

The GLM Procedure

Number of Observations Read	71
Number of Observations Used	71

The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	0.03445760	0.00861440	7869.27	<.0001
Error	66	0.00007225	0.00000109		
Corrected Total	70	0.03452985			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.997908	5.967618	0.001046	0.017533

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03444388	0.03444388	31464.5	<.0001
e10	1	0.00000167	0.00000167	1.53	0.2205
e15	1	0.00000064	0.00000064	0.59	0.4464
e20	1	0.00001140	0.00001140	10.41	0.0019

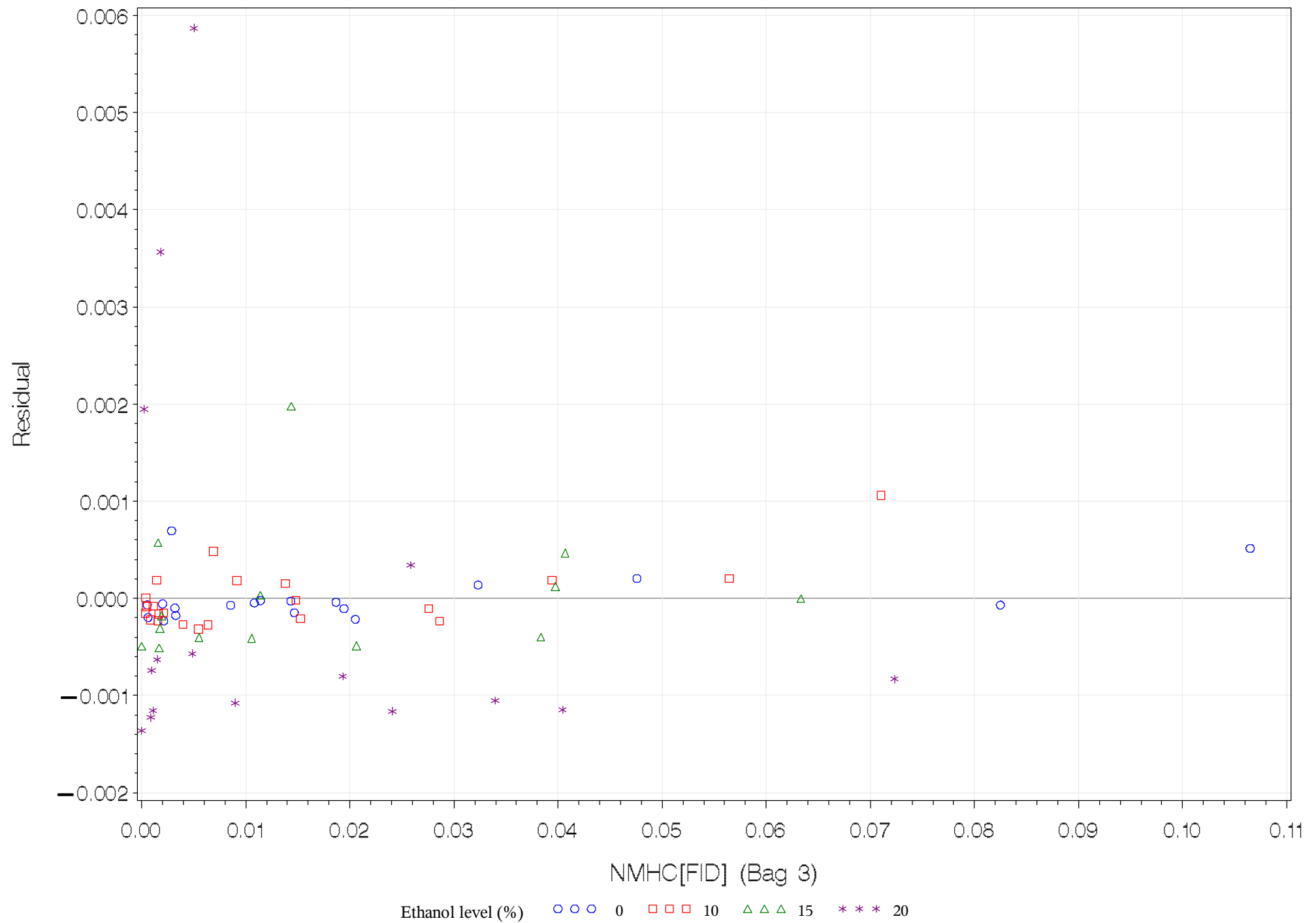
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03392945	0.03392945	30994.6	<.0001
e10	1	0.00000016	0.00000016	0.15	0.6997
e15	1	0.00000060	0.00000060	0.55	0.4612
e20	1	0.00001140	0.00001140	10.41	0.0019

The GLM Procedure

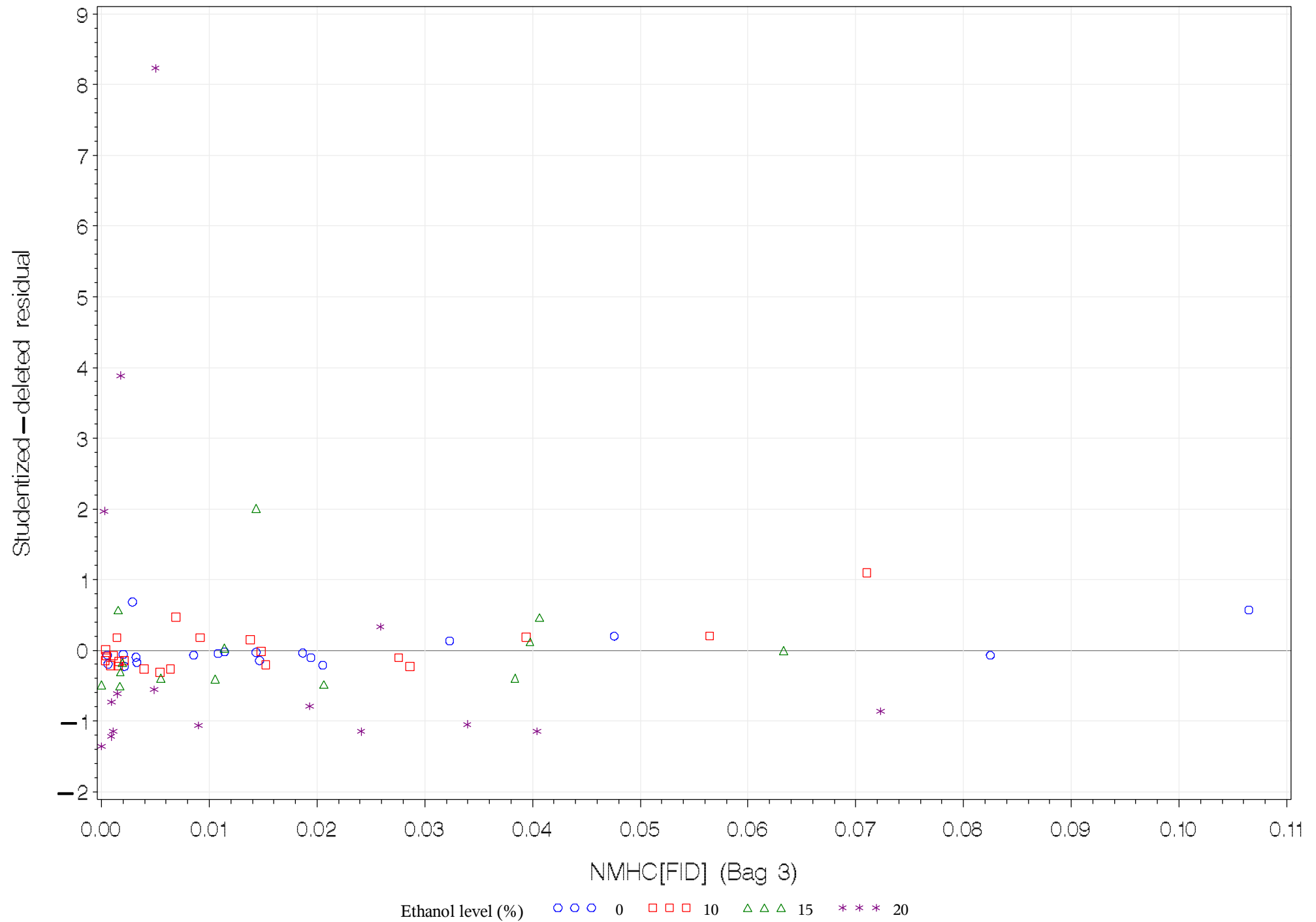
Dependent Variable: NMOG_B3 NMOG (Bag 3)

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.0002457714	0.00026838	0.92	0.3631
NM_FIDHC_B3	0.9984431693	0.00567127	176.05	<.0001
e10	0.0001279131	0.00033016	0.39	0.6997
e15	0.0002734864	0.00036897	0.74	0.4612
e20	0.0011510795	0.00035668	3.23	0.0019

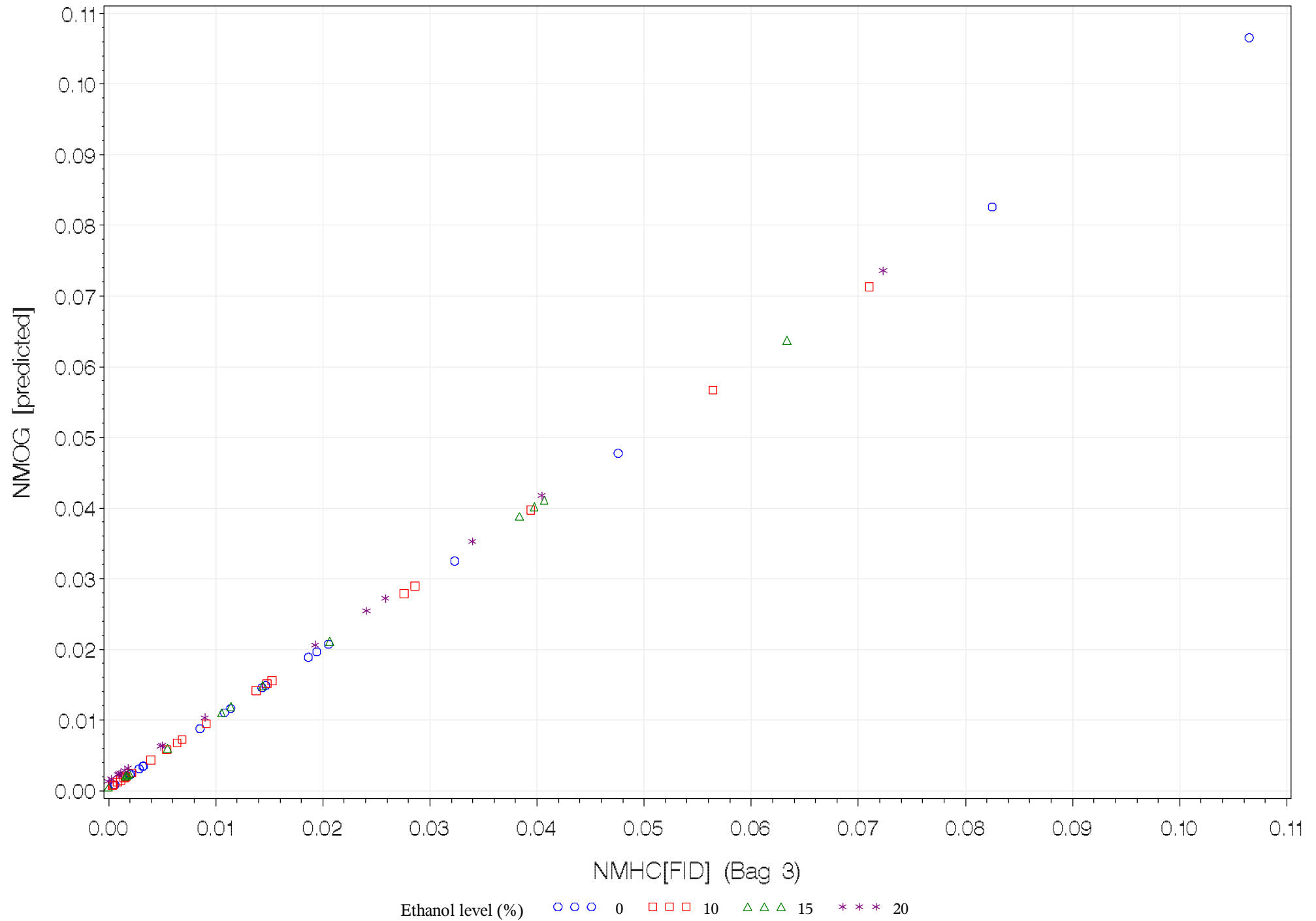
Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



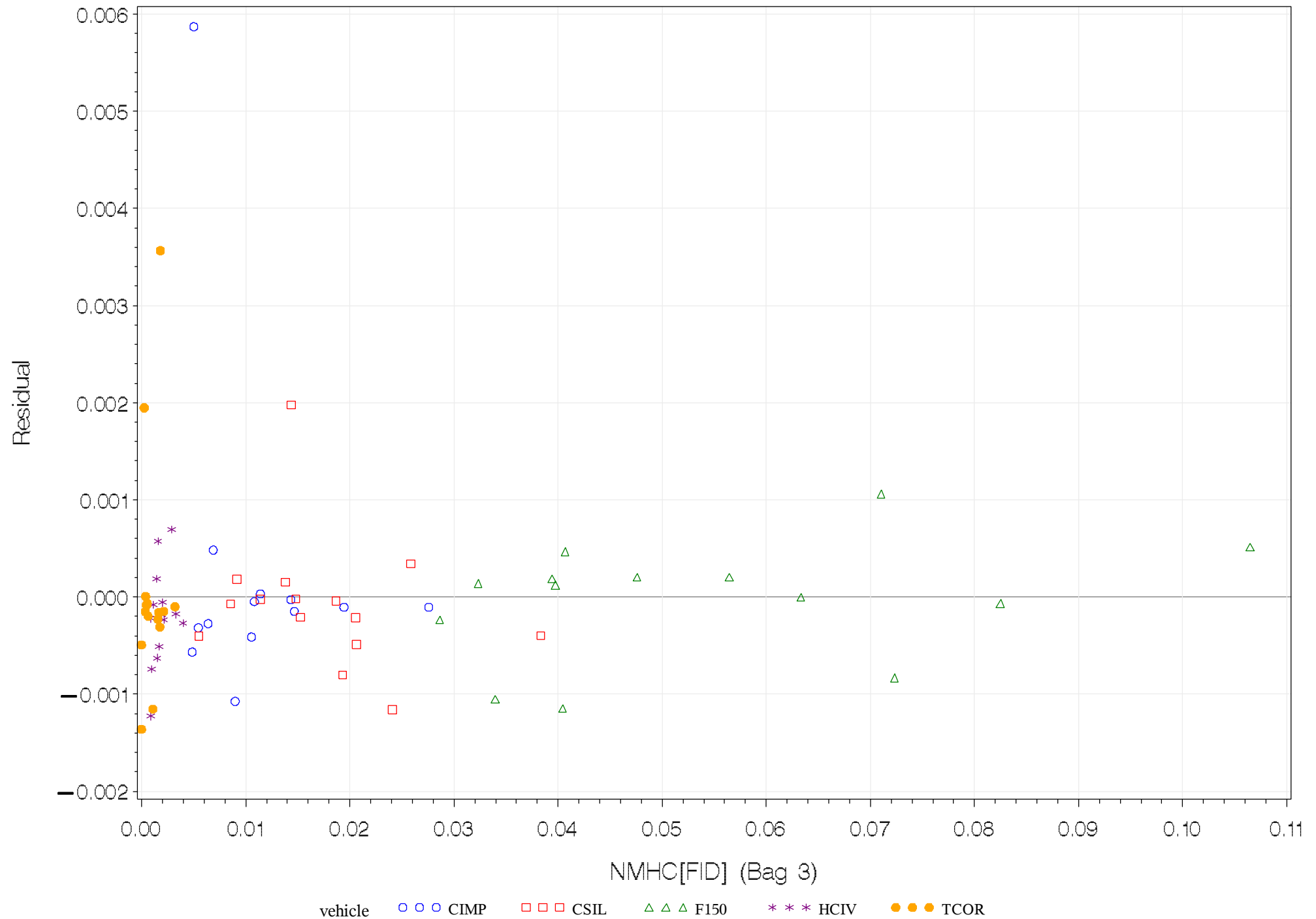
Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



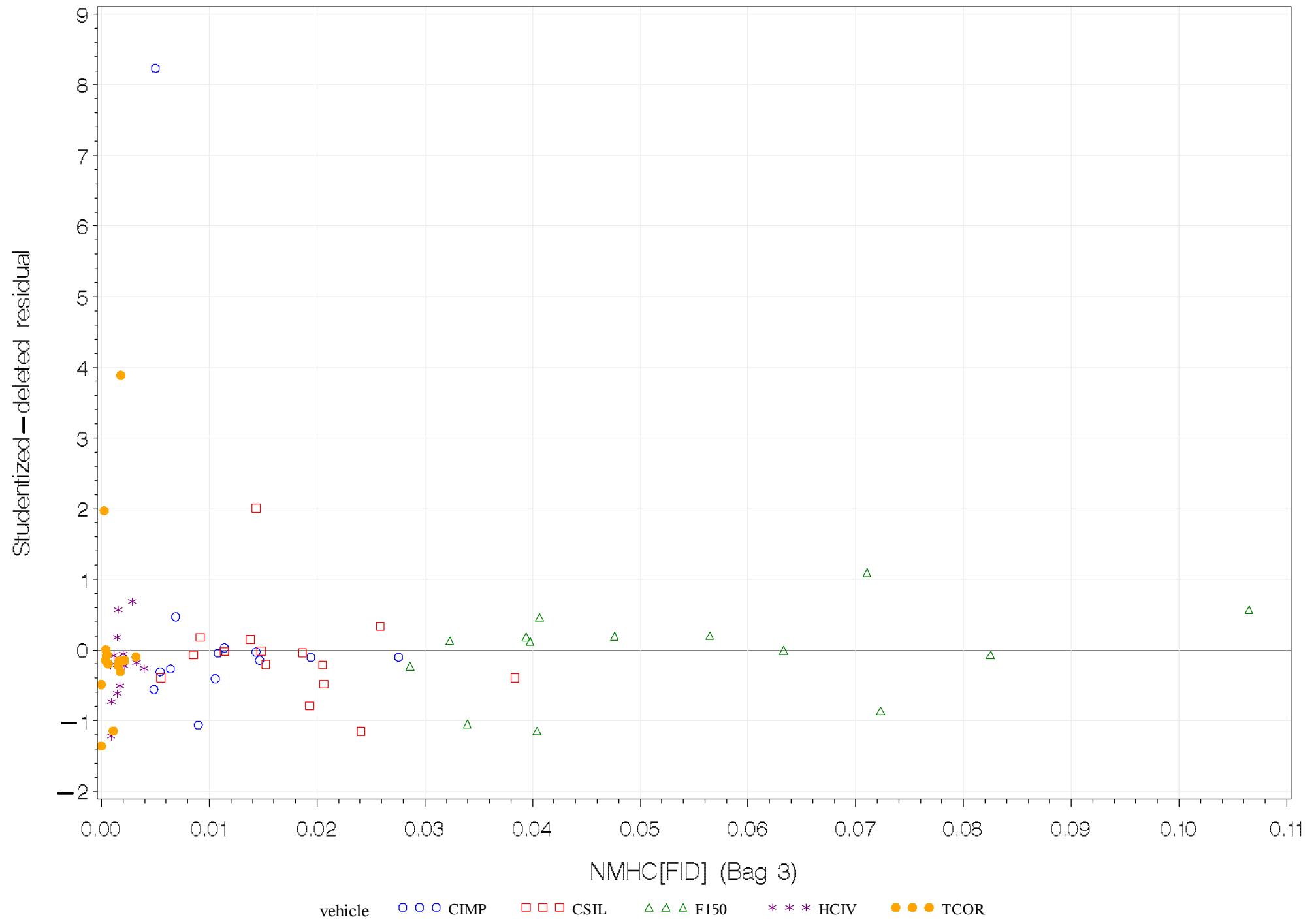
Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



