

Final Report

EASA 2014.C15 CAQ / 2015.LVP.64 CAQ II

Appendix A

Sample Volume Calculation

EASA 2014.C15 CAQ:	60	measurement flights (main study)	page	002 - 123
2015.LVP.64 CAQ II:	8	measurement flights (B787)	page	124 - 137

Remarks:

1. Including additional test flights on Condor Boeing 757-300 after reported smell (flight 37 a).
2. B787 measurement solely in the cabin on flights #05 and #06.

Cycle #01 Measurement flight #01				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-PUI									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-01-K-01		10	SG-10	K	PU/Filter	12:22	12:44	0	22	220	0,220		
Organophosphates	t/o climb		F-EA-OPC-01-K-02		10	SG-10	K	PU/Filter	12:46	13:36	0	50	500	0,5000		
Organophosphates	complete flight		F-EA-OPC-01-L-01		1	SG-5100	L	PU/Filter	12:20	22:30	0	610	610	0,6100		
Organophosphates	descent / landing		F-EA-OPC-01-K-03		10	SG-10	K	PU/Filter	21:50	22:29	0	39	390	0,3900		
Aldehydes	taxi	pump failure	F-EA-ALD-01-K-01		0,3	SG 350	K	DNPH	so sample	no sample	0	0				
Aldehydes	t/o climb		F-EA-ALD-01-K-02		0,3	SG 350	K	DNPH	13:01	13:38	0	37	11,1	0,0111		
Aldehydes	complete flight		F-EA-ALD-01-L-01		0,3	SG 350	L	DNPH	13:08	22:30	0	562	169	0,1686		
Aldehydes	descent / landing		F-EA-ALD-01-K-03		0,3	SG 350	K	DNPH	21:51	22:29	0	38	11,4	0,0114		
VOC	blank		F-EA-VOC-01-blank_01	XXIII/b												
VOC	taxi		F-EA-VOC-01-TC-01a	005	0,1	SG 350	Tenax	Tenax TA	12:33	12:45	0	12	1,2	0,0012		
VOC	taxi		F-EA-VOC-01-TC-01b	005b	0,1	SG 350	Tenax	Tenax TA	12:33	12:45	0	12	1,2	0,0012		
VOC	t/o climb		F-EA-VOC-01-TC-02a	007	0,1	SG 350	Tenax	Tenax TA	12:50	13:37	0	47	4,7	0,0047		
VOC	t/o climb		F-EA-VOC-01-TC-02b	007b	0,1	SG 350	Tenax	Tenax TA	12:50	13:37	0	47	4,7	0,0047		
VOC	descent / landing		F-EA-VOC-01-TC-03a	009	0,1	SG 350	Tenax	Tenax TA	21:53	22:30	0	37	3,7	0,0037		
VOC	descent / landing		F-EA-VOC-01-TC-03b	009b	0,1	SG 350	Tenax	Tenax TA	21:53	22:30	0	37	3,7	0,0037		

Cycle #01 Measurement flight #01				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-PUI										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-01-K-01		10	SG-10	K	PU/Filter	12:23	12:42	0	19	190	0,190		
Organophosphates	t/o climb		C-EA-OPC-01-K-02		10	SG-10	K	PU/Filter	12:42	13:22	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-01-L-01		1	SG-5100	L	PU/Filter	12:23	22:26	0	603	603	0,6030		
Organophosphates	descent / landing		C-EA-OPC-01-K-03		10	SG-10	K	PU/Filter	21:48	22:26	0	38	380	0,3800		
Aldehydes	taxi		C-EA-ALD-01-K-01		0,3	SG 350	K	DNPH	12:23	12:42	0	19	5,7	0,0057		
Aldehydes	t/o climb		C-EA-ALD-01-K-02		0,3	SG 350	K	DNPH	12:42	13:22	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-01-L-01		0,3	SG 350	L	DNPH	12:23	22:26	0	603	181	0,1809		
Aldehydes	descent / landing		C-EA-ALD-01-K-03		0,3	SG 350	K	DNPH	21:48	22:26	0	38	11,4	0,0114		
VOC	blank		C-EA-VOC-01-blank_01	23/23b												
VOC	taxi		C-EA-VOC-01-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	12:23	12:42	0	19	1,9	0,0019		
VOC	taxi		C-EA-VOC-01-TC-01b	VIIIb	0,1	SG 350	Tenax	Tenax TA	12:23	12:42	0	19	1,9	0,0019		
VOC	t/o climb		C-EA-VOC-01-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	12:42	13:22	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-01-TC-02b	IXb	0,1	SG 350	Tenax	Tenax TA	12:42	13:22	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-01-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	21:48	22:26	0	38	3,8	0,0038		
VOC	descent / landing		C-EA-VOC-01-TC-03b	XIb	0,1	SG 350	Tenax	Tenax TA	21:48	22:26	0	38	3,8	0,0038		

Cycle #01			Measurement flight #02			EASA CAQ Campaign 2015-2016						Return flight				
Project	EASA Study															
Flight route	PUI-FRA										Date:					
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	sample volume [m³]		
Organophosphates	taxi + t/o climb		F-EA-OPC-01-K-04		10	SG-10	K	PU/Filter	01:52	02:37	0	45	450	0,450		
Organophosphates	t/o climb	combined with taxi	F-EA-OPC-01-K-05	no sample	10	SG-10	K	PU/Filter	no sample	no sample						
Organophosphates	complete flight		F-EA-OPC-01-L-02		1	SG-5100	L	PU/Filter	01:52	11:17	0	565	565	0,5650		
Organophosphates	descent / landing		F-EA-OPC-01-K-06		10	SG-10	K	PU/Filter	10:35	11:17	0	42	420	0,4200		
Aldehydes	taxi + t/o climb		F-EA-ALD-01-K-04		0,3	SG 350	K	DNPH	01:52	02:37	0	45	13,5	0,0135		
Aldehydes	t/o climb	combined with taxi	F-EA-ALD-01-K-05	no sample	0,3	SG 350	K	DNPH	no sample	no sample						
Aldehydes	complete flight		F-EA-ALD-01-L-02		0,3	SG 350	L	DNPH	01:52	10:30	0	512	154	0,1536		
Aldehydes	descent / landing		F-EA-ALD-01-K-06		0,3	SG 350	K	DNPH	10:35	11:17	0	42	12,6	0,0126		
VOC	blank		F-EA-VOC-01-blank_02	XIII												
VOC	taxi + t/o climb		F-EA-VOC-01-TF-04a	XIX	0,1	SG 350	Tenax	Tenax TA	01:52	02:37	0	45	4,5	0,0045		
VOC	taxi + t/o climb		F-EA-VOC-01-TF-04b	XIXb	0,1	SG 350	Tenax	Tenax TA	01:52	02:37	0	45	4,5	0,0045		
VOC	t/o climb	combined with taxi	F-EA-VOC-01-TF-05a	XXII	0,1	SG 350	Tenax	Tenax TA	no sample	no sample						
VOC	t/o climb	combined with taxi	F-EA-VOC-01-TF-05b	XXIIb	0,1	SG 350	Tenax	Tenax TA	no sample	no sample						
VOC	descent / landing		F-EA-VOC-01-TF-06a	I	0,1	SG 350	Tenax	Tenax TA	10:35	11:17	0	42	4,2	0,0042		
VOC	descent / landing		F-EA-VOC-01-TF-06b	Ib	0,1	SG 350	Tenax	Tenax TA	10:35	11:17	0	42	4,2	0,0042		

Cycle #01			Measurement flight #02		EASA CAQ Campaign 2015-2016							Return flight				
Project	EASA Study															
Flight route	PUI-FRA										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-01-K-04		10	SG-10	K	PU/Filter	01:52	02:37	0	45	450	0,450		
Organophosphates	t/o climb	combined with taxi	C-EA-OPC-01-K-05		10	SG-10	K	PU/Filter	no sample	no sample	0					
Organophosphates	complete flight		C-EA-OPC-01-L-02		1	SG-5100	L	PU/Filter	01:52	11:16	0	564	564	0,5640		
Organophosphates	descent / landing		C-EA-OPC-01-K-06		10	SG-10	K	PU/Filter	10:35	11:16	0	41	410	0,4100		
Aldehydes	taxi + t/o climb		C-EA-ALD-01-K-04		0,3	SG 350	K	DNPH	01:52	02:37	0	45	13,5	0,0135		
Aldehydes	t/o climb	combined with taxi	C-EA-ALD-01-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0					
Aldehydes	complete flight		C-EA-ALD-01-L-02		0,3	SG 350	L	DNPH	01:52	11:16	0	564	169	0,1692		
Aldehydes	descent / landing		C-EA-ALD-01-K-06		0,3	SG 350	K	DNPH	10:35	11:16	0	41	12,3	0,0123		
VOC	blank		C-EA-VOC-01-blank_02	23/23b												
VOC	cruise	instead of t/o climb	C-EA-VOC-01-TC-04a	XIV	0,1	SG 350	Tenax	Tenax TA	02:37	03:07	0	30	3,0	0,0030		
VOC	cruise	instead of t/o climb	C-EA-VOC-01-TC-04b	XIVb	0,1	SG 350	Tenax	Tenax TA	02:37	03:07	0	30	3,0	0,0030		
VOC	t/o climb	no sample pump failure	C-EA-VOC-01-TC-05a	XV	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0					
VOC	t/o climb	no sample pump failure	C-EA-VOC-01-TC-05b	XVb	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0					
VOC	descent / landing		C-EA-VOC-01-TC-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	10:35	11:16	0	41	4,1	0,0041		
VOC	descent / landing		C-EA-VOC-01-TC-06b	XVIIIb	0,1	SG 350	Tenax	Tenax TA	10:35	11:16	0	41	4,1	0,0041		

Cycle #02 Measurement flight #03				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-02-K-01		10	SG-10	K	PU/Filter	12:33	12:49	0	16	160	0,160	
Organophosphates	t/o climb		F-EA-OPC-02-K-02		10	SG-10	K	PU/Filter	12:49	13:32	0	43	430	0,4300	
Organophosphates	complete flight		F-EA-OPC-02-L-01		1	SG-5100	L	PU/Filter	12:32	22:25	0	593	593	0,5930	
Organophosphates	descent / landing		F-EA-OPC-02-K-03		10	SG-10	K	PU/Filter	21:53	22:24	0	31	310	0,3100	
Aldehydes	taxi		F-EA-ALD-02-K-01		0,3	SG 350	K	DNPH	12:33	12:49	0	16	4,8	0,0048	
Aldehydes	t/o climb		F-EA-ALD-02-K-02		0,3	SG 350	K	DNPH	12:49	13:32	0	43	12,9	0,0129	
Aldehydes	complete flight		F-EA-ALD-02-L-01		0,3	SG 350	L	DNPH	12:32	22:25	0	593	178	0,1779	
Aldehydes	descent / landing		F-EA-ALD-02-K-03		0,3	SG 350	K	DNPH	21:53	22:24	0	31	9,3	0,0093	
VOC	blank		F-EA-VOC-02-blank_01												
VOC	taxi		F-EA-VOC-02-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	12:33	12:50	0	17	1,7	0,0017	
VOC	taxi		F-EA-VOC-02-TC-01b	VIIIb	0,1	SG 350	Tenax	Tenax TA	12:33	12:50	0	17	1,7	0,0017	
VOC	t/o climb		F-EA-VOC-02-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	12:50	13:31	0	41	4,1	0,0041	
VOC	t/o climb		F-EA-VOC-02-TC-02b	IXb	0,1	SG 350	Tenax	Tenax TA	12:50	13:31	0	41	4,1	0,0041	
VOC	descent / landing		F-EA-VOC-02-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	21:53	22:24	0	31	3,1	0,0031	
VOC	descent / landing		F-EA-VOC-02-TC-03b	XIb	0,1	SG 350	Tenax	Tenax TA	21:53	22:24	0	31	3,1	0,0031	

Cycle #02				Measurement flight #03				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project		EASA Study																	
Flight route		FRA-PUI										Date:							
Sampling point		Cabin										Sampler:							
Aircraft		Boing 767-300																	
Registration										UTC		UTC							
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]					
Organophosphates	taxi		C-EA-OPC-02-K-01		10	SG-10	K	PU/Filter	12:46	12:51	0	5	50	0,050					
Organophosphates	t/o climb		C-EA-OPC-02-K-02		10	SG-10	K	PU/Filter	12:53	13:26	0	33	330	0,3300					
Organophosphates	complete flight		C-EA-OPC-02-L-01		1	SG-5100	L	PU/Filter	12:46	22:23	0	577	577	0,5770					
Organophosphates	descent / landing		C-EA-OPC-02-K-03		10	SG-10	K	PU/Filter	21:54	22:23	0	29	290	0,2900					
Aldehydes	taxi		C-EA-ALD-02-K-01		0,3	SG 350	K	DNPH	12:46	12:51	0	5	1,5	0,0015					
Aldehydes	t/o climb		C-EA-ALD-02-K-02		0,3	SG 350	K	DNPH	12:53	13:26	0	33	9,9	0,0099					
Aldehydes	complete flight		C-EA-ALD-02-L-01		0,3	SG 350	L	DNPH	12:48	22:23	0	577	173	0,1731					
Aldehydes	descent / landing		C-EA-ALD-02-K-03		0,3	SG 350	K	DNPH	21:54	22:23	0	29	8,7	0,0087					
VOC	blank		C-EA-VOC-02-blank_01																
VOC	taxi		C-EA-VOC-02-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	12:46	12:51	0	5	0,5	0,0005					
VOC	taxi		C-EA-VOC-02-TC-01b	2b	0,1	SG 350	Tenax	Tenax TA	12:46	12:51	0	5	0,5	0,0005					
VOC	t/o climb		C-EA-VOC-02-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	12:53	13:26	0	33	3,3	0,0033					
VOC	t/o climb		C-EA-VOC-02-TC-02b	3b	0,1	SG 350	Tenax	Tenax TA	12:53	13:26	0	33	3,3	0,0033					
VOC	descent / landing		C-EA-VOC-02-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	21:54	22:23	0	29	2,9	0,0029					
VOC	descent / landing		C-EA-VOC-02-TC-03b	5b	0,1	SG 350	Tenax	Tenax TA	21:54	22:23	0	29	2,9	0,0029					

Cycle #02 Measurement flight #04				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	PUI-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-02-K-04		10	SG-10	K	PU/Filter	01:36	02:07	0	31	310	0,310		
Organophosphates	t/o climb		F-EA-OPC-02-K-05		10	SG-10	K	PU/Filter	02:08	02:54	0	46	460	0,4600		
Organophosphates	complete flight		F-EA-OPC-02-L-02		1	SG-5100	L	PU/Filter	01:34	10:34	0	540	540	0,5400		
Organophosphates	descent / landing		F-EA-OPC-02-K-06		10	SG-10	K	PU/Filter	09:45	10:34	0	49	490	0,4900		
Aldehydes	taxi		F-EA-ALD-02-K-04		0,3	SG 350	K	DNPH	01:36	02:07	0	31	9,3	0,0093		
Aldehydes	t/o climb		F-EA-ALD-02-K-05		0,3	SG 350	K	DNPH	02:08	02:54	0	46	13,8	0,0138		
Aldehydes	complete flight		F-EA-ALD-02-L-02		0,3	SG 350	L	DNPH	01:34	10:34	0	540	162	0,1620		
Aldehydes	descent / landing		F-EA-ALD-02-K-06		0,3	SG 350	K	DNPH	09:46	10:34	0	48	14,4	0,0144		
VOC	blank		F-EA-VOC-02-blank_02													
VOC	taxi		F-EA-VOC-02-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	01:36	02:07	0	31	3,1	0,0031		
VOC	taxi		F-EA-VOC-02-TF-04b	XIVb	0,1	SG 350	Tenax	Tenax TA	01:36	02:07	0	31	3,1	0,0031		
VOC	t/o climb		F-EA-VOC-02-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	02:08	02:49	0	41	4,1	0,0041		
VOC	t/o climb		F-EA-VOC-02-TF-05b	XVb	0,1	SG 350	Tenax	Tenax TA	02:08	02:49	0	41	4,1	0,0041		
VOC	descent / landing		F-EA-VOC-02-TF-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	09:47	10:34	0	47	4,7	0,0047		
VOC	descent / landing		F-EA-VOC-02-TF-06b	XVIIIb	0,1	SG 350	Tenax	Tenax TA	09:47	10:34	0	47	4,7	0,0047		

Cycle #02 Measurement flight #04				Return flight							Return flight					
Project	EASA Study															
Flight route	PUI-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-02-K-04		10	SG-10	K	PU/Filter	01:30	02:10	0	40	400	0,400		
Organophosphates	t/o climb		C-EA-OPC-02-K-05		10	SG-10	K	PU/Filter	02:10	02:50	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-02-L-02		1	SG-5100	L	PU/Filter	01:30	10:33	0	543	543	0,5430		
Organophosphates	descent / landing		C-EA-OPC-02-K-06		10	SG-10	K	PU/Filter	09:45	10:33	0	48	480	0,4800		
Aldehydes	taxi		C-EA-ALD-02-K-04		0,3	SG 350	K	DNPH	01:30	02:10	0	40	12,0	0,0120		
Aldehydes	t/o climb		C-EA-ALD-02-K-05		0,3	SG 350	K	DNPH	02:10	02:50	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-02-L-02		0,3	SG 350	L	DNPH	01:30	10:33	0	543	163	0,1629		
Aldehydes	descent / landing		C-EA-ALD-02-K-06		0,3	SG 350	K	DNPH	09:45	10:33	0	48	14,4	0,0144		
VOC	blank		C-EA-VOC-02-blank_02													
VOC	taxi		C-EA-VOC-02-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	01:30	02:10	0	40	4,0	0,0040		
VOC	taxi		C-EA-VOC-02-TC-04b	7b	0,1	SG 350	Tenax	Tenax TA	01:30	02:10	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-02-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	02:10	02:50	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-02-TC-05b	10b	0,1	SG 350	Tenax	Tenax TA	02:10	02:50	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-02-TC-06a	11	0,1	SG 350	Tenax	Tenax TA	09:45	10:33	0	48	4,8	0,0048		
VOC	descent / landing		C-EA-VOC-02-TC-06b	11b	0,1	SG 350	Tenax	Tenax TA	09:45	10:33	0	48	4,8	0,0048		

Cycle #03 Measurement flight #05				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-03-K-01		10	SG-10	K	PU/Filter	12:45	12:56	0	11	110	0,110	
Organophosphates	t/o climb		F-EA-OPC-03-K-02		10	SG-10	K	PU/Filter	12:56	13:43	0	47	470	0,4700	
Organophosphates	complete flight		F-EA-OPC-03-L-01		1	SG-5100	L	PU/Filter	12:45	22:53	0	608	608	0,6080	
Organophosphates	descent / landing		F-EA-OPC-03-K-03		10	SG-10	K	PU/Filter	22:10	22:53	0	43	430	0,4300	
Aldehydes	taxi		F-EA-ALD-03-K-01		0,3	SG 350	K	DNPH	12:45	12:56	0	11	3,3	0,0033	
Aldehydes	t/o climb		F-EA-ALD-03-K-02		0,3	SG 350	K	DNPH	12:56	13:43	0	47	14,1	0,0141	
Aldehydes	complete flight		F-EA-ALD-03-L-01		0,3	SG 350	L	DNPH	12:45	22:53	0	608	182	0,1824	
Aldehydes	descent / landing		F-EA-ALD-03-K-03		0,3	SG 350	K	DNPH	22:10	22:53	0	43	12,9	0,0129	
VOC	blank		F-EA-VOC-03-blank_01												
VOC	taxi		F-EA-VOC-03-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	12:45	12:56	0	11	1,1	0,0011	
VOC	taxi		F-EA-VOC-03-TC-01b	51b	0,1	SG 350	Tenax	Tenax TA	12:45	12:56	0	11	1,1	0,0011	
VOC	t/o climb		F-EA-VOC-03-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	12:56	13:43	0	47	4,7	0,0047	
VOC	t/o climb		F-EA-VOC-03-TC-02b	52b	0,1	SG 350	Tenax	Tenax TA	12:56	13:43	0	47	4,7	0,0047	
VOC	descent / landing		F-EA-VOC-03-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	22:10	22:53	0	43	4,3	0,0043	
VOC	descent / landing		F-EA-VOC-03-TC-03b	53b	0,1	SG 350	Tenax	Tenax TA	22:10	22:53	0	43	4,3	0,0043	

Cycle #03 Measurement flight #05				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-PUI										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Boing 767-300															
Registration										UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-03-K-01		10	SG-10	K	PU/Filter	12:47	12:55	0	8	80	0,080		
Organophosphates	t/o climb		C-EA-OPC-03-K-02		10	SG-10	K	PU/Filter	12:56	13:37	0	41	410	0,4100		
Organophosphates	complete flight	short sampling time	C-EA-OPC-03-L-01	battery failure	1	SG-5100	L	PU/Filter	12:47	20:32	0	465	465	0,4650		
Organophosphates	descent / landing		C-EA-OPC-03-K-03		10	SG-10	K	PU/Filter	22:10	22:52	0	42	420	0,4200		
Aldehydes	taxi		C-EA-ALD-03-K-01		0,3	SG 350	K	DNPH	12:47	12:55	0	8	2,4	0,0024		
Aldehydes	t/o climb		C-EA-ALD-03-K-02		0,3	SG 350	K	DNPH	12:56	13:37	0	41	12,3	0,0123		
Aldehydes	complete flight		C-EA-ALD-03-L-01		0,3	SG 350	L	DNPH	12:47	22:52	0	605	182	0,1815		
Aldehydes	descent / landing		C-EA-ALD-03-K-03		0,3	SG 350	K	DNPH	22:10	22:52	0	42	12,6	0,0126		
VOC	blank		C-EA-VOC-03-blank_01	69												
VOC	taxi		C-EA-VOC-03-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	12:47	12:55	0	8	0,8	0,0008		
VOC	taxi		C-EA-VOC-03-TC-01b	61b	0,1	SG 350	Tenax	Tenax TA	12:47	12:55	0	8	0,8	0,0008		
VOC	t/o climb		C-EA-VOC-03-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	12:56	13:37	0	41	4,1	0,0041		
VOC	t/o climb		C-EA-VOC-03-TC-02b	62b	0,1	SG 350	Tenax	Tenax TA	12:56	13:37	0	41	4,1	0,0041		
VOC	descent / landing		C-EA-VOC-03-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	22:10	22:52	0	42	4,2	0,0042		
VOC	descent / landing		C-EA-VOC-03-TC-03b	63b	0,1	SG 350	Tenax	Tenax TA	22:10	22:52	0	42	4,2	0,0042		

Cycle #03			Measurement flight #06			EASA CAQ Campaign 2015-2016					Return flight				
Project	EASA Study														
Flight route	PUI-FRA										Date:				
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi+ t/o climb		F-EA-OPC-03-K-04		10	SG-10	K	PU/Filter	01:50	02:28	0	38	380	0,380	
Organophosphates	t/o climb	combined with taxi	F-EA-OPC-03-K-05		10	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000	
Organophosphates	complete flight		F-EA-OPC-03-L-02		1	SG-5100	L	PU/Filter	01:50	10:47	0	537	537	0,5370	
Organophosphates	descent / landing		F-EA-OPC-03-K-06		10	SG-10	K	PU/Filter	10:05	10:47	0	42	420	0,4200	
Aldehydes	taxi+ t/o climb		F-EA-ALD-03-K-04		0,3	SG 350	K	DNPH	01:50	02:28	0	38	11,4	0,0114	
Aldehydes	t/o climb	combined with taxi	F-EA-ALD-03-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000	
Aldehydes	complete flight		F-EA-ALD-03-L-02		0,3	SG 350	L	DNPH	01:50	10:47	0	537	161	0,1611	
Aldehydes	descent / landing		F-EA-ALD-03-K-06		0,3	SG 350	K	DNPH	10:05	10:47	0	42	12,6	0,0126	
VOC	blank		F-EA-VOC-03-blank_02												
VOC	taxi+ t/o climb		F-EA-VOC-03-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	01:50	02:28	0	38	3,8	0,0038	
VOC	taxi+ t/o climb		F-EA-VOC-03-TF-04b	54b	0,1	SG 350	Tenax	Tenax TA	01:50	02:28	0	38	3,8	0,0038	
VOC	t/o climb	combined with taxi	F-EA-VOC-03-TF-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	t/o climb	combined with taxi	F-EA-VOC-03-TF-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	descent / landing		F-EA-VOC-03-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	10:05	10:47	0	42	4,2	0,0042	
VOC	descent / landing		F-EA-VOC-03-TF-06b	56b	0,1	SG 350	Tenax	Tenax TA	10:05	10:47	0	42	4,2	0,0042	

Cycle #03 Measurement flight #06				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	PUI-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi+ t/o climb		C-EA-OPC-03-K-04		10	SG-10	K	PU/Filter	01:41	02:21	0	40	400	0,400		
Organophosphates	t/o climb	combined with taxi	C-EA-OPC-03-K-05		10	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		C-EA-OPC-03-L-02		1	SG-5100	L	PU/Filter	01:41	10:47	0	546	546	0,5460		
Organophosphates	descent / landing		C-EA-OPC-03-K-06		10	SG-10	K	PU/Filter	10:05	10:47	0	42	420	0,4200		
Aldehydes	taxi+ t/o climb		C-EA-ALD-03-K-04		0,3	SG 350	K	DNPH	01:41	02:21	0	40	12,0	0,0120		
Aldehydes	t/o climb	combined with taxi	C-EA-ALD-03-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		C-EA-ALD-03-L-02		0,3	SG 350	L	DNPH	01:41	10:47	0	546	164	0,1638		
Aldehydes	descent / landing		C-EA-ALD-03-K-06		0,3	SG 350	K	DNPH	10:05	10:47	0	42	12,6	0,0126		
VOC	blank		C-EA-VOC-03-blank_02													
VOC	taxi+ t/o climb		C-EA-VOC-03-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	01:41	02:21	0	40	4,0	0,0040		
VOC	taxi+ t/o climb		C-EA-VOC-03-TC-04b	64b	0,1	SG 350	Tenax	Tenax TA	01:41	02:21	0	40	4,0	0,0040		
VOC	t/o climb	combined with taxi	C-EA-VOC-03-TC-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	t/o climb	combined with taxi	C-EA-VOC-03-TC-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing		C-EA-VOC-03-TC-06a	65	0,1	SG 350	Tenax	Tenax TA	10:05	10:47	0	42	4,2	0,0042		
VOC	descent / landing		C-EA-VOC-03-TC-06b	65b	0,1	SG 350	Tenax	Tenax TA	10:05	10:47	0	42	4,2	0,0042		

Cycle #04 Measurement flight #07				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-04-K-01		10	SG-10	K	PU/Filter	12:31	12:52	0	21	210	0,210	
Organophosphates	t/o climb		F-EA-OPC-04-K-02		10	SG-10	K	PU/Filter	12:53	13:31	0	38	380	0,3800	
Organophosphates	complete flight		F-EA-OPC-04-L-01		1	SG-5100	L	PU/Filter	12:32	22:26	0	594	594	0,5940	
Organophosphates	descent / landing		F-EA-OPC-04-K-03		10	SG-10	K	PU/Filter	21:46	22:26	0	40	400	0,4000	
Aldehydes	taxi		F-EA-ALD-04-K-01		0,3	SG 350	K	DNPH	12:31	12:52	0	21	6,3	0,0063	
Aldehydes	t/o climb		F-EA-ALD-04-K-02		0,3	SG 350	K	DNPH	12:53	13:31	0	38	11,4	0,0114	
Aldehydes	complete flight		F-EA-ALD-04-L-01		0,3	SG 350	L	DNPH	12:32	22:26	0	594	178	0,1782	
Aldehydes	descent / landing		F-EA-ALD-04-K-03		0,3	SG 350	K	DNPH	21:46	22:26	0	40	12	0,0120	
VOC	blank		F-EA-VOC-04-blank_01												
VOC	taxi		F-EA-VOC-04-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	12:32	12:52	0	20	2,0	0,0020	
VOC	taxi		F-EA-VOC-04-TC-01b	VIIIb	0,1	SG 350	Tenax	Tenax TA	12:32	12:52	0	20	2,0	0,0020	
VOC	t/o climb		F-EA-VOC-04-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	12:52	13:31	0	39	3,9	0,0039	
VOC	t/o climb		F-EA-VOC-04-TC-02b	IXb	0,1	SG 350	Tenax	Tenax TA	12:52	13:31	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-04-TC-03a		0,1	SG 350	Tenax	Tenax TA	21:46	22:26	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-04-TC-03b		0,1	SG 350	Tenax	Tenax TA	21:46	22:26	0	40	4,0	0,0040	

Cycle #04 Measurement flight #07				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-04-K-01		10	SG-10	K	PU/Filter	12:26	12:54	0	28	280	0,280	
Organophosphates	t/o climb		C-EA-OPC-04-K-02		10	SG-10	K	PU/Filter	12:55	13:35	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-04-L-01		1	SG-5100	L	PU/Filter	12:26	22:26	0	600	600	0,6000	
Organophosphates	descent / landing		C-EA-OPC-04-K-03		10	SG-10	K	PU/Filter	21:43	22:26	0	43	430	0,4300	
Aldehydes	taxi		C-EA-ALD-04-K-01		0,3	SG 350	K	DNPH	12:26	12:54	0	28	8,4	0,0084	
Aldehydes	t/o climb		C-EA-ALD-04-K-02		0,3	SG 350	K	DNPH	12:55	13:35	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-04-L-01		0,3	SG 350	L	DNPH	12:26	22:26	0	600	180	0,1800	
Aldehydes	descent / landing		C-EA-ALD-04-K-03		0,3	SG 350	K	DNPH	21:43	22:26	0	43	12,9	0,0129	
VOC	blank		C-EA-VOC-04-blank_01												
VOC	taxi		C-EA-VOC-04-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	12:26	12:54	0	28	2,8	0,0028	
VOC	taxi		C-EA-VOC-04-TC-01b	2b	0,1	SG 350	Tenax	Tenax TA	12:26	12:54	0	28	2,8	0,0028	
VOC	t/o climb		C-EA-VOC-04-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	12:55	13:35	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-04-TC-02b	3b	0,1	SG 350	Tenax	Tenax TA	12:55	13:35	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-04-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	21:43	22:26	0	43	4,3	0,0043	
VOC	descent / landing		C-EA-VOC-04-TC-03b	5b	0,1	SG 350	Tenax	Tenax TA	21:43	22:26	0	43	4,3	0,0043	

Cycle #04 Measurement flight #08				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	PUI-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-04-K-04		10	SG-10	K	PU/Filter	01:28	01:57	0	29	290	0,290		
Organophosphates	t/o climb		F-EA-OPC-04-K-05		10	SG-10	K	PU/Filter	01:57	02:47	0	50	500	0,5000		
Organophosphates	complete flight		F-EA-OPC-04-L-02		1	SG-5100	L	PU/Filter	01:27	11:12	0	585	585	0,5850		
Organophosphates	descent / landing		F-EA-OPC-04-K-06		10	SG-10	K	PU/Filter	10:28	11:13	0	45	450	0,4500		
Aldehydes	taxi		F-EA-ALD-04-K-04		0,3	SG 350	K	DNPH	01:28	01:58	0	30	9,0	0,0090		
Aldehydes	t/o climb		F-EA-ALD-04-K-05		0,3	SG 350	K	DNPH	01:58	01:46	0	48	14,4	0,0144		
Aldehydes	complete flight		F-EA-ALD-04-L-02		0,3	SG 350	L	DNPH	01:27	11:12	0	585	176	0,1755		
Aldehydes	descent / landing		F-EA-ALD-04-K-06		0,3	SG 350	K	DNPH	10:28	11:13	0	45	13,5	0,0135		
VOC	blank		F-EA-VOC-04-blank_02													
VOC	taxi		F-EA-VOC-04-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	01:28	01:59	0	31	3,1	0,0031		
VOC	taxi		F-EA-VOC-04-TF-04b	XIVb	0,1	SG 350	Tenax	Tenax TA	01:28	01:59	0	31	3,1	0,0031		
VOC	t/o climb		F-EA-VOC-04-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	01:59	02:42	0	43	4,3	0,0043		
VOC	t/o climb		F-EA-VOC-04-TF-05b	XVb	0,1	SG 350	Tenax	Tenax TA	01:59	02:40	0	43	4,3	0,0043		
VOC	descent / landing		F-EA-VOC-04-TF-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	10:29	11:12	0	43	4,3	0,0043		
VOC	descent / landing		F-EA-VOC-04-TF-06b	XVIIIb	0,1	SG 350	Tenax	Tenax TA	10:29	11:12	0	43	4,3	0,0043		

Cycle #04 Measurement flight #08				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	PUI-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-04-K-04		10	SG-10	K	PU/Filter	01:26	01:57	0	31	310	0,310	
Organophosphates	t/o climb		C-EA-OPC-04-K-05		10	SG-10	K	PU/Filter	01:58	02:30	0	32	320	0,3200	
Organophosphates	complete flight		C-EA-OPC-04-L-02		1	SG-5100	L	PU/Filter	01:26	11:09	0	583	583	0,5830	
Organophosphates	descent / landing		C-EA-OPC-04-K-06		10	SG-10	K	PU/Filter	10:24	11:09	0	45	450	0,4500	
Aldehydes	taxi		C-EA-ALD-04-K-04		0,3	SG 350	K	DNPH	01:27	01:57	0	30	9,0	0,0090	
Aldehydes	t/o climb		C-EA-ALD-04-K-05		0,3	SG 350	K	DNPH	01:58	02:30	0	32	9,6	0,0096	
Aldehydes	complete flight	delayed start	C-EA-ALD-04-L-02		0,3	SG 350	L	DNPH	01:52	11:09	0	557	167	0,1671	
Aldehydes	descent / landing		C-EA-ALD-04-K-06		0,3	SG 350	K	DNPH	10:24	11:09	0	45	13,5	0,0135	
VOC	blank		C-EA-VOC-04-blank_02												
VOC	taxi		C-EA-VOC-04-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	01:26	01:57	0	31	3,1	0,0031	
VOC	taxi		C-EA-VOC-04-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	01:26	01:57	0	31	3,1	0,0031	
VOC	t/o climb		C-EA-VOC-04-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	01:58	02:30	0	32	3,2	0,0032	
VOC	t/o climb		C-EA-VOC-04-TC-05b	10 b	0,1	SG 350	Tenax	Tenax TA	01:58	02:30	0	32	3,2	0,0032	
VOC	descent / landing		C-EA-VOC-04-TC-06a	11	0,1	SG 350	Tenax	Tenax TA	10:24	11:09	0	45	4,5	0,0045	
VOC	descent / landing		C-EA-VOC-04-TC-06b	11 b	0,1	SG 350	Tenax	Tenax TA	10:24	11:09	0	45	4,5	0,0045	

Cycle #05 Measurement flight #09			EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-05-K-01		10	SG-10	K	PU/Filter	12:25	12:47	0	22	220	0,220	
Organophosphates	t/o climb		F-EA-OPC-05-K-02		10	SG-10	K	PU/Filter	12:48	13:28	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-05-L-01		1	SG-5100	L	PU/Filter	12:25	22:29	0	604	604	0,6040	
Organophosphates	descent / landing		F-EA-OPC-05-K-03		10	SG-10	K	PU/Filter	21:45	22:29	0	44	440	0,4400	
Aldehydes	taxi		F-EA-ALD-05-K-01		0,3	SG 350	K	DNPH	12:25	12:47	0	22	6,6	0,0066	
Aldehydes	t/o climb		F-EA-ALD-05-K-02		0,3	SG 350	K	DNPH	12:48	13:28	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-05-L-01		0,3	SG 350	L	DNPH	12:25	22:29	0	604	181	0,1812	
Aldehydes	descent / landing		F-EA-ALD-05-K-03		0,3	SG 350	K	DNPH	21:45	22:29	0	44	13,2	0,0132	
VOC	blank		F-EA-VOC-05-blank_01												
VOC	taxi		F-EA-VOC-05-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	12:25	12:47	0	22	2,2	0,0022	
VOC	taxi		F-EA-VOC-05-TC-01b	51b	0,1	SG 350	Tenax	Tenax TA	12:25	12:47	0	22	2,2	0,0022	
VOC	t/o climb		F-EA-VOC-05-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	12:48	13:28	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-05-TC-02b	52b	0,1	SG 350	Tenax	Tenax TA	12:48	13:28	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-05-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	21:45	22:29	0	44	4,4	0,0044	
VOC	descent / landing		F-EA-VOC-05-TC-03b	53b	0,1	SG 350	Tenax	Tenax TA	21:45	22:29	0	44	4,4	0,0044	

Cycle #05 Measurement flight #09				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-PUI									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-05-K-01		10	SG-10	K	PU/Filter	12:21	12:47	0	26	260	0,260	
Organophosphates	t/o climb		C-EA-OPC-05-K-02		10	SG-10	K	PU/Filter	12:51	13:31	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-05-L-01		1	SG-5100	L	PU/Filter	12:21	22:30	0	609	609	0,6090	
Organophosphates	descent / landing		C-EA-OPC-05-K-03		10	SG-10	K	PU/Filter	21:45	22:32	0	47	470	0,4700	
Aldehydes	taxi		C-EA-ALD-05-K-01		0,3	SG 350	K	DNPH	12:21	12:47	0	26	7,8	0,0078	
Aldehydes	t/o climb		C-EA-ALD-05-K-02		0,3	SG 350	K	DNPH	12:51	13:31	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-05-L-01		0,3	SG 350	L	DNPH	12:21	22:30	0	609	183	0,1827	
Aldehydes	descent / landing		C-EA-ALD-05-K-03		0,3	SG 350	K	DNPH	21:45	22:32	0	47	14,1	0,0141	
VOC	blank		C-EA-VOC-05-blank_01												
VOC	taxi		C-EA-VOC-05-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	12:21	12:47	0	26	2,6	0,0026	
VOC	taxi		C-EA-VOC-05-TC-01b	61b	0,1	SG 350	Tenax	Tenax TA	12:21	12:47	0	26	2,6	0,0026	
VOC	t/o climb		C-EA-VOC-05-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	12:51	13:31	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-05-TC-02b	62b	0,1	SG 350	Tenax	Tenax TA	12:51	13:31	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-05-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	21:45	22:32	0	47	4,7	0,0047	
VOC	descent / landing		C-EA-VOC-05-TC-03b	63b	0,1	SG 350	Tenax	Tenax TA	21:45	22:32	0	47	4,7	0,0047	

