SUPPORTING INFORMATION

On the simultaneous deployment of two single particle mass spectrometers at an urban background and a road side site during SAPUSS

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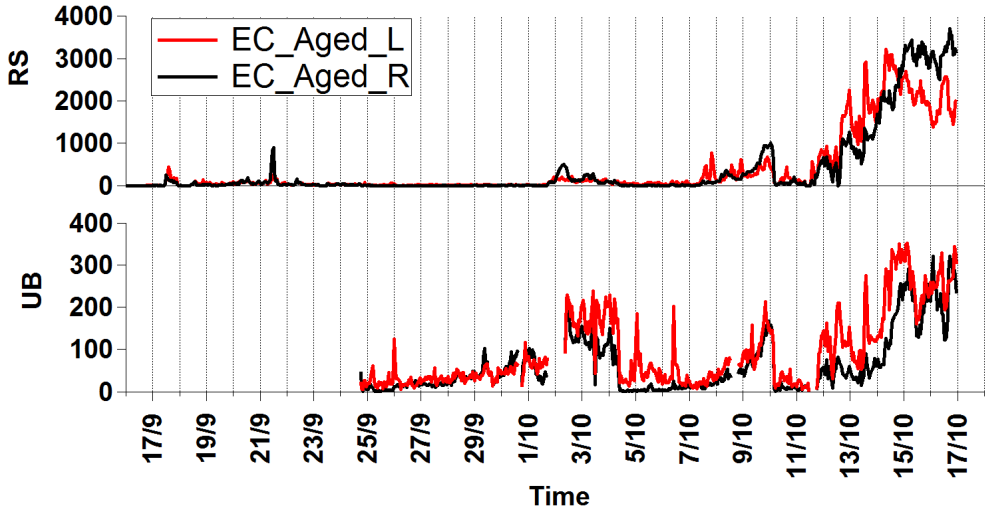
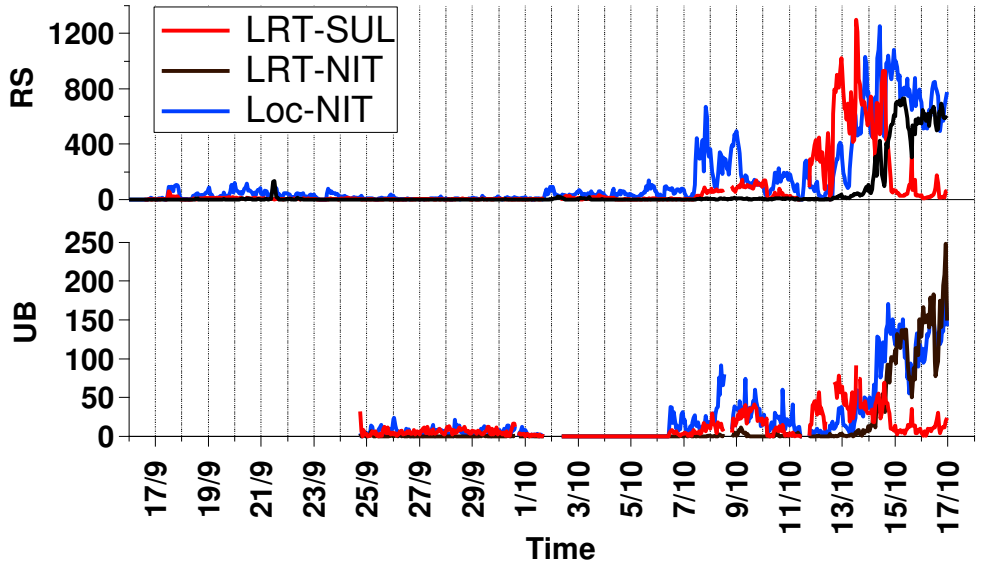
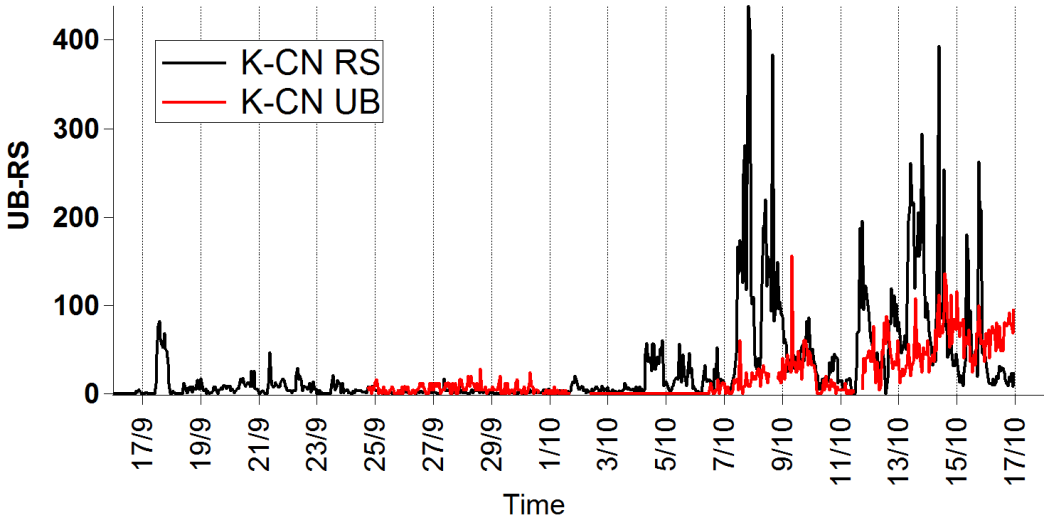

