

Appendices

Appendix A: Aethalometer Parameters for Delta-C Calculation

AE33 Mass Absorption Cross-Sections

Channel	λ (nm)	σ_{air} (m ² /g)
1	370	18.47
2	470	14.54
3	520	13.14
4	590	11.58
5	660	10.35
6	880	7.77
7	950	7.19

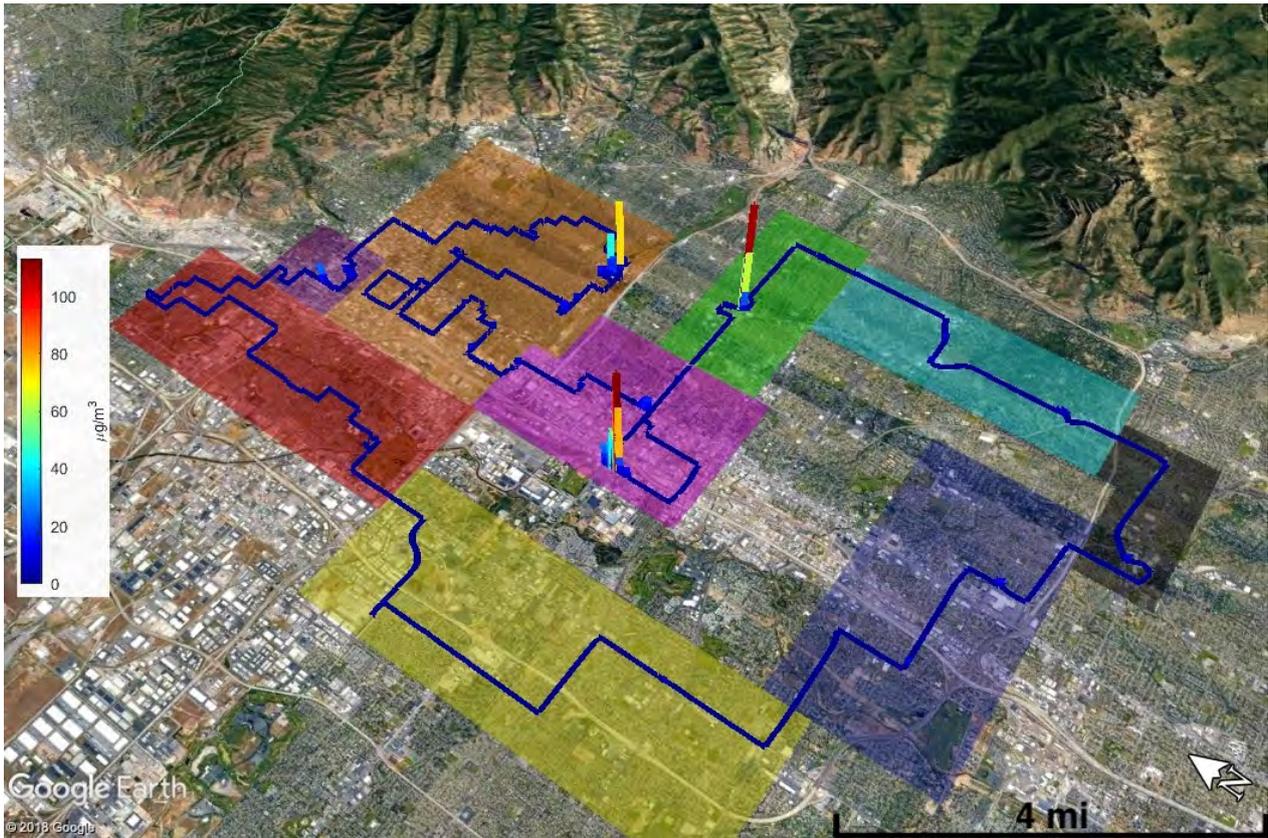
Appendix B: Mobile Monitoring

Appendix B.1: Mobile Monitoring Dates

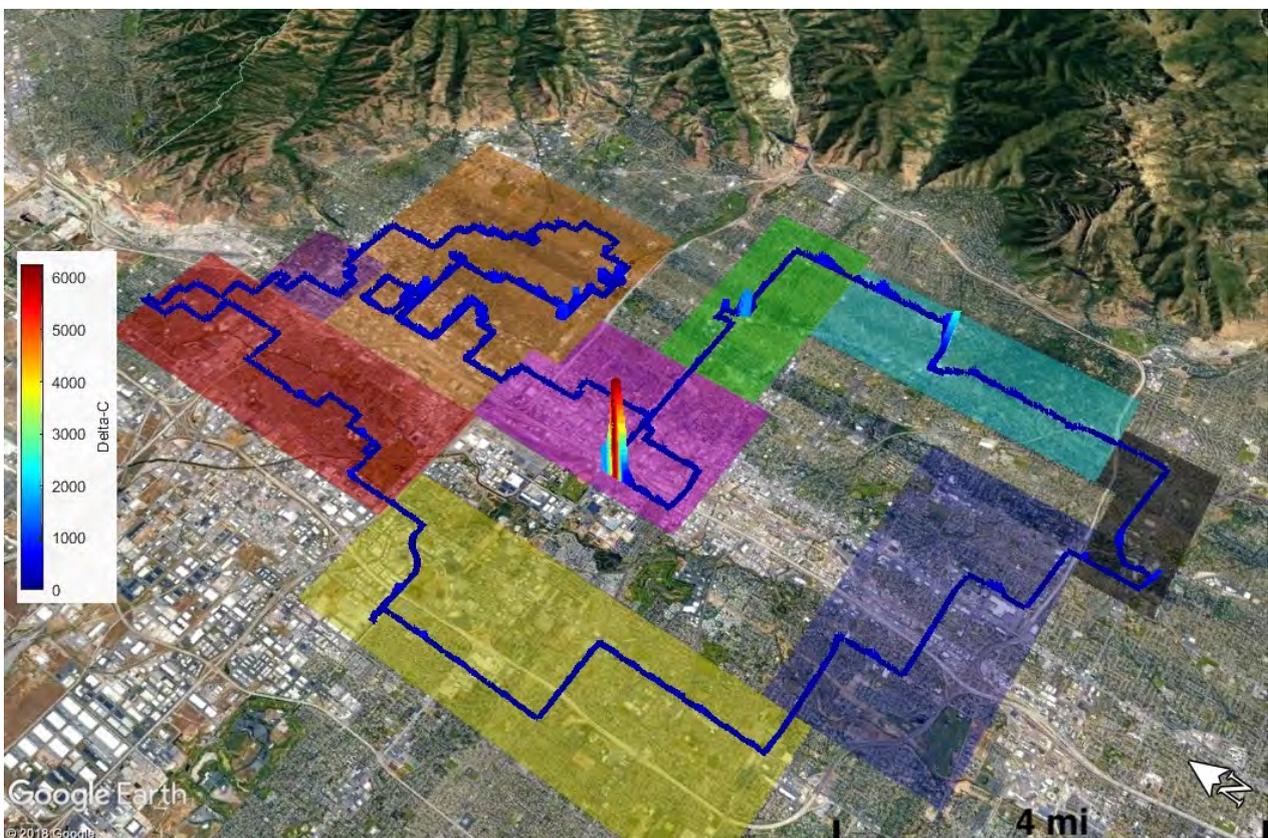
Date	Day of Week	Action Level	Heat Deficit (MJ/m³)	# of Events Identified
Jan. 16	Wed.	Mandatory	1.65	7
Jan. 25	Fri.	Voluntary	0.37	18
Jan. 26	Sat.	Mandatory	0.72	16
Jan. 27	Sun.	Mandatory	0.61	14
Jan. 28	Mon.	Mandatory	0.68	17
Jan. 29	Tues.	Mandatory	0.73	15
Jan. 30	Wed.	Mandatory	0.91	11
Feb. 1	Fri.	Mandatory	1.21	13
Feb. 7	Thurs.	Unrestricted	0.00	17
Feb. 8	Fri.	Unrestricted	1.60	15
Feb. 11	Mon.	Unrestricted	0.16	15
Feb. 12	Tues.	Voluntary	1.11	13

Note: Heat deficit values were calculated using data obtained in Salt Lake County

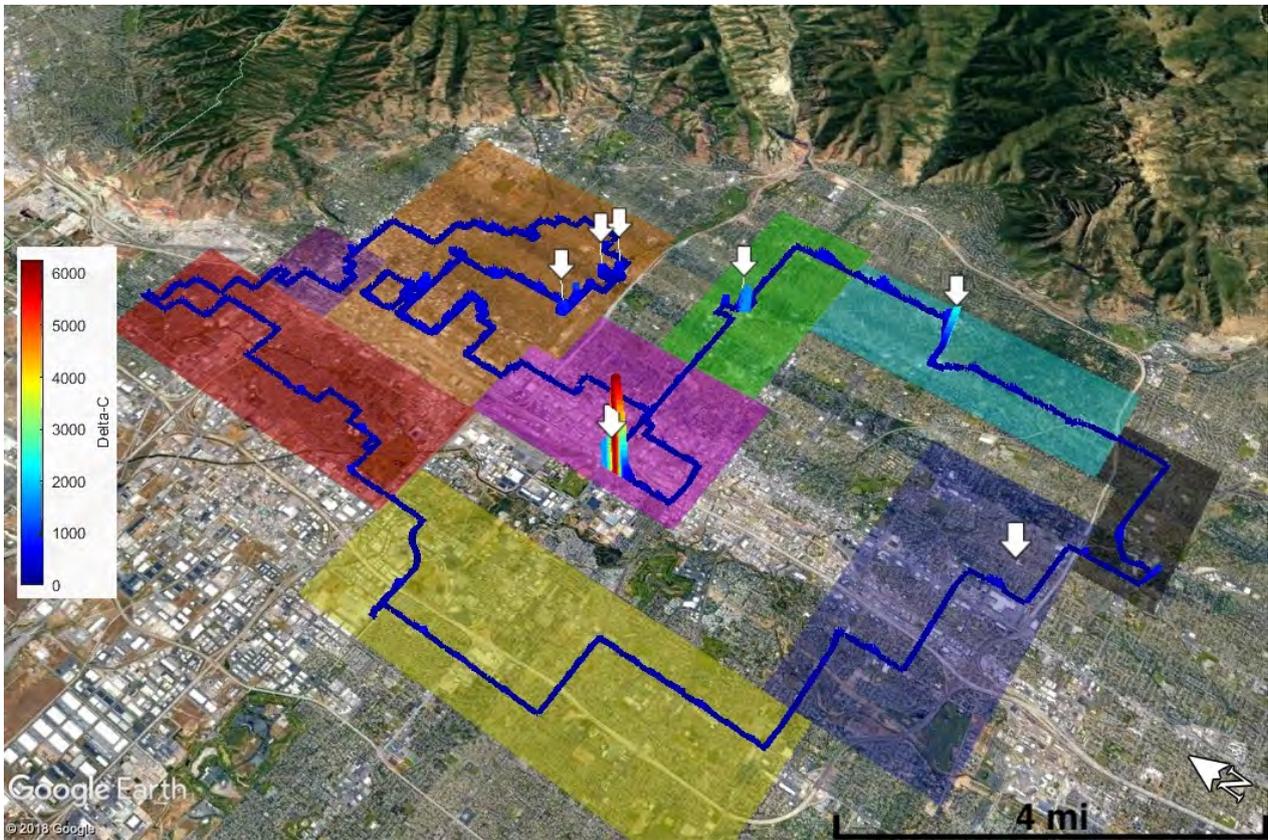
Appendix B.3: PM_{2.5} and Delta-C Mobile Monitoring Plots



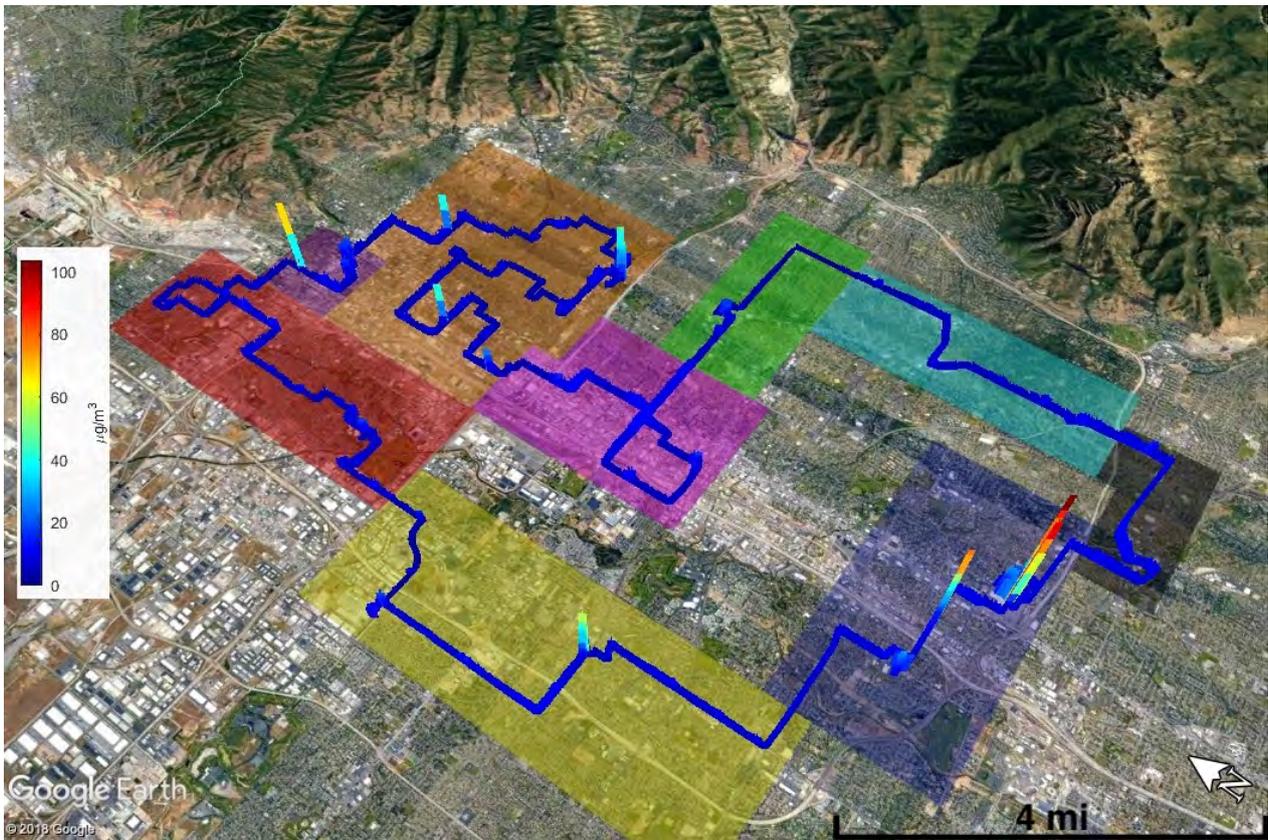
January 16, 2019 mobile monitoring PM_{2.5} data



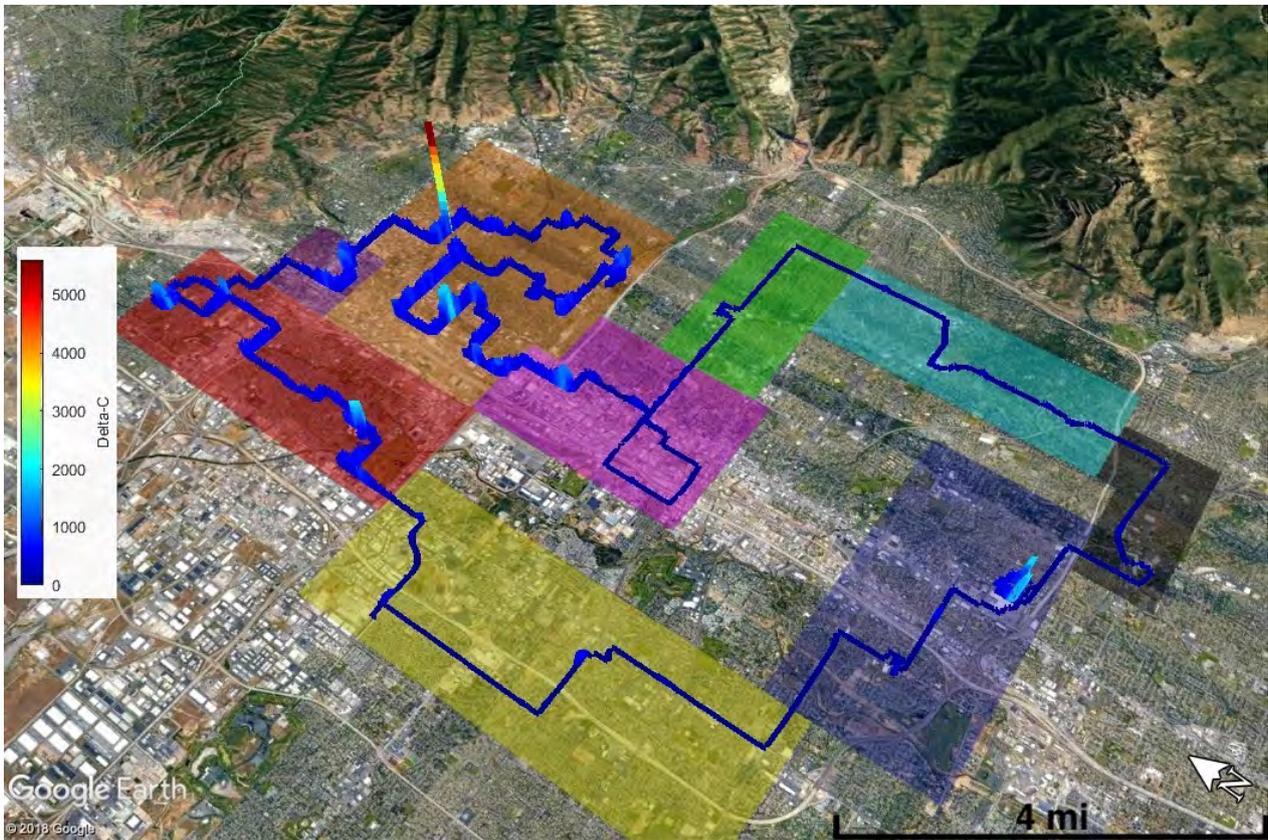
January 16, 2019 mobile monitoring Delta-C data



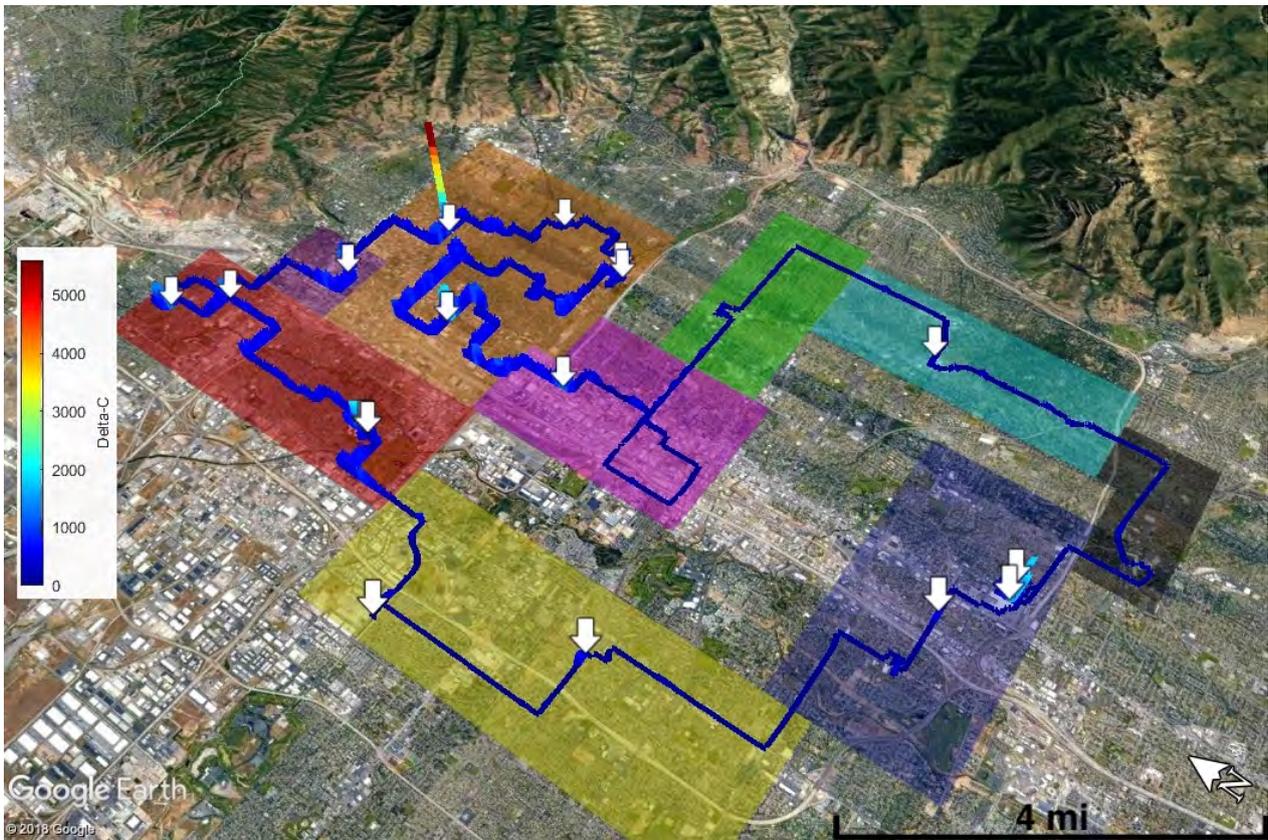
January 16, 2019 mobile monitoring Delta-C data with identified wood-burning events



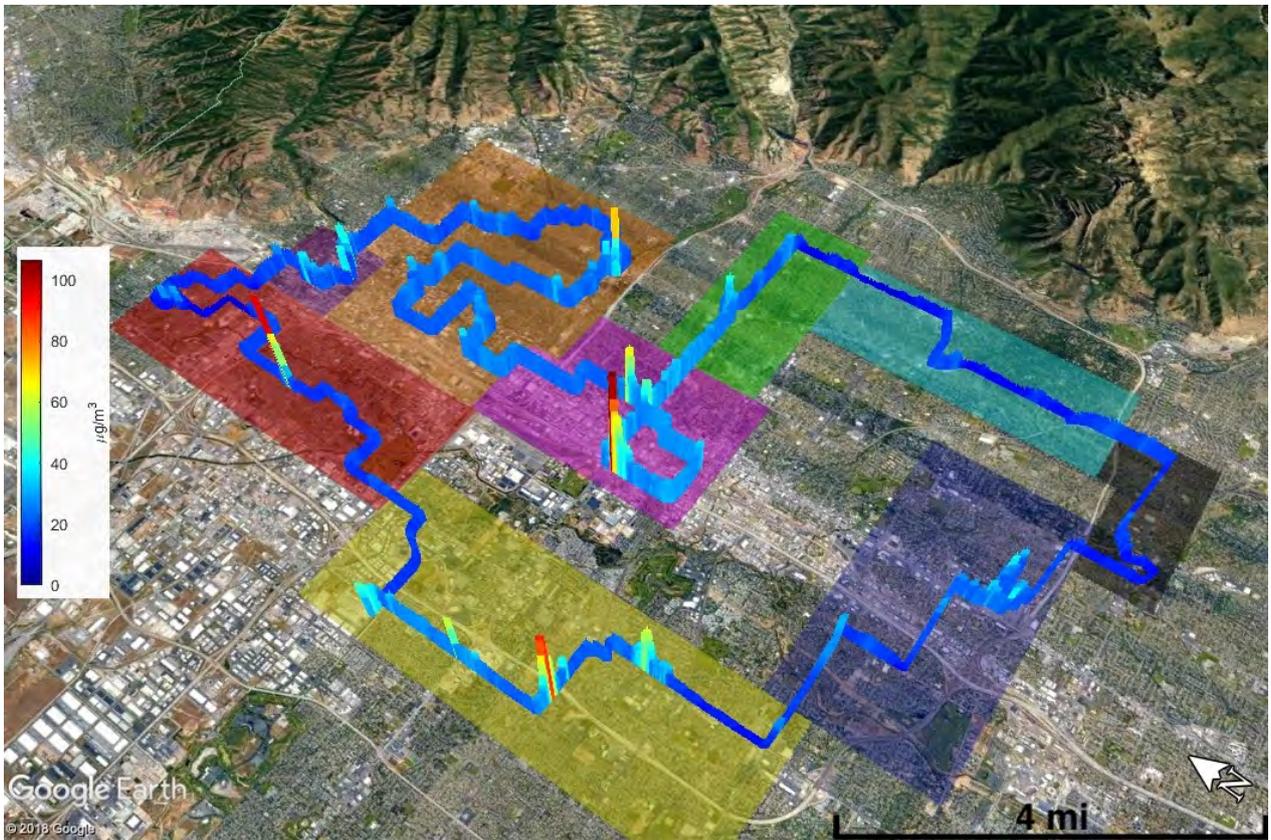
January 25, 2019 mobile monitoring PM_{2.5} data