Cycle #05 Measurement flight #10			EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study														
Flight route	PUI-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-05-K-04		10	SG-10	K	PU/Filter	01:53	02:33	0	40	400	0,400	
Organophosphates	t/o climb	combined with taxi	F-EA-OPC-05-K-05		10	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000	
Organophosphates	complete flight		F-EA-OPC-05-L-02		1	SG-5100	L	PU/Filter	01:53	10:43	0	590	590	0,5900	
Organophosphates	descent / landing		F-EA-OPC-05-K-06		10	SG-10	K	PU/Filter	10:00	10:43	0	43	430	0,4300	
Aldehydes	taxi + t/o climb		F-EA-ALD-05-K-04		0,3	SG 350	K	DNPH	01:53	02:33	0	40	12,0	0,0120	
Aldehydes	t/o climb	combined with taxi	F-EA-ALD-05-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000	
Aldehydes	complete flight		F-EA-ALD-05-L-02		0,3	SG 350	L	DNPH	01:53	10:43	0	590	177	0,1770	
Aldehydes	descent / landing		F-EA-ALD-05-K-06		0,3	SG 350	K	DNPH	10:00	10:43	0	43	12,9	0,0129	
VOC	blank		F-EA-VOC-05-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-05-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	01:53	02:33	0	40	4,0	0,0040	
VOC	taxi + t/o climb		F-EA-VOC-05-TF-04b	54b	0,1	SG 350	Tenax	Tenax TA	01:53	02:33	0	40	4,0	0,0040	
VOC	t/o climb	combined with taxi	F-EA-VOC-05-TF-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	t/o climb	combined with taxi	F-EA-VOC-05-TF-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	descent / landing		F-EA-VOC-05-TF-06a	55	0,1	SG 350	Tenax	Tenax TA	10:00	10:43	0	43	4,3	0,0043	
VOC	descent / landing		F-EA-VOC-05-TF-06b	55b	0,1	SG 350	Tenax	Tenax TA	10:00	10:43	0	43	4,3	0,0043	

Cycle #05 Measurement flight #10				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	PUI-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-05-K-04		10	SG-10	K	PU/Filter	01:58	02:45	0	47	470	0,470		
Organophosphates	t/o climb	combined with taxi	C-EA-OPC-05-K-05		10	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		C-EA-OPC-05-L-02		1	SG-5100	L	PU/Filter	01:59	10:44	0	525	525	0,5250		
Organophosphates	descent / landing		C-EA-OPC-05-K-06		10	SG-10	K	PU/Filter	10:00	10:44	0	44	440	0,4400		
Aldehydes	taxi + t/o climb		C-EA-ALD-05-K-04		0,3	SG 350	K	DNPH	01:58	02:45	0	47	14,1	0,0141		
Aldehydes	t/o climb	combined with taxi	C-EA-ALD-05-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		C-EA-ALD-05-L-02		0,3	SG 350	L	DNPH	01:59	10:44	0	525	158	0,1575		
Aldehydes	descent / landing		C-EA-ALD-05-K-06		0,3	SG 350	K	DNPH	10:00	10:44	0	44	13,2	0,0132		
VOC	blank		C-EA-VOC-05-blank_02													
VOC	taxi + t/o climb		C-EA-VOC-05-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	01:58	02:45	0	47	4,7	0,0047		
VOC	taxi + t/o climb		C-EA-VOC-05-TC-04b	64b	0,1	SG 350	Tenax	Tenax TA	01:58	02:45	0	47	4,7	0,0047		
VOC	t/o climb	combined with taxi	C-EA-VOC-05-TC-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	t/o climb	combined with taxi	C-EA-VOC-05-TC-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing		C-EA-VOC-05-TC-06a	65	0,1	SG 350	Tenax	Tenax TA	10:00	10:44	0	44	4,4	0,0044		
VOC	descent / landing		C-EA-VOC-05-TC-06b	65b	0,1	SG 350	Tenax	Tenax TA	10:00	10:44	0	44	4,4	0,0044		

Cycle #06 Measurement flight #11				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-GIG									Date:					
Sampling point	Cockpit									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-06-K-01		10	SG-10	K	PU/Filter	20:01	20:39	0	38	380	0,380	
Organophosphates	t/o climb		F-EA-OPC-06-K-02		10	SG-10	K	PU/Filter	20:40	21:20	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-06-L-01		1	SG-5100	L	PU/Filter	20:12	07:31	0	679	679	0,6790	
Organophosphates	descent / landing		F-EA-OPC-06-K-03		10	SG-10	K	PU/Filter	06:18	07:24	0	66	660	0,6600	
Aldehydes	taxi		F-EA-ALD-06-K-01		0,3	SG 350	K	DNPH	20:01	20:39	0	38	11,4	0,0114	
Aldehydes	t/o climb		F-EA-ALD-06-K-02		0,3	SG 350	K	DNPH	20:40	21:18	0	38	11,4	0,0114	
Aldehydes	complete flight		F-EA-ALD-06-L-01		0,3	SG 350	L	DNPH	20:12	07:29	0	677	203	0,2031	
Aldehydes	descent / landing		F-EA-ALD-06-K-03		0,3	SG 350	K	DNPH	06:16	07:24	0	68	20,4	0,0204	
VOC	blank		F-EA-VOC-06-blank_01												
VOC	taxi		F-EA-VOC-06-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	20:02	20:39	0	37	3,7	0,0037	
VOC	taxi		F-EA-VOC-06-TC-01b	XIII b	0,1	SG 350	Tenax	Tenax TA	20:02	20:39	0	37	3,7	0,0037	
VOC	t/o climb		F-EA-VOC-06-TC-02a	IX b	0,1	SG 350	Tenax	Tenax TA	20:41	21:16	0	35	3,5	0,0035	
VOC	t/o climb		F-EA-VOC-06-TC-02b	IX b	0,1	SG 350	Tenax	Tenax TA	20:41	21:16	0	35	3,5	0,0035	
VOC	descent / landing		F-EA-VOC-06-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	06:42	07:22	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-06-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	06:42	07:22	0	40	4,0	0,0040	

Cycle #06 Measurement flight #11				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-GIG									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-06-K-01		10	SG-10	K	PU/Filter	20:06	20:39	0	33	330	0,330	
Organophosphates	t/o climb		C-EA-OPC-06-K-02		10	SG-10	K	PU/Filter	20:41	21:21	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-06-L-01		1	SG-5100	L	PU/Filter	20:06	07:35	0	689	689	0,6890	
Organophosphates	descent / landing		C-EA-OPC-06-K-03		10	SG-10	K	PU/Filter	06:15	07:39	0	84	840	0,8400	
Aldehydes	taxi		C-EA-ALD-06-K-01		0,3	SG 350	K	DNPH	20:06	20:39	0	33	9,9	0,0099	
Aldehydes	t/o climb		C-EA-ALD-06-K-02		0,3	SG 350	K	DNPH	20:41	21:21	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-06-L-01	Runtime 09:19 h due to transient pump shut down	0,3	SG 350	L	DNPH	20:06	07:35	0	559	168	0,1677	
Aldehydes	descent / landing		C-EA-ALD-06-K-03		0,3	SG 350	K	DNPH	06:15	07:39	0	84	25,2	0,0252	
VOC	blank		C-EA-VOC-06-blank_01	13											
VOC	taxi		C-EA-VOC-06-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	20:06	20:39	0	33	3,3	0,0033	
VOC	taxi		C-EA-VOC-06-TC-01b	2b	0,1	SG 350	Tenax	Tenax TA	20:06	20:39	0	33	3,3	0,0033	
VOC	t/o climb		C-EA-VOC-06-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	20:41	21:21	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-06-TC-02b	3b	0,1	SG 350	Tenax	Tenax TA	20:41	21:21	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-06-TC-03a	5b	0,1	SG 350	Tenax	Tenax TA	06:35	07:41	0	66	6,6	0,0066	
VOC	descent / landing		C-EA-VOC-06-TC-03b	5	0,1	SG 350	Tenax	Tenax TA	06:35	07:41	0	66	6,6	0,0066	

Cycle #06 Measurement flight #12				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	GIG-FRA									Date:					
Sampling point	Cockpit									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-06-K-04		10	SG-10	K	PU/Filter	01:33	01:56	0	23	230	0,230	
Organophosphates	t/o climb		F-EA-OPC-06-K-05		10	SG-10	K	PU/Filter	01:56	02:41	0	45	450	0,4500	
Organophosphates	complete flight		F-EA-OPC-06-L-02		1	SG-5100	L	PU/Filter	01:31	13:06	0	695	695	0,6950	
Organophosphates	descent / landing		F-EA-OPC-06-K-06		10	SG-10	K	PU/Filter	12:15	13:02	0	47	470	0,4700	
Aldehydes	taxi + t/o climb		F-EA-ALD-06-K-04		0,3	SG 350	K	DNPH	01:33	01:57	0	34	10,2	0,0102	
Aldehydes	t/o climb		F-EA-ALD-06-K-05		0,3	SG 350	K	DNPH	01:57	02:40	0	43	12,9	0,0129	
Aldehydes	complete flight		F-EA-ALD-06-L-02		0,3	SG 350	L	DNPH	01:32	13:07	0	695	209	0,2085	
Aldehydes	descent / landing		F-EA-ALD-06-K-06		0,3	SG 350	K	DNPH	12:16	13:04	0	48	14,4	0,0144	
VOC	blank		F-EA-VOC-06-blank_02	23											
VOC	taxi + t/o climb		F-EA-VOC-06-TF-04a	XIV A	0,1	SG 350	Tenax	Tenax TA	01:40	01:58	0	18	1,8	0,0018	
VOC	taxi + t/o climb		F-EA-VOC-06-TF-04b	XIV B	0,1	SG 350	Tenax	Tenax TA	01:40	01:58	0	18	1,8	0,0018	
VOC	t/o climb		F-EA-VOC-06-TF-05a	15 a	0,1	SG 350	Tenax	Tenax TA	01:59	02:38	0	39	3,9	0,0039	
VOC	t/o climb		F-EA-VOC-06-TF-05b	15 b	0,1	SG 350	Tenax	Tenax TA	01:59	02:38	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-06-TF-06a	18 a	0,1	SG 350	Tenax	Tenax TA	12:18	13:01	0	43	4,3	0,0043	
VOC	descent / landing		F-EA-VOC-06-TF-06b	18 b	0,1	SG 350	Tenax	Tenax TA	12:18	13:01	0	43	4,3	0,0043	

Cycle #06 Measurement flight #12				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	GIG-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		C-EA-OPC-06-K-04		10	SG-10	K	PU/Filter	01:35	01:57	0	22	220	0,220	
Organophosphates	t/o climb		C-EA-OPC-06-K-05		10	SG-10	K	PU/Filter	01:57	02:39	0	42	420	0,4200	
Organophosphates	complete flight		C-EA-OPC-06-L-02		1	SG-5100	L	PU/Filter	01:37	13:03	0	686	686	0,6860	
Organophosphates	descent / landing		C-EA-OPC-06-K-06		10	SG-10	K	PU/Filter	12:05	13:03	0	58	580	0,5800	
Aldehydes	taxi + t/o climb		C-EA-ALD-06-K-04		0,3	SG 350	K	DNPH	01:36	01:57	0	21	6,3	0,0063	
Aldehydes	t/o climb		C-EA-ALD-06-K-05		0,3	SG 350	K	DNPH	01:57	02:39	0	42	12,6	0,0126	
Aldehydes	complete flight		C-EA-ALD-06-L-02		0,3	SG 350	L	DNPH	01:37	13:03	0	686	206	0,2058	
Aldehydes	descent / landing		C-EA-ALD-06-K-06	delayed pump start	0,3	SG 350	K	DNPH	12:09	13:03	0	54	16,2	0,0162	
VOC	blank		C-EA-VOC-06-blank_02	13b											
VOC	taxi + t/o climb		C-EA-VOC-06-TC-04a	7b	0,1	SG 350	Tenax	Tenax TA	01:35	01:57	0	22	2,2	0,0022	
VOC	taxi + t/o climb		C-EA-VOC-06-TC-04b	7	0,1	SG 350	Tenax	Tenax TA	01:35	01:57	0	22	2,2	0,0022	
VOC	t/o climb		C-EA-VOC-06-TC-05a	10b	0,1	SG 350	Tenax	Tenax TA	01:58	02:40	0	42	4,2	0,0042	
VOC	t/o climb		C-EA-VOC-06-TC-05b	10	0,1	SG 350	Tenax	Tenax TA	01:58	02:40	0	42	4,2	0,0042	
VOC	descent / landing		C-EA-VOC-06-TC-06a	11	0,1	SG 350	Tenax	Tenax TA	12:19	13:03	0	44	4,4	0,0044	
VOC	descent / landing		C-EA-VOC-06-TC-06b	11b	0,1	SG 350	Tenax	Tenax TA	12:19	13:03	0	44	4,4	0,0044	

Cycle #07 Measurement flight #13				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-BCN									Date:						
Sampling point	Flight deck									Sampler:	nn					
Aircraft	Airbus A320															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-07-K-01		10	SG-10	K	PU/Filter	11:48	12:07	0	19	190	0,190		
Organophosphates	t/o climb		F-EA-OPC-07-K-02		10	SG-10	K	PU/Filter	12:08	12:35	0	27	270	0,2700		
Organophosphates	complete flight		F-EA-OPC-07-L-01		3,5	SG-5100	L	PU/Filter	11:48	13:57	0	129	452	0,4515		
Organophosphates	descent / landing		F-EA-OPC-07-K-03		10	SG-10	K	PU/Filter	13:20	13:53	0	33	330	0,3300		
Aldehydes	taxi		F-EA-ALD-07-K-01		0,3	SG 350	K	DNPH	11:48	12:07	0	19	5,7	0,0057		
Aldehydes	t/o climb		F-EA-ALD-07-K-02		0,3	SG 350	K	DNPH	12:08	12:35	0	27	8,1	0,0081		
Aldehydes	complete flight		F-EA-ALD-07-L-01	with Ozone-Scrubber	0,3	SG 350	L	DNPH	11:48	13:57	0	129	39	0,0387		
Aldehydes	descent / landing		F-EA-ALD-07-K-03		0,3	SG 350	K	DNPH	13:21	13:53	0	32	9,6	0,0096		
VOC	blank		F-EA-VOC-07-blank_01	57												
VOC	taxi		F-EA-VOC-07-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	11:55	12:07	0	12	1,2	0,0012		
VOC	taxi		F-EA-VOC-07-TC-01b	51 b	0,1	SG 350	Tenax	Tenax TA	11:55	12:07	0	12	1,2	0,0012		
VOC	t/o climb		F-EA-VOC-07-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	12:08	12:35	0	27	2,7	0,0027		
VOC	t/o climb		F-EA-VOC-07-TC-02b	52 b	0,1	SG 350	Tenax	Tenax TA	12:08	12:35	0	27	2,7	0,0027		
VOC	descent / landing		F-EA-VOC-07-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	13:24	13:50	0	26	2,6	0,0026		
VOC	descent / landing		F-EA-VOC-07-TC-03b	53 b	0,1	SG 350	Tenax	Tenax TA	13:24	13:50	0	26	2,6	0,0026		

Cycle #07 Measurement flight #13				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-BCN									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A320															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-07-K-01		10	SG-10	K	PU/Filter	12:02	12:06	0	4	40	0,040		
Organophosphates	t/o climb		C-EA-OPC-07-K-02		10	SG-10	K	PU/Filter	12:07	12:47	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-07-L-01		3,5	SG-5100	L	PU/Filter	11:32	13:56	0	144	504	0,5040		
Organophosphates	descent / landing		C-EA-OPC-07-K-03		10	SG-10	K	PU/Filter	13:25	13:56	0	31	310	0,3100		
Aldehydes	taxi		C-EA-ALD-07-K-01		0,3	SG 350	K	DNPH	12:02	12:06	0	4	1,2	0,0012		
Aldehydes	t/o climb		C-EA-ALD-07-K-02		0,3	SG 350	K	DNPH	12:07	12:47	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-07-L-01	with Ozone-Scrubber	0,3	SG 350	L	DNPH	11:33	13:56	0	144	43	0,0432		
Aldehydes	descent / landing		C-EA-ALD-07-K-03		0,3	SG 350	K	DNPH	13:25	13:56	0	31	9,3	0,0093		
VOC	blank		C-EA-VOC-07-blank_01	67												
VOC	taxi	unsealing tubes impossible	C-EA-VOC-07-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	taxi	unsealing tubes impossible	C-EA-VOC-07-TC-01b	61b	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	t/o climb		C-EA-VOC-07-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	12:07	12:47	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-07-TC-02b	62b	0,1	SG 350	Tenax	Tenax TA	12:07	12:47	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-07-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	13:25	13:56	0	31	3,1	0,0031		
VOC	descent / landing		C-EA-VOC-07-TC-03b	63b	0,1	SG 350	Tenax	Tenax TA	13:25	13:56	0	31	3,1	0,0031		

Cycle #07 Measurement flight #14				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	BCN-FRA									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-07-K-04		10	SG-10	K	PU/Filter	14:50	14:59	0	9	90	0,090	
Organophosphates	t/o climb		F-EA-OPC-07-K-05		10	SG-10	K	PU/Filter	14:59	15:28	0	29	290	0,2900	
Organophosphates	complete flight		F-EA-OPC-07-L-02		3,5	SG-5100	L	PU/Filter	14:49	16:43	0	114	399	0,3990	
Organophosphates	descent / landing		F-EA-OPC-07-K-06		10	SG-10	K	PU/Filter	16:13	16:40	0	27	270	0,2700	
Aldehydes	taxi + t/o climb		F-EA-ALD-07-K-04		0,3	SG 350	K	DNPH	14:50	14:59	0	9	2,7	0,0027	
Aldehydes	t/o climb		F-EA-ALD-07-K-05		0,3	SG 350	K	DNPH	14:59	15:28	0	29	8,7	0,0087	
Aldehydes	complete flight		F-EA-ALD-07-L-02	with Ozone-Scrubber	0,3	SG 350	L	DNPH	14:50	16:43	0	114	34	0,0342	
Aldehydes	descent / landing		F-EA-ALD-07-K-06		0,3	SG 350	K	DNPH	16:13	16:40	0	27	8,1	0,0081	
VOC	blank		F-EA-VOC-07-blank_02	57 b											
VOC	taxi + t/o climb		F-EA-VOC-07-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	14:49	14:59	0	10	1,0	0,0010	
VOC	taxi + t/o climb		F-EA-VOC-07-TF-04b	54b	0,1	SG 350	Tenax	Tenax TA	14:49	14:59	0	10	1,0	0,0010	
VOC	t/o climb		F-EA-VOC-07-TF-05a	55	0,1	SG 350	Tenax	Tenax TA	14:59	15:27	0	28	2,8	0,0028	
VOC	t/o climb		F-EA-VOC-07-TF-05b	55b	0,1	SG 350	Tenax	Tenax TA	14:59	15:27	0	28	2,8	0,0028	
VOC	descent / landing		F-EA-VOC-07-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	16:13	16:38	0	25	2,5	0,0025	
VOC	descent / landing		F-EA-VOC-07-TF-06b	56b	0,1	SG 350	Tenax	Tenax TA	16:13	16:38	0	25	2,5	0,0025	

Cycle #07 Measurement flight #14				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	BCN-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		C-EA-OPC-07-K-04		10	SG-10	K	PU/Filter	14:50	15:01	0	11	110	0,110	
Organophosphates	t/o climb		C-EA-OPC-07-K-05		10	SG-10	K	PU/Filter	15:02	15:41	0	39	390	0,3900	
Organophosphates	complete flight		C-EA-OPC-07-L-02		3,5	SG-5100	L	PU/Filter	14:50	16:50	0	120	420	0,4200	
Organophosphates	descent / landing		C-EA-OPC-07-K-06		10	SG-10	K	PU/Filter	16:15	16:50	0	35	350	0,3500	
Aldehydes	taxi + t/o climb		C-EA-ALD-07-K-04		0,3	SG 350	K	DNPH	14:50	15:01	0	11	3,3	0,0033	
Aldehydes	t/o climb		C-EA-ALD-07-K-05		0,3	SG 350	K	DNPH	15:03	15:41	0	38	11,4	0,0114	
Aldehydes	complete flight		C-EA-ALD-07-L-02	with Ozone-Scrubber	0,3	SG 350	L	DNPH	14:50	16:50	0	120	36	0,0360	
Aldehydes	descent / landing		C-EA-ALD-07-K-06		0,3	SG 350	K	DNPH	16:15	16:50	0	35	10,5	0,0105	
VOC	blank		C-EA-VOC-07-blank_02	67 b											
VOC	taxi + t/o climb		C-EA-VOC-07-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	14:50	15:02	0	12	1,2	0,0012	
VOC	taxi + t/o climb		C-EA-VOC-07-TC-04b	64 b	0,1	SG 350	Tenax	Tenax TA	14:50	15:02	0	12	1,2	0,0012	
VOC	t/o climb		C-EA-VOC-07-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	15:04	15:41	0	37	3,7	0,0037	
VOC	t/o climb		C-EA-VOC-07-TC-05b	65 b	0,1	SG 350	Tenax	Tenax TA	15:04	15:41	0	37	3,7	0,0037	
VOC	descent / landing		C-EA-VOC-07-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	16:15	16:50	0	35	3,5	0,0035	
VOC	descent / landing		C-EA-VOC-07-TC-06b	66 b	0,1	SG 350	Tenax	Tenax TA	16:15	16:50	0	35	3,5	0,0035	

Cycle #08 Measurement flight #15				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-RAK									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-08-K-01		10	SG-10	K	PU/Filter	08:28	08:46	0	18	180	0,180	
Organophosphates	t/o climb		F-EA-OPC-08-K-02		10	SG-10	K	PU/Filter	08:46	09:24	0	38	380	0,3800	
Organophosphates	complete flight		F-EA-OPC-08-L-01		3,5	SG-5100	L	PU/Filter	07:53	12:23	0	270	945	0,9450	
Organophosphates	descent / landing		F-EA-OPC-08-K-03		10	SG-10	K	PU/Filter	11:49	12:19	0	30	300	0,3000	
Aldehydes	taxi		F-EA-ALD-08-K-01		0,3	SG 350	K	DNPH	08:29	08:46	0	17	5,1	0,0051	
Aldehydes	t/o climb		F-EA-ALD-08-K-02		0,3	SG 350	K	DNPH	08:46	09:24	0	38	11,4	0,0114	
Aldehydes	complete flight		F-EA-ALD-08-L-01		0,3	SG 350	L	DNPH	07:51	12:23	0	272	82	0,0816	
Aldehydes	descent / landing		F-EA-ALD-08-K-03		0,3	SG 350	K	DNPH	11:49	12:19	0	30	9	0,0090	
VOC	blank		F-EA-VOC-08-blank_01												
VOC	taxi	unsealing tube impossible	F-EA-VOC-08-TC-01a	58	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	taxi	taxi and t/o until 09:13	F-EA-VOC-08-TC-01b	58 b	0,1	SG 350	Tenax	Tenax TA	08:28	09:13	0	45	4,5	0,0045	
VOC	t/o climb		F-EA-VOC-08-TC-02a	59	0,1	SG 350	Tenax	Tenax TA	08:46	09:24	0	38	3,8	0,0038	
VOC	t/o climb	only part of climb sampled	F-EA-VOC-08-TC-02b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	11	1,1	0,0011	
VOC	descent / landing		F-EA-VOC-08-TC-03a	71	0,1	SG 350	Tenax	Tenax TA	11:49	12:18	0	29	2,9	0,0029	
VOC	descent / landing		F-EA-VOC-08-TC-03b	60 b	0,1	SG 350	Tenax	Tenax TA	11:49	12:18	0	29	2,9	0,0029	

Cycle #08 Measurement flight #15				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-RAK									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-08-K-01		10	SG-10	K	PU/Filter	08:32	08:46	0	14	140	0,140	
Organophosphates	t/o climb		C-EA-OPC-08-K-02		10	SG-10	K	PU/Filter	08:47	09:47	0	60	600	0,6000	
Organophosphates	complete flight		C-EA-OPC-08-L-01		3,5	SG-5100	L	PU/Filter	07:53	12:18	0	265	928	0,9275	
Organophosphates	descent / landing		C-EA-OPC-08-K-03		10	SG-10	K	PU/Filter	11:28	12:18	0	50	500	0,5000	
Aldehydes	taxi		C-EA-ALD-08-K-01		0,3	SG 350	K	DNPH	08:32	08:46	0	14	4,2	0,0042	
Aldehydes	t/o climb		C-EA-ALD-08-K-02		0,3	SG 350	K	DNPH	08:47	09:47	0	60	18,0	0,0180	
Aldehydes	complete flight		C-EA-ALD-08-L-01		0,3	SG 350	L	DNPH	07:53	12:18	0	265	80	0,0795	
Aldehydes	descent / landing		C-EA-ALD-08-K-03		0,3	SG 350	K	DNPH	11:28	12:18	0	50	15	0,0150	
VOC	blank		C-EA-VOC-08-blank_01	78											
VOC	taxi		C-EA-VOC-08-TC-01a	72 b	0,1	SG 350	Tenax	Tenax TA	08:32	08:46	0	14	1,4	0,0014	
VOC	taxi		C-EA-VOC-08-TC-01b	72	0,1	SG 350	Tenax	Tenax TA	08:32	08:46	0	14	1,4	0,0014	
VOC	t/o climb		C-EA-VOC-08-TC-02a	73 b	0,1	SG 350	Tenax	Tenax TA	08:48	09:48	0	60	6,0	0,0060	
VOC	t/o climb		C-EA-VOC-08-TC-02b	73	0,1	SG 350	Tenax	Tenax TA	08:48	09:48	0	60	6,0	0,0060	
VOC	descent / landing		C-EA-VOC-08-TC-03a	74 b	0,1	SG 350	Tenax	Tenax TA	11:28	12:18	0	50	5,0	0,0050	
VOC	descent / landing		C-EA-VOC-08-TC-03b	74	0,1	SG 350	Tenax	Tenax TA	11:28	12:18	0	50	5,0	0,0050	

Cycle #08 Measurement flight #16				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	RAK-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-08-K-04		10	SG-10	K	PU/Filter	13:25	13:39	0	14	140	0,140	
Organophosphates	t/o climb		F-EA-OPC-08-K-05		10	SG-10	K	PU/Filter	13:39	14:08	0	29	290	0,2900	
Organophosphates	complete flight		F-EA-OPC-08-L-02		3,5	SG-5100	L	PU/Filter	13:25	17:24	0	239	837	0,8365	
Organophosphates	descent / landing		F-EA-OPC-08-K-06		10	SG-10	K	PU/Filter	16:33	17:22	0	49	490	0,4900	
Aldehydes	taxi + t/o climb		F-EA-ALD-08-K-04		0,3	SG 350	K	DNPH	13:25	13:39	0	14	4,2	0,0042	
Aldehydes	t/o climb		F-EA-ALD-08-K-05		0,3	SG 350	K	DNPH	13:39	14:08	0	29	8,7	0,0087	
Aldehydes	complete flight		F-EA-ALD-08-L-02	delayed pump start	0,3	SG 350	L	DNPH	14:22	17:24	0	182	55	0,0546	
Aldehydes	descent / landing		F-EA-ALD-08-K-06		0,3	SG 350	K	DNPH	16:33	17:22	0	49	14,7	0,0147	
VOC	blank		F-EA-VOC-08-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-08-TF-04a	68 a	0,1	SG 350	Tenax	Tenax TA	13:27	13:39	0	12	1,2	0,0012	
VOC	taxi + t/o climb		F-EA-VOC-08-TF-04b	68 b	0,1	SG 350	Tenax	Tenax TA	13:27	13:39	0	12	1,2	0,0012	
VOC	t/o climb		F-EA-VOC-08-TF-05a	69 a	0,1	SG 350	Tenax	Tenax TA	13:39	14:06	0	27	2,7	0,0027	
VOC	t/o climb		F-EA-VOC-08-TF-05b	69 b	0,1	SG 350	Tenax	Tenax TA	13:39	14:06	0	27	2,7	0,0027	
VOC	descent / landing		F-EA-VOC-08-TF-06a	70 a	0,1	SG 350	Tenax	Tenax TA	16:38	17:20	0	42	4,2	0,0042	
VOC	descent / landing		F-EA-VOC-08-TF-06b	70 b	0,1	SG 350	Tenax	Tenax TA	16:38	17:20	0	42	4,2	0,0042	

Cycle #08 Measurement flight #16				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	RAK-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		C-EA-OPC-08-K-04		10	SG-10	K	PU/Filter	13:27	13:41	0	14	140	0,140	
Organophosphates	t/o climb		C-EA-OPC-08-K-05		10	SG-10	K	PU/Filter	13:41	14:21	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-08-L-02		3,5	SG-5100	L	PU/Filter	13:25	17:20	0	235	823	0,8225	
Organophosphates	descent / landing		C-EA-OPC-08-K-06		10	SG-10	K	PU/Filter	16:20	17:20	0	60	600	0,6000	
Aldehydes	taxi + t/o climb		C-EA-ALD-08-K-04		0,3	SG 350	K	DNPH	13:27	13:40	0	13	3,9	0,0039	
Aldehydes	t/o climb		C-EA-ALD-08-K-05		0,3	SG 350	K	DNPH	13:42	14:22	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-08-L-02		0,3	SG 350	L	DNPH	13:25	17:20	0	235	71	0,0705	
Aldehydes	descent / landing		C-EA-ALD-08-K-06		0,3	SG 350	K	DNPH	16:20	17:20	0	60	18	0,0180	
VOC	blank		C-EA-VOC-08-blank_02	78 b											
VOC	taxi + t/o climb		C-EA-VOC-08-TC-04a	75 b	0,1	SG 350	Tenax	Tenax TA	13:27	13:40	0	13	1,3	0,0013	
VOC	taxi + t/o climb		C-EA-VOC-08-TC-04b	75	0,1	SG 350	Tenax	Tenax TA	13:27	13:40	0	13	1,3	0,0013	
VOC	t/o climb		C-EA-VOC-08-TC-05a	76 b	0,1	SG 350	Tenax	Tenax TA	13:43	14:23	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-08-TC-05b	76	0,1	SG 350	Tenax	Tenax TA	13:43	14:23	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-08-TC-06a	77 b	0,1	SG 350	Tenax	Tenax TA	16:20	17:20	0	60	6,0	0,0060	
VOC	descent / landing		C-EA-VOC-08-TC-06b	77	0,1	SG 350	Tenax	Tenax TA	16:20	17:20	0	60	6,0	0,0060	

Cycle #09 Measurement flight #17				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-09-K-01		10	SG-10	K	PU/Filter	16:04	16:26	0	22	220	0,220	
Organophosphates	t/o climb		F-EA-OPC-09-K-02		10	SG-10	K	PU/Filter	16:27	17:00	0	33	330	0,3300	
Organophosphates	complete flight		F-EA-OPC-09-L-01		1	SG-5100	L	PU/Filter	16:05	02:59	0	654	654	0,6540	
Organophosphates	descent / landing		F-EA-OPC-09-K-03		10	SG-10	K	PU/Filter	02:23	02:58	0	35	350	0,3500	
Aldehydes	taxi		F-EA-ALD-09-K-01		0,3	SG 350	K	DNPH	16:04	16:26	0	22	6,6	0,0066	
Aldehydes	t/o climb		F-EA-ALD-09-K-02		0,3	SG 350	K	DNPH	16:27	16:59	0	32	9,6	0,0096	
Aldehydes	complete flight		F-EA-ALD-09-L-01		0,3	SG 350	L	DNPH	16:05	02:59	0	654	196	0,1962	
Aldehydes	descent / landing		F-EA-ALD-09-K-03		0,3	SG 350	K	DNPH	02:23	02:58	0	35	10,5	0,0105	
VOC	blank		F-EA-VOC-09-blank_01												
VOC	taxi		F-EA-VOC-09-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	16:13	16:27	0	14	1,4	0,0014	
VOC	taxi		F-EA-VOC-09-TC-01b	VIII b	0,1	SG 350	Tenax	Tenax TA	16:15	16:27	0	12	1,2	0,0012	
VOC	t/o climb		F-EA-VOC-09-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	16:28	16:56	0	28	2,8	0,0028	
VOC	t/o climb		F-EA-VOC-09-TC-02b	IX b	0,1	SG 350	Tenax	Tenax TA	16:28	16:56	0	28	2,8	0,0028	
VOC	descent / landing		F-EA-VOC-09-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	02:27	02:57	0	30	3,0	0,0030	
VOC	descent / landing		F-EA-VOC-09-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	02:27	02:57	0	30	3,0	0,0030	

Cycle #09 Measurement flight #17				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-09-K-01		10	SG-10	K	PU/Filter	16:04	16:26	0	22	220	0,220	
Organophosphates	t/o climb		C-EA-OPC-09-K-02		10	SG-10	K	PU/Filter	16:28	17:06	0	38	380	0,3800	
Organophosphates	complete flight		C-EA-OPC-09-L-01		1	SG-5100	L	PU/Filter	16:04	02:54	0	650	650	0,6500	
Organophosphates	descent / landing		C-EA-OPC-09-K-03		10	SG-10	K	PU/Filter	02:22	02:54	0	32	320	0,3200	
Aldehydes	taxi		C-EA-ALD-09-K-01		0,3	SG 350	K	DNPH	16:04	16:26	0	22	6,6	0,0066	
Aldehydes	t/o climb		C-EA-ALD-09-K-02		0,3	SG 350	K	DNPH	16:28	17:06	0	38	11,4	0,0114	
Aldehydes	complete flight		C-EA-ALD-09-L-01		0,3	SG 350	L	DNPH	16:04	02:54	0	650	195	0,1950	
Aldehydes	descent / landing		C-EA-ALD-09-K-03		0,3	SG 350	K	DNPH	02:22	02:54	0	32	9,6	0,0096	
VOC	blank		C-EA-VOC-09-blank_01												
VOC	taxi	measurement during "service"	C-EA-VOC-09-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	17:38	18:00	0	22	2,2	0,0022	
VOC	taxi	measurement during "service"	C-EA-VOC-09-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	17:38	18:00	0	22	2,2	0,0022	
VOC	t/o climb	measurement during "service"	C-EA-VOC-09-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	17:08	17:38	0	30	3,0	0,0030	
VOC	t/o climb	measurement during "service"	C-EA-VOC-09-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	17:08	17:38	0	30	3,0	0,0030	
VOC	descent / landing		C-EA-VOC-09-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	02:22	02:52	0	30	3,0	0,0030	
VOC	descent / landing		C-EA-VOC-09-TC-03b	5 b	0,1	SG 350	Tenax	Tenax TA	02:22	02:52	0	30	3,0	0,0030	

Cycle #09 Measurement flight #18				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HND-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-09-K-04		10	SG-10	K	PU/Filter	05:11	05:28	0	17	170	0,170	
Organophosphates	t/o climb		F-EA-OPC-09-K-05		10	SG-10	K	PU/Filter	05:29	06:09	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-09-L-02		1	SG-5100	L	PU/Filter	05:11	17:10	0	719	719	0,7190	
Organophosphates	descent / landing		F-EA-OPC-09-K-06		10	SG-10	K	PU/Filter	16:20	17:08	0	48	480	0,4800	
Aldehydes	taxi + t/o climb		F-EA-ALD-09-K-04		0,3	SG 350	K	DNPH	05:11	05:28	0	17	5,1	0,0051	
Aldehydes	t/o climb		F-EA-ALD-09-K-05		0,3	SG 350	K	DNPH	05:29	06:09	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-09-L-02		0,3	SG 350	L	DNPH	05:11	17:10	0	719	216	0,2157	
Aldehydes	descent / landing		F-EA-ALD-09-K-06		0,3	SG 350	K	DNPH	16:20	17:08	0	48	14,4	0,0144	
VOC	blank		F-EA-VOC-09-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-09-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	05:05	05:28	0	23	2,3	0,0023	
VOC	taxi + t/o climb		F-EA-VOC-09-TF-04b	XIV b	0,1	SG 350	Tenax	Tenax TA	05:05	05:28	0	23	2,3	0,0023	
VOC	t/o climb		F-EA-VOC-09-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	05:29	06:08	0	39	3,9	0,0039	
VOC	t/o climb		F-EA-VOC-09-TF-05b	XV b	0,1	SG 350	Tenax	Tenax TA	05:29	06:08	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-09-TF-06a	XVIII 13	0,1	SG 350	Tenax	Tenax TA	16:21	17:02	0	41	4,1	0,0041	
VOC	descent / landing		F-EA-VOC-09-TF-06b	XVIII 6	0,1	SG 350	Tenax	Tenax TA	16:21	17:02	0	41	4,1	0,0041	

Cycle #09 Measurement flight #18				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	HND-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 747-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-09-K-04		10	SG-10	K	PU/Filter	05:05	05:26	0	21	210	0,210		
Organophosphates	t/o climb		C-EA-OPC-09-K-05		10	SG-10	K	PU/Filter	05:27	06:07	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-09-L-02		1	SG-5100	L	PU/Filter	05:05	17:05	0	720	720	0,7200		
Organophosphates	descent / landing		C-EA-OPC-09-K-06		10	SG-10	K	PU/Filter	16:07	17:05	0	58	580	0,5800		
Aldehydes	taxi + t/o climb		C-EA-ALD-09-K-04		0,3	SG 350	K	DNPH	05:05	05:26	0	21	6,3	0,0063		
Aldehydes	t/o climb		C-EA-ALD-09-K-05		0,3	SG 350	K	DNPH	05:27	06:07	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-09-L-02		0,3	SG 350	L	DNPH	05:05	17:05	0	720	216	0,2160		
Aldehydes	descent / landing		C-EA-ALD-09-K-06		0,3	SG 350	K	DNPH	16:07	17:05	0	58	17,4	0,0174		
VOC	blank		C-EA-VOC-09-blank_02													
VOC	taxi + t/o climb		C-EA-VOC-09-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	05:05	05:26	0	21	2,1	0,0021		
VOC	taxi + t/o climb		C-EA-VOC-09-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	05:05	05:26	0	21	2,1	0,0021		
VOC	t/o climb		C-EA-VOC-09-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	05:27	06:07	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-09-TC-05b	10 b	0,1	SG 350	Tenax	Tenax TA	05:27	06:07	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-09-TC-06a	11 b	0,1	SG 350	Tenax	Tenax TA	16:07	17:05	0	58	5,8	0,0058		
VOC	descent / landing		C-EA-VOC-09-TC-06b	11	0,1	SG 350	Tenax	Tenax TA	16:07	17:05	0	58	5,8	0,0058		

