

Supplementary material

Vertical distribution of ozone and VOCs in the low boundary layer of Mexico City by Velasco et al.

Table SP1. Vertical profiles of meteorological parameters, ozone and VOCs measured at 3 different sites within the urban core of Mexico City between 2000 and 2004 (CENICA = National Center for Environmental Research and Training; IPN = National Polytechnic Institute; UNAM = National Autonomous University of Mexico). The heights are referenced to ground level. Profiles measured in 2002 and 2003 were part of the MCMA-2002 & 2003 field campaigns.

Flight number	Day	Site	File	Date	Local time (h)	Height (m)
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3	1	CENICA	10190747.dat	10/19/2000	07:47	196
4	1	CENICA	10190949.dat	10/19/2000	09:49	600
5	1	CENICA	10191202.dat	10/19/2000	12:02	201
6	1	CENICA	10191550.dat	10/19/2000	15:50	151
7	1	CENICA	10191706.dat	10/19/2000	17:06	200
8	2	IPN	11231011.dat	11/23/2000	10:11	787
9	2	IPN	11231344.dat	11/23/2000	13:44	151
10	2	IPN	11231602.dat	11/23/2000	16:02	997
11	2	IPN	11231729.dat	11/23/2000	17:29	196
12	3	CENICA	12150338.dat	12/15/2000	03:38	998
13	3	CENICA	12150452.dat	12/15/2000	04:52	193
14	3	CENICA	12150733.dat	12/15/2000	07:33	900
15	3	CENICA	12150845.dat	12/15/2000	08:45	102
16	3	CENICA	12151052.dat	12/15/2000	10:52	900
17	3	CENICA	12151203.dat	12/15/2000	12:03	147
18	3	CENICA	12151443.dat	12/15/2000	14:43	1001
19	3	CENICA	12151623.dat	12/15/2000	16:23	145
20	4	UNAM	01310954.dat	01/31/2001	09:54	150
21	4	UNAM	01311156.dat	01/31/2001	11:56	500
22	4	UNAM	01311340.dat	01/31/2001	13:40	199
23	4	UNAM	01311439.dat	01/31/2001	14:39	499
24	4	UNAM	01311627.dat	01/31/2001	16:27	451
25	5	CENICA	02210340.dat	02/21/2001	03:40	1004
26	5	CENICA	02210455.dat	02/21/2001	04:55	148
27	5	CENICA	02210641.dat	02/21/2001	06:41	1004
28	5	CENICA	02210825.dat	02/21/2001	08:25	199
29	5	CENICA	02210956.dat	02/21/2001	09:56	803
30	6	IPN	03290851.dat	03/29/2001	08:51	147
31	6	IPN	03291248.dat	03/29/2001	12:48	197
32	7	UNAM	08220959.dat	08/22/2001	09:59	504
33	7	UNAM	08221118.dat	08/22/2001	11:18	200
34	7	UNAM	08221306.dat	08/22/2001	13:06	550
35	7	UNAM	08221419.dat	08/22/2001	14:19	346
36	8	CENICA	09190300.dat	09/19/2001	03:00	1000
37	8	CENICA	09190438.dat	09/19/2001	04:38	154

