CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	On the simultaneous deployment of two single-particle mass spectrometers at an urban background and a roadside site during SAPUSS
Authors	Dall'Osto, M.;Beddows, D.;McGillicuddy, Eoin;Esser-Gietl, Johanna K.;Harrison, Roy M.;Wenger, John C.
Publication date	2016-08-02
Original Citation	Dall'Osto, M., Beddows, D. C. S., McGillicuddy, E. J., Esser-Gietl, J. K., Harrison, R. M. and Wenger, J. C. (2016) 'On the simultaneous deployment of two single-particle mass spectrometers at an urban background and a roadside site during SAPUSS', Atmospheric Chemistry and Physics, 16, pp.9693-9710. doi: 10.5194/acp-16-9693-2016
Type of publication	Article (peer-reviewed)
Link to publisher's version	http://www.atmos-chem-phys.net/16/9693/2016/ - 10.5194/acp-16-9693-2016
Rights	© 2016, the Author(s). This work is distributed under the Creative Commons Attribution 3.0 License. - https://creativecommons.org/licenses/by/3.0/
Download date	2026-11-06 06:01:32
Item downloaded from	https://hdl.handle.net/10468/4139

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Supplement of Atmos. Chem. Phys., 16, 9693–9710, 2016
http://www.atmos-chem-phys.net/16/9693/2016/
doi:10.5194/acp-16-9693-2016-supplement
© Author(s) 2016. CC Attribution 3.0 License.