Cycle #10 Measurement flight #19				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-HKG										Date:					
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 747-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-10-K-01		10	SG-10	K	PU/Filter	20:02	20:39	0	37	370	0,370		
Organophosphates	t/o climb		F-EA-OPC-10-K-02		10	SG-10	K	PU/Filter	20:39	21:19	0	40	400	0,4000		
Organophosphates	complete flight		F-EA-OPC-10-L-01		1	SG-5100	L	PU/Filter	20:03	07:53	0	710	710	0,7100		
Organophosphates	descent / landing		F-EA-OPC-10-K-03		10	SG-10	K	PU/Filter	07:10	07:52	0	42	420	0,4200		
Aldehydes	taxi		F-EA-ALD-10-K-01		0,3	SG 350	K	DNPH	20:02	20:40	0	38	11,4	0,0114		
Aldehydes	t/o climb		F-EA-ALD-10-K-02		0,3	SG 350	K	DNPH	20:40	21:18	0	38	11,4	0,0114		
Aldehydes	complete flight		F-EA-ALD-10-L-01	Pump failure after 7h55 m runtime	0,3	SG 350	L	DNPH	20:03	03:58	0	475	143	0,1425		
Aldehydes	descent / landing		F-EA-ALD-10-K-03		0,3	SG 350	K	DNPH	07:10	07:52	0	42	12,6	0,0126		
VOC	blank		F-EA-VOC-10-blank_01													
VOC	taxi		F-EA-VOC-10-TC-01a	51 A	0,1	SG 350	Tenax	Tenax TA	20:01	20:38	0	37	3,7	0,0037		
VOC	taxi		F-EA-VOC-10-TC-01b	51 B	0,1	SG 350	Tenax	Tenax TA	20:01	20:38	0	37	3,7	0,0037		
VOC	t/o climb		F-EA-VOC-10-TC-02a	52 A	0,1	SG 350	Tenax	Tenax TA	20:38	21:16	0	38	3,8	0,0038		
VOC	t/o climb		F-EA-VOC-10-TC-02b	52 B	0,1	SG 350	Tenax	Tenax TA	20:38	21:16	0	38	3,8	0,0038		
VOC	descent / landing		F-EA-VOC-10-TC-03a	53 A	0,1	SG 350	Tenax	Tenax TA	07:11	07:49	0	38	3,8	0,0038		
VOC	descent / landing		F-EA-VOC-10-TC-03b	53 B	0,1	SG 350	Tenax	Tenax TA	07:11	07:49	0	38	3,8	0,0038		

Cycle #10 Measurement flight #19				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HKG									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-10-K-01		10	SG-10	K	PU/Filter	20:04	20:38	0	37	370	0,370	
Organophosphates	t/o climb		C-EA-OPC-10-K-02		10	SG-10	K	PU/Filter	20:39	21:19	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-10-L-01		1	SG-5100	L	PU/Filter	20:04	07:49	0	705	705	0,7050	
Organophosphates	descent / landing		C-EA-OPC-10-K-03		10	SG-10	K	PU/Filter	06:58	07:49	0	51	510	0,5100	
Aldehydes	taxi		C-EA-ALD-10-K-01		0,3	SG 350	K	DNPH	20:04	20:38	0	37	11,1	0,0111	
Aldehydes	t/o climb		C-EA-ALD-10-K-02		0,3	SG 350	K	DNPH	20:39	21:19	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-10-L-01		0,3	SG 350	L	DNPH	20:04	07:49	0	705	212	0,2115	
Aldehydes	descent / landing		C-EA-ALD-10-K-03		0,3	SG 350	K	DNPH	06:58	07:49	0	51	15,3	0,0153	
VOC	blank		C-EA-VOC-10-blank_01												
VOC	taxi		C-EA-VOC-10-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	20:04	20:38	0	37	3,7	0,0037	
VOC	taxi		C-EA-VOC-10-TC-01b	61 b	0,1	SG 350	Tenax	Tenax TA	20:04	20:38	0	37	3,7	0,0037	
VOC	t/o climb		C-EA-VOC-10-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	20:39	21:19	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-10-TC-02b	62 b	0,1	SG 350	Tenax	Tenax TA	20:39	21:19	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-10-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	06:58	07:49	0	51	5,1	0,0051	
VOC	descent / landing		C-EA-VOC-10-TC-03b	63 b	0,1	SG 350	Tenax	Tenax TA	06:58	07:49	0	51	5,1	0,0051	

Cycle #10 Measurement flight #20				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HKG-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-10-K-04		10	SG-10	K	PU/Filter	15:05	15:29	0	24	240	0,240	
Organophosphates	t/o climb		F-EA-OPC-10-K-05		10	SG-10	K	PU/Filter	15:30	16:12	0	42	420	0,4200	
Organophosphates	complete flight		F-EA-OPC-10-L-02		1	SG-5100	L	PU/Filter	15:05	03:51	0	766	766	0,7660	
Organophosphates	descent / landing		F-EA-OPC-10-K-06		10	SG-10	K	PU/Filter	03:10	03:49	0	39	390	0,3900	
Aldehydes	taxi + t/o climb		F-EA-ALD-10-K-04		0,3	SG 350	K	DNPH	15:07	15:29	0	22	6,6	0,0066	
Aldehydes	t/o climb		F-EA-ALD-10-K-05		0,3	SG 350	K	DNPH	15:30	16:12	0	42	12,6	0,0126	
Aldehydes	complete flight		F-EA-ALD-10-L-02		0,3	SG 350	L	DNPH	15:07	03:51	0	764	229	0,2292	
Aldehydes	descent / landing		F-EA-ALD-10-K-06		0,3	SG 350	K	DNPH	03:10	03:49	0	39	11,7	0,0117	
VOC	blank		F-EA-VOC-10-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-10-TF-04a	54 A	0,1	SG 350	Tenax	Tenax TA	15:06	15:29	0	23	2,3	0,0023	
VOC	taxi + t/o climb		F-EA-VOC-10-TF-04b	54 B	0,1	SG 350	Tenax	Tenax TA	15:06	15:29	0	23	2,3	0,0023	
VOC	t/o climb		F-EA-VOC-10-TF-05a	55 A	0,1	SG 350	Tenax	Tenax TA	15:30	16:14	0	44	4,4	0,0044	
VOC	t/o climb		F-EA-VOC-10-TF-05b	55 B	0,1	SG 350	Tenax	Tenax TA	15:30	16:14	0	44	4,4	0,0044	
VOC	descent / landing		F-EA-VOC-10-TF-06a	56 A	0,1	SG 350	Tenax	Tenax TA	03:13	03:47	0	34	3,4	0,0034	
VOC	descent / landing		F-EA-VOC-10-TF-06b	56 B	0,1	SG 350	Tenax	Tenax TA	03:13	03:47	0	34	3,4	0,0034	

Cycle #10 Measurement flight #20				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	HKG-FRA										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Boing 747-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-10-K-04		10	SG-10	K	PU/Filter	15:05	15:29	0	24	240	0,240		
Organophosphates	t/o climb		C-EA-OPC-10-K-05		10	SG-10	K	PU/Filter	15:29	16:13	0	44	440	0,4400		
Organophosphates	complete flight		C-EA-OPC-10-L-02		1	SG-5100	L	PU/Filter	15:05	03:53	0	768	768	0,7680		
Organophosphates	descent / landing		C-EA-OPC-10-K-06		10	SG-10	K	PU/Filter	03:13	03:51	0	38	380	0,3800		
Aldehydes	taxi + t/o climb		C-EA-ALD-10-K-04		0,3	SG 350	K	DNPH	15:05	15:29	0	24	7,2	0,0072		
Aldehydes	t/o climb		C-EA-ALD-10-K-05		0,3	SG 350	K	DNPH	15:29	16:12	0	43	12,9	0,0129		
Aldehydes	complete flight		C-EA-ALD-10-L-02		0,3	SG 350	L	DNPH	15:05	03:53	0	768	230	0,2304		
Aldehydes	descent / landing		C-EA-ALD-10-K-06		0,3	SG 350	K	DNPH	03:13	03:51	0	38	11,4	0,0114		
VOC	blank		C-EA-VOC-10-blank_02													
VOC	taxi + t/o climb	In this period finding of mothballs!	C-EA-VOC-10-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	15:14	15:30	0	16	1,6	0,0016		
VOC	taxi + t/o climb		C-EA-VOC-10-TC-04b	64 B	0,1	SG 350	Tenax	Tenax TA	15:14	15:30	0	16	1,6	0,0016		
VOC	t/o climb		C-EA-VOC-10-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	15:30	16:10	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-10-TC-05b	65 B	0,1	SG 350	Tenax	Tenax TA	15:30	16:10	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-10-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	03:13	03:49	0	36	3,6	0,0036		
VOC	descent / landing		C-EA-VOC-10-TC-06b	66 B	0,1	SG 350	Tenax	Tenax TA	03:13	03:49	0	36	3,6	0,0036		

Cycle #11 Measurement flight #21				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-11-K-01		10	SG-10	K	PU/Filter	16:18	16:42	0	26	260	0,260	
Organophosphates	t/o climb		F-EA-OPC-11-K-02		10	SG-10	K	PU/Filter	16:42	17:27	0	45	450	0,4500	
Organophosphates	complete flight		F-EA-OPC-11-L-01		1	SG-5100	L	PU/Filter	16:17	01:32	0	555	555	0,5550	
Organophosphates	descent / landing		F-EA-OPC-11-K-03		10	SG-10	K	PU/Filter	00:17	01:20	0	63	630	0,6300	
Aldehydes	taxi		F-EA-ALD-11-K-01		0,3	SG 350	K	DNPH	16:18	16:42	0	26	7,8	0,0078	
Aldehydes	t/o climb		F-EA-ALD-11-K-02		0,3	SG 350	K	DNPH	16:42	17:27	0	45	13,5	0,0135	
Aldehydes	complete flight		F-EA-ALD-11-L-01		0,3	SG 350	L	DNPH	16:17	01:32	0	555	167	0,1665	
Aldehydes	descent / landing		F-EA-ALD-11-K-03		0,3	SG 350	K	DNPH	00:18	01:20	0	62	18,6	0,0186	
VOC	blank		F-EA-VOC-11-blank_01												
VOC	taxi		F-EA-VOC-11-TC-01a	58	0,1	SG 350	Tenax	Tenax TA	16:20	16:43	0	23	2,3	0,0023	
VOC	taxi		F-EA-VOC-11-TC-01b	58 B	0,1	SG 350	Tenax	Tenax TA	16:20	16:43	0	23	2,3	0,0023	
VOC	t/o climb		F-EA-VOC-11-TC-02a	59	0,1	SG 350	Tenax	Tenax TA	16:44	17:24	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-11-TC-02b	59 B	0,1	SG 350	Tenax	Tenax TA	16:44	17:24	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-11-TC-03a	60	0,1	SG 350	Tenax	Tenax TA	00:25	001:17	0	52	5,2	0,0052	
VOC	descent / landing		F-EA-VOC-11-TC-03b	60 B	0,1	SG 350	Tenax	Tenax TA	00:25	001:17	0	52	5,2	0,0052	

Cycle #11 Measurement flight #21				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-11-K-01		10	SG-10	K	PU/Filter	16:19	16:42	0	23	230	0,230	
Organophosphates	t/o climb		C-EA-OPC-11-K-02		10	SG-10	K	PU/Filter	16:42	17:22	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-11-L-01		1	SG-5100	L	PU/Filter	16:19	01:20	0	541	541	0,5410	
Organophosphates	descent / landing		C-EA-OPC-11-K-03		10	SG-10	K	PU/Filter	00:25	01:20	0	55	550	0,5500	
Aldehydes	taxi		C-EA-ALD-11-K-01		0,3	SG 350	K	DNPH	16:19	16:42	0	23	6,9	0,0069	
Aldehydes	t/o climb		C-EA-ALD-11-K-02		0,3	SG 350	K	DNPH	16:42	17:22	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-11-L-01		0,3	SG 350	L	DNPH	16:19	01:20	0	541	162	0,1623	
Aldehydes	descent / landing		C-EA-ALD-11-K-03		0,3	SG 350	K	DNPH	00:25	01:20	0	55	16,5	0,0165	
VOC	blank		C-EA-VOC-11-blank_01												
VOC	taxi		C-EA-VOC-11-TC-01a	72	0,1	SG 350	Tenax	Tenax TA	16:19	16:42	0	23	2,3	0,0023	
VOC	taxi		C-EA-VOC-11-TC-01b	72 B	0,1	SG 350	Tenax	Tenax TA	16:19	16:42	0	23	2,3	0,0023	
VOC	t/o climb		C-EA-VOC-11-TC-02a	73	0,1	SG 350	Tenax	Tenax TA	16:42	17:22	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-11-TC-02b	73 B	0,1	SG 350	Tenax	Tenax TA	16:42	17:22	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-11-TC-03a	74	0,1	SG 350	Tenax	Tenax TA	00:25	01:20	0	55	5,5	0,0055	
VOC	descent / landing		C-EA-VOC-11-TC-03b	74 B	0,1	SG 350	Tenax	Tenax TA	00:25	01:20	0	55	5,5	0,0055	

Cycle #11 Measurement flight #22				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	JFK-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-11-K-04		10	SG-10	K	PU/Filter	03:20	03:34	0	14	140	0,140	
Organophosphates	t/o climb		F-EA-OPC-11-K-05		10	SG-10	K	PU/Filter	03:35	04:06	0	31	310	0,3100	
Organophosphates	complete flight		F-EA-OPC-11-L-02		1	SG-5100	L	PU/Filter	03:20	10:23	0	423	423	0,4230	
Organophosphates	descent / landing		F-EA-OPC-11-K-06		10	SG-10	K	PU/Filter	09:50	10:22	0	32	320	0,3200	
Aldehydes	taxi + t/o climb		F-EA-ALD-11-K-04		0,3	SG 350	K	DNPH	03:20	03:34	0	14	4,2	0,0042	
Aldehydes	t/o climb		F-EA-ALD-11-K-05		0,3	SG 350	K	DNPH	03:35	04:06	0	31	9,3	0,0093	
Aldehydes	complete flight		F-EA-ALD-11-L-02		0,3	SG 350	L	DNPH	03:20	10:23	0	423	127	0,1269	
Aldehydes	descent / landing		F-EA-ALD-11-K-06		0,3	SG 350	K	DNPH	09:50	10:22	0	32	9,6	0,0096	
VOC	blank		F-EA-VOC-11-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-11-TF-04a	68	0,1	SG 350	Tenax	Tenax TA	03:15	03:34	0	19	1,9	0,0019	
VOC	taxi + t/o climb		F-EA-VOC-11-TF-04b	68 B	0,1	SG 350	Tenax	Tenax TA	03:15	03:34	0	19	1,9	0,0019	
VOC	t/o climb		F-EA-VOC-11-TF-05a	6	0,1	SG 350	Tenax	Tenax TA	03:35	04:05	0	30	3,0	0,0030	
VOC	t/o climb		F-EA-VOC-11-TF-05b	69 B	0,1	SG 350	Tenax	Tenax TA	03:35	04:05	0	30	3,0	0,0030	
VOC	descent / landing		F-EA-VOC-11-TF-06a	70	0,1	SG 350	Tenax	Tenax TA	09:51	10:21	0	30	3,0	0,0030	
VOC	descent / landing		F-EA-VOC-11-TF-06b	70 B	0,1	SG 350	Tenax	Tenax TA	09:51	10:21	0	30	3,0	0,0030	

Cycle #11 Measurement flight #22				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	JFK-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		C-EA-OPC-11-K-04		10	SG-10	K	PU/Filter	03:20	03:33	0	13	130	0,130	
Organophosphates	t/o climb		C-EA-OPC-11-K-05		10	SG-10	K	PU/Filter	03:36	04:17	0	41	410	0,4100	
Organophosphates	complete flight		C-EA-OPC-11-L-02		1	SG-5100	L	PU/Filter	03:20	10:27	0	427	427	0,4270	
Organophosphates	descent / landing		C-EA-OPC-11-K-06		10	SG-10	K	PU/Filter	09:40	10:27	0	47	470	0,4700	
Aldehydes	taxi + t/o climb		C-EA-ALD-11-K-04		0,3	SG 350	K	DNPH	03:20	03:32	0	12	3,6	0,0036	
Aldehydes	t/o climb		C-EA-ALD-11-K-05		0,3	SG 350	K	DNPH	03:36	04:17	0	41	12,3	0,0123	
Aldehydes	complete flight		C-EA-ALD-11-L-02		0,3	SG 350	L	DNPH	03:20	10:27	0	427	128	0,1281	
Aldehydes	descent / landing		C-EA-ALD-11-K-06		0,3	SG 350	K	DNPH	09:40	10:27	0	47	14,1	0,0141	
VOC	blank		C-EA-VOC-11-blank_02												
VOC	taxi + t/o climb		C-EA-VOC-11-TC-04a	75	0,1	SG 350	Tenax	Tenax TA	03:20	03:30	0	10	1,0	0,0010	
VOC	taxi + t/o climb		C-EA-VOC-11-TC-04b	75 B	0,1	SG 350	Tenax	Tenax TA	03:20	03:30	0	10	1,0	0,0010	
VOC	t/o climb		C-EA-VOC-11-TC-05a	76	0,1	SG 350	Tenax	Tenax TA	03:34	04:17	0	43	4,3	0,0043	
VOC	t/o climb		C-EA-VOC-11-TC-05b	76 B	0,1	SG 350	Tenax	Tenax TA	03:34	04:17	0	43	4,3	0,0043	
VOC	descent / landing		C-EA-VOC-11-TC-06a	77	0,1	SG 350	Tenax	Tenax TA	09:40	10:27	0	47	4,7	0,0047	
VOC	descent / landing		C-EA-VOC-11-TC-06b	77 B	0,1	SG 350	Tenax	Tenax TA	09:40	10:27	0	47	4,7	0,0047	

Cycle #12 Measurement flight #23				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-TFS									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-12-K-01		10	SG-10	K	PU/Filter	07:26	07:39	0	13	130	0,130	
Organophosphates	t/o climb		F-EA-OPC-12-K-02		10	SG-10	K	PU/Filter	07:39	08:18	0	39	390	0,3900	
Organophosphates	complete flight		F-EA-OPC-12-L-01		3,5	SG-5100	L	PU/Filter	07:26	12:10	0	284	994	0,9940	
Organophosphates	descent / landing		F-EA-OPC-12-K-03		10	SG-10	K	PU/Filter	11:41	12:10	0	29	290	0,2900	
Aldehydes	taxi		F-EA-ALD-12-K-01		0,3	SG 350	K	DNPH	07:26	07:39	0	13	3,9	0,0039	
Aldehydes	t/o climb		F-EA-ALD-12-K-02		0,3	SG 350	K	DNPH	07:39	08:18	0	39	11,7	0,0117	
Aldehydes	complete flight		F-EA-ALD-12-L-01		0,3	SG 350	L	DNPH	07:26	12:10	0	284	85	0,0852	
Aldehydes	descent / landing		F-EA-ALD-12-K-03		0,3	SG 350	K	DNPH	11:41	12:10	0	29	8,7	0,0087	
VOC	blank		F-EA-VOC-12-blank_01												
VOC	taxi		F-EA-VOC-12-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	07:26	07:39	0	13	1,3	0,0013	
VOC	taxi		F-EA-VOC-12-TC-01b	VIII b	0,1	SG 350	Tenax	Tenax TA	07:26	07:39	0	13	1,3	0,0013	
VOC	t/o climb		F-EA-VOC-12-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	07:39	08:18	0	39	3,9	0,0039	
VOC	t/o climb		F-EA-VOC-12-TC-02b	IX b	0,1	SG 350	Tenax	Tenax TA	07:39	08:18	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-12-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	11:41	12:10	0	29	2,9	0,0029	
VOC	descent / landing		F-EA-VOC-12-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	11:41	12:10	0	29	2,9	0,0029	

Cycle #12 Measurement flight #23				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-TFS									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-12-K-01		10	SG-10	K	PU/Filter	07:28	07:39	0	11	110	0,110	
Organophosphates	t/o climb		C-EA-OPC-12-K-02		10	SG-10	K	PU/Filter	07:40	08:20	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-12-L-01		3,5	SG-5100	L	PU/Filter	07:28	12:09	0	281	984	0,9835	
Organophosphates	descent / landing		C-EA-OPC-12-K-03		10	SG-10	K	PU/Filter	11:22	12:09	0	47	470	0,4700	
Aldehydes	taxi		C-EA-ALD-12-K-01		0,3	SG 350	K	DNPH	07:28	07:39	0	11	3,3	0,0033	
Aldehydes	t/o climb		C-EA-ALD-12-K-02		0,3	SG 350	K	DNPH	07:40	08:20	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-12-L-01		0,3	SG 350	L	DNPH	07:28	12:09	0	281	84	0,0843	
Aldehydes	descent / landing		C-EA-ALD-12-K-03		0,3	SG 350	K	DNPH	11:22	12:09	0	47	14,1	0,0141	
VOC	blank		C-EA-VOC-12-blank_01	13											
VOC	taxi		C-EA-VOC-12-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	07:28	07:39	0	11	1,1	0,0011	
VOC	taxi		C-EA-VOC-12-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	07:28	07:39	0	11	1,1	0,0011	
VOC	t/o climb		C-EA-VOC-12-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	07:40	08:20	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-12-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	07:40	08:20	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-12-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	11:22	12:09	0	47	4,7	0,0047	
VOC	descent / landing		C-EA-VOC-12-TC-03b	5 b	0,1	SG 350	Tenax	Tenax TA	11:22	12:09	0	47	4,7	0,0047	

Cycle #12 Measurement flight #24				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	TFS-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		F-EA-OPC-12-K-04		10	SG-10	K	PU/Filter	13:23	13:35	0	12	120	0,120		
Organophosphates	t/o climb		F-EA-OPC-12-K-05		10	SG-10	K	PU/Filter	13:35	14:11	0	36	360	0,3600		
Organophosphates	complete flight		F-EA-OPC-12-L-02		3,5	SG-5100	L	PU/Filter	13:23	18:08	0	285	998	0,9975		
Organophosphates	descent / landing		F-EA-OPC-12-K-06		10	SG-10	K	PU/Filter	17:23	18:08	0	45	450	0,4500		
Aldehydes	taxi + t/o climb		F-EA-ALD-12-K-04		0,3	SG 350	K	DNPH	13:23	13:35	0	12	3,6	0,0036		
Aldehydes	t/o climb		F-EA-ALD-12-K-05		0,3	SG 350	K	DNPH	13:35	14:12	0	37	11,1	0,0111		
Aldehydes	complete flight		F-EA-ALD-12-L-02		0,3	SG 350	L	DNPH	13:23	18:08	0	285	86	0,0855		
Aldehydes	descent / landing		F-EA-ALD-12-K-06		0,3	SG 350	K	DNPH	17:23	18:08	0	45	13,5	0,0135		
VOC	blank		F-EA-VOC-12-blank_02													
VOC	taxi + t/o climb		F-EA-VOC-12-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	13:23	13:35	0	12	1,2	0,0012		
VOC	taxi + t/o climb		F-EA-VOC-12-TF-04b	XIV b	0,1	SG 350	Tenax	Tenax TA	13:23	13:35	0	12	1,2	0,0012		
VOC	t/o climb		F-EA-VOC-12-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	13:35	14:12	0	37	3,7	0,0037		
VOC	t/o climb		F-EA-VOC-12-TF-05b	XV b	0,1	SG 350	Tenax	Tenax TA	13:35	14:12	0	37	3,7	0,0037		
VOC	descent / landing		F-EA-VOC-12-TF-06a	XVI	0,1	SG 350	Tenax	Tenax TA	17:22	18:08	0	46	4,6	0,0046		
VOC	descent / landing		F-EA-VOC-12-TF-06b	XVI b	0,1	SG 350	Tenax	Tenax TA	17:22	18:08	0	46	4,6	0,0046		

Cycle #12 Measurement flight #24				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	TFS-FRA										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-12-K-04		10	SG-10	K	PU/Filter	13:23	13:34	0	11	110	0,110		
Organophosphates	t/o climb		C-EA-OPC-12-K-05		10	SG-10	K	PU/Filter	13:36	14:16	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-12-L-02		3,5	SG-5100	L	PU/Filter	13:23	18:07	0	284	994	0,9940		
Organophosphates	descent / landing		C-EA-OPC-12-K-06		10	SG-10	K	PU/Filter	17:20	18:07	0	47	470	0,4700		
Aldehydes	taxi + t/o climb		C-EA-ALD-12-K-04		0,3	SG 350	K	DNPH	13:23	13:34	0	11	3,3	0,0033		
Aldehydes	t/o climb		C-EA-ALD-12-K-05		0,3	SG 350	K	DNPH	13:36	14:16	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-12-L-02		0,3	SG 350	L	DNPH	13:23	18:07	0	284	85	0,0852		
Aldehydes	descent / landing		C-EA-ALD-12-K-06		0,3	SG 350	K	DNPH	17:20	18:07	0	47	14,1	0,0141		
VOC	blank		C-EA-VOC-12-blank_02	13 b												
VOC	taxi + t/o climb		C-EA-VOC-12-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	13:23	13:34	0	11	1,1	0,0011		
VOC	taxi + t/o climb		C-EA-VOC-12-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	13:23	13:34	0	11	1,1	0,0011		
VOC	t/o climb		C-EA-VOC-12-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	13:36	14:16	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-12-TC-05b	10 b	0,1	SG 350	Tenax	Tenax TA	13:36	14:16	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-12-TC-06a	12	0,1	SG 350	Tenax	Tenax TA	17:20	18:07	0	47	4,7	0,0047		
VOC	descent / landing		C-EA-VOC-12-TC-06b	12 b	0,1	SG 350	Tenax	Tenax TA	17:20	18:07	0	47	4,7	0,0047		

Cycle #13 Measurement flight #25				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-ACE									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-13-K-01		10	SG-10	K	PU/Filter	09:12	09:28	0	16	160	0,160	
Organophosphates	t/o climb		F-EA-OPC-13-K-02		10	SG-10	K	PU/Filter	09:28	10:08	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-13-L-01		3,5	SG-5100	L	PU/Filter	09:12	13:28	0	256	896	0,8960	
Organophosphates	descent / landing		F-EA-OPC-13-K-03		10	SG-10	K	PU/Filter	12:52	13:28	0	36	360	0,3600	
Aldehydes	taxi		F-EA-ALD-13-K-01		0,3	SG 350	K	DNPH	09:12	09:28	0	16	4,8	0,0048	
Aldehydes	t/o climb		F-EA-ALD-13-K-02		0,3	SG 350	K	DNPH	09:28	10:08	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-13-L-01		0,3	SG 350	L	DNPH	09:12	13:28	0	256	77	0,0768	
Aldehydes	descent / landing		F-EA-ALD-13-K-03		0,3	SG 350	K	DNPH	09:12	13:28	0	36	10,8	0,0108	
VOC	blank		F-EA-VOC-13-blank_01												
VOC	taxi		F-EA-VOC-13-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	09:12	09:28	0	16	1,6	0,0016	
VOC	taxi		F-EA-VOC-13-TC-01b	51 b	0,1	SG 350	Tenax	Tenax TA	09:12	09:28	0	16	1,6	0,0016	
VOC	t/o climb		F-EA-VOC-13-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	09:28	10:08	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-13-TC-02b	52 b	0,1	SG 350	Tenax	Tenax TA	09:28	10:08	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-13-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	09:12	13:28	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-13-TC-03b	53 b	0,1	SG 350	Tenax	Tenax TA	09:12	13:28	0	36	3,6	0,0036	

Cycle #13 Measurement flight #25				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-ACE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi	delayed pump start	C-EA-OPC-13-K-01		10	SG-10	K	PU/Filter	09:14	09:28	0	14	140	0,140	
Organophosphates	t/o climb		C-EA-OPC-13-K-02		10	SG-10	K	PU/Filter	09:28	10:08	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-13-L-01		3,5	SG-5100	L	PU/Filter	09:07	13:25	0	258	903	0,9030	
Organophosphates	descent / landing		C-EA-OPC-13-K-03		10	SG-10	K	PU/Filter	12:50	13:25	0	35	350	0,3500	
Aldehydes	taxi		C-EA-ALD-13-K-01		0,3	SG 350	K	DNPH	09:07	09:28	0	21	6,3	0,0063	
Aldehydes	t/o climb		C-EA-ALD-13-K-02		0,3	SG 350	K	DNPH	09:28	10:08	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-13-L-01		0,3	SG 350	L	DNPH	09:07	13:25	0	258	77	0,0774	
Aldehydes	descent / landing		C-EA-ALD-13-K-03		0,3	SG 350	K	DNPH	12:50	13:25	0	35	10,5	0,0105	
VOC	blank		C-EA-VOC-13-blank_01												
VOC	taxi		C-EA-VOC-13-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	09:07	09:28	0	22	2,2	0,0022	
VOC	taxi		C-EA-VOC-13-TC-01b	61 b	0,1	SG 350	Tenax	Tenax TA	09:07	09:28	0	22	2,2	0,0022	
VOC	t/o climb		C-EA-VOC-13-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	09:31	10:09	0	38	3,8	0,0038	
VOC	t/o climb		C-EA-VOC-13-TC-02b	62 b	0,1	SG 350	Tenax	Tenax TA	09:31	10:09	0	38	3,8	0,0038	
VOC	descent / landing		C-EA-VOC-13-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	12:50	13:25	0	35	3,5	0,0035	
VOC	descent / landing		C-EA-VOC-13-TC-03b	63 b	0,1	SG 350	Tenax	Tenax TA	12:50	13:25	0	35	3,5	0,0035	

Cycle #13 Measurement flight #26				EASA CAQ Campaign 2015-2016							Return flight				
Project	EASA Study														
Flight route	ACE-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-13-K-04		10	SG-10	K	PU/Filter	15:50	15:58	0	8	80	0,080	
Organophosphates	t/o climb		F-EA-OPC-13-K-05		10	SG-10	K	PU/Filter	15:58	16:52	0	54	540	0,5400	
Organophosphates	complete flight		F-EA-OPC-13-L-02		3,5	SG-5100	L	PU/Filter	15:50	19:58	0	248	868	0,8680	
Organophosphates	descent / landing		F-EA-OPC-13-K-06		10	SG-10	K	PU/Filter	19:25	19:58	0	33	330	0,3300	
Aldehydes	taxi + t/o climb		F-EA-ALD-13-K-04		0,3	SG 350	K	DNPH	15:50	15:58	0	8	2,4	0,0024	
Aldehydes	t/o climb		F-EA-ALD-13-K-05		0,3	SG 350	K	DNPH	15:58	16:52	0	54	16,2	0,0162	
Aldehydes	complete flight	pump failure 30 m before end of measurement	F-EA-ALD-13-L-02		0,3	SG 350	L	DNPH	15:50	19:28	0	248	74	0,0744	
Aldehydes	descent / landing		F-EA-ALD-13-K-06		0,3	SG 350	K	DNPH	19:25	19:58	0	33	9,9	0,0099	
VOC	blank		F-EA-VOC-13-blank_02												
VOC	taxi + t/o climb		F-EA-VOC-13-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	15:50	15:58	0	8	0,8	0,0008	
VOC	taxi + t/o climb		F-EA-VOC-13-TF-04b	54 b	0,1	SG 350	Tenax	Tenax TA	15:50	15:58	0	8	0,8	0,0008	
VOC	t/o climb		F-EA-VOC-13-TF-05a	55	0,1	SG 350	Tenax	Tenax TA	15:58	16:52	0	54	5,4	0,0054	
VOC	t/o climb		F-EA-VOC-13-TF-05b	55 b	0,1	SG 350	Tenax	Tenax TA	15:58	16:52	0	54	5,4	0,0054	
VOC	descent / landing		F-EA-VOC-13-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	19:25	19:58	0	33	3,3	0,0033	
VOC	descent / landing		F-EA-VOC-13-TF-06b	56 b	0,1	SG 350	Tenax	Tenax TA	19:25	19:58	0	33	3,3	0,0033	

Cycle #13				Measurement flight #26				Return flight						EASA CAQ Campaign 2015-2016					
Project		EASA Study																	
Flight route		ACE-FRA										Date:							
Sampling point		Cabin									Sampler:								
Aircraft		Airbus A321																	
Registration										UTC	UTC								
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]					
Organophosphates	taxi + t/o climb		C-EA-OPC-13-K-04		10	SG-10	K	PU/Filter	15:42	15:57	0	15	150	0,150					
Organophosphates	t/o climb		C-EA-OPC-13-K-05		10	SG-10	K	PU/Filter	15:59	16:39	0	40	400	0,4000					
Organophosphates	complete flight		C-EA-OPC-13-L-02		3,5	SG-5100	L	PU/Filter	15:42	19:58	0	256	896	0,8960					
Organophosphates	descent / landing		C-EA-OPC-13-K-06		10	SG-10	K	PU/Filter	19:25	19:58	0	33	330	0,3300					
Aldehydes	taxi + t/o climb		C-EA-ALD-13-K-04		0,3	SG 350	K	DNPH	15:42	15:57	0	15	4,5	0,0045					
Aldehydes	t/o climb		C-EA-ALD-13-K-05		0,3	SG 350	K	DNPH	15:59	16:39	0	40	12,0	0,0120					
Aldehydes	complete flight		C-EA-ALD-13-L-02		0,3	SG 350	L	DNPH	15:42	19:58	0	256	77	0,0768					
Aldehydes	descent / landing		C-EA-ALD-13-K-06		0,3	SG 350	K	DNPH	19:25	19:58	0	33	9,9	0,0099					
VOC	blank		C-EA-VOC-13-blank_02																
VOC	taxi + t/o climb		C-EA-VOC-13-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	15:42	15:57	0	15	1,5	0,0015					
VOC	taxi + t/o climb		C-EA-VOC-13-TC-04b	64 b	0,1	SG 350	Tenax	Tenax TA	15:42	15:57	0	15	1,5	0,0015					
VOC	t/o climb		C-EA-VOC-13-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	15:59	16:39	0	40	4,0	0,0040					
VOC	t/o climb		C-EA-VOC-13-TC-05b	65 b	0,1	SG 350	Tenax	Tenax TA	15:59	16:39	0	40	4,0	0,0040					
VOC	descent / landing		C-EA-VOC-13-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	19:25	19:58	0	33	3,3	0,0033					
VOC	descent / landing		C-EA-VOC-13-TC-06b	66 b	0,1	SG 350	Tenax	Tenax TA	19:25	19:58	0	33	3,3	0,0033					

Cycle #14 Measurement flight #27				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-AGA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-14-K-01		10	SG-10	K	PU/Filter	07:04	07:19	0	15	150	0,150	
Organophosphates	t/o climb		F-EA-OPC-14-K-02		10	SG-10	K	PU/Filter	07:19	08:01	0	42	420	0,4200	
Organophosphates	complete flight		F-EA-OPC-14-L-01		3,5	SG-5100	L	PU/Filter	07:04	10:54	0	230	805	0,8050	
Organophosphates	descent / landing		F-EA-OPC-14-K-03		10	SG-10	K	PU/Filter	10:15	10:54	0	39	390	0,3900	
Aldehydes	taxi		F-EA-ALD-14-K-01		0,3	SG 350	K	DNPH	07:04	07:19	0	15	4,5	0,0045	
Aldehydes	t/o climb		F-EA-ALD-14-K-02		0,3	SG 350	K	DNPH	07:19	08:01	0	42	12,6	0,0126	
Aldehydes	complete flight		F-EA-ALD-14-L-01		0,3	SG 350	L	DNPH	07:04	10:54	0	230	69	0,0690	
Aldehydes	descent / landing		F-EA-ALD-14-K-03		0,3	SG 350	K	DNPH	10:15	10:54	0	39	11,7	0,0117	
VOC	blank		F-EA-VOC-14-blank_01												
VOC	taxi		F-EA-VOC-14-TC-01a	79	0,1	SG 350	Tenax	Tenax TA	07:04	07:19	0	15	1,5	0,0015	
VOC	taxi		F-EA-VOC-14-TC-01b	79 B	0,1	SG 350	Tenax	Tenax TA	07:04	07:19	0	15	1,5	0,0015	
VOC	t/o climb		F-EA-VOC-14-TC-02a	80	0,1	SG 350	Tenax	Tenax TA	07:19	08:01	0	42	4,2	0,0042	
VOC	t/o climb		F-EA-VOC-14-TC-02b	80 B	0,1	SG 350	Tenax	Tenax TA	07:19	08:01	0	42	4,2	0,0042	
VOC	descent / landing		F-EA-VOC-14-TC-03a	81	0,1	SG 350	Tenax	Tenax TA	10:15	10:54	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-14-TC-03b	81 B	0,1	SG 350	Tenax	Tenax TA	10:15	10:54	0	39	3,9	0,0039	

