## Appendix to: "Multiple Imputation with Double Samples: A Simulation Study"

**Table I:** Case 0 (without METHOD=PROP), Analysis of Variance for *MeanBias*, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\ \operatorname{SS}$	$\operatorname{Adj}\operatorname{MS}$	F	P
COVSTR	7	$1.46 \mathrm{e} ext{-}005$	1.46e-005	2.1e-006	5.01	0
SSIZE	1	1.58 e-005	1.58e-005	1.58e-005	37.95	0
KNRATIO	2	$2.51\mathrm{e}\text{-}005$	2.51e-005	1.25 e-005	30.16	0
METHOD	3	$1\mathrm{e}\text{-}007$	1e-007	0	0.09	0.964
COVSTR*SSIZE	7	1.33 e-005	1.33e-005	1.9e-006	4.58	0
COVSTR*KNRATIO	14	$3.08\mathrm{e}\text{-}005$	3.08e-005	2.2e-006	5.28	0
COVSTR*METHOD	21	5e-007	5e-007	0	0.06	1
SSIZE*KNRATIO	2	$1\mathrm{e}\text{-}007$	1e-007	1e-007	0.17	0.84
SSIZE*METHOD	3	0	0	0	0.01	0.999
KNRATIO*METHOD	6	1e-007	1e-007	0	0.05	0.999
Error	125	$5.2\mathrm{e}\text{-}005$	5.2e-005	4e-007		
Total	191	0.0001525				

**Table II:** Case 0 (without METHOD=PROP), Analysis of Variance for *Clevel*, using Adjusted SS for Tests.

Source	$\mathrm{DF}$	Seq SS	Adj SS	Adj MS	F	Р
COVSTR	7	0.053336	0.053336	0.0076194	486.86	0
SSIZE	1	0.0014138	0.0014138	0.0014138	90.34	0
KNRATIO	2	0.0049116	0.0049116	0.0024558	156.92	0
METHOD	3	$1.59 \mathrm{e}\text{-}005$	1.59 e-005	5.3 e - 006	0.34	0.797
COVSTR*SSIZE	7	0.0007437	0.0007437	0.0001062	6.79	0
COVSTR*KNRATIO	14	0.0019254	0.0019254	0.0001375	8.79	0
COVSTR*METHOD	21	0.0001186	0.0001186	$5.6 \mathrm{e}\text{-}006$	0.36	0.996
SSIZE*KNRATIO	2	0.0001539	0.0001539	7.7e-005	4.92	0.009
SSIZE*METHOD	3	1.38 e-005	1.38e-005	4.6 e - 006	0.29	0.83
KNRATIO*METHOD	6	$1.06\mathrm{e}\text{-}005$	1.06 e-005	1.8e-006	0.11	0.995
Error	125	0.0019563	0.0019563	1.57 e-005		
Total	191	0.0646				

Table III: Case 0 (without METHOD=PROP), means and standard errors (SE) of 1st and 2nd order effects on MeanBias and Clevel across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR	0.0001#4	0.000180	0.00=00	0.000000
1	0.000154	0.000132	0.98796	0.000808
2	0.000176	0.000132	0.98238	0.000808
3	0.000123	0.000132	0.98279	0.000808
4	0.000942	0.000132	0.98833	0.000808
5	0.000231	0.000132	0.95088	0.000808
6	0.000694	0.000132	0.95013	0.000808
7	0.000494	0.000132	0.94946	0.000808
8 SSIZE	0.000343	0.000132	0.97888	0.000808
1000	0.000681	6.6e-005	0.97406	0.000404
5000	0.000081 $0.000108$	6.6e-005	0.96864	0.000404 $0.000404$
KNRATIO	0.000100	0.06-000	0.30004	0.000404
1/2	0.000905	8.1e-005	0.96422	0.000495
$\frac{1}{2}$ $\frac{2}{2}$	0.000162	8.1e-005	0.97442	0.000495
$\frac{1}{3}$	0.000116	8.1e-005	0.97541	0.000495
METHOD				
EM	0.0004	9.3e-005	0.97146	0.000571
MCEM	0.000399	9.3e-005	0.97177	0.000571
MCBOOT	0.000423	9.3e-005	0.97106	0.000571
REG	0.000355	9.3e-005	0.9711	0.000571
COVSTR*SSIZE				
1 1000	0.000609	0.000186	0.99158	0.001142
1 5000	-0.000301	0.000186	0.98433	0.001142
2 1000	5.6e-005	0.000186	0.98525	0.001142
2 5000	0.000297	0.000186	0.9795	0.001142
3 1000	0.000214	0.000186	0.98775	0.001142
3 5000	3.1e-005	0.000186	0.97783	0.001142
4 1000	0.001125	0.000186	0.99392	0.001142
4 5000	0.000759	0.000186	0.98275	0.001142
5 1000	0.000439	0.000186	0.9505	0.001142
5 5000	2.2e-005	0.000186	0.95125	0.001142
6 1000	0.001466	0.000186	0.95342	0.001142
6 5000	-7.9e-005	0.000186	0.94683	0.001142
7 1000	0.00067	0.000186	0.95	0.001142
7 5000 8 1000	$0.000318 \\ 0.00087$	$0.000186 \\ 0.000186$	0.94892 $0.98008$	0.001142
8 5000	-0.00084	0.000186	0.98008 $0.97767$	$0.001142 \\ 0.001142$
COVSTR*KNRATIO	-0.000164	0.000100	0.91101	0.001142
1 1/2	0.001401	0.000228	0.976	0.001399
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-0.000677	0.000228	0.99138	0.001399 $0.001399$
$1 \frac{2}{3} \frac{2}{2}$	-0.000261	0.000228	0.9965	0.001399
2 1/2	0.000341	0.000228	0.9705	0.001399
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.000806	0.000228	0.98687	0.001399
$2 \ 3/2$	-0.000619	0.000228	0.98975	0.001399
$3 \ 1/2$	0.000375	0.000228	0.976	0.001399
$3 \ 2/2$	-0.000523	0.000228	0.98562	0.001399
$3 \ 3/2$	0.000516	0.000228	0.98675	0.001399
$4 \ 1/2$	0.001773	0.000228	0.97675	0.001399
$4 \ 2/2$	0.000192	0.000228	0.99162	0.001399
4 3/2	0.000861	0.000228	0.99662	0.001399
$5 \ 1/2$	0.000699	0.000228	0.94588	0.001399
$5 \ 2/2$	5.5 e - 005	0.000228	0.95613	0.001399
$5 \ 3/2$	-6.3e-005	0.000228	0.95063	0.001399
$6 \ 1/2$	0.001207	0.000228	0.9485	0.001399
$6\ 2/2$	0.000756	0.000228	0.95013	0.001399
$6 \ 3/2$	0.000118	0.000228	0.95175	0.001399
7 1/2	0.000516	0.000228	0.94763	0.001399
7 2/2	0.000373	0.000228	0.95175	0.001399
7 3/2	0.000593	0.000228	0.949	0.001399
8 1/2	0.000929	0.000228	0.9725	0.001399
8 2/2	0.000313	0.000228	0.98188	0.001399
8 3/2	-0.000213	0.000228	0.98225	0.001399

Effect	${ m MeanBias}$	SE MeanBias	Clevel	SE Clevel
COVSTR*METHOD				
1  EM	0.00016	0.000263	0.9895	0.001615
1  MCEM	0.000195	0.000263	0.98817	0.001615
1 MCBOOT	0.000106	0.000263	0.98817	0.001615
1  REG	0.000155	0.000263	0.986	0.001615
2  EM	0.000181	0.000263	0.98117	0.001615
2 MCEM	0.000104	0.000263	0.98367	0.001615
2 MCBOOT	0.00027	0.000263	0.9815	0.001615
2 REG	0.00015	0.000263	0.98317	0.001615
3  EM	9.7e-005	0.000263	0.98433	0.001615
3  MCEM	8.8e - 005	0.000263	0.98367	0.001615
3 MCBOOT	0.000286	0.000263	0.9815	0.001615
3 REG	2e-005	0.000263	0.98167	0.001615
4  EM	0.000938	0.000263	0.98783	0.001615
4 MCEM	0.001021	0.000263	0.98983	0.001615
4 MCBOOT	0.001036	0.000263	0.98783	0.001615
4 REG	0.000773	0.000263	0.98783	0.001615
$5~{ m EM}$	0.000239	0.000263	0.9505	0.001615
5  MCEM	0.000229	0.000263	0.9515	0.001615
5 MCBOOT	0.000222	0.000263	0.951	0.001615
5  REG	0.000233	0.000263	0.9505	0.001615
$6~\mathrm{EM}$	0.000694	0.000263	0.95	0.001615
6 MCEM	0.000694	0.000263	0.94983	0.001615
6 MCBOOT	0.000689	0.000263	0.95017	0.001615
$6~\mathrm{REG}$	0.000698	0.000263	0.9505	0.001615
7  EM	0.000497	0.000263	0.95	0.001615
7 MCEM	0.000492	0.000263	0.949	0.001615
7 MCBOOT	0.000496	0.000263	0.94933	0.001615
7  REG	0.000492	0.000263	0.9495	0.001615
8 EM	0.000399	0.000263	0.97833	0.001615
8 MCEM	0.000367	0.000263	0.9785	0.001615
8 MCBOOT	0.000282	0.000263	0.979	0.001615
8 REG	0.000322	0.000263	0.97967	0.001615
SSIZE*KNRATIO				
$1000 \ 1/2$	0.001194	0.000114	0.96666	0.000699
$1000 \ 2/2$	0.000481	0.000114	0.97834	0.000699
$1000 \ 3/2$	0.000369	0.000114	0.97719	0.000699
$5000 \ 1/2$	0.000616	0.000114	0.96178	0.000699
$5000 \ 2/2$	-0.000158	0.000114	0.9705	0.000699
$5000 \ 3/2$	-0.000136	0.000114	0.97362	0.000699
SSIZE*METHOD				
1000 EM	0.000696	0.000132	0.97437	0.000808
1000 MCEM	0.000685	0.000132	0.97433	0.000808
1000 MCBOOT	0.000697	0.000132	0.97342	0.000808
1000  REG	0.000647	0.000132	0.97413	0.000808
5000 EM	0.000105	0.000132	0.96854	0.000808
5000 MCEM	0.000113	0.000132	0.96921	0.000808
5000 MCBOOT	0.000149	0.000132	0.96871	0.000808
5000 REG	6.4e- $005$	0.000132	0.96808	0.000808
KNRATIO*METHOD				
1/2  EM	0.00091	0.000161	0.96419	0.000989
1/2  MCEM	0.000924	0.000161	0.96488	0.000989
1/2 MCBOOT	0.000933	0.000161	0.96394	0.000989
1/2 REG	0.000854	0.000161	0.96388	0.000989
2/2 EM	0.00022	0.000161	0.97494	0.000989
2/2 MCEM	0.000139	0.000161	0.97469	0.000989
2/2 MCBOOT	0.000167	0.000161	0.97375	0.000989
2/2 REG	0.000122	0.000161	0.97431	0.000989
3/2 EM	7.1e-005	0.000161	0.97525	0.000989
3/2 MCEM	0.000134	0.000161	0.97575	0.000989
3/2 MCBOOT	0.000171	0.000161	0.9755	0.000989
3/2  REG	9e-005	0.000161	0.97513	0.000989

**Table IV:** Case 0 (factor OBSERVED substituted for factor KNRATIO), Analysis of Variance for *MeanBias*, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	7.65 e - 005	7.65e-005	1.09e-005	42.95	0
SSIZE	1	3.9e-006	3.9e-006	3.9e-006	15.2	0
OBSERVED	1	3.5 e - 006	$3.5 e{-}006$	3.5e-006	13.61	0
METHOD	3	2e-007	2e-007	1e-007	0.31	0.815
COVSTR*SSIZE	7	4.99 e - 005	4.99e-005	7.1e-006	28.05	0
COVSTR*OBSERVED	7	4.41 e - 005	4.41e-005	6.3e-006	24.78	0
COVSTR*METHOD	21	1.1e-006	1.1e-006	1e-007	0.21	1
SSIZE*OBSERVED	1	1.7e-006	1.7e-006	1.7e-006	6.62	0.012
SSIZE*METHOD	3	1e-007	1e-007	0	0.16	0.925
OBSERVED*METHOD	3	1e-007	1e-007	0	0.17	0.918
Error	73	1.86e-005	1.86e-005	3e-007		
Total	127	0.0001997				

**Table V:** Case 0 (factor Observed substituted for factor knratio), Analysis of Variance for *Clevel*, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj}\operatorname{MS}$	F	P
COVSTR	7	0.0065958	0.0065958	0.0009423	55.45	0
SSIZE	1	0.0023719	0.0023719	0.0023719	139.59	0
OBSERVED	1	0.0031701	0.0031701	0.0031701	186.57	0
METHOD	3	8.6e-006	8.6e-006	2.9e-006	0.17	0.917
COVSTR*SSIZE	7	0.0013771	0.0013771	0.0001967	11.58	0
COVSTR*OBSERVED	7	0.0049234	0.0049234	0.0007033	41.39	0
COVSTR*METHOD	21	0.0002895	0.0002895	1.38e-005	0.81	0.697
SSIZE*OBSERVED	1	0.0004463	0.0004463	0.0004463	26.26	0
SSIZE*METHOD	3	1.77 e - 005	1.77 e - 005	5.9e-006	0.35	0.791
OBSERVED*METHOD	3	$2.75 \mathrm{e}\text{-}005$	2.75 e - 005	9.2e-006	0.54	0.656
Error	73	0.0012404	0.0012404	1.7e-005		
Total	127	0.020468				

**Table VI:** Case 0 (factor observed substituted for factor knratio), means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	${\it MeanBias}$	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.001468	0.000126	0.97575	0.001031
2	0.000357	0.000126	0.97044	0.001031
3	0.000283	0.000126	0.9765	0.001031
4	0.001721	0.000126	0.97637	0.001031
5	0.001314	0.000126	0.95944	0.001031
6	0.00019	0.000126	0.95994	0.001031
7	-0.00068	0.000126	0.96137	0.001031
8	0.001271	0.000126	0.97375	0.001031
SSIZE				
1000	0.000914	6.3 e - 005	0.9735	0.000515
5000	0.000567	6.3e-005	0.96489	0.000515
OBSERVED				
X2	0.000576	6.3e-005	0.97417	0.000515
X1X2	0.000905	6.3e <b>-</b> 005	0.96422	0.000515
METHOD	0.000000	0.00 000	0.00122	0.0000313
EM	0.000736	8.9e <b>-</b> 005	0.96878	0.000729
MCEM	0.000808	8.9e-005	0.96934	0.000729
MCBOOT	0.000303	8.9e-005	0.96919	0.000729
REG	0.000688	8.9e-005	0.96947	0.000729
COVSTR*SSIZE	0.000000	0. <i>5</i> e-000	0.30341	0.000123
1 1000	0.002615	0.000178	0.9805	0.001457
1 5000	0.002319 $0.000321$	0.000178 $0.000178$	0.9000	0.001457 $0.001457$
2 1000	-0.00021	0.000178	0.971	0.001457 $0.001457$
2 5000	0.000252	0.000178	0.96788	0.001457 $0.001457$
3 1000	-0.000448	0.000178	0.98425	0.001457 $0.001457$
3 5000	0.001015	0.000178	0.96425 $0.96875$	
4 1000	0.001013 $0.001988$	0.000178	0.98687	$0.001457 \\ 0.001457$
			0.96588	
4 5000	0.001455	0.000178		0.001457
5 1000	0.002035	0.000178	0.96162	0.001457
5 5000	0.000594	0.000178	0.95725	0.001457
6 1000	0.000715	0.000178	0.961	0.001457
6 5000	-0.000334	0.000178	0.95888	0.001457
7 1000	-0.001013	0.000178	0.96675	0.001457
7 5000	-0.000347	0.000178	0.956	0.001457
8 1000	0.001675	0.000178	0.974	0.001457
8 5000	0.000866	0.000178	0.9735	0.001457
COVSTR*OBSERVED	0.001595	0.000170	0.0755	0.001457
1 X2	0.001535	0.000178	0.9755	0.001457
1 X1X2	0.001401	0.000178	0.976	0.001457
2 X2	0.000372	0.000178	0.97037	0.001457
2 X1X2	0.000341	0.000178	0.9705	0.001457
3 X2	0.000192	0.000178	0.977	0.001457
3 X1X2	0.000375	0.000178	0.976	0.001457
4 X2	0.00167	0.000178	0.976	0.001457
4 X1X2	0.001773	0.000178	0.97675	0.001457
5 X2	0.001929	0.000178	0.973	0.001457
5 X1X2	0.000699	0.000178	0.94588	0.001457
6 X2	-0.000826	0.000178	0.97137	0.001457
6 X1X2	0.001207	0.000178	0.9485	0.001457
7 X2	-0.001876	0.000178	0.97513	0.001457
7 X1X2	0.000516	0.000178	0.94763	0.001457
8 X2	0.001612	0.000178	0.975	0.001457
8 X1X2	0.000929	0.000178	0.9725	0.001457

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*METHOD	0.001.000	0.0000#0	0.05055	0.000001
1 EM	0.001669	0.000252	0.97675	0.002061
1 MCEM	0.001649	0.000252	0.97725	0.002061
1 MCBOOT	0.001299	0.000252	0.9755	0.002061
1 REG	0.001255	0.000252	0.9735	0.002061
2 EM	0.000366	0.000252	0.96975	0.002061
2 MCEM	0.000316	0.000252	0.969	0.002061
2 MCBOOT	0.000385	0.000252	0.96925	0.002061
2 REG	0.000359	0.000252	0.97375	0.002061
3 EM	0.000311	0.000252	0.977	0.002061
3 MCEM	0.000344	0.000252	0.9765	0.002061
3 MCBOOT	0.000271	0.000252	0.97625	0.002061
3 REG	0.000207	0.000252	0.97625	0.002061
4 EM	0.00158	0.000252	0.975	0.002061
4 MCEM	0.001854	0.000252	0.979	0.002061
4 MCBOOT	0.001901	0.000252	0.97775	0.002061
4 REG	0.00155	0.000252	0.97375	0.002061
5 EM	0.001313	0.000252	0.959	0.002061
5 MCEM	0.001364	0.000252	0.96125	0.002061
5 MCBOOT	0.001216	0.000252	0.9595	0.002061
5 REG	0.001365	0.000252	0.958	0.002061
6 EM	0.000184	0.000252	0.96	0.002061
6 MCEM	0.000235	0.000252	0.95825	0.002061
6 MCBOOT	0.000234	0.000252	0.96075	0.002061
6 REG	0.000108	0.000252	0.96075	0.002061
7 EM 7 MCEM	-0.000845	0.000252	$0.9615 \\ 0.959$	0.002061
	-0.000613	0.000252		0.002061
7 MCBOOT 7 REG	-0.000632	$0.000252 \\ 0.000252$	0.961	0.002061
8 EM	-0.000631		0.964	0.002061
8 MCEM	0.001313	0.000252	$0.97125 \\ 0.9745$	$0.002061 \\ 0.002061$
8 MCBOOT	$0.001317 \\ 0.001162$	$0.000252 \\ 0.000252$	$0.9745 \\ 0.9735$	0.002061 $0.002061$
8 REG	0.001102 $0.001291$	0.000252 $0.000252$	0.97575	0.002061 $0.002061$
SSIZE*OBSERVED	0.001291	0.000232	0.91515	0.002001
1000 X2	0.000635	8.9e-005	0.98034	0.000729
1000 X2 1000 X1X2	0.000033 $0.001194$	8.9e-005	0.96666	0.000729 $0.000729$
5000 X1X2	0.001134 $0.000517$	8.9e-005	0.9000	0.000729
5000 X2 5000 X1X2	0.000517 $0.000616$	8.9e-005	0.96178	0.000729
SSIZE*METHOD	0.000010	0.56-000	0.50170	0.000123
1000 EM	0.000881	0.000126	0.97306	0.001031
1000 EM 1000 MCEM	0.000001	0.000126	0.97425	0.001031
1000 MCBOOT	0.000941	0.000126	0.97331	0.001031 $0.001031$
1000 REG	0.000884	0.000126	0.97337	0.001031
5000 EM	0.000592	0.000126	0.9645	0.001031
5000 EM 5000 MCEM	0.000666	0.000126	0.96444	0.001031
5000 MCBOOT	0.000518	0.000126	0.96506	0.001031
5000 REG	0.000492	0.000126	0.96556	0.001031
OBSERVED*METHOD	0.000432	0.000120	0.50550	0.001001
X2 EM	0.000563	0.000126	0.97337	0.001031
X2 MCEM	0.000693	0.000126	0.97381	0.001031
X2 MCBOOT	0.000526	0.000126	0.97444	0.001031
X2 REG	0.000520 $0.000522$	0.000126	0.97506	0.001031
X1X2 EM	0.000922	0.000126	0.96419	0.001031
X1X2 MCEM	0.000924	0.000126	0.96488	0.001031
X1X2 MCBOOT	0.000933	0.000126	0.96394	0.001031
X1X2 REG	0.000854	0.000126	0.96388	0.001031

