Table 1: Limits of detection (LOD),ng (fmolm^{-3}), of single amino compounds in aerosol samples and average concentration in the blank samples, ng (fmolm^{-3}).

	Background filters		Slotted filters	
	LOD	Blank samples	LOD	Blank samples
Phe	10.7 (5.6)	23.5 (12.3)	21.0 (10.7)	43.8 (2.2)
Thr	1.8 (1.3)	15.6 (11.3)	14.0 (9.8)	29.1 (2.1)
Leu	5.6 (3.7)	24.4 (16.0)	13.0 (8.3)	35.8 (6.7)
Ile	4.6 (3.0)	12.5 (8.2)	11 (7.0)	17 (3.9)
Met	0.4 (0.2)	1.5 (0.8)	0.5 (0.2)	1.5 (0.3)
Tyr	5.1 (2.4)	10.7 (5.1)	18.0 (8.2)	27.9 (3.8)
Val	6.9 (5.2)	24.0 (17.9)	16.0 (11.6)	30.9 (12.7)
3-Hyp	2.8 (1.8)	18.8 (12.3)	6.0 (3.8)	2.7 (0.1)
Pro	2.5 (1.9)	35.3 (26.4)	6.0 (4.3)	38.7 (20.9)
4-Hyp	2.5 (1.6)	1.3 (0.9)	0.8 (0.5)	1.4 (0.1)
Ala	4.2 (4.0)	35.4 (34.2)	2.0 (1.9)	24.7 (7.6)
Glu	3.6 (2.1)	2.6 (1.5)	9.0 (5.1)	24.0 (1.9)
Gln	0.1 (0.1)	4.7 (2.8)	4.0 (2.3)	8.5 (0.7)
Ser	2.7 (2.2)	76.5 (62.7)	$8\cdot10^{1}$ ($6\cdot10^{1}$)	$9\cdot10^{1}$ ($5\cdot10^{1}$)
Asn	5.4 (3.5)	14.8 (9.6)	8.0 (5.0)	12.9 (3.9)
Asp	$4\cdot10^{1}$ ($2\cdot10^{1}$)	$1\cdot10^{1}$ ($7\cdot10^{1}$)	$7.2\cdot10^{2}$ ($4.5\cdot10^{2}$)	$2.85\cdot10^{3}$ ($2.7\cdot10^{1}$)
Cys	16 (11)	34 (25)	5.0 (3.4)	5.7 (0.7)
Gly	$1.2\cdot10^{2}$ ($1.4\cdot10^{2}$)	$7\cdot10^{1}$ ($8\cdot10^{1}$)	$8\cdot10^{1}$ ($8\cdot10^{1}$)	$6\cdot10^{1}$ ($2\cdot10^{1}$)
MetSO	1.5 (0.7)	0.9 (0.5)	0.7 (0.4)	0.54 (0.3)
$MetSO_2$	0.8 (0.3)	0.4 (0.2)	0.2 (0.1)	0.19 (0.09)

Table 2: Amino acid concentration ranges in the single stages of the completely analyzed samples (fmol m^{-3}).

	Aerosol size fractions (µm)					
	10-7.2	7.2-3.0	3.0-1.5	1.5-0.95	0.95-0.49	<0.49
Phe	N.D.-44	N.D.-27	N.D.-31	<LOD	N.D.-18	N.D.-49
Thr	N.D.-44	N.D.-29	N.D.-36	<LOD	N.D.-20	3-52
Leu	N.D.-32	N.D.-20	N.D.-21	<LOD	N.D.-37	N.D.-37
Ile	N.D.-30	N.D.-16	N.D.-17	<LOD	N.D.-31	N.D.-35
Met	N.D.-1.96	N.D.-1.49	N.D.-1.60	<LOD	N.D.-4.79	N.D.-2.79
Tyr	N.D.-23	N.D.-13	N.D.-14	<LOD	N.D.-30	N.D.-40
Val	N.D.-49	N.D.-25	N.D.-27	<LOD	N.D.-49	N.D.-78
Pro	N.D.-30	N.D.-19	N.D.-18	<LOD	N.D.-40	23-72
3-Hyp	<LOD	<LOD	<LOD	<LOD	<LOD	N.D.-81.8
4-Hyp	<LOD	<LOD	<LOD	<LOD	<LOD	N.D.-3.7
Ala	N.D.-99	N.D.-52	N.D.-66	<LOD	N.D.-144	28-245
Glu	N.D.-24	N.D.-45	N.D.-21	<LOD	N.D.-37	N.D.-55
Gln	N.D.-36.6	N.D.-125.7	N.D.-25.4	N.D.-3.0	N.D.-14.0	0.26-37.22
Ser	N.D.-$3.4\cdot10^{2}$	N.D.-$1.9\cdot10^{2}$	N.D.-$2.0\cdot10^{2}$	<LOD	N.D.-$4.5\cdot10^{2}$	104-611
Asn	<LOD	<LOD	<LOD	<LOD	N.D.-13	N.D.-63
Asp	<LOD	N.D.-77	N.D.-56	N.D.-69	N.D.-165	N.D.-275
Cys	<LOD	<LOD	<LOD	<LOD	<LOD	N.D.-32
Gly	N.D.-$3.2\cdot10^{2}$	N.D.-$1.1\cdot10^{2}$	N.D.-$1.2\cdot10^{2}$	N.D.-$1.1\cdot10^{2}$	N.D.-$6.1\cdot10^{2}$	N.D.-$1.25\cdot10^{3}$
MetSO	<LOD	<LOD	N.D-1.4	<LOD	N.D-3.6	N.D.-4.7
Σ FAAs	N.D.-$2.2\cdot10^{2}$	N.D.-$1.3\cdot10^{2}$	N.D.-$1.1\cdot10^{2}$	N.D.-$3\cdot10^{1}$	N.D.-$3.0\cdot10^{2}$	$1.6\cdot10^{2}$-$3.03\cdot10^{3}$