Cycle #14 Measurement flight #27				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-AGA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-14-K-01		10	SG-10	K	PU/Filter	06:58	07:19	0	21	210	0,210	
Organophosphates	t/o climb		C-EA-OPC-14-K-02		10	SG-10	K	PU/Filter	07:19	07:59	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-14-L-01		3,5	SG-5100	L	PU/Filter	06:58	10:54	0	236	826	0,8260	
Organophosphates	descent / landing		C-EA-OPC-14-K-03		10	SG-10	K	PU/Filter	10:15	10:54	0	39	390	0,3900	
Aldehydes	taxi		C-EA-ALD-14-K-01		0,3	SG 350	K	DNPH	06:58	07:19	0	21	6,3	0,0063	
Aldehydes	t/o climb		C-EA-ALD-14-K-02		0,3	SG 350	K	DNPH	07:19	07:59	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-14-L-01		0,3	SG 350	L	DNPH	06:58	10:54	0	236	71	0,0708	
Aldehydes	descent / landing		C-EA-ALD-14-K-03		0,3	SG 350	K	DNPH	10:15	10:54	0	39	11,7	0,0117	
VOC	blank		C-EA-VOC-14-blank_01												
VOC	taxi		C-EA-VOC-14-TC-01a	86	0,1	SG 350	Tenax	Tenax TA	06:58	07:19	0	21	2,1	0,0021	
VOC	taxi		C-EA-VOC-14-TC-01b	86 B	0,1	SG 350	Tenax	Tenax TA	06:58	07:19	0	21	2,1	0,0021	
VOC	t/o climb		C-EA-VOC-14-TC-02a	87	0,1	SG 350	Tenax	Tenax TA	07:19	07:59	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-14-TC-02b	87 B	0,1	SG 350	Tenax	Tenax TA	07:19	07:59	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-14-TC-03a	88	0,1	SG 350	Tenax	Tenax TA	10:15	10:54	0	39	3,9	0,0039	
VOC	descent / landing		C-EA-VOC-14-TC-03b	88 B	0,1	SG 350	Tenax	Tenax TA	10:15	10:54	0	39	3,9	0,0039	

Cycle #14 Measurement flight #28				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	AGA-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-14-K-04		10	SG-10	K	PU/Filter	12:34	12:42	0	8	80	0,080		
Organophosphates	t/o climb		F-EA-OPC-14-K-05		10	SG-10	K	PU/Filter	12:42	13:20	0	38	380	0,3800		
Organophosphates	complete flight		F-EA-OPC-14-L-02		3,5	SG-5100	L	PU/Filter	12:34	16:32	0	238	833	0,8330		
Organophosphates	descent / landing		F-EA-OPC-14-K-06		10	SG-10	K	PU/Filter	16:00	16:32	0	32	320	0,3200		
Aldehydes	taxi		F-EA-ALD-14-K-04		0,3	SG 350	K	DNPH	12:34	12:42	0	8	2,4	0,0024		
Aldehydes	t/o climb	delayed pump start	F-EA-ALD-14-K-05		0,3	SG 350	K	DNPH	12:49	13:20	0	31	9,3	0,0093		
Aldehydes	complete flight		F-EA-ALD-14-L-02		0,3	SG 350	L	DNPH	12:34	16:32	0	238	71	0,0714		
Aldehydes	descent / landing		F-EA-ALD-14-K-06		0,3	SG 350	K	DNPH	16:00	16:32	0	32	9,6	0,0096		
VOC	blank		F-EA-VOC-14-blank_02													
VOC	taxi		F-EA-VOC-14-TF-04a	82	0,1	SG 350	Tenax	Tenax TA	12:34	12:42	0	8	0,8	0,0008		
VOC	taxi		F-EA-VOC-14-TF-04b	82 B	0,1	SG 350	Tenax	Tenax TA	12:34	12:42	0	8	0,8	0,0008		
VOC	t/o climb		F-EA-VOC-14-TF-05a	83	0,1	SG 350	Tenax	Tenax TA	12:42	13:20	0	38	3,8	0,0038		
VOC	t/o climb		F-EA-VOC-14-TF-05b	83 B	0,1	SG 350	Tenax	Tenax TA	12:42	13:20	0	38	3,8	0,0038		
VOC	descent / landing		F-EA-VOC-14-TF-06a	84	0,1	SG 350	Tenax	Tenax TA	16:00	16:32	0	32	3,2	0,0032		
VOC	descent / landing		F-EA-VOC-14-TF-06b	84 B	0,1	SG 350	Tenax	Tenax TA	16:00	16:32	0	32	3,2	0,0032		

Cycle #14 Measurement flight #28				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	AGA-FRA										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-14-K-04		10	SG-10	K	PU/Filter	12:33	12:43	0	10	100	0,100		
Organophosphates	t/o climb		C-EA-OPC-14-K-05		10	SG-10	K	PU/Filter	12:43	13:23	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-14-L-02		3,5	SG-5100	L	PU/Filter	12:33	16:28	0	235	823	0,8225		
Organophosphates	descent / landing		C-EA-OPC-14-K-06		10	SG-10	K	PU/Filter	15:55	16:28	0	33	330	0,3300		
Aldehydes	taxi		C-EA-ALD-14-K-04		0,3	SG 350	K	DNPH	12:33	12:43	0	10	3,0	0,0030		
Aldehydes	t/o climb		C-EA-ALD-14-K-05		0,3	SG 350	K	DNPH	12:43	13:23	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-14-L-02		0,3	SG 350	L	DNPH	12:33	16:28	0	235	71	0,0705		
Aldehydes	descent / landing		C-EA-ALD-14-K-06		0,3	SG 350	K	DNPH	15:55	16:28	0	33	9,9	0,0099		
VOC	blank		C-EA-VOC-14-blank_02													
VOC	taxi		C-EA-VOC-14-TC-04a	89	0,1	SG 350	Tenax	Tenax TA	12:33	12:43	0	10	1,0	0,0010		
VOC	taxi		C-EA-VOC-14-TC-04b	89 B	0,1	SG 350	Tenax	Tenax TA	12:33	12:43	0	10	1,0	0,0010		
VOC	t/o climb		C-EA-VOC-14-TC-05a	90	0,1	SG 350	Tenax	Tenax TA	12:43	13:23	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-14-TC-05b	90 B	0,1	SG 350	Tenax	Tenax TA	12:43	13:23	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-14-TC-06a	91	0,1	SG 350	Tenax	Tenax TA	15:55	16:28	0	33	3,3	0,0033		
VOC	descent / landing		C-EA-VOC-14-TC-06b	91 B	0,1	SG 350	Tenax	Tenax TA	15:55	16:28	0	33	3,3	0,0033		

Cycle #15 Measurement flight #29				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-FUE									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-15-K-01		10	SG-10	K	PU/Filter	06:55	07:09	0	14	140	0,140	
Organophosphates	t/o climb		F-EA-OPC-15-K-02		10	SG-10	K	PU/Filter	07:09	07:49	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-15-L-01		3,5	SG-5100	L	PU/Filter	06:56	11:25	0	269	942	0,9415	
Organophosphates	descent / landing	hose disconnected from pump	F-EA-OPC-15-K-03	discard sample	10	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000	
Aldehydes	taxi		F-EA-ALD-15-K-01		0,3	SG 350	K	DNPH	06:55	07:09	0	14	4,2	0,0042	
Aldehydes	t/o climb		F-EA-ALD-15-K-02		0,3	SG 350	K	DNPH	07:09	07:50	0	41	12,3	0,0123	
Aldehydes	complete flight		F-EA-ALD-15-L-01		0,3	SG 350	L	DNPH	06:56	11:25	0	269	81	0,0807	
Aldehydes	descent / landing		F-EA-ALD-15-K-03		0,3	SG 350	K	DNPH	10:59	11:25	0	26	7,8	0,0078	
VOC	blank		F-EA-VOC-15-blank_01												
VOC	taxi		F-EA-VOC-15-TC-01a	58	0,1	SG 350	Tenax	Tenax TA	06:55	07:09	0	14	1,4	0,0014	
VOC	taxi		F-EA-VOC-15-TC-01b	58 B	0,1	SG 350	Tenax	Tenax TA	06:55	07:09	0	14	1,4	0,0014	
VOC	t/o climb		F-EA-VOC-15-TC-02a	59	0,1	SG 350	Tenax	Tenax TA	07:09	07:50	0	41	4,1	0,0041	
VOC	t/o climb		F-EA-VOC-15-TC-02b	59 B	0,1	SG 350	Tenax	Tenax TA	07:09	07:50	0	41	4,1	0,0041	
VOC	descent / landing		F-EA-VOC-15-TC-03a	60	0,1	SG 350	Tenax	Tenax TA	10:59	11:25	0	26	2,6	0,0026	
VOC	descent / landing		F-EA-VOC-15-TC-03b	60 B	0,1	SG 350	Tenax	Tenax TA	10:59	11:25	0	26	2,6	0,0026	

Cycle #15 Measurement flight #29				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-FUE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-15-K-01		10	SG-10	K	PU/Filter	06:55	07:09	0	14	140	0,140	
Organophosphates	t/o climb		C-EA-OPC-15-K-02		10	SG-10	K	PU/Filter	07:09	07:49	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-15-L-01		3,5	SG-5100	L	PU/Filter	06:55	11:25	0	270	945	0,9450	
Organophosphates	descent / landing		C-EA-OPC-15-K-03		10	SG-10	K	PU/Filter	11:02	11:25	0	23	230	0,2300	
Aldehydes	taxi		C-EA-ALD-15-K-01		0,3	SG 350	K	DNPH	06:55	07:09	0	14	4,2	0,0042	
Aldehydes	t/o climb		C-EA-ALD-15-K-02		0,3	SG 350	K	DNPH	07:09	07:49	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-15-L-01		0,3	SG 350	L	DNPH	06:55	11:25	0	270	81	0,0810	
Aldehydes	descent / landing		C-EA-ALD-15-K-03		0,3	SG 350	K	DNPH	11:02	11:25	0	23	6,9	0,0069	
VOC	blank		C-EA-VOC-15-blank_01												
VOC	taxi		C-EA-VOC-15-TC-01a	72	0,1	SG 350	Tenax	Tenax TA	06:55	07:09	0	14	1,4	0,0014	
VOC	taxi		C-EA-VOC-15-TC-01b	72 B	0,1	SG 350	Tenax	Tenax TA	06:55	07:09	0	14	1,4	0,0014	
VOC	t/o climb		C-EA-VOC-15-TC-02a	73	0,1	SG 350	Tenax	Tenax TA	07:09	07:49	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-15-TC-02b	73 B	0,1	SG 350	Tenax	Tenax TA	07:09	07:49	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-15-TC-03a	74	0,1	SG 350	Tenax	Tenax TA	11:02	11:25	0	23	2,3	0,0023	
VOC	descent / landing		C-EA-VOC-15-TC-03b	74 B	0,1	SG 350	Tenax	Tenax TA	11:02	11:25	0	23	2,3	0,0023	

Cycle #15 Measurement flight #30				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	FUE-FRA									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-15-K-04		10	SG-10	K	PU/Filter	12:55	13:14	0	19	190	0,190	
Organophosphates	t/o climb		F-EA-OPC-15-K-05		10	SG-10	K	PU/Filter	13:14	13:50	0	36	360	0,3600	
Organophosphates	complete flight		F-EA-OPC-15-L-02		3,5	SG-5100	L	PU/Filter	12:54	17:22	0	268	938	0,9380	
Organophosphates	descent / landing		F-EA-OPC-15-K-06		10	SG-10	K	PU/Filter	16:40	17:22	0	42	420	0,4200	
Aldehydes	taxi		F-EA-ALD-15-K-04		0,3	SG 350	K	DNPH	12:53	13:14	0	21	6,3	0,0063	
Aldehydes	t/o climb		F-EA-ALD-15-K-05		0,3	SG 350	K	DNPH	13:14	13:50	0	36	10,8	0,0108	
Aldehydes	complete flight		F-EA-ALD-15-L-02		0,3	SG 350	L	DNPH	12:54	17:22	0	268	80	0,0804	
Aldehydes	descent / landing		F-EA-ALD-15-K-06		0,3	SG 350	K	DNPH	16:40	17:22	0	42	12,6	0,0126	
VOC	blank		F-EA-VOC-15-blank_02												
VOC	taxi		F-EA-VOC-15-TF-04a	68	0,1	SG 350	Tenax	Tenax TA	12:54	13:14	0	20	2,0	0,0020	
VOC	taxi		F-EA-VOC-15-TF-04b	68 B	0,1	SG 350	Tenax	Tenax TA	12:54	13:14	0	20	2,0	0,0020	
VOC	t/o climb		F-EA-VOC-15-TF-05a	69	0,1	SG 350	Tenax	Tenax TA	13:14	13:50	0	36	3,6	0,0036	
VOC	t/o climb		F-EA-VOC-15-TF-05b	69 B	0,1	SG 350	Tenax	Tenax TA	13:14	13:50	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-15-TF-06a	70	0,1	SG 350	Tenax	Tenax TA	16:40	17:22	0	42	4,2	0,0042	
VOC	descent / landing		F-EA-VOC-15-TF-06b	70 B	0,1	SG 350	Tenax	Tenax TA	16:40	17:22	0	42	4,2	0,0042	

Cycle #15 Measurement flight #30				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	FUE-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-15-K-04		10	SG-10	K	PU/Filter	12:53	13:13	0	20	200	0,200	
Organophosphates	t/o climb		C-EA-OPC-15-K-05		10	SG-10	K	PU/Filter	13:13	14:15	0	62	620	0,6200	
Organophosphates	complete flight		C-EA-OPC-15-L-02		3,5	SG-5100	L	PU/Filter	12:53	17:20	0	267	935	0,9345	
Organophosphates	descent / landing		C-EA-OPC-15-K-06		10	SG-10	K	PU/Filter	16:40	17:20	0	40	400	0,4000	
Aldehydes	taxi		C-EA-ALD-15-K-04		0,3	SG 350	K	DNPH	12:53	13:13	0	20	6,0	0,0060	
Aldehydes	t/o climb		C-EA-ALD-15-K-05		0,3	SG 350	K	DNPH	13:13	14:15	0	62	18,6	0,0186	
Aldehydes	complete flight		C-EA-ALD-15-L-02		0,3	SG 350	L	DNPH	12:53	17:20	0	267	80	0,0801	
Aldehydes	descent / landing		C-EA-ALD-15-K-06		0,3	SG 350	K	DNPH	16:40	17:20	0	40	12	0,0120	
VOC	blank		C-EA-VOC-15-blank_02												
VOC	taxi		C-EA-VOC-15-TC-04a	75	0,1	SG 350	Tenax	Tenax TA	12:53	13:13	0	20	2,0	0,0020	
VOC	taxi		C-EA-VOC-15-TC-04b	75 B	0,1	SG 350	Tenax	Tenax TA	12:53	13:13	0	20	2,0	0,0020	
VOC	t/o climb		C-EA-VOC-15-TC-05a	76	0,1	SG 350	Tenax	Tenax TA	13:13	14:15	0	62	6,2	0,0062	
VOC	t/o climb		C-EA-VOC-15-TC-05b	76 B	0,1	SG 350	Tenax	Tenax TA	13:13	14:15	0	62	6,2	0,0062	
VOC	descent / landing		C-EA-VOC-15-TC-06a	77	0,1	SG 350	Tenax	Tenax TA	16:40	17:20	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-15-TC-06b	77 B	0,1	SG 350	Tenax	Tenax TA	16:40	17:20	0	40	4,0	0,0040	

Cycle #16 Measurement flight #31				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-AGA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-16-K-01		10	SG-10	K	PU/Filter	08:03	08:36	0	33	330	0,330	
Organophosphates	t/o climb		F-EA-OPC-16-K-02		10	SG-10	K	PU/Filter	08:36	09:10	0	34	340	0,3400	
Organophosphates	complete flight		F-EA-OPC-16-L-01		3,5	SG-5100	L	PU/Filter	08:02	12:14	0	252	882	0,8820	
Organophosphates	descent / landing		F-EA-OPC-16-K-03		10	SG-10	K	PU/Filter	11:30	12:14	0	44	440	0,4400	
Aldehydes	taxi		F-EA-ALD-16-K-01		0,3	SG 350	K	DNPH	08:03	08:37	0	34	10,2	0,0102	
Aldehydes	t/o climb		F-EA-ALD-16-K-02		0,3	SG 350	K	DNPH	08:37	09:09	0	32	9,6	0,0096	
Aldehydes	complete flight		F-EA-ALD-16-L-01		0,3	SG 350	L	DNPH	08:02	12:14	0	252	76	0,0756	
Aldehydes	descent / landing		F-EA-ALD-16-K-03		0,3	SG 350	K	DNPH	11:30	12:14	0	44	13,2	0,0132	
VOC	blank		F-EA-VOC-16-blank_01												
VOC	taxi		F-EA-VOC-16-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	08:03	08:35	0	32	3,2	0,0032	
VOC	taxi		F-EA-VOC-16-TC-01b	VIII b	0,1	SG 350	Tenax	Tenax TA	08:03	08:35	0	32	3,2	0,0032	
VOC	t/o climb		F-EA-VOC-16-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	08:35	09:13	0	38	3,8	0,0038	
VOC	t/o climb		F-EA-VOC-16-TC-02b	IX b	0,1	SG 350	Tenax	Tenax TA	08:35	09:13	0	38	3,8	0,0038	
VOC	descent / landing		F-EA-VOC-16-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	11:30	12:14	0	44	4,4	0,0044	
VOC	descent / landing		F-EA-VOC-16-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	11:30	12:14	0	44	4,4	0,0044	

Cycle #16 Measurement flight #31				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-AGA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A321														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-16-K-01		10	SG-10	K	PU/Filter	08:23	08:39	0	16	160	0,160	
Organophosphates	t/o climb		C-EA-OPC-16-K-02		10	SG-10	K	PU/Filter	08:40	09:21	0	41	410	0,4100	
Organophosphates	complete flight		C-EA-OPC-16-L-01		3,5	SG-5100	L	PU/Filter	08:23	12:15	0	232	812	0,8120	
Organophosphates	descent / landing		C-EA-OPC-16-K-03		10	SG-10	K	PU/Filter	11:30	12:15	0	45	450	0,4500	
Aldehydes	taxi		C-EA-ALD-16-K-01		0,3	SG 350	K	DNPH	08:23	08:39	0	16	4,8	0,0048	
Aldehydes	t/o climb		C-EA-ALD-16-K-02		0,3	SG 350	K	DNPH	08:40	09:21	0	41	12,3	0,0123	
Aldehydes	complete flight		C-EA-ALD-16-L-01		0,3	SG 350	L	DNPH	08:23	12:15	0	232	70	0,0696	
Aldehydes	descent / landing		C-EA-ALD-16-K-03		0,3	SG 350	K	DNPH	11:30	12:15	0	45	13,5	0,0135	
VOC	blank		C-EA-VOC-16-blank_01												
VOC	taxi		C-EA-VOC-16-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	08:23	08:39	0	16	1,6	0,0016	
VOC	taxi		C-EA-VOC-16-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	08:23	08:39	0	16	1,6	0,0016	
VOC	t/o climb		C-EA-VOC-16-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	08:41	09:22	0	41	4,1	0,0041	
VOC	t/o climb		C-EA-VOC-16-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	08:41	09:22	0	41	4,1	0,0041	
VOC	descent / landing		C-EA-VOC-16-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	11:30	12:15	0	45	4,5	0,0045	
VOC	descent / landing		C-EA-VOC-16-TC-03b	5 b	0,1	SG 350	Tenax	Tenax TA	11:30	12:15	0	45	4,5	0,0045	

Cycle #16 Measurement flight #32				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	AGA-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-16-K-04		10	SG-10	K	PU/Filter	13:27	13:53	0	26	260	0,260		
Organophosphates	t/o climb		F-EA-OPC-16-K-05		10	SG-10	K	PU/Filter	13:53	14:34	0	41	410	0,4100		
Organophosphates	complete flight		F-EA-OPC-16-L-02		3,5	SG-5100	L	PU/Filter	13:26	17:48	0	262	917	0,9170		
Organophosphates	descent / landing		F-EA-OPC-16-K-06		10	SG-10	K	PU/Filter	17:02	17:47	0	45	450	0,4500		
Aldehydes	taxi		F-EA-ALD-16-K-04		0,3	SG 350	K	DNPH	13:27	13:52	0	25	7,5	0,0075		
Aldehydes	t/o climb		F-EA-ALD-16-K-05		0,3	SG 350	K	DNPH	13:52	14:32	0	40	12,0	0,0120		
Aldehydes	complete flight		F-EA-ALD-16-L-02		0,3	SG 350	L	DNPH	13:26	17:48	0	262	79	0,0786		
Aldehydes	descent / landing		F-EA-ALD-16-K-06		0,3	SG 350	K	DNPH	17:02	17:46	0	44	13,2	0,0132		
VOC	blank		F-EA-VOC-16-blank_02													
VOC	taxi		F-EA-VOC-16-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	13:27	13:51	0	24	2,4	0,0024		
VOC	taxi		F-EA-VOC-16-TF-04b	XIV b	0,1	SG 350	Tenax	Tenax TA	13:27	13:51	0	24	2,4	0,0024		
VOC	t/o climb		F-EA-VOC-16-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	13:51	14:38	0	47	4,7	0,0047		
VOC	t/o climb		F-EA-VOC-16-TF-05b	XV b	0,1	SG 350	Tenax	Tenax TA	13:51	14:38	0	47	4,7	0,0047		
VOC	descent / landing		F-EA-VOC-16-TF-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	17:02	17:43	0	41	4,1	0,0041		
VOC	descent / landing		F-EA-VOC-16-TF-06b	XVIII b	0,1	SG 350	Tenax	Tenax TA	17:02	17:43	0	41	4,1	0,0041		

Cycle #16 Measurement flight #32				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	AGA-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A321															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-16-K-04		10	SG-10	K	PU/Filter	13:40	13:51	0	11	110	0,110		
Organophosphates	t/o climb		C-EA-OPC-16-K-05		10	SG-10	K	PU/Filter	13:53	14:33	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-16-L-02		3,5	SG-5100	L	PU/Filter	13:40	17:45	0	245	858	0,8575		
Organophosphates	descent / landing		C-EA-OPC-16-K-06		10	SG-10	K	PU/Filter	16:58	17:45	0	47	470	0,4700		
Aldehydes	taxi		C-EA-ALD-16-K-04		0,3	SG 350	K	DNPH	13:40	13:51	0	11	3,3	0,0033		
Aldehydes	t/o climb		C-EA-ALD-16-K-05		0,3	SG 350	K	DNPH	13:53	14:33	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-16-L-02		0,3	SG 350	L	DNPH	13:40	17:45	0	245	74	0,0735		
Aldehydes	descent / landing		C-EA-ALD-16-K-06		0,3	SG 350	K	DNPH	16:58	17:45	0	47	14,1	0,0141		
VOC	blank		C-EA-VOC-16-blank_02													
VOC	taxi		C-EA-VOC-16-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	13:40	13:51	0	11	1,1	0,0011		
VOC	taxi		C-EA-VOC-16-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	13:40	13:51	0	11	1,1	0,0011		
VOC	t/o climb		C-EA-VOC-16-TC-05a	10 b	0,1	SG 350	Tenax	Tenax TA	13:53	14:34	0	41	4,1	0,0041		
VOC	t/o climb		C-EA-VOC-16-TC-05b	10	0,1	SG 350	Tenax	Tenax TA	13:53	14:34	0	41	4,1	0,0041		
VOC	descent / landing		C-EA-VOC-16-TC-06a	11	0,1	SG 350	Tenax	Tenax TA	16:58	17:45	0	47	4,7	0,0047		
VOC	descent / landing		C-EA-VOC-16-TC-06b	11 b	0,1	SG 350	Tenax	Tenax TA	16:58	17:45	0	47	4,7	0,0047		

Cycle #17 Measurement flight #33				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-17-K-01		10	SG-10	K	PU/Filter	16:42	17:06	0	24	240	0,240	
Organophosphates	t/o climb		F-EA-OPC-17-K-02		10	SG-10	K	PU/Filter	17:07	17:47	0	40	400	0,4000	
Organophosphates	complete flight		F-EA-OPC-17-L-01		1	SG-5100	L	PU/Filter	16:44	04:09	0	685	685	0,6850	
Organophosphates	descent / landing		F-EA-OPC-17-K-03		10	SG-10	K	PU/Filter	03:25	04:08	0	43	430	0,4300	
Aldehydes	taxi		F-EA-ALD-17-K-01		0,3	SG 350	K	DNPH	16:41	17:06	0	25	7,5	0,0075	
Aldehydes	t/o climb		F-EA-ALD-17-K-02		0,3	SG 350	K	DNPH	17:07	17:46	0	39	11,7	0,0117	
Aldehydes	complete flight		F-EA-ALD-17-L-01		0,3	SG 350	L	DNPH	16:43	04:09	0	686	206	0,2058	
Aldehydes	descent / landing		F-EA-ALD-17-K-03		0,3	SG 350	K	DNPH	03:25	04:08	0	43	12,9	0,0129	
VOC	blank		F-EA-VOC-17-blank_01												
VOC	taxi		F-EA-VOC-17-TC-01a	812808	0,1	SG 350	Tenax	Tenax TA	16:42	17:06	0	24	2,4	0,0024	
VOC	taxi		F-EA-VOC-17-TC-01b	SUPELCO	0,1	SG 350	Tenax	Tenax TA	16:42	17:06	0	24	2,4	0,0024	
VOC	t/o climb		F-EA-VOC-17-TC-02a	B23781	0,1	SG 350	Tenax	Tenax TA	17:07	17:43	0	36	3,6	0,0036	
VOC	t/o climb		F-EA-VOC-17-TC-02b	B10258	0,1	SG 350	Tenax	Tenax TA	17:07	17:43	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-17-TC-03a	B12888	0,1	SG 350	Tenax	Tenax TA	03:26	04:05	0	39	3,9	0,0039	
VOC	descent / landing		F-EA-VOC-17-TC-03b	B10222	0,1	SG 350	Tenax	Tenax TA	03:26	04:05	0	39	3,9	0,0039	

Cycle #17 Measurement flight #33				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-17-K-01		10	SG-10	K	PU/Filter	16:48	17:06	0	18	180	0,180	
Organophosphates	t/o climb		C-EA-OPC-17-K-02		10	SG-10	K	PU/Filter	17:08	17:48	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-17-L-01		1	SG-5100	L	PU/Filter	16:48	04:05	0	677	677	0,6770	
Organophosphates	descent / landing		C-EA-OPC-17-K-03		10	SG-10	K	PU/Filter	03:07	04:05	0	58	580	0,5800	
Aldehydes	taxi		C-EA-ALD-17-K-01		0,3	SG 350	K	DNPH	16:48	17:06	0	18	5,4	0,0054	
Aldehydes	t/o climb		C-EA-ALD-17-K-02		0,3	SG 350	K	DNPH	17:08	17:48	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-17-L-01		0,3	SG 350	L	DNPH	16:48	04:05	0	677	203	0,2031	
Aldehydes	descent / landing		C-EA-ALD-17-K-03		0,3	SG 350	K	DNPH	03:07	04:05	0	58	17,4	0,0174	
VOC	blank		C-EA-VOC-17-blank_01	67 + 67 B											
VOC	taxi		C-EA-VOC-17-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	16:48	17:06	0	18	1,8	0,0018	
VOC	taxi		C-EA-VOC-17-TC-01b	61 B	0,1	SG 350	Tenax	Tenax TA	16:48	17:06	0	18	1,8	0,0018	
VOC	t/o climb		C-EA-VOC-17-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	17:08	17:48	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-17-TC-02b	62 B	0,1	SG 350	Tenax	Tenax TA	17:08	17:48	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-17-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	03:07	04:05	0	58	5,8	0,0058	
VOC	descent / landing		C-EA-VOC-17-TC-03b	63 B	0,1	SG 350	Tenax	Tenax TA	03:07	04:05	0	58	5,8	0,0058	

Cycle #17 Measurement flight #34				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HND-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-17-K-04		10	SG-10	K	PU/Filter	06:18	06:37	0	19	190	0,190	
Organophosphates	t/o climb		F-EA-OPC-17-K-05		10	SG-10	K	PU/Filter	06:37	07:19	0	42	420	0,4200	
Organophosphates	complete flight		F-EA-OPC-17-L-02		1	SG-5100	L	PU/Filter	06:19	18:02	0	703	703	0,7030	
Organophosphates	descent / landing		F-EA-OPC-17-K-06		10	SG-10	K	PU/Filter	17:24	17:59	0	35	350	0,3500	
Aldehydes	taxi		F-EA-ALD-17-K-04		0,3	SG 350	K	DNPH	06:18	06:37	0	19	5,7	0,0057	
Aldehydes	t/o climb		F-EA-ALD-17-K-05		0,3	SG 350	K	DNPH	06:37	07:19	0	42	12,6	0,0126	
Aldehydes	complete flight		F-EA-ALD-17-L-02		0,3	SG 350	L	DNPH	06:19	18:02	0	703	211	0,2109	
Aldehydes	descent / landing		F-EA-ALD-17-K-06		0,3	SG 350	K	DNPH	17:24	17:59	0	35	10,5	0,0105	
VOC	blank		F-EA-VOC-17-blank_02												
VOC	taxi		F-EA-VOC-17-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	06:17	06:36	0	19	1,9	0,0019	
VOC	taxi		F-EA-VOC-17-TF-04b	54 B	0,1	SG 350	Tenax	Tenax TA	06:17	06:36	0	19	1,9	0,0019	
VOC	t/o climb		F-EA-VOC-17-TF-05a	55	0,1	SG 350	Tenax	Tenax TA	06:36	07:19	0	43	4,3	0,0043	
VOC	t/o climb		F-EA-VOC-17-TF-05b	55 B	0,1	SG 350	Tenax	Tenax TA	06:36	07:19	0	43	4,3	0,0043	
VOC	descent / landing		F-EA-VOC-17-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	17:23	17:59	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-17-TF-06b	56 B	0,1	SG 350	Tenax	Tenax TA	17:23	17:59	0	36	3,6	0,0036	

Cycle #17 Measurement flight #34				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HND-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-17-K-04		10	SG-10	K	PU/Filter	06:23	06:35	0	12	120	0,120	
Organophosphates	t/o climb		C-EA-OPC-17-K-05		10	SG-10	K	PU/Filter	06:36	07:20	0	44	440	0,4400	
Organophosphates	complete flight		C-EA-OPC-17-L-02		1	SG-5100	L	PU/Filter	06:24	17:53	0	689	689	0,6890	
Organophosphates	descent / landing		C-EA-OPC-17-K-06		10	SG-10	K	PU/Filter	17:05	17:50	0	45	450	0,4500	
Aldehydes	taxi		C-EA-ALD-17-K-04		0,3	SG 350	K	DNPH	06:23	06:35	0	12	3,6	0,0036	
Aldehydes	t/o climb		C-EA-ALD-17-K-05		0,3	SG 350	K	DNPH	06:36	07:20	0	44	13,2	0,0132	
Aldehydes	complete flight		C-EA-ALD-17-L-02		0,3	SG 350	L	DNPH	06:24	17:53	0	689	207	0,2067	
Aldehydes	descent / landing		C-EA-ALD-17-K-06		0,3	SG 350	K	DNPH	17:05	17:52	0	47	14,1	0,0141	
VOC	blank		C-EA-VOC-17-blank_02												
VOC	taxi		C-EA-VOC-17-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	06:25	06:36	0	11	1,1	0,0011	
VOC	taxi		C-EA-VOC-17-TC-04b	64 B	0,1	SG 350	Tenax	Tenax TA	06:25	06:36	0	11	1,1	0,0011	
VOC	t/o climb		C-EA-VOC-17-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	06:37	07:21	0	44	4,4	0,0044	
VOC	t/o climb		C-EA-VOC-17-TC-05b	65 B	0,1	SG 350	Tenax	Tenax TA	06:37	07:21	0	44	4,4	0,0044	
VOC	descent / landing		C-EA-VOC-17-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	17:11	17:48	0	37	3,7	0,0037	
VOC	descent / landing		C-EA-VOC-17-TC-06b	66 B	0,1	SG 350	Tenax	Tenax TA	17:11	17:48	0	37	3,7	0,0037	

Cycle #18 Measurement flight #35				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HEL									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-18-K-01		10	SG-10	K	PU/Filter	09:06	09:16	0	10	100	0,100	
Organophosphates	t/o climb		F-EA-OPC-18-K-02		10	SG-10	K	PU/Filter	09:16	09:51	0	35	350	0,3500	
Organophosphates	complete flight		F-EA-OPC-18-L-01		3,5	SG-5100	L	PU/Filter	09:03	11:48	0	165	578	0,5775	
Organophosphates	descent / landing		F-EA-OPC-18-K-03		10	SG-10	K	PU/Filter	11:06	11:45	0	39	390	0,3900	
Aldehydes	taxi		F-EA-ALD-18-K-01		0,3	SG 350	K	DNPH	09:05	09:16	0	11	3,3	0,0033	
Aldehydes	t/o climb		F-EA-ALD-18-K-02		0,3	SG 350	K	DNPH	09:16	09:50	0	34	10,2	0,0102	
Aldehydes	complete flight		F-EA-ALD-18-L-01		0,3	SG 350	L	DNPH	09:03	11:49	0	166	50	0,0498	
Aldehydes	descent / landing		F-EA-ALD-18-K-03		0,3	SG 350	K	DNPH	11:07	11:45	0	38	11,4	0,0114	
VOC	blank		F-EA-VOC-18-blank_01												
VOC	taxi		F-EA-VOC-18-TC-01a	B13473	0,1	SG 350	Tenax	Tenax TA	09:06	09:15	0	9	0,9	0,0009	
VOC	taxi		F-EA-VOC-18-TC-01b	B13324	0,1	SG 350	Tenax	Tenax TA	09:06	09:15	0	9	0,9	0,0009	
VOC	t/o climb		F-EA-VOC-18-TC-02a	B13451	0,1	SG 350	Tenax	Tenax TA	09:16	09:47	0	31	3,1	0,0031	
VOC	t/o climb		F-EA-VOC-18-TC-02b	B13336	0,1	SG 350	Tenax	Tenax TA	09:16	09:47	0	31	3,1	0,0031	
VOC	descent / landing		F-EA-VOC-18-TC-03a	B13420	0,1	SG 350	Tenax	Tenax TA	11:10	11:44	0	34	3,4	0,0034	
VOC	descent / landing		F-EA-VOC-18-TC-03b	B13340	0,1	SG 350	Tenax	Tenax TA	11:10	11:44	0	34	3,4	0,0034	

Cycle #18 Measurement flight #35				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HEL									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-18-K-01		10	SG-10	K	PU/Filter	09:08	09:18	0	10	100	0,100	
Organophosphates	t/o climb		C-EA-OPC-18-K-02		10	SG-10	K	PU/Filter	09:19	09:59	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-18-L-01		3,5	SG-5100	L	PU/Filter	09:08	11:42	0	154	539	0,5390	
Organophosphates	descent / landing		C-EA-OPC-18-K-03		10	SG-10	K	PU/Filter	11:05	11:42	0	37	370	0,3700	
Aldehydes	taxi		C-EA-ALD-18-K-01		0,3	SG 350	K	DNPH	09:08	09:18	0	10	3,0	0,0030	
Aldehydes	t/o climb		C-EA-ALD-18-K-02		0,3	SG 350	K	DNPH	09:19	09:59	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-18-L-01		0,3	SG 350	L	DNPH	09:08	11:42	0	154	46	0,0462	
Aldehydes	descent / landing		C-EA-ALD-18-K-03		0,3	SG 350	K	DNPH	11:05	11:42	0	37	11,1	0,0111	
VOC	blank		C-EA-VOC-18-blank_01	92											
VOC	taxi		C-EA-VOC-18-TC-01a	86	0,1	SG 350	Tenax	Tenax TA	09:08	09:18	0	10	1,0	0,0010	
VOC	taxi		C-EA-VOC-18-TC-01b	86 b	0,1	SG 350	Tenax	Tenax TA	09:08	09:18	0	10	1,0	0,0010	
VOC	t/o climb		C-EA-VOC-18-TC-02a	87	0,1	SG 350	Tenax	Tenax TA	09:19	09:59	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-18-TC-02b	87 b	0,1	SG 350	Tenax	Tenax TA	09:19	09:59	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-18-TC-03a	88	0,1	SG 350	Tenax	Tenax TA	11:05	11:42	0	37	3,7	0,0037	
VOC	descent / landing		C-EA-VOC-18-TC-03b	88 b	0,1	SG 350	Tenax	Tenax TA	11:05	11:42	0	37	3,7	0,0037	

Cycle #18 Measurement flight #36				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HEL-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-18-K-04		10	SG-10	K	PU/Filter	12:15	12:31	0	16	160	0,160	
Organophosphates	t/o climb		F-EA-OPC-18-K-05		10	SG-10	K	PU/Filter	12:30	12:59	0	29	290	0,2900	
Organophosphates	complete flight		F-EA-OPC-18-L-02		3,5	SG-5100	L	PU/Filter	12:07	14:46	0	159	557	0,5565	
Organophosphates	descent / landing		F-EA-OPC-18-K-06		10	SG-10	K	PU/Filter	14:01	14:43	0	42	420	0,4200	
Aldehydes	taxi		F-EA-ALD-18-K-04		0,3	SG 350	K	DNPH	12:15	12:31	0	16	4,8	0,0048	
Aldehydes	t/o climb	no sampling	F-EA-ALD-18-K-05	unknown reason	0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000	
Aldehydes	complete flight		F-EA-ALD-18-L-02		0,3	SG 350	L	DNPH	12:08	14:46	0	158	47	0,0474	
Aldehydes	descent / landing		F-EA-ALD-18-K-06		0,3	SG 350	K	DNPH	14:01	14:42	0	41	12,3	0,0123	
VOC	blank		F-EA-VOC-18-blank_02												
VOC	taxi		F-EA-VOC-18-TF-04a	B13486	0,1	SG 350	Tenax	Tenax TA	12:16	12:30	0	14	1,4	0,0014	
VOC	taxi		F-EA-VOC-18-TF-04b	B13338	0,1	SG 350	Tenax	Tenax TA	12:16	12:30	0	14	1,4	0,0014	
VOC	t/o climb		F-EA-VOC-18-TF-05a	B13372	0,1	SG 350	Tenax	Tenax TA	12:30	13:00	0	30	3,0	0,0030	
VOC	t/o climb		F-EA-VOC-18-TF-05b	B13358	0,1	SG 350	Tenax	Tenax TA	12:30	13:00	0	30	3,0	0,0030	
VOC	descent / landing		F-EA-VOC-18-TF-06a	B13441	0,1	SG 350	Tenax	Tenax TA	14:05	14:36	0	31	3,1	0,0031	
VOC	descent / landing		F-EA-VOC-18-TF-06b	B13462	0,1	SG 350	Tenax	Tenax TA	14:05	14:36	0	31	3,1	0,0031	

