Supplement of Atmos. Chem. Phys., 25, 6257–6272, 2025
https://doi.org/10.5194/acp-25-6257-2025-supplement

Atmospheric Chemistry and Physics
Open Access

Supplement of

Determination of the atmospheric volatility of pesticides using Filter Inlet for Gases and AEROsols–chemical ionisation mass spectrometry

Olivia M. Jackson et al.

Correspondence to: Hugh Coe (hugh.coe@manchester.ac.uk)

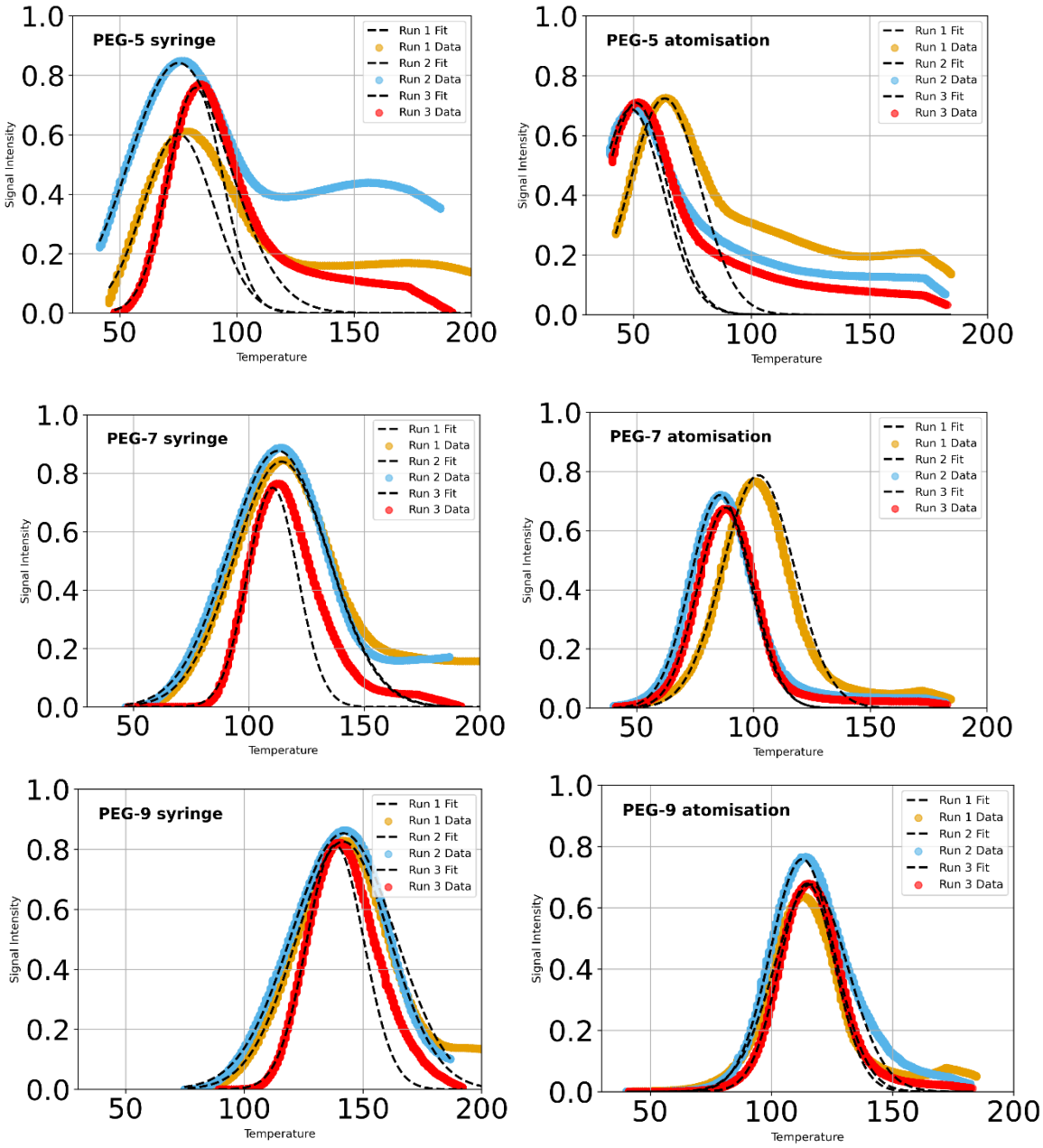
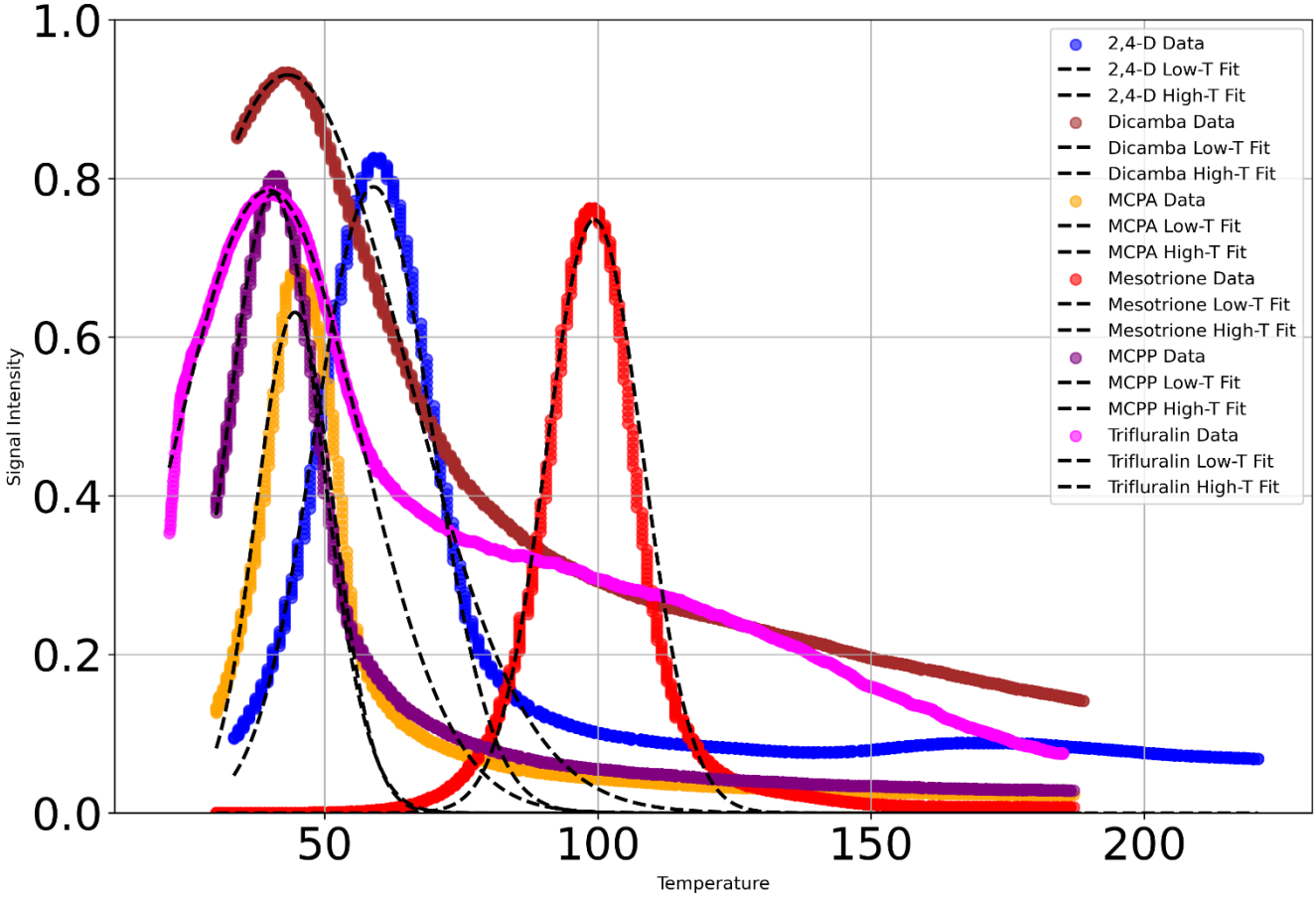


Figure S1: Repeat run fitted with a low T-side gaussian fit with a mirrored high T-side fit from the PEG syringe thermograms presented in figure 6 of the main manuscript.



