

Compound	Whole campaign	Stressed boreal	Transported pollution	Normal boreal
temperature	0.2738	-0.2266	0.5821	0.3456
wind direction	0.1192	0.5356	0.1260	-0.0827
wind speed	0.0262	-0.2997	0.0368	-0.1456
PAR	0.0565	-0.3170	0.1360	0.1339
global radiation	0.0606	-0.2961	0.1513	0.1381
solar zenith angle	-0.0687	0.4609	-0.1396	-0.1909
J (NO ₂)	0.0614	-0.3209	0.1697	0.1183
water vapour flux	0.0732	-0.3006	0.3210	0.0783
CO ₂ flux	-0.0200	0.3927	0.0343	-0.1261
relative humidity	-0.1244	0.0956	-0.1443	0.0032
NO ₂	-0.1079	-0.0260	-0.1701	-0.0374
NO	-0.0073	-0.3656	-0.1571	0.0766
O ₃	0.2174	0.1684	0.4617	0.3869
CO	0.0785	-0.4915	0.3090	0.0946
SO ₂	0.1249	-0.1657	0.3007	0.1588
iso-butane	0.0550	0.2691	0.0292	0.0808
iso-pentane	0.2477	-0.5508	0.0092	0.0167
n-butane	0.0063	-0.3132	-0.0380	0.1032
n-pentane	0.0233	-0.5084	-0.0633	0.0368
propene	0.1559	0.0454	0.3627	0.0382
methane	-0.0964	-0.5195	0.2532	0.1338
H ₂ O ₂	0.4175	-0.1141	0.7110	0.3005
HCHO	0.1869	-0.1272	0.2787	0.1982
MHP	0.2135	0.0423	0.5888	0.1016
organic peroxides	0.3599	0.0258	0.7349	0.2090
m-xylene	0.1151	0.2187	0.4473	0.2021
p-xylene	0.1711	0.1931	0.4846	0.1992
toluene	0.0010	0.1289	0.2768	0.0194
ethylbenzene	0.0321	0.3086	0.5063	0.0254
benzene	0.0910	-0.4439	0.3949	-0.0458
isoprene	0.1753	-0.2470	0.4486	0.0736
α -pinene	-0.0596	-0.2313	-0.0229	-0.0918
β -pinene	-0.1327	-0.2027	0.2423	-0.2176
Δ -3-carene	-0.0826	-0.1805	-0.1332	-0.1044
myrcene	-0.0893	-0.1682	0.4527	-0.1383
total monoterpenes (GC-MS)	-0.1101	-0.2166	0.0547	-0.1369
m31 (formaldehyde)	0.3228	-0.1485	0.5340	0.3177
m33 (methanol)	0.2008	-0.2519	0.4218	0.2806
m42 (acetonitrile)	0.0944	0.0704	0.5433	0.1249
m45 (acetaldehyde)	0.2082	-0.3403	0.4719	0.2139
m47 (formic acid)	0.2699	-0.3775	0.5231	0.1919
m59 (acetone)	0.1319	-0.4695	0.4201	0.1562
m61 (acetic acid)	0.2643	-0.1771	0.5647	0.2362
m69 (isoprene)	0.2849	-0.2389	0.4994	0.2756
m71 (MVK/MACR)	0.1913	-0.4861	0.4122	0.2189
m73 (MEK)	0.1903	-0.3558	0.3715	0.1798
m79 (benzene)	0.1429	-0.2847	0.4687	0.1368
m81*	0.0660	-0.2795	0.1669	-0.0226
m83*	0.3250	-0.0908	0.3697	0.1968
m85*	0.1843	-0.4057	0.2100	0.1081
m87*	0.2417	-0.3091	0.4251	0.2485
m93 (toluene)	0.0427	-0.4155	0.0308	0.1016
m99*	0.1971	-0.1758	0.3097	0.1597
m101*	0.2397	-0.1657	0.3916	0.1678
m103*	0.1509	0.0583	0.2144	-0.0999
m113 (chlorobenzene)	0.2427	-0.2055	0.5450	0.2069
m137 (α -pinene)	0.1199	-0.2910	0.1520	-0.0350
m141*	0.1991	-0.0606	0.0502	0.2373
m153*	0.1580	-0.2006	0.0649	0.1127
m155*	0.1796	-0.1208	0.0762	-0.0350
m169*	0.2314	-0.1003	0.2360	-0.0013
m205*	0.1406	-0.1442	-0.0153	0.0965
m263*	0.1732	0.0158	-0.0048	-0.0804
PAA	0.2075		0.3110	0.2207
PAN	0.0888	0.1248	0.1997	0.2994
pinonicacid	0.1312	0.0149	0.1623	-0.0969
pinicacid	0.1519	-0.0151	0.2189	-0.0596

* un-calibrated PTR-MS measurements

Table S1. Correlations (Pearson R coefficients) for missing OH reactivity and the suite of other measurements for the three defined regimes (stressed boreal, transported pollution and normal boreal conditions) as well as for the whole campaign.