



Lincolnshire County Council

GREATER LINCOLN TRANSPORT MODEL

Local Model Validation Report - Appendices



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Local Model Validation Report - Appendices - Appendices

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QUALITY CONTROL

Issue/revision	First issue	Final Issue
Remarks	First Draft	Final
Date	January 2024	April 2024
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Report number	LMVRA001	LMVRA001
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CONTENTS

QUALITY CONTROL	3
CONTENTS	4
APPENDIX A	5
<hr/>	
SPEED-FLOW CURVES	5
APPENDIX B	10
<hr/>	
ROUTE OD PLOTS	10
APPENDIX C	32
<hr/>	
IMPACTS OF MATRIX ESTIMATION	32
APPENDIX D	46
<hr/>	
CALIBRATION RESULTS	46
APPENDIX E	104
<hr/>	
VALIDATION RESULTS	104
APPENDIX F	135
<hr/>	
JOURNEY TIME ROUTE PLOTS	135
APPENDIX G	154
<hr/>	
SYNTHETIC MATRIX TRIP LENGTH DISTRIBUTION PLOTS	154



APPENDIX A

SPEED-FLOW CURVES

Index	Description	S0	S2	Capacity	N	HGV	Lane
Motorways: Rural							
1	Motorway D4 Carriageways (70mph)	112	82	9320	2.78	96	4
2	Motorway D4 Carriageways (70mph)	111	81	9320	2.78	96	4
3	Motorway D4 Carriageways (70mph)	110	80	9320	2.78	96	4
4	Motorway D3 Carriageways (70mph)	111	81	6990	2.78	96	3
5	Motorway D3 Carriageways (70mph)	110	80	6990	2.78	96	3
6	Motorway D3 Carriageways (70mph)	109	78	6990	2.79	96	3
7	Motorway D2 Carriageways (70mph)	105	74	4660	2.88	96	2
8	Motorway D2 Carriageways (70mph)	104	73	4660	2.88	96	2
9	Motorway D2 Carriageways (70mph)	102	71	4660	2.89	96	2
10	Motorway D2 Carriageways (70mph)	101	70	4660	2.89	96	2
Dual Carriageway: Rural							
11	All-Purpose D3 Carriageways (70mph)	109.0	82.0	6300	2.70	96	3
12	All-Purpose D3 Carriageways (70mph)	108.0	81.0	6300	2.70	96	3
13	All-Purpose D2 Carriageways (70mph)	105.0	78.0	4200	2.71	96	2
14	All-Purpose D2 Carriageways (70mph)	101.0	74.0	4200	2.79	96	2
15	All-Purpose D3 Carriageways (60mph)	98.0	72.0	6300	2.71	96	3
16	All-Purpose D3 Carriageways (60mph)	95.0	71.0	6300	2.71		3
17	All-Purpose D2 Carriageways (60mph)	96.0	70.0	4200	2.71		2
18	All-Purpose D2 Carriageways (60mph)	93.0	69.0	4200	2.79		2
19	All-Purpose D3 Carriageways (50mph)	80.0	56.0	5580	2.82		3
20	All-Purpose D3 Carriageways (50mph)	79.0	55.0	5580	2.83		3
21	All-Purpose D2 Carriageways (50mph)	80.0	56.0	3720	2.82		2
22	All-Purpose D2 Carriageways (50mph)	78.0	55.0	3720	2.83		2



Dual Carriageway: Suburban/Urban							
31	D3 Carriageways (40mph)	64	35	4710	2.42		3
32	D3 Carriageways (40mph)	64	35	4380	2.1		3
33	D3 Carriageways (40mph)	64	35	4110	1.79		3
34	D2 Carriageways (40mph)	64	35	3280	2.79		2
35	D2 Carriageways (40mph)	64	35	3100	2.35		2
36	D2 Carriageways (40mph)	64	35	2900	2.01		2
37	D3 Carriageways (30mph)	48	25	4290	2.61		3
38	D3 Carriageways (30mph)	45	25	4020	2.09		3
39	D3 Carriageways (30mph)	43	25	3720	1.59		3
40	D2 Carriageways (30mph)	48	25	2760	2.37		2
41	D2 Carriageways (30mph)	45	25	2580	1.84		2
42	D2 Carriageways (30mph)	43	25	2380	1.41		2
Single Carrigeway: Rural (60mph)							
51	Single Carriageways: SW2-9.0m A Road 60mph	92	60	1720	2.25		1
52	Single Carriageways: S2-7.3m A Road 60mph	90	59	1390	2.08		1
53	Single Carriageways: S2-7.0m A Road 60mph	87	57	1330	2.07		1
54	Single Carriageways: S2-6.6m A Road 60mph	83	56	1240	2.06		1
55	Single Carriageways: S2-6.3m B Road 60mph	81	54	1170	2.02		1
56	Single Carriageways: S2-6.0m B Road 60mph	76	54	1090	2		1
57	Single Carriageways: S2-5.6m B Road 60mph	73	53	970	1.94		1
58	Single Carriageways: S2-5.2m Other Road 60mph	76	54	830	1.88		1
581	Single Carriageways: S2-5.2m Other Road 60mph	76	54	700	1.88		1
59	Single Carriageways: S2-5.0m Other Road 60mph	66	51	750	1.88		1
60	Single Carriageways: S2-4.6m Other Road 60mph	57	40	570	1.84		1
61	Single Carriageways: S2-4.4m Other Road 60mph	54	35	440	1.58		1

62	Single Carriageways: S2-7.3m A Road 50mph	80	50	1590	2.25		1
63	Single Carriageways: S2-7.3m A Road 50mph	80	50	1390	2.08		1
64	Single Carriageways: S2-7.0m A Road 50mph	76	47	1330	2.07		1
65	Single Carriageways: S2-6.6m A Road 50mph	73	46	1240	2.06		1
66	Single Carriageways: S2-6.3m B Road 50mph	70	45	1170	2.02		1
67	Single Carriageways: S2-6.0m B Road 50mph	66	45	1090	2		1
68	Single Carriageways: S2-5.6m B Road 50mph	63	45	970	1.94		1
69	Single Carriageways: S2-5.2m Other Road 50mph	61	40	830	1.88		1
70	Single Carriageways: S2-5.0m Other Road 50mph	56	35	750	1.88		1
Single Carrigeway: Suburban							
71	Suburban Roads - Single 40mph (Good)	63	25	1380	2.51		1
72	Suburban Roads - Single 40mph (Good)	60	25	1240	2.16		1
73	Suburban Roads - Single 40mph (Average)	57	25	1200	1.94		1
74	Suburban Roads - Single 40mph (Average)	54	25	1060	1.72		1
75	Suburban Roads - Single 40mph (Poor)	51	25	980	1.53		1
76	Suburban Roads - Single 30mph (Good)	48	25	1300	3.91		1
77	Suburban Roads - Single 30mph (Good)	46	25	1210	2.61		1
78	Suburban Roads - Single 30mph (Average)	44	25	1170	2.4		1
79	Suburban Roads - Single 30mph (Average)	42	25	950	1.37		1
80	Suburban Roads - Single 30mph (Poor)	38	25	860	1.32		1
Single Carrigeway: Urban							
81	Urban Non-central 50% development	48	25	930	1.97		1
82	Urban Non-central 80% development	48	25	930	1.65		1
83	Urban Non central 90% development	47	25	840	1.52		1
84	Urban Central INT = 2	38	15	910	1.87		1
85	Urban Central INT = 4.5	33	15	710	1.72		1



86	Urban Central INT = 9	30	15	560	1.61		1
87	Urban Central INT = 15	20	10	560	1.61		1
88	Special cobble street	10	5	400	1.61		1
Small Town							
91	Small Town 10% development	64	30	1400	2.95		1
92	Small Town 25% development	60	30	1370	2.96		1
93	Small Town 40% development	58	30	1300	2.94		1
94	Small Town 60% development	48	25	1370	3.91		1
95	Small Town 80% development	48	25	1240	3.35		1
96	Small Town 95% development	45	25	1120	2.81		1
97	Small Town 95% development - 20mph	32	15	950	1.72		1
99	spigot link	40	40	9999	0.00		1

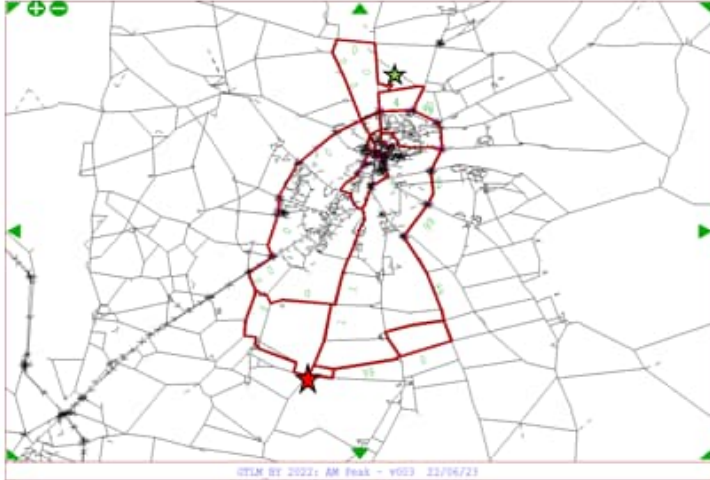


APPENDIX B

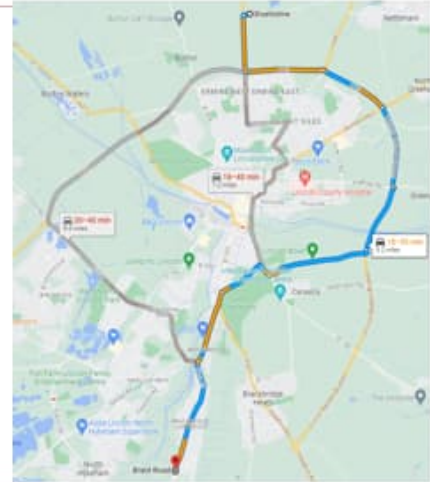
ROUTE OD PLOTS

From Zone 363 [Riseholme (Site 2)] To Zone 539 [Brant Road (Site 5)] - User Class 1 [Business]

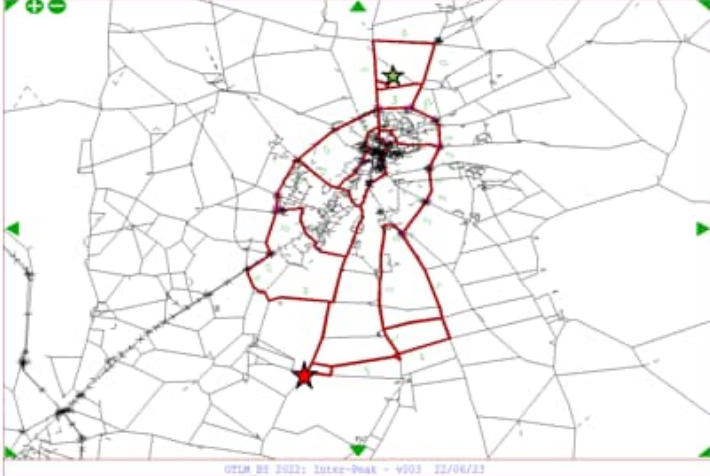
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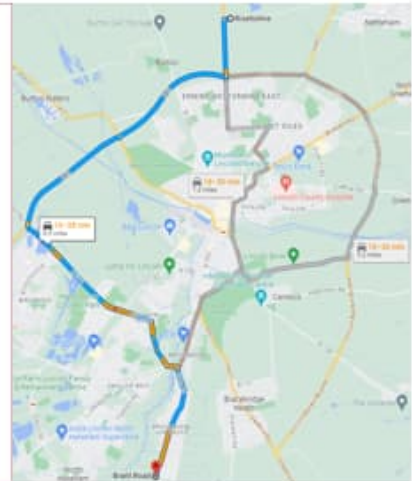
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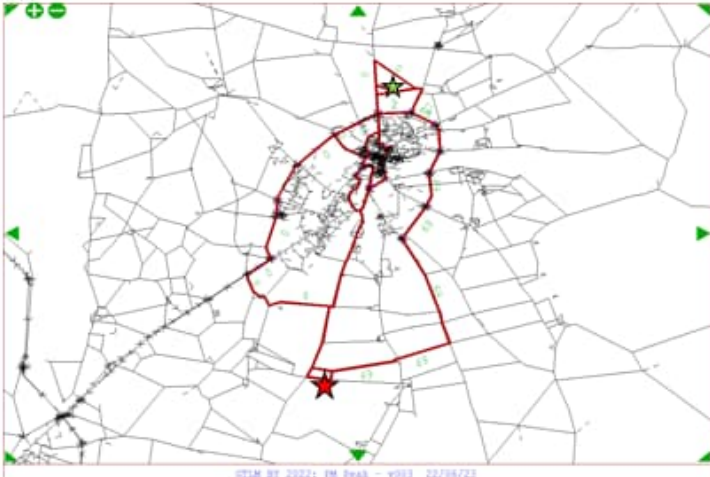
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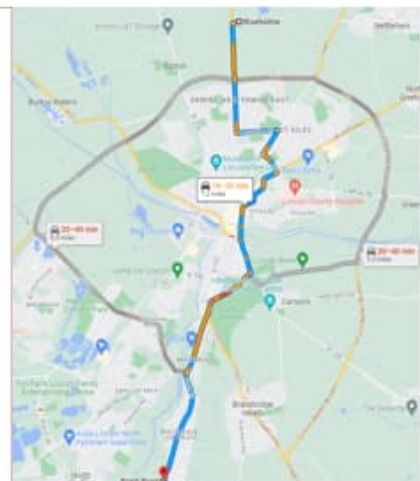
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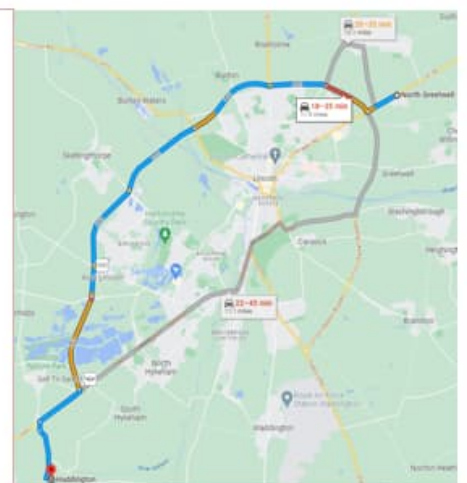
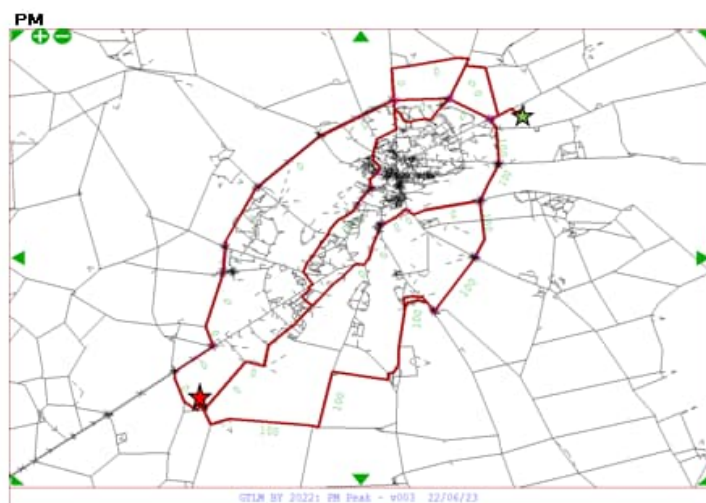
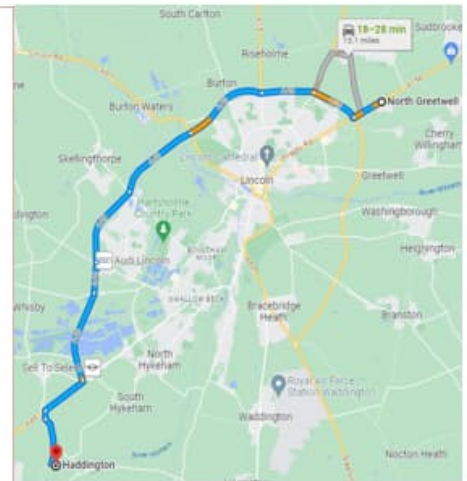
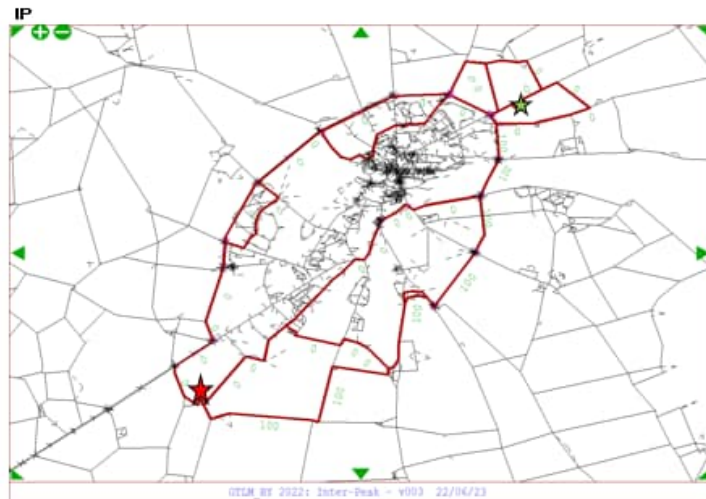
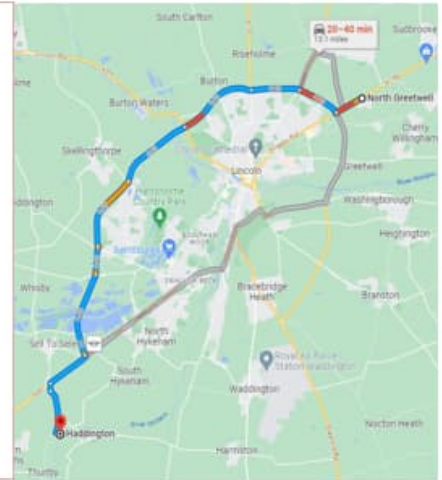
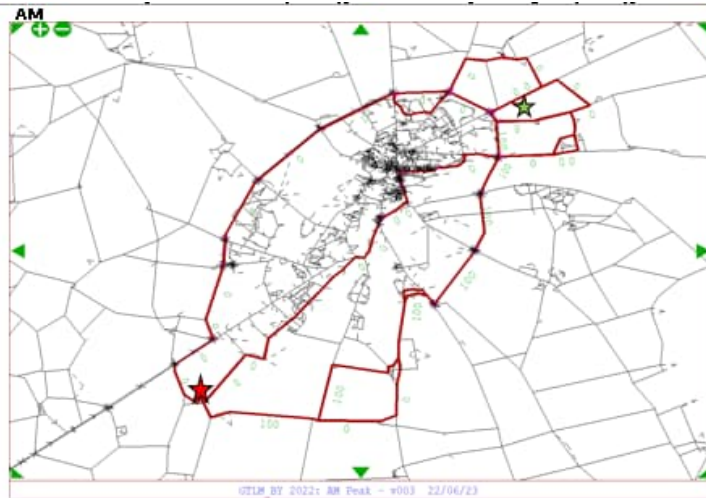
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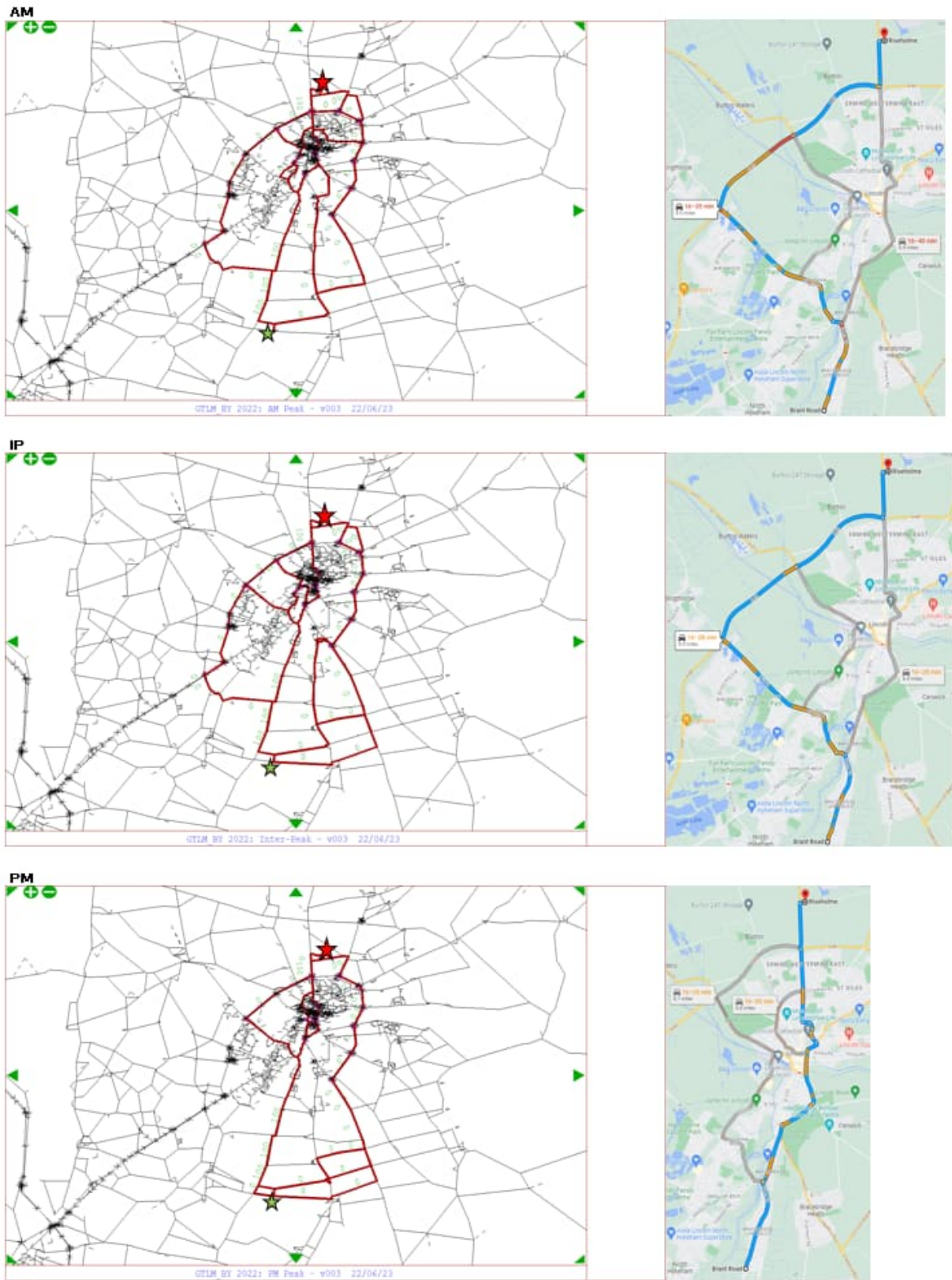
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From Zone 350 [North Greetwell (Site 4)] To Zone 542 [Haddington (Site 1)] - User Class 1 [Business]

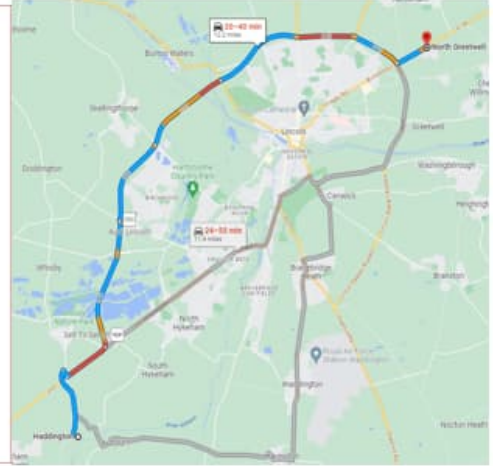
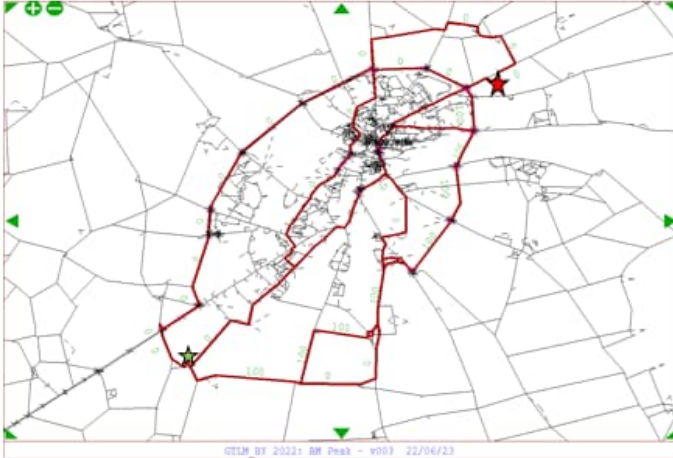


From Zone 539 [Brant Road (Site 5)] To Zone 363 [Riseholme (Site 2)] - User Class 1 [Business]

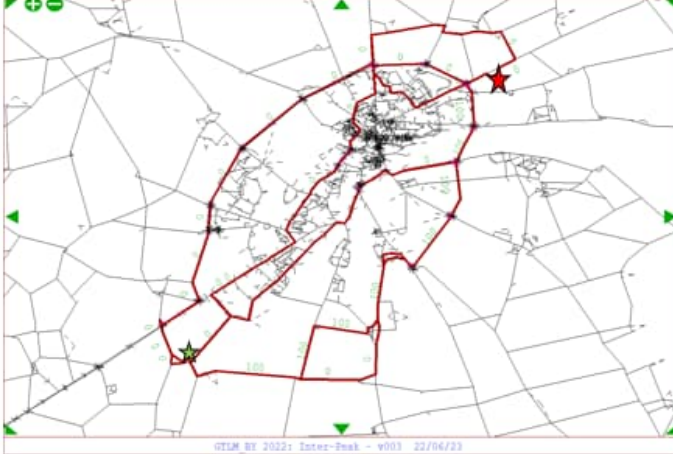


From Zone 542 [Haddington (Site 1)] To Zone 350 [North Greetwell (Site 4)] - User Class 1 [Business]

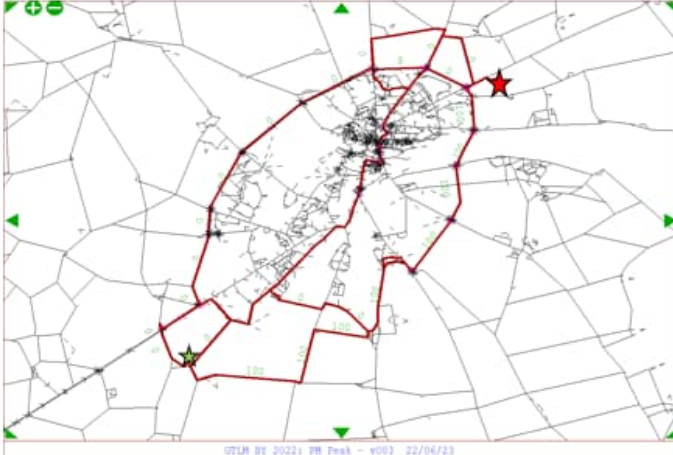
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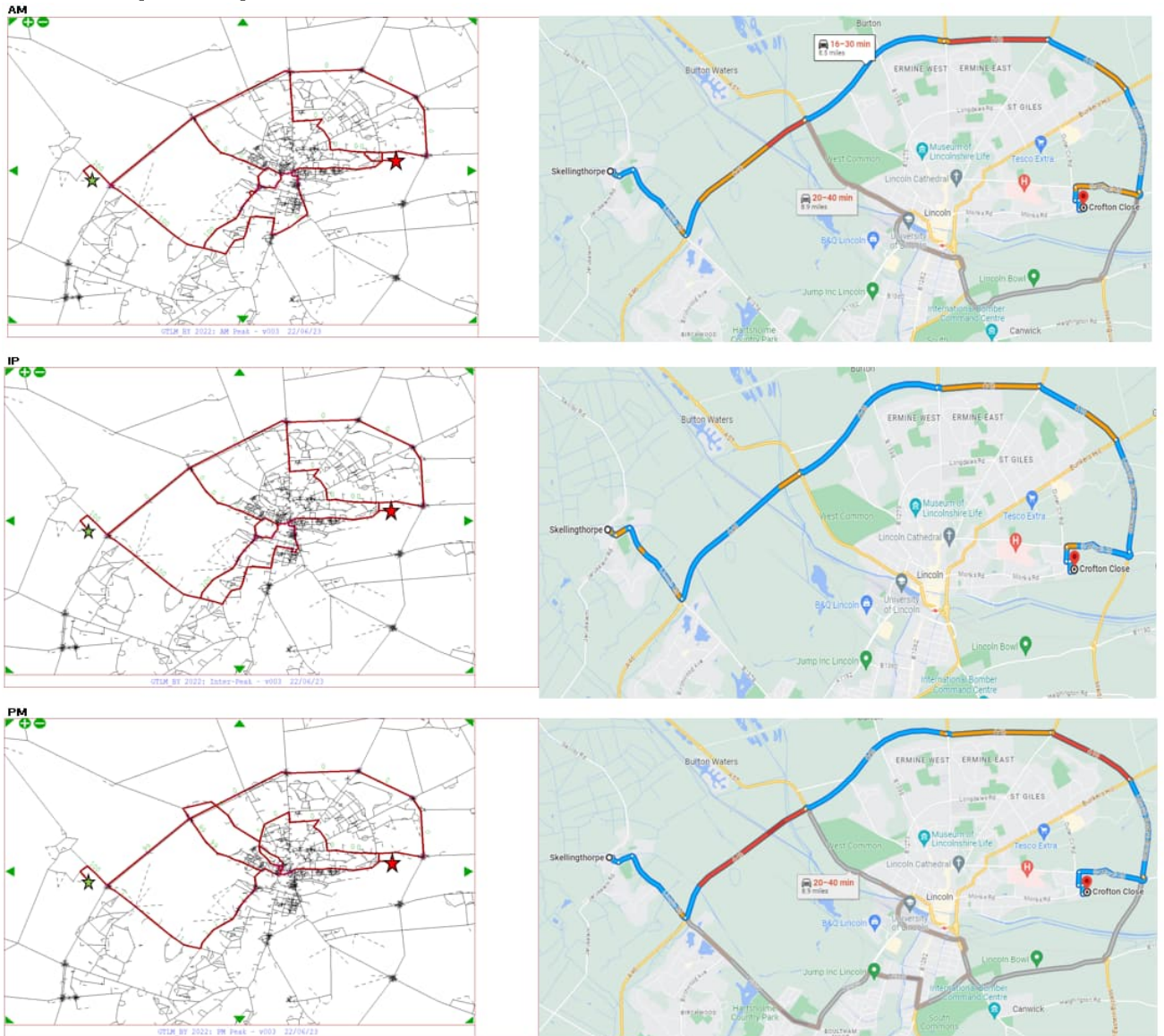
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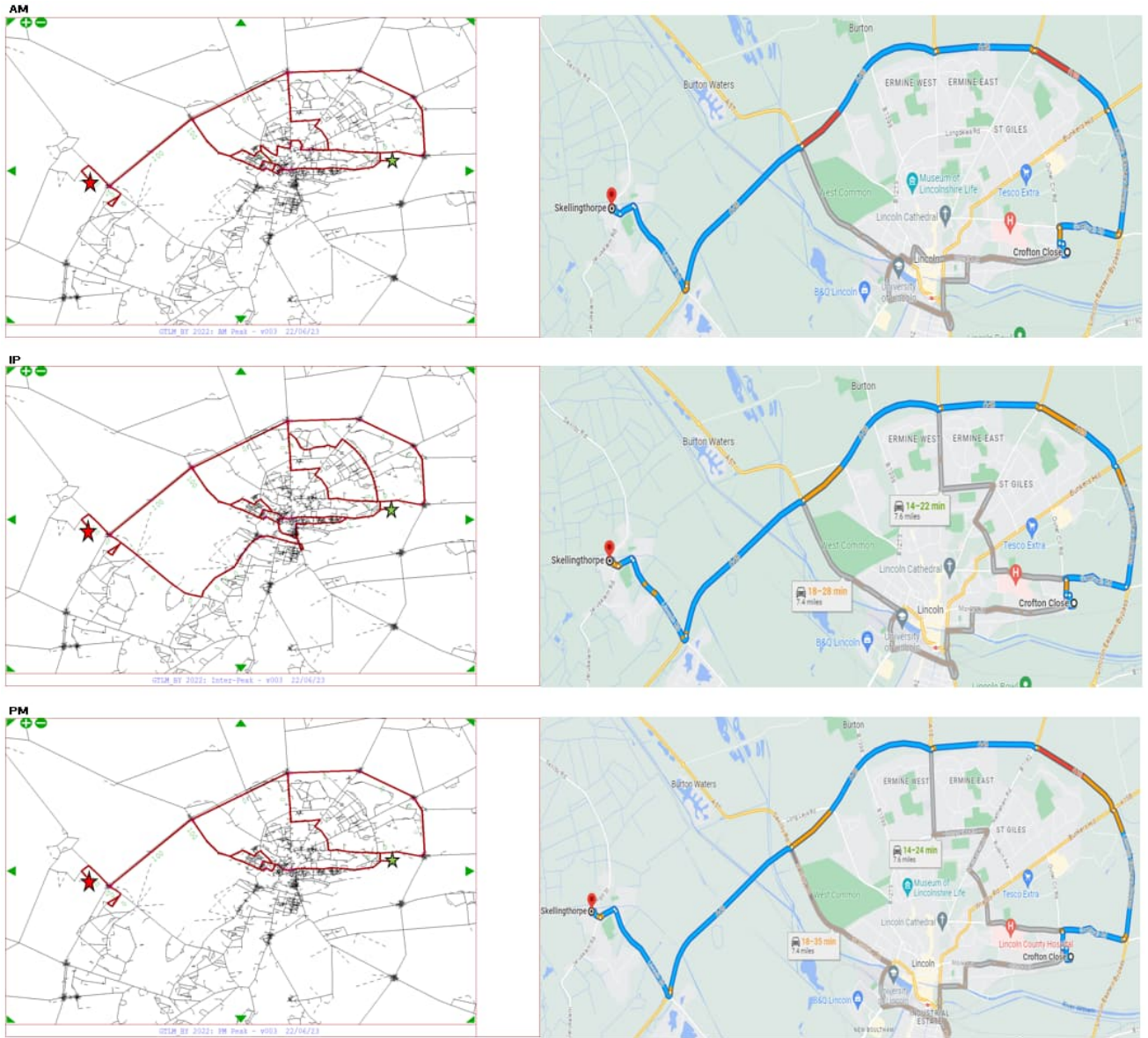
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From Zone 475 [Skellingthorpe (Site 10)] To Zone 892 [Lincoln Eastern Bypass - North Delph (Site 11)] - User Class 1 [Business]

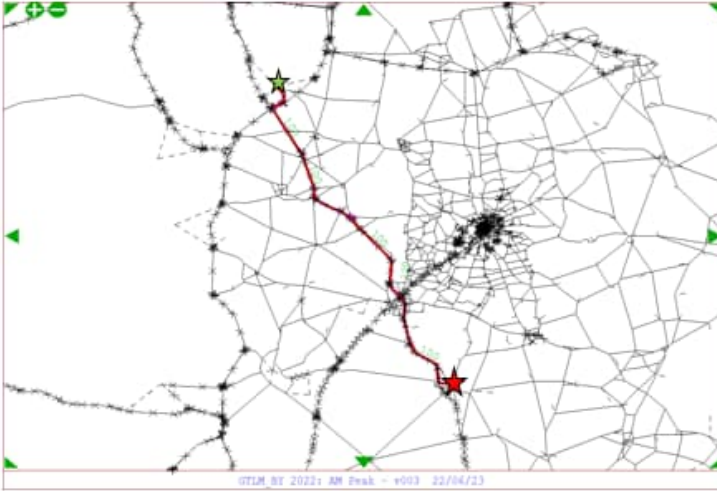


From Zone 892 [Crofton Road (Site 11)] To Zone 475 [Skellingthorpe (Site 10)] - User Class 1 [Business]

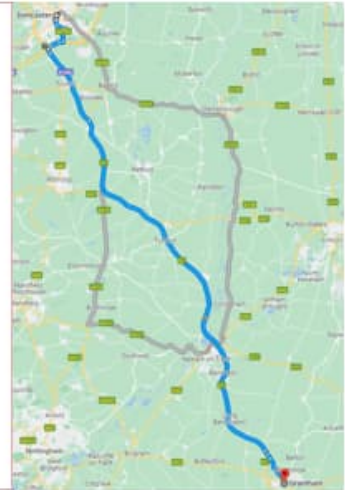
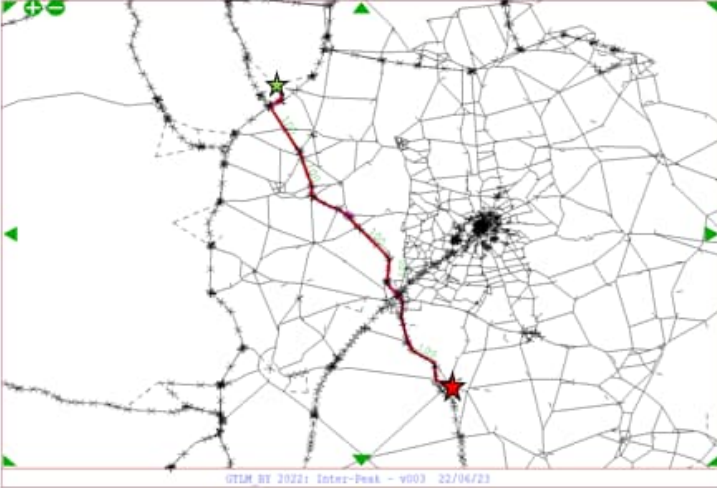


From Zone 27 [Doncaster] To Zone 190 [Grantham] - User Class 1 [Business]

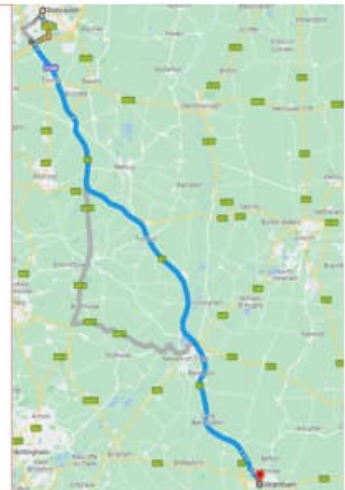
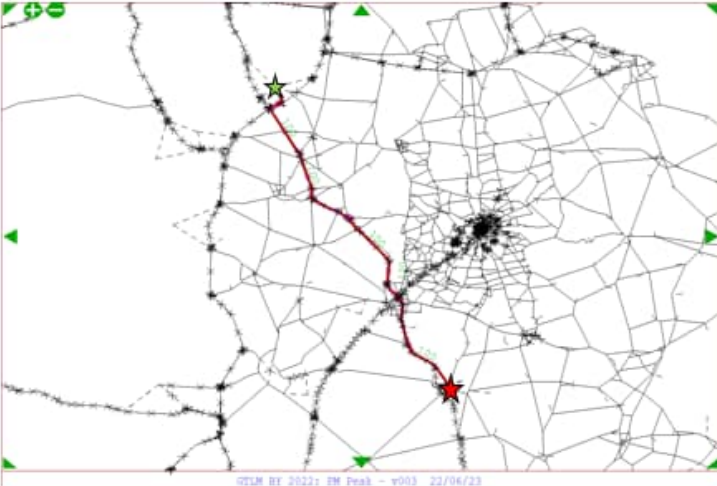
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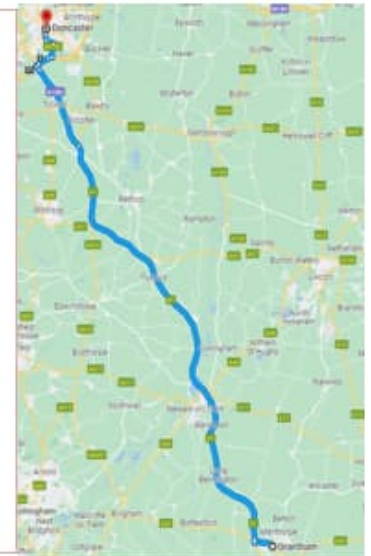
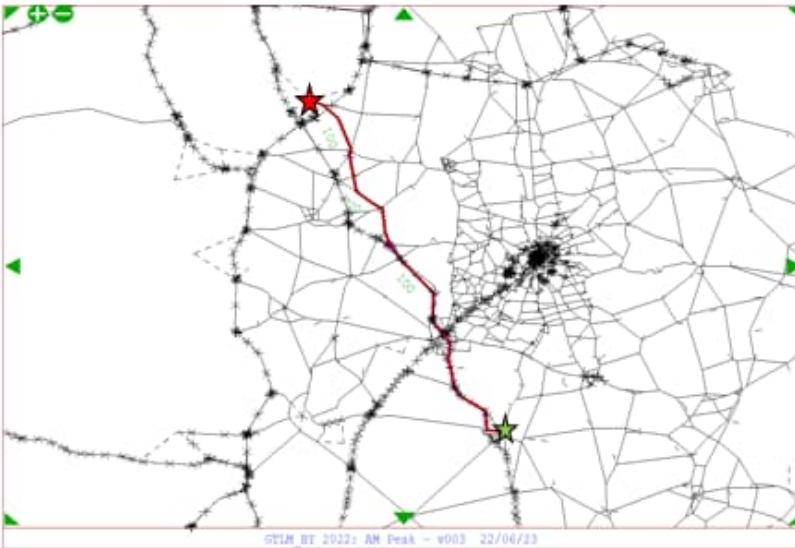
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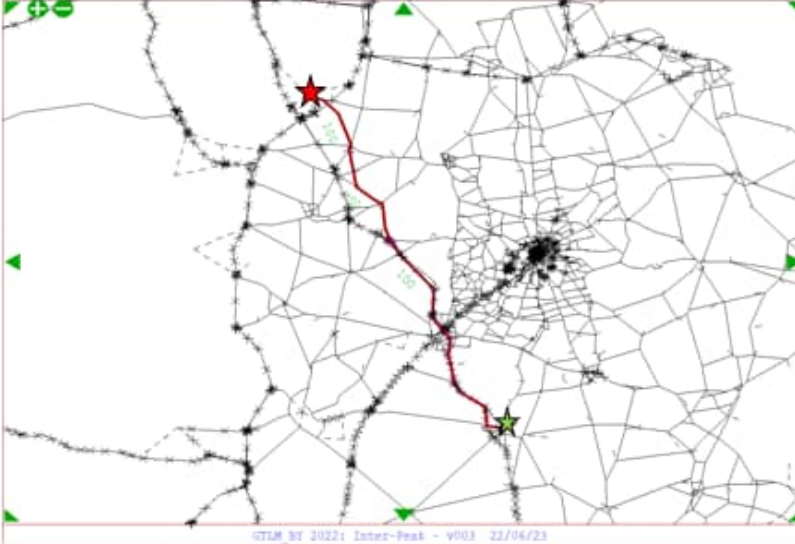


From Zone 190 [Grantham] To Zone 27 [Doncaster] - User Class 1 [Business]

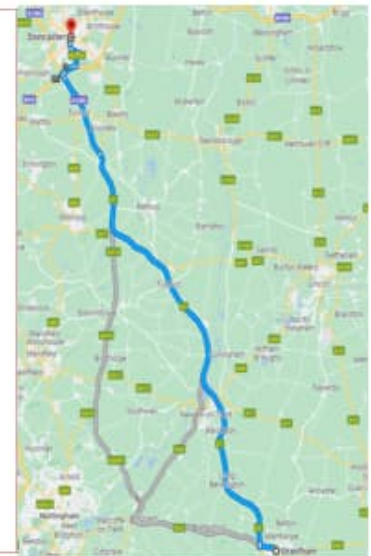
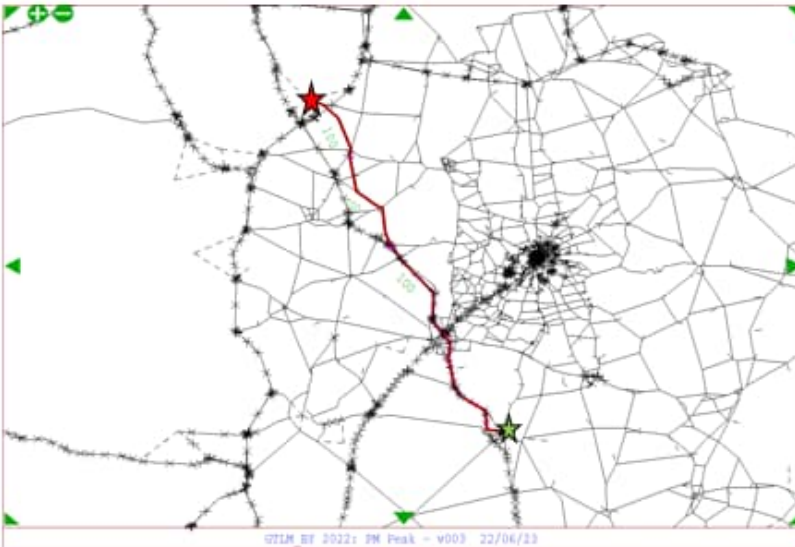
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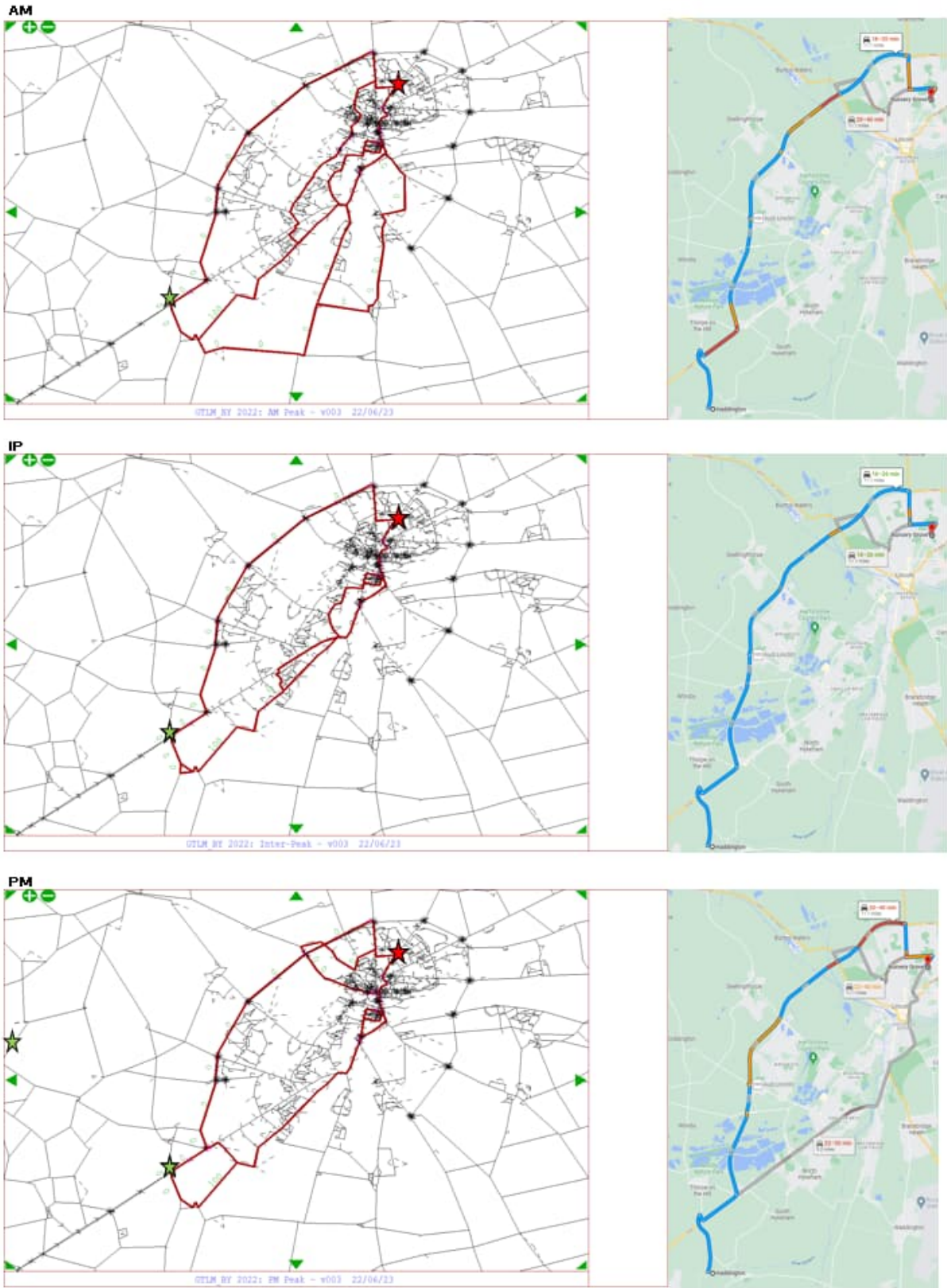
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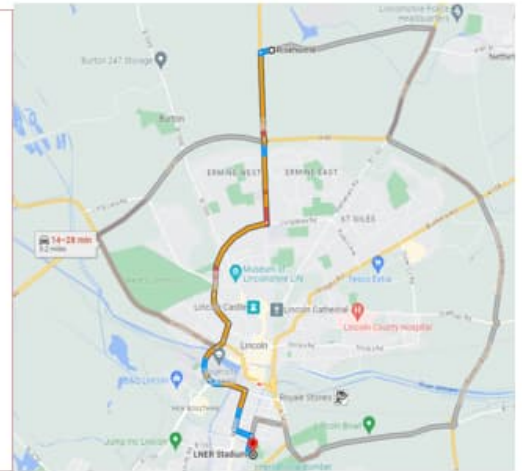
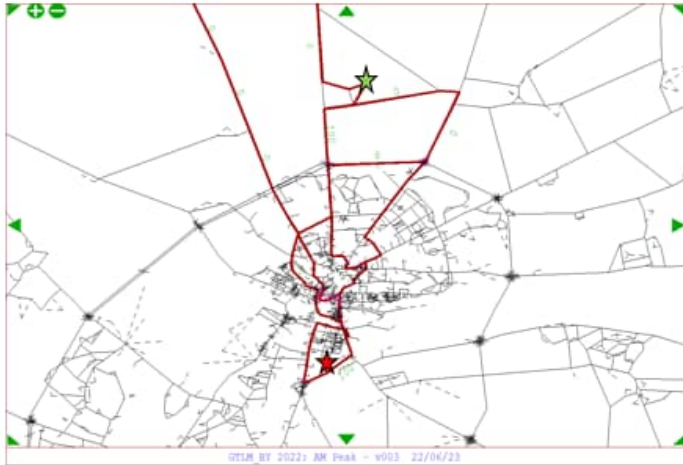


From Zone 542 [Haddington] To Zone 749 [Nursery Grove] - User Class 1 [Business]

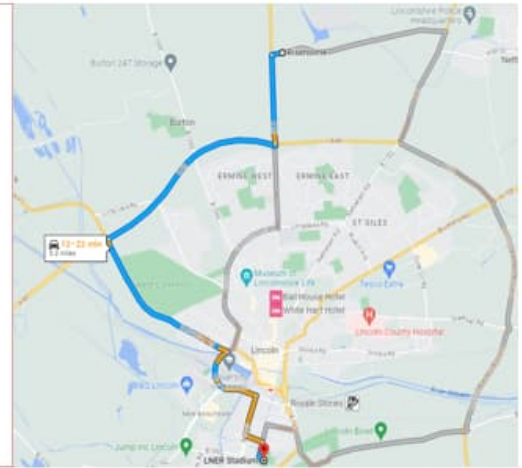


From Zone 363 [Riseholme] To Zone 840 [LNER Stadium] - User Class 1 [Business]

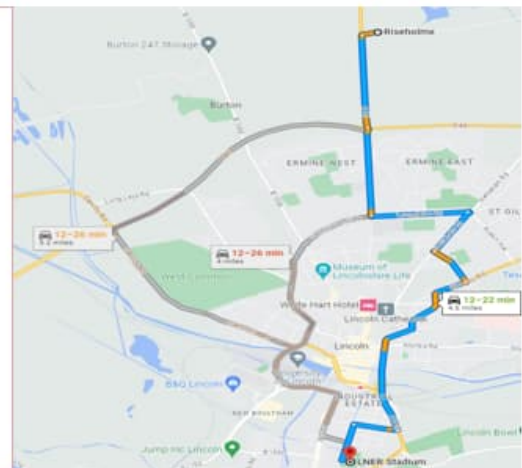
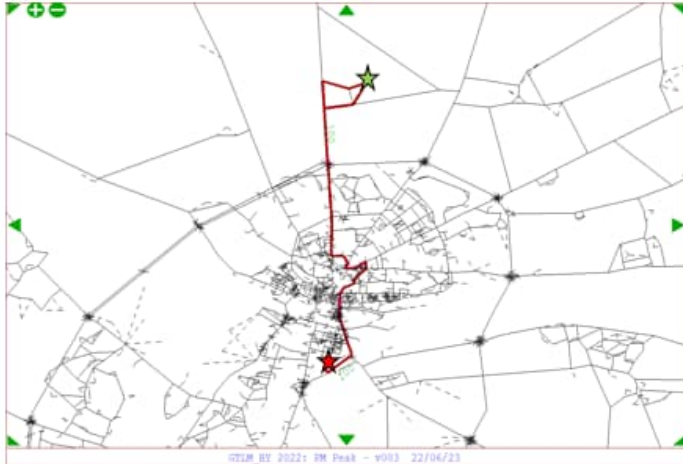
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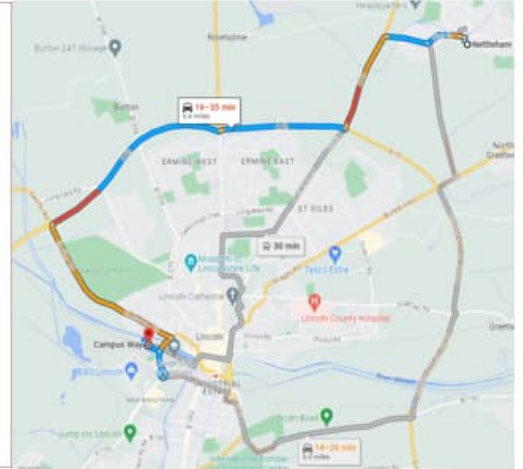
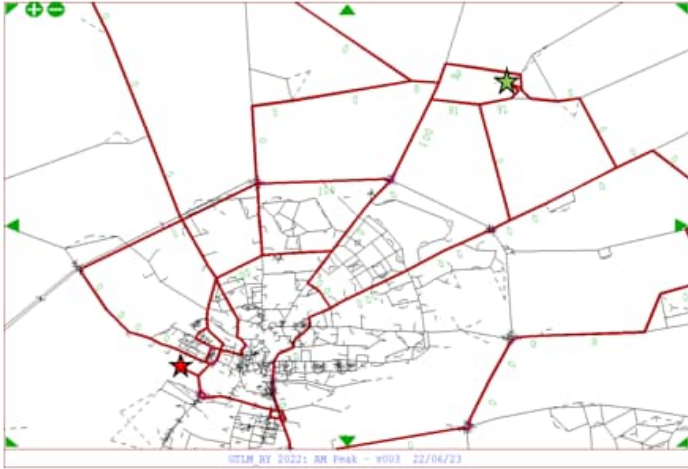


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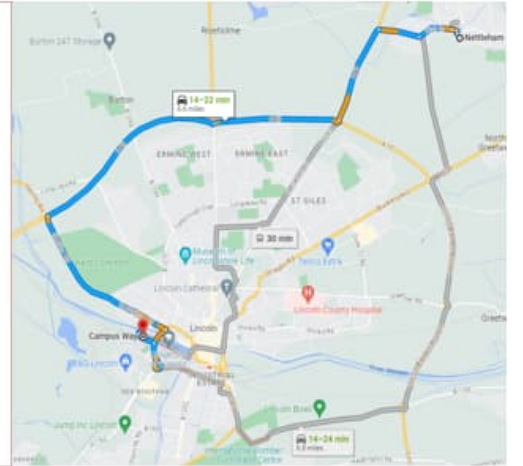
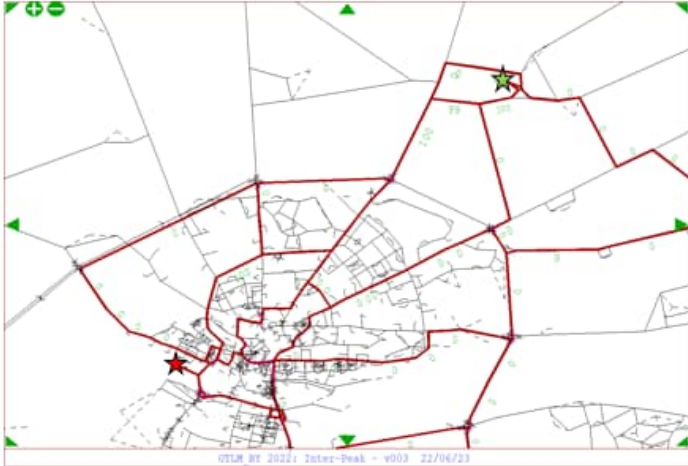


From Zone 303 [Nettleham] To Zone 778 [Campus Way] - User Class 1 [Business]

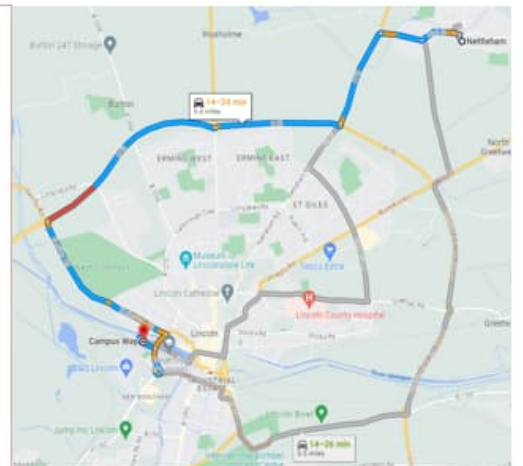
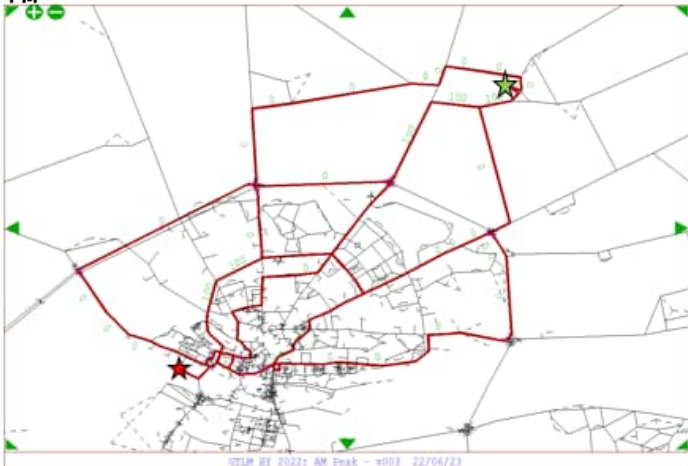
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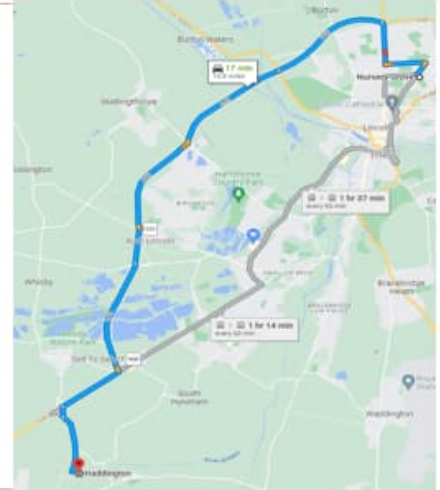
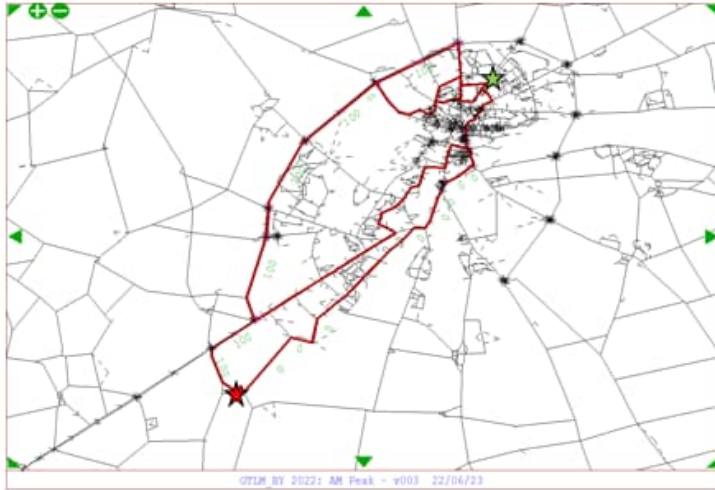


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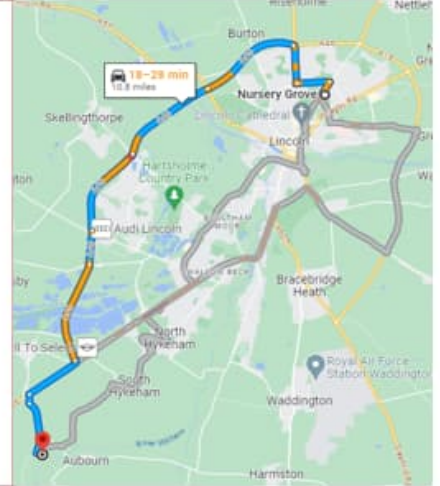
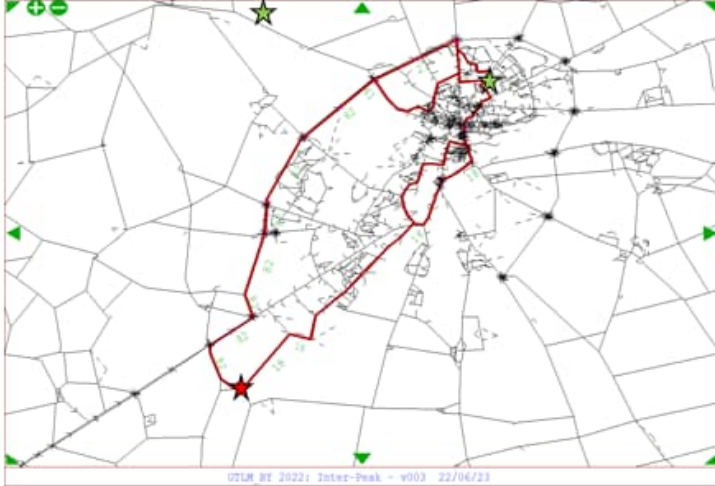


From Zone 749 [Nursery Grove] To Zone 542 [Haddington] - User Class 1 [Business]

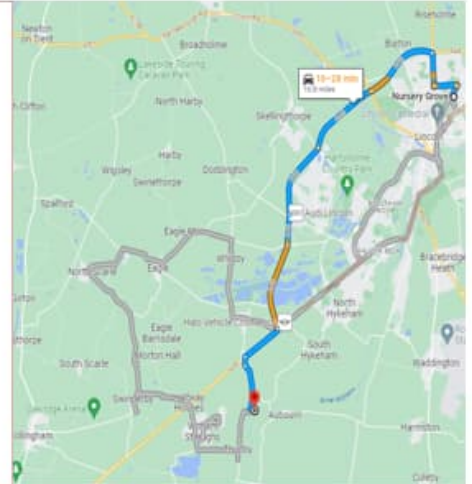
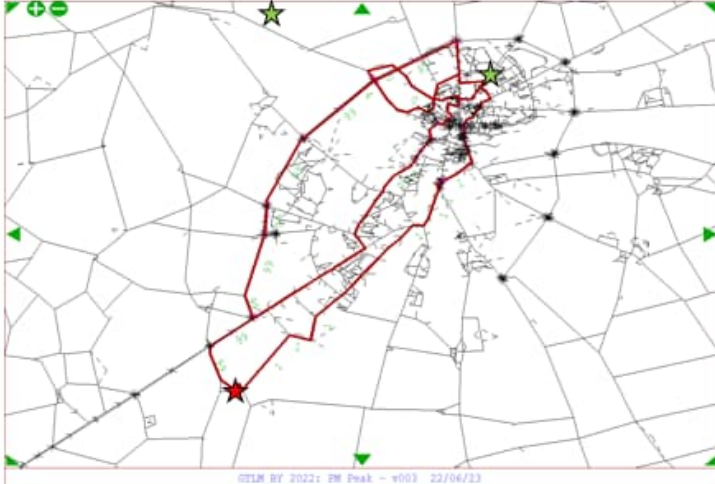
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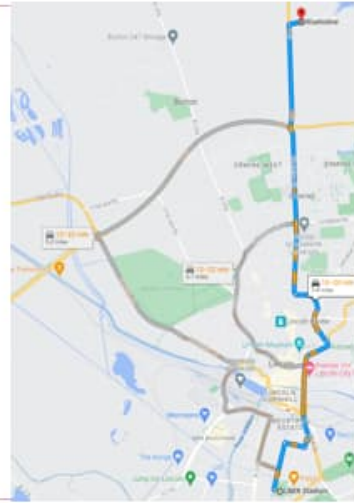
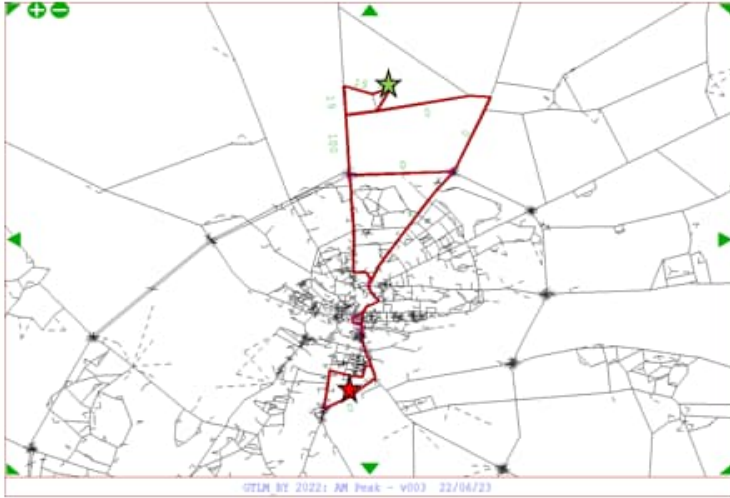


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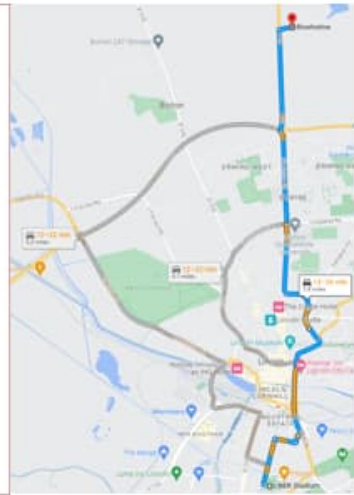
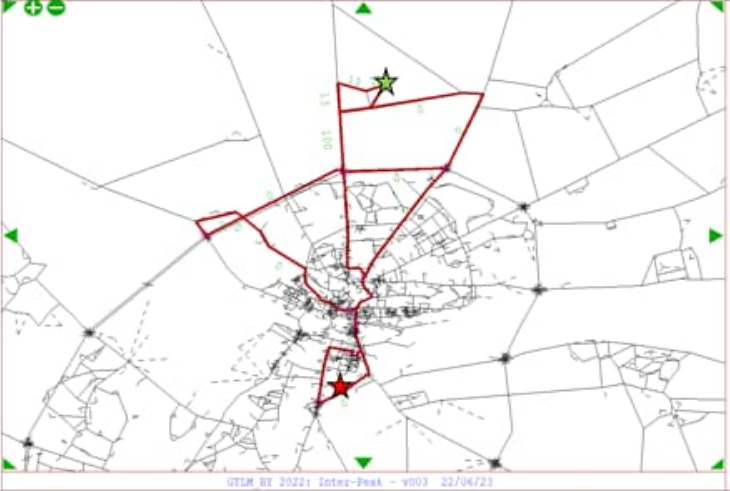


From Zone 840 [LNER Stadium] To Zone 363 [Riseholme] - User Class 1 [Business]

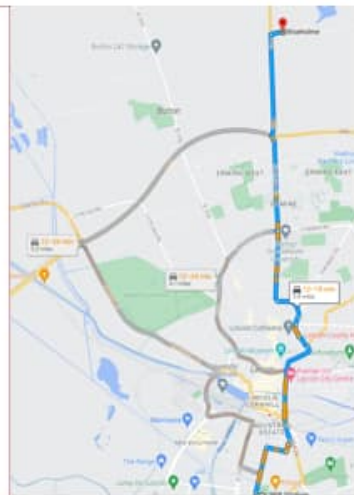
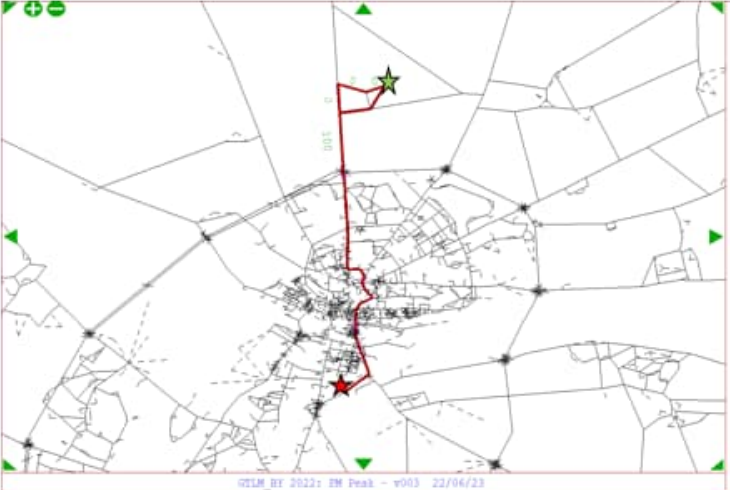
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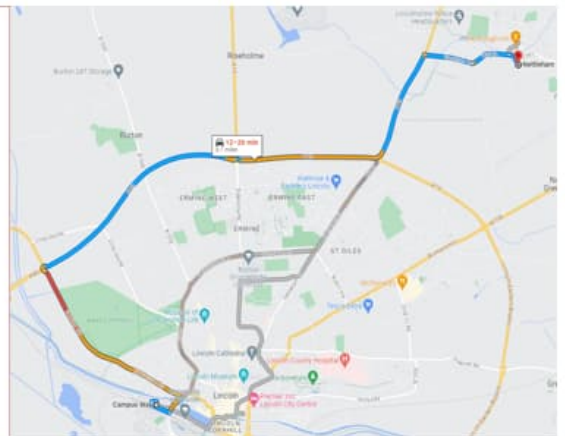
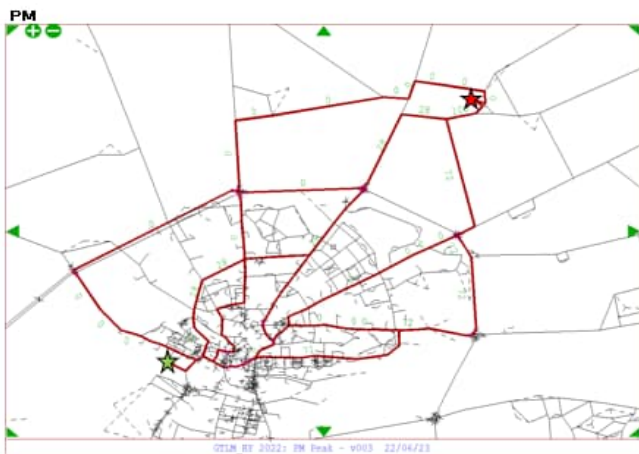
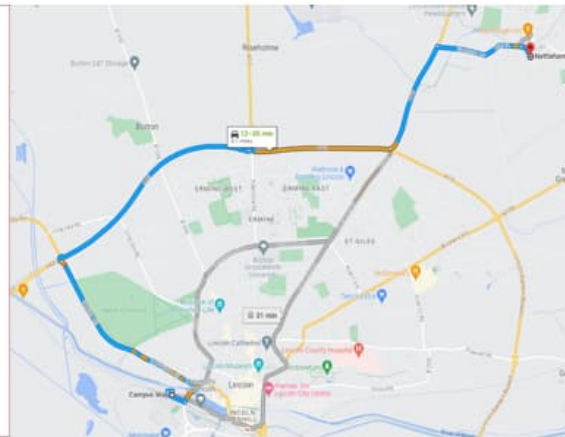
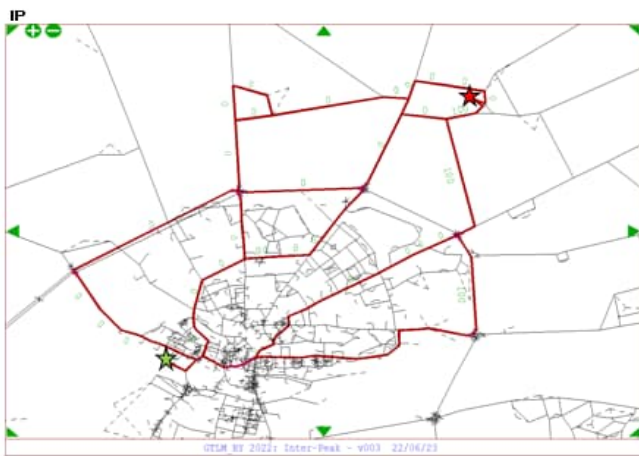
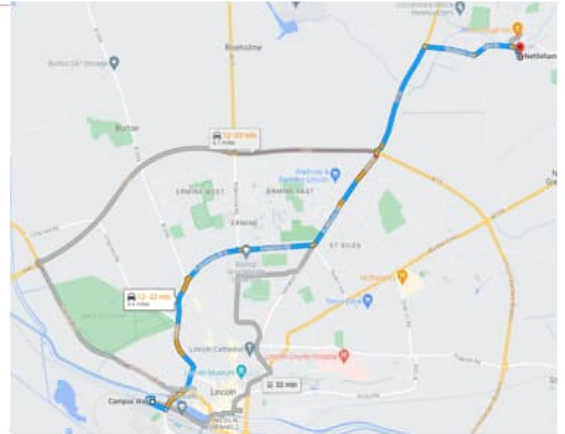
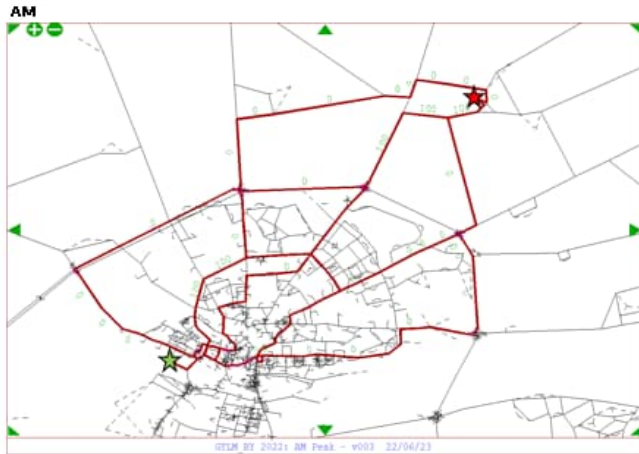
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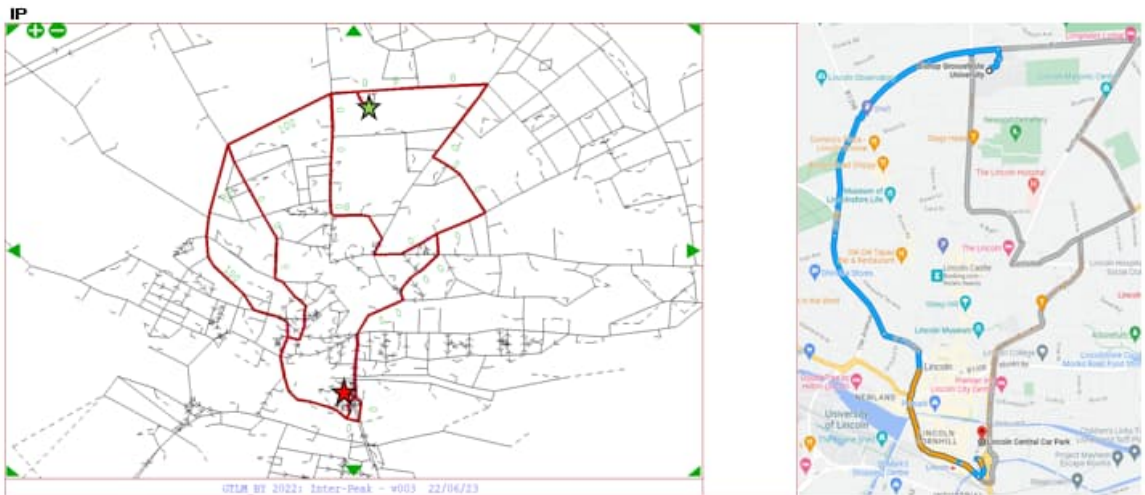
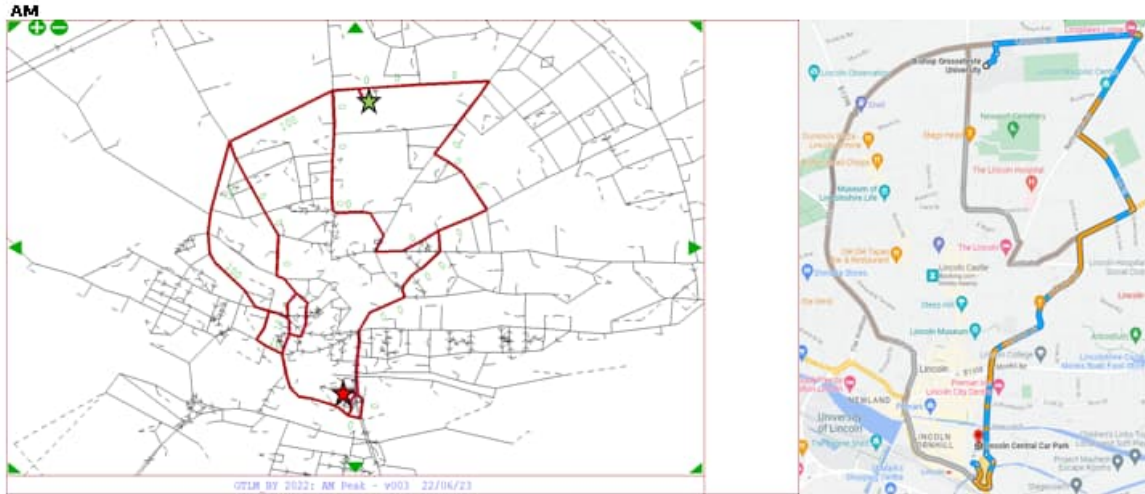
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From Zone 778 [Campus Way] To Zone 303 [Nettleham] - User Class 1 [Business]

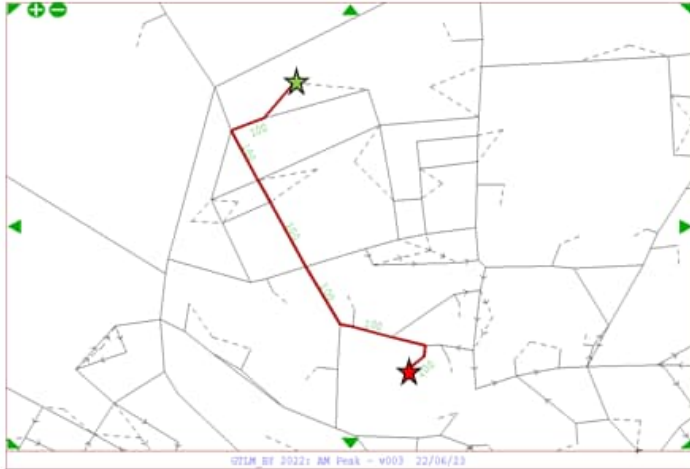


From Zone 655 [Bishop Grosseteste University] To Zone 692 [Lincoln Central Car Park] - User Class 1 [Business]

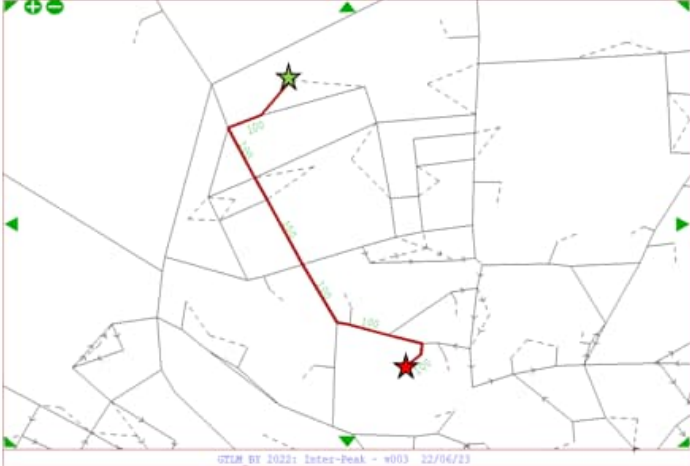


From Zone 699 [Mount Street] To Zone 657 [Lincoln Castle] - User Class 1 [Business]

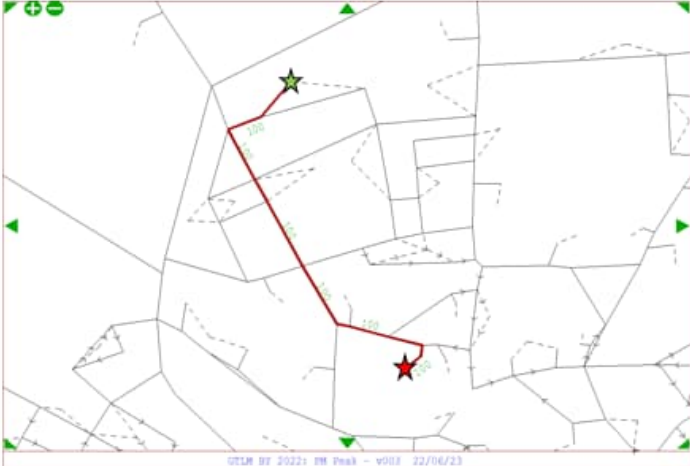
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IP

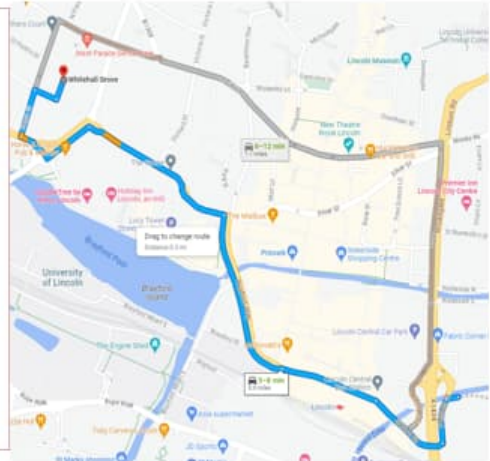
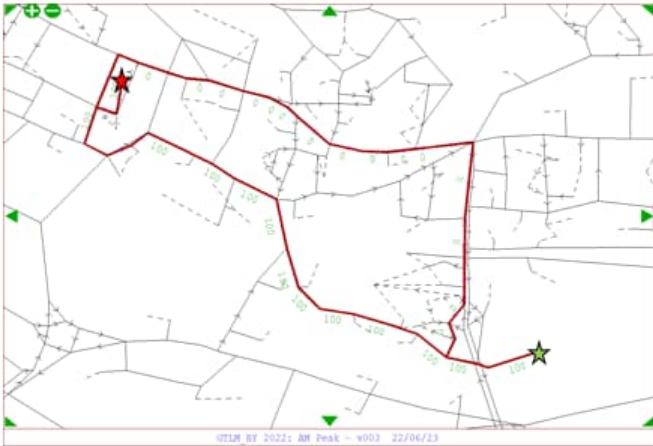


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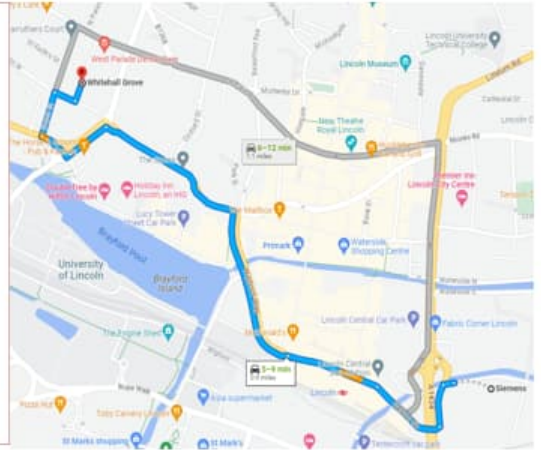


From Zone 731 [Siemens] To Zone 722 [Whitehall Grove] - User Class 1 [Business]

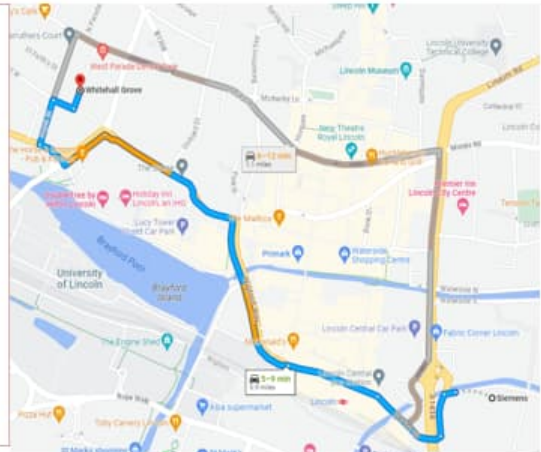
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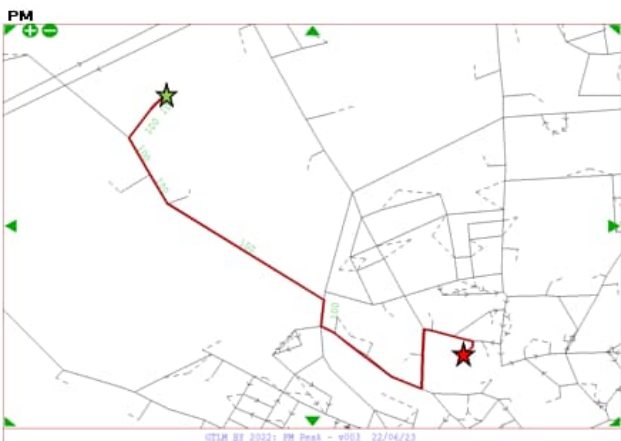
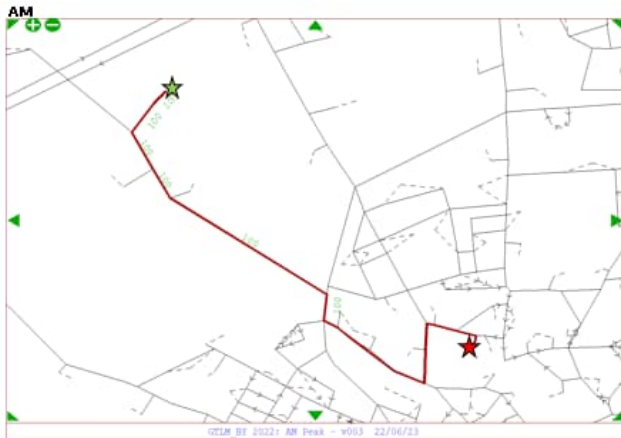
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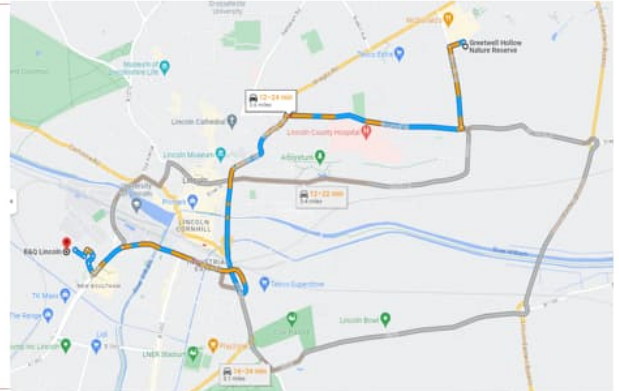


From Zone 628 [St. George's Hospital] To Zone 657 [Lincoln Castle] - User Class 1 [Business]



From Zone 1020 [Greetwell Hollow Nature Reserve] To Zone 789 [New Boultham B&Q] - User Class 1 [Business]

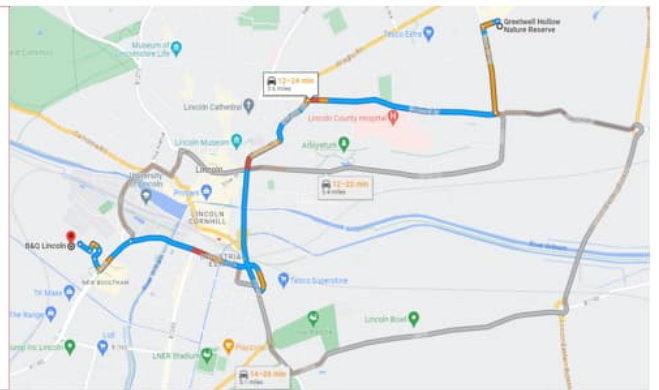
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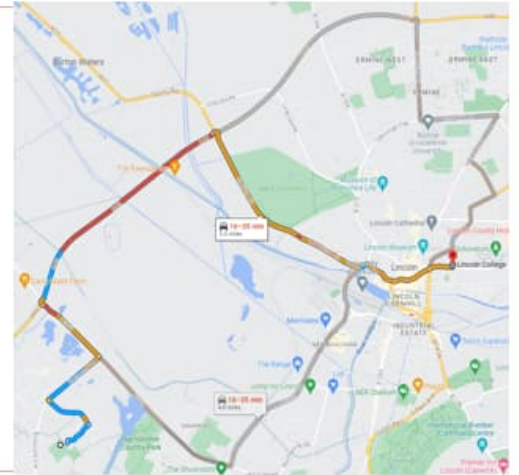
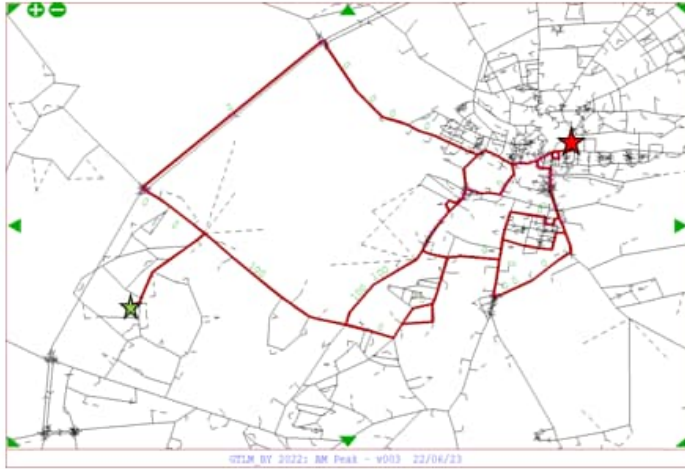


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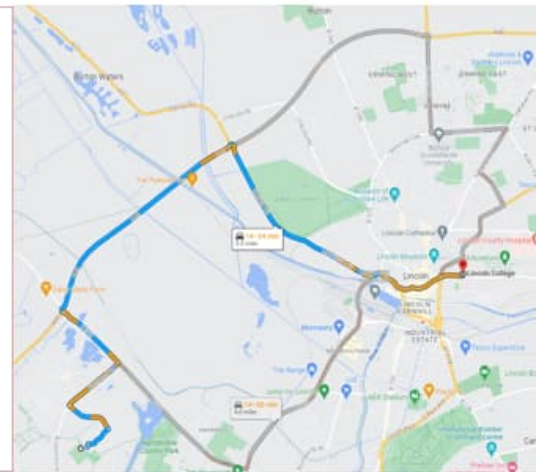
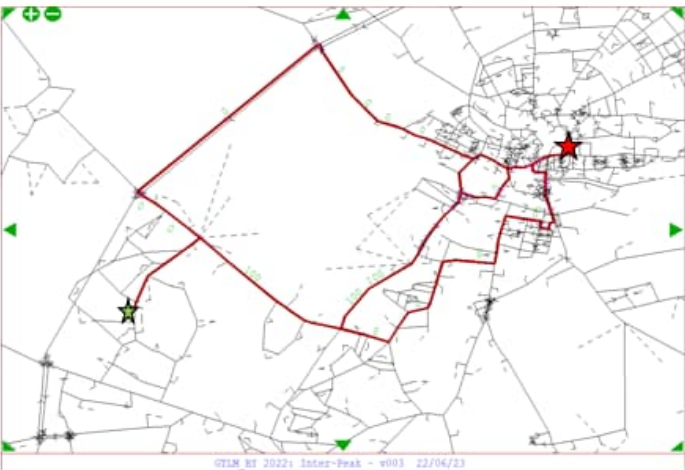


From Zone 826 [Birchwood] To Zone 901 [Lincoln College] - User Class 1 [Business]

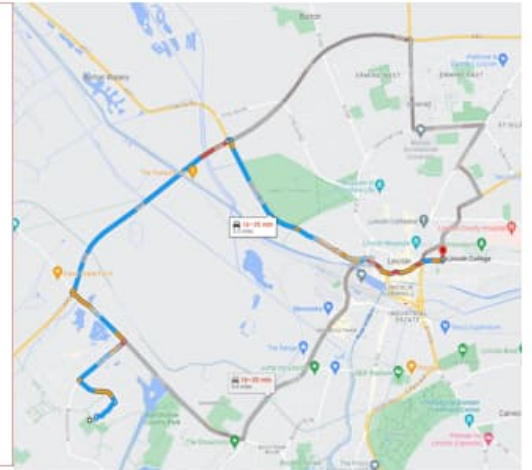
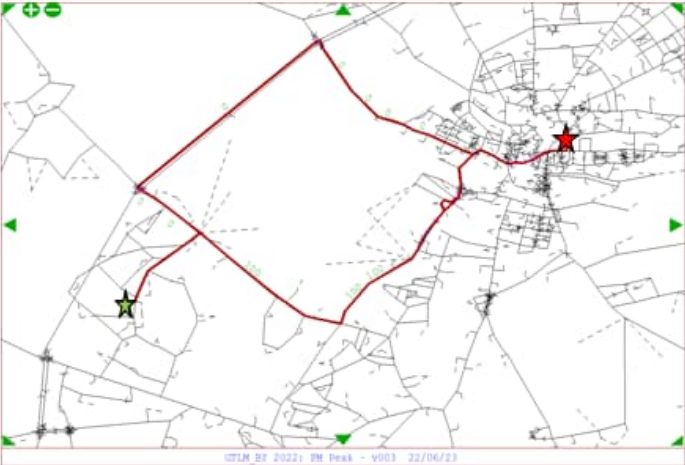
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IP



PM

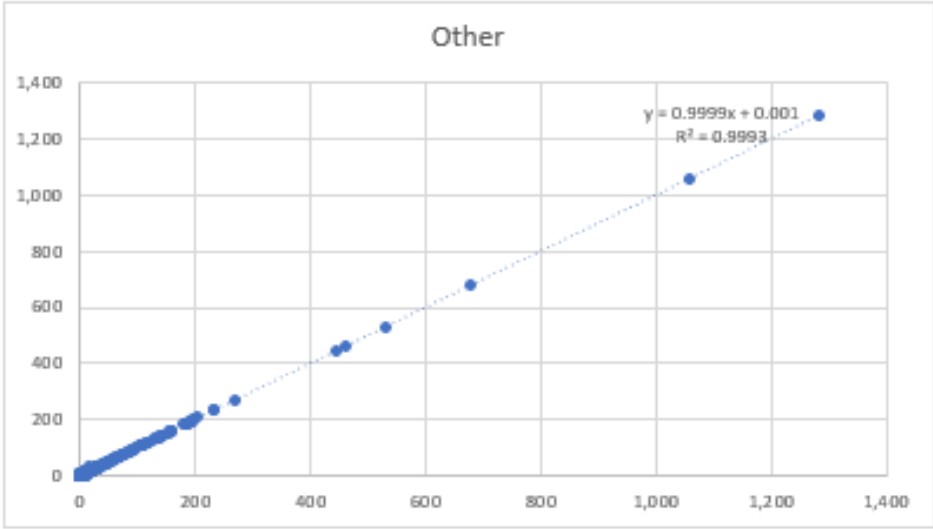
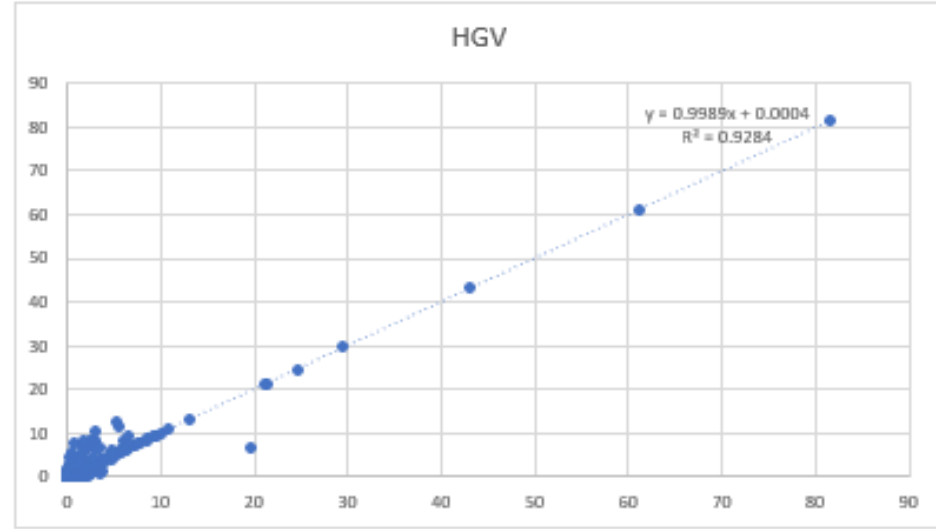
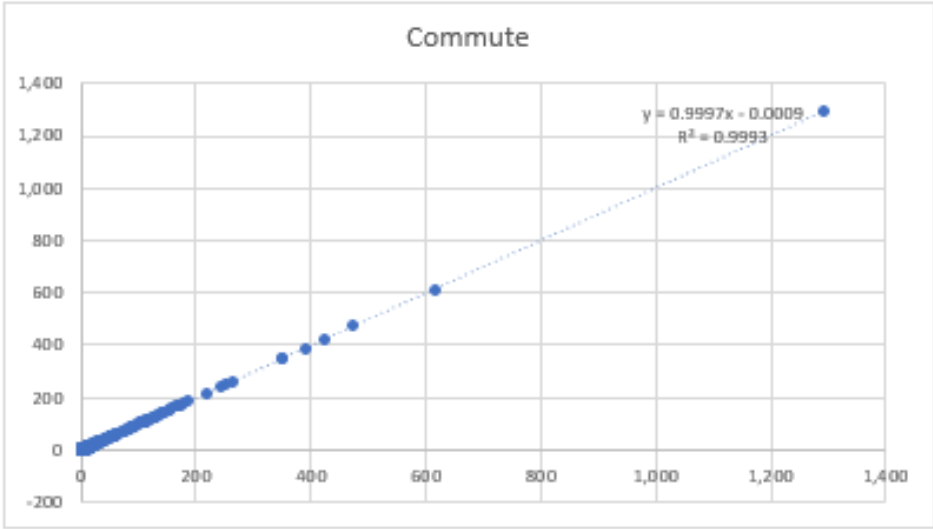
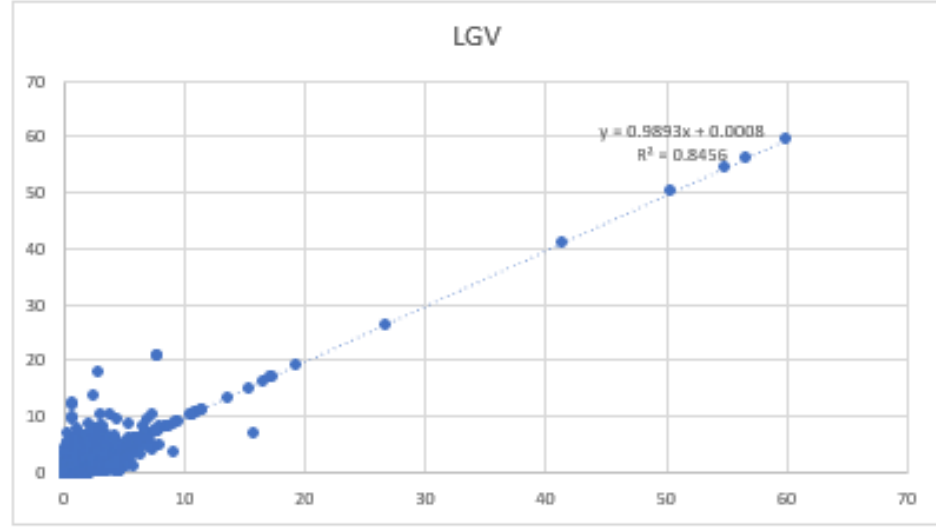
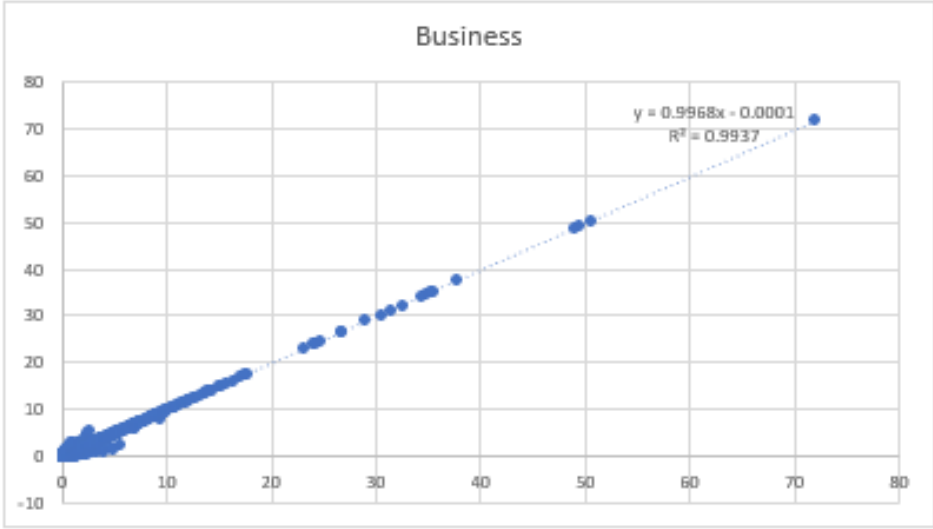




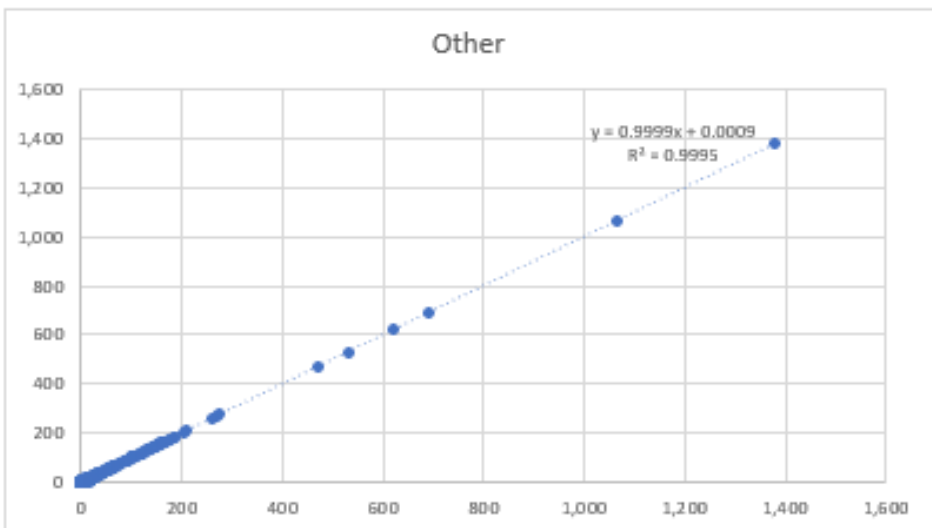
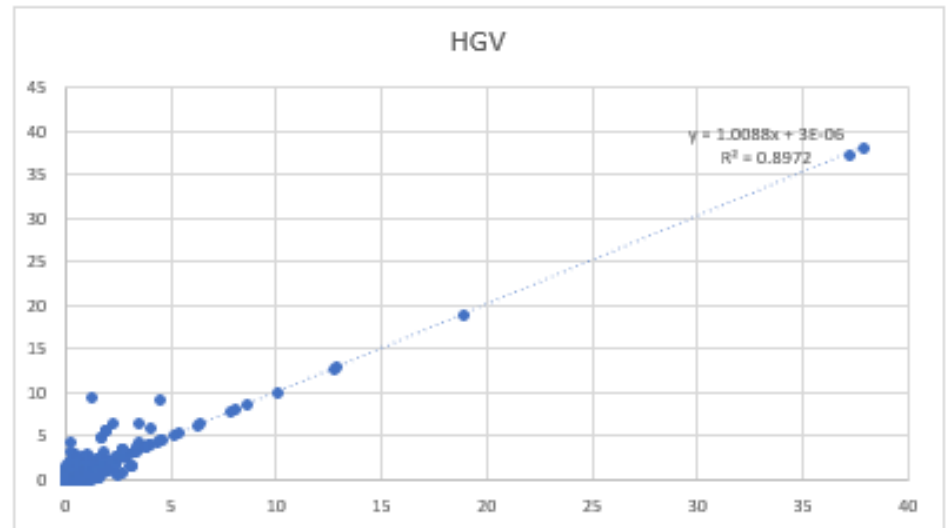
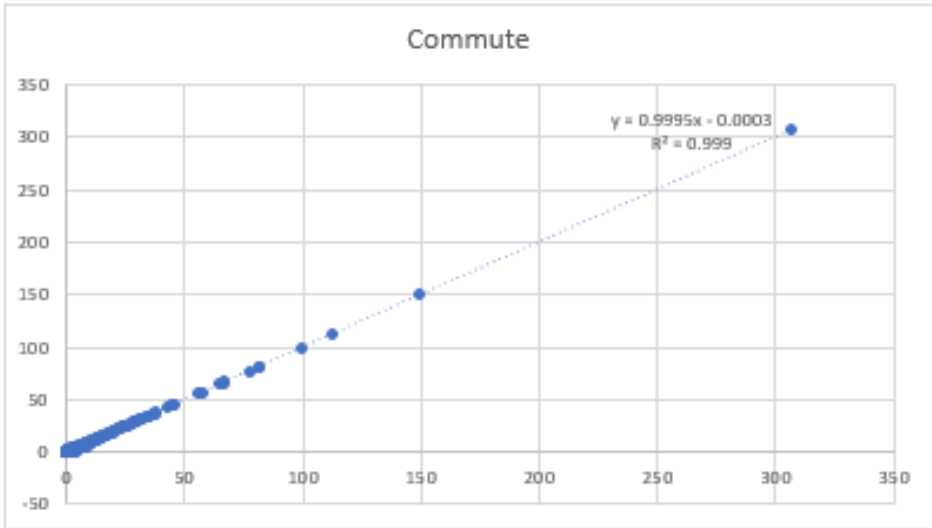
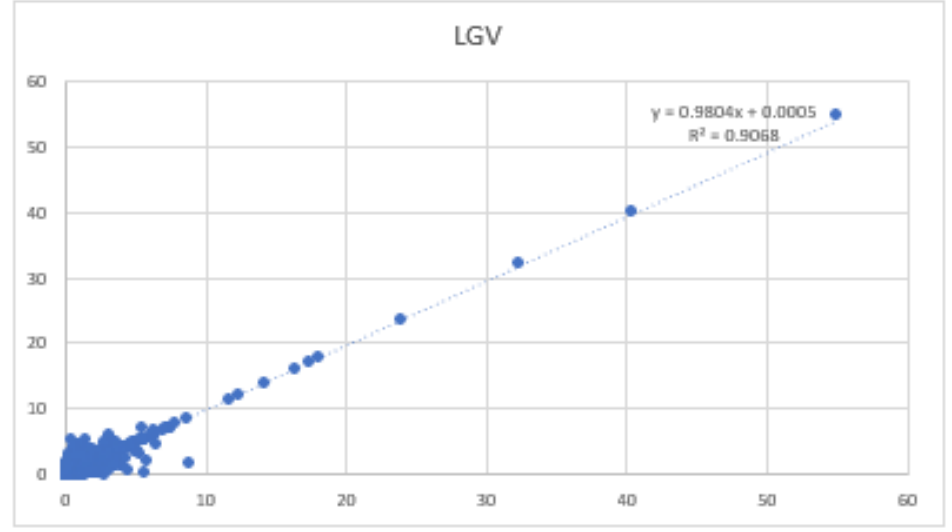
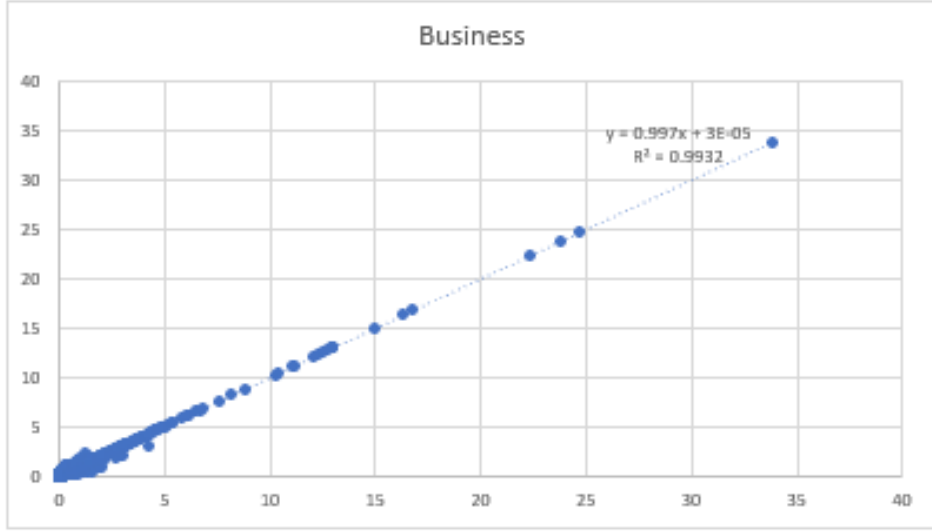
APPENDIX C