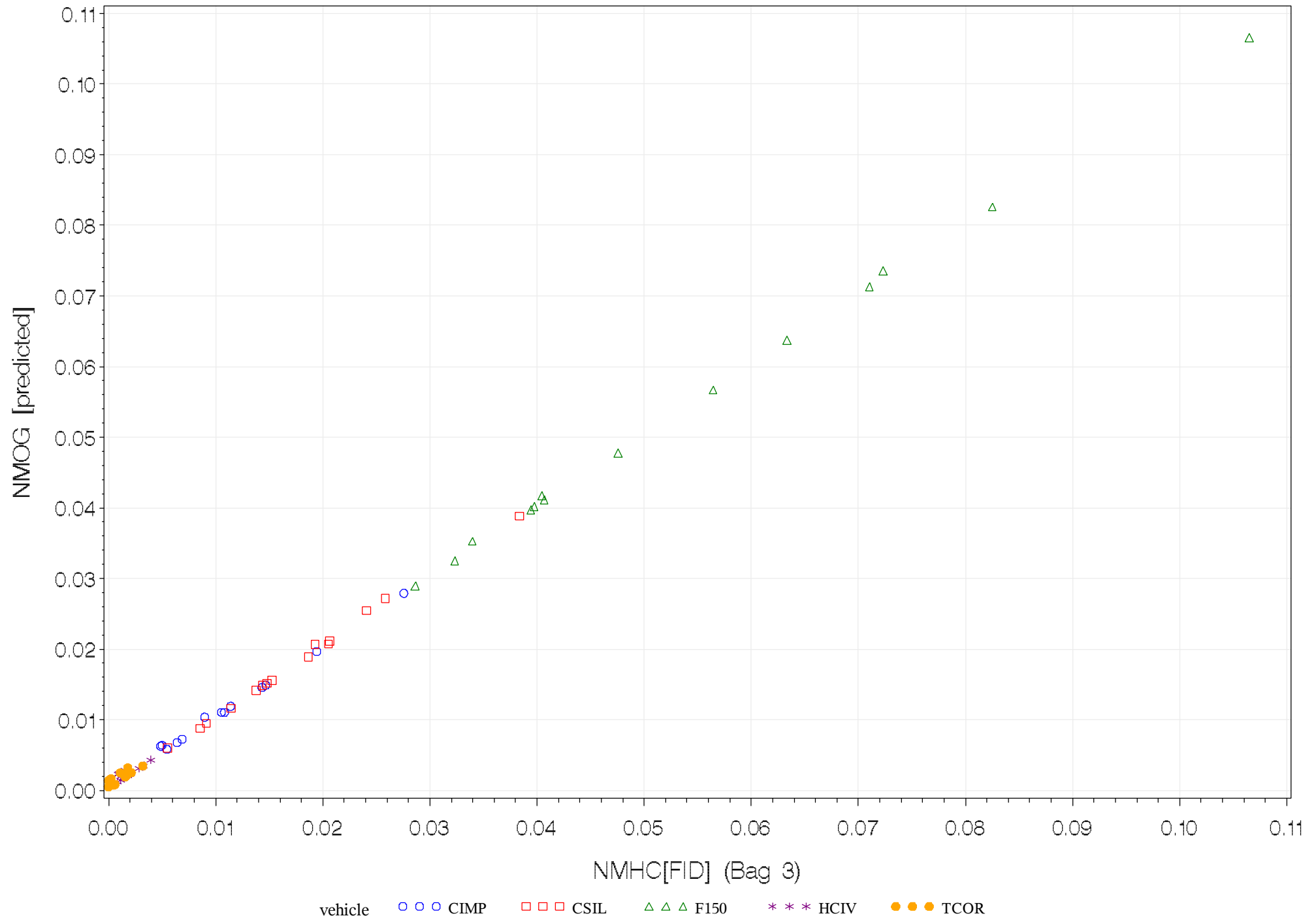
Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



Imputing Bag 3 NMOG from FID NMHC
Model 1: Intercepts for Ethanol Level



The GLM Procedure

Number of Observations Read	69
Number of Observations Used	69

The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	0.03436424	0.00859106	30136.0	<.0001
Error	64	0.00001824	0.00000029		
Corrected Total	68	0.03438249			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.999469	3.005527	0.000534	0.017765

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03436214	0.03436214	120536	<.0001
e10	1	0.00000010	0.00000010	0.34	0.5628
e15	1	0.00000006	0.00000006	0.20	0.6601
e20	1	0.00000195	0.00000195	6.84	0.0111

Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03385811	0.03385811	118768	<.0001
e10	1	0.00000024	0.00000024	0.83	0.3650
e15	1	0.00000065	0.00000065	2.29	0.1350
e20	1	0.00000195	0.00000195	6.84	0.0111

The GLM Procedure

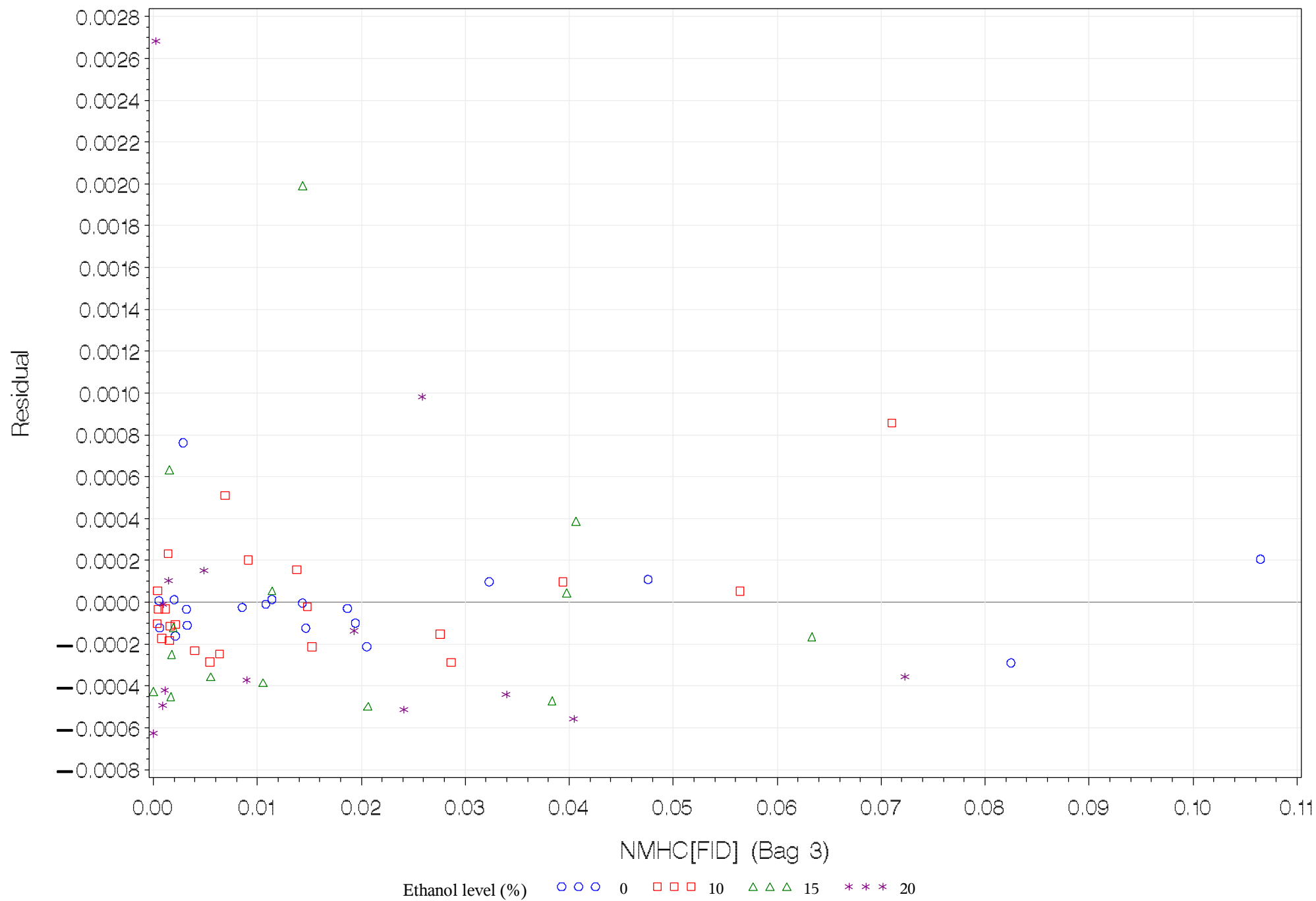
Dependent Variable: NMOG_B3 NMOG (Bag 3)

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.000169016	0.00013708	1.23	0.2221
NM_FIDHC_B3	1.002069357	0.00290768	344.63	<.0001
e10	0.000153740	0.00016850	0.91	0.3650
e15	0.000285066	0.00018829	1.51	0.1350
e20	0.000492911	0.00018850	2.61	0.0111

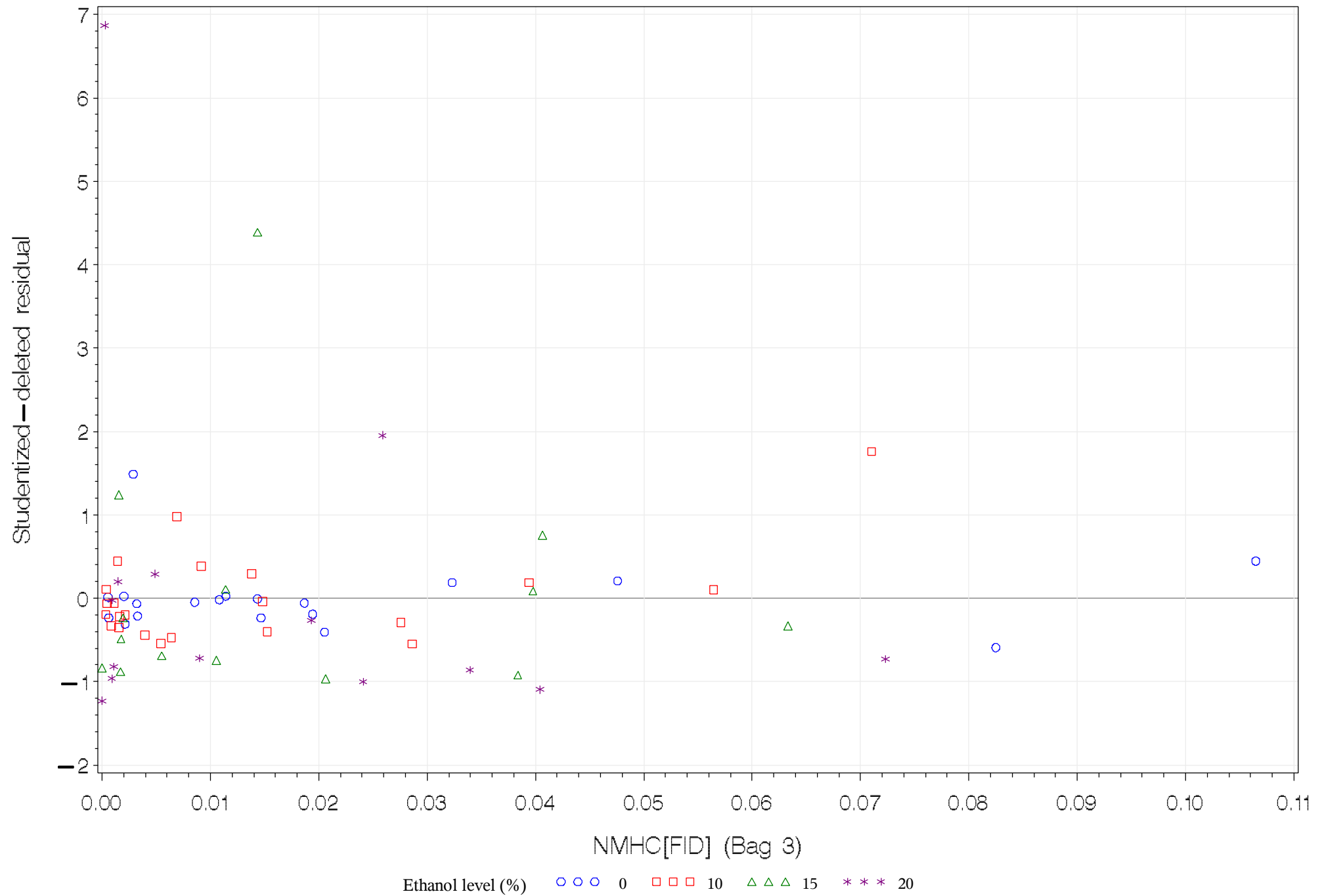
Imputing Bag 3 NMOG from FID NMHC

Model 1.a: Intercepts for Ethanol Level

OUTLIER REMOVED (1st round)



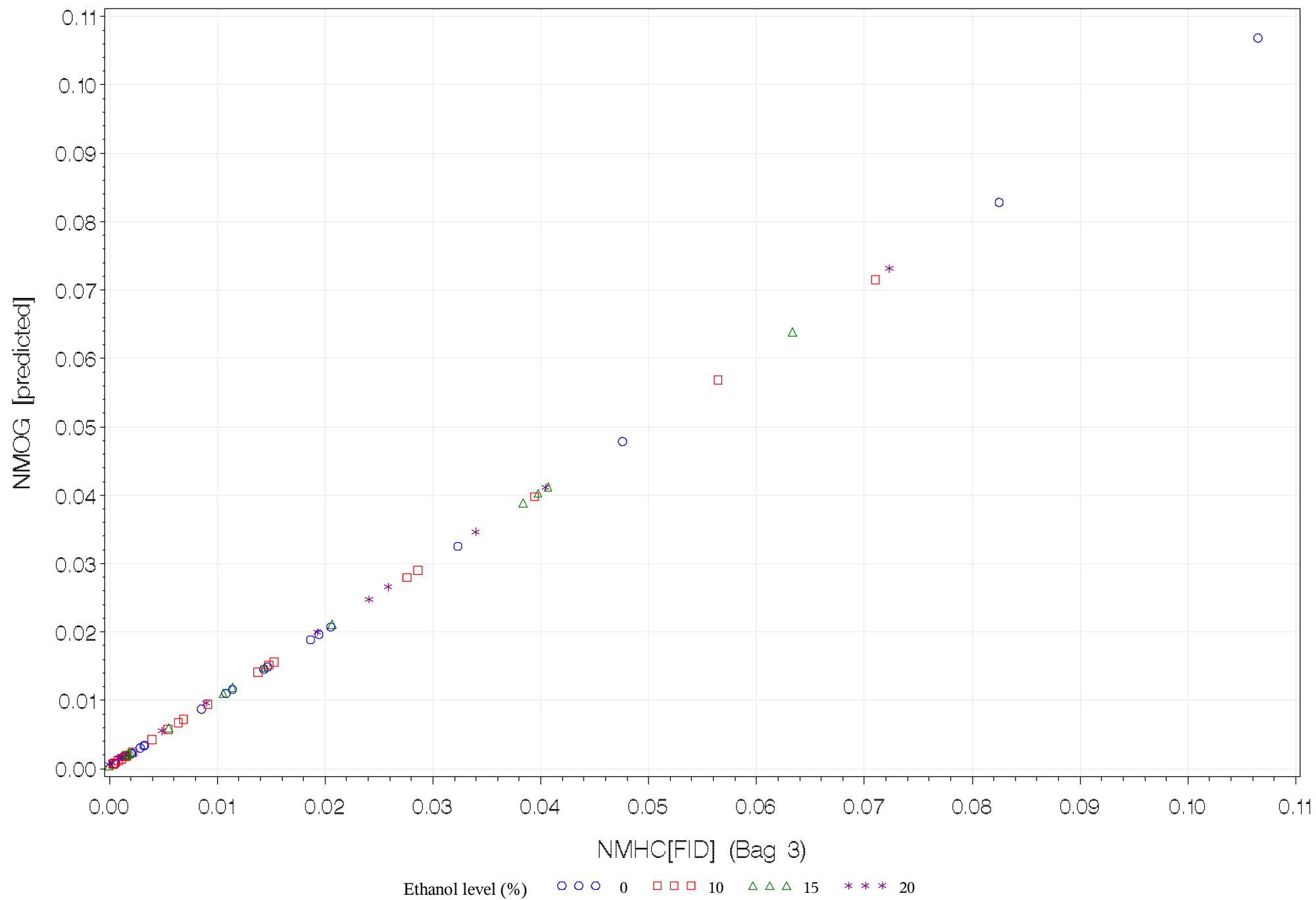
Imputing Bag 3 NMOG from FID NMHC
Model 1.a: Intercepts for Ethanol Level
OUTLIER REMOVED (1st round)



