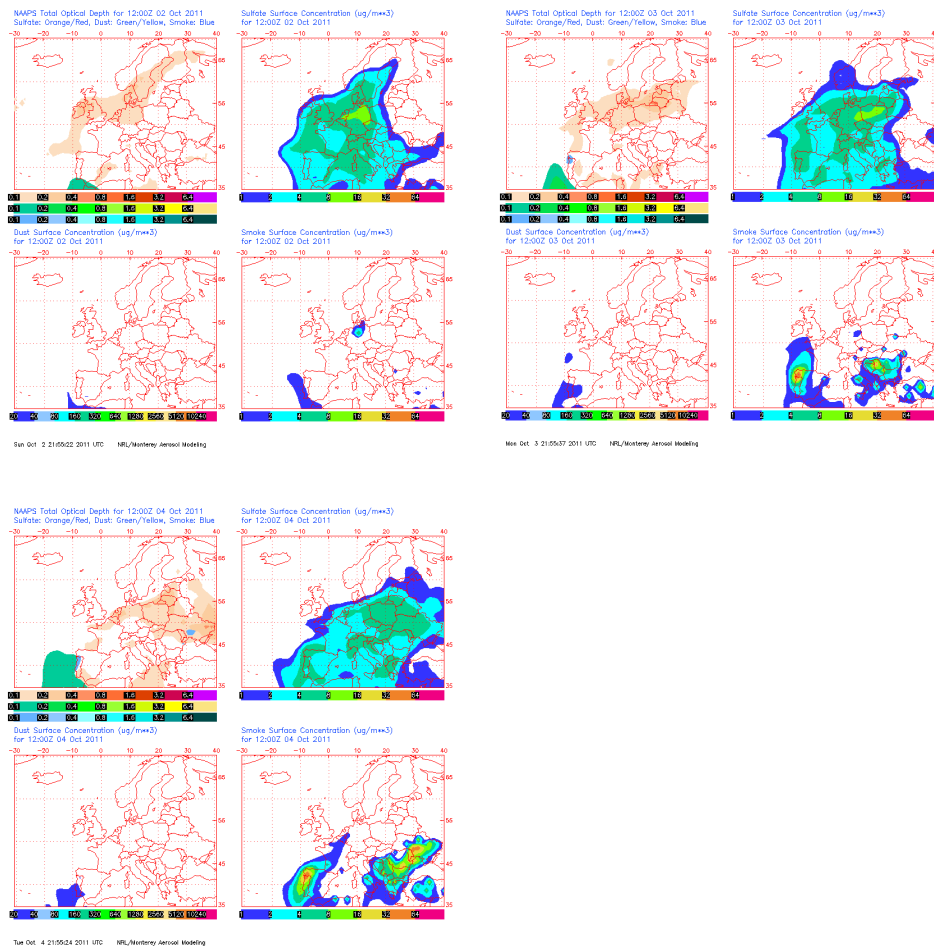
- Authors suppose that the high fine particles load from 30 September to 4 October is due to the presence of anthropogenic particles carried from Central Europe to Alboran Island. They support this hypothesis with the HYSPLIT back-trajectories shown in figure 4c saying:

“ Indeed, the back trajectory analysis revealed that this event was associated with air masses coming from central Europe and passing over the Mediterranean Sea and Spanish coastal urban areas before reaching Alborán Island (Fig. 4c). Therefore, these air masses might pick up fine anthropogenic particles in their way to Alborán Island, which may explain the high values of both $\ddot{o}_a(500\text{ nm})$ and $\alpha(440\text{-}870)$ parameters observed during this event.”

The figure they refer to (reported below) shows something different



The trajectories shown cross regions that, even if they host some industrial area, cannot be considered as if they were in Po valley. Moreover, the trajectory with ending point 3000, moves very high above the ground level, in such a way it can be considered out of the Boundary Layer. For this reason and considering only this figure, it can be hypothesized that marine aerosol are the main particles family carried over the measurement site, thus not explaining the experimental results. In the figures reported below, the NAAPS maps for the days preceding 4 October are shown. It is interesting to note that the trajectory ending at 1500 m, before its arrival over Alboran, crosses an area with a great contribution of sulphates to the aerosol loading at the surface. This could better support the hypothesis of an anthropic particles loading over the measurement site.



Other kind of measurements, i. e. single scattering albedo data, could explain experimental data, as authors did in a paper just published on JGR:

A.Valenzuela, F.J. Olmo, H. Lyamani, M.J. Granados-Muñoz, M. Antón, J.L. Guerrero-Rascado, A. Quirantes, C. Toledano, D. Perez-Ramírez and L. Alados-Arboledas, Title “AEROSOL TRANSPORT OVER THE WESTERN MEDITERRANEAN BASIN: EVIDENCE OF THE CONTRIBUTION OF FINE PARTICLES TO DESERT DUST PLUMES OVER ALBORÁN ISLAND.”

- The paragraph 3.5 has been improved too. However, table 4 says that the number of coincident measurements for the Black sea segment of the ship cruise is 26, whereas for the Eastern Mediterranean it is 28, a little more than 1 measurement per day. By the light of this, one can ask if it is meaningful to compare an average AOD value in Alboran and an “average” value over the Black Sea or in the Eastern Mediterranean.