IMPACTS OF MATRIX ESTIMATION

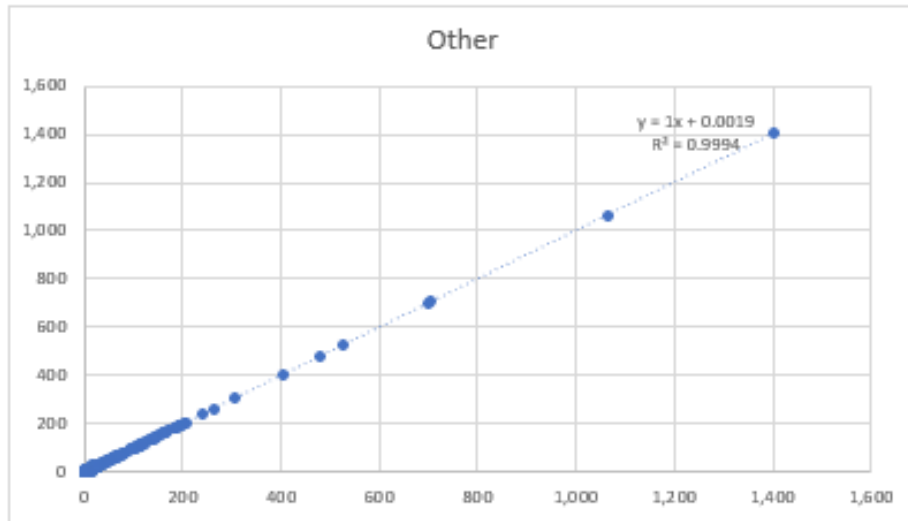
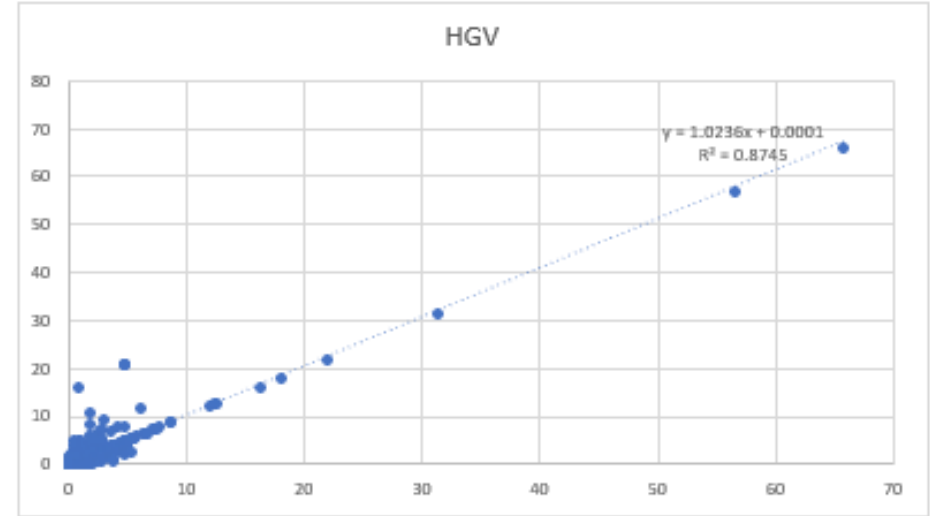
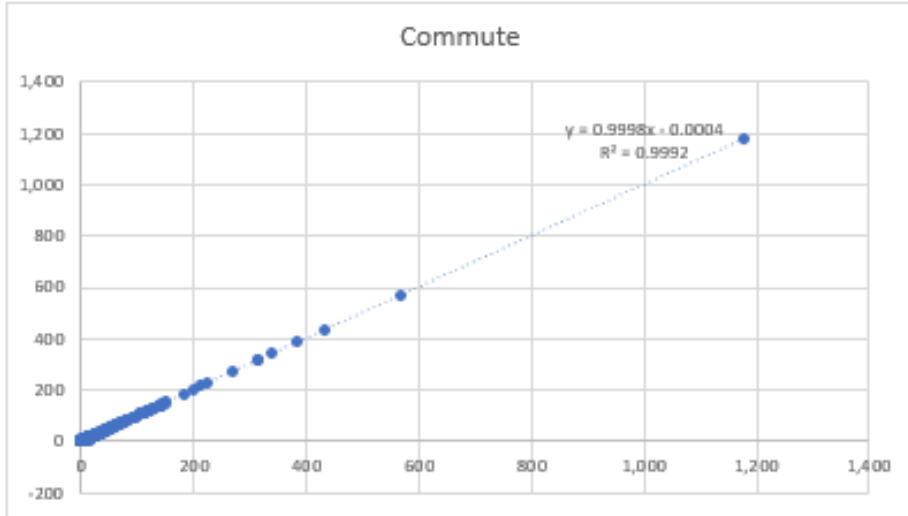
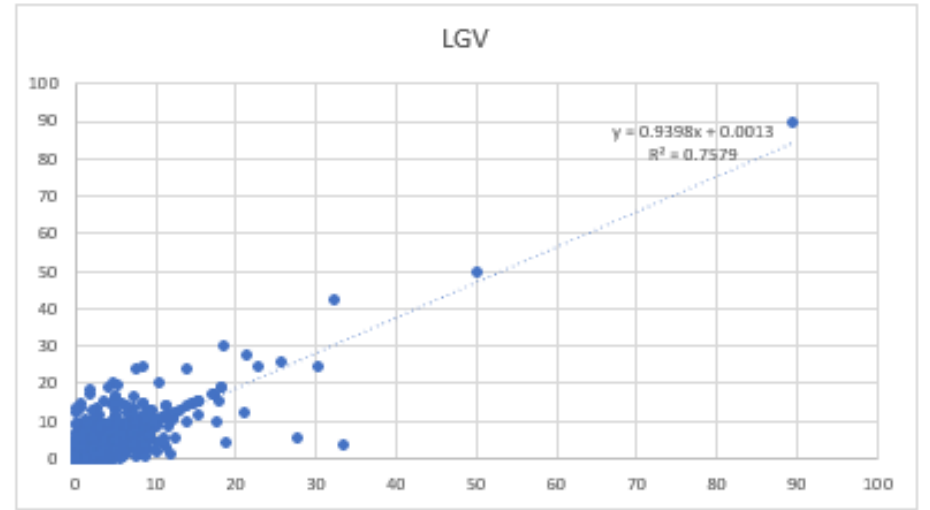
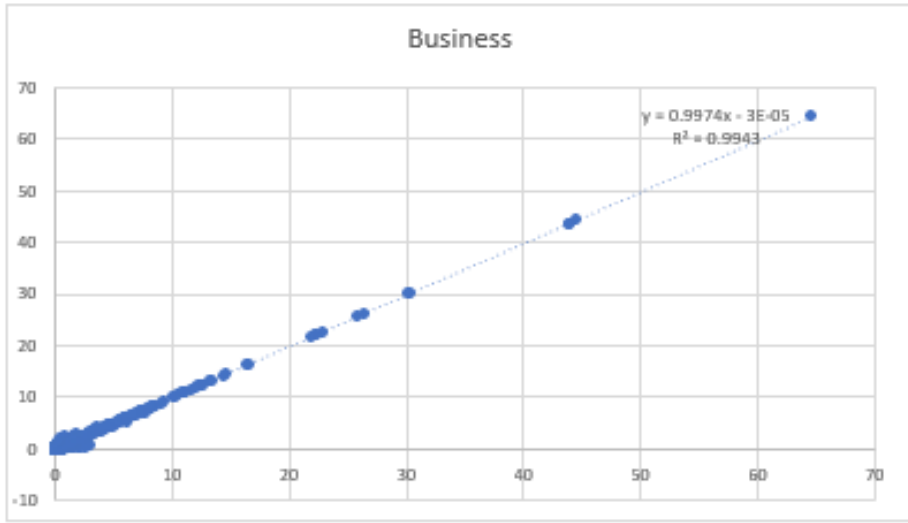
AM Zonal trip end plots: Prior vs Post ME



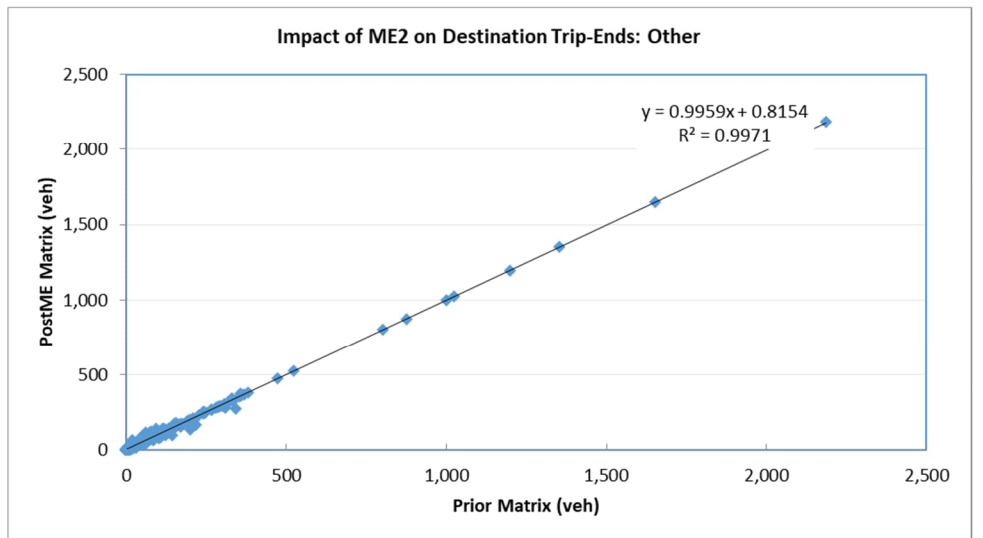
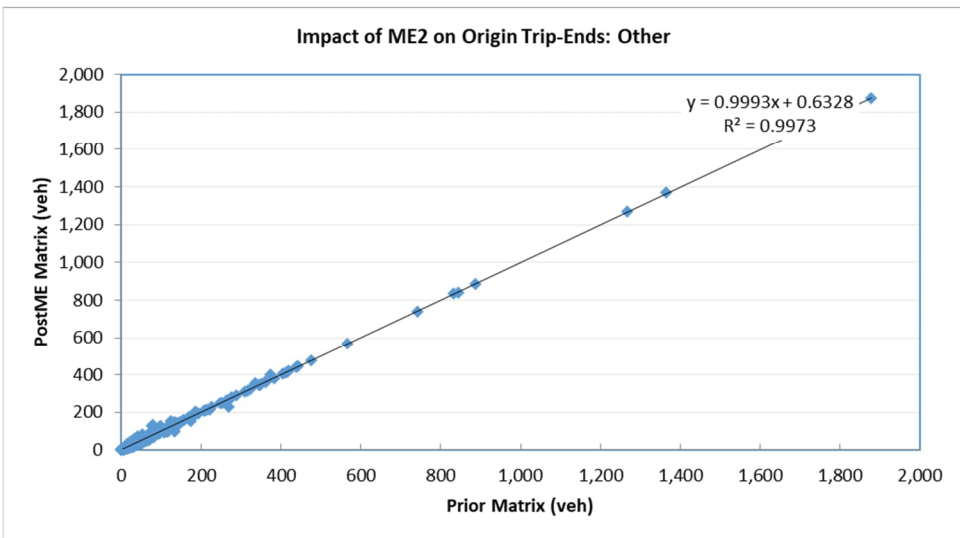
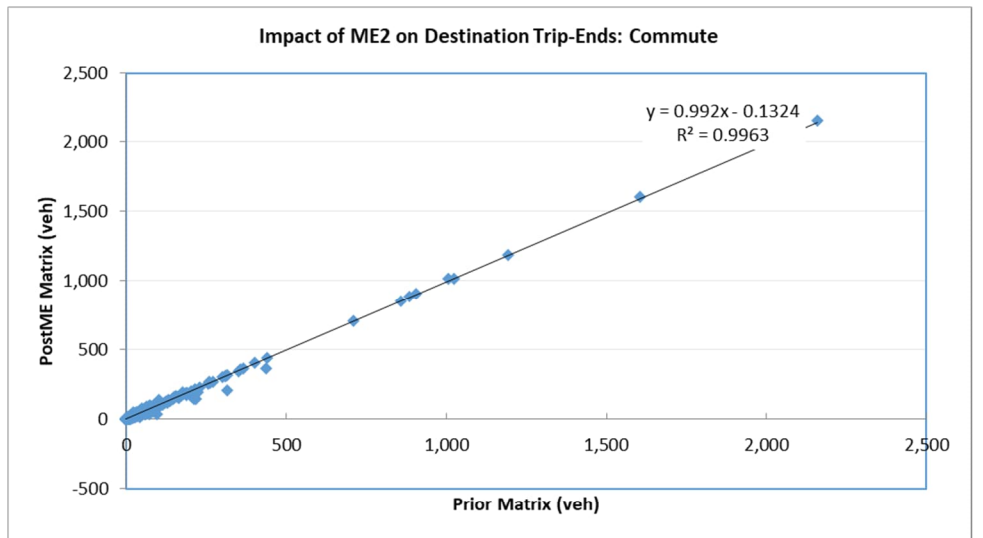
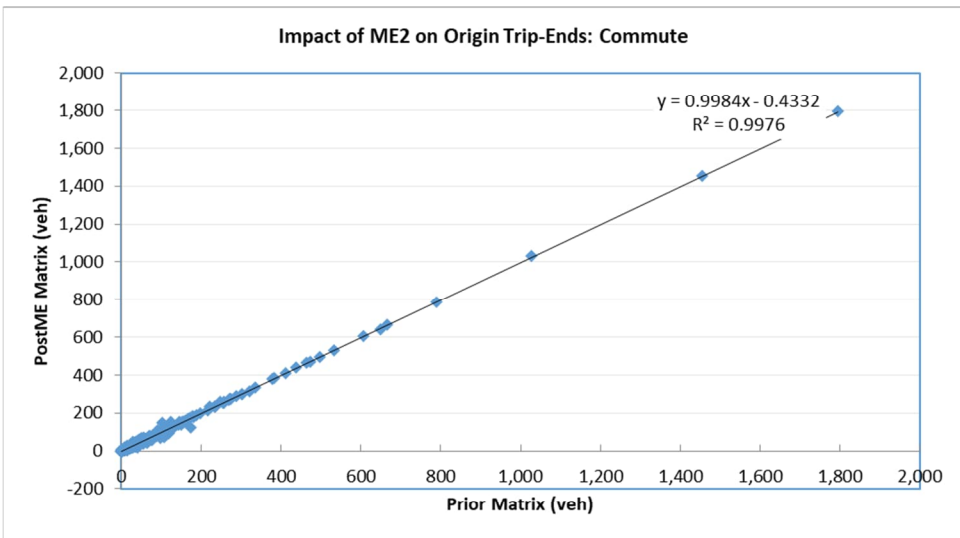
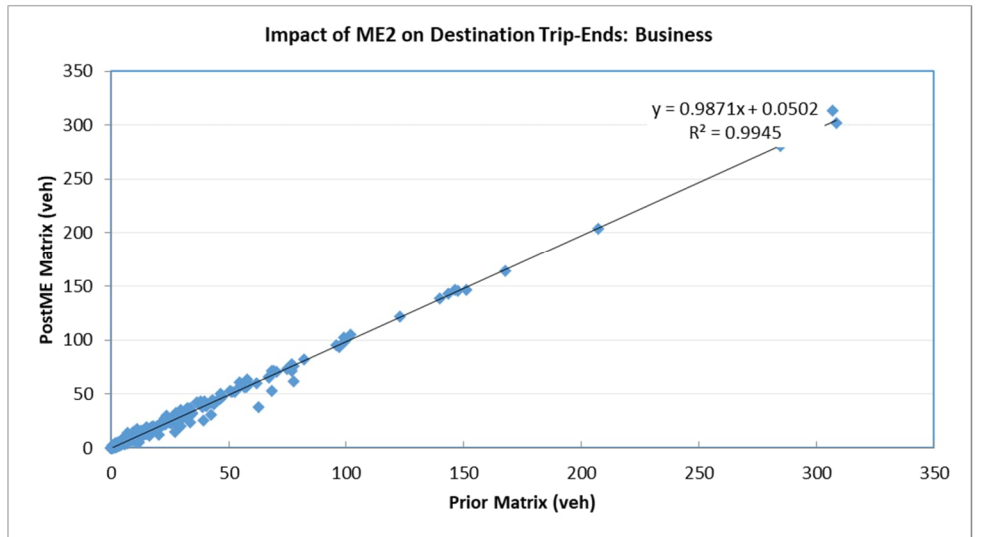
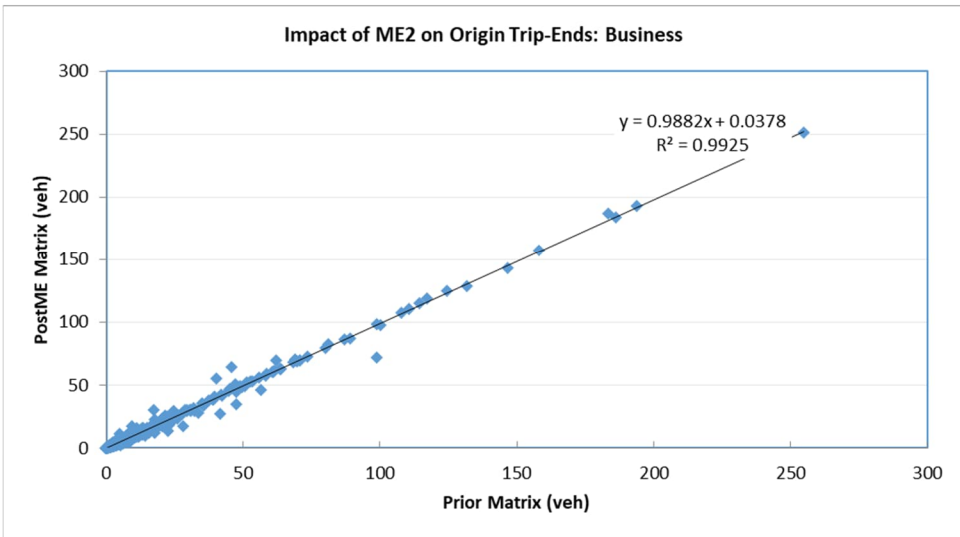
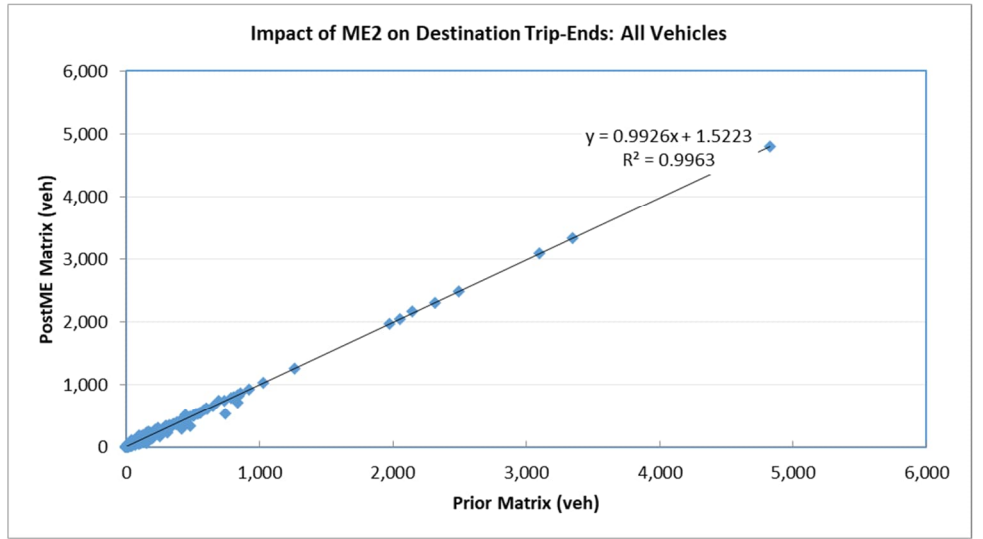
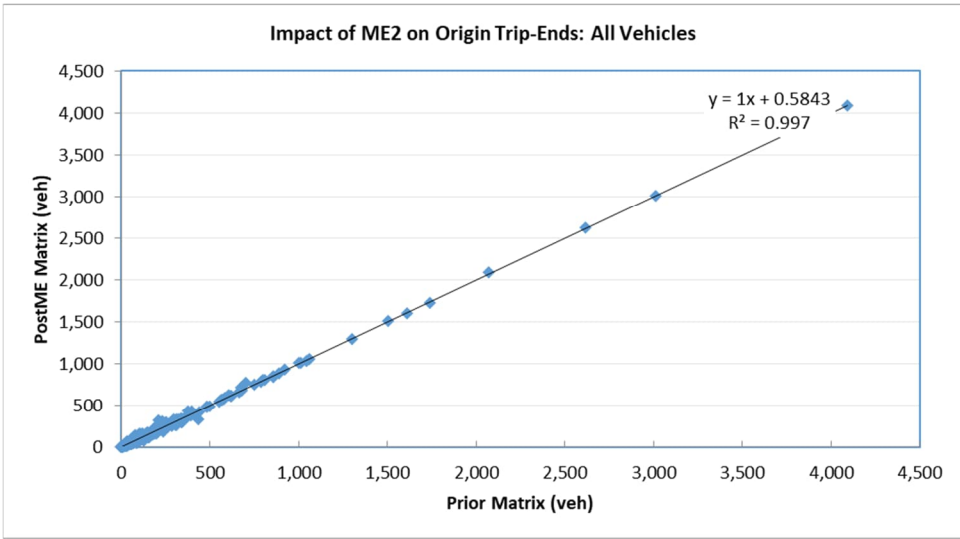
IP Zonal trip end plots: Prior vs Post ME

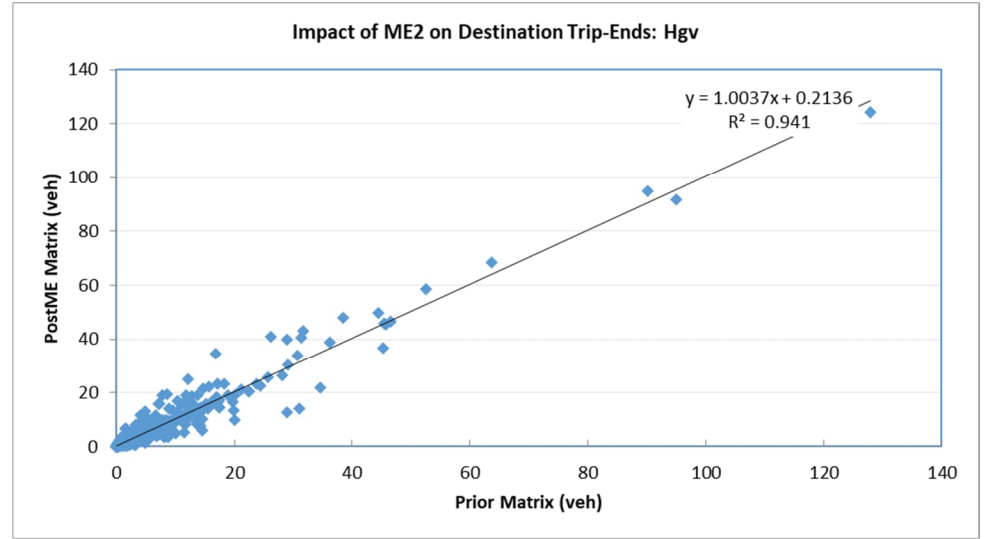
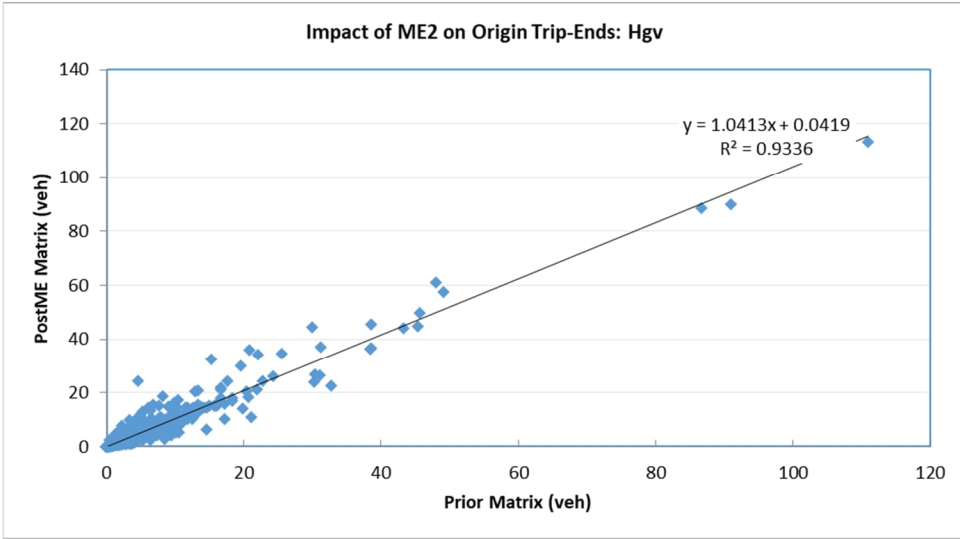
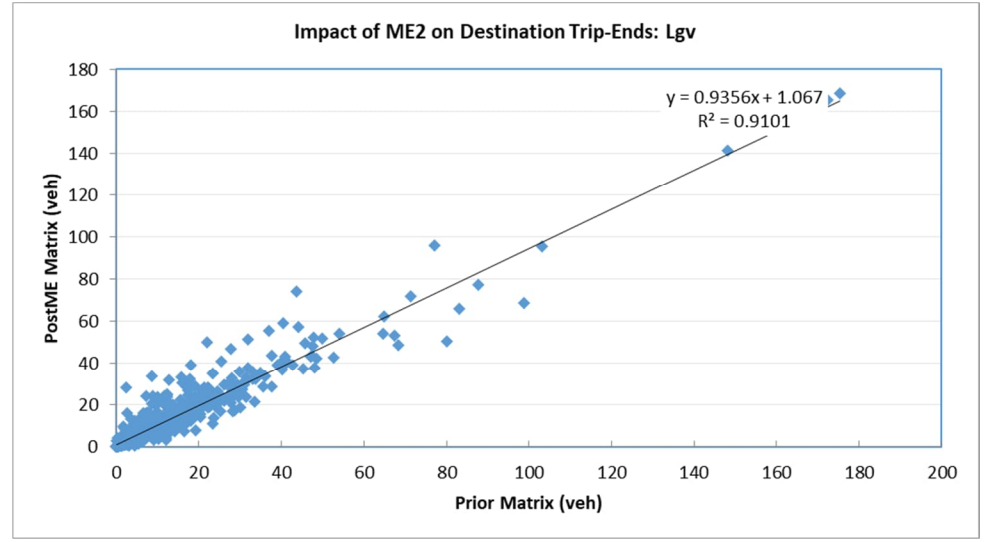
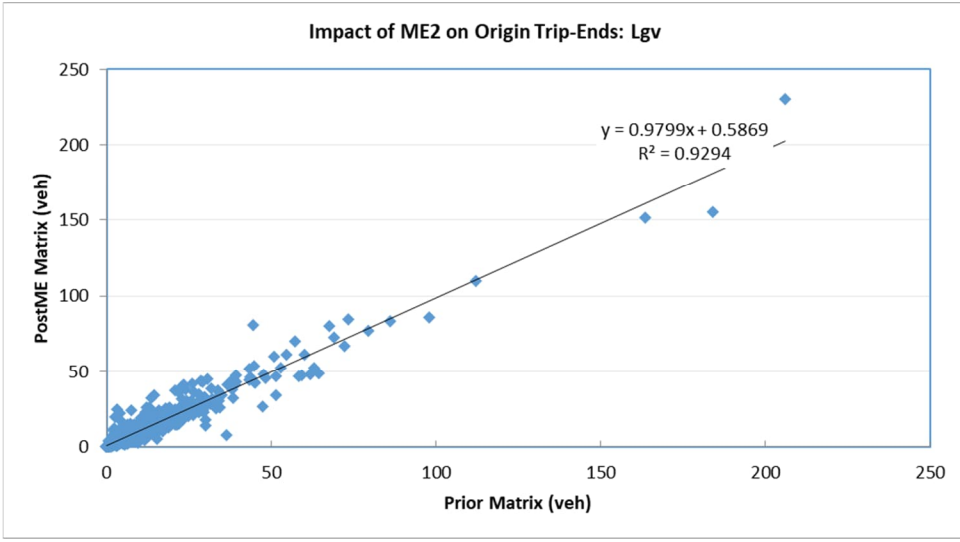


PM Zonal trip end plots: Prior vs Post ME

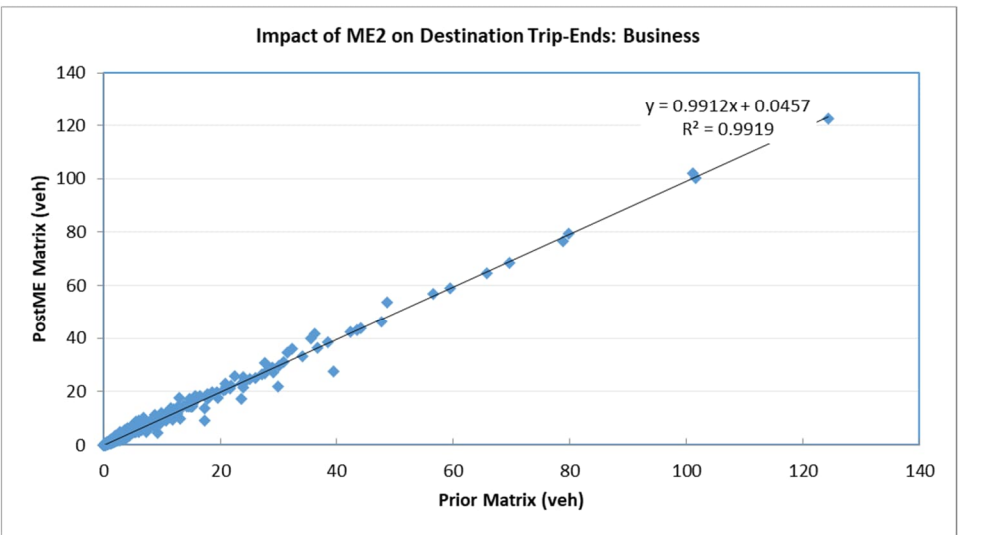
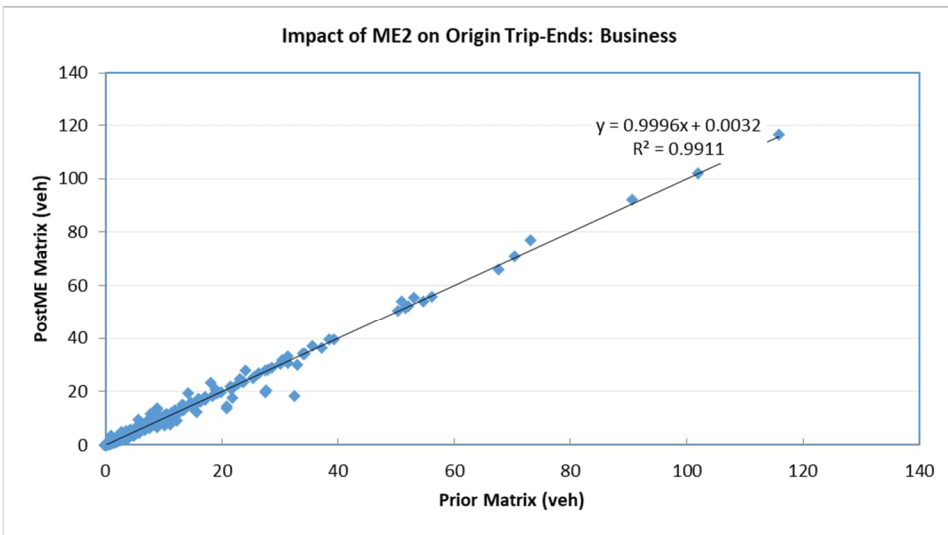
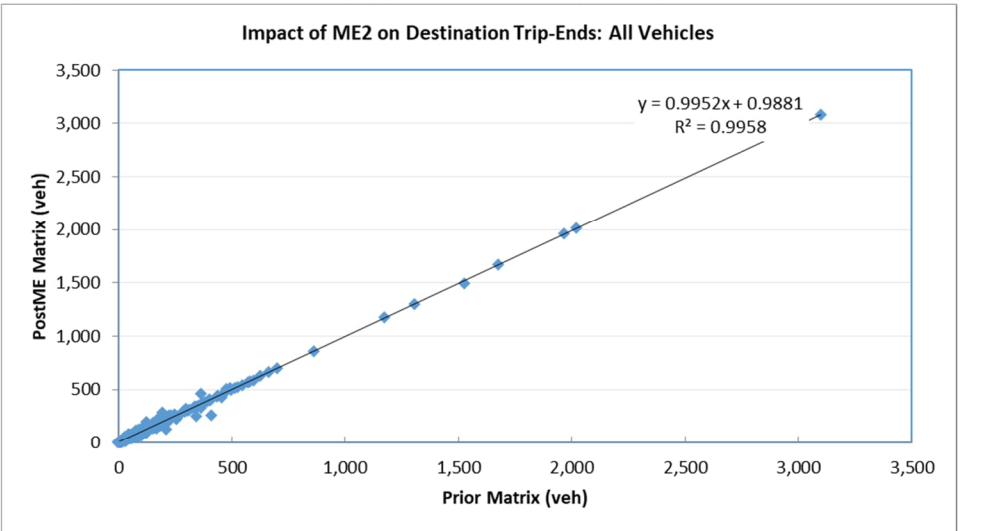
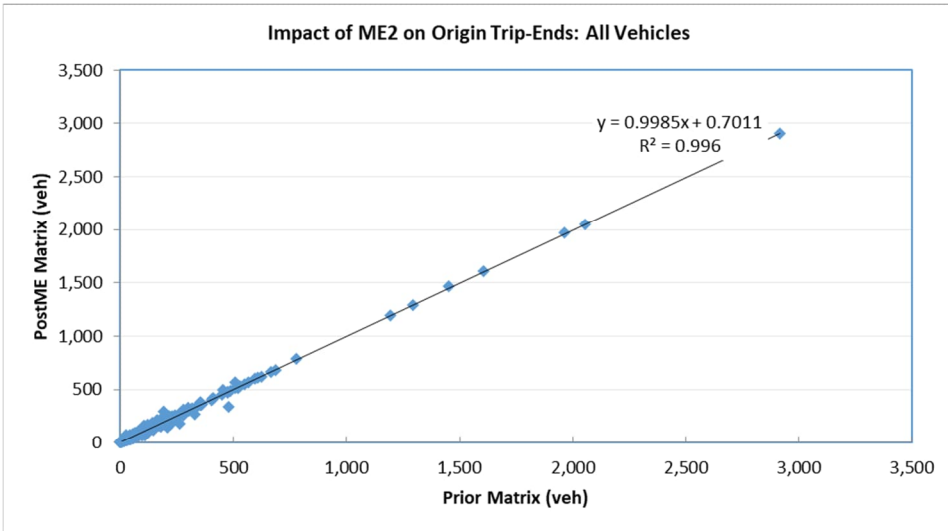


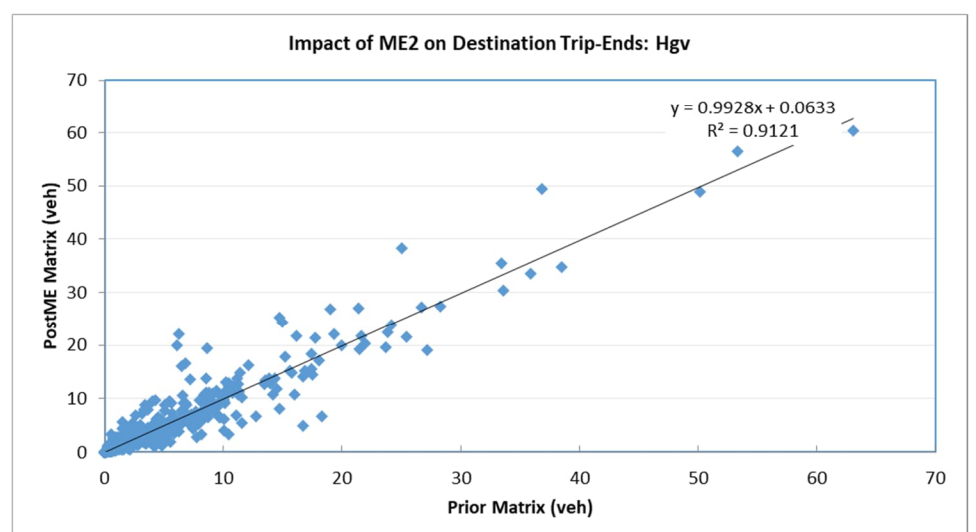
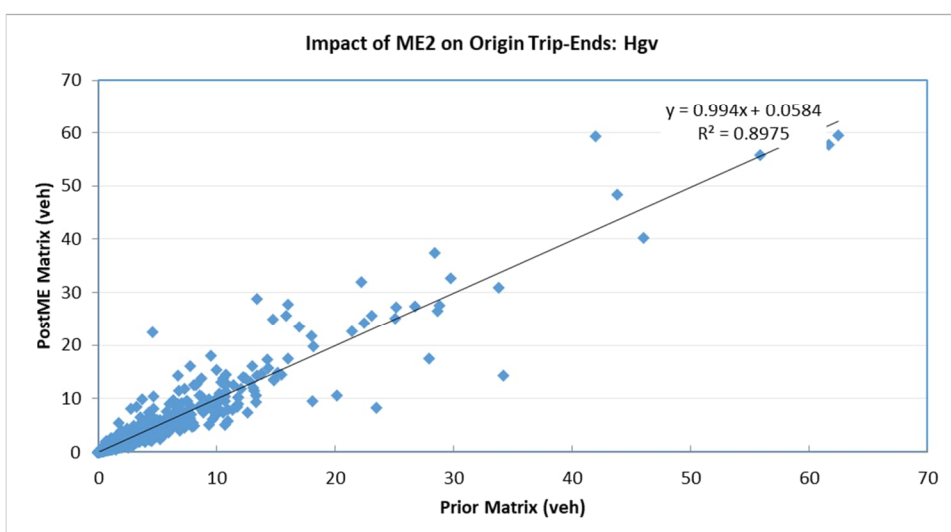
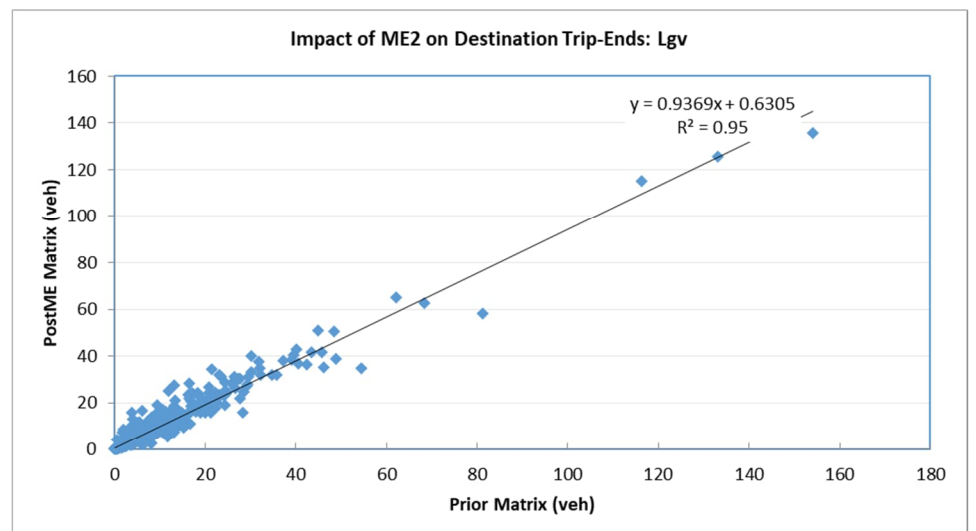
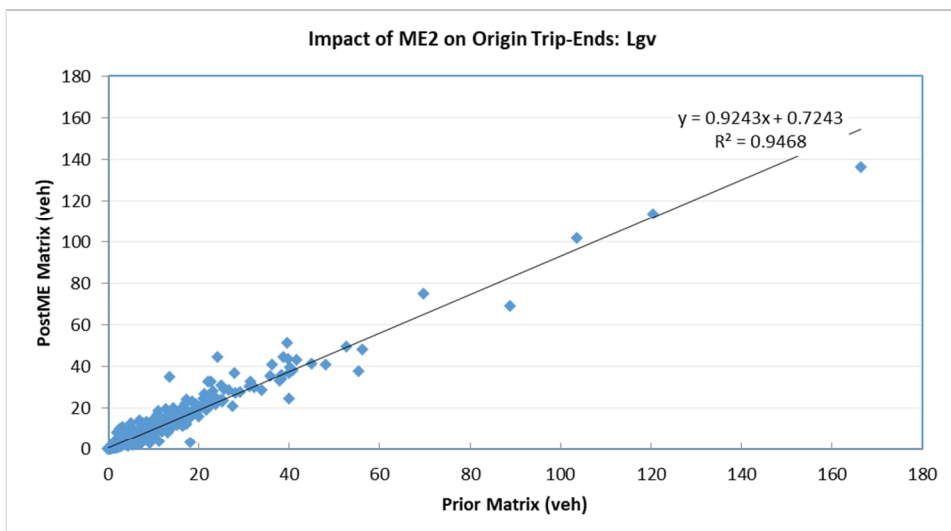
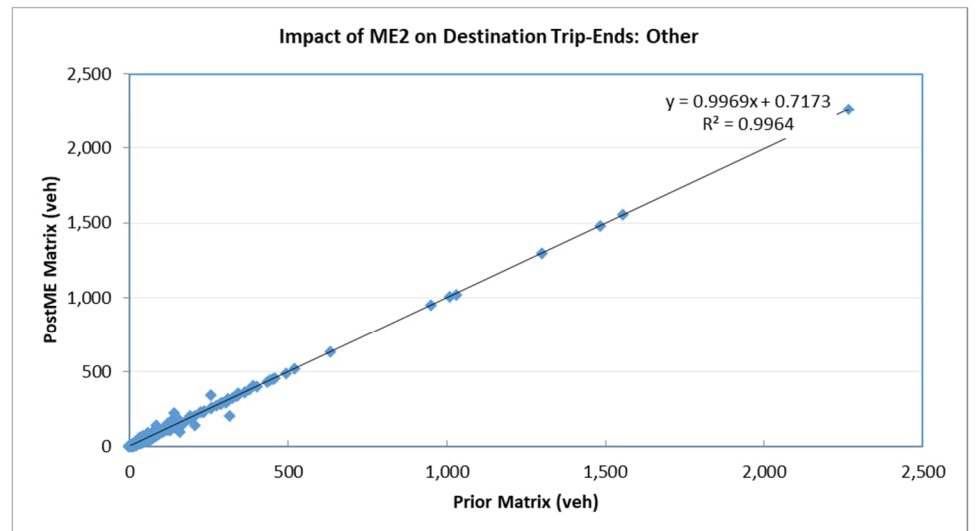
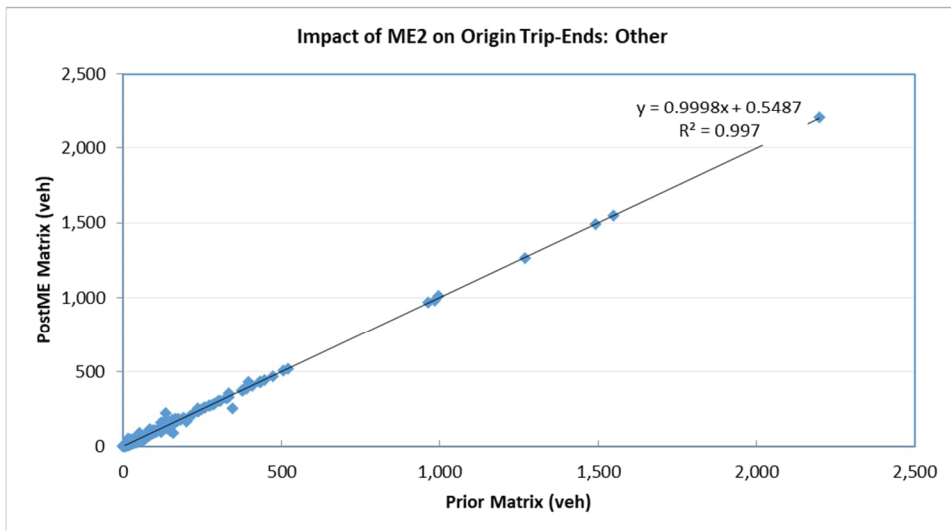
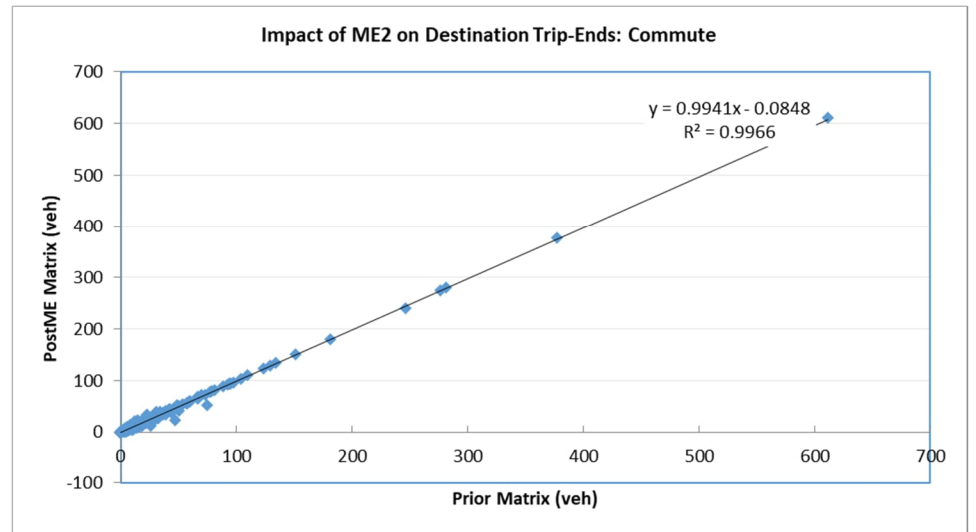
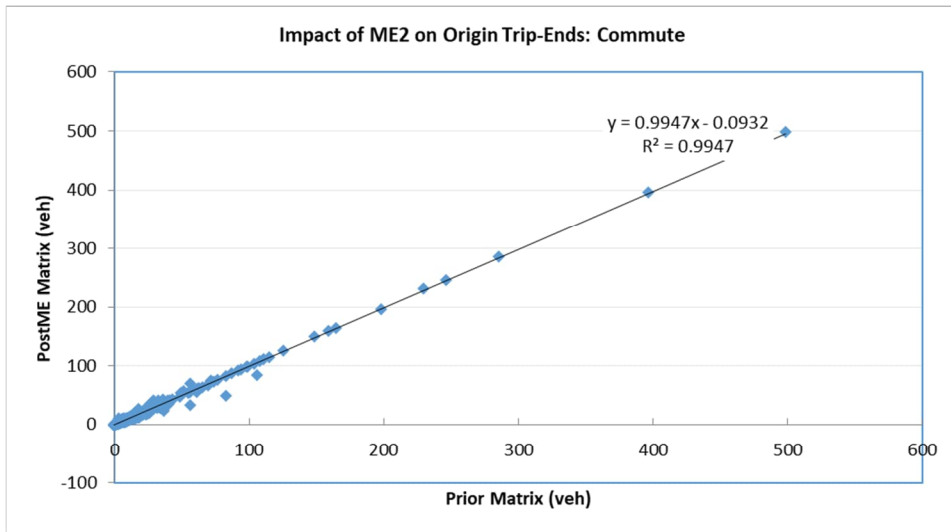
AM Origin/destination totals prior vs post ME:



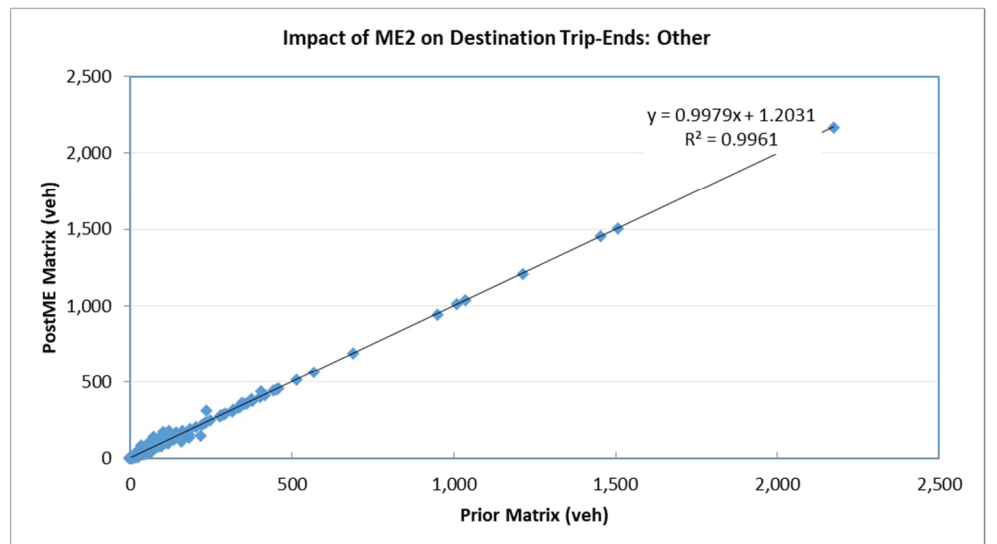
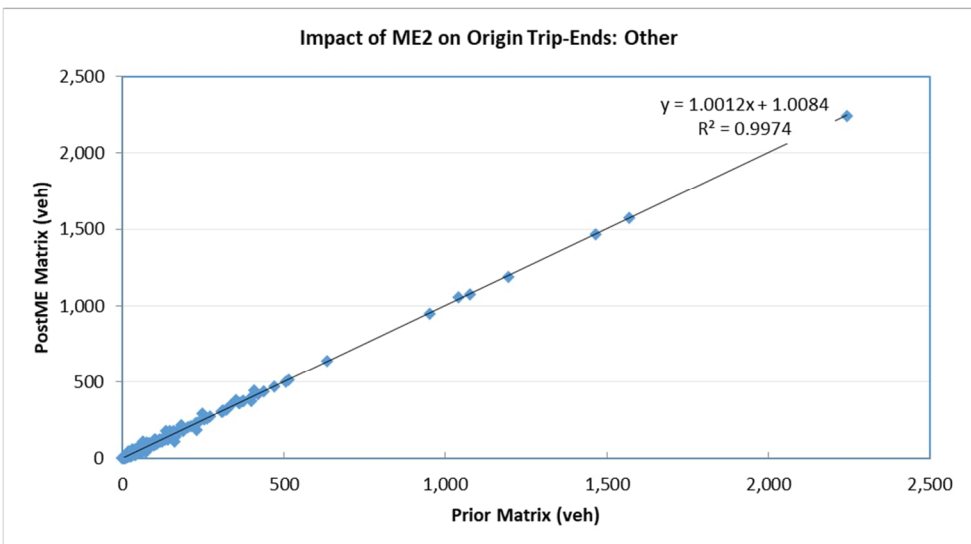
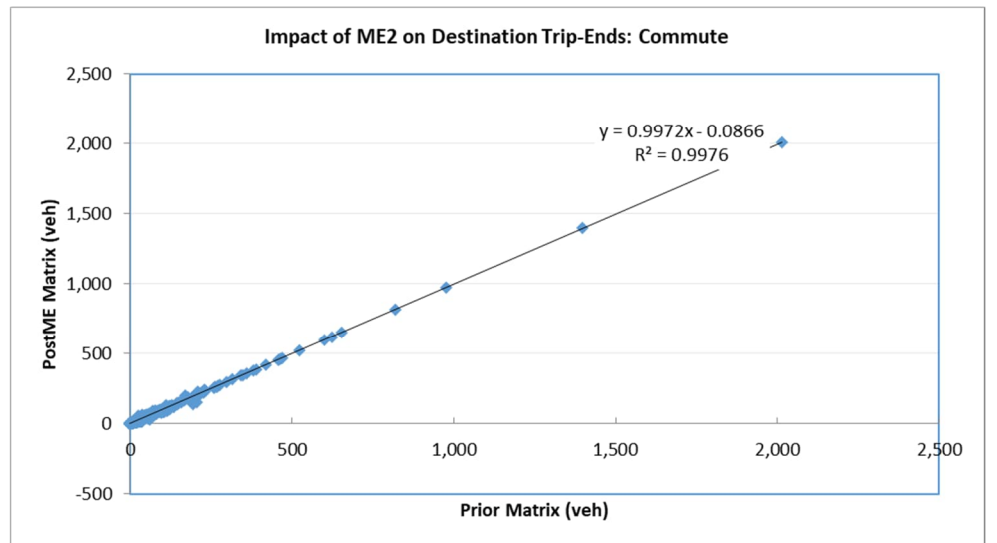
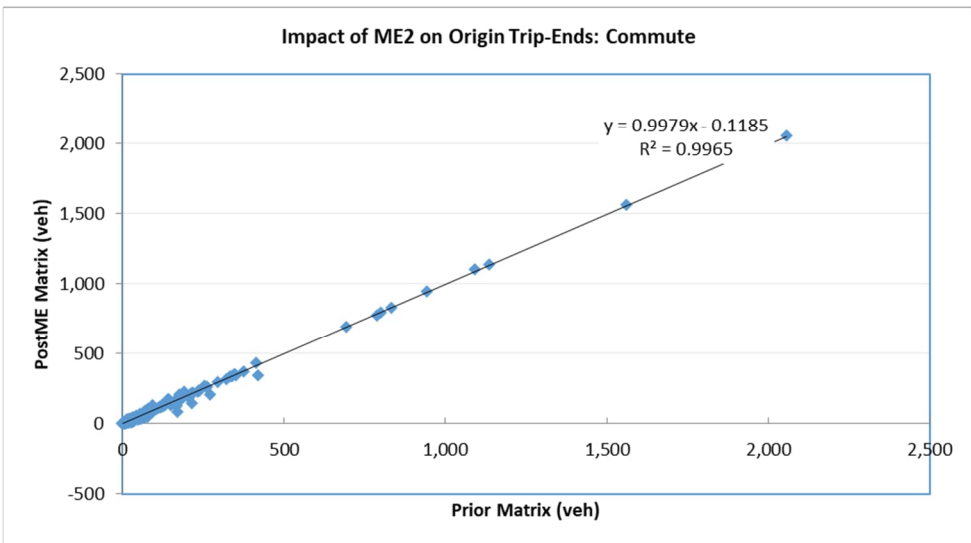
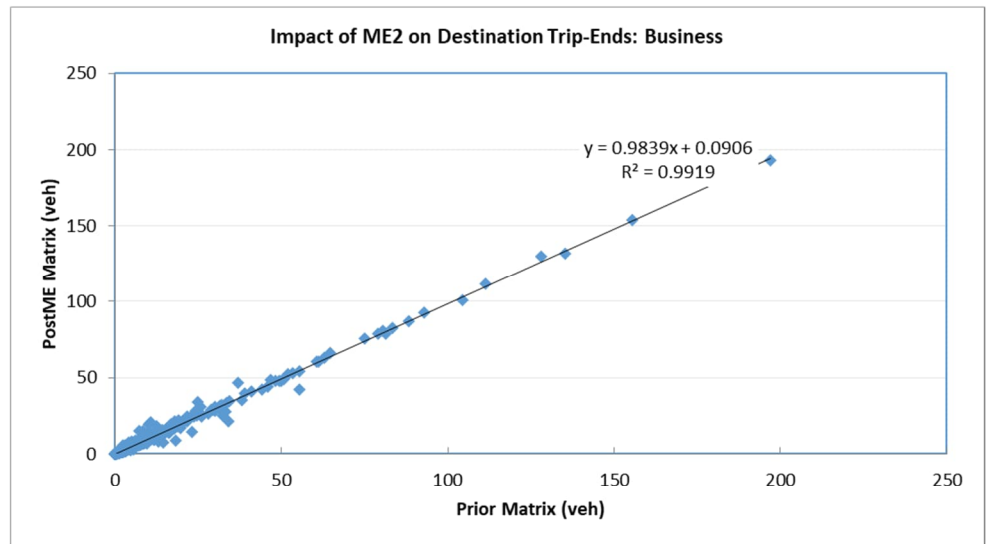
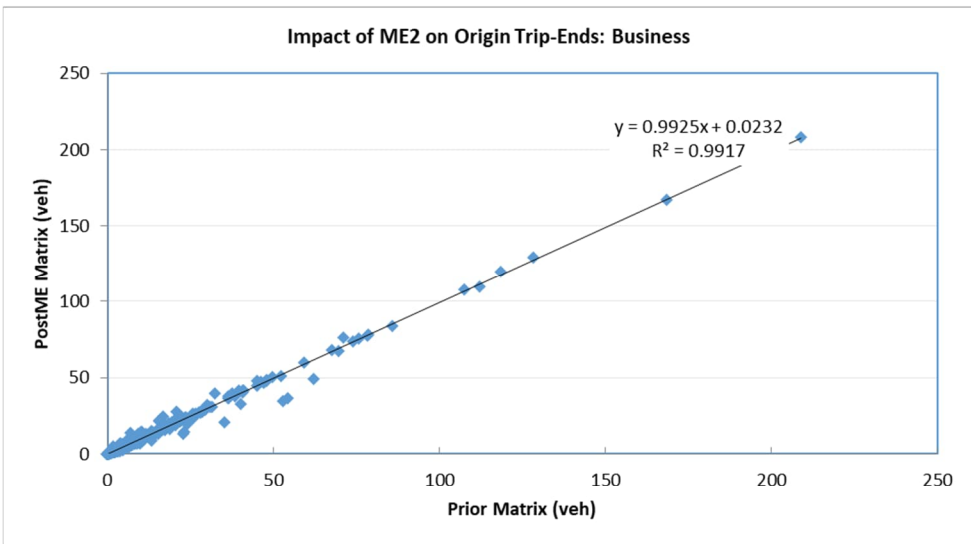
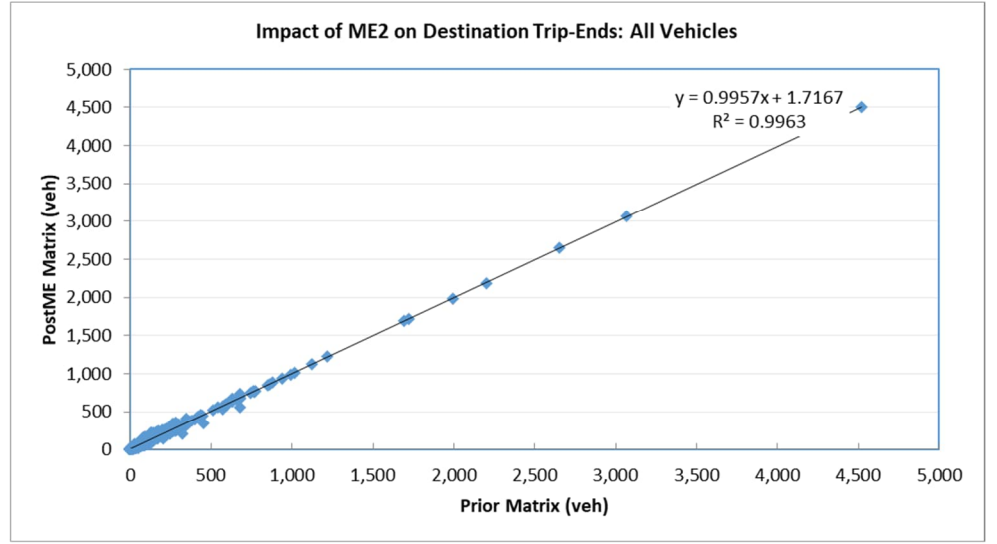
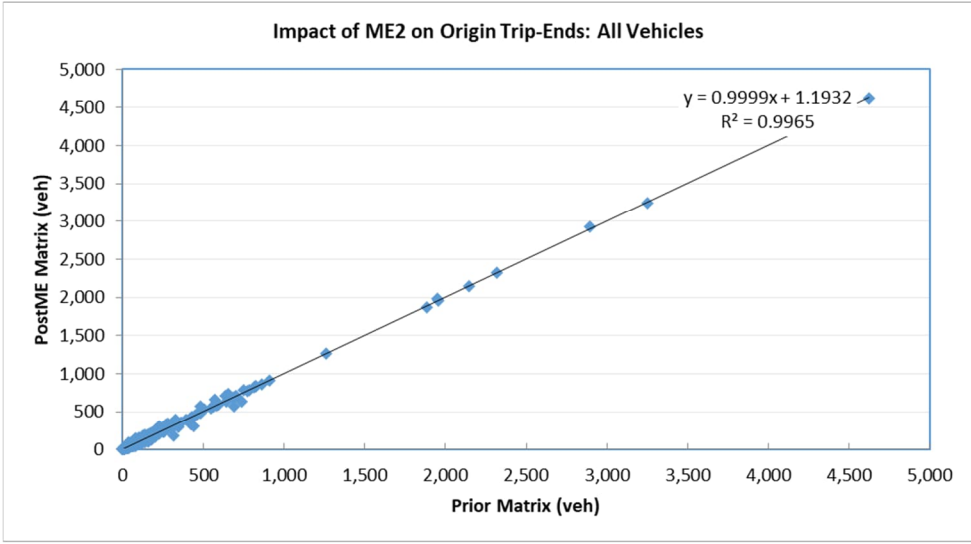


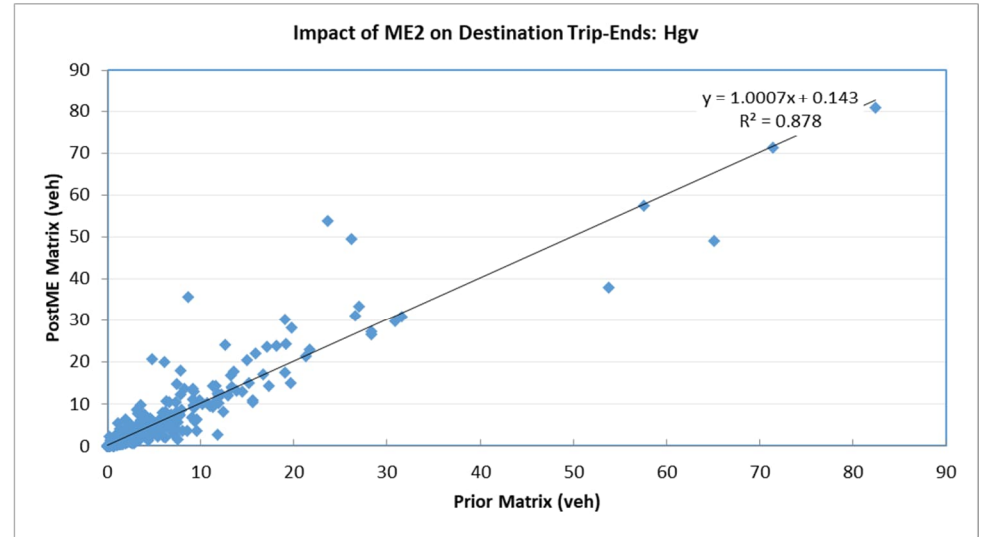
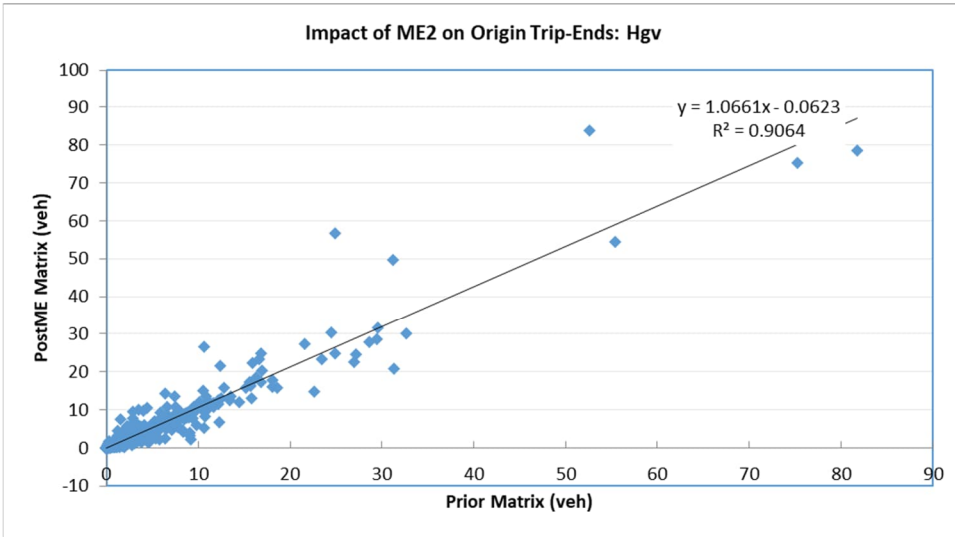
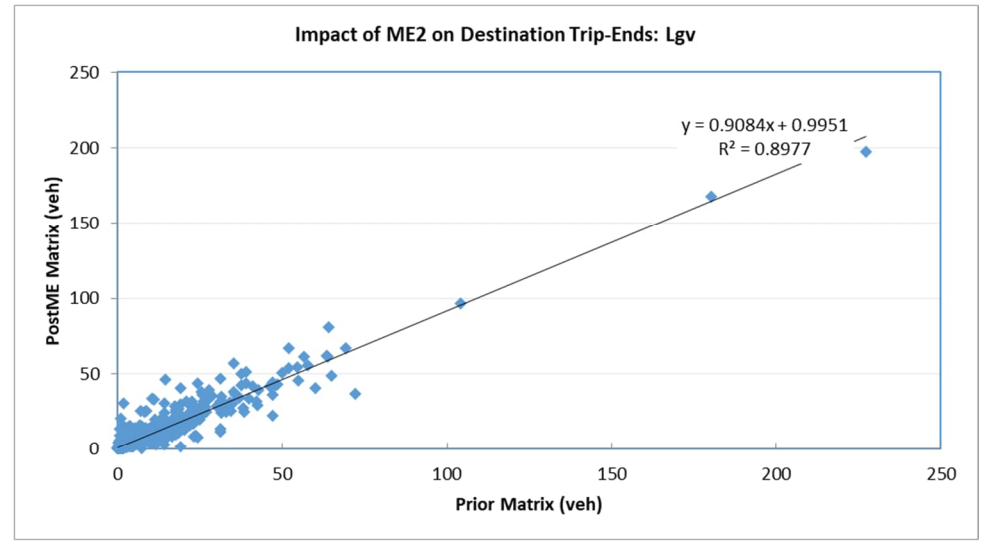
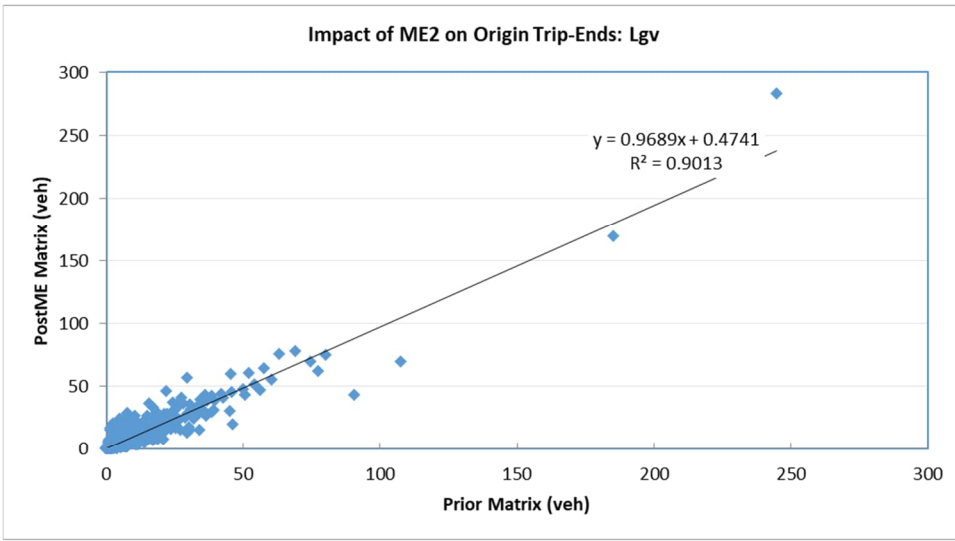
IP Origin/destination totals prior vs post ME:



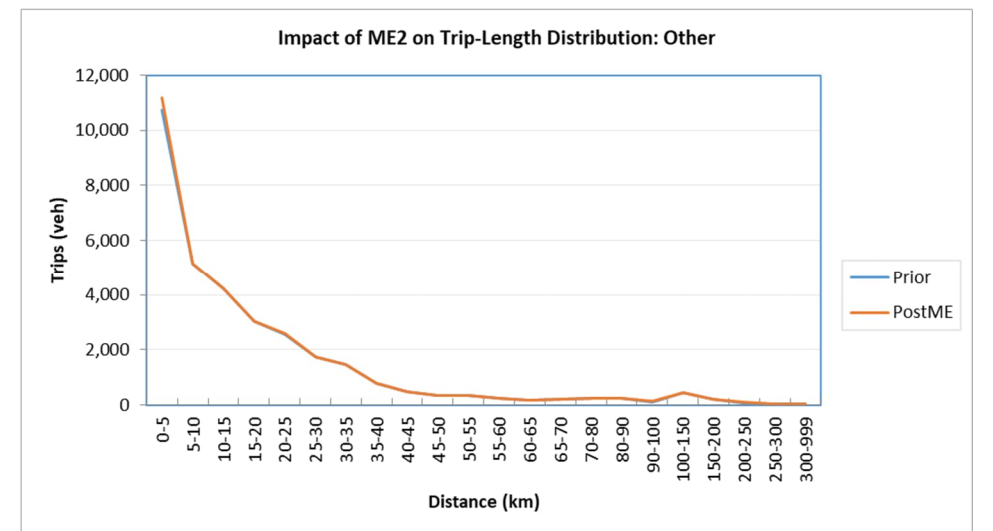
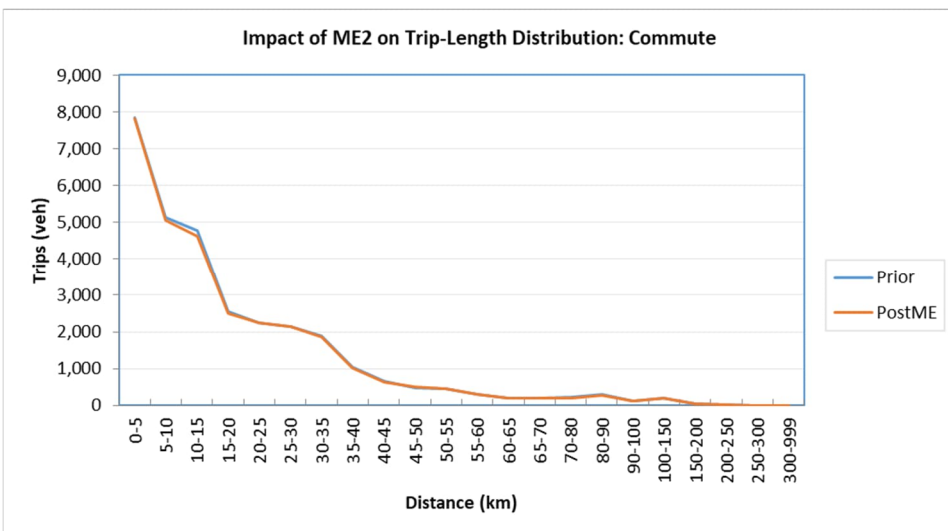
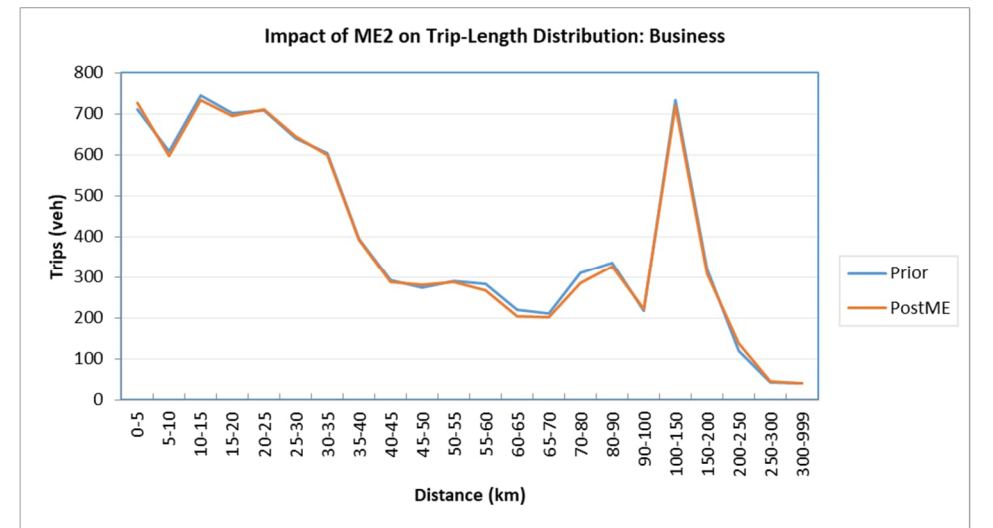
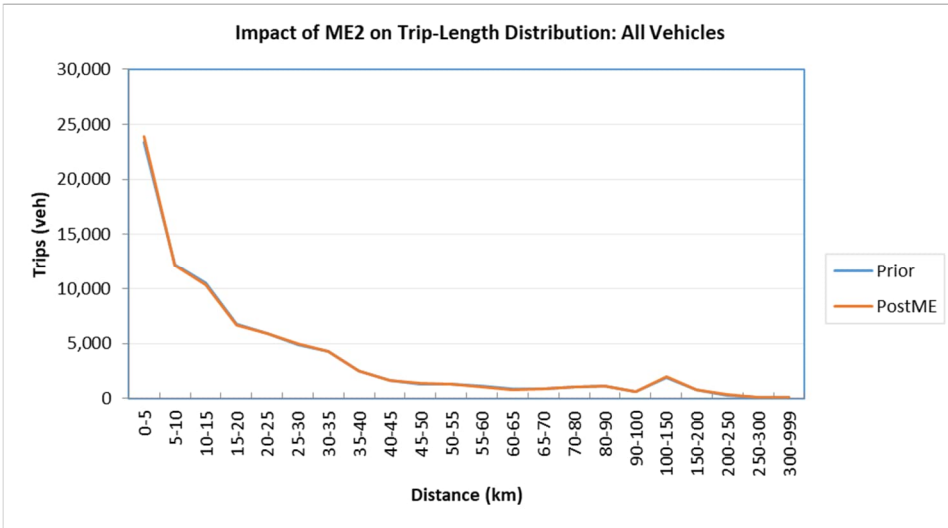


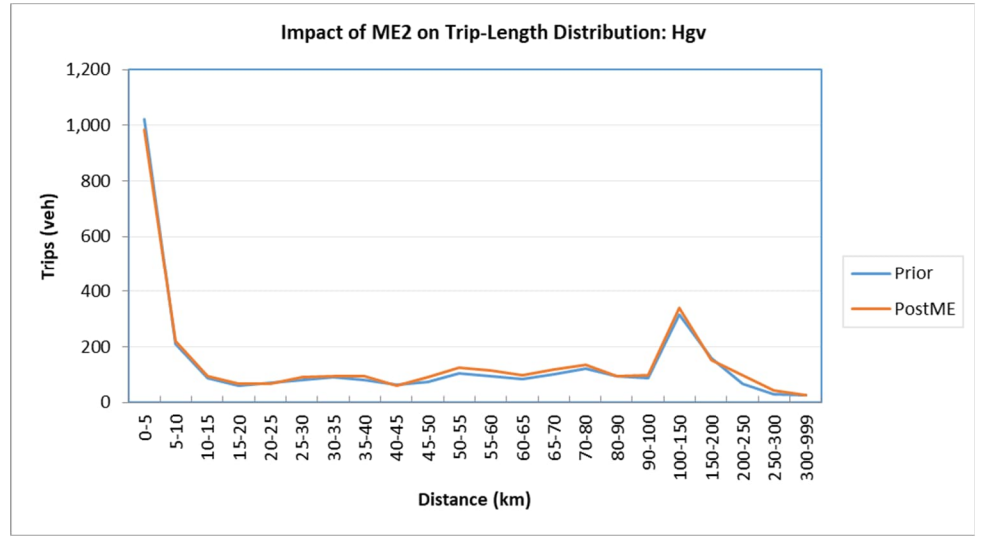
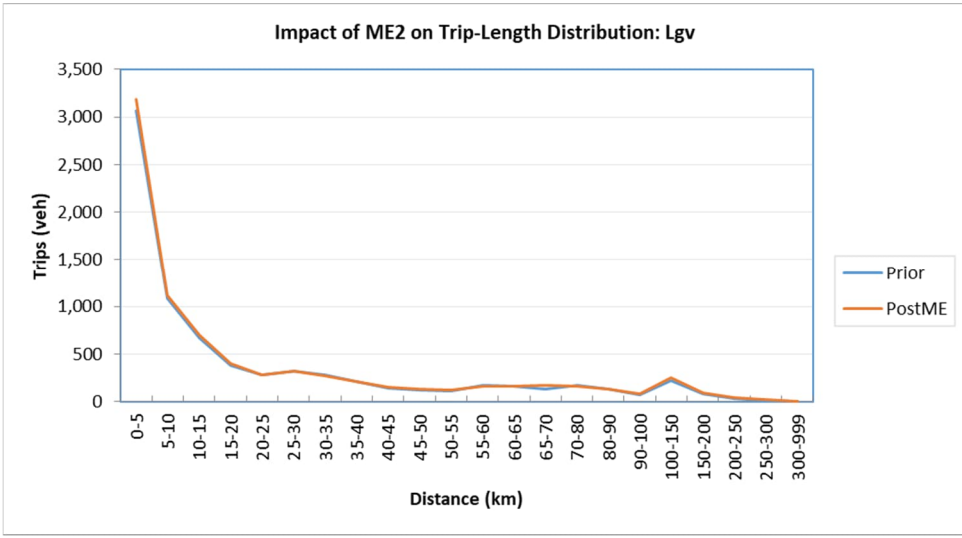
PM Origin/destination totals prior vs post ME:



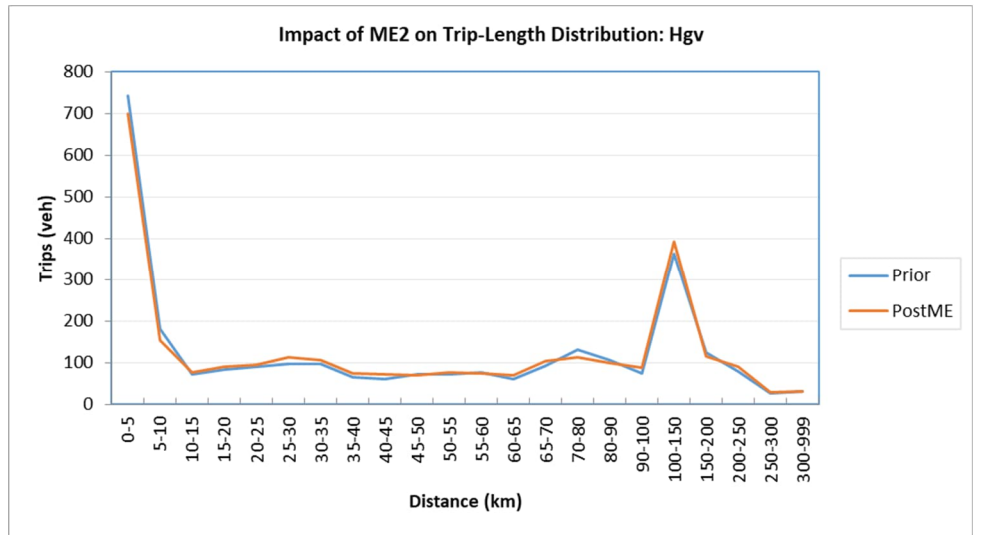
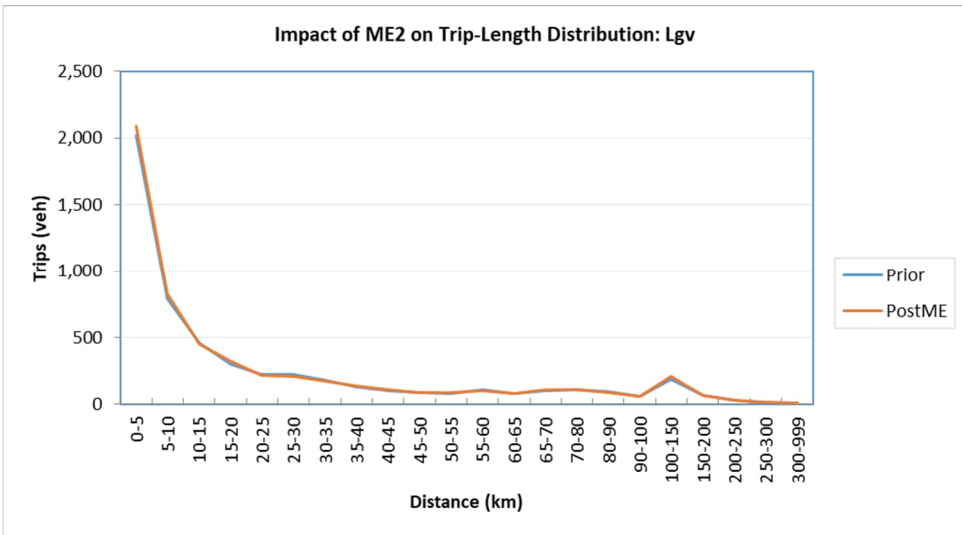
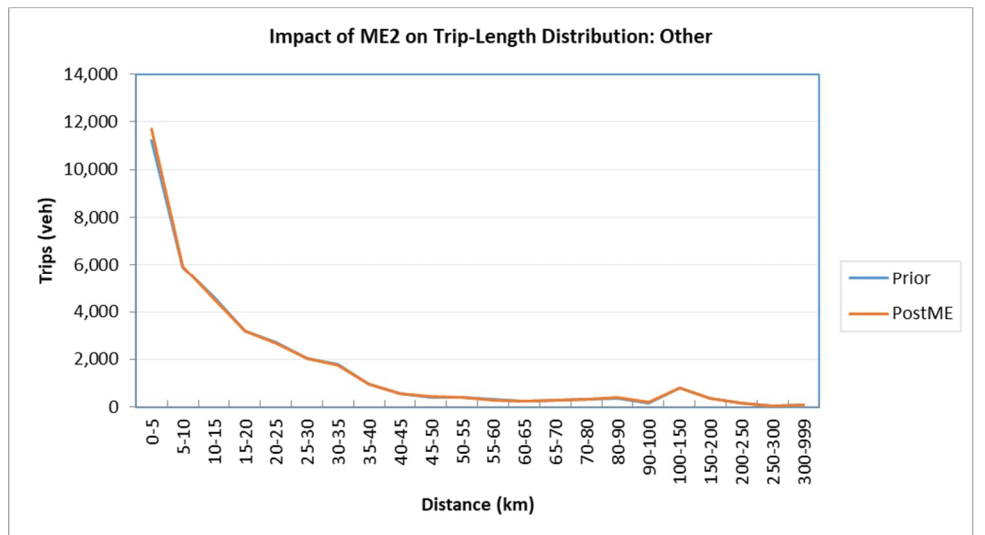
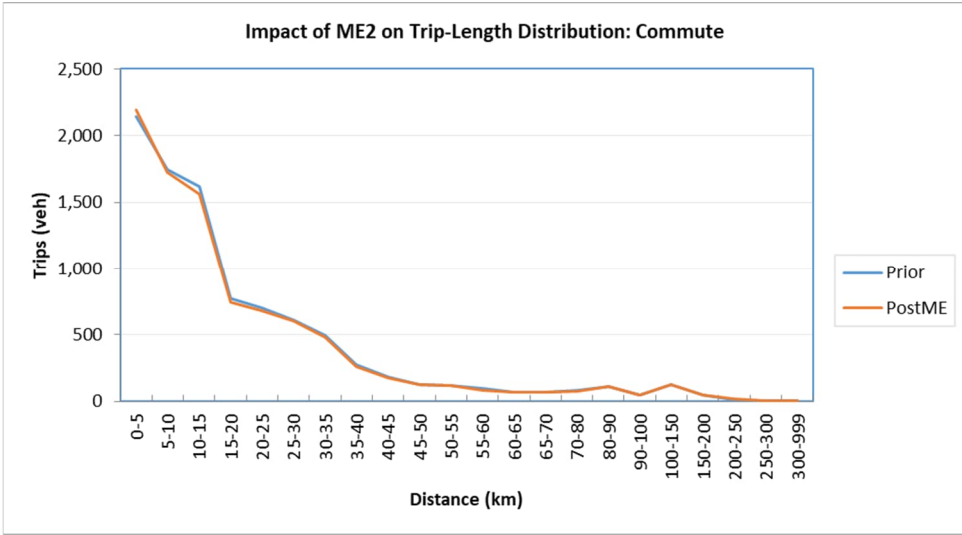
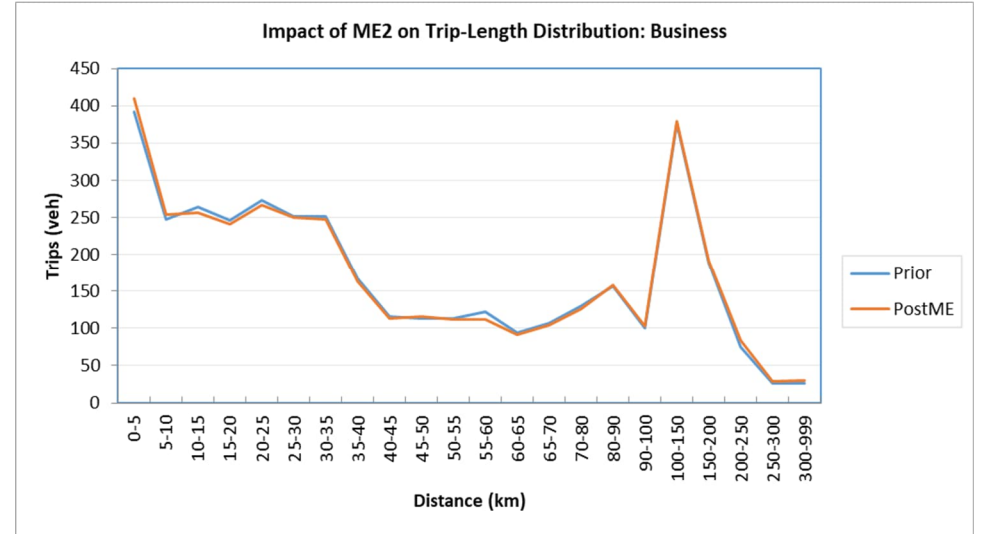
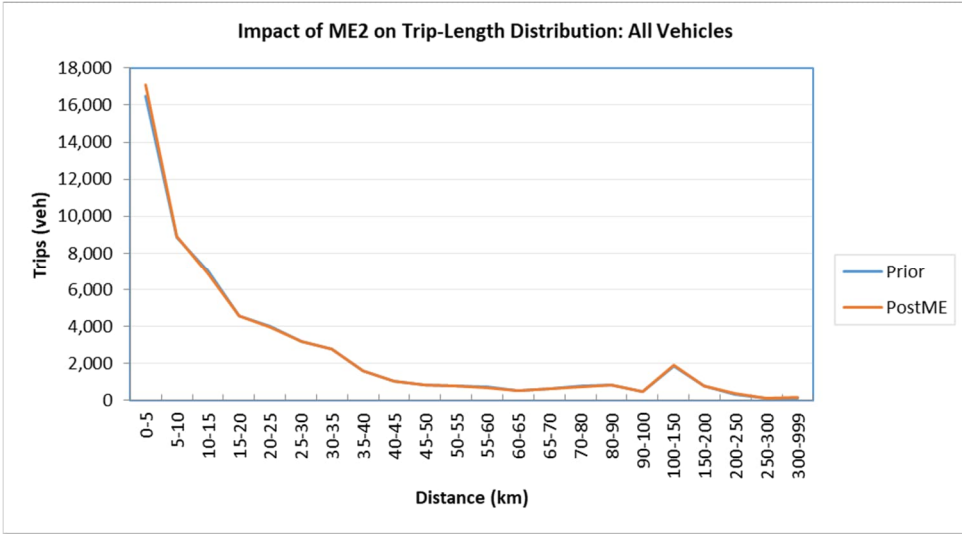


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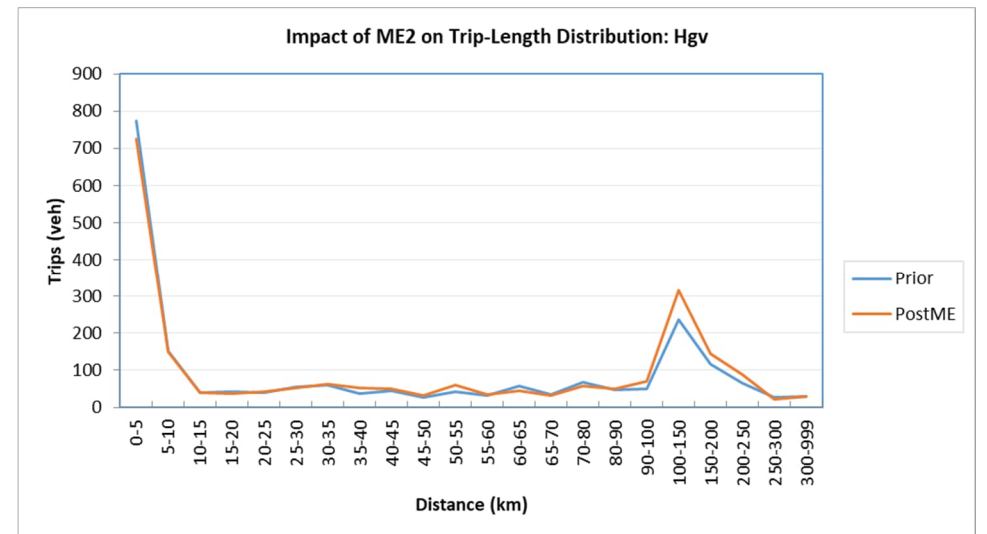
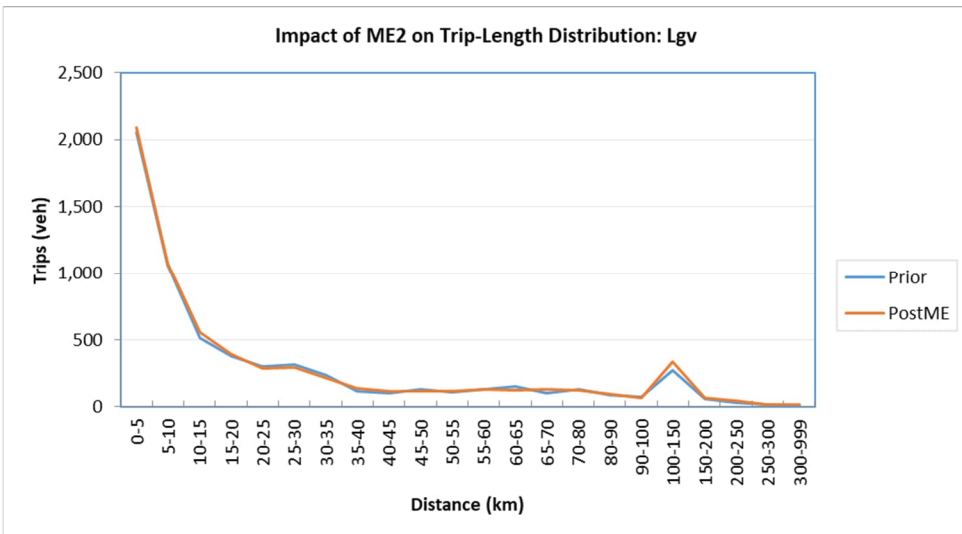
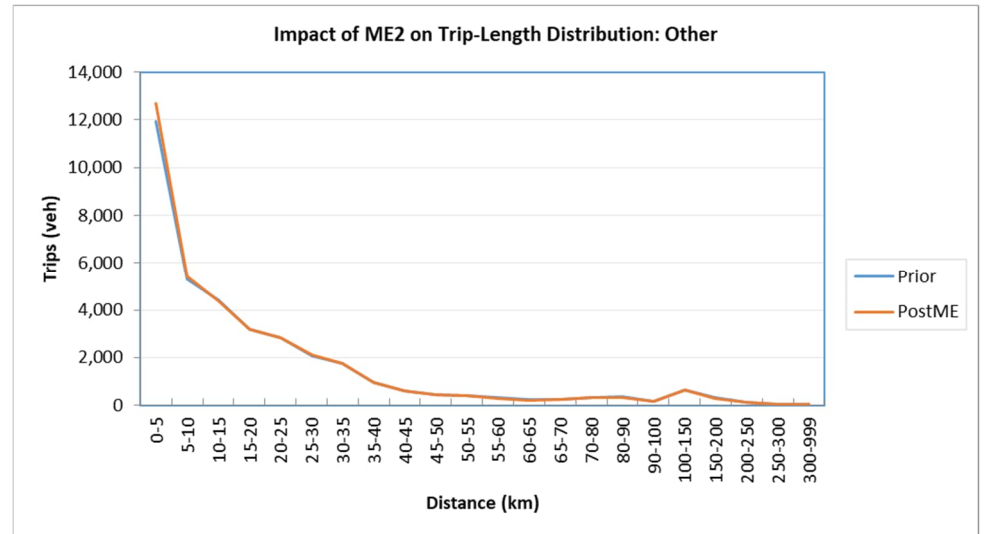
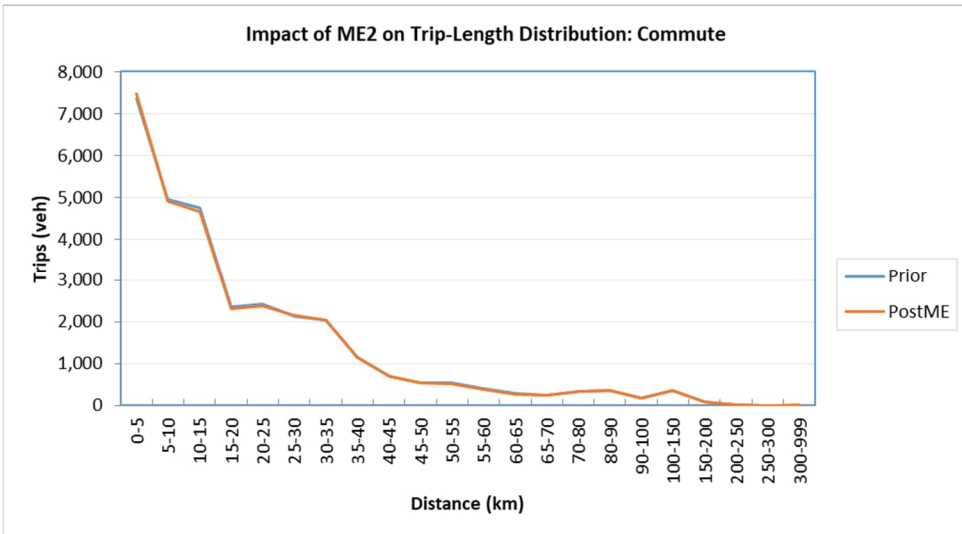
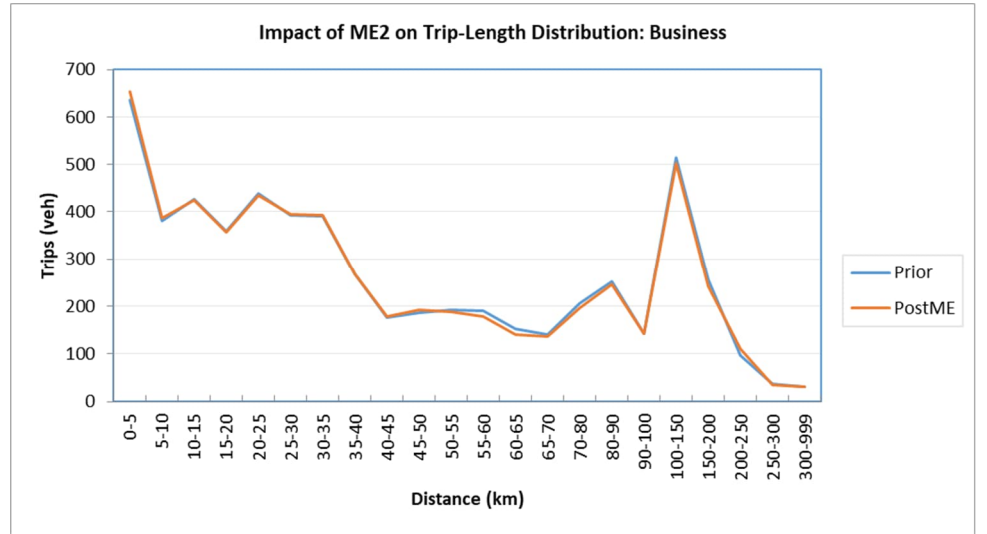
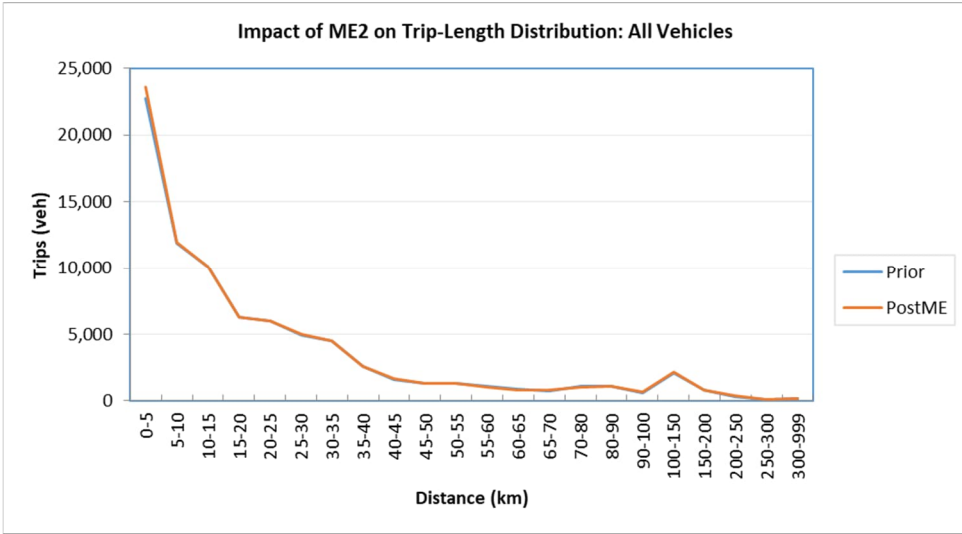




IP Trip length:



PM Trip length:



AM Sector summary table, Percentage difference by trip purpose:

All vehicles

OD	1	2	3	4	5	6	7	Total
1	1.0%	-1.5%	-6.6%	1.1%	-6.8%	7.5%	5.7%	0.2%
2	-6.7%	-0.1%	-3.4%	-20.3%	4.9%	-0.3%	-6.6%	-1.7%
3	3.1%	-1.0%	0.6%	4.0%	-22.5%	-0.2%	-0.6%	0.5%
4	5.5%	6.0%	-0.6%	2.9%	-4.4%	5.6%	14.6%	3.2%
5	-2.0%	-3.4%	-33.6%	-6.2%				-6.5%
6	4.5%	-1.4%	-0.3%	4.9%				2.1%
7	2.7%	4.5%	-0.4%	16.4%				2.5%
Total	0.6%	-0.5%	-0.4%	2.7%	-5.7%	3.0%	1.3%	0.5%

Business

OD	1	2	3	4	5	6	7	Total
1	0.2%	-7.0%	-5.1%	-1.8%	-11.8%	1.2%	0.0%	-1.7%
2	-12.9%	-1.0%	-1.9%	-26.2%	9.3%	-1.8%	-5.8%	-3.3%
3	3.8%	-2.0%	0.4%	-1.3%	-29.6%	-4.8%	-0.6%	-0.6%
4	3.7%	-14.8%	0.9%	6.8%	-5.3%	2.5%	16.7%	4.5%
5	1.9%	-3.9%	-38.0%	-10.4%				-9.3%
6	-1.1%	-2.5%	-8.8%	0.9%				-3.1%
7	4.6%	-4.9%	-1.6%	13.5%				1.1%
Total	-0.2%	-2.5%	-2.0%	1.5%	-8.1%	-0.5%	2.1%	-0.9%

Commuter

OD	1	2	3	4	5	6	7	Total
1	-2.8%	-0.6%	-11.6%	-3.4%	-9.4%	13.7%	-0.7%	-3.3%
2	-11.8%	-0.2%	-3.3%	-28.8%	6.9%	-0.1%	-7.8%	-3.1%
3	0.1%	0.1%	0.3%	-3.1%	-25.8%	-0.3%	0.0%	0.0%
4	5.4%	-2.1%	-1.1%	2.6%	-6.5%	2.3%	8.2%	2.1%
5	-3.9%	-3.5%	-40.1%	-8.5%				-8.0%
6	5.2%	-0.3%	-4.3%	0.6%				0.1%
7	-4.2%	-2.2%	-0.2%	7.9%				0.2%
Total	-3.1%	-0.3%	-0.8%	0.8%	-7.3%	1.8%	0.5%	-1.1%

Other

OD	1	2	3	4	5	6	7	Total
1	3.1%	0.6%	0.4%	3.7%	-5.4%	6.6%	5.1%	2.7%
2	-1.2%	-0.1%	-2.3%	-29.1%	8.3%	-0.4%	-4.7%	-0.5%
3	7.5%	-1.9%	0.6%	-1.9%	-25.0%	-1.5%	-0.1%	0.7%
4	3.3%	-10.2%	0.2%	2.4%	-5.1%	3.8%	18.0%	2.4%
5	-1.3%	-0.2%	-38.3%	-4.2%				-4.2%
6	3.6%	-0.4%	-3.6%	3.2%				0.4%
7	2.7%	-4.7%	-0.6%	15.5%				1.1%
Total	3.0%	-0.3%	0.1%	2.0%	-4.3%	1.6%	1.4%	1.1%

Lgv

OD	1	2	3	4	5	6	7	Total
1	4.0%	-1.2%	-6.0%	3.4%	-3.9%	13.2%	30.1%	3.1%
2	6.9%	1.7%	-13.7%	-12.3%	-18.6%	-4.7%	-8.4%	-1.1%
3	2.4%	0.4%	2.3%	28.2%	-17.4%	23.2%	36.0%	5.7%
4	9.4%	-17.9%	-7.8%	3.8%	-4.9%	23.2%	40.2%	5.9%
5	-0.4%	-21.0%	-35.6%	-1.2%				-8.7%
6	12.1%	-13.5%	7.1%	21.9%				11.4%
7	16.0%	-2.4%	23.7%	-0.8%				7.1%
Total	4.3%	-2.1%	-2.3%	8.2%	-8.2%	17.1%	34.7%	3.4%

Hgv

OD	1	2	3	4	5	6	7	Total
1	-5.6%	-13.1%	-17.8%	19.1%	1.7%	3.3%	20.6%	-4.9%
2	-6.8%	-1.7%	-1.8%	19.3%	8.8%	8.6%	-14.5%	-0.1%
3	-9.5%	-4.9%	3.6%	28.7%	-2.1%	0.0%	-18.8%	0.0%
4	18.2%	83.8%	16.0%	9.1%	57.1%	19.9%	-1.6%	15.4%
5	0.7%	30.8%	-6.3%	7.4%				2.4%
6	5.2%	-0.9%	31.4%	19.9%				20.0%
7	-8.3%	37.0%	0.1%	33.7%				19.2%
Total	-3.9%	3.4%	5.0%	16.9%	14.0%	11.6%	-8.6%	5.0%

IP Sector summary table, Percentage difference by trip purpose:

All Vehicles

OD	1	2	3	4	5	6	7	Total
1	2.4%	-1.1%	2.4%	-2.8%	-5.8%	1.6%	0.9%	1.5%
2	-1.4%	-0.8%	-3.7%	-12.0%	3.6%	0.5%	0.1%	-1.0%
3	-4.8%	-3.0%	0.7%	2.2%	-25.0%	1.7%	0.2%	0.0%
4	-0.7%	-11.2%	-2.9%	2.4%	-10.5%	7.4%	7.9%	1.9%
5	0.3%	-0.2%	-26.3%	-9.3%				-4.6%
6	2.4%	-2.0%	-2.3%	7.6%				2.1%
7	9.6%	-7.7%	-0.6%	12.2%				2.1%
Total	1.5%	-1.4%	0.1%	2.3%	-7.8%	3.7%	1.4%	0.6%

Business

OD	1	2	3	4	5	6	7	Total
1	3.9%	-6.5%	1.3%	-11.0%	-9.4%	3.9%	0.7%	1.0%
2	-9.4%	-1.3%	-3.3%	-18.7%	4.0%	0.6%	-1.9%	-2.4%
3	-4.2%	-3.7%	0.2%	3.2%	-21.0%	6.0%	1.2%	0.4%
4	-5.4%	-27.0%	-2.7%	5.3%	-14.9%	3.6%	15.9%	2.0%
5	-3.8%	-3.7%	-39.7%	-16.8%				-12.6%
6	4.7%	-3.7%	-4.6%	3.4%				-0.5%
7	8.0%	-7.8%	-1.1%	14.9%				1.7%
Total	1.0%	-3.8%	-1.4%	1.9%	-11.9%	3.7%	3.7%	0.0%