Atmospheric Chemistry and Physics Open Access EGU

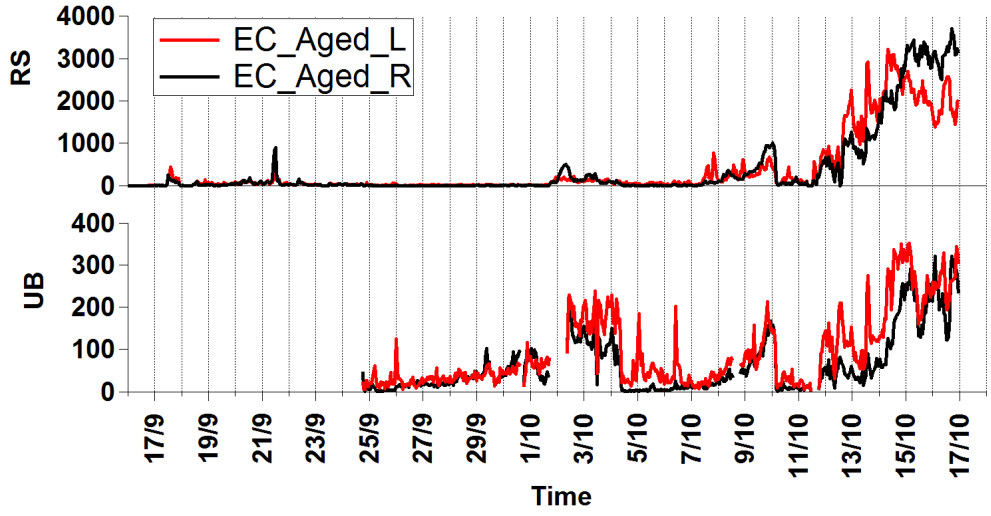
Supplement of

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

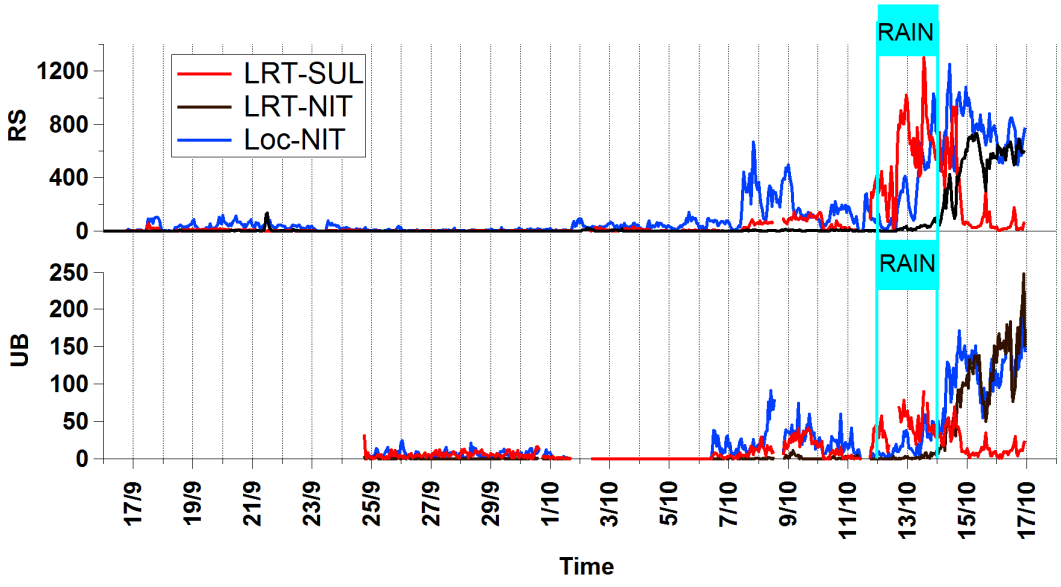
Manuel Dall'Osto et al.

Correspondence to: Manuel Dall'Osto (dallosto@icm.csic.es)

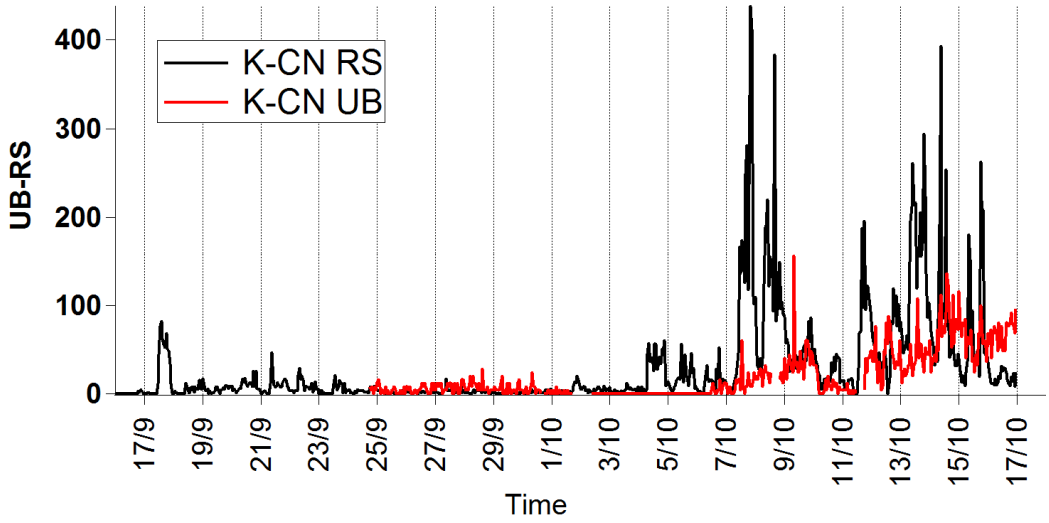
The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.


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

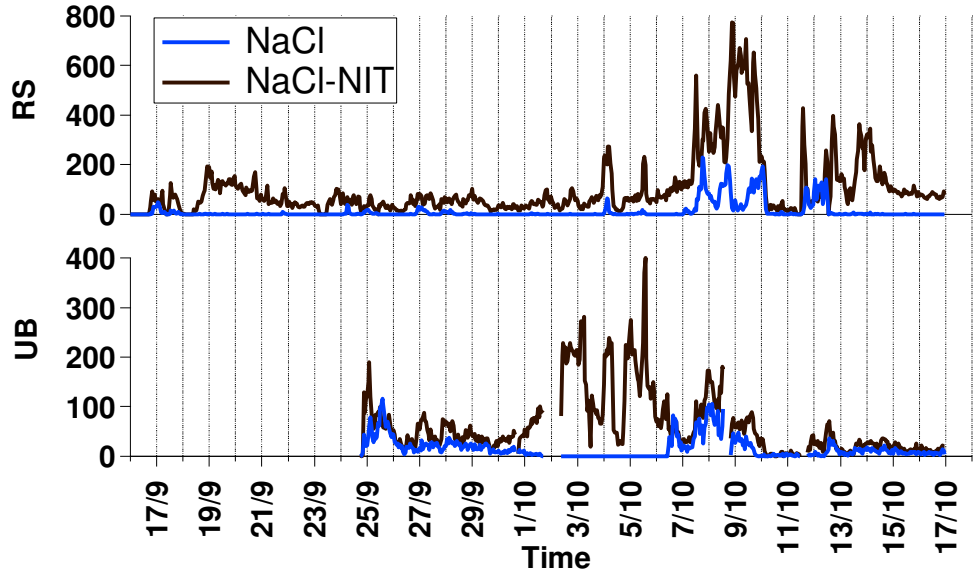
(a)