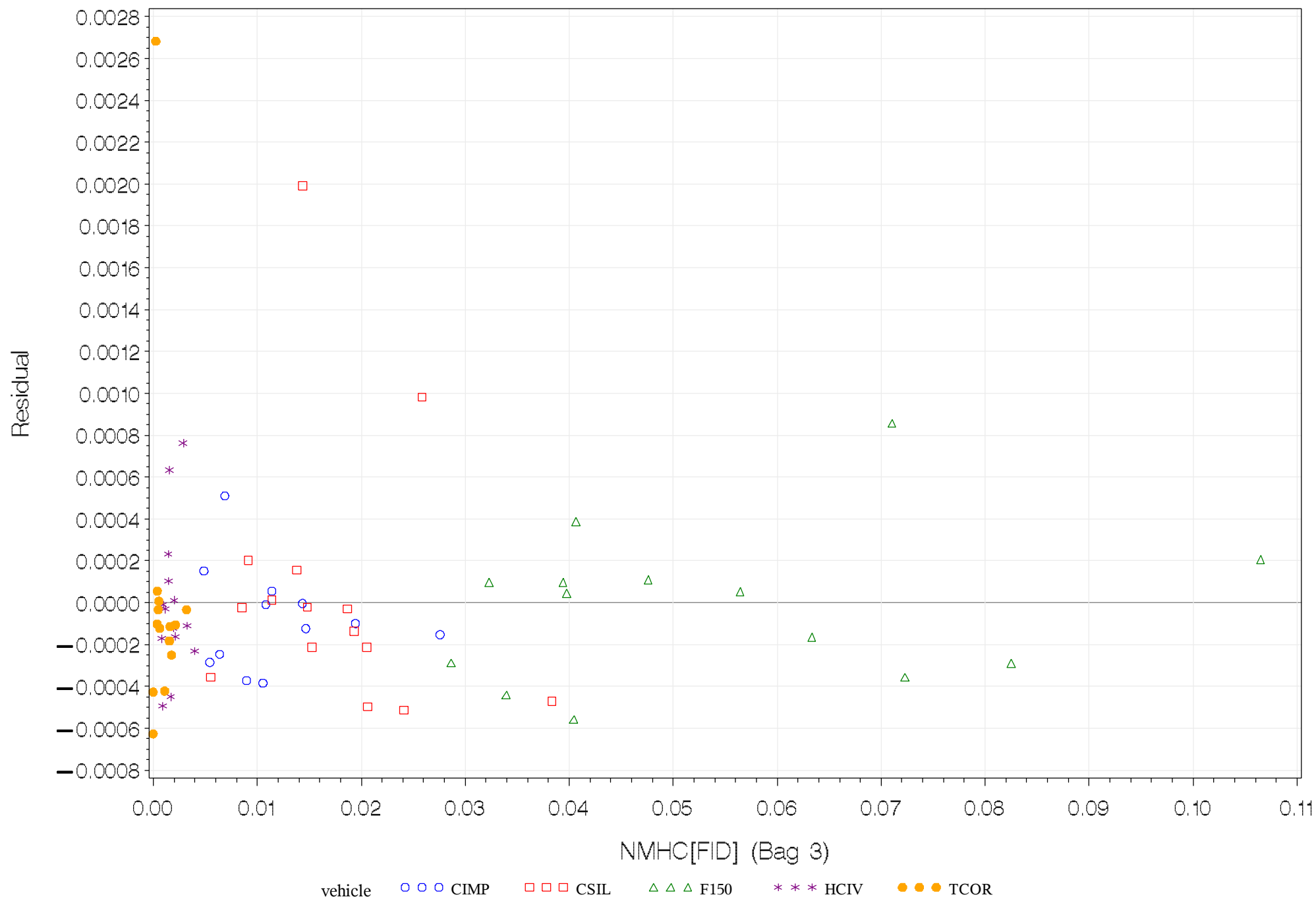
Imputing Bag 3 NMOG from FID NMHC

Model 1.a: Intercepts for Ethanol Level

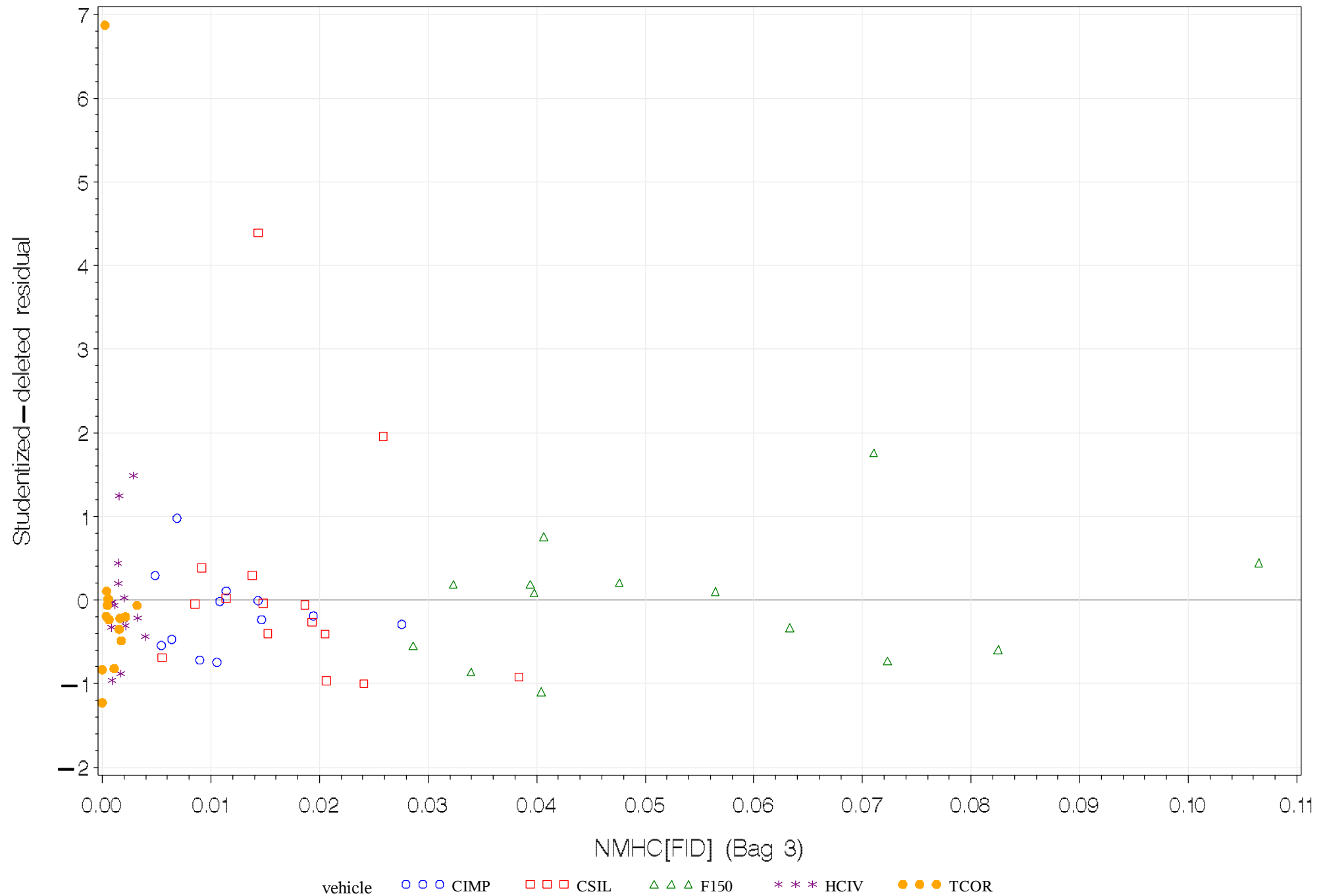
OUTLIER REMOVED (1st round)



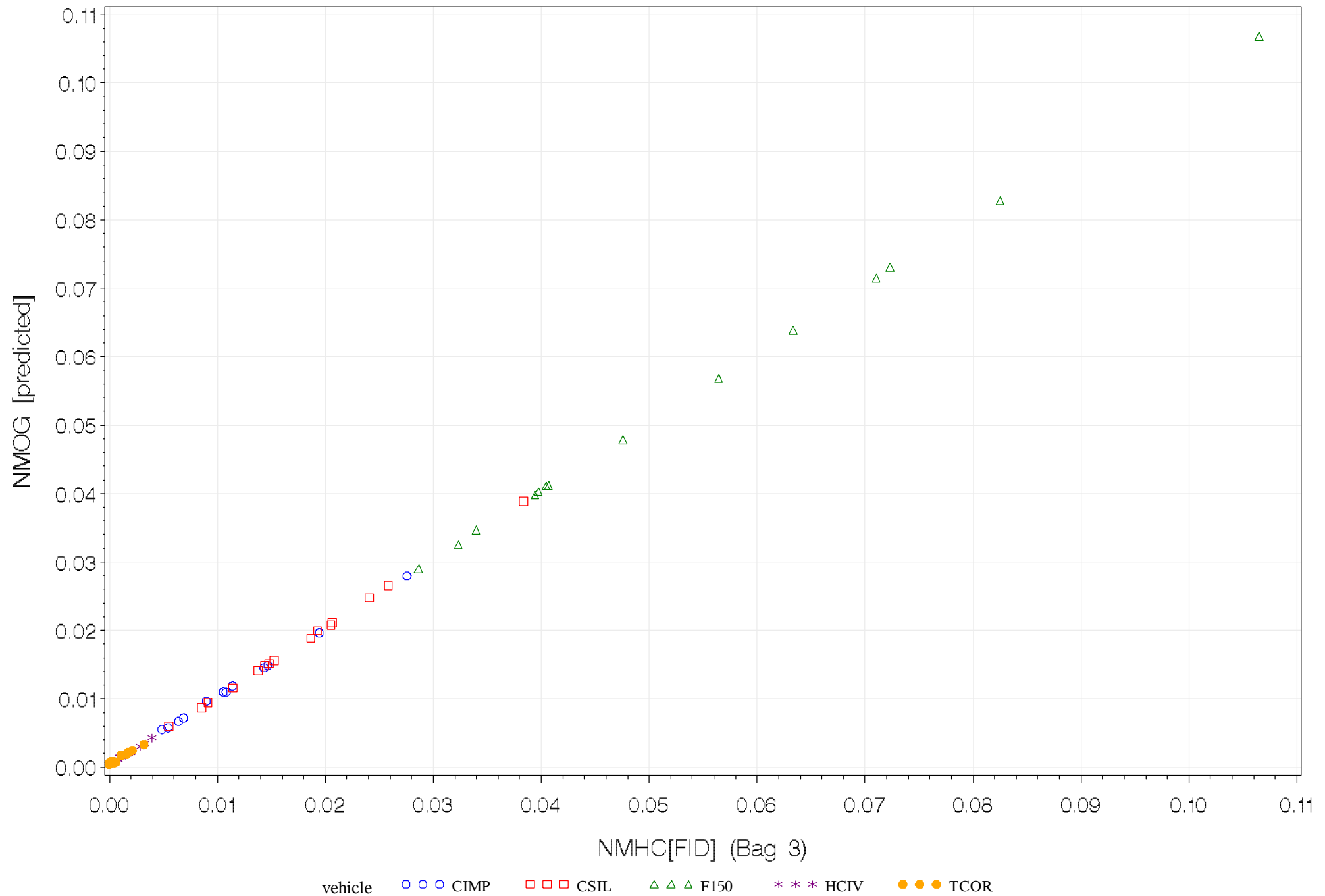
OUTLIER REMOVED (1st round)



Imputing Bag 3 NMOG from FID NMHC
Model 1.a: Intercepts for Ethanol Level
OUTLIER REMOVED (1st round)



Imputing Bag 3 NMOG from FID NMHC
Model 1.a: Intercepts for Ethanol Level
OUTLIER REMOVED (1st round)



The GLM Procedure

Number of Observations Read	67
Number of Observations Used	67

The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	0.03417164	0.00854291	86427.9	<.0001
Error	62	0.00000613	0.00000010		
Corrected Total	66	0.03417777			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.999821	1.747627	0.000314	0.017990

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03417095	0.03417095	345705	<.0001
e10	1	0.00000002	0.00000002	0.24	0.6235
e15	1	0.00000000	0.00000000	0.03	0.8643
e20	1	0.00000066	0.00000066	6.63	0.0124

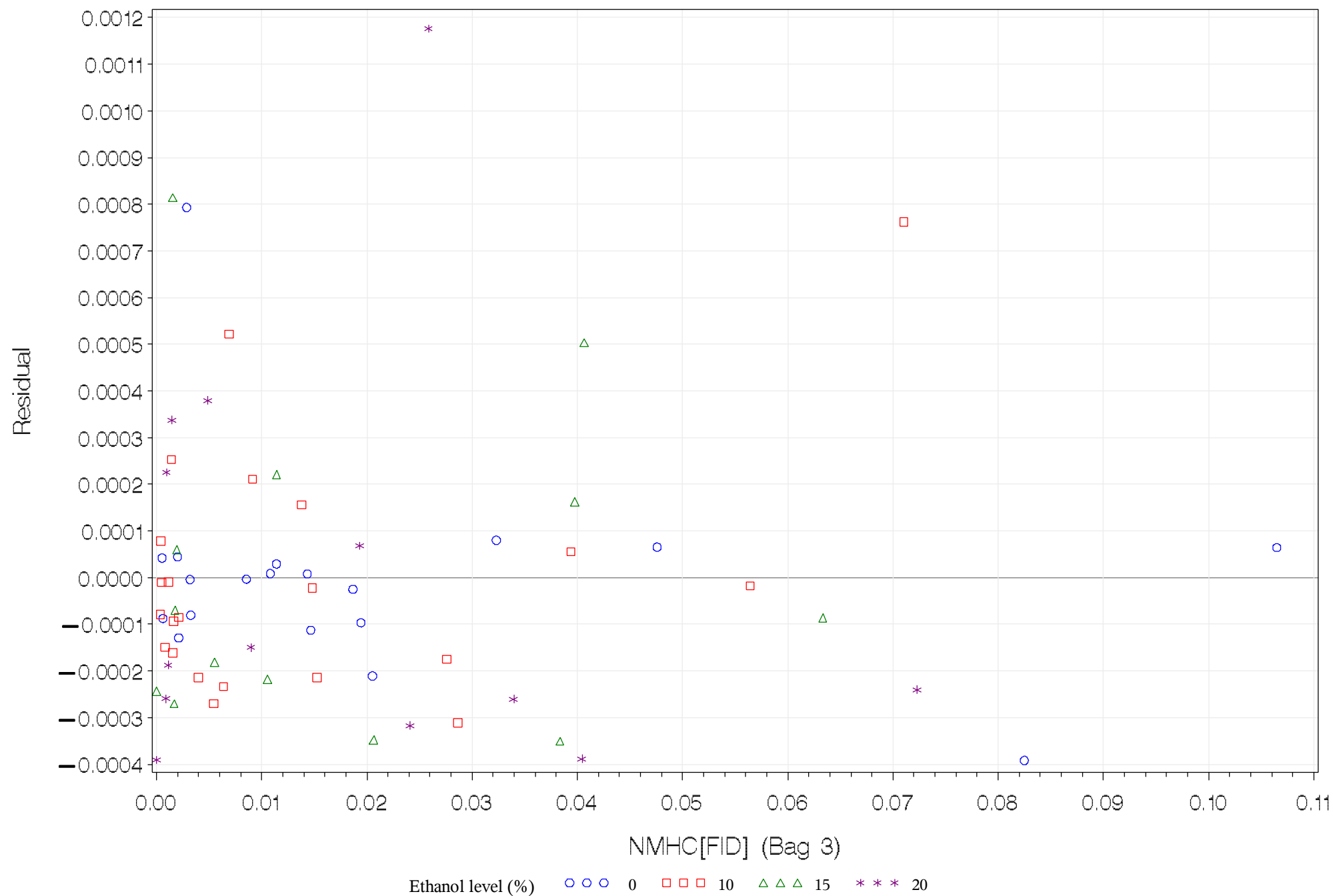
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03366093	0.03366093	340545	<.0001
e10	1	0.00000028	0.00000028	2.78	0.1003
e15	1	0.00000014	0.00000014	1.46	0.2323
e20	1	0.00000066	0.00000066	6.63	0.0124

The GLM Procedure

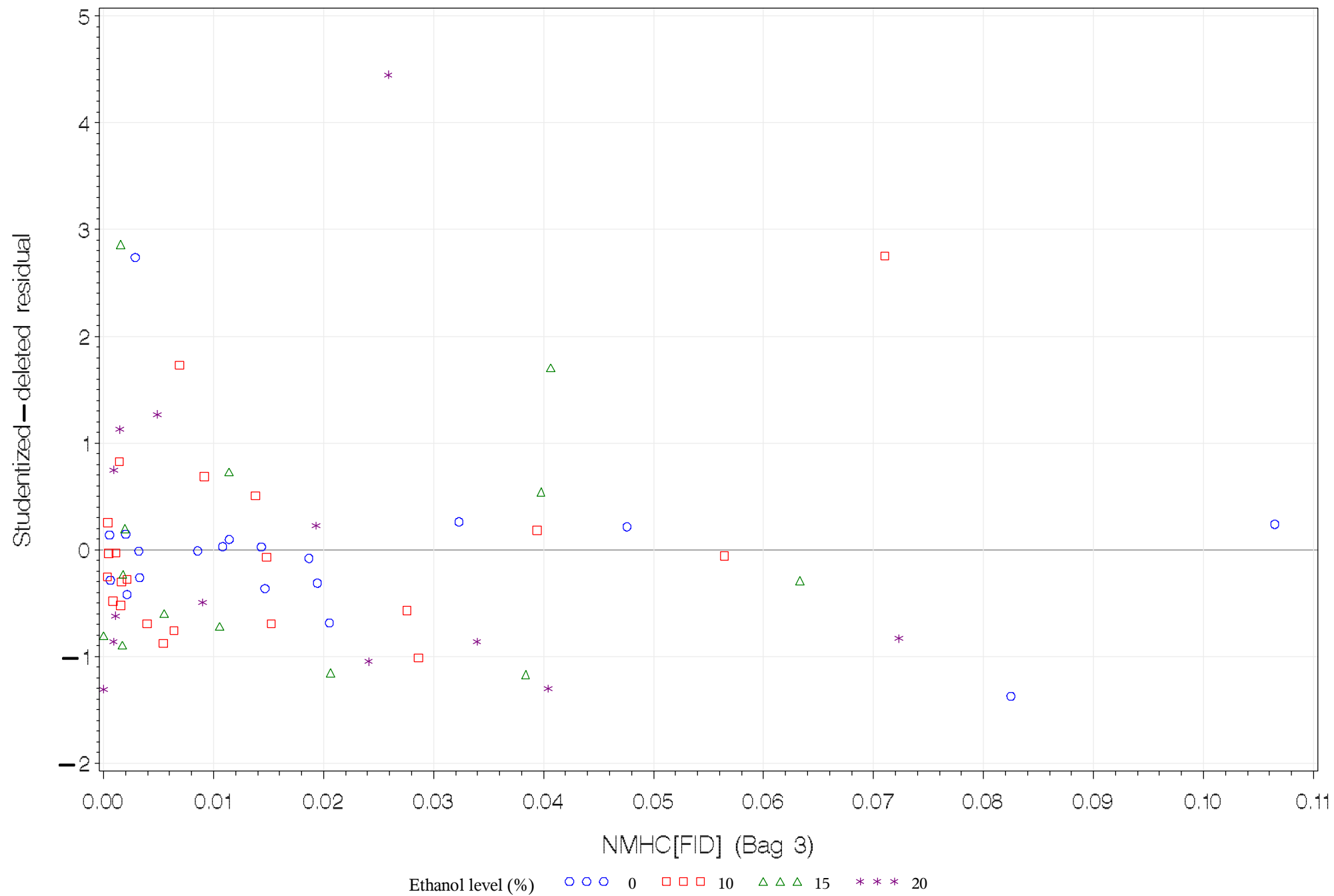
Dependent Variable: NMOG_B3 NMOG (Bag 3)