EC_Aged_L
EC_Aged_R
RS
UB
Time
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
17/10

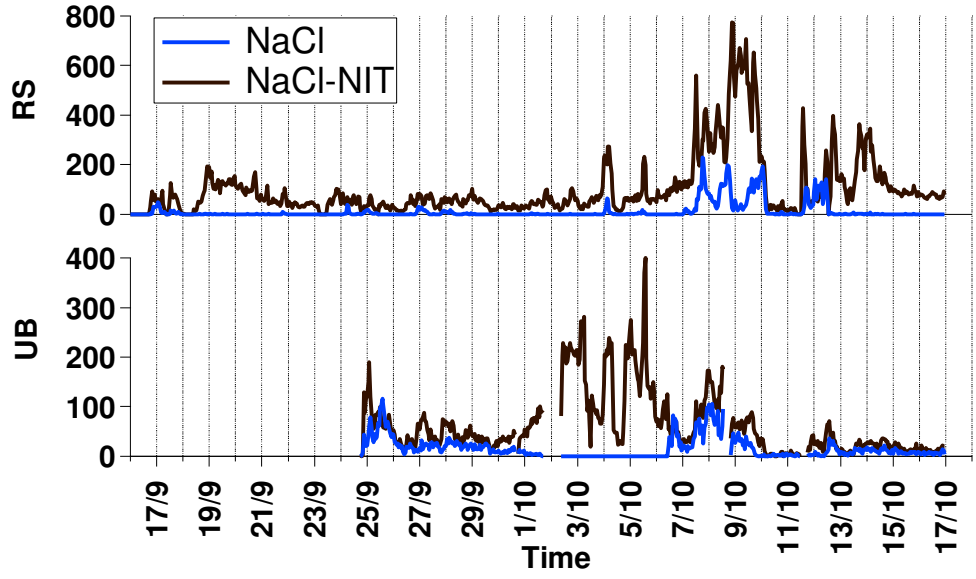
(a)


LRT-SUL
LRT-NIT
Loc-NIT
RS
UB
Time
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
17/10