Table VII: Case 1, Analysis of Variance for MeanBias, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	1.0583	1.0583	0.15119	530000	0
SSIZE	1	0	0	0	0.01	0.924
OBSERVED	2	0.95195	0.95195	0.47597	1700000	0
METHOD	3	0	0	0	0.23	0.875
COVSTR*SSIZE	7	6.6e-005	6.6e-005	9e-006	33.04	0
COVSTR*OBSERVED	14	2.1054	2.1054	0.15038	520000	0
COVSTR*METHOD	21	1e-006	1e-006	0	0.1	1
SSIZE*OBSERVED	2	1.3e-005	1.3e-005	6e-006	22.26	0
SSIZE*METHOD	3	0	0	0	0	1
OBSERVED*METHOD	6	0	0	0	0.13	0.992
Error	125	3.6e-005	3.6e-005	0		
Total	191	4.1158				

Table VIII: Case 1, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	Adj MS	F	Р
COVSTR	7	2.8745	2.8745	0.41064	111.4	0
SSIZE	1	0.16521	0.16521	0.16521	44.82	0
OBSERVED	2	20.8255	20.8255	10.4127	2824.91	0
METHOD	3	2e-005	2e-005	1e-005	0	1
COVSTR*SSIZE	7	0.24063	0.24063	0.03438	9.33	0
COVSTR*OBSERVED	14	5.2624	5.2624	0.37588	101.98	0
COVSTR*METHOD	21	0.0003	0.0003	1e-005	0	1
SSIZE*OBSERVED	2	0.241	0.241	0.1205	32.69	0
SSIZE*METHOD	3	2e-005	2e-005	1e-005	0	1
OBSERVED*METHOD	6	4e-005	4e-005	1e-005	0	1
Error	125	0.46075	0.46075	0.00369		
Total	191	30.0703				

**Table IX:** Case 1, means and standard errors (SE) of 1st and 2nd order effects on Mean-Bias and Clevel across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.034	0.000109	0.7644	0.012393
2	0.1397	0.000109	0.647	0.012393
3	0.0094	0.000109	0.9305	0.012393
4	0.0129	0.000109	0.9435	0.012393
5	0.1167	0.000109	0.6396	0.012393
6	0.1414	0.000109	0.64	0.012393
7	-0.091	0.000109	0.6409	0.012393
8	0.041	0.000109	0.6849	0.012393
SSIZE				
1000	0.0505	$5.5\mathrm{e}\text{-}005$	0.7657	0.006196
5000	0.0505	$5.5\mathrm{e}\text{-}005$	0.707	0.006196
OBSERVED				
X1	0.1501	6.7e-005	0.2706	0.007589
X2	0.0006	6.7e-005	0.9742	0.007589
X1X2	0.0009	6.7e-005	0.9642	0.007589
METHOD				
EM	0.0505	7.7e-005	0.736	0.008763
MCEM	0.0506	7.7e-005	0.7366	0.008763
MCBOOT	0.0505	7.7e-005	0.736	0.008763
REG	0.0505	7.7e-005	0.7366	0.008763
COVSTR*SSIZE				
1 1000	0.0349	0.000155	0.8757	0.017526
1 5000	0.0332	0.000155	0.6531	0.017526
2 1000	0.1387	0.000155	0.6487	0.017526
2 5000	0.1408	0.000155	0.6452	0.017526
3 1000	0.0087	0.000155	0.9732	0.017526
3 5000	0.0101	0.000155	0.8877	0.017526
4 1000	0.0132	0.000155	0.9808	0.017526
4 5000	0.0127	0.000155	0.9063	0.017526
5 1000	0.1169	0.000155	0.6411	0.017526
5 5000	0.1165	0.000155	0.6382	0.017526
6 1000	0.1418	0.000155	0.6407	0.017526
6 5000	0.141	0.000155	0.6392	0.017526
7 1000	-0.0913	0.000155	0.6445	0.017526
7 5000	-0.0907	0.000155	0.6373	0.017526
8 1000	0.0414	0.000155	0.7208	0.017526
8 5000	0.0407	0.000155	0.649	0.017526
COVSTR*OBSERVED	0.0000	0.00010	0.041.0	0.001.405
1 X1	0.0992	0.00019	0.3416	0.021465
1 X2	0.0015	0.00019	0.9755	0.021465
1 X1X2	0.0014	0.00019	0.976	0.021465
2 X1	0.4185	0.00019	0.0704	0.021465
2 X2	0.0004	0.00019	0.9704	0.021465
2 X1X2	0.0003	0.00019	0.9705	0.021465
3 X1	0.0277	0.00019	0.8384	0.021465
3 X2 3 X1X2	0.0002	0.00019	0.977	0.021465
3 X1X2 4 X1	$0.0004 \\ 0.0354$	0.00019 $0.00019$	0.976	0.021465
4 X1 4 X2			0.8777	0.021465
	0.0017	0.00019	0.976	0.021465
4 X1X2 5 X1	$0.0018 \\ 0.3474$	$0.00019 \\ 0.00019$	0.9768	0.021465
			0 072	0.021465
5 X2 5 X1X2	0.0019	0.00019	0.973	$0.021465 \\ 0.021465$
5 X1X2 6 X1	$0.0007 \\ 0.4238$	0.00019 $0.00019$	$0.9459 \\ 0$	0.021465 $0.021465$
6 X2	-0.0008	0.00019	0.9714	
6 X1X2			$0.9714 \\ 0.9485$	0.021465
6 X1X2 7 X1	0.0012	0.00019	0.9485	0.021465
7 X1 7 X2	-0.2717 -0.0019	0.00019 $0.00019$	0.9751	$0.021465 \\ 0.021465$
7 X1X2	0.0019	0.00019 $0.00019$	0.9751 $0.9476$	0.021465 $0.021465$
8 X1	0.0005 $0.1206$	0.00019	0.9476 $0.1071$	0.021465 $0.021465$
8 X2	0.1200 $0.0016$	0.00019	$0.1071 \\ 0.975$	0.021465 $0.021465$
8 X1X2	0.0010	0.00019	0.975 $0.9725$	0.021465 $0.021465$
O 18118M	0.0003	0.00013	0.0140	0.021400

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*METHOD	0.0249	0.000210	0.7647	0.004796
1 EM 1 MCEM	$0.0342 \\ 0.0342$	0.000219 $0.000219$	$0.7647 \\ 0.7652$	$0.024786 \\ 0.024786$
1 MCBOOT	0.0342 $0.034$	0.000219 $0.000219$	0.7642	0.024786
1 REG	0.034 $0.0338$	0.000219 $0.000219$	0.7635	0.024786
2 EM	0.0338 $0.1397$	0.000219 $0.000219$	0.7055 $0.6465$	0.024786 $0.024786$
2 MCEM	0.1398	0.000219	0.646	0.024786
2 MCBOOT	0.1398	0.000219	0.6462	0.024786
2 REG	0.1398	0.000219	0.6492	0.024786
3  EM	0.0094	0.000219	0.9308	0.024786
3  MCEM	0.0094	0.000219	0.9313	0.024786
3 MCBOOT	0.0094	0.000219	0.9303	0.024786
3 REG	0.0094	0.000219	0.9293	0.024786
4 EM	0.0128	0.000219	0.9427	0.024786
4 MCEM	0.013	0.000219	0.9472	0.024786
4 MCBOOT	0.013	0.000219	0.9428	0.024786
4 REG	0.0129	0.000219	0.9413	0.024786
5 EM	0.1167	0.000219	0.6393	0.024786
5 MCEM 5 MCBOOT	$0.1167 \\ 0.1166$	$0.000219 \\ 0.000219$	$0.6408 \\ 0.6397$	$0.024786 \\ 0.024786$
5 REG	0.1160 $0.1167$	0.000219 $0.000219$	0.6387	0.024786
6 EM	0.1107 $0.1414$	0.000219 $0.000219$	0.0364	0.024786
6 MCEM	0.1414	0.000219	0.6388	0.024786
6 MCBOOT	0.1414	0.000219	0.6405	0.024786
6 REG	0.1414	0.000219	0.6405	0.024786
$7~\mathrm{EM}$	-0.0911	0.000219	0.641	0.024786
7 MCEM	-0.091	0.000219	0.6393	0.024786
7 MCBOOT	-0.091	0.000219	0.6407	0.024786
7  REG	-0.091	0.000219	0.6427	0.024786
8 EM	0.041	0.000219	0.6833	0.024786
8 MCEM	0.0411	0.000219	0.6845	0.024786
8 MCBOOT	0.041	0.000219	0.6837	0.024786
8 REG SSIZE*OBSERVED	0.041	0.000219	0.688	0.024786
1000 X1	0.1498	9.5e <b>-</b> 005	0.35	0.010733
1000 X2	0.0006	9.5e-005	0.9803	0.010733
1000 X1X2	0.0012	9.5e <b>-</b> 005	0.9667	0.010733
5000 X1	0.1504	$9.5\mathrm{e}\text{-}005$	0.1912	0.010733
5000 X2	0.0005	$9.5\mathrm{e} ext{-}005$	0.968	0.010733
5000  X1X2	0.0006	$9.5\mathrm{e} ext{-}005$	0.9618	0.010733
SSIZE*METHOD				
1000 EM	0.0505	0.000109	0.7649	0.012393
1000 MCEM 1000 MCBOOT	0.0506	0.000109	0.7661	0.012393
1000 MCBOO1 1000 REG	$0.0505 \\ 0.0505$	$0.000109 \\ 0.000109$	$0.7652 \\ 0.7665$	0.012393 $0.012393$
5000 EM	0.0505	0.000109 $0.000109$	0.7003 $0.7072$	0.012393 $0.012393$
5000 MCEM	0.0506	0.000109	0.7072	0.012393 $0.012393$
5000 MCBOOT	0.0505	0.000109	0.7067	0.012393
5000 REG	0.0505	0.000109	0.7068	0.012393
OBSERVED*METHOD				
X1 EM	0.1501	0.000134	0.2706	0.015178
X1 MCEM	0.1501	0.000134	0.2712	0.015178
X1 MCBOOT	0.1501	0.000134	0.2696	0.015178
X1 REG	0.1501	0.000134	0.271	0.015178
X2 EM	0.0006	0.000134	0.9734	0.015178
X2 MCEM X2 MCBOOT	0.0007	0.000134	$0.9738 \\ 0.9744$	0.015178
X2 MCBOOT X2 REG	$0.0005 \\ 0.0005$	$0.000134 \\ 0.000134$	$0.9744 \\ 0.9751$	$0.015178 \\ 0.015178$
X1X2 EM	0.0003	0.000134 $0.000134$	0.9642	0.015178 $0.015178$
X1X2 MCEM	0.0009	0.000134 $0.000134$	0.9649	0.015178 $0.015178$
X1X2 MCBOOT	0.0009	0.000134	0.9639	0.015178
X1X2 REG	0.0009	0.000134	0.9639	0.015178

 $\textbf{Table X:} \ \text{Case 2, Analysis of Variance for } \textit{MeanBias}, \ \text{using Adjusted SS for Tests}.$ 

Source	DF	Seq SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	0.09516	0.09516	0.013594	116.96	0
SSIZE	1	1.4e-006	1.4 e - 006	1.4e-006	0.01	0.914
OBSERVED	1	0.011816	0.011816	0.011816	101.66	0
SITAVIO1	1	0.21758	0.21758	0.21758	1872.03	0
METHOD	3	1e-007	1e-007	0	0	1
COVSTR*SSIZE	7	5.5 e - 005	$5.5\mathrm{e} ext{-}005$	7.9e-006	0.07	1
COVSTR*OBSERVED	7	0.022637	0.022637	0.0032339	27.82	0
COVSTR*SITAVIO1	7	0.095158	0.095158	0.013594	116.96	0
COVSTR*METHOD	21	7e-007	7e-007	0	0	1
SSIZE*OBSERVED	1	2.2e-006	2.2e-006	2.2e-006	0.02	0.892
SSIZE*SITAVIO1	1	$1.56 \mathrm{e}\text{-}005$	$1.56 \mathrm{e}\text{-}005$	$1.56 \mathrm{e}\text{-}005$	0.13	0.715
SSIZE*METHOD	3	1e-007	1e-007	0	0	1
OBSERVED*SITAVIO1	1	0.012395	0.012395	0.012395	106.64	0
OBSERVED*METHOD	3	2e-007	2e-007	1e-007	0	1
SITAVIO1*METHOD	3	1e-007	1e-007	0	0	1
Error	188	0.02185	0.02185	0.0001162		
Total	255	0.47667				

Table XI: Case 2, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$\mathrm{DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	Ρ
COVSTR	7	2.5873	2.5873	0.36962	28.38	0
SSIZE	1	2.9247	2.9247	2.9247	224.56	0
OBSERVED	1	0.03593	0.03593	0.03593	2.76	0.098
SITAVIO1	1	10.5556	10.5556	10.5556	810.44	0
METHOD	3	3e-005	3e-005	1e-005	0	1
COVSTR*SSIZE	7	0.48187	0.48187	0.06884	5.29	0
COVSTR*OBSERVED	7	1.7155	1.7155	0.24507	18.82	0
COVSTR*SITAVIO1	7	2.5473	2.5473	0.3639	27.94	0
COVSTR*METHOD	21	0.00061	0.00061	3e-005	0	1
SSIZE*OBSERVED	1	0.00694	0.00694	0.00694	0.53	0.466
SSIZE*SITAVIO1	1	2.6939	2.6939	2.6939	206.83	0
SSIZE*METHOD	3	$4\mathrm{e}\text{-}005$	$4\mathrm{e}\text{-}005$	1e-005	0	1
OBSERVED*SITAVIO1	1	0.01209	0.01209	0.01209	0.93	0.337
OBSERVED*METHOD	3	1e-005	$1\mathrm{e}\text{-}005$	0	0	1
SITAVIO1*METHOD	3	6e-005	6e-005	$2\mathrm{e}\text{-}005$	0	1
Error	188	2.4486	2.4486	0.01302		
Total	255	26.0106				

**Table XII:** Case 2, means and standard errors (SE) of 1st and 2nd order effects on MeanBias and Clevel across the other factors.

