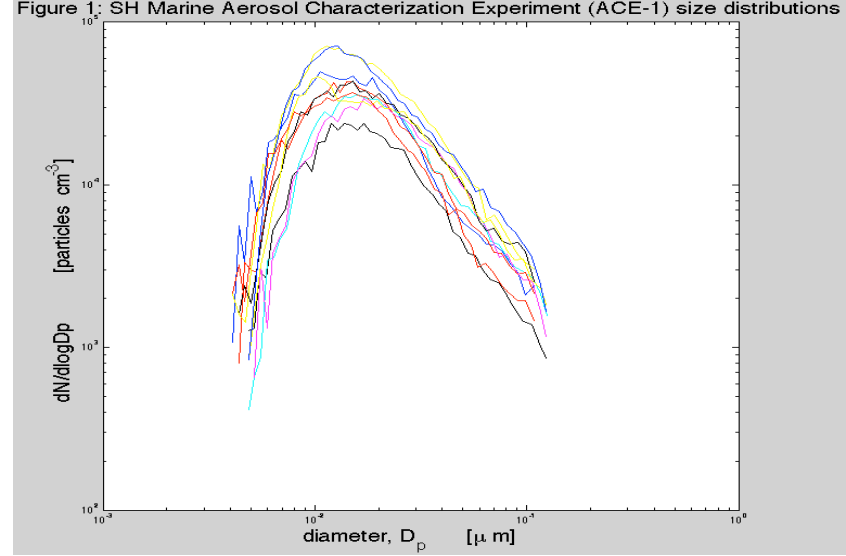


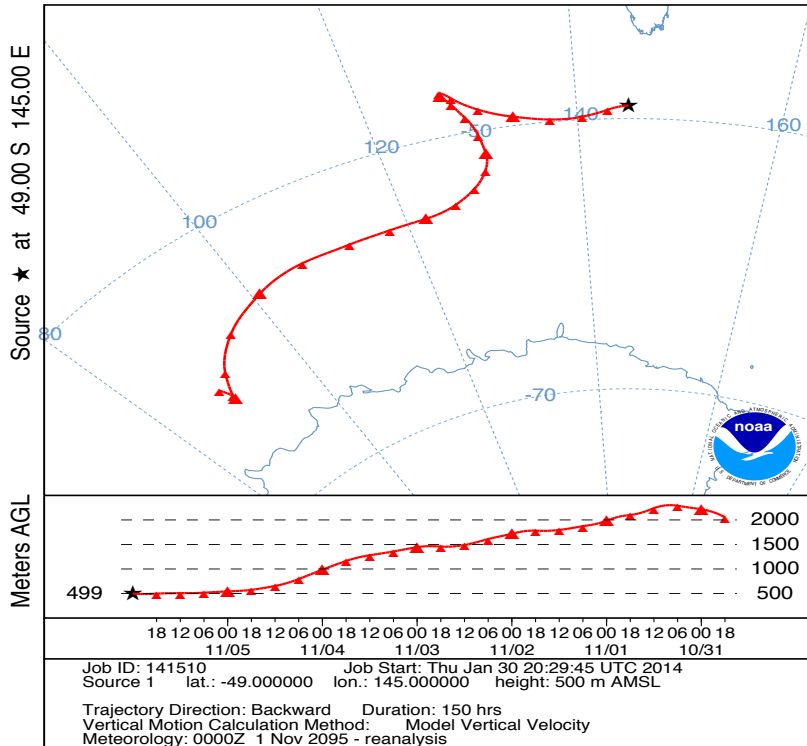
# Interstitial aerosol scavenging by stratiform clouds over the Southern Ocean MBL

$$\frac{\partial n(D_p, t)}{\partial t} = -n(D_p, t) \int_0^\infty K(D_p, x) n(x, t) dx$$

