

Figure s1. The radar base reflectivity during the rainfall event (the sampling site at the IAP is indicated by the red star).

5 ABBREVIATIONS

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Nomenclature					
d_{p}	aerosol particle diameter	F	aerosol flux		
D_p	raindrop diameter	D_{ep}	wet deposition		
$N(d_p)$	aerosol particle number concentration	C_p	concentration in the precipitation		

$N(D_p)$	concentration of raindrops	C_{a0}	original aerosol concentration before the rainfall
$K(d_p)$	size-resolved below-cloud scavenging coefficient	$C_a(0)$	aerosol concentration at the surface
K	below-cloud scavenging coefficient	$C_a(z)$	aerosol concentration at height z
$U_{t}(D_{p})$	falling velocity of raindrops	$C_{p, m below}$	washout concentration
$E(D_p,d_p)$	collision efficiency	P	precipitation intensity
A	horizontal area of the given box	h'(z)	depth of the layers in the vertical direction
h	vertical height of the given box or cloud-base height	f	vertical distribution of aerosols
M	aerosol mass of the given box	$C_{a}^{'}(0)$	aerosol concentration at the surface and eliminates effects of north and north-west wind
C_a	average aerosol concentration		