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Interactive comment on “Long-range transport of giant particles in Asian dust identified by physical, mineralogical, and meteorological analysis” by G. Y. Jeong et al.

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Dear Dr Jeong,

Thanks a lot for your replies to comments to Dr Posfai.

I would like to comment on your reply #1. XRD analysis of dust can be done with a few mg, not necessarily with 1 g of sample, by extracting with ethanol in a microwave bath particles from high or low vol sampler filters and deposition on a silver filter. Furthermore TEM-XRD analysis of single particles may yield also mineralogy data. See Alastuey et al., 2005. Atmos Environ: "The mineralogical characterisation of TSP was

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carried out by X-ray diffraction (XRD) analysis by means of a SIEMENS D5000 powder diffractometer. To this end, a fraction of the filter was placed in an ultrasonic bath with pure ethanol for the extraction of particulate material, thereby avoiding the dissolution of water soluble particles. The solution obtained was filtered on silver filters for XRD in order to pre-concentrate the mineral matter and to reduce the high XRD background produced by the quartz filter. Given that the finest grain fraction may be trapped in the quartz fibre filters, results obtained from the XRD have to be considered as indicative of the mineralogical composition but not as fully quantitative."

Kind regards

Xavier Querol

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