1	Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
Company	COVSTR				
3					
1					
5         -0.00143         0.001906         0.74234         0.020175           6         0.02393         0.001906         0.74234         0.020175           7         0.04414         0.001906         0.91659         0.020175           8         0.01322         0.001906         0.91659         0.020175           SSIZE         1000         0.02997         0.000953         0.65925         0.010087           5000         0.02997         0.000953         0.65925         0.010087           X1X2         0.03669         0.000953         0.75429         0.010087           X1X2         0.03669         0.000953         0.75429         0.010087           X1X2         0.05905         0.000953         0.75429         0.010087           Y         0.05905         0.000953         0.56308         0.010087           METHOD         EM         0.02989         0.001348         0.76603         0.014266           MCBM         0.02993         0.001348         0.76602         0.014266           REG         0.02986         0.001348         0.76652         0.014266           COVSTR*SSIZE         0.02695         0.84863         0.028531         1 5000         0.05					
6         0.02393         0.001906         0.74234         0.020175           7         0.04141         0.001906         0.62344         0.020175           SSIZE         0.01322         0.001906         0.91659         0.020175           SSIZE         0.000953         0.87302         0.010087           5000         0.02997         0.000953         0.65925         0.010087           OBSERVED         X2         0.03669         0.000953         0.77798         0.010087           X1X2         0.0231         0.000953         0.75429         0.010087           SITAVIO1         0.00074         0.000953         0.56308         0.010087           Y         0.05905         0.000953         0.56308         0.010087           MCHOD         0.02999         0.001348         0.76603         0.0104266           MCEM         0.02993         0.001348         0.76603         0.014266           COVSTR*SSIZE         1         1000         0.05294         0.002695         0.84863         0.02853           1         1000         0.05224         0.002695         0.84863         0.028531           2         5000         0.01445         0.002695         0.89444					
7         0.04414         0.001906         0.62344         0.020175           8         0.01322         0.001906         0.91659         0.020175           SSIZE         1000         0.02997         0.000953         0.87302         0.010087           5000         0.02997         0.000953         0.65925         0.010087           VA         0.03669         0.000953         0.77498         0.010087           X1X2         0.0395         0.000953         0.75429         0.010087           STTAVIO1         N         0.00074         0.000953         0.9692         0.010087           METHOD         EM         0.02998         0.001348         0.76603         0.014266           MCEM         0.02993         0.001348         0.76603         0.014266           REG         0.02986         0.001348         0.76662         0.014266           COVSTR*SSIZE         1         1         0.00         0.05294         0.002695         0.84863         0.028531           1 5000         0.01485         0.002695         0.85281         0.028531           2 1000         0.01485         0.002695         0.85281         0.028531           3 5000         0.03387 <td></td> <td></td> <td></td> <td></td> <td></td>					
SSIZE         University of the content of the co					
SSIZE					
1000		0.01322	0.001906	0.91659	0.020175
5000         0.02997         0.000953         0.65925         0.010087           VA         0.03669         0.000953         0.77798         0.010087           X1X2         0.0231         0.000953         0.75429         0.010087           SITAVIO1         0.00074         0.000953         0.9692         0.010087           Y         0.05905         0.000953         0.56308         0.010087           METHOD         EM         0.02989         0.001348         0.76603         0.014266           MCEM         0.02993         0.001348         0.7667         0.014266           MCBOOT         0.02999         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7667         0.014266           COVSTR*SSIZE         1         1         1         0.002695         0.81863         0.02851           1         1         0.00         0.05309         0.002695         0.81863         0.028531           1         1         0.00         0.01485         0.002695         0.81863         0.028531           2         1         0.00         0.01485         0.002695         0.85281         0.028531					
Name					
X1X2		0.02997	0.000953	0.65925	0.010087
N					
SITAVIO1   N					
N         0.00074         0.009953         0.9692         0.010087           Y         0.05905         0.000953         0.56308         0.010087           METHOD         EM         0.02989         0.001348         0.76602         0.014266           MCEM         0.02993         0.001348         0.76602         0.014266           MCBOOT         0.02986         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         T         0.002695         0.84863         0.028531           1 5000         0.05224         0.002695         0.5587         0.028531           2 1000         0.01485         0.002695         0.95587         0.028531           3 1000         0.03387         0.002695         0.69131         0.028531           3 1000         0.03588         0.002695         0.69131         0.028531           4 1000         0.05664         0.002695         0.69131         0.028531           4 5000         0.05662         0.002695         0.6981         0.028531           5 1000         -0.00201         0.002695         0.6981         0.028531		0.0231	0.000953	0.75429	0.010087
Y         0.05905         0.000953         0.56308         0.010087           METHOD         EM         0.02989         0.001348         0.76603         0.014266           MCEM         0.02993         0.001348         0.76602         0.014266           MCBOOT         0.02996         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         1         1000         0.05309         0.002695         0.84863         0.028531           1         5000         0.05224         0.002695         0.517         0.028531           2         5000         0.01454         0.002695         0.55281         0.028531           3         1000         0.03387         0.002695         0.85281         0.028531           3         1000         0.03588         0.002695         0.89444         0.028531           4         1000         0.05664         0.002695         0.89131         0.028531           4         1000         0.05662         0.002695         0.503         0.028531           5         1000         -0.00084         0.002695         0.5931         0.028531					
METHOD         EM         0.02989         0.001348         0.76603         0.014266           MCEM         0.02993         0.001348         0.76602         0.014266           MCBOT         0.02996         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         1         1000         0.05309         0.002695         0.84863         0.028531           1         5000         0.05224         0.002695         0.517         0.028531           2         5000         0.01485         0.002695         0.95587         0.028531           3         1000         0.03388         0.002695         0.85281         0.028531           3         1000         0.03588         0.002695         0.89444         0.028531           4         1000         0.03588         0.002695         0.89444         0.028531           4         1000         0.05664         0.002695         0.89311         0.028531           4         1000         0.05662         0.002695         0.503         0.028531           5         5000         -0.00201         0.002695         0.69681					
EM         0.02989         0.001348         0.76603         0.014266           MCEM         0.02993         0.001348         0.76602         0.014266           MCBOOT         0.02986         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         0.002695         0.84863         0.028531           1 5000         0.05224         0.002695         0.517         0.028531           2 5000         0.0154         0.002695         0.95587         0.028531           3 1000         0.03387         0.002695         0.85281         0.028531           3 5000         0.03588         0.002695         0.89444         0.028531           4 1000         0.05664         0.002695         0.89444         0.028531           4 5000         0.05662         0.002695         0.503         0.028531           5 1000         -0.0084         0.002695         0.503         0.028531           5 5000         -0.00201         0.002695         0.69681         0.028531           6 1000         0.02490         0.002695         0.65813         0.028531           7 5000         0.043		0.05905	0.000953	0.56308	0.010087
MCEM         0.02993         0.001348         0.76602         0.014266           MCBOOT         0.0299         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         1         1000         0.05309         0.002695         0.84863         0.028531           1         5000         0.01485         0.002695         0.95587         0.028531           2         5000         0.0154         0.002695         0.85281         0.028531           3         1000         0.03387         0.002695         0.89444         0.028531           3         5000         0.03588         0.002695         0.89131         0.028531           4         1000         0.05664         0.002695         0.89131         0.028531           4         5000         0.05662         0.002695         0.8931         0.028531           5         5000         -0.05662         0.002695         0.8931         0.028531           5         5000         -0.00201         0.002695         0.8981         0.028531           6         5000         0.024499         0.002695         0.65813					
MCBOOT         0.0299         0.001348         0.7667         0.014266           REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE					
REG         0.02986         0.001348         0.7658         0.014266           COVSTR*SSIZE         1 1000         0.05309         0.002695         0.84863         0.028531           1 5000         0.05224         0.002695         0.517         0.028531           2 1000         0.01485         0.002695         0.9587         0.028531           2 5000         0.0154         0.002695         0.85281         0.028531           3 1000         0.03387         0.002695         0.89144         0.028531           4 1000         0.05664         0.002695         0.89131         0.028531           4 5000         0.05664         0.002695         0.83425         0.028531           4 5000         0.05662         0.002695         0.89931         0.028531           5 1000         -0.00084         0.002695         0.89931         0.028531           5 5000         -0.00201         0.002695         0.89931         0.028531           6 1000         0.02409         0.002695         0.89931         0.028531           7 1000         0.04395         0.002695         0.65813         0.028531           7 5000         0.04432         0.002695         0.76119         0.028531					
COVSTR*SSIZE					
1 1000       0.05309       0.002695       0.84863       0.028531         1 5000       0.05224       0.002695       0.517       0.028531         2 1000       0.01485       0.002695       0.95587       0.028531         2 5000       0.0154       0.002695       0.85281       0.028531         3 1000       0.03387       0.002695       0.89444       0.028531         3 5000       0.03588       0.002695       0.69131       0.028531         4 1000       0.05664       0.002695       0.83425       0.028531         4 5000       0.05662       0.002695       0.503       0.028531         5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.89931       0.028531         6 5000       0.02409       0.002695       0.89681       0.028531         7 1000       0.04395       0.002695       0.5813       0.028531         7 5000       0.04432       0.002695       0.48569       0.028531         8 1000       0.01291       0.002695       0.6934       0.028531         1 X2       0.05768       0.002695       0.6934       0.028531 <t< td=""><td></td><td>0.02986</td><td>0.001348</td><td>0.7658</td><td>0.014266</td></t<>		0.02986	0.001348	0.7658	0.014266
1 5000         0.05224         0.002695         0.517         0.028531           2 1000         0.01485         0.002695         0.95587         0.028531           2 5000         0.0154         0.002695         0.85281         0.028531           3 1000         0.03387         0.002695         0.89444         0.028531           4 1000         0.05664         0.002695         0.83425         0.028531           4 5000         0.05662         0.002695         0.503         0.028531           5 5000         -0.0084         0.002695         0.89931         0.028531           5 5000         -0.00201         0.002695         0.89931         0.028531           6 1000         0.02409         0.002695         0.89931         0.028531           6 5000         0.02377         0.002695         0.8681         0.028531           7 5000         0.04432         0.002695         0.76119         0.028531           8 5000         0.01291         0.002695         0.89692         0.028531           1 X2         0.05768         0.002695         0.86925         0.028531           1 X1X2         0.04765         0.002695         0.8919         0.028531           2		0.05000		0.01000	
2 1000       0.01485       0.002695       0.95587       0.028531         2 5000       0.0154       0.002695       0.85281       0.028531         3 1000       0.03387       0.002695       0.89444       0.028531         3 5000       0.03588       0.002695       0.69131       0.028531         4 1000       0.05664       0.002695       0.83425       0.028531         4 5000       0.05662       0.002695       0.503       0.028531         5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.69681       0.028531         6 1000       0.02409       0.002695       0.65813       0.028531         6 5000       0.02377       0.002695       0.65813       0.028531         7 5000       0.044395       0.002695       0.48569       0.028531         8 1000       0.014395       0.002695       0.48569       0.028531         8 5000       0.01291       0.002695       0.48569       0.028531         1 X2       0.05768       0.002695       0.65944       0.028531         1 X1X2       0.04765       0.002695       0.6038       0.028531					
2 5000         0.0154         0.002695         0.85281         0.028531           3 1000         0.03387         0.002695         0.89444         0.028531           3 5000         0.03588         0.002695         0.69131         0.028531           4 1000         0.05664         0.002695         0.83425         0.028531           4 5000         0.05662         0.002695         0.89931         0.028531           5 1000         -0.00084         0.002695         0.89931         0.028531           5 5000         -0.00201         0.002695         0.69681         0.028531           6 1000         0.02409         0.002695         0.69681         0.028531           6 5000         0.02377         0.002695         0.65813         0.028531           7 1000         0.04395         0.002695         0.76119         0.028531           8 1000         0.01432         0.002695         0.48569         0.028531           8 5000         0.01291         0.002695         0.48569         0.028531           COVSTR*OBSERVED         1         X2         0.04765         0.002695         0.65944         0.028531           1 X1X2         0.04765         0.002695         0.7619					
3 1000       0.03387       0.002695       0.89444       0.028531         3 5000       0.03588       0.002695       0.69131       0.028531         4 1000       0.05664       0.002695       0.83425       0.028531         4 5000       0.05662       0.002695       0.503       0.028531         5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.69681       0.028531         6 1000       0.02409       0.002695       0.69681       0.028531         6 5000       0.02377       0.002695       0.65813       0.028531         7 5000       0.04395       0.002695       0.76119       0.028531         8 1000       0.01291       0.002695       0.48569       0.028531         8 5000       0.01352       0.002695       0.6934       0.028531         COVSTR*OBSERVED       1 X2       0.04765       0.002695       0.65944       0.028531         1 X1X2       0.04765       0.002695       0.70619       0.028531         2 X2       0.0165       0.002695       0.89219       0.028531         3 X1X2       0.015687       0.002695       0.66038       0.02853					
3 5000       0.03588       0.002695       0.69131       0.028531         4 1000       0.05664       0.002695       0.83425       0.028531         4 5000       0.05662       0.002695       0.503       0.028531         5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.69681       0.028531         6 1000       0.02409       0.002695       0.82656       0.028531         6 5000       0.02377       0.002695       0.65813       0.028531         7 1000       0.04395       0.002695       0.76119       0.028531         7 5000       0.04432       0.002695       0.48569       0.028531         8 1000       0.01291       0.002695       0.48569       0.028531         8 5000       0.01352       0.002695       0.86925       0.028531         2 X1       2       0.05768       0.002695       0.65944       0.028531         1 X1X2       0.04765       0.002695       0.89219       0.028531         2 X1X2       0.01375       0.002695       0.9165       0.028531         3 X1X2       0.015687       0.002695       0.66038       0.028531					
4 1000       0.05664       0.002695       0.83425       0.028531         4 5000       0.05662       0.002695       0.503       0.028531         5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.69681       0.028531         6 1000       0.02409       0.002695       0.82656       0.028531         6 5000       0.02377       0.002695       0.65813       0.028531         7 5000       0.04395       0.002695       0.76119       0.028531         8 1000       0.01291       0.002695       0.48569       0.028531         8 5000       0.01352       0.002695       0.86925       0.028531         COVSTR*OBSERVED       1 X2       0.05768       0.002695       0.65944       0.028531         1 X1X2       0.04765       0.002695       0.70619       0.028531         2 X2       0.0165       0.002695       0.89219       0.028531         3 X2       0.01375       0.002695       0.9165       0.028531         3 X1X2       0.01289       0.002695       0.66038       0.028531         4 X1X2       0.05742       0.002695       0.66038       0.028531 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
5 1000       -0.00084       0.002695       0.89931       0.028531         5 5000       -0.00201       0.002695       0.69681       0.028531         6 1000       0.02409       0.002695       0.82656       0.028531         6 5000       0.02377       0.002695       0.65813       0.028531         7 1000       0.04395       0.002695       0.76119       0.028531         7 5000       0.04432       0.002695       0.48569       0.028531         8 1000       0.01291       0.002695       0.96394       0.028531         8 5000       0.01352       0.002695       0.86925       0.028531         1 X2       0.05768       0.002695       0.65944       0.028531         2 X2       0.0165       0.002695       0.70619       0.028531         2 X1X2       0.01375       0.002695       0.89219       0.028531         3 X2       0.05687       0.002695       0.66038       0.028531         3 X1X2       0.01289       0.002695       0.66038       0.028531         4 X1X2       0.05742       0.002695       0.6366       0.028531         5 X1X2       0.01702       0.002695       0.89706       0.028531					
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.01302	0.002099	0.00929	0.020001
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.05768	0.002695	0.65944	0.028531
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
6 X1X2       0.03255       0.002695       0.58556       0.028531         7 X2       0.05587       0.002695       0.66113       0.028531         7 X1X2       0.03241       0.002695       0.58575       0.028531         8 X2       0.01682       0.002695       0.891       0.028531					
7 X2     0.05587     0.002695     0.66113     0.028531       7 X1X2     0.03241     0.002695     0.58575     0.028531       8 X2     0.01682     0.002695     0.891     0.028531					
7 X1X2       0.03241       0.002695       0.58575       0.028531         8 X2       0.01682       0.002695       0.891       0.028531					
8 X2 0.01682 0.002695 0.891 0.028531					
	8 X1X2	0.00961	0.002695	0.94219	0.028531

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*SITAVIO1				
1 N	0.00147	0.002695	0.97575	0.028531
1 Y	0.10386	0.002695	0.38988	0.028531
2 N	0.00036	0.002695	0.97044	0.028531
2 Y	0.02989	0.002695	0.83825	0.028531
3 N	0.00028	0.002695	0.9765	0.028531
3 Y	0.06947	0.002695	0.60925	0.028531
4 N	0.00172	0.002695	0.97637	0.028531
4 Y	0.11153	0.002695	0.36087	0.028531
5 N	0.00131	0.002695	0.95944	0.028531
5 Y	-0.00417	0.002695	0.63669	0.028531
6 N	0.00019	0.002695	0.95994	0.028531
6 Y	0.04767	0.002695	0.52475	0.028531
7 N	-0.00068	0.002695	0.96138	0.028531
7 Y	0.08896	0.002695	0.2855	0.028531
8 N	0.00127	0.002695	0.97375	0.028531
8 Y	0.02516	0.002695	0.85944	0.028531
COVSTR*METHOD				
1  EM	0.05271	0.003812	0.6855	0.040349
1 MCEM	0.05277	0.003812	0.68188	0.040349
1 MCBOOT	0.05264	0.003812	0.68588	0.040349
1  REG	0.05252	0.003812	0.678	0.040349
2  EM	0.0151	0.003812	0.90412	0.040349
2  MCEM	0.01512	0.003812	0.90262	0.040349
2 MCBOOT	0.01518	0.003812	0.90387	0.040349
2 REG	0.01509	0.003812	0.90675	0.040349
3  EM	0.03486	0.003812	0.79275	0.040349
3  MCEM	0.03489	0.003812	0.79238	0.040349
3 MCBOOT	0.03488	0.003812	0.79413	0.040349
3 REG	0.03489	0.003812	0.79225	0.040349
4  EM	0.05659	0.003812	0.6675	0.040349
4  MCEM	0.05663	0.003812	0.66975	0.040349
4 MCBOOT	0.05677	0.003812	0.66987	0.040349
4  REG	0.05652	0.003812	0.66737	0.040349
5  EM	-0.00146	0.003812	0.79988	0.040349
5 MCEM	-0.00139	0.003812	0.798	0.040349
5 MCBOOT	-0.00147	0.003812	0.7975	0.040349
5 REG	-0.00138	0.003812	0.79688	0.040349
6  EM	0.02395	0.003812	0.74125	0.040349
6  MCEM	0.02392	0.003812	0.74288	0.040349
6 MCBOOT	0.0239	0.003812	0.7425	0.040349
6 REG	0.02394	0.003812	0.74275	0.040349
7 EM	0.0441	0.003812	0.623	0.040349
7 MCEM	0.04423	0.003812	0.62238	0.040349
7 MCBOOT	0.04408	0.003812	0.62263	0.040349
7  REG	0.04415	0.003812	0.62575	0.040349
8 EM	0.01325	0.003812	0.91425	0.040349
8 MCEM	0.01323	0.003812	0.91825	0.040349
8 MCBOOT	0.01319	0.003812	0.91725	0.040349
8 REG	0.01319	0.003812	0.91662	0.040349
SSIZE*OBSERVED				
1000 X2	0.03652	0.001348	0.89008	0.014266
1000 X1X2	0.02312	0.001348	0.85597	0.014266
5000 X2	0.03685	0.001348	0.66589	0.014266
5000 X1X2	0.02308	0.001348	0.65261	0.014266
SSIZE*SITAVIO1				
1000 N	0.00091	0.001348	0.9735	0.014266
1000 Y	0.05873	0.001348	0.77255	0.014266
5000 N	0.00057	0.001348	0.96489	0.014266
5000 Y	0.05937	0.001348	0.35361	0.014266

SSIZE*METHOD         1000 EM         0.02979         0.001906         0.8725         0.020175           1000 MCEM         0.02984         0.001906         0.87331         0.020175           1000 MCBOOT         0.02985         0.001906         0.87325         0.020175           1000 REG         0.02981         0.001906         0.87303         0.020175           5000 EM         0.02998         0.001906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.65872         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         X2 N         0.0098         0.001348         0.97417         0.014266           X1X2 N         0.0098         0.001348         0.97417         0.014266           X1X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77844         0.020175           X1X2 EM         0.03668         0.001906 <th>Effect</th> <th>MeanBias</th> <th>SE MeanBias</th> <th>Clevel</th> <th>SE Clevel</th>	Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
1000 MCEM         0.02984         0.001906         0.87331         0.020175           1000 MCBOOT         0.02985         0.001906         0.87325         0.020175           1000 REG         0.02981         0.001906         0.87303         0.020175           5000 EM         0.02998         0.001906         0.65956         0.020175           5000 MCEM         0.03002         0.001906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.65856         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         X2 N         0.00058         0.001348         0.97417         0.014266           X1X2 N         0.00091         0.001348         0.9417         0.014266           X1X2 Y         0.0453         0.001348         0.96422         0.014266           X1X2 Y         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X1X2 REG         0.03664         0.001906         0.7544	SSIZE*METHOD				
1000 MCBOOT         0.02985         0.001906         0.87325         0.020175           1000 REG         0.02981         0.001906         0.87303         0.020175           5000 EM         0.02998         0.001906         0.65956         0.020175           5000 MCEM         0.03002         0.001906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.66816         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         X2 Y         0.00058         0.001348         0.97417         0.014266           X1X2 N         0.0028         0.001348         0.97417         0.014266           X1X2 Y         0.0453         0.001348         0.96422         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77844         0.020175           X2 REG         0.03664         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447	1000  EM	0.02979	0.001906	0.8725	0.020175
1000 REG         0.02981         0.001906         0.87303         0.020175           5000 EM         0.02998         0.001906         0.65956         0.020175           5000 MCEM         0.03002         0.001906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.66016         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         0.00058         0.001348         0.97417         0.014266           X1X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77844         0.020175           X2 REG         0.03664         0.001906         0.77784         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175 <td><math>1000 \mathrm{\ MCEM}</math></td> <td>0.02984</td> <td>0.001906</td> <td>0.87331</td> <td>0.020175</td>	$1000 \mathrm{\ MCEM}$	0.02984	0.001906	0.87331	0.020175
5000 EM         0.02998         0.001906         0.65956         0.020175           5000 MCEM         0.03002         0.001906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.66016         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         Var         0.00058         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 Y         0.00091         0.001348         0.54436         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 REG         0.03664         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497	1000  MCBOOT	0.02985	0.001906	0.87325	0.020175
5000 MCEM         0.03002         0.01906         0.65872         0.020175           5000 MCBOOT         0.02995         0.001906         0.66016         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         VARIAGE         VARIAGE         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 Y         0.00091         0.001348         0.54436         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         VARIAGE         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCEM         0.03664         0.001906         0.77844         0.020175           X1 REG         0.03668         0.001906         0.77844         0.020175           X1X2 MCEM         0.02312         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75	1000  REG	0.02981	0.001906	0.87303	0.020175
5000 MCBOOT         0.02995         0.001906         0.66016         0.020175           5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         V         V         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         2 EM         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75447         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           X1X2 REG         0.02075 <t< td=""><td>5000  EM</td><td>0.02998</td><td>0.001906</td><td>0.65956</td><td>0.020175</td></t<>	5000  EM	0.02998	0.001906	0.65956	0.020175
5000 REG         0.02992         0.001906         0.65856         0.020175           OBSERVED*SITAVIO1         X2 N         0.00058         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 N         0.00091         0.001348         0.54436         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         V         V         V         V         0.02175         0.02175         0.020175         V         V         0.02175         0.020175         0.020175         0.020175         V         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175         0.020175	$5000~\mathrm{MCEM}$	0.03002	0.001906	0.65872	0.020175
OBSERVED*SITAVIO1           X2 N         0.00058         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 N         0.00091         0.001348         0.96422         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V<	5000  MCBOOT	0.02995	0.001906	0.66016	0.020175
X2 N         0.00058         0.001348         0.97417         0.014266           X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 N         0.00091         0.001348         0.96422         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         VARIAGE         VARIAGE         0.001906         0.77759         0.020175           X2 EM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75497         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           N MCH         0.00074         0.001906         0.96878	5000  REG	0.02992	0.001906	0.65856	0.020175
X2 Y         0.0728         0.001348         0.5818         0.014266           X1X2 N         0.00091         0.001348         0.96422         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         0.001906         0.77759         0.020175           X2 EM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCBOOT         0.02312         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N         N         0.001906         0.96878         0.020175           N MCEM         0.00094         0.001906         0.96934         0.02	OBSERVED*SITAVIO1				
X1X2 N         0.00091         0.001348         0.96422         0.014266           X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         V         V         V           X2 EM         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X1 REG         0.03668         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCBOOT         0.02312         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N         EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00073         0.001906         0.96934	X2 N	0.00058	0.001348	0.97417	0.014266
X1X2 Y         0.0453         0.001348         0.54436         0.014266           OBSERVED*METHOD         V         V         V           X2 EM         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCBOOT         0.02312         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N         N         MCEM         0.00094         0.001906         0.96878         0.020175           N MCEM         0.00073         0.001906         0.96934         0.020175           N REG         0.00069         0.001906         0.96947	X2 Y	0.0728	0.001348	0.5818	0.014266
OBSERVED*METHOD           X2 EM         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77784         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N         N         M         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N MCBOOT         0.00073         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56422         0.020175	X1X2 N	0.00091	0.001348	0.96422	0.014266
X2 EM         0.0367         0.001906         0.77759         0.020175           X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77844         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N REG         0.00073         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56422         0.020175	X1X2 Y	0.0453	0.001348	0.54436	0.014266
X2 MCEM         0.03674         0.001906         0.77806         0.020175           X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77784         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N REG         0.00073         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56422         0.020175	OBSERVED*METHOD				
X2 MCBOOT         0.03664         0.001906         0.77844         0.020175           X2 REG         0.03668         0.001906         0.77784         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N REG         0.00073         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X2 EM	0.0367	0.001906	0.77759	0.020175
X2 REG         0.03668         0.001906         0.77784         0.020175           X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         N         N         M         0.000974         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N REG         0.00073         0.001906         0.96919         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X2 MCEM	0.03674	0.001906	0.77806	0.020175
X1X2 EM         0.02308         0.001906         0.75447         0.020175           X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         V         V         V         V           N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N REG         0.00073         0.001906         0.96919         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X2 MCBOOT	0.03664	0.001906	0.77844	0.020175
X1X2 MCEM         0.02312         0.001906         0.75397         0.020175           X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         V         V         V         V           N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N MCBOOT         0.00073         0.001906         0.96919         0.020175           N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X2 REG	0.03668	0.001906	0.77784	0.020175
X1X2 MCBOOT         0.02315         0.001906         0.75497         0.020175           X1X2 REG         0.02305         0.001906         0.75375         0.020175           SITAVIO1*METHOD         V         V         V           N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N MCBOOT         0.00073         0.001906         0.96919         0.020175           N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X1X2 EM	0.02308	0.001906	0.75447	0.020175
X1X2 REG       0.02305       0.001906       0.75375       0.020175         SITAVIO1*METHOD       V       V       V         N EM       0.00074       0.001906       0.96878       0.020175         N MCEM       0.00081       0.001906       0.96934       0.020175         N MCBOOT       0.00073       0.001906       0.96919       0.020175         N REG       0.00069       0.001906       0.96947       0.020175         Y EM       0.05904       0.001906       0.56328       0.020175         Y MCEM       0.05904       0.001906       0.56269       0.020175         Y MCBOOT       0.05907       0.001906       0.56422       0.020175	X1X2 MCEM	0.02312	0.001906	0.75397	0.020175
SITAVIO1*METHOD         N EM       0.00074       0.001906       0.96878       0.020175         N MCEM       0.00081       0.001906       0.96934       0.020175         N MCBOOT       0.00073       0.001906       0.96919       0.020175         N REG       0.00069       0.001906       0.96947       0.020175         Y EM       0.05904       0.001906       0.56328       0.020175         Y MCEM       0.05904       0.001906       0.56269       0.020175         Y MCBOOT       0.05907       0.001906       0.56422       0.020175	X1X2 MCBOOT	0.02315	0.001906	0.75497	0.020175
N EM         0.00074         0.001906         0.96878         0.020175           N MCEM         0.00081         0.001906         0.96934         0.020175           N MCBOOT         0.00073         0.001906         0.96919         0.020175           N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	X1X2 REG	0.02305	0.001906	0.75375	0.020175
N MCEM         0.00081         0.001906         0.96934         0.020175           N MCBOOT         0.00073         0.001906         0.96919         0.020175           N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	SITAVIO1*METHOD				
N MCBOOT         0.00073         0.001906         0.96919         0.020175           N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	N EM	0.00074	0.001906	0.96878	0.020175
N REG         0.00069         0.001906         0.96947         0.020175           Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	N MCEM	0.00081	0.001906	0.96934	0.020175
Y EM         0.05904         0.001906         0.56328         0.020175           Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	N MCBOOT	0.00073	0.001906	0.96919	0.020175
Y MCEM         0.05904         0.001906         0.56269         0.020175           Y MCBOOT         0.05907         0.001906         0.56422         0.020175	N REG	0.00069	0.001906	0.96947	0.020175
Y MCBOOT 0.05907 0.001906 0.56422 0.020175	Y EM	0.05904	0.001906	0.56328	0.020175
	Y MCEM	0.05904	0.001906	0.56269	0.020175
Y REG 0.05904 0.001906 0.56213 0.020175	Y MCBOOT	0.05907	0.001906	0.56422	0.020175
	Y REG	0.05904	0.001906	0.56213	0.020175