LRT-SUL
LRT-NIT
Loc-NIT
RAIN
RAIN
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

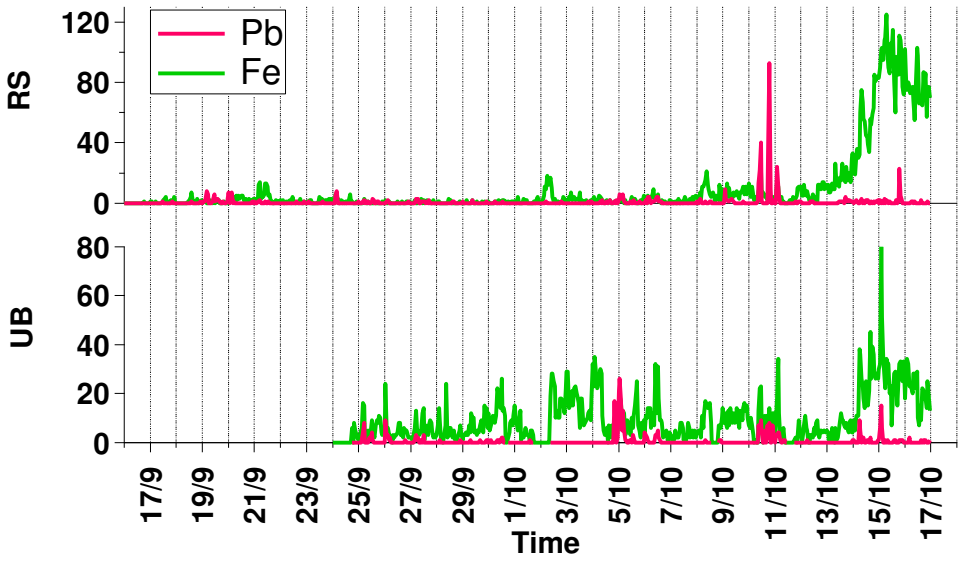
(b)


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

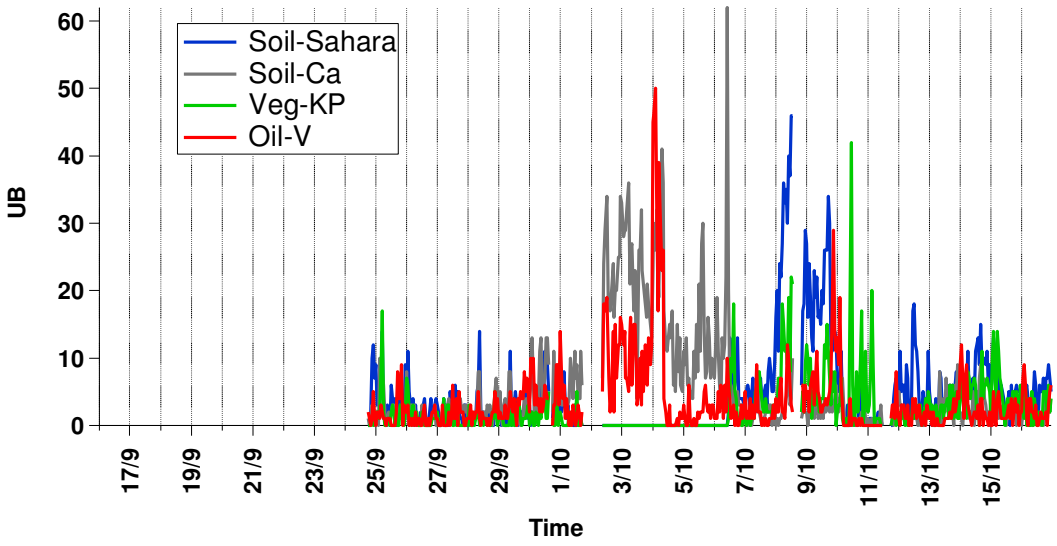
(c)