Cycle #18 Measurement flight #36				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HEL-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-18-K-04		10	SG-10	K	PU/Filter	12:21	12:31	0	10	100	0,100	
Organophosphates	t/o climb		C-EA-OPC-18-K-05		10	SG-10	K	PU/Filter	12:32	13:12	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-18-L-02		3,5	SG-5100	L	PU/Filter	12:21	14:44	0	143	501	0,5005	
Organophosphates	descent / landing		C-EA-OPC-18-K-06		10	SG-10	K	PU/Filter	13:59	14:44	0	45	450	0,4500	
Aldehydes	taxi		C-EA-ALD-18-K-04		0,3	SG 350	K	DNPH	12:21	12:31	0	10	3,0	0,0030	
Aldehydes	t/o climb		C-EA-ALD-18-K-05		0,3	SG 350	K	DNPH	12:32	13:12	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-18-L-02		0,3	SG 350	L	DNPH	12:21	14:44	0	143	43	0,0429	
Aldehydes	descent / landing		C-EA-ALD-18-K-06		0,3	SG 350	K	DNPH	13:59	14:44	0	45	13,5	0,0135	
VOC	blank		C-EA-VOC-18-blank_02	92 b											
VOC	taxi		C-EA-VOC-18-TC-04a	89	0,1	SG 350	Tenax	Tenax TA	12:21	12:31	0	10	1,0	0,0010	
VOC	taxi		C-EA-VOC-18-TC-04b	89 b	0,1	SG 350	Tenax	Tenax TA	12:21	12:31	0	10	1,0	0,0010	
VOC	t/o climb		C-EA-VOC-18-TC-05a	90	0,1	SG 350	Tenax	Tenax TA	12:32	13:12	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-18-TC-05b	90 b	0,1	SG 350	Tenax	Tenax TA	12:32	13:12	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-18-TC-06a	91	0,1	SG 350	Tenax	Tenax TA	13:59	14:44	0	45	4,5	0,0045	
VOC	descent / landing		C-EA-VOC-18-TC-06b	91 b	0,1	SG 350	Tenax	Tenax TA	13:59	14:44	0	45	4,5	0,0045	

Cycle #19 Measurement flight #37				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-19--K-01		10	SG-10	K	PU/Filter	16:25	16:40	0	15	150	0,150	
Organophosphates	t/o climb		F-EA-OPC-19--K-02		10	SG-10	K	PU/Filter	16:41	17:16	0	35	350	0,3500	
Organophosphates	complete flight		F-EA-OPC-19--L-01		1	SG-5100	L	PU/Filter	16:14	01:00	0	526	526	0,5260	
Organophosphates	descent / landing		F-EA-OPC-19--K-03		10	SG-10	K	PU/Filter	00:16	00:55	0	39	390	0,3900	
Aldehydes	taxi		F-EA-ALD-19--K-01		0,3	SG 350	K	DNPH	16:25	16:40	0	15	4,5	0,0045	
Aldehydes	t/o climb		F-EA-ALD-19--K-02		0,3	SG 350	K	DNPH	16:41	17:16	0	35	10,5	0,0105	
Aldehydes	complete flight		F-EA-ALD-19--L-01		0,3	SG 350	L	DNPH	16:14	01:00	0	526	157,8	0,1578	
Aldehydes	descent / landing		F-EA-ALD-19--K-03		0,3	SG 350	K	DNPH	00:16	00:55	0	39	11,7	0,0117	
VOC	blank		F-EA-VOC-19-blank_01												
VOC	taxi		F-EA-VOC-19--TC-01a	58	0,1	SG 350	Tenax	Tenax TA	16:15	16:40	0	25	2,5	0,0025	
VOC	taxi		F-EA-VOC-19--TC-01b	58 B	0,1	SG 350	Tenax	Tenax TA	16:15	16:40	0	25	2,5	0,0025	
VOC	t/o climb		F-EA-VOC-19--TC-02a	59	0,1	SG 350	Tenax	Tenax TA	16:42	17:15	0	33	3,3	0,0033	
VOC	t/o climb		F-EA-VOC-19--TC-02b	59 B	0,1	SG 350	Tenax	Tenax TA	16:42	17:15	0	33	3,3	0,0033	
VOC	descent / landing		F-EA-VOC-19--TC-03a	60	0,1	SG 350	Tenax	Tenax TA	00:20	00:53	0	33	3,3	0,0033	
VOC	descent / landing		F-EA-VOC-19--TC-03b	60 B	0,1	SG 350	Tenax	Tenax TA	00:20	00:53	0	33	3,3	0,0033	

Cycle #19 Measurement flight #37				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-19--K-01		10	SG-10	K	PU/Filter	16:16	16:43	0	27	270	0,270	
Organophosphates	t/o climb		C-EA-OPC-19--K-02		10	SG-10	K	PU/Filter	16:45	17:25	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-19--L-01		1	SG-5100	L	PU/Filter	16:16	00:55	0	519	519	0,5190	
Organophosphates	descent / landing		C-EA-OPC-19--K-03		10	SG-10	K	PU/Filter	00:03	00:55	0	52	520	0,5200	
Aldehydes	taxi		C-EA-ALD-19--K-01		0,3	SG 350	K	DNPH	16:16	16:43	0	27	8,1	0,0081	
Aldehydes	t/o climb		C-EA-ALD-19--K-02		0,3	SG 350	K	DNPH	16:45	17:25	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-19--L-01		0,3	SG 350	L	DNPH	16:16	00:55	0	519	156	0,1557	
Aldehydes	descent / landing		C-EA-ALD-19--K-03		0,3	SG 350	K	DNPH	00:03	00:55	0	52	15,6	0,0156	
VOC	blank		C-EA-VOC-19-blank_01												
VOC	taxi		C-EA-VOC-19--TC-01a	72	0,1	SG 350	Tenax	Tenax TA	16:16	16:43	0	27	2,7	0,0027	
VOC	taxi		C-EA-VOC-19--TC-01b	72 B	0,1	SG 350	Tenax	Tenax TA	16:16	16:43	0	27	2,7	0,0027	
VOC	t/o climb		C-EA-VOC-19--TC-02a	73	0,1	SG 350	Tenax	Tenax TA	16:45	17:25	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-19--TC-02b	73 B	0,1	SG 350	Tenax	Tenax TA	16:45	17:25	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-19--TC-03a	74	0,1	SG 350	Tenax	Tenax TA	00:03	00:55	0	52	5,2	0,0052	
VOC	descent / landing		C-EA-VOC-19--TC-03b	74 B	0,1	SG 350	Tenax	Tenax TA	00:03	00:55	0	52	5,2	0,0052	

Cycle #19 Measurement flight #38				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	JFK-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-19--K-04		10	SG-10	K	PU/Filter	03:13	03:35	0	22	220	0,220	
Organophosphates	t/o climb		F-EA-OPC-19--K-05		10	SG-10	K	PU/Filter	03:35	04:17	0	42	420	0,4200	
Organophosphates	complete flight		F-EA-OPC-19--L-02		1	SG-5100	L	PU/Filter	03:13	10:55	0	462	462	0,4620	
Organophosphates	descent / landing		F-EA-OPC-19--K-06		10	SG-10	K	PU/Filter	10:02	10:54	0	52	520	0,5200	
Aldehydes	taxi		F-EA-ALD-19--K-04		0,3	SG 350	K	DNPH	03:13	03:36	0	23	6,9	0,0069	
Aldehydes	t/o climb		F-EA-ALD-19--K-05		0,3	SG 350	K	DNPH	03:36	04:17	0	41	12,3	0,0123	
Aldehydes	complete flight		F-EA-ALD-19--L-02		0,3	SG 350	L	DNPH	03:13	10:55	0	462	139	0,1386	
Aldehydes	descent / landing		F-EA-ALD-19--K-06		0,3	SG 350	K	DNPH	10:01	10:54	0	53	15,9	0,0159	
VOC	blank		F-EA-VOC-19-blank_02												
VOC	taxi		F-EA-VOC-19--TF-04a	68	0,1	SG 350	Tenax	Tenax TA	03:16	03:35	0	19	1,9	0,0019	
VOC	taxi		F-EA-VOC-19--TF-04b	68 B	0,1	SG 350	Tenax	Tenax TA	03:16	03:35	0	19	1,9	0,0019	
VOC	t/o climb		F-EA-VOC-19--TF-05a	69	0,1	SG 350	Tenax	Tenax TA	03:35	04:16	0	41	4,1	0,0041	
VOC	t/o climb		F-EA-VOC-19--TF-05b	69 B	0,1	SG 350	Tenax	Tenax TA	03:35	04:16	0	41	4,1	0,0041	
VOC	descent / landing		F-EA-VOC-19--TF-06a	70	0,1	SG 350	Tenax	Tenax TA	10:01	10:41	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-19--TF-06b	70 B	0,1	SG 350	Tenax	Tenax TA	10:01	10:41	0	40	4,0	0,0040	

Cycle #19 Measurement flight #38				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	JFK-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A340-600															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-19--K-04		10	SG-10	K	PU/Filter	03:11	03:36	0	25	250	0,250		
Organophosphates	t/o climb		C-EA-OPC-19--K-05		10	SG-10	K	PU/Filter	03:37	04:16	0	39	390	0,3900		
Organophosphates	complete flight		C-EA-OPC-19--L-02		1	SG-5100	L	PU/Filter	03:12	10:54	0	462	462	0,4620		
Organophosphates	descent / landing		C-EA-OPC-19--K-06		10	SG-10	K	PU/Filter	09:55	10:53	0	58	580	0,5800		
Aldehydes	taxi		C-EA-ALD-19--K-04		0,3	SG 350	K	DNPH	03:11	03:36	0	25	7,5	0,0075		
Aldehydes	t/o climb		C-EA-ALD-19--K-05		0,3	SG 350	K	DNPH	03:37	04:16	0	39	11,7	0,0117		
Aldehydes	complete flight		C-EA-ALD-19--L-02		0,3	SG 350	L	DNPH	03:12	10:54	0	462	139	0,1386		
Aldehydes	descent / landing		C-EA-ALD-19--K-06		0,3	SG 350	K	DNPH	09:55	10:53	0	58	17,4	0,0174		
VOC	blank		C-EA-VOC-19-blank_02													
VOC	taxi		C-EA-VOC-19--TC-04a	75	0,1	SG 350	Tenax	Tenax TA	03:11	03:36	0	25	2,5	0,0025		
VOC	taxi		C-EA-VOC-19--TC-04b	75 B	0,1	SG 350	Tenax	Tenax TA	03:11	03:36	0	25	2,5	0,0025		
VOC	t/o climb		C-EA-VOC-19--TC-05a	76	0,1	SG 350	Tenax	Tenax TA	03:36	04:16	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-19--TC-05b	76 B	0,1	SG 350	Tenax	Tenax TA	03:36	04:16	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-19--TC-06a	77	0,1	SG 350	Tenax	Tenax TA	09:55	10:53	0	58	5,8	0,0058		
VOC	descent / landing		C-EA-VOC-19--TC-06b	77 B	0,1	SG 350	Tenax	Tenax TA	09:55	10:53	0	58	5,8	0,0058		

Cycle #19a Measurement flight #37a				EASA CAQ Campaign 2015-2016						Additional Measurement after "smell event"					
Project	EASA Study														No VOC samples available for this flight.
Flight route	Test Flight									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Boeing 757-300														
Registration								UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		OPC-F-K1		10	SG-10	K	PU/Filter	08:53	09:16	0	23	230	0,230	
Organophosphates	t/o climb		OPC-F-K2		10	SG-10	K	PU/Filter	09:17	09:30	0	13	130	0,1300	
Organophosphates	complete flight		OPC-F-L		3,5	SG-5100	L	PU/Filter	08:54	10:48	0	114	399	0,3990	
Organophosphates	cruise flight		OPC-F-K3		10	SG-10	K	PU/Filter	09:32	10:19	0	47	470	0,4700	
Organophosphates	descent / landing		OPC-F-K4		10	SG-10	K	PU/Filter	10:21	10:48	0	27	270	0,2700	
Aldehydes	taxi		ALD-F-K1		0,3	SG 350	K	DNPH	08:53	09:16	0	23	6,9	0,0069	
Aldehydes	t/o climb		ALD-F-K2		0,3	SG 350	K	DNPH	09:17	09:30	0	13	3,9	0,0039	
Aldehydes	complete flight		ALD-F-L		0,3	SG 350	L	DNPH	08:54	10:48	0	114	34,2	0,0342	
Aldehydes	cruise flight		ALD-F-K3		0,3	SG 350	K	DNPH	09:31	10:19	0	48	14,4	0,0144	
Aldehydes	descent / landing		ALD-F-K4		0,3	SG 350	K	DNPH	10:19	10:48	0	29	8,7	0,0087	

Cycle #19a Measurement flight #37a				EASA CAQ Campaign 2015-2016						Additional Measurement after "smell event"					
Project	EASA Study														
Flight route	Test Flight									Date:					No VOC samples available for this flight.
Sampling point	Cabin								Sampler:						
Aircraft	Boeing 757-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		OPC-C-K1		10	SG-10	K	PU/Filter	08:51	09:19	0	28	280	0,280	
Organophosphates	t/o climb		OPC-C-K2		10	SG-10	K	PU/Filter	09:19	09:30	0	11	110	0,1100	
Organophosphates	complete flight		OPC-C-L		3,5	SG-5100	L	PU/Filter	08:51	10:45	0	114	399	0,3990	
Organophosphates	cruise flight		OPC-C-K3		10	SG-10	K	PU/Filter	09:30	10:17	0	47	470	0,4700	
Organophosphates	descent / landing		OPC-C-K4		10	SG-10	K	PU/Filter	10:17	10:45	0	28	280	0,2800	
Aldehydes	taxi		ALD-C-K1		0,3	SG 350	K	DNPH	08:51	09:19	0	28	8,4	0,0084	
Aldehydes	t/o climb		ALD-C-K2		0,3	SG 350	K	DNPH	09:19	09:30	0	11	3,3	0,0033	
Aldehydes	complete flight		ALD-C-L		0,3	SG 350	L	DNPH	08:51	10:45	0	114	34,2	0,0342	
Aldehydes	cruise flight		ALD-C-K3		0,3	SG 350	K	DNPH	09:30	10:17	0	47	14,1	0,0141	
Aldehydes	descent / landing		ALD-C-K4		0,3	SG 350	K	DNPH	10:17	10:45	0	28	8,4	0,0084	

Cycle #20 Measurement flight #39				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-MLE									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-20-K-01		3,5	Gilian 5000	K	PU/Filter	19:37	21:12	0	95	333	0,333		
Organophosphates	t/o climb	de-icing	F-EA-OPC-20-K-02		3,5	Gilian 5000	K	PU/Filter	21:12	22:34	0	82	287	0,2870		
Organophosphates	complete flight		F-EA-OPC-20-L-01		1	SG-5100	L	PU/Filter	19:34	07:04	0	690	690	0,6900		
Organophosphates	descent / landing		F-EA-OPC-20-K-03		3,5	Gilian 5000	K	PU/Filter	06:22	07:04	0	42	147	0,1470		
Aldehydes	taxi		F-EA-ALD-20-K-01	sample lost	0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	t/o climb	de-icing	F-EA-ALD-20-K-02	pump failure	0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		F-EA-ALD-20-L-01		0,3	SG 350	L	DNPH	19:35	07:05	0	690	207	0,2070		
Aldehydes	descent / landing		F-EA-ALD-20-K-03		0,3	SG 350	K	DNPH	06:21	07:03	0	42	12,6	0,0126		
VOC	blank		F-EA-VOC-20-blank_01													
VOC	taxi		F-EA-VOC-20-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	19:36	21:10	0	94	9,4	0,0094		
VOC	taxi		F-EA-VOC-20-TC-01b	VIII b	0,1	SG 350	Tenax	Tenax TA	19:36	21:12	0	94	9,4	0,0094		
VOC	t/o climb	de-icing	F-EA-VOC-20-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	21:10	22:31	0	81	8,1	0,0081		
VOC	t/o climb	de-icing	F-EA-VOC-20-TC-02b	IX b	0,1	SG 350	Tenax	Tenax TA	21:10	22:31	0	81	8,1	0,0081		
VOC	descent / landing		F-EA-VOC-20-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	06:21	07:00	0	39	3,9	0,0039		
VOC	descent / landing		F-EA-VOC-20-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	06:21	07:00	0	39	3,9	0,0039		

Cycle #20 Measurement flight #39				EASA CAQ Campaign 2015-2016						Outgoing flight						
Project	EASA Study															
Flight route	FRA-MLE									Date:						
Sampling point	Cabin								Sampler:							
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-20-K-01		3,5	Gilian 5000	K	PU/Filter	19:33	21:01	0	88	308	0,308		
Organophosphates	t/o climb	de-icing	C-EA-OPC-20-K-02		3,5	Gilian 5000	K	PU/Filter	21:01	22:20	0	79	277	0,2765		
Organophosphates	complete flight		C-EA-OPC-20-L-01		1	SG-5100	L	PU/Filter	19:34	07:00	0	686	686	0,6860		
Organophosphates	descent / landing		C-EA-OPC-20-K-03		3,5	Gilian 5000	K	PU/Filter	06:15	07:00	0	45	157,5	0,1575		
Aldehydes	taxi		C-EA-ALD-20-K-01		0,3	SG 350	K	DNPH	19:34	21:02	0	88	26,4	0,0264		
Aldehydes	t/o climb	de-icing	C-EA-ALD-20-K-02		0,3	SG 350	K	DNPH	21:02	22:20	0	78	23,4	0,0234		
Aldehydes	complete flight		C-EA-ALD-20-L-01		0,3	SG 350	L	DNPH	19:35	07:00	0	685	206	0,2055		
Aldehydes	descent / landing		C-EA-ALD-20-K-03		0,3	SG 350	K	DNPH	06:15	07:00	0	45	13,5	0,0135		
VOC	blank		C-EA-VOC-20-blank_01													
VOC	taxi		C-EA-VOC-20-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	19:36	21:00	0	84	8,4	0,0084		
VOC	taxi		C-EA-VOC-20-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	19:36	21:00	0	84	8,4	0,0084		
VOC	t/o climb	de-icing	C-EA-VOC-20-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	21:00	22:20	0	80	8,0	0,0080		
VOC	t/o climb	de-icing	C-EA-VOC-20-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	21:00	22:20	0	80	8,0	0,0080		
VOC	descent / landing		C-EA-VOC-20-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	06:15	07:00	0	45	4,5	0,0045		
VOC	descent / landing		C-EA-VOC-20-TC-03b	5 b	0,1	SG 350	Tenax	Tenax TA	06:15	07:00	0	45	4,5	0,0045		

Cycle #20 Measurement flight #40				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi and t/o climb	combined with taxi	F-EA-OPC-20-K-04		3,5	Gilian 5000	K	PU/Filter	08:20	09:00	0	40	140	0,140		
Organophosphates			F-EA-OPC-20-K-05		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		F-EA-OPC-20-L-02		1	SG-5100	L	PU/Filter	08:20	18:58	0	638	638	0,6380		
Organophosphates	descent / landing		F-EA-OPC-20-K-06		3,5	Gilian 5000	K	PU/Filter	18:15	18:58	0	43	151	0,1505		
Aldehydes	taxi and t/o climb	combined with taxi	F-EA-ALD-20-K-04		0,3	SG 350	K	DNPH	08:20	09:00	0	40	12,0	0,0120		
Aldehydes			F-EA-ALD-20-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		F-EA-ALD-20-L-02		0,3	SG 350	L	DNPH	08:20	18:58	0	638	191	0,1914		
Aldehydes	descent / landing		F-EA-ALD-20-K-06		0,3	SG 350	K	DNPH	18:15	18:58	0	43	12,9	0,0129		
VOC	blank		F-EA-VOC-20-blank_02													
VOC	taxi and t/o climb	combined with taxi	F-EA-VOC-20-TF-04a	XV	0,1	SG 350	Tenax	Tenax TA	08:20	09:00	0	40	4,0	0,0040		
VOC	taxi and t/o climb		F-EA-VOC-20-TF-04b	XV b	0,1	SG 350	Tenax	Tenax TA	08:20	09:00	0	40	4,0	0,0040		
VOC			F-EA-VOC-20-TF-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC			F-EA-VOC-20-TF-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing		F-EA-VOC-20-TF-06a	XIV	0,1	SG 350	Tenax	Tenax TA	18:15	18:58	0	43	4,3	0,0043		
VOC	descent / landing		F-EA-VOC-20-TF-06b	XIV b	0,1	SG 350	Tenax	Tenax TA	18:15	18:58	0	43	4,3	0,0043		

Cycle #20 Measurement flight #40				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Cabin								Sampler:							
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi and t/o climb	combined with taxi	C-EA-OPC-20-K-04		3,5	Gilian 5000	K	PU/Filter	08:20	09:20	0	60	210	0,210		
Organophosphates			C-EA-OPC-20-K-05		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		C-EA-OPC-20-L-02		1	SG-5100	L	PU/Filter	08:20	18:55	0	695	695	0,6950		
Organophosphates	descent / landing		C-EA-OPC-20-K-06		3,5	Gilian 5000	K	PU/Filter	18:15	18:55	0	40	140	0,1400		
Aldehydes	taxi and t/o climb	combined with taxi	C-EA-ALD-20-K-04		0,3	SG 350	K	DNPH	08:20	09:20	0	60	18,0	0,0180		
Aldehydes			C-EA-ALD-20-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		C-EA-ALD-20-L-02		0,3	SG 350	L	DNPH	08:20	18:55	0	695	209	0,2085		
Aldehydes	descent / landing		C-EA-ALD-20-K-06		0,3	SG 350	K	DNPH	18:15	18:55	0	40	12	0,0120		
VOC	blank		C-EA-VOC-20-blank_02													
VOC	taxi and t/o climb	combined with taxi	C-EA-VOC-20-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	08:20	09:20	0	60	6,0	0,0060		
VOC	taxi and t/o climb		C-EA-VOC-20-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	08:20	09:20	0	60	6,0	0,0060		
VOC			C-EA-VOC-20-TC-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC			C-EA-VOC-20-TC-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing	pump failure	C-EA-VOC-20-TC-06a	10	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing	pump failure	C-EA-VOC-20-TC-06b	10 B	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		

Cycle #21 Measurement flight #41				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-MLE									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-21-K-01		3,5	Gilian 5000	K	PU/Filter	19:16	19:34	0	18	63	0,063		
Organophosphates	t/o climb		F-EA-OPC-21-K-02		3,5	Gilian 5000	K	PU/Filter	19:34	20:13	0	39	137	0,1365		
Organophosphates	complete flight		F-EA-OPC-21-L-01		1	SG-5100	L	PU/Filter	19:16	05:10	0	594	594	0,5940		
Organophosphates	descent / landing		F-EA-OPC-21-K-03		3,5	Gilian 5000	K	PU/Filter	04:15	05:10	0	55	193	0,1925		
Aldehydes	taxi	sample lost	F-EA-ALD-21-K-01		0,3	SG 350	K	DNPH	no sample	no sample	0	18	5,4	0,0054		
Aldehydes	t/o climb		F-EA-ALD-21-K-02		0,3	SG 350	K	DNPH	19:34	20:13	0	39	11,7	0,0117		
Aldehydes	complete flight	calibration corrected	F-EA-ALD-21-L-01		0,26	SG 350	L	DNPH	19:16	05:10	0	594	154	0,1544		
Aldehydes	descent / landing		F-EA-ALD-21-K-03		0,3	SG 350	K	DNPH	04:15	05:10	0	55	16,5	0,0165		
VOC	blank		F-EA-VOC-21-blank_01													
VOC	taxi		F-EA-VOC-21-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	19:16	19:34	0	18	1,8	0,0018		
VOC	taxi		F-EA-VOC-21-TC-01b	51 b	0,1	SG 350	Tenax	Tenax TA	19:16	19:34	0	18	1,8	0,0018		
VOC	t/o climb		F-EA-VOC-21-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	19:34	20:13	0	39	3,9	0,0039		
VOC	t/o climb		F-EA-VOC-21-TC-02b	52 b	0,1	SG 350	Tenax	Tenax TA	19:34	20:13	0	39	3,9	0,0039		
VOC	descent / landing		F-EA-VOC-21-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	04:15	05:10	0	55	5,5	0,0055		
VOC	descent / landing		F-EA-VOC-21-TC-03b	53 b	0,1	SG 350	Tenax	Tenax TA	04:15	05:10	0	55	5,5	0,0055		

Cycle #21 Measurement flight #41				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-MLE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-21-K-01		3,5	Gilian 5000	K	PU/Filter	19:16	19:34	0	18	63	0,063	
Organophosphates	t/o climb		C-EA-OPC-21-K-02		3,5	Gilian 5000	K	PU/Filter	19:35	20:15	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-21-L-01		1	SG-5100	L	PU/Filter	19:16	05:10	0	594	594	0,5940	
Organophosphates	descent / landing		C-EA-OPC-21-K-03		3,5	Gilian 5000	K	PU/Filter	04:10	05:10	0	60	210	0,2100	
Aldehydes	taxi		C-EA-ALD-21-K-01		0,3	SG 350	K	DNPH	19:15	19:34	0	19	5,7	0,0057	
Aldehydes	t/o climb		C-EA-ALD-21-K-02		0,3	SG 350	K	DNPH	19:35	20:15	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-21-L-01		0,3	SG 350	L	DNPH	19:15	05:10	0	595	179	0,1785	
Aldehydes	descent / landing		C-EA-ALD-21-K-03		0,3	SG 350	K	DNPH	04:10	05:10	0	60	18	0,0180	
VOC	blank		C-EA-VOC-21-blank_01	67											
VOC	taxi		C-EA-VOC-21-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	19:16	19:34	0	18	1,8	0,0018	
VOC	taxi		C-EA-VOC-21-TC-01b	61 b	0,1	SG 350	Tenax	Tenax TA	19:16	19:34	0	18	1,8	0,0018	
VOC	t/o climb		C-EA-VOC-21-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	19:35	20:15	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-21-TC-02b	62 b	0,1	SG 350	Tenax	Tenax TA	19:35	20:15	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-21-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	04:10	05:10	0	60	6,0	0,0060	
VOC	descent / landing		C-EA-VOC-21-TC-03b	63 b	0,1	SG 350	Tenax	Tenax TA	04:10	05:10	0	60	6,0	0,0060	

Cycle #21 Measurement flight #42				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi and t/o climb		F-EA-OPC-21-K-04		3,5	Gilian 5000	K	PU/Filter	06:54	07:53	0	59	207	0,207		
Organophosphates		combined with taxi	F-EA-OPC-21-K-05		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		F-EA-OPC-21-L-02		1	SG-5100	L	PU/Filter	06:51	18:09	0	678	678	0,6780		
Organophosphates	descent / landing		F-EA-OPC-21-K-06		3,5	Gilian 5000	K	PU/Filter	17:12	18:04	0	52	182	0,1820		
Aldehydes	taxi and t/o climb		F-EA-ALD-21-K-04		0,3	SG 350	K	DNPH	06:54	07:52	0	58	17,4	0,0174		
Aldehydes		combined with taxi	F-EA-ALD-21-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		F-EA-ALD-21-L-02		0,3	SG 350	L	DNPH	06:51	18:09	0	678	203	0,2034		
Aldehydes	descent / landing		F-EA-ALD-21-K-06		0,3	SG 350	K	DNPH	17:12	18:04	0	52	15,6	0,0156		
VOC	blank		F-EA-VOC-21-blank_02													
VOC	taxi and t/o climb		F-EA-VOC-21-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	06:54	07:55	0	61	6,1	0,0061		
VOC	taxi and t/o climb		F-EA-VOC-21-TF-04b	54 b	0,1	SG 350	Tenax	Tenax TA	06:54	07:55	0	61	6,1	0,0061		
VOC		combined with taxi	F-EA-VOC-21-TF-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC		combined with taxi	F-EA-VOC-21-TF-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing		F-EA-VOC-21-TF-06a	55	0,1	SG 350	Tenax	Tenax TA	17:12	18:04	0	52	5,2	0,0052		
VOC	descent / landing		F-EA-VOC-21-TF-06b	55 b	0,1	SG 350	Tenax	Tenax TA	17:12	18:04	0	52	5,2	0,0052		

Cycle #21 Measurement flight #42				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	MLE-FRA									Date:					
Sampling point	Cabin								Sampler:						
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi and t/o climb		C-EA-OPC-21-K-04		3,5	Gilian 5000	K	PU/Filter	06:54	08:05	0	71	249	0,249	
Organophosphates		combined with taxi	C-EA-OPC-21-K-05		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,0000	
Organophosphates	complete flight		C-EA-OPC-21-L-02		1	SG-5100	L	PU/Filter	06:53	18:02	0	669	669	0,6690	
Organophosphates	descent / landing		C-EA-OPC-21-K-06		3,5	Gilian 5000	K	PU/Filter	17:10	18:04	0	54	189	0,1890	
Aldehydes	taxi and t/o climb		C-EA-ALD-21-K-04		0,3	SG 350	K	DNPH	06:54	08:05	0	71	21,3	0,0213	
Aldehydes		combined with taxi	C-EA-ALD-21-K-05		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000	
Aldehydes	complete flight		C-EA-ALD-21-L-02		0,3	SG 350	L	DNPH	06:53	18:02	0	669	201	0,2007	
Aldehydes	descent / landing		C-EA-ALD-21-K-06		0,3	SG 350	K	DNPH	17:10	18:04	0	54	16,2	0,0162	
VOC	blank		C-EA-VOC-21-blank_02												
VOC	taxi and t/o climb		C-EA-VOC-21-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	06:55	08:05	0	70	7,0	0,0070	
VOC	taxi and t/o climb		C-EA-VOC-21-TC-04b	64 b	0,1	SG 350	Tenax	Tenax TA	06:55	08:05	0	70	7,0	0,0070	
VOC		combined with taxi	C-EA-VOC-21-TC-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC		combined with taxi	C-EA-VOC-21-TC-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000	
VOC	descent / landing		C-EA-VOC-21-TC-06a	65	0,1	SG 350	Tenax	Tenax TA	17:10	18:04	0	54	5,4	0,0054	
VOC	descent / landing		C-EA-VOC-21-TC-06b	65 b	0,1	SG 350	Tenax	Tenax TA	17:10	18:04	0	54	5,4	0,0054	

Cycle #22 Measurement flight #43				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-DTW									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-22-K-01		3,5	Gilian 5000	K	PU/Filter	09:52	10:09	0	17	60	0,060	
Organophosphates	t/o climb		F-EA-OPC-22-K-02		3,5	Gilian 5000	K	PU/Filter	10:10	10:36	0	26	91	0,0910	
Organophosphates	complete flight		F-EA-OPC-22-L-01		1	SG-5100	L	PU/Filter	09:50	19:11	0	561	561	0,5610	
Organophosphates	descent / landing		F-EA-OPC-22-K-03		3,5	Gilian 5000	K	PU/Filter	18:36	19:10	0	34	119	0,1190	
Aldehydes	taxi		F-EA-ALD-22-K-01		0,3	SG 350	K	DNPH	09:52	10:09	0	17	5,1	0,0051	
Aldehydes	t/o climb		F-EA-ALD-22-K-02		0,3	SG 350	K	DNPH	10:10	10:36	0	26	7,8	0,0078	
Aldehydes	complete flight	calibration corrected	F-EA-ALD-22-L-01		0,26	SG 350	L	DNPH	09:50	19:12	0	562	146	0,1461	
Aldehydes	descent / landing		F-EA-ALD-22-K-03		0,3	SG 350	K	DNPH	18:36	19:10	0	34	10,2	0,0102	
VOC	blank		F-EA-VOC-22-blank_01												
VOC	taxi		F-EA-VOC-22-TC-01a	79	0,1	SG 350	Tenax	Tenax TA	09:56	10:09	0	17	1,7	0,0017	
VOC	taxi		F-EA-VOC-22-TC-01b	79 b	0,1	SG 350	Tenax	Tenax TA	09:56	10:09	0	7	0,7	0,0007	
VOC	t/o climb		F-EA-VOC-22-TC-02a	80	0,1	SG 350	Tenax	Tenax TA	10:10	10:35	0	25	2,5	0,0025	
VOC	t/o climb		F-EA-VOC-22-TC-02b	80 b	0,1	SG 350	Tenax	Tenax TA	10:10	10:35	0	25	2,5	0,0025	
VOC	descent / landing		F-EA-VOC-22-TC-03a	81	0,1	SG 350	Tenax	Tenax TA	18:37	19:08	0	31	3,1	0,0031	
VOC	descent / landing		F-EA-VOC-22-TC-03b	81 b	0,1	SG 350	Tenax	Tenax TA	18:37	19:08	0	31	3,1	0,0031	

Cycle #22 Measurement flight #43				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-DTW									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-22-K-01		3,5	Gilian 5000	K	PU/Filter	09:44	10:10	0	26	91	0,091	
Organophosphates	t/o climb		C-EA-OPC-22-K-02		3,5	Gilian 5000	K	PU/Filter	10:10	10:41	0	31	109	0,1085	
Organophosphates	complete flight		C-EA-OPC-22-L-01		1	SG-5100	L	PU/Filter	09:44	19:13	0	569	569	0,5690	
Organophosphates	descent / landing		C-EA-OPC-22-K-03		3,5	Gilian 5000	K	PU/Filter	18:36	19:13	0	37	130	0,1295	
Aldehydes	taxi		C-EA-ALD-22-K-01		0,3	SG 350	K	DNPH	09:44	10:10	0	26	7,8	0,0078	
Aldehydes	t/o climb		C-EA-ALD-22-K-02		0,3	SG 350	K	DNPH	10:10	10:41	0	31	9,3	0,0093	
Aldehydes	complete flight		C-EA-ALD-22-L-01		0,3	SG 350	L	DNPH	09:44	19:13	0	569	171	0,1707	
Aldehydes	descent / landing		C-EA-ALD-22-K-03		0,3	SG 350	K	DNPH	18:36	19:13	0	37	11,1	0,0111	
VOC	blank		C-EA-VOC-22-blank_01												
VOC	taxi		C-EA-VOC-22-TC-01a	86 b	0,1	SG 350	Tenax	Tenax TA	09:44	10:10	0	26	2,6	0,0026	
VOC	taxi		C-EA-VOC-22-TC-01b	86	0,1	SG 350	Tenax	Tenax TA	09:44	10:10	0	26	2,6	0,0026	
VOC	t/o climb		C-EA-VOC-22-TC-02a	87	0,1	SG 350	Tenax	Tenax TA	10:10	10:41	0	31	3,1	0,0031	
VOC	t/o climb		C-EA-VOC-22-TC-02b	87 b	0,1	SG 350	Tenax	Tenax TA	10:10	10:41	0	31	3,1	0,0031	
VOC	descent / landing		C-EA-VOC-22-TC-03a	88	0,1	SG 350	Tenax	Tenax TA	18:36	19:13	0	37	3,7	0,0037	
VOC	descent / landing		C-EA-VOC-22-TC-03b	88 b	0,1	SG 350	Tenax	Tenax TA	18:36	19:13	0	37	3,7	0,0037	

Cycle #22 Measurement flight #44				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	DTW-FRA									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-22-K-04		3,5	Gilian 5000	K	PU/Filter	21:17	21:35	0	18	63	0,063	
Organophosphates	t/o climb		F-EA-OPC-22-K-05		3,5	Gilian 5000	K	PU/Filter	21:35	22:15	0	40	140	0,1400	
Organophosphates	complete flight		F-EA-OPC-22-L-02		1	SG-5100	L	PU/Filter	21:16	05:03	0	467	467	0,4670	
Organophosphates	descent / landing		F-EA-OPC-22-K-06		3,5	Gilian 5000	K	PU/Filter	04:24	05:01	0	37	130	0,1295	
Aldehydes	taxi		F-EA-ALD-22-K-04		0,3	SG 350	K	DNPH	21:17	21:35	0	18	5,4	0,0054	
Aldehydes	t/o climb		F-EA-ALD-22-K-05		0,3	SG 350	K	DNPH	21:35	22:15	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-22-L-02		0,3	SG 350	L	DNPH	21:16	05:04	0	468	140	0,1404	
Aldehydes	descent / landing		F-EA-ALD-22-K-06		0,3	SG 350	K	DNPH	04:24	05:01	0	37	11,1	0,0111	
VOC	blank		F-EA-VOC-22-blank_02												
VOC	taxi		F-EA-VOC-22-TF-04a	82	0,1	SG 350	Tenax	Tenax TA	21:18	21:35	0	17	1,7	0,0017	
VOC	taxi		F-EA-VOC-22-TF-04b	82 b	0,1	SG 350	Tenax	Tenax TA	21:18	21:35	0	17	1,7	0,0017	
VOC	t/o climb		F-EA-VOC-22-TF-05a	83	0,1	SG 350	Tenax	Tenax TA	21:35	22:15	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-22-TF-05b	83 b	0,1	SG 350	Tenax	Tenax TA	21:35	22:15	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-22-TF-06a	84	0,1	SG 350	Tenax	Tenax TA	04:24	05:00	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-22-TF-06b	84 b	0,1	SG 350	Tenax	Tenax TA	04:24	05:00	0	36	3,6	0,0036	