Continuation Table SP1

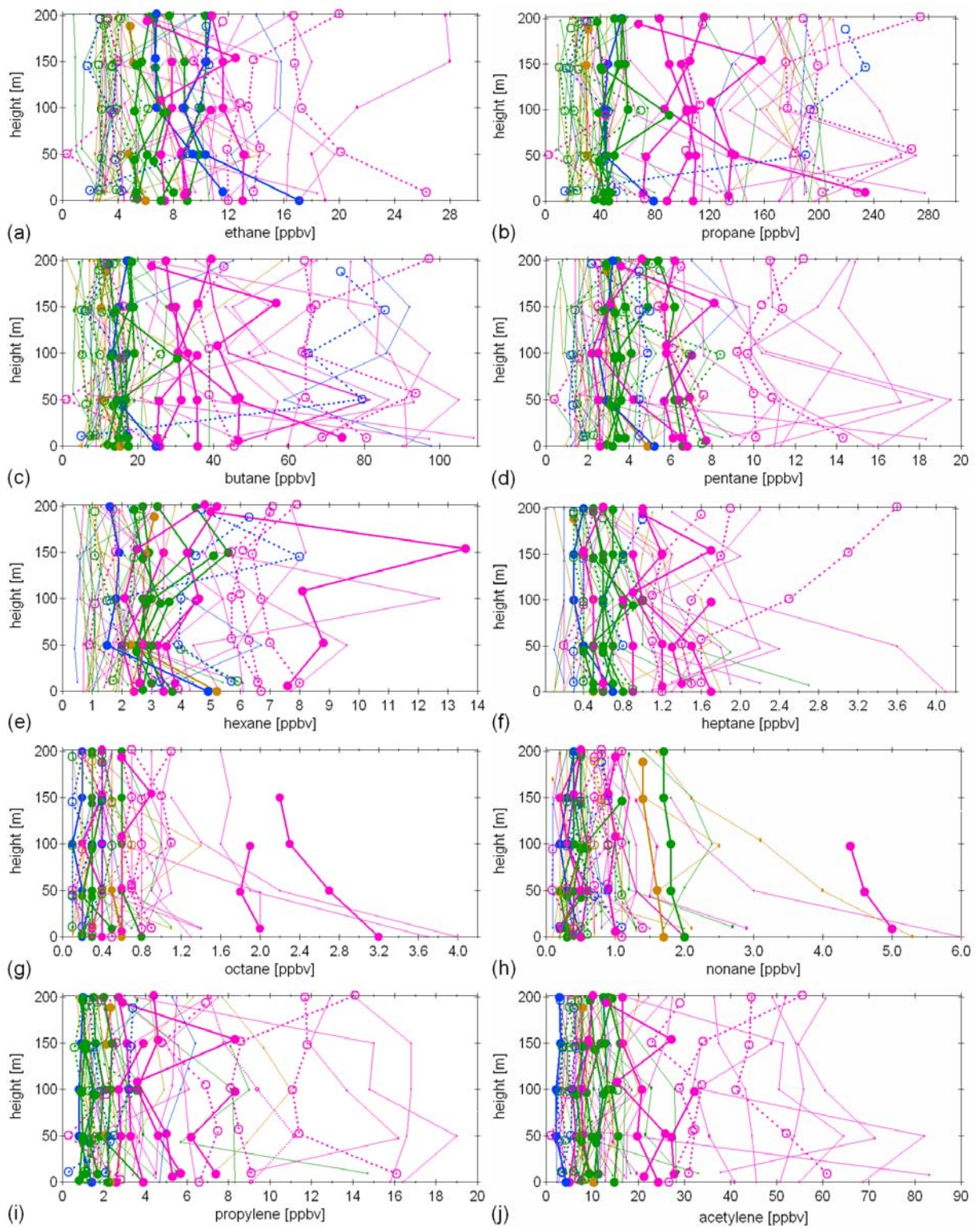
Flight number	Day	Site	File	Date	Local time (h)	Height (m)
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41	8	CENICA	09191304.dat	09/19/2001	13:04	896
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43	9	IPN	10171020.dat	10/17/2001	10:20	197
44	9	IPN	10171200.dat	10/17/2001	12:00	500
45	9	IPN	10171313.dat	10/17/2001	13:13	1000
46	9	IPN	10171416.dat	10/17/2001	14:16	149
47	9	IPN	10171603.dat	10/17/2001	16:03	947
48	10	CENICA	11070328.dat	11/07/2001	03:28	1004
49	10	CENICA	11070418.dat	11/07/2001	04:18	899
50	10	CENICA	11070610.dat	11/07/2001	06:10	905
51	10	CENICA	11070816.dat	11/07/2001	08:16	199
52	10	CENICA	11071031.dat	11/07/2001	10:31	608
53	10	CENICA	11071108.dat	11/07/2001	11:08	1001
54	10	CENICA	11071155.dat	11/07/2001	11:55	150
55	10	CENICA	11071347.dat	11/07/2001	13:47	989
56	10	CENICA	11071532.dat	11/07/2001	15:32	903
57	11	UNAM	12051100.dat	12/05/2001	11:00	152
58	11	UNAM	12051210.dat	12/05/2001	12:10	1001
59	11	UNAM	12051313.dat	12/05/2001	13:13	149
60	11	UNAM	12051814.dat	12/05/2001	18:14	1007
61	12	CENICA	02200802.dat	02/20/2002	08:02	804
62	12	CENICA	02200833.dat	02/20/2002	08:33	1000
63	12	CENICA	02200911.dat	02/20/2002	09:11	102
64	12	CENICA	02201001.dat	02/20/2002	10:01	154
65	12	CENICA	02201039.dat	02/20/2002	10:39	199
66	12	CENICA	02201124.dat	02/20/2002	11:24	849
67	12	CENICA	02201221.dat	02/20/2002	12:21	151
68	12	CENICA	02201436.dat	02/20/2002	14:36	1006
69	12	CENICA	02201619.dat	02/20/2002	16:19	1005
70	13	CENICA	2211145.dat	02/21/2002	11:45	1000
71	13	CENICA	02211523.dat	02/21/2002	15:23	1000
72	13	CENICA	02211705.dat	02/21/2002	17:05	992
73	14	CENICA	02220355.dat	02/22/2002	03:55	700
74	14	CENICA	02220605.dat	02/22/2002	06:05	105
75	14	CENICA	02220715.dat	02/22/2002	07:15	999
76	14	CENICA	02220917.dat	02/22/2002	09:17	150
77	14	CENICA	02221102.dat	02/22/2002	11:02	992
78	14	CENICA	02221315.dat	02/22/2002	13:15	950
79	14	CENICA	02221407.dat	02/22/2002	14:07	197
80	14	CENICA	02221601.dat	02/22/2002	16:01	501
81	15	CENICA	04010506.dat	04/01/2003	05:06	391
82	15	CENICA	04010925.dat	04/01/2003	09:25	48
83	15	CENICA	04011001.dat	04/01/2003	10:01	1002
84	15	CENICA	04011109.dat	04/01/2003	11:09	947