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

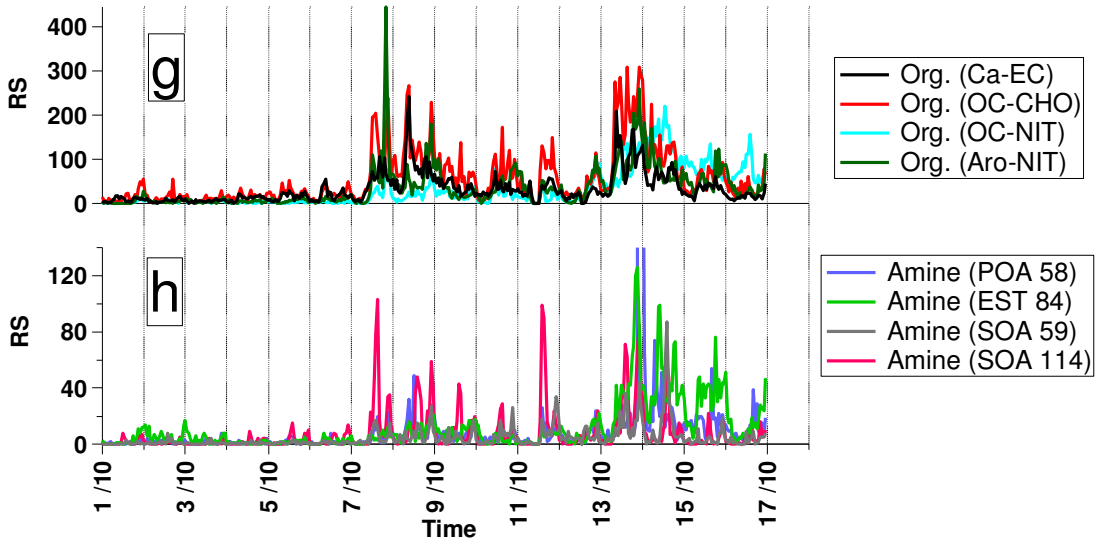
(d)


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)

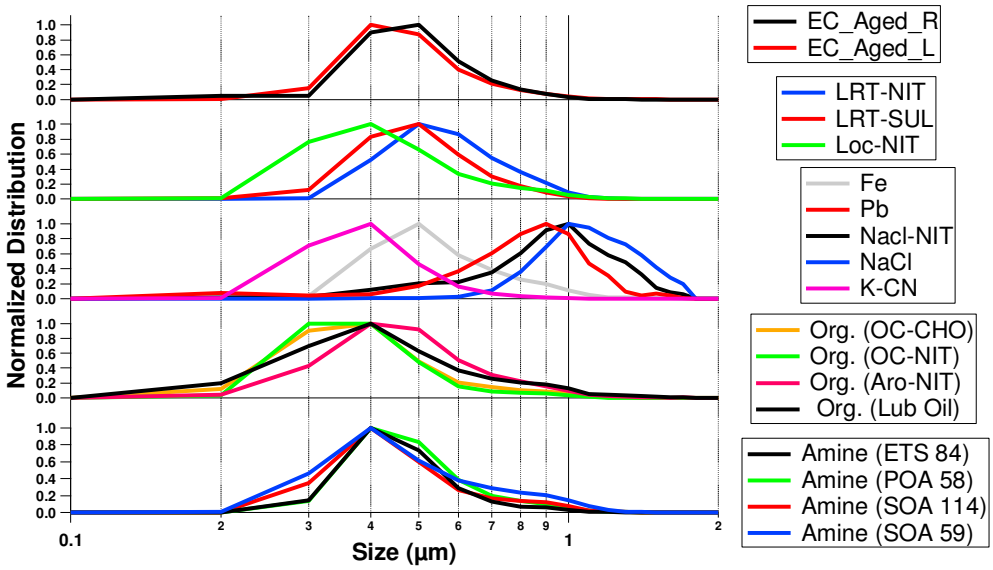

Soil-Sahara
Soil-Ca
Veg-KP
Oil-V
UB
60
50
40
30
20
10
0
17/9
19/9
21/9
23/9
25/9
27/9
29/9
1/10
3/10
5/10
7/10
9/10
11/10
13/10
15/10
Time