**Table XIII:** Case 3, Analysis of Variance for *MeanBias*, using Adjusted SS for Tests.

Source	$_{ m DF}$	$\operatorname{Seq}\operatorname{SS}$	$\operatorname{Adj} \operatorname{SS}$	Adj MS	F	Р
COVSTR	7	0.0001304	0.0001304	1.86e-005	17.7	0
SSIZE	1	9e-007	9e-007	9e-007	0.86	0.356
OBSERVED	1	0	0	0	0.01	0.925
SITAVIO2	1	2.4e-005	$2.4\mathrm{e}\text{-}005$	2.4e-005	22.76	0
METHOD	3	0	0	0	0.01	0.999
COVSTR*SSIZE	7	6.91 e-005	$6.91 \mathrm{e}\text{-}005$	9.9e-006	9.37	0
COVSTR*OBSERVED	7	$2.67\mathrm{e}\text{-}005$	$2.67\mathrm{e}\text{-}005$	3.8e-006	3.62	0.001
COVSTR*SITAVIO2	7	0.0001206	0.0001206	1.72 e-005	16.37	0
COVSTR*METHOD	21	1.1e-006	1.1e-006	1e-007	0.05	1
SSIZE*OBSERVED	1	2e-007	2e-007	2e-007	0.2	0.655
SSIZE*SITAVIO2	1	3.4e - 006	3.4 e - 006	3.4e-006	3.18	0.076
SSIZE*METHOD	3	1e-007	1e-007	0	0.03	0.993
OBSERVED*SITAVIO2	1	7.4e - 006	7.4 e - 006	7.4e-006	7.07	0.009
OBSERVED*METHOD	3	5e-007	5e-007	2e-007	0.16	0.921
SITAVIO2*METHOD	3	3e-007	3e-007	1e-007	0.1	0.962
Error	188	0.0001979	0.0001979	1.1e-006		
Total	255	0.0005827				

Table XIV: Case 3, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	0.0051599	0.0051599	0.0007371	24.77	0
SSIZE	1	0.012474	0.012474	0.012474	419.17	0
OBSERVED	1	0.0017378	0.0017378	0.0017378	58.4	0
SITAVIO2	1	0.0095918	0.0095918	0.0095918	322.31	0
METHOD	3	$3.85 \mathrm{e} \text{-} 005$	3.85 e - 005	1.28e-005	0.43	0.731
COVSTR*SSIZE	7	0.0016214	0.0016214	0.0002316	7.78	0
COVSTR*OBSERVED	7	0.0043029	0.0043029	0.0006147	20.66	0
COVSTR*SITAVIO2	7	0.0027006	0.0027006	0.0003858	12.96	0
COVSTR*METHOD	21	0.0002	0.0002	9.5 e - 006	0.32	0.998
SSIZE*OBSERVED	1	0.0008374	0.0008374	0.0008374	28.14	0
SSIZE*SITAVIO2	1	0.0018329	0.0018329	0.0018329	61.59	0
SSIZE*METHOD	3	9e-006	9e-006	3e-006	0.1	0.959
OBSERVED*SITAVIO2	1	0.0014393	0.0014393	0.0014393	48.36	0
OBSERVED*METHOD	3	8.89 e-005	8.89 e - 005	2.96 e - 005	1	0.396
SITAVIO2*METHOD	3	6.03 e-005	6.03 e - 005	$2.01 e{-}005$	0.68	0.568
Error	188	0.0055948	0.0055948	2.98e-005		
Total	255	0.04769				

**Table XV:** Case 3, means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	${\it MeanBias}$	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.001156	0.000181	0.96622	0.000964
2	0.000255	0.000181	0.96275	0.000964
3	-0.000692	0.000181	0.96962	0.000964
4	0.00163	0.000181	0.96731	0.000964
5	0.000415	0.000181	0.95969	0.000964
6	-0.000448	0.000181	0.95584	0.000964
7	0.000623	0.000181	0.95825	0.000964
8	0.000539	0.000181	0.96491	0.000964
SSIZE				
1000	0.000494	9.1e <b>-</b> 005	0.97006	0.000482
5000	0.000375	9.1e <b>-</b> 005	0.95609	0.000482
OBSERVED				
X2	0.000441	9.1e <b>-</b> 005	0.96568	0.000482
X1X2	0.000429	9.1e <b>-</b> 005	0.96047	0.000482
SITAVIO2				
N	0.000741	9.1e <b>-</b> 005	0.9692	0.000482
Y	0.000129	9.1e <b>-</b> 005	0.95695	0.000482
METHOD				
EM	0.000436	0.000128	0.96309	0.000682
MCEM	0.000446	0.000128	0.96244	0.000682
MCBOOT	0.000437	0.000128	0.96344	0.000682
REG	0.000419	0.000128	0.96333	0.000682
COVSTR*SSIZE				
1 1000	0.002083	0.000257	0.97325	0.001364
1 5000	0.000229	0.000257	0.95919	0.001364
2 1000	0.000214	0.000257	0.97088	0.001364
2 5000	0.000296	0.000257	0.95462	0.001364
3 1000	-0.00164	0.000257	0.97931	0.001364
3 5000	0.000255	0.000257	0.95994	0.001364
4 1000	0.002064	0.000257	0.97894	0.001364
4 5000	0.001195	0.000257	0.95569	0.001364
5 1000	0.000605	0.000257	0.96381	0.001364
5 5000	0.000225	0.000257	0.95556	0.001364
6 1000	-0.000593	0.000257	0.96	0.001364
6 5000	-0.000303	0.000257	0.95169	0.001364
7 1000	0.000953	0.000257	0.96413	0.001364
7 5000	0.000293	0.000257	0.95237	0.001364
8 1000	0.000266	0.000257	0.97013	0.001364
8 5000	0.000811	0.000257	0.95969	0.001364
COVSTR*OBSERVED				
1 X2	0.001335	0.000257	0.96581	0.001364
1 X1X2	0.000977	0.000257	0.96662	0.001364
2 X2	0.000233	0.000257	0.96319	0.001364
2 X1X2	0.000277	0.000257	0.96231	0.001364
3 X2	-0.001115	0.000257	0.96925	0.001364
3 X1X2	-0.00027	0.000257	0.97	0.001364
4 X2	0.001596	0.000257	0.96713	0.001364
4 X1X2	0.001663	0.000257	0.9675	0.001364
5 X2	0.000867	0.000257	0.96775	0.001364
5 X1X2	-3.7e-005	0.000257	0.95163	0.001364
6 X2	-0.000979	0.000257	0.96325	0.001364
6 X1X2	8.3e-005	0.000257	0.94844	0.001364
7 X2	0.000987	0.000257 $0.000257$	0.96625	0.001364
7 X1X2	0.000259	0.000257	0.95025	0.001364
8 X2	0.0006	0.000257	0.96281	0.001364
8 X1X2	0.000477	0.000257	0.967	0.001364
0 111112	0.000411	0.000201	0.501	0.001004

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*SITAVIO2				
1 N	0.001468	0.000257	0.97575	0.001364
1 Y	0.000844	0.000257	0.95669	0.001364
2 N	0.000357	0.000257	0.97044	0.001364
2 Y	0.000154	0.000257	0.95506	0.001364
3 N	0.000283	0.000257	0.9765	0.001364
3 Y	-0.001668	0.000257	0.96275	0.001364
4 N	0.001721	0.000257	0.97637	0.001364
4 Y	0.001538	0.000257	0.95825	0.001364
5 N	0.001314	0.000257	0.95944	0.001364
5 Y	-0.000485	0.000257	0.95994	0.001364
6 N	0.00019	0.000257	0.95994	0.001364
6 Y	-0.001087	0.000257	0.95175	0.001364
7 N	-0.00068	0.000257	0.96137	0.001364
7 Y	0.001927	0.000257	0.95513	0.001364
8 N	0.001271	0.000257	0.97375	0.001364
8 Y	-0.000193	0.000257	0.95606	0.001364
COVSTR*METHOD			_	_
1 EM	0.001171	0.000363	0.96713	0.001929
1 MCEM	0.001178	0.000363	0.96613	0.001929
1 MCBOOT	0.001224	0.000363	0.96662	0.001929
1 REG	0.001051	0.000363	0.965	0.001929
2 EM	0.000249	0.000363	0.96325	0.001929
2 MCEM	0.000249	0.000363	0.96037	0.001929
2 MCBOOT	0.000271	0.000363	0.96213	0.001929
2 REG	0.000251	0.000363	0.96525	0.001929
3 EM	-0.000648	0.000363	0.96925	0.001929
3 MCEM	-0.000677	0.000363	0.96913	0.001929
3 MCBOOT	-0.000767	0.000363	0.97075	0.001929
3 REG	-0.000677	0.000363	0.96937	0.001929
4 EM	0.001462	0.000363	0.96788	0.001929
4 MCEM	0.00164	0.000363	0.96737	0.001929
4 MCBOOT	0.00181	0.000363	0.96788	0.001929
4 REG	0.001607	0.000363	0.96613	0.001929
5 EM	0.000393	0.000363	0.95937	0.001929
5 MCEM	0.000475	0.000363	0.96	0.001929
5 MCBOOT	0.000349	0.000363	0.9595	0.001929
5 REG	0.000443	0.000363	0.95988	0.001929
6 EM 6 MCEM	-0.000394	0.000363	0.95588	0.001929
6 MCBOOT	-0.000468	0.000363 $0.000363$	0.954	0.001929
	-0.00039 -0.000541	0.000363	0.9575	$0.001929 \\ 0.001929$
6 REG 7 EM	0.000657	0.000363	$0.956 \\ 0.95813$	0.001929 $0.001929$
7 MCEM	0.000588	0.000363	0.95725	0.001929 $0.001929$
7 MCBOOT	0.00058	0.000363	0.95725 $0.95875$	0.001929 $0.001929$
7 REG	0.00059 $0.000658$	0.000363	0.95888	0.001929 $0.001929$
8 EM	0.000601	0.000363	0.96388	0.001929
8 MCEM	0.000584	0.000363	0.96525	0.001929
8 MCBOOT	0.000384 $0.000412$	0.000363	0.96437	0.001929
8 REG	0.000412 $0.000558$	0.000363	0.96613	0.001929
SSIZE*OBSERVED	0.000338	0.000303	0.90015	0.001929
1000 X2	0.000529	0.000128	0.97447	0.000682
1000 X2 1000 X1X2	0.000329 $0.000459$	0.000128	0.96564	0.000682 $0.000682$
5000 X1X2	0.000453	0.000128	0.95689	0.000682
5000 X2 5000 X1X2	0.000398	0.000128	0.9553	0.000682
SSIZE*SITAVIO2	0.000000	0.000140	0.2000	0.000002
1000 N	0.000914	0.000128	0.9735	0.000682
1000 N 1000 Y	7.4e-005	0.000128	0.96661	0.000682
5000 N	0.000567	0.000128	0.96489	0.000682
5000 Y	0.000307	0.000128	0.9473	0.000682
5500 1	0.000104	0.000120	0.0110	0.00000

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
SSIZE*METHOD				
1000  EM	0.000485	0.000181	0.97016	0.000964
1000  MCEM	0.000511	0.000181	0.96969	0.000964
1000 MCBOOT	0.000525	0.000181	0.97025	0.000964
1000  REG	0.000455	0.000181	0.97013	0.000964
5000  EM	0.000388	0.000181	0.95603	0.000964
$5000 \mathrm{\ MCEM}$	0.000381	0.000181	0.95519	0.000964
5000  MCBOOT	0.000349	0.000181	0.95662	0.000964
5000  REG	0.000382	0.000181	0.95653	0.000964
OBSERVED*SITAVIO2				
X2 N	0.000576	0.000128	0.97417	0.000682
X2 Y	0.000305	0.000128	0.95719	0.000682
X1X2 N	0.000905	0.000128	0.96422	0.000682
X1X2 Y	-4.8e-005	0.000128	0.95672	0.000682
OBSERVED*METHOD				
X2 EM	0.000496	0.000181	0.96503	0.000964
X2 MCEM	0.000472	0.000181	0.96459	0.000964
X2 MCBOOT	0.000375	0.000181	0.96684	0.000964
X2 REG	0.00042	0.000181	0.96625	0.000964
X1X2 EM	0.000377	0.000181	0.96116	0.000964
X1X2 MCEM	0.00042	0.000181	0.96028	0.000964
X1X2 MCBOOT	0.0005	0.000181	0.96003	0.000964
X1X2 REG	0.000417	0.000181	0.96041	0.000964
SITAVIO2*METHOD				
N EM	0.000736	0.000181	0.96878	0.000964
N MCEM	0.000808	0.000181	0.96934	0.000964
N MCBOOT	0.00073	0.000181	0.96919	0.000964
N REG	0.000688	0.000181	0.96947	0.000964
YEM	0.000136	0.000181	0.95741	0.000964
YMCEM	$8.4 \mathrm{e} \text{-} 005$	0.000181	0.95553	0.000964
Y MCBOOT	0.000145	0.000181	0.95769	0.000964
Y REG	0.000149	0.000181	0.95719	0.000964

Table XVI: Case 4, Analysis of Variance for MeanBias, using Adjusted SS for Tests.

Source

DF Seq SS Adj SS Adj MS F P

COVETB 7 6 1103 6 1103 0 87418 3485 92 0

Source	$_{ m DF}$	${ m Seq}~{ m SS}$	$\operatorname{Adj} \operatorname{SS}$	Adj MS	F	Р
COVSTR	7	6.1193	6.1193	0.87418	3485.92	0
SSIZE	1	1e-005	1e-005	1e-005	0.02	0.878
OBSERVED	2	4.7392	4.7392	2.3696	9449.11	0
SITAVIO1	1	0.22238	0.22238	0.22238	886.79	0
METHOD	3	0	0	0	0	1
COVSTR*SSIZE	7	6e-005	6e-005	1e-005	0.03	1
COVSTR*OBSERVED	14	13.9769	13.9769	0.99835	3981.05	0
COVSTR*SITAVIO1	7	0.04429	0.04429	0.00633	25.23	0
COVSTR*METHOD	21	0	0	0	0	1
SSIZE*OBSERVED	2	1e-005	1e-005	1e-005	0.02	0.977
SSIZE*SITAVIO1	1	0	0	0	0	0.946
SSIZE*METHOD	3	0	0	0	0	1
OBSERVED*SITAVIO1	2	0.00887	0.00887	0.00444	17.69	0
OBSERVED*METHOD	6	0	0	0	0	1
SITAVIO1*METHOD	3	0	0	0	0	1
Error	303	0.07598	0.07598	0.00025		
Total	383	25.1869				

Table XVII: Case 4, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	$\operatorname{Adj} \operatorname{MS}$	$\mathbf{F}$	P
COVSTR	7	2.9246	2.9246	0.4178	31.07	0
SSIZE	1	2.5614	2.5614	2.5614	190.45	0
OBSERVED	2	40.6479	40.6479	20.324	1511.15	0
SITAVIO1	1	3.7083	3.7083	3.7083	275.73	0
METHOD	3	3e-005	3e-005	1e-005	0	1
COVSTR*SSIZE	7	0.98517	0.98517	0.14074	10.46	0
COVSTR*OBSERVED	14	6.2546	6.2546	0.44676	33.22	0
COVSTR*SITAVIO1	7	1.1638	1.1638	0.16625	12.36	0
COVSTR*METHOD	21	0.0007	0.0007	3e-005	0	1
SSIZE*OBSERVED	2	0.01226	0.01226	0.00613	0.46	0.634
SSIZE*SITAVIO1	1	0.97869	0.97869	0.97869	72.77	0
SSIZE*METHOD	3	8e-005	8e-005	3e-005	0	1
OBSERVED*SITAVIO1	2	0.61488	0.61488	0.30744	22.86	0
OBSERVED*METHOD	6	0.00011	0.00011	2e-005	0	1
SITAVIO1*METHOD	3	2e-005	2e-005	1e-005	0	1
Error	303	4.0751	4.0751	0.01345		
Total	383	63.9278				

**Table XVIII:** Case 4, means and standard errors (SE) of 1st and 2nd order effects on MeanBias and Clevel across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR	0.0044	0.00000		0.040=00
1	0.0841	0.002286	0.5697	0.016739
2	0.2236	0.002286	0.6224	0.016739
3	0.0349	0.002286	0.7717	0.016739
4 5	0.0607	0.002286	$0.6926 \\ 0.5707$	$0.016739 \\ 0.016739$
6	$0.1746 \\ 0.2966$	0.002286 $0.002286$	0.5767 $0.5263$	0.016739 $0.016739$
7	-0.1486	0.002286	0.3203 $0.4777$	0.016739 $0.016739$
8	0.0869	0.002286	0.4777 $0.6237$	0.016739 $0.016739$
SSIZE	0.0009	0.002280	0.0207	0.010755
1000	0.1015	0.001143	0.6885	0.008369
5000	0.1017	0.001143	0.5252	0.008369
OBSERVED	0.1011	0.001110	0.0202	0.000000
X1	0.2586	0.0014	0.1473	0.01025
X2	0.0286	0.0014	0.8567	0.01025
X1X2	0.0176	0.0014	0.8166	0.01025
SITAVIO1				
N	0.0775	0.001143	0.7051	0.008369
Y	0.1257	0.001143	0.5086	0.008369
METHOD				
EM	0.1016	0.001616	0.6066	0.011836
MCEM	0.1016	0.001616	0.6066	0.011836
MCBOOT	0.1016	0.001616	0.6072	0.011836
REG	0.1016	0.001616	0.6071	0.011836
COVSTR*SSIZE				
1 1000	0.0843	0.003232	0.6775	0.023672
1 5000	0.0838	0.003232	0.462	0.023672
2 1000	0.2231	0.003232	0.6413	0.023672
2 5000	0.2241	0.003232	0.6034	0.023672
3 1000	0.035	0.003232	0.9104	0.023672
3 5000	0.0348	0.003232	0.6331	0.023672
4 1000	0.0598	0.003232	0.8591	0.023672
4 5000 5 1000	$0.0616 \\ 0.1747$	0.003232 $0.003232$	$0.5262 \\ 0.6215$	$0.023672 \\ 0.023672$
5 5000	0.1747 $0.1745$	0.003232 $0.003232$	0.0213 $0.52$	0.023672 $0.023672$
6 1000	0.2967	0.003232	0.589	0.023672
6 5000	0.2965	0.003232	0.4635	0.023672
7 1000	-0.1484	0.003232	0.568	0.023672
7 5000	-0.1488	0.003232	0.3874	0.023672
8 1000	0.0865	0.003232	0.6414	0.023672
8 5000	0.0872	0.003232	0.606	0.023672
COVSTR*OBSERVED				
1 X1	0.1707	0.003959	0.0921	0.028993
1 X2	0.0447	0.003959	0.7845	0.028993
1 X1X2	0.0367	0.003959	0.8325	0.028993
2 X1	0.6481	0.003959	0	0.028993
2 X2	0.0125	0.003959	0.9272	0.028993
2 X1X2	0.0102	0.003959	0.9399	0.028993
3 X1	0.0488	0.003959	0.5937	0.028993
3 X2	0.0446	0.003959	0.7859	0.028993
3 X1X2	0.0112	0.003959	0.9356	0.028993
4 X1	0.0972	0.003959	0.4926	0.028993
4 X2	0.0431	0.003959	0.7886	0.028993
4 X1X2	0.0419	0.003959	0.7967	0.028993
5 X1	0.5257	0.003959	0 0280	0.028993
5 X2 5 X1X2	0.0138 $-0.0158$	$0.003959 \\ 0.003959$	$0.9289 \\ 0.7833$	$0.028993 \\ 0.028993$
6 X1	-0.0158 $0.8523$	0.003959 $0.003959$	0.7833	0.028993 $0.028993$
6 X2	0.8323 $0.0125$	0.003959 $0.003959$	0.9286	0.028993 $0.028993$
6 X1X2	0.0125 $0.0251$	0.003959	0.6502	0.028993
7 X1	-0.5147	0.003959	0.0002	0.028993
7 X2	0.0443	0.003959	0.7841	0.028993
7 X1X2	0.0246	0.003959	0.649	0.028993
8 X1	0.2405	0.003959	0.0001	0.028993
8 X2	0.013	0.003959	0.9256	0.028993
8 X1X2	0.0072	0.003959	0.9453	0.028993