Commuter

OD	1	2	3	4	5	6	7	Total
1	-0.2%	-6.1%	0.8%	-14.5%	-7.0%	-2.7%	-3.4%	-2.0%
2	-8.5%	-0.8%	-4.2%	-15.8%	3.5%	0.2%	-0.6%	-2.7%
3	10.6%	-5.0%	0.5%	-1.1%	-23.7%	4.1%	0.2%	-0.6%
4	-8.2%	-22.8%	-6.3%	3.0%	-13.7%	3.8%	5.0%	0.1%
5	-2.1%	-1.0%	-48.5%	-10.9%				-7.6%
6	5.0%	-1.2%	-2.7%	4.3%				1.1%
7	9.1%	-12.6%	-0.3%	13.4%				0.7%
Total	-2.3%	-2.7%	-0.2%	0.2%	-9.2%	2.2%	0.4%	-1.2%

Other

OD	1	2	3	4	5	6	7	Total
1	3.3%	-0.1%	6.4%	-7.3%	-3.1%	6.6%	0.1%	2.6%
2	-0.5%	-0.7%	-2.5%	-18.4%	6.3%	0.9%	-2.5%	-0.7%
3	-0.8%	-2.4%	0.6%	0.7%	-22.7%	3.2%	0.3%	0.3%
4	0.3%	-28.5%	-3.2%	2.1%	-12.5%	5.2%	16.7%	1.5%
5	2.7%	-0.1%	-39.8%	-12.9%				-5.1%
6	9.8%	-2.2%	-2.0%	4.9%				1.5%
7	9.9%	-8.2%	-0.4%	16.7%				1.8%
Total	2.8%	-1.1%	0.3%	1.2%	-6.5%	3.7%	2.1%	0.9%

Lgv

OD	1	2	3	4	5	6	7	Total
1	3.2%	7.7%	-3.5%	9.9%	-14.8%	6.7%	37.1%	2.8%
2	20.4%	-0.7%	-16.1%	-13.4%	-8.7%	2.1%	14.2%	1.7%
3	-7.1%	-10.1%	4.0%	8.1%	-37.1%	-7.5%	-11.0%	-1.7%
4	0.6%	7.9%	2.4%	4.6%	-0.6%	24.1%	0.1%	5.2%
5	-6.3%	-3.8%	-11.8%	0.3%				-5.1%
6	-2.1%	1.2%	-2.2%	11.8%				3.9%
7	-5.9%	7.7%	-1.6%	11.9%				8.0%
Total	2.6%	0.3%	-0.6%	6.9%	-13.6%	7.8%	8.3%	2.2%

Hgv

OD	1	2	3	4	5	6	7	Total
1	-7.5%	-4.6%	-17.6%	43.8%	-2.1%	-24.2%	-21.6%	-6.2%
2	-20.8%	-4.0%	-5.1%	27.6%	25.1%	-4.3%	8.3%	-6.1%
3	-17.2%	13.9%	3.5%	10.2%	-19.8%	-10.9%	-4.0%	-1.9%
4	29.7%	69.6%	-5.0%	2.0%	22.1%	14.6%	-13.3%	7.2%
5	7.0%	30.9%	42.6%	45.0%				24.2%
6	-17.4%	0.1%	0.7%	21.8%				8.3%
7	15.3%	-6.1%	-2.3%	4.8%				3.4%
Total	-7.4%	0.5%	0.3%	13.8%	3.0%	2.5%	-8.7%	0.9%



PM Sector summary table, Percentage difference by trip purpose:

All Vehicles

OD	1	2	3	4	5	6	7	Total
1	2.8%	-6.1%	5.9%	-8.0%	7.2%	5.4%	6.4%	2.1%
2	-1.8%	-0.8%	0.5%	-23.5%	8.5%	-1.9%	2.4%	-0.8%
3	-1.9%	-0.1%	0.6%	-3.0%	-21.4%	-3.6%	-0.4%	0.0%
4	0.9%	-22.7%	-4.2%	3.4%	-1.6%	9.2%	20.1%	3.3%
5	-1.4%	-3.4%	-23.7%	-10.8%				-6.9%
6	8.0%	-2.6%	-5.8%	4.5%				0.8%
7	13.3%	-5.5%	-0.5%	13.3%				2.3%
Total	2.1%	-2.2%	0.3%	1.8%	2.2%	3.2%	2.7%	0.9%

Business

OD	1	2	3	4	5	6	7	Total
1	1.7%	-8.3%	7.7%	-11.4%	7.0%	0.6%	5.1%	0.9%
2	10.5%	-0.9%	-1.0%	-26.6%	2.9%	-3.3%	-6.7%	-3.1%
3	3.7%	-0.7%	0.2%	-1.6%	-26.3%	-5.1%	-1.2%	-0.8%
4	6.6%	-28.6%	-2.1%	7.0%	-7.9%	2.5%	24.4%	4.4%
5	-2.8%	-6.0%	-40.0%	-12.8%				-12.2%
6	6.7%	-6.6%	-10.8%	1.0%				-3.0%
7	7.4%	-14.1%	-1.8%	12.4%				0.5%
Total	2.1%	-5.0%	-1.4%	1.2%	-3.4%	-0.8%	3.3%	-0.4%

Commuter

OD	1	2	3	4	5	6	7	Total
1	-1.0%	-8.6%	7.5%	-9.7%	4.6%	1.5%	-14.0%	-1.1%
2	-7.2%	-0.7%	-0.3%	-20.3%	3.5%	-1.1%	-18.0%	-1.6%
3	-4.9%	-1.5%	0.3%	-1.5%	-19.1%	-2.7%	-0.2%	-0.3%
4	-5.6%	-34.3%	-5.5%	3.6%	-3.0%	5.1%	3.3%	1.6%
5	-5.3%	-6.0%	-33.3%	-8.6%				-9.2%
6	4.6%	-1.1%	-4.1%	1.7%				0.1%
7	15.1%	-11.8%	0.0%	15.8%				1.5%
Total	-2.0%	-3.0%	0.2%	1.3%	0.1%	1.9%	-0.4%	-0.5%

Other

OD	1	2	3	4	5	6	7	Total
1	5.8%	-3.9%	9.6%	-8.8%	12.8%	5.9%	6.9%	5.1%
2	-1.9%	-0.5%	-0.6%	-28.5%	7.5%	-1.4%	-8.5%	-0.7%
3	5.7%	-0.4%	0.8%	-4.8%	-28.5%	-1.4%	-0.3%	0.5%
4	8.7%	-27.3%	-3.2%	3.1%	-4.0%	4.9%	27.1%	3.1%
5	1.2%	-1.0%	-37.6%	-12.5%				-6.4%
6	12.5%	-3.5%	-4.5%	4.3%				0.8%
7	10.6%	-14.5%	-0.6%	14.6%				1.2%
Total	5.4%	-1.5%	0.6%	1.4%	3.7%	1.7%	2.1%	1.8%

Lgv

OD	1	2	3	4	5	6	7	Total
1	2.5%	1.4%	-8.5%	-2.1%	0.7%	10.9%	18.9%	1.7%
2	15.2%	-4.7%	13.5%	-24.7%	24.9%	-7.3%	32.9%	2.9%
3	-10.6%	10.4%	2.6%	-3.6%	-5.7%	-15.9%	11.8%	-2.6%
4	-1.1%	11.1%	-8.8%	6.9%	22.3%	35.9%	20.1%	8.3%
5	2.6%	-12.9%	21.4%	-16.1%				0.2%
6	6.3%	-13.0%	1.4%	5.2%				3.9%
7	60.5%	-12.0%	33.9%	11.6%				21.3%
Total	2.2%	-0.9%	1.3%	1.9%	8.4%	6.0%	19.2%	2.4%

Hgv

OD	1	2	3	4	5	6	7	Total
1	-9.6%	-22.0%	-20.3%	10.8%	-15.7%	41.3%	11.3%	-7.8%
2	9.6%	-0.2%	-0.2%	-4.1%	34.1%	-10.0%	77.2%	4.3%
3	-13.0%	-0.8%	2.4%	0.1%	11.4%	-4.2%	-3.7%	-0.1%
4	-2.7%	-60.3%	37.8%	1.2%	7.8%	74.7%	14.1%	16.3%
5	-27.0%	25.1%	-33.0%	25.5%				2.0%
6	22.3%	15.8%	-18.4%	18.1%				12.8%
7	-1.4%	76.7%	-6.2%	11.3%				10.0%
Total	-6.4%	1.9%	-1.8%	9.2%	3.7%	49.5%	13.0%	4.6%



APPENDIX D

CALIBRATION RESULTS



AM Calibration:

					AM Peak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
3	Calibration	ATC002	EB	10091-10090	375	374	0.015	Yes	Yes	313.2814734	313	0.023	Yes	Yes	47.6732677	48	0.047	13.62093363	13	0.055
4	Calibration	ATC002	WB	10090-10091	250	249	0.071	Yes	Yes	202.3665462	202	0.060	Yes	Yes	33.38004886	33	0.066	14.60377138	15	0.030
11	Calibration	ATC006	NE	10291-10292	292	294	0.128	Yes	Yes	197.8776725	197	0.043	Yes	Yes	71.76910401	72	0.027	22.55600412	25	0.526
12	Calibration	ATC006	SW	10292-10291	423	424	0.037	Yes	Yes	342.1305316	342	0.007	Yes	Yes	69.8976355	70	0.015	11.03646876	12	0.153
13	Calibration	ATC007	NE	10494-10118	483	446	1.710	Yes	Yes	232.7318309	238	0.356	Yes	Yes	189.3955589	138	3.977	60.99179017	70	1.064
14	Calibration	ATC007	SW	10118-10494	602	585	0.685	Yes	Yes	444.0638512	447	0.155	Yes	Yes	115.4775972	102	1.315	41.99185355	36	1.001
15	Calibration	ATC008	EB	30477-30467	51	51	0.054	Yes	Yes	41.07474747	24	2.922	Yes	Yes	6.133333333	21	4.044	3.717171717	6	0.999
16	Calibration	ATC008	WB	30467-30477	97	91	0.663	Yes	Yes	82.34338747	80	0.278	Yes	Yes	11.53712297	7	1.617	3.167053364	4	0.500
17	Calibration	ATC009	EB	20094-20093	203	225	1.508	Yes	Yes	178.3218036	177	0.116	Yes	Yes	19.04801084	38	3.478	5.268598742	10	1.817
18	Calibration	ATC009	WB	20093-20094	157	194	2.790	Yes	Yes	96.82058371	109	1.219	Yes	Yes	40.48860773	76	4.597	19.36411674	9	2.781
19	Calibration	ATC010	SE	20206-21018	247	244	0.172	Yes	Yes	191.2151988	191	0.016	Yes	Yes	35.55654522	36	0.074	19.75363624	17	0.684
20	Calibration	ATC010	WB	21018-20206	315	233	4.987	Yes	Yes	281.4787764	196	5.519	No	Yes	27.49860502	27	0.096	6.492726186	10	1.132
25	Calibration	ATC013	SB	10243-10244	573	533	1.686	Yes	Yes	472.279835	409	3.038	Yes	Yes	71.7297193	77	0.566	29.11800486	48	3.088
26	Calibration	ATC013	NB	10244-10243	671	641	1.153	Yes	Yes	440.4471973	458	0.819	Yes	Yes	141.8557415	141	0.085	88.2878391	42	5.674
27	Calibration	ATC014	SW	10220-10221	243	243	0.027	Yes	Yes	202.3757128	202	0.023	Yes	Yes	25.17592599	25	0.037	15.49287753	16	0.023
28	Calibration	ATC014	NE	10221-10220	205	205	0.032	Yes	Yes	162.1004528	162	0.009	Yes	Yes	37.60062049	38	0.065	5.013416065	5	0.080
45	Calibration	ATC023	WB	10122-10131	374	378	0.220	Yes	Yes	283.3265715	284	0.010	Yes	Yes	58.27919983	58	0.037	32.27771068	37	0.745
46	Calibration	ATC023	EB	10131-10122	472	472	0.010	Yes	Yes	348.9352133	349	0.003	Yes	Yes	75.2605362	75	0.036	47.89306849	48	0.023
49	Calibration	ATC025	NB	30740-30749	22	47	4.244	Yes	Yes	16.16272817	40	4.510	Yes	Yes	4.284096624	5	0.507	1.460487486	1	0.138
50	Calibration	ATC025	SB	30749-30740	20	46	4.488	Yes	Yes	17.78741419	42	4.442	Yes	Yes	1.610383178	3	1.020	0.878390824	1	0.018
51	Calibration	ATC026	EB	10095-10094	629	630	0.006	Yes	Yes	478.2408582	478	0.011	Yes	Yes	102.7332214	103	0.032	48.41450664	48	0.011
52	Calibration	ATC026	WB	10094-10095	437	437	0.008	Yes	Yes	348.3548137	349	0.012	Yes	Yes	54.23106074	54	0.031	34.45267388	35	0.030



57	Calibration	ATC029	NB	10080-10081	567	566	0.022	Yes	Yes	422.2288155	421	0.043	Yes	Yes	115.6355299	116	0.039	28.64366336	29	0.014
58	Calibration	ATC029	SB	10081-10080	899	902	0.112	Yes	Yes	765.9282395	769	0.122	Yes	Yes	111.9594558	112	0.012	20.92700108	21	0.032
65	Calibration	ATC033	NB	30520-30149	179	179	0.034	Yes	Yes	144.9669965	145	0.010	Yes	Yes	20.70957093	21	0.064	12.94348183	13	0.012
66	Calibration	ATC033	SB	30149-30520	249	163	6.036	No	Yes	208.8355088	122	6.721	No	Yes	25.16090467	25	0.030	15.0965428	15	0.013
67	Calibration	ATC034	NW	20080-20332	564	542	0.923	Yes	Yes	437.6118347	436	0.074	Yes	Yes	81.37410149	81	0.042	45.20783416	25	3.330
68	Calibration	ATC034	SE	20332-20080	300	310	0.624	Yes	Yes	267.2659028	267	0.015	Yes	Yes	26.11010176	31	0.949	6.164885138	12	2.000
69	Calibration	ATC035	NB	31379-30153	70	70	0.021	Yes	Yes	56.82785605	57	0.023	Yes	Yes	8.118265149	8	0.042	5.073915718	5	0.053
70	Calibration	ATC035	SB	30153-31379	80	80	0.022	Yes	Yes	67.04663483	67	0.004	Yes	Yes	8.07790781	8	0.027	4.846744686	5	0.039
71	Calibration	ATC036	EB	10119-20077	103	87	1.601	Yes	Yes	74.22465528	63	1.331	Yes	Yes	18.55616382	19	0.102	9.823851434	5	1.848
72	Calibration	ATC036	WB	20077-10119	119	111	0.791	Yes	Yes	97.77150016	90	0.816	Yes	Yes	10.02784617	11	0.428	11.69915386	10	0.608
73	Calibration	ATC037	NB	10240-10119	679	683	0.164	Yes	Yes	547.7429507	552	0.177	Yes	Yes	90.78612443	91	0.022	40.34938864	40	0.014
74	Calibration	ATC037	SB	10119-10240	609	611	0.068	Yes	Yes	406.9435815	409	0.100	Yes	Yes	116.2695947	116	0.025	86.23328275	86	0.009
75	Calibration	ATC038	EB	10242-20132	152	151	0.045	Yes	Yes	117.7012779	119	0.148	Yes	Yes	21.88660126	20	0.466	12.15922292	12	0.011
76	Calibration	ATC038	WB	20132-10242	119	119	0.007	Yes	Yes	105.8777928	106	0.011	Yes	Yes	10.34355642	10	0.108	2.442228598	3	0.098
79	Calibration	ATC040	EB	20331-10240	168	168	0.003	Yes	Yes	113.9344762	114	0.013	Yes	Yes	42.85608739	41	0.293	11.49797466	13	0.563
80	Calibration	ATC040	WB	10240-20331	234	233	0.075	Yes	Yes	195.5787911	195	0.047	Yes	Yes	27.39992725	27	0.077	11.33790093	11	0.025
81	Calibration	ATC041	NB	10213-10212	321	312	0.515	Yes	Yes	236.3016655	232	0.259	Yes	Yes	65.22910557	65	0.028	19.69180545	15	1.201
82	Calibration	ATC041	SB	10212-10213	257	253	0.279	Yes	Yes	226.4338451	222	0.314	Yes	Yes	21.81588541	22	0.039	9.027262927	9	0.020
83	Calibration	ATC042	NB	10113-10408	552	550	0.054	Yes	Yes	480.246186	478	0.093	Yes	Yes	53.79539762	54	0.028	17.60576649	18	0.138
84	Calibration	ATC042	SB	10408-10113	360	358	0.086	Yes	Yes	258.4519737	258	0.018	Yes	Yes	73.84342105	73	0.135	27.45460526	27	0.036
87	Calibration	ATC044	NB	30288-30107	152	150	0.171	Yes	Yes	121.6	122	0.032	Yes	Yes	26.92571429	27	0.014	3.474285714	1	1.695
88	Calibration	ATC044	SB	30107-30288	153	97	4.977	Yes	Yes	117.8070974	81	3.655	Yes	Yes	29.20837125	10	4.271	5.841674249	6	0.089
89	Calibration	ATC045	EB	30108-30107	235	235	0.002	Yes	Yes	173.8872478	174	0.003	Yes	Yes	48.95854548	49	0.007	11.81757994	12	0.038
90	Calibration	ATC045	WB	30107-30108	260	260	0.009	Yes	Yes	220.1294118	219	0.074	Yes	Yes	31.59264706	32	0.072	8.152941176	9	0.283
91	Calibration	ATC047	NB	30229-30110	69	104	3.801	Yes	Yes	59.54794521	95	3.999	Yes	Yes	7.561643836	8	0.157	1.890410959	2	0.118
92	Calibration	ATC047	SB	30110-30229	52	59	0.939	Yes	Yes	40.32653061	47	1.008	Yes	Yes	10.6122449	11	0.160	1.06122449	1	0.199
93	Calibration	ATC048	NB	31414-30184	111	121	0.895	Yes	Yes	104.049506	113	0.871	Yes	Yes	7.357035778	7	0.133	0	1	1.358



94	Calibration	ATC048	SB	30184-31414	58	110	5.652	No	Yes	48.263594	98	5.777	No	Yes	7.879770449	8	0.043	1.969942612	4	1.327
95	Calibration	ATC049	EB	30190-30185	144	144	0.029	Yes	Yes	125.5786686	126	0.028	Yes	Yes	14.02091931	14	0.006	4.267236313	4	0.030
96	Calibration	ATC049	WB	30185-30190	90	82	0.901	Yes	Yes	65.78624265	66	0.045	Yes	Yes	21.70946007	13	2.115	2.960380919	3	0.040
99	Calibration	ATC051	NB	30178-30177	188	186	0.090	Yes	Yes	159.9425746	159	0.071	Yes	Yes	23.13634728	23	0.028	4.526676641	4	0.094
100	Calibration	ATC051	SB	30177-30178	156	156	0.002	Yes	Yes	129.2617663	129	0.023	Yes	Yes	24.14227542	24	0.029	3.017784427	3	0.215
101	Calibration	ATC052	EB	30191-30187	139	139	0.055	Yes	Yes	115.6817364	116	0.030	Yes	Yes	19.83115481	20	0.038	3.305192468	3	0.086
102	Calibration	ATC052	WB	30187-30191	96	97	0.095	Yes	Yes	77.91811613	78	0.009	Yes	Yes	16.40381392	16	0.100	1.366984494	3	0.887
103	Calibration	ATC053	EB	30164-30161	48	49	0.075	Yes	Yes	40.34190988	40	0.052	Yes	Yes	6.915755979	7	0.032	1.152625997	2	0.624
104	Calibration	ATC053	WB	30161-30164	52	48	0.569	Yes	Yes	42.59387163	43	0.028	Yes	Yes	8.96713087	5	1.663	0.747260906	1	0.132
105	Calibration	ATC054	NB	30163-30157	219	164	3.955	Yes	Yes	170.2970741	127	3.550	Yes	Yes	40.18245569	30	1.656	8.610526219	7	0.590
106	Calibration	ATC054	SB	30157-30163	103	103	0.027	Yes	Yes	84.31732194	84	0.041	Yes	Yes	16.86346439	17	0.033	2.199582311	2	0.024
109	Calibration	ATC056	NB	30158-20054	113	113	0.062	Yes	Yes	87.5813524	88	0.046	Yes	Yes	20.66526293	21	0.073	4.428270627	4	0.047
110	Calibration	ATC056	SB	20054-30158	126	102	2.302	Yes	Yes	102.9526721	78	2.617	Yes	Yes	20.59053442	21	0.090	2.68572188	3	0.054
113	Calibration	ATC058	NB	20258-20055	335	335	0.021	Yes	Yes	242.6522219	243	0.020	Yes	Yes	66.04735034	66	0.006	25.84461535	26	0.025
114	Calibration	ATC058	SB	20055-20258	454	453	0.036	Yes	Yes	364.9201577	365	0.012	Yes	Yes	53.40294991	53	0.061	35.60196661	35	0.017
115	Calibration	ATC059	NW	10093-10094	460	425	1.672	Yes	Yes	349.6478375	337	0.691	Yes	Yes	75.10953546	54	2.622	35.39644774	34	0.220
116	Calibration	ATC059	SE	10094-10093	693	714	0.773	Yes	Yes	552.7242997	540	0.523	Yes	Yes	86.04682321	114	2.815	54.66504063	59	0.606
117	Calibration	ATC060	NB	20064-20033	200	129	5.551	No	Yes	180.0812166	103	6.507	No	Yes	18.37563434	25	1.381	1.31254531	1	0.157
118	Calibration	ATC060	SB	20033-20064	463	394	3.304	Yes	Yes	360.7107037	347	0.747	Yes	Yes	91.08856153	44	5.724	10.93062738	4	2.707
119	Calibration	ATC061	NB	10084-10085	727	770	1.565	Yes	Yes	467	508	1.856	Yes	Yes	126	127	0.077	134	135	0.083
120	Calibration	ATC061	SB	10085-10084	826	846	0.692	Yes	Yes	564	589	1.055	Yes	Yes	112	111	0.118	150	146	0.336
121	Calibration	ATC062	NB	10660-10078	716	780	2.326	Yes	Yes	570	619	2.013	Yes	Yes	112	126	1.242	34	35	0.171
122	Calibration	ATC062	SB	10078-10660	977	1005	0.901	Yes	Yes	849	851	0.066	Yes	Yes	95	115	1.969	33	39	1.043
123	Calibration	ATC063	NE	10114-10396	485	552	2.948	Yes	Yes	304.041781	357	2.920	Yes	Yes	120.7113771	120	0.099	60.35568855	75	1.835
124	Calibration	ATC063	SW	10396-10114	703	777	2.725	Yes	Yes	558.4269679	618	2.437	Yes	Yes	101.0009912	108	0.662	43.40538465	52	1.201
125	Calibration	ATC064	EB	31245-30662	185	123	4.969	Yes	Yes	149.3519803	98	4.630	Yes	Yes	22.30142692	17	1.261	13.51601631	9	1.397
126	Calibration	ATC064	WB	30662-31245	347	244	6.005	No	No	294.6891	230	4.006	Yes	Yes	41.28885741	10	6.109	11.33419615	4	2.660



127	Calibration	ATC065	EB	30061-30060	191	231	2.735	Yes	Yes	154.404483	174	1.528	Yes	Yes	23.05587302	41	3.189	13.97325638	16	0.543
128	Calibration	ATC065	WB	30060-30061	404	442	1.870	Yes	Yes	342.4765216	380	1.977	Yes	Yes	47.9843478	49	0.196	13.17217391	13	0.136
129	Calibration	ATC066	EB	20188-20184	179	175	0.324	Yes	Yes	110.6520957	102	0.880	Yes	Yes	46.27269455	51	0.658	22.13041913	22	0.035
130	Calibration	ATC066	WB	20184-20188	504	463	1.857	Yes	Yes	443.2696502	384	2.917	Yes	Yes	47.34925809	65	2.380	13.0966033	14	0.175
131	Calibration	ATC067	EB	30473-31420	118	117	0.076	Yes	Yes	97.59956465	108	0.982	Yes	Yes	13.39601868	5	2.596	6.698009339	4	1.217
132	Calibration	ATC067	WB	31420-30473	178	147	2.425	Yes	Yes	159.9048523	136	2.006	Yes	Yes	14.80600485	9	1.660	2.961200969	2	0.480
133	Calibration	ATC068	NW	20199-20200	827	849	0.767	Yes	Yes	738.0154416	747	0.316	Yes	Yes	72.09920189	82	1.158	17.02342267	20	0.794
134	Calibration	ATC068	SB	20200-20199	429	394	1.730	Yes	Yes	332.9947412	304	1.599	Yes	Yes	61.92050973	61	0.056	34.40028318	28	1.093
135	Calibration	ATC069	SE	31246-20077	91	87	0.425	Yes	Yes	73.78695445	80	0.720	Yes	Yes	10.54099349	5	2.000	6.588120933	2	2.313
136	Calibration	ATC069	NW	20077-31246	74	113	4.050	Yes	Yes	61.88109221	106	4.799	Yes	Yes	7.455553278	7	0.139	4.473331967	0	2.952
137	Calibration	ATC070	NB	10471-10457	606	612	0.248	Yes	Yes	495.738563	496	0.004	Yes	Yes	75.05205336	78	0.371	35.55097264	39	0.488
138	Calibration	ATC070	SB	10457-10471	514	532	0.777	Yes	Yes	326.8391025	347	1.120	Yes	Yes	108.2900641	103	0.533	78.75641023	81	0.299
143	Calibration	ATC073	EB	30037-30033	91	24	8.844	No	Yes	79.58905965	11	10.169	No	Yes	8.186303279	13	1.430	3.183562386	0	2.523
144	Calibration	ATC073	WB	30033-30037	89	56	3.905	Yes	Yes	73.29443255	52	2.626	Yes	Yes	12.99310395	3	3.410	2.665252093	0	2.309
147	Calibration	ATC075	NE	30111-30031	124	154	2.594	Yes	Yes	106.1698945	132	2.394	Yes	Yes	16.40508806	15	0.298	1	7	2.876
148	Calibration	ATC075	SW	30031-30111	58	86	3.309	Yes	Yes	41.01582451	67	3.476	Yes	Yes	12.93877551	13	0.138	4.015306122	6	0.930
149	Calibration	ATC076	NE	10100-10004	1485	1579	2.381	Yes	Yes	1051.256975	1143	2.771	Yes	Yes	255.3620441	256	0.042	178.8527935	180	0.056
150	Calibration	ATC076	SW	10007-10099	1459	1481	0.576	Yes	Yes	1034.224045	1058	0.728	Yes	Yes	253.7538958	254	0.014	170.8542167	169	0.128
151	Calibration	ATC077	EB	30171-30172	106	31	9.040	No	Yes	71.21586817	25	6.667	No	Yes	26.70595056	4	5.922	8.217215558	3	2.414
152	Calibration	ATC077	WB	30172-30171	152	84	6.274	No	Yes	107.4950289	64	4.737	Yes	Yes	32.71587836	12	4.366	11.68424227	8	1.155
153	Calibration	ATC078	EB	30162-10008	66	63	0.371	Yes	Yes	55.40463597	33	3.372	Yes	Yes	5.89411021	24	4.753	4.715288168	6	0.412
154	Calibration	ATC078	WB	10008-30162	54	52	0.263	Yes	Yes	44.75106907	27	2.988	Yes	Yes	7.458511512	17	2.722	1.356093002	8	3.017
155	Calibration	ATC079	EB	30157-30764	253	165	6.050	No	Yes	208.3480052	134	5.642	No	Yes	23.40988823	17	1.361	21.0688994	14	1.795
156	Calibration	ATC079	WB	30764-30157	114	134	1.741	Yes	Yes	81.10483255	85	0.480	Yes	Yes	18.02329612	37	3.569	15.01941344	11	1.013
157	Calibration	ATC080	NW	20053-20052	398	480	3.914	Yes	Yes	312.6556837	399	4.575	Yes	Yes	58.34339815	44	1.975	26.97123952	37	1.742
158	Calibration	ATC080	SE	20052-20053	290	349	3.308	Yes	Yes	192.3202958	266	4.865	Yes	Yes	71.58424391	59	1.622	25.73989478	24	0.293
159	Calibration	ATC081	NB	30046-31242	299	290	0.528	Yes	Yes	220.2748954	204	1.140	Yes	Yes	58.38611685	64	0.689	19.90435802	22	0.473



160	Calibration	ATC081	SB	31242-30046	218	301	5.132	No	Yes	191.514797	248	3.787	Yes	Yes	17.33878821	41	4.452	9.457520839	12	0.748
161	Calibration	ATC082	EB	10033-10661	1003	1000	0.090	Yes	Yes	666.5	664	0.092	Yes	Yes	190.5	190	0.031	145.5	145	0.003
162	Calibration	ATC082	WB	10661-10033	931	961	0.985	Yes	Yes	665.5	695	1.139	Yes	Yes	149.5	150	0.047	116	116	0.002
163	Calibration	ATC083	NW	10667-10662	899	847	1.738	Yes	Yes	671.2588152	641	1.173	Yes	Yes	116.4095514	116	0.040	110.9698528	90	2.081
164	Calibration	ATC083	SE	10662-10667	821	856	1.225	Yes	Yes	543.4996075	574	1.310	Yes	Yes	151.6743091	156	0.359	125.4924343	126	0.004
165	Calibration	ATC084	NB	31423-31386	319	316	0.192	Yes	Yes	264.2731162	261	0.200	Yes	Yes	42.11523765	42	0.016	12.63457129	13	0.021
166	Calibration	ATC084	SB	31386-31423	178	180	0.164	Yes	Yes	129.2790472	132	0.265	Yes	Yes	33.72496883	33	0.162	14.61415316	15	0.026
167	Calibration	ATC085	EB	30643-30027	400	455	2.681	Yes	Yes	325.4492209	381	2.980	Yes	Yes	58.48652665	56	0.362	16.03662828	18	0.522
168	Calibration	ATC085	WB	30027-30643	524	522	0.063	Yes	Yes	462.5601308	464	0.055	Yes	Yes	48.57937447	46	0.363	12.6728803	13	0.031
175	Calibration	ATC089	EB	20002-20252	538	540	0.052	Yes	Yes	453.4330442	454	0.032	Yes	Yes	57.65635691	58	0.041	27.36233887	28	0.040
176	Calibration	ATC089	WB	20252-20002	605	610	0.210	Yes	Yes	497.5017278	499	0.063	Yes	Yes	86.92409371	91	0.395	20.34393683	20	0.007
177	Calibration	ATC090	NW	20073-20072	269	271	0.073	Yes	Yes	224.6960352	225	0.048	Yes	Yes	35.69178898	36	0.051	8.922947246	9	0.056
178	Calibration	ATC090	SE	20072-20073	296	297	0.051	Yes	Yes	250.6782117	252	0.082	Yes	Yes	35.23045138	35	0.039	10.16263021	10	0.064
179	Calibration	ATC091	NB	10373-10420	488	500	0.502	Yes	Yes	421.9080745	433	0.521	Yes	Yes	49.56513196	50	0.062	16.92467921	17	0.010
180	Calibration	ATC091	SB	10420-10373	336	336	0.013	Yes	Yes	300.3723262	300	0.011	Yes	Yes	27.08275072	27	0.016	8.617238866	9	0.014
181	Calibration	ATC092	NB	20297-20298	619	623	0.196	Yes	Yes	486.7104017	491	0.215	Yes	Yes	112.9016331	113	0.010	18.97506439	19	0.006
182	Calibration	ATC092	SB	20298-20297	752	749	0.088	Yes	Yes	577.2215019	575	0.103	Yes	Yes	139.1145346	139	0.009	35.29771774	35	0.028
183	Calibration	ATC093	SE	30708-31047	344	304	2.223	Yes	Yes	285.597199	251	2.091	Yes	Yes	45.40875967	40	0.861	13.14464096	13	0.036
184	Calibration	ATC093	NW	31047-30708	352	421	3.516	Yes	Yes	316.4044944	379	3.374	Yes	Yes	25.31235955	31	1.138	10.28314607	10	0.044
185	Calibration	ATC094	NB	30566-31024	561	518	1.853	Yes	Yes	428.1240489	430	0.109	Yes	Yes	101.0593248	61	4.453	32.15523972	27	0.965
186	Calibration	ATC094	SB	31024-30566	532	523	0.399	Yes	Yes	419.9360271	420	0.004	Yes	Yes	92.88547811	84	0.961	19.51375591	19	0.008
189	Calibration	ATC096	NW	20024-30824	342	336	0.311	Yes	Yes	290.2326415	285	0.304	Yes	Yes	46.27725189	46	0.060	5.713240974	6	0.071
190	Calibration	ATC096	SE	30824-20024	263	273	0.609	Yes	Yes	240.7504924	239	0.129	Yes	Yes	19.17481798	32	2.509	3.550892218	3	0.393
195	Calibration	ATC099	NE	20263-20264	396	403	0.336	Yes	Yes	341.1977907	346	0.278	Yes	Yes	48.88220497	50	0.190	5.865864596	6	0.085
196	Calibration	ATC099	SW	20264-20263	616	630	0.564	Yes	Yes	560.814906	575	0.589	Yes	Yes	44.98515289	45	0.014	9.996700641	10	0.018
197	Calibration	ATC100	NE	10345-10485	395	410	0.754	Yes	Yes	337.6265734	335	0.166	Yes	Yes	44.87878788	63	2.439	12.42797203	13	0.078
198	Calibration	ATC100	SW	10485-10345	388	471	4.008	Yes	Yes	317.9254717	397	4.184	Yes	Yes	57.13867925	59	0.264	13.18584906	15	0.524



203	Calibration	ATC103	NE	20281-20282	207	182	1.848	Yes	Yes	143.1349875	128	1.306	Yes	Yes	39.41398206	34	0.880	24.8930413	20	1.108
204	Calibration	ATC103	SW	20282-20281	509	439	3.212	Yes	Yes	425.5132555	360	3.329	Yes	Yes	70.91887592	73	0.292	12.45872145	6	2.124
205	Calibration	ATC104	NB	20230-20041	1204	1255	1.471	Yes	Yes	1109.670869	1156	1.363	Yes	Yes	75.83390887	75	0.110	18.23853504	25	1.432
206	Calibration	ATC104	SB	20041-20230	442	481	1.810	Yes	Yes	343.9428885	371	1.422	Yes	Yes	70.4801001	77	0.759	27.25230537	33	0.998
207	Calibration	ATC105	NB	10436-10379	567	586	0.759	Yes	Yes	508.9850405	529	0.858	Yes	Yes	45.82815499	45	0.157	12.67587266	12	0.077
208	Calibration	ATC105	SB	10379-10436	392	404	0.596	Yes	Yes	333.1525424	343	0.550	Yes	Yes	40.81355932	42	0.184	18.03389831	19	0.135
209	Calibration	ATC106	NB	10444-10439	900	974	2.431	Yes	Yes	782	851	2.429	Yes	Yes	91	94	0.360	27	29	0.292
210	Calibration	ATC106	SB	10439-10444	878	878	0.003	Yes	Yes	728.3008336	728	0.000	Yes	Yes	118.9757528	119	0.005	30.72341361	31	0.005
211	Calibration	ATC107	NB	30838-30815	472	483	0.475	Yes	Yes	425.1915994	436	0.497	Yes	Yes	40.82455574	41	0.029	6.162197092	6	0.052
212	Calibration	ATC107	SB	30815-30838	306	307	0.021	Yes	Yes	257.0243386	257	0.027	Yes	Yes	41.05820106	41	0.012	8.211640212	8	0.005
213	Calibration	ATC108	NE	20338-20222	841	813	0.971	Yes	Yes	719.0973074	691	1.040	Yes	Yes	104.9493368	105	0.009	16.51980301	16	0.051
214	Calibration	ATC108	SW	20222-20338	519	517	0.115	Yes	Yes	412.6210551	410	0.142	Yes	Yes	86.75622184	87	0.028	20.1020514	20	0.000
217	Calibration	ATC110	NB	10107-10409	460	510	2.305	Yes	Yes	413.1728839	462	2.314	Yes	Yes	35.88590776	38	0.293	10.66878339	11	0.177
218	Calibration	ATC110	SB	10409-10107	327	335	0.421	Yes	Yes	270.8782564	279	0.463	Yes	Yes	41.13336487	41	0.021	15.04879202	15	0.026
219	Calibration	ATC111	NB	30393-30392	371	370	0.025	Yes	Yes	320.4904526	320	0.001	Yes	Yes	44.46110325	44	0.081	5.557637907	6	0.030
220	Calibration	ATC111	SB	30392-30393	397	397	0.006	Yes	Yes	359.3584691	359	0.003	Yes	Yes	32.84994316	33	0.026	4.977264115	5	0.094
223	Calibration	ATC113	NE	10338-10375	658	662	0.155	Yes	Yes	583.1249394	586	0.136	Yes	Yes	59.69568668	60	0.096	15.28791976	15	0.014
224	Calibration	ATC113	SW	10375-10338	550	643	3.818	Yes	Yes	463.9753054	557	4.135	Yes	Yes	64.8386543	65	0.038	21.05151114	21	0.024
229	Calibration	ATC116	NE	10278-10441	448	465	0.841	Yes	Yes	359.9555315	369	0.461	Yes	Yes	61.61400989	70	1.074	25.94274101	26	0.087
230	Calibration	ATC116	SW	10441-10278	701	685	0.587	Yes	Yes	594.8261572	579	0.641	Yes	Yes	80.23236538	80	0.014	25.8219107	26	0.038
231	Calibration	ATC117	NE	30622-30087	325	319	0.323	Yes	Yes	285.7295033	285	0.018	Yes	Yes	34.71479947	29	0.939	4.450615317	4	0.081
232	Calibration	ATC117	SW	30087-30622	214	220	0.399	Yes	Yes	179.2848234	185	0.436	Yes	Yes	31.13894301	31	0.023	3.774417334	4	0.060
233	Calibration	ATC118	NB	20070-20238	666	619	1.872	Yes	Yes	565.6324963	521	1.904	Yes	Yes	86.93980962	84	0.265	13.61707862	13	0.169
234	Calibration	ATC118	SB	20238-20070	246	256	0.666	Yes	Yes	193.3346457	204	0.759	Yes	Yes	41.99123527	42	0.001	10.49780882	10	0.047
235	Calibration	ATC119	EB	10466-10056	852	878	0.882	Yes	Yes	734.9262613	758	0.847	Yes	Yes	89.38292367	92	0.253	28.17731773	29	0.072
236	Calibration	ATC119	WB	10056-10466	999	1000	0.032	Yes	Yes	850.6336634	851	0.024	Yes	Yes	117.7938794	118	0.015	30.57245725	31	0.031
237	Calibration	ATC120	EB	20324-20036	373	373	0.021	Yes	Yes	299.5771411	299	0.007	Yes	Yes	61.91260916	62	0.005	11.98308564	12	0.097



238	Calibration	ATC120	WB	20036-20324	544	558	0.617	Yes	Yes	470.4111188	483	0.589	Yes	Yes	60.63511303	62	0.173	12.71381402	13	0.076
253	Calibration	ATC128	NB	10388-10052	1742	1638	2.528	Yes	Yes	1547.117483	1487	1.540	Yes	Yes	162.9603591	123	3.379	32.18970056	29	0.652
254	Calibration	ATC128	SB	10052-10388	789	796	0.241	Yes	Yes	631.5793269	637	0.206	Yes	Yes	111.9014423	114	0.228	45.51923077	45	0.124
255	Calibration	ATC129	NB	20018-20194	1152	1142	0.318	Yes	Yes	940.5428132	947	0.194	Yes	Yes	174.360878	159	1.214	37.55465065	36	0.177
256	Calibration	ATC129	SB	20194-20018	1175	1186	0.325	Yes	Yes	1035.435368	1040	0.130	Yes	Yes	101.5987424	109	0.696	37.88996003	38	0.028
259	Calibration	ATC131	NW	10065-10066	281	280	0.041	Yes	Yes	246.1744966	245	0.046	Yes	Yes	26.36912752	26	0.045	8.456375839	9	0.091
260	Calibration	ATC131	SE	10066-10065	216	214	0.157	Yes	Yes	177	177	0.035	Yes	Yes	27	25	0.323	12	12	0.053
261	Calibration	ATC132	EB	10072-10448	205	221	1.032	Yes	Yes	153.404967	176	1.768	Yes	Yes	38.35124176	31	1.250	13.69687206	13	0.073
262	Calibration	ATC132	WB	10448-10072	266	226	2.543	Yes	Yes	241.1418375	198	2.920	Yes	Yes	14.64880322	22	1.738	10.14147915	6	1.432
263	Calibration	ATC133	EB	20152-20175	679	679	0.014	Yes	Yes	578.0387856	555	0.971	Yes	Yes	80.08094007	101	2.188	20.38423929	23	0.572
264	Calibration	ATC134	WB	20303-20153	495	567	3.128	Yes	Yes	421.8685536	520	4.522	Yes	Yes	53.79531892	30	3.678	18.8755505	17	0.538
265	Calibration	ATC135	EB	30019-30572	135	74	5.933	No	Yes	110.3445277	55	6.110	No	Yes	19.35868907	18	0.407	4.839672268	2	1.853
266	Calibration	ATC136	EB	30014-31229	310	349	2.150	Yes	Yes	263.2684256	314	3.007	Yes	Yes	41.97783952	29	2.133	5.182449324	6	0.293
267	Calibration	ATC136	WB	31229-30014	522	497	1.110	Yes	Yes	476.7826144	429	2.266	Yes	Yes	37.97383655	55	2.487	7.032191953	13	1.952
268	Calibration	ATC137	NE	10041-10394	407	400	0.349	Yes	Yes	352.8929267	348	0.276	Yes	Yes	36.0620509	36	0.000	18.03102545	16	0.444
269	Calibration	ATC137	SW	10394-10041	417	443	1.262	Yes	Yes	358.2770776	384	1.353	Yes	Yes	43.98286375	44	0.000	14.66095458	15	0.024
270	Calibration	ATC138	EB	31181-31408	301	270	1.823	Yes	Yes	270.836405	243	1.748	Yes	Yes	20.19394248	20	0.028	9.503031754	7	0.925
271	Calibration	ATC138	WB	31408-31181	283	220	3.943	Yes	Yes	241.2830419	197	3.012	Yes	Yes	33.34092943	16	3.543	7.896535918	8	0.131
276	Calibration	ATC141	NE	20020-20319	483	507	1.117	Yes	Yes	371.587993	394	1.166	Yes	Yes	96.8950969	98	0.104	14.11093644	15	0.264
277	Calibration	ATC141	SE	20319-20020	713	702	0.411	Yes	Yes	633.9508193	624	0.409	Yes	Yes	63.69840768	63	0.069	15.16628754	15	0.031
292	Calibration	ATC149	NE	10043-10369	570	578	0.319	Yes	Yes	516.5074627	522	0.233	Yes	Yes	38.78535892	39	0.063	15.13574982	17	0.487
293	Calibration	ATC149	SW	10369-10043	566	630	2.603	Yes	Yes	496.7809839	559	2.701	Yes	Yes	54.36471145	54	0.007	14.99716178	17	0.415
303	Calibration	ATC155	NB	10049-10050	1309	1323	0.376	Yes	Yes	1177.637456	1175	0.091	Yes	Yes	106.385159	122	1.446	24.97738516	26	0.261
304	Calibration	ATC155	SB	10047-10048	970	959	0.349	Yes	Yes	813.4840699	807	0.236	Yes	Yes	118.6330935	114	0.410	37.88283659	38	0.047
317	Calibration	LEB012	NB	10676-10675	791	795	0.143	Yes	Yes	595.0064962	599	0.183	Yes	Yes	129.2617663	129	0.034	66.3912574	66	0.009
318	Calibration	LEB012	SB	10675-10676	1174	1171	0.084	Yes	Yes	914.127451	911	0.090	Yes	Yes	164.4066492	164	0.025	95.47819159	96	0.019
319	Calibration	LEB013	NB	10708-10681	1065	1065	0.011	Yes	Yes	854.0329929	855	0.017	Yes	Yes	147.8714369	148	0.002	62.8705089	63	0.013



320	Calibration	LEB013	SB	10681-10708	922	921	0.024	Yes	Yes	657.3740411	657	0.028	Yes	Yes	174.0255686	174	0.004	90.53353282	90	0.006
321	Calibration	LEB014	NB	10707-10688	722	722	0.024	Yes	Yes	557.2841909	557	0.011	Yes	Yes	117.1906286	117	0.021	47.78158677	48	0.024
322	Calibration	LEB014	SB	10688-10707	572	569	0.155	Yes	Yes	383.7615863	384	0.012	Yes	Yes	108.1372753	108	0.012	80.47425139	77	0.432
323	Calibration	LEB015	NB	10701-10699	730	733	0.085	Yes	Yes	599.0302088	601	0.100	Yes	Yes	90.03056875	90	0.003	41.24305384	41	0.018
324	Calibration	LEB015	SB	10699-10701	544	530	0.586	Yes	Yes	371.6904486	358	0.694	Yes	Yes	102.1017065	102	0.009	69.9120059	70	0.026
377	Calibration	WebTRIS_7073/1	NB	10105-10106	1584	1677	2.295	Yes	Yes	1113.62452	1206	2.708	Yes	Yes	285.5398884	286	0.029	184.8883624	185	0.002
378	Calibration	WebTRIS_7074/1	SB	10101-10102	1547	1571	0.602	Yes	Yes	1137.834644	1161	0.690	Yes	Yes	237.6590455	238	0.023	171.8601448	172	0.000
379	Calibration	WebTRIS_8001/1	NB	10167-10165	1263	1265	0.059	Yes	Yes	893.9047279	894	0.017	Yes	Yes	217.1394282	217	0.007	152.0820898	154	0.137
380	Calibration	WebTRIS_30360764	NB	10177-10161	1590	1591	0.022	Yes	Yes	1127.004944	1127	0.012	Yes	Yes	276.5183196	277	0.031	186.1816574	186	0.002
381	Calibration	WebTRIS_30361627	SB	10160-10174	1698	1698	0.010	Yes	Yes	1201.713264	1202	0.012	Yes	Yes	291.9095548	292	0.006	204.4502718	204	0.008
382	Calibration	WebTRIS_6550/2	SB	11039-11038	1150	1150	0.002	Yes	Yes	719.6774238	720	0.015	Yes	Yes	263.2718259	263	0.017	166.70494	167	0.003
383	Calibration	WebTRIS_6550/1	NB	11038-11039	1139	1139	0.000	Yes	Yes	697.0582648	697	0.003	Yes	Yes	250.9409753	251	0.004	190.8867248	191	0.002
384	Calibration	WebTRIS_6527/1	NB	10183-10181	510	509	0.066	Yes	Yes	315.0628662	314	0.048	Yes	Yes	88.2815747	88	0.047	106.8334998	107	0.018
385	Calibration	WebTRIS_6527/2	NB	10183-10182	1054	1051	0.078	Yes	Yes	650.7220677	649	0.055	Yes	Yes	182.3343053	182	0.050	220.6509346	220	0.031
386	Calibration	WebTRIS_65271/2/2	NB	11008-10183	1556	1560	0.094	Yes	Yes	961.0072754	964	0.081	Yes	Yes	269.2771655	270	0.014	325.8643959	327	0.054
387	Calibration	WebTRIS_6526/1	SB	10184-10176	516	516	0.003	Yes	Yes	323.8771768	324	0.020	Yes	Yes	98.41571671	98	0.023	93.6440456	94	0.008
388	Calibration	WebTRIS_6526/2	SB	10184-10185	1165	1181	0.466	Yes	Yes	731.3444822	731	0.013	Yes	Yes	222.2317487	239	1.079	211.4568761	211	0.004
389	Calibration	WebTRIS_6526/1/2	SB	11035-10184	1681	1697	0.391	Yes	Yes	1055.221659	1055	0.001	Yes	Yes	320.6474654	337	0.891	305.1009217	305	0.008
390	Calibration	WebTRIS_6535/1	NB	11069-11074	1540	1508	0.823	Yes	Yes	888.7542674	890	0.025	Yes	Yes	303.2103485	270	1.948	347.9463016	348	0.005
391	Calibration	WebTRIS_6534/1	SB	11075-11070	1539	1511	0.724	Yes	Yes	792.05	792	0.003	Yes	Yes	382.4767763	354	1.487	364.7598684	365	0.009
392	Calibration	WebTRIS_6533/1	NB	11031-11021	1542	1542	0.010	Yes	Yes	940.9471078	942	0.018	Yes	Yes	292.9835309	293	0.001	307.9826878	308	0.011
393	Calibration	WebTRIS_6532/1	SB	11022-11014	1607	1606	0.016	Yes	Yes	922.3083978	922	0.005	Yes	Yes	381.3227169	381	0.017	303.1897772	303	0.009
394	Calibration	WebTRIS_6531/1	SB	11027-11012	88	97	1.010	Yes	Yes	46.87736252	57	1.389	Yes	Yes	20.17109031	20	0.038	20.48528174	20	0.028
395	Calibration	WebTRIS_6531/2	SB	11027-11028	1355	1354	0.007	Yes	Yes	725.4423501	725	0.007	Yes	Yes	312.154148	312	0.009	317.0163621	317	0.003
396	Calibration	WebTRIS_6531/1/2	SB	11026-11027	1442	1452	0.248	Yes	Yes	772.3197127	782	0.352	Yes	Yes	332.3252383	332	0.018	337.5016439	337	0.004
397	Calibration	WebTRIS_6530/1	NB	11017-11527	100	101	0.056	Yes	Yes	62.87420212	63	0.017	Yes	Yes	17.68540122	18	0.065	19.76603666	20	0.033
398	Calibration	WebTRIS_6530/2	NB	11017-11018	1240	1257	0.491	Yes	Yes	777.1106729	795	0.626	Yes	Yes	218.5874902	219	0.003	244.3036655	244	0.010



399	Calibration	WebTRIS_6530/1/2	NB	11016-11017	1340	1358	0.487	Yes	Yes	839.984875	858	0.607	Yes	Yes	236.2728914	237	0.015	264.0697022	264	0.000
400	Calibration	WebTRIS_30360804	NB	11011-11015	1458	1458	0.004	Yes	Yes	913.9184201	914	0.002	Yes	Yes	257.0690903	257	0.004	287.3125126	287	0.008
401	Calibration	WebTRIS_30360803	SB	11030-11013	1655	1620	0.853	Yes	Yes	934.5342229	912	0.750	Yes	Yes	395.5082336	386	0.481	324.5837613	322	0.125
402	Calibration	WebTRIS_6529/1	SB	11034-11059	172	188	1.181	Yes	Yes	97.20615148	97	0.006	Yes	Yes	41.13903197	53	1.771	33.7617794	37	0.606
403	Calibration	WebTRIS_6529/2	SB	11034-11035	1437	1432	0.138	Yes	Yes	811.8435555	815	0.093	Yes	Yes	343.5837905	333	0.592	281.9706635	285	0.178
404	Calibration	WebTRIS_6529/1/2	SB	11013-11034	1619	1620	0.034	Yes	Yes	914.2541015	912	0.083	Yes	Yes	386.9253965	386	0.047	317.5400406	322	0.268
405	Calibration	WebTRIS_6528/1	NB	11009-11062	173	173	0.018	Yes	Yes	109.8598348	110	0.014	Yes	Yes	27.02551935	27	0.005	35.81430614	36	0.019
406	Calibration	WebTRIS_6528/2	NB	11009-11010	1253	1253	0.012	Yes	Yes	797.1879699	797	0.007	Yes	Yes	196.1082406	196	0.008	259.8832782	260	0.009
407	Calibration	WebTRIS_6528/1/2	NB	10182-11009	1426	1426	0.006	Yes	Yes	907.0478047	907	0.002	Yes	Yes	223.13376	223	0.009	295.6975843	296	0.002
408	Calibration	WebTRIS_6525/1	SB	11004-11043	306	306	0.032	Yes	Yes	178.9275655	179	0.005	Yes	Yes	76.63160382	77	0.042	50.06357136	50	0.016
409	Calibration	WebTRIS_6525/2	SB	11004-11045	1442	1441	0.014	Yes	Yes	844.028321	844	0.003	Yes	Yes	361.4828364	361	0.025	236.1574191	236	0.002
410	Calibration	WebTRIS_6525/1/2	SB	11003-11004	1747	1747	0.001	Yes	Yes	1022.955886	1023	0.000	Yes	Yes	438.1144403	438	0.005	286.2209905	286	0.008
411	Calibration	WebTRIS_6524/1	NB	11005-11042	187	186	0.058	Yes	Yes	115.6502648	115	0.022	Yes	Yes	32.40555642	32	0.094	39.21541973	39	0.003
412	Calibration	WebTRIS_6524/2	NB	11005-11006	1264	1259	0.152	Yes	Yes	780.7401145	777	0.130	Yes	Yes	218.765758	218	0.043	264.7382723	264	0.069
413	Calibration	WebTRIS_6524/1/2	NB	11375-11005	1438	1445	0.189	Yes	Yes	888.1383102	893	0.147	Yes	Yes	248.8590595	250	0.072	301.1555286	303	0.096
414	Calibration	MCJC01	WB	10415-10063	690	690	0.028	Yes	Yes	583.2957515	584	0.012	Yes	Yes	83.25374181	83	0.079	23.03332822	24	0.240
415	Calibration	MCJC01	EB	10063-10415	454	455	0.050	Yes	Yes	363.5552109	364	0.030	Yes	Yes	66.07248426	66	0.046	24.53686864	25	0.027
416	Calibration	MCJC01	EB	10414-10063	559	565	0.234	Yes	Yes	436.2297017	441	0.209	Yes	Yes	83.25374181	84	0.133	39.86537577	40	0.006
417	Calibration	MCJC01	WB	10063-10414	936	933	0.098	Yes	Yes	790.9643114	788	0.096	Yes	Yes	108.8252682	109	0.027	36.38225349	36	0.004
418	Calibration	MCJC01	NB	31386-10063	319	317	0.139	Yes	Yes	264.2731162	262	0.141	Yes	Yes	42.11523765	42	0.016	12.63457129	13	0.023
419	Calibration	MCJC01	SB	10063-31386	178	183	0.424	Yes	Yes	129.2790472	134	0.390	Yes	Yes	33.72496883	34	0.047	14.61415316	16	0.245
420	Calibration	MCJC02	NB	10062-30566	426	428	0.130	Yes	Yes	376.2171253	378	0.110	Yes	Yes	38.22526941	38	0.033	11.06520957	11	0.102
421	Calibration	MCJC02	SB	30566-10062	314	327	0.754	Yes	Yes	250.4761075	262	0.733	Yes	Yes	49.29047898	50	0.129	14.08299399	15	0.224
422	Calibration	MCJC02	WB	10062-10417	429	440	0.573	Yes	Yes	334.9740714	347	0.660	Yes	Yes	62.36754483	62	0.029	31.18377242	31	0.004
423	Calibration	MCJC02	EB	10417-10062	526	536	0.417	Yes	Yes	438.5846701	444	0.272	Yes	Yes	61.36161669	65	0.508	26.1541317	26	0.029
424	Calibration	MCJC02	SB	10062-30564	382	385	0.135	Yes	Yes	330.9503589	330	0.047	Yes	Yes	36.21341313	40	0.556	15.08892214	15	0.015
425	Calibration	MCJC02	NB	30564-10062	403	407	0.173	Yes	Yes	359.1163468	363	0.198	Yes	Yes	31.18377242	31	0.033	13.07706585	13	0.023



426	Calibration	MCJC02	EB	10062-10392	505	511	0.269	Yes	Yes	418.4661073	424	0.255	Yes	Yes	62.36754483	63	0.081	24.14227542	24	0.038
427	Calibration	MCJC02	WB	10392-10062	498	495	0.147	Yes	Yes	412.4305384	410	0.118	Yes	Yes	57.33790412	57	0.107	28.16598799	28	0.013
428	Calibration	MCJC03	NB	30008-30009	589	514	3.207	Yes	Yes	525.0944903	456	3.136	Yes	Yes	55.32604783	49	0.819	9.053353282	9	0.012
429	Calibration	MCJC03	SB	30009-30008	366	366	0.021	Yes	Yes	309.8258679	310	0.030	Yes	Yes	41.24305384	40	0.160	15.08892214	15	0.025
430	Calibration	MCJC03	NB	30008-31047	448	452	0.204	Yes	Yes	402.371257	407	0.228	Yes	Yes	32.18970056	32	0.033	13.07706585	13	0.015
431	Calibration	MCJC03	SB	31047-30008	290	289	0.032	Yes	Yes	240.416826	240	0.016	Yes	Yes	38.22526941	37	0.248	11.06520957	12	0.358
432	Calibration	MCJC03	SB	30008-30671	319	317	0.108	Yes	Yes	269.5887422	268	0.100	Yes	Yes	36.21341313	36	0.034	13.07706585	13	0.023
433	Calibration	MCJC03	NB	30671-30008	529	530	0.021	Yes	Yes	474.7980832	476	0.033	Yes	Yes	42.24898198	42	0.041	12.07113771	12	0.014
434	Calibration	MCJC03	SB	30008-30028	217	192	1.762	Yes	Yes	171.0077842	147	1.872	Yes	Yes	34.20155684	33	0.260	12.07113771	12	0.026
435	Calibration	MCJC03	NB	30028-30008	388	291	5.301	No	Yes	343.0214966	252	5.284	No	Yes	36.21341313	31	0.858	9.053353282	7	0.541
448	Calibration	MCJC06	NB	30026-30676	403	403	0.017	Yes	Yes	348.9212651	349	0.017	Yes	Yes	47.8951593	48	0.002	6.035568855	6	0.010
449	Calibration	MCJC06	SB	30676-30026	400	401	0.056	Yes	Yes	361.2421149	362	0.019	Yes	Yes	33.39322173	34	0.101	5.029640712	5	0.077
450	Calibration	MCJC06	SB	30026-30027	592	592	0.009	Yes	Yes	532.6389514	532	0.032	Yes	Yes	45.76973048	46	0.046	14.08299399	14	0.056
451	Calibration	MCJC06	NB	30027-30026	582	580	0.121	Yes	Yes	477.8158677	478	0.002	Yes	Yes	84.49796396	82	0.301	20.11856285	20	0.047
452	Calibration	MCJC06	EB	30026-30986	555	552	0.136	Yes	Yes	457.8331051	457	0.036	Yes	Yes	75.83400222	74	0.241	21.12449099	21	0.075
453	Calibration	MCJC06	WB	30986-30026	568	567	0.053	Yes	Yes	500.3353391	499	0.070	Yes	Yes	51.60770631	52	0.055	16.09485028	16	0.019
454	Calibration	MCJC07	NB	10112-10456	366	363	0.172	Yes	Yes	327.8360878	325	0.178	Yes	Yes	25.13085805	25	0.026	13.37627349	13	0.012
455	Calibration	MCJC07	SB	10456-10112	194	196	0.140	Yes	Yes	152.6993421	153	0.040	Yes	Yes	24.66776316	26	0.253	16.25394737	16	0.049
456	Calibration	MCJC07	WB	10112-30034	259	189	4.683	Yes	Yes	212.0550147	156	4.147	Yes	Yes	29.88340503	28	0.295	17.00407516	5	3.711
457	Calibration	MCJC07	EB	30034-10112	239	165	5.201	No	Yes	160.7526316	108	4.587	Yes	Yes	55.17565789	47	1.182	23.20065789	11	3.001
458	Calibration	MCJC07	SB	10112-10408	360	358	0.086	Yes	Yes	258.4519737	258	0.018	Yes	Yes	73.84342105	73	0.135	27.45460526	27	0.036
459	Calibration	MCJC07	NB	10408-10112	552	549	0.127	Yes	Yes	484.8911026	478	0.322	Yes	Yes	49.01426307	53	0.598	18.38034865	18	0.046
503	Calibration	MCJC14	SB	10119-10240	633	611	0.867	Yes	Yes	422.4898198	409	0.663	Yes	Yes	120.7113771	116	0.433	89.52760468	86	0.361
505	Calibration	MCJC14	EB	20331-10240	162	168	0.490	Yes	Yes	109.6461675	114	0.393	Yes	Yes	41.24305384	41	0.044	11.06520957	13	0.692
506	Calibration	MCJC14	SB	10240-10241	680	680	0.004	Yes	Yes	446.6320952	449	0.100	Yes	Yes	143.8477244	142	0.174	89.52760468	90	0.008
507	Calibration	MCJC14	NB	10241-10240	812	817	0.186	Yes	Yes	668.9422147	673	0.149	Yes	Yes	101.5987424	103	0.120	41.24305384	41	0.037
508	Calibration	MCJC15	NB	10119-10471	615	609	0.217	Yes	Yes	507.9937119	497	0.475	Yes	Yes	73.4327544	75	0.232	33.1956287	36	0.557



509	Calibration	MCJC15	SB	10471-10119	511	513	0.099	Yes	Yes	325.9207181	328	0.102	Yes	Yes	107.6343112	108	0.036	77.45646697	77	0.004
510	Calibration	MCJC15	SB	10119-10240	631	611	0.787	Yes	Yes	422.4898198	409	0.663	Yes	Yes	119.7054489	116	0.341	88.52167653	86	0.254
572	Calibration	MCJC23	WB	10028-10023	1494	1497	0.079	Yes	Yes	1103.503172	1107	0.114	Yes	Yes	225.3279039	225	0.023	164.9722154	165	0.029
573	Calibration	MCJC23	EB	10022-10025	1656	1652	0.094	Yes	Yes	1175.929999	1173	0.093	Yes	Yes	304.7962272	305	0.012	175.0314968	175	0.031
613	Calibration	MCJC28	NB	30001-30095	481	410	3.353	Yes	Yes	425.869687	355	3.609	Yes	Yes	47.6381164	48	0.049	7.149645471	7	0.078
614	Calibration	MCJC28	SB	30095-30002	271	219	3.326	Yes	Yes	204.055571	152	3.893	Yes	Yes	60.97700743	61	0.007	5.744680968	6	0.055
615	Calibration	MCJC28	WB	30004-30505	502	499	0.143	Yes	Yes	306.5134601	307	0.011	Yes	Yes	139.8755979	137	0.264	55.70499337	55	0.039
616	Calibration	MCJC28	EB	30005-30001	929	927	0.094	Yes	Yes	757.4638913	754	0.115	Yes	Yes	128.7588022	129	0.024	43.25491012	43	0.005
617	Calibration	MCJC28	SB	30003-30504	240	240	0.006	Yes	Yes	200.0597134	200	0.005	Yes	Yes	36.72104805	37	0.044	3.574822735	3	0.060
618	Calibration	MCJC28	NB	30504-30004	114	75	3.996	Yes	Yes	88.48427416	49	4.704	Yes	Yes	23.81914353	24	0.039	1.72340429	2	0.010
619	Calibration	MCJC28	EB	30002-30006	622	620	0.070	Yes	Yes	475.9133904	474	0.091	Yes	Yes	106.874984	107	0.012	39.27884028	39	0.015
620	Calibration	MCJC28	WB	30006-30003	531	549	0.780	Yes	Yes	358.3525146	379	1.087	Yes	Yes	117.5547931	115	0.256	54.98530647	55	0.000
623	Calibration	MCJC29	WB	20002-20001	588	589	0.030	Yes	Yes	436.9284718	437	0.007	Yes	Yes	119.4791815	123	0.291	31.80882803	29	0.420
624	Calibration	MCJC29	EB	20001-20002	760	761	0.053	Yes	Yes	643.7736799	645	0.034	Yes	Yes	80.58716808	81	0.040	35.55499312	36	0.040
625	Calibration	MCJC29	SB	20002-31004	337	341	0.215	Yes	Yes	295.2898399	296	0.067	Yes	Yes	34.72874699	35	0.046	6.608450968	9	0.900
626	Calibration	MCJC29	NB	31004-20002	99	98	0.066	Yes	Yes	44.3759482	44	0.058	Yes	Yes	44.35302358	44	0.053	9.880687924	10	0.028
627	Calibration	MCJC30	NB	30007-30990	459	464	0.264	Yes	Yes	338.997784	340	0.081	Yes	Yes	92.5453891	97	0.422	27.16005985	27	0.016
628	Calibration	MCJC30	SB	30990-30007	578	578	0.026	Yes	Yes	465.7447299	466	0.010	Yes	Yes	91.53946096	90	0.137	21.12449099	22	0.099
629	Calibration	MCJC30	WB	30007-31392	604	600	0.149	Yes	Yes	460.7150892	460	0.043	Yes	Yes	109.6461675	107	0.274	33.1956287	33	0.022
630	Calibration	MCJC30	EB	31392-30007	555	553	0.103	Yes	Yes	406.3949695	404	0.119	Yes	Yes	119.7054489	120	0.014	29.17191613	29	0.032
631	Calibration	MCJC30	SB	30007-31391	686	682	0.158	Yes	Yes	541.1893406	539	0.093	Yes	Yes	119.7054489	118	0.177	25.14820356	25	0.007
632	Calibration	MCJC30	NB	31391-30007	615	616	0.041	Yes	Yes	468.7625144	470	0.038	Yes	Yes	110.6520957	111	0.033	35.20748499	35	0.024
633	Calibration	MCJC31	NB	10060-10419	452	460	0.408	Yes	Yes	389.2941911	399	0.490	Yes	Yes	45.26676641	44	0.126	17.10077842	17	0.039
634	Calibration	MCJC31	SB	10419-10060	542	525	0.751	Yes	Yes	455.6854485	439	0.796	Yes	Yes	66.3912574	66	0.036	20.11856285	20	0.048
635	Calibration	MCJC31	NB	10060-20007	479	465	0.646	Yes	Yes	434.5609575	421	0.665	Yes	Yes	38.22526941	38	0.036	6.035568855	6	0.027
636	Calibration	MCJC31	SB	20007-10060	136	133	0.199	Yes	Yes	116.6876645	116	0.060	Yes	Yes	12.07113771	11	0.458	7.041496997	7	0.044
637	Calibration	MCJC31	SB	10060-10337	657	638	0.742	Yes	Yes	554.2664065	536	0.771	Yes	Yes	77.45646697	77	0.093	25.14820356	25	0.011



638	Calibration	MCJC31	NB	10337-10060	909	905	0.152	Yes	Yes	805.7484421	801	0.160	Yes	Yes	82.48610768	82	0.008	21.12449099	21	0.011
639	Calibration	MCJC32	NB	10059-10278	508	535	1.163	Yes	Yes	418.4661073	442	1.144	Yes	Yes	68.40311369	71	0.280	21.12449099	22	0.102
640	Calibration	MCJC32	SB	10278-10059	739	723	0.608	Yes	Yes	620.6576639	604	0.681	Yes	Yes	92.5453891	93	0.060	26.1541317	26	0.029
641	Calibration	MCJC32	WB	10059-20171	327	328	0.035	Yes	Yes	283.6717362	284	0.000	Yes	Yes	32.18970056	33	0.144	11.06520957	11	0.060
642	Calibration	MCJC32	EB	20171-10059	168	172	0.312	Yes	Yes	125.7410178	127	0.141	Yes	Yes	33.1956287	35	0.361	9.053353282	9	0.121
643	Calibration	MCJC32	SB	10059-10405	533	503	1.320	Yes	Yes	443.6143108	414	1.432	Yes	Yes	70.41496997	70	0.036	19.11263471	19	0.018
644	Calibration	MCJC32	NB	10405-10059	461	470	0.441	Yes	Yes	399.3534725	409	0.466	Yes	Yes	45.26676641	45	0.023	16.09485028	16	0.005
645	Calibration	MCJC33	NB	20008-20223	842	813	1.034	Yes	Yes	720.6445087	691	1.098	Yes	Yes	105.1751445	105	0.031	16.55534682	16	0.060
646	Calibration	MCJC33	SB	20223-20008	521	517	0.165	Yes	Yes	413.5310591	410	0.187	Yes	Yes	86.94755601	87	0.008	20.14638493	20	0.009
647	Calibration	MCJC33	WB	20008-20103	453	453	0.003	Yes	Yes	381.7833503	382	0.022	Yes	Yes	60.44806517	60	0.060	10.30168024	10	0.031
648	Calibration	MCJC33	EB	20103-20008	430	433	0.105	Yes	Yes	385.1410405	388	0.123	Yes	Yes	40.26763006	40	0.044	4.973843931	5	0.021
649	Calibration	MCJC33	SB	20008-20238	297	295	0.102	Yes	Yes	233.7309063	232	0.120	Yes	Yes	50.77545825	51	0.031	12.66369654	13	0.043
650	Calibration	MCJC33	NB	20238-20008	622	598	0.972	Yes	Yes	528.0989884	505	1.031	Yes	Yes	81.16907514	81	0.035	12.6599711	12	0.075
651	Calibration	MCJC33	EB	20008-20239	253	280	1.674	Yes	Yes	220.0168024	247	1.758	Yes	Yes	25.72403259	26	0.054	7.181008147	7	0.074
652	Calibration	MCJC33	WB	20239-20008	272	294	1.276	Yes	Yes	229.4044798	250	1.356	Yes	Yes	33.73843931	34	0.045	8.921531792	9	0.064
653	Calibration	MCJC34	NB	30010-31100	617	615	0.066	Yes	Yes	555.2723346	554	0.063	Yes	Yes	53.31419155	53	0.043	8.047425139	8	0.053
654	Calibration	MCJC34	SB	31100-30010	375	374	0.052	Yes	Yes	314.8555086	314	0.034	Yes	Yes	50.29640712	50	0.043	10.05928142	10	0.032
655	Calibration	MCJC34	WB	30010-31060	265	245	1.230	Yes	Yes	221.3041913	203	1.228	Yes	Yes	35.20748499	34	0.252	8.047425139	8	0.091
656	Calibration	MCJC34	EB	31060-30010	247	247	0.025	Yes	Yes	219.2923351	219	0.011	Yes	Yes	24.14227542	24	0.027	4.02371257	4	0.051
657	Calibration	MCJC34	SB	30010-30846	228	203	1.728	Yes	Yes	191.1263471	168	1.712	Yes	Yes	33.1956287	31	0.406	4.02371257	4	0.064
658	Calibration	MCJC34	NB	30846-30010	367	319	2.613	Yes	Yes	322.9029337	287	2.059	Yes	Yes	39.23119755	27	2.103	5.029640712	5	0.145
659	Calibration	MCJC34	SB	30010-30847	245	242	0.198	Yes	Yes	204.2034129	204	0.019	Yes	Yes	37.21934127	34	0.546	4.02371257	4	0.051
660	Calibration	MCJC34	NB	30847-30010	365	365	0.006	Yes	Yes	314.8555086	310	0.300	Yes	Yes	45.26676641	51	0.756	5.029640712	5	0.084
661	Calibration	MCJC35	NB	10057-31349	297	304	0.407	Yes	Yes	248.3584906	250	0.074	Yes	Yes	43.92722372	50	0.830	4.590296496	5	0.093
662	Calibration	MCJC35	SB	31349-10057	330	332	0.103	Yes	Yes	289.2124682	291	0.098	Yes	Yes	34.70483461	35	0.047	6.170483461	6	0.034
663	Calibration	MCJC35	WB	10058-10441	689	674	0.564	Yes	Yes	584.7735849	569	0.637	Yes	Yes	78.70350404	79	0.049	25.4393531	26	0.028
664	Calibration	MCJC35	EB	10441-10058	446	465	0.880	Yes	Yes	359.1692112	370	0.544	Yes	Yes	61.43256997	69	0.978	25.87531807	26	0.098



665	Calibration	MCJC35	SB	10058-30396	273	320	2.722	Yes	Yes	235.1778976	281	2.851	Yes	Yes	31.4393531	31	0.120	6.590296496	8	0.643
666	Calibration	MCJC35	NB	30396-10058	336	348	0.622	Yes	Yes	307.326972	319	0.652	Yes	Yes	25.93765903	26	0.014	3.170483461	3	0.055
667	Calibration	MCJC35	EB	10057-10466	791	867	2.644	Yes	Yes	681.0133524	748	2.510	Yes	Yes	83.49203582	90	0.750	26.1541317	28	0.386
668	Calibration	MCJC35	WB	10466-10057	1120	1020	3.052	Yes	Yes	949.5961665	869	2.681	Yes	Yes	136.8062274	120	1.514	33.1956287	31	0.326
669	Calibration	MCJC36	NB	10056-10446	963	990	0.850	Yes	Yes	832.7464424	856	0.817	Yes	Yes	100.2095731	103	0.256	30.48382924	31	0.043
670	Calibration	MCJC36	SB	10446-10056	860	861	0.025	Yes	Yes	724.8928893	726	0.024	Yes	Yes	106.9189919	107	0.011	28.17731773	28	0.004
673	Calibration	MCJC36	SB	10056-30813	391	390	0.014	Yes	Yes	345.1798189	345	0.005	Yes	Yes	40.17335058	40	0.027	5.20698577	5	0.005
674	Calibration	MCJC36	NB	30813-10056	640	641	0.045	Yes	Yes	568.7407741	569	0.023	Yes	Yes	61.87488749	62	0.006	9.395139514	10	0.176
675	Calibration	MCJC37	NB	10108-10422	771	795	0.871	Yes	Yes	695.0963464	720	0.931	Yes	Yes	56.33197598	56	0.044	19.11263471	19	0.015
676	Calibration	MCJC37	SB	10422-10108	532	537	0.205	Yes	Yes	446.6320952	452	0.248	Yes	Yes	56.33197598	56	0.044	29.17191613	29	0.031
677	Calibration	MCJC37	SB	10108-10491	406	361	2.309	Yes	Yes	351.0689217	306	2.494	Yes	Yes	41.24305384	41	0.038	14.08299399	14	0.054
678	Calibration	MCJC37	NB	10491-10108	549	538	0.477	Yes	Yes	490.8929335	480	0.503	Yes	Yes	44.26083827	44	0.039	14.08299399	14	0.054
679	Calibration	MCJC37	SB	10108-10434	294	235	3.629	Yes	Yes	238.4049698	183	3.793	Yes	Yes	33.1956287	33	0.034	22.13041913	18	0.823
680	Calibration	MCJC37	NB	10434-10108	389	316	3.913	Yes	Yes	347.0452091	277	3.944	Yes	Yes	30.17784427	30	0.032	12.07113771	8	1.123
683	Calibration	MCJC38	WB	10107-30736	52	52	0.017	Yes	Yes	51.30233526	51	0.042	Yes	Yes	1.005928142	1	0.006	0	0	0.930
685	Calibration	MCJC38	SB	10107-10422	552	552	0.031	Yes	Yes	462.7269455	463	0.021	Yes	Yes	60.35568855	59	0.130	29.17191613	29	0.031
686	Calibration	MCJC38	NB	10422-10107	799	796	0.096	Yes	Yes	726.2801188	724	0.086	Yes	Yes	53.31419155	53	0.043	19.11263471	19	0.015
687	Calibration	MCJC38	EB	10107-20271	401	372	1.481	Yes	Yes	368.1697001	340	1.514	Yes	Yes	20.11856285	20	0.026	13.07706585	13	0.146
688	Calibration	MCJC38	WB	20271-10107	356	356	0.008	Yes	Yes	312.8436523	313	0.003	Yes	Yes	24.14227542	24	0.029	19.11263471	19	0.015
699	Calibration	MCJC40	NB	10071-20286	788	797	0.337	Yes	Yes	700.1259871	710	0.362	Yes	Yes	73.4327544	73	0.049	14.08299399	14	0.080
700	Calibration	MCJC40	SB	20286-10467	517	515	0.075	Yes	Yes	421.4838917	420	0.066	Yes	Yes	80.47425139	80	0.052	15.08892214	15	0.026
702	Calibration	MCJC40	SB	10468-10496	415	404	0.572	Yes	Yes	353.080778	343	0.526	Yes	Yes	43.25491012	42	0.192	19.11263471	19	0.116
703	Calibration	MCJC40	SB	10468-10054	663	673	0.402	Yes	Yes	540.3676443	550	0.430	Yes	Yes	101.0598523	101	0.003	21.52076571	22	0.086
704	Calibration	MCJC40	NB	10442-10071	1345	1372	0.728	Yes	Yes	1190.012992	1215	0.726	Yes	Yes	118.6995208	120	0.101	36.21341313	37	0.094
705	Calibration	MCJC40	EB	10467-10069	822	838	0.551	Yes	Yes	713.0188212	726	0.474	Yes	Yes	82.01906961	85	0.303	26.76378512	27	0.077
706	Calibration	MCJC40	WB	10069-10468	826	825	0.033	Yes	Yes	695.0963464	694	0.050	Yes	Yes	100.5928142	101	0.044	30.17784427	30	0.013
707	Calibration	MCJC41	EB	20043-20307	327	330	0.131	Yes	Yes	253.5910395	254	0.044	Yes	Yes	52.98221635	55	0.307	20.79237319	20	0.129



708	Calibration	MCJC41	WB	20307-20043	834	832	0.046	Yes	Yes	766.1213488	766	0.012	Yes	Yes	53.57372157	53	0.073	13.99164005	13	0.311
709	Calibration	MCJC41	WB	20043-20042	1189	1185	0.109	Yes	Yes	1101.87116	1099	0.097	Yes	Yes	67.38649782	67	0.042	19.67884247	19	0.045
710	Calibration	MCJC41	EB	20042-20043	459	461	0.093	Yes	Yes	360.2594438	360	0.002	Yes	Yes	70.38116363	72	0.220	27.98328009	28	0.029
711	Calibration	MCJC41	SB	20043-31428	218	217	0.108	Yes	Yes	176.2127941	175	0.099	Yes	Yes	29.13417969	29	0.025	13.13741273	13	0.042
712	Calibration	MCJC41	NB	31428-20043	442	439	0.173	Yes	Yes	405.2942009	401	0.206	Yes	Yes	25.54800867	26	0.089	11.63370824	12	0.016
719	Calibration	MCJC43	NB	20037-30070	56	56	0.068	Yes	Yes	50.29640712	50	0.055	Yes	Yes	5.029640712	5	0.013	1.005928142	1	0.094
720	Calibration	MCJC43	SB	30070-20037	55	55	0.014	Yes	Yes	46.27269455	46	0.040	Yes	Yes	9.053353282	9	0.018	0	0	0.930
721	Calibration	MCJC43	WB	20037-20262	724	725	0.044	Yes	Yes	572.373113	573	0.038	Yes	Yes	142.8417962	143	0.017	9.053353282	9	0.017
722	Calibration	MCJC43	EB	20262-20037	286	285	0.066	Yes	Yes	218.2864069	218	0.029	Yes	Yes	58.34383226	58	0.045	9.053353282	9	0.117
723	Calibration	MCJC43	SB	20037-30835	341	340	0.039	Yes	Yes	297.7547302	297	0.032	Yes	Yes	34.20155684	34	0.036	9.053353282	9	0.012
724	Calibration	MCJC43	NB	30835-20037	662	661	0.042	Yes	Yes	528.1122748	527	0.059	Yes	Yes	124.7350897	125	0.023	9.053353282	9	0.004
725	Calibration	MCJC43	EB	20037-20220	428	425	0.131	Yes	Yes	348.0511373	346	0.133	Yes	Yes	68.40311369	68	0.049	11.06520957	11	0.052
726	Calibration	MCJC43	WB	20220-20037	546	546	0.028	Yes	Yes	475.8040114	475	0.019	Yes	Yes	58.34383226	58	0.040	12.07113771	12	0.021
727	Calibration	MCJC44	NB	20036-20288	531	539	0.322	Yes	Yes	473.7921551	482	0.358	Yes	Yes	47.27862269	47	0.046	10.05928142	10	0.013
728	Calibration	MCJC44	SB	20288-20036	428	426	0.074	Yes	Yes	362.1341313	361	0.068	Yes	Yes	53.31419155	53	0.044	12.07113771	12	0.026
731	Calibration	MCJC44	SB	20036-20284	508	506	0.105	Yes	Yes	411.4246103	409	0.097	Yes	Yes	81.48017954	81	0.052	15.08892214	15	0.022
732	Calibration	MCJC44	NB	20284-20036	795	803	0.309	Yes	Yes	705.1556278	714	0.333	Yes	Yes	75.44461068	75	0.050	14.08299399	14	0.076
733	Calibration	MCJC45	NB	20050-20318	351	360	0.501	Yes	Yes	302.7857143	312	0.513	Yes	Yes	39.53571429	40	0.069	8.678571429	9	0.014
734	Calibration	MCJC45	SB	20318-20050	329	328	0.069	Yes	Yes	282.8597561	282	0.059	Yes	Yes	35.10670732	35	0.016	11.03353659	11	0.052
735	Calibration	MCJC45	SB	20050-20290	338	337	0.054	Yes	Yes	292.7804878	292	0.051	Yes	Yes	35.09756098	35	0.015	10.0304878	10	0.011
736	Calibration	MCJC45	NB	20290-20050	446	455	0.429	Yes	Yes	384.7857143	394	0.445	Yes	Yes	51.53571429	52	0.059	9.678571429	10	0.030
737	Calibration	MCJC45	EB	20050-31113	125	125	0.015	Yes	Yes	108.0792683	108	0.030	Yes	Yes	15.00914634	15	0.005	2.00304878	2	0.112
738	Calibration	MCJC45	WB	31113-20050	39	39	0.069	Yes	Yes	36	36	0.000	Yes	Yes	3	3	0.000	0	0	0.930
745	Calibration	MCJC47	NB	10048-10049	1618	1630	0.303	Yes	Yes	1467.628253	1479	0.291	Yes	Yes	122.015932	123	0.053	28.35581519	29	0.087
747	Calibration	MCJC47	SB	10048-10052	789	796	0.241	Yes	Yes	631.5793269	637	0.206	Yes	Yes	111.9014423	114	0.228	45.51923077	45	0.124
748	Calibration	MCJC47	NB	10052-10048	1618	1630	0.303	Yes	Yes	1467.628253	1479	0.291	Yes	Yes	122.015932	123	0.053	28.35581519	29	0.087
749	Calibration	MCJC47	EB	10048-30082	384	385	0.040	Yes	Yes	301	302	0.033	Yes	Yes	65	65	0.001	18	18	0.051



750	Calibration	MCJC47	WB	30082-10048	225	221	0.224	Yes	Yes	132.7644231	132	0.104	Yes	Yes	68.27884615	65	0.388	23.70793269	25	0.207
757	Calibration	MCJC49	NB	30081-30425	310	352	2.285	Yes	Yes	231.3634728	266	2.170	Yes	Yes	57.84086819	65	0.922	21.12449099	21	0.029
758	Calibration	MCJC49	SB	30425-30081	469	470	0.018	Yes	Yes	367.6667361	368	0.023	Yes	Yes	79.97128732	80	0.008	21.62745506	22	0.004
759	Calibration	MCJC49	WB	30081-30629	77	10	10.134	No	Yes	57.58384246	0	10.642	No	Yes	17.03600275	10	2.053	2.037649314	0	1.881
761	Calibration	MCJC49	SB	30081-31140	279	303	1.403	Yes	Yes	185.6582507	210	1.716	Yes	Yes	65.13765756	65	0.029	28.5270904	29	0.008
762	Calibration	MCJC49	NB	31140-30081	391	392	0.036	Yes	Yes	292.7250894	294	0.052	Yes	Yes	77.10439212	77	0.012	21.57715866	22	0.014
763	Calibration	MCJC49	EB	30081-30150	311	311	0.002	Yes	Yes	252.177517	252	0.011	Yes	Yes	50.10589043	50	0.039	9.169421914	9	0.026
764	Calibration	MCJC49	WB	30150-30081	117	115	0.207	Yes	Yes	66.3912574	66	0.049	Yes	Yes	33.04473948	33	0.008	17.6540389	16	0.436
767	Calibration	MCJC50	WB	30425-31353	590	591	0.012	Yes	Yes	511.9399237	513	0.035	Yes	Yes	58.37072028	58	0.047	20.09483813	20	0.033
768	Calibration	MCJC50	EB	31353-30425	360	317	2.332	Yes	Yes	277.123144	235	2.647	Yes	Yes	66.32006864	66	0.050	16.58001716	16	0.037
769	Calibration	MCJC50	NB	30425-30426	132	132	0.036	Yes	Yes	91.72355558	92	0.037	Yes	Yes	32.78811947	33	0.037	7.526663878	7	0.057
770	Calibration	MCJC50	SB	30426-30425	575	556	0.795	Yes	Yes	516.4666004	497	0.849	Yes	Yes	46.9460812	47	0.008	11.54444892	12	0.049
773	Calibration	MCJC51	EB	20035-31354	405	406	0.015	Yes	Yes	329.8122449	330	0.005	Yes	Yes	54.56493506	55	0.047	20.89285714	21	0.030
774	Calibration	MCJC51	WB	31354-20035	532	533	0.011	Yes	Yes	436.5554214	438	0.060	Yes	Yes	65.5005965	65	0.061	30.41341463	30	0.093
775	Calibration	MCJC51	SB	20035-30400	632	641	0.360	Yes	Yes	530.9734694	540	0.400	Yes	Yes	68.97077922	69	0.003	31.78571429	32	0.024
776	Calibration	MCJC51	EB	30400-20035	483	481	0.073	Yes	Yes	404.3043347	402	0.095	Yes	Yes	53.60611082	54	0.039	24.62012195	25	0.005
777	Calibration	MCJC51	SB	20035-20318	329	328	0.069	Yes	Yes	282.8597561	282	0.059	Yes	Yes	35.10670732	35	0.016	11.03353659	11	0.052
778	Calibration	MCJC51	NB	20318-20035	351	360	0.501	Yes	Yes	302.7857143	312	0.513	Yes	Yes	39.53571429	40	0.069	8.678571429	9	0.014
793	Calibration	MCJC54	NB	10076-10075	1051	1039	0.384	Yes	Yes	871.1337713	865	0.215	Yes	Yes	150.8892214	145	0.471	29.17191613	29	0.066
794	Calibration	MCJC54	SB	10447-10076	808	800	0.281	Yes	Yes	699.120059	691	0.297	Yes	Yes	82.48610768	82	0.007	26.1541317	26	0.013
795	Calibration	MCJC54	NB	10076-10389	518	524	0.264	Yes	Yes	403.3771851	403	0.002	Yes	Yes	84.49796396	90	0.621	30.17784427	30	0.046
796	Calibration	MCJC54	SB	10389-10076	814	815	0.038	Yes	Yes	693.0844901	697	0.138	Yes	Yes	86.50982025	84	0.254	34.20155684	34	0.035
797	Calibration	MCJC54	SB	10076-20194	1183	1156	0.798	Yes	Yes	1040.129699	1014	0.802	Yes	Yes	105.622455	104	0.157	37.21934127	37	0.000
798	Calibration	MCJC54	NB	20194-10076	1122	1099	0.689	Yes	Yes	912.3768252	889	0.766	Yes	Yes	173.0196405	173	0.007	36.21341313	36	0.024
799	Calibration	MCJC54	SB	10076-30449	4	5	0.518	Yes	Yes	3.017784427	4	0.372	Yes	Yes	1.005928142	1	0.006	0	0	0.930
800	Calibration	MCJC54	NB	30449-10076	13	10	0.796	Yes	Yes	13.07706585	9	1.253	Yes	Yes	0	1	1.414	0	0	0.930
807	Calibration	MCJC56	NB	10450-10068	118	121	0.265	Yes	Yes	93	96	0.306	Yes	Yes	18	18	0.000	7	7	0.028



808	Calibration	MCJC56	SB	10068-10450	199	197	0.094	Yes	Yes	179.6711409	179	0.064	Yes	Yes	13.27516779	13	0.076	5.818791946	6	0.078
809	Calibration	MCJC56	NB	10450-10065	281	280	0.041	Yes	Yes	246.1744966	245	0.046	Yes	Yes	26.36912752	26	0.045	8.456375839	9	0.091
810	Calibration	MCJC56	SB	10065-10450	216	214	0.157	Yes	Yes	177	177	0.035	Yes	Yes	27	25	0.323	12	12	0.053
811	Calibration	MCJC56	SB	10450-10440	170	173	0.212	Yes	Yes	142	147	0.394	Yes	Yes	15	13	0.438	13	13	0.089
812	Calibration	MCJC56	NB	10440-10450	154	163	0.683	Yes	Yes	124.5033557	133	0.733	Yes	Yes	19.09395973	19	0.008	10.63758389	11	0.076
813	Calibration	MCJC57	NB	10051-10377	1240	1207	0.941	Yes	Yes	1101.496113	1069	0.993	Yes	Yes	114.2840989	114	0.005	24.42685512	24	0.035
814	Calibration	MCJC57	SB	10342-10046	981	990	0.272	Yes	Yes	823.8725591	830	0.223	Yes	Yes	121.676259	124	0.184	35.90750257	36	0.016
815	Calibration	MCJC57	WB	10050-10067	188	190	0.175	Yes	Yes	171.1413428	171	0.023	Yes	Yes	11.10106007	14	0.743	5.550530035	6	0.034
816	Calibration	MCJC57	EB	10067-10051	119	129	0.925	Yes	Yes	95	104	0.901	Yes	Yes	19	19	0.000	5	6	0.555
819	Calibration	MCJC57	EB	10046-10064	159	177	1.392	Yes	Yes	136	149	1.094	Yes	Yes	17	22	1.100	6	6	0.053
820	Calibration	MCJC57	WB	10064-10047	148	146	0.110	Yes	Yes	125.6115108	126	0.004	Yes	Yes	13.95683453	12	0.443	7.975334018	8	0.112
821	Calibration	MCJC58	SB	20020-30334	7	8	0.424	Yes	Yes	6.035568855	7	0.294	Yes	Yes	1.005928142	1	0.006	0	0	0.930
822	Calibration	MCJC58	NB	30334-20020	14	15	0.132	Yes	Yes	11.06520957	11	0.035	Yes	Yes	3.017784427	3	0.103	0	0	0.930
825	Calibration	MCJC58	SB	20020-20019	488	475	0.599	Yes	Yes	438.5846701	426	0.610	Yes	Yes	38.22526941	38	0.033	11.06520957	11	0.076
826	Calibration	MCJC58	NB	20019-20020	416	382	1.729	Yes	Yes	318.8792212	293	1.506	Yes	Yes	87.51574839	80	0.838	10.05928142	10	0.173
827	Calibration	MCJC58	SB	20020-20021	221	219	0.161	Yes	Yes	191.1263471	191	0.010	Yes	Yes	26.1541317	24	0.404	4.02371257	4	0.113
828	Calibration	MCJC58	NB	20021-20020	93	111	1.825	Yes	Yes	72.42682626	91	2.046	Yes	Yes	15.08892214	15	0.059	5.029640712	5	0.064
841	Calibration	MCJC60	NB	10385-30487	315	373	3.130	Yes	Yes	272.8119678	331	3.326	Yes	Yes	38	38	0.058	4	4	0.048
842	Calibration	MCJC60	SB	30487-10043	20	15	1.084	Yes	Yes	17.67590618	13	1.271	Yes	Yes	2	2	0.000	0	0	0.930
843	Calibration	MCJC60	SB	10385-10344	577	581	0.138	Yes	Yes	505.9690161	510	0.162	Yes	Yes	56.36471145	56	0.065	14.99716178	15	0.043
844	Calibration	MCJC60	NB	10344-10385	877	887	0.333	Yes	Yes	780.8315565	790	0.343	Yes	Yes	76.78535892	77	0.038	19.13574982	19	0.012
853	Calibration	MCJC62	SB	10042-10041	220	220	0.005	Yes	Yes	190.1204189	190	0.011	Yes	Yes	17.10077842	17	0.005	13.07706585	13	0.025
854	Calibration	MCJC62	NB	10041-10042	625	629	0.162	Yes	Yes	554.2664065	558	0.168	Yes	Yes	52.30826341	52	0.003	18.10670656	18	0.024
855	Calibration	MCJC62	WB	10042-31178	234	212	1.468	Yes	Yes	199.1737722	199	0.016	Yes	Yes	28.16598799	6	5.242	7.041496997	7	0.027
857	Calibration	MCJC62	WB	10042-10458	670	676	0.252	Yes	Yes	594.5035322	599	0.170	Yes	Yes	57.33790412	60	0.300	18.10670656	18	0.021
858	Calibration	MCJC62	NB	10458-10042	431	478	2.209	Yes	Yes	382.2526941	427	2.208	Yes	Yes	29.17191613	32	0.490	19.11263471	19	0.009
859	Calibration	MCJC62	SB	10042-30354	254	258	0.191	Yes	Yes	229.3516165	234	0.324	Yes	Yes	17.10077842	17	0.115	8.047425139	7	0.516



860	Calibration	MCJC62	WB	30354-10042	324	260	3.710	Yes	Yes	276.6302392	237	2.457	Yes	Yes	38.22526941	16	4.366	9.053353282	8	0.478
861	Calibration	MCJC63	NB	30021-31179	81	149	6.279	No	Yes	72.42682626	117	4.555	Yes	Yes	7.041496997	30	5.332	2.011856285	2	0.103
862	Calibration	MCJC63	SB	31179-30021	296	308	0.727	Yes	Yes	267.5768859	281	0.830	Yes	Yes	25.14820356	24	0.232	3.017784427	3	0.022
863	Calibration	MCJC63	WB	30021-30582	284	211	4.632	Yes	Yes	237.3990416	189	3.324	Yes	Yes	39.23119755	15	4.646	7.041496997	7	0.040
864	Calibration	MCJC63	EB	30582-30021	389	389	0.009	Yes	Yes	356.0985624	356	0.017	Yes	Yes	25.14820356	25	0.018	8.047425139	8	0.077
865	Calibration	MCJC63	EB	30021-30356	679	697	0.701	Yes	Yes	618.6458076	637	0.733	Yes	Yes	49.29047898	49	0.031	11.06520957	11	0.076
866	Calibration	MCJC63	WB	30356-30021	359	360	0.026	Yes	Yes	304.7962272	306	0.040	Yes	Yes	45.26676641	45	0.037	9.053353282	9	0.012
867	Calibration	MCJC64	NB	10040-30584	107	148	3.707	Yes	Yes	90.53353282	110	1.955	Yes	Yes	13.07706585	35	4.413	3.017784427	4	0.395
868	Calibration	MCJC64	SB	30584-10040	202	241	2.631	Yes	Yes	182.0729938	223	2.886	Yes	Yes	16.09485028	14	0.474	4.02371257	4	0.027
869	Calibration	MCJC64	SB	10040-10394	458	456	0.083	Yes	Yes	393.3179037	396	0.115	Yes	Yes	48.28455084	45	0.473	16.09485028	15	0.210
870	Calibration	MCJC64	NB	10394-10040	318	278	2.283	Yes	Yes	275.624311	236	2.466	Yes	Yes	28.16598799	28	0.033	14.08299399	14	0.055
871	Calibration	MCJC64	SB	10040-31179	297	317	1.173	Yes	Yes	266.5709577	287	1.234	Yes	Yes	27.16005985	27	0.004	3.017784427	3	0.022
872	Calibration	MCJC64	NB	31179-10040	82	149	6.220	No	Yes	71.42089811	117	4.668	Yes	Yes	9.053353282	31	4.842	2.011856285	2	0.103
873	Calibration	MCJC64	NB	10040-10451	345	347	0.120	Yes	Yes	308.8199397	309	0.022	Yes	Yes	24.14227542	25	0.167	12.07113771	13	0.290
874	Calibration	MCJC64	SB	10451-10040	604	600	0.157	Yes	Yes	530.1241311	526	0.178	Yes	Yes	59.3497604	59	0.056	14.08299399	15	0.173
875	Calibration	MCJC65	NB	10039-30049	338	301	2.075	Yes	Yes	277.6361673	238	2.439	Yes	Yes	49.29047898	51	0.274	11.06520957	11	0.045
876	Calibration	MCJC65	SB	30049-10039	660	652	0.310	Yes	Yes	576.3968256	566	0.421	Yes	Yes	68.40311369	70	0.230	15.08892214	15	0.055
877	Calibration	MCJC65	WB	10039-10418	666	663	0.111	Yes	Yes	594.5035322	592	0.098	Yes	Yes	55.32604783	55	0.056	16.09485028	16	0.012
878	Calibration	MCJC65	EB	10418-10039	386	351	1.824	Yes	Yes	351.0689217	316	1.916	Yes	Yes	23.13634728	23	0.001	12.07113771	12	0.007
879	Calibration	MCJC65	EB	10039-10390	575	574	0.042	Yes	Yes	491.8988616	489	0.149	Yes	Yes	65.38532926	67	0.253	18.10670656	18	0.052
880	Calibration	MCJC65	WB	10390-10039	533	535	0.088	Yes	Yes	436.5728138	437	0.010	Yes	Yes	78.46239511	80	0.190	18.10670656	18	0.033
881	Calibration	MCJC66	NB	10038-30878	282	282	0.039	Yes	Yes	222.3101195	225	0.209	Yes	Yes	44.26083827	42	0.381	15.08892214	15	0.008
882	Calibration	MCJC66	SB	30878-10038	295	292	0.139	Yes	Yes	258.5235326	255	0.213	Yes	Yes	29.17191613	31	0.247	7.041496997	7	0.118
883	Calibration	MCJC66	SB	10038-10391	467	456	0.497	Yes	Yes	398.3475444	386	0.647	Yes	Yes	51.30233526	53	0.256	17.10077842	17	0.069
884	Calibration	MCJC66	NB	10391-10038	435	389	2.241	Yes	Yes	360.122275	320	2.151	Yes	Yes	64.37940112	58	0.805	10.05928142	11	0.151
885	Calibration	MCJC66	SB	10038-20216	774	765	0.308	Yes	Yes	666.9303584	658	0.333	Yes	Yes	91.53946096	92	0.003	15.08892214	15	0.002
886	Calibration	MCJC66	NB	20216-10038	506	505	0.053	Yes	Yes	367.163772	365	0.087	Yes	Yes	102.6046705	103	0.040	36.21341313	36	0.014



887	Calibration	MCJC66	NB	10038-10037	339	339	0.011	Yes	Yes	240.416826	240	0.001	Yes	Yes	71.42089811	71	0.036	27.16005985	27	0.023
888	Calibration	MCJC66	SB	10037-10038	626	656	1.196	Yes	Yes	542.1952688	569	1.122	Yes	Yes	62.36754483	66	0.455	21.12449099	21	0.042
889	Calibration	MCJC67	NB	20342-20265	656	661	0.187	Yes	Yes	516.0411371	521	0.208	Yes	Yes	119.7054489	120	0.027	20.11856285	20	0.056
890	Calibration	MCJC67	SB	20265-20342	728	726	0.097	Yes	Yes	559.2960472	557	0.118	Yes	Yes	134.7943711	135	0.019	34.20155684	34	0.006
891	Calibration	MCJC67	WB	20038-20294	756	752	0.162	Yes	Yes	684.0311369	680	0.158	Yes	Yes	60.35568855	60	0.046	12.07113771	12	0.012
892	Calibration	MCJC67	EB	20294-20038	272	278	0.404	Yes	Yes	224.3219758	231	0.430	Yes	Yes	40.2371257	40	0.026	7.041496997	7	0.139
893	Calibration	MCJC67	SB	20039-20170	692	691	0.041	Yes	Yes	563.3197598	562	0.068	Yes	Yes	101.5987424	102	0.044	27.16005985	27	0.018
894	Calibration	MCJC67	NB	20170-20039	364	365	0.065	Yes	Yes	259.5294607	260	0.052	Yes	Yes	88.52167653	89	0.051	16.09485028	16	0.019
895	Calibration	MCJC67	WB	20197-20039	1107	1100	0.199	Yes	Yes	963.6791604	957	0.214	Yes	Yes	116.6876645	117	0.026	26.1541317	26	0.054
896	Calibration	MCJC67	EB	20039-20197	366	366	0.029	Yes	Yes	243.4346105	242	0.068	Yes	Yes	98.58095796	99	0.042	24.14227542	24	0.020
897	Calibration	MCJC68	NB	30011-30908	215	216	0.024	Yes	Yes	187.1026345	187	0.021	Yes	Yes	24.14227542	24	0.022	4.02371257	4	0.023
898	Calibration	MCJC68	SB	30908-30011	382	401	0.939	Yes	Yes	357.1044906	376	0.976	Yes	Yes	18.10670656	18	0.006	7.041496997	7	0.032
899	Calibration	MCJC68	WB	30011-30586	242	264	1.339	Yes	Yes	224.3219758	225	0.070	Yes	Yes	12.07113771	34	4.508	6.035568855	5	0.558
900	Calibration	MCJC68	EB	30586-30011	172	173	0.078	Yes	Yes	150.8892214	152	0.098	Yes	Yes	19.11263471	19	0.045	2.011856285	2	0.285
901	Calibration	MCJC68	EB	30011-30879	201	239	2.518	Yes	Yes	187.1026345	224	2.603	Yes	Yes	10.05928142	10	0.029	4.02371257	4	0.047
902	Calibration	MCJC68	WB	30879-30011	105	144	3.533	Yes	Yes	90.53353282	109	1.878	Yes	Yes	9.053353282	31	4.844	5.029640712	4	0.452
903	Calibration	MCJC69	NB	20028-20263	407	403	0.236	Yes	Yes	351.0689217	346	0.252	Yes	Yes	50.29640712	50	0.011	6.035568855	6	0.015
904	Calibration	MCJC69	SB	20263-20028	620	630	0.409	Yes	Yes	564.3256879	575	0.441	Yes	Yes	45.26676641	45	0.028	10.05928142	10	0.038
905	Calibration	MCJC69	SB	20028-20027	627	619	0.308	Yes	Yes	538.1715562	531	0.308	Yes	Yes	71.42089811	71	0.059	17.10077842	17	0.016
906	Calibration	MCJC69	NB	20027-20028	805	792	0.465	Yes	Yes	688.0548494	676	0.472	Yes	Yes	96.56910167	96	0.065	20.11856285	20	0.041
907	Calibration	MCJC69	SB	20028-30871	337	355	0.963	Yes	Yes	305.8021553	324	1.012	Yes	Yes	25.14820356	25	0.016	6.035568855	6	0.017
908	Calibration	MCJC69	NB	30871-20028	265	268	0.188	Yes	Yes	233.375329	236	0.188	Yes	Yes	28.16598799	28	0.018	3.017784427	3	0.049
909	Calibration	MCJC69	SB	20028-20049	708	702	0.229	Yes	Yes	616.6339513	611	0.218	Yes	Yes	75.44461068	75	0.052	16.09485028	16	0.058
910	Calibration	MCJC69	NB	20049-20028	390	390	0.037	Yes	Yes	325.9207181	326	0.019	Yes	Yes	52.30826341	52	0.051	12.07113771	12	0.003
911	Calibration	MCJC70	NB	20026-20251	594	590	0.142	Yes	Yes	501.501464	505	0.134	Yes	Yes	71.5885528	65	0.780	20.78918161	21	0.000
912	Calibration	MCJC70	SB	20251-20026	741	739	0.063	Yes	Yes	653.4886683	652	0.071	Yes	Yes	73.21289585	73	0.014	14.2635452	14	0.002
913	Calibration	MCJC70	WB	20026-20025	604	591	0.531	Yes	Yes	531.6330233	519	0.573	Yes	Yes	60.85865262	61	0.009	11.56817364	12	0.025



914	Calibration	MCJC70	EB	20025-20026	776	766	0.360	Yes	Yes	648.8236519	646	0.093	Yes	Yes	108.1372753	102	0.636	18.60967063	17	0.264
915	Calibration	MCJC70	SB	20026-31228	576	554	0.932	Yes	Yes	512.6685007	491	0.978	Yes	Yes	51.8757629	52	0.060	11.43404989	11	0.204
916	Calibration	MCJC70	NB	31228-20026	367	339	1.523	Yes	Yes	329.2616249	301	1.583	Yes	Yes	31.09040783	31	0.059	7.1317726	7	0.074
917	Calibration	MCJC70	EB	20026-20268	746	736	0.378	Yes	Yes	640.5818296	632	0.332	Yes	Yes	91.30134271	90	0.104	14.55242713	14	0.244
918	Calibration	MCJC70	WB	20268-20026	636	628	0.338	Yes	Yes	554.8108725	547	0.345	Yes	Yes	63.18373204	63	0.027	18.33884383	18	0.044
921	Calibration	MCJC71	NB	20025-20309	255	256	0.052	Yes	Yes	198.9362836	200	0.078	Yes	Yes	50.44347264	50	0.061	5.904360836	6	0.064
922	Calibration	MCJC71	SB	20309-20025	756	755	0.035	Yes	Yes	682.6092125	682	0.009	Yes	Yes	68.38075973	68	0.087	4.786271	5	0.011
923	Calibration	MCJC71	SB	20025-20062	776	769	0.252	Yes	Yes	696.2769926	691	0.218	Yes	Yes	68.60312279	67	0.148	10.82466153	11	0.011
924	Calibration	MCJC71	NB	20062-20025	686	671	0.593	Yes	Yes	536.3358098	529	0.317	Yes	Yes	133.8309155	127	0.630	16.2733214	15	0.235
925	Calibration	MCJC71	SB	20025-30410	428	414	0.703	Yes	Yes	368.7354348	353	0.810	Yes	Yes	53.470081	54	0.109	5.904360836	6	0.069
926	Calibration	MCJC71	NB	30410-20025	188	187	0.089	Yes	Yes	162.1943173	161	0.132	Yes	Yes	17.58362393	18	0.099	8.615287801	9	0.015
933	Calibration	MCJC73	NB	30180-30181	190	191	0.085	Yes	Yes	161.9544309	162	0.023	Yes	Yes	21.12449099	21	0.027	7.041496997	9	0.568
934	Calibration	MCJC73	SB	30181-30180	102	101	0.062	Yes	Yes	58.34383226	58	0.058	Yes	Yes	37.21934127	37	0.034	6.035568855	6	0.012
935	Calibration	MCJC73	NB	30180-30178	165	165	0.052	Yes	Yes	146.8655088	146	0.054	Yes	Yes	16.09485028	16	0.024	2.514820356	3	0.052
936	Calibration	MCJC73	SB	30178-30180	233	233	0.002	Yes	Yes	178.5522453	179	0.032	Yes	Yes	47.27862269	47	0.041	7.041496997	7	0.044
945	Calibration	MCJC74	SB	30178-30179	106	105	0.020	Yes	Yes	93.55131725	93	0.024	Yes	Yes	10.05928142	10	0.019	2.011856285	2	0.058
946	Calibration	MCJC74	NB	30179-30178	204	203	0.051	Yes	Yes	155.9188621	156	0.016	Yes	Yes	40.2371257	40	0.037	8.047425139	7	0.251
959	Calibration	MCJC77	NB	10370-10657	492	499	0.306	Yes	Yes	399.5257896	405	0.292	Yes	Yes	67.42626676	68	0.121	25.15905476	25	0.008
960	Calibration	MCJC77	SB	10657-10370	433	434	0.052	Yes	Yes	342.9560835	344	0.052	Yes	Yes	62.61051116	63	0.008	27.10007199	27	0.035
961	Calibration	MCJC77	SB	10370-10656	562	560	0.089	Yes	Yes	462.6421886	461	0.074	Yes	Yes	73.93808495	74	0.045	25.23110151	25	0.027
962	Calibration	MCJC77	NB	10656-10370	548	548	0.028	Yes	Yes	450.2140423	451	0.036	Yes	Yes	71.37536923	71	0.009	26.15269257	26	0.036
963	Calibration	MCJC77	SB	10370-30912	159	153	0.487	Yes	Yes	138.3138949	134	0.394	Yes	Yes	16.67242621	15	0.371	3.868970482	4	0.001
964	Calibration	MCJC77	NB	30912-10370	232	231	0.081	Yes	Yes	207.3117473	207	0.027	Yes	Yes	24.05089752	23	0.146	1.00636219	1	0.145
965	Calibration	MCJC78	NB	30029-31045	493	492	0.021	Yes	Yes	430.537245	431	0.043	Yes	Yes	49.29047898	48	0.181	13.07706585	13	0.032
966	Calibration	MCJC78	SB	31045-30029	413	411	0.106	Yes	Yes	352.0748499	350	0.111	Yes	Yes	47.27862269	47	0.041	14.08299399	14	0.056
967	Calibration	MCJC78	NB	30029-31089	147	153	0.471	Yes	Yes	132.7825148	137	0.356	Yes	Yes	14.08299399	14	0.017	0	2	1.838
968	Calibration	MCJC78	SB	31089-30029	317	316	0.070	Yes	Yes	291.7191613	292	0.001	Yes	Yes	21.12449099	20	0.237	4.02371257	4	0.077



IP Calibration:

					Inter Peak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
3	Calibration	ATC002	EB	10091-10090	176	176	0.014	Yes	Yes	138.2591715	138	0.022	Yes	Yes	28.81233096	29	0.035	9.203939056	9	0.037
4	Calibration	ATC002	WB	10090-10091	187	187	0.027	Yes	Yes	147.3338543	147	0.028	Yes	Yes	30.06006155	30	0.011	9.492651015	10	0.010
11	Calibration	ATC006	NE	10291-10292	243	243	0.023	Yes	Yes	178.4381136	178	0.033	Yes	Yes	48.40428979	48	0.058	15.85366983	17	0.296
12	Calibration	ATC006	SW	10292-10291	254	262	0.520	Yes	Yes	184.9247197	185	0.009	Yes	Yes	50.01302938	50	0.002	18.98642782	27	1.716
13	Calibration	ATC007	NE	10494-10118	510	488	1.002	Yes	Yes	379.4576622	370	0.486	Yes	Yes	79.32165819	71	1.005	51.18390782	47	0.607
14	Calibration	ATC007	SW	10118-10494	507	479	1.259	Yes	Yes	354.5623879	338	0.881	Yes	Yes	106.4235739	93	1.324	45.89745197	48	0.244
15	Calibration	ATC008	EB	30477-30467	62	46	2.149	Yes	Yes	51.11471037	35	2.516	Yes	Yes	8.479420732	9	0.213	2.191310976	2	0.046
16	Calibration	ATC008	WB	30467-30477	57	57	0.118	Yes	Yes	47.25567192	43	0.600	Yes	Yes	7.949967362	12	1.185	2.220661274	2	0.404
17	Calibration	ATC009	EB	20094-20093	123	151	2.433	Yes	Yes	103.2919348	124	1.908	Yes	Yes	13.7496805	23	2.186	5.689522967	4	0.548
18	Calibration	ATC009	WB	20093-20094	121	159	3.155	Yes	Yes	97.5048909	123	2.455	Yes	Yes	17.64453858	25	1.644	6.188132012	10	1.375
19	Calibration	ATC010	SE	20206-21018	209	210	0.023	Yes	Yes	177.1931359	177	0.014	Yes	Yes	23.58739797	24	0.085	8.547349786	9	0.038
20	Calibration	ATC010	WB	21018-20206	232	217	0.986	Yes	Yes	188.2573668	174	1.068	Yes	Yes	30.25239389	30	0.046	13.12152024	13	0.037
25	Calibration	ATC013	SB	10243-10244	411	406	0.257	Yes	Yes	266.2977125	266	0.018	Yes	Yes	77.36380124	77	0.041	67.6134048	63	0.562
26	Calibration	ATC013	NB	10244-10243	435	414	1.025	Yes	Yes	317.095409	296	1.231	Yes	Yes	64.58766049	65	0.050	53.21770559	53	0.005
27	Calibration	ATC014	SW	10220-10221	133	133	0.014	Yes	Yes	105.768677	106	0.023	Yes	Yes	21.2195324	21	0.048	5.921729973	6	0.057
28	Calibration	ATC014	NE	10221-10220	148	147	0.034	Yes	Yes	114.9674863	115	0.003	Yes	Yes	25.24460887	25	0.049	7.557303294	7	0.072
45	Calibration	ATC023	WB	10122-10131	324	349	1.337	Yes	Yes	229.2219347	254	1.602	Yes	Yes	52.35315792	52	0.049	42.44850642	42	0.004
46	Calibration	ATC023	EB	10131-10122	332	355	1.263	Yes	Yes	230.0775373	253	1.498	Yes	Yes	53.86685577	54	0.018	47.64167668	48	0.003
49	Calibration	ATC025	NB	30740-30749	18	31	2.612	Yes	Yes	14.8547847	27	2.623	Yes	Yes	1.951632801	3	0.568	0.895016317	1	0.031
50	Calibration	ATC025	SB	30749-30740	20	32	2.461	Yes	Yes	16.46441529	28	2.406	Yes	Yes	2.249005181	4	0.754	0.93354932	1	0.071
51	Calibration	ATC026	EB	10095-10094	476	476	0.035	Yes	Yes	360.7390555	361	0.014	Yes	Yes	66.68031459	67	0.039	48.31068345	48	0.025
52	Calibration	ATC026	WB	10094-10095	487	487	0.005	Yes	Yes	381.1615361	381	0.009	Yes	Yes	67.71308985	68	0.019	38.18959514	38	0.015



57	Calibration	ATC029	NB	10080-10081	497	496	0.014	Yes	Yes	391.235324	391	0.011	Yes	Yes	84.13058451	84	0.008	21.3605493	21	0.032
58	Calibration	ATC029	SB	10081-10080	523	523	0.000	Yes	Yes	396.2502369	396	0.011	Yes	Yes	96.68759109	97	0.032	30.39959196	30	0.018
65	Calibration	ATC033	NB	30520-30149	97	97	0.004	Yes	Yes	75.0225862	75	0.029	Yes	Yes	12.69612997	13	0.085	9.618280282	10	0.031
66	Calibration	ATC033	SB	30149-30520	92	92	0.040	Yes	Yes	64.00265077	64	0.002	Yes	Yes	14.76984249	15	0.060	13.25498685	13	0.045
67	Calibration	ATC034	NW	20080-20332	321	321	0.026	Yes	Yes	271.9394429	272	0.008	Yes	Yes	36.19973104	36	0.033	13.11767257	13	0.036
68	Calibration	ATC034	SE	20332-20080	307	307	0.019	Yes	Yes	249.5108784	250	0.032	Yes	Yes	40.09564939	40	0.015	17.39088407	17	0.018
69	Calibration	ATC035	NB	31379-30153	51	51	0.041	Yes	Yes	39.46609564	39	0.078	Yes	Yes	6.678877723	7	0.123	5.059755851	6	0.200
70	Calibration	ATC035	SB	30153-31379	39	40	0.129	Yes	Yes	26.97759356	28	0.189	Yes	Yes	6.225598513	6	0.091	5.587075589	6	0.017
71	Calibration	ATC036	EB	10119-20077	64	63	0.138	Yes	Yes	45.20497878	45	0.038	Yes	Yes	10.43191818	10	0.135	8.693265149	8	0.143
72	Calibration	ATC036	WB	20077-10119	60	62	0.282	Yes	Yes	44.01895586	44	0.004	Yes	Yes	7.511767212	10	0.894	8.563414622	8	0.147
73	Calibration	ATC037	NB	10240-10119	433	432	0.043	Yes	Yes	293.1649244	293	0.011	Yes	Yes	71.31524204	70	0.108	68.62071148	69	0.025
74	Calibration	ATC037	SB	10119-10240	442	431	0.514	Yes	Yes	319.6144342	310	0.532	Yes	Yes	66.80996569	65	0.170	55.33567796	55	0.010
75	Calibration	ATC038	EB	10242-20132	113	113	0.009	Yes	Yes	95.37135045	95	0.038	Yes	Yes	12.69553691	13	0.085	4.600473306	5	0.075
76	Calibration	ATC038	WB	20132-10242	100	101	0.015	Yes	Yes	81.65790396	82	0.037	Yes	Yes	13.12218011	13	0.034	5.691548001	6	0.027
79	Calibration	ATC040	EB	20331-10240	130	129	0.058	Yes	Yes	98.40332925	98	0.045	Yes	Yes	22.34021529	22	0.072	9.397074685	10	0.041
80	Calibration	ATC040	WB	10240-20331	133	133	0.022	Yes	Yes	93.85128517	94	0.014	Yes	Yes	28.99899261	29	0.000	9.84208234	10	0.036
81	Calibration	ATC041	NB	10213-10212	208	208	0.011	Yes	Yes	173.6793284	174	0.023	Yes	Yes	25.96048909	26	0.008	8.409735902	8	0.064
82	Calibration	ATC041	SB	10212-10213	202	201	0.096	Yes	Yes	162.1539908	161	0.098	Yes	Yes	30.00957137	30	0.002	10.06002677	10	0.033
83	Calibration	ATC042	NB	10113-10408	306	309	0.184	Yes	Yes	237.064442	241	0.253	Yes	Yes	51.08113068	51	0.011	17.4841454	17	0.145
84	Calibration	ATC042	SB	10408-10113	305	304	0.081	Yes	Yes	250.4000215	249	0.097	Yes	Yes	39.79542526	40	0.034	14.80455326	15	0.022
87	Calibration	ATC044	NB	30288-30107	76	75	0.071	Yes	Yes	56.30204082	56	0.042	Yes	Yes	14.88979592	15	0.029	4.808163265	4	0.195
88	Calibration	ATC044	SB	30107-30288	85	76	0.959	Yes	Yes	63.38983051	63	0.049	Yes	Yes	14.72693032	10	1.313	6.883239171	3	1.595
89	Calibration	ATC045	EB	30108-30107	134	135	0.053	Yes	Yes	104.4683196	104	0.050	Yes	Yes	24.91735537	25	0.017	4.614325069	6	0.459
90	Calibration	ATC045	WB	30107-30108	123	123	0.021	Yes	Yes	91.39708029	91	0.047	Yes	Yes	20.64963504	21	0.077	10.95328467	11	0.040
91	Calibration	ATC047	NB	30229-30110	53	52	0.097	Yes	Yes	42.29470199	42	0.045	Yes	Yes	9.476821192	9	0.157	1.228476821	1	0.062
92	Calibration	ATC047	SB	30110-30229	45	45	0.059	Yes	Yes	35.03690037	35	0.005	Yes	Yes	7.472324723	7	0.176	2.490774908	3	0.067
93	Calibration	ATC048	NB	31414-30184	47	68	2.722	Yes	Yes	37.14238865	56	2.816	Yes	Yes	7.232991475	7	0.087	2.932293841	5	0.848



94	Calibration	ATC048	SB	30184-31414	59	71	1.429	Yes	Yes	50.61162181	60	1.323	Yes	Yes	7.337744427	7	0.126	1.505178344	4	1.275
95	Calibration	ATC049	EB	30190-30185	61	61	0.005	Yes	Yes	44.40950143	44	0.063	Yes	Yes	11.77000149	12	0.067	5.044286354	5	0.067
96	Calibration	ATC049	WB	30185-30190	61	61	0.061	Yes	Yes	44.84727894	45	0.024	Yes	Yes	10.70219157	11	0.090	5.181219726	5	0.006
99	Calibration	ATC051	NB	30178-30177	55	56	0.120	Yes	Yes	44.84762968	45	0.024	Yes	Yes	8.634216556	9	0.123	1.676546904	2	0.269
100	Calibration	ATC051	SB	30177-30178	70	70	0.089	Yes	Yes	56.41580332	56	0.057	Yes	Yes	11.40051895	11	0.120	2.514820356	3	0.052
101	Calibration	ATC052	EB	30191-30187	71	71	0.012	Yes	Yes	60.46133761	60	0.058	Yes	Yes	8.572876229	9	0.144	1.804816048	2	0.055
102	Calibration	ATC052	WB	30187-30191	82	82	0.048	Yes	Yes	68.73737048	69	0.032	Yes	Yes	10.86570118	11	0.041	2.125898056	2	0.026
103	Calibration	ATC053	EB	30164-30161	39	39	0.057	Yes	Yes	32.86822684	33	0.023	Yes	Yes	4.660420224	5	0.155	0.9811411	1	0.120
104	Calibration	ATC053	WB	30161-30164	38	38	0.007	Yes	Yes	31.89817707	32	0.022	Yes	Yes	5.042323524	5	0.019	0.986541559	1	0.125
105	Calibration	ATC054	NB	30163-30157	78	73	0.617	Yes	Yes	62.74294222	57	0.724	Yes	Yes	12.84895359	13	0.042	2.503042908	3	0.059
106	Calibration	ATC054	SB	30157-30163	92	87	0.599	Yes	Yes	73.89414906	68	0.751	Yes	Yes	15.53671852	16	0.117	2.842082656	3	0.110
109	Calibration	ATC056	NB	30158-20054	64	65	0.115	Yes	Yes	51.61333365	52	0.054	Yes	Yes	10.56975242	11	0.131	2.05904268	2	0.073
110	Calibration	ATC056	SB	20054-30158	69	66	0.330	Yes	Yes	55.13111053	52	0.432	Yes	Yes	11.59166939	12	0.119	2.120427328	2	0.030
113	Calibration	ATC058	NB	20258-20055	260	259	0.039	Yes	Yes	187.9376256	188	0.005	Yes	Yes	45.51832537	46	0.071	26.52908534	25	0.232
114	Calibration	ATC058	SB	20055-20258	241	240	0.045	Yes	Yes	170.6219477	171	0.029	Yes	Yes	44.28999878	44	0.044	25.73038024	25	0.155
115	Calibration	ATC059	NW	10093-10094	542	511	1.354	Yes	Yes	411.1138913	398	0.640	Yes	Yes	75.99178183	72	0.476	55.05695256	41	2.036
116	Calibration	ATC059	SE	10094-10093	549	511	1.619	Yes	Yes	429.3153292	386	2.168	Yes	Yes	76.26757872	79	0.280	43.01425264	47	0.601
117	Calibration	ATC060	NB	20064-20033	179	118	4.958	Yes	Yes	149.7892688	102	4.298	Yes	Yes	23.68331354	13	2.629	5.331308676	4	0.485
118	Calibration	ATC060	SB	20033-20064	170	147	1.803	Yes	Yes	144.6131916	127	1.497	Yes	Yes	20.60349235	16	1.186	4.37338281	4	0.091
119	Calibration	ATC061	NB	10084-10085	617	694	3.004	Yes	Yes	357.3333333	427	3.528	Yes	Yes	93.66666667	90	0.426	165.8333333	177	0.848
120	Calibration	ATC061	SB	10085-10084	622	683	2.393	Yes	Yes	382.8333333	460	3.760	Yes	Yes	99.33333333	86	1.436	139.8333333	138	0.192
121	Calibration	ATC062	NB	10660-10078	610	624	0.558	Yes	Yes	508.8333333	500	0.398	Yes	Yes	71.16666667	90	2.110	29.83333333	34	0.683
122	Calibration	ATC062	SB	10078-10660	647	645	0.041	Yes	Yes	534.1666667	518	0.693	Yes	Yes	75.66666667	92	1.803	36.66666667	35	0.278
123	Calibration	ATC063	NE	10114-10396	622	607	0.575	Yes	Yes	492.2342358	463	1.354	Yes	Yes	78.32533793	86	0.881	50.9789915	58	0.992
124	Calibration	ATC063	SW	10396-10114	572	627	2.237	Yes	Yes	429.691275	456	1.254	Yes	Yes	89.82246992	107	1.767	52.59874364	63	1.422
125	Calibration	ATC064	EB	31245-30662	148	151	0.277	Yes	Yes	122.2052431	130	0.676	Yes	Yes	20.27263119	18	0.527	5.238994578	3	0.916
126	Calibration	ATC064	WB	30662-31245	100	100	0.038	Yes	Yes	82.31858146	90	0.796	Yes	Yes	13.84870872	8	1.790	3.868354392	2	1.079



127	Calibration	ATC065	EB	30061-30060	223	263	2.562	Yes	Yes	184.5210781	224	2.743	Yes	Yes	30.61020681	29	0.366	7.910502883	11	0.902
128	Calibration	ATC065	WB	30060-30061	212	260	3.133	Yes	Yes	174.5059218	212	2.730	Yes	Yes	29.35766918	32	0.555	8.200466251	15	2.069
129	Calibration	ATC066	EB	20188-20184	243	242	0.079	Yes	Yes	195.485369	191	0.343	Yes	Yes	35.37513968	39	0.553	12.40644709	13	0.047
130	Calibration	ATC066	WB	20184-20188	295	229	4.045	Yes	Yes	247.9591192	182	4.485	Yes	Yes	33.00701717	36	0.536	13.65807607	11	0.813
131	Calibration	ATC067	EB	30473-31420	142	131	0.949	Yes	Yes	121.4474058	112	0.832	Yes	Yes	14.32712881	14	0.001	5.830808236	4	0.949
132	Calibration	ATC067	WB	31420-30473	83	110	2.730	Yes	Yes	66.09867668	99	3.640	Yes	Yes	13.00301836	9	1.138	4.334339454	2	1.373
133	Calibration	ATC068	NW	20199-20200	477	425	2.429	Yes	Yes	387.2960032	352	1.861	Yes	Yes	62.23730545	51	1.552	26.99449393	23	0.831
134	Calibration	ATC068	SB	20200-20199	461	446	0.721	Yes	Yes	390.518509	383	0.389	Yes	Yes	51.98460671	47	0.687	18.83762752	16	0.687
135	Calibration	ATC069	SE	31246-20077	40	37	0.478	Yes	Yes	31.03091009	35	0.667	Yes	Yes	5.251384785	2	1.812	3.978321807	1	2.247
136	Calibration	ATC069	NW	20077-31246	47	33	2.097	Yes	Yes	32.39154798	29	0.636	Yes	Yes	7.474972611	4	1.304	6.708308753	0	3.551
137	Calibration	ATC070	NB	10471-10457	385	395	0.517	Yes	Yes	253.0308695	261	0.472	Yes	Yes	67.23897231	66	0.195	64.23091302	68	0.518
138	Calibration	ATC070	SB	10457-10471	388	379	0.435	Yes	Yes	281.4642052	271	0.625	Yes	Yes	58.40382257	57	0.226	48.02483001	52	0.508
143	Calibration	ATC073	EB	30037-30033	32	33	0.296	Yes	Yes	24.9697292	28	0.523	Yes	Yes	5.073354872	6	0.220	1.499948397	0	1.732
144	Calibration	ATC073	WB	30033-30037	53	37	2.412	Yes	Yes	39.96828492	23	2.990	Yes	Yes	10.11392576	14	1.031	2.924508653	0	2.418
147	Calibration	ATC075	NE	30111-30031	56	65	1.183	Yes	Yes	44.44220895	54	1.408	Yes	Yes	7.988962472	7	0.392	3.681818182	4	0.197
148	Calibration	ATC075	SW	30031-30111	51	52	0.130	Yes	Yes	39.97868791	41	0.195	Yes	Yes	6.851730039	9	0.676	4.314391144	2	1.223
149	Calibration	ATC076	NE	10100-10004	1289	1293	0.122	Yes	Yes	852.7748041	857	0.157	Yes	Yes	214.5871239	214	0.026	221.4613435	222	0.012
150	Calibration	ATC076	SW	10007-10099	1268	1273	0.161	Yes	Yes	837.1939604	844	0.241	Yes	Yes	225.0580858	224	0.071	205.3355508	205	0.014
151	Calibration	ATC077	EB	30171-30172	77	49	3.526	Yes	Yes	54.83909671	42	1.799	Yes	Yes	13.95029653	3	3.551	7.776889446	3	2.113
152	Calibration	ATC077	WB	30172-30171	70	48	2.851	Yes	Yes	50.9796921	41	1.453	Yes	Yes	12.85770996	6	2.413	6.165685476	1	2.425
153	Calibration	ATC078	EB	30162-10008	56	59	0.371	Yes	Yes	49.1171004	44	0.763	Yes	Yes	5.457455599	12	2.142	1.736463145	3	1.078
154	Calibration	ATC078	WB	10008-30162	67	60	0.972	Yes	Yes	59.29972733	41	2.535	Yes	Yes	5.647593079	14	2.697	2.470821972	4	0.957
155	Calibration	ATC079	EB	30157-30764	136	101	3.239	Yes	Yes	109.3965755	84	2.567	Yes	Yes	15.1198519	12	0.730	11.41400585	4	2.603
156	Calibration	ATC079	WB	30764-30157	139	134	0.453	Yes	Yes	110.7979745	109	0.151	Yes	Yes	17.3448921	17	0.054	11.06484496	8	1.140
157	Calibration	ATC080	NW	20053-20052	261	286	1.550	Yes	Yes	199.6036386	218	1.256	Yes	Yes	44.12095146	43	0.133	17.1056915	25	1.814
158	Calibration	ATC080	SE	20052-20053	304	306	0.072	Yes	Yes	234.4978313	240	0.359	Yes	Yes	51.37155366	39	1.777	18.40890891	26	1.634
159	Calibration	ATC081	NB	30046-31242	249	282	2.048	Yes	Yes	208.6485582	232	1.595	Yes	Yes	27.41240472	38	1.842	12.57129389	12	0.246



160	Calibration	ATC081	SB	31242-30046	214	250	2.305	Yes	Yes	179.7101522	205	1.819	Yes	Yes	24.54803626	32	1.426	10.1897509	12	0.683
161	Calibration	ATC082	EB	10033-10661	874	875	0.038	Yes	Yes	630.25	632	0.061	Yes	Yes	135.9166667	136	0.019	108	108	0.020
162	Calibration	ATC082	WB	10661-10033	935	936	0.033	Yes	Yes	652.5833333	654	0.051	Yes	Yes	152.0833333	152	0.023	130.75	131	0.001
163	Calibration	ATC083	NW	10667-10662	842	834	0.274	Yes	Yes	579.2451556	578	0.031	Yes	Yes	137.0177068	137	0.002	125.2573314	118	0.649
164	Calibration	ATC083	SE	10662-10667	788	788	0.022	Yes	Yes	566.119249	568	0.059	Yes	Yes	121.3355105	121	0.060	100.1230087	100	0.013
165	Calibration	ATC084	NB	31423-31386	148	144	0.362	Yes	Yes	110.2194631	106	0.383	Yes	Yes	24.21005547	24	0.043	13.59161009	13	0.047
166	Calibration	ATC084	SB	31386-31423	153	143	0.800	Yes	Yes	120.4552046	112	0.746	Yes	Yes	20.36788005	19	0.247	11.82651099	11	0.172
167	Calibration	ATC085	EB	30643-30027	287	290	0.160	Yes	Yes	248.3044208	248	0.017	Yes	Yes	30.70141428	31	0.054	8.438400417	11	0.858
168	Calibration	ATC085	WB	30027-30643	275	276	0.055	Yes	Yes	224.1820849	224	0.013	Yes	Yes	41.94601902	42	0.008	8.81218887	10	0.343
175	Calibration	ATC089	EB	20002-20252	423	424	0.038	Yes	Yes	338.6300984	339	0.034	Yes	Yes	61.63101841	62	0.047	23.15419476	23	0.044
176	Calibration	ATC089	WB	20252-20002	449	455	0.261	Yes	Yes	359.5565534	365	0.282	Yes	Yes	66.58454693	67	0.046	23.13813006	23	0.041
177	Calibration	ATC090	NW	20073-20072	305	305	0.002	Yes	Yes	254.8995797	255	0.009	Yes	Yes	39.08365129	39	0.007	11.41128505	11	0.046
178	Calibration	ATC090	SE	20072-20073	310	310	0.004	Yes	Yes	259.876278	260	0.011	Yes	Yes	39.40202511	39	0.051	10.6252652	11	0.062
179	Calibration	ATC091	NB	10373-10420	292	292	0.001	Yes	Yes	257.4110226	257	0.027	Yes	Yes	26.50306539	27	0.096	8.282207935	8	0.020
180	Calibration	ATC091	SB	10420-10373	270	269	0.086	Yes	Yes	232.8908616	232	0.063	Yes	Yes	26.48449848	26	0.093	10.79531188	11	0.008
181	Calibration	ATC092	NB	20297-20298	685	685	0.006	Yes	Yes	575.9811125	576	0.014	Yes	Yes	87.32562902	87	0.033	21.41318106	21	0.044
182	Calibration	ATC092	SB	20298-20297	674	674	0.002	Yes	Yes	560.5079784	561	0.023	Yes	Yes	94.27860795	94	0.029	18.82240759	19	0.051
183	Calibration	ATC093	SE	30708-31047	288	288	0.015	Yes	Yes	242.0009319	242	0.001	Yes	Yes	37.25673154	37	0.042	9.062448212	9	0.009
184	Calibration	ATC093	NW	31047-30708	301	301	0.015	Yes	Yes	250.8938826	251	0.007	Yes	Yes	41.33173559	41	0.052	8.710407088	9	0.018
185	Calibration	ATC094	NB	30566-31024	338	330	0.393	Yes	Yes	250.4498128	254	0.242	Yes	Yes	65.5585232	54	1.437	21.53678758	22	0.023
186	Calibration	ATC094	SB	31024-30566	436	415	0.998	Yes	Yes	329.5179315	330	0.037	Yes	Yes	75.39562517	55	2.518	30.78905012	30	0.168
189	Calibration	ATC096	NW	20024-30824	177	178	0.096	Yes	Yes	149.9491323	150	0.004	Yes	Yes	24.14002215	24	0.029	2.426774714	4	0.822
190	Calibration	ATC096	SE	30824-20024	205	205	0.011	Yes	Yes	175.5181218	176	0.036	Yes	Yes	25.4461204	25	0.089	4.207626208	4	0.059
195	Calibration	ATC099	NE	20263-20264	397	398	0.033	Yes	Yes	353.6415962	354	0.016	Yes	Yes	35.71629208	36	0.047	7.713377633	8	0.028
196	Calibration	ATC099	SW	20264-20263	393	394	0.025	Yes	Yes	348.7796722	349	0.017	Yes	Yes	35.90132267	36	0.013	8.555922694	9	0.033
197	Calibration	ATC100	NE	10345-10485	494	494	0.017	Yes	Yes	434.8012764	433	0.074	Yes	Yes	48.502018	50	0.226	10.30131356	11	0.108
198	Calibration	ATC100	SW	10485-10345	339	331	0.467	Yes	Yes	303.60033	296	0.460	Yes	Yes	29.28820918	29	0.089	6.6054259	7	0.039



203	Calibration	ATC103	NE	20281-20282	265	283	1.112	Yes	Yes	204.238908	221	1.179	Yes	Yes	41.97436633	46	0.538	18.53413578	16	0.565
204	Calibration	ATC103	SW	20282-20281	298	261	2.187	Yes	Yes	244.7851111	205	2.627	Yes	Yes	36.43151901	41	0.767	16.82789212	15	0.488
205	Calibration	ATC104	NB	20230-20041	522	530	0.349	Yes	Yes	439.2500152	453	0.674	Yes	Yes	59.33486893	53	0.819	23.56196245	23	0.018
206	Calibration	ATC104	SB	20041-20230	623	602	0.830	Yes	Yes	543.4119196	524	0.860	Yes	Yes	64.01222867	61	0.384	15.22453006	18	0.583
207	Calibration	ATC105	NB	10436-10379	360	389	1.501	Yes	Yes	291.9699528	318	1.489	Yes	Yes	45.65348353	47	0.139	22.29588731	24	0.435
208	Calibration	ATC105	SB	10379-10436	330	324	0.341	Yes	Yes	280.3448276	276	0.262	Yes	Yes	35.17241379	34	0.199	14.48275862	14	0.167
209	Calibration	ATC106	NB	10444-10439	763	763	0.006	Yes	Yes	641	641	0.012	Yes	Yes	92	92	0.000	30	30	0.024
210	Calibration	ATC106	SB	10439-10444	871	876	0.171	Yes	Yes	709.1752468	714	0.173	Yes	Yes	117.7753533	118	0.032	44.04939991	44	0.017
211	Calibration	ATC107	NB	30838-30815	265	282	0.996	Yes	Yes	229.4427926	246	1.085	Yes	Yes	30.32635172	30	0.059	5.719443527	6	0.025
212	Calibration	ATC107	SB	30815-30838	286	298	0.723	Yes	Yes	252.2885759	265	0.766	Yes	Yes	27.12780386	27	0.000	6.103755869	6	0.011
213	Calibration	ATC108	NE	20338-20222	719	701	0.648	Yes	Yes	618.8706269	602	0.695	Yes	Yes	78.07612011	78	0.009	21.73611362	22	0.006
214	Calibration	ATC108	SW	20222-20338	739	723	0.614	Yes	Yes	650.1957029	633	0.677	Yes	Yes	71.52830726	72	0.042	17.45833092	18	0.048
217	Calibration	ATC110	NB	10107-10409	336	318	1.002	Yes	Yes	275.847508	259	1.028	Yes	Yes	38.38654642	38	0.004	21.60359124	20	0.275
218	Calibration	ATC110	SB	10409-10107	318	317	0.074	Yes	Yes	275.6067655	273	0.150	Yes	Yes	29.90554299	31	0.263	12.40400363	12	0.081
219	Calibration	ATC111	NB	30393-30392	295	295	0.022	Yes	Yes	252.2875322	252	0.017	Yes	Yes	33.91467946	34	0.015	8.855499638	9	0.067
220	Calibration	ATC111	SB	30392-30393	312	313	0.024	Yes	Yes	266.7892561	267	0.014	Yes	Yes	36.82805141	37	0.028	8.564663118	9	0.005
223	Calibration	ATC113	NE	10338-10375	633	632	0.032	Yes	Yes	547.9495469	547	0.032	Yes	Yes	58.93243943	59	0.007	25.64935188	26	0.021
224	Calibration	ATC113	SW	10375-10338	555	555	0.003	Yes	Yes	483.5689384	484	0.015	Yes	Yes	49.12617738	49	0.018	22.26873425	22	0.026
229	Calibration	ATC116	NE	10278-10441	494	494	0.016	Yes	Yes	411.0730913	412	0.025	Yes	Yes	58.90521055	59	0.012	23.53049966	23	0.048
230	Calibration	ATC116	SW	10441-10278	551	555	0.177	Yes	Yes	447.7299023	450	0.085	Yes	Yes	70.37488979	72	0.171	33.21573462	34	0.158
231	Calibration	ATC117	NE	30622-30087	176	178	0.124	Yes	Yes	152.8734067	154	0.109	Yes	Yes	18.61919697	19	0.088	4.409809809	4	0.039
232	Calibration	ATC117	SW	30087-30622	139	139	0.032	Yes	Yes	122.2697681	122	0.028	Yes	Yes	13.34231059	14	0.165	3.022867242	3	0.044
233	Calibration	ATC118	NB	20070-20238	556	553	0.120	Yes	Yes	486.0968761	483	0.123	Yes	Yes	55.93021762	56	0.009	14.02531451	14	0.046
234	Calibration	ATC118	SB	20238-20070	490	487	0.109	Yes	Yes	433.6935441	432	0.077	Yes	Yes	44.48996634	44	0.092	11.37337485	11	0.061
235	Calibration	ATC119	EB	10466-10056	832	845	0.451	Yes	Yes	731.1462909	725	0.237	Yes	Yes	94.47492748	94	0.049	6.3787816	26	4.929
236	Calibration	ATC119	WB	10056-10466	857	861	0.148	Yes	Yes	708.9903737	714	0.174	Yes	Yes	106.2757644	106	0.015	41.73386183	42	0.026
237	Calibration	ATC120	EB	20324-20036	367	378	0.562	Yes	Yes	318.3956104	328	0.525	Yes	Yes	40.49339045	42	0.235	8.327269811	8	0.034



238	Calibration	ATC120	WB	20036-20324	427	429	0.072	Yes	Yes	367.7404716	368	0.030	Yes	Yes	46.86397846	48	0.151	12.67495503	13	0.034
253	Calibration	ATC128	NB	10388-10052	813	851	1.303	Yes	Yes	675.313093	724	1.840	Yes	Yes	107.1313472	94	1.309	30.84846303	33	0.364
254	Calibration	ATC128	SB	10052-10388	959	962	0.107	Yes	Yes	814.6022845	818	0.101	Yes	Yes	110.5389408	111	0.068	33.85877466	34	0.051
255	Calibration	ATC129	NB	20018-20194	972	999	0.867	Yes	Yes	809.9956942	838	0.961	Yes	Yes	117.5818229	117	0.012	43.92552889	44	0.037
256	Calibration	ATC129	SB	20194-20018	964	984	0.637	Yes	Yes	803.0100821	820	0.613	Yes	Yes	126.0204423	129	0.226	34.70452091	35	0.022
259	Calibration	ATC131	NW	10065-10066	222	222	0.011	Yes	Yes	195.6237624	195	0.033	Yes	Yes	18.68316832	19	0.045	7.693069307	8	0.036
260	Calibration	ATC131	SE	10066-10065	224	226	0.126	Yes	Yes	195.5902439	197	0.128	Yes	Yes	21.85365854	22	0.031	6.556097561	6	0.023
261	Calibration	ATC132	EB	10072-10448	215	222	0.527	Yes	Yes	180.3693805	193	0.890	Yes	Yes	27.18141363	23	0.756	7.02036511	6	0.215
262	Calibration	ATC132	WB	10448-10072	209	185	1.717	Yes	Yes	185.1224772	159	2.015	Yes	Yes	15.93042088	20	0.987	8.056764585	6	0.703
263	Calibration	ATC133	EB	20152-20175	550	598	2.008	Yes	Yes	451.6391772	490	1.770	Yes	Yes	78.63360674	88	1.060	19.49038116	19	0.001
264	Calibration	ATC134	WB	20303-20153	431	443	0.549	Yes	Yes	353.343886	382	1.470	Yes	Yes	65.22428505	47	2.395	12.7890755	14	0.344
265	Calibration	ATC135	EB	30019-30572	114	65	5.120	No	Yes	96.82937236	57	4.584	Yes	Yes	14.88766488	8	1.995	2.024722423	1	1.350
266	Calibration	ATC136	EB	30014-31229	161	155	0.406	Yes	Yes	136.4060057	128	0.729	Yes	Yes	21.95974027	23	0.255	2.207592938	4	1.151
267	Calibration	ATC136	WB	31229-30014	379	389	0.513	Yes	Yes	324.2363347	320	0.247	Yes	Yes	47.00686587	61	1.842	7.772788845	9	0.345
268	Calibration	ATC137	NE	10041-10394	331	331	0.001	Yes	Yes	291.5590941	292	0.025	Yes	Yes	29.38192421	29	0.069	9.562164685	10	0.012
269	Calibration	ATC137	SW	10394-10041	275	270	0.292	Yes	Yes	242.5444537	239	0.253	Yes	Yes	22.85580647	22	0.187	9.551680315	10	0.003
270	Calibration	ATC138	EB	31181-31408	222	204	1.230	Yes	Yes	190.8829914	173	1.349	Yes	Yes	26.70937379	27	0.054	4.629624791	5	0.025
271	Calibration	ATC138	WB	31408-31181	250	251	0.047	Yes	Yes	214.616976	215	0.059	Yes	Yes	30.28991363	30	0.015	5.022950501	5	0.088
276	Calibration	ATC141	NE	20020-20319	514	511	0.143	Yes	Yes	429.3649822	426	0.139	Yes	Yes	65.05530034	65	0.006	19.77005231	19	0.068
277	Calibration	ATC141	SE	20319-20020	478	476	0.097	Yes	Yes	396.3400243	396	0.041	Yes	Yes	68.03610862	67	0.127	14.08228682	14	0.070
292	Calibration	ATC149	NE	10043-10369	436	435	0.060	Yes	Yes	379.4433962	379	0.022	Yes	Yes	46.27358491	45	0.138	10.28301887	10	0.033
293	Calibration	ATC149	SW	10369-10043	463	471	0.370	Yes	Yes	403	411	0.376	Yes	Yes	46	46	0.012	14	14	0.084
303	Calibration	ATC155	NB	10049-10050	802	776	0.912	Yes	Yes	694.579974	669	0.980	Yes	Yes	84.47594278	84	0.007	22.94408322	23	0.010
304	Calibration	ATC155	SB	10047-10048	969	966	0.091	Yes	Yes	828.4039666	826	0.099	Yes	Yes	111.263048	111	0.013	29.33298539	29	0.028
317	Calibration	LEB012	NB	10676-10675	595	592	0.104	Yes	Yes	411.843747	410	0.110	Yes	Yes	100.3413322	100	0.034	82.65376237	83	0.003
318	Calibration	LEB012	SB	10675-10676	603	603	0.002	Yes	Yes	431.6345778	432	0.009	Yes	Yes	96.29109752	96	0.029	75.17842732	75	0.016
319	Calibration	LEB013	NB	10708-10681	681	680	0.067	Yes	Yes	498.0182578	496	0.086	Yes	Yes	106.0415917	106	0.004	77.28881228	77	0.023



320	Calibration	LEB013	SB	10681-10708	669	671	0.051	Yes	Yes	502.7964165	504	0.035	Yes	Yes	99.67071345	100	0.033	66.89422147	67	0.024
321	Calibration	LEB014	NB	10707-10688	426	426	0.003	Yes	Yes	289.2881683	289	0.016	Yes	Yes	72.59448095	73	0.048	63.70878235	64	0.009
322	Calibration	LEB014	SB	10688-10707	430	427	0.117	Yes	Yes	304.7123998	305	0.013	Yes	Yes	68.90607776	69	0.011	56.24814863	54	0.370
323	Calibration	LEB015	NB	10701-10699	344	347	0.153	Yes	Yes	232.3694009	232	0.023	Yes	Yes	57.50555881	58	0.065	53.81715562	57	0.362
324	Calibration	LEB015	SB	10699-10701	352	353	0.026	Yes	Yes	246.1170855	247	0.058	Yes	Yes	58.34383226	58	0.045	47.69775942	48	0.011
377	Calibration	WebTRIS_7073/1	NB	10105-10106	1299	1303	0.130	Yes	Yes	861.492848	866	0.166	Yes	Yes	213.5811958	213	0.025	223.6408544	224	0.011
378	Calibration	WebTRIS_7074/1	SB	10101-10102	1261	1268	0.200	Yes	Yes	832.6672837	840	0.261	Yes	Yes	220.3637544	220	0.025	207.8503712	208	0.004
379	Calibration	WebTRIS_8001/1	NB	10167-10165	1099	1098	0.036	Yes	Yes	727.2793817	727	0.010	Yes	Yes	183.0082104	182	0.058	188.8708111	189	0.009
380	Calibration	WebTRIS_30360764	NB	10177-10161	1459	1459	0.022	Yes	Yes	963.8858466	964	0.004	Yes	Yes	259.1159442	258	0.056	236.408814	236	0.003
381	Calibration	WebTRIS_30361627	SB	10160-10174	1370	1370	0.009	Yes	Yes	906.3989755	906	0.014	Yes	Yes	228.0807879	228	0.005	235.3872721	236	0.009
382	Calibration	WebTRIS_6550/2	SB	11039-11038	1125	1125	0.007	Yes	Yes	821.8782102	822	0.004	Yes	Yes	186.1776469	186	0.013	117.042342	117	0.015
383	Calibration	WebTRIS_6550/1	NB	11038-11039	989	989	0.011	Yes	Yes	721.502844	722	0.019	Yes	Yes	151.0475625	151	0.004	116.5527973	116	0.010
384	Calibration	WebTRIS_6527/1	NB	10183-10181	424	420	0.179	Yes	Yes	228.4988488	227	0.129	Yes	Yes	92.54854179	92	0.103	103.0960235	102	0.074
385	Calibration	WebTRIS_6527/2	NB	10183-10182	1188	1181	0.201	Yes	Yes	639.8249996	636	0.153	Yes	Yes	259.1473481	258	0.075	288.6815997	287	0.109
386	Calibration	WebTRIS_65271/2/2	NB	11008-10183	1590	1601	0.280	Yes	Yes	856.5764908	863	0.202	Yes	Yes	346.9378755	350	0.137	386.4773521	389	0.137
387	Calibration	WebTRIS_6526/1	SB	10184-10176	407	407	0.005	Yes	Yes	256.3119714	256	0.019	Yes	Yes	61.61429324	62	0.049	88.95481826	89	0.019
388	Calibration	WebTRIS_6526/2	SB	10184-10185	1149	1166	0.497	Yes	Yes	723.6950506	724	0.011	Yes	Yes	173.9675241	187	0.987	251.1633044	255	0.211
389	Calibration	WebTRIS_6526/1/2	SB	11035-10184	1556	1573	0.425	Yes	Yes	980.007022	980	0.000	Yes	Yes	235.5818173	249	0.877	340.1181227	343	0.172
390	Calibration	WebTRIS_6535/1	NB	11069-11074	1705	1609	2.344	Yes	Yes	909.6408651	910	0.012	Yes	Yes	370.6725039	275	5.319	424.4288007	424	0.009
391	Calibration	WebTRIS_6534/1	SB	11075-11070	1585	1495	2.314	Yes	Yes	852.8640529	853	0.005	Yes	Yes	337.628297	246	5.395	394.9154087	396	0.059
392	Calibration	WebTRIS_6533/1	NB	11031-11021	1774	1774	0.013	Yes	Yes	1154.239817	1154	0.007	Yes	Yes	294.1815038	295	0.035	325.3520268	326	0.011
393	Calibration	WebTRIS_6532/1	SB	11022-11014	1678	1694	0.392	Yes	Yes	1075.016744	1075	0.001	Yes	Yes	258.4099797	262	0.242	344.7548249	357	0.652
394	Calibration	WebTRIS_6531/1	SB	11027-11012	65	82	2.061	Yes	Yes	35.46909043	53	2.672	Yes	Yes	12.0766888	12	0.022	16.9621546	17	0.019
395	Calibration	WebTRIS_6531/2	SB	11027-11028	1425	1427	0.070	Yes	Yes	783.3064366	783	0.005	Yes	Yes	266.7039938	267	0.018	374.5955905	377	0.112
396	Calibration	WebTRIS_6531/1/2	SB	11026-11027	1489	1509	0.524	Yes	Yes	818.775527	837	0.624	Yes	Yes	278.7806826	279	0.013	391.5577451	394	0.106
397	Calibration	WebTRIS_6530/1	NB	11017-11527	68	68	0.023	Yes	Yes	38.54268097	39	0.070	Yes	Yes	13.07113179	13	0.020	16.19073365	16	0.043
398	Calibration	WebTRIS_6530/2	NB	11017-11018	1547	1559	0.301	Yes	Yes	879.5799479	891	0.376	Yes	Yes	298.2954255	299	0.028	369.4876511	370	0.011



399	Calibration	WebTRIS_6530/1/2	NB	11016-11017	1615	1627	0.300	Yes	Yes	918.1226289	930	0.382	Yes	Yes	311.3665573	312	0.023	385.6783848	386	0.002
400	Calibration	WebTRIS_30360804	NB	11011-11015	1722	1723	0.019	Yes	Yes	979.0029506	979	0.001	Yes	Yes	332.0131415	333	0.042	411.2525547	411	0.001
401	Calibration	WebTRIS_30360803	SB	11030-11013	1567	1556	0.271	Yes	Yes	904.9270227	896	0.314	Yes	Yes	285.0815849	282	0.183	377.0529261	379	0.092
402	Calibration	WebTRIS_6529/1	SB	11034-11059	124	143	1.679	Yes	Yes	71.62831781	72	0.020	Yes	Yes	22.5652609	34	2.229	29.84513242	37	1.268
403	Calibration	WebTRIS_6529/2	SB	11034-11035	1431	1413	0.476	Yes	Yes	826.2517261	824	0.089	Yes	Yes	260.2962954	248	0.801	344.2715526	342	0.141
404	Calibration	WebTRIS_6529/1/2	SB	11013-11034	1546	1556	0.267	Yes	Yes	892.6700659	896	0.095	Yes	Yes	281.220243	282	0.046	371.9458608	379	0.356
405	Calibration	WebTRIS_6528/1	NB	11009-11062	132	132	0.028	Yes	Yes	80.18054563	80	0.020	Yes	Yes	24.37016431	24	0.067	27.51787473	28	0.036
406	Calibration	WebTRIS_6528/2	NB	11009-11010	1567	1531	0.906	Yes	Yes	951.2942246	915	1.202	Yes	Yes	289.1374257	290	0.065	326.4831275	326	0.004
407	Calibration	WebTRIS_6528/1/2	NB	10182-11009	1699	1663	0.878	Yes	Yes	1031.47477	995	1.159	Yes	Yes	313.50759	314	0.044	354.0010023	354	0.006
408	Calibration	WebTRIS_6525/1	SB	11004-11043	208	207	0.055	Yes	Yes	122.4318763	122	0.033	Yes	Yes	36.42478407	36	0.059	49.43363553	49	0.012
409	Calibration	WebTRIS_6525/2	SB	11004-11045	1351	1352	0.012	Yes	Yes	794.210628	794	0.007	Yes	Yes	236.2861006	236	0.009	320.6739937	321	0.006
410	Calibration	WebTRIS_6525/1/2	SB	11003-11004	1559	1559	0.009	Yes	Yes	916.6425043	916	0.005	Yes	Yes	272.7108847	273	0.013	370.1076292	370	0.001
411	Calibration	WebTRIS_6524/1	NB	11005-11042	164	153	0.867	Yes	Yes	88.30202741	88	0.036	Yes	Yes	35.76483609	25	1.908	39.84084796	40	0.006
412	Calibration	WebTRIS_6524/2	NB	11005-11006	1457	1467	0.262	Yes	Yes	784.7729622	785	0.008	Yes	Yes	317.8554013	328	0.579	354.0804349	354	0.009
413	Calibration	WebTRIS_6524/1/2	NB	11375-11005	1619	1620	0.028	Yes	Yes	871.9817108	873	0.018	Yes	Yes	353.1774283	354	0.017	393.4280082	394	0.015
414	Calibration	MCJC01	WB	10415-10063	466	467	0.056	Yes	Yes	377.1298465	377	0.007	Yes	Yes	59.26197893	59	0.034	29.4312137	31	0.292
415	Calibration	MCJC01	EB	10063-10415	515	516	0.032	Yes	Yes	421.0638503	421	0.009	Yes	Yes	66.37037591	66	0.046	28.04585895	29	0.237
416	Calibration	MCJC01	EB	10414-10063	610	609	0.030	Yes	Yes	491.735896	492	0.005	Yes	Yes	78.4641844	78	0.052	39.56554672	39	0.027
417	Calibration	MCJC01	WB	10063-10414	555	556	0.017	Yes	Yes	437.5661507	438	0.023	Yes	Yes	75.19796285	75	0.023	42.71600056	43	0.020
418	Calibration	MCJC01	NB	31386-10063	148	147	0.047	Yes	Yes	110.2194631	110	0.018	Yes	Yes	24.21005547	24	0.043	13.59161009	13	0.047
419	Calibration	MCJC01	SB	10063-31386	153	151	0.098	Yes	Yes	120.4552046	120	0.064	Yes	Yes	20.36788005	20	0.082	11.82651099	12	0.040
420	Calibration	MCJC02	NB	10062-30566	298	301	0.150	Yes	Yes	237.9020057	238	0.003	Yes	Yes	46.27269455	49	0.392	13.9153393	14	0.017
421	Calibration	MCJC02	SB	30566-10062	330	347	0.909	Yes	Yes	266.9062671	281	0.861	Yes	Yes	44.93145703	47	0.302	18.60967063	19	0.101
422	Calibration	MCJC02	WB	10062-10417	500	514	0.621	Yes	Yes	409.915718	424	0.690	Yes	Yes	56.16432129	56	0.022	33.69859277	34	0.009
423	Calibration	MCJC02	EB	10417-10062	521	521	0.009	Yes	Yes	429.1960074	429	0.026	Yes	Yes	61.52927138	62	0.060	30.01018958	30	0.026
424	Calibration	MCJC02	SB	10062-30564	317	317	0.016	Yes	Yes	271.9359078	272	0.002	Yes	Yes	35.71044906	36	0.048	9.053353282	9	0.012
425	Calibration	MCJC02	NB	30564-10062	344	345	0.036	Yes	Yes	294.569291	295	0.022	Yes	Yes	40.57243508	41	0.067	9.221007972	9	0.043



426	Calibration	MCJC02	EB	10062-10392	599	599	0.013	Yes	Yes	508.8319854	509	0.010	Yes	Yes	61.193962	61	0.025	29.33957082	29	0.018
427	Calibration	MCJC02	WB	10392-10062	518	518	0.028	Yes	Yes	437.9140513	438	0.014	Yes	Yes	52.30826341	52	0.043	28.16598799	28	0.008
428	Calibration	MCJC03	NB	30008-30009	345	312	1.816	Yes	Yes	299.7665864	271	1.701	Yes	Yes	38.22526941	34	0.695	7.376806378	7	0.006
429	Calibration	MCJC03	SB	30009-30008	349	341	0.421	Yes	Yes	304.2932631	300	0.247	Yes	Yes	36.7163772	33	0.598	8.21507983	8	0.003
430	Calibration	MCJC03	NB	30008-31047	295	296	0.014	Yes	Yes	246.2847402	246	0.018	Yes	Yes	40.57243508	41	0.064	8.550389211	9	0.037
431	Calibration	MCJC03	SB	31047-30008	288	288	0.002	Yes	Yes	241.7580636	242	0.014	Yes	Yes	37.21934127	37	0.036	9.053353282	9	0.012
432	Calibration	MCJC03	SB	30008-30671	297	296	0.065	Yes	Yes	256.8469857	257	0.034	Yes	Yes	31.35142711	31	0.063	8.550389211	7	0.467
433	Calibration	MCJC03	NB	30671-30008	280	280	0.034	Yes	Yes	245.4464668	245	0.012	Yes	Yes	28.33364268	28	0.063	6.538532926	6	0.018
434	Calibration	MCJC03	SB	30008-30028	215	168	3.344	Yes	Yes	180.8994109	136	3.526	Yes	Yes	27.32771454	26	0.356	6.538532926	6	0.018
435	Calibration	MCJC03	NB	30028-30008	235	163	5.090	No	Yes	192.2999299	124	5.461	No	Yes	35.20748499	33	0.317	7.209151687	6	0.495
448	Calibration	MCJC06	NB	30026-30676	262	262	0.037	Yes	Yes	224.4180001	224	0.028	Yes	Yes	30.17784427	30	0.032	7.879770449	8	0.003
449	Calibration	MCJC06	SB	30676-30026	245	245	0.000	Yes	Yes	208.935588	209	0.006	Yes	Yes	28.87160263	29	0.024	6.706187616	6	0.083
450	Calibration	MCJC06	SB	30026-30027	302	302	0.038	Yes	Yes	247.7098051	248	0.020	Yes	Yes	41.32688118	42	0.056	12.57410178	13	0.006
451	Calibration	MCJC06	NB	30027-30026	334	334	0.005	Yes	Yes	281.1569158	281	0.007	Yes	Yes	38.72823348	39	0.044	14.41830337	14	0.014
452	Calibration	MCJC06	EB	30026-30986	350	350	0.002	Yes	Yes	300.844145	301	0.012	Yes	Yes	36.38106782	36	0.013	13.07706585	13	0.025
453	Calibration	MCJC06	WB	30986-30026	307	336	1.616	Yes	Yes	253.8751848	283	1.777	Yes	Yes	40.28595716	40	0.048	12.40644709	13	0.042
454	Calibration	MCJC07	NB	10112-10456	171	171	0.037	Yes	Yes	140.9731013	141	0.001	Yes	Yes	22.60179325	23	0.083	7.291139241	7	0.025
455	Calibration	MCJC07	SB	10456-10112	181	180	0.106	Yes	Yes	152.1137242	151	0.103	Yes	Yes	21.0027921	21	0.004	7.972723368	8	0.064
456	Calibration	MCJC07	WB	10112-30034	183	138	3.565	Yes	Yes	138.2874473	100	3.508	Yes	Yes	32.12658228	28	0.753	12.21993671	10	0.818
457	Calibration	MCJC07	EB	30034-10112	170	124	3.831	Yes	Yes	136.2862973	98	3.536	Yes	Yes	24.45929983	19	1.171	9.66516323	7	0.951
458	Calibration	MCJC07	SB	10112-10408	305	304	0.081	Yes	Yes	250.4000215	249	0.097	Yes	Yes	39.79542526	40	0.034	14.80455326	15	0.022
459	Calibration	MCJC07	NB	10408-10112	307	309	0.106	Yes	Yes	241.2605485	241	0.018	Yes	Yes	49.06170886	51	0.274	16.67774262	17	0.050
503	Calibration	MCJC14	SB	10119-10240	400	431	1.512	Yes	Yes	289.5396503	310	1.192	Yes	Yes	60.52334324	65	0.618	50.12875243	55	0.727
505	Calibration	MCJC14	EB	20331-10240	123	129	0.572	Yes	Yes	93.04835317	98	0.503	Yes	Yes	21.12449099	22	0.189	8.885698591	10	0.210
506	Calibration	MCJC14	SB	10240-10241	462	490	1.301	Yes	Yes	336.6506183	364	1.459	Yes	Yes	68.57076838	69	0.052	56.49963067	57	0.085
507	Calibration	MCJC14	NB	10241-10240	431	495	2.946	Yes	Yes	279.3127142	343	3.599	Yes	Yes	81.14487016	81	0.017	70.91793404	71	0.009
508	Calibration	MCJC15	NB	10119-10471	363	371	0.385	Yes	Yes	241.0874448	249	0.500	Yes	Yes	61.36161669	61	0.046	60.69099793	61	0.010



509	Calibration	MCJC15	SB	10471-10119	367	370	0.186	Yes	Yes	266.2356484	267	0.050	Yes	Yes	54.99073845	56	0.114	45.4344211	47	0.278
510	Calibration	MCJC15	SB	10119-10240	405	431	1.295	Yes	Yes	293.8986723	310	0.937	Yes	Yes	60.52334324	65	0.618	50.12875243	55	0.727
572	Calibration	MCJC23	WB	10028-10023	1279	1278	0.023	Yes	Yes	913.4665807	913	0.011	Yes	Yes	203.3651395	203	0.026	162.457395	162	0.008
573	Calibration	MCJC23	EB	10022-10025	1256	1256	0.002	Yes	Yes	886.8094849	887	0.019	Yes	Yes	189.8689369	189	0.047	179.6420008	180	0.001
613	Calibration	MCJC28	NB	30001-30095	205	181	1.739	Yes	Yes	167.622154	143	1.957	Yes	Yes	31.06935042	31	0.009	6.193310924	6	0.119
614	Calibration	MCJC28	SB	30095-30002	219	218	0.039	Yes	Yes	179.088235	178	0.054	Yes	Yes	32.90507399	33	0.017	6.874864521	7	0.020
615	Calibration	MCJC28	WB	30004-30505	463	453	0.503	Yes	Yes	327.0832103	317	0.566	Yes	Yes	85.45994379	85	0.048	50.8314292	51	0.024
616	Calibration	MCJC28	EB	30005-30001	431	431	0.026	Yes	Yes	304.1256084	305	0.032	Yes	Yes	74.10337316	74	0.012	52.30826341	52	0.011
617	Calibration	MCJC28	SB	30003-30504	104	105	0.099	Yes	Yes	86.3799989	86	0.041	Yes	Yes	11.61177743	13	0.396	6.488230491	6	0.002
618	Calibration	MCJC28	NB	30504-30004	127	98	2.705	Yes	Yes	105.9941634	77	3.049	Yes	Yes	14.5743935	15	0.111	6.478237721	6	0.006
619	Calibration	MCJC28	EB	30002-30006	426	426	0.025	Yes	Yes	300.5177207	301	0.028	Yes	Yes	74.01285689	74	0.001	51.04334958	51	0.006
620	Calibration	MCJC28	WB	30006-30003	422	417	0.228	Yes	Yes	292.395077	287	0.303	Yes	Yes	80.57108788	81	0.051	48.89495454	49	0.004
623	Calibration	MCJC29	WB	20002-20001	525	530	0.214	Yes	Yes	412.0296563	418	0.270	Yes	Yes	83.41715566	83	0.048	30.01442298	30	0.026
624	Calibration	MCJC29	EB	20001-20002	465	465	0.000	Yes	Yes	355.9271452	356	0.016	Yes	Yes	82.20212232	82	0.022	27.36996805	27	0.019
625	Calibration	MCJC29	SB	20002-31004	178	179	0.037	Yes	Yes	133.7219229	134	0.023	Yes	Yes	36.62568137	37	0.058	7.923806745	8	0.047
626	Calibration	MCJC29	NB	31004-20002	212	213	0.045	Yes	Yes	168.897979	170	0.057	Yes	Yes	32.88718619	33	0.020	10.58432638	10	0.060
627	Calibration	MCJC30	NB	30007-30990	367	371	0.249	Yes	Yes	283.3364268	288	0.249	Yes	Yes	60.85865262	61	0.012	22.46572851	23	0.099
628	Calibration	MCJC30	SB	30990-30007	411	411	0.023	Yes	Yes	316.3644008	316	0.015	Yes	Yes	67.39718554	67	0.048	27.49536923	28	0.041
629	Calibration	MCJC30	WB	30007-31392	389	384	0.262	Yes	Yes	280.1509877	275	0.293	Yes	Yes	80.47425139	80	0.050	28.83660675	29	0.034
630	Calibration	MCJC30	EB	31392-30007	413	414	0.010	Yes	Yes	304.9638818	305	0.004	Yes	Yes	76.9535029	77	0.005	31.5190818	32	0.015
631	Calibration	MCJC30	SB	30007-31391	486	486	0.001	Yes	Yes	367.8343907	368	0.019	Yes	Yes	84.16265458	84	0.018	34.36921153	34	0.029
632	Calibration	MCJC30	NB	31391-30007	418	418	0.004	Yes	Yes	309.9935226	310	0.005	Yes	Yes	81.14487016	81	0.018	26.65709577	27	0.035
633	Calibration	MCJC31	NB	10060-10419	375	374	0.043	Yes	Yes	312.8436523	312	0.035	Yes	Yes	43.08725543	43	0.012	19.11263471	19	0.033
634	Calibration	MCJC31	SB	10419-10060	373	373	0.010	Yes	Yes	308.8199397	309	0.021	Yes	Yes	42.58429136	42	0.085	21.29214568	21	0.001
635	Calibration	MCJC31	NB	10060-20007	353	352	0.057	Yes	Yes	319.8851493	319	0.023	Yes	Yes	23.47165666	23	0.096	9.723972044	10	0.065
636	Calibration	MCJC31	SB	20007-10060	350	348	0.097	Yes	Yes	322.9029337	322	0.074	Yes	Yes	20.28621754	20	0.064	7.041496997	7	0.077
637	Calibration	MCJC31	SB	10060-10337	689	689	0.014	Yes	Yes	600.7067557	600	0.016	Yes	Yes	61.02630731	61	0.002	27.66302392	28	0.006



638	Calibration	MCJC31	NB	10337-10060	695	694	0.010	Yes	Yes	601.7126839	601	0.018	Yes	Yes	64.7147105	65	0.035	28.16598799	28	0.020
639	Calibration	MCJC32	NB	10059-10278	486	486	0.015	Yes	Yes	398.3475444	399	0.015	Yes	Yes	62.36754483	62	0.045	25.31585825	25	0.057
640	Calibration	MCJC32	SB	10278-10059	567	568	0.054	Yes	Yes	459.206197	460	0.036	Yes	Yes	71.5885528	72	0.064	36.21341313	36	0.002
641	Calibration	MCJC32	WB	10059-20171	255	256	0.014	Yes	Yes	205.3769957	205	0.003	Yes	Yes	33.86624746	34	0.044	16.09485028	16	0.018
642	Calibration	MCJC32	EB	20171-10059	169	169	0.004	Yes	Yes	139.3210477	140	0.023	Yes	Yes	22.46572851	22	0.099	7.209151687	7	0.056
643	Calibration	MCJC32	SB	10059-10405	363	364	0.039	Yes	Yes	300.4372052	301	0.023	Yes	Yes	41.9136726	42	0.013	20.78918161	21	0.056
644	Calibration	MCJC32	NB	10405-10059	369	368	0.032	Yes	Yes	305.6345006	305	0.016	Yes	Yes	44.09318358	44	0.014	18.77732533	19	0.056
645	Calibration	MCJC33	NB	20008-20223	720	701	0.697	Yes	Yes	619.6806967	602	0.728	Yes	Yes	78.37445573	78	0.042	21.94484761	22	0.050
646	Calibration	MCJC33	SB	20223-20008	741	723	0.681	Yes	Yes	650.5349794	633	0.690	Yes	Yes	72.16872428	72	0.034	18.2962963	18	0.151
647	Calibration	MCJC33	WB	20008-20103	429	429	0.018	Yes	Yes	375.6666667	376	0.004	Yes	Yes	43.2962963	43	0.025	10.06584362	10	0.037
648	Calibration	MCJC33	EB	20103-20008	400	400	0.007	Yes	Yes	347.7837446	348	0.007	Yes	Yes	40.94484761	41	0.009	11.3149492	11	0.018
649	Calibration	MCJC33	SB	20008-20238	496	494	0.068	Yes	Yes	438.7983539	437	0.081	Yes	Yes	45.69135802	46	0.028	11.18106996	11	0.004
650	Calibration	MCJC33	NB	20238-20008	562	559	0.103	Yes	Yes	489.9172714	487	0.115	Yes	Yes	57.06966618	57	0.009	14.53991292	15	0.047
651	Calibration	MCJC33	EB	20008-20239	269	269	0.028	Yes	Yes	232.0699588	232	0.010	Yes	Yes	30.18106996	30	0.033	7.049382716	7	0.047
652	Calibration	MCJC33	WB	20239-20008	211	211	0.015	Yes	Yes	177.9796807	178	0.001	Yes	Yes	27.35994194	27	0.044	6.089985486	6	0.014
653	Calibration	MCJC34	NB	30010-31100	335	336	0.089	Yes	Yes	289.2043409	291	0.100	Yes	Yes	38.22526941	38	0.036	7.209151687	7	0.056
654	Calibration	MCJC34	SB	31100-30010	353	351	0.108	Yes	Yes	311.8377242	309	0.142	Yes	Yes	33.53093808	34	0.103	7.544461068	7	0.042
655	Calibration	MCJC34	WB	30010-31060	194	194	0.021	Yes	Yes	165.13987	165	0.011	Yes	Yes	23.47165666	23	0.071	5.867914164	6	0.079
656	Calibration	MCJC34	EB	31060-30010	251	207	2.949	Yes	Yes	215.2686225	171	3.182	Yes	Yes	30.01018958	30	0.002	6.035568855	6	0.165
657	Calibration	MCJC34	SB	30010-30846	223	126	7.329	No	Yes	196.6589518	108	7.169	No	Yes	21.45980037	14	1.719	4.861986022	4	0.514
658	Calibration	MCJC34	NB	30846-30010	181	163	1.323	Yes	Yes	156.9247902	140	1.383	Yes	Yes	19.11263471	19	0.026	4.526676641	4	0.184
659	Calibration	MCJC34	SB	30010-30847	308	308	0.013	Yes	Yes	265.7326843	266	0.013	Yes	Yes	35.87810375	36	0.020	6.203223545	6	0.058
660	Calibration	MCJC34	NB	30847-30010	275	243	1.969	Yes	Yes	232.7047103	209	1.585	Yes	Yes	36.38106782	28	1.440	6.035568855	6	0.010
661	Calibration	MCJC35	NB	10057-31349	286	289	0.164	Yes	Yes	246.7707865	250	0.175	Yes	Yes	33.18426966	33	0.032	5.851685393	6	0.086
662	Calibration	MCJC35	SB	31349-10057	322	321	0.036	Yes	Yes	279.7755102	279	0.036	Yes	Yes	34.97118848	35	0.005	6.995198079	7	0.026
663	Calibration	MCJC35	WB	10058-10441	587	573	0.565	Yes	Yes	475.8337079	463	0.607	Yes	Yes	75.36741573	75	0.029	35.70224719	36	0.033
664	Calibration	MCJC35	EB	10441-10058	521	510	0.526	Yes	Yes	434.5318127	424	0.492	Yes	Yes	61.93517407	61	0.073	24.97118848	24	0.236



665	Calibration	MCJC35	SB	10058-30396	230	246	1.004	Yes	Yes	196.1797753	212	1.098	Yes	Yes	27.29550562	27	0.057	6.814606742	7	0.043
666	Calibration	MCJC35	NB	30396-10058	235	245	0.658	Yes	Yes	206.8403361	217	0.685	Yes	Yes	22.98319328	23	0.004	4.996398559	5	0.088
667	Calibration	MCJC35	EB	10057-10466	837	842	0.185	Yes	Yes	713.3707077	720	0.231	Yes	Yes	92.5453891	93	0.083	31.18377242	30	0.295
668	Calibration	MCJC35	WB	10466-10057	894	875	0.641	Yes	Yes	738.0159472	723	0.544	Yes	Yes	111.9933332	109	0.274	43.59021951	42	0.224
669	Calibration	MCJC36	NB	10056-10446	732	752	0.724	Yes	Yes	633.4426026	633	0.012	Yes	Yes	93.97126675	94	0.003	4.666666667	25	5.220
670	Calibration	MCJC36	SB	10446-10056	795	807	0.426	Yes	Yes	644.6549641	656	0.448	Yes	Yes	109.6638354	110	0.044	40.53118158	41	0.027
673	Calibration	MCJC36	SB	10056-30813	473	473	0.014	Yes	Yes	407.5370217	408	0.025	Yes	Yes	52.33699406	52	0.047	12.7787816	13	0.036
674	Calibration	MCJC36	NB	30813-10056	435	434	0.037	Yes	Yes	374.1687429	374	0.009	Yes	Yes	48.44526236	48	0.064	12.26934692	12	0.042
675	Calibration	MCJC37	NB	10108-10422	463	462	0.007	Yes	Yes	384.7675145	385	0.012	Yes	Yes	51.46998995	51	0.066	26.32178639	26	0.017
676	Calibration	MCJC37	SB	10422-10108	444	443	0.069	Yes	Yes	384.2645504	383	0.076	Yes	Yes	43.08725543	43	0.013	16.76546904	17	0.029
677	Calibration	MCJC37	SB	10108-10491	296	271	1.460	Yes	Yes	260.5353889	236	1.561	Yes	Yes	26.82475046	27	0.034	8.38273452	8	0.055
678	Calibration	MCJC37	NB	10491-10108	315	315	0.008	Yes	Yes	271.2652891	271	0.017	Yes	Yes	30.84846303	31	0.027	12.57410178	13	0.006
679	Calibration	MCJC37	SB	10108-10434	252	207	2.962	Yes	Yes	211.2449099	167	3.252	Yes	Yes	28.33364268	28	0.063	12.40644709	13	0.042
680	Calibration	MCJC37	NB	10434-10108	251	183	4.612	Yes	Yes	201.0179738	134	5.201	No	Yes	32.69266463	32	0.122	17.77139718	18	0.006
683	Calibration	MCJC38	WB	10107-30736	12	14	0.430	Yes	Yes	10.05928142	11	0.344	Yes	Yes	1.844201594	2	0.112	0.16765469	0	0.484
685	Calibration	MCJC38	SB	10107-10422	452	451	0.078	Yes	Yes	391.1383927	390	0.069	Yes	Yes	43.92552889	44	0.013	17.26843311	17	0.093
686	Calibration	MCJC38	NB	10422-10107	469	470	0.039	Yes	Yes	391.6413568	392	0.015	Yes	Yes	50.6317165	51	0.052	26.65709577	27	0.035
687	Calibration	MCJC38	EB	10107-20271	229	229	0.001	Yes	Yes	197.8325347	198	0.010	Yes	Yes	23.13634728	23	0.028	8.21507983	8	0.003
688	Calibration	MCJC38	WB	20271-10107	226	225	0.098	Yes	Yes	194.4794409	193	0.112	Yes	Yes	24.81289418	25	0.039	7.041496997	7	0.044
699	Calibration	MCJC40	NB	10071-20286	553	552	0.026	Yes	Yes	463.9005284	462	0.076	Yes	Yes	70.75027935	72	0.133	18.27436125	18	0.023
700	Calibration	MCJC40	SB	20286-10467	586	588	0.052	Yes	Yes	497.9344305	499	0.046	Yes	Yes	72.76213564	73	0.028	15.59188621	16	0.002
702	Calibration	MCJC40	SB	10468-10496	320	324	0.220	Yes	Yes	272.2712172	276	0.224	Yes	Yes	34.03390215	34	0.006	13.58002992	14	0.074
703	Calibration	MCJC40	SB	10468-10054	712	714	0.061	Yes	Yes	586.2865654	588	0.079	Yes	Yes	95.43092922	95	0.032	30.69819566	31	0.008
704	Calibration	MCJC40	NB	10442-10071	985	983	0.058	Yes	Yes	826.8729331	825	0.060	Yes	Yes	118.1965567	118	0.018	39.73416163	40	0.014
705	Calibration	MCJC40	EB	10467-10069	662	661	0.055	Yes	Yes	566.1717764	565	0.068	Yes	Yes	72.72672525	73	0.032	23.45426934	23	0.016
706	Calibration	MCJC40	WB	10069-10468	676	681	0.159	Yes	Yes	563.8227238	567	0.129	Yes	Yes	81.98314361	83	0.111	30.68080834	31	0.011
707	Calibration	MCJC41	EB	20043-20307	333	334	0.048	Yes	Yes	287.7002133	289	0.061	Yes	Yes	36.06835642	36	0.011	9.623837963	10	0.032



708	Calibration	MCJC41	WB	20307-20043	309	309	0.015	Yes	Yes	258.3460276	258	0.003	Yes	Yes	35.5815759	36	0.070	15.25613441	15	0.026
709	Calibration	MCJC41	WB	20043-20042	468	467	0.028	Yes	Yes	396.2273594	396	0.022	Yes	Yes	51.03552984	51	0.005	20.47521322	20	0.028
710	Calibration	MCJC41	EB	20042-20043	514	514	0.008	Yes	Yes	448.0377606	448	0.005	Yes	Yes	53.20914561	53	0.027	13.06416107	13	0.021
711	Calibration	MCJC41	SB	20043-31428	214	213	0.057	Yes	Yes	186.8424598	186	0.072	Yes	Yes	21.79579031	22	0.046	5.26622	5	0.031
712	Calibration	MCJC41	NB	31428-20043	192	191	0.049	Yes	Yes	164.3862444	164	0.035	Yes	Yes	20.10895507	20	0.024	7.044975698	7	0.045
719	Calibration	MCJC43	NB	20037-30070	48	47	0.058	Yes	Yes	40.74008977	41	0.006	Yes	Yes	6.370878235	6	0.149	0.502964071	0	0.102
720	Calibration	MCJC43	SB	30070-20037	46	45	0.114	Yes	Yes	39.39885225	39	0.064	Yes	Yes	6.035568855	6	0.193	0.335309381	0	0.157
721	Calibration	MCJC43	WB	20037-20262	492	492	0.008	Yes	Yes	425.0046402	426	0.052	Yes	Yes	56.49963067	56	0.097	10.5622455	10	0.053
722	Calibration	MCJC43	EB	20262-20037	478	477	0.061	Yes	Yes	415.9512869	415	0.056	Yes	Yes	53.64950093	53	0.030	8.718043901	9	0.003
723	Calibration	MCJC43	SB	20037-30835	333	349	0.865	Yes	Yes	287.02483	303	0.902	Yes	Yes	38.56057879	39	0.071	7.376806378	7	0.019
724	Calibration	MCJC43	NB	30835-20037	307	325	0.972	Yes	Yes	267.4092312	285	1.041	Yes	Yes	34.70452091	35	0.028	5.364950093	5	0.074
725	Calibration	MCJC43	EB	20037-20220	411	409	0.098	Yes	Yes	358.6133828	356	0.115	Yes	Yes	43.92552889	44	0.011	8.550389211	9	0.037
726	Calibration	MCJC43	WB	20220-20037	452	451	0.067	Yes	Yes	388.6235724	387	0.068	Yes	Yes	50.96702588	51	0.009	12.57410178	13	0.006
727	Calibration	MCJC44	NB	20036-20288	354	354	0.012	Yes	Yes	295.2399098	295	0.001	Yes	Yes	46.94331331	47	0.023	12.07113771	12	0.013
728	Calibration	MCJC44	SB	20288-20036	445	445	0.034	Yes	Yes	376.887744	377	0.007	Yes	Yes	55.15839314	54	0.139	13.24472054	13	0.048
731	Calibration	MCJC44	SB	20036-20284	594	595	0.028	Yes	Yes	506.6524744	508	0.051	Yes	Yes	72.42682626	72	0.050	14.75361276	15	0.009
732	Calibration	MCJC44	NB	20284-20036	555	555	0.007	Yes	Yes	467.7565862	467	0.058	Yes	Yes	69.74435121	71	0.134	17.77139718	18	0.006
733	Calibration	MCJC45	NB	20050-20318	284	283	0.053	Yes	Yes	235.2537313	234	0.055	Yes	Yes	36.02985075	36	0.018	12.71641791	13	0.047
734	Calibration	MCJC45	SB	20318-20050	371	370	0.028	Yes	Yes	315.5516304	316	0.037	Yes	Yes	43.35054348	42	0.187	12.09782609	12	0.007
735	Calibration	MCJC45	SB	20050-20290	373	372	0.049	Yes	Yes	318.1766304	318	0.003	Yes	Yes	43.29347826	42	0.178	11.08967391	11	0.050
736	Calibration	MCJC45	NB	20290-20050	354	368	0.738	Yes	Yes	298.1343284	312	0.788	Yes	Yes	41.97014925	42	0.020	13.71641791	14	0.036
737	Calibration	MCJC45	EB	20050-31113	127	129	0.120	Yes	Yes	111.375	112	0.082	Yes	Yes	14.05706522	14	0.026	2.008152174	3	0.388
738	Calibration	MCJC45	WB	31113-20050	59	45	1.933	Yes	Yes	51.11940299	37	2.163	Yes	Yes	8.059701493	8	0.021	0	0	0.930
745	Calibration	MCJC47	NB	10048-10049	851	851	0.012	Yes	Yes	724.46084	724	0.001	Yes	Yes	93.6969353	94	0.032	32.84222474	33	0.011
747	Calibration	MCJC47	SB	10048-10052	959	962	0.107	Yes	Yes	814.6022845	818	0.101	Yes	Yes	110.5389408	111	0.068	33.85877466	34	0.051
748	Calibration	MCJC47	NB	10052-10048	851	851	0.012	Yes	Yes	724.46084	724	0.001	Yes	Yes	93.6969353	94	0.032	32.84222474	33	0.011
749	Calibration	MCJC47	EB	10048-30082	368	369	0.067	Yes	Yes	305	307	0.122	Yes	Yes	50	49	0.124	13	13	0.004



750	Calibration	MCJC47	WB	30082-10048	366	365	0.055	Yes	Yes	302.7372793	299	0.211	Yes	Yes	46.80477674	49	0.353	16.92938733	17	0.039
757	Calibration	MCJC49	NB	30081-30425	343	387	2.306	Yes	Yes	279.9833333	317	2.132	Yes	Yes	45.76973048	53	1.025	16.93312373	17	0.003
758	Calibration	MCJC49	SB	30425-30081	424	423	0.064	Yes	Yes	336.7344457	335	0.094	Yes	Yes	58.76296899	59	0.031	28.83660675	29	0.031
759	Calibration	MCJC49	WB	30081-30629	99	7	12.728	No	Yes	79.25776192	0	12.505	No	Yes	16.13590857	6	3.181	4.02371257	1	2.162
761	Calibration	MCJC49	SB	30081-31140	386	386	0.039	Yes	Yes	318.3687314	316	0.130	Yes	Yes	47.39923143	51	0.446	19.95090816	20	0.008
762	Calibration	MCJC49	NB	31140-30081	397	397	0.010	Yes	Yes	325.8131705	326	0.020	Yes	Yes	56.78079476	56	0.087	14.65608286	15	0.023
763	Calibration	MCJC49	EB	30081-30150	197	197	0.010	Yes	Yes	138.7846886	139	0.016	Yes	Yes	35.2973	35	0.050	22.96869259	23	0.005
764	Calibration	MCJC49	WB	30150-30081	203	157	3.470	Yes	Yes	153.8468987	111	3.724	Yes	Yes	29.05840673	29	0.011	20.38374743	17	0.844
767	Calibration	MCJC50	WB	30425-31353	504	504	0.007	Yes	Yes	416.3789605	417	0.019	Yes	Yes	62.5485575	62	0.053	24.94605226	25	0.038
768	Calibration	MCJC50	EB	31353-30425	332	322	0.542	Yes	Yes	268.7403821	258	0.643	Yes	Yes	45.52340226	46	0.073	17.60012578	18	0.035
769	Calibration	MCJC50	NB	30425-30426	125	124	0.032	Yes	Yes	101.458009	101	0.035	Yes	Yes	19.11585458	19	0.040	4.187889653	4	0.083
770	Calibration	MCJC50	SB	30426-30425	374	350	1.228	Yes	Yes	301.880482	279	1.370	Yes	Yes	48.21623971	48	0.036	23.60481474	24	0.042
773	Calibration	MCJC51	EB	20035-31354	321	317	0.186	Yes	Yes	254.9187317	252	0.176	Yes	Yes	45.4119403	45	0.058	20.46811398	20	0.028
774	Calibration	MCJC51	WB	31354-20035	450	451	0.058	Yes	Yes	373.7692068	376	0.107	Yes	Yes	52.8724839	52	0.102	23.49901186	23	0.020
775	Calibration	MCJC51	SB	20035-30400	465	475	0.437	Yes	Yes	384.3349996	393	0.453	Yes	Yes	53.61791045	54	0.067	27.24830393	27	0.009
776	Calibration	MCJC51	EB	30400-20035	423	428	0.256	Yes	Yes	345.7824236	351	0.297	Yes	Yes	53.47805958	53	0.066	23.59881423	24	0.042
777	Calibration	MCJC51	SB	20035-20318	371	370	0.028	Yes	Yes	315.5516304	316	0.037	Yes	Yes	43.35054348	42	0.187	12.09782609	12	0.007
778	Calibration	MCJC51	NB	20318-20035	284	283	0.053	Yes	Yes	235.2537313	234	0.055	Yes	Yes	36.02985075	36	0.018	12.71641791	13	0.047
793	Calibration	MCJC54	NB	10076-10075	814	813	0.029	Yes	Yes	682.6898993	682	0.022	Yes	Yes	99.41923141	99	0.042	31.85439118	32	0.031
794	Calibration	MCJC54	SB	10447-10076	742	736	0.205	Yes	Yes	627.0285421	622	0.221	Yes	Yes	92.71304379	93	0.017	21.79510975	22	0.042
795	Calibration	MCJC54	NB	10076-10389	522	522	0.022	Yes	Yes	414.4423947	415	0.025	Yes	Yes	73.60040909	74	0.031	33.69859277	33	0.047
796	Calibration	MCJC54	SB	10389-10076	598	598	0.002	Yes	Yes	472.4509176	472	0.010	Yes	Yes	90.70118751	91	0.032	35.20748499	35	0.025
797	Calibration	MCJC54	SB	10076-20194	960	956	0.134	Yes	Yes	803.5689311	799	0.159	Yes	Yes	122.5555787	123	0.029	33.69859277	34	0.005
798	Calibration	MCJC54	NB	20194-10076	955	957	0.045	Yes	Yes	801.0541108	802	0.048	Yes	Yes	111.9933332	112	0.012	42.24898198	42	0.028
799	Calibration	MCJC54	SB	10076-30449	3	4	0.500	Yes	Yes	2.850129737	3	0.082	Yes	Yes	0.502964071	1	0.583	0	0	0.816
800	Calibration	MCJC54	NB	30449-10076	4	4	0.369	Yes	Yes	3.017784427	3	0.010	Yes	Yes	0.670618762	1	0.360	0	0	0.930
807	Calibration	MCJC56	NB	10450-10068	165	164	0.021	Yes	Yes	150.9512195	151	0.010	Yes	Yes	11.46341463	11	0.102	2.092682927	2	0.034



808	Calibration	MCJC56	SB	10068-10450	187	163	1.761	Yes	Yes	173.8118812	151	1.783	Yes	Yes	9.495049505	9	0.163	3.198019802	3	0.036
809	Calibration	MCJC56	NB	10450-10065	222	222	0.011	Yes	Yes	195.6237624	195	0.033	Yes	Yes	18.68316832	19	0.045	7.693069307	8	0.036
810	Calibration	MCJC56	SB	10065-10450	224	226	0.126	Yes	Yes	195.5902439	197	0.128	Yes	Yes	21.85365854	22	0.031	6.556097561	6	0.023
811	Calibration	MCJC56	SB	10450-10440	216	218	0.079	Yes	Yes	189.6390244	191	0.125	Yes	Yes	20.3902439	20	0.087	6.463414634	6	0.069
812	Calibration	MCJC56	NB	10440-10450	192	215	1.549	Yes	Yes	166.8118812	189	1.671	Yes	Yes	19.18811881	19	0.043	6.495049505	6	0.001
813	Calibration	MCJC57	NB	10051-10377	938	833	3.504	Yes	Yes	829.5760728	726	3.729	Yes	Yes	86.21846554	86	0.012	21.8153446	22	0.037
814	Calibration	MCJC57	SB	10342-10046	923	925	0.067	Yes	Yes	786.2912317	788	0.074	Yes	Yes	108.0793319	108	0.004	28.27557411	28	0.018
815	Calibration	MCJC57	WB	10050-10067	82	116	3.332	Yes	Yes	73.00390117	105	3.352	Yes	Yes	6.257477243	8	0.624	3.128738622	3	0.056
816	Calibration	MCJC57	EB	10067-10051	218	198	1.395	Yes	Yes	208	185	1.663	Yes	Yes	8	11	0.979	2	2	0.114
819	Calibration	MCJC57	EB	10046-10064	161	167	0.474	Yes	Yes	144	150	0.510	Yes	Yes	13	13	0.000	4	4	0.052
820	Calibration	MCJC57	WB	10064-10047	207	209	0.085	Yes	Yes	186.1127349	187	0.093	Yes	Yes	16.18371608	16	0.046	5.057411273	5	0.063
821	Calibration	MCJC58	SB	20020-30334	7	7	0.205	Yes	Yes	5.867914164	6	0.050	Yes	Yes	0.838273452	1	0.169	0.16765469	0	0.484
822	Calibration	MCJC58	NB	30334-20020	8	15	1.938	Yes	Yes	5.029640712	12	2.262	Yes	Yes	3.017784427	3	0.007	0.335309381	0	0.170
825	Calibration	MCJC58	SB	20020-20019	359	360	0.015	Yes	Yes	294.2339817	297	0.163	Yes	Yes	53.48184624	51	0.301	11.73582833	11	0.099
826	Calibration	MCJC58	NB	20019-20020	419	400	0.965	Yes	Yes	353.5837421	337	0.919	Yes	Yes	49.29047898	47	0.291	16.59781435	16	0.106
827	Calibration	MCJC58	SB	20020-20021	117	117	0.037	Yes	Yes	98.58095796	99	0.021	Yes	Yes	16.43015966	16	0.107	2.347165666	2	0.122
828	Calibration	MCJC58	NB	20021-20020	93	104	1.065	Yes	Yes	74.43868254	85	1.155	Yes	Yes	15.7595409	16	0.063	3.017784427	3	0.010
841	Calibration	MCJC60	NB	10385-30487	227	227	0.024	Yes	Yes	197.0323974	197	0.025	Yes	Yes	27.01079914	27	0.004	3	3	0.017
842	Calibration	MCJC60	SB	30487-10043	5	8	1.076	Yes	Yes	4	6	1.006	Yes	Yes	1	1	0.000	0	0	0.930
843	Calibration	MCJC60	SB	10385-10344	468	468	0.021	Yes	Yes	407.3196544	408	0.036	Yes	Yes	46.48596112	46	0.064	14.1511879	14	0.045
844	Calibration	MCJC60	NB	10344-10385	646	652	0.231	Yes	Yes	562	568	0.235	Yes	Yes	71	71	0.036	13	13	0.002
853	Calibration	MCJC62	SB	10042-10041	228	228	0.003	Yes	Yes	200.5150097	201	0.031	Yes	Yes	20.28621754	20	0.062	7.544461068	7	0.081
854	Calibration	MCJC62	NB	10041-10042	406	383	1.161	Yes	Yes	354.5896702	332	1.229	Yes	Yes	38.3929241	38	0.064	12.90941116	13	0.031
855	Calibration	MCJC62	WB	10042-31178	174	175	0.064	Yes	Yes	147.7037822	149	0.094	Yes	Yes	23.47165666	23	0.087	2.514820356	3	0.073
857	Calibration	MCJC62	WB	10042-10458	473	474	0.057	Yes	Yes	412.2628837	413	0.040	Yes	Yes	46.10503986	46	0.039	14.58595807	15	0.045
858	Calibration	MCJC62	NB	10458-10042	403	414	0.538	Yes	Yes	349.2247201	360	0.580	Yes	Yes	43.25491012	43	0.019	10.5622455	10	0.053
859	Calibration	MCJC62	SB	10042-30354	209	195	1.010	Yes	Yes	179.7258281	166	1.078	Yes	Yes	25.14820356	25	0.032	4.359021951	4	0.014



860	Calibration	MCJC62	WB	30354-10042	275	275	0.009	Yes	Yes	236.3931135	236	0.005	Yes	Yes	33.36328339	33	0.056	5.532604783	6	0.040
861	Calibration	MCJC63	NB	30021-31179	85	85	0.065	Yes	Yes	70.75027935	71	0.068	Yes	Yes	12.07113771	12	0.035	2.011856285	2	0.106
862	Calibration	MCJC63	SB	31179-30021	147	147	0.029	Yes	Yes	122.5555787	123	0.036	Yes	Yes	19.78325347	19	0.128	4.526676641	4	0.088
863	Calibration	MCJC63	WB	30021-30582	256	252	0.252	Yes	Yes	219.2923351	216	0.231	Yes	Yes	31.5190818	31	0.089	4.861986022	5	0.046
864	Calibration	MCJC63	EB	30582-30021	234	235	0.059	Yes	Yes	199.844391	201	0.050	Yes	Yes	30.17784427	30	0.036	4.359021951	5	0.189
865	Calibration	MCJC63	EB	30021-30356	377	382	0.258	Yes	Yes	318.7115665	323	0.264	Yes	Yes	49.12282429	49	0.011	8.885698591	9	0.073
866	Calibration	MCJC63	WB	30356-30021	336	337	0.058	Yes	Yes	286.3542112	287	0.046	Yes	Yes	42.75194605	43	0.033	6.873842307	7	0.020
867	Calibration	MCJC64	NB	10040-30584	96	97	0.099	Yes	Yes	79.80363263	81	0.103	Yes	Yes	13.9153393	14	0.017	2.179510975	2	0.010
868	Calibration	MCJC64	SB	30584-10040	92	98	0.654	Yes	Yes	76.28288413	83	0.726	Yes	Yes	10.89755488	11	0.022	4.526676641	4	0.086
869	Calibration	MCJC64	SB	10040-10394	270	270	0.032	Yes	Yes	238.4049698	238	0.015	Yes	Yes	22.46572851	22	0.099	9.388662663	10	0.055
870	Calibration	MCJC64	NB	10394-10040	319	302	0.964	Yes	Yes	281.1569158	265	1.000	Yes	Yes	28.33364268	28	0.059	9.221007972	9	0.043
871	Calibration	MCJC64	SB	10040-31179	149	148	0.020	Yes	Yes	124.567435	125	0.035	Yes	Yes	19.44794409	19	0.102	4.526676641	4	0.088
872	Calibration	MCJC64	NB	31179-10040	86	91	0.621	Yes	Yes	71.42089811	77	0.675	Yes	Yes	12.07113771	12	0.038	2.011856285	2	0.106
873	Calibration	MCJC64	NB	10040-10451	342	337	0.260	Yes	Yes	303.6226443	299	0.273	Yes	Yes	28.83660675	29	0.025	9.723972044	10	0.065
874	Calibration	MCJC64	SB	10451-10040	361	361	0.010	Yes	Yes	317.5379836	318	0.034	Yes	Yes	33.36328339	33	0.060	10.05928142	10	0.024
875	Calibration	MCJC65	NB	10039-30049	310	283	1.572	Yes	Yes	275.7919657	250	1.616	Yes	Yes	26.65709577	26	0.169	7.376806378	7	0.002
876	Calibration	MCJC65	SB	30049-10039	439	415	1.154	Yes	Yes	384.5998598	360	1.282	Yes	Yes	44.26083827	45	0.123	9.723972044	10	0.027
877	Calibration	MCJC65	WB	10039-10418	372	372	0.008	Yes	Yes	332.2915964	332	0.009	Yes	Yes	30.17784427	30	0.029	9.388662663	10	0.052
878	Calibration	MCJC65	EB	10418-10039	365	365	0.028	Yes	Yes	324.5794806	325	0.021	Yes	Yes	30.01018958	30	0.000	10.22693611	10	0.051
879	Calibration	MCJC65	EB	10039-10390	578	579	0.012	Yes	Yes	509.5026041	508	0.056	Yes	Yes	56.83494005	58	0.166	12.07113771	12	0.089
880	Calibration	MCJC65	WB	10390-10039	457	453	0.170	Yes	Yes	408.4068258	405	0.161	Yes	Yes	39.39885225	39	0.094	8.885698591	9	0.073
881	Calibration	MCJC66	NB	10038-30878	326	340	0.753	Yes	Yes	279.1450595	292	0.767	Yes	Yes	37.55465065	38	0.106	9.388662663	10	0.040
882	Calibration	MCJC66	SB	30878-10038	269	270	0.074	Yes	Yes	231.6987821	234	0.129	Yes	Yes	29.50722551	29	0.055	7.544461068	7	0.173
883	Calibration	MCJC66	SB	10038-10391	367	364	0.203	Yes	Yes	324.4118259	321	0.189	Yes	Yes	35.20748499	35	0.067	7.879770449	8	0.027
884	Calibration	MCJC66	NB	10391-10038	468	456	0.568	Yes	Yes	410.0833727	396	0.695	Yes	Yes	45.60207579	47	0.220	12.57410178	13	0.069
885	Calibration	MCJC66	SB	10038-20216	645	606	1.544	Yes	Yes	545.7160173	507	1.704	Yes	Yes	73.60040909	74	0.048	25.48351294	26	0.009
886	Calibration	MCJC66	NB	20216-10038	679	656	0.890	Yes	Yes	577.2350991	554	0.963	Yes	Yes	78.29474042	78	0.030	23.63931135	24	0.035



887	Calibration	MCJC66	NB	10038-10037	494	525	1.379	Yes	Yes	420.4779635	452	1.489	Yes	Yes	55.15839314	55	0.016	18.27436125	18	0.023
888	Calibration	MCJC66	SB	10037-10038	416	452	1.744	Yes	Yes	350.7336123	387	1.897	Yes	Yes	48.11689615	48	0.021	17.26843311	17	0.011
889	Calibration	MCJC67	NB	20342-20265	686	687	0.029	Yes	Yes	577.2350991	577	0.003	Yes	Yes	87.51574839	88	0.054	21.45980037	22	0.040
890	Calibration	MCJC67	SB	20265-20342	678	678	0.004	Yes	Yes	564.1580332	564	0.004	Yes	Yes	94.89255477	95	0.011	18.94498002	19	0.021
891	Calibration	MCJC67	WB	20038-20294	390	389	0.053	Yes	Yes	337.9918559	337	0.037	Yes	Yes	42.41663667	42	0.069	9.891626734	10	0.021
892	Calibration	MCJC67	EB	20294-20038	389	390	0.031	Yes	Yes	343.0214966	344	0.027	Yes	Yes	37.88996003	38	0.015	8.21507983	8	0.007
893	Calibration	MCJC67	SB	20039-20170	409	409	0.017	Yes	Yes	310.9994507	311	0.018	Yes	Yes	74.94164661	75	0.007	22.96869259	23	0.006
894	Calibration	MCJC67	NB	20170-20039	403	403	0.017	Yes	Yes	312.3406882	312	0.040	Yes	Yes	66.55891209	67	0.054	24.30993011	24	0.014
895	Calibration	MCJC67	WB	20197-20039	530	530	0.014	Yes	Yes	430.7048997	431	0.016	Yes	Yes	75.1093013	75	0.013	24.14227542	24	0.020
896	Calibration	MCJC67	EB	20039-20197	515	516	0.029	Yes	Yes	423.998712	424	0.015	Yes	Yes	69.57669652	70	0.051	21.29214568	21	0.017
897	Calibration	MCJC68	NB	30011-30908	232	231	0.100	Yes	Yes	202.6945207	201	0.104	Yes	Yes	24.81289418	25	0.031	4.526676641	4	0.094
898	Calibration	MCJC68	SB	30908-30011	173	174	0.042	Yes	Yes	149.5479838	150	0.061	Yes	Yes	16.43015966	16	0.087	7.209151687	7	0.062
899	Calibration	MCJC68	WB	30011-30586	128	124	0.350	Yes	Yes	112.8316066	109	0.335	Yes	Yes	11.73582833	11	0.131	3.856057879	4	0.020
900	Calibration	MCJC68	EB	30586-30011	181	180	0.047	Yes	Yes	159.2719559	159	0.021	Yes	Yes	17.93905187	18	0.010	3.856057879	3	0.212
901	Calibration	MCJC68	EB	30011-30879	89	95	0.633	Yes	Yes	73.93571847	80	0.708	Yes	Yes	10.72990019	11	0.015	4.526676641	4	0.086
902	Calibration	MCJC68	WB	30879-30011	95	96	0.070	Yes	Yes	80.64190608	81	0.080	Yes	Yes	12.90941116	13	0.020	1.844201594	2	0.074
903	Calibration	MCJC69	NB	20028-20263	397	398	0.036	Yes	Yes	353.5837421	354	0.019	Yes	Yes	35.71044906	36	0.048	7.712115759	8	0.029
904	Calibration	MCJC69	SB	20263-20028	393	394	0.037	Yes	Yes	348.5541014	349	0.029	Yes	Yes	35.87810375	36	0.017	8.550389211	9	0.035
905	Calibration	MCJC69	SB	20028-20027	507	507	0.021	Yes	Yes	445.9614765	446	0.016	Yes	Yes	49.96109774	50	0.006	11.40051895	11	0.056
906	Calibration	MCJC69	NB	20027-20028	575	575	0.007	Yes	Yes	499.7786321	500	0.005	Yes	Yes	62.03223545	62	0.004	13.24472054	13	0.071
907	Calibration	MCJC69	SB	20028-30871	180	180	0.027	Yes	Yes	155.9188621	156	0.040	Yes	Yes	17.26843311	17	0.070	6.370878235	7	0.057
908	Calibration	MCJC69	NB	30871-20028	249	249	0.010	Yes	Yes	218.789371	219	0.010	Yes	Yes	24.81289418	24	0.101	5.867914164	6	0.079
909	Calibration	MCJC69	SB	20028-20049	458	457	0.015	Yes	Yes	399.0181632	399	0.004	Yes	Yes	48.45220553	48	0.020	10.05928142	10	0.032
910	Calibration	MCJC69	NB	20049-20028	324	324	0.008	Yes	Yes	287.3601394	287	0.021	Yes	Yes	28.66895206	29	0.062	7.879770449	8	0.039
911	Calibration	MCJC70	NB	20026-20251	492	493	0.041	Yes	Yes	413.615765	414	0.038	Yes	Yes	62.86332113	63	0.017	16.01893117	16	0.001
912	Calibration	MCJC70	SB	20251-20026	470	470	0.010	Yes	Yes	397.1190862	397	0.002	Yes	Yes	55.55800577	56	0.059	17.09420373	17	0.045
913	Calibration	MCJC70	WB	20026-20025	499	499	0.005	Yes	Yes	433.8065114	434	0.011	Yes	Yes	51.80529934	52	0.024	13.24472054	13	0.042



914	Calibration	MCJC70	EB	20025-20026	555	554	0.044	Yes	Yes	474.3789465	474	0.029	Yes	Yes	65.4691566	65	0.057	15.08892214	15	0.016
915	Calibration	MCJC70	SB	20026-31228	250	249	0.059	Yes	Yes	213.4845571	213	0.028	Yes	Yes	30.24235449	30	0.044	6.340826923	6	0.113
916	Calibration	MCJC70	NB	31228-20026	298	299	0.015	Yes	Yes	251.9286357	253	0.037	Yes	Yes	40.28375041	40	0.050	6.081591711	6	0.007
917	Calibration	MCJC70	EB	20026-20268	575	574	0.026	Yes	Yes	496.1022763	496	0.008	Yes	Yes	65.41183415	65	0.050	13.01538158	13	0.008
918	Calibration	MCJC70	WB	20268-20026	493	493	0.000	Yes	Yes	433.5824414	434	0.001	Yes	Yes	49.01189633	49	0.002	10.35514264	10	0.003
921	Calibration	MCJC71	NB	20025-20309	296	296	0.032	Yes	Yes	253.0973316	253	0.009	Yes	Yes	35.49469857	35	0.083	7.709367321	8	0.030
922	Calibration	MCJC71	SB	20309-20025	289	290	0.010	Yes	Yes	242.5141267	243	0.027	Yes	Yes	38.14637901	38	0.024	8.762297931	9	0.035
923	Calibration	MCJC71	SB	20025-20062	494	493	0.024	Yes	Yes	418.0868556	417	0.035	Yes	Yes	60.77629991	61	0.029	14.73345755	15	0.011
924	Calibration	MCJC71	NB	20062-20025	615	614	0.038	Yes	Yes	518.5586118	519	0.008	Yes	Yes	76.29275803	75	0.147	19.71517034	20	0.041
925	Calibration	MCJC71	SB	20025-30410	237	236	0.040	Yes	Yes	200.3687209	200	0.023	Yes	Yes	27.45816304	27	0.088	8.908602238	9	0.056
926	Calibration	MCJC71	NB	30410-20025	179	177	0.156	Yes	Yes	151.0526046	149	0.178	Yes	Yes	22.95388174	23	0.014	4.718160424	5	0.018
933	Calibration	MCJC73	NB	30180-30181	80	80	0.070	Yes	Yes	58.84679633	59	0.021	Yes	Yes	13.74768461	14	0.068	7.209151687	7	0.078
934	Calibration	MCJC73	SB	30181-30180	87	86	0.083	Yes	Yes	63.37347297	63	0.050	Yes	Yes	18.44201594	18	0.104	4.694331331	5	0.031
935	Calibration	MCJC73	NB	30180-30178	88	89	0.065	Yes	Yes	64.96619253	65	0.004	Yes	Yes	17.51991515	18	0.114	5.532604783	6	0.040
936	Calibration	MCJC73	SB	30178-30180	113	112	0.070	Yes	Yes	85.25241007	85	0.028	Yes	Yes	19.2802894	19	0.064	8.550389211	8	0.070
945	Calibration	MCJC74	SB	30178-30179	64	64	0.008	Yes	Yes	46.10503986	46	0.017	Yes	Yes	14.08299399	14	0.022	4.19136726	4	0.067
946	Calibration	MCJC74	NB	30179-30178	74	75	0.027	Yes	Yes	54.82308376	55	0.025	Yes	Yes	13.07706585	13	0.021	6.370878235	6	0.048
959	Calibration	MCJC77	NB	10370-10657	488	487	0.039	Yes	Yes	396.3151515	396	0.031	Yes	Yes	62.10909091	62	0.014	29.57575758	29	0.026
960	Calibration	MCJC77	SB	10657-10370	490	490	0.021	Yes	Yes	395.5674518	396	0.020	Yes	Yes	58.75802998	59	0.032	35.6745182	35	0.032
961	Calibration	MCJC77	SB	10370-10656	510	510	0.028	Yes	Yes	411.6959315	412	0.014	Yes	Yes	62.5117773	63	0.062	35.62526767	35	0.024
962	Calibration	MCJC77	NB	10656-10370	513	512	0.018	Yes	Yes	416.8525253	417	0.003	Yes	Yes	65.19393939	65	0.024	30.58989899	30	0.051
963	Calibration	MCJC77	SB	10370-30912	115	113	0.158	Yes	Yes	97.87152034	98	0.004	Yes	Yes	14.24625268	13	0.466	3.049250535	3	0.011
964	Calibration	MCJC77	NB	30912-10370	110	108	0.186	Yes	Yes	93.46262626	93	0.078	Yes	Yes	14.91515152	14	0.365	1.985858586	2	0.124
965	Calibration	MCJC78	NB	30029-31045	211	214	0.200	Yes	Yes	180.2287922	183	0.211	Yes	Yes	23.97462073	24	0.005	6.873842307	7	0.020
966	Calibration	MCJC78	SB	31045-30029	223	224	0.045	Yes	Yes	184.7554688	185	0.030	Yes	Yes	29.84253489	30	0.029	8.550389211	9	0.037
967	Calibration	MCJC78	NB	30029-31089	110	111	0.049	Yes	Yes	97.57502982	98	0.053	Yes	Yes	11.06520957	11	0.020	1.676546904	2	0.042
968	Calibration	MCJC78	SB	31089-30029	87	87	0.060	Yes	Yes	78.12708573	78	0.022	Yes	Yes	8.047425139	7	0.318	1.173582833	1	0.113



PM Calibration:

					PM Peak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
3	Calibration	ATC002	EB	10091-10090	248	248	0.038	Yes	Yes	209.1902482	209	0.009	Yes	Yes	34.38080468	34	0.065	4.842366856	5	0.037
4	Calibration	ATC002	WB	10090-10091	346	345	0.046	Yes	Yes	299.1530475	299	0.012	Yes	Yes	39.48212809	39	0.079	7.086535812	7	0.060
11	Calibration	ATC006	NE	10291-10292	391	391	0.004	Yes	Yes	325.5696849	326	0.024	Yes	Yes	57.37116225	57	0.049	7.929347627	8	0.049
12	Calibration	ATC006	SW	10292-10291	321	330	0.456	Yes	Yes	230.3433566	230	0.024	Yes	Yes	79.98033216	80	0.002	10.96873127	20	2.195
13	Calibration	ATC007	NE	10494-10118	641	599	1.688	Yes	Yes	471.7300024	467	0.234	Yes	Yes	133.5621091	111	2.020	35.52183753	21	2.754
14	Calibration	ATC007	SW	10118-10494	539	501	1.634	Yes	Yes	380.0961224	368	0.618	Yes	Yes	129.4779049	105	2.279	28.93634996	28	0.119
15	Calibration	ATC008	EB	30477-30467	93	96	0.290	Yes	Yes	80.78785047	75	0.679	Yes	Yes	10.12570093	11	0.412	1.850934579	9	3.156
16	Calibration	ATC008	WB	30467-30477	64	59	0.606	Yes	Yes	50.35581395	52	0.263	Yes	Yes	11.38837209	3	2.980	2.195348837	4	0.844
17	Calibration	ATC009	EB	20094-20093	171	212	2.980	Yes	Yes	143.7637954	154	0.809	Yes	Yes	22.63765285	55	5.178	4.409932373	4	0.438
18	Calibration	ATC009	WB	20093-20094	197	240	2.871	Yes	Yes	167.2004557	181	1.054	Yes	Yes	26.68092378	48	3.529	3.557456504	10	2.617
19	Calibration	ATC010	SE	20206-21018	304	275	1.710	Yes	Yes	268.081133	239	1.843	Yes	Yes	30.69265208	31	0.055	4.795726888	5	0.015
20	Calibration	ATC010	WB	21018-20206	333	332	0.078	Yes	Yes	284.1528629	284	0.008	Yes	Yes	43.49917174	43	0.131	5.320042587	5	0.186
25	Calibration	ATC013	SB	10243-10244	682	662	0.754	Yes	Yes	526.9105104	527	0.003	Yes	Yes	113.0583914	94	1.914	41.71896361	42	0.025
26	Calibration	ATC013	NB	10244-10243	686	688	0.073	Yes	Yes	580.8649836	581	0.005	Yes	Yes	73.05085541	73	0.020	31.87673691	34	0.285
27	Calibration	ATC014	SW	10220-10221	158	158	0.015	Yes	Yes	139.2896125	139	0.024	Yes	Yes	18.02129757	18	0.005	0.750887399	1	0.128
28	Calibration	ATC014	NE	10221-10220	223	219	0.295	Yes	Yes	176.4198872	178	0.084	Yes	Yes	43.22871408	38	0.859	3.505030871	3	0.022
45	Calibration	ATC023	WB	10122-10131	456	456	0.012	Yes	Yes	362.2026234	362	0.017	Yes	Yes	67.5222382	68	0.056	26.25864819	26	0.027
46	Calibration	ATC023	EB	10131-10122	475	475	0.023	Yes	Yes	363.9263633	364	0.007	Yes	Yes	78.7539966	79	0.028	31.91609336	32	0.021
49	Calibration	ATC025	NB	30740-30749	15	51	6.250	No	Yes	12.55673545	45	6.094	No	Yes	2.04900704	5	1.530	0.288962531	0	0.240
50	Calibration	ATC025	SB	30749-30740	33	47	2.183	Yes	Yes	28.00743408	41	2.280	Yes	Yes	4.623236725	5	0.172	0.80404117	1	0.068
51	Calibration	ATC026	EB	10095-10094	576	577	0.024	Yes	Yes	487.5593124	488	0.020	Yes	Yes	72.72984218	73	0.032	16.16218715	16	0.036
52	Calibration	ATC026	WB	10094-10095	633	623	0.419	Yes	Yes	526.1893862	523	0.152	Yes	Yes	86.93923769	87	0.021	20.28582213	13	1.660



57	Calibration	ATC029	NB	10080-10081	742	741	0.005	Yes	Yes	629.4163004	629	0.017	Yes	Yes	102.5873766	103	0.040	9.617566559	10	0.030
58	Calibration	ATC029	SB	10081-10080	613	620	0.275	Yes	Yes	472.0079373	472	0.002	Yes	Yes	126.717254	127	0.025	14.3871118	21	1.565
65	Calibration	ATC033	NB	30520-30149	141	140	0.019	Yes	Yes	121.3918579	121	0.035	Yes	Yes	15.8637087	16	0.034	3.448632327	3	0.008
66	Calibration	ATC033	SB	30149-30520	126	115	0.947	Yes	Yes	95.463334	85	1.126	Yes	Yes	23.66185202	24	0.069	6.527407453	6	0.013
67	Calibration	ATC034	NW	20080-20332	393	393	0.007	Yes	Yes	347.1427226	347	0.002	Yes	Yes	39.7444262	40	0.040	6.210066594	6	0.060
68	Calibration	ATC034	SE	20332-20080	464	465	0.030	Yes	Yes	395.9271179	396	0.015	Yes	Yes	60.60998831	61	0.050	7.412732383	7	0.020
69	Calibration	ATC035	NB	31379-30153	116	116	0.014	Yes	Yes	100.2377808	100	0.024	Yes	Yes	13.09925544	13	0.027	2.847664227	3	0.107
70	Calibration	ATC035	SB	30153-31379	51	51	0.086	Yes	Yes	38.58261727	39	0.035	Yes	Yes	9.563212828	10	0.140	2.638127677	3	0.025
71	Calibration	ATC036	EB	10119-20077	128	100	2.603	Yes	Yes	99.91022015	82	1.869	Yes	Yes	17.94503954	18	0.013	10.18502244	0	4.411
72	Calibration	ATC036	WB	20077-10119	93	88	0.471	Yes	Yes	68.2923693	68	0.061	Yes	Yes	17.07309233	17	0.018	7.256064238	3	1.696
73	Calibration	ATC037	NB	10240-10119	611	633	0.874	Yes	Yes	481.2898895	504	1.012	Yes	Yes	89.77184462	93	0.350	39.9508209	36	0.653
74	Calibration	ATC037	SB	10119-10240	723	723	0.011	Yes	Yes	608.8040736	609	0.001	Yes	Yes	79.97426254	78	0.194	33.98906158	36	0.337
75	Calibration	ATC038	EB	10242-20132	170	169	0.046	Yes	Yes	150.1130345	150	0.026	Yes	Yes	17.18646549	17	0.045	2.685385232	3	0.054
76	Calibration	ATC038	WB	20132-10242	131	132	0.022	Yes	Yes	112.0775439	112	0.023	Yes	Yes	17.15724515	17	0.092	2.098368112	3	0.547
79	Calibration	ATC040	EB	20331-10240	182	178	0.332	Yes	Yes	147.2169678	147	0.035	Yes	Yes	28.29080519	28	0.055	6.810749399	3	1.681
80	Calibration	ATC040	WB	10240-20331	259	268	0.513	Yes	Yes	190.8566228	199	0.569	Yes	Yes	57.79461113	58	0.026	10.75248579	11	0.059
81	Calibration	ATC041	NB	10213-10212	301	300	0.023	Yes	Yes	260.3729338	260	0.027	Yes	Yes	36.73692187	37	0.043	3.673692187	3	0.111
82	Calibration	ATC041	SB	10212-10213	306	284	1.268	Yes	Yes	242.7092408	243	0.017	Yes	Yes	52.04291712	37	2.307	10.88170085	4	2.428
83	Calibration	ATC042	NB	10113-10408	480	486	0.301	Yes	Yes	372.2868203	383	0.540	Yes	Yes	91.77904251	88	0.416	15.51195085	16	0.018
84	Calibration	ATC042	SB	10408-10113	446	444	0.081	Yes	Yes	397.832	396	0.081	Yes	Yes	41.924	42	0.030	6.244	6	0.122
87	Calibration	ATC044	NB	30288-30107	150	139	0.892	Yes	Yes	129.4642857	119	0.906	Yes	Yes	16.96428571	17	0.009	3.571428571	3	0.365
88	Calibration	ATC044	SB	30107-30288	142	124	1.551	Yes	Yes	120.5660377	117	0.309	Yes	Yes	20.5408805	6	3.978	0.893081761	1	0.029
89	Calibration	ATC045	EB	30108-30107	270	277	0.432	Yes	Yes	227.5476424	228	0.003	Yes	Yes	39.05108055	46	1.080	3.754911591	4	0.072
90	Calibration	ATC045	WB	30107-30108	258	255	0.209	Yes	Yes	205.0769231	204	0.075	Yes	Yes	44.1025641	44	0.015	8.820512821	7	0.781
91	Calibration	ATC047	NB	30229-30110	65	70	0.594	Yes	Yes	51.14754098	51	0.022	Yes	Yes	11.72131148	17	1.326	2.131147541	2	0.023
92	Calibration	ATC047	SB	30110-30229	66	66	0.018	Yes	Yes	59.90769231	60	0.025	Yes	Yes	5.076923077	5	0.034	1.015384615	1	0.274
93	Calibration	ATC048	NB	31414-30184	76	99	2.435	Yes	Yes	62.30916507	85	2.618	Yes	Yes	12.96030634	13	0.011	0.996946641	1	0.289