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Flight number	Day	Site	File	Date	Local time (h)	Height (m)
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88	16	CENICA	04091228.dat	04/09/2003	12:28	197
89	16	CENICA	04091510.dat	04/09/2003	15:10	852
90	17	CENICA	04100341.dat	04/10/2003	03:41	251
91	17	CENICA	04100515.dat	04/10/2003	05:15	1003
92	17	CENICA	04100709.dat	04/10/2003	07:09	256
93	17	CENICA	04100905.dat	04/10/2003	09:05	699
94	17	CENICA	04100957.dat	04/10/2003	09:57	994
95	17	CENICA	04101106.dat	04/10/2003	11:06	150
96	17	CENICA	04101319.dat	04/10/2003	13:19	199
97	18	CENICA	04180300.dat	04/18/2003	03:00	196
98	18	CENICA	04180416.dat	04/18/2003	04:16	896
99	18	CENICA	04180633.dat	04/18/2003	06:33	1004
100	18	CENICA	04180736.dat	04/18/2003	07:36	200
101	18	CENICA	04180851.dat	04/18/2003	08:51	196
102	18	CENICA	04180959.dat	04/18/2003	09:59	708
103	18	CENICA	04181116.dat	04/18/2003	11:16	194
104	19	CENICA	04190249.dat	04/19/2003	02:49	799
105	19	CENICA	04190426.dat	04/19/2003	04:26	202
106	19	CENICA	04190643.dat	04/19/2003	06:43	1004
107	19	CENICA	04190821.dat	04/19/2003	08:21	194
108	19	CENICA	04190937.dat	04/19/2003	09:37	900
109	19	CENICA	04191119.dat	04/19/2003	11:19	147
110	20	CENICA	04240211.dat	04/24/2003	02:11	1002
111	20	CENICA	04240339..dat	04/24/2003	03:39	1004
112	20	CENICA	04240511.dat	04/24/2003	05:11	1006
113	20	CENICA	04240708.dat	04/24/2003	07:08	997
114	20	CENICA	04240936..dat	04/24/2003	09:36	999
115	20	CENICA	04241155.dat	04/24/2003	11:55	403
116	21	CENICA	04280253.dat	04/28/2003	02:53	188
117	21	CENICA	04280424.dat	04/28/2003	04:24	995
118	21	CENICA	04280606.dat	04/28/2003	06:06	1003
119	21	CENICA	04280711.dat	04/28/2003	07:11	193
120	21	CENICA	04280932.dat	04/28/2003	09:32	1003
121	21	CENICA	04281156.dat	04/28/2003	11:56	197
122	22	CENICA	04300404.dat	04/30/2003	04:04	1006
123	22	CENICA	04300527.dat	04/30/2003	05:27	202
124	22	CENICA	04300619.dat	04/30/2003	06:19	604
125	22	CENICA	04300718.dat	04/30/2003	07:18	148
126	22	CENICA	04300801.dat	04/30/2003	08:01	812
127	22	CENICA	04300941.at	04/30/2003	09:41	1003
128	22	CENICA	04301156.dat	04/30/2003	11:56	189
129	23	CENICA	11220950.dat	11/22/2004	09:50	898
130	23	CENICA	11221101.dat	11/22/2004	11:01	898
131	23	CENICA	11221233.dat	11/22/2004	12:33	150