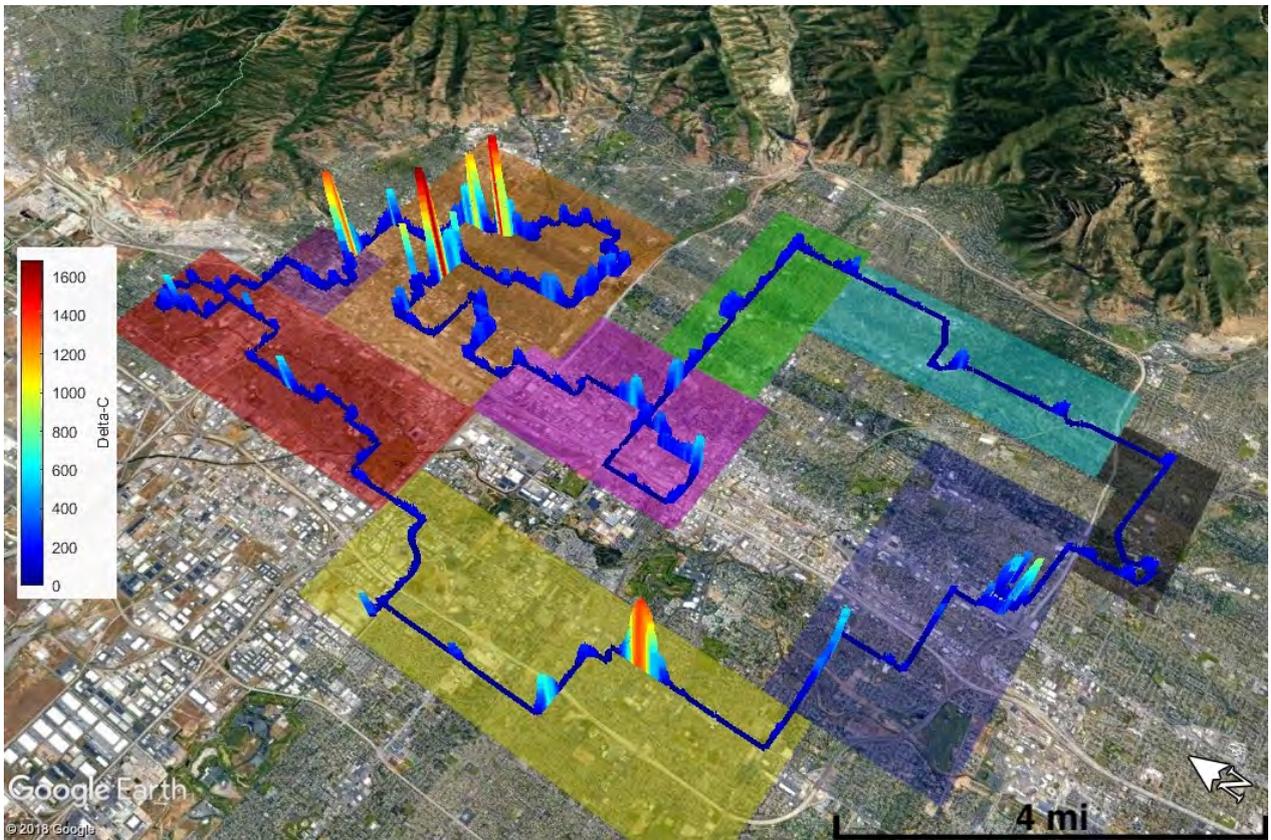
January 25, 2019 mobile monitoring Delta-C data



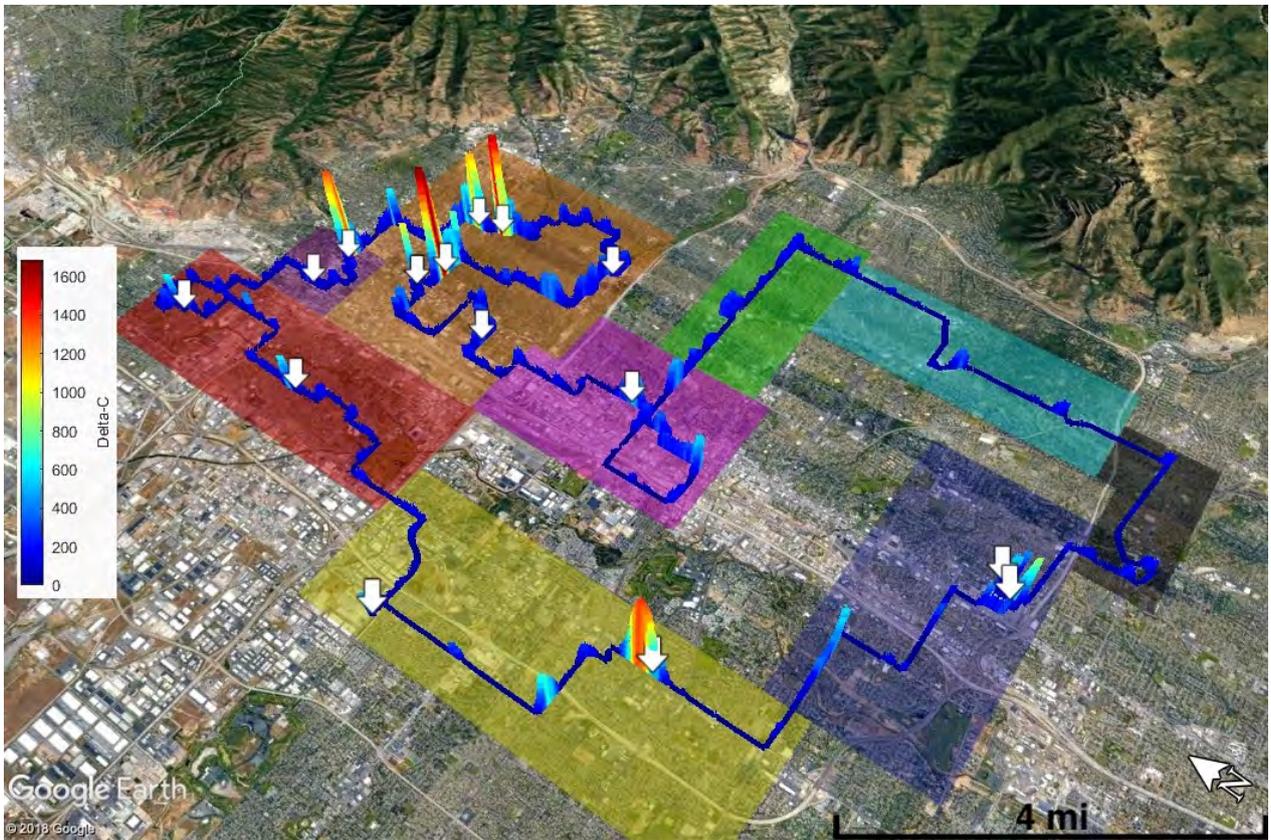
January 25, 2019 mobile monitoring Delta-C data with identified wood-burning events



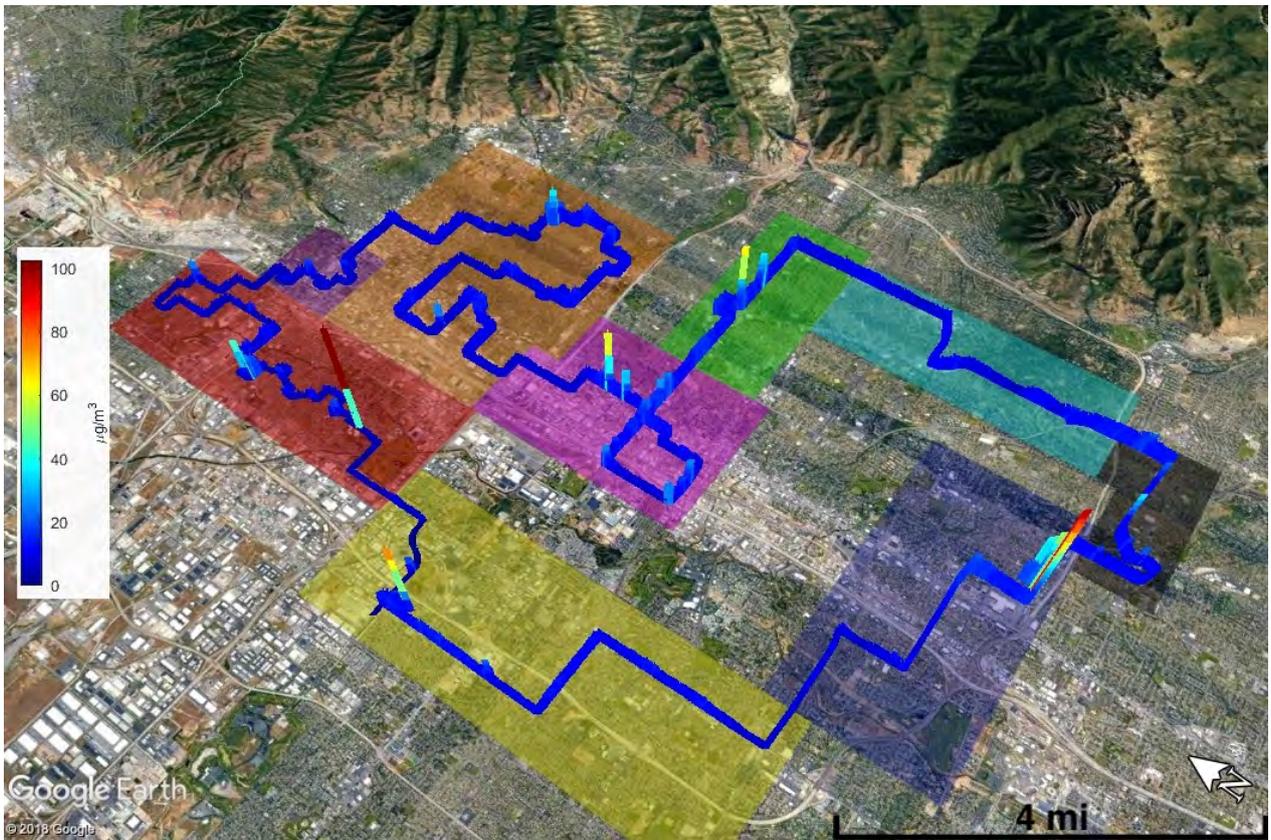
January 26, 2019 mobile monitoring PM_{2.5} data



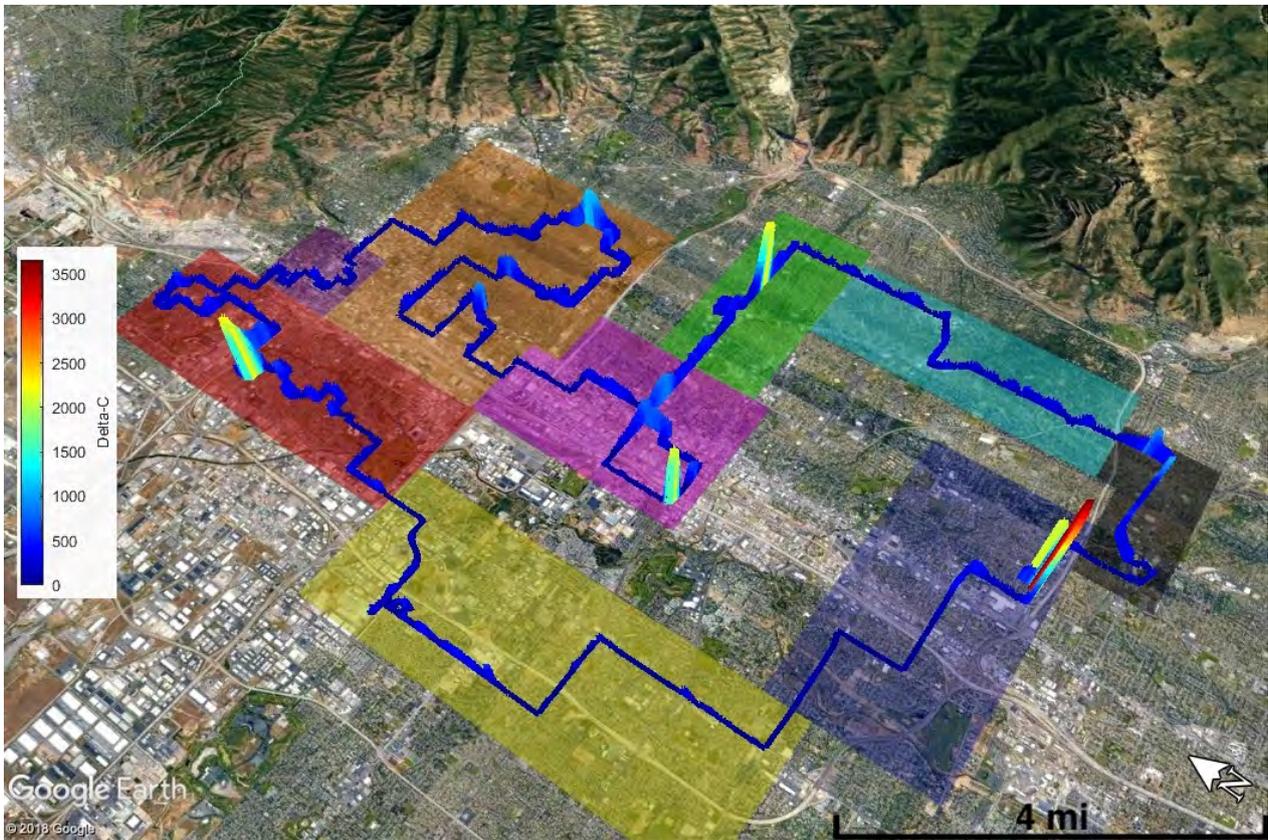
January 26, 2019 mobile monitoring Delta-C data



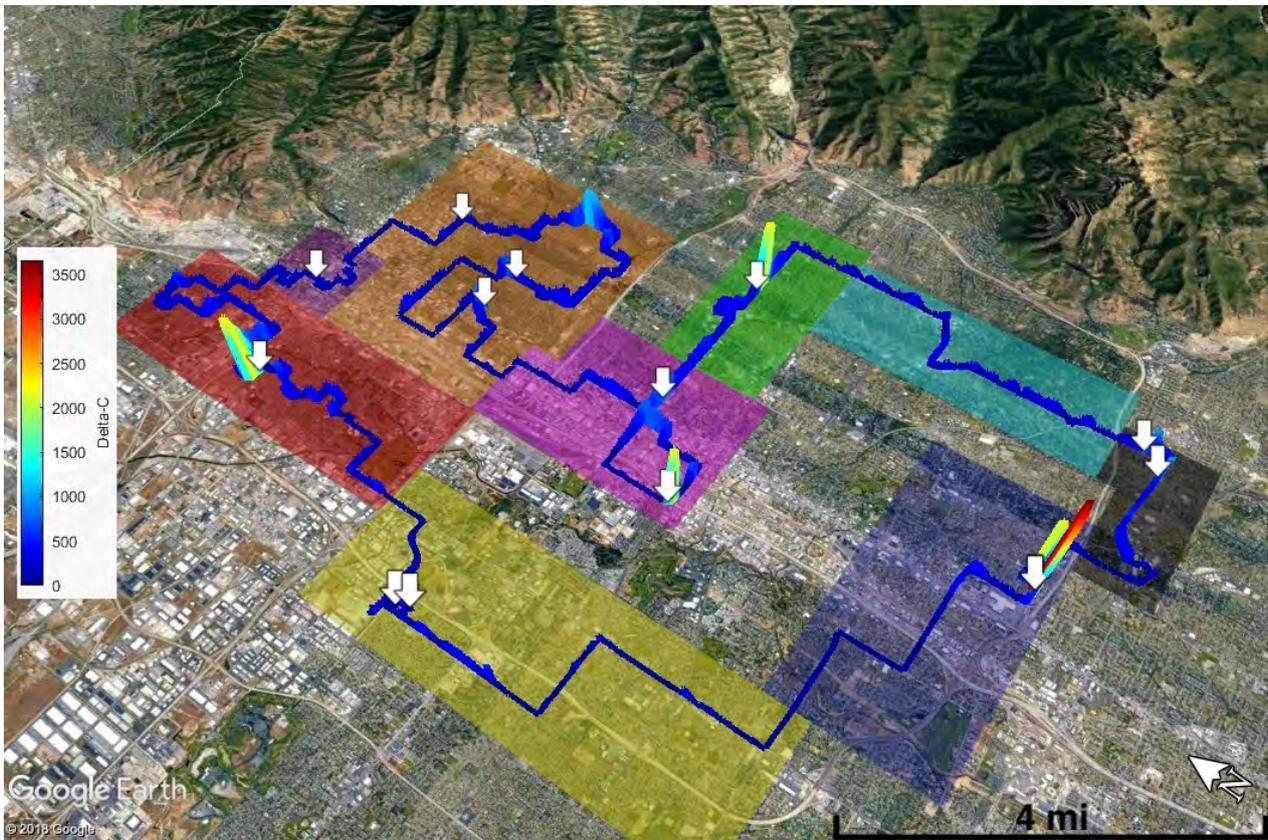
January 26, 2019 mobile monitoring Delta-C data with identified wood-burning events



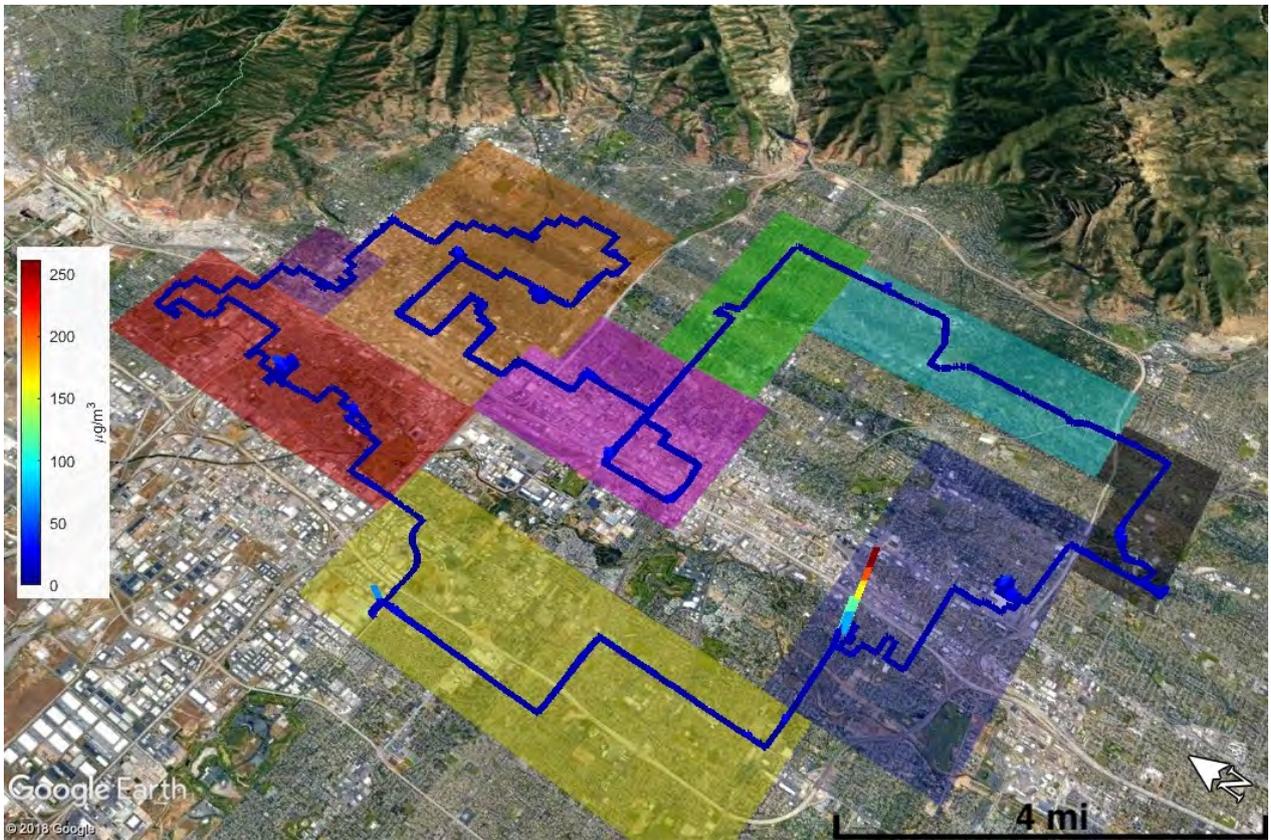
January 27, 2019 mobile monitoring PM_{2.5} data



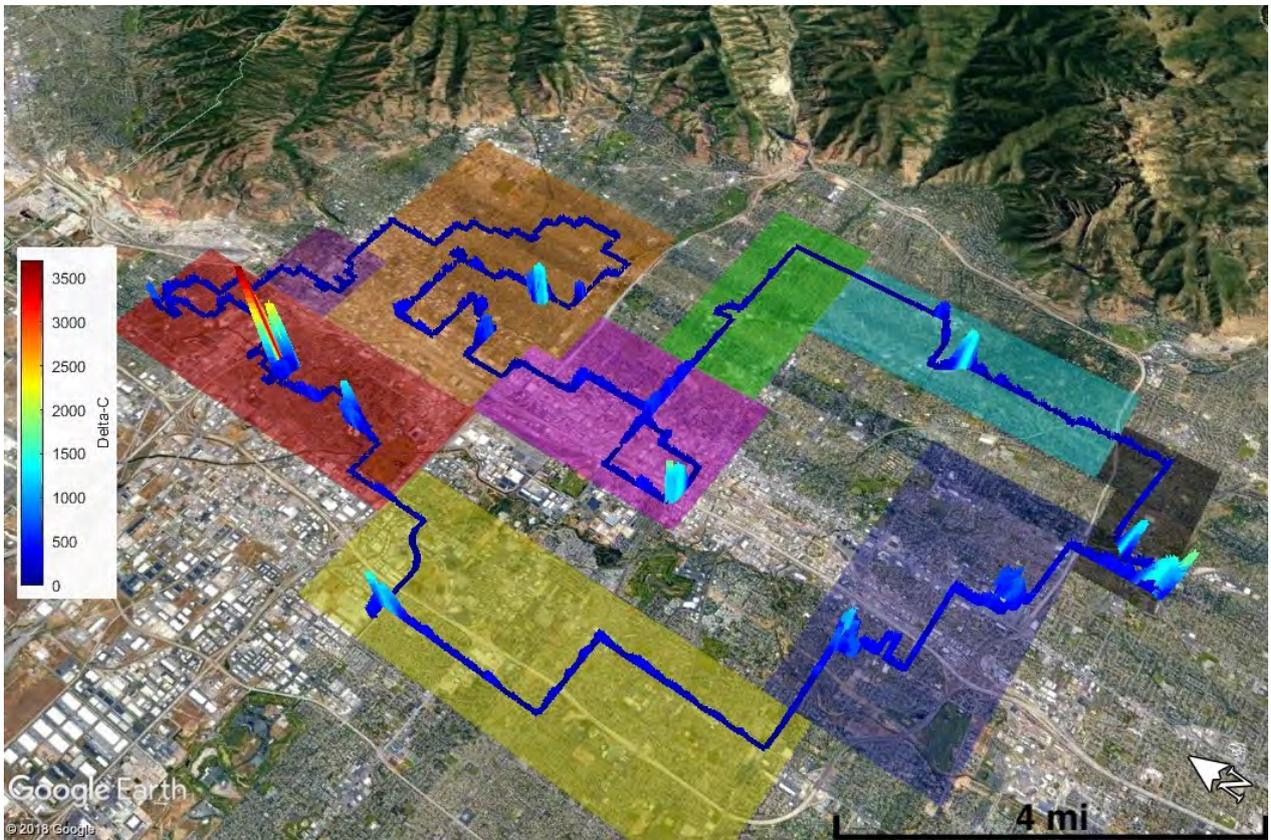
January 27, 2019 mobile monitoring Delta-C data