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*SITAVIO1	0.0478	0.003232	0.6978	0.023672
1 Y	0.0478 $0.1203$	0.003232 $0.003232$	0.0978 $0.4416$	0.023672 $0.023672$
2 N	0.201	0.003232	0.6427	0.023672 $0.023672$
2 Y	0.2462	0.003232 $0.003232$	0.602	0.023672 $0.023672$
3 N	0.0141	0.003232	0.8732	0.023672 $0.023672$
3 Y	0.0556	0.003232	0.6703	0.023672
4 N	0.0204	0.003232	0.8682	0.023672
4 Y	0.1011	0.003232	0.517	0.023672
5 N	0.1668	0.003232	0.642	0.023672
5 Y	0.1823	0.003232	0.4995	0.023672
6 N	0.2641	0.003232	0.6385	0.023672
6 Y	0.3291	0.003232	0.414	0.023672
7 N	-0.1689	0.003232	0.6376	0.023672
7 Y	-0.1283	0.003232	0.3178	0.023672
8 N	0.0749	0.003232	0.6409	0.023672
8 Y	0.0989	0.003232	0.6065	0.023672
COVSTR*METHOD				
1 EM	0.084	0.004571	0.569	0.033478
1 MCEM	0.0841	0.004571	0.5684	0.033478
1 MCBOOT	0.0842	0.004571	0.5687	0.033478
1 REG	0.0839	0.004571	0.5727	0.033478
2 EM	0.2236	0.004571	0.6228	0.033478
2 MCEM	0.2236	0.004571	0.6234	0.033478
2 MCBOOT 2 REG	0.2235	0.004571	$0.6223 \\ 0.621$	0.033478
2 REG 3 EM	$0.2237 \\ 0.0349$	$0.004571 \\ 0.004571$	0.621 $0.7738$	$0.033478 \\ 0.033478$
3 MCEM	0.0349 $0.0351$	0.004571 $0.004571$	0.7730 $0.7671$	0.033478
3 MCBOOT	0.0331 $0.0348$	0.004571 $0.004571$	0.7671 $0.7737$	0.033478
3 REG	0.0348	0.004571 $0.004571$	0.7723	0.033478
4 EM	0.0608	0.004571	0.691	0.033478
4 MCEM	0.0608	0.004571	0.6935	0.033478
4 MCBOOT	0.0607	0.004571	0.6937	0.033478
4 REG	0.0607	0.004571	0.6923	0.033478
$5~\mathrm{EM}$	0.1746	0.004571	0.5696	0.033478
5  MCEM	0.1746	0.004571	0.5724	0.033478
5 MCBOOT	0.1745	0.004571	0.5709	0.033478
5  REG	0.1746	0.004571	0.5701	0.033478
6  EM	0.2967	0.004571	0.5261	0.033478
6  MCEM	0.2965	0.004571	0.5252	0.033478
6 MCBOOT	0.2966	0.004571	0.5275	0.033478
6 REG	0.2967	0.004571	0.5263	0.033478
7 EM	-0.1486	0.004571	0.4767	0.033478
7 MCEM	-0.1486	0.004571	0.4788	0.033478
7 MCBOOT 7 REG	-0.1486	0.004571	0.4773	0.033478
8 EM	-0.1487	$0.004571 \\ 0.004571$	$0.4781 \\ 0.6242$	$0.033478 \\ 0.033478$
8 MCEM	$0.0869 \\ 0.087$	0.004571 $0.004571$	0.6242 $0.6237$	0.033478
8 MCBOOT	0.0868	0.004571 $0.004571$	0.6237 $0.6233$	0.033478
8 REG	0.0868	0.004571 $0.004571$	0.6236	0.033478 $0.033478$
SSIZE*OBSERVED	0.0000	0.001011	0.0200	0.000110
1000 X1	0.2583	0.001979	0.224	0.014496
1000 X2	0.0287	0.001979	0.9355	0.014496
1000 X1X2	0.0174	0.001979	0.9061	0.014496
5000 X1	0.2588	0.001979	0.0707	0.014496
5000 X2	0.0284	0.001979	0.7779	0.014496
5000  X1X2	0.0179	0.001979	0.727	0.014496
SSIZE*SITAVIO1				
1000 N	0.0774	0.001616	0.7363	0.011836
1000 Y	0.1256	0.001616	0.6407	0.011836
5000 N	0.0777	0.001616	0.6739	0.011836
5000 Y	0.1257	0.001616	0.3764	0.011836

Effect	${ m MeanBias}$	SE MeanBias	Clevel	SE Clevel
SSIZE*METHOD				_
1000  EM	0.1014	0.002286	0.689	0.016739
1000  MCEM	0.1015	0.002286	0.6883	0.016739
1000 MCBOOT	0.1014	0.002286	0.6885	0.016739
$1000~\mathrm{REG}$	0.1014	0.002286	0.6883	0.016739
$5000 \; \mathrm{EM}$	0.1018	0.002286	0.5242	0.016739
5000  MCEM	0.1017	0.002286	0.5249	0.016739
5000  MCBOOT	0.1017	0.002286	0.5258	0.016739
$5000~\mathrm{REG}$	0.1017	0.002286	0.5258	0.016739
OBSERVED*SITAVIO1				
X1 N	0.2322	0.001979	0.1932	0.014496
X1 Y	0.2849	0.001979	0.1015	0.014496
X2 N	0.0001	0.001979	0.9627	0.014496
X2 Y	0.057	0.001979	0.7506	0.014496
X1X2 N	0.0003	0.001979	0.9595	0.014496
X1X2 Y	0.035	0.001979	0.6736	0.014496
OBSERVED*METHOD				
X1 EM	0.2586	0.002799	0.1473	0.020501
X1 MCEM	0.2586	0.002799	0.1468	0.020501
X1 MCBOOT	0.2586	0.002799	0.1472	0.020501
X1 REG	0.2586	0.002799	0.148	0.020501
X2 EM	0.0286	0.002799	0.857	0.020501
X2 MCEM	0.0286	0.002799	0.8568	0.020501
X2 MCBOOT	0.0285	0.002799	0.8572	0.020501
X2 REG	0.0285	0.002799	0.8557	0.020501
X1X2 EM	0.0177	0.002799	0.8157	0.020501
X1X2 MCEM	0.0177	0.002799	0.816	0.020501
X1X2 MCBOOT	0.0176	0.002799	0.8171	0.020501
X1X2 REG	0.0176	0.002799	0.8175	0.020501
SITAVIO1*METHOD				
N EM	0.0776	0.002286	0.7047	0.016739
N MCEM	0.0776	0.002286	0.7051	0.016739
N MCBOOT	0.0775	0.002286	0.7052	0.016739
N REG	0.0775	0.002286	0.7055	0.016739
Y EM	0.1256	0.002286	0.5086	0.016739
Y MCEM	0.1257	0.002286	0.508	0.016739
Y MCBOOT	0.1256	0.002286	0.5091	0.016739
Y REG	0.1257	0.002286	0.5086	0.016739

 $\textbf{Table XIX:} \ \text{Case 5, Analysis of Variance for } \textit{MeanBias}, \ \text{using Adjusted SS for Tests}.$ 

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	4.405	4.405	0.62929	211.99	0
SSIZE	1	0	0	0	0	0.994
OBSERVED	2	3.6131	3.6131	1.8065	608.59	0
SITAVIO2	1	0.13134	0.13134	0.13134	44.24	0
METHOD	3	0	0	0	0	1
COVSTR*SSIZE	7	7e-005	7e-005	1e-005	0	1
COVSTR*OBSERVED	14	8.8501	8.8501	0.63215	212.96	0
COVSTR*SITAVIO2	7	0.43758	0.43758	0.06251	21.06	0
COVSTR*METHOD	21	0	0	0	0	1
SSIZE*OBSERVED	2	0	0	0	0	1
SSIZE*SITAVIO2	1	0	0	0	0	0.995
SSIZE*METHOD	3	0	0	0	0	1
OBSERVED*SITAVIO2	2	0.27144	0.27144	0.13572	45.72	0
OBSERVED*METHOD	6	0	0	0	0	1
SITAVIO2*METHOD	3	0	0	0	0	1
Error	303	0.89943	0.89943	0.00297		
Total	383	18.608				

Table XX: Case 5, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	4.3246	4.3246	0.6178	144.88	0
SSIZE	1	0.35278	0.35278	0.35278	82.73	0
OBSERVED	2	47.0302	47.0302	23.5151	5514.58	0
SITAVIO2	1	0.1648	0.1648	0.1648	38.65	0
METHOD	3	1e-005	1e-005	0	0	1
COVSTR*SSIZE	7	0.35673	0.35673	0.05096	11.95	0
COVSTR*OBSERVED	14	8.0846	8.0846	0.57747	135.42	0
COVSTR*SITAVIO2	7	0.14519	0.14519	0.02074	4.86	0
COVSTR*METHOD	21	0.00032	0.00032	2e-005	0	1
SSIZE*OBSERVED	2	0.41883	0.41883	0.20942	49.11	0
SSIZE*SITAVIO2	1	0.00037	0.00037	0.00037	0.09	0.77
SSIZE*METHOD	3	1e-005	1e-005	0	0	1
OBSERVED*SITAVIO2	2	0.16504	0.16504	0.08252	19.35	0
OBSERVED*METHOD	6	0.00015	0.00015	3e-005	0.01	1
SITAVIO2*METHOD	3	8e-005	8e-005	3e-005	0.01	0.999
Error	303	1.292	1.292	0.00426		
Total	383	62.3358				

**Table XXI:** Case 5, means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.0441	0.007864	0.7175	0.009425
2	0.184	0.007864	0.6418	0.009425
3	0.0117	0.007864	0.8908	0.009425
4	0.0187	0.007864	0.8979	0.009425
5	0.153	0.007864	0.6398	0.009425
6	0.2173	0.007864	0.6372	0.009425
7	-0.1384	0.007864	0.6388	0.009425
8	0.0618	0.007864	0.6611	0.009425
SSIZE	0.000	0.008080	0.7450	0.004718
1000	0.069	0.003932	0.7459	0.004713
5000 OBSERVED	0.069	0.003932	0.6853	0.004713
OBSERVED	0.2062	0.004016	0.0007	0.005770
X1 X2	0.2002 $0.0004$	0.004816 $0.004816$	$0.2207 \\ 0.9657$	$0.005772 \\ 0.005772$
X1X2	0.0004 $0.0004$	0.004816	0.9605	0.005772 $0.005772$
SITAVIO2	0.0004	0.004610	0.9000	0.005772
N	0.0505	0.003932	0.7363	0.004713
Y	0.0875	0.003932	0.6949	0.004713 $0.004713$
METHOD	0.0010	0.000332	0.0343	0.004713
EM	0.069	0.005561	0.7158	0.006665
MCEM	0.069	0.005561	0.7153 $0.7154$	0.006665
MCBOOT	0.069	0.005561	0.7154	0.006665
REG	0.069	0.005561	0.7156	0.006665
COVSTR*SSIZE	0.000	3.000001	5100	0.00000
1 1000	0.0448	0.011121	0.7927	0.013329
1 5000	0.0434	0.011121	0.6423	0.013329
2 1000	0.1837	0.011121	0.6472	0.013329
2 5000	0.1843	0.011121	0.6364	0.013329
3 1000	0.0109	0.011121	0.9595	0.013329
3 5000	0.0125	0.011121	0.8221	0.013329
4 1000	0.019	0.011121	0.9603	0.013329
4 5000	0.0184	0.011121	0.8354	0.013329
5 1000	0.1529	0.011121	0.6425	0.013329
5 5000	0.1531	0.011121	0.637	0.013329
6 1000	0.2174	0.011121	0.64	0.013329
6 5000	0.2172	0.011121	0.6345	0.013329
7 1000	-0.1381	0.011121	0.6428	0.013329
7 5000	-0.1387	0.011121	0.6349	0.013329
8 1000	0.0616	0.011121	0.6825	0.013329
8 5000	0.0619	0.011121	0.6398	0.013329
COVSTR*OBSERVED				
1 X1	0.13	0.013621	0.2201	0.016325
1 X2	0.0013	0.013621	0.9658	0.016325
1 X1X2	0.001	0.013621	0.9666	0.016325
2 X1	0.5515	0.013621	0 0622	0.016325
2 X2	0.0002	0.013621	0.9632	0.016325
2 X1X2	0.0003	$\begin{array}{c} 0.013621 \\ 0.013621 \end{array}$	0.9623	$0.016325 \\ 0.016325$
3 X1 3 X2	0.0365		0.7331	
3 X1X2	-0.0011 -0.0003	$0.013621 \\ 0.013621$	$0.9692 \\ 0.97$	$0.016325 \\ 0.016325$
4 X1	0.0529	0.013621 $0.013621$	0.97 $0.7589$	0.016325 $0.016325$
4 X1 4 X2	0.0016	0.013621 $0.013621$	0.7589 $0.9671$	0.010325 $0.016325$
4 X1X2	0.0010 $0.0017$	0.013621 $0.013621$	0.9671 $0.9675$	0.016325 $0.016325$
5 X1	0.4581	0.013621 $0.013621$	0.5015	0.010325 $0.016325$
5 X2	0.0009	0.013621	0.9677	0.016325 $0.016325$
5 X1X2	0.0003	0.013621 $0.013621$	0.9516	0.016325 $0.016325$
6 X1	0.6528	0.013621	0.5510	0.016325 $0.016325$
6 X2	-0.001	0.013621	0.9632	0.016325
6 X1X2	0.0001	0.013621	0.9484	0.016325
7 X1	-0.4165	0.013621	0.5404	0.016325
7 X2	0.001	0.013621	0.9662	0.016325
7 X1X2	0.0003	0.013621	0.9503	0.016325
8 X1	0.1843	0.013621	0.0536	0.016325
8 X2	0.0006	0.013621	0.9628	0.016325
8 X1X2	0.0005	0.013621	0.967	0.016325

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*SITAVIO2	0.024	0.011191	0.7644	0.012220
1 N 1 Y	$0.034 \\ 0.0542$	$0.011121 \\ 0.011121$	$0.7644 \\ 0.6706$	$0.013329 \\ 0.013329$
2 N	0.0342 $0.1397$	0.011121 $0.011121$	0.647	0.013329 $0.013329$
2 Y	0.2282	0.011121	0.6367	0.013329 $0.013329$
3 N	0.0094	0.011121	0.9305	0.013329
3 Y	0.014	0.011121	0.8511	0.013329
4 N	0.0129	0.011121	0.9435	0.013329
4 Y	0.0245	0.011121	0.8522	0.013329
5 N	0.1167	0.011121	0.6396	0.013329
5 Y	0.1893	0.011121	0.64	0.013329
6 N	0.1414	0.011121	0.64	0.013329
6 Y	0.2932	0.011121	0.6345	0.013329
7 N	-0.091	0.011121	0.6409	0.013329
7 Y	-0.1858	0.011121	0.6368	0.013329
8 N	0.041	0.011121	0.6849	0.013329
8 Y	0.0825	0.011121	0.6374	0.013329
COVSTR*METHOD 1 EM	0.0441	0.015728	0.719	0.018851
1 MCEM	0.0441 $0.0441$	0.015728 $0.015728$	0.719 $0.7177$	0.018851
1 MCBOOT	0.0441	0.015728 $0.015728$	0.717	0.018851
1 REG	0.044	0.015728	0.7163	0.018851
2 EM	0.1839	0.015728	0.6422	0.018851
2  MCEM	0.184	0.015728	0.6402	0.018851
2 MCBOOT	0.184	0.015728	0.6414	0.018851
2 REG	0.184	0.015728	0.6435	0.018851
3 EM	0.0117	0.015728	0.8904	0.018851
3  MCEM	0.0117	0.015728	0.8909	0.018851
3 MCBOOT	0.0116	0.015728	0.8922	0.018851
3 REG	0.0117	0.015728	0.8896	0.018851
4 EM	0.0186	0.015728	0.8986	0.018851
4 MCEM 4 MCBOOT	$0.0188 \\ 0.0188$	$0.015728 \\ 0.015728$	$0.8991 \\ 0.898$	$0.018851 \\ 0.018851$
4 REG	0.0187	0.015728 $0.015728$	0.8957	0.018851
5 EM	0.153	0.015728	0.6396	0.018851
5 MCEM	0.153	0.015728	0.64	0.018851
5 MCBOOT	0.1529	0.015728	0.6397	0.018851
5  REG	0.153	0.015728	0.6399	0.018851
6  EM	0.2173	0.015728	0.6372	0.018851
6 MCEM	0.2173	0.015728	0.636	0.018851
6 MCBOOT	0.2173	0.015728	0.6383	0.018851
6 REG	0.2173	0.015728	0.6373	0.018851
7 EM	-0.1384	0.015728	0.6388	0.018851
7 MCEM 7 MCBOOT	-0.1384 -0.1384	0.015728	0.6382	0.018851
7 REG	-0.1384 -0.1384	$0.015728 \\ 0.015728$	$0.6392 \\ 0.6393$	$0.018851 \\ 0.018851$
8 EM	0.0618	0.015728 $0.015728$	0.6605	0.018851
8 MCEM	0.0619	0.015728	0.6609	0.018851
8 MCBOOT	0.0617	0.015728	0.6602	0.018851
8 REG	0.0617	0.015728	0.6628	0.018851
SSIZE*OBSERVED				
1000 X1	0.2061	0.00681	0.2977	0.008163
1000 X2	0.0005	0.00681	0.9745	0.008163
1000 X1X2	0.0005	0.00681	0.9656	0.008163
5000 X1	0.2063	0.00681	0.1437	0.008163
5000 X2	0.0004	0.00681	0.9569	0.008163
5000 X1X2 SSIZE*SITAVIO2	0.0004	0.00681	0.9553	0.008163
1000 N	0.0505	0.005561	0.7657	0.006665
1000 N 1000 Y	0.0303 $0.0876$	0.005561	0.7262	0.006665
5000 N	0.0505	0.005561	0.707	0.006665
5000 Y	0.0875	0.005561	0.6636	0.006665