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.000133930	0.00008079	1.66	0.1024
NM_FIDHC_B3	1.003726968	0.00172000	583.56	<.0001
e10	0.000165546	0.00009922	1.67	0.1003
e15	0.000136636	0.00011327	1.21	0.2323
e20	0.000291771	0.00011329	2.58	0.0124

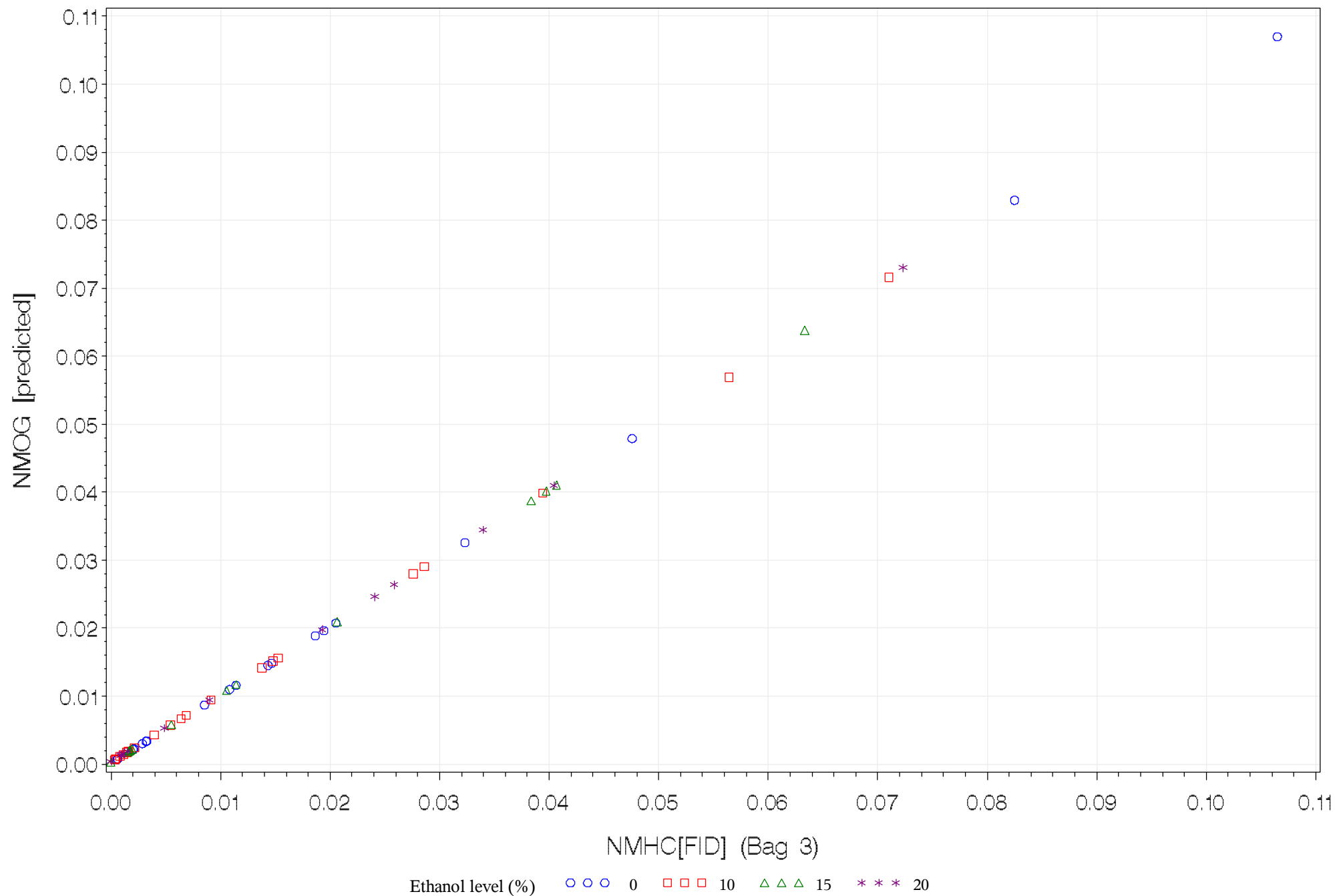
Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



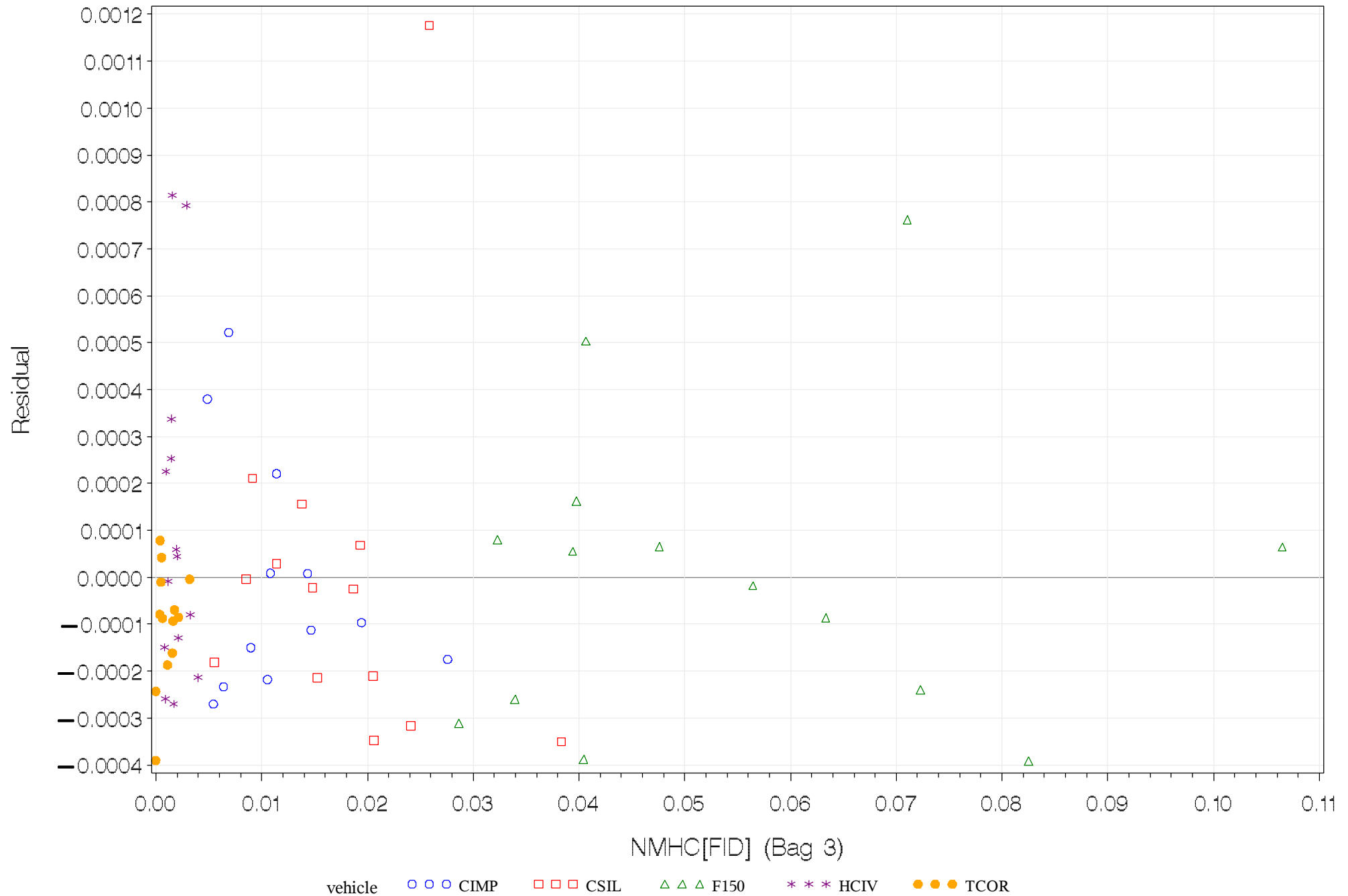
Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



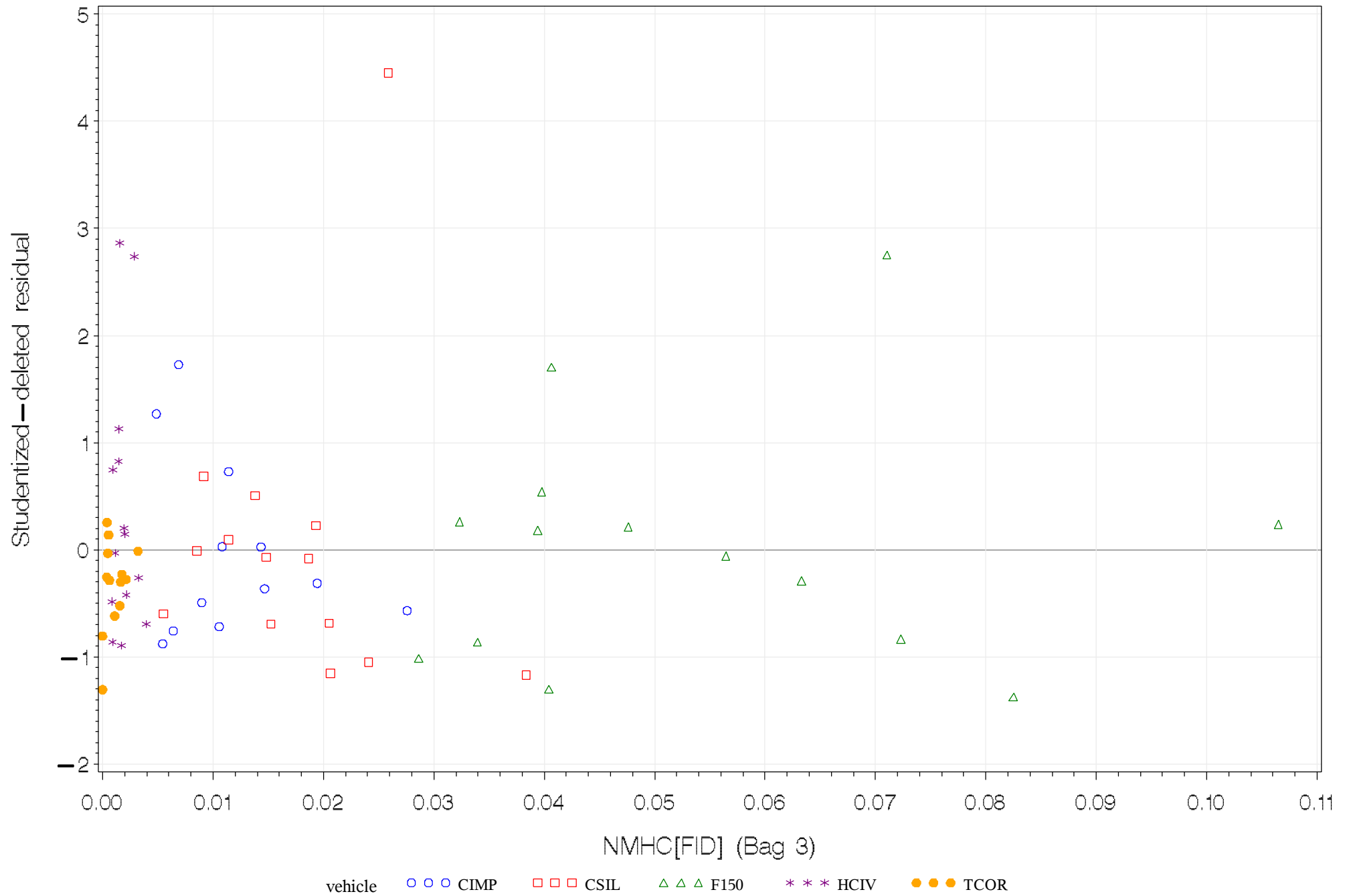
Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



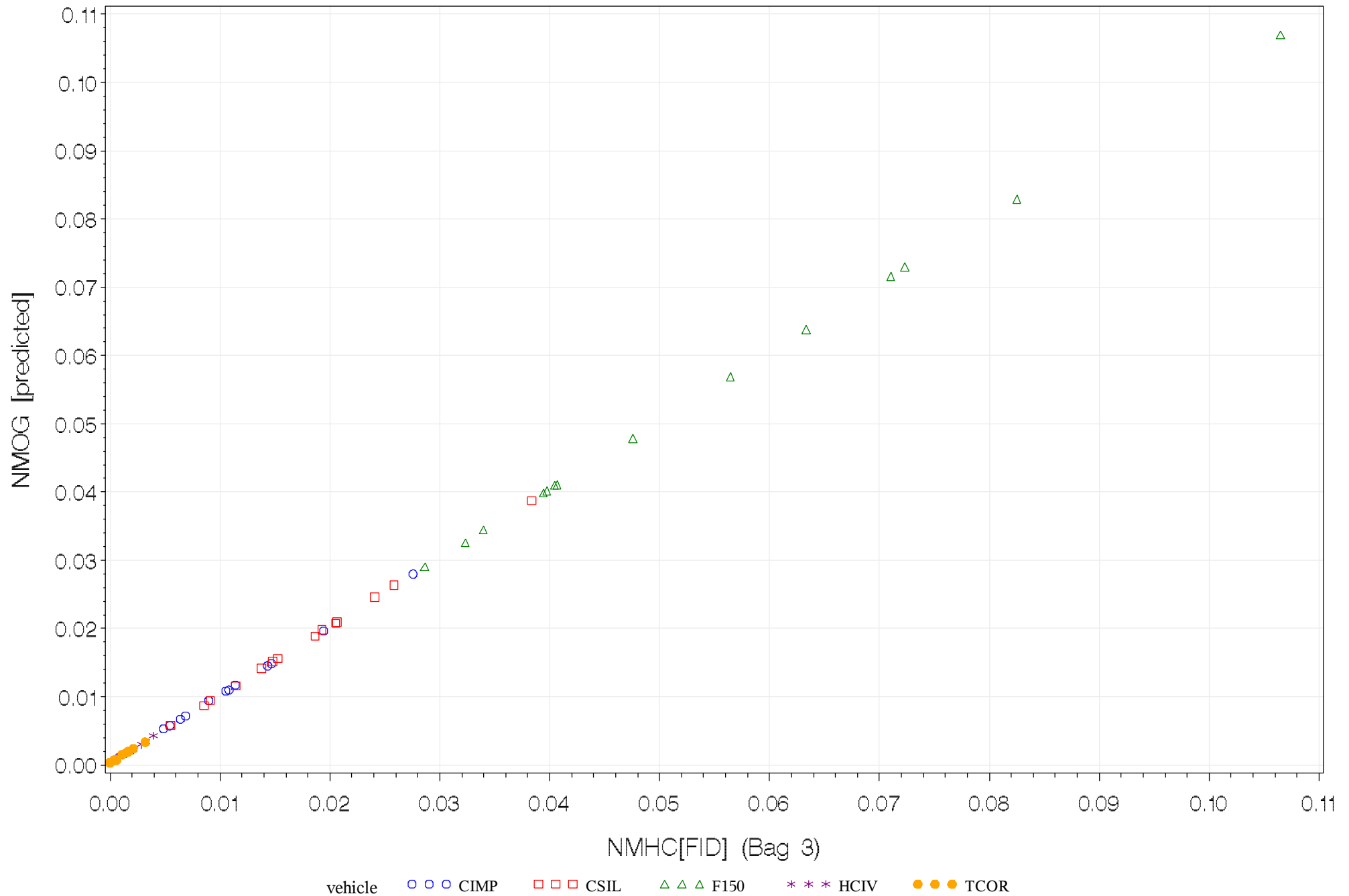
Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



Model 1.b: Intercepts for Ethanol Level
OUTLIER REMOVED (2nd round)



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Libref	WORK
Engine	V9
Physical Name	C:\DOCUME~1\jwarila\LOCALS~1\Temp\SAS Temporary Files_TD2376
Filename	C:\DOCUME~1\jwarila\LOCALS~1\Temp\SAS Temporary Files_TD2376

#	Name	Member Type	File Size	Last Modified
1	GSEG	CATALOG	947200	09Feb11:12:39:44
2	PDF	CATALOG	988160	09Feb11:12:39:44
3	RATIOS	DATA	17408	09Feb11:09:22:06
4	RATIOS2	DATA	33792	09Feb11:09:34:45
5	RATIOS2A	DATA	17408	09Feb11:12:38:44
6	RATIOS3	DATA	33792	09Feb11:12:38:59
7	RATIOS3A	DATA	17408	09Feb11:12:39:43
8	RATIOS4	DATA	17408	09Feb11:12:39:43
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The GLM Procedure

Number of Observations Read	71
Number of Observations Used	71

The GLM Procedure***Dependent Variable: NMOG_B3 NMOG (Bag 3)***

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.03446274	0.00492325	4621.87	<.0001
Error	63	0.00006711	0.00000107		
Corrected Total	70	0.03452985			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.998057	5.886712	0.001032	0.017533

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03444388	0.03444388	32335.4	<.0001
e10	1	0.00000167	0.00000167	1.57	0.2145
e15	1	0.00000064	0.00000064	0.60	0.4403
e20	1	0.00001140	0.00001140	10.70	0.0017
NM_FIDHC_B3*e10	1	0.00000115	0.00000115	1.08	0.3036
NM_FIDHC_B3*e15	1	0.00000032	0.00000032	0.31	0.5827
NM_FIDHC_B3*e20	1	0.00000367	0.00000367	3.45	0.0681