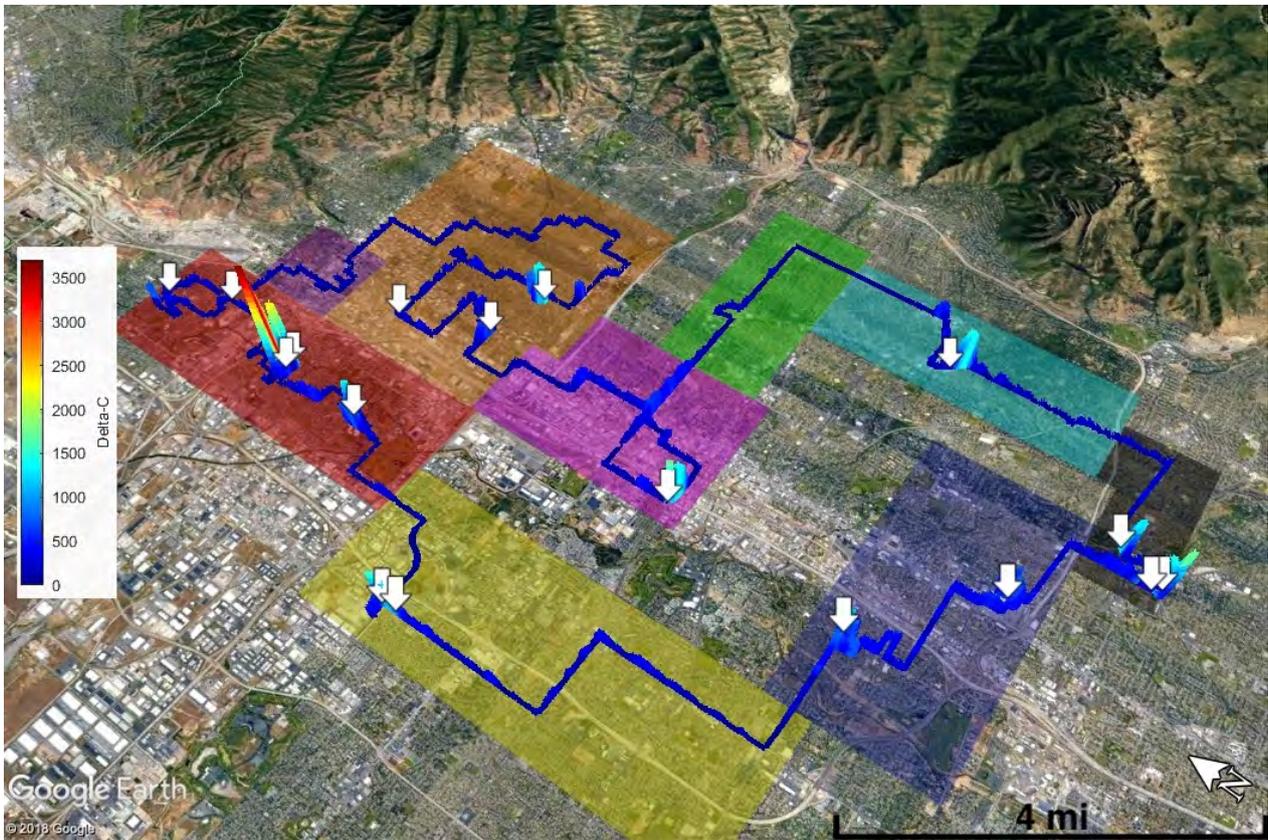
January 27, 2019 mobile monitoring Delta-C data with identified wood-burning events



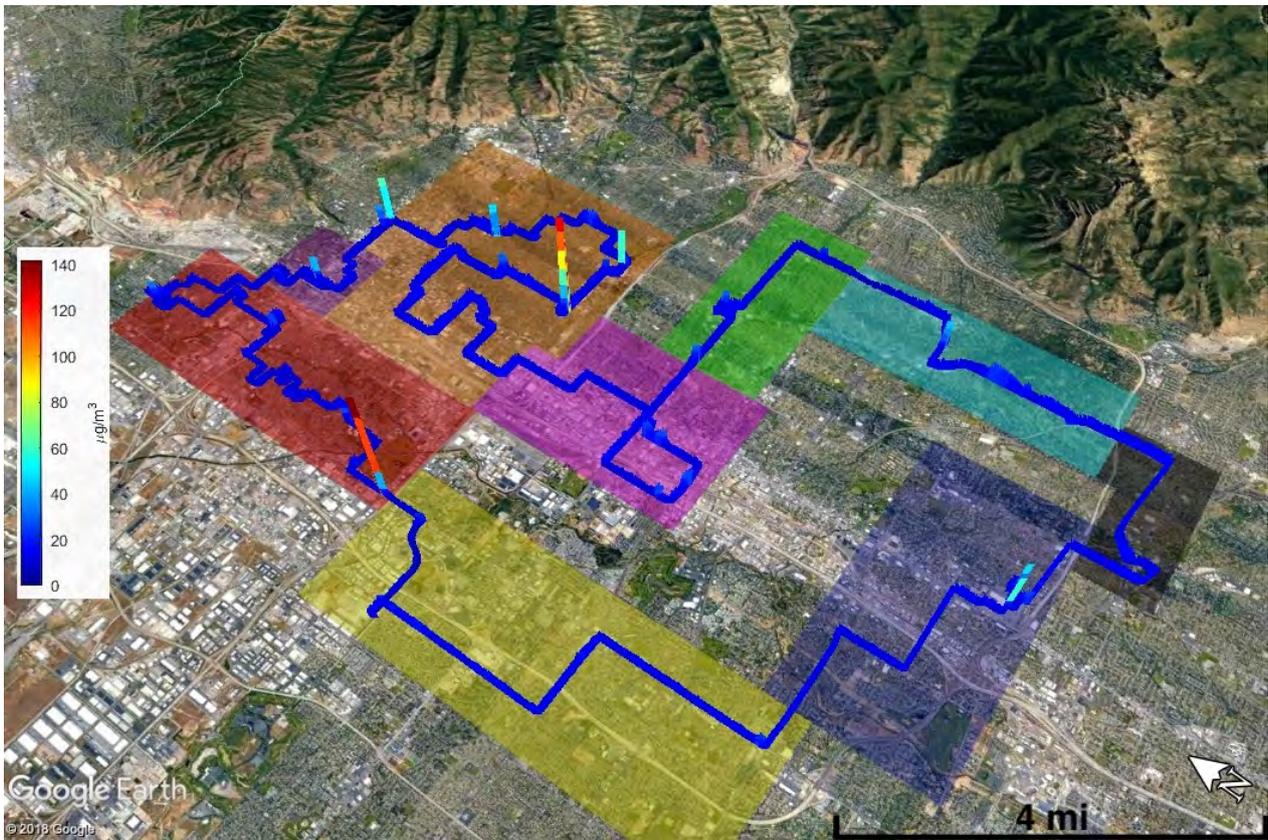
January 28, 2019 mobile monitoring PM_{2.5} data



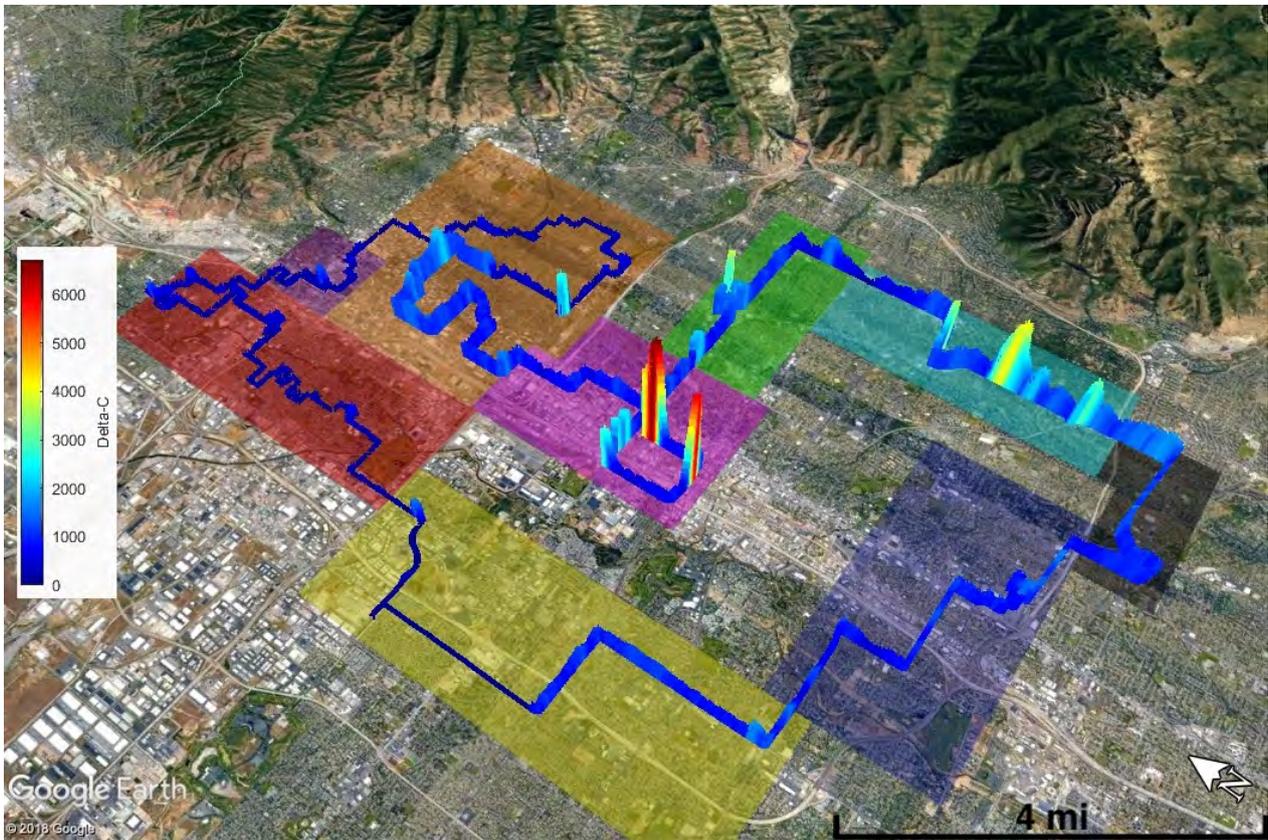
January 28, 2019 mobile monitoring Delta-C data



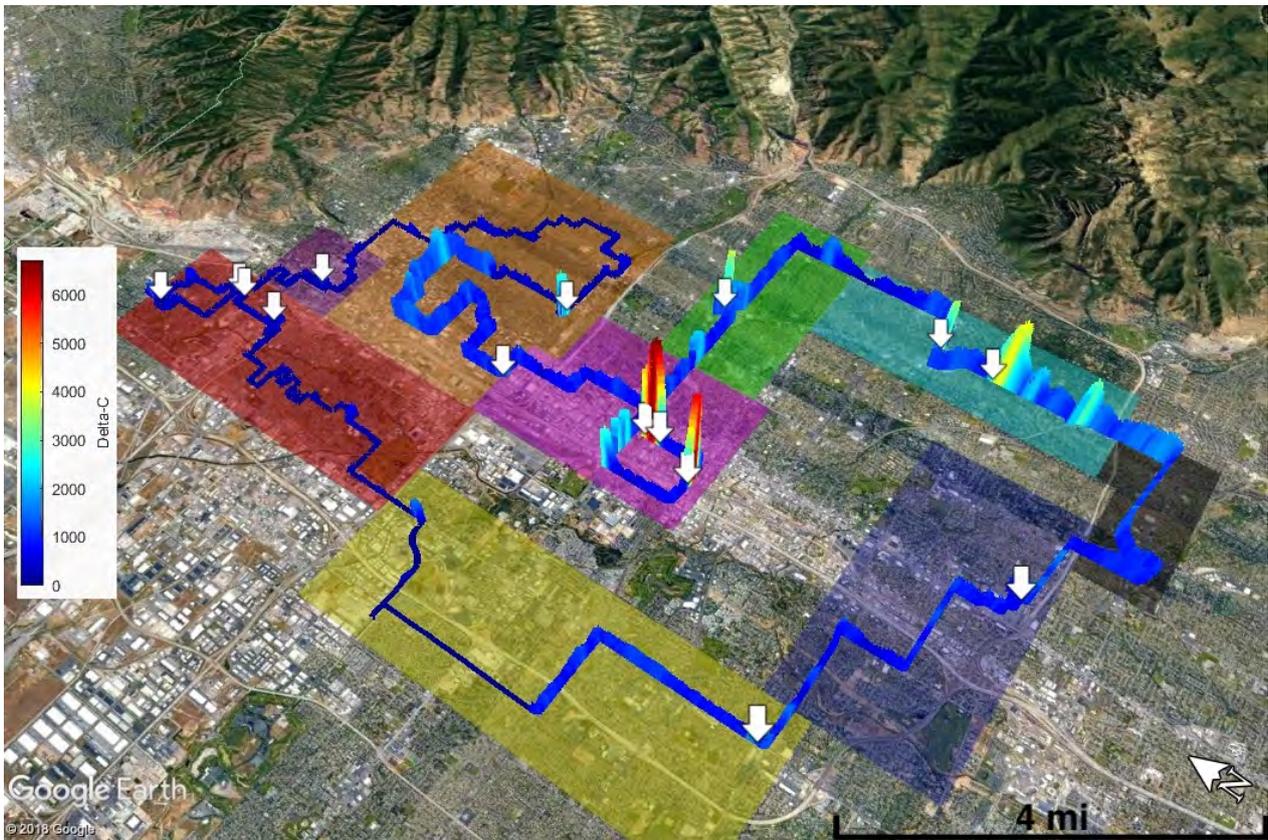
January 28, 2019 mobile monitoring Delta-C data with identified wood-burning events



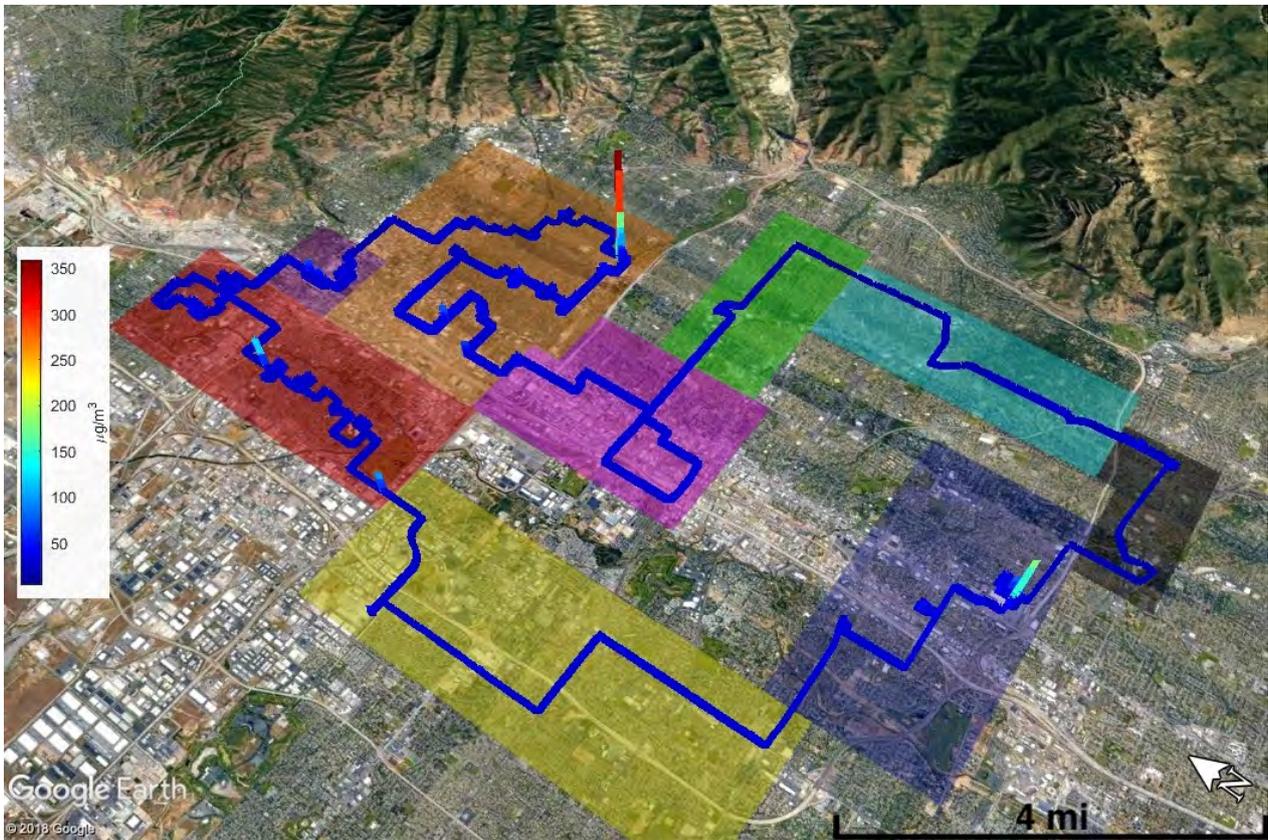
January 29, 2019 mobile monitoring PM_{2.5} data



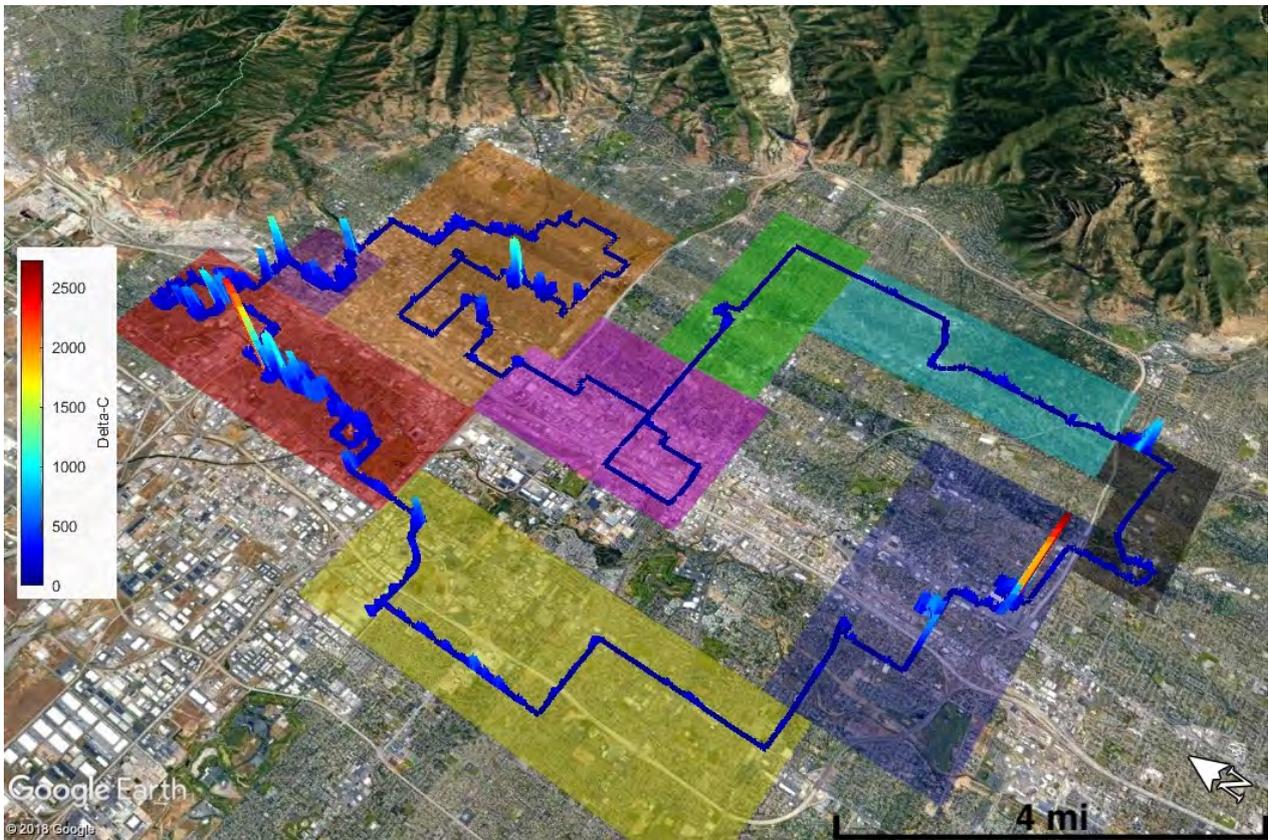
January 29, 2019 mobile monitoring Delta-C data



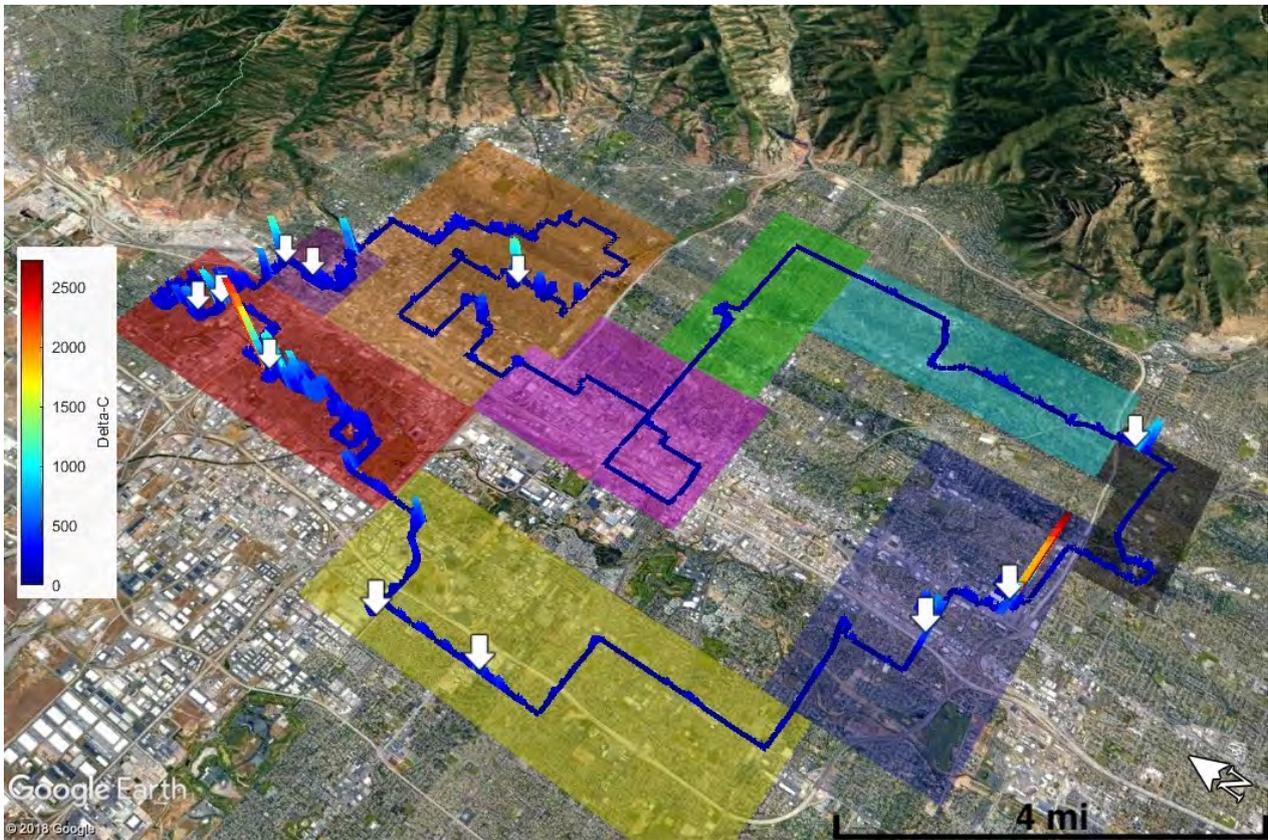
January 29, 2019 mobile monitoring Delta-C data with identified wood-burning events