(f)

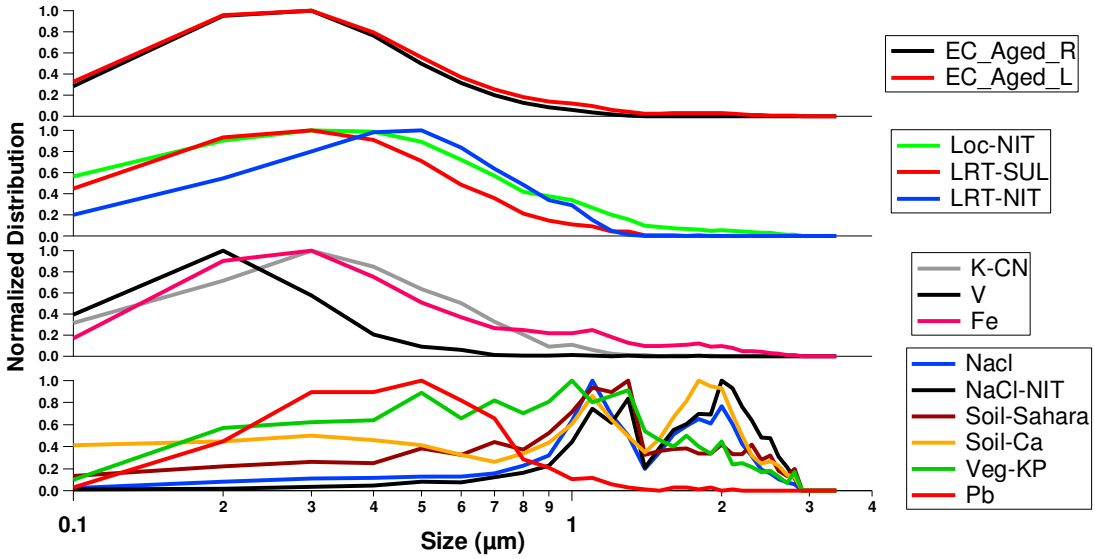


(g, h)

Figure SI 1. Temporal trends of ATOFMS particle types

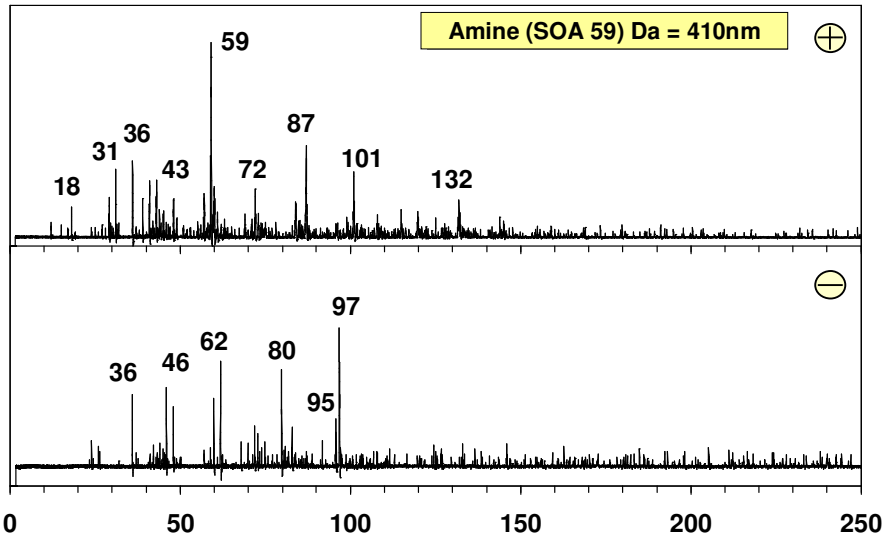


(a)

