Experimental studies like this one are still rare and should be encouraged. This is a useful paper and can be published largely as is. I would only suggest to expand the motivation for this study in the introduction by pointing out that satellite retrievals of dust-aerosol characteristics such as, e.g., the optical thickness are strongly affected by particle nonsphericity (e.g., [1]), and so reliable knowledge of the phase function (or, more generally, the scattering matrix) for real dust aerosols is essential.