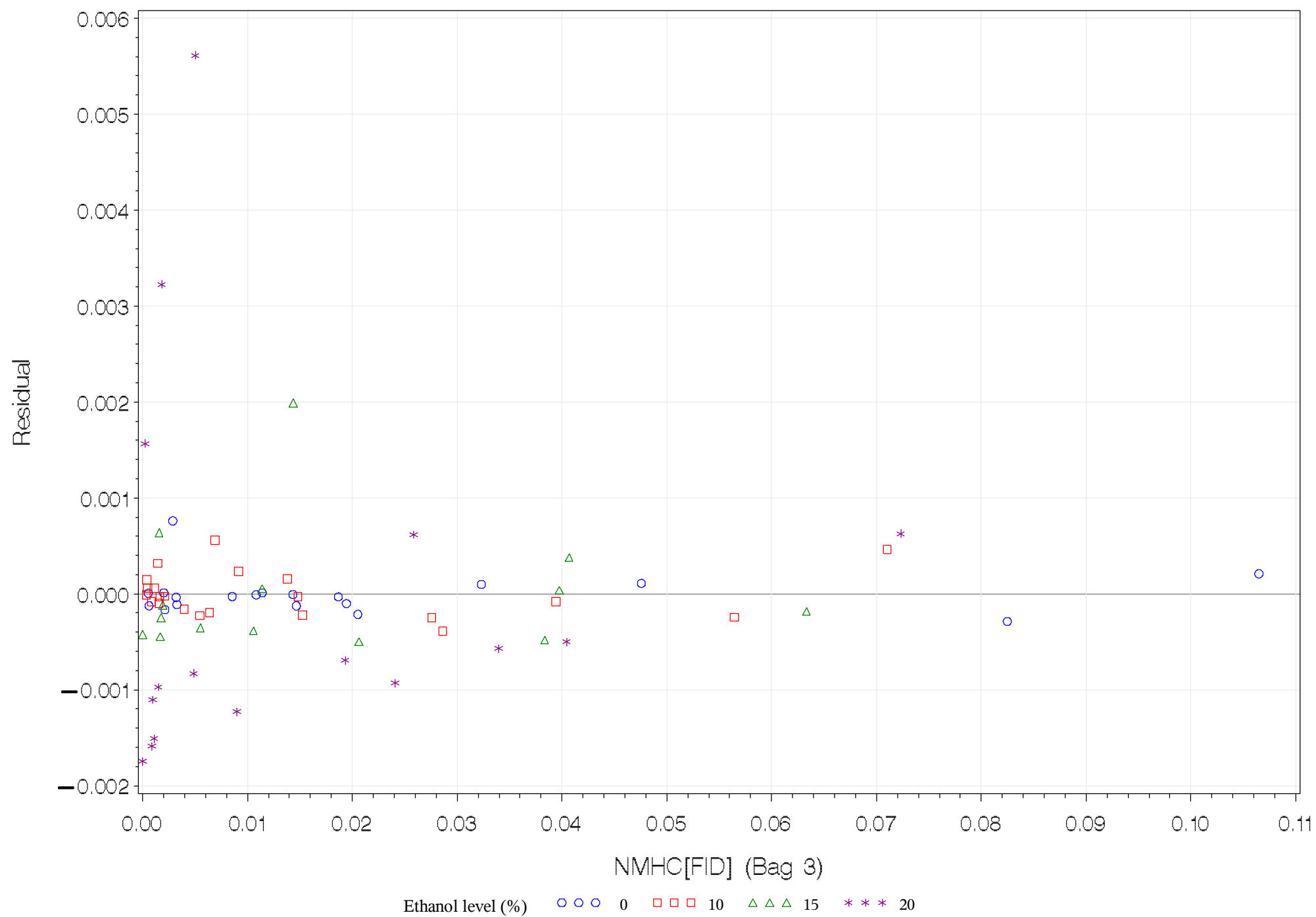
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.01493692	0.01493692	14022.5	<.0001
e10	1	0.00000002	0.00000002	0.02	0.8920
e15	1	0.00000035	0.00000035	0.33	0.5660
e20	1	0.00001424	0.00001424	13.37	0.0005
NM_FIDHC_B3*e10	1	0.00000025	0.00000025	0.24	0.6282

The GLM Procedure***Dependent Variable: NMOG_B3 NMOG (Bag 3)***

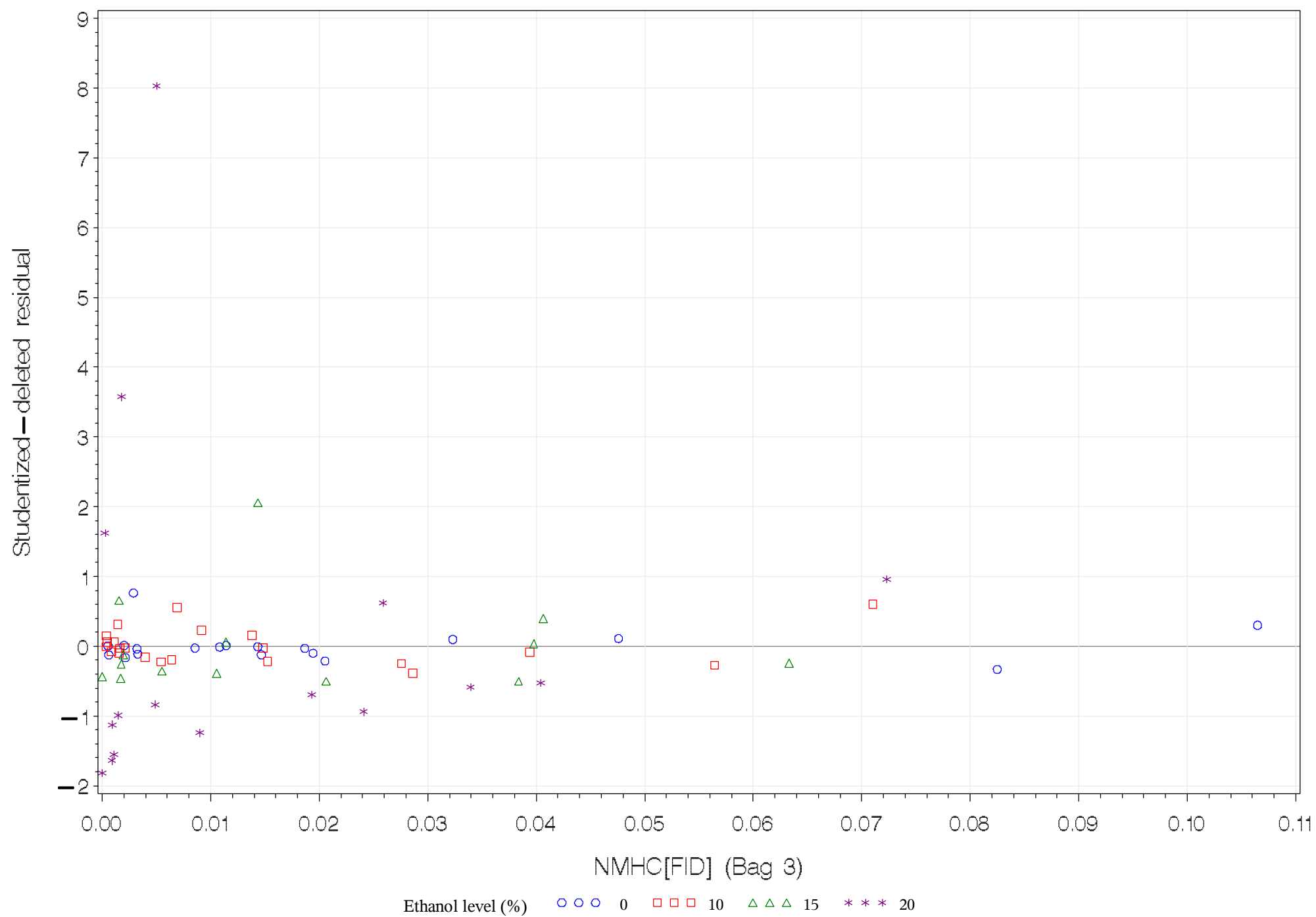
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3*e15	1	0.00000000	0.00000000	0.00	0.9810
NM_FIDHC_B3*e20	1	0.00000367	0.00000367	3.45	0.0681

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.000170467	0.00029689	0.57	0.5679
NM_FIDHC_B3	1.002000837	0.00846164	118.42	<.0001
e10	0.000055072	0.00040390	0.14	0.8920
e15	0.000277658	0.00048117	0.58	0.5660
e20	0.001611197	0.00044070	3.66	0.0005
NM_FIDHC_B3*e10	0.006990655	0.01436422	0.49	0.6282
NM_FIDHC_B3*e15	0.000400004	0.01673051	0.02	0.9810
NM_FIDHC_B3*e20	-0.029063635	0.01565677	-1.86	0.0681

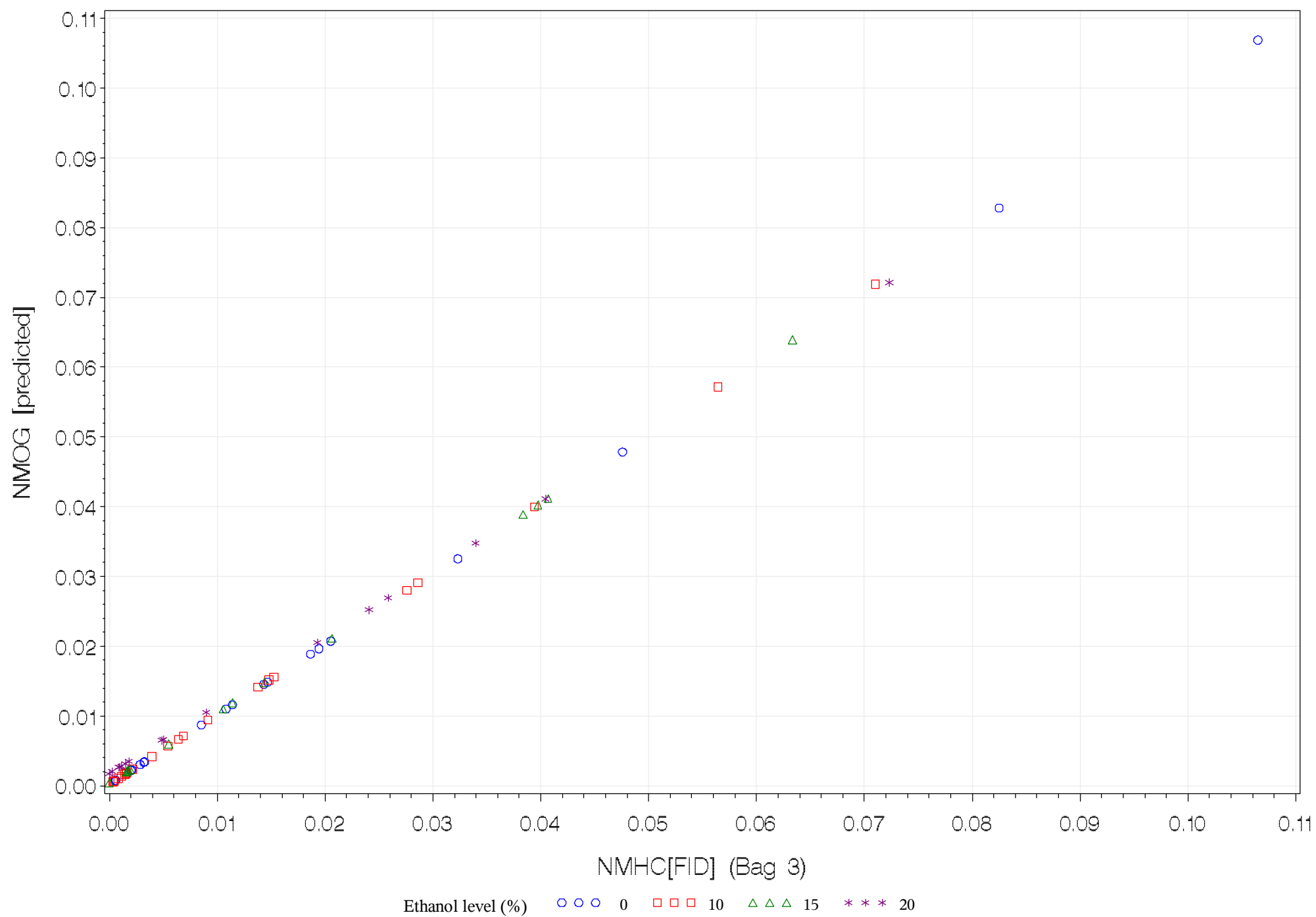
Model 2: Intercepts and Slopes by Ethanol Level



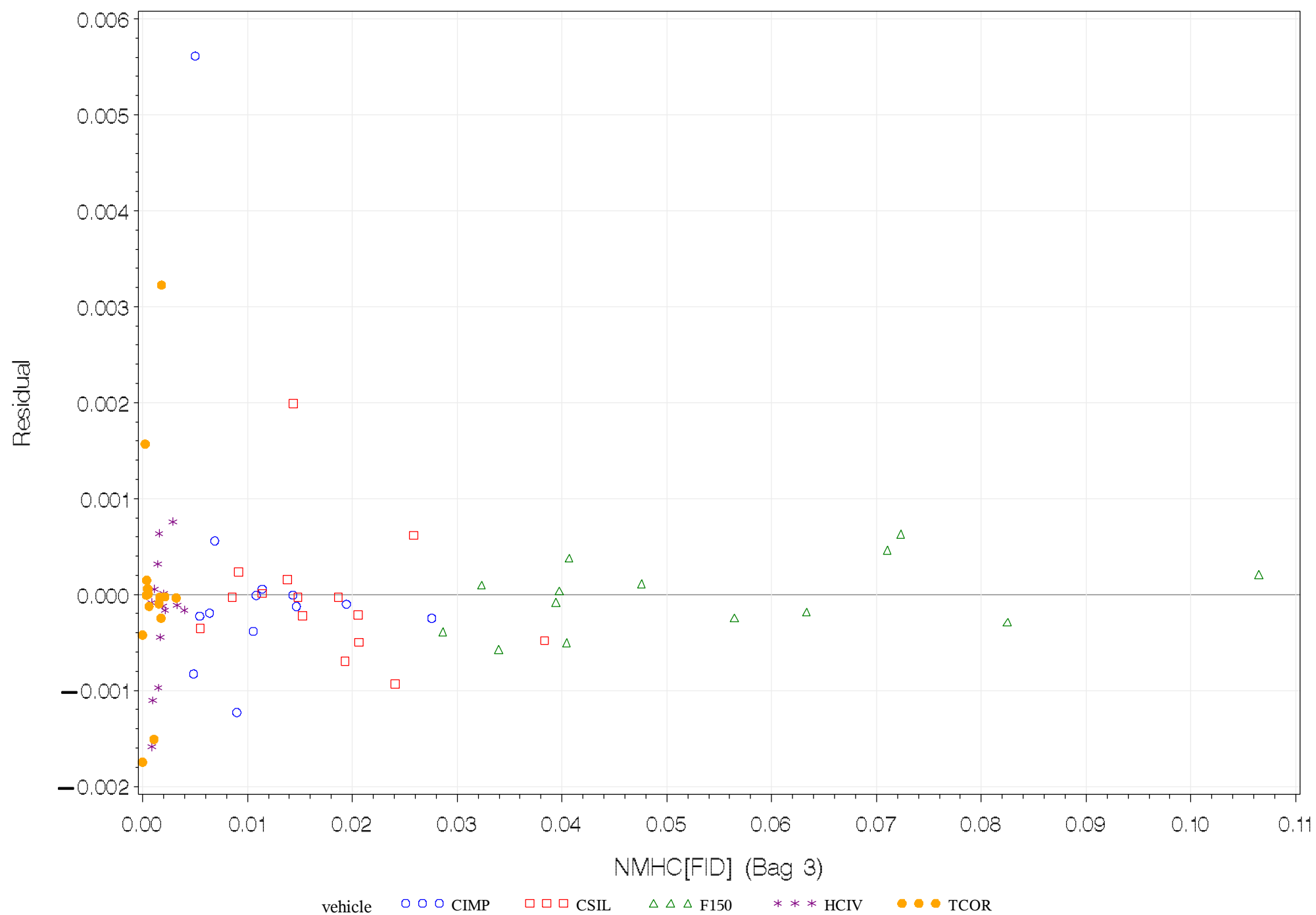
Model 2: Intercepts and Slopes by Ethanol Level



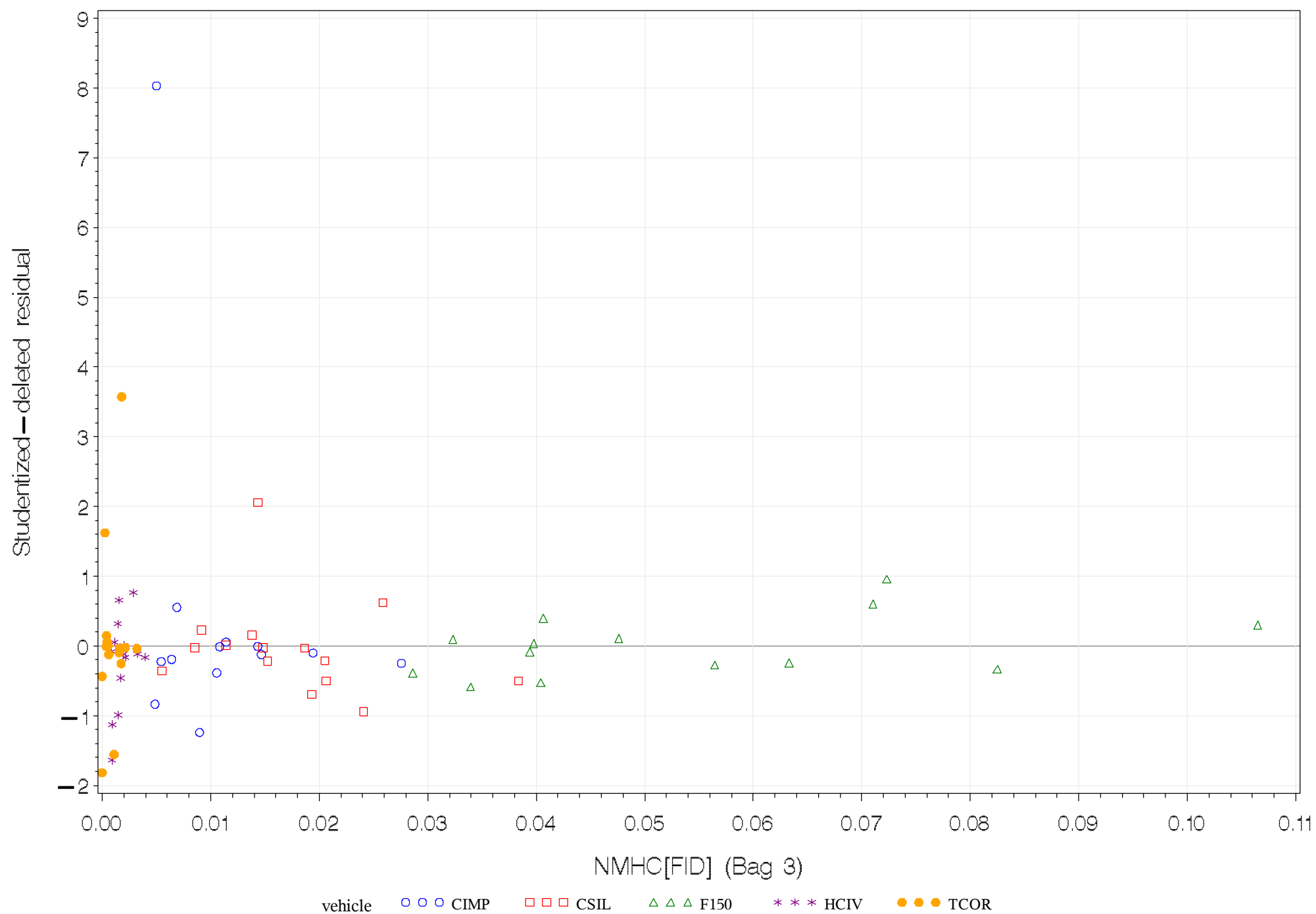
Model 2: Intercepts and Slopes by Ethanol Level