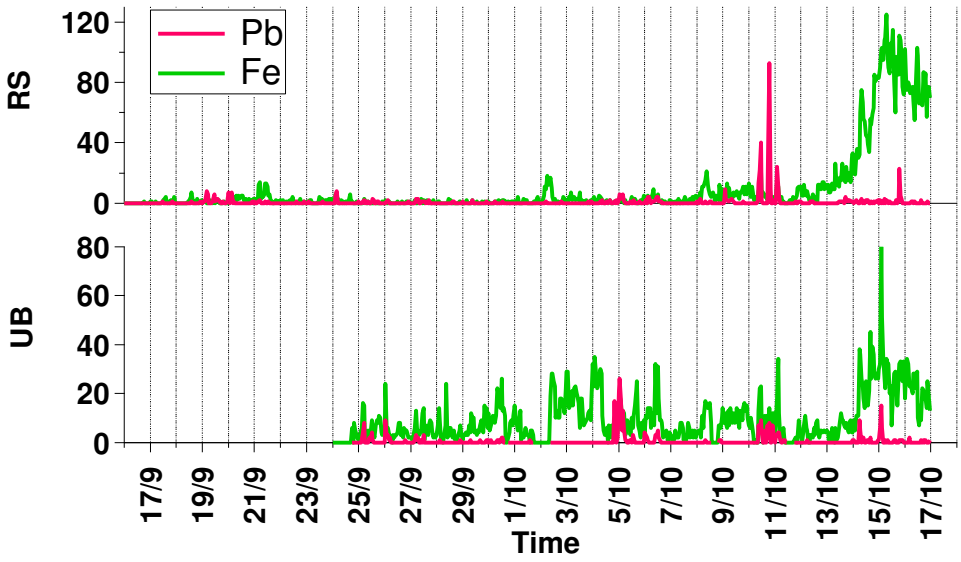
(b)


K-CN RS
K-CN UB
UB-RS
400
300
200
100
0
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
17/10
Time

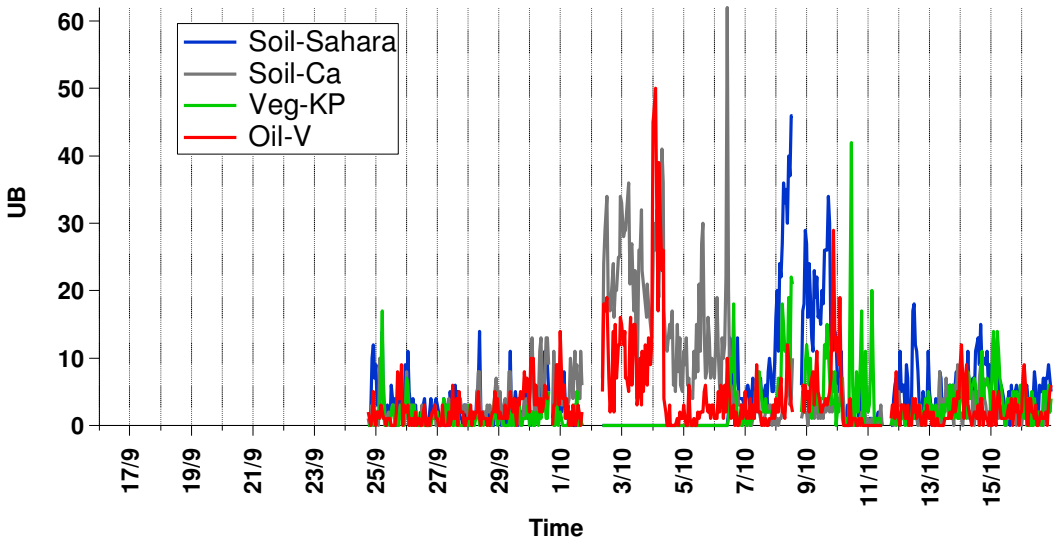
(c)


NaCl
NaCl-NIT
RS
800
600
400
200
0
UB
400
300
200
100
0
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
17/10
Time

