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Supplement of

Comparison of aerosol properties retrieved using GARRLiC, LIRIC, and Raman algorithms applied to multi-wavelength lidar and sun/sky-photometer data

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Table 1. = Tabel 2 from article. Aerosol properties during the dust event over the Dakar site on 29 March 2015. Here and further, the LR values marked by ** were retrieved by using the LIRIC algorithm. Only the values given for all the wavelengths refer to the column-integrated property. Day: AOD 440 nm $\approx 1.35 \pm 0.20$; $\alpha \approx -0.04 \pm 0.01$. Night: AOD 440 nm $\approx 0.83 \pm 0.03$; $\alpha \approx 0.08 \pm 0.02$.

λ [nm]	GARRLiC					AERONET			Raman (Day)	Raman + Regularization (Night)			
	r_{eff} [μm]	Sph %	RRI	IRI	LR [sr]	RRI	IRI	LR [sr]	LR [sr]	r_{eff} [μm]	RRI	IRI	LR [sr]
355			1.59	0.003	37			82**	~ 57				~ 70
440			1.59	0.003	33	1.54 ± 0.06	0.0045	74					
532			1.59	0.002	28			58**	~ 53				~ 58
675	1.9	20%	1.58	0.002	25	1.53 ± 0.05	0.0016	43		1.1	1.53	0.010	
870			1.57	0.002	24	1.53 ± 0.07	0.0011	37					
1020			1.56	0.002	22	1.53 ± 0.07	0.0010	35					
1064			1.56	0.002	22			34**					

Table 2. = Tabel 3 from article. Aerosol properties during the dust event over the Dakar site on 10 April 2015. The LR values marked by ** were retrieved by the LIRIC algorithm. Only the values given for all the wavelengths refer to the column-integrated property. Day: AOD 440 nm $\approx 1.53 \pm 0.04$; $\alpha \approx 0.02 \pm 0.01$. Night: AOD 532 nm ≈ 0.83 ; $\alpha \approx 0$ by Raman.

λ [nm]	GARRLiC					AERONET			Raman (Day)	Raman + Regularization (Night)			
	r_{eff} [μm]	Sph %	RRI	IRI	LR [sr]	RRI	IRI	LR [sr]	LR [sr]	r_{eff} [μm]	RRI	IRI	LR [sr]
355			1.60	0.004	20			70**	~ 25				~ 59
440			1.60	0.003	17	1.60 ± 0.08	0.0058	62					
532			1.60	0.003	14			49**	~ 23				~ 50
675	2.0	57%	1.60	0.002	13	1.60 ± 0.05	0.0020	39		0.9	1.54	0.008	
870			1.59	0.002	12	1.58 ± 0.05	0.0014	32					
1020			1.58	0.002	13	1.58 ± 0.06	0.0014	31					
1064			1.58	0.002	13			30**					

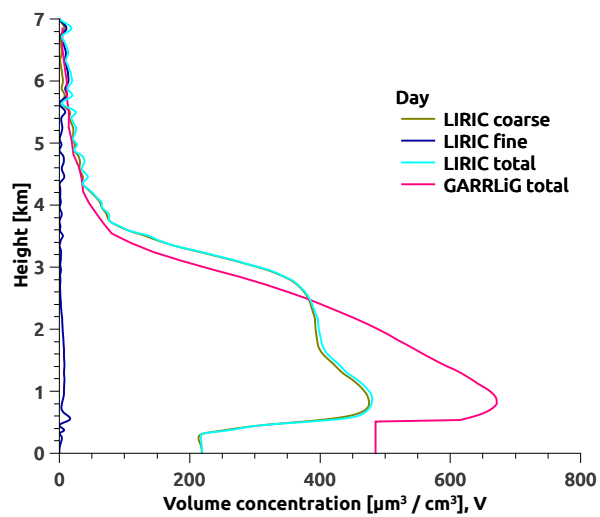


Figure 1. = Figure 14 from article. Volume concentration profiles for an event over the Dakar site on 10 April 2015.