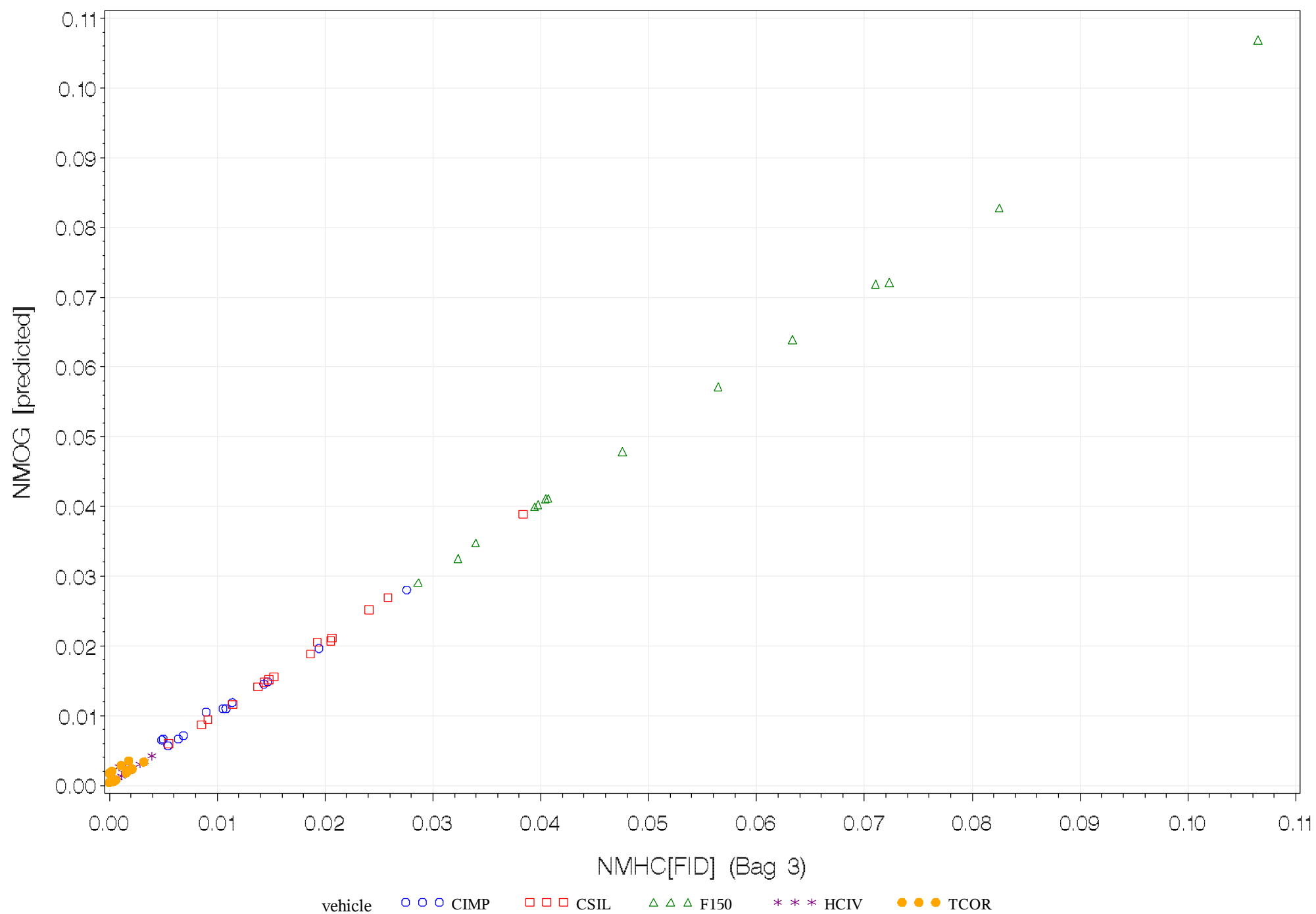
Model 2: Intercepts and Slopes by Ethanol Level



Model 2: Intercepts and Slopes by Ethanol Level



Model 2: Intercepts and Slopes by Ethanol Level



The GLM Procedure

Number of Observations Read	69
Number of Observations Used	69

The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.03436515	0.00490931	17272.2	<.0001
Error	61	0.00001734	0.00000028		
Corrected Total	68	0.03438249			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.999496	3.001072	0.000533	0.017765

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03436214	0.03436214	120895	<.0001
e10	1	0.00000010	0.00000010	0.34	0.5623
e15	1	0.00000006	0.00000006	0.20	0.6597
e20	1	0.00000195	0.00000195	6.86	0.0111
NM_FIDHC_B3*e10	1	0.00000049	0.00000049	1.74	0.1919
NM_FIDHC_B3*e15	1	0.00000004	0.00000004	0.13	0.7147
NM_FIDHC_B3*e20	1	0.00000037	0.00000037	1.31	0.2561

Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.01493692	0.01493692	52551.8	<.0001
e10	1	0.00000002	0.00000002	0.07	0.7927
e15	1	0.00000035	0.00000035	1.25	0.2683
e20	1	0.00000209	0.00000209	7.37	0.0086

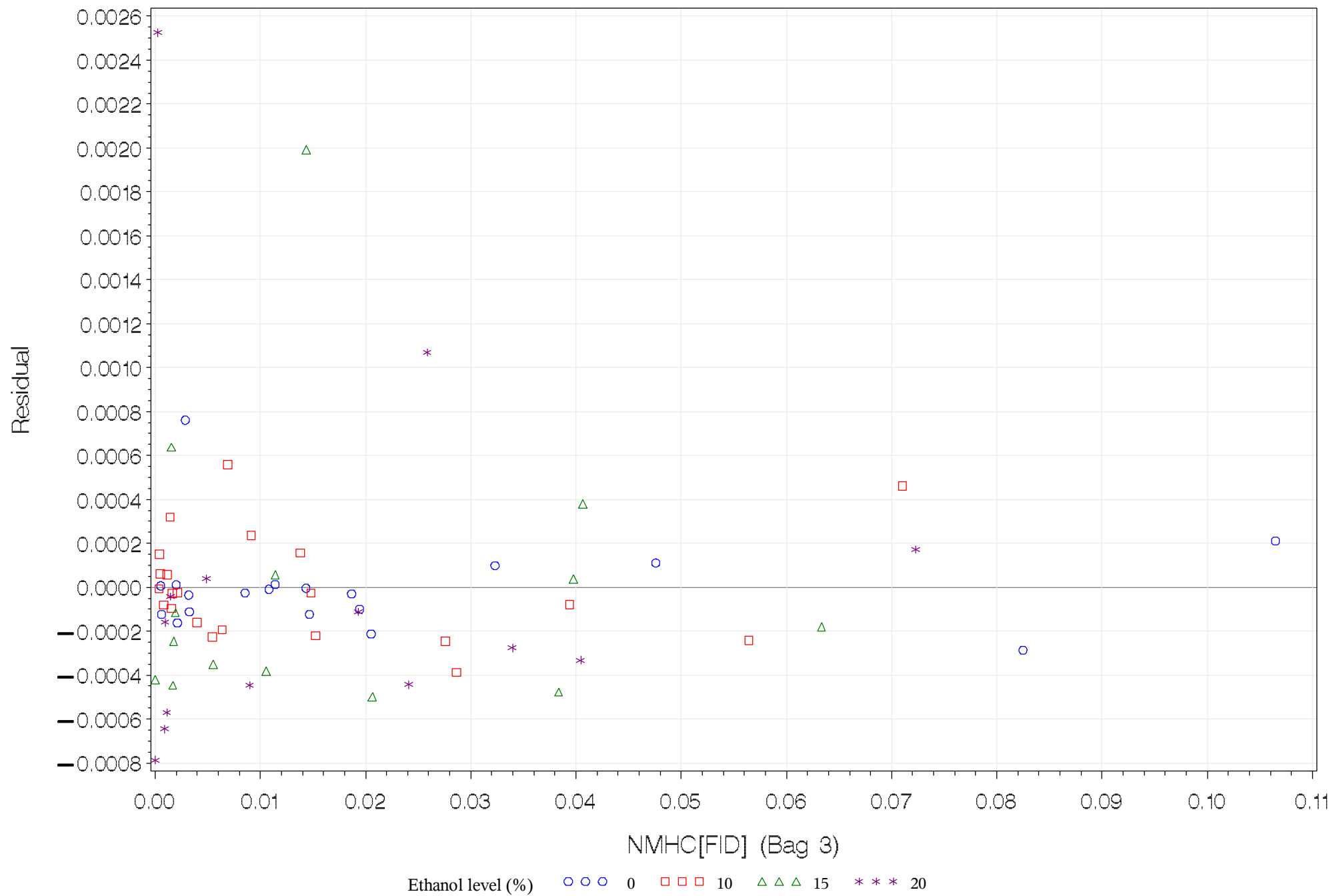
The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

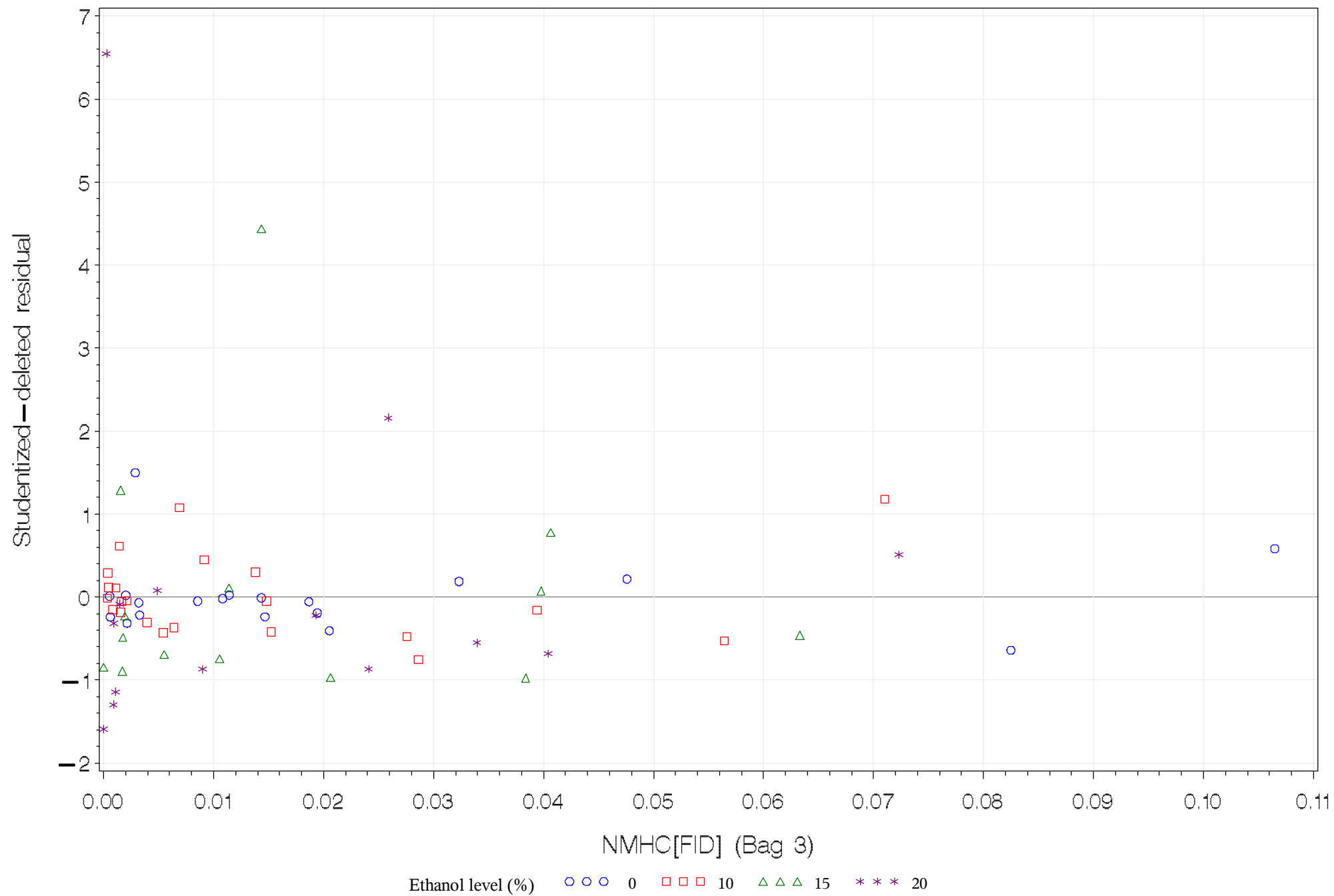
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3*e10	1	0.00000025	0.00000025	0.89	0.3498
NM_FIDHC_B3*e15	1	0.00000000	0.00000000	0.00	0.9632
NM_FIDHC_B3*e20	1	0.00000037	0.00000037	1.31	0.2561

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.000170467	0.00015336	1.11	0.2707
NM_FIDHC_B3	1.002000837	0.00437093	229.24	<.0001
e10	0.000055072	0.00020864	0.26	0.7927
e15	0.000277658	0.00024855	1.12	0.2683
e20	0.000650927	0.00023985	2.71	0.0086
NM_FIDHC_B3*e10	0.006990655	0.00741996	0.94	0.3498
NM_FIDHC_B3*e15	0.000400004	0.00864228	0.05	0.9632
NM_FIDHC_B3*e20	-0.009448695	0.00824201	-1.15	0.2561

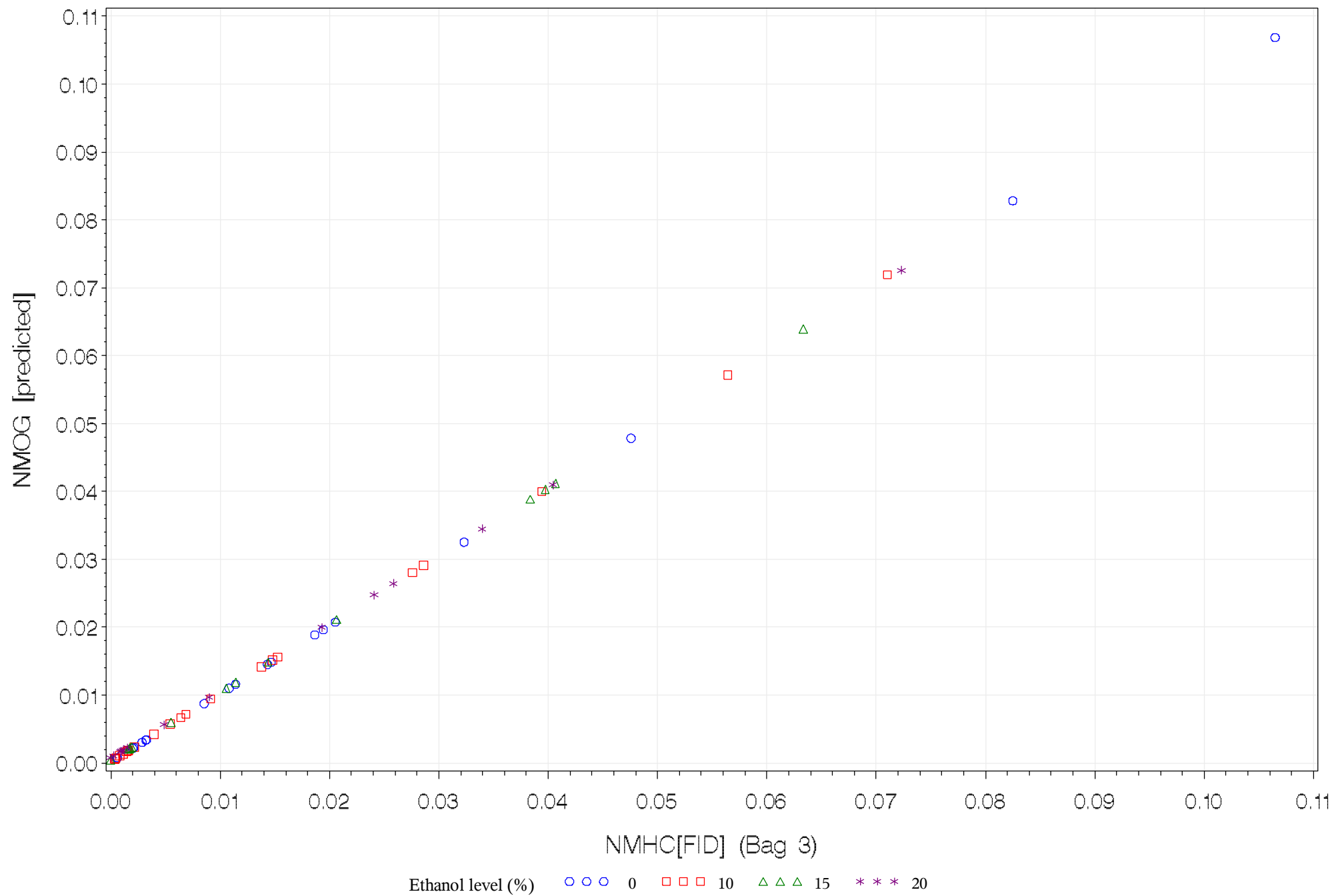
Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



