Advances in CALIPSO (IIR) cirrus cloud property retrievals – Part 1: Methods and testing

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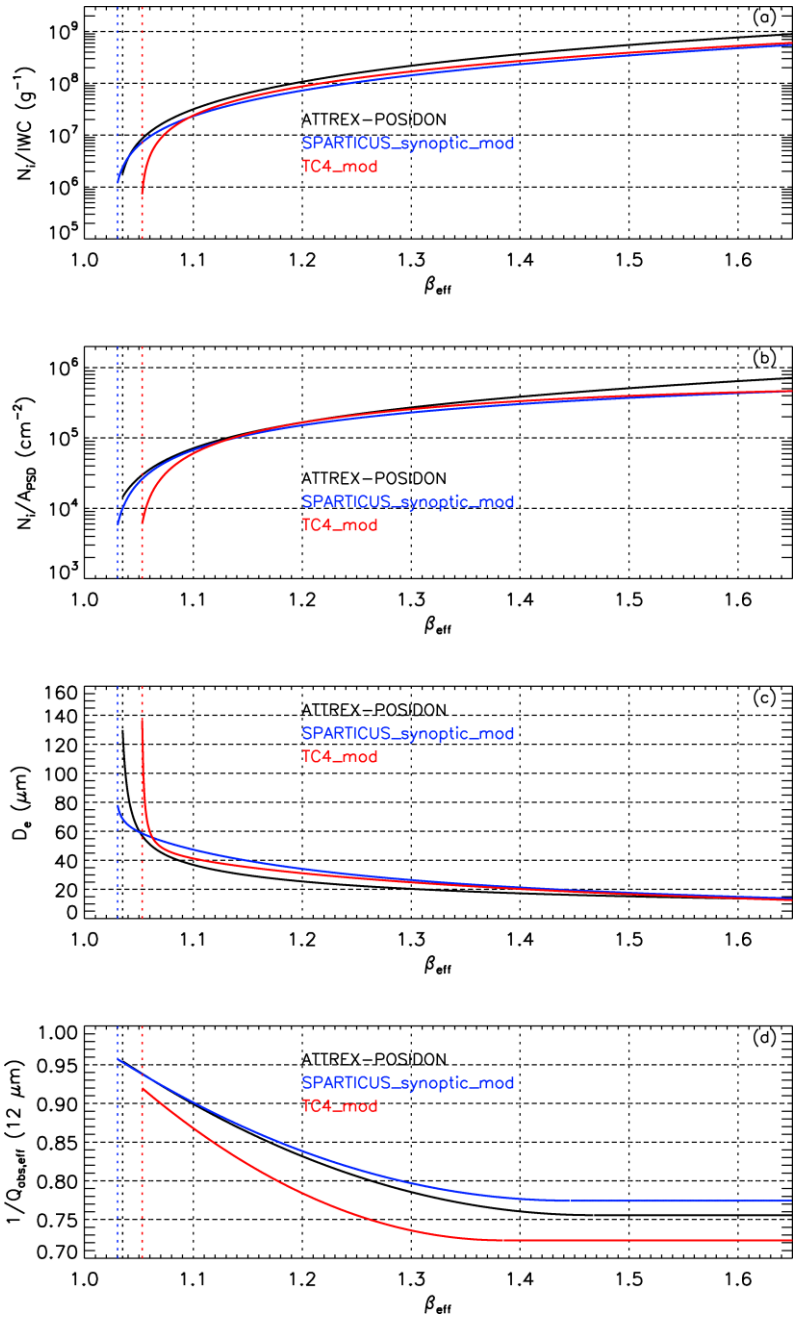

Figure S1: same as Fig. 14 but showing the curve fits only.