94	Calibration	ATC048	SB	30184-31414	108	153	3.994	Yes	Yes	94.69376421	139	4.136	Yes	Yes	11.83672053	12	0.047	1.029280046	2	0.582
95	Calibration	ATC049	EB	30190-30185	119	114	0.484	Yes	Yes	93.46702931	93	0.049	Yes	Yes	20.53033014	16	1.130	5.132582534	5	0.027
96	Calibration	ATC049	WB	30185-30190	113	113	0.050	Yes	Yes	95.55407263	96	0.045	Yes	Yes	14.8937171	15	0.027	2.175486767	2	0.007
99	Calibration	ATC051	NB	30178-30177	127	127	0.022	Yes	Yes	102.1017065	102	0.006	Yes	Yes	21.12449099	21	0.027	3.520748499	3	0.031
100	Calibration	ATC051	SB	30177-30178	244	244	0.018	Yes	Yes	205.9637872	206	0.003	Yes	Yes	34.70452091	35	0.050	3.520748499	3	0.031
101	Calibration	ATC052	EB	30191-30187	81	81	0.005	Yes	Yes	69.30291179	69	0.035	Yes	Yes	10.54609527	11	0.138	1.506585039	1	0.176
102	Calibration	ATC052	WB	30187-30191	134	134	0.044	Yes	Yes	108.62032	109	0.036	Yes	Yes	23.84348488	24	0.032	1.324638049	1	0.023
103	Calibration	ATC053	EB	30164-30161	46	46	0.029	Yes	Yes	39.23778948	39	0.038	Yes	Yes	5.970967965	6	0.012	0.852995424	1	0.014
104	Calibration	ATC053	WB	30161-30164	49	48	0.208	Yes	Yes	40.15655896	40	0.026	Yes	Yes	8.814854407	8	0.453	0.489714134	0	0.012
105	Calibration	ATC054	NB	30163-30157	145	143	0.144	Yes	Yes	120.0496642	118	0.198	Yes	Yes	22.54207668	23	0.096	2.621171707	3	0.015
106	Calibration	ATC054	SB	30157-30163	309	184	7.961	No	No	257.4834748	159	6.813	No	Yes	48.60129845	22	4.481	3.102210539	3	0.041
109	Calibration	ATC056	NB	30158-20054	136	135	0.059	Yes	Yes	112.0750638	112	0.003	Yes	Yes	21.04466263	20	0.177	2.447053794	3	0.095
110	Calibration	ATC056	SB	20054-30158	137	138	0.035	Yes	Yes	114.2275415	114	0.022	Yes	Yes	21.56102189	22	0.094	1.37623544	2	0.175
113	Calibration	ATC058	NB	20258-20055	443	440	0.123	Yes	Yes	356.4278942	356	0.025	Yes	Yes	69.94618383	70	0.006	16.37038345	14	0.554
114	Calibration	ATC058	SB	20055-20258	350	350	0.024	Yes	Yes	265.7963368	266	0.012	Yes	Yes	68.42281937	68	0.052	15.78988139	16	0.052
115	Calibration	ATC059	NW	10093-10094	676	696	0.756	Yes	Yes	572.0679789	577	0.223	Yes	Yes	85.33610735	103	1.810	18.96357941	16	0.746
116	Calibration	ATC059	SE	10094-10093	640	625	0.600	Yes	Yes	531.7820098	503	1.279	Yes	Yes	87.86327464	106	1.808	20.50143075	17	0.878
117	Calibration	ATC060	NB	20064-20033	397	337	3.136	Yes	Yes	339.2379697	297	2.389	Yes	Yes	53.28345074	37	2.430	4.736306732	4	0.578
118	Calibration	ATC060	SB	20033-20064	232	205	1.820	Yes	Yes	203.3507124	177	1.919	Yes	Yes	25.65639829	27	0.202	3.040758316	2	0.981
119	Calibration	ATC061	NB	10084-10085	934	962	0.912	Yes	Yes	727	739	0.426	Yes	Yes	126	138	1.005	81	86	0.551
120	Calibration	ATC061	SB	10085-10084	807	893	2.938	Yes	Yes	597	664	2.662	Yes	Yes	116	128	1.070	94	101	0.710
121	Calibration	ATC062	NB	10660-10078	955	962	0.232	Yes	Yes	826	848	0.752	Yes	Yes	112	98	1.343	17	16	0.201
122	Calibration	ATC062	SB	10078-10660	876	832	1.521	Yes	Yes	659	646	0.497	Yes	Yes	180	150	2.349	37	35	0.263
123	Calibration	ATC063	NE	10114-10396	849	765	2.942	Yes	Yes	707.9955136	637	2.724	Yes	Yes	108.6274705	107	0.192	31.94925603	21	2.127
124	Calibration	ATC063	SW	10396-10114	643	652	0.368	Yes	Yes	485.8510507	492	0.280	Yes	Yes	117.7499271	119	0.154	39.24997571	41	0.236
125	Calibration	ATC064	EB	31245-30662	225	216	0.568	Yes	Yes	195.8175447	185	0.791	Yes	Yes	24.54316934	27	0.403	4.486385794	5	0.197
126	Calibration	ATC064	WB	30662-31245	109	114	0.446	Yes	Yes	86.02901561	103	1.784	Yes	Yes	19.45615339	8	3.164	3.750583787	3	0.540



127	Calibration	ATC065	EB	30061-30060	389	483	4.526	Yes	Yes	338.3753953	431	4.744	Yes	Yes	42.4109323	42	0.114	7.752536012	10	0.720
128	Calibration	ATC065	WB	30060-30061	213	221	0.578	Yes	Yes	167.4029172	182	1.117	Yes	Yes	37.85951534	30	1.402	7.298219824	9	0.660
129	Calibration	ATC066	EB	20188-20184	391	419	1.414	Yes	Yes	330.9503589	352	1.153	Yes	Yes	52.81122748	55	0.251	7.041496997	12	1.703
130	Calibration	ATC066	WB	20184-20188	297	228	4.263	Yes	Yes	250.0207499	164	5.998	No	Yes	39.36932054	57	2.502	7.669348157	8	0.053
131	Calibration	ATC067	EB	30473-31420	249	192	3.881	Yes	Yes	231.4823301	175	3.939	Yes	Yes	16.82680985	13	0.892	0.909557289	3	1.459
132	Calibration	ATC067	WB	31420-30473	92	93	0.119	Yes	Yes	76.66544166	77	0.017	Yes	Yes	13.33312029	14	0.220	1.666640036	2	0.345
133	Calibration	ATC068	NW	20199-20200	528	531	0.124	Yes	Yes	450.8814607	449	0.086	Yes	Yes	69.02260246	72	0.345	8.441613251	10	0.581
134	Calibration	ATC068	SB	20200-20199	685	669	0.613	Yes	Yes	604.9460854	590	0.614	Yes	Yes	69.26037472	66	0.409	10.82193355	13	0.697
135	Calibration	ATC069	SE	31246-20077	75	120	4.504	Yes	Yes	64.98098559	105	4.383	Yes	Yes	8.491833345	14	1.689	1.846050727	0	1.653
136	Calibration	ATC069	NW	20077-31246	97	140	3.935	Yes	Yes	73.7008667	125	5.120	No	Yes	18.26773619	14	0.983	5.039375501	1	2.460
137	Calibration	ATC070	NB	10471-10457	535	564	1.244	Yes	Yes	418.5605493	443	1.162	Yes	Yes	84.17717714	77	0.767	32.08964212	44	1.932
138	Calibration	ATC070	SB	10457-10471	627	622	0.190	Yes	Yes	537.2303556	535	0.115	Yes	Yes	60.76393609	53	0.977	28.93520766	34	0.943
143	Calibration	ATC073	EB	30037-30033	44	51	1.082	Yes	Yes	36.4630622	30	1.050	Yes	Yes	6.397028457	21	3.910	0.895583984	0	1.338
144	Calibration	ATC073	WB	30033-30037	126	72	5.482	No	Yes	99.2036261	66	3.687	Yes	Yes	24.97433944	6	4.865	1.90776204	0	1.953
147	Calibration	ATC075	NE	30111-30031	86	92	0.601	Yes	Yes	70.93943054	64	0.794	Yes	Yes	13.08941878	24	2.486	2.008196721	4	0.914
148	Calibration	ATC075	SW	30031-30111	67	53	1.707	Yes	Yes	57.32118924	50	0.967	Yes	Yes	9.358974359	2	3.211	0	1	1.698
149	Calibration	ATC076	NE	10100-10004	1715	1713	0.034	Yes	Yes	1333.372032	1336	0.062	Yes	Yes	277.9351299	278	0.003	103.3939157	100	0.369
150	Calibration	ATC076	SW	10007-10099	1322	1333	0.283	Yes	Yes	1014.515098	1030	0.487	Yes	Yes	185.8270229	186	0.001	122.0431529	117	0.483
151	Calibration	ATC077	EB	30171-30172	123	72	5.139	No	Yes	96.62418233	64	3.647	Yes	Yes	21.74044102	6	4.206	4.227307977	2	1.326
152	Calibration	ATC077	WB	30172-30171	96	58	4.279	Yes	Yes	73.18382981	45	3.656	Yes	Yes	17.6425304	12	1.606	4.900702889	2	1.824
153	Calibration	ATC078	EB	30162-10008	40	60	2.923	Yes	Yes	29.50945348	40	1.789	Yes	Yes	9.221704213	19	2.552	0.922170421	1	0.516
154	Calibration	ATC078	WB	10008-30162	40	79	5.097	No	Yes	37.12253014	46	1.314	Yes	Yes	2.5310816	30	6.798	0.421846933	4	2.406
155	Calibration	ATC079	EB	30157-30764	131	114	1.508	Yes	Yes	114.1429385	96	1.816	Yes	Yes	13.08357793	17	1.087	3.609262876	1	1.496
156	Calibration	ATC079	WB	30764-30157	283	154	8.729	No	No	247.0057252	135	8.067	No	No	31.13961065	13	3.959	5.277900111	6	0.393
157	Calibration	ATC080	NW	20053-20052	278	344	3.738	Yes	Yes	224.9651868	273	3.044	Yes	Yes	41.65206769	54	1.777	11.68750428	17	1.476
158	Calibration	ATC080	SE	20052-20053	436	494	2.697	Yes	Yes	362.9578522	419	2.825	Yes	Yes	57.94535867	61	0.359	14.61770648	14	0.129
159	Calibration	ATC081	NB	30046-31242	265	337	4.150	Yes	Yes	223.1015907	301	4.805	Yes	Yes	36.4056989	31	0.865	5.134137025	4	0.366



160	Calibration	ATC081	SB	31242-30046	275	256	1.164	Yes	Yes	230.4985649	223	0.471	Yes	Yes	38.04880617	28	1.765	6.617183682	5	0.731
161	Calibration	ATC082	EB	10033-10661	976	980	0.131	Yes	Yes	840	843	0.104	Yes	Yes	93.5	94	0.051	42	43	0.091
162	Calibration	ATC082	WB	10661-10033	887	883	0.124	Yes	Yes	686	684	0.083	Yes	Yes	152.5	152	0.041	48	47	0.146
163	Calibration	ATC083	NW	10667-10662	726	721	0.173	Yes	Yes	584.665808	581	0.171	Yes	Yes	108.6071706	109	0.035	32.86411674	32	0.159
164	Calibration	ATC083	SE	10662-10667	695	698	0.100	Yes	Yes	572.0502092	576	0.147	Yes	Yes	76.49453588	76	0.057	46.66005985	46	0.057
165	Calibration	ATC084	NB	31423-31386	175	174	0.129	Yes	Yes	138.0500655	138	0.017	Yes	Yes	29.50263497	28	0.356	7.793148859	8	0.000
166	Calibration	ATC084	SB	31386-31423	293	293	0.016	Yes	Yes	239.7399085	240	0.003	Yes	Yes	46.85145821	47	0.020	5.981037218	6	0.032
167	Calibration	ATC085	EB	30643-30027	444	531	3.947	Yes	Yes	376.157945	455	3.853	Yes	Yes	62.29059679	71	1.041	5.79447412	6	0.056
168	Calibration	ATC085	WB	30027-30643	470	505	1.554	Yes	Yes	393.9206633	434	1.988	Yes	Yes	68.018599	61	0.888	8.31882146	9	0.332
175	Calibration	ATC089	EB	20002-20252	605	604	0.043	Yes	Yes	487.9803866	487	0.040	Yes	Yes	99.20757085	99	0.020	18.12930229	18	0.009
176	Calibration	ATC089	WB	20252-20002	604	603	0.019	Yes	Yes	522.3760125	522	0.001	Yes	Yes	69.30533236	69	0.038	11.89569137	12	0.049
177	Calibration	ATC090	NW	20073-20072	388	395	0.366	Yes	Yes	332.6224889	338	0.295	Yes	Yes	50.49936572	52	0.251	4.713274134	5	0.024
178	Calibration	ATC090	SE	20072-20073	297	303	0.337	Yes	Yes	256.115936	255	0.053	Yes	Yes	36.82712805	43	1.033	4.184900915	4	0.068
179	Calibration	ATC091	NB	10373-10420	394	395	0.011	Yes	Yes	346.03767	346	0.019	Yes	Yes	44.25619595	44	0.039	4.196708236	4	0.064
180	Calibration	ATC091	SB	10420-10373	473	472	0.060	Yes	Yes	418.8729412	417	0.088	Yes	Yes	44.59483785	45	0.077	9.556036681	10	0.010
181	Calibration	ATC092	NB	20297-20298	781	784	0.118	Yes	Yes	692.1392973	692	0.000	Yes	Yes	74.22800702	77	0.375	14.25570996	14	0.009
182	Calibration	ATC092	SB	20298-20297	707	707	0.000	Yes	Yes	614.1840833	614	0.019	Yes	Yes	85.59007883	86	0.045	6.881614378	7	0.014
183	Calibration	ATC093	SE	30708-31047	338	347	0.474	Yes	Yes	294.6203557	301	0.341	Yes	Yes	38.20857738	41	0.439	5.063787363	5	0.058
184	Calibration	ATC093	NW	31047-30708	340	341	0.036	Yes	Yes	287.5796818	288	0.030	Yes	Yes	44.90597556	45	0.011	7.711127116	8	0.029
185	Calibration	ATC094	NB	30566-31024	338	428	4.601	Yes	Yes	276.5836849	365	4.956	Yes	Yes	52.08394067	52	0.012	9.279322763	11	0.426
186	Calibration	ATC094	SB	31024-30566	668	597	2.839	Yes	Yes	541.7123883	501	1.805	Yes	Yes	92.86498086	68	2.830	33.53457642	29	0.871
189	Calibration	ATC096	NW	20024-30824	251	256	0.281	Yes	Yes	223.6166511	227	0.196	Yes	Yes	25.34322045	25	0.062	2.318987493	4	1.021
190	Calibration	ATC096	SE	30824-20024	377	376	0.043	Yes	Yes	332.8604511	333	0.016	Yes	Yes	39.44500148	39	0.073	4.844122989	5	0.038
195	Calibration	ATC099	NE	20263-20264	514	525	0.447	Yes	Yes	476.8001531	486	0.408	Yes	Yes	33.74278006	35	0.213	3.912206384	4	0.008
196	Calibration	ATC099	SW	20264-20263	494	518	1.091	Yes	Yes	429.07246	448	0.880	Yes	Yes	56.49094699	62	0.770	8.193343457	8	0.061
197	Calibration	ATC100	NE	10345-10485	619	615	0.129	Yes	Yes	559.6070981	558	0.077	Yes	Yes	47.81189917	48	0.022	11.22540241	10	0.376
198	Calibration	ATC100	SW	10485-10345	353	351	0.102	Yes	Yes	320.558964	321	0.039	Yes	Yes	29.36894991	25	0.800	3.436792011	5	0.765



203	Calibration	ATC103	NE	20281-20282	386	413	1.364	Yes	Yes	330.7503003	354	1.267	Yes	Yes	48.9597484	53	0.629	5.983969249	5	0.290
204	Calibration	ATC103	SW	20282-20281	284	190	6.127	No	Yes	243.6173598	158	6.019	No	Yes	31.67601605	23	1.583	8.638913469	8	0.223
205	Calibration	ATC104	NB	20230-20041	489	546	2.488	Yes	Yes	428.8803414	480	2.389	Yes	Yes	53.18116233	59	0.714	7.290965803	8	0.128
206	Calibration	ATC104	SB	20041-20230	1101	1048	1.601	Yes	Yes	1007.141263	961	1.482	Yes	Yes	85.56159757	79	0.759	8.125961781	9	0.296
207	Calibration	ATC105	NB	10436-10379	444	488	2.067	Yes	Yes	388.0362904	427	1.950	Yes	Yes	47.20636136	50	0.418	8.497145045	11	0.748
208	Calibration	ATC105	SB	10379-10436	406	469	2.990	Yes	Yes	376.7173489	430	2.638	Yes	Yes	25.32553606	35	1.753	3.95711501	4	0.031
209	Calibration	ATC106	NB	10444-10439	937	944	0.217	Yes	Yes	833	840	0.232	Yes	Yes	94	94	0.001	10	10	0.015
210	Calibration	ATC106	SB	10439-10444	1119	1138	0.568	Yes	Yes	1000.942547	1010	0.289	Yes	Yes	103.7593522	110	0.588	14.29810123	18	0.951
211	Calibration	ATC107	NB	30838-30815	310	311	0.054	Yes	Yes	262.1780838	266	0.213	Yes	Yes	44.44329341	42	0.390	2.987784431	3	0.029
212	Calibration	ATC107	SB	30815-30838	465	462	0.140	Yes	Yes	404.8982718	401	0.180	Yes	Yes	56.66933216	57	0.056	3.285178676	3	0.095
213	Calibration	ATC108	NE	20338-20222	632	618	0.553	Yes	Yes	574.3978397	565	0.373	Yes	Yes	52.17525385	49	0.446	5.640567984	4	0.805
214	Calibration	ATC108	SW	20222-20338	891	883	0.253	Yes	Yes	795.6557714	800	0.166	Yes	Yes	92.43012018	80	1.326	2.702635093	3	0.067
217	Calibration	ATC110	NB	10107-10409	417	442	1.183	Yes	Yes	361.1976539	383	1.136	Yes	Yes	42.94291791	45	0.310	12.88287537	13	0.148
218	Calibration	ATC110	SB	10409-10107	450	486	1.648	Yes	Yes	409.141718	441	1.556	Yes	Yes	37.74542045	41	0.536	3.261949916	3	0.110
219	Calibration	ATC111	NB	30393-30392	381	364	0.877	Yes	Yes	304.0645631	304	0.020	Yes	Yes	71.34684466	55	2.100	5.976699029	6	0.034
220	Calibration	ATC111	SB	30392-30393	464	451	0.609	Yes	Yes	408.5231129	395	0.661	Yes	Yes	52.71265973	53	0.040	3.10074469	3	0.038
223	Calibration	ATC113	NE	10338-10375	704	703	0.036	Yes	Yes	621.3361614	620	0.051	Yes	Yes	75.53498432	76	0.027	7.309837193	7	0.029
224	Calibration	ATC113	SW	10375-10338	579	586	0.277	Yes	Yes	513.451149	517	0.152	Yes	Yes	51.11958731	53	0.304	14.2834141	15	0.272
229	Calibration	ATC116	NE	10278-10441	584	588	0.144	Yes	Yes	515.6038226	521	0.218	Yes	Yes	60.42993762	59	0.182	8.284749513	8	0.022
230	Calibration	ATC116	SW	10441-10278	549	576	1.127	Yes	Yes	465.0478774	494	1.314	Yes	Yes	64.55338809	65	0.058	19.32210256	17	0.590
231	Calibration	ATC117	NE	30622-30087	241	243	0.124	Yes	Yes	210.8211161	213	0.127	Yes	Yes	28.36158513	29	0.043	1.890772342	2	0.115
232	Calibration	ATC117	SW	30087-30622	217	236	1.263	Yes	Yes	186.8486122	206	1.373	Yes	Yes	28.40603902	28	0.076	1.893735935	2	0.128
233	Calibration	ATC118	NB	20070-20238	498	489	0.433	Yes	Yes	446.972727	437	0.456	Yes	Yes	46.84618004	47	0.022	4.297814683	4	0.086
234	Calibration	ATC118	SB	20238-20070	593	588	0.220	Yes	Yes	539.2383121	532	0.311	Yes	Yes	52.04588684	54	0.237	1.609666603	2	0.104
235	Calibration	ATC119	EB	10466-10056	971	978	0.221	Yes	Yes	868.0873405	875	0.230	Yes	Yes	91.47791953	91	0.075	11.43473994	12	0.243
236	Calibration	ATC119	WB	10056-10466	947	981	1.087	Yes	Yes	830.8321884	852	0.736	Yes	Yes	97.58096173	108	0.983	18.58684985	21	0.550
237	Calibration	ATC120	EB	20324-20036	359	369	0.533	Yes	Yes	321.5114938	330	0.462	Yes	Yes	33.81675053	36	0.309	3.533093339	4	0.004



238	Calibration	ATC120	WB	20036-20324	429	500	3.320	Yes	Yes	370.6986537	434	3.139	Yes	Yes	52.89501257	61	1.029	5.202788122	6	0.361
253	Calibration	ATC128	NB	10388-10052	940	876	2.093	Yes	Yes	814.2988313	789	0.887	Yes	Yes	107.6343112	79	2.963	17.60374249	8	2.597
254	Calibration	ATC128	SB	10052-10388	1415	1414	0.016	Yes	Yes	1307.277419	1307	0.018	Yes	Yes	95.85483871	97	0.072	11.86774194	11	0.201
255	Calibration	ATC129	NB	20018-20194	1262	1209	1.503	Yes	Yes	1124.962973	1078	1.407	Yes	Yes	116.5200098	111	0.481	20.11856285	19	0.227
256	Calibration	ATC129	SB	20194-20018	1094	1098	0.122	Yes	Yes	940.2075038	942	0.061	Yes	Yes	140.4946306	142	0.116	13.74768461	15	0.213
259	Calibration	ATC131	NW	10065-10066	278	276	0.104	Yes	Yes	255.3061224	254	0.084	Yes	Yes	18.15510204	18	0.036	4.53877551	4	0.112
260	Calibration	ATC131	SE	10066-10065	312	322	0.541	Yes	Yes	287.8074866	295	0.420	Yes	Yes	21.68983957	24	0.496	2.502673797	3	0.065
261	Calibration	ATC132	EB	10072-10448	307	308	0.111	Yes	Yes	268.2600307	277	0.552	Yes	Yes	32.98279066	28	0.827	5.277246506	3	1.302
262	Calibration	ATC132	WB	10448-10072	265	211	3.508	Yes	Yes	244.4069352	194	3.419	Yes	Yes	12.72006354	13	0.097	7.722895722	4	1.594
263	Calibration	ATC133	EB	20152-20175	657	702	1.715	Yes	Yes	584.8860964	623	1.569	Yes	Yes	63.81990673	69	0.662	8.561207	9	0.255
264	Calibration	ATC134	WB	20303-20153	528	535	0.306	Yes	Yes	459.4465139	459	0.037	Yes	Yes	60.85014583	64	0.425	7.81561506	12	1.416
265	Calibration	ATC135	EB	30019-30572	120	77	4.311	Yes	Yes	108.2688854	69	4.223	Yes	Yes	10.42589267	7	0.988	1.202987616	1	0.113
266	Calibration	ATC136	EB	30014-31229	210	223	0.882	Yes	Yes	187.0282324	194	0.535	Yes	Yes	21.19653301	25	0.775	1.93955204	4	1.101
267	Calibration	ATC136	WB	31229-30014	585	644	2.366	Yes	Yes	516.1987142	579	2.687	Yes	Yes	61.1711574	58	0.446	7.5122474	7	0.303
268	Calibration	ATC137	NE	10041-10394	449	449	0.009	Yes	Yes	411.9514374	412	0.001	Yes	Yes	29.96934008	30	0.058	7.111368834	7	0.047
269	Calibration	ATC137	SW	10394-10041	321	328	0.356	Yes	Yes	288.0253747	294	0.353	Yes	Yes	29.6933376	30	0.052	3.46422272	4	0.057
270	Calibration	ATC138	EB	31181-31408	184	160	1.885	Yes	Yes	163.5351752	139	2.011	Yes	Yes	19.07910377	19	0.018	1.635351752	2	0.074
271	Calibration	ATC138	WB	31408-31181	387	382	0.250	Yes	Yes	355.9201674	352	0.203	Yes	Yes	26.5003561	26	0.012	4.892373434	4	0.491
276	Calibration	ATC141	NE	20020-20319	685	744	2.220	Yes	Yes	602.4382202	657	2.193	Yes	Yes	73.37688175	77	0.395	8.880004797	10	0.281
277	Calibration	ATC141	SE	20319-20020	419	466	2.238	Yes	Yes	356.405432	397	2.070	Yes	Yes	56.55804084	63	0.824	5.83535342	6	0.219
292	Calibration	ATC149	NE	10043-10369	453	461	0.374	Yes	Yes	410.8822314	413	0.119	Yes	Yes	35.5661157	41	0.880	6.551652893	7	0.051
293	Calibration	ATC149	SW	10369-10043	604	604	0.009	Yes	Yes	559	560	0.030	Yes	Yes	40	40	0.076	5	5	0.004
303	Calibration	ATC155	NB	10049-10050	852	884	1.092	Yes	Yes	766.0272109	797	1.107	Yes	Yes	80.17687075	81	0.078	5.795918367	6	0.218
304	Calibration	ATC155	SB	10047-10048	1413	1421	0.219	Yes	Yes	1300.137736	1304	0.118	Yes	Yes	102.1981132	105	0.262	10.66415094	12	0.397
317	Calibration	LEB012	NB	10676-10675	922	919	0.102	Yes	Yes	746.6501637	743	0.126	Yes	Yes	141.584386	142	0.032	34.20155684	34	0.004
318	Calibration	LEB012	SB	10675-10676	780	783	0.110	Yes	Yes	623.6042675	626	0.081	Yes	Yes	107.1026596	107	0.015	49.17406001	50	0.171
319	Calibration	LEB013	NB	10708-10681	958	958	0.002	Yes	Yes	777.8339361	778	0.012	Yes	Yes	143.8477244	144	0.011	36.21341313	36	0.021



320	Calibration	LEB013	SB	10681-10708	1021	1020	0.042	Yes	Yes	838.4411067	836	0.093	Yes	Yes	138.5666016	139	0.036	44.26083827	45	0.138
321	Calibration	LEB014	NB	10707-10688	635	635	0.001	Yes	Yes	499.9462868	500	0.001	Yes	Yes	102.8561526	103	0.014	32.18970056	32	0.027
322	Calibration	LEB014	SB	10688-10707	701	697	0.149	Yes	Yes	560.0504933	557	0.144	Yes	Yes	103.3591166	103	0.036	37.72230534	38	0.030
323	Calibration	LEB015	NB	10701-10699	565	564	0.036	Yes	Yes	448.3924695	448	0.021	Yes	Yes	84.24648193	84	0.027	32.18970056	32	0.027
324	Calibration	LEB015	SB	10699-10701	635	635	0.021	Yes	Yes	516.5441011	516	0.034	Yes	Yes	83.74351786	84	0.027	34.95600295	35	0.001
377	Calibration	WebTRIS_7073/1	NB	10105-10106	1812	1814	0.062	Yes	Yes	1413.846283	1417	0.075	Yes	Yes	296.0418364	296	0.002	101.8850235	102	0.015
378	Calibration	WebTRIS_7074/1	SB	10101-10102	1390	1400	0.262	Yes	Yes	1068.332254	1083	0.462	Yes	Yes	195.8863043	196	0.003	125.5639014	120	0.478
379	Calibration	WebTRIS_8001/1	NB	10167-10165	1528	1541	0.320	Yes	Yes	1188.450101	1191	0.065	Yes	Yes	247.726835	248	0.017	92.15620749	102	1.019
380	Calibration	WebTRIS_30360764	NB	10177-10161	2029	2032	0.071	Yes	Yes	1556.544499	1560	0.079	Yes	Yes	285.1096359	285	0.006	187.2476798	187	0.015
381	Calibration	WebTRIS_30361627	SB	10160-10174	1591	1605	0.360	Yes	Yes	1236.816378	1237	0.002	Yes	Yes	257.808558	258	0.006	95.9066827	110	1.401
382	Calibration	WebTRIS_6550/2	SB	11039-11038	1238	1238	0.001	Yes	Yes	992.0648048	992	0.002	Yes	Yes	176.9100785	177	0.007	68.90696428	69	0.009
383	Calibration	WebTRIS_6550/1	NB	11038-11039	1128	1128	0.014	Yes	Yes	919.8201458	920	0.007	Yes	Yes	140.7790916	141	0.019	67.06031052	67	0.005
384	Calibration	WebTRIS_6527/1	NB	10183-10181	519	515	0.150	Yes	Yes	335.7971065	334	0.103	Yes	Yes	104.2081103	103	0.086	78.53767037	78	0.073
385	Calibration	WebTRIS_6527/2	NB	10183-10182	1412	1396	0.413	Yes	Yes	914.1655745	908	0.201	Yes	Yes	283.6935316	282	0.091	213.8089732	206	0.544
386	Calibration	WebTRIS_65271/2/2	NB	11008-10183	1906	1911	0.133	Yes	Yes	1233.986965	1242	0.229	Yes	Yes	382.9438888	386	0.130	288.6101745	284	0.283
387	Calibration	WebTRIS_6526/1	SB	10184-10176	473	473	0.014	Yes	Yes	323.8579883	324	0.010	Yes	Yes	63.72948037	64	0.033	84.97264049	85	0.014
388	Calibration	WebTRIS_6526/2	SB	10184-10185	1271	1290	0.554	Yes	Yes	870.7218172	871	0.005	Yes	Yes	171.3425358	184	0.940	228.4567144	236	0.470
389	Calibration	WebTRIS_6526/1/2	SB	11035-10184	1743	1763	0.481	Yes	Yes	1194.579806	1195	0.009	Yes	Yes	235.0720162	248	0.823	313.4293549	320	0.395
390	Calibration	WebTRIS_6535/1	NB	11069-11074	1785	1771	0.337	Yes	Yes	1085.261761	1085	0.009	Yes	Yes	410.4951601	396	0.700	289.0468879	289	0.008
391	Calibration	WebTRIS_6534/1	SB	11075-11070	1737	1683	1.297	Yes	Yes	1088.124538	1088	0.003	Yes	Yes	309.2454129	256	3.192	339.6458094	340	0.007
392	Calibration	WebTRIS_6533/1	NB	11031-11021	1873	1886	0.282	Yes	Yes	1239.296834	1239	0.009	Yes	Yes	415.101628	415	0.005	219.0207274	232	0.842
393	Calibration	WebTRIS_6532/1	SB	11022-11014	1780	1779	0.006	Yes	Yes	1160.480233	1160	0.013	Yes	Yes	264.5407202	265	0.028	354.6648132	354	0.013
394	Calibration	WebTRIS_6531/1	SB	11027-11012	88	99	1.195	Yes	Yes	54.14185836	66	1.477	Yes	Yes	15.05703253	15	0.015	18.43188465	19	0.042
395	Calibration	WebTRIS_6531/2	SB	11027-11028	1507	1507	0.006	Yes	Yes	931.1094566	931	0.010	Yes	Yes	258.9446651	259	0.001	316.9839865	317	0.005
396	Calibration	WebTRIS_6531/1/2	SB	11026-11027	1595	1606	0.283	Yes	Yes	985.2513149	996	0.353	Yes	Yes	274.0016976	274	0.004	335.4158712	336	0.015
397	Calibration	WebTRIS_6530/1	NB	11017-11527	97	97	0.000	Yes	Yes	61.31364658	61	0.036	Yes	Yes	19.80042425	20	0.038	15.88741322	16	0.029
398	Calibration	WebTRIS_6530/2	NB	11017-11018	1595	1604	0.204	Yes	Yes	1008.480598	1017	0.263	Yes	Yes	325.6753563	326	0.008	261.3145503	261	0.003



399	Calibration	WebTRIS_6530/1/2	NB	11016-11017	1692	1701	0.198	Yes	Yes	1069.794245	1078	0.246	Yes	Yes	345.4757805	346	0.001	277.2019636	277	0.004
400	Calibration	WebTRIS_30360804	NB	11011-11015	1826	1826	0.004	Yes	Yes	1154.147939	1154	0.005	Yes	Yes	372.716681	373	0.015	299.0594468	299	0.004
401	Calibration	WebTRIS_30360803	SB	11030-11013	1761	1733	0.664	Yes	Yes	1110.899673	1093	0.526	Yes	Yes	286.4784258	282	0.264	363.4031883	358	0.307
402	Calibration	WebTRIS_6529/1	SB	11034-11059	160	176	1.199	Yes	Yes	101.0626041	101	0.013	Yes	Yes	26.06198959	37	1.873	33.06011642	38	0.869
403	Calibration	WebTRIS_6529/2	SB	11034-11035	1574	1557	0.415	Yes	Yes	992.8789444	993	0.012	Yes	Yes	256.0432808	245	0.668	324.7956432	319	0.305
404	Calibration	WebTRIS_6529/1/2	SB	11013-11034	1733	1733	0.002	Yes	Yes	1093.449059	1093	0.000	Yes	Yes	281.9782674	282	0.002	357.694654	358	0.007
405	Calibration	WebTRIS_6528/1	NB	11009-11062	219	219	0.034	Yes	Yes	154.0778934	154	0.005	Yes	Yes	38.60226007	39	0.064	26.20790696	26	0.034
406	Calibration	WebTRIS_6528/2	NB	11009-11010	1576	1570	0.157	Yes	Yes	1109.300455	1103	0.186	Yes	Yes	277.9211456	278	0.005	188.6866601	189	0.009
407	Calibration	WebTRIS_6528/1/2	NB	10182-11009	1795	1789	0.136	Yes	Yes	1263.378348	1257	0.177	Yes	Yes	316.5234057	317	0.027	214.8945671	215	0.003
408	Calibration	WebTRIS_6525/1	SB	11004-11043	391	391	0.007	Yes	Yes	263.428477	263	0.020	Yes	Yes	58.74943691	59	0.033	68.63355767	69	0.024
409	Calibration	WebTRIS_6525/2	SB	11004-11045	1457	1457	0.001	Yes	Yes	982.1508792	982	0.005	Yes	Yes	219.0378647	219	0.010	255.8892257	256	0.003
410	Calibration	WebTRIS_6525/1/2	SB	11003-11004	1848	1848	0.002	Yes	Yes	1245.579356	1245	0.005	Yes	Yes	277.7873016	278	0.006	324.5227834	325	0.008
411	Calibration	WebTRIS_6524/1	NB	11005-11042	300	276	1.405	Yes	Yes	194.4385218	193	0.126	Yes	Yes	60.34021896	39	3.093	45.47611708	45	0.051
412	Calibration	WebTRIS_6524/2	NB	11005-11006	1760	1769	0.203	Yes	Yes	1139.716382	1132	0.218	Yes	Yes	353.6888442	371	0.926	266.5617654	265	0.107
413	Calibration	WebTRIS_6524/1/2	NB	11375-11005	2031	2045	0.299	Yes	Yes	1315.508187	1325	0.263	Yes	Yes	408.2424168	410	0.082	307.6767083	310	0.130
414	Calibration	MCJC01	WB	10415-10063	511	520	0.411	Yes	Yes	447.537174	452	0.233	Yes	Yes	47.72150238	50	0.365	15.59181938	17	0.446
415	Calibration	MCJC01	EB	10063-10415	779	781	0.075	Yes	Yes	659.6001948	659	0.015	Yes	Yes	105.7896459	106	0.019	13.63633926	16	0.591
416	Calibration	MCJC01	EB	10414-10063	1042	1041	0.032	Yes	Yes	869.048811	868	0.022	Yes	Yes	151.5280694	151	0.041	21.07002619	21	0.030
417	Calibration	MCJC01	WB	10063-10414	656	662	0.236	Yes	Yes	555.2959471	559	0.168	Yes	Yes	76.11110268	78	0.253	24.83761794	25	0.025
418	Calibration	MCJC01	NB	31386-10063	175	176	0.085	Yes	Yes	138.0500655	138	0.017	Yes	Yes	29.50263497	30	0.091	7.793148859	8	0.154
419	Calibration	MCJC01	SB	10063-31386	293	294	0.075	Yes	Yes	239.7399085	241	0.059	Yes	Yes	46.85145821	47	0.019	5.981037218	6	0.097
420	Calibration	MCJC02	NB	10062-30566	336	337	0.052	Yes	Yes	280.6539517	281	0.030	Yes	Yes	45.76973048	46	0.030	9.556317353	10	0.077
421	Calibration	MCJC02	SB	30566-10062	382	429	2.355	Yes	Yes	333.4651792	372	2.048	Yes	Yes	40.2371257	49	1.312	8.047425139	8	0.070
422	Calibration	MCJC02	WB	10062-10417	550	595	1.877	Yes	Yes	485.3603287	528	1.906	Yes	Yes	48.28455084	50	0.288	16.09485028	16	0.010
423	Calibration	MCJC02	EB	10417-10062	550	549	0.047	Yes	Yes	462.2239814	461	0.039	Yes	Yes	76.45053882	76	0.052	11.06520957	11	0.057
424	Calibration	MCJC02	SB	10062-30564	386	385	0.016	Yes	Yes	334.4711074	334	0.038	Yes	Yes	45.76973048	46	0.034	5.532604783	6	0.064
425	Calibration	MCJC02	NB	30564-10062	400	400	0.011	Yes	Yes	350.0629936	350	0.002	Yes	Yes	44.26083827	44	0.033	6.035568855	6	0.010



426	Calibration	MCJC02	EB	10062-10392	571	579	0.320	Yes	Yes	495.9225742	495	0.022	Yes	Yes	65.88829333	74	0.980	9.556317353	10	0.011
427	Calibration	MCJC02	WB	10392-10062	511	518	0.315	Yes	Yes	450.6558078	455	0.220	Yes	Yes	44.76380234	47	0.378	15.59188621	15	0.025
428	Calibration	MCJC03	NB	30008-30009	492	443	2.307	Yes	Yes	421.4838917	381	2.000	Yes	Yes	64.88236519	55	1.268	6.035568855	6	0.010
429	Calibration	MCJC03	SB	30009-30008	479	473	0.300	Yes	Yes	432.0461372	433	0.031	Yes	Yes	41.74601791	34	1.305	5.532604783	6	0.337
430	Calibration	MCJC03	NB	30008-31047	377	373	0.220	Yes	Yes	318.8792212	317	0.114	Yes	Yes	49.79344305	47	0.335	8.550389211	9	0.037
431	Calibration	MCJC03	SB	31047-30008	369	367	0.099	Yes	Yes	321.8970056	322	0.003	Yes	Yes	41.74601791	40	0.306	5.532604783	6	0.040
432	Calibration	MCJC03	SB	30008-30671	452	453	0.071	Yes	Yes	408.9097899	409	0.017	Yes	Yes	37.72230534	38	0.045	5.029640712	6	0.381
433	Calibration	MCJC03	NB	30671-30008	418	419	0.015	Yes	Yes	358.6133828	359	0.006	Yes	Yes	53.81715562	54	0.025	6.035568855	6	0.010
434	Calibration	MCJC03	SB	30008-30028	299	260	2.322	Yes	Yes	260.0324248	221	2.485	Yes	Yes	35.20748499	35	0.035	3.520748499	3	0.031
435	Calibration	MCJC03	NB	30028-30008	353	270	4.720	Yes	Yes	296.748802	216	5.061	No	Yes	50.29640712	48	0.328	6.035568855	6	0.010
448	Calibration	MCJC06	NB	30026-30676	513	501	0.530	Yes	Yes	409.1835195	408	0.066	Yes	Yes	96.20909316	85	1.131	8.047425139	8	0.062
449	Calibration	MCJC06	SB	30676-30026	302	309	0.402	Yes	Yes	265.6740162	268	0.116	Yes	Yes	33.93539687	39	0.824	2.011856285	2	0.109
450	Calibration	MCJC06	SB	30026-30027	508	505	0.134	Yes	Yes	436.3213318	434	0.106	Yes	Yes	60.35568855	60	0.051	11.06520957	11	0.126
451	Calibration	MCJC06	NB	30027-30026	682	657	0.961	Yes	Yes	569.8582927	569	0.020	Yes	Yes	101.3472603	77	2.564	10.5622455	10	0.053
452	Calibration	MCJC06	EB	30026-30986	569	570	0.034	Yes	Yes	488.6073476	490	0.047	Yes	Yes	73.0383168	73	0.006	7.544461068	7	0.068
453	Calibration	MCJC06	WB	30986-30026	607	611	0.149	Yes	Yes	498.57989	495	0.177	Yes	Yes	94.32044129	102	0.810	14.08299399	14	0.111
454	Calibration	MCJC07	NB	10112-10456	236	235	0.019	Yes	Yes	209.1702544	209	0.020	Yes	Yes	18.84735812	19	0.035	7.514677104	7	0.057
455	Calibration	MCJC07	SB	10456-10112	301	296	0.291	Yes	Yes	272.732	271	0.107	Yes	Yes	25.192	22	0.632	2.676	2	0.122
456	Calibration	MCJC07	WB	10112-30034	304	246	3.550	Yes	Yes	230.1389432	171	4.143	Yes	Yes	65.87475538	66	0.009	8.454011742	8	0.082
457	Calibration	MCJC07	EB	30034-10112	205	149	4.261	Yes	Yes	182.1	125	4.587	Yes	Yes	19.732	20	0.060	3.568	3	0.056
458	Calibration	MCJC07	SB	10112-10408	446	444	0.081	Yes	Yes	397.832	396	0.081	Yes	Yes	41.924	42	0.030	6.244	6	0.122
459	Calibration	MCJC07	NB	10408-10112	480	481	0.039	Yes	Yes	382.3091977	380	0.102	Yes	Yes	81.7221135	85	0.354	15.96868885	16	0.099
503	Calibration	MCJC14	SB	10119-10240	727	723	0.156	Yes	Yes	612.6102387	609	0.153	Yes	Yes	80.47425139	78	0.250	34.20155684	36	0.301
505	Calibration	MCJC14	EB	20331-10240	175	178	0.213	Yes	Yes	141.332904	147	0.455	Yes	Yes	27.16005985	28	0.160	6.538532926	3	1.581
506	Calibration	MCJC14	SB	10240-10241	779	815	1.273	Yes	Yes	659.8888614	688	1.065	Yes	Yes	82.98907175	91	0.874	36.21341313	36	0.025
507	Calibration	MCJC14	NB	10241-10240	822	815	0.252	Yes	Yes	635.2436219	634	0.031	Yes	Yes	136.3032633	136	0.026	50.29640712	44	0.889
508	Calibration	MCJC15	NB	10119-10471	552	552	0.023	Yes	Yes	433.0520653	432	0.034	Yes	Yes	82.98907175	83	0.001	36.21341313	36	0.025



509	Calibration	MCJC15	SB	10471-10119	656	654	0.090	Yes	Yes	558.7930831	552	0.300	Yes	Yes	67.90014961	69	0.149	29.6748802	33	0.632
510	Calibration	MCJC15	SB	10119-10240	737	723	0.528	Yes	Yes	617.6398795	609	0.355	Yes	Yes	84.49796396	78	0.693	35.20748499	36	0.130
572	Calibration	MCJC23	WB	10028-10023	1686	1676	0.253	Yes	Yes	1287.839504	1281	0.195	Yes	Yes	269.5887422	267	0.133	129.0102843	128	0.106
573	Calibration	MCJC23	EB	10022-10025	1611	1614	0.067	Yes	Yes	1309.466959	1316	0.183	Yes	Yes	212.2508381	214	0.127	89.52760468	84	0.621
613	Calibration	MCJC28	NB	30001-30095	267	259	0.541	Yes	Yes	242.8234577	230	0.808	Yes	Yes	23.94770784	24	0.009	0.727201679	4	2.269
614	Calibration	MCJC28	SB	30095-30002	346	344	0.109	Yes	Yes	319.246183	319	0.015	Yes	Yes	24.86519827	21	0.753	2.011856285	4	1.086
615	Calibration	MCJC28	WB	30004-30505	693	680	0.483	Yes	Yes	585.4228863	581	0.164	Yes	Yes	87.21711347	81	0.650	20.19047257	17	0.630
616	Calibration	MCJC28	EB	30005-30001	461	460	0.053	Yes	Yes	345.5363169	346	0.005	Yes	Yes	86.00685618	86	0.003	29.17191613	28	0.227
617	Calibration	MCJC28	SB	30003-30504	62	62	0.047	Yes	Yes	52.03359807	52	0.006	Yes	Yes	8.381697746	8	0.133	1.212002798	2	0.625
618	Calibration	MCJC28	NB	30504-30004	152	149	0.223	Yes	Yes	139.357107	139	0.030	Yes	Yes	9.712968072	7	0.820	3.017784427	3	0.007
619	Calibration	MCJC28	EB	30002-30006	488	505	0.782	Yes	Yes	381.6770797	399	0.896	Yes	Yes	78.63467545	79	0.073	27.59111419	27	0.178
620	Calibration	MCJC28	WB	30006-30003	551	553	0.098	Yes	Yes	457.8174148	460	0.088	Yes	Yes	77.596172	78	0.039	15.5192344	16	0.014
623	Calibration	MCJC29	WB	20002-20001	777	777	0.005	Yes	Yes	676.7375921	677	0.001	Yes	Yes	88.03586218	88	0.004	12.7231452	13	0.037
624	Calibration	MCJC29	EB	20001-20002	629	628	0.039	Yes	Yes	499.262247	498	0.053	Yes	Yes	110.7222867	111	0.026	19.09777832	19	0.014
625	Calibration	MCJC29	SB	20002-31004	204	204	0.029	Yes	Yes	170.6230511	171	0.005	Yes	Yes	29.64136178	30	0.064	3.330445776	3	0.072
626	Calibration	MCJC29	NB	31004-20002	354	354	0.037	Yes	Yes	313.7027701	314	0.016	Yes	Yes	36.85717574	37	0.024	3.189423568	3	0.148
627	Calibration	MCJC30	NB	30007-30990	409	409	0.013	Yes	Yes	337.4888918	337	0.015	Yes	Yes	61.86458076	62	0.010	9.556317353	9	0.022
628	Calibration	MCJC30	SB	30990-30007	391	393	0.060	Yes	Yes	315.8614367	317	0.056	Yes	Yes	56.83494005	57	0.022	18.60967063	19	0.007
629	Calibration	MCJC30	WB	30007-31392	485	487	0.087	Yes	Yes	394.8267959	397	0.105	Yes	Yes	72.92979033	73	0.007	17.10077842	17	0.055
630	Calibration	MCJC30	EB	31392-30007	586	584	0.063	Yes	Yes	479.8277239	479	0.020	Yes	Yes	80.97721547	81	0.001	25.14820356	24	0.217
631	Calibration	MCJC30	SB	30007-31391	651	651	0.014	Yes	Yes	528.1122748	528	0.001	Yes	Yes	90.53353282	91	0.048	32.69266463	32	0.147
632	Calibration	MCJC30	NB	31391-30007	568	569	0.068	Yes	Yes	464.7388018	466	0.059	Yes	Yes	87.51574839	88	0.045	15.59188621	16	0.019
633	Calibration	MCJC31	NB	10060-10419	429	436	0.348	Yes	Yes	372.6963768	378	0.286	Yes	Yes	50.29640712	52	0.224	5.532604783	6	0.040
634	Calibration	MCJC31	SB	10419-10060	507	513	0.240	Yes	Yes	442.6083827	447	0.210	Yes	Yes	49.79344305	50	0.028	15.08892214	16	0.204
635	Calibration	MCJC31	NB	10060-20007	329	321	0.435	Yes	Yes	295.7428739	288	0.457	Yes	Yes	31.18377242	31	0.033	2.011856285	2	0.103
636	Calibration	MCJC31	SB	20007-10060	298	294	0.220	Yes	Yes	271.6005985	270	0.112	Yes	Yes	22.13041913	20	0.393	4.02371257	4	0.064
637	Calibration	MCJC31	SB	10060-10337	775	779	0.158	Yes	Yes	687.0489213	689	0.085	Yes	Yes	68.40311369	70	0.229	19.11263471	19	0.055



638	Calibration	MCJC31	NB	10337-10060	727	729	0.079	Yes	Yes	641.2791908	639	0.104	Yes	Yes	77.95943104	83	0.551	7.544461068	7	0.069
639	Calibration	MCJC32	NB	10059-10278	540	549	0.364	Yes	Yes	465.2417659	473	0.379	Yes	Yes	66.89422147	67	0.013	8.047425139	8	0.061
640	Calibration	MCJC32	SB	10278-10059	673	684	0.410	Yes	Yes	574.8879334	584	0.368	Yes	Yes	75.94757475	77	0.087	22.13041913	23	0.219
641	Calibration	MCJC32	WB	10059-20171	276	281	0.323	Yes	Yes	223.8190117	228	0.298	Yes	Yes	41.74601791	43	0.148	10.05928142	10	0.016
642	Calibration	MCJC32	EB	20171-10059	257	256	0.036	Yes	Yes	219.2923351	219	0.016	Yes	Yes	33.1956287	33	0.036	4.02371257	4	0.066
643	Calibration	MCJC32	SB	10059-10405	512	512	0.007	Yes	Yes	443.6143108	449	0.241	Yes	Yes	55.32604783	49	0.852	13.07706585	14	0.330
644	Calibration	MCJC32	NB	10405-10059	398	402	0.196	Yes	Yes	338.4948199	348	0.494	Yes	Yes	54.82308376	49	0.784	5.029640712	5	0.189
645	Calibration	MCJC33	NB	20008-20223	635	618	0.664	Yes	Yes	586.6096423	565	0.880	Yes	Yes	46.41524106	49	0.374	1.975116641	4	1.115
646	Calibration	MCJC33	SB	20223-20008	890	883	0.226	Yes	Yes	818.5478158	800	0.640	Yes	Yes	68.29988194	80	1.371	3.152302243	3	0.196
647	Calibration	MCJC33	WB	20008-20103	575	581	0.236	Yes	Yes	504.5596222	509	0.199	Yes	Yes	67.37072019	69	0.145	3.050767414	3	0.012
648	Calibration	MCJC33	EB	20103-20008	480	480	0.027	Yes	Yes	439.5863142	439	0.032	Yes	Yes	36.82581649	37	0.029	3.98755832	4	0.046
649	Calibration	MCJC33	SB	20008-20238	577	591	0.602	Yes	Yes	543.0637544	535	0.338	Yes	Yes	31.47225502	54	3.443	2.101534829	2	0.080
650	Calibration	MCJC33	NB	20238-20008	546	529	0.719	Yes	Yes	500.3716952	480	0.899	Yes	Yes	43.61430793	45	0.195	1.98755832	4	1.125
651	Calibration	MCJC33	EB	20008-20239	384	382	0.145	Yes	Yes	348.9244392	347	0.129	Yes	Yes	32.45690673	32	0.082	3	3	0.015
652	Calibration	MCJC33	WB	20239-20008	255	279	1.513	Yes	Yes	224.651633	237	0.782	Yes	Yes	28.97511664	42	2.115	1	1	0.275
653	Calibration	MCJC34	NB	30010-31100	417	415	0.083	Yes	Yes	353.080778	353	0.021	Yes	Yes	59.85272447	58	0.257	4.02371257	4	0.060
654	Calibration	MCJC34	SB	31100-30010	569	566	0.155	Yes	Yes	495.9225742	493	0.146	Yes	Yes	69.40904183	69	0.038	4.02371257	4	0.064
655	Calibration	MCJC34	WB	30010-31060	264	264	0.057	Yes	Yes	225.3279039	226	0.050	Yes	Yes	36.7163772	37	0.063	1.508892214	1	0.177
656	Calibration	MCJC34	EB	31060-30010	348	304	2.466	Yes	Yes	290.7132332	273	1.055	Yes	Yes	53.31419155	28	4.043	4.02371257	3	0.584
657	Calibration	MCJC34	SB	30010-30846	346	230	6.838	No	No	297.7547302	207	5.736	No	Yes	45.26676641	21	4.220	3.017784427	2	0.407
658	Calibration	MCJC34	NB	30846-30010	257	214	2.738	Yes	Yes	224.3219758	182	2.934	Yes	Yes	30.17784427	30	0.032	2.011856285	2	0.001
659	Calibration	MCJC34	SB	30010-30847	429	418	0.519	Yes	Yes	369.6785923	363	0.375	Yes	Yes	55.32604783	52	0.469	3.520748499	3	0.035
660	Calibration	MCJC34	NB	30847-30010	281	244	2.298	Yes	Yes	234.8842213	201	2.325	Yes	Yes	44.26083827	41	0.473	2.011856285	2	0.109
661	Calibration	MCJC35	NB	10057-31349	261	261	0.015	Yes	Yes	220.2001963	219	0.057	Yes	Yes	39.02158979	40	0.201	1.929342493	2	0.143
662	Calibration	MCJC35	SB	31349-10057	384	378	0.324	Yes	Yes	344.4878758	338	0.359	Yes	Yes	36.60329777	37	0.026	2.883608147	3	0.088
663	Calibration	MCJC35	WB	10058-10441	587	598	0.428	Yes	Yes	517.1658489	517	0.012	Yes	Yes	56.97252208	65	1.030	13.0107949	15	0.558
664	Calibration	MCJC35	EB	10441-10058	579	586	0.266	Yes	Yes	513.7167798	519	0.224	Yes	Yes	58.97381183	59	0.003	6.650824442	8	0.486



665	Calibration	MCJC35	SB	10058-30396	405	409	0.224	Yes	Yes	359.6074583	363	0.163	Yes	Yes	37.51619235	38	0.079	7.576054956	9	0.333
666	Calibration	MCJC35	NB	30396-10058	314	315	0.062	Yes	Yes	278.1387003	279	0.052	Yes	Yes	30.77788555	31	0.040	4.767216295	5	0.000
667	Calibration	MCJC35	EB	10057-10466	1010	1000	0.343	Yes	Yes	895.7790108	896	0.014	Yes	Yes	100.0898502	91	0.955	14.58595807	13	0.527
668	Calibration	MCJC35	WB	10466-10057	1009	990	0.628	Yes	Yes	858.5596696	860	0.050	Yes	Yes	121.2143412	107	1.301	29.6748802	22	1.460
669	Calibration	MCJC36	NB	10056-10446	849	889	1.342	Yes	Yes	796.3709519	802	0.188	Yes	Yes	39.02158979	73	4.591	13.57605496	13	0.046
670	Calibration	MCJC36	SB	10446-10056	977	1004	0.833	Yes	Yes	866.0019627	889	0.766	Yes	Yes	94.47791953	96	0.179	16.94013739	19	0.420
673	Calibration	MCJC36	SB	10056-30813	598	602	0.142	Yes	Yes	529.7163886	533	0.126	Yes	Yes	62.63395486	63	0.045	5.858684985	6	0.084
674	Calibration	MCJC36	NB	30813-10056	490	489	0.006	Yes	Yes	422.8302257	423	0.005	Yes	Yes	57.1030422	57	0.014	9.646712463	10	0.040
675	Calibration	MCJC37	NB	10108-10422	655	655	0.021	Yes	Yes	571.3671849	572	0.019	Yes	Yes	67.90014961	68	0.012	15.59188621	16	0.002
676	Calibration	MCJC37	SB	10422-10108	770	787	0.617	Yes	Yes	687.0489213	705	0.670	Yes	Yes	75.44461068	75	0.039	7.041496997	7	0.044
677	Calibration	MCJC37	SB	10108-10491	520	474	2.086	Yes	Yes	456.1884126	433	1.108	Yes	Yes	58.34383226	35	3.399	5.532604783	6	0.040
678	Calibration	MCJC37	NB	10491-10108	448	408	1.955	Yes	Yes	396.8386522	369	1.405	Yes	Yes	42.24898198	29	2.170	9.053353282	9	0.012
679	Calibration	MCJC37	SB	10108-10434	406	353	2.714	Yes	Yes	361.6311672	309	2.892	Yes	Yes	39.73416163	40	0.042	4.526676641	4	0.094
680	Calibration	MCJC37	NB	10434-10108	363	288	4.192	Yes	Yes	305.2991912	239	4.003	Yes	Yes	48.28455084	39	1.445	9.556317353	10	0.011
683	Calibration	MCJC38	WB	10107-30736	17	14	0.550	Yes	Yes	14.08299399	14	0.022	Yes	Yes	2.514820356	0	2.243	0	0	0.930
685	Calibration	MCJC38	SB	10107-10422	777	777	0.013	Yes	Yes	695.5993105	695	0.030	Yes	Yes	74.94164661	75	0.054	6.538532926	6	0.018
686	Calibration	MCJC38	NB	10422-10107	662	664	0.052	Yes	Yes	584.4442508	586	0.071	Yes	Yes	62.36754483	62	0.047	15.59188621	16	0.002
687	Calibration	MCJC38	EB	10107-20271	374	376	0.101	Yes	Yes	342.5185325	343	0.003	Yes	Yes	27.66302392	30	0.380	4.02371257	4	0.064
688	Calibration	MCJC38	WB	20271-10107	459	459	0.005	Yes	Yes	406.8979336	407	0.011	Yes	Yes	47.27862269	47	0.041	5.029640712	5	0.073
699	Calibration	MCJC40	NB	10071-20286	596	600	0.175	Yes	Yes	522.57967	529	0.276	Yes	Yes	62.8705089	61	0.239	10.5622455	10	0.053
700	Calibration	MCJC40	SB	20286-10467	837	842	0.160	Yes	Yes	750.9253583	758	0.255	Yes	Yes	78.46239511	76	0.250	7.544461068	7	0.065
702	Calibration	MCJC40	SB	10468-10496	474	469	0.266	Yes	Yes	431.5431731	430	0.090	Yes	Yes	38.72823348	35	0.622	4.02371257	4	0.064
703	Calibration	MCJC40	SB	10468-10054	873	900	0.885	Yes	Yes	767.8561366	790	0.796	Yes	Yes	88.93811881	91	0.241	16.45595269	18	0.439
704	Calibration	MCJC40	NB	10442-10071	1195	1199	0.120	Yes	Yes	1049.183053	1056	0.213	Yes	Yes	127.7528741	125	0.259	17.60374249	18	0.034
705	Calibration	MCJC40	EB	10467-10069	709	716	0.271	Yes	Yes	621.3306281	629	0.289	Yes	Yes	76.03409655	76	0.004	11.20707123	11	0.013
706	Calibration	MCJC40	WB	10069-10468	621	644	0.928	Yes	Yes	543.2011969	563	0.851	Yes	Yes	60.35568855	62	0.219	17.10077842	19	0.379
707	Calibration	MCJC41	EB	20043-20307	534	537	0.123	Yes	Yes	483.8176788	487	0.159	Yes	Yes	42.8207724	42	0.128	7.185904856	7	0.064



708	Calibration	MCJC41	WB	20307-20043	388	390	0.093	Yes	Yes	333.8868425	335	0.079	Yes	Yes	47.74299278	48	0.037	6.783363416	7	0.055
709	Calibration	MCJC41	WB	20043-20042	565	567	0.063	Yes	Yes	497.686501	499	0.053	Yes	Yes	58.61768005	59	0.049	8.718967671	9	0.021
710	Calibration	MCJC41	EB	20042-20043	941	944	0.104	Yes	Yes	851.1964997	854	0.111	Yes	Yes	79.81278086	80	0.020	10.17504512	10	0.069
711	Calibration	MCJC41	SB	20043-31428	451	451	0.002	Yes	Yes	401.4927867	401	0.019	Yes	Yes	45.5798176	46	0.061	4.329290613	4	0.000
712	Calibration	MCJC41	NB	31428-20043	221	220	0.043	Yes	Yes	197.9136242	198	0.026	Yes	Yes	19.4624964	19	0.105	3.275754598	3	0.102
719	Calibration	MCJC43	NB	20037-30070	124	112	1.099	Yes	Yes	111.6580238	111	0.023	Yes	Yes	11.56817364	0	4.810	1.005928142	1	0.145
720	Calibration	MCJC43	SB	30070-20037	54	49	0.681	Yes	Yes	46.77565862	45	0.204	Yes	Yes	7.041496997	4	1.497	0.502964071	0	0.102
721	Calibration	MCJC43	WB	20037-20262	454	432	1.062	Yes	Yes	402.874221	386	0.840	Yes	Yes	47.27862269	42	0.819	4.02371257	4	0.097
722	Calibration	MCJC43	EB	20262-20037	599	567	1.311	Yes	Yes	533.1419155	514	0.841	Yes	Yes	61.36161669	49	1.654	4.02371257	4	0.062
723	Calibration	MCJC43	SB	20037-30835	552	546	0.236	Yes	Yes	467.7565862	463	0.228	Yes	Yes	77.45646697	77	0.063	6.538532926	6	0.019
724	Calibration	MCJC43	NB	30835-20037	360	357	0.173	Yes	Yes	319.8851493	319	0.074	Yes	Yes	37.72230534	36	0.335	2.514820356	3	0.057
725	Calibration	MCJC43	EB	20037-20220	426	426	0.008	Yes	Yes	386.7793708	389	0.130	Yes	Yes	37.21934127	35	0.430	2.011856285	2	0.114
726	Calibration	MCJC43	WB	20220-20037	543	543	0.007	Yes	Yes	469.2654784	472	0.123	Yes	Yes	67.39718554	65	0.295	6.538532926	6	0.045
727	Calibration	MCJC44	NB	20036-20288	372	380	0.421	Yes	Yes	329.4414666	337	0.437	Yes	Yes	34.70452091	35	0.048	7.544461068	7	0.041
728	Calibration	MCJC44	SB	20288-20036	825	827	0.050	Yes	Yes	734.830508	738	0.133	Yes	Yes	81.48017954	79	0.248	9.053353282	9	0.014
731	Calibration	MCJC44	SB	20036-20284	882	887	0.165	Yes	Yes	794.1802684	801	0.228	Yes	Yes	79.97128732	78	0.192	8.047425139	8	0.065
732	Calibration	MCJC44	NB	20284-20036	568	571	0.132	Yes	Yes	498.4373946	503	0.222	Yes	Yes	60.85865262	59	0.240	9.053353282	9	0.012
733	Calibration	MCJC45	NB	20050-20318	273	276	0.151	Yes	Yes	240.6444444	243	0.166	Yes	Yes	24.26666667	24	0.056	8.088888889	8	0.073
734	Calibration	MCJC45	SB	20318-20050	536	537	0.027	Yes	Yes	490.6666667	493	0.112	Yes	Yes	41.77777778	40	0.275	3.555555556	3	0.052
735	Calibration	MCJC45	SB	20050-20290	555	557	0.046	Yes	Yes	511.4444444	513	0.088	Yes	Yes	40.44444444	40	0.127	3.555555556	3	0.052
736	Calibration	MCJC45	NB	20290-20050	362	377	0.795	Yes	Yes	324.6333333	333	0.469	Yes	Yes	28.25555556	35	1.193	9.088888889	9	0.025
737	Calibration	MCJC45	EB	20050-31113	135	147	1.072	Yes	Yes	123.2222222	130	0.569	Yes	Yes	10.33333333	16	1.650	1	1	0.279
738	Calibration	MCJC45	WB	31113-20050	65	65	0.051	Yes	Yes	60.01111111	60	0.001	Yes	Yes	5.011111111	5	0.005	0	0	0.930
745	Calibration	MCJC47	NB	10048-10049	869	877	0.269	Yes	Yes	781.6986143	790	0.286	Yes	Yes	79.27367206	79	0.030	8.027713626	8	0.068
747	Calibration	MCJC47	SB	10048-10052	1415	1414	0.016	Yes	Yes	1307.277419	1307	0.018	Yes	Yes	95.85483871	97	0.072	11.86774194	11	0.201
748	Calibration	MCJC47	NB	10052-10048	869	877	0.269	Yes	Yes	781.6986143	790	0.286	Yes	Yes	79.27367206	79	0.030	8.027713626	8	0.068
749	Calibration	MCJC47	EB	10048-30082	521	490	1.399	Yes	Yes	466	434	1.494	Yes	Yes	51	51	0.001	4	4	0.132



750	Calibration	MCJC47	WB	30082-10048	431	483	2.424	Yes	Yes	388.8967742	437	2.345	Yes	Yes	39.25483871	43	0.538	2.738709677	3	0.407
757	Calibration	MCJC49	NB	30081-30425	473	537	2.849	Yes	Yes	414.4423947	472	2.722	Yes	Yes	50.04492509	56	0.878	8.047425139	8	0.104
758	Calibration	MCJC49	SB	30425-30081	414	414	0.019	Yes	Yes	347.7996552	348	0.034	Yes	Yes	54.32011969	54	0.045	11.56817364	12	0.024
759	Calibration	MCJC49	WB	30081-30629	131	0	16.122	No	No	111.5013474	0	14.899	No	No	16.49960243	0	5.729	3.017784427	0	2.272
761	Calibration	MCJC49	SB	30081-31140	443	448	0.249	Yes	Yes	387.7434244	393	0.266	Yes	Yes	48.99881934	49	0.001	6.035568855	6	0.010
762	Calibration	MCJC49	NB	31140-30081	516	511	0.211	Yes	Yes	455.5524954	451	0.235	Yes	Yes	52.97730052	53	0.002	7.284307238	7	0.071
763	Calibration	MCJC49	EB	30081-30150	65	119	5.633	No	Yes	37.66937414	82	5.750	No	Yes	18.99954219	28	1.948	8.550389211	9	0.037
764	Calibration	MCJC49	WB	30150-30081	182	179	0.215	Yes	Yes	148.00439	148	0.005	Yes	Yes	27.24546884	27	0.047	6.798686756	4	1.158
767	Calibration	MCJC50	WB	30425-31353	629	621	0.325	Yes	Yes	547.7437776	548	0.010	Yes	Yes	71.15550008	63	0.979	10.23820145	10	0.104
768	Calibration	MCJC50	EB	31353-30425	361	360	0.027	Yes	Yes	312.0332877	312	0.028	Yes	Yes	41.05701154	41	0.010	7.755213291	8	0.015
769	Calibration	MCJC50	NB	30425-30426	112	149	3.207	Yes	Yes	94.70328064	130	3.327	Yes	Yes	16.72980962	17	0.066	0.713716294	2	0.985
770	Calibration	MCJC50	SB	30426-30425	289	282	0.468	Yes	Yes	237.5384472	238	0.027	Yes	Yes	45.23303796	37	1.332	6.717452951	7	0.078
773	Calibration	MCJC51	EB	20035-31354	344	344	0.019	Yes	Yes	306.2760234	306	0.041	Yes	Yes	31.67733333	32	0.055	6.022222222	6	0.017
774	Calibration	MCJC51	WB	31354-20035	640	641	0.036	Yes	Yes	587.2744311	587	0.020	Yes	Yes	45.5361552	47	0.214	7.555555556	7	0.029
775	Calibration	MCJC51	SB	20035-30400	558	559	0.060	Yes	Yes	513.3684211	514	0.042	Yes	Yes	34.58933333	35	0.068	10.06666667	10	0.024
776	Calibration	MCJC51	EB	30400-20035	525	523	0.076	Yes	Yes	482.3922356	483	0.027	Yes	Yes	38.24162257	36	0.365	4	4	0.054
777	Calibration	MCJC51	SB	20035-20318	536	537	0.027	Yes	Yes	490.6666667	493	0.112	Yes	Yes	41.77777778	40	0.275	3.555555556	3	0.052
778	Calibration	MCJC51	NB	20318-20035	273	276	0.151	Yes	Yes	240.6444444	243	0.166	Yes	Yes	24.26666667	24	0.056	8.088888889	8	0.073
793	Calibration	MCJC54	NB	10076-10075	1057	1039	0.556	Yes	Yes	955.1287712	936	0.621	Yes	Yes	92.5453891	93	0.060	9.556317353	10	0.160
794	Calibration	MCJC54	SB	10447-10076	885	852	1.123	Yes	Yes	778.0854182	745	1.200	Yes	Yes	94.55724539	95	0.028	12.07113771	12	0.064
795	Calibration	MCJC54	NB	10076-10389	685	664	0.796	Yes	Yes	599.5331729	582	0.730	Yes	Yes	66.89422147	64	0.335	18.60967063	18	0.048
796	Calibration	MCJC54	SB	10389-10076	689	699	0.393	Yes	Yes	585.953143	599	0.518	Yes	Yes	93.04835317	91	0.225	10.05928142	10	0.034
797	Calibration	MCJC54	SB	10076-20194	1090	1070	0.609	Yes	Yes	934.5072443	918	0.550	Yes	Yes	140.8299399	138	0.218	15.08892214	14	0.187
798	Calibration	MCJC54	NB	20194-10076	1264	1223	1.157	Yes	Yes	1128.651376	1093	1.066	Yes	Yes	114.1728442	109	0.494	21.12449099	21	0.016
799	Calibration	MCJC54	SB	10076-30449	13	10	0.860	Yes	Yes	11.06520957	9	0.560	Yes	Yes	1.508892214	0	1.737	0	0	0.921
800	Calibration	MCJC54	NB	30449-10076	8	9	0.638	Yes	Yes	7.544461068	8	0.163	Yes	Yes	0	1	1.414	0	0	0.897
807	Calibration	MCJC56	NB	10450-10068	108	124	1.434	Yes	Yes	98.22994652	117	1.797	Yes	Yes	9.005347594	6	1.154	1	1	0.057



808	Calibration	MCJC56	SB	10068-10450	185	168	1.238	Yes	Yes	174.0081633	158	1.216	Yes	Yes	9.808163265	9	0.310	1.134693878	1	0.149
809	Calibration	MCJC56	NB	10450-10065	278	276	0.104	Yes	Yes	255.3061224	254	0.084	Yes	Yes	18.15510204	18	0.036	4.53877551	4	0.112
810	Calibration	MCJC56	SB	10065-10450	312	322	0.541	Yes	Yes	287.8074866	295	0.420	Yes	Yes	21.68983957	24	0.496	2.502673797	3	0.065
811	Calibration	MCJC56	SB	10450-10440	307	320	0.756	Yes	Yes	284.5775401	293	0.503	Yes	Yes	19.68449198	24	0.940	2.502673797	3	0.275
812	Calibration	MCJC56	NB	10440-10450	196	230	2.316	Yes	Yes	176.2979592	211	2.462	Yes	Yes	15.34693878	15	0.089	4.404081633	4	0.051
813	Calibration	MCJC57	NB	10051-10377	938	924	0.468	Yes	Yes	851.8163265	838	0.469	Yes	Yes	80.44897959	80	0.048	5.829931973	6	0.088
814	Calibration	MCJC57	SB	10342-10046	1253	1266	0.372	Yes	Yes	1147.430189	1161	0.393	Yes	Yes	91.64716981	92	0.017	13.66415094	13	0.083
815	Calibration	MCJC57	WB	10050-10067	88	115	2.715	Yes	Yes	79.21088435	105	2.698	Yes	Yes	7.727891156	9	0.393	0.965986395	1	0.313
816	Calibration	MCJC57	EB	10067-10051	174	176	0.122	Yes	Yes	165	167	0.136	Yes	Yes	8	8	0.000	1	1	0.144
819	Calibration	MCJC57	EB	10046-10064	157	175	1.364	Yes	Yes	145	163	1.416	Yes	Yes	9	9	0.000	3	3	0.002
820	Calibration	MCJC57	WB	10064-10047	317	330	0.707	Yes	Yes	297.7075472	306	0.492	Yes	Yes	19.5509434	22	0.552	0	2	1.816
821	Calibration	MCJC58	SB	20020-30334	14	16	0.400	Yes	Yes	12.57410178	13	0.221	Yes	Yes	1.508892214	2	0.371	0	0	0.715
822	Calibration	MCJC58	NB	30334-20020	11	21	2.515	Yes	Yes	8.047425139	19	2.917	Yes	Yes	3.017784427	2	0.636	0	0	0.926
825	Calibration	MCJC58	SB	20020-20019	336	332	0.193	Yes	Yes	284.1747002	280	0.223	Yes	Yes	46.77565862	47	0.025	5.029640712	5	0.020
826	Calibration	MCJC58	NB	20019-20020	578	528	2.106	Yes	Yes	507.9937119	466	1.917	Yes	Yes	61.36161669	56	0.756	8.550389211	7	0.519
827	Calibration	MCJC58	SB	20020-20021	130	131	0.119	Yes	Yes	112.663952	114	0.110	Yes	Yes	15.59188621	16	0.103	1.508892214	1	0.177
828	Calibration	MCJC58	NB	20021-20020	158	208	3.649	Yes	Yes	142.3388322	184	3.273	Yes	Yes	15.08892214	21	1.435	1.005928142	2	1.101
841	Calibration	MCJC60	NB	10385-30487	384	494	5.287	No	No	345.6407285	456	5.496	No	No	36	36	0.000	2	3	0.496
842	Calibration	MCJC60	SB	30487-10043	11	13	0.685	Yes	Yes	8	11	0.976	Yes	Yes	2	2	0.000	1	0	0.745
843	Calibration	MCJC60	SB	10385-10344	576	526	2.130	Yes	Yes	530.6688742	483	2.125	Yes	Yes	39.94701987	39	0.231	5.743377483	5	0.315
844	Calibration	MCJC60	NB	10344-10385	860	864	0.141	Yes	Yes	777	781	0.145	Yes	Yes	74	74	0.001	9	9	0.030
853	Calibration	MCJC62	SB	10042-10041	298	297	0.056	Yes	Yes	269.5887422	270	0.024	Yes	Yes	24.14227542	22	0.406	4.02371257	5	0.280
854	Calibration	MCJC62	NB	10041-10042	516	513	0.102	Yes	Yes	455.1824845	463	0.362	Yes	Yes	54.32011969	44	1.454	6.035568855	6	0.056
855	Calibration	MCJC62	WB	10042-31178	335	346	0.573	Yes	Yes	297.7547302	309	0.626	Yes	Yes	33.1956287	33	0.032	4.02371257	4	0.073
857	Calibration	MCJC62	WB	10042-10458	623	610	0.528	Yes	Yes	562.3138316	563	0.019	Yes	Yes	51.80529934	40	1.818	8.550389211	7	0.448
858	Calibration	MCJC62	NB	10458-10042	432	436	0.208	Yes	Yes	386.2764067	390	0.205	Yes	Yes	39.73416163	40	0.041	6.035568855	6	0.010
859	Calibration	MCJC62	SB	10042-30354	170	147	1.821	Yes	Yes	150.8892214	128	1.948	Yes	Yes	17.60374249	18	0.042	1.508892214	1	0.092



860	Calibration	MCJC62	WB	30354-10042	478	449	1.321	Yes	Yes	439.0876342	416	1.114	Yes	Yes	32.69266463	28	0.780	6.035568855	5	0.468
861	Calibration	MCJC63	NB	30021-31179	185	226	2.882	Yes	Yes	175.0314968	216	2.896	Yes	Yes	9.053353282	10	0.237	0.502964071	1	0.127
862	Calibration	MCJC63	SB	31179-30021	150	146	0.332	Yes	Yes	133.7884429	130	0.327	Yes	Yes	15.08892214	15	0.020	1.508892214	1	0.174
863	Calibration	MCJC63	WB	30021-30582	440	390	2.439	Yes	Yes	403.8801492	357	2.402	Yes	Yes	30.68080834	29	0.354	5.029640712	4	0.420
864	Calibration	MCJC63	EB	30582-30021	202	203	0.055	Yes	Yes	178.5522453	179	0.061	Yes	Yes	21.12449099	21	0.027	2.514820356	3	0.054
865	Calibration	MCJC63	EB	30021-30356	348	349	0.063	Yes	Yes	307.8140116	309	0.086	Yes	Yes	36.21341313	36	0.036	4.02371257	4	0.060
866	Calibration	MCJC63	WB	30356-30021	620	616	0.159	Yes	Yes	574.3849693	572	0.081	Yes	Yes	39.73416163	39	0.194	5.532604783	5	0.358
867	Calibration	MCJC64	NB	10040-30584	224	235	0.702	Yes	Yes	209.7360177	218	0.553	Yes	Yes	14.08299399	16	0.537	0.502964071	1	0.548
868	Calibration	MCJC64	SB	30584-10040	95	98	0.293	Yes	Yes	81.98314361	85	0.283	Yes	Yes	12.57410178	13	0.075	0.502964071	1	0.029
869	Calibration	MCJC64	SB	10040-10394	326	329	0.122	Yes	Yes	292.7250894	294	0.074	Yes	Yes	30.17784427	31	0.192	3.520748499	3	0.066
870	Calibration	MCJC64	NB	10394-10040	445	410	1.695	Yes	Yes	407.9038618	373	1.780	Yes	Yes	29.6748802	30	0.060	7.041496997	7	0.068
871	Calibration	MCJC64	SB	10040-31179	150	151	0.069	Yes	Yes	133.2854789	134	0.055	Yes	Yes	15.59188621	16	0.105	1.508892214	1	0.174
872	Calibration	MCJC64	NB	31179-10040	185	225	2.824	Yes	Yes	174.5285327	214	2.851	Yes	Yes	9.556317353	10	0.139	0.502964071	1	0.291
873	Calibration	MCJC64	NB	10040-10451	454	449	0.222	Yes	Yes	418.4661073	417	0.091	Yes	Yes	29.17191613	26	0.528	6.538532926	6	0.033
874	Calibration	MCJC64	SB	10451-10040	431	432	0.036	Yes	Yes	389.7971552	391	0.050	Yes	Yes	37.21934127	37	0.039	4.02371257	4	0.005
875	Calibration	MCJC65	NB	10039-30049	458	378	3.904	Yes	Yes	416.454251	343	3.744	Yes	Yes	36.7163772	30	1.221	5.029640712	5	0.073
876	Calibration	MCJC65	SB	30049-10039	603	523	3.366	Yes	Yes	532.6389514	460	3.277	Yes	Yes	59.3497604	53	0.905	11.06520957	11	0.035
877	Calibration	MCJC65	WB	10039-10418	460	456	0.179	Yes	Yes	418.4661073	418	0.035	Yes	Yes	37.72230534	34	0.543	4.02371257	4	0.070
878	Calibration	MCJC65	EB	10418-10039	495	494	0.056	Yes	Yes	463.2299096	462	0.076	Yes	Yes	25.65116763	26	0.071	6.035568855	6	0.010
879	Calibration	MCJC65	EB	10039-10390	748	745	0.131	Yes	Yes	676.9896399	674	0.118	Yes	Yes	57.84086819	58	0.024	13.58002992	13	0.084
880	Calibration	MCJC65	WB	10390-10039	569	563	0.257	Yes	Yes	516.0411371	514	0.093	Yes	Yes	47.27862269	43	0.608	5.532604783	6	0.038
881	Calibration	MCJC66	NB	10038-30878	407	414	0.312	Yes	Yes	363.1400594	366	0.143	Yes	Yes	38.22526941	42	0.564	6.035568855	6	0.014
882	Calibration	MCJC66	SB	30878-10038	264	264	0.042	Yes	Yes	241.9257183	243	0.081	Yes	Yes	14.08299399	14	0.060	7.544461068	7	0.303
883	Calibration	MCJC66	SB	10038-10391	402	379	1.173	Yes	Yes	356.6015265	345	0.636	Yes	Yes	35.71044906	25	1.907	10.05928142	9	0.246
884	Calibration	MCJC66	NB	10391-10038	614	578	1.492	Yes	Yes	554.2664065	518	1.571	Yes	Yes	54.82308376	55	0.022	5.029640712	5	0.046
885	Calibration	MCJC66	SB	10038-20216	654	632	0.874	Yes	Yes	581.9294304	560	0.936	Yes	Yes	56.83494005	57	0.021	15.08892214	15	0.014
886	Calibration	MCJC66	NB	20216-10038	840	840	0.015	Yes	Yes	758.9727835	760	0.037	Yes	Yes	70.41496997	70	0.052	10.5622455	10	0.052



887	Calibration	MCJC66	NB	10038-10037	682	681	0.024	Yes	Yes	611.1013465	611	0.023	Yes	Yes	62.8705089	63	0.015	7.544461068	7	0.071
888	Calibration	MCJC66	SB	10037-10038	428	423	0.211	Yes	Yes	357.6074546	360	0.103	Yes	Yes	54.32011969	48	0.882	15.59188621	16	0.002
889	Calibration	MCJC67	NB	20342-20265	799	775	0.832	Yes	Yes	708.1734123	685	0.892	Yes	Yes	75.94757475	76	0.006	14.58595807	15	0.036
890	Calibration	MCJC67	SB	20265-20342	826	801	0.877	Yes	Yes	718.2326937	693	0.945	Yes	Yes	100.0898502	100	0.008	8.047425139	8	0.059
891	Calibration	MCJC67	WB	20038-20294	365	365	0.022	Yes	Yes	328.9385026	329	0.019	Yes	Yes	31.18377242	31	0.029	4.526676641	5	0.109
892	Calibration	MCJC67	EB	20294-20038	592	593	0.038	Yes	Yes	550.745658	550	0.028	Yes	Yes	38.72823348	40	0.231	2.514820356	3	0.081
893	Calibration	MCJC67	SB	20039-20170	458	461	0.121	Yes	Yes	386.2764067	388	0.100	Yes	Yes	64.37940112	65	0.099	7.544461068	7	0.060
894	Calibration	MCJC67	NB	20170-20039	664	661	0.142	Yes	Yes	579.9175741	576	0.147	Yes	Yes	73.93571847	74	0.007	10.5622455	10	0.057
895	Calibration	MCJC67	WB	20197-20039	534	533	0.011	Yes	Yes	455.6854485	456	0.007	Yes	Yes	65.38532926	65	0.048	12.57410178	13	0.006
896	Calibration	MCJC67	EB	20039-20197	995	987	0.242	Yes	Yes	881.1930528	873	0.266	Yes	Yes	106.6283831	107	0.036	7.041496997	7	0.044
897	Calibration	MCJC68	NB	30011-30908	428	433	0.244	Yes	Yes	395.32976	400	0.230	Yes	Yes	30.68080834	31	0.057	2.011856285	2	0.106
898	Calibration	MCJC68	SB	30908-30011	187	189	0.116	Yes	Yes	166.4811076	167	0.039	Yes	Yes	19.61559878	21	0.272	1.005928142	1	0.140
899	Calibration	MCJC68	WB	30011-30586	152	153	0.078	Yes	Yes	137.8121555	138	0.053	Yes	Yes	13.58002992	14	0.108	0.502964071	0	0.102
900	Calibration	MCJC68	EB	30586-30011	259	261	0.175	Yes	Yes	236.8960775	239	0.148	Yes	Yes	20.62152692	21	0.083	1.005928142	1	0.156
901	Calibration	MCJC68	EB	30011-30879	96	98	0.150	Yes	Yes	83.49203582	84	0.083	Yes	Yes	12.07113771	13	0.218	0.502964071	0	0.070
902	Calibration	MCJC68	WB	30879-30011	230	233	0.203	Yes	Yes	213.2567662	216	0.217	Yes	Yes	16.09485028	16	0.026	1.005928142	1	0.007
903	Calibration	MCJC69	NB	20028-20263	529	525	0.195	Yes	Yes	490.3899694	486	0.210	Yes	Yes	34.70452091	35	0.048	4.02371257	4	0.064
904	Calibration	MCJC69	SB	20263-20028	576	518	2.462	Yes	Yes	500.4492509	448	2.432	Yes	Yes	65.88829333	62	0.432	9.556317353	8	0.397
905	Calibration	MCJC69	SB	20028-20027	830	784	1.632	Yes	Yes	730.3038314	684	1.736	Yes	Yes	90.03056875	90	0.006	9.556317353	9	0.044
906	Calibration	MCJC69	NB	20027-20028	738	732	0.222	Yes	Yes	650.3325441	645	0.204	Yes	Yes	77.45646697	77	0.057	10.5622455	10	0.102
907	Calibration	MCJC69	SB	20028-30871	232	232	0.039	Yes	Yes	205.7123051	205	0.017	Yes	Yes	25.14820356	25	0.030	1.508892214	1	0.174
908	Calibration	MCJC69	NB	30871-20028	417	425	0.409	Yes	Yes	385.2704786	393	0.394	Yes	Yes	29.6748802	30	0.060	2.011856285	2	0.210
909	Calibration	MCJC69	SB	20028-20049	625	622	0.112	Yes	Yes	543.2011969	542	0.066	Yes	Yes	68.40311369	68	0.052	13.07706585	12	0.232
910	Calibration	MCJC69	NB	20049-20028	485	486	0.044	Yes	Yes	433.5550294	431	0.106	Yes	Yes	45.26676641	49	0.477	6.035568855	6	0.034
911	Calibration	MCJC70	NB	20026-20251	925	922	0.107	Yes	Yes	819.9248208	816	0.128	Yes	Yes	93.57113849	94	0.042	11.6714609	12	0.001
912	Calibration	MCJC70	SB	20251-20026	681	678	0.124	Yes	Yes	587.412077	589	0.050	Yes	Yes	79.06551176	74	0.529	14.96916879	15	0.047
913	Calibration	MCJC70	WB	20026-20025	718	717	0.016	Yes	Yes	621.41211	621	0.020	Yes	Yes	87.01278432	87	0.005	9.304835317	9	0.033



914	Calibration	MCJC70	EB	20025-20026	665	665	0.019	Yes	Yes	591.4857477	590	0.041	Yes	Yes	67.64866758	68	0.035	6.28705089	6	0.080
915	Calibration	MCJC70	SB	20026-31228	315	317	0.092	Yes	Yes	274.4856015	276	0.109	Yes	Yes	34.07209934	34	0.012	6.596912684	6	0.040
916	Calibration	MCJC70	NB	31228-20026	568	553	0.638	Yes	Yes	493.2278621	489	0.208	Yes	Yes	66.71152555	57	1.236	7.983556686	7	0.281
917	Calibration	MCJC70	EB	20026-20268	734	715	0.685	Yes	Yes	644.839336	641	0.145	Yes	Yes	78.8235134	64	1.703	10.14909644	10	0.107
918	Calibration	MCJC70	WB	20268-20026	777	775	0.061	Yes	Yes	688.5361814	687	0.064	Yes	Yes	80.05383066	80	0.010	8.482528979	9	0.023
921	Calibration	MCJC71	NB	20025-20309	627	623	0.136	Yes	Yes	548.972739	548	0.038	Yes	Yes	69.42172159	67	0.313	8.150597257	8	0.023
922	Calibration	MCJC71	SB	20309-20025	336	335	0.010	Yes	Yes	286.9643986	287	0.027	Yes	Yes	44.6513572	45	0.052	3.964540326	4	0.035
923	Calibration	MCJC71	SB	20025-20062	610	608	0.079	Yes	Yes	514.0847519	513	0.055	Yes	Yes	86.39147576	86	0.046	9.678834242	9	0.085
924	Calibration	MCJC71	NB	20062-20025	847	845	0.087	Yes	Yes	752.217324	752	0.021	Yes	Yes	85.82983106	84	0.223	9.415783274	10	0.032
925	Calibration	MCJC71	SB	20025-30410	283	282	0.046	Yes	Yes	253.4509655	252	0.071	Yes	Yes	27.76868864	28	0.042	2.037649314	2	0.090
926	Calibration	MCJC71	NB	30410-20025	285	281	0.209	Yes	Yes	247.4003716	245	0.178	Yes	Yes	33.73658099	33	0.126	3.468972785	3	0.003
933	Calibration	MCJC73	NB	30180-30181	215	214	0.068	Yes	Yes	179.0552094	178	0.101	Yes	Yes	29.6748802	30	0.060	6.035568855	6	0.010
934	Calibration	MCJC73	SB	30181-30180	147	147	0.043	Yes	Yes	125.2380537	124	0.087	Yes	Yes	19.61559878	20	0.084	2.514820356	3	0.046
935	Calibration	MCJC73	NB	30180-30178	155	151	0.311	Yes	Yes	120.208413	120	0.014	Yes	Yes	27.16005985	27	0.031	7.544461068	4	1.473
936	Calibration	MCJC73	SB	30178-30180	369	370	0.036	Yes	Yes	304.5447451	305	0.029	Yes	Yes	58.84679633	59	0.021	6.035568855	6	0.010
945	Calibration	MCJC74	SB	30178-30179	98	94	0.383	Yes	Yes	74.43868254	74	0.052	Yes	Yes	17.60374249	18	0.092	5.532604783	2	1.921
946	Calibration	MCJC74	NB	30179-30178	195	195	0.020	Yes	Yes	154.9129339	155	0.009	Yes	Yes	35.71044906	36	0.048	4.02371257	4	0.064
959	Calibration	MCJC77	NB	10370-10657	537	560	0.974	Yes	Yes	457.5098684	458	0.005	Yes	Yes	67.125	90	2.543	12.36513158	13	0.054
960	Calibration	MCJC77	SB	10657-10370	516	532	0.718	Yes	Yes	465.0118577	473	0.375	Yes	Yes	41.81027668	49	1.135	9.177865613	10	0.206
961	Calibration	MCJC77	SB	10370-10656	596	582	0.578	Yes	Yes	528.9051383	512	0.739	Yes	Yes	56.7312253	59	0.340	10.17786561	10	0.078
962	Calibration	MCJC77	NB	10656-10370	700	648	1.999	Yes	Yes	597.2467105	545	2.186	Yes	Yes	89.70888158	90	0.030	13.36513158	13	0.015
963	Calibration	MCJC77	SB	10370-30912	257	193	4.244	Yes	Yes	225.1067194	189	2.530	Yes	Yes	31.07905138	4	6.569	1	1	0.072
964	Calibration	MCJC77	NB	30912-10370	174	163	0.855	Yes	Yes	149.2631579	148	0.071	Yes	Yes	23.41611842	13	2.353	1	1	0.139
965	Calibration	MCJC78	NB	30029-31045	448	448	0.017	Yes	Yes	376.2171253	376	0.018	Yes	Yes	64.88236519	65	0.012	7.041496997	7	0.044
966	Calibration	MCJC78	SB	31045-30029	411	412	0.019	Yes	Yes	360.6252391	361	0.000	Yes	Yes	44.76380234	45	0.035	6.035568855	6	0.057
967	Calibration	MCJC78	NB	30029-31089	256	255	0.029	Yes	Yes	229.3516165	228	0.060	Yes	Yes	23.63931135	24	0.074	2.514820356	3	0.052
968	Calibration	MCJC78	SB	31089-30029	152	152	0.046	Yes	Yes	132.2795507	132	0.028	Yes	Yes	19.11263471	19	0.026	1.005928142	1	0.145



APPENDIX E

VALIDATION RESULTS



AM Validation:

					AM Peak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
1	Validation	ATC001	NB	20058-20057	153	148	0.402	Yes	Yes	110.7918079	107	0.319	Yes	Yes	30.15635008	24	1.220	11.8003109	17	1.260
2	Validation	ATC001	SB	20057-20058	172	220	3.422	Yes	Yes	138.1844475	192	4.172	Yes	Yes	20.22211428	20	0.059	13.48140952	8	1.841
5	Validation	ATC003	NB	20228-31409	78	107	3.081	Yes	Yes	56.21322057	91	4.019	Yes	Yes	15.30063992	11	1.047	5.987206925	5	0.431
6	Validation	ATC003	SB	31409-20228	211	237	1.688	Yes	Yes	169.8243393	212	3.034	Yes	Yes	24.85234234	18	1.539	16.56822823	7	2.778
7	Validation	ATC004	NB	10199-10200	616	616	0.009	Yes	Yes	372.1060508	372	0.013	Yes	Yes	117.6511778	118	0.032	125.8593995	126	0.011
8	Validation	ATC004	SB	10200-10199	684	685	0.028	Yes	Yes	451.5135856	452	0.020	Yes	Yes	102.8872766	103	0.011	130.0971348	130	0.018
9	Validation	ATC005	NB	30678-30680	118	79	3.864	Yes	Yes	96.21036995	70	2.863	Yes	Yes	18.80475413	7	3.205	2.62391918	2	0.441
10	Validation	ATC005	SB	30680-30678	112	87	2.522	Yes	Yes	100.3793195	77	2.434	Yes	Yes	9.36873649	4	1.880	2.409103669	5	1.401
21	Validation	ATC011	SB	20139-20140	208	231	1.602	Yes	Yes	185.3422602	185	0.051	Yes	Yes	18.10670656	34	3.092	4.275194605	13	2.953
22	Validation	ATC011	NB	20140-20139	214	207	0.524	Yes	Yes	166.0928347	158	0.670	Yes	Yes	30.88503125	37	0.994	17.15835069	12	1.265
23	Validation	ATC012	SE	20132-30312	29	36	1.160	Yes	Yes	23.80224337	27	0.646	Yes	Yes	3.400320481	8	1.822	2.125200301	1	0.711
24	Validation	ATC012	NW	30312-20132	20	41	3.800	Yes	Yes	16.97249718	39	4.094	Yes	Yes	2.044879178	3	0.314	1.226927507	0	1.109
29	Validation	ATC015	SB	30293-30295	178	128	4.020	Yes	Yes	137.1257858	104	2.985	Yes	Yes	33.9981287	17	3.260	6.79962574	6	0.155
30	Validation	ATC015	NB	30295-30293	139	180	3.276	Yes	Yes	110.923582	140	2.612	Yes	Yes	24.56165029	35	1.876	3.169245199	5	0.919
31	Validation	ATC016	SW	30222-30603	48	62	1.813	Yes	Yes	39.94582567	36	0.607	Yes	Yes	6.521767457	21	3.807	1.630441864	5	1.768
32	Validation	ATC016	NE	30603-30222	24	51	4.526	Yes	Yes	21.96078738	28	1.210	Yes	Yes	1.552782946	23	6.058	0	1	1.049
33	Validation	ATC017	EB	10170-10166	1329	1432	2.765	Yes	Yes	940.8228155	1043	3.246	Yes	Yes	228.536355	216	0.823	160.0643732	173	0.992
34	Validation	ATC017	WB	10166-10170	1432	1328	2.801	Yes	Yes	1015.36498	938	2.467	Yes	Yes	249.1266959	233	1.066	167.7386917	157	0.818
35	Validation	ATC018	WB	30208-30655	28	21	1.305	Yes	Yes	22.55532432	11	2.770	Yes	Yes	4.748489331	9	1.761	0.395707444	1	0.319
36	Validation	ATC018	EB	30655-30208	41	52	1.667	Yes	Yes	33.87169699	41	1.156	Yes	Yes	5.806576627	10	1.596	0.967762771	1	0.281
37	Validation	ATC019	SE	30249-30272	26	80	7.367	No	Yes	21.53096808	71	7.272	No	Yes	4.532835385	7	0.872	0.377736282	3	1.855
38	Validation	ATC019	NW	30272-30249	25	29	0.896	Yes	Yes	20.59757625	25	0.896	Yes	Yes	3.531013071	3	0.147	0.588502179	1	0.687



39	Validation	ATC020	WB	30167-30259	77	62	1.880	Yes	Yes	63.08953034	53	1.264	Yes	Yes	13.28200639	4	3.038	1.106833866	4	1.843
40	Validation	ATC020	EB	30259-30167	72	96	2.590	Yes	Yes	60.38361785	81	2.469	Yes	Yes	10.35147734	11	0.303	1.725246224	4	1.221
41	Validation	ATC021	EB	30264-30265	40	22	3.212	Yes	Yes	33.1583721	13	4.209	Yes	Yes	3.725659787	6	1.015	3.353093808	3	0.008
42	Validation	ATC021	WB	30265-30264	44	12	5.930	No	Yes	30.91243653	9	4.945	Yes	Yes	6.869430341	3	1.912	5.724525284	1	2.836
43	Validation	ATC022	SW	30279-30280	30	38	1.459	Yes	Yes	24.26622014	24	0.005	Yes	Yes	5.108677923	10	1.644	0.42572316	5	2.602
44	Validation	ATC022	NE	30280-30279	32	56	3.543	Yes	Yes	26.82475046	36	1.647	Yes	Yes	4.598528651	18	3.900	0.766421442	2	1.063
47	Validation	ATC024	NW	10122-10123	132	112	1.812	Yes	Yes	96.59860515	89	0.828	Yes	Yes	26.20892388	20	1.241	8.985916758	3	2.476
48	Validation	ATC024	SE	10123-10122	192	188	0.270	Yes	Yes	159.8748285	157	0.218	Yes	Yes	21.94360391	19	0.750	10.18810181	13	0.709
53	Validation	ATC027	NB	20273-20034	157	99	5.149	No	Yes	122.7330569	73	4.978	Yes	Yes	30.99319619	25	1.141	3.719183542	1	1.999
54	Validation	ATC027	SB	20034-20273	460	387	3.577	Yes	Yes	414.9206714	342	3.773	Yes	Yes	42.33884402	42	0.034	3.024203144	3	0.006
55	Validation	ATC028	NB	10086-10470	709	748	1.430	Yes	Yes	447.1779096	494	2.139	Yes	Yes	131.9376265	123	0.800	129.9233116	131	0.109
56	Validation	ATC028	SB	10470-10086	866	873	0.252	Yes	Yes	548.4374467	621	3.008	Yes	Yes	144.0904901	109	3.101	173.1319842	143	2.420
59	Validation	ATC030	NE	10116-10117	566	560	0.232	Yes	Yes	443.911005	345	5.004	No	Yes	92.6422967	145	4.811	29.33672729	71	5.853
60	Validation	ATC030	SW	10117-10116	761	739	0.787	Yes	Yes	440.713923	551	4.972	Yes	No	243.0922036	136	7.760	76.95005005	52	3.174
61	Validation	ATC031	EB	30057-30056	107	138	2.717	Yes	Yes	86.66052657	105	1.861	Yes	Yes	12.94025962	22	2.244	7.84258159	10	0.806
62	Validation	ATC031	WB	30056-30057	199	233	2.286	Yes	Yes	169.2311891	206	2.687	Yes	Yes	23.71096331	15	1.864	6.508891888	12	1.685
63	Validation	ATC032	EB	20186-20047	86	119	3.281	Yes	Yes	53.05858686	67	1.855	Yes	Yes	22.18813632	33	2.046	10.61171737	19	2.108
64	Validation	ATC032	WB	20047-20186	134	118	1.464	Yes	Yes	118.256672	92	2.597	Yes	Yes	12.63196269	23	2.466	3.493947126	3	0.137
77	Validation	ATC039	NE	10213-20330	126	181	4.426	Yes	Yes	105.5770064	168	5.346	No	Yes	14.79098157	8	2.173	6.120406168	6	0.149
78	Validation	ATC039	SW	20330-10213	145	155	0.820	Yes	Yes	98.29476214	69	3.154	Yes	Yes	36.97325916	52	2.221	9.919654895	34	5.148
107	Validation	ATC055	EB	30159-31416	109	130	1.881	Yes	Yes	77.45977594	112	3.521	Yes	Yes	17.21328354	9	2.192	14.34440295	9	1.688
108	Validation	ATC055	WB	31416-30159	80	97	1.851	Yes	Yes	65.79864464	62	0.438	Yes	Yes	7.393106139	33	5.642	6.653795525	2	2.033
111	Validation	ATC057	NB	20053-30453	135	89	4.420	Yes	Yes	99.95822746	81	1.958	Yes	Yes	26.49495186	6	5.180	9.032369951	2	3.190
112	Validation	ATC057	SB	30453-20053	190	121	5.597	No	Yes	167.0707431	112	4.652	Yes	Yes	15.12574629	6	2.759	8.250407068	2	2.536
139	Validation	ATC071	NB	10110-10455	626	527	4.120	Yes	Yes	562.3152666	465	4.283	Yes	Yes	45.20219185	50	0.733	18.08087674	11	1.796
140	Validation	ATC071	SB	10455-10110	363	363	0.026	Yes	Yes	296.5634802	297	0.042	Yes	Yes	51.39006156	51	0.055	14.98876795	15	0.042
141	Validation	ATC072	NW	30032-30988	447	445	0.090	Yes	Yes	394.3681259	393	0.082	Yes	Yes	40.22554884	40	0.036	12.61978003	13	0.019



142	Validation	ATC072	SE	30988-30032	543	541	0.124	Yes	Yes	447.7894673	447	0.035	Yes	Yes	74.96035135	73	0.257	20.71272866	21	0.014
169	Validation	ATC086	NB	30030-30029	222	250	1.794	Yes	Yes	183.0944389	211	1.984	Yes	Yes	30.35762718	29	0.207	8.538082643	9	0.279
170	Validation	ATC086	SB	30029-30030	327	331	0.255	Yes	Yes	275.360022	284	0.536	Yes	Yes	37.31985647	34	0.518	14.12102677	13	0.337
171	Validation	ATC087	NE	10657-10416	489	495	0.292	Yes	Yes	401.5621441	403	0.055	Yes	Yes	63.64042908	67	0.396	23.30494586	25	0.443
172	Validation	ATC087	SW	10416-10657	431	431	0.014	Yes	Yes	353.8144231	340	0.762	Yes	Yes	57.01967976	63	0.742	19.73758146	28	1.779
187	Validation	ATC095	EB	10426-10487	715	690	0.941	Yes	Yes	600.6861634	572	1.173	Yes	Yes	81.95890657	86	0.463	32.16108992	31	0.135
188	Validation	ATC095	WB	10487-10426	498	565	2.906	Yes	Yes	384.4968431	413	1.445	Yes	Yes	86.33610575	114	2.758	27.10552157	38	1.852
191	Validation	ATC097	NW	20169-20168	224	171	3.770	Yes	Yes	174.4715563	129	3.677	Yes	Yes	44.05847382	38	0.998	5.287016858	4	0.589
192	Validation	ATC097	SE	20168-20169	592	598	0.243	Yes	Yes	533.6952418	531	0.106	Yes	Yes	54.45869814	63	1.147	3.88990701	3	0.223
193	Validation	ATC098	NB	20339-20304	445	456	0.539	Yes	Yes	377.0426902	376	0.060	Yes	Yes	52.66385754	63	1.355	15.26488624	18	0.566
194	Validation	ATC098	SB	20304-20339	758	708	1.858	Yes	Yes	668.6171572	642	1.026	Yes	Yes	75.20655235	53	2.809	14.42317442	13	0.424
199	Validation	ATC101	EB	30419-30420	329	258	4.159	Yes	Yes	271.7038529	224	3.026	Yes	Yes	48.73611712	29	3.115	8.528820496	4	1.625
200	Validation	ATC101	WB	30420-30419	449	441	0.401	Yes	Yes	406.4254924	380	1.355	Yes	Yes	35.86107286	54	2.690	7.172214572	8	0.138
201	Validation	ATC102	WB	20312-20311	575	563	0.503	Yes	Yes	410.0601129	431	1.026	Yes	Yes	139.8654649	111	2.591	25.43008452	21	0.836
202	Validation	ATC102	EB	20311-20312	286	286	0.009	Yes	Yes	232.848345	221	0.776	Yes	Yes	41.99586222	54	1.756	11.22661663	11	0.097
215	Validation	ATC109	NB	20214-31428	438	434	0.158	Yes	Yes	402.310696	402	0.037	Yes	Yes	24.46483962	22	0.550	10.87326205	11	0.028
216	Validation	ATC109	SB	31428-20214	220	205	1.067	Yes	Yes	176.3933531	167	0.689	Yes	Yes	30.44352288	27	0.560	13.43096597	10	1.026
221	Validation	ATC112	NE	30346-30807	316	284	1.848	Yes	Yes	281.7282728	260	1.310	Yes	Yes	29.68401342	22	1.552	4.857384014	2	1.361
222	Validation	ATC112	SW	30807-30346	329	269	3.446	Yes	Yes	277.9944431	232	2.893	Yes	Yes	37.00575379	29	1.466	13.53869041	9	1.501
225	Validation	ATC114	EB	20006-20276	466	524	2.618	Yes	Yes	392.1297422	420	1.359	Yes	Yes	49.86132498	84	4.142	23.66300168	21	0.635
226	Validation	ATC114	WB	20276-20006	686	686	0.022	Yes	Yes	564.2208717	598	1.381	Yes	Yes	98.5813419	75	2.569	23.07222896	14	2.040
227	Validation	ATC115	NW	20341-20075	383	327	2.971	Yes	Yes	342.827375	277	3.736	Yes	Yes	35.94865058	44	1.255	4.383981778	6	0.803
228	Validation	ATC115	SE	20075-20341	359	379	1.043	Yes	Yes	302.8547858	342	2.197	Yes	Yes	47.77655712	31	2.606	8.097721547	5	1.182
239	Validation	ATC121	EB	20328-20066	36	32	0.758	Yes	Yes	32.07511586	23	1.748	Yes	Yes	3.200701583	8	1.944	0.681000337	1	0.238
240	Validation	ATC121	WB	20066-20328	21	21	0.050	Yes	Yes	17.96135456	17	0.203	Yes	Yes	2.644310533	4	0.530	0.598711819	1	0.178
241	Validation	ATC122	EB	31364-30025	517	554	1.592	Yes	Yes	434.8696538	460	1.209	Yes	Yes	67.38900204	66	0.222	14.7413442	28	2.832
242	Validation	ATC122	WB	30025-31364	552	459	4.156	Yes	Yes	471.1034483	387	4.082	Yes	Yes	59.00689655	46	1.820	21.88965517	26	0.873



