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Atmospheric Measurement Techniques Discussions

Interactive comment on "Estimating chemical composition of atmospheric deposition fluxes from mineral insoluble particles deposition collected in the Western Mediterranean region" *by* Yinghe Fu et al.

Anonymous Referee #2

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Overall Comments: The manuscript estimates the insoluble chemical composition of bulk deposition samples obtained by using CARAGA sampler. Samples are collected at La Casset, Corsica and Frioul Island (France), Mallorca Island (Spain) and Lapedusa Island (Italy) situated at Western Mediterranean. Samples are analyzed for Al, CA, K, Mg, Na, Ti, P, Fe, Cd, Co, Cr, Cu, Mn, Ni, V and Zn applying Inductively Coupled Plasma-Atomic Emission Spectrometry (ICPAES). The manuscript evaluates the relative loss by dissolution in wet deposition in order to test the efficiency of the CARAGA sampler since it only collects insoluble fraction of bulk deposition. Furthermore, the

manuscript demonstrates chemical composition of in soluble bulk deposition at La Casset, Corsica and Frioul Island (France), Mallorca Island (Spain) and Lapedusa Island (Italy). In this respect, it may be the interest of scientific community. Consequently I suggest acceptance of the manuscript. However, before that the manuscript should be revised.

General Comments:

1-Title: Since the manuscript only focuses on the samples obtained from Western Mediterranean, Western Mediterranean should be used instead of Mediterranean.

2- Abstract: The references in the abstract should be removed from the text.

3- Experimental: Brief, information about sampling sites (such as site character, elevation and distance from major pollution sources) would be helpful for reader

4- Results and Discussion: Figure 1 is obtained by Excel and it has low resolution, better diagram should be presented. Results from the sites could be presented in a single diagram instead of Table 5 since it is difficult to follow crowded number. The difference between sampling sites should be supported by using t-test (if there is a normal distribution, if not then non-parametric t-test).

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