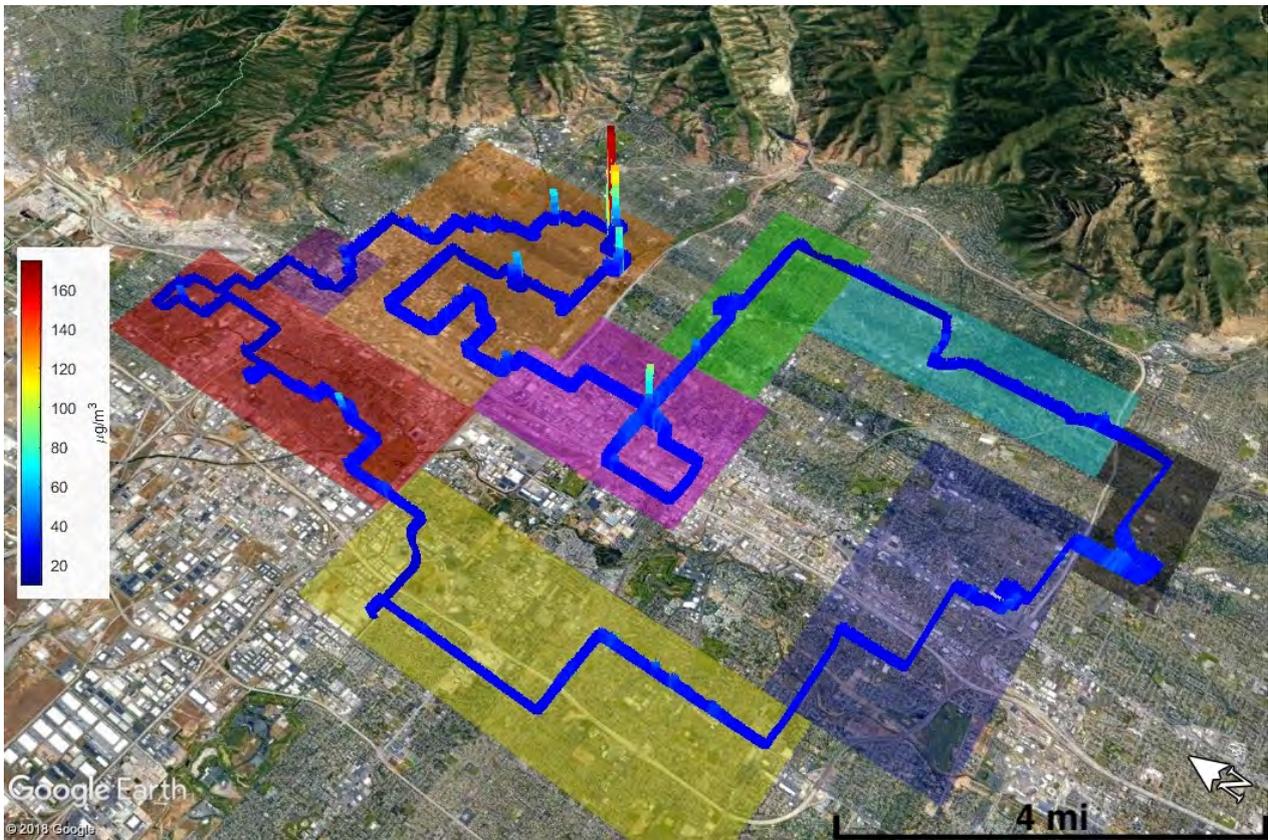
January 30, 2019 mobile monitoring PM_{2.5} data



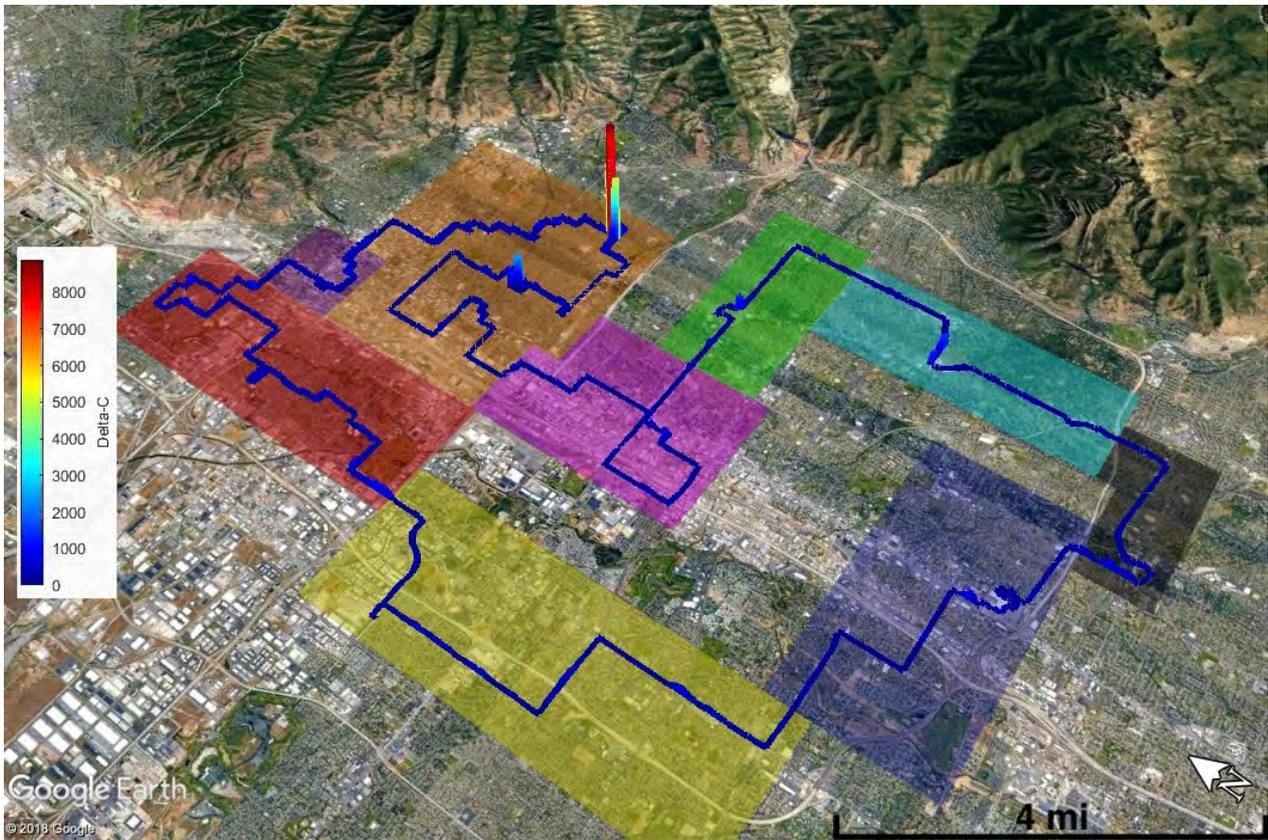
January 30, 2019 mobile monitoring Delta-C data



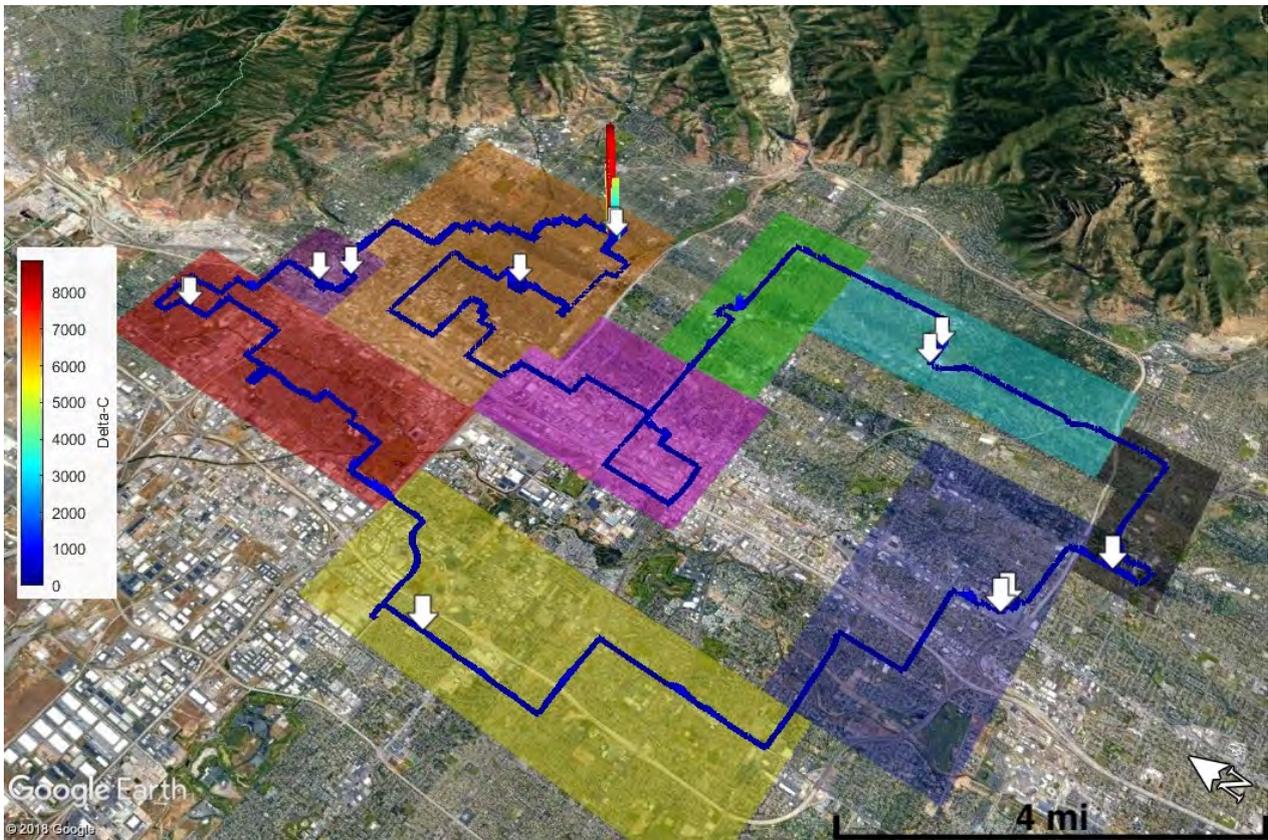
January 30, 2019 mobile monitoring Delta-C data with identified wood-burning events



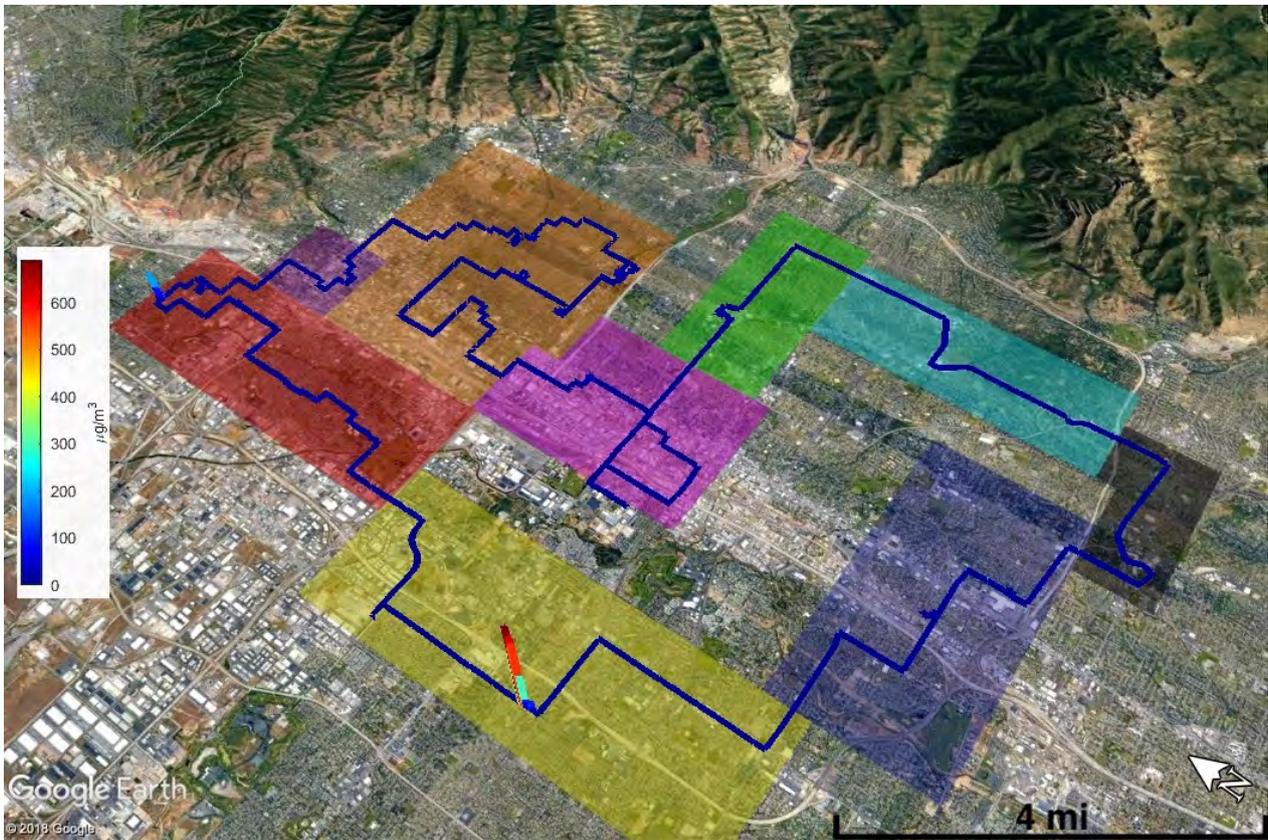
February 1, 2019 mobile monitoring PM_{2.5} data



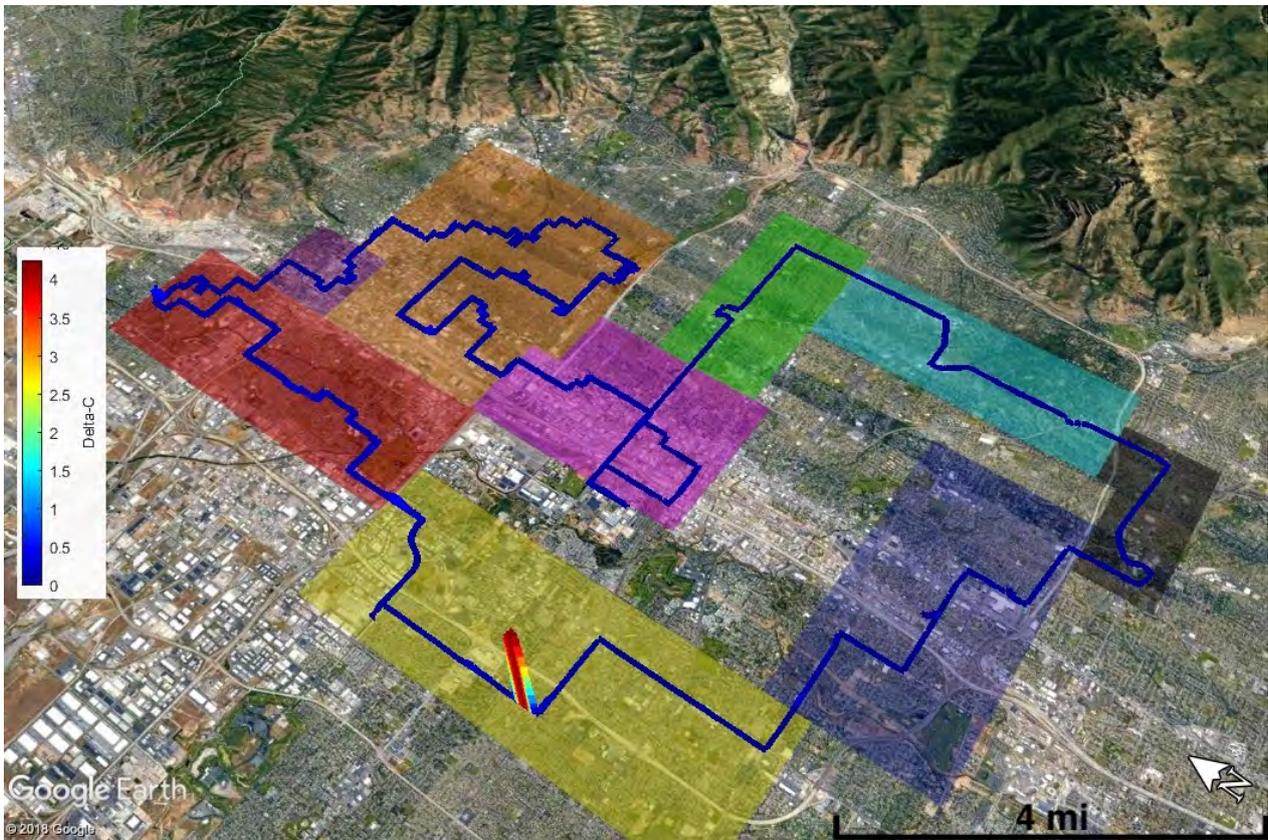
February 1, 2019 mobile monitoring Delta-C data



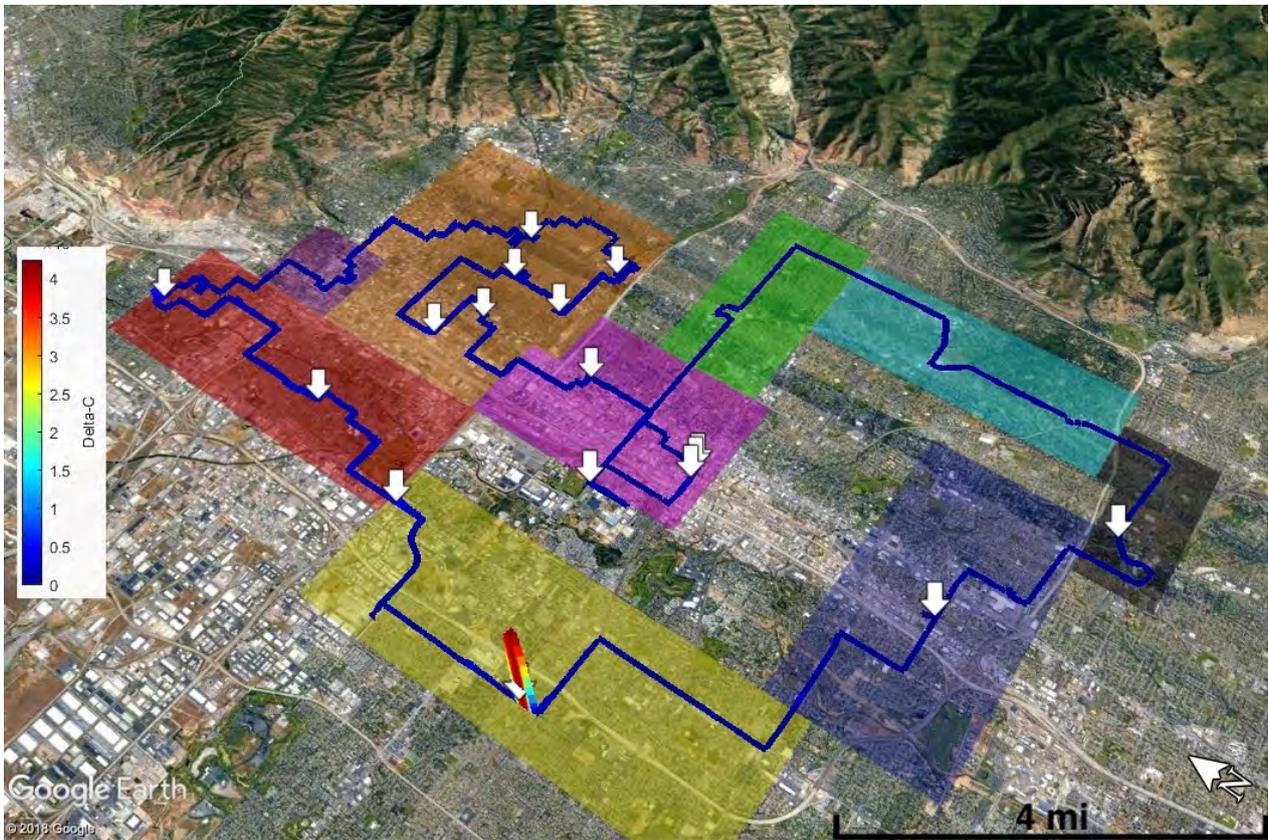
February 1, 2019 mobile monitoring Delta-C data with identified wood-burning events



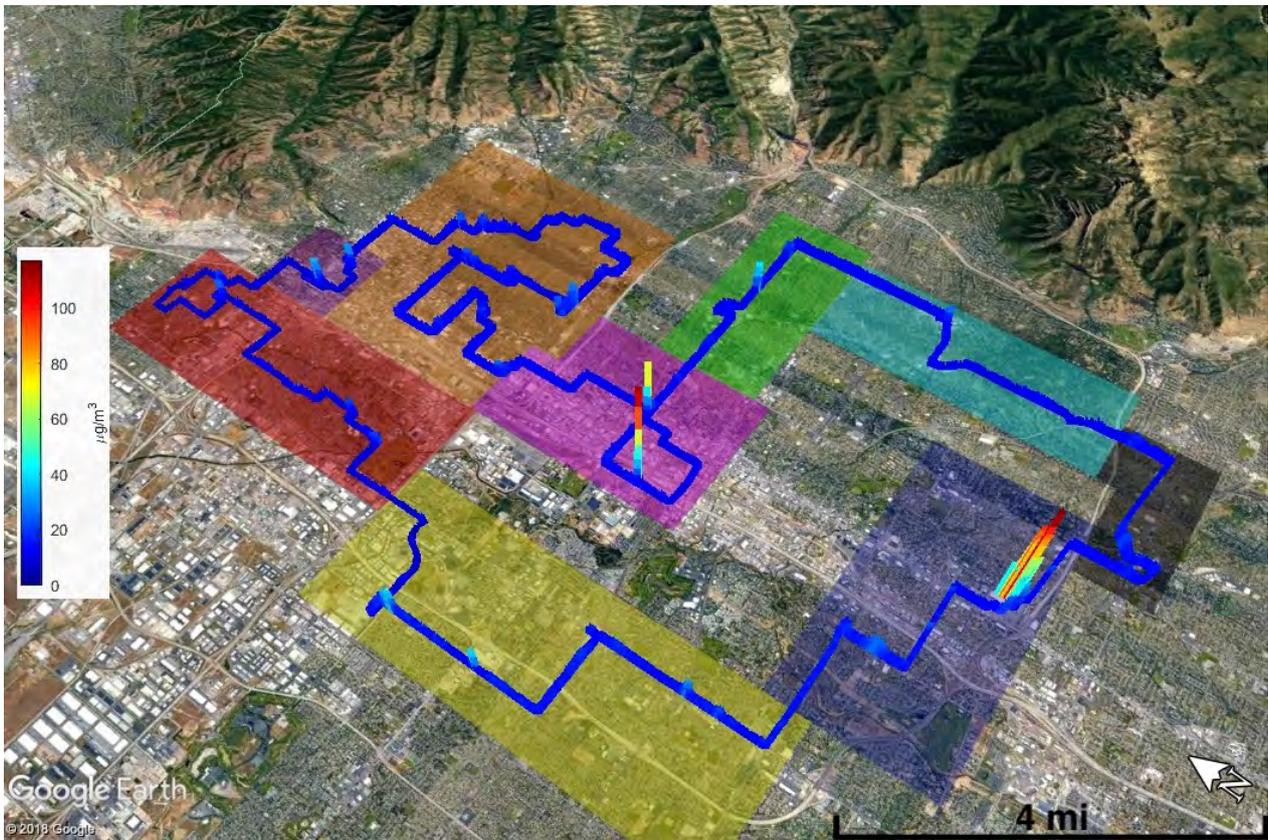
February 7, 2019 mobile monitoring PM_{2.5} data