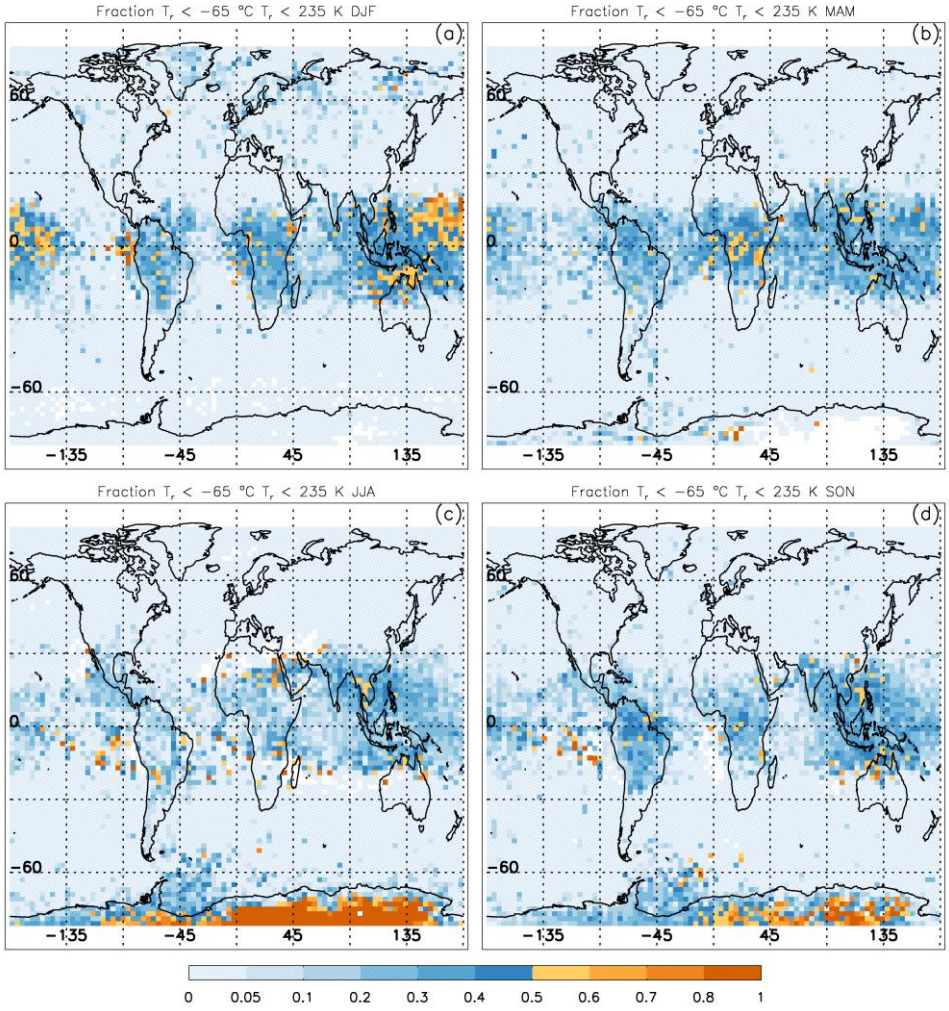

Figure S2: Same as Fig. 16 but for cirrus clouds having ~ 0.3 < τ < ~ 3, over oceans and land.