245	Validation	ATC124	EB	20069-30083	78	61	2.024	Yes	Yes	69.43613575	44	3.419	Yes	Yes	6.928871295	16	2.567	1.474227935	2	0.200
246	Validation	ATC124	WB	30083-20069	99	75	2.600	Yes	Yes	83.99269272	54	3.557	Yes	Yes	12.36559087	17	1.243	2.799756424	3	0.319
247	Validation	ATC125	EB	30592-30076	10	8	0.801	Yes	Yes	9.017139869	5	1.385	Yes	Yes	1.252380537	2	0.843	0.166984072	0	0.281
248	Validation	ATC125	WB	30076-30592	83	74	1.026	Yes	Yes	76.605297	65	1.354	Yes	Yes	6.38377475	7	0.212	0	2	1.882
249	Validation	ATC126	EB	31113-30079	107	130	2.154	Yes	Yes	98.54226841	111	1.188	Yes	Yes	8.211855701	17	2.508	0	2	2.176
250	Validation	ATC126	WB	30079-31113	32	33	0.168	Yes	Yes	28.02918176	28	0.015	Yes	Yes	3.892941911	5	0.357	0.519058921	1	0.192
272	Validation	ATC139	EB	10431-10389	790	791	0.049	Yes	Yes	672.573975	677	0.175	Yes	Yes	83.94972692	81	0.353	33.18942692	33	0.005
273	Validation	ATC139	WB	10389-10431	422	496	3.422	Yes	Yes	328.9537607	378	2.616	Yes	Yes	68.9080197	88	2.122	24.61000704	30	1.028
274	Validation	ATC140	EB	30634-20019	86	104	1.845	Yes	Yes	86.38407923	75	1.212	Yes	Yes	0	25	7.072	0	4	2.796
275	Validation	ATC140	WB	20019-30634	81	112	3.203	Yes	Yes	66.11832315	106	4.254	Yes	Yes	11.59970582	3	2.994	2.899926454	3	0.128
278	Validation	ATC142	NW	31235-31234	87	33	6.935	No	Yes	86.50982025	29	7.487	No	Yes	0	2	2.078	0	1	1.593
279	Validation	ATC142	SE	31234-31235	41	78	4.819	Yes	Yes	33.41273549	74	5.505	No	Yes	5.86188342	4	0.873	1.465470855	0	1.362
280	Validation	ATC143	EB	30411-31240	21	2	5.448	No	Yes	17.9948447	0	5.989	No	Yes	2.869256734	2	0.257	0.354229226	0	0.842
281	Validation	ATC143	WB	31240-30411	154	142	0.967	Yes	Yes	140.5877475	122	1.664	Yes	Yes	11.19725422	14	0.720	2.073565597	7	2.249
282	Validation	ATC144	NB	30022-30859	143	87	5.250	No	Yes	123.1190678	67	5.814	No	Yes	13.34504724	17	0.967	6.535884913	3	1.563
283	Validation	ATC144	SB	30859-30022	375	365	0.504	Yes	Yes	322.9940434	311	0.676	Yes	Yes	46.83777155	48	0.228	5.168185004	6	0.324
284	Validation	ATC145	NB	30412-30861	25	17	1.843	Yes	Yes	25.14820356	15	2.326	Yes	Yes	0	2	1.772	0	0	0.878
285	Validation	ATC145	SB	30861-30412	52	29	3.540	Yes	Yes	42.281548	23	3.359	Yes	Yes	7.417815439	5	0.975	1.85445386	1	0.707
286	Validation	ATC146	NB	30013-31227	305	212	5.791	No	Yes	305.1734502	193	7.114	No	No	0	17	5.757	0	3	2.264
287	Validation	ATC146	SB	31227-30013	411	321	4.715	Yes	Yes	336.9117496	280	3.266	Yes	Yes	59.10732448	35	3.587	14.77683112	6	2.542
288	Validation	ATC147	NE	31225-30583	190	176	1.036	Yes	Yes	166.6068486	154	1.017	Yes	Yes	21.10353415	21	0.005	2.221424648	1	0.859
289	Validation	ATC147	SW	30583-31225	250	267	1.022	Yes	Yes	231.417875	228	0.222	Yes	Yes	12.45297982	34	4.428	6.22648991	5	0.635
290	Validation	ATC148	EB	30017-30018	412	375	1.864	Yes	Yes	379.8870006	338	2.199	Yes	Yes	26.29986927	30	0.728	5.844415394	7	0.329
291	Validation	ATC148	WB	30018-30017	248	131	8.536	No	No	213.1952001	117	7.487	No	Yes	30.89785508	6	5.676	4.119714011	7	1.343
294	Validation	ATC150	WB	30422-10344	89	111	2.160	Yes	Yes	75.88590998	98	2.374	Yes	Yes	11.27018465	7	1.555	2.25403693	6	1.992
295	Validation	ATC151	EB	20310-20240	325	302	1.306	Yes	Yes	276.3618779	249	1.719	Yes	Yes	44.34459932	46	0.184	4.75120707	8	1.361
296	Validation	ATC150	WB	20240-20310	393	374	0.952	Yes	Yes	320.976646	320	0.060	Yes	Yes	54.08397698	39	2.230	17.63607945	15	0.582



297	Validation	ATC152	EB	30423-30626	117	57	6.502	No	Yes	106.7846348	48	6.632	No	Yes	8.508044074	7	0.523	1.909969078	1	0.597
298	Validation	ATC152	WB	30626-30423	150	174	1.883	Yes	Yes	127.5551334	125	0.226	Yes	Yes	18.9438317	41	4.090	3.788766339	8	1.684
299	Validation	ATC153	EB	31253-30350	12	37	5.002	No	Yes	10.13039014	26	3.677	Yes	Yes	1.674089896	10	3.366	0.300477674	1	1.238
300	Validation	ATC153	WB	30350-31253	68	64	0.461	Yes	Yes	62.03174666	47	2.091	Yes	Yes	4.380773069	14	3.205	1.401847382	3	1.251
301	Validation	ATC154	EB	31067-31069	38	77	5.081	No	Yes	34.10575416	69	4.846	Yes	Yes	3.31583721	4	0.594	0.94738206	4	1.750
302	Validation	ATC154	WB	31069-31067	20	8	3.190	Yes	Yes	18.07249132	6	3.523	Yes	Yes	1.698542417	1	0.248	0.20382509	1	0.808
307	Validation	ATC157	NB	20155-20067	1038	1200	4.840	Yes	No	882.9344982	990	3.514	Yes	Yes	114.6847627	187	5.920	40.07057973	22	3.316
308	Validation	ATC157	SB	20067-20336	586	741	5.997	No	No	483.3838823	588	4.517	Yes	No	87.36545792	125	3.658	15.51886424	28	2.628
325	Validation	LEB016	EB	10036-10035	449	422	1.282	Yes	Yes	348.0511373	331	0.901	Yes	Yes	62.36754483	60	0.267	38.22526941	30	1.376
326	Validation	LEB016	WB	10035-10036	500	472	1.287	Yes	Yes	426.5135324	406	0.990	Yes	Yes	56.33197598	58	0.164	17.10077842	8	2.672
329	Validation	LEB018	EB	20308-10690	377	366	0.571	Yes	Yes	258.0205685	242	0.989	Yes	Yes	94.55724539	100	0.513	24.64523949	24	0.081
330	Validation	LEB018	WB	10690-20308	1105	1100	0.148	Yes	Yes	966.1939808	957	0.295	Yes	Yes	112.663952	117	0.420	26.1541317	26	0.054
331	Validation	LEB019	EB	20282-10689	203	203	0.003	Yes	Yes	140.2570516	123	1.540	Yes	Yes	38.62150696	60	2.992	24.39253071	21	0.686
332	Validation	LEB019	WB	10689-20282	526	500	1.115	Yes	Yes	439.592482	380	2.937	Yes	Yes	73.26541367	109	3.754	12.87095105	11	0.469
366	Validation	LincsLab_FC032	WB	10083-14202	473	527	2.414	Yes	Yes	382.808786	432	2.419	Yes	Yes	78.2082466	79	0.089	12.34867052	17	1.155
367	Validation	LincsLab_FC032	EB	14201-10083	293	361	3.720	Yes	Yes	198.6077841	255	3.773	Yes	Yes	72.03391134	79	0.794	22.63922928	26	0.711
368	Validation	LincsLab_FC032	SB	31387-14201	431	405	1.290	Yes	Yes	385.8959536	365	1.089	Yes	Yes	36.01695567	34	0.262	9.261502887	6	1.369
369	Validation	LincsLab_FC032	NB	14200-31387	277	225	3.276	Yes	Yes	226.3922928	184	2.973	Yes	Yes	44.24940268	38	0.921	6.174335258	3	1.602
370	Validation	LincsLab_FC032	NEB	14198-14199	550	585	1.509	Yes	Yes	409.5642388	439	1.442	Yes	Yes	112.1670905	117	0.476	27.78450866	29	0.216
371	Validation	LincsLab_FC032	SWB	14203-14198	884	932	1.600	Yes	Yes	753.2689015	796	1.551	Yes	Yes	110.1089788	113	0.317	20.58111753	22	0.368
436	Validation	MCJC04	NB	30031-31423	319	305	0.803	Yes	Yes	264.2731162	266	0.089	Yes	Yes	42.11523765	27	2.539	12.63457129	12	0.197
437	Validation	MCJC04	SB	31423-30031	178	164	1.040	Yes	Yes	129.2790472	121	0.777	Yes	Yes	33.72496883	33	0.167	14.61415316	11	1.109
440	Validation	MCJC04	EB	30031-31424	233	260	1.699	Yes	Yes	191.1475269	209	1.229	Yes	Yes	32.38275657	37	0.761	9.562093505	14	1.394
441	Validation	MCJC04	WB	31424-30031	308	333	1.355	Yes	Yes	259.1741012	288	1.737	Yes	Yes	37.33088483	29	1.364	11.74013765	15	0.930
446	Validation	MCJC05	SB	30027-30037	179	160	1.435	Yes	Yes	158.9681133	157	0.187	Yes	Yes	13.72272431	1	4.522	5.977346851	2	1.954
447	Validation	MCJC05	NB	30037-30027	292	214	4.917	Yes	Yes	241.2559394	185	3.867	Yes	Yes	42.54380561	27	2.574	8.649167726	2	2.859
460	Validation	MCJC08	NB	30161-30163	219	164	3.955	Yes	Yes	170.2970741	127	3.550	Yes	Yes	40.18245569	30	1.656	8.610526219	7	0.590



461	Validation	MCJC08	SB	30163-30161	103	103	0.027	Yes	Yes	84.31732194	84	0.041	Yes	Yes	16.86346439	17	0.033	2.199582311	2	0.024
464	Validation	MCJC08	SB	30161-30169	94	122	2.775	Yes	Yes	75.2021367	99	2.536	Yes	Yes	14.68440125	21	1.532	3.631780375	2	0.760
465	Validation	MCJC08	NB	30169-30161	218	181	2.611	Yes	Yes	170.0630835	143	2.191	Yes	Yes	41.3176003	34	1.263	6.595091534	5	0.732
466	Validation	MCJC08	EB	30161-31326	30	5	5.929	No	Yes	26.32074784	4	5.839	No	Yes	3.059250261	1	1.080	0.726356075	0	1.071
467	Validation	MCJC08	WB	31326-30161	25	7	4.536	Yes	Yes	19.69151494	6	3.905	Yes	Yes	1.796417404	0	1.895	3.768623734	1	1.572
468	Validation	MCJC09	NB	30182-30180	268	310	2.439	Yes	Yes	238.4049698	269	1.946	Yes	Yes	23.13634728	29	1.128	6.538532926	11	1.573
469	Validation	MCJC09	SB	30180-30182	247	287	2.468	Yes	Yes	166.4811076	198	2.357	Yes	Yes	70.41496997	76	0.652	10.05928142	13	0.865
472	Validation	MCJC09	SB	30182-30184	59	77	2.081	Yes	Yes	48.9758589	68	2.501	Yes	Yes	8.387457188	4	1.683	2.011856285	4	1.263
473	Validation	MCJC09	NB	30184-30182	108	81	2.776	Yes	Yes	101.5786238	79	2.387	Yes	Yes	6.790014961	2	2.358	0	1	1.049
474	Validation	MCJC09	EB	30182-30183	262	211	3.334	Yes	Yes	186.9142905	130	4.505	Yes	Yes	66.05122535	72	0.695	9.053353282	9	0.104
475	Validation	MCJC09	WB	30183-30182	234	228	0.392	Yes	Yes	206.2353878	191	1.117	Yes	Yes	20.37004488	27	1.364	7.544461068	11	1.036
476	Validation	MCJC10	NB	30110-30111	286	355	3.867	Yes	Yes	249.8082192	309	3.517	Yes	Yes	28.94520548	34	0.838	7	13	1.835
477	Validation	MCJC10	SB	30111-30110	266	248	1.175	Yes	Yes	187.1020408	183	0.282	Yes	Yes	67.30612245	52	1.967	12.06122449	12	0.056
480	Validation	MCJC10	EB	30110-30109	271	244	1.712	Yes	Yes	189.739726	181	0.611	Yes	Yes	68.61643836	50	2.409	12.89041096	12	0.167
481	Validation	MCJC10	WB	30109-30110	274	306	1.892	Yes	Yes	233.2244898	259	1.647	Yes	Yes	33.30612245	35	0.242	7	12	1.606
488	Validation	MCJC12	NB	30103-31359	246	213	2.179	Yes	Yes	197	171	1.927	Yes	Yes	40	40	0.002	9	2	2.912
489	Validation	MCJC12	SB	31359-30103	255	147	7.644	No	No	222.1696167	142	5.949	No	Yes	25.27047772	5	5.363	7.370556003	0	3.789
492	Validation	MCJC12	EB	30103-30104	298	234	3.956	Yes	Yes	241	191	3.383	Yes	Yes	46	32	2.251	11	10	0.215
493	Validation	MCJC12	WB	30104-30103	281	273	0.500	Yes	Yes	227.4789672	225	0.181	Yes	Yes	43.62304025	34	1.615	9.897992567	14	1.272
514	Validation	MCJC16	NB	10705-10706	387	433	2.256	Yes	Yes	326.9266463	381	2.888	Yes	Yes	49.29047898	46	0.551	11.06520957	6	1.658
515	Validation	MCJC16	SB	10706-10702	429	529	4.574	Yes	No	336.9859277	450	5.714	No	No	67.39718554	56	1.464	24.14227542	22	0.375
524	Validation	MCJC17	WB	10696-20307	825	834	0.330	Yes	Yes	760.4816757	766	0.216	Yes	Yes	51.30233526	55	0.513	13.07706585	13	0.062
525	Validation	MCJC17	EB	20307-10697	330	330	0.042	Yes	Yes	253.8508853	254	0.028	Yes	Yes	55.36333381	55	0.021	21.25697522	20	0.230
544	Validation	MCJC19	EB	10677-20305	276	259	1.022	Yes	Yes	222.3101195	195	1.878	Yes	Yes	33.1956287	42	1.463	20.11856285	22	0.314
545	Validation	MCJC19	WB	20305-10678	432	472	1.923	Yes	Yes	366.1578438	400	1.733	Yes	Yes	51.30233526	51	0.072	14.08299399	22	1.770
546	Validation	MCJC20	NB	10670-10668	647	628	0.737	Yes	Yes	405.3890414	425	0.978	Yes	Yes	160.9485028	127	2.794	80.47425139	75	0.566
547	Validation	MCJC20	SB	10668-10671	847	925	2.620	Yes	Yes	672.9659273	747	2.784	Yes	Yes	121.7173052	126	0.399	52.30826341	52	0.087



552	Validation	MCJC20	SB	10671-10673	991	1051	1.869	Yes	Yes	740.3631128	780	1.420	Yes	Yes	155.9188621	171	1.143	94.55724539	101	0.604
553	Validation	MCJC20	NB	10673-10672	796	795	0.035	Yes	Yes	599.5331729	599	0.002	Yes	Yes	129.7647304	129	0.078	66.3912574	66	0.009
558	Validation	MCJC21	SB	10665-10034	780	708	2.645	Yes	Yes	721	630	3.501	Yes	Yes	48	64	2.134	11	14	0.819
559	Validation	MCJC21	NB	10034-10666	439	453	0.651	Yes	Yes	337	363	1.380	Yes	Yes	82	74	0.857	20	16	1.066
564	Validation	MCJC22	WB	10032-10027	1306	1300	0.176	Yes	Yes	950	964	0.450	Yes	Yes	192	183	0.622	164	152	0.935
566	Validation	MCJC22	SB	10031-20031	705	758	1.973	Yes	Yes	579	630	2.089	Yes	Yes	105	107	0.175	21	21	0.041
567	Validation	MCJC22	NB	20031-10032	524	533	0.400	Yes	Yes	439	474	1.634	Yes	Yes	71	50	2.738	14	10	1.289
570	Validation	MCJC23	NB	10025-10092	521	476	2.005	Yes	Yes	397.6305024	353	2.280	Yes	Yes	85.33761022	87	0.126	37.82533024	36	0.288
571	Validation	MCJC23	SB	10092-10026	690	710	0.743	Yes	Yes	554.6208193	555	0.010	Yes	Yes	84.18467633	97	1.351	51.57712584	58	0.886
574	Validation	MCJC23	SB	10027-10077	675	679	0.172	Yes	Yes	568.4643479	574	0.230	Yes	Yes	77.49047365	73	0.472	28.59963994	32	0.559
575	Validation	MCJC23	NB	10077-10028	500	544	1.918	Yes	Yes	389.0472047	401	0.585	Yes	Yes	85.17508429	106	2.171	25.78856292	37	1.957
576	Validation	MCJC23	EB	10026-10476	1463	1487	0.621	Yes	Yes	1000	1008	0.250	Yes	Yes	278	296	1.090	185	182	0.190
582	Validation	MCJC24	SB	10024-10020	1284	1245	1.098	Yes	Yes	948.5902383	938	0.344	Yes	Yes	187.6055986	162	1.937	147.8714369	145	0.236
583	Validation	MCJC24	NB	10020-10021	1261	1272	0.292	Yes	Yes	822.3462564	878	1.919	Yes	Yes	274.1154188	232	2.630	164.9722154	161	0.290
584	Validation	MCJC24	SB	10023-20010	260	460	10.578	No	No	221.1896772	369	8.584	No	No	32.93067441	74	5.616	5.433808269	18	3.598
585	Validation	MCJC24	NB	20010-10024	524	578	2.264	Yes	Yes	448.6205837	451	0.129	Yes	Yes	66.93650606	105	4.115	8.839148451	21	3.169
588	Validation	MCJC25	NB	10015-10019	1261	1272	0.292	Yes	Yes	822.3462564	878	1.919	Yes	Yes	274.1154188	232	2.630	164.9722154	161	0.290
589	Validation	MCJC25	SB	10019-10016	1284	1245	1.098	Yes	Yes	948.5902383	938	0.344	Yes	Yes	187.6055986	162	1.937	147.8714369	145	0.236
592	Validation	MCJC25	SB	10017-10018	1330	1313	0.472	Yes	Yes	965.6910167	981	0.486	Yes	Yes	211.2449099	178	2.382	152.9010776	154	0.072
593	Validation	MCJC25	NB	10011-10014	1371	1382	0.297	Yes	Yes	925.9568551	998	2.310	Yes	Yes	272.1035625	221	3.263	172.5166764	163	0.724
597	Validation	MCJC26	SB	10018-10012	959	901	1.905	Yes	Yes	677.995568	633	1.768	Yes	Yes	149.8832932	131	1.602	130.7706585	137	0.531
598	Validation	MCJC26	WB	10010-30156	79	149	6.476	No	Yes	58.34383226	96	4.333	Yes	Yes	9.053353282	38	5.908	12.07113771	15	0.685
599	Validation	MCJC26	EB	30156-10011	221	178	3.022	Yes	Yes	181.864653	144	2.982	Yes	Yes	20.56994086	19	0.278	18.2307251	15	0.828
600	Validation	MCJC26	SB	10013-10009	1162	1073	2.646	Yes	Yes	792.6713762	694	3.624	Yes	Yes	205.2093411	210	0.366	163.9662872	169	0.395
601	Validation	MCJC26	NB	10009-10010	1480	1491	0.284	Yes	Yes	1069.301615	1088	0.581	Yes	Yes	244.4405386	239	0.372	165.9781435	164	0.183
602	Validation	MCJC26	EB	10012-30005	549	514	1.510	Yes	Yes	458.7032329	406	2.544	Yes	Yes	68.40311369	82	1.582	22.13041913	26	0.880
603	Validation	MCJC26	EB	10018-30005	380	412	1.602	Yes	Yes	298.7606583	348	2.745	Yes	Yes	60.35568855	47	1.806	21.12449099	17	0.975



604	Validation	MCJC26	WB	30505-10013	502	549	2.035	Yes	Yes	306.5134601	328	1.191	Yes	Yes	139.8755979	163	1.892	55.70499337	58	0.287
605	Validation	MCJC27	NB	10001-10005	1412	1449	0.996	Yes	Yes	1012.453942	1064	1.604	Yes	Yes	235.8041998	225	0.716	163.3105239	160	0.249
606	Validation	MCJC27	SB	10005-10002	1106	1043	1.918	Yes	Yes	746.4772698	676	2.652	Yes	Yes	195.008601	204	0.642	164.6578628	163	0.096
611	Validation	MCJC27	NB	10002-10006	687	590	3.845	Yes	Yes	550.3833486	439	5.019	No	No	85.2187294	104	1.904	51.79149506	48	0.577
612	Validation	MCJC27	SB	10006-10003	1006	946	1.945	Yes	Yes	833.5286477	783	1.763	Yes	Yes	127.4239644	123	0.352	45.46336375	39	1.033
689	Validation	MCJC39	NB	10443-10442	1314	1345	0.850	Yes	Yes	1156.700039	1191	1.009	Yes	Yes	123.2021481	119	0.339	33.85040276	34	0.023
691	Validation	MCJC39	SB	10496-10407	415	404	0.572	Yes	Yes	353.080778	343	0.526	Yes	Yes	43.25491012	42	0.192	19.11263471	19	0.116
692	Validation	MCJC39	SB	10054-10055	663	662	0.043	Yes	Yes	540.3676443	541	0.028	Yes	Yes	101.0598523	99	0.195	21.52076571	22	0.039
693	Validation	MCJC39	WB	10443-31107	5	8	1.078	Yes	Yes	3.975067127	7	1.433	Yes	Yes	1	0	1.103	0	0	0.526
694	Validation	MCJC39	EB	31107-10443	17	0	5.831	No	Yes	14	0	5.292	No	Yes	2	0	2.000	1	0	1.414
695	Validation	MCJC39	SB	10055-10439	824	867	1.477	Yes	Yes	683.3099349	719	1.364	Yes	Yes	111.6260069	119	0.662	28.82546989	29	0.057
696	Validation	MCJC39	NB	10439-10055	900	972	2.340	Yes	Yes	782	849	2.332	Yes	Yes	91	94	0.360	27	29	0.292
713	Validation	MCJC42	NB	20042-30587	124	129	0.424	Yes	Yes	103.0432774	117	1.376	Yes	Yes	13.778525	7	2.278	6.923110741	4	1.015
714	Validation	MCJC42	SB	30587-20042	181	162	1.486	Yes	Yes	162.3851709	150	1.019	Yes	Yes	15.75390651	10	1.653	3.189267089	2	0.493
715	Validation	MCJC42	WB	20042-20231	1264	1225	1.127	Yes	Yes	1167.82381	1132	1.068	Yes	Yes	77.75024824	73	0.528	18.79130058	20	0.241
716	Validation	MCJC42	EB	20231-20042	476	467	0.451	Yes	Yes	366.8702008	361	0.308	Yes	Yes	78.76953254	75	0.425	30.82958186	31	0.035
741	Validation	MCJC46	WB	10475-10387	738	855	4.131	Yes	No	628.3719807	728	3.822	Yes	Yes	88.2791014	99	1.122	21.68247348	28	1.245
742	Validation	MCJC46	EB	10387-10475	724	781	2.065	Yes	Yes	616.5407351	672	2.200	Yes	Yes	79.15286875	80	0.042	28.51954992	29	0.078
743	Validation	MCJC46	SB	10474-20040	569	738	6.617	No	No	407.6280193	560	6.948	No	No	125.7368306	125	0.031	35.67334171	52	2.510
744	Validation	MCJC46	NB	20040-10474	1585	1655	1.740	Yes	Yes	1421.087518	1466	1.193	Yes	Yes	134.8630633	153	1.533	28.83626527	35	1.120
753	Validation	MCJC48	WB	10049-31342	541	533	0.352	Yes	Yes	466	475	0.432	Yes	Yes	66	47	2.499	9	10	0.409
754	Validation	MCJC48	EB	31342-10049	156	225	5.045	No	Yes	114.5733042	171	4.728	Yes	Yes	31.50765864	46	2.390	9.547775346	8	0.613
779	Validation	MCJC52	NB	30025-30658	107	171	5.481	No	Yes	83.90631365	136	4.968	Yes	Yes	21.58248473	29	1.401	1.052953157	7	2.812
783	Validation	MCJC52	EB	30025-30400	466	481	0.665	Yes	Yes	396.9633401	402	0.272	Yes	Yes	55.80651731	54	0.259	13.68839104	25	2.503
784	Validation	MCJC52	WB	30400-30025	608	557	2.121	Yes	Yes	517.1034483	465	2.373	Yes	Yes	69.00689655	63	0.772	21.88965517	30	1.510
787	Validation	MCJC53	NB	20013-30337	252	319	3.958	Yes	Yes	224.3219758	269	2.857	Yes	Yes	18.10670656	40	4.107	10.05928142	10	0.046
788	Validation	MCJC53	SB	30337-20014	156	415	15.314	No	No	122.7232334	332	13.867	No	No	28.16598799	66	5.557	5.029640712	16	3.476



789	Validation	MCJC53	EB	20017-20012	755	958	6.919	No	No	642.788083	805	6.021	No	No	83.49203582	115	3.195	29.17191613	38	1.500
790	Validation	MCJC53	WB	20154-20013	1026	1054	0.879	Yes	Yes	845.9855678	866	0.699	Yes	Yes	152.9010776	163	0.824	27.16005985	25	0.483
791	Validation	MCJC53	SB	20016-30024	698	831	4.805	Yes	No	614.622095	683	2.691	Yes	Yes	66.3912574	116	5.203	17.10077842	32	2.959
792	Validation	MCJC53	NB	30024-20017	521	595	3.129	Yes	Yes	434.5609575	466	1.468	Yes	Yes	62.36754483	92	3.386	24.14227542	37	2.352
801	Validation	MCJC55	NB	10073-10074	246	326	4.721	Yes	Yes	217.2804788	268	3.243	Yes	Yes	19.11263471	46	4.716	10.05928142	13	0.738
802	Validation	MCJC55	SB	10074-10073	246	253	0.402	Yes	Yes	191.1263471	201	0.736	Yes	Yes	41.24305384	37	0.641	14.08299399	14	0.012
803	Validation	MCJC55	SB	10073-30485	64	41	3.158	Yes	Yes	64.37940112	31	4.876	Yes	Yes	0	9	4.280	0	2	1.733
804	Validation	MCJC55	NB	30485-10073	53	156	10.040	No	No	44.26083827	115	7.911	No	Yes	7.041496997	32	5.715	2.011856285	9	2.917
805	Validation	MCJC55	SB	10073-10469	226	267	2.596	Yes	Yes	168.9959279	216	3.361	Yes	Yes	42.24898198	37	0.905	15.08892214	15	0.037
806	Validation	MCJC55	NB	10469-10073	237	226	0.746	Yes	Yes	215.2686225	198	1.210	Yes	Yes	13.07706585	22	2.151	9.053353282	6	1.087
829	Validation	MCJC59	NB	10045-10044	917	895	0.753	Yes	Yes	826.8729331	793	1.196	Yes	Yes	71.42089811	82	1.197	19.11263471	20	0.201
830	Validation	MCJC59	SB	10044-10045	713	689	0.920	Yes	Yes	633.7347297	605	1.158	Yes	Yes	59.3497604	62	0.333	20.11856285	22	0.411
831	Validation	MCJC59	WB	10045-20344	527	644	4.825	Yes	No	449.6498797	564	5.089	No	No	57.33790412	64	0.828	20.11856285	16	1.007
834	Validation	MCJC59	EB	20176-10045	938	888	1.655	Yes	Yes	798.7069451	722	2.783	Yes	Yes	110.6520957	136	2.248	28.16598799	30	0.334
835	Validation	MCJC59	SB	10045-10386	1081	956	3.943	Yes	Yes	929.4776036	823	3.601	Yes	Yes	113.6698801	101	1.199	38.22526941	31	1.156
836	Validation	MCJC59	NB	10367-10045	953	960	0.237	Yes	Yes	850.0092804	860	0.330	Yes	Yes	82.48610768	83	0.026	20.11856285	18	0.591
837	Validation	MCJC59	EB	10045-20320	413	459	2.165	Yes	Yes	351.0689217	377	1.371	Yes	Yes	56.33197598	64	1.018	6.035568855	17	3.269
838	Validation	MCJC59	WB	20320-10045	336	416	4.147	Yes	Yes	274.6183829	371	5.346	No	Yes	46.27269455	31	2.478	15.08892214	15	0.050
839	Validation	MCJC60	NB	10043-10369	570	578	0.319	Yes	Yes	516.5074627	522	0.233	Yes	Yes	38.78535892	39	0.063	15.13574982	17	0.487
845	Validation	MCJC61	SB	30017-31221	603	476	5.446	No	No	511.0114964	413	4.563	Yes	Yes	81.48017954	53	3.518	10.05928142	10	0.126
846	Validation	MCJC61	NB	30016-30017	373	338	1.883	Yes	Yes	341.0096403	307	1.893	Yes	Yes	27.16005985	25	0.435	5.029640712	6	0.346
847	Validation	MCJC61	NB	30017-30570	153	148	0.402	Yes	Yes	110.7918079	107	0.319	Yes	Yes	30.15635008	24	1.220	11.8003109	17	1.260
848	Validation	MCJC61	SB	30570-30017	172	220	3.422	Yes	Yes	138.1844475	192	4.172	Yes	Yes	20.22211428	20	0.059	13.48140952	8	1.841
849	Validation	MCJC61	SB	30017-30571	78	107	3.081	Yes	Yes	56.21322057	91	4.019	Yes	Yes	15.30063992	11	1.047	5.987206925	5	0.431
850	Validation	MCJC61	NB	30571-30017	211	237	1.688	Yes	Yes	169.8243393	212	3.034	Yes	Yes	24.85234234	18	1.539	16.56822823	7	2.778
929	Validation	MCJC72	WB	30111-31402	616	616	0.009	Yes	Yes	372.1060508	372	0.013	Yes	Yes	117.6511778	118	0.032	125.8593995	126	0.011
930	Validation	MCJC72	EB	31402-30111	684	685	0.028	Yes	Yes	451.5135856	452	0.020	Yes	Yes	102.8872766	103	0.011	130.0971348	130	0.018



947	Validation	MCJC75	EB	30170-30171	118	79	3.864	Yes	Yes	96.21036995	70	2.863	Yes	Yes	18.80475413	7	3.205	2.62391918	2	0.441
948	Validation	MCJC75	WB	30171-30170	112	87	2.522	Yes	Yes	100.3793195	77	2.434	Yes	Yes	9.36873649	4	1.880	2.409103669	5	1.401
949	Validation	MCJC75	WB	30170-31403	208	231	1.602	Yes	Yes	185.3422602	185	0.051	Yes	Yes	18.10670656	34	3.092	4.275194605	13	2.953
950	Validation	MCJC75	EB	31403-30170	214	207	0.524	Yes	Yes	166.0928347	158	0.670	Yes	Yes	30.88503125	37	0.994	17.15835069	12	1.265
951	Validation	MCJC75	SB	30170-30177	29	36	1.160	Yes	Yes	23.80224337	27	0.646	Yes	Yes	3.400320481	8	1.822	2.125200301	1	0.711
952	Validation	MCJC75	NB	30177-30170	20	41	3.800	Yes	Yes	16.97249718	39	4.094	Yes	Yes	2.044879178	3	0.314	1.226927507	0	1.109
953	Validation	MCJC76	NB	10008-10009	178	128	4.020	Yes	Yes	137.1257858	104	2.985	Yes	Yes	33.9981287	17	3.260	6.79962574	6	0.155
954	Validation	MCJC76	SB	10009-10008	139	180	3.276	Yes	Yes	110.923582	140	2.612	Yes	Yes	24.56165029	35	1.876	3.169245199	5	0.919
957	Validation	MCJC76	SB	10008-10005	48	62	1.813	Yes	Yes	39.94582567	36	0.607	Yes	Yes	6.521767457	21	3.807	1.630441864	5	1.768
958	Validation	MCJC76	NB	10005-10008	24	51	4.526	Yes	Yes	21.96078738	28	1.210	Yes	Yes	1.552782946	23	6.058	0	1	1.049
973	Validation	MCJC79	WB	10110-30036	1329	1432	2.765	Yes	Yes	940.8228155	1043	3.246	Yes	Yes	228.536355	216	0.823	160.0643732	173	0.992
974	Validation	MCJC79	EB	30036-10110	1432	1328	2.801	Yes	Yes	1015.36498	938	2.467	Yes	Yes	249.1266959	233	1.066	167.7386917	157	0.818
975	Validation	MCJC79	SB	10110-31405	28	21	1.305	Yes	Yes	22.55532432	11	2.770	Yes	Yes	4.748489331	9	1.761	0.395707444	1	0.319
976	Validation	MCJC79	NB	31405-10110	41	52	1.667	Yes	Yes	33.87169699	41	1.156	Yes	Yes	5.806576627	10	1.596	0.967762771	1	0.281
977	Validation	MCJC80	NB	10372-10454	26	80	7.367	No	Yes	21.53096808	71	7.272	No	Yes	4.532835385	7	0.872	0.377736282	3	1.855
978	Validation	MCJC80	SB	10454-10372	25	29	0.896	Yes	Yes	20.59757625	25	0.896	Yes	Yes	3.531013071	3	0.147	0.588502179	1	0.687
979	Validation	MCJC80	SB	10372-10455	77	62	1.880	Yes	Yes	63.08953034	53	1.264	Yes	Yes	13.28200639	4	3.038	1.106833866	4	1.843
980	Validation	MCJC80	NB	10455-10372	72	96	2.590	Yes	Yes	60.38361785	81	2.469	Yes	Yes	10.35147734	11	0.303	1.725246224	4	1.221
981	Validation	MCJC80	WB	10372-30450	40	22	3.212	Yes	Yes	33.1583721	13	4.209	Yes	Yes	3.725659787	6	1.015	3.353093808	3	0.008
982	Validation	MCJC80	EB	30450-10372	44	12	5.930	No	Yes	30.91243653	9	4.945	Yes	Yes	6.869430341	3	1.912	5.724525284	1	2.836



IP Validation:

					Interpeak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
1	Validation	ATC001	NB	20058-20057	118	127	0.768	Yes	Yes	85.44992296	100	1.515	Yes	Yes	20.69589516	21	0.145	12.06202479	5	2.294
2	Validation	ATC001	SB	20057-20058	114	117	0.307	Yes	Yes	80.47539725	85	0.531	Yes	Yes	20.88978173	23	0.358	12.13596844	9	0.988
5	Validation	ATC003	NB	20228-31409	92	91	0.101	Yes	Yes	66.42749433	82	1.835	Yes	Yes	16.0886799	3	4.172	9.376837981	6	1.412
6	Validation	ATC003	SB	31409-20228	92	115	2.336	Yes	Yes	65.02900301	103	4.178	Yes	Yes	16.88021092	5	3.634	9.806598723	7	0.883
7	Validation	ATC004	NB	10199-10200	645	644	0.029	Yes	Yes	365.0874718	365	0.005	Yes	Yes	107.7008042	107	0.066	171.7939381	172	0.003
8	Validation	ATC004	SB	10200-10199	545	545	0.004	Yes	Yes	327.5743429	328	0.023	Yes	Yes	85.32085033	85	0.035	132.2202607	132	0.016
9	Validation	ATC005	NB	30678-30680	65	54	1.452	Yes	Yes	55.40486663	44	1.661	Yes	Yes	8.88958681	5	1.331	1.137040173	5	2.264
10	Validation	ATC005	SB	30680-30678	69	49	2.518	Yes	Yes	55.78324086	39	2.369	Yes	Yes	11.14117432	7	1.525	1.77949312	3	0.965
21	Validation	ATC011	SB	20139-20140	141	148	0.516	Yes	Yes	114.9558611	114	0.104	Yes	Yes	18.4730619	23	0.934	8.012412388	11	0.997
22	Validation	ATC011	NB	20140-20139	154	165	0.932	Yes	Yes	130.0090113	138	0.683	Yes	Yes	17.30639436	21	0.850	6.271306668	6	0.054
23	Validation	ATC012	SE	20132-30312	14	18	0.895	Yes	Yes	11.10134773	14	0.871	Yes	Yes	1.878689616	1	0.520	1.423249709	3	0.815
24	Validation	ATC012	NW	30312-20132	16	18	0.549	Yes	Yes	11.2273493	13	0.507	Yes	Yes	2.590926762	4	0.712	2.325190683	2	0.543
29	Validation	ATC015	SB	30293-30295	84	89	0.464	Yes	Yes	63.15791694	76	1.503	Yes	Yes	14.67305141	7	2.253	6.37958757	6	0.311
30	Validation	ATC015	NB	30295-30293	99	107	0.795	Yes	Yes	73.05034407	83	1.114	Yes	Yes	19.31909926	17	0.556	6.238459135	7	0.229
31	Validation	ATC016	SW	30222-30603	30	37	1.224	Yes	Yes	25.24337147	19	1.289	Yes	Yes	3.659819656	14	3.560	0.750732237	3	1.740
32	Validation	ATC016	NE	30603-30222	32	39	1.202	Yes	Yes	25.00738249	23	0.362	Yes	Yes	4.869858696	13	2.812	1.974267039	2	0.298
33	Validation	ATC017	EB	10170-10166	1189	1178	0.309	Yes	Yes	786.7814127	773	0.484	Yes	Yes	197.9809437	194	0.249	204.3231904	211	0.442
34	Validation	ATC017	WB	10166-10170	1175	1128	1.387	Yes	Yes	776.2528319	744	1.167	Yes	Yes	208.6756292	193	1.133	190.3887395	192	0.085
35	Validation	ATC018	WB	30208-30655	31	30	0.087	Yes	Yes	25.97240639	23	0.693	Yes	Yes	4.10560376	7	1.047	0.803270301	1	0.502
36	Validation	ATC018	EB	30655-30208	33	21	2.402	Yes	Yes	28.40038135	14	3.054	Yes	Yes	4.026919744	6	0.833	0.847772578	1	0.273
37	Validation	ATC019	SE	30249-30272	14	33	3.905	Yes	Yes	11.81023416	29	3.735	Yes	Yes	1.866909867	3	0.918	0.365264974	1	0.792
38	Validation	ATC019	NW	30272-30249	17	33	3.175	Yes	Yes	14.42697124	28	2.925	Yes	Yes	2.045615325	2	0.032	0.430655858	3	1.884



39	Validation	ATC020	WB	30167-30259	58	66	1.030	Yes	Yes	48.4032627	55	0.904	Yes	Yes	7.65137486	7	0.154	1.497008125	4	1.270
40	Validation	ATC020	EB	30259-30167	60	58	0.333	Yes	Yes	51.37270495	48	0.460	Yes	Yes	7.284189507	7	0.068	1.53351358	2	0.375
41	Validation	ATC021	EB	30264-30265	27	14	2.817	Yes	Yes	21.85862599	11	2.545	Yes	Yes	3.021110909	2	0.364	2.280642549	0	1.576
42	Validation	ATC021	WB	30265-30264	29	10	4.382	Yes	Yes	23.38526317	8	3.762	Yes	Yes	3.660850914	1	1.546	2.335370411	0	1.749
43	Validation	ATC022	SW	30279-30280	31	35	0.655	Yes	Yes	25.88761148	23	0.497	Yes	Yes	4.092199752	8	1.664	0.800647778	3	1.534
44	Validation	ATC022	NE	30280-30279	32	31	0.299	Yes	Yes	27.58292223	15	2.720	Yes	Yes	3.911011361	9	2.091	0.823370813	6	2.911
47	Validation	ATC024	NW	10122-10123	142	113	2.544	Yes	Yes	108.2827234	74	3.590	Yes	Yes	19.46471917	25	1.216	14.0669399	14	0.050
48	Validation	ATC024	SE	10123-10122	139	116	2.015	Yes	Yes	103.059103	83	2.104	Yes	Yes	21.20072976	20	0.352	14.42827442	14	0.231
53	Validation	ATC027	NB	20273-20034	157	104	4.670	Yes	Yes	133.7562997	89	4.257	Yes	Yes	19.05667711	12	1.865	4.045049386	3	0.572
54	Validation	ATC027	SB	20034-20273	150	131	1.594	Yes	Yes	125.5803737	113	1.192	Yes	Yes	19.85562377	15	1.181	4.469664226	4	0.475
55	Validation	ATC028	NB	10086-10470	665	721	2.127	Yes	Yes	383.6016971	444	2.971	Yes	Yes	111.578833	99	1.240	169.5444324	178	0.628
56	Validation	ATC028	SB	10470-10086	675	675	0.004	Yes	Yes	412.4405301	447	1.649	Yes	Yes	109.5806064	93	1.651	153.412849	136	1.471
59	Validation	ATC030	NE	10116-10117	621	592	1.187	Yes	Yes	438.0442804	445	0.334	Yes	Yes	131.8660431	90	3.978	51.50133012	57	0.764
60	Validation	ATC030	SW	10117-10116	584	583	0.076	Yes	Yes	442.165874	420	1.092	Yes	Yes	96.1988902	108	1.151	46.02713341	55	1.294
61	Validation	ATC031	EB	30057-30056	110	116	0.508	Yes	Yes	91.26303518	98	0.710	Yes	Yes	15.13962746	13	0.477	3.912487995	4	0.147
62	Validation	ATC031	WB	30056-30057	98	142	4.001	Yes	Yes	80.7309879	116	3.522	Yes	Yes	13.58162296	21	1.784	3.793749431	5	0.710
63	Validation	ATC032	EB	20186-20047	91	107	1.633	Yes	Yes	72.97410233	86	1.481	Yes	Yes	13.20543361	14	0.250	4.631289513	7	0.883
64	Validation	ATC032	WB	20047-20186	98	97	0.096	Yes	Yes	82.74050325	83	0.019	Yes	Yes	11.01398174	12	0.322	4.557509687	2	1.190
77	Validation	ATC039	NE	10213-20330	78	106	2.921	Yes	Yes	54.99299765	63	0.990	Yes	Yes	16.99221838	19	0.388	5.767055934	25	4.820
78	Validation	ATC039	SW	20330-10213	95	93	0.191	Yes	Yes	71.49299419	80	0.969	Yes	Yes	16.23084192	5	3.362	6.827258904	8	0.274
107	Validation	ATC055	EB	30159-31416	77	82	0.523	Yes	Yes	61.38929438	68	0.782	Yes	Yes	9.610199929	11	0.308	6.130644782	4	1.182
108	Validation	ATC055	WB	31416-30159	76	100	2.547	Yes	Yes	61.54206855	80	2.173	Yes	Yes	8.505814353	15	1.999	6.421055933	5	0.511
111	Validation	ATC057	NB	20053-30453	117	94	2.243	Yes	Yes	97.8318644	87	1.148	Yes	Yes	12.85322403	4	2.963	5.894472165	3	1.608
112	Validation	ATC057	SB	30453-20053	103	88	1.558	Yes	Yes	86.27303755	79	0.793	Yes	Yes	11.78471905	6	1.767	4.89177017	2	1.411
139	Validation	ATC071	NB	10110-10455	310	306	0.222	Yes	Yes	264.5836077	263	0.112	Yes	Yes	33.97036393	33	0.086	11.7320329	10	0.474
140	Validation	ATC071	SB	10455-10110	339	295	2.507	Yes	Yes	292.1726094	248	2.700	Yes	Yes	39.32386063	39	0.052	7.71776704	8	0.027
141	Validation	ATC072	NW	30032-30988	328	328	0.000	Yes	Yes	271.9991024	272	0.001	Yes	Yes	43.11742706	43	0.018	13.29454001	13	0.034



142	Validation	ATC072	SE	30988-30032	310	310	0.004	Yes	Yes	266.0656454	266	0.002	Yes	Yes	32.16503903	32	0.029	11.56162693	12	0.037
169	Validation	ATC086	NB	30030-30029	161	147	1.093	Yes	Yes	133.7514319	123	0.978	Yes	Yes	20.06271479	18	0.480	7.049061953	7	0.154
170	Validation	ATC086	SB	30029-30030	145	133	1.019	Yes	Yes	114.5082041	105	0.907	Yes	Yes	22.51466993	20	0.514	8.091209507	8	0.052
171	Validation	ATC087	NE	10657-10416	486	492	0.286	Yes	Yes	395.6956623	400	0.197	Yes	Yes	61.44148372	63	0.158	28.61015654	30	0.211
172	Validation	ATC087	SW	10416-10657	487	485	0.090	Yes	Yes	393.8356041	396	0.101	Yes	Yes	59.96400383	56	0.481	33.38716003	33	0.057
187	Validation	ATC095	EB	10426-10487	527	553	1.132	Yes	Yes	421.0154463	432	0.530	Yes	Yes	71.47709563	87	1.765	34.28853514	34	0.065
188	Validation	ATC095	WB	10487-10426	538	554	0.669	Yes	Yes	427.306668	435	0.372	Yes	Yes	73.72292598	90	1.800	36.86146299	28	1.465
191	Validation	ATC097	NW	20169-20168	257	223	2.197	Yes	Yes	219.2448154	189	2.144	Yes	Yes	31.23649252	27	0.728	6.630387562	7	0.192
192	Validation	ATC097	SE	20168-20169	256	220	2.336	Yes	Yes	214.5173629	185	2.102	Yes	Yes	33.91752965	28	1.041	7.6351149	7	0.204
193	Validation	ATC098	NB	20339-20304	478	469	0.389	Yes	Yes	401.3165629	390	0.584	Yes	Yes	60.68129476	63	0.247	15.74433594	17	0.298
194	Validation	ATC098	SB	20304-20339	464	429	1.633	Yes	Yes	392.4876208	366	1.385	Yes	Yes	54.22095262	47	0.953	17.03619055	16	0.184
199	Validation	ATC101	EB	30419-30420	294	269	1.515	Yes	Yes	259.4925845	225	2.192	Yes	Yes	28.66340376	38	1.620	6.214631789	6	0.269
200	Validation	ATC101	WB	30420-30419	320	254	3.884	Yes	Yes	277.3279681	213	4.108	Yes	Yes	34.80355948	36	0.248	8.116245097	5	1.159
201	Validation	ATC102	WB	20312-20311	363	346	0.895	Yes	Yes	280.8112314	272	0.521	Yes	Yes	59.84007454	59	0.129	21.85594662	15	1.681
202	Validation	ATC102	EB	20311-20312	310	269	2.376	Yes	Yes	235.5193438	216	1.317	Yes	Yes	56.7531788	40	2.356	17.394151	13	1.081
215	Validation	ATC109	NB	20214-31428	193	184	0.646	Yes	Yes	165.9926989	162	0.350	Yes	Yes	20.65553872	17	0.932	6.735501757	6	0.147
216	Validation	ATC109	SB	31428-20214	218	208	0.675	Yes	Yes	190.4906899	184	0.489	Yes	Yes	22.12453648	20	0.508	5.648817823	5	0.367
221	Validation	ATC112	NE	30346-30807	234	210	1.560	Yes	Yes	202.8455334	190	0.951	Yes	Yes	25.86620896	15	2.309	4.991724537	6	0.243
222	Validation	ATC112	SW	30807-30346	239	220	1.275	Yes	Yes	208.5279304	196	0.874	Yes	Yes	25.16122135	19	1.295	5.629679663	5	0.343
225	Validation	ATC114	EB	20006-20276	506	514	0.377	Yes	Yes	404.5223085	435	1.507	Yes	Yes	73.6234669	56	2.196	27.65964502	23	0.932
226	Validation	ATC114	WB	20276-20006	582	526	2.358	Yes	Yes	465.5172606	430	1.656	Yes	Yes	86.20690012	71	1.769	29.95689779	25	0.909
227	Validation	ATC115	NW	20341-20075	377	403	1.304	Yes	Yes	327.7995627	352	1.295	Yes	Yes	38.3749611	40	0.187	11.28675326	12	0.212
228	Validation	ATC115	SE	20075-20341	337	347	0.562	Yes	Yes	295.7871639	306	0.580	Yes	Yes	33.42302477	31	0.501	7.397981767	11	1.057
239	Validation	ATC121	EB	20328-20066	30	43	2.160	Yes	Yes	24.61778985	27	0.561	Yes	Yes	3.914242566	14	3.444	1.006519517	1	0.315
240	Validation	ATC121	WB	20066-20328	17	34	3.347	Yes	Yes	14.36205122	29	3.079	Yes	Yes	2.101919417	4	1.072	0.504716213	1	0.778
241	Validation	ATC122	EB	31364-30025	496	490	0.248	Yes	Yes	407.4285714	402	0.260	Yes	Yes	66.68907563	61	0.721	21.88235294	27	1.104
242	Validation	ATC122	WB	30025-31364	420	313	5.609	No	No	341.745283	251	5.251	No	Yes	52.5	40	1.807	25.75471698	21	0.959



245	Validation	ATC124	EB	20069-30083	78	58	2.411	Yes	Yes	64.94593385	40	3.486	Yes	Yes	10.32644036	16	1.664	2.655370379	2	0.494
246	Validation	ATC124	WB	30083-20069	79	70	0.992	Yes	Yes	66.79029533	48	2.476	Yes	Yes	9.774914218	20	2.548	2.347167852	3	0.270
247	Validation	ATC125	EB	30592-30076	18	20	0.414	Yes	Yes	16.03017876	11	1.479	Yes	Yes	2.079329372	9	2.834	0.338495479	1	0.809
248	Validation	ATC125	WB	30076-30592	64	64	0.008	Yes	Yes	55.76999061	56	0.021	Yes	Yes	8.121843293	6	0.762	0.54145622	2	1.575
249	Validation	ATC126	EB	31113-30079	103	133	2.727	Yes	Yes	89.50614467	118	2.794	Yes	Yes	13.03487544	12	0.432	0.868991696	4	1.820
250	Validation	ATC126	WB	30079-31113	31	24	1.407	Yes	Yes	27.12799483	17	2.088	Yes	Yes	3.518865091	6	1.129	0.572838503	1	0.008
272	Validation	ATC139	EB	10431-10389	589	582	0.289	Yes	Yes	465.42079	458	0.338	Yes	Yes	89.35154271	90	0.025	34.68359329	35	0.007
273	Validation	ATC139	WB	10389-10431	505	510	0.237	Yes	Yes	401.0101628	407	0.274	Yes	Yes	71.2149925	72	0.066	32.60640887	32	0.130
274	Validation	ATC140	EB	30634-20019	48	57	1.201	Yes	Yes	46.52820675	47	0.094	Yes	Yes	1.86112827	8	2.799	0	2	1.916
275	Validation	ATC140	WB	20019-30634	89	86	0.403	Yes	Yes	76.0782657	71	0.631	Yes	Yes	11.69715032	11	0.219	1.590812444	4	1.425
278	Validation	ATC142	NW	31235-31234	30	17	2.644	Yes	Yes	28.71489589	14	3.194	Yes	Yes	1.148595836	3	1.019	0	1	1.065
279	Validation	ATC142	SE	31234-31235	28	36	1.394	Yes	Yes	23.94415893	34	1.887	Yes	Yes	3.68145125	1	1.821	0.50067737	1	0.568
280	Validation	ATC143	EB	30411-31240	15	0	5.447	No	Yes	12.62646336	0	5.019	No	Yes	2.032710031	0	2.016	0.204346511	0	0.639
281	Validation	ATC143	WB	31240-30411	130	126	0.310	Yes	Yes	110.9184916	110	0.042	Yes	Yes	16.0806489	13	0.897	2.659004936	3	0.198
282	Validation	ATC144	NB	30022-30859	147	86	5.683	No	Yes	124.2548965	66	5.968	No	Yes	18.87884723	18	0.288	3.866256295	2	1.081
283	Validation	ATC144	SB	30859-30022	217	168	3.504	Yes	Yes	183.6767352	140	3.460	Yes	Yes	25.16433611	23	0.375	8.158928647	5	1.075
284	Validation	ATC145	NB	30412-30861	16	12	1.026	Yes	Yes	14.99987477	10	1.312	Yes	Yes	0.599994991	1	0.579	0	0	0.816
285	Validation	ATC145	SB	30861-30412	25	13	2.727	Yes	Yes	21.55248065	10	2.773	Yes	Yes	3.313727037	3	0.421	0.450666877	0	0.280
286	Validation	ATC146	NB	30013-31227	240	199	2.752	Yes	Yes	231.0174547	170	4.347	Yes	Yes	9.240698187	27	4.163	0	3	2.453
287	Validation	ATC146	SB	31227-30013	197	158	2.960	Yes	Yes	167.9202049	128	3.261	Yes	Yes	25.81798968	25	0.067	3.511246597	4	0.297
288	Validation	ATC147	NE	31225-30583	184	179	0.347	Yes	Yes	161.4609433	157	0.341	Yes	Yes	18.18560098	18	0.069	3.909054416	3	0.350
289	Validation	ATC147	SW	30583-31225	123	125	0.131	Yes	Yes	108.2905619	110	0.123	Yes	Yes	11.26350569	11	0.028	3.700866156	4	0.142
290	Validation	ATC148	EB	30017-30018	233	202	2.125	Yes	Yes	201.653449	172	2.168	Yes	Yes	26.61498963	24	0.441	4.735182203	5	0.237
291	Validation	ATC148	WB	30018-30017	189	164	1.886	Yes	Yes	160.4291649	138	1.850	Yes	Yes	26.16285362	23	0.657	1.998551318	3	0.526
294	Validation	ATC150	WB	30422-10344	48	105	6.580	No	Yes	40.7925537	98	6.906	No	Yes	6.090223181	2	1.929	0.979212355	5	2.285
295	Validation	ATC151	EB	20310-20240	273	277	0.268	Yes	Yes	226.9290265	233	0.403	Yes	Yes	36.62830949	31	0.925	9.323569688	13	1.111
296	Validation	ATC150	WB	20240-20310	311	265	2.655	Yes	Yes	251.9187985	219	2.165	Yes	Yes	48.14830279	34	2.264	10.48945168	13	0.765



297	Validation	ATC152	EB	30423-30626	92	43	5.903	No	Yes	77.42877826	30	6.450	No	Yes	11.93405157	11	0.204	2.158719226	2	0.313
298	Validation	ATC152	WB	30626-30423	95	123	2.611	Yes	Yes	81.35222173	93	1.227	Yes	Yes	12.14567713	26	3.221	1.952834362	4	1.020
299	Validation	ATC153	EB	31253-30350	9	22	3.260	Yes	Yes	7.739110096	17	2.729	Yes	Yes	1.112349158	4	1.710	0.171585774	1	0.707
300	Validation	ATC153	WB	30350-31253	58	26	4.880	Yes	Yes	49.62560489	16	5.785	No	Yes	7.493799397	8	0.164	1.082437691	2	0.815
301	Validation	ATC154	EB	31067-31069	22	33	1.958	Yes	Yes	18.69596233	17	0.411	Yes	Yes	3.189832436	14	3.643	0.531638739	2	1.258
302	Validation	ATC154	WB	31069-31067	32	18	2.797	Yes	Yes	26.64497918	11	3.743	Yes	Yes	4.30110471	6	0.793	0.984151078	1	0.332
307	Validation	ATC157	NB	20155-20067	892	951	1.925	Yes	Yes	764.7480206	815	1.789	Yes	Yes	107.1274477	109	0.136	20.4681102	27	1.379
308	Validation	ATC157	SB	20067-20336	868	886	0.633	Yes	Yes	740.3857989	775	1.259	Yes	Yes	100.8821398	90	1.094	26.41393566	21	1.068
325	Validation	LEB016	EB	10036-10035	453	419	1.640	Yes	Yes	388.791227	365	1.221	Yes	Yes	44.59614765	38	1.046	19.44794409	16	0.907
326	Validation	LEB016	WB	10035-10036	385	325	3.158	Yes	Yes	317.2026742	272	2.624	Yes	Yes	51.13468057	44	0.998	16.26250497	9	2.136
329	Validation	LEB018	EB	20308-10690	517	515	0.056	Yes	Yes	424.1663667	424	0.007	Yes	Yes	71.42089811	70	0.200	20.9568363	21	0.056
330	Validation	LEB018	WB	10690-20308	525	530	0.242	Yes	Yes	426.9326691	431	0.198	Yes	Yes	73.51658174	75	0.195	24.4775848	24	0.048
331	Validation	LEB019	EB	20282-10689	251	314	3.720	Yes	Yes	193.708884	228	2.362	Yes	Yes	39.81027777	67	3.706	17.57856421	19	0.266
332	Validation	LEB019	WB	10689-20282	291	290	0.078	Yes	Yes	239.3022158	211	1.882	Yes	Yes	35.61549633	62	3.814	16.45096735	17	0.057
366	Validation	LincsLab_FC032	WB	10083-14202	282	320	2.161	Yes	Yes	205.4681566	229	1.591	Yes	Yes	55.56901732	62	0.790	21.09564547	29	1.592
367	Validation	LincsLab_FC032	EB	14201-10083	247	288	2.517	Yes	Yes	181.4568529	217	2.497	Yes	Yes	49.22317275	53	0.571	16.1218754	18	0.444
368	Validation	LincsLab_FC032	SB	31387-14201	152	217	4.752	Yes	Yes	123.6582145	176	4.296	Yes	Yes	24.69734103	38	2.342	3.944714193	3	0.620
369	Validation	LincsLab_FC032	NB	14200-31387	217	216	0.045	Yes	Yes	183.8579832	181	0.197	Yes	Yes	29.49960179	31	0.337	3.77320488	4	0.067
370	Validation	LincsLab_FC032	NEB	14198-14199	455	504	2.272	Yes	Yes	358.111445	398	2.046	Yes	Yes	77.00768141	85	0.852	19.55206165	22	0.508
371	Validation	LincsLab_FC032	SWB	14203-14198	425	536	5.076	No	No	321.92298	405	4.367	Yes	Yes	78.55126523	99	2.211	24.69734103	32	1.349
436	Validation	MCJC04	NB	30031-31423	148	131	1.448	Yes	Yes	110.2194631	102	0.837	Yes	Yes	24.21005547	18	1.354	13.59161009	11	0.644
437	Validation	MCJC04	SB	31423-30031	153	137	1.333	Yes	Yes	120.4552046	106	1.352	Yes	Yes	20.36788005	21	0.213	11.82651099	9	0.809
440	Validation	MCJC04	EB	30031-31424	175	160	1.147	Yes	Yes	144.1375885	126	1.601	Yes	Yes	21.63388542	24	0.538	9.34298103	11	0.368
441	Validation	MCJC04	WB	31424-30031	165	141	1.885	Yes	Yes	128.9613856	108	1.930	Yes	Yes	24.21168319	23	0.316	11.45035043	11	0.236
446	Validation	MCJC05	SB	30027-30037	139	74	6.245	No	Yes	111.2467114	61	5.461	No	Yes	21.22892427	10	2.878	6.258889441	4	1.102
447	Validation	MCJC05	NB	30037-30027	159	92	6.002	No	Yes	121.0744503	70	5.273	No	Yes	29.87488131	18	2.384	8.476879489	4	1.635
460	Validation	MCJC08	NB	30161-30163	78	73	0.617	Yes	Yes	62.74294222	57	0.724	Yes	Yes	12.84895359	13	0.042	2.503042908	3	0.059



461	Validation	MCJC08	SB	30163-30161	92	87	0.599	Yes	Yes	73.89414906	68	0.751	Yes	Yes	15.53671852	16	0.117	2.842082656	3	0.110
464	Validation	MCJC08	SB	30161-30169	81	88	0.756	Yes	Yes	65.20942773	70	0.560	Yes	Yes	13.47461356	15	0.332	1.992155811	3	0.682
465	Validation	MCJC08	NB	30169-30161	68	80	1.377	Yes	Yes	54.29010544	64	1.254	Yes	Yes	11.73638994	13	0.480	1.991080264	2	0.330
466	Validation	MCJC08	EB	30161-31326	26	22	0.843	Yes	Yes	20.93142125	15	1.505	Yes	Yes	3.537086061	6	1.238	1.328103874	1	0.492
467	Validation	MCJC08	WB	31326-30161	24	15	2.086	Yes	Yes	19.72948694	9	2.822	Yes	Yes	2.969448057	5	0.820	0.995540132	1	0.017
468	Validation	MCJC09	NB	30182-30180	117	143	2.359	Yes	Yes	88.10253981	105	1.759	Yes	Yes	18.69349798	25	1.397	9.723972044	13	0.911
469	Validation	MCJC09	SB	30180-30182	148	172	1.907	Yes	Yes	112.915434	129	1.494	Yes	Yes	25.14820356	30	0.968	10.22693611	13	0.769
472	Validation	MCJC09	SB	30182-30184	54	54	0.033	Yes	Yes	45.76148692	47	0.220	Yes	Yes	6.904040978	3	1.685	1.381274464	3	1.311
473	Validation	MCJC09	NB	30184-30182	41	46	0.699	Yes	Yes	33.14373558	39	0.908	Yes	Yes	5.664749279	3	1.112	2.5535099	4	0.843
474	Validation	MCJC09	EB	30182-30183	121	119	0.191	Yes	Yes	88.94905682	82	0.741	Yes	Yes	21.59725639	27	1.117	10.18689917	9	0.242
475	Validation	MCJC09	WB	30183-30182	102	97	0.422	Yes	Yes	76.75391398	67	1.172	Yes	Yes	16.38184251	22	1.268	8.511699667	9	0.060
476	Validation	MCJC10	NB	30110-30111	126	144	1.515	Yes	Yes	93.40286976	112	1.853	Yes	Yes	22.94922737	21	0.488	9.833333333	11	0.341
477	Validation	MCJC10	SB	30111-30110	138	152	1.204	Yes	Yes	100.9231242	121	1.909	Yes	Yes	22.31795818	23	0.085	14.36236162	8	1.787
480	Validation	MCJC10	EB	30110-30109	134	152	1.503	Yes	Yes	97.89183223	117	1.882	Yes	Yes	22.02759382	27	0.987	14.42847682	8	1.914
481	Validation	MCJC10	WB	30109-30110	115	136	1.911	Yes	Yes	83.11377614	102	1.922	Yes	Yes	20.65436654	23	0.473	11.16174662	12	0.219
488	Validation	MCJC12	NB	30103-31359	147	105	3.705	Yes	Yes	118	79	3.919	Yes	Yes	28	23	0.926	1	3	1.400
489	Validation	MCJC12	SB	31359-30103	153	91	5.606	No	Yes	119.4264491	65	5.694	No	Yes	24.2206527	22	0.458	9.352898198	4	1.946
492	Validation	MCJC12	EB	30103-30104	208	130	5.992	No	Yes	160	100	5.233	No	Yes	37	22	2.789	11	8	0.999
493	Validation	MCJC12	WB	30104-30103	196	134	4.862	Yes	Yes	151.0998365	109	3.727	Yes	Yes	34.75069311	14	4.139	10.14947041	11	0.168
514	Validation	MCJC16	NB	10705-10706	267	285	1.050	Yes	Yes	196.1559878	220	1.685	Yes	Yes	45.09911172	43	0.275	26.1541317	21	1.036
515	Validation	MCJC16	SB	10706-10702	265	267	0.174	Yes	Yes	213.2567662	222	0.589	Yes	Yes	35.71044906	32	0.668	15.59188621	14	0.516
524	Validation	MCJC17	WB	10696-20307	312	309	0.186	Yes	Yes	260.8706983	258	0.160	Yes	Yes	36.54872251	35	0.212	14.58595807	15	0.148
525	Validation	MCJC17	EB	20307-10697	340	334	0.334	Yes	Yes	293.3177618	289	0.268	Yes	Yes	36.61237586	36	0.125	10.32302247	10	0.254
544	Validation	MCJC19	EB	10677-20305	217	287	4.404	Yes	Yes	179.8934828	238	4.009	Yes	Yes	29.84253489	30	0.107	7.712115759	19	3.124
545	Validation	MCJC19	WB	20305-10678	217	283	4.183	Yes	Yes	178.3845906	230	3.602	Yes	Yes	30.01018958	34	0.686	8.38273452	19	2.905
546	Validation	MCJC20	NB	10670-10668	617	664	1.836	Yes	Yes	488.8810772	524	1.544	Yes	Yes	77.79177635	82	0.451	50.6317165	58	1.041
547	Validation	MCJC20	SB	10668-10671	593	678	3.385	Yes	Yes	445.123203	504	2.702	Yes	Yes	93.04835317	111	1.735	54.48777438	63	1.165



552	Validation	MCJC20	SB	10671-10673	670	655	0.597	Yes	Yes	486.1986022	472	0.652	Yes	Yes	107.4666565	106	0.138	76.28288413	77	0.040
553	Validation	MCJC20	NB	10673-10672	595	592	0.104	Yes	Yes	411.5922649	410	0.098	Yes	Yes	100.7604689	100	0.076	82.48610768	83	0.022
558	Validation	MCJC21	SB	10665-10034	486	513	1.199	Yes	Yes	419.6666667	428	0.428	Yes	Yes	50.33333333	71	2.635	16.16666667	14	0.655
559	Validation	MCJC21	NB	10034-10666	535	507	1.228	Yes	Yes	458.3333333	421	1.770	Yes	Yes	58.5	69	1.262	18.16666667	17	0.234
564	Validation	MCJC22	WB	10032-10027	1163	1217	1.561	Yes	Yes	802.6666667	871	2.373	Yes	Yes	189.5	177	0.922	170.5	168	0.179
566	Validation	MCJC22	SB	10031-20031	449	458	0.393	Yes	Yes	366.8333333	384	0.883	Yes	Yes	64.5	58	0.828	18	16	0.550
567	Validation	MCJC22	NB	20031-10032	428	431	0.134	Yes	Yes	353.5	369	0.819	Yes	Yes	57.5	48	1.341	17	14	0.778
570	Validation	MCJC23	NB	10025-10092	550	536	0.624	Yes	Yes	418.2250346	426	0.376	Yes	Yes	76.83205507	71	0.644	55.31332405	39	2.441
571	Validation	MCJC23	SB	10092-10026	549	538	0.499	Yes	Yes	430.7192217	410	1.006	Yes	Yes	76.56600747	82	0.616	41.98465008	45	0.528
574	Validation	MCJC23	SB	10027-10077	517	545	1.215	Yes	Yes	413.8650302	431	0.826	Yes	Yes	69.83217153	80	1.177	33.28735968	34	0.147
575	Validation	MCJC23	NB	10077-10028	498	542	1.919	Yes	Yes	396.3612722	432	1.771	Yes	Yes	68.42775505	81	1.482	33.26476122	28	0.924
576	Validation	MCJC23	EB	10026-10476	1120	1193	2.154	Yes	Yes	771	831	2.131	Yes	Yes	174.3333333	175	0.069	174.3333333	186	0.896
582	Validation	MCJC24	SB	10024-10020	1065	1010	1.695	Yes	Yes	734.4951987	711	0.856	Yes	Yes	175.9535976	145	2.403	154.2423152	153	0.089
583	Validation	MCJC24	NB	10020-10021	1062	1054	0.247	Yes	Yes	725.0227087	733	0.285	Yes	Yes	163.6309778	150	1.071	173.1034678	171	0.176
584	Validation	MCJC24	SB	10023-20010	343	474	6.517	No	No	286.1708807	379	5.106	No	Yes	43.1577069	78	4.423	13.29136267	18	1.074
585	Validation	MCJC24	NB	20010-10024	357	441	4.214	Yes	Yes	297.9246809	360	3.409	Yes	Yes	44.84849253	65	2.696	13.99635875	16	0.609
588	Validation	MCJC25	NB	10015-10019	1062	1054	0.247	Yes	Yes	725.0227087	733	0.285	Yes	Yes	163.6309778	150	1.071	173.1034678	171	0.176
589	Validation	MCJC25	SB	10019-10016	1065	1010	1.695	Yes	Yes	734.4951987	711	0.856	Yes	Yes	175.9535976	145	2.403	154.2423152	153	0.089
592	Validation	MCJC25	SB	10017-10018	1092	1064	0.842	Yes	Yes	753.7754881	746	0.281	Yes	Yes	176.7080437	153	1.880	161.4514669	166	0.327
593	Validation	MCJC25	NB	10011-10014	1072	1062	0.318	Yes	Yes	723.0946797	728	0.192	Yes	Yes	170.4209928	152	1.411	178.971382	181	0.177
597	Validation	MCJC26	SB	10018-10012	907	858	1.650	Yes	Yes	620.8253186	594	1.093	Yes	Yes	142.5064868	122	1.774	143.512415	142	0.141
598	Validation	MCJC26	WB	10010-30156	160	146	1.152	Yes	Yes	126.2439819	116	0.909	Yes	Yes	21.12449099	18	0.737	12.74175647	12	0.280
599	Validation	MCJC26	EB	30156-10011	151	108	3.823	Yes	Yes	121.728396	90	3.071	Yes	Yes	16.8932447	13	1.032	12.62587112	5	2.687
600	Validation	MCJC26	SB	10013-10009	1077	1078	0.040	Yes	Yes	730.9744502	703	1.058	Yes	Yes	174.0255686	203	2.090	171.678403	173	0.073
601	Validation	MCJC26	NB	10009-10010	1033	1026	0.231	Yes	Yes	680.5103884	664	0.640	Yes	Yes	161.4514669	170	0.644	190.9586924	192	0.065
602	Validation	MCJC26	EB	10012-30005	245	225	1.337	Yes	Yes	169.8342014	153	1.364	Yes	Yes	40.74008977	44	0.428	34.53686622	29	1.061
603	Validation	MCJC26	EB	10018-30005	185	206	1.503	Yes	Yes	134.291407	152	1.494	Yes	Yes	33.36328339	30	0.509	17.77139718	24	1.324



604	Validation	MCJC26	WB	30505-10013	463	520	2.534	Yes	Yes	327.0832103	352	1.340	Yes	Yes	85.45994379	112	2.656	50.8314292	56	0.699
605	Validation	MCJC27	NB	10001-10005	1000	982	0.544	Yes	Yes	650.282511	633	0.693	Yes	Yes	158.381016	160	0.161	190.914694	189	0.116
606	Validation	MCJC27	SB	10005-10002	1032	1034	0.068	Yes	Yes	690.5639459	674	0.632	Yes	Yes	170.7649803	191	1.505	170.9000458	169	0.118
611	Validation	MCJC27	NB	10002-10006	772	632	5.290	No	No	589.8865257	493	4.181	Yes	Yes	111.7396495	98	1.316	70.79969303	41	3.931
612	Validation	MCJC27	SB	10006-10003	715	560	6.105	No	No	533.0183189	437	4.365	Yes	Yes	109.323683	80	3.058	72.17372826	44	3.713
689	Validation	MCJC39	NB	10443-10442	993	972	0.667	Yes	Yes	832.737352	816	0.591	Yes	Yes	119.542723	117	0.233	40.61708919	39	0.219
691	Validation	MCJC39	SB	10496-10407	320	324	0.220	Yes	Yes	272.2712172	276	0.224	Yes	Yes	34.03390215	34	0.006	13.58002992	14	0.074
692	Validation	MCJC39	SB	10054-10055	712	699	0.498	Yes	Yes	586.2865654	575	0.477	Yes	Yes	95.43092922	95	0.061	30.69819566	30	0.208
693	Validation	MCJC39	WB	10443-31107	5	12	2.437	Yes	Yes	4.123417839	11	2.568	Yes	Yes	1	0	0.884	0	1	1.259
694	Validation	MCJC39	EB	31107-10443	11	0	4.690	Yes	Yes	9	0	4.243	Yes	Yes	2	0	2.000	0	0	0.000
695	Validation	MCJC39	SB	10055-10439	844	867	0.790	Yes	Yes	687.109183	707	0.756	Yes	Yes	114.1107605	116	0.189	42.67879811	44	0.170
696	Validation	MCJC39	NB	10439-10055	763	763	0.006	Yes	Yes	641	641	0.012	Yes	Yes	92	92	0.000	30	30	0.024
713	Validation	MCJC42	NB	20042-30587	140	131	0.831	Yes	Yes	120.297575	112	0.741	Yes	Yes	14.33161296	15	0.091	5.565214787	4	0.953
714	Validation	MCJC42	SB	30587-20042	90	118	2.768	Yes	Yes	71.03446962	104	3.546	Yes	Yes	13.69132045	11	0.632	4.812621506	2	1.501
715	Validation	MCJC42	WB	20042-20231	501	518	0.775	Yes	Yes	421.4540557	443	1.038	Yes	Yes	57.49309849	54	0.513	21.78384074	22	0.056
716	Validation	MCJC42	EB	20231-20042	598	578	0.822	Yes	Yes	522.5275622	503	0.842	Yes	Yes	60.30700676	59	0.182	15.12538187	16	0.136
741	Validation	MCJC46	WB	10475-10387	695	682	0.480	Yes	Yes	571.7693467	568	0.161	Yes	Yes	92.98282541	82	1.135	29.98747404	32	0.336
742	Validation	MCJC46	EB	10387-10475	665	663	0.064	Yes	Yes	562.1077509	566	0.175	Yes	Yes	78.90794233	72	0.776	23.77254586	25	0.191
743	Validation	MCJC46	SB	10474-20040	840	896	1.884	Yes	Yes	717.8329379	749	1.134	Yes	Yes	96.5561154	114	1.713	25.87130062	33	1.330
744	Validation	MCJC46	NB	20040-10474	762	803	1.472	Yes	Yes	637.353089	657	0.761	Yes	Yes	93.78899297	107	1.328	31.06967888	40	1.431
753	Validation	MCJC48	WB	10049-31342	266	286	1.209	Yes	Yes	210	227	1.120	Yes	Yes	42	40	0.254	14	19	1.272
754	Validation	MCJC48	EB	31342-10049	193	211	1.263	Yes	Yes	150.1125654	171	1.654	Yes	Yes	33.59162304	31	0.497	9.447643979	9	0.060
779	Validation	MCJC52	NB	30025-30658	89	148	5.438	No	Yes	75.55462185	123	4.749	Yes	Yes	12.25210084	18	1.480	1.042016807	7	3.021
783	Validation	MCJC52	EB	30025-30400	450	428	1.051	Yes	Yes	368.8739496	351	0.925	Yes	Yes	60.43697479	53	0.987	20.84033613	24	0.628
784	Validation	MCJC52	WB	30400-30025	463	398	3.117	Yes	Yes	378.745283	323	2.958	Yes	Yes	58.5	50	1.116	25.75471698	25	0.206
787	Validation	MCJC53	NB	20013-30337	132	288	10.754	No	No	105.2871456	245	10.564	No	No	20.62152692	31	2.126	6.538532926	12	1.754
788	Validation	MCJC53	SB	30337-20014	147	297	10.093	No	No	121.2143412	249	9.405	No	No	20.11856285	32	2.338	5.197295403	16	3.209



789	Validation	MCJC53	EB	20017-20012	906	927	0.681	Yes	Yes	776.7441806	807	1.076	Yes	Yes	108.8078941	93	1.598	20.78918161	27	1.304
790	Validation	MCJC53	WB	20154-20013	914	938	0.797	Yes	Yes	780.0972745	795	0.533	Yes	Yes	106.2930737	107	0.073	27.83067861	36	1.508
791	Validation	MCJC53	SB	20016-30024	518	604	3.633	Yes	Yes	433.8903388	480	2.161	Yes	Yes	62.19989014	92	3.421	22.13041913	32	1.888
792	Validation	MCJC53	NB	30024-20017	510	599	3.792	Yes	Yes	426.3458777	505	3.646	Yes	Yes	57.84086819	66	1.070	25.98647701	28	0.422
801	Validation	MCJC55	NB	10073-10074	265	289	1.437	Yes	Yes	232.5370556	242	0.637	Yes	Yes	24.14227542	37	2.277	8.38273452	10	0.510
802	Validation	MCJC55	SB	10074-10073	178	200	1.598	Yes	Yes	148.5420557	175	2.076	Yes	Yes	24.30993011	19	1.244	5.364950093	7	0.541
803	Validation	MCJC55	SB	10073-30485	22	35	2.332	Yes	Yes	18.60967063	33	2.870	Yes	Yes	3.520748499	0	2.445	0.16765469	1	1.352
804	Validation	MCJC55	NB	30485-10073	118	172	4.518	Yes	Yes	101.0957783	145	3.959	Yes	Yes	14.08299399	21	1.617	2.347165666	6	1.795
805	Validation	MCJC55	SB	10073-10469	200	233	2.275	Yes	Yes	167.9899998	203	2.576	Yes	Yes	25.31585825	23	0.551	6.538532926	8	0.408
806	Validation	MCJC55	NB	10469-10073	191	185	0.471	Yes	Yes	169.498892	159	0.843	Yes	Yes	14.58595807	20	1.328	7.376806378	6	0.459
829	Validation	MCJC59	NB	10045-10044	648	653	0.217	Yes	Yes	565.1639614	570	0.198	Yes	Yes	69.07373245	70	0.158	13.58002992	13	0.134
830	Validation	MCJC59	SB	10044-10045	506	571	2.803	Yes	Yes	441.9377639	504	2.860	Yes	Yes	48.28455084	48	0.099	16.09485028	20	0.837
831	Validation	MCJC59	WB	10045-20344	396	478	3.952	Yes	Yes	324.2441712	409	4.442	Yes	Yes	59.85272447	53	0.868	11.73582833	16	1.105
834	Validation	MCJC59	EB	20176-10045	686	737	1.932	Yes	Yes	563.3197598	595	1.328	Yes	Yes	98.07799389	118	1.881	24.30993011	24	0.006
835	Validation	MCJC59	SB	10045-10386	801	868	2.303	Yes	Yes	675.9837117	743	2.506	Yes	Yes	93.55131725	100	0.695	31.5190818	24	1.339
836	Validation	MCJC59	NB	10367-10045	625	656	1.234	Yes	Yes	543.0335422	572	1.235	Yes	Yes	66.05594802	68	0.267	15.59188621	15	0.030
837	Validation	MCJC59	EB	10045-20320	275	296	1.262	Yes	Yes	228.513343	239	0.679	Yes	Yes	36.88403189	39	0.347	9.388662663	18	2.370
838	Validation	MCJC59	WB	20320-10045	303	331	1.583	Yes	Yes	245.6141214	289	2.664	Yes	Yes	46.94331331	30	2.791	10.22693611	12	0.564
839	Validation	MCJC60	NB	10043-10369	436	435	0.060	Yes	Yes	379.4433962	379	0.022	Yes	Yes	46.27358491	45	0.138	10.28301887	10	0.033
845	Validation	MCJC61	SB	30017-31221	463	427	1.719	Yes	Yes	393.6532131	364	1.505	Yes	Yes	63.37347297	56	0.924	6.370878235	7	0.064
846	Validation	MCJC61	NB	30016-30017	172	150	1.690	Yes	Yes	146.8655088	127	1.710	Yes	Yes	21.29214568	19	0.541	3.520748499	5	0.490
847	Validation	MCJC61	NB	30017-30570	118	127	0.768	Yes	Yes	85.44992296	100	1.515	Yes	Yes	20.69589516	21	0.145	12.06202479	5	2.294
848	Validation	MCJC61	SB	30570-30017	114	117	0.307	Yes	Yes	80.47539725	85	0.531	Yes	Yes	20.88978173	23	0.358	12.13596844	9	0.988
849	Validation	MCJC61	SB	30017-30571	92	91	0.101	Yes	Yes	66.42749433	82	1.835	Yes	Yes	16.0886799	3	4.172	9.376837981	6	1.412
850	Validation	MCJC61	NB	30571-30017	92	115	2.336	Yes	Yes	65.02900301	103	4.178	Yes	Yes	16.88021092	5	3.634	9.806598723	7	0.883
929	Validation	MCJC72	WB	30111-31402	645	644	0.029	Yes	Yes	365.0874718	365	0.005	Yes	Yes	107.7008042	107	0.066	171.7939381	172	0.003
930	Validation	MCJC72	EB	31402-30111	545	545	0.004	Yes	Yes	327.5743429	328	0.023	Yes	Yes	85.32085033	85	0.035	132.2202607	132	0.016



947	Validation	MCJC75	EB	30170-30171	65	54	1.452	Yes	Yes	55.40486663	44	1.661	Yes	Yes	8.88958681	5	1.331	1.137040173	5	2.264
948	Validation	MCJC75	WB	30171-30170	69	49	2.518	Yes	Yes	55.78324086	39	2.369	Yes	Yes	11.14117432	7	1.525	1.77949312	3	0.965
949	Validation	MCJC75	WB	30170-31403	141	148	0.516	Yes	Yes	114.9558611	114	0.104	Yes	Yes	18.4730619	23	0.934	8.012412388	11	0.997
950	Validation	MCJC75	EB	31403-30170	154	165	0.932	Yes	Yes	130.0090113	138	0.683	Yes	Yes	17.30639436	21	0.850	6.271306668	6	0.054
951	Validation	MCJC75	SB	30170-30177	14	18	0.895	Yes	Yes	11.10134773	14	0.871	Yes	Yes	1.878689616	1	0.520	1.423249709	3	0.815
952	Validation	MCJC75	NB	30177-30170	16	18	0.549	Yes	Yes	11.2273493	13	0.507	Yes	Yes	2.590926762	4	0.712	2.325190683	2	0.543
953	Validation	MCJC76	NB	10008-10009	84	89	0.464	Yes	Yes	63.15791694	76	1.503	Yes	Yes	14.67305141	7	2.253	6.37958757	6	0.311
954	Validation	MCJC76	SB	10009-10008	99	107	0.795	Yes	Yes	73.05034407	83	1.114	Yes	Yes	19.31909926	17	0.556	6.238459135	7	0.229
957	Validation	MCJC76	SB	10008-10005	30	37	1.224	Yes	Yes	25.24337147	19	1.289	Yes	Yes	3.659819656	14	3.560	0.750732237	3	1.740
958	Validation	MCJC76	NB	10005-10008	32	39	1.202	Yes	Yes	25.00738249	23	0.362	Yes	Yes	4.869858696	13	2.812	1.974267039	2	0.298
973	Validation	MCJC79	WB	10110-30036	1189	1178	0.309	Yes	Yes	786.7814127	773	0.484	Yes	Yes	197.9809437	194	0.249	204.3231904	211	0.442
974	Validation	MCJC79	EB	30036-10110	1175	1128	1.387	Yes	Yes	776.2528319	744	1.167	Yes	Yes	208.6756292	193	1.133	190.3887395	192	0.085
975	Validation	MCJC79	SB	10110-31405	31	30	0.087	Yes	Yes	25.97240639	23	0.693	Yes	Yes	4.10560376	7	1.047	0.803270301	1	0.502
976	Validation	MCJC79	NB	31405-10110	33	21	2.402	Yes	Yes	28.40038135	14	3.054	Yes	Yes	4.026919744	6	0.833	0.847772578	1	0.273
977	Validation	MCJC80	NB	10372-10454	14	33	3.905	Yes	Yes	11.81023416	29	3.735	Yes	Yes	1.866909867	3	0.918	0.365264974	1	0.792
978	Validation	MCJC80	SB	10454-10372	17	33	3.175	Yes	Yes	14.42697124	28	2.925	Yes	Yes	2.045615325	2	0.032	0.430655858	3	1.884
979	Validation	MCJC80	SB	10372-10455	58	66	1.030	Yes	Yes	48.4032627	55	0.904	Yes	Yes	7.65137486	7	0.154	1.497008125	4	1.270
980	Validation	MCJC80	NB	10455-10372	60	58	0.333	Yes	Yes	51.37270495	48	0.460	Yes	Yes	7.284189507	7	0.068	1.53351358	2	0.375
981	Validation	MCJC80	WB	10372-30450	27	14	2.817	Yes	Yes	21.85862599	11	2.545	Yes	Yes	3.021110909	2	0.364	2.280642549	0	1.576
982	Validation	MCJC80	EB	30450-10372	29	10	4.382	Yes	Yes	23.38526317	8	3.762	Yes	Yes	3.660850914	1	1.546	2.335370411	0	1.749



PM Validation:

					PM Peak															
					ALL VEHICLES					CAR					LGV			HGV		
ID	Calibration / Validation	Ref	Dir	Link Ref	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	GEH Pass?	Flow Pass?	Observed	Modelled	GEH	Observed	Modelled	GEH
1	Validation	ATC001	NB	20058-20057	182	224	2.974	Yes	Yes	146.4315335	198	3.957	Yes	Yes	28.73604207	25	0.691	6.725456654	1	3.104
2	Validation	ATC001	SB	20057-20058	168	135	2.674	Yes	Yes	127.5196902	113	1.364	Yes	Yes	32.82685094	19	2.663	7.57542714	3	1.888
5	Validation	ATC003	NB	20228-31409	173	238	4.550	Yes	Yes	139.104904	195	4.311	Yes	Yes	27.29824838	38	1.921	6.388951749	5	0.628
6	Validation	ATC003	SB	31409-20228	120	146	2.240	Yes	Yes	90.93656093	139	4.493	Yes	Yes	23.40941173	4	5.210	5.402171937	2	1.563
7	Validation	ATC004	NB	10199-10200	702	702	0.032	Yes	Yes	520.3815714	519	0.057	Yes	Yes	101.5492815	102	0.044	80.49067471	81	0.002
8	Validation	ATC004	SB	10200-10199	650	650	0.007	Yes	Yes	446.1968538	446	0.005	Yes	Yes	110.9246378	111	0.007	92.43719815	93	0.021
9	Validation	ATC005	NB	30678-30680	101	81	2.101	Yes	Yes	88.49421092	63	2.953	Yes	Yes	12.27165815	14	0.501	0.172840256	4	2.651
10	Validation	ATC005	SB	30680-30678	101	74	2.904	Yes	Yes	87.66825186	63	2.816	Yes	Yes	12.88562232	5	2.488	0.460200797	5	2.845
21	Validation	ATC011	SB	20139-20140	214	237	1.547	Yes	Yes	188.8589889	205	1.177	Yes	Yes	21.62249605	26	0.830	3.378515008	6	1.228
22	Validation	ATC011	NB	20140-20139	237	270	2.025	Yes	Yes	202.6188346	238	2.366	Yes	Yes	31.01764098	31	0.065	3.793524436	1	2.181
23	Validation	ATC012	SE	20132-30312	22	39	3.125	Yes	Yes	18.6357346	30	2.342	Yes	Yes	2.435351681	9	2.612	0.529424278	0	1.029
24	Validation	ATC012	NW	30312-20132	31	58	3.949	Yes	Yes	23.776004	48	4.009	Yes	Yes	5.893197573	10	1.420	1.625709675	0	1.803
29	Validation	ATC015	SB	30293-30295	119	159	3.336	Yes	Yes	99.73976687	149	4.442	Yes	Yes	18.16821032	8	2.844	1.48311921	2	0.033
30	Validation	ATC015	NB	30295-30293	176	163	1.013	Yes	Yes	144.1161896	143	0.114	Yes	Yes	26.88734881	19	1.674	5.377469761	2	2.060
31	Validation	ATC016	SW	30222-30603	36	46	1.617	Yes	Yes	31.41506746	32	0.109	Yes	Yes	3.926883432	12	2.973	0.341468125	2	1.249
32	Validation	ATC016	NE	30603-30222	58	79	2.590	Yes	Yes	47.12372096	52	0.712	Yes	Yes	9.801733959	25	3.681	0.753979535	2	0.896
33	Validation	ATC017	EB	10170-10166	1392	1369	0.637	Yes	Yes	1082.572805	1030	1.627	Yes	Yes	225.6572105	234	0.532	83.94614459	105	2.175
34	Validation	ATC017	WB	10166-10170	1664	1568	2.389	Yes	Yes	1276.279505	1211	1.848	Yes	Yes	233.7739687	254	1.311	153.5326335	102	4.540
35	Validation	ATC018	WB	30208-30655	43	39	0.652	Yes	Yes	35.0775145	27	1.419	Yes	Yes	7.699942207	11	1.112	0.427774567	1	0.428
36	Validation	ATC018	EB	30655-30208	39	25	2.388	Yes	Yes	33.24789612	14	3.923	Yes	Yes	5.059462452	8	1.308	0.72278035	3	1.595
37	Validation	ATC019	SE	30249-30272	20	47	4.796	Yes	Yes	15.97657902	37	4.080	Yes	Yes	3.507053932	7	1.421	0.19483633	4	2.543
38	Validation	ATC019	NW	30272-30249	23	52	4.630	Yes	Yes	19.79325122	49	4.976	Yes	Yes	3.012016491	2	0.577	0.43028807	0	0.081



39	Validation	ATC020	WB	30167-30259	80	83	0.346	Yes	Yes	64.96247538	68	0.382	Yes	Yes	14.26005557	12	0.684	0.792225309	3	1.740
40	Validation	ATC020	EB	30259-30167	85	96	1.076	Yes	Yes	72.81038976	71	0.174	Yes	Yes	11.07984192	19	2.044	1.58283456	5	2.032
41	Validation	ATC021	EB	30264-30265	49	27	3.502	Yes	Yes	42.78229733	22	3.650	Yes	Yes	4.903899694	4	0.612	1.352799916	2	0.312
42	Validation	ATC021	WB	30265-30264	35	18	3.260	Yes	Yes	30.4605866	12	3.935	Yes	Yes	3.840116687	6	0.856	0.650867235	0	0.744
43	Validation	ATC022	SW	30279-30280	36	54	2.644	Yes	Yes	29.60516241	38	1.369	Yes	Yes	6.498694187	16	2.924	0.361038566	0	0.032
44	Validation	ATC022	NE	30280-30279	38	56	2.556	Yes	Yes	32.63498526	49	2.559	Yes	Yes	4.96619341	6	0.474	0.709456201	1	0.096
47	Validation	ATC024	NW	10122-10123	198	181	1.240	Yes	Yes	165.8629668	139	2.207	Yes	Yes	24.92029797	42	3.017	7.353530547	0	3.835
48	Validation	ATC024	SE	10123-10122	156	156	0.006	Yes	Yes	120.4095986	132	0.991	Yes	Yes	26.46774459	24	0.536	8.946843243	0	3.929
53	Validation	ATC027	NB	20273-20034	357	299	3.221	Yes	Yes	312.7628334	261	3.065	Yes	Yes	39.46073132	36	0.588	4.676827416	2	1.551
54	Validation	ATC027	SB	20034-20273	216	165	3.705	Yes	Yes	184.7398515	144	3.201	Yes	Yes	29.0167306	21	1.554	2.579264943	0	2.004
55	Validation	ATC028	NB	10086-10470	860	962	3.365	Yes	Yes	635.9594759	739	3.916	Yes	No	122.9019224	139	1.448	101.4520586	84	1.836
56	Validation	ATC028	SB	10470-10086	792	831	1.377	Yes	Yes	555.5267409	620	2.665	Yes	Yes	131.3589273	117	1.252	105.3186113	94	1.144
59	Validation	ATC030	NE	10116-10117	814	743	2.549	Yes	Yes	589.714064	582	0.333	Yes	Yes	189.9915604	140	3.908	34.54392006	22	2.434
60	Validation	ATC030	SW	10117-10116	639	614	1.033	Yes	Yes	496.0809402	470	1.183	Yes	Yes	115.7702521	116	0.013	27.59010682	28	0.003
61	Validation	ATC031	EB	30057-30056	170	214	3.148	Yes	Yes	148.4077753	192	3.369	Yes	Yes	18.60097453	12	1.696	3.400178139	10	2.459
62	Validation	ATC031	WB	30056-30057	113	127	1.242	Yes	Yes	89.05483972	119	2.934	Yes	Yes	20.14046784	6	3.922	3.882499824	2	1.290
63	Validation	ATC032	EB	20186-20047	126	161	2.924	Yes	Yes	106.8914571	125	1.721	Yes	Yes	17.05714742	30	2.743	2.274286322	5	1.604
64	Validation	ATC032	WB	20047-20186	120	100	1.861	Yes	Yes	101.0000315	86	1.560	Yes	Yes	15.90389045	11	1.228	3.098160477	3	0.045
77	Validation	ATC039	NE	10213-20330	117	151	2.963	Yes	Yes	85.81345141	113	2.733	Yes	Yes	25.98576346	26	0.020	4.834560643	12	2.400
78	Validation	ATC039	SW	20330-10213	142	168	2.105	Yes	Yes	114.5301283	159	3.780	Yes	Yes	22.0093485	4	4.949	5.29854686	5	0.041
107	Validation	ATC055	EB	30159-31416	93	101	0.873	Yes	Yes	80.9474882	83	0.222	Yes	Yes	10.20491838	17	1.918	1.729647184	1	0.431
108	Validation	ATC055	WB	31416-30159	117	130	1.155	Yes	Yes	102.1525294	112	0.964	Yes	Yes	11.70918321	13	0.300	3.230119506	5	0.890
111	Validation	ATC057	NB	20053-30453	223	187	2.515	Yes	Yes	187.878184	171	1.254	Yes	Yes	30.65794634	13	3.657	4.323556535	2	1.107
112	Validation	ATC057	SB	30453-20053	126	110	1.402	Yes	Yes	105.2690633	98	0.734	Yes	Yes	17.37695064	9	2.190	3.022078372	3	0.096
139	Validation	ATC071	NB	10110-10455	416	441	1.205	Yes	Yes	358.6809787	376	0.921	Yes	Yes	47.00662399	62	2.036	10.72977287	3	2.954
140	Validation	ATC071	SB	10455-10110	573	493	3.467	Yes	Yes	496.603284	418	3.657	Yes	Yes	66.41201602	66	0.037	9.912241197	8	0.500
141	Validation	ATC072	NW	30032-30988	572	567	0.208	Yes	Yes	469.3577329	465	0.222	Yes	Yes	89.69525937	90	0.032	13.28818657	13	0.134



142	Validation	ATC072	SE	30988-30032	452	453	0.062	Yes	Yes	387.9531639	389	0.032	Yes	Yes	57.87367157	58	0.017	5.986931541	7	0.223
169	Validation	ATC086	NB	30030-30029	335	359	1.240	Yes	Yes	279.3088865	305	1.504	Yes	Yes	50.04071458	47	0.437	6.127434438	7	0.175
170	Validation	ATC086	SB	30029-30030	192	219	1.917	Yes	Yes	163.5290137	193	2.229	Yes	Yes	24.80780703	22	0.583	3.543972433	4	0.271
171	Validation	ATC087	NE	10657-10416	536	546	0.430	Yes	Yes	449.2143156	444	0.230	Yes	Yes	76.07355048	90	1.551	10.26992932	11	0.221
172	Validation	ATC087	SW	10416-10657	513	532	0.845	Yes	Yes	446.7777641	472	1.155	Yes	Yes	49.00428045	49	0.018	16.77624015	11	1.487
187	Validation	ATC095	EB	10426-10487	560	657	3.938	Yes	Yes	483.177787	558	3.281	Yes	Yes	70.94645049	88	1.894	6.02812978	11	1.833
188	Validation	ATC095	WB	10487-10426	615	683	2.664	Yes	Yes	533.9827139	584	2.113	Yes	Yes	60.8275961	72	1.398	19.96631017	26	1.345
191	Validation	ATC097	NW	20169-20168	509	469	1.831	Yes	Yes	446.043697	409	1.772	Yes	Yes	56.27654121	53	0.398	6.669812292	6	0.348
192	Validation	ATC097	SE	20168-20169	298	266	1.939	Yes	Yes	254.7733392	212	2.807	Yes	Yes	40.01675484	51	1.607	3.557044875	3	0.293
193	Validation	ATC098	NB	20339-20304	761	781	0.725	Yes	Yes	675.32893	703	1.042	Yes	Yes	76.46801423	70	0.780	9.558501779	9	0.180
194	Validation	ATC098	SB	20304-20339	624	585	1.602	Yes	Yes	537.7980074	511	1.177	Yes	Yes	72.61407695	60	1.503	13.61513943	13	0.046
199	Validation	ATC101	EB	30419-30420	368	369	0.063	Yes	Yes	342.5215364	326	0.922	Yes	Yes	24.08598932	42	3.103	1.564025281	2	0.183
200	Validation	ATC101	WB	30420-30419	353	329	1.310	Yes	Yes	318.2390383	300	1.051	Yes	Yes	30.16945012	25	1.064	4.379436307	4	0.060
201	Validation	ATC102	WB	20312-20311	420	463	2.056	Yes	Yes	366.1687098	394	1.421	Yes	Yes	46.68412865	63	2.162	6.669161236	6	0.194
202	Validation	ATC102	EB	20311-20312	437	409	1.399	Yes	Yes	368.669845	355	0.695	Yes	Yes	61.44497416	49	1.645	7.20058291	4	1.401
215	Validation	ATC109	NB	20214-31428	232	207	1.646	Yes	Yes	208.39655	194	1.047	Yes	Yes	20.29836526	12	2.003	3.157523485	2	0.950
216	Validation	ATC109	SB	31428-20214	458	435	1.059	Yes	Yes	407.5761753	399	0.446	Yes	Yes	45.75797338	32	2.121	4.245585159	4	0.074
221	Validation	ATC112	NE	30346-30807	353	273	4.553	Yes	Yes	302.4242425	238	3.944	Yes	Yes	46.55456717	28	2.962	4.330657411	7	1.016
222	Validation	ATC112	SW	30807-30346	316	289	1.564	Yes	Yes	285.0461792	270	0.887	Yes	Yes	27.54229671	15	2.827	3.650183901	4	0.279
225	Validation	ATC114	EB	20006-20276	506	549	1.871	Yes	Yes	407.8498308	455	2.290	Yes	Yes	82.91683866	83	0.041	15.15231569	11	1.170
226	Validation	ATC114	WB	20276-20006	562	592	1.278	Yes	Yes	486.0519811	505	0.865	Yes	Yes	64.48610442	74	1.165	11.06851046	13	0.497
227	Validation	ATC115	NW	20341-20075	399	495	4.560	Yes	Yes	355.4477374	419	3.219	Yes	Yes	39.02290196	72	4.452	4.241619779	4	0.078
228	Validation	ATC115	SE	20075-20341	360	303	3.144	Yes	Yes	314.7981632	266	2.876	Yes	Yes	43.29313759	35	1.352	1.678028589	2	0.182
239	Validation	ATC121	EB	20328-20066	61	38	3.290	Yes	Yes	54.06100631	36	2.696	Yes	Yes	5.694976238	1	2.350	1.238038313	1	0.674
240	Validation	ATC121	WB	20066-20328	30	49	3.159	Yes	Yes	26.3385195	44	3.037	Yes	Yes	2.920492922	4	0.736	0.324499214	1	0.551
241	Validation	ATC122	EB	31364-30025	605	656	2.017	Yes	Yes	546.1943987	606	2.474	Yes	Yes	54.81878089	43	1.663	3.986820428	7	1.250
242	Validation	ATC122	WB	30025-31364	468	359	5.381	No	No	424.2162162	326	5.054	No	Yes	38.91891892	25	2.368	4.864864865	7	0.800



245	Validation	ATC124	EB	20069-30083	93	69	2.672	Yes	Yes	82.77562901	51	3.952	Yes	Yes	8.719875423	18	2.473	1.895625092	1	0.679
246	Validation	ATC124	WB	30083-20069	102	107	0.435	Yes	Yes	91.02630167	86	0.580	Yes	Yes	10.09326548	19	2.410	1.121473943	2	0.537
247	Validation	ATC125	EB	30592-30076	17	17	0.150	Yes	Yes	14.96847548	12	0.743	Yes	Yes	1.508451017	4	1.651	0.058017347	1	0.933
248	Validation	ATC125	WB	30076-30592	164	101	5.496	No	Yes	153.6062704	85	6.248	No	Yes	10.59353589	14	0.851	0	2	2.024
249	Validation	ATC126	EB	31113-30079	121	148	2.275	Yes	Yes	113.4024631	130	1.518	Yes	Yes	7.820859527	16	2.288	0	2	1.893
250	Validation	ATC126	WB	30079-31113	36	25	2.093	Yes	Yes	32.83958308	20	2.553	Yes	Yes	3.309415349	5	0.699	0.127285206	0	0.293
272	Validation	ATC139	EB	10431-10389	635	642	0.258	Yes	Yes	539.9762318	556	0.669	Yes	Yes	85.74729861	76	1.059	9.269978228	10	0.126
273	Validation	ATC139	WB	10389-10431	584	647	2.529	Yes	Yes	511.2521953	565	2.306	Yes	Yes	57.04407884	64	0.917	15.86940539	18	0.517
274	Validation	ATC140	EB	30634-20019	58	88	3.575	Yes	Yes	57.9037387	81	2.790	Yes	Yes	0	5	3.228	0	2	2.056
275	Validation	ATC140	WB	20019-30634	111	178	5.568	No	Yes	100.3936206	148	4.256	Yes	Yes	9.667533831	20	2.648	1.115484673	10	3.891
278	Validation	ATC142	NW	31235-31234	44	10	6.667	No	Yes	44.00935623	9	6.684	No	Yes	0	0	0.000	0	0	0.372
279	Validation	ATC142	SE	31234-31235	38	90	6.454	No	Yes	34.56633029	74	5.350	No	Yes	3.328609584	15	3.887	0.384070337	1	0.583
280	Validation	ATC143	EB	30411-31240	18	0	5.961	No	Yes	15.91753994	0	5.621	No	Yes	1.80398786	0	1.899	0.165070785	0	0.575
281	Validation	ATC143	WB	31240-30411	171	162	0.652	Yes	Yes	150.5126613	143	0.659	Yes	Yes	17.83621973	17	0.111	2.19041295	2	0.023
282	Validation	ATC144	NB	30022-30859	228	190	2.614	Yes	Yes	198.2051372	161	2.759	Yes	Yes	27.02287501	26	0.158	2.771987772	3	0.001
283	Validation	ATC144	SB	30859-30022	229	187	2.890	Yes	Yes	204.9147366	170	2.579	Yes	Yes	22.44400508	16	1.472	1.641258297	2	0.043
284	Validation	ATC145	NB	30412-30861	24	28	0.899	Yes	Yes	23.555484	28	0.840	Yes	Yes	0	0	0.000	0	0	0.795
285	Validation	ATC145	SB	30861-30412	26	15	2.541	Yes	Yes	23.82854535	15	2.108	Yes	Yes	2.294600664	0	2.142	0.264761615	0	0.010
286	Validation	ATC146	NB	30013-31227	406	342	3.297	Yes	Yes	405.6315419	299	5.688	No	No	0	40	8.919	0	3	2.543
287	Validation	ATC146	SB	31227-30013	235	218	1.133	Yes	Yes	212.1439493	188	1.721	Yes	Yes	20.4286766	27	1.305	2.357154992	3	0.560
288	Validation	ATC147	NE	31225-30583	253	268	0.915	Yes	Yes	232.1033823	242	0.665	Yes	Yes	20.2043284	25	0.909	0.985576995	1	0.236
289	Validation	ATC147	SW	30583-31225	145	144	0.099	Yes	Yes	131.8299558	130	0.187	Yes	Yes	12.99054309	14	0.269	0.481131226	0	0.058
290	Validation	ATC148	EB	30017-30018	290	306	0.947	Yes	Yes	259.5900134	268	0.497	Yes	Yes	26.80791877	33	1.085	3.127590523	5	1.134
291	Validation	ATC148	WB	30018-30017	314	306	0.455	Yes	Yes	280.1491011	280	0.032	Yes	Yes	30.59648886	23	1.484	3.346490969	4	0.107
294	Validation	ATC150	WB	30422-10344	162	236	5.241	No	Yes	150.3543921	227	5.581	No	Yes	10.40104814	6	1.529	1.448247209	3	1.114
295	Validation	ATC151	EB	20310-20240	339	280	3.357	Yes	Yes	303.8243262	251	3.159	Yes	Yes	30.98491712	25	1.185	3.87311464	4	0.073
296	Validation	ATC150	WB	20240-20310	358	275	4.667	Yes	Yes	309.8213731	245	3.920	Yes	Yes	42.95031496	26	2.948	4.825878086	4	0.199



297	Validation	ATC152	EB	30423-30626	129	55	7.779	No	Yes	114.3387153	47	7.522	No	Yes	13.45161356	7	1.906	1.494623729	1	0.940
298	Validation	ATC152	WB	30626-30423	120	192	5.730	No	Yes	111.3650665	155	3.751	Yes	Yes	7.703888135	35	5.904	1.072693285	2	0.807
299	Validation	ATC153	EB	31253-30350	6	23	4.432	Yes	Yes	5.596755461	23	4.566	Yes	Yes	0.42515826	0	0.922	0.069698075	0	0.344
300	Validation	ATC153	WB	30350-31253	76	60	2.036	Yes	Yes	67.4422883	40	3.735	Yes	Yes	7.97908763	19	2.979	0.949891384	1	0.363
301	Validation	ATC154	EB	31067-31069	9	23	3.323	Yes	Yes	8.844435752	22	3.328	Yes	Yes	0.457470815	0	0.957	0.025415045	1	1.133
302	Validation	ATC154	WB	31069-31067	68	30	5.438	No	Yes	60.39592567	29	4.633	Yes	Yes	6.811570564	0	3.691	0.681157056	1	0.221
307	Validation	ATC157	NB	20155-20067	805	903	3.330	Yes	Yes	708.538522	830	4.383	Yes	No	90.64853154	64	3.003	6.289898107	8	0.802
308	Validation	ATC157	SB	20067-20336	1023	1141	3.589	Yes	Yes	908.3672339	1019	3.560	Yes	Yes	99.95921484	115	1.492	15.04240612	7	2.376
325	Validation	LEB016	EB	10036-10035	461	535	3.290	Yes	Yes	407.9038618	465	2.725	Yes	Yes	46.27269455	64	2.355	7.041496997	6	0.380
326	Validation	LEB016	WB	10035-10036	338	447	5.498	No	No	278.6420955	347	3.871	Yes	Yes	48.78751491	79	3.732	11.06520957	22	2.647
329	Validation	LEB018	EB	20308-10690	994	987	0.227	Yes	Yes	883.7078731	873	0.351	Yes	Yes	103.1076346	107	0.380	7.544461068	7	0.230
330	Validation	LEB018	WB	10690-20308	532	533	0.076	Yes	Yes	454.4280383	456	0.066	Yes	Yes	64.63088315	65	0.046	12.57410178	13	0.006
331	Validation	LEB019	EB	20282-10689	366	449	4.098	Yes	Yes	314.1182036	364	2.727	Yes	Yes	46.49776041	66	2.632	5.683059605	18	3.671
332	Validation	LEB019	WB	10689-20282	260	258	0.141	Yes	Yes	223.0416547	177	3.226	Yes	Yes	29.00068796	63	5.054	7.909278535	17	2.564
366	Validation	LincsLab_FC032	WB	10083-14202	362	381	0.976	Yes	Yes	259.3220808	273	0.857	Yes	Yes	90.04238918	88	0.246	12.34867052	19	1.791
367	Validation	LincsLab_FC032	EB	14201-10083	431	426	0.269	Yes	Yes	359.1405008	372	0.666	Yes	Yes	63.2869364	46	2.349	8.746974949	8	0.334
368	Validation	LincsLab_FC032	SB	31387-14201	226	256	1.932	Yes	Yes	196.0351444	214	1.274	Yes	Yes	28.81356454	40	1.923	1.029055876	1	0.400
369	Validation	LincsLab_FC032	NB	14200-31387	300	332	1.795	Yes	Yes	263.4383043	271	0.478	Yes	Yes	36.53148361	59	3.302	0.514527938	2	1.172
370	Validation	LincsLab_FC032	NEB	14198-14199	714	758	1.616	Yes	Yes	606.1139112	643	1.481	Yes	Yes	98.78936413	105	0.647	9.261502887	10	0.095
371	Validation	LincsLab_FC032	SWB	14203-14198	570	636	2.698	Yes	Yes	438.8923313	488	2.263	Yes	Yes	117.8268978	128	0.901	13.37772639	21	1.832
436	Validation	MCJC04	NB	30031-31423	175	172	0.239	Yes	Yes	138.0500655	137	0.128	Yes	Yes	29.50263497	30	0.148	7.793148859	5	0.958
437	Validation	MCJC04	SB	31423-30031	293	296	0.224	Yes	Yes	239.7399085	248	0.519	Yes	Yes	46.85145821	44	0.465	5.981037218	5	0.483
440	Validation	MCJC04	EB	30031-31424	326	354	1.501	Yes	Yes	274.2653404	294	1.147	Yes	Yes	45.61547378	53	1.115	6.291385961	7	0.197
441	Validation	MCJC04	WB	31424-30031	202	191	0.743	Yes	Yes	169.3480313	168	0.093	Yes	Yes	27.57032912	18	1.989	4.895973163	5	0.131
446	Validation	MCJC05	SB	30027-30037	153	130	1.923	Yes	Yes	125.9333196	127	0.123	Yes	Yes	23.56236331	1	6.476	3.279653764	2	1.010
447	Validation	MCJC05	NB	30037-30027	353	255	5.597	No	Yes	277.2329987	242	2.171	Yes	Yes	70.28193732	8	9.915	5.301037033	5	0.223
460	Validation	MCJC08	NB	30161-30163	145	143	0.144	Yes	Yes	120.0496642	118	0.198	Yes	Yes	22.54207668	23	0.096	2.621171707	3	0.015