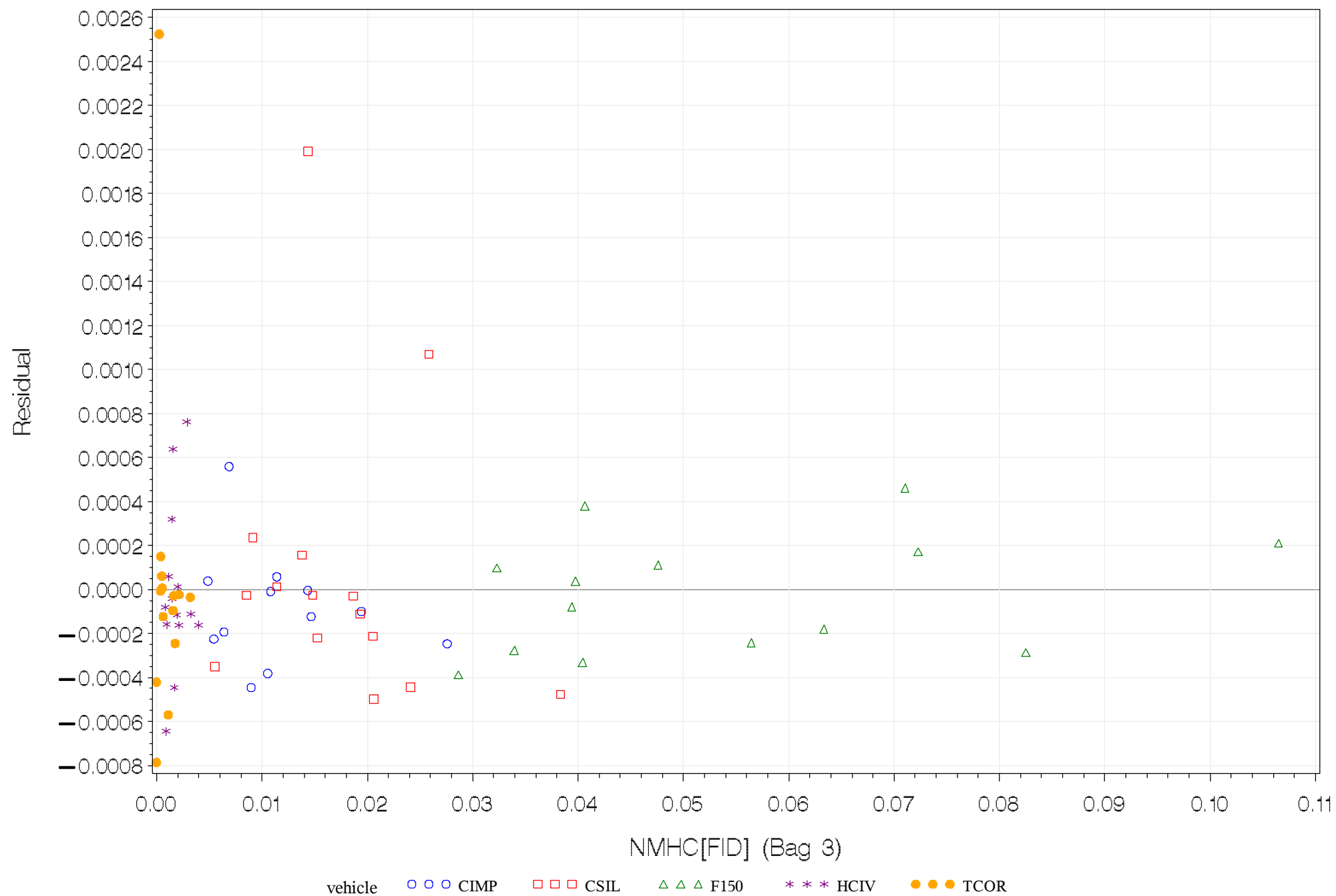
Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



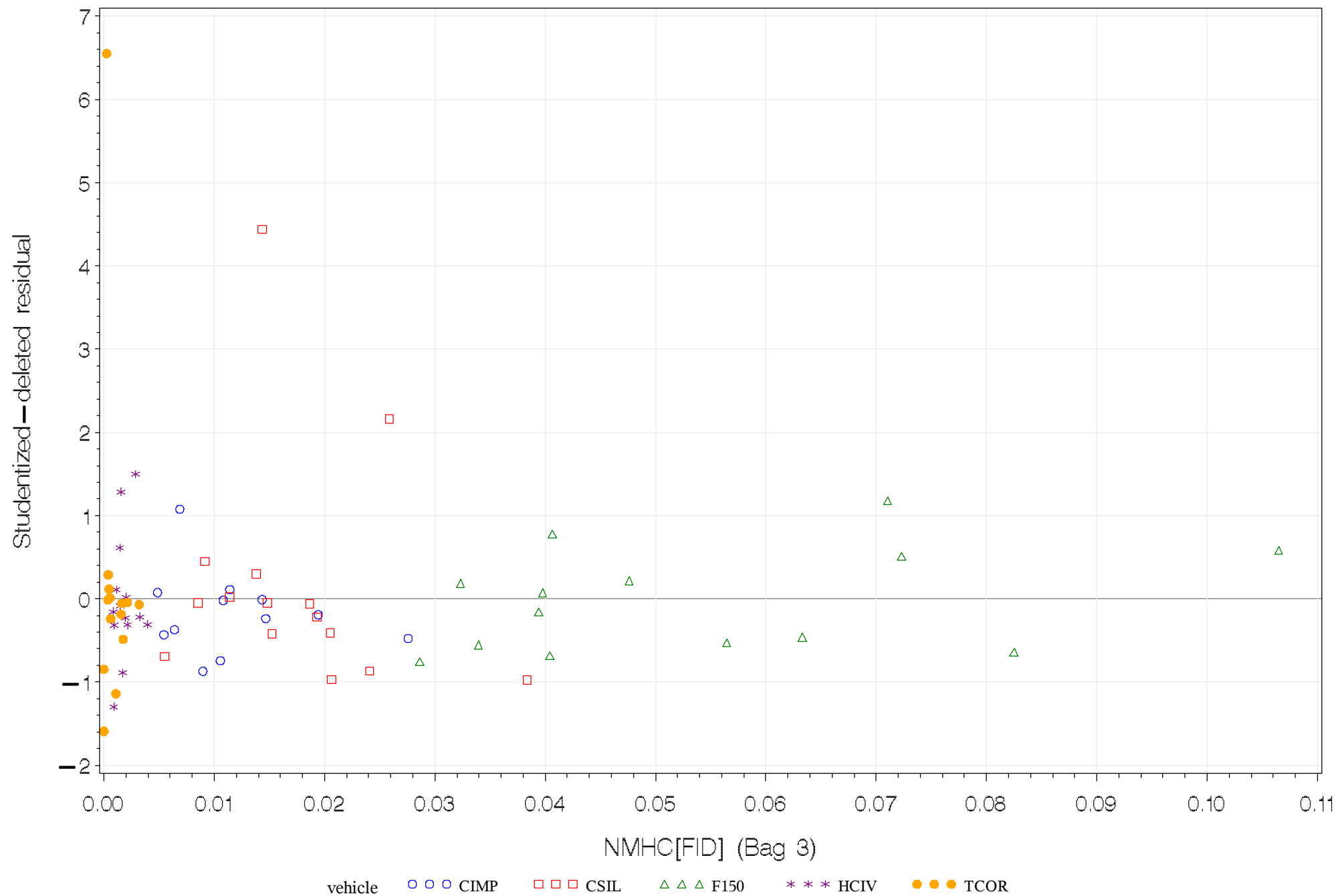
Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



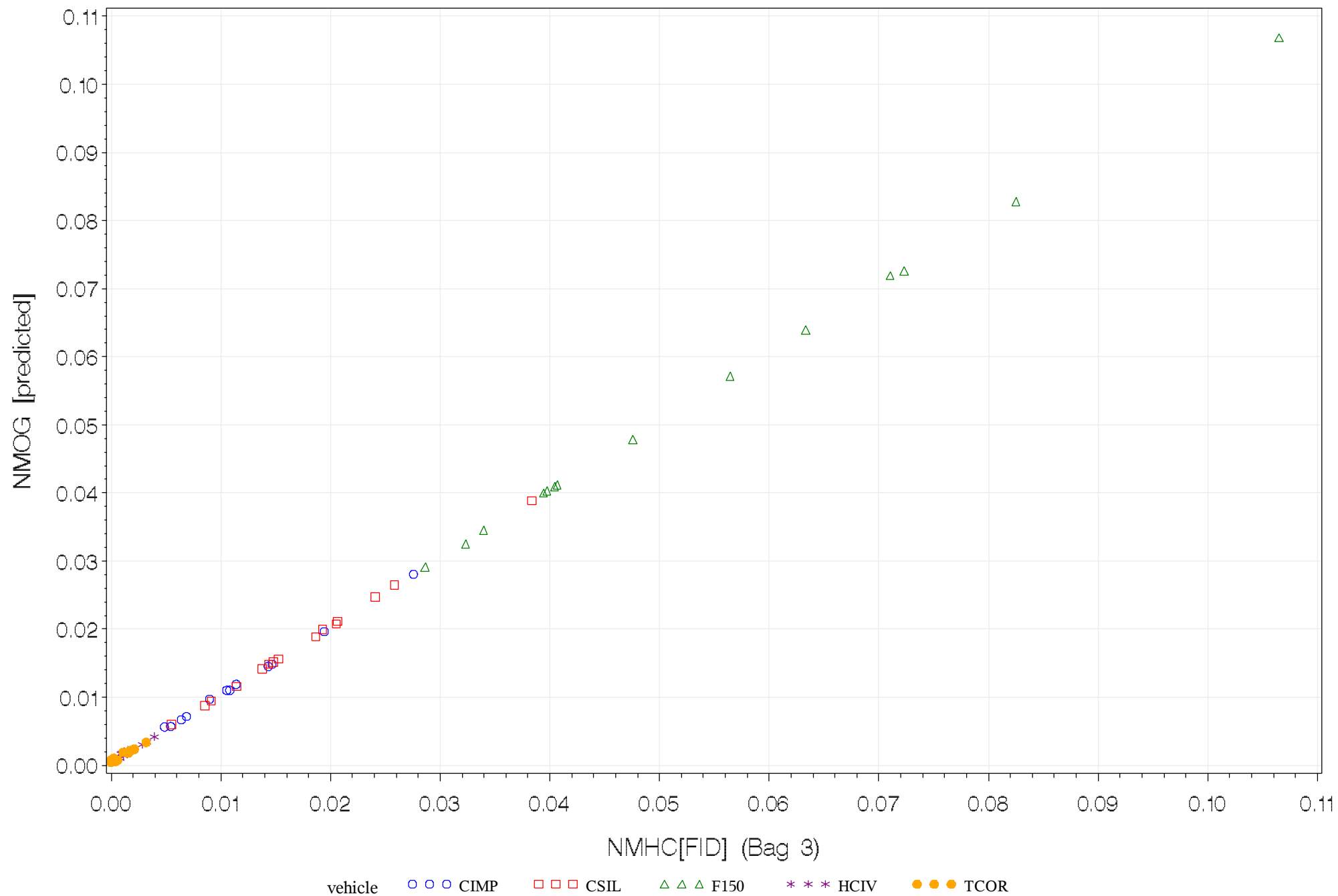
Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



Model 2.a: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (1st round)



The GLM Procedure

Number of Observations Read	67
Number of Observations Used	67

The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.03417195	0.00488171	49548.0	<.0001
Error	59	0.00000581	0.00000010		
Corrected Total	66	0.03417777			

R-Square	Coeff Var	Root MSE	NMOG_B3 Mean
0.999830	1.744800	0.000314	0.017990

Source	DF	Type I SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.03417095	0.03417095	346826	<.0001
e10	1	0.00000002	0.00000002	0.24	0.6230
e15	1	0.00000000	0.00000000	0.03	0.8641
e20	1	0.00000066	0.00000066	6.65	0.0124
NM_FIDHC_B3*e10	1	0.00000029	0.00000029	2.91	0.0931
NM_FIDHC_B3*e15	1	0.00000002	0.00000002	0.21	0.6447
NM_FIDHC_B3*e20	1	0.00000001	0.00000001	0.07	0.7883

Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3	1	0.01493692	0.01493692	151606	<.0001
e10	1	0.00000002	0.00000002	0.20	0.6556
e15	1	0.00000004	0.00000004	0.42	0.5189
e20	1	0.00000044	0.00000044	4.48	0.0386

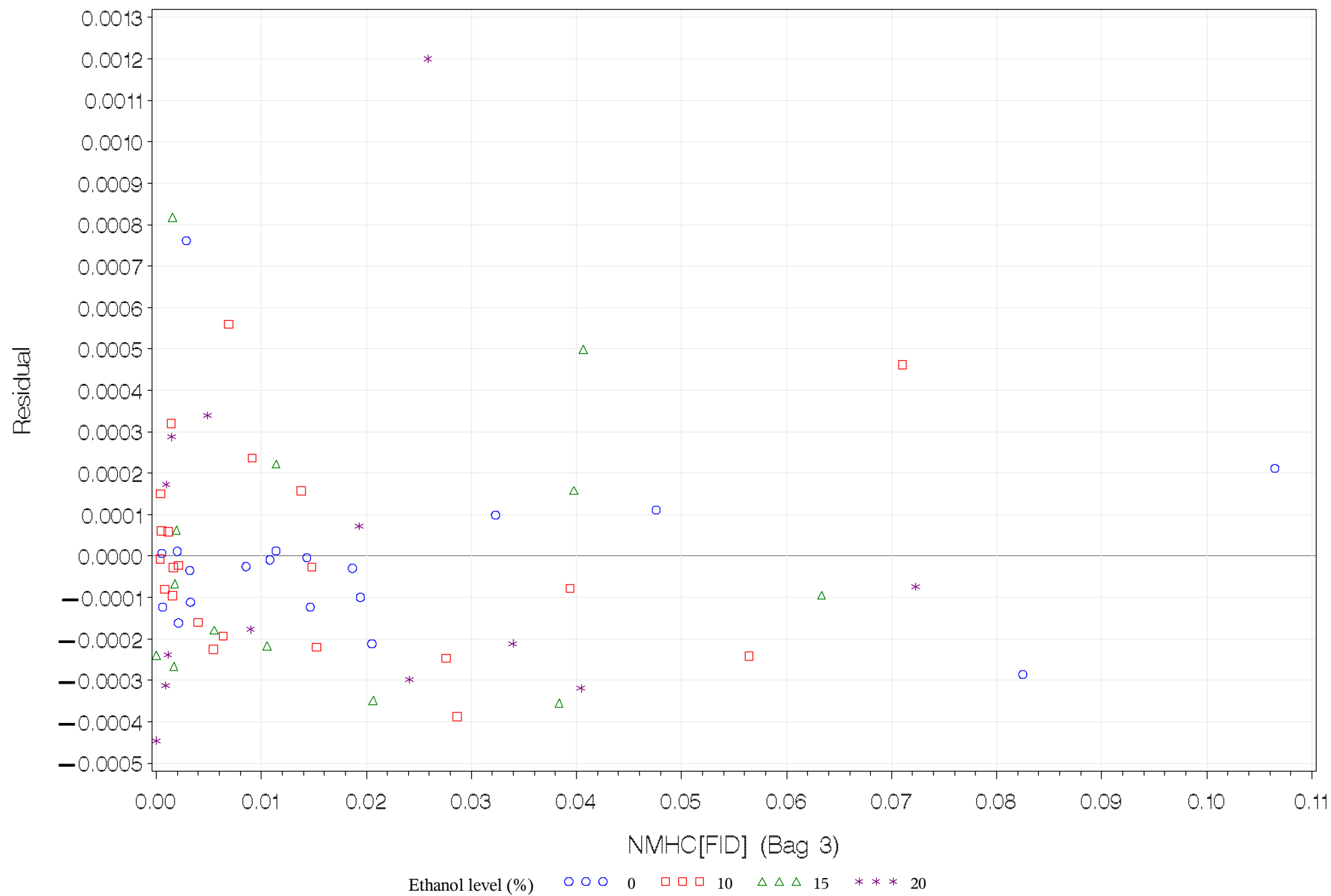
The GLM Procedure

Dependent Variable: NMOG_B3 NMOG (Bag 3)

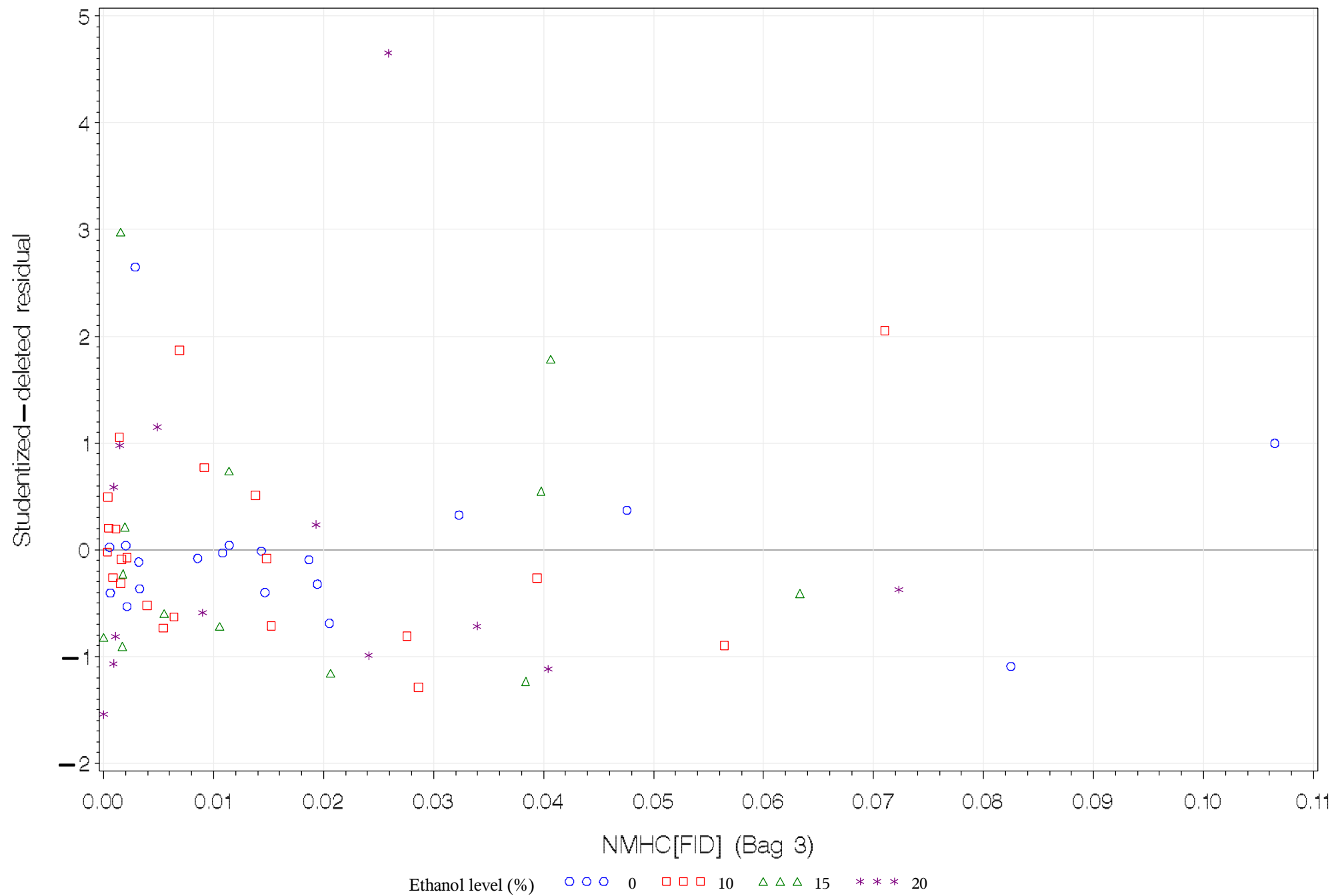
Source	DF	Type III SS	Mean Square	F Value	Pr > F
NM_FIDHC_B3*e10	1	0.00000025	0.00000025	2.56	0.1149
NM_FIDHC_B3*e15	1	0.00000001	0.00000001	0.14	0.7080
NM_FIDHC_B3*e20	1	0.00000001	0.00000001	0.07	0.7883