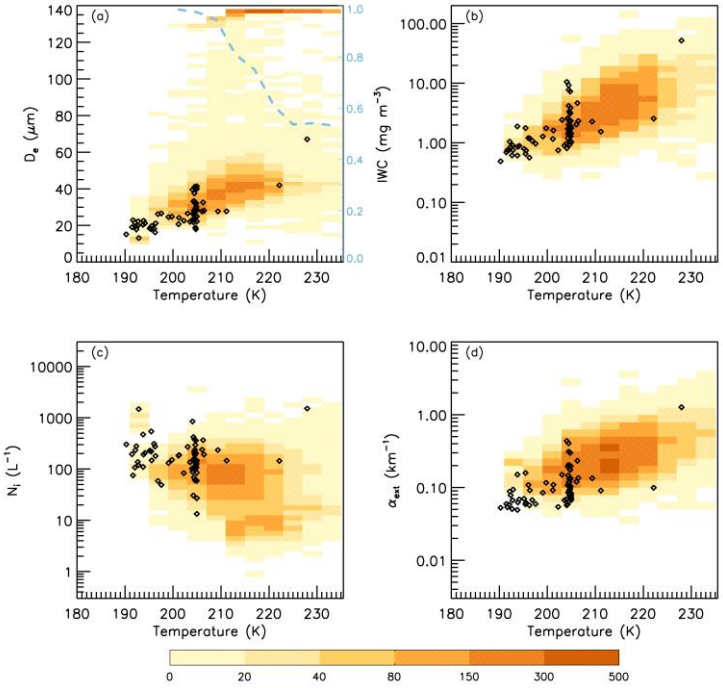

Figure S3: Same as Fig. 17 (ATTREX) but where ~ 0.3 < τ < ~ 3

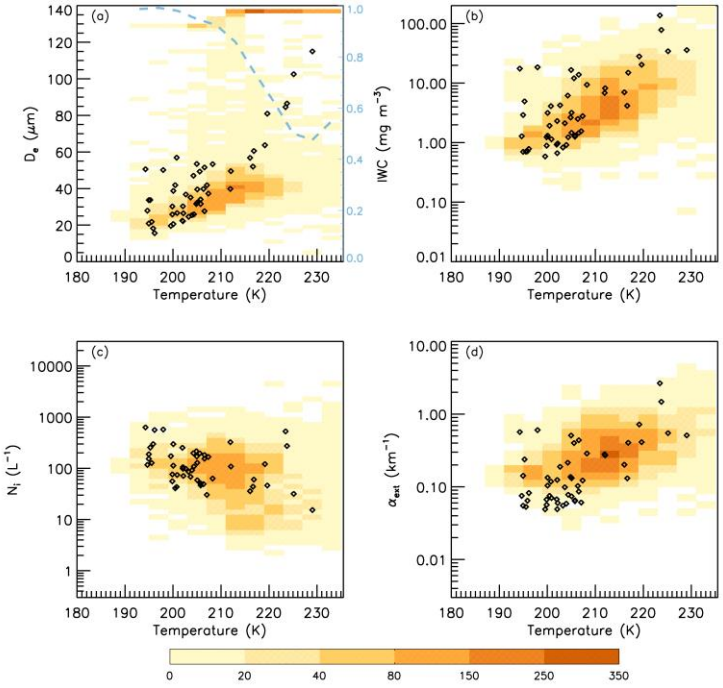

Figure S4: Same as Fig. 18 (POSIDON) but where ~ 0.3 < τ < ~ 3

Table S1: Same as Table 6 but for the POSIDON campaign.

POSIDON	~ 0.2 - 0.3 < τ < ~ 3			~ 0.01 < τ < ~ 3		
T_r (K)	193	213	233	193	213	233
Pixel count	151	1448	188	2107	2366	350
τ_{abs}(12.05 µm)	0.17	0.39	0.58	0.04	0.26	0.28
$\Delta\tau_{abs}$(12.05 µm)	0.017	0.020	0.029	0.016	0.019	0.023
τ	0.27	0.69	1.04	0.06	0.45	0.49
Δτ	0.033	0.041	0.053	0.032	0.040	0.046
β_{eff}	1.241	1.088	1.060	1.200	1.087	1.050
$\Delta\beta_{eff}$	0.07	0.03	0.03	0.30	0.04	0.05
α_{vis} (km^{-1})	0.16	0.29	0.60	0.05	0.20	0.29
$\Delta\alpha_{vis}/\alpha_{vis}$	0.11	0.06	0.06	0.52	0.09	0.10
D_e (µm)	23	43	61	25	43	136
$\Delta D_e/D_e$	0.16	0.15	1.73	0.97	0.33	>3.00
IWC (mg m^{-3})	1.0	4.6	11.5	0.5	3.4	6.9
ΔIWC/IWC	0.25	0.21	1.70	1.45	0.44	>3.00
N_i (L^{-1})	158	66	43	46	44	28
$\Delta N_i/N_i$ (L^{-1})	0.30	0.65	2.73	1.87	1.22	> 3.00