

Data generation						Results by different regression approaches												
Case	Data scheme	True Slope	True Intercept	R^2 (X, Y)	Measurement error	OLS		DR $\lambda = 1$		DR $\lambda = \frac{\omega(X_i)}{\omega(Y_i)}$		ODR		WODR		YR		
						slope	intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	
1		4	0	0.67 ± 0.03	LOD _{POC} = 1, LOD _{EC} = 1, α_{POC} = 1, $\alpha_{EC} = 1.LODPOC = 0.5,LODEC = 0.5,\alpha_{POC} = 0.5,\alpha_{EC} = 0.5.LODPOC = 1,LODEC = 0.5,\alpha_{POC} = 1,\alpha_{EC} = 1.\gamma_{Unc} = 30%$	2.94 ± 0.14	5.84 ± 0.78	4.27 ± 0.27	-1.45 ± 1.36	4.01 ± 0.25	-0.04 ± 1.28	4.27 ± 0.27	-1.45 ± 1.36	3.98 ± 0.22	1.12 ± 1.02	3.98 ± 0.22	1.12 ± 1.02	
2		4	3	0.67 ± 0.04		2.95 ± 0.15	8.83 ± 0.80	4.32 ± 0.28	1.28 ± 1.43	4.01 ± 0.26	2.94 ± 1.34	4.32 ± 0.28	1.28 ± 1.43	3.99 ± 0.23	3.98 ± 1.05	3.99 ± 0.23	3.98 ± 1.05	
3	Chu	4	0	0.95 ± 0.01		3.83 ± 0.08	0.95 ± 0.40	4.03 ± 0.09	-0.18 ± 0.44	4 ± 0.09	0 ± 0.44	4.03 ± 0.09	-0.18 ± 0.44	4 ± 0.08	0.12 ± 0.37	4 ± 0.08	0.12 ± 0.37	
4		4	0	0.78 ± 0.02		3.39 ± 0.15	3.34 ± 0.75	4.3 ± 0.21	-1.66 ± 1.06	4 ± 0.19	-0.03 ± 0.99	4.3 ± 0.21	-1.66 ± 1.06	4 ± 0.17	0.33 ± 0.81	4 ± 0.17	0.33 ± 0.81	
5		4	0	0.69 ± 0.04		3.32 ± 0.20	3.77 ± 0.90	4.75 ± 0.30	-4.14 ± 1.36	4.01 ± 0.25	-0.04 ± 1.13	4.75 ± 0.30	-4.14 ± 1.36	4 ± 0.18	-0.01 ± 0.59	4 ± 0.18	-0.01 ± 0.59	
6		4	3	0.66 ± 0.04	γ_{Unc} = 30%	3.31 ± 0.22	6.79 ± 1.02	4.95 ± 0.31	-2.26 ± 1.48	3.99 ± 0.26	3.05 ± 1.22	4.95 ± 0.31	-2.26 ± 1.48	4.01 ± 0.20	2.72 ± 0.74	4.01 ± 0.20	2.72 ± 0.74	
7		4	0	0.76 ± 0.01		3.22 ± 0.03	4.3 ± 0.14	4.17 ± 0.04	-0.94 ± 0.18	4 ± 0.03	0 ± 0.17	4.17 ± 0.04	-0.94 ± 0.18	3.96 ± 0.03	1.21 ± 0.13	3.96 ± 0.03	1.21 ± 0.13	
8		4	3	0.75 ± 0.01		3.22 ± 0.03	7.29 ± 0.14	4.2 ± 0.04	1.88 ± 0.18	4 ± 0.03	3 ± 0.18	4.2 ± 0.04	1.88 ± 0.18	3.97 ± 0.03	4.11 ± 0.13	3.97 ± 0.03	4.11 ± 0.13	
9		0.5	0	0.76 ± 0.01		LOD _{POC} = 1, LOD _{EC} = 1, α_{POC} = 1, α_{EC} = 1.	0.43 ± 0.00	0.36 ± 0.02	0.46 ± 0.01	0.23 ± 0.03	0.5 ± 0.01	0 ± 0.03	0.46 ± 0.01	0.23 ± 0.03	0.5 ± 0.00	0 ± 0.01	0.5 ± 0.00	0 ± 0.01
10		0.5	3	0.56 ± 0.01		0.43 ± 0.01	3.36 ± 0.03	0.5 ± 0.01	3.02 ± 0.04	0.49 ± 0.01	3.05 ± 0.04	0.5 ± 0.01	3.02 ± 0.04	0.51 ± 0.01	2.73 ± 0.03	0.51 ± 0.01	2.73 ± 0.03	
11		1	0	0.76 ± 0.01		0.87 ± 0.01	0.72 ± 0.05	1 ± 0.01	0 ± 0.06	1 ± 0.01	0 ± 0.06	1 ± 0.01	0 ± 0.06	1 ± 0.01	0 ± 0.02	1 ± 0.01	0 ± 0.02	
12	MT	1	3	0.66 ± 0.01		0.87 ± 0.01	3.72 ± 0.05	1.09 ± 0.01	2.52 ± 0.07	0.99 ± 0.01	3.07 ± 0.06	1.09 ± 0.01	2.52 ± 0.07	1.01 ± 0.01	2.71 ± 0.04	1.01 ± 0.01	2.7 ± 0.04	
13		4	0	0.76 ± 0.01		3.48 ± 0.04	2.87 ± 0.18	4.53 ± 0.05	-2.94 ± 0.24	4 ± 0.05	0 ± 0.22	4.53 ± 0.05	-2.94 ± 0.24	4 ± 0.03	0 ± 0.09	4 ± 0.03	0 ± 0.09	
14		4	3	0.73 ± 0.01		3.48 ± 0.04	5.87 ± 0.19	4.67 ± 0.05	-0.67 ± 0.26	3.98 ± 0.05	3.08 ± 0.23	4.67 ± 0.05	-0.67 ± 0.26	4.02 ± 0.03	2.68 ± 0.11	4.02 ± 0.03	2.68 ± 0.11	
15		0.5	0	0.54 ± 0.01		0.4 ± 0.01	0.55 ± 0.03	0.45 ± 0.01	0.26 ± 0.03	0.5 ± 0.01	0.01 ± 0.03	0.45 ± 0.01	0.26 ± 0.03	0.52 ± 0.01	-0.23 ± 0.02	0.52 ± 0.01	-0.23 ± 0.02	
16		0.5	3	0.40 ± 0.01	0.4 ± 0.01	3.54 ± 0.04	0.5 ± 0.01	2.98 ± 0.04	0.5 ± 0.01	3 ± 0.04	0.5 ± 0.01	2.98 ± 0.04	0.52 ± 0.01	2.65 ± 0.04	0.52 ± 0.01	2.65 ± 0.04		
17		1	0	0.65 ± 0.01	0.8 ± 0.01	1.07 ± 0.04	1 ± 0.01	0 ± 0.05	1 ± 0.01	0 ± 0.05	1 ± 0.01	0 ± 0.05	1 ± 0.01	0 ± 0.04	1 ± 0.01	0 ± 0.04		
18		1	3	0.59 ± 0.01	0.8 ± 0.01	4.07 ± 0.05	1.07 ± 0.01	2.62 ± 0.07	1 ± 0.01	3 ± 0.06	1.07 ± 0.01	2.62 ± 0.07	1.02 ± 0.01	2.84 ± 0.05	1.02 ± 0.01	2.84 ± 0.05		