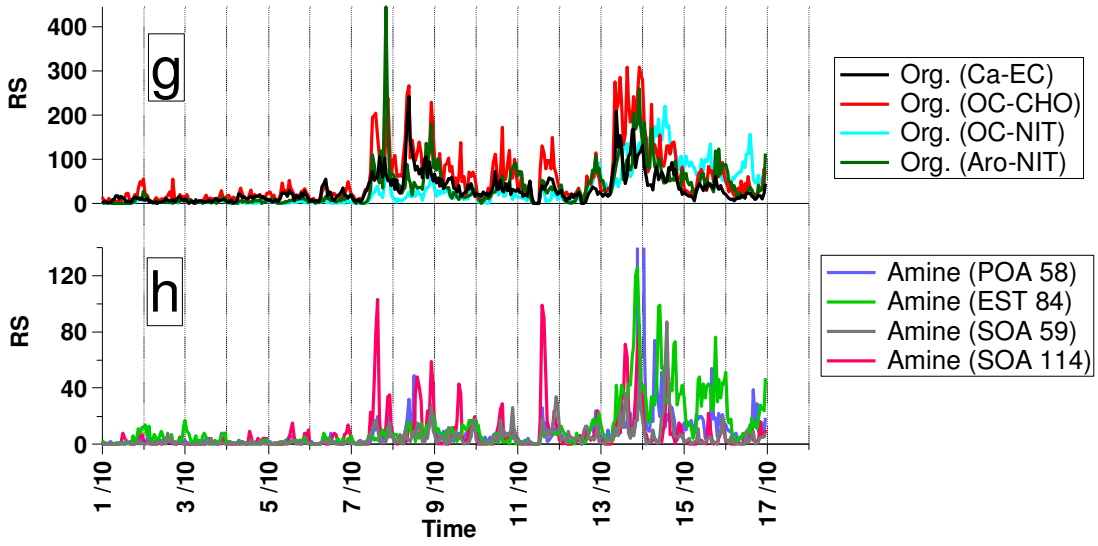
(d)


Pb
Fe
RS
UB
120
80
40
0
80
60
40
20
0
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
17/10
Time

(e)

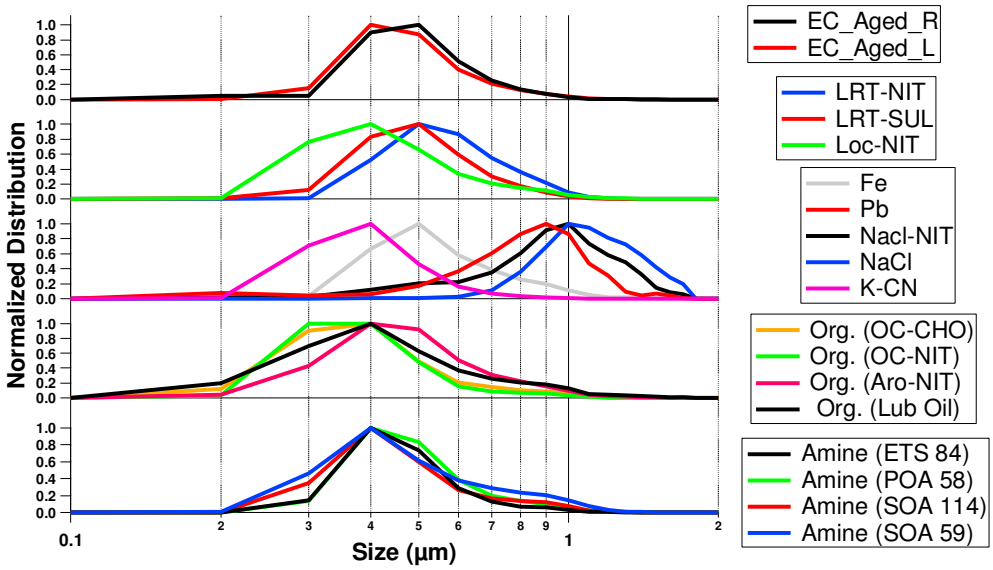

Soil-Sahara
Soil-Ca
Veg-KP
Oil-V
UB
60
50
40
30
20
10
0
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
Time

(f)