Cycle #22 Measurement flight #44				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	DTW-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-22-K-04		3,5	Gilian 5000	K	PU/Filter	21:18	21:37	0	19	67	0,067	
Organophosphates	t/o climb		C-EA-OPC-22-K-05		3,5	Gilian 5000	K	PU/Filter	21:37	22:17	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-22-L-02		1	SG-5100	L	PU/Filter	21:18	05:00	0	462	462	0,4620	
Organophosphates	descent / landing		C-EA-OPC-22-K-06		3,5	Gilian 5000	K	PU/Filter	04:22	05:00	0	38	133	0,1330	
Aldehydes	taxi		C-EA-ALD-22-K-04		0,3	SG 350	K	DNPH	21:18	21:37	0	19	5,7	0,0057	
Aldehydes	t/o climb		C-EA-ALD-22-K-05		0,3	SG 350	K	DNPH	21:37	22:17	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-22-L-02		0,3	SG 350	L	DNPH	21:18	05:00	0	462	139	0,1386	
Aldehydes	descent / landing		C-EA-ALD-22-K-06		0,3	SG 350	K	DNPH	04:22	05:00	0	38	11,4	0,0114	
VOC	blank		C-EA-VOC-22-blank_02												
VOC	taxi		C-EA-VOC-22-TC-04a	89	0,1	SG 350	Tenax	Tenax TA	21:18	21:37	0	19	1,9	0,0019	
VOC	taxi		C-EA-VOC-22-TC-04b	89 b	0,1	SG 350	Tenax	Tenax TA	21:18	21:37	0	19	1,9	0,0019	
VOC	t/o climb		C-EA-VOC-22-TC-05a	90	0,1	SG 350	Tenax	Tenax TA	21:37	22:17	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-22-TC-05b	90 b	0,1	SG 350	Tenax	Tenax TA	21:37	22:17	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-22-TC-06a	91	0,1	SG 350	Tenax	Tenax TA	04:22	05:00	0	38	3,8	0,0038	
VOC	descent / landing		C-EA-VOC-22-TC-06b	91 b	0,1	SG 350	Tenax	Tenax TA	04:22	05:00	0	38	3,8	0,0038	

Cycle #23 Measurement flight #45				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-OSL									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Airbus A320-200														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-23-K-01		3,5	Gilian 5000	K	PU/Filter	09:19	09:35	0	16	56	0,056	
Organophosphates	t/o climb		F-EA-OPC-23-K-02		3,5	Gilian 5000	K	PU/Filter	09:36	10:04	0	28	98	0,0980	
Organophosphates	complete flight		F-EA-OPC-23-L-01		3,5	SG-5100	L	PU/Filter	09:19	11:27	0	128	448	0,4480	
Organophosphates	descent / landing		F-EA-OPC-23-K-03		3,5	Gilian 5000	K	PU/Filter	11:02	11:27	0	25	87,5	0,0875	
Aldehydes	taxi		F-EA-ALD-23-K-01		0,3	SG 350	K	DNPH	09:20	09:35	0	16	4,8	0,0048	
Aldehydes	t/o climb		F-EA-ALD-23-K-02		0,3	SG 350	K	DNPH	09:36	10:04	0	28	8,4	0,0084	
Aldehydes	complete flight		F-EA-ALD-23-L-01		0,3	SG 350	L	DNPH	09:20	11:27	0	127	38	0,0381	
Aldehydes	descent / landing		F-EA-ALD-23-K-03		0,3	SG 350	K	DNPH	11:02	11:27	0	25	7,5	0,0075	
VOC	blank		F-EA-VOC-23-blank_01												
VOC	taxi		F-EA-VOC-23-TC-01a	58	0,1	SG 350	Tenax	Tenax TA	09:20	09:35	0	15	1,5	0,0015	
VOC	taxi		F-EA-VOC-23-TC-01b	58 b	0,1	SG 350	Tenax	Tenax TA	09:20	09:35	0	15	1,5	0,0015	
VOC	t/o climb		F-EA-VOC-23-TC-02a	59	0,1	SG 350	Tenax	Tenax TA	09:35	10:02	0	27	2,7	0,0027	
VOC	t/o climb		F-EA-VOC-23-TC-02b	59 b	0,1	SG 350	Tenax	Tenax TA	09:35	10:02	0	27	2,7	0,0027	
VOC	descent / landing		F-EA-VOC-23-TC-03a	60	0,1	SG 350	Tenax	Tenax TA	11:02	11:23	0	21	2,1	0,0021	
VOC	descent / landing		F-EA-VOC-23-TC-03b	60 b	0,1	SG 350	Tenax	Tenax TA	11:02	11:23	0	21	2,1	0,0021	

Cycle #23 Measurement flight #45				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-OSL									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320-200														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-23-K-01		3,5	Gilian 5000	K	PU/Filter	09:22	09:34	0	12	42	0,042	
Organophosphates	t/o climb		C-EA-OPC-23-K-02		3,5	Gilian 5000	K	PU/Filter	09:36	10:19	0	43	151	0,1505	
Organophosphates	complete flight		C-EA-OPC-23-L-01		3,5	SG-5100	L	PU/Filter	09:22	11:27	0	125	438	0,4375	
Organophosphates	descent / landing		C-EA-OPC-23-K-03		3,5	Gilian 5000	K	PU/Filter	11:02	11:27	0	25	88	0,0875	
Aldehydes	taxi		C-EA-ALD-23-K-01		0,3	SG 350	K	DNPH	09:22	09:34	0	12	3,6	0,0036	
Aldehydes	t/o climb		C-EA-ALD-23-K-02		0,3	SG 350	K	DNPH	09:36	10:19	0	43	12,9	0,0129	
Aldehydes	complete flight		C-EA-ALD-23-L-01		0,3	SG 350	L	DNPH	09:22	11:27	0	125	38	0,0375	
Aldehydes	descent / landing		C-EA-ALD-23-K-03		0,3	SG 350	K	DNPH	11:03	11:27	0	24	7,2	0,0072	
VOC	blank		C-EA-VOC-23-blank_01												
VOC	taxi		C-EA-VOC-23-TC-01a	72	0,1	SG 350	Tenax	Tenax TA	09:22	09:34	0	12	1,2	0,0012	
VOC	taxi		C-EA-VOC-23-TC-01b	72 b	0,1	SG 350	Tenax	Tenax TA	09:22	09:34	0	12	1,2	0,0012	
VOC	t/o climb		C-EA-VOC-23-TC-02a	73	0,1	SG 350	Tenax	Tenax TA	09:36	10:19	0	43	4,3	0,0043	
VOC	t/o climb		C-EA-VOC-23-TC-02b	73 b	0,1	SG 350	Tenax	Tenax TA	09:36	10:19	0	43	4,3	0,0043	
VOC	descent / landing		C-EA-VOC-23-TC-03a	74	0,1	SG 350	Tenax	Tenax TA	11:04	11:27	0	23	2,3	0,0023	
VOC	descent / landing		C-EA-VOC-23-TC-03b	74 b	0,1	SG 350	Tenax	Tenax TA	11:04	11:27	0	23	2,3	0,0023	

Cycle #23 Measurement flight #46				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	OSL-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320-200														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi	De-icing	F-EA-OPC-23-K-04		3,5	Gilian 5000	K	PU/Filter	12:10	12:30	0	20	70	0,070	
Organophosphates	t/o climb		F-EA-OPC-23-K-05		3,5	Gilian 5000	K	PU/Filter	12:30	12:55	0	25	88	0,0875	
Organophosphates	complete flight		F-EA-OPC-23-L-02		3,5	SG-5100	L	PU/Filter	12:10	14:16	0	126	441	0,4410	
Organophosphates	descent / landing		F-EA-OPC-23-K-06		3,5	Gilian 5000	K	PU/Filter	13:47	14:15	0	28	98	0,0980	
Aldehydes	taxi	De-icing	F-EA-ALD-23-K-04	with ozone scrubber	0,3	SG 350	K	DNPH	12:10	12:30	0	20	6,0	0,0060	
Aldehydes	t/o climb		F-EA-ALD-23-K-05	with ozone scrubber	0,3	SG 350	K	DNPH	12:30	12:55	0	25	7,5	0,0075	
Aldehydes	complete flight		F-EA-ALD-23-L-02		0,3	SG 350	L	DNPH	12:10	14:16	0	126	38	0,0378	
Aldehydes	descent / landing		F-EA-ALD-23-K-06	with ozone scrubber	0,3	SG 350	K	DNPH	13:47	14:16	0	29	8,7	0,0087	
VOC	blank		F-EA-VOC-23-blank_02												
VOC	taxi	De-icing	F-EA-VOC-23-TF-04a	68	0,1	SG 350	Tenax	Tenax TA	12:10	12:30	0	20	2,0	0,0020	
VOC	taxi	De-icing	F-EA-VOC-23-TF-04b	68 b	0,1	SG 350	Tenax	Tenax TA	12:10	12:30	0	20	2,0	0,0020	
VOC	t/o climb		F-EA-VOC-23-TF-05a	69	0,1	SG 350	Tenax	Tenax TA	12:30	12:55	0	25	2,5	0,0025	
VOC	t/o climb		F-EA-VOC-23-TF-05b	69 b	0,1	SG 350	Tenax	Tenax TA	12:30	12:55	0	25	2,5	0,0025	
VOC	descent / landing		F-EA-VOC-23-TF-06a	70	0,1	SG 350	Tenax	Tenax TA	13:47	14:15	0	28	2,8	0,0028	
VOC	descent / landing		F-EA-VOC-23-TF-06b	70 b	0,1	SG 350	Tenax	Tenax TA	13:47	14:15	0	28	2,8	0,0028	

Cycle #23 Measurement flight #46				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	OSL-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320-200														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi	De-icing	C-EA-OPC-23-K-04		3,5	Gilian 5000	K	PU/Filter	12:11	12:30	0	19	67	0,067	
Organophosphates	t/o climb		C-EA-OPC-23-K-05		3,5	Gilian 5000	K	PU/Filter	12:30	13:10	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-23-L-02		3,5	SG-5100	L	PU/Filter	12:10	14:24	0	134	469	0,4690	
Organophosphates	descent / landing		C-EA-OPC-23-K-06		3,5	Gilian 5000	K	PU/Filter	13:42	14:24	0	42	147	0,1470	
Aldehydes	taxi	De-icing	C-EA-ALD-23-K-04	with ozone scrubber	0,3	SG 350	K	DNPH	12:11	12:30	0	19	5,7	0,0057	
Aldehydes	t/o climb		C-EA-ALD-23-K-05	with ozone scrubber	0,3	SG 350	K	DNPH	12:30	13:10	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-23-L-02		0,3	SG 350	L	DNPH	12:10	14:24	0	134	40	0,0402	
Aldehydes	descent / landing		C-EA-ALD-23-K-06	with ozone scrubber	0,3	SG 350	K	DNPH	13:42	14:24	0	42	12,6	0,0126	
VOC	blank		C-EA-VOC-23-blank_02												
VOC	taxi	De-icing	C-EA-VOC-23-TC-04a	75	0,1	SG 350	Tenax	Tenax TA	12:12	12:31	0	19	1,9	0,0019	
VOC	taxi	De-icing	C-EA-VOC-23-TC-04b	75 b	0,1	SG 350	Tenax	Tenax TA	12:12	12:31	0	19	1,9	0,0019	
VOC	t/o climb		C-EA-VOC-23-TC-05a	76	0,1	SG 350	Tenax	Tenax TA	12:31	13:11	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-23-TC-05b	76 b	0,1	SG 350	Tenax	Tenax TA	12:31	13:11	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-23-TC-06a	77	0,1	SG 350	Tenax	Tenax TA	13:42	14:24	0	42	4,2	0,0042	
VOC	descent / landing		C-EA-VOC-23-TC-06b	77 b	0,1	SG 350	Tenax	Tenax TA	13:42	14:24	0	42	4,2	0,0042	

Cycle #24 Measurement flight #47				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-24-K-01		3,5	Gilian 5000	K	PU/Filter	16:07	16:40	0	33	116	0,116	
Organophosphates	t/o climb		F-EA-OPC-24-K-02		3,5	Gilian 5000	K	PU/Filter	16:40	17:19	0	39	137	0,1365	
Organophosphates	complete flight		F-EA-OPC-24-L-01		1	SG-5100	L	PU/Filter	15:45	01:41	0	536	536	0,5360	
Organophosphates	descent / landing		F-EA-OPC-24-K-03		3,5	Gilian 5000	K	PU/Filter	01:15	01:38	0	23	80,5	0,0805	
Aldehydes	taxi		F-EA-ALD-24-K-01		0,3	SG 350	K	DNPH	16:08	16:40	0	32	9,6	0,0096	
Aldehydes	t/o climb		F-EA-ALD-24-K-02		0,3	SG 350	K	DNPH	16:40	17:19	0	39	11,7	0,0117	
Aldehydes	complete flight		F-EA-ALD-24-L-01		0,3	SG 350	L	DNPH	15:46	01:40	0	534	160	0,1602	
Aldehydes	descent / landing		F-EA-ALD-24-K-03		0,3	SG 350	K	DNPH	00:49	01:39	0	50	15,0	0,0150	
VOC	blank		F-EA-VOC-24-blank_01												
VOC	taxi		F-EA-VOC-24-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	16:10	16:40	0	30	3,0	0,0030	
VOC	taxi		F-EA-VOC-24-TC-01b	V III b	0,1	SG 350	Tenax	Tenax TA	16:10	16:40	0	30	3,0	0,0030	
VOC	t/o climb		F-EA-VOC-24-TC-02a	IX b	0,1	SG 350	Tenax	Tenax TA	16:40	17:16	0	36	3,6	0,0036	
VOC	t/o climb		F-EA-VOC-24-TC-02b	IX	0,1	SG 350	Tenax	Tenax TA	16:40	17:16	0	36	3,6	0,0036	
VOC	descent / landing		F-EA-VOC-24-TC-03a	XI b	0,1	SG 350	Tenax	Tenax TA	01:16	01:42	0	26	2,6	0,0026	
VOC	descent / landing		F-EA-VOC-24-TC-03b	XI	0,1	SG 350	Tenax	Tenax TA	01:16	01:42	0	26	2,6	0,0026	

Cycle #24 Measurement flight #47				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-JFK									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A340-600														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-24-K-01		3,5	Gilian 5000	K	PU/Filter	16:21	16:44	0	23	81	0,081	
Organophosphates	t/o climb		C-EA-OPC-24-K-02		3,5	Gilian 5000	K	PU/Filter	16:44	17:24	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-24-L-01		1	SG-5100	L	PU/Filter	16:21	01:40	0	499	499	0,4990	
Organophosphates	descent / landing		C-EA-OPC-24-K-03		3,5	Gilian 5000	K	PU/Filter	01:07	01:40	0	33	116	0,1155	
Aldehydes	taxi		C-EA-ALD-24-K-01		0,3	SG 350	K	DNPH	16:21	16:44	0	23	6,9	0,0069	
Aldehydes	t/o climb		C-EA-ALD-24-K-02		0,3	SG 350	K	DNPH	16:44	17:24	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-24-L-01		0,3	SG 350	L	DNPH	16:21	01:40	0	499	150	0,1497	
Aldehydes	descent / landing		C-EA-ALD-24-K-03		0,3	SG 350	K	DNPH	01:07	01:40	0	33	9,9	0,0099	
VOC	blank		C-EA-VOC-24-blank_01												
VOC	taxi		C-EA-VOC-24-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	16:21	16:44	0	23	2,3	0,0023	
VOC	taxi		C-EA-VOC-24-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	16:21	16:44	0	23	2,3	0,0023	
VOC	t/o climb		C-EA-VOC-24-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	16:44	17:28	0	44	4,4	0,0044	
VOC	t/o climb		C-EA-VOC-24-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	16:44	17:28	0	44	4,4	0,0044	
VOC	descent / landing		C-EA-VOC-24-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	01:07	01:40	0	33	3,3	0,0033	
VOC	descent / landing		C-EA-VOC-24-TC-03b	5 b	0,1	SG 350	Tenax	Tenax TA	01:07	01:40	0	33	3,3	0,0033	

Cycle #24 Measurement flight #48				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	JFK-FRA									Date:						
Sampling point	Flight deck								Sampler:							
Aircraft	Airbus A340-600															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-24-K-04		3,5	Gilian 5000	K	PU/Filter	04:15	05:05	0	50	175	0,175		
Organophosphates	t/o climb		F-EA-OPC-24-K-05		3,5	Gilian 5000	K	PU/Filter	05:05	05:41	0	36	126	0,1260		
Organophosphates	complete flight		F-EA-OPC-24-L-02		1	SG-5100	L	PU/Filter	03:35	12:01	0	506	506	0,5060		
Organophosphates	descent / landing		F-EA-OPC-24-K-06		3,5	Gilian 5000	K	PU/Filter	11:25	12:00	0	35	123	0,1225		
Aldehydes	taxi		F-EA-ALD-24-K-04		0,3	SG 350	K	DNPH	04:15	05:05	0	50	15,0	0,0150		
Aldehydes	t/o climb		F-EA-ALD-24-K-05		0,3	SG 350	K	DNPH	05:05	05:41	0	36	10,8	0,0108		
Aldehydes	complete flight		F-EA-ALD-24-L-02		0,3	SG 350	L	DNPH	03:35	12:01	0	506	152	0,1518		
Aldehydes	descent / landing		F-EA-ALD-24-K-06		0,3	SG 350	K	DNPH	11:25	12:00	0	35	10,5	0,0105		
VOC	blank		F-EA-VOC-24-blank_02													
VOC	taxi		F-EA-VOC-24-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	04:45	05:04	0	19	1,9	0,0019		
VOC	taxi		F-EA-VOC-24-TF-04b	XIV b	0,1	SG 350	Tenax	Tenax TA	04:45	05:04	0	19	1,9	0,0019		
VOC	t/o climb		F-EA-VOC-24-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	05:07	05:40	0	33	3,3	0,0033		
VOC	t/o climb		F-EA-VOC-24-TF-05b	XV b	0,1	SG 350	Tenax	Tenax TA	05:07	05:40	0	33	3,3	0,0033		
VOC	descent / landing		F-EA-VOC-24-TF-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	11:26	11:57	0	31	3,1	0,0031		
VOC	descent / landing		F-EA-VOC-24-TF-06b	XVIII b	0,1	SG 350	Tenax	Tenax TA	11:26	11:57	0	31	3,1	0,0031		

Cycle #24 Measurement flight #48				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	JFK-FRA									Date:						
Sampling point	Cabin								Sampler:							
Aircraft	Airbus A340-600															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-24-K-04		3,5	Gilian 5000	K	PU/Filter	04:12	05:10	0	58	203	0,203		
Organophosphates	t/o climb		C-EA-OPC-24-K-05		3,5	Gilian 5000	K	PU/Filter	05:10	05:45	0	35	123	0,1225		
Organophosphates	complete flight		C-EA-OPC-24-L-02		1	SG-5100	L	PU/Filter	04:12	12:00	0	468	468	0,4680		
Organophosphates	descent / landing		C-EA-OPC-24-K-06		3,5	Gilian 5000	K	PU/Filter	11:05	12:00	0	55	192,5	0,1925		
Aldehydes	taxi		C-EA-ALD-24-K-04		0,3	SG 350	K	DNPH	04:12	05:10	0	58	17,4	0,0174		
Aldehydes	t/o climb		C-EA-ALD-24-K-05		0,3	SG 350	K	DNPH	05:10	05:45	0	35	10,5	0,0105		
Aldehydes	complete flight		C-EA-ALD-24-L-02		0,3	SG 350	L	DNPH	04:12	12:00	0	468	140	0,1404		
Aldehydes	descent / landing		C-EA-ALD-24-K-06		0,3	SG 350	K	DNPH	11:05	12:00	0	55	16,5	0,0165		
VOC	blank		C-EA-VOC-24-blank_02													
VOC	taxi		C-EA-VOC-24-TC-04a	7 b	0,1	SG 350	Tenax	Tenax TA	04:12	05:10	0	58	5,8	0,0058		
VOC	taxi		C-EA-VOC-24-TC-04b	13	0,1	SG 350	Tenax	Tenax TA	04:12	05:10	0	58	5,8	0,0058		
VOC	t/o climb		C-EA-VOC-24-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	05:10	05:45	0	35	3,5	0,0035		
VOC	t/o climb		C-EA-VOC-24-TC-05b	10 b	0,1	SG 350	Tenax	Tenax TA	05:10	05:45	0	35	3,5	0,0035		
VOC	descent / landing		C-EA-VOC-24-TC-06a	11 b	0,1	SG 350	Tenax	Tenax TA	11:06	12:00	0	54	5,4	0,0054		
VOC	descent / landing		C-EA-VOC-24-TC-06b	13 b	0,1	SG 350	Tenax	Tenax TA	11:06	12:00	0	54	5,4	0,0054		

Cycle #25 Measurement flight #49				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-25-K-01		3,5	Gilian 5000	K	PU/Filter	16:56	17:27	0	31	109	0,109	
Organophosphates	t/o climb		F-EA-OPC-25-K-02		3,5	Gilian 5000	K	PU/Filter	17:27	18:07	0	40	140	0,1400	
Organophosphates	complete flight		F-EA-OPC-25-L-01		1	SG-5100	L	PU/Filter	16:56	04:26	0	690	690	0,6900	
Organophosphates	descent / landing		F-EA-OPC-25-K-03		3,5	Gilian 5000	K	PU/Filter	03:51	04:26	0	35	123	0,1225	
Aldehydes	taxi		F-EA-ALD-25-K-01		0,3	SG 350	K	DNPH	16:56	17:27	0	31	9,3	0,0093	
Aldehydes	t/o climb		F-EA-ALD-25-K-02		0,3	SG 350	K	DNPH	17:27	18:07	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-25-L-01		0,3	SG 350	L	DNPH	16:56	04:26	0	690	207	0,2070	
Aldehydes	descent / landing		F-EA-ALD-25-K-03		0,3	SG 350	K	DNPH	03:51	04:26	0	35	10,5	0,0105	
VOC	blank		F-EA-VOC-25-blank_01												
VOC	taxi		F-EA-VOC-25-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	16:54	17:27	0	33	3,3	0,0033	
VOC	taxi		F-EA-VOC-25-TC-01b	51 B	0,1	SG 350	Tenax	Tenax TA	16:54	17:27	0	33	3,3	0,0033	
VOC	t/o climb		F-EA-VOC-25-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	17:27	18:07	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-25-TC-02b	57 B	0,1	SG 350	Tenax	Tenax TA	17:27	18:07	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-25-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	03:52	04:25	0	33	3,3	0,0033	
VOC	descent / landing		F-EA-VOC-25-TC-03b	53 B	0,1	SG 350	Tenax	Tenax TA	03:52	04:25	0	33	3,3	0,0033	

Cycle #25 Measurement flight #49				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-HND									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-25-K-01		3,5	Gilian 5000	K	PU/Filter	16:53	17:28	0	35	123	0,123	
Organophosphates	t/o climb		C-EA-OPC-25-K-02		3,5	Gilian 5000	K	PU/Filter	17:28	18:08	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-25-L-01		1	SG-5100	L	PU/Filter	16:53	04:24	0	691	691	0,6910	
Organophosphates	descent / landing		C-EA-OPC-25-K-03		3,5	Gilian 5000	K	PU/Filter	03:45	04:24	0	39	137	0,1365	
Aldehydes	taxi		C-EA-ALD-25-K-01		0,3	SG 350	K	DNPH	16:53	17:28	0	35	10,5	0,0105	
Aldehydes	t/o climb		C-EA-ALD-25-K-02		0,3	SG 350	K	DNPH	17:28	18:08	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-25-L-01		0,3	SG 350	L	DNPH	16:53	04:24	0	691	207	0,2073	
Aldehydes	descent / landing		C-EA-ALD-25-K-03		0,3	SG 350	K	DNPH	03:45	04:24	0	39	11,7	0,0117	
VOC	blank		C-EA-VOC-25-blank_01	67											
VOC	taxi		C-EA-VOC-25-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	16:53	17:28	0	35	3,5	0,0035	
VOC	taxi		C-EA-VOC-25-TC-01b	61 B	0,1	SG 350	Tenax	Tenax TA	16:53	17:28	0	35	3,5	0,0035	
VOC	t/o climb		C-EA-VOC-25-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	17:28	18:08	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-25-TC-02b	62 B	0,1	SG 350	Tenax	Tenax TA	17:28	18:08	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-25-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	03:45	04:24	0	39	3,9	0,0039	
VOC	descent / landing		C-EA-VOC-25-TC-03b	63 B	0,1	SG 350	Tenax	Tenax TA	03:45	04:24	0	39	3,9	0,0039	

Cycle #25 Measurement flight #50				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	HND-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 747-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-25-K-04		3,5	Gilian 5000	K	PU/Filter	06:15	06:40	0	25	88	0,088	
Organophosphates	t/o climb		F-EA-OPC-25-K-05		3,5	Gilian 5000	K	PU/Filter	06:40	07:20	0	40	140	0,1400	
Organophosphates	complete flight		F-EA-OPC-25-L-02		1	SG-5100	L	PU/Filter	06:15	18:20	0	725	725	0,7250	
Organophosphates	descent / landing		F-EA-OPC-25-K-06		3,5	Gilian 5000	K	PU/Filter	17:35	18:20	0	45	158	0,1575	
Aldehydes	taxi		F-EA-ALD-25-K-04		0,3	SG 350	K	DNPH	06:15	06:40	0	25	7,5	0,0075	
Aldehydes	t/o climb		F-EA-ALD-25-K-05		0,3	SG 350	K	DNPH	06:40	07:20	0	40	12,0	0,0120	
Aldehydes	complete flight		F-EA-ALD-25-L-02		0,3	SG 350	L	DNPH	06:15	18:20	0	725	218	0,2175	
Aldehydes	descent / landing		F-EA-ALD-25-K-06		0,3	SG 350	K	DNPH	17:35	18:20	0	45	13,5	0,0135	
VOC	blank		F-EA-VOC-25-blank_02												
VOC	taxi		F-EA-VOC-25-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	06:15	06:40	0	25	2,5	0,0025	
VOC	taxi		F-EA-VOC-25-TF-04b	54 B	0,1	SG 350	Tenax	Tenax TA	06:15	06:40	0	25	2,5	0,0025	
VOC	t/o climb		F-EA-VOC-25-TF-05a	55	0,1	SG 350	Tenax	Tenax TA	06:40	07:20	0	40	4,0	0,0040	
VOC	t/o climb		F-EA-VOC-25-TF-05b	55 B	0,1	SG 350	Tenax	Tenax TA	06:40	07:20	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-25-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	17:40	18:20	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-25-TF-06b	56 B	0,1	SG 350	Tenax	Tenax TA	17:40	18:20	0	40	4,0	0,0040	

Cycle #25 Measurement flight #50				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	HND-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boeing 747-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-25-K-04		3,5	Gilian 5000	K	PU/Filter	06:19	06:42	0	23	81	0,081		
Organophosphates	t/o climb		C-EA-OPC-25-K-05		3,5	Gilian 5000	K	PU/Filter	06:44	07:24	0	40	140	0,1400		
Organophosphates	complete flight		C-EA-OPC-25-L-02		1	SG-5100	L	PU/Filter	06:19	18:15	0	716	716	0,7160		
Organophosphates	descent / landing		C-EA-OPC-25-K-06		3,5	Gilian 5000	K	PU/Filter	17:40	18:15	0	35	122,5	0,1225		
Aldehydes	taxi		C-EA-ALD-25-K-04		0,3	SG 350	K	DNPH	06:19	06:42	0	23	6,9	0,0069		
Aldehydes	t/o climb		C-EA-ALD-25-K-05		0,3	SG 350	K	DNPH	06:44	07:24	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-25-L-02		0,3	SG 350	L	DNPH	06:19	18:15	0	716	215	0,2148		
Aldehydes	descent / landing		C-EA-ALD-25-K-06		0,3	SG 350	K	DNPH	17:40	18:15	0	35	10,5	0,0105		
VOC	blank		C-EA-VOC-25-blank_02	67 B												
VOC	taxi		C-EA-VOC-25-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	06:19	06:42	0	23	2,3	0,0023		
VOC	taxi		C-EA-VOC-25-TC-04b	64 B	0,1	SG 350	Tenax	Tenax TA	06:19	06:42	0	23	2,3	0,0023		
VOC	t/o climb		C-EA-VOC-25-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	06:44	07:24	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-25-TC-05b	65 B	0,1	SG 350	Tenax	Tenax TA	06:44	07:24	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-25-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	17:40	18:15	0	35	3,5	0,0035		
VOC	descent / landing		C-EA-VOC-25-TC-06b	66 B	0,1	SG 350	Tenax	Tenax TA	17:40	18:15	0	35	3,5	0,0035		

Cycle #26 Measurement flight #51				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-OSL									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-26-K-01		3,5	Gilian 5000	K	PU/Filter	09:24	09:36	0	12	42	0,042	
Organophosphates	t/o climb		F-EA-OPC-26-K-02		3,5	Gilian 5000	K	PU/Filter	09:40	10:12	0	32	112	0,1120	
Organophosphates	complete flight		F-EA-OPC-26-L-01		3,5	SG-5100	L	PU/Filter	09:22	11:29	0	127	445	0,4445	
Organophosphates	descent / landing	sample failure	F-EA-OPC-26-K-03		3,5	Gilian 5000	K	PU/Filter	10:56	11:27	0	65	228	0,2275	
Aldehydes	taxi		F-EA-ALD-26-K-01		0,3	SG 350	K	DNPH	09:24	09:36	0	12	3,6	0,0036	
Aldehydes	t/o climb		F-EA-ALD-26-K-02		0,3	SG 350	K	DNPH	09:40	10:11	0	31	9,3	0,0093	
Aldehydes	complete flight		F-EA-ALD-26-L-01		0,3	SG 350	L	DNPH	09:22	11:29	0	127	38	0,0381	
Aldehydes	descent / landing	sample failure	F-EA-ALD-26-K-03		0,3	SG 350	K	DNPH	10:57	11:26	0	61	18,3	0,0183	
VOC	blank		F-EA-VOC-26-blank_01												
VOC	taxi		F-EA-VOC-26-TC-01a	80	0,1	SG 350	Tenax	Tenax TA	09:26	09:36	0	12	1,2	0,0012	
VOC	taxi		F-EA-VOC-26-TC-01b	80 B	0,1	SG 350	Tenax	Tenax TA	09:26	09:36	0	12	1,2	0,0012	
VOC	t/o climb		F-EA-VOC-26-TC-02a	81	0,1	SG 350	Tenax	Tenax TA	09:40	10:09	0	29	2,9	0,0029	
VOC	t/o climb		F-EA-VOC-26-TC-02b	81 B	0,1	SG 350	Tenax	Tenax TA	09:40	10:09	0	29	2,9	0,0029	
VOC	descent / landing	sample failure	F-EA-VOC-26-TC-03a	82	0,1	SG 350	Tenax	Tenax TA	10:59	11:29	0	58	5,8	0,0058	
VOC	descent / landing	sample failure	F-EA-VOC-26-TC-03b	82 B	0,1	SG 350	Tenax	Tenax TA	10:59	11:29	0	58	5,8	0,0058	
sample failure: these samples were taken during both descent phases (outbound- and return flight)								sampling times for descent samples are the result of both sasampling phases given on the data sheet flight deck return							

Cycle #26 Measurement flight #51				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-OSL									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Airbus A320														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-26-K-01		3,5	Gilian 5000	K	PU/Filter	09:23	09:43	0	20	70	0,070	
Organophosphates	t/o climb		C-EA-OPC-26-K-02		3,5	Gilian 5000	K	PU/Filter	09:44	10:24	0	40	140	0,1400	
Organophosphates	complete flight		C-EA-OPC-26-L-01		3,5	SG-5100	L	PU/Filter	09:23	11:26	0	123	431	0,4305	
Organophosphates	descent / landing		C-EA-OPC-26-K-03		3,5	Gilian 5000	K	PU/Filter	10:58	11:26	0	28	98	0,0980	
Aldehydes	taxi		C-EA-ALD-26-K-01		0,3	SG 350	K	DNPH	09:23	09:43	0	20	6,0	0,0060	
Aldehydes	t/o climb		C-EA-ALD-26-K-02		0,3	SG 350	K	DNPH	09:44	10:24	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-26-L-01		0,3	SG 350	L	DNPH	09:23	11:26	0	123	37	0,0369	
Aldehydes	descent / landing		C-EA-ALD-26-K-03		0,3	SG 350	K	DNPH	10:58	11:26	0	28	8,4	0,0084	
VOC	blank		C-EA-VOC-26-blank_01	92 B											
VOC	taxi		C-EA-VOC-26-TC-01a	86	0,1	SG 350	Tenax	Tenax TA	09:23	09:43	0	20	2,0	0,0020	
VOC	taxi		C-EA-VOC-26-TC-01b	86 B	0,1	SG 350	Tenax	Tenax TA	09:23	09:43	0	20	2,0	0,0020	
VOC	t/o climb		C-EA-VOC-26-TC-02a	97	0,1	SG 350	Tenax	Tenax TA	09:44	10:24	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-26-TC-02b	97 B	0,1	SG 350	Tenax	Tenax TA	09:44	10:24	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-26-TC-03a	98	0,1	SG 350	Tenax	Tenax TA	10:58	11:26	0	28	2,8	0,0028	
VOC	descent / landing		C-EA-VOC-26-TC-03b	98 B	0,1	SG 350	Tenax	Tenax TA	10:58	11:26	0	28	2,8	0,0028	

Cycle #26 Measurement flight #52				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	OSL-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Airbus A320															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-26-K-04		3,5	Gilian 5000	K	PU/Filter	12:08	12:22	0	14	49	0,049		
Organophosphates	t/o climb		F-EA-OPC-26-K-05		3,5	Gilian 5000	K	PU/Filter	12:23	12:58	0	35	123	0,1225		
Organophosphates	complete flight		F-EA-OPC-26-L-02		3,5	SG-5100	L	PU/Filter	12:07	14:11	0	124	434	0,4340		
Organophosphates	descent / landing	see flight deck outgoing flight	F-EA-OPC-26-K-06		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	34	119	0,1190		
Aldehydes	taxi		F-EA-ALD-26-K-04		0,3	SG 350	K	DNPH	12:08	12:22	0	14	4,2	0,0042		
Aldehydes	t/o climb		F-EA-ALD-26-K-05		0,3	SG 350	K	DNPH	12:23	12:58	0	35	10,5	0,0105		
Aldehydes	complete flight		F-EA-ALD-26-L-02		0,3	SG 350	L	DNPH	12:07	14:10	0	123	37	0,0369		
Aldehydes	descent / landing	see flight deck outgoing flight	F-EA-ALD-26-K-06		0,3	SG 350	K	DNPH	no sample	no sample	0	32	9,6	0,0096		
VOC	blank		F-EA-VOC-26-blank_02													
VOC	taxi		F-EA-VOC-26-TF-04a	83	0,1	SG 350	Tenax	Tenax TA	12:09	12:22	0	13	1,3	0,0013		
VOC	taxi		F-EA-VOC-26-TF-04b	83 B	0,1	SG 350	Tenax	Tenax TA	12:09	12:22	0	13	1,3	0,0013		
VOC	t/o climb		F-EA-VOC-26-TF-05a	B 13462	0,1	SG 350	Tenax	Tenax TA	12:23	12:56	0	33	3,3	0,0033		
VOC	t/o climb		F-EA-VOC-26-TF-05b	B13441	0,1	SG 350	Tenax	Tenax TA	12:23	12:56	0	33	3,3	0,0033		
VOC	descent / landing	see flight deck outgoing flight	F-EA-VOC-26-TF-06a	82	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing	see flight deck outgoing flight	F-EA-VOC-26-TF-06b	82 B	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		

Cycle #26 Measurement flight #52				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	OSL-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Airbus A320															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-26-K-04		3,5	Gilian 5000	K	PU/Filter	12:11	12:25	0	14	49	0,049		
Organophosphates	t/o climb		C-EA-OPC-26-K-05		3,5	Gilian 5000	K	PU/Filter	12:27	13:07	0	40	140	0,1400		
Organophosphates	complete flight		C-EA-OPC-26-L-02		3,5	SG-5100	L	PU/Filter	12:11	14:14	0	123	431	0,4305		
Organophosphates	descent / landing		C-EA-OPC-26-K-06		3,5	Gilian 5000	K	PU/Filter	13:44	14:14	0	30	105	0,1050		
Aldehydes	taxi		C-EA-ALD-26-K-04		0,3	SG 350	K	DNPH	12:11	12:25	0	14	4,2	0,0042		
Aldehydes	t/o climb		C-EA-ALD-26-K-05		0,3	SG 350	K	DNPH	12:27	13:07	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-26-L-02		0,3	SG 350	L	DNPH	12:11	14:14	0	123	37	0,0369		
Aldehydes	descent / landing		C-EA-ALD-26-K-06		0,3	SG 350	K	DNPH	13:44	14:14	0	30	9	0,0090		
VOC	blank		C-EA-VOC-26-blank_02													
VOC	taxi		C-EA-VOC-26-TC-04a		0,1	SG 350	Tenax	Tenax TA	12:11	12:25	0	14	1,4	0,0014		
VOC	taxi		C-EA-VOC-26-TC-04b		0,1	SG 350	Tenax	Tenax TA	12:11	12:25	0	14	1,4	0,0014		
VOC	t/o climb		C-EA-VOC-26-TC-05a		0,1	SG 350	Tenax	Tenax TA	12:27	13:07	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-26-TC-05b		0,1	SG 350	Tenax	Tenax TA	12:27	13:07	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-26-TC-06a		0,1	SG 350	Tenax	Tenax TA	13:44	14:14	0	30	3,0	0,0030		
VOC	descent / landing		C-EA-VOC-26-TC-06b		0,1	SG 350	Tenax	Tenax TA	13:44	14:14	0	30	3,0	0,0030		