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134	23	CENICA	11221552.dat	11/22/2004	15:52	190
135	24	CENICA	11230357.dat	11/23/2004	03:57	490
136	24	CENICA	11230550.dat	11/23/2004	05:50	1002
137	24	CENICA	11230817.dat	11/23/2004	08:17	500
138	24	CENICA	11231041.dat	11/23/2004	10:41	1001
139	24	CENICA	11231228.dat	11/23/2004	12:28	499
140	24	CENICA	11231351.dat	11/23/2004	13:51	702
141	25	CENICA	12010446.dat	12/01/2004	04:46	804
142	25	CENICA	12010650.dat	12/01/2004	06:50	800
143	25	CENICA	12010857.dat	12/01/2004	08:57	807
144	25	CENICA	12011057.dat	12/01/2004	10:57	402
145	25	CENICA	12011217.dat	12/01/2004	12:17	806
146	25	CENICA	12011313.dat	12/01/2004	13:13	804
147	25	CENICA	12011458.dat	12/01/2004	14:58	805
148	26	CENICA	12020400.dat	12/02/2004	04:00	143
149	26	CENICA	12020511.dat	12/02/2004	05:11	501
150	26	CENICA	12020717.dat	12/02/2004	07:17	805
151	26	CENICA	12020807.dat	12/02/2004	08:07	200
152	26	CENICA	12021012.dat	12/02/2004	10:12	798
153	26	CENICA	12021254.dat	12/02/2004	12:54	193
154	26	CENICA	12021325.dat	12/02/2004	13:25	799