461	Validation	MCJC08	SB	30163-30161	309	184	7.961	No	No	257.4834748	159	6.813	No	Yes	48.60129845	22	4.481	3.102210539	3	0.041
464	Validation	MCJC08	SB	30161-30169	322	205	7.212	No	No	269.0595633	173	6.447	No	Yes	49.03456776	28	3.393	3.460805217	3	0.027
465	Validation	MCJC08	NB	30169-30161	157	162	0.371	Yes	Yes	130.6331342	129	0.142	Yes	Yes	24.25042229	31	1.196	2.592404867	3	0.030
466	Validation	MCJC08	EB	30161-31326	15	13	0.558	Yes	Yes	13.57870693	13	0.296	Yes	Yes	1.011022016	0	1.422	0.494400745	0	0.014
467	Validation	MCJC08	WB	31326-30161	19	17	0.405	Yes	Yes	15.49009496	16	0.235	Yes	Yes	2.579832158	0	2.271	0.518480973	0	0.092
468	Validation	MCJC09	NB	30182-30180	229	256	1.681	Yes	Yes	181.5700297	206	1.782	Yes	Yes	38.22526941	41	0.436	9.556317353	8	0.465
469	Validation	MCJC09	SB	30180-30182	376	408	1.576	Yes	Yes	312.0892062	338	1.434	Yes	Yes	59.85272447	63	0.398	4.526676641	7	0.938
472	Validation	MCJC09	SB	30182-30184	107	119	1.162	Yes	Yes	93.6185621	111	1.671	Yes	Yes	12.71543053	8	1.602	0.773790879	1	0.574
473	Validation	MCJC09	NB	30184-30182	79	55	2.821	Yes	Yes	65.44494784	52	1.775	Yes	Yes	12.1235298	3	3.554	0.958026802	1	0.119
474	Validation	MCJC09	EB	30182-30183	338	288	2.802	Yes	Yes	279.8322608	227	3.290	Yes	Yes	53.67582687	55	0.228	4.255849833	5	0.514
475	Validation	MCJC09	WB	30183-30182	219	200	1.321	Yes	Yes	177.4866986	155	1.781	Yes	Yes	32.64027254	38	0.976	9.101254622	7	0.705
476	Validation	MCJC10	NB	30110-30111	242	271	1.792	Yes	Yes	189.5737705	211	1.513	Yes	Yes	44.39344262	52	1.075	8.06557377	8	0.062
477	Validation	MCJC10	SB	30111-30110	372	314	3.102	Yes	Yes	328.5538462	270	3.359	Yes	Yes	41	39	0.339	2	5	1.537
480	Validation	MCJC10	EB	30110-30109	367	313	2.945	Yes	Yes	317.5737705	261	3.313	Yes	Yes	46.32786885	45	0.128	3.06557377	6	1.380
481	Validation	MCJC10	WB	30109-30110	238	265	1.690	Yes	Yes	187.3538462	211	1.668	Yes	Yes	43.07692308	47	0.545	8.015384615	8	0.132
488	Validation	MCJC12	NB	30103-31359	234	209	1.676	Yes	Yes	202	178	1.712	Yes	Yes	27	29	0.371	5	2	1.799
489	Validation	MCJC12	SB	31359-30103	268	131	9.688	No	No	220.6847161	122	7.521	No	Yes	41.72148861	7	7.109	5.489669555	2	1.721
492	Validation	MCJC12	EB	30103-30104	295	258	2.195	Yes	Yes	247	226	1.391	Yes	Yes	42	27	2.563	6	6	0.028
493	Validation	MCJC12	WB	30104-30103	350	298	2.863	Yes	Yes	292.6000786	256	2.202	Yes	Yes	50.22858392	36	2.147	7.171337463	6	0.371
514	Validation	MCJC16	NB	10705-10706	440	531	4.138	Yes	Yes	341.0096403	429	4.479	Yes	Yes	82.98907175	85	0.204	15.59188621	17	0.350
515	Validation	MCJC16	SB	10706-10702	463	498	1.593	Yes	Yes	404.8860773	434	1.405	Yes	Yes	51.30233526	61	1.270	7.041496997	4	1.452
524	Validation	MCJC17	WB	10696-20307	408	390	0.883	Yes	Yes	351.5718858	335	0.876	Yes	Yes	49.79344305	48	0.256	6.538532926	7	0.149
525	Validation	MCJC17	EB	20307-10697	541	537	0.194	Yes	Yes	491.1484481	487	0.173	Yes	Yes	42.98814403	42	0.153	7.046967676	7	0.116
544	Validation	MCJC19	EB	10677-20305	429	504	3.502	Yes	Yes	373.1993408	451	3.816	Yes	Yes	46.77565862	42	0.766	8.550389211	12	1.028
545	Validation	MCJC19	WB	20305-10678	234	249	0.930	Yes	Yes	184.5878141	209	1.741	Yes	Yes	41.74601791	30	2.012	8.047425139	10	0.681
546	Validation	MCJC20	NB	10670-10668	906	847	1.963	Yes	Yes	801.460898	718	3.047	Yes	Yes	90.36078752	109	1.862	13.75055462	21	1.740
547	Validation	MCJC20	SB	10668-10671	719	750	1.150	Yes	Yes	591.2442754	569	0.935	Yes	Yes	104.2121205	141	3.285	23.39455766	41	3.064



552	Validation	MCJC20	SB	10671-10673	895	885	0.337	Yes	Yes	733.3927966	707	0.977	Yes	Yes	112.1896755	126	1.244	49.90986202	53	0.364
553	Validation	MCJC20	NB	10673-10672	922	919	0.102	Yes	Yes	746.6501637	743	0.126	Yes	Yes	141.584386	142	0.032	34.20155684	34	0.004
558	Validation	MCJC21	SB	10665-10034	634	607	1.073	Yes	Yes	529	524	0.219	Yes	Yes	94	73	2.310	11	10	0.184
559	Validation	MCJC21	NB	10034-10666	611	617	0.261	Yes	Yes	547	561	0.604	Yes	Yes	58	46	1.608	6	10	1.377
564	Validation	MCJC22	WB	10032-10027	1268	1467	5.375	No	No	971	1141	5.235	No	No	205	220	1.022	92	106	1.382
566	Validation	MCJC22	SB	10031-20031	820	829	0.303	Yes	Yes	716	710	0.242	Yes	Yes	94	106	1.188	10	13	0.968
567	Validation	MCJC22	NB	20031-10032	812	896	2.873	Yes	Yes	726	809	2.994	Yes	Yes	81	77	0.444	5	10	1.819
570	Validation	MCJC23	NB	10025-10092	609	678	2.727	Yes	Yes	541.0995626	597	2.362	Yes	Yes	64.55914804	68	0.392	2.925027578	13	3.460
571	Validation	MCJC23	SB	10092-10026	743	782	1.417	Yes	Yes	639.2673345	651	0.456	Yes	Yes	89.83170669	107	1.734	14.09493901	24	2.361
574	Validation	MCJC23	SB	10027-10077	581	630	1.977	Yes	Yes	519.1765601	548	1.257	Yes	Yes	60.97252871	70	1.172	1.056259959	11	4.089
575	Validation	MCJC23	NB	10077-10028	733	693	1.476	Yes	Yes	664.3813331	599	2.596	Yes	Yes	56.03787417	66	1.324	12.36902811	28	3.453
576	Validation	MCJC23	EB	10026-10476	1479	1566	2.222	Yes	Yes	1236	1275	1.114	Yes	Yes	168	200	2.391	75	90	1.624
582	Validation	MCJC24	SB	10024-10020	1196	1156	1.182	Yes	Yes	873.1456276	842	1.065	Yes	Yes	199.6767363	197	0.155	123.4776795	116	0.656
583	Validation	MCJC24	NB	10020-10021	1398	1367	0.838	Yes	Yes	1133.178052	1125	0.246	Yes	Yes	180.5641016	161	1.510	84.749446	82	0.346
584	Validation	MCJC24	SB	10023-20010	615	709	3.648	Yes	Yes	530.5166334	606	3.186	Yes	Yes	79.79482408	86	0.664	5.108291468	17	3.569
585	Validation	MCJC24	NB	20010-10024	328	516	9.179	No	No	284.7146894	436	7.988	No	No	39.9264474	73	4.354	2.870798705	7	1.874
588	Validation	MCJC25	NB	10015-10019	1398	1367	0.838	Yes	Yes	1133.178052	1125	0.246	Yes	Yes	180.5641016	161	1.510	84.749446	82	0.346
589	Validation	MCJC25	SB	10019-10016	1196	1156	1.182	Yes	Yes	873.1456276	842	1.065	Yes	Yes	199.6767363	197	0.155	123.4776795	116	0.656
592	Validation	MCJC25	SB	10017-10018	1225	1239	0.398	Yes	Yes	907.8501485	904	0.127	Yes	Yes	194.1441315	213	1.349	123.2261974	122	0.132
593	Validation	MCJC25	NB	10011-10014	1436	1451	0.391	Yes	Yes	1128.399894	1154	0.766	Yes	Yes	214.0112123	207	0.515	93.80279928	90	0.373
597	Validation	MCJC26	SB	10018-10012	1007	997	0.313	Yes	Yes	748.913502	730	0.684	Yes	Yes	151.3921854	160	0.719	106.6283831	106	0.028
598	Validation	MCJC26	WB	10010-30156	284	170	7.530	No	No	250.9790715	148	7.278	No	No	30.17784427	14	3.337	2.58673008	8	2.259
599	Validation	MCJC26	EB	30156-10011	142	125	1.437	Yes	Yes	127.0257206	103	2.231	Yes	Yes	14.13014688	20	1.526	0.754446107	2	0.876
600	Validation	MCJC26	SB	10013-10009	1176	1227	1.483	Yes	Yes	892.7612264	914	0.715	Yes	Yes	171.0077842	200	2.123	112.1609879	113	0.093
601	Validation	MCJC26	NB	10009-10010	1285	1196	2.519	Yes	Yes	995.3658969	912	2.707	Yes	Yes	197.1619159	188	0.645	92.5453891	96	0.392
602	Validation	MCJC26	EB	10012-30005	231	217	0.898	Yes	Yes	184.5878141	172	0.944	Yes	Yes	34.70452091	33	0.309	11.56817364	13	0.277
603	Validation	MCJC26	EB	10018-30005	230	242	0.801	Yes	Yes	160.9485028	174	0.986	Yes	Yes	51.30233526	53	0.239	17.60374249	15	0.535



604	Validation	MCJC26	WB	30505-10013	693	748	2.037	Yes	Yes	585.4228863	644	2.348	Yes	Yes	87.21711347	85	0.266	20.19047257	19	0.240
605	Validation	MCJC27	NB	10001-10005	1268	1148	3.462	Yes	Yes	982.694984	880	3.378	Yes	Yes	193.6574287	173	1.564	91.96130789	96	0.401
606	Validation	MCJC27	SB	10005-10002	1159	1160	0.030	Yes	Yes	872.4772368	877	0.138	Yes	Yes	174.1939196	173	0.085	112.0772302	110	0.185
611	Validation	MCJC27	NB	10002-10006	1114	1062	1.575	Yes	Yes	914.7404979	870	1.512	Yes	Yes	172.4810258	170	0.194	26.85961917	23	0.852
612	Validation	MCJC27	SB	10006-10003	774	662	4.199	Yes	Yes	657.8167603	549	4.445	Yes	No	90.78307468	87	0.362	25.89589813	26	0.010
689	Validation	MCJC39	NB	10443-10442	1204	1183	0.632	Yes	Yes	1073.864188	1041	1.014	Yes	Yes	114.8266718	125	0.915	15.66476336	17	0.282
691	Validation	MCJC39	SB	10496-10407	474	469	0.266	Yes	Yes	431.5431731	430	0.090	Yes	Yes	38.72823348	35	0.622	4.02371257	4	0.064
692	Validation	MCJC39	SB	10054-10055	873	886	0.414	Yes	Yes	767.8561366	780	0.432	Yes	Yes	88.93811881	91	0.171	16.45595269	15	0.340
693	Validation	MCJC39	WB	10443-31107	10	13	1.062	Yes	Yes	8.832381682	12	1.103	Yes	Yes	1	0	1.414	0	1	1.432
694	Validation	MCJC39	EB	31107-10443	10	0	4.472	Yes	Yes	8	0	4.000	Yes	Yes	2	0	2.000	0	0	0.000
695	Validation	MCJC39	SB	10055-10439	1083	1118	1.063	Yes	Yes	968.3397202	990	0.690	Yes	Yes	100.3796896	110	0.923	13.83238168	18	1.057
696	Validation	MCJC39	NB	10439-10055	937	940	0.095	Yes	Yes	833	836	0.102	Yes	Yes	94	94	0.001	10	10	0.015
713	Validation	MCJC42	NB	20042-30587	274	187	5.712	No	Yes	254.0588832	172	5.602	No	Yes	18.6726046	13	1.327	1.023673244	1	0.355
714	Validation	MCJC42	SB	30587-20042	107	103	0.320	Yes	Yes	88.88398674	85	0.412	Yes	Yes	15.53685901	15	0.027	2.129709194	3	0.427
715	Validation	MCJC42	WB	20042-20231	570	555	0.660	Yes	Yes	499.1333659	487	0.544	Yes	Yes	62.57845865	60	0.360	8.70122257	8	0.264
716	Validation	MCJC42	EB	20231-20042	1114	1016	2.984	Yes	Yes	1017.818261	930	2.819	Yes	Yes	86.90930506	79	0.904	9.051264073	8	0.412
741	Validation	MCJC46	WB	10475-10387	648	634	0.546	Yes	Yes	583.282961	551	1.365	Yes	Yes	59.39018531	67	0.929	5.560322581	17	3.377
742	Validation	MCJC46	EB	10387-10475	719	725	0.219	Yes	Yes	632.6047059	640	0.294	Yes	Yes	76.89414215	75	0.162	9.666621383	10	0.040
743	Validation	MCJC46	SB	10474-20040	1413	1399	0.379	Yes	Yes	1293.994458	1271	0.637	Yes	Yes	106.4646534	114	0.720	12.30741935	13	0.289
744	Validation	MCJC46	NB	20040-10474	796	770	0.922	Yes	Yes	719.0939085	665	2.076	Yes	Yes	72.3795299	88	1.721	4.361092243	18	4.027
753	Validation	MCJC48	WB	10049-31342	219	236	1.123	Yes	Yes	199	195	0.294	Yes	Yes	18	36	3.443	1.89148265	5	1.705
754	Validation	MCJC48	EB	31342-10049	220	243	1.500	Yes	Yes	193.2866817	202	0.628	Yes	Yes	23.07900677	38	2.657	3.846501129	3	0.352
779	Validation	MCJC52	NB	30025-30658	152	269	8.083	No	No	140.7397035	240	7.207	No	Yes	7.980230643	23	3.782	3	6	1.380
783	Validation	MCJC52	EB	30025-30400	520	523	0.114	Yes	Yes	467.4546952	483	0.712	Yes	Yes	48.83855025	36	1.968	3.986820428	4	0.048
784	Validation	MCJC52	WB	30400-30025	535	495	1.771	Yes	Yes	486.2162162	444	1.959	Yes	Yes	40.91891892	41	0.035	7.864864865	10	0.617
787	Validation	MCJC53	NB	20013-30337	145	396	15.273	No	No	129.7647304	381	15.722	No	No	13.07706585	9	1.253	2.011856285	6	2.025
788	Validation	MCJC53	SB	30337-20014	242	387	8.138	No	No	229.3516165	364	7.797	No	No	12.07113771	19	1.672	1.005928142	5	2.119



789	Validation	MCJC53	EB	20017-20012	1095	1047	1.454	Yes	Yes	963.1761964	929	1.109	Yes	Yes	123.2261974	109	1.323	8.550389211	9	0.265
790	Validation	MCJC53	WB	20154-20013	1061	1196	4.026	Yes	Yes	941.5487413	1082	4.421	Yes	Yes	103.6105987	101	0.282	15.59188621	13	0.678
791	Validation	MCJC53	SB	20016-30024	611	720	4.260	Yes	No	545.2130532	635	3.690	Yes	Yes	55.8290119	75	2.415	9.556317353	10	0.221
792	Validation	MCJC53	NB	30024-20017	711	691	0.746	Yes	Yes	647.3147597	635	0.469	Yes	Yes	53.81715562	43	1.505	10.05928142	13	0.777
801	Validation	MCJC55	NB	10073-10074	399	416	0.835	Yes	Yes	368.1697001	373	0.275	Yes	Yes	21.12449099	33	2.228	10.05928142	10	0.000
802	Validation	MCJC55	SB	10074-10073	300	288	0.695	Yes	Yes	260.5353889	252	0.553	Yes	Yes	33.1956287	33	0.034	6.035568855	3	1.558
803	Validation	MCJC55	SB	10073-30485	19	38	3.465	Yes	Yes	18.10670656	37	3.632	Yes	Yes	1.005928142	0	1.418	0	0	0.832
804	Validation	MCJC55	NB	30485-10073	176	290	7.466	No	No	161.9544309	262	6.854	No	Yes	12.57410178	21	2.150	1.508892214	7	2.612
805	Validation	MCJC55	SB	10073-10469	351	335	0.850	Yes	Yes	306.8080834	296	0.594	Yes	Yes	37.72230534	35	0.409	6.035568855	3	1.376
806	Validation	MCJC55	NB	10469-10073	293	211	5.196	No	Yes	270.5946703	194	5.040	No	Yes	14.08299399	13	0.275	8.550389211	4	1.872
829	Validation	MCJC59	NB	10045-10044	819	864	1.552	Yes	Yes	735.8364362	782	1.669	Yes	Yes	73.93571847	74	0.029	9.556317353	9	0.236
830	Validation	MCJC59	SB	10044-10045	791	750	1.483	Yes	Yes	713.7060171	697	0.627	Yes	Yes	65.38532926	45	2.813	12.07113771	8	1.142
831	Validation	MCJC59	WB	10045-20344	476	569	4.061	Yes	Yes	413.9394306	504	4.191	Yes	Yes	54.82308376	53	0.274	7.041496997	12	1.629
834	Validation	MCJC59	EB	20176-10045	850	869	0.664	Yes	Yes	755.954999	783	0.982	Yes	Yes	82.48610768	74	0.935	11.06520957	12	0.150
835	Validation	MCJC59	SB	10045-10386	1108	1096	0.348	Yes	Yes	986.8155077	1025	1.201	Yes	Yes	104.1135627	60	4.835	17.10077842	11	1.551
836	Validation	MCJC59	NB	10367-10045	786	867	2.815	Yes	Yes	699.120059	784	3.110	Yes	Yes	76.45053882	70	0.804	10.05928142	13	0.910
837	Validation	MCJC59	EB	10045-20320	396	316	4.231	Yes	Yes	355.0926343	279	4.295	Yes	Yes	36.21341313	31	0.853	4.526676641	6	0.688
838	Validation	MCJC59	WB	20320-10045	373	360	0.669	Yes	Yes	322.9029337	325	0.119	Yes	Yes	44.76380234	30	2.467	5.029640712	5	0.052
839	Validation	MCJC60	NB	10043-10369	453	461	0.374	Yes	Yes	410.8822314	413	0.119	Yes	Yes	35.5661157	41	0.880	6.551652893	7	0.051
845	Validation	MCJC61	SB	30017-31221	763	786	0.844	Yes	Yes	679.0014961	695	0.602	Yes	Yes	76.9535029	85	0.858	7.041496997	7	0.001
846	Validation	MCJC61	NB	30016-30017	274	225	3.096	Yes	Yes	241.9257183	192	3.365	Yes	Yes	28.66895206	29	0.045	3.520748499	4	0.223
847	Validation	MCJC61	NB	30017-30570	182	224	2.974	Yes	Yes	146.4315335	198	3.957	Yes	Yes	28.73604207	25	0.691	6.725456654	1	3.104
848	Validation	MCJC61	SB	30570-30017	168	135	2.674	Yes	Yes	127.5196902	113	1.364	Yes	Yes	32.82685094	19	2.663	7.57542714	3	1.888
849	Validation	MCJC61	SB	30017-30571	173	238	4.550	Yes	Yes	139.104904	195	4.311	Yes	Yes	27.29824838	38	1.921	6.388951749	5	0.628
850	Validation	MCJC61	NB	30571-30017	120	146	2.240	Yes	Yes	90.93656093	139	4.493	Yes	Yes	23.40941173	4	5.210	5.402171937	2	1.563
929	Validation	MCJC72	WB	30111-31402	702	702	0.032	Yes	Yes	520.3815714	519	0.057	Yes	Yes	101.5492815	102	0.044	80.49067471	81	0.002
930	Validation	MCJC72	EB	31402-30111	650	650	0.007	Yes	Yes	446.1968538	446	0.005	Yes	Yes	110.9246378	111	0.007	92.43719815	93	0.021



947	Validation	MCJC75	EB	30170-30171	101	81	2.101	Yes	Yes	88.49421092	63	2.953	Yes	Yes	12.27165815	14	0.501	0.172840256	4	2.651
948	Validation	MCJC75	WB	30171-30170	101	74	2.904	Yes	Yes	87.66825186	63	2.816	Yes	Yes	12.88562232	5	2.488	0.460200797	5	2.845
949	Validation	MCJC75	WB	30170-31403	214	237	1.547	Yes	Yes	188.8589889	205	1.177	Yes	Yes	21.62249605	26	0.830	3.378515008	6	1.228
950	Validation	MCJC75	EB	31403-30170	237	270	2.025	Yes	Yes	202.6188346	238	2.366	Yes	Yes	31.01764098	31	0.065	3.793524436	1	2.181
951	Validation	MCJC75	SB	30170-30177	22	39	3.125	Yes	Yes	18.6357346	30	2.342	Yes	Yes	2.435351681	9	2.612	0.529424278	0	1.029
952	Validation	MCJC75	NB	30177-30170	31	58	3.949	Yes	Yes	23.776004	48	4.009	Yes	Yes	5.893197573	10	1.420	1.625709675	0	1.803
953	Validation	MCJC76	NB	10008-10009	119	159	3.336	Yes	Yes	99.73976687	149	4.442	Yes	Yes	18.16821032	8	2.844	1.48311921	2	0.033
954	Validation	MCJC76	SB	10009-10008	176	163	1.013	Yes	Yes	144.1161896	143	0.114	Yes	Yes	26.88734881	19	1.674	5.377469761	2	2.060
957	Validation	MCJC76	SB	10008-10005	36	46	1.617	Yes	Yes	31.41506746	32	0.109	Yes	Yes	3.926883432	12	2.973	0.341468125	2	1.249
958	Validation	MCJC76	NB	10005-10008	58	79	2.590	Yes	Yes	47.12372096	52	0.712	Yes	Yes	9.801733959	25	3.681	0.753979535	2	0.896
973	Validation	MCJC79	WB	10110-30036	1392	1369	0.637	Yes	Yes	1082.572805	1030	1.627	Yes	Yes	225.6572105	234	0.532	83.94614459	105	2.175
974	Validation	MCJC79	EB	30036-10110	1664	1568	2.389	Yes	Yes	1276.279505	1211	1.848	Yes	Yes	233.7739687	254	1.311	153.5326335	102	4.540
975	Validation	MCJC79	SB	10110-31405	43	39	0.652	Yes	Yes	35.0775145	27	1.419	Yes	Yes	7.699942207	11	1.112	0.427774567	1	0.428
976	Validation	MCJC79	NB	31405-10110	39	25	2.388	Yes	Yes	33.24789612	14	3.923	Yes	Yes	5.059462452	8	1.308	0.72278035	3	1.595
977	Validation	MCJC80	NB	10372-10454	20	47	4.796	Yes	Yes	15.97657902	37	4.080	Yes	Yes	3.507053932	7	1.421	0.19483633	4	2.543
978	Validation	MCJC80	SB	10454-10372	23	52	4.630	Yes	Yes	19.79325122	49	4.976	Yes	Yes	3.012016491	2	0.577	0.43028807	0	0.081
979	Validation	MCJC80	SB	10372-10455	80	83	0.346	Yes	Yes	64.96247538	68	0.382	Yes	Yes	14.26005557	12	0.684	0.792225309	3	1.740
980	Validation	MCJC80	NB	10455-10372	85	96	1.076	Yes	Yes	72.81038976	71	0.174	Yes	Yes	11.07984192	19	2.044	1.58283456	5	2.032
981	Validation	MCJC80	WB	10372-30450	49	27	3.502	Yes	Yes	42.78229733	22	3.650	Yes	Yes	4.903899694	4	0.612	1.352799916	2	0.312
982	Validation	MCJC80	EB	30450-10372	35	18	3.260	Yes	Yes	30.4605866	12	3.935	Yes	Yes	3.840116687	6	0.856	0.650867235	0	0.744

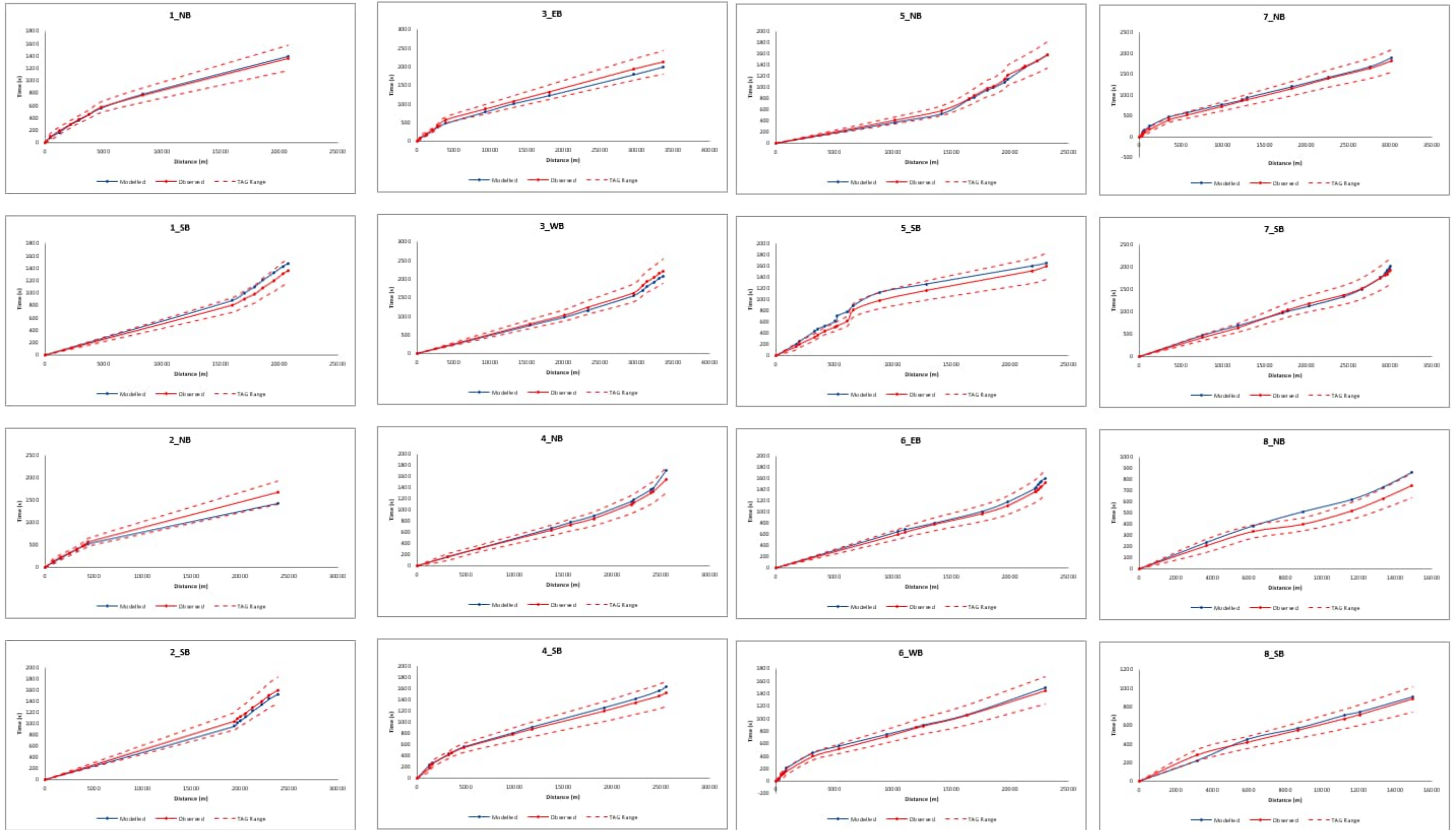


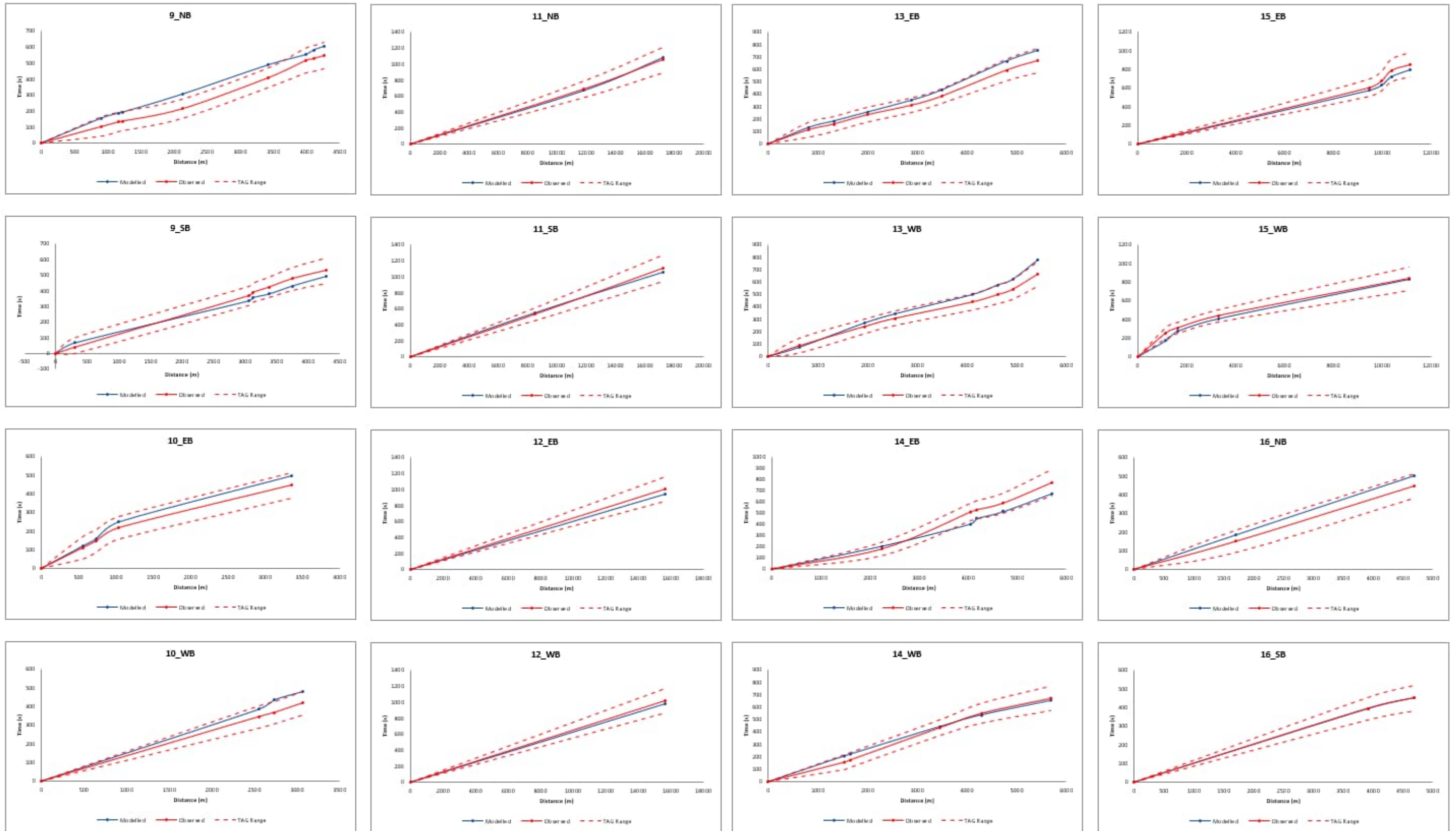
APPENDIX F

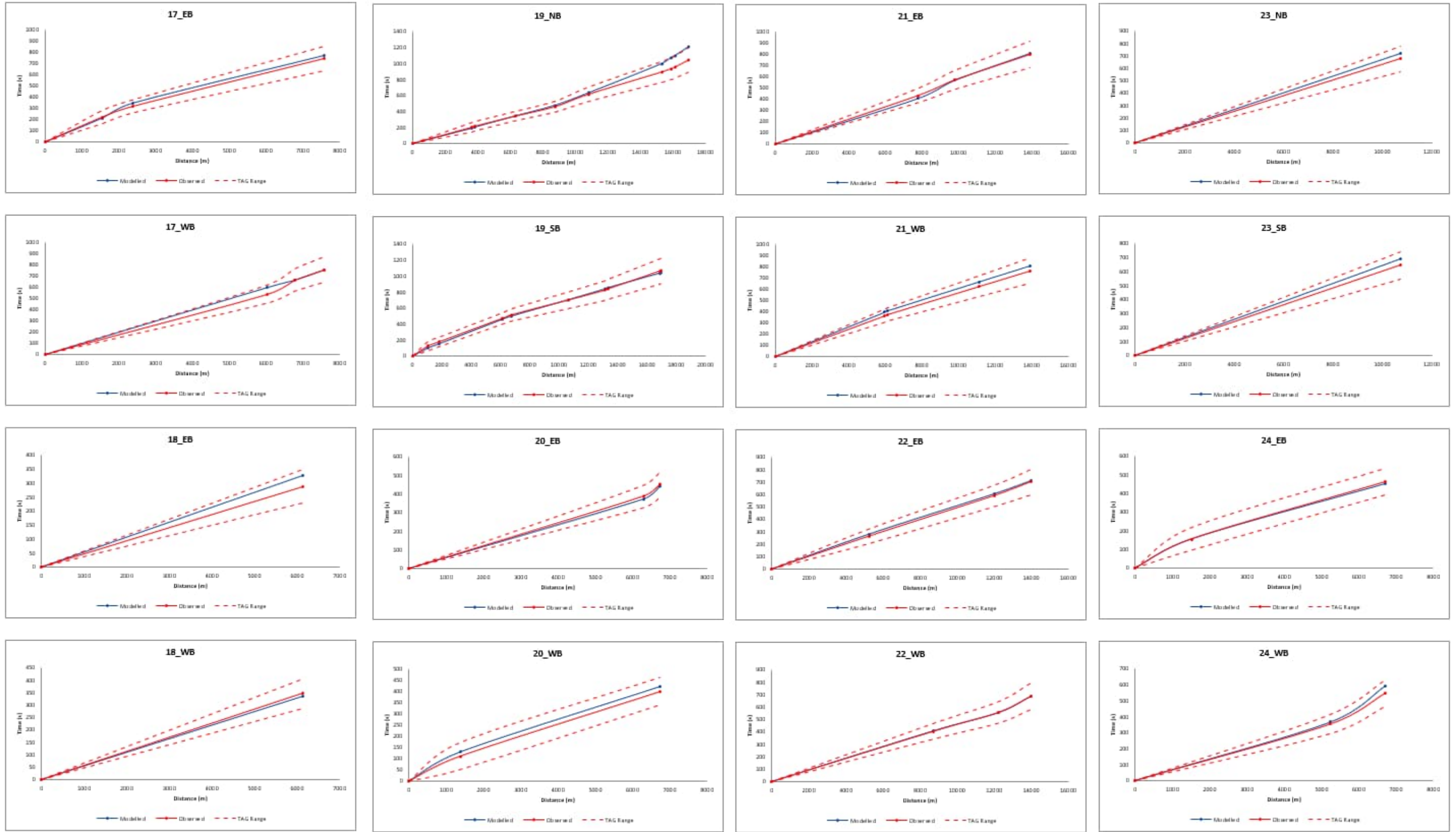
JOURNEY TIME ROUTE PLOTS

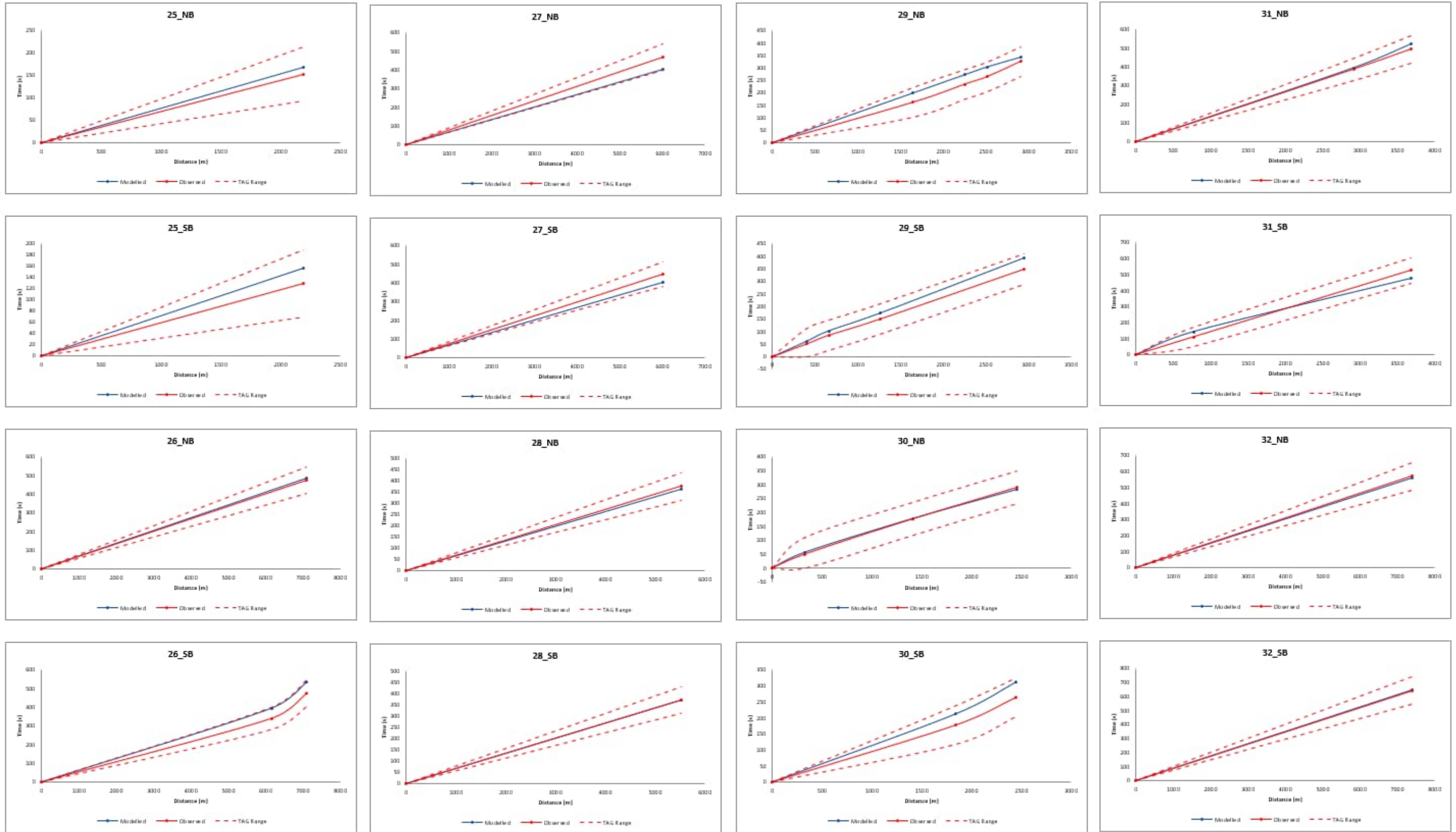


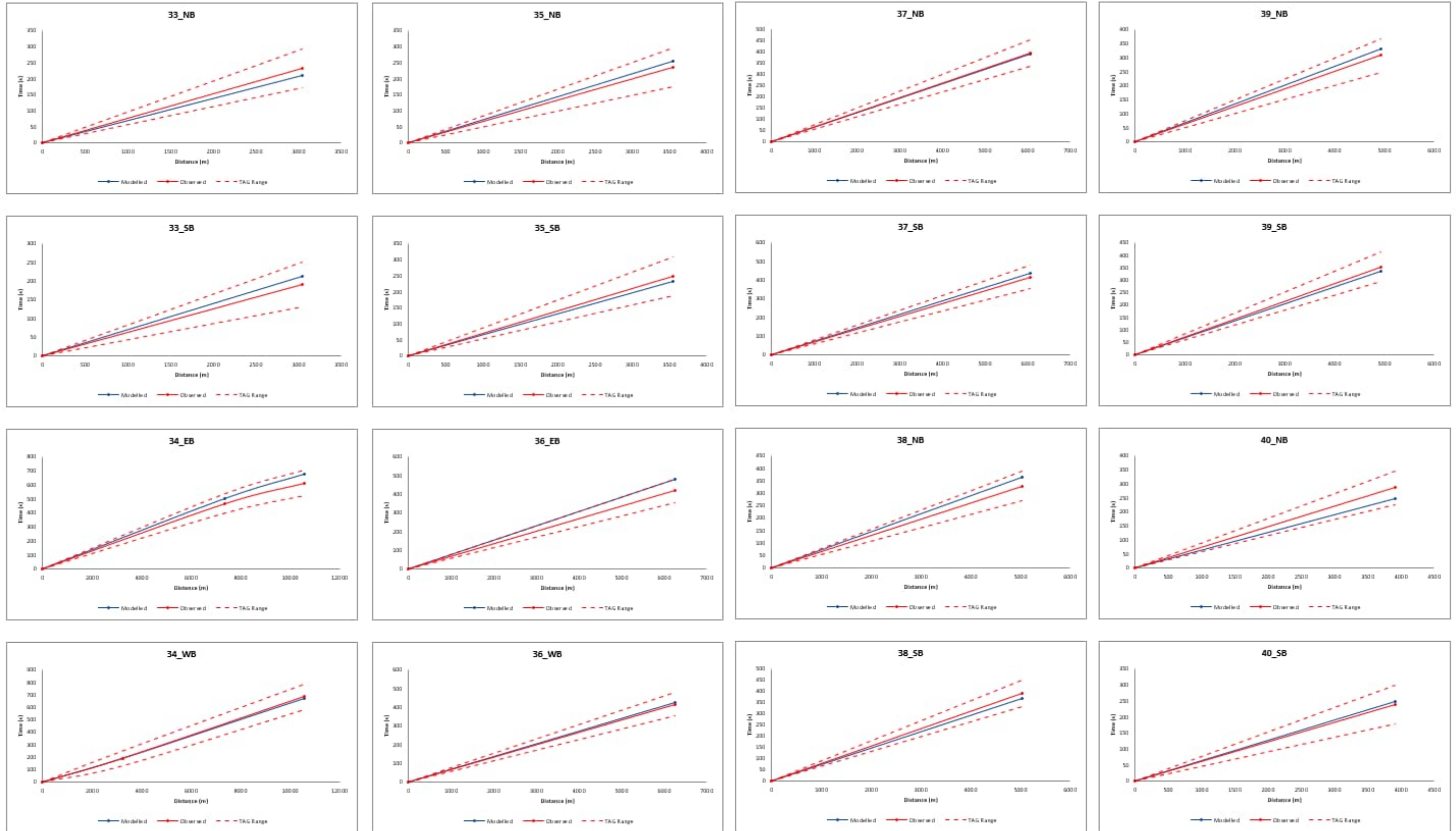
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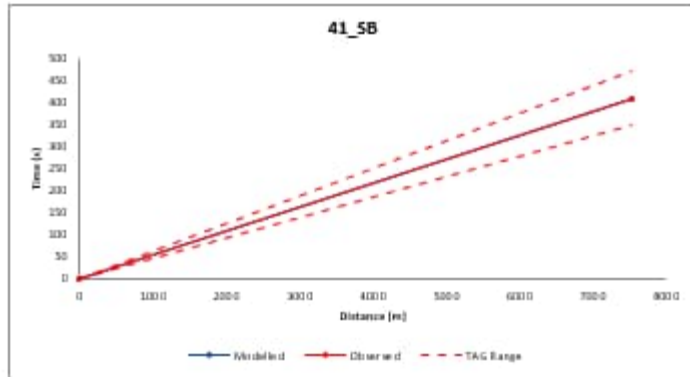
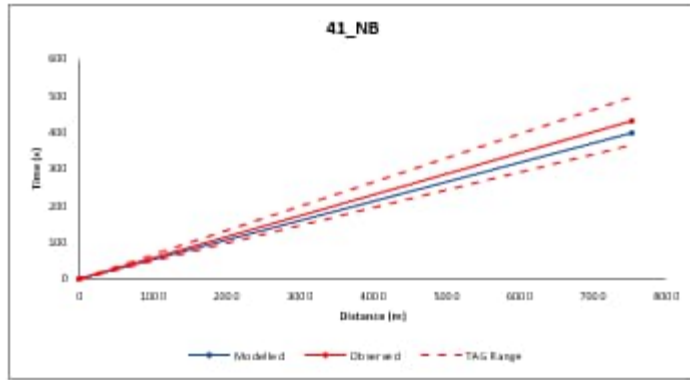






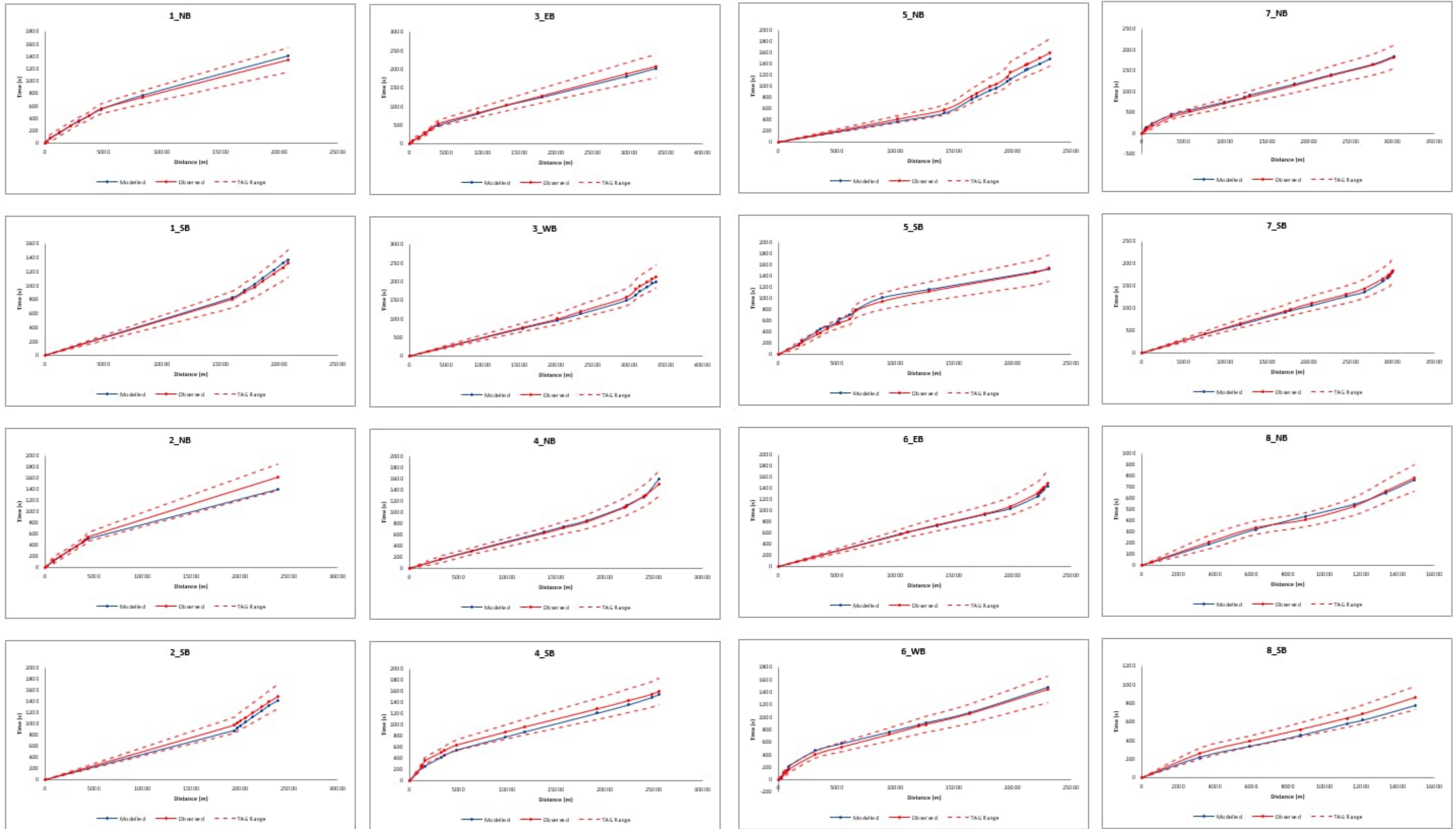


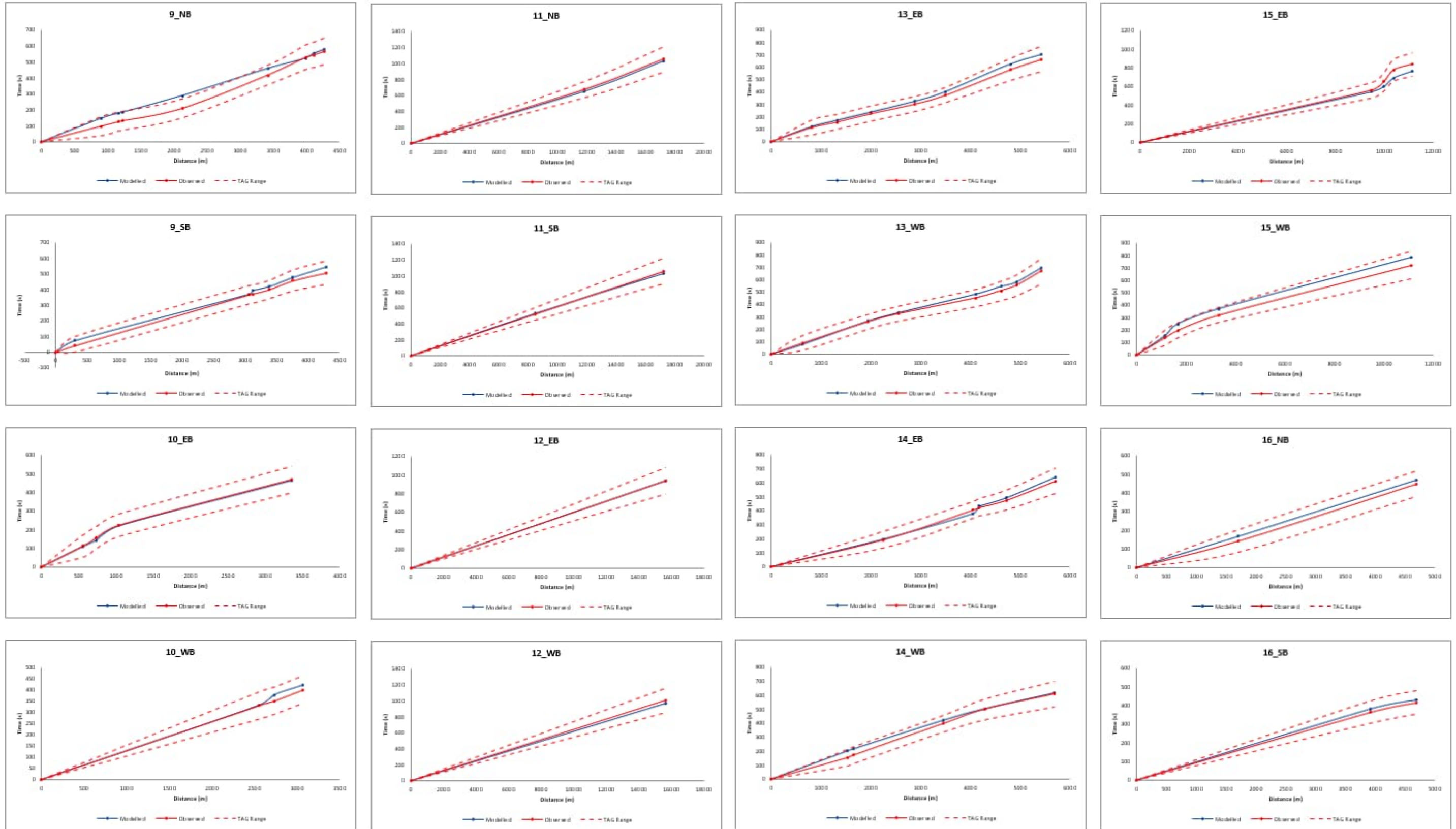


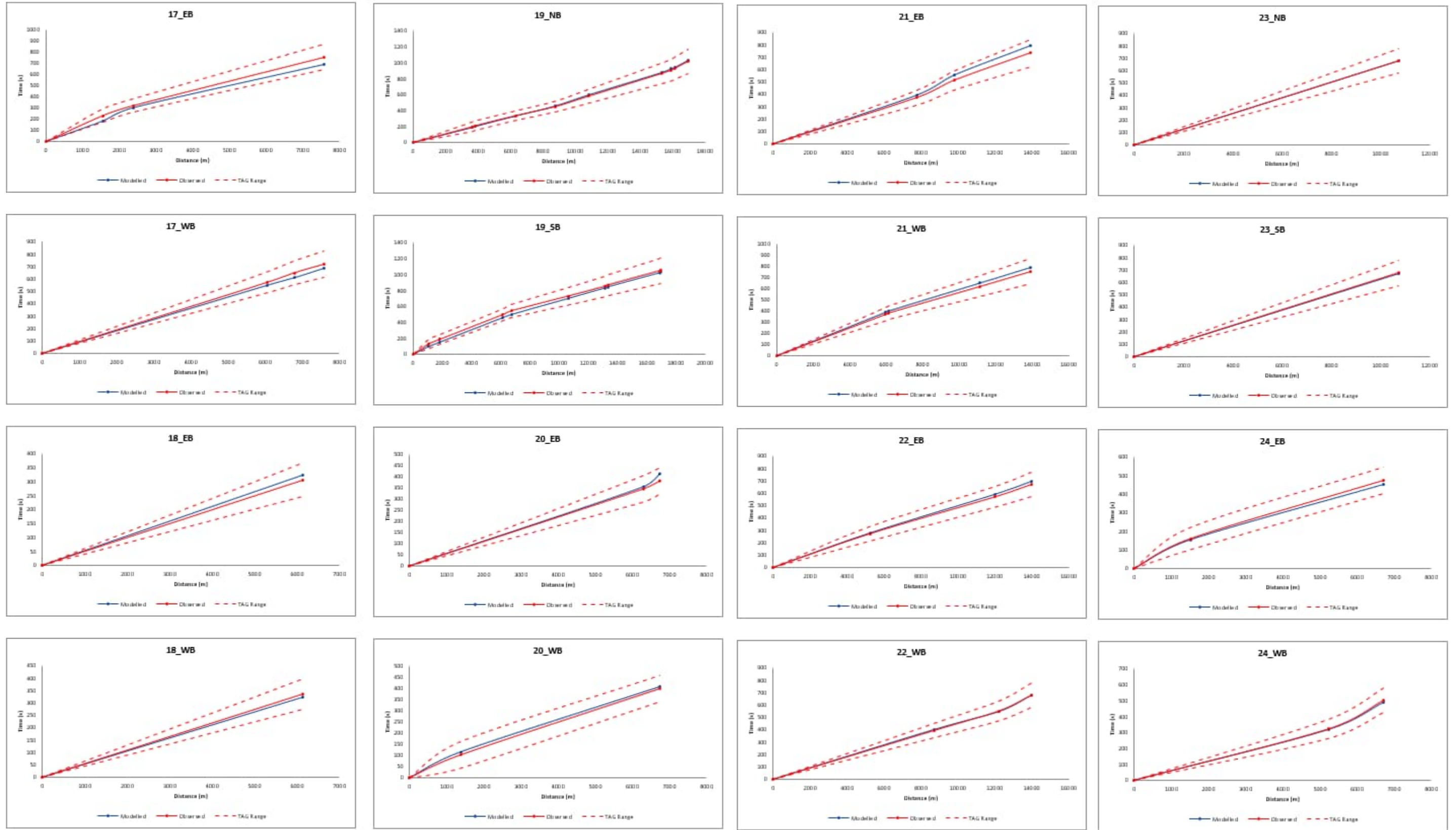


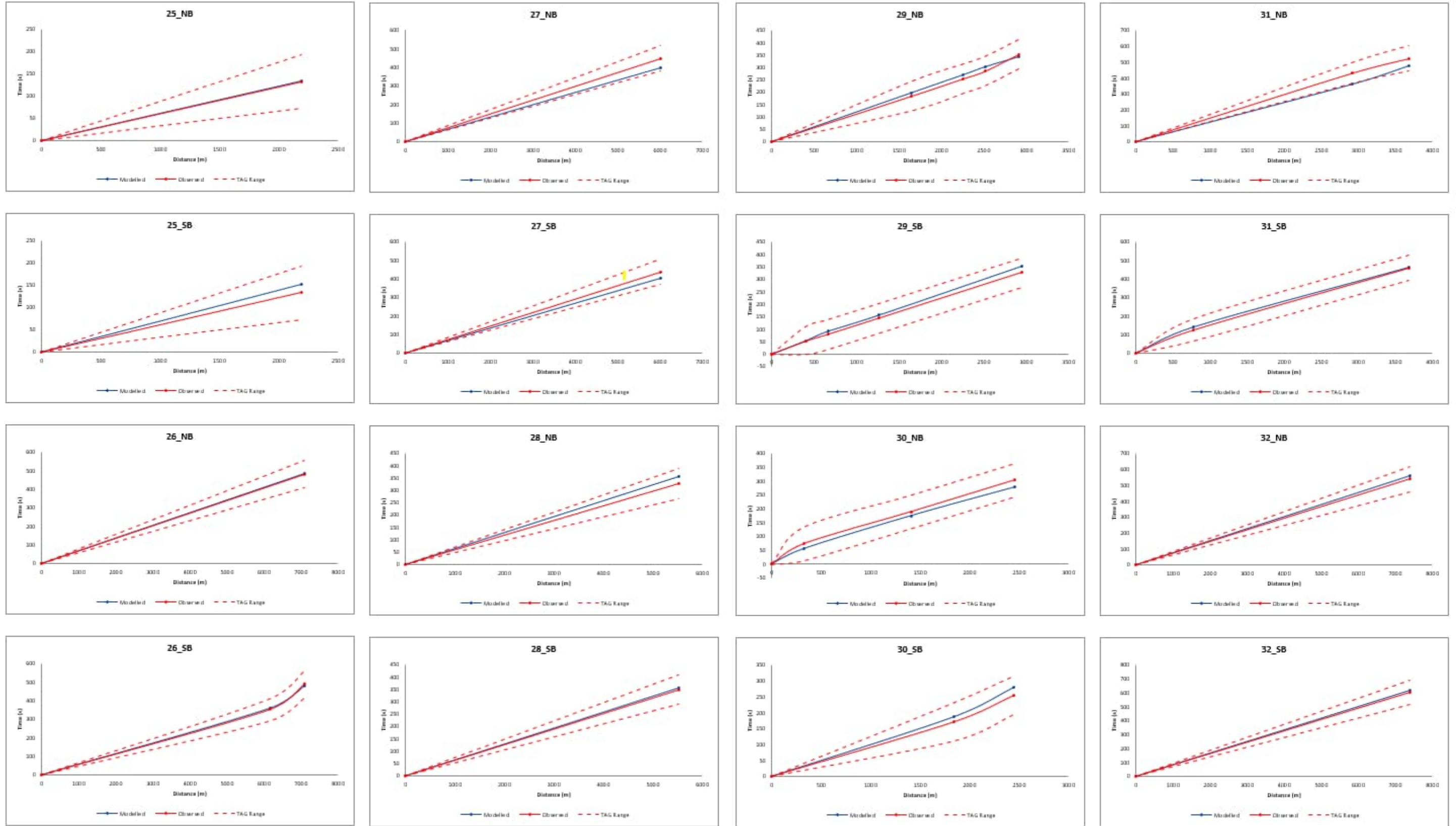


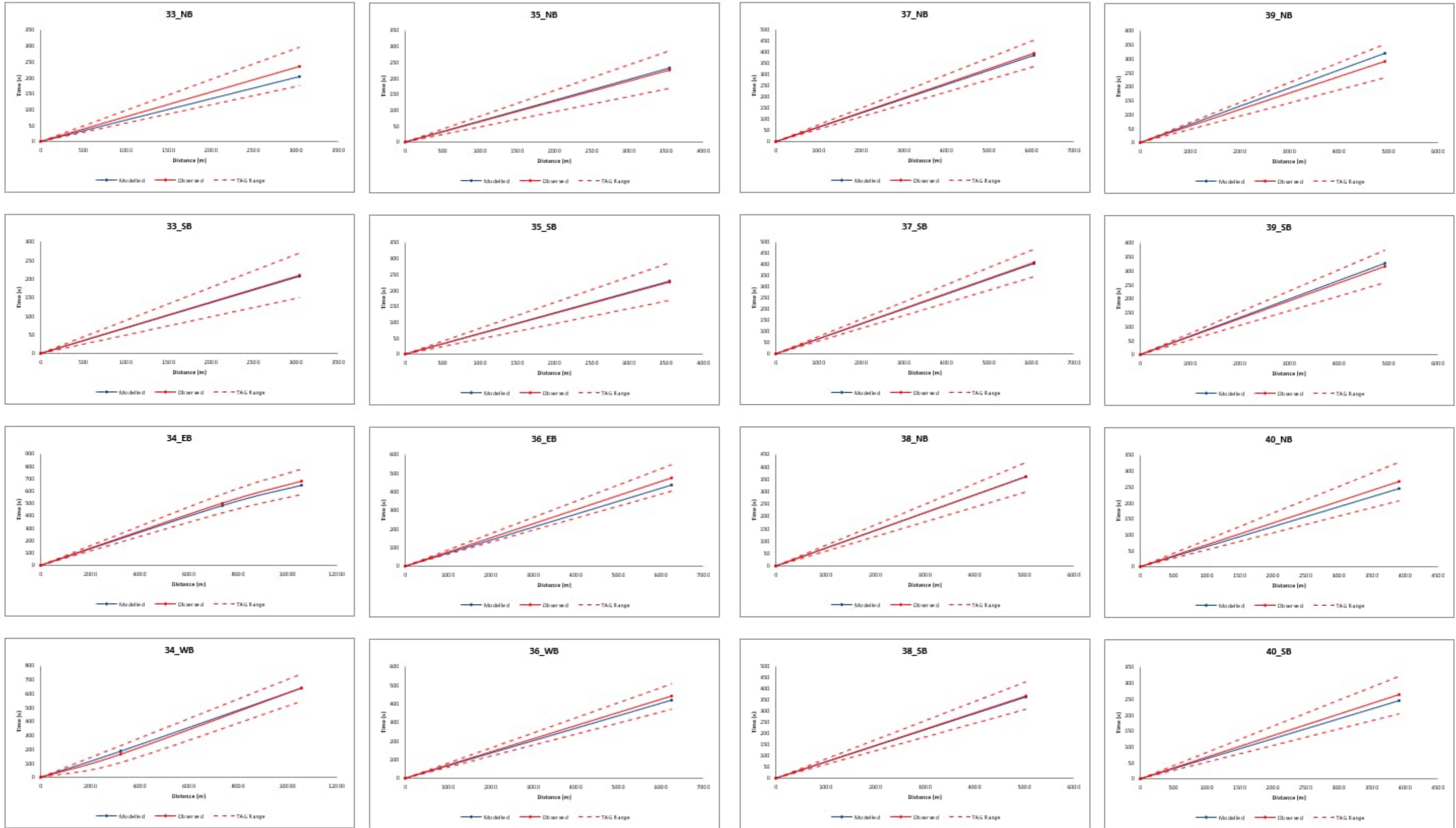
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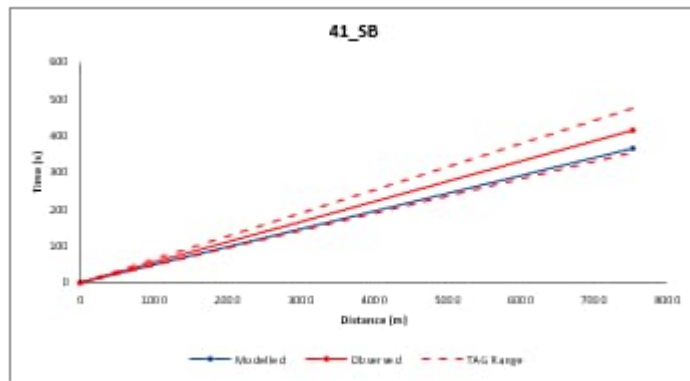
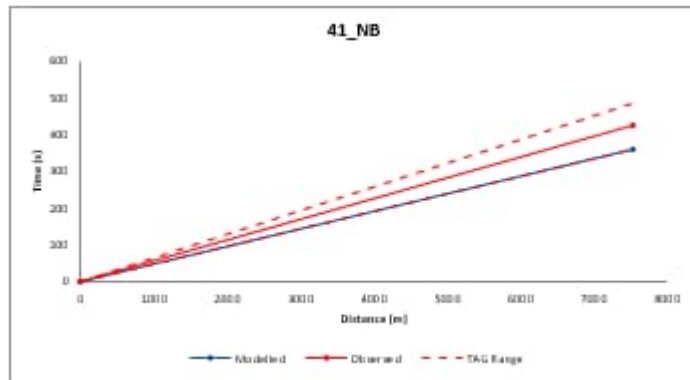






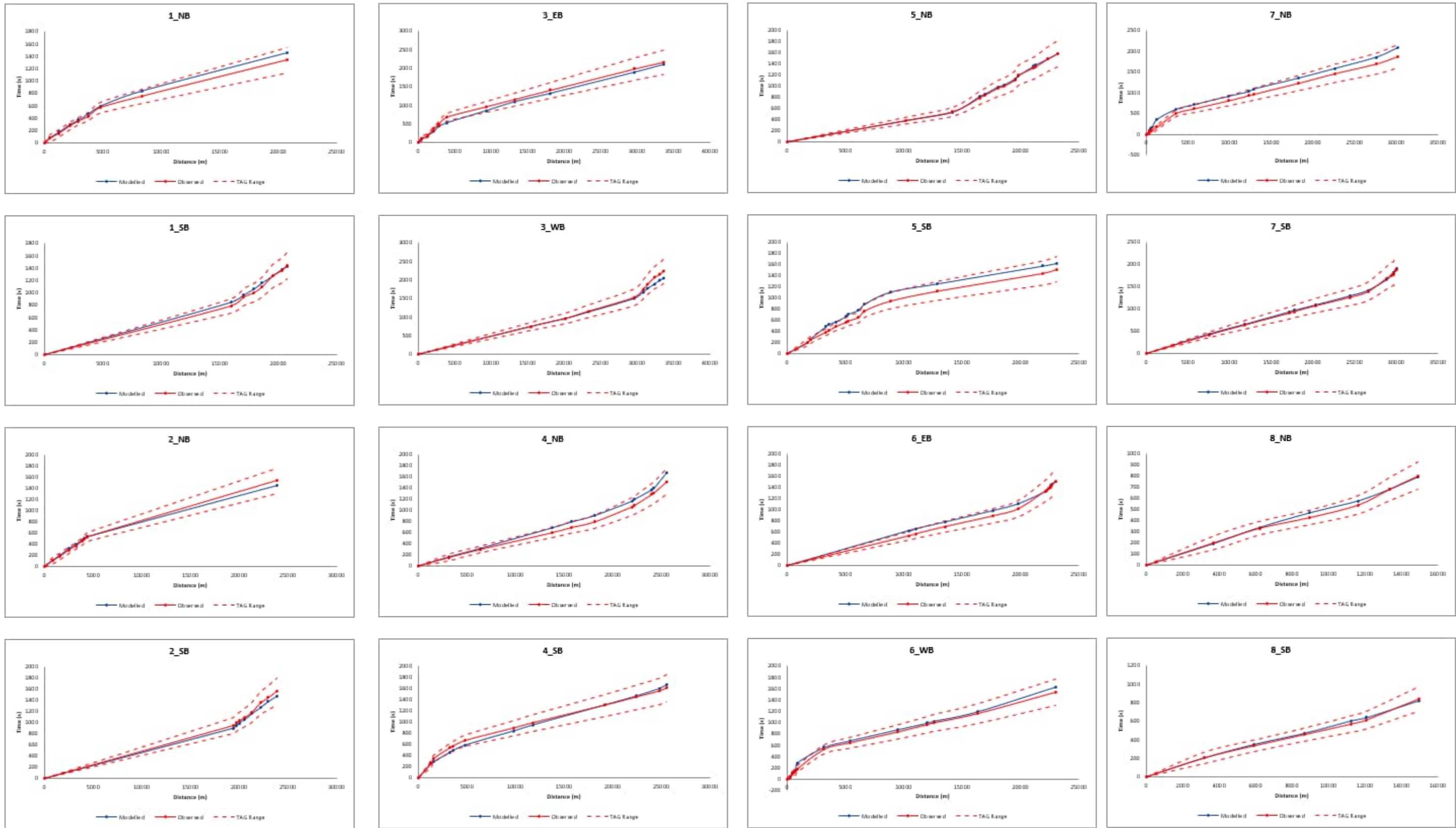


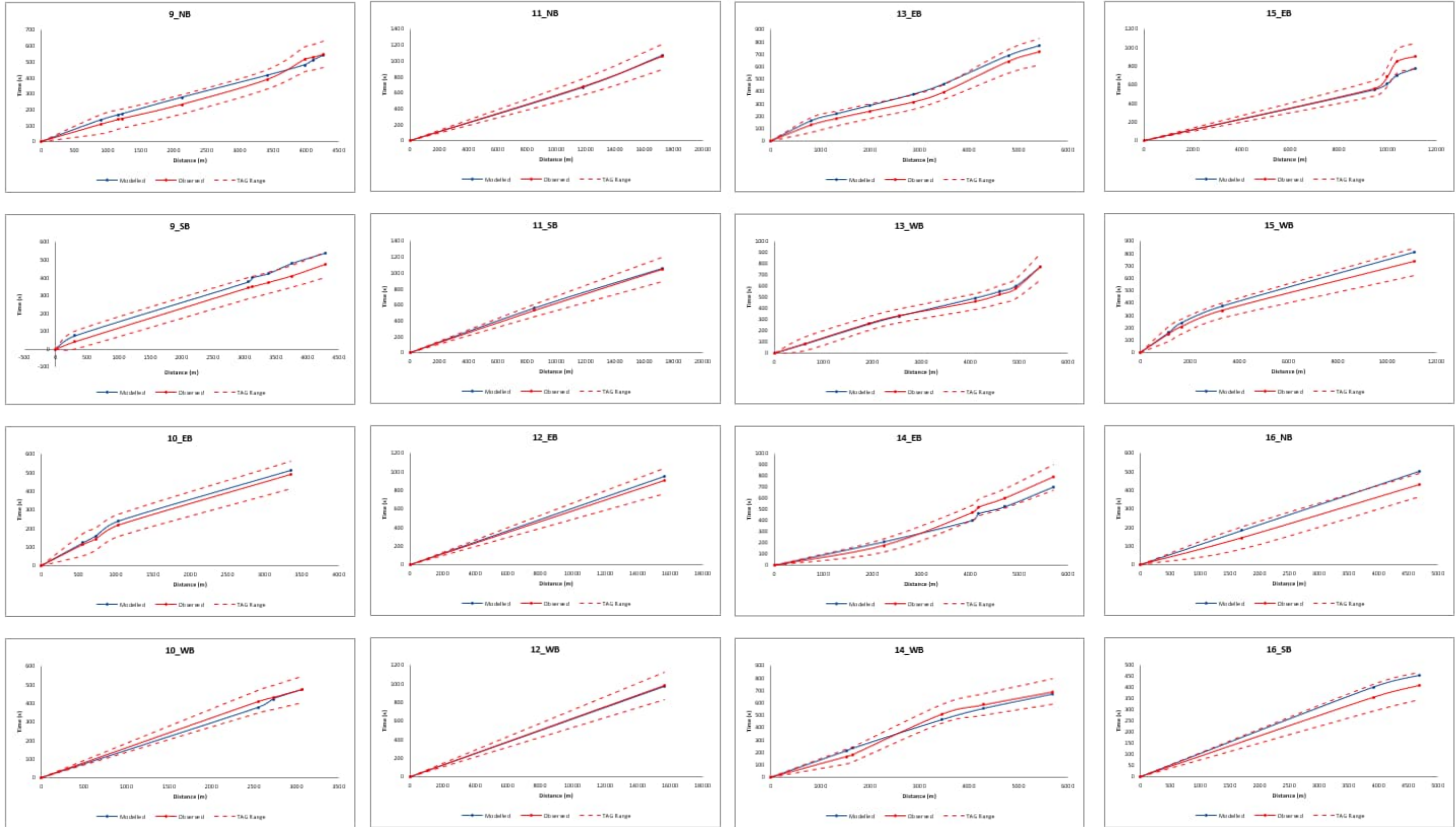


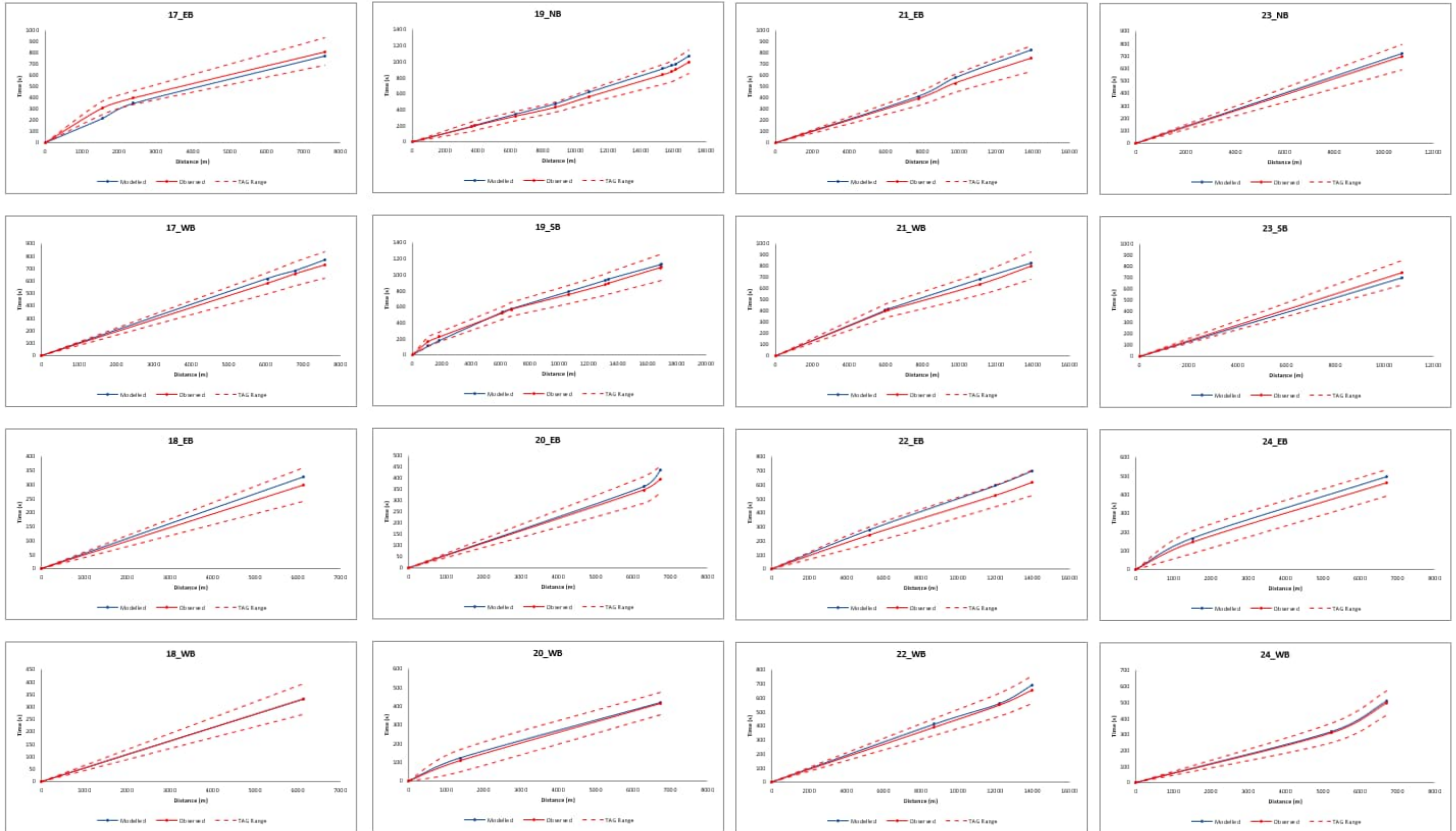


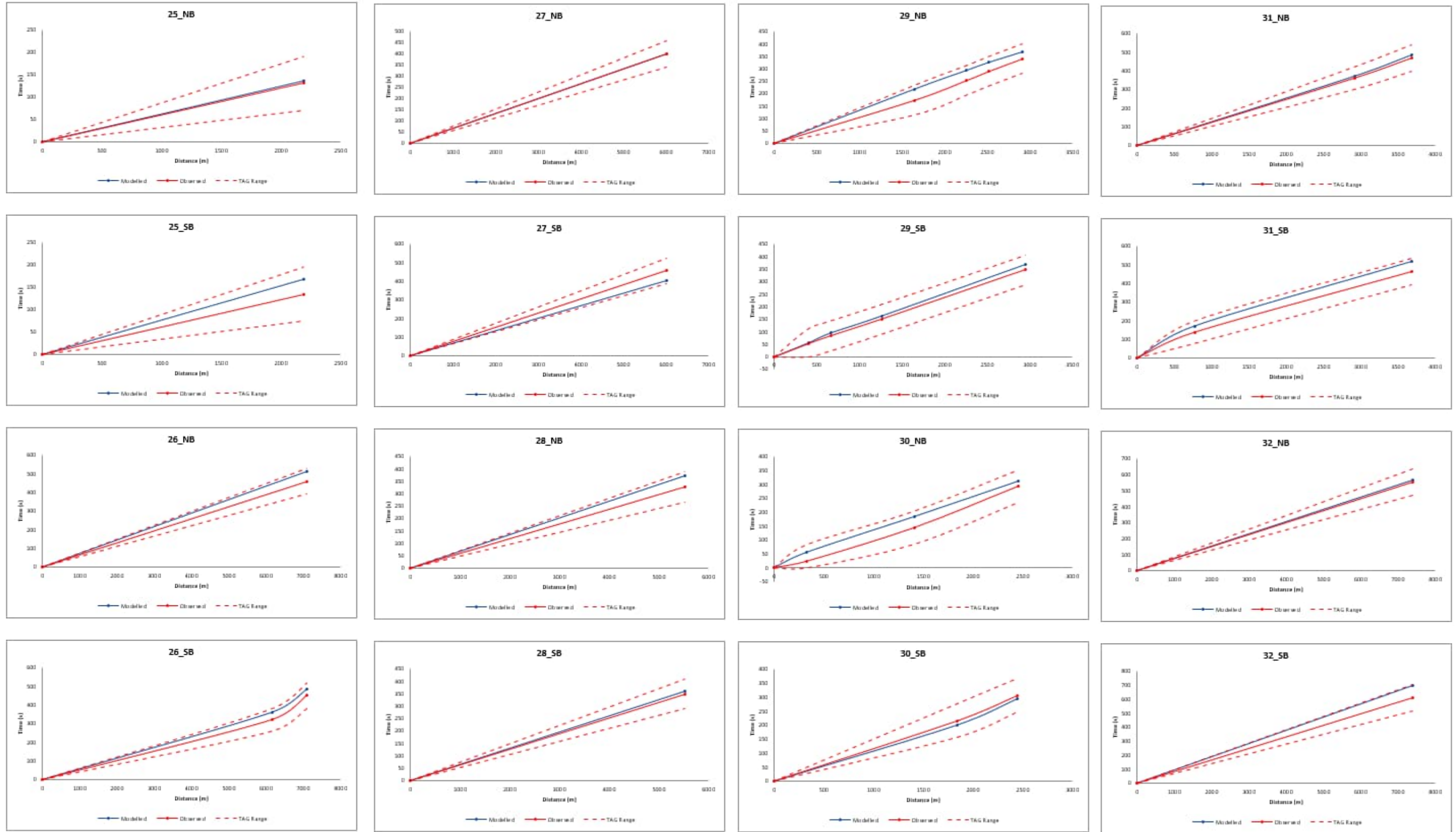


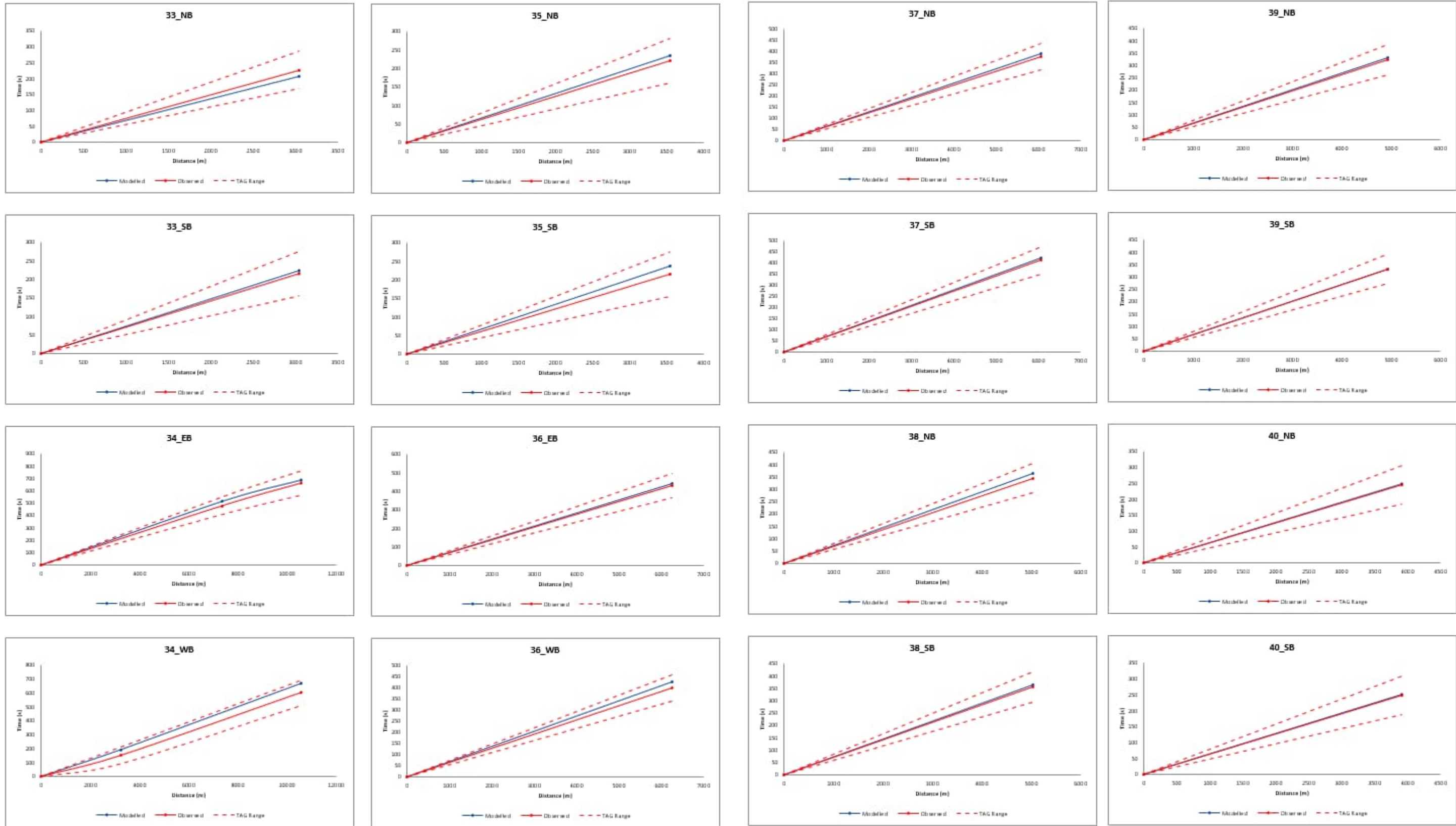
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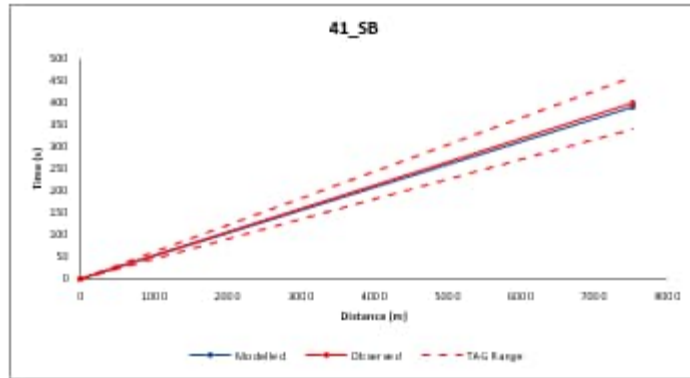
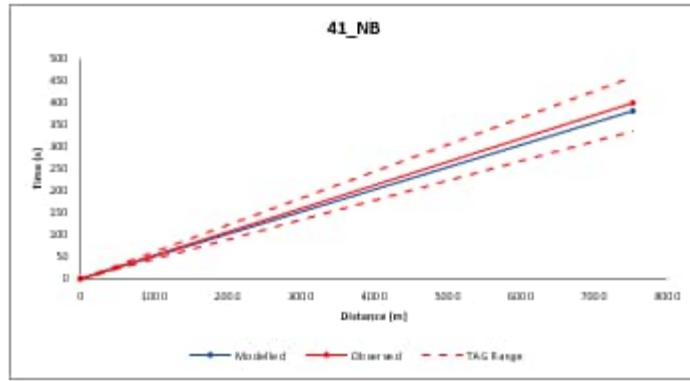












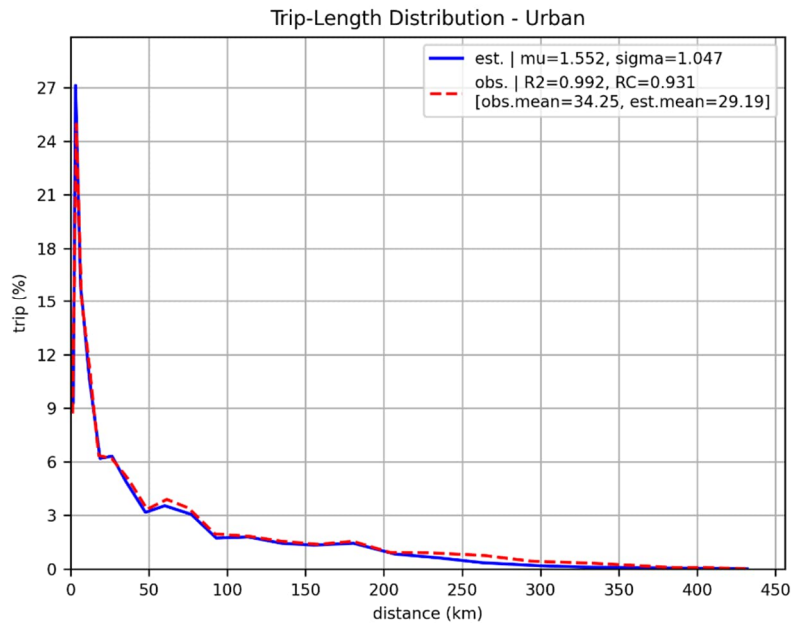
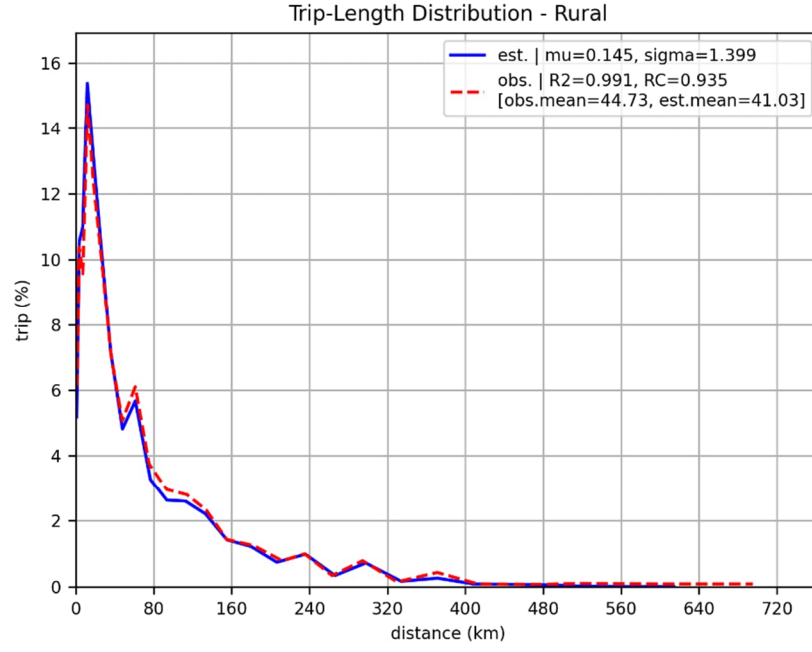
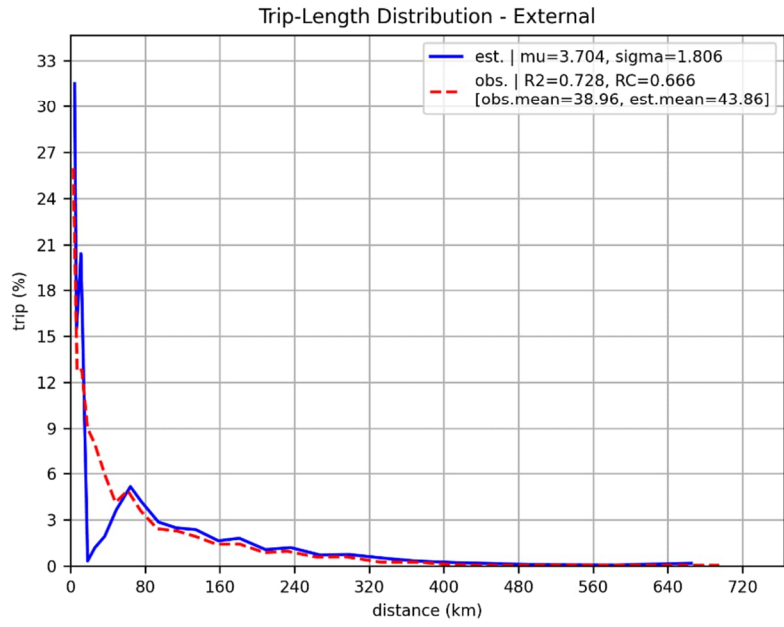


APPENDIX G

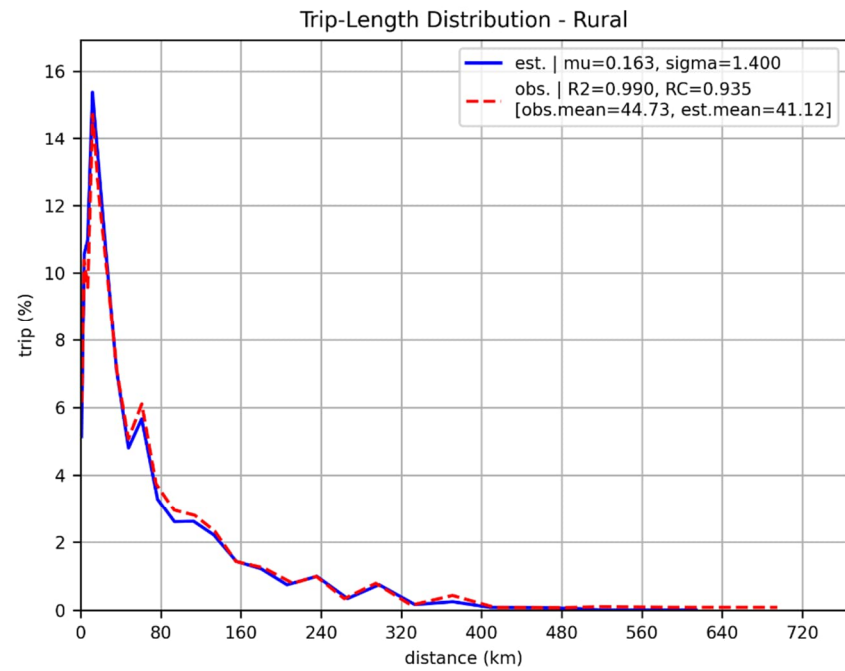
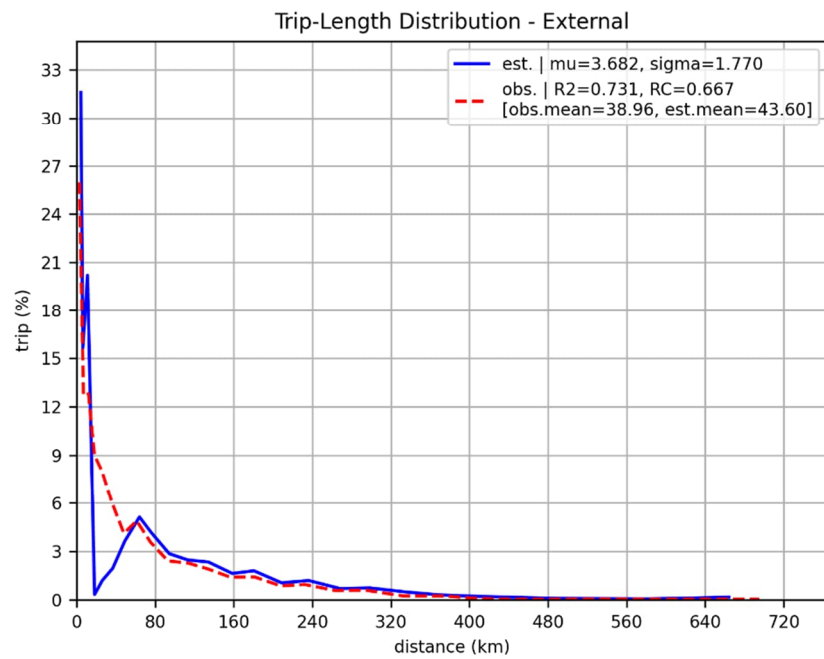
SYNTHETIC MATRIX TRIP LENGTH DISTRIBUTION PLOTS

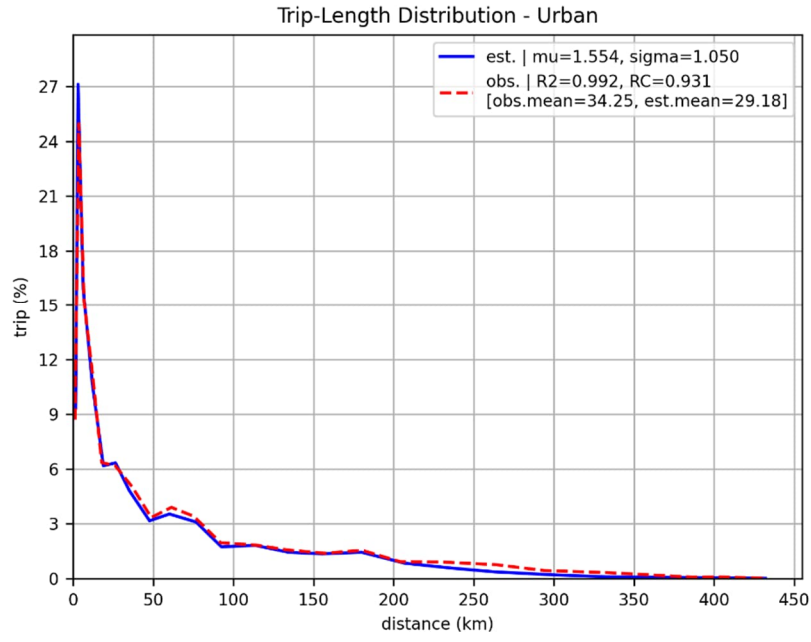
Note: Plots are presented by trip purpose, time period (AM, IP, PM, OP) and area type (external, rural, urban)

Home Based Business AM

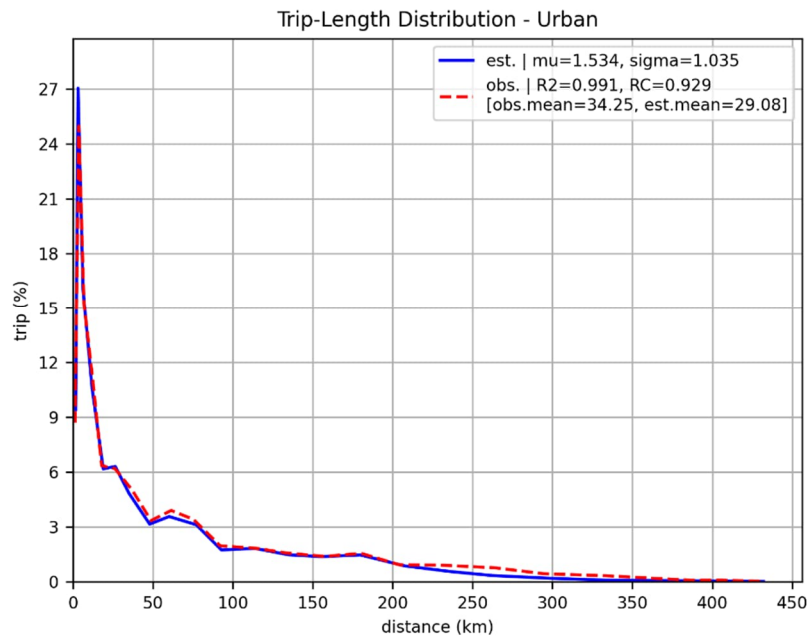
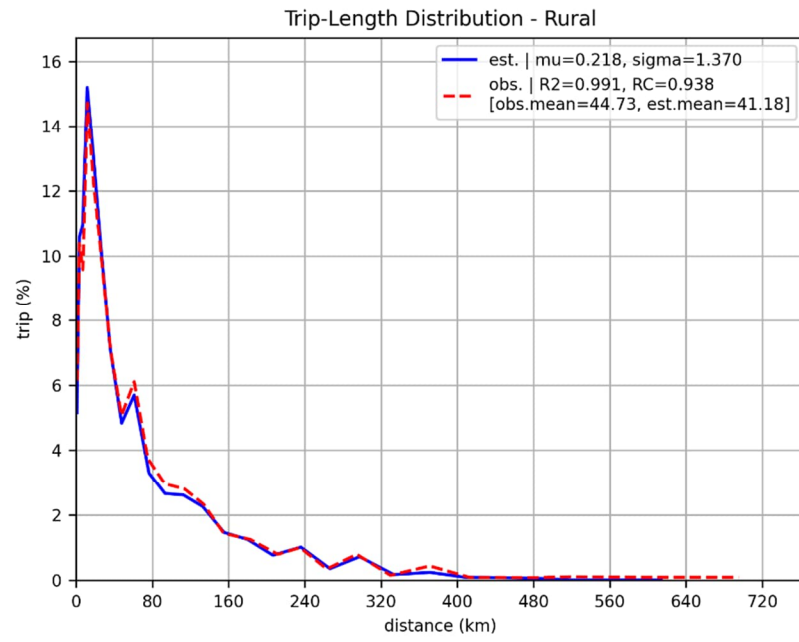
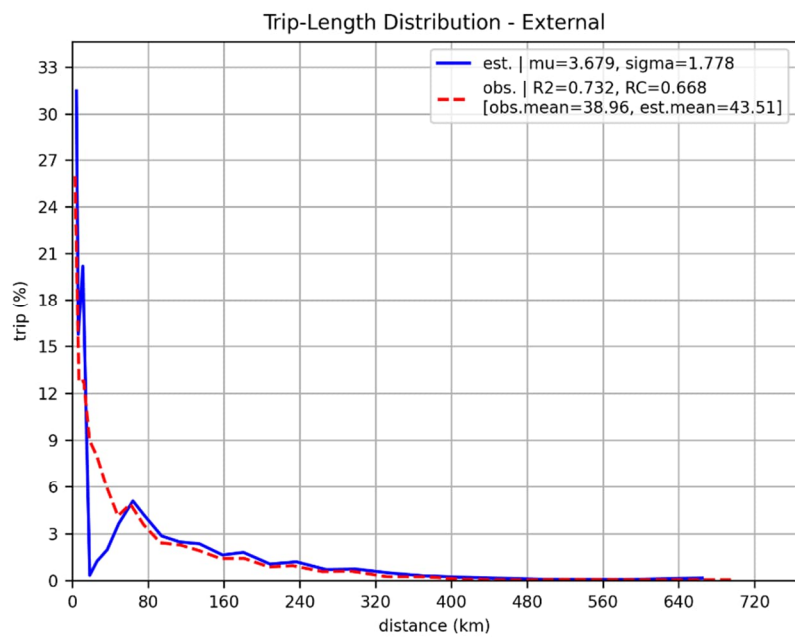


Home Based Business IP

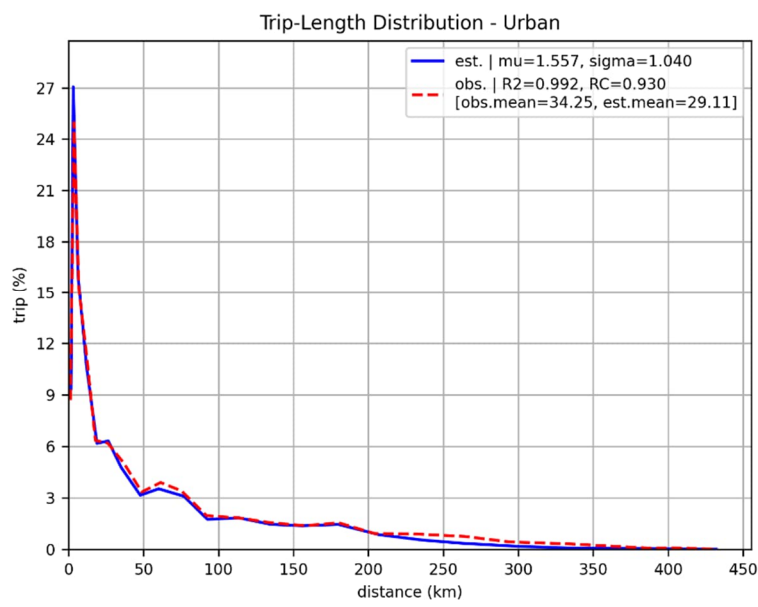
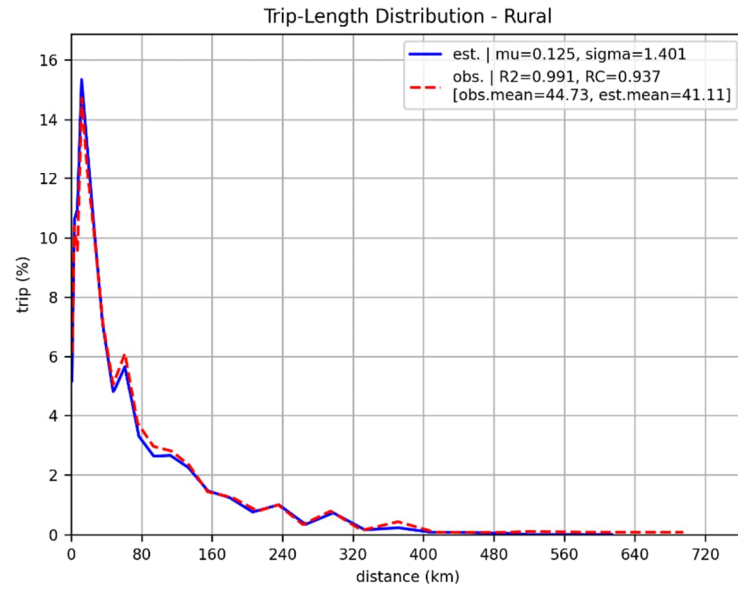
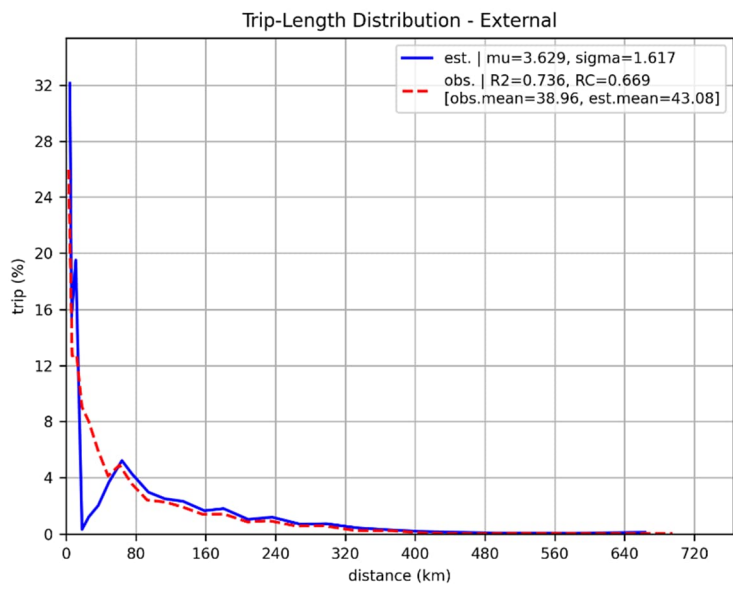




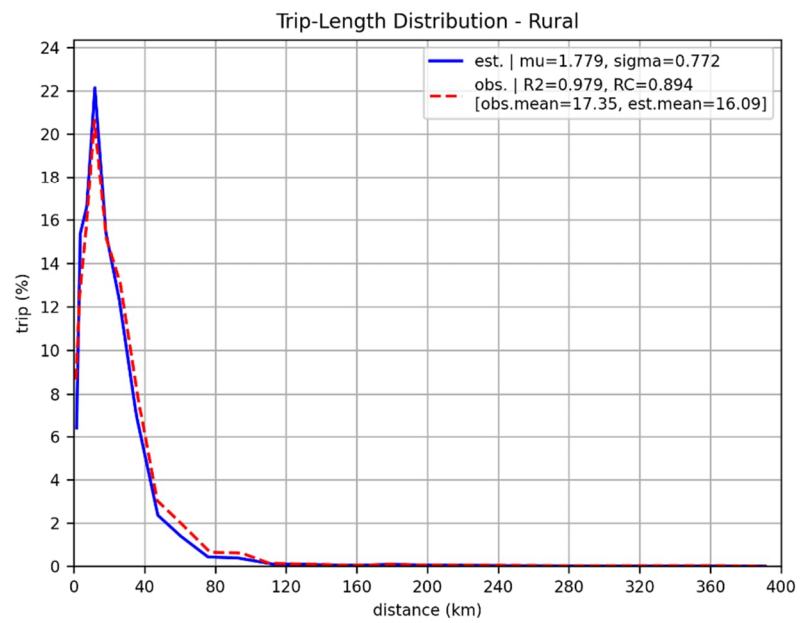
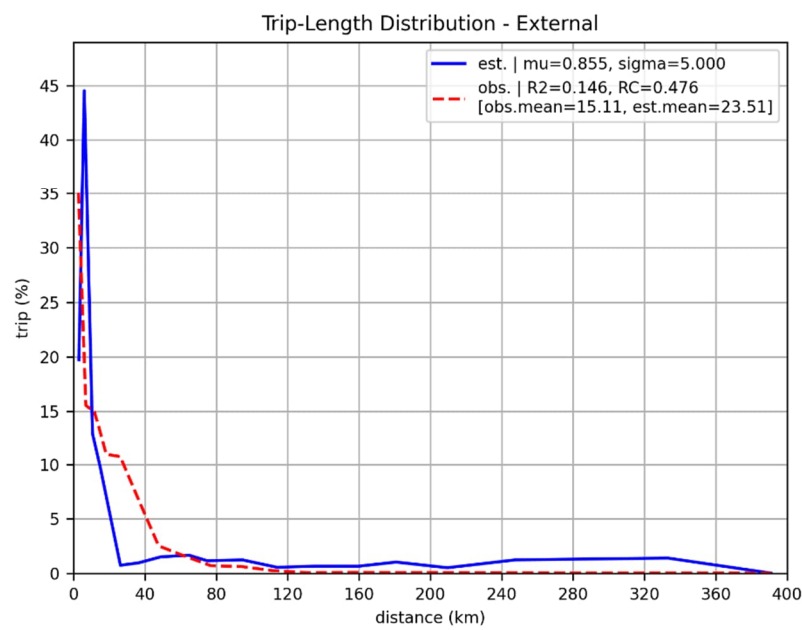
Home Based Business PM