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
SSIZE*METHOD				_
1000  EM	0.069	0.007864	0.7462	0.009425
1000  MCEM	0.0691	0.007864	0.7457	0.009425
1000 MCBOOT	0.069	0.007864	0.7458	0.009425
$1000 \mathrm{\ REG}$	0.069	0.007864	0.7461	0.009425
$5000 \; \mathrm{EM}$	0.069	0.007864	0.6854	0.009425
5000  MCEM	0.069	0.007864	0.6851	0.009425
5000  MCBOOT	0.069	0.007864	0.6857	0.009425
$5000~\mathrm{REG}$	0.069	0.007864	0.6851	0.009425
OBSERVED*SITAVIO2				
X1 N	0.1501	0.00681	0.2706	0.008163
X1 Y	0.2623	0.00681	0.1708	0.008163
X2 N	0.0006	0.00681	0.9742	0.008163
X2 Y	0.0003	0.00681	0.9572	0.008163
X1X2 N	0.0009	0.00681	0.9642	0.008163
X1X2 Y	0	0.00681	0.9567	0.008163
OBSERVED*METHOD				
X1 EM	0.2062	0.009631	0.2212	0.011544
X1 MCEM	0.2062	0.009631	0.2212	0.011544
X1 MCBOOT	0.2062	0.009631	0.2204	0.011544
X1 REG	0.2062	0.009631	0.22	0.011544
X2 EM	0.0005	0.009631	0.965	0.011544
X2 MCEM	0.0005	0.009631	0.9646	0.011544
X2 MCBOOT	0.0004	0.009631	0.9668	0.011544
X2 REG	0.0004	0.009631	0.9662	0.011544
X1X2 EM	0.0004	0.009631	0.9612	0.011544
X1X2 MCEM	0.0004	0.009631	0.9603	0.011544
X1X2 MCBOOT	0.0005	0.009631	0.96	0.011544
X1X2 REG	0.0004	0.009631	0.9604	0.011544
SITAVIO2*METHOD				
N EM	0.0505	0.007864	0.736	0.009425
N MCEM	0.0506	0.007864	0.7366	0.009425
N MCBOOT	0.0505	0.007864	0.736	0.009425
N REG	0.0505	0.007864	0.7366	0.009425
Y EM	0.0875	0.007864	0.6955	0.009425
Y MCEM	0.0875	0.007864	0.6941	0.009425
Y MCBOOT	0.0875	0.007864	0.6955	0.009425
Y REG	0.0875	0.007864	0.6945	0.009425

 $\textbf{Table XXII:} \ \text{Case 6, Analysis of Variance for } \textit{MeanBias}, \ \text{using Adjusted SS for Tests}.$ 

Source	DF	$_{ m Seq}$ $_{ m SS}$	Adj SS	Adj MS	F	F
COVSTR	7	0.15134	0.15134	0.021621	236.34	(
SSIZE	1	1.8e-006	1.8e-006	1.8e-006	0.02	0.89
OBSERVED	1	0.019616	0.019616	0.019616	214.43	(
SITAVIO1	1	0.34742	0.34742	0.34742	3797.77	
SITAVIO2	1	0.0059542	0.0059542	0.0059542	65.09	1
METHOD	3	1e-007	1e-007	0	0	
COVSTR*SSIZE	7	8.52 e-005	8.52 e-005	1.22 e-005	0.13	0.990
COVSTR*OBSERVED	7	0.035459	0.035459	0.0050656	55.37	1
COVSTR*SITAVIO1	7	0.14563	0.14563	0.020804	227.42	
COVSTR*SITAVIO2	7	0.002272	0.002272	0.0003246	3.55	0.00
COVSTR*METHOD	21	1.3e-006	1.3e-006	1e-007	0	
SSIZE*OBSERVED	1	4e-006	4e-006	4e-006	0.04	0.83
SSIZE*SITAVIO1	1	7.1e-006	7.1e-006	7.1e-006	0.08	0.7
SSIZE*SITAVIO2	1	1e-007	1e-007	1e-007	0	0.97
SSIZE*METHOD	3	1e-007	1e-007	0	0	
OBSERVED*SITAVIO1	1	0.019578	0.019578	0.019578	214.01	
OBSERVED*SITAVIO2	1	0.0001868	0.0001868	0.0001868	2.04	0.15
OBSERVED*METHOD	3	5e-007	5e-007	2e-007	0	
SITAVIO1*SITAVIO2	1	0.0049338	0.0049338	0.0049338	53.93	
SITAVIO1*METHOD	3	0	0	0	0	
SITAVIO2*METHOD	3	1e-007	1e-007	0	0	
Error	430	0.039337	0.039337	9.15 e-005		
Total	511	0.77183				

Table XXIII: Case 6, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	3.6431	3.6431	0.52044	46.2	0
SSIZE	1	4.6803	4.6803	4.6803	415.51	0
OBSERVED	1	0.12469	0.12469	0.12469	11.07	0.001
SITAVIO1	1	13.559	13.559	13.559	1203.76	0
SITAVIO2	1	0.59897	0.59897	0.59897	53.18	0
METHOD	3	9e-005	9e-005	3e-005	0	1
COVSTR*SSIZE	7	0.7963	0.7963	0.11376	10.1	0
COVSTR*OBSERVED	7	2.6755	2.6755	0.38222	33.93	0
COVSTR*SITAVIO1	7	3.5647	3.5647	0.50925	45.21	0
COVSTR*SITAVIO2	7	0.18799	0.18799	0.02686	2.38	0.021
COVSTR*METHOD	21	0.00034	0.00034	2e-005	0	1
SSIZE*OBSERVED	1	3e-005	3e-005	3e-005	0	0.961
SSIZE*SITAVIO1	1	4.0218	4.0218	4.0218	357.05	0
SSIZE*SITAVIO2	1	0.06512	0.06512	0.06512	5.78	0.017
SSIZE*METHOD	3	5e-005	5e-005	2e-005	0	1
OBSERVED*SITAVIO1	1	0.08653	0.08653	0.08653	7.68	0.006
OBSERVED*SITAVIO2	1	0.00723	0.00723	0.00723	0.64	0.423
OBSERVED*METHOD	3	4e-005	4e-005	1e-005	0	1
SITAVIO1*SITAVIO2	1	0.83253	0.83253	0.83253	73.91	0
SITAVIO1*METHOD	3	3e-005	3e-005	1e-005	0	1
SITAVIO2*METHOD	3	3e-005	3e-005	1e-005	0	1
Error	430	4.8435	4.8435	0.01126		
Total	511	39.6879				

**Table XXIV:** Case 6, means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.04665	0.001196	0.74344	0.013266
2	0.01321	0.001196	0.91669	0.013266
3	0.0307	0.001196	0.82723	0.013266
4	0.05014	0.001196	0.73027	0.013266
5	-0.00133	0.001196	0.82633	0.013266
6	0.02112	0.001196	0.76434	0.013266
7	0.03985	0.001196	0.66969	0.013266
8	0.01153	0.001196	0.92473	0.013266
SSIZE				
1000	0.02643	0.000598	0.89595	0.006633
5000	0.02654	0.000598	0.70473	0.006633
OBSERVED				0.000000
X2	0.03267	0.000598	0.81595	0.006633
X1X2	0.02029	0.000598	0.78473	0.006633
SITAVIO1	0.00049	0.000 500	0.0000=	0.000000
N	0.00043	0.000598	0.96307	0.006633
Y	0.05253	0.000598	0.63761	0.006633
SITAVIO2	0.0000	0.000809	0.76614	0.006622
N Y	0.02989	0.000598	0.76614	0.006633 $0.006633$
	0.02307	0.000598	0.83454	U.UU0033
METHOD EM	0.02648	0.000845	0.8003	0.009381
MCEM	0.02648 $0.02651$	0.000845 $0.000845$	0.8003 $0.79981$	0.009381
MCBOOT	0.02631 $0.02648$	0.000845 $0.000845$	0.79981	0.009381 $0.009381$
REG	0.02647	0.000845 $0.000845$	0.80036	0.009381
COVSTR*SSIZE	0.02047	0.000040	0.00020	0.005501
1 1000	0.04679	0.001691	0.8835	0.018762
1 5000	0.04651	0.001691	0.60338	0.018762
2 1000	0.01301	0.001691	0.95816	0.018762
2 5000	0.01341	0.001691	0.87522	0.018762
3 1000	0.02985	0.001691	0.91594	0.018762
3 5000	0.03154	0.001691	0.73853	0.018762
4 1000	0.05008	0.001691	0.87456	0.018762
4 5000	0.05019	0.001691	0.58597	0.018762
5 1000	-0.00091	0.001691	0.91516	0.018762
5 5000	-0.00175	0.001691	0.7375	0.018762
6 1000	0.02108	0.001691	0.85325	0.018762
6 5000	0.02116	0.001691	0.67544	0.018762
7 1000	0.04035	0.001691	0.80525	0.018762
7 5000	0.03935	0.001691	0.53413	0.018762
8 1000	0.01114	0.001691	0.96178	0.018762
8 5000	0.01192	0.001691	0.88769	0.018762
COVSTR*OBSERVED				
1 X2	0.05126	0.001691	0.71988	0.018762
1 X1X2	0.04204	0.001691	0.767	0.018762
2 X2	0.01444	0.001691	0.90772	0.018762
2 X1X2	0.01197	0.001691	0.92566	0.018762
3 X2	0.04986	0.001691	0.72334	0.018762
3 X1X2	0.01153	0.001691	0.93113	0.018762
4 X2	0.0509	0.001691	0.72556	0.018762
4 X1X2	0.04937	0.001691	0.73497	0.018762
5 X2 5 X1X2	0.01534	0.001691	0.91166	0.018762
5 X1X2 6 X2	-0.018 $0.01371$	0.001691	0.741	0.018762
6 X1X2		$0.001691 \\ 0.001691$	0.9125	0.018762 $0.018762$
6 X1X2 7 X2	$0.02854 \\ 0.05111$	0.001691 $0.001691$	$0.61619 \\ 0.72159$	$0.018762 \\ 0.018762$
7 X1X2	0.03111 $0.0286$	0.001691 $0.001691$	$0.72159 \\ 0.61778$	0.018762 $0.018762$
8 X2	0.0280 $0.01478$	0.001691 $0.001691$	0.90531	0.018762 $0.018762$
8 X1X2	0.00829	0.001691	0.90331 $0.94416$	0.018762 $0.018762$
	5.00020	5.551001		

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*SITAVIO1	0.00116	0.001601	0.00000	0.010560
1 N 1 Y	$0.00116 \\ 0.09215$	$0.001691 \\ 0.001691$	$0.96622 \\ 0.52066$	$0.018762 \\ 0.018762$
2 N	0.09215 $0.00026$	0.001691 $0.001691$	0.96275	0.018762 $0.018762$
2 Y	0.00020 $0.02616$	0.001691 $0.001691$	0.87063	0.018762 $0.018762$
3 N	-0.00069	0.001691	0.96962	0.018762 $0.018762$
3 Y	0.06209	0.001691	0.68484	0.018762
4 N	0.00163	0.001691	0.96731	0.018762
4 Y	0.09864	0.001691	0.49322	0.018762
5 N	0.00041	0.001691	0.95969	0.018762
5 Y	-0.00308	0.001691	0.69297	0.018762
6 N	-0.00045	0.001691	0.95584	0.018762
6 Y	0.0427	0.001691	0.57284	0.018762
7 N	0.00062	0.001691	0.95825	0.018762
7 Y	0.07908	0.001691	0.38113	0.018762
8 N	0.00054	0.001691	0.96491	0.018762
8 Y COVSTR*SITAVIO2	0.02253	0.001691	0.88456	0.018762
1 N	0.05266	0.001691	0.68281	0.018769
1 N 1 Y	0.03266 $0.04064$	0.001691 $0.001691$	0.80406	0.018762 $0.018762$
2 N	0.04004 $0.01512$	0.001691 $0.001691$	0.80400 $0.90434$	0.018762 $0.018762$
2 Y	0.01312 $0.01129$	0.001691 $0.001691$	0.92903	0.018762 $0.018762$
3 N	0.03488	0.001691	0.79288	0.018762
3 Y	0.02652	0.001691	0.86159	0.018762
4 N	0.05663	0.001691	0.66863	0.018762
4 Y	0.04364	0.001691	0.79191	0.018762
5 N	-0.00143	0.001691	0.79806	0.018762
5 Y	-0.00124	0.001691	0.85459	0.018762
6 N	0.02393	0.001691	0.74234	0.018762
6 Y	0.01832	0.001691	0.78634	0.018762
7 N	0.04414	0.001691	0.62344	0.018762
7 Y 8 N	$0.03556 \\ 0.01322$	$0.001691 \\ 0.001691$	$0.71594 \\ 0.91659$	$0.018762 \\ 0.018762$
8 Y	0.01322 $0.00985$	0.001691 $0.001691$	0.91039 $0.93288$	0.018762 $0.018762$
COVSTR*METHOD	0.00300	0.001031	0.55200	0.010102
1 EM	0.04657	0.002391	0.74425	0.026533
1 MCEM	0.04668	0.002391	0.74194	0.026533
1 MCBOOT	0.04679	0.002391	0.74538	0.026533
1 REG	0.04656	0.002391	0.74219	0.026533
2  EM	0.01317	0.002391	0.91706	0.026533
2 MCEM	0.01323	0.002391	0.91544	0.026533
2 MCBOOT	0.01323	0.002391	0.9165	0.026533
2 REG	0.01321	0.002391	0.91775	0.026533
3 EM 3 MCEM	$0.03065 \\ 0.03077$	0.002391	0.82831 $0.82544$	0.026533
3 MCBOOT	0.03077 $0.03066$	$0.002391 \\ 0.002391$	0.82344 $0.82888$	$0.026533 \\ 0.026533$
3 REG	0.03000 $0.03072$	0.002391 $0.002391$	0.82631	0.026533
4 EM	0.0501	0.002391 $0.002391$	0.73019	0.026533
4 MCEM	0.05015	0.002391	0.72981	0.026533
4 MCBOOT	0.05017	0.002391	0.73138	0.026533
4 REG	0.05012	0.002391	0.72969	0.026533
5  EM	-0.00134	0.002391	0.82631	0.026533
5 MCEM	-0.00131	0.002391	0.82663	0.026533
5 MCBOOT	-0.00137	0.002391	0.82625	0.026533
5 REG	-0.00131	0.002391	0.82613	0.026533
6 EM	0.0212	0.002391	0.7635	0.026533
6 MCEM	0.02106	0.002391	0.76375	0.026533
6 MCBOOT 6 REG	$0.02114 \\ 0.0211$	0.002391 $0.002391$	$0.76569 \\ 0.76444$	$0.026533 \\ 0.026533$
7 EM	0.0211 $0.03989$	0.002391 $0.002391$	0.66906	0.026533
7 MCEM	0.03989	0.002391 $0.002391$	0.00900	0.026533
7 MCBOOT	0.03989 $0.03976$	0.002391 $0.002391$	0.66938	0.026533
7 REG	0.03986	0.002391 $0.002391$	0.67031	0.026533
8 EM	0.01157	0.002391	0.92375	0.026533
8 MCEM	0.01159	0.002391	0.9255	0.026533
8 MCBOOT	0.01146	0.002391	0.92444	0.026533
8 REG	0.0115	0.002391	0.92525	0.026533

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
SSIZE*OBSERVED				
1000 X2	0.0327	0.000845	0.91133	0.009381
1000 X1X2	0.02015	0.000845	0.88057	0.009381
5000 X2	0.03264	0.000845	0.72056	0.009381
5000 X1X2	0.02044	0.000845	0.6889	0.009381
SSIZE*SITAVIO1				
1000 N	0.00049	0.000845	0.97005	0.009381
1000 Y	0.05236	0.000845	0.82184	0.009381
5000 N	0.00038	0.000845	0.95609	0.009381
5000 Y	0.05271	0.000845	0.45337	0.009381
SSIZE*SITAVIO2	0.00211	0.000013	0.10001	0.000001
1000 N	0.02982	0.000845	0.87302	0.009381
1000 Y	0.02303	0.000845	0.91887	0.009381
5000 N	0.02997	0.000845	0.65925	0.009381
5000 Y	0.02331 $0.02312$	0.000845 $0.000845$	0.05925 $0.75021$	0.009381
SSIZE*METHOD	0.02312	0.000645	0.75021	0.009361
	0.0064	0.001106	0.00002	0.012066
1000 EM	0.0264	0.001196	0.89603	0.013266
1000 MCEM	0.02645	0.001196	0.89584	0.013266
1000 MCBOOT	0.02644	0.001196	0.89614	0.013266
1000 REG	0.02641	0.001196	0.89578	0.013266
5000 EM	0.02655	0.001196	0.70458	0.013266
5000 MCEM	0.02656	0.001196	0.70378	0.013266
5000 MCBOOT	0.02652	0.001196	0.70583	0.013266
5000 REG	0.02653	0.001196	0.70473	0.013266
OBSERVED*SITAVIO1				
X2 N	0.00044	0.000845	0.96568	0.009381
X2 Y	0.06491	0.000845	0.66621	0.009381
X1X2 N	0.00043	0.000845	0.96047	0.009381
X1X2 Y	0.04016	0.000845	0.609	0.009381
OBSERVED*SITAVIO2				
X2 N	0.03669	0.000845	0.77798	0.009381
X2 Y	0.02866	0.000845	0.85391	0.009381
X1X2 N	0.0231	0.000845	0.75429	0.009381
X1X2 Y	0.01749	0.000845	0.81518	0.009381
OBSERVED*METHOD				
X2 EM	0.0327	0.001196	0.8157	0.013266
X2 MCEM	0.03271	0.001196	0.81538	0.013266
X2 MCBOOT	0.03262	0.001196	0.81706	0.013266
X2 REG	0.03266	0.001196	0.81564	0.013266
X1X2 EM	0.02025	0.001196	0.78491	0.013266
X1X2 MCEM	0.02031	0.001196	0.78425	0.013266
X1X2 MCBOOT	0.02031	0.001196	0.78429 $0.78491$	0.013266
X1X2 MOBOOT X1X2 REG	0.02034	0.001196	0.78488	0.013266 $0.013266$
SITAVIO1*SITAVIO2	0.02028	0.001130	0.76466	0.013200
	0.00074	0.000945	0.0602	0.000291
N N	$0.00074 \\ 0.00013$	0.000845	$0.9692 \\ 0.95695$	0.009381
NY		0.000845		0.009381
Y N V V	0.05905	0.000845	0.56308	0.009381
Y Y	0.04602	0.000845	0.71213	0.009381
SITAVIO1*METHOD	0.00044	0.001102	0.00000	0.019966
N EM	0.00044	0.001196	0.96309	0.013266
N MCEM	0.00045	0.001196	0.96244	0.013266
N MCBOOT	0.00044	0.001196	0.96344	0.013266
N REG	0.00042	0.001196	0.96333	0.013266
Y EM	0.05252	0.001196	0.63752	0.013266
YMCEM	0.05257	0.001196	0.63719	0.013266
Y MCBOOT	0.05252	0.001196	0.63853	0.013266
Y REG	0.05252	0.001196	0.63719	0.013266
SITAVIO2*METHOD				
N EM	0.02989	0.001196	0.76603	0.013266
N MCEM	0.02993	0.001196	0.76602	0.013266
N MCBOOT	0.0299	0.001196	0.7667	0.013266
N REG	0.02986	0.001196	0.7658	0.013266
Y EM	0.02307	0.001196	0.83458	0.013266
YMCEM	0.02309	0.001196	0.83361	0.013266
Y MCBOOT	0.02306	0.001196	0.83527	0.013266
Y REG	0.02308	0.001196	0.83472	0.013266
			•	

Table XXV: Case 7, Analysis of Variance for MeanBias, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	7.7747	7.7747	1.1107	447.4	0
SSIZE	1	1e-005	$1\mathrm{e}\text{-}005$	1e-005	0	0.963
OBSERVED	2	6.6685	6.6685	3.3342	1343.1	0
SITAVIO1	1	0.41523	0.41523	0.41523	167.26	0
SITAVIO2	1	0.15733	0.15733	0.15733	63.38	0
METHOD	3	0	0	0	0	1
COVSTR*SSIZE	7	8e-005	8e-005	1e-005	0	1
COVSTR*OBSERVED	14	18.8331	18.8331	1.3452	541.88	0
COVSTR*SITAVIO1	7	0.16489	0.16489	0.02356	9.49	0
COVSTR*SITAVIO2	7	0.85247	0.85247	0.12178	49.06	0
COVSTR*METHOD	21	0	0	0	0	1
SSIZE*OBSERVED	2	0	0	0	0	0.999
SSIZE*SITAVIO1	1	1e-005	$1\mathrm{e}\text{-}005$	1e-005	0	0.954
SSIZE*SITAVIO2	1	0	0	0	0	0.971
SSIZE*METHOD	3	0	0	0	0	1
OBSERVED*SITAVIO1	2	0.03159	0.03159	0.0158	6.36	0.002
OBSERVED*SITAVIO2	2	0.48266	0.48266	0.24133	97.21	0
OBSERVED*METHOD	6	0	0	0	0	1
SITAVIO1*SITAVIO2	1	0.01342	0.01342	0.01342	5.41	0.02
SITAVIO1*METHOD	3	0	0	0	0	1
SITAVIO2*METHOD	3	0	0	0	0	1
Error	672	1.6682	1.6682	0.00248		
Total	767	37.0622				

