

Species	Reference species	Mean ER (SD)	ER (all data combined)	No. of samples	$R^2$
White cell FTIR					
CO	CO <sub>2</sub>	0.19 (0.15)	0.17 ± 0.06	67	0.47
CH <sub>4</sub>	CO	0.06 (0.01)	0.059 ± 0.003	67	0.89
Ethane	CO	0.004 (0.001)	0.0038 ± 0.0003	67	0.87
Ethene	CO <sub>2</sub>		0.0017 ± 0.0002	58	0.71
SIFT-MS					
Ethene	CO <sub>2</sub>		0.0018 ± 0.0002	54	0.77
Acetaldehyde	CO	0.009 (0.002)	0.007 ± 0.001	50	0.75
Acetone	CO	0.005 (0.002)	0.0034 ± 0.0005	47	0.74
Acetonitrile	CO	0.004 (0.001)	0.0038 ± 0.0005 <sup>a</sup>	42	0.91
Acetylene	Ethene		0.21 ± 0.04	29	0.59
Benzene	Ethene	0.08 (0.01)	0.078 ± 0.006	43	0.84
Butadiene	Ethene	0.042 (0.006)	0.042 ± 0.002	38	0.95
Butanone	CO		0.00082 ± 0.00007	45	0.69
Ethanol <sup>b</sup>	CO		0.00021 ± 0.00005	7	0.97
Formaldehyde	Hydrogen cyanide		2.9 ± 0.3	50	0.65
Furan + isoprene	CO	0.0018 (0.0006)	0.0019 ± 0.0003	37	0.87
Hydrogen cyanide	CO		0.0063 ± 0.0007	50	0.46
Sum of MACR, MVK and 2-butenal	CO		0.0035 ± 0.0009	44	0.73
Methanol	CO	0.025 (0.006) <sup>c</sup>	0.022 ± 0.002	54	0.72
Monoterpenes	Methanol		0.042 ± 0.006	33	0.86
Pyrrole	Acetonitrile		0.15 ± 0.07	25	0.78
Toluene	CO	0.0006 (0.0002)	0.0006 ± 0.0001	40	0.75
Sum of C <sub>8</sub> H <sub>10</sub> species	Toluene		0.42 ± 0.04	36	0.75

<sup>a</sup> This ER excludes samples from the Gulguer fire – see text and Fig. 5 for detail.

<sup>b</sup> Value reported is for the Alford's Point fire.

<sup>c</sup> This mean value was derived from four fires only as no ER could be determined for methanol for the Gulguer fire.