

Supplement

Table S1: Lognormal Parameters for Fennec-Sahara 10th percentile PSD

Mode	$d_{pg}, \mu m$	N_{tot}, cm^{-3}	σ
1	0.039	129.377	2.50
2	0.726	0.672	1.33
3	2.144	0.132	1.48
4	4.503	0.125	1.84

Table S2: Lognormal parameters for Fennec-SAL PSD mean, minimum and maximum, fitted to observational data from Ryder et al. (2013a).

		Mode 1	Mode 2	Mode 3	Mode 4
$d_{pg}, \mu m$	Mean	0.024	0.687	2.174	6.277
σ_g		2.500	1.380	1.438	1.620
N_{tot}, cm^{-3}		946.031	2.599	0.559	0.122
$d_{pg}, \mu m$	Min	0.020	0.677	1.945	8.283
σ_g		2.500	1.335	1.661	1.507
N_{tot}, cm^{-3}		644.186	1.134	0.365	0.022
$d_{pg}, \mu m$	Max	0.021	0.660	2.279	6.300
σ_g		2.500	1.431	1.405	1.632
N_{tot}, cm^{-3}		2233.030	3.732	0.666	0.171