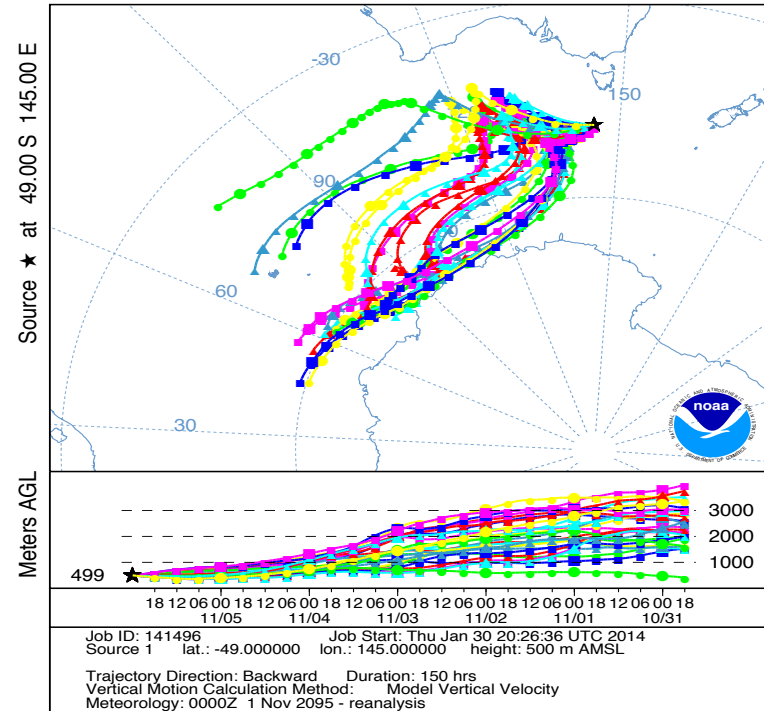
$$\int_0^\infty K(D_p, x) n(x) dx = N_0 K(D_p, 11\mu m)$$



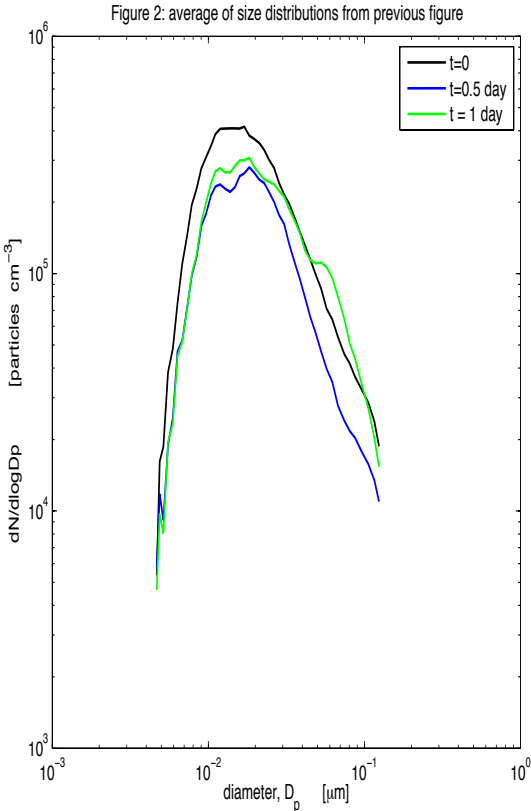
NOAA HYSPLIT MODEL  
Backward trajectory ending at 0000 UTC 06 Nov 95  
CDC1 Meteorological Data



NOAA HYSPLIT MODEL  
Backward trajectories ending at 0000 UTC 06 Nov 95  
CDC1 Meteorological Data



Average particle size distributions at start, ½ and one day of sampling



Aerosol ↓

Cloud →

- Table 1: Atmospheric particle lifetime as a function of particle diameter due to interstitial scavenging within MBL stratiform clouds with a monodisperse droplet size distribution. Values in the table indicate the characteristic particle lifetime in days as a function of size.

	<b>micron</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>13</b>	<b>15</b>
5e-3	0.606	0.4714	0.3857	0.3264	0.2829	
0.0195	2.364	1.8836	1.5043	1.2729	1.1031	
0.0340	4.122	3.2057	2.6228	2.2193	1.9234	
0.0485	5.880	4.5728	3.7414	3.1658	2.7437	
0.0630	7.637	5.9400	4.8600	4.1123	3.5640	
0.0775	9.395	7.3071	5.9785	5.0588	4.3843	
0.0920	11.15	8.6743	7.0971	6.0053	5.2046	
0.1065	12.91	10.041	8.2157	6.9517	6.0248	
0.1210	14.67	11.409	9.3342	7.8982	6.8451	
0.1500	18.18	14.143	11.571	9.7912	8.4857	