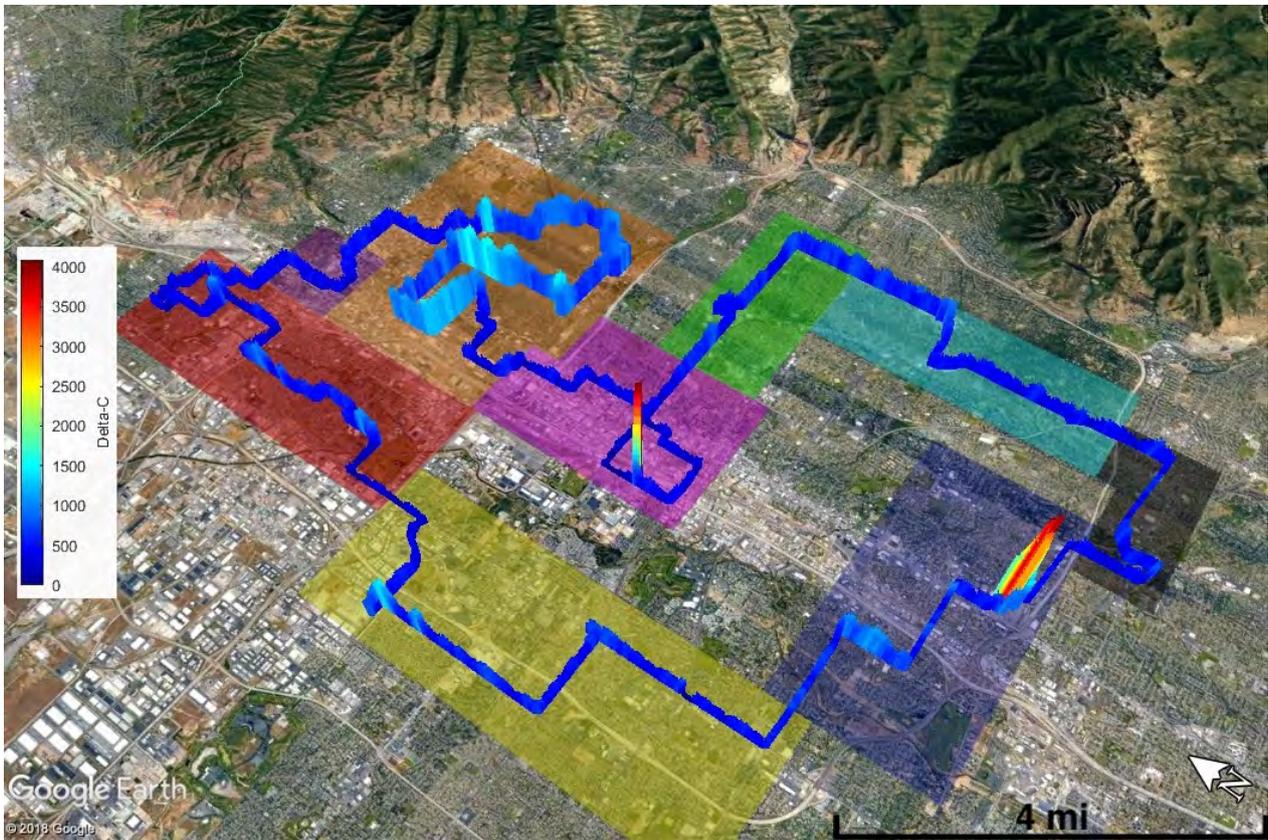
February 7, 2019 mobile monitoring Delta-C data



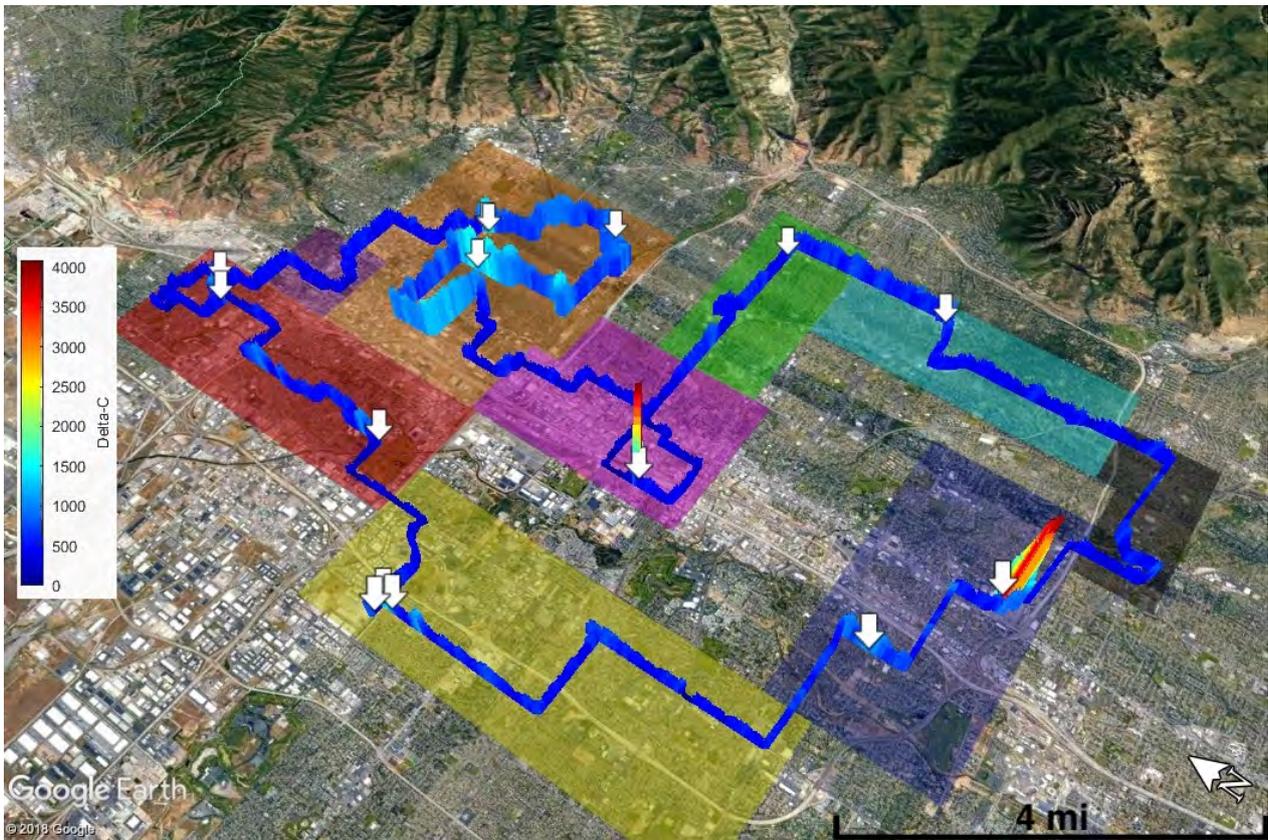
February 7, 2019 mobile monitoring Delta-C data with identified wood-burning events



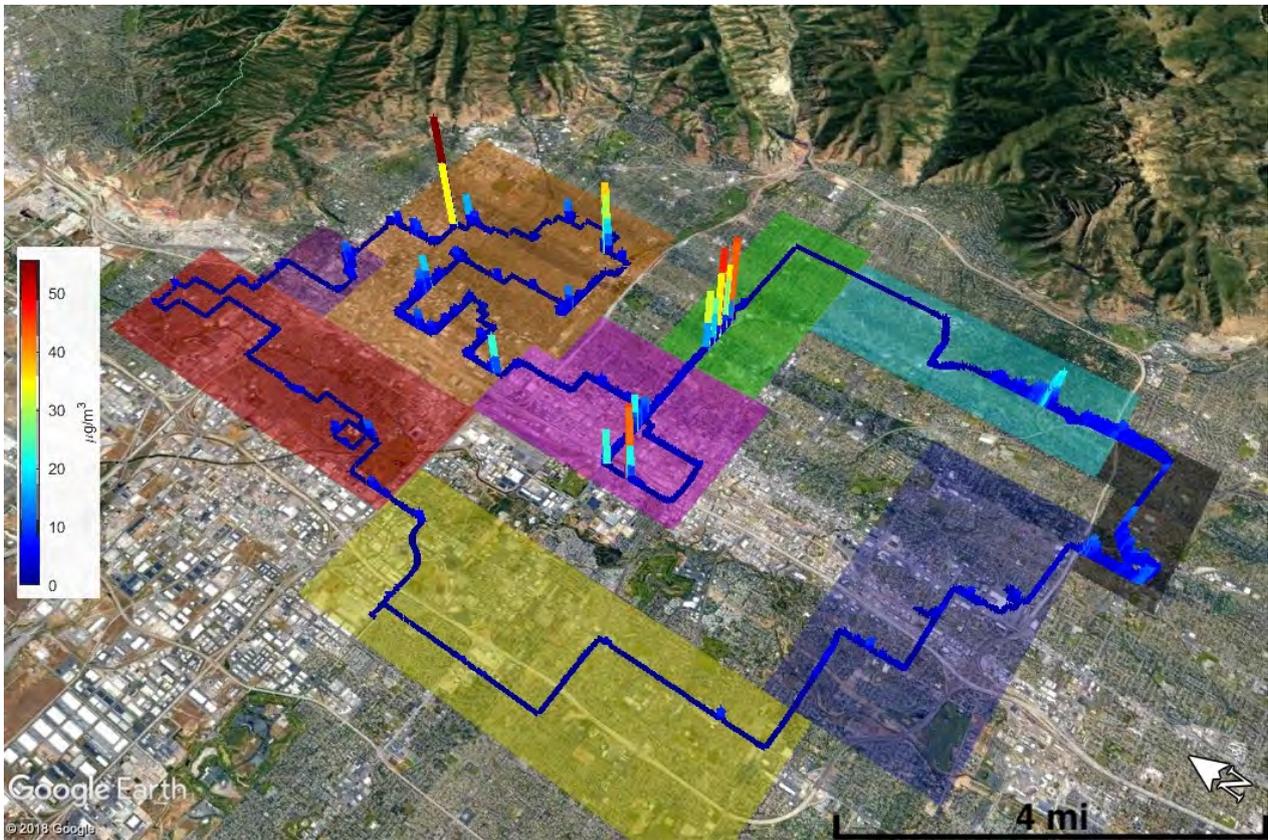
February 8, 2019 mobile monitoring PM_{2.5} data



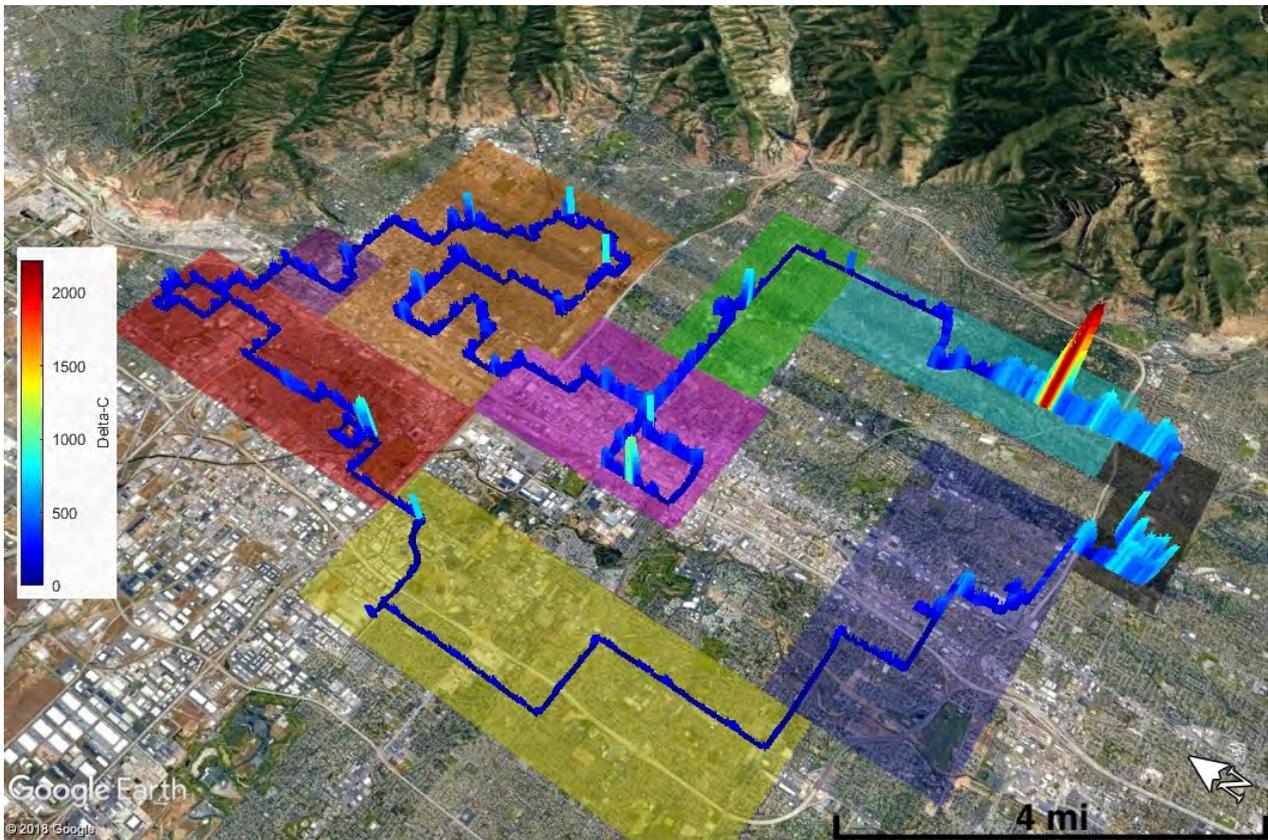
February 8, 2019 mobile monitoring Delta-C data



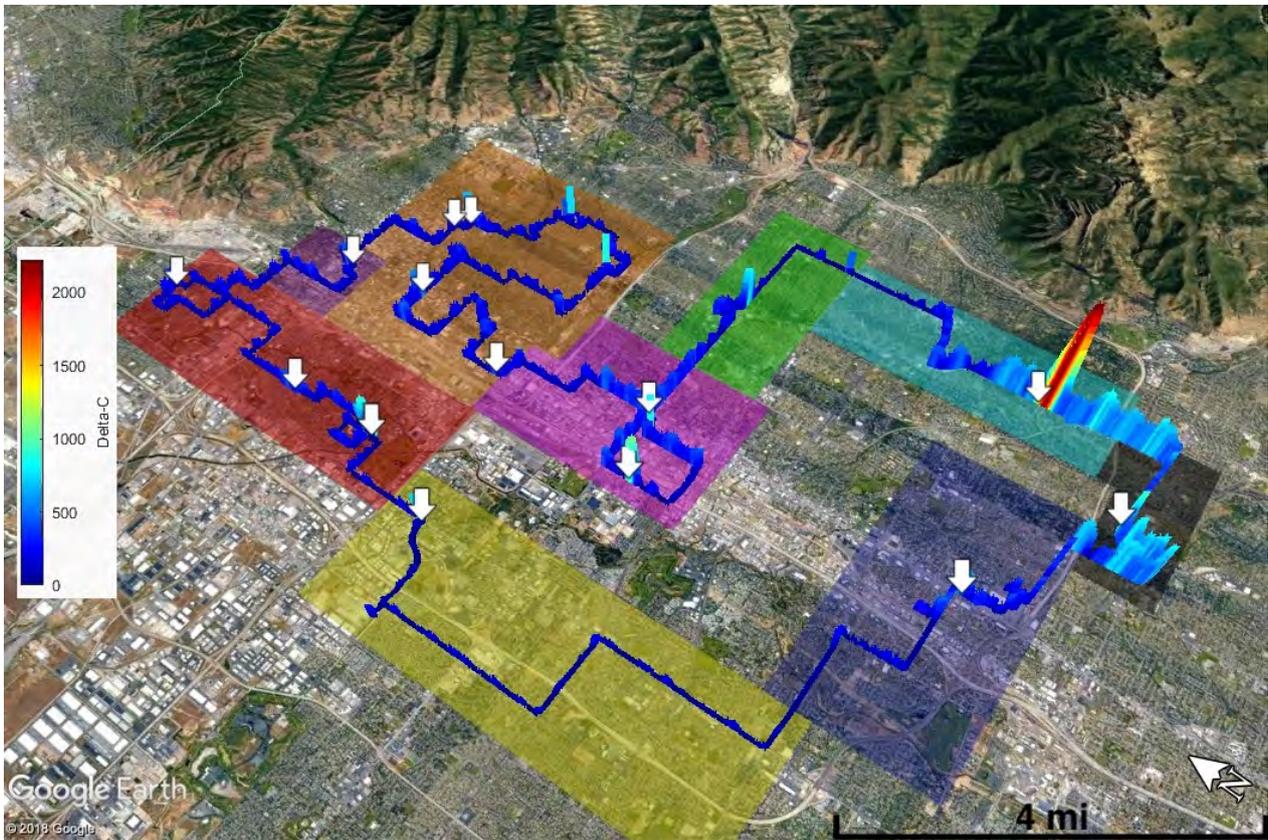
February 8, 2019 mobile monitoring Delta-C data with identified wood-burning events



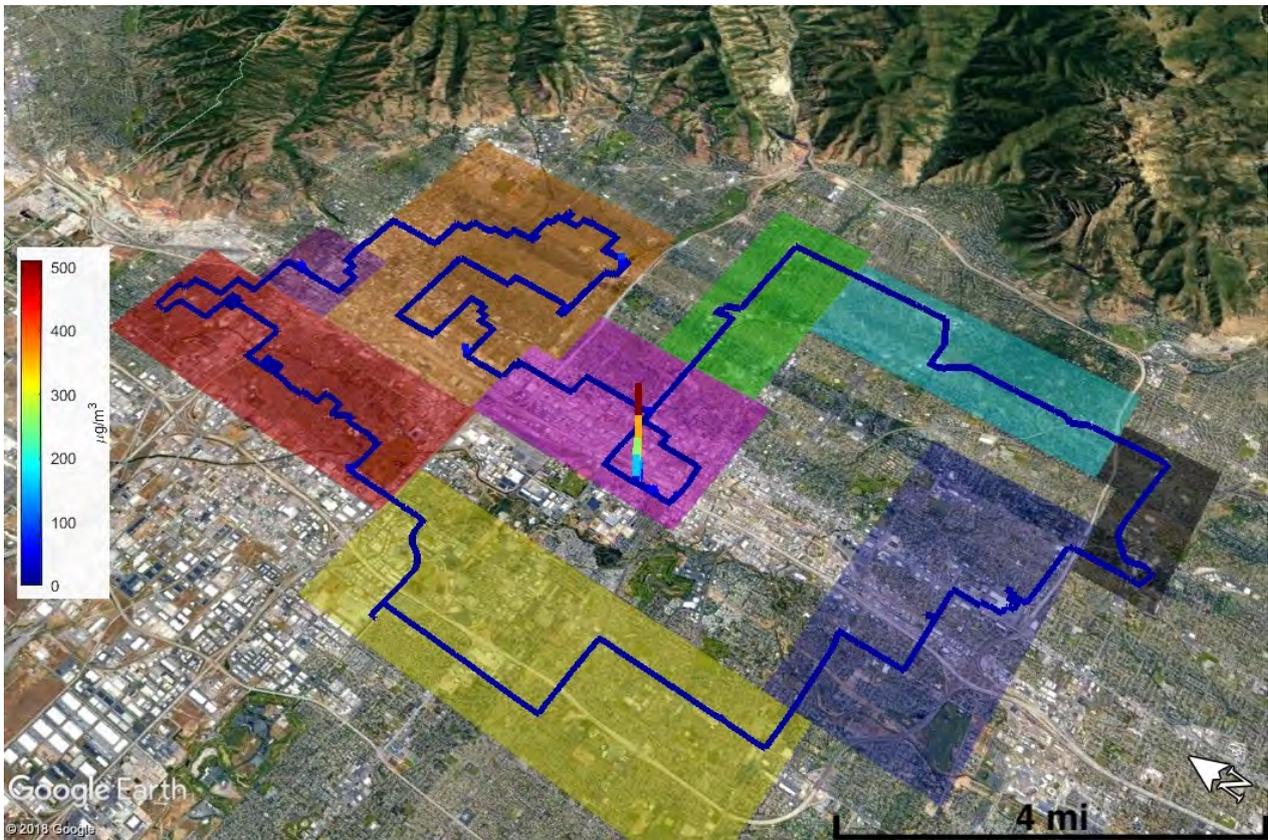
February 11, 2019 mobile monitoring PM_{2.5} data



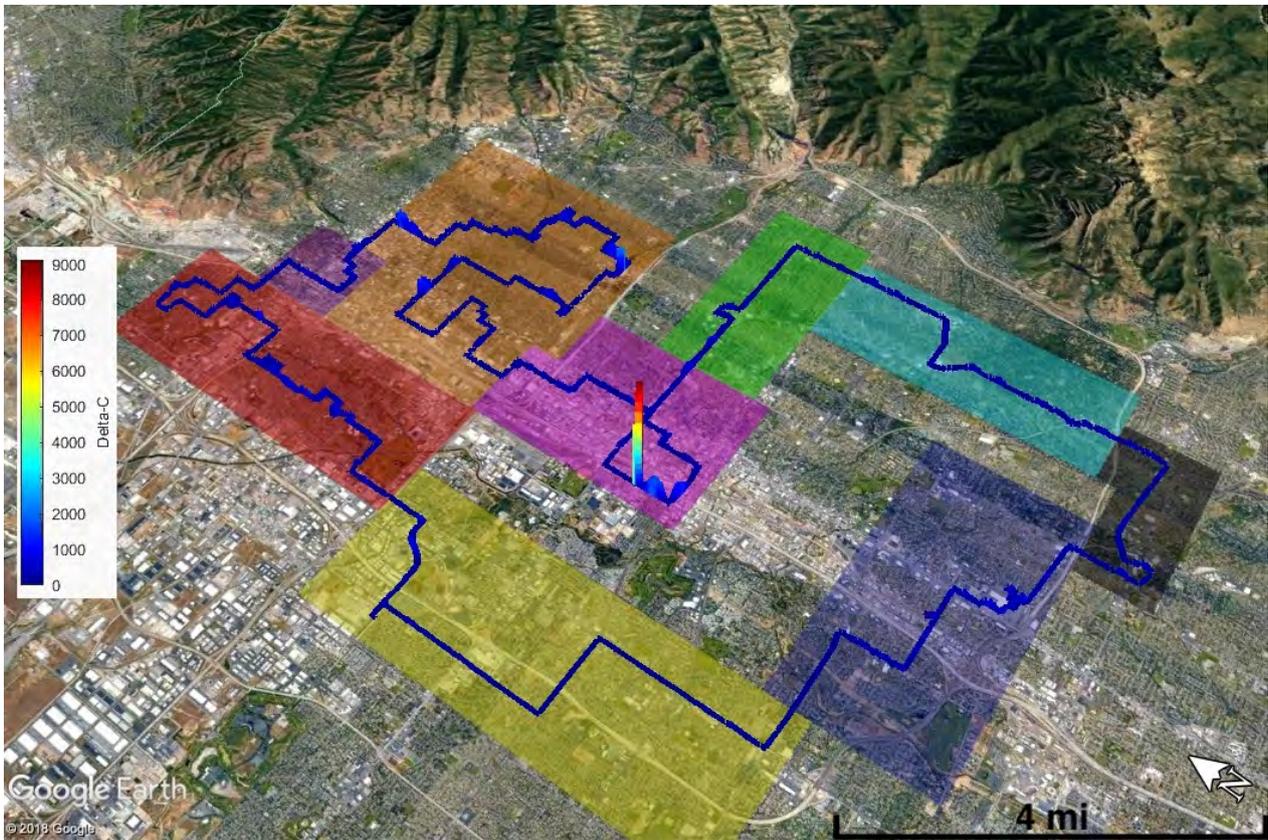
February 11, 2019 mobile monitoring Delta-C data



