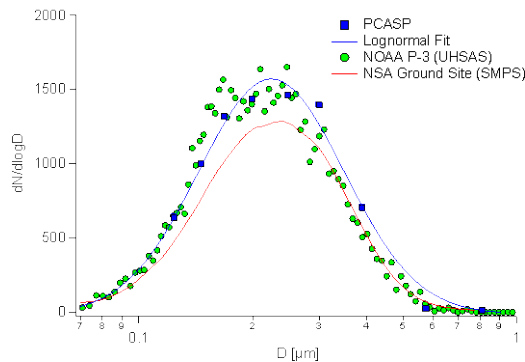


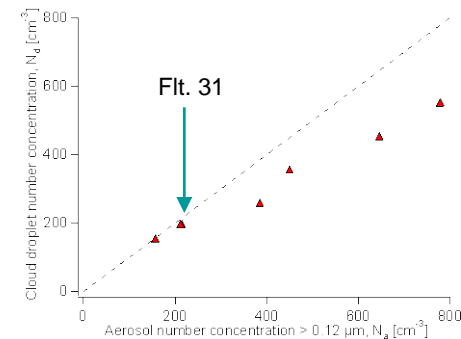
# ISDAC Aerosol-Cloud Droplet Closure Study

Liu, Earle, Ghan, Strapp, Leitch, Zelenyuk, Collins, Ovchinnikov et. al.

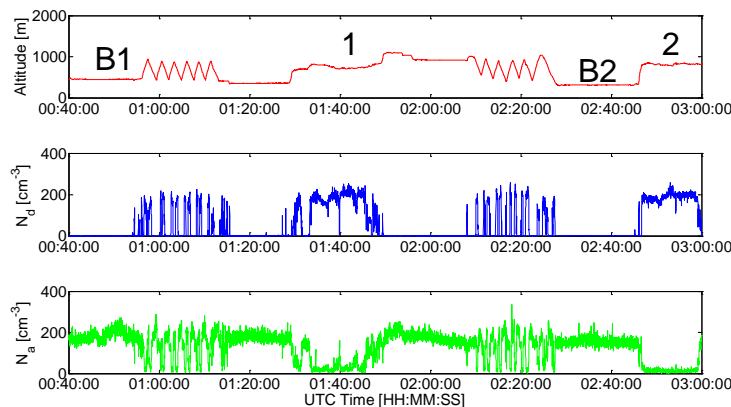
Aerosol size distribution comparison



Cloud droplet vs. PCASP number concentrations



Case study analysis for ISDAC Flight 31 (April 26, 2008)



Parcel model results for case study

Case	W [m s <sup>-1</sup> ]	N <sub>calc</sub> [cm <sup>-3</sup> ]	N <sub>avg,obs</sub> [cm <sup>-3</sup> ]	% Diff (avg)	N <sub>max,obs</sub> [cm <sup>-3</sup> ]	% Diff (max)
1	>0.6σ	185	191	3	228	19
2	>0.6σ	160	190	16	215	26

Below-cloud aerosol size distributions for ISDAC 'golden' days – lognormal fitting parameters

Date	ISDAC Flights	D [μm]	σ	N [cm <sup>-3</sup> ]
April 8	16	0.188	1.40	165
April 26	30,31	0.194	1.48	199