25 **Figure S2: Gaussian fitted pesticide thermograms presented in figure 6 of the main manuscript.**

30

Table S1: Presented standard deviation and full width half maximums for each of the PEG syringe thermograms

Compound	Run Number	Standard Deviation	Full Width Half Maximum
PEG 1	PEG Syringe 1	0.043029	n/a
PEG 2	PEG Syringe 1	0.019841	n/a
PEG 3	PEG Syringe 1	0.061816	n/a
PEG 4	PEG Syringe 1	0.120898	n/a
PEG 5	PEG Syringe 1	0.141968	63.7
PEG 6	PEG Syringe 1	0.213258	652.4
PEG 7	PEG Syringe 1	0.249988	49.4
PEG 8	PEG Syringe 1	0.255238	46.9
PEG 9	PEG Syringe 1	0.267166	46
PEG 10	PEG Syringe 1	0.279353	45.3
PEG 11	PEG Syringe 1	0.279771	42.5
PEG 12	PEG Syringe 1	0.274312	42.1
PEG 13	PEG Syringe 1	0.264753	40.9
PEG 14	PEG Syringe 1	0.259454	40.7
PEG 15	PEG Syringe 1	0.227712	38.7
PEG 16	PEG Syringe 1	0.152519	n/a
PEG 1	PEG Syringe 2	0.055531	n/a
PEG 2	PEG Syringe 2	0.012884	n/a
PEG 3	PEG Syringe 2	0.070254	n/a
PEG 4	PEG Syringe 2	0.159831	n/a
PEG 5	PEG Syringe 2	0.158666	58.9
PEG 6	PEG Syringe 2	0.226129	51.6
PEG 7	PEG Syringe 2	0.287126	51.6
PEG 8	PEG Syringe 2	0.303555	49.4
PEG 9	PEG Syringe 2	0.307325	47.7
PEG 10	PEG Syringe 2	0.319395	48.3
PEG 11	PEG Syringe 2	0.329424	47.5
PEG 12	PEG Syringe 2	0.315942	n/a
PEG 13	PEG Syringe 2	0.278748	n/a
PEG 14	PEG Syringe 2	0.22262	n/a
PEG 15	PEG Syringe 2	0.150391	n/a
PEG 16	PEG Syringe 2	0.069654	n/a
PEG 1	PEG Syringe 3	0.080361	n/a
PEG 2	PEG Syringe 3	0.039363	n/a
PEG 3	PEG Syringe 3	0.140204	n/a

PEG 4	PEG Syringe 3	0.231058	n/a
PEG 5	PEG Syringe 3	0.22881	34.9
PEG 6	PEG Syringe 3	0.219188	32.4
PEG 7	PEG Syringe 3	0.24527	32.6
PEG 8	PEG Syringe 3	0.253734	35
PEG 9	PEG Syringe 3	0.276235	34.3
PEG 10	PEG Syringe 3	0.285409	34.2
PEG 11	PEG Syringe 3	0.291096	31.2
PEG 12	PEG Syringe 3	0.242444	25.5
PEG 13	PEG Syringe 3	0.158333	n/a
PEG 14	PEG Syringe 3	0.203823	n/a
PEG 15	PEG Syringe 3	0.064268	n/a
PEG 16	PEG Syringe 3	0.033518	n/a

35

Table S2: Presented standard deviation and full width half maximums for each of the PEG atomisation thermograms

Compound	Run Number	Standard Deviation	Full Width Half Maximum
PEG 1	PEG Atomisation run 1	0.003731	n/a
PEG 2	PEG Atomisation run 1	0.027495	n/a
PEG 3	PEG Atomisation run 1	0.173071	n/a
PEG 4	PEG Atomisation run 1	0.063222	n/a
PEG 5	PEG Atomisation run 1	0.188054	n/a
PEG 6	PEG Atomisation run 1	0.214379	31.6
PEG 7	PEG Atomisation run 1	0.223407	31.7
PEG 8	PEG Atomisation run 1	0.22717	31.7
PEG 9	PEG Atomisation run 1	0.247393	35.1
PEG 10	PEG Atomisation run 1	0.277645	42.5
PEG 11	PEG Atomisation run 1	0.308204	51.2
PEG 12	PEG Atomisation run 1	0.298668	50.5

PEG 13	PEG Atomisation run 1	0.249717	45.4
PEG 14	PEG Atomisation run 1	0.183889	43
PEG 15	PEG Atomisation run 1	0.089173	37.4
PEG 16	PEG Atomisation run 1	0.031918	n/a
PEG 1	PEG Atomisation run 2	0.065051	n/a
PEG 2	PEG Atomisation run 2	0.11932	n/a
PEG 3	PEG Atomisation run 2	0.134942	n/a
PEG 4	PEG Atomisation run 2	0.195675	n/a
PEG 5	PEG Atomisation run 2	0.170252	42.2
PEG 6	PEG Atomisation run 2	0.234296	36
PEG 7	PEG Atomisation run 2	0.241734	33.4
PEG 8	PEG Atomisation run 2	0.216853	30
PEG 9	PEG Atomisation run 2	0.196929	30
PEG 10	PEG Atomisation run 2	0.181912	31.7
PEG 11	PEG Atomisation run 2	0.162213	35.8
PEG 12	PEG Atomisation run 2	0.15842	49.1
PEG 13	PEG Atomisation run 2	0.169465	n/a
PEG 14	PEG Atomisation run 2	0.149642	n/a
PEG 15	PEG Atomisation run 2	0.143715	51.7
PEG 16	PEG Atomisation run 2	0.172397	45.6
PEG 1	PEG Atomisation run 3	0.008783	n/a
PEG 2	PEG Atomisation run 3	0.051641	n/a
PEG 3	PEG Atomisation run 3	0.190573	n/a
PEG 4	PEG Atomisation run 3	0.033878	n/a

PEG 5	PEG Atomisation run 3	0.206966	n/a
PEG 6	PEG Atomisation run 3	0.203647	29.8
PEG 7	PEG Atomisation run 3	0.209143	28.7
PEG 8	PEG Atomisation run 3	0.213781	27.9
PEG 9	PEG Atomisation run 3	0.214382	28
PEG 10	PEG Atomisation run 3	0.221895	29.6
PEG 11	PEG Atomisation run 3	0.255236	34.5
PEG 12	PEG Atomisation run 3	0.311995	43.1
PEG 13	PEG Atomisation run 3	0.306441	41.2
PEG 14	PEG Atomisation run 3	0.209504	n/a
PEG 15	PEG Atomisation run 3	0.13016	n/a
PEG 16	PEG Atomisation run 3	0.06895	n/a

40

Table S3: Presented standard deviation and full width half maximums for each of the pesticide atomisation thermograms.

Compound	Run Number	Standard Deviation	Full Width Half Maximum
2,4-D	Pesticide run 1	0.187182	18.1
Dicamba	Pesticide run 1	0.241627	16.3
MCPA	Pesticide run 1	0.163907	15.9
Mesotrione	Pesticide run 1	0.196694	18.5
Mecoprop-P	Pesticide run 1	0.207007	20.6
Trilfuralin	Pesticide run 1	0.202343	44
2,4-D	Pesticide run 2	0.074938	36.5
Dicamba	Pesticide run 2	0.194977	58.9
MCPA	Pesticide run 2	0.163907	16
Mesotrione	Pesticide run 2	0.320658	41.3
Mecoprop-P	Pesticide run 2	0.207007	21
Trilfuralin	Pesticide run 2	0.271879	n/a