Cycle #27 Measurement flight #53				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-MLE									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-27-K-01		3,5	Gilian 5000	K	PU/Filter	18:48	19:12	0	24	84	0,084	
Organophosphates	t/o climb		F-EA-OPC-27-K-02		3,5	Gilian 5000	K	PU/Filter	19:13	19:57	0	44	154	0,1540	
Organophosphates	complete flight		F-EA-OPC-27-L-01		1	SG-5100	L	PU/Filter	18:44	04:50	0	606	606	0,6060	
Organophosphates	descent / landing		F-EA-OPC-27-K-03		3,5	Gilian 5000	K	PU/Filter	03:54	04:50	0	56	196	0,1960	
Aldehydes	taxi		F-EA-ALD-27-K-01		0,3	SG 350	K	DNPH	18:47	19:11	0	24	7,2	0,0072	
Aldehydes	t/o climb		F-EA-ALD-27-K-02		0,3	SG 350	K	DNPH	19:12	19:56	0	44	13,2	0,0132	
Aldehydes	complete flight		F-EA-ALD-27-L-01		0,3	SG 350	L	DNPH	18:44	04:50	0	606	182	0,1818	
Aldehydes	descent / landing		F-EA-ALD-27-K-03		0,3	SG 350	K	DNPH	04:00	04:50	0	50	15,0	0,0150	
VOC	blank		F-EA-VOC-27-blank_01												
VOC	taxi		F-EA-VOC-27-TC-01a	58	0,1	SG 350	Tenax	Tenax TA	18:47	19:10	0	23	2,3	0,0023	
VOC	taxi		F-EA-VOC-27-TC-01b	58 b	0,1	SG 350	Tenax	Tenax TA	18:47	19:10	0	23	2,3	0,0023	
VOC	t/o climb		F-EA-VOC-27-TC-02a	59	0,1	SG 350	Tenax	Tenax TA	19:11	19:58	0	47	4,7	0,0047	
VOC	t/o climb		F-EA-VOC-27-TC-02b	59 b	0,1	SG 350	Tenax	Tenax TA	19:11	19:58	0	47	4,7	0,0047	
VOC	descent / landing		F-EA-VOC-27-TC-03a	60	0,1	SG 350	Tenax	Tenax TA	03:55	04:50	0	55	5,5	0,0055	
VOC	descent / landing		F-EA-VOC-27-TC-03b	60 b	0,1	SG 350	Tenax	Tenax TA	03:55	04:50	0	55	5,5	0,0055	

Cycle #27 Measurement flight #53				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-MLE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-27-K-01		3,5	Gilian 5000	K	PU/Filter	18:47	19:09	0	22	77	0,077	
Organophosphates	t/o climb		C-EA-OPC-27-K-02		3,5	Gilian 5000	K	PU/Filter	19:11	19:50	0	39	137	0,1365	
Organophosphates	complete flight		C-EA-OPC-27-L-01		1	SG-5100	L	PU/Filter	18:47	04:48	0	601	601	0,6010	
Organophosphates	descent / landing		C-EA-OPC-27-K-03		3,5	Gilian 5000	K	PU/Filter	03:52	04:48	0	56	196	0,1960	
Aldehydes	taxi		C-EA-ALD-27-K-01		0,3	SG 350	K	DNPH	18:47	19:09	0	22	6,6	0,0066	
Aldehydes	t/o climb		C-EA-ALD-27-K-02		0,3	SG 350	K	DNPH	19:11	19:50	0	39	11,7	0,0117	
Aldehydes	complete flight		C-EA-ALD-27-L-01		0,3	SG 350	L	DNPH	18:47	04:48	0	601	180	0,1803	
Aldehydes	descent / landing		C-EA-ALD-27-K-03		0,3	SG 350	K	DNPH	03:52	04:48	0	56	16,8	0,0168	
VOC	blank		C-EA-VOC-27-blank_01	78 b											
VOC	taxi		C-EA-VOC-27-TC-01a	72	0,1	SG 350	Tenax	Tenax TA	18:48	19:09	0	22	2,2	0,0022	
VOC	taxi		C-EA-VOC-27-TC-01b	72 b	0,1	SG 350	Tenax	Tenax TA	18:48	19:09	0	22	2,2	0,0022	
VOC	t/o climb		C-EA-VOC-27-TC-02a	73	0,1	SG 350	Tenax	Tenax TA	19:11	19:50	0	39	3,9	0,0039	
VOC	t/o climb		C-EA-VOC-27-TC-02b	73 b	0,1	SG 350	Tenax	Tenax TA	19:11	19:50	0	39	3,9	0,0039	
VOC	descent / landing		C-EA-VOC-27-TC-03a	74	0,1	SG 350	Tenax	Tenax TA	03:52	04:48	0	56	5,6	0,0056	
VOC	descent / landing		C-EA-VOC-27-TC-03b	74 b	0,1	SG 350	Tenax	Tenax TA	03:52	04:48	0	56	5,6	0,0056	

Cycle #27 Measurement flight #54				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA										Date:					
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi and t/o climb	combined with taxi	F-EA-OPC-27-K-05		3,5	Gilian 5000	K	PU/Filter	06:22	07:07	0	45	158	0,158		
Organophosphates			F-EA-OPC-27-K-04		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,0000		
Organophosphates	complete flight		F-EA-OPC-27-L-02		1	SG-5100	L	PU/Filter	06:22	17:07	0	645	645	0,6450		
Organophosphates	descent / landing		F-EA-OPC-27-K-06		3,5	Gilian 5000	K	PU/Filter	16:15	17:07	0	52	182	0,1820		
Aldehydes	taxi and t/o climb	combined with taxi	F-EA-ALD-27-K-05		0,3	SG 350	K	DNPH	06:22	07:07	0	45	13,5	0,0135		
Aldehydes			F-EA-ALD-27-K-04		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	complete flight		F-EA-ALD-27-L-02		0,3	SG 350	L	DNPH	06:22	17:07	0	645	194	0,1935		
Aldehydes	descent / landing		F-EA-ALD-27-K-06		0,3	SG 350	K	DNPH	16:15	17:07	0	52	15,6	0,0156		
VOC	blank		F-EA-VOC-27-blank_02													
VOC	taxi and t/o climb	combined with taxi	F-EA-VOC-27-TF-04a	68	0,1	SG 350	Tenax	Tenax TA	06:22	07:07	0	45	4,5	0,0045		
VOC	taxi and t/o climb	combined with taxi	F-EA-VOC-27-TF-04b	68 b	0,1	SG 350	Tenax	Tenax TA	06:22	07:07	0	45	4,5	0,0045		
VOC			F-EA-VOC-27-TF-05a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC			F-EA-VOC-27-TF-05b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	descent / landing		F-EA-VOC-27-TF-06a	69	0,1	SG 350	Tenax	Tenax TA	16:15	17:07	0	52	5,2	0,0052		
VOC	descent / landing		F-EA-VOC-27-TF-06b	69 b	0,1	SG 350	Tenax	Tenax TA	16:15	17:07	0	52	5,2	0,0052		

Cycle #27 Measurement flight #54				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Cabin								Sampler:							
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates			C-EA-OPC-27-K-04		3,5	Gilian 5000	K	PU/Filter	no sample	no sample	0	0	0	0,000		
Organophosphates	taxi and t/o climb	combined with taxi	C-EA-OPC-27-K-05		3,5	Gilian 5000	K	PU/Filter	06:20	07:05	0	45	158	0,1575		
Organophosphates	complete flight		C-EA-OPC-27-L-02		1	SG-5100	L	PU/Filter	06:20	17:05	0	645	645	0,6450		
Organophosphates	descent / landing		C-EA-OPC-27-K-06		3,5	Gilian 5000	K	PU/Filter	16:15	17:05	0	50	175	0,1750		
Aldehydes			C-EA-ALD-27-K-04		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	taxi and t/o climb	combined with taxi	C-EA-ALD-27-K-05		0,3	SG 350	K	DNPH	06:20	07:05	0	45	13,5	0,0135		
Aldehydes	complete flight		C-EA-ALD-27-L-02		0,3	SG 350	L	DNPH	06:20	17:05	0	645	194	0,1935		
Aldehydes	descent / landing		C-EA-ALD-27-K-06		0,3	SG 350	K	DNPH	16:15	17:05	0	50	15	0,0150		
VOC	blank		C-EA-VOC-27-blank_02													
VOC			C-EA-VOC-27-TC-04a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC			C-EA-VOC-27-TC-04b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		
VOC	taxi and t/o climb	combined with taxi	C-EA-VOC-27-TC-05a	75 B	0,1	SG 350	Tenax	Tenax TA	06:20	07:05	0	45	4,5	0,0045		
VOC	taxi and t/o climb	combined with taxi	C-EA-VOC-27-TC-05b	75	0,1	SG 350	Tenax	Tenax TA	06:20	07:05	0	45	4,5	0,0045		
VOC	descent / landing		C-EA-VOC-27-TC-06a	76	0,1	SG 350	Tenax	Tenax TA	16:15	17:05	0	50	5,0	0,0050		
VOC	descent / landing		C-EA-VOC-27-TC-06b	76 B	0,1	SG 350	Tenax	Tenax TA	16:15	17:05	0	50	5,0	0,0050		

Cycle #28 Measurement flight #55				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-MLE									Date:						
Sampling point	Flight deck								Sampler:							
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-28-K-01		3,5	Gilian 5000	K	PU/Filter	19:25	20:03	0	38	133	0,133		
Organophosphates	t/o climb		F-EA-OPC-28-K-02		3,5	Gilian 5000	K	PU/Filter	20:04	20:43	0	39	137	0,1365		
Organophosphates	complete flight		F-EA-OPC-28-L-01		1	SG-5100	L	PU/Filter	19:25	05:48	0	623	623	0,6230		
Organophosphates	descent / landing		F-EA-OPC-28-K-03		3,5	Gilian 5000	K	PU/Filter	04:45	05:48	0	63	221	0,2205		
Aldehydes	taxi		F-EA-ALD-28-K-01		0,3	SG 350	K	DNPH	19:25	20:03	0	38	11,4	0,0114		
Aldehydes	t/o climb		F-EA-ALD-28-K-02		0,3	SG 350	K	DNPH	20:04	20:43	0	39	11,7	0,0117		
Aldehydes	complete flight		F-EA-ALD-28-L-01		0,3	SG 350	L	DNPH	19:25	05:48	0	623	187	0,1869		
Aldehydes	descent / landing		F-EA-ALD-28-K-03		0,3	SG 350	K	DNPH	04:45	05:48	0	63	18,9	0,0189		
VOC	blank		F-EA-VOC-28-blank_01													
VOC	taxi		F-EA-VOC-28-TC-01a	VIII	0,1	SG 350	Tenax	Tenax TA	19:25	20:03	0	38	3,8	0,0038		
VOC	taxi		F-EA-VOC-28-TC-01b	VIII b	0,1	SG 350	Tenax	Tenax TA	19:25	20:03	0	38	3,8	0,0038		
VOC	t/o climb		F-EA-VOC-28-TC-02a	IX	0,1	SG 350	Tenax	Tenax TA	20:04	20:41	0	37	3,7	0,0037		
VOC	t/o climb		F-EA-VOC-28-TC-02b	IX 2	0,1	SG 350	Tenax	Tenax TA	20:04	20:41	0	37	3,7	0,0037		
VOC	descent / landing		F-EA-VOC-28-TC-03a	XI	0,1	SG 350	Tenax	Tenax TA	04:45	05:48	0	63	6,3	0,0063		
VOC	descent / landing		F-EA-VOC-28-TC-03b	XI b	0,1	SG 350	Tenax	Tenax TA	04:45	05:48	0	63	6,3	0,0063		

Cycle #28 Measurement flight #55				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-MLE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-28-K-01		3,5	Gilian 5000	K	PU/Filter	19:16	20:05	0	49	172	0,172	
Organophosphates	t/o climb		C-EA-OPC-28-K-02		3,5	Gilian 5000	K	PU/Filter	20:05	20:45	0	40	140,0	0,1400	
Organophosphates	complete flight		C-EA-OPC-28-L-01		1	SG-5100	L	PU/Filter	19:16	05:47	0	631	631	0,6310	
Organophosphates	descent / landing		C-EA-OPC-28-K-03		3,5	Gilian 5000	K	PU/Filter	04:45	05:47	0	62	217	0,2170	
Aldehydes	taxi		C-EA-ALD-28-K-01		0,3	SG 350	K	DNPH	19:16	20:05	0	49	14,7	0,0147	
Aldehydes	t/o climb		C-EA-ALD-28-K-02		0,3	SG 350	K	DNPH	20:05	20:45	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-28-L-01		0,3	SG 350	L	DNPH	19:16	05:47	0	631	189	0,1893	
Aldehydes	descent / landing		C-EA-ALD-28-K-03		0,3	SG 350	K	DNPH	04:45	05:47	0	62	18,6	0,0186	
VOC	blank		C-EA-VOC-28-blank_01												
VOC	taxi		C-EA-VOC-28-TC-01a	2	0,1	SG 350	Tenax	Tenax TA	19:16	20:05	0	49	4,9	0,0049	
VOC	taxi		C-EA-VOC-28-TC-01b	2 b	0,1	SG 350	Tenax	Tenax TA	19:16	20:05	0	49	4,9	0,0049	
VOC	t/o climb		C-EA-VOC-28-TC-02a	3	0,1	SG 350	Tenax	Tenax TA	20:06	20:46	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-28-TC-02b	3 b	0,1	SG 350	Tenax	Tenax TA	20:06	20:46	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-28-TC-03a	5	0,1	SG 350	Tenax	Tenax TA	04:45	05:47	0	62	6,2	0,0062	
VOC	descent / landing		C-EA-VOC-28-TC-03b	5b	0,1	SG 350	Tenax	Tenax TA	04:45	05:47	0	62	6,2	0,0062	

Cycle #28 Measurement flight #56				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	MLE-FRA									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-28-K-04		3,5	Gilian 5000	K	PU/Filter	07:01	07:38	0	37	130	0,130	
Organophosphates	t/o climb		F-EA-OPC-28-K-05		3,5	Gilian 5000	K	PU/Filter	07:39	08:32	0	53	186	0,1855	
Organophosphates	complete flight		F-EA-OPC-28-L-02		1	SG-5100	L	PU/Filter	06:58	17:57	0	659	659	0,6590	
Organophosphates	descent / landing		F-EA-OPC-28-K-06		3,5	Gilian 5000	K	PU/Filter	17:13	17:58	0	45	158	0,1575	
Aldehydes	taxi		F-EA-ALD-28-K-04		0,3	SG 350	K	DNPH	07:01	07:38	0	37	11,1	0,0111	
Aldehydes	t/o climb		F-EA-ALD-28-K-05		0,3	SG 350	K	DNPH	07:39	08:32	0	53	15,9	0,0159	
Aldehydes	complete flight		F-EA-ALD-28-L-02		0,3	SG 350	L	DNPH	06:58	17:57	0	659	198	0,1977	
Aldehydes	descent / landing		F-EA-ALD-28-K-06		0,3	SG 350	K	DNPH	17:14	17:58	0	44	13,2	0,0132	
VOC	blank		F-EA-VOC-28-blank_02												
VOC	taxi		F-EA-VOC-28-TF-04a	XIV	0,1	SG 350	Tenax	Tenax TA	07:00	07:39	0	39	3,9	0,0039	
VOC	taxi		F-EA-VOC-28-TF-04b	XIV b	0,1	SG 350	Tenax	Tenax TA	07:00	07:39	0	39	3,9	0,0039	
VOC	t/o climb		F-EA-VOC-28-TF-05a	XV	0,1	SG 350	Tenax	Tenax TA	07:41	08:32	0	51	5,1	0,0051	
VOC	t/o climb		F-EA-VOC-28-TF-05b	XV b	0,1	SG 350	Tenax	Tenax TA	07:41	08:32	0	51	5,1	0,0051	
VOC	descent / landing		F-EA-VOC-28-TF-06a	XVIII	0,1	SG 350	Tenax	Tenax TA	17:18	17:58	0	40	4,0	0,0040	
VOC	descent / landing		F-EA-VOC-28-TF-06b	XVIII b	0,1	SG 350	Tenax	Tenax TA	17:18	17:58	0	40	4,0	0,0040	

Cycle #28 Measurement flight #56				EASA CAQ Campaign 2015-2016						Return flight					
Project	EASA Study														
Flight route	MLE-FRA									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-28-K-04		3,5	Gilian 5000	K	PU/Filter	07:00	07:37	0	37	130	0,130	
Organophosphates	t/o climb		C-EA-OPC-28-K-05		3,5	Gilian 5000	K	PU/Filter	07:38	08:41	0	63	221	0,2205	
Organophosphates	complete flight		C-EA-OPC-28-L-02		1	SG-5100	L	PU/Filter	07:04	17:55	0	651	651	0,6510	
Organophosphates	descent / landing		C-EA-OPC-28-K-06		3,5	Gilian 5000	K	PU/Filter	17:10	17:55	0	45	158	0,1575	
Aldehydes	taxi		C-EA-ALD-28-K-04		0,3	SG 350	K	DNPH	07:00	07:37	0	37	11,1	0,0111	
Aldehydes	t/o climb		C-EA-ALD-28-K-05		0,3	SG 350	K	DNPH	07:38	08:41	0	63	18,9	0,0189	
Aldehydes	complete flight		C-EA-ALD-28-L-02		0,3	SG 350	L	DNPH	07:04	17:55	0	651	195	0,1953	
Aldehydes	descent / landing		C-EA-ALD-28-K-06		0,3	SG 350	K	DNPH	17:10	17:55	0	45	13,5	0,0135	
VOC	blank		C-EA-VOC-28-blank_02												
VOC	taxi		C-EA-VOC-28-TC-04a	7	0,1	SG 350	Tenax	Tenax TA	07:01	07:38	0	37	3,7	0,0037	
VOC	taxi		C-EA-VOC-28-TC-04b	7 b	0,1	SG 350	Tenax	Tenax TA	07:01	07:38	0	37	3,7	0,0037	
VOC	t/o climb		C-EA-VOC-28-TC-05a	10	0,1	SG 350	Tenax	Tenax TA	07:38	08:41	0	63	6,3	0,0063	
VOC	t/o climb		C-EA-VOC-28-TC-05b	10 b	0,1	SG 350	Tenax	Tenax TA	07:38	08:41	0	63	6,3	0,0063	
VOC	descent / landing		C-EA-VOC-28-TC-06a	11	0,1	SG 350	Tenax	Tenax TA	17:10	17:55	0	45	4,5	0,0045	
VOC	descent / landing		C-EA-VOC-28-TC-06b	11 b	0,1	SG 350	Tenax	Tenax TA	17:10	17:55	0	45	4,5	0,0045	

Cycle #29 Measurement flight #57				EASA CAQ Campaign 2015-2016							Outgoing flight					
Project	EASA Study															
Flight route	FRA-MLE										Date:					
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-29-K-01		3,5	Gilian 5000	K	PU/Filter	19:07	19:21	0	14	49	0,049		
Organophosphates	t/o climb		F-EA-OPC-29-K-02		3,5	Gilian 5000	K	PU/Filter	19:21	20:06	0	45	158	0,1575		
Organophosphates	complete flight		F-EA-OPC-29-L-01		1	SG-5100	L	PU/Filter	19:07	05:13	0	606	606	0,6060		
Organophosphates	descent / landing		F-EA-OPC-29-K-03		3,5	Gilian 5000	K	PU/Filter	04:20	05:13	0	53	186	0,1855		
Aldehydes	taxi		F-EA-ALD-29-K-01		0,3	SG 350	K	DNPH	19:07	19:21	0	14	4,2	0,0042		
Aldehydes	t/o climb		F-EA-ALD-29-K-02		0,3	SG 350	K	DNPH	19:21	20:06	0	45	13,5	0,0135		
Aldehydes	complete flight		F-EA-ALD-29-L-01		0,3	SG 350	L	DNPH	19:07	05:13	0	606	182	0,1818		
Aldehydes	descent / landing		F-EA-ALD-29-K-03		0,3	SG 350	K	DNPH	04:20	05:13	0	53	15,9	0,0159		
VOC	blank		F-EA-VOC-29-blank_01													
VOC	taxi		F-EA-VOC-29-TC-01a	51	0,1	SG 350	Tenax	Tenax TA	19:07	19:21	0	14	1,4	0,0014		
VOC	taxi		F-EA-VOC-29-TC-01b	51 b	0,1	SG 350	Tenax	Tenax TA	19:07	19:21	0	14	1,4	0,0014		
VOC	t/o climb		F-EA-VOC-29-TC-02a	52	0,1	SG 350	Tenax	Tenax TA	19:21	20:06	0	45	4,5	0,0045		
VOC	t/o climb		F-EA-VOC-29-TC-02b	52 b	0,1	SG 350	Tenax	Tenax TA	19:21	20:06	0	45	4,5	0,0045		
VOC	descent / landing		F-EA-VOC-29-TC-03a	53	0,1	SG 350	Tenax	Tenax TA	04:20	05:13	0	53	5,3	0,0053		
VOC	descent / landing		F-EA-VOC-29-TC-03b	53 b	0,1	SG 350	Tenax	Tenax TA	04:20	05:13	0	53	5,3	0,0053		

Cycle #29 Measurement flight #57				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-MLE									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boeing 767-300														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-29-K-01		3,5	Gilian 5000	K	PU/Filter	19:07	19:19	0	12	42,0	0,042	
Organophosphates	t/o climb		C-EA-OPC-29-K-02		3,5	Gilian 5000	K	PU/Filter	19:21	20:04	0	43	150,5	0,1505	
Organophosphates	complete flight		C-EA-OPC-29-L-01		1	SG-5100	L	PU/Filter	19:06	05:11	0	605	605,0	0,6050	
Organophosphates	descent / landing		C-EA-OPC-29-K-03		3,5	Gilian 5000	K	PU/Filter	04:19	05:11	0	52	182,0	0,1820	
Aldehydes	taxi		C-EA-ALD-29-K-01		0,3	SG 350	K	DNPH	19:07	19:19	0	12	3,6	0,0036	
Aldehydes	t/o climb		C-EA-ALD-29-K-02		0,3	SG 350	K	DNPH	19:21	20:04	0	43	12,9	0,0129	
Aldehydes	complete flight		C-EA-ALD-29-L-01		0,3	SG 350	L	DNPH	19:06	05:11	0	605	181,5	0,1815	
Aldehydes	descent / landing		C-EA-ALD-29-K-03		0,3	SG 350	K	DNPH	04:20	05:11	0	51	15,3	0,0153	
VOC	blank		C-EA-VOC-29-blank_01												
VOC	taxi		C-EA-VOC-29-TC-01a	61	0,1	SG 350	Tenax	Tenax TA	19:08	19:18	0	10	1,0	0,0010	
VOC	taxi		C-EA-VOC-29-TC-01b	61 b	0,1	SG 350	Tenax	Tenax TA	19:08	19:18	0	10	1,0	0,0010	
VOC	t/o climb		C-EA-VOC-29-TC-02a	62	0,1	SG 350	Tenax	Tenax TA	19:20	20:04	0	44	4,4	0,0044	
VOC	t/o climb		C-EA-VOC-29-TC-02b	62 b	0,1	SG 350	Tenax	Tenax TA	19:20	20:04	0	44	4,4	0,0044	
VOC	descent / landing		C-EA-VOC-29-TC-03a	63	0,1	SG 350	Tenax	Tenax TA	04:19	05:11	0	52	5,2	0,0052	
VOC	descent / landing		C-EA-VOC-29-TC-03b	63 b	0,1	SG 350	Tenax	Tenax TA	04:19	05:11	0	52	5,2	0,0052	

Cycle #29 Measurement flight #58				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-29-K-04		3,5	Gilian 5000	K	PU/Filter	06:30	06:52	0	22	77	0,077		
Organophosphates	t/o climb		F-EA-OPC-29-K-05		3,5	Gilian 5000	K	PU/Filter	06:52	07:32	0	40	140	0,1400		
Organophosphates	complete flight		F-EA-OPC-29-L-02		1	SG-5100	L	PU/Filter	06:30	17:26	0	656	656	0,6560		
Organophosphates	descent / landing		F-EA-OPC-29-K-06		3,5	Gilian 5000	K	PU/Filter	16:45	17:26	0	41	144	0,1435		
Aldehydes	taxi		F-EA-ALD-29-K-04		0,3	SG 350	K	DNPH	06:30	06:52	0	22	6,6	0,0066		
Aldehydes	t/o climb		F-EA-ALD-29-K-05		0,3	SG 350	K	DNPH	06:52	07:31	0	39	11,7	0,0117		
Aldehydes	complete flight		F-EA-ALD-29-L-02		0,3	SG 350	L	DNPH	06:30	17:26	0	656	196,8	0,1968		
Aldehydes	descent / landing		F-EA-ALD-29-K-06		0,3	SG 350	K	DNPH	16:45	17:26	0	41	12,3	0,0123		
VOC	blank		F-EA-VOC-29-blank_02													
VOC	taxi		F-EA-VOC-29-TF-04a	54	0,1	SG 350	Tenax	Tenax TA	06:30	06:52	0	22	2,2	0,0022		
VOC	taxi		F-EA-VOC-29-TF-04b	54 b	0,1	SG 350	Tenax	Tenax TA	06:30	06:52	0	22	2,2	0,0022		
VOC	t/o climb		F-EA-VOC-29-TF-05a	55	0,1	SG 350	Tenax	Tenax TA	06:52	07:30	0	38	3,8	0,0038		
VOC	t/o climb		F-EA-VOC-29-TF-05b	55 b	0,1	SG 350	Tenax	Tenax TA	06:52	07:30	0	38	3,8	0,0038		
VOC	descent / landing		F-EA-VOC-29-TF-06a	56	0,1	SG 350	Tenax	Tenax TA	16:45	17:26	0	41	4,1	0,0041		
VOC	descent / landing		F-EA-VOC-29-TF-06b	56 b	0,1	SG 350	Tenax	Tenax TA	16:45	17:26	0	41	4,1	0,0041		

Cycle #29 Measurement flight #58				EASA CAQ Campaign 2015-2016							Return flight					
Project	EASA Study															
Flight route	MLE-FRA									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boeing 767-300															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-29-K-04		3,5	Gilian 5000	K	PU/Filter	06:32	06:52	0	20	70	0,070		
Organophosphates	t/o climb		C-EA-OPC-29-K-05		3,5	Gilian 5000	K	PU/Filter	06:53	07:33	0	40	140	0,1400		
Organophosphates	complete flight		C-EA-OPC-29-L-02		1	SG-5100	L	PU/Filter	06:32	17:26	0	654	654	0,6540		
Organophosphates	descent / landing		C-EA-OPC-29-K-06		3,5	Gilian 5000	K	PU/Filter	16:47	17:26	0	39	137	0,1365		
Aldehydes	taxi		C-EA-ALD-29-K-04		0,3	SG 350	K	DNPH	06:32	06:52	0	20	6,0	0,0060		
Aldehydes	t/o climb		C-EA-ALD-29-K-05		0,3	SG 350	K	DNPH	06:53	07:33	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-29-L-02		0,3	SG 350	L	DNPH	06:32	17:26	0	654	196	0,1962		
Aldehydes	descent / landing		C-EA-ALD-29-K-06		0,3	SG 350	K	DNPH	16:47	17:26	0	39	11,7	0,0117		
VOC	blank		C-EA-VOC-29-blank_02	67 b												
VOC	taxi		C-EA-VOC-29-TC-04a	64	0,1	SG 350	Tenax	Tenax TA	06:32	06:52	0	20	2,0	0,0020		
VOC	taxi		C-EA-VOC-29-TC-04b	64 b	0,1	SG 350	Tenax	Tenax TA	06:32	06:52	0	20	2,0	0,0020		
VOC	t/o climb		C-EA-VOC-29-TC-05a	65	0,1	SG 350	Tenax	Tenax TA	06:53	07:33	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-29-TC-05b	65 b	0,1	SG 350	Tenax	Tenax TA	06:53	07:33	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-29-TC-06a	66	0,1	SG 350	Tenax	Tenax TA	16:47	17:26	0	39	3,9	0,0039		
VOC	descent / landing		C-EA-VOC-29-TC-06b	66 b	0,1	SG 350	Tenax	Tenax TA	16:47	17:26	0	39	3,9	0,0039		

Cycle #30 Measurement flight #59				EASA CAQ Campaign 2015-2016						Outgoing flight						
Project	EASA Study															
Flight route	FRA-LHR										Date:					
Sampling point	Flight deck									Sampler:						
Aircraft	Airbus A 320															
Registration		labeling for assessment	labeling on samples						UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi	F-EA-OPC-30-K-01	F-EA-OPC-59-K-01		5	SG-10	K	PU/Filter	07:54	08:09	0	15	75	0,075		
Organophosphates	t/o climb	F-EA-OPC-30-K-02	F-EA-OPC-59-K-02		5	SG-10	K	PU/Filter	08:09	08:50	0	41	205	0,2050		
Organophosphates	complete flight	F-EA-OPC-30-L-01	F-EA-OPC-59-L		3,5	SG-5100	L	PU/Filter	07:47	09:34	0	107	375	0,3745		
Organophosphates	descent / landing	F-EA-OPC-30-K-03	F-EA-OPC-59-K-03		5	SG-10	K	PU/Filter	09:00	09:30	0	30	150	0,1500		
Aldehydes	taxi	F-EA-ALD-30-K-01	F-EA-ALD-59-K-01		0,3	SG 350	K	DNPH	07:54	08:09	0	15	4,5	0,0045		
Aldehydes	t/o climb	F-EA-ALD-30-K-02	F-EA-ALD-59-K-02		0,3	SG 350	K	DNPH	08:09	08:50	0	41	12,3	0,0123		
Aldehydes	complete flight	F-EA-ALD-30-L-01	F-EA-ALD-59-L		0,3	SG 350	L	DNPH	07:53	09:34	0	101	30,3	0,0303		
Aldehydes	descent / landing	F-EA-ALD-30-K-03	F-EA-ALD-59-K-03		0,3	SG 350	K	DNPH	09:00	09:31	0	31	9,3	0,0093		
VOC	blank	F-EA-VOC-30-blank_01	F-EA-VOC-59-blank_01													
VOC	taxi	F-EA-VOC-30-TC-01a	F-EA-VOC-59-TC-01a	71	0,1	SG 350	Tenax	Tenax TA	07:56	08:09	0	13	1,3	0,0013		
VOC	taxi	F-EA-VOC-30-TC-01b	F-EA-VOC-59-TC-01b	71 b	0,1	SG 350	Tenax	Tenax TA	07:56	08:09	0	13	1,3	0,0013		
VOC	t/o climb	F-EA-VOC-30-TC-02a	F-EA-VOC-59-TC-02a	58	0,1	SG 350	Tenax	Tenax TA	08:09	08:50	0	41	4,1	0,0041		
VOC	t/o climb	F-EA-VOC-30-TC-02b	F-EA-VOC-59-TC-02b	58 b	0,1	SG 350	Tenax	Tenax TA	08:09	08:50	0	41	4,1	0,0041		
VOC	descent / landing	F-EA-VOC-30-TC-03a	F-EA-VOC-59-TC-03a	59	0,1	SG 350	Tenax	Tenax TA	09:01	09:30	0	29	2,9	0,0029		
VOC	descent / landing	F-EA-VOC-30-TC-03b	F-EA-VOC-59-TC-03b	59 b defect	0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000		

Cycle #30 Measurement flight #59				EASA CAQ Campaign 2015-2016						Outgoing flight					
Project	EASA Study														
Flight route	FRA-LHR									Date:					
Sampling point	Cabin								Sampler:						
Aircraft	Airbus A320														
Registration		labeling for assessment	labeling on samples						UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi	C-EA-OPC-30-K-01	C-EA-OPC-59-K-01		10	SG-10	K	PU/Filter	07:56	08:09	0	13	130	0,130	
Organophosphates	t/o climb	C-EA-OPC-30-K-02	C-EA-OPC-59-K-02		10	SG-10	K	PU/Filter	08:09	08:49	0	40	400	0,4000	
Organophosphates	complete flight	C-EA-OPC-30-L-01	C-EA-OPC-59-L		3,5	SG-5100	L	PU/Filter	07:56	09:37	0	101	354	0,3535	
Organophosphates	descent / landing	C-EA-OPC-30-K-03	C-EA-OPC-59-K-03		10	SG-10	K	PU/Filter	08:49	09:37	0	48	480	0,4800	
Aldehydes	taxi	C-EA-ALD-30-K-01	C-EA-ALD-59-K-01		0,3	SG 350	K	DNPH	07:56	08:09	0	13	3,9	0,0039	
Aldehydes	t/o climb	C-EA-ALD-30-K-02	C-EA-ALD-59-K-02		0,3	SG 350	K	DNPH	08:09	08:49	0	40	12,0	0,0120	
Aldehydes	complete flight	C-EA-ALD-30-L-01	C-EA-ALD-59-L		0,3	SG 350	L	DNPH	07:56	09:37	0	101	30,3	0,0303	
Aldehydes	descent / landing	C-EA-ALD-30-K-03	C-EA-ALD-59-K-03		0,3	SG 350	K	DNPH	08:49	09:37	0	48	14,4	0,0144	
VOC	blank	C-EA-VOC-30-blank_01	C-EA-VOC-59-blank_01	78 u. 78 b											
VOC	taxi	C-EA-VOC-30-TC-01a	C-EA-VOC-59-TC-01a	72	0,1	SG 350	Tenax	Tenax TA	07:56	08:09	0	13	1,3	0,0013	
VOC	taxi	C-EA-VOC-30-TC-01b	C-EA-VOC-59-TC-01b	72 b	0,1	SG 350	Tenax	Tenax TA	07:56	08:09	0	13	1,3	0,0013	
VOC	t/o climb	C-EA-VOC-30-TC-02a	C-EA-VOC-59-TC-02a	73	0,1	SG 350	Tenax	Tenax TA	08:09	08:49	0	40	4,0	0,0040	
VOC	t/o climb	C-EA-VOC-30-TC-02b	C-EA-VOC-59-TC-02b	73 b	0,1	SG 350	Tenax	Tenax TA	08:09	08:49	0	40	4,0	0,0040	
VOC	descent / landing	C-EA-VOC-30-TC-03a	C-EA-VOC-59-TC-03a	74	0,1	SG 350	Tenax	Tenax TA	08:49	09:37	0	48	4,8	0,0048	
VOC	descent / landing	C-EA-VOC-30-TC-03b	C-EA-VOC-59-TC-03b	74 b	0,1	SG 350	Tenax	Tenax TA	08:49	09:37	0	48	4,8	0,0048	

Cycle #30				Measurement flight #60				EASA CAQ Campaign 2015-2016						Return flight							
Project	EASA Study																				
Flight route	LHR-FRA														Date:						
Sampling point	Flight deck											Sampler:									
Aircraft	Airbus A320																				
Registration		labeling for assessment	labeling on samples						UTC	UTC											
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]							
Organophosphates	taxi	F-EA-OPC-30-K-04	F-EA-OPC-60-K-01		5	Gilian 5000	K	PU/Filter	09:37	09:46	0	9	45	0,045							
Organophosphates	t/o climb	F-EA-OPC-30-K-05	F-EA-OPC-60-K-02		5	Gilian 5000	K	PU/Filter	09:46	10:27	0	41	205	0,2050							
Organophosphates	complete flight	F-EA-OPC-30-L-02	F-EA-OPC-60-L		3,5	SG-5100	L	PU/Filter	09:36	11:03	0	87	305	0,3045							
Organophosphates	descent / landing	F-EA-OPC-30-K-06	F-EA-OPC-60-K-03		5	Gilian 5000	K	PU/Filter	10:27	10:57	0	30	150	0,1500							
Aldehydes	taxi	F-EA-ALD-30-K-04	F-EA-ALD-60-K-01		0,3	SG 350	K	DNPH	09:37	09:46	0	9	2,7	0,0027							
Aldehydes	t/o climb	F-EA-ALD-30-K-05	F-EA-ALD-60-K-02		0,3	SG 350	K	DNPH	09:46	10:27	0	41	12,3	0,0123							
Aldehydes	complete flight	F-EA-ALD-30-L-02	F-EA-ALD-60-L		0,3	SG 350	L	DNPH	09:36	11:03	0	87	26,1	0,0261							
Aldehydes	descent / landing	F-EA-ALD-30-K-06	F-EA-ALD-60-K-03		0,3	SG 350	K	DNPH	10:27	10:57	0	30	9,0	0,0090							
VOC	blank	F-EA-VOC-30-blank_02	F-EA-VOC-60-blank																		
VOC	taxi	F-EA-VOC-30-TC-04a	F-EA-VOC-60-TF-01a	96	0,1	SG 350	Tenax	Tenax TA	09:38	09:47	0	9	0,9	0,0009							
VOC	taxi	F-EA-VOC-30-TC-04b	F-EA-VOC-60-TF-01b	96 b	0,1	SG 350	Tenax	Tenax TA	09:38	09:47	0	9	0,9	0,0009							
VOC	t/o climb	F-EA-VOC-30-TC-05a	F-EA-VOC-60-TF-02a	97	0,1	SG 350	Tenax	Tenax TA	09:47	10:27	0	40	4,0	0,0040							
VOC	t/o climb	F-EA-VOC-30-TC-05b	F-EA-VOC-60-TF-02b	97 b	0,1	SG 350	Tenax	Tenax TA	09:47	10:27	0	40	4,0	0,0040							
VOC	descent / landing	F-EA-VOC-30-TC-06a	F-EA-VOC-60-TF-03a	98	0,1	SG 350	Tenax	Tenax TA	10:34	10:59	0	25	2,5	0,0025							
VOC	descent / landing	F-EA-VOC-30-TC-06b	F-EA-VOC-60-TF-03b	98 b	0,1	SG 350	Tenax	Tenax TA	10:34	10:59	0	25	2,5	0,0025							