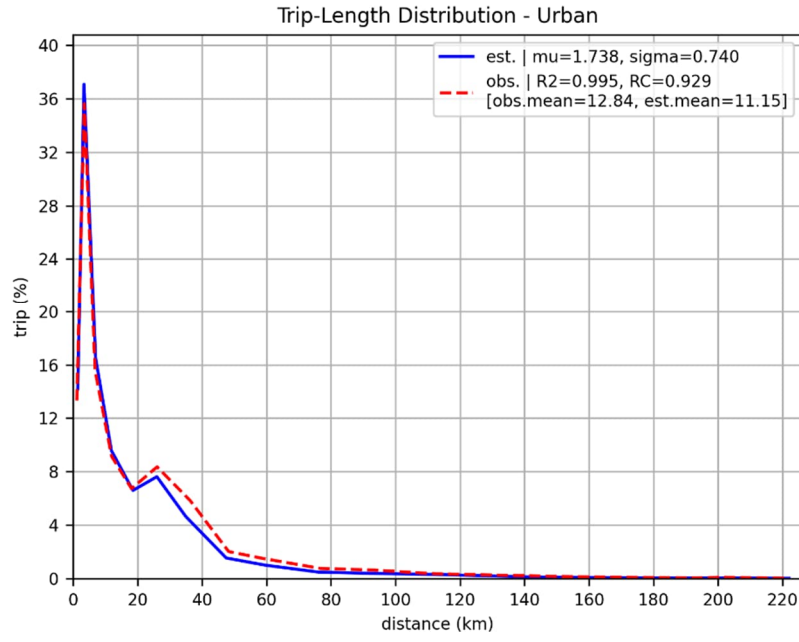


Home Based Business OP

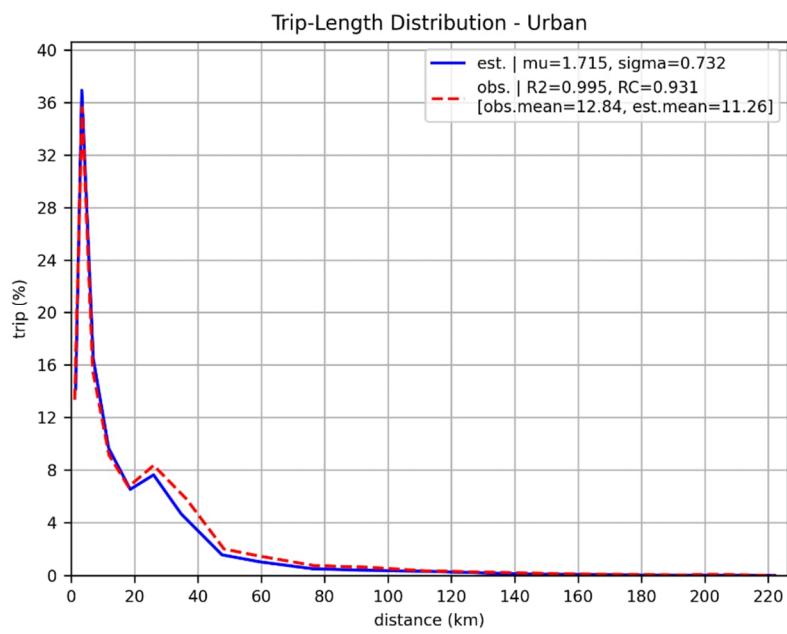
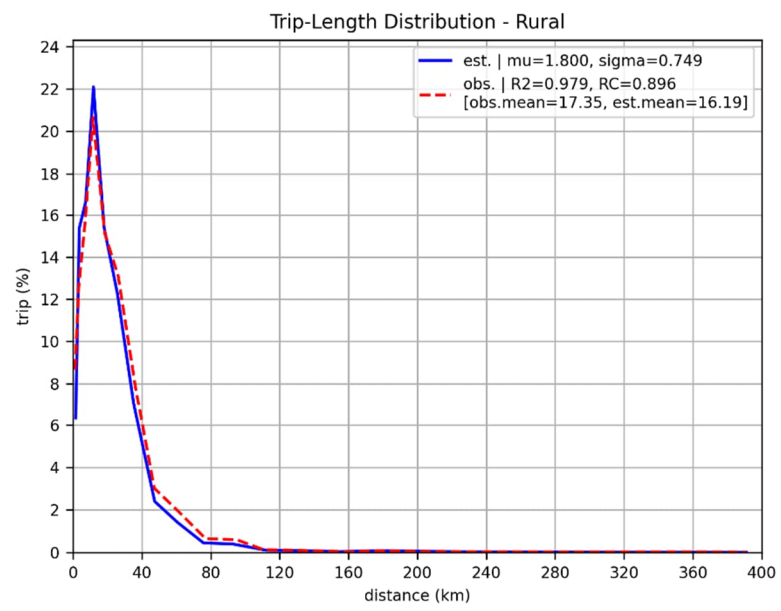
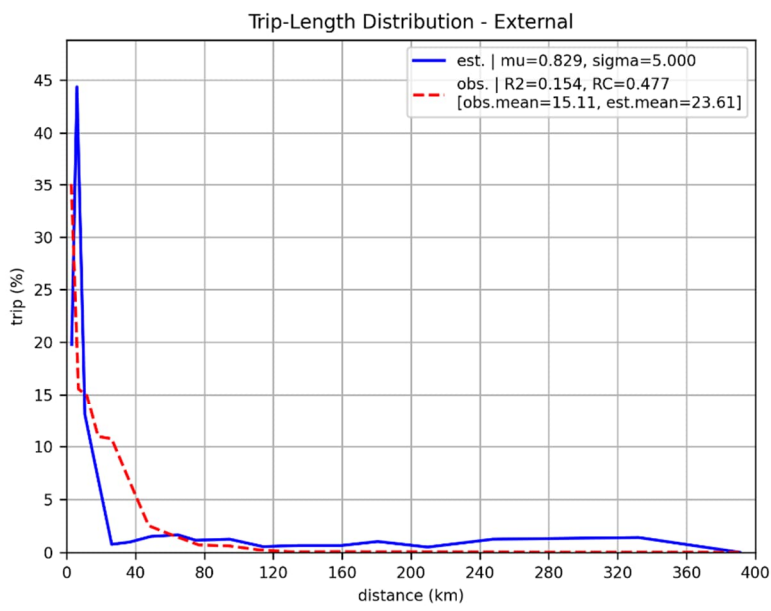


Home Based Work AM

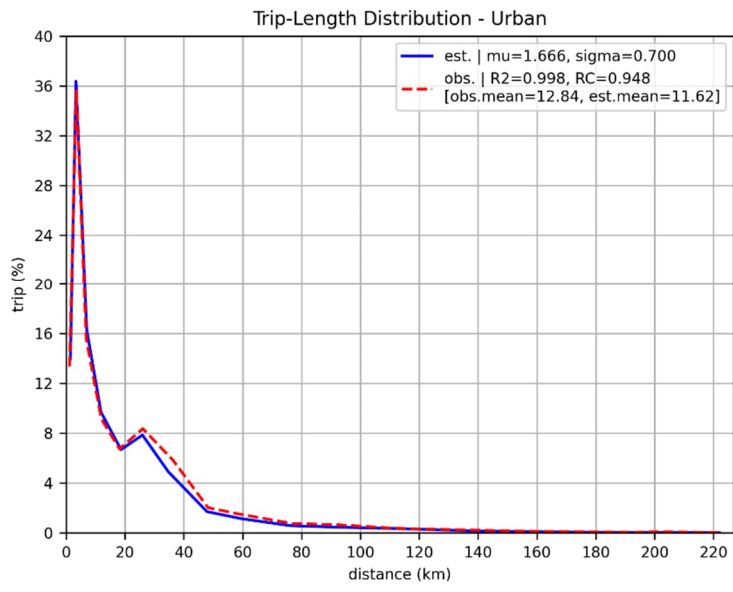
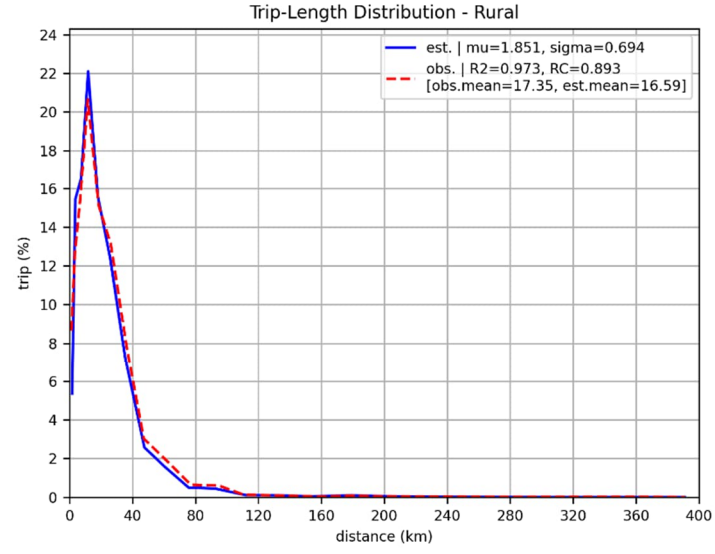
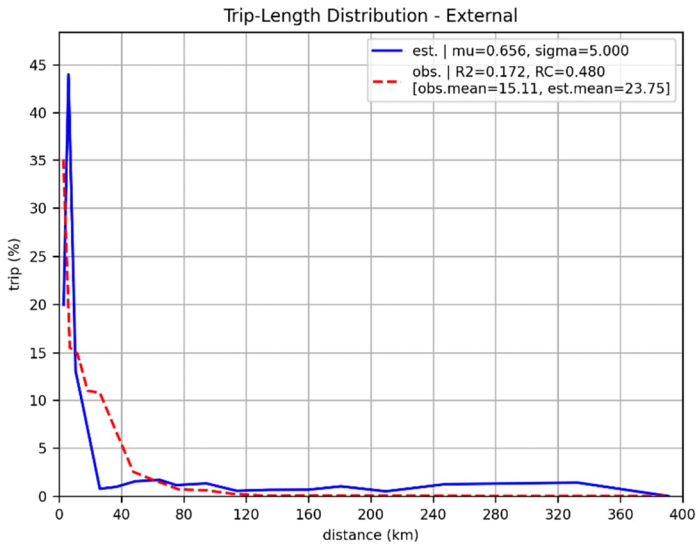




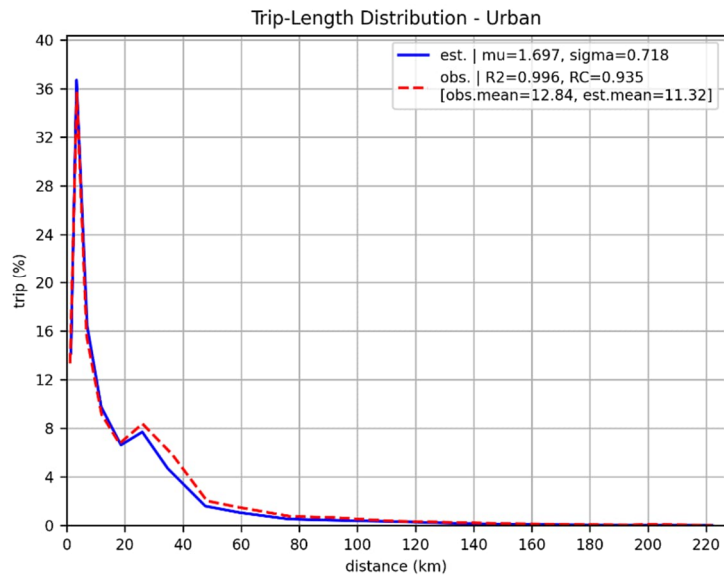
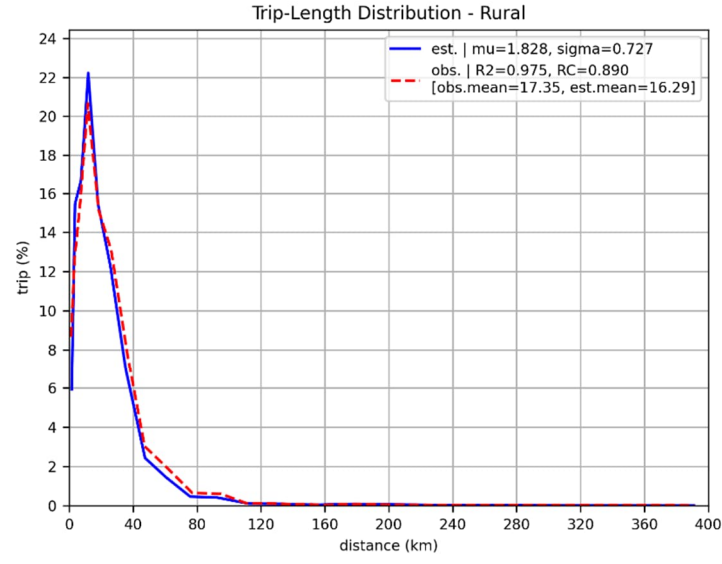
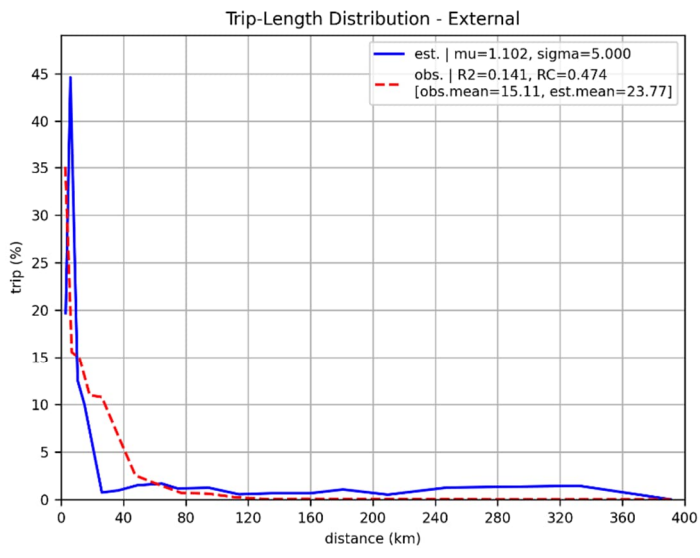
Home Based Work IP



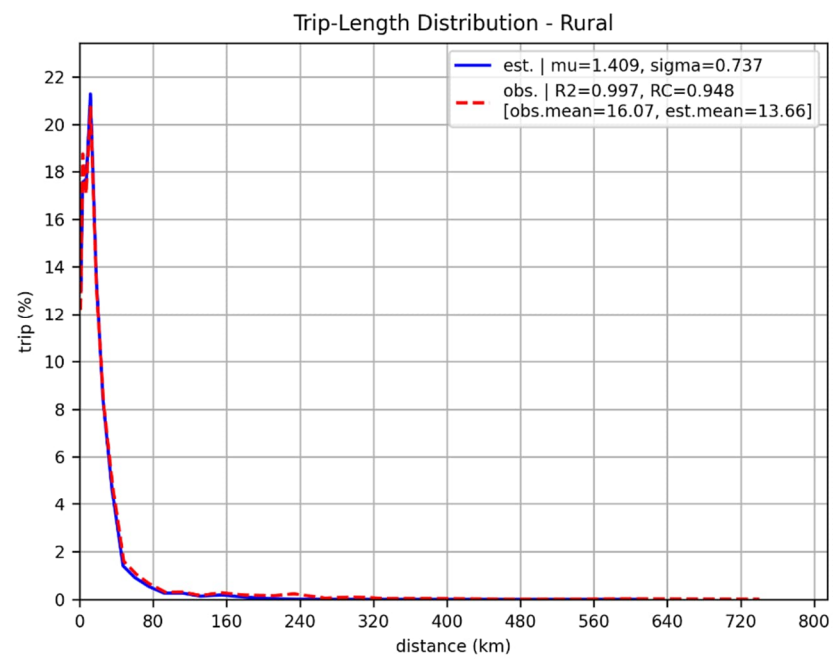
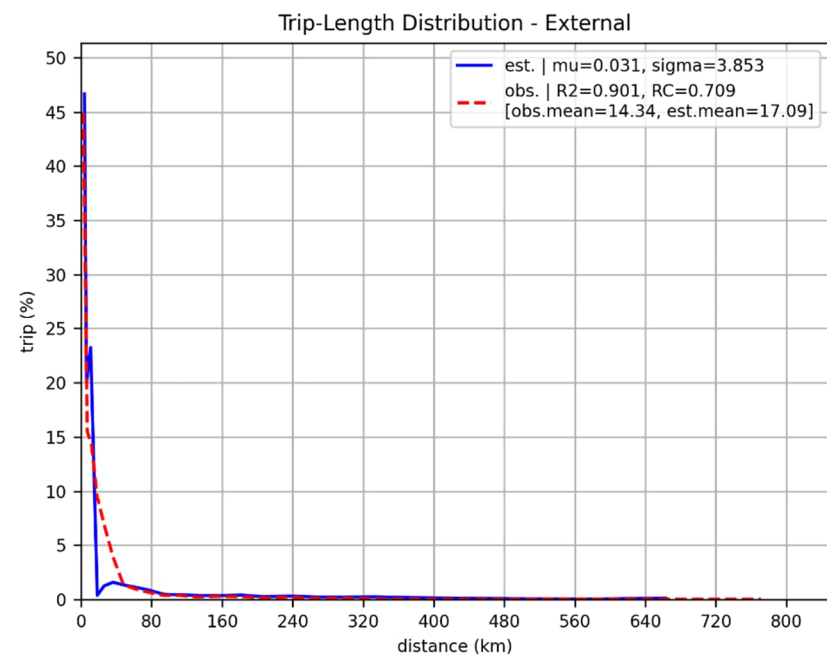
Home Based Work PM

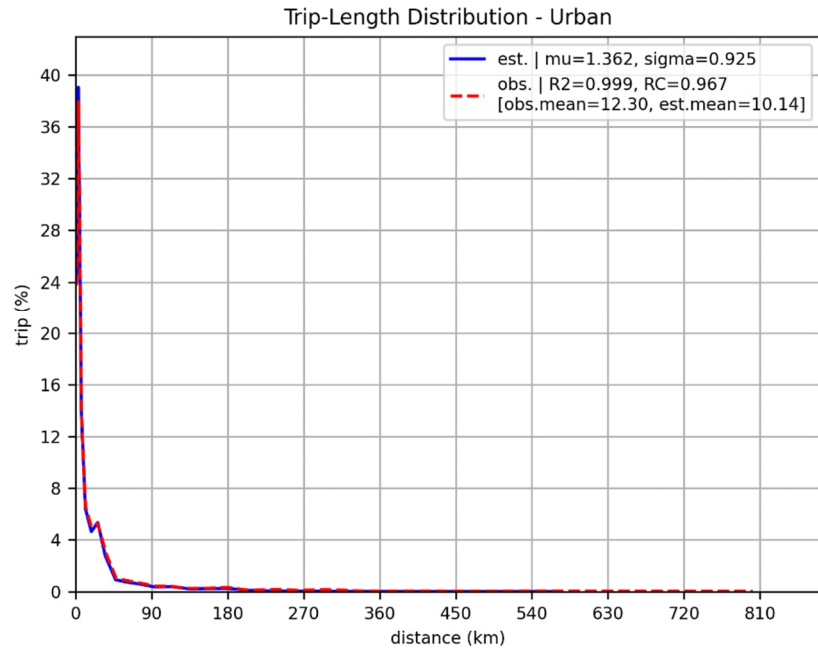


Home Based Work OP

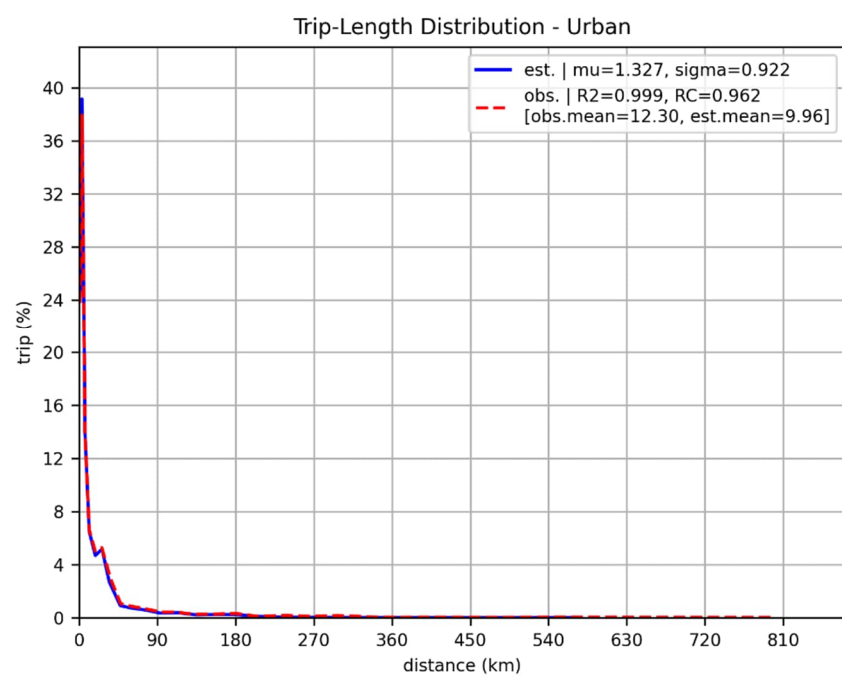
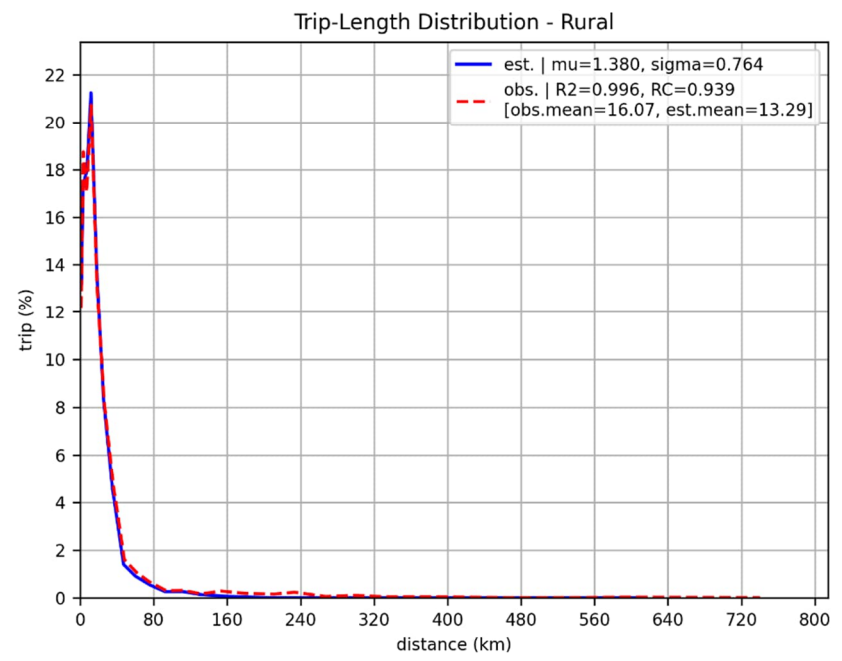
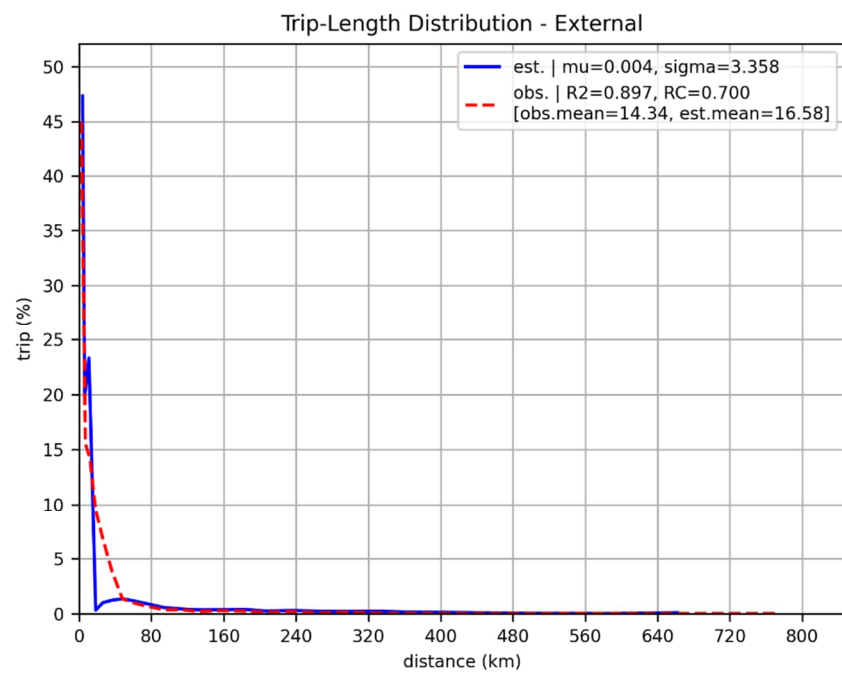


Home Based Other AM

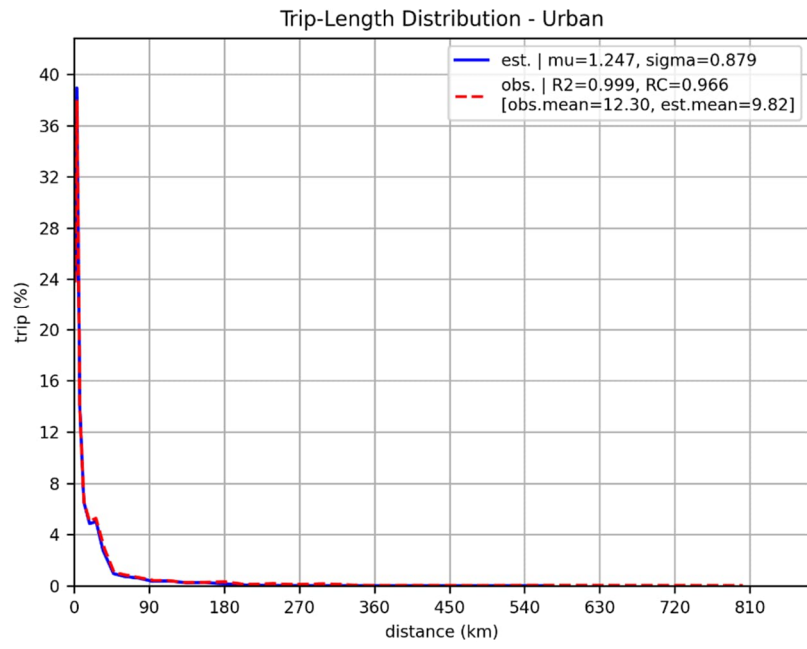
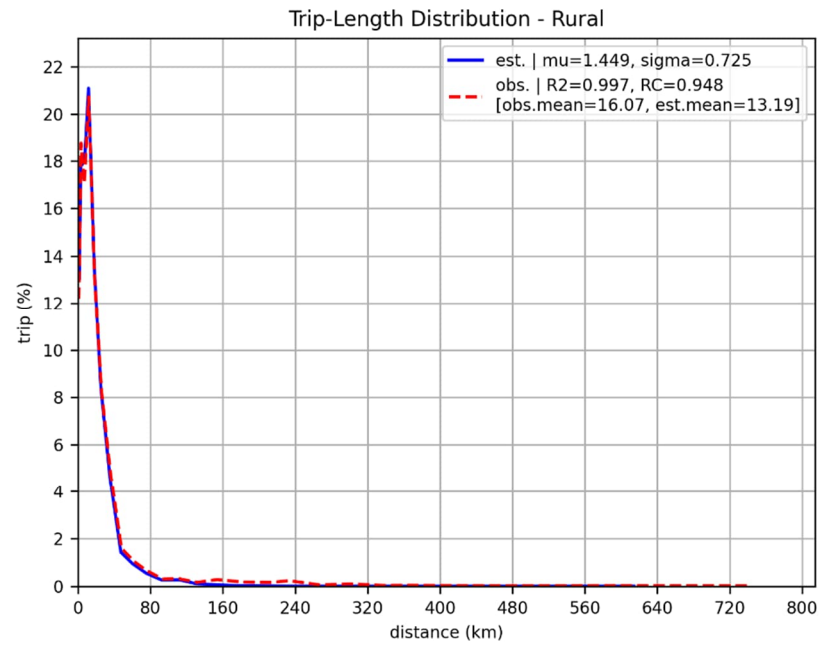
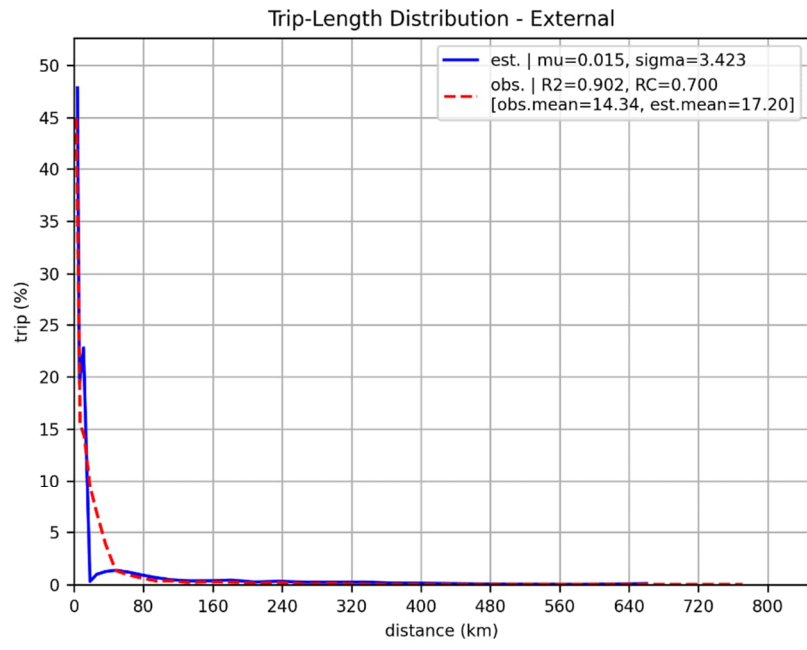




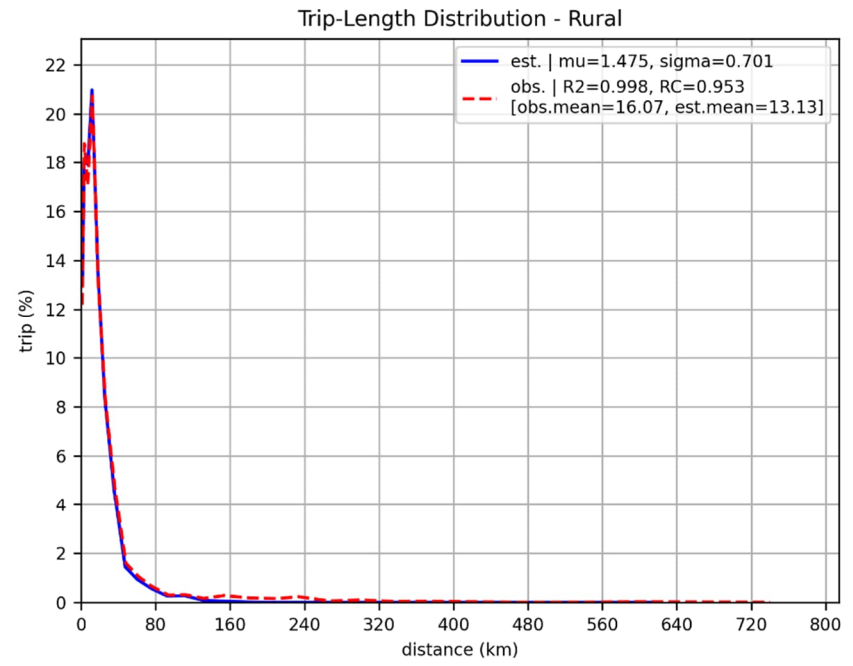
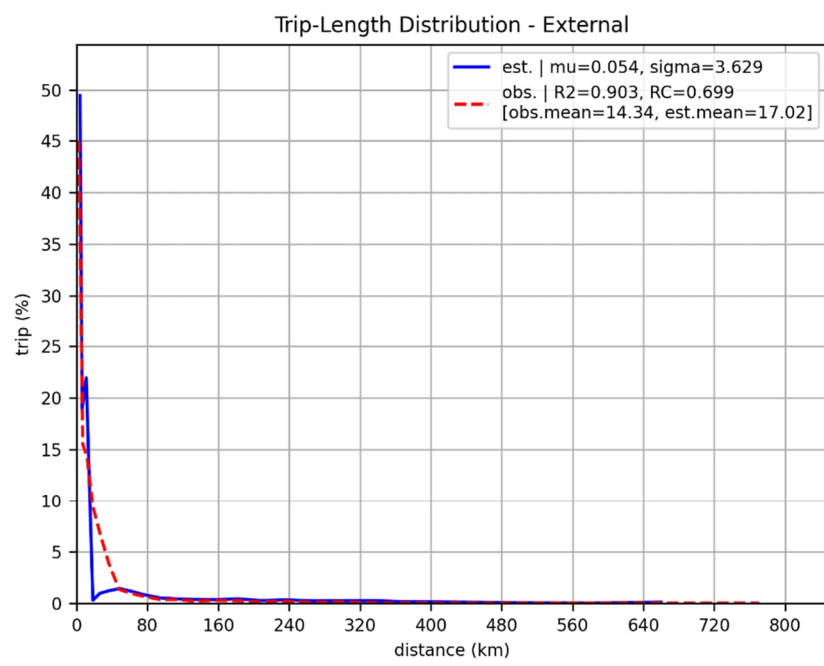
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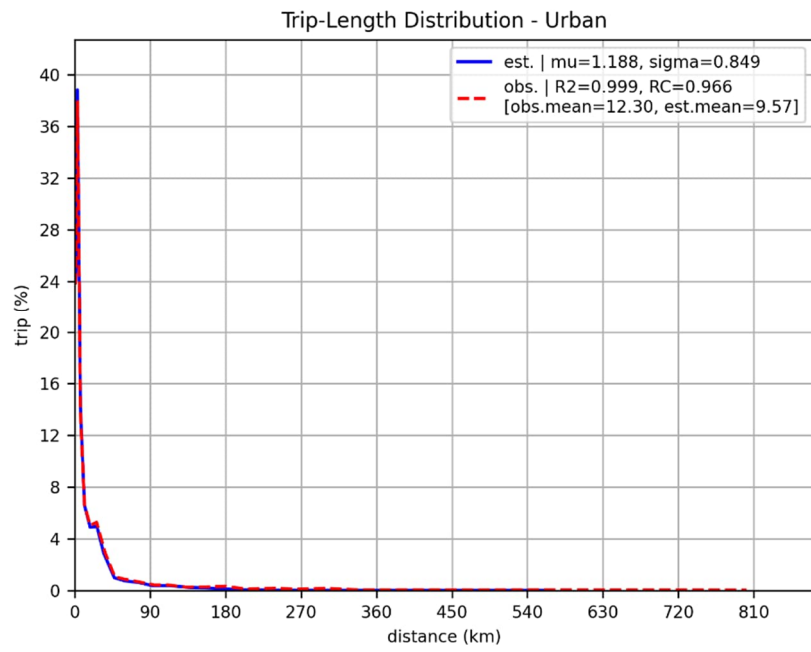


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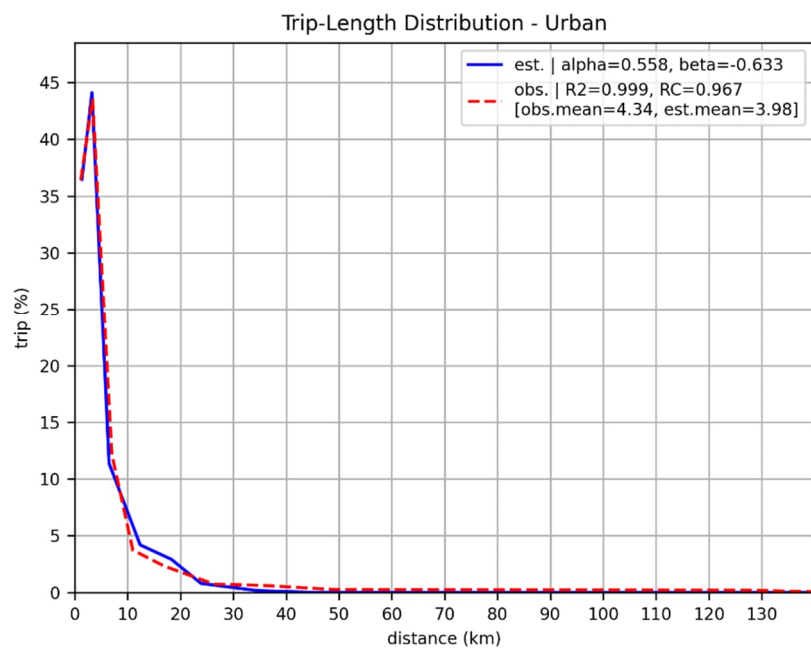
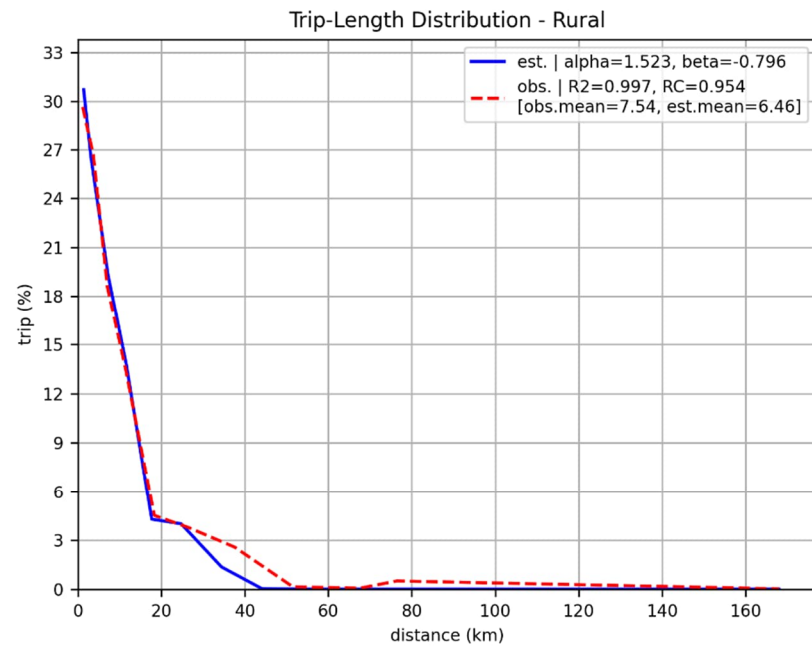
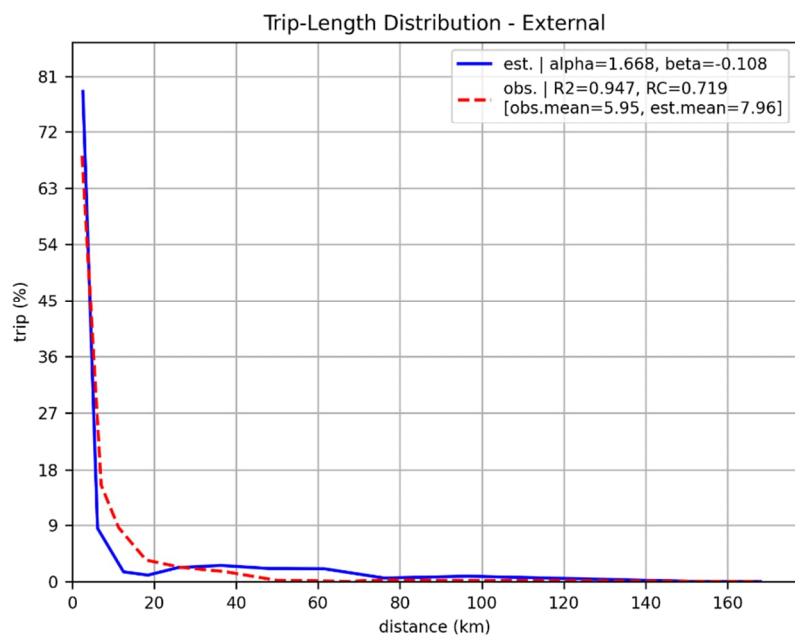


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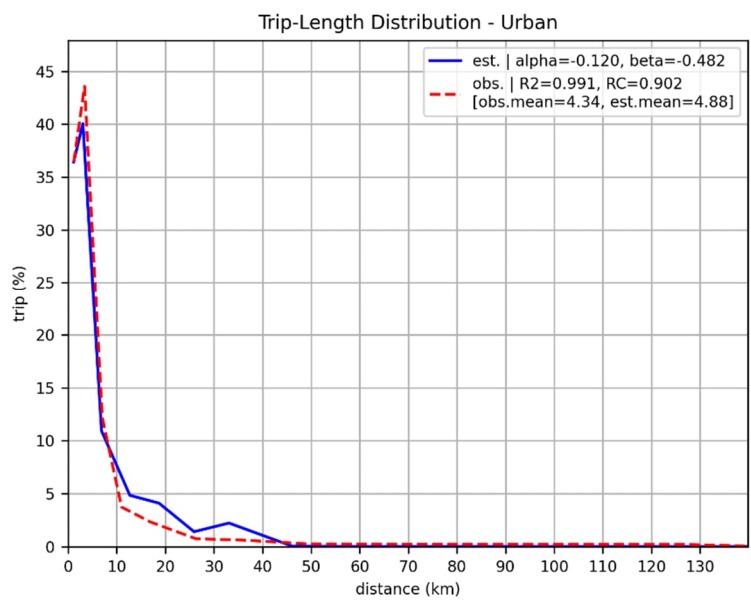
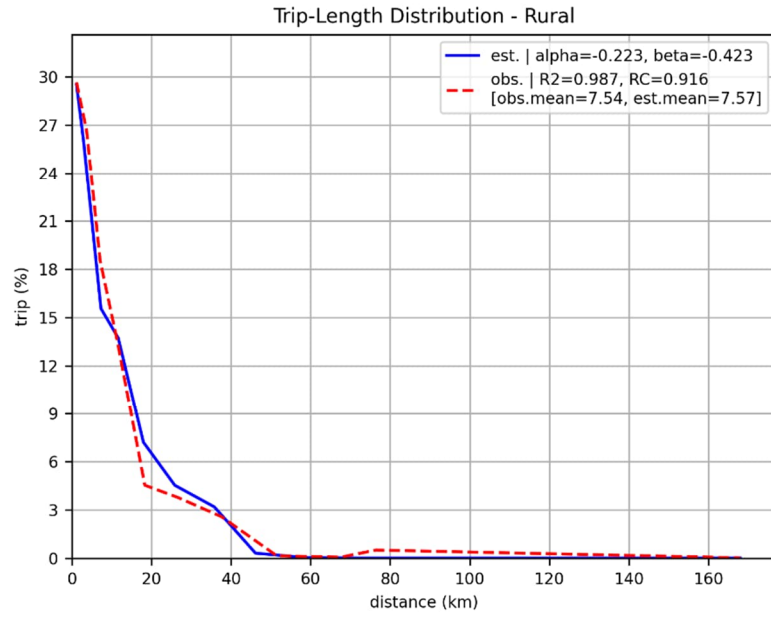
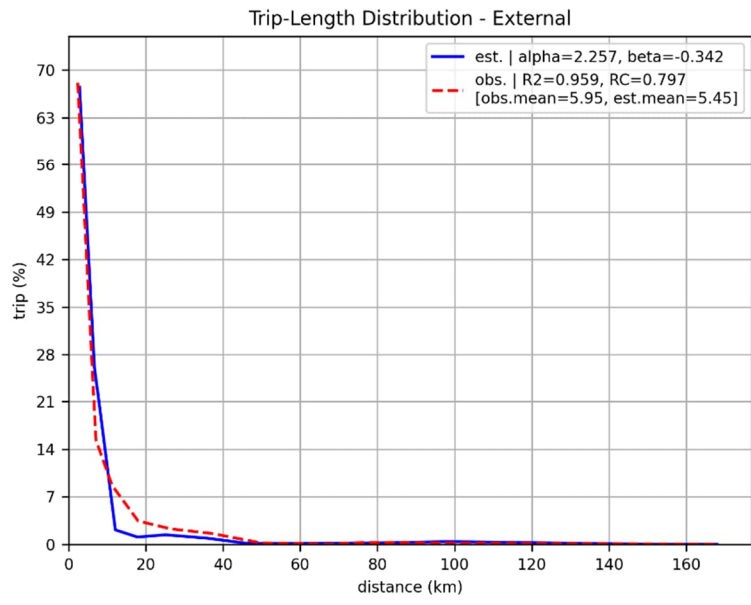




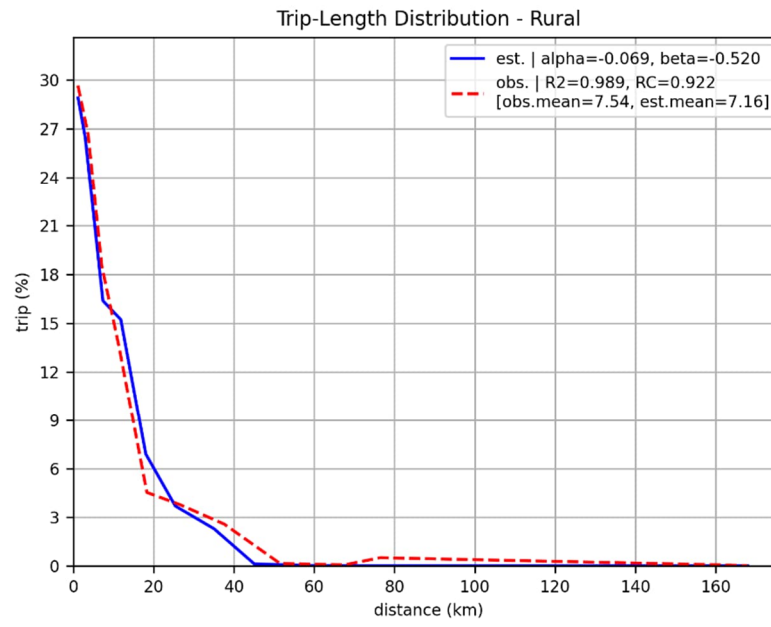
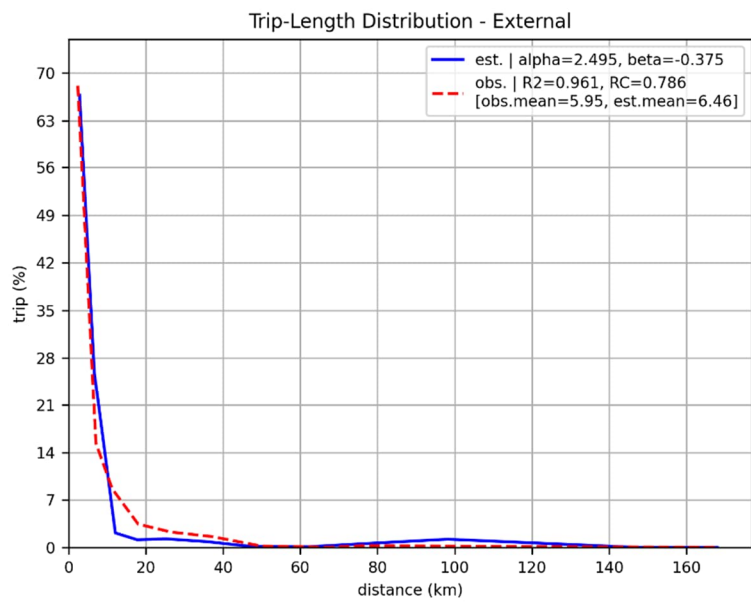
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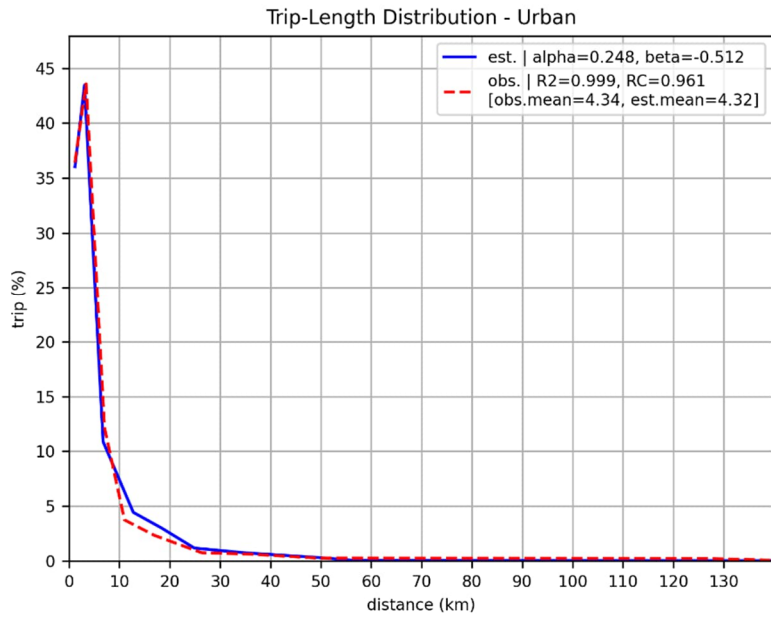


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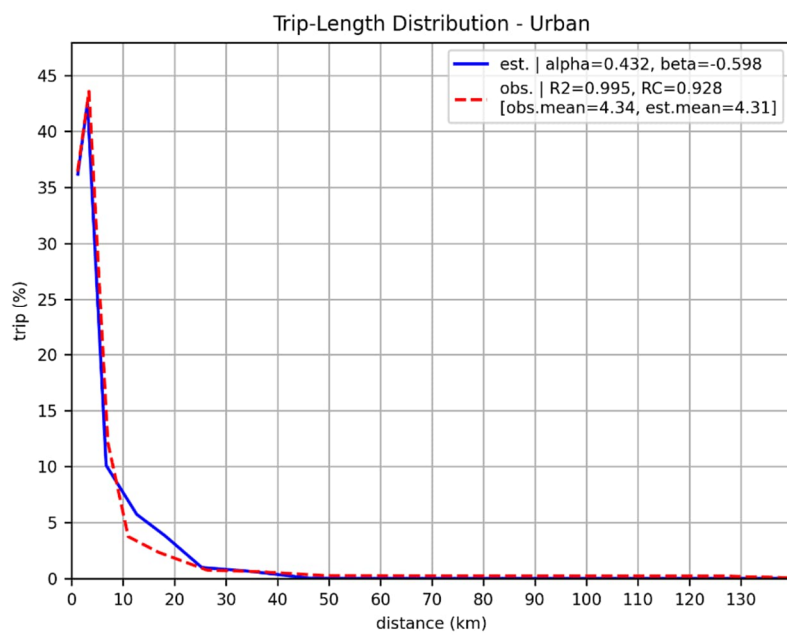
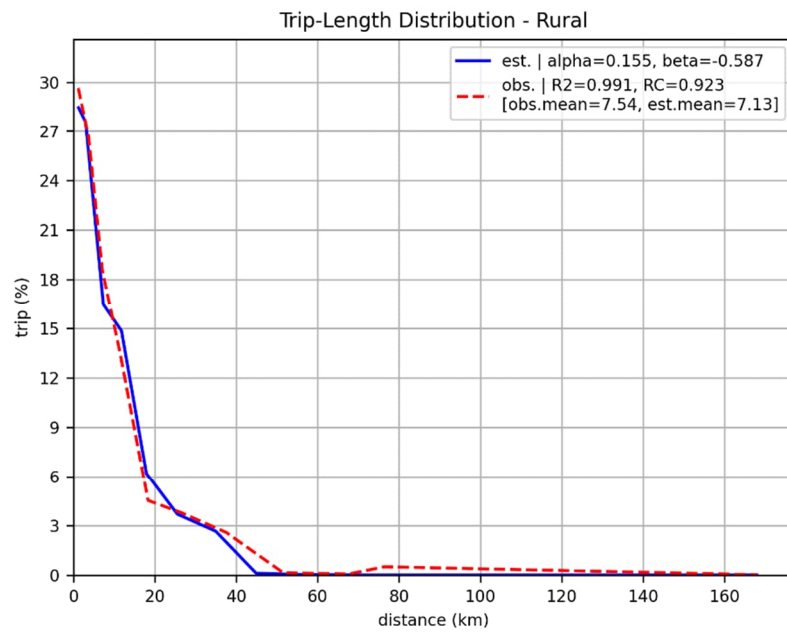
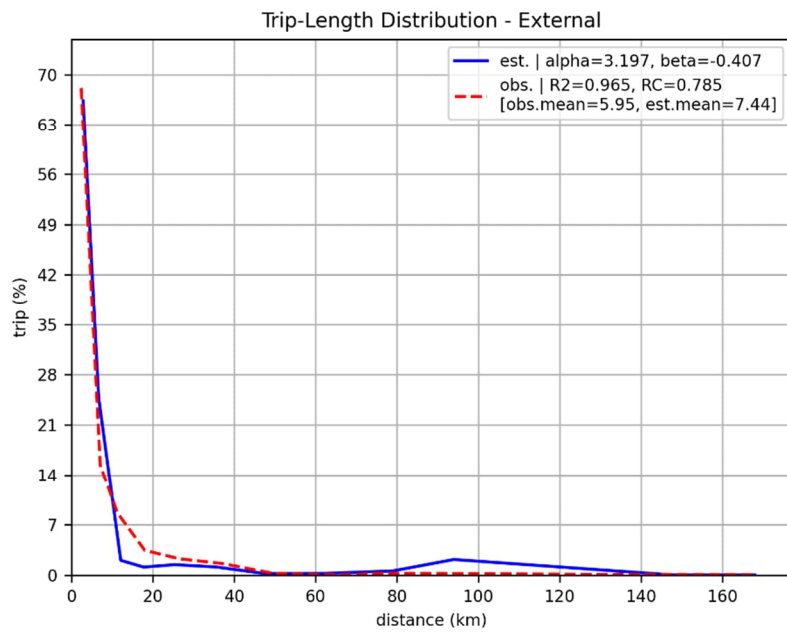


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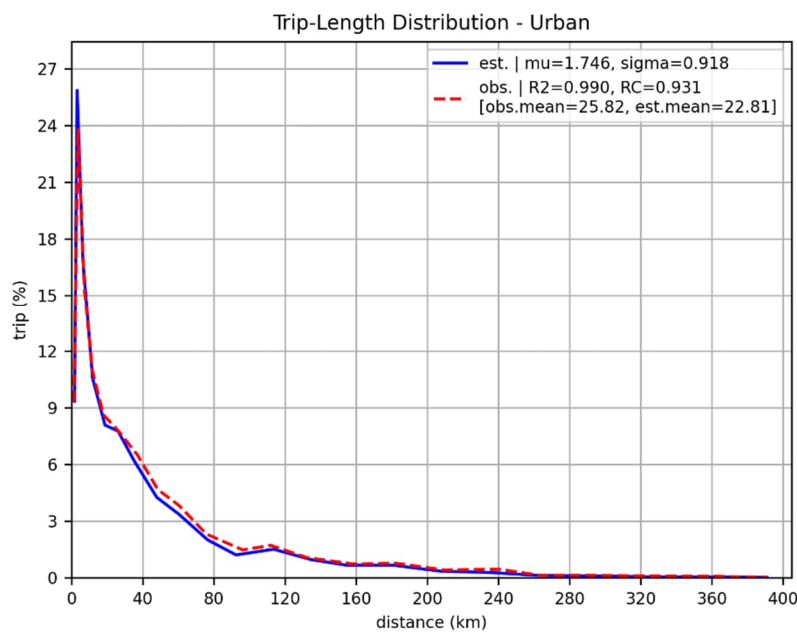
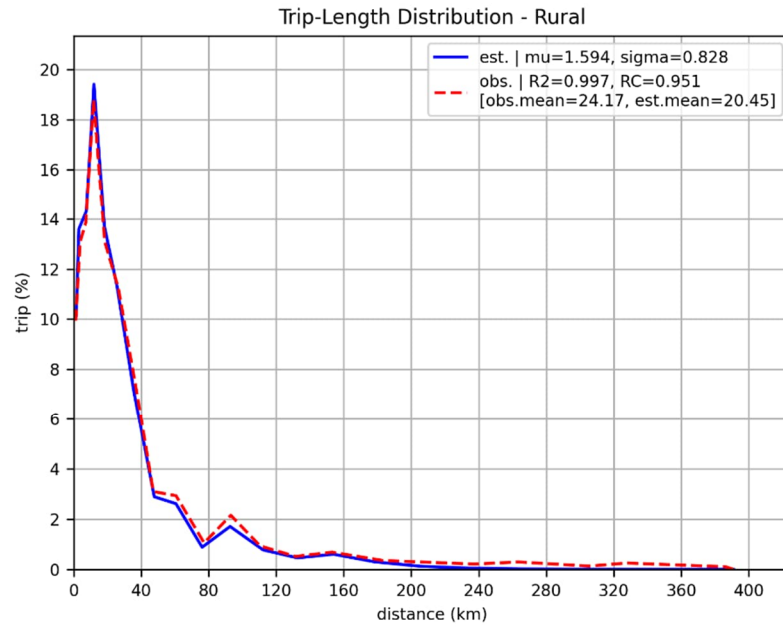
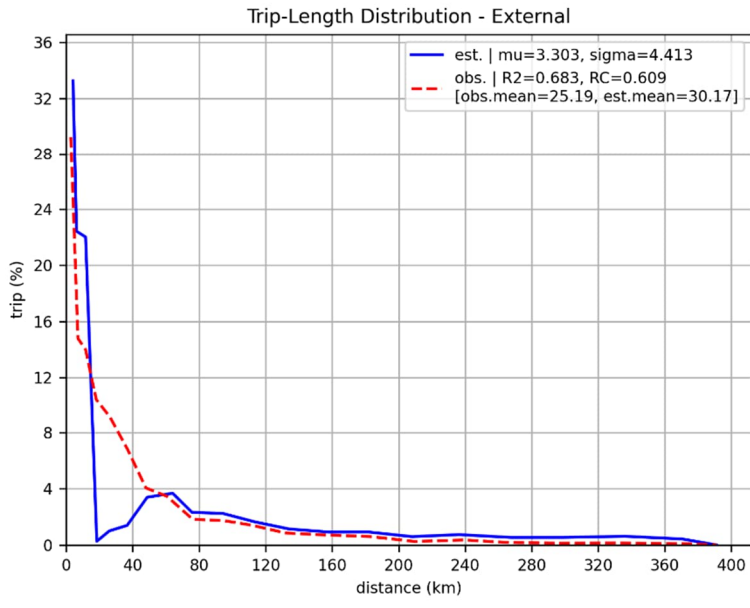




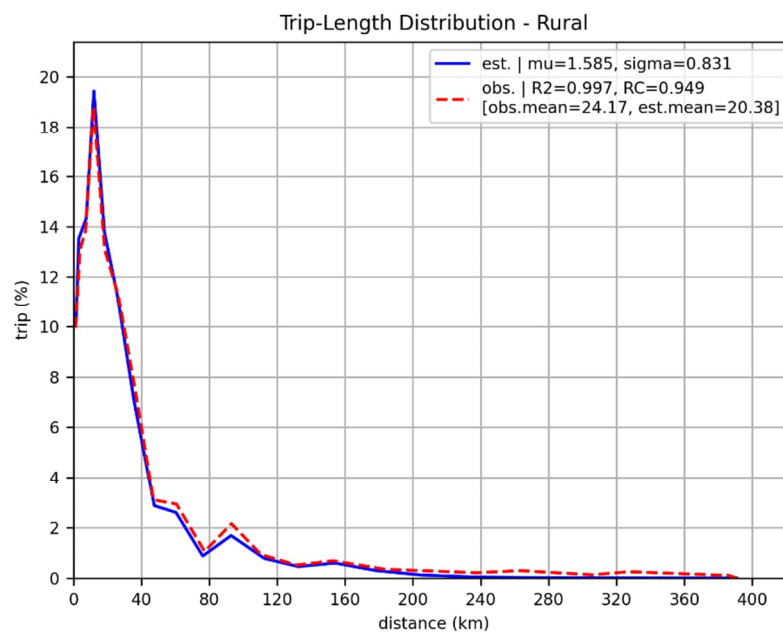
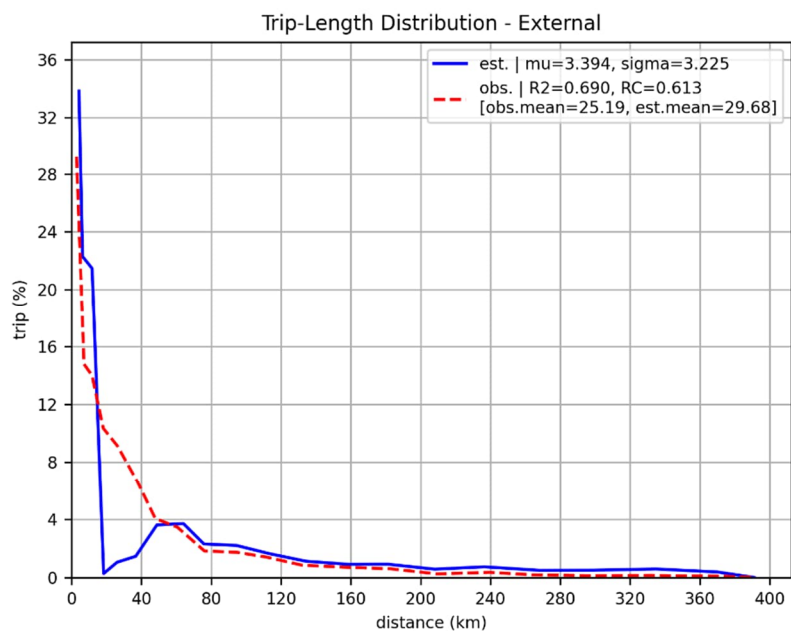
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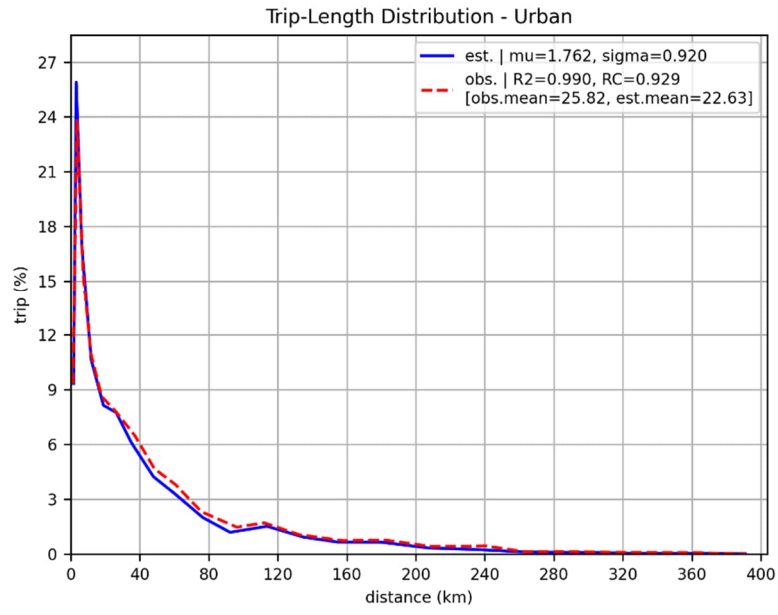


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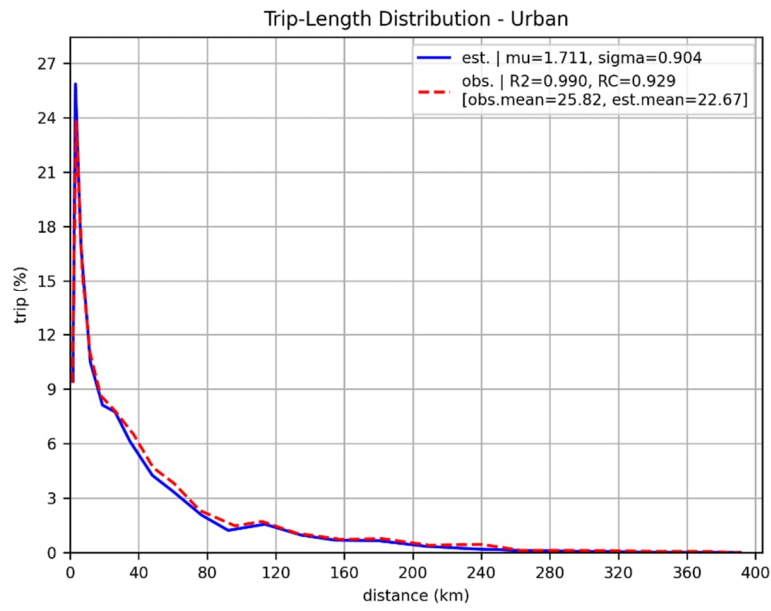
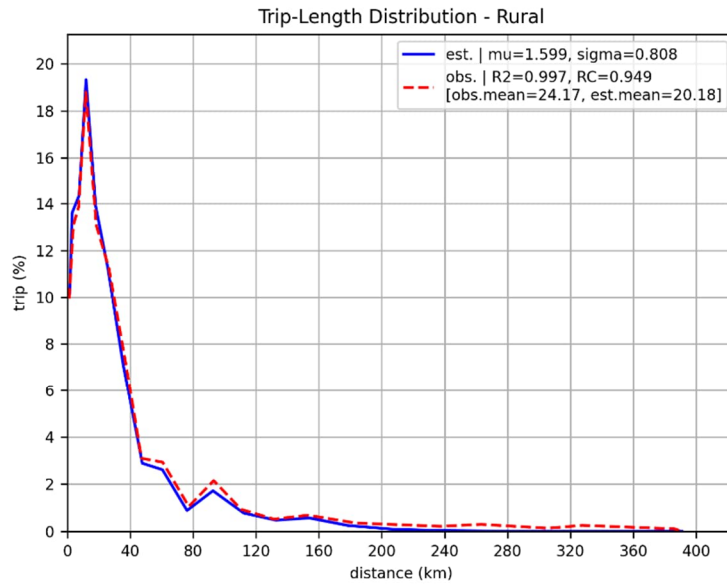
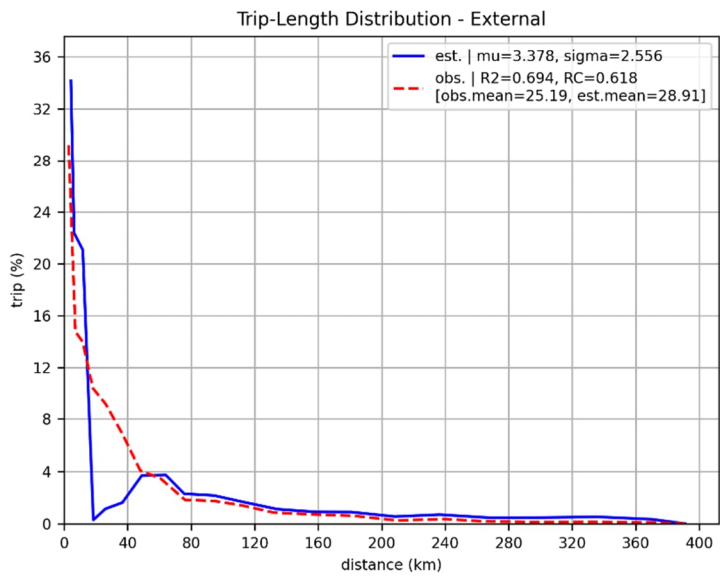


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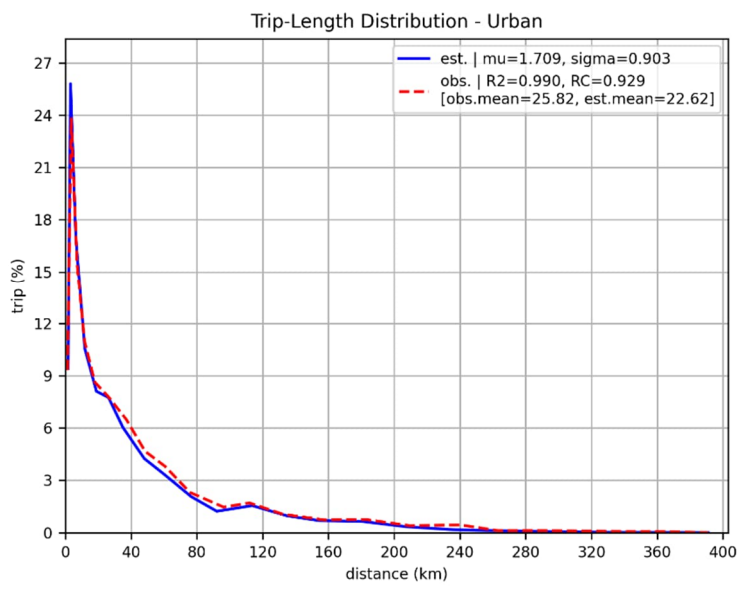
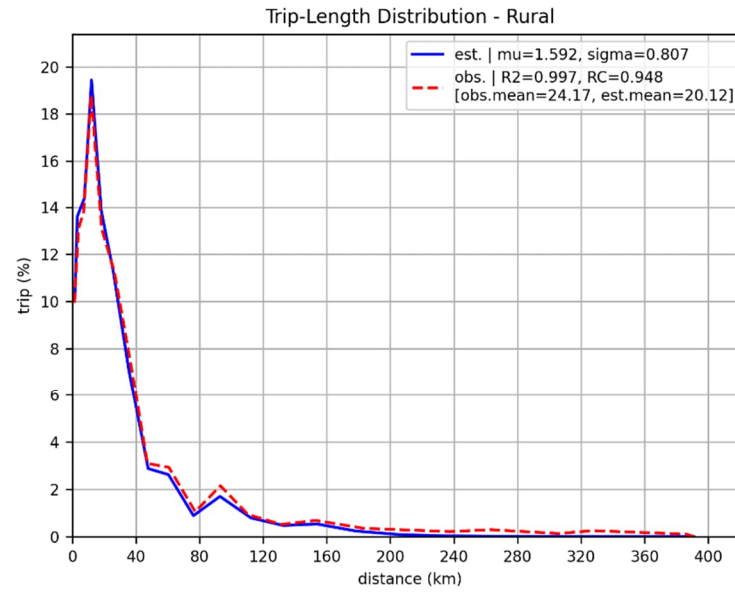
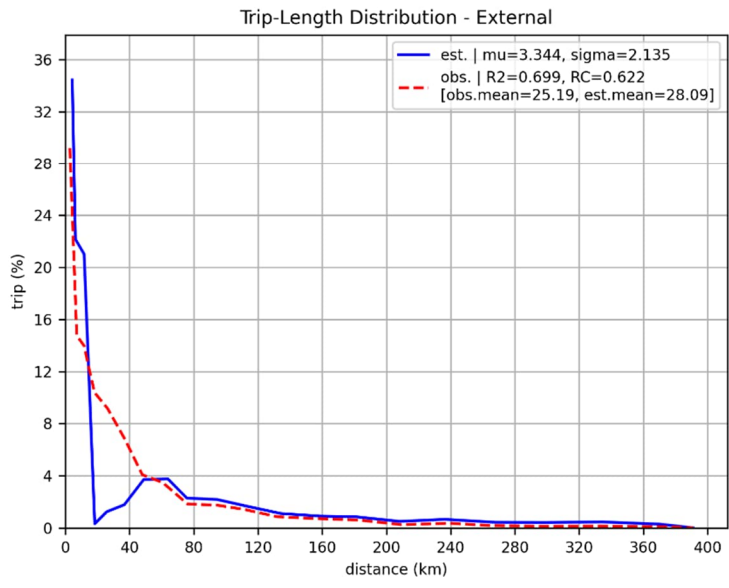




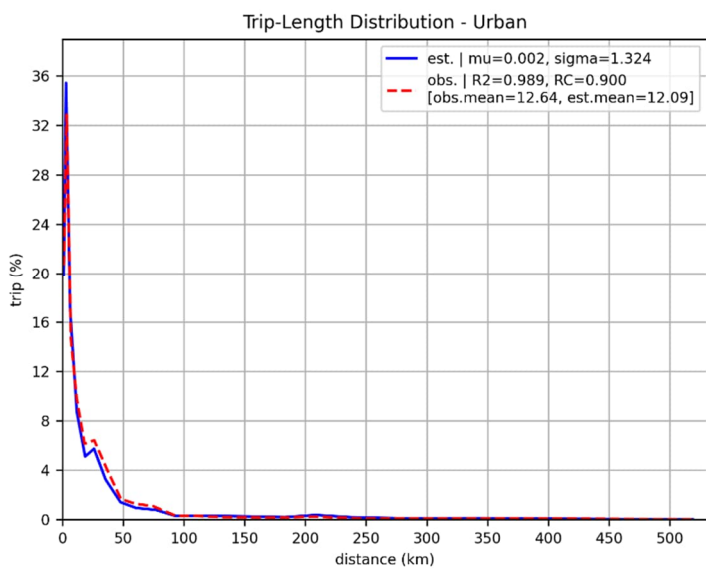
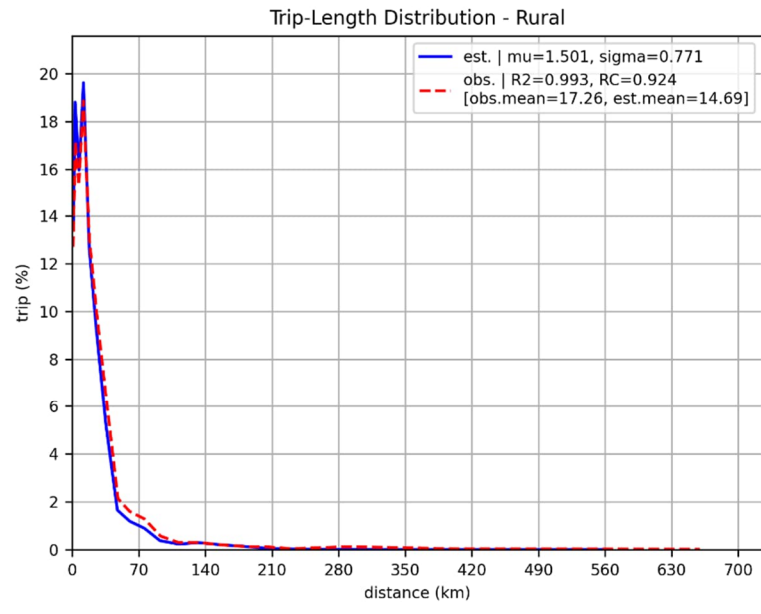
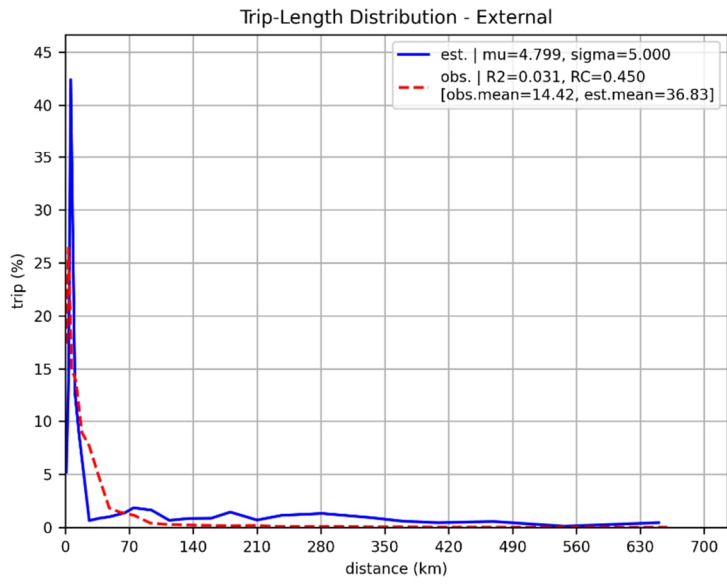
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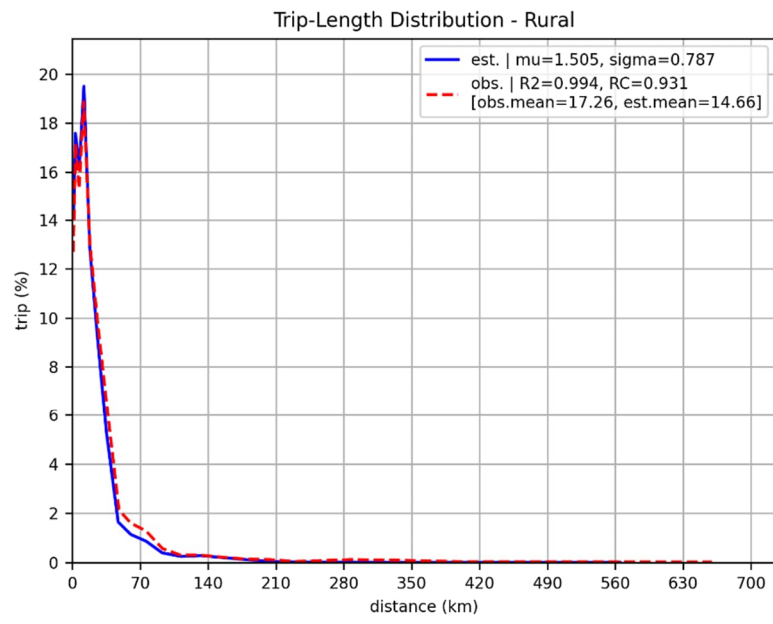
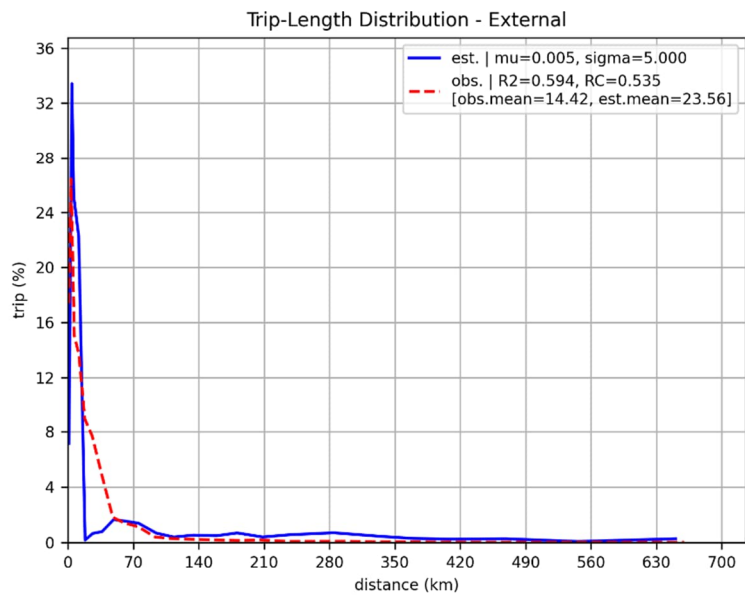
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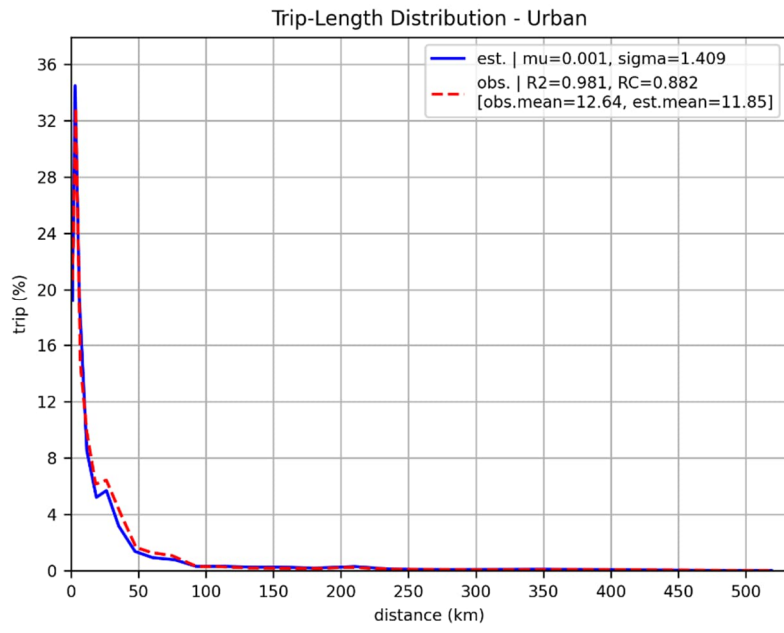


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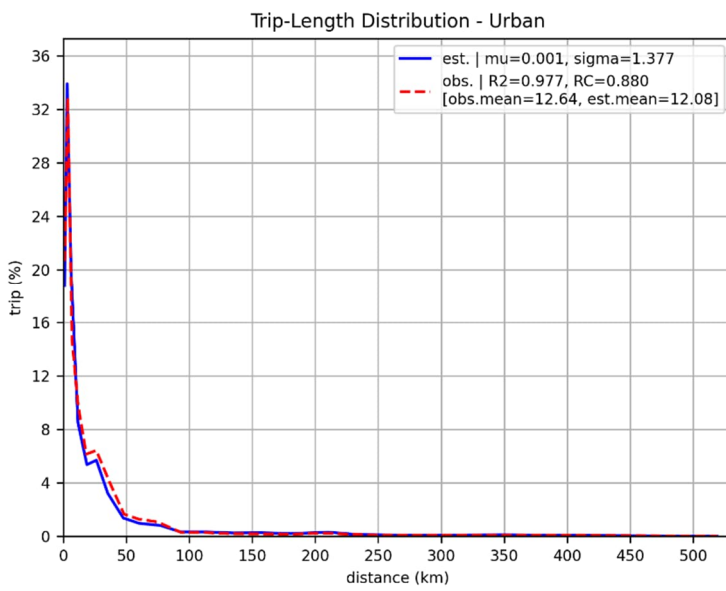
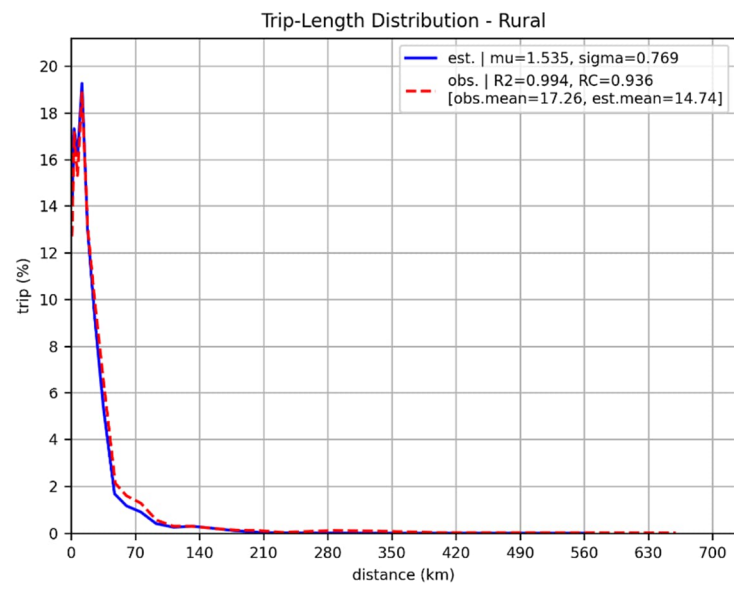
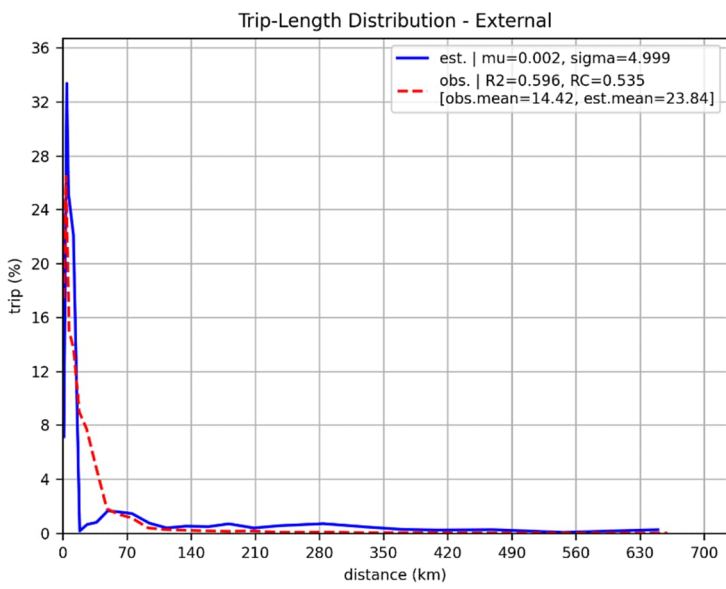


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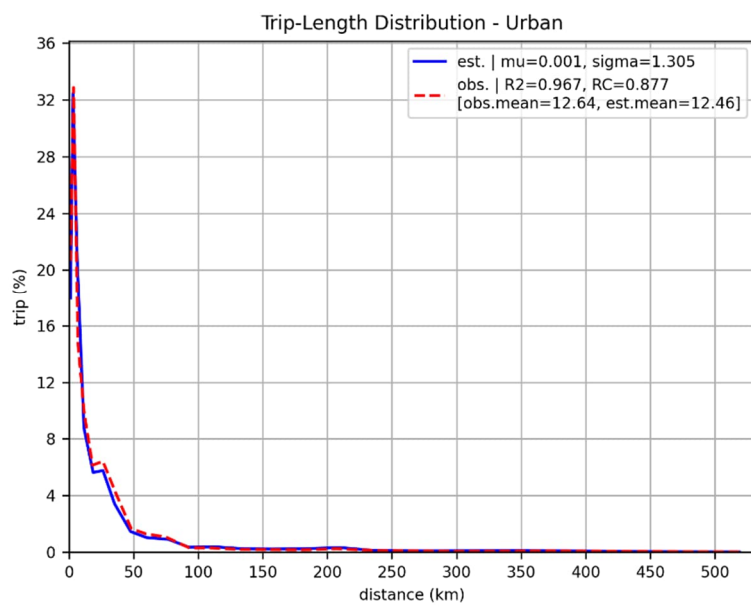
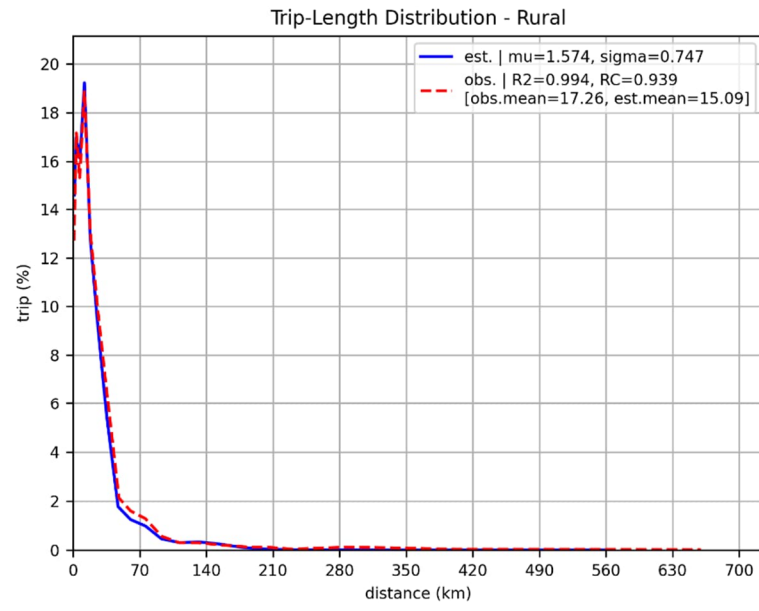
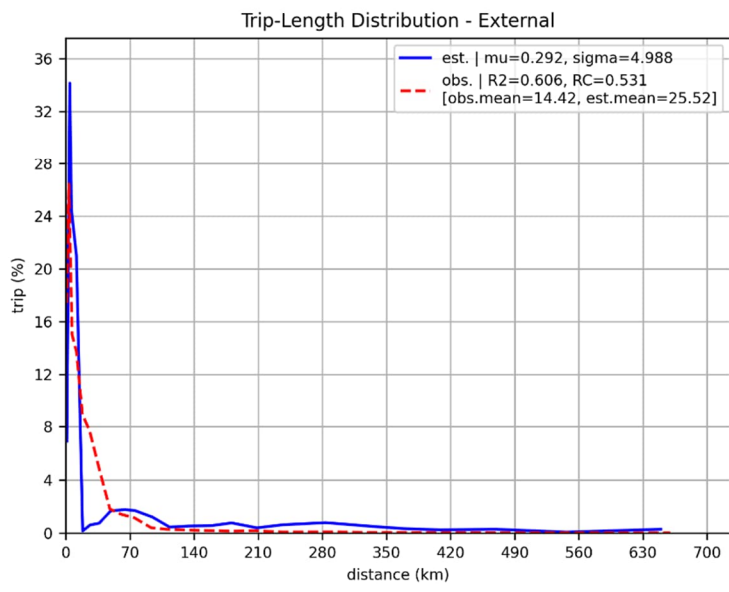




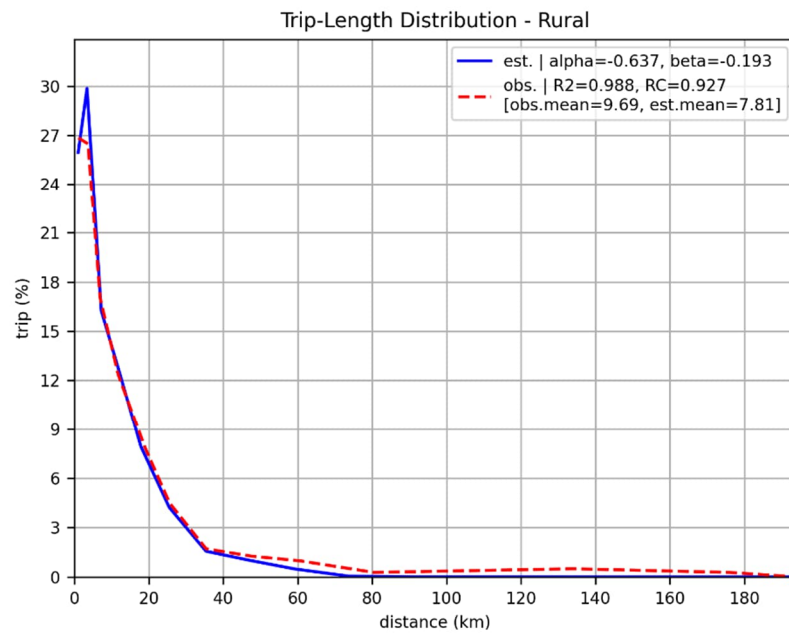
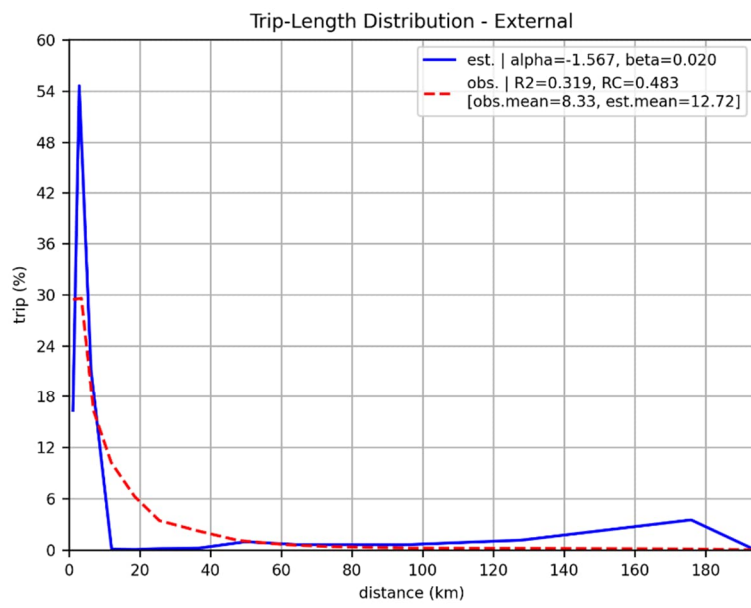
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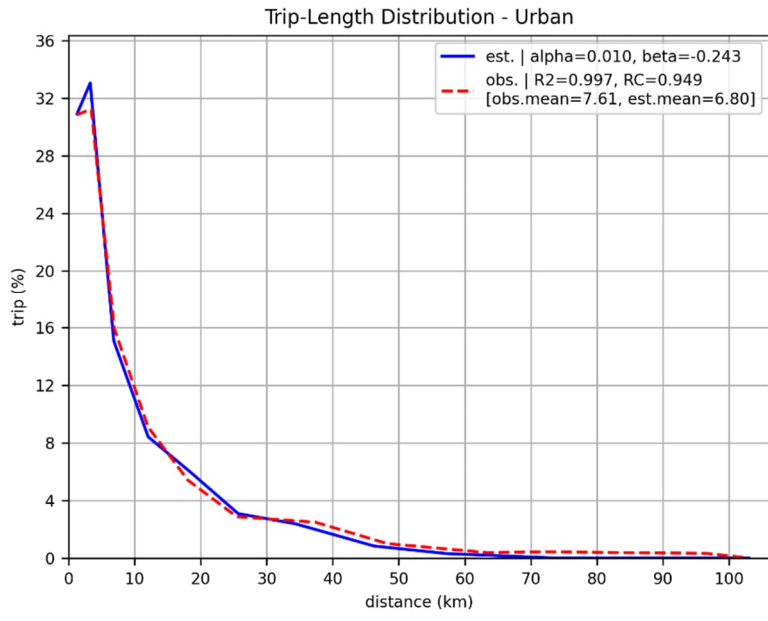


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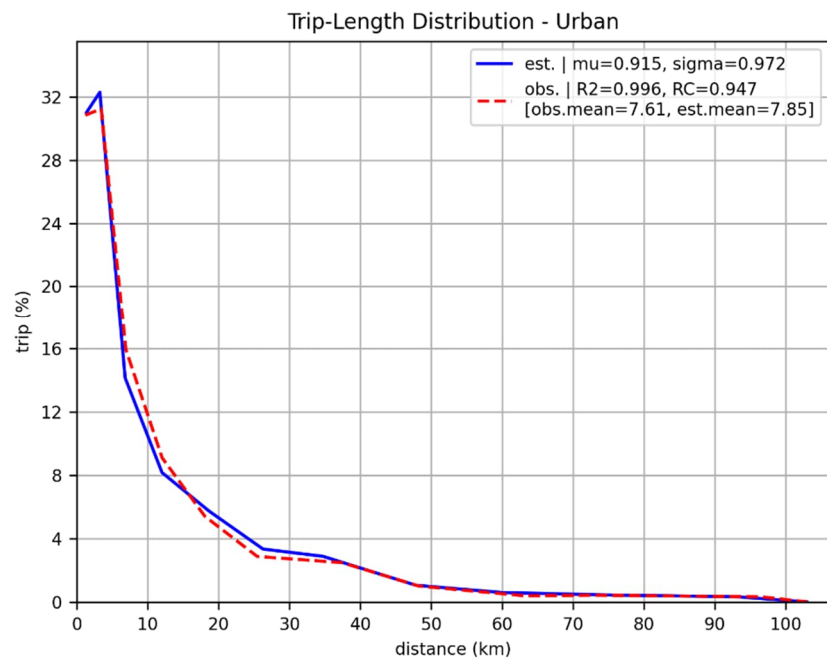
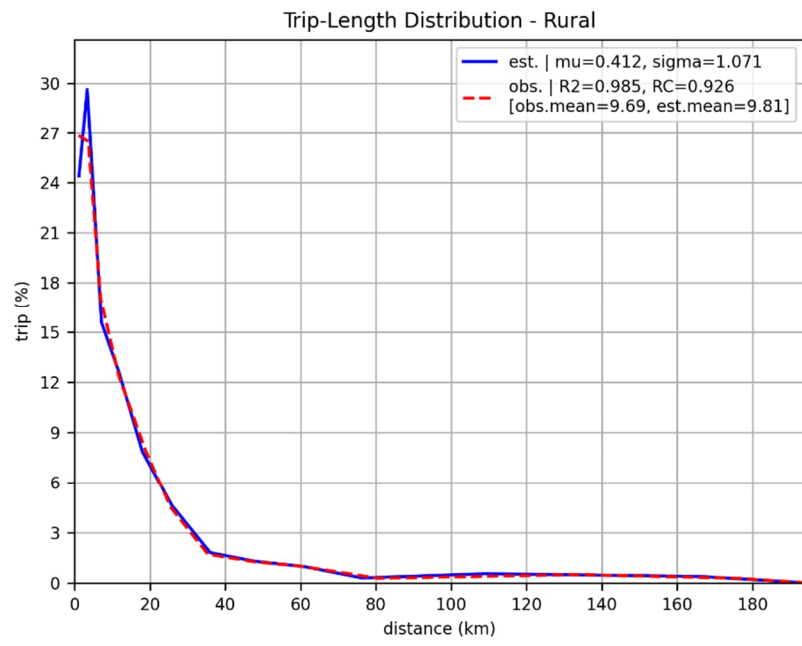
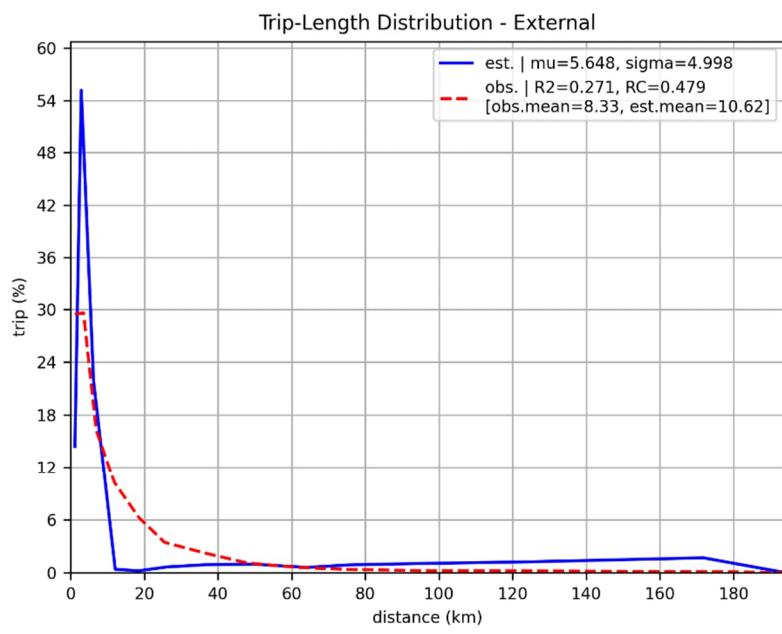


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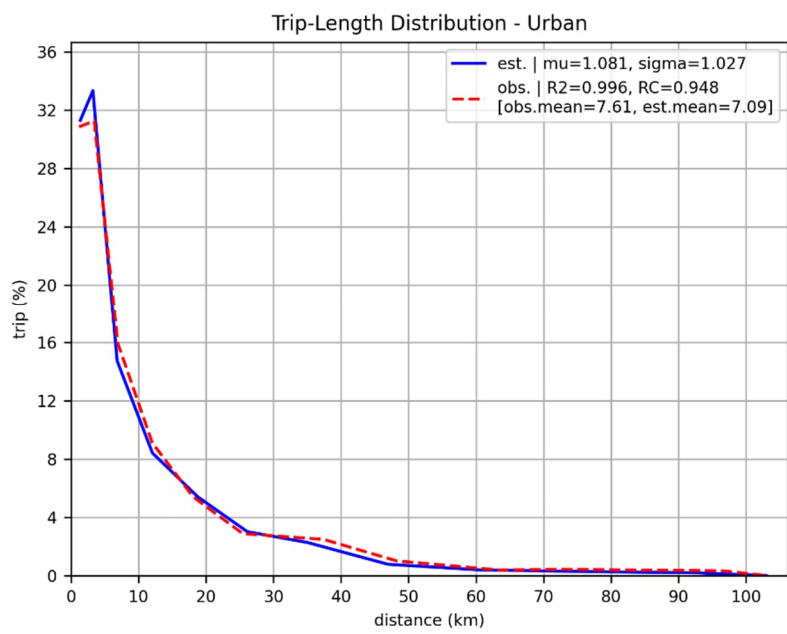
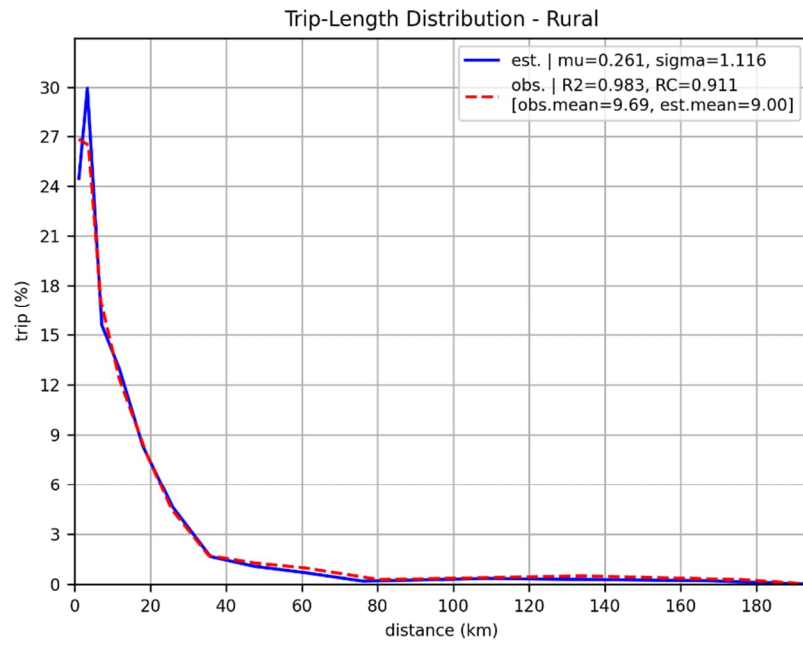
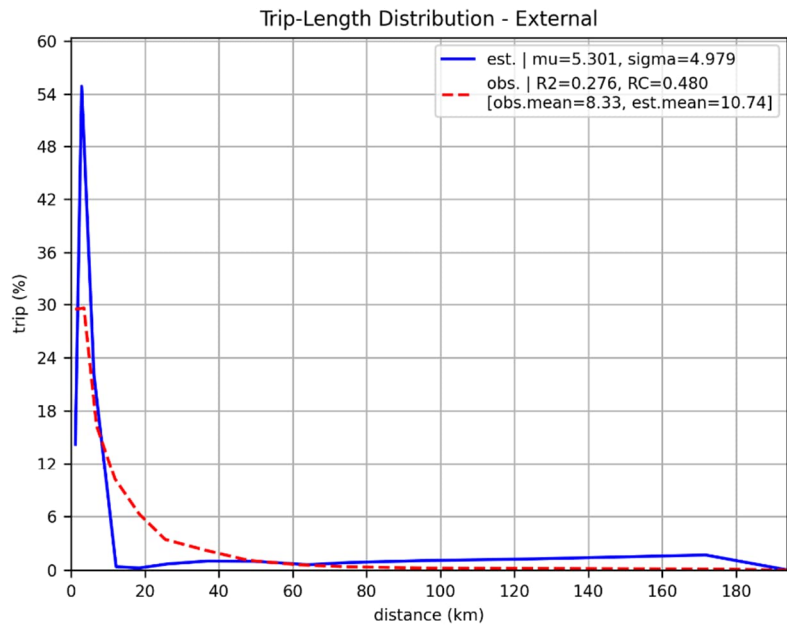




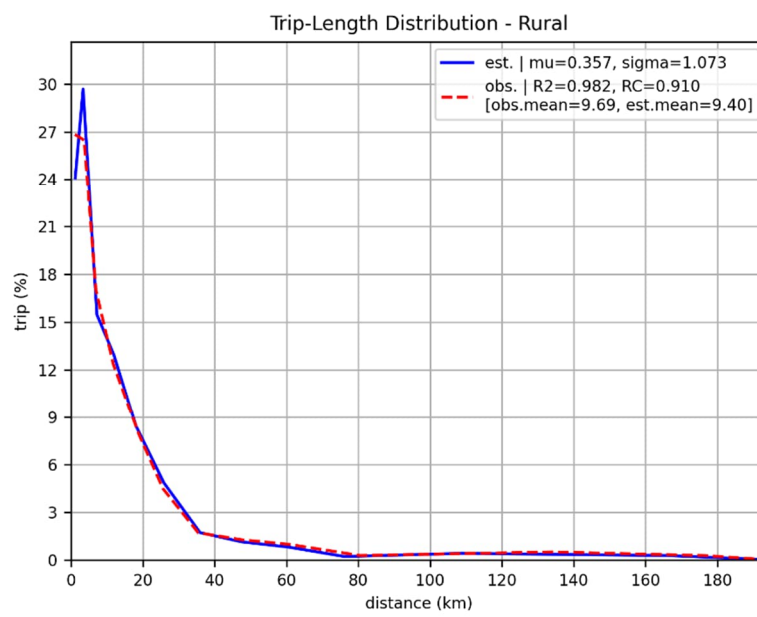
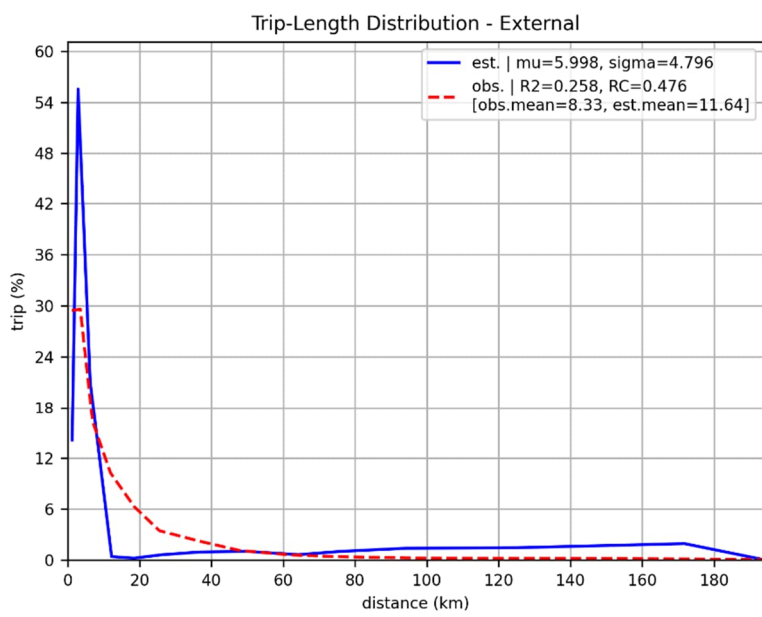
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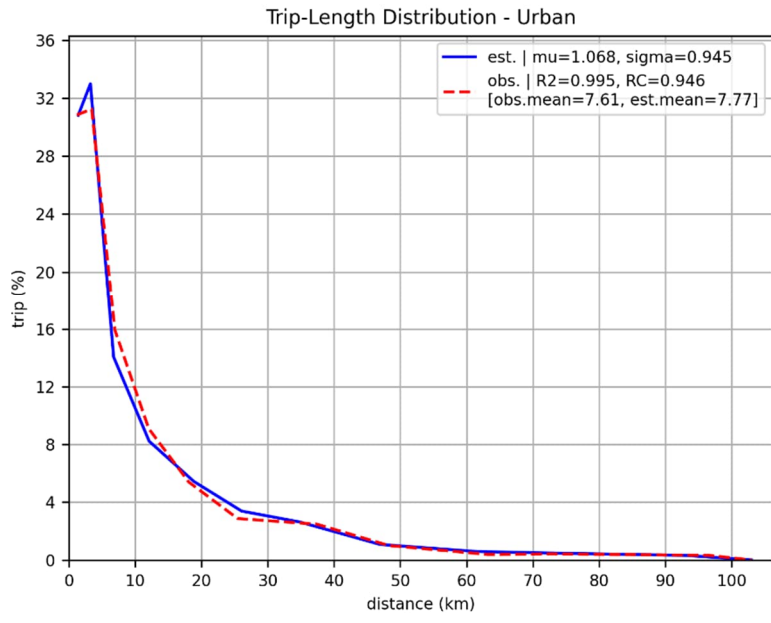


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