155	26	CENICA	12021448.dat	12/02/2004	14:48	502
156	27	CENICA	12030343.dat	12/03/2004	03:43	804
157	27	CENICA	12030737.dat	12/03/2004	07:37	897
158	27	CENICA	12030918.dat	12/03/2004	09:18	698
159	27	CENICA	12031012.dat	12/03/2004	10:12	789
160	27	CENICA	12031134.dat	12/03/2004	11:34	801
161	27	CENICA	12031251.dat	12/03/2004	12:51	800
162	27	CENICA	12031423.dat	12/03/2004	14:23	803
163	27	CENICA	12031513.dat	12/03/2004	15:13	800
164	27	CENICA	12031603.dat	12/03/2004	16:03	806
165	28	CENICA	12040448.dat	12/04/2004	04:48	250
166	28	CENICA	12040628.dat	12/04/2004	06:28	854
167	28	CENICA	12040725.dat	12/04/2004	07:25	853
168	28	CENICA	12040843.dat	12/04/2004	08:43	250
169	28	CENICA	12040938.dat	12/04/2004	09:38	850
170	28	CENICA	12041039.dat	12/04/2004	10:39	150
171	28	CENICA	12041109.dat	12/04/2004	11:09	800
172	28	CENICA	12041203.dat	12/04/2004	12:03	202
173	28	CENICA	12041238.dat	12/04/2004	12:38	847
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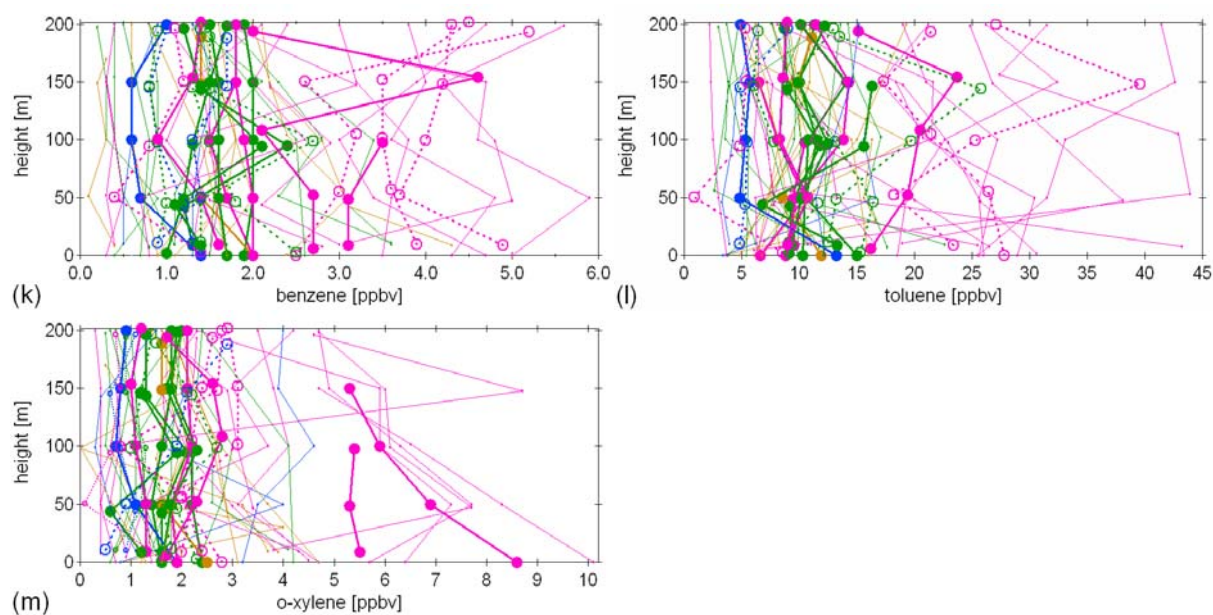
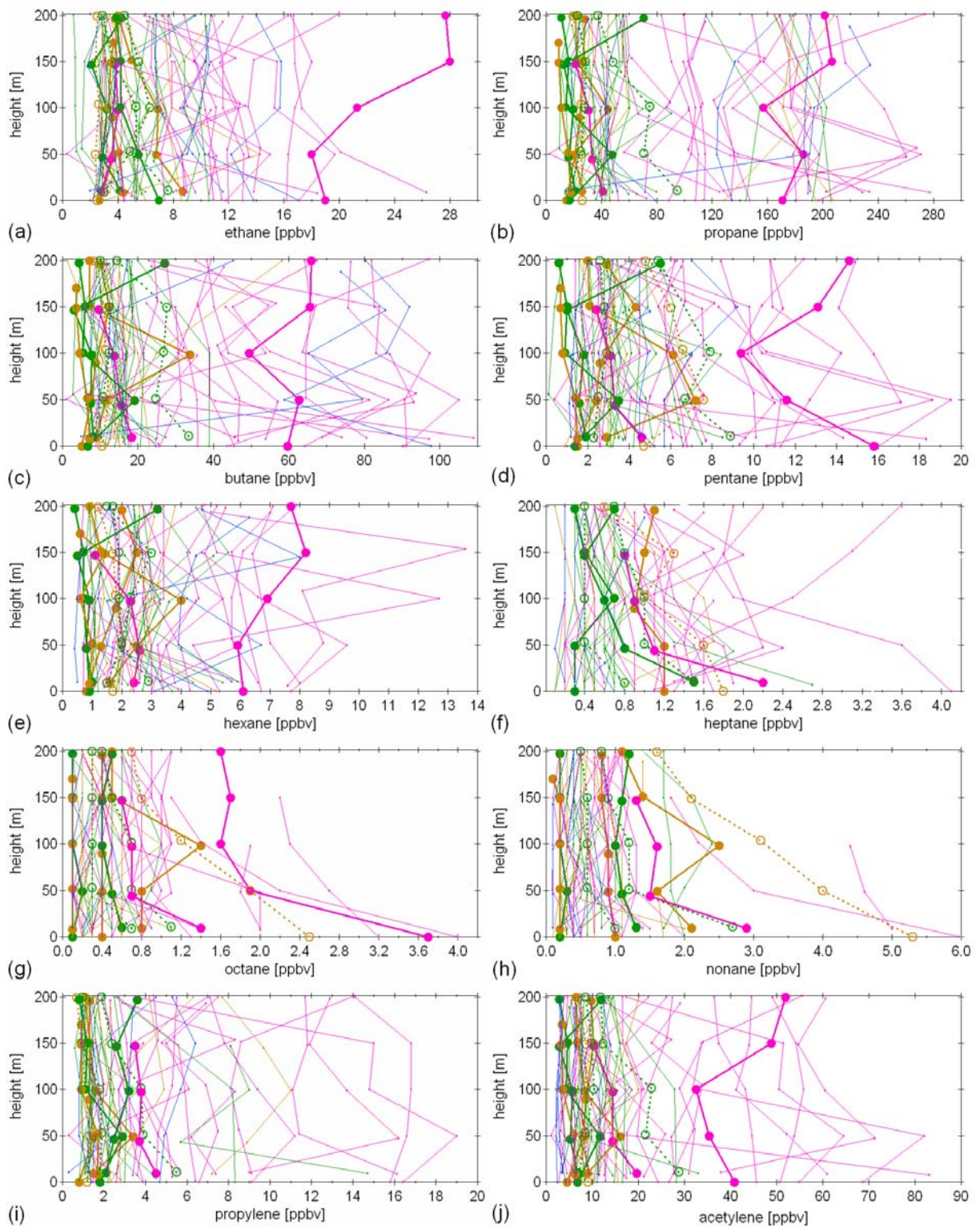