Cycle #30 Measurement flight #60				EASA CAQ Campaign 2015-2016							Return flight								
Project	EASA Study																		
Flight route	LHR-FRA													Date:					
Sampling point	Cabin									Sampler:									
Aircraft	Airbus A320																		
Registration		labeling for assessment	labeling on samples							UTC	UTC								
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]		Sample volume [m³]				
Organophosphates	taxi	C-EA-OPC-30-K-04	C-EA-OPC-60-K-01		10	Gilian 5000	K	PU/Filter	09:36	09:46	0	10	100	0,100					
Organophosphates	t/o climb	C-EA-OPC-30-K-05	C-EA-OPC-60-K-01		10	Gilian 5000	K	PU/Filter	09:47	10:27	0	40	400	0,4000					
Organophosphates	complete flight	C-EA-OPC-30-L-02	C-EA-OPC-60-L		3,5	SG-5100	L	PU/Filter	09:36	11:02	0	86	301	0,3010					
Organophosphates	descent / landing	C-EA-OPC-30-K-06	C-EA-OPC-60-K-03		10	Gilian 5000	K	PU/Filter	10:27	11:02	0	35	350	0,3500					
Aldehydes	taxi	C-EA-ALD-30-K-04	C-EA-ALD-60-K-01		0,3	SG 350	K	DNPH	09:36	09:46	0	10	3,0	0,0030					
Aldehydes	t/o climb	C-EA-ALD-30-K-05	C-EA-ALD-60-K-02		0,3	SG 350	K	DNPH	09:47	10:27	0	40	12,0	0,0120					
Aldehydes	complete flight	C-EA-ALD-30-L-02	C-EA-ALD-60-L		0,3	SG 350	L	DNPH	09:36	11:02	0	86	26	0,0258					
Aldehydes	descent / landing	C-EA-ALD-30-K-06	C-EA-ALD-60-K-03		0,3	SG 350	K	DNPH	10:27	11:02	0	35	10,5	0,0105					
VOC	blank	C-EA-VOC-30-blank_02	C-EA-VOC-60-blank																
VOC	taxi	C-EA-VOC-30-TC-04a	C-EA-VOC-60-TC-01a	93	0,1	SG 350	Tenax	Tenax TA	09:36	09:46	0	10	1,0	0,0010					
VOC	taxi	C-EA-VOC-30-TC-04b	C-EA-VOC-60-TC-01b	93 b	0,1	SG 350	Tenax	Tenax TA	09:36	09:46	0	10	1,0	0,0010					
VOC	t/o climb	C-EA-VOC-30-TC-05a	C-EA-VOC-60-TC-02a	94	0,1	SG 350	Tenax	Tenax TA	09:46	10:26	0	40	4,0	0,0040					
VOC	t/o climb	C-EA-VOC-30-TC-05b	C-EA-VOC-60-TC-02b	94 b	0,1	SG 350	Tenax	Tenax TA	09:46	10:26	0	40	4,0	0,0040					
VOC	descent / landing	C-EA-VOC-30-TC-06a	C-EA-VOC-60-TC-03a	95	0,1	SG 350	Tenax	Tenax TA	10:26	11:02	0	36	3,6	0,0036					
VOC	descent / landing	C-EA-VOC-30-TC-06b	C-EA-VOC-60-TC-03b	95 b	0,1	SG 350	Tenax	Tenax TA	10:26	11:02	0	36	3,6	0,0036					

Cycle #01 Measurement flight #01		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"							Outgoing flight					
Project	EASA Study Add On													
Flight route	LHR-EWR							Date:						
Sampling point	Flight deck							Sampler:						
Aircraft	Boing 787-8													
Registration								UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]
Organophosphates	taxi		F-EA-OPC-BA01-S-01		5	SG-10	K	PU/Filter	16:26	16:32	0	6	30	0,030
Organophosphates	t/o climb		F-EA-OPC-BA01-S-02		5	SG-10	K	PU/Filter	16:34	17:10	0	36	180	0,1800
Organophosphates	complete flight		F-EA-OPC-BA01-L		3,5	SG-5100	L	PU/Filter	16:26	23:42	0	436	1526	1,5260
Organophosphates	descent / landing		F-EA-OPC-BA01-S-03		5	SG-10	K	PU/Filter	22:49	23:42	0	53	265	0,2650
Aldehydes	taxi		F-EA-ALD-BA01-S-01		0,3	SG 350	K	DNPH	16:26	16:34	0	8	2,4	0,0024
Aldehydes	t/o climb		F-EA-ALD-BA01-S-02		0,3	SG 350	K	DNPH	16:34	17:10	0	36	10,8	0,0108
Aldehydes	complete flight		F-EA-ALD-BA01-L		0,3	SG 350	L	DNPH	16:26	23:42	0	436	131	0,1308
Aldehydes	descent / landing		F-EA-ALD-BA01-S-03		0,3	SG 350	K	DNPH	22:49	23:42	0	53	15,9	0,0159
VOC	blank		F-EA-VOC-BA01-blank_01											
VOC	taxi		F-EA-VOC-BA01-S-01a	51	0,1	SG 350	Tenax	Tenax TA	16:26	16:34	0	8	0,8	0,0008
VOC	taxi		F-EA-VOC-BA01-S-01b	51 b	0,1	SG 350	Tenax	Tenax TA	16:26	16:34	0	8	0,8	0,0008
VOC	t/o climb		F-EA-VOC-BA01-S-02a	52	0,1	SG 350	Tenax	Tenax TA	16:34	17:10	0	36	3,6	0,0036
VOC	t/o climb		F-EA-VOC-BA01-S-02b	52 b	0,1	SG 350	Tenax	Tenax TA	16:34	17:10	0	36	3,6	0,0036
VOC	descent / landing		F-EA-VOC-BA01-S-03a	53	0,1	SG 350	Tenax	Tenax TA	22:49	23:42	0	53	5,3	0,0053
VOC	descent / landing		F-EA-VOC-BA01-S-03b	53 b	0,1	SG 350	Tenax	Tenax TA	22:49	23:42	0	53	5,3	0,0053

Cycle #01			Measurement flight #01		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Outgoing flight					
Project	EASA Study Add On															
Flight route	LHR-EWR									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-BA01-S-01		10	SG-10	K	PU/Filter	15:48	16:26	0	38	380	0,380		
Organophosphates	t/o climb		C-EA-OPC-BA01-S-02		10	SG-10	K	PU/Filter	16:26	17:06	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-BA01-L		1	Gilian 5000	L	PU/Filter	15:48	23:38	0	470	470	0,4700		
Organophosphates	descent / landing		C-EA-OPC-BA01-S-03		10	SG-10	K	PU/Filter	22:49	23:38	0	49	490	0,4900		
Aldehydes	taxi		C-EA-ALD-BA01-S-01		0,3	SG 350	K	DNPH	15:48	16:26	0	38	11,4	0,0114		
Aldehydes	t/o climb		C-EA-ALD-BA01-S-02		0,3	SG 350	K	DNPH	16:26	17:06	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-BA01-L		0,3	SG 350	L	DNPH	15:48	23:38	0	470	141	0,1410		
Aldehydes	descent / landing		C-EA-ALD-BA01-S-03		0,3	SG 350	K	DNPH	22:49	23:38	0	49	14,7	0,0147		
VOC	blank		C-EA-VOC-BA01-blank_01	67												
VOC	taxi		C-EA-VOC-BA01-S-01a	61	0,1	SG 350	Tenax	Tenax TA	15:48	16:26	0	38	3,8	0,0038		
VOC	taxi		C-EA-VOC-BA01-S-01b	61 b	0,1	SG 350	Tenax	Tenax TA	15:48	16:26	0	38	3,8	0,0038		
VOC	t/o climb		C-EA-VOC-BA01-S-02a	62	0,1	SG 350	Tenax	Tenax TA	16:26	17:06	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-BA01-S-02b	62 b	0,1	SG 350	Tenax	Tenax TA	16:26	17:06	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-BA01-S-03a	63	0,1	SG 350	Tenax	Tenax TA	22:49	23:38	0	49	4,9	0,0049		
VOC	descent / landing		C-EA-VOC-BA01-S-03b	63 b	0,1	SG 350	Tenax	Tenax TA	22:49	23:38	0	49	4,9	0,0049		

Cycle #01			Measurement flight #02			EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Return flight					
Project	EASA Study Add On																
Flight route	EWR-LHR										Date:						
Sampling point	Flight deck									Sampler:							
Aircraft	Boing 787-8																
Registration									UTC	UTC							
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]			
Organophosphates	taxi + t/o climb	combined with taxi	F-EA-OPC-BA02-S-02		5	SG-10	K	PU/Filter	01:23	02:12	0	49	245	0,245			
Organophosphates			F-EA-OPC-BA02-S-01		5	SG-10	K	PU/Filter	no sample	no sample	0	0	0	0,0000			
Organophosphates	complete flight		F-EA-OPC-BA02-L		3,5	SG-5100	L	PU/Filter	01:23	08:03	0	400	1400	1,4000			
Organophosphates	descent / landing		F-EA-OPC-BA02-S-03		5	SG-10	K	PU/Filter	06:47	08:14	0	87	435	0,4350			
Aldehydes	taxi + t/o climb	combined with taxi	F-EA-ALD-BA02-S-02		0,3	SG 350	K	DNPH	01:23	02:12	0	49	14,7	0,0147			
Aldehydes			F-EA-ALD-BA02-S-01		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0	0,0000			
Aldehydes	complete flight		F-EA-ALD-BA02-L		0,3	SG 350	L	DNPH	01:23	08:03	0	400	120	0,1200			
Aldehydes	descent / landing		F-EA-ALD-BA02-S-03		0,3	SG 350	K	DNPH	06:47	08:06	0	79	23,7	0,0237			
VOC	blank		F-EA-VOC-BA02-blank_01														
VOC	taxi + t/o climb	combined with taxi	F-EA-VOC-BA02-S-01a	54	0,1	SG 350	Tenax	Tenax TA	01:23	02:12	0	49	4,9	0,0049			
VOC	taxi + t/o climb	combined with taxi	F-EA-VOC-BA02-S-01b	54 b	0,1	SG 350	Tenax	Tenax TA	01:23	02:12	0	49	4,9	0,0049			
VOC			F-EA-VOC-BA02-S-02a		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000			
VOC			F-EA-VOC-BA02-S-02b		0,1	SG 350	Tenax	Tenax TA	no sample	no sample	0	0	0,0	0,0000			
VOC	descent / landing		F-EA-VOC-BA02-S-03a	56	0,1	SG 350	Tenax	Tenax TA	06:47	08:06	0	79	7,9	0,0079			
VOC	descent / landing		F-EA-VOC-BA02-S-03b	56 b	0,1	SG 350	Tenax	Tenax TA	06:47	08:06	0	79	7,9	0,0079			

Cycle #01			Measurement flight #02			EASA CAQ Campaign 2015-2016 Add On "Dreamliner"					Return flight					
Project	EASA Study Add On															
Flight route	EWR-LHR										Date:					
Sampling point	Cabin										Sampler:					
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-BA02-S-01		10	SG-10	K	PU/Filter	01:25	01:45	0	20	200	0,200		
Organophosphates	t/o climb		C-EA-OPC-BA02-S-02		10	SG-10	K	PU/Filter	01:45	02:19	0	34	340	0,3400		
Organophosphates	complete flight		C-EA-OPC-BA02-L		3,5	SG-5100	L	PU/Filter	01:25	08:08	0	403	1411	1,4105		
Organophosphates	descent / landing		C-EA-OPC-BA02-S-03		10	SG-10	K	PU/Filter	07:22	08:08	0	46	460	0,4600		
Aldehydes	taxi + t/o climb		C-EA-ALD-BA02-S-01		0,3	SG 350	K	DNPH	01:25	01:45	0	20	6,0	0,0060		
Aldehydes	t/o climb		C-EA-ALD-BA02-S-02		0,3	SG 350	K	DNPH	01:45	02:19	0	34	10	0,0102		
Aldehydes	complete flight		C-EA-ALD-BA02-L		0,3	SG 350	L	DNPH	01:25	08:08	0	403	121	0,1209		
Aldehydes	descent / landing		C-EA-ALD-BA02-S-03		0,3	SG 350	K	DNPH	07:22	08:08	0	46	13,8	0,0138		
VOC	blank		C-EA-VOC-BA02-blank_01													
VOC	cruise		C-EA-VOC-BA02-S-01a	64	0,1	SG 350	Tenax	Tenax TA	01:25	01:45	0	20	2,0	0,0020		
VOC	cruise		C-EA-VOC-BA02-S-01b	64 b	0,1	SG 350	Tenax	Tenax TA	01:25	01:45	0	20	2,0	0,0020		
VOC	t/o climb		C-EA-VOC-BA02-S-02a	65	0,1	SG 350	Tenax	Tenax TA	01:45	02:19	0	34	3,4	0,0034		
VOC	t/o climb		C-EA-VOC-BA02-S-02b	65 b	0,1	SG 350	Tenax	Tenax TA	01:45	02:19	0	34	3,4	0,0034		
VOC	descent / landing		C-EA-VOC-BA02-S-03a	66	0,1	SG 350	Tenax	Tenax TA	07:22	08:08	0	46	4,6	0,0046		
VOC	descent / landing		C-EA-VOC-BA02-S-03b	66 b	0,1	SG 350	Tenax	Tenax TA	07:22	08:08	0	46	4,6	0,0046		

Cycle #02			Measurement flight #03		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Outgoing flight					
Project	EASA Study Add On															
Flight route	LHR-EWR									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		F-EA-OPC-BA03-S-01		5	SG-10	K	PU/Filter	16:50	17:15	0	25	125	0,125		
Organophosphates	t/o climb		F-EA-OPC-BA03-S-02		5	SG-10	K	PU/Filter	17:20	18:05	0	45	225	0,2250		
Organophosphates	complete flight		F-EA-OPC-BA03-L		3,5	SG-5100	L	PU/Filter	16:10	00:34	0	504	1764	1,7640		
Organophosphates	descent / landing		F-EA-OPC-BA03-S-03		5	SG-10	K	PU/Filter	23:34	00:34	0	60	300	0,3000		
Aldehydes	taxi	pump not working	F-EA-ALD-BA03-S-01		0,3	SG 350	K	DNPH	no sample	no sample	0	0	0,0	0,0000		
Aldehydes	t/o climb		F-EA-ALD-BA03-S-02		0,3	SG 350	K	DNPH	17:20	18:05	0	45	13,5	0,0135		
Aldehydes	complete flight		F-EA-ALD-BA03-L		0,3	SG 350	L	DNPH	16:10	00:34	0	504	151	0,1512		
Aldehydes	descent / landing		F-EA-ALD-BA03-S-03		0,3	SG 350	K	DNPH	23:34	00:34	0	60	18	0,0180		
VOC	blank		F-EA-VOC-BA03-blank_01	85 b												
VOC	taxi		F-EA-VOC-BA03-S-01a	79	0,1	SG 350	Tenax	Tenax TA	16:50	17:15	0	25	2,5	0,0025		
VOC	taxi		F-EA-VOC-BA03-S-01b	79 b	0,1	SG 350	Tenax	Tenax TA	16:50	17:15	0	25	2,5	0,0025		
VOC	t/o climb		F-EA-VOC-BA03-S-02a	80	0,1	SG 350	Tenax	Tenax TA	17:20	18:05	0	45	4,5	0,0045		
VOC	t/o climb		F-EA-VOC-BA03-S-02b	80 b	0,1	SG 350	Tenax	Tenax TA	17:20	18:05	0	45	4,5	0,0045		
VOC	descent / landing		F-EA-VOC-BA03-S-03a	81	0,1	SG 350	Tenax	Tenax TA	23:34	00:34	0	60	6,0	0,0060		
VOC	descent / landing		F-EA-VOC-BA03-S-03b	81 b	0,1	SG 350	Tenax	Tenax TA	23:34	00:34	0	60	6,0	0,0060		

Cycle #02			Measurement flight #03		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"					Outgoing flight					
Project	EASA Study Add On														
Flight route	LHR-EWR									Date:					
Sampling point	Cabin									Sampler:					
Aircraft	Boing 787-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-BA03-S-01		10	SG-10	K	PU/Filter	16:49	17:14	0	25	250	0,250	
Organophosphates	t/o climb		C-EA-OPC-BA03-S-02		10	SG-10	K	PU/Filter	17:14	18:00	0	46	460	0,4600	
Organophosphates	complete flight		C-EA-OPC-BA03-L		1	Gilian 5000	L	PU/Filter	16:49	00:30	0	461	461	0,4610	
Organophosphates	descent / landing		C-EA-OPC-BA03-S-03		10	SG-10	K	PU/Filter	23:35	00:30	0	55	550	0,5500	
Aldehydes	taxi		C-EA-ALD-BA03-S-01		0,3	SG 350	K	DNPH	16:49	17:14	0	25	7,5	0,0075	
Aldehydes	t/o climb		C-EA-ALD-BA03-S-02		0,3	SG 350	K	DNPH	17:14	18:00	0	46	13,8	0,0138	
Aldehydes	complete flight		C-EA-ALD-BA03-L		0,3	SG 350	L	DNPH	16:49	00:30	0	461	138	0,1383	
Aldehydes	descent / landing		C-EA-ALD-BA03-S-03		0,3	SG 350	K	DNPH	23:35	00:30	0	55	16,5	0,0165	
VOC	blank		C-EA-VOC-BA03-blank_01	92											
VOC	taxi		C-EA-VOC-BA03-S-01a	86	0,1	SG 350	Tenax	Tenax TA	16:49	17:14	0	25	2,5	0,0025	
VOC	taxi		C-EA-VOC-BA03-S-01b	86 b	0,1	SG 350	Tenax	Tenax TA	16:49	17:14	0	25	2,5	0,0025	
VOC	t/o climb		C-EA-VOC-BA03-S-02a	87	0,1	SG 350	Tenax	Tenax TA	17:14	18:00	0	46	4,6	0,0046	
VOC	t/o climb		C-EA-VOC-BA03-S-02b	87 b	0,1	SG 350	Tenax	Tenax TA	17:14	18:00	0	46	4,6	0,0046	
VOC	descent / landing		C-EA-VOC-BA03-S-03a	88	0,1	SG 350	Tenax	Tenax TA	23:35	00:30	0	55	5,5	0,0055	
VOC	descent / landing		C-EA-VOC-BA03-S-03b	88 b	0,1	SG 350	Tenax	Tenax TA	23:35	00:30	0	55	5,5	0,0055	

Cycle #02			Measurement flight #04		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Return flight					
Project	EASA Study Add On															
Flight route	EWR-LHR									Date:						
Sampling point	Flight deck									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		F-EA-OPC-BA04-S-01		5	SG-10	K	PU/Filter	02:11	02:22	0	11	55	0,055		
Organophosphates	t/o climb		F-EA-OPC-BA04-S-02		5	SG-10	K	PU/Filter	02:22	03:03	0	41	205	0,2050		
Organophosphates	complete flight		F-EA-OPC-BA04-L		3,5	SG-5100	L	PU/Filter	02:10	08:38	0	388	1358	1,3580		
Organophosphates	descent / landing		F-EA-OPC-BA04-S-03		5	SG-10	K	PU/Filter	07:45	08:36	0	51	255	0,2550		
Aldehydes	taxi + t/o climb		F-EA-ALD-BA04-S-01		0,3	SG 350	K	DNPH	02:11	02:23	0	12	3,6	0,0036		
Aldehydes	t/o climb		F-EA-ALD-BA04-S-02		0,3	SG 350	K	DNPH	02:23	03:03	0	40	12	0,0120		
Aldehydes	complete flight		F-EA-ALD-BA04-L		0,3	SG 350	L	DNPH	02:10	08:38	0	388	116	0,1164		
Aldehydes	descent / landing		F-EA-ALD-BA04-S-03		0,3	SG 350	K	DNPH	07:45	08:36	0	51	15,3	0,0153		
VOC	blank		F-EA-VOC-BA04-blank_01	85												
VOC	taxi + t/o climb		F-EA-VOC-BA04-S-01a	82	0,1	SG 350	Tenax	Tenax TA	02:11	02:21	0	10	1,0	0,0010		
VOC	taxi + t/o climb		F-EA-VOC-BA04-S-01b	82 b	0,1	SG 350	Tenax	Tenax TA	02:11	02:21	0	10	1,0	0,0010		
VOC	t/o climb		F-EA-VOC-BA04-S-02a	83	0,1	SG 350	Tenax	Tenax TA	02:21	03:02	0	41	4,1	0,0041		
VOC	t/o climb		F-EA-VOC-BA04-S-02b	83 b	0,1	SG 350	Tenax	Tenax TA	02:21	03:02	0	41	4,1	0,0041		
VOC	descent / landing		F-EA-VOC-BA04-S-03a	84	0,1	SG 350	Tenax	Tenax TA	07:45	08:35	0	50	5,0	0,0050		
VOC	descent / landing		F-EA-VOC-BA04-S-03b	84 b	0,1	SG 350	Tenax	Tenax TA	07:45	08:35	0	50	5,0	0,0050		

Cycle #02			Measurement flight #04		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Return flight					
Project	EASA Study Add On															
Flight route	EWR-LHR									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-BA04-S-01		10	SG-10	K	PU/Filter	02:09	02:22	0	13	130	0,130		
Organophosphates	t/o climb		C-EA-OPC-BA04-S-02		10	SG-10	K	PU/Filter	02:22	03:02	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-BA04-L		3,5	SG-5100	L	PU/Filter	02:09	08:37	0	388	1358	1,3580		
Organophosphates	descent / landing		C-EA-OPC-BA04-S-03		10	SG-10	K	PU/Filter	07:47	08:37	0	50	500	0,5000		
Aldehydes	taxi + t/o climb		C-EA-ALD-BA04-S-01		0,3	SG 350	K	DNPH	02:09	02:22	0	13	3,9	0,0039		
Aldehydes	t/o climb		C-EA-ALD-BA04-S-02		0,3	SG 350	K	DNPH	02:22	03:02	0	40	12	0,0120		
Aldehydes	complete flight		C-EA-ALD-BA04-L		0,3	SG 350	L	DNPH	02:09	08:37	0	388	116	0,1164		
Aldehydes	descent / landing		C-EA-ALD-BA04-S-03		0,3	SG 350	K	DNPH	07:47	08:37	0	50	15	0,0150		
VOC	blank		C-EA-VOC-BA04-blank_0	92 b												
VOC	cruise		C-EA-VOC-BA04-S-01a	89	0,1	SG 350	Tenax	Tenax TA	02:09	02:22	0	13	1,3	0,0013		
VOC	cruise		C-EA-VOC-BA04-S-01b	89 b	0,1	SG 350	Tenax	Tenax TA	02:09	02:22	0	13	1,3	0,0013		
VOC	t/o climb		C-EA-VOC-BA04-S-02a	90	0,1	SG 350	Tenax	Tenax TA	02:22	03:02	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-BA04-S-02b	90 b	0,1	SG 350	Tenax	Tenax TA	02:22	03:02	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-BA04-S-03a	91	0,1	SG 350	Tenax	Tenax TA	07:47	08:37	0	50	5,0	0,0050		
VOC	descent / landing		C-EA-VOC-BA04-S-03b	91 b	0,1	SG 350	Tenax	Tenax TA	07:47	08:37	0	50	5,0	0,0050		

Cycle #03			Measurement flight #05		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Outgoing flight					
Project	EASA Study Add On															
Flight route	LHR-EWR									Date:						
Sampling point	Cabin									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi		C-EA-OPC-BA05-S-01		10	SG-10	K	PU/Filter	17:06	17:27	0	21	210	0,210		
Organophosphates	t/o climb		C-EA-OPC-BA05-S-02		10	SG-10	K	PU/Filter	17:28	18:08	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-BA05-L		1	Gilian 5000	L	PU/Filter	17:06	00:36	0	450	450	0,4500		
Organophosphates	descent / landing		C-EA-OPC-BA05-S-03		10	SG-10	K	PU/Filter	23:46	00:36	0	50	500	0,5000		
Aldehydes	taxi		C-EA-ALD-BA05-S-01		0,3	SG 350	K	DNPH	17:06	17:27	0	21	6,3	0,0063		
Aldehydes	t/o climb		C-EA-ALD-BA05-S-02		0,3	SG 350	K	DNPH	17:28	18:08	0	40	12,0	0,0120		
Aldehydes	complete flight		C-EA-ALD-BA05-L		0,3	SG 350	L	DNPH	17:06	00:36	0	450	135	0,1350		
Aldehydes	descent / landing		C-EA-ALD-BA05-S-03		0,3	SG 350	K	DNPH	23:46	00:36	0	50	15	0,0150		
VOC	blank		C-EA-VOC-BA05-blank_0	13 b												
VOC	taxi		C-EA-VOC-BA05-S-01a	2	0,1	SG 350	Tenax	Tenax TA	17:06	17:27	0	21	2,1	0,0021		
VOC	taxi		C-EA-VOC-BA05-S-01b	2 b	0,1	SG 350	Tenax	Tenax TA	17:06	17:27	0	21	2,1	0,0021		
VOC	t/o climb		C-EA-VOC-BA05-S-02a	3	0,1	SG 350	Tenax	Tenax TA	17:28	18:08	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-BA05-S-02b	3 b	0,1	SG 350	Tenax	Tenax TA	17:28	18:08	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-BA05-S-03a	5	0,1	SG 350	Tenax	Tenax TA	23:46	00:36	0	50	5,0	0,0050		
VOC	descent / landing		C-EA-VOC-BA05-S-03b	5 b	0,1	SG 350	Tenax	Tenax TA	23:46	00:36	0	50	5,0	0,0050		

Cycle #03			Measurement flight #06		EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Return flight					
Project	EASA Study Add On															
Flight route	EWR-LHR										Date:					
Sampling point	Cabin									Sampler:						
Aircraft	Boing 787-8															
Registration									UTC	UTC						
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]		
Organophosphates	taxi + t/o climb		C-EA-OPC-BA06-S-01		10	SG-10	K	PU/Filter	02:18	02:30	0	12	120	0,120		
Organophosphates	t/o climb		C-EA-OPC-BA06-S-02		10	SG-10	K	PU/Filter	02:30	03:10	0	40	400	0,4000		
Organophosphates	complete flight		C-EA-OPC-BA06-L		3,5	SG-5100	L	PU/Filter	02:18	09:00	0	402	1407	1,4070		
Organophosphates	descent / landing		C-EA-OPC-BA06-S-03		10	SG-10	K	PU/Filter	08:00	09:00	0	60	600	0,6000		
Aldehydes	taxi + t/o climb		C-EA-ALD-BA06-S-01		0,3	SG 350	K	DNPH	02:18	02:30	0	12	3,6	0,0036		
Aldehydes	t/o climb		C-EA-ALD-BA06-S-02		0,3	SG 350	K	DNPH	02:30	03:10	0	40	12	0,0120		
Aldehydes	complete flight		C-EA-ALD-BA06-L		0,3	SG 350	L	DNPH	02:18	09:00	0	402	121	0,1206		
Aldehydes	descent / landing		C-EA-ALD-BA06-S-03		0,3	SG 350	K	DNPH	08:00	09:00	0	60	18	0,0180		
VOC	blank		C-EA-VOC-BA06-blank_0	13												
VOC	cruise		C-EA-VOC-BA06-S-01a	7	0,1	SG 350	Tenax	Tenax TA	02:18	02:30	0	12	1,2	0,0012		
VOC	cruise		C-EA-VOC-BA06-S-01b	7 b	0,1	SG 350	Tenax	Tenax TA	02:18	02:30	0	12	1,2	0,0012		
VOC	t/o climb		C-EA-VOC-BA06-S-02a	10	0,1	SG 350	Tenax	Tenax TA	02:30	03:10	0	40	4,0	0,0040		
VOC	t/o climb		C-EA-VOC-BA06-S-02b	10 b	0,1	SG 350	Tenax	Tenax TA	02:30	03:10	0	40	4,0	0,0040		
VOC	descent / landing		C-EA-VOC-BA06-S-03a	11	0,1	SG 350	Tenax	Tenax TA	08:00	09:00	0	60	6,0	0,0060		
VOC	descent / landing		C-EA-VOC-BA06-S-03b	11 b	0,1	SG 350	Tenax	Tenax TA	08:00	09:00	0	60	6,0	0,0060		

Cycle #04 Measurement flight #07				EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Outgoing flight					
Project	EASA Study Add On														
Flight route	LHR-EWR									Date:					
Sampling point	Flight deck									Sampler:					
Aircraft	Boing 787-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		F-EA-OPC-BA07-S-01		5	SG-10	K	PU/Filter	15:42	16:32	0	50	250	0,250	
Organophosphates	t/o climb		F-EA-OPC-BA07-S-02		5	SG-10	K	PU/Filter	16:32	17:20	0	48	240	0,2400	
Organophosphates	complete flight		F-EA-OPC-BA07-L		3,5	SG-5100	L	PU/Filter	15:42	23:50	0	488	1708	1,7080	
Organophosphates	descent / landing		F-EA-OPC-BA07-S-03		5	SG-10	K	PU/Filter	22:55	23:39	0	44	220	0,2200	
Aldehydes	taxi		F-EA-ALD-BA07-S-01		0,3	SG 350	K	DNPH	15:42	16:32	0	50	15,0	0,0150	
Aldehydes	t/o climb		F-EA-ALD-BA07-S-02		0,3	SG 350	K	DNPH	16:32	17:19	0	47	14,1	0,0141	
Aldehydes	complete flight	pump stop 21:48-22:52	F-EA-ALD-BA07-L	recorded time minus 64 min.	0,3	SG 350	L	DNPH	15:42	23:50	0	424	127	0,1272	
Aldehydes	descent / landing		F-EA-ALD-BA07-S-03		0,3	SG 350	K	DNPH	22:54	23:39	0	45	13,5	0,0135	
VOC	blank		F-EA-VOC-BA07-blank_01	XX III											
VOC	taxi		F-EA-VOC-BA07-S-01a	VII	0,1	SG 350	Tenax	Tenax TA	15:42	16:32	0	50	5,0	0,0050	
VOC	taxi		F-EA-VOC-BA07-S-01b	VII b	0,1	SG 350	Tenax	Tenax TA	15:42	16:32	0	50	5,0	0,0050	
VOC	t/o climb		F-EA-VOC-BA07-S-02a	IX	0,1	SG 350	Tenax	Tenax TA	16:32	17:19	0	47	4,7	0,0047	
VOC	t/o climb		F-EA-VOC-BA07-S-02b	IX b	0,1	SG 350	Tenax	Tenax TA	16:32	17:19	0	47	4,7	0,0047	
VOC	descent / landing		F-EA-VOC-BA07-S-03a	XI	0,1	SG 350	Tenax	Tenax TA	22:54	23:40	0	46	4,6	0,0046	
VOC	descent / landing		F-EA-VOC-BA07-S-03b	XI b	0,1	SG 350	Tenax	Tenax TA	22:54	23:40	0	46	4,6	0,0046	

Cycle #04 Measurement flight #07				EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Outgoing flight					
Project	EASA Study Add On														
Flight route	LHR-EWR									Date:					
Sampling point	Cabin								Sampler:						
Aircraft	Boing 787-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi		C-EA-OPC-BA07-S-01		10	SG-10	K	PU/Filter	16:04	16:27	0	23	230	0,230	
Organophosphates	t/o climb		C-EA-OPC-BA07-S-02		10	SG-10	K	PU/Filter	16:27	17:07	0	40	400	0,4000	
Organophosphates	complete flight		C-EA-OPC-BA07-L		1	Gilian 5000	L	PU/Filter	16:04	23:39	0	455	455	0,4550	
Organophosphates	descent / landing		C-EA-OPC-BA07-S-03		10	SG-10	K	PU/Filter	22:55	23:39	0	44	440	0,4400	
Aldehydes	taxi		C-EA-ALD-BA07-S-01		0,3	SG 350	K	DNPH	16:04	16:27	0	23	6,9	0,0069	
Aldehydes	t/o climb		C-EA-ALD-BA07-S-02		0,3	SG 350	K	DNPH	16:27	17:07	0	40	12,0	0,0120	
Aldehydes	complete flight		C-EA-ALD-BA07-L		0,3	SG 350	L	DNPH	16:04	23:39	0	455	137	0,1365	
Aldehydes	descent / landing		C-EA-ALD-BA07-S-03		0,3	SG 350	K	DNPH	22:55	23:39	0	44	13,2	0,0132	
VOC	blank		C-EA-VOC-BA07-blank_01	106 b											
VOC	taxi		C-EA-VOC-BA07-S-01a	100	0,1	SG 350	Tenax	Tenax TA	16:04	16:27	0	23	2,3	0,0023	
VOC	taxi		C-EA-VOC-BA07-S-01b	100 b	0,1	SG 350	Tenax	Tenax TA	16:04	16:27	0	23	2,3	0,0023	
VOC	t/o climb		C-EA-VOC-BA07-S-02a	101	0,1	SG 350	Tenax	Tenax TA	16:27	17:07	0	40	4,0	0,0040	
VOC	t/o climb		C-EA-VOC-BA07-S-02b	101 b	0,1	SG 350	Tenax	Tenax TA	16:27	17:07	0	40	4,0	0,0040	
VOC	descent / landing		C-EA-VOC-BA07-S-03a	102	0,1	SG 350	Tenax	Tenax TA	22:55	23:39	0	44	4,4	0,0044	
VOC	descent / landing		C-EA-VOC-BA07-S-03b	102 b	0,1	SG 350	Tenax	Tenax TA	22:55	23:39	0	44	4,4	0,0044	

Cycle #04 Measurement flight #08			EASA CAQ Campaign 2015-2016 Add On "Dreamliner"							Return flight					
Project	EASA Study Add On														
Flight route	EWR-LHR									Date:					
Sampling point	Flight deck								Sampler:						
Aircraft	Boing 787-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		F-EA-OPC-BA08-S-01		5	SG-10	K	PU/Filter	01:30	01:43	0	13	65	0,065	
Organophosphates	t/o climb		F-EA-OPC-BA08-S-02		5	SG-10	K	PU/Filter	01:44	02:29	0	45	225	0,2250	
Organophosphates	complete flight		F-EA-OPC-BA08-L		3,5	SG-5100	L	PU/Filter	01:30	08:02	0	392	1372	1,3720	
Organophosphates	descent / landing		F-EA-OPC-BA08-S-03		5	SG-10	K	PU/Filter	07:15	08:02	0	47	235	0,2350	
Aldehydes	taxi + t/o climb		F-EA-ALD-BA08-S-01		0,3	SG 350	K	DNPH	01:30	01:43	0	13	3,9	0,0039	
Aldehydes	t/o climb		F-EA-ALD-BA08-S-02		0,3	SG 350	K	DNPH	01:47	02:29	0	42	13	0,0126	
Aldehydes	complete flight		F-EA-ALD-BA08-L		0,3	SG 350	L	DNPH	01:30	08:02	0	392	118	0,1176	
Aldehydes	descent / landing		F-EA-ALD-BA08-S-03		0,3	SG 350	K	DNPH	07:15	08:02	0	47	14,1	0,0141	
VOC	blank		F-EA-VOC-BA08-blank_01	XX III b											
VOC	taxi + t/o climb		F-EA-VOC-BA08-S-01a	XIV	0,1	SG 350	Tenax	Tenax TA	01:30	01:43	0	13	1,3	0,0013	
VOC	taxi + t/o climb		F-EA-VOC-BA08-S-01b	XIV b	0,1	SG 350	Tenax	Tenax TA	01:30	01:43	0	13	1,3	0,0013	
VOC	t/o climb		F-EA-VOC-BA08-S-02a	XV	0,1	SG 350	Tenax	Tenax TA	01:47	02:17	0	30	3,0	0,0030	
VOC	t/o climb		F-EA-VOC-BA08-S-02b	XV b	0,1	SG 350	Tenax	Tenax TA	01:47	02:17	0	30	3,0	0,0030	
VOC	descent / landing		F-EA-VOC-BA08-S-03a	XVIII	0,1	SG 350	Tenax	Tenax TA	07:15	08:02	0	47	4,7	0,0047	
VOC	descent / landing		F-EA-VOC-BA08-S-03b	XVIII b	0,1	SG 350	Tenax	Tenax TA	07:15	08:02	0	47	4,7	0,0047	

Cycle #04 Measurement flight #08				EASA CAQ Campaign 2015-2016 Add On "Dreamliner"						Return flight					
Project	EASA Study Add On														
Flight route	EWR-LHR									Date:					
Sampling point	Cabin								Sampler:						
Aircraft	Boing 787-8														
Registration									UTC	UTC					
Parameter	Condition	Remarks	Sample Code	Remarks	Air flow [L/min]	Pump	No.	Sample phase	Start [hh:mm]	Stop [hh:mm]	Start [Min.]	Stop [Min.]	Sample volume [L]	Sample volume [m³]	
Organophosphates	taxi + t/o climb		C-EA-OPC-BA08-S-01		10	SG-10	K	PU/Filter	01:21	01:38	0	17	170	0,170	
Organophosphates	t/o climb		C-EA-OPC-BA08-S-02		10	SG-10	K	PU/Filter	01:38	02:42	0	64	640	0,6400	
Organophosphates	complete flight		C-EA-OPC-BA08-L		3,5	SG-5100	L	PU/Filter	01:21	08:04	0	403	1411	1,4105	
Organophosphates	descent / landing		C-EA-OPC-BA08-S-03		10	SG-10	K	PU/Filter	07:03	08:04	0	61	610	0,6100	
Aldehydes	taxi + t/o climb		C-EA-ALD-BA08-S-01		0,3	SG 350	K	DNPH	01:21	01:38	0	17	5,1	0,0051	
Aldehydes	t/o climb		C-EA-ALD-BA08-S-02		0,3	SG 350	K	DNPH	01:38	02:42	0	64	19	0,0192	
Aldehydes	complete flight		C-EA-ALD-BA08-L		0,3	SG 350	L	DNPH	01:21	08:04	0	403	121	0,1209	
Aldehydes	descent / landing		C-EA-ALD-BA08-S-03		0,3	SG 350	K	DNPH	07:03	08:04	0	61	18,3	0,0183	
VOC	blank		C-EA-VOC-BA08-blank_0	106/106 b											
VOC	cruise		C-EA-VOC-BA08-S-01a	103	0,1	SG 350	Tenax	Tenax TA	01:21	01:38	0	17	1,7	0,0017	
VOC	cruise		C-EA-VOC-BA08-S-01b	103 b	0,1	SG 350	Tenax	Tenax TA	01:21	01:38	0	17	1,7	0,0017	
VOC	t/o climb		C-EA-VOC-BA08-S-02a	104	0,1	SG 350	Tenax	Tenax TA	01:38	02:42	0	64	6,4	0,0064	
VOC	t/o climb		C-EA-VOC-BA08-S-02b	104 b	0,1	SG 350	Tenax	Tenax TA	01:38	02:42	0	64	6,4	0,0064	
VOC	descent / landing		C-EA-VOC-BA08-S-03a	105	0,1	SG 350	Tenax	Tenax TA	07:03	08:04	0	61	6,1	0,0061	
VOC	descent / landing		C-EA-VOC-BA08-S-03b	105 b	0,1	SG 350	Tenax	Tenax TA	07:03	08:04	0	61	6,1	0,0061	