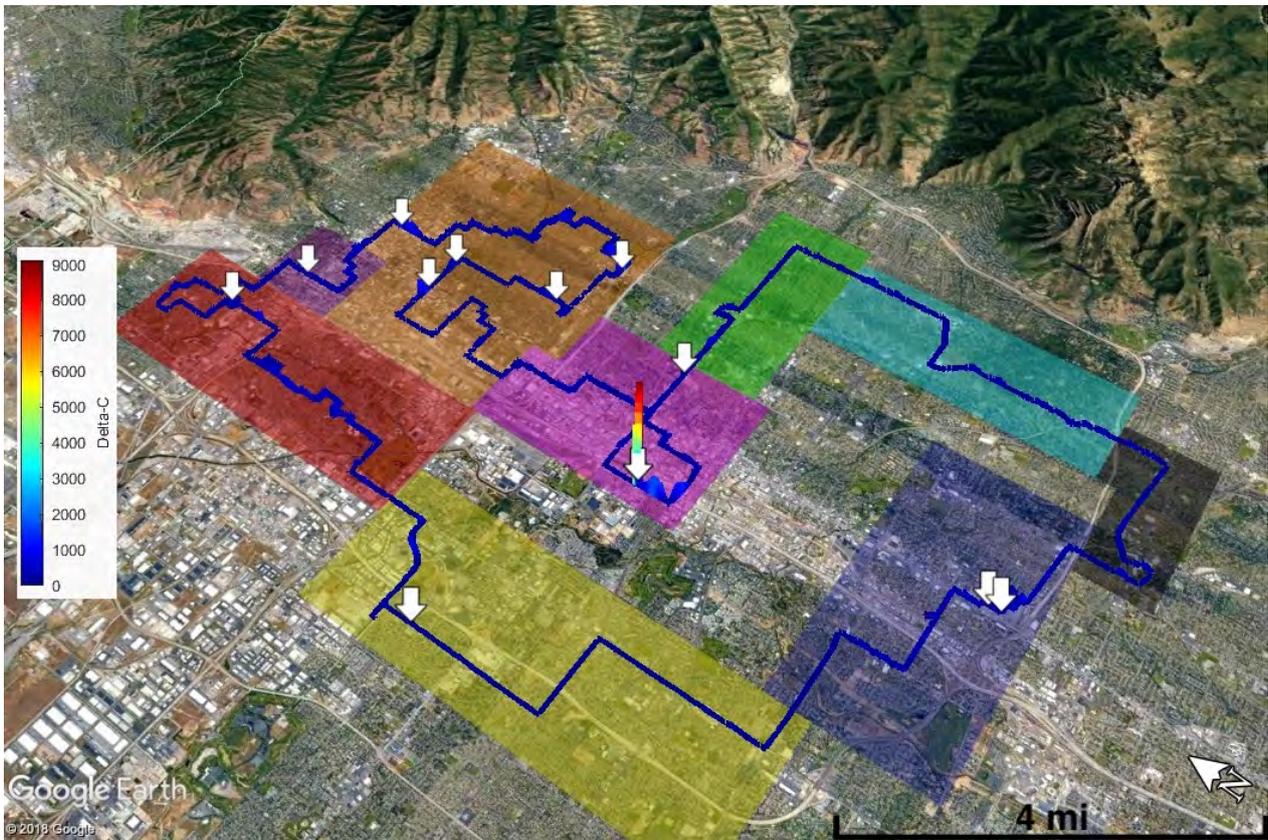
February 11, 2019 mobile monitoring Delta-C data with identified wood-burning events



February 12, 2019 mobile monitoring PM_{2.5} data



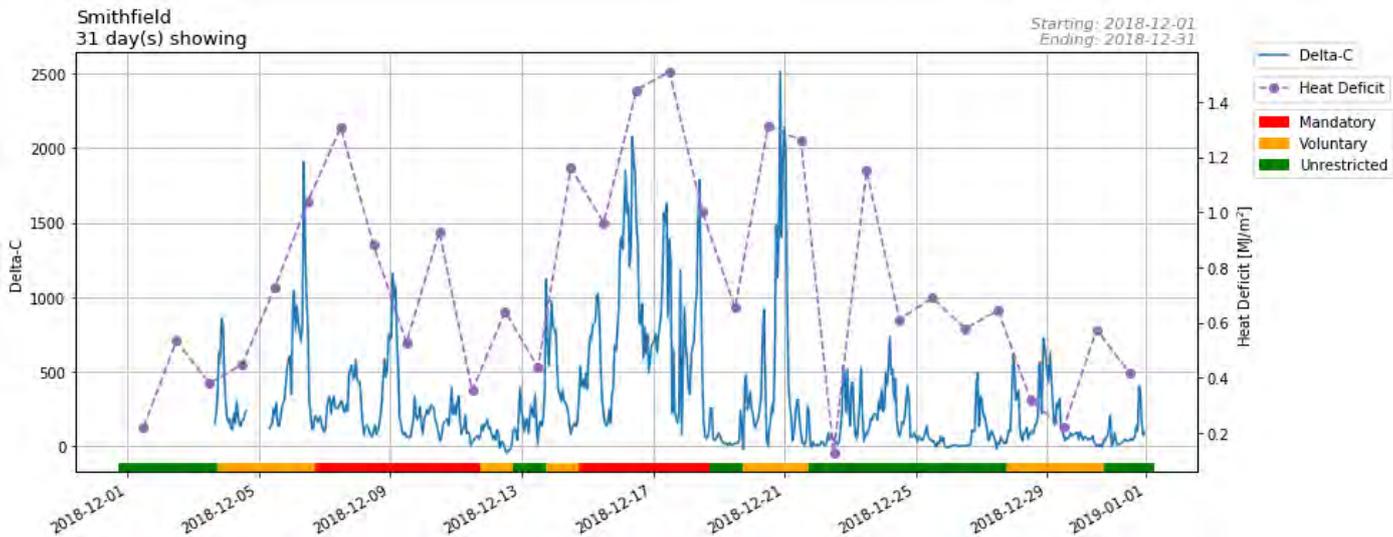
February 12, 2019 mobile monitoring Delta-C data



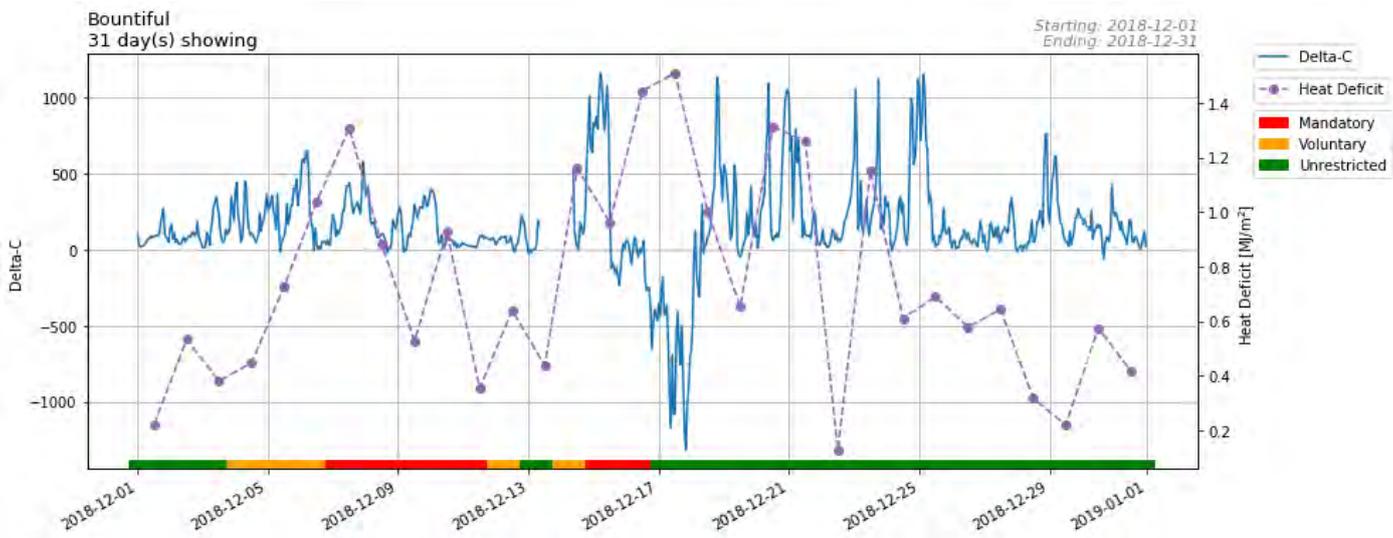
February 12, 2019 mobile monitoring Delta-C data with identified wood-burning events

Appendix C: Stationary Monitoring

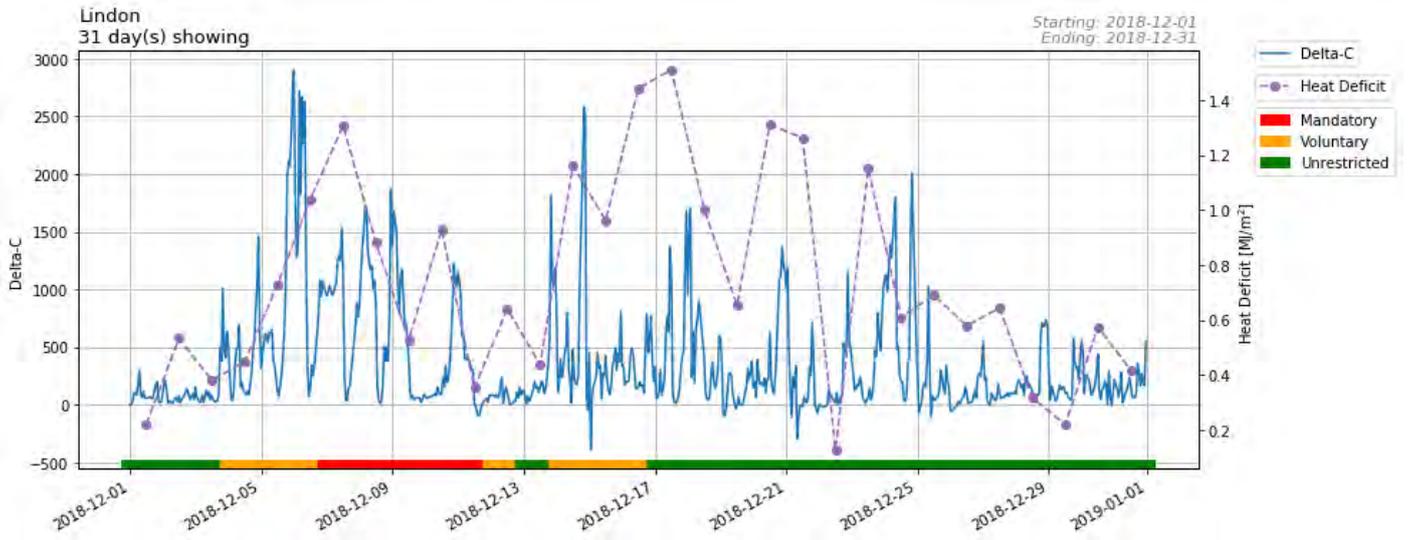
Appendix C.1: Delta-C and Heat Deficit



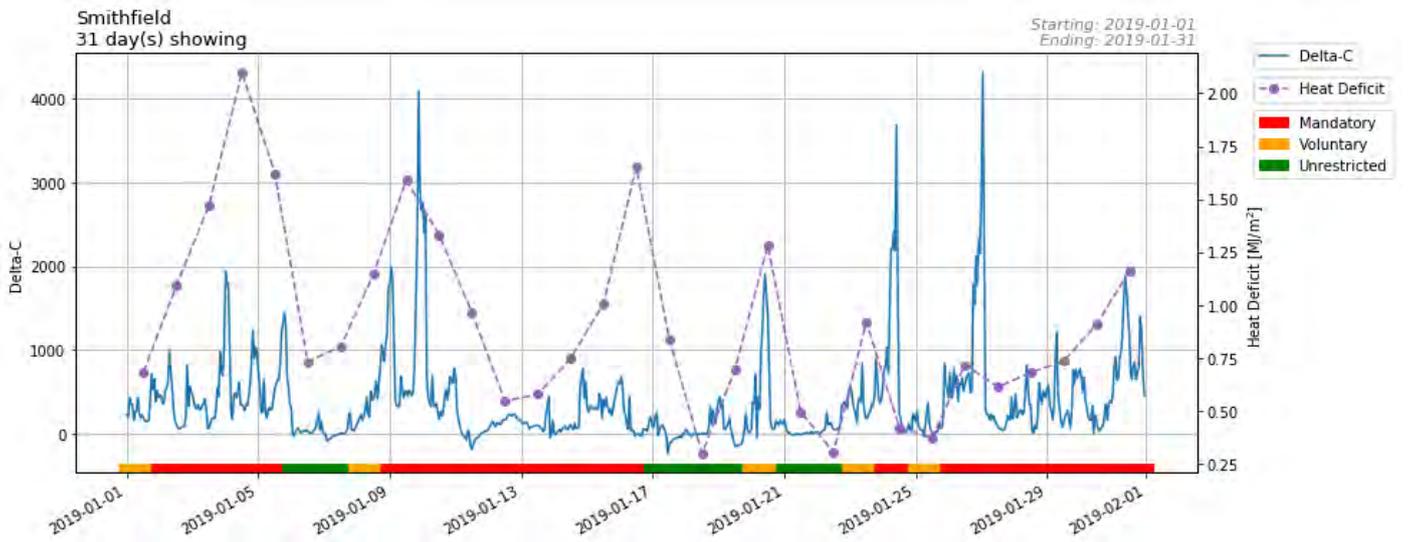
Smithfield Delta-C and heat deficit December 2018



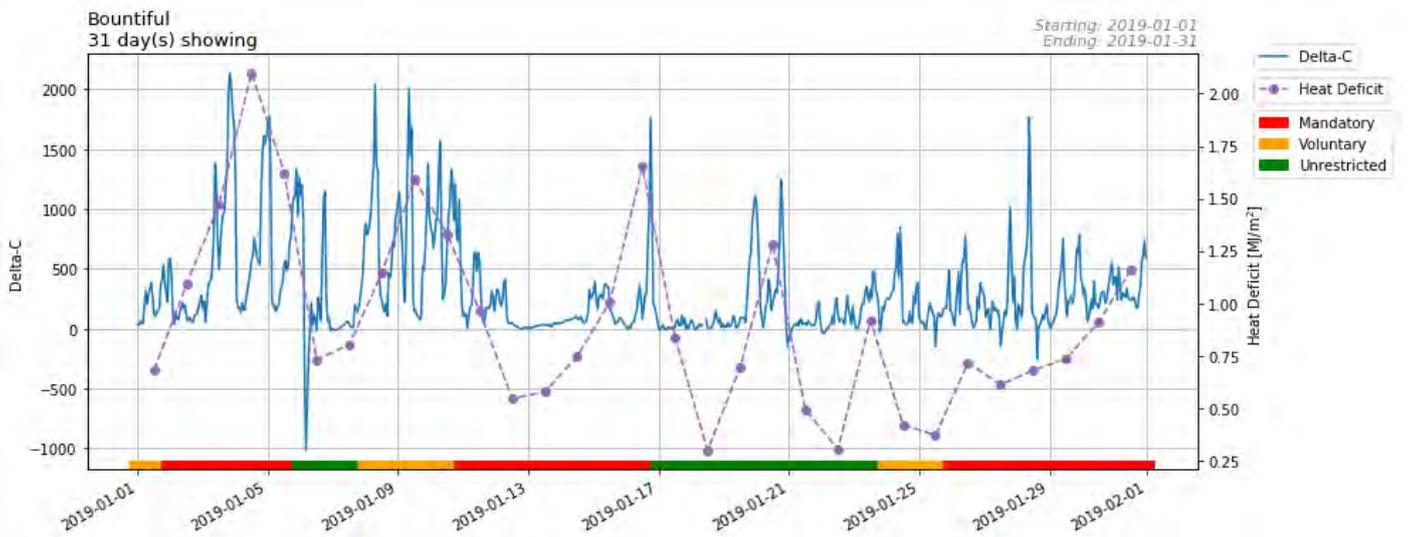
Bountiful Delta-C and heat deficit December 2018



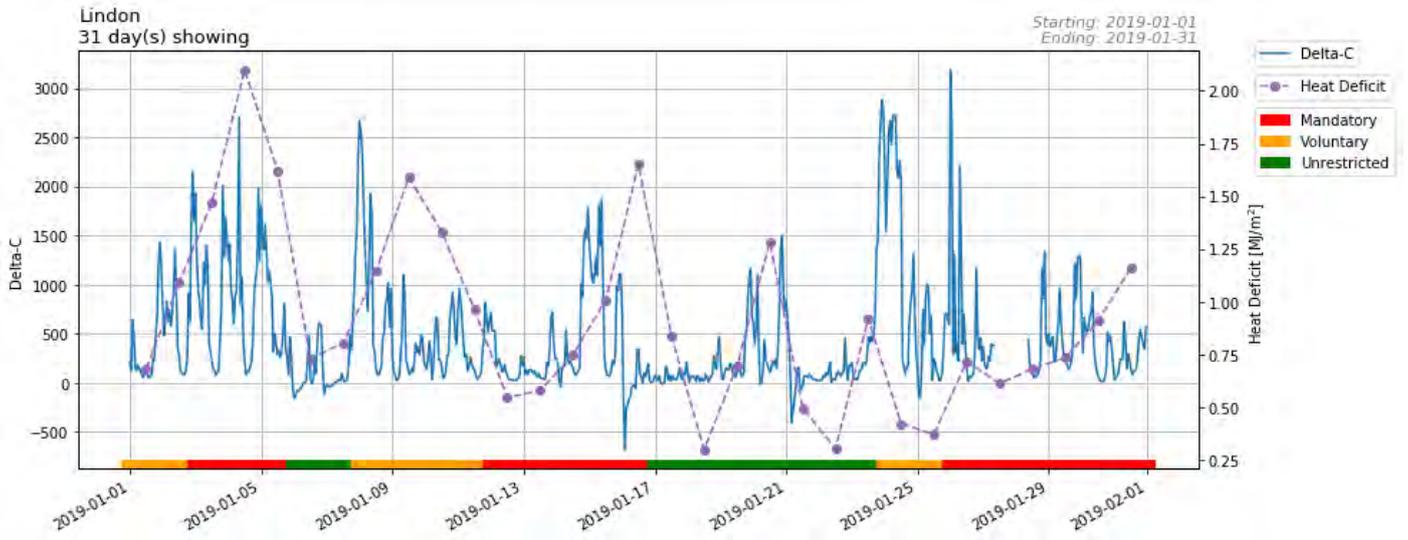
Lindon Delta-C and heat deficit December 2018



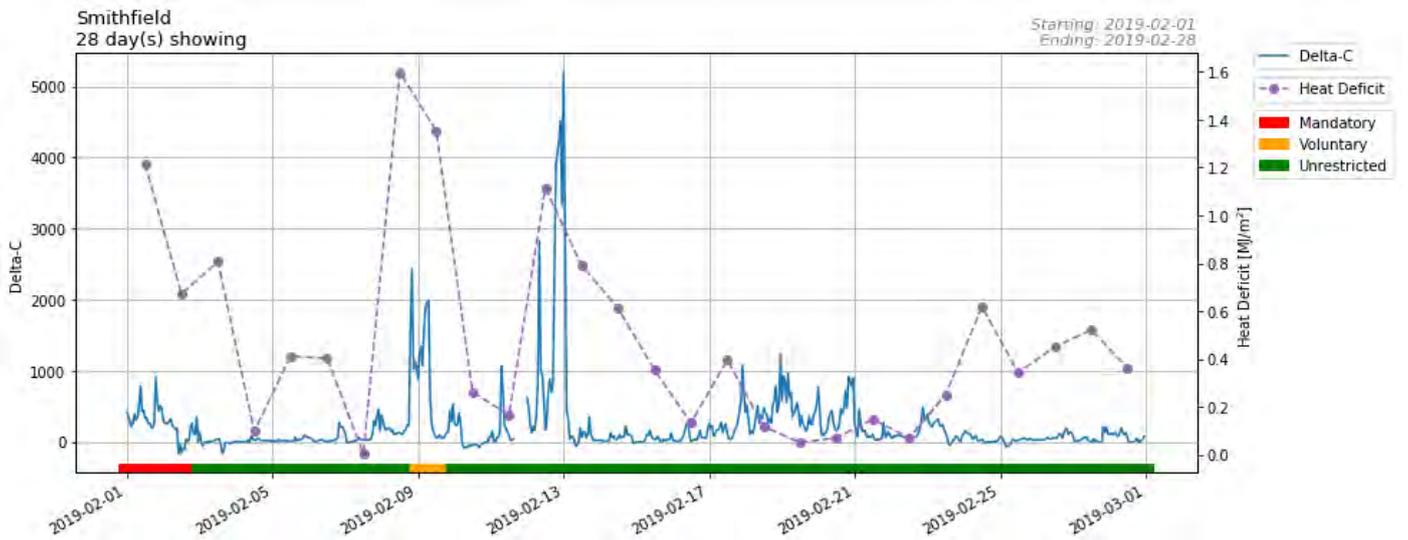
Smithfield Delta-C and heat deficit January 2019



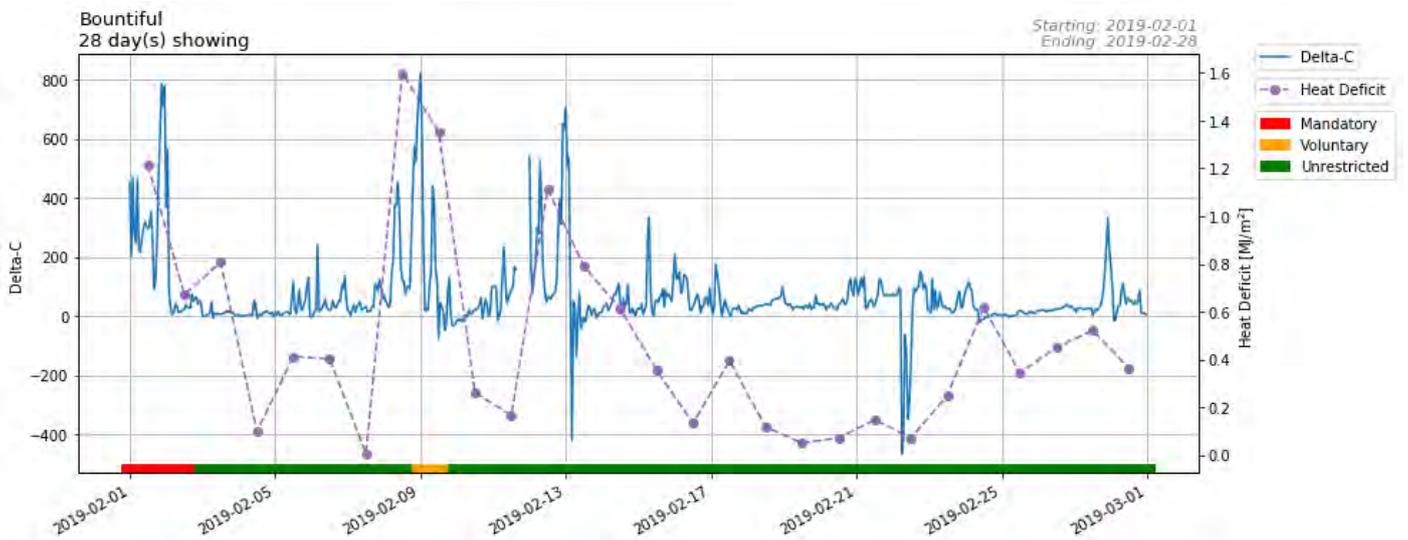
Bountiful Delta-C and heat deficit January 2019