Figure SP1. Vertical distributions of the 13 monitored VOCs, (a) ethane, (b) propane, (c) butane, (d) pentane, (e) hexane, (f) heptane, (g) octane, (h) nonane, (i) propylene, (j) acetylene, (k) benzene, (l) toluene, (m) o-xylene. The wide and dashed lines show the profiles measured on O₃-North (open circles) and Cold Surge (filled circles) days during the MCMA-2003 field campaign. Profiles in blue correspond to before sunrise (2 to 6 h), in pink to the morning rush-hour period (5:30 to 9:30 h), in green to the late morning and early afternoon (9:30 to 14 h), and in brown to the afternoon (after 14 h).



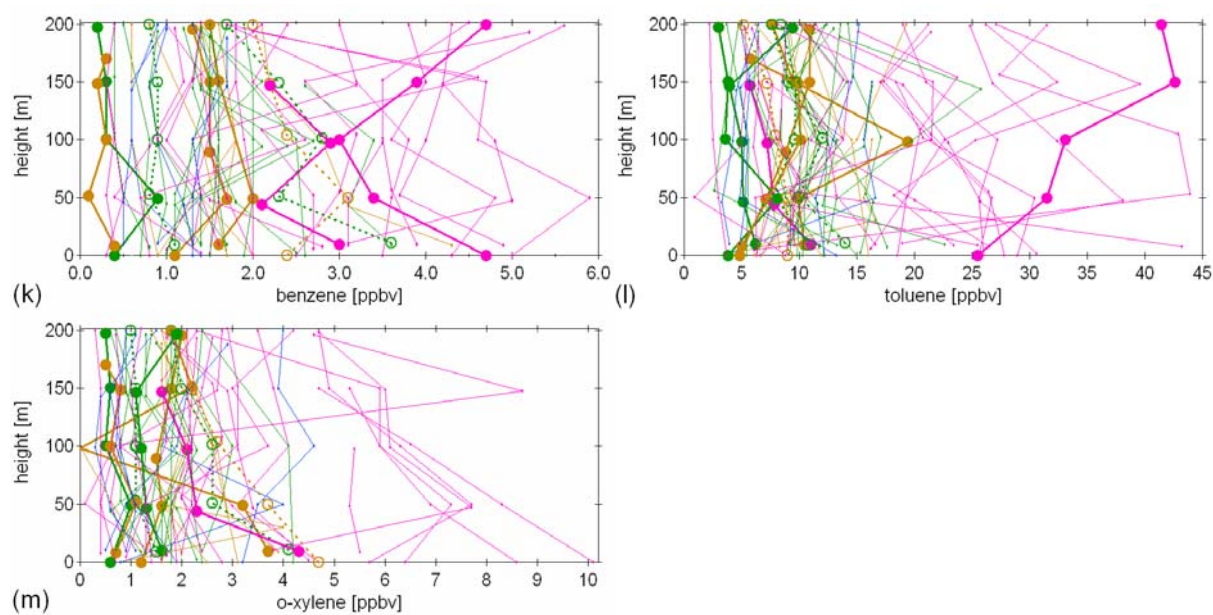


Figure SP2. Vertical distributions of the 13 monitored VOCs, (a) ethane, (b) propane, (c) butane, (d) pentane, (e) hexane, (f) heptane, (g) octane, (h) nonane, (i) propylene, (j) acetylene, (k) benzene, (l) toluene, (m) o-xylene. The profiles are classified according to the monitoring site. Profiles with open circles were measured at UNAM, filled circles at IPN, and the rest at the CENICA lab. Profiles in blue correspond to before sunrise (2 to 6 h), in pink to the morning rush-hour period (5:30 to 9:30 h), in green to the late morning and early afternoon (9:30 to 14 h), and in brown to the afternoon (after 14 h).