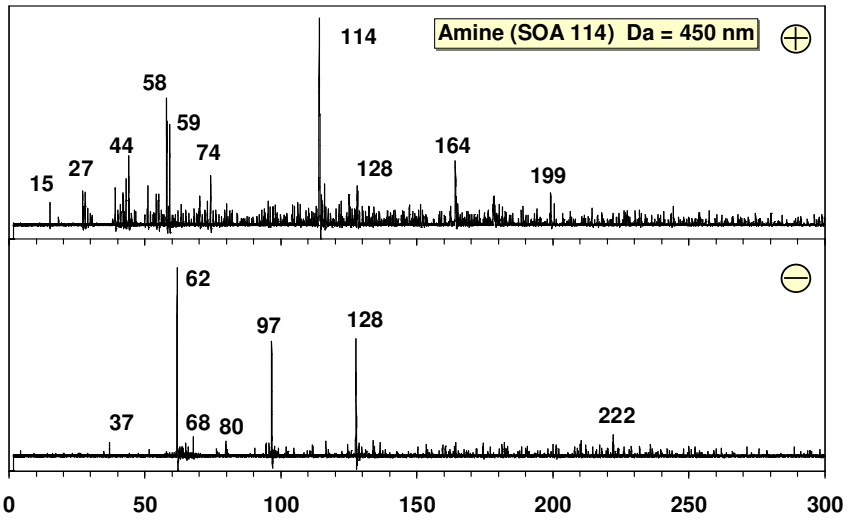


(b)

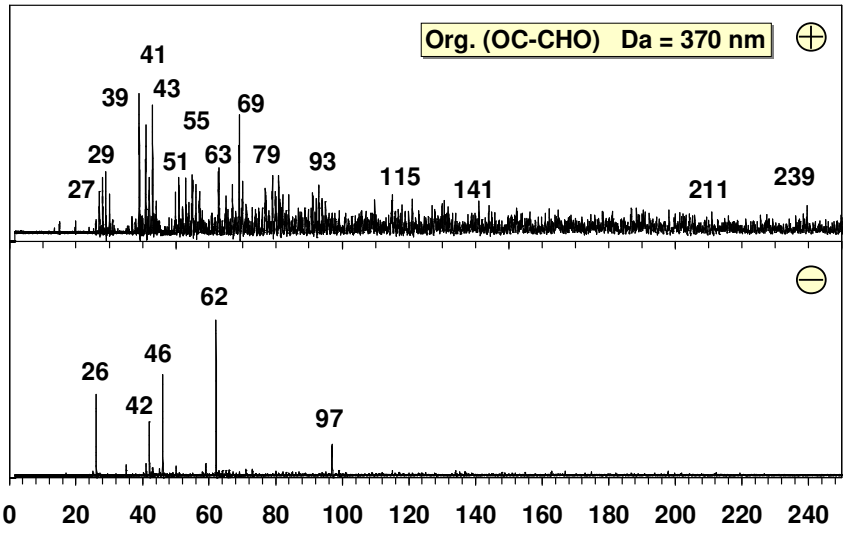
SI 2. Aerodynamic size ATOFMS modes for ATOFMS at RS (a) and UB (b)



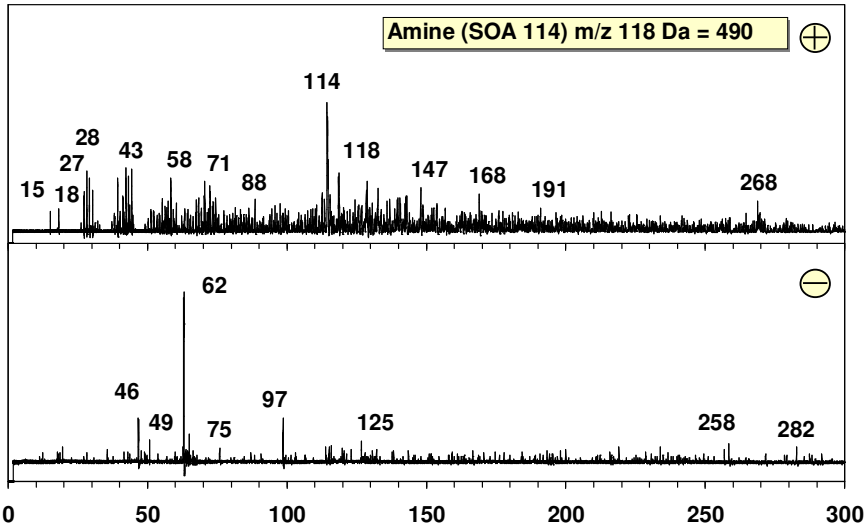
(a) Amine (SOA 59)



(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