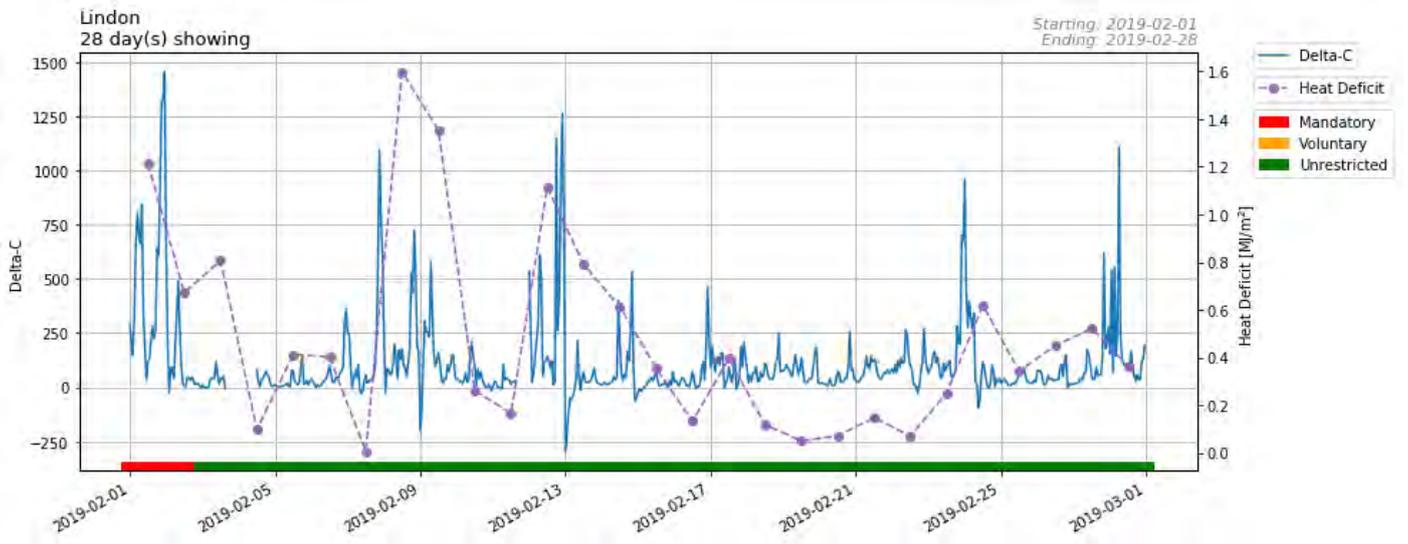
Lindon Delta-C and heat deficit January 2019



Smithfield Delta-C and heat deficit February 2019

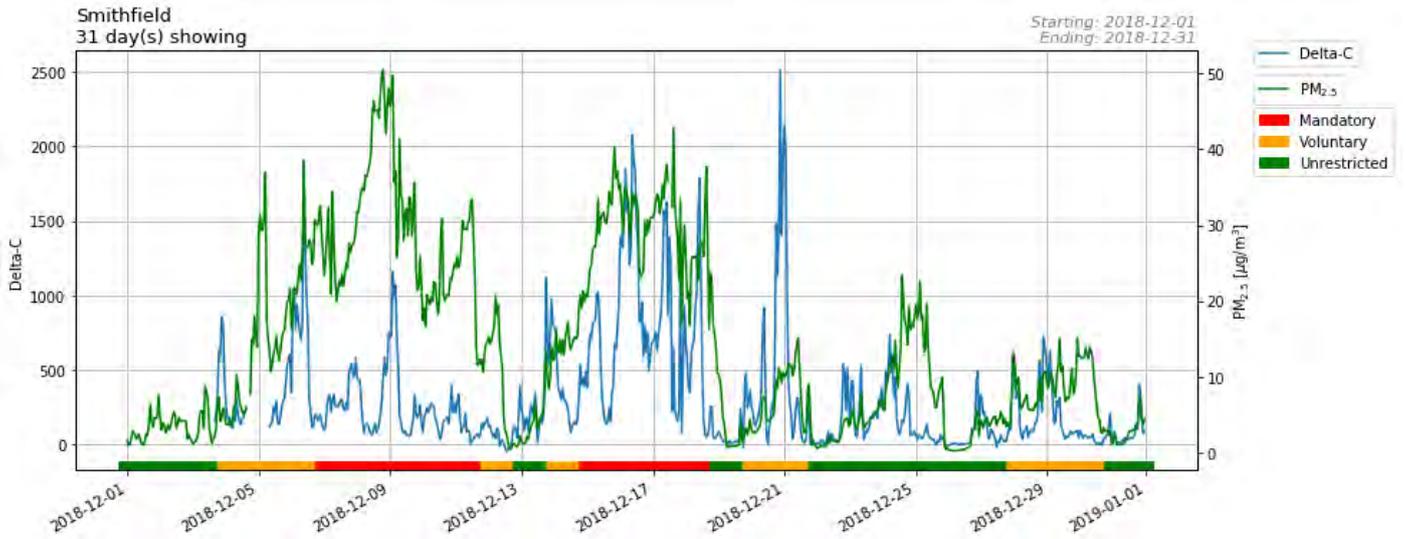


Bountiful Delta-C and heat deficit February 2019

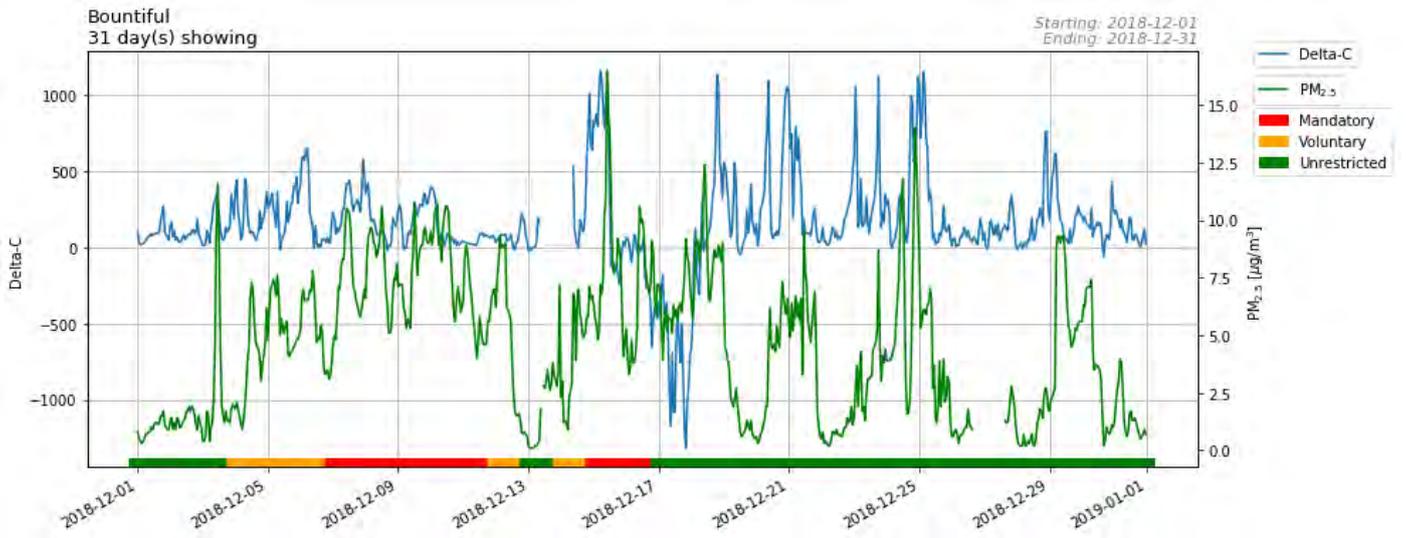


Lindon Delta-C and heat deficit February 2019

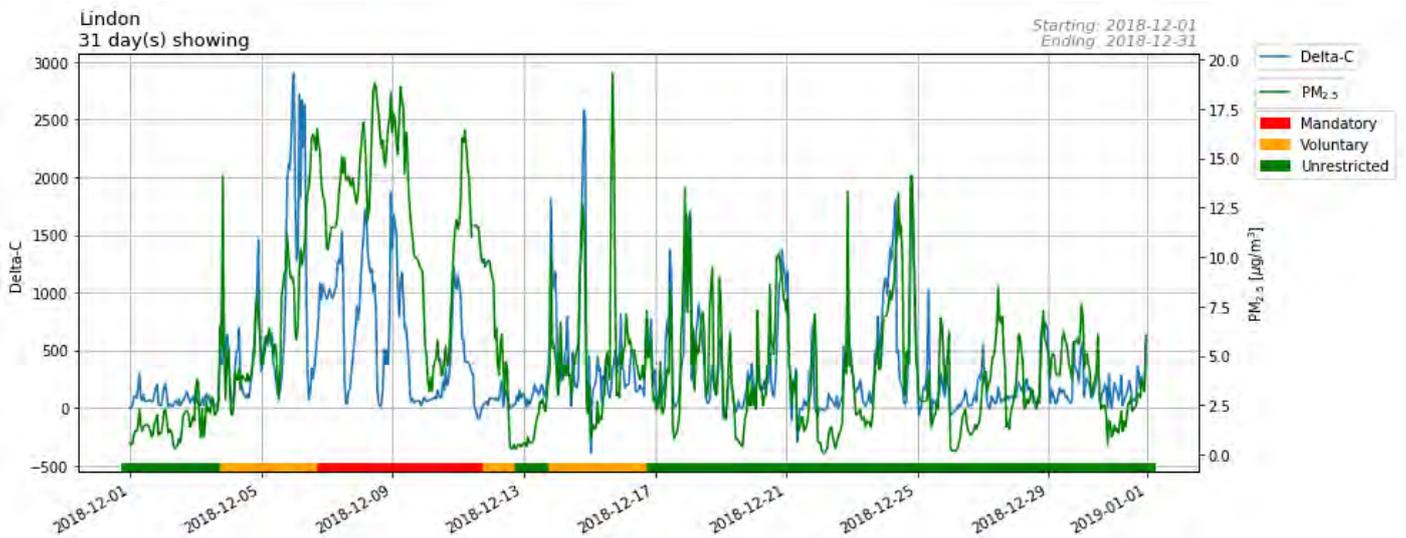
Appendix C.2: Delta-C and PM_{2.5}



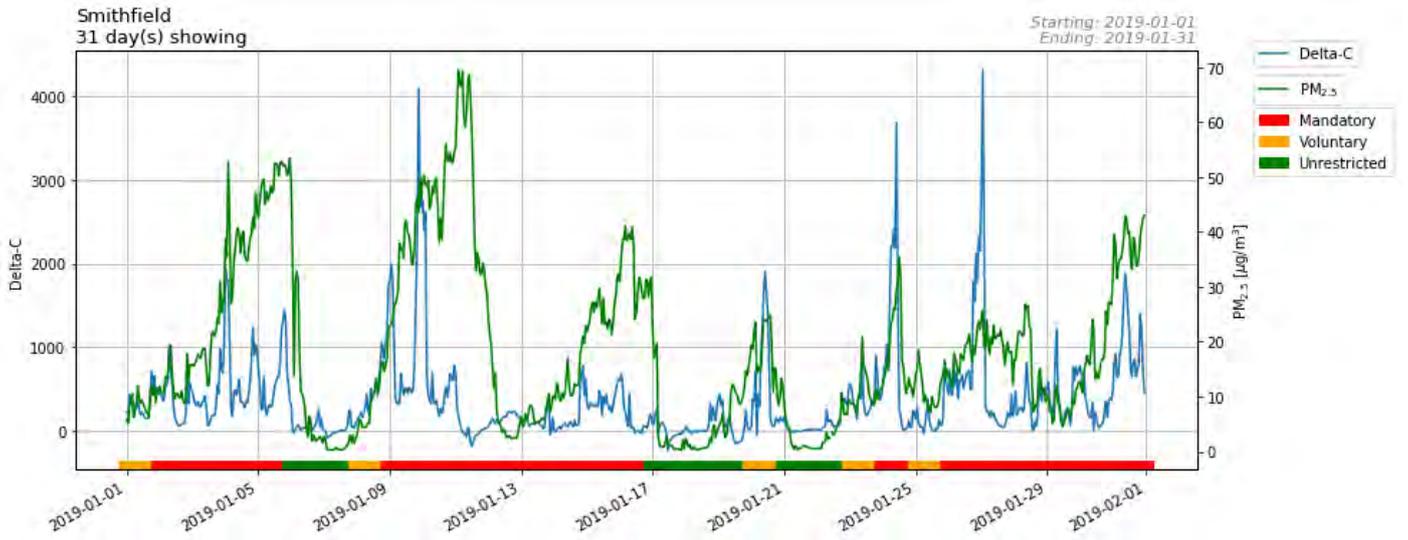
Smithfield Delta-C and PM_{2.5} December 2018



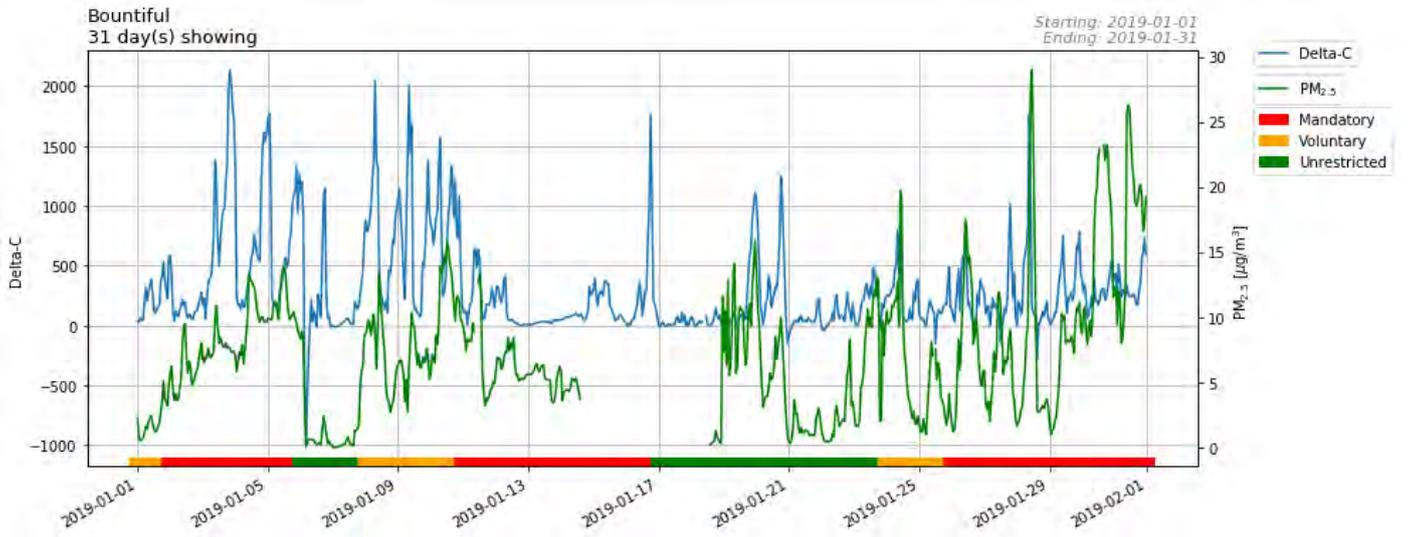
Bountiful Delta-C and PM_{2.5} December 2018



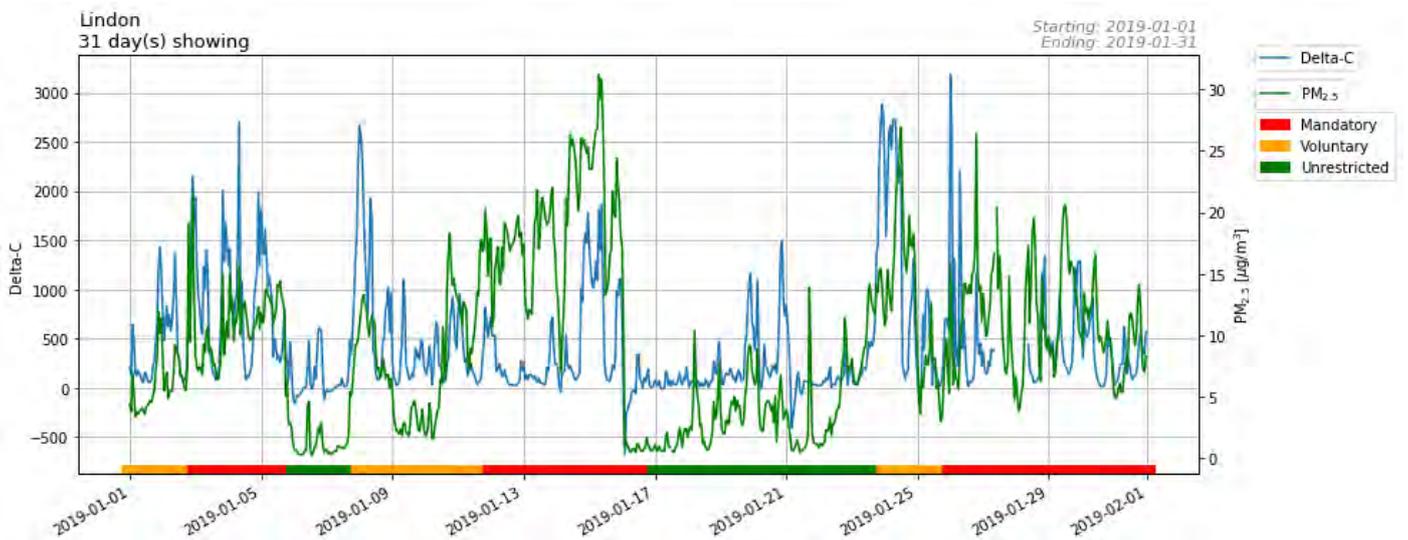
Lindon Delta-C and PM_{2.5} December 2018



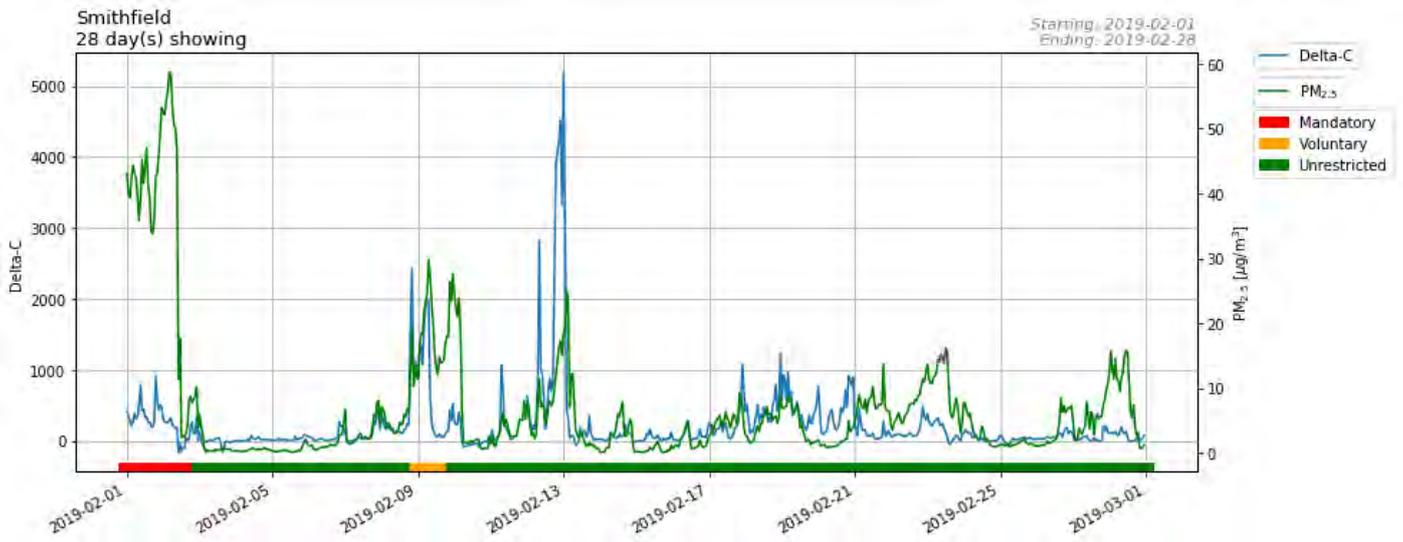
Smithfield Delta-C and PM_{2.5} January 2019



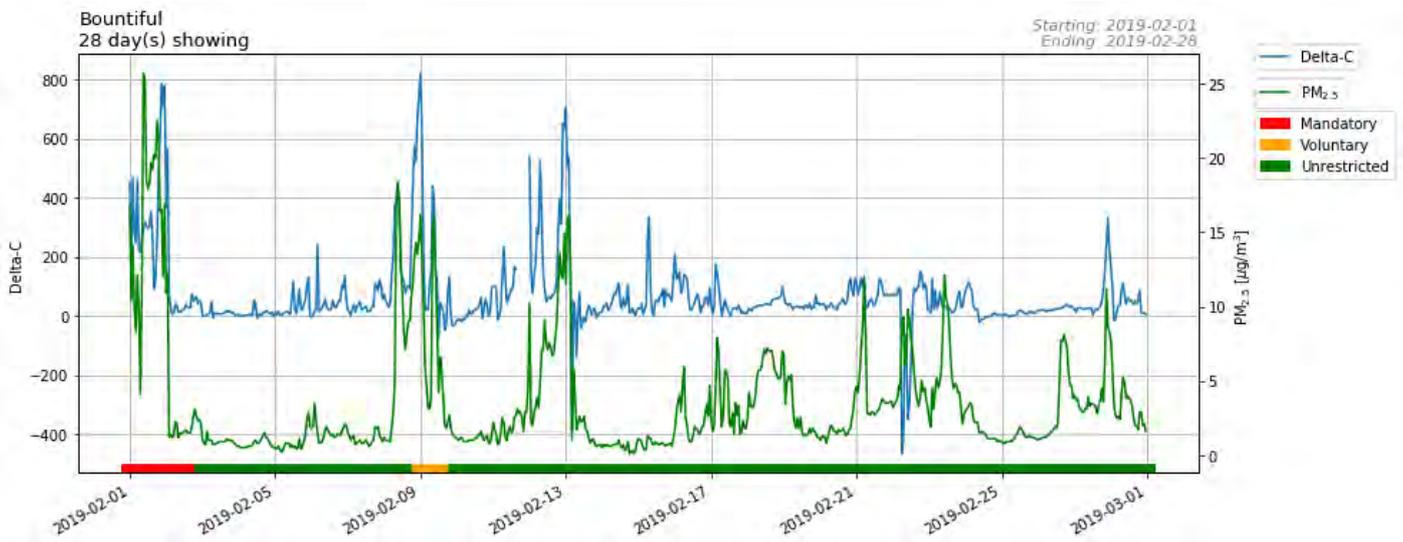
Bountiful Delta-C and PM_{2.5} January 2019



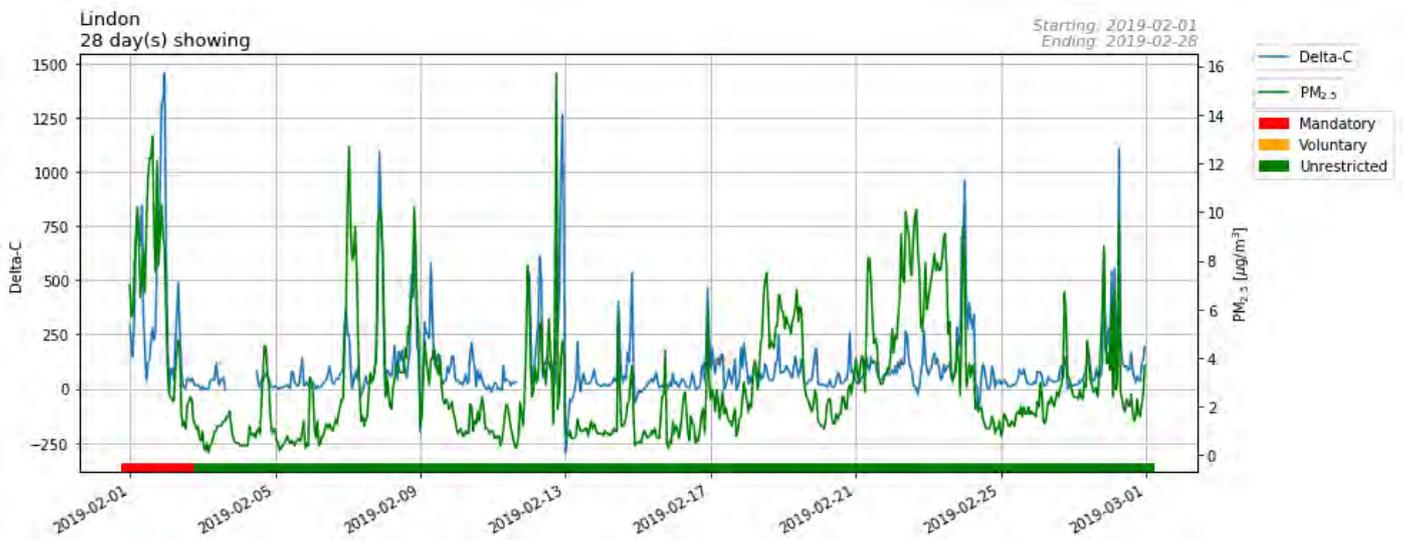
Lindon Delta-C and PM_{2.5} January 2019