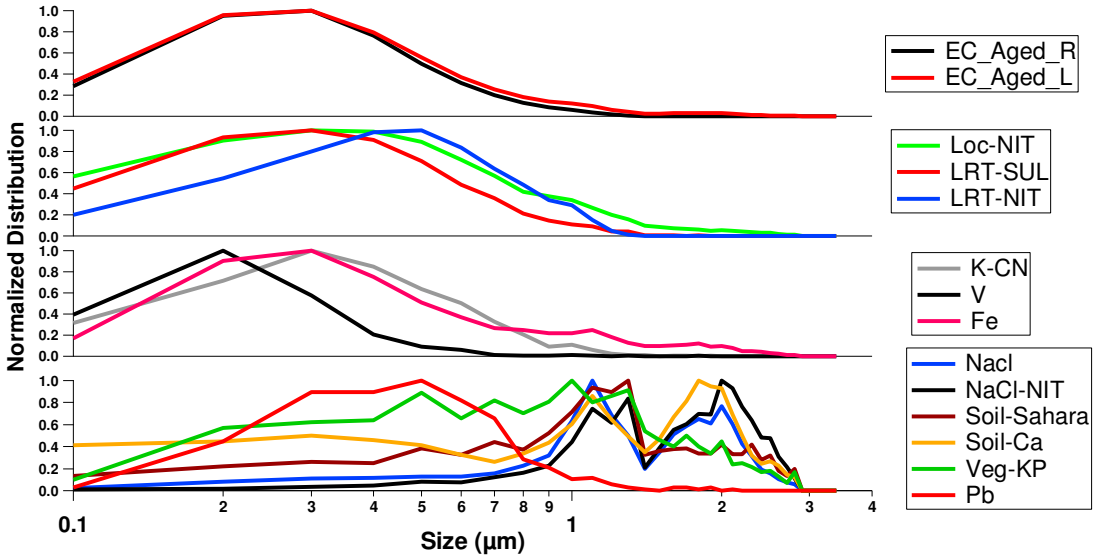


(g, h)

Figure SI 1. Temporal trends of ATOFMS particle types

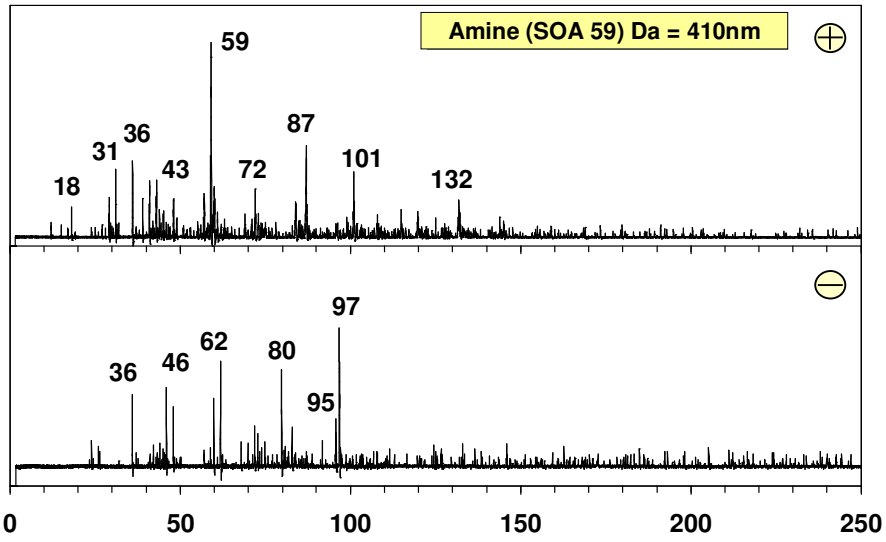


(a)