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	0.000170467	0.00009029	1.89	0.0640
NM_FIDHC_B3	1.002000837	0.00257342	389.37	<.0001
e10	0.000055072	0.00012284	0.45	0.6556
e15	0.000096619	0.00014889	0.65	0.5189
e20	0.000310381	0.00014670	2.12	0.0386
NM_FIDHC_B3*e10	0.006990655	0.00436855	1.60	0.1149
NM_FIDHC_B3*e15	0.001916805	0.00509339	0.38	0.7080
NM_FIDHC_B3*e20	-0.001333432	0.00494411	-0.27	0.7883

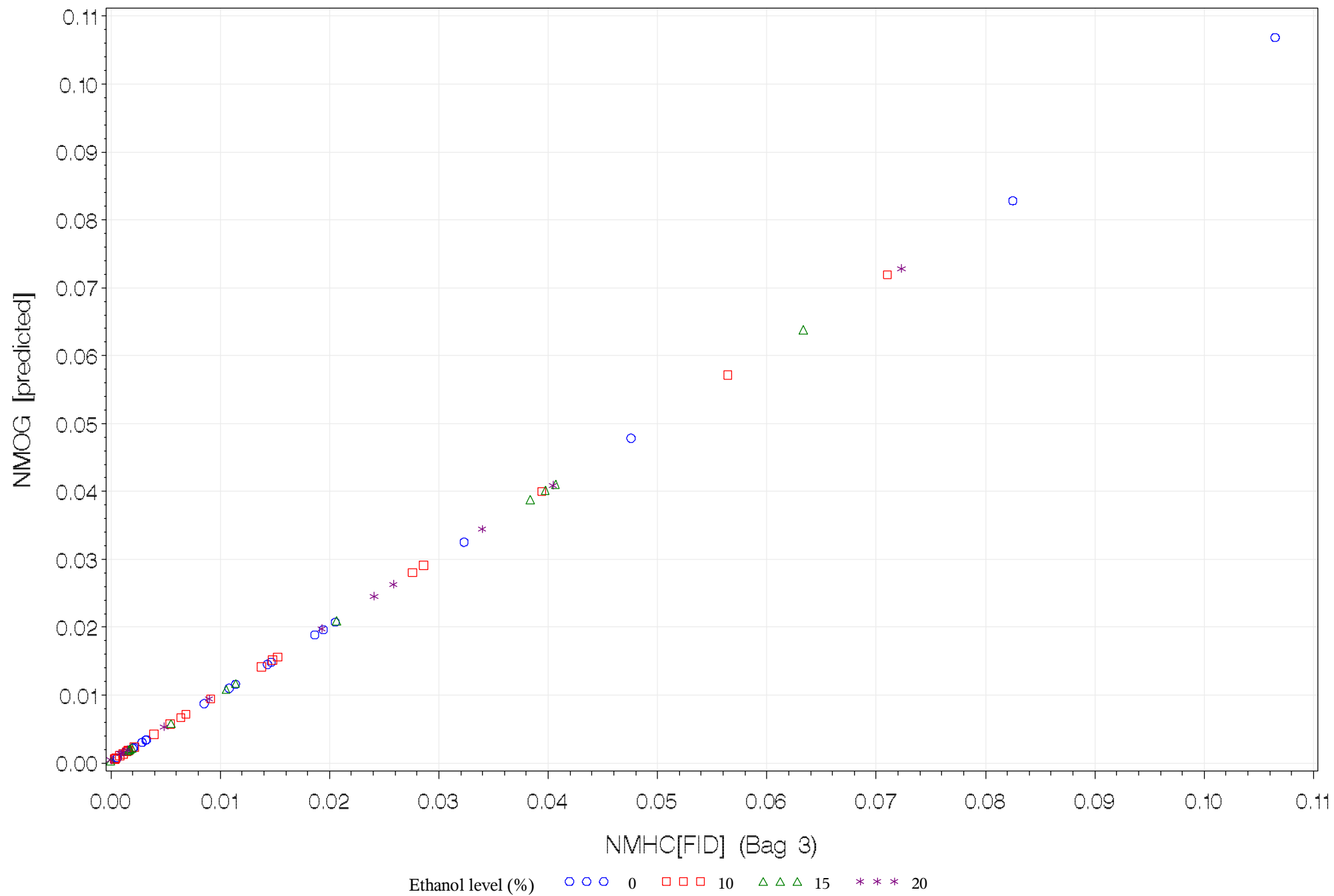
Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



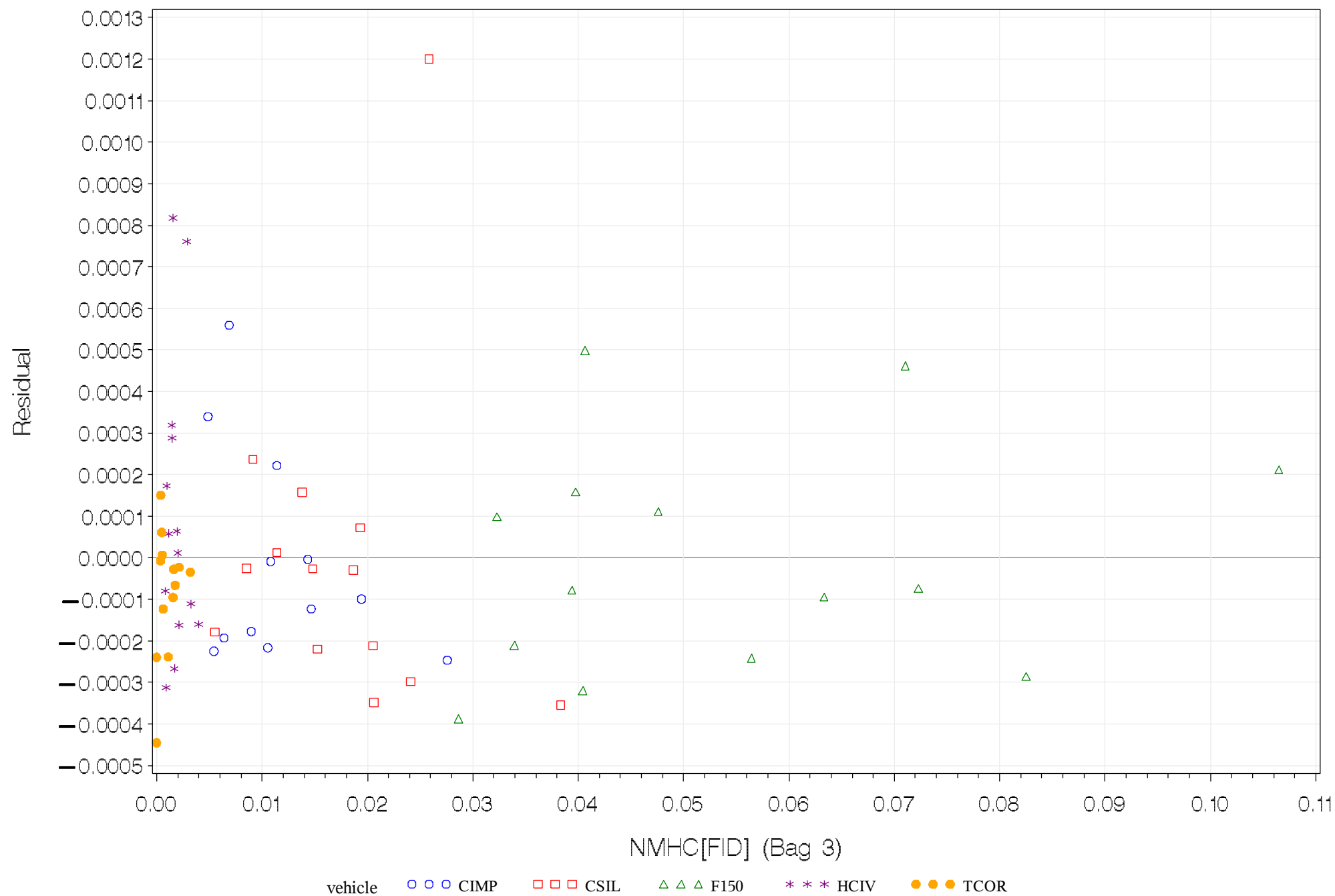
Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



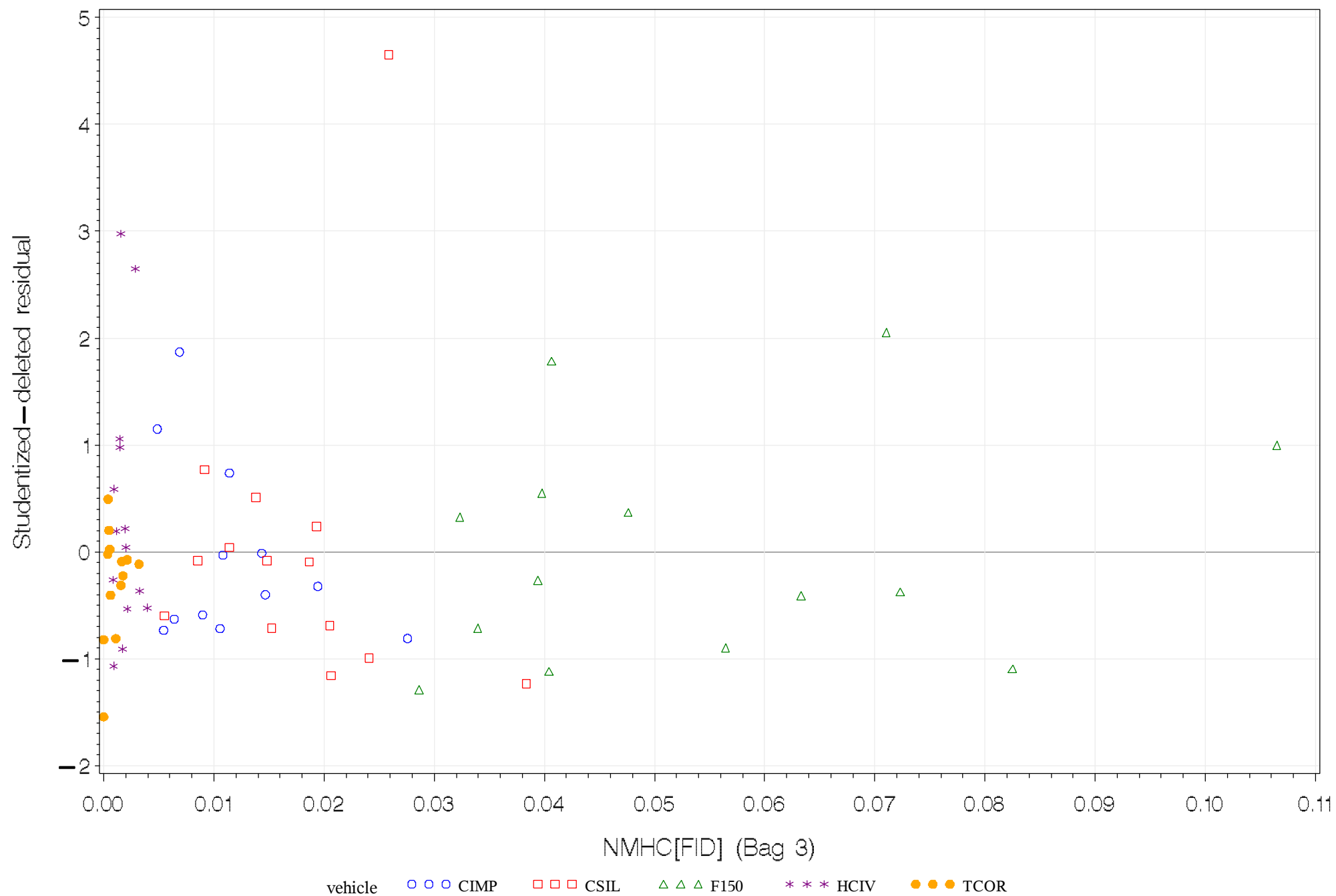
Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



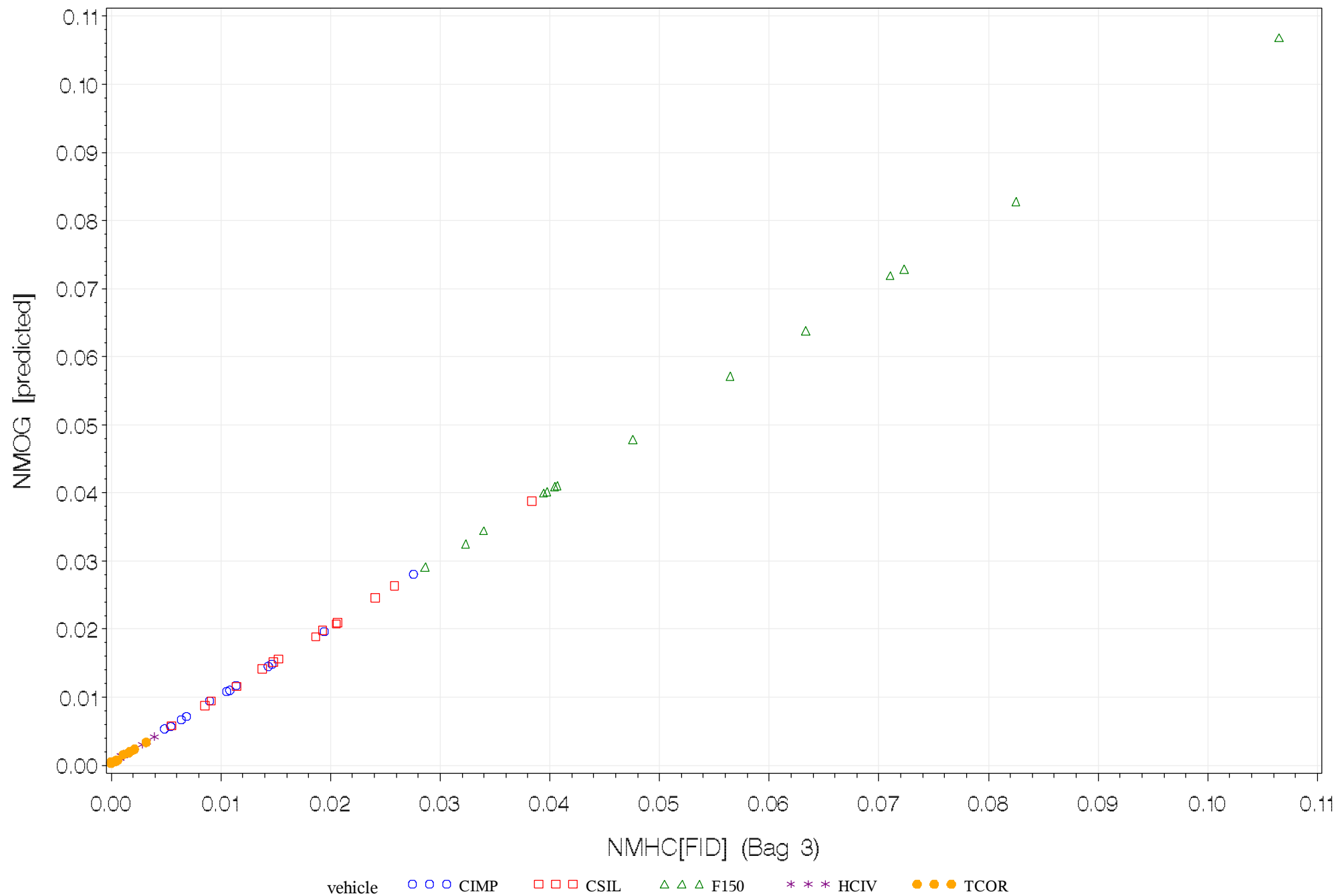
Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



Model 2.b: Intercepts and Slopes by Ethanol Level
OUTLIER REMOVED (2nd round)



Directory	
Libref	WORK
Engine	V9
Physical Name	C:\DOCUME~1\jwarila\LOCALS~1\Temp\SAS Temporary Files_TD2376
Filename	C:\DOCUME~1\jwarila\LOCALS~1\Temp\SAS Temporary Files_TD2376

#	Name	Member Type	File Size	Last Modified
1	GSEG	CATALOG	1233920	09Feb11:12:45:09
2	PDF	CATALOG	1287168	09Feb11:12:45:09
3	RATIOS	DATA	17408	09Feb11:09:22:06
4	RATIOS2	DATA	33792	09Feb11:12:43:36
5	RATIOS2A	DATA	17408	09Feb11:12:44:25
6	RATIOS3	DATA	33792	09Feb11:12:44:25
7	RATIOS3A	DATA	17408	09Feb11:12:44:57
8	RATIOS4	DATA	17408	09Feb11:12:45:08
9	SASGOPT	CATALOG	5120	09Feb11:09:22:56