Table XXVI: Case 7, Analysis of Variance for Clevel, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	Р
COVSTR	7	6.5949	6.5949	0.9421	61.14	0
SSIZE	1	6.2179	6.2179	6.2179	403.55	0
OBSERVED	2	68.6229	68.6229	34.3115	2226.86	0
SITAVIO1	1	12.2806	12.2806	12.2806	797.03	0
SITAVIO2	1	0.1215	0.1215	0.1215	7.89	0.005
METHOD	3	0	0	0	0	1
COVSTR*SSIZE	7	1.8639	1.8639	0.2663	17.28	0
COVSTR*OBSERVED	14	15.0379	15.0379	1.0741	69.71	0
COVSTR*SITAVIO1	7	3.7246	3.7246	0.5321	34.53	0
COVSTR*SITAVIO2	7	0.1179	0.1179	0.0168	1.09	0.366
COVSTR*METHOD	21	0.0003	0.0003	0	0	1
SSIZE*OBSERVED	2	0.0487	0.0487	0.0244	1.58	0.207
SSIZE*SITAVIO1	1	2.7344	2.7344	2.7344	177.47	0
SSIZE*SITAVIO2	1	0.0524	0.0524	0.0524	3.4	0.066
SSIZE*METHOD	3	0.0001	0.0001	0	0	1
OBSERVED*SITAVIO1	2	2.1084	2.1084	1.0542	68.42	0
OBSERVED*SITAVIO2	2	0.7255	0.7255	0.3628	23.54	0
OBSERVED*METHOD	6	0.0001	0.0001	0	0	1
SITAVIO1*SITAVIO2	1	0.8513	0.8513	0.8513	55.25	0
SITAVIO1*METHOD	3	0	0	0	0	1
SITAVIO2*METHOD	3	0.0001	0.0001	0	0	1
Error	672	10.3542	10.3542	0.0154		
Total	767	131.4577				

**Table XXVII:** Case 7, means and standard errors (SE) of 1st and 2nd order effects on MeanBias and Clevel across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.0834	0.005085	0.54	0.012669
2	0.1979	0.005085	0.6111	0.012669
3	0.0352	0.005085	0.7648	0.012669
4	0.0638	0.005085	0.6608	0.012669
5	0.1508	0.005085	0.5509	0.012669
6	0.2417	0.005085	0.5096	0.012669
7	-0.1065	0.005085	0.4465	0.012669
8	0.0719	0.005085	0.6297	0.012669
SSIZE				
1000	0.0922	0.002543	0.6791	0.006334
5000	0.0924	0.002543	0.4992	0.006334
OBSERVED				
X1	0.2239	0.003114	0.1668	0.007758
X2	0.0327	0.003114	0.8159	0.007758
X1X2	0.0203	0.003114	0.7847	0.007758
SITAVIO1				
N	0.069	0.002543	0.7156	0.006334
Y	0.1155	0.002543	0.4627	0.006334
SITAVIO2				
N	0.078	0.002543	0.5766	0.006334
Y	0.1066	0.002543	0.6017	0.006334
METHOD				
EM	0.0923	0.003596	0.5892	0.008958
MCEM	0.0923	0.003596	0.5889	0.008958
MCBOOT	0.0923	0.003596	0.5895	0.008958
REG	0.0923	0.003596	0.589	0.008958
COVSTR*SSIZE				
1 1000	0.0835	0.007192	0.6763	0.017916
1 5000	0.0833	0.007192	0.4037	0.017916
2 1000	0.1976	0.007192	0.6388	0.017916
2 5000	0.1982	0.007192	0.5835	0.017916
3 1000	0.0345	0.007192	0.9046	0.017916
3 5000	0.0359	0.007192	0.6251	0.017916
$4\ 1000$	0.0637	0.007192	0.8302	0.017916
$4\ 5000$	0.0639	0.007192	0.4914	0.017916
5 1000	0.151	0.007192	0.6101	0.017916
5 5000	0.1505	0.007192	0.4917	0.017916
6 1000	0.2416	0.007192	0.5688	0.017916
6 5000	0.2418	0.007192	0.4503	0.017916
7 1000	-0.1061	0.007192	0.5368	0.017916
7 5000	-0.1069	0.007192	0.3561	0.017916
8 1000	0.0716	0.007192	0.6676	0.017916
8 5000	0.0723	0.007192	0.5918	0.017916

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*OBSERVED	0.1560	0.000000	0.1991	0.001048
1 X1	0.1568	0.008808	0.1331	0.021943
1 X2 1 X1X2	$0.0513 \\ 0.042$	0.008808 $0.008808$	$0.7199 \\ 0.767$	$0.021943 \\ 0.021943$
2 X1	0.042 $0.5673$	0.008808	0.767	0.021943 $0.021943$
2 X1 2 X2	0.0073 $0.0144$	0.008808	0.9077	0.021943 $0.021943$
2 X1X2	0.0144	0.008808	0.9257	0.021943 $0.021943$
3 X1	0.0442	0.008808	0.5261	0.021943 $0.021943$
3 X2	0.0499	0.008808	0.7233	0.021943
3 X1X2	0.0115	0.008808	0.9311	0.021943
4 X1	0.0912	0.008808	0.5218	0.021943
4 X2	0.0509	0.008808	0.7256	0.021943
4 X1X2	0.0494	0.008808	0.735	0.021943
5 X1	0.455	0.008808	0	0.021943
5 X2	0.0153	0.008808	0.9117	0.021943
5 X1X2	-0.018	0.008808	0.741	0.021943
6 X1	0.6829	0.008808	0	0.021943
6 X2	0.0137	0.008808	0.9125	0.021943
6 X1X2	0.0285	0.008808	0.6162	0.021943
7 X1	-0.3992	0.008808	0	0.021943
7 X2	0.0511	0.008808	0.7216	0.021943
7 X1X2	0.0286	0.008808	0.6178	0.021943
8 X1	0.1927	0.008808	0.0396	0.021943
8 X2	0.0148	0.008808	0.9053	0.021943
8 X1X2 COVSTR*SITAVIO1	0.0083	0.008808	0.9442	0.021943
1 N	0.0441	0.007192	0.7175	0.017916
1 Y	0.1226	0.007192	0.3625	0.017916
2 N	0.184	0.007192	0.6418	0.017916
2 Y	0.2118	0.007192	0.5804	0.017916
3 N	0.0117	0.007192	0.8908	0.017916
3 Y	0.0587	0.007192	0.6389	0.017916
4 N	0.0187	0.007192	0.8979	0.017916
4 Y	0.109	0.007192	0.4237	0.017916
5 N	0.153	0.007192	0.6398	0.017916
5 Y	0.1486	0.007192	0.462	0.017916
6 N	0.2173	0.007192	0.6372	0.017916
6 Y	0.2661	0.007192	0.3819	0.017916
7 N 7 Y	-0.1384	0.007192	0.6388	$0.017916 \\ 0.017916$
8 N	-0.0746 $0.0618$	$0.007192 \\ 0.007192$	$0.2541 \\ 0.6611$	0.017916 $0.017916$
8 Y	0.0821	0.007192 $0.007192$	0.5982	0.017916
COVSTR*SITAVIO2	0.0021	0.001132	0.0002	0.017510
1 N	0.0795	0.007192	0.5239	0.017916
1 Y	0.0873	0.007192	0.5561	0.017916
2 N	0.1586	0.007192	0.6029	0.017916
2 Y	0.2372	0.007192	0.6194	0.017916
3 N	0.0356	0.007192	0.769	0.017916
3 Y	0.0348	0.007192	0.7607	0.017916
4 N	0.0649	0.007192	0.6369	0.017916
4 Y	0.0628	0.007192	0.6846	0.017916
5 N	0.1158	0.007192	0.532	0.017916
5 Y	0.1858	0.007192	0.5697	0.017916
6 N	0.1723	0.007192	0.4949	0.017916
6 Y	0.3112	0.007192	0.5242	0.017916
7 N	-0.056	0.007192	0.4156	0.017916
7 Y	-0.157	0.007192	0.4773	0.017916
8 N	0.0531	0.007192	0.6375	0.017916
8 Y	0.0907	0.007192	0.6219	0.017916

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR*METHOD				
1 EM	0.0833	0.01017	0.5413	0.025338
1 MCEM	0.0834	0.01017	0.5391	0.025338
1 MCBOOT 1 REG	0.0835	0.01017	0.5408	$0.025338 \\ 0.025338$
2 EM	$0.0833 \\ 0.1978$	$0.01017 \\ 0.01017$	$0.5388 \\ 0.6114$	0.025338 $0.025338$
2 MCEM	0.1978 $0.1979$	0.01017 $0.01017$	0.6114 $0.6103$	0.025338 $0.025338$
2 MCBOOT	0.1979	0.01017 $0.01017$	0.611	0.025338
2 REG	0.1979	0.01017	0.6118	0.025338
3 EM	0.0351	0.01017	0.765	0.025338
3  MCEM	0.0352	0.01017	0.7638	0.025338
3 MCBOOT	0.0352	0.01017	0.7667	0.025338
3 REG	0.0352	0.01017	0.7638	0.025338
4 EM	0.0638	0.01017	0.6609	0.025338
4 MCEM	0.0638	0.01017	0.6615	0.025338
4 MCBOOT	0.0638	0.01017	0.6607	0.025338
4 REG	0.0639	0.01017	0.6601	0.025338
5 EM	0.1508	0.01017	0.5509	0.025338
5 MCEM	0.1508	0.01017	0.5511	0.025338
5 MCBOOT	0.1507	0.01017	0.5508	0.025338
5 REG 6 EM	0.1508	0.01017	$0.5507 \\ 0.509$	0.025338
6 MCEM	$0.2418 \\ 0.2416$	$0.01017 \\ 0.01017$	0.509 $0.5092$	$0.025338 \\ 0.025338$
6 MCBOOT	0.2410 $0.2417$	0.01017 $0.01017$	0.5092 $0.5105$	0.025338
6 REG	0.2417 $0.2417$	0.01017 $0.01017$	0.5105 $0.5096$	0.025338
7 EM	-0.1065	0.01017	0.446	0.025338
7 MCEM	-0.1065	0.01017	0.4467	0.025338
7 MCBOOT	-0.1066	0.01017	0.4463	0.025338
7  REG	-0.1065	0.01017	0.4469	0.025338
8 EM	0.072	0.01017	0.629	0.025338
8 MCEM	0.072	0.01017	0.63	0.025338
8 MCBOOT	0.0719	0.01017	0.6292	0.025338
8 REG	0.0719	0.01017	0.6304	0.025338
SSIZE*OBSERVED	0.000=	0.004404	0.0455	0.0100=0
1000 X1	0.2237	0.004404	0.2455	0.010972
1000 X2	0.0327	0.004404	0.9113	0.010972
1000 X1X2 5000 X1	$0.0201 \\ 0.224$	$0.004404 \\ 0.004404$	$0.8806 \\ 0.0881$	$0.010972 \\ 0.010972$
5000 X1 5000 X2	0.224 $0.0326$	0.004404 $0.004404$	0.0361 $0.7206$	0.010972 $0.010972$
5000 X2 5000 X1X2	0.0204	0.004404	0.7200	0.010972 $0.010972$
SSIZE*SITAVIO1	0.0204	0.004404	0.0003	0.010512
1000 N	0.069	0.003596	0.7459	0.008958
1000 Y	0.1153	0.003596	0.6124	0.008958
5000  N	0.069	0.003596	0.6853	0.008958
5000 Y	0.1157	0.003596	0.3131	0.008958
SSIZE*SITAVIO2				
1000  N	0.0778	0.003596	0.6748	0.008958
1000 Y	0.1066	0.003596	0.6835	0.008958
5000 N	0.0781	0.003596	0.4783	0.008958
5000 Y	0.1066	0.003596	0.52	0.008958
SSIZE*METHOD	0.0000	0.005005	0.6705	0.012660
1000 EM 1000 MCEM	$0.0922 \\ 0.0922$	$0.005085 \\ 0.005085$	$0.6795 \\ 0.6791$	$0.012669 \\ 0.012669$
1000 MCEM 1000 MCBOOT	0.0922 $0.0922$	0.005085	0.6791	0.012669 $0.012669$
1000 REG	0.0922	0.005085	0.679	0.012669
5000 EM	0.0922	0.005085	0.4989	0.012669
5000 MCEM	0.0924	0.005085	0.4988	0.012669
5000 MCBOOT	0.0924	0.005085	0.4999	0.012669
5000 REG	0.0924	0.005085	0.4991	0.012669
OBSERVED*SITAVIO1				
X1 N	0.2062	0.004404	0.2207	0.010972
X1 Y	0.2415	0.004404	0.1129	0.010972
X2 N	0.0004	0.004404	0.9657	0.010972
X2 Y	0.0649	0.004404	0.6662	0.010972
X1X2 N	0.0004	0.004404	0.9605	0.010972
X1X2 Y	0.0402	0.004404	0.609	0.010972

Effect	${ m MeanBias}$	SE MeanBias	Clevel	SE Clevel
OBSERVED*SITAVIO2				
X1 N	0.1741	0.004404	0.1975	0.010972
X1 Y	0.2736	0.004404	0.1361	0.010972
X2 N	0.0367	0.004404	0.778	0.010972
X2 Y	0.0287	0.004404	0.8539	0.010972
X1X2 N	0.0231	0.004404	0.7543	0.010972
X1X2 Y	0.0175	0.004404	0.8152	0.010972
OBSERVED*METHOD				
X1 EM	0.2238	0.006228	0.167	0.015516
X1 MCEM	0.2239	0.006228	0.1672	0.015516
X1 MCBOOT	0.2239	0.006228	0.1665	0.015516
X1 REG	0.2239	0.006228	0.1666	0.015516
X2 EM	0.0327	0.006228	0.8157	0.015516
X2 MCEM	0.0327	0.006228	0.8154	0.015516
X2 MCBOOT	0.0326	0.006228	0.8171	0.015516
X2 REG	0.0327	0.006228	0.8156	0.015516
X1X2 EM	0.0203	0.006228	0.7849	0.015516
X1X2 MCEM	0.0203	0.006228	0.7843	0.015516
X1X2 MCBOOT	0.0203	0.006228	0.7849	0.015516
X1X2 REG	0.0203	0.006228	0.7849	0.015516
SITAVIO1*SITAVIO2				
N N	0.0505	0.003596	0.7363	0.008958
NY	0.0875	0.003596	0.6949	0.008958
Y N	0.1054	0.003596	0.4168	0.008958
YY	0.1257	0.003596	0.5086	0.008958
SITAVIO1*METHOD				
N EM	0.069	0.005085	0.7158	0.012669
N MCEM	0.069	0.005085	0.7154	0.012669
N MCBOOT	0.069	0.005085	0.7157	0.012669
N REG	0.069	0.005085	0.7156	0.012669
Y EM	0.1155	0.005085	0.4626	0.012669
Y MCEM	0.1155	0.005085	0.4625	0.012669
Y MCBOOT	0.1155	0.005085	0.4632	0.012669
Y REG	0.1155	0.005085	0.4625	0.012669
SITAVIO2*METHOD				
N EM	0.078	0.005085	0.5763	0.012669
N MCEM	0.078	0.005085	0.5768	0.012669
N MCBOOT	0.078	0.005085	0.5767	0.012669
N REG	0.0779	0.005085	0.5765	0.012669
Y EM	0.1066	0.005085	0.6021	0.012669
Y MCEM	0.1066	0.005085	0.601	0.012669
Y MCBOOT	0.1066	0.005085	0.6023	0.012669
Y REG	0.1066	0.005085	0.6016	0.012669

**Table XXVIII:** Case 0, only METHOD=PROP, Analysis of Variance for MeanBias, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	0.034904	0.034904	0.0049863	9223.05	0
SSIZE	1	$1.04\mathrm{e}\text{-}005$	1.04 e-005	$1.04\mathrm{e}\text{-}005$	19.2	0.001
KNRATIO	2	0.0006933	0.0006933	0.0003467	641.19	0
COVSTR*SSIZE	7	6.5 e - 006	$6.5\mathrm{e}\text{-}006$	9e-007	1.71	0.187
COVSTR*KNRATIO	14	0.0002775	0.0002775	$1.98  \mathrm{e}\text{-}005$	36.66	0
SSIZE*KNRATIO	2	0	0	0	0.01	0.988
Error	14	7.6e-006	7.6e-006	$5\mathrm{e}\text{-}007$		
Total	47	0.0359				

**Table XXIX:** Case 0, only METHOD=PROP, Analysis of Variance for *Clevel*, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	Adj SS	$\operatorname{Adj} \operatorname{MS}$	F	P
COVSTR	7	4.6005	4.6005	0.65721	482.54	0
SSIZE	1	1.1904	1.1904	1.1904	874	0
KNRATIO	2	0.10289	0.10289	0.05144	37.77	0
COVSTR*SSIZE	7	0.7398	0.7398	0.10569	77.6	0
COVSTR*KNRATIO	14	0.09809	0.09809	0.00701	5.14	0.002
SSIZE*KNRATIO	2	0.00914	0.00914	0.00457	3.35	0.065
Error	14	0.01907	0.01907	0.00136		
Total	47	6.7599				

**Table XXX:** Case 0, only METHOD=PROP, means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	MeanBias	${ m SE~MeanBias}$	Clevel	SE Clevel
	$_{ m Mean}$	SE Mean	Mean	SE Mean
COVSTR	0.00100	0.0000	0.050.05	0.015000
$\frac{1}{2}$	0.02123	0.0003	0.95367	0.015066
$\frac{2}{3}$	0.07519	0.0003 $0.0003$	0.33683	0.015066
4	$0.02151 \\ 0.02189$	0.0003	0.95933 $0.94567$	$0.015066 \\ 0.015066$
5	0.07511	0.0003	0.33333	0.015066
6	0.07587	0.0003	0.33017	0.015066
7	0.0213	0.0003	0.95217	0.015066
8	0.07548	0.0003	0.334	0.015066
SSIZE				
1000	0.04891	0.00015	0.80063	0.007533
5000	0.04798	0.00015	0.48567	0.007533
KNRATIO	0.04860	0.000104	0.50500	0.000000
$\frac{1}{2}$	0.04368	0.000184	0.70506	0.009226
2/2	0.04869 $0.05298$	0.000184 $0.000184$	$0.63063 \\ 0.59375$	$0.009226 \\ 0.009226$
3/2 COVSTR*SSIZE	0.05296	0.000104	0.09010	0.009220
1 1000	0.02148	0.000425	0.98267	0.021307
1 5000	0.02098	0.000425	0.92467	0.021307
2 1000	0.07519	0.000425	0.61567	0.021307
2 5000	0.07519	0.000425	0.058	0.021307
3 1000	0.02219	0.000425	0.99	0.021307
3 5000	0.02083	0.000425	0.92867	0.021307
4 1000	0.02201	0.000425	0.983	0.021307
4 5000	0.02178	0.000425	0.90833	0.021307
5 1000	0.0756	0.000425	0.614	0.021307
5 5000 6 1000	0.07463 $0.07685$	0.000425 $0.000425$	$0.05267 \\ 0.61667$	0.021307
6 5000	0.07489	0.000425 $0.000425$	0.01007 $0.04367$	$0.021307 \\ 0.021307$
7 1000	0.02149	0.000425 $0.000425$	0.98867	0.021307 $0.021307$
7 5000	0.02111	0.000425	0.91567	0.021307
8 1000	0.0765	0.000425	0.61433	0.021307
8 5000	0.07446	0.000425	0.05367	0.021307
COVSTR*KNRATIO				
$1 \ 1/2$	0.02044	0.00052	0.9445	0.026096
$\frac{1}{2}\frac{2}{2}$	0.02027	0.00052	0.96	0.026096
$\frac{1}{2}\frac{3}{2}$	0.02297	0.00052	0.9565	0.026096
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$0.06746 \\ 0.07585$	$0.00052 \\ 0.00052$	$0.461 \\ 0.311$	$0.026096 \\ 0.026096$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.07383	0.00052 $0.00052$	0.311 $0.2385$	0.026096
$\frac{2}{3} \frac{3}{1/2}$	0.02001	0.00052	0.2369	0.026096
$\frac{3}{3} \frac{1}{2} / 2$	0.02068	0.00052	0.964	0.026096
$3 \ 3/2$	0.02384	0.00052	0.952	0.026096
$4 \frac{1}{2}$	0.02057	0.00052	0.943	0.026096
$4 \ 2/2$	0.02126	0.00052	0.946	0.026096
$4 \ 3/2$	0.02386	0.00052	0.948	0.026096
5 1/2	0.06701	0.00052	0.4575	0.026096
5 2/2	0.07605	0.00052	0.3035	0.026096
$5 \ 3/2 \\ 6 \ 1/2$	$0.08229 \\ 0.06791$	$0.00052 \\ 0.00052$	$0.239 \\ 0.449$	$0.026096 \\ 0.026096$
$6 \ 2/2$	0.00791 $0.07712$	0.00052 $0.00052$	0.449 $0.305$	0.026096
$6 \ 3/2$	0.08258	0.00052 $0.00052$	0.365	0.026096
7 1/2	0.01858	0.00052	0.968	0.026096
7 2/2	0.02188	0.00052	0.942	0.026096
$7 \ 3/2$	0.02344	0.00052	0.9465	0.026096
8 1/2	0.06745	0.00052	0.4555	0.026096
8 2/2	0.0764	0.00052	0.3135	0.026096
8 3/2	0.08259	0.00052	0.233	0.026096
SSIZE*KNRATIO	0.04446	0.00000	0.05480	0.018040
$1000 \ 1/2$	0.04413	0.00026	0.87438	0.013048
$\begin{array}{c} 1000 \ 2/2 \\ 1000 \ 3/2 \end{array}$	$0.04915 \\ 0.05347$	$0.00026 \\ 0.00026$	0.79563 $0.73188$	$0.013048 \\ 0.013048$
5000 1/2	0.03347 $0.04323$	0.00026	0.73100 $0.53575$	0.013048
5000 1/2	0.04823	0.00026	0.46562	0.013048
$5000 \ 3/2$	0.05249	0.00026	0.45562	0.013048
			-	

