

1 **Table 2** Summary of conclusions from comparison of Steady State and Time Dependent Models

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Upwind Behavior of oVOCs			Accuracy of Steady State Model					
oVOC <sub>A</sub>	oVOC <sub>B</sub>	oVOC <sub>C</sub>	APN <sub>A</sub>	APN <sub>B</sub>	APN <sub>C</sub>	APN <sub>A</sub> /APN <sub>B</sub>	APN <sub>C</sub> /APN <sub>A</sub>	APN <sub>C</sub> /APN <sub>B</sub>
constant	constant	constant	± 10%	±10%	±10%	±10%	±10%	±10%
decreasing	decreasing	decreasing	-60%	-60%	-60%	±15%	±25%	±25%
decreasing	constant	decreasing	-60%	±10%	-60%	-45%	±25%	-55%

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**Table 3** Summary of observed and inferred species for entire campaign, temperatures above 20 °C, and temperatures below 20 °C.

Species	Full Campaign (n = 66)			Temperatures > 20 °C (n = 40)			Temperatures < 20 °C (n = 26)			accuracy
	mean <sup>a</sup>	median	max	mean	median	max	Mean	median	max	
PAN	451	392	1469	304	301	663	676	600	1469	21%
PPN	43	29	160	20	18	51	77	79	160	21%
MPAN	32	28	75	30	30	66	36	28	75	31%
Acetaldehyde	589	538	1580	677	651	1580	452	418	848	25%
Methyvinyl Ketone (MVK)	1123	1044	4087	1741	1768	4087	173	177	438	25%
Methacrolein (MACR)	334	256	1107	480	484	1107	109	121	228	25%
Biacetyl	49	49	80	57	55	80	36	35	53	25%
Methyl Glyoxal (MGLY) <sup>b</sup>	139	139	300	212	219	300	49	34	97	100%
NO <sup>b</sup>	65	55	188	57	53	99	77	72	188	100%
NO <sub>2</sub> <sup>c</sup>	400	400	400	400	400	400	400	400	400	10%
OH	0.283	0.279	0.662	0.361	0.333	0.662	0.162	0.156	0.277	16%
HO <sub>2</sub>	21	23	44	28	28	44	12	10	24	16%
RO <sub>2</sub> <sup>b</sup>	82	85	223	118	113	223	28	26	48	100%
O <sub>3</sub> (ppbv)	57	57	83	63	65	83	47	44	71	1%

<sup>a</sup> all concentration units are pptv unless otherwise noted

<sup>b</sup> concentrations inferred (see text) and given a conservative factor of 2 uncertainty

<sup>c</sup> Average NO<sub>2</sub> concentration used for entire analysis