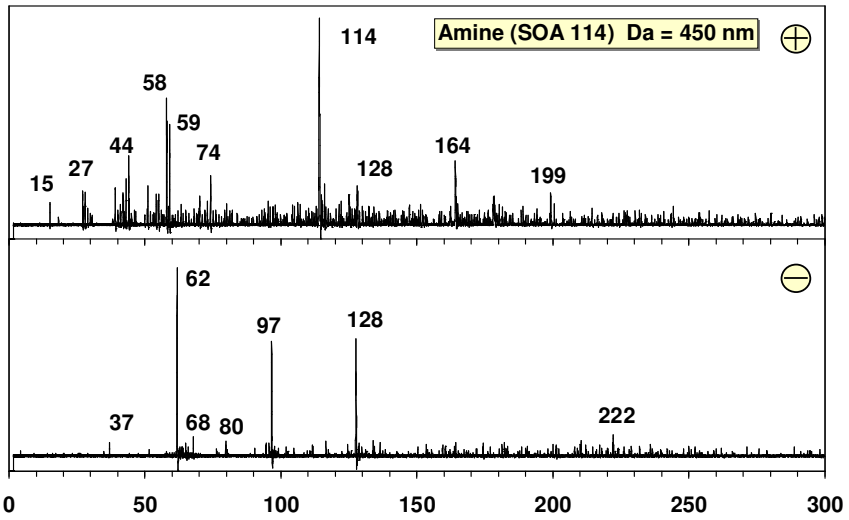


(b)

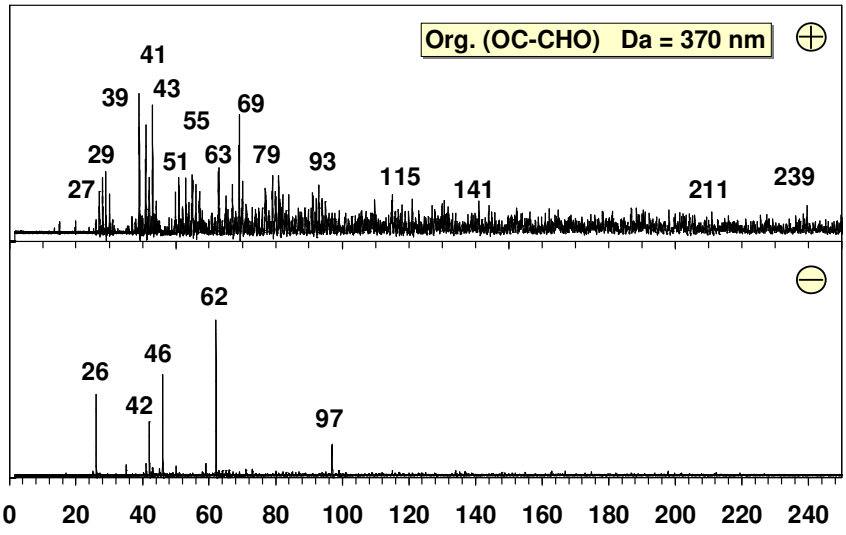
SI 2. Aerodynamic size ATOFMS modes for ATOFMS at RS (a) and UB (b)



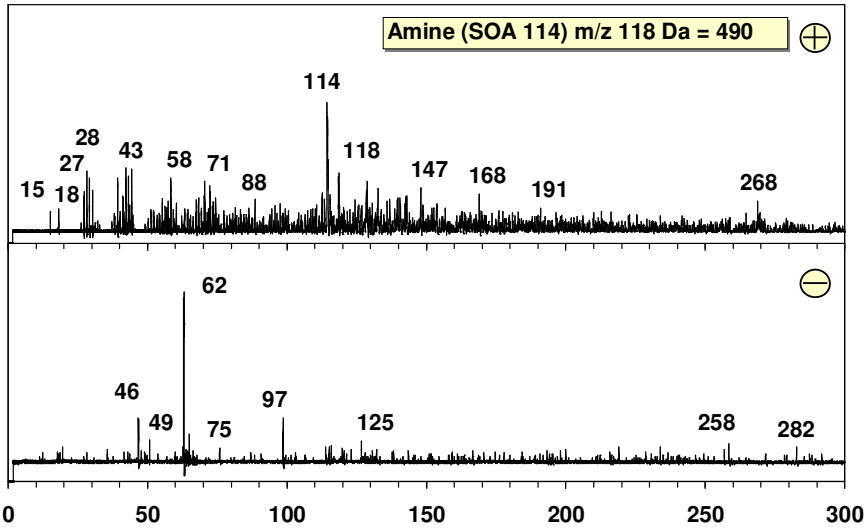
(a) Amine (SOA 59)



(b) Amine (SOA 114)



(c) Org. (OC-CHO)



(d) Amine (SOA 114) with m/z 118

SI 3 a-d: Single particle mass spectra of selected ATOFMS particle types