**Table XXXI:** Case 7, only METHOD=PROP, Analysis of Variance for *MeanBias*, using Adjusted SS for Tests.

Source	$_{ m DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	$\operatorname{Adj} \operatorname{MS}$	$\mathbf{F}$	P
COVSTR	7	3.9316	3.9316	0.56166	154.85	0
SSIZE	1	0.00076	0.00076	0.00076	0.21	0.648
OBSERVED	2	0.50975	0.50975	0.25487	70.27	0
SITAVIO1	1	0.06669	0.06669	0.06669	18.39	0
SITAVIO2	1	0.6419	0.6419	0.6419	176.97	0
COVSTR*SSIZE	7	0.00383	0.00383	0.00055	0.15	0.994
COVSTR*OBSERVED	14	2.6518	2.6518	0.18941	52.22	0
COVSTR*SITAVIO1	7	0.09831	0.09831	0.01404	3.87	0.001
COVSTR*SITAVIO2	7	0.88434	0.88434	0.12633	34.83	0
SSIZE*OBSERVED	2	0.00241	0.00241	0.00121	0.33	0.717
SSIZE*SITAVIO1	1	0.00273	0.00273	0.00273	0.75	0.387
SSIZE*SITAVIO2	1	0.00086	0.00086	0.00086	0.24	0.627
OBSERVED*SITAVIO1	2	0.06329	0.06329	0.03165	8.73	0
OBSERVED*SITAVIO2	2	0.03039	0.03039	0.01519	4.19	0.017
SITAVIO1*SITAVIO2	1	0.03388	0.03388	0.03388	9.34	0.003
Error	135	0.48966	0.48966	0.00363		
Total	191	9.4122				

**Table XXXII:** Case 7, only METHOD=PROP, Analysis of Variance for *Clevel*, using Adjusted SS for Tests.

Source	$\mathrm{DF}$	Seq~SS	$\operatorname{Adj}\operatorname{SS}$	$\operatorname{Adj}\operatorname{MS}$	F	P
COVSTR	7	2.9642	2.9642	0.42345	16.51	0
SSIZE	1	1.4116	1.4116	1.4116	55.05	0
OBSERVED	2	2.1055	2.1055	1.0528	41.06	0
SITAVIO1	1	1.2641	1.2641	1.2641	49.3	0
SITAVIO2	1	2.3966	2.3966	2.3966	93.46	0
COVSTR*SSIZE	7	0.1213	0.1213	0.01733	0.68	0.692
COVSTR*OBSERVED	14	1.1466	1.1466	0.0819	3.19	0
COVSTR*SITAVIO1	7	0.71842	0.71842	0.10263	4	0.001
COVSTR*SITAVIO2	7	0.39282	0.39282	0.05612	2.19	0.039
SSIZE*OBSERVED	2	0.00325	0.00325	0.00162	0.06	0.939
SSIZE*SITAVIO1	1	0.01352	0.01352	0.01352	0.53	0.469
SSIZE*SITAVIO2	1	1.1621	1.1621	1.1621	45.32	0
OBSERVED*SITAVIO1	2	0.14527	0.14527	0.07263	2.83	0.062
OBSERVED*SITAVIO2	2	0.76435	0.76435	0.38217	14.9	0
SITAVIO1*SITAVIO2	1	0.96064	0.96064	0.96064	37.46	0
Error	135	3.4617	3.4617	0.02564		
Total	191	19.0319				

**Table XXXIII:** Case 7, only METHOD=PROP, means and standard errors (SE) of 1st and 2nd order effects on *MeanBias* and *Clevel* across the other factors.

Effect	MeanBias	SE MeanBias	Clevel	SE Clevel
COVSTR				
1	0.113	0.012294	0.3461	0.032687
2	0.3246	0.012294	0.1552	0.032687
3	0.0486	0.012294	0.4913	0.032687
4	0.1046	0.012294	0.444	0.032687
5	0.2591	0.012294	0.2279	0.032687
6	0.3936	0.012294	0.1493	0.032687
7	-0.0695	0.012294	0.289	0.032687
8	0.2203	0.012294	0.169	0.032687
SSIZE				
1000	0.1763	0.006147	0.3697	0.016343
5000	0.1723	0.006147	0.1982	0.016343
OBSERVED				
X1	0.2434	0.007528	0.138	0.020016
X2	0.1596	0.007528	0.3355	0.020016
X1X2	0.1198	0.007528	0.3785	0.020016
SITAVIO1				
N	0.1556	0.006147	0.3651	0.016343
Y	0.1929	0.006147	0.2028	0.016343
SITAVIO2				
N	0.1165	0.006147	0.3957	0.016343
Y	0.2321	0.006147	0.1723	0.016343
COVSTR*SSIZE			. = =	
1 1000	0.1144	0.017386	0.4348	0.046226
1 5000	0.1116	0.017386	0.2574	0.046226
2 1000	0.3225	0.017386	0.2362	0.046226
2 5000	0.3267	0.017386	0.0742	0.046226
3 1000	0.0557	0.017386	0.6183	0.046226
3 5000	0.0415	0.017386	0.3642	0.046226
4 1000	0.1079	0.017386	0.5618	0.046226
4 5000	0.1013	0.017386	0.3261	0.046226
5 1000	0.264	0.017386	0.3006	0.046226
5 5000	0.2541	0.017386	0.3553	0.046226
6 1000	0.3873	0.017386	0.1993 $0.2224$	0.046226
6 5000	0.3998	0.017386	0.2224	0.046226
7 1000	-0.0617	0.017386	0.3307	0.046226
7 5000	-0.0017	0.017386	0.3301 $0.2474$	0.046226
8 1000	0.2201	0.017386	0.2474	0.046226
8 5000	0.2201 $0.2205$	0.017386	0.255 $0.0851$	0.046226
COVSTR*OBSERVED	0.2200	0.017500	0.0001	0.040220
1 X1	0.1559	0.021293	0.139	0.056615
1 X1 1 X2	0.1071	0.021293 $0.021293$	0.133	0.056615
1 X2 1 X1X2	0.1071	0.021293 $0.021293$	0.44 $0.4594$	0.056615
2 X1	0.5494	0.021293 $0.021293$	0.4334	0.056615
2 X1 2 X2			0.2299	
2 X2 2 X1X2	$0.2142 \\ 0.2104$	0.021293 $0.021293$	0.2299 $0.2358$	$0.056615 \\ 0.056615$
3 X1				
	0.0583	0.021293	0.5106	0.056615
3 X2 3 X1X2	0.1062 $-0.0187$	$0.021293 \\ 0.021293$	$0.4479 \\ 0.5152$	$0.056615 \\ 0.056615$
		0.021293 $0.021293$	0.3152 $0.4448$	
4 X1	0.1085			0.056615
4 X2	0.1056	0.021293	0.4438	0.056615
4 X1X2	0.0998	0.021293	0.4434	0.056615
5 X1	0.4523	0.021293	0 0000	0.056615
5 X2	0.2143	0.021293	0.2238	0.056615
5 X1X2	0.1105	0.021293	0.46	0.056615
6 X1	0.6957	0.021293	0.0074	0.056615
6 X2	0.2134	0.021293	0.2274	0.056615
6 X1X2	0.2716	0.021293	0.2206	0.056615
7 X1	-0.3307	0.021293	0.0025	0.056615
7 X2	0.1027	0.021293	0.4428	0.056615
7 X1X2	0.0195	0.021293	0.4219	0.056615
8 X1	0.258	0.021293	0.007	0.056615
8 X2	0.2135	0.021293	0.2285	0.056615
8 X1X2	0.1893	0.021293	0.2716	0.056615

COVSTR*SITAVIO1  1 N	el
1 Y       0.1475       0.017386       0.2056       0.04622         2 N       0.3022       0.017386       0.1933       0.04622         2 Y       0.3471       0.017386       0.1172       0.04622         3 N       0.0514       0.017386       0.6028       0.04622         3 Y       0.0458       0.017386       0.3797       0.04622         4 N       0.0583       0.017386       0.6312       0.04622         4 Y       0.151       0.017386       0.2567       0.04622         5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2115       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.618       0.017386       0.1964       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         2 V       0.2302       0.017386       0.2914       0.04622         2 N       0.2302       0.017386       0.2915       0.04622         2 N       0.244       0.017386       0.2915	e
2 N       0.3022       0.017386       0.1933       0.04622         2 Y       0.3471       0.017386       0.1172       0.04622         3 N       0.0514       0.017386       0.6028       0.04622         3 Y       0.0458       0.017386       0.3797       0.04622         4 N       0.0583       0.017386       0.6312       0.04622         5 N       0.2781       0.017386       0.2567       0.04622         5 Y       0.24       0.017386       0.2115       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         6 Y       0.4436       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.3817       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         2 N       0.204       0.017386       0.3817       0.04622         2 V       0.0618       0.017386       0.3817       0.04622         2 V       0.0204       0.017386       0.2014       0.04622         2 V       0.0302       0.017386       0.294       0.04622         2 Y       0.04624       0.017386       0.295	
2 Y       0.3471       0.017386       0.1172       0.04622         3 N       0.0514       0.017386       0.6028       0.04622         3 Y       0.0458       0.017386       0.3797       0.04622         4 N       0.0583       0.017386       0.6312       0.04622         4 Y       0.151       0.017386       0.2567       0.04622         5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2143       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.2014       0.04622         8 N       0.2104       0.017386       0.1367       0.04622         2 N       0.2302       0.017386       0.1367       0.04622         2 N       0.1303       0.017386       0.295       0.04622         2 Y       0.4409       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.6831	
3 N       0.0514       0.017386       0.6028       0.04622         3 Y       0.0458       0.017386       0.3797       0.04622         4 N       0.0583       0.017386       0.6312       0.04622         4 Y       0.151       0.017386       0.2567       0.04622         5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2443       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.1964       0.04622         8 N       0.2104       0.017386       0.1964       0.04622         8 Y       0.2302       0.017386       0.1367       0.04622         2 V       0.1303       0.017386       0.4827       0.04622         2 Y       0.4409       0.017386       0.2995       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.6831	
3 Y       0.0458       0.017386       0.3797       0.04622         4 N       0.0583       0.017386       0.6312       0.04622         4 Y       0.151       0.017386       0.2567       0.04622         5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2124       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.2014       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         COVSTR*SITAVIO2       0.2302       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.4827       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.6831       0.04622         4 Y       0.0442       0.017386       0.5722       0.04622         4 Y       0.0442       0.017386       0.68	
4 N       0.0583       0.017386       0.6312       0.04622         4 Y       0.151       0.017386       0.2567       0.04622         5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2443       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         6 Y       0.4436       0.017386       0.0862       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.2014       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         COVSTR*SITAVIO2       0.2302       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.4827       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.6831       0.04622         4 Y       0.1249       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.31	
5 N       0.2781       0.017386       0.2115       0.04622         5 Y       0.24       0.017386       0.2443       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         6 Y       0.4436       0.017386       0.0862       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.1964       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         8 Y       0.2302       0.017386       0.2014       0.04622         2 COVSTR*SITAVIO2       1       N       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.2995       0.04622         2 Y       0.4409       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.6831       0.04622         4 Y       0.0442       0.017386       0.5722       0.04622         5 Y       0.3485       0.017386       0.3158       0.04622         5 Y       0.3485	6
5 Y       0.24       0.017386       0.2443       0.04622         6 N       0.3435       0.017386       0.2124       0.04622         6 Y       0.4436       0.017386       0.0862       0.04622         7 N       -0.0772       0.017386       0.3817       0.04622         7 Y       -0.0618       0.017386       0.1964       0.04622         8 N       0.2104       0.017386       0.2014       0.04622         8 Y       0.2302       0.017386       0.1367       0.04622         COVSTR*SITAVIO2       1       N       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.295       0.04622         2 Y       0.4409       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.6831       0.04622         4 Y       0.04429       0.017386       0.5722       0.04622         5 N       0.0494       0.017386       0.3158       0.04622         5 Y       0.3485       0.017386       0.3158       0.04622         6 Y       0.3485	6
6 N	6
6 Y	6
7 N         -0.0772         0.017386         0.3817         0.04622           7 Y         -0.0618         0.017386         0.1964         0.04622           8 N         0.2104         0.017386         0.2014         0.04622           8 Y         0.2302         0.017386         0.1367         0.04622           COVSTR*SITAVIO2         0.0957         0.017386         0.4827         0.04622           1 Y         0.1303         0.017386         0.295         0.04622           2 N         0.2084         0.017386         0.2317         0.04622           2 Y         0.4409         0.017386         0.0787         0.04622           3 Y         0.0412         0.017386         0.2994         0.04622           4 N         0.0844         0.017386         0.2994         0.04622           4 Y         0.1249         0.017386         0.3158         0.04622           4 Y         0.1249         0.017386         0.3158         0.04622           5 Y         0.3485         0.017386         0.3007         0.04622           6 N         0.2241         0.017386         0.1551         0.04622           6 Y         0.563         0.017386	
7 Y         -0.0618         0.017386         0.1964         0.04622           8 N         0.2104         0.017386         0.2014         0.04622           8 Y         0.2302         0.017386         0.1367         0.04622           COVSTR*SITAVIO2         0.0957         0.017386         0.4827         0.04622           1 Y         0.1303         0.017386         0.295         0.04622           2 N         0.2084         0.017386         0.2317         0.04622           2 Y         0.4409         0.017386         0.0787         0.04622           3 Y         0.0412         0.017386         0.2994         0.04622           4 N         0.0844         0.017386         0.2994         0.04622           4 Y         0.1249         0.017386         0.3158         0.04622           4 Y         0.1249         0.017386         0.3158         0.04622           5 Y         0.3485         0.017386         0.3158         0.04622           5 Y         0.3485         0.017386         0.1551         0.04622           6 Y         0.563         0.017386         0.0903         0.04622           7 N         -0.0241         0.017386	
8 N       0.2104       0.017386       0.2014       0.04622         8 Y       0.2302       0.017386       0.1367       0.04622         COVSTR*SITAVIO2       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.2095       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         4 N       0.0412       0.017386       0.2994       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3158       0.04622         5 Y       0.3485       0.017386       0.3007       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.1327       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2	
8 Y       0.2302       0.017386       0.1367       0.04622         COVSTR*SITAVIO2       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.2095       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.2994       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
COVSTR*SITAVIO2         1 N       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.295       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         4 N       0.0844       0.017386       0.2994       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3158       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
1 N       0.0957       0.017386       0.4827       0.04622         1 Y       0.1303       0.017386       0.295       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         4 N       0.0412       0.017386       0.2994       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3158       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	б
1 Y       0.1303       0.017386       0.2095       0.04622         2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	6
2 N       0.2084       0.017386       0.2317       0.04622         2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
2 Y       0.4409       0.017386       0.0787       0.04622         3 N       0.056       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
3 N       0.056       0.017386       0.6831       0.04622         3 Y       0.0412       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
3 Y       0.0412       0.017386       0.2994       0.04622         4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
4 N       0.0844       0.017386       0.5722       0.04622         4 Y       0.1249       0.017386       0.3158       0.04622         5 N       0.1696       0.017386       0.3007       0.04622         5 Y       0.3485       0.017386       0.1551       0.04622         6 N       0.2241       0.017386       0.2083       0.04622         6 Y       0.563       0.017386       0.0903       0.04622         7 N       -0.0241       0.017386       0.4453       0.04622         7 Y       -0.1149       0.017386       0.1327       0.04622         8 N       0.1176       0.017386       0.2415       0.04622	
5 N     0.1696     0.017386     0.3007     0.04622       5 Y     0.3485     0.017386     0.1551     0.04622       6 N     0.2241     0.017386     0.2083     0.04622       6 Y     0.563     0.017386     0.0903     0.04622       7 N     -0.0241     0.017386     0.4453     0.04622       7 Y     -0.1149     0.017386     0.1327     0.04622       8 N     0.1176     0.017386     0.2415     0.04622	
5 Y     0.3485     0.017386     0.1551     0.04622       6 N     0.2241     0.017386     0.2083     0.04622       6 Y     0.563     0.017386     0.0903     0.04622       7 N     -0.0241     0.017386     0.4453     0.04622       7 Y     -0.1149     0.017386     0.1327     0.04622       8 N     0.1176     0.017386     0.2415     0.04622	
6 N     0.2241     0.017386     0.2083     0.04622       6 Y     0.563     0.017386     0.0903     0.04622       7 N     -0.0241     0.017386     0.4453     0.04622       7 Y     -0.1149     0.017386     0.1327     0.04622       8 N     0.1176     0.017386     0.2415     0.04622	6
6 Y     0.563     0.017386     0.0903     0.04622       7 N     -0.0241     0.017386     0.4453     0.04622       7 Y     -0.1149     0.017386     0.1327     0.04622       8 N     0.1176     0.017386     0.2415     0.04622	6
7 N     -0.0241     0.017386     0.4453     0.04622       7 Y     -0.1149     0.017386     0.1327     0.04622       8 N     0.1176     0.017386     0.2415     0.04622	6
7 Y -0.1149 0.017386 0.1327 0.046224 8 N 0.1176 0.017386 0.2415 0.046224	
8 N 0.1176 0.017386 0.2415 0.04622	
0.000 0.04=000 0.0000 0.04000	
8 Y 0.323 0.017386 0.0966 0.046224 SSIZE*OBSERVED	6
1000 X1	7
1000 X2	
1000 X1X2 0.1268 0.010646 0.4623 0.02830	7
5000 X1 0.2438 0.010646 0.0561 0.02830	7
5000 X2 0.1603 0.010646 0.244 0.02830	7
5000 X1X2 0.1128 0.010646 0.2946 0.02830	7
SSIZE*SITAVIO1	
1000 N 0.1539 0.008693 0.4425 0.02311	
1000 Y 0.1987 0.008693 0.297 0.02311	
5000 N 0.1574 0.008693 0.2878 0.02311	
5000 Y 0.1872 0.008693 0.1087 0.02311 SSIZE*SITAVIO2	3
1000 N 0.1163 0.008693 0.5592 0.02311	3
1000 Y 0.2362 0.008693 0.1802 0.02311	
5000 N 0.1166 0.008693 0.2322 0.02311	
5000 Y 0.228 0.008693 0.1643 0.02311	
OBSERVED*SITAVIO1	
X1 N 0.2161 0.010646 0.1928 0.02830	7
X1 Y 0.2708 0.010646 0.0832 0.02830	7
X2 N 0.1244 0.010646 0.4546 0.02830	7
X2 Y 0.1948 0.010646 0.2164 0.02830	
X1X2 N 0.1264 0.010646 0.448 0.02830	
X1X2 Y 0.1132 0.010646 0.309 0.02830	7
OBSERVED*SITAVIO2	
X1 N 0.1935 0.010646 0.1618 0.02830	
X1 Y 0.2934 0.010646 0.1142 0.02830	
X2 N 0.0841 0.010646 0.4778 0.02830	
X2 Y 0.2352 0.010646 0.1931 0.02830 X1 Y2 N 0.0710 0.010646 0.5475 0.02830	
X1X2 N 0.0719 0.010646 0.5475 0.02830 X1X2 Y 0.1677 0.010646 0.2095 0.02830	
SITAVIO1*SITAVIO2	1
N N 0.0845 0.008693 0.5476 0.02311	3
N Y 0.2267 0.008693 0.1827 0.02311	
Y N 0.1484 0.008693 0.2438 0.02311	
Y Y 0.2375 0.008693 0.1619 0.02311	