Smithfield Delta-C and PM_{2.5} February 2019

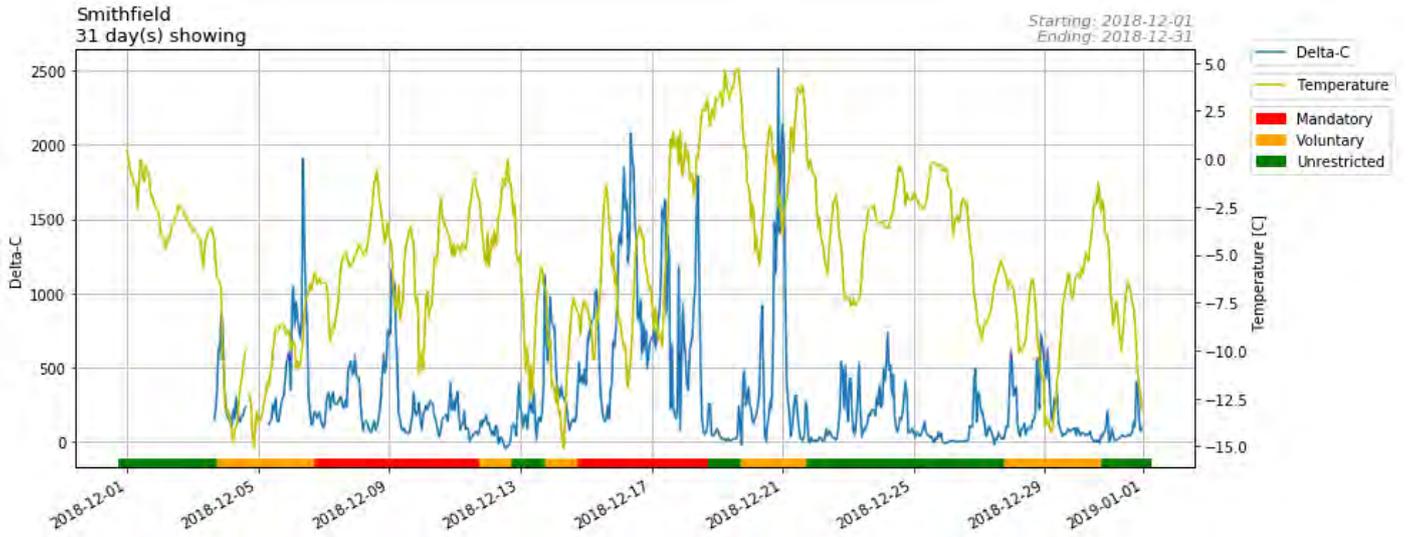


Bountiful Delta-C and PM_{2.5} February 2019

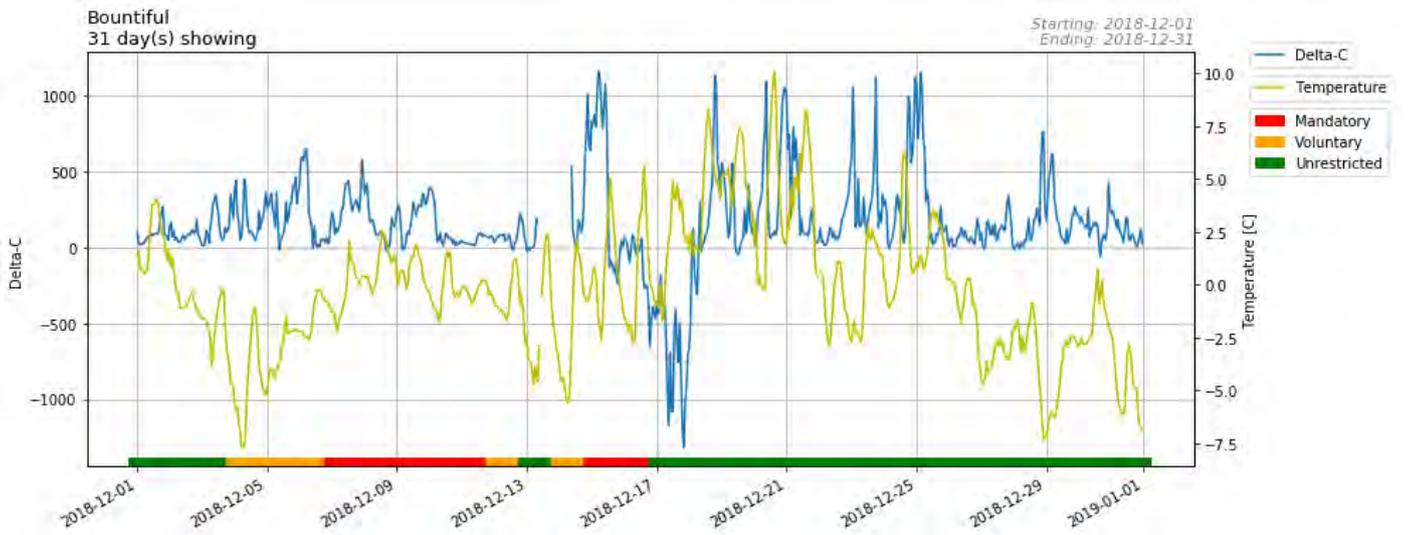


Lindon Delta-C and PM_{2.5} February 2019

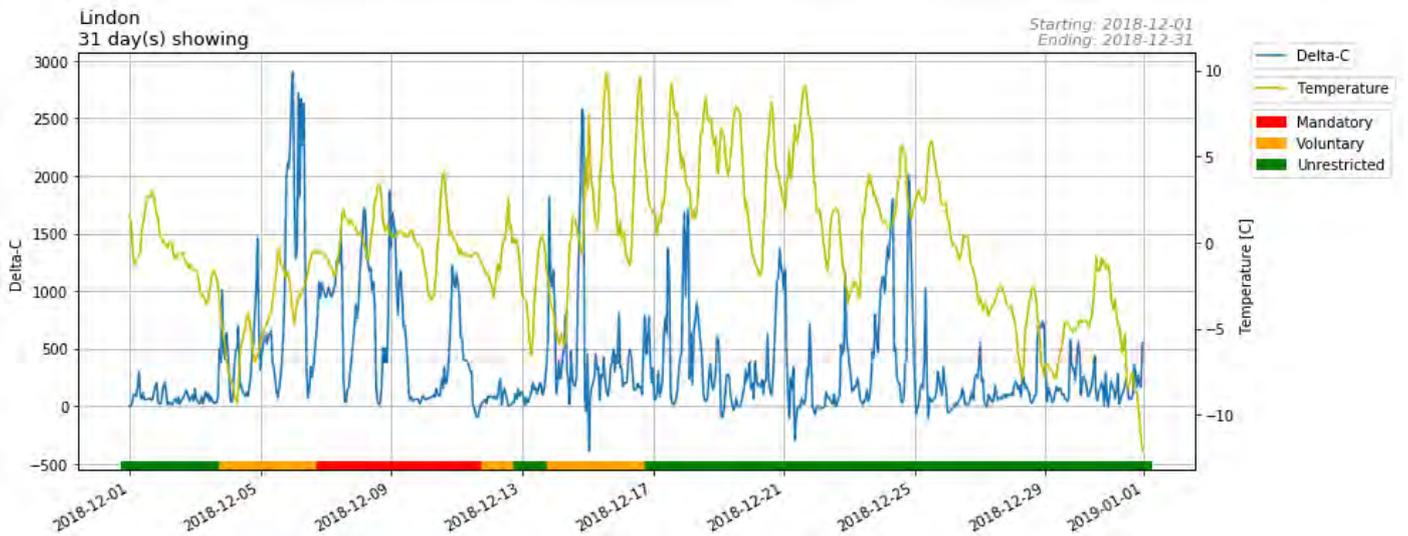
Appendix C.2: Delta-C and Temperature



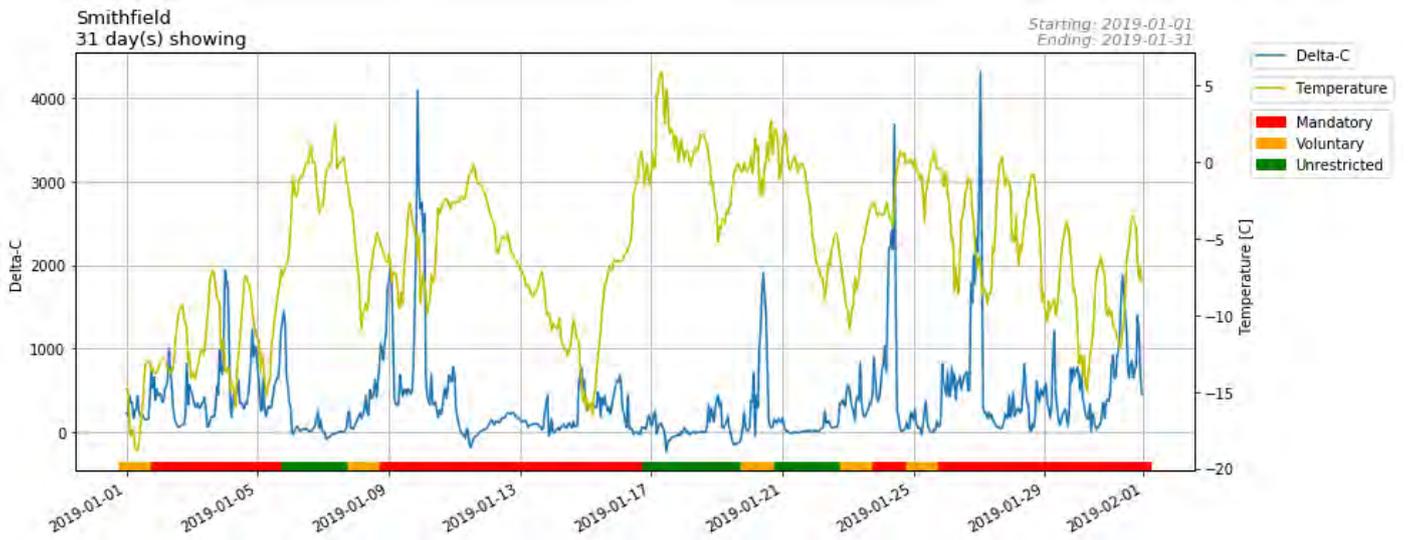
Smithfield Delta-C and temperature December 2018



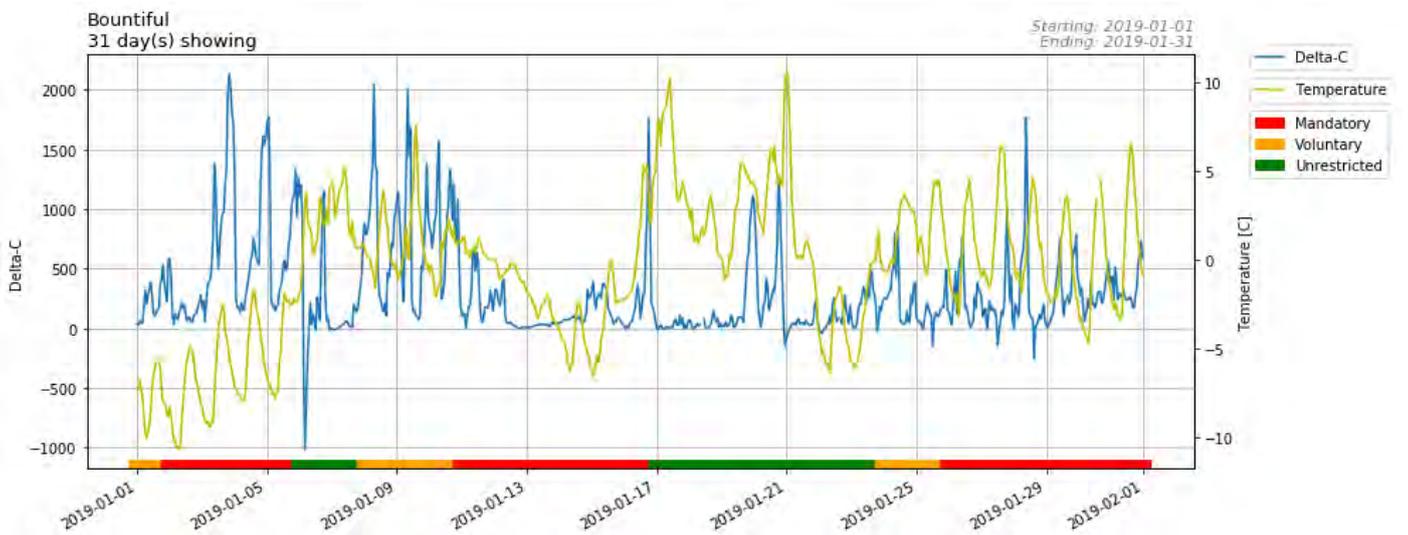
Bountiful Delta-C and temperature December 2018



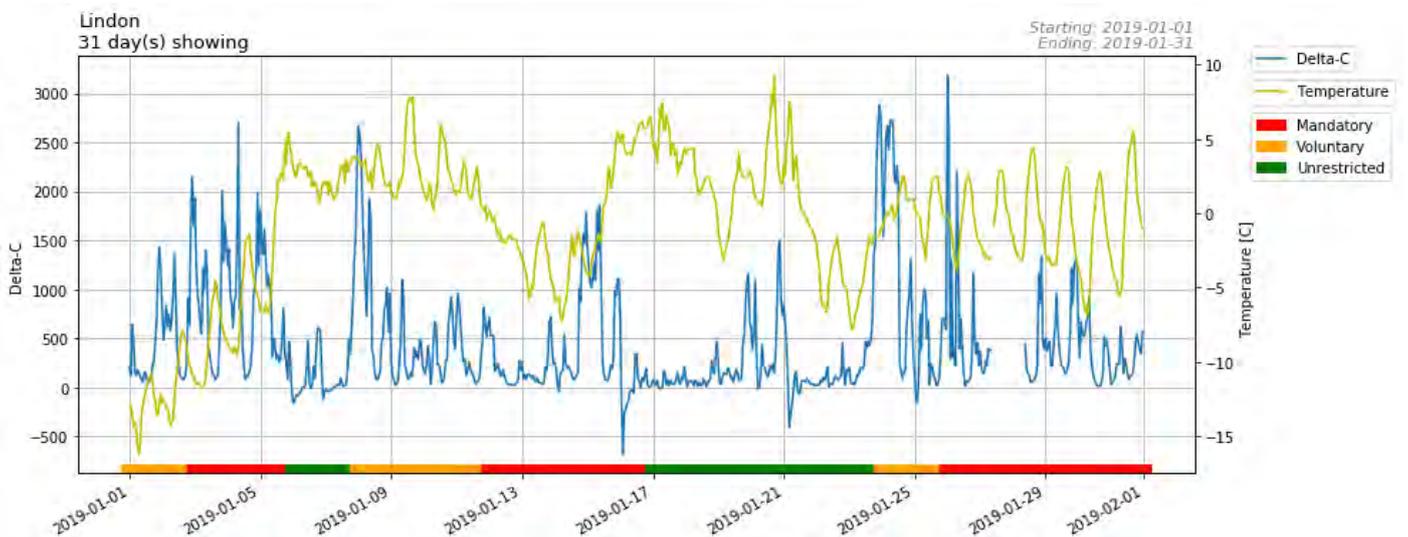
Lindon Delta-C and temperature December 2018



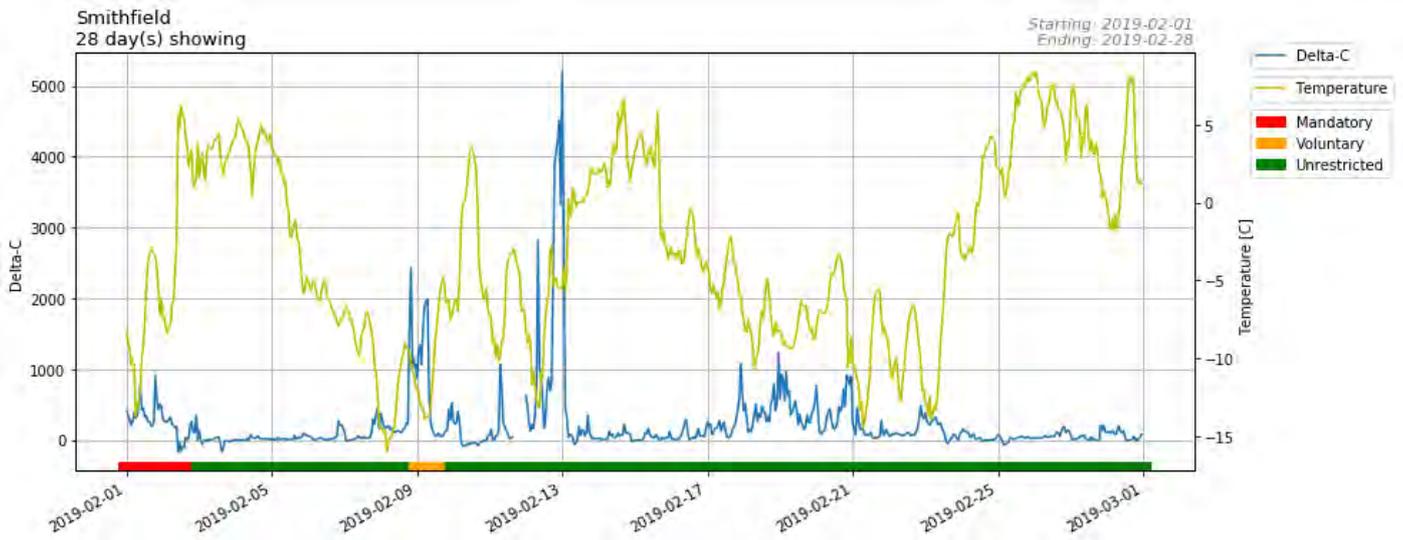
Smithfield Delta-C and temperature January 2019



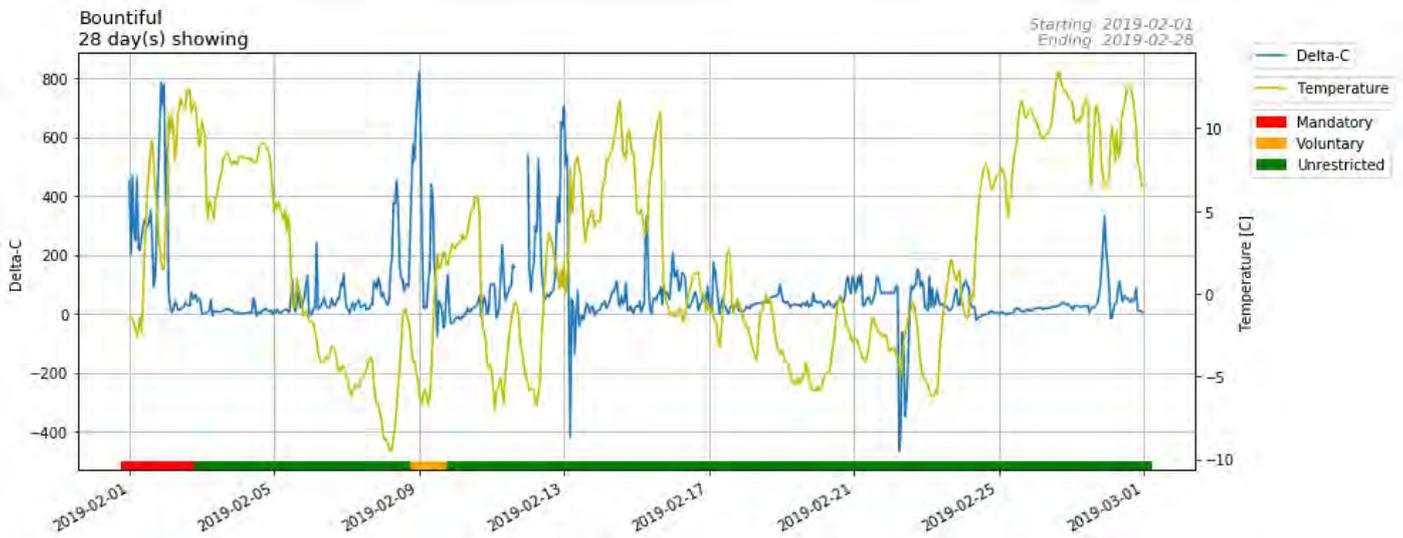
Bountiful Delta-C and temperature January 2019



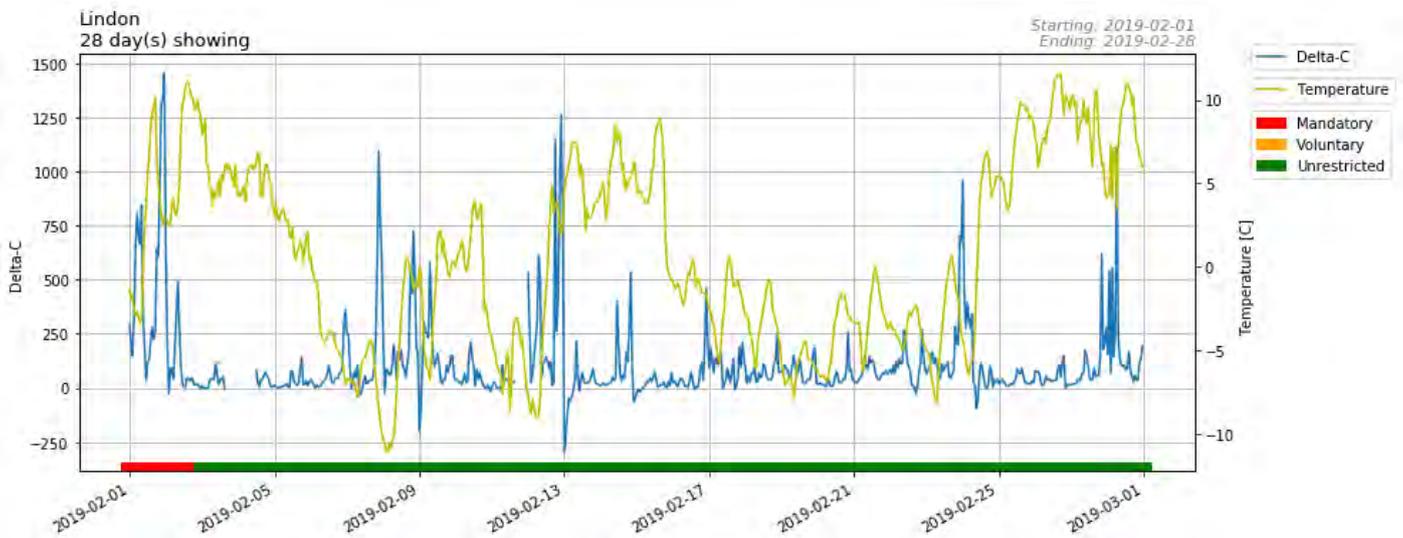
Lindon Delta-C and temperature January 2019



Smithfield Delta-C and temperature February 2019



Bountiful Delta-C and temperature February 2019



